S760, S770, S780, S785, S790 and HillMaster™ Combines

(Serial No. 125000 -)

JOHN DEERE

OPERATOR'S MANUAL

S760, S770, S780, S785, S790 and HillMaster™ Combines

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Introduction

Foreword

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your machine may also be available in other languages (see your John Deere dealer to order).

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing the direction of forward travel.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I. N.) in the Specification or Identification Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

SETTING FUEL DELIVERY BEYOND PUBLISHED factory specifications or otherwise overpowering will result in loss of warranty protection for this machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed a predelivery inspection. After operating for the first 20 to 50 hours, schedule an after-sale inspection with your dealer to ensure best performance.

THIS COMBINE IS DESIGNED SOLELY for use in customary agricultural or similar operations ("INTENDED USE"). Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

THIS COMBINE SHOULD BE OPERATED, serviced and repaired only by persons familiar with all its particular characteristics and acquainted with the relevant safety rules (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times. Any arbitrary modifications carried out on this combine will relieve the manufacturer of all liability for any resulting damage or injury.

REGISTER USED PRODUCTS. If you purchased used John Deere products from an authorized John Deere dealer, the warranty registration information was updated by the dealer and requires no further information on your part.

If you purchased any used John Deere product from an auction, through a trader or from a farmer, please register it now. John Deere and John Deere dealers value their customer's safety and satisfaction. Your local John Deere dealer is best equipped and anxious to provide you superior levels of support for your machine. Please enter your product details and your address online, using the John Deere website corresponding to your country. Then select the dealer of your choice and you will receive a voucher for a discount towards a qualifying purchase of John Deere parts.

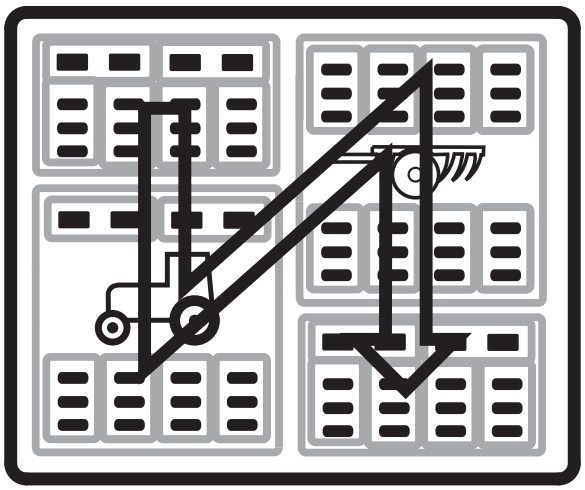
OUO6075,000174F-19-31JAN14

A Message to Our Customers

We appreciate the confidence placed in us by the purchase of this machine. To ensure that the machine performs at the highest level, countless hours were spent designing and testing, before this machine was produced. To achieve the maximum performance, it is imperative that this machine is operated in accordance with the procedures outlined in this manual.

Information in this manual is divided into sections. The section names are identified in the table of contents and at the top of each page. Each section has a unique number and page count. Specific information within each section is organized into topics identified with bold headings.

The topic headings are listed in the table of contents with the section number and page number where the topic begins. Topics and information related to each topic are also referenced in the index along with the section and page number.



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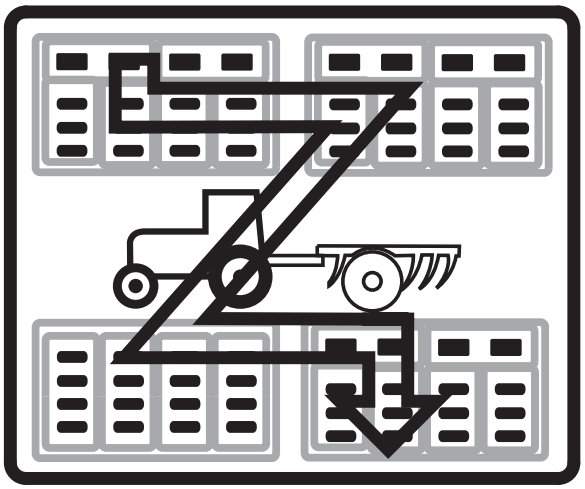

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Review this manual often to learn where to look for information.

Thanks again for purchasing this machine.

OUO6075,00049D4-19-08JUN18

Emissions Performance and Tampering

Operation and Maintenance

The engine, including the emissions control system, shall be operated, used, and maintained in accordance with the instructions provided in this manual to maintain the emissions performance of the engine within the requirements applicable to the engine's category/ certification.

Tampering

No deliberate tampering with or misuse of the engine emissions control system shall take place; in particular with regard to deactivating or not maintaining an exhaust gas recirculation (EGR) or a DEF dosing system. Tampering with an engine’s emissions control system will void the European Union (EU) type approval and applicable emissions-related warranties.

DX,EMISSIONS,PERFORM-19-12JAN18

Identification View

H115702—UN—31AUG15
OUO6075,000413D-19-31AUG15

Contents

Page

Safety Features
Machine Safety Features 05-1

Safety
Recognize Safety Information 10-1
Understand Signal Words 10-1
Follow Safety Instructions 10-1
Driving the Machine 10-1
Operator Ability 10-2
Observe Road Traffic Regulations 10-2
Check Machine Safety 10-2
Use Handholds and Steps 10-2
Keep Riders and Children Off Machine 10-2
Ballasting for Safe Ground Contact 10-3
Roadway Transport with Header Attached 10-3
Avoid Electrical Power Lines 10-3
Parking and Leaving the Machine 10-3
Work In Ventilated Area 10-4
Handle Fuel Safely—Avoid Fires 10-4
Prepare for Emergencies 10-4
Handle Starting Fluid Safely 10-4
In Case of Fire 10-5
Avoid Static Electricity Risk When Refueling 10-5
Wear Protective Clothing 10-6
Stay Clear of Harvesting Units 10-6
Keep Hands Away From Knives 10-6
Use Safety Lights and Devices 10-6
Use Seat Belts 10-7
Heated and Ventilated Operator's Seat 10-7
Instructional Seat 10-7
Transport Combine With Header Safely 10-7
Prevent Machine Runaway or Unexpected Movement 10-8
Practice Safe Maintenance 10-8
Welding Near Electronic Control Units 10-8
Remove Paint Before Welding or Heating 10-9
Avoid Heating Near Pressurized Fluid Lines 10-9
Avoid Contact With Moving Parts 10-9
Cleaning Grain Tank and Removal of Blockages Safely 10-9
Stay Clear of Rotating Drivelines 10-10
Install All Shields and Guards 10-10
Avoid High-Pressure Fluids 10-10
Do Not Open High-Pressure Fuel System 10-10
Service Accumulator Systems Safely 10-11
Protect Against High Pressure Spray 10-11
Follow Tire Recommendations 10-11
Service Tires Safely 10-11
Decommissioning — Proper Recycling and Disposal of Fluids and Components 10-12
Service Cooling System Safely 10-12
Remove Accumulated Crop Debris 10-13
Support Machine Properly 10-13
Store Attachments Safely 10-13
Service Drive Belts Safely 10-13
Handle Electronic Components and Brackets Safely 10-14
Avoid Backover Accidents 10-14
Emergency Exit 10-14
Handling Batteries Safely 10-14
Clean Exhaust Filter Safely 10-15
Avoid Hot Exhaust 10-16
Rotational Alarm System 10-16
Operator Presence System 10-16

Safety Signs
Pictorial Safety Signs 15-1
Replace Safety Signs 15-1
Operator's Manual 15-1
Repair and Maintenance 15-1
Seat Belt 15-1
Parking Brake 15-2
Hydraulic Oil and Gas Under Pressure 15-2
Accumulator 15-2
Avoid Low Hanging Power Lines 15-2
Grain Tank 15-3
Emergency Exit 15-3
Cab/Platform Access Ladder 15-3
Avoid Motor Vehicle Collisions 15-3
Dual Wheels (If Equipped) 15-3
Feeder House Safety Stop 15-4
Feeder House Guard 15-4
Hydraulic Oil and Gas Under Pressure 15-4
Feeder House Inspection Doors 15-4
Feeder House Tilt Frame 15-5
Left-Hand Guard 15-5
Grain Tank Cleanout Doors 15-5
Powered Folding Unloading Auger (If Equipped) 15-5
Battery Box 15-5
Hydraulic Oil and Gas Under Pressure 15-6
Accumulator 15-6
Separator Inspection Door 15-6
Chopper Flying Debris 15-7
Chopper Flying Debris Continued 15-7
Chopper Blades 15-7
Spreader Flying Debris 15-7
Spreader Lock-Out 15-7
Rear Access Ladder and Service Platform 15-8
Avoid Fires 15-8
Grain Tank 15-8
Hydraulic Oil and Gas Under Pressure 15-8
Accumulator 15-9
Cooling System 15-9
Avoid Grain Tank 15-9

Continued on next page

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Page

Avoid Clean Grain Loading Auger 15-9
Tailings Elevator Sensor Laser 15-9
Rotary Screen Door and Radiator Fan 15-10
Clean Grain Loading Auger 15-10
Clean Grain Elevator 15-10
Stone Trap 15-10
Hydraulic Oil and Gas Under Pressure 15-11
Accumulator 15-11
Feeder Conveyor Drive Guard 15-11
Feeder House Feed Plate Latch 15-11
Starter 15-12
Exhaust Temperature (Final Tier 4/Stage V) 15-12
Air Compressor System (If Equipped) 15-12
Air Compressor Reservoir (If Equipped) 15-12

Operator's Station
Radio Types (Optional) 20-1
After Market Radios 20-1
Program Radio for Local Area Frequency 20-1
Radio Controls 20-2
Antenna 20-2
Communications/CB Radio Wiring 20-2
Communications/CB Radio Mounting 20-3
Cab Ladder Positions 20-4
Fire Extinguisher (Europe) 20-5
Fire Extinguishers (Australia and New Zealand) 20-5
Fire Extinguishers (Eurasian Economic Union) 20-6
Fire Extinguisher Locations 20-6
Handrails and Right-Hand Landing Access 20-7

Break-In Service
Breaking-In Engine 25-1
Belt Drives Adjustment - First 50 Hours 25-3
Break-In Check Before First 100 Hours 25-3
Break-In Service After 100 Hours (Tier 2/ Stage II) 25-4
Break-In Service After 400 Hours (Final Tier 4/Stage V) 25-4

Prestarting Checks
Engine Oil Level 30-1
Hydrostatic/Hydraulic Oil Level 30-2
Coolant Level 30-2
Fuel System 30-3
Fuel Tank Breather 30-4
Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V) 30-4
Engine Air Scoop Positions 30-4
Position Engine Air Scoop (Standard Field Position) 30-5
Position Engine Air Scoop (Extended Field Position) 30-6
Position Engine Air Scoop (Transport Position) 30-7
Cleaning Engine Compartment 30-8

Operating the Engine
Clean Exhaust Filter Safely 35-1
Avoid Hot Exhaust 35-1
Aftertreatment Indicators Overview 35-2
Required Machine Stop Warning 35-3

Page

Object Detection Sensor (Final Tier 4/Stage V) 35-4
Starting the Engine 35-4
Stopping the Engine 35-5
Engine Speed Management (ProDrive™ Machines) 35-5
Handle Starting Fluid Safely 35-6
Cold Weather Starting Aid (If Equipped) 35-6
Coolant Heater 35-6

CommandCenter™ Display Information
Generation 4 Display 40-1

CommandCenter™ Display Applications
CommandCenter™ Display Applications 45-1

Controls Setup
Access Controls Setup 45-A-1
Controls Setup Overview 45-A-1
Multi-Function Lever - Controls Setup 45-A-2
Multi-Function Lever 45-A-2
CommandARM™ - Controls Setup 45-A-3
CommandARM™ 45-A-4
Create Single Position Assignments 45-A-4
Create Dual Position Assignments 45-A-5
Scroll Button 45-A-5
Application Assignments 45-A-6
Function Assignments 45-A-6

Residue Management
Access Residue Management 45-B-1
Residue Management Main Page 45-B-1
Residue Mode 45-B-2
Separator Vane 45-B-3
Width 45-B-3
Speed 45-B-4
Direction 45-B-5
Swap 45-B-6
Out of Cab Adjustments 45-B-6
Knife Bank 45-B-6
Auto Swap 45-B-7

Header
Access Header 45-C-1
Header Main Page 45-C-1
Header Details 45-C-3
Width 45-C-4
Width Corn Head 45-C-4
Row Width 45-C-5
Minimum Reel Speed 45-C-5
Work Recording 45-C-5
Hours 45-C-6
Raise/Lower Speed 45-C-6
Tilt Speed 45-C-7
Height Sensitivity 45-C-8
Tilt Sensitivity 45-C-9
Fore/Aft Tilt 45-C-10
Auto Header Control 45-C-11
Control Preview 45-C-11
Header Automation 45-C-12
Height Resume 45-C-12
Height Sensing—Off Ground 45-C-14
Height Sensing—On Ground 45-C-15

Page

Feeder House Float 45-C-17
Lateral Tilt 45-C-19
Resume Preferences 45-C-20
Dial-A-Speed™ Resume 45-C-20
Fore/Aft Resume 45-C-22
Reel Position Resume 45-C-23
Deck Plate Position Resume 45-C-24
HydraFlex™ Pressure 45-C-25
Draper Belt Speed 45-C-26
Draper Float Position 45-C-27
Cutterbar Tilt 45-C-28
Deck Plate Spacing 45-C-28
Backshaft Speed 45-C-29
Cutterbar Position Resume 45-C-30
Cutterbar Position 45-C-31
Advanced Settings 45-C-32
Limp Home Mode 45-C-33
Cutterbar Position Wizard 45-C-33

Grain Handling
Access Grain Handling 45-D-1
Grain Handling Main Page 45-D-1
Advanced Settings 45-D-2
Advanced Settings | Grain Level Auto Beacon 45-D-2
Advanced Settings | Tank Unloading Offset 45-D-2
Advanced Settings | Custom Level Alarm 45-D-3
Grain Level 45-D-3
Moisture Settings 45-D-3
Moisture Alarm 45-D-4
Moisture Correction 45-D-4
Status Center 45-D-5

Folding
Access Folding 45-E-1
Folding Main Page 45-E-1
Grain Tank Covers 45-E-2
Folding Unloading Auger 45-E-3
Fountain Auger 45-E-4
Extendable Platform 45-E-5
Folding Corn Head (John Deere Models) 45-E-6
Folding Corn Head (non-John Deere models) 45-E-7
Manual Control 45-E-7

Harvest Settings
Access Harvest Settings 45-F-1
Harvest Settings Main Page 45-F-1
Load Harvest Settings 45-F-2
Load Harvest Settings | Preset 45-F-3
Load Harvest Settings | Threshing Conditions 45-F-4
Load Harvest Settings | Straw Conditions 45-F-5
Load Harvest Settings | Save Preset 45-F-6
Load Harvest Settings | Save Preset | Factory Default 45-F-6
Load Harvest Settings | Save Preset | Custom Preset 45-F-6
Load Harvest Settings | Effects of Crop Change 45-F-7
Current Settings | Threshing Clearance 45-F-7
Current Settings | Threshing Speed 45-F-8
Current Settings | Cleaning Fan 45-F-9
Current Settings | Chaffer Clearance 45-F-9
Current Settings | Sieve Clearance 45-F-10

Page

Current Settings | Outside Configuration 45-F-11
Current Settings | Adjustment States 45-F-12
Advanced Settings 45-F-13
Advanced Settings | Separator Resolution 45-F-13
Advanced Settings | Shoe Resolution 45-F-14
Performance Target 45-F-14

Engine
Access Engine 45-G-1
Engine Main Page 45-G-1
Engine Power 45-G-2
Exhaust Filter System Overview 45-G-3
AUTO Exhaust Filter Cleaning 45-G-3
Parked Filter Cleaning 45-G-4
Disable AUTO Exhaust Filter Cleaning 45-G-5
Engine Cool Down In Progress 45-G-5
Debris Management Filter Capacity 45-G-6
Air Compressor 45-G-6
Air Compressor Status 45-G-7

HVAC
Access HVAC 45-H-1
Heating, Ventilation, and Air Conditioning (HVAC) Main Page 45-H-1
Set Temperature 45-H-2
Fan Speed 45-H-2
Air Flow Mode 45-H-3
Air Conditioning (A/C) 45-H-3
Outside Temperature 45-H-3

Transmission
Access Transmission 45-I-1
Transmission Main Page 45-I-1
Max Speed 1 and 2 ..... 45-I-2
Advanced Settings ProDrive™ 45-I-2
Advanced Settings ProDrive™ Tow Mode 45-I-2
Advanced Settings ProDrive™ Limp Home Mode 45-I-3
Advanced Settings Push Button 45-I-4

Lights
Access Lights 45-J-1
Lights Main Page 45-J-1
Worklights Preset 1—Low-Beam 45-J-2
Worklights Preset 2—Low-Beam 45-J-2
Worklights Preset 1—High-Beam 45-J-3
Worklights Preset 2—High-Beam 45-J-3
Exit Lights 45-J-4
Worklight Controls 45-J-4
Advanced Settings 45-J-5

Phone
Access Phone 45-K-1
Phone Main Page 45-K-1
Add Favorite Page 45-K-2
Advanced Settings 45-K-3
Edit Favorite Page 45-K-3
Manage Devices 45-K-3
Pairing Bluetooth® Device 45-K-4
Phone Favorites Page 45-K-4
Recent Calls 45-K-5

Page

Calibrations
Access Calibrations and Procedures 45-L-1
Calibrations and Procedures Overview 45-L-1
Mass Flow Vibration 45-L-1
Mass Flow Vibration Calibration Procedure 45-L-2
Moisture Sensor 45-L-2
Moisture Sensor Procedure 45-L-2
Threshing Clearance (STS Electric) 45-L-3
Threshing Clearance (STS Electric) Calibration Procedure 45-L-3
Yield Calibration 45-L-4
Yield | Calibration Quality 45-L-4
Yield | Status Indicator 45-L-5
Yield | Record Sample 45-L-5
Yield | Match Scale Weight 45-L-6
Yield | Advanced Settings 45-L-7
Yield | Calibration Quality Indicator 45-L-7
Yield | Collected Sample Status 45-L-8
Yield | Mass Flow Rate 45-L-8
Yield | Weight Indicator 45-L-9
Yield | Recording Status 45-L-9
Yield | Reset 45-L-9
Yield | Edit/Select Calibration 45-L-10
Yield | Advanced Edit 45-L-11
Yield | Delete Unused Samples 45-L-11
ActiveYield™ 45-L-12
ActiveYield™ | Status Indicator 45-L-12
ActiveYield™ | Advanced Settings 45-L-13
ActiveYield™ | Reset 45-L-13
Chassis Tilt 45-L-13
Chassis Tilt Calibration Procedure 45-L-14
Threshing Clearance (Hydraulic) 45-L-14
Threshing Clearance (Hydraulic) Calibration Procedure 45-L-14
Unloading Auger Engage 45-L-15
Unloading Auger Engage Calibration Procedure 45-L-15
Deck Plate Spacing 45-L-15
Deck Plate Spacing Calibration Procedure 45-L-16
Feeder House Raise Speed 45-L-16
Feeder House Raise Speed Calibration Procedure 45-L-16
Header Calibration 45-L-17
Header Calibration Procedure 45-L-17
Extendable Platform Header Self-Test 45-L-17
Extendable Platform Header Self-Test Calibration Procedure 45-L-17
Feeder House Tilt Fore/Aft Range 45-L-18
Feeder House Tilt Fore/Aft Range Calibration Procedure 45-L-18
Feeder House Lateral Tilt Range 45-L-18
Feeder House Lateral Tilt Range Calibration Procedure 45-L-19
Feeder House Lateral Tilt Speed 45-L-19
Feeder House Lateral Tilt Speed Calibration Procedure 45-L-19
Wings (Folding Corn Head) 45-L-20
Wings (Folding Corn Head) Calibration Procedure 45-L-20
Reel and Cutterbar Position 45-L-20
Reel and Cutterbar Position Calibration Procedure 45-L-21
Reel Position 45-L-21
Reel Position Calibration Procedure 45-L-21
Amber Flasher 45-L-22
Amber Flasher Calibration Procedure 45-L-22
Concave Air Removal 45-L-22
Concave Air Removal Calibration Procedure 45-L-23
Concave Leveling 45-L-23
Concave Leveling Calibration Procedure 45-L-23

Page

Combine Overview
Combine Overview 45-M-1
Front Console 45-M-2
Corner Post Display 45-M-3
CommandARM™ Console and Display 45-M-6
Multi-function Lever 45-M-6
Navigation Bar 45-M-8
Right-Hand Cab Items 45-M-9
Left-Hand Cab Items 45-M-11
Overhead Controls 45-M-12
Seat Controls 45-M-12
Key Switch 45-M-12
Adjusting Steering Wheel 45-M-13
Operate Lights 45-M-13
Operate Turn Signals, Horn and High and Low Beam 45-M-14
Operate Windshield Wiper and Washer 45-M-15
Operate Ether Injection (If Equipped) 45-M-15
ComfortCommand™ Operators Seat (Basic Seat) 45-M-15
ComfortCommand™ Operators Seat (Premium Cloth Seat) 45-M-16
ComfortCommand™ Operators Seat (Premium Leather Seat) 45-M-18
Seat Belts 45-M-19
Instructional Seat 45-M-20
Harvesting Controls 45-M-20
HVAC 45-M-22
Radio 45-M-22
Engine and Ground Drive 45-M-23
Lights 45-M-24
Console and Display 45-M-24
Feeder House Reverser 45-M-25
Belt Pickup Cleanout 45-M-26
Header Engage 45-M-26
Separator Engage 45-M-26
Threshing Clearance Adjust 45-M-26
Threshing Speed Adjust 45-M-27
Cleaning Fan Speed Adjust 45-M-27
Chaffer Adjust 45-M-28
Sieve Adjust 45-M-28
Seek 45-M-28
Push Button Shift Gear (If Equipped) 45-M-29
ProDrive™ (If Equipped) 45-M-29
Road Transport Disconnect 45-M-29
Four-Wheel Drive (If Equipped) 45-M-30
Differential Lock (If Equipped) 45-M-30
Park Brake 45-M-30
Exhaust Filter Cleaning Indicator 45-M-31
Fuel Level Indicator 45-M-31
Diesel Exhaust Fluid (DEF) Level Indicator 45-M-31
Quick Stop Switch 45-M-31
Unloading Auger Swing Switch 45-M-32
Unloading Auger Drive Switch 45-M-32
AutoTrac™ Resume Button (If Equipped) 45-M-33
Header Raise Lower and Tilt (If Equipped) Switch 45-M-33
Reel Raise and Lower and Reel Fore and Aft (If Equipped) 45-M-33

Page

Feeder House Backshaft Speed and Adjustable Corn Head Deck Plates (If Equipped) 45-M-33
Header Activation Buttons 45-M-34
VisionTrak™ 45-M-34

Radio
Access Audio 45-N-1
Audio Main Page 45-N-1
Premium Radio Auxiliary Tab 45-N-2
Premium Radio Bluetooth® Tab 45-N-2
AM, FM, Weather Channel Tab 45-N-3
Premium Radio USB Tab 45-N-4
Premium Radio CD Tab (If Equipped) 45-N-5
Advanced Settings 45-N-6

Combine Advisor™
Access Combine Advisor™ 45-O-1
Combine Advisor™ Main Page 45-O-1
Advanced Settings 45-O-3
Grain System Video 45-O-3
History 45-O-4
Performance 45-O-4
Active 45-O-5
Completed 45-O-6
Offset Details 45-O-7
Adjustment Details 45-O-8
Lens Debris 45-O-8
Automation Status 45-O-9
HarvestSmart™ Settings 45-O-9
Speed Limit 45-O-10
Response Aggressiveness 45-O-11
HarvestSmart™ | Automation 45-O-11
Engine Power Target 45-O-12
Active Terrain Adjustment™ Settings 45-O-13
Uphill Sensitivity 45-O-14
Downhill Sensitivity 45-O-14
HarvestSmart™ Status 45-O-15
Active Terrain Adjustment™ Status 45-O-16
Auto Maintain Status 45-O-17
Optimize Performance 45-O-18
Offset Tuning Chaffer 45-O-18
Offset Tuning Sieve 45-O-19
Cannot Maintain Target 45-O-20
Offset Tuning Cleaning Fan 45-O-21
Set Performance Target 45-O-21
Performance Issues 45-O-22
Separator Losses 45-O-23
Shoe Losses 45-O-23
Unthreshed Losses 45-O-23
Broken Grain 45-O-23
Light Foreign Material 45-O-23
Heavy Foreign Material 45-O-23
Unthreshed Material 45-O-23
Straw Quality Issues 45-O-24
Excess Tailings 45-O-24
Solutions 45-O-24
Ground Speed Adjustment 45-O-25
Separator Vane Adjustments 45-O-25
Out-of-Cab Adjustments 45-O-26
Auto Maintain Settings 45-O-28
Response Aggressiveness 45-O-28
Grain Loss Sensitivity 45-O-28
Broken Grain Sensitivity 45-O-29

Page

Foreign Material Sensitivity 45-O-29

Lights and Signals
Lighting Locations (Front and Rear View Lights) 50-1
Lighting Locations (Front and Rear View Lights Continued) 50-2
Lighting Locations (Front and Rear View Lights Continued) 50-3
Lighting Locations (Left and Right Side View Lights) 50-4
Lighting Locations (Left and Right Side View Lights Continued) 50-5
Lighting Locations (Left and Right Side View Lights Continued) 50-7
Lighting Delay/Timeout 50-8

Feeder House
Hydraulic Cylinder Safety Stop 55-1
Feeder House Side Shields 55-1
Feeder House Doors 55-2
Feed Accelerator Top Access Door 55-2
Feeder House Bottom Door and Feed Plate Seal Support (Style A) 55-3
Feeder House Bottom Door and Feed Plate Seal Support (Style B) 55-3
Stone Trap 55-4
Adjust and Set Feeder House Fore/Aft Tilt Frame (Manual Tilt) 55-5
Set Feeder House Fore/Aft Tilt Frame Zero Point (Hydraulic Tilt) (If Equipped) 55-6
Feeder House Conveyor Chain—Adjusting 55-7
Feeder House Conveyor Chain Links—Removing 55-8
Feeder House Drum (Manual Tilt)—Height Adjustment 55-8
Feeder House Drum (Hydraulic Tilt) (If Equipped)—Height Adjustment 55-9
Feeder House Conveyor Speed—Changing 55-9
Feeder House Conveyor Drive Chain Links—Removing 55-10
Feeder House Conveyor Drive Chain—Adjusting 55-11
Feeder House Top Shaft Sprockets 55-11
Feeder House Variable Speed Drive Belt—Replacing 55-11
Feeder House Variable Speed Drive Belt—Adjusting 55-13
Header Reel/Belt Pickup Pump Belt (Variable Speed Feeder House)—Replacing 55-15
Header Reel/Belt Pickup Pump Belt (Variable Speed Feeder House)—Adjusting 55-18
Feeder House Fixed Speed Drive Belt—Replacing 55-18
Feeder House Fixed Speed Drive Belt—Adjusting 55-19
Header Reel/Belt Pickup Pump Belt (Fixed Speed Feeder House)—Replacing 55-19
Header Reel/Belt Pickup Pump Belt (Fixed Speed Feeder House)—Adjusting 55-21
CommandTouch Multi-Speed Feeder House Drive Belt—Replacing 55-21
CommandTouch Multi-Speed Feeder House Drive Belt—Adjusting 55-21

Page

Header Reel/Belt Pickup Pump Belt (CommandTouch Multi-Speed Feeder House)—Replacing 55-22
Header Reel/Belt Pickup Pump Belt (CommandTouch Multi-Speed Feeder House)—Adjusting 55-23
Manual Tilt Indicator (Lateral Tilt System) 55-23
Attach Multicoupler and Single-Point Latching 55-24
Attaching and Detaching Header from Feeder House 55-25
Single-Point Latching—Adjusting 55-26
Level Land Feeder House Lower Cable End —Adjusting 55-27
Level Land Feeder House—Shim Adjusting 55-28
Feeder House Latching Pins (Cleanout) 55-28
Feeder House Manual Unlatching 55-28
Shear Screw Location 55-29

Shields
Gull Wing Doors 60-1
Gull Wing Doors and Shields 60-1
Gull Wing Door Cylinder Adjustment 60-2
Toolbox (If Equipped) 60-2
Left-Hand Side Shields 60-2
Right-Hand Side Shields 60-4
Separator Covers 60-4

Separator
Standard Feed Accelerator Wear Strips—Replacing 65-1
Tough Crop Feed Accelerator Wear Strips—Replacing 65-1
Tine Feed Accelerator Wear Strips—Replacing 65-2
Tine Feed Accelerator Comb Floor (Rice Machines) 65-2
Tine Feed Accelerator Comb Floor (Rice Machines)—Removing 65-3
Feed Accelerator Belt—Replacing 65-5
Feed Accelerator Belt—Adjusting 65-6
Standard Speed High Capacity Feed Accelerator—Changing Speed 65-7
High Speed High Capacity Feed Accelerator —Changing To Slow Speed 65-7
Concave Recommendations 65-8
Concave Types 65-8
Separator Grate Spacers 65-9
Separator Grate Types 65-9
Separator Grate Covers (If Equipped) 65-9
Separator Grate Interrupters (If Equipped) 65-10
Separator Grate Interrupter Locations (If Equipped) 65-11
Separator Rail Liners (If Equipped) 65-12
Concave Sector Gear Shear Bolts (Standard Concave Adjust) 65-12
Concave Sections (Standard Concave Adjust)—Remove and Install 65-13
Concave Sections (Active Concave Isolation) —Remove and Install 65-16
Concave Leveling (Standard Concave Adjust) 65-22
Concave Leveling (Active Concave Isolation) 65-24
Separator Top Cover Vanes (If Equipped) 65-28

Page

Threshing Elements and Tines (TriStream Rotor)—Remove and Install 65-28
Threshing Element and Separator Tine Location (TriStream Rotor Tough Grain Configuration) 65-30
Threshing Element and Separator Tine Location (TriStream Rotor Dense Pack Configuration) 65-31
Threshing Elements and Tines (Variable Stream Rotor)—Remove and Install 65-32
Threshing Element and Separator Tine Location (Variable Stream Rotor Standard Configuration) 65-34
Threshing Element and Separator Tine Location (Variable Stream Rotor Dense Pack Configuration) 65-35
Posi-Torq™ Separator—Dual-Range 65-35
Separator Drive Sheave Gap—Adjusting 65-36
Separator Variable Drive Belt—Replacing 65-37
Auger Bed Dividers 65-37
Discharge Beater Belt—Adjusting 65-38
Discharge Beater Belt—Replacing 65-38
Discharge Beater Wear Strips—Replacing (5 and 10 Wing Style) 65-41
Standard Discharge Beater Wear Strips—Replacing (8 Wing Style) 65-42
Tough Crop Discharge Beater Wear Strip—Replacing 65-43
Overshot Beater Belt (If Equipped)—Adjusting 65-43
Overshot Beater Belt (If Equipped)—Replacing 65-44
Standard Overshot Beater (If Equipped)—Wing Replacing 65-44
Tough Crop Overshot Beater (If Equipped)—Wing Replacing 65-45
Countershaft Right-Hand Front Belt—Adjusting 65-46
Countershaft Right-Hand Front Belt—Replacing 65-46
Countershaft Right-Hand Rear Belt—Adjusting 65-46
Countershaft Right-Hand Rear Belt—Replacing 65-47
Cleaning Shoe Air Chutes and Access Door 65-47
Cleaning Shoe Auger Gears—Manual Cleanout Door (If Equipped) 65-47
Cleaning Shoe Auger Gears—Cleanout Door (If Equipped) 65-48
Shoe, Fan, and Conveyor Auger Belt—Adjusting 65-48
Shoe, Fan, and Conveyor Auger Belt—Replacing 65-48
Cleaning Fan Actuator (Without Active Terrain Adjustment™)—Adjusting 65-49
Cleaning Fan Actuator (Active Terrain Adjustment™)—Adjusting 65-49
Cleaning Fan Belt (Without Active Terrain Adjustment™)—Replacing 65-49
Cleaning Fan Belt (Active Terrain Adjustment™)—Replacing 65-50
Adjustable Front Chaffer (If Equipped) 65-50
Fixed Front Chaffer 65-50
Chaffer and Sieve—Measuring 65-51
General-Purpose Chaffer 30 mm (1-3/16 in) 65-51

Page

Deep-Tooth Chaffer 41 mm (1-5/8 in) 65-52
Premium Corn Chaffer 41 mm (1-5/8 in) 65-52
High-Performance Chaffer 30 mm (1-3/16 in) 65-52
General Purpose Sieve 30 mm (1-3/16 in) 65-53
Deep-Tooth Sieve 30 mm (1-3/16 in) 65-53
Chaffer/Sieve Adjusting Switch 65-53
Dual Zone Adjust Rear Chaffer—Adjusting 65-53
Chaffer/Sieve Elements—Remove and Install 65-55
Chaffer/Sieve/Return Pan Assemblies 65-57
Chaffer/Sieve Motor—Manual Adjust 65-57
Clean Grain Elevator Belt—Adjusting 65-58
Clean Grain Elevator Belt—Replacing 65-58
Clean Grain Elevator Conveyor Chain—Adjusting 65-59
Clean Grain Elevator Wear Plates and Door (If Equipped) 65-60
VisionTrak™ Operational Checks 65-60
ActiveVision™ Clean Grain Elevator Camera (If Equipped) 65-61
ActiveVision™ Tailings System Camera (If Equipped) 65-61
Tailings System Elevator Sensors 65-62
Tailings System Elevator Paddles 65-63
Tailings Elevator Drive Belt—Adjusting (Style A) 65-63
Tailings System Elevator Paddle Chain—Adjusting 65-63
Upper Tailings Auger Drive Chain—Adjusting (Style A) 65-64
Tailings System Drive Belt—Adjusting (Style B) 65-64
Tailings System Drive Belt—Replacing (Style B) 65-64
Tailings System Drive Chain—Adjusting (Style B) 65-65
Tailings System Drive Chain—Replacing (Style B) 65-65
Tailings System Wear Strips and Rasp Bars—Remove and Install (Style B) 65-66
Tailings System Wear Strips and Rasp Bars—Adjusting (Style B) 65-68
Tailings System Return Concave—Adjusting (Style B) 65-69
Tailings System Auger Cleanout Door (Style B) 65-69
Drive Belts—Left-Hand 65-70
Drive Belts—Right-Hand (Style A) 65-71
Drive Belts—Right-Hand (Style B) 65-71
Feed Accelerator—Unplugging 65-72
Separator—Unplugging 65-72
Discharge Beater—Unplugging 65-72

Residue Management

Residue Material Handling Option (Intermediate/Deluxe Residue) 70-1
Residue Material Handling Option (Premium Residue) 70-1
Residue Material Handling Option (Straw Spreader) 70-1
General Windrowing Information (Intermediate/Deluxe Residue) 70-2
Crop Diverter Vanes—Adjusting 70-2
General Windrowing Information (Premium Residue) 70-3

Page

Windrow Convergence Rakes 70-3
Tailboard—Adjusting (Deluxe Residue) 70-3
Tailboard Vanes (Manual Adjust)—Adjusting (Deluxe Residue) 70-4
Tailboard Vanes (Electric Motor)—Adjusting (Deluxe Residue) 70-4
Tailboard Vanes (Manual Adjust)—Factory Settings (Deluxe Residue) 70-5
Tailboard Vanes (Electrical Adjust)—Factory Settings (Deluxe Residue) 70-6
PowerCast™ Tailboard—Adjusting (Optional) 70-7
PowerCast™ Tailboard Blade—Replacing (Optional) 70-7
PowerCast™ Tailboard (Optional) Rear Shrouds 70-8
Crop Diverter 70-8
Air Chutes 70-9
Overshot Beater Floor (If Equipped)—Removing (Premium Residue) 70-9
Chopper Controller Bar (Optional) 70-10
Chopper Stationary Knife Bank (Without Electric Actuator)—Adjusting 70-10
Chopper Stationary Knife Bank (Electric Actuator)—Removing (If Equipped) 70-11
Chopper Stationary Knife Bank (Electric Actuator)—Installing (If Equipped) 70-12
Chopper Stationary Knives (Without Electric Actuator)—Replacing 70-13
Chopper Stationary Knives (Electric Actuator)—Replacing 70-14
Chopper Access Door 70-15
Fine Cut Chopper Blades—Replacing and Configuration 70-16
Extra Fine Cut Chopper Blades—Replacing and Configuration 70-17
Middle Splitter Knife—Replacing (Advanced PowerCast™ Tailboard) 70-18
Chopper Blades—Centering 70-19
Chopper Adjusting Switch 70-20
Chopper Drive Speeds—Changing 70-20
Tailboard Vanes—Adjusting (Intermediate/Premium Residue) 70-21
Tailboard Vanes (Electric Motor)—Adjusting (Intermediate/Premium Residue) 70-21
Tailboard Vanes (Electrical Adjust)—Factory Settings (Intermediate/Premium Residue) 70-22
Advanced PowerCast Spreader Disks—Replacing 70-23
Spreader (General Information) 70-24
Spreader—Windrow Position 70-24
Spreader—Lowering 70-25
Spreader Disks (Single Speed)—Replacing 70-26
Spreader Disks (Dual Speed)—Replacing 70-27
Wide Spread Straw Spreader (Optional) 70-27
Chopper Drive Belt Tension—Adjusting 70-28
Chopper Belt—Replacing 70-28
Chopper Jackshaft Belt—Adjusting 70-31
Chopper Jackshaft Belt—Replacing (Style A) 70-32
Chopper Jackshaft Belt—Replacing (Style B) 70-34

Grain Tank and Unloading System

Grain Tank/Engine Ladder 75-1
Grain Tank Sample Trough 75-1
Grain Tank Cleanout Doors 75-1

Page

Grain Tank Fill Sensors—Adjusting 75-2
Grain Tank Covers (If Equipped)—Operating 75-2
Grain Tank Covers (If Equipped)—Adjusting 75-3
Grain Tank Cross Auger Covers 75-3
ActiveYield™ (If Equipped) Cross Auger Covers—Removing 75-4
ActiveYield™ (If Equipped) Sensor Locations 75-4
Shear Bolt Location 75-6
Unloading Auger Drive Shear Bolt 75-6
Grain Tank Loading Auger Deflector 75-6
Grain Tank Loading Auger (Grain Tank Extensions)—Folding 75-7
Grain Tank Loading Auger (Grain Tank Covers)—Adjusting 75-7
Mass Flow Sensor Plate (Grain Tank Extensions)—Cleaning 75-8
Mass Flow Sensor Plate (Grain Tank Covers) —Cleaning 75-9
Unloading Auger Drive Chain—Adjusting 75-9
Unloading Auger Drive Chain Links—Removing 75-9
Unloading Auger Cradle Support—Adjusting 75-10
Unloading Auger Position—Adjusting (Style A) 75-10
Unloading Auger Position—Adjusting (Style B) 75-11
Unloading Auger Lock Arm Positions 75-11
Unloading Auger Drive Belt—Replacing (Style A) 75-12
Unloading Auger Drive Belt—Replacing (Style B) 75-13

Service - Electrical System
Welding Near Electronic Control Units 80-1
Keep Electronic Control Unit Connectors Clean 80-1
Observe Electrical Precautions 80-1
Basic Electrical Component Handling / Precautions for Vehicles Equipped with Computer Controlled Systems 80-1
Handling Batteries Safely 80-2
Batteries—Safe Installation 80-3
Battery Cables—Connecting 80-3
Batteries—Charging 80-4
Batteries—Checking Specific Gravity 80-4
Batteries—Connecting Booster 80-5
Batteries—Removing and Installing (Style A) 80-5
Batteries—Removing and Installing (Style B) 80-6
Battery Disconnect Switch 80-6
Machine Fuse Center 80-7
Inline Fuses 80-8
Cab Fuse Center 80-9
Video Safety 80-9
Video Interface Capability 80-9
Adjust Cameras (If Equipped) 80-11
Safety Rules When Replacing Halogen Bulbs ... 80-11
Cab Headlight Bulb—Replacing 80-12
Cab Headlights—Adjusting 80-12
Cab Halogen Light Bulb—Replacing 80-12
Cab Halogen Lights—Adjusting 80-13
Halogen Bulb Fascia Lights (If Equipped)—Replacing 80-13
Light Emitting Diode (LED) Fascia Lights (If Equipped)—Replacing 80-14

Page

Lower Driving Light Bulb (If Equipped)—Replacing 80-14
Lower Driving Light Bulb (If Equipped)—Adjusting 80-14
Light Emitting Diode (LED) Lights (Optional) —Replacing 80-15
Light Emitting Diode (LED) Lights (Optional) —Adjusting 80-16
Replace Beacon Lights (Style A) 80-17
Replace Beacon Light (Style B) 80-17
Halogen Bulb Work Lights (If Equipped)—Replacing 80-18
Light Emitting Diode (LED) Work Lights (If Equipped)—Replacing 80-18
Halogen Bulb Side Finder Lights and Cleaning Shoe Lights (If Equipped)—Replacing 80-19
Light Emitting Diode (LED) Side Finder Lights and Cleaning Shoe Lights (If Equipped)—Replacing 80-19
Hazard/Marker Lights, Marker/Brake Lights, and Rear Hazard Lights—Replacing 80-20
Cab Interior Light—Replacing 80-20
Map Light—Replacing 80-20

Ground Drive and Rear Axle
Service Tires Safely 85-1
Roadway Transport with Header Attached 85-1
Care and Service of Tires 85-1
Basic Tire Information 85-2
Tire Tread Types 85-2
Front Tire Pressure (S760 and S770) 85-3
Front Tire Pressure (S780, S785, and S790) 85-5
Front Tire Pressure (HillMaster™) 85-7
Rear Tire Pressure (S760 and S770) 85-8
Rear Tire Pressure (S780, S785, and S790) 85-9
Rear Tire Pressure (HillMaster™) 85-10
Front and Rear Tire Information 85-10
Drive Wheel Starter Stud 85-11
Drive Wheel Bolt Torque 85-11
Front Drive Wheel Offset 85-11
Preparing Dual Wheels for Transport or Service 85-12
Remove Front Wheels 85-13
Install Front Wheels 85-17
Rear Wheel Bolt Torque 85-21
Using Liquid Weight 85-21
Ballast Requirements 85-23
Ballast Requirements (HillMaster™) 85-24
Jack Pocket Locations Decal 85-24
Jack Pocket Locations 85-25

Transporting
Roadway Transport with Header Attached 90-1
Driving Machine on Roads 90-1
Back-Up Alarm 90-4
Transporting Machine on a Trailer 90-4
Machine Tie Down Locations Decal 90-10
Machine Tie Down Locations 90-10
Jack Pocket Locations 90-11
Transport Information 90-11
Towing Machine (Mechanical Shift Transmission Machines) 90-11
Manual Trailer Hitch—Attaching (Standard) 90-12

Page

Semi-Automatic Trailer Hitch—Attaching (Optional) 90-12
Front Tow Hook 90-12
Rear Tow Hook 90-13

Harvesting Hints
Operation at Low Temperatures 95-1
Harvesting Tips 95-1
Auto Header Control Combinations 95-2
Change Tire Radius Code 95-4
Single Point Yield Calibration Or Multi-Point Yield Calibration 95-4

Crop Settings
Alfalfa / Barley 100-1
Canola / Chickpeas 100-2
Corn (Dry) / Corn (Wet) 100-3
Corn Cob Mix / Edible Beans 100-4
Flax / Grass Seed 100-5
Guar (Cluster Beans) / Lentils 100-6
Lupins / Millet 100-7
Mustard / Navy Beans 100-8
Oats / Peas 100-9
Popcorn / Rape Seed (Dry) 100-10
Rape Seed (Green) / Rice 100-11
Rye / Safflower 100-12
Sorghum / Soybeans 100-13
Sunflower / Triticale 100-14
Wheat Difficult / Wheat Normal 100-15
Footnotes Description Page 100-15
Concave Recommendations 100-16
Power Shutdown Procedure 100-16
Payable Moisture and Density Chart 100-18
Standard Weights Chart 100-18

HillMaster™ Leveling System (If Equipped)
HillMaster™ System (General Information) 105-1
HillMaster™ Daily Operation Preparations 105-3
HillMaster™ Leveling Control Switches 105-3

John Deere Tracks (If Equipped)
Machine Photo 110-1
Safe Track Operating Practices 110-1
Operator's Manual 110-1
Accumulator 110-1
Cab/Platform Access Ladder 110-1
Cab Ladder Positions (60.9 cm (24 in) Wide Tracks) 110-2
Cab Ladder Positions (76.2 cm (30 in) and 91.4 cm (36 in) Wide Tracks) 110-2
Cab Ladder Positions (Fold/Unfold from Ground) 110-3
Cab Ladder Positions (Fold/Unfold from Cab Landing) 110-3
Track Components 110-5
Track Features and Benefits 110-5
Operate Track Machines 110-6
Road Transport Speeds 110-7
Track Tensioning System 110-8
Cleaning Tracks 110-8
Track Cleanout Areas 110-8
Service Interval Chart 110-9
Belt Care and Conditioning Break-In 110-9
Track Replacement Criteria 110-10

Page

Hydraulic Oil 110-10
Check Oil 110-10
Change Oil 110-11
Specifications 110-12
Track Module Dimensions 110-13
Combine Dimensions 110-14
Dimension Reference Points 110-15
EC Declaration Of Incorporation Of Partly Completed Machinery 110-16
Track Identification Plates 110-16
Identification Plate Location 110-17

Fire Prevention
Recommended Fire Preventions 115-1
Fire Extinguisher Operation 115-1
Charge Liquid Fire Extinguisher (Europe, Australia, and New Zealand) (If Required) 115-2
Handle Fuel Safely—Avoid Fires 115-2
Prepare for Emergencies 115-2
Handle Starting Fluid Safely 115-3
Remove Accumulated Crop Debris 115-3
Fire Extinguisher (Europe) 115-3
Fire Extinguishers (Australia and New Zealand) 115-4
Fire Extinguishers (Eurasian Economic Union) 115-4
Fire Extinguisher Locations 115-5
In Case of Fire 115-5
Cleaning Engine Compartment 115-5

Machine Cleanout
General Cleaning Guidelines 120-1
Quick Response (QR) Code 120-1
Cleaning Out Machine (Periodic Cleanout) 120-1
Cleaning Out Machine (Annual Cleanout and Specialty Crops) 120-7

Fuels and Lubricants
Handle Fuel Safely—Avoid Fires 125-1
Avoid Static Electricity Risk When Refueling 125-1
Fuel Tank—Filling 125-1
Handling and Storing Diesel Fuel 125-2
Diesel Fuel 125-2
Biodiesel Fuel 125-3
Lubricity of Diesel Fuel 125-4
Supplemental Diesel Fuel Additives 125-4
Testing Diesel Fuel 125-5
Minimizing the Effect of Cold Weather on Diesel Engines 125-5
Diesel Exhaust Fluid (DEF) — Use in Selective Catalytic Reduction (SCR) Equipped Engines 125-6
Testing Diesel Exhaust Fluid (DEF) 125-6
Storing Diesel Exhaust Fluid (DEF) 125-7
Refilling Diesel Exhaust Fluid (DEF) Tank 125-7
Disposal of Diesel Exhaust Fluid (DEF) 125-8
Diesel Engine Coolant (engine with wet sleeve cylinder liners) 125-8
John Deere COOL-GARD™ II Coolant Extender 125-9
Operating in Warm Temperature Climates 125-9
Water Quality for Mixing with Coolant Concentrate 125-9
Testing Coolant Freeze Point 125-10

Page

Diesel Engine Break-In Oil — Non-Emissions Certified and Certified Tier 1, Tier 2, Tier 3, Stage I, Stage II, and Stage III 125-10
John Deere Break-In Plus™ Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V 125-11
Diesel Engine Oil — Tier 2 and Stage II 125-12
Diesel Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V 125-12
Diesel Engine Oil Service Interval for Operation at High Altitude 125-13
Engine Oil and Filter Service Intervals — Tier 2 and Stage II Engines 125-13
Engine Oil and Filter Service Intervals — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V Engines 125-13
Oilscan™ and CoolScan™ 125-14
ProDrive™ Transmission, CommandTouch™ Multi-Speed Feeder House Drive, Hydrostatic Drive System, Main Hydraulic System, and Main Engine Gear Case Oils .. 125-14
Transmission (Mechanical Shift and Push-Button Shift), Final Drives, Loading Auger, Primary Countershaft, and Two-Speed Separator Drive Gear Case Oils 125-15
Feeder House Reverser Gear Case 125-16
Grease 125-16
Brake Fluid (If Equipped) 125-16
Oil Filters 125-17
Fuel Filters 125-17
Alternative and Synthetic Lubricants 125-17
Lubricant Storage 125-17
Mixing of Lubricants 125-17

Lubrication and Maintenance
Service Interval—Setup or Clearing 130-1
Lubrication Decal Locations 130-1
Hydraulic Hose Replacement 130-1
Hydraulic System Cleanliness 130-1
Accumulator Pressure 130-2
Using High-Pressure Washers 130-2
Using Pressurized Air 130-2
Lubrication Symbols 130-3
Service Your Machine at Specified Intervals 130-3
Important Considerations 130-3

Maintenance—Every 10 Hours
Service Interval Chart—Every 10 Hours 130-A-1
Engine Oil Level 130-A-2
Engine Coolant 130-A-3
Rotary Screen, Oil Cooler, Condenser, Radiator, and Charge Air Cooler 130-A-3
Hydrostatic/Hydraulic Oil 130-A-4
Main Engine Gear Case Oil 130-A-4
Air Compressor Reservoir (If Equipped) 130-A-5
Fuel Precleaner Filter 130-A-5
Two Speed Four-Wheel Drive Motor Pivots (Muddy Conditions) 130-A-5
Two-Wheel Drive Heavy-Duty and Extra Heavy-Duty Axle Spindle Bearings/Pivot Pins (Muddy Conditions) 130-A-5
Final Drive Outer Bearings (Muddy Conditions) 130-A-6
Air Conditioner Drain Hose 130-A-6

Page

Variable Speed Feeder House Reverser Drive Gear Case (S760 and S770 Machines) (Severe Conditions) 130-A-6
Stone Trap 130-A-6
Tailings Elevator Slip Clutch (Tough Crop Conditions) (S780, S785, and S790 Machines) 130-A-7
ActiveVision™ Tailings System Camera (If Equipped) 130-A-7
Central Lube Bank (If Equipped) (HillMaster™ Machines) 130-A-7
Final Drive Pivot (Without Central Lube Bank) (HillMaster™ Machines) 130-A-7
Header Tilt Primary Cylinder Pivot Pin (Without Central Lube Bank) (HillMaster™ Machines) 130-A-8
Leveling Cylinder Barrel (Without Central Lube Bank) (HillMaster™ Machines) 130-A-8

Maintenance—Every 50 Hours
Service Interval Chart—Every 50 Hours 130-B-1
Two Speed Four-Wheel Drive Motor Pivots (Normal Conditions) 130-B-2
Two-Wheel Drive Heavy-Duty and Extra Heavy-Duty Axle Spindle Bearings and Pivot Pins (Normal Conditions) 130-B-2
Final Drive Outer Bearings (Normal Conditions) 130-B-2
Variable Speed Feeder House Reverser Drive Gear Case (S760 and S770 Machines) (Normal Conditions) 130-B-2
Feeder House Reverser Drive Gear Case Oil . 130-B-3
Variable Speed Feeder House Upper Sheaves (S760 and S770 Machines) 130-B-3
Lateral Tilt Feeder House 130-B-3
Separator Variable Speed Driven/Driver Sheaves 130-B-3
Separator Variable Speed Driven/Driver Sheaves (S770 Optional, S780, S785, and S790 Machines) 130-B-4
Cleaning Fan Variable Upper and Lower Sheaves 130-B-4
Fuel Precleaner Filter 130-B-4
Two-Speed Separator Drive Oil 130-B-5
Water Separator Primary Fuel Filter 130-B-5
Radiator, Charge Air Cooler, Oil Cooler, and Condenser 130-B-5
Mass Flow Sensor 130-B-5
Cab Fresh Air Filter 130-B-6
ActiveVision™ Clean Grain Elevator Camera (If Equipped) 130-B-6
Tailings Elevator Slip Clutch (Normal Crop Conditions) (S780, S785, and S790 Machines) 130-B-6
Final Drive Couplers 130-B-6

Maintenance—First 100 Hours
Service Interval Chart—First 100 Hours 130-C-1
Main Engine Gear Case Filter (S760 and S770 ProDrive™ Machines) 130-C-1
Main Engine Gear Case Lube Filter (ProDrive™ Machines) 130-C-1

Page

Maintenance—Every 100 Hours
Service Interval Chart—Every 100 Hours 130-D-1
Tire Pressure and Bolt Torque 130-D-1

Maintenance—Every 200 Hours
Service Interval Chart—Every 200 Hours 130-E-1
Recirculating Filter 130-E-1
Primary Countershaft (Multi-Speed Feeder House on S770, S780, S785, and S790 Machines) 130-E-1
Separator Variable Speed Driven/Driver Sheaves (S760 and S770 Machines) 130-E-2

Maintenance—Every 250 Hours
Service Interval Chart—Every 250 Hours 130-F-1
Engine Oil and Filter (Tier 2/Stage II) 130-F-1
Engine Oil and Filter (Final Tier 4/Stage V) ... 130-F-2
Fuel Tank Breather 130-F-3
Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V) 130-F-3

Maintenance—Every 400 Hours
Service Interval Chart—Every 400 Hours 130-G-1
Fuel Precleaner Filter 130-G-1
Water Separator 130-G-2
Primary and Secondary Fuel Filter 130-G-2
Variable Speed Driver/Driven Sheaves (Final Tier 4/Stage V) (S760 and S770 Machines) 130-G-3
Unloading Auger Upper Gear Case 130-G-3
Header/Reel Drive Pump Sheave Bearing 130-G-3
Primary Countershaft Universal Joint Spline (Non-Multi-Speed Feeder House) 130-G-4
Vertical Unloading Auger Upper Gear Case (S780, S785, and S790 Machines) 130-G-4
Chopper/Unloading Driveshaft Bearing 130-G-4
Variable Speed Driver Sheave 130-G-4
Feed Accelerator Bearings 130-G-5
Service Interval Chart—Every 400 Hours (Continued) 130-G-6
Tailings Auger Drive Slip Clutch (S760 and S770 Machines) 130-G-6
Conveyor Auger Drive Slip Clutch 130-G-7
Right-Hand Side Lube Bank 130-G-7
Overshot Beater Bearings (Optional) (S770, S780, S785, and S790 Machines) 130-G-7
Discharge Beater Bearings 130-G-7
Cleaning Fan Shaft Bearings 130-G-7
Rear Axle Tie Rod 130-G-8
Spreader Disk (If Equipped) 130-G-8
Overshot Beater Gear Case Oil (Optional) (S770, S780, S785, and S790 Machines) .. 130-G-8
Separator Drive Oil 130-G-8
Final Drive Oil 130-G-8
Service Interval Chart—Every 400 Hours (Continued) 130-G-10
Transmission Oil (S760 and S770 Non-ProDrive™ Machines) 130-G-11
Park Brake Cylinder Cables (S760 and S770 Push-Button Shift Transmission Machines) 130-G-11
Batteries 130-G-11
Hydraulic/Hydrostatic Filter (S760 and S770 Machines) 130-G-11

Page

Hydrostatic Charge Filter 130-G-12
Main Engine Gear Case Filter 130-G-12
Engine Debris Management Air Filter (Final Tier 4/Stage V) 130-G-12
Fire Extinguishers 130-G-13
Primary Countershaft Gear Case Oil (Fixed Speed and Variable Speed Feeder House Drive) 130-G-13
Brake Fluid (S760 and S770 Non-ProDrive™ Machines) 130-G-13
Seat Belts 130-G-13
ProDrive™/Main Engine Gear Case Lube Filter (ProDrive™ Machines) 130-G-14
Feeder House Slip Clutch 130-G-14
Multi-Speed Feeder House Drive Gear Case (S770, S780, S785, and S790 Machines) 130-G-14
Loading Auger Gear Case Oil 130-G-14
Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V) 130-G-15
Fuel Tank Breather 130-G-15
Air Filter Elements 130-G-15
Moisture Sensor (If Equipped) 130-G-15
ActiveVision™ Camera Desiccant Cartridge (If Equipped) 130-G-16

Maintenance—Every 800 Hours
Service Interval Chart—Every 800 Hours 130-H-1
Feeder House Reverser Gear Case 130-H-1

Maintenance—Every 1000 Hours
Service Interval Chart—Every 1000 Hours (ProDrive™ Machines) 130-I-1
Change Main Engine Gear Case Oil 130-I-1
Hydraulic Reservoir Filter (S780, S785, and S790) 130-I-2

Maintenance—Every 2000 Hours
Service Interval Chart—Every 2000 Hours 130-J-1
Hydraulic/Hydrostatic Reservoir Oil 130-J-1
Engine Valve Lash 130-J-2
Final Drive Oil 130-J-2
Main Engine Gear Case Oil (Non-ProDrive™ Machines) 130-J-2
Separator Drive Oil 130-J-2
Primary Countershaft Gear Case Oil (Fixed Speed and Variable Speed Feeder House) ..130-J-3
Transmission Oil (Mechanical Shift and Push-Button Shift Transmission) 130-J-3
Overshot Beater Gear Case Oil (Optional) (S770, S780, S785, and S790 Machines) ...130-J-3

Maintenance—Every 2000 Hours or Three Years
Service Interval Chart—Every 2000 Hours or Three Years 130-K-1
Changing Diesel Exhaust Fluid (DEF) Dosing Unit Filter (S780, S785, and S790 Machines) 130-K-1
Replace Diesel Exhaust Fluid (DEF) In-Line Filter (S780, S785, and S790 Machines) ... 130-K-2

Page

Maintenance—Every 3500 Hours or Three Years
Service Interval Chart—Every 3500 Hours or Three Years 130-L-1
Changing Diesel Exhaust Fluid (DEF) Dosing Unit Filter (S760 and S770 Machines) 130-L-1
Replace Diesel Exhaust Fluid (DEF) In-Line Filter (S760 and S770 Machines) 130-L-2

Maintenance—Every 4500 Hours or Five Years
Service Interval Chart—Every 4500 Hours or Five Years 130-M-1
Engine Crankshaft Damper 130-M-1

Maintenance—Every 6000 Hours or Six years
Service Interval Chart—Every 6000 Hours or Six Years 130-N-1
Engine Cooling System 130-N-1

Maintenance—As Required
Service Interval Chart—As Required 130-O-1
Recirculating Filter 130-O-1
Cab Fresh Air Filter 130-O-1
Windshield Washer Reservoir 130-O-2
Alternator Screen 130-O-2
Moisture Sensor (If Equipped) 130-O-2
ActiveVision™ Clean Grain Elevator Camera (If Equipped) 130-O-3
ActiveVision™ Tailings System Camera (If Equipped) 130-O-3
ActiveVision™ Camera Desiccant Cartridge (If Equipped) 130-O-3
Fire Extinguisher Bracket Straps (If Equipped) 130-O-4

Maintenance—As Required (Engine Fluids and Filters)
Required Emission-Related Information 130-P-1
Rear Ladder and Landing 130-P-1
Engine Filter Access Cover 130-P-1
Engine Access Covers 130-P-1
Changing Starting Fluid Can 130-P-1
Do Not Modify Engine Power or Fuel/Air System 130-P-2
Fuel System 130-P-2
Diesel Exhaust Fluid (DEF) Tank—Filling (Final Tier 4/Stage V) 130-P-2
Diesel Exhaust Fluid (DEF) Tank—Draining (Final Tier 4/Stage V) 130-P-3
Access Diesel Exhaust Fluid (DEF) Dosing Unit Filter (Final Tier 4/Stage V) 130-P-4
Access Diesel Exhaust Fluid (DEF) In-Line Filter (Final Tier 4/Stage V) 130-P-4
Cleaning Diesel Exhaust Fluid (DEF) Tank 130-P-4
Fuel Tank—Filling 130-P-5
Fuel Tank—Draining 130-P-5
Fuel Tank—Shut-Off Valve 130-P-6
Water Separator Primary Fuel Filter—Draining 130-P-6
Fuel Precleaner Filter—Cleaning 130-P-6

Page

Heavy-Duty Fuel Precleaner Filter (Optional)—Flushing 130-P-7
Heavy-Duty Fuel Precleaner Filter (Optional)—Replacing and Cleaning 130-P-8
Primary and Secondary Fuel Filter Element—Replacing 130-P-8
Fuel System—Bleeding 130-P-10
Cooling System—Draining 130-P-10
Cooling System—Filling 130-P-12
Cooling System—Winterize 130-P-12
Air Cleaner Filters—Removing 130-P-13
Air Compressor System (If Equipped) 130-P-13
Diesel Particulate Filter Maintenance and Service (Final Tier 4/Stage V) 130-P-14
Exhaust Filter / Diesel Particulate Filter Ash Handling and Disposal (Final Tier 4/Stage V) 130-P-15
Exhaust Filter Disposal (Final Tier 4/Stage V) 130-P-15
Engine Debris Management Air Filter—Removing (Final Tier 4/Stage V) 130-P-15

Maintenance—As Required (9.0 L Engine Belts)
Engine Belt—Routing (Tier 2/Stage II) 130-Q-1
Engine Accessory/Fan Drive/Air Compressor (If Equipped) Belt—Replacing (Tier 2/Stage II) 130-Q-1
Rotary Screen Belt—Routing 130-Q-3
Rotary Screen Belt—Replacing 130-Q-3
Rotary Screen Drive Belt—Replacing (Tier 2/Stage II) 130-Q-4
Engine Belt—Routing (Final Tier 4/Stage V) .. 130-Q-5
Air Conditioner Compressor/Alternator Belt—Replacing (Final Tier 4/Stage V) 130-Q-5
Rotary Screen Drive Belt—Replacing (Final Tier 4/Stage V) 130-Q-7
Vacuum Fan Drive Belt—Replacing (Final Tier 4/Stage V) 130-Q-7
Vacuum Fan Driven Belt—Replacing (Final Tier 4/Stage V) 130-Q-8
Variable Speed Fan Drive Belt—Replacing (Final Tier 4/Stage V) 130-Q-8
Air Compressor Belt (If Equipped)—Replacing (Final Tier 4/Stage V) 130-Q-11
Rotary Screen Brush—Adjustment 130-Q-14
Engine Debris Management Belt—Replacing (Final Tier 4/Stage V) 130-Q-14

Maintenance—As Required (13.5 L Engine Belts)
Engine Belt—Routing (Tier 2/Stage II) 130-R-1
Engine Accessory/Air Compressor (If Equipped) Belt—Replacing (Tier 2/Stage II) 130-R-1
Fan Drive Belt—Replacing (Tier 2/Stage II) ... 130-R-3
Rotary Screen Belt—Routing 130-R-5
Rotary Screen Belt—Replacing 130-R-5
Rotary Screen Drive Belt—Replacing (Tier 2/Stage II) 130-R-7
Engine Belt—Routing (Final Tier 4/Stage V) .. 130-R-7
Air Conditioner Compressor/Alternator Belt—Replacing (Final Tier 4/Stage V) 130-R-8
Rotary Screen Drive Belt—Replacing (Final Tier 4/Stage V) 130-R-10

Page

Vacuum Fan Drive Belt—Replacing (Final Tier 4/Stage V) 130-R-11
Air Compressor Belt (If Equipped)—Replacing (Final Tier 4/Stage V) 130-R-11
Fan Drive Belt—Replacing (Final Tier 4/Stage V) 130-R-13
Rotary Screen Brush—Adjustment 130-R-15
Engine Debris Management Belt—Replacing (Final Tier 4/Stage V) 130-R-15

Troubleshooting
Feeder House 135-1
Separator 135-1
Hydrostatic Ground Drive 135-4
Four-Wheel Drive (Optional) 135-7
Steering 135-7
Brakes 135-8
Engine 135-8
Electrical 135-16
Heater 135-18
Air Conditioner 135-18
Moisture Sensor (If Equipped) 135-19
Mass Flow Sensor (If Equipped) 135-19

Storage
Preparing Machine for Storage 140-1
Removing Machine from Storage 140-1

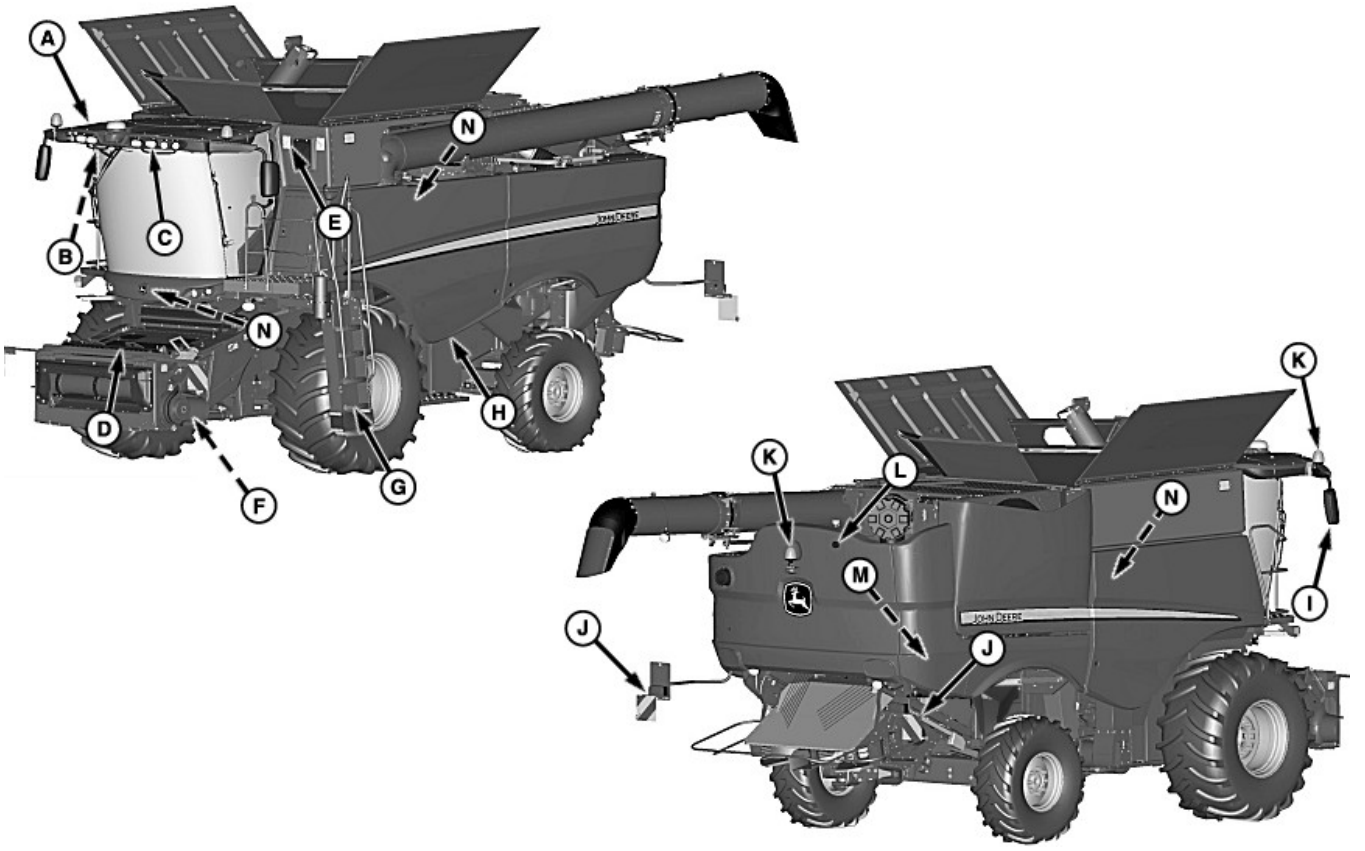
Specifications
Operating Speeds (S760 and S770) 145-1
Operating Speeds (S780, S785, and S790) 145-3
Specifications (S760 and S770) 145-5
Specifications (S780, S785, and S790) 145-7
Dimensions (S760 and S770) 145-10
Dimensions (S770 HillMaster™) 145-11
Dimensions (S780, S785, and S790) 145-12
Dimensions (S780 HillMaster™, S785 HillMaster™ and S790 HillMaster™) 145-13
Dimension Reference Points 145-14
Whole Body Vibration 145-15
Sound Level 145-15
Safety Note Regarding the Subsequent Installation of Electrical and Electronic Appliances and/or Components 145-15
EU Declaration of Conformity 145-16
Eurasian Economic Union 145-16
Machine Design Life 145-17
Fluorinated Greenhouse Gas 145-17
Carbon Dioxide Emissions (CO_2) 145-17
Unified Inch Bolt and Screw Torque Values 145-18
Metric Bolt and Screw Torque Values 145-19

Machine Identification Numbers
Interpreting Machine Serial Number 155-1
Identification Numbers 155-1
Machine Identification Plate 155-2
Machine Identification Plate Location 155-2
Eurasian Economic Union Compliance Label Location 155-2
Interpreting Engine Serial Number 155-3
Engine Serial Number (Tier 2/Stage II) 155-3
Engine Serial Number (Final Tier 4/Stage V) 155-4
Cab Serial Number 155-4
Hydrostatic Drive Unit Pump 155-4

Page

Hydrostatic Drive Unit Motor 155-4
Two Speed Four-Wheel Drive Motor 155-5
Engine Gear Case 155-5
Rotor Drive Gear Case 155-5
Transmission 155-5
Feeder House Reverser 155-5
Multi-Speed Feeder House Gear Case (If Equipped) 155-6
Chopper (If Equipped) 155-6
Vane Tailboard (Deluxe, Intermediate and Premium Residue) 155-6
Advanced PowerCast™ Tailboard (Intermediate and Premium Residue) 155-6
PowerCast Tailboard (Deluxe Residue) 155-6
Spreader (Deluxe Residue) 155-7
Keep Proof of Ownership 155-7
Keep Machines Secure 155-7

Machine Safety Features



H115704—UN—31AUG15

Front View/Rear View Safety Features

A—Cab Safety Features: Operator's Presence System, Electronic Engine Start Lockout, Seat Belts, Horn, Emergency Exit Window, Park Brake, Turn Signals
B—Handholds
C—Headlights
D—Slip Resistant Skid Mats
E—Safety Signs
F—Mechanical Safety Stop (Feeder House)
G—Slip Resistant Steps and Platform with Handrails
H—Shields
I—Rear View Mirrors
J—Warning Lights and Reflective Tape
K—Beacon Lights
L—Back-Up Alarm
M—Slip Resistant Service Platform with Handrails
N—Rotational Alarm Safety Features: Discharge Light, Stubble Lights, Gullwing Service Lights

In addition to the safety features shown here, other components and systems, safety lights on the machine, and safety messages and instructions in the operator's manual contribute to the safe operation of this machine when combined with the care and concern of a capable operator.

OUO6075,000413E-19-31AUG15

Recognize Safety Information

T81389—UN—28JUN13

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

DX,ALERT-19-29SEP98

Understand Signal Words

TS187—19—30SEP88

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

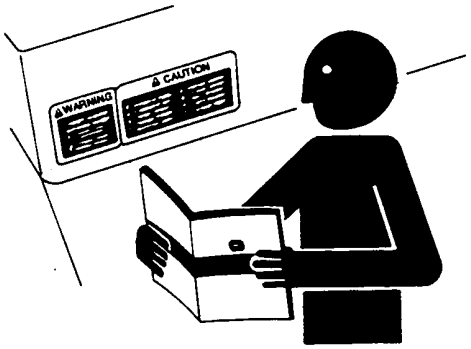
WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

DX,SIGNAL-19-05OCT16

Follow Safety Instructions



TS201—UN—15APR13

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

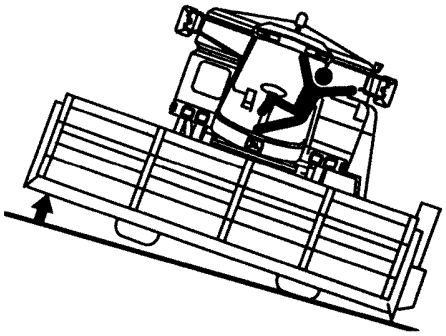
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

DX,READ-19-16JUN09

Driving the Machine



ZX002461

ZX002461—UN—16JUN95

Operate machine only when all guards are correctly installed.

Before moving away, always check immediate vicinity of machine (e.g. for children). Ensure adequate visibility. Use the horn as a warning immediately before moving away.

Always adapt ground speed to road or field conditions. Avoid making sharp turns when driving up or down slopes or when driving across a slope. Be especially careful when turning on slopes with full grain tank.

Follow instructions in header Operator's Manual when attaching or detaching the header.

When making turns, always take into consideration the width of the attachment and the fact that the rear end of the machine swings out. Attachments and ground conditions affect the driving characteristics of the combine.

Reduce ground speed when driving on slopes or over uneven ground and before making sharp turns. Before descending a steep hill, shift to a lower gear.

Avoid holes, ditches and obstructions which may cause the combine to tip, particularly on hillsides.

OUO6075,0000AB7-19-21FEB07

Operator Ability

- Machine owners must make sure that operators are responsible, trained, have read the operating instructions and warnings, and know how to operate the machine properly and safely.
- Age, physical ability, and mental capacity can be factors in machine-related injuries. Operators must be mentally and physically capable of accessing the operator station and/or controls, and operating the machine properly and safely.
- Never allow a child or an untrained person to operate the machine. Instruct all operators not to give children a ride on the machine or an attachment.
- Never operate machine when distracted, fatigued, or impaired. Proper machine operation requires the operator’s full attention and awareness.

DX,ABILITY-19-07DEC18

Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.

OUO6075,0000032-19-22JAN01

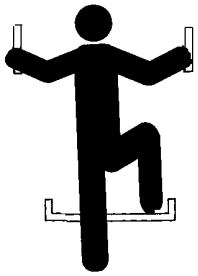
Check Machine Safety

Always check the road and general operating safety of the machine before using.

FX,READY-19-28FEB91

Use Handholds and Steps

T6981AN—UN—15JUN89



T133468—UN—15APR13

Falling is a major cause of personal injury.

Prevent falls by facing the machine when getting on and off.

When you get on and off the machine, maintain a 3-point contact with the steps, handholds, and handrails and face the machine. Unfold and use the handrail whenever you climb on top of the engine deck.

Use extra care when mud, snow, or moisture present slippery conditions. Keep the steps clean and free of grease or oil.

Never jump when exiting the machine. Never mount or dismount a moving machine.

OUO6075,0004E97-19-17JUN20

Keep Riders and Children Off Machine

TS253—UN—23AUG88

Only allow the operator on the machine. Keep riders off

the machine except for periods of training or short periods of observation.

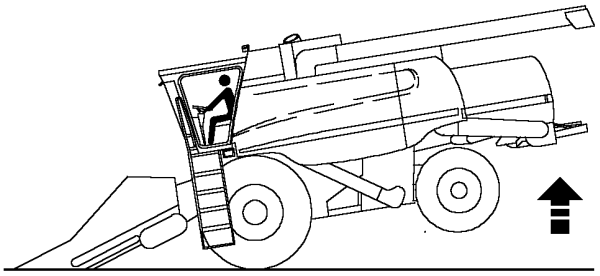
Riders are subject to injury such as being thrown off the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

Children should never be allowed on the machine or in the combine cab when the engine is running.

The instructional seat should only be used for instruction or short periods of machine observation, and not for the accommodation of children.

HX,AG,SF6904-19-22JUL99

Ballasting for Safe Ground Contact



H51907—UN—10FEB99

Operating, steering and braking performance of combine can be considerably affected by heavy front end attachments which alter the center of gravity of the combine.

To maintain the necessary ground contact, ballast the combine at the rear end as necessary.

Observe the maximum permissible axle loads and total weights.

HX,AG,SF6782-19-05FEB99

Roadway Transport with Header Attached

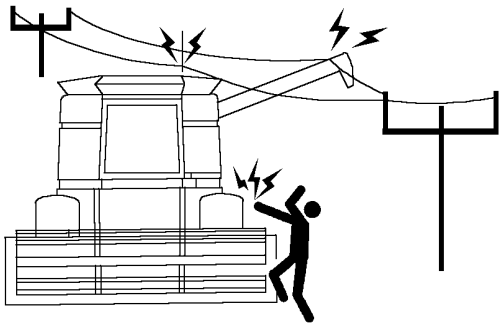
Observe national and local laws regarding operation of the combine on public roadways.

Roadway transport in Germany must be approved by your local TUEV to achieve a road permission.

Apply for allowance at your dealership or at manufacturing factory.

OUO6075,0004672-19-16MAR17

Avoid Electrical Power Lines



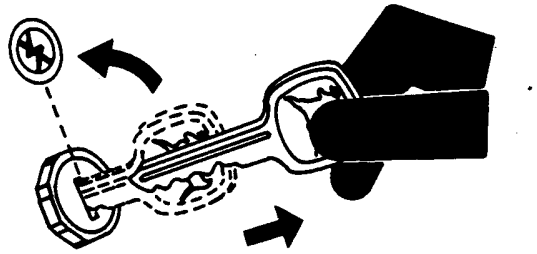
H52022—UN—14APR99

Put the grain tank unloading auger in transport position and lower the grain tank access handrail before driving on public roads.

Secure radio aerial in its transport position before driving on public roads, it may come into contact with low-hanging electrical cables. This would result in the operator suffering a severe electrical shock.

HX,STSSA,D-19-22JUL99

Parking and Leaving the Machine



TS230—UN—24MAY89

Lower the combine’s front-end equipment to the ground.

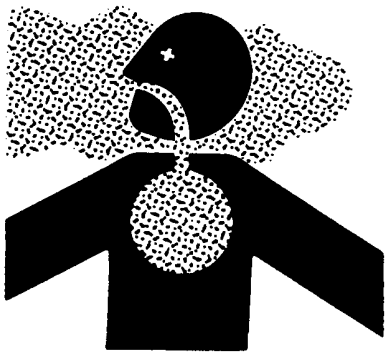
Before leaving the machine, disengage the header and separator. Move the multi-function lever to the neutral position and shut OFF the machine. Apply the park brake, remove key, and lock the operator's cab.

Never leave the machine unattended if the engine is running.

Never leave the operator's cab when driving.

OUO6075,0004E18-19-25JUN20

Work In Ventilated Area



TS220—UN—15APR13

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.

DX,AIR-19-17FEB99

Handle Fuel Safely—Avoid Fires

TS202—UN—23AUG88

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

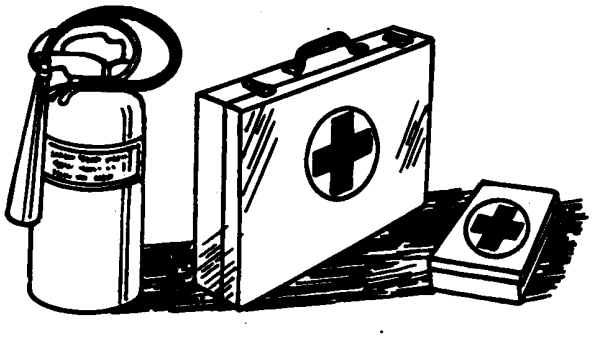
Use only an approved fuel container for transporting flammable liquids.

Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.

Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1-19-12OCT11

Prepare for Emergencies



TS291—UN—15APR13

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.

DX,FIRE2-19-03MAR93

Handle Starting Fluid Safely

TS1356—UN—18MAR92

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.

Do not use starting fluid on an engine equipped with glow plugs or an air intake heater.

DX,FIRE3-19-14MAR14

In Case of Fire

TS227—UN—15APR13

CAUTION: Avoid personal injury.

Stop machine immediately at the first sign of fire. Fire may be identified by the smell of smoke or sight of flames. Because fire grows and spreads rapidly, get off the machine immediately and move safely away from the fire. Do not return to the machine! The number one priority is safety.

Call the fire department. A portable fire extinguisher can put out a small fire or contain it until the fire department arrives; but portable extinguishers have limitations. Always put the safety of the operator and bystanders first. If attempting to extinguish a fire, keep your back to the wind with an unobstructed escape path so you can move away quickly if the fire cannot be extinguished.

Read the fire extinguisher instructions and become familiar with their location, parts, and operation before a fire starts. Local fire departments or fire equipment distributors may offer fire extinguisher training and recommendations.

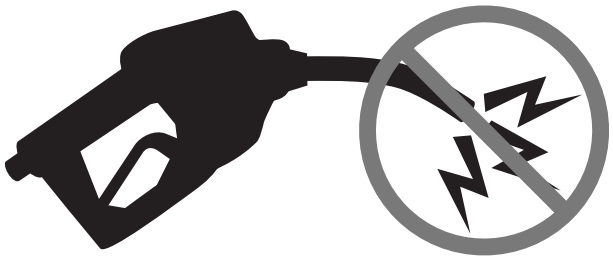
If your extinguisher does not have instructions, follow these general guidelines:

1. Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
2. Aim low. Point the extinguisher at the base of the fire.
3. Squeeze the lever slowly and evenly.
4. Sweep the nozzle from side-to-side.

DX,FIRE4-19-22AUG13

Avoid Static Electricity Risk When Refueling

RG22142—UN—17MAR14



RG21992—UN—21AUG13

The removal of sulfur and other compounds in Ultra-Low Sulfur Diesel (ULSD) fuel decreases its conductivity and increases its ability to store a static charge.

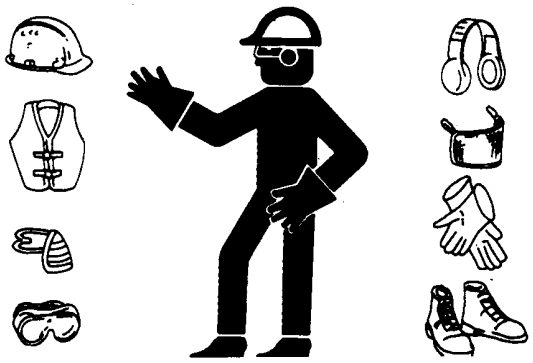
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

Static charges can build up in ULSD fuel while it is flowing through fuel delivery systems. Static electricity discharge when combustible vapors are present could result in a fire or explosion.

Therefore, it is important to ensure that the entire system used to refuel your machine (fuel supply tank, transfer pump, transfer hose, nozzle, and others) is properly grounded and bonded. Consult with your fuel or fuel system supplier to ensure that the delivery system is in compliance with fueling standards for proper grounding and bonding practices.

DX,FUEL,STATIC,ELEC-19-12JUL13

Wear Protective Clothing



TS206—UN—15APR13

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

DX,WEAR2-19-03MAR93

Keep Hands Away From Knives

TS254—UN—23AUG88

Never attempt to clear obstructions in front of or on header unless separator is disengaged, parking brake is set, engine is shut off and key is removed.

Everyone must be clear of machine before starting engine.

OUO6075,00009E6-19-28SEP10

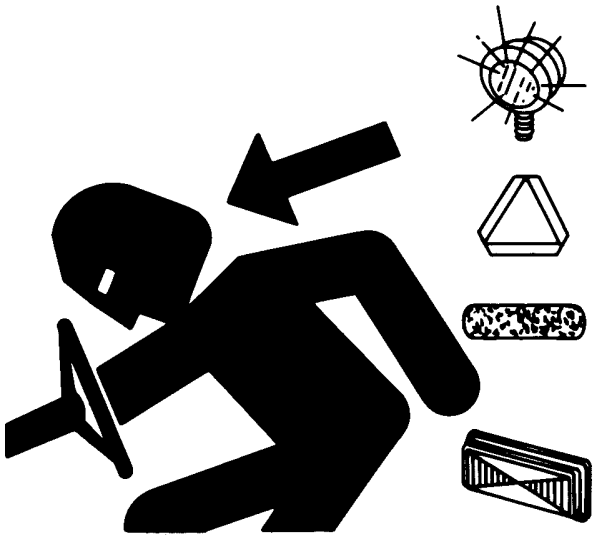
Stay Clear of Harvesting Units

ES118704—UN—21MAR95

Cutterbar, auger, reel and feed rolls cannot be completely shielded due to their function. Stay clear of these moving elements during operation. Always disengage main clutch, shut off engine, set parking brake and remove key before servicing or unclogging machine.

OUO6075,00009E5-19-28SEP10

Use Safety Lights and Devices



TS951—UN—12APR90

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean and in good working order. Replace or repair lighting and marking that has been damaged or lost.

HX,STSSA,O-19-22JUL99

Use Seat Belts

TS1730—UN—24MAY13

Use the seat belt whenever you operate the machine or ride as an observer.

OUO6075,0004E96-19-17JUN20

Instructional Seat

TS1730—UN—24MAY13

The instructional seat, if so equipped, has been provided only for training operators or diagnosing machine problems.

DX,SEAT,NA-19-22AUG13

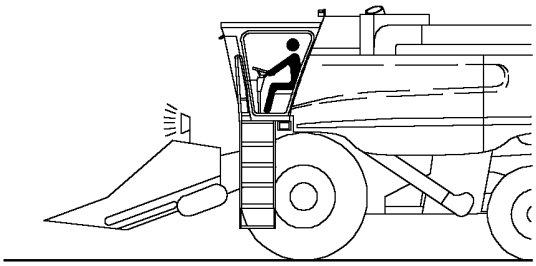
Heated and Ventilated Operator's Seat

H124189—UN—11MAY18

An overheated seat heater can cause a burn injury or damage to the seat. To reduce the risk of burns, use caution when using the seat heater for extended periods of time, especially if the operator cannot feel temperature change or pain to the skin. Do not place objects on the seat, such as a blanket, cushion, cover, or similar item, which can cause the seat heater to overheat.

DX,SEATHEATER-19-20NOV18

Transport Combine With Header Safely



H51909—UN—07MAY99

Whenever possible avoid transporting on public roadways with the header attached.

If the combine must be transported with the header attached, make sure that the flashing warning lights on the header are operating and the reflective material is clean and visible.

The use of a spotter or pilot vehicle is recommended on busy, narrow or hilly roads and when crossing bridges.

Drive at a speed that is safe for conditions.

OUO6075,0000034-19-22JAN01

Prevent Machine Runaway or Unexpected Movement

H58737—UN—08JUL99

Avoid injury or death from unexpected movement of machine or components.

Do not start engine by shorting across starter or solenoid terminals. Machine or components may move if the normal circuitry is bypassed.

AG,OUO1035,792-19-08JUL99

Practice Safe Maintenance

TS218—UN—23AUG88

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing away from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.

Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-28FEB17

Welding Near Electronic Control Units

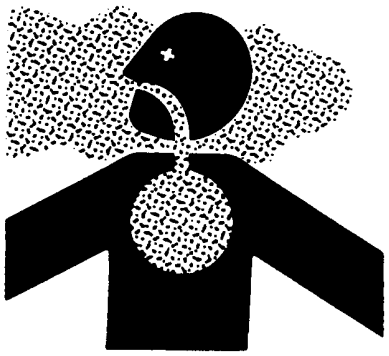
TS953—UN—15MAY90

IMPORTANT: Do not jump-start engines with arc welding equipment. Currents and voltages are too high and may cause permanent damage.

1. Disconnect the negative (-) battery cable(s).
2. Disconnect the positive (+) battery cable(s).
3. Connect the positive and negative cables together. Do not attach to vehicle frame.
4. Clear or move any wiring harness sections away from welding area.
5. Connect welder ground close to welding point and away from control units.
6. After welding, reverse Steps 1—5.

DX,WW,ECU02-19-14AUG09

Remove Paint Before Welding or Heating



TS220—UN—15APR13

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

DX,PAINT-19-24JUL02

Avoid Heating Near Pressurized Fluid Lines

TS953—UN—15MAY90

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.

DX,TORCH-19-10DEC04

Avoid Contact With Moving Parts

TS256—UN—23AUG88

Keep hands, feet and clothing away from power driven parts. Never clean, lubricate or adjust machine when it is running.

H01,9000SA,E-19-15JUN90

Cleaning Grain Tank and Removal of Blockages Safely

TS256—UN—23AUG88

Avoid serious injury or death from entanglement in the grain tank cross augers. For functional purposes the cross augers cannot be completely covered. Do not enter the grain tank when the engine is running. Before entering the tank to clean out residual grain, always shut off the engine, set parking brake and remove the key

If grain bridges and fails to flow into the cross augers, shut off the engine, remove the key and from a position on the engine compartment door use a rod, broom or shovel to break the bridge and restore grain flow.

OUO6043,00015E2-19-24MAY04

Stay Clear of Rotating Drivelines

TS1644—UN—22AUG95

Entanglement in rotating driveline can cause serious injury or death.

Keep all shields in place at all times. Make sure rotating shields turn freely.

Wear close-fitting clothing. Stop the engine and be sure that all rotating parts and drivelines are stopped before making adjustments, connections, or performing any type of service on engine or machine driven equipment.

DX,ROTATING-19-18AUG09

Install All Shields and Guards

TS677—UN—21SEP89

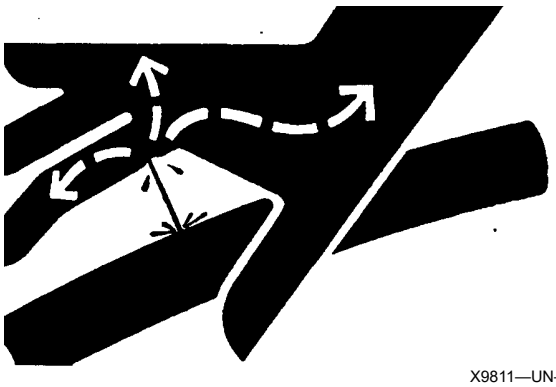
Rotating fans, belts, pulleys, and drives can cause serious injury.

Keep all shields and guards in place at all times during operation.

Wear close-fitting clothes. Stop the engine and be sure fans, belts, pulleys, and drives are stopped before making adjustments, connections, or cleaning near fans and their drive components.

OUO6075,0000C23-19-03MAY11

Avoid High-Pressure Fluids



X9811—UN—23AUG88

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

DX,FLUID-19-12OCT11

Do Not Open High-Pressure Fuel System

TS1343—UN—18MAR92

High-pressure fluid remaining in fuel lines can cause serious injury. Do not disconnect or attempt repair of fuel

lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system.

Only technicians familiar with this type of system can perform repairs. (See your John Deere dealer.)

DX,WW,HPCR1-19-07JAN03

Service Accumulator Systems Safely

TS281—UN—15APR13

Escaping fluid or gas from systems with pressurized accumulators that are used in air conditioning, hydraulic, and air brake systems can cause serious injury. Extreme heat can cause the accumulator to burst, and pressurized lines can be accidentally cut. Do not weld or use a torch near a pressurized accumulator or pressurized line.

Relieve pressure from the pressurized system before removing accumulator.

Relieve pressure from the hydraulic system before removing accumulator. Never attempt to relieve hydraulic system or accumulator pressure by loosening a fitting.

Accumulators cannot be repaired.

DX,WW,ACCLA2-19-22AUG03

Protect Against High Pressure Spray

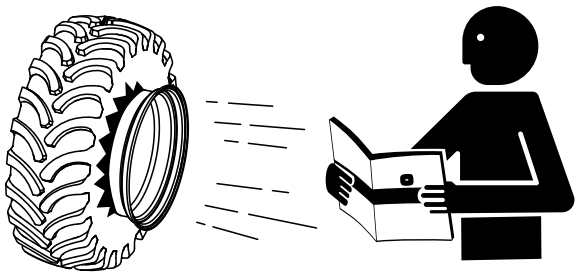
TS1343—UN—18MAR92

Spray from high pressure nozzles can penetrate the skin and cause serious injury. Keep spray from contacting hands or body.

If an accident occurs, see a doctor immediately. Any high pressure spray injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.

DX,SPRAY-19-16APR92

Follow Tire Recommendations



H111235—UN—13MAY14

Keep your machine in proper working order.

Use only prescribed tire sizes with correct ratings and inflate to the pressure specified in this manual.

Use of other than prescribed tires may decrease stability, affect steering, result in premature tire failure, or cause other durability or safety issues.

DX,TIRE,INFO-19-19MAY14

Service Tires Safely

RXA0103438—UN—11JUN09

Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate

the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

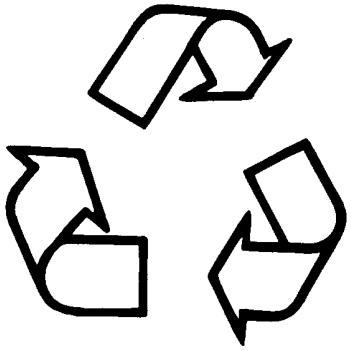
When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.

Wheels and tires are heavy. When handling wheels and tires use a safe lifting device or get an assistant to help lift, install, or remove.

DX,WW,RIMS-19-28FEB17

Decommissioning — Proper Recycling and Disposal of Fluids and Components



TS1133—UN—15APR13

Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.
- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid); filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
- Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

DX,DRAIN-19-01JUN15

Service Cooling System Safely

TS281—UN—15APR13

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut OFF engine, set park brake, and remove key.

NEVER add coolant when engine is overheated. Wait for it to cool.

NEVER remove surge tank cap when coolant or engine is hot. Wait until engine coolant is cool to remove cap.

SLOWLY loosen cap to relieve pressure before removing completely.

Add coolant only when engine is shut off.

OUO6075,0004E98-19-26JUN20

Remove Accumulated Crop Debris

TS227—UN—15APR13

The build up of chaff and crop debris in the engine compartment, on the engine, and near moving parts is a fire hazard. Check and clean these areas frequently. Before performing any inspection or service, shut off the engine, set the parking brake and remove the key.

HX,9010SA,B-19-23AUG97

Store Attachments Safely

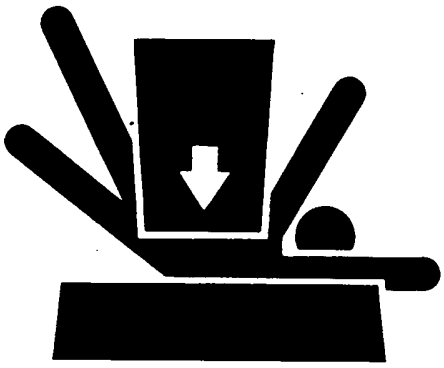
TS219—UN—23AUG88

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.

DX,STORE-19-03MAR93

Support Machine Properly



TS229—UN—23AUG88

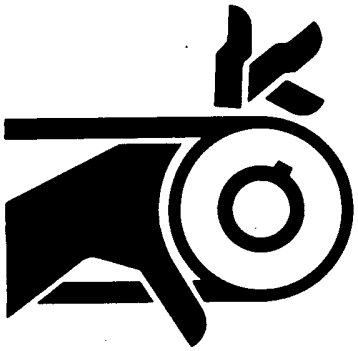
Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.

When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator's manual.

DX,LOWER-19-24FEB00

Service Drive Belts Safely



TS285—UN—23AUG88

When servicing drive belts always observe these precautions:

- Avoid serious injury from hand or arm entanglement. Never attempt to clean, check or adjust belts while the machine is running. Always shut off the engine, set the parking brake and remove the key.
- Do not attempt to clean belts with flammable cleaning solvents.

OUO6075,00026A4-19-06FEB03

Handle Electronic Components and Brackets Safely

TS249—UN—23AUG88

Falling while installing or removing electronic components mounted on equipment can cause serious injury. Use a ladder or platform to easily reach each mounting location. Use sturdy and secure footholds and handholds. Do not install or remove components in wet or icy conditions.

If installing or servicing a RTK base station on a tower or other tall structure, use a certified climber.

If installing or servicing a global positioning receiver mast used on an implement, use proper lifting techniques and wear proper protective equipment. The mast is heavy and can be awkward to handle. Two people are required when mounting locations are not accessible from the ground or from a service platform.

DX,WW,RECEIVER-19-24AUG10

Avoid Backover Accidents

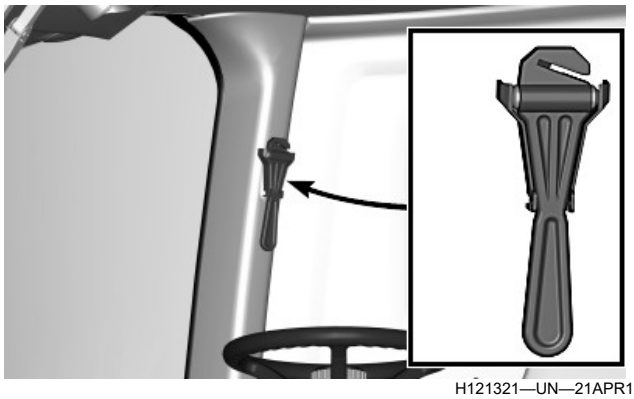
PC10857XW—UN—15APR13

Before moving machine, be sure that all persons are clear of machine path. Turn around and look directly for best visibility. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.

DX,AVOID,BACKOVER,ACCIDENTS-19-30AUG10

Emergency Exit



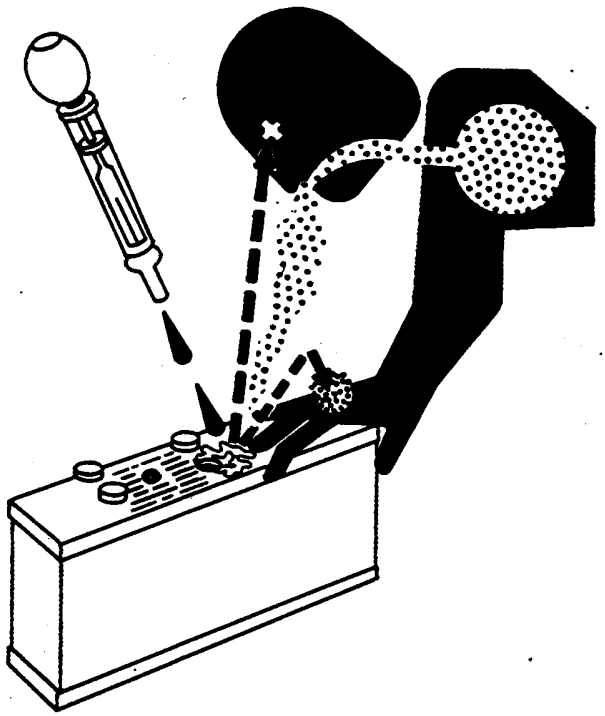
H121321—UN—21APR17

Seat belt may be cut and window glass broken with hammer to exit cab in an emergency.

OUO6075,0004722-19-21APR17

Handling Batteries Safely

TS204—UN—15APR13



TS203—UN—23AUG88

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace grounded clamp last.

Sulfuric acid in battery electrolyte is poisonous and strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid hazards by:

- Filling batteries in a well-ventilated area
- Wearing eye protection and rubber gloves
- Avoiding use of air pressure to clean batteries
- Avoiding breathing fumes when electrolyte is added
- Avoiding spilling or dripping electrolyte
- Using correct battery booster or charger procedure.

If acid is spilled on skin or in eyes:

1. Flush skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush eyes with water for 15—30 minutes. Get medical attention immediately.

If acid is swallowed:

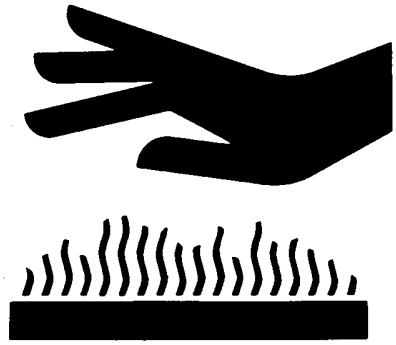
1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 qt.).
3. Get medical attention immediately.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

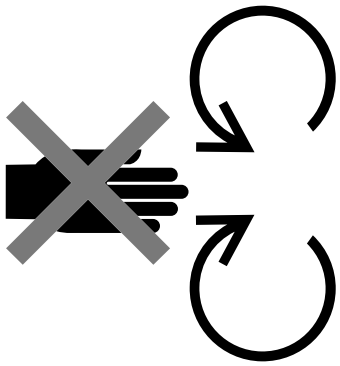
DX,WW,BATTERIES-19-02DEC10

Clean Exhaust Filter Safely

TS227—UN—15APR13



TS271—UN—23AUG88



TS1693—UN—09DEC09

During exhaust filter cleaning operations, the engine may run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust

filter components reach temperatures hot enough to burn people, or ignite or melt common materials.

Keep machine away from people, animals, or structures which may be susceptible to harm or damage from hot exhaust gases or components. Avoid potential fire or explosion hazards from flammable materials and vapors near the exhaust. Keep exhaust outlet away from people and anything that can melt, burn, or explode.

Closely monitor machine and surrounding area for smoldering debris during and after exhaust filter cleaning.

Adding fuel while an engine is running can create a fire or explosion hazard. Always stop engine before refueling machine and clean up any spilled fuel.

Always make sure that engine is stopped while hauling machine on a truck or trailer.

Contact with exhaust components while still hot can result in serious personal injury.

Avoid contact with these components until cooled to safe temperatures.

If service procedure requires engine to be running:

- Only engage power-driven parts required by service procedure
- Ensure that other people are clear of operator station and machine

Keep hands, feet, and clothing away from power-driven parts.

Always disable movement (neutral), set the parking brake or mechanism and disconnect power to attachments or tools before leaving the operator's station.

Shut off engine and remove key (if equipped) before leaving the machine unattended.

OUO6075,0000E81-19-07FEB12

Avoid Hot Exhaust

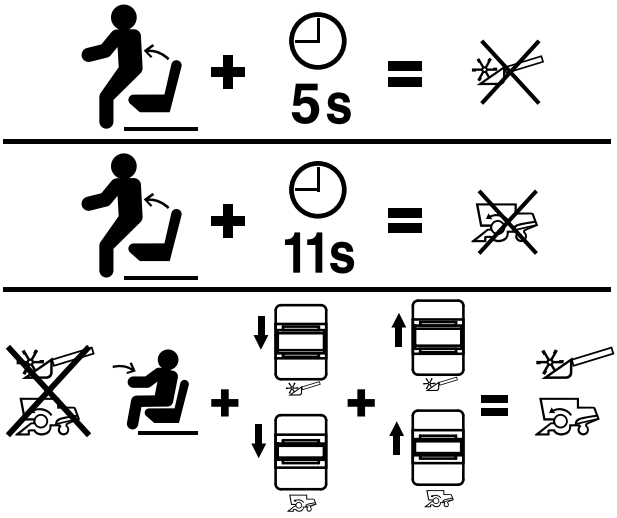
RG17488—UN—21AUG09

Servicing machine or attachments with engine running can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

Exhaust parts and streams become very hot during operation. Exhaust gases and components reach temperatures hot enough to burn people, ignite, or melt common materials.

DX,EXHAUST-19-20AUG09

Rotational Alarm System



H125008—UN—25SEP18

If operator leaves seat with header and or separator engaged, lights flash and an alarm sounds. If operator continues to be out of the seat, harvesting functions stop.

If harvesting functions are stopped, they need to be restarted before continuing to harvest.

To restart harvesting functions, operator must be in seated position and reset and engage separator and header switches on the armrest console.

OUO6075,0004A2A-19-25SEP18

Operator Presence System

Operator presence system indicates the presence of the operator.

System prevents engagement of the following functions when operator is not present in seat.

- Separator Engage
- Header Engage
- Unloading Auger Engage
- AutoTrac™
- Propulsion
- Feedrate

AutoTrac is a trademark of Deere & Company

- Header Height Control
- Kemper Roading Float Mode

If operator leaves seat with header and or separator engaged for more than 12 seconds, lights flash and an alarm sounds. If operator continues to be out of the seat, harvesting functions stop.

To restart functions, operator must return to seated position and re-engage each function.

OUO6075,000488C-19-30JAN18

Safety Signs

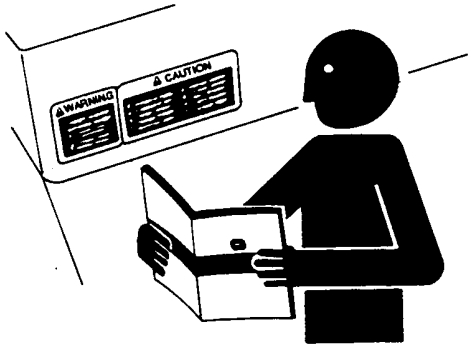
Pictorial Safety Signs

TS231—19—07OCT88

At several important places on this machine safety signs are affixed intended to signify potential hazards. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown below.

OUO6075,0001163-19-19JUN12

Replace Safety Signs



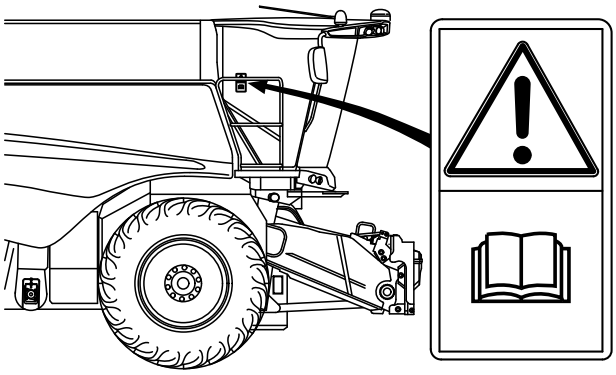
TS201—UN—15APR13

Replace missing or damaged safety signs. Use this operator’s manual for correct safety sign placement.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

DX,SIGNS-19-18AUG09

Operator's Manual

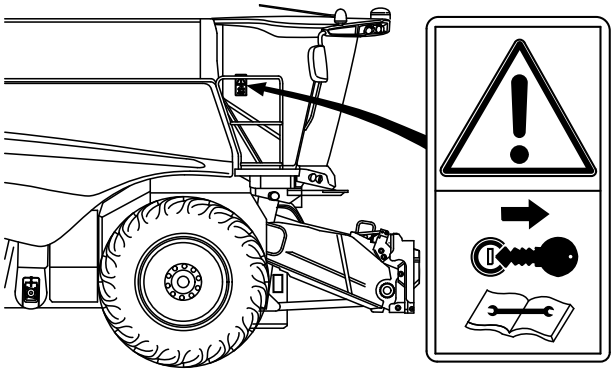


H97195—UN—14JUN11

This operator’s manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.

OUO6075,00015D7-19-09AUG13

Repair and Maintenance

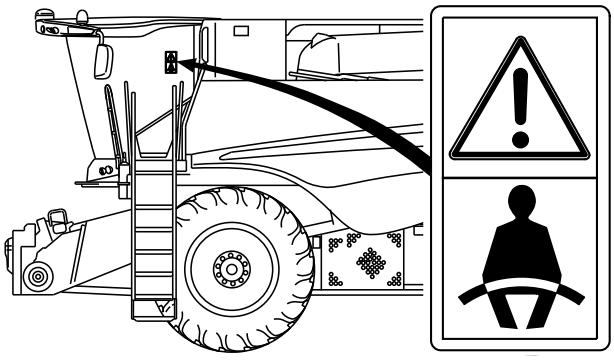


H97196—UN—13JUN11

Before carrying out repair and maintenance work, shut off engine, set parking brake and remove key. Refer to operator’s manual for all maintenance work.

OUO6041,0000453-19-03SEP10

Seat Belt



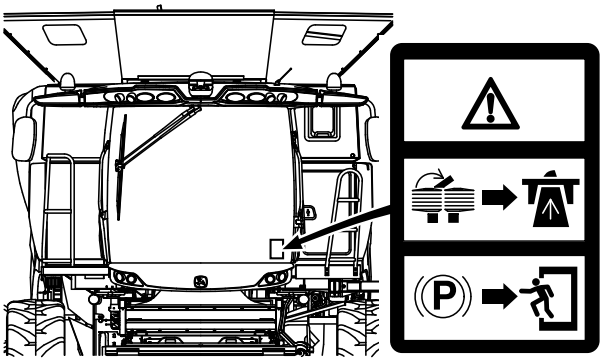
H97197—UN—13JUN11

The instructional seat is for training operators or

diagnosing machine problems. Keep all other riders and children off. Use the seat belt whenever operating the machine or riding as an observer.

OUO6041,0000454-19-03SEP10

Parking Brake



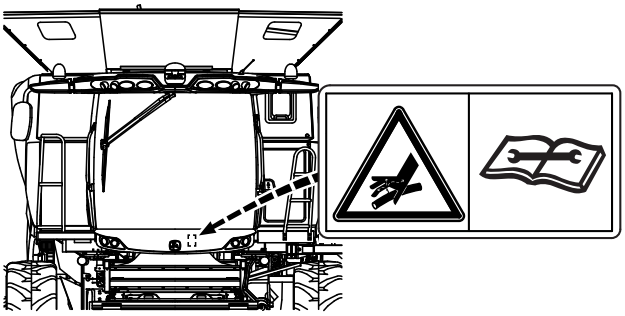
H104579—UN—25JAN12

Set parking brake before leaving machine.

Lock service brakes together before driving on roadway.

OUO6075,0000DE8-19-24JAN12

Hydraulic Oil and Gas Under Pressure



H126133—UN—22APR19

NOTE: Decal is on the cab support and is only on ProDrive™ transmission machines.

Avoid serious injury from contact with hydraulic oil and gas under pressure.

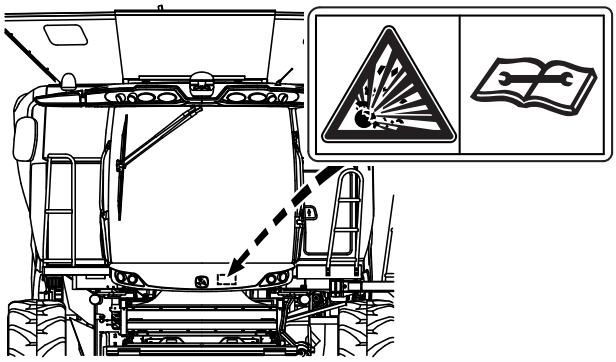
Before removing hydraulic components, disassembling or charging accumulators:

1. Relieve system hydraulic pressure. Refer to operator's manual and repair manual for system information.
2. Stop engine and remove key.

Use only DRY NITROGEN for recharging accumulator. See your local John Deere dealer.

OUO6075,0004B64-19-30MAY19

Accumulator



H125969—UN—02APR19

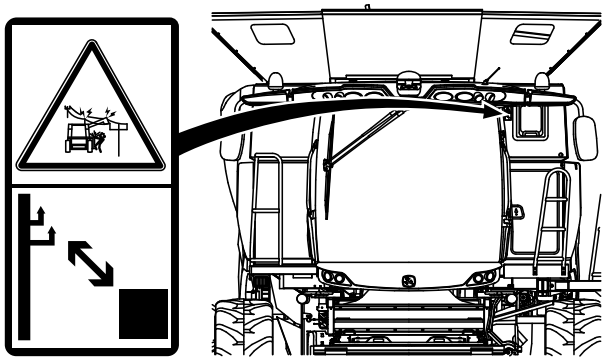
NOTE: Decal is located on cab support and is only on ProDrive™ transmission machines.

To prevent the risk of injury as well as possible damage to the accumulator or hydraulic system, maintain recommended nitrogen gas pressure.

Charge only with dry nitrogen. Rated working pressure is 21 500 kPa (3120 psi), see your John Deere dealer.

OUO6075,0004ACF-19-27MAR19

Avoid Low Hanging Power Lines



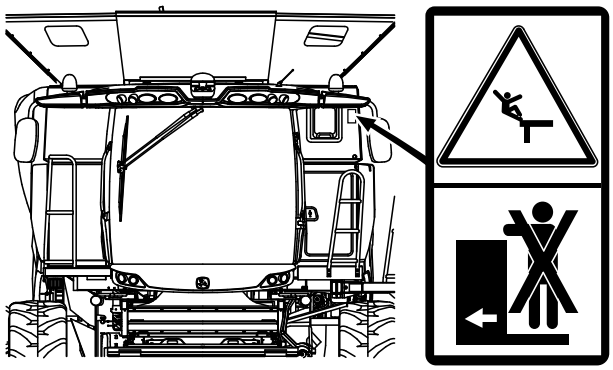
H96811—UN—03AUG10

Avoid serious injury or death from electrocution. Do not contact electric lines. Lower grain tank covers when operating near low hanging power lines.

OUO6041,00003F6-19-03SEP10

ProDrive is a trademark of Deere & Company

Grain Tank

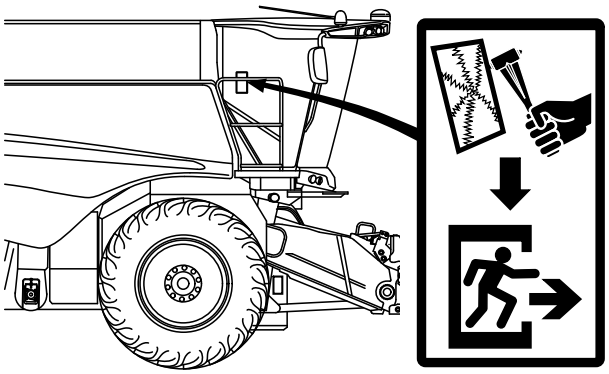


H96812—UN—02SEP10

Avoid serious injury from falling. Do not enter grain tank in this area.

OUO6041,00003F7-19-03SEP10

Emergency Exit

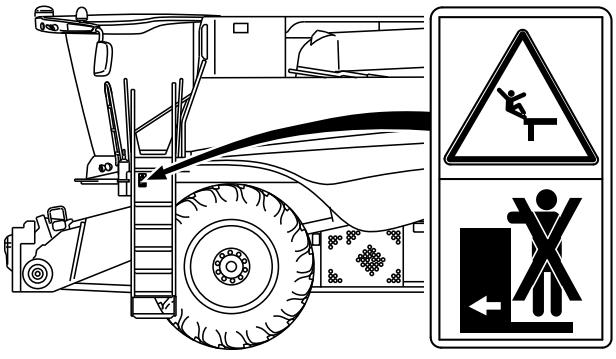


H97852—UN—13JUN11

Seat belt may be cut and window glass broken with hammer to exit cab in an emergency. See your John Deere dealer for window replacement.

WM05597,0001339-19-24JUN15

Cab/Platform Access Ladder

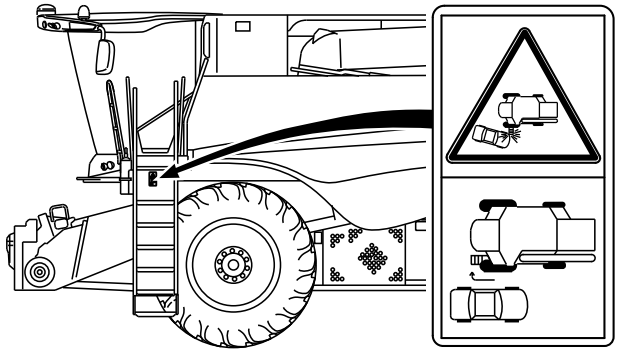


H96816—UN—03AUG10

Avoid serious injury from falling. Do not allow riders on ladder or platform area while machine is moving.

OUO6041,0000404-19-03SEP10

Avoid Motor Vehicle Collisions

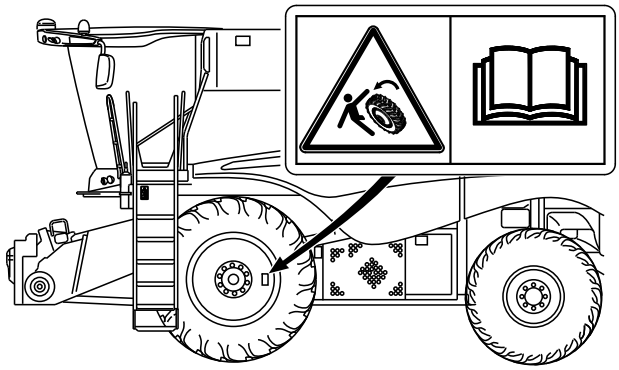


H96815—UN—03AUG10

Avoid motor vehicle collision and serious injury or death. Always swing ladder to forward locked position before driving machine on roadway.

OUO6041,0000403-19-03SEP10

Dual Wheels (If Equipped)



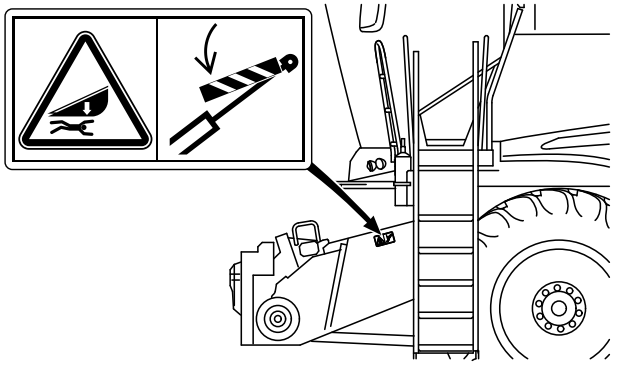
H125689—UN—13MAR19

NOTE: Decal is on dual wheels and on both sides of machine.

- Dual wheels have an offset center of weight. To avoid injury, two people must install and remove wheels using pilot studs.
- Use jack to lift machine. Support machine on blocks. Install all wheel bolts before lowering machine to ground.
- See Operator's Manual

OUO6075,0004AAF-19-13FEB19

Feeder House Safety Stop



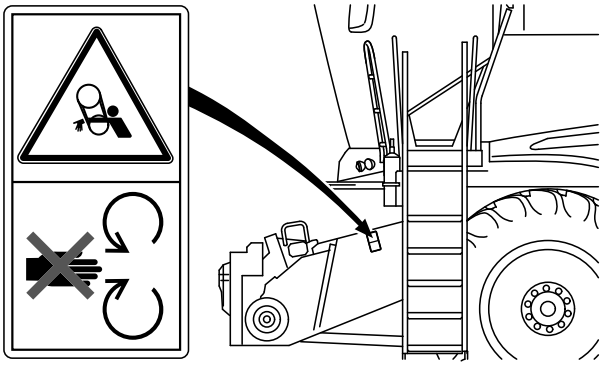
H120945—UN—21JUN17

NOTE: Decal is located on outside and inside of shielding and on both sides of feeder house.

Avoid crushing injury. Rest header on ground or set safety stop, located on feeder house lift cylinder before getting under header.

OUO6075,0004732-19-26APR17

Feeder House Guard

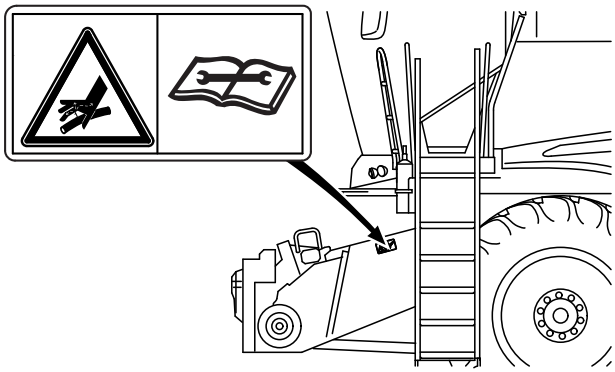


H126161—UN—22APR19

Avoid serious injury or death from entanglement. Never raise shield with the engine running. Stop engine and remove key.

OUO6075,0004B6F-19-18APR19

Hydraulic Oil and Gas Under Pressure



H126134—UN—22APR19

Avoid serious injury from contact with hydraulic oil and gas under pressure.

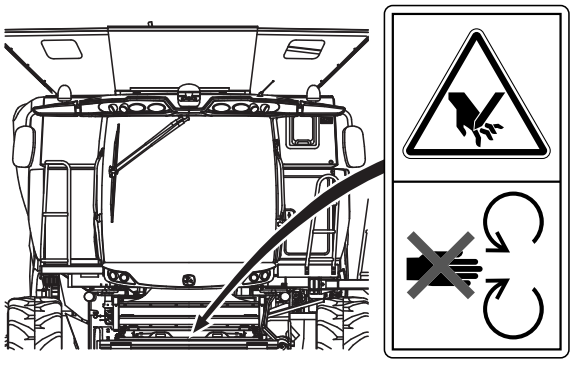
Before removing hydraulic components, disassembling or charging accumulators:

1. Relieve system hydraulic pressure. Refer to operator's manual and repair manual for system information.
2. Stop engine and remove key.

Use only DRY NITROGEN for recharging accumulator. See your local John Deere dealer.

OUO6075,0004B65-19-16APR19

Feeder House Inspection Doors



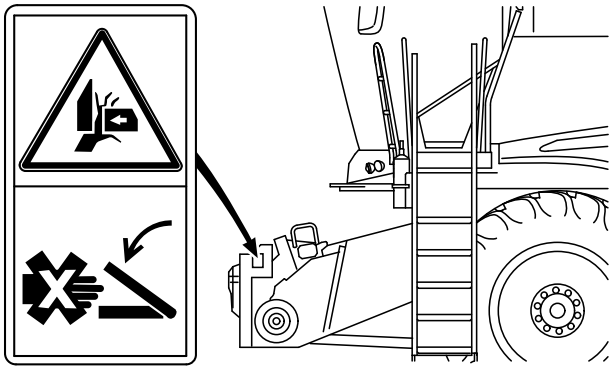
H124082—UN—10MAY18

NOTE: Decal is on the feeder house in between inspection doors.

Avoid serious injury from contact with moving components. Do not open inspection door until all feeder house motion has stopped.

OUO6075,0004950-19-14JUN18

Feeder House Tilt Frame



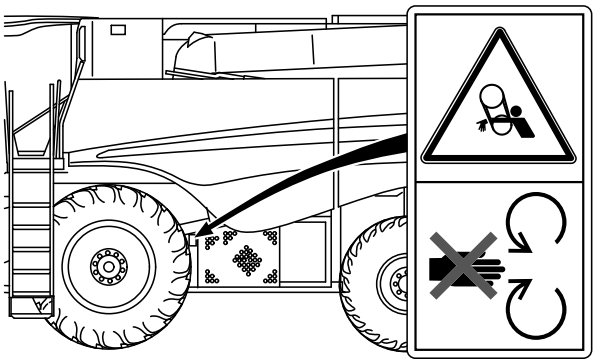
H96813—UN—03AUG10

NOTE: Decal is on both sides of the feeder house.

Header can tilt causing serious injury or death. Avoid crushing injuries. Stay clear when engine is running.

OUO6075,0004AEA-19-28MAR19

Left-Hand Guard

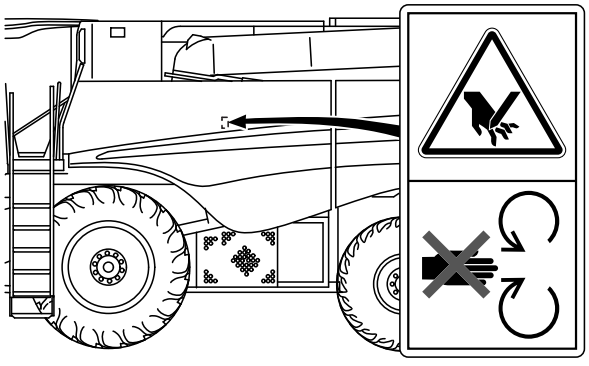


H126162—UN—22APR19

Avoid serious injury or death from entanglement. Never raise shield with the engine running. Stop engine and remove key.

OUO6075,0004B70-19-18APR19

Grain Tank Cleanout Doors

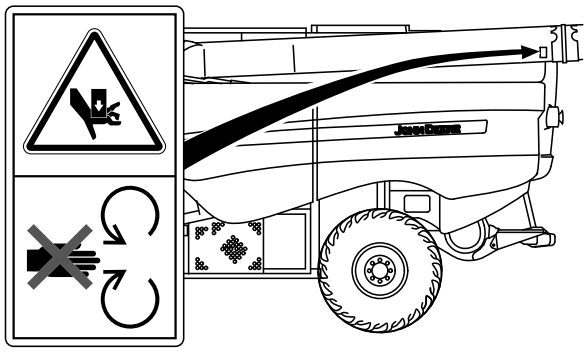


H125971—UN—28MAR19

Avoid serious injury or death from entanglement. Stop engine and remove key before opening cleanout doors.

OUO6075,0004AD0-19-22MAR19

Powered Folding Unloading Auger (If Equipped)



H125973—UN—28MAR19

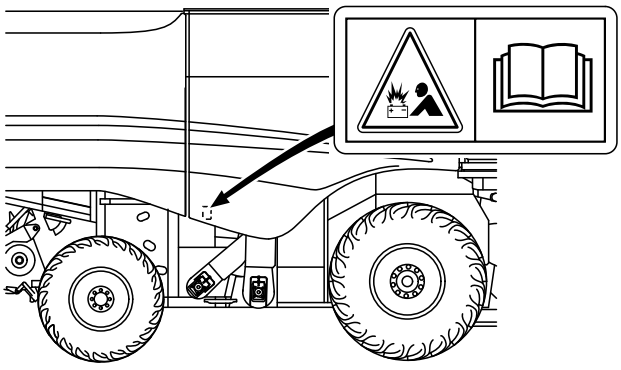
If unloading auger actuator should fail, place unloading auger lock-out pin in locked position (see Grain Tank section).

Use a ladder or equivalent with an appropriate load rating to access lock-out pin. Do not attempt to access auger from engine platform.

Avoid bodily injury from auger hinge components. Keep hands away from pinch points when actuator is removed as unintended auger movement may occur.

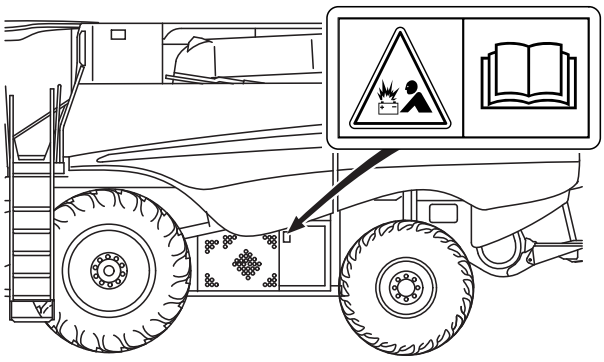
OUO6075,0004AD1-19-22MAR19

Battery Box



H124084—UN—09MAY18

Style A



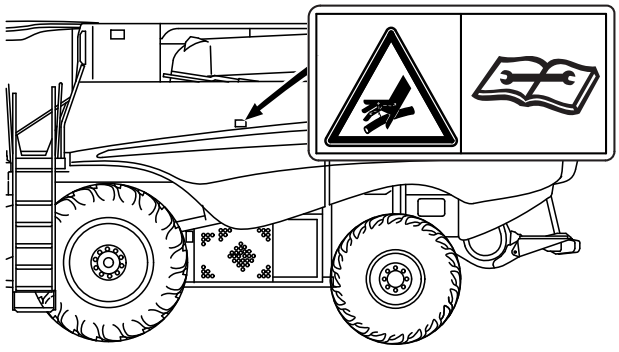
H124085—UN—09MAY18

Style B

Avoid serious injury or death from explosion. High levels of hydrogen gas can accumulate if battery box is not vented properly. Always reinstall vent tubes after performing service or maintenance on batteries or battery box.

OUO6075,0004952-19-30APR18

Hydraulic Oil and Gas Under Pressure



H126135—UN—22APR19

S760 and S770

Avoid serious injury from contact with hydraulic oil and gas under pressure.

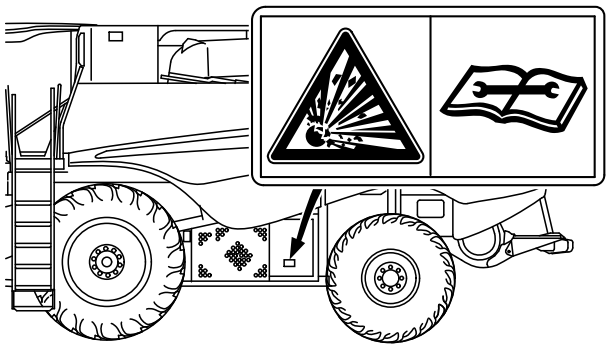
Before removing hydraulic components, disassembling or charging accumulators:

1. Relieve system hydraulic pressure. Refer to operator's manual and repair manual for system information.
2. Stop engine and remove key.

Use only DRY NITROGEN for recharging accumulator. See your local John Deere dealer.

OUO6075,0004B66-19-16APR19

Accumulator



H125975—UN—28MAR19

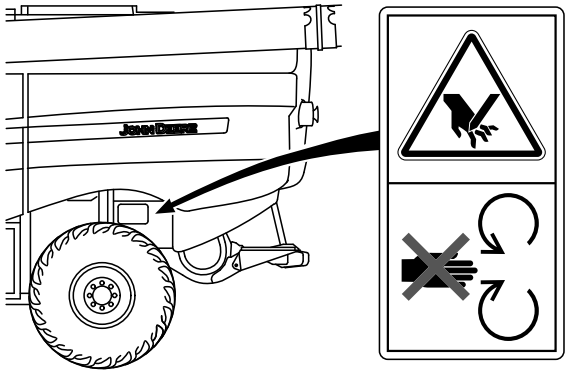
S760 and S770

To prevent the risk of injury as well as possible damage to the accumulator or hydraulic system, maintain recommended nitrogen gas pressure.

Charge only with dry nitrogen. Rated working pressure is 21 500 kPa (3120 psi), see your John Deere dealer.

OUO6075,0004AD2-19-27MAR19

Separator Inspection Door

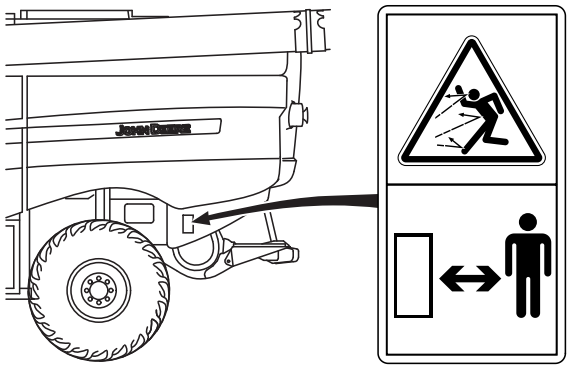


H125977—UN—29MAR19

Avoid serious injury from contact with moving components. Do not open inspection door until all separator motion has stopped.

OUO6075,0004AD3-19-22MAR19

Chopper Flying Debris



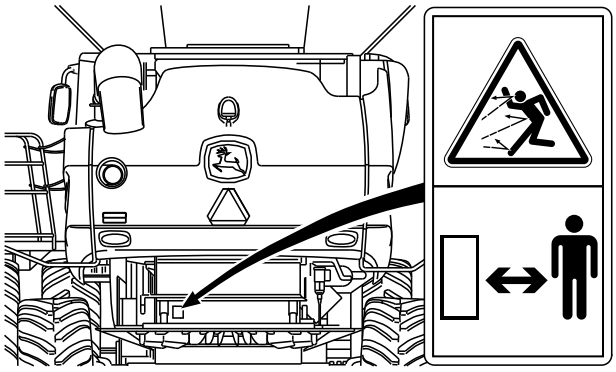
H124086—UN—09MAY18

NOTE: Decal is located on both sides of chopper.

Avoid serious injury from thrown objects. Stay clear while engine is running.

OUO6075,0004A86-19-17DEC18

Chopper Flying Debris Continued

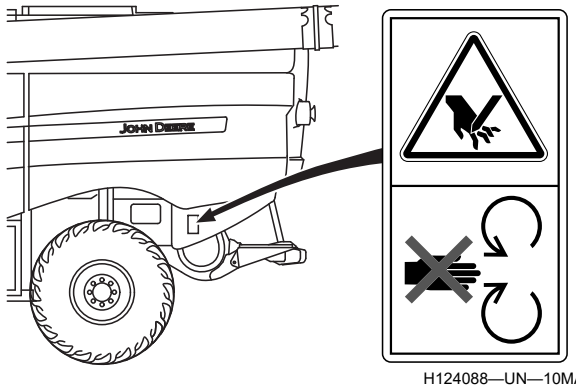


H124087—UN—09MAY18

Avoid serious injury from thrown objects. Stay clear while engine is running.

OUO6075,0004A87-19-17DEC18

Chopper Blades



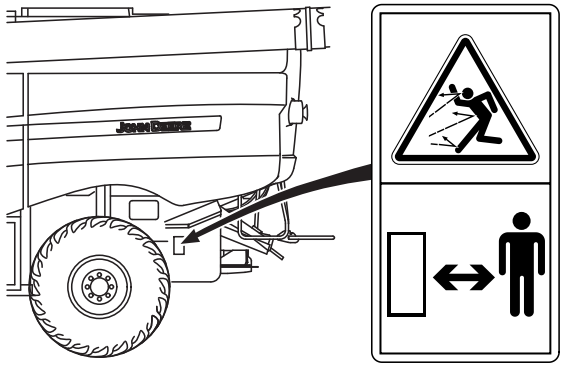
H124088—UN—10MAY18

NOTE: Decal is located on both sides of chopper.

Avoid serious injury from contact with chopper blades. Chopper rotates in windrow position. Keep clear.

OUO6075,0004DF6-19-08APR20

Spreader Flying Debris



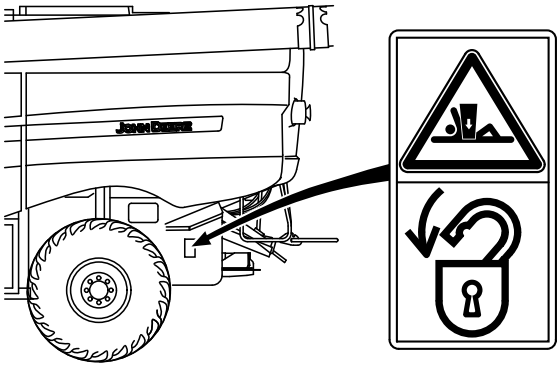
H124089—UN—09MAY18

NOTE: Decal is located on both sides of spreader.

Avoid serious injury from thrown objects. Stay clear while engine is running.

OUO6075,0004A88-19-17DEC18

Spreader Lock-Out



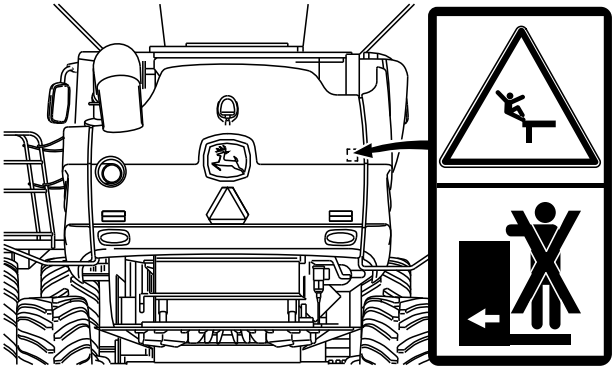
H125979—UN—29MAR19

NOTE: Decal is located on both sides of spreader.

Avoid serious injury or death from crushing. Before performing service or maintenance on raised spreader, fully insert lock-out pin into place.

OUO6075,0004AD4-19-22MAR19

Rear Access Ladder and Service Platform

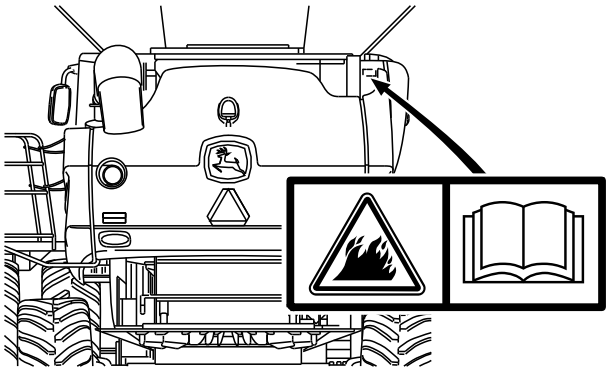


H96847—UN—04AUG10

Avoid serious injury from falling. Do not ride ladder while machine is moving.

OUO6041,00003FB-19-03SEP10

Avoid Fires

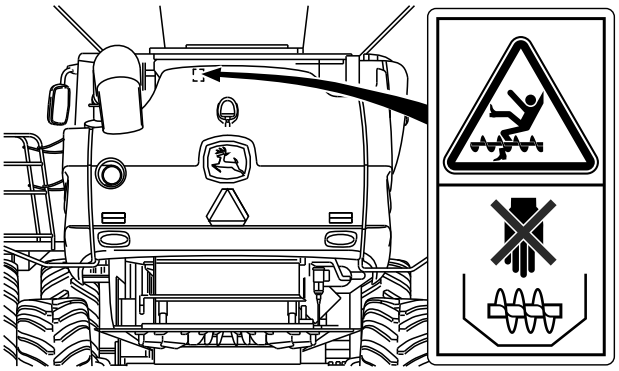


H108698—UN—08AUG13

Avoid equipment fires. The accumulation of chaff, leaves and other crop material in the engine compartment, on the engine or near moving parts can cause a fire. Inspect and clean these areas frequently.

OUO6075,00015CA-19-31JUL13

Grain Tank

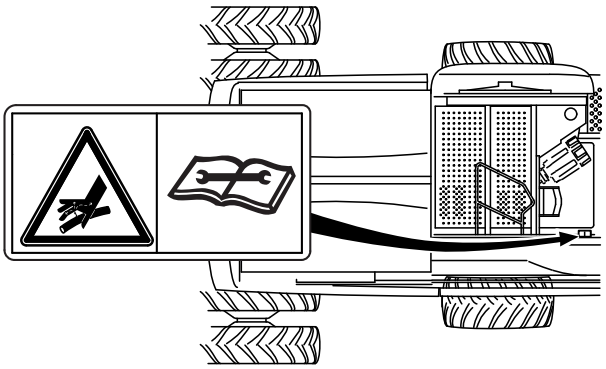


H120946—UN—21JUN17

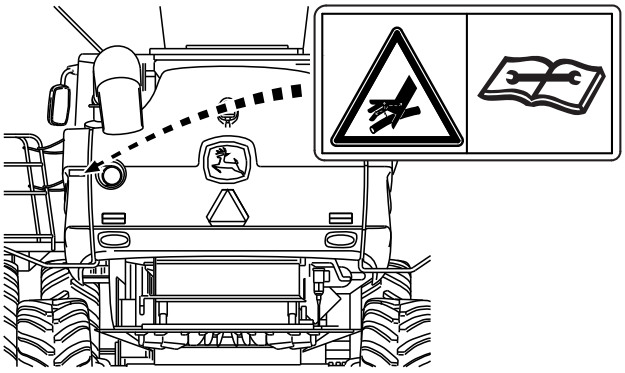
Avoid serious injury or death from entanglement. Do not enter grain tank when engine is running.

OUO6075,0004733-19-26APR17

Hydraulic Oil and Gas Under Pressure



H126136—UN—22APR19



H126137—UN—22APR19

S780, S785, and S790

NOTE: Decal is on the hydraulic reservoir and near the primary control valve.

Avoid serious injury from contact with hydraulic oil and gas under pressure.

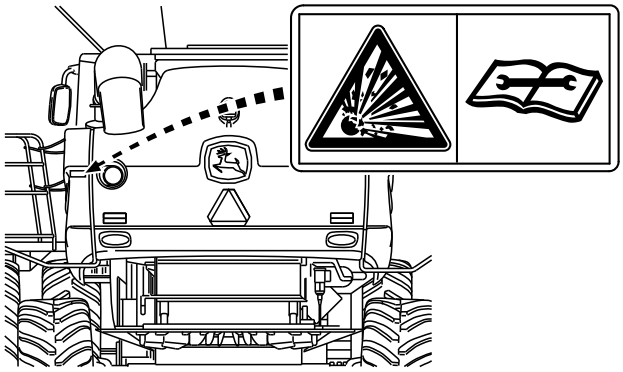
Before removing hydraulic components, disassembling or charging accumulators:

1. Relieve system hydraulic pressure. Refer to operator's manual and repair manual for system information.
2. Stop engine and remove key.

Use only DRY NITROGEN for recharging accumulator. See your local John Deere dealer.

OUO6075,0004B69-19-25APR19

Accumulator



H126203—UN—26APR19

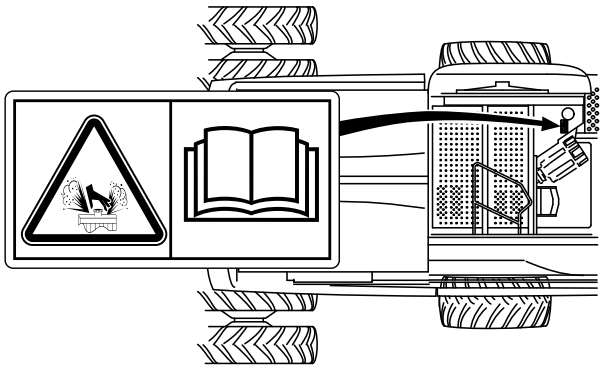
S780, S785, and S790

To prevent the risk of injury as well as possible damage to the accumulator or hydraulic system, maintain recommended nitrogen gas pressure.

Charge only with dry nitrogen. Rated working pressure is 21 500 kPa (3120 psi), see your John Deere dealer.

OUO6075,0004B79-19-29APR19

Cooling System

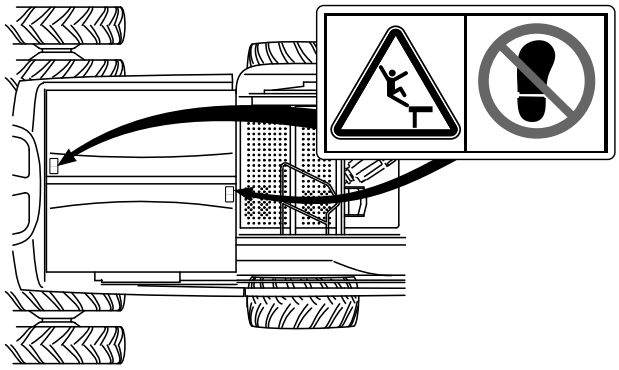


H120947—UN—21JUN17

Pressurized cooling system. To prevent burn injury due to uncontrolled release of steam and hot coolant, wait until system is cool. Loosen cap slowly. Allow pressure to release before removing cap.

OUO6075,0004734-19-26APR17

Avoid Grain Tank

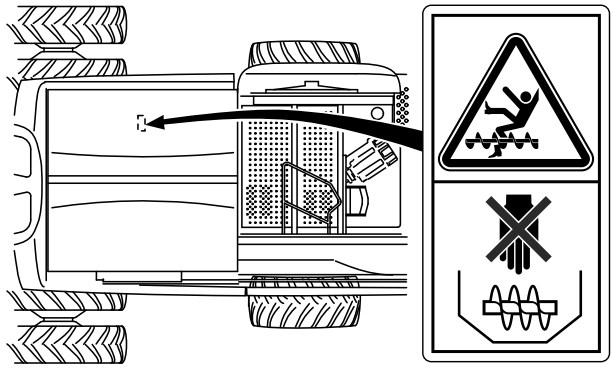


H120948—UN—22JUN17

Avoid serious injury from falling. Do not stand or walk on grain tank covers.

OUO6075,0004735-19-26APR17

Avoid Clean Grain Loading Auger

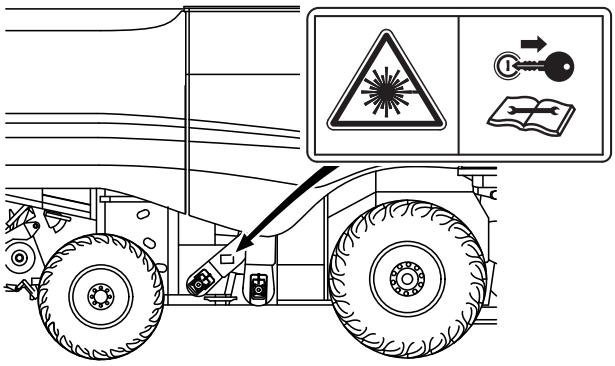


H120949—UN—22JUN17

Avoid serious injury or death from entanglement. Do not enter grain tank when engine is running.

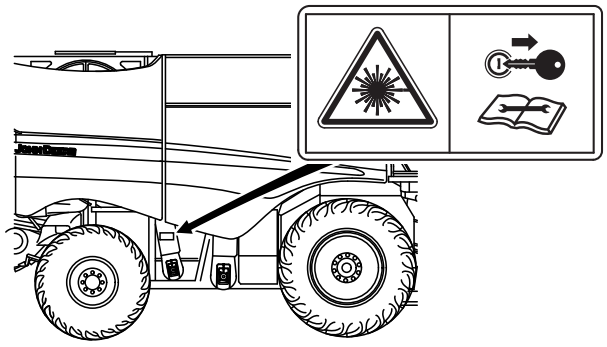
OUO6075,0004736-19-26APR17

Tailings Elevator Sensor Laser



H126519—UN—18JUN19

Style A



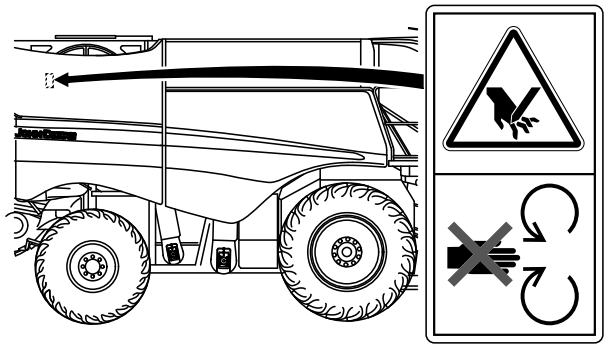
H125985—UN—18JUN19

Style B

Avoid eye exposure. Key off during service.

OUO6075,0004AD5-19-18JUN19

Rotary Screen Door and Radiator Fan

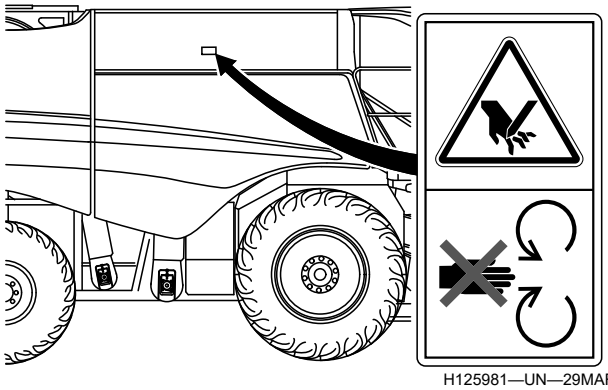


H126128—UN—16APR19

Avoid bodily injury from rotating fan and screen components. Shut engine off and remove key before opening rotary screen door.

OUO6075,0004B63-19-16APR19

Clean Grain Loading Auger



H125981—UN—29MAR19

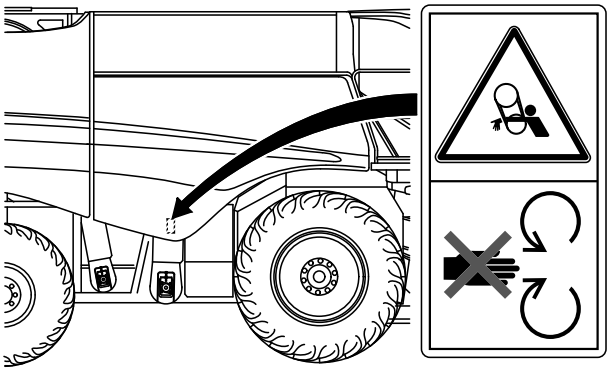
Avoid bodily injury from rotating auger and components:

Shut engine off and remove key before opening or closing auger.

Keep hands from pinch points when closing auger.

OUO6075,0004ADC-19-22MAR19

Clean Grain Elevator

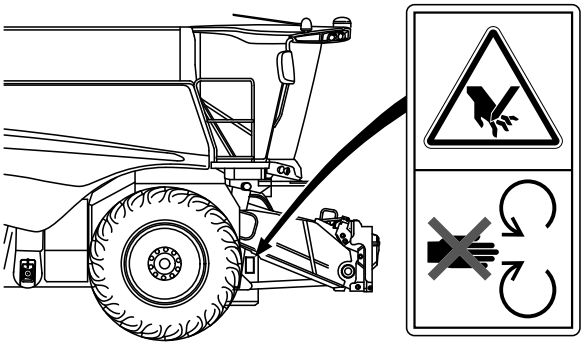


H126164—UN—22APR19

Avoid serious injury or death from entanglement. Never raise shield with the engine running. Stop engine and remove key.

OUO6075,0004B71-19-18APR19

Stone Trap

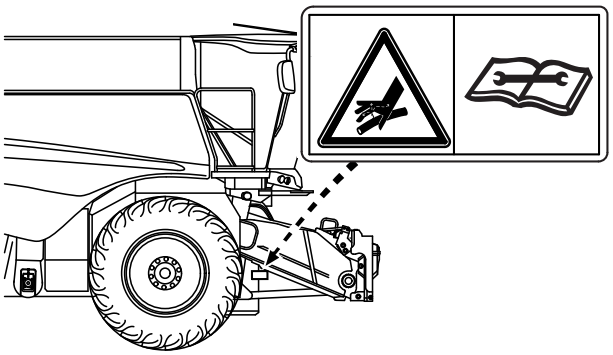


H125983—UN—29MAR19

Avoid serious injury from entanglement with feed accelerator. Feed accelerator turns when separator is engaged and will run down after separator is disengaged. Do not clean out stone trap until all separator motion has stopped.

OUO6075,0004AD8-19-22MAR19

Hydraulic Oil and Gas Under Pressure



H126138—UN—22APR19

NOTE: Decal is on the stone trap door and is only on ProDrive™ transmission machines.

Avoid serious injury from contact with hydraulic oil and gas under pressure.

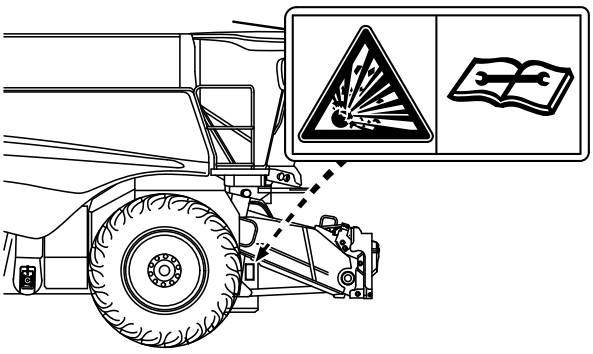
Before removing hydraulic components, disassembling or charging accumulators:

1. Relieve system hydraulic pressure. Refer to operator's manual and repair manual for system information.
2. Stop engine and remove key.

Use only DRY NITROGEN for recharging accumulator. See your local John Deere dealer.

OUO6075,0004B68-19-16APR19

Accumulator



H125987—UN—29MAR19

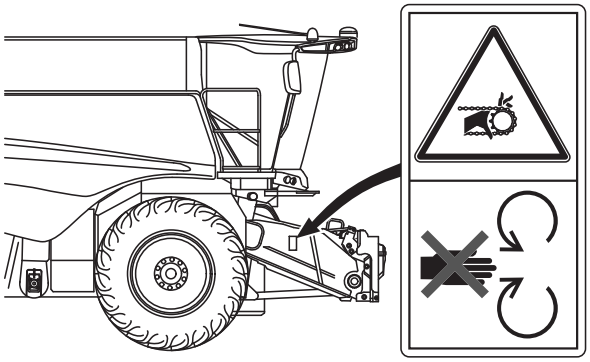
NOTE: Decal is only on ProDrive™ transmission machines.

To prevent the risk of injury as well as possible damage to the accumulator or hydraulic system, maintain recommended nitrogen gas pressure.

Charge only with dry nitrogen. Rated working pressure is 21 500 kPa (3120 psi), see your John Deere dealer.

OUO6075,0004AD9-19-21MAY19

Feeder Conveyor Drive Guard

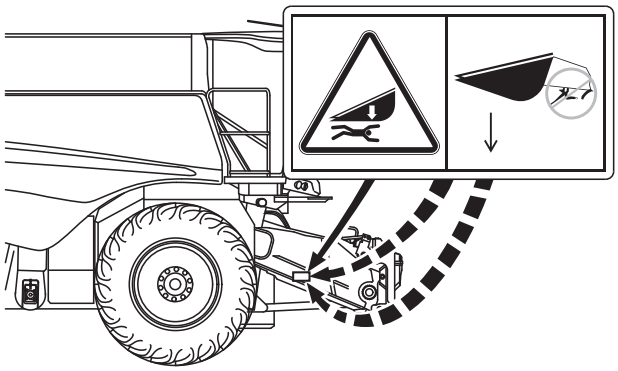


H126165—UN—23APR19

Do not open the guard when the engine is running.

OUO6075,0004B72-19-29APR19

Feeder House Feed Plate Latch



H127682—UN—17OCT19

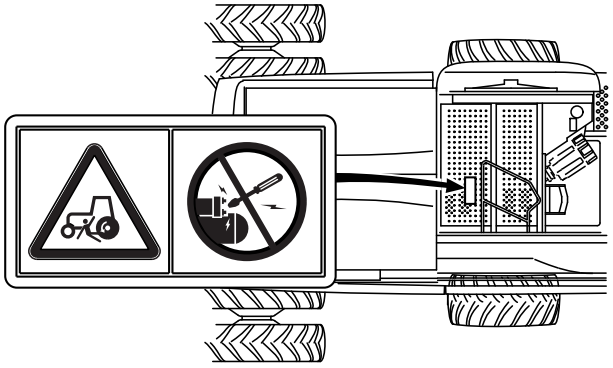
NOTE: Safety sign is located on the inside and outside of the feeder house shield and by the feed plate lever.

Avoid crushing injury. Close feeder house bottom door prior to lowering the feeder house as damage to feeder house lift components may occur.

OUO6075,0004CB2-19-10OCT19

ProDrive is a trademark of Deere & Company

Starter



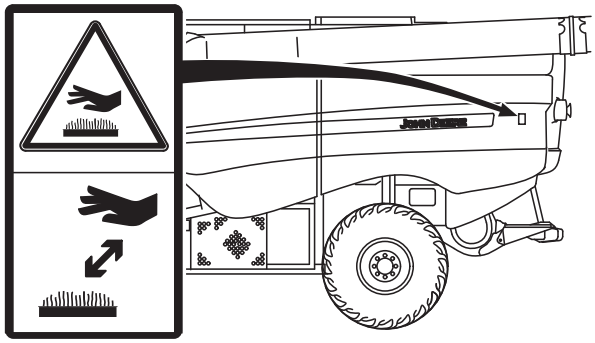
H97206—UN—05AUG10

NOTE: Decal is located on starter.

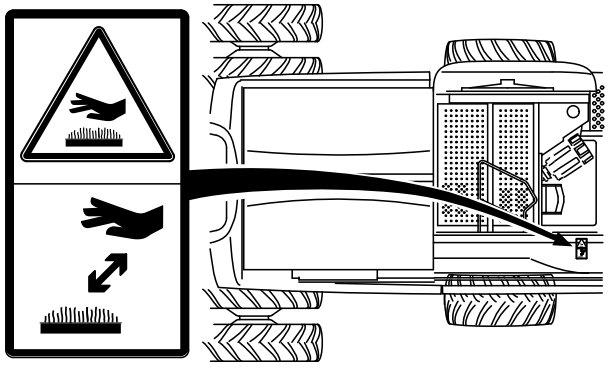
Do not start engine by shorting across starter or solenoid terminals. Machine or components may move if normal circuitry is bypassed.

OUO6075,00015D0-19-31JUL13

Exhaust Temperature (Final Tier 4/Stage V)



H114552—UN—17JUN15



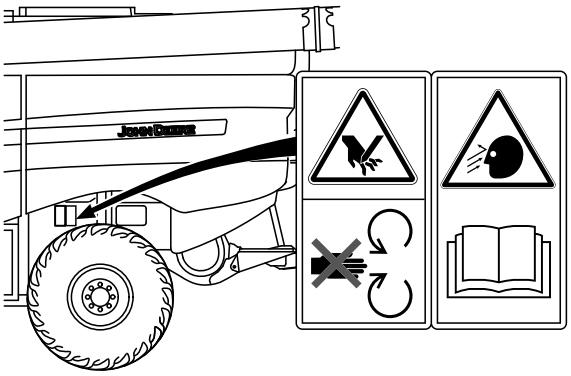
H108092—UN—06JUN13

NOTE: Decals are located on shielding surfaces (outside and on top).

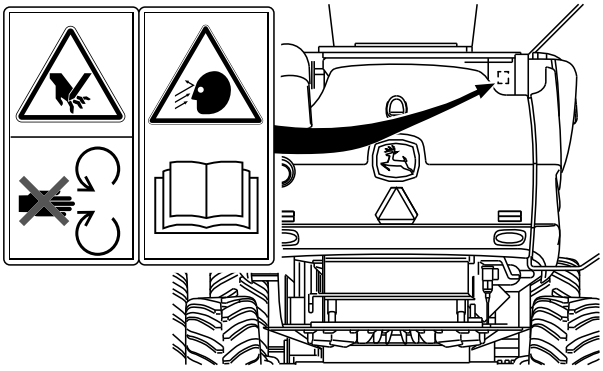
Exhaust system components may be hot. To avoid severe burns, keep away from exhaust system components.

OUO6075,00047D2-19-10NOV17

Air Compressor System (If Equipped)



H125989—UN—01APR19



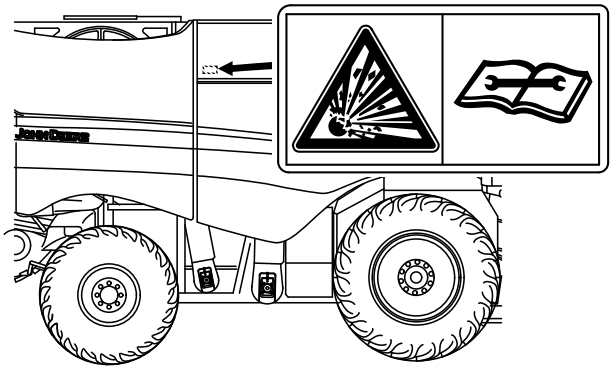
H125991—UN—01APR19

Engine components are rotating during air compressor operation. When using the air compressor system, avoid moving components.

Air system at high pressure can dislodge debris or components. Wear protective equipment. Before servicing air system, refer to Operators Manual.

OUO6075,0004ADA-19-22MAR19

Air Compressor Reservoir (If Equipped)

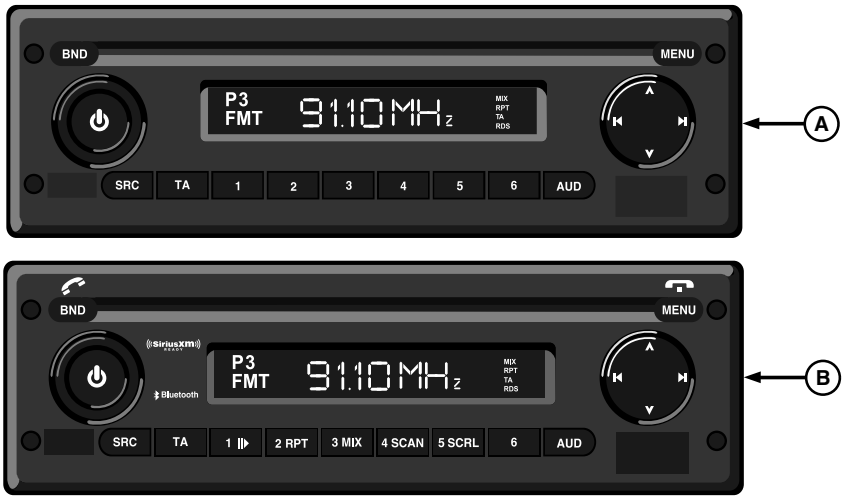


H125993—UN—01APR19

Air reservoir at high pressure. Wear personal protective equipment, while servicing. Before servicing, relieve all system air pressure.

OUO6075,0004ADB-19-22MAR19

Radio Types (Optional)



H120833—UN—16FEB17

Main Features	Radio	Connection of external devices	USB (MP3/WMA)	Bluetooth®	Satellite Radio Ready
(A)—Deluxe Radio System	X	X			
(B)—Premium Radio System	X	X	X	X	United States / Canada

Bluetooth is a registered trademark of Bluetooth SIG

OUO6075,00045E6-19-14FEB17

After Market Radios

IMPORTANT: If installing or replacing an aftermarket radio, see your John Deere dealer for further information.

OUO6075,0000B6E-19-21MAR11

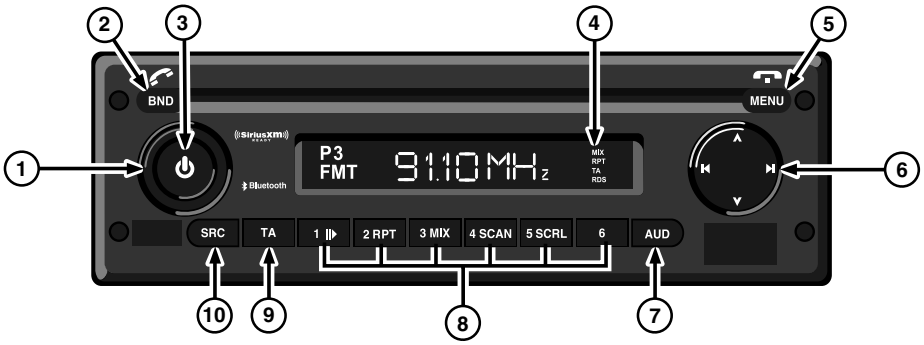
Program Radio for Local Area Frequency

NOTE: If a different tuner frequency is needed for the radio, see your John Deere dealer for further information.

Wave Bands (United States / Canada)		Wave Bands (All Other Countries)	
FM	87.7—107.9 MHz	UKW (FM)	87.5—108.0 MHz
AM	530—1710 kHz	MW	522—1629 kHz
WX	162.4—162.55 MHz	LW	153—279 kHz

OUO6075,0004584-19-18JAN17

Radio Controls



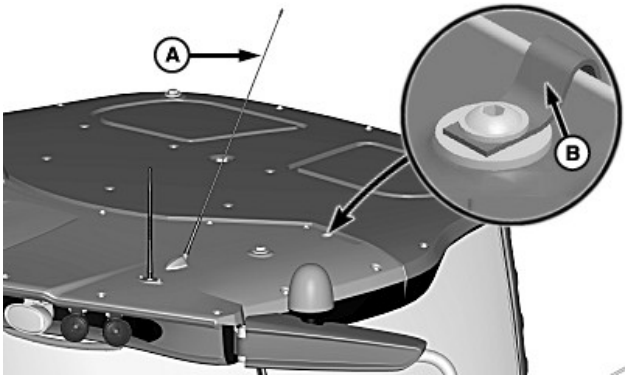
H120834—UN—17FEB17

1—Volume Control
2—Band (BND) Key
3—Power/Mute Key
4—Radio Display
5—Menu Key
6—Multi-Function Rocker Switch
7—Audio (AUD) Key
8—Key Block (1—6)
9—Traffic Announcements (TA) Key
10—Source Select (SRC) Key

NOTE: See Radio Operator's Manual for further information.

OUO6075,00045E7-19-14FEB17

Antenna



H117993—UN—01APR16

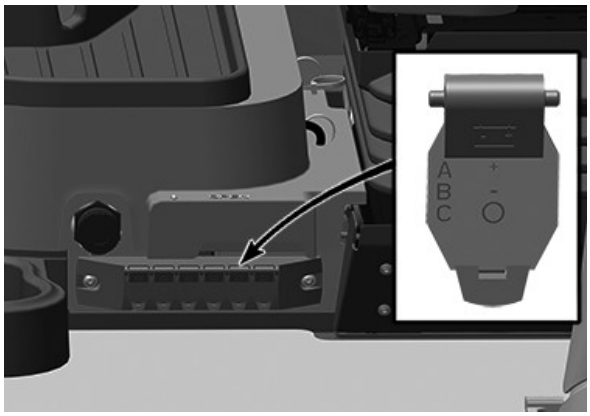
A—Radio Antenna
B—Clip

IMPORTANT: If radio is not used, or machine is transported, lower antenna and retain with clip. If the clip is not available, retain the antenna to cab roof with tape.

Remove radio antenna (A) from clip (B) when using radio.

OUO6075,0004640-19-08MAR17

Communications/CB Radio Wiring



H118079—UN—19JAN17

Auxiliary Power Outlet Strip

NOTE: Maximum combined current draw for switch power is 20 amps and unswitched power is 30 amps.

- Spade terminal (A) is direct positive power at all times.
- Spade terminal (B) is ground.
- Spade terminal (C) is auxiliary power (key switch ON).

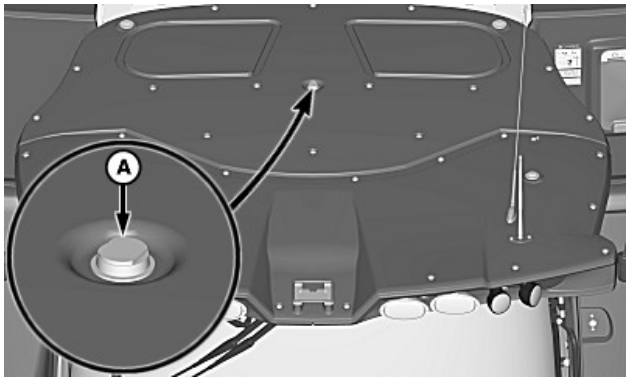
It is recommended to use spade terminals (A) and (B) to provide power and ground to the 2-way radio with high current draw. This requires the operator to manually power off the 2-way radio or utilize the battery disconnect switch at the end of the day.

It is recommended to use spade terminals (B) and (C) to provide power and ground to the 2-way radio with normal current draw. When the operator turns the key switch OFF, power to the 2-way radio is also turned OFF.

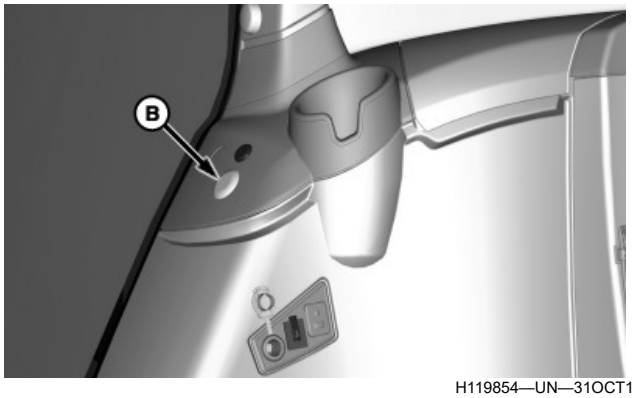
For additional information, see your John Deere dealer.

OUO6075,0004895-19-07FEB18

Communications/CB Radio Mounting

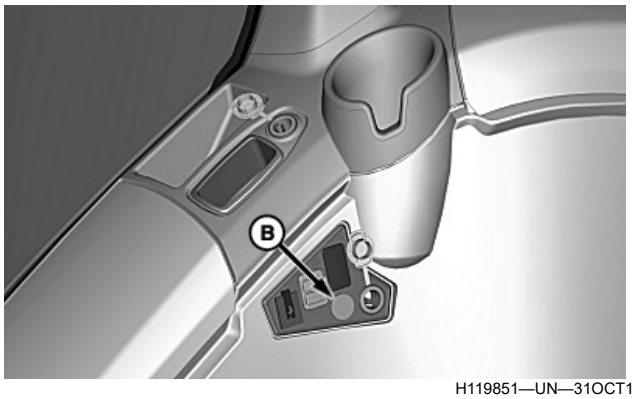


H119749—UN—31OCT16



H119854—UN—31OCT16

Antenna Cable Hole (Deluxe Cab Location)



H119851—UN—31OCT16

Antenna Cable Hole (Premium Cab Location)

A—Antenna Mount
B—Plug

IMPORTANT: Do not install a radio requiring more than 3 amps or electrical system may malfunction.

To install additional communications radio, see your John Deere dealer for further information.

Antenna mount (A) is located in the center of the cab roof.

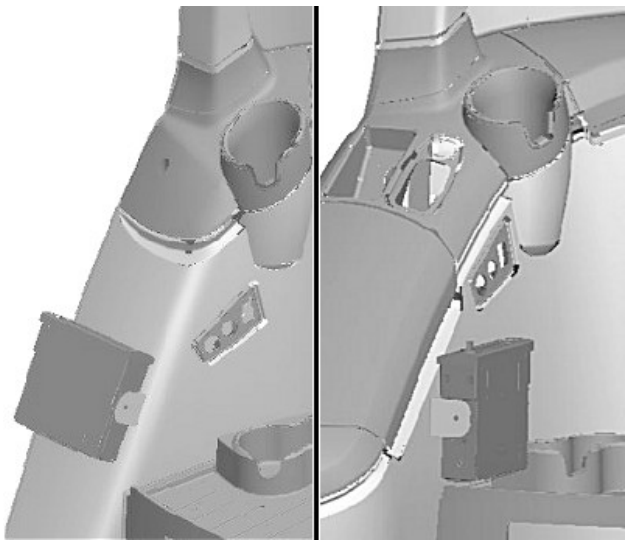
1. Remove dust cap from the antenna base.
2. Remove brass nut from the antenna base.
3. Discard rubber washer.
4. Reinstall antenna base with O-ring facing downward.
5. Install antenna.

Antenna cable is located inside the right-hand console.

1. Remove plug (B) from various locations shown.
2. Remove cup holder and locate antenna cable.
3. Route antenna cable through hole opening.

H101604—UN—18MAY11

Rear Corner Post Location (Right-Hand Rear)



H101603—UN—18MAY11

Deluxe Cab Location / Premium Cab Location

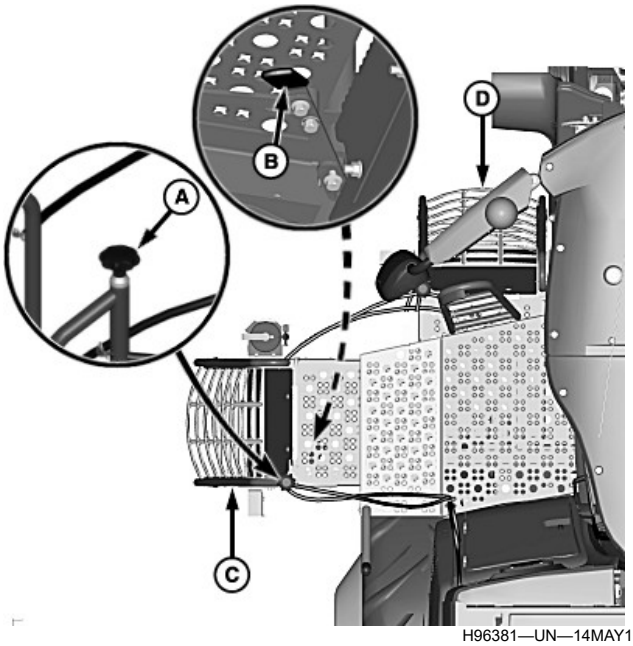
IMPORTANT: Corner post cover must be removed before drilling. Be careful not to damage wiring harnesses and coolant hoses in locations shown when drilling holes or installing hardware.

Use bracket supplied by manufacturer as a template to locate and drill holes as required in various locations shown. Use self-tapping screws or cap screws with nuts to mount bracket.

NOTE: Certain broadcast bands may cause interference with the position receiver. Select a different broadcast band or see your John Deere dealer if signal losses are noticed with the position receiver.

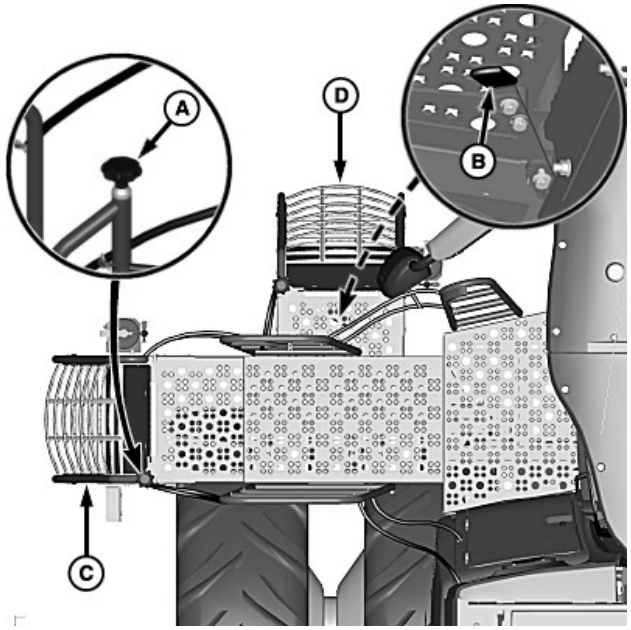
OUO6075,000439C-19-31OCT16

Cab Ladder Positions



H96381—UN—14MAY10

Ladder Positions (Single Tire Configuration)



H96380—UN—14MAY10

Ladder Positions (Dual Tire Configuration)

A—Handle
B—Lever
C—Field Position
D—Roadway Driving Position

CAUTION: Do not ride or attempt to climb front or rear ladders while machine is moving.

Ladder can be positioned from ground or on the ladder landing with handle (A) or lever (B).

If the ladder latch appears loose, clean out latch pin area. Do not use oil or grease in this area.

Swing ladder forward or rearward and lock into these different positions:

- **Position (C):** is for the normal operating field conditions.
- **Position (D):** is for transporting the machine on public roadways.

CAUTION: Always swing ladder to position (D) before transporting on public roadways in order to reduce machine width and position marker/ hazard light towards oncoming motorists.

OUO6075,0004563-19-08DEC16

Fire Extinguisher (Europe)

H92841—UN—16SEP08

General-Purpose Powder / Liquid Fire Extinguisher

CAUTION: Fire extinguishers must meet local government laws and regulations:

- **A general-purpose powder fire extinguisher that is at least 6 kg (13 lb)**
- **A pressurized liquid fire extinguisher (if equipped) with minimum volume of 8 L (2.1 gal)**

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose powder fire extinguisher and a pressurized liquid fire extinguisher with mounting brackets are installed on your machine.

Read label on extinguishers and become familiar with instructions on how to use and maintain them. Once extinguisher is discharged, no matter for how long, it must be recharged or replaced.

IMPORTANT: Pressurized liquid fire extinguisher must not be exposed to freezing temperatures unless protected with antifreeze. See instructions decal on extinguisher for further information.

OUO6075,00042F6-19-20JUN16

Fire Extinguishers (Australia and New Zealand)

H117754—UN—17MAR16

General-Purpose Powder / Liquid Fire Extinguisher

CAUTION: Fire extinguishers must meet local government laws and regulations:

- **A general-purpose powder fire extinguisher that is at least 4 kg (10 lb)**
- **A pressurized liquid fire extinguisher with minimum volume of 8 L (2.1 gal)**

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose powder fire extinguisher and a pressurized liquid fire extinguisher with mounting brackets are installed on your machine.

Read label on extinguishers and become familiar with instructions on how to use and maintain them. Once extinguisher is discharged, no matter for how long, it must be recharged or replaced.

IMPORTANT: Pressurized liquid fire extinguisher must not be exposed to freezing temperatures unless protected with antifreeze. See instructions decal on extinguisher for further information.

OUO6075,00042F7-19-20JUN16

Fire Extinguishers (Eurasian Economic Union)

H117754—UN—17MAR16

General-Purpose Powder / Liquid-Foam Combination Fire Extinguisher

CAUTION: Fire extinguishers must meet local government laws and regulations:

- **A general-purpose powder fire extinguisher that is at least 6 kg (13 lb)**
- **A pressurized liquid-foam combination fire extinguisher with minimum volume of 8 L (2.1 gal)**

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose powder fire extinguisher and a pressurized liquid-foam combination fire extinguisher with mounting brackets are installed on your machine.

Read label on extinguishers and become familiar with instructions on how to use and maintain them. Once extinguisher is discharged, no matter for how long, it must be recharged or replaced.

IMPORTANT: Pressurized liquid-foam combination fire extinguisher must not be exposed to freezing temperatures. See instructions decal on extinguisher for further information.

OUO6075,00049FE-19-28JUN18

Fire Extinguisher Locations

H123653—UN—02MAR18

Front Fire Extinguisher Location

H123654—UN—02MAR18

Rear Fire Extinguisher Location

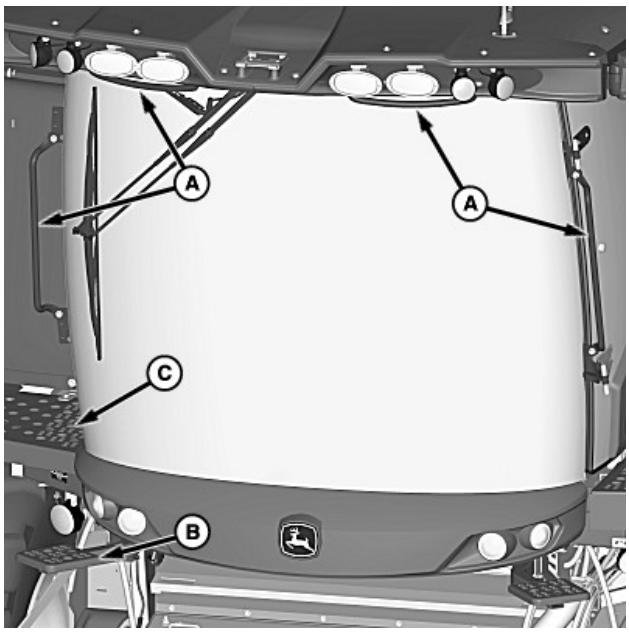
NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose fire extinguisher is on the front ladder platform.

A pressurized liquid fire extinguisher (if equipped) is on the inside of the right-hand rear engine access door.

OUO6075,0004911-19-02MAR18

Handrails and Right-Hand Landing Access



H119679—UN—20OCT16

A—Handrails
B—Step
C—Landing

CAUTION: Raise feeder house completely and lower safety stop on the feeder house lift cylinder.

IMPORTANT: Close cab door before using handrail.

Do not manually move wiper arm. This could cause damage to wiper mechanism.

Use ladder and landing to clean left side of cab.

Access feeder house by using step on the left-hand side.

Use handrails (A) on either side of cab and at top of cab.

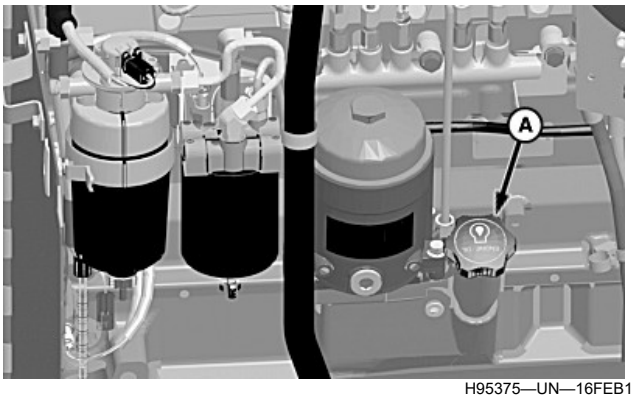
Stand on the raised feeder house to clean front cab window and service headlights or wiper.

Use step (B) and landing (C) to clean right side of the cab.

OUO6075,000439D-19-15DEC16

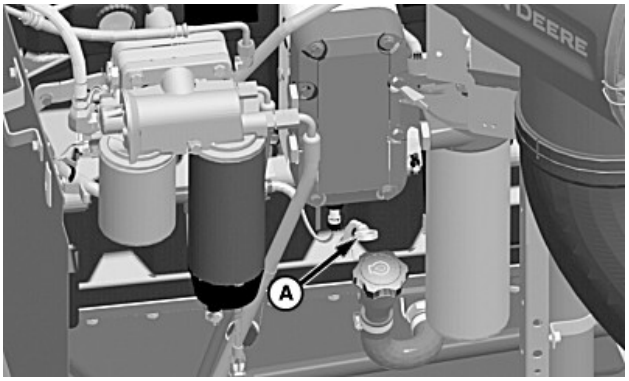
Breaking-In Engine

Tier 2/Stage II



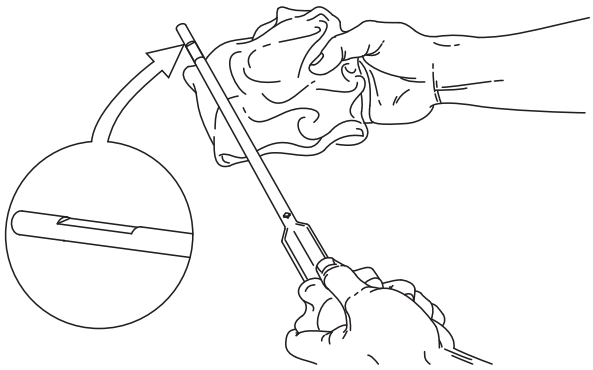
H95375—UN—16FEB10

Style A



H95419—UN—19FEB10

Style B



H112961—UN—17FEB15

A—Dipstick

Engine is factory filled with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

If John Deere Break-In™ Engine Oil is used during the initial operation of a new or rebuilt engine, change the oil and filter at a maximum of 100 hours.

If John Deere Break-In Plus™ Engine Oil is used, change oil and filter at a minimum of 100 hours and a maximum equal to interval specified for John Deere Plus-50™ II or Plus-50™ Oil. See Fuel and Lubricants section for oil recommendations.

IMPORTANT: DO NOT add make-up oil until the oil level is BELOW the ADD mark on dipstick. John Deere Break-In Plus™ Oil should be used to make up any oil consumed during this period.

DO NOT use Plus-50™ or Plus-50™ II Engine Oil during the break-in period of a new engine or engine that has had a major overhaul. These oils will not allow a new or overhauled engine to properly wear during this break-in period.

Check engine oil level frequently during the break-in period. If oil must be added during this period, John Deere Break-In Plus™ Oil is preferred.

IMPORTANT: DO NOT fill above the FULL mark. Oil levels anywhere within the cross-hatch marks are considered in the acceptable operating range.

NOTE: Some increase in oil consumption may be expected when low viscosity oils are used. Check oil levels more frequently.

Avoid prolonged periods of engine idling or sustained maximum load operation. If the engine idles longer than 5 minutes, stop engine.

After the break-in period, change the engine oil and replace the engine oil filter. Fill the crankcase with John Deere Plus-50™ II, John Deere Plus-50™, or seasonal viscosity grade oil. See Fuel and Lubricants section for oil recommendations.

NOTE: Verify that the dipstick is screwed or pushed completely into the housing before removing to check the oil level.

Remove dipstick (A) and check the oil level daily. The oil level should be between the ADD and the top of cross-hatch area on the dipstick. If the oil level is below the ADD mark, add oil as needed. See the Fuel and Lubricants section for oil recommendations.

Watch for leaks. Do not operate the engine when the oil level is below the ADD mark on the dipstick.

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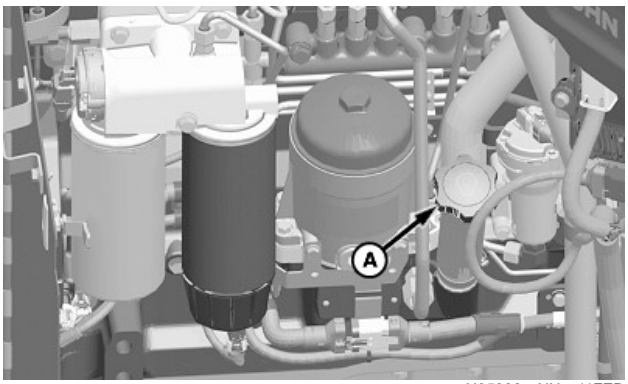
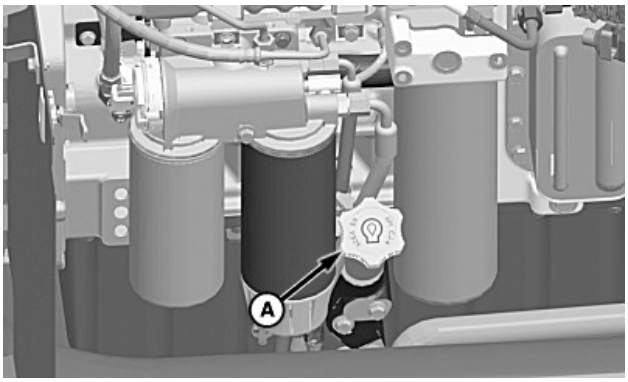
Plus-50 is a trademark of Deere & Company

Final Tier 4/Stage V



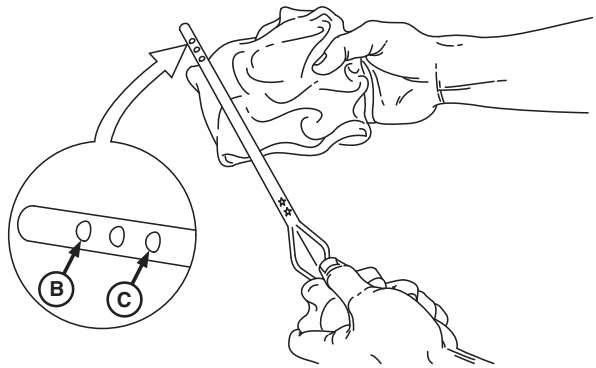
H95306—UN—11FEB10

Style A



H95396—UN—17FEB10

Style B



H113142—UN—11MAR15

A—Dipstick
B—ADD Mark
C—FULL Mark

Engine is factory filled with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum equal to the interval specified for John Deere Plus-50™ II Oil. See Fuel and Lubricants section for oil recommendations.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 400 hours.

IMPORTANT: DO NOT add make-up oil until the oil level is BELOW the ADD mark (B) on dipstick. John Deere Break-In Plus™ Oil should be used to make up any oil consumed during this period.

DO NOT use Plus-50™ or Plus-50™ II Engine Oil during the break-in period of a new engine or engine that has had a major overhaul. These oils will not allow a new or overhauled engine to properly wear during this break-in period.

Check engine oil level frequently during the break-in period. If oil must be added during this period, John Deere Break-In Plus™ Oil is preferred.

IMPORTANT: DO NOT fill above the FULL mark (C). Oil levels anywhere within the cross-hatch marks are considered in the acceptable operating range.

If John Deere Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following:

- API Service Category CK-4
- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

If one of these oils is used during the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 250 hours.

NOTE: Some increase in oil consumption may be expected when low viscosity oils are used. Check oil levels more frequently.

Avoid prolonged periods of engine idling or sustained maximum load operation. If the engine idles longer than 5 minutes, stop engine.

After the break-in period, change the engine oil and replace the engine oil filter. Fill the crankcase with John Deere Plus-50™ II or other diesel engine oil. See Fuel and Lubricants section for oil recommendations.

NOTE: Verify that the dipstick is screwed completely into housing before removing to check oil level.

Remove dipstick (A) and check the oil level daily. The oil level should be between the ADD and the top of cross-

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Plus-50 is a trademark of Deere & Company

hatch area on the dipstick. If the oil level is below the ADD mark, add oil as needed. See Fuel and Lubricants section for oil recommendations.

Watch for leaks. Do not operate the engine when the oil level is below the ADD mark on the dipstick.

All Machines

H117823—UN—22DEC16

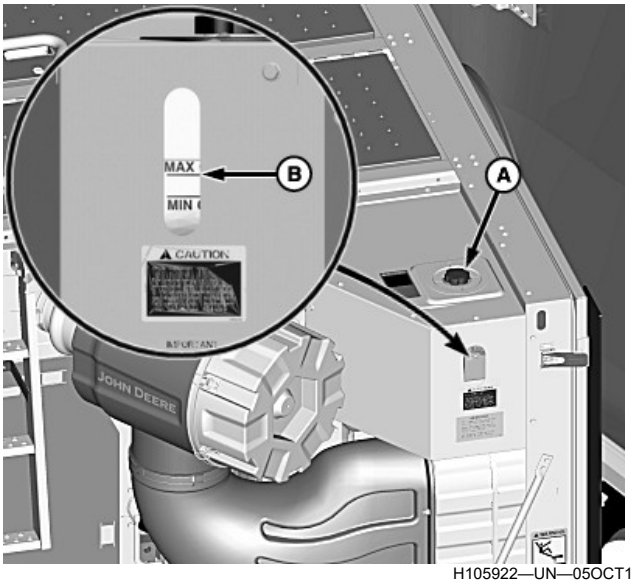
Temperature Indicator

If air temperature is below -10°C (14°F), use an engine block heater (if equipped).

Temperature indicator should read in the green zone during normal operation.

IMPORTANT: Prevent possible engine damage. Do not shut OFF the engine if the temperature warning light comes ON or the bars enter red zone. Shutting OFF the engine causes coolant temperature to rise even higher, resulting in machine damage. Reduce the load and run the engine at a slower speed to lower the coolant temperature. Unless the temperature drops quickly, stop the engine and determine the cause before resuming operation.

Watch the temperature gauge closely. If the gauge moves into the red zone, reduce the load on the engine and determine the cause before resuming operation.



H105922—UN—05OCT12

A—Surge Tank Cap
B—Max Cold Line

CAUTION: Shut OFF engine, set park brake, and remove key. Avoid being scalded when opening the surge tank cap. Never open the cap when the engine is hot. Open the cap slowly to relieve the pressure.

Check the coolant level periodically and watch for signs of leaks. Remove surge tank cap (A), then pour coolant into the surge tank and fill to “Max Cold” line (B).

NOTE: The coolant level must be between the “Max Cold” and “Min Cold” lines. Add coolant as needed if coolant is below “Min Cold” line.

OUO6075,0004D8A-19-18FEB20

Belt Drives Adjustment - First 50 Hours

CAUTION: Never check or adjust belt drives with engine running. Shut OFF engine, set parking brake and remove key.

Check all spring loaded belt idler adjustments after first 50 hours of operation. Most belt stretch occurs during the first hours of service.

After initial adjustments, check belt adjustment as required. Washer on spring tensioner should be positioned between end of gauge and bottom of step.

OUO6075,000056C-19-14JAN10

Break-In Check Before First 100 Hours

Perform the daily or 10-hour service. See Lubrication and Maintenance section.

Watch for engine temperature and engine oil pressure diagnostic trouble codes. See Combine Overview Applications or Operator’s Station Help for further information.

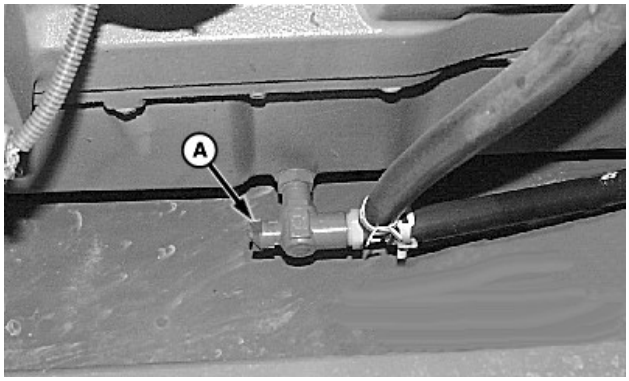
Check the engine oil level (if needed, add John Deere Break-In™ Plus Oil) and the coolant level frequently and watch for signs of leaks.

Check engine air intake system hoses and clamps for tightness.

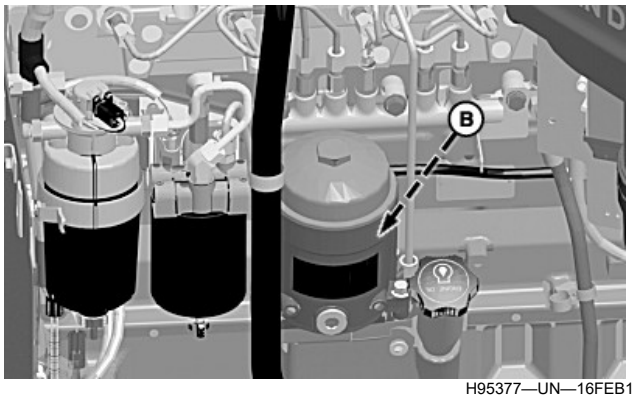
OUO6075,0004DAB-19-18FEB20

Break-In is a trademark of Deere & Company

Break-In Service After 100 Hours (Tier 2/ Stage II)

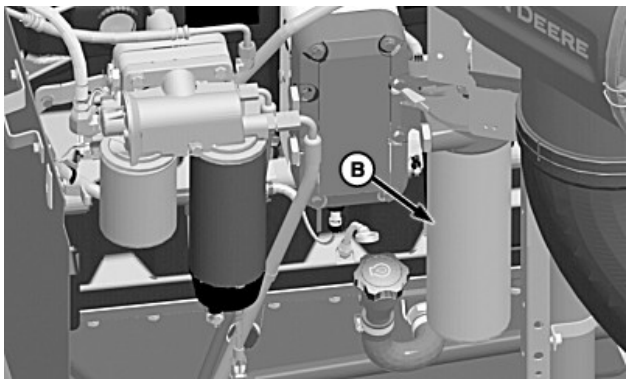


H81205—UN—15JUN04



H95377—UN—16FEB10

Style A



H95420—UN—09MAR10

Style B

A—Drain
B—Oil Filter

Drain crankcase oil by opening drain (A) and close drain once oil is drained.

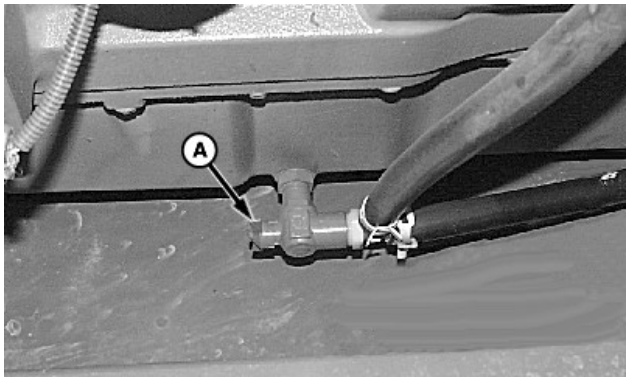
Remove and retain cap and dispose of the oil filter (B) properly.

Install oil filter and retain with cap.

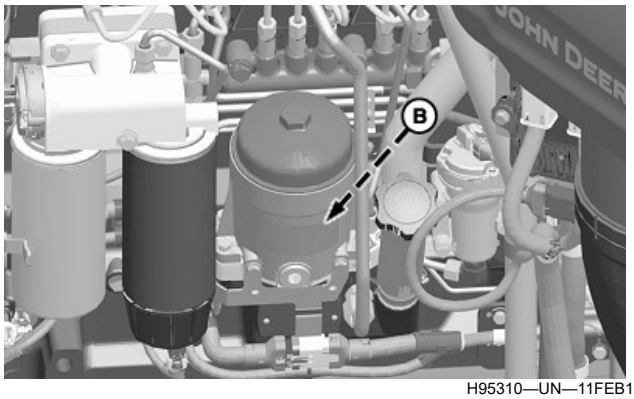
Fill crankcase with the proper amount of engine oil. See Fuel and Lubricants section for oil recommendations. See Specifications section for oil capacity.

OUO6075,00044D4-19-19DEC16

Break-In Service After 400 Hours (Final Tier 4/Stage V)

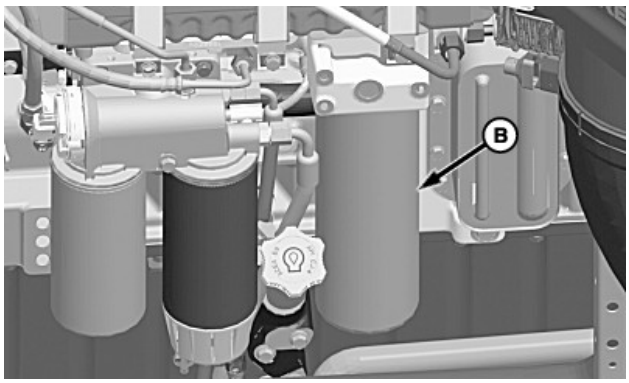


H81205—UN—15JUN04



H95310—UN—11FEB10

Style A



H95397—UN—17FEB10

Style B

A—Drain
B—Oil Filter

Drain crankcase oil by opening drain (A) and close drain once oil is drained.

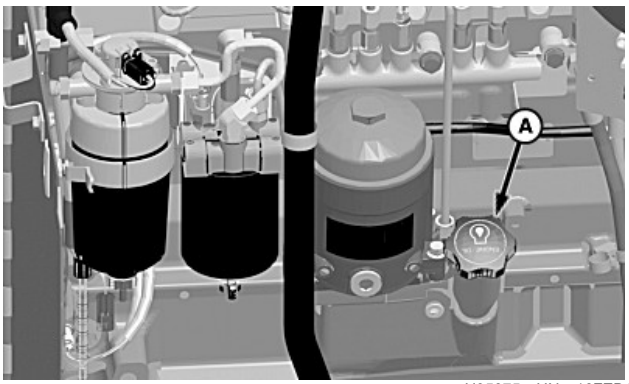
Remove and retain cap and dispose of the oil filter (B) properly.

Install oil filter and retain with cap.

Fill crankcase with the proper amount of engine oil. See Fuel and Lubricants section for oil recommendations. See Specifications section for oil capacity.

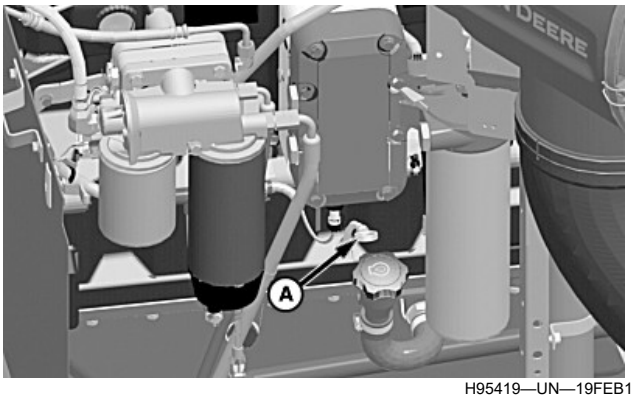
OUO6075,00047D7-19-10NOV17

Engine Oil Level



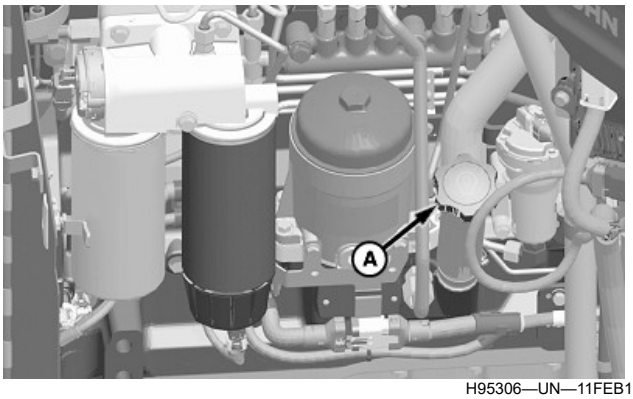
H95375—UN—16FEB10

Tier 2/Stage II (Style A)



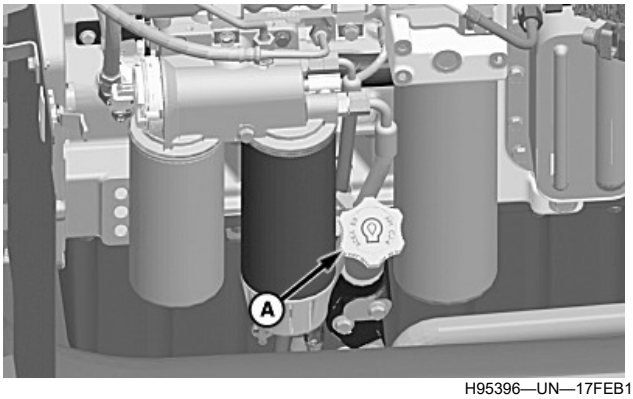
H95419—UN—19FEB10

Tier 2/Stage II (Style B)



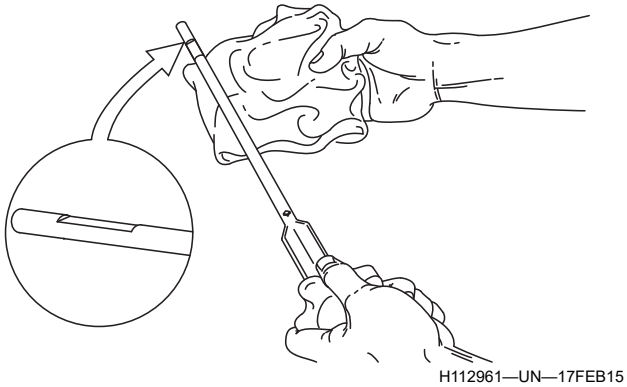
H95306—UN—11FEB10

Final Tier 4/Stage V (Style A)



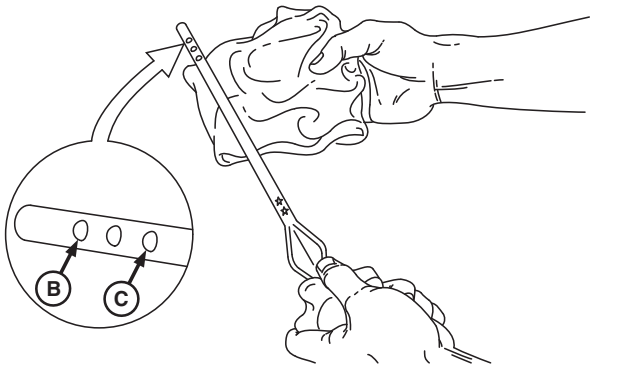
H95396—UN—17FEB10

Final Tier 4/Stage V (Style B)



H112961—UN—17FEB15

Tier 2/Stage II



H113142—UN—11MAR15

Final Tier 4/Stage V

A—Dipstick
B—ADD Mark
C—FULL Mark

IMPORTANT: It is vital to maintain engine oil at correct levels to ensure a long service life. Check oil level with the machine parked on level ground.

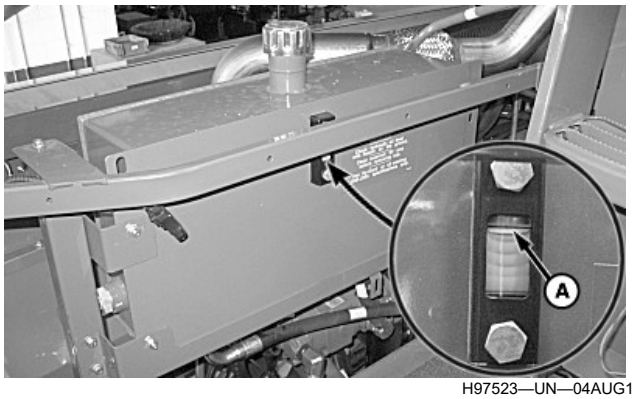
NOTE: Verify that dipstick is screwed or pushed completely into housing before removing to check oil level.

Check engine oil level with dipstick (A) daily. Do not operate engine when oil level is below "ADD" mark on dipstick.

Remove dipstick and check oil level. Oil level should be between "ADD" and top of cross-hatch area on dipstick. If oil level is below "ADD" mark, add oil as needed. See Fuel and Lubricants section for oil recommendations.

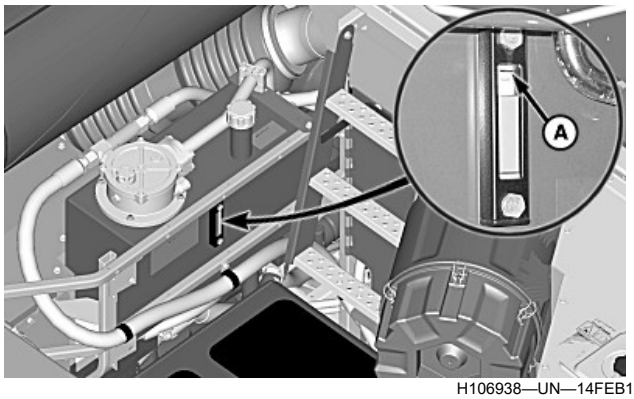
OUO6075,00047DB-19-13NOV17

Hydrostatic/Hydraulic Oil Level



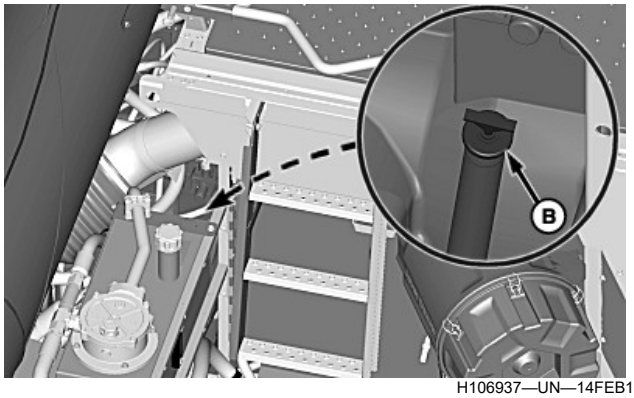
H97523—UN—04AUG10

Style A



H106938—UN—14FEB13

Style B



H106937—UN—14FEB13

Hydraulic Oil Level (Engine Gear Case)

A—Sight Glass
B—Dipstick

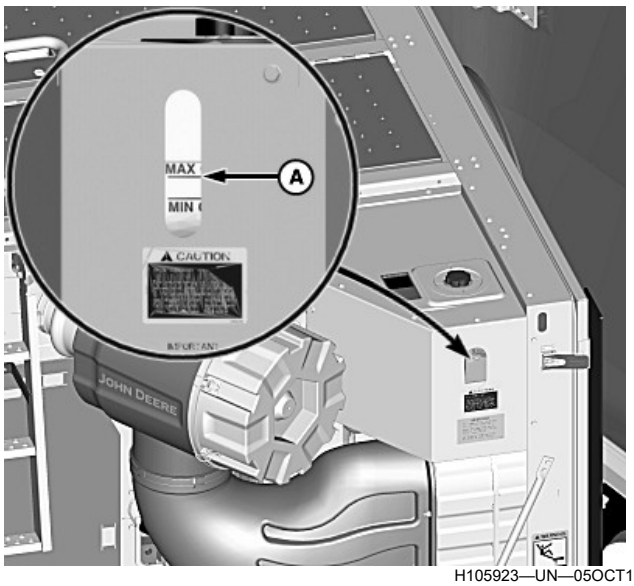
Check hydrostatic/hydraulic oil level with header on ground and all cylinders retracted. Oil level must be at top of sight glass (A) with the feeder house fully lowered. Add oil as needed, but do not overfill.

Shut OFF engine, set park brake and remove key before checking hydraulic oil at the engine gear case. Oil must not be below “ADD” mark on dipstick (B).

NOTE: On machines with ProDrive™ transmission, run the engine at slow speed for few minutes before checking the oil level.

OUO6075,00049D2-19-07JUN18

Coolant Level



H105923—UN—05OCT12

A—Max Cold Line

CAUTION: Shut OFF engine, set park brake and remove key. Avoid being scalded when opening surge tank cap. Never open cap when engine is hot. Open cap slowly to relieve pressure.

IMPORTANT: A special cap is used on the surge tank. If cap is damaged or missing, it must be replaced by an equivalent cap.

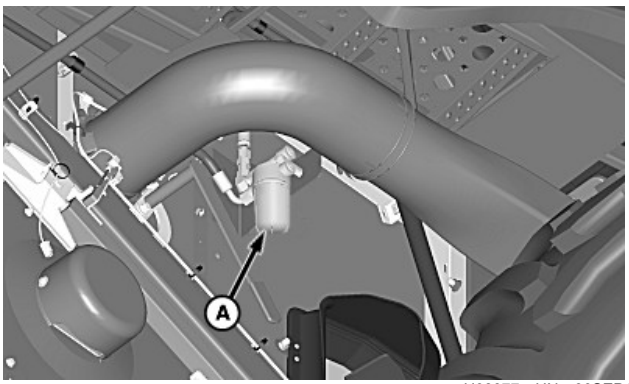
Allow engine to cool. Coolant level in the surge tank should be at "Max Cold" line (A).

NOTE: Coolant level must be between "Max Cold" and "Min Cold" lines. Add coolant as needed if coolant is below "Min Cold" line.

OUO6075,00041CB-19-11APR16

ProDrive is a trademark of Deere & Company

Fuel System



H98377—UN—30SEP10

Fuel Precleaner Bowl

A—Precleaner Bowl

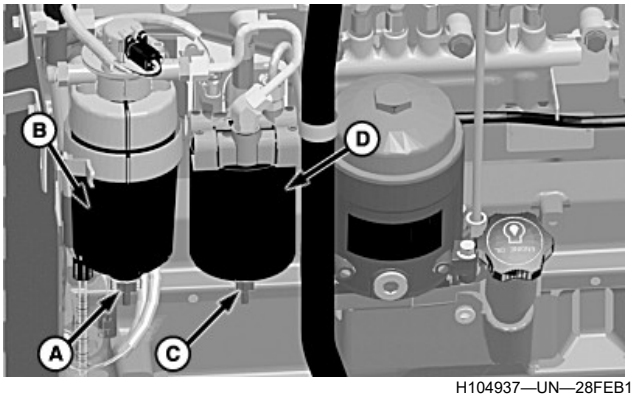
⚠ CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work on fuel filters.

NOTE: Make sure that precleaner bowl is fully seated to prevent air from entering the fuel system.

Close fuel shutoff valve on the fuel tank.

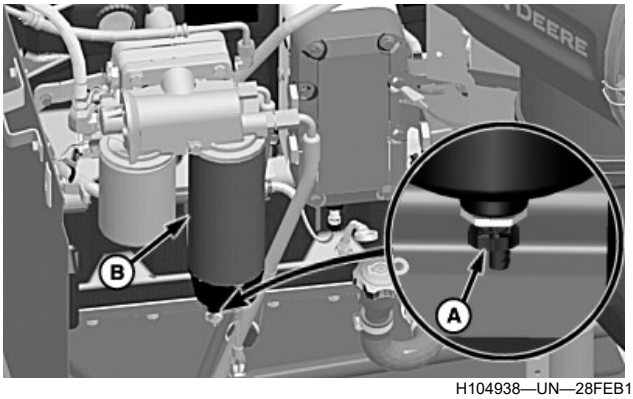
Remove precleaner bowl (A) and clean screen if dirty fuel was used.

Tier 2/Stage II



H104937—UN—28FEB12

Style A



H104938—UN—28FEB12

Style B

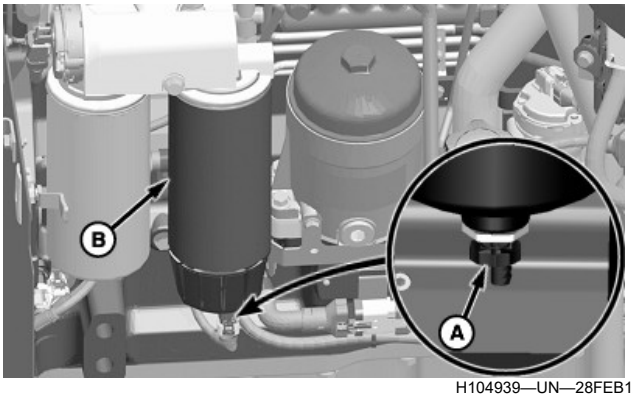
A—Drain
B—Primary Fuel Filter
C—Drain
D—Secondary Fuel Filter

Open drain (A) to inspect the fuel system for water in the primary filter (B).

Style A Only: Open drain (C) to inspect fuel system for water in the secondary filter (D).

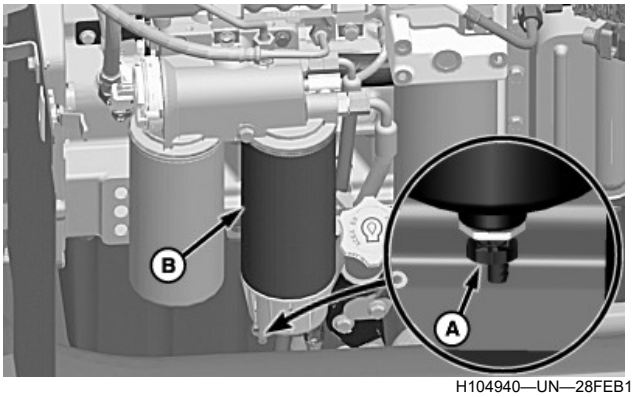
If the problem persists, change fuel filters. See Maintenance—As Required (Engine Fluids and Filters) section for further information.

Final Tier 4/Stage V



H104939—UN—28FEB12

Style A



H104940—UN—28FEB12

Style B

A—Drain

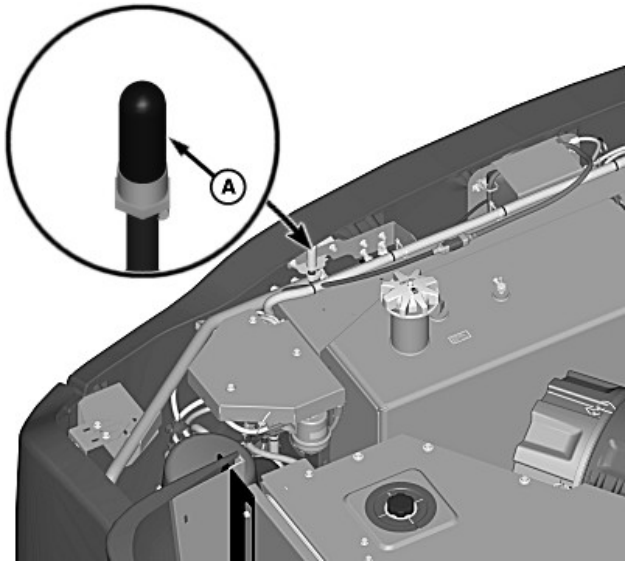
B—Primary Fuel Filter

Open drain (A) to inspect the fuel system for water in the primary filter (B).

If the problem persists, change fuel filters. See Maintenance—As Required (Engine Fluids and Filters) section for further information.

OUO6075,00047DC-19-13NOV17

Fuel Tank Breather



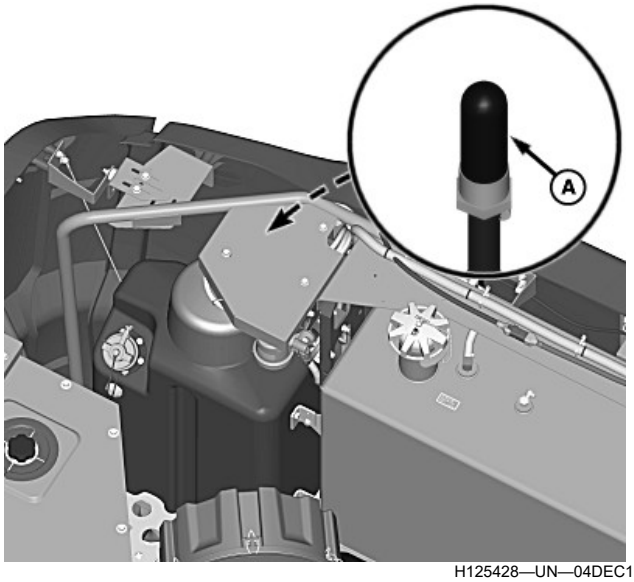
H125427—UN—04DEC18

A—Fuel Tank Breather

Visually inspect fuel tank breather (A) weekly. Do not allow excessive amounts of chaff or debris to collect on breather. If the breather is covered with debris, it does not allow fuel tank to breathe. Remove fuel tank breather from hose and clean.

OUO6075,0004A5B-19-04DEC18

Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V)



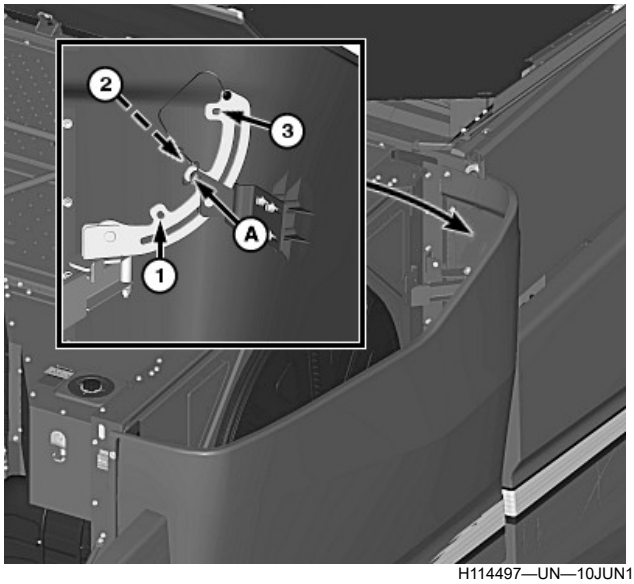
H125428—UN—04DEC18

A—Diesel Exhaust Fluid (DEF) Tank Breather

Visually inspect Diesel Exhaust Fluid (DEF) tank breather (A) weekly. Do not allow excessive amounts of chaff or debris to collect on breather. If the breather is covered with debris, it does not allow tank to breathe. Remove breather from hose and clean.

OUO6075,0004A5C-19-04DEC18

Engine Air Scoop Positions



H114497—UN—10JUN15

A—Lock-Out Pin
1—Transport Position
2—Standard Field Position
3—Extended Field Position

NOTE: Before field operations, verify that engine air scoop is moved to selected field position.

Remove lock-out pin (A) and rotate engine air scoop to desired position.

Transport Position:

IMPORTANT: Engine air scoop must be placed into transport position when local roadway restrictions apply. Follow your local country regulations.

Verify that engine air scoop is moved to transport position (1) when machine must be transported.

Refer to Position Engine Air Scoop (Transport Position) in this section for further information.

Standard Field Position:

IMPORTANT: Engine air scoop must be placed into standard field position when harvesting to prevent overheating of engine.

Verify that engine air scoop is in standard field position (2) when operating in normal field conditions.

Refer to Position Engine Air Scoop (Standard Field Position) in this section for further information.

Extended Field Position:

IMPORTANT: Engine air scoop must be placed into extended field position when harvesting in high ambient temperature conditions and/or high altitude areas to prevent overheating of engine.

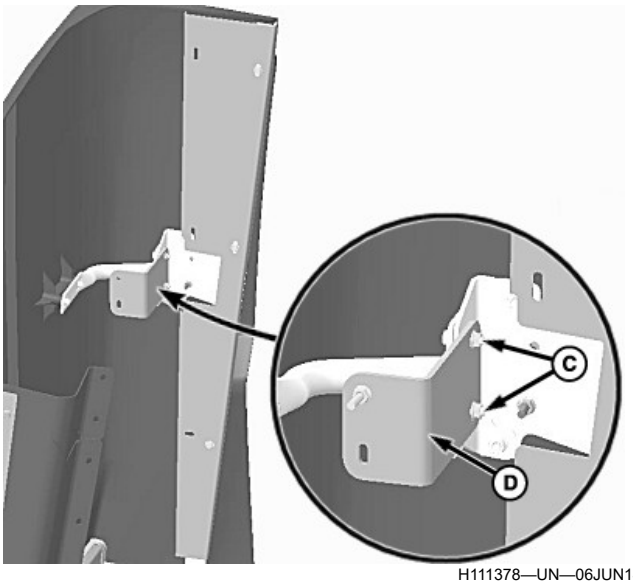
Verify that engine air scoop is in extended field position (3) for increased cooling capacity when harvesting in high ambient temperature conditions and/or high altitude areas.

Refer to Position Engine Air Scoop (Extended Field Position) in this section for further information.

SS43267,000061F-19-10JUN15

Position Engine Air Scoop (Standard Field Position)

H114498—UN—10JUN15



H111378—UN—06JUN14

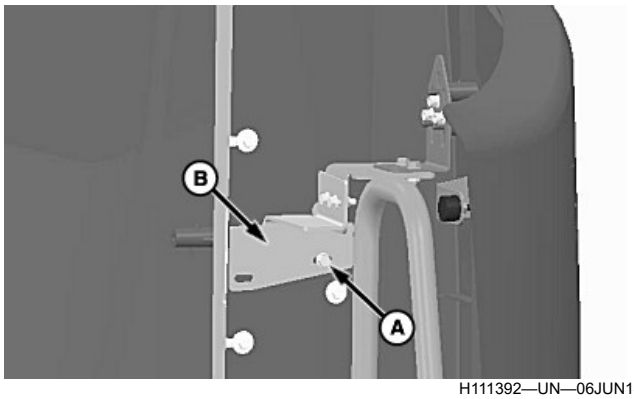
Transport Position

A—Lock-Out Pin
B—Holes
C—Nuts, M8 (2 used)
D—Bracket

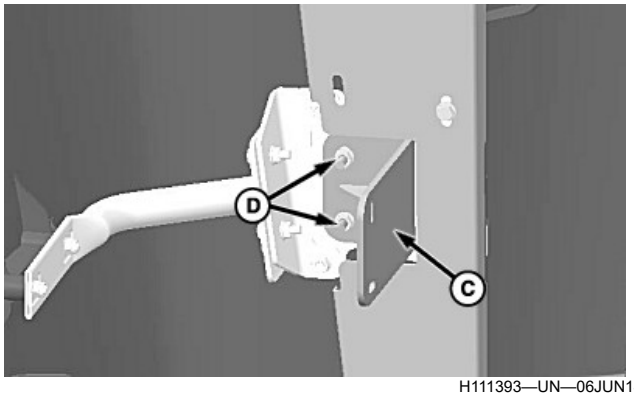
IMPORTANT: Engine air scoop must be placed into standard field position when harvesting to prevent overheating of engine.

1. Remove lock-out pin (A) and move air scoop outward until holes (B) align.
2. Install previously removed lock-out pin.
3. Remove nuts (C) and bracket (D).

4. Install previously removed nuts back onto cap screws.



H111392—UN—06JUN14



H111393—UN—06JUN14

Standard Field Position

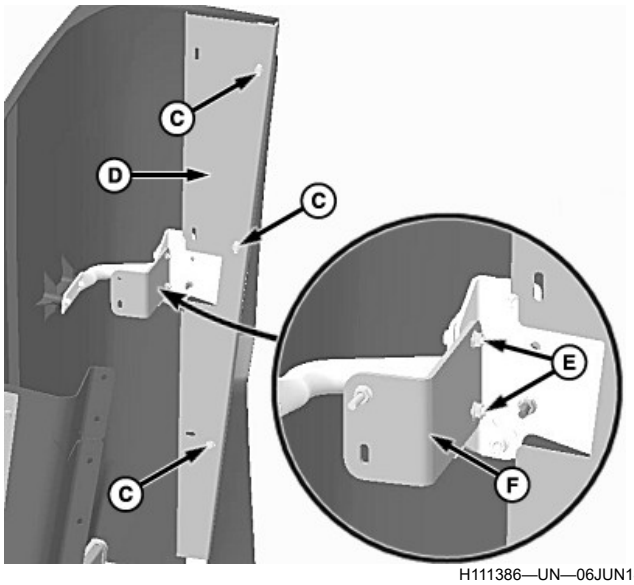
A—Cap Screw, M8 x 40
B—Bracket
C—Bracket
D—Nuts, M8 (2 used)

5. Move air scoop outward and install cap screw (A) through bracket (B) as shown.
6. Install bracket (C) as shown and retain with nuts (D).

SS43267,0000620-19-10JUN15

Position Engine Air Scoop (Extended Field Position)

H114499—UN—10JUN15



H111386—UN—06JUN14

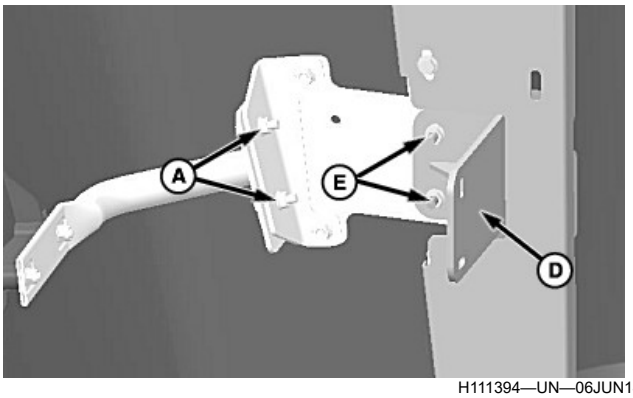
Transport Position

A—Lock-Out Pin
B—Holes
C—Cap Screws, M8 x 25 (3 used)
D—Panel
E—Nut, M8 (2 used)
F—Bracket

IMPORTANT: Engine air scoop must be placed into extended field position when harvesting in high ambient temperature conditions and/or high altitude areas to prevent overheating of engine.

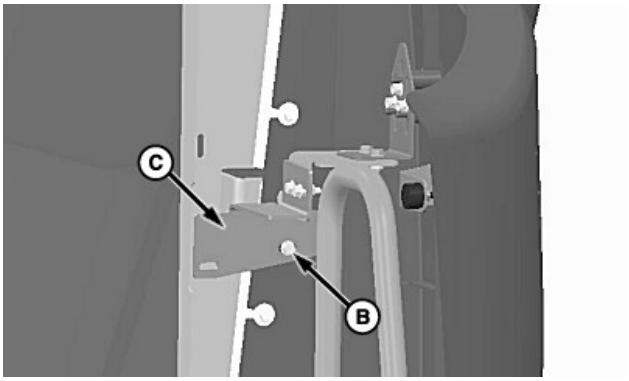
1. Remove lock-out pin (A) and move air scoop outward until hole (B) align.

2. Install previously removed lock-out pin.
3. Remove and retain cap screws (C) from panel (D).
4. Remove nuts (E) and bracket (F).



H111394—UN—06JUN14

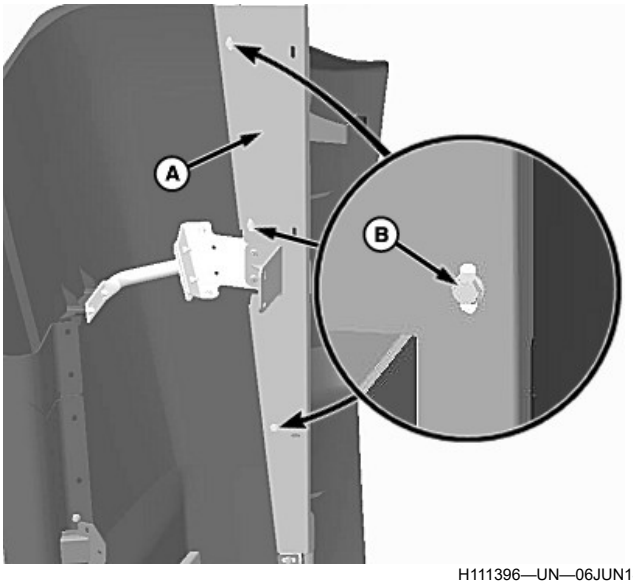
Extended Field Position



H111395—UN—06JUN14

A—Nuts, M8 (2 used)
B—Cap Screws, M8 x 40 (2 used)
C—Bracket
D—Bracket
E—Nuts, M8 (2 used)

5. Install previously removed nuts (A) onto cap screws.
6. Move air scoop outward and install cap screw (B) through bracket (C) as shown.
7. Install bracket (D) as shown and retain with nuts (E).



H111396—UN—06JUN14

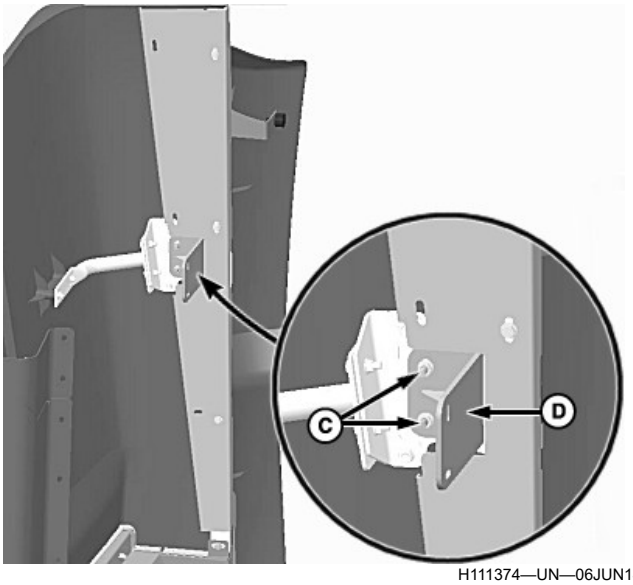
A—Panel
B—Cap Screws, M8 x 25 (3 used)

8. Install previously removed panel (A) and retain with cap screws (B).

SS43267,0000621-19-10JUN15

Position Engine Air Scoop (Transport Position)

H114500—UN—10JUN15



H111374—UN—06JUN14

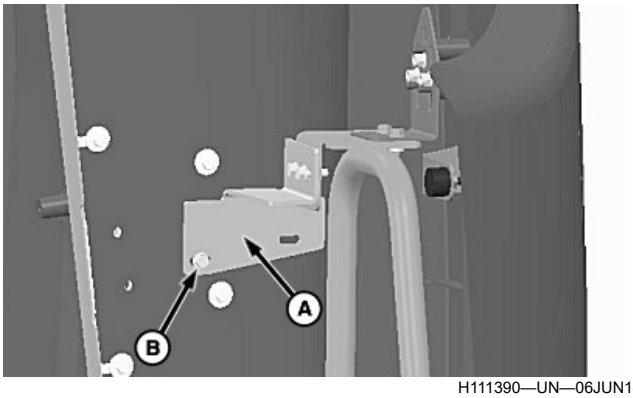
Standard Field Position

A—Lock-Out Pin
B—Holes
C—Cap Screws, M8 x 40 and Nuts, M8 (2 used)
D—Bracket

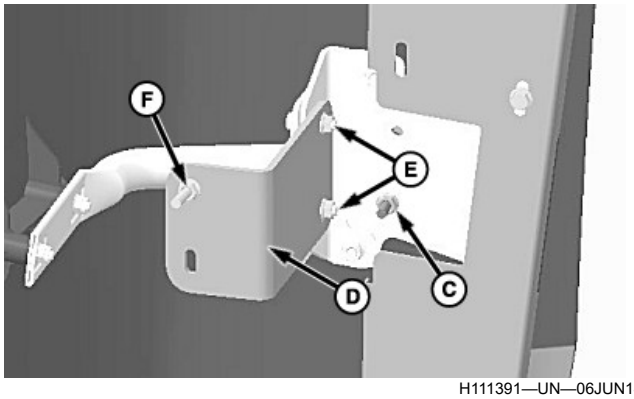
IMPORTANT: Engine air scoop must be placed into transport position when local roadway restrictions apply. Follow your local country regulations.

NOTE: Before field operations, engine air scoop must be moved to selected field position.

1. Remove lock-out pin (A) and move air scoop inward until holes (B) align.
2. Install previously removed lock-out pin.
3. Remove and retain cap screws and nuts (C) and bracket (D).



H111390—UN—06JUN14



H111391—UN—06JUN14

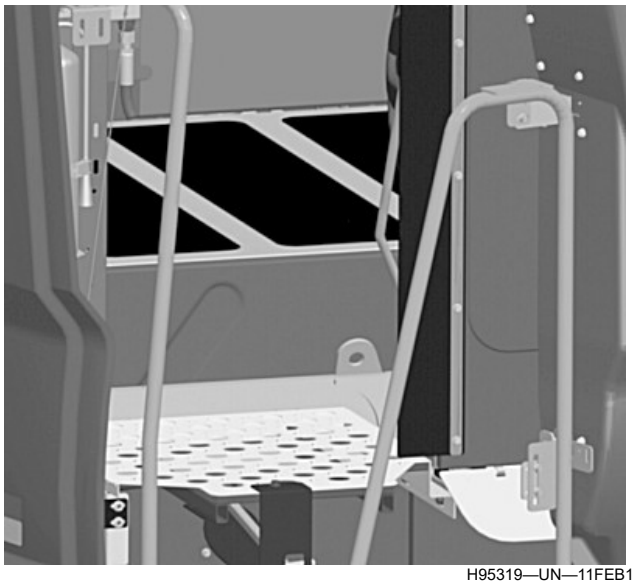
Transport Position

A—Bracket
B—Cap Screw, M8 x 40
C—Nut, M8
D—Bracket
E—Nuts, M8 (2 used)
F—Cap Screw, M8 x 40 and Nut, M8

4. Move air scoop inward and install cap screw through bracket (A) as shown and retain with nut (C).
5. Install previously removed bracket (D) and retain with nuts (E).
6. Install previously removed cap screw and nut (F) on bracket as shown.

SS43267,0000622-19-10JUN15

Cleaning Engine Compartment



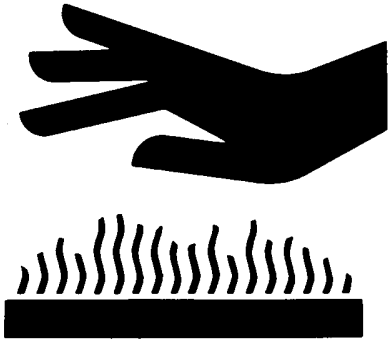
H95319—UN—11FEB10

CAUTION: Do not clean engine or engine compartment with engine running. Dirt, oil, chaff, and crop debris in engine compartment and on engine is a fire hazard. Direction of wind, type of crop and its moisture content can all have an effect on where and how much chaff and debris accumulate. Check and clean this area frequently.

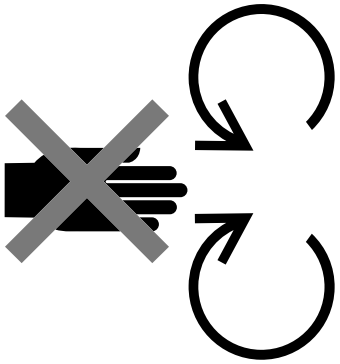
OUO6075,0000575-19-17MAR10

Clean Exhaust Filter Safely

TS227—UN—15APR13



TS271—UN—23AUG88



TS1693—UN—09DEC09

During exhaust filter cleaning operations, the engine may run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite or melt common materials.

Keep machine away from people, animals, or structures which may be susceptible to harm or damage from hot exhaust gases or components. Avoid potential fire or explosion hazards from flammable materials and vapors near the exhaust. Keep exhaust outlet away from people and anything that can melt, burn, or explode.

Closely monitor machine and surrounding area for smoldering debris during and after exhaust filter cleaning.

Adding fuel while an engine is running can create a fire or explosion hazard. Always stop engine before refueling machine and clean up any spilled fuel.

Always make sure that engine is stopped while hauling machine on a truck or trailer.

Contact with exhaust components while still hot can result in serious personal injury.

Avoid contact with these components until cooled to safe temperatures.

If service procedure requires engine to be running:

- Only engage power-driven parts required by service procedure
- Ensure that other people are clear of operator station and machine

Keep hands, feet, and clothing away from power-driven parts.

Always disable movement (neutral), set the parking brake or mechanism and disconnect power to attachments or tools before leaving the operator's station.

Shut off engine and remove key (if equipped) before leaving the machine unattended.

OUO6075,0000E81-19-07FEB12

Avoid Hot Exhaust

RG17488—UN—21AUG09

Servicing machine or attachments with engine running can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

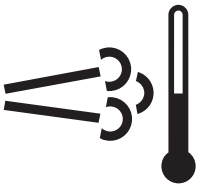
Exhaust parts and streams become very hot during operation. Exhaust gases and components reach temperatures hot enough to burn people, ignite, or melt common materials.

DX,EXHAUST-19-20AUG09

Aftertreatment Indicators Overview

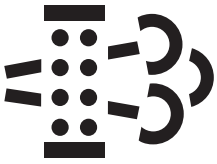
RG22487—UN—21AUG13

Diesel Exhaust Fluid Indicator



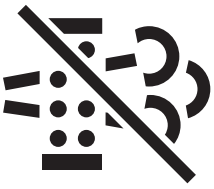
RG22488—UN—21AUG13

Engine Emissions Temperature Indicator



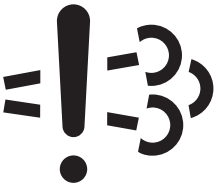
RG22489—UN—21AUG13

Exhaust Filter Indicator



RG22490—UN—21AUG13

Auto Cleaning Disabled Indicator



RG22491—UN—21AUG13

Engine Emissions System Malfunction Indicator

RG22492—UN—21AUG13

Warning Indicator

RG22493—UN—21AUG13

Engine Stop Indicator

IMPORTANT: The operator will be informed by the operator warning system when the emission control system does not function correctly and/or an engine malfunction is detected by the engine control unit. Ignoring the operator warning signals will lead to an emission related derate, resulting in an effective disablement of non-road mobile machinery operation.

It is essential to take prompt action to rectify any incorrect operation, use or maintenance of the emissions control system in accordance with the rectification measures indicated by the warnings referenced below.

The Diesel Exhaust Fluid (DEF) indicator illuminates when the DEF is low. Fill DEF tank.

When the DEF indicator is combined with the warning indicator or engine stop indicator engine performance is reduced by the Engine Control Unit (ECU) because the DEF is below a measurable level. Fill DEF tank.

When engine emissions temperature indicator illuminates exhaust gas temperature is high, elevated idle is active, or exhaust filter cleaning is in process. The machine can be operated as normal unless the operator determines the machine is not in a safe location for high exhaust temperatures and disables auto cleaning.

When engine emissions temperature indicator is combined with the warning indicator or engine stop indicator engine performance is reduced by the ECU because the exhaust gas temperature is higher than expected. Follow Diagnostic Trouble Code (DTC) procedure or see your authorized servicing dealer.

When the exhaust filter indicator illuminates the exhaust filter cleaning is in process, aftertreatment system has a fault, or the exhaust filter is in need of cleaning and the operator has disabled auto exhaust filter cleaning. If conditions are safe, the operator should enable the auto exhaust filter clean setting or perform manual service regeneration or follow DTC procedure.

When the exhaust filter indicator is combined with the warning indicator engine performance is reduced by the ECU because there is an aftertreatment system fault or the soot level of the exhaust filter is moderately high. If conditions are safe, the operator should enable the auto exhaust filter clean function. If conditions are not safe, the operator should move the machine to a safe location and engage the auto exhaust filter cleaning mode.

Perform manual service regeneration or follow DTC procedure.

When the exhaust filter indicator is combined with the engine stop indicator engine performance is further reduced by the ECU because there is an aftertreatment system fault or the soot level of the exhaust filter is extremely high. If this combination is present, see your authorized servicing dealer.

The auto cleaning disabled indicator illuminates when the operator has engaged the request to disable the auto exhaust filter cleaning function. This icon remains illuminated until the operator re-engages automatic exhaust filter cleaning from the diagnostic gauge. Disabling auto mode is not recommended for any situation unless it is safety-related or if the fuel tank lacks the required fuel to complete the cleaning process.

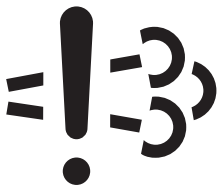
The engine emissions system malfunction indicator illuminates when engine emissions are outside of normal operating range or engine emissions system fault. Follow DTC procedure or see your authorized servicing dealer.

When the engine emissions system malfunction indicator is combined with the warning indicator engine performance is reduced by the ECU because the engine emissions are outside of normal operating range or engine emissions system fault. Follow DTC procedure or see your authorized servicing dealer.

DX,AFTRTREAT,INDCATRS-19-12FEB18

Required Machine Stop Warning

Machine Stop Mandate Occurs



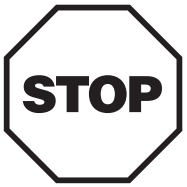
RG22491—UN—21AUG13

IMPORTANT: In some situations, machine engine power may be reduced as described. On notification, immediately place the machine in a safe state and or move it to a safe location. A mandated machine stop can only be removed by a service technician.

Engine Emissions System Malfunction Indicator illuminates when an emission-related fault occurs.

RG22492—UN—21AUG13

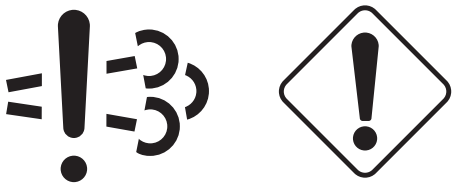
Warning Indicator illuminates when a condition exists which requires operator action.



RG22493—UN—21AUG13

Engine Stop Indicator illuminates when a condition exists which requires immediate operator action and service.

Emission System Fault Has Occurred



RG26361—UN—04SEP14

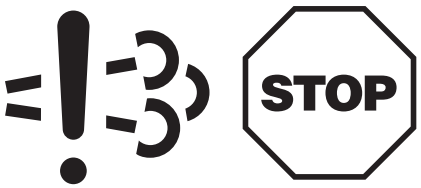
30 minutes remaining, Engine Emissions System Malfunction and Warning Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. “Less than 30 minutes to Power Restriction” displayed on machines with display.

- Engine power is normal.
- Machine operation is normal.
- Place machine in a safe state.
- Contact service provider.

RG26972—UN—26MAR15

20 minutes remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. “Less than 20 minutes to Power Restriction” displayed on machines with displays.

- Engine power and torque are reduced.
- Key Off - Key On will temporarily provide full power.
- Place machine in a safe state.
- Contact service provider.



RG26972—UN—26MAR15

2 minutes or less remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault which has not been corrected. “Power Restriction” displayed on machines with displays.

- Engine power is idle only.
- Place machine in a safe state.
- Contact service provider.

DX,MACHSTOPWARN,AG-19-02OCT15

Object Detection Sensor (Final Tier 4/Stage V)

H106571—UN—16JAN13

A—Sensor

NOTE: Verify that sensor is not obstructed and is not covered with mud or crop debris.

Sensor (A) located on rear composite panel verifies that objects are more than 2 m (6.5 ft.) away from exhaust plume (elevated exhaust gas temperatures) during the exhaust filter cleaning process. If sensor detects that objects are closer than 2 m (6.5 ft.), system will stop the exhaust filter cleaning process.

OUO6075,00047DD-19-13NOV17

Starting the Engine

H119917—UN—02NOV16

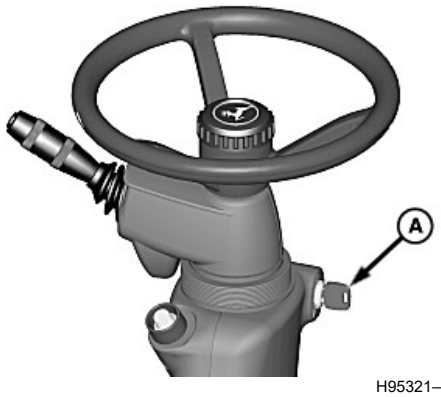
A—Multi-Function Lever
B—Header Engage Switch
C—Separator Engage Switch

CAUTION: Before starting engine, make sure that everyone is clear of machine. Sound horn to warn others.

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove exhaust fumes from area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open doors and get outside air into area.

1. Move multi-function lever (A) to neutral position.
2. Verify that header engage switch (B) and separator engage switch (C) are OFF.



H95321—UN—02NOV10

A—Key Switch

CAUTION: Sound horn before starting engine to warn others to stay clear from machine.

To avoid the possibility of personal injury or death, start engine ONLY from the operator seat. Do not start engine by shorting across starter terminals. Machine starts in gear if bypassed.

IMPORTANT: To prevent starter damage, do not operate starter for more than 30 seconds at a time. If engine does not start, wait at least 2 minutes before trying again.

NOTE: If temperature is below -5°C (23°F) it may be necessary to use cold weather starting aid. See Cold Weather Starting Aid in Operating the Engine section in the Operator's Manual.

When the key switch is turned to START, a delay of a couple of seconds will occur. This allows control units to power up, relays to close, and starter solenoid to energize.

Decal under the storage box lid on the armrest shows engine starting information.

3. Sound horn and turn key switch (A) on the steering column to START position.

   Key positions are:

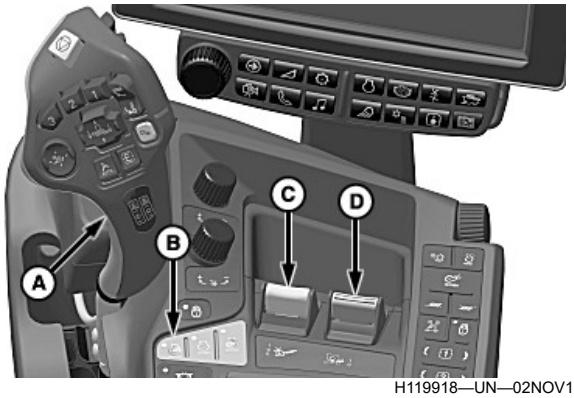
First Position	Accessories
Second Position	OFF
Third Position	Run
Fourth Position	Start

NOTE: Diagnostic Trouble Codes (DTC) displays if Stop Engine Code appears on display. Display stops normal functions, indicating a problem that requires the machine to be stopped and the problem corrected immediately. Codes are displayed until the problem is resolved. If the problem cannot be resolved, see your John Deere dealer.

4. Release key after engine starts and let engine run at slow speed for 5 minutes to warm oil.

OUO6075,0004930-19-07JUN18

Stopping the Engine



H119918—UN—02NOV16

A—Multi-Function Lever
B—Slow Speed Engine Switch
C—Header Engage Switch
D—Separator Engage Switch

1. Lower header or reel completely to ground.
2. Move multi-function lever (A) to neutral position.
3. Press slow speed engine switch (B).
4. Shut OFF header engage switch (C) and separator engage switch (D).

IMPORTANT: Cooling of turbocharger and some engine parts is provided by engine oil. Stopping a hot engine might cause damage to these parts.

5. Before stopping an engine that was operating at working load, idle engine 2—3 minutes to allow turbocharger to cool.

CAUTION: Set park brake and remove key before leaving machine.

6. Turn the key switch to the OFF position.

IMPORTANT: Final Tier 4/Stage V: Do not disconnect battery for at least 90 seconds after machine is shut OFF. Selective Catalyst Reduction (SCR) system automatically purges lines of Diesel Exhaust Fluid (DEF) during this time, immediately after machine is shut OFF. If adequate time is not allowed for lines to be purged, any fluid remaining in lines can crystallize and plug lines. In freezing weather, fluid freezes and possibly burst lines.

OUO6075,0004931-19-07JUN18

Engine Speed Management (ProDrive™ Machines)

NOTE: Engine speed management is software-controlled and activated with the road transport disconnect switch.

Engine speed management reduces fuel consumption and increases fuel efficiency.

- Fuel consumption is reduced in low load conditions with a reduction in engine speed.
- Maintain high load capabilities by dynamically increasing engine speed when needed.
- Ground speed is maintained during engine speed changes through varying hydrostatic displacements.
- Engine speed stays at low idle when machine is not moving.
- Engine speed is approximately 1600 rpm when machine is on flat ground or with low ground speeds.
- Engine speed changes between approximately 1600 rpm and maximum high idle depending on the engine load.

- Low Engine Speed - engine speed stays at 1200 rpm.
- Medium Engine Speed - engine speed will not exceed 1690 rpm.
- High Engine Speed - engine speed changes between approximately 1600 rpm and maximum high idle.

OUO6075,00046F3-19-30MAR17

Handle Starting Fluid Safely

TS1356—UN—18MAR92

CAUTION: Starting fluid is highly flammable. DO NOT use near fire, sparks, or flames. Read CAUTION information on container. Protect container against damage. DO NOT carry extra or empty cans inside cab.

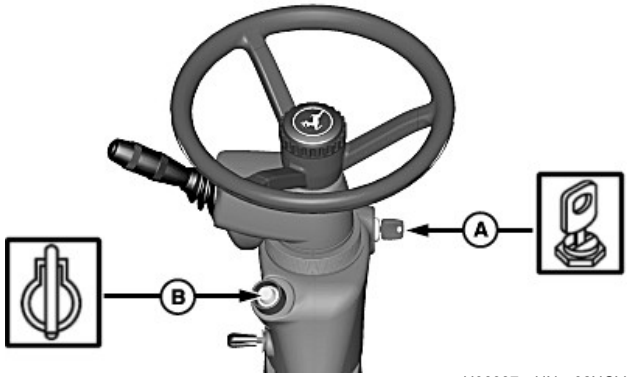
If starting fluid is not used for several days, remove can. Check fluid and valve operation by reinstalling and depressing spray nozzle. If no fluid is emitted, use a new can.

To prevent accidental discharge when storing the pressurized can, keep cap on container. Store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.

OUO6075,0000585-19-17MAY10

Cold Weather Starting Aid (If Equipped)



H96387—UN—02NOV10

A—Key Switch
B—Starting Aid Button

CAUTION: Avoid personal injury and damage to the engine. Inject fluid only while engine is turning.

Starting aid only works in "Run" or "Start" positions.

Turn key switch (A) to start engine. When engine starts to turn over, press starting aid button (B).

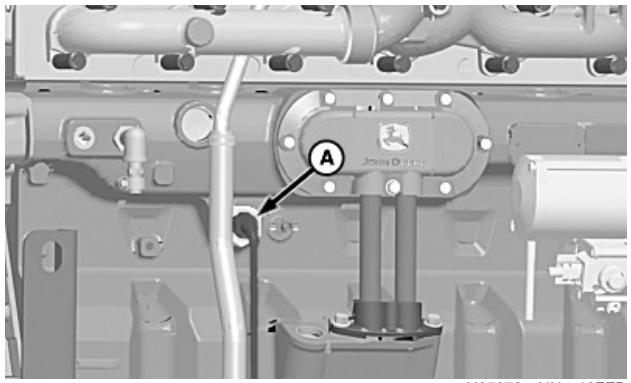
When engine starts, release key, and starting aid button.

If temperature is below -5°C (23°F), hold starting aid button down for 2—3 seconds after engine starts. Repeat procedure until engine runs without faltering.

IMPORTANT: To assure proper lubrication, operate engine at slow speed, with no load for 1—2 minutes. Extend this period to 2—4 minutes when operating at temperatures below freezing.

OUO6075,0004932-19-07JUN18

Coolant Heater

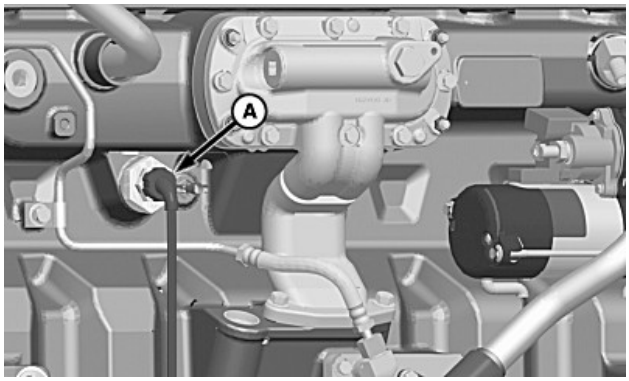


H95379—UN—16FEB10

Tier 2/Stage II (Style A) (Front Side)

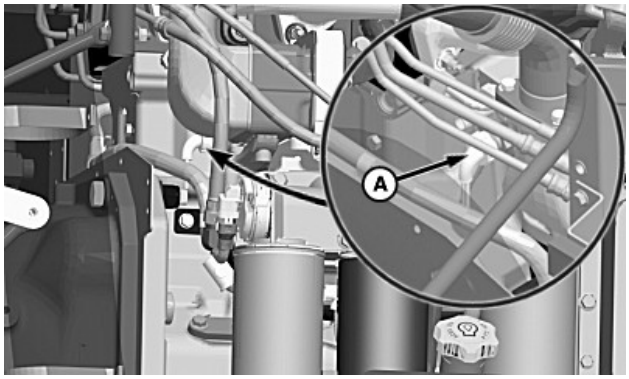
H71689—UN—18APR02

Tier 2/Stage II (Style B) (Rear Side)



H95324—UN—11FEB10

Final Tier 4/Stage V (Style A) (Front Side)



H95424—UN—19FEB10

Final Tier 4/Stage V (Style B) (Rear Side)

TS210—UN—23AUG88

A—Coolant Heater

CAUTION: To avoid shock or hazardous operation, always use a three wire heavy-duty electrical cord (minimum gauge 10 AWG and no longer than 7.6 m (25 ft)) equipped with three connectors. If a two to three contact adapter is used at the wall receptacle, always connect green wire to a good ground.

Before connecting heater to the power source, be sure that element is immersed in coolant. NEVER energize the heater in the air. Doing so can cause the element sheath to burst causing personal injury.

Coolant heater (A) mounts in freeze plug opening (front side or rear side of engine). By warming engine coolant, the heater reduces oil drag, eases starting, and shortens warm up time.

Coolant Heater Types

- 1000 W (110 V)
- 1000 W (220 V) (Export Machines)

OUO6075,00047E0-19-13NOV17

CommandCenter™ Display Information

Generation 4 Display

For additional information on Generation 4 Display hardware and software functionality, reference the Generation 4 Display Operator's Manual and the Help Center application on the display. To obtain a copy of the Operator's Manual, contact your dealer, use the Help Center application on the display, or visit techpubs.deere.com.

DX,PC,DISPLAY,REFERENCE-19-21MAY20

CommandCenter™ Display Applications

The following information contains the on-screen help for each application specific to this machine. This information is also available on the display.

CommandCenter is a trademark of Deere & Company

VM03385,0000137-19-15NOV16

Access Controls Setup

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H118152—UN—20JAN17

Controls Setup

3. Controls Setup

Access Application Through Navigation Bar:

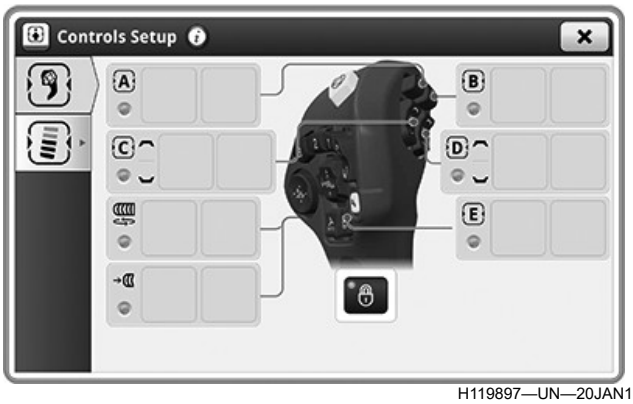
H118151—UN—20JAN17

Controls Setup Application Button

Press Controls Setup button on navigation bar below display.

N0LMWLO,0000326-19-16JUL20

Controls Setup Overview



H119897—UN—20JAN17

Controls Setup

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Controls Setup application is used to make new assignments or access custom presets that you previously configured on the Multi-Function Lever or the CommandARM™ .

NOTE: Controls Setup contains no default assignments; the Multi-Function Lever and CommandARM™ reset to a locked state upon key cycle.

NOTE: Display must be booted in order for you to disengage the Control Group locks for function assignment. Control Group refers to the reconfigurable buttons on both the Multi-Function Lever and CommandARM™.

Alignment Tabs Available in the Controls Setup Application:

H118141—UN—20JAN17

Multi-Function Lever Tab

Multi-Function Lever— select to access the Multi-Function Lever presets.

H118139—UN—20JAN17

CommandARM™ Tab

CommandARM™— select to access the CommandARM™ presets.

H118169—UN—20JAN17

Highlighted Tab

Highlighted tab— indicates which preset is selected.

NOTE: The on-screen Lock Indicator is illuminated whenever the displayed control group is locked with the Control Group Lock button on the CommandARM™. Applications or Functions setup will not operate.

CommandARM is a trademark of Deere & Company

H118140—UN—20JAN17

Lock Indicator

Lock Indicator— illuminates to indicate that the Control Group Lock button is locked.

H116648—UN—19DEC16

Close

Select to close the Controls Setup application.

N0LMWLO,0000327-19-16JUL20

Multi-Function Lever - Controls Setup

Multi-Function Lever Controls Setup is used to assign Applications and Functions to buttons on the Multi-Function Lever.

Items Accessible on the Multi-Function Lever Controls Setup Page:

H118141—UN—20JAN17

Multi-Function Lever

Multi-Function Lever— allows you to make assignments to the buttons on the Multi-Function Lever.

H118143—UN—20JAN17

Programmable Button A

H118147—UN—20JAN17

Programmable Button B

H118149—UN—20JAN17

Programmable Button E

Buttons A, B, and E— are used for applications that require you to select from single position assignments.

H118144—UN—20JAN17

Programmable Button C

H118148—UN—20JAN17

Programmable Button D

Buttons C and D— are used for applications that require you to select from multiple positions, to increase or decrease a value, or to make a left-hand or right-hand adjustment.

H118145—UN—20JAN17

Scroll Button

H118146—UN—20JAN17

Scroll Press Button

Scroll Button— is used to select function assignments, increase or decrease a value, or make a left-hand or right-hand adjustment.

H118140—UN—20JAN17

Lock Indicator

Lock Indicator— illuminates to indicate that the Control Group Lock button is locked.

N0LMWLO,0000328-19-16JUL20

Multi-Function Lever

Multi-Function Lever Controls Setup is used to assign Applications and Functions to buttons on the Multi-Function Lever.

Procedure to Modify:

H118141—UN—20JAN17

Multi-Function Lever

Select the Multi-Function Lever assignments tab.

H114656—UN—05JAN17

Active State

NOTE: As you select the Control Group Lock button all previously assigned custom controls are illuminated "Green" to indicate their active state, and the on-screen Lock Indicator is hidden.

H118140—UN—20JAN17

Lock Indicator

NOTE: If there are no custom assignments present, the application does not open upon unlocking the Control Group.

H118143—UN—20JAN17

Programmable Button A

H118147—UN—20JAN17

Programmable Button B

H118149—UN—20JAN17

Programmable Button E

Buttons A, B, and E— are used for applications that require you to select from single position assignments.

NOTE: The on-screen Lock Indicator is present whenever the displayed Control Group is locked with the Control Group Lock button on the CommandARM™. Control Group locks re-engage on key cycle.

H118144—UN—20JAN17

Programmable Button C

H118148—UN—20JAN17

Programmable Button D

Buttons C and D— are used for applications that require you to select from multiple positions, to increase or decrease a value, or to make a left-hand or right-hand adjustment.

H118145—UN—20JAN17

Scroll Button

H118146—UN—20JAN17

Scroll Press Button

NOTE: The Scroll Button bypasses the "Select Application" list, offering a limited and distinct number of functional options.

Scroll Button— is used to select function assignments, increase or decrease a value, or make a left-hand or right-hand adjustment.

NOTE: Assigning functions to either the Scroll Button "roll" or "press" action works the same as other assignments.

H118140—UN—20JAN17

Lock Indicator

Lock Indicator— illuminates to indicate that the Control Group Lock button is locked.

H116648—UN—19DEC16

Close

Select to close the Controls Setup application.

SS43267,0000910-19-16MAY17

CommandARM™ - Controls Setup

CommandARM™ Controls Setup is used to assign Application and Functions to the CommandARM™.

H118139—UN—20JAN17

CommandARM™ Button

Items Accessible on the CommandARM™ Controls Setup Page:

CommandARM™ Button— allows you to make assignments to the buttons on the CommandARM™.

H118159—UN—20JAN17

Programmable Button 1

H118161—UN—20JAN17

Programmable Button 2

Buttons 1 and 2— are used for applications that require you to select from multiple positions, to increase or decrease a value, or to make a left-hand or right-hand adjustment.

H118160—UN—20JAN17

Programmable Button 3

H118162—UN—20JAN17

Programmable Button 4

Buttons 3 and 4— are used for applications that require you to select from single position assignments.

H118140—UN—20JAN17

Lock Indicator

Lock Indicator— illuminates to indicate that the Control Group Lock button is locked.

SS43267,0000911-19-03FEB17

CommandARM is a trademark of Deere & Company

CommandARM™

CommandARM™ Controls Setup is used to assign Application and Functions to the CommandARM™.

Procedure to Modify:

H118139—UN—20JAN17

CommandARM™

Select the CommandARM™ assignments tab.

H114656—UN—05JAN17

Active State

H118140—UN—20JAN17

Lock Indicator

NOTE: When you select the Control Group Lock button, all previously assigned custom controls are illuminated "Green" to indicate their active state, and the on-screen Lock Indicator is hidden.

NOTE: If there are no custom assignments present, the application does not open upon unlocking the control group.

H118159—UN—20JAN17

Programmable Button 1

H118161—UN—20JAN17

Programmable Button 2

Buttons 1 and 2— are used for applications that require you to select from multiple positions, to increase or decrease a value, or to make a left-hand or right-hand adjustment.

H118160—UN—20JAN17

Programmable Button 3

H118162—UN—20JAN17

Programmable Button 4

Buttons 3 and 4— are used for applications that require you to select from single position assignments.

NOTE: The on-screen Lock Indicator is present whenever the displayed Control Group is locked with the Control Group Lock button on the CommandARM™. Control Group locks re-engage on key cycle.

CommandARM is a trademark of Deere & Company

H118140—UN—20JAN17

Lock Indicator

Lock Indicator— illuminates to indicate that the Control Group Lock button is locked.

H116648—UN—19DEC16

Close

Select to close the Controls Setup application.

SS43267,0000912-19-16MAY17

Create Single Position Assignments

Buttons A and B or 3 and 4 allow you to assign and activate your preferred Applications, then make Function assignments.

NOTE: For additional Application and Function information, select the Help Contents button.

Procedure to Modify:

Use Controls Setup reconfigurable buttons to personalize your machine and perform tasks quickly with the press of a button.

NOTE: The example shown is typical for making Application assignments. Select to view a list of available Application or Function assignments.

Example: This example will assign the AutoTrac™ Guidance application to button A.

H118507—UN—20JAN17

Select Application

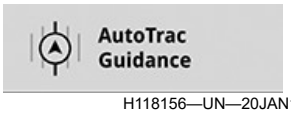
1. Select to activate the Select Application display.

H118506—UN—20JAN17

Remove Assignment

NOTE: If an assignment is already present on the Control Setup display, the "Remove Assignment" option is placed at the top of the list. Select to close and clear the assignment.

AutoTrac is a trademark of Deere & Company



H118156—UN—20JAN17

AutoTrac™ Guidance

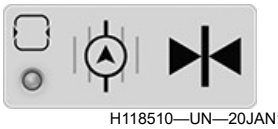
H118509—UN—20JAN17

AutoTrac™ Guidance Selected

2. Select the AutoTrac™ Guidance application.

H118157—UN—20JAN17

Center Track



H118510—UN—20JAN17

Center Track Selected

3. Select Center Track function.

NOTE: After selecting the function, the control assignment is made.

H116648—UN—19DEC16

Close

4. Select to close the Controls Setup application.

SS43267,0000913-19-30MAY19

Create Dual Position Assignments

Buttons C and D or 1 and 2 allow you to assign and activate your preferred Applications, then make Function assignments.

NOTE: For additional Application and Function information, select the Help Contents button.

Procedure to Modify:

Use Controls Setup reconfigurable buttons to personalize your machine and perform tasks quickly with the press of a button.

NOTE: The example shown is typical for making Application and Function assignments. Select to view a list of available Application or Function assignments.

Example: This example will assign the Unloading Auger Tip Fold/Unfold function to button C. This will allow you to fold/unfold the auger tip any time you press button C.

H118508—UN—20JAN17

Select Application

1. Select to activate the Select Application display.

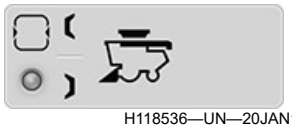
H118506—UN—20JAN17

Remove Assignment

NOTE: If an assignment is already present on the Control Setup display, the "Remove Assignment" option is placed at the top of the list. Select to close and clear the assignment.

H118166—UN—20JAN17

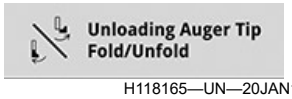
Folding



H118536—UN—20JAN17

Folding Selected

2. Select the Folding application.



H118165—UN—20JAN17

Unloading Auger Top Fold/Unfold

H118537—UN—20JAN17

Unloading Auger Tip Fold/Unfold Selected

3. Select Unloading Auger Tip Fold/Unfold function.

NOTE: After selecting the function, the control assignment is made.

H116648—UN—19DEC16

Close

4. Select to close the Controls Setup application.

SS43267,0000914-19-30MAY19

Scroll Button

H118504—UN—20JAN17

Scroll Button

Scroll Button is used to select Function assignments,

increase or decrease a value, or make a left-hand or right-hand adjustment.

NOTE: Assigning functions to either the Scroll Button "roll" or "press" action works the same as other assignments.

SS43267,0000915-19-20JAN17

Application Assignments

Allows you to assign your preferred Application and Functions.

Application Assignments Available:

NOTE: Only application assignments available for your machine will appear.

H118511—UN—20JAN17

AutoTrac

AutoTrac™ Guidance— allows you to access functions to make guidance system adjustments.

H118515—UN—20JAN17

Folding

Folding— allows you to access functions to Fold/Unfold the Folding Unloading Auger and to Fold/Unfold a Folding Head.

H118514—UN—20JAN17

Header

Header— allows you to access functions to adjust front-end equipment.

H127016—UN—26SEP19

Machine Sync

Machine Sync— allows you to access the machine sync functions.

H118517—UN—20JAN17

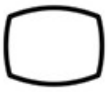
Residue Management

Residue Management— allows you to access the residue management functions.

H127004—UN—26SEP19

Engine

Engine— allows you to access the engine functions.



H118512—UN—20JAN17

Display

Display— allows you to access the display.

H118516—UN—20JAN17

Transmission

Transmission— allows you to access the transmission functions.

H127017—UN—26SEP19

Grain Handling

Grain Handling— allows you to access the grain handling functions.

H128144—UN—17JAN20

Combine Advisor™

Combine Advisor™— allows you to access the Combine Advisor™ functions.

N0LMWLO,0000329-19-16JUL20

Function Assignments

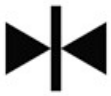
The programmable and Scroll buttons allow you to make function assignments, select from multiple positions, to increase or decrease a value, or to make a

left-hand or right-hand adjustment. Use the Scroll Button to assign function assignments.

NOTE: For additional Application and Function information, select the Help Contents button.

Function Assignments Available:

AutoTrac™ Guidance



H118518—UN—20JAN17

Center Track

Center Track— select to establish a new track.

H118519—UN—20JAN17

Shift Track

Shift Track— select to make left-hand or right-hand adjustments to your track.

H118520—UN—20JAN17

Swap Track

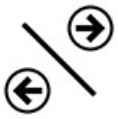
Swap Track— select to change from the current guidance system track you are using and change to the next track.

Display

H118521—UN—20JAN17

Close Overlay

Close Overlay— select to close the overlay.



H118522—UN—20JAN17

Run Page Swap

Run Page Swap— select to change the displayed run page to the next or previous page in the system.

Header

H127006—UN—26SEP19

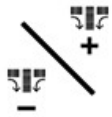
Reel Speed

Reel Speed— select to change the speed of the reel or the belt pickup as needed.

H118525—UN—20JAN17

AHHC Encoder

Automatic Header Height Control (AHHC) Encoder — select to adjust the header height.



H118526—UN—20JAN17

Draper Belt Speed

Draper Belt Speed— select to increase or decrease the draper belt speed.

H118527—UN—20JAN17

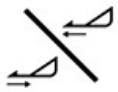
Draper Belt Speed Slow Down

Draper Belt Speed Slow Down— select to slow down the draper belt speed.

H118528—UN—20JAN17

Feeder House Tilt

Feeder House Tilt— select to increase or decrease the angle of the feeder house tilt frame.



H118529—UN—20JAN17

Cutterbar Extend/Retract

Cutterbar Extend/Retract (Extendable Platform Headers Only)— select to extend or retract the cutterbar.

H118530—UN—20JAN17

Draper Platform Tilt

Draper Platform Tilt— select to tilt the draper platform up and down.

H127008—UN—26SEP19

Belt Pickup Speed

Belt Pickup Speed— select to adjust belt pickup speed.

Folding

H118532—UN—20JAN17

Folding Unloading Auger

Folding Unloading Auger— select to Fold/Unfold the Folding Unloading Auger.

H127012—UN—26SEP19

Folding Head

Folding Head— select to Fold/Unfold the Folding Head.

H127013—UN—26SEP19

Platform Stow/Deploy

Platform Stow/Deploy— select to stow or deploy the platform.

Transmission

H118534—UN—20JAN17

ProDrive

ProDrive™ Speed Setpoint— select to increase or decrease the transmission setpoint.

Residue Management

H118535—UN—20JAN17

Residue Direction Swap

Residue Direction Swap— select to change the direction of the residue discharge from one side to the other side.

Engine

H127005—UN—26SEP19

Air Compressor

Air Compressor— select to enable or disable the air compressor.

Machine Sync

H127014—UN—26SEP19

Machine Sync Nudge Left/Right

Machine Sync Nudge Left/Right— select to nudge left or right.

H127015—UN—26SEP19

Machine Sync Nudge Fore/Aft

Machine Sync Nudge Fore/Aft— select to nudge fore or aft.

Combine Advisor™

H128145—UN—17JAN20

HarvestSmart

HarvestSmart™ Pause/Resume— select to pause or resume HarvestSmart™ operation.

AZ06166,000078C-19-16JUL20

Access Residue Management

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H114082—UN—03JAN17

Residue Management

3. Residue Management

Access Application Through Navigation Bar:

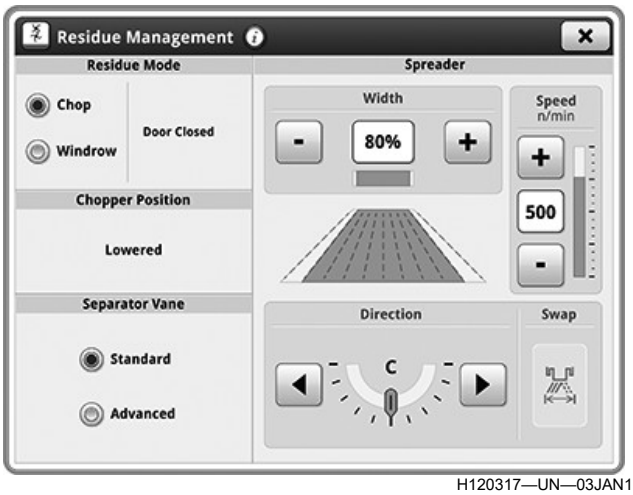
H116635—UN—03JAN17

Residue Management Application Button

Press Residue Management button on navigation bar below display.

N0LMWLO,000032B-19-15JUL20

Residue Management Main Page



H120317—UN—03JAN17

Residue Management

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Residue Management allows you to adjust residue distribution as desired based on machine configuration.

Items Accessible on Residue Management Main Page:

NOTE: Some items below are only displayed if machine is equipped with the associated option.

H116638—UN—03JAN17

Residue Mode

Residue Mode— select between Chopping and Windrowing functions.

H116639—UN—03JAN17

Chopper Position

Chopper Position— shows current position of chopper.

H118116—UN—03JAN17

Separator Vane

Separator Vane— select between Standard and Advanced separator vane position.

H116988—UN—03JAN17

Width

Width— controls the spread width of chaff and straw by adjusting spreader speed or shroud position based on machine configuration.

H116987—UN—04JAN17

Speed

Speed— increases or decreases spreader speed.

H117001—UN—03JAN17

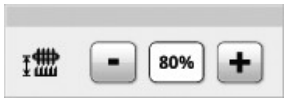
Direction

Direction— changes chaff and straw spreading direction.

H118304—UN—03JAN17

Swap

Swap— quickly adjusts the residue dispersal in the opposite direction.



H126977—UN—26SEP19

Knife Bank

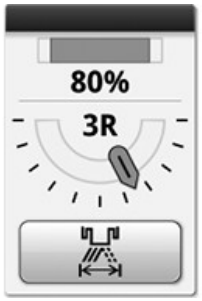
Knife Bank— slides in and out for better chopping quality of residue or to conserve machine power.

Out of Cab Adjustments— mechanical adjustments made outside of the cab.

Run Page Modules

Modules for this application can be added to run pages using Layout Manager.

Example:



H116641—UN—04JAN17

Spread

Spread— controls the width and direction of chaff and straw distribution.

NOTE: Different modules can be available for your application.

Shortcut Keys

Shortcut keys for this application can be added to the shortcut bar using Layout Manager.

Example:

H116642—UN—03JAN17

Residue

Residue— use for quick access to change residue dispersal direction. Light is illuminated toward direction of residue dispersal. If no illumination then residue dispersal is centered.

NOTE: Different shortcut keys can be available for your application.

PR79369,0000035-19-16JUL20

Residue Mode

Select Chop or Windrow Residue Mode option for desired straw and chaff processing.

Select Windrow When:

You want to leave a windrow of residue behind the machine.

Machines Equipped With Premium Residue System Only: In Windrow mode straw bypasses the chopper while chaff is still being chopped and spread. The straw discharges from the separator into a windrow behind the machine. This leaves a cleaner windrow.

Select Chop When:

You want to send residue through the chopper to minimize residue length.

Windrow Setup:

Non-Premium Residue System: When placed into "Windrow" mode, all other spreader settings are unable to be changed.

NOTE: Settings return to previous states when changed back to "Chop" mode.

NOTE: See Operator's Manual for more information on the following out of cab adjustments.

CAUTION: Shut down the machine prior to performing the recommended adjustments.

1. Place cob deflector in small grains position.
2. Shift chopper drive into neutral position.

H116998—UN—03JAN17
Windrow

H116639—UN—03JAN17
Chopper Position

3. Select Windrow or place chopper in raised position.

NOTE: When harvesting low residue volume crops, lower cob deflector into corn position.

H116644—UN—03JAN17
Status Indicator

Status indicator shows status of door.

H116645—UN—03JAN17
Error Detected

Premium Residue ONLY: When an error occurs during a close/open process, the system attempts to return to previously selected state prior to your change request. If it is unable to successfully reach that prior state, the "Tailboard Error" message is displayed, and you must make a mode choice again.

Chop Setup:

NOTE: Chop automatically closes the chop-to-drop door. The chopper cuts the straw discharged from the separator when the chop-to-drop door is closed.

NOTE: Separator must be OFF to change the position of the chop-to-drop door.

H116997—UN—03JAN17
Chop

Select Chop or place chopper in lower position.

N0LMWLO,000032C-19-16JUL20

Separator Vane

Change separator vane position to increase grain savings and improve straw quality.

NOTE: Separator must be OFF to change the position of the Separator Vane.

Select Standard When:

- You want to reduce grain loss.
- You want to improve crop separating ability.

Select Advanced When:

- You want to improve straw quality.
- You want to reduce power consumption.

Procedure to Modify:

H116999—UN—03JAN17
Standard

Select Standard.

H117000—UN—03JAN17
Advanced

Select Advanced.

NOTE: Running separator vanes in advanced position may increase grain losses in certain crops and conditions. Crop dwell time in separator is reduced to improve straw quality.

N0LMWLO,000032D-19-16JUL20

Width

Width adjusts the spread range for chaff and straw by controlling spreader speed or shroud position depending on machine configuration.

NOTE: Adjust the spread width setting before adjusting the spreader speed.

Modify When:

- Chopped material and chaff are not reaching the full width of the cut mode by header. Increase width.
- Chopped material and chaff are being thrown onto the uncut crop. Decrease width.

Procedure to Modify:

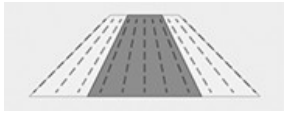
1. Turn on the machine.
2. Engage separator.

H116988—UN—03JAN17

Width

NOTE: Current setting is displayed by bar gauge.

3. Select plus (+) to increase or minus (-) to decrease desired percentage.



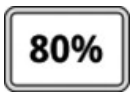
H118119—UN—03JAN17

Width Percentage

NOTE: When changes are made to the width percentage, the spreader diagram changes as well.

Alternative Procedure to Modify:

NOTE: When width is changed, the bar gauge representing it turns yellow to match the yellow bounding box of the input field.



H113699—UN—03JAN17

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired percentage.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

H114674—UN—06FEB19

Close

3. Select to close.

N0LMWLO,000032E-19-16JUL20

Speed

Spreader speed adjustments allow for optimal distribution of material across the width of the spread.

NOTE: Adjust the spread width setting before adjusting the spreader speed.

Modify When:

- Changing crop type.
- Size of material exiting chopper is getting larger or smaller.
- Changing header size.
- Changing header size.
- Compensating for blowing wind.

Procedure to Modify:

1. Turn on the machine.
2. Engage separator.

H116987—UN—04JAN17

Speed

NOTE: Current setting is displayed by bar gauge.

3. Select plus (+) to increase or (-) to decrease desired speed.

NOTE: When changes are made to the spreader speed, the spreader width diagram will not change. It remains filled to previous width setting regardless of spreader speed adjustments.

Allowable Settings for Corn:

Minimum: 350

Maximum: 550

Default: 500

Increment: 10

Allowable Settings for Small Grain:

Minimum: 600

Maximum: 800

Default: 700

Increment: 10

Alternative Procedure to Modify:

NOTE: When speed is changed, the bar gauge representing it turns yellow to match the yellow bounding box of the input field.

H118126—UN—03JAN17

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired speed.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

H114674—UN—06FEB19

Close

3. Select to close.

N0LMWLO,000032F-19-16JUL20

Direction

Direction changes the direction of material exiting the chopper for wind compensation.

Modify When:

- Wind speed changes.
- Wind direction changes.
- Machine direction changes.
- Field changes.
- Terrain changes.

Procedure to Modify:

H117001—UN—03JAN17

Direction

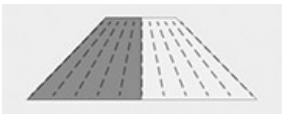
Select to adjust the direction left or right.

NOTE: When changes are made to the spread direction, the spreader diagram changes as well.

NOTE: If direction is not known, the center marker disappears and dashes appear for the position value.

H118133—UN—03JAN17

Direction

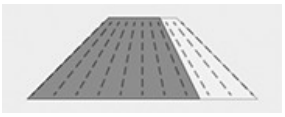


H118128—UN—03JAN17

Width

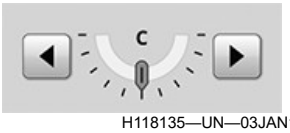
H118134—UN—03JAN17

Direction



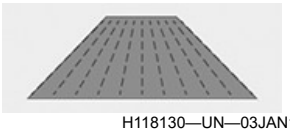
H118129—UN—03JAN17

Width



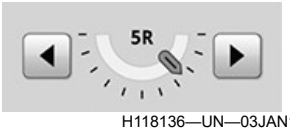
H118135—UN—03JAN17

Direction



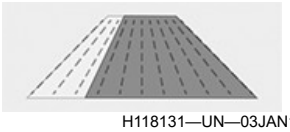
H118130—UN—03JAN17

Width



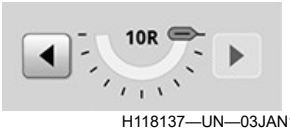
H118136—UN—03JAN17

Direction



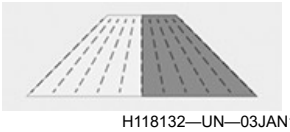
H118131—UN—03JAN17

Width



H118137—UN—03JAN17

Direction



H118132—UN—03JAN17

Width

Alternative Procedure to Modify:

H118138—UN—03JAN17

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired direction.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

H114674—UN—06FEB19

Close

3. Select to close.

N0LMWLO,0000330-19-16JUL20

Swap

Swap allows you to quickly adjust the residue spread in the opposite direction to compensate for wind interference after making a 180 ° turn. Swap is a manual adjustment made by the operator as opposed to Auto Swap which is an automated adjustment.

NOTE: Swap is only available when the Direction adjustment is not in the center position.

Modify When:

Wind is blowing residue and you want to swap residue direction.

Procedure to Modify:

H118115—UN—03JAN17

Swap

Select to activate and deactivate.

NOTE: Messages for spread direction swapping appear whenever the Residue Management application is not open and a swap has been initiated.

N0LMWLO,0000331-19-16JUL20

Out of Cab Adjustments

Adjustments must be made outside the cab to improve residue management and prevent damage of the machine. See Operator's Manual for further crop settings and adjustment procedures.

⚠ CAUTION: Shut down the machine prior to performing the recommended adjustments.

Out of Cab Adjustments Page:

Crop Diverter/Deflector— select corn or grain position.

IMPORTANT: Place in corn position to prevent cleaning shoe damage while harvesting corn.

Crop Diverter Vanes— adjust vanes to control distribution of material into chopper or spreaders.

Knife Bank— select a knife bank position to achieve desired residue length.

IMPORTANT: Knife bank must be fully disengaged for corn.

NOTE: The more engagement, the more power is consumed by the chopper.

Chopper Drive Speed— select high speed for small grains and soybeans and low speed for corn.

N0LMWLO,0000332-19-16JUL20

Knife Bank

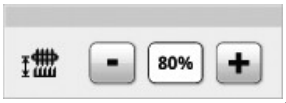
Knife Bank is an optional, in-cab adjustable system which slides knife bank in-and-out for better chopping quality or to save machine power.

Modify When:

- You want to improve chopping quality. Increase the knife bank setting to improve chopping quality.
- You want to conserve power for use elsewhere on the machine. Reduce the knife bank setting to conserve power.

NOTE: This optional system is available only if the machine is equipped with a chopper option.

Procedure to Modify:



H126977—UN—26SEP19

Knife Bank Adjustment— the adjustment is in 25% increment and decrement sizes.

H126979—UN—26SEP19

Increase Knife Bank— select the increment button (plus symbol) to slide the knife bank inward.

H126978—UN—26SEP19

Decrease Knife Bank— select the decrement button (minus symbol) to slide the knife bank outward, pulling the knives away from the chopper.

Active Cleanout Mode Procedure:

Active Cleanout Mode automatically cleans the knife bank by opening and closing the knife bank. Active Cleanout Mode is performed after the separator has been disengaged 25 times. Active Cleanout Mode cannot be adjusted.

N0LMWLO,0000333-19-16JUL20

Auto Swap

Auto Swap automatically adjusts the residue spread in the opposite direction from what you have set after making a 180º turn.

Procedure to Modify:

H113668—UN—22OCT15

Menu

1. Select to open Menu.

N119118—UN—23SEP16

Machine Settings

2. Select Machine Settings tab.

H114082—UN—03JAN17

Residue Management

3. Select to open Residue Management.

H125280—UN—01FEB19

Auto Swap ON/OFF

4. Select to enable or disable Auto Swap.

NOTE: If Auto Swap is disabled, you must manually swap the spread direction.

H128567—UN—20JAN20

Direction

5. Select to adjust the direction left or right.

N0LMWLO,0000334-19-16JUL20

Access Header

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H113541—UN—19DEC16

Header

3. Header

Access Application Through Navigation Bar:

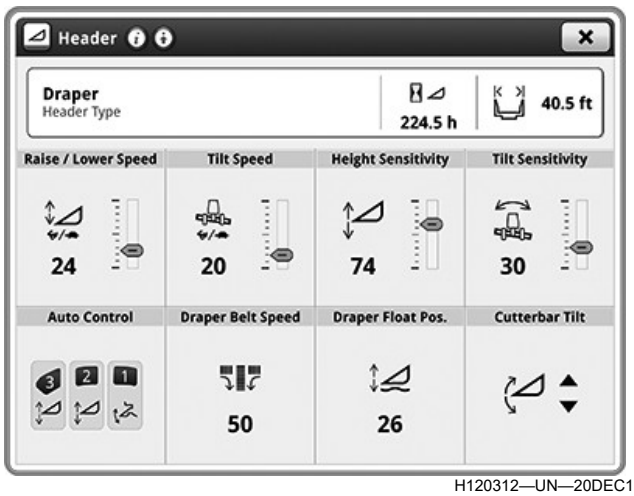
H117904—UN—22JAN20

Header Application Button

Press Header button on navigation bar display.

N0LMWLO,0000335-19-16JUL20

Header Main Page



H120312—UN—20DEC16

Header

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Header Main Page shows available features that can be adjusted for your attached header.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Items Accessible on Header Main Page:

H116126—UN—19DEC16

Header Type

Header Details— change header settings such as width, minimum reel speed, and row width.

H113542—UN—19DEC16

Header Type

Header Type— automatically determined by the front end equipment attached.

NOTE: If system does not recognize the type of header connected, Unknown Header is displayed.

H113543—UN—19DEC16

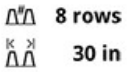
Hours

Hours— number of hours per header type recorded by the combine.

H113544—UN—19DEC16

Cut Width

Cut Width— measured width setting appears when platform type headers are detected.



H116127—UN—19DEC16

Row Width

Cut Width— number of rows and row width settings appear when row type headers are detected.

H127438—UN—26SEP19

Raise/Lower Speed

Raise/Lower Speed— controls speed of feeder house raise/lower function when in manual mode.

H127439—UN—26SEP19

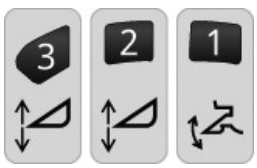
Height Sensitivity

Height Sensitivity— controls sensitivity to changes in terrain of header raise/lower in automatic mode.

N118004—UN—22OCT15

Advanced Settings Icon

Advanced Settings— allows you to access further adjustments and less common settings.



H127440—UN—26SEP19

Auto Control

Auto Control— indicates status of which header configurations are enabled.

H127441—UN—26SEP19

Tilt Sensitivity

Tilt Sensitivity— controls sensitivity to changes in terrain of the feeder house lateral tilt movements when in automatic sensing and automatic float modes.

H127442—UN—26SEP19

Tilt Speed

Tilt Speed— controls speed of lateral tilt movements when in manual mode.

H127443—UN—26SEP19

Fore/Aft Tilt

Fore/Aft Tilt— controls the angle of the front face of the feeder house.

H127472—UN—26SEP19

HydraFlex™ Pressure

HydraFlex™ Pressure— controls cutterbar pressure for optimal ground following ability.

H127445—UN—26SEP19

Draper Belt Speed

Draper Belt Speed— controls the speeds of the side draper belts.

H127444—UN—26SEP19

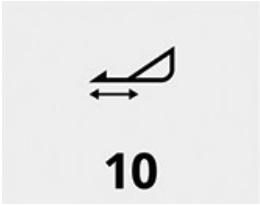
Draper Float Position

Draper Float Position— controls the pressure in the cylinders for the gauge wheel float arms.

H127446—UN—26SEP19

Cutterbar Tilt

Cutterbar Tilt— controls the angle of the cutterbar in relation to the rest of the platform.



H114081—UN—19DEC16

Cutterbar Position

Cutterbar Position— controls the position of the cutterbar.

H127448—UN—26SEP19

Deck Plate Spacing

Deck Plate Spacing— displays the deck plate spacing.

H127449—UN—26SEP19

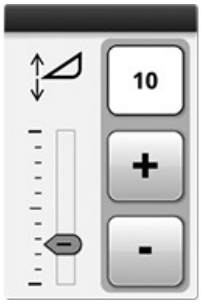
Backshaft Speed

Backshaft Speed— displays backshaft speed.

Run Page Modules

Modules for this application can be added to run pages using Layout Manager.

Example:



H116668—UN—20DEC16

Height Sensitivity

Height Sensitivity— controls sensitivity to changes in terrain of header raise/lower in automatic mode.

NOTE: Different modules can be available for your application.

AZ06166,000078D-19-16JUL20

Header Details

Header Details includes settings such as width, minimum reel speed, and row width.

NOTE: Each header type has factory default settings for all header settings. Connecting a header of a given type for the first time automatically loads the factory default settings. You can change header settings while the header is connected. Connecting any header of the same type automatically uses settings for that header type, but will not automatically change the settings or hours.

Items Accessible on the Header Details Page:

H113523—UN—19DEC16

Width

Width— set the cut width.

H113525—UN—19DEC16

Width

Width— set the number of rows.

H113526—UN—19DEC16

Row Width

Row Width— spacing between rows.

H113521—UN—19DEC16

Work Recording

Work Recording— set the recording stop height.

H113522—UN—19DEC16

Hours

Hours— number of hours per header type recorded by the combine.

H113527—UN—19DEC16

Reel Installed

Reel— select to indicate to system that header has a reel installed.

Example: If you have a corn head that normally does not have a reel installed, you would select this to tell the machine that a reel is installed.

H113524—UN—19DEC16

Minimum Reel Speed

Minimum Reel Speed— set the minimum reel speed.

N0LMWLO,0000336-19-16JUL20

Width

Width allows the cut width to be changed when not utilizing full width of the header.

Modify When:

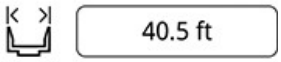
- Not utilizing full width of the header.
- Using for point rows.
- Changing header size.
- Changing cut width for AutoTrac™ and mapping purposes.

Procedure to Modify:

H116649—UN—19DEC16

Header Type

1. Select Header Type screen area to open Header Details page.



H116131—UN—19DEC16

Width

2. Select to open number pad and enter desired cut width.

H116132—UN—19DEC16

OK

3. Select OK to save value.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,0000337-19-16JUL20

Width Corn Head

Width allows the number of rows to be changed when not utilizing all rows of the header.

Modify When:

- Not utilizing all rows of the header.
- Using for point rows.
- Changing the header size.
- Changing row width for AutoTrac™ and mapping purposes.

Procedure to Modify:

H116650—UN—19DEC16

Header Type

1. Select Header Type screen area to open Header Details page.

H116171—UN—19DEC16

Rows

2. Select to open number pad and enter desired rows.

AutoTrac is a trademark of Deere & Company

H116132—UN—19DEC16

OK

3. Select OK to save value.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,0000338-19-16JUL20

Row Width

Row Width allows the spacing between rows to be changed.

Modify To:

NOTE: Modifying row width affects yield mapping.

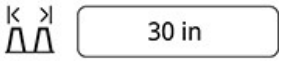
- Adjust row width spacing to match the header configuration.

Procedure to Modify:

H116650—UN—19DEC16

Header Type

1. Select Header Type screen area to open Header Details page.



H118576—UN—19DEC16

Row Width

2. Select to open number pad and enter desired row width.

H116132—UN—19DEC16

OK

3. Select OK to save value.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,0000339-19-16JUL20

Minimum Reel Speed

Minimum Reel Speed allows you to set the minimum speed at which the reel operates.

Modify When:

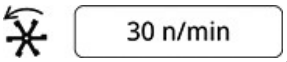
- Picking up downed crop. Minimum speed varies based on condition and operator.

Procedure to Modify:

H116649—UN—19DEC16

Header Type

1. Select Header Type screen area to open Header Details page.



H126113—UN—11APR19

Minimum Reel Speed

2. Select to open number pad and enter desired minimum reel speed.

H116132—UN—19DEC16

OK

3. Select OK to save value.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,000033A-19-16JUL20

Work Recording

Work Recording allows you to set the stop height for turning recording ON/OFF.

NOTE: Work Recording automatically turns OFF above preset height and turns ON below preset height, provided all other conditions are met (separator/header engaged, engine at high idle, and farm/field is set up).

NOTE: If Header Height Sensing or Feeder House Float are active, record stop height setting is irrelevant and Work Recording turns ON, provided all other conditions are met (separator/header engaged, engine at high idle, farm/field is set up).

Modify When:

- Changing crop conditions (taller vs. shorter).
- Changing header types.
- Changing fields and terrain.
- Recording stays on while out of crop or doesn't turn on when in crop.

Procedure to Modify:

1. Raise or lower header to desired record stop height.

H116650—UN—19DEC16

Header Type

2. Select Header Type screen area to open Header Details page.

H113521—UN—19DEC16

Set to Current Height

3. Select Set to Current Height button.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,000033B-19-16JUL20

Hours

Hours allows you to set the total number hours for the header type attached.

NOTE: Combine stores hours by header type. If multiple headers of the same type are used on the same combine, you have to enter the appropriate hours for the attached header.

Modify When:

- You want to track the amount of run time for a particular field or fields.
- You have multiple heads that may be moved to different combines.
- You want to zero the hours at the beginning of the season.

Procedure to Modify:

H116649—UN—19DEC16

Header Type

1. Select Header Type screen area to open Header Details page.

H116134—UN—19DEC16

Hours

2. Select to open number pad and enter desired hours.

H116132—UN—19DEC16

OK

3. Select OK to save value.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,000033C-19-16JUL20

Raise/Lower Speed

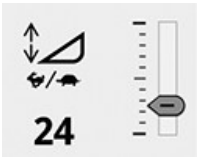
Raise/Lower Speed controls the speed which the feeder house raises or lowers when using the manual raise/lower buttons on the multi-function lever.

Modify When:

NOTE: Calibration is needed when changing header regardless of size and type unless previously calibrated.

- Header size and type affect raise/lower speed.
- Increase Raise/Lower Speed if the header is slow to react to changing ground conditions.
- Decrease Raise/Lower Speed if the header over-compensates in changing ground conditions.
- Loading/unloading the header from trailer requires lower raise/lower speed.

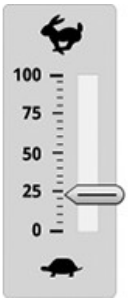
Procedure to Modify:



H113728—UN—19DEC16

Raise/Lower Speed

1. Select screen area under Raise/Lower Speed to open Raise/Lower Speed page.



H113513—UN—20DEC16

Slide Bar

NOTE: Slide bar displays current speed.

H116141—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired speed.

   Minimum: 0

   Maximum: 100

   Default: 50

   Increment: 1

H116648—UN—19DEC16

Close

3. Select to close.

Alternative Procedure to Modify:

H116140—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.

   Minimum: 0

   Maximum: 100

   Default: 50

   Increment: 1

N0LMWLO,000033D-19-16JUL20

Tilt Speed

Tilt Speed controls rate of the lateral tilt feeder house movements when in manual rate mode.

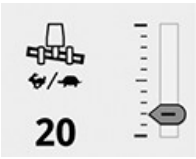
NOTE: Manual Tilt Speed function only works on closed center hydraulic machines equipped with lateral tilt feeder house.

Modify When:

NOTE: Calibration is needed when changing header regardless of size and type unless the specific header was previously calibrated.

- Header size and type affect tilt speed.
- The header is slow to react to changing ground conditions. Increase Tilt Speed.
- The header overcompensates in changing ground conditions. Decrease Tilt Speed.
- Loading/unloading the header from trailer requires slower tilt speed

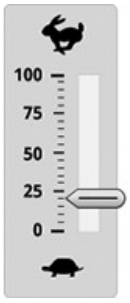
Procedure to Modify:



H113545—UN—19DEC16

Tilt Speed

1. Select screen area under Tilt Speed to open Tilt Speed page.



H113514—UN—20DEC16

Slide Bar

NOTE: Slide bar displays current speed.

H116141—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired speed.

   Minimum: 0

   Maximum: 100

   Default: 50

   Increment: 1

H116648—UN—19DEC16

Close

3. Select to close.

Alternative Procedure to Modify:

H116140—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.

N0LMWLO,000033E-19-16JUL20

Height Sensitivity

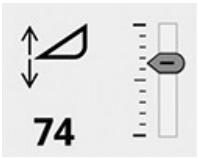
Height Sensitivity controls the speed of which the feeder house will raise/lower in automatic mode to accommodate the terrain.

NOTE: Increasing sensitivity causes feeder house to respond faster to changing terrain features.

Modify When:

- Header is slow to react to changing ground conditions. Increase Height Sensitivity.
- Header is leaving wavy stubble off the ground or pulsing up and down while on the ground. Decrease Height Sensitivity.

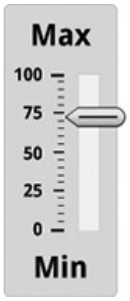
Procedure to Modify:



H114074—UN—19DEC16

Height Sensitivity

1. Select screen area under Height Sensitivity to open Height Sensitivity page.



H113515—UN—20DEC16

Slide Bar

NOTE: Slide bar displays current sensitivity.

H118578—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired sensitivity.

   Minimum: 0

   Maximum: 100

   Default: 50

   Increment: 1

NOTE: Start with 50 and adjust in steps of 5. Avoid setting over 75 and under 25. Height sensitivity needs to be set lower when achieving higher ground speeds.

H116648—UN—19DEC16

Close

3. Select to close.

Alternative Procedure to Modify:

H116140—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

   Minimum: 0

   Maximum: 100

   Default: 50

   Increment: 1

NOTE: Start with 50 and adjust in steps of 5. Avoid setting over 75 and under 25. Height sensitivity needs to be set lower when achieving higher ground speeds.

N0LMWLO,000033F-19-16JUL20

Tilt Sensitivity

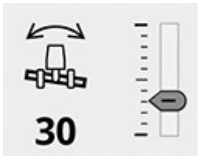
Tilt Sensitivity controls the speed at which the feeder house tilts to accommodate changes in terrain. Increasing sensitivity causes feeder house to react faster.

NOTE: If operating 600F, 600FD, or 700FD HydraFlex™ Pressure settings may also affect header height sensitivity.

Modify When:

- Header is slow to react to changing ground conditions. Increase Tilt Sensitivity.
- Header is leaving wavy stubble off the ground or pulsing up and down while on the ground. Decrease Tilt Sensitivity.

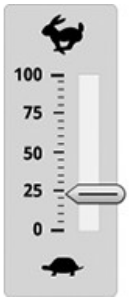
Procedure to Modify:



H113546—UN—19DEC16

Tilt Sensitivity

1. Select screen area under Tilt Sensitivity to open Tilt Sensitivity page.



H113513—UN—20DEC16

Slide Bar

NOTE: Slide bar displays current sensitivity.

H116141—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired sensitivity.

   Minimum: 0

   Maximum: 100

   Default: 50

   Increment: 1

NOTE: Start with 50 and adjust in steps of 5. Avoid setting over 75 and under 25. Height sensitivity needs to be set lower when achieving higher ground speeds.

H116648—UN—19DEC16

Close

3. Select to close.

Alternative Procedure to Modify:

H116140—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

N0LMWLO,0000340-19-16JUL20

Fore/Aft Tilt

Fore/Aft Tilt allows you to quickly move the feeder house face fore and aft to achieve optimal cutting performance of the header in challenging conditions.

NOTE: Fore/Aft Tilt minimum and maximum settings are different for each header type.

Modify When:

- You want to prevent pushing or dragging wet or dense residual residue.
- You want to better attach or detach the header.
- You want to optimize conveying of crop material into the feeder house.

Tilt Feeder House Fore:

- Picking up downed crop.
- Cutting closer to the ground.

Tilt Feeder House Aft:

- Material is being pushed by the cutter bar. Move aft to reduce lost material.
- For standing crop, tilting aft can optimize feeding/ conveying material into the machine.

Procedure to Modify:

NOTE: If operating 600F, 600FD, or 700FD platforms, HydraFlex™ Pressure settings also affect header height sensitivity.

H116129—UN—19DEC16

Fore/Aft Tilt

1. Select screen area under Fore/Aft Tilt to open Fore/ Aft page.

HydraFlex is a trademark of Deere & Company

H116141—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired position.

NOTE: Minimum and maximum settings will be affected by header type and calibration. See Calibrations application for more information on calibration procedures.

H116648—UN—19DEC16

Close

3. Select to close.

Alternative Procedure to Modify:

H116140—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

N0LMWLO,0000341-19-16JUL20

Auto Header Control

Auto Header Control shows the status of Control Preview, Header Automation, and Resume Preferences.

H116962—UN—19DEC16

Auto Control

Select screen area under Auto Control to open.

NOTE: Auto Header Control icons change depending on how they are set up and which header is attached to the machine.

Items Accessible on Auto Header Controls Page:

Control Preview— displays status of available features.

Header Automation— displays available automated functions.

Resume Preferences— displays available resume functions.

SS43267,00007EB-19-27JAN17

Control Preview

H116968—UN—20DEC16

Control Preview

Control Preview displays status of available features.

NOTE: Header Automation and Resume features (listed as icons under the activation buttons 1, 2, and 3) activate when corresponding button is pressed.

SS43267,00007EC-19-26NOV19

Header Automation

Enable or disable header automation functions.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

H116995—UN—19DEC16

Defaults

Defaults— select to use defaults of header type connected.

H116995—UN—19DEC16

Custom

Custom— select to choose which automated systems you want to enable based on your personal operating preferences.

NOTE: ON/OFF toggles are unable to be switched until the "Custom" option is selected.

H116168—UN—19DEC16

Alert

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert icon button.

H116161—UN—19DEC16

Height Resume

Height Resume— select position of the feeder house relative to machine chassis and return to that position automatically.

H116160—UN—19DEC16

Feeder House Float

Feeder House Float— allows a rigid header to be operated in contact with the ground and maintain a set pressure.

H113720—UN—19DEC16

Height Sensing

Height Sensing (Off Ground)— select the position of the header relative to the ground and return to that position automatically.

H113720—UN—19DEC16

Height Sensing

Height Sensing (On Ground)— adjust cutterbar ground pressure and return to that setting automatically.

H113721—UN—19DEC16

Lateral Tilt

Lateral Tilt— maintain the header position relative to ground.

N0LMWLO,0000342-19-16JUL20

Height Resume

Height Resume allows you to select position of the feeder house relative to the machine and return to that position automatically.

Modify When:

- Changing crop height throughout the same field.
- Changing the header type.
- Ground terrain changes.
- Changing from cutting on-ground to cutting off-ground.

System Is Enabled When:

- Properly equipped header is connected to the machine.
- Engine is running.
- Road transport disconnect switch is in field position.
- Height Resume system is ON.
- Header is engaged.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Height Resume ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: If the automation option has issues preventing it from being enabled, the ON/OFF toggle is replaced with an alert icon. Selecting this button brings up information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116346—UN—19DEC16

Activation Buttons

3. Press the desired activation button.

NOTE: Height Resume will return to last known adjustment setting.

H116353—UN—19DEC16

Height Resume

NOTE: Height Resume icon appears on the corner post display.

H116354—UN—19DEC16

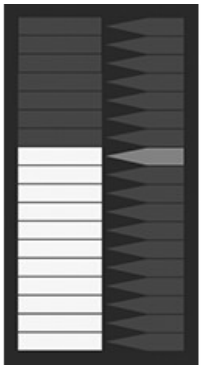
Activation Number

Activation number on the corner post display indicates which button was selected.

H116347—UN—20DEC16

Adjustment Dial

4. Adjust height using header adjustment dial.
   - Turn header adjustment dial clockwise to raise the header and setpoint.
   - Turn header adjustment dial counterclockwise to lower the header and setpoint.



H116356—UN—20DEC16

Bar Graph

Bar graph on the corner post display shows the header's relative position based on header height sensor linked to the header.

H118305—UN—19DEC16

Numeric Display

Numeric display on the corner post display shows the header's relative position based on header height sensor linked to the header.

H116348—UN—19DEC16

Raise/Lower

Using the header raise/lower switch temporarily deactivates system.

NOTE: Pressing and holding the header raise/lower switch for 5 seconds disables the system.

Press activation buttons 1, 2, or 3 to reactivate system. Header automatically moves to last known setting.

H116648—UN—19DEC16

Close

5. Select to close.

N0LMWLO,0000343-19-16JUL20

Height Sensing—Off Ground

Allows you to select the position of the header relative to the ground and return to that position automatically.

Modify When:

NOTE: Calibration is required when platform is initially connected to the combine. If a different platform of the same type is connected, the calibration should be repeated.

- Header is not following contour of ground.
- Cutting off the ground using height sensing arms. HydraFlex™ Pressure can be increased to lock the header in a rigid position.
- Header appears to be cutting too low. Raise height setting.
- Header rides over the top or leaves uncut crop. Lower height setting.
- Changing header type.
- Ground terrain changes.

System Is Enabled When:

- Properly equipped header is connected to the machine.
- Engine is running.
- Road transport disconnect switch is in field position.
- Height Sensing system is ON.
- Header is engaged.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main page.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Height Sensing ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert icon button. Selecting this button brings up a message dialogue with information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116346—UN—19DEC16

Activation Buttons

3. Press the desired activation button.

NOTE: Height Sensing returns to last known adjustment setting. Each activation button can save a different reel position. Press and hold the desired button for 2 seconds to save the reel position.

HydraFlex is a trademark of Deere & Company

H116358—UN—19DEC16

Height Sensing

NOTE: Height Sensing icon appears on the corner post display.

H116354—UN—19DEC16

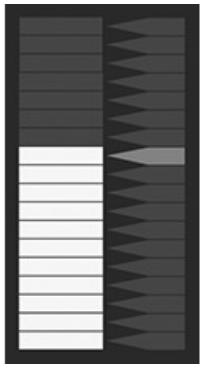
Activation Number

Activation number on the corner post display indicates which button was selected.

H116347—UN—20DEC16

Adjustment Dial

4. Change the height setpoint by pressing desired activation button and adjust height using header adjustment dial.
   - Turn header adjustment dial clockwise to raise the header and setpoint.
   - Turn header adjustment dial counterclockwise to lower the header and setpoint.



H116356—UN—20DEC16

Bar Graph

Bar graph on the corner post display shows the header's relative position based on header height sensor linked to the feeder house.

H118305—UN—19DEC16

Numeric Display

Numeric display on the corner post display shows the header's relative position based on header height sensor linked to the feeder house.

H116348—UN—19DEC16

Raise/Lower

Using the header raise/lower switch temporarily deactivates system.

NOTE: Pressing and holding the header raise/lower switch for 5 seconds disables the system.

NOTE: Header lower switch can be set to immediately disable system until activation button is pressed. See your John Deere dealer for further information.

NOTE: Header lower switch can be set not to reactivate system when header lower switch is pressed. See your John Deere dealer for further information.

Press activation buttons 1, 2, or 3 to reactivate system. Header automatically moves to last known setting.

H116648—UN—19DEC16

Close

5. Select to close.

N0LMWLO,0000344-19-16JUL20

Height Sensing—On Ground

On ground Height Sensing allows you to adjust cutterbar ground pressure and return to that setting automatically.

Modify When:

NOTE: Calibration is needed when changing the header regardless of size and type unless previously calibrated.

- Cutterbar is not following contour of the ground.
- Cutterbar appears to be pushing. Increase HydraFlex™ pressure.
- Cutterbar rides over the top or leaves uncut crop. Decrease HydraFlex™ pressure.
- Changing header type.

System Is Enabled When:

- Properly equipped header is connected to machine.
- Engine is running.
- Road transport disconnect switch is in field position.
- Height Sensing system is ON.
- Header is engaged.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main page.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Height Sensing ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert icon button. Selecting this button brings up a message dialogue with information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116346—UN—19DEC16

Activation Buttons

3. Press the desired activation button.

NOTE: Height Sensing returns to last known adjustment setting. Each activation button can save a different reel position. Press and hold the desired button for 2 seconds to save the reel position.

H116358—UN—19DEC16

Height Sensing

NOTE: Height Sensing icon appears on the corner post display.

H116354—UN—19DEC16

Activation Number

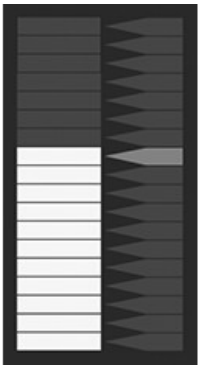
Activation number on the corner post display indicates which button was selected.

H116347—UN—20DEC16

Adjustment Dial

4. Change the height setpoint by pressing desired activation button and adjust height using header adjustment dial.
   - Turn header adjustment dial clockwise to increase HydraFlex™ pressure.
   - Turn header adjustment dial counterclockwise to decrease HydraFlex™ pressure.

HydraFlex is a trademark of Deere & Company



H116356—UN—20DEC16

Bar Graph

Bar graph on the corner post display shows pressure setpoint based on pressure in the cutterbar on the platform.

H118305—UN—19DEC16

Numeric Display

Numeric display on the corner post display shows pressure setpoint based on pressure in the cutterbar on the platform.

H116348—UN—19DEC16

Raise/Lower

Using the header raise/lower switch temporarily deactivates system.

NOTE: Pressing and holding the header raise/lower switch for 5 seconds disables the system.

- Manually adjusting the header height with header lower switch temporarily overrides system until released. Once switch is released, system returns back to automatic mode.

  NOTE: Header lower switch can be set to immediately disable system until activation button is pressed. See your John Deere dealer for further information.

- Manually adjusting the header height with header raise switch temporarily deactivates system until header lower switch is pressed. Once switch is pressed, system reactivates.

  NOTE: Header lower switch can be set not to reactivate system when header lower switch is pressed. See your John Deere dealer for further information.

  Press activation buttons 1, 2, or 3 to reactivate system. Header automatically moves to last known setting.

H116648—UN—19DEC16

Close

5. Select to close.

N0LMWLO,0000345-19-16JUL20

Feeder House Float

Feeder House Float allows you to select how firmly a rigid header contacts the ground and maintains a set pressure.

Modify When:

- Ground conditions are firm and the head is leaving taller stubble or not following the ground as desired. Decrease pressure.
- Ground conditions are soft and the head is pushing material or not following the ground as desired. Increase pressure.

System Is Enabled When:

- Properly equipped header is connected to machine.
- Engine is running.
- Road transport disconnect switch is in field position.
- Feeder House Float system is ON.
- Header is engaged.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Active Header Float ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert button. Selecting this button brings up a message dialogue with information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116346—UN—19DEC16

Activation Buttons

3. Press the desired activation button.

NOTE: Header Height Float will return to last known adjustment setting.

H116972—UN—19DEC16

Feeder House Float

NOTE: Header Height Float icon appears on the corner post display.

H116354—UN—19DEC16

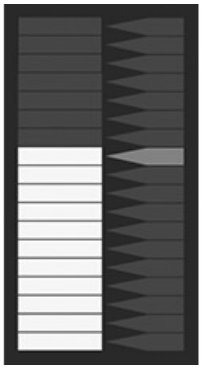
Activation Number

Activation number on the corner post display indicates which button was selected.

H116347—UN—20DEC16

Adjustment Dial

4. Change pressure by pressing desired activation button and adjust the height using header adjustment dial.
   - Turn header adjustment dial clockwise to raise the header lift cylinder pressure and setpoint.
   - Turn header adjustment dial counterclockwise to lower the lift cylinder pressure and setpoint.



H116356—UN—20DEC16

Bar Graph

Bar graph display shows the actual header float pressure.

H118305—UN—19DEC16

Numeric Display

Numeric display shows the actual header float pressure.

H116348—UN—19DEC16

Raise/Lower

NOTE: Pressing and holding the header raise/lower switch for 5 s disables the system.

Press activation buttons 1, 2, or 3 to reactivate system. Header automatically moves to last known setting.

H116648—UN—19DEC16

Close

5. Select to close.

N0LMWLO,0000346-19-16JUL20

Lateral Tilt

Lateral Tilt allows you to maintain header position relative to the ground using the lateral tilt system to equalize the distance to the ground at each end of the header.

Modify When:

- ON: For headers equipped with the appropriate sensors use lateral tilt to maintain a uniform cut height across the width of the head while cutting on or off the ground.
- OFF: You may disable lateral tilt if it is preferred to tilt the head manually by pressing the lateral tilt button on the multi-function lever. Disable lateral tilt if the header is not equipped with the appropriate sensors.

System Is Enabled When:

- Properly equipped header is connected to machine.
- Engine is running.
- Road transport disconnect switch is in field position.
- Header was calibrated.
- Lateral Tilt system is ON.
- Header is engaged.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Lateral Tilt ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert button. Selecting this button brings up a message dialogue with information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116346—UN—19DEC16

Activation Buttons

3. Press the desired activation button.

H116359—UN—19DEC16

Lateral Tilt

NOTE: Lateral Tilt icon appears on the corner post display.

NOTE: Lateral Tilt will return to last known adjustment setting.

H116354—UN—19DEC16

Activation Number

Activation number on the corner post display indicates which button was selected.

H116348—UN—19DEC16

Raise/Lower

NOTE: Pressing Lateral Tilt switch overrides system. When the switch is released within 5 seconds, system returns to automatic mode.

Press right side of switch to tilt the header to the right or press left side of switch to tilt the header to the left.

Press activation buttons 1, 2, or 3 to reactivate system. Header automatically returns to last known setting.

H116648—UN—19DEC16

Close

4. Select to close.

N0LMWLO,0000347-19-16JUL20

Resume Preferences

Enable or disable automatic resume of header automation functions.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

H113524—UN—19DEC16

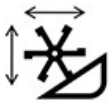
Dial-A-Speed™

Dial-A-Speed™— automatic control of reel or belt pickup speed relative to ground speed.

H113717—UN—19DEC16

Fore/Aft Resume

Fore/Aft Resume— select fore/aft position and return to that position automatically.



H116163—UN—19DEC16

Reel Position Resume

Reel Position Resume— select reel position and return to that position automatically.

H113532—UN—19DEC16

Deck Plate Position Resume

Deck Plate Position Resume— select position of the deck plates and return to that position automatically.

H113726—UN—19DEC16

Cutterbar Position Resume

Cutterbar Position Resume— allows cutterbar to be adjusted forward and rearward for various plant and stubble heights.

SS43267,00007F3-19-03FEB17

Dial-A-Speed™ Resume

Dial-A-Speed™ Resume allows you to program a saved reel speed to any of the activation buttons 1, 2, or 3 on the multi-function lever.

NOTE: You may have a standard position for harvesting standing crop and then another for downed crop. This allows you to quickly switch back and forth. Dial-A-Speed™ setting is automatically saved when Header Automation is active.

Modify When:

- Picking up downed crop. Minimum speed varies based on condition and operator.
- Crop is being "threshed" by the reel. Slow down the reel by decreasing the Dial-A-Speed™.
- Crop is being pushed over by the reel. Speed up the reel by increasing the Dial-A-Speed™.

System Is Enabled When:

- Properly equipped header is connected to machine.
- Engine is running.
- Road transport disconnect switch is in field position.
- Dial-A-Speed™ system is ON.
- Header and Separator are engaged.
- Ground speed is greater than 0.25 km/h (0.16 mph).

Procedure to Modify:

Dial-A-Speed is a trademark of Deere & Company

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Dial-A-Speed™ ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert button. Selecting this button brings up a message dialogue with information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116346—UN—19DEC16

Activation Buttons

3. Press the desired activation button.

NOTE: Dial-A-Speed™ will return to last known adjustment setting.

H116360—UN—19DEC16

Dial-A-Speed™

NOTE: Dial-A-Speed™ icon appears on the corner post display.

H116352—UN—20DEC16

Dial-A-Speed™

4. Change speed using Dial-A-Speed™ adjustment dial.
   - Turn Dial-A-Speed™ adjustment dial clockwise to increase speed.
   - Turn Dial-A-Speed™ adjustment dial counterclockwise to lower/decrease speed.

NOTE: Suggested ratio for standing crop is 4. Suggested ratio for down crop is 11.

H118305—UN—19DEC16

Numeric Display

Numeric display on the corner post display shows current speed ratio setting.

H116352—UN—20DEC16

Dial-A-Speed™

NOTE: Changing speed using Dial-A-Speed™ adjustment dial changes preselected setting. To return back to preselected setting, press programmed activation button.

NOTE: The larger the ratio number selected, the faster the reel, or belt pickup, operates with respect to the machine ground speed.

H116648—UN—19DEC16

Close

5. Select to close.

N0LMWLO,0000348-19-16JUL20

Fore/Aft Resume

Fore/Aft Resume allows you to program a saved fore/aft tilt position of the feeder house frame to any of the Activation buttons 1,2, or 3 on the multi-function lever.

NOTE: You may have a standard position for harvesting standing crop and then another for downed crop. This allows you to quickly switch back and forth.

Modify When:

- Riding over wet or dense residual residue.
- You want to better attach or detach the header.
- You want to optimize conveying of crop material into the feeder house.

Tilt Feeder House Fore When:

- Picking up downed crop.
- Cutting closer to the ground.

Tilt Feeder House Aft When:

- Material is being pushed by the cutterbar. Move aft to reduce lost material.
- For standing crop, tilting aft can optimize feeding/ conveying material into the machine.

System Is Enabled When:

- Engine is running.
- Road transport disconnect switch is in field position.
- Hydraulic Feeder House Fore/Aft Resume system is ON.
- Multi-function lever switches are functionally assigned.
- Head is engaged.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Fore/Aft Resume ON/OFF.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H118577—UN—19DEC16

Programmable Buttons

3. To change fore/aft tilt setpoint, press desired programmable button C or D and adjust fore/aft tilt using hydraulic feeder house fore/aft tilt switches.

H116346—UN—19DEC16

Activation Buttons

4. Press and hold the desired activation button for 2 seconds to enter desired setting into memory.

H116354—UN—19DEC16

Activation Number

Activation number on the corner post display indicates which button was selected.

5. Push and hold top of switch to tilt feeder house forward or push and hold bottom of switch to tilt feeder house rearward.

   Armrest display shows the feeder house fore/aft tilt position based on a sensor linked to the feeder house.

   Manually moving hydraulic feeder house fore/aft tilt switches on multi-function lever deactivates system.

   Press activation buttons 1, 2, or 3 to reactivate system. Hydraulic feeder house fore/aft tilt automatically moves to preselected position.

NOTE: When the feeder house is raised and the header is engaged, feeder house fore/aft tilt automatically moves forward. This allows the feeder house safety stop to be lowered onto hydraulic cylinder rod. Feeder house fore/aft tilt automatically returns to last known position when lowering.

When the header is disengaged, feeder house fore/aft tilt automatically moves forward upon raising. Feeder house fore/aft tilt will not return to last known position when lowering.

H116648—UN—19DEC16

Close

6. Select to close.

N0LMWLO,0000349-19-16JUL20

Reel Position Resume

Reel Position Resume allows you to select position of the reel relative to belts, auger, cutterbar, floor and so forth and return to that position automatically.

Modify To:

- Assist in picking up downed crop.
- Clean off the cutter bar at the end of a cut.
- Harvest standing crop of different heights in the same field.

Set to optimize crop flow:

- **Standing Crop (with Height Sensing Active)**— Position the reel above the cutterbar so that it slightly touches the grain heads. This helps the crop fall into the platform.

  In small grain crops, place the reel slightly in front of the auger to allow the crop fall into the auger. Position the reel tines straight down or slightly forward. If the crop starts to turn with the reel, the reel position setting is too low. If you see crop being hit by the reel and bouncing back and forth before being cut, reduce the reel speed. Too fast of a reel speed will result in header losses.
- **Down Crop (with Float Mode Active)**— place the reel in front of the cutterbar so that the reel can rake up the crop. Position the reel tines backward to help with lifting the crop. Consider the use of crop lifters if they are available for your platform type.
- **Headland Turns (with Height Resume Active)**— Position the reel as close as possible to the cutterbar. This prevents crop from falling out of the platform during a headland turn.

System Is Enabled When:

H116361—UN—19DEC16

Reel Position Resume

NOTE: Reel Position Resume icon appears on the corner post display.

- Properly equipped header (with reel position sensors) is connected to machine and is calibrated.
- Engine is running.
- Feeder house is engaged.
- Road transport disconnect switch is in field position.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Reel Position Resume ON/OFF.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116349—UN—19DEC16

Reel Lift

3. Use reel lift switch to obtain desired reel height position.

H116346—UN—19DEC16

Activation Buttons

4. Press and hold the desired activation button for 2 seconds to enter desired setting into memory.

NOTE: Each activation button can save a different reel position. Press and hold the desired button for 2 seconds to save the reel position.

H116361—UN—19DEC16

Reel Position Resume

NOTE: Reel Position Resume icon flashes indicating setpoint is saved.

H116354—UN—19DEC16

Activation Number

Activation number on the corner post display indicates which button was selected.

Manually moving reel lift switch on the multi-function lever deactivates reel position.

Press activation buttons 1, 2, or 3 to reactivate system. Reel automatically moves to preselected height.

H116648—UN—19DEC16

Close

5. Select to close.

N0LMWLO,000034A-19-16JUL20

Deck Plate Position Resume

Deck Plate Position Resume allows you to select spacing of the hydraulic deck plates and return to that position automatically.

Modify When:

Decrease Deck Plate Spacing When:

- Ear shelling at deck plates.
- For an area that has smaller stalks due to flooding or low nutrient level.
- To reduce grain loss and damage at the header if the condition exists.

Increase Deck Plate Spacing When:

- Excessive trash intake from the corn head causes shelled corn to come out of rear of combine.
- Pulling up corn stalks and ears. Gradually open deck plates until stalks feed through rolls more freely.
- For less material other than grain to reduce shoe load.
- For picking up downed corn to improve feeding and reduce the amount of trash the machine takes in.
- To clean out any buildup of material around the deck plates when coming to an end of cut.

System Is Enabled When:

- Properly equipped header (with the deck plate sensors) is connected to machine and is calibrated.
- Engine is running.
- Feeder house is engaged.
- Road transport disconnect switch is in field position.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Deck Plate Position Resume ON/OFF.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.

H116349—UN—19DEC16

Reel Lift and Fore/Aft

3. Use reel fore/aft switch to obtain desired deck plate spacing.
   - Left side of switch increases spacing.
   - Right side of switch decreases spacing.

   Minimum: 0

   Maximum: 9

   Increment: 1

H116346—UN—19DEC16

Activation Buttons

4. Press and hold the desired activation button for 2 seconds to enter desired setting into memory.

H116362—UN—19DEC16

Deck Plate Position Resume

NOTE: Deck Plate Position Resume icon appears on the corner post display.

H116354—UN—19DEC16

Activation Number

Activation number on corner post display indicates which button was selected.

Manually moving fore/aft switch on the multi-function lever deactivates deck plate resume.

Press Activation Buttons 1, 2, or 3 to reactivate system. Deck plates automatically move to preselected position.

N0LMWLO,000034B-19-16JUL20

HydraFlex™ Pressure

HydraFlex™ Pressure helps optimize platform ground-following performance and allows you to vary the cutterbar ground pressure without affecting the cutting height of the crop.

Modify When:

- Cutting off the ground using height sensing arms. HydraFlex™ Pressure can be increased to lock the cutterbar in a rigid position.
- Increase pressure when cutterbar is pushing.
- Decrease pressure when cutterbar rides over the top or leaves uncut crop.

Procedure to Modify:

H114076—UN—19DEC16

HydraFlex™ Pressure

1. Select screen area under HydraFlex™ Pressure to open HydraFlex™ Pressure page.

H116142—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired pressure.
   - Minimum: 0
   - Maximum: 20 684 kPa (207 bar) (3000 psi)
   - Increment: 345 kPa (4 bar) (50 psi)
   - No default

H116648—UN—19DEC16

Close

3. Select to close.

Recommended Settings (600FD and 700FD):

HydraFlex is a trademark of Deere & Company

- 6894 kPa (69 bar) (1000 psi) for firm ground conditions.
- 8963 kPa (90 bar) (1300 psi) for normal ground conditions.
- 11 031 kPa (110 bar) (1600 psi) for soft ground conditions.

Recommended Settings (600F):

- 7584 kPa (76 bar) (1100 psi) for firm ground conditions.
- 8963 kPa (90 bar) (1300 psi) for normal ground conditions.
- 11 721 kPa (117 bar) (1700 psi) for soft ground conditions.

Alternative Procedure to Modify:

H116143—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

N0LMWLO,000034C-19-16JUL20

Draper Belt Speed

Draper Belt Speed controls the speeds of the side draper belts. Set belt speed for prevailing crop conditions and adjust for an even distribution of crop material across the side draper belts.

NOTE: It is generally best to start with the maximum belt speed and reduce speed if you encounter feeding problems.

Increase Belt Speed When:

- Heavy loading of side belts occurs.
- Heavy loading of material along sides of the center belt occurs.
- Excessive plugging of the feed drum and/or feeder house occurs.
- Crops are pulled under the platform by side draper belts.
- Too much material builds up on belts, blocking the knife, and leaving standing uncut crop.

Decrease Belt Speed When:

- Crops are feeding under opposing side draper belt.
- You want to reduce shatter loss for long green straw/ stems.

Procedure to Modify:

H114075—UN—19DEC16

Draper Belt Speed

1. Select screen area under Draper Belt Speed to open Draper Belt Speed page.

H116145—UN—19DEC16

Standard

2. Use toggle button to select desired belt mode.

H116144—UN—19DEC16

Reduced Speed

NOTE: Use Reduced Speed when not harvesting with the full width of platform.

NOTE: In Reduced Speed mode, belts slow down to a factory default setting and a turtle icon flashes below the draper belt speed icon.

NOTE: Increasing belt speed overrides Reduced Speed.

H116146—UN—20DEC16

Adjustment

3. Select plus (+) to increase or minus (-) to decrease desired speed.

   Minimum: 0

   Maximum: 240 rpm

   Increment: 10 rpm

   No default

H116648—UN—19DEC16

Close

4. Select to close.

Recommended Settings:

160—220 n/min

Faster belt speeds are typically required in tougher crop conditions.

Alternative Procedure to Modify:

H116147—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

N0LMWLO,000034D-19-16JUL20

Draper Float Position

Draper Float Position controls the pressure in the cylinders for the gauge wheels and center section.

NOTE: Higher numbers make the header lighter, which increases oil pressure to gauge wheels/center section float. Lower numbers make the header heavier with less pressure in the float system.

Modify When:

For off ground cutting only:

- You want to reduce unwanted ground contact. Increase float setting.
- You want to reduce wavy cutting. Decrease float setting.
- The head is slow to react to changing ground conditions. Decrease float setting.

Downed crop:

- The header begins to push material in front of the cutterbar as can sometimes be seen in soft ground conditions. Increase float setting.
- The header begins to leave uncut crop behind the cutterbar as can sometimes be seen in firm ground conditions. Decrease float setting.

Procedure to Modify:

H116130—UN—19DEC16

Draper Float Position

1. Select screen area under Draper Float Position to open Draper Float Position page.

H116148—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired position.

   Minimum: 1

   Maximum: 10

   Default 5

   Increment: 1

H116648—UN—19DEC16

Close

3. Select to close.

Alternative Procedure to Modify:

H116149—UN—19DEC16

Input Field

1. Select to activate Navigation Bar and Armrest Adjustment Dials.

H115035—UN—14MAR16

Navigation Bar Adjustment Dial

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Navigation Bar or Armrest Adjustment Dial to select desired setting.
   - Turn dial clockwise to increase value.
   - Turn dial counterclockwise to decrease value.

N0LMWLO,000034E-19-16JUL20

Cutterbar Tilt

Cutterbar Tilt adjusts angle of the cutterbar in relation to the rest of the platform to optimize harvesting capabilities.

Modify To:

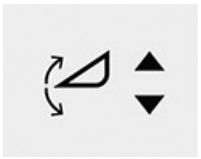
Tilt the cutterbar forward:

- Assist in picking up downed crop.
- Harvest closer to the ground.

Tilt the cutterbar rearward:

- Prevent picking up rocks, dirt, and foreign objects. Level out the head while cutting on the ground.
- Prevent cut crop buildup falling from the cutterbar or loss of grain heads at cutterbar.

Procedure to Modify:



H114077—UN—19DEC16

Cutterbar Tilt

1. Select screen area under Cutterbar Tilt to open Cutterbar Tilt page.

H116155—UN—20DEC16

Adjustment

2. Select to tilt the cutterbar up or down.

H116648—UN—19DEC16

Close

3. Select to close.

N0LMWLO,000034F-19-16JUL20

Deck Plate Spacing

Deck Plate Spacing adjusts deck plate opening in order to match changes in crop conditions.

Modify When:

- Switching fields, or conditions vary in the same field.

Decrease Deck Plate Spacing When:

- Ear shelling at deck plates.
- Header loss has been identified as grain shelling at the base of the ear.
- Grain damage is recognized in the corn head. Reduce deck plate spacing to provide a cushion for the ears.

- You want to optimize feeding for narrow stalks.

Increase Deck Plate Spacing When:

- Excessive trash intake from the corn head is causing shelled corn to come out of the rear of the combine.
- The corn head is pulling up corn stalks and ears. Gradually open deck plates until stalks feed through rolls more freely.
- The corn appears to be pushing stalks over.
- You want to optimize feeding for large diameter stalks.

Procedure to Modify:

H116349—UN—19DEC16

Deck Plate Spacing Switch

- Press left side of switch to increase spacing.
- Press right side of switch to decrease spacing.

H116362—UN—19DEC16

Deck Plate Spacing

NOTE: Pressing left or right side of switch on multi-function lever activates the Deck Plate Spacing icon on corner post display.

Minimum: 0

Maximum: 9

Increment: 1

NOTE: To provide Deck Plate Spacing adjustment for heads with electric deck plate spacing - operators will have to go through Advanced Settings and select the option for 3rd Party Deck Plate Override.

Once enabled, this option allows operators to tap on the Deck Plate Spacing frame of the application to bring up an adjustment overlay with conditionally available readout.

N0LMWLO,0000350-19-16JUL20

Backshaft Speed

Adjusting Backshaft Speed allows you to optimize the feed rate of the header to the travel speed and volume of material the machine is harvesting.

Modify When:

Increase Backshaft Speed When:

- Flagging of stalk.
- Pulling stalk out of the ground.

NOTE: Higher backshaft speeds are recommended for faster harvesting speeds and taking in large volumes of material to reduce loading on drive components.

Decrease Backshaft Speed When:

- Snapping off stalk and ingesting into separator.
- Butt shelling because ear hits deck plate too fast.

NOTE: Reducing the Backshaft Speed can reduce ears bouncing and the generation of free grain in the header when harvesting lower volumes of material.

Procedure to Modify:

H116349—UN—19DEC16

Backshaft Speed Switch

- Press top of the switch to increase gear selection or backshaft speed.
- Press bottom of the switch to decrease gear selection or backshaft speed.

H118498—UN—19DEC16

Numeric Display

NOTE: Pressing left or right side of switch on multi-function lever activates Numeric Display on corner post display.

NOTE: Only for CommandTouch™ Multi-Speed Feeder House Drive.

Feeder House Lower Shaft Speeds	
Fixed Speed (if equipped)	490 rpm
Heavy Duty Variable Speed (if equipped)	490-750 rpm

CommandTouch is a trademark of Deere & Company

Feeder House Lower Shaft Speeds	
High Torque Variable Speed (if equipped)	490-750 rpm
Multi-Speed (if equipped)	**1st Gear:** 490 rpm, **2nd Gear:** 550 rpm, **3rd Gear:** 600 rpm, **4th Gear:** 670 rpm, 5th Gear: 750 rpm

N0LMWLO,0000351-19-16JUL20

Cutterbar Position Resume

Cutterbar Position Resume allows you to program a saved cutterbar position to any of the activation buttons 1, 2, or 3 on the multi-function lever.

NOTE: You may have a standard position for harvesting standing crop and then another for downed crop. This allows you to quickly switch back and forth. Cutterbar position resume only works on European extendable platform headers.

Modify To:

- Reduce pre-harvest losses in tall standing crops. Extend the cutterbar.
- Improve feeding in short standing crops. Retract the cutterbar.

Procedure to Modify:

H116962—UN—19DEC16

Auto Control

1. Select Auto Control on Header application main screen.

H116165—UN—19DEC16

ON/OFF

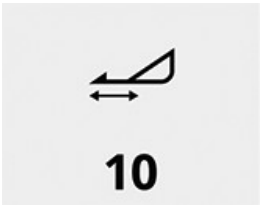
2. Select to turn Cutterbar Position Resume ON/OFF.

H116168—UN—19DEC16

Alert Icon

NOTE: When a given automation option has issues preventing it from being enabled, the toggle switch is replaced with a generic issue alert button. Selecting this button brings up a message dialogue with information to aid in troubleshooting the issues.

NOTE: Depending on machine configurations and the setup of your configurable switches and buttons on the multi-function lever, many combinations exist.



H114081—UN—19DEC16

Cutterbar Position

3. Select the screen area under Cutterbar Position to open the Cutterbar Position page.

H116150—UN—20DEC16

Adjustment

4. Select plus (+) to increase or minus (-) to decrease the desired position.

H116648—UN—19DEC16

Close

5. Select to close.

H116346—UN—19DEC16

Activation Buttons

6. Press and hold the desired activation button for 2 seconds to enter the desired setting into memory.

H116354—UN—19DEC16

Activation Number

Activation number on the corner post display indicates which button was selected.

Alternative Procedure to Modify:

NOTE: The combine allows you to enter plant height and desired stubble height in the armrest display. This data, together with the entered amount of crop harvested, allows the combine to make a pre-set of the cutting table for optimized operation.

NOTE: Wizard can be accessed through this overlay or launched from Information and Settings.

H116151—UN—19DEC16

Cutterbar Wizard

1. Select to start Cutterbar Wizard.

H116152—UN—19DEC16

Input Box

2. Select to open the number pad and enter the desired plant height.

H116152—UN—19DEC16

Input Box

3. Select to open the number pad and enter the desired stubble height.

H116154—UN—19DEC16

Save

- Select to close the overlay and update the position setting.

H116153—UN—19DEC16

Cancel

- Select to exit the wizard without updating the position setting.

H116346—UN—19DEC16

Activation Buttons

4. Press and hold the desired activation button for 2 seconds to enter the desired setting into memory.

H116354—UN—19DEC16

Activation Number

Activation number on the corner post display indicates which button was selected.

MM95366,0000485-19-05JUN19

Cutterbar Position

Cutterbar Position adjust allows you to control the position of the cutterbar.

NOTE: Only works on European Extendable Platform Headers.

Modify To:

- Reduce pre-harvest losses in tall standing crops. Extend the cutterbar.
- Improve feeding in short standing crops. Retract the cutterbar.

H114081—UN—19DEC16

Cutterbar Position

Procedure to Modify:

1. Select screen area under Cutterbar Position to open Cutterbar Position page.

H116150—UN—20DEC16

Adjustment

2. Select plus (+) to increase or minus (-) to decrease desired position.

H116648—UN—19DEC16

Close

3. Select to close.

H116151—UN—19DEC16

Wizard

Alternative Procedure to Modify:

NOTE: The combine allows you to enter plant height and desired stubble height in the armrest display. This data, together with the entered amount of crop harvested, allows the combine to make a pre-set of the cutting table for optimized operation.

NOTE: Wizard can be accessed through this overlay or launched from Information and Settings.

1. Select to Start Wizard.

H116152—UN—19DEC16

Number Pad

2. Select to open number pad and enter desired plant height.

H116152—UN—19DEC16

Number Pad

3. Select to open number pad and enter desired stubble height.

H116154—UN—19DEC16

Save

- Select to close the overlay and update position setting.

H116153—UN—19DEC16

Cancel

- Select to exit the wizard without updating position setting.

MM95366,000048E-19-07JUN19

Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

NOTE: To access the Advanced Settings, Limp Home Mode and Cutterbar Position Wizard, the Header button on the Navigation Bar MUST be pressed.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Items Accessible on Advanced Settings Page:

N118434—UN—22JAN20

Check Box

Installed Optional Equipment— select each piece of optional header equipment that is currently installed on the header.

NOTE: Selecting the installed options ensures appropriate suspension behavior.

H116165—UN—19DEC16

ON/OFF

Limp Home Mode— use the toggle to enable and disable.

H116165—UN—19DEC16

ON/OFF

Cutterbar Position Wizard— use the toggle to enable and disable.

H114786—UN—10JAN17

Check Box

Deck Plate Override— allows deck plate spacing adjustment for heads with electric deck plate spacing adjustment. Once enabled, this option allows you to select on the Deck Plate Spacing icon in the Header application to bring up an Deck Plate Spacing adjustment page.

AZ06166,000078E-19-16JUL20

Limp Home Mode

Allows you to continue to fold, actuate, drive, or transport machine when a system fault is recognized.

Available Limp Home Modes:

- Fore/Aft Tilt
- Reel and Cutterbar
- Folding Corn Head

Modify When:

Select Limp Home mode check box if machine faults occur and machine components still need to function in order for:

- Harvesting to continue.
- Transporting on roadways. Loading on to a trailer.
- Placing the machine into a building.

Procedure to Modify:

NOTE: Limp Home Mode only appears if a sensor fails or fault code exists.

N118004—UN—22OCT15

Advanced

1. Select Advanced Settings to access further adjustments and less common settings.

H116165—UN—19DEC16

ON/OFF

2. Select to turn Limp Home Mode ON/OFF.

CAUTION: You accept the risk of collisions of machine components when turning Limp Home Mode ON.

H116648—UN—19DEC16

Close

3. Select to close.

N0LMWLO,0000353-19-16JUL20

Cutterbar Position Wizard

Allows operator to adjust cutterbar position for various plant heights and stubble heights.

Modify When:

- Calibrating platform.
- Crop conditions vary across the field.
- Changing Crop types.

H116151—UN—19DEC16

Wizard

Procedure to Modify:

1. Select to Start Wizard.

H116152—UN—19DEC16

Number Pad

2. Select to open number pad and enter desired plant height.

H116152—UN—19DEC16

Number Pad

3. Select to open number pad and enter desired stubble height.

Entering plant and stubble height configures a recommended cutterbar position.

H116154—UN—19DEC16

Save

- Select to close the overlay and update position setting.

H116153—UN—19DEC16

Cancel

- Select to exit the wizard without updating position setting.

SS43267,0000801-19-27JAN17

Grain Handling

Access Grain Handling

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H114773—UN—10JAN17

Grain Handling

3. Grain Handling

Access Application Through Navigation Bar:

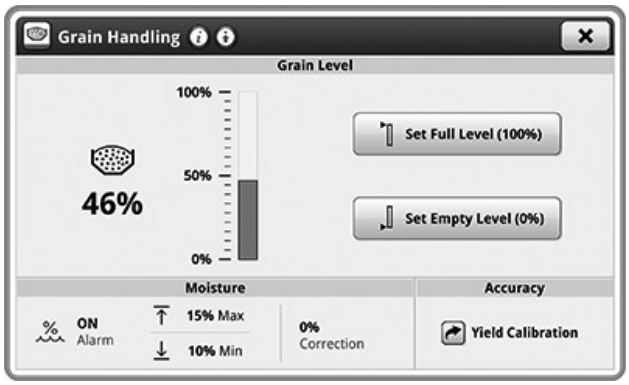
H114775—UN—10JAN17

Grain Handling

Press Grain Handling button on navigation bar below display.

N0LMWLO,0000354-19-16JUL20

Grain Handling Main Page



H119900—UN—10JAN17

Grain Handling

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Grain Handling application is used to access and modify Grain Level settings, Moisture, and Accuracy. Advanced Settings are used to modify Grain Level Auto Beacon, Tank Unloading Offset, and Custom Level Alarm.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

H114778—UN—10JAN17

Moisture

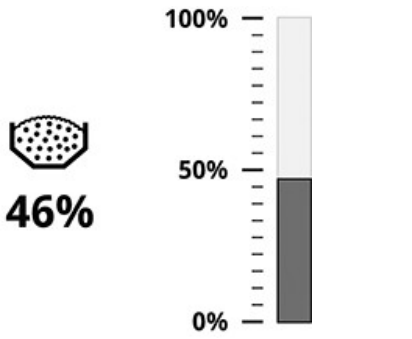
Items accessible on Grain Handling Main Page:

Moisture— enable or disable moisture alarm, set maximum and minimum moisture alarm settings, and set moisture correction.

H114779—UN—10JAN17

Yield Calibration

Accuracy— access Yield Calibration.



H115000—UN—10JAN17

Grain Level

Grain Level Items

Grain Level— displays current grain tank level.

H114776—UN—10JAN17

Set Full Level

Set Full Level— set grain tank full level.

H114777—UN—10JAN17

Set Empty Level

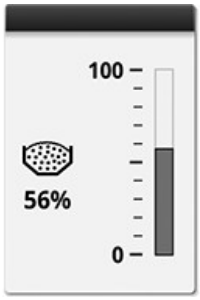
Set Empty Level— set grain tank empty level.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings Items

Advanced Settings— access further adjustments and less common settings.



H116266—UN—31JAN17

Grain Level

Run Page Modules

Modules for this application can be added to run pages using Layout Manager.

Example:

Grain Level— gives you direct access to Grain Level application.

NOTE: Different modules can be available for your application.

SS43267,0000807-19-17MAY17

Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

H113848—UN—04JAN17

ON/OFF

Items accessible on Advanced Settings page:

Grain Level Auto Beacon— beacon light illuminates when grain tank is 3/4 full or is full.

H126193—UN—24APR19

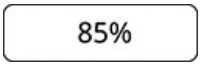
Offset

Tank Unloading Offset— adjust grain tank empty level if all grain is not emptied from grain tank or unloading auger continues to run after grain tank is empty.

H113848—UN—04JAN17

ON/OFF

Custom Level Alarm— message appears on the screen when selected grain level has been met.



H119129—UN—10JAN17

Custom Level Alarm Input Box

Custom Level Alarm Input Box— select to edit custom level alarm.

MM95366,000047C-19-03JUN19

Advanced Settings | Grain Level Auto Beacon

Grain Level Auto Beacon illuminates when grain tank is 3/4 full or is full.

Modify To:

- Enable or disable Grain Level Auto Beacon.
- Provide a signal that the grain tank is 3/4 or full.

H114769—UN—22OCT15

ON/OFF

Procedure to Modify:

Select to enable or disable Grain Level Auto Beacon.

SS43267,00008B5-19-17MAY17

Advanced Settings | Tank Unloading Offset

Tank Unloading Offset allows you to adjust grain tank empty level if all grain is not emptied from grain tank or grain level does not show 0% after grain tank is empty. Different crops, weights, and moisture can affect grain tank level sensor readings.

Modify When:

- Grain remains in tank after grain tank level reads 0%.

- Grain tank is emptied before grain tank level reads 0%.

H114780—UN—10JAN17

Decrease

Procedure to Modify:

- Decrease offset value if grain remains in tank when grain tank level reads 0%.
- Increase offset value if grain tank is emptied before grain tank level reads 0%.

Select to decrease value.

H114781—UN—10JAN17

Increase

Select to increase value.

Minimum: -15 bu/sec

Maximum: 15 bu/sec

Increment: (+/-) 0.5 bu/sec

MM95366,000047B-19-03JUN19

Advanced Settings | Custom Level Alarm

Custom Level Alarm allows you to enable a message to appear on the screen when selected grain level has been met.

Modify To:

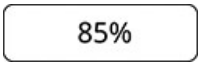
- Enable or disable Custom Level Alarm.
- Set an additional earlier notification of grain tank level other than 3/4 full or full.
- Set a lower alarm threshold.

H114769—UN—22OCT15

ON/OFF

Procedure to Modify:

1. Select to enable or disable Custom Level Alarm.



H119129—UN—10JAN17

Input Box

2. Select to open number pad and enter desired value.

H114789—UN—10JAN17

OK

3. Select OK to save value.

NOTE: When custom level alarm is met, a message appears on-screen. The message can be viewed in the Status Center on the display.

SS43267,00008B7-19-27JAN17

Grain Level

Grain Level allows you to set correct grain tank Full Level or grain tank Empty Level if grain level is not reading correctly.

Modify When:

- Grain is spilling over the sides when operating in hilly conditions. Set a lower grain tank level.
- The grain tank is full and you want to set the Grain Level as 100%. Select the "Set Full Level" button to calibrate the 100% reading.
- The grain tank is empty but the system is still unloading. Select the "Set Empty Level" button to calibrate the empty reading.

Procedure to Modify:

H114776—UN—10JAN17

Set Full Level

- Select to save grain tank full level.

H114777—UN—10JAN17

Set Empty Level

- Select to save grain tank zero level.

NOTE: Selecting Set Empty Level will automatically adjust Tank Unloading Offset.

NOTE: Grain level 3/4 and full beacon will adjust based on grain level.

SS43267,00008B8-19-26NOV19

Moisture Settings

Moisture Settings allows you to enable or disable

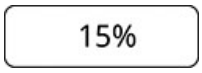
moisture alarm, set maximum and minimum moisture alarm settings, set moisture correction, and enable or disable Use Fixed Moisture.

H113848—UN—04JAN17

ON/OFF

Items accessible on Moisture Settings page:

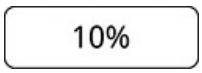
ON/OFF— enable or disable Moisture Alarm.



H119131—UN—10JAN17

Maximum Moisture Value

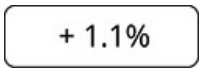
Maximum Moisture— upper limit to activate the moisture alarm.



H119130—UN—10JAN17

Minimum Moisture Value

Minimum Moisture— lower limit to activate the moisture alarm.



H119132—UN—10JAN17

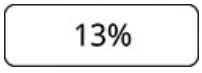
Correction Value

Correction— amount of correction needed to match a certified moisture measurement.

H114786—UN—10JAN17

Unchecked

Use Fixed Moisture— enable or disable fixed moisture.



H119133—UN—10JAN17

Fixed Moisture Value

Use Fixed Moisture— fixed moisture level.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings— further Moisture Settings adjustments and less common settings.

SS43267,00008B9-19-27JAN17

Moisture Alarm

Moisture Alarm allows you to enable or disable the Moisture Alarm that sounds when moisture value drops below minimum or above maximum setting.

Modify To:

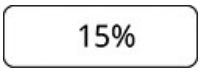
- Enable or disable the Moisture Alarm.
- Adjust the minimum moisture percentage.
- Adjust the maximum moisture percentage.

H114769—UN—22OCT15

ON/OFF

Procedure to Modify:

- Select to enable or disable Moisture Alarm.



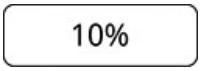
H119131—UN—10JAN17

Maximum

- Select to set percentage for alarm to sound when moisture percentage is above value.

  Minimum: 1%

  Maximum: 60%



H119130—UN—10JAN17

Minimum

- Select to set percentage for alarm to sound when moisture percentage is below value.

  Minimum: 1%

  Maximum: 50%

NOTE: Maximum moisture percentage must be set higher than minimum moisture percentage.

SS43267,00008BA-19-17JAN17

Moisture Correction

Moisture Correction allows you to toggle between Moisture Correction or Fixed Moisture, adjust the value when moisture percentage measured by combine

moisture sensor differs from the elevator certified moisture, and disable moisture sensor reading and force a preset moisture value.

Modify To:

- Toggle between moisture correction and fixed moisture.
- Change amount of correction needed to match a certified moisture reading.
- Change fixed moisture level used when the fixed moisture feature is enabled.

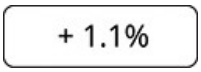
H114785—UN—10JAN17

Checked

Moisture Correction Procedure:

Set moisture correction to difference between combine moisture sensor and elevator certified moisture sensor. {Example: elevator moisture (13%) minus combine measured moisture (12%) = moisture difference (+1%)}

1. If Use Fixed Moisture is checked, deselect checkbox to enable Correction.



H119132—UN—10JAN17

Value

2. Select to open number pad and enter desired value.

H114789—UN—10JAN17

OK

3. Select OK to save value.

NOTE: Moisture correction can be a positive or negative number.

H114786—UN—10JAN17

Unchecked

Fixed Moisture Procedure:

1. If Use Fixed Moisture is not checked, select checkbox to enable.

H119133—UN—10JAN17

Value

2. Select to open number pad and enter desired value.

H114789—UN—10JAN17

OK

3. Select OK to save value.

SS43267,00008BB-19-17JAN17

Status Center

Status Center provides status and quick access for Grain Handling functions. See Display Overview for more information.

Items accessible for Grain Handling in Status Center:

H116268—UN—10JAN17

Unloading Auger

Unloading Auger Swung Out— auger is out.

H125880—UN—14MAR19

Unloading Auger Engaged

Unloading Auger Engaged— auger is currently unloading.

H119800—UN—06JUN19

Grain Level

Grain Level— shown as 4/4.

H116267—UN—10JAN17

Grain Level

Grain Level— shown as 3/4.

NOTE: Selecting Set Empty Level automatically adjusts Tank Unloading Offset.

NOTE: Grain level 3/4 and full beacon adjusts based on grain level.

SS43267,00008BC-19-06JUN19

Folding

Access Folding

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H114607—UN—10JAN17

Folding

3. Folding

Access Application Through Navigation Bar:

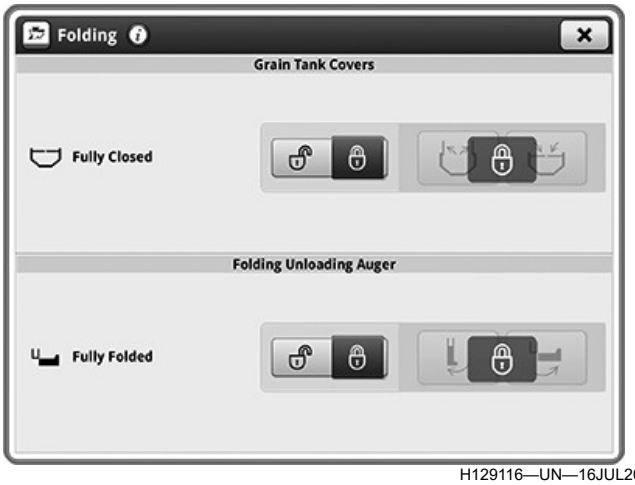
H115016—UN—22MAR16

Folding

Press Folding button on navigation bar below display.

N0LMWLO,0000355-19-16JUL20

Folding Main Page



H129116—UN—16JUL20

Folding

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Folding Application is used to operate folding equipment.

Items Accessible on Folding Main Page:

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Grain Tank Covers Items:

H114615—UN—06JAN17

Lock/Unlock

Grain Tank Covers— lock or unlock the folding function buttons for the grain tank covers.

H127217—UN—26SEP19

Content Blocker

Content Blocker— shows locked status. Prevents accidental engagement of the function. Press and hold to disengage.

Fountain Auger Items:

H114615—UN—06JAN17

Lock/Unlock

Fountain Auger— lock or unlock the folding function buttons for the fountain auger.

H127220—UN—26SEP19

Content Blocker

Content Blocker— shows locked status. Prevents accidental engagement of the function. Press and hold to disengage.

Folding Unloading Auger Items:

H114615—UN—06JAN17

Lock/Unlock

Folding Unloading Auger— lock or unlock the folding function buttons for the folding unloading auger.

H127221—UN—26SEP19

Content Blocker

Content Blocker— shows locked status. Prevents accidental engagement of the function. Press and hold to disengage.

Extendable Platform Items:

H114615—UN—06JAN17

Lock/Unlock

Extendable Platform— lock or unlock the folding function buttons for the extendable platform.

H127514—UN—26SEP19

Content Blocker

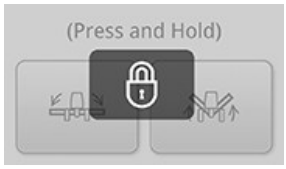
Content Blocker— shows locked status. Prevents accidental engagement of the function. Press and hold to disengage.

Folding Corn Head (John Deere Models):

H114615—UN—06JAN17

Lock/Unlock

Folding Corn Head— lock or unlock folding function buttons for the corn head.



H116240—UN—06JAN17

Content Blocker

Content Blocker— shows locked status. Prevents accidental engagement of the function.

Folding Corn Head (non-John Deere Models):

H114615—UN—06JAN17

Lock/Unlock

Folding Corn Head— lock or unlock folding function buttons for the corn head.

H127219—UN—26SEP19

Content Blocker

Content Blocker— shows locked status. Prevents accidental engagement of the function. Press and hold to disengage.

Manual Control Overlay:

H116669—UN—30JAN17

Manual Control

Manual Control—any abnormal state causes the control frame to display the Manual Control icon link push button.

NOTE: This applies to any subsystem affected by the position sensor issue or any other issue.

AZ06166,000078F-19-16JUL20

Grain Tank Covers

Grain Tank Covers application allows you to open and close grain tank covers from within the cab.

CAUTION: Avoid power line entanglement. Grain tank covers must be closed before transporting machine.

IMPORTANT: Unload grain before closing grain tank covers.

NOTE: Grain tank covers must be fully opened in order to engage separator.

Modify To:

- Configure machine for field operation.
- Service machine components.
- Configure machine for road transportation or storage.
- Clean out machine.

Procedure to Modify:

H114612—UN—06JAN17

Position Unknown Error

NOTE: When a position unknown error is present on Grain Tank Covers, one-touch folding is unavailable. Select and hold buttons to fold or unfold grain tank covers.

NOTE: You can press the quick-stop switch on multi-function lever at any time to stop all movement controlled by the Folding application. Resume folding by selecting desired button.

H114619—UN—06JAN17

Lock/Unlock

1. Select to unlock folding and unfolding buttons.
2. Select desired button to fold or unfold grain tank covers.

H114623—UN—06JAN17

Open

- Select to fully open grain tank covers.

H114621—UN—06JAN17

Close

- Select to close grain tank covers.

H114616—UN—06JAN17

Progress Indicator

Displays progress of grain tank covers when opening and closing.

H114622—UN—06JAN17

Open/Close

NOTE: You can interrupt grain tank cover movement at any time by selecting either of the action buttons. Resume folding by selecting desired button.

H114627—UN—06JAN17

Fully Open

H114640—UN—06JAN17

Fully Closed

- Folding status is displayed on screen when action is complete.

H114615—UN—06JAN17

Lock

NOTE: System automatically changes to locked status 30 seconds after last button selection.

NOTE: Locked state prevents you from accessing folding controls, however it does not stop equipment that is already in motion. Locked state does not block physical controls that can be assigned to actuate movement in Controls Setup application.

N0LMWLO,0000357-19-16JUL20

Folding Unloading Auger

Folding Auger Tip allows you to fold and unfold unloading auger as required.

Modify To:

- Configure machine for field operation.
- Service machine components.
- Configure machine for road transportation or storage.

Procedure to Modify:

H114612—UN—06JAN17

Position Unknown Error

NOTE: When a position unknown error is present on Folding Unloading Auger, one-touch folding is unavailable. Select and hold buttons to fold or unfold auger tip.

NOTE: You can press the quick-stop switch on multi-function lever at any time to stop all movement controlled by the Folding application. Resume folding by selecting desired button.

H114619—UN—06JAN17

Lock/Unlock

1. Select to unlock folding and unfolding buttons.
2. Select desired button to fold or unfold auger tip.

H114637—UN—06JAN17

Unfold

- Select to unfold auger tip.

H114628—UN—06JAN17

Fold

- Select to fold the auger tip.

H114616—UN—06JAN17

Progress Indicator

Displays progress of auger tip when folding and unfolding.

H114629—UN—06JAN17

Unfold/Fold

NOTE: You can interrupt auger tip folding movement at any time by selecting either of the action buttons. Resume folding by selecting desired button.

H128147—UN—16DEC19

Fully Unfolded

H128148—UN—16DEC19

Fully Folded

- Folding status is displayed on screen when action is complete.

H114615—UN—06JAN17

Lock/Unlock

NOTE: System automatically changes to locked status 30 seconds after last button selection.

NOTE: Locked state prevents you from accessing folding controls, however it does not stop equipment that is already in motion. Locked state does not block physical controls that can be assigned to actuate movement in Controls Setup application.

N0LMWLO,0000358-19-16JUL20

Fountain Auger

Fountain Auger application allows you to raise and lower the fountain auger from within the cab.

Modify To:

- Configure machine for field operation.
- Configure machine for road transportation.

Procedure to Modify:

H114612—UN—06JAN17

Position Unknown Error

NOTE: When a position unknown error is present on Fountain Auger, one-touch raising is unavailable. Select and hold buttons to raise or lower fountain auger.

NOTE: You can press the quick-stop switch on multi-function lever at any time to stop all movement controlled by the Folding application. Resume folding by selecting desired button.

H114619—UN—06JAN17

Lock/Unlock

1. Select to unlock raise and lower buttons.
2. Select desired button to raise or lower fountain auger.

H127641—UN—08OCT19

Raise

- Select to fully raise fountain auger.

H127642—UN—08OCT19

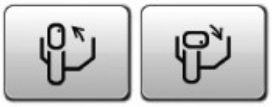
Lower

- Select to fully lower fountain auger.

H114616—UN—06JAN17

Progress Indicator

Displays progress of the fountain auger when raising and lowering.



H127648—UN—08OCT19

Raised/Lowered

NOTE: You can interrupt fountain auger movement at any time by selecting either of the action buttons. Resume raising or lowering by selecting desired button.

H127653—UN—08OCT19

Fully Raised

H127654—UN—08OCT19

Fully Lowered

- Folding status is displayed on screen when action is complete.

H114615—UN—06JAN17

Lock/Unlock

NOTE: System automatically changes to locked status 30 seconds after last button selection.

NOTE: Locked state prevents you from accessing folding controls, however it does not stop equipment that is already in motion. Locked state does not block physical controls that can be assigned to actuate movement in Controls Setup application.

AZ06166,0000790-19-16JUL20

Extendable Platform

Extendable Platform application allows you to deploy (extend) and stow (retract) the extendable platform from within the cab.

Modify To:

- Configure machine for field operation.
- Configure machine for road transportation.

Procedure to Modify:

H114612—UN—06JAN17

Position Unknown Error

NOTE: When a position unknown error is present on Extendable Platform, one-touch automatic length adjustment is unavailable. Select and hold buttons to deploy or stow Extendable Platform.

NOTE: You can press the quick-stop switch on the multi-function lever at any time to stop all movement controlled by the Folding application. Resume deploy/stow by selecting desired button.

H114619—UN—06JAN17

Lock/Unlock

1. Select to unlock deploy and stow buttons.
2. Select desired button to deploy or stow extendable platform.

H127644—UN—08OCT19

Deploy

- Select to fully deploy extendable platform.

H127643—UN—08OCT19

Stow

- Select to fully stow extendable platform.

H114616—UN—06JAN17

Progress Indicator

Displays progress of the extendable platform when deploying and stowing.

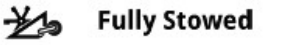
H127649—UN—08OCT19

Deployed/Stowed

NOTE: You can interrupt extendable platform movement at any time by selecting either of the action buttons. Resume folding by selecting desired button.

H127658—UN—08OCT19

Fully Deployed



H127657—UN—08OCT19

Fully Stowed

- Folding status is displayed on screen when action is complete.

H114615—UN—06JAN17

Lock/Unlock

NOTE: System automatically changes to locked status 30 seconds after last button selection.

NOTE: Locked state prevents you from accessing folding controls, however it does not stop equipment that is already in motion. Locked state does not block physical controls that can be assigned to actuate movement in Controls Setup application.

AZ06166,0000791-19-16JUL20

Folding Corn Head (John Deere Models)

Folding Corn Head Control allows you to fold and unfold corn head.

Modify To:

- Configure machine for field operation.
- Service machine components.
- Detaching corn head from machine.
- Gain clearance at headlands.
- Configure machine for road transportation.

CAUTION: Follow local government laws and regulations regarding transporting a header on roadways.

H114619—UN—06JAN17

Lock/Unlock

Procedure to Modify:

NOTE: You can press the quick-stop switch on multi-function lever at any time to stop all movement controlled by the Folding application. Resume folding by selecting desired button.

1. Select to unlock folding and unfolding buttons.
2. Select and hold desired button to fold or unfold corn head.

NOTE: You can interrupt folding movement at any time by releasing the action button. Resume folding by selecting and holding desired button.

H115022—UN—06JAN17

Unfold

- Select and hold to unfold corn head.

H115021—UN—06JAN17

Fold

- Select and hold to fold corn head.

H114615—UN—06JAN17

Lock/Unlock

NOTE: System automatically changes to locked status 30 seconds after last button selection.

NOTE: Locked state prevents you from accessing folding controls, however it does not stop equipment that is already in motion. Locked state does not block physical controls that can be assigned to actuate movement in Controls Setup application.

N0LMWLO,0000359-19-16JUL20

Folding Corn Head (non-John Deere models)

Folding Corn Head Control allows you to fold and unfold corn head.

Modify To:

- Configure machine for field operation.
- Service machine components.
- Detaching corn head from machine.
- Configure machine for road transportation.

CAUTION: Follow local government laws and regulations regarding transporting a header on roadways.

Procedure to Modify:

NOTE: You can press the quick-stop switch on multi-function lever at any time to stop all movement controlled by the Folding application. Resume folding by selecting desired button.

H114619—UN—06JAN17

Lock/Unlock

1. Select to unlock folding and unfolding buttons.
2. Select and hold desired button to fold or unfold corn head.

H114617—UN—06JAN17

Unfold

- Select and hold to unfold corn head.

H115021—UN—06JAN17

Fold

- Select and hold to fold corn head.

NOTE: You can interrupt folding movement at any time by releasing the action button. Resume folding by selecting and holding desired button.

H114616—UN—06JAN17

Progress Indicator

Displays progress of the corn head when folding and unfolding.

H116122—UN—06JAN17

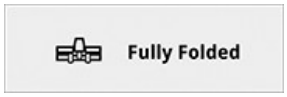
Partially Unfolded

H116121—UN—06JAN17

Fully Unfolded

H116123—UN—06JAN17

Partially Folded



H116124—UN—06JAN17

Fully Folded

- A folding corn head equipped with position sensors displays current folding status.

H114615—UN—06JAN17

Lock/Unlock

NOTE: System automatically changes to locked status 30 seconds after last button selection.

NOTE: Locked state prevents you from accessing folding controls, however it does not stop equipment that is already in motion. Locked state does not block physical controls that can be assigned to actuate movement in Controls Setup application.

N0LMWLO,000035A-19-16JUL20

Manual Control

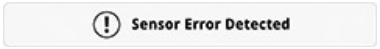
Manual Control displays subsystem features that are malfunctioning or have been placed into manual control mode.

NOTE: This does not include all subsystems, only those experiencing or affected by position sensor issues.

Items Accessible on Manual Control Page:

Displayed below are examples of attention frames that

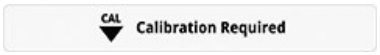
may appear on subsystems experiencing an issue. Subsystems not experiencing an issue will still be displayed, but without the sensor error or calibration required attention frames.



H126208—UN—06JUN19

Sensor Error Detected

Grain Tank Covers



H126207—UN—06JUN19

Calibration Required

Folding Unloading Auger

H126208—UN—06JUN19

Sensor Error Detected

Folding Corn Head

N0LMWLO,000035B-19-16JUL20

Harvest Settings

Access Harvest Settings

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H113528—UN—27JAN17

Harvest Settings

3. Harvest Settings

Access Application Through Navigation Bar:

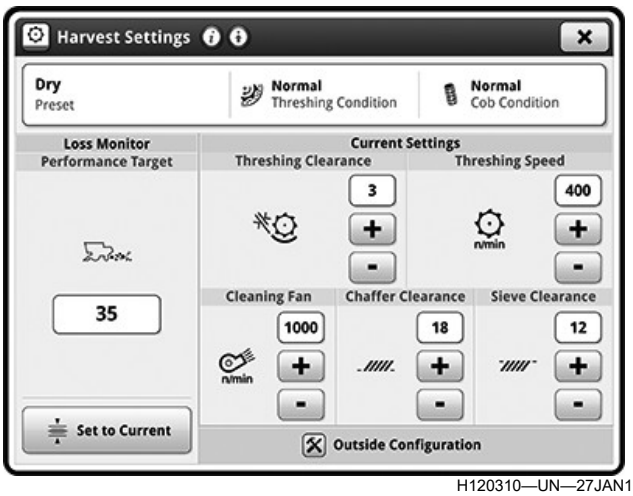
H116102—UN—27JAN17

Harvest Settings

Press the Harvest Settings button on the navigation bar below the display.

N0LMWLO,000035C-19-16JUL20

Harvest Settings Main Page



H120310—UN—27JAN17

Harvest Settings

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Harvest Settings is used to adjust the threshing and cleaning performance for minimum harvest loss based on crop harvested and crop conditions.

Items Accessible on Harvest Settings Main Page:

H126455—UN—07JUN19

Load Harvest Settings

Load Harvest Settings— allows you to make default selections on Presets, Threshing Conditions, and Straw/Cob Conditions to help grain cleanliness and grain loss.

H119104—UN—30JAN17

Performance Target

Performance Target— allows you to select the acceptable grain loss for your machine.

H119125—UN—27JAN17

Set To Current

Set to Current— select to set the new "acceptable loss" to the current loss level. When pressed, the height total loss column of the VisionTrak™ display is adjusted to the center of the column.

H113683—UN—27JAN17

Threshing Clearance

Threshing Clearance— allows you to modify the threshing clearance.

H113685—UN—27JAN17

Threshing Speed

Threshing Speed— allows you to modify the threshing speed.

H113684—UN—27JAN17

Cleaning Fan

Cleaning Fan— allows you to modify the fan speed.

H116095—UN—27JAN17

Outside Configuration

Outside Configuration— shows the external machine adjustments that must be made prior to harvesting a selected crop type.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings— allows you to access further adjustments and less common settings.

H113706—UN—27JAN17

Chaffer Clearance

Chaffer Clearance— allows you to modify the opening of the chaffer elements.

H113693—UN—27JAN17

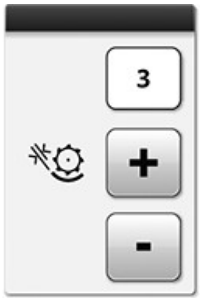
Sieve Clearance

Sieve Clearance— allows you to modify the opening of the sieve elements.

Run Page Modules:

Modules for this application can be added to the run pages using Layout Manager.

Example:



H116117—UN—30JAN17

Clearance

Clearance— allows you to adjust the threshing clearance.

NOTE: Different modules can be available for your application.

N0LMWLO,000035D-19-16JUL20

Load Harvest Settings

Load Harvest Settings allows you to make default selections on Presets, Threshing Conditions, and Straw/Cob Conditions to help grain cleanliness and grain loss.

NOTE: Changing Crop Type in Work Setup causes change in harvest settings. See Effects of Crop Change for further information.

Items Accessible on Load Harvest Settings Page:

Preset— allows you to select defaults, previous preset values, and adjust previous preset values to adjust to crop conditions.

Threshing Conditions— allows you to describe the threshing conditions so the system can help determine correct machine settings.

Straw Conditions— allows you to describe the straw/cob

conditions so the system can help determine correct machine settings.

Settings Preview— displays the current settings and displays your setting changes in bold in the "New" column.

NOTE: If any automated adjustment is made by the system, the values update to provide you the most current value.

H113683—UN—27JAN17

Threshing Clearance

Threshing Clearance

H113685—UN—27JAN17

Threshing Speed

Threshing Speed

H113684—UN—27JAN17

Cleaning Fan

Cleaning Fan

H113706—UN—27JAN17

Chaffer Clearance

Chaffer Clearance

H113693—UN—27JAN17

Sieve Clearance

Sieve Clearance

H116984—UN—27JAN17

Save Preset

Save Preset— allows you to save changes made to Presets, Threshing Conditions, and Straw/Cob Conditions.

NOTE: Auto Maintain performance can be reduced if settings differ from the selected preset. Create a new preset with the current settings for best performance.

N0LMWLO,000035E-19-16JUL20

Load Harvest Settings | Preset

Preset allows you to select from a list of saved machine configurations for a given crop.

Modify When:

- You want to create a preset to capture the harvest settings that provide the desired performance and grain quality for the crop and conditions that you are harvesting.
- You want to create a new custom preset when working with Auto Maintain and your settings are very different from the actual preset.

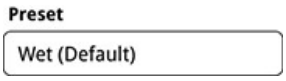
Procedure to Modify:

H126455—UN—07JUN19

Load Harvest Settings

1. Select to open.

NOTE: Other than corn, all other crop types are listed with default first, then clean out option, and finally, all of your created presets in alphabetical order.



H118081—UN—27JAN17

Preset

2. Select to open Select Preset.

H119178—UN—27JAN17

Select Preset

3. Select desired preset.

H116106—UN—27JAN17

OK

4. Select to save preset and return to Load Harvest Settings.

H116110—UN—27JAN17

Current / New

NOTE: As you select a different preset, the "New" column of Settings Preview updates to display the settings change in bold.

When presets for defaults are changed, the "New" column value in the Settings Preview changes. Defaults remain unchanged when changing presets within the crop type.

NOTE: If the New Threshing Speed is outside the current rotor drive gear range, an overlay may show to prompt you to change the gear.

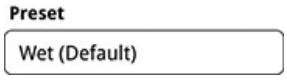
NOTE: When modifications are made to the selected preset, the word (Modified) is added to the name.

Procedure to Delete:

H126455—UN—07JUN19

Load Harvest Settings

1. Select to open Preset.



H118081—UN—27JAN17

Preset

2. Select to open Select Preset.

H119178—UN—27JAN17

Select Preset

3. Select desired preset.

H116104—UN—27JAN17

Delete

4. Select to delete Preset.

NOTE: Presets that you created can be deleted. If pressed, a message dialogue is shown to confirm the delete action on the preset.

H116105—UN—27JAN17

Cancel

5. Select to cancel if you do not wish to delete the selected preset.

H116106—UN—27JAN17

OK

NOTE: Manually record data by hand before deleting. If you delete a preset, it is removed from the display and cannot be undone.

6. Select to delete the preset.

N0LMWLO,000035F-19-16JUL20

Load Harvest Settings | Threshing Conditions

Threshing Conditions allows you to select from three options to choose the best description of your current threshing conditions.

Modify When:

- There is unthreshed grain or kernels with hullpresent in the sample. Set to Difficult.
- A satisfactory sample is created using the threshing settings within the recommended range for that crop. Set to Normal.
- Grain separates from the hull or cob before entering the threshing section. Set to Easy.

NOTE: For small grain crops, rubbing a grain head in between your fingers gives a good indication of how easy the grain will thresh. Rub the head in between your fingers until all the kernels are out of the their husks:

***Easy**— around 4 rubs of the grain head.*

***Normal**— around 8 rubs of the grain head.*

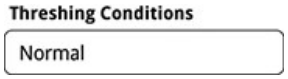
***Difficult**— around 15 rubs of the grain head.*

Procedure to Modify:

H126455—UN—07JUN19

Load Harvest Settings

1. Select to open.



H118083—UN—27JAN17

Threshing Conditions

2. Select the Threshing Conditions list box to open list of the threshing conditions.
3. Select the desired threshing condition.
   - **Difficult**— increased threshing aggressiveness to reduce unthreshed grain.
   - **Normal**— regular settings for ordinary harvest conditions.
   - **Easy**— decreased threshing aggressiveness to reduce power consumption and grain damage.

H116105—UN—27JAN17

Cancel

4. Select to cancel if you do not wish to change.

H116106—UN—27JAN17

OK

5. Select to save the Threshing Condition.

NOTE: Once selected, the system begins adjusting the settings to match the selected preset you have chosen.

H116113—UN—27JAN17

Close

6. Select to close.

N0LMWLO,0000360-19-16JUL20

Load Harvest Settings | Straw Conditions

Straw Conditions allows you to select from three options to choose the best description of your current straw condition.

Modify When:

- Harvesting tough, wet straw, green stems, or lots of material other than grain is being processed. Set to Difficult.
- Ordinary material handling for the crop is present. Set to Normal.
- Harvesting very dry straw or stems that break easily, creating an undesirable sample. Set to Brittle.

NOTE: Pick a handful of standing straw and twist it. Twisting a handful of straw will gives a good indication of straw conditions.

***Difficult**— straw will not break even when twisted more than 10 times.*

***Normal**— straw starts to break after twisting it a few times.*

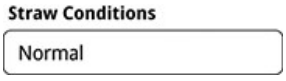
***Brittle**— straw breaks easily when starting to twist it.*

Procedure to Modify:

H126455—UN—07JUN19

Load Harvest Settings

1. Select to open.



H118086—UN—27JAN17

Straw Conditions

2. Select Straw Conditions list box.
3. Select the desired Straw Condition.
   - **Difficult**— improves material flow in tough or wet straw.
   - **Normal**— regular settings for ordinary harvest conditions.
   - **Brittle**— decreases straw breakage to reduce cleaning shoe load.

H116105—UN—27JAN17

Cancel

4. Select to cancel if you do not wish to change the Preset Modifiers.

H116106—UN—27JAN17

OK

5. Select to save Straw Condition.

NOTE: Once selected, the system begins adjusting the settings to match the selected preset you have chosen.

H116113—UN—27JAN17

Close

6. Select to close.

N0LMWLO,0000361-19-16JUL20

Load Harvest Settings | Save Preset

Save Preset allows you to create a new preset or to update the last preset you used.

Items Accessible on Save Preset:

Default Preset— allows you to change default presets and save them as your own custom preset.

Custom Preset— allows you to either update an existing custom preset or create a preset.

SS43267,0000967-19-26JAN17

Load Harvest Settings | Save Preset | Factory Default

Default Presets are factory loaded settings for each combination of Threshing Condition and Straw/Cob Quality for a given crop. You can modify these defaults and save them as a new name based on your harvesting conditions.

Modify When:

You want to create your own preset to capture the harvest settings that provide the desired performance and grain quality for the crop and conditions that you are harvesting.

Procedure to Modify:

H126455—UN—07JUN19

Load Harvest Settings

1. Select to access the Load Harvest Settings page.

H116984—UN—27JAN17

Save Preset

2. Select to save the preset as a new name.
3. Use the keyboard to enter the name of this customized setting.

H116105—UN—27JAN17

Cancel

4. Select to cancel if you do not want to save the preset.

H116107—UN—27JAN17

OK

5. Select to save the preset.

PR79369,00000A1-19-07JUN19

Load Harvest Settings | Save Preset | Custom Preset

Custom Presets are defined by you based on your harvesting conditions. These can be modified as crop conditions or machine performance changes.

Modify When:

- Harvesting different varieties of a particular crop.
- Harvesting at different times of the day (morning and evening versus afternoon).
- Harvesting in different grain moisture (wet crop versus dry crop).
- Operating with Auto Maintain.

Procedure to Modify:

H126455—UN—07JUN19

Load Harvest Settings

1. Select to access the Load Harvest Settings page.

H116984—UN—27JAN17

Save Preset

2. Select to save the preset and activate the keyboard.
3. Select an option to save the current Harvest Setting.

Create a New Preset

H116289—UN—27JAN17

Selection

Enter a new Preset name

Update Last Used Preset

H116289—UN—27JAN17

Selection

"Corn"

H116105—UN—27JAN17

Cancel

4. Select to cancel if you do not wish to save the preset.

H116107—UN—27JAN17

OK

5. Select to save the preset.

N0LMWLO,0000362-19-16JUL20

Load Harvest Settings | Effects of Crop Change

Changing the crop type in Work Setup also makes changes to the Load Harvest Settings.

H116105—UN—27JAN17

Cancel

Selecting Cancel on the Load Harvest Settings page while changing crop type in Work Setup results in the combine not being adjusted.

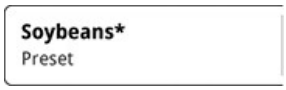
NOTE: The "Preset" indication shown on the Harvest Settings main page shows "- -" until a new preset is loaded.

H116106—UN—27JAN17

OK

Selecting OK changes the Load Harvest Settings based on the crop selected.

- If the crop type has never been used, the factory default settings are set.
- If the last used settings were a preset, the preset is selected, the last used threshing and straw conditions are selected, and individual settings are set to last use (matching the preset and conditions set).



H119175—UN—27JAN17

Preset

- If the last used settings were custom, the Preset shows {PresetName}* and the individual settings are set to the last used.

NOTE: If the new value for Threshing Speed is outside of the current rotor drive gear range, an overlay may show to prompt you to change the gear.

NOTE: Several harvesting functions are affected by the selected crop type preset. It is important to change the preset to match the crop being harvested.

N0LMWLO,0000363-19-16JUL20

Current Settings | Threshing Clearance

Threshing Clearance allows you to modify the threshing clearance for varying crops and conditions.

NOTE: For the threshing clearance settings, refer to Crop Settings section in your Operator's Manual.

Modify To:

Increase Threshing Clearance To:

- Improve straw quality; making longer straw and generates less breakage of material.
- Improve grain quality; reduce splits and grain damage.
- Reduce power consumption; for easy threshing grain.
- Improve sample cleanliness; reduce chaff load on the cleaning shoe.

Decrease Threshing Clearance To:

- Reduce unthreshed separator loss; unhulled grain or grain on the cob behind the machine.
- Improve grain tank sample; reduce white caps or unopened pods.

Adjustment States— depending on machine options, different adjustment states may appear as current settings are changed.

Procedure to Modify:

H113683—UN—27JAN17

Threshing Clearance

1. Select to set the threshing clearance.

H113698—UN—30JAN17

Adjustment

2. Select plus (+) to increase or minus (-) to decrease threshing clearance or select the input field and use the Armrest Adjustment Dial to make desired clearance changes.

H116282—UN—27JAN17
Input Field

H115034—UN—28MAR16
Armrest Adjustment Dial

- Turn the dial clockwise to increase the value.
- Turn the dial counterclockwise to decrease the value.

NOTE: Depending on machine configurations, some values may not be reached.

NOTE: Maximum value may not be attainable if dense pack elements are installed.

Minimum: 0

Maximum: 40

Increment: 1

H116113—UN—27JAN17
Close

3. Select to close.

N0LMWLO,0000364-19-16JUL20

Current Settings | Threshing Speed

Threshing Speed allows you to modify the threshing speed for varying crop conditions. If the crop is being under-threshed, first attempt to solve the problem by decreasing the threshing clearance before adjusting the threshing speed. If the crop or straw is being damaged, try reducing the threshing speed first to solve the problem before adjusting the threshing clearance.

NOTE: For the threshing speed settings, refer to Crop Settings section in your Operator's Manual.

Modify To:

Increase Threshing Speed To:

- Allow grain to be removed from the other crop material before it escapes the separator.
- Improve material flow.
- Achieve more capacity in tough material conditions.
- Improve handling in tough straw.
- Reduce the risk of plugging when taking in large amounts of material.

Decrease Threshing Speed To:

- Reduce power consumption; reduce threshing speed in easy threshing grain for improved efficiency.
- Improve grain sample quality; generate less chaff and foreign material in the cleaning shoe by reducing threshing speed.
- Reduce grain damage; broken kernels and splits can occur if the threshing speed is too fast, even if the concave clearance is set correctly.

Adjustment States— depending on machine options, different adjustment states may appear as current settings are changed.

NOTE: The threshing speed may increase about 30 rpm over 4 hours as the oil temperature increases. Adjust the speed as necessary.

Procedure to Modify:

1. Engage the separator and run the engine at high idle.

H113685—UN—27JAN17
Threshing Speed

2. Select to modify the threshing speed.

H116279—UN—30JAN17
Adjustment

3. Select plus (+) to increase or minus (-) to decrease speed or select the input field and use the Armrest Adjustment Dial to make desired speed changes.

H118087—UN—27JAN17
Input Field

H115034—UN—28MAR16
Armrest Adjustment Dial

- Turn the dial clockwise to increase the value.
- Turn the dial counterclockwise to decrease the value.

NOTE: Threshing has a two-speed gearbox, with high and low speeds. Minimum and Maximum values may require you to change the gear case setting. See Operator's Manual for further information on which speed should be selected.

NOTE: Depending on machine configurations, some values may not be reached.

Minimum: 200 rpm

Maximum: 1000 rpm

Increment: 10 rpm

H116113—UN—27JAN17

Close

4. Select to close.

N0LMWLO,0000365-19-16JUL20

Current Settings | Cleaning Fan

Cleaning Fan Speed allows you to modify the fan speed to improve grain cleanliness and reduce grain loss.

NOTE: For the fan speed settings, refer to Crop Settings section in your Operator's Manual.

Modify To:

Increase Fan Speed To:

- Improve sample quality; reduce the amount chaff or light material other than grain in the grain tank by blowing it out.
- Reduce cleaning shoe loss due to insufficient aeration; lighter grains can become trapped in chaff.

Decrease Fan Speed To:

- Reduce cleaning shoe loss; smaller lighter grains can be carried out of the cleaning shoe if the cleaning fan speed is too high.

Adjustment States— depending on machine options, different adjustment states may appear as current settings are changed.

Procedure to Modify:

1. Engage the separator and run the engine at high idle.

H113684—UN—27JAN17

Cleaning Fan Speed

2. Select to set the cleaning fan speed.

H116982—UN—30JAN17

Adjustment

3. Select plus (+) to increase or minus (-) to decrease speed or select the input field and use the Armrest Adjustment Dial to make desired speed changes.

H118088—UN—27JAN17

Input Field

H115034—UN—28MAR16

Armrest Adjustment Dial

- Turn the dial clockwise to increase the value.
- Turn the dial counterclockwise to decrease the value.

NOTE: Minimum and Maximum values may change if machine is equipped with a cleaning fan slow down Kit.

Minimum: 620 rpm

Maximum: 1350 rpm

Increment: 10 rpm

H116113—UN—27JAN17

Close

4. Select to close.

N0LMWLO,0000366-19-16JUL20

Current Settings | Chaffer Clearance

Chaffer Clearance allows you to modify the opening of the chaffer elements to improve the grain cleanliness and reduce the cleaning shoe loss for varying crops and conditions.

NOTE: For the chaffer clearance settings, refer to Crop Settings section in your Operator's Manual.

Modify To:

Increase Chaffer Clearance To:

- Reduce cleaning shoe loss; allows the grain to fall through sooner before it can escape the cleaning shoe.
- Reduce tailings; allows the grain to fall through sooner before it is forced into the tailings.

NOTE: Opening of the chaffer will also decrease pressure in cleaning shoe. Large adjustments could require readjustment of the fan speed.

Decrease Chaffer Clearance To:

- Improve sample quality; reduce the amount of larger, foreign material in the grain tank.
- Reduce high tailings volume when it does not contain free grain.

Adjustment States— depending on machine options, different adjustment states may appear as current settings are changed.

Procedure to Modify:

H113706—UN—27JAN17

Chaffer Clearance

1. Select to set the chaffer clearance.

H116993—UN—30JAN17

Adjustment

2. Select plus (+) to increase or minus (-) to decrease the desired chaffer clearance.

H118089—UN—27JAN17

Input Field

H115034—UN—28MAR16

Armrest Adjustment Dial

- Turn the dial clockwise to increase the value.
- Turn the dial counterclockwise to decrease the value.

NOTE: Depending on machine configurations, some values may not be reached.

General Purpose:

Minimum: 0

Maximum: 22

Increment: 1

Deep Tooth:

Minimum: 0

Maximum: 30

Increment: 1

H116113—UN—27JAN17

Close

3. Select to close.

N0LMWLO,0000367-19-16JUL20

Current Settings | Sieve Clearance

Sieve Clearance allows you to modify the opening of the sieve to improve grain cleanliness and manage tailings volumes for varying crops and conditions.

NOTE: For the sieve clearance settings, refer to Crop Settings section in your Operator's Manual.

Modify To:

Increase Sieve Clearance To:

- Reduce amount of free grain in the tailings; allows more grain to fall through to clean grain sooner before it is recirculated in tailings.
- Increase cleaning fan air flow; increasing sieve clearance allows more cleaning fan air up through the chaffer.

NOTE: Opening of the sieve will also decrease pressure in cleaning shoe. Large adjustments could require readjustment of the fan speed.

Decrease Sieve Clearance To:

- Increase tailings; for any hard threshing grain, force any unthreshed material back through the separator.
- Improve sample quality; reduce the amount of foreign material in the grain tank.

NOTE: To find the optimal setting for low tailings, high capacity, and grain tank cleanliness, increase sieve clearance until you see a dirty grain tank. Then decrease sieve clearance until dirt disappears.

Adjustment States— depending on machine options, different adjustment states may appear as current settings are changed.

Procedure to Modify:

H113693—UN—27JAN17

Sieve Clearance

1. Select to set the sieve clearance.

H116994—UN—30JAN17

Adjustment

2. Select plus (+) to increase or minus (-) to decrease the desired sieve clearance.

H118090—UN—27JAN17

Input Field

- Turn the dial clockwise to increase the value.

H115034—UN—28MAR16

Armrest Adjustment Dial

- Turn the dial counterclockwise to decrease the value.

NOTE: Depending on machine configurations, some values may not be reached.

General Purpose:

Minimum: 0

Maximum: 22

Increment: 1

Deep Tooth:

Minimum: 0

Maximum: 30

Increment: 1

H116113—UN—27JAN17

Close

3. Select to close.

N0LMWLO,0000368-19-16JUL20

Current Settings | Outside Configuration

Outside Configuration shows external machine adjustments that must be made prior to harvesting the selected crop type.

NOTE: For more information, refer to the machine Operator's Manual.

Procedure to Modify:

⚠ CAUTION: Shut OFF engine, set the park brake, and remove the key before making changes.

H116095—UN—27JAN17

Outside Configuration

1. Select to access outside configuration.
2. Select desired outside configuration for further information on machine settings.

   Chopper Speed

   Crop Diverter

   Tailings System Concave Position (If Equipped)

   Feed Accelerator Speed

   Feeder House Drum Position

   Feeder House Conveyor Chain Sprocket

H116113—UN—27JAN17

Close

3. Select to close.

N0LMWLO,0000369-19-16JUL20

Current Settings | Adjustment States

Adjustment States show how the system adjustment settings react when machine changes are made.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Operator Initiated Changes:

NOTE: Operator changes are made using the display or the Armrest Adjustment Dial.

H116277—UN—27JAN17

Progress Indicator

Operator Initiated Changes Progress Indicator.

H118102—UN—27JAN17

Input Field

Operator Initiated Setpoint Value Input Field.

H118101—UN—27JAN17

Performance Value

The value displayed below the setting icon represents the actual performance value.

NOTE: The actual value representing the system, which is below the icon, flashes until the actual value matches the new setpoint. Once the value reaches the new setpoint, it continues to display for 1 second before the value and progress indicator are removed from the screen.

Combine Advisor and Initiated Active Terrain Adjustment™ Changes:

NOTE: At any time, you can make manual adjustments while a Combine Advisor or Active Terrain Adjustment™ is being applied.

NOTE: The majority of adjustments made by Combine Advisor systems are offsets, meaning a setting is adjusted temporarily and reverted back to its original value when the system removes the offset.

H116278—UN—27JAN17

Progress Indicator

Combine Advisor and Active Terrain Adjustment™ Initiated Progress Indicator.

H118094—UN—27JAN17

Input Field

Combine Advisor and Active Terrain Adjustment™ Initiated Setpoint Value Input Field.

H116277—UN—27JAN17

Progress Indicator

Operator initiated changes Progress Indicator.

H118107—UN—27JAN17

Input Field

Operator Initiated Setpoint Value Input Field.

H118101—UN—27JAN17

Performance Value

The value displayed below the setting icon represents the actual performance value.

NOTE: The actual value representing the system, which is below the icon, flashes until the actual value matches the new setpoint. Once the value reaches the new setpoint, it continues to display for 1 second before the value and progress indicator are removed from the screen.

NOTE: The input field remains blue with "AUTO" printed on it to indicate that the system is maintaining the offset. When the system removes the offset, performance value returns to its value prior to the system making the offset.

N0LMWLO,000036A-19-16JUL20

Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

Items Accessible on Advanced Settings Page:

H116272—UN—27JAN17

Separator Resolution

Separator Resolution— allows you to modify the number of bars shown on the Corner Post Display VisionTrak™ for the separator loss indicator (independent of the number of center bars).

H116272—UN—27JAN17

Shoe Resolution

Shoe Resolution— allows you to modify the number of bars shown on the Corner Post Display VisionTrak™ for the shoe loss indicator (independent of the number of center bars).

H116669—UN—30JAN17

Loss Sensor Tap Test

Loss Sensor Tap Test— allows you to verify that various grain loss monitor sensors are functioning normally and detecting loss strikes. Select to open the grain loss monitor sensor tap test.

NOTE: The grain loss monitor sensor tap test can also be accessed from the Calibrations and Procedures application.

N0LMWLO,000036B-19-16JUL20

Advanced Settings | Separator Resolution

Separator Resolution allows you to modify the number of bars on the Corner Post Display VisionTrak™ for the separator loss indicator.

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Prior to Modification:

H119125—UN—27JAN17

Set to Current

1. Harvest with the machine and press the Set to Current button.
2. Perform a Power Shutdown (see Operator's Manual for procedure).
3. Inspect for any grain loss from the separator.

NOTE: If loss is present, determine if the loss is acceptable to the amount of bars indicated by the VisionTrak™ display.

Modify When:

The VisionTrak™ display does not indicate the amount of grain loss from the separator that is preferred.

- Increase Separator Resolution to show more emphasis on grain loss from the threshing and separating section.
- Decrease Separator Resolution to show less emphasis on grain loss from the threshing and separating section.

Procedure to Modify:

N118004—UN—22OCT15

Advanced Settings

1. Select the Advanced Settings button.

H118553—UN—27JAN17

Slide Bar

NOTE: Slide bar displays the current resolution.

H116272—UN—27JAN17

Separator Resolution

2. Select plus (+) to increase or minus (-) to decrease the separator resolution.

Minimum: -5

Maximum: 5

Default: 0

Increment: 1

H116113—UN—27JAN17

Close

3. Select to close.

N0LMWLO,000036C-19-16JUL20

Advanced Settings | Shoe Resolution

Shoe Resolution allows you to modify the number of bars on the Corner Post Display VisionTrak™ for the shoe loss indicator.

Prior to Modification:

H119125—UN—27JAN17

Set to Current

1. Harvest with the machine and press the Set to Current button.
2. Perform a Power Shutdown (see Operator's Manual for procedure).
3. Inspect for any grain loss from the cleaning shoe.

NOTE: If loss is present, determine if the loss is acceptable to the amount of bars indicated by the VisionTrak™ display.

Modify When:

Modify when the VisionTrak™ display does not indicate the amount of grain loss from the cleaning shoe that is preferred.

- Increase Shoe Resolution to show more emphasis on grain loss from the cleaning shoe section.
- Decrease Shoe Resolution to show less emphasis on grain loss from the cleaning shoe section.

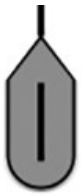
Procedure to Modify:

N118004—UN—22OCT15

Advanced Settings

VisionTrak is a trademark of Deere & Company

1. Select the Advanced Settings button.



H118553—UN—27JAN17

Slide Bar

NOTE: Slide bar displays the current resolution.

H116272—UN—27JAN17

Shoe Resolution

2. Select plus (+) to increase or minus (-) to decrease the shoe resolution.

   Minimum: -5

   Maximum: 5

   Default: 0

   Increment: 1

H116113—UN—27JAN17

Close

3. Select to close.

N0LMWLO,000036D-19-16JUL20

Performance Target

Performance Target allows you to set acceptable grain losses for your machine.

Modify When:

- Changing crop type.
- Harvesting conditions vary (wet crop versus dry crop, high moisture versus low moisture, variety A versus variety B, or large swings in seed size or yield).

NOTE: It is not necessary to set a new target if you are using a recent performance target for this crop type and harvesting conditions.

Procedure to Modify:

NOTE: Larger seed sizes such as corn or soybeans generally have a lower numerical calibration value than smaller seed sizes like wheat or canola.

NOTE: Selecting a lower calibration value will register more bars on the display for the same acceptable grain loss.

Automatic:

NOTE: Operate the machine at the desired performance and select Set to Current, this stores operating characteristics to memory and centers the total loss indicator.

NOTE: Clicking Set Performance Target in Combine Advisor also performs an Automatic Target for Grain Loss.

H119125—UN—27JAN17

Set To Current

If your machine is equipped with ICA2, select Set to Current to automatically set the new "acceptable loss" to the current loss level. When pressed, the height total loss column of the VisionTrak™ display is adjusted to the center of the column.

If your machine is equipped with Combine Advisor™, selecting Set to Current adjusts the total loss column of the VisionTrak™ display but does not set a new "acceptable loss" level.

Manual:

H119105—UN—27JAN17

Input Box

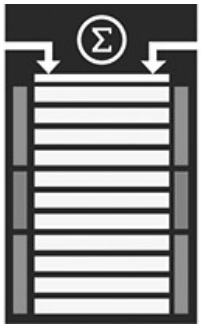
Select to open number pad and manually enter desired value.

Minimum: 1

Maximum: 99

Increment: 1

NOTE: The Automatic setting is recommended. The Manual setting should only be used if the Automatic setting does not give the desired results.



H117836—UN—22DEC16

Total Loss Indicator

NOTE: Total Loss Indicator bar graph is now a visual guide. You can refer to the corner post display periodically to know when an increase or decrease in the total loss amount occurs.

If the total loss indicator bar graph is above or below the green area and losses are acceptable, the grain loss monitor is either incorrectly adjusted or there is a higher flow of material through the machine since the grain loss monitor was last calibrated. Higher flow of material can be caused by increased ground speed or higher crop yields.

When machine encounters a “slug”, middle bar graph will fluctuate upward (15 to 20 seconds) and return to previous reading. Ignore these fluctuations when this occurs.

N0LMWLO,000036E-19-16JUL20

Access Engine

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H113552—UN—09MAR16

Engine

3. Engine

Access Application Through Navigation Bar:

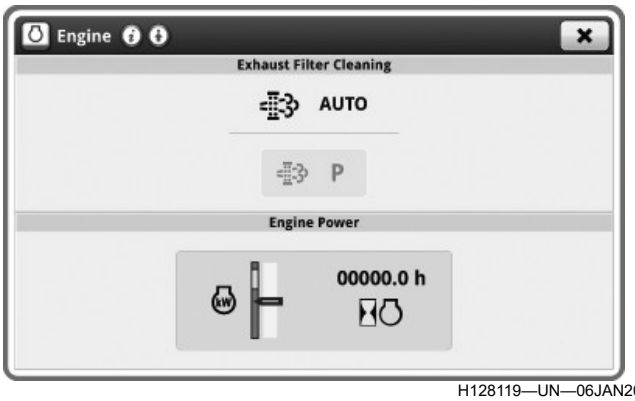
H113709—UN—04JAN17

Engine Application Button

Press Engine button on navigation bar below display.

N0LMWLO,000036F-19-16JUL20

Engine Main Page



H128119—UN—06JAN20

Engine

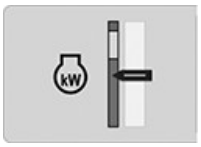
NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

The Engine application is used to access and adjust engine settings.

Items Accessible on the Engine Main Page:

NOTE: Some items below are only displayed if machine is equipped with the associated option.



H113549—UN—04JAN17

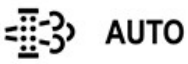
Engine Power

Engine Power— amount of power the engine is using.

H115017—UN—04JAN17

Engine Hours

Engine Hours— accumulated engine hours.



H113829—UN—04JAN17

Auto Exhaust Filter Cleaning

AUTO Exhaust Filter Cleaning— automated process that performs exhaust filter cleaning during normal operation as required.

H113830—UN—04JAN17

Parked Filter Cleaning

Parked Filter Cleaning— process which allows the system to perform additional exhaust filter cleaning when required.

H126195—UN—24APR19

Debris Management

Debris Management Filter Capacity— indicator of used and remaining filter capacity.

H118112—UN—04JAN17

Air Compressor

Air Compressor— toggle button to enable or disable air compressor system.

Run Page Modules

Modules for this application can be added to run pages using Layout Manager.

Example:

H115023—UN—04JAN17

Engine Power

Engine Power— shows engine hours and power output of the engine.

NOTE: Different modules can be available for your application.

Shortcut Keys

Shortcut keys for this application can be added to the shortcut bar using Layout Manager.

H118309—UN—04JAN17

Air Compressor

Air Compressor Shortcut Key— allows you quick access to turn air compressor ON/OFF.

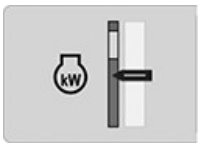
N0LMWLO,0000370-19-16JUL20

Engine Power

Engine Power allows you to view amount of engine power being used and accumulated engine hours. A power meter is available on both the display and the corner post display for visual indication of current power consumption.

IMPORTANT: If alerts or excessive exhaust smoke are visible, see your John Deere dealer or other qualified service provider for further diagnosis.

Items Displayed on the Engine Power Page:



H113549—UN—04JAN17

Engine Power

Engine Power— amount of power the engine is using.

H115017—UN—04JAN17

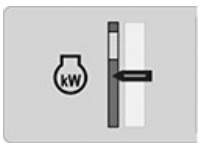
Engine Hours

Engine Hours— accumulated engine hours.

Isochronous Engine Governor

Keeps the engine and driven component speeds constant to enhance capacity and efficiency until rated engine power is exceeded.

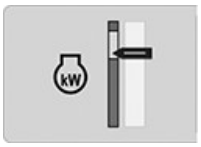
Power Meter



H113549—UN—04JAN17

Green Zone

- **Green Zone**— operate engine at upper portion of the green zone to maximize machine productivity and maintain constant engine speed.

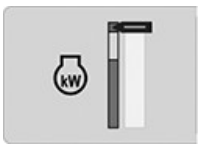


H113551—UN—04JAN17

Yellow Zone

- **Yellow Zone**— preferred upper limit in tough conditions. Less power bulge available in this zone.

  Target lower range of the yellow zone before unloading auger is engaged.



H113550—UN—04JAN17

Red Zone

- **Red Zone**— peak power level and is not recommended for extended periods because no power reserve is available.

IMPORTANT: If indicator moves into the red zone, engine power is maximized and the machine could potentially stall. Reduce load on the machine until indicator moves back into green or yellow zones.

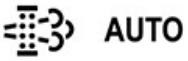
Operating in the following conditions increases power consumption:

- Hilly terrain
- Heavy or wet crop
- Wet ground conditions
- Excessive ground speed

N0LMWLO,0000371-19-16JUL20

Exhaust Filter System Overview

Your machine is equipped with an emission-compliant engine, which cleans and filters the exhaust. Under normal machine operation and with the system in AUTO mode, the system requires minimal operator interaction.



H113829—UN—04JAN17

Auto Exhaust Filter Cleaning

To avoid the unnecessary buildup of diesel particulates or soot in the exhaust filter system:

- Utilize AUTO Exhaust Filter Cleaning mode.
- Avoid unnecessary idling.
- Use proper engine oil.
- Use only ultra low sulfur fuel.

NOTE: For more information, refer to Fuels and Lubricants section in the machine Operator's Manual.

CAUTION: When AUTO or PARKED cleaning is enabled, the exhaust temperature can be high under no load or light load conditions at certain times during the exhaust filter cleaning cycle.

Servicing machine or attachments during the exhaust filter cleaning can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

During auto or manual/stationary exhaust filter cleaning operations, the engine runs at elevated temperatures for up to 45 minutes. To avoid injury or fire, verify exhaust filter, components, and outlet are free of debris. During entire cleaning process, keep exhaust outlet away from people, buildings, and anything that can melt, burn, or explode.

AUTO Mode— automated process that performs exhaust filter cleaning during normal operation.

Disable AUTO Exhaust Filter— in conditions where it can be unsafe for elevated exhaust temperatures.

H113830—UN—04JAN17

Parked Filter Cleaning

Parked Filter Cleaning— process which allows the system to perform additional exhaust filter cleaning when required.

Engine Cool Down— period of cool down after exhaust filter cleaning.

N0LMWLO,0000372-19-16JUL20

AUTO Exhaust Filter Cleaning

H113829—UN—04JAN17

Auto Exhaust Filter Cleaning

AUTO Mode allows the Exhaust Filter System to perform exhaust filter cleaning as required. Corner post display indicator and armrest display provide you with information related to exhaust filter system activity.

H113561—UN—07NOV16

High Exhaust System Temperature (HEST) Indicator

High Exhaust System Temperature (HEST) Indicator illuminates on the corner post display when the exhaust system temperatures are elevated.

CAUTION: When AUTO or PARKED cleaning is enabled, the exhaust temperature can be high under no load or light load conditions at certain times during the exhaust filter cleaning cycle. Disable exhaust filter cleaning system in conditions where it can be unsafe for elevated exhaust temperatures.

NOTE: System defaults to AUTO mode when parked exhaust filter cleaning is complete.

Disable AUTO Exhaust Filter Cleaning system in conditions where it can be unsafe for elevated exhaust temperatures.

IMPORTANT: Damage to exhaust cleaning components can occur if engine is turned OFF while performing exhaust filter cleaning or shortly after cleaning is complete. Alarm sounds and a warning message appears on display. Start machine and follow messages on display to allow components to cool. See Engine Cool Down In Progress.

N0LMWLO,0000373-19-16JUL20

Parked Filter Cleaning

Parked Filter Cleaning is a process which you initiate to clean the exhaust filter when required.

During the process, engine speed is controlled by the system, and the machine must remain parked to complete the procedure. Time required for the Parked Filter Cleaning process is dependent upon the level of exhaust filter restriction, ambient temperatures, and current exhaust gas temperature.

Procedure to Modify:

CAUTION: When AUTO or PARKED cleaning is enabled, the exhaust temperature can be high under no load or light load conditions at certain times during the exhaust filter cleaning cycle.

Servicing machine or attachments during the exhaust filter cleaning can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

During auto or manual/stationary exhaust filter cleaning operations, the engine runs at elevated idle and hot temperatures for an extended period. Exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite, or melt common materials.

IMPORTANT: Damage to exhaust cleaning components can occur if engine is turned OFF while performing exhaust filter cleaning or shortly after cleaning is complete. Start machine and follow messages on display to allow components to cool. See Engine Cool Down In Progress.

NOTE: Parked Filter Cleaning can exceed 40 minutes.

H113804—UN—09MAR16

Abort

Select Abort at any time during Parked Filter Cleaning procedure to cancel process.

H113830—UN—04JAN17

Parked Filter Cleaning

1. Select Parked Exhaust Filter Cleaning button.
2. Verify that the machine is configured for Parked Filter Cleaning.
   - Position the machine outdoors
   - Stop machine motion
   - Set engine speed to low idle
   - Engage park brake
   - Disengage separator
   - Clear proximity sensor
   - Engine debris management system functional

N118440—UN—09MAR16

Check Mark

Once a condition has been met, a green check mark in box appears preceding the condition.

H113803—UN—09MAR16

Next

3. Once all conditions have been met, select NEXT on display.

NOTE: Exhaust Filter System controls the engine speed to increase exhaust temperature.

H113801—UN—04JAN17

Progress Indicator

Exhaust filter cleaning is shown by Progress Indicator.

H114770—UN—22JAN20

Close

4. Select and a message appears on the screen that can be viewed in the Status Center on the display.

NOTE: Cleaning process continues when close button is selected.

H113816—UN—04JAN17

Status Center

To check status of the procedure, select Status Center to open Status Center page.

H118543—UN—04JAN17

Check Status

Select Check Status to view the cleaning process.

H113825—UN—04JAN17

Cleaning Complete

System informs you when exhaust filter cleaning is complete.

H114770—UN—22JAN20

Close

5. Select to return to the display.

If you are not returning the machine to service immediately after procedure, allow engine time to return to normal operating temperature before stopping engine. See Engine Cool Down In Progress.

NOTE: System defaults to AUTO mode when parked exhaust filter cleaning is complete.

N0LMWLO,0000374-19-16JUL20

Disable AUTO Exhaust Filter Cleaning

Auto Exhaust Filter Cleaning can be disabled in certain conditions.

IMPORTANT: Disable the automatic exhaust filter cleaning system only when necessary.

Modify When:

- Indoors or under a roof unless a high temperature externally vented exhaust system is connected.
- There is not enough time available for the machine to complete a cleaning cycle before it is shut down.
- In high crop dust or chaff conditions.
- Next to a fueling area.

Procedure to Modify:

H113829—UN—04JAN17

Automatic

1. Select to open Exhaust Filter Cleaning.

H113848—UN—04JAN17

ON/OFF

2. Select to enable or disable Automatic Filter Cleaning.

H114770—UN—22JAN20

Close

3. Select to close Exhaust Filter Cleaning.

N0LMWLO,0000375-19-16JUL20

Engine Cool Down In Progress

Engine Cool Down is a specific time period necessary to allow the engine and components to cool down.

IMPORTANT: Damage to exhaust cleaning components can occur if engine is turned OFF while performing exhaust filter cleaning or shortly after cleaning is complete. Alarm sounds and a warning message appears on display. Start machine and follow messages on display to allow components to cool.

Access Engine Cool Down In Progress:

H127479—UN—26SEP19

Engine Cool Down Icon

1. Engine Cool Down In Progress alert opens on-screen showing the minutes left before the machine can be shut down.

H113812—UN—04JAN17

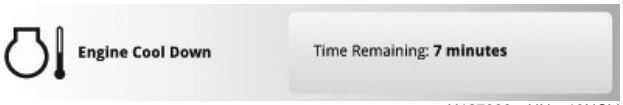
OK

2. Select OK on Engine Cool Down In Progress alert.

H113817—UN—04JAN17

Status Center

3. Engine Cool Down Icon illuminates in Status Center during Engine Cool Down In Progress.



H127983—UN—19NOV19

Status Center Display

4. Select Engine Cool Down icon to view Engine Cool Down progress in the Status Center Display.

H127510—UN—26SEP19

Engine Cool Down Complete

5. When engine cool down time elapses, the Engine OK Icon appears on-screen.

IMPORTANT: If engine is shut off during Engine Cool Down, an alert displays on screen requiring the engine to be started.

H113812—UN—04JAN17

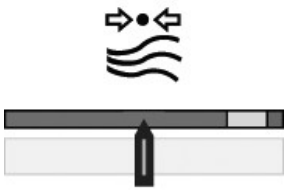
OK

6. Cool Down Complete message appears and tells you that the machine can be shut down. Select to close message.

N0LMWLO,0000376-19-16JUL20

Debris Management Filter Capacity

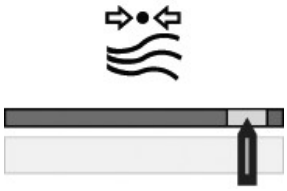
An indicator that allows you to view the debris management filter capacity.



H126195—UN—24APR19

Green Zone

- **Green Zone—** filter capacity is good.



H126196—UN—24APR19

Yellow Zone

- **Yellow Zone—** little filter capacity is remaining. Remove and clean filter soon.

NOTE: A message appears on the screen that retriggers once per key cycle until filter is cleaned.

H126197—UN—24APR19

Red Zone

- **Red Zone—** there is no filter capacity remaining. Remove and clean filter now.

NOTE: When indicator moves into the red zone, a Stop Alert DTC is triggered. Remove and clean the engine debris management filter.

N0LMWLO,0000377-19-16JUL20

Air Compressor

Air Compressor provides a supplemental compressed air source to clean the machine.

The air compressor will only function if the following requirements are met:

- Engine must be running.
- Machine must be in park.
- Separator must be disengaged.
- Header must be disengaged.
- Machine external components must not be in motion.

Procedure to Modify:

IMPORTANT: Drain moisture from the air tank daily. Refer to Operator's Manual for details.

IMPORTANT: Never clean engine air filters or debris management air filters while engine is running.

NOTE: Onboard Air Compressor is NOT recommended to inflate tires on the machine or run air tools.

H113822—UN—04JAN17

Status Indicator

Status Indicator— displays status of Air Compressor requirements.

H116670—UN—04JAN17

ON/OFF

Select to enable or disable Air Compressor. ON/OFF toggle button is located on the Engine Main Page.

NOTE: When the air compressor is active, the green status indicator pulses to remind you that certain machine functions such as separator, header, unloading auger and propulsion systems are reduced in functionality.

NOTE: When preconditions are not met, selecting the ON/OFF toggle button displays Air Compressor Status to help troubleshoot what is preventing the system from activating.

N0LMWLO,0000378-19-16JUL20

Air Compressor Status

Air Compressor Status shows the requirements needed to enable the air compressor system.

H116670—UN—04JAN17

ON/OFF

Select ON/OFF toggle button under Air Compressor to open Air Compressor Status page if all requirements are not met.

Items Displayed on Air Compressor Status Page:

H113824—UN—04JAN17

Gray

Not Ready— requirements not met.

H113824—UN—04JAN17

Gray

Ready— requirements met but not enabled.

H113822—UN—04JAN17

Green

Active— requirements met and system enabled.

Air Compressor Requirements:

- Engine must be running.
- Machine must be in park.
- Separator must be disengaged.
- Header must be disengaged.
- Machine external components must not be in motion.

H113826—UN—04JAN17

Alert Message

A message appears when a requirement is not met.

H113825—UN—04JAN17

Check Mark

Once a condition is met, a green check mark appears.

H114770—UN—22JAN20

Close

Select to close Air Compressor Status.

SS43267,00008A2-19-19NOV19

Access HVAC

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H114795—UN—04JAN17

HVAC

3. HVAC

Access Application Through Navigation Bar:

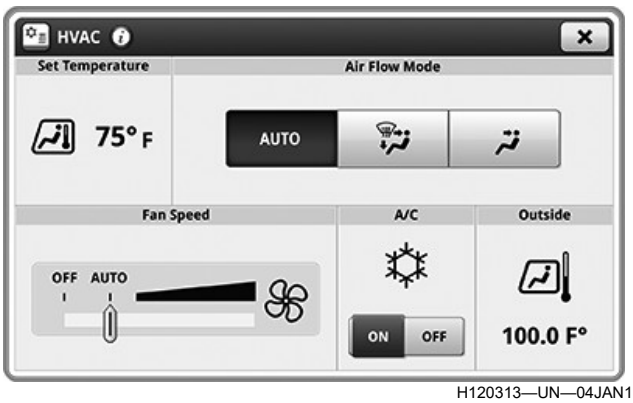
H114794—UN—17MAR16

HVAC

Press HVAC button on navigation bar below display.

N0LMWLO,0000379-19-16JUL20

Heating, Ventilation, and Air Conditioning (HVAC) Main Page



H120313—UN—04JAN17

HVAC

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

HVAC application is used to adjust temperature, fan speed, and air flow mode inside of cab and view outside temperature.

H119378—UN—15SEP16

Set Temperature

Items Accessible on HVAC Main Page:

Set Temperature— set a desired temperature inside cab.

H114797—UN—17MAR16

Air Flow Mode

Air Flow Mode— adjust distribution of air flow inside cab.

H114801—UN—17MAR16

Fan Speed

Fan Speed— control fan speed inside cab.

H113850—UN—05MAY16

Air Conditioning

Air Conditioning (A/C)— enable or disable air conditioning.

H119377—UN—16SEP16

Outside

Outside— view current outside temperature.

H115024—UN—04JAN17

A/C

Run Page Modules

Modules for this application can be added to run pages using Layout Manager.

Example:

A/C— toggle gives you direct access to enable/disable the A/C.

NOTE: Different modules can be available for your application.

Shortcut Keys

Shortcut keys for this application can be added to the shortcut bar using Layout Manager.

Example:

H116265—UN—04JAN17

A/C ON/OFF

A/C ON and OFF— quick access to turn air conditioning on and off.

NOTE: Different shortcut keys may be available for your application.

N0LMWLO,000037B-19-16JUL20

Set Temperature

Set Temperature allows you to set a desired temperature inside the cab.

H114796—UN—17MAR16

Set Temperature

Procedure to Modify:

1. Select Set Temperature value to modify cab temperature setting.

H114792—UN—22JAN20

Decrease

2. Select to decrease value.

H114791—UN—22JAN20

Increase

3. Select to increase value.

H114770—UN—22JAN20

Close

4. Select to close cab temperature setting.

Alternate Procedure to Modify:

ClimaTrak™ Automatic Temperature Control— press temperature increase or decrease buttons on armrest to modify temperature.

N0LMWLO,000037C-19-16JUL20

Fan Speed

Fan Speed allows you to control fan speed inside the cab.

H114801—UN—17MAR16

Fan Speed

Procedure to Modify:

1. Select the screen area under Fan Speed to modify it.

H114802—UN—17MAR16

Indicator

ClimaTrak is a trademark of Deere & Company

2. Indicator moves to selected fan speed, automatic mode, or off by selecting the minus (-) or plus (+) buttons.

H114998—UN—04JAN17

Decrease

   a. Select to decrease fan speed.

H114997—UN—04JAN17

Increase

   b. Select to increase fan speed.

   Fan will be turned OFF when indicator moves to OFF.

   Fan speed will be automatically regulated when indicator moves to AUTO.

H114770—UN—22JAN20

Close

3. Select to close fan speed setting.

NOTE: In AUTO mode, as temperature approaches setpoint, fan speed decreases.

Alternate Procedure to Modify:

ClimaTrak™ Automatic Temperature Control— press fan speed increase or decrease buttons on armrest to modify fan speed.

N0LMWLO,000037D-19-16JUL20

Air Flow Mode

Air Flow Mode allows you to adjust distribution of air flow inside the cab or enable windshield defrost.

Procedure to Modify:

H114797—UN—17MAR16

Air Flow Modes

Select desired air flow mode on toggle bar.

H114798—UN—17MAR16

Automatic

Automatic— automatically distributes and redirects air flow based on actual temperature and desired temperature in the cab.

H114799—UN—17MAR16

Defrost, Operator, and Floor

Defrost, Operator, and Floor— distribute air flow evenly throughout cab and defrost windshield.

NOTE: Air conditioning turns ON when Defrost air flow mode is selected.

H114800—UN—17MAR16

Operator

Operator— direct air flow at you.

Alternate Procedure to Modify:

ClimaTrak™ Automatic Temperature Control— press air flow mode button on armrest to toggle between modes.

N0LMWLO,000037E-19-16JUL20

Air Conditioning (A/C)

Air Conditioning allows you to enable or disable air conditioning.

NOTE: Air conditioning turns ON when defrost air flow mode is selected.

H114790—UN—04JAN17

ON/OFF

Procedure to Modify:

Select to enable or disable Air Conditioning.

SS43267,00008A7-19-17MAY17

Outside Temperature

Outside allows you to view the current outside temperature.

ClimaTrak is a trademark of Deere & Company

H119377—UN—16SEP16

Outside

Procedure to Modify:

Select screen area under Outside to open a larger display of current outside temperature.

H114770—UN—22JAN20

Close

Select to close Outside temperature.

SS43267,00008A8-19-27JAN17

Access Transmission

Access Application Through Display:

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

H113668—UN—22OCT15

Menu

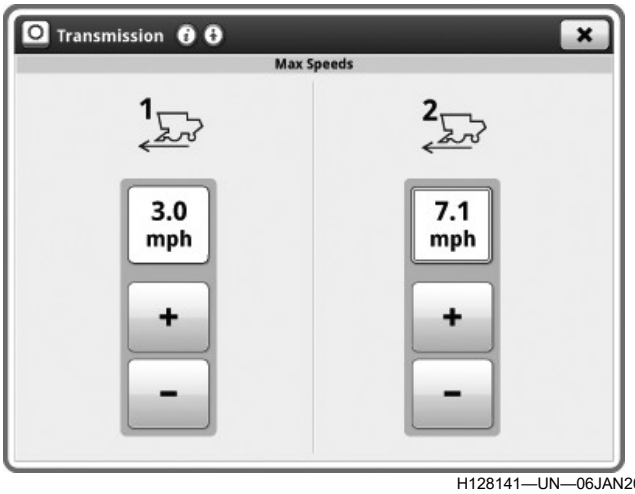
H113843—UN—30OCT15

Transmission

3. Transmission

N0LMWLO,000037F-19-16JUL20

Transmission Main Page



H128141—UN—06JAN20

Transmission

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Transmission application is used to display transmission information and adjust settings.

Items Accessible on ProDrive™ Transmission Main Page:

H126972—UN—26SEP19

Max Speed 1

Max Speed 1— maximum speed when max speed 1 is active. Select input box to adjust setting.

H126973—UN—26SEP19

Max Speed 2

Max Speed 2— maximum speed when max speed 2 is active. Select input box to adjust setting.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings— allows you to access further adjustments and less common settings.

Items Accessible on Push-Button Shift Transmission Main Page:

Current Gear— shows you the current gear that is selected.

Press Push-Button Shift Transmission buttons to change the current gear.

H126976—UN—26SEP19

Current Gear

N118004—UN—22OCT15

Advanced Settings

Advanced Settings— allows you to access further adjustments and less common settings.

N0LMWLO,0000380-19-16JUL20

Max Speed 1 and 2

Max Speeds allows you to set a comfortable harvest or transport speed. When desired ground speed is set and multi-function lever is moved fully forward with the engine at high idle, machine operates no faster than the setpoint for the selected mode. Two modes are available.

NOTE: Max Speed 1 cannot be set higher than current maximum speed set in Max Speed 2.

NOTE: Greater maximum setpoints mean more aggressive machine movements. It is always best to use low range with a low maximum setpoint when doing precision movements (hooking up header).

- Example 1: Attaching header to machine and harvesting desired crop. Max Speed 1 set to 1.6 km/h (1 mph). Max Speed 2 set to 11.3 km/h (7 mph).
- Example 2: Waterway approaches and harvesting desired crop. Max Speed 1 set to 4.8 km/h (3 mph). Max Speed 2 set to 11.3 km/h (7 mph).

H114768—UN—10JAN17

Value

Select plus (+) button to increase value.

Select minus (-) button to decrease value.

NOTE: As you switch between speed settings using the ProDrive™ Mode buttons on the armrest, a message appears on-screen reminding you of the speed settings currently active. The message can be viewed in the Status Center on the display.

N0LMWLO,0000381-19-16JUL20

Advanced Settings ProDrive™

Items Accessible on Advanced Settings Page:

Limp Home Mode— enable to move a machine with a power train sensor fault to a safe location or to be serviced.

Tow Mode— must be enabled to tow the machine.

N0LMWLO,0000382-19-16JUL20

Advanced Settings ProDrive™ Tow Mode

You can enable Tow Mode to protect transmission if machine is disabled and requires towing.

CAUTION: Do not tow machine with wire rope. If rope breaks, the whipping action could cause bodily injury.

Do not remove couplers. When couplers are removed, brakes are disabled.

Avoid electrical line entanglement. Grain extensions or grain tank covers must be lowered and radio antenna lowered before transporting.

Check local governmental regulations regarding driving or towing equipment on public roads. Use auxiliary lights and devices available from your John Deere dealer to warn other roadway users.

Avoid crushing injuries from runaway machine. If machine is on a slope, do not disengage park brake until wheels are blocked.

Machine can be towed for emergency situations up to 10 min at maximum speed of 10 km/h (6.2 mph).

Tow Mode Procedure Requirements:

Engine State	Running
Wheel Speed	0 km/h (0 mph)
Operator	In Seat

Procedure to Modify:

To tow machine, proceed as follows:

1. Start engine.

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2. Empty grain tank and remove header.
3. Swing unloading auger back.
4. Close the grain tank covers.
5. Swing ladder forward and remove the radio antenna.

NOTE: Always tow machine in a forward direction by attaching a chain around main axle. Be certain chain does not damage any hydraulic lines. Have driver in operator's seat to steer machine.

6. Turn warning lights ON, unless prohibited by law.

NOTE: Engine must be running to turn off park brake and tow machine. If engine is inoperable, see your John Deere dealer or other qualified service provider for further information.

H114769—UN—22OCT15

ON/OFF

7. Select ON/OFF toggle button to enable Tow Mode.

H114772—UN—22OCT15

Message

8. If requirements for tow mode were not met, a message appears displaying which requirements are not met.

H114770—UN—22JAN20

Close

9. If you need to exit tow mode for any reason you can do so by selecting close button.

H114771—UN—22OCT15

Green Checkmark

10. Once a requirement is met, a green checkmark appears preceding the requirement.

H114769—UN—22OCT15

ON/OFF

11. Once all requirements are met, you can select ON/OFF toggle button to activate Tow Mode.

CAUTION: Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use hand signals or turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible and in good working order. Replace or repair lighting and marking that are damaged or lost.

12. Press park button on armrest to release brakes before towing machine.

NOTE: Operator must remain in seat for park to be disengaged.

Tow mode is disabled and a message appears on screen that can be viewed in the Status Center if you:

- Shift transmission into gear.

N0LMWLO,0000383-19-16JUL20

Advanced Settings ProDrive™ Limp Home Mode

You can enable Limp Home Mode to move a machine to a safe location that is brought to a stop due to a power train sensor fault at a derated speed.

NOTE: The Header application must be active to access Limp Home Mode.

Allows machine to operate up to 4 hours. Not to be used for normal operation.

H114769—UN—22OCT15

ON/OFF

Select ON/OFF toggle button to enable Limp Home Mode.

If there is a power train sensor fault Limp Home Mode enables and a message appears.

NOTE: Limp Home Mode will automatically disable on machine key cycle.

If no power train sensor fault was detected, Limp Home Mode is not enabled and a message appears.

N0LMWLO,0000384-19-16JUL20

Advanced Settings Push Button

Items accessible on Advanced Settings page:

Tow Mode— must be enabled to tow the machine.

SS43267,00008CE-19-09JAN17

Access Lights

Access Application Through Display:

1. Menu

N119118—UN—23SEP16

Machine Settings

H113668—UN—22OCT15

Menu

2. Machine Settings tab

H115006—UN—09JAN17

Lights

3. Lights

H115005—UN—11MAR16

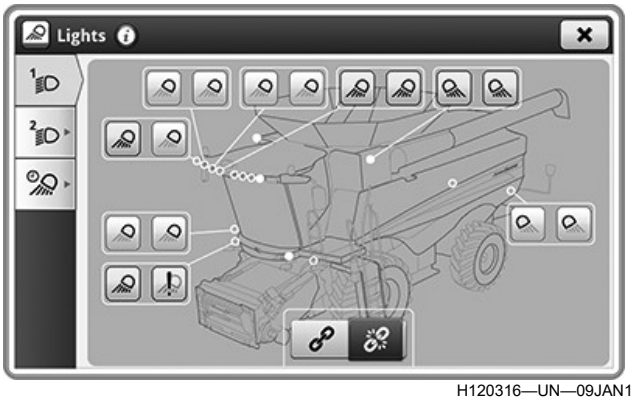
Lights

Access Application Through Navigation Bar:

Press Lights button on navigation bar below display.

N0LMWLO,0000385-19-16JUL20

Lights Main Page



H120316—UN—09JAN17

Lights

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.

Lights application is used to access light presets that can be configured by the operator. Selecting one of the tab presets will allow you to make adjustments.

NOTE: Worklights are configurable. Road lights are not configurable.

Tabs Available in Lights Application:

H114593—UN—11MAR16

Worklight Preset 1—Low-Beam

Worklights Preset 1—Low-Beam— lights that will illuminate in Preset 1—Low-Beam mode.

H114596—UN—11MAR16

Worklights Preset 2—Low-Beam

Worklights Preset 2—Low-Beam— lights that will illuminate in Preset 2—Low-Beam mode.

H114594—UN—11MAR16

Worklights Preset 1—High-Beam

Worklights Preset 1—High-Beam— lights that will illuminate in Preset 1—High-Beam mode.

H114595—UN—11MAR16

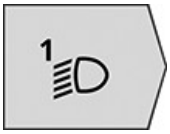
Worklights Preset 2—High-Beam

Worklights Preset 2—High-Beam— lights that will illuminate in Preset 2—High-Beam mode.

H114587—UN—11MAR16

Exit Lights

Exit Lights— select duration and lights which will remain illuminated after key switch is turned to OFF position.



H114597—UN—11MAR16

Highlighted Tab

Highlighted Tabs— indicate which light preset is selected.

Worklights Controls— provide you with controls to select worklights on/off, high/low beams, and preset mode 1 or 2.

H113862—UN—11MAR16

Light With Fault

Light with Fault— exclamation point indicates light is in error. Example, light bulb is burnt out.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings— allows you to access further adjustments and less common settings.

N0LMWLO,0000386-19-16JUL20

Worklights Preset 1—Low-Beam

Customize Preset 1—Low-Beam mode lights for specific customer needs. Modify when needing customized lighting in low visibility such as during unloading or harvesting operations.

Procedure to Modify:

H114593—UN—11MAR16

Worklights Preset 1—Low-Beam

1. Select to allow customization of each individual light in this mode.

H113857—UN—11MAR16

Linked

- Select Link on toggle button to link paired left-hand and right-hand lights for simultaneous ON and OFF operation on all tabs.

H113858—UN—11MAR16

Unlinked

- Select Unlink on toggle button to allow paired left-hand and right-hand lights individual ON and OFF operation on all tabs.

H114591—UN—11MAR16

Light Button

H113853—UN—11MAR16

Light Pair Button

2. Select light or light pair button for lights you want illuminated.

H114592—UN—11MAR16

Highlighted Button

NOTE: Button becomes highlighted when selected.

N0LMWLO,0000387-19-16JUL20

Worklights Preset 2—Low-Beam

Customize Preset 2—Low-Beam mode lights for specific customer needs. Modify when needing customized lighting in low visibility such as during unloading or harvesting operations.

Procedure to Modify:

H114596—UN—11MAR16

Worklights Preset 2—Low-Beam

1. Select to allow customization of each individual light in this mode.

H113857—UN—11MAR16

Linked

- Select Link on toggle button to link paired left-hand and right-hand lights for simultaneous ON and OFF operation on all tabs.

H113858—UN—11MAR16

Unlinked

- Select Unlink on toggle button to allow paired left-hand and right-hand lights individual ON and OFF operation on all tabs.

H114591—UN—11MAR16

Light Button

H113853—UN—11MAR16

Light Pair Button

2. Select light or light pair button for lights you want illuminated.

H114592—UN—11MAR16

Highlighted Button

NOTE: Button becomes highlighted when selected.

N0LMWLO,0000388-19-16JUL20

Worklights Preset 1—High-Beam

Customize Preset 1—High-Beam mode lights for specific customer needs. Modify when needing customized lighting in low visibility such as during unloading or harvesting operations.

Procedure to Modify:

H114594—UN—11MAR16

Worklights Preset 1—High-Beam

1. Select to allow customization of each individual light in this mode.

H113857—UN—11MAR16

Linked

- Select Link on toggle button to link paired left-hand and right-hand lights for simultaneous ON and OFF operation on all tabs.

H113858—UN—11MAR16

Unlinked

- Select Unlink on toggle button to allow paired left-hand and right-hand lights individual ON and OFF operation on all tabs.

H114591—UN—11MAR16

Light Button

H113853—UN—11MAR16

Light Pair Button

2. Select light or light pair button for lights you want illuminated.

H114592—UN—11MAR16

Highlighted Button

NOTE: Button becomes highlighted when selected.

N0LMWLO,0000389-19-16JUL20

Worklights Preset 2—High-Beam

Customize Preset 2—High-Beam mode lights for specific customer needs. Modify when needing customized lighting in low visibility such as during unloading or harvesting operations.

Procedure to Modify:

H114595—UN—11MAR16

Worklights Preset 2—High-Beam

1. Select to allow customization of each individual light in this mode.

H113857—UN—11MAR16

Linked

- Select Link on toggle button to link paired left-hand and right-hand lights for simultaneous ON and OFF operation on all tabs.

H113858—UN—11MAR16

Unlinked

- Select Unlink on toggle button to allow paired left-hand and right-hand lights individual ON and OFF operation on all tabs.

H114591—UN—11MAR16

Light Button

H113853—UN—11MAR16

Light Pair Button

2. Select light or light pair button for lights you want illuminated.

H114592—UN—11MAR16

Highlighted Button

NOTE: Button becomes highlighted when selected.

N0LMWLO,000038A-19-16JUL20

Exit Lights

Exit Lights allows you to select duration and lights which will remain illuminated after key switch is turned to OFF position.

NOTE: Exit lights turn on if road or work lights were used in the last 5 min.

Procedure to Modify:

H114587—UN—11MAR16

Exit Lights

1. Select to allow customization of each individual light in this mode.

H113857—UN—11MAR16

Linked

- Select Link on toggle button to link paired left-hand and right-hand lights for simultaneous ON and OFF operation on all tabs.

H113858—UN—11MAR16

Unlinked

- Select Unlink on toggle button to allow paired left-hand and right-hand lights individual ON and OFF operation on all tabs.

H114591—UN—11MAR16

Light Button

H113853—UN—11MAR16

Light Pair Button

2. Select light or light pair button for lights you want illuminated.

H114592—UN—11MAR16

Highlighted Button

NOTE: Button becomes highlighted when selected.

H114588—UN—11MAR16

Exit Timeout

3. Select to open Exit Timeout screen.
4. Select desired Exit Timeout Setting.

Exit Timeout Values		
Instant-off (0 s)	60 s	3 min
10 s	90 s	4 min
30 s	2 min	5 min

H114606—UN—09JAN17

OK

H114605—UN—09JAN17

Cancel

5. Select OK to save or Cancel to revert to previous setting.

N0LMWLO,000038B-19-16JUL20

Worklight Controls

Worklights controls allows you to select the desired worklight preset and mode.

Procedure to Modify:

H115019—UN—09JAN17

Worklight Position

1. Turn steering column selector knob to worklight position.
2. Select desired high-beam or low-beam mode.

- Push lever to select high-beam mode.
- Pull lever to select low-beam mode.

H115018—UN—11MAR16

Armrest Light Toggle

3. Press armrest light toggle to select work lights preset 1 or work lights preset 2.

NOTE: LED illuminates for selected preset mode 1 or 2.

- ***Momentary High Beam:*** *Pull and hold lever to upper position to momentarily activate high-beam mode.*
- ***Low Beam Position:*** *Pull lever to middle position to operate low-beams.*
- ***High Beam Position:*** *Push lever to lower position to operate high-beams.*

N0LMWLO,000038C-19-16JUL20

Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

Items Accessible on Advanced Settings Page:

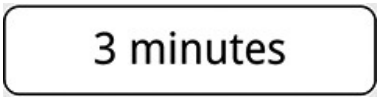
H125409—UN—01FEB19

Engine Off Delayed Lighting

Engine Off Delayed Lighting— lets you set the time limit for the lights to shut off after exiting the machine.

NOTE: Operators are able to set the timeout delay for egress lighting upon engine off.

Procedure To Modify:



H125410—UN—01FEB19

Time Limit

Select to change time limit.

MM95366,00004A8-19-05JUN19

Phone

Access Phone

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

A104013—UN—28MAY19

Phone

3. Phone

Access Application Through Navigation Bar:

N145015—UN—28MAY19

Phone

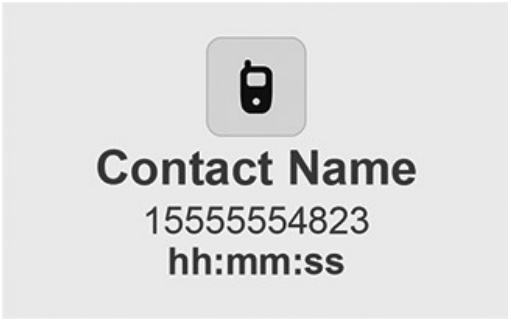
Press Phone button on navigation bar below display.

N0LMWLO,000038D-19-16JUL20

Phone Main Page

Phone application allows you to place and answer calls from inside the cab using a connected Bluetooth® device.

NOTE: Some items below are only displayed if machine is equipped with the associated options.



N144998—UN—28MAY19

In-Call Display

In-Call Display— view contact name (if available), number, and call duration. Privacy Mode also displays when call is in privacy mode.

NOTE: Number pad displays when not in-call.

N145000—UN—28MAY19

Privacy

Privacy— select to continue call on the device in Privacy Mode.

N145002—UN—28MAY19

Transfer to Cab

Transfer to Cab— select to continue the call in the cab.

N144938—UN—28MAY19

Connection Information

Connection Information— displays battery and signal strength when a device is connected. Displays No Connection when no device is connected.

N145035—UN—28MAY19

Pair Device

Pair Device— connect a Bluetooth® device.

N144995—UN—28MAY19

Dial Pad

Dial Pad— select to open a dial pad page.

NOTE: Only available when in-call.

N144997—UN—28MAY19

Favorites

Favorites— create a list of frequently used contacts.

NOTE: Maximum of 25 contacts can be stored.

N145001—UN—28MAY19

Recent

Recent— view a list of the most recent calls to and from all paired devices. You can also place a call to a number in the list, delete a list entry, or add an entry to favorites from this page.

N144994—UN—28MAY19

Call

Call— place a call to the entered number.

N144996—UN—28MAY19

End

End— stop the call in progress.

N145003—UN—28MAY19

Volume— select + to increase volume or - to decrease volume.

N144999—UN—28MAY19

Mute

Mute— select to silence.

N144937—UN—28MAY19

Advanced Settings

Advanced Settings— access further adjustments and less common settings.

AZ06166,000063F-19-02DEC19

Add Favorite Page

Add Favorite page allows you to add a contact to your favorite list.

NOTE: Up to 25 favorite contacts can be stored.

Procedure to Modify:

N145005—UN—28MAY19

Edit

1. Select the Edit key in the box under First to add the first name of the contact.

N145005—UN—28MAY19

Edit

2. Select the Edit key in the box under Last to add the last name of the contact.

N145005—UN—28MAY19

Edit

3. Select the Edit key in the box under Number to add the phone number for the contact.

N145010—UN—28MAY19

Mobile-Home-Work

4. Select the Type (mobile, home, or work) of number entered.

N145009—UN—28MAY19

Save

5. Select Save to store the contact to the Favorites list.

NOTE: Duplicate Favorite message will display if the number is already in favorites. Information Required message will display if information is missing.

N145008—UN—28MAY19

Cancel

- Select Cancel to exit without storing the contact.

N0LMWLO,000038E-19-16JUL20

Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

Items Accessible on Advanced Settings Page:

N145011—UN—28MAY19

Clear

Favorites and Call History— select the Clear key(s) to clear the history of favorites and/or call history.

N145012—UN—28MAY19

Manage

Devices— select the Manage key to access and manage a list of already added devices or add a new device.

AZ06166,0000641-19-26NOV19

Edit Favorite Page

Edit Favorite page allows you to change information for a contact in your Favorites list.

Procedure to Modify:

N145005—UN—28MAY19

Edit

Select the Edit key in the box under First to add the first name of the contact.

N145005—UN—28MAY19

Edit

Select the Edit key in the box under Last to add the last name of the contact.

N145005—UN—28MAY19

Edit

Select the Edit key in the box under Number to add the phone number for the contact.

N145010—UN—28MAY19

Mobile-Home-Work

Select another Type (mobile, home, or work) of number entered.

N145004—UN—28MAY19

Delete

- Select the Delete key next to Delete Favorite to remove the contact from the list.

N145009—UN—28MAY19

Save

- Select Save to store the contact to the Favorites list.

NOTE: Duplicate Favorite message will display if the number is already in favorites. Information Required message will display if information is missing.

N145008—UN—28MAY19

Cancel

- Select Cancel to exit without saving changes.

AZ06166,0000643-19-26NOV19

Manage Devices

Manage Devices allows you to connect a device in a list of already added devices or add a new device.

Procedure to Modify:

N144936—UN—28MAY19

Connect

Select the Connect key to connect the device the key displays next to. Selecting Connect will begin the Pair Device process.

N144935—UN—28MAY19

Add New Device

Select the Add key next to Add New Device to add a new device not already listed. Selecting Add will begin the Pair Device process.

AZ06166,0000644-19-26NOV19

Pairing Bluetooth® Device

Pair Device allows you to add a phone though Bluetooth®.

NOTE: Up to five devices can be added to the list at a time.

Procedure to Modify:

N145035—UN—28MAY19

Pair Device

1. Select the Pair Device key.

N144934—UN—28MAY19

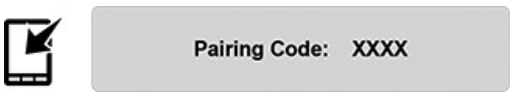
Initiating

Initiating message should appear.

N144933—UN—28MAY19

Pairing Failed

If the Pairing Failed message appears, power the radio off and back on, then try to pair the device again.



N144930—UN—28MAY19

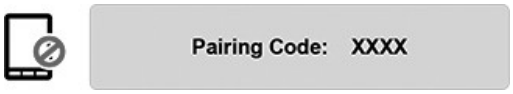
Pairing Code

2. Enter the pairing code into the device after the connection is established.

N144932—UN—28MAY19

Pairing Complete

If the Pairing Complete message appears, the device has been added and will be added to the Manage Devices list.



N144931—UN—28MAY19

Pairing Code Rejected

If the Pairing Code Rejected message appears, check that the code was entered correctly and try again.

PR79369,0000097-19-28MAY19

Phone Favorites Page

Favorites page allows you to create a list of frequently used contacts. You can also edit, remove, and call contacts from this page.

NOTE: Maximum of 25 contacts can be stored.

Procedure to Modify:

N144935—UN—28MAY19

Add

Add Favorite— select to add a new contact to favorites.

NOTE: Maximum Favorites Reached message will display if the maximum number of contacts has already been stored.

N145005—UN—28MAY19

Edit

Edit— select to edit an existing contact.

NOTE: Key appears when the contact is selected in the list.

N145004—UN—28MAY19

Delete

Delete— select to delete the existing contact. A message confirming deletion will display.

NOTE: Key appears when the contact is selected in the list.

N145006—UN—28MAY19

Call

Call— select to call the contact.

NOTE: Key appears when the contact is selected in the list.

PR79369,000009A-19-26NOV19

Recent Calls

Recent Calls page allows you to view a list of the most recent calls to and from all paired devices. On this page you can also place a call to a number in the list, delete a list entry, or add an entry to favorites.

NOTE: List contains up to, ten outbound calls, ten inbound calls, and ten missed calls. Older calls will be removed as new ones are added.

Procedure to Modify:

N145007—UN—28MAY19

Add to Favorites

Add to Favorites— entry is added to the Favorites list.

NOTE: Key appears when the entry is selected and not already in the favorites list.

N145004—UN—28MAY19

Delete

Delete— select to delete the entry from the list of recent calls.

NOTE: Key appears when the entry is selected in the list.

N145006—UN—28MAY19

Call

Call— select to call the number in the entry.

NOTE: Key appears when the entry is selected in the list.

PR79369,000009B-19-26NOV19

Access Calibrations and Procedures

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

N119118—UN—23SEP16

Machine Settings

2. Machine Settings tab

N119098—UN—25MAY16

Calibrations and Procedures

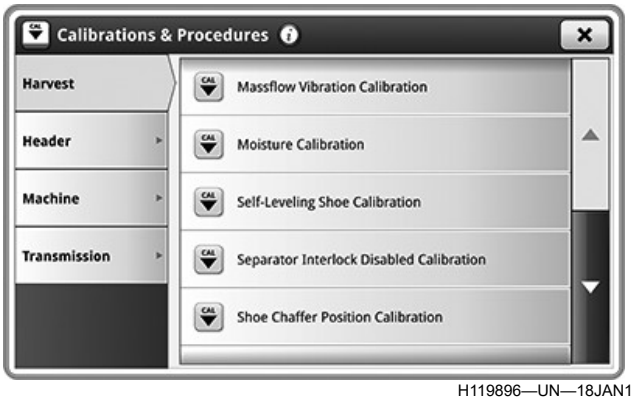
3. Calibrations & Procedures

SS43267,000084C-19-17JAN17

Calibrations and Procedures Overview

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Main page shown is for example only. Your main page may differ depending on options or connected equipment.



H119896—UN—18JAN17

Calibrations and Procedures

Calibrations and Procedures application provides centralized access to maintenance procedures and calibrations for the machine.

H119225—UN—23SEP16

Harvest Tab

Harvest Tab

Mass Flow Vibration

Yield

Amber Flasher

Chassis Tilt

Threshing Clearance (Hydraulic)

Moisture Sensor

Concave Air Removal

Concave Leveling

ActiveYield™

Threshing Clearance (STS Electric)

Unloading Auger Engage

H119226—UN—23SEP16

Header Tab

Header Tab

Feeder House Speed

Header

Deck Plate Spacing

Extendable Platform Header Self-Test

Feeder House Lateral Tilt Speed

Wings (Folding Corn Head)

Reel and Cutterbar Position

Reel Position

Feeder House Tilt Fore/Aft Range

Feeder House Lateral Tilt Range

AZ06166,0000645-19-11JUN19

Mass Flow Vibration

This procedure calibrates the mass flow sensor to accommodate for normal vibration of machinery while in operation. Performing this calibration prevents the mass flow sensor from falsely reading vibration as material being harvested.

NOTE: Mass Flow Vibration calibration must be performed when changing headers and in every crop that is harvested.

Perform Calibration When:

- Control unit AYM or associated components are replaced/adjusted.
- Equipment configuration such as a Header has changed.
- Crop type being harvested has changed.
- Mass Flow Sensor has been replaced.

Items Accessible on Mass Flow Vibration Calibration Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	See “Perform Calibration When” section for more information.
Estimated Time Required	Approximately 1 min

SS43267,000084D-19-19MAY17

Mass Flow Vibration Calibration Procedure

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

N120226—UN—23FEB16

Begin Calibration

Procedure Overview:

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000867-19-19JAN17

Moisture Sensor

Perform Calibration When:

- The moisture sensor has been installed, replaced, or adjusted.
- The moisture sensor accuracy needs to be improved.

Items Accessible on Moisture Sensor Calibration Page:

N119105—UN—02MAY16

Calibrate

Moisture Sensor Procedure—begina calibration procedure.

Requirements—machine state required for calibration.

PR79369,000004B-19-06FEB19

Moisture Sensor Procedure

This procedure performs the calibration for the Moisture Sensor.

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

Procedure to Perform:

A102855—UN—01FEB19

Start

1. Select Start to begin calibration procedure.

H113801—UN—04JAN17

Calibrating

2. Calibrating symbol will appear on screen. Calibration will proceed to next step automatically.

A92084—UN—09MAY19

Calibration Complete

If no issues are present, Calibration Complete will appear on screen.

A92068—UN—16MAR18

Save

3. Confirm Calibration by pressing ENTER and selecting Save.

A92067—UN—16MAR18

Cancel

4. Select Cancel to return to previous page.

PR79369,000004D-19-26NOV19

Threshing Clearance (STS Electric)

This procedure calibrates Threshing Clearance by identifying the fully opened and closed positions of the concaves. A properly calibrated Threshing Clearance provides the best results for the harvest setting recommendation. See your Operator's Manual for more details.

IMPORTANT: Calibration should not be completed with round bar concave covers installed. An incorrect zero position results.

Perform Calibration When:

- Before each harvest season.
- Physical concave opening does not match what is being displayed in the cab.
- Concaves are replaced with a new or different set of concaves.
- Threshing clearance sensor, or associated components are replaced/adjusted.

Items Accessible on Threshing Clearance Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 1-2 min

SS43267,0000850-19-02MAR18

Threshing Clearance (STS Electric) Calibration Procedure

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000869-19-02MAR18

Yield Calibration

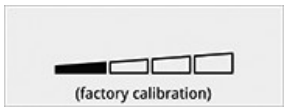
This procedure calibrates the estimated yield. Calibration is done by matching recorded samples with corresponding scale weight measurements.

NOTE: Yield Calibration must be performed every year and in every crop that is harvested to achieve accurate grain weight measurements. Also, verify that Mass Flow Vibration Calibration has been performed for each crop.

Perform Calibration When:

- Control unit AYM or associated components are replaced/adjusted.
- Yield totals do not match scale tickets.
- Highest accuracy of yield totals desired.

Items Accessible on Yield Calibration Page:



H119365—UN—18JAN17

Calibration Quality

Calibration Quality—indicates the quality of the calibration samples.

H119417—UN—18JAN17

Status

Status Indicator—indicates the status of sample recording.

H119235—UN—18JAN17

Record

Record—collect sample data.

H119363—UN—18JAN17

Unmatched Samples

Unmatched Samples—number of samples not matched to an actual weight.

H119364—UN—18JAN17

Match Scale Weight

Match Scale Weight—match recorded sample weight to actual weight of sample.

N118004—UN—22OCT15

Advanced Settings

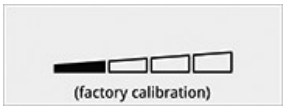
Advanced Settings—access further adjustments and less common settings.

NOTE: If Mass Flow Vibration Calibration is not current, then it is recommended to perform that calibration before performing Yield Calibration.

SS43267,0000851-19-22MAY17

Yield | Calibration Quality

Calibration Quality indicates the quality of the calibration samples and the margin of error between the recorded samples and actual weights.



H119365—UN—18JAN17

Calibration Quality

Items Accessible on Calibration Quality Page:

Calibration Quality Indicator—indicates the quality of the calibration samples.

H119374—UN—18JAN17

Collected Samples

Collected Sample Status—indicates the criteria met by the current set of samples.

H119372—UN—18JAN17

Yield Margin of Error

Yield Margin of Error—difference between recorded sample weight and actual weight expressed as a percentage. Colored backgrounds indicate the quality of the margin.

H119375—UN—18JAN17

Calibration Mode

Calibration Mode—current sample selection mode.

H119373—UN—18JAN17

Samples in Calibration

Samples in Calibration—number of samples stored. If no samples are stored, the factory calibration is used.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings—access further adjustments and less common settings.

SS43267,000086F-19-17JAN17

Yield | Status Indicator

Status Indicator displays the status of Record Samples and a message about that status.

Status options are as follows:

H119424—UN—18JAN17

Progress Indicator

Progress Indicator—displays when a sample is being recorded.

N118420—UN—02NOV16

Green

Active—sample recording is active.

N118019—UN—22OCT15

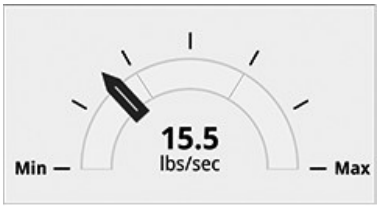
Gray

Inactive—sample recording is not active.

SS43267,0000870-19-18JAN17

Yield | Record Sample

Record Sample page allows you to collect a yield sample, monitor flow rate, and view the recorded weight of the sample.



H119379—UN—18JAN17

Mass Flow Rate

Items Accessible on Record Sample Page:

Mass Flow Rate—indicates the flow of crop being harvested.

H119418—UN—18JAN17

Medium Flow

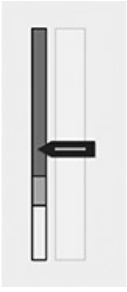
Flow Rate Range—indicates the current range that the sample is being harvested in.

NOTE: Low flow rate is displayed using dashes.

H119380—UN—18JAN17

Weight

Weight—calculated weight of the sample.



H119399—UN—18JAN17

Weight Status

Weight Status—indicates when enough crop has been harvested to perform the calibration.

H119419—UN—18JAN17

Crop Type: Corn

Crop Type—crop being harvested.

H119400—UN—18JAN17

Recording Sample

Recording Status—displays status of sample recording.

H119401—UN—18JAN17

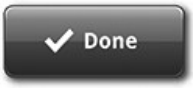
Delete

Delete—deletes the current sample data.

H119421—UN—18JAN17

Start

Start—begins recording sample data.



H119420—UN—18JAN17

Done

Done—stops sample recording and stores the information.

H119235—UN—18JAN17

Record

Procedure to Modify:

1. Select Record.
2. Begin harvesting crop.

H119421—UN—18JAN17

Start

3. Select Start button.
4. Adjust ground speed until desired flow rate range is obtained.
5. Continue harvesting until the necessary amount of crop is harvested.

H119420—UN—18JAN17

Done

6. Select Done button to store the sample information.

SS43267,0000871-19-17JAN17

Yield | Match Scale Weight

Match Scale Weight allows you to match recorded sample weight to the actual weight of sample.

H119407—UN—18JAN17

Sample

Procedure to Modify:

1. Select sample to match.
2. Enter the actual sample weight using the keypad.

N118093—UN—16FEB16

Save

3. Select Save button to confirm.

N118094—UN—18JAN17

Cancel

NOTE: Select Cancel button to return to the previous page without making any changes.

Procedure to Delete a Sample:

H119407—UN—18JAN17

Sample

1. Select sample to delete.

H119408—UN—18JAN17

Delete Sample

2. Select Delete Sample.

H114654—UN—05JAN17

OK

3. Select OK button.

N118094—UN—18JAN17

Cancel

NOTE: Select Cancel button to return to the previous page without making any changes.

SS43267,0000872-19-19JAN17

Yield | Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

NOTE: Advanced Settings is not available when ActiveYield™ is selected.

Modify When:

- Resetting to the factory defaults.
- Manually selecting samples.
- Manually adjusting the calibration value.
- Transferring the calibration to another machine.

Items Accessible on Advanced Settings Page:

H119409—UN—18JAN17

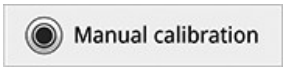
Reset

Reset—reset the system to the factory default.

H119410—UN—18JAN17

Auto Sample Selection

Auto Sample Selection—system randomly selects samples to use for calibration value.



H119411—UN—18JAN17

Manual Calibration

Manual Calibration—select desired samples to use for calibration value.

H119412—UN—18JAN17

Edit/Select Samples

Edit/Select Samples—choose samples to use for manual calibration. Edit sample scale weights or delete samples.

H119413—UN—18JAN17

Advanced Options

Advanced Options—manually adjust the calibration value or transfer calibration from another machine.

H119414—UN—18JAN17

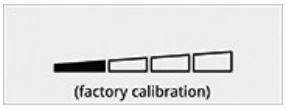
Delete Unused Samples

Delete Unused Samples—delete any samples not being used for the calibration.

SS43267,0000873-19-22MAY17

Yield | Calibration Quality Indicator

Calibration Quality Indicator indicates the quality of the calibration samples.



H119365—UN—18JAN17

Factory Calibration

Factory Calibration—indicates that factory calibration is in use. No adjustments have been made.

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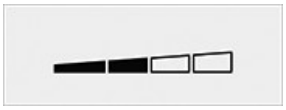


H119366—UN—18JAN17

Single Sample

Single Sample—indicates that only one sample has been taken or selected for use.

NOTE: Flow rate does not affect calibration quality when only one sample is used.

H119367—UN—18JAN17

Low Quality

Low Quality Sample—four or more samples are selected, but samples are not high quality and only two represent two of the flow ranges.

H121087—UN—19MAY17

High Quality

High Quality Sample—four or more samples are selected from high-quality loads and represent all flow ranges.

SS43267,0000874-19-19MAY17

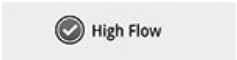
Yield | Collected Sample Status

Collected Sample Status indicates the criteria met, by the current sample set. When a criterion is met a checkmark is displayed next to it.

H119368—UN—18JAN17

High Quality

High Quality—all samples are taken from a uniform area of the field that provides a constant flow of grain.



H119369—UN—18JAN17

High Flow

High Flow—determined using the gauge on the record sample page. Grain flow must be above 66% of the maximum flow for combine model and crop. Increase ground speed to increase flow.

H119370—UN—18JAN17

Medium Flow

Medium Flow—determined using the gauge on the record sample page. Grain flow must be between 33%-66% of the maximum flow for combine model and crop. Adjust ground speed to regulate flow.

H119371—UN—18JAN17

Low Flow

Low Flow—determined using the gauge on the record sample page. Grain flow must be below 33% of the maximum flow for combine model and crop. Decrease ground speed to decrease flow.

For the best calibration collect at least 4 loads in all flow ranges:

- High
- Medium
- Low

In tough harvesting conditions, when higher flow rates are not achievable, use following process:

Collect the first load using the highest harvesting speed as 100%, then collect 3 more loads lowering harvesting speed to 83%, 67%, and 50%.

Repeat the process, if more loads are to be collected.

SS43267,0000875-19-17JAN17

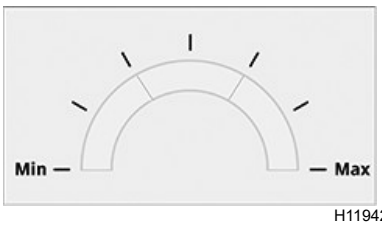
Yield | Mass Flow Rate

Mass Flow Rate indicates the flow of crop being harvested.

H119403—UN—18JAN17

Current Flow Rate

Current Flow Rate—current flow rate of harvested crop.



H119422—UN—18JAN17

Gauge

Gauge—graphically displays flow rate.

Min = 0%

Max = 100%

H119402—UN—18JAN17

Numeric Display

Numeric Display—displays flow rate numerically.

SS43267,0000876-19-18JAN17

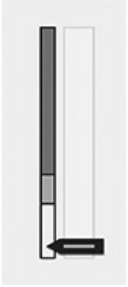
Yield | Weight Indicator

Weight Indicator displays when enough crop has been harvested to perform the calibration.

H119403—UN—18JAN17

Current Weight

Current Weight—current calculated weight of the sample.



H119404—UN—18JAN17

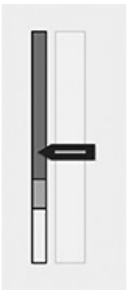
Gray Zone

Gray Zone—sample is too small for calibration to occur.

H119405—UN—18JAN17

Light Green Zone

Light Green Zone—sample size is sufficient for calibration but is not at the ideal level. Calibration may be inaccurate.



H119399—UN—18JAN17

Green Zone

Green Zone—sample size is sufficient to perform an accurate calibration.

SS43267,0000877-19-17JAN17

Yield | Recording Status

Recording Status displays status of sample recording.

H119406—UN—18JAN17

Standing By

Standing By—system is ready to record sample once Start button is selected.

H119400—UN—18JAN17

Recording Sample

Recording Sample—sample is being recorded.

NOTE: Once sample has been recorded and saved, the system returns to stand by. The number of unmatched samples increases by one on the main page after a sample is collected.

SS43267,0000878-19-17JAN17

Yield | Reset

Reset allows you to delete all stored samples and return the system to the factory calibration value. You can also reset the calibration value to the factory default while retaining all samples.

Reset Types:

H119429—UN—18JAN17

Delete Samples (full reset)

Delete Samples (full reset)—deletes all stored samples and the current calibration value. Calibration value is set to the factory default.

H119430—UN—18JAN17

Keep Samples and Use Manual Calibration Mode

Keep Samples and Use Manual Calibration Mode—calibration value is reset to the factory value. All stored samples are retained.

H119409—UN—18JAN17

Reset

Procedure to Modify:

1. Select Reset button.
2. Select desired reset type.

H114654—UN—05JAN17

OK

3. Select OK button to confirm.

N118094—UN—18JAN17

Cancel

NOTE: Select Cancel button to return to the previous screen without making any changes.

SS43267,0000879-19-18JAN17

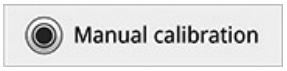
Yield | Edit/Select Calibration

Edit/Select Calibration allows you to choose samples to use for manual calibration. Edit sample scale weights or delete samples.

Modify When:

- Specific samples must be selected to obtain accurate yield.
- Automatic selection does not perform as desired.
- A new sample is not necessary.
- Incorrect scale weight was entered for a sample.

Procedure to Modify Selected Samples:



H119411—UN—18JAN17

Manual Calibration

1. Select Manual Calibration.

H119412—UN—18JAN17

Edit/Select Samples

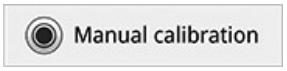
2. Select Edit/Select Samples button.

N118434—UN—22JAN20

Checkmark

3. Select checkmarks next to desired samples to use for calibration.

NOTE: For the most accurate calibration, select samples that are high quality, have a 0-3 percent margin, and represent the three flow ranges.



H119411—UN—18JAN17

Manual Calibration

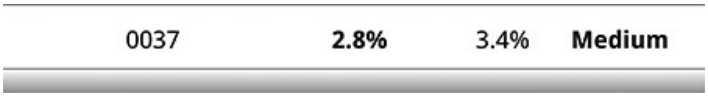
Procedure to Modify Scale Weight:

1. Select Manual Calibration.

H119412—UN—18JAN17

Edit/Select Samples

2. Select Edit/Select Samples button.



H119415—UN—18JAN17

Sample

3. Select sample to modify.

H119416—UN—18JAN17

Edit Scale Weight

4. Select Edit Scale Weight.
5. Enter desired scale weight using the keypad.

N118093—UN—16FEB16

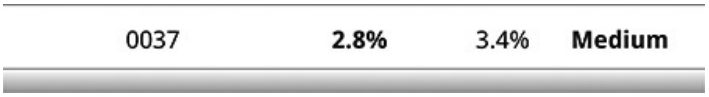
Save

6. Select Save button to confirm.

N118396—UN—17FEB16

Close

7. Select Close button to return to the previous page.



H119415—UN—18JAN17

Sample

3. Select sample to delete.

H119408—UN—18JAN17

Delete Sample

4. Select Delete Sample.

H114654—UN—05JAN17

OK

5. Select OK button to confirm.

N118094—UN—18JAN17

Cancel

NOTE: Select Cancel button to return to the previous screen without making any changes.

N118093—UN—16FEB16

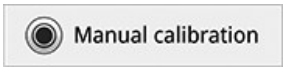
Save

6. Select Save button to finalize.

SS43267,000087A-19-18JAN17

Yield | Advanced Edit

Advanced Edit allows you to manually adjust the calibration value or transfer calibration from another machine.



H119411—UN—18JAN17

Manual Calibration

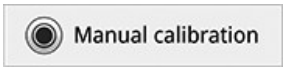
Procedure to Delete a Sample:

1. Select Manual Calibration.

H119412—UN—18JAN17

Edit/Select Samples

2. Select Edit/Select Samples button.



H119411—UN—18JAN17

Manual Calibration

Procedure to Modify:

1. Select Manual Calibration.

H119413—UN—18JAN17

Advanced Options

2. Select Advanced Options button.

H119425—UN—18JAN17

Advanced Edit

3. Select Advanced Edit.
4. Follow the on-screen directions to complete the desired procedure.

SS43267,000087B-19-17JAN17

Yield | Delete Unused Samples

Delete Unused Samples allows you to delete any samples not being used for the calibration.

Procedure to Modify:

H119414—UN—18JAN17

Delete Unused Samples

1. Select Delete Unused Sample button.

H114654—UN—05JAN17

OK

2. Select OK button to confirm.

N118094—UN—18JAN17

Cancel

NOTE: Select Cancel button to return to the previous screen without making any changes.

SS43267,000087C-19-25NOV19

ActiveYield™

This procedure automatically calibrates the estimated yield to more closely match actual scale weight of yields.

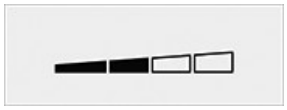
NOTE: Manual Yield Calibration is unavailable while ActiveYield™ automation is ON.

Items Accessible on ActiveYield™ Page:

H114647—UN—05JAN17

ON/OFF

Master ON/OFF—use toggle button to turn ActiveYield™ ON/OFF.



H119366—UN—18JAN17

Quality

Quality—indicates the quality of the calibration samples.

N118420—UN—02NOV16

Status

Status Indicator—indicates the status of sample.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings—access further adjustments and less common settings.

Details Displayed on Page:

Crop Type	Corn
Accepted Samples	10
Last Accepted	32 min ago

SS43267,0000852-19-17MAY17

ActiveYield™ | Status Indicator

Status Indicator displays the status of Record Samples and a message about that status.

Status options are as follows:

H119424—UN—18JAN17

Progress Indicator

Progress Indicator—displays when a sample is being collected.

N118420—UN—02NOV16

Green

Waiting for Sample— ActiveYield™ is not currently performing any activity.

N118019—UN—22OCT15

Gray

Master OFF—ActiveYield™ is OFF.

N118021—UN—13JAN17

Blue

Collecting Sample—sample recording is being collected.

ActiveYield is a trademark of Deere & Company

N118420—UN—02NOV16

Green

Calibration Updated—sample recording is being updated.

N118420—UN—02NOV16

Green

Sample Rejected—sample recording has been rejected. Explanation for rejection displayed.

N118020—UN—22OCT15

Amber

Crop Type Unsupported—crop type is not currently supported.

SS43267,000086C-19-17MAY17

ActiveYield™ | Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

NOTE: The ActiveYield™ Factory Reset will not have an impact on the samples collected in Yield Calibration.

Modify When:

- Resetting to the factory defaults.
- Transferring the calibration to another machine.

Items Accessible on Advanced Settings Page:

H119409—UN—18JAN17

Reset

Reset—reset the system to the factory default.

SS43267,000086D-19-17MAY17

ActiveYield™ | Reset

Reset allows you to delete all stored samples and returns the system to the factory calibration value, or to reset the calibration value to the factory default while retaining all samples.

Procedure to Modify:

H119409—UN—18JAN17

Reset

1. Select Reset button.
2. Select desired reset type.

H114654—UN—05JAN17

OK

3. Select OK button to confirm.

N118094—UN—18JAN17

Cancel

NOTE: Select Cancel button to return to the previous screen without making any changes.

SS43267,000086E-19-17MAY17

Chassis Tilt

This procedure calibrates the Chassis Tilt to ensure best machine pitch sensor accuracy. A properly calibrated Chassis Tilt provides the best results for the harvest setting recommendations provided in the Operator's Manual.

Perform Calibration When:

- Each header type is connected to the combine for the first time.
- Fore/Aft Pitch sensor has been replaced.

Items Accessible on Chassis Tilt Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

ActiveYield is a trademark of Deere & Company

Last Calibration	Date and Time
Estimated Time Required	Approximately 1-2 min

SS43267,0000853-19-18JAN17

Chassis Tilt Calibration Procedure

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000865-19-18JAN17

Threshing Clearance (Hydraulic)

This procedure calibrates Threshing Clearance by identifying the fully opened and closed positions of the concaves. A properly calibrated Threshing Clearance provides the best results for the harvest setting recommendation. See your Operator's Manual for more details.

IMPORTANT: Calibration should not be completed with round bar concave covers installed. An incorrect zero position results.

Perform Calibration When:

- Before each harvest season.
- Physical concave opening does not match what is being displayed in the cab.
- Concaves are replaced with a new or different set of concaves.
- Threshing clearance sensor, or associated components are replaced/adjusted.

Items Accessible on Threshing Clearance Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 1-2 min

VM03385,000027D-19-02MAR18

Threshing Clearance (Hydraulic) Calibration Procedure

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

VM03385,000027E-19-02MAR18

Unloading Auger Engage

This procedure calibrates Unloading Auger Engage by measuring the time it takes to engage the auger when commanded, and then adjusts to make a softer auger engagement.

Perform Calibration When:

- Unloading auger belt, hydraulic, drive, electrical or associated components are replaced/adjusted.
- Unloading auger engagement is more difficult than expected.

Items Accessible on Unloading Auger Engage Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 1-2 min

SS43267,0000855-19-18JAN17

Unloading Auger Engage Calibration Procedure

Procedure Requirements:

Engine State	Running at high idle
Operating State	Unloading auger disengaged Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,000086B-19-18JAN17

Deck Plate Spacing

This procedure calibrates the deck plate opening by identifying the fully opened and closed positions of the deck plates. Properly calibrated deck plates provide the best results for the harvest setting recommendations provided in the Corn Head Operator's Manual.

Perform Calibration When:

- Before each harvest season.
- For each different corn head that was previously attached.
- Deck plate position sensor, or associated components are replaced/adjusted.
- Deck plate opening does not appear to match what is being displayed in the cab.

Items Accessible on Deck Plate Spacing Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed

Estimated Time Required	Approximately 1-2 min

SS43267,0000856-19-18JAN17

Deck Plate Spacing Calibration Procedure

Procedure Requirements:

Engine State	Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

AZ06166,0000749-19-31MAR20

Feeder House Raise Speed

This procedure calibrates Feeder House Raise Speed by providing the rate of response at which the feeder house raise or lower reacts. A properly calibrated Feeder House Raise Speed provides smooth feeder house raise and lowering characteristics and prevents movement that is too fast or slow.

Perform Calibration When:

- Each header type is connected to the combine for the first time.
- Attachments of significant weight are added to or removed from header.

Items Accessible on Feeder House Raise Speed Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,0000857-19-17MAY17

Feeder House Raise Speed Calibration Procedure

Procedure Requirements:

Engine State	Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000880-19-17MAY17

Header Calibration

This procedure calibrates the coarse and fine movement of the header. Calibration is done by raising and lowering the header to set sensor ranges.

Perform Calibration When:

- Each header type is connected to the combine for the first time.
- Header height control sensor or associated components are replaced/adjusted.

N120226—UN—23FEB16

Begin Calibration

Items Accessible on Header Calibration Page:

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 5 min

SS43267,000087D-19-17JAN17

Header Calibration Procedure

Procedure Requirements

Engine State	Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,000087E-19-18JAN17

Extendable Platform Header Self-Test

This procedure validates the calibration of the extendable platform header reel and cutterbar position limits. This self-test is required for normal operation. It verifies that the previous calibration points are valid for the header that is connected.

Perform Calibration When:

- Connecting to the Combine for the first time or reconnecting after using a different header.
- Reel position sensor or cutterbar position sensor is replaced.

Items Accessible on Extendable Platform Header Self-Test Page:

H119233—UN—19JAN17

Begin Self-Test

Begin Self-Test—begin calibration procedure.

Requirements—machine state required for calibration.

Last Calibration	Date and Time
Recommended Interval	Upon Connection
Estimated Time Required	Less than 1 minute

MM95366,0000476-19-06JUN19

Extendable Platform Header Self-Test Calibration Procedure

Procedure Requirements

Engine State	Running
Operating State	Parked on a level surface

CAUTION: During the self-test process, the header moves automatically.

To avoid the risk of death or serious injury to a bystander, ensure:

- The machine and header are clear of any obstruction.
- Bystanders are clear of the machine and header.

Procedure Overview:

H119233—UN—19JAN17

Begin Self-Test

1. Select Begin Self-Test to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

MM95366,0000477-19-06JUN19

Feeder House Tilt Fore/Aft Range

This procedure calibrates Feeder House Tilt Fore/Aft Range by measuring current commanded and associated range of the feeder house tilt. Performing this calibration improves feeder house tilt range when operating with header height lateral tilt control active.

Perform Calibration When:

- Before connecting header.
- Feeder house lateral tilt sensor or associated components are replaced/adjusted.

Items Accessible on Feeder House Tilt Fore/Aft Range Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,0000A3E-19-21JUN17

Feeder House Tilt Fore/Aft Range Calibration Procedure

Procedure Requirements:

Engine State	Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000A40-19-10OCT19

Feeder House Lateral Tilt Range

This procedure calibrates Feeder House Lateral Tilt Range by measuring current commanded and associated range of the feeder house tilt. Performing this calibration improves feeder house tilt range when operating with header height lateral tilt control active.

Perform Calibration When:

- Before connecting header.
- Feeder house lateral tilt sensor or associated components are replaced/adjusted.

Items Accessible on Feeder House Lateral Tilt Range Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,0000A3B-19-21JUN17

Feeder House Lateral Tilt Range Calibration Procedure

Procedure Requirements:

Engine State	Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000A3D-19-21JUN17

Feeder House Lateral Tilt Speed

This procedure calibrates Feeder House Lateral Tilt Speed by measuring current commanded and associated speed of the feeder house tilting. Performing this calibration improves feeder house tilt response when operating with header height lateral tilt control active.

Perform Calibration When:

- Before connecting header.
- Feeder house lateral tilt sensor or associated components are replaced/adjusted.

Items Accessible on Feeder House Lateral Tilt Speed Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,0000858-19-18JAN17

Feeder House Lateral Tilt Speed Calibration Procedure

Procedure Requirements:

Engine State	Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000881-19-18JAN17

Wings (Folding Corn Head)

This procedure calibrates Folding Corn Head by folding and unfolding the wings of the corn head and measuring associated sensor voltage at each position. This allows the system to detect the position of each wing. This prevents mechanical damage to the combine or equipment by not allowing the header to contact the machine if the wings are folded or engage in any other non-desired condition.

Perform Calibration When:

- First time each header is connected to combine.
- Mechanical adjustments have been made to the head.
- Folding corn head wing position sensor, or associated components are replaced/adjusted.

Items Accessible on Folding Corn Head Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,0000859-19-17MAY17

Wings (Folding Corn Head) Calibration Procedure

Procedure Requirements

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000882-19-17MAY17

Reel and Cutterbar Position

This procedure calibrates Reel and Cutterbar by extending/retracting the cutterbar and moving the reel to the minimum and maximum positions to associate the mechanical limits with sensor voltages. Performing this calibration allows the control unit to calculate positions and prevent potential damaging collisions between the Reel and Cutterbar.

Perform Calibration When:

- Reel/Cutterbar position sensors or associated components are replaced/adjusted.

Items Accessible on Reel and Cutterbar Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,000085A-19-17MAY17

Reel and Cutterbar Position Calibration Procedure

Procedure Requirements

Engine State	Combine in field mode Running at high idle
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000883-19-18MAY17

Reel Position

This procedure calibrates the Reel Position by raising and lowering the reel and moving the reel fore/aft to determine the maximum position to associate the mechanical limits with sensor voltage. Performing this procedure allows the control unit to determine the adjustment limits and allow reel resume functionality.

Perform Calibration When:

- Each header type is connected to the combine for the first time.
- Reel/Cutterbar position sensors or associated components are replaced/adjusted.

Items Accessible on Reel Position Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 1-2 min

SS43267,000085B-19-18JAN17

Reel Position Calibration Procedure

Procedure Requirements

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000884-19-18JAN17

Amber Flasher

This calibration measures current demands of the amber lights. A normal current is used to compare the current demands when lights are used to detect if the trailer is attached or for bad bulb detection.

Perform Calibration When:

- Amber Flasher bulbs, or associated components are replaced/adjusted.

N120226—UN—23FEB16

Begin Calibration

Items Accessible on Amber Flasher Page:

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 1-2 min

SS43267,000085C-19-18JAN17

Amber Flasher Calibration Procedure

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000887-19-18JAN17

Concave Air Removal

This procedure calibrates Active Concave Isolation Air Removal by removing air from the hydraulic system of ACI. Perform this calibration if the hydraulic system has been opened to atmosphere for service or repair. Failure to complete this calibration results in less than optimal performance.

NOTE: Before entering concave air removal calibration, verify that leveling cap screws are in storage position, air removal hoses are installed, and the engine is running. See your Operator's Manual for further information.

Perform Calibration When:

- Hydraulic components for the concave system have been serviced or replaced.
- Air has entered the hydraulic system.

Items Accessible on ACI Air Removal Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,000085F-19-18MAY17

Concave Air Removal Calibration Procedure

Procedure Requirements:

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000885-19-18MAY17

Concave Leveling

This procedure calibrates Active Concave Isolation Leveling by identifying the fully opened and closed positions of the concaves. A properly calibrated Active Concave Isolation Leveling provides the best results for the harvest setting recommendation. See your Operator's Manual for more details.

Perform Calibration When:

- Physical concave opening does not match what is being displayed in the cab.
- Threshing clearance sensor or associated components are replaced/adjusted.
- Concaves or associated components are replaced/adjusted.

Items Accessible on ACI Leveling Page:

N120226—UN—23FEB16

Begin Calibration

Begin Calibration—begin calibration procedure.

Requirements—machine state required for calibration.

Details Displayed on Page:

Last Calibration	Date and Time
Recommended Interval	As Needed
Estimated Time Required	Approximately 3-4 min

SS43267,0000860-19-18MAY17

Concave Leveling Calibration Procedure

Procedure Requirements

Engine State	Running
Operating State	Parked on a level surface

Procedure Overview:

N120226—UN—23FEB16

Begin Calibration

1. Select Begin Calibration to begin procedure.
2. Follow messages on-screen to complete procedure.

N118093—UN—16FEB16

Save

3. Confirm Calibration by selecting Save.

N118122—UN—02MAY16

Retry

If Calibration Fails:

1. Select Retry button.
2. Verify all requirements listed on-screen have been met.
3. If calibration fails twice, see your John Deere dealer or qualified service provider.

SS43267,0000886-19-18MAY17

Combine Overview

NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.

Combine Overview outlines the controls and features found inside the cab. Knowledge of these items helps you to correctly operate the machine as well as enhancing your comfort and operating experience.

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Items Accessible on the Combine Overview Page:

H118294—UN—22DEC16

Front Console

Front Console— items located in front of you near the steering wheel.

H118296—UN—22DEC16

H118299—UN—22DEC16

Navigation Bar

Navigation Bar— items on navigation bar located below the monitor.

Corner Post Display— on the front right-hand corner post.

H118301—UN—22DEC16

CommandARM™

CommandARM™ Console and Display— switches for machine operation, attached to the right-hand side of the seat.

H118300—UN—22DEC16

Multi-Function Lever

Multi-Function Lever— items on the multi-function lever.

H118302—UN—22DEC16

Right-Hand Cab Items

Right-Hand Cab Items— connectors and ports for information input and powering auxiliary devices, on the right-hand fender well near the window.

H118303—UN—22DEC16

Left-Hand Cab Items

Left-Hand Cab Items— items located on the left-hand side of the front console.

H118297—UN—22DEC16

Overhead Controls

Overhead Controls— items located in the headliner above you.

H118295—UN—22DEC16

Seat Controls

Seat Controls— allow adjustment to the seat to increase your operating comfort.

SS43267,000080F-19-31OCT19

Front Console

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Key Switch

Adjusting Steering Wheel

Operate Lights

Operate Turn Signals, Horn, and High/Low Beam

Operate Windshield Wiper/Washer

H121072—UN—18MAY17

Footrest

Footrest— place feet on footrests as needed to decrease fatigue and improve comfort.

Operate Ether Injection (If Equipped)

SS43267,0000812-19-31OCT19

Corner Post Display

NOTE: Some items below are only displayed if machine is equipped with the associated option.

H117815—UN—28MAR16

Left-Hand Turn Indicator

Left-Hand Turn Indicator— left-hand turn signal is active. Simultaneous operation of right-hand/left-hand turn indicators shows your warning lights are activated.

H117819—UN—28MAR16

Stop Operation

Stop Operation (Red)— illuminates and requires the machine be stopped at once and the problem corrected. Diagnostic trouble code is shown on the armrest display until the problem is resolved.

H117817—UN—28MAR16

Operator Alert

Operator Alert (Yellow)— illuminates and flashes when a problem exists with the machine. Requires the machine be stopped at earliest convenience. Diagnostic trouble code is shown on the armrest display.

H117818—UN—28MAR16

Information Alert

Information Alert (Blue)— illuminates and flashes when diagnostic trouble code is active. Alerts you to be aware of a condition. When the alert is acknowledged, the screen message disappears.

H117816—UN—28MAR16

Right-Hand Turn Indicator

Right-Hand Turn Indicator— right-hand turn signal is active. Simultaneous operation of right-hand/left-hand turn indicators shows your warning lights are activated.

H117820—UN—28MAR16

Trailer Lights Indicator

Trailer Lights Indicator— when the trailer harness is connected, lights illuminate when turn signals and brakes are applied.

H117807—UN—28MAR16

High Beam Indicator

High Beam Indicator— illuminates when the high beam lights are activated.

H113811—UN—04JAN17

Exhaust Filter Cleaning Indicator

Exhaust Filter Cleaning Indicator— illuminates when exhaust filter system is actively performing exhaust filter cleaning.

H117822—UN—22DEC16

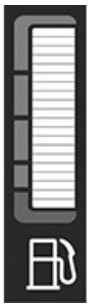
Engine Power Meter Indicator

Engine Power Meter Indicator— indicates the percentage of power the engine is using at any given time.

H117823—UN—22DEC16

Engine Temperature Indicator

Engine Temperature Indicator— indicates the engine temperature. Green area indicates normal operating temperature, red indicates overheating condition.



H117824—UN—22DEC16

Fuel Gauge Indicator

Fuel Level Indicator— indicates the amount of fuel remaining in the fuel tank.

H118085—UN—22DEC16

Diesel Exhaust Fluid (DEF) Level Indicator

Diesel Exhaust Fluid (DEF) Level Indicator— indicates how much fluid remains in the tank.

H117826—UN—22DEC16

Transmission Gear or Range Indicator

Transmission Gear or Range Indicator, 3-Speed Push-Button Shift Transmission (PBST) Machines— 1, 2, or 3 illuminates indicating the current gear selected.

H118558—UN—22DEC16

Transmission Gear or Range Indicator

Transmission Gear or Range Indicator, 2-Speed ProDrive™ Machines— 1 or 2 illuminates indicating the current gear selected.

H117827—UN—28MAR16

Park Brake Indicator

Park Brake Indicator— illuminates when the park brake is engaged.

H117828—UN—28MAR16

Neutral Indicator

Neutral Indicator— illuminates when the neutral position is selected.

H126457—UN—10JUN19

Engine Speed Indicator

Engine Speed Indicator— indicates the engine rpm speed.

H126458—UN—10JUN19

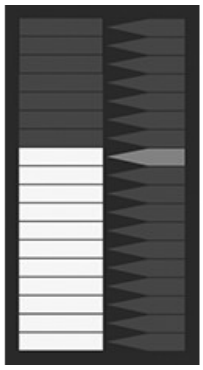
Vehicle Speed Indicator

Vehicle Speed Indicator— indicates the machine speed (km/h or mph).

H116357—UN—22DEC16

Header Height Numeric Display

Header Height Numeric Display— when running on ground height sensing psi or bar will be illuminated depending on units selected. In off ground height sensing the numbers will fluctuate according to sensor feedback and neither psi or bar will be illuminated.



H116356—UN—20DEC16

Header Height Display

Header Height Display— the green arrow is the set point and the white bars represent the current position.

H116354—UN—19DEC16

Header Activation Number

Header Activation Number— indicates the currently selected activation button.

H116362—UN—19DEC16

Deck Plate Position Resume

Deck Plate Position Resume— illuminates when deck plate position resume is enabled.

H116360—UN—19DEC16

Dial-A-Speed™

Dial-A-Speed— illuminates when Dial-A-Speed is enabled.

H116361—UN—19DEC16

Reel Resume

Reel Resume— illuminates when reel the resume is enabled.

H116353—UN—19DEC16

Header Height Resume

Header Height Resume— illuminates when the header height resume is enabled.

H116358—UN—19DEC16

Header Height Sensing

Header Height Sensing— illuminates when header height sensing is active.

H117843—UN—22JUN17

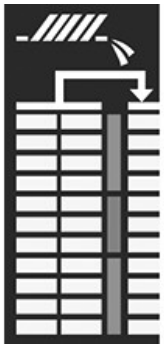
Active Header Float

Active Header Float— illuminates when the active header float is active.

H116359—UN—19DEC16

Lateral Tilt Display

Lateral Tilt Display— indicates position of the feeder house frame.

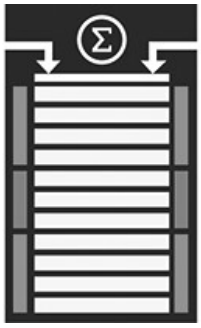


H117835—UN—22DEC16

Shoe Loss Indicator

Shoe Loss Indicator— indicates grain loss from shoe.

NOTE: Shoe Loss Indicator is part of the VisionTrak™ system.

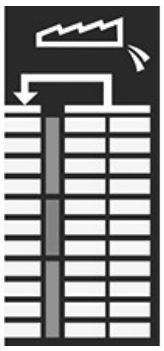


H117836—UN—22DEC16

Total Loss Indicator

Total Loss Indicator— indicates the combined grain loss from shoe and separator area.

NOTE: Total Loss Indicator is part of the VisionTrak™ system.

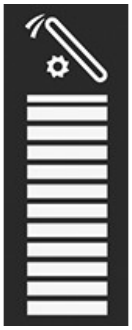


H117837—UN—22DEC16

Separator Loss Indicator

Separator Loss Indicator— indicates the grain loss from separator area.

NOTE: Separator Loss Indicator is part of the VisionTrak™ system.



H117838—UN—22DEC16

Tailings Volume Indicator

Tailings Volume Indicator— indicates volume of tailings return.

NOTE: Tailings Loss Indicator is part of the VisionTrak™ system.

SS43267,0000813-19-11JUN19

CommandARM™ Console and Display

NOTE: Some items below are only displayed if machine is equipped with the associated option.

Harvesting Controls— controls for the cleaning fan, threshing clearance, separator speed, and other harvesting functions.

HVAC— select to adjust temperature, fan speed, and air flow mode inside of cab and view outside temperature.

Radio— select to access radio presets that you can configure.

Engine and Ground Drive— controls for engine speed, park brake, and ground drive.

Lights— select to access light presets that you can configure.

Console and Display— select for adjustments to the console and display.

Operator Interface Controls— controls for main menu, home, and confirm functions.

CommandARM is a trademark of Deere & Company

PR79369,00000A3-19-11JUN19

Multi-function Lever

NOTE: Some items below are only displayed if machine is equipped with the associated option.

H126543—UN—20JUN19

Movement

Movements—multi-function lever can be pushed forward to move the machine forward, pulled backward to move the machine in reverse, and placed in the middle position to put the machine in a neutral state.

H117033—UN—15APR16

Quick Stop Switch

Quick Stop Switch— allows you to simultaneously shut OFF multiple systems in the case of an emergency.

H117003—UN—22DEC16

Unloading Auger Switch

Unloading Auger Swing Switch— allows you to swing unloading auger in or out manually or automatically.

H123658—UN—02MAR18

Unloading Auger Drive Switch

Unloading Auger Drive Switch— allows you to engage or disengage the unloading auger and indicator light.

H117006—UN—28MAR16

Programmable Button

Programmable Buttons— depending on the machine options and header types, the buttons are programmable to different functions. (See Controls Setup Application in Onscreen Help for more information.)

H117005—UN—15APR16

AutoTrac™ Resume Button

AutoTrac™ Resume Button (If Equipped)— allows you to activate or deactivate system.

AutoTrac™

H116348—UN—19DEC16

Header Raise/Lower Switch

Header Raise/Lower and Tilt (If Equipped) Switch— allows you to raise or lower header and tilt the feeder house.

H116349—UN—19DEC16

Reel Raise/Lower, Reel Fore/Aft

Reel Raise/Lower, Reel Fore/Aft (If Equipped) Switch— allows you to control the position of the reel.

AutoTrac is a trademark of Deere & Company

H116349—UN—19DEC16

Feeder House Backshaft Speed, Adjustable Corn Head Deck Plates

Feeder House Backshaft Speed, Adjustable Corn Head Deck Plates Switch (If Equipped)— allows you to control feeder house backshaft speed or adjustable corn head deck plates.

H116346—UN—19DEC16

Header Activation Buttons

Header Activation Buttons— allows you to activate multiple automatic header control systems by pressing one of the three buttons.

SS43267,0000815-19-20JUN19

Navigation Bar

H117902—UN—29MAR16

Dial

Adjustment Dial— Turn the Adjustment Dial to increase or decrease selected input field. The button located in the center of the adjustment wheel is called the Close Button. Pressing this button closes pages on the CommandCenter™.

CommandCenter is a trademark of Deere & Company

H117903—UN—29MAR16

Home Page Scroll

Home Page Scroll— press to scroll through custom Run Pages.

H117904—UN—22JAN20

Header

Header— press to open the Header Application.

H117905—UN—29MAR16

Harvest Settings

Harvest Settings— press to open the Harvest Settings Application.

H117906—UN—29MAR16

Engine— press to open the Engine Application.

H117907—UN—29MAR16

Grain Handling

Grain Handling— press to open the Grain Handling Application.

H117908—UN—29MAR16

Residue Management

Residue Management— press to open the Residue Management Application.

H117909—UN—29MAR16

Folding

Folding— press to open the Folding Application.

H117910—UN—29MAR16

Work Monitor

Work Monitor— press to open the Work Monitor Application.

H117911—UN—29MAR16

Control Setup

Control Setup— press to open the Control Setup Application.

H117912—UN—29MAR16

HVAC

HVAC— press to open the HVAC Application.

H117913—UN—29MAR16

Lights

Lights— press to open the Lights Application.

H117914—UN—29MAR16

Audio

Audio— press to open the Audio Application.

H117915—UN—29MAR16

Phone

Phone— press to open the Phone Application.

H117916—UN—29MAR16

Video

Video— press to open the Video Application.

SS43267,0000816-19-27JAN17

Right-Hand Cab Items

N128645—UN—15FEB17

Auxiliary Outlet

Auxiliary Outlet— used when connecting accessories (12 V).

N122943—UN—02MAY16

USB Outlet

USB Outlet— used for exporting information to a flash drive, loading information to the display, and display programming.

N122944—UN—05MAY16

Auxiliary (AUX) Input

Auxiliary (AUX) Input— used for playing music from an auxiliary source on the radio when that mode is selected on the radio.

N122945—UN—05MAY16

USB Input

USB Input— used for playing music from an USB source on the radio when that mode is selected on the radio.

H121337—UN—18MAY17

2630 Ethernet Input

2630 Ethernet— used to connect a 2630 display as a secondary monitor.

H121338—UN—18MAY17

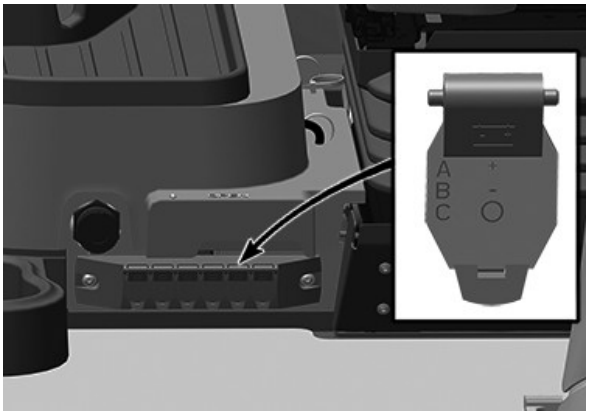
4600 Extended Monitor Port

4600 Extended Monitor Port— used to connect a 4600 extended monitor for a secondary display.

H121339—UN—18MAY17

Auxiliary Display Connector

Auxiliary Display Connector— used for connecting auxiliary equipment.



H118079—UN—19JAN17

Auxiliary Power Outlet Strip

Auxiliary Power Outlet Strip— is equipped with six additional electrical outlets which are at the lower rear of the right-hand window. These outlets provide key-switched or unswitched power.

NOTE: Maximum combined current draw for switch power is 20 amps and unswitched power is 30 amps.

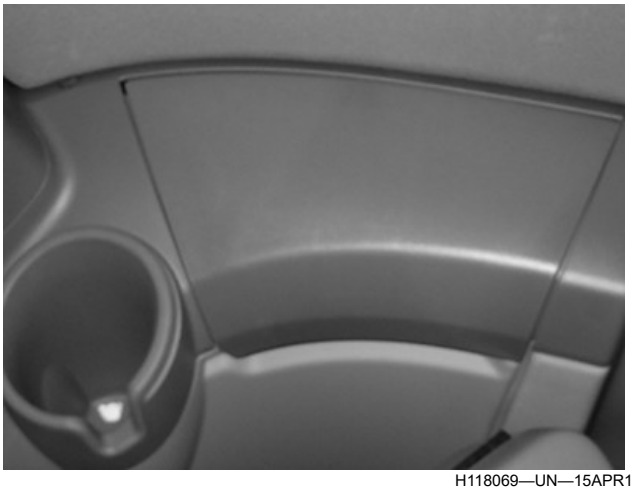
- Spade terminal (A) is direct positive power at all times.
- Spade terminal (B) is ground.
- Spade terminal (C) is auxiliary power (key switch ON).

H121414—UN—18MAY17

Emergency Exit

Emergency Exit— allows you to exit the combine in case of emergency.

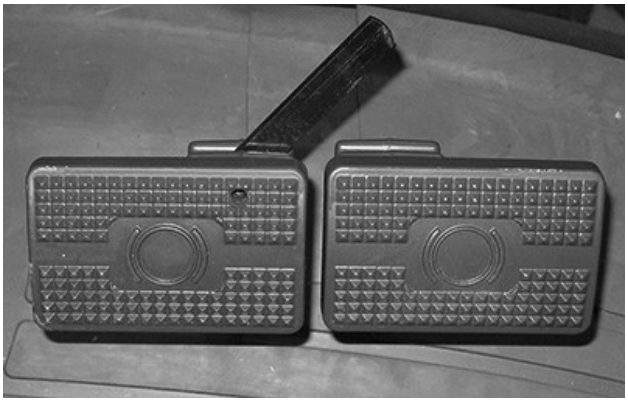
- Pull down to remove the emergency exit device.
- Use the hammer to break the window and exit cab if doors do not open.
- Use the knife in the handle to cut seat belts if they do not unbuckle.



H118069—UN—15APR16

Manual Storage Location

Manual Storage Location— compartment located along rear cab wall that stores the Operator's Manual.

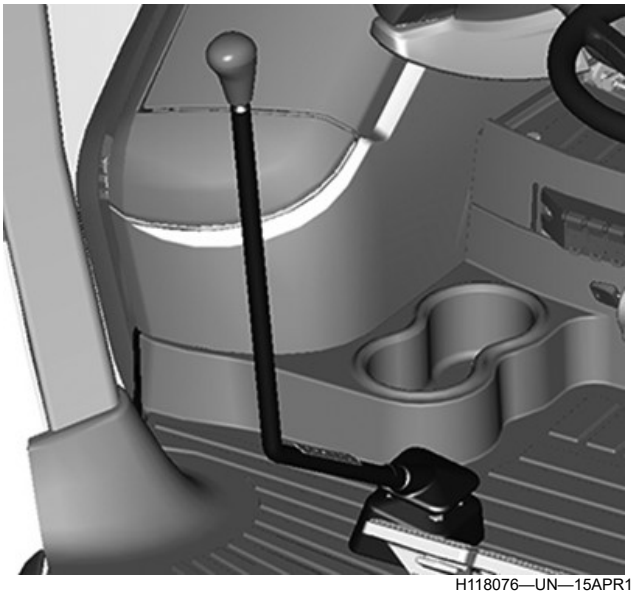


H118068—UN—15APR16

Brake Pedals

Brake Pedals— allows you to stop the machine.

Leave the brake pedals unlocked for field use and locked together when transporting.



H118076—UN—15APR16

Gearshift Lever

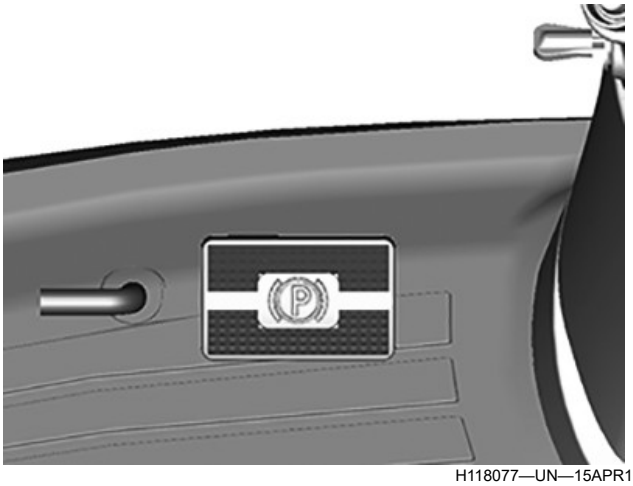
Gearshift Lever (If Equipped)— allows you to manually shift gears.

IMPORTANT: Stop the machine and move the multi-function lever to neutral before shifting gears.

When shifting the gearshift lever, the shift pattern is a straight line with detents for 1, 2, and 3. Less resistance is felt for neutral between 1st and 2nd gears.

SS43267,0000817-19-02MAR18

Left-Hand Cab Items



H118077—UN—15APR16

Manual Park Brake

Manual Park Brake (If Equipped)— allows you to manually set the parking brake.

IMPORTANT: Machine is equipped with manual engage and disengage the park brake pedals. Be certain to engage the park brake when the engine is running and the machine is parked or before leaving the machine with the engine turned OFF.

Press the right pedal to engage the park brake and the left pedal to disengage the park brake.

H118074—UN—15APR16

Refrigerator

Refrigerator (If Equipped)— provides a space to keep food or beverages cool throughout the day.

NOTE: Refrigerator operates only when the key switch is in the Run position and MUST remain plugged into the auxiliary outlet to keep food or beverages cold.

Raise the seat bottom to open the refrigerator top cover. Refrigerator front cover can also be opened without raising the seat bottom.

Turn the temperature control dial clockwise to decrease temperature or counterclockwise to increase temperature.

SS43267,0000818-19-27JAN17

Overhead Controls

H118064—UN—22DEC16

Microphone

Microphone (Optional)— allows you to communicate hands-free using a Bluetooth® cell phone. (Bluetooth™ must be enabled.)

NOTE: Key switch must be in the Run position.

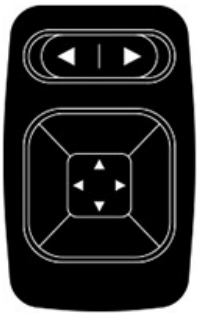
H118065—UN—22DEC16

Mirror Heater Button

Mirror Heater Button— activates mirror heaters to remove ice and fog.

- Press top of the switch to activate mirror heat.
- Press bottom of the switch to deactivate mirror heat.

NOTE: Key switch must be in the Run position.



H118066—UN—15APR16

Mirror Control Buttons

Mirror Control Buttons— allow you to select and adjust either the right-hand or left-hand cab mirrors.

- Select mirror to adjust using the top button.
- Selected mirror can be moved up or down or left or right using the bottom button. Move the button in the direction you desire the mirror to move.

NOTE: Key switch must be in the Run position.

SS43267,0000819-19-27JAN17

Seat Controls

ComfortCommand™ Operator's Seat (Basic Seat)

ComfortCommand™ Operator's Seat (Premium Cloth Seat)

ComfortCommand™ Operator's Seat (Premium Leather Seat)

Seat Belts

Instructional Seat

ComfortCommand is a trademark of Deere & Company

CS12167,0000B71-19-07JUN18

Key Switch

CAUTION: Sound horn before starting the engine to clear people away from the machine.

To avoid the possibility of personal injury or death, start ONLY from the operator seat. Do NOT start the engine by shorting across starter terminals. Machine starts in gear if normal circuit is bypassed.

H118582—UN—22DEC16

Key Switch

Key switch is on the right-hand side of the steering column and has four positions:

H117799—UN—15APR16

Accessories

Bluetooth is a trademark of Bluetooth SIG

Accessories— allows accessories such as the radio and windshield wiper to operate without engine running.

H117800—UN—28MAR16

Stop

Stop— shut OFF the engine and all accessory functions.

H117801—UN—28MAR16

Run

Run— allows all accessories to operate and the engine to run once it has been started.

H117802—UN—28MAR16

Start

Start— momentary switch position that cranks the engine. Once the engine starts and the switch is released, it returns to the run position.

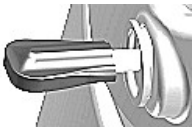
SS43267,000081B-19-27JAN17

Adjusting Steering Wheel

H117796—UN—28MAR16

Telescope

Telescope— rotate the knob counterclockwise to release lock. Extend or retract the steering wheel to the desired position. Rotate knob clockwise to lock.



H117797—UN—28MAR16

Tilt

Tilt— pull up on lever and move the steering column to the desired position. Release lever to lock.

H117798—UN—28MAR16

Memory

Memory— push down on the foot pedal on the floor of the cab to permit steering column to move up and out of your way for easy entry or exit. Push down on the foot pedal and pull down on steering wheel to return steering column to previous setting.

SS43267,000081C-19-27JAN17

Operate Lights

CAUTION: Accidental collision with another vehicle can cause serious injury or death to you or others. Always comply with traffic regulations when driving machine on a road. Dim headlights to low-beam for oncoming vehicles. To avoid motorist confusion, do not operate work lights when transporting on public roadways.

H117803—UN—28MAR16

Switch

Switch— select light operation mode.

H117809—UN—28MAR16

OFF

OFF— select to turn all exterior lighting OFF.

NOTE: If warning light switch is ON then warning lights remain ON.

H119796—UN—07JUN18

Park Lights

Park Lights— select to turn ON marker lights.

H117808—UN—28MAR16

Road Lights

Road Lights— select to turn ON headlights and marker lights.

N123280—UN—16MAY16

Work Lights

Work Lights— select to turn ON field lights to selected preset.

PR79369,00000A4-19-11JUN19

Operate Turn Signals, Horn and High and Low Beam

H117803—UN—28MAR16

Turn Signals

Turn Signals— push up lever for a right turn or pull down for a left turn. Return lever to the center position after completing turn.

H117804—UN—28MAR16

Right-Hand Turn

Right-Hand Turn— push lever up for a right-hand turn.

H117805—UN—28MAR16

Left-Hand Turn

Left-Hand Turn— pull down for a left-hand turn.

H117806—UN—28MAR16

Horn

Horn— push inward on end of lever to activate the horn.

H117048—UN—22DEC16

High Beam

High Beam— push lever forward to activate the high beam headlights. Pull lever toward you and release to flash the high beam.

H117808—UN—28MAR16

Low Beam

Low Beam— pull lever into center position to operate the low beam.

H117886—UN—29MAR16

Work Light Preset 1

Work Light Preset 1— press to select Field Light Preset 1.

H117887—UN—29MAR16

Work Light Preset 2

Work Light Preset 2— press to select Field Light Preset 2.

PR79369,00000A5-19-11JUN19

Operate Windshield Wiper and Washer

H117803—UN—28MAR16

Switch

NOTE: Fill washer reservoir with non-freezing solution to prevent damage to washer system in cold temperatures.

Switch— rotate to operate the wiper at desired speed.

H117809—UN—28MAR16

OFF

OFF— select to turn the wiper OFF.

H117810—UN—28MAR16

Intermittent

Intermittent— select so the wiper operates intermittently.

H117811—UN—28MAR16

Windshield Washer

Windshield Washer— press to operate the windshield washer.

H117812—UN—28MAR16

Wiper ON

Wiper ON— select to operate the windshield wiper.

SS43267,000081F-19-27JAN17

Operate Ether Injection (If Equipped)

H121070—UN—18MAY17

Ether Injection

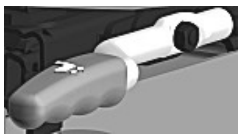
Ether Injection— press while cranking the engine to aid in cold weather starting. Release button after the engine starts.

CAUTION: Avoid personal injury and damage to engine. Inject fluid only while engine is turning.

IMPORTANT: To assure proper lubrication, operate engine at low speed, with no load for 1-2 minutes. Extend this period to 2-4 minutes when operating at temperatures below freezing.

SS43267,0000820-19-18MAY17

ComfortCommand™ Operators Seat (Basic Seat)



H117034—UN—28MAR16

Fore/Aft Adjustment Handle

Fore/Aft Adjustment Handle— pull up on the handle to slide seat forward or rearward for the best working position.

H117035—UN—28MAR16

Vertical Shock Dampener Control

Vertical Shock Dampener Control— limits amount of upward motion the seat suspension provides. Push control forward for a soft ride or pull handle rearward for a firm ride. Between these two positions is medium firmness.

H117861—UN—28MAR16

Weight/Height Adjustment Handle

Weight/Height Adjustment Handle— pull up on the handle to raise seat, or push down on the handle to lower seat. Adjust seat until green mark is visible in the weight/height indicator.

H117037—UN—28MAR16

Weight/Height Indicator

Weight/Height Indicator— use the weight/height adjustment handle to adjust seat until green marking is visible in indicator.

H117036—UN—28MAR16

Fore/Aft Isolation Adjustment Handle

Fore/Aft Isolation Adjustment Handle— pull up on the handle to lock forward or rearward movements. Push down on the handle to release.

H117042—UN—28MAR16

Armrest Height Adjustment

Armrest Height Adjustment— remove the round cap and loosen the nut to adjust the left-hand armrest to desired position.

H117041—UN—28MAR16

Back Rest Angle Adjustment Handle

Back Rest Angle Adjustment Handle— adjusts the seat back angle. Pull up on handle and adjust backrest to desired position and release handle.

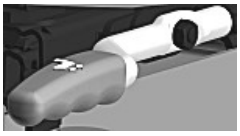
H121071—UN—18MAY17

Seat Swivel Handle

Seat Swivel Handle— Lift on the handle to allow the seat to swivel. Push down on handle to lock seat in position.

SS43267,0000821-19-18MAY17

ComfortCommand™ Operators Seat (Premium Cloth Seat)



H117034—UN—28MAR16

Fore/Aft Adjustment Handle

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H117035—UN—28MAR16

Vertical Shock Dampener Control

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H117861—UN—28MAR16

Weight/Height Adjustment Handle

Weight/Height Adjustment Handle— pull up on the handle to raise seat, or push down on the handle to lower seat. Adjust seat until green mark is visible in the weight/height indicator.

H117037—UN—28MAR16

Weight/Height Indicator

Weight/Height Indicator— use the weight/height adjustment handle to adjust seat until green marking is visible in indicator.

H117039—UN—28MAR16

Seat Bottom Depth Adjustment Handle

Seat Bottom Depth Adjustment Handle— press the handle to move the seat bottom forward or rearward for the best working condition.

H117036—UN—28MAR16

Fore/Aft Isolation Adjustment Handle

Fore/Aft Isolation Adjustment Handle— pull up on the handle to lock forward or rearward movements. Push down on the handle to release.

H117040—UN—28MAR16

Lateral Isolation Adjustment Handle

Lateral Isolation Adjustment Handle— push the handle forward to release side-to-side movement. Pull the handle rearward to lock.

H117043—UN—28MAR16

Armrest Angle Adjustment Knob

Armrest Angle Adjustment Knob— adjusts the armrest up or down. Rotate knob clockwise to lower and counterclockwise to raise.

H117042—UN—28MAR16

Armrest Height Adjustment

Armrest Height Adjustment— remove the round cap and loosen the nut to adjust the left-hand armrest to desired position.

H117041—UN—28MAR16

Back Rest Angle Adjustment Handle

Back Rest Angle Adjustment Handle— adjusts the seat back angle. Pull up on handle and adjust backrest to desired position and release handle.

H121071—UN—18MAY17

Seat Swivel Handle

Seat Swivel Handle— Lift on the handle to allow the seat to swivel. Push down on handle to lock seat in position.

H117044—UN—28MAR16

Heated/Ventilated Seat

Heated/Ventilated Seat— press the top of the switch to turn ON seat heater. Press the bottom of the switch to turn ON seat ventilation. Switch in the middle position turns seat heater and seat ventilation OFF.

CAUTION: An overheated seat heater can cause a burn injury or damage to the seat. To reduce the risk of burns, use caution when using the seat heater for extended periods of time, especially if the operator cannot feel temperature change or pain to the skin. Do not place objects on the seat, such as a blanket, cushion, cover, or similar item, which can cause the seat heater to overheat.

H117045—UN—28MAR16

Upper Lumbar Support

Upper Lumbar Support— press the top switch towards the plus (+) symbol to increase upper lumbar support curvature. Push the top switch towards the minus (-) symbol to decrease upper lumbar support curvature.

H117046—UN—28MAR16

Lower Lumbar Support

Lower Lumbar Support— press the bottom switch towards the plus (+) symbol to increase lower lumbar support curvature. Push the bottom switch towards the minus (-) symbol to decrease lower lumbar support curvature.

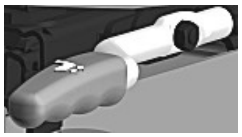
H117047—UN—28MAR16

Armrest Control Console

Armrest Control Console— loosen knob and slide the armrest control console up/forward or down/back in slots on outer plate. Tighten knob.

CS12167,0000B72-19-18JUN18

ComfortCommand™ Operators Seat (Premium Leather Seat)



H117034—UN—28MAR16

Fore/Aft Adjustment Handle

Fore/Aft Adjustment Handle— pull up on the handle to slide seat forward or rearward for the best working position.

H117035—UN—28MAR16

Vertical Shock Dampener Control

Vertical Shock Dampener Control— limits amount of upward motion the seat suspension provides. Push control forward for a soft ride or pull handle rearward for a firm ride. Between these two positions is medium firmness.

H119780—UN—07JUN18

Weight/Height Adjustment Switch

Weight/Height Adjustment Switch— press the top of the switch to raise seat or press the bottom of the switch to lower seat. Adjust seat until green mark is visible in the weight/height indicator.

H117037—UN—28MAR16

Weight/Height Indicator

Weight/Height Indicator— use the weight/height adjustment handle to adjust seat until green marking is visible in indicator.

H117039—UN—28MAR16

Seat Bottom Depth Adjustment Handle

Seat Bottom Depth Adjustment Handle— press the handle to move the seat bottom forward or rearward for the best working condition.

H117036—UN—28MAR16

Fore/Aft Isolation Adjustment Handle

Fore/Aft Isolation Adjustment Handle— pull up on the handle to lock forward or rearward movements. Push down on the handle to release.

H119781—UN—07JUN18

Lateral Isolation Adjustment Handle

Lateral Isolation Adjustment Handle— push the handle forward to release side-to-side movement. Pull the handle rearward to lock.

H117043—UN—28MAR16

Armrest Angle Adjustment Knob

Armrest Angle Adjustment Knob— adjusts the armrest up or down. Rotate knob clockwise to lower and counterclockwise to raise.

H117042—UN—28MAR16

Armrest Height Adjustment

Armrest Height Adjustment— remove the round cap and loosen the nut to adjust the left-hand armrest to desired position.

H117041—UN—28MAR16

Back Rest Angle Adjustment Handle

Back Rest Angle Adjustment Handle— adjusts the seat back angle. Pull up on handle and adjust backrest to desired position and release handle.

H121071—UN—18MAY17

Seat Swivel Handle

Seat Swivel Handle— Lift on the handle to allow the seat to swivel. Push down on handle to lock seat in position.

H119782—UN—07JUN18

Heated/Ventilated Seat

Heated/Ventilated Seat— press the top of the switch to turn ON seat heater. Press the bottom of the switch to turn ON seat ventilation. Switch in the middle position turns seat heater and seat ventilation OFF.

CAUTION: An overheated seat heater can cause a burn injury or damage to the seat. To reduce the risk of burns, use caution when using the seat heater for extended periods of time, especially if the operator cannot feel temperature change or pain to the skin. Do not place objects on the seat, such as a blanket, cushion, cover, or similar item, which can cause the seat heater to overheat.

H117045—UN—28MAR16

Upper Lumbar Support

Upper Lumbar Support— press the top switch towards the plus (+) symbol to increase upper lumbar support curvature. Push the top switch towards the minus (-) symbol to decrease upper lumbar support curvature.

H117046—UN—28MAR16

Lower Lumbar Support

Lower Lumbar Support— press the bottom switch towards the plus (+) symbol to increase lower lumbar support curvature. Push the bottom switch towards the minus (-) symbol to decrease lower lumbar support curvature.

H117047—UN—28MAR16

Armrest Control Console

Armrest Control Console— loosen knob and slide the armrest control console up/forward or down/back in slots on outer plate. Tighten knob.

CS12167,0000B73-19-18JUN18

Seat Belts

H118075—UN—15APR16

Seat Belt

Seat belts are standard equipment on both operator and instructional seats. Lap type seat belts have a push-button quick release and automatic belt retraction to allow unrestricted exiting and entering.

CAUTION: Inspect seat belts and mounting hardware on your machine at least once a year. If the seat belt system, including mounting hardware, buckle, belt, or retractor, shows any sign of damage such as cuts, fraying, extreme or unusual wear, discoloration or abrasion, the entire seat belt system should be replaced immediately. For your safety, replace the belt system only with replacement parts approved for your machine. See your John Deere dealer for replacement parts.

SS43267,0000823-19-02DEC19

Instructional Seat

H118073—UN—15APR16

Instructional Seat

Seat back and seat bottom can be raised or lowered to desired operating position.

CAUTION: The instructional seat has been provided only for training operators or diagnosing machine problems. Keep all other riders off the machine and equipment. Always wear seat belts.

SS43267,0000824-19-27JAN17

Harvesting Controls

H117027—UN—28MAR16

Lock

Programmable Shortcut Lock— sets shortcut switch to avoid accidental change. Indicator illuminates when selected.

H116352—UN—20DEC16

Dial-A-Speed™ Dial

Dial-A-Speed™ Dial— turn the dial clockwise to increase reel or belt pickup speed and setpoint or counterclockwise to decrease reel or belt pickup speed and setpoint.

H116347—UN—20DEC16

Header Height/HydraFlex™ Pressure Control Dial

Header Height/HydraFlex™ Pressure Control Dial— select position of the header relative to the ground and return to that position automatically. Turn dial clockwise to raise header and setpoint (if equipped with HydraFlex™ increase pressure). Turn dial counterclockwise to lower header and setpoint (if equipped with HydraFlex™ decrease pressure).

H117923—UN—22DEC16

Feeder House Reverser

Feeder House Reverser— used to hydraulically shift the feeder house gearcase into reverse mode to clear a plugged feeder house or header.

Dial-A-Speed is a trademark of Deere & Company
HydraFlex is a trademark of Deere & Company

H117924—UN—22DEC16

Belt Pickup Cleanout

Belt Pickup Cleanout— delays re-engagement of the header belt drive system, which allows an ejected slug to be reingested into the feeder house in smaller segments.

H117924—UN—22DEC16

Header Engage

Header Engage— push down and forward to lock the switch in ON position or pull back on the switch to turn OFF.

H117925—UN—22DEC16

Separator Engage

Separator Engage— push down and forward to lock the switch in ON position or pull back on the switch to turn OFF.

H117017—UN—28MAR16

Discharge Swap Button

Discharge Swap— allows you to quickly adjust the residue spread in the opposite direction to compensate for wind interference when turning on headlands.

NOTE: Swap is only available when the Direction adjustment is not in the center position.

H115034—UN—28MAR16

Armrest Adjustment Dial

Armrest Adjustment Dial— is used to increase or decrease adjustments.

- Rotate dial clockwise to increase setting.
- Rotate dial counterclockwise to decrease setting.

H117012—UN—28MAR16

Threshing Clearance Adjust

Threshing Clearance Adjust— press to activate Armrest Adjustment Dial to select desired clearance.

H117013—UN—28MAR16

Threshing Speed Adjust

Threshing Speed Adjust— press to activate Armrest Adjustment Dial to select desired speed.

H117011—UN—29MAR16

Cleaning Fan Speed Adjust

Cleaning Fan Speed Adjust— press to activate Armrest Adjustment Dial to select desired speed.

H117014—UN—28MAR16

Chaffer Adjust

Chaffer Adjust— press to activate Armrest Adjustment Dial to select desired clearance.

H117015—UN—28MAR16

Sieve Adjust

Sieve Adjust— press to activate Armrest Adjustment Dial to select desired clearance.

H118063—UN—15APR16

Programmable Buttons

Programmable Buttons— depending on the machine options and header type, the buttons are programmable to different functions. (See Controls Setup Application in Onscreen Help for more information.)

H117029—UN—28MAR16

Manual Left Tilt

HillMaster™ Manual Tilt Left (If Equipped)— press to tilt the machine chassis to the left.

H117030—UN—28MAR16

Manual Right Tilt

HillMaster™ Manual Tilt Right (If Equipped)— press to tilt the machine chassis to the right.

H117031—UN—28MAR16

Automatic Leveling

HillMaster™ Automatic Leveling (If Equipped)— press to allow the machine separator to automatically level itself as the machine moves over rolling ground.

SS43267,0000977-19-27JAN17

HVAC

N120890—UN—05MAY16

Fan Speed

Fan Speed— press to change the in cab fan speed.

H117877—UN—29MAR16

Air Flow Direction

Air Flow Control— press to select desired air flow direction.

N121549—UN—12MAY16

Temperature Control

Temperature Control— press to change the temperature of cab.

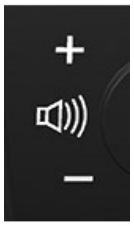
SS43267,0000826-19-27JAN17

Radio

N123514—UN—22SEP16

Seek

Seek— press to seek radio channel.



N124430—UN—22SEP16

Volume Control

Volume Control— press to change the audio volume.

H117918—UN—29MAR16

Mute— press to mute the microphone.

- Press to mute audio.
- Press to resume play of audio.

SS43267,0000827-19-27JAN17

Engine and Ground Drive

H117023—UN—22DEC16

Push-Button Shift Gear

Push-Button Shift Gear (If Equipped)— press the desired button (1, 2, or 3) to increase or decrease the machine ground speed. Selected speed indicator illuminates.

H117917—UN—22DEC16

ProDrive™

ProDrive™ (If Equipped)— press the desired button (1 or 2) to increase or decrease the machine ground speed. Selected speed indicator illuminates.

ProDrive is a trademark of Deere & Company

H117019—UN—28MAR16

Engine Speed (Slow Speed)

Engine Speed (Slow Speed)— press for slow engine speed. Indicator illuminates when selected.

H117020—UN—28MAR16

Engine Speed (Medium Speed)

Engine Speed (Medium Speed)— press for medium engine speed. Indicator illuminates when selected.

H117021—UN—28MAR16

Engine Speed (Fast Speed)

Engine Speed (Fast Speed)— press for fast engine speed. Indicator illuminates when selected.

H117022—UN—28MAR16

Road Transport Disconnect

Road Transport Disconnect— press prior to transporting

the machine on roadway. Indicator illuminates when selected.

H117024—UN—28MAR16

Four-Wheel Drive High Speed

Four-Wheel Drive High Speed (If Equipped)— press to control the speed of the four-wheel drive system.

H117025—UN—28MAR16

Four-Wheel Drive Slow Speed

Four-Wheel Drive Slow Speed (If Equipped)— press to control the speed of the four-wheel drive system.

H117026—UN—28MAR16

Differential Lock

Differential Lock (If Equipped)— press to manually engage/disengage the differential lock to resolve traction problems in the field.

H117028—UN—28MAR16

Park Brake

Park Brake— press to manually or automatically engage/disengage the park brake to prevent machine movement.

SS43267,0000828-19-27JAN17

Lights

H117886—UN—29MAR16

Work Light Preset 1

Work Light Preset 1— press to select Field Light Preset 1.

H117887—UN—29MAR16

Work Light Preset 2

Work Light Preset 2— press to select Field Light Preset 2.

H117884—UN—29MAR16

Beacon Lights— press to turn beacon lights ON/OFF.

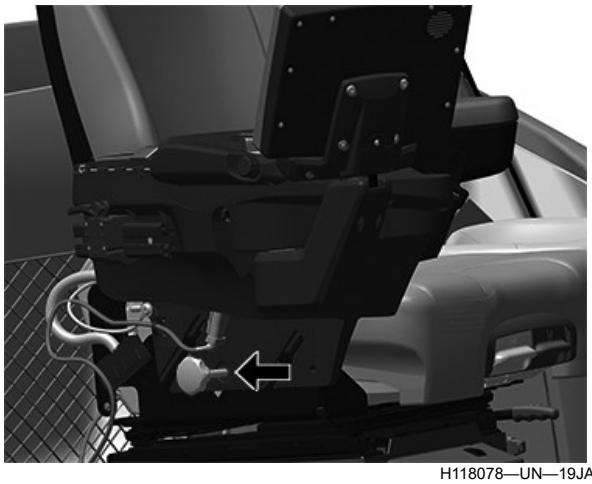
H117885—UN—29MAR16

Hazard Light

Hazard Light— press to turn hazard lights ON/OFF.

PR79369,00000A6-19-11JUN19

Console and Display



H118078—UN—19JAN17

Armrest Control Console

Armrest Control Console— loosen knob and slide the armrest control console up/forward or down/back in slots on outer plate. Tighten knob to lock the armrest into position.

N128644—UN—15FEB17

USB Charging

USB Charging— allows you to charge mobile devices. These ports are located inside the console storage compartment. They are not connected to the radio or the display.

N128645—UN—15FEB17

Auxiliary Outlet

Auxillary Outlet— used for powering devices (12 V). Located inside the console storage compartment.

H117794—UN—19JAN17

Arm

Arm— rotate arm left/right to the desired operating position.

NOTE: This function is only available on machines not equipped with seat swivel configurations.

H117795—UN—15APR16

Display

Display— rotate display left/right to the desired operating position.

SS43267,000082A-19-18MAY17

Feeder House Reverser

H117923—UN—22DEC16

Feeder House Reverser

Used to hydraulically shift the feeder house gearcase into reverse mode to clear a plugged feeder house or header.

- Push down, pull back, and hold feeder house reverser switch to clear out feeder house plug.
- Release switch once feeder house is cleared.

NOTE: If operating at a high engine speed, turn feeder house reverser switch OFF and throttle engine to low idle.

SS43267,000082B-19-27JAN17

Belt Pickup Cleanout

H117924—UN—22DEC16

Belt Pickup

Delays re-engagement of the header belt drive system, which allows an ejected slug to be reingested into the feeder house in smaller segments.

NOTE: In order for cleanout operation to begin, the process of engaging, reversing, and engaging again must occur within 30 s.

Press forward to engage the header, pull back to engage feeder house reverser, and forward again to engage header.

SS43267,000082C-19-27JAN17

Header Engage

H117924—UN—22DEC16

Header Engage

Push down and forward to lock the switch in ON position or pull back on the switch to turn OFF.

System Requirements:

- Separator Engage must be ON.
- Road Transport Disconnect must be in field position.
- You must be seated for the header to operate.

NOTE: If you leave seat after engagement, header continues to operate for five seconds before disengaging.

SS43267,000082D-19-27JAN17

Separator Engage

H117925—UN—22DEC16

Separator Engage

Push down and forward to lock the switch in ON position or pull back on the switch to turn OFF.

System Requirements:

- Engine must be running at the low idle.
- Road Transport Disconnect must be in field position.
- You must be seated for the separator to operate.

NOTE: Separator disengages when discharge beater speed drops below 300 rpm.

If you leave operator seat after engagement, separator rotational alarm sounds and outside lights will flash to alert operator of leaving seat while separator is still rotating. Lights and alarm sounds continue until the separator has come to a complete stop.

SS43267,000082E-19-27JAN17

Threshing Clearance Adjust

H117012—UN—28MAR16

Threshing Clearance Adjust

Increases or decreases distance between threshing elements and concave.

Procedure to Modify:

1. Press button on the Armrest to activate the Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use the Armrest Adjustment Dial to select the desired threshing clearance.

- Turn dial clockwise to increase value.
- Turn dial counterclockwise to decrease value.

NOTE: Depending on machine configurations, some values may not be reached.

NOTE: Maximum value may not be attainable if dense pack elements are installed.

Minimum: 0

Maximum: 40

Increment: 1

SS43267,000082F-19-18MAY17

Threshing Speed Adjust

Increases or decreases threshing speed.

H117013—UN—28MAR16

Threshing Speed

Procedure to Modify:

1. Engage the separator and run engine at high idle.
2. Press the button on the Armrest to activate the Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

3. Use the Armrest Adjustment Dial to select the desired speed.
   - Turn the dial clockwise to increase the value.
   - Turn the dial counterclockwise to decrease the value.

NOTE: Depending on machine configurations, some values may not be reached.

Minimum: 200 rpm

Maximum: 1000 rpm

Increment: 10 rpm

SS43267,0000830-19-27JAN17

Cleaning Fan Speed Adjust

Increases or decreases cleaning fan speed.

Fan speed motor has a thermal (heat) shut off that stops the motor from working if any of the following happen:

- Switch is used continuously for more than two or three minutes.
- Adjustment system is against stop while the motor is still trying to change speed.
- Excessive binding or dragging in linkage.

If any of the above causes are suspected, clean and adjust as necessary.

NOTE: Allow motor to cool 10 to 15 minutes before trying the switch again.

H117011—UN—29MAR16

Cleaning Fan Speed Adjust

Procedure to Modify:

1. Engage the separator and run engine at high idle.
2. Press button on the armrest to activate the Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

3. Use the Armrest Adjustment Dial to select the desired speed.
   - Turn the dial clockwise to increase the value.
   - Turn the dial counterclockwise to decrease the value.

NOTE: Minimum and Maximum values may change if machine is equipped with a cleaning fan slow down Kit.

Minimum: 620 rpm

Maximum: 1350 rpm

Increment: 10 rpm

SS43267,0000831-19-27JAN17

Chaffer Adjust

Increases or decreases the amount of chaffer clearance.

H117014—UN—28MAR16

Chaffer Adjust

Procedure to Modify:

1. Press button on the armrest to activate Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use the Armrest Adjustment Dial to select the desired clearance.
   - Turn the dial clockwise to increase the value.
   - Turn the dial counterclockwise to decrease the value.

NOTE: Depending on machine configurations, some values may not be reached.

General Purpose:

Minimum: 0

Maximum: 22

Increment: 1

Deep Tooth:

Minimum: 0

Maximum: 30

Increment: 1

SS43267,0000832-19-27JAN17

Sieve Adjust

Increases or decreases the amount of sieve clearance.

H117015—UN—28MAR16

Chaffer Adjust

Procedure to Modify:

1. Press button on the armrest to activate Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use the Armrest Adjustment Dial to select the desired clearance.
   - Turn the dial clockwise to increase the value.
   - Turn the dial counterclockwise to decrease the value.

NOTE: Depending on machine configurations, some values may not be reached.

General Purpose:

Minimum: 0

Maximum: 22

Increment: 1

Deep Tooth:

Minimum: 0

Maximum: 30

Increment: 1

SS43267,0000833-19-27JAN17

Seek

N123514—UN—22SEP16

Seek

Press to seek radio channel.

- AM/FM/WX/MW/LW: Press the switch (short press) to change preset.
- AM/FM/WX/MW/LW: Press the switch (long press) to SEEK.
- SiriusXM™ Satellite Radio: Press and hold the switch to change channel.
- MP3: Press the switch to go to the beginning of the

current track, to the previous track or to the next track.

SS43267,0000834-19-02MAR18

Push Button Shift Gear (If Equipped)

H117023—UN—22DEC16

Push-Button Shift Gear

Press desired button (1, 2, or 3) to increase or decrease the machine ground speed. Selected speed indicator illuminates.

NOTE: Tire sizes and country code regulations limit maximum ground speed.

Machine must be stopped and multi-function lever moved to neutral position before selecting the desired gear.

CAUTION: Push-Button Shift Transmission: When pressing the quick stop switch with separator engaged, you are responsible for pulling back on the multi-function lever to stop the machine.

SS43267,0000835-19-27JAN17

ProDrive™ (If Equipped)

H117917—UN—22DEC16

ProDrive™

Press desired button (1 or 2) to increase or decrease the machine ground speed. Selected speed indicator illuminates.

NOTE: Tire sizes and country code regulations limit maximum ground speed. Speed can be programmed from zero to the maximum allowable ground speed.

Maximum reverse ground speed is 10 km/h (6.2 mph) and does not change when in either mode.

ProDrive™ mode 1 or 2 switches can be selected while the machine is moving.

CAUTION: ProDrive™ Machines: Pressing quick stop switch with separator engaged causes machine to slowly roll to a stop. It is always recommended to wear your seat belt to avoid serious injury.

SS43267,0000836-19-27JAN17

Road Transport Disconnect

H117022—UN—28MAR16

Road Transport Disconnect

Press the road transport disconnect button when transporting the machine on roadway. Indicator illuminates when selected.

Road transport disconnect switch prevents the following functions:

- Separator Engage
- Header Engage

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- Header Raise/Lower
- Header Height Resume
- Header Height Sensing
- Lateral Tilt
- Reel Raise/Lower and Reel Fore/Aft
- Unloading Auger
- Auger Swing
- Power Folding Auger (If Equipped)
- Grain Tank Covers (If Equipped)

After transporting the machine on roadway and field operation is desired, press the road transport disconnect switch for two seconds allowing indicator light to turn OFF and allowing the desired switch functions to operate again.

SS43267,0000837-19-27JAN17

Four-Wheel Drive (If Equipped)

Controls the speed of the four-wheel drive system.

IMPORTANT: Do NOT switch four-wheel drive ON or OFF while driving machine at maximum travel speed. Decrease speed or bring machine to a stop.

Turn four-wheel drive OFF before going down steep grades.

Non-ProDrive™ Machines: In conditions that cause high pressure in the hydrostatic system and the machine slows or stops, move multi-function lever to neutral and shift transmission to a lower gear.

It is OK to switch between slow (turtle) and high (rabbit) settings while machine is in motion.

H117025—UN—28MAR16

Slow Speed

Procedure to Modify:

1. Press to turn ON when more traction is required.
2. Press to turn OFF.

H117024—UN—28MAR16

High Speed

1. Press to turn ON when higher speeds are required.
2. Press to turn OFF.

CAUTION: Non-ProDrive™ Machines: Ground speed increases when turned OFF and decreases when turned ON.

SS43267,0000838-19-27JAN17

Differential Lock (If Equipped)

H117026—UN—28MAR16

Differential Lock

Press to manually engage/disengage the differential lock to resolve traction problems in the field.

NOTE: Differential lock does not engage when the road transport disconnect switch is ON. Differential disengages when the brake pedals are pressed.

Engagement is only possible if ground speed is below 10 km/h (6.2 mph) and automatically disengages when ground speed is above 12 km/h (7.5 mph).

SS43267,0000839-19-27JAN17

Park Brake

H117028—UN—28MAR16

Park Brake

Press to manually or automatically engage/disengage the park brake to prevent machine movement.

Automatic Mode: If the multi-function lever is in neutral position and speed is less than 1.5 km/h (1 mph), the park brake is applied. If the multi-function lever is moved out of neutral position, the park brake is released.

Manual Mode: If the multi-function lever is in neutral position and speed is less than 3.0 km/h (1.9 mph), the park brake is applied. If the multi-function lever is moved out of neutral position or speed is greater than 1.5 km/h (1 mph), an alarm sounds.

- Press the park brake button to activate the park brake. Park brake indicator on corner post illuminates indicating the park brake is engaged.
- Press the park brake button to disengage the park

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brake when multi-function lever is in neutral position. Park brake indicator on corner post turns OFF. Park brake is still engaged until multi-function lever is moved out of neutral position returning to automatic mode.

SS43267,000083A-19-27JAN17

Exhaust Filter Cleaning Indicator

H120319—UN—22JUN17

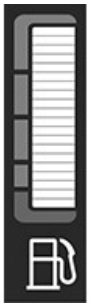
Exhaust Filter Cleaning Indicator

Exhaust Filter Cleaning Indicator illuminates when exhaust filter system is actively performing exhaust filter cleaning.

IMPORTANT: Final Tier 4/Stage V: Damage to exhaust cleaning components may occur if the engine is turned OFF while performing exhaust filter cleaning or shortly after cleaning is complete. Alarm sounds and a warning message appears on the display. Start the machine and follow messages on the display to allow the components to cool.

SS43267,0000A67-19-05MAR18

Fuel Level Indicator



H117824—UN—22DEC16

Fuel Gauge Indicator

Fuel Level Indicator indicates the amount of fuel remaining in the fuel tank.

- When the level reaches 10% of remaining fuel, fuel indicator flashes, alarm sounds, and low fluid message appears.

SS43267,000083C-19-27JAN17

Diesel Exhaust Fluid (DEF) Level Indicator

H118085—UN—22DEC16

Diesel Exhaust Fluid (DEF) Level Indicator

Diesel Exhaust Fluid (DEF) Level Indicator—indicates how much fluid is left in the tank.

- When the level reaches 10%, level indicator flashes, alarm sounds, and low fluid message appears.
- When the level reaches 0%, level indicator illuminates and stops flashing, alarm sounds, and empty fluid message and engine power limited message appears.
- When loss of prime is reached, level indicator illuminates and stops flashing. Alarm sounds and empty fluid message, engine power limited message, and speed limited message appears. Stop engine warning indicator (Red) illuminates, engine is derated and machine functions are restricted.

SS43267,000083D-19-27JAN17

Quick Stop Switch

H117033—UN—15APR16

Quick Stop Switch

Quick Stop Switch allows you to simultaneously shut OFF multiple systems in the case of an emergency.

CAUTION: ProDrive™ Machines: Pressing the quick stop switch with the separator engaged causes the machine to slowly roll to a stop. Multi-function lever must be returned to neutral position to reset the propulsion system.

Push-Button Shift Transmission or Mechanical Shift Machines: When pressing the quick stop switch with separator engaged, you are responsible for pulling back on the multi-function lever to stop the machine.

It is always recommended to wear your seat belt to avoid serious injury.

IMPORTANT: Header drive can be disengaged by this switch in case of plugging.

NOTE: Pushing unloading auger drive switch on the multi-function lever restarts the unloading auger drive. To engage header drive, turn the header engage switch OFF and back ON.

The following systems stop when Quick Stop Switch is pressed:

- Header Engage
- Unloading Auger Drive
- Unloading Auger Swing
- Grain Tank Covers (If Equipped)
- Power Folding Auger (If Equipped)
- ProDrive™ (propulsion movement slowly stops) (If Equipped)

SS43267,000083E-19-27JAN17

Unloading Auger Swing Switch

H117003—UN—22DEC16

Unloading Auger Switch

Unloading Auger Swing Switch allows you to swing unloading auger in or out manually or automatically.

System Requirements:

- Road transport disconnect switch must be in field position.
- You must be seated.

Press the top of the switch to swing out auger. Press the bottom of the switch to swing auger in.

Manual Control: Press and hold the switch part way in until auger reaches desired position. Auger stops when the switch is released.

Automatic Control: Press the switch all the way in and release it. Auger swings fully outward or inward without holding the switch.

NOTE: Automatic auger swing function does not operate when unloading auger drive is engaged. Move auger back to transport position when not in use.

SS43267,0000A65-19-13DEC17

Unloading Auger Drive Switch

H123658—UN—02MAR18

Unloading Auger Drive Switch

Unloading Auger Drive Switch allows you to engage or disengage the unloading auger.

System Requirements:

- Road transport disconnect switch must be in field position.
- You must be seated.

Press the unloading auger drive switch once to turn ON or press the unloading auger drive switch again to turn OFF. Indicator light comes ON when system is engaged.

NOTE: Unloading auger drive can also be turned OFF with the quick stop switch in case of an emergency. To engage unloading auger if the header and unloading auger are stopped with the quick stop switch, press unloading auger switch again.

Unloading auger drive engages only when the button is held while the auger is in auto swing mode or when the auger is manually swung out greater than 50%.

If you leave the seat after engagement, the unloading auger drive will continue to operate for five seconds before disengaging. To engage the system, sit on the operator's seat and press the unloading auger switch again.

- Press the switch once to turn ON. Indicator light comes ON when the system is engaged.
- Press the switch again to turn OFF.

SS43267,0000840-19-02MAR18

ProDrive is a trademark of Deere & Company

AutoTrac™ Resume Button (If Equipped)

H117005—UN—15APR16

AutoTrac™ Resume Button

AutoTrac™ Resume Button allows you to activate or deactivate system.

AutoTrac™ resume button also activates or deactivates RowSense™ system. Refer to the AutoTrac™ Operator's Manual for further information.

System Requirements:

- Engine is running.
- Road transport disconnect switch must be in field position.
- Header switch is engaged.
- Operator in seat.

Press to engage system. Press again to disengage.

SS43267,0000841-19-27JAN17

Header Raise Lower and Tilt (If Equipped) Switch

H116348—UN—19DEC16

Header Raise/Lower Switch

Header Raise/Lower and Tilt Switch allows you to raise or lower header and tilt the feeder house.

System Requirements:

- Road transport disconnect switch must be in field position.
- You must be seated.

Press and hold the top of the switch to raise header.

Press and hold the bottom of the switch to lower header.

NOTE: Header raise/lower switch has two detent positions. Pushing part way in on the switch causes the header to raise or lower slowly. Header raises or lowers at a faster rate when the switch is pressed in all the way.

AutoTrac is a trademark of Deere & Company

Press and hold left-hand side or right-hand side of switch to tilt feeder house.

SS43267,0000842-19-27JAN17

Reel Raise and Lower and Reel Fore and Aft (If Equipped)

H116349—UN—19DEC16

Reel Raise/Lower, Reel Fore/Aft

Reel Raise/Lower, Reel Fore/Aft Switch allows you to control the position of the reel.

Using the switch to raise/lower the reel and to move the reel fore/aft (if equipped):

- Press and hold the top of the switch to raise reel.
- Press and hold the bottom of the switch to lower reel.
- Press and hold the left side of the switch to extend reel forward.
- Press and hold the right side of the switch to retract reel reward.

SS43267,0000843-19-27JAN17

Feeder House Backshaft Speed and Adjustable Corn Head Deck Plates (If Equipped)

H116349—UN—19DEC16

Feeder House Backshaft Speed, Adjustable Corn Head Deck Plates

Feeder House Backshaft Speed, Adjustable Corn Head Deck Plates Switch allows you to control the feeder house backshaft speed or the adjustable corn head deck plates.

Using the switch to adjust backshaft speed and adjustable corn head deck plates (if equipped):

- Press the top of the switch to increase backshaft speed.
- Press the bottom of the switch to decrease backshaft speed.

- Press the left or right side of the switch once to activate display.
- Press the left side of the switch to increase deck plate spacing.
- Press the right side of the switch to decrease deck plate spacing.

SS43267,0000844-19-27JAN17

Header Activation Buttons

H116346—UN—19DEC16

Header Activation Buttons

Header Activation Buttons allow you to activate the following by pressing one of the three buttons.

NOTE: Header positions obtained by pressing the activation buttons may be overcome by pressing reel raise/lower or reel fore/aft switch or header raise/lower and lateral tilt switch. Once the activation buttons are manually overcome, press the desired activation button to reactivate.

System Requirements:

- Properly equipped header is connected.
- Engine is running.
- Road transport disconnect switch must be in field position.
- Header Height Resume, Header Height Sensing, or Active Header Float mode are enabled.
- Header is engaged.

Pressing the header activation buttons activates the system. Header control system takes control and moves the header to your selected position.

- Header Height Resume
- Header Height Sensing
- Lateral Tilt Control
- Reel Position Resume
- Deck Plate Position Resume
- Active Header Float
- Hydraulic Feeder House Fore/Aft Tilt (If Equipped)

SS43267,0000A38-19-18MAY17

VisionTrak™

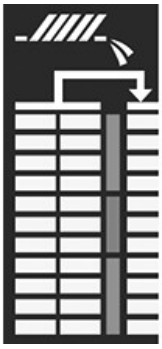
VisionTrak™ monitor checks grain loss by measuring a representative sample of losses over the cleaning shoe and through the separator. VisionTrak™ continuously monitors machine performance to enable you to use maximum machine capacity. A change in loss rate is indicated by the indicators.

If there appears to be an issue with the indicator readings, such as the indicators consistently read as full (all bars lit) when not harvesting or empty (no bars lit) when harvesting, inspect the sensors related to the system showing the error. See your Operator's Manual for VisionTrak™ operational checks and sensor inspection procedures.

System Requirements:

Engine State	Running
Road Transport Disconnect Switch	Field Position
Header and Separator Switch	Engaged

Items Accessible on VisionTrak™ Page:



H117835—UN—22DEC16

Shoe Loss Indicator

Shoe Loss Indicator—shows grain loss from the shoe.

H126288—UN—06JUN19

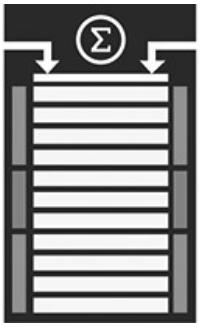
Loss Range Indicators

Loss Range Indicators—indicates whether loss levels are at an acceptable rate. The green range in the center of the bar graph indicates acceptable loss levels. The orange ranges above and below the green range indicate that losses are not within an acceptable level.

H126289—UN—06JUN19

Summation Symbol

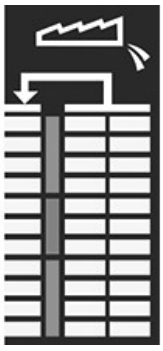
Summation Symbol—displays above the Total Loss Indicator.



H117836—UN—22DEC16

Total Loss Indicator

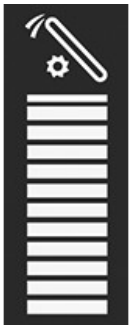
Total Loss Indicator—shows an average of grain loss from the shoe and separator areas.



H117837—UN—22DEC16

Separator Loss Indicator

Separator Loss Indicator—shows grain loss from separator area. The separator symbol above the bar graph appears when system is functioning properly.



H117838—UN—22DEC16

Tailings Volume Indicator

Tailings Volume Indicator—shows volume of tailings return. The Tailings Volume Indicator can be referred to periodically to see if an increase or decrease in tailings volume occurs.

MM95366,0000475-19-06JUN19

Access Audio

Access Application Through Display:

N144957—UN—24MAY19

Menu

1. Menu

N144956—UN—24MAY19

Machine Settings

2. Machine Settings tab

N144940—UN—24MAY19

Audio

3. Audio

Access Application Through Navigation Bar:

N144941—UN—24MAY19

Audio

Press Audio button on navigation bar below display.

N0LMWLO,000038F-19-16JUL20

Audio Main Page

Items Accessible on Audio Main Page:

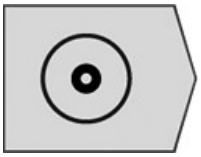
NOTE: Some items below are only displayed if machine is equipped with the associated options.

N144954—UN—24MAY19

AM, FM, and Weather

AM, FM, and Weather— displays radio options.

NOTE: European models have FM/MW/LW channels.



N144949—UN—24MAY19

CD

CD— displays CD options.

NOTE: Premium radio only.

N144970—UN—24MAY19

XM

XM— displays XM options.

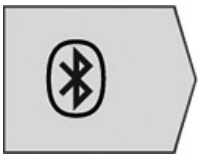
NOTE: Premium radio only. North American models only.

N144965—UN—24MAY19

USB

USB— displays USB options.

NOTE: Premium radio only.



N144946—UN—24MAY19

Bluetooth®

Bluetooth® Audio— displays Bluetooth® options.

NOTE: Premium radio only.

N144943—UN—24MAY19

Auxiliary

Auxiliary— displays auxiliary options.

NOTE: Premium radio only.

N144939—UN—24MAY19

Advanced Settings

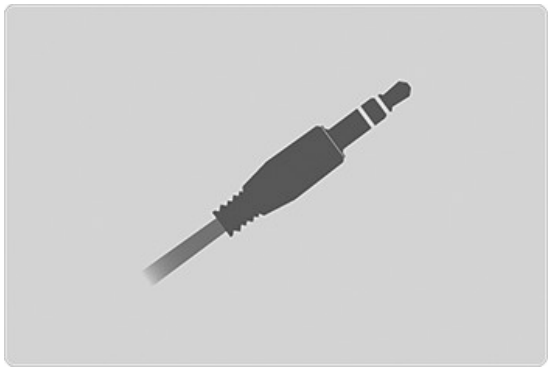
Advanced Settings— access further adjustments and less common settings.

N0LMWLO,0000059-19-01APR20

Premium Radio Auxiliary Tab

Auxiliary page allows you to adjust volume.

Items Accessible on Auxiliary Page:



N144942—UN—24MAY19

Display Area

Displays image shown. Activity/information displays on external device only, not on CommandCenter™ display.

N144967—UN—24MAY19

Volume

Select + or - to adjust volume up or down.

N144958—UN—24MAY19

Mute

Select to silence sound.

N144951—UN—24MAY19

Close

Select to close.

External Auxiliary Sources:

External audio sources can be connected using AUX input. Operator may use port to charge certain external audio sources. Examples of external audio sources may include Portable CD player, Mini Disc player, or MP3 player.

N144944—UN—24MAY19

Auxiliary Input

Connect external audio source using auxiliary input and press SRC button until AUX is displayed on radio.

NOTE: The external audio source can only be selected if an audio device is connected to the external AUX input.

Volume for connected external audio source can be adjusted to volume in radio mode.

Adjust AUX input volume:

1. Press SRC button several times until the desired audio source is displayed.
2. Press MENU button. GAIN and current setting is displayed.
3. Turn volume control knob clockwise or counterclockwise to adjust value from -9 to +9.
4. Press MENU button several times to exit menu.

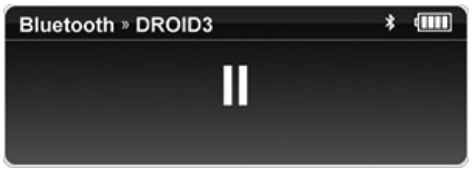
N0LMWLO,000005A-19-28MAY19

Premium Radio Bluetooth® Tab

Bluetooth® page allows you to play, pause, and select a track. Volume can also be adjusted on this page.

NOTE: Not all devices support pause function. Devices may mute sound, but not pause play.

Items Accessible on Bluetooth® Page:



N144945—UN—24MAY19

Display Area

Display of current Bluetooth® activity/information.

N144959—UN—24MAY19

Previous/Next

Select to go to previous or next track. Previous will go to beginning of currently playing track the first time it is selected.

N144960—UN—24MAY19

Play/Pause

Select to play or pause track.

N144967—UN—24MAY19

Volume

Select + or - to adjust volume up or down.

N144958—UN—24MAY19

Mute

Select to silence sound.

N144951—UN—24MAY19

Close

Select to close.

External Bluetooth® Sources:

Bluetooth® must be set up on radio before it can be used.

Set up Bluetooth®:

1. Enable Bluetooth® on mobile device.
2. Press MENU button, on radio, until BT MODE displays.
3. Wait 2 seconds until BT ON or BT OFF displays. Turn volume knob clockwise or counterclockwise to turn Bluetooth® on or off. May take up to 5 seconds.
4. Press MENU button until display shows CON-TYPE. Select connection type phone/audio (default).
5. To pair device, press MENU button until BT Pair displays.
6. Enter pin provided into device.

Pairing process may take up to 5 minutes to complete. Bluetooth® symbol flashes while pairing takes place. As soon as cell phone/external audio source is successfully paired, phone calls, and audio messages can be received and placed via radio system. Contact information or call history will not be transferred to CommandCenter™.

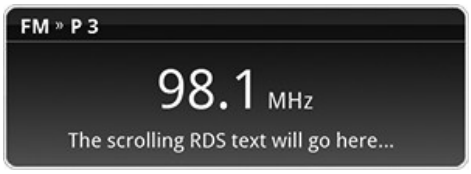
N0LMWLO,000005B-19-28MAY19

AM, FM, Weather Channel Tab

Channel page allows you to find and select a desired radio station, save stations as presets, and adjust audio volume.

NOTE: European models have FM/MW/LW channels.

Items Accessible on AM, FM, and Weather Page:



N144955—UN—24MAY19

Display Area

Display of current radio settings/information.

N144962—UN—24MAY19

Manual Tune

Select to tune in desired station manually. Each time softkey is pressed, radio frequency increases or decreases by standard increment.

CommandCenter is a trademark of Deere & Company

N144959—UN—24MAY19

Previous/Next

Select to seek next available station before or after current station.

N144961—UN—24MAY19

Scan

Select to cycle through available stations. Each station will broadcast for 5 seconds before moving to next station. Cycle ends when returning to original station or by selecting scan again.

Select from available channels.

NOTE: European models have FM/MW/LW channels.

N151274—UN—15JUL20

Channel Toggle

Program frequently used stations as preset stations. Up to six stations can be programmed to FM1, FM2, FMT, AM, and AMT banks.

Set or change presets:

1. Navigate to desired station.
2. Hold down desired preset button for three seconds until “beep” sounds.

N151274—UN—15JUL20

Presets

NOTE: WX presets cannot be changed.

N144967—UN—24MAY19

Volume

Select + or - to adjust volume up or down.

N144958—UN—24MAY19

Mute

Select to silence sound.

N144951—UN—24MAY19

Close

Select to close.

N0LMWLO,0000390-19-16JUL20

Premium Radio USB Tab

USB page allows you to play, pause, and select a track. Volume can also be adjusted on this page.

Items Accessible on USB Page:

N144964—UN—24MAY19

Display Area

Display of current USB activity/information.

N144959—UN—24MAY19

Previous/Next

Select to go to previous or next track. Previous will go to

beginning of currently playing track the first time it is selected.

N144960—UN—24MAY19

Play/Pause

Select to play or pause track.

N144967—UN—24MAY19

Volume

Select + or - to adjust volume up or down.

N144958—UN—24MAY19

Mute

Select to silence sound.

N144951—UN—24MAY19

Close

Select to close.

External USB Sources:

External audio sources can be connected using USB input. Operator may use port to charge certain external audio sources. Examples of external audio sources may include Portable CD player, Mini Disc player, or MP3 player.

N144966—UN—24MAY19

USB Input

Connect USB audio source using USB input and press SRC button several times until USB is displayed on radio.

NOTE: USB audio source can only be selected if USB device is connected to external USB input.

N0LMWLO,000005D-19-28MAY19

Premium Radio CD Tab (If Equipped)

CD page allows you to play, pause, and select a track. Volume can also be adjusted on this page.

Items Accessible on CD Page:

N144948—UN—24MAY19

Display Area

Display of current CD activity/information.

N144959—UN—24MAY19

Previous/Next

Select to go to previous or next track. Previous will go to beginning of currently playing track the first time it is selected.

N144960—UN—24MAY19

Play/Pause

Select to play or pause track.

N144967—UN—24MAY19

Volume

Select + or - to adjust volume up or down.

N144958—UN—24MAY19

Mute

Select to silence sound.

N144951—UN—24MAY19

Close

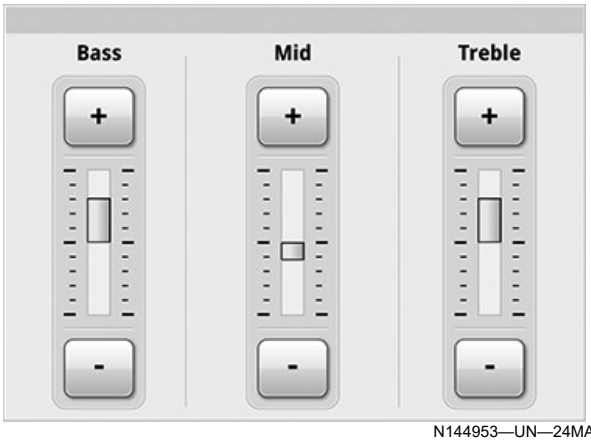
Select to close.

N0LMWLO,000005F-19-28MAY19

Advanced Settings

Advanced Settings allows you to access further adjustments and less common settings.

Items Accessible on Advanced Settings Page:



N144953—UN—24MAY19

Equalizer

Equalizer— adjust sound settings.

N0LMWLO,0000060-19-28MAY19

Access Combine Advisor™

Access Application Through Display:

H113668—UN—22OCT15

Menu

1. Menu

H125018—UN—01FEB19

Combine Advisor™

2. Combine Advisor™

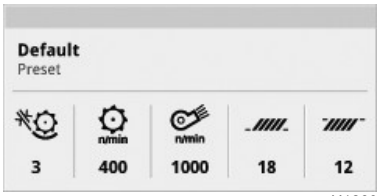
AZ06166,00005F5-19-21NOV19

Combine Advisor™ Main Page

Combine Advisor™, formerly Interactive Combine Adjustment 2, is where you can access Optimize Performance, HarvestSmart™,Active Terrain Adjustment™, and Auto Maintain.

Items Accessible on Combine Advisor™ Main Page:

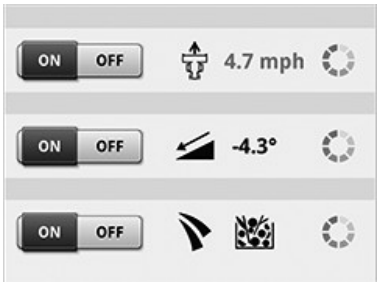
NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.



H126941—UN—26SEP19

Current Settings

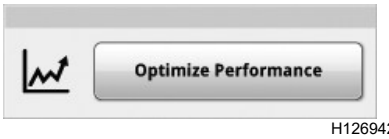
Current Settings—select Current Settings screen area to access Harvest Settings Application.



H129164—UN—27FEB20

Automation Status

Automation Status—Automation Status displays the status of any individual system such as HarvestSmart™, Active Terrain Adjustment™, or Auto Maintain.



H126942—UN—26SEP19

Harvest Optimization

Harvest Optimization—takes you to the Optimize Performance application, formerly Interactive Combine Adjustment.

N118004—UN—22OCT15

Advanced Settings

Advanced Settings—advanced settings allows you to access further adjustments and less common settings.

HarvestSmart™

H126949—UN—26SEP19

HarvestSmart™

HarvestSmart™—varies ground speed to maintain a constant engine power. These changes are based on the several harvesting factors which maximize productivity and reduce operator fatigue. To access HarvestSmart™ settings, select the screen area to the right of the on-off button.

If used in the following conditions, the system may not perform optimally:

- Extreme Hill Conditions
- Tangled or Lodged Crop Conditions
- Excessively Muddy Conditions

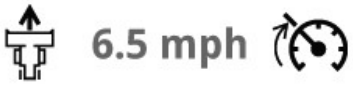
HarvestSmart is a trademark of Deere & Company
Active Terrain Adjustment is a trademark of Deere & Company

NOTE: Blue text indicates that HarvestSmart™ is controlling the ground speed. Black text indicates that the user is controlling the ground speed.

H116937—UN—05FEB19

ON/OFF

Automation allows you to enable or disable HarvestSmart™.



H126950—UN—26SEP19

HarvestSmart™ Ground Speed

NOTE: The ground speed indicator shown here indicates that the Ground Speed Limit has been reached.

Active Terrain Adjustment™

H129163—UN—27FEB20

Active Terrain Adjustment

Active Terrain Adjustment™—automatically adjusts the cleaning fan, chaffer, and sieve to compensate for uphill and downhill terrain. These adjustments are dependent upon the machine pitch while harvesting. To access Active Terrain Adjustment™ settings, select the screen area to the right of the ON/OFF button.

NOTE: Blue dial indicates that offset adjustments are being made because of a change in terrain.

H116937—UN—05FEB19

ON/OFF

Automation—allows you to enable or disable Active Terrain Adjustment™.

NOTE: Active Terrain Adjustment™ does NOT require a performance target to be set.

Auto Maintain

H126954—UN—26SEP19

Auto Maintain

Active Terrain Adjustment is a trademark of Deere & Company

Auto Maintain—automatically adjusts the threshing speed, threshing clearance, cleaning fan, chaffer, and sieve to compensate for changes in grain quality and grain loss throughout the day. To access Auto Maintain settings, select the screen area to the right of the ON/OFF button.

NOTE: Blue dial indicates that offset adjustments are being applied to maintain the performance target.

H116937—UN—05FEB19

ON/OFF

Automation—allows you to enable or disable Auto Maintain.

H113740—UN—05FEB19

Live Camera

Live Camera—allows you to view the clean grain and tailings elevator camera feeds.

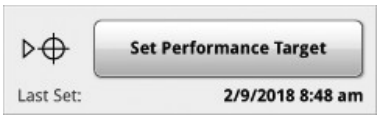
History

H125041—UN—05FEB19

History

History—allows you to view current and past adjustments made by Auto Maintain and Active Terrain Adjustment™ and view a graph of the machine performance for the previous 30 minutes.

Set Performance Target



H126944—UN—26SEP19

Set Performance Target

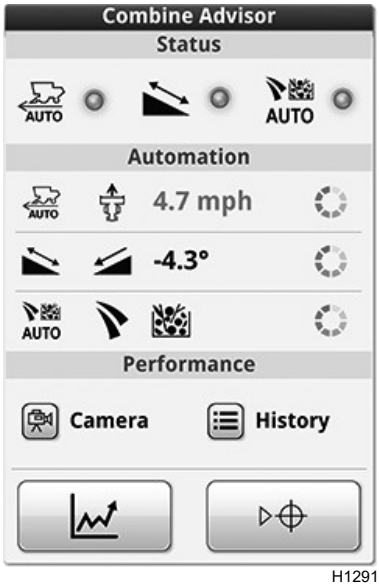
Set Performance Target—allows you to set a new performance target at existing loss, grain quality, and engine power levels.

NOTE: Selecting Set Performance Target sets targets for both HarvestSmart™ and Auto Maintain.

Run Page Module

Modules for this application can be added to run pages using Layout Manager.

Example:



H129165—UN—27FEB20

Combine Advisor™

The run page module takes on a distinct state to reflect current automation status. The page also offers links to HarvestSmart™, Active Terrain Adjustment™, Auto Maintain settings, and links to performance history and graphs.

NOTE: Different run page modules can be available for your application.

Shortcut Keys

Shortcut keys for this application can be added to the shortcut bar using Layout Manager.

Example:

H125230—UN—01FEB19

Advisor

Advisor—use for quick access to Combine Advisor™.

AZ06166,00005F6-19-16JUL20

Advanced Settings

Advanced Settings allows you to set Tuning Parameters. See your John Deere dealer for information on what to set the parameters to.

MM95366,00003F5-19-26NOV19

Grain System Video

Allows you to view the ActiveVision™ Clean Grain elevator and the Tailings elevator camera feeds through the Live Camera screen.

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

Items Accessible on the Grain System Video Page:

H128686—UN—06FEB20

Live Camera

Live Camera—Grain Camera, Tailings Camera, and Both.

H113773—UN—30JAN17

Source

Source—allows you to choose Grain Camera, Tailings Camera, or Both.

H113730—UN—30JAN17

ON/OFF

View Grain Analysis—ON/OFF toggle enables the color overlays for grain analysis (only available for Grain Camera).

NOTE: When operating with an Auto Maintain unsupported crop type, the View Grain Analysis is locked in the OFF position.

NOTE: Turning on the Grain Analysis overlays slows down the live video feed.

ActiveVision is a trademark of Deere & Company

H126957—UN—26SEP19

Grain Analysis

Grain Analysis Legend—displays a color legend for grain quality and foreign material when the Grain Analysis toggle is ON.

NOTE: The Quality and Foreign Material items listed can fluctuate depending on what is available for the selected crop type.

H126958—UN—26SEP19

Lens Debris

Lens Debris—indicates if the lens needs to be cleaned.

N0LMWLO,0000392-19-16JUL20

History

History allows you to view the adjustments Auto Maintain and Active Terrain Adjustment™ have made in the last 12 hours. It also includes viewing graphs of the machine performance for the previous 30 minutes.

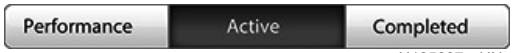
NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

Items Accessible on History Page:

H125226—UN—05FEB19

Performance

- Select to access Performance history monitor.



H125227—UN—05FEB19

Active

- Select to access Active adjustments page.

H125228—UN—05FEB19

Completed

- Select to access Completed adjustments page.

N0LMWLO,0000393-19-16JUL20

Performance

Performance monitor is used to show the performance target and current performance displayed on a timeline. To view the performance monitor, select History and choose Performance tab at top.

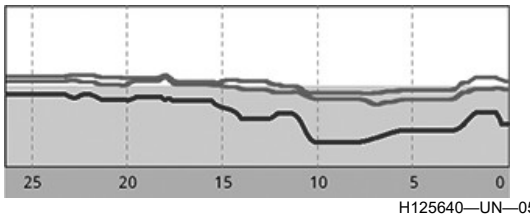
NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

Items Accessible on Performance Monitor Page:

H125226—UN—05FEB19

Performance/Active/Completed

Performance/Active/Complete—use the Performance/Active/Completed toggle to switch between Performance Monitor, Active Adjustments, and Completed Adjustments.



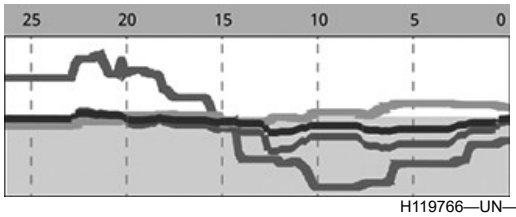
H125640—UN—05FEB19

Loss Performance

Loss Performance—chart view of the Separator, Shoe, and Tailings.

NOTE: The Loss Performance graphs may not match the VisionTrak display. The information shown on the graph is long-term trends while the VisionTrak displays the current loss.

Active Terrain Adjustment is a trademark of Deere & Company



H119766—UN—06FEB19

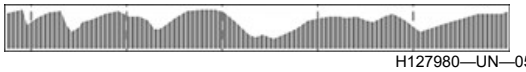
Quality Performance

Quality Performance—chart view of the Broken Grain, Foreign Material Light, Foreign Material Heavy, and Unthreshed.

NOTE: The items shown can depend on what is available for the selected crop type.

NOTE: If a parameter is operating in the green area of the chart it indicates that it is operating within the performance target.

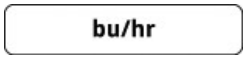
NOTE: If a parameter is operating in the white area of the chart it indicates that it is not within the performance target. Auto Maintain then adjusts to correct the issue to bring it into the green area.



H127980—UN—05NOV19

Field/Machine Performance Graph

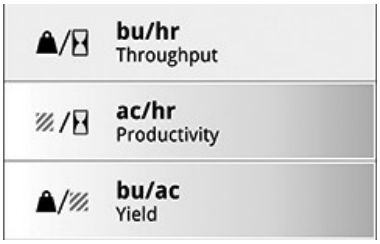
Field/Machine Performance Graph—displays Throughput, Productivity, or Yield over a 30 minute time.



H119776—UN—25JAN17

Units

Performance Options—select to change the information being displayed.



H125532—UN—01FEB19

Performance Options

Select between Throughput, Productivity, and Yield graphs.

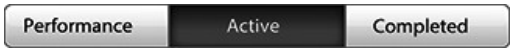
N0LMWLO,0000394-19-16JUL20

Active

The Active tab shows adjustments currently applied by Auto Maintain and Active Terrain Adjustment™. The list includes the setting that was adjusted, the reason the adjustment was made, and how long the adjustment has been applied.

Items Accessible on History | Active Page:

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.



H125227—UN—05FEB19

Performance/Active/Completed

Performance/Active/Complete—use the Performance/Active/Completed toggle to switch between Performance Monitor, Active Adjustments, and Completed Adjustments.

H127036—UN—26SEP19

System Icon

System Icon—an icon indicates if the row is for Active Terrain Adjustment™ or Auto Maintain.

H127035—UN—26SEP19

Offset

Offset—indicates the current adjustments applied to the settings.

H127033—UN—26SEP19

Reason

Reason—indicates why the adjustment is being applied.

Active Terrain Adjustment is a trademark of Deere & Company

H127034—UN—26SEP19

Timestamp

Timestamp—indicates how long since the first adjustment was made for the corresponding reason.

To view Offset Details on a particular adjustment, select an adjustment in the History List.

H114674—UN—06FEB19

Close

Select to close.

N0LMWLO,0000395-19-16JUL20

Completed

The Completed tab shows adjustments Auto Maintain and Active Terrain Adjustment™ have made in the last 12 hours. The list includes the system that made the adjustment, the reason the adjustment was made, and how long ago it was completed.

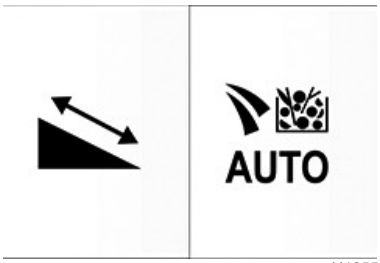
Items Accessible on History | Completed Page:

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

H125228—UN—05FEB19

Performance/Active/Completed

Performance/Active/Complete— use the Performance/Active/Completed toggle to switch between Performance Monitor, Active Adjustments, and Completed Adjustments.



H125522—UN—01FEB19

System Icon

Feature— indicates which system made the adjustment.

H129180—UN—27FEB20

Active Terrain Adjustment™ Offset— Active Terrain Adjustment™ made a temporary adjustment.

H125509—UN—01FEB19

Auto Maintain Offset

Auto Maintain Offset— Auto Maintain made a temporary adjustment.

H125507—UN—01FEB19

Auto Maintain Permanent Adjustment

Auto Maintain— Auto Maintain made a permanent adjustment.

H125565—UN—01FEB19

Reason

Reason— indicates why the adjustment was applied.

H125593—UN—01FEB19

Timestamp

Completed— indicates how long ago the adjustment was completed.

To view Offset Details or Adjustment Details on a particular adjustment, select an adjustment in the History List.

H114674—UN—06FEB19

Close

Select to close.

Procedure to Modify:

NOTE: The most recent adjustment is listed at the top.

Active Terrain Adjustment is a trademark of Deere & Company

H116672—UN—30JAN17

Scroll Arrows

1. Use Scroll Arrows to move up and down list.

H114674—UN—06FEB19

Close

2. Select to close.

N0LMWLO,0000396-19-16JUL20

Offset Details

Offset Details allows you to view current and past adjustments, the reasons they were made, and when they were made. If the adjustment is "Active", the adjustments are currently applied to the settings. If the adjustment is "Complete", the adjustments have been removed and the settings were reverted to their previous value.

NOTE: Only some items show on this page depending on available options.

Items Accessible on the Offset Details Page for Active Adjustments:

H125594—UN—01FEB19

Active Offset

Active Offset—shows the currently applied offsets.

H129176—UN—27FEB20

Auto Maintain Reason

H129175—UN—27FEB20

Active Terrain Adjustment™ Reason

Reason—indicates why the adjustment is applied (the current pitch for Active Terrain Adjustment™ and the current detected issues for Auto Maintain).

H125579—UN—01FEB19

Timestamp

Timestamp—shows how long since the first offset was applied for the corresponding reason.

H113740—UN—05FEB19

Live Camera

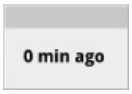
Live Camera—view the Clean Grain Elevator and Tailings elevator camera feeds.

Items Accessible on the Offset Details Page for Completed Adjustments:

H125594—UN—01FEB19

Active Offset

Maximum Offset—shows the maximum offset made to each setting for the corresponding reason.

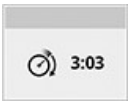


H127981—UN—05NOV19

Timestamp

Timestamp—shows how long ago the last offset was removed for the corresponding reason.

Active Terrain Adjustment is a trademark of Deere & Company



H119866—UN—30JAN17

Duration

Duration—shows how much time passed from when the first offset was made to when the last offset was removed for the corresponding reason.

H129176—UN—27FEB20

Auto Maintain Reason

H129175—UN—27FEB20

Active Terrain Adjustment™ Reason

Reason—indicates the reasons the listed offsets were made.

H113740—UN—05FEB19

Live Camera

Live Camera—view the Clean Grain Elevator and Tailings elevator camera feeds.

N0LMWLO,0000397-19-16JUL20

Adjustment Details

Adjustment Details allows you to view which adjustments have been made and the reasons the adjustments were made. It shows when the adjustment was completed.

NOTE: This Adjustment Details screen is only applicable to permanent Auto Maintain adjustments.

Items Accessible on the Adjustment Details Page:

H125251—UN—06FEB19

Adjustment

Adjustment—indicates the adjustment that was made.

H125252—UN—01FEB19

Before

Before—indicates the setting value before the adjustment.

H125253—UN—01FEB19

After

After—indicates the setting value after the adjustment.

H129176—UN—27FEB20

Auto Maintain Reason

Reason— indicates the issues Auto Maintain adjusted for.

H129117—UN—16JUL20

Timestamp

Timestamp—displays when the adjustment was made.

H113740—UN—05FEB19

Live Camera

Live Camera—view the clean grain elevator and tailings elevator camera feeds.

N0LMWLO,0000398-19-16JUL20

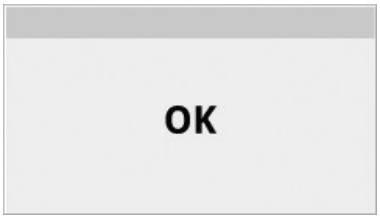
Lens Debris

Lens Debris shows the amount of dirt or smudges on the grain and tailings camera lens.

Lens Debris States:

The ActiveVision™ cameras have three levels of lens debris indicators that allow you to monitor the status of cameras.

ActiveVision is a trademark of Deere & Company



H126959—UN—26SEP19

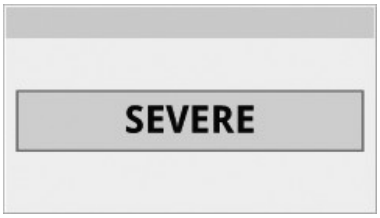
OK

OK—indicates that there is little to no debris on the lens.

H126960—UN—26SEP19

Moderate

Moderate—indicates that there is some debris on the lens. Auto Maintain continues functioning, but it is recommended to clean your cameras as soon as possible.



H126961—UN—26SEP19

Severe

Severe—indicates that there is a significant amount of debris on the lens. Auto Maintain turns OFF and is not functional until the cameras are cleaned.

NOTE: Cleaning frequency varies depending on a number of factors, including operating conditions, weather, and crop conditions.

N0LMWLO,0000399-19-16JUL20

Automation Status

Automation Status shows the status of HarvestSmart™, Active Terrain Adjustment™, and Auto Maintain.

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

H126945—UN—26SEP19

HarvestSmart™ Status

HarvestSmart™ Status—select to open.

H129170—UN—27FEB20

Active Terrain Adjustment™

Active Terrain Adjustment™ Status—select to open.

H126947—UN—26SEP19

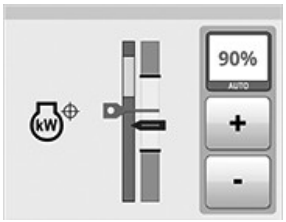
Auto Maintain Status

Auto Maintain Status—select to open.

N0LMWLO,000039A-19-16JUL20

HarvestSmart™ Settings

HarvestSmart™ settings can be used to adjust the HarvestSmart™ system. To access HarvestSmart™ settings, select the screen area to the right of the ON/OFF button.

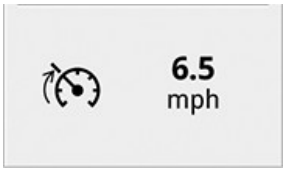


H127982—UN—05NOV19

Engine Power Target

Engine Power Target—sets target engine power for HarvestSmart™ to maintain.

NOTE: When managing engine power target while grain loss is enabled and changing the engine power target, the engine power target turns blue.

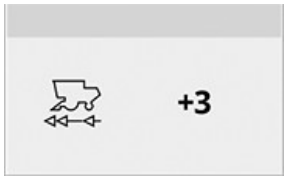


H118568—UN—20JAN17

Speed Limit

Speed Limit—sets the maximum allowable ground speed for HarvestSmart™ to operate.

HarvestSmart is a trademark of Deere & Company
Active Terrain Adjustment is a trademark of Deere & Company



H114682—UN—20JAN17

Response Aggressiveness

Response Aggressiveness—controls how quickly the HarvestSmart™ system responds to changes in harvesting conditions.

H125233—UN—01FEB19

Manage target with Grain Loss

Manage target with Grain Loss—select to have HarvestSmart™ adjust the speed to maintain grain loss levels.

NOTE: The target will be displayed in blue while being managed.

N0LMWLO,000039B-19-16JUL20

Speed Limit

Speed Limit sets the maximum allowable ground speed for HarvestSmart™ to operate.

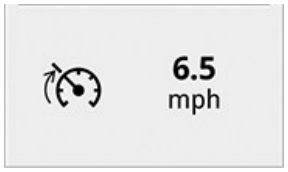
Modify When:

- You want to set the maximum operating speed.
- You do not want the machine from running over a specific speed because the terrain is rough or feeding conditions exist that could plug the header.

  Example: Your head becomes limited at 8 km/h (5 mph). Set ground speed to 7.5 km/h (4.7 mph).
- You want to prevent the machine from going too fast through places in the field where there is little to no crop. This results in the machine going too fast when crop yields return to normal. Set the speed limit slightly higher than the expected harvesting speed.

  Example: You expect to harvest at an average speed of 5.5 km/h (3.4 mph). Set the ground speed to 7 km/h (4.3 mph).

Procedure to Modify:



H118568—UN—20JAN17

Speed Limit

HarvestSmart is a trademark of Deere & Company

1. Select to adjust Speed Limit.

H118570—UN—31JAN17

Speed Limit

2. Select plus (+) to increase or minus (-) to decrease the desired ground speed.

   Minimum— 2.0 km/h (1.2 mph)

   Maximum— 14.0 km/h (8.7 mph)

   Increments— 0.1 km/h (0.1 mph)

   Set speed limit slightly higher than your expected average harvesting speed.

   Example: If you would like to harvest at 5.5 km/h (3.4 mph) set speed limit to 7 km/h (4.4 mph). If you would like to harvest at 8 km/h (5.0 mph) set speed limit to 10 km/h (6.2 mph).

H114674—UN—06FEB19

Close

3. Select to close.

Alternative Procedure to Modify:

H118573—UN—20JAN17

Speed Limit

1. Select to activate Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Armrest Adjustment Dial to select desired ground speed.

- Turn dial clockwise to increase value.

- Turn dial counterclockwise to decrease value.

Minimum— 2.0 km/h (1.2 mph)

Maximum— 14.0 km/h (8.7 mph)

Increments— 0.1 km/h (0.1 mph)

N0LMWLO,000039C-19-16JUL20

Response Aggressiveness

Response Aggressiveness controls how quickly the HarvestSmart™ system responds to changes in harvesting conditions.

Setting 1—Minimum

Setting 2—Lowered Setting

Setting 3—Default

Setting 4—Increased

Setting 5—Maximum

Modify When:

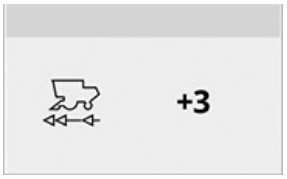
Increase When:

You want the machine to react faster to changes in harvesting conditions.

Decrease When:

You want the machine to react slower to changes in harvesting conditions.

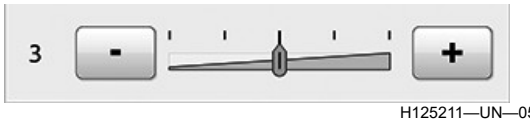
Procedure to Modify:



H114682—UN—20JAN17

Aggressiveness

1. Select to access Response Aggressiveness.



H125211—UN—05FEB19

Aggressiveness

2. Select plus (+) to increase or minus (-) to decrease desired aggressiveness.

   Minimum— 1

   Maximum— 5

   Increments— 1

NOTE: Response Aggressiveness will default back to 3 when a new performance target is set.

H114674—UN—06FEB19

Close

3. Select to close.

N0LMWLO,000039D-19-16JUL20

HarvestSmart™ | Automation

Automation allows you to enable or disable the HarvestSmart™ system.

Modify When:

- Performing a turn at a headland. Press header activation button 1 to raise the header and maintain a static ground speed. Move the multi-function lever to take control of the ground speed.
- You want to maintain a constant ground speed while unloading. Press reconfigurable button.
- Preparing to cross waterways or rough terrain. Press reconfigurable button to maintain a static ground speed or press header activation button 1 to raise the header and maintain a static ground speed. Move the multi-function lever to take control of the ground speed.

Procedure to Modify:

H113848—UN—04JAN17

Toggle Button

1. On the Combine Advisor Main Page, select the toggle button under HarvestSmart™ to turn HarvestSmart™ automation on or off.

NOTE: The remaining steps of this procedure can only be performed if HarvestSmart™ is turned on.

H128157—UN—16JAN20

Header Activation Buttons

2. Press header activation button 2 or 3 on the front of the multi-function lever to lower the header.

HarvestSmart is a trademark of Deere & Company

H117005—UN—15APR16

AutoTrac™ Resume Button

3. Engage AutoTrac™ and enter crop.

H128156—UN—14JAN20

Reconfigurable Buttons

4. Press reconfigurable button on the side of the multi-function lever to activate HarvestSmart™. The machine will slowly move to the previously determined average harvesting speed.

   Press reconfigurable button at any time to pause HarvestSmart™. The machine will continue harvesting and maintain a static ground speed.

T8T8737—UN—18DEC19

Reconfigurable Button B

NOTE: HarvestSmart™ pause/resume is assigned to reconfigurable button B by default. This function can be assigned to any reconfigurable single position button in Controls Setup. If you want to assign HarvestSmart™ to header activation buttons 2 or 3, see your John Deere dealer.

T8T8738—UN—18DEC19

Header Activation Button 1

5. Press header activation button 1 on the front of the multi-function lever to raise the header.

HarvestSmart™ Will Pause If:

- The reconfigurable button on the side of the multi-function lever is pressed while HarvestSmart™ is active.
- The header activation button 1 is pressed while HarvestSmart™ is active.
- The unloading auger is engaged. When the unloading auger is shut off, HarvestSmart™ will resume automatic control of the ground speed.

NOTE: If the engine becomes overloaded while the unloading auger is engaged, HarvestSmart™ will slow the ground speed. HarvestSmart™ will not increase the ground speed until the unloading auger is turned off.

HarvestSmart™ Will Disengage If:

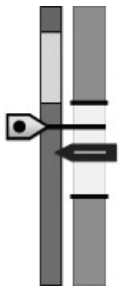
- The multi-function lever is moved.
- The ground speed is lowered below 2 km/h (1.2 mph).
- The brake pedals are pressed.

N0LMWLO,000039E-19-16JUL20

Engine Power Target

Engine Power Target sets the target engine power that HarvestSmart™ should maintain.

Items Accessible on Engine Power Target:



H128154—UN—16DEC19

Engine Power Meter

Engine Power Meter— shows engine power usage and maximum engine power setting. The system does not allow the target to be set in the yellow or red.

H118584—UN—20JAN17

Target Indicator

Target Indicator— shows the Engine Power Target.

NOTE: The target will be displayed in blue while being automatically managed.

H118585—UN—20JAN17

Usage Indicator

AutoTrac is a trademark of Deere & Company

HarvestSmart is a trademark of Deere & Company

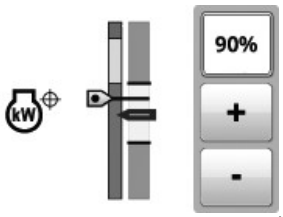
Usage Indicator— shows current engine power usage.

Modify When:

- Operating with a draper platform:
  Near 85-95% in consistent conditions.
  Near 80-90% in changing conditions.
  Near 75-85% in down crop or tough feeding conditions.
- Operating with an auger platform:
  Near 80-90% in consistent conditions.
  Near 75-85% in changing conditions.
  Near 70-80% in down crop or tough feeding conditions.
- Less experienced operator. Set a lower engine power target.
- Bad crop flow in the header causes inconsistent feeding of the rotor. Set a lower engine power target.
- Consistent, smooth feeding allows you to set a higher engine power target.
- Harvesting in dry conditions, level terrain, even feeding, and standing crop. Operating at a higher engine power target can promote more capacity and efficiency.
- Harvesting in muddy conditions, steep terrain, slug feeding, and lodged crop. Operating at a lower engine power target allows for more consistent performance.

NOTE: If harvesting in mud, steep hills, or adverse conditions, targeting near 85-95% is recommended to allow for additional power consumption and more consistent system performances.

Procedure to Modify:



H128155—UN—16DEC19

Engine Power Target

1. Select to adjust the Engine Power Target.

H127986—UN—20NOV19

Engine Power Target

2. Select plus (+) to increase or minus (-) to decrease the Engine Power Target.

   Minimum— 60%

   Maximum— 100%

   Increments— 1%

Alternative Procedure to Modify:

H118572—UN—20JAN17

Engine Power Target

1. Select to activate Armrest Adjustment Dial.

H115034—UN—28MAR16

Armrest Adjustment Dial

2. Use Armrest Adjustment Dial to select desired engine power.

- Turn dial clockwise to increase value.
- Turn dial counterclockwise to decrease value.

Minimum— 60%

Maximum— 100%

Increments— 1%

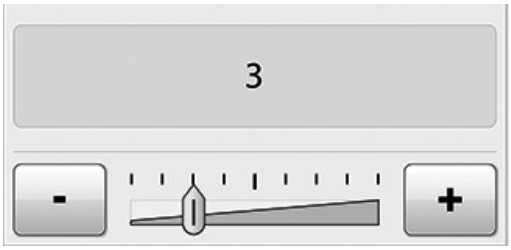
N0LMWLO,000039F-19-16JUL20

Active Terrain Adjustment™ Settings

Active Terrain Adjustment™ allows cleaning fan, chaffer, and sieve to adjust automatically depending on the machine pitch when harvesting in uphill or downhill terrain. To access Active Terrain Adjustment™ settings, select the screen area to the right of the ON/OFF button.

Items Accessible on Active Terrain Adjustment™ Settings Page:

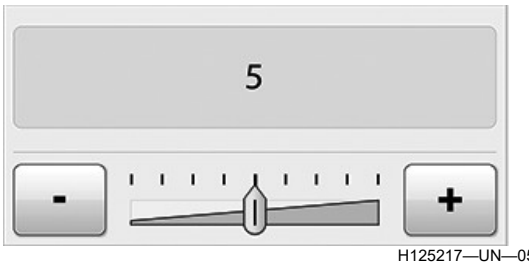
Active Terrain Adjustment is a trademark of Deere & Company



H125216—UN—05FEB19

Uphill Sensitivity

Uphill Sensitivity—accelerates or decelerates the system reaction to vehicle pitch while harvesting uphill to help reduce grain loss and tailings.



H125217—UN—05FEB19

Downhill Sensitivity

Downhill Sensitivity—accelerates or decelerates the system reaction to vehicle pitch while harvesting downhill to help maintain harvested grain cleanliness.

H127987—UN—20NOV19

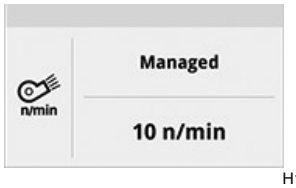
Chaffer

Offset Tuning | Chaffer—this feature allows changes to the size of adjustments made by Active Terrain Adjustment™ to the chaffer.

H127988—UN—20NOV19

Sieve

Offset Tuning | Sieve—this feature allows changes to the size of adjustments made by Active Terrain Adjustment™ to the sieve.



H127989—UN—20NOV19

Cleaning Fan

Offset Tuning | Cleaning Fan—this feature allows changes to the size of adjustments made by Active Terrain Adjustment™ to the speed of the cleaning fan.

N0LMWLO,00003A0-19-16JUL20

Uphill Sensitivity

Uphill Sensitivity allows you to accelerate or decelerate system reaction to vehicle pitch helping to reduce grain loss and tailings while traveling uphill.

NOTE: Higher sensitivity values react more quickly to changes in pitch and lower sensitivity react slower to changes in pitch, while harvesting uphill.

Modify When:

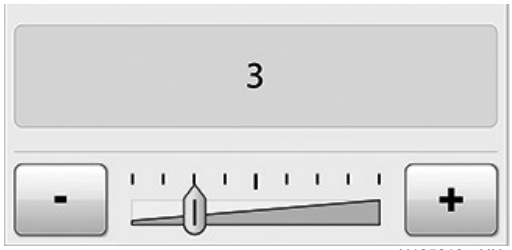
- Active Terrain Adjustment™ system is adjusting too soon or too late, causing grain loss or tailings to be higher while harvesting uphill than on level land.
- Grain tank is not clean while harvesting uphill. Adjust the sensitivity lower.
- Cleaning shoe loss or tailings levels are elevated while harvesting uphill. Adjust the sensitivity higher.

Setting 1— no adjustments (-100)

Setting 5— average number of adjustments (0)

Setting 9— maximum adjustments (100)

Procedure to Modify:



H125216—UN—05FEB19

Sensitivity

Select plus (+) to increase or minus (-) to decrease desired sensitivity.

N0LMWLO,00003A1-19-16JUL20

Downhill Sensitivity

Downhill Sensitivity allows you to accelerate or decelerate system reaction to vehicle pitch to help maintain grain cleanliness while harvesting downhill.

NOTE: Higher sensitivity values react more quickly to changes in pitch and lower sensitivity values react slower to changes in pitch, while harvesting downhill.

Modify When:

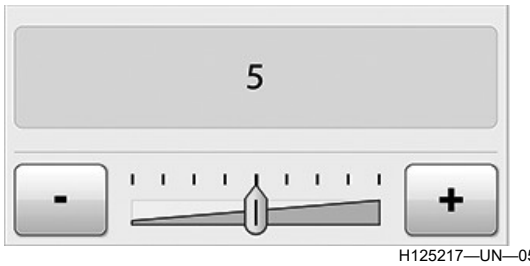
- Active Terrain Adjustment™ system is adjusting too soon or too late, causing grain loss or tailings to be higher while harvesting downhill than on level land.
- Cleaning shoe loss or tailings levels are elevated while harvesting downhill. Adjust the sensitivity lower.
- Grain tank is not clean while harvesting downhill. Adjust the sensitivity higher.

Setting 1—no adjustments (-100)

Setting 5—average number of adjustments (0)

Setting 9—maximum adjustments (100)

Procedure to Modify:



H125217—UN—05FEB19

Sensitivity

Select plus (+) to increase or minus (-) to decrease desired sensitivity.

N0LMWLO,00003A2-19-16JUL20

HarvestSmart™ Status

H126945—UN—26SEP19

HarvestSmart™ Status

HarvestSmart™ Status is used to communicate the current state of the HarvestSmart™ system. HarvestSmart™ Status also allows you to view requirements that must be met for the system to operate properly and errors that are affecting the system. To see more details select HarvestSmart™ Status.

Items Displayed on HarvestSmart™ Status Page:

NOTE: Not all possibilities are listed here. To open a list of current statuses, select the HarvestSmart™ Status.

H113730—UN—30JAN17

ON/OFF

Automation On/Off— indicates whether the system is on or off.

H126948—UN—26SEP19

Idle

Idle— displayed when system is in standby state or preparing targets status.

H126949—UN—26SEP19

Active

Active— displayed when the system is in the active state or maintaining state.

H114663—UN—05JAN17

Issue

Issue— displayed when the system has one or more severe faults present.

H126950—UN—26SEP19

Ground Speed Limit

Ground Speed Limit— displayed when the ground speed limit is reached.

HarvestSmart™ Requirements:

- HarvestSmart™ automation must be ON.
- Performance Target must be set.
- Machine must be ready to harvest:
  - Separator must be engaged.
  - Header must be engaged.
  - Engine must be set to high idle.
- Multi-function lever must be set to at least 2 km/h (1.25 mph)

H113789—UN—30JAN17

Not Met Icon

An icon appears when a requirement is not met.

Active Terrain Adjustment is a trademark of Deere & Company
HarvestSmart is a trademark of Deere & Company

H119194—UN—30JAN17

Met Icon

Once a condition has been met, a green checkmark appears.

H114674—UN—06FEB19

Close

Select to close.

N0LMWLO,00003A3-19-16JUL20

Active Terrain Adjustment™ Status

Active Terrain Adjustment™ Status is used to communicate the current state of the Active Terrain Adjustment™ system. Active Terrain Adjustment™ Status also allows you to view requirements that must be met for the system to operate properly and errors affecting the system.

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

H129170—UN—27FEB20

Active Terrain Adjustment™ Status

To see more details select Active Terrain Adjustment™ Status.

Items Displayed on Active Terrain Adjustment™ Status Page:

NOTE: Not all possibilities are listed here. To open a list of current statuses, select the Active Terrain Adjustment™ Status.

H114659—UN—05JAN17

Blue

Applying Offsets

H114656—UN—05JAN17

Green

Monitoring

H114656—UN—05JAN17

Green

Not Ready

H113787—UN—30JAN17

Red

Error Detected

H113788—UN—30JAN17

Gray

Automation OFF

Active Terrain Adjustment™ Requirements:

- Active Terrain Adjustment™ automation must be ON.
- Machine must be ready to harvest:
- Separator must be engaged.
- Header must be engaged.
- Engine must be set to high idle.
- Header must be below record stop height.

H113789—UN—30JAN17

Message

A message appears when a requirement is not met.

H119194—UN—30JAN17

Green Checkmark

Active Terrain Adjustment is a trademark of Deere & Company

Once a condition has been met, a green checkmark appears.

H118541—UN—30JAN17

Header Details

Requirement not met for "Header must be below record stop height", select to access Header Details page.

H114674—UN—06FEB19

Close

Select to close.

N0LMWLO,00003A4-19-16JUL20

Auto Maintain Status

Auto Maintain Status is used to communicate the current state of the Auto Maintain system. Auto Maintain Status also allows you to view requirements that must be met for the system to operate properly.

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

H126947—UN—26SEP19

Auto Maintain Status

Select the Auto Maintain status to see more details.

Items Displayed on Auto Maintain Status Page:

NOTE: Not all faults are listed here. To open a list of current statuses, select the Auto Maintain Status.

H113730—UN—30JAN17

ON/OFF

Automation On/Off— indicates whether the system is on or off.

H126953—UN—26SEP19

Idle

Idle— displayed when system is on and no issues are detected.

H126954—UN—26SEP19

Active

Active— displayed when the system is accommodating for loss or quality.

H114663—UN—05JAN17

Issue

Issue— displayed when the system has one or more severe faults present.

H126955—UN—26SEP19

Target Acquisition Process

Target Acquisition Process— displayed when the system is acquiring performance targets.

Auto Maintain Requirements:

- Auto Maintain automation must be ON.
- Performance Target must be set.
- Machine must be ready to harvest:
  - Separator must be engaged.
  - Header must be engaged.
  - Engine must be set to high idle.
- Header must be below record stop height.

H113789—UN—30JAN17

Not Met Icon

A message appears when a requirement is not met.

H119194—UN—30JAN17

Met Icon

Once a condition has been met, a green check appears.

H118541—UN—30JAN17

Header Details

Requirement not met for "Header must be below record stop height", select to access Header Details page.

H114674—UN—06FEB19

Close

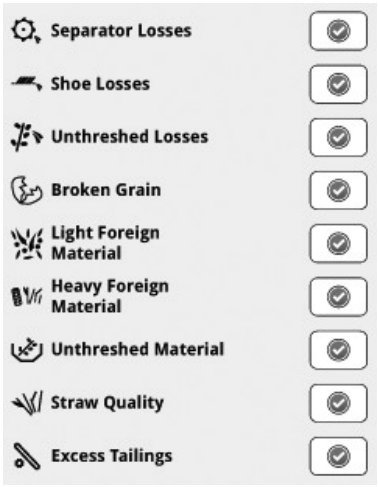
Select to close.

N0LMWLO,00003A5-19-16JUL20

Optimize Performance

Optimize Performance, formerly Interactive Combine Adjustment, recommends adjustments to the user based on one or more reported issues.

Items Accessible on Optimize Performance Main Page:



H127037—UN—26SEP19

Performance Issues

Performance Issues—select to report one or more performance issues that apply to the machine.

H127038—UN—26SEP19

Current Settings

Current Settings—select to open Harvest Settings application.

H125517—UN—01FEB19

Solution

Solutions—displays after one or more performance issues are reported. Allows you to toggle through the system recommended solutions and apply them to the machine.

H126962—UN—26SEP19

Stop

Stop—select to clear all issues.

NOTE: Stop is only selectable when one or more performance issues are selected.

H126963—UN—26SEP19

Apply

Apply—select to apply the currently selected solution.

NOTE: Apply is only selectable when one or more performance issues are selected.

H114674—UN—06FEB19

Close

Select to close.

NOTE: If you close Optimize Performance with issue severities selected, the system remembers your current selections. Reopening triggers the system to find recommendations based on those selections.

N0LMWLO,00003A6-19-16JUL20

Offset Tuning Chaffer

Offset Tuning | Chaffer adjusts the Step Size amount to

the chaffer when commanded by the Active Terrain Adjustment™ system.

Include in Automation

Modify When:

Include in Automation—check if you want Active Terrain Adjustment™ to adjust the chaffer. If you do not want Active Terrain Adjustment™ adjusting the chaffer, uncheck Include in Automation.

Procedure to Modify:

Uncheck to prevent Active Terrain Adjustment™ from adjusting the chaffer.

H126183—UN—24APR19

Include in automation

NOTE: "Include in automation" defaults to different states depending on the crop type.

NOTE: If "Include in automation" is checked, the word "Managed" appears on the main screen. If not checked, then the word "Ignored" appears on-screen

Step Size

Modify When:

NOTE: Adjust the step sizes if sensitivity adjustments are ineffective.

NOTE: Step sizes are the size of individual adjustments made by Active Terrain Adjustment™, not the total range of the adjustments or number of adjustments.

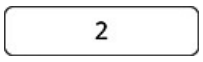
Increasing Step Size:

Use when maximum sensitivity setting is not achieving desired results, or when all but one component (fan speed, chaffer, or sieve) needs more adjustment than the others.

Decreasing Step Size:

Use when minimum sensitivity setting is not achieving desired results, or when all but one component (fan speed, chaffer, or sieve) needs less adjustment than the others.

Procedure to Modify:



H125580—UN—01FEB19

Step Size

1. To open number pad, select Step Size and enter desired value.

H114645—UN—05JAN17

Chaffer

Minimum: 1

Default: Based on crop being harvested.

Maximum: 3

Increment: 1

H114674—UN—06FEB19

Close

2. Select to close.

N0LMWLO,00003A7-19-16JUL20

Offset Tuning Sieve

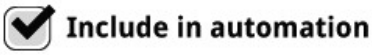
Offset Tuning | Sieve adjusts the Step Size amount to the sieve when commanded by the Active Terrain Adjustment™ system.

Include in Automation

Modify When:

Include in Automation—select check if you want Active Terrain Adjustment™ to adjust the sieve. If you do not want Active Terrain Adjustment™ adjusting the sieve, uncheck Include in Automation.

Procedure to Modify:



H126183—UN—24APR19

Include in automation

Uncheck to prevent Active Terrain Adjustment™ from adjusting the sieve.

NOTE: "Include in automation" defaults to different states depending on the crop type.

NOTE: If "Include in automation" is checked, the word "Managed" appears on the main screen. If not checked, then the word "Ignored" appears on-screen

Step Size

Modify When:

NOTE: Adjust the step sizes if sensitivity adjustments are ineffective.

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NOTE: Step sizes are individual increments, not the total range of the adjustments or number of adjustments.

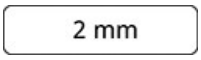
Increasing Step Size:

Use when maximum sensitivity setting is not achieving desired results, or when all but one component (cleaning fan, chaffer, or sieve) needs more adjustment than the others.

Decreasing Step Size:

Use when minimum sensitivity setting is not achieving desired results, or when all but one component (cleaning fan, chaffer, or sieve) needs less adjustment than the others.

Procedure to Modify:



H119751—UN—30JAN17

Step Size

1. Select Step Size to open number pad and enter desired value.

H114646—UN—05JAN17

Sieve

Minimum: 1

Default: Based on crop being harvested.

Maximum: 3

Increment: 1

H114674—UN—06FEB19

Close

2. Select to close.

N0LMWLO,00003A8-19-16JUL20

Cannot Maintain Target

Combine Advisor™ Cannot Maintain Target states that Combine Advisor™ may not be able to maintain the Performance Target in the current conditions.

Items Accessible on Cannot Maintain Target Page:

H126964—UN—26SEP19

Set New Auto MaintainTarget

Set New Auto Maintain Target—starts the Set Targets process. It has the same function as pressing the "Set Performance Target" button.

H126965—UN—26SEP19

Check Manual Adjustments

Check Manual Adjustments—opens the Harvest Settings Outside Configuration Overlay and turns OFF Auto Maintain.

H126969—UN—26SEP19

Auto Maintain OFF

Auto Maintain OFF—closes this overlay and turns off Auto Maintain.

H113840—UN—06FEB19

Next

Select to proceed.

Procedure to Modify:

Set New Auto Maintain Target

H126964—UN—26SEP19

Set New Auto Maintain Target

1. Select to set a new Auto Maintain target.

H113840—UN—06FEB19

Next

2. Select to proceed.

Check Manual Adjustments

H126965—UN—26SEP19

Check Manual Adjustments

1. Select to check manual adjustments.

H113840—UN—06FEB19

Next

2. Select to open Harvest Settings Outside Configuration

Turn Off Auto Maintain

H126969—UN—26SEP19

Auto Maintain OFF

1. Select to turn off Auto Maintain.

H113840—UN—06FEB19

Next

2. Select to proceed.

N0LMWLO,00003A9-19-16JUL20

Offset Tuning Cleaning Fan

Offset Tuning | Cleaning Fan adjusts the Step Size amount to the fan speed when commanded by the Active Terrain Adjustment™ system.

NOTE: The Cleaning Fan is always "Included in Automation", so the word "Managed" always appears on the Active Terrain Adjustment™ settings page

Modify When:

NOTE: Adjust the step sizes if sensitivity adjustments are ineffective

NOTE: Step sizes are individual increments, not the total range of the adjustments or number of adjustments.

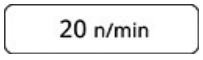
Increasing Step Size:

Use when maximum sensitivity setting is not achieving desired results, or when all but one component (fan speed, chaffer, or sieve) needs more adjustment than the others.

Decreasing Step Size:

Use when minimum sensitivity setting is not achieving desired results, or when all but one component (fan speed, chaffer, or sieve) needs less adjustment than the others.

Procedure to Modify:



H119128—UN—05JAN17

Step Size

1. Select to open Step Size page.

H118542—UN—05JAN17

Step Size

2. Select desired value.

H114644—UN—05JAN17

Fan Speed

Minimum: 20 n/min

Default: Based on crop being harvested.

Maximum: 50 n/min

Increment: 10 n/min

H114674—UN—06FEB19

Close

3. Select to close.

N0LMWLO,00003AA-19-16JUL20

Set Performance Target

Set Performance Target allows you to inform the system that existing grain loss, grain quality, and engine power levels are acceptable. The system initiates and performs the necessary changes to create the new "maintain" threshold. Performance Targets are needed to run Auto Maintain and HarvestSmart™.

NOTE: Acquiring a performance target can take about 30 minutes in a field with varying crop conditions. If you are satisfied with an existing performance target, you do not need to set a new performance target when changing fields.

NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.

Modify When:

- You optimize the machine; set a new performance target after optimization is complete.
- Auto Maintain has detected several issues while harvesting and you are still satisfied with the current performance.
- Moving to a new field with a significant change in yield, moisture, or variety.
- You want to automatically set the Engine Power Target for HarvestSmart™.
- Ground speed is oscillating while HarvestSmart™ is engaged.

Procedure to Modify:

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HarvestSmart is a trademark of Deere & Company

NOTE: If there is not a valid target available, you are prompted to set a new target when you turn on HarvestSmart™ or Auto Maintain.

1. Operate machine at the preferred harvest speed/ engine power level, grain quality, and grain loss levels.

H119889—UN—31JAN17

Set Performance Target

2. Select to Set Performance Target.

NOTE: Pressing Set Performance Target also calibrates the grain loss monitor by setting the VisionTrak™ monitor.

NOTE: Targets are saved by crop type and during key and battery cycles.

NOTE: If automation systems are not able to maintain the current performance target, Cannot Maintain Target is shown.

N0LMWLO,00003AB-19-16JUL20

Performance Issues

Performance Issues let you change the severity of the issues you are experiencing to generate recommendations in Optimize Performance. Select all issues you are currently experiencing.

Items Accessible:

Select Severity—select to change the severity of the issue you are experiencing.

NOTE: Any time the severity changes from what was previously reported, the system goes through the "Finding Recommendations" state.

H125174—UN—01FEB19

OK

OK—Machine is optimally running to your specifications.

H125175—UN—01FEB19

Minor

Minor

H125176—UN—01FEB19

Moderate

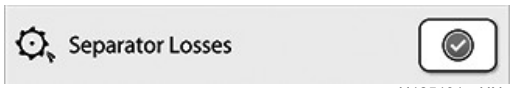
Moderate

H125177—UN—01FEB19

Major

Major

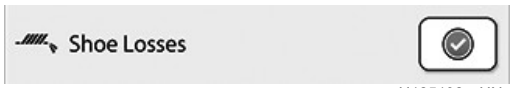
Types of Performance Issues:



H125191—UN—05FEB19

Separator Losses

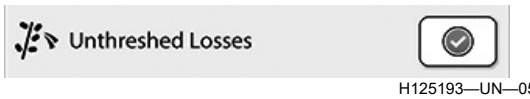
Separator Losses—select if large amounts of free grain are at the rear of the grain return pan.



H125192—UN—05FEB19

Shoe Losses

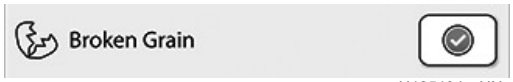
Shoe Loss—select if grain is exiting the machine through the cleaning shoe.



H125193—UN—05FEB19

Unthreshed Losses

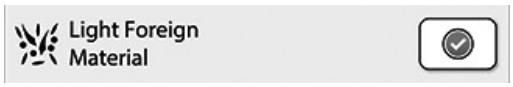
Unthreshed Loss—select if grain on the ground is remaining attached to the plant material.



H125194—UN—05FEB19

Broken Grain

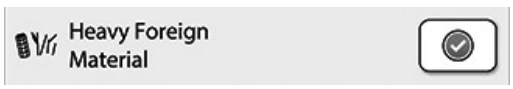
Broken Grain—select if damaged or broken grain is in the grain tank.



H125195—UN—05FEB19

Light Foreign Material

Light Foreign Material—select if there are pieces of light and fluffy material in the grain tank.



H125196—UN—05FEB19

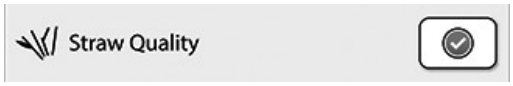
Heavy Foreign Material

Heavy Foreign Material—select if pieces of cob or short sections of stem/stalk are in the grain tank.

H125197—UN—05FEB19

Unthreshed Material

Unthreshed Material—select if grain in the grain tank is remaining attached to cob, grain head, or pod.



H125198—UN—05FEB19

Straw Quality

Straw Quality—select if Straw Quality is an area you would like to improve.

H125199—UN—05FEB19

Excess Tailings

Excess Tailings—select if you have high tailings volume.

MM95366,000040F-19-07FEB19

Separator Losses

Separator Loss is loose kernels that leave the machine through the discharge/overshot beater. The large amounts of free grain at the rear of the grain return pan is an indicator.

How to Determine:

View Separator Loss on the VisionTrak™ display.

Perform Power Shutdown, refer to Operator's Manual for more information.

MM95366,0000410-19-07FEB19

Shoe Losses

Separator Loss is loose kernels that leave the machine through the discharge/overshot beater. The large amounts of free grain at the rear of the grain return pan is an indicator.

How to Determine:

View Separator Loss on the VisionTrak™display.

Perform Power Shutdown, refer to Operator's Manual for more information.

MM95366,0000411-19-07FEB19

Unthreshed Losses

Unthreshed Losses is grain on the ground remaining attached to cob, grain head, or pod.

How to Determine:

Perform Power Shutdown, refer to Operator's Manual for more information.

View ground behind machine.

N0LMWLO,00003AC-19-16JUL20

Broken Grain

Broken Grain is damaged or broken grain in the grain tank.

How to Determine:

View the grain tank and inspect the grain sample.

MM95366,0000413-19-02DEC19

Light Foreign Material

Foreign Material Light is pieces of light and fluffy material in the grain tank with the clean grain. These pieces are something that you would expect air to blow away.

How to Determine:

View the grain tank and inspect the grain sample.

MM95366,0000414-19-07FEB19

Heavy Foreign Material

Foreign Material Heavy is pieces of cob or short sections of stem/stalk in the grain tank with the clean grain. These pieces are something that you would not expect air to blow away.

How to Determine:

View the grain tank and inspect the grain sample.

MM95366,0000415-19-07FEB19

Unthreshed Material

Unthreshed Material is grain in the grain tank remaining attached to cob, grain head, or pod.

How to Determine:

View the grain tank and inspect the grain sample.

MM95366,0000416-19-21NOV19

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Straw Quality Issues

Windrow mode only. Straw is excessively broken, too short, or tangled.

How to Determine:

Inspect straw windrow.

MM95366,0000417-19-21NOV19

Excess Tailings

Tailings volume is high enough to cause tailings full alarm or higher than expected by operator.

How to Determine:

Check composition of tailings:

- A high amount of free grain in tailings can indicate too little sieve clearance.
- Unthreshed kernels can indicate a threshing issue.
- High tailings volume with only chaff can indicate high chaff load on cleaning shoe.

NOTE: Properly set machines have some tailings volume.

N0LMWLO,00003AD-19-16JUL20

Solutions

Recommended Solutions allows you to see a complete list of suggested solutions and specifics about the intended adjustment.

Items Accessible on "Solution Display":

H113801—UN—04JAN17

Progress Indicator

Finding Recommendations—displays the progress indicator while the system is searching for recommended solutions.

H125496—UN—01FEB19

Recommended Solutions

Recommended Solutions—allows access to list of suggested solutions.

H116623—UN—25JAN17

Left

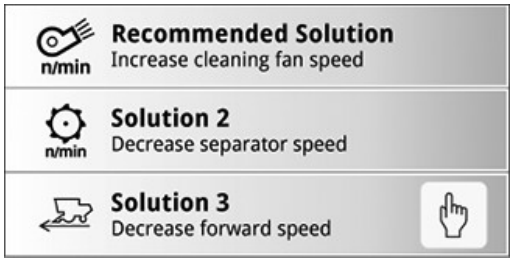
H116624—UN—25JAN17

Right

Left and Right controls—allows you to scroll through the complete list of suggested solutions, showing adjustment specifics.

H125497—UN—01FEB19

Recommended Solution



H116625—UN—30JAN17

Select Solution

Select to view the entire list of recommended solutions.

NOTE: Solutions that require you to adjust settings manually, or climb out of the cab, have a slightly different appearance within the Solutions multi-pane toggle view. The "hand icon", "Manual" , or "Out of Cab" wording on the screen indicate these solutions. These types of adjustments replace the "Apply" button with a "Next" button, indicating there can be more actions required.

NOTE: For out-of-cab adjustments, refer to the machine Operator's Manual

Ground Speed Adjustments

Separator Vane Adjustments

Out-of-Cab Adjustments

H126962—UN—26SEP19

Stop

Stop—select to clear all issues.

NOTE: If you stop the optimization process at any time, a message appears on the display.

H126963—UN—26SEP19

Apply

Apply—select to apply the currently selected recommended solution.

NOTE: When the adjustment is complete, a message appears on the display and you are returned to a blank issue selection page.

N0LMWLO,00003AE-19-16JUL20

Ground Speed Adjustment

A Ground Speed Adjustment requires you to make manual machine adjustments. These adjustments are necessary for the Combine Advisor™ application to auto-advance to the next step of the process.

Ground Speed Adjustments:

H125240—UN—01FEB19

Change Ground Speed to 3 mph

Optimize Performance recommends a ground speed adjustment.

H127027—UN—26SEP19

Next

Select to accept the Ground Speed adjustment.

H128110—UN—21NOV19

Awaiting Operator Action

You make the speed adjustment. Once the speed adjustment is made, Optimize Performance shows a message and returns to a blank issue selection screen.

H127028—UN—26SEP19

Back

To choose a different recommendation, select to return to the Solution list.

H125182—UN—01FEB19

Stop

Select to clear all issues.

H114674—UN—06FEB19

Close

Select to close the Optimize Performance Application application.

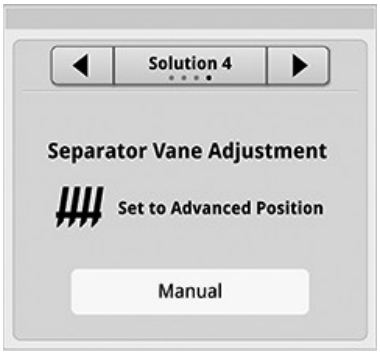
NOTE: Optimize Performance will resume in the same place when you open the application again after closing.

N0LMWLO,00003AF-19-16JUL20

Separator Vane Adjustments

Separator Vane Adjustments may require you to make manual machine adjustments. These adjustments are necessary in order for the Optimize Performance application to auto-advance to the next step of the process.

Separator Vane Adjustments:



H125518—UN—01FEB19

Separator Vane Adjustment

Optimize Performance recommends a Separator Vane adjustment.

H127027—UN—26SEP19

Next

Select to accept the Separator Vane adjustment.

H125180—UN—01FEB19

Separator must be disengaged

Optimize Performance prompts you to disengage the separator.

NOTE: If the separator is already disengaged, Optimize Performance skips this step and automatically adjust the Separator Vanes.

H125181—UN—01FEB19

Applying Solution

Optimize Performance makes the separator vane adjustment. Once the adjustment is completed, Optimize Performance shows a message and returns to a blank issue selection page.

H127028—UN—26SEP19

Back

To choose a different recommendation, select to return to the Solution list.

H126962—UN—26SEP19

Stop

Select to clear all issues.

H114674—UN—06FEB19

Close

Select to close the Optimize Performance Application.

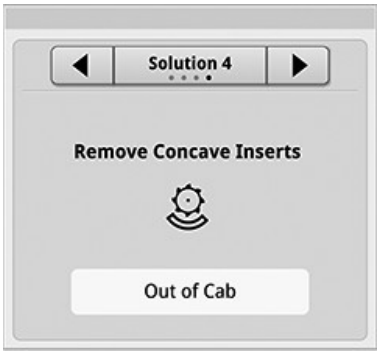
NOTE: Optimize Performance will resume in the same place when you reenter after closing.

N0LMWLO,00003B0-19-16JUL20

Out-of-Cab Adjustments

Out-of-Cab Adjustments are machine optimization adjustments that you make outside of the cab.

Out-of-Cab Adjustments:



H125183—UN—01FEB19

Remove Concave Inserts

To perform Out-of-Cab adjustments, refer to Operator's Manual.

IMPORTANT: Shut down the machine before performing the recommended adjustments.

H127027—UN—26SEP19

Next

Select to accept Out-of-Cab adjustment.

H125184—UN—01FEB19

Awaiting Operator Action

H116316—UN—25JAN17

Message

NOTE: An icon appears when a requirement is not met.

H125188—UN—01FEB19

Hand Icon

NOTE: Out-of-Cab adjustments needed are shown as hand icons.

H125185—UN—01FEB19

Awaiting Operator Action

H116336—UN—30JAN17

Green Check Mark

NOTE: As you meet the prerequisites, a check mark replaces the original icon.

H125186—UN—01FEB19

Adjustment Completed

H125586—UN—01FEB19

Complete

Select "Complete" to confirm that the adjustment has been performed.

H127028—UN—26SEP19

Back

To choose a different recommendation, select to return to the Solutions list.

H126962—UN—26SEP19

Stop

Select to clear all issues.

NOTE: Turning off the machine prompts an "Optimization Complete" display to be present when machine is turned back on. The machine considers the adjustment to be complete. Select "OK" to close the window. Select "Optimize Performance" to return to the Optimize Performance application.

H114674—UN—06FEB19

Close

Select to close the Optimize Performance application.

NOTE: Optimize Performance will resume in the same place when you open the application after closing.

N0LMWLO,00003B1-19-16JUL20

Auto Maintain Settings

Auto Maintain | Settings allows you to set the Response Aggressiveness and Sensitivity levels for Grain Loss, Broken Grain, and Foreign Material. To access Auto Maintain settings, select the screen area to the right of the ON/OFF button.

Items Accessible on Auto Maintain | Settings Page:

Instructions—describes how aggressiveness and sensitivity affect the system.

H126152—UN—21NOV19

Target Acquisition

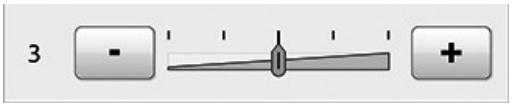
Target Acquisition Process— this state displays when the system is ON and in the Target Acquisition Process.

NOTE: Acquiring performance targets is always enabled, allowing the system to set Grain Loss, HarvestSmart™, or Auto Maintain targets at any time.

H114663—UN—05JAN17

Message

System Fault— this state displays when the system has one or more severe faults present.



H125211—UN—05FEB19

Response Aggressiveness

Response Aggressiveness—controls how frequently Auto Maintain adjusts when issues are present.

H125212—UN—05FEB19

Grain Loss Sensitivity

Grain Loss Sensitivity—the amount of change in grain loss needed for Auto Maintain to detect an issue.

H125213—UN—05FEB19

Broken Grain Sensitivity

Broken Grain Sensitivity—the amount of change in broken grain needed for Auto Maintain to detect an issue.

H125214—UN—05FEB19

Foreign Material Sensitivity

Foreign Material Sensitivity—the amount of change in foreign material needed for Auto Maintain to detect an issue.

N0LMWLO,00003B2-19-16JUL20

Response Aggressiveness

Response Aggressiveness controls how frequently Auto Maintain adjusts the machine when an issue is present.

Setting 1—Minimum

Setting 2—Lowered

Setting 3—Default

Setting 4—Increased

Setting 5—Maximum

Modify When:

Increase When:

Auto Maintain is not adjusting frequently enough to resolve the issues that are found.

Decrease When:

Auto Maintain is adjusting too frequently to resolve the issues that are found.

Procedure to Modify:

H125219—UN—01FEB19

Aggressiveness

Select Plus (+) button to increase and Minus (-) button to decrease.

N0LMWLO,00003B4-19-16JUL20

Grain Loss Sensitivity

Grain Loss | Sensitivity controls how fast the system recognizes grain loss before making an automatic change.

Setting 1 — Minimum

Setting 2 — Lowered

Setting 3 — Default

Setting 4 — Increased

Setting 5 — Maximum

Modify When:

Increase When:

You see shoe loss or separator loss and Auto Maintain is not detecting the issue.

Decrease When:

Auto Maintain is detecting a shoe loss or separator loss issue and the performance of that area is still acceptable to you.

Procedure to Modify:

H119857—UN—30JAN17

Sensitivity

Select Plus (+) button to increase and Minus (-) button to decrease.

MM95366,000041F-19-07FEB19

Broken Grain Sensitivity

Broken Grain | Sensitivity controls how fast the system recognizes broken grain.

Setting 1— Minimum

Setting 2— Lowered

Setting 3— Default

Setting 4— Increased

Setting 5— Maximum

Modify When:

Increase When:

You see an unacceptable amount of broken grain in the grain tank and Auto Maintain is not detecting an issue.

Decrease When:

Auto Maintain is detecting a broken grain issue and the performance of that area is still acceptable to you.

Procedure to Modify:

H125219—UN—01FEB19

Sensitivity

Select Plus (+) button to increase and Minus (-) button to decrease.

MM95366,0000420-19-07FEB19

Foreign Material Sensitivity

Foreign Material | Sensitivity controls how fast the system recognizes foreign material.

Setting 1— Minimum

Setting 2— Lowered

Setting 3— Default

Setting 4— Increased

Setting 5— Maximum

Modify When:

Increase When:

You see an unacceptable amount of one or more of the following and Auto Maintain is not detecting an issue.

- Light Foreign Material (chaff, small bits of leaves and hulls).
- Heavy Foreign Material (cobs, larger leaves, and sticks or stems).
- Unthreshed Material in the grain tank.

Decrease When:

Auto Maintain is detecting one or more of the following and the performance of that area is still acceptable to you.

- Light Foreign Material (chaff, small bits of leaves and hulls).
- Heavy Foreign Material (cobs, larger leaves, and sticks or stems).
- Unthreshed Material in the grain tank.

Procedure to Modify:

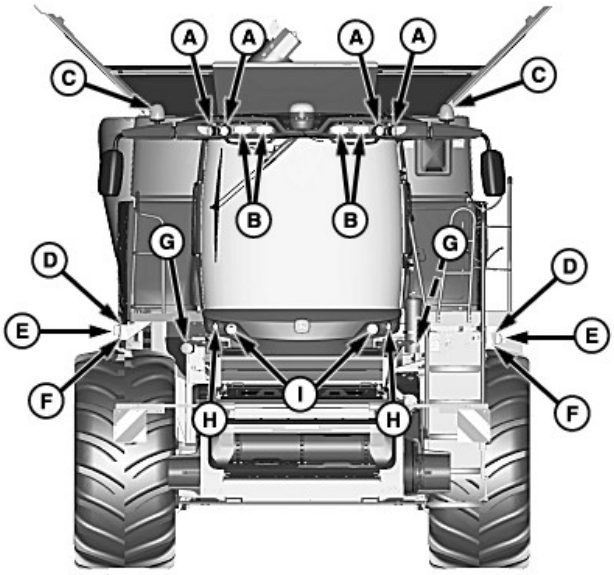
H125219—UN—01FEB19

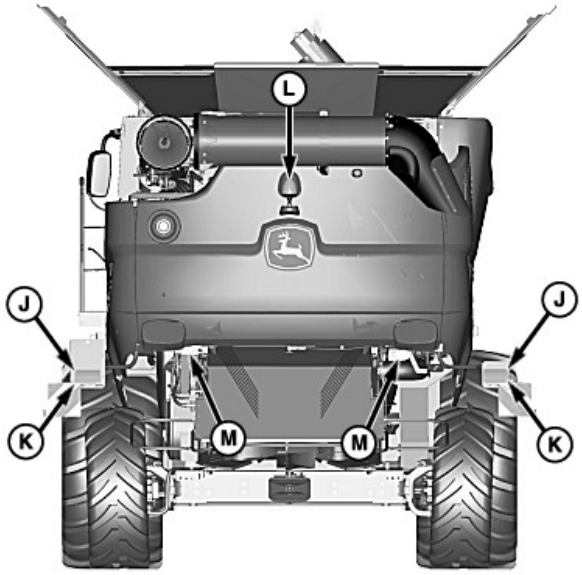
Sensitivity

Select Plus (+) button to increase and Minus (-) button to decrease.

N0LMWLO,00003B3-19-16JUL20

Lighting Locations (Front and Rear View Lights)





H107108—UN—28FEB13

A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights
B—Cab Headlights (High/Low Beam)
C—Beacon Lights
D—Hazard Lights (Amber)
E—Hazard Lights (Amber)
F—Marker Lights (White)
G—Stubble Lights
H—Fascia Lights (if equipped)
I—Lower Driving Lights (if equipped)
J—Marker/Brake Lights (Red)
K—Rear Hazard Lights (Amber)
L—Beacon Light
M—Rear Discharge Lights

Beacon Lights

CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.

- Controls beacon lights (C, L).
- Two beacon lights are at the front (left and right) and one at the rear of the machine. These lights warn other drivers when transporting on roadways.

Hazard Lights

CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.

- Controls beacon lights (C, L), hazard lights (D, E), and rear hazard lights (K).
- Hazard lights are on both sides of the machine at front and rear. These lights are used to indicate an inoperable machine.

Road Lights

CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.

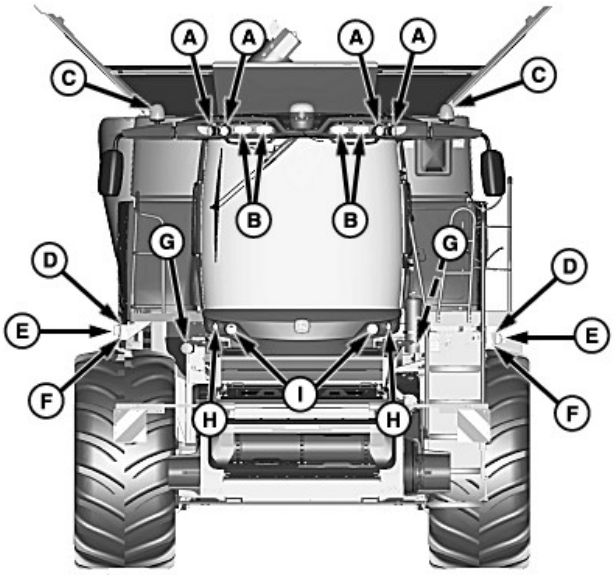
NOTE: When road lights are ON and no header is connected, lower driving lights turn ON and cab headlights turn OFF. When a header is connected, lower driving lights turn OFF and cab headlights turn ON.

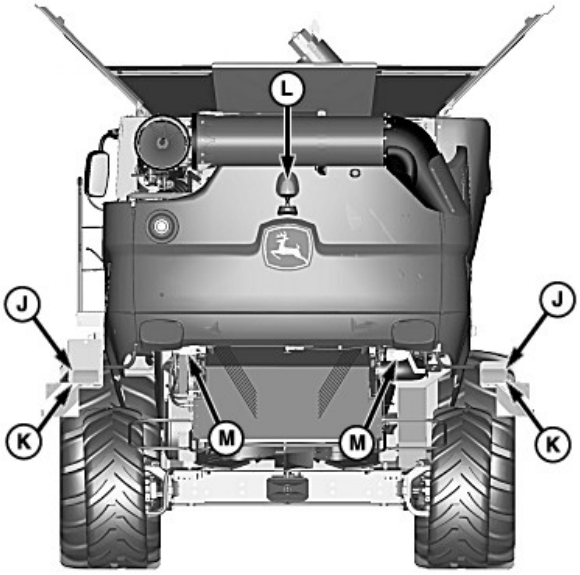
Hazard lights turn ON if turn signals are OFF. If turn signals are ON, hazard lights function as turn signal lights.

- Controls beacon lights (C, L), cab headlights (B), marker lights (F), lower driving lights (I), and marker/brake lights (J).
- Beacon lights warn other drivers when transporting on roadways.

OUO6075,00049AC-19-31MAY18

Lighting Locations (Front and Rear View Lights Continued)





H107108—UN—28FEB13

A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights
B—Cab Headlights (High/Low Beam)
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I—Lower Driving Lights (if equipped)
J—Marker/Brake Lights (Red)
K—Rear Hazard Lights (Amber)
L—Beacon Light
M—Rear Discharge Lights

Auto Beacon Lights

NOTE: When auto beacon lights are activated and grain reaches the 3/4 full sensor, the beacon lights start to flash (3 seconds ON and 6 seconds OFF). When grain reaches the grain tank full sensor, the beacon lights turn ON steady and do not flash.

- Beacon lights (C, L) illuminate when grain tank is 3/4 full. Beacons provide a signal to the grain cart operator that grain tank is full and is ready to be unloaded.

Field Lights

- Controls marker lights (F), marker/brake lights (J), and cab headlights (A, B).
- Field lights provide operator with area lighting for operation at night and during low light conditions.

Front Stubble Lights

CAUTION: To avoid motorist confusion, do not operate work lights when transporting on public roadways.

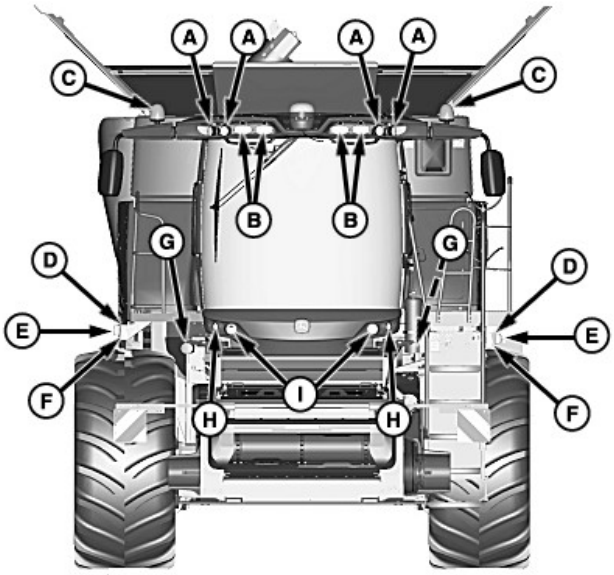
NOTE: If operator leaves seat after separator is engaged, front stubble lights flash and will continue to flash until separator speed reaches zero.

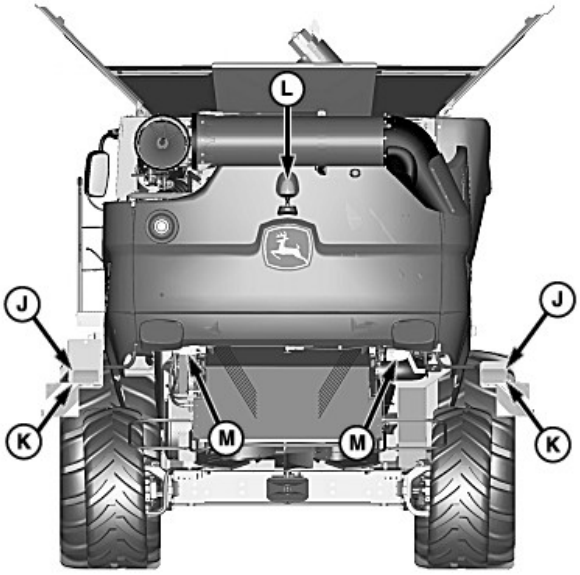
- Controls stubble lights (G) and fascia lights (H).
- Stubble lights provide operator with more lighting behind header for night operation and low light conditions.[1]
- Fascia lights provide operator with more lighting at the front of the machine during harvest.

OUO6075,00049AD-19-31MAY18

[1] *If road lights are ON and machine is in Road Mode, stubble lights, fascia lights, and rear discharge lights cannot be turned ON.*

Lighting Locations (Front and Rear View Lights Continued)





H107108—UN—28FEB13

A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights
B—Cab Headlights (High/Low Beam)
C—Beacon Lights
D—Hazard Lights (Amber)
E—Hazard Lights (Amber)
F—Marker Lights (White)
G—Stubble Lights
H—Fascia Lights (if equipped)
I—Lower Driving Lights (if equipped)
J—Marker/Brake Lights (Red)
K—Rear Hazard Lights (Amber)
L—Beacon Light
M—Rear Discharge Lights

Rear Discharge Lights

CAUTION: To avoid motorist confusion, do not operate work lights when transporting on public roadways.

NOTE: If operator leaves seat after separator is engaged, rear discharge lights flash and will continue to flash until separator speed reaches zero.

- Controls rear discharge lights (M).
- Rear discharge lights provide operator with rear area lighting for night operation and low light conditions.[2][3]

Marker/Brake Lights

- Marker/Brake lights (J) come ON when machine senses a deceleration. Lights stay on for a minimum of 2 seconds.[4]
- Once speed is less than 1.6 km/h (1 mph), brake lights stay on for 2 minutes or until forward acceleration is sensed and speed is greater than 1.6 km/h (1 mph).
- Marker lights also act as turn indicators, and illuminate when a turn is signaled. Light in direction of turn flashes.

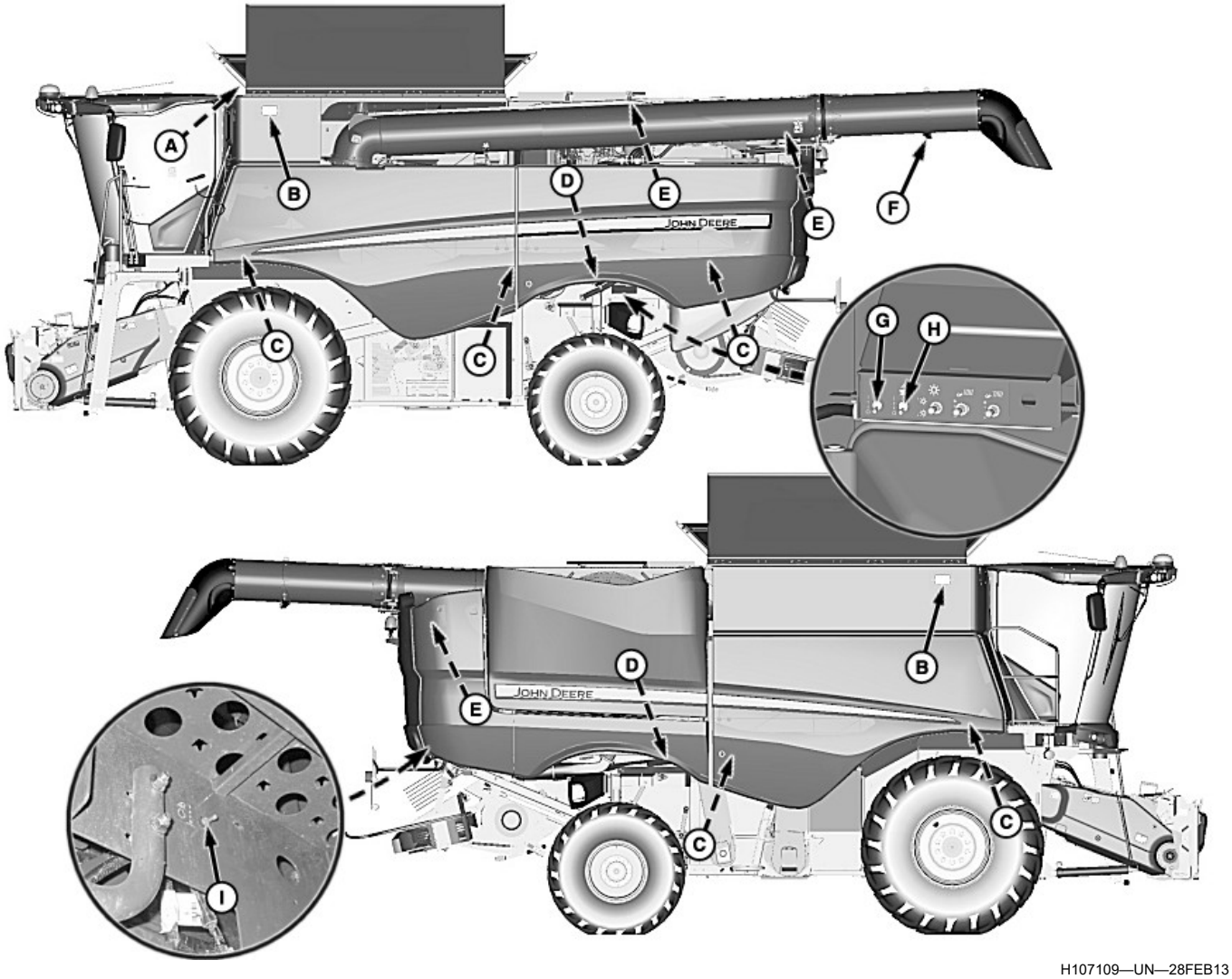
Exit Lighting

- Two outermost cab headlights (B) remain on for a maximum of 180 seconds after key switch and light switch are turned OFF (if road or field lights were in use within the previous 5 minutes).

OUO6075,00049AE-19-01JUN18

[2] *If road lights are ON and machine is in Road Mode, stubble lights, fascia lights, and rear discharge lights cannot be turned ON.*
[3] *France Only: If machine is in Road Mode, rear discharge lights do not turn ON.*
[4] *France Only: Brake lights come ON when the brake pedal is pressed.*

Lighting Locations (Left and Right Side View Lights)



H107109—UN—28FEB13

A—Grain Tank Light
B—Row Finder Lights
C—Gull Wing Service Lights
D—Shoe Service Lights
E—Engine Compartment Service Lights
F—Unloading Auger Light
G—Shoe Service Light Switch
H—Gull Wing Service Lights Switch
I—Engine Compartment Service Lights Switch

Field Lights

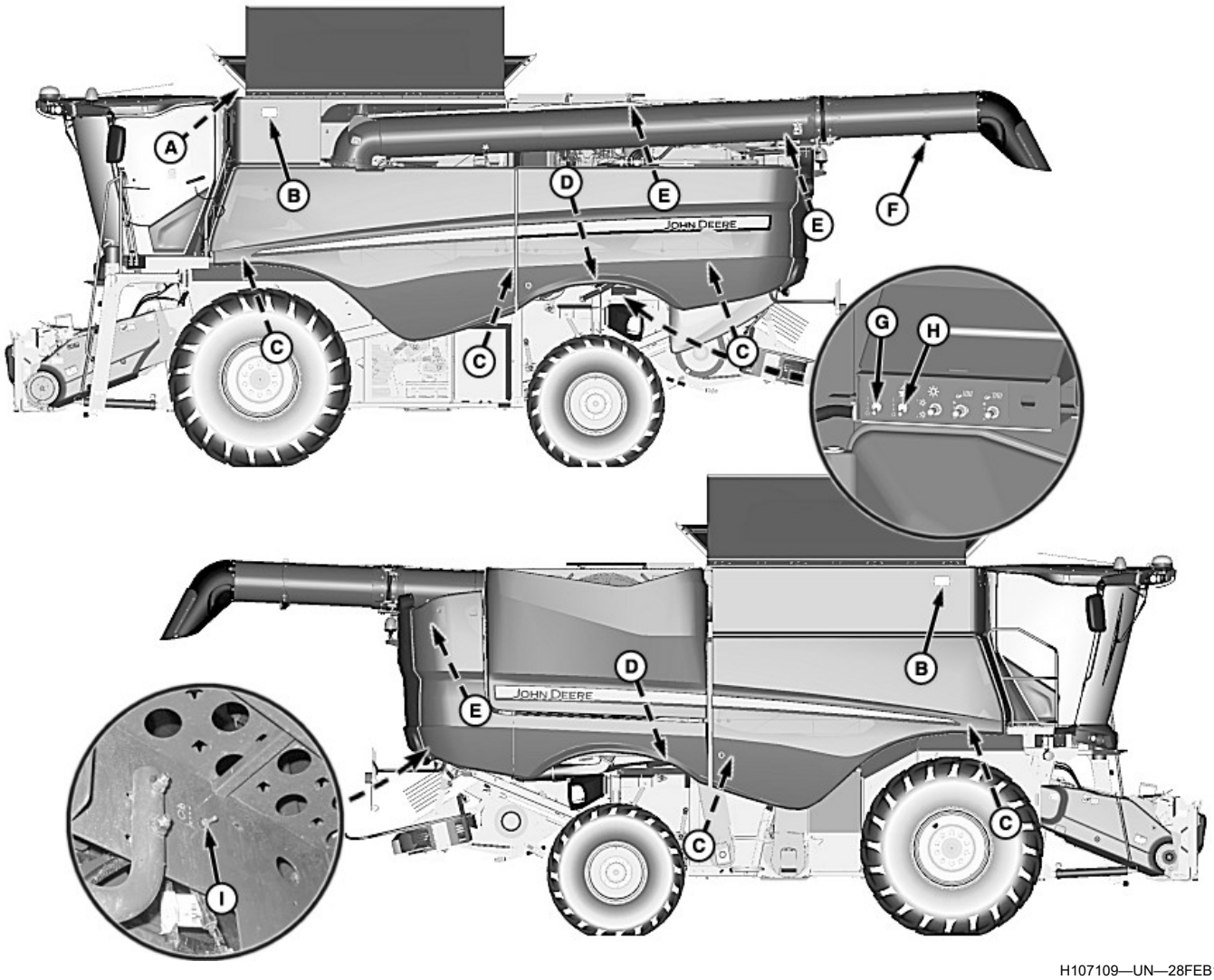
- Controls grain tank light (A), row finder lights (B) (with the turn signal lever), unloading auger light (F), and marker/hazard lights.
- Row finder lights provide operator with area lighting on each side of the machine for night operation and low light conditions.

NOTE: With Field Light ON, use turn signal lever to actuate either right or left side row finder light.

- Grain tank light provides operator with lighting in the grain tank for night operation and low light conditions.
- Grain tank light turns OFF when grain reaches the 3/4 full sensor.
- Unloading auger light comes ON when the auger is extended more than 50% with field light switch ON.
- Unloading auger light provides lighting for unloading grain tank at night or low light conditions.

OUO6075,00049AF-19-31MAY18

Lighting Locations (Left and Right Side View Lights Continued)



H107109—UN—28FEB13

A—Grain Tank Light
B—Row Finder Lights
C—Gull Wing Service Lights
D—Shoe Service Lights
E—Engine Compartment Service Lights
F—Unloading Auger Light
G—Shoe Service Light Switch
H—Gull Wing Service Lights Switch
I—Engine Compartment Service Lights Switch

Shoe Service Lights

NOTE: If operator leaves seat after separator is engaged, shoe service lights flash and will continue to flash until separator speed reaches zero.

- Shoe service lights (D) provide operator with lighting for cleaning shoe adjustment at night or low light conditions.
- Shoe service lights ON/OFF switch (G) is located above the left-hand separator shield.
- Illuminates during maintenance and service operations (not during harvest).

Gull Wing Service Lights (Optional)

CAUTION: Avoid motorist confusion. Do not operate gull wing service lights when transporting.

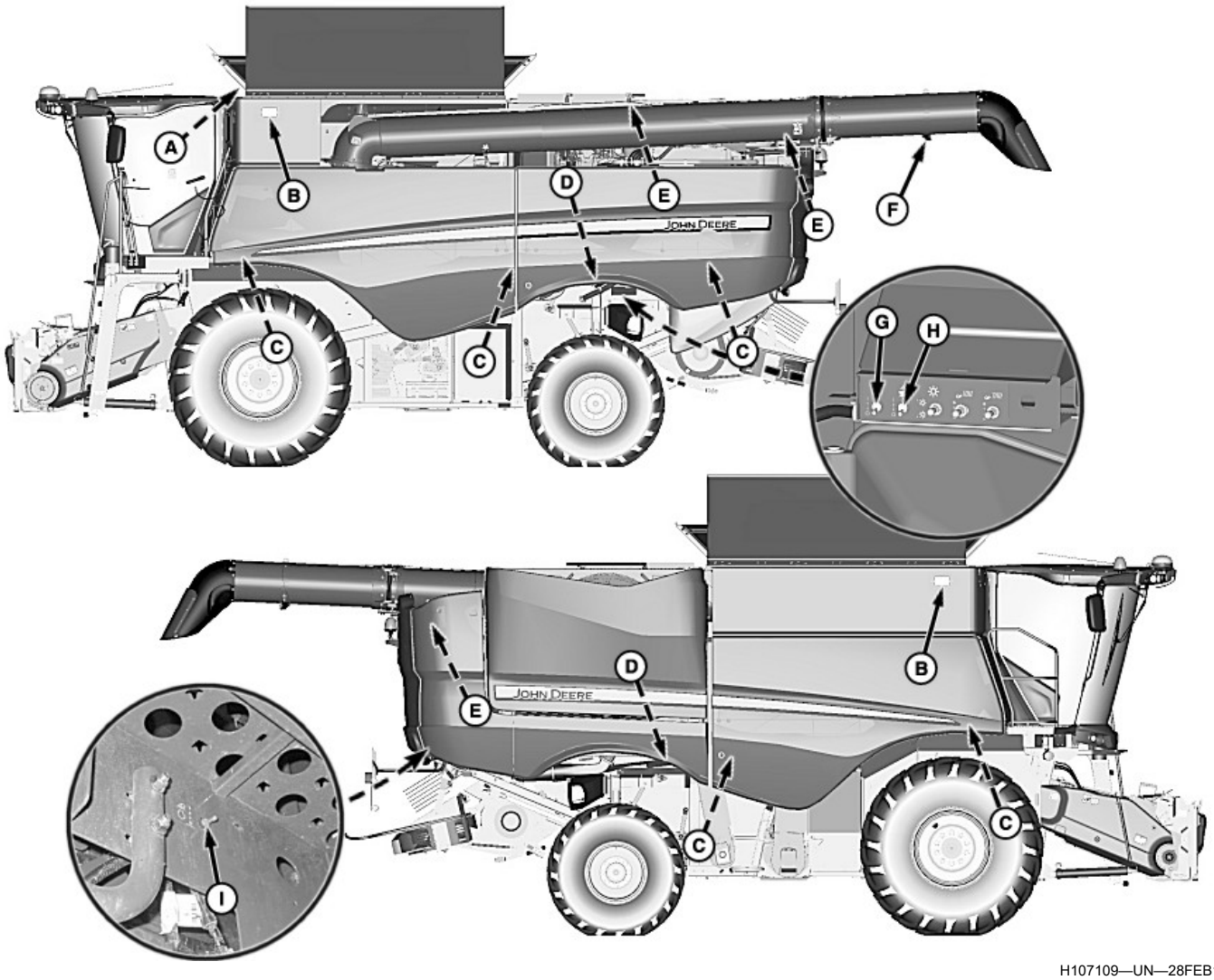
NOTE: If operator leaves seat after separator is engaged, gull wing service lights flash and will continue to flash until separator speed reaches zero.

- Gull wing service lights (C) are provided on both sides of the machine under the gull wing doors and provide better visibility of separator area.

- Gull wing service lights ON/OFF switch (H) is located above the left-hand separator shield.

OUO6075,00049B0-19-31MAY18

Lighting Locations (Left and Right Side View Lights Continued)



H107109—UN—28FEB13

A—Grain Tank Light
B—Row Finder Lights
C—Gull Wing Service Lights
D—Shoe Service Lights
E—Engine Compartment Service Lights
F—Unloading Auger Light
G—Shoe Service Light Switch
H—Gull Wing Service Lights Switch
I—Engine Compartment Service Lights Switch

Engine Compartment Service Lights (Optional)

CAUTION: Avoid motorist confusion. Do not operate engine compartment service lights when transporting.

- Engine compartment service lights (E) provide lighting for engine deck area at night or low light conditions.
- Engine compartment service lights ON/OFF switch (I) is on the right-hand rear side of machine.
- Switch controls engine compartment door light, rear engine deck light, and engine compartment front light.
- Illuminates during maintenance and service operations (not during harvest).

Exit Lighting

- Row finder lights (B) remain on for a maximum of 180 seconds after key switch and light switch are turned OFF (if road or field lights were in use within the previous 5 minutes). Operator chooses to light left or right side of machine using turn signal lever.

OUO6075,00049B1-19-31MAY18

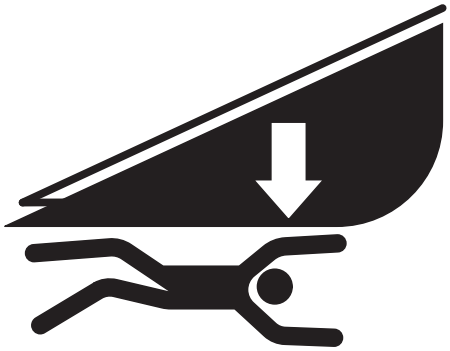
Lighting Delay/Timeout

When all lights are first turned to the ON position with key switch OFF, there is a slight delay. Machine is determining whether current battery voltage exists to operate lights without the machine running. This feature is built into the machine to help prevent too much voltage being drawn from the battery, which may prevent machine from starting.

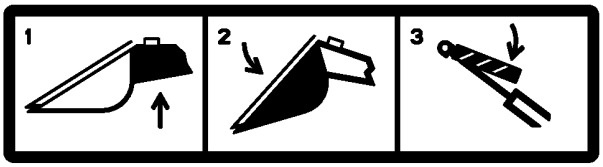
NOTE: After Cleaning Shoe Lights, Service Lights or Engine Compartment Service Lights are ON for over 10 minutes lights flash, then turn OFF momentarily, then back ON for 20 seconds. This cycle continues for 3 minutes, then lights turn OFF until switch is cycled. If lights do not come back on after switch is cycled, machine has determined that battery voltage is too low to allow light operation. Lights come on again once the engine is running and the batteries are recharging.

OUO6075,0004937-19-12APR18

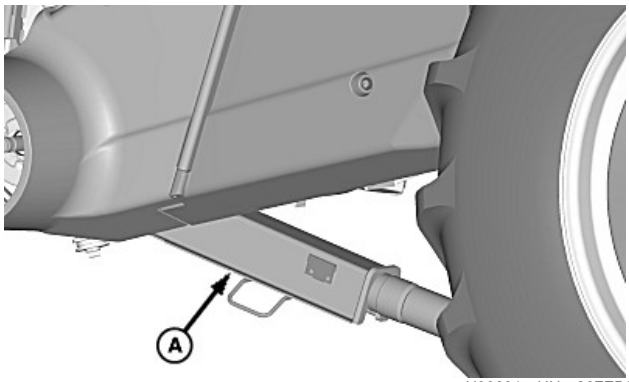
Hydraulic Cylinder Safety Stop



H121063—UN—14MAR17



H112829—UN—18FEB15



H90891—UN—26FEB08

A—Safety Stop

CAUTION: Shut OFF engine, set park brake and remove key.

Cracking of hydraulic line fittings to lower the feeder house results in an instantaneous dropping of the feeder house and header.

Manual Feeder House Fore/Aft Tilt

Raise feeder house completely and lower safety stop (A) onto hydraulic cylinder rod.

Shut OFF engine, set park brake and remove key.

Hydraulic Feeder House Fore/Aft Tilt

Raise feeder house completely and tilt hydraulic feeder house fore/aft tilt frame fully forward and lower safety stop (A) onto hydraulic cylinder rod.

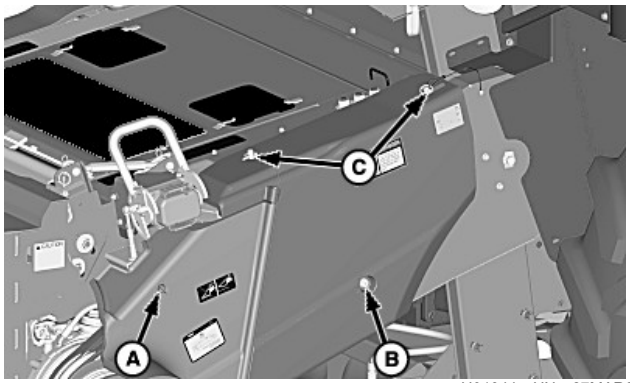
Shut OFF engine, set park brake and remove key.

NOTE: When feeder house is raised and header is engaged, feeder house fore/aft tilt automatically moves forward allowing feeder house safety stop to be lowered onto hydraulic cylinder rod. Feeder house fore/aft tilt automatically returns to last known position when lowering.

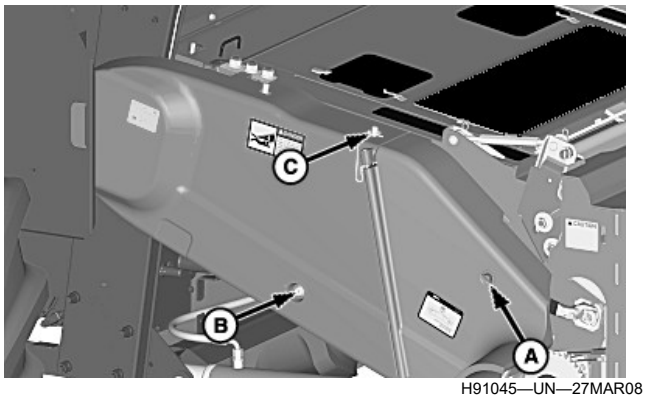
When the header is disengaged, feeder house fore/aft tilt automatically moves forward upon raising. Feeder house fore/aft tilt will not return to last known position when lowering.

OUO6075,00046F1-19-29MAR17

Feeder House Side Shields



H91044—UN—27MAR08



H91045—UN—27MAR08

A—Latch
B—Latch
C—Quick-Lock Pin

CAUTION: Raise the feeder house and lower the safety stop. Shut OFF engine, set park brake, and remove key.

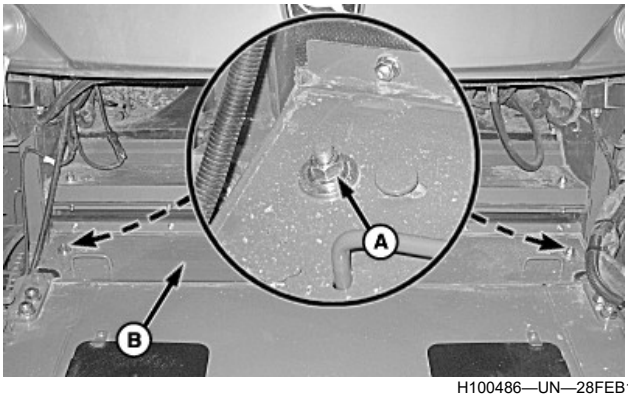
The feeder house shields have a front and rear shield.

1. Turn latch (A) and swing the front shield open for service.

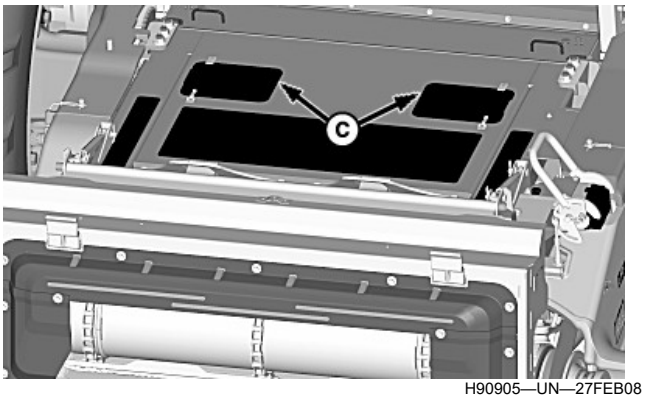
2. Turn latch (B) and remove quick-lock pins (C) to remove the rear shield.
3. Install and close the shields before operating the machine.

OUO6075,0004E85-19-16JUN20

Feeder House Doors



H100486—UN—28FEB11



H90905—UN—27FEB08

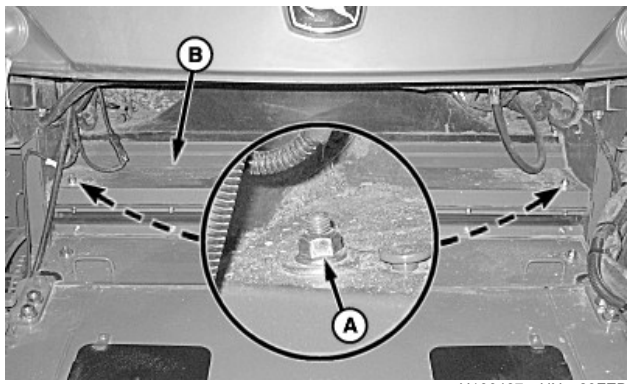
A—Nut (2 used)
B—Door
C—Door (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

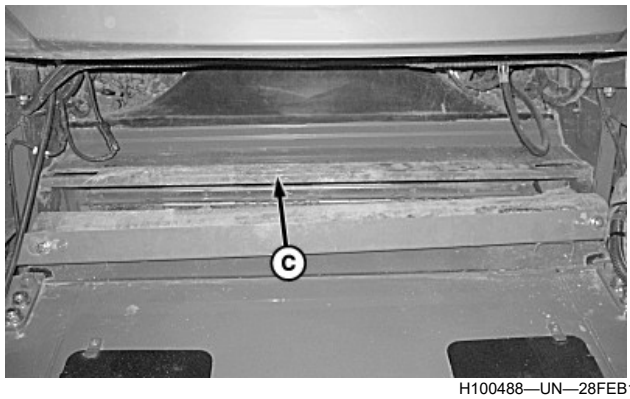
1. Loosen nuts (A) on each side of the door and push nuts towards the center of the feeder house.
2. Pull the door (B) forward to remove.
3. Lift doors (C) to access the inside of the feeder house.
4. Close the doors before operating the machine.

OUO6075,0004E86-19-16JUN20

Feed Accelerator Top Access Door



H100487—UN—28FEB11



H100488—UN—28FEB11

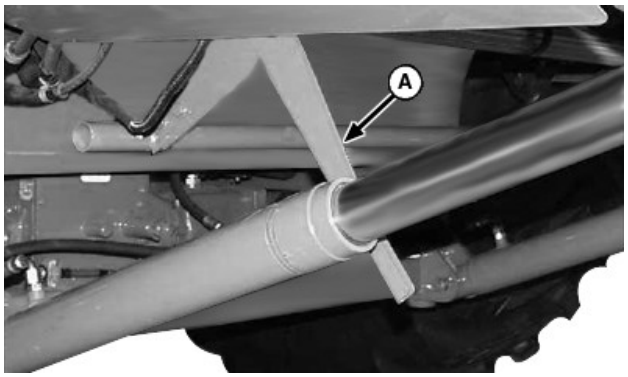
A—Nut (2 used)
B—Door
C—Door

CAUTION: Shut OFF engine, set park brake, and remove key.

1. Loosen nuts (A) on each side of the door and push nuts towards the center of machine.
2. Pull door (B) forward to remove.
3. Slide door (C) forward to remove.
4. Close the doors before operating the machine.

OUO6075,0004E87-19-16JUN20

Feeder House Bottom Door and Feed Plate Seal Support (Style A)



H52761—UN—17MAY99

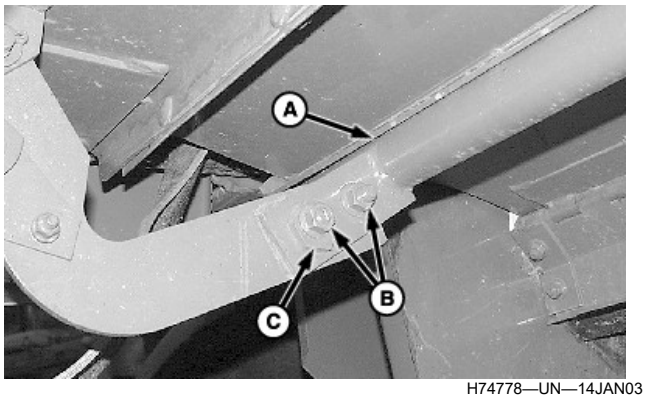
A—Lever

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

Remove quick-lock pin and move lever (A) down and rearward.

IMPORTANT: Lever will be bent if left down when feeder house is lowered.

Push lever forward and up to close door. Retain with the previously removed quick-lock pin.



H74778—UN—14JAN03

A—Crossbar Support
B—Cap Screws
C—Eccentric

If crossbar support (A) does not seal tightly against the feed plate, grain leakage could occur.

Loosen cap screws (B) on both sides.

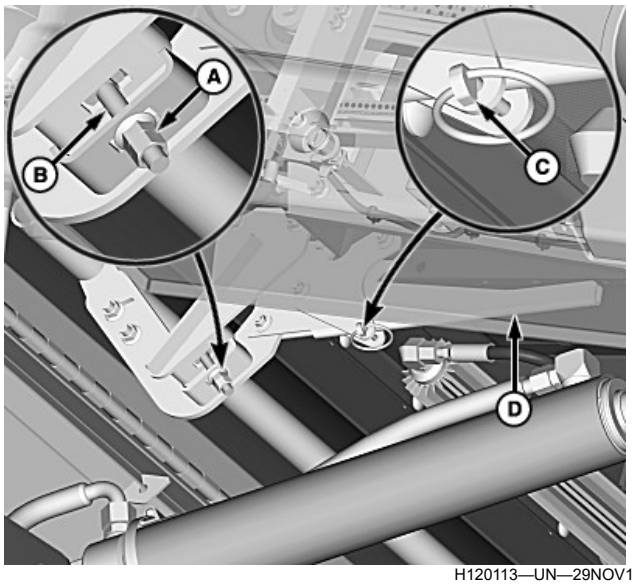
Turn eccentric (C).

Tighten cap screw securing eccentric.

Tighten remaining cap screws.

OUO6075,0004554-19-01DEC16

Feeder House Bottom Door and Feed Plate Seal Support (Style B)



H120113—UN—29NOV16

A—Nuts
B—Round Head Bolt
C—Quick-Lock Pin
D—Lever

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

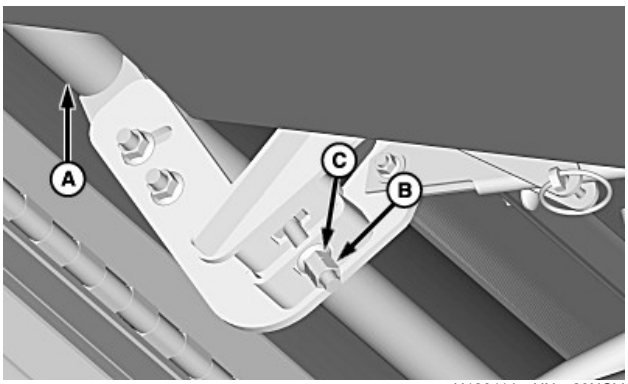
1. Remove nuts (A) and round head bolt (B) on both sides of the machine.
2. Remove quick-lock pin (C) and move lever (D) down and rearward.

CAUTION: The left-hand feeder house lift cylinder hose fitting can become damaged by contact from the feeder house bottom door if the door is left open while moving the feeder house down. If the fitting becomes damaged, hydraulic oil can release from the fitting and the feeder house can suddenly and unexpectedly drop to the ground.

IMPORTANT: Lever will be bent if left down when feeder house is lowered.

3. Push lever forward and up to close door. Retain with previously removed quick-lock pin.
4. Install previously removed round head bolt (B) and nuts (A) on both sides of the machine.

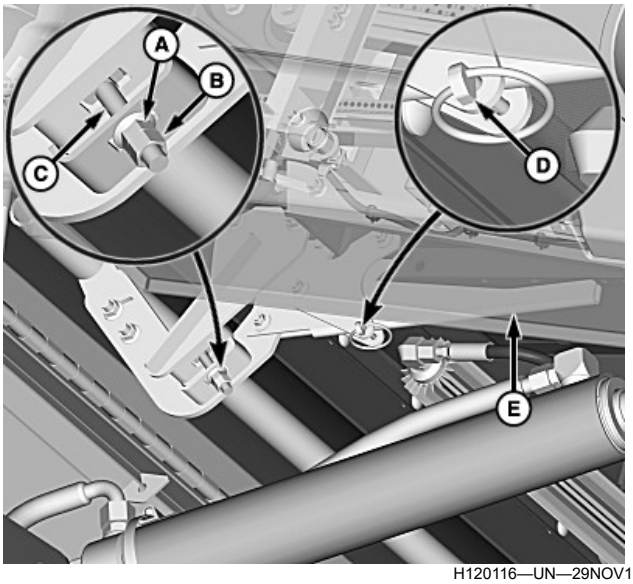
Feed Plate Adjustment



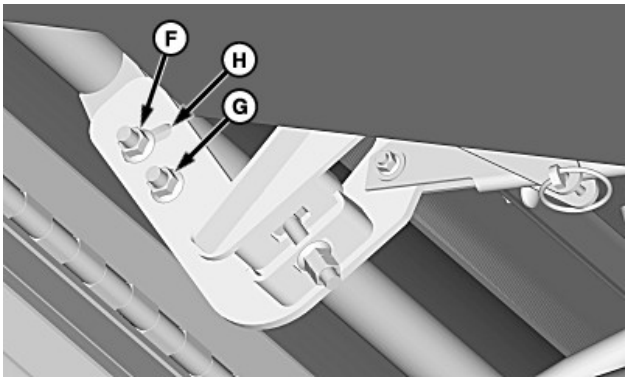
H120114—UN—29NOV16

A—Crossbar Support
B—Nut
C—Nut

1. If crossbar support (A) does not seal tightly against the feed plate, grain leakage could occur.
2. On the side that has the gap, loosen nut (B) and tighten nut (C) as needed.
3. Tighten previously loosened nut (B) against nut (C).



H120116—UN—29NOV16



H120115—UN—29NOV16

A—Nut
B—Nut
C—Round Head Bolt
D—Quick-Lock Pin
E—Lever
F—Nut
G—Nut
H—Slot

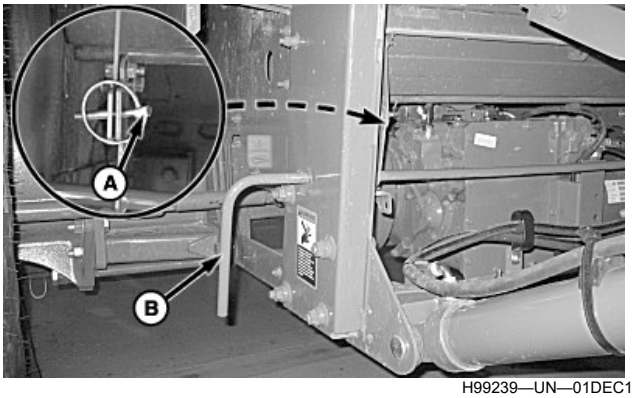
4. If further adjustment is needed, remove nuts (A and B) from the round head bolt (C) on both sides of the machine.
5. Remove quick-lock pin (D) and move lever (E) down and rearward.
6. Loosen nuts (F and G) and adjust crossbar support as needed in slot (H).
7. Tighten previously loosened nuts (F and G).

NOTE: Lever should close easily without a high amount of force.

8. Push lever (E) forward and up to close door. Retain with the previously removed quick-lock pin (D).
9. Install previously removed round head bolt (C) and tighten nut (A) on both sides of the machine.
10. Tighten previously removed nut (B) against nut (A) on both sides of the machine.

OUO6075,0004CB9-19-24OCT19

Stone Trap



H99239—UN—01DEC10

A—Quick-Lock Pin
B—Lever

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set parking brake and remove key.

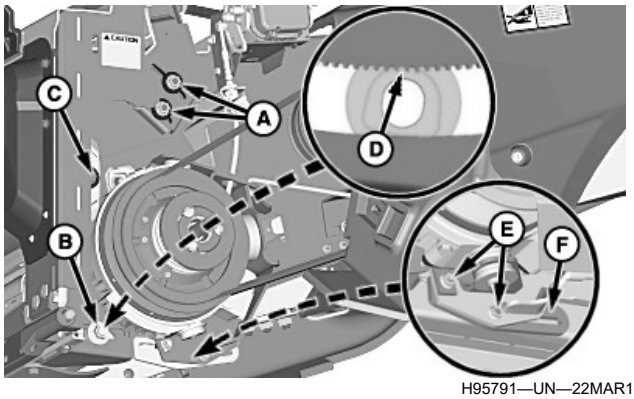
Stone trap protects the cylinder and concave from rock or stone damage.

Remove quick-lock pin (A) and move lever (B) up to open stone trap.

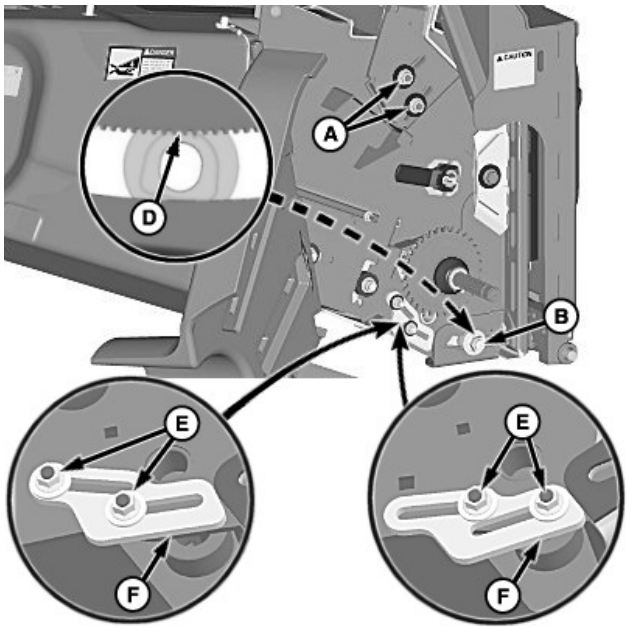
Move lever down to close stone trap. Retain with quick-lock pin.

OUO6075,000065C-19-01DEC10

Adjust and Set Feeder House Fore/Aft Tilt Frame (Manual Tilt)



H95791—UN—22MAR10



H105003—UN—08MAR12

Rearward Holes (Left) / Forward Holes (Right)

A—Tilt Frame Nuts, M16
B—Tilt Frame Nut, M20
C—Cap Screw
D—Washer Splines
E—Nuts
F—Stop Plate

⚠ CAUTION: Lower header to ground to relieve tension from fore/aft tilt frame turnbuckles. Shut OFF engine, set parking brake and remove key.

Fore/Aft tilt frame is used to set the correct relationship between platform skid plates and the ground. It compensates for different tire sizes, rear axle settings, and other variables.

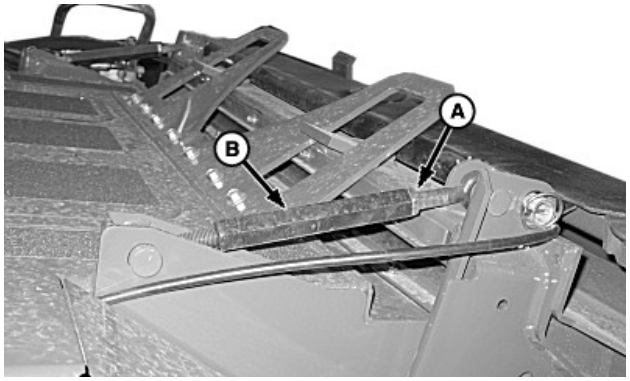
Loosen tilt frame nuts (A) and nut (B) on both sides.

IMPORTANT: Do not loosen cap screw (C).

Disengage washer splines (D) from support plate on both sides.

NOTE: Move right-hand stop plate to rearward mounting holes if needed.

Loosen nuts (E) and move stop plate (F) rearward on both sides.



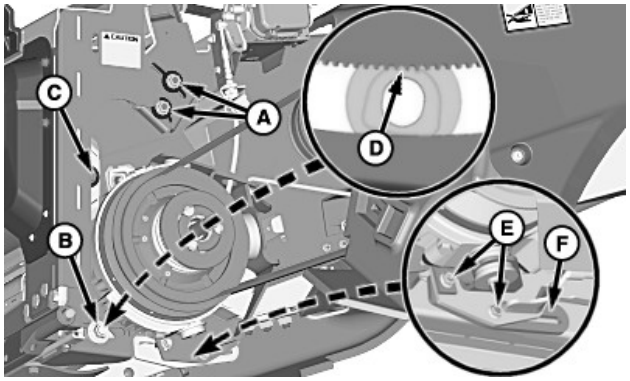
H105751—UN—05SEP12

A—Nut
B—Turnbuckle

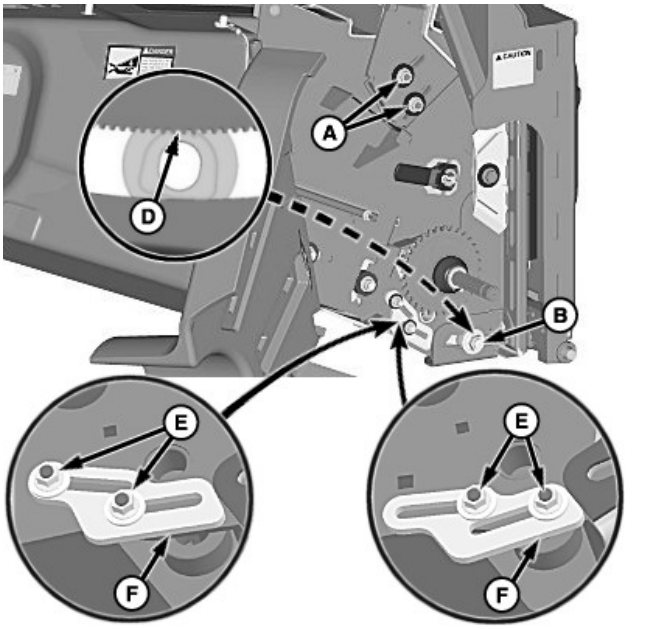
IMPORTANT: Hose clamp on multi-coupler may need to be repositioned when adjusting fore/aft tilt frame.

Loosen nut (A) and adjust turnbuckle (B) on both sides as needed for correct header angle.

Tighten turnbuckle nut on both sides.



H95791—UN—22MAR10



H105003—UN—08MAR12

Rearward Holes (Left) / Forward Holes (Right)

A—Tilt Frame Nuts, M16
B—Tilt Frame Nut, M20
C—Cap Screw
D—Washer Splines
E—Nuts
F—Stop Plate

Engage washer splines (D) into support plate and tighten tilt frame nuts (A and B) on both sides to specification.

Specification

M16 Tilt Frame Nuts
(A)—Torque. . . . . 300 N·m (221 lb.-ft.)
M20 Tilt Frame Nut (B)—Torque. . . . . 620 N·m (460 lb.-ft.)

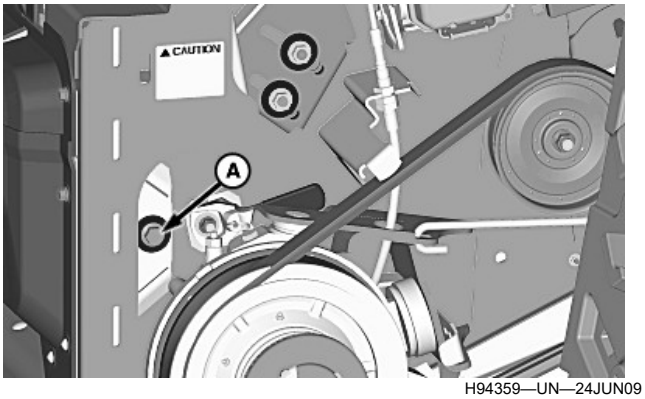
IMPORTANT: No gap should exist between stop plates and fore/aft tilt frame after tightening nuts.

NOTE: Attach right-hand stop plate to forward or rearward holes as needed.

Move stop plate (F) fully forward on both sides and tighten nuts (E) to specification.

Specification

Stop Plate Nuts—Torque. . . . . 130 N·m (96 lb.-ft.)



H94359—UN—24JUN09

A—Pivot Bolt

Tilt frame is set to an approximate position at factory, but if tires or axle positions are changed or ground conditions change (soft ground), it may be necessary to readjust.

An approximate setting can be obtained without a header attached by the following:

- With machine on a smooth level surface, lower or raise feeder house until pivot bolt (A) to ground distance is set to specification.

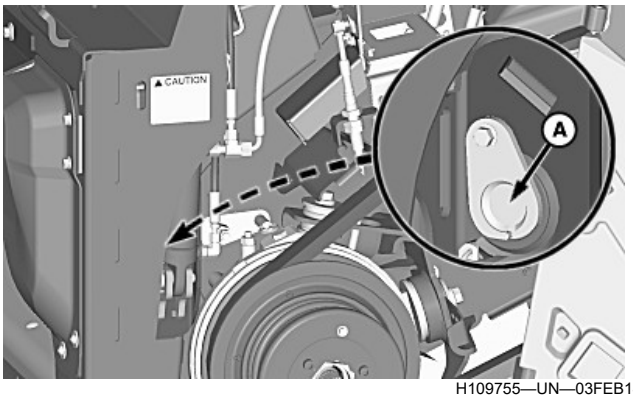
Specification

Pivot Bolt To Ground—Distance. . . . . 903 mm (35-1/2 in.)

- Using a level as a reference, adjust fore/aft tilt frame until front face is vertical.

OUO6075,0001757-19-12MAR14

Set Feeder House Fore/Aft Tilt Frame Zero Point (Hydraulic Tilt) (If Equipped)



H109755—UN—03FEB14

A—Pivot Pin

CAUTION: Alert others around the machine to stay clear while calibration is being performed.

Fore/Aft tilt frame is used to set the correct relationship between platform skid plates and the ground. It compensates for the different tire sizes, rear axle settings, and other variables.

Tilt frame is set to an approximate position at factory, but if tires or axle positions are changed or ground conditions change (soft ground), it may be necessary to readjust zero point.

NOTE: If field conditions are normal, calibration can be done on level concrete.

If field conditions are soft (leaving ruts), calibration MUST be done in a level location in the field.

An approximate setting can be obtained without a header attached. See Calibrations Application Help or Operator's Station Help to calibrate Feeder House Tilt Fore/Aft Range. During calibration, set zero point by measuring the following:

- **Tilt fore/aft frame fully forward.** Lower or raise feeder house until pivot pin (A) to ground distance is set to **1016 mm (40 in)**.
- Using a level as a reference, adjust fore/aft tilt frame until front face is vertical.

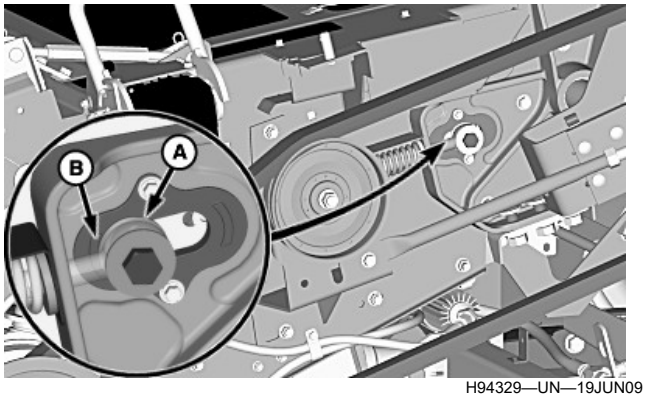
NOTE: This fore/aft frame adjustment changes the pivot pin to ground distance from 1016 mm (40 in) to the desired specification distance.

Specification

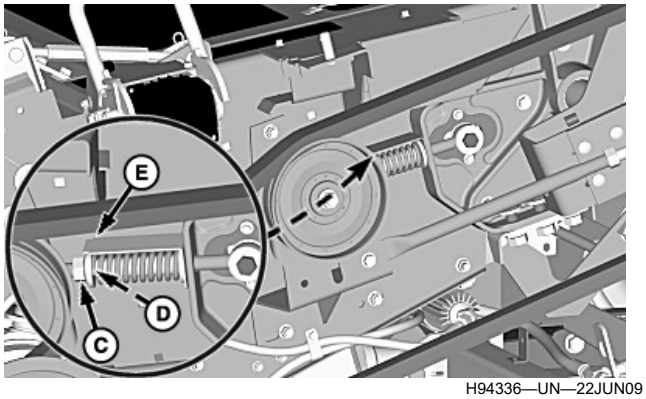
Pivot Pin To Ground—Distance. . . . . 903 mm (35-1/2 in.)

OUO6075,00045FF-19-22FEB17

Feeder House Conveyor Chain—Adjusting



H94329—UN—19JUN09



H94336—UN—22JUN09

A—Washer
B—Embossment
C—Nut
D—Washer
E—Gauge

Remove feeder house shields on both sides.

One offset link on each chain strand must be removed when washer (A) aligns with inner edge of front embossment (B) as shown.

Tighten nut (C) on both sides of feeder house until washer (D) is between end of gauge (E) and bottom of step.

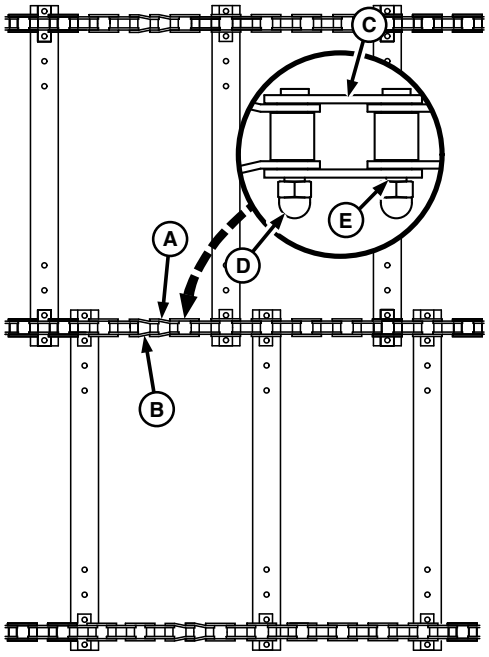
NOTE: Check tension on both sides every 25 hours for the first 100 hours.

- Check tension on both sides every 100 hours. Adjust when any part of washer is beyond end of gauge.
- Out-of-round sprockets or drum and bent shafts can cause chain tension to be uneven, too tight, or too loose.
- Excessive chain tension causes shaft and bearing failures.

Install feeder house side shields.

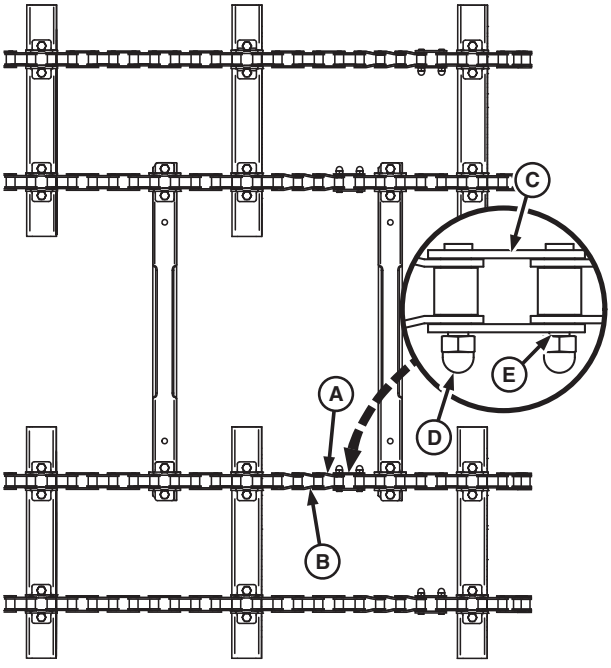
OUO6075,000067C-19-22NOV10

Feeder House Conveyor Chain Links—Removing



H87543—UN—17APR07

Three Strand Feeder House Conveyor Chain



H109687—UN—30JAN14

Four Strand Feeder House Conveyor Chain

A—Offset Link
B—Offset Link
C—Sidebar
D—Cap Nut
E—Gap, 1—2 mm (3/64 in.—5/64 in.)

NOTE: Three strand feeder house conveyor chain is only available on HillMaster™ machines.

When replacing chain links always check sprockets for wear.

Remove offset links (A) for initial chain adjustment.

Remove offset links (B) for second adjustment. When adjustment is used up from second adjustment, chain is worn out and must be replaced.

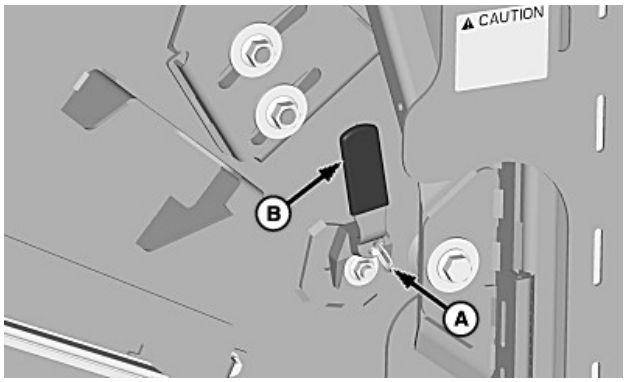
Specification	
"U" Slat M10 Hardware—Torque	73 N·m (54 lb.-ft.)
Chain Link M8 Cap Nuts—Torque	25 N·m (18 lb.-ft.)

IMPORTANT: When installing connector links, cap nuts must be oriented away from drum rings.

When chain link cap nuts (D) are torqued to specification, gap (E) should exist between connector link sidebar (C) and cap nut.

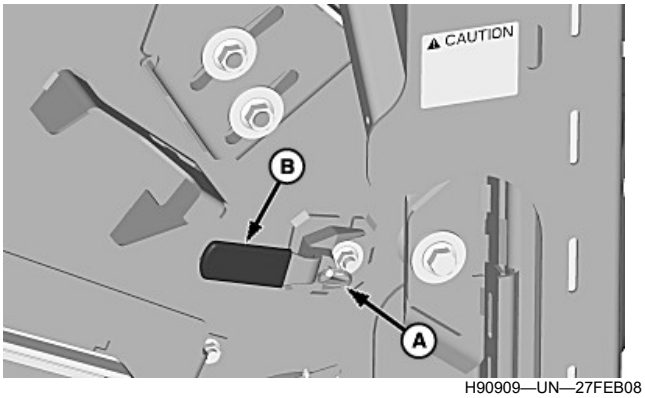
OUO6075,0001755-19-03FEB14

Feeder House Drum (Manual Tilt)—Height Adjustment



H90908—UN—27FEB08

Corn Only Position



H90909—UN—27FEB08

Small Grain Position

HillMaster is a trademark of Deere & Company

A—Pin
B—Drum Height Handle

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

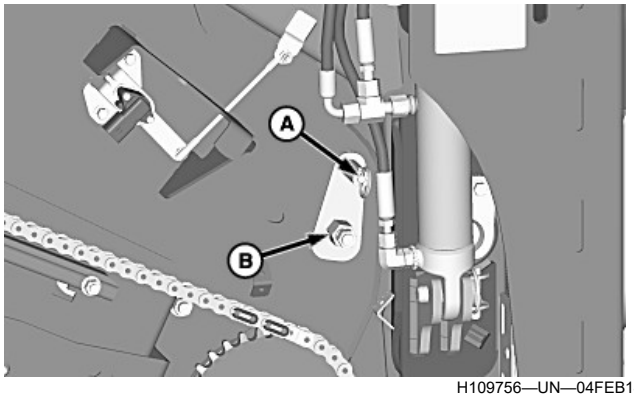
Open feeder house shields.

Pull and hold pin (A) while rotating handle (B) to desired crop position on both sides.

Close feeder house shields.

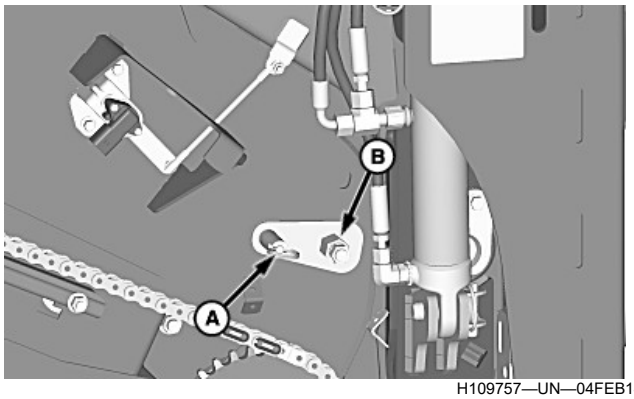
SS43267,0000377-19-18FEB14

Feeder House Drum (Hydraulic Tilt) (If Equipped)—Height Adjustment



H109756—UN—04FEB14

Corn Only Position



H109757—UN—04FEB14

Small Grain Position

A—Pin
B—Drum Height Handle

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

Open feeder house shields.

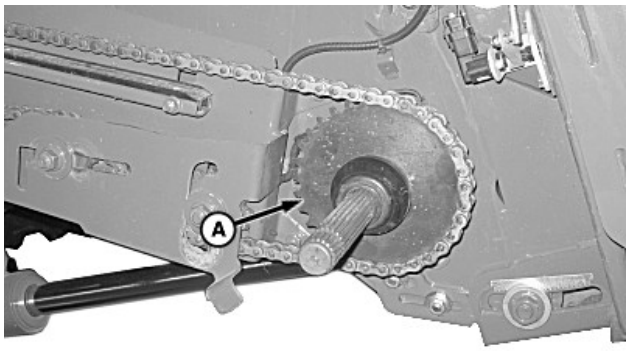
Pull and hold pin (A) while rotating drum height handle (B) to desired crop position on both sides.

NOTE: Use a socket or wrench to rotate drum height handle.

Close feeder house shields.

SS43267,00004EA-19-05MAR15

Feeder House Conveyor Speed—Changing



H102187—UN—13JUN11

A—Sprocket

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set parking brake and remove key.

NOTE: Refer to Crop Settings section for recommended feeder house conveyor sprocket settings.

Important Notes About 32-Tooth Sprocket:

- Sprocket is not recommended for corn use.

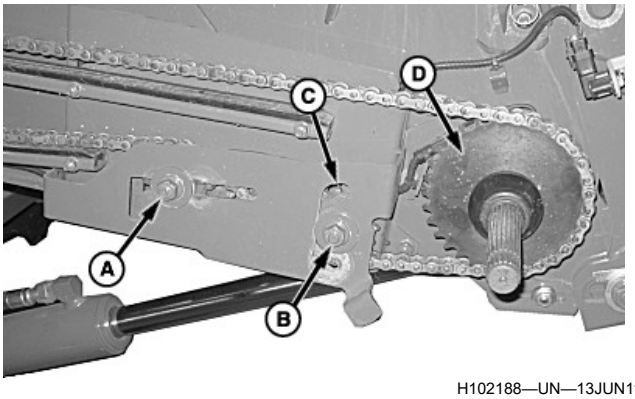
Recommended for conditions when feeding is poor due to following crops and conditions:

- **Crops:** Barley, Canola, Oats, Rice, Rye, and Wheat
- **Conditions:** High Volume, Green, Wet, Windrowed, and Poor Feeding

As crop conditions change or feeding improves (dryer, more even windrows, lighter straw), it is recommended to use the 26 tooth sprocket. Chain speed slows and reduces potential for straw damage or pre-threshing and extends chain life.

Feeder conveyor chain can be set to two different speeds by selecting drive sprocket (A) on right-hand side of the lower shaft.

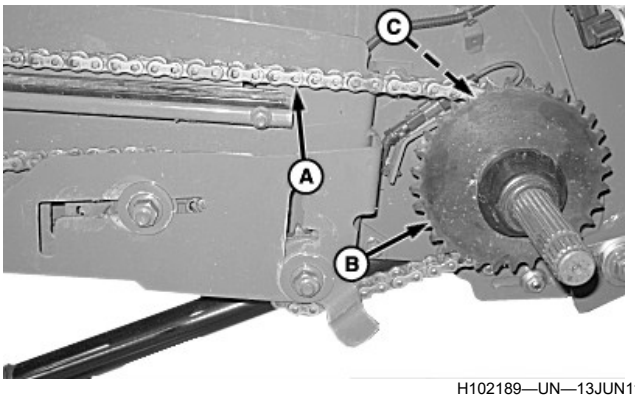
Use small sprocket for slow speed and large sprocket for high speed.



H102188—UN—13JUN11

A—Nut
B—Nut
C—Upper Position
D—Sprocket

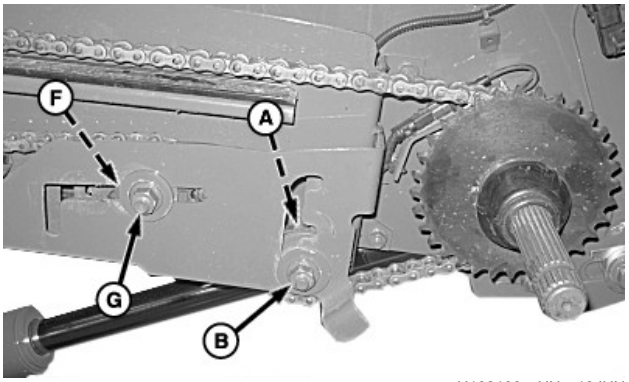
1. **To move drive chain to smaller sprocket:** Open right-hand front shield.
2. Loosen nut (A) and push sprocket rearward.
3. Loosen nut (B) and move sprocket to upper position (C).
4. Push in on coupler and move sprocket (D) outward until it engages detent.



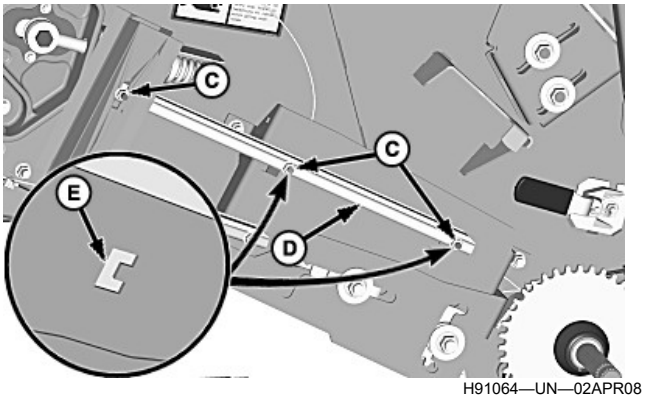
H102189—UN—13JUN11

A—Chain
B—Large Sprocket
C—Small Sprocket

5. Move chain (A) from large sprocket (B) to small sprocket (C).



H102190—UN—13JUN11



H91064—UN—02APR08

A—Sprocket
B—Nut
C—Nuts
D—Chain Guide
E—Notches
F—Sprocket
G—Nut

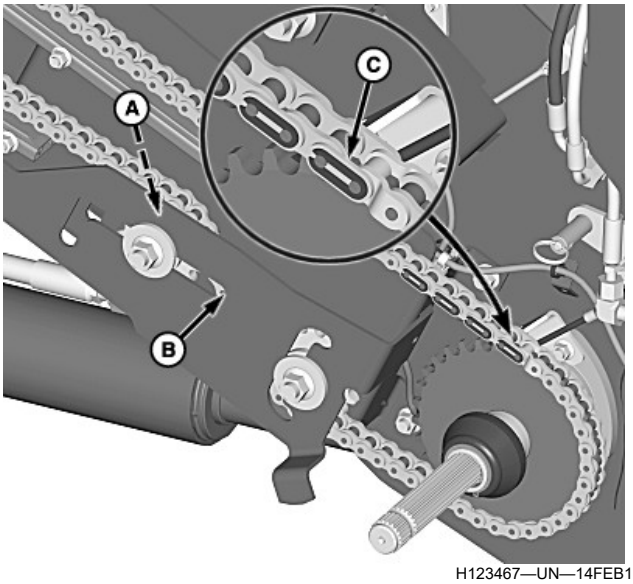
6. Move sprocket (A) to lower position and tighten nut (B).
7. Loosen nuts (C) and slide chain guide (D) into desired notches (E) and tighten nuts.

NOTE: Do not over tighten feeder conveyor drive chain. It is acceptable for chain to ride on plastic guide.

8. Use pry bar in holes of inside plate to move sprocket (F) forward and tighten nut (G).
9. Close right-hand front shield.

OUO6075,0000661-19-13JUN11

Feeder House Conveyor Drive Chain Links —Removing



H123467—UN—14FEB18

A—Sprocket
B—End of Slot
C—Connector Link

It is normal for the drive chain to stretch over time. Additional connector links allow the drive chain to be used longer.

NOTE: When removing connector links, always check sprockets for wear.

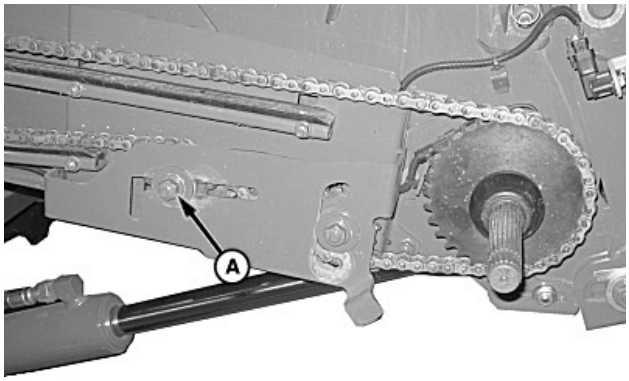
When the sprocket (A) reaches the end of slot (B) remove connector link (C).

See Feeder House Conveyor Drive Chain—Adjusting for further information.

When the final adjustment is used up, the chain is worn out and must be replaced.

OUO6075,00048B0-19-04JUN19

Feeder House Conveyor Drive Chain—Adjusting



H102191—UN—13JUN11

A—Nut

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set parking brake and remove key.

Open right-hand front shield.

Loosen nut (A) and push sprocket rearward.

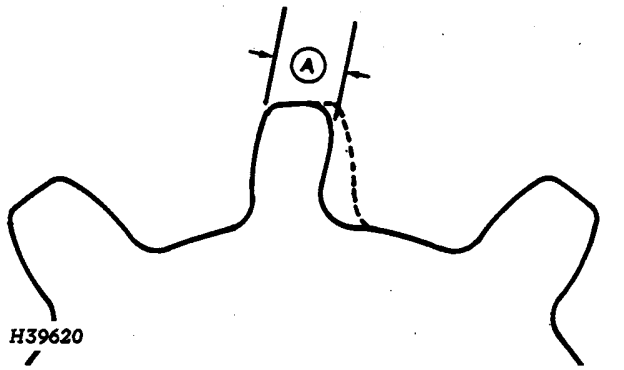
NOTE: Do not over tighten feeder conveyor drive chain. It is acceptable for chain to ride on plastic guide.

Use pry bar in holes on inside plate to move sprocket forward and tighten nut (A).

Close right-hand front shield.

OUO6075,0000662-19-13JUN11

Feeder House Top Shaft Sprockets



H39620—UN—11OCT88

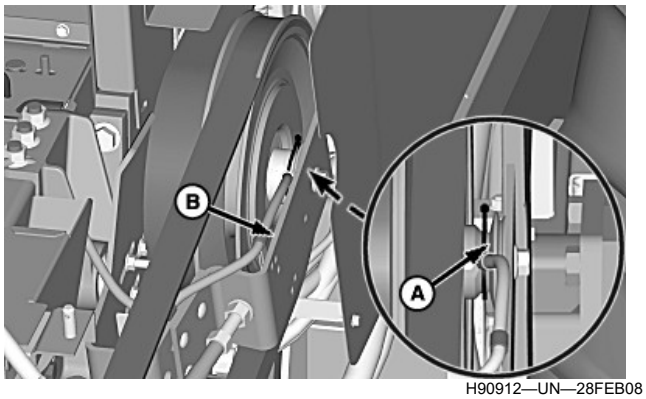
A—Dimension 12 mm (1/2 in.)

After 1000 hours, depending on the crops being harvested, check the upper shaft sprockets for wear.

If these sprockets are worn past 12 mm (1/2 in.) (A), sprockets can be reversed for additional wear.

OUO6075,0000665-19-02FEB10

Feeder House Variable Speed Drive Belt—Replacing



H90912—UN—28FEB08

A—Rubber Boot
B—Bracket

CAUTION: Lower variable sheave is under spring tension; if belt is removed, it will snap back to a closed position.

Start engine, engage separator and move engine speed switch to fast idle. **Adjust feeder house drive belt to slow front shaft speed.**

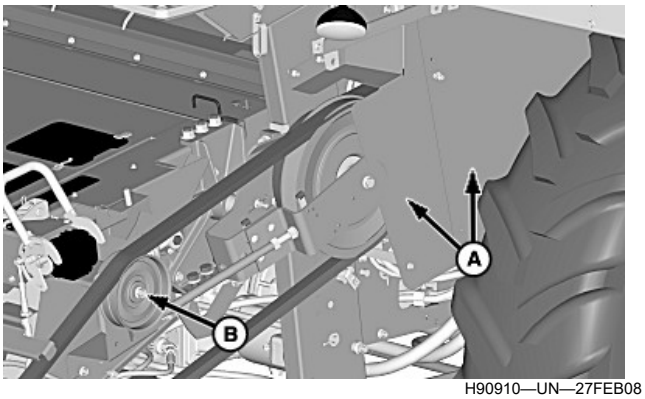
CAUTION: Shut OFF engine, set parking brake and remove key.

Disengage separator, stop engine, and remove key.

Lower safety stop and remove left-hand feeder house shields.

Look under rubber boot (A) to verify if upper sheaves

are fully open. At low speed position, outer sheave half bulb is against bracket (B).

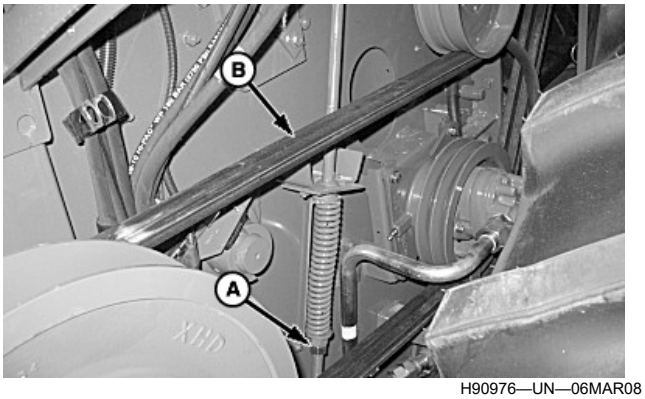


H90910—UN—27FEB08

A—Shields
B—Nut

Remove shields (A).

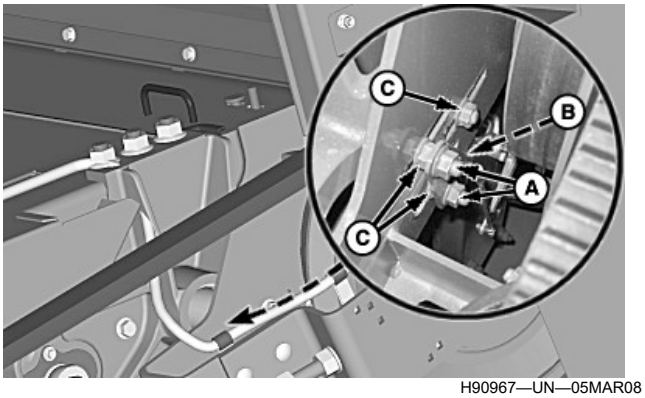
Loosen idler nut (B) to relieve drive belt tension.



H90976—UN—06MAR08

A—Nut
B—Drive Belt

Loosen nuts (A) to relieve tension on reel drive belt (B).

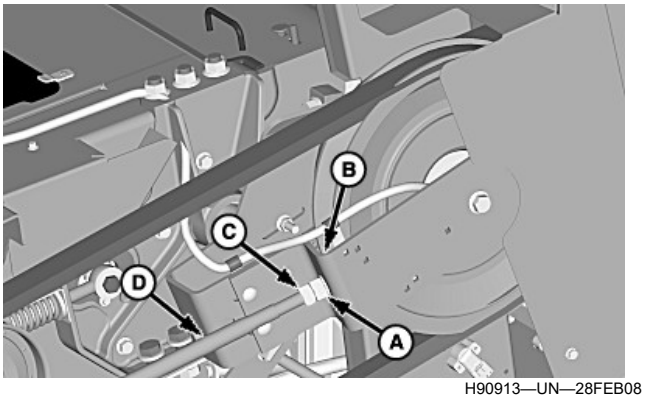


H90967—UN—05MAR08

A—Nuts (2 Used)
B—Bracket
C—Nuts (3 Used)

Remove and retain nuts (A) and bracket (B).

Loosen nuts (C) to allow upper sheave assembly to move.



H90913—UN—28FEB08

A—Nut
B—Bracket
C—Nut
D—Tensioner

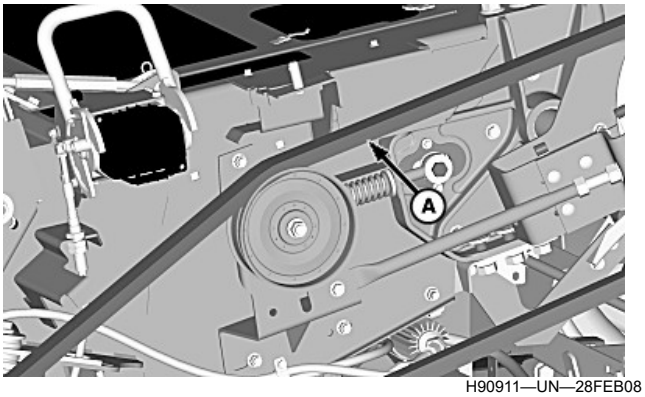
NOTE: Nut (C) must be moved and jammed against nut (A). Together these nuts can be used to turn tensioner bolt.

Loosen nut (A) away from bracket (B) until a 3 mm (1/8 in.) gap exists between either side of bracket.

Tighten nut (C) against nut (A).

NOTE: Threading bolt into tensioner allows sheave to move forward to remove drive belt.

Use nut (A) to screw threaded bolt into tensioner (D).



H90911—UN—28FEB08

A—Drive Belt

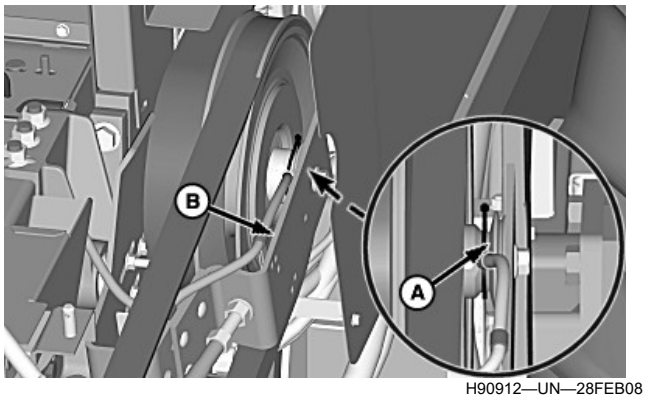
Remove drive belt (A) from sheaves.

Install replacement drive belt and adjust tension. (See Feeder House Variable Speed Belt—Adjusting).

Install bracket and feeder house shields previously removed.

OUO6075,0000666-19-02FEB10

Feeder House Variable Speed Drive Belt—Adjusting



H90912—UN—28FEB08

A—Rubber Boot
B—Bracket

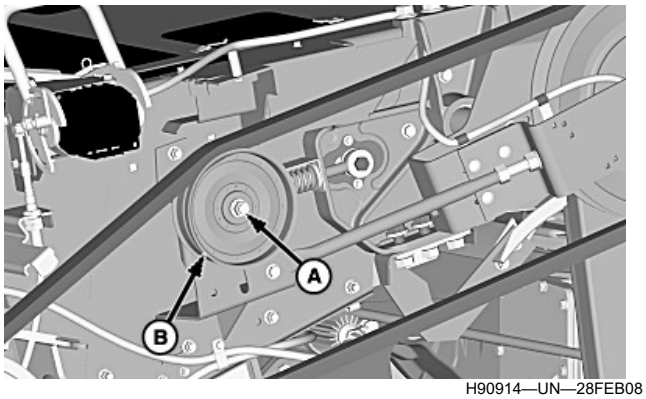
NOTE: Minor adjustments can be made to variable speed belt by raising idler. If a 3 mm (1/8 in.) gap cannot be reached by raising idler, proceed to next step.

Start engine, engage separator and move engine speed switch to fast idle. **Adjust feeder house drive belt to slow front shaft speed.**

Disengage separator, stop engine, and remove key.

Lower safety stop and remove left-hand feeder house shields.

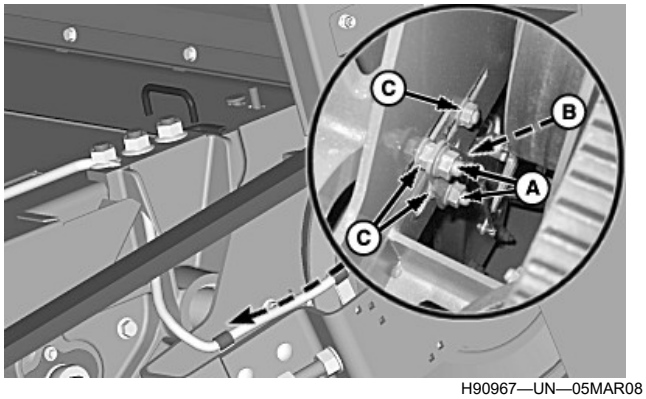
Look under rubber boot (A) to verify if upper sheaves are fully open. At low speed position, outer sheave half bulb is against bracket (B).



H90914—UN—28FEB08

A—Nut
B—Idler

Loosen nut (A) to adjust idler (B) to lower position.

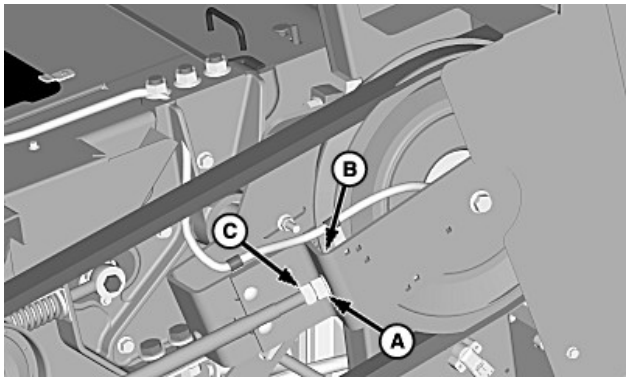


H90967—UN—05MAR08

A—Nuts (2 Used)
B—Bracket
C—Nuts (3 Used)

Remove and retain nuts (A) and bracket (B).

Loosen nuts (C) to allow upper sheave assembly to move.



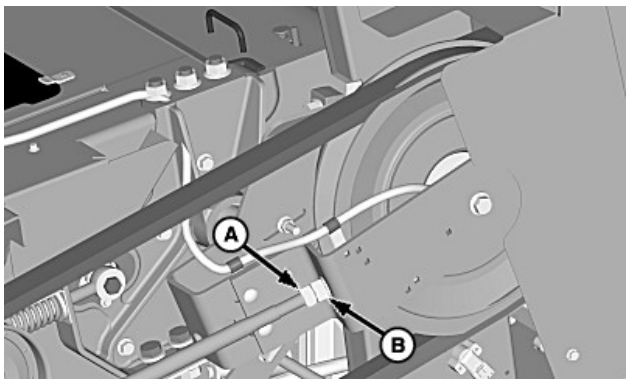
H90915—UN—28FEB08

A—Nut
B—Bracket
C—Nut

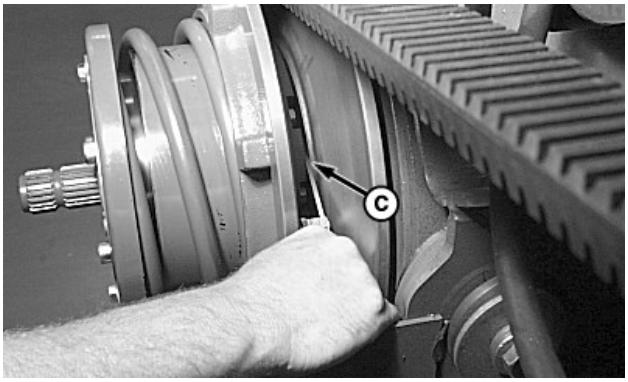
NOTE: Nut (C) must be moved and jammed against nut (A). Together these nuts can be used to turn tensioner bolt.

Loosen nut (A) away from bracket (B) until a 3 mm (1/8 in.) gap exists between either side of bracket.

Tighten nut (C) against nut (A).



H90916—UN—28FEB08



H84140—UN—26JUL05

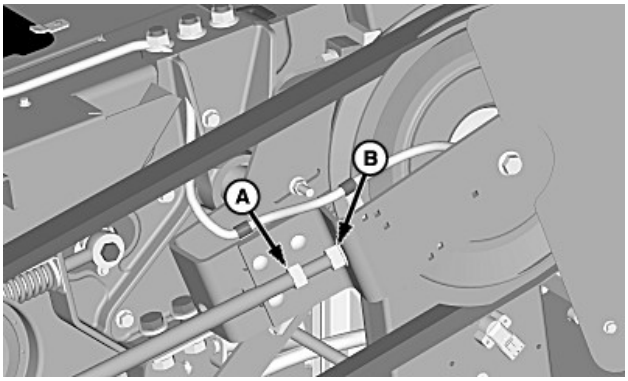
A—Nut
B—Bolt
C—Gap, 3 mm (1/8 in.)

IMPORTANT: Rotate belt while adjusting sheave gap. Failure to rotate belt while adjusting sheave gap results in belt damage.

A gap between sheave halves is important so sheave halves can grip belt when in slow speed position. Cutting platform drive shaft speed must be at slow speed.

Turn nut (A) to adjust bolt (B).

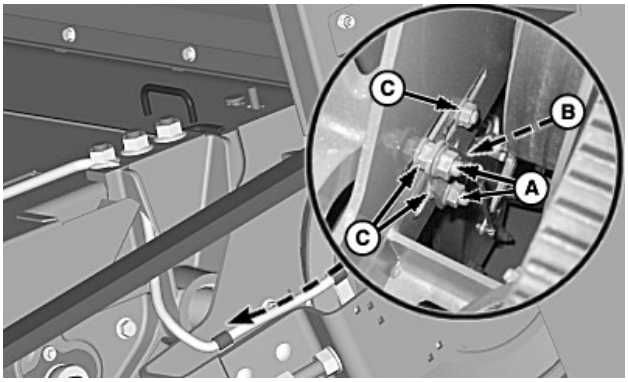
Move upper variable sheaves with bolt until a 3 mm (1/8 in.) gap exists between lower sheave halves or upper sheave assembly reaches end of slots.



H90917—UN—28FEB08

A—Nut
B—Nut

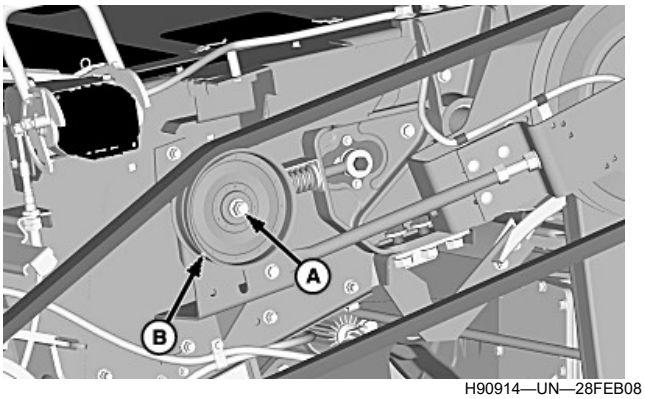
Tighten nut (A) first and then nut (B).



H90967—UN—05MAR08

A—Nuts (2 Used)
B—Bracket
C—Nuts (3 Used)

Tighten nuts (C) and install bracket (B) and retain with nuts (A).



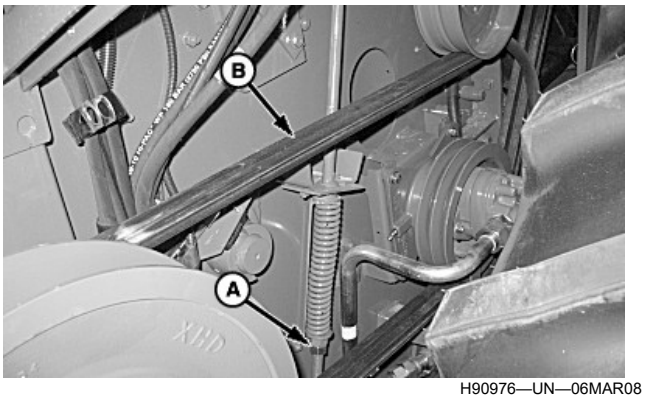
H90914—UN—28FEB08

A—Idler
B—Nut

IMPORTANT: DO NOT stand on belt while pushing up on idler to set gap.

Raise idler (A) until idler touches drive belt.

Raise sheave an additional 25 mm (1 in.) and tighten nut (B).



H90976—UN—06MAR08

A—Nut
B—Drive Belt

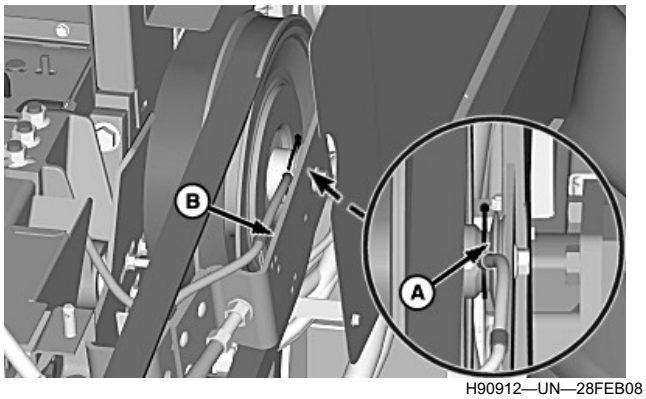
Tighten adjusting nut (A) to position washer between

end of gauge and bottom of step to adjust reel drive belt (B).

Install feeder house shields.

OUO6075,0000667-19-02FEB10

Header Reel/Belt Pickup Pump Belt (Variable Speed Feeder House)—Replacing



H90912—UN—28FEB08

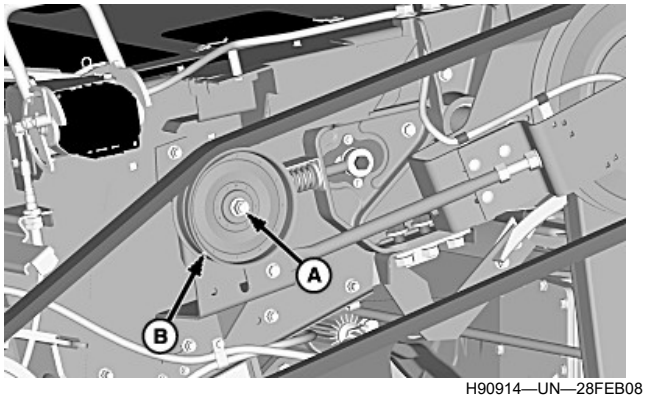
A—Rubber Boot
B—Bracket

CAUTION: Lower variable sheave is under spring tension; if belt is removed, it snaps back to a closed position.

1. Start the engine and engage the separator.
2. Press the fast engine speed switch on the armrest.
3. **Adjust the feeder house drive belt to slow the front shaft speed.**

CAUTION: Shut OFF engine, set park brake, and remove key.

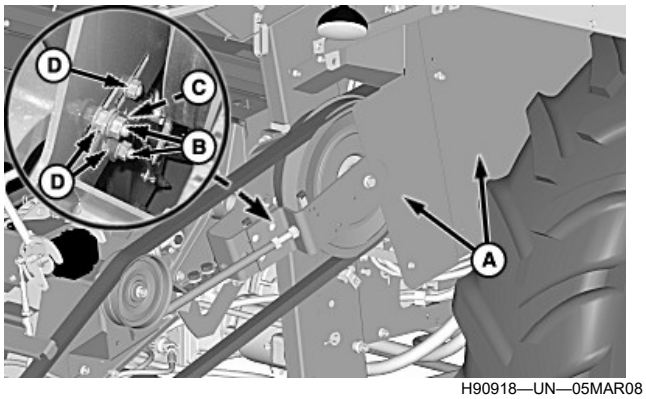
4. Disengage the separator, stop the engine, and remove the key.
5. Lower the safety stop and remove the left-hand feeder house shields.
6. Look under the rubber boot (A) to verify if the upper sheaves are fully open. At the low speed position, the outer sheave half bulb is against bracket (B).



H90914—UN—28FEB08

A—Idler Nut
B—Sheave

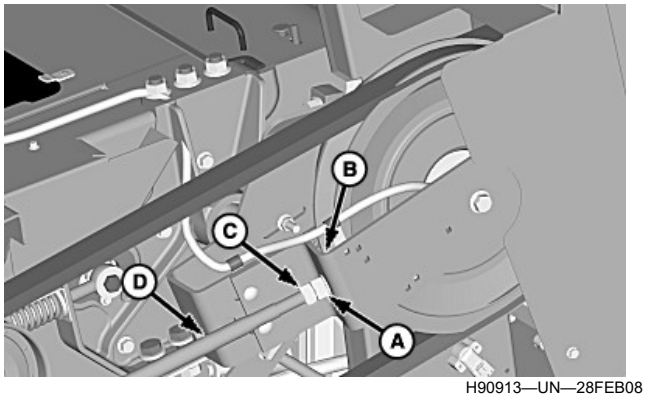
7. Loosen idler nut (A) and slide the sheave (B) down to release the tension on the drive belt.



H90918—UN—05MAR08

A—Shield (2 used)
B—Nut (2 used)
C—Sensor Bracket
D—Nut (3 used)

8. Remove shields (A), nuts (B), and sensor bracket (C).
9. Loosen nuts (D) to allow the upper sheave assembly to move.



H90913—UN—28FEB08

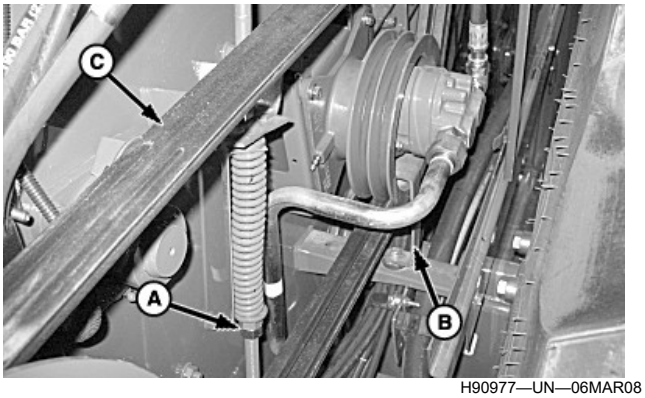
A—Nut
B—Bracket
C—Nut
D—Tensioner Rod

NOTE: Nut (C) must be moved and jammed against nut (A). Together these nuts can be used to turn the tensioner bolt.

10. Loosen nut (A) away from the bracket (B) until a 3 mm (1/8 in) gap exists between either side of the bracket.
11. Tighten nut (C) against nut (A).

NOTE: Threading the bolt into the tensioner allows the sheave to move forward to remove the drive belt.

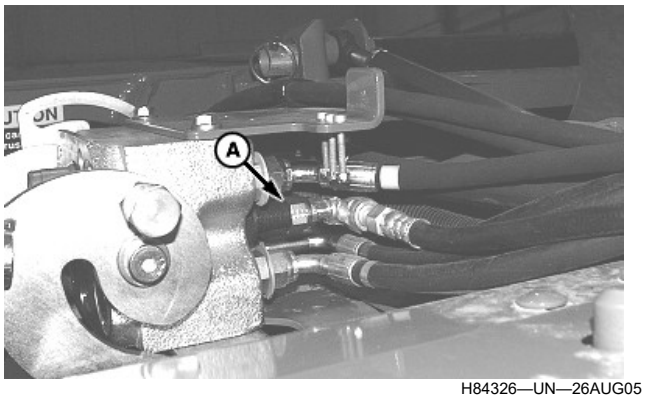
12. Use nut (A) to screw the threaded bolt into the tensioner rod (D).



H90977—UN—06MAR08

A—Nut (2 used)
B—Brace
C—Drive Belt

13. Loosen nuts (A) to relieve the tension from the drive belt.
14. Remove cap screw and nut to move the reel pump brace (B) out of the way so that the drive belt (C) can be removed.

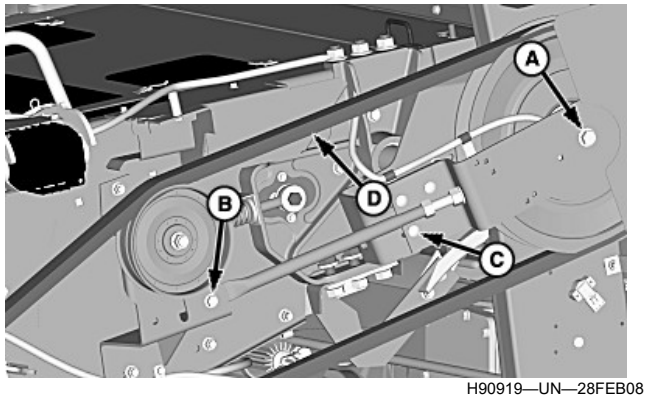


H84326—UN—26AUG05

A—Hydraulic Hose

NOTE: Cap the hydraulic hose to prevent system contamination and fluid loss.

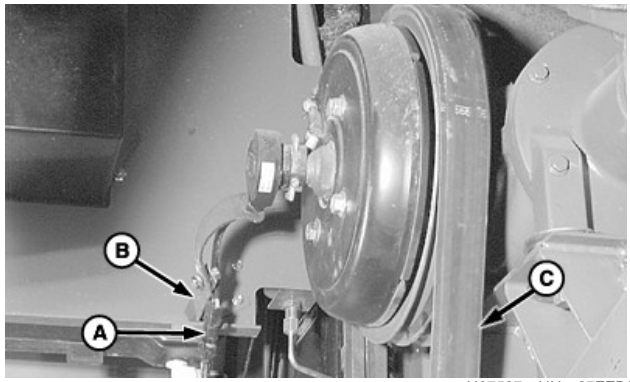
15. Disconnect the hydraulic hose (A) from the multicoupler.



H90919—UN—28FEB08

A—Cap Screw
B—Cap Screw and Nut
C—Round Head Bolt (3 used)
D—Drive Belt

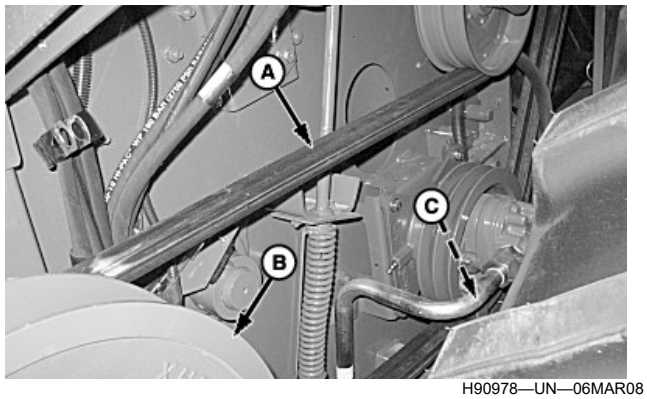
16. Remove cap screw (A), cap screw and nut (B) and round head bolts (C).
17. Remove drive belt (D) from the rear sheave.



H87527—UN—27FEB07

A—Connector
B—Bracket
C—Drive Belt

18. Unplug the connector (A) and remove the strap from the bracket (B).
19. Remove and discard the drive belt (C).
20. Install the replacement drive belt.
21. Connect the strap to the bracket and reconnect the electrical connector.

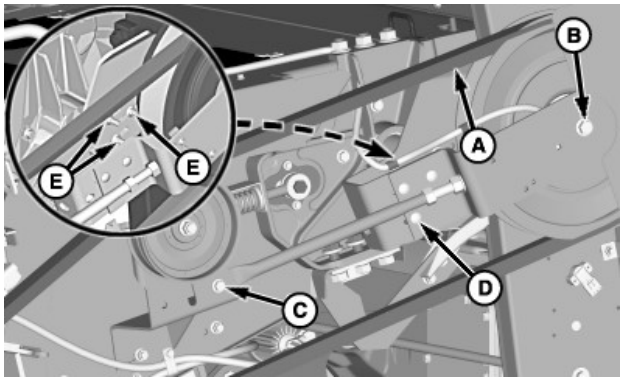


H90978—UN—06MAR08

A—Drive Belt

B—Sheave
C—Brace

22. Install the drive belt (A) around the reel pump and the rear sheave (B).
23. Install the previously removed reel pump brace (C) with the cap screw and nut.



H130511—UN—17JUN20

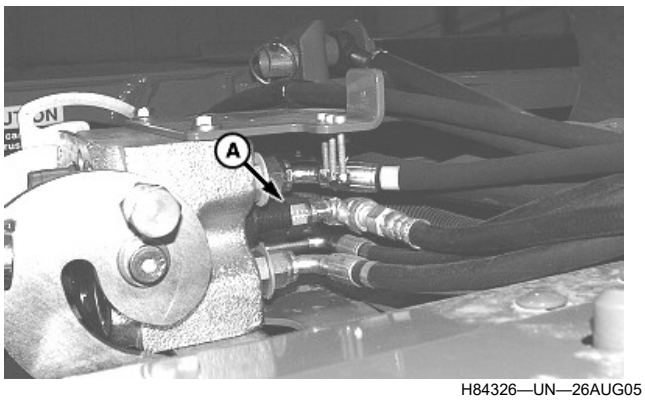
A—Drive Belt
B—Cap Screw
C—Cap Screw and Nut
D—Round Head Bolt (3 used)
E—Nut (3 used)

24. Install the drive belt (A) around the rear sheave.
25. Install cap screw (B) and tighten to specification.

Specification

Cap Screw—Torque. . . . . 185 N·m (136 lb·ft)

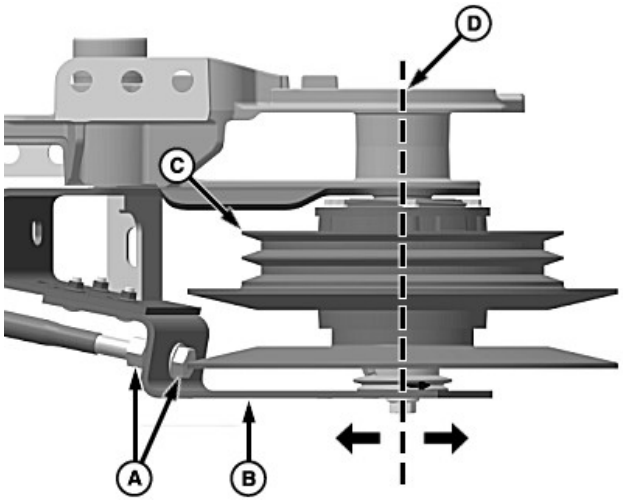
26. Tighten cap screw and nut (C).
27. Leave the round head bolts (D) loose at this time.
28. Tighten nuts (E) to prevent the upper sheave assembly from moving.



H84326—UN—26AUG05

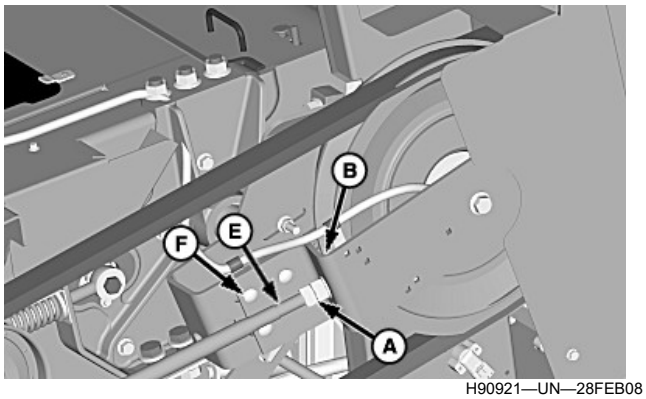
A—Hydraulic Hose

29. Connect the hydraulic hose (A) to the multicoupler.



H122740—UN—15JAN18

Top View



H90921—UN—28FEB08

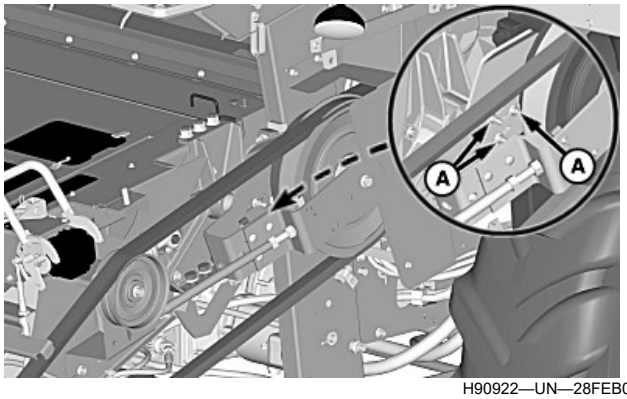
A—Nut (2 used)
B—Outer Strap
C—Sheave (2 used)
D—Side Sheet
E—Tensioner Rod
F—Round Head Bolt (3 used)

NOTE: Check the alignment of the upper countershaft sheaves (C). Make sure that the sheaves are running parallel to the feeder house side sheet. Parallel alignment of the countershaft sheaves must be adjusted by loosening the round head bolts (F) and using the nuts (A) on the tensioner rod (E).

30. Use nuts (A) to turn the tensioner rod (E) to move the outer strap (B) forward or rearward to align sheaves (C). Outer sheaves must be parallel to the feeder house side sheet (D).
31. Tighten round head bolts (F) to specification.

Specification

Round Head Bolts—Torque. . . . . 54 N·m (40 lb·ft)



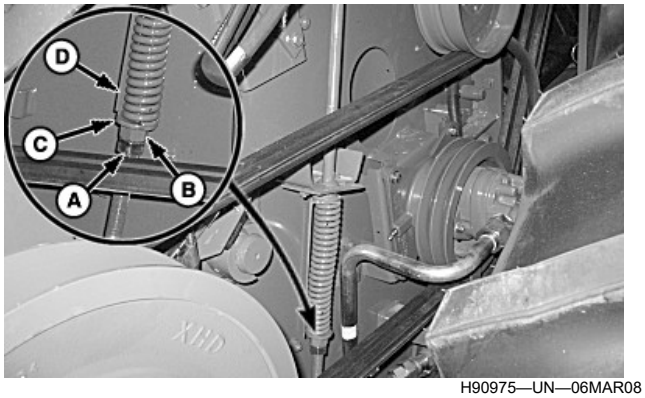
H90922—UN—28FEB08

A—Nut (3 used)

32. Loosen the previously tightened nuts (A). See Feeder House Variable Speed Belt—Adjusting to set the sheave gap.
33. Install the previously removed shields.

OUO6075,0004E88-19-16JUN20

Header Reel/Belt Pickup Pump Belt (Variable Speed Feeder House)—Adjusting



H90975—UN—06MAR08

A—Lock Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set parking brake and remove key.

Loosen lock nut (A).

Tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,0000669-19-02FEB10

Feeder House Fixed Speed Drive Belt—Replacing

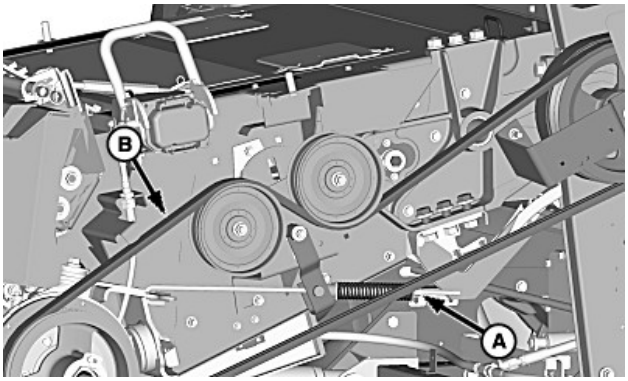
H90923—UN—28FEB08

A—Shields

CAUTION: Shut OFF engine, set parking brake and remove key.

Lower safety stop and remove left-hand feeder house shields.

Remove shields (A).



H90924—UN—28FEB08

A—Nuts
B—Drive Belt

Loosen nuts (A) to relieve tension on drive belt (B).

Remove drive belt from sheaves.

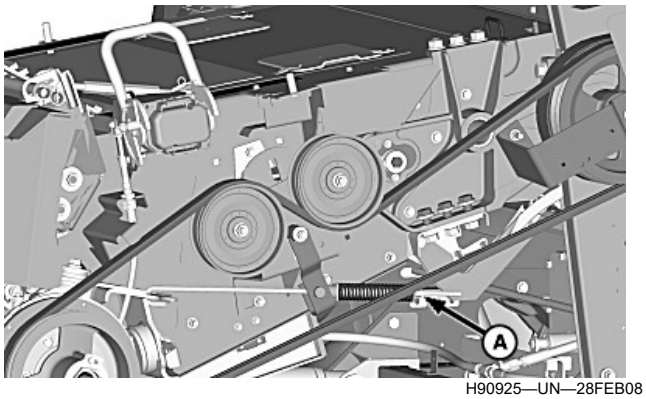
Install replacement drive belt and tighten nuts to position washer between end of gauge and bottom of step.

Swing bracket into position and retain with cap screw and nut.

Install feeder house shields previously removed.

OUO6075,000066A-19-02FEB10

Feeder House Fixed Speed Drive Belt—Adjusting



H90925—UN—28FEB08

A—Nuts

CAUTION: Shut OFF engine, set parking brake and remove key.

Lower safety stop and remove left-hand feeder house shields.

Tighten nuts (A) to position washer between end of gauge and bottom of step.

Install feeder house shields previously removed.

OUO6075,000066B-19-02FEB10

Header Reel/Belt Pickup Pump Belt (Fixed Speed Feeder House)—Replacing

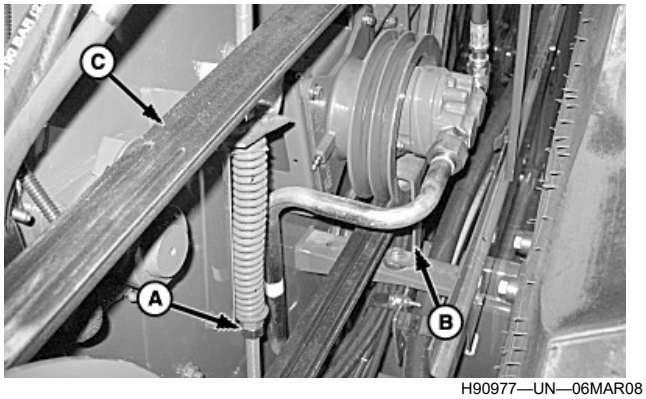
H90923—UN—28FEB08

A—Shields

CAUTION: Shut OFF engine, set parking brake and remove key.

Lower safety stop and remove left-hand feeder house shields.

Remove shields (A).

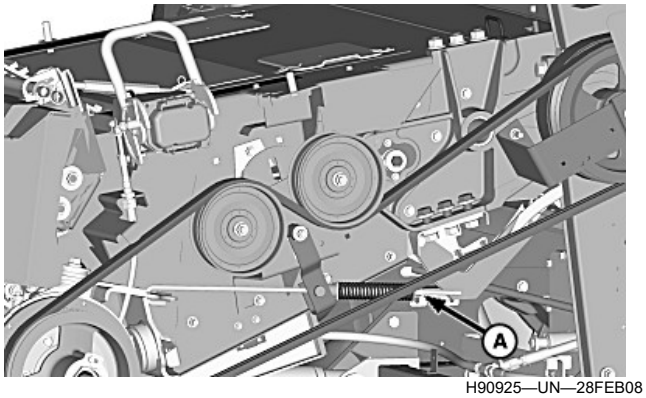


H90977—UN—06MAR08

A—Nuts
B—Brace
C—Drive Belt

Loosen nuts (A) to relieve tension from drive belt.

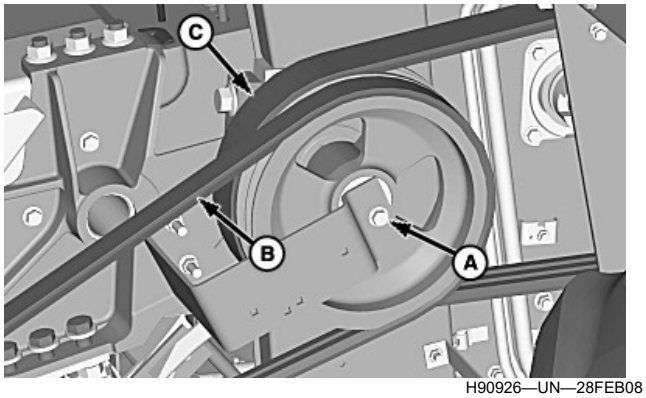
Remove cap screw and nut to move reel pump brace (B) out of way so drive belt (C) can be removed.



H90925—UN—28FEB08

A—Nuts

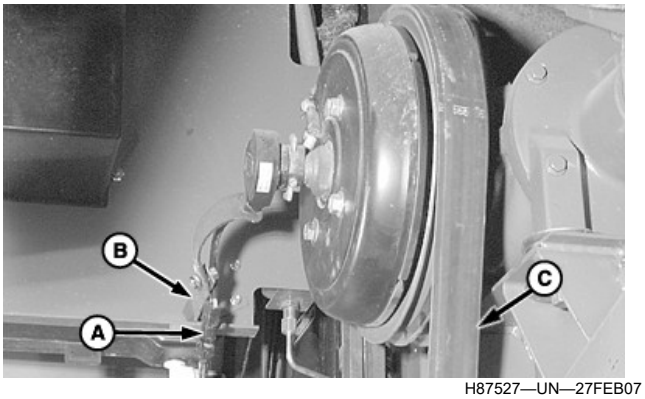
Loosen nuts (A) to relieve tension on drive belt.



H90926—UN—28FEB08

A—Cap Screw
B—Fixed Speed Drive Belt
C—Header Reel/Belt Pickup Pump Belt

Remove cap screw (A), fixed speed drive belt (B) and header reel/belt pickup pump belt (C).



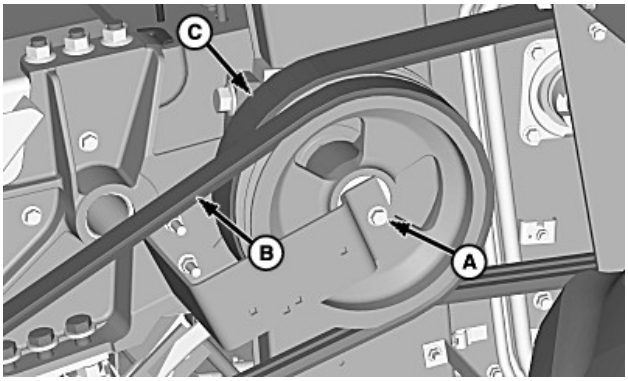
H87527—UN—27FEB07

A—Connector
B—Bracket
C—Header Reel/Belt Pickup Pump Belt

Disconnect connector (A) and remove strap from bracket (B).

Remove and discard header reel/belt pickup pump belt (C).

Install replacement header reel/belt pickup pump belt, connect strap to bracket, and connect electrical connector.



H90926—UN—28FEB08

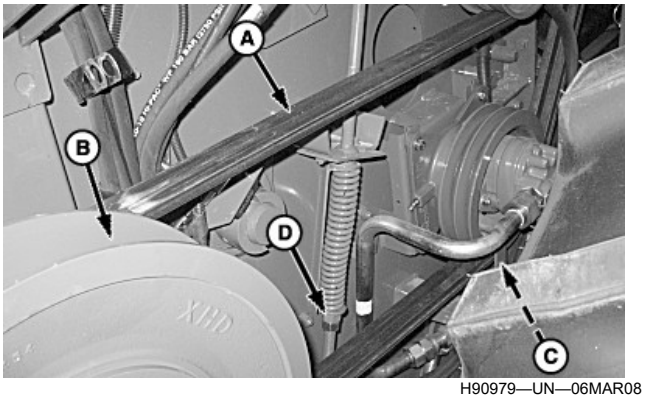
A—Cap Screw
B—Fixed Speed Drive Belt
C—Header Reel/Belt Pickup Pump Belt

Install replacement header reel/belt pickup pump belt (C) and fixed speed drive belt (B).

Install and tighten cap screw (A) to specification.

Specification

Cap Screw—Torque. . . . . 185 N·m (136 lb-ft)



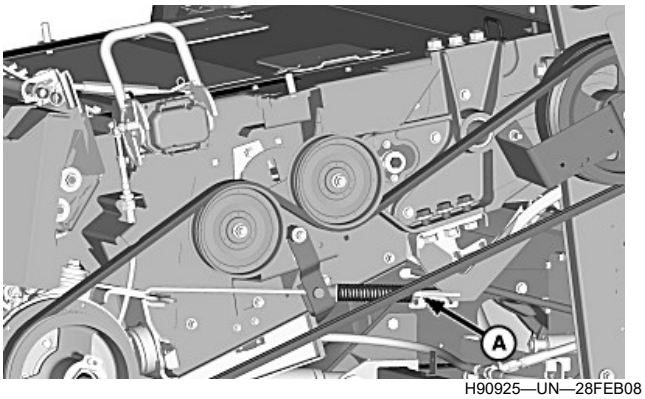
H90979—UN—06MAR08

A—Drive Belt
B—Sheave
C—Brace
D—Nuts (2 Used)

Install drive belt (A) around reel pump and rear sheaves (B).

Install previously removed reel pump brace (C) with cap screw and nut.

Tighten nuts (D) to position washer between end of gauge and bottom of step to adjust drive belt.



H90925—UN—28FEB08

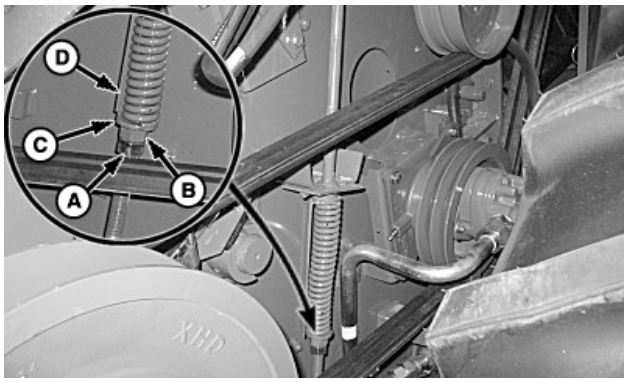
A—Nuts

Tighten nuts (A) to position washer between end of gauge and bottom of step to properly tension drive belt.

Install left-hand feeder house shields.

OUO6075,000066C-19-02FEB10

Header Reel/Belt Pickup Pump Belt (Fixed Speed Feeder House)—Adjusting



H90975—UN—06MAR08

A—Lock Nut
B—Nut
C—Washer
D—Gauge

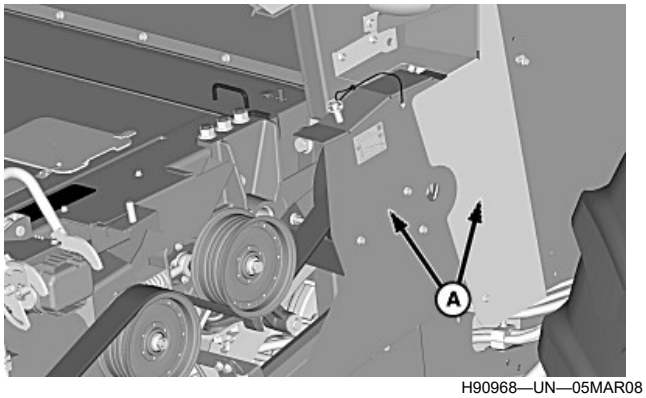
CAUTION: Shut OFF engine, set parking brake and remove key.

Loosen lock nut (A).

Tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,000066D-19-02FEB10

CommandTouch Multi-Speed Feeder House Drive Belt—Replacing



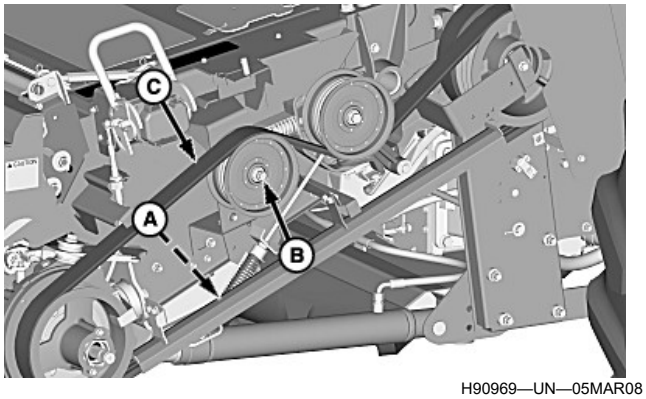
H90968—UN—05MAR08

A—Shields

CAUTION: Shut OFF engine, set parking brake and remove key.

Lower safety stop and remove left-hand feeder house shields.

Remove shields (A).



H90969—UN—05MAR08

A—Nuts
B—Idler Nut
C—Drive Belt

Loosen nuts (A) to relieve tension on drive belt and loosen idler nut (B).

Remove drive belt (C) from sheaves.

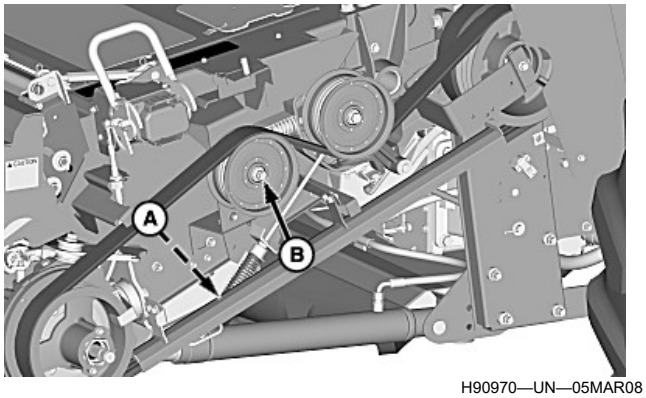
Install replacement drive belt and move idler to 3/4 of way up slot and tighten idler nut.

Tighten nuts to position washer between end of gauge and bottom of step.

Install feeder house shields previously removed.

OUO6075,0000653-19-02FEB10

CommandTouch Multi-Speed Feeder House Drive Belt—Adjusting



H90970—UN—05MAR08

A—Nuts
B—Idler Nut

CAUTION: Shut OFF engine, set parking brake and remove key.

Lower safety stop and remove left-hand feeder house shields.

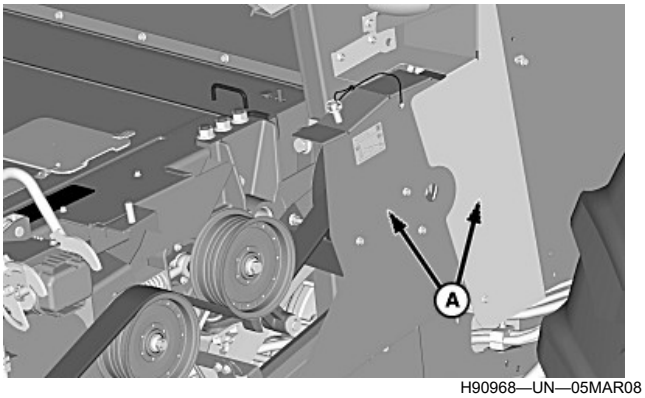
Tighten nuts (A) to position washer between end of gauge and bottom of step.

NOTE: If gauge reaches end of tensioning, loosen idler nut (B) and move idler higher in slot. Tighten nuts to position washer between end of gauge and bottom of step.

Install feeder house shields previously removed.

OUO6075,0000654-19-02FEB10

Header Reel/Belt Pickup Pump Belt (CommandTouch Multi-Speed Feeder House)—Replacing



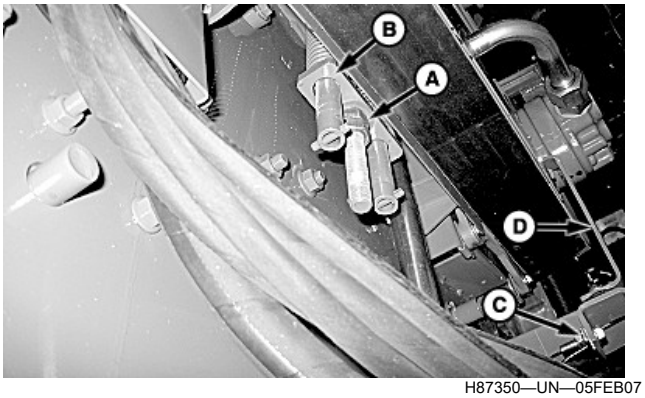
H90968—UN—05MAR08

A—Shields

⚠ CAUTION: Shut OFF engine, set parking brake and remove key.

Lower safety stop and remove left-hand feeder house shields.

Remove shields (A).

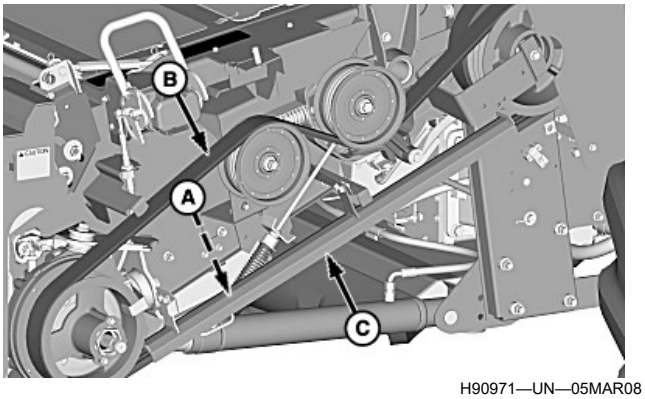


H87350—UN—05FEB07

A—Nuts
B—Spring Tensioner
C—Cap Screw and Nut
D—Brace

Loosen nuts (A) on spring tensioner (B) to relieve tension on drive belt.

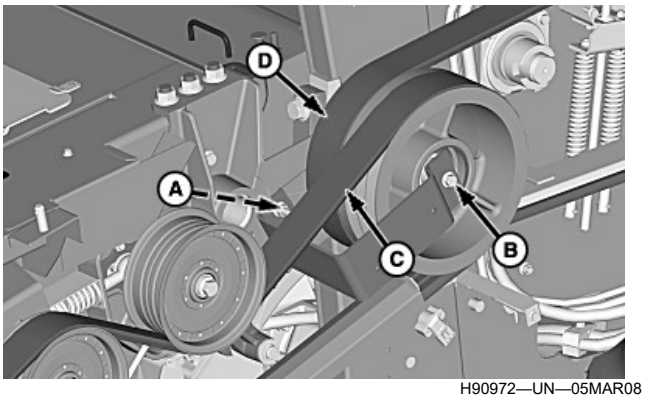
Remove cap screw and nut (C) to move reel pump brace (D) out of way.



H90971—UN—05MAR08

A—Nuts
B—Drive Belt
C—Shield

Loosen nuts (A) to relieve tension on drive belt (B) and remove shield (C).



H90972—UN—05MAR08

A—Sensor Bracket
B—Cap Screw
C—Feeder House Drive Belt
D—Header Reel/Belt Pickup Pump Belt

Remove sensor bracket (A) and cap screw (B).

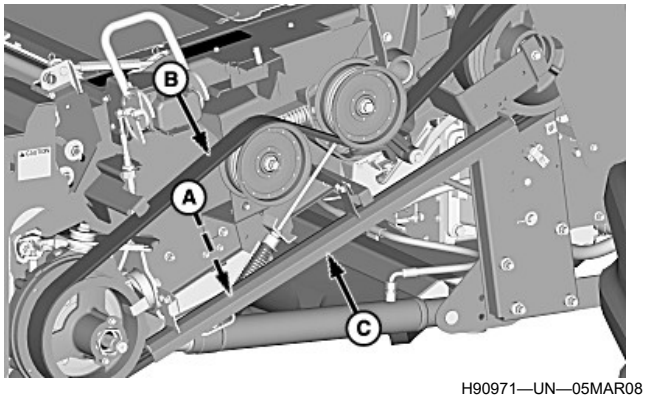
Remove feeder house drive belt (C) from sheaves and header reel/belt pickup pump belt (D).

Install replacement header reel/belt pickup pump belt and feeder house drive belt.

Install sensor bracket and tighten cap screw to specification.

Specification

Cap Screw—Torque	185 N•m (136 lb-ft)

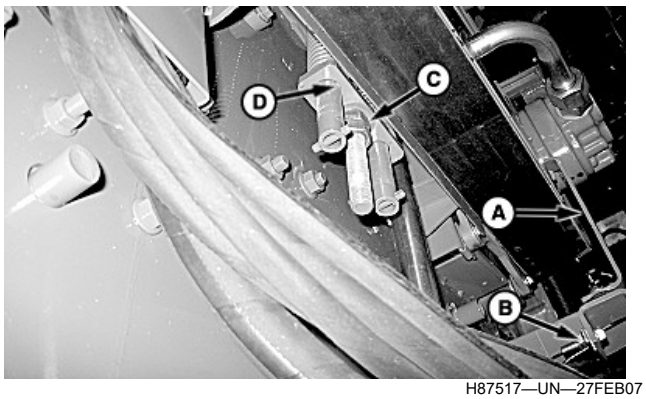


H90971—UN—05MAR08

A—Nuts
B—Drive Belt
C—Shield

NOTE: An equal gap is required on each side of drive belt and belt shield to prevent belt rubbing.

Install previously removed shield (C) and tighten nuts (A) to position washer between end of gauge and bottom of step to properly tension drive belt (B).



H87517—UN—27FEB07

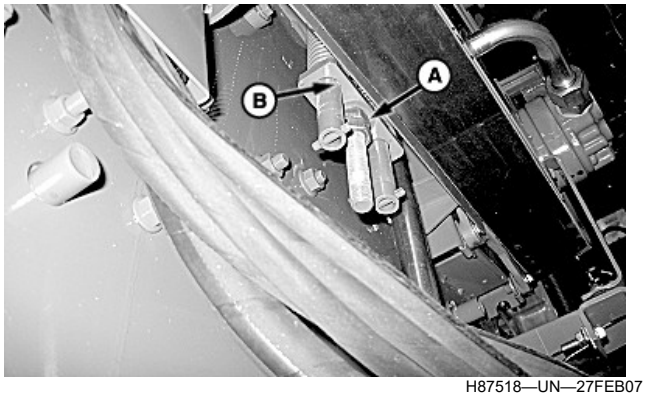
A—Brace
B—Cap Screw and Nut
C—Nuts
D—Holes

Install previously removed reel pump brace (A) and retain with cap screw and nut (B).

Tighten nuts (C) until holes (D) appear through gauge.

OUO6075,0000655-19-02FEB10

Header Reel/Belt Pickup Pump Belt (CommandTouch Multi-Speed Feeder House)—Adjusting



H87518—UN—27FEB07

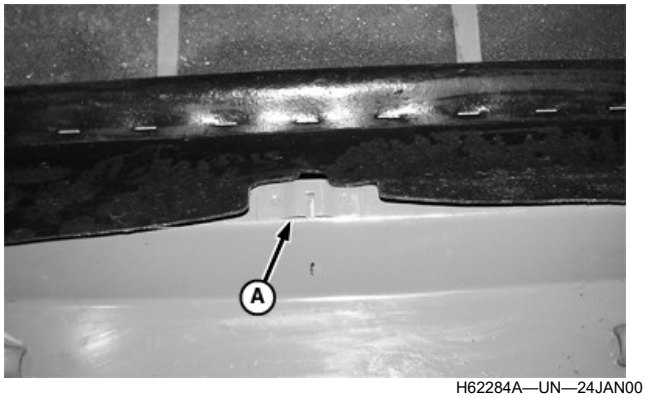
A—Nuts
B—Holes

CAUTION: Shut OFF engine, set parking brake and remove key.

Tighten nuts (A) until holes (B) appear through gauge.

OUO6075,0000656-19-02FEB10

Manual Tilt Indicator (Lateral Tilt System)



H62284A—UN—24JAN00

A—Notch

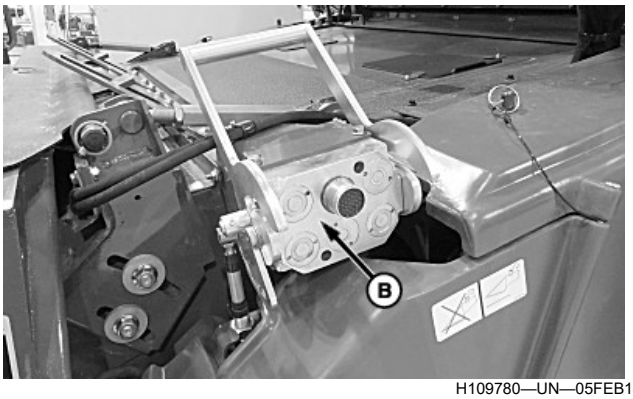
For a quick visual indication of whether header is level with machine chassis, the lateral tilt system is equipped with a manual tilt indicator.

When notch (A) is in center of rubber seal, the header is approximately level with the machine body. Indicator may also be useful as a reference during operation.

OUO6075,000066E-19-02FEB10

Attach Multicoupler and Single-Point Latching

H109779—UN—05FEB14



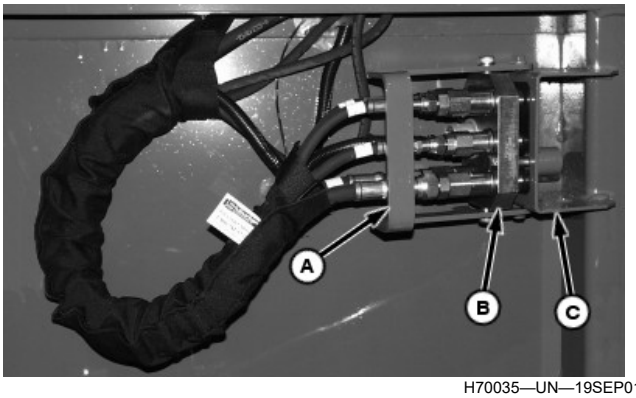
H109780—UN—05FEB14

A—Cover
B—Multicoupler Face

IMPORTANT: Do not actuate the latch pins with the header on the ground. If the multicoupler must be actuated with the header on the ground, unhook the cable from the handle.

To prevent hydraulic system contamination, clean the multicoupler surface with an electrical contact cleaner before connecting.

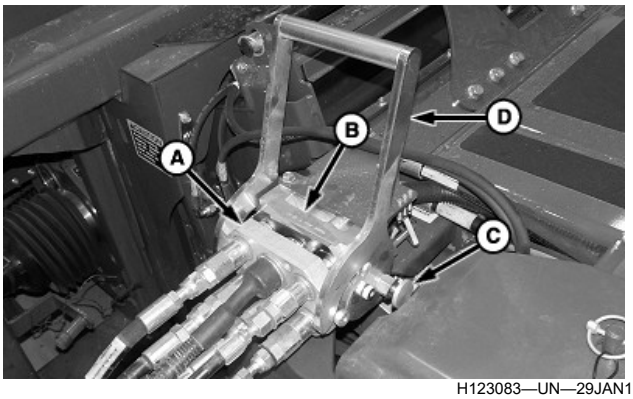
1. Remove the cover (A) and clean the multicoupler face (B).



H70035—UN—19SEP01

A—Handle
B—Multicoupler
C—Storage Bracket

2. Open handle (A) and remove the multicoupler (B) from the storage bracket (C).



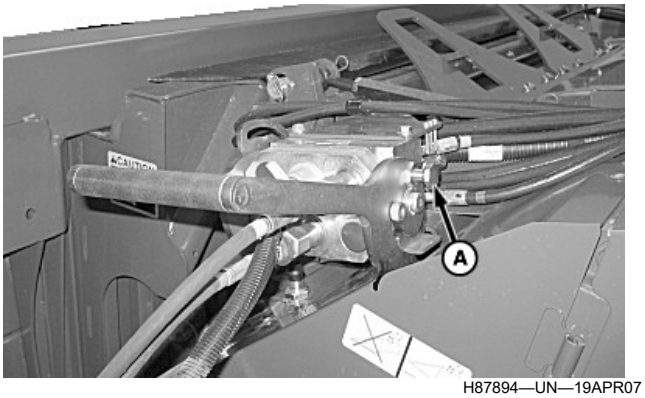
H123083—UN—29JAN18

A—Multicoupler
B—Receptacle
C—Knob
D—Handle

IMPORTANT: To prevent hydraulic system contamination, clean the multicoupler surfaces with an electrical contact cleaner before connecting.

NOTE: To prevent damage to the latching cable, a shear screw is attached to the handle. Attempts to actuate the latching pins with the header on the ground results in screw shearing. See Shear Screw Location later in this section.

3. Install the multicoupler (A) onto the receptacle (B).
4. Pull and hold the knob (C) to close the handle (D).

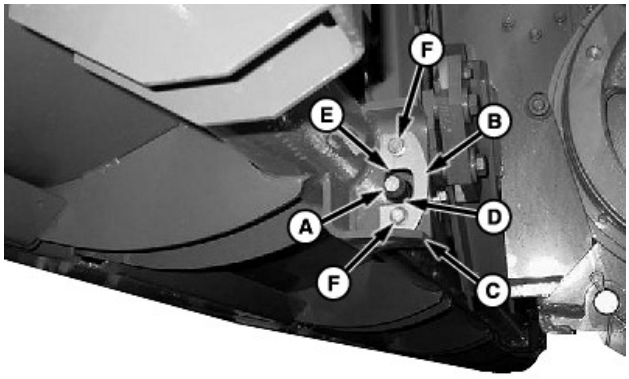


H87894—UN—19APR07

A—Knob

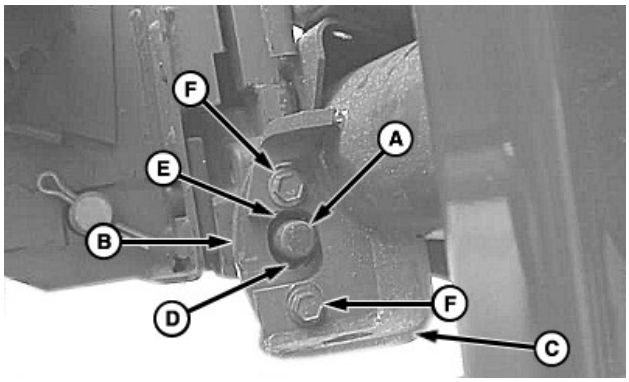
IMPORTANT: Failure to close the multicoupler fully so the knob can engage could result in the header falling off while harvesting or transporting.

5. When the multicoupler handle is fully closed, the knob (A) automatically locks the couplers together.



H81307—UN—28JUN04

Inside Latch Plate (M10 Cap Screws)



H81308—UN—28JUN04

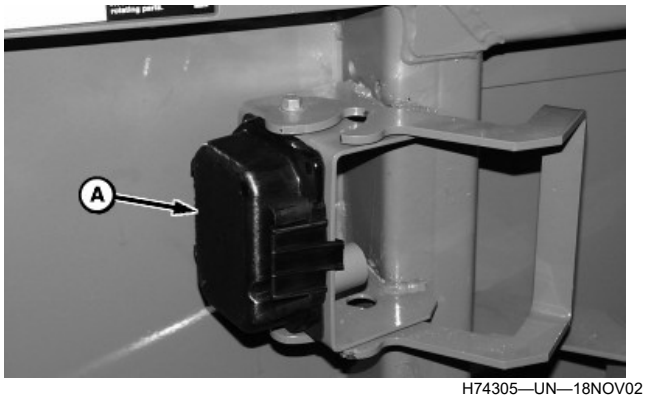
Outside Latch Plate (M12 Cap Screws)

A—Latch Pin
B—Latch Plate
C—Frame
D—Lower Gap
E—Upper Gap
F—Cap Screw (2 used)

NOTE: With the header attached, the latch pins must move freely through the latch plate holes. If the latch pins do not extend through the latch plates, make sure that the latching plates on the header are properly adjusted.

6. Latch pins (A) must move freely through the latch plate holes in the header when the multicoupler is latched. Latch plate (B) must contact frame (C). Less clearance must be maintained between the lower gap (D) of the plate and the latch pin rather than the upper gap (E) of the plate and latch pin. This may require the latch plate to be flipped.
7. **If adjustment is needed:** Remove cap screws (F), flip the plate end for end, and reinstall.
8. Tighten cap screws to specification.

Specification	
Inside Latch Plate (M10 Cap Screws)—Torque	80 N·m (60 lb·ft)
Outside Latch Plate (M12 Cap Screws)—Torque	130 N·m (96 lb·ft)



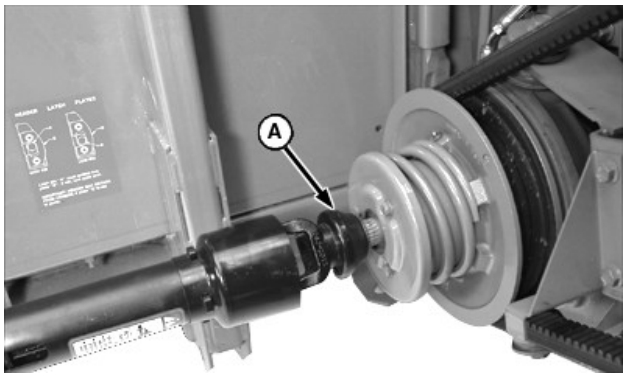
H74305—UN—18NOV02

A—Cover

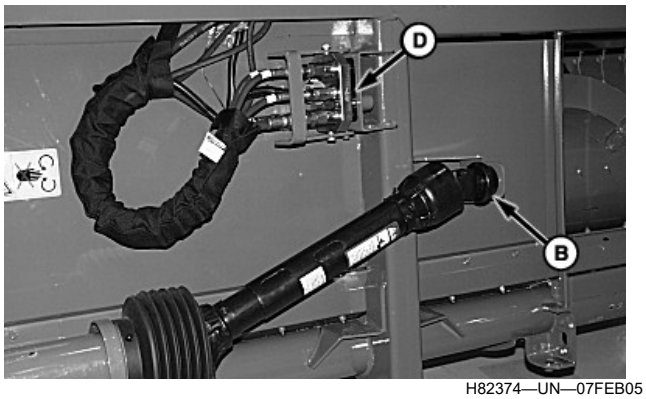
9. Install the cover (A) onto the platform storage position.
10. Remove the telescopic shaft from the storage position and install onto the feeder house backshaft, making sure the locking collar lock fully.

OUO6075,0004EB9-19-06JUL20

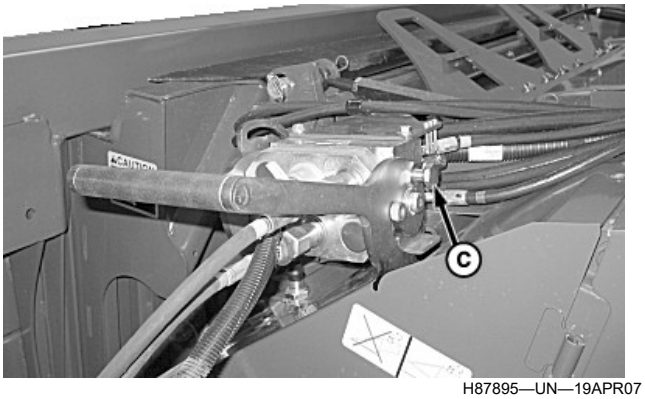
Attaching and Detaching Header from Feeder House



H52778—UN—23MAR99



H82374—UN—07FEB05



H87895—UN—19APR07

A—Locking Collar
B—Storage Position
C—Knob
D—Multicoupler Storage Position

CAUTION: Do not leave driveshafts on the machine. Personal injury or machine damage may occur if feeder house is accidentally engaged.

IMPORTANT: Driveshafts with U-joints are used on left-hand and right-hand sides of all approved headers.

NOTE: For complete attaching and detaching procedures, refer to the header Operator's Manual.

1. Disconnect telescoping drive shaft from the feeder house at locking collar (A) on both side of the machine.
2. Place the telescoping driveshaft in storage position (B).

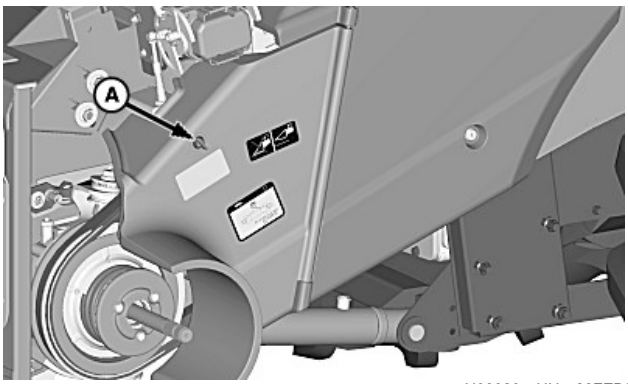
IMPORTANT: Latch pins are not to be actuated with the header on the ground. If multicoupler must be actuated with the header on the ground, unhook the cable from the handle.

NOTE: Latch pins should be fully retracted when the handle is up all the way against the stop. Adjust cable mounting if the latch pins are not fully retracted. See Single-Point Latching—Adjusting.

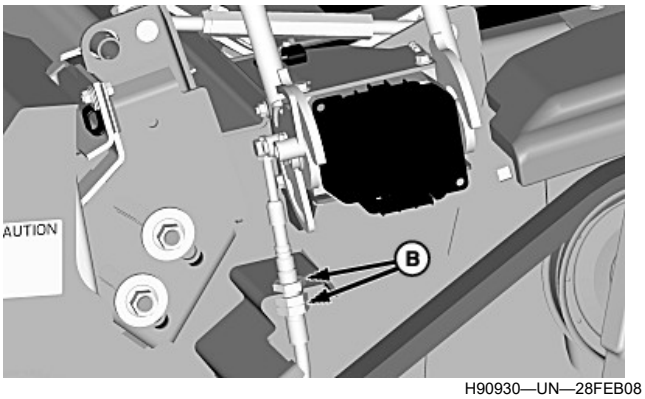
3. Pull and hold knob (C) to release the lock while raising handle to disconnect the multicoupler.
4. Remove the multicoupler cover from the storage position on the header and place the cover on the machine multicoupler.
5. Place and lock multicoupler in storage position (D).

OUO6075,0004EBA-19-06JUL20

Single-Point Latching—Adjusting



H90929—UN—28FEB08



H90930—UN—28FEB08

A—Shield
B—Lock Nut (2 used)

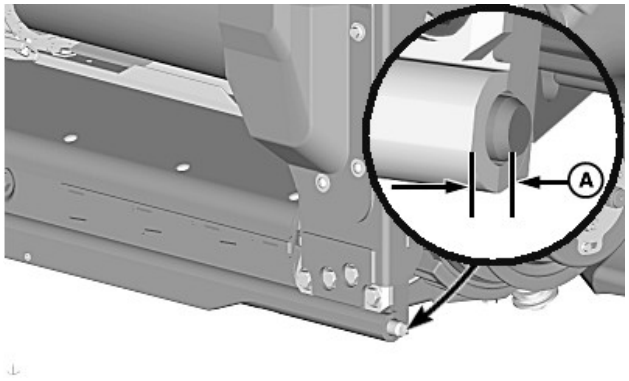
CAUTION: Shut OFF engine, set park brake, and remove key.

NOTE: Lateral tilt feeder house adjustments must only be made to the cable at multicoupler handle.

1. Open the left-hand feeder house shield (A).
2. Loosen the cable lock nuts (B).

IMPORTANT: Verify that the handle is against the stop on the multicoupler. Failure to verify that the handle is against the stop results in inaccurate pin dimensions and could result in the header falling off while harvesting or transporting.

3. Rest the multicoupler handle against the stop.



H90931—UN—05MAR08

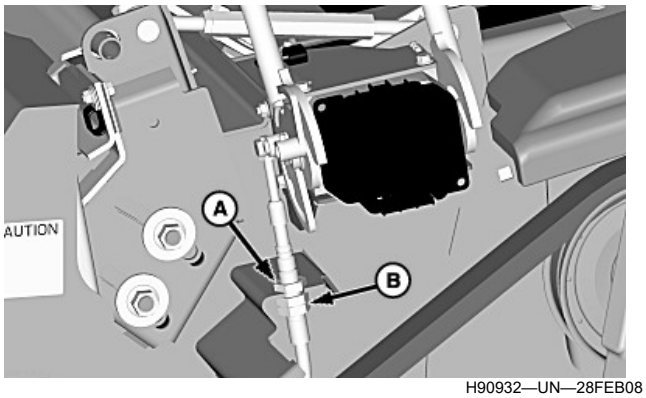
Left-Hand Latching Pin

A—Dimension

NOTE: Moving the cable "up" in the bracket pulls the pin farther in.

Moving the cable "down" in the bracket pushes the pin farther out.

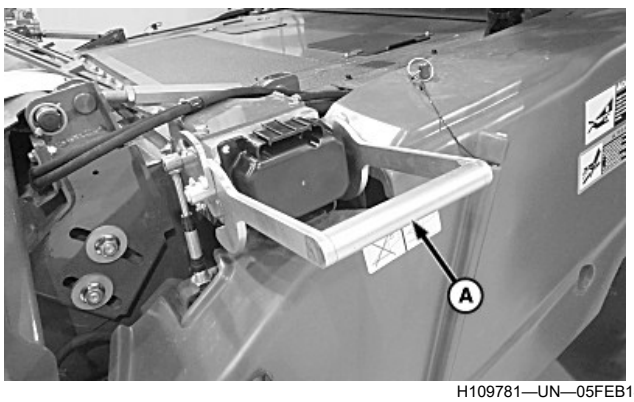
4. Adjust the cable in the bracket as needed for proper pin adjustment:
   - Left-hand latching pin must be flush to +/- 2 mm (0.08 in) (A).



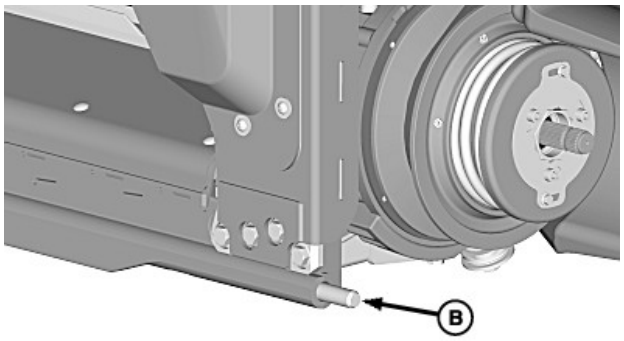
H90932—UN—28FEB08

A—Top Lock Nut
B—Bottom Lock Nut

5. Hold the bottom lock nut (B) and tighten the top lock nut (A).



H109781—UN—05FEB14



H90933—UN—28FEB08

A—Multicoupler Handle
B—Pin (2 used)

IMPORTANT: Failure to verify that the pins are set to the specified dimensions could result in the header falling off while harvesting or transporting.

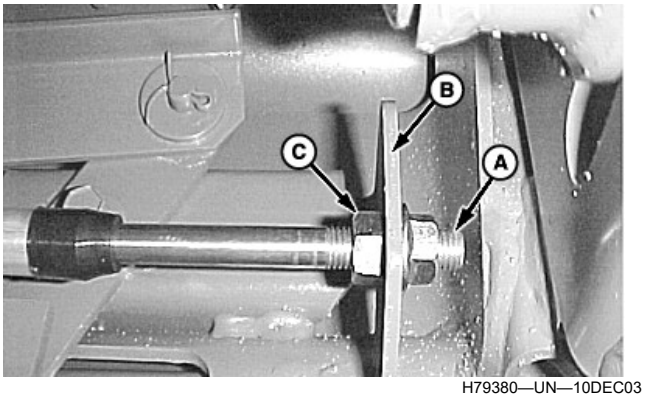
6. Fully lower the multicoupler handle (A) and verify that the pins (B) (both sides) are set to specification. Readjust if not set to specification.

Specification	
Feeder House Pins—Distance	45—52 mm (1-3/4—2 in)

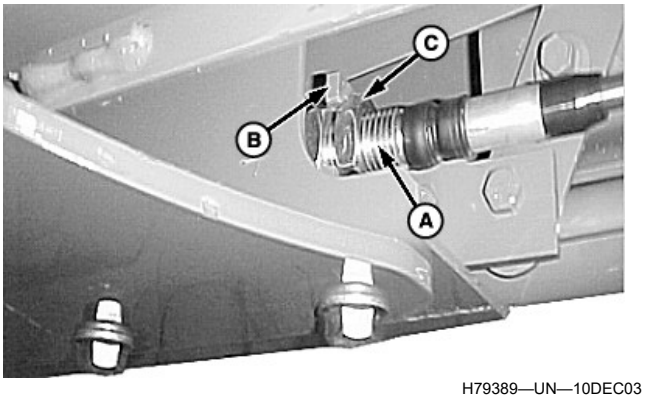
7. Close the left-hand feeder house shield.

OUO6075,0004E89-19-06JUL20

Level Land Feeder House Lower Cable End —Adjusting



H79380—UN—10DEC03



H79389—UN—10DEC03

A—Threads
B—Bracket
C—Lock Nuts

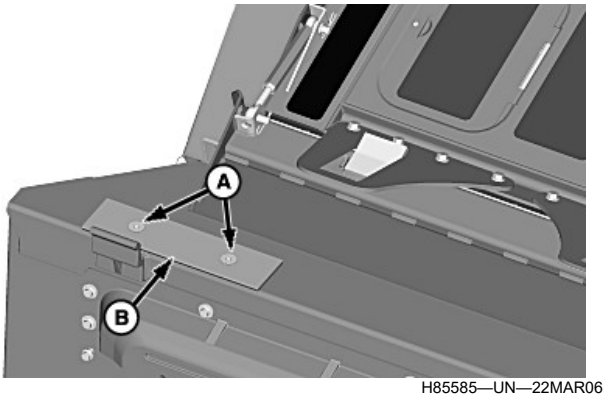
Adjustments should be made to lower end of latching cable if threads (A) are not centered in bracket (B).

Loosen lock nuts (C) and adjust cable so that threads are centered in bracket.

Tighten lock nuts.

OUO6075,0000672-19-02FEB10

Level Land Feeder House—Shim Adjusting



H85585—UN—22MAR06

A—Screws
B—Shim

NOTE: Tires must be inflated to equal air pressure for accurate leveling adjustment.

Header must be level when attached to feeder house.

Raise header to medium height.

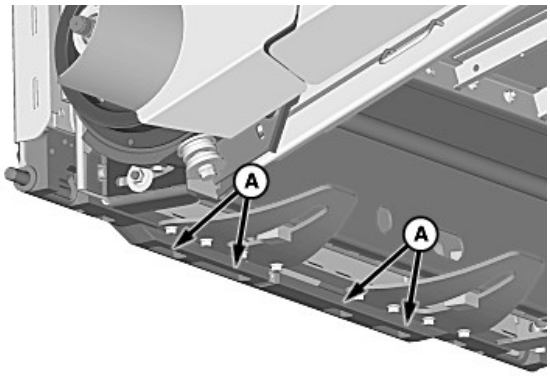
Take a position approximately 5 m (15 ft.) in front of header.

Compare bottom of header with machine front axle.

If header is not level, remove screws (A) and move shims (B) from side to side on top beam of feeder house to level header.

OUO6075,0000673-19-02FEB10

Feeder House Latching Pins (Cleanout)



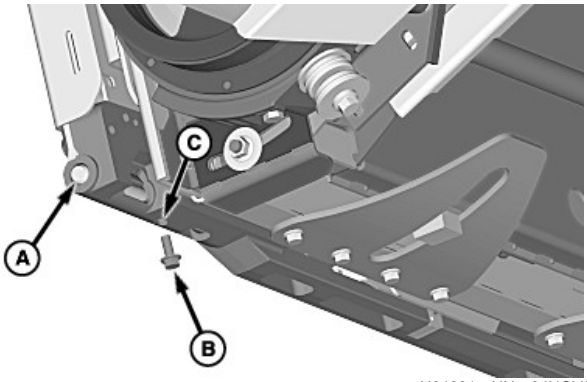
H84880—UN—04NOV05

A—Clean Out Locations

If latch pins move hard on lateral tilt feeder houses, clean crop debris from locations (A).

OUO6075,0000674-19-02FEB10

Feeder House Manual Unlatching



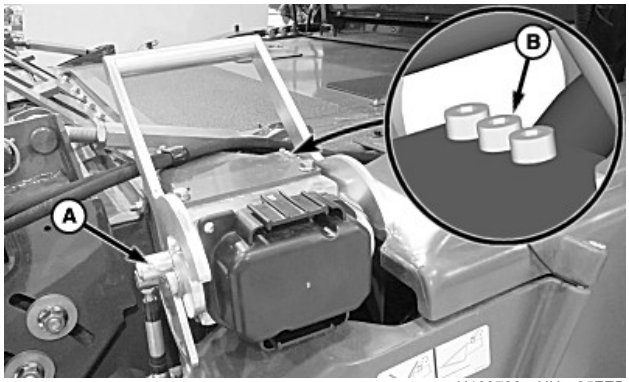
H84881—UN—04NOV05

A—Latching Pins
B—Cap Screw
C—Hole

To remove header if shear screw should fail, push latching pins (A) through latch plates and install M12 cap screw (B) in hole (C). Repeat on opposite side.

OUO6075,0000675-19-02FEB10

Shear Screw Location



H109782—UN—05FEB14

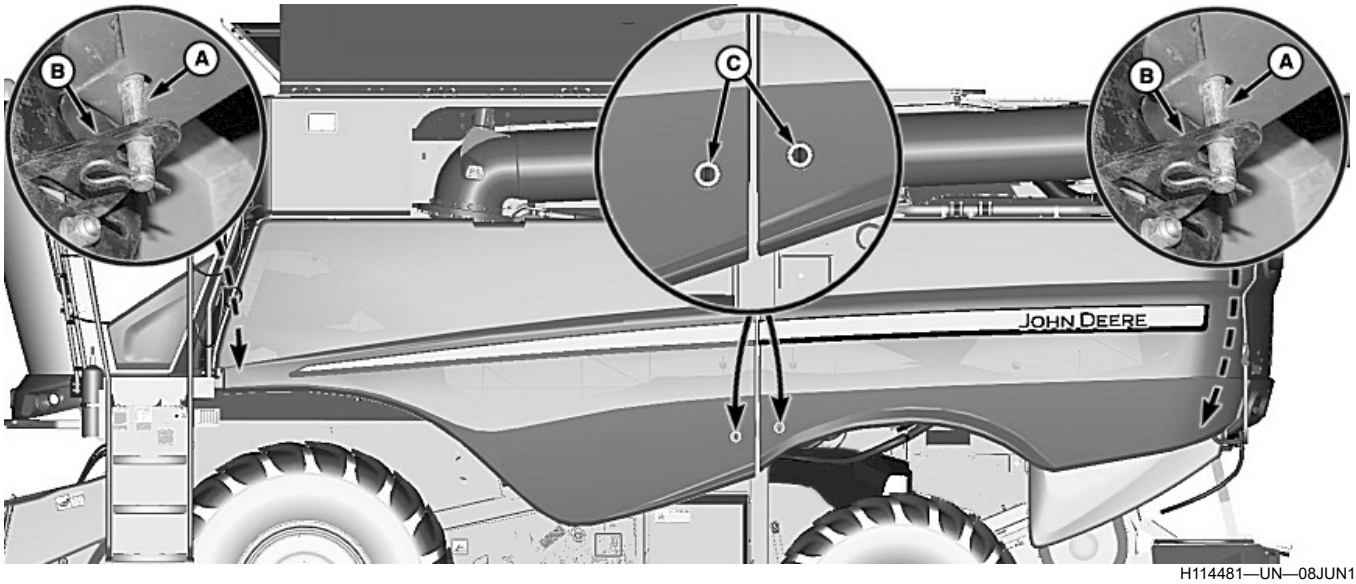
A—Shear Screw
B—Extra Shear Screws

NOTE: Three extra shear screws are provided.

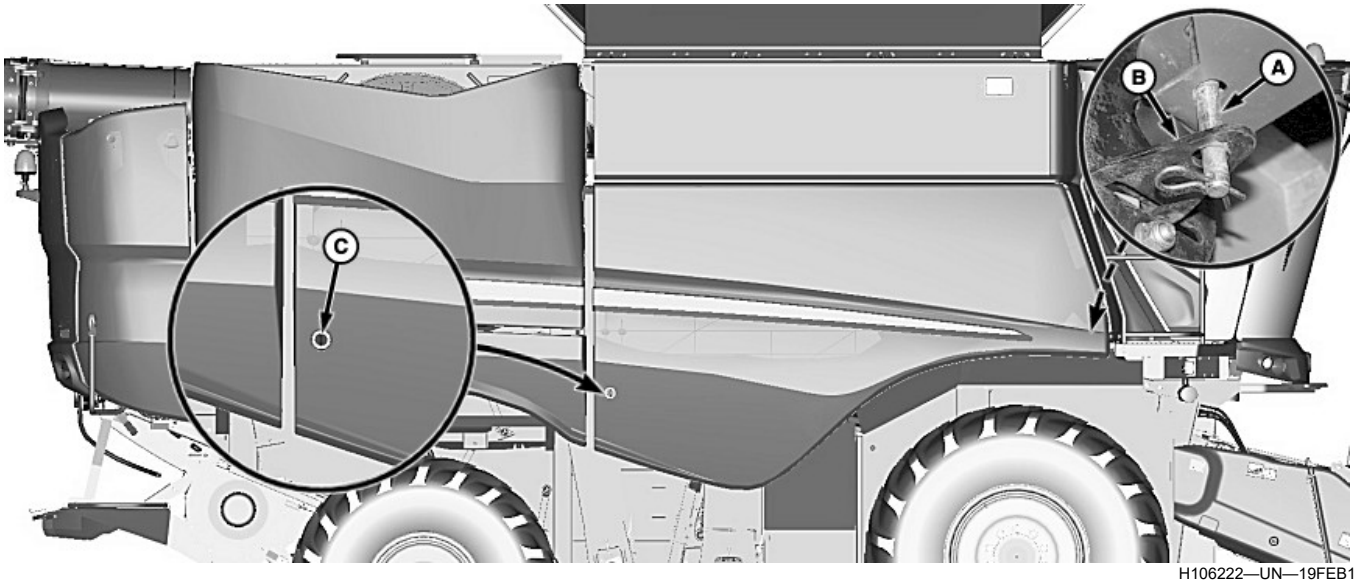
If shear screw (A) breaks, remove and replace with extra shear screw (B).

SS43267,000037A-19-05FEB14

Gull Wing Doors



H114481—UN—08JUN15



H106222—UN—19FEB13

A—Pin
B—Locking Plates
C—Latch

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Pinning and latch lever operation is the same on both sides of machine.

1. Remove spring clip, and pin (A) from locking plate (B). Reinstall spring clip onto pin.
2. Turn latch (C) and pull out on the gull wing doors to raise.

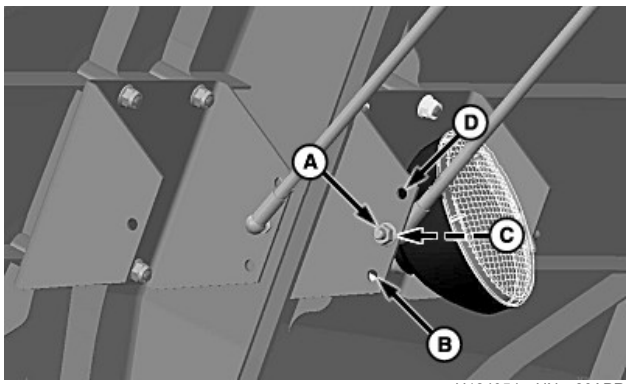
OUO6075,0004942-19-26APR18

Gull Wing Doors and Shields

Before operating the machine, verify that all the gull wing doors and shields are attached and closed.

OUO6075,0004E8A-19-26JUN20

Gull Wing Door Cylinder Adjustment



H124054—UN—26APR18

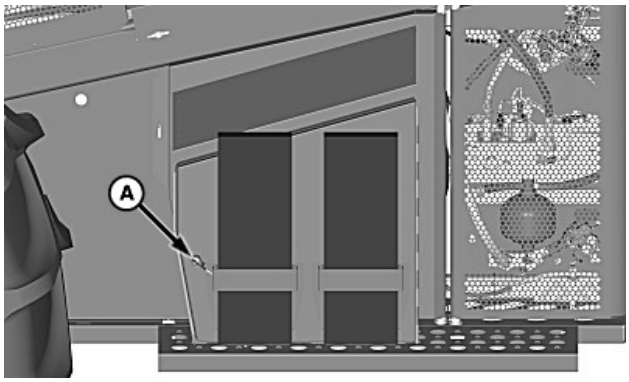
A—Nut
B—Bottom Hole
C—Middle Hole
D—Upper Hole

NOTE: Bottom hole is used to lower the overall height of the gull wing door when in the open position. Upper hole is used to raise the overall height of the gull wing door when in the open position.

Remove nut (A) from the cylinder and move to the desired hole (B—D).

OUO6075,0004943-19-07JUN18

Toolbox (If Equipped)



H116915—UN—14JAN16

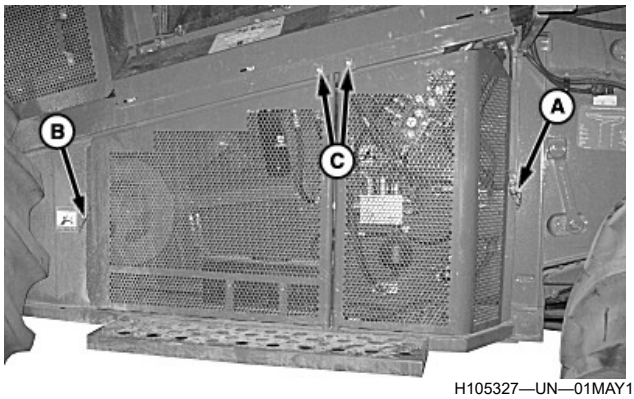
A—Latch

Turn latch (A) to open the toolbox door.

OUO6075,00041E3-19-11APR16

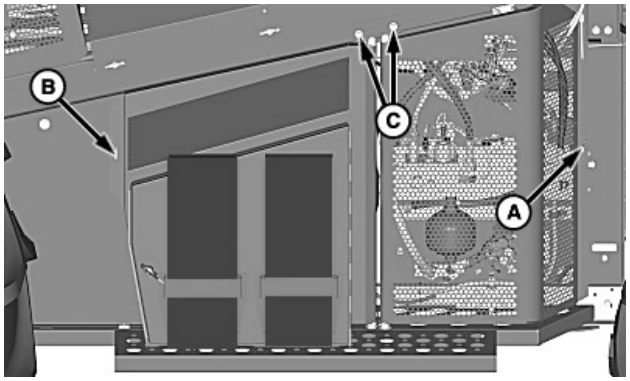
Left-Hand Side Shields

Side Shields (Style A)



H105327—UN—01MAY12

Shields (Without Toolbox)



H116913—UN—14JAN16

Shields (With Toolbox)

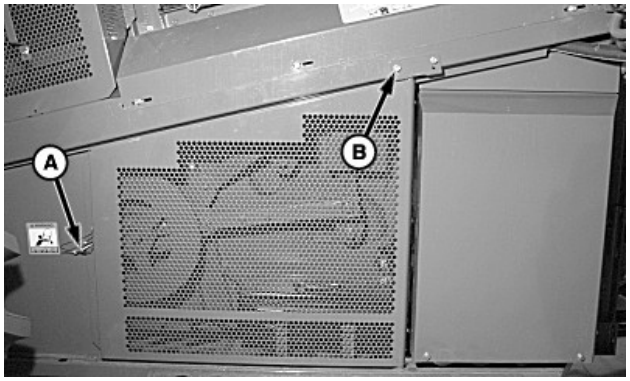
A—Quick-Lock Pin
B—Quick-Lock Pin
C—Cap Screws

CAUTION: Shut OFF engine, set park brake and remove key.

Remove quick-lock pin (A and B) to open shields.

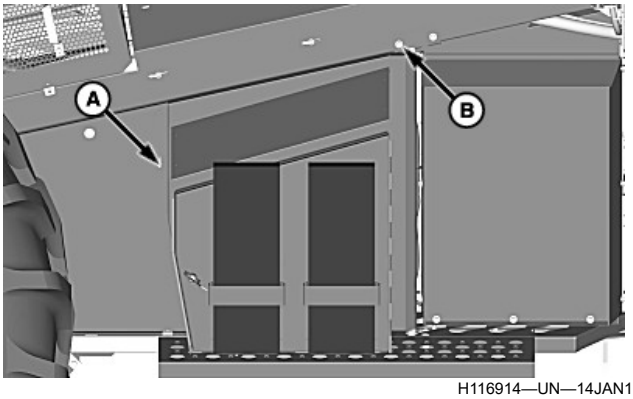
Remove cap screws (C) and lift shields to remove.

Side Shields (Style B)



H96802—UN—09JUN10

Shields (Without Toolbox)



H116914—UN—14JAN16

Shields (With Toolbox)

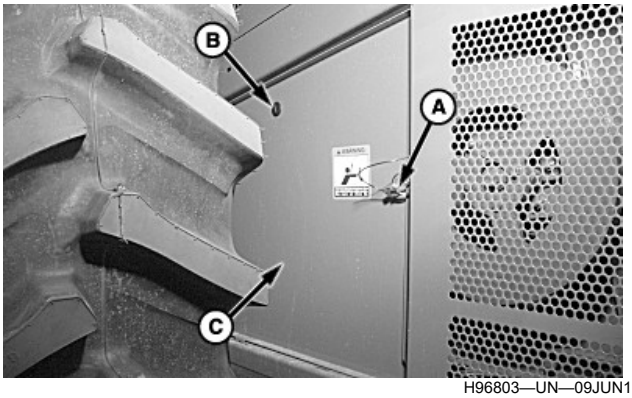
A—Quick-Lock Pin
B—Cap Screws

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

Remove quick-lock pin (A) to open shield.

Remove cap screws (B) and lift shield to remove.

Fan Shield

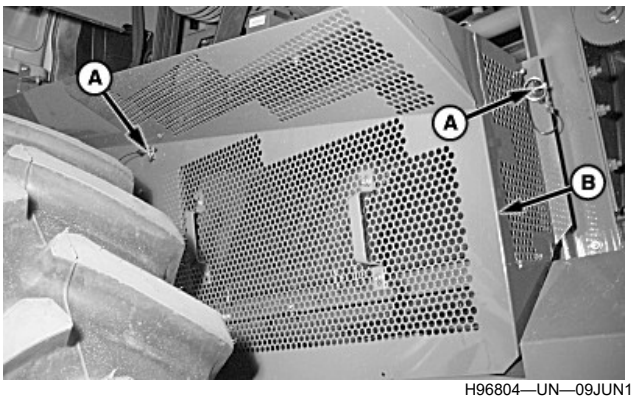


H96803—UN—09JUN10

A—Quick-Lock Pin
B—Latch
C—Shield

Remove quick-lock pin (A) and turn latch (B) to remove shield (C).

Upper Separator Shield

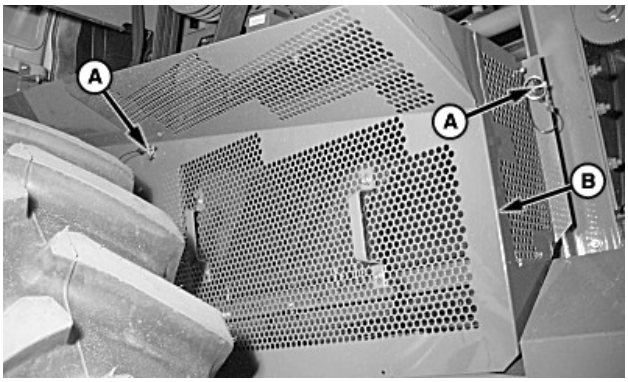


H96804—UN—09JUN10

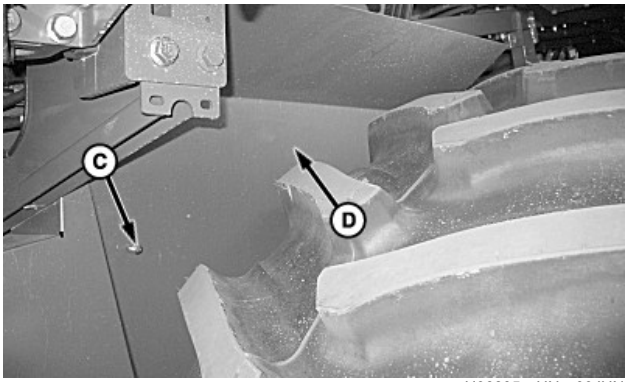
A—Quick-Lock Pins
B—Shield

Remove quick-lock pins (A) and remove shield (B).

Front Separator Shield



H96804—UN—09JUN10



H96805—UN—09JUN10

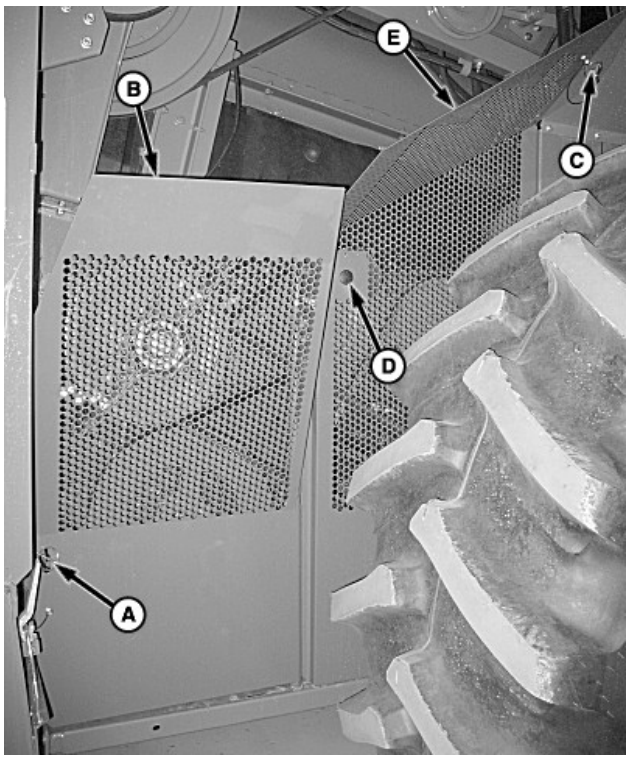
A—Quick-Lock Pins
B—Shield
C—Cap Screw
D—Shield

Remove quick-lock pins (A) and remove shield (B).

Remove cap screw (C) and push front separator shield (D) rearward to remove.

OUO6075,00044A1-19-20DEC16

Right-Hand Side Shields



H96806—UN—09JUN10

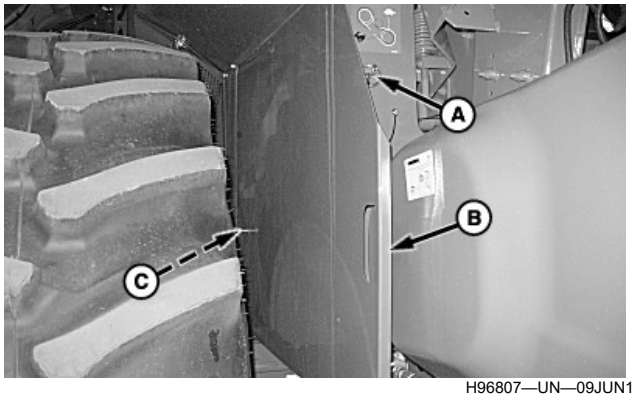
A—Quick-Lock Pin
B—Shield
C—Quick-Lock Pin
D—Latch
E—Shield

CAUTION: Shut OFF engine, set parking brake and remove key.

Rear Shield and Middle Fan Shield— Remove quick-lock pin (A) and open shield (B) to service belts.

Remove quick-lock pin (C) and turn latch (D) to unlock.

Lift and remove rear shield (B) and middle fan shield (E).



H96807—UN—09JUN10

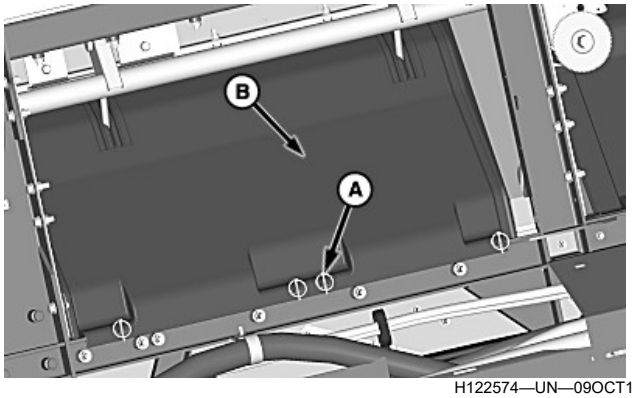
A—Quick-Lock Pin
B—Shield
C—Cap Screw

Front Separator Shield— Remove quick-lock pin (A) and pull shield (B) forward.

Remove cap screw (C) and remove shield.

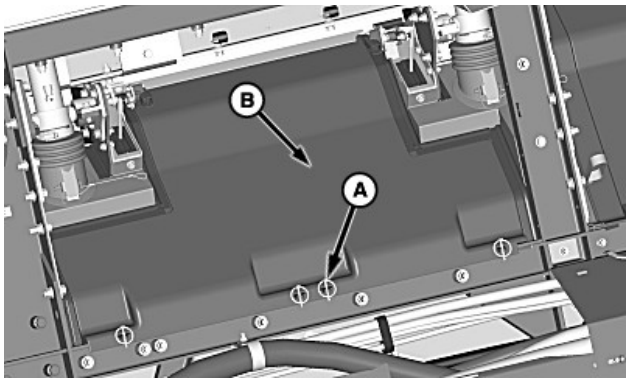
OUO6075,00007C7-19-28SEP10

Separator Covers



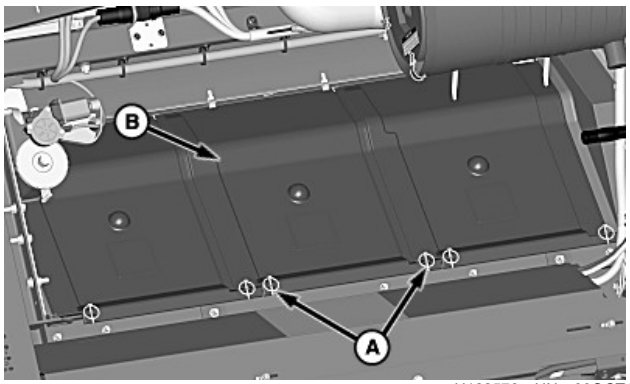
H122574—UN—09OCT17

Threshing Cover (Standard Concave Adjust)



H122575—UN—09OCT17

Threshing Cover (Active Concave Isolation)



H122576—UN—09OCT17

Separator Covers

A—Quick-Lock Pins
B—Covers

CAUTION: Shut OFF engine, set park brake and remove key.

IMPORTANT: To prevent grain loss, verify that separator covers are flush against separator and underneath the edge of the separator. Covers are installed starting from the left-hand side, as facing the machine and working to the right.

Do not lay covers in the hot sun or they become distorted.

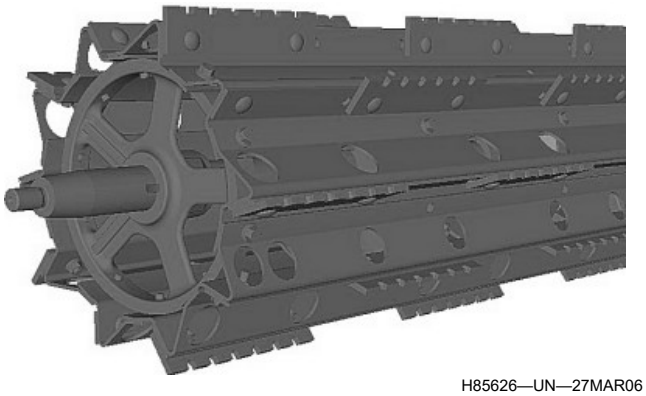
NOTE: One cover on the left-hand side of the machine and two covers on the right-hand side of the machine are used to seal the threshing section. Three covers on both sides of the machine are used to seal the separating section.

Quick-lock pins (A) are used to retain covers (B).

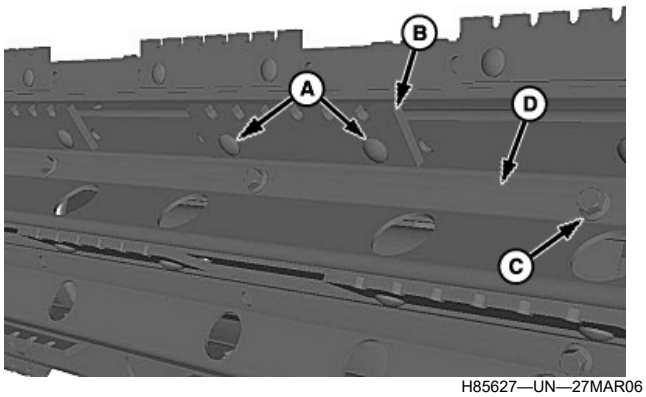
Remove quick-lock pins and remove covers.

OUO6075,00047C3-19-09OCT17

Standard Feed Accelerator Wear Strips—Replacing



H85626—UN—27MAR06



H85627—UN—27MAR06

Feed Accelerator Wings and Wear Strips (Standard)

A—Round Head Cap Screws
B—Feed Accelerator Wear Strip
C—Cap Screws
D—Feed Accelerator Wings

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Wear strips can be reversed for additional wear.

Feed accelerator wings and wear strips can be replaced without removing the feed accelerator. Replace feed accelerator wings and wear strips in sets of two and opposite of each other to maintain proper balance.

NOTE: If feed accelerator is removed from machine, or has been serviced, tighten clamp bolts before securing wings.

Remove round head cap screws (A) and replace feed accelerator wear strips (B) as required. Tighten round head cap screws to specification.

Specification

Feed Accelerator Wear Strip
Round Head Cap
Screws—Torque. . . . . 70 N·m (52 lb-ft)

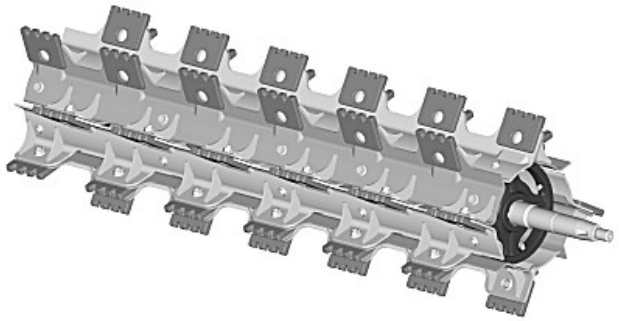
Remove cap screws (C) and replace feed accelerator wings (D) as required. Tighten cap screws to specification.

Specification

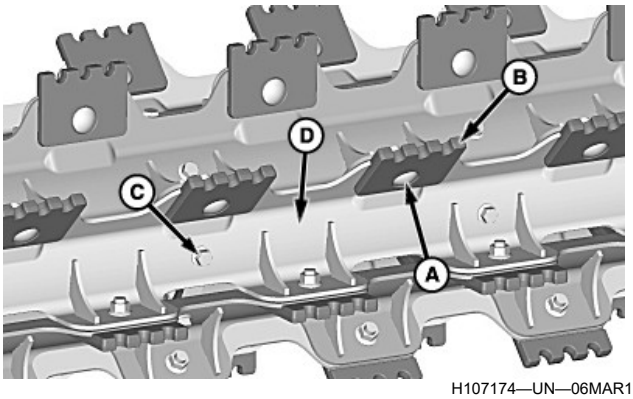
Feed Accelerator Wing Cap
Screws—Torque. . . . . 70 N·m (52 lb-ft)

OUO6075,0001726-19-14JAN14

Tough Crop Feed Accelerator Wear Strips —Replacing



H107173—UN—06MAR13



H107174—UN—06MAR13

Feed Accelerator Wings and Wear Strips (Tough Crop)

A—Round Head Cap Screws
B—Feed Accelerator Wear Strip
C—Cap Screws
D—Feed Accelerator Wings

CAUTION: Shut OFF engine, set park brake and remove key.

Feed accelerator wings and wear strips can be replaced without removing the feed accelerator. Replace feed accelerator wings and wear strips in sets of two and opposite of each other to maintain proper balance.

NOTE: If the feed accelerator is removed from the machine, or has been serviced, tighten clamp bolts before securing wings.

Always replace hardware when replacing feed accelerator wear strips.

Remove round head cap screws (A) and replace feed accelerator wear strips (B) as required. Tighten round head cap screws to specification.

Specification

Feed Accelerator Wear Strip
Round Head Cap
Screws—Torque. . . . . 107 N·m (79 lb·ft)

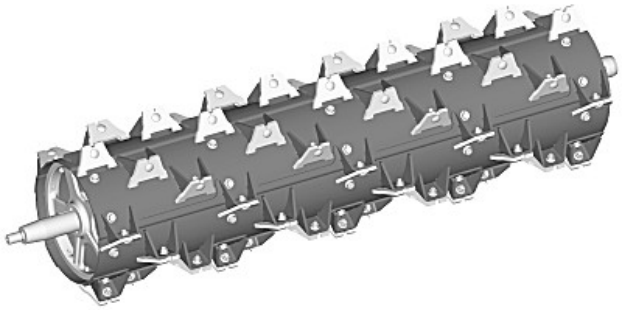
Remove cap screws (C) and replace feed accelerator wings (D) as required. Tighten cap screws to specification.

Specification

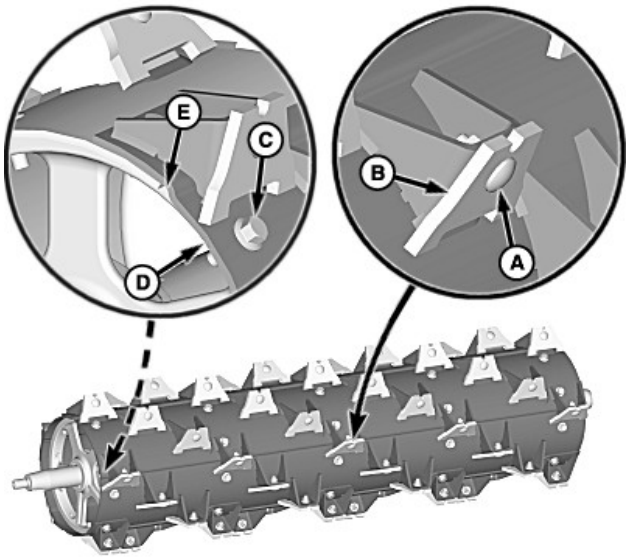
Feed Accelerator Wing Cap
Screws—Torque. . . . . 70 N·m (52 lb·ft)

OUO6075,0004A13-19-09AUG18

Tine Feed Accelerator Wear Strips—Replacing



H102209—UN—15JUN11



H102210—UN—15JUN11

Feed Accelerator Wings and Wear Strips

A—Round Head Cap Screws
B—Feed Accelerator Wear Strip
C—Cap Screws
D—Wing Assembly
E—Overlap Location

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

Feed accelerator wings and wear strips can be replaced without removing the feed accelerator.

Remove round head cap screws (A) and replace feed accelerator wear strips (B) as required. Tighten round head cap screws to specification.

Specification

Feed Accelerator Wear Strip
Round Head Cap
Screws—Torque. . . . . 73 N·m (54 lb.-ft.)

Remove cap screws (C) and replace wing assembly (D) as required.

IMPORTANT: Feed accelerator must be statically balanced. Add washers as needed until feed accelerator is balanced.

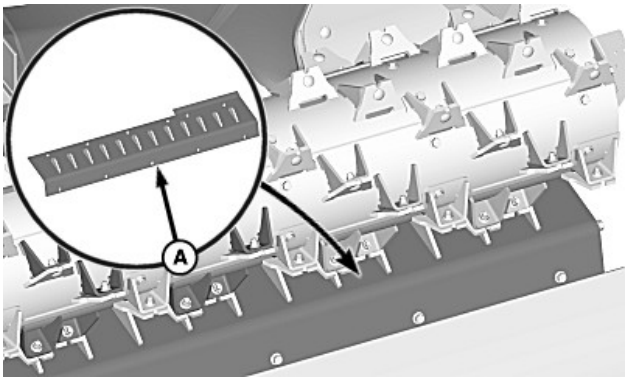
Install wing assembly so it overlaps at location (E) as shown. Tighten cap screws to specification.

Specification

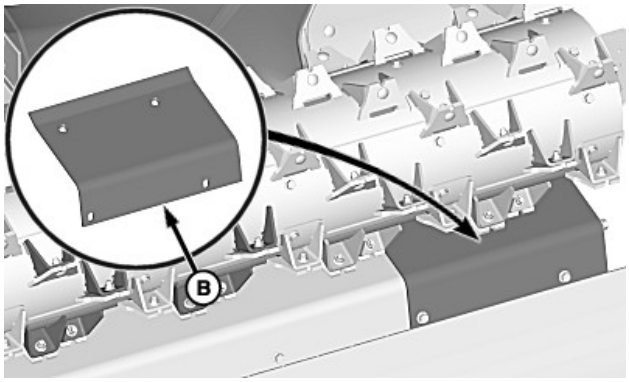
Feed Accelerator Wing
Assembly Cap Screws—Torque. . . . . 73 N·m (54 lb.-ft.)

OUO6075,0001729-19-14JAN14

Tine Feed Accelerator Comb Floor (Rice Machines)



H105544—UN—20JUN12



H105543—UN—20JUN12

A—Comb Floor
B—Smooth Liner Plate

NOTE: Machine is shipped from the factory with the comb floor installed. Comb floor can only be run with the tine feed accelerator.

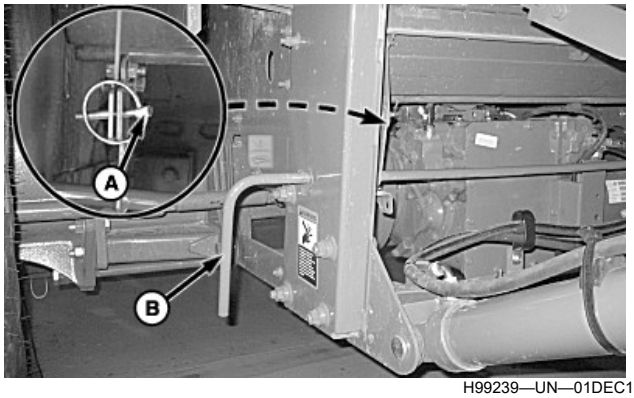
When the comb floor (A) is removed for harvest, the smooth liner plate (B) which was shipped with the machine must be installed (left side of the machine).

Non-Rice Harvest Information

- Corn - Remove comb floor and install smooth liner plate.
- Soybeans - If splits become a concern, remove comb floor and install smooth liner plate.
- Small Grains - Remove the comb floor and install smooth liner plate.

OUO6075,0004557-19-02DEC16

Tine Feed Accelerator Comb Floor (Rice Machines)—Removing



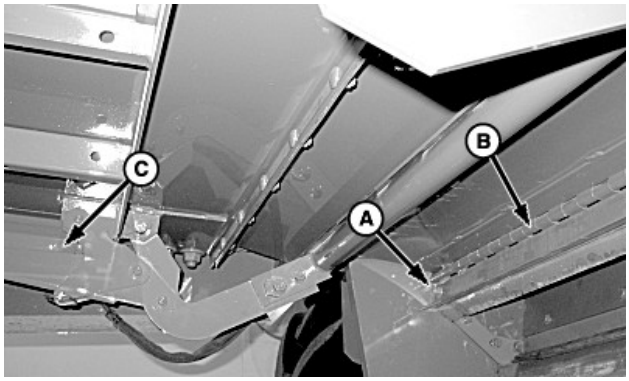
H99239—UN—01DEC10

A—Quick-Lock Pin
B—Lever

CAUTION: Raise feeder house, lower safety stop, shut OFF engine, set park brake and remove key.

Remove quick-lock pin (A) and move lever (B) up to open stone trap.

Feed Plate (Style A)



H86271—UN—10JUL06

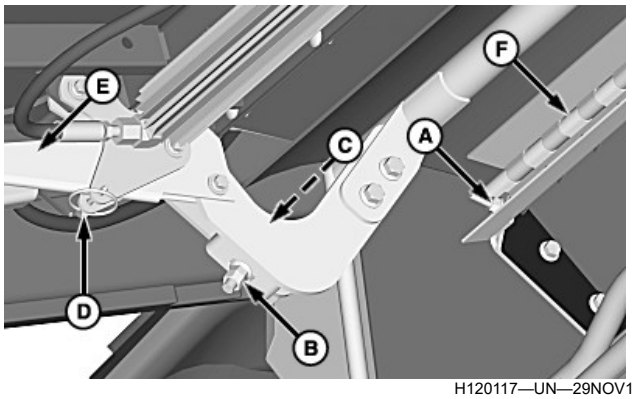
A—Cap Screws and Nuts
B—Feed Plate Assembly
C—Lever

Remove and retain cap screws and nuts (A) on both sides of the machine.

Remove quick-lock pin and move lever (C) down and rearward while removing feed plate assembly (B) at the same time.

Raise lever (C) and retain with previously removed quick-lock pin.

Feed Plate (Style B)



H120117—UN—29NOV16

A—Cap Screws and Nuts
B—Nuts
C—Round Head Bolt
D—Quick-Lock Pin
E—Lever
F—Feed Plate Assembly

Remove and retain cap screws and nuts (A) on both sides of the machine.

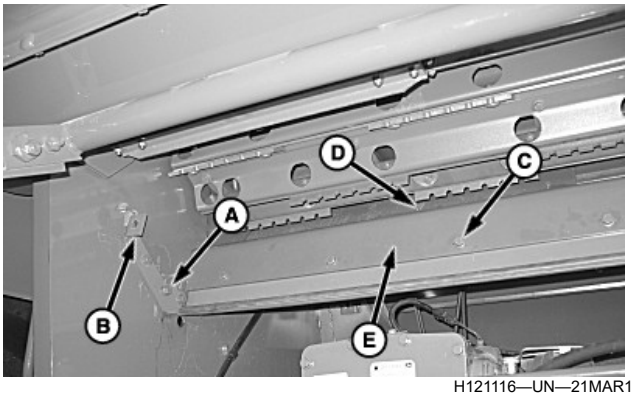
Remove nuts (B) and round head bolt (C) on both sides of the machine.

Remove quick-lock pin (D) and move lever (E) down and rearward while removing feed plate assembly (F) at the same time.

Raise lever (E) and retain with previously removed

round head bolt (C) and retain with previously removed nuts (B) on both sides of the machine.

Install previously removed quick-lock pin (D).



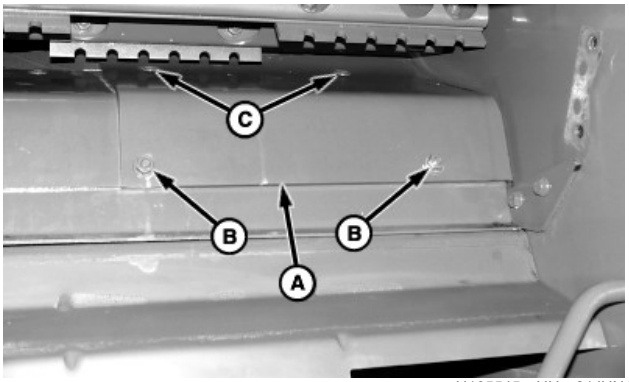
H121116—UN—21MAR17

A—Hardware (2 used)
B—Brackets (2 used)
C—Cap Screws and Nuts (5 used)
D—Plow Bolts
E—Comb Floor

Remove and retain hardware (A) and bracket (B) from both sides of the machine.

Remove and retain cap screws and nuts (C).

Remove and retain plow bolts (D) and remove the comb floor (E).



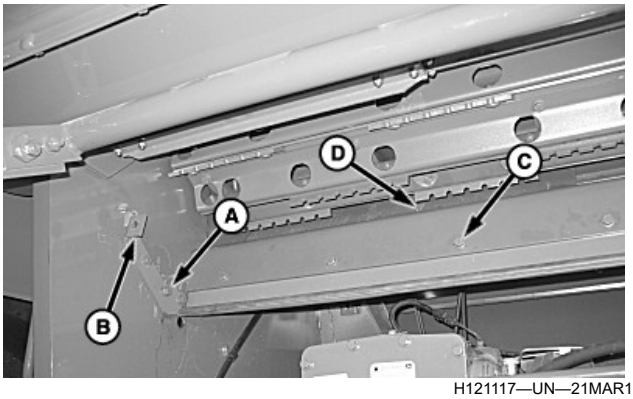
H105545—UN—21JUN12

A—Smooth Liner Plate
B—Cap Screws and Nuts (2 used)
C—Plow Bolts (2 used)

Install smooth liner plate (A) shipped with the machine on the left-hand side.

Install previously removed cap screws and nuts (B).

Install previously removed plow bolts (C).



H121117—UN—21MAR17

A—Hardware (2 used)
B—Brackets (2 used)
C—Cap Screws and Nuts (3 used)
D—Plow Bolts (3 used)

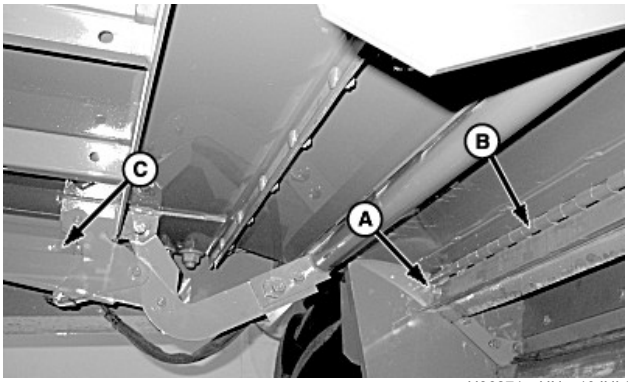
NOTE: Plow bolt must be installed in holes that previously held comb floor to prevent grain loss.

Install previously removed plow bolts (D).

Install previously removed cap screws and nuts (C).

Install previously removed bracket (B) on both sides of the machine and retain with previously removed hardware (A).

Feed Plate (Style A)



H86271—UN—10JUL06

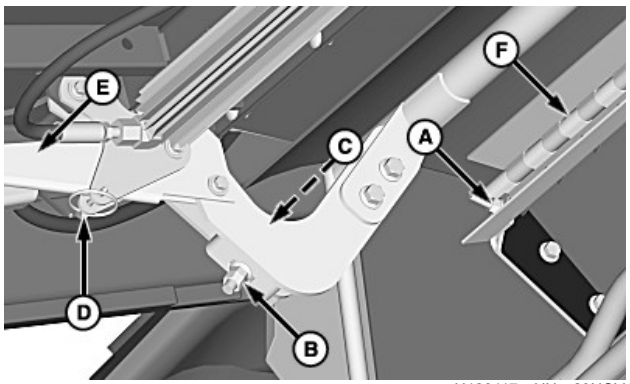
A—Cap Screws and Nuts
B—Feed Plate Assembly
C—Lever

Remove quick-lock pin and move lever (C) down and rearward.

Install previously removed feed plate assembly (B) and retain with previously removed cap screws and nuts (A) on both sides of the machine.

Push lever forward and up to close feed plate door and retain with previously removed quick-lock pin.

Feed Plate (Style B)



H120117—UN—29NOV16

A—Cap Screws and Nuts
B—Nuts
C—Round Head Bolt
D—Quick-Lock Pin
E—Lever
F—Feed Plate Assembly

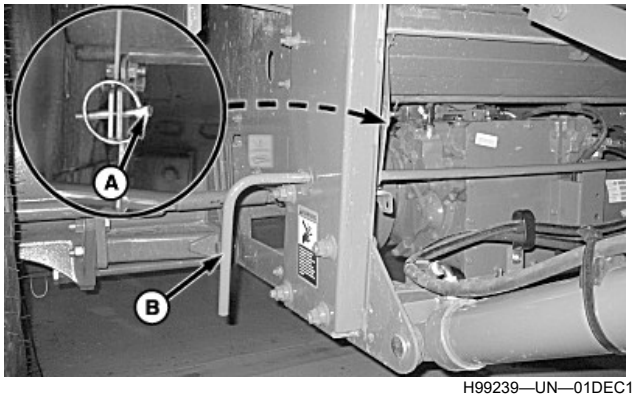
Remove nuts (B) and round head bolt (C) on both sides of the machine.

Remove quick-lock pin (D) and move lever (E) down and rearward.

Install previously removed feed plate assembly (F) and retain with previously removed cap screws and nuts (A) on both sides of the machine.

Raise lever (E) and retain with previously removed round head bolt (C) and retain with previously removed nuts (B) on both sides of the machine.

Install previously removed quick-lock pin (D).



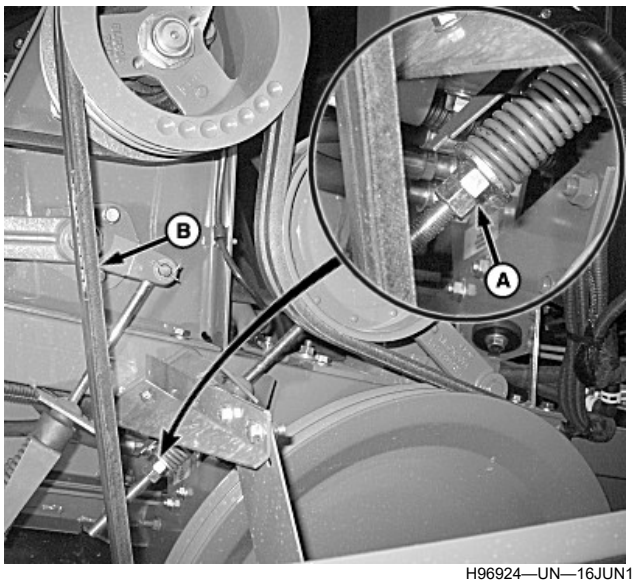
H99239—UN—01DEC10

A—Quick-Lock Pin
B—Lever

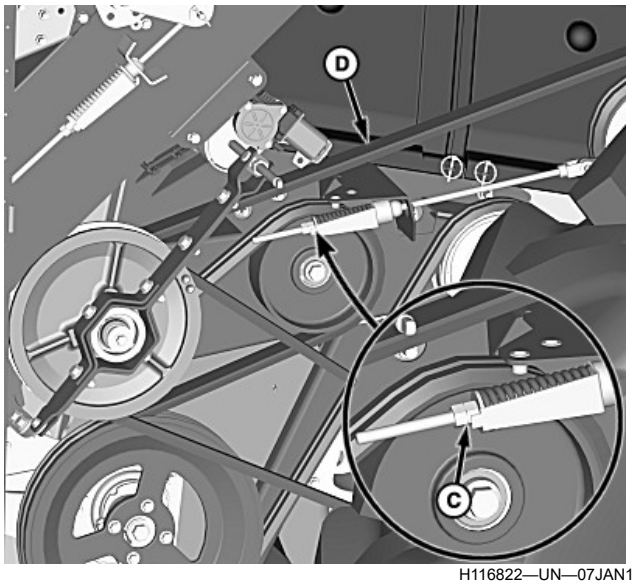
Move lever (B) down to close stone trap and retain with quick-lock pin (A).

OUO6075,00046A7-19-21MAR17

Feed Accelerator Belt—Replacing



H96924—UN—16JUN10



H116822—UN—07JAN16

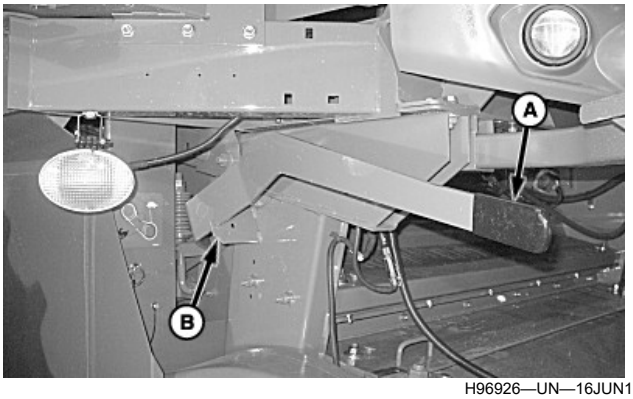
A—Nuts
B—Front Jackshaft Belt
C—Nuts
D—Belt

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nuts (A) to remove tension from the front jackshaft belt (B).

Loosen nuts (C) to remove tension on shoe, fan, and conveyor auger belt (D).

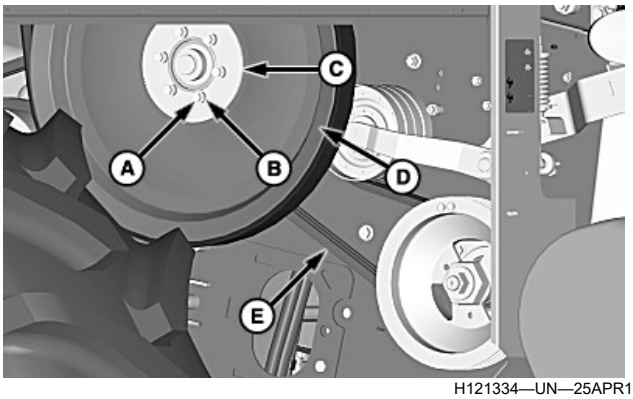
Remove both belts to allow removal of the feed accelerator belt.



H96926—UN—16JUN10

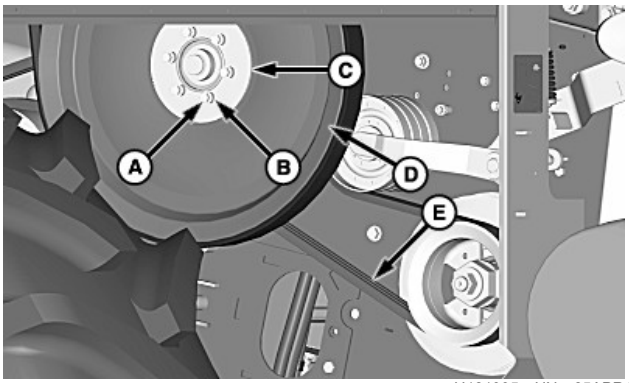
A—Lever
B—Bracket

Push lever (A) up and out of notch in bracket (B) to relieve belt tension from the accelerator belt.



H121334—UN—25APR17

Feed Accelerator Belt (Standard Speed High Capacity)



H121335—UN—25APR17

Feed Accelerator Belt (High-Speed High Capacity)

A—Cap Screw (6 used)
B—Spacer (6 used)
C—Shim (2 used)
D—Sheave
E—Feed Accelerator Belt

Remove cap screws (A), spacers (B), shims (C), and sheave (D).

Remove feed accelerator belt (E) and install replacement belt.

Install sheave, shims, spacers, and retain with cap screws.

Tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 70 N·m (52 lb·ft)

Push up lever and into the notch in bracket.

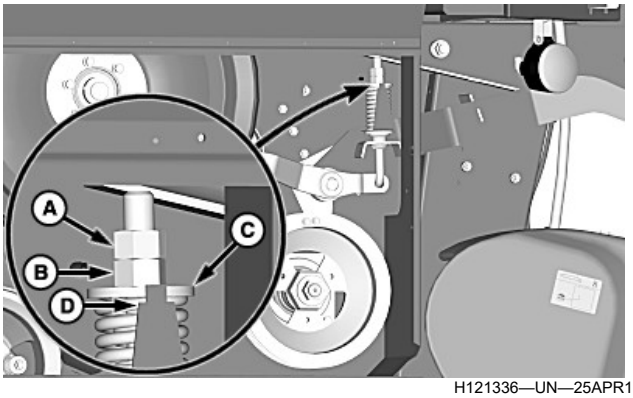
Adjust feed accelerator belt tension so washer is positioned between end of gauge and bottom of step.

Install shoe, fan, and conveyor auger belt and front jackshaft belt.

Adjust tension for belts so washer is positioned between end of gauge and bottom of step.

OUO6075,0004727-19-25APR17

Feed Accelerator Belt—Adjusting



H121336—UN—25APR17

A—Nut
B—Nut
C—Washer
D—Gauge

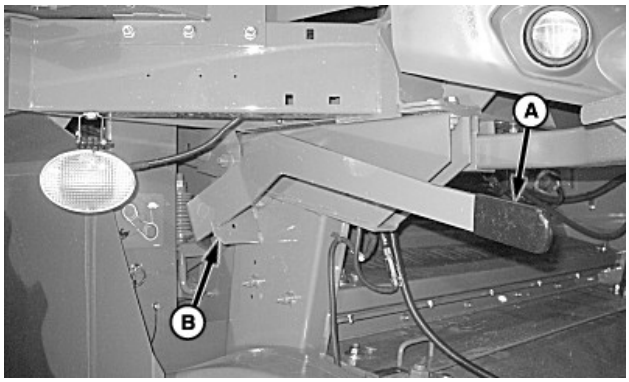
CAUTION: Shut OFF engine, set park brake and remove key.

Feed accelerator belt idler is on the right-hand side of the machine behind the feeder house pivot.

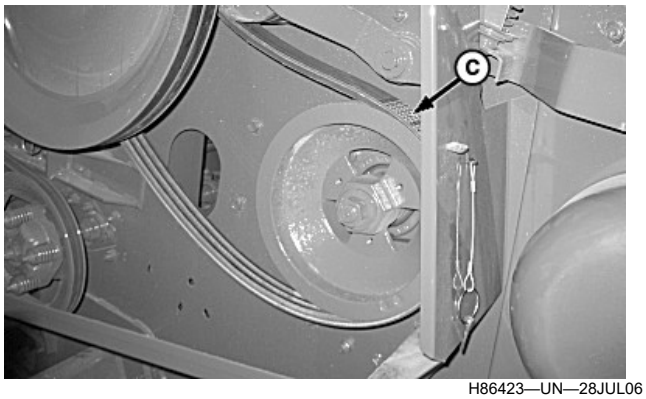
Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,0004728-19-25APR17

Standard Speed High Capacity Feed Accelerator—Changing Speed



H96926—UN—16JUN10



H86423—UN—28JUL06

A—Lever
B—Bracket
C—Belt

NOTE: Refer to Crop Settings section for recommended feed accelerator speed settings.

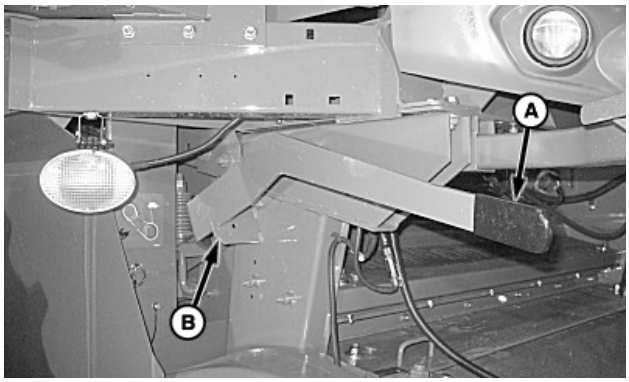
When changing separator speeds make sure to cycle power ON and OFF to recognize new speed range.

To change feed accelerator speed to high speed position:

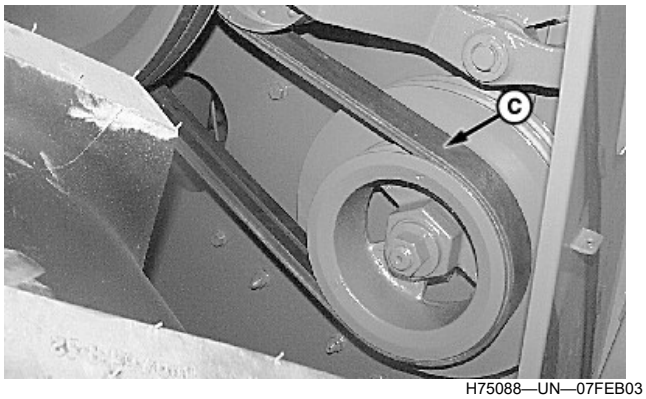
- Push lever (A) up and out of notch in bracket (B) to relieve belt tension.
- Move belt (C) to inside sheave grooves on both sheaves for high speed.
- Push lever up and into notch in bracket to reset belt tension.

OUO6075,00007F2-19-27OCT10

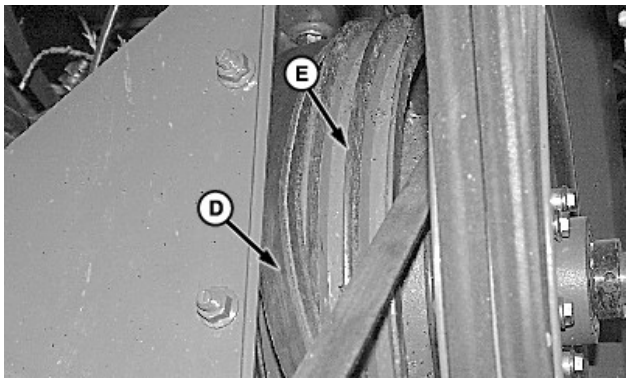
High Speed High Capacity Feed Accelerator—Changing To Slow Speed



H96926—UN—16JUN10



H75088—UN—07FEB03



H75076—UN—06FEB03

A—Lever
B—Bracket
C—Belt
D—Belt
E—Upper Sheave

NOTE: Refer to Crop Settings section for recommended feed accelerator speed settings.

When changing separator speeds make sure to cycle power ON and OFF to recognize new speed range.

To change feed accelerator speed to low speed position:

- Push lever (A) up and out of notch in bracket (B) to relieve belt tension.

- Remove belt (C) from lower sheave and let belt hang freely from upper sheave.

NOTE: Belt must be twisted to fit between upper sheave and sidesheet.

- Remove belt (D) from upper sheave (E) and move to inside sheave for low speed.
- Install belt (C) on inner sheave groove on lower sheave.
- Push lever up and into notch in bracket to reset belt tension.

OUO6075,00007F3-19-14JUN11

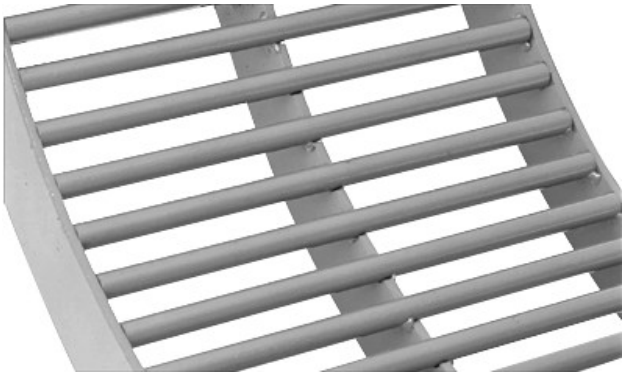
Concave Recommendations

NOTE: For recommended machine settings for various crops, refer to Crop Setting section for further information.

Concave Type	Corn	Soybeans	Wheat Barely Small Grains	Rice	Popcorn Food Corn	Sorghum (Milo) Sunflowers (Confection)	Sunflowers (Oil)	Canola
Small Wire	NR	NR	Best	NR	NR	NR	Average	Best
Large Wire	Good	Good	Good	Best	NR	Best	Best	Good
Round Bar	Best	Best	Average	Good	Best	Average	Best	Average
Best = Provides best level of performance. Good = Provides a good level of performance. Average = Provides an average level of performance. NR = Not recommended.								

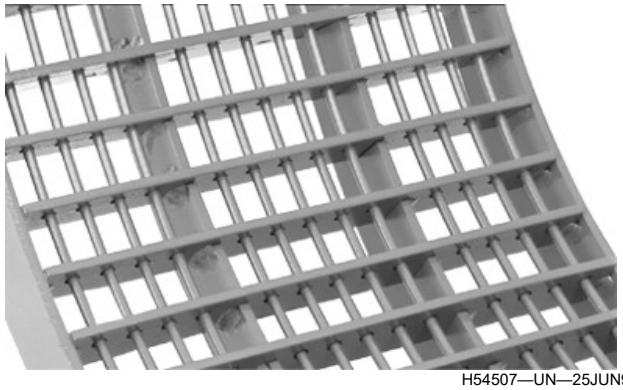
OUO6075,00017E2-19-07MAY14

Concave Types



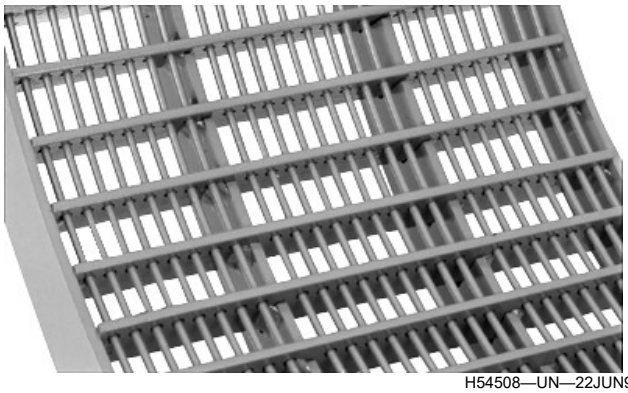
H54506—UN—23MAR99

Round Bar Multi Crop Concave



H54507—UN—25JUN99

Large Wire Concave



H54508—UN—22JUN99

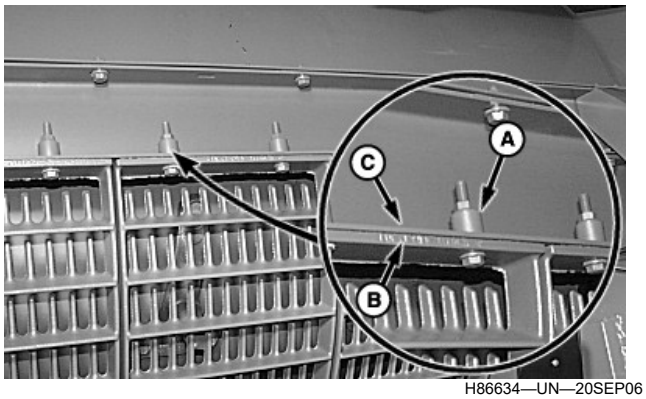
Small Wire Concave

Three different concaves are available for different crop and crop conditions.

- Round bar multi crop concave is used for corn and soybeans.
- Large wire concave is used for rice, soybeans, and grain sorghum.
- Small wire concave is used for small grains.

OUO6075,00007A8-19-02JUN10

Separator Grate Spacers



H86634—UN—20SEP06

A—Spacers
B—Separator Grates
C—Separator Channel

Spacers are installed in storage position (as shown) from factory.

Spacers can be used in corn to reduce bits of cob in the grain tank sample.

IMPORTANT: Spacers should be used in corn and soybeans only. Remove spacers for all other crops (place spacers in storage position as shown).

Remove all separator grate spacers (A) from storage position (as shown) and install between separator grates (B) and separator channel (C).

OUO6075,0000B06-19-03JAN11

H107178—UN—06MAR13

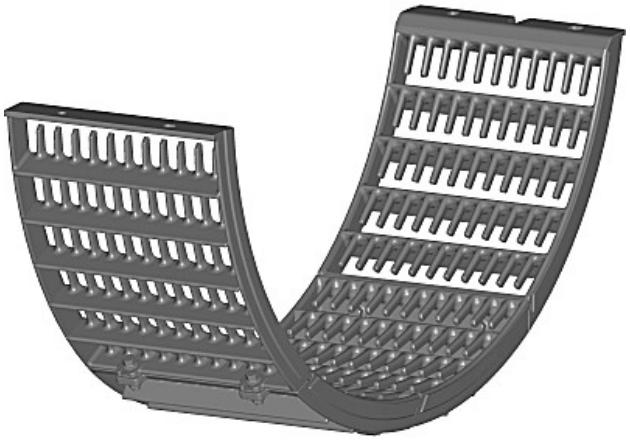
Heavy-Duty Separator Grate

Two different separator grates options are available for the machine.

- Standard Cast Separator Grates - come standard on all machines, except for rice and small tough grain packages.
- Heavy-Duty Separator Grates - are used in tough crop situations. These grates are option on all Variable Stream Rotor machines, but standard on small tough grains, rice, and tough rice packages.

SS43267,00004EB-19-05FEB15

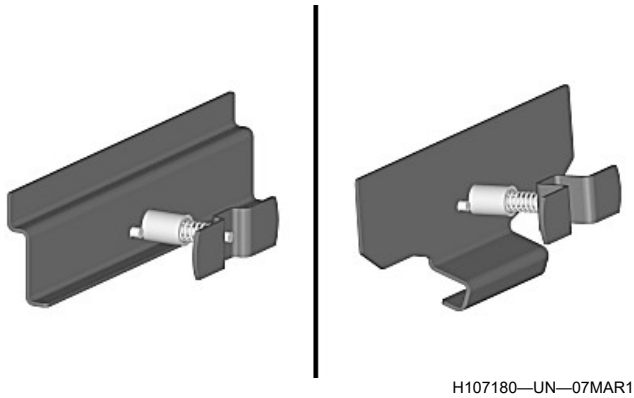
Separator Grate Types



H107177—UN—06MAR13

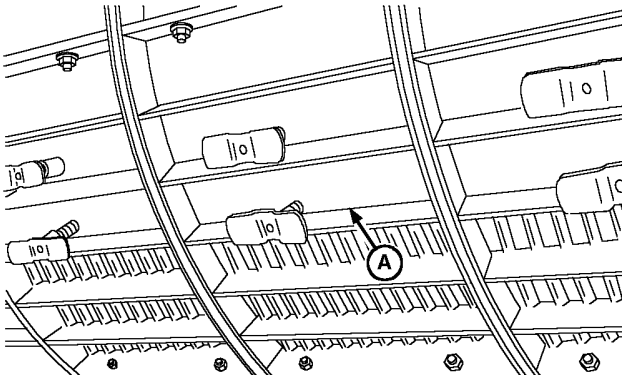
Standard Cast Separator Grate

Separator Grate Covers (If Equipped)



H107180—UN—07MAR13

Standard Cast Grate Covers/Heavy-Duty Grate Covers



H54512—UN—01APR99

A—Separator Grate Covers

Recommended for very dry small grain. Covers (A) are installed on separator grates to help balance chaff load to cleaning shoe.

Standard Cast Grate Covers

- Install two rows (eight covers) on right-hand side and three rows (twelve covers) on left-hand side. Make adjustments as necessary depending on conditions.

Heavy-Duty Grate Covers

- Install one row (four covers) on right-hand side and two rows (eight covers) on left-hand side. Make adjustments as necessary depending on conditions.

OUO6075,0001410-19-08MAR13

Separator Grate Interrupters (If Equipped)

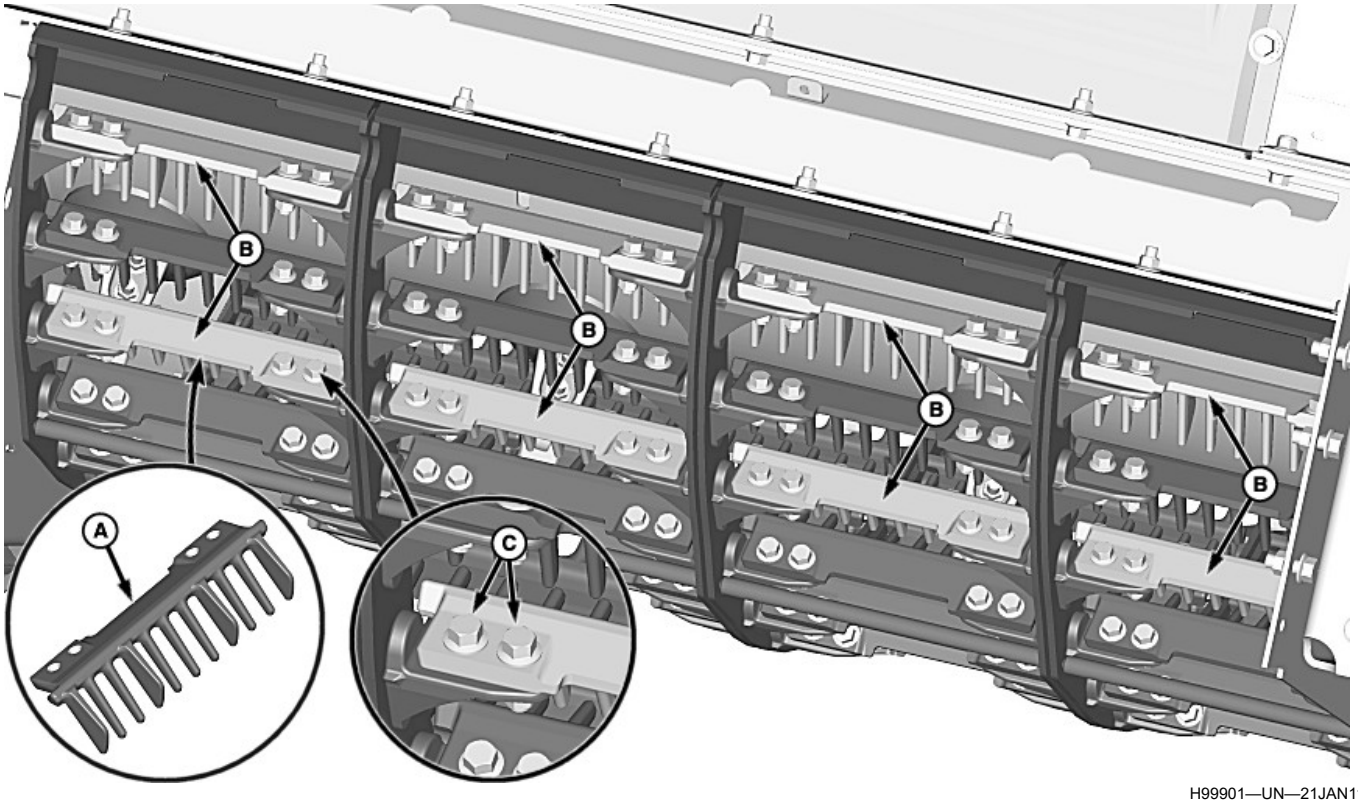
H99873—UN—27JAN11

Separator grate interrupters are used with the heavy-duty separator grates and are located on the right-hand side of the machine, in rows one and three.

These interrupters create a disruption in crop mat flow that allows additional grain to be shaken loose, increasing separator capacity.

OUO6075,00016F7-19-19DEC13

Separator Grate Interrupter Locations (If Equipped)



H99901—UN—21JAN11

A—Separator Grate Interrupters
B—Locations (8 used)
C—Cap Screws and Nuts (32 used)

IMPORTANT: Separator grate interrupters are intended for use on rows one and rows three on right-hand side of separator grates as shown. Installation in other locations may cause interference or a reduction in machine performance.

Verify that rotor is free spinning after installation of separator grate interrupters before starting machine or engaging separator.

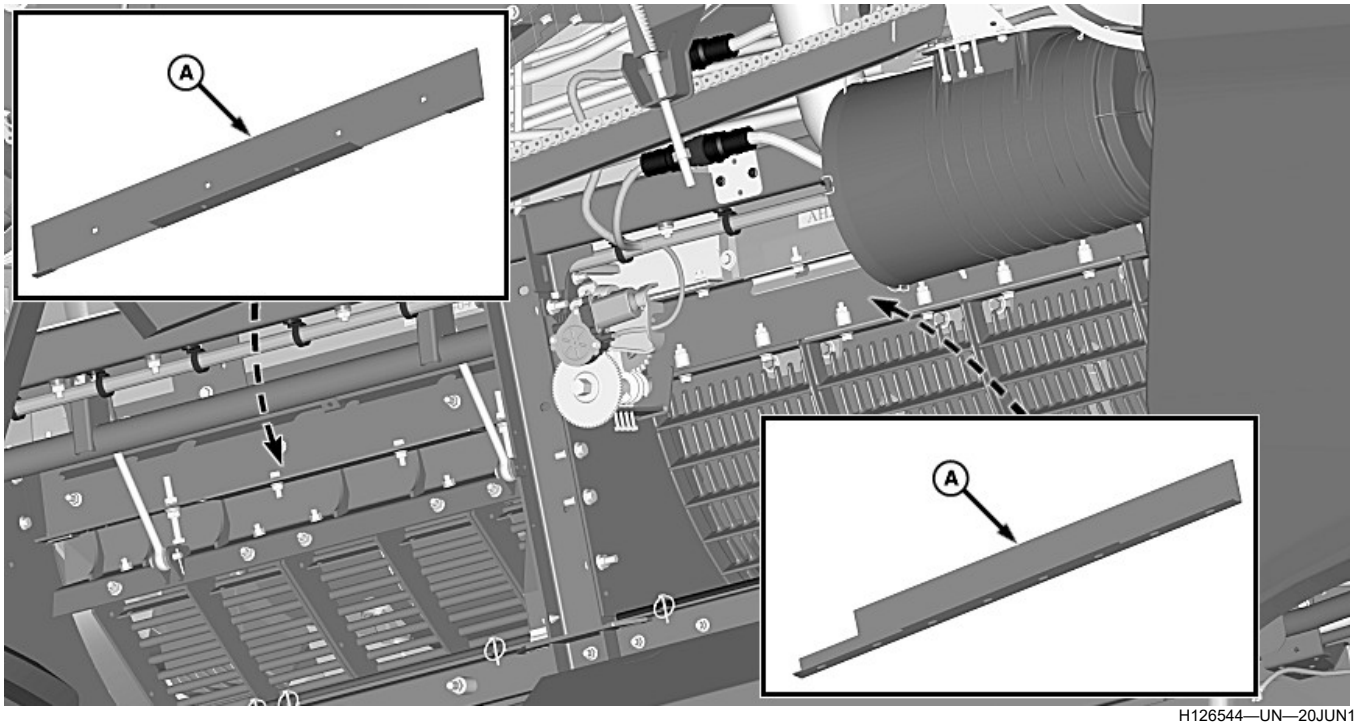
1. Separator grate interrupters (A) MUST be installed in locations (B) as shown.
2. Retain separator grate interrupters with cap screws and nuts (C).
3. Tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 73 N·m (54 lb.-ft.)

OUO6075,00016F8-19-19DEC13

Separator Rail Liners (If Equipped)



H126544—UN—20JUN19

A—Separator Rail Liners

NOTE: Left-hand separator rail liners are shown. Right-hand separator rail liners are similar.

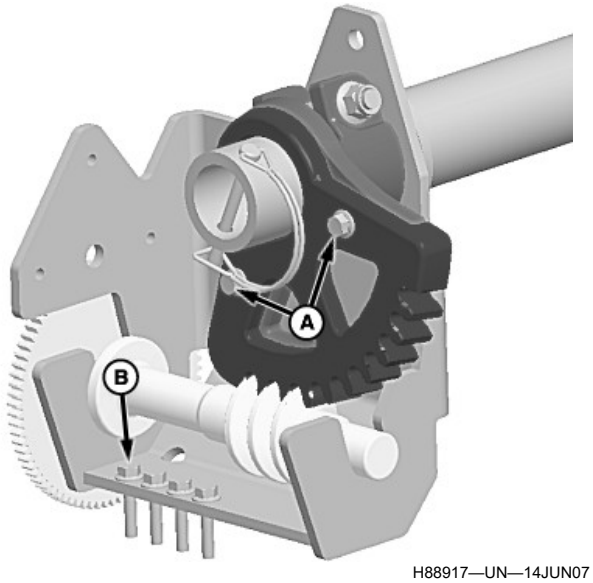
The separator rail liners (A) provide protection to the separator rail when harvesting abrasive crops.

Periodically inspect the left-hand and right-hand separator rail liners for wear.

Remove and replace separator rail liners as needed. See your John Deere dealer for further information.

OUO6075,0004BCF-19-20JUN19

Concave Sector Gear Shear Bolts (Standard Concave Adjust)



H88917—UN—14JUN07

A—Shear Bolts
B—Extra Shear Bolts (4 Used)

CAUTION: Shut OFF engine, set park brake and remove key.

Use only John Deere supplied shear bolts (A), see your John Deere dealer for replacement shear bolts.

If shear bolts should break, replace with extra shear bolts (B), which are provided on sector gear bracket.

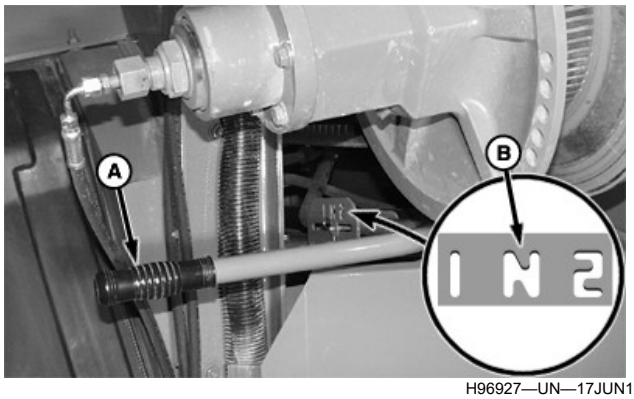
Tighten shear bolts to specification.

Specification

Shear Bolts—Torque. . . . . 15 N·m (133 lb-in.)

OUO6075,0001800-19-13MAY14

Concave Sections (Standard Concave Adjust)—Remove and Install



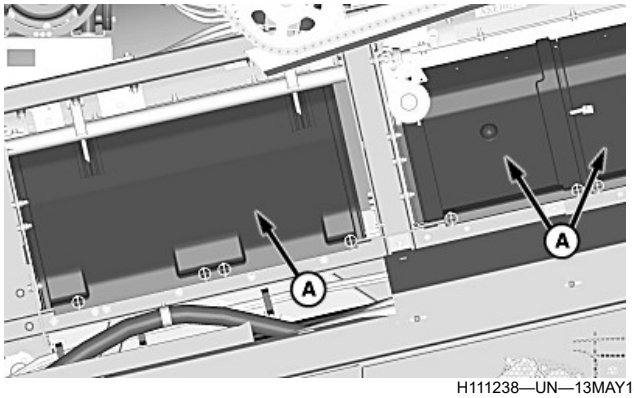
H96927—UN—17JUN10

A—Handle
B—Neutral Position

⚠ CAUTION: Concave sections are heavy and awkward to handle. Another person may be needed to remove and install concave sections.

NOTE: For ease of removal, close concave completely.

1. Move handle (A) to shift the rotor gear case in neutral position (B).

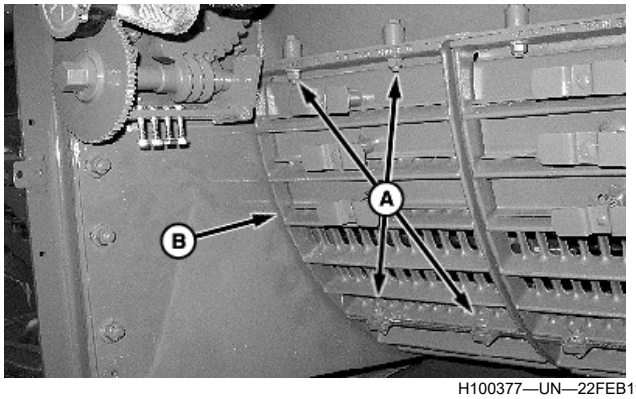


H111238—UN—13MAY14

A—Separator Covers

NOTE: Remove shielding as needed to access separator inspection covers.

2. Remove separator inspection covers (A).

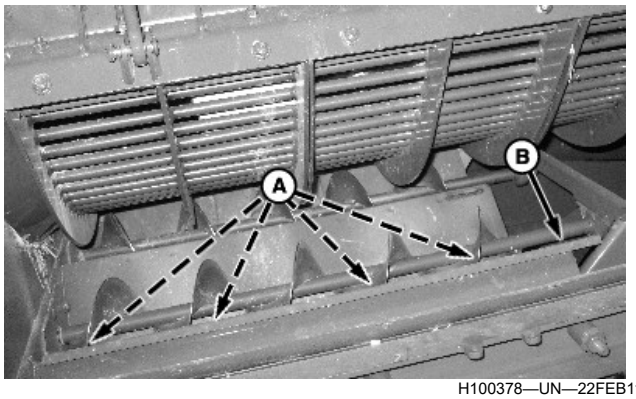


H100377—UN—22FEB11

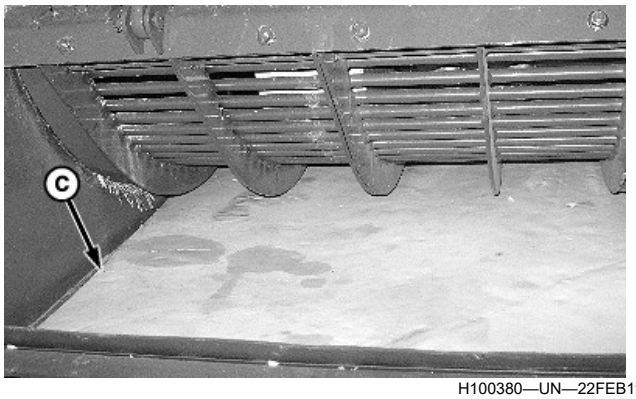
A—Cap Screws
B—Separator Grate

NOTE: Removing separator grate provides access for rotating rotor.

3. Remove cap screws (A) and separator grate (B).



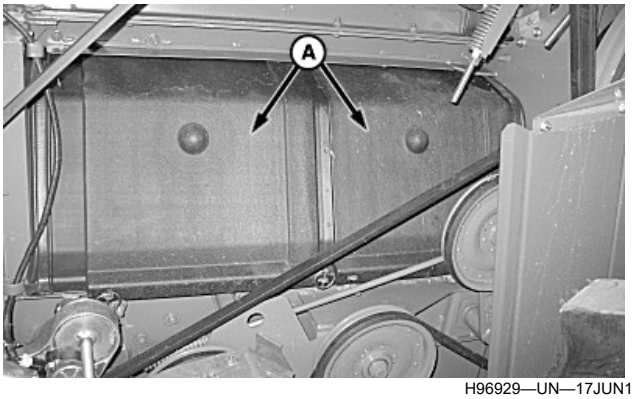
H100378—UN—22FEB11



H100380—UN—22FEB11

A—Cap Screws (4 used)
B—Diverter
C—Cardboard

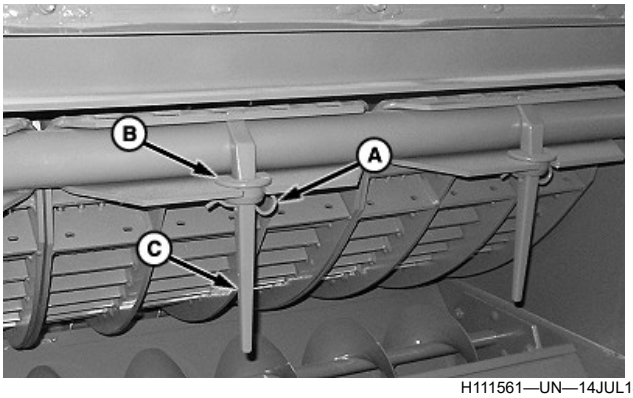
4. Loosen cap screws (A) and remove left-hand sheet metal diverter (B).
5. Place a piece of cardboard (C) or poly over conveyor augers. This provides protection for the augers and allows a smooth surface to remove the concaves.



H96929—UN—17JUN10

A—Separator Cover (2 used)

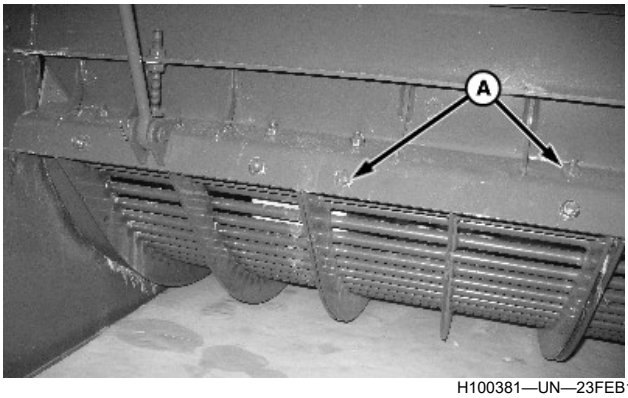
6. Remove shielding as needed to access separator inspection covers.
7. Remove quick-lock pins and front two separator covers (A) on the right-hand side of the machine.



H111561—UN—14JUL14

A—Spring Pin
B—Concave Retainer
C—Handle

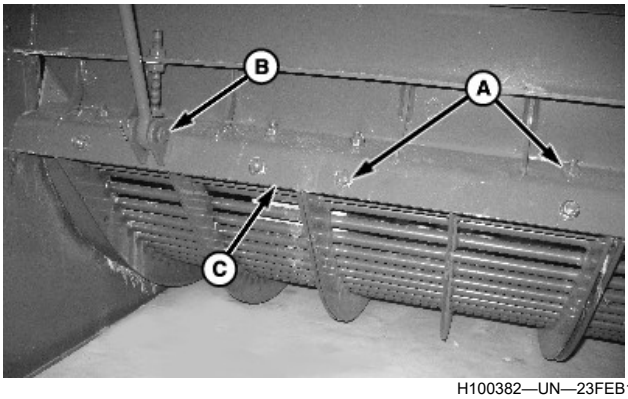
8. Remove spring pin (A) from the concave retainer (B).
9. Lift concave retainer (B) and remove the handle (C) from each concave section.



H100381—UN—23FEB11

A—Cap Screws (12 used)

10. Loosen cap screws (A).

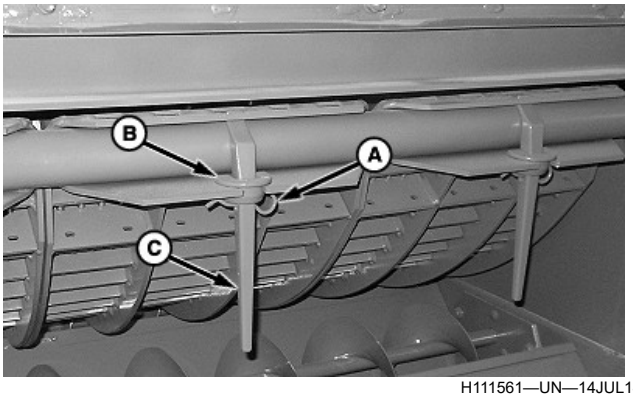


H100382—UN—23FEB11

A—Cap Screws (12 used)
B—Pins (2 used)
C—”Z” Bar

CAUTION: To prevent damage, carefully lower concave onto the auger bed.

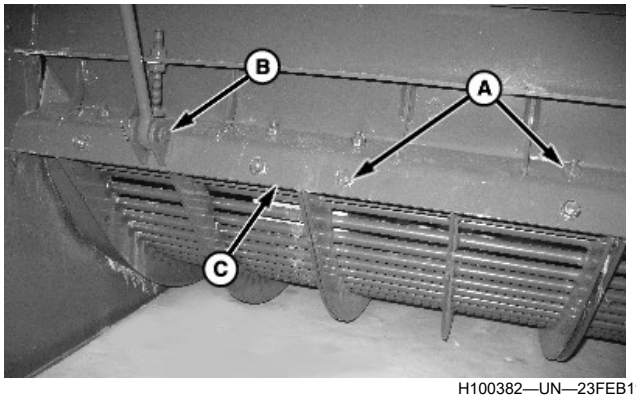
11. Remove cap screws (A).
12. Remove cotter pins, pins (B) and ”Z” bar (C).
13. Rotate rotor such that a gap in the threshing element pattern occurs at mid concave.
14. Remove center concave section.
15. Slide rear concave to the center position and remove.
16. Slide front concave to the center position and remove.
17. Inspect wear on concave sections, threshing elements and threshing tines using KXE10110 Clearance Gauge.
18. Install concaves in reverse order.



H111561—UN—14JUL14

A—Spring Pin
B—Concave Retainer
C—Handle

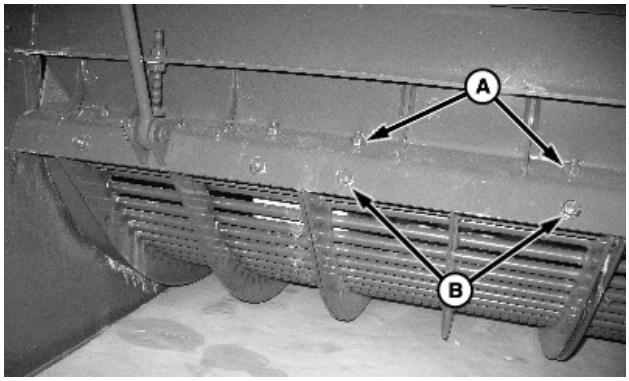
19. Install handle (C), concave retainer (B), and spring pin (A) on concave sections.



H100382—UN—23FEB11

A—Cap Screws (12 used)
B—Pins (2 used)
C—"Z" Bar

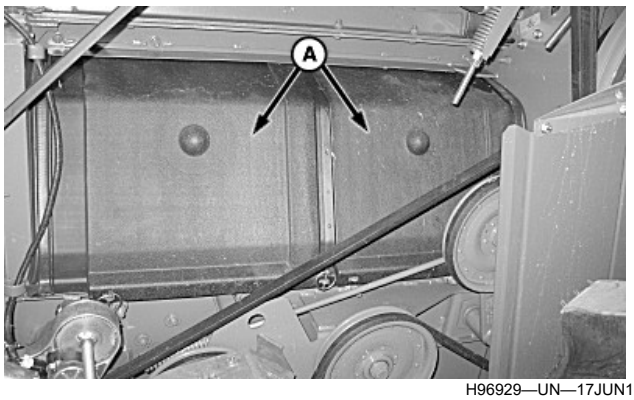
20. Position "Z" bar (C) over end of concaves and install cap screws, but do not tighten.
21. Install pins (B).



H121120—UN—22MAR17

A—Cap Screws (6 used)
B—Cap Screws (6 used)

22. Be sure the ends of concaves fit snug into "Z" bar; then tighten top row of the cap screws (A) first.
23. Tighten bottom row of the cap screws (B) last.
24. Adjust concave level. See Concave Leveling (Standard Concave Adjust) later in this section.

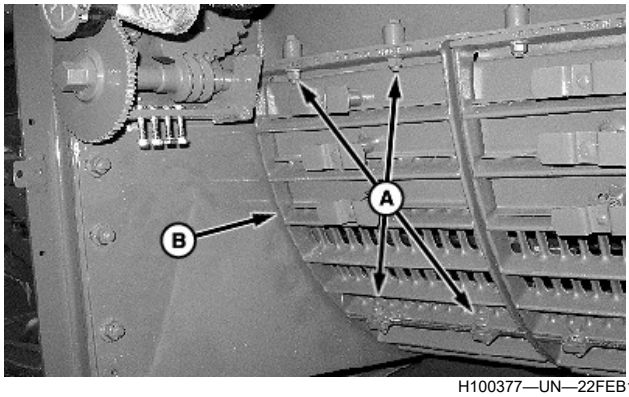


H96929—UN—17JUN10

A—Separator Covers

NOTE: Verify that top edge of separator cover is under clips.

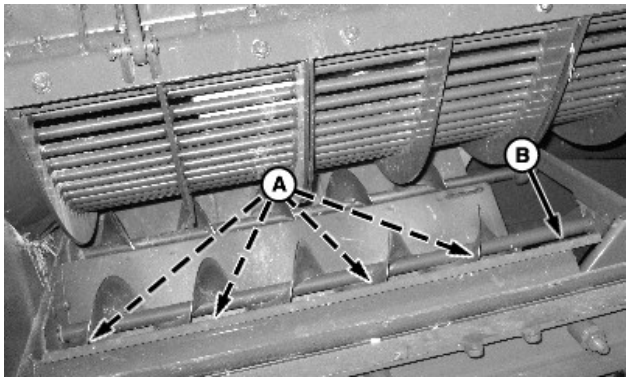
25. Install separator covers (A).
26. Install shielding previously removed to access separator inspection covers.



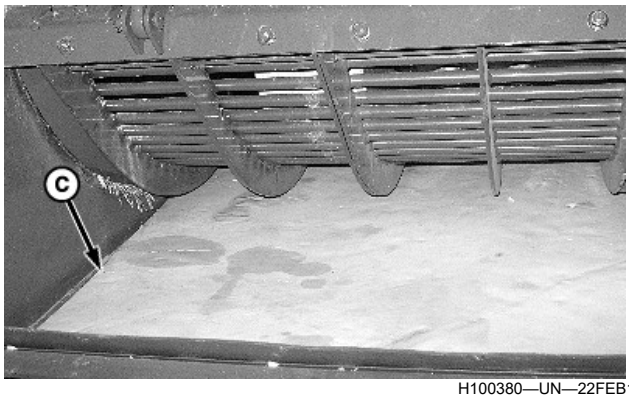
H100377—UN—22FEB11

A—Cap Screws (4 used)
B—Separator Grate

27. Install separator grate (B) and retain with cap screws (A).



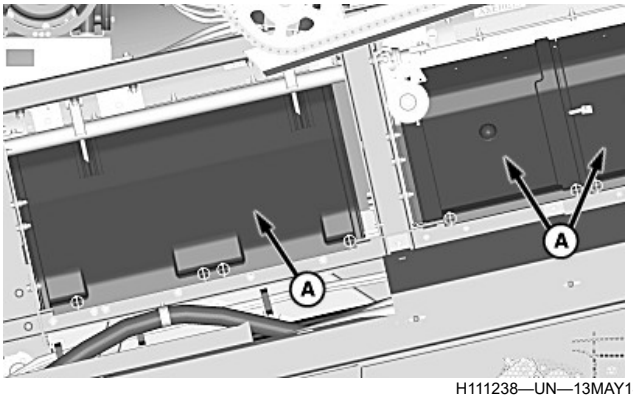
H100378—UN—22FEB11



H100380—UN—22FEB11

A—Cap Screws (4 used)
B—Diverter
C—Cardboard

28. Remove cardboard (C) or poly from conveyor augers.
29. Install diverter (B) to original position and tighten cap screws (A).



H111238—UN—13MAY14

A—Separator Cover

30. Install separator inspection covers (A).
31. Install shielding previously removed to access separator inspection covers.
32. Place rotor drive gear case in desired speed range.

OUO6075,0004605-19-04APR17

Concave Sections (Active Concave Isolation)—Remove and Install

H117012—UN—28MAR16

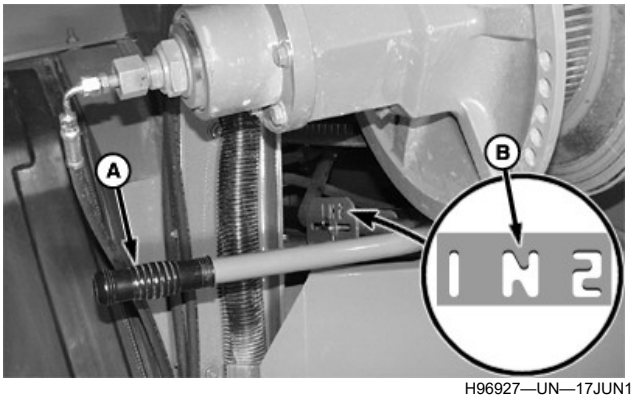
Threshing Clearance Adjust

CAUTION: Concave sections are heavy and awkward to handle. Another person may be needed to remove and install concave sections.

1. Start engine and press threshing clearance adjust switch.
2. To allow easier access to “Z” bar hardware, open threshing clearance to 5.

NOTE: Threshing clearance may need to be increased depending on machine configuration.

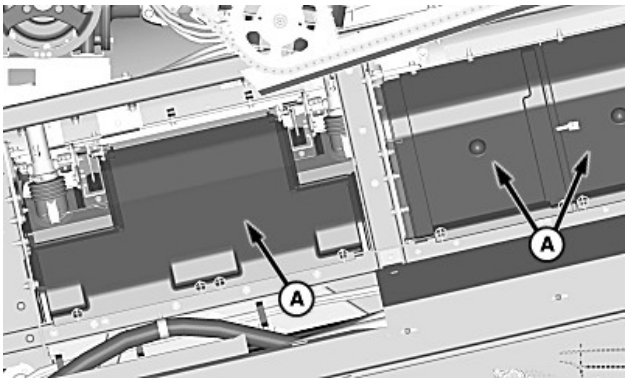
3. Shut OFF engine, set park brake and remove key.



H96927—UN—17JUN10

A—Handle
B—Neutral Position

4. Move handle (A) to shift the rotor gear case in neutral position (B).

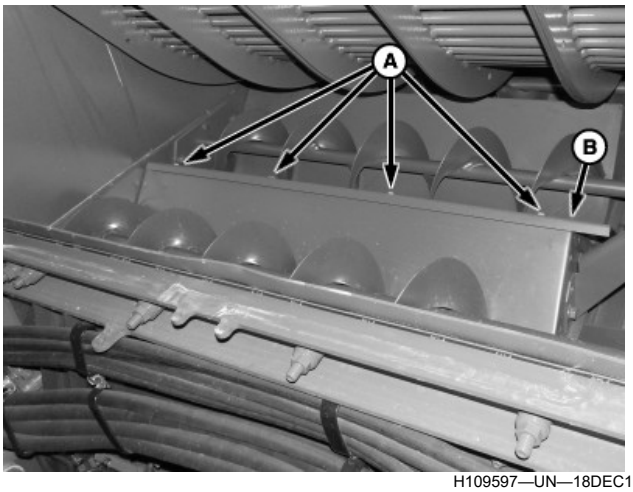


H111239—UN—13MAY14

A—Separator Covers

NOTE: Remove shielding as needed to access separator inspection covers.

5. Remove separator inspection covers (A).

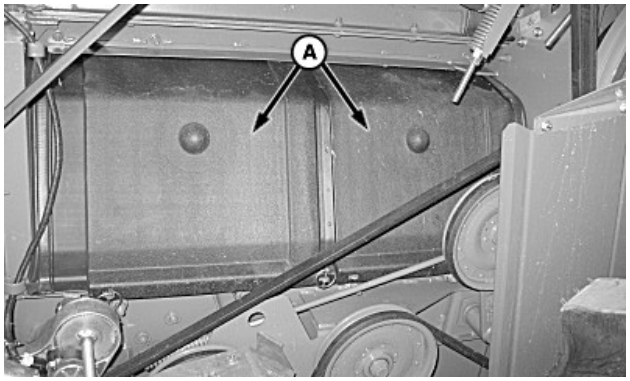


H109597—UN—18DEC13

A—Cap Screws
B—Diverter

6. Loosen cap screws (A) and remove left-hand sheet metal diverter (B).

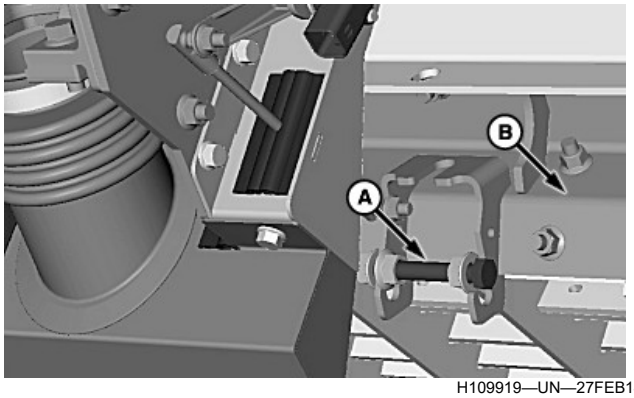
NOTE: Place a piece of cardboard or poly over conveyor augers. This provides protection for the augers and allows a smooth surface to remove the concaves.



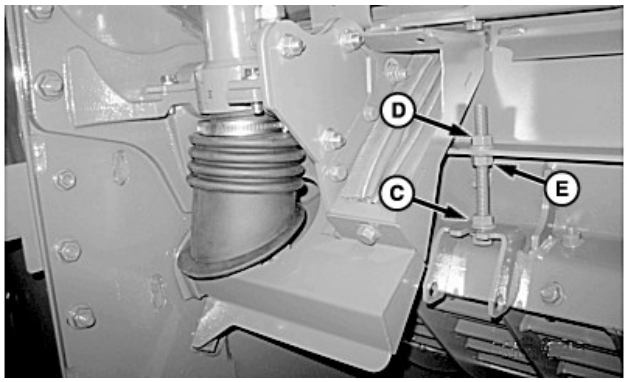
H96929—UN—17JUN10

A—Separator Cover

7. Remove shielding as needed to access separator inspection covers.
8. Remove quick-lock pins and front two separator covers (A) on the right-hand side of the machine.



H109919—UN—27FEB14

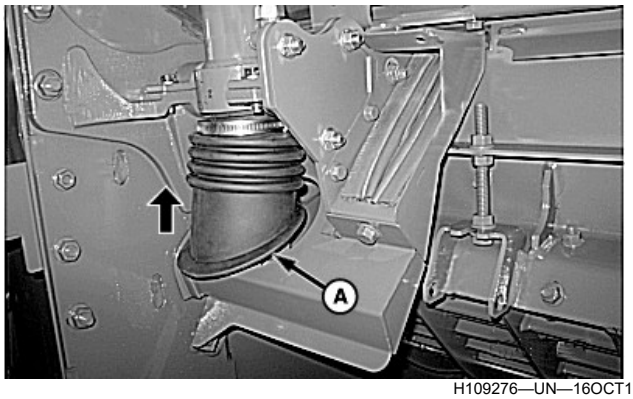


H109920—UN—27FEB14

A—Leveling Cap Screw (2 used)
B—"Z" Bar
C—Nut (2 used)
D—Nut (2 used)
E—Nut (2 used)

9. Remove concave leveling cap screws (A) from the bracket on "Z" bar (B) and install through the rail to hold concave and "Z" bar assembly.
10. Hand tighten nut (C) against "Z" bar bracket and slightly tighten nut (D) against the rail on both sides.

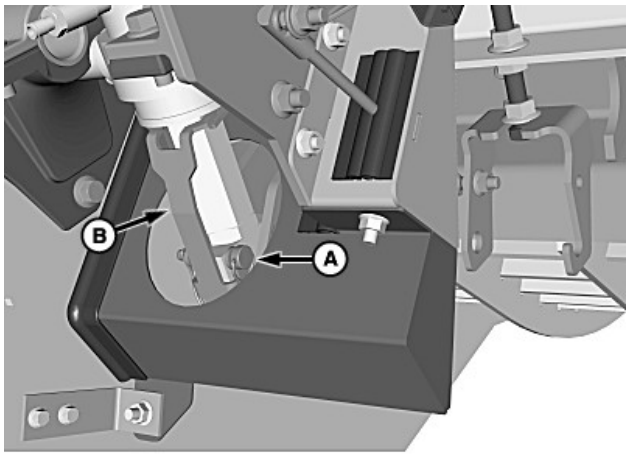
NOTE: Verify that there is adequate space between nut (E) and rail for zeroing adjustments. Do NOT tighten the nut against the rail.



H109276—UN—16OCT13

A—Rubber Seal (2 used)

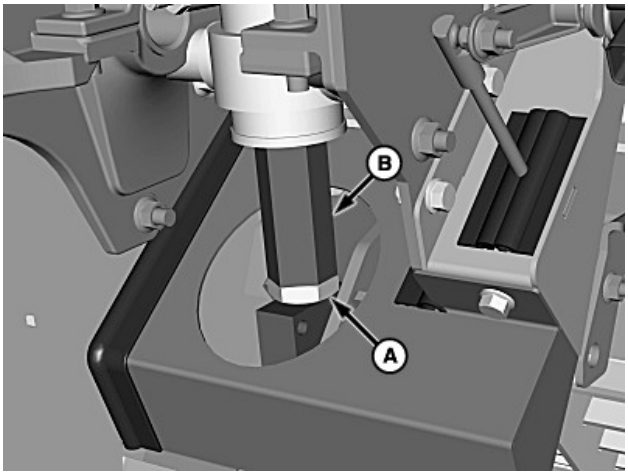
11. Remove base of the rubber seal (A) and lift upward on both cylinders.



H111261—UN—22MAY14

A—Pin (2 used)
B—Cylinder Safety Stop (2 used)

12. Remove pin (A) and cylinder safety stop (B) on both cylinders.

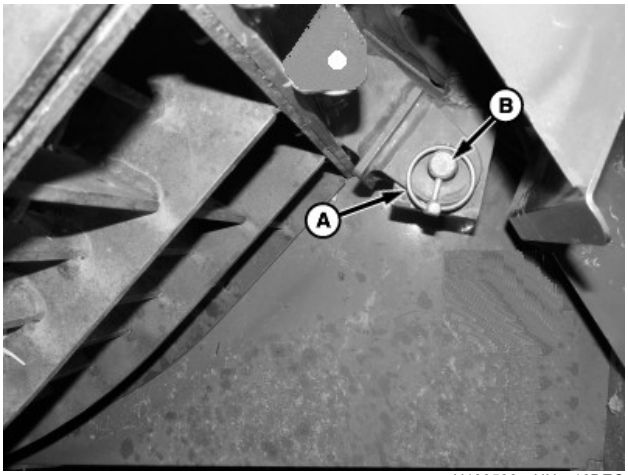


H109683—UN—22JAN14

A—Jam Nut (2 used)
B—Cylinder Stop (2 used)

13. Loosen jam nut (A) from the cylinder stop (B) and lower stop on both cylinder rods.

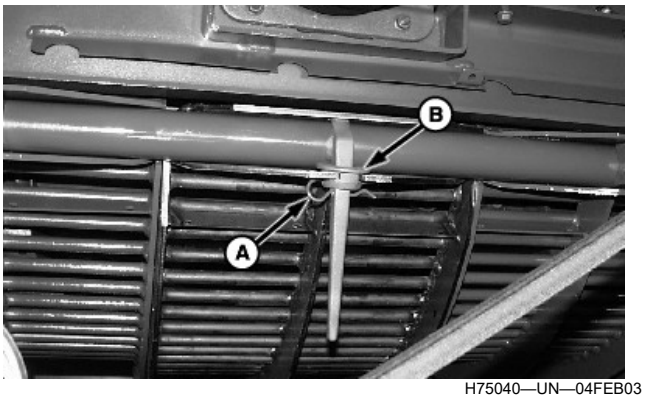
NOTE: Jam nut and stop must be lowered at least 15 mm (19/32 in) from current location.



H109593—UN—16DEC13

A—Quick-Lock Pin (2 used)
B—Pin (2 used)

14. Remove quick-lock pin (A) and pin (B) from the cylinder rod on both sides.

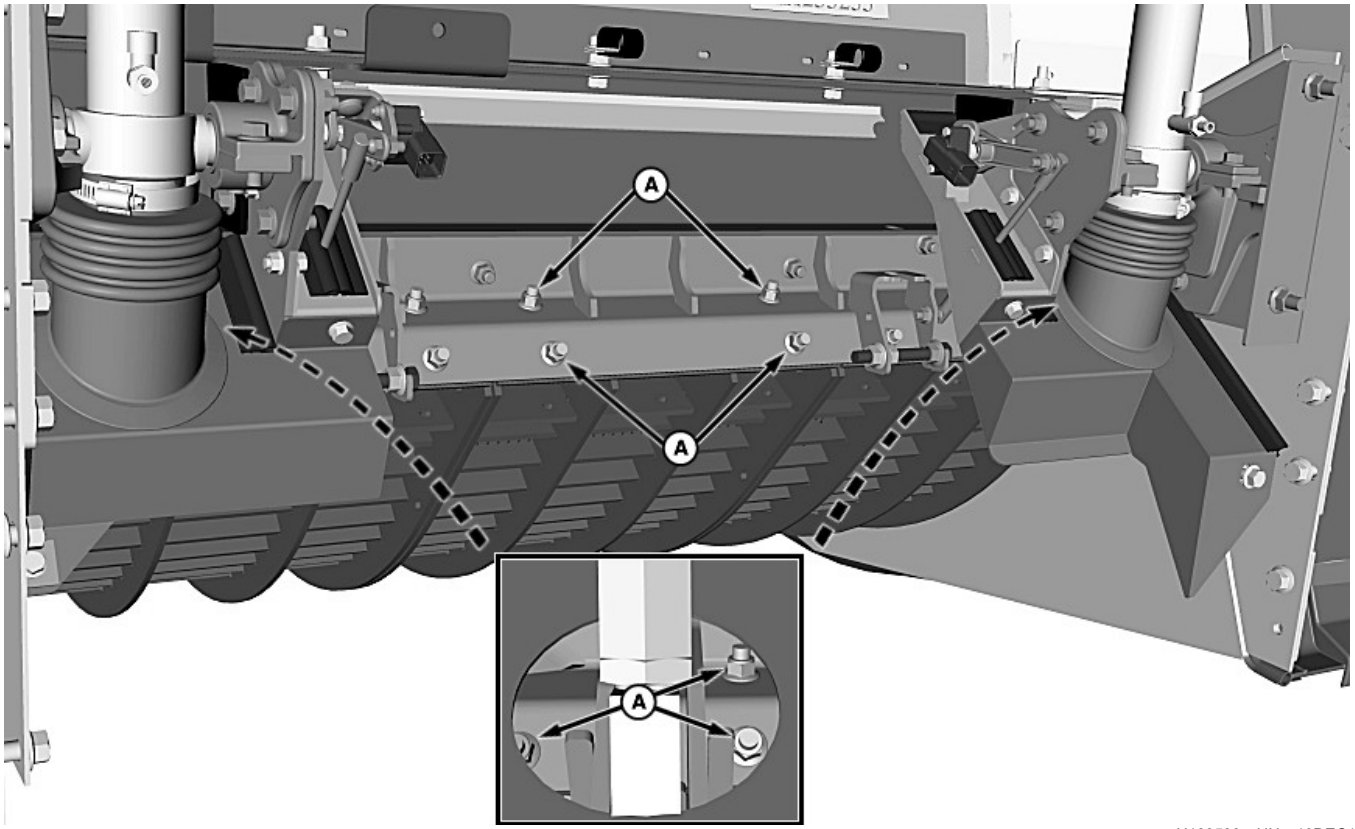


H75040—UN—04FEB03

Concave Retainer

A—Spring Pin
B—Concave Retainer

15. Remove spring pin (A) from the concave retainer (B).
16. Lift concave retainer and remove the handle from each concave section.

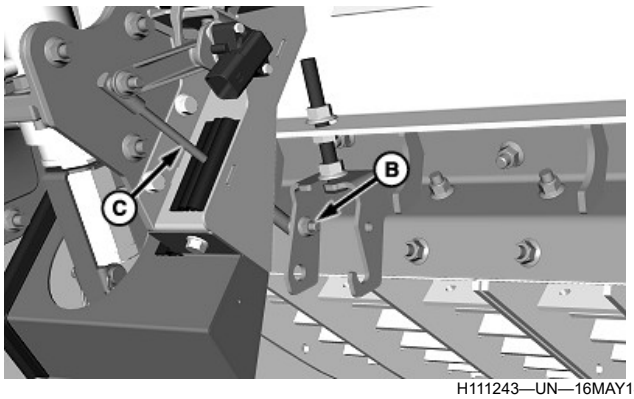


H109599—UN—19DEC13

A—Cap Screw (14 used)

17. Loosen cap screws (A).

H109677—UN—21JAN14



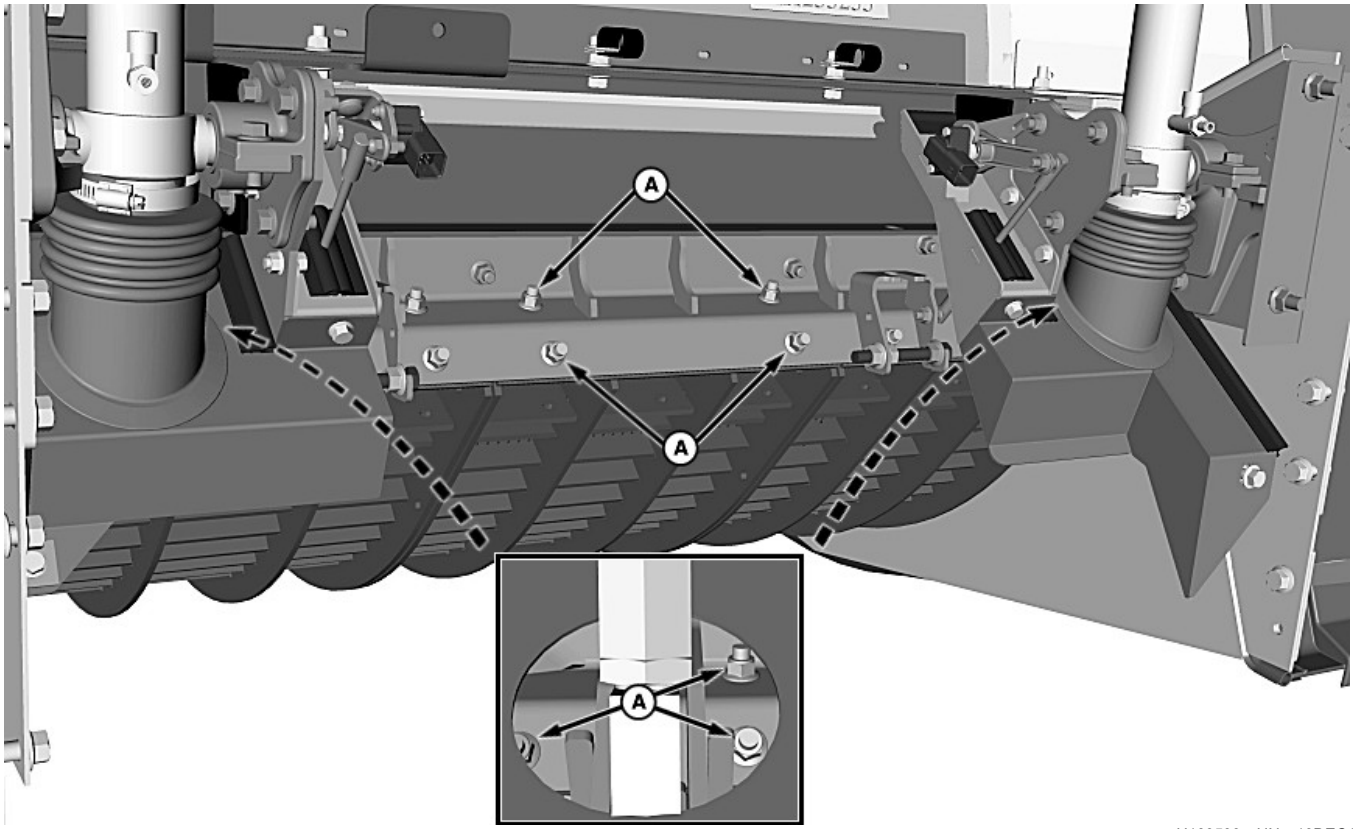
H111243—UN—16MAY14

A—Leveling Cap Screw (2 used)
B—Nut (2 used)
C—Linkage Arm (2 used)

18. Use leveling cap screw (A) to adjust “Z” bar and concaves up approximately 10 mm (13/32 in) or until middle concave can be easily removed.

NOTE: Depending on machine configuration, “Z” bar may need to be removed.

19. If removing “Z” bar, remove nuts (B) and linkage arms (C).



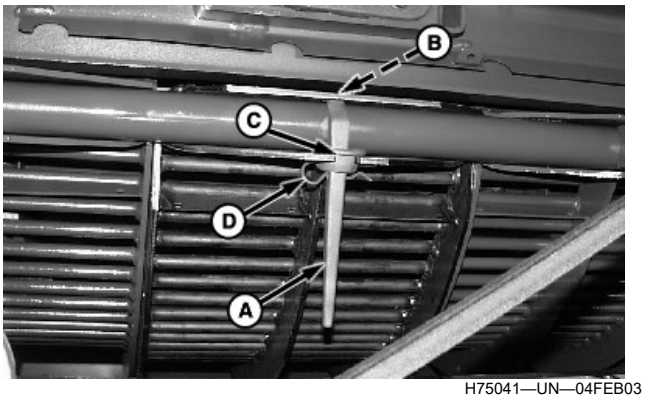
H109599—UN—19DEC13

A—Cap Screw and Nut (14 used)

20. Remove cap screws and nuts (A).

NOTE: Rotate rotor such that a gap in the threshing element pattern occurs at mid concave.

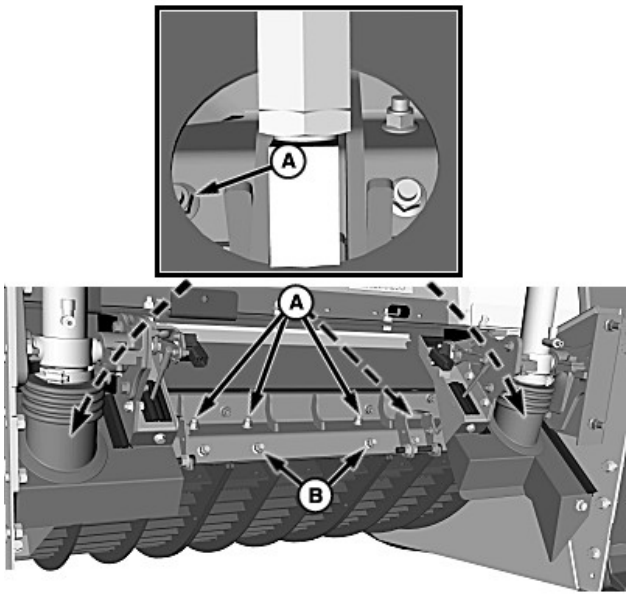
21. Remove center concave section.
22. Slide rear concave to the center position and remove.
23. Slide front concave to the center position and remove.
24. Inspect wear on concave sections, threshing elements and threshing tines using KXE10110 Clearance Gauge.
25. Install concaves in reverse order.



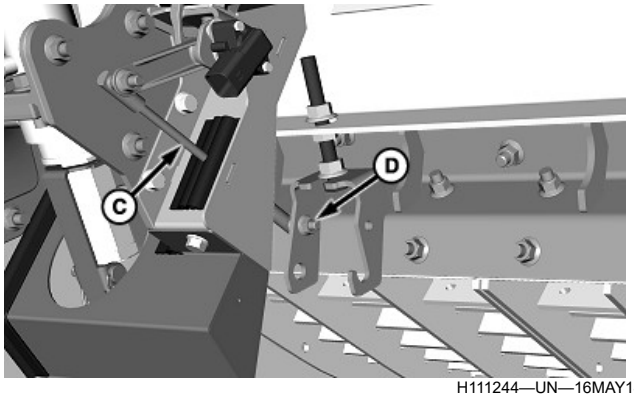
H75041—UN—04FEB03

A—Handle
B—Groove
C—Concave Retainer
D—Spring Pin

26. Install concave handle (A) into groove (B) on concave sections.
27. Install concave retainer (C) and retain with spring pin (D).



H109684—UN—22JAN14



H111244—UN—16MAY14

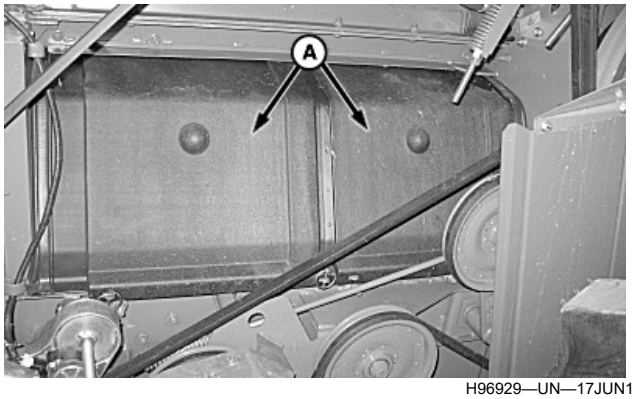
A—Cap Screw and Nut (6 used)
B—Cap Screw and Nut (8 used)
C—Linkage Arm (2 used)
D—Nut (2 used)

NOTE: If "Z" bar was previously removed, install at this time.

28. Using leveling cap screws, lower "Z" bar and concaves approximately 10 mm (13/32 in) or equal distance of amount raised previously.

NOTE: Verify that concave sections are tight against each other with no gaps prior to tightening hardware.

29. Verify ends of concaves fit snug into "Z" bar; then tighten top row of the cap screws and nuts (A) first.
30. Tighten bottom row of the cap screws and nuts (B) last.
31. If "Z" bar was removed, install linkage arms (C) using nuts (D).
32. Adjust concave level. See Concave Leveling (Active Concave Isolation) later in this section.



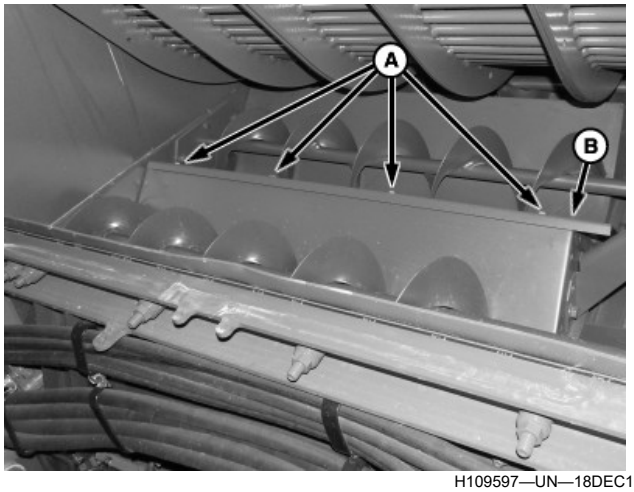
H96929—UN—17JUN10

A—Separator Covers

NOTE: Verify that top edge of separator cover is under clips.

33. Install separator covers (A).
34. Install shielding previously removed to access separator inspection covers.

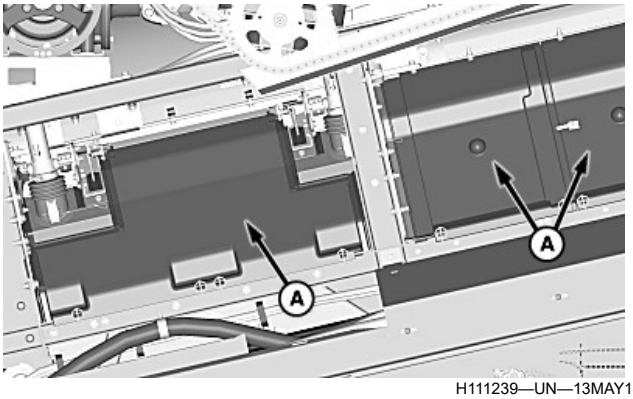
NOTE: Remove cardboard or poly from conveyor augers.



H109597—UN—18DEC13

A—Cap Screw (4 used)
B—Diverter

35. Install diverter (B) to original position and tighten cap screws (A).



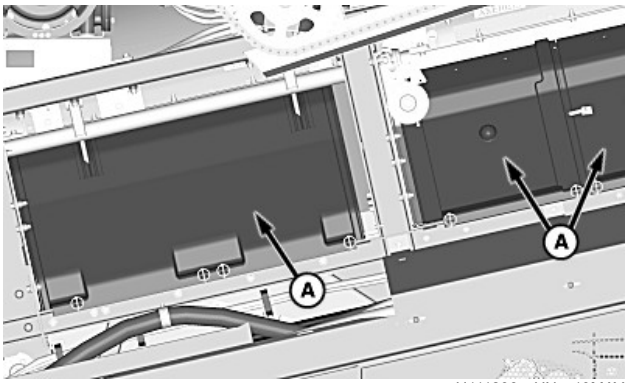
H111239—UN—13MAY14

A—Separator Cover

36. Install separator inspection covers (A).
37. Install shielding previously removed to access separator inspection covers.
38. Shift rotor drive gear case to previous position.

OUO6075,0004606-19-11APR17

Concave Leveling (Standard Concave Adjust)

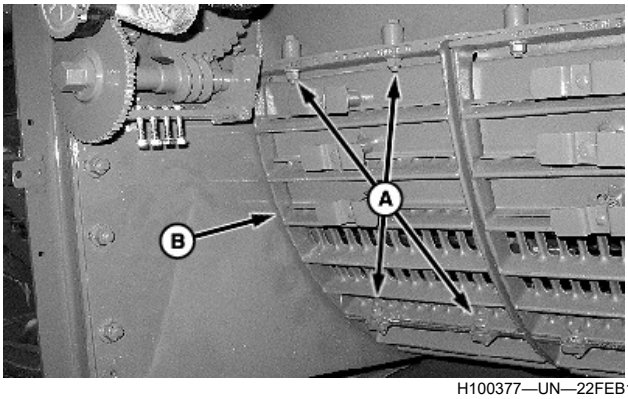


H111238—UN—13MAY14

A—Separator Cover

NOTE: Round bar concave covers (if installed) should be removed prior to beginning concave leveling.

1. Remove shielding as needed to access separator inspection covers.
2. Remove separator inspection covers (A).

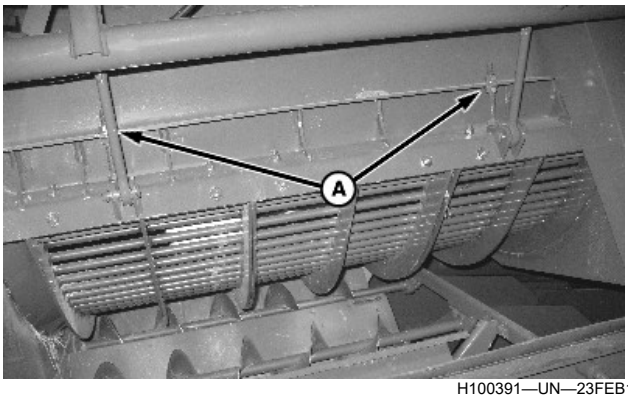


H100377—UN—22FEB11

A—Cap Screw (4 used)
B—Separator Grate

NOTE: Removing separator grate provides access for rotating rotor.

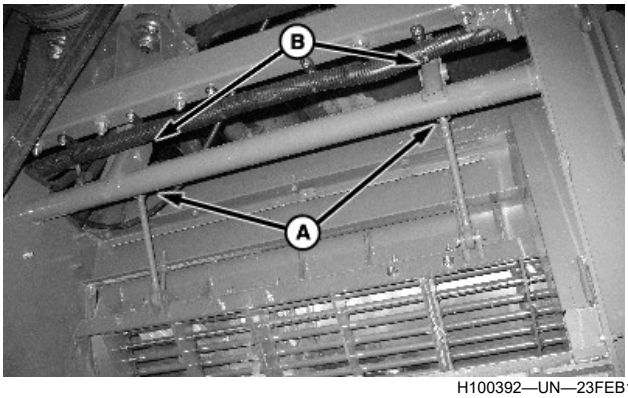
3. Remove cap screws (A) and separator grate (B).



H100391—UN—23FEB11

A—Stop Bolts (2 used)

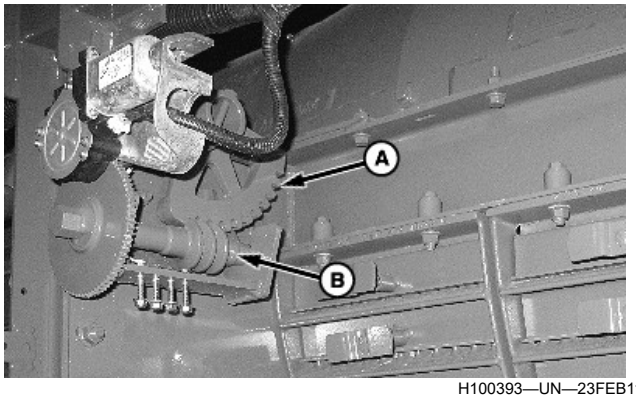
4. Back off stop bolts (A).



H100392—UN—23FEB11

A—Bottom Nut (2 used)
B—Top Nut (2 used)

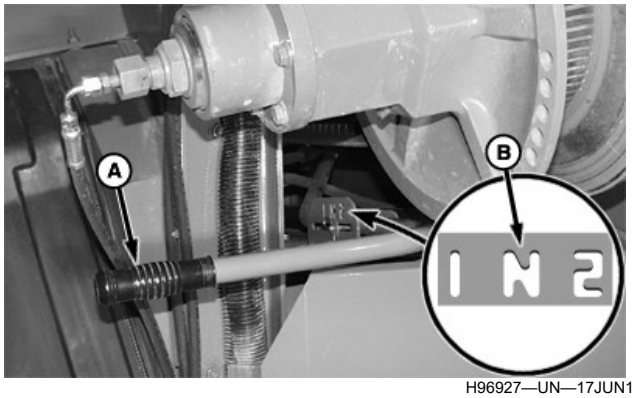
5. Loosen lock nuts (A) and back off nuts (B) five turns each.



H100393—UN—23FEB11

A—Sector Gear
B—Worm Gear

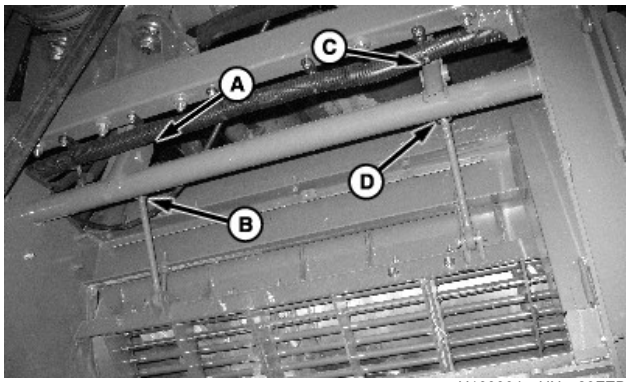
6. Adjust concave to closed position using switch in cab until the worm gear (B) and sector gear (A) are bottomed out in up position.



H96927—UN—17JUN10

A—Handle
B—Neutral Position

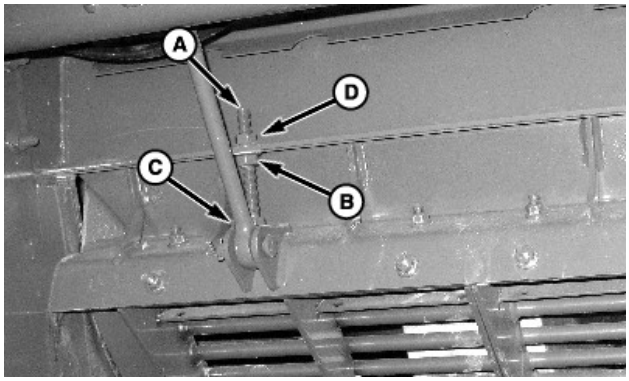
7. Move handle (A) to shift the rotor gear case in neutral position (B).



H100394—UN—23FEB11

A—Front Eyebolt Top Nut
B—Front Eyebolt Bottom Lock Nut
C—Rear Eyebolt Top Nut
D—Rear Eyebolt Bottom Lock Nut

8. Adjust front eyebolt top nut (A) slowly until elements ”tick” concave while rotor is rotating counterclockwise. Back off three complete turns.
9. Adjust rear eyebolt top nut (C) slowly, until elements ”tick” concave while rotor is rotating counterclockwise. Back off three complete turns.
10. Adjust front eyebolt top nut (A) down slowly until elements ”tick” concave. Back off slowly until ”tick” stops. As soon as ”tick” has stopped back off one complete turn and tighten top lock nut.
11. Adjust rear eyebolt top nut (C) down slowly, until elements ”tick” concave. Back off slowly until ”tick” stops. As soon as ”tick” has stopped back off one complete turn and tighten top lock nut.
12. Tighten bottom front concave adjustment nut. Hold front eyebolt top nut (A) with wrench and tighten front eyebolt bottom lock nut (B).
13. Tighten bottom rear concave adjustment nut. Hold rear eyebolt top nut (C) with wrench and tighten rear eyebolt bottom lock nut (D).

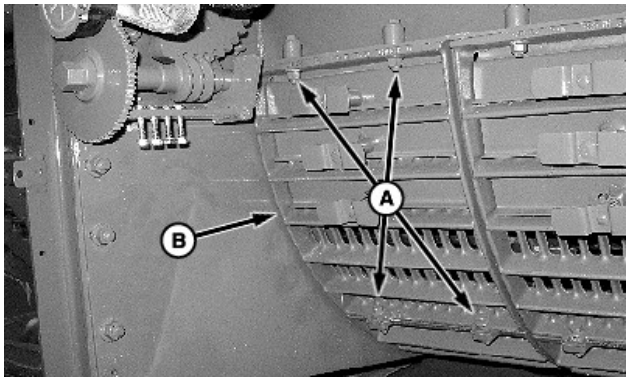


H100395—UN—23FEB11

Stop Bolts

A—Stop Bolt (2 used)
B—Lock Nut
C—Head of Bolt
D—Lock Nut

14. Adjust front and rear concave stop bolt (A) by tightening bottom nut (B) until head of bolt (C) is snug against concave. Tighten top nut (D) while holding bottom nut (B) with wrench.



H100377—UN—22FEB11

A—Cap Screw (4 used)
B—Separator Grate

15. Install separator grate (B) and retain with cap screws (A).

16. Shift rotor drive gear case to previous position.
17. Install previously removed separator inspection covers and shields.
18. Select **Threshing Clearance Calibration (STS Electric)** from inside the cab and follow information shown on the display. See Calibrations Application Help or Operator's Station Help for further information.

OUO6075,0004601-19-28MAR17

Concave Leveling (Active Concave Isolation)

H117012—UN—28MAR16

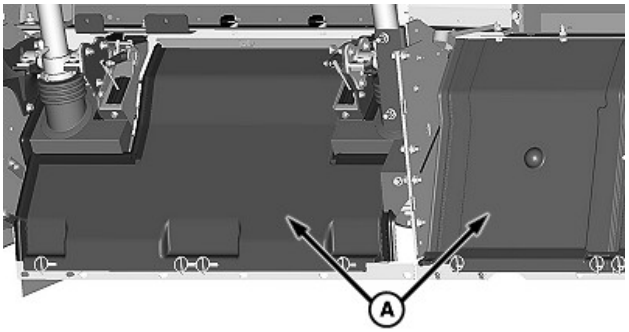
Threshing Clearance Adjust

NOTE: If installed, remove round bar concave covers before beginning concave leveling.

1. Start engine and press threshing clearance adjust switch.
2. Set threshing clearance to 0.

NOTE: If taller dense pack threshing tines or rice threshing elements have replaced grain elements, set threshing clearance to 15.

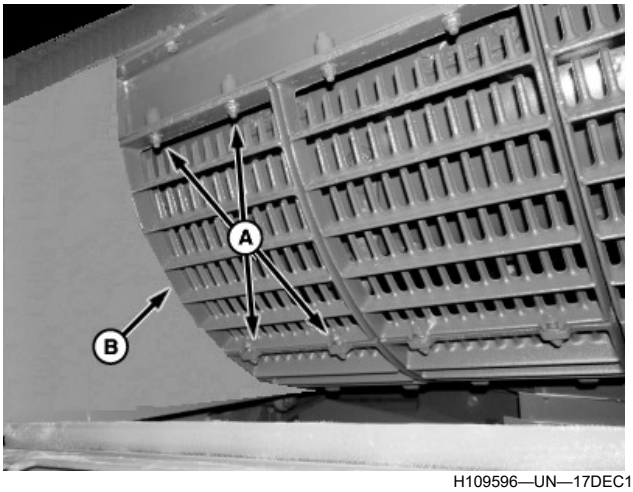
3. Shut OFF engine, set park brake and turn key switch ON.



H113295—UN—23MAR15

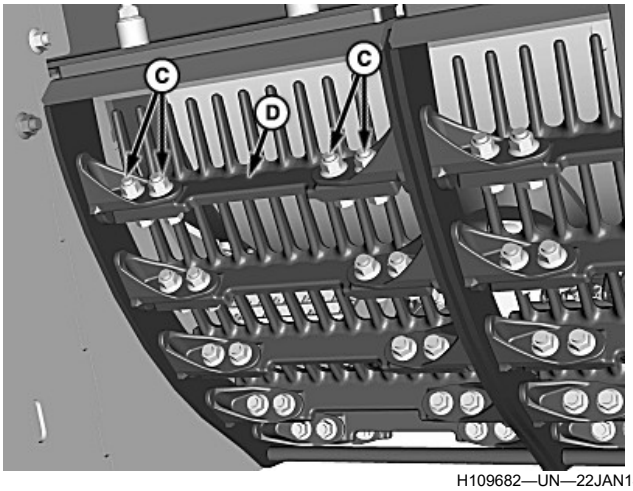
A—Separator Inspection Covers

4. Remove separator inspection covers (A).



H109596—UN—17DEC13

Standard Cast Separator Grates



H109682—UN—22JAN14

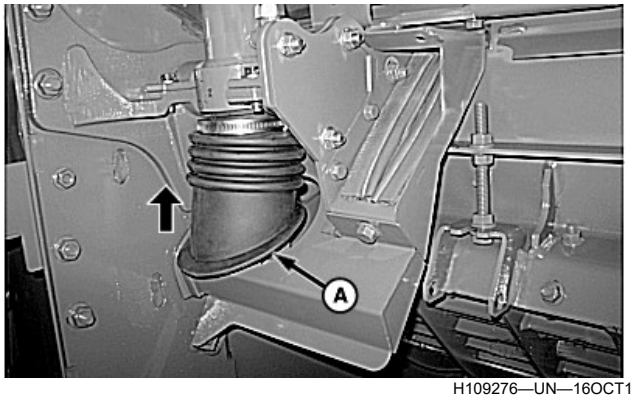
Heavy-Duty Separator Grates

A—Cap Screws (4 used)
B—Separator Grate
C—Cap Screws and Nuts
D—Separator Grate Fingers

NOTE: Removing separator grate provides access for rotating rotor.

5. On machines equipped with the standard separator grates, remove cap screws (A) and separator grate (B).
6. On machines equipped with heavy-duty separator grate fingers, remove cap screws and nuts (C) and finger (D).

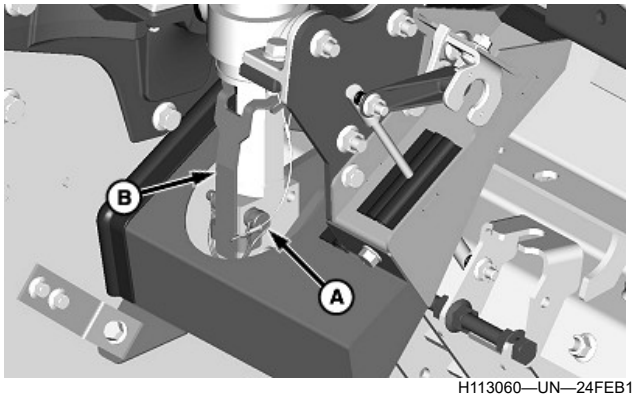
NOTE: It may be necessary to remove two or more separator grate fingers to allow access for rotating rotor.



H109276—UN—16OCT13

A—Rubber Seal (2 used)

7. Remove base of the rubber seal (A) and lift upward on both cylinders.

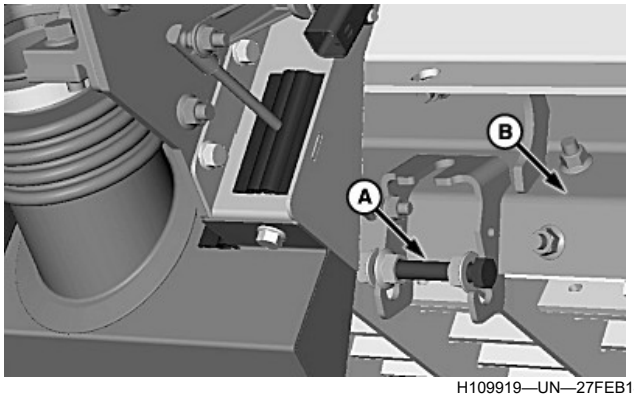


H113060—UN—24FEB15

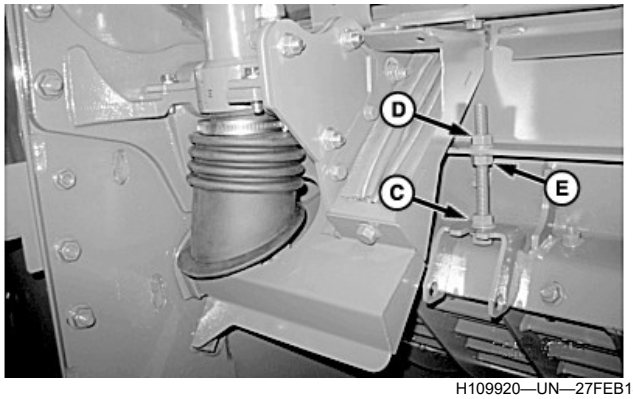
A—Pin (2 used)
B—Cylinder Lock (2 used)

NOTE: Concave may need to be repositioned to remove cylinder lock.

8. Remove pin (A) and cylinder lock (B) on each cylinder.



H109919—UN—27FEB14

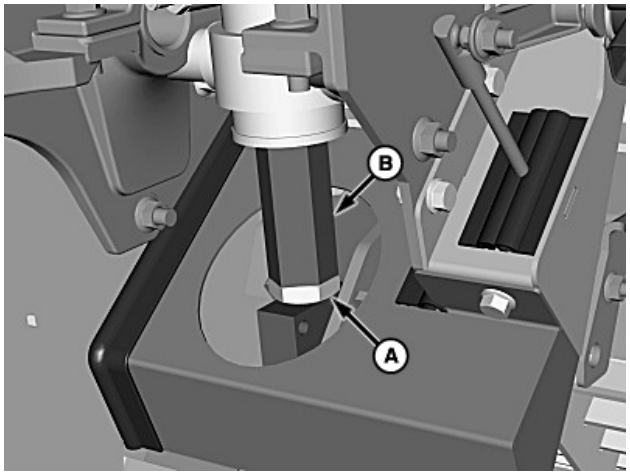


H109920—UN—27FEB14

A—Leveling Cap Screws (2 used)
B—"Z" Bar
C—Nut (2 used)
D—Nut (2 used)
E—Nut (2 used)

9. Remove concave leveling cap screws (A) from the bracket on "Z" bar (B) and install through the rail to hold concave and "Z" bar assembly.
10. Hand tighten nut (C) against "Z" bar bracket and slightly tighten nut (D) against the rail on both sides.

NOTE: Verify that there is adequate space between nut (E) and rail for zeroing adjustments. Do NOT fully tighten the nut against the rail.

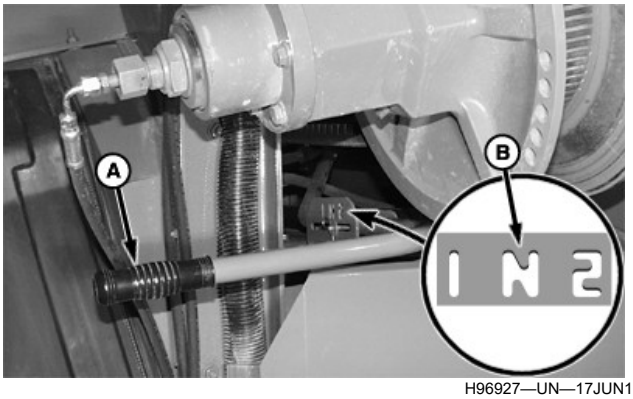


H109683—UN—22JAN14

A—Jam Nut (2 used)
B—Cylinder Stop (2 used)

11. Loosen jam nut (A) from the cylinder stop (B) and lower stop on both cylinder rods.
12. Select **Concave Leveling Calibration** from inside the cab and follow information shown on the display. See Calibrations Application Help or Operator's Station Help for further information.

NOTE: Key switch MUST be left ON while performing following steps outside of cab.



H96927—UN—17JUN10

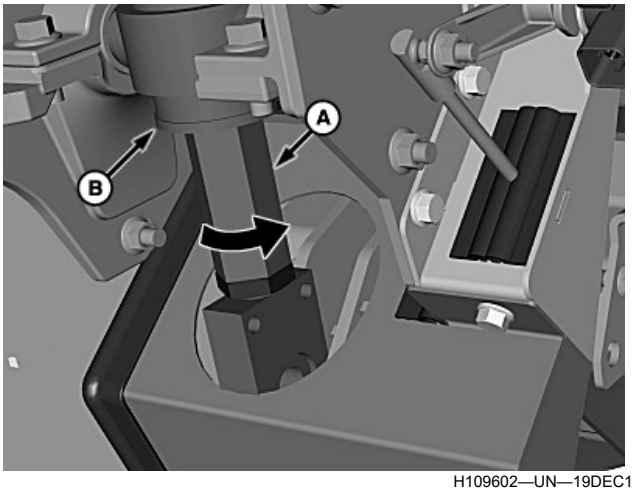
A—Handle
B—Neutral Position

13. Move handle (A) to shift the rotor gear case in neutral position (B).
14. Spin rotor counterclockwise and tighten rear leveling cap screw, pulling concave upward until elements “tick”. Once “ticking” occurs, back off leveling cap screw three complete turns.
15. Spin rotor counterclockwise and tighten front leveling cap screw, pulling concave upward until elements “tick”. Once “ticking” occurs, back off leveling cap screw three complete turns.
16. Continue spinning rotor counterclockwise and tighten rear leveling cap screw, pulling concave upward until elements “tick”. Once “ticking” occurs, back off leveling cap screw one and a half turns.
17. Continue spinning rotor counterclockwise and tighten front leveling cap screw, pulling concave upward until elements “tick”. Once “ticking” occurs, back off leveling cap screw one and a half turns.

H109594—UN—16DEC13

A—Nut 2 (used)

18. Tighten nut (A) against the rail to help lock concaves in position.



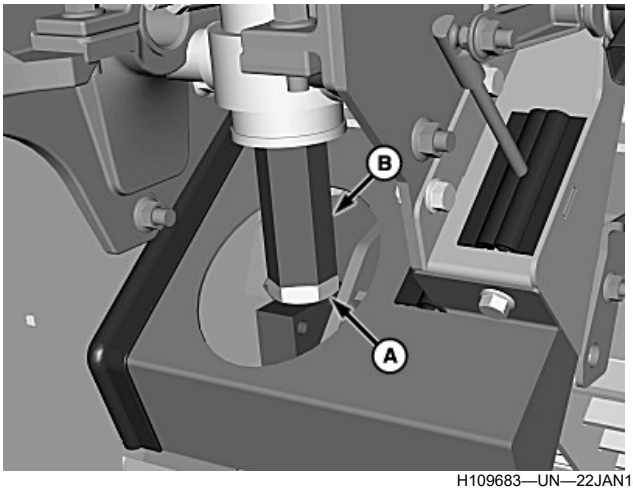
H109602—UN—19DEC13

A—Cylinder Stops (2 used)
B—Cylinder Barrels (2 used)

19. During the calibration, it is critical to adjust the cylinder stops correctly.

NOTE: Do not over tighten cylinder stops.

20. Turn cylinder stops (A) in direction of arrow until hand tight against cylinder barrels (B).



H109683—UN—22JAN14

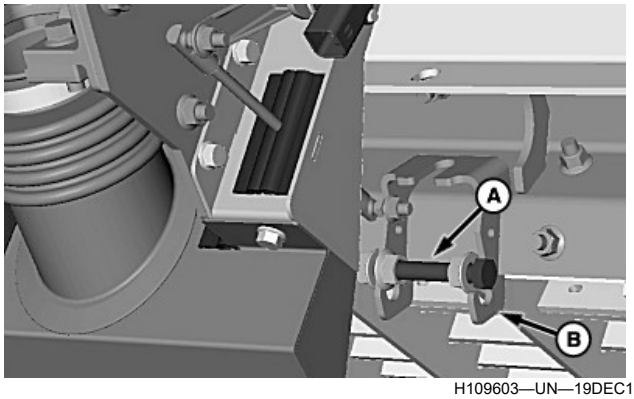
A—Jam Nut (2 used)
B—Cylinder Stop (2 used)

NOTE: Prior to tightening jam nuts (A), index cylinder stops (B) to install cylinder locks in correct position on hex flats of cylinder stops.

21. Tighten jam nut (A) against the cylinder stop (B) on each cylinder.

NOTE: Leveling cap screws MUST remain fastened to “Z” bar bracket and rail.

22. Continue with **Concave Leveling Calibration** until complete.

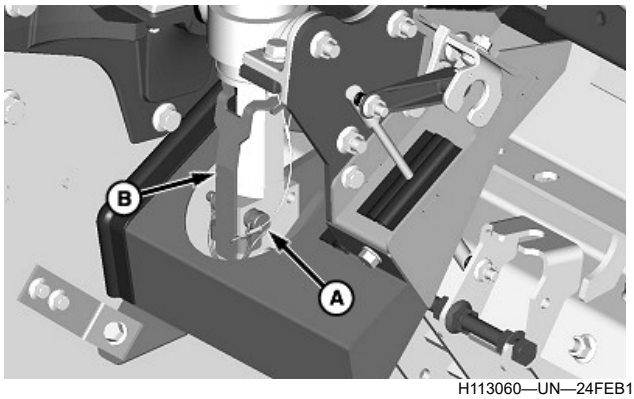


H109603—UN—19DEC13

A—Leveling Cap Screw (2 used)
B—Storage Bracket (2 used)

23. If calibration was accepted, exit **Concave Leveling Calibration**, turn key switch OFF, and remove leveling cap screws (A).
24. Store leveling cap screws in storage brackets (B).
25. Start engine. Calibrate **Threshing Clearance Calibration (Hydraulic)** from inside the cab and follow information shown on the display. See Calibrations Application Help or Operator's Station Help for further information.

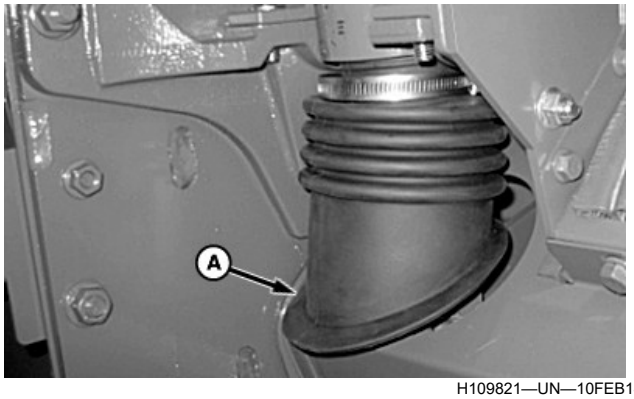
IMPORTANT: A warning message may appear on display stating to abort the calibration because the system has detected a concave zero position that does not match concave leveling position. If this occurs, abort Concave Leveling Calibration, repeat the Concave Leveling procedure, and calibrate Threshing Clearance Calibration (Hydraulic) again.



H113060—UN—24FEB15

A—Pin (2 used)
B—Cylinder Lock (2 used)

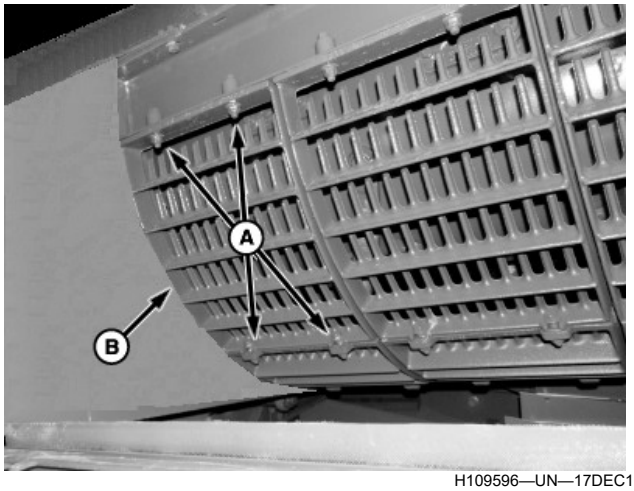
26. Open concave to 35 and install previously removed cylinder locks (B) and pins (A) on each cylinder.



H109821—UN—10FEB14

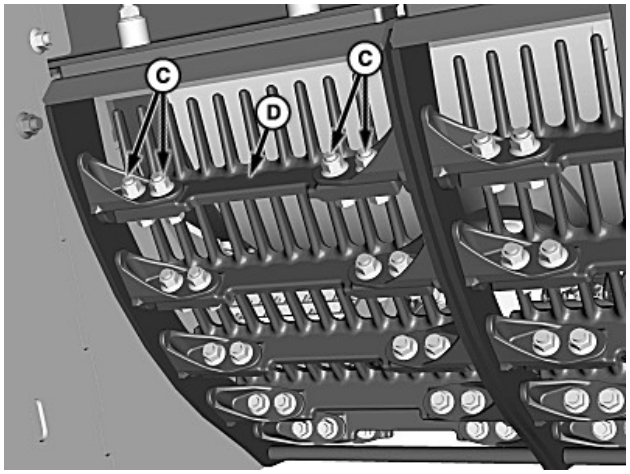
A—Rubber Seal (2 used)

27. Install bottom of the rubber seal (A) on both cylinders.



H109596—UN—17DEC13

Standard Cast Separator Grate



H109682—UN—22JAN14

Heavy-Duty Separator Grate

A—Cap Screws (4 used)
B—Separator Grate
C—Cap Screws and Nuts
D—Separator Grate Fingers

28. On machines equipped with the standard separator

grates, install separator grate (B) using cap screws (A).

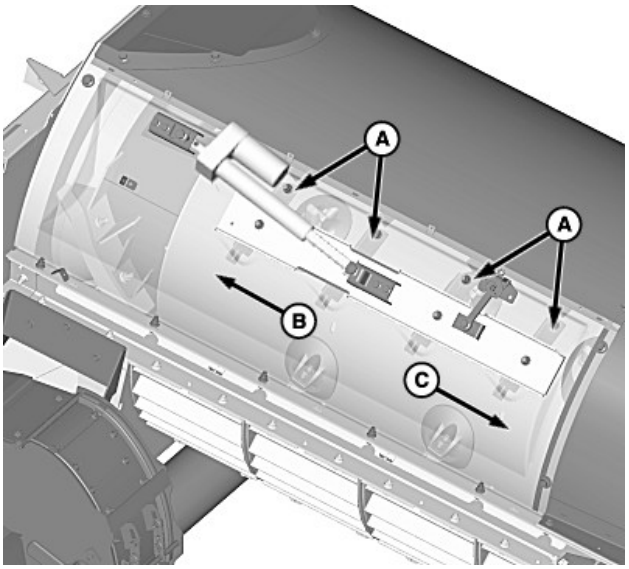
29. On machines equipped with heavy-duty separator grates, install separator grate fingers (D) using cap screws and nuts (C). Tighten to specification.

Specification	
Heavy-Duty Separator Grate Cap Screws and Lock Nuts—Torque	73 N·m (54 lb·ft)

30. Shift rotor drive gear case to previous position.
31. Install previously removed separator inspection covers and shields.

OUO6075,0004600-19-28MAR17

Separator Top Cover Vanes (If Equipped)



H97060—UN—22JUN10

A—Separator Top Cover Vanes
B—Advanced Position
C—Standard Position

Separator top cover vanes (A) are located on the right-hand side of the machine behind the clean grain loading auger.

Separator top cover vanes can be be adjusted to two different positions through software.

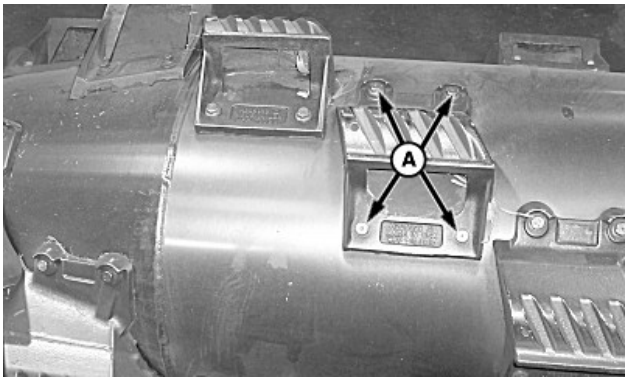
NOTE: Running separator vanes in the advanced position may increase grain losses in certain crop and conditions. Crop dwell time in separator is reduced to improve straw quality.

- (B)—Advanced Position
- (C)—Standard Position

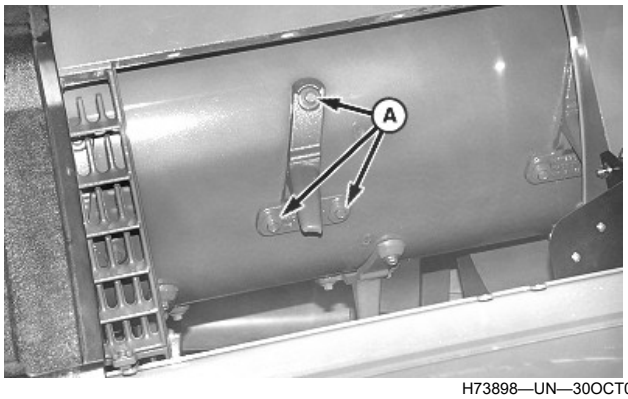
See Residue Management Application Help or Operator's Station Help for further information.

OUO6075,0004392-19-31JAN17

Threshing Elements and Tines (TriStream Rotor)—Remove and Install



H82539—UN—07MAR05



H73898—UN—30OCT02

A—Cap Screw

IMPORTANT: Rotor is a balanced assembly. Elements and tines must be replaced in sets of three to maintain balance. Replacement kits are available through service parts and include new cap screws with pre-applied Threadlock and Sealer. Tines or elements that become loose may result in machine damage.

If tines or elements need to be removed for other than replacement, mark location on tine (s)/element(s) and rotor, prior to removal. Install in same location as removed to maintain balance. Always use new cap screws.

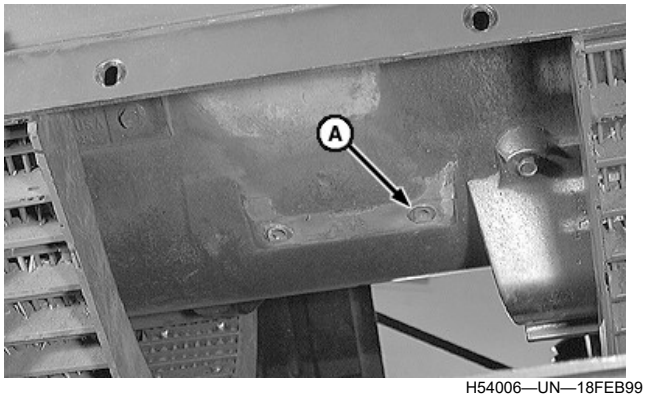
Make sure to clean out tailings and front cross auger if tine replacement is due to broken or damaged tines. Failure to do so before initial start-up may allow broken tines to recirculate and cause tine damage to reoccur.

1. Shut OFF engine, set park brake and remove key.
2. Remove separator grates or concave sections as needed to access rotor.

NOTE: Depending on machine option, refer to the following in this section:

- *Concave Sections (Standard Concave Adjust)—Remove and Install*
- *Concave Sections (Active Concave Isolation)—Remove and Install*

3. Inspect wear on threshing elements and separator tines using KXE10110 Clearance Gauge.
4. Remove cap screws (A) and threshing element or tine.



H54006—UN—18FEB99

A—Threaded Insert

5. Inspect RIVNUT® threaded inserts (A). Replace if damaged.
6. If one element or tine needs replaced, replace all in the group. Example: If element 2 needs to be replaced, replace elements 1 and 3 also.
7. Use Threshing Elements and Separator Tine Location diagram for identifying elements and tines.
8. Tighten cap screws to specification.

Specification	
Threshing Element and Separator Tine Cap Screws—Torque	90 N·m (66 lb.-ft.)

OUO6075,0001804-19-13MAY14

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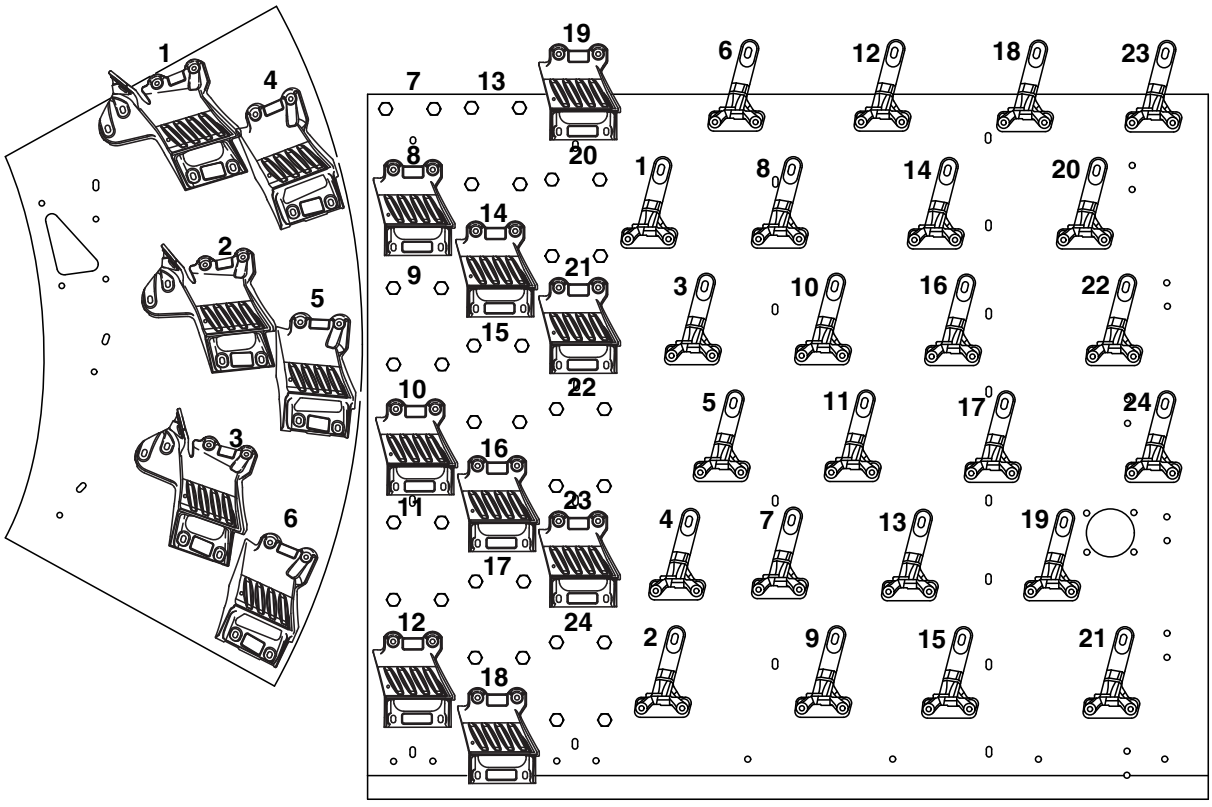
Threshing Element and Separator Tine Location (TriStream Rotor Tough Grain Configuration)



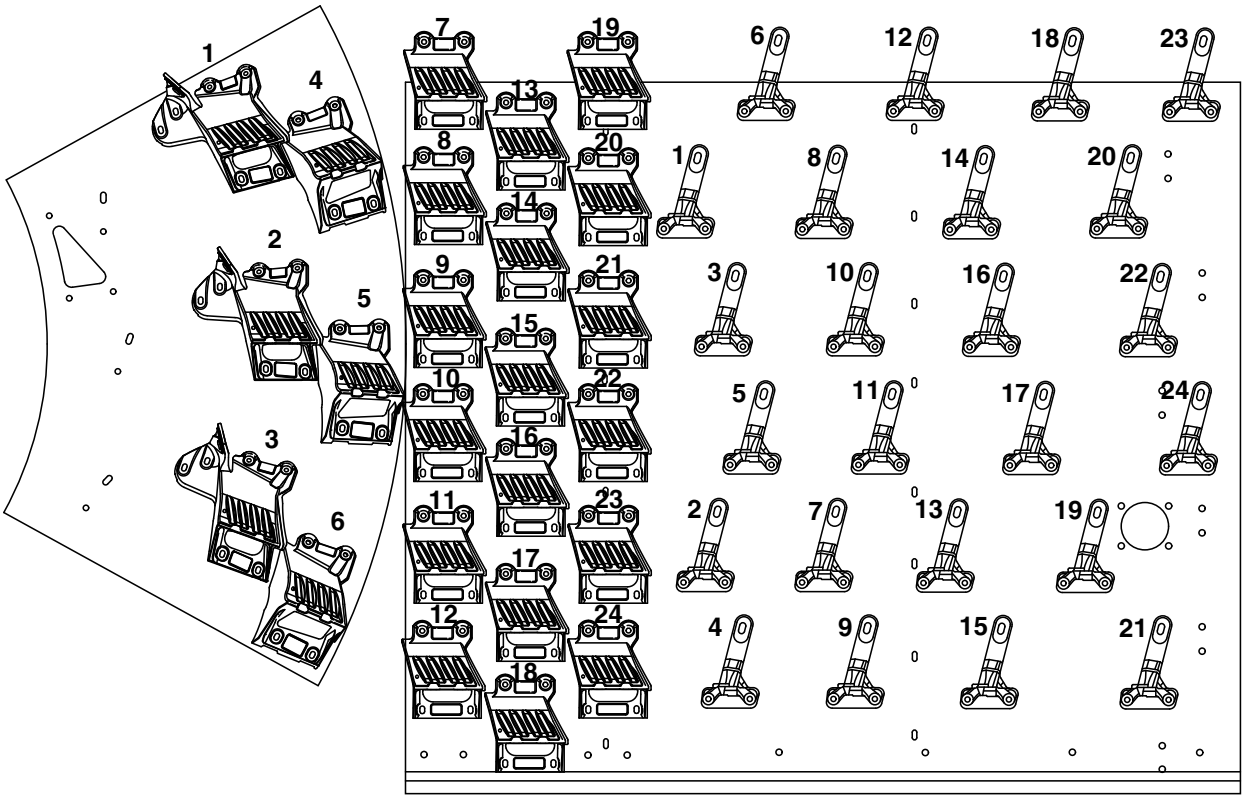
H82830—UN—23MAR05

NOTE: Additional elements can be added to the tough grain configuration in locations with an "O" stamped into the rotor if the dense pack configuration is desired.

Threshing Element Groups (Tough Grain Rotor Configuration)	Separator Tine Groups (Tough Grain Rotor Configuration)
Group 1 Elements = 1, 2, 3	**Group 1 Tines =** 1, 4, 5
Group 2 Elements = 4, 5, 6	**Group 2 Tines =** 2, 3, 6
Group 3 Elements = 8, 10, 12	**Group 3 Tines =** 8, 9, 11
Group 4 Elements = 14, 16, 18	**Group 4 Tines =** 7, 10, 12
Group 5 Elements = 19, 21, 23	**Group 5 Tines =** 13, 16, 18
	Group 6 Tines = 14, 15, 17
	Group 7 Tines = 19, 22, 23
	Group 8 Tines = 20, 21, 24

OUO6075,0000B81-19-22MAR11

Threshing Element and Separator Tine Location (TriStream Rotor Dense Pack Configuration)



H82364—UN—03FEB05

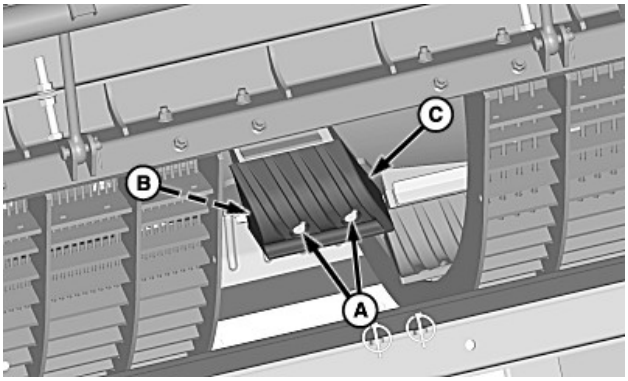
NOTE: Dense pack configuration is field conversion only.

Threshing Element Groups (Dense Pack Rotor Configuration)	Separator Tine Groups (Dense Pack Rotor Configuration)
Group 1 Elements = 1, 2, 3	**Group 1 Tines =** 1, 4, 5
Group 2 Elements = 4, 5, 6	**Group 2 Tines =** 2, 3, 6
Group 3 Elements = 7, 9, 11	**Group 3 Tines =** 8, 9, 11
Group 4 Elements = 8, 10, 12	**Group 4 Tines =** 7, 10, 12
Group 5 Elements = 13, 15, 17	**Group 5 Tines =** 13, 16, 18
Group 6 Elements = 14, 16, 18	**Group 6 Tines =** 14, 15, 17
Group 7 Elements = 19, 21, 23	**Group 7 Tines =** 19, 22, 23
Group 8 Elements = 20, 22, 24	**Group 8 Tines =** 20, 21, 24

OUO6075,0000B80-19-22MAR11

Threshing Elements and Tines (Variable Stream Rotor)—Remove and Install

Threshing Elements



H94732—UN—22SEP09

A—Cap Screws
B—Threaded Strap
C—Threshing Element

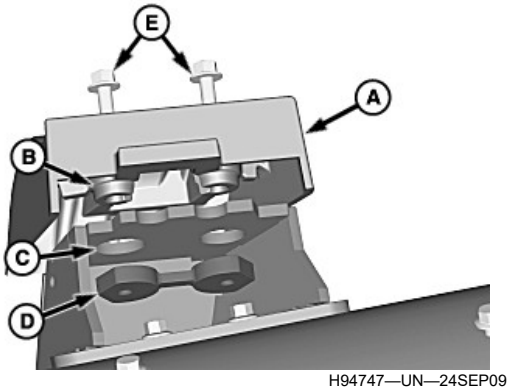
IMPORTANT: Rotor is a balanced assembly. Elements must be replaced in groups of three to maintain balance. When installing more than one kit, do not mix and match elements. Replacement kits are available through service parts and include cap screws with pre-applied Thread Lock and Sealer. Always use supplied cap screws. Elements that become loose may result in machine damage.

1. Shut OFF engine, set park brake and remove key.
2. Remove concave sections as needed to access threshing elements.

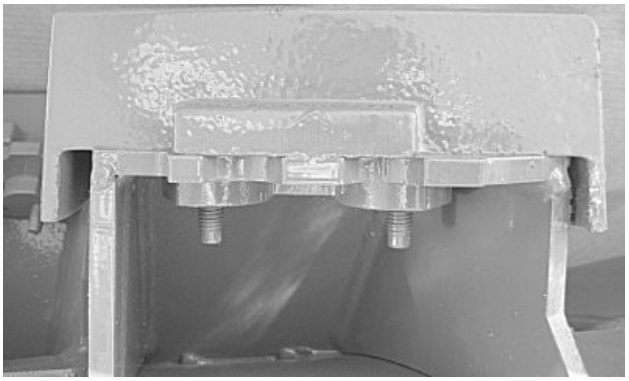
NOTE: Depending on machine option, refer to the following in this section:

- *Concave Sections (Standard Concave Adjust)—Remove and Install*
- *Concave Sections (Active Concave Isolation)—Remove and Install*

3. Inspect wear on threshing elements using KXE10110 Clearance Gauge.
4. Remove and discard cap screws (A) and retain threaded strap (B) from threshing element (C) as needed.

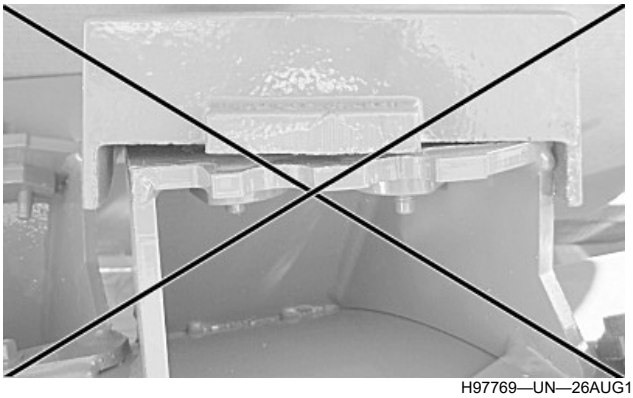


H94747—UN—24SEP09



H97768—UN—25AUG10

Fully Seated



H97769—UN—26AUG10

Not Fully Seated

A—Threshing Element
B—Element Boss
C—Rotor Base Hole
D—Threaded Strap
E—Cap Screws

5. Install replacement threshing element (A) onto rotor base. (Use Threshing Element location diagram to identify threshing elements).

Threshing Element Groups
Group 1 Elements = 1, 2, 3
Group 2 Elements = 4, 5, 6
Group 3 Elements = 7, 8, 9
Group 4 Elements = 10, 11, 12
Group 5 Elements = 13, 14, 15

6. Verify element boss (B) is fully seated through rotor base holes (C).
7. Install previously removed threaded strap (D) and supplied cap screws (E).
8. Tighten cap screws to specification.

Specification

Threshing Elements Cap Screws—Torque. . . . . 87 ± 9 N·m (64 ± 7 lb.-ft.)

IMPORTANT: Verify that elements are seated properly after tightening.

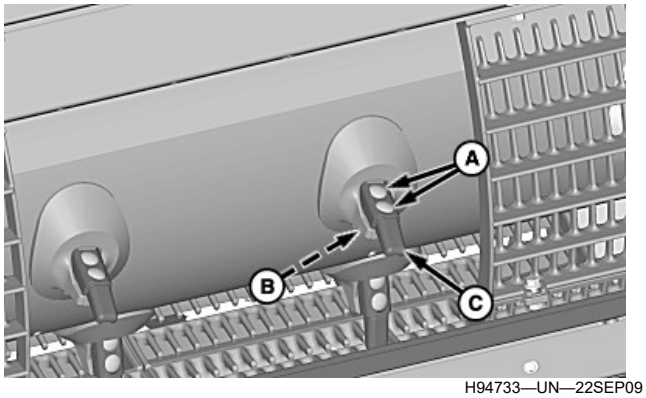
Rice threshing elements are taller than corn/grain threshing elements. Concave level must be adjusted.

9. Adjust concave levelness. (See Concave Leveling in this section).
10. Adjust concave levelness.

NOTE: Depending on machine option, refer to the following in this section:

- *Concave Leveling (Standard Concave Adjust)*
- *Concave Leveling (Active Concave Isolation)*

Separator Tines



H94733—UN—22SEP09

A—Round Head Cap Screws
B—Lock Nuts (2 used)
C—Separator Tines

IMPORTANT: Rotor is a balanced assembly. Tines must be replaced in pairs to maintain balance. When installing more than one kit, do not mix and match tines. Always use supplied cap screws. Tines that become loose may result in machine damage.

1. Remove separator grates as needed to access separator tines.

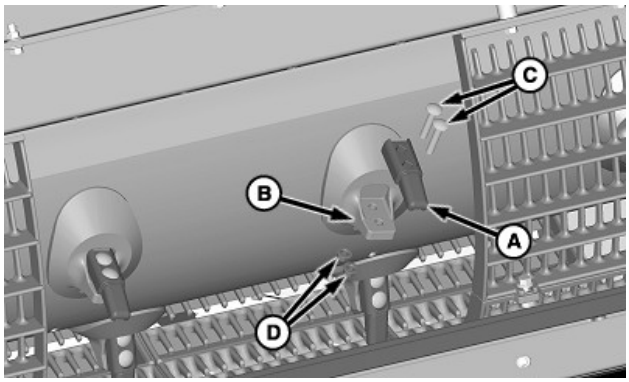
NOTE: Depending on machine option, refer to the following in this section:

- *Concave Sections (Standard Concave Adjust)—Remove and Install*
- *Concave Sections (Active Concave Isolation)—Remove and Install*

2. Inspect wear on separator tines using KXE10110 Clearance Gauge.

NOTE: For ease of removal, shift rotor gear case to neutral position.

3. Remove and discard round head cap screws (A), nuts (B) and separator tines (C) as needed.



H94751—UN—25SEP09

A—Separator Tine
B—Rotor Base
C—Round Head Cap Screws
D—Nuts

IMPORTANT: Separator tines MUST be replaced in pairs to maintain proper balance.

Separator Tine Pairs	
1-2	11-12
3-4	13-14
5-6	15-16
7-8	17-18
9-10	19-20

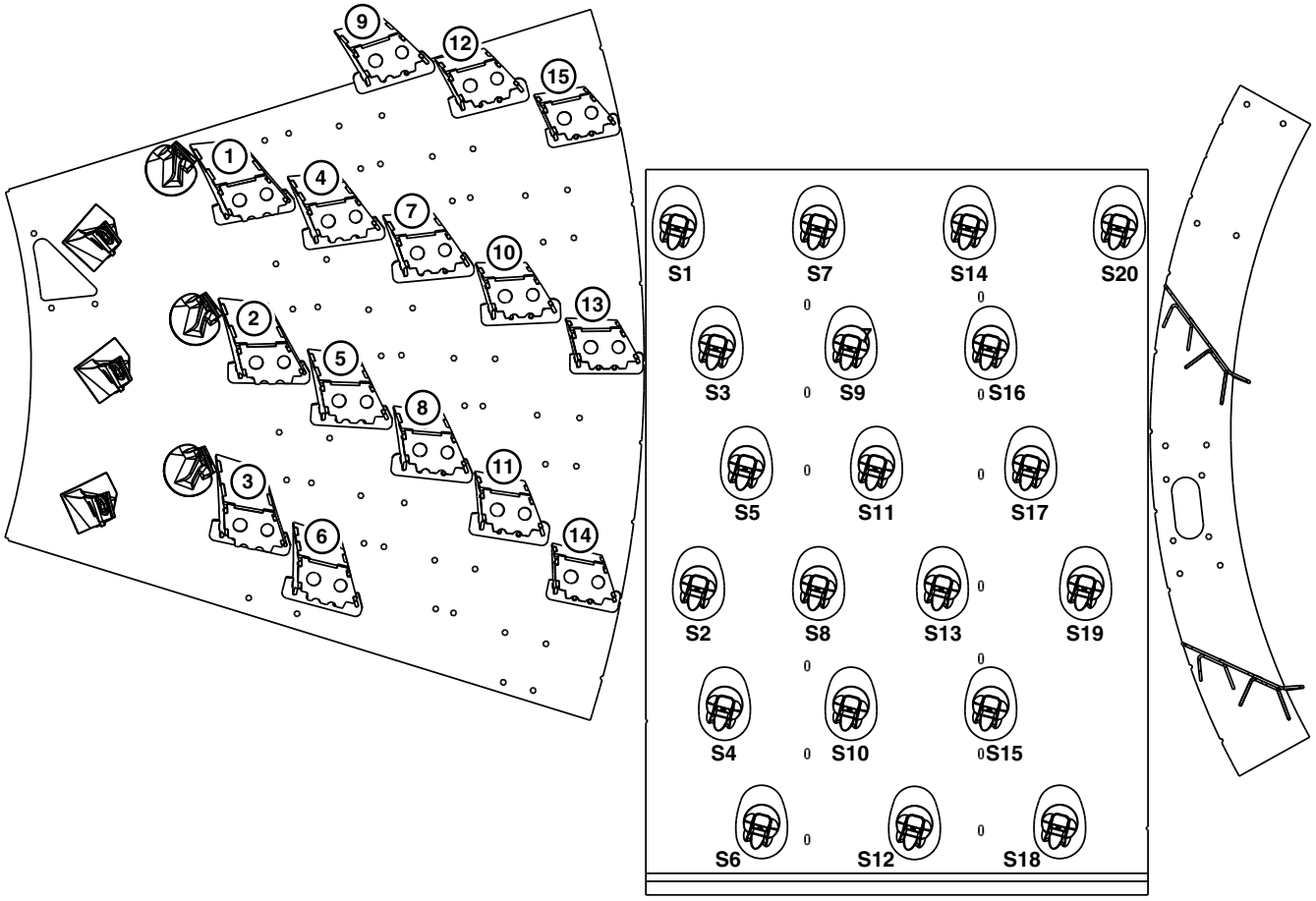
4. Install supplied separator tine (A) onto rotor base (B). (Use Separator Tine location diagram to identify separator tines).
5. Install supplied round head cap screws (C) and retain with nuts (D).
6. Tighten nuts to specification.

Specification

Tine Cap Screws—Torque. . . . . 75 ± 11 N·m (55 ± 8 lb.-ft.)

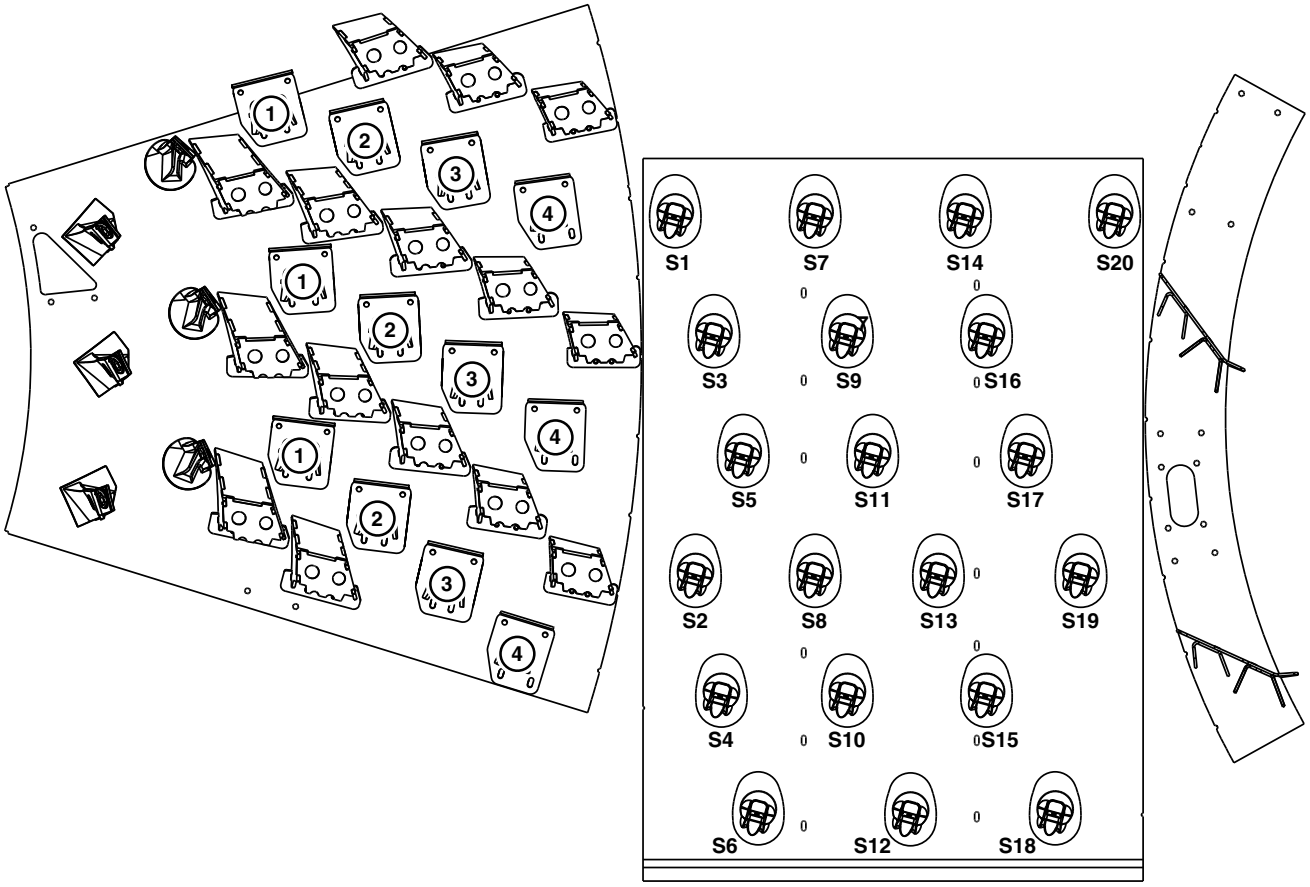
OUO6075,0001805-19-13MAY14

Threshing Element and Separator Tine Location (Variable Stream Rotor Standard Configuration)



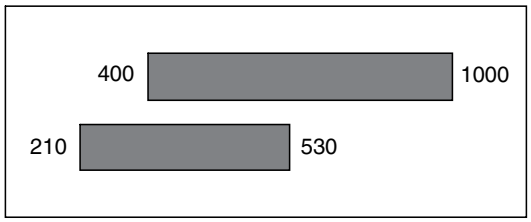
H94731—UN—09MAR10
OUO6075,0000B83-19-07APR11

Threshing Element and Separator Tine Location (Variable Stream Rotor Dense Pack Configuration)

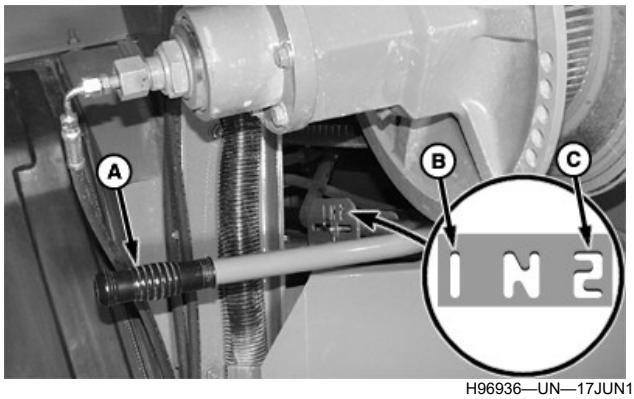


H94748—UN—08MAR10
OUO6075,0000B84-19-07APR11

Posi-Torq™ Separator—Dual-Range



H96715—UN—02JUN10



H96936—UN—17JUN10

A—Handle
B—Low-Speed Position (1)
C—High-Speed Position (2)

CAUTION: Shut OFF engine, set park brake and remove key before shifting Posi-Torq™ separator.

Posi-Torq is a trademark of Deere & Company

NOTE: Use slowest possible speed with large seed crops to prevent damage.

To shift from low to high speed or high to low speed, move handle (A) to detented neutral position.

For low-speed position (B), push handle towards the separator side sheet.

For high-speed position (C), pull handle away from the separator side sheet.

To fully engage drive, it may be necessary to rotate variable sheaves a small amount while moving shift handle.

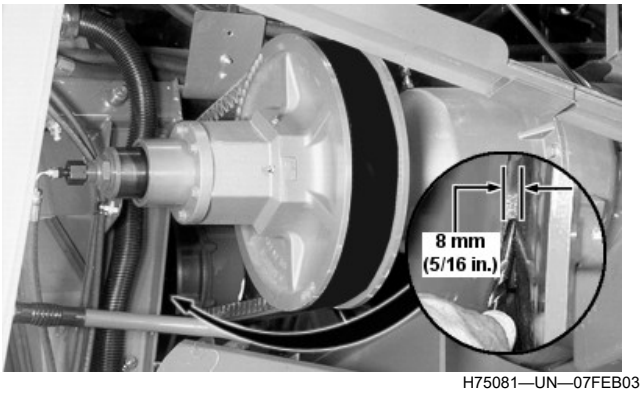
NOTE: Verify that gears are fully engaged.

When changing separator speeds, make sure to cycle power ON and OFF to recognize new speed range.

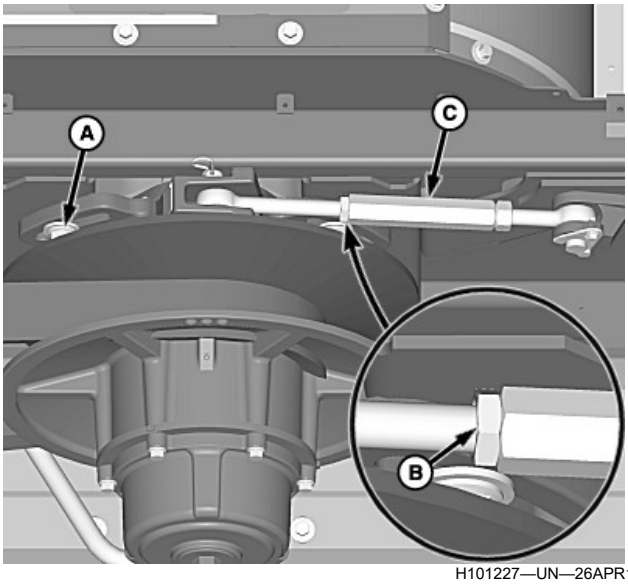
Shift to low speed if operating below 530 rpm for extended periods.

OUO6075,00045D0-19-20MAR17

Separator Drive Sheave Gap—Adjusting



H75081—UN—07FEB03



H101227—UN—26APR11

A—Cap Screw (4 used)
B—Nut
C—Turnbuckle

IMPORTANT: If gap is more than 10 mm (3/8 in), it limits sheave travel. Any of these failures can occur when drive is operated at the high end of the variable drive range:

- **Belt stretch or failure**
- **Bearing or shaft failure**

If gap is less than 6 mm (1/4 in), it limits torque sensing. Any of these failures can occur when drive is operated at the low end of the variable range:

- **Belt failure**
- **Belt slippage**

If unable to obtain high speed while operating at high end of variable drive range or belt slippage occurs while operating at the low end of the variable drive, check for incorrect gap. For best performance, set gap to specification.

Specification

Sheaves—Gap. . . . . 8 mm ± 2 mm (5/16 in ± 1/16 in)

With separator engaged, set separator drive to slowest speed allowing driven sheaves to close.

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen cap screws (A) around gear case.

NOTE: Shift gear case to neutral to properly seat belt between sheaves. Manually rotate sheaves, while adjusting turnbuckle.

Loosen nut (B) and adjust the turnbuckle (C) to obtain the specified gap between the driven sheaves.

Specification

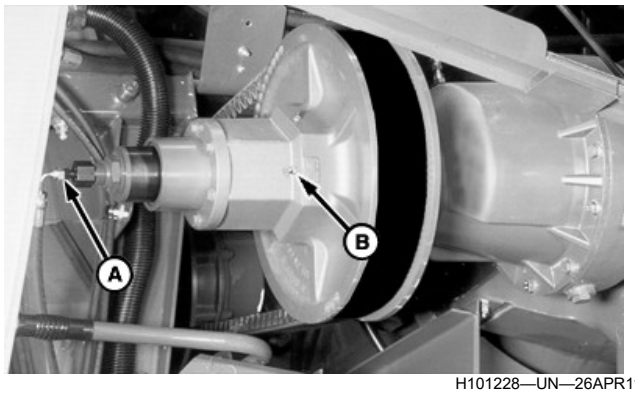
Sheaves—Gap. . . . . 8 mm (5/16 in)

Tighten nut (B) and cap screws (A).

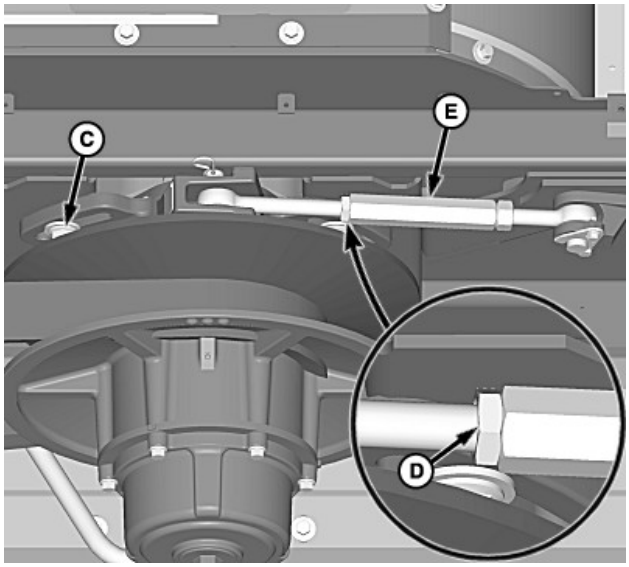
Shift gear case to desired speed range.

OUO6075,00046EA-19-11APR17

Separator Variable Drive Belt—Replacing



H101228—UN—26APR11



H101229—UN—26APR11

A—Hose
B—Plug
C—Cap Screw (4 used)
D—Nut
E—Turnbuckle

With separator engaged, set separator drive to slowest speed allowing driven sheaves to close.

CAUTION: Shut OFF engine, set park brake and remove key.

Shift gear case to neutral position.

Disconnect hose (A) at the rotary hydraulic coupling using two wrenches.

Clean and remove the plug (B) to relieve vacuum in grease cavity.

Pry driver sheaves open.

NOTE: Remove shielding as needed to gain access to the separator variable drive belt.

Loosen cap screws (C) around gear case.

Loosen nut (D) and adjust the turnbuckle (E) to move the gear case and sheave assembly to the left.

Remove and replace belt. Rotate pulleys by hand to seat the belt.

Rotate pulleys and adjust the turnbuckle to obtain the specified gap between the driven sheaves.

Specification	
Sheaves—Gap	8 mm (5/16 in)

Tighten nut (D) and cap screws (C).

NOTE: Install shielding previously removed to gain access to the separator variable drive belt.

Install plug (B) and hydraulic hose (A) on the driver sheave.

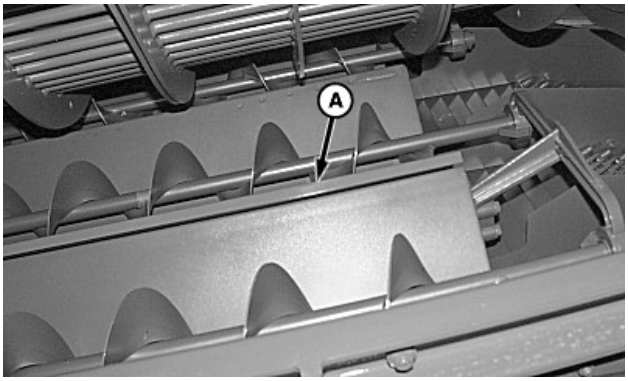
Shift gear case to desired speed range.

Start engine and engage separator. Cycle variable drive through speed range several times. Disengage separator drive.

NOTE: Check sheave gap again after several hours and adjust as required.

OUO6075,00046EB-19-11APR17

Auger Bed Dividers



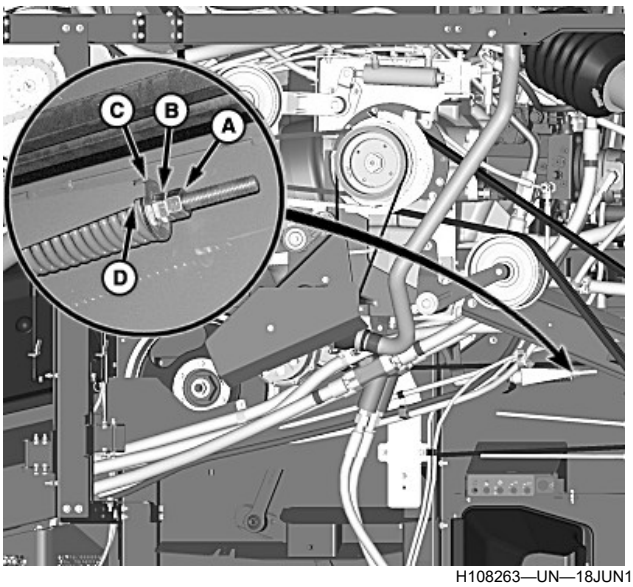
H83545—UN—20MAY05

A—Auger Bed Dividers

To prevent high seed losses or to prevent material building up on one side while harvesting on hillsides, move auger bed dividers (A) in an upwards direction.

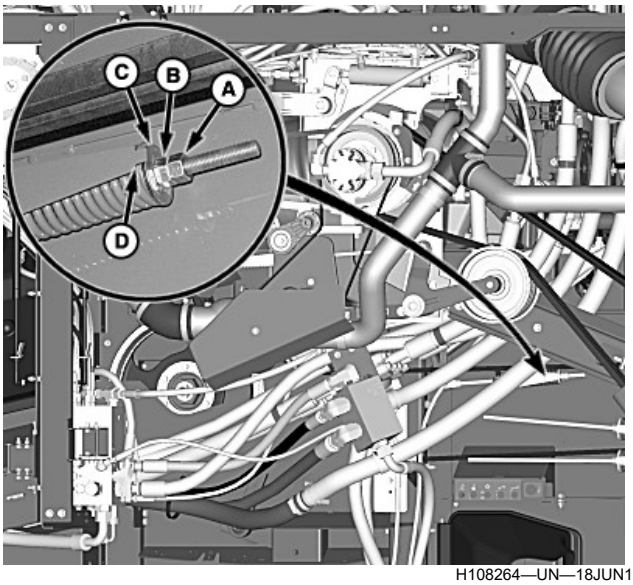
OUO6075,0000755-19-20MAR07

Discharge Beater Belt—Adjusting



H108263—UN—18JUN13

Style A



H108264—UN—18JUN13

Style B

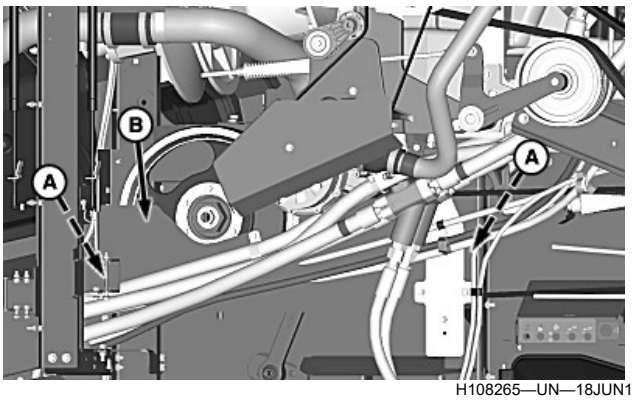
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

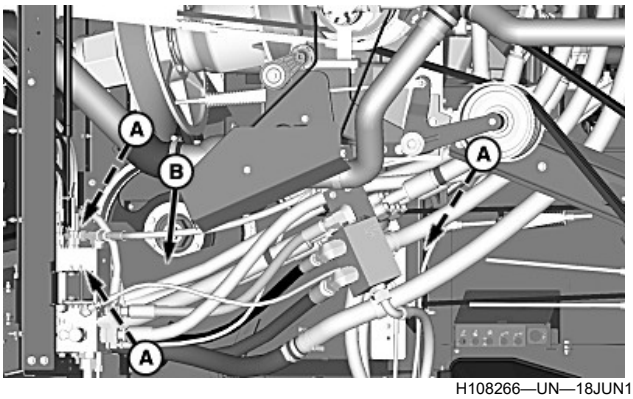
OUO6075,000438F-19-10OCT16

Discharge Beater Belt—Replacing



H108265—UN—18JUN13

Style A



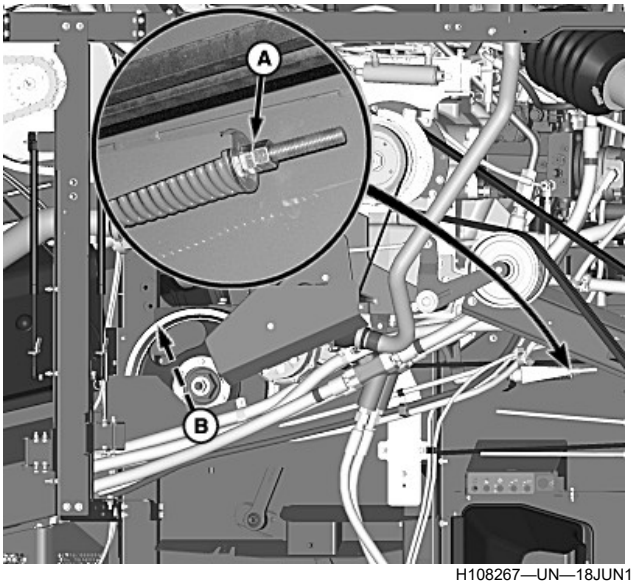
H108266—UN—18JUN13

Style B

A—Cap Screws
B—Shield

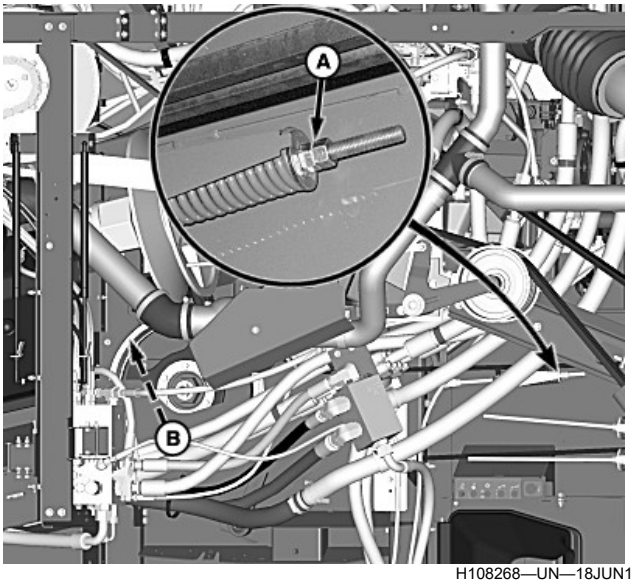
CAUTION: Shut OFF engine, set park brake and remove key.

Remove cap screws (A) and shield (B) from left-hand rear of machine.



H108267—UN—18JUN13

Style A



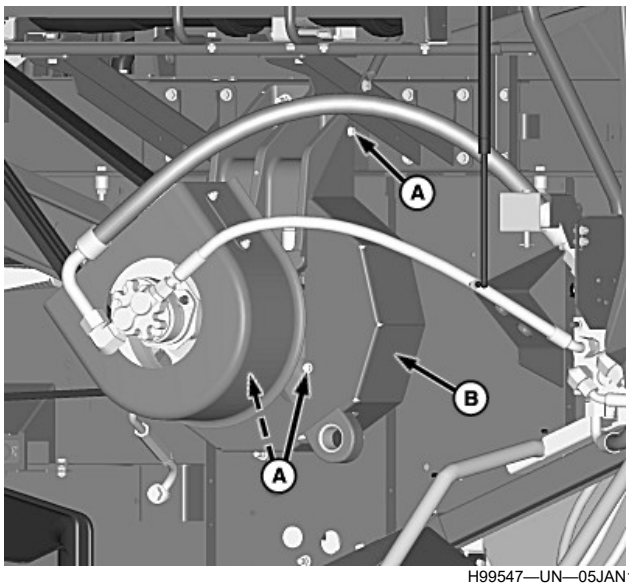
H108268—UN—18JUN13

Style B

A—Nuts
B—Discharge Beater Belt

Loosen nuts (A) and remove belt (B) from sheave.

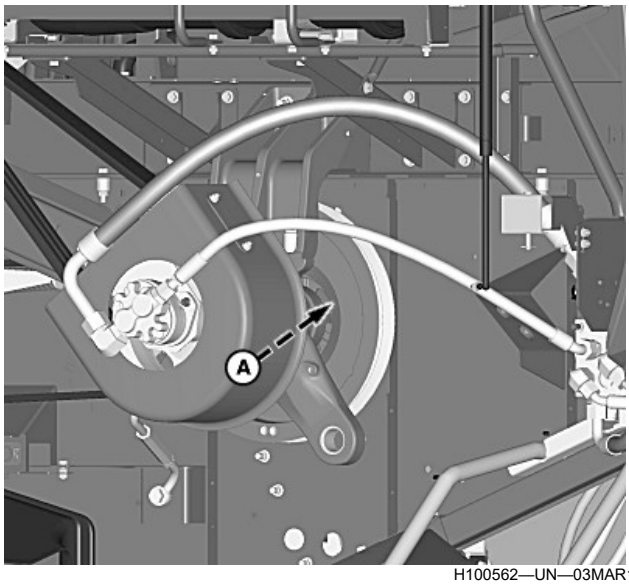
Spreader Equipped Machines



H99547—UN—05JAN11

A—Cap Screws
B—Shield

Remove cap screws (A) and shield (B).



H100562—UN—03MAR11

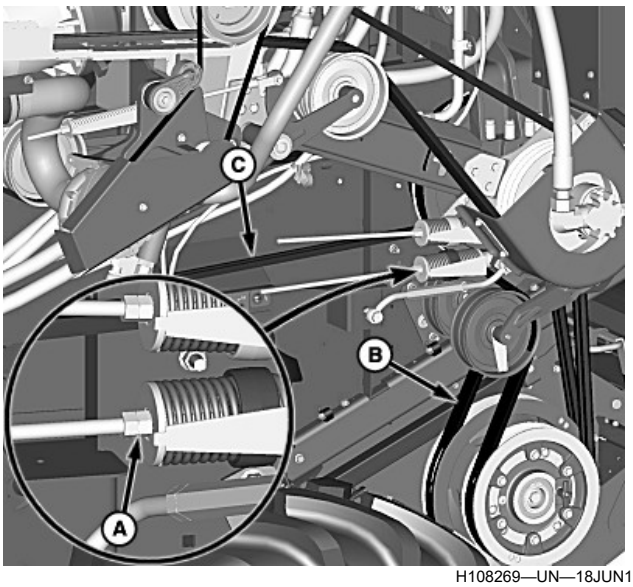
A—Discharge Beater Belt

Remove and discard belt (A) from jackshaft.

Install replacement discharge beater belt onto jackshaft.

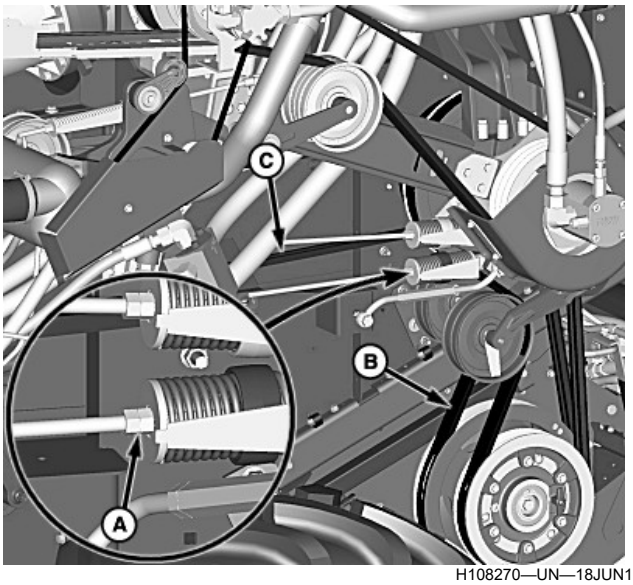
Install previously removed shield and cap screws.

Chopper Equipped Machines



H108269—UN—18JUN13

Style A



H108270—UN—18JUN13

Style B

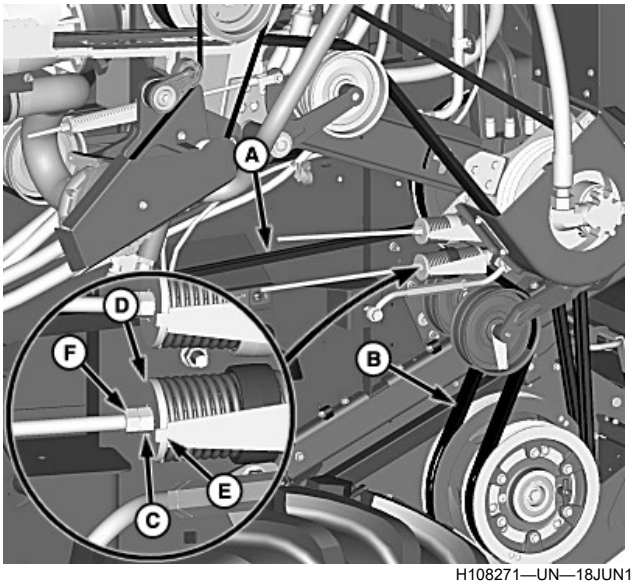
A—Nuts
B—Inner Chopper Drive Belt
C—Discharge Beater Belt

Raise chopper assembly fully with switch on the left-hand side sheet and remove chopper shields.

NOTE: Mark location of tensioner nuts before loosening to aid in reassembly.

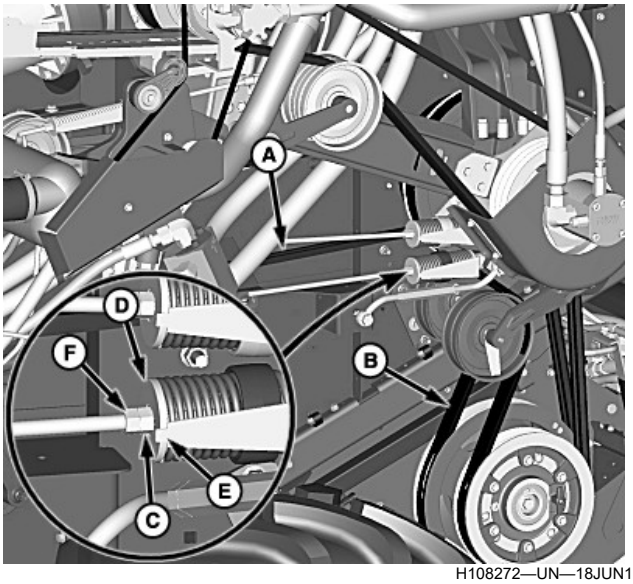
Loosen nuts (A) and remove inner belt (B) from sheave.

Remove and discard belt (C) from chopper jackshaft.



H108271—UN—18JUN13

Style A



H108272—UN—18JUN13

Style B

A—Discharge Beater Belt
B—Inner Chopper Drive Belt
C—Nut
D—Washer
E—Gauge
F—Lock Nut

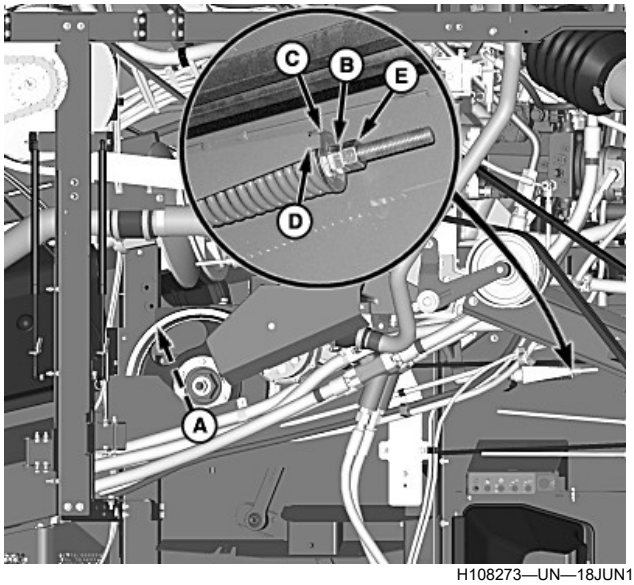
Install replacement discharge beater belt (A) onto chopper jackshaft.

Install inner belt (B) and verify that belt aligns with sheaves.

Lower chopper assembly fully with switch on the left-hand side sheet.

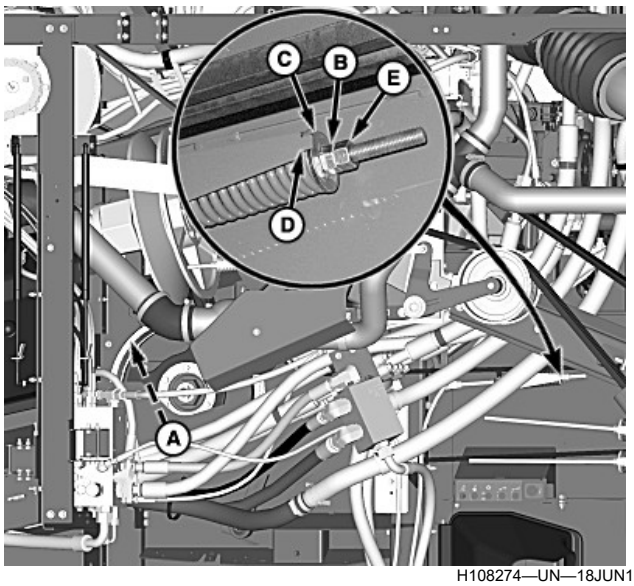
Tighten nut (C) until washer (D) is positioned between end of gauge (E) and bottom of step. Tighten lock nut (F).

Install previously removed chopper shields.



H108273—UN—18JUN13

Style A



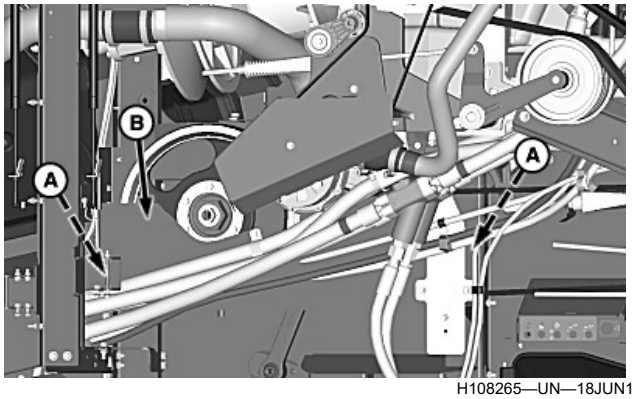
H108274—UN—18JUN13

Style B

A—Discharge Beater Belt
B—Nut
C—Washer
D—Gauge
E—Lock Nut

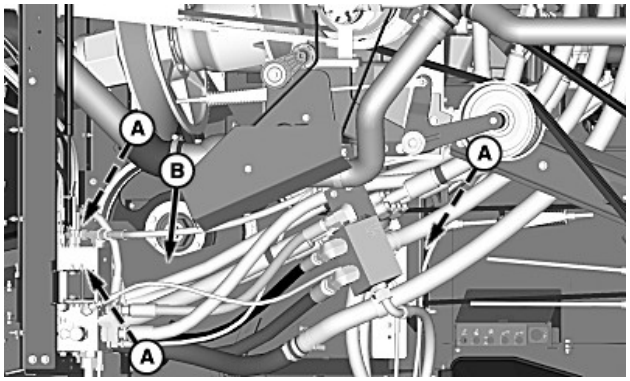
Install discharge beater belt (A) onto sheave.

Tighten nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut (E).



H108265—UN—18JUN13

Style A



H108266—UN—18JUN13

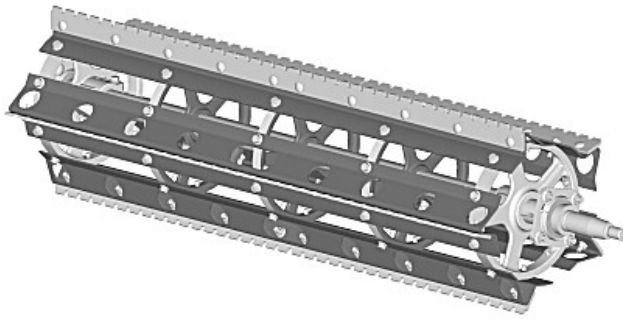
Style B

A—Cap Screws
B—Shield

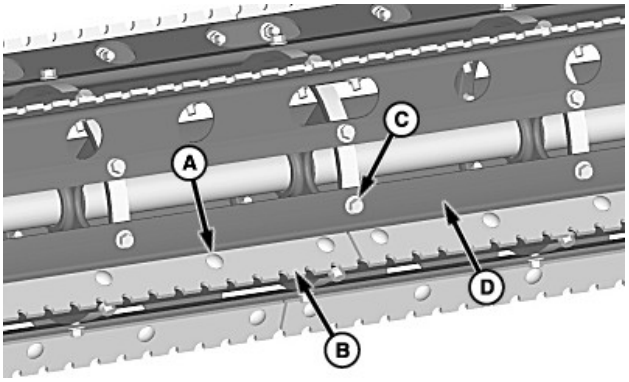
Install shield (B) and retain with cap screws (A).

OUO6075,000438E-19-10OCT16

Discharge Beater Wear Strips—Replacing (5 and 10 Wing Style)



H109628—UN—14JAN14



H109629—UN—14JAN14

A—Round Head Cap Screws
B—Discharge Beater Wear Strip
C—Cap Screws
D—Discharge Beater Wings

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Wear strips can be reversed for additional wear.

Discharge beater wings and wear strips can be replaced without removing the discharge beater.

NOTE: If discharge beater is removed from machine, or has been serviced, tighten clamp bolts before securing wings.

Remove round head cap screws (A) and replace discharge beater wear strips (B) as required. Tighten round head cap screws to specification.

Specification

Discharge Beater Wear Strip
Round Head Cap
Screws—Torque. . . . . 70 N·m (52 lb·ft)

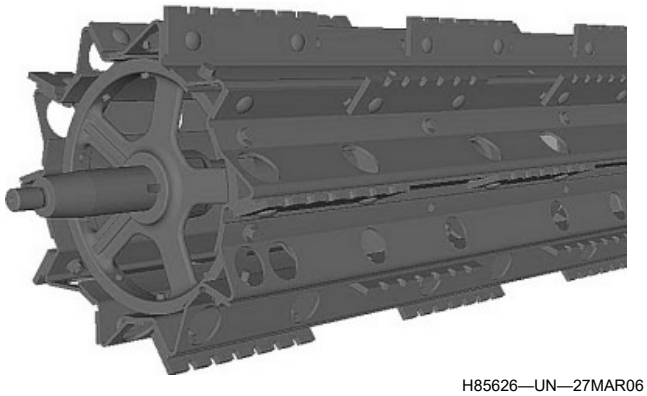
Remove cap screws (C) and replace discharge beater wings (D) as required. Tighten cap screws to specification.

Specification

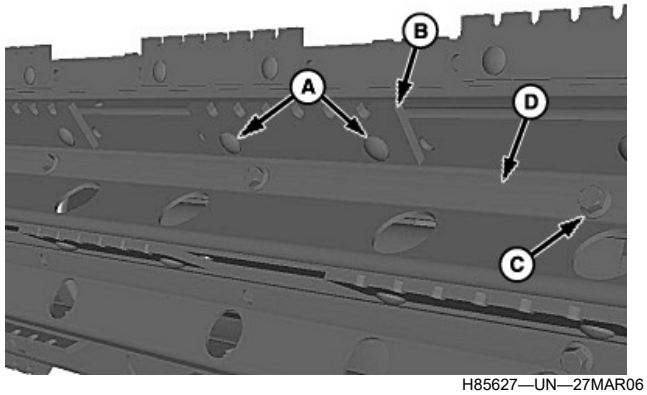
Discharge Beater Wing Cap
Screws—Torque. . . . . 70 N·m (52 lb·ft)

OUO6075,000464E-19-13MAR17

Standard Discharge Beater Wear Strips—Replacing (8 Wing Style)



H85626—UN—27MAR06



H85627—UN—27MAR06

Discharge Beater Wings and Wear Strips (Standard)

A—Round Head Bolts
B—Discharge Beater Wear Strip
C—Cap Screws
D—Discharge Beater Wings

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Wear strips can be reversed for additional wear.

Discharge beater wings and wear strips can be replaced without removing the discharge beater. Replace discharge beater wings in sets of two and opposite of each other to maintain proper balance.

NOTE: If discharge beater is removed from machine, or has been serviced, tighten clamp bolts before securing wings.

Remove round head bolts (A) and replace discharge beater wear strips (B) as required. Tighten round head bolts to specification.

Specification

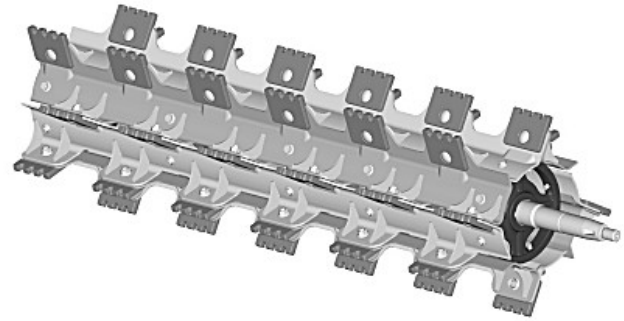
Discharge Beater Wear Strip
Round Head Bolts—Torque. . . . . 70 N·m (52 lb·ft)

Remove cap screws (C) and replace discharge beater wings (D) as required. Tighten cap screws to specification.

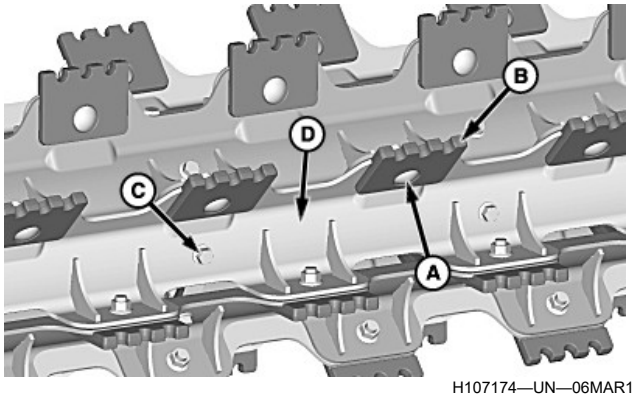
Specification
Discharge Beater Wing Cap Screws—Torque	70 N·m (52 lb·ft)

OUO6075,000464F-19-20MAR17

Tough Crop Discharge Beater Wear Strip—Replacing



H107173—UN—06MAR13



H107174—UN—06MAR13

Discharge Beater Wings and Wear Strips (Tough Crop)

A—Round Head Cap Screws
B—Discharge Beater Wear Strip
C—Cap Screws
D—Discharge Beater Wings

CAUTION: Shut OFF engine, set park brake and remove key.

Discharge beater wings and wear strips can be replaced without removing the discharge beater. Replace discharge beater wings in sets of two and opposite of each other to maintain proper balance.

NOTE: If the discharge beater is removed from the machine, or has been serviced, tighten clamp bolts before securing wings.

Always replace hardware when replacing discharge beater wear strips.

Remove round head cap screws (A) and replace discharge beater wear strips (B) as required. Tighten round head cap screws to specification.

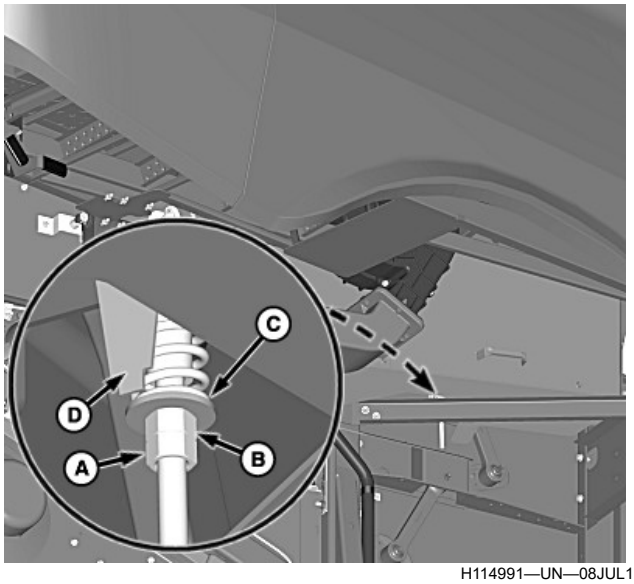
Specification
Discharge Beater Wear Strip Round Head Cap Screws—Torque	107 N·m (79 lb·ft)

Remove cap screws (C) and replace discharge beater wings (D) as required. Tighten cap screws to specification.

Specification
Discharge Beater Wing Cap Screws—Torque	70 N·m (52 lb·ft)

OUO6075,0004A14-19-09AUG18

Overshot Beater Belt (If Equipped)—Adjusting



H114991—UN—08JUL15

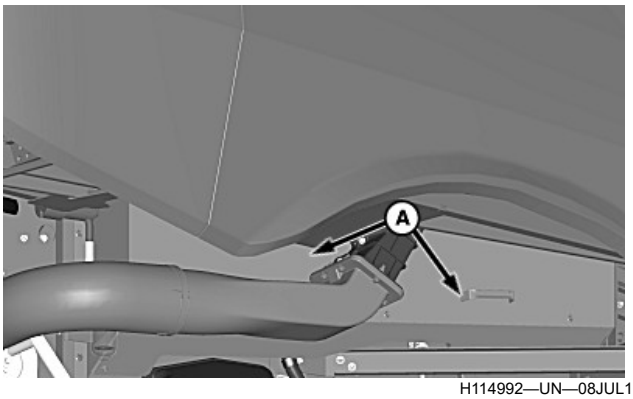
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,000438D-19-12OCT16

Overshot Beater Belt (If Equipped)—Replacing

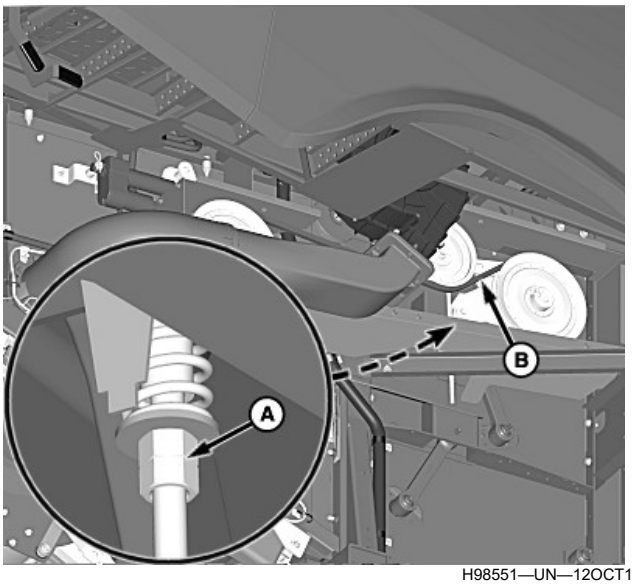


H114992—UN—08JUL15

A—Shields

CAUTION: Shut OFF engine, set park brake and remove key.

Remove cap screws and shields (A) from right-hand rear of machine.



H98551—UN—12OCT10

A—Nuts
B—Overshot Beater Belt

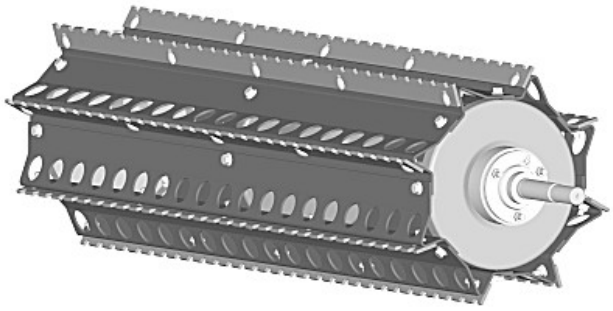
Loosen nuts (A) and remove belt (B) from sheave.

Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step. Tighten lock nut.

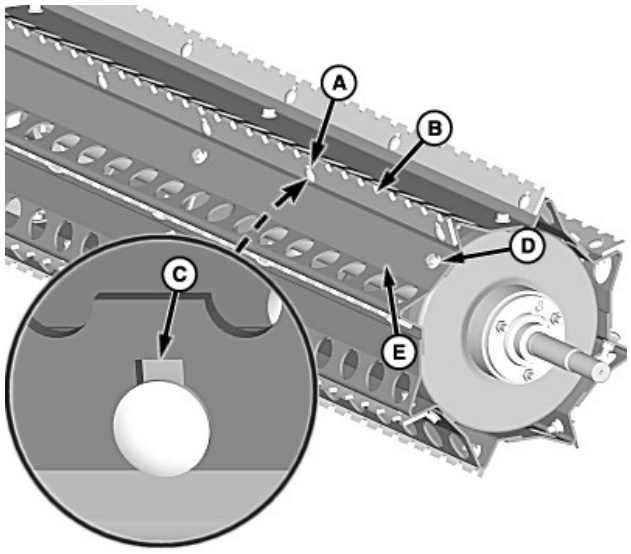
Install shields and retain with cap screws.

OUO6075,0004389-19-12OCT16

Standard Overshot Beater (If Equipped)—Wing Replacing



H98552—UN—12OCT10



H98553—UN—14OCT10

Overshot Beater Wings and Wear Strips (Standard)

A—Round Head Bolts
B—Overshot Beater Wear Strip
C—Notch
D—Cap Screws
E—Overshot Beater Wings

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Wings can be reversed for additional wear.

Overshot beater wings and wear strips can be replaced without removing the overshot beater. Replace overshot beater wings in sets of two and opposite of each other to maintain proper balance.

NOTE: If the overshot beater is removed from machine, or has been serviced, tighten clamp bolts before securing wings. Tighten cap screws to specification.

Remove round head bolts (A) and replace overshot beater wear strips (B) as required.

Adjust overshot beater wear strips outward until at the end of notch (C) as shown.

Tighten round head bolts to specification.

Specification

Overshot Beater Wear Strip
Round Head Bolts—Torque. . . . . 79 N·m (58 lb·ft)

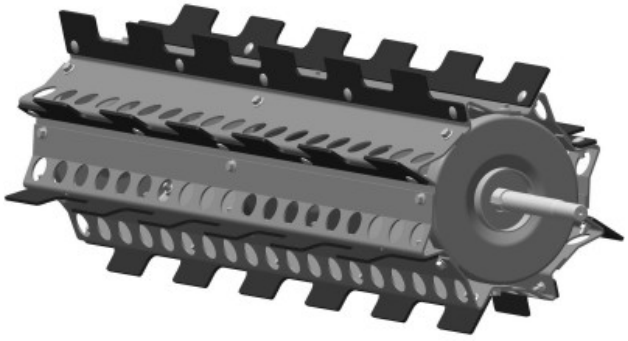
Remove cap screws (D) and replace overshot beater wings (E) as required. Tighten cap screws to specification.

Specification

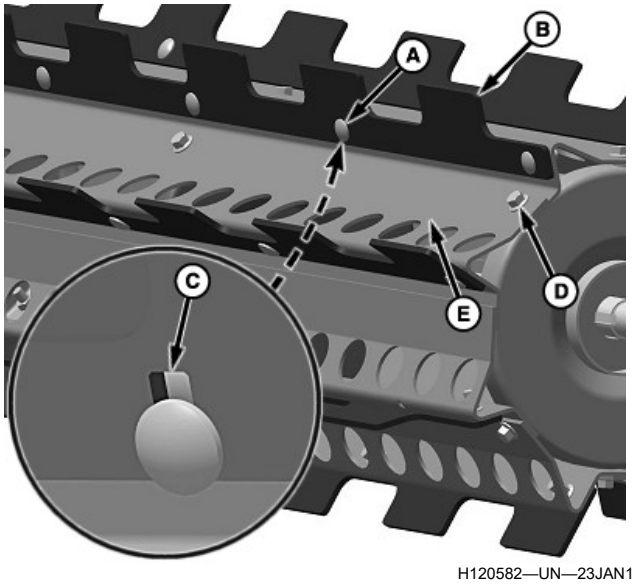
Overshot Beater Wing Cap
Screws—Torque. . . . . 79 N·m (58 lb·ft)

OUO6075,000458F-19-23JAN17

Tough Crop Overshot Beater (If Equipped) —Wing Replacing



H120581—UN—23JAN17



H120582—UN—23JAN17

Overshot Beater Wings and Wear Strips (Tough Crop)

A—Round Head Bolts
B—Overshot Beater Wear Strip
C—Notch
D—Cap Screws
E—Overshot Beater Wings

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Wings cannot be reversed for additional wear.

Overshot beater wings and wear strips can be replaced without removing the overshot beater. Replace overshot beater wings in sets of two and opposite of each other to maintain proper balance.

NOTE: If the overshot beater is removed from machine, or has been serviced, tighten clamp bolts before securing wings. Tighten cap screws to specification.

Remove round head bolts (A) and replace overshot beater wear strips (B) as required.

Adjust overshot beater wear strips outward until at the end of notch (C) as shown.

Tighten round head bolts to specification.

Specification

Overshot Beater Wear Strip
Round Head Bolts—Torque. . . . . 79 N·m (58 lb·ft)

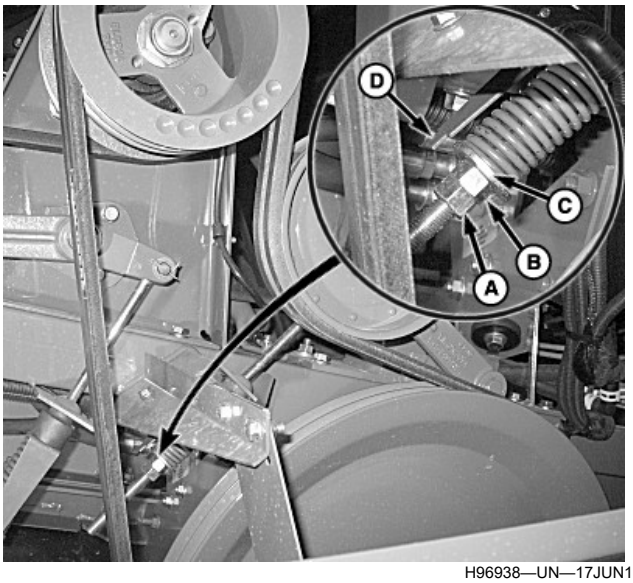
Remove cap screws (D) and replace overshot beater wings (E) as required. Tighten cap screws to specification.

Specification

Overshot Beater Wing Cap
Screws—Torque. . . . . 79 N·m (58 lb·ft)

OUO6075,0004590-19-23JAN17

Countershaft Right-Hand Front Belt—Adjusting



H96938—UN—17JUN10

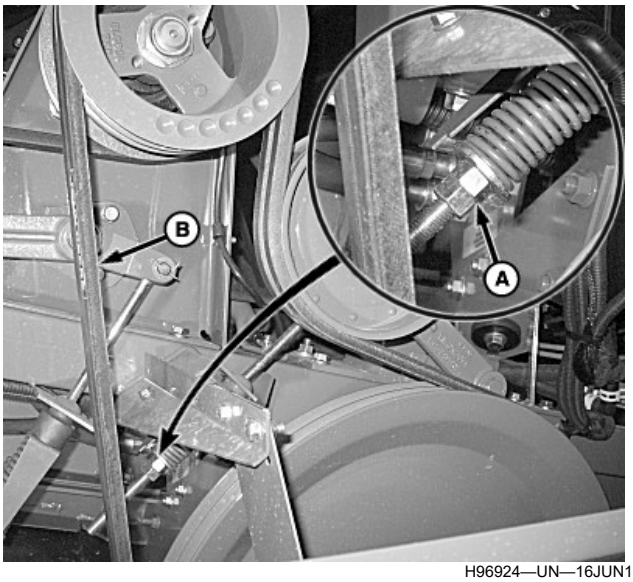
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set parking brake and remove key.

Loosen nut (A) and tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,00007F8-19-17JUN10

Countershaft Right-Hand Front Belt—Replacing



H96924—UN—16JUN10

A—Nuts
B—Right-Hand Front Belt

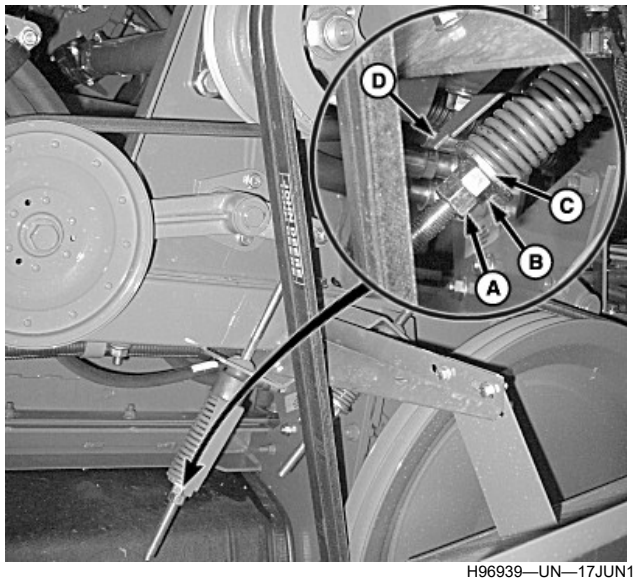
CAUTION: Shut OFF engine, set parking brake and remove key.

Loosen nuts (A) and remove belt (B).

Install replacement belt and adjust tensioner until washer is positioned between end of gauge and bottom of step. Tighten lock nut.

OUO6075,00007F9-19-17JUN10

Countershaft Right-Hand Rear Belt—Adjusting



H96939—UN—17JUN10

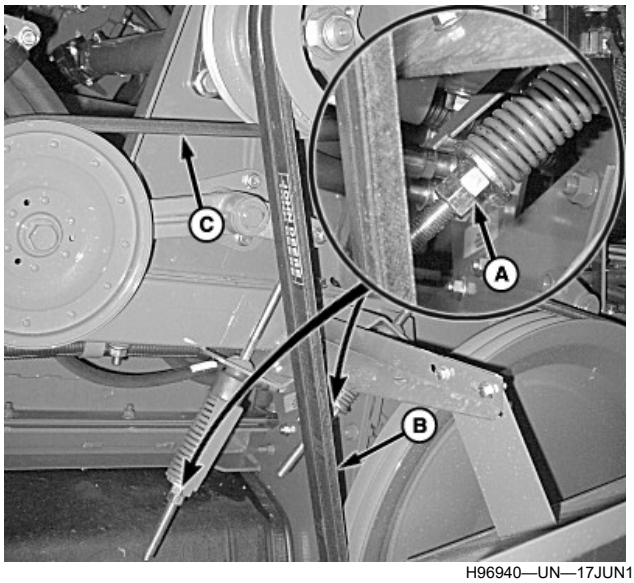
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set parking brake and remove key.

Loosen nut (A) and tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,00007FA-19-17JUN10

Countershaft Right-Hand Rear Belt—Replacing



H96940—UN—17JUN10

A—Nuts
B—Front Countershaft Belt
C—Rear Countershaft Belt

CAUTION: Shut OFF engine, set parking brake and remove key.

Loosen nuts (A) and remove right-hand front countershaft belt (B).

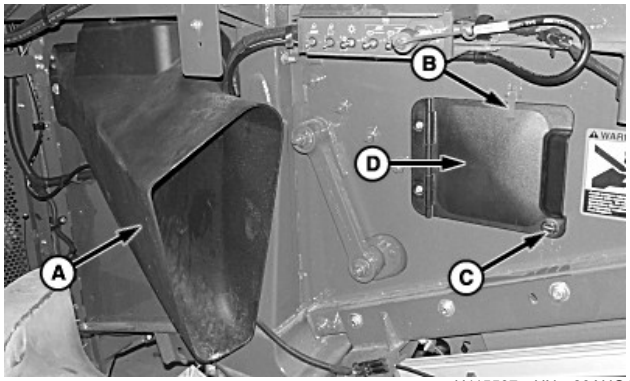
Loosen nuts (A) and remove rear countershaft belt (C).

Install replacement belt and adjust tensioner until washer is positioned between end of gauge and bottom of step.

Install front countershaft belt and adjust tensioner until washer is positioned between end of gauge and bottom of step.

OUO6075,00007FB-19-22JUN10

Cleaning Shoe Air Chutes and Access Door



H115537—UN—20AUG15

A—Air Chute (2 used)
B—Clip
C—Lock
D—Cleaning Shoe Access Door

CAUTION: Shut OFF engine, set park brake, and remove key.

Remove any material found in the air chutes (A).

NOTE: Cleaning shoe access door is on the left-hand side of machine only.

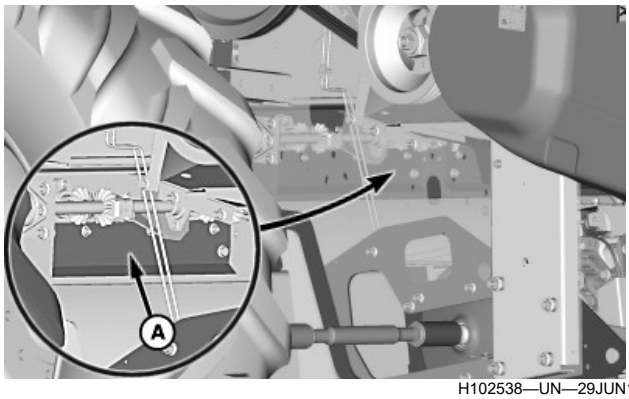
Open clip (B) and turn lock (C) to open the cleaning shoe access door (D).

Opening the access door allows the operator to look at the cleaning shoe area when adjusting the chaffer, sieve or when inspecting the cleaning shoe area.

Close the access door and retain with the lock and clip.

OUO6075,0004E8B-19-16JUN20

Cleaning Shoe Auger Gears—Manual Cleanout Door (If Equipped)



H102538—UN—29JUN11

A—Cleanout Door

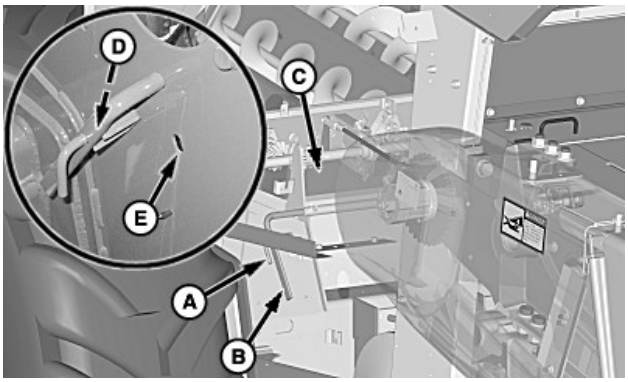
CAUTION: Shut OFF engine, set park brake, and remove key.

Allows operator to clean and inspect the area around the cleaning shoe auger gears.

1. Remove cap screws from cleanout door (A) to clean area.
2. Close the cleanout door before operating the machine.

OUO6075,0004E8C-19-08JUL20

Cleaning Shoe Auger Gears—Cleanout Door (If Equipped)



H95822—UN—24MAR10

A—Lock-Out Pin
B—Handle
C—Cleanout Door
D—Closed Position
E—Open Position

CAUTION: Shut OFF engine, set parking brake and remove key.

Allows operator to clean and inspect the cleaning shoe augers gear area.

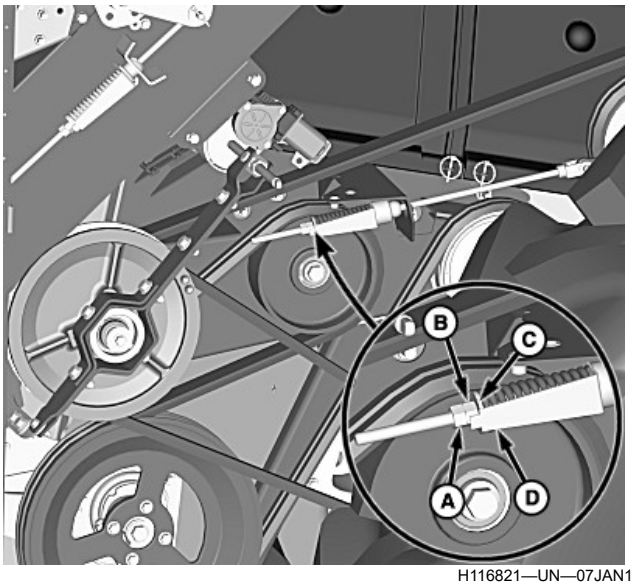
Pull lock-out pin (A) and move handle (B) to open or close cleanout door (C).

Move handle to desired position:

- Closed Position (D)
- Open Position (E)

OUO6075,0000F8B-19-09FEB12

Shoe, Fan, and Conveyor Auger Belt—Adjusting



H116821—UN—07JAN16

Shield Removed for Clarity

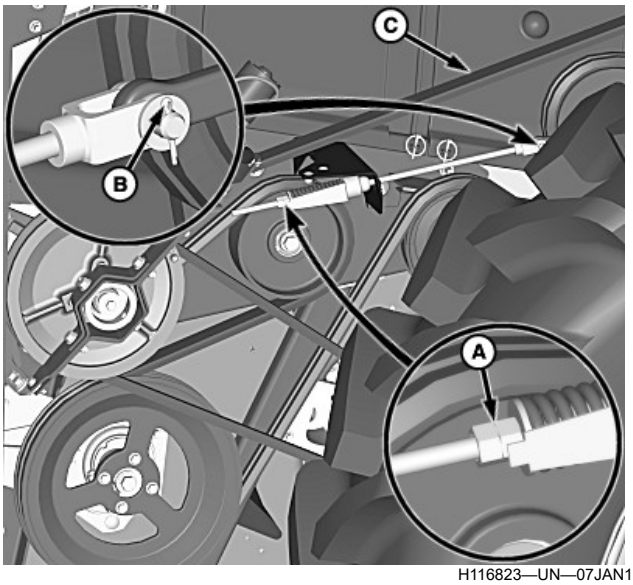
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

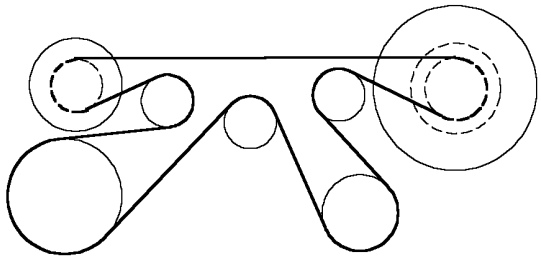
Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,00041C4-19-11APR16

Shoe, Fan, and Conveyor Auger Belt—Replacing



H116823—UN—07JAN16



H54683—UN—17MAY99

Belt Routing

A—Nuts
B—Cotter Pin
C—Belt

CAUTION: Shut OFF engine, set park brake and remove key.

Remove right-hand front countershaft belt and cleaning fan variable drive belts.

Loosen nuts (A) and remove the cotter pin (B) from the tensioning rod.

Remove shoe, fan, and conveyor auger drive belt (C).

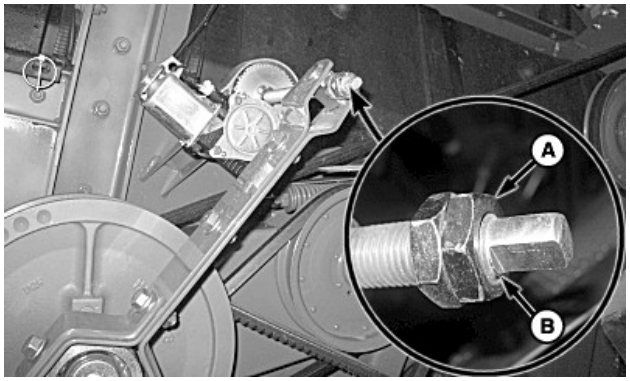
Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step.

Assemble tensioning rod and install the cotter pin.

Install front countershaft belt, cleaning fan variable drive belt and adjust tensioners until washer is positioned between end of gauge and bottom of step.

OUO6075,00041C5-19-11APR16

Cleaning Fan Actuator (Without Active Terrain Adjustment™)—Adjusting



H96946—UN—17JUN10

A—Nuts
B—End of Threads

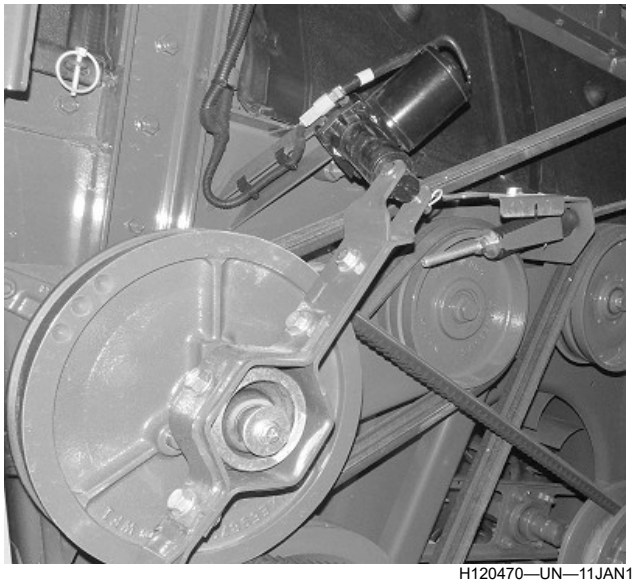
CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Cleaning fan minimum/maximum speed is controlled electronically. Stop nuts ensure drive protection, if there is an improper electronic speed setting. Nuts must be installed as shown.

Verify nuts (A) are jammed together at the end of the threads (B) as shown.

OUO6075,0004580-19-11JAN17

Cleaning Fan Actuator (Active Terrain Adjustment™)—Adjusting

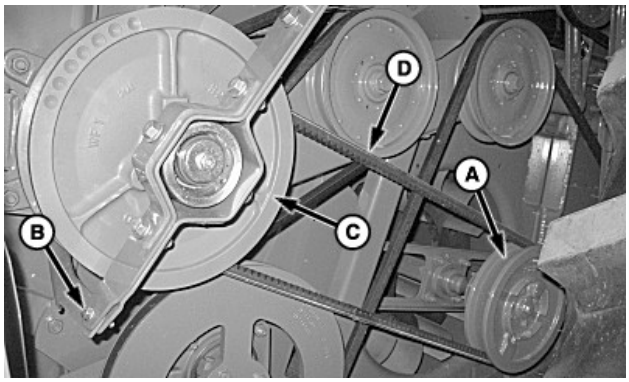


H120470—UN—11JAN17

Cleaning fan minimum/maximum speed is controlled electronically, there is no adjusting needed.

OUO6075,000457F-19-11JAN17

Cleaning Fan Belt (Without Active Terrain Adjustment™)—Replacing



H96945—UN—17JUN10

A—Bottom Sheave
B—Support Arms
C—Upper Sheave
D—Belt

Start machine, engage separator and operate fan at minimum speed.

Disengage separator, shut OFF engine and remove key.

CAUTION: Shut OFF engine, set park brake and remove key.

Wedge bottom sheave (A) to full open position.

Disconnect support arms (B) and swing arms away.

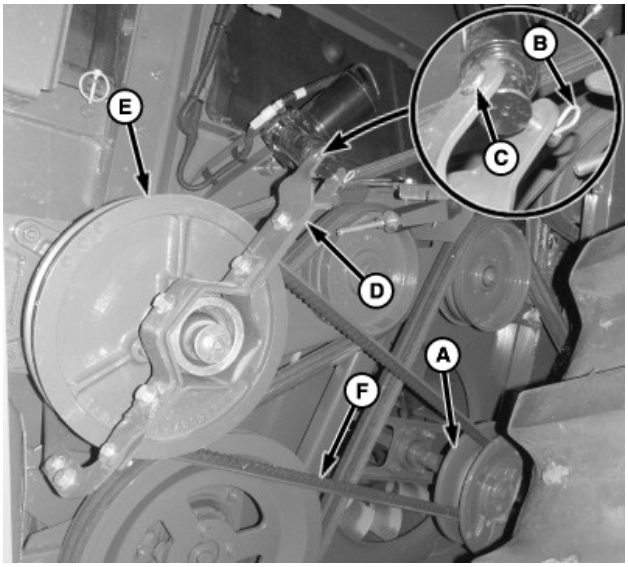
Remove upper sheave (C) and pull belt (D) over lower sheave.

Install replacement belt, remove the wedge, and connect the support arms.

Check adjustment of cleaning fan speed.

OUO6075,000457D-19-11JAN17

Cleaning Fan Belt (Active Terrain Adjustment™)—Replacing



H120469—UN—11JAN17

A—Bottom Sheave
B—Spring Pin
C—Pin
D—Support Arms
E—Upper Sheave
F—Belt

Start machine, engage separator and operate fan at minimum speed.

Disengage separator, shut OFF engine and remove key.

CAUTION: Shut OFF engine, set park brake and remove key.

Wedge bottom sheave (A) to full open position.

Remove spring pin (B) and pin (C) from the actuator motor.

Allow support arms (D) to swing out of the way.

Remove upper sheave (E) and pull belt (F) over lower sheave.

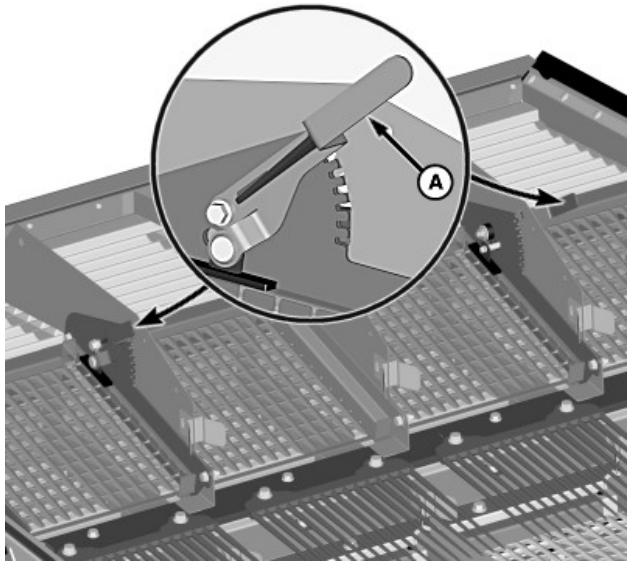
Install replacement belt, remove the wedge, and connect the support arms.

Align support arms with the actuator motor and retain with the previously removed pins.

Check adjustment of cleaning fan speed.

OUO6075,000457E-19-11JAN17

Adjustable Front Chaffer (If Equipped)



H120645—UN—31JAN17

A—Lever

CAUTION: Shut OFF engine, set park brake and remove key to help prevent accidental starting and personal injury.

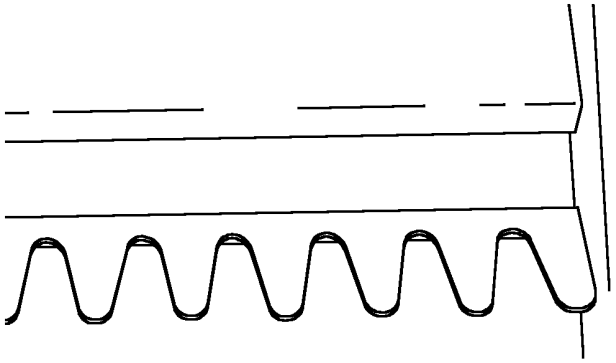
Remove separator covers to access the front chaffer.

Adjust front chaffer to desired position with lever (A).

NOTE: When the lever is fully raised, the front chaffer is fully closed. When the lever is fully lowered, the front chaffer is fully open. One notch is equal to approximately 4 mm (5/32 in).

OUO6075,00045AC-19-02FEB17

Fixed Front Chaffer



H54528—UN—01APR99

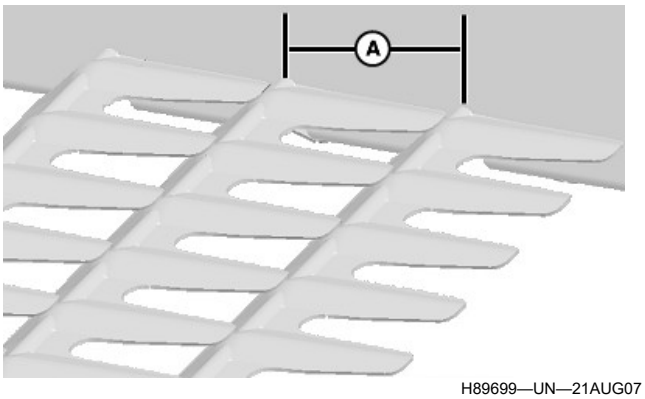
Fixed front chaffer is set at 24 mm (15/16 in).

Crop material that passes through the front chaffer is delivered to the chaffer for further cleaning.

OUO6075,00045AF-19-02FEB17

Chaffer and Sieve—Measuring

Louver Length



H89699—UN—21AUG07

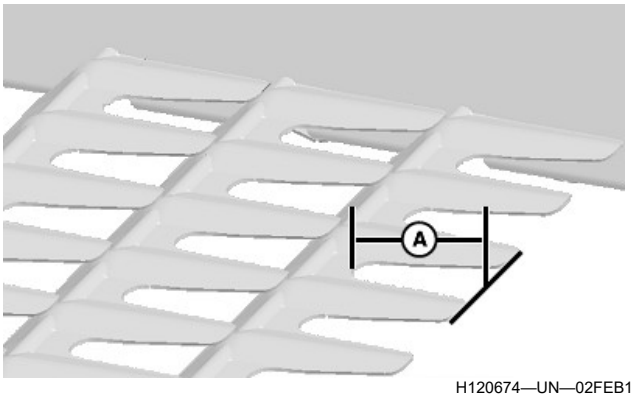
A—Wire-To-Wire

Machines can be equipped with two different types of chaffer and sieves.

- **Premium Corn** chaffer
  - **Chaffer** 41 mm (1-5/8 in)
- **Deep-tooth** chaffer and sieve.
  - **Chaffer** 41 mm (1-5/8 in)
  - **Sieve** 30 mm (1-3/16 in)
- **General-Purpose** chaffer and sieve.
  - **Chaffer** 30 mm (1-3/16 in)
  - **Sieve** 30 mm (1-3/16 in)

Proper way to measure chaffer and sieve louver length is from wire-to-wire (A) as shown. This can be used to determine if a deep-tooth or general-purpose chaffer or sieve is installed.

Sieve Louver Depth



H120674—UN—02FEB17

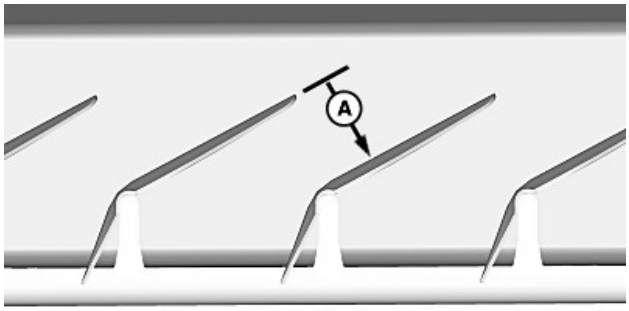
A—Louver Depth

Machines can be equipped with two different types of sieves.

- **Deep-tooth** sieve.
  - **Sieve** 22 mm (7/8 in)
- **General-Purpose** sieve.
  - **Sieve** 10 mm (3/8 in)

Proper way to measure sieve louver depth (A) is from bottom of louver to tip of louver as shown. This can be used to determine if a deep-tooth or general-purpose sieve is installed.

Louver Clearance



H92974—UN—03OCT08

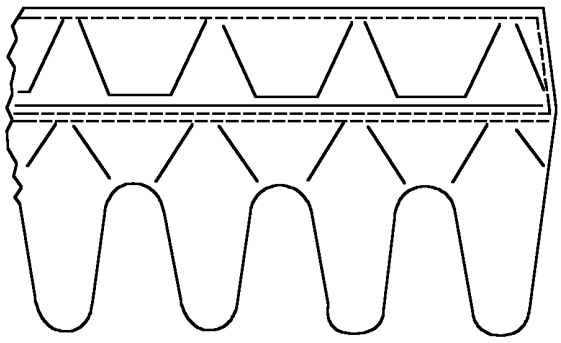
A—Louver-To-Louver

NOTE: Always close the chaffer/sieve louvers past the desired set point and then open the louvers to the desired set point to remove play.

Proper way to measure chaffer and sieve clearance is from louver-to-louver (A) as shown. This can be used to determine if clearance on chaffer and sieve matches with setting shown on armrest display.

OUO6075,0004978-19-22MAY18

General-Purpose Chaffer 30 mm (1-3/16 in)



H54526—UN—01APR99

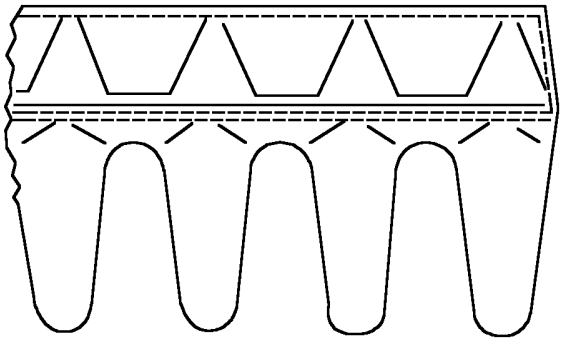
NOTE: Dimension shown is wire-to-wire spacing.

General-purpose chaffer is suitable for corn, soybeans,

sorghum, small grains, oil seed crops, grass seed, and many specialty crops. It is recommended for dry conditions and is resistant to “stabbing” of corn tassels and soybean, sunflower, and sorghum stems.

OUO6075,00045B1-19-02FEB17

Deep-Tooth Chaffer 41 mm (1-5/8 in)



H58751—UN—13JUL99

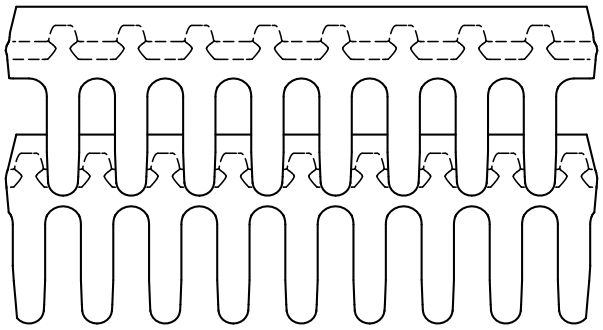
NOTE: Dimension shown is wire-to-wire spacing.

Not recommended for use in small grains, food corn, or popcorn.

Deep-tooth chaffer and deep-tooth sieve provide additional grain separation capacity in high moisture and high yield corn and high-capacity and clean grain sample in corn and soybeans.

OUO6075,000467C-19-20MAR17

Premium Corn Chaffer 41 mm (1-5/8 in)



H124256—UN—17MAY18

NOTE: Dimension shown is wire-to-wire spacing.

Recommended in high-yielding wet corn (+25%) conditions.

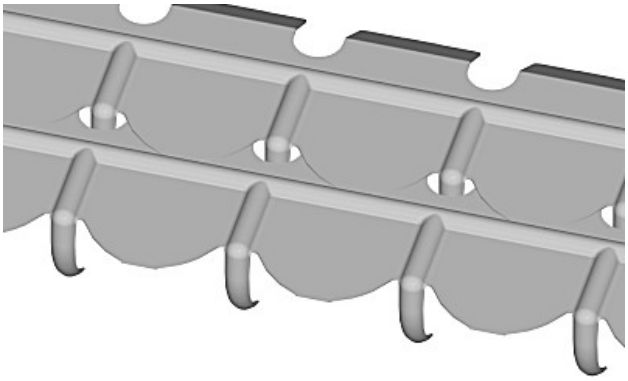
The Premium Corn chaffer has been designed for best performance when harvesting corn. The longer louver design featured on the chaffer provides a larger opening and increased grain-capturing capacity, especially in high-yielding corn or when harvesting on slopes where the larger louver opening of these elements can help to increase cleaning shoe capacity.

Other performance advantages of the Premium Corn chaffer are:

- Reduction of cleaning show losses from rear of machine.
- Reduction of tailings return volume for a higher-quality grain sample reduced cob particles in the grain tank for a cleaner grain sample.
- The Premium Corn design tends to have less material accumulation in wet corn conditions.
- Due to the curved tip of the louver, the Premium Corn chaffer is easier to clean and less likely to be damaged during cleaning. The offset of the louvers causes small plant stems to less likely fall through the element or get stuck in the element.

OUO6075,0004944-19-25MAY18

High-Performance Chaffer 30 mm (1-3/16 in)



H125454—UN—06DEC18

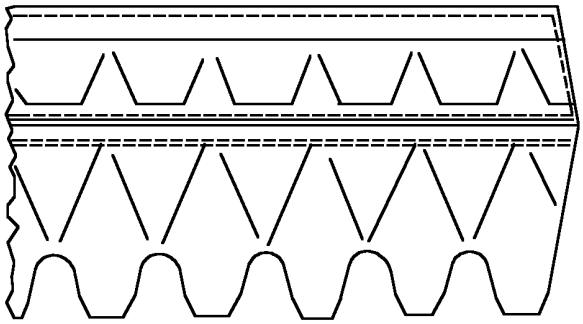
NOTE: Dimension shown is wire-to-wire spacing.

The High-Performance chaffer requires a 2 mm (5/64 in) wider chaffer clearance opening and 100 rpm higher fan speed compared to the General-Purpose chaffer.

The High-Performance chaffer improves tailings volume and grain tank sample, especially in challenging conditions (weedy conditions and heavily bearded crops), such as Canola, Oil Seed (Rape), Lentils. The curled chaffer finger reduces the amount of longer sticks passing through the chaffer.

OUO6075,0004A67-19-10JAN19

General Purpose Sieve 30 mm (1-3/16 in)



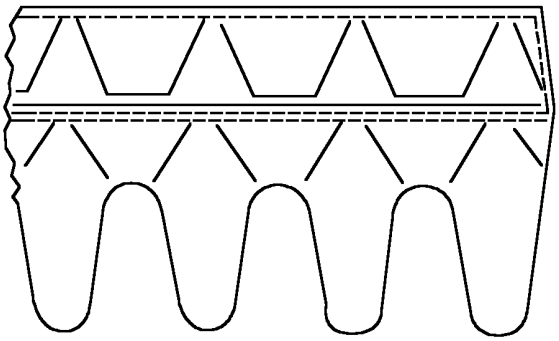
H54527—UN—01APR99

NOTE: Dimension shown is wire-to-wire spacing.

This sieve is suitable for all major crops and many specialty crops.

OUO6075,00045B3-19-03FEB17

Deep-Tooth Sieve 30 mm (1-3/16 in)



H54526—UN—01APR99

NOTE: Dimension shown is wire-to-wire spacing.

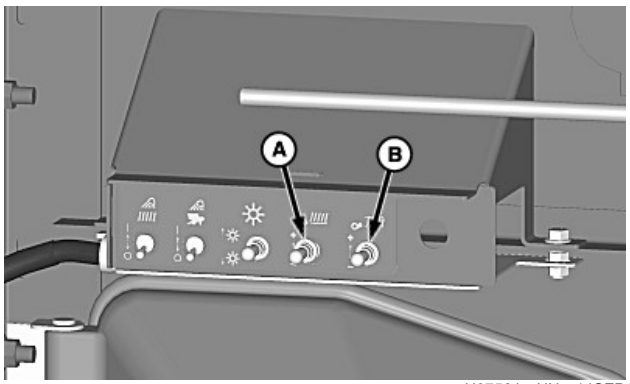
Not recommended for use in small grains, food corn, or popcorn.

Deep-tooth sieve provides additional grain separation in high-moisture and high-yield corn.

This sieve together with the deep-tooth chaffer provides high-capacity and clean grain samples in corn and soybeans.

OUO6075,000467D-19-20MAR17

Chaffer/Sieve Adjusting Switch



H97564—UN—14SEP10

A—Chaffer Adjust Switch
B—Sieve Adjust Switch

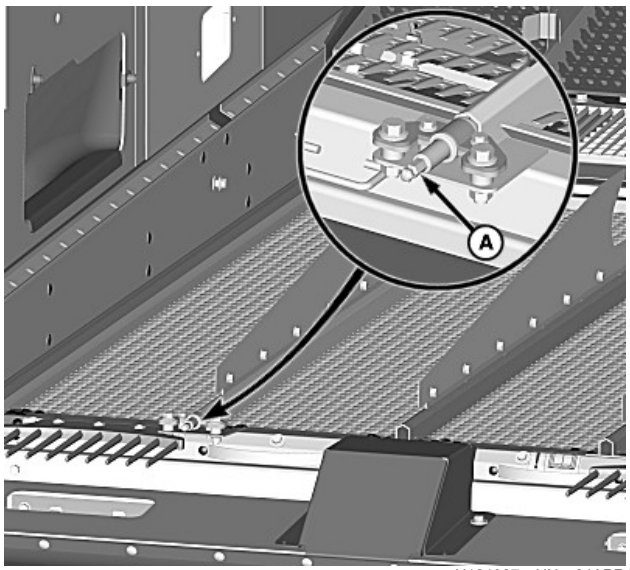
IMPORTANT: Close chaffer/sieve louvers completely to prevent louver damage while removing chaffer/sieve.

Chaffer adjust switch (A) and sieve adjust switch (B) are located on left-hand side of machine.

Chaffer adjust switch and sieve adjust switch allows operator to open or close chaffer and sieve to various positions.

OUO6075,00007DC-19-21MAR11

Dual Zone Adjust Rear Chaffer—Adjusting



H121327—UN—24APR17

A—Adjustment Linkage

CAUTION: Shut OFF engine, set park brake and remove key to help prevent accidental starting and personal injury.

Raise chopper/spreader assembly.

Turn adjustment linkage (A) clockwise to close the chaffer and counterclockwise to open the chaffer.

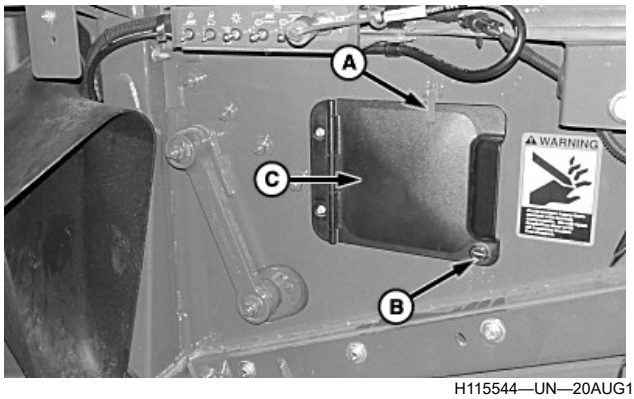
Close chaffer louvers past the desired set point and then open louvers to the desired set point to remove play.

NOTE: See Crop Settings section for recommended Dual Zone Adjust Rear Chaffer settings.

Measure distance between louvers and verify setting.

OUO6075,0004726-19-24APR17

Chaffer/Sieve Elements—Remove and Install



H115544—UN—20AUG15

A—Clip
B—Lock
C—Access Door

CAUTION: Shut OFF engine, set park brake, and remove key to help prevent accidental starting and personal injury.

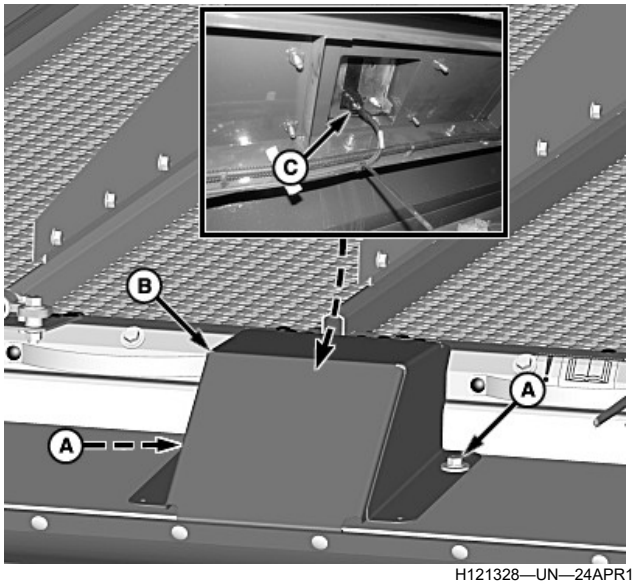
IMPORTANT: To avoid damage chaffer/sieve elements, completely close the louvers before removing the elements from the machine.

NOTE: Electric Knife Bank Actuator machines: To allow removal of the chaffer/sieve elements, adjust knife bank to the 100% engaged position. See Residue Management Help or Operator's Station Help for further information.

It is not necessary to remove the chopper or spreader (if equipped) to remove the chaffer/sieve elements. The chopper or spreader must be fully raised.

The sieve removal is similar to the chaffer removal.

1. Open clip (A) and turn lock (B) to open access door (C).

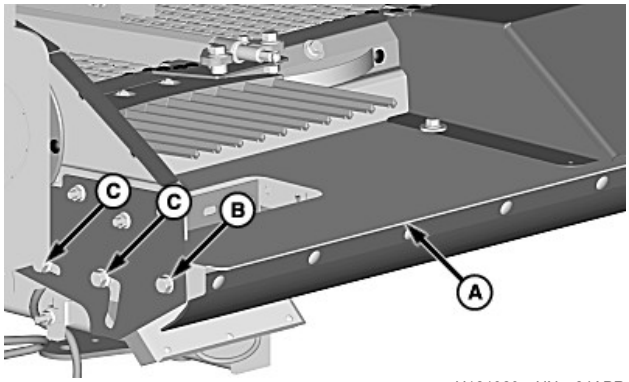


H121328—UN—24APR17

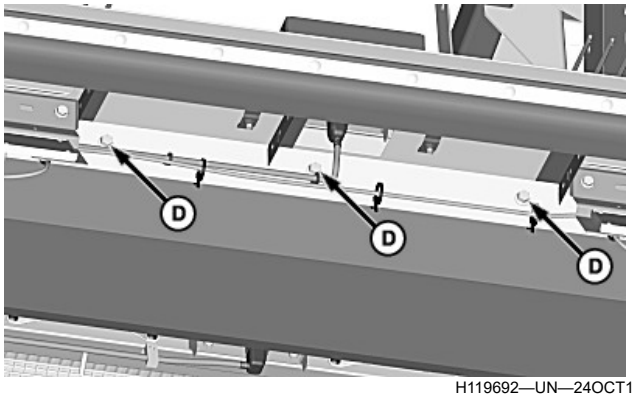
A—Cap Screw (2 used)
B—Cover
C—Electrical Harness

NOTE: It is not required to remove the chaffer motor.

2. Remove cap screws (A) and cover (B).
3. Disconnect electrical harness (C) from the chaffer motor.



H121329—UN—24APR17

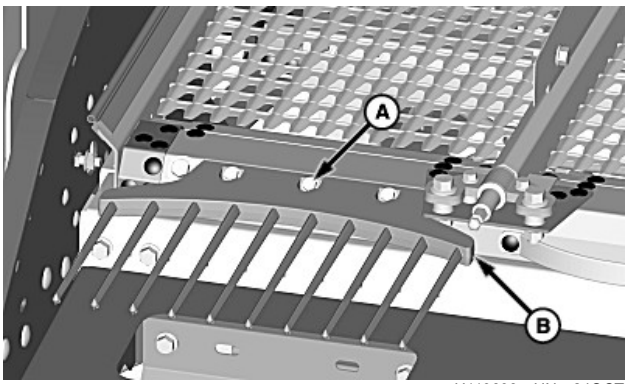


H119692—UN—24OCT16

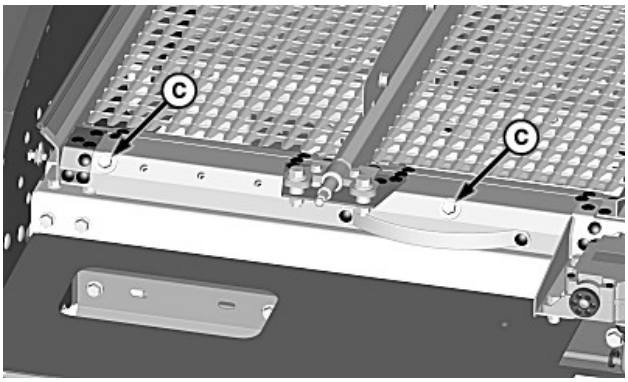
A—Tailboard
B—Cap Screw and Nut (2 used)
C—Cap Screw (4 used)
D—Cap Screw and Nut (3 used)

NOTE: It is not required to remove the tailboard.

4. **Lower Tailboard (A):**
   a. Remove cap screw and nut (B) from both sides of the machine.
   b. Loosen cap screws (C) from both sides of the machine.
   c. Remove cap screws and nuts (D) from underneath center of tailboard.
   d. Pull tailboard rearward and lower.



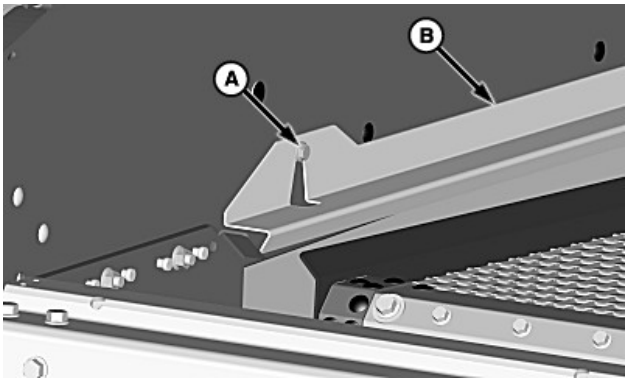
H119693—UN—24OCT16



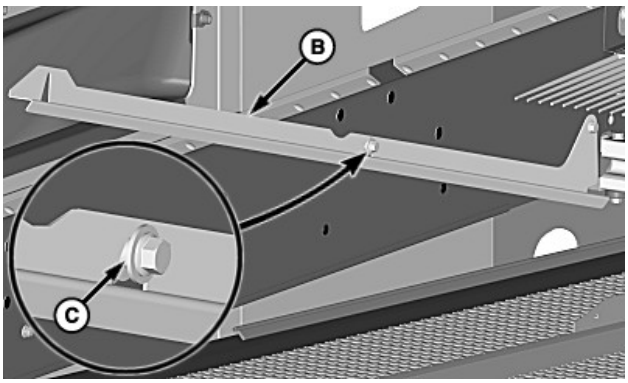
H119913—UN—02NOV16

A—Cap Screw (6 used)
B—Plastic Finger (2 used)
C—Cap Screw (4 used)

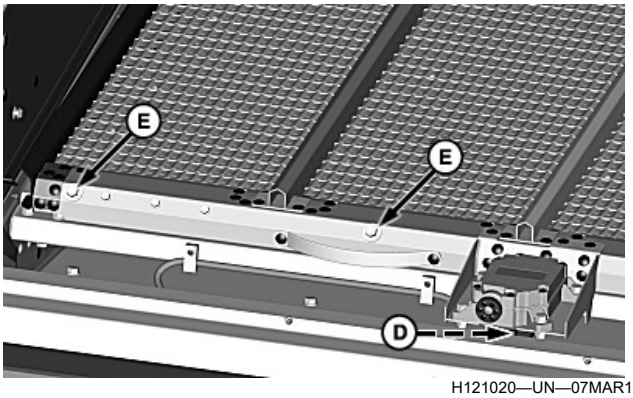
5. **Chaffer Removal:**
   a. Remove cap screws (A) and plastic fingers (B) from both sides of the machine.
   b. Remove cap screws (C) from both sides of the machine.
   c. Slide chaffer element through rear of the machine.
   d. Inspect grain seals on chaffer element and repair or replace as needed.



H119696—UN—24OCT16



H119695—UN—24OCT16



H121020—UN—07MAR17

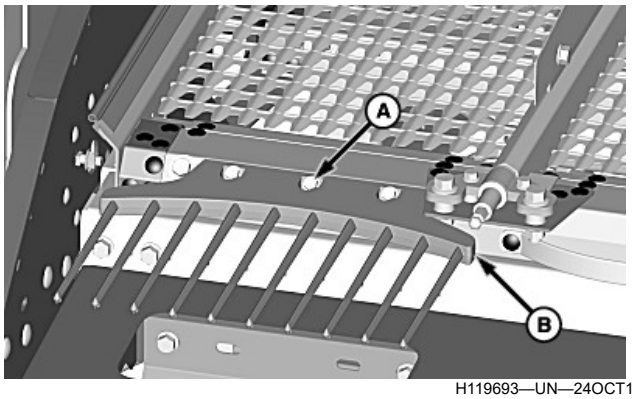
A—Cap Screw
B—Rail
C—Bushing
D—Electrical Harness
E—Cap Screw (4 used)

6. **Sieve Removal:**
   a. Loosen cap screw (A) on both sides of the machine.
   b. Lift rail (B) and place over bushing (C).
   c. Disconnect electrical harness (D) from the sieve motor.
   d. Remove cap screws (E) from both sides of the machine.
   e. Slide sieve element through the rear of the machine.
   f. Inspect grain seals on sieve element and repair or replace as needed.

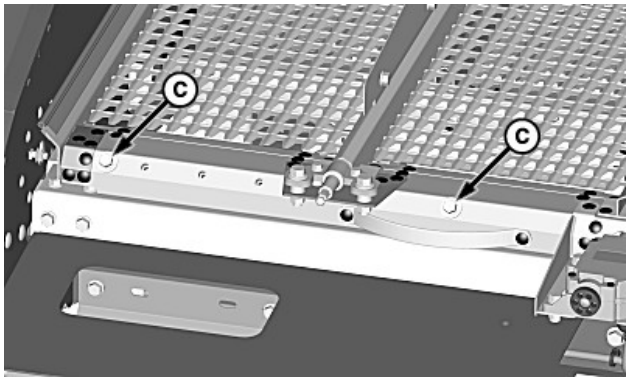
7. **Sieve Installation:**
   a. Install sieve element through the rear of the machine.
   b. Lower rails and install electrical harness.
   c. Tighten cap screws to specification.

Specification

Sieve Cap Screws—Torque. . . . . 37 N·m (27 lb·ft)



H119693—UN—24OCT16



H119913—UN—02NOV16

A—Cap Screw (6 used)
B—Plastic Finger (2 used)
C—Cap Screw (4 used)

8. **Chaffer Installation:**
   a. Install chaffer and install electrical harness.
   b. Tighten cap screws (C) to specification.

Specification

Chaffer Cap Screws—Torque. . . . . 37 N·m (27 lb·ft)

   c. Install plastic fingers (B) on both sides of the chaffer.
   d. Tighten cap screws (A) to specification.

Specification

Plastic Finger Cap Screws—Torque. . . . . 8 N·m (71 lb·in)

9. Raise tailboard and install previously removed hardware.
10. Install previously removed cover and retain with cap screws.
11. Close access door and retain with lock and clip.

OUO6075,0004A49-19-09NOV18

Chaffer/Sieve/Return Pan Assemblies

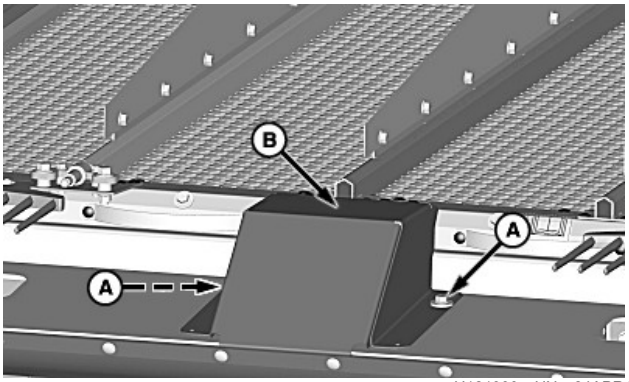
The following assemblies contain non-serviceable structural fasteners and are not repairable:

- Left and Right Chaffer Frame Sides
- Left and Right Sieve Frame Sides
- Return Pan Frame
- Chaffer Element
- Sieve Element

NOTE: The listed assemblies can be replaced through service parts. See your John Deere dealer for more information.

SS43267,0000623-19-11JUN15

Chaffer/Sieve Motor—Manual Adjust



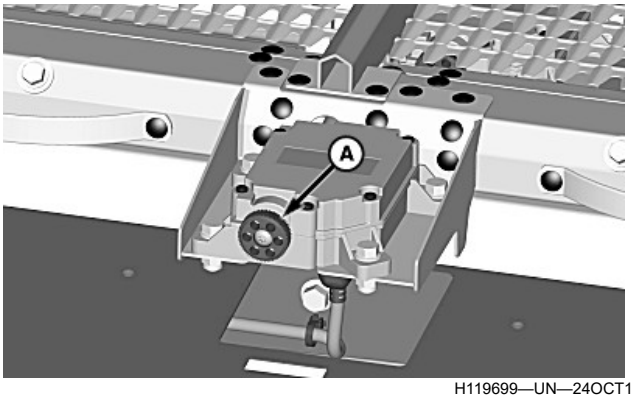
H121330—UN—24APR17

A—Cap Screws
B—Cover

CAUTION: Shut OFF engine, set park brake and remove key to help prevent accidental starting and personal injury.

NOTE: Same manual adjust procedure can be used on the chaffer/sieve motor.

1. Remove cap screws (A) and cover (B).



H119699—UN—24OCT16

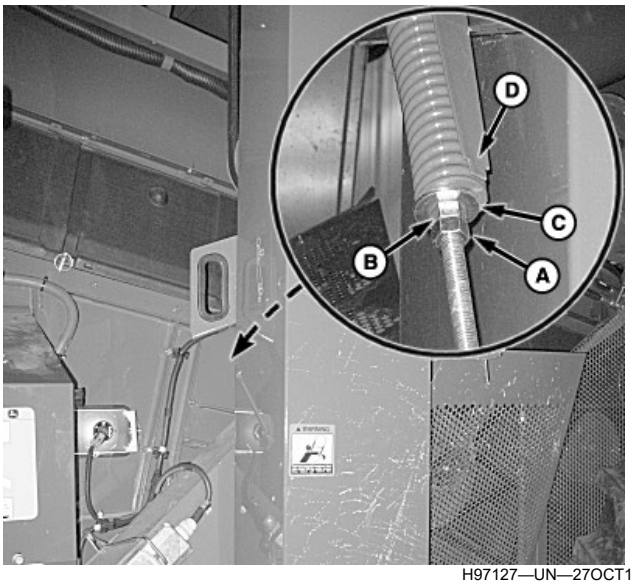
A—Knob

IMPORTANT: To prevent adjusting motor damage, do not use a wrench on knob.

2. Use knob (A) to adjust motor. Turn knob clockwise to close and counterclockwise to open chaffer/sieve.

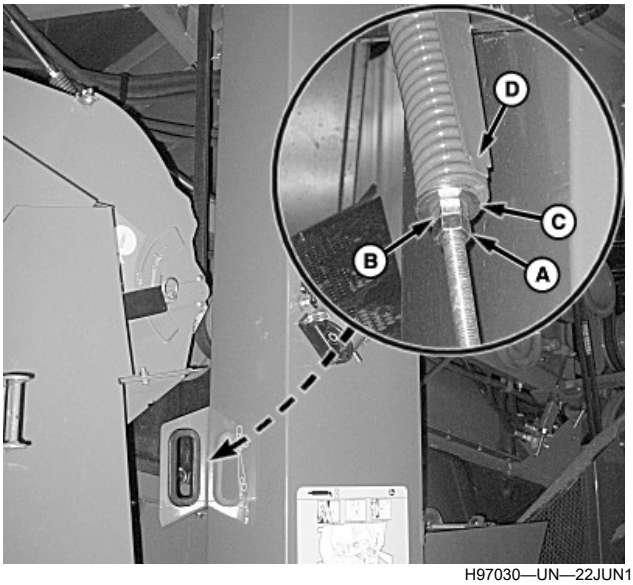
OUO6075,000467E-19-24APR17

Clean Grain Elevator Belt—Adjusting



H97127—UN—27OCT10

Style A



H97030—UN—22JUN10

Style B

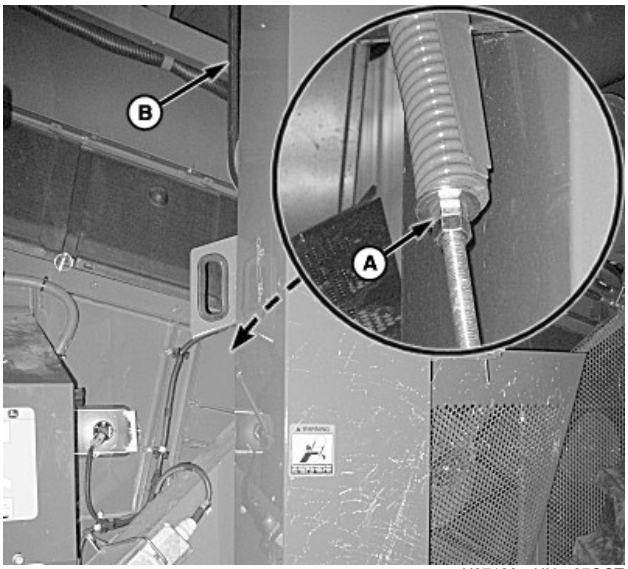
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

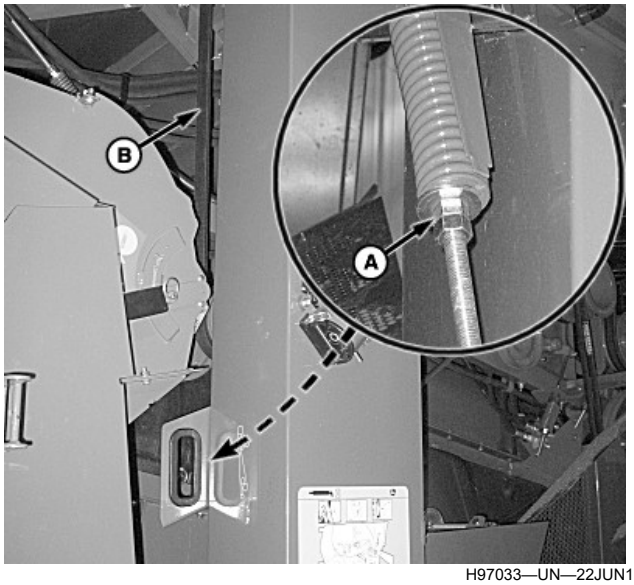
OUO6075,0004385-19-10OCT16

Clean Grain Elevator Belt—Replacing



H97128—UN—27OCT10

Style A



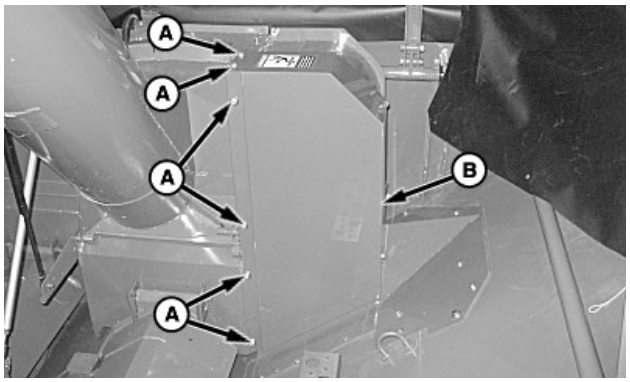
H97033—UN—22JUN10

Style B

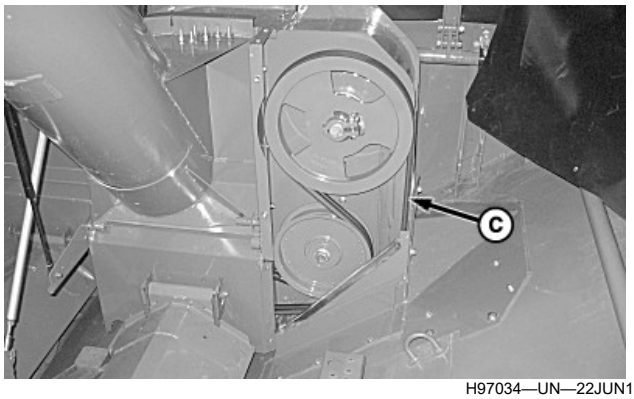
A—Nuts
B—Clean Grain Elevator Belt

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nuts (A) to relieve tension on the clean grain elevator belt (B).



H97032—UN—22JUN10



H97034—UN—22JUN10

A—Cap Screws
B—Cover
C—Clean Grain Elevator Belt

Remove cap screws (A) and cover (B).

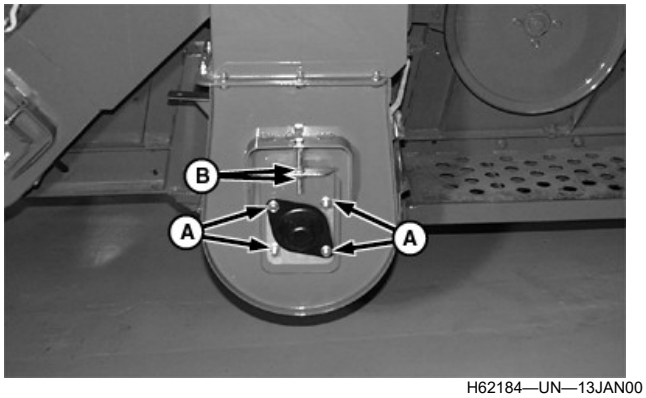
Remove clean grain elevator belt (C) from pulleys.

Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step. Tighten lock nut.

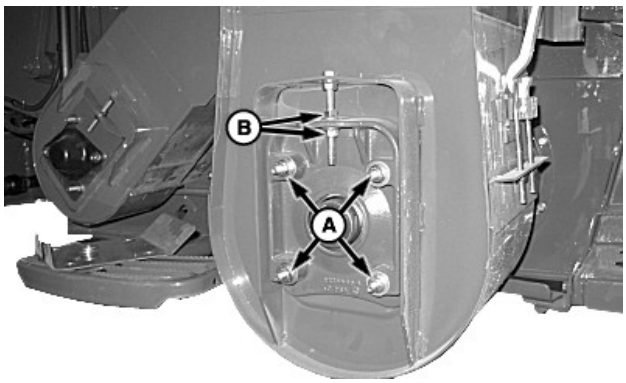
Install previously removed cover and retain with cap screws.

OUO6075,0004384-19-10OCT16

Clean Grain Elevator Conveyor Chain—Adjusting



H62184—UN—13JAN00



H87582—UN—07MAR07

A—Nut (4 used)
B—Nut (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

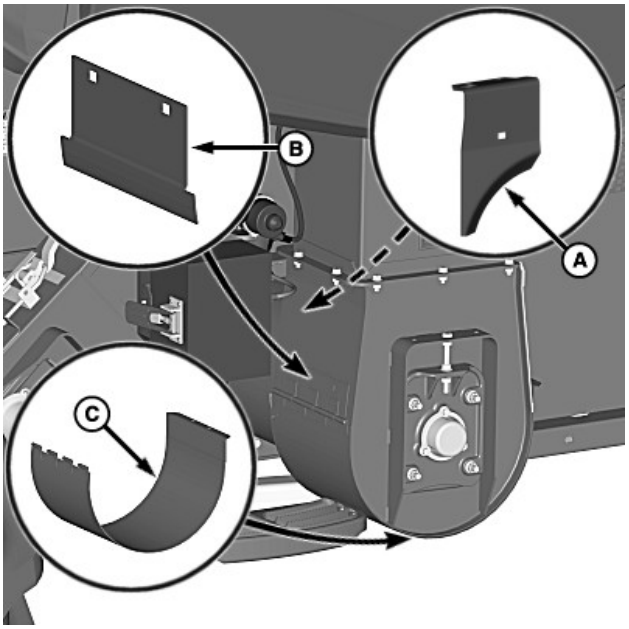
1. Release the latch and open the lower door.
2. Remove the nuts from the bearing cover (if equipped).
3. Loosen nuts (A) and use nuts (B) to adjust the chain. Move the bearing carrier downward to tighten the chain.
4. The elevator chain is adjusted properly when the lower end of the chain can be moved side-to-side on the sprocket but cannot be pulled away from the sprocket. When the chain loosens up to 6 mm (1/4 in) from the sprocket, readjust the chain. After a period

of use, it may be necessary to remove a half link to adjust the chain correctly.

5. Install the bearing cover (if equipped) and retain with nuts.
6. Close and latch the lower door.

OUO6075,0004E8D-19-17JUN20

Clean Grain Elevator Wear Plates and Door (If Equipped)



H126546—UN—20JUN19

The following parts provide protection to the clean grain elevator when harvesting abrasive crops:

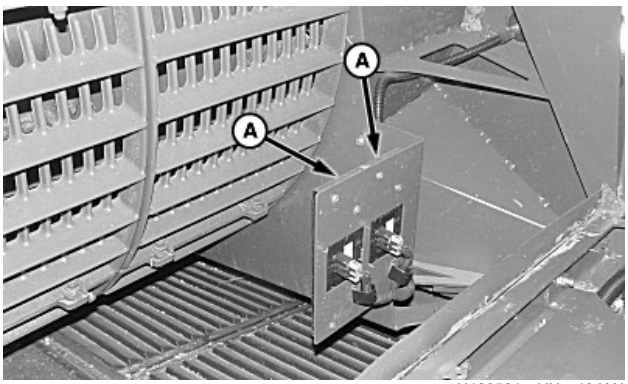
- Rear Wear Plate (A)
- Wear Plate (B)
- Door (C)

Periodically inspect these clean grain elevator parts for wear.

Remove and replace these clean grain elevator parts as needed. See your John Deere dealer for further information.

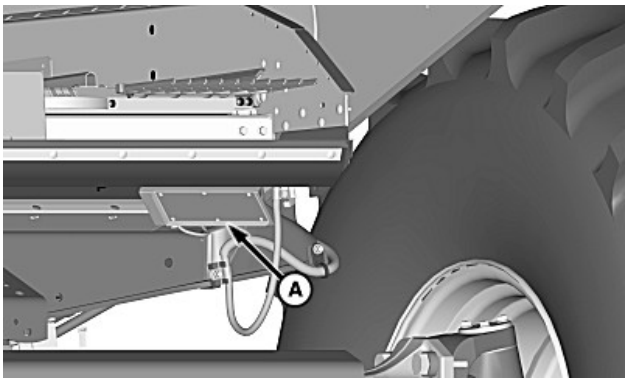
OUO6075,0004BD0-19-20JUN19

VisionTrak™ Operational Checks



H120521—UN—19JAN17

Separator Sensors



H120618—UN—26JAN17

Right-Hand Shoe Sensor

A—Sensors

NOTE: Two people are required to perform this operational check. One person must remain seated in the operator's seat, while another person taps on the sensors.

Separator sensors are on the left-hand side of the machine underneath the separator covers.

Shoe sensors are at the rear of the machine on the tailboard.

1. Turn key switch to RUN position, but do not start machine.
2. Engage header switch.

NOTE: MUST be in a crop that was previously calibrated. Grain loss calibration value MUST be less than 50.

3. Tap on sensors (A) several times. Person watching VisionTrak™ display should see movement on the shoe loss and separator loss indicators.

NOTE: Return grain loss calibration value to original value or perform another crop calibration.

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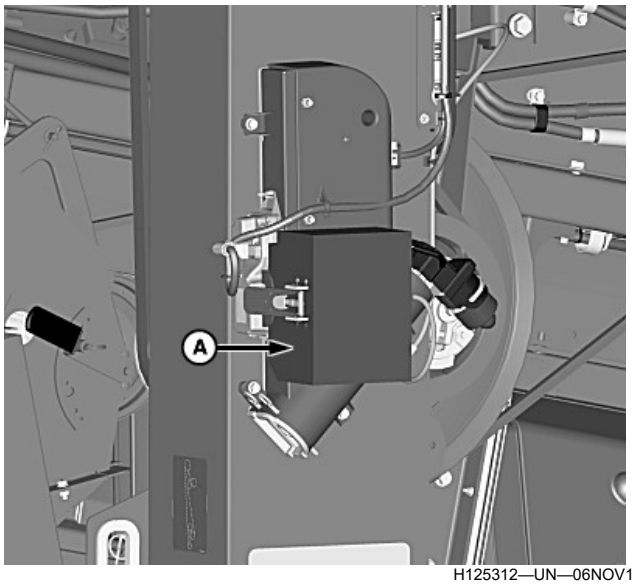
4. Disengage header switch and turn key switch OFF.
5. If VisionTrak™ does not work after these checks, see your John Deere dealer for further information.

OUO6075,000447B-19-26JAN17

ActiveVision™ Clean Grain Elevator Camera (If Equipped)



H125312—UN—06NOV18

A—ActiveVision™ Clean Grain Elevator Camera

CAUTION: Shut OFF engine, set park brake and remove key before servicing or removing camera.

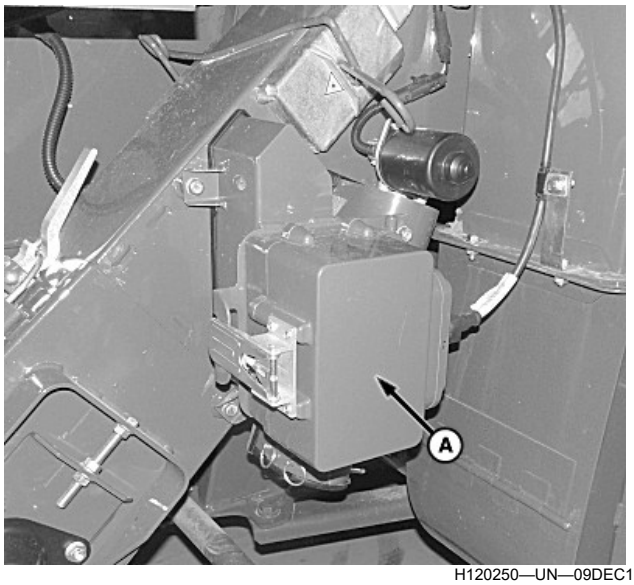
NOTE: The lens debris indicator in the software alerts operator when the camera lens needs cleaned, as the system functionality is reduced.

The cleaning frequency varies depending on several factors, including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.

Open latch and clean the ActiveVision™ clean grain elevator camera (A).

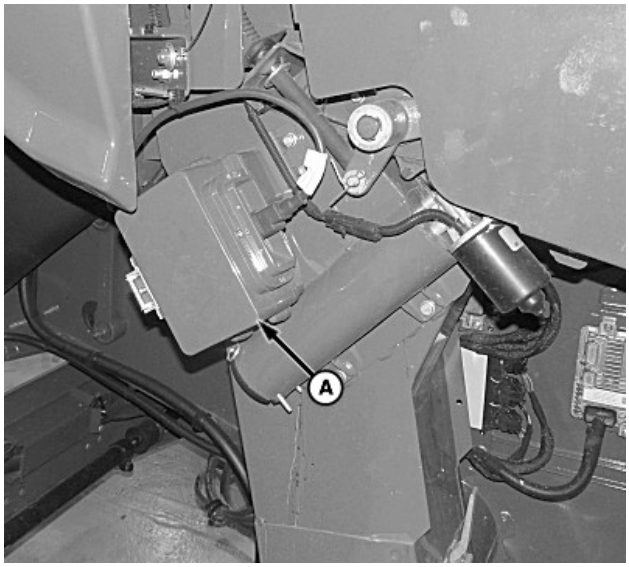
OUO6075,0004A40-19-06NOV18

ActiveVision™ Tailings System Camera (If Equipped)



H120250—UN—09DEC16

ActiveVision™ Tailings Elevator Camera (Style A)



H120251—UN—09DEC16

ActiveVision™ Tailings Elevator Camera (Style B)

A—ActiveVision™ Tailings System Camera

CAUTION: Shut OFF engine, set park brake and remove key before servicing or removing camera.

NOTE: Lens debris indicator in the software alerts operator when the camera lens needs to be cleaned as the system functionality may be reduced.

Cleaning frequency varies depending on a number of factors including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.

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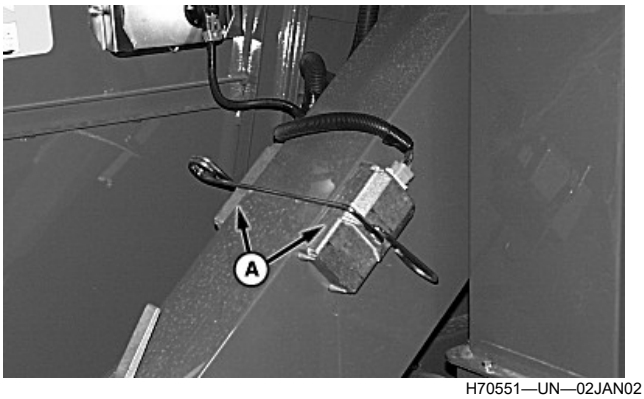
Open latch and clean the ActiveVision™ tailings system camera (A).

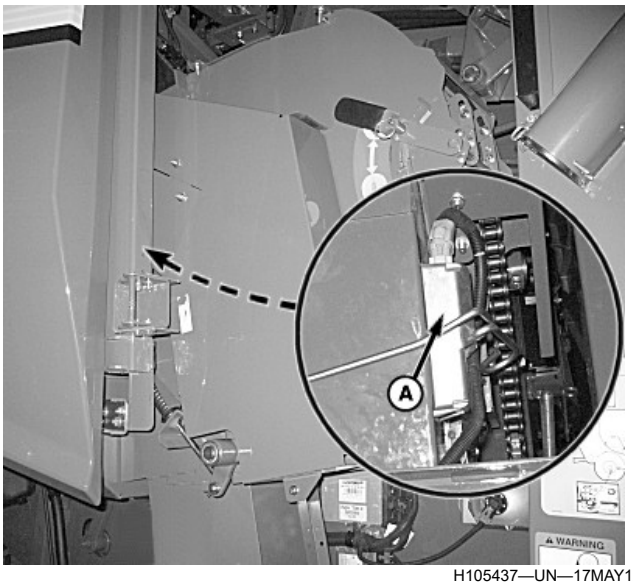
OUO6075,0004567-19-24JAN17

Tailings System Elevator Sensors



H70551—UN—02JAN02

Style A



H105437—UN—17MAY12

Style B

A—Tailings Sensors

If tailings sensor display consistently reads full (all bars lit) when not harvesting or empty (no bars lit) when harvesting, it may indicate that the sensor lens is coated with material or seal under lens has allowed dust to enter.

CAUTION: Tailings sensor is a Class 1 laser product and emits laser radiation when powered. When servicing or removing tailings sensors, use caution and do not view beam directly.

Key switch must be turned OFF and tailings sensor must be unplugged before servicing or removing sensors.

DO NOT operate sensor with lens removed. Accessible laser emission when the lens is in place:

- 850 nm
- 500 nsec pulse width
- ≤ 500 Hz rep rate
- < 90 nJ per pulse
- 43 uW average power
- Class 1 levels (Eye Safe)

Accessible laser emission levels if sensor was operated with lens removed are:

- 850 nm
- 500 nsec pulse width
- ≤ 500 Hz rep rate
- < 380 nJ per pulse
- 188 uW average power
- Class 3R Levels (small potential for eye injury)

1. Remove tailings sensors (A) to inspect and clean lenses if needed.
2. If lenses are clean, remove and check for dust. If dust is found, clean area and reassemble the lens onto the unit making sure that gasket is sealing.
3. Verify that lens is retained with all previously removed screws prior to installation.

CAUTION: Failure to install plastic cover prior to replacement of sensors on elevator may cause malfunction, incorrect harvest readings, or sensor damage, and could allow for potentially hazardous eye exposure when sensor is removed.

4. Install sensor and test system.
5. If display continues to read full or empty, contact your John Deere dealer.

OUO6075,0004568-19-12DEC16

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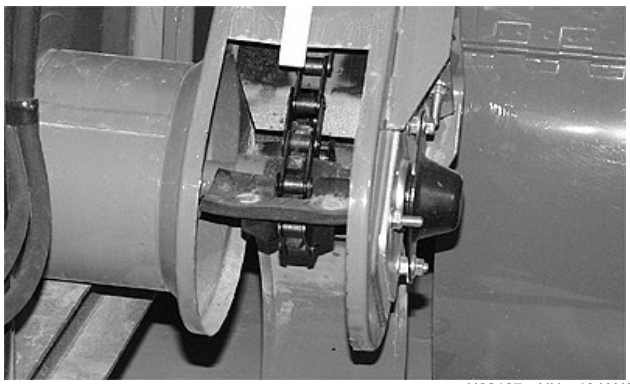
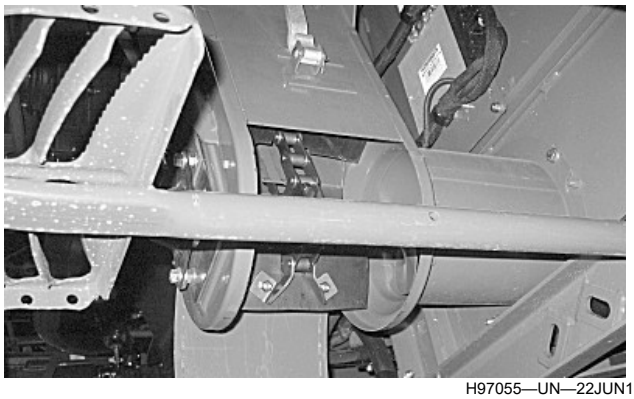
Tailings System Elevator Paddles



H62187—UN—13JAN00

Style A



H97055—UN—22JUN10

Style B

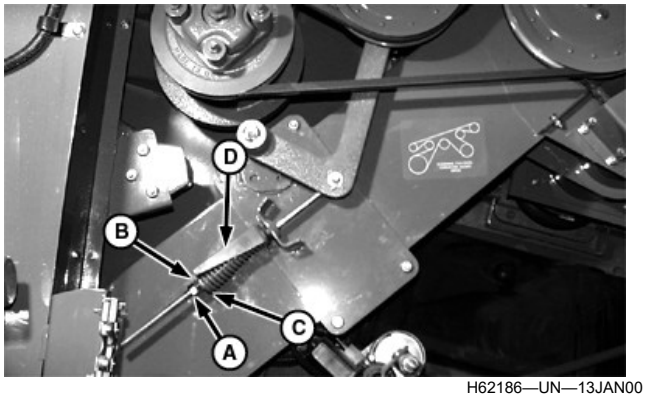
CAUTION: Shut OFF engine, set park brake and remove key.

Check elevator chain occasionally for worn or missing paddles.

In muddy conditions, one steel paddle may be installed in the elevator chain to act as a wiper.

OUO6075,0004382-19-10OCT16

Tailings Elevator Drive Belt—Adjusting (Style A)



H62186—UN—13JAN00

A—Lock Nut
B—Nut
C—Washer
D—Gauge

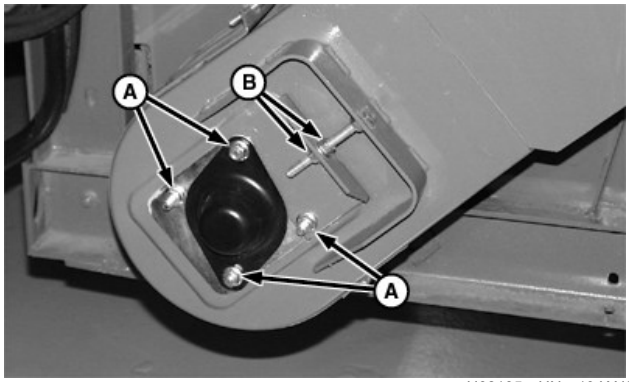
CAUTION: Shut OFF engine, set park brake and remove key.

Loosen lock nut (A).

Tighten nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

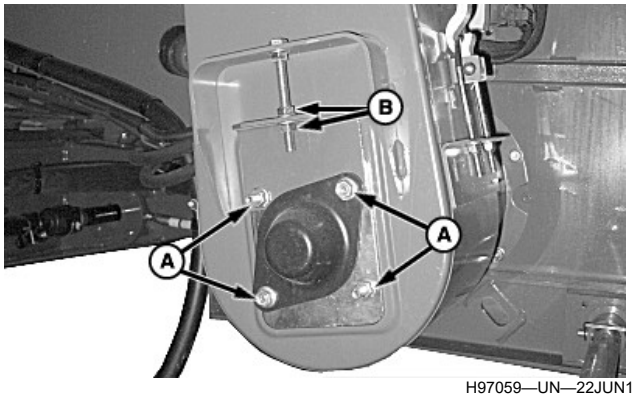
OUO6075,0004381-19-26JAN17

Tailings System Elevator Paddle Chain—Adjusting



H62185—UN—13JAN00

Style A



H97059—UN—22JUN10

Style B

A—Nut (4 used)
B—Nut (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

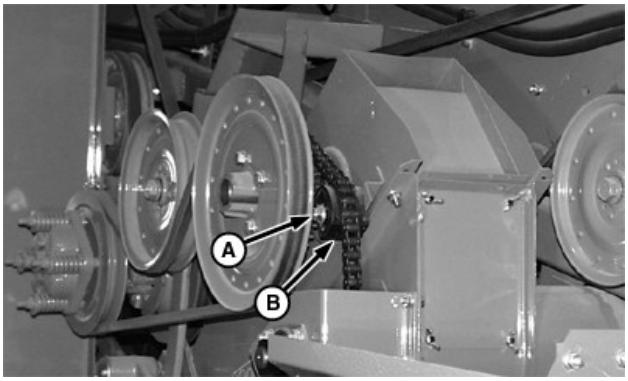
1. Release the latch and open the lower door.
2. Remove the nuts from the bearing cover.
3. Loosen nuts (A) and use nuts (B) to adjust the chain.

Move the bearing carrier downward to tighten the chain.

4. The elevator chain is adjusted properly when the lower end of the chain can be moved side-to-side on the sprocket but cannot be pulled away from the sprocket. When the chain loosens up to 6 mm (1/4 in) from the sprocket, readjust the chain. After a period of use, it may be necessary to remove a half link to adjust the chain correctly.
5. Install the bearing cover and retain with nuts.
6. Close and latch the lower door.

OUO6075,0004E8E-19-17JUN20

Upper Tailings Auger Drive Chain—Adjusting (Style A)



H62189—UN—13JAN00

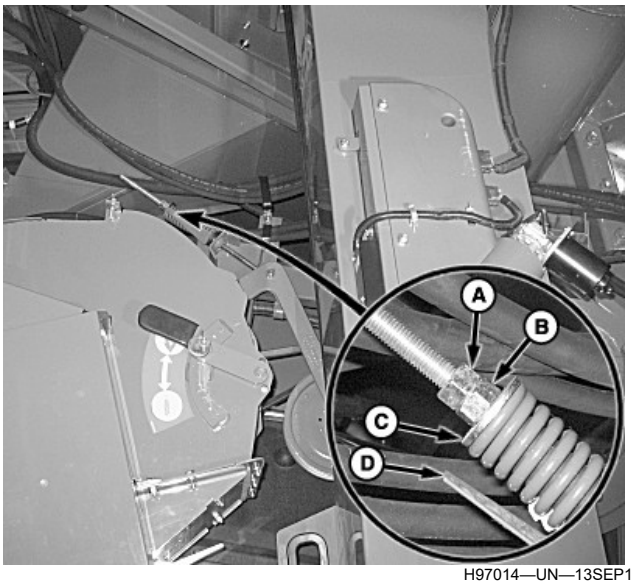
A—Cap Screw
B—Block

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen cap screw (A) and adjust block (B) to tighten chain. Tighten cap screw when chain is tight.

OUO6075,000437F-19-26JAN17

Tailings System Drive Belt—Adjusting (Style B)



H97014—UN—13SEP10

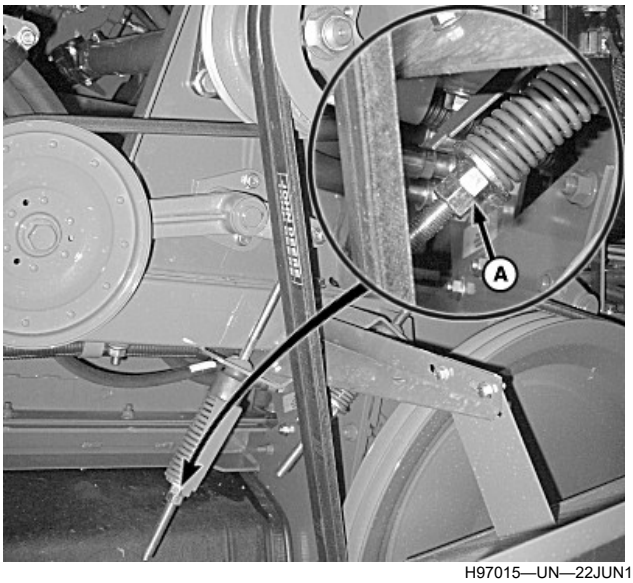
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

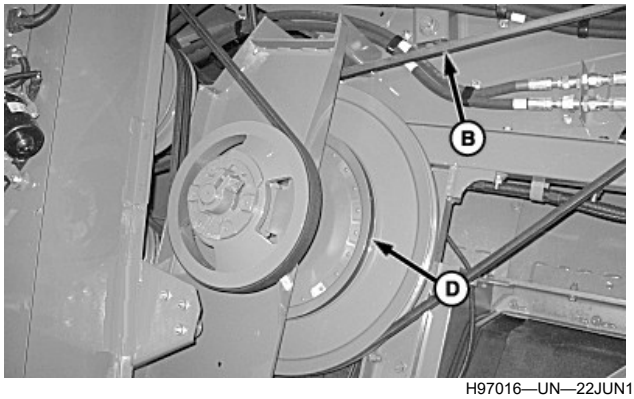
Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,0004377-19-26JAN17

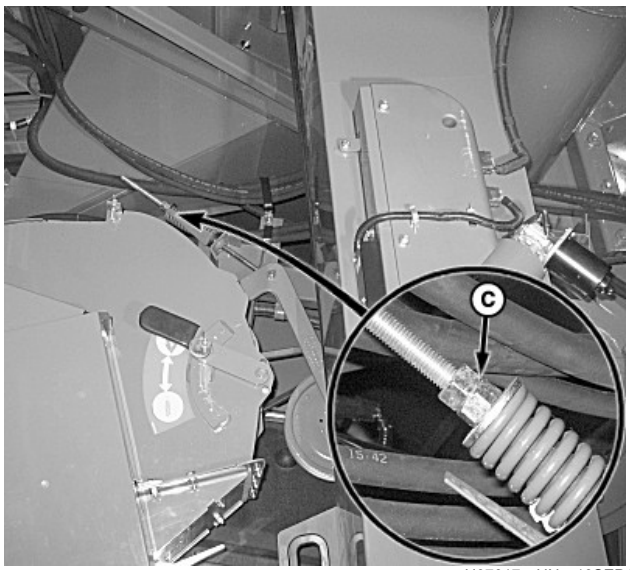
Tailings System Drive Belt—Replacing (Style B)



H97015—UN—22JUN10



H97016—UN—22JUN10



H97017—UN—13SEP10

A—Nuts
B—Rear Countershaft Belt
C—Nuts
D—Tailings System Drive Belt

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nuts (A) and remove rear countershaft belt (B) from pulley.

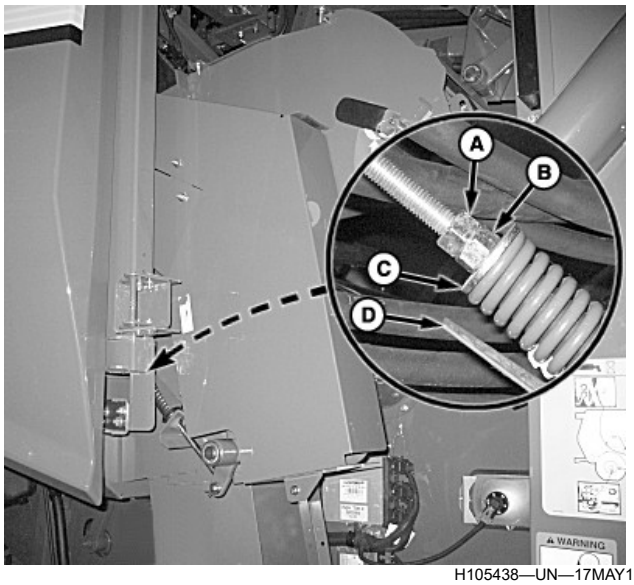
Loosen nuts (C) and remove tailings system drive belt (D).

Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step.

Install rear countershaft belt onto pulley and adjust the tensioner until washer is positioned between end of gauge and bottom of step.

OUO6075,0004378-19-26JAN17

Tailings System Drive Chain—Adjusting (Style B)



H105438—UN—17MAY12

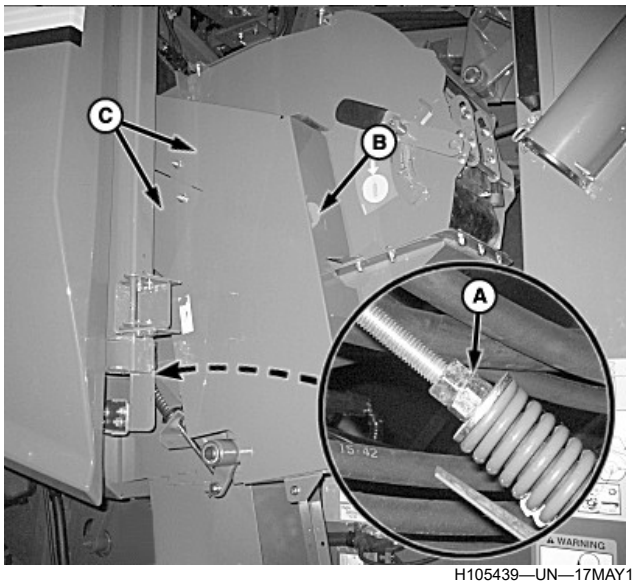
A—Nut
B—Nut
C—Washer
D—Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,0004379-19-26JAN17

Tailings System Drive Chain—Replacing (Style B)



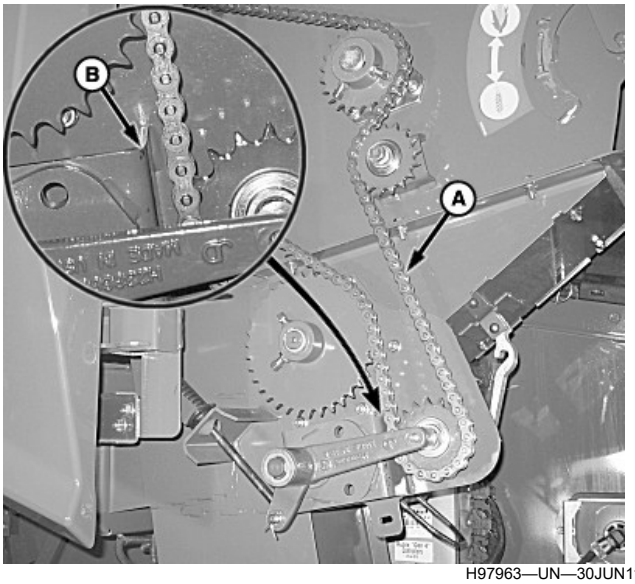
H105439—UN—17MAY12

A—Nuts

B—Shield
C—Shields

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nuts (A) and remove shields (B and C).



H97963—UN—30JUN11

A—Chain
B—Bracket

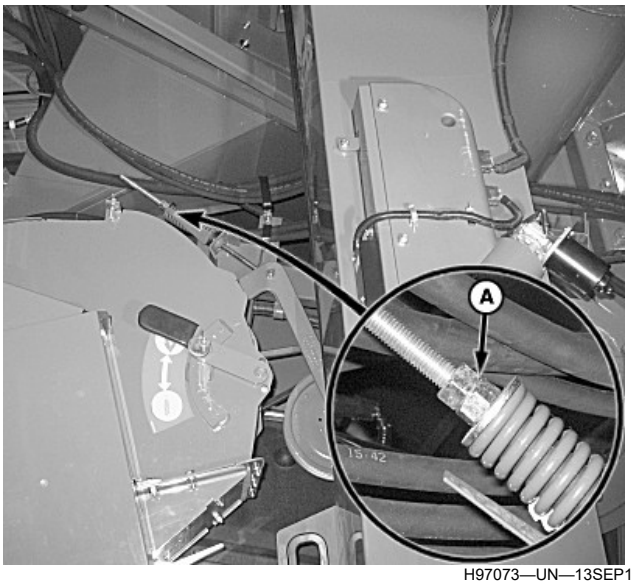
Replace if fully tensioned chain (A) contacts or is less than 3 mm (1/8 in) away from bracket (B).

Install replacement chain and adjust the tensioner until washer is positioned between end of gauge and bottom of step.

Install previously removed shields.

OUO6075,000437A-19-26JAN17

Tailings System Wear Strips and Rasp Bars —Remove and Install (Style B)

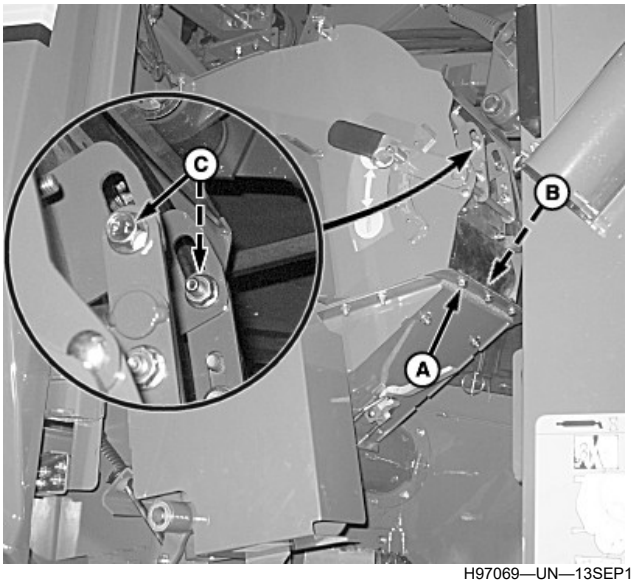


H97073—UN—13SEP10

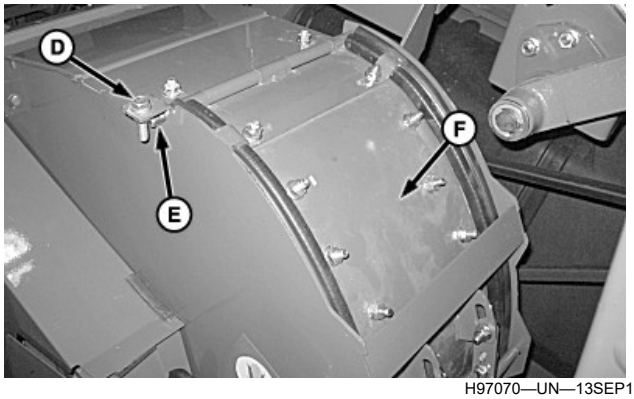
A—Nuts

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nuts (A) to relieve belt tension from the tailings system drive belt.



H97069—UN—13SEP10

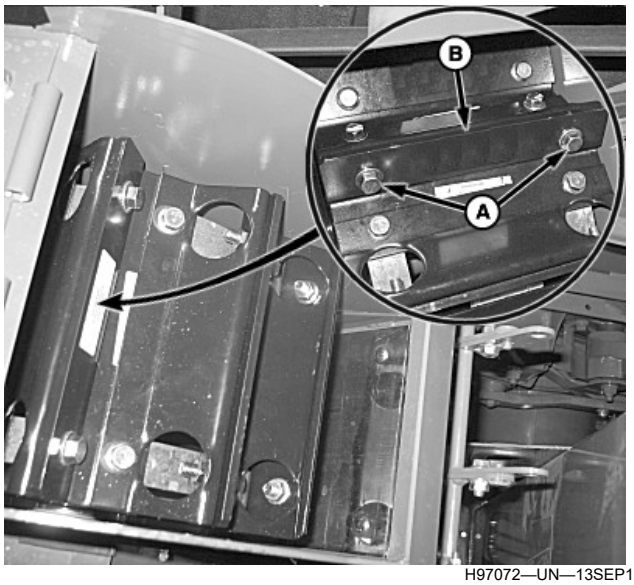


H97070—UN—13SEP10

A—Cap Screws (3 Used)
B—Strap
C—Shoulder Bolts (2 Used)
D—Cap Screw
E—Rod
F—Access Cover

Remove cap screws (A) and strap (B).

Remove shoulder bolts (C), cap screw (D), and rod (E) from access cover (F).



H97072—UN—13SEP10

A—Cap Screws and Nuts
B—Wear Strips

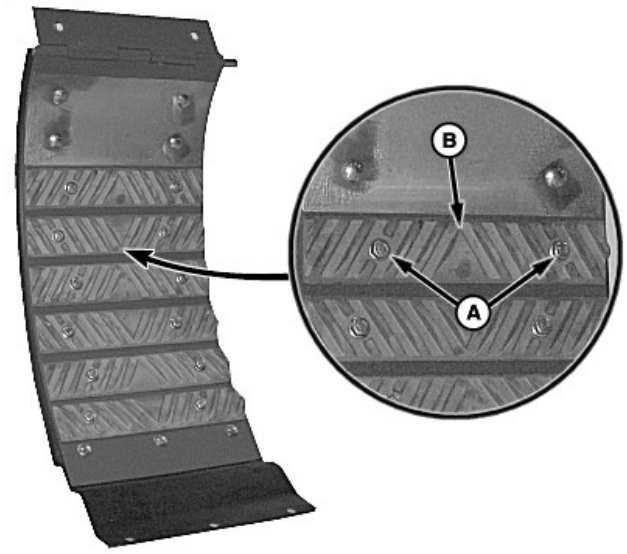
Remove cap screws and nuts (A) from wear strips.

Remove and replace wear strips as needed.

Tighten wear strip cap screws to specification.

Specification

Wear Strip Cap Screws—Torque. . . . . 70 N·m (52 lb·ft)



H97084—UN—23JUN10

A—Cap Screws and Nuts
B—Rasp Bar

Remove cap screws and nuts (A) from rasp bar (B).

Remove and replace rasp bars as needed.

Tighten rasp bar cap screws to specification.

Specification

Rasp Bar Cap Screws—Torque. . . . . 37 N·m ± 7 N·m (27 lb·ft ± 5 lb·ft)

NOTE: Verify that seals on access cover remain in place when installing onto the tailings system.

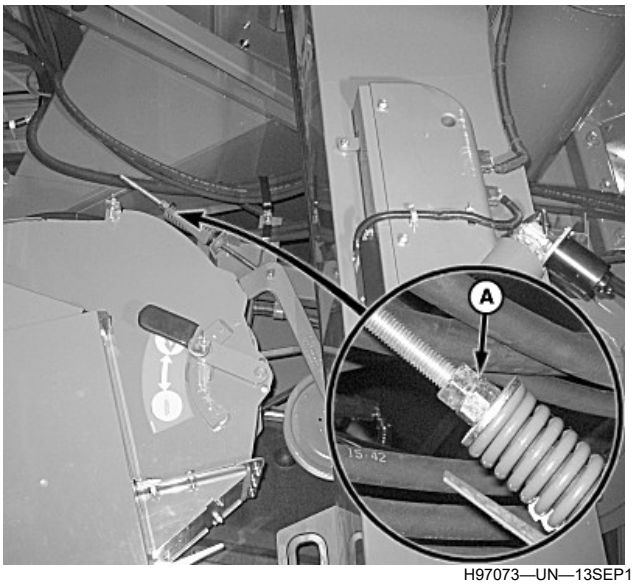
Install access cover and retain with rod and cap screw.

Install shoulder bolts and align rubber piece with holes and install strap and cap screws.

Adjust tailings system drive belt tensioner until washer is positioned between end of gauge and bottom of step.

OUO6075,000437B-19-26JAN17

Tailings System Wear Strips and Rasp Bars —Adjusting (Style B)

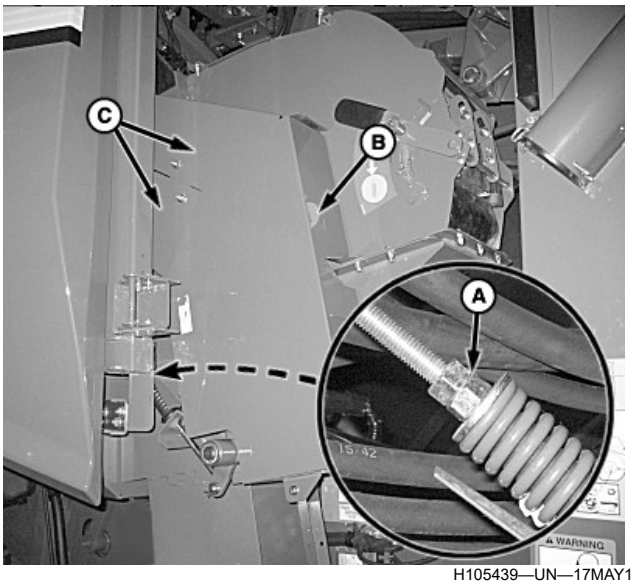


H97073—UN—13SEP10

A—Nuts

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nuts (A) to relieve belt tension from the tailings system drive belt.

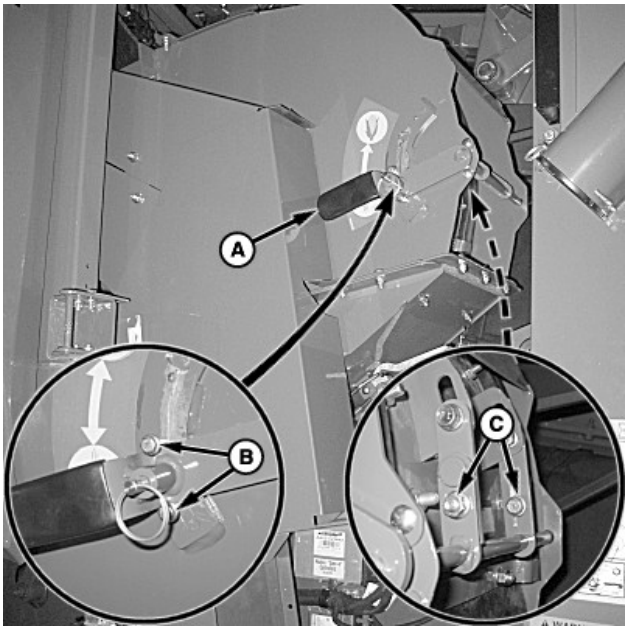


H105439—UN—17MAY12

A—Nuts
B—Shield
C—Shields

Loosen nuts (A) and remove shields (B and C).

Remove drive chain to allow tailings system to turn freely.



H97094—UN—13SEP10

A—Adjustment Handle
B—Cap Screws, M6
C—Cap Screws and Nuts

NOTE: Moving adjustment handle downward zeros the position between wear strips and rasp bars.

Move adjustment handle (A) downward as shown and install cap screws (B) in existing holes.

Loosen cap screws and nuts (C).

Slowly adjust access door while rotating beater until ”ticking” is heard.

Slowly back off until ”ticking” stops and tighten cap screws and nuts.

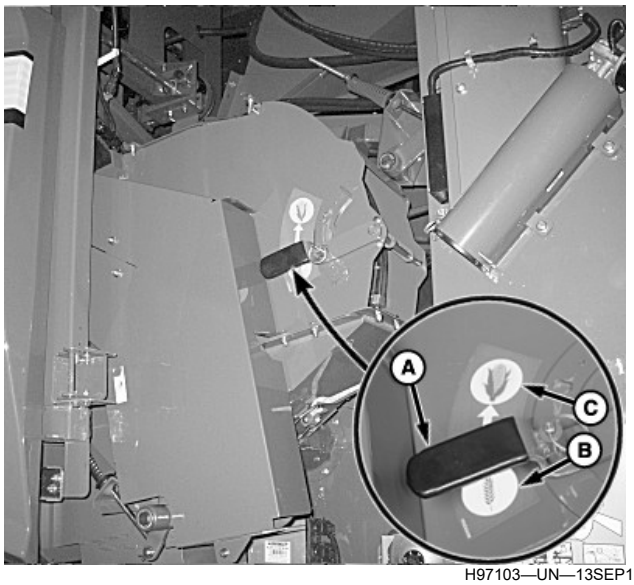
Adjust tailings system drive belt tensioner until washer is positioned between end of gauge and bottom of step.

Install chain and adjust the tensioner until washer is positioned between end of gauge and bottom of step.

Install previously removed shields.

OUO6075,000437C-19-26JAN17

Tailings System Return Concave—Adjusting (Style B)



H97103—UN—13SEP10

A—Crop Selection Handle
B—Small Grain Position
C—Large Grain Position

CAUTION: Shut OFF engine, set park brake and remove key.

IMPORTANT: To prevent personal injury or machine damage do not move crop selection handle when machine is running.

NOTE: See Crop Settings section for recommended tailings system concave position settings.

Small Grain Position (B):

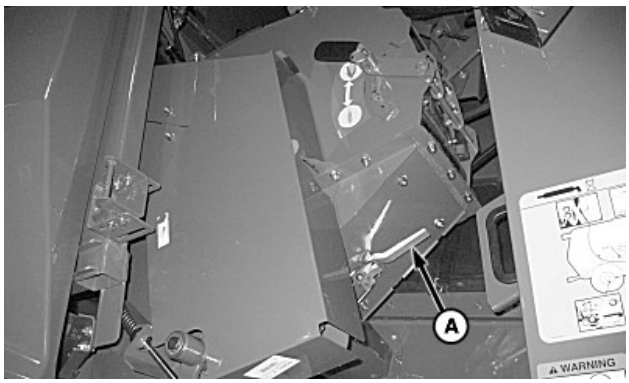
Crop selection handle (A) should be in ”LOWER” position, when harvesting small grain crops.

Large Grain Position (C):

Crop selection handle (A) should be in ”UPPER” position, when harvesting large crops or damage-sensitive crops.

OUO6075,000467F-19-20MAR17

Tailings System Auger Cleanout Door (Style B)



H97095—UN—13SEP10

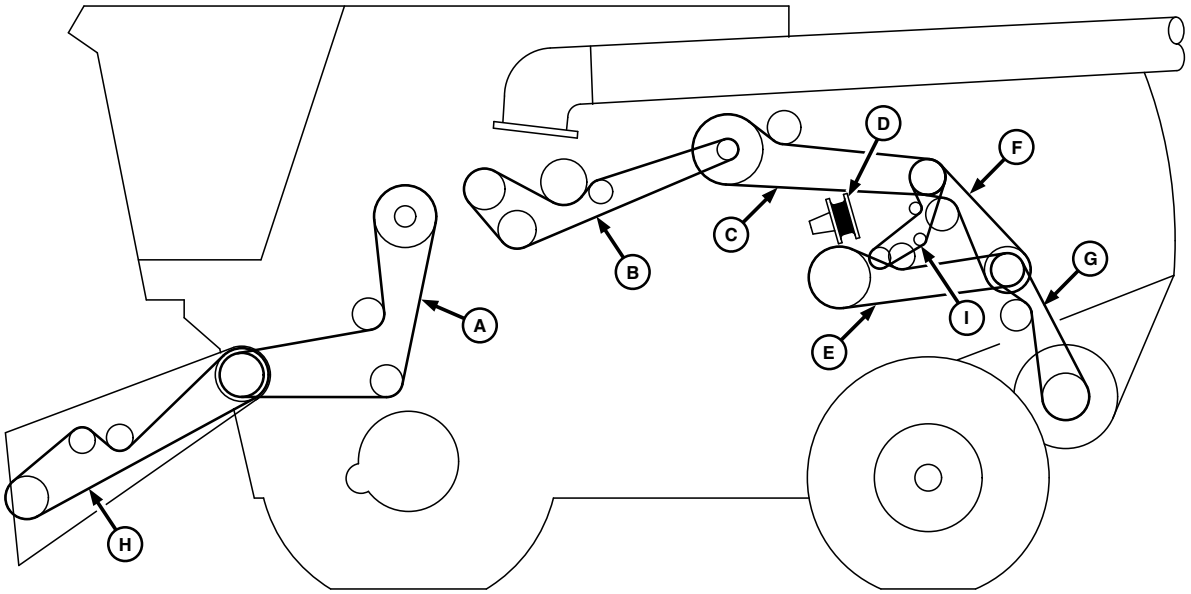
A—Handle

CAUTION: Shut OFF engine, set park brake and remove key.

Use handle (A) to open tailings system auger cleanout door and remove material as needed.

OUO6075,000437E-19-26JAN17

Drive Belts—Left-Hand



H107018—UN—25FEB13

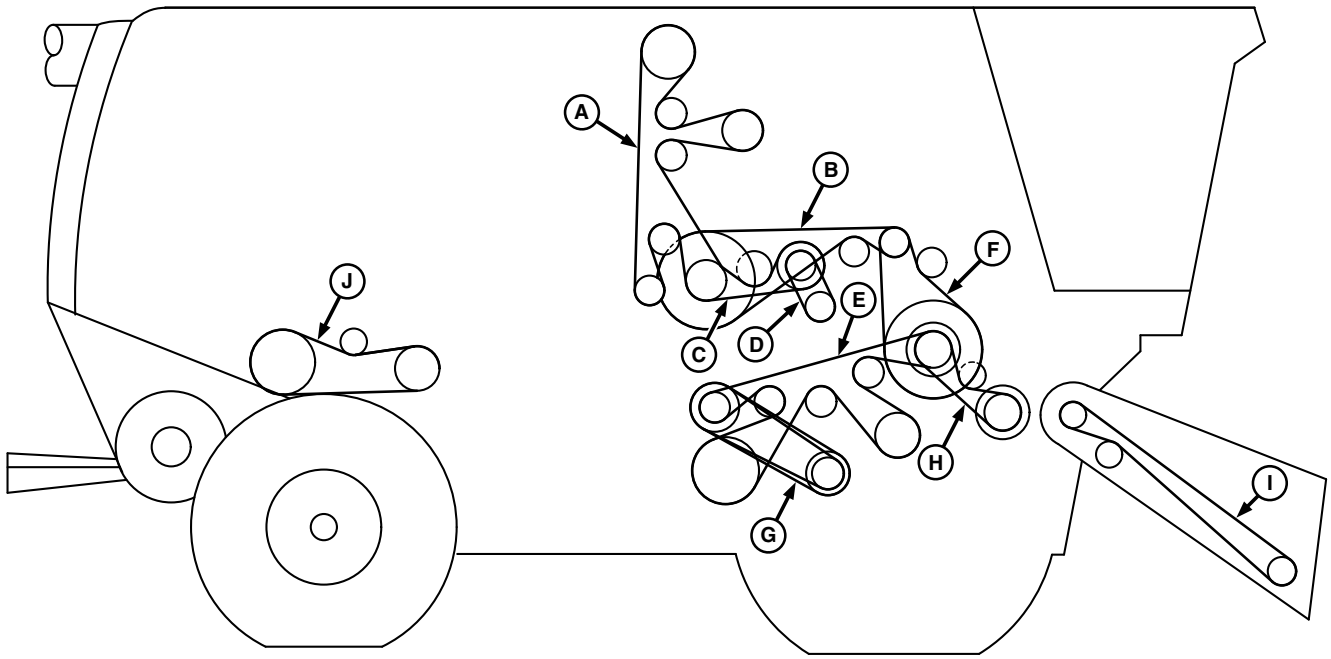
Style A			
A	Header and Reel Pump Standard/High Capacity Belt	F	Countershaft, Discharge Beater and Chopper Belt
B	Unloading Auger System, #60 Roller Chain	G	Straw Chopper Belts
C	Unloading Auger System Belt	H	Fixed Speed Feeder House Drive Belt Feeder House Variable Drive Standard/High Capacity Belt
D	Separator Variable Drive Belt	I	Engine Debris Management Belt (Final Tier 4/Stage V)
E	Discharge Beater Belt (Non-Rice Machine) Discharge Beater Belts (Rice Machine)		

Style B	
A	Header and Reel Pump Standard/High Capacity Belt or CommandTouch™ Multi-Speed Feeder House Drive Belt (Option)
B	Unloading Auger System, #60 Roller Chain (10 572 L (300 bu) Grain Tank) Unloading Auger System, #80 Roller Chain (14 096 L (400 bu) Grain Tank)
C	Unloading Auger System Belt
D	Separator Variable Drive Belt
E	Discharge Beater Belts
F	Countershaft, Discharge Beater and Chopper Belt
G	Straw Chopper Belts
H	Fixed Speed Feeder House Drive Belt Feeder House Variable Drive Standard/High Capacity Belt or CommandTouch™ Multi-Speed Feeder House Drive Belt (Option)
I	Engine Debris Management Belt (Final Tier 4/Stage V)

CommandTouch is a trademark of Deere & Company

OUO6075,00047E1-19-13NOV17

Drive Belts—Right-Hand (Style A)

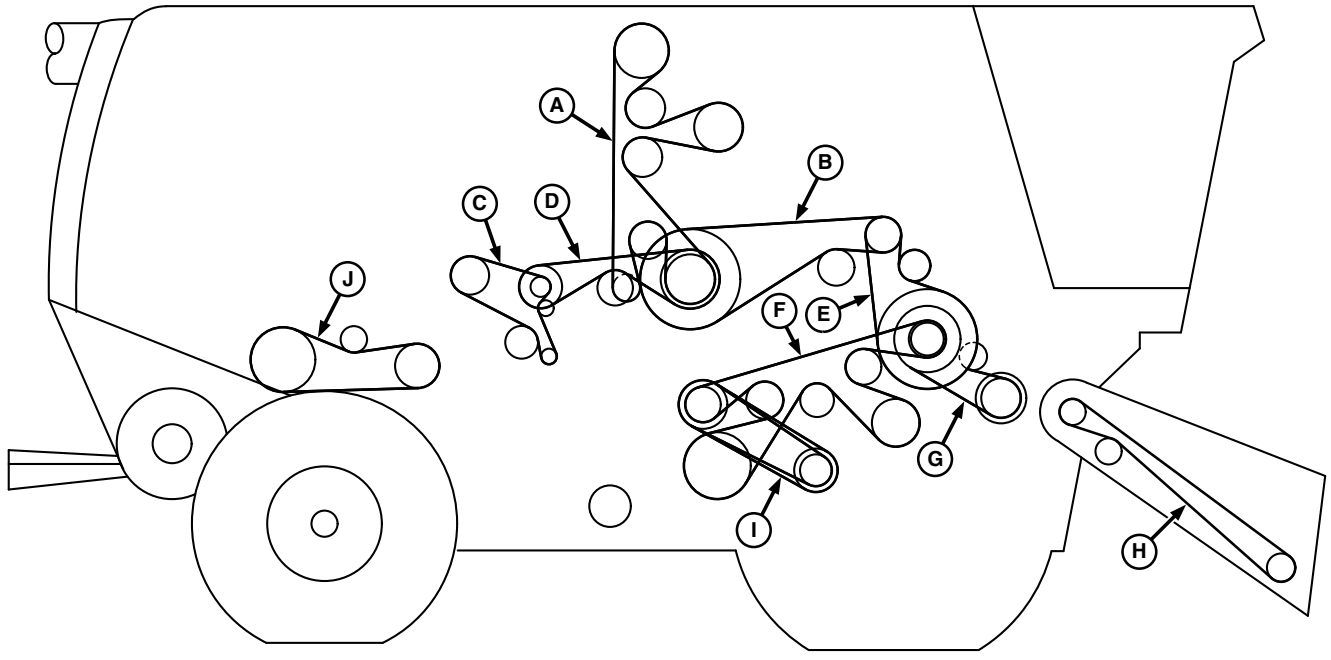


H99322—UN—10DEC10

A—Clean Grain Elevator Belt
B—Rear Right-Hand Jackshaft Belt
C—Tailings Auger and Elevator Belt
D—Tailings Return Auger, #50 Chain
E—Shoe Fan and Conveyor Augers Belt
F—Front Right-Hand Jackshaft Belt
G—Cleaning Fan Variable Belt
H—Feed Accelerator Belt
I—Feeder Conveyor (Chain), #60 Chain
J—Overshot Beater Drive Belt (If Equipped)

OUO6075,0004375-19-26JAN17

Drive Belts—Right-Hand (Style B)



H96904—UN—16JUN10

A—Clean Grain Elevator Belt
B—Rear Right-Hand Jackshaft Belt

C—Tailings Elevator/Upper Auger #60 Roller Chain
D—Tailings System Drive Belt
E—Front Right-Hand Jackshaft Belt
F—Shoe Fan and Conveyor Augers Belt
G—Feed Accelerator Belt
H—Feeder Conveyor (Chain), #60 Chain
I—Cleaning Fan Variable Belt
J—Overshot Beater Drive Belt (Optional)

OUO6075,0004374-19-26JAN17

Feed Accelerator—Unplugging

NOTE: Use Feed Accelerator unplugging tool if available. See your John Deere dealer for further information.

1. Disengage separator.
2. Shut OFF engine, set park brake and remove key.
3. Shift separator drive gear case to low speed.
4. Remove belt tension from feed accelerator drive by pushing lever up and out from the notch in the bracket.
5. Open stone trap door and clean. Leave stone trap door open.
6. Sound horn, start engine, and set engine speed at mid idle.
7. Engage separator to clean out material, discharge beater, and chopper.
8. Disengage separator.
9. Shut OFF engine, set park brake and remove key.
10. Remove feed accelerator access covers and remove crop material from accelerator area. After clearing plug, rotate accelerator one revolution to be sure that it is free.
11. Engage feed accelerator drive by pushing lever up and into the notch in the bracket.
12. Sound horn, start engine, and set engine speed at mid idle.
13. Engage separator. If the plug does not clear, disengage separator and repeat steps 9—13.
14. Shut OFF engine, set park brake and remove key.
15. Close stone trap door and set concave spacing back to original setting. Replace feed accelerator access covers.
16. If initially operating in high speed, shift separator drive gear case and adjust separator speed back to initial setting and resume operation.

OUO6075,00046EC-19-29MAR17

Separator—Unplugging

Disengage separator.

NOTE: Note concave setting and adjust concave to wide open position.

Shut OFF engine, set park brake and remove key.

Shift separator drive gear case to neutral position.

Remove belt tension from feed accelerator drive by pushing lever up and out from the notch in the bracket.

Open stone trap door and clean. Close stone trap door.

Sound horn, start engine, and set engine speed at mid idle.

Engage separator to clean out material from the discharge beater.

Adjust separator variable belt to mid range.

Disengage separator.

Shut OFF engine, set park brake and remove key.

Shift separator drive gear case to low speed.

Sound horn, start engine, and set engine speed at mid idle.

IMPORTANT: To prevent damage to main engine gear case and wet clutch, do not engage separator clutch with a plugged separator more than three times in a period of 3 minutes.

Wait for 1 minute between plugged separator engagements while idling machine.

Engage separator to clear the separator. If the plug does not clear, disengage the separator.

If the separator cannot be power unplugged, it is necessary to remove concaves and grates and remove some straw by hand. After clearing plug, replace concaves and grates.

After separator is unplugged, set concave spacing back to original setting.

Engage feed accelerator drive by pushing lever up and into the notch in the bracket.

If originally operating in high speed, shift separator gear case to high-speed position. Adjust separator speed back to original setting and resume operation.

OUO6075,0004939-19-12APR18

Discharge Beater—Unplugging

NOTE: Use Discharge Beater unplugging tool if available. See your John Deere dealer for further information.

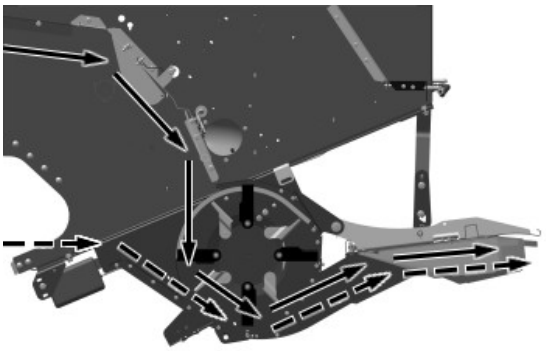
1. Disengage header and separator.

NOTE: Note concave setting and adjust concave to wide open position.

2. Shut OFF engine, set park brake and remove key.
3. Raise straw chopper.
4. Remove covers to access discharge beater area and remove crop material from beater area.
5. Remove shields over the discharge beater drive pulley, so the pulley can be rotated by hand.
6. After clearing plug, rotate beater one revolution to be sure that it is free.
7. Shift separator drive gear case to neutral position.
8. Remove belt tension from feed accelerator drive by pushing lever up and out from the notch in the bracket.
9. Sound horn, start engine, and set engine speed at mid idle.
10. Engage separator to clean out material from discharge beater and chopper.
11. Disengage separator.
12. Shut OFF engine, set park brake and remove key.
13. Shift separator drive gear case to original speed.
14. Engage feed accelerator drive by pushing lever up and into the notch in the bracket.
15. Install all shields previously removed.
16. Lower straw chopper to operating position.
17. Sound horn, start engine, and set engine speed at mid idle.
18. Engage separator.
19. Set concave spacing back to initial setting and resume operation.

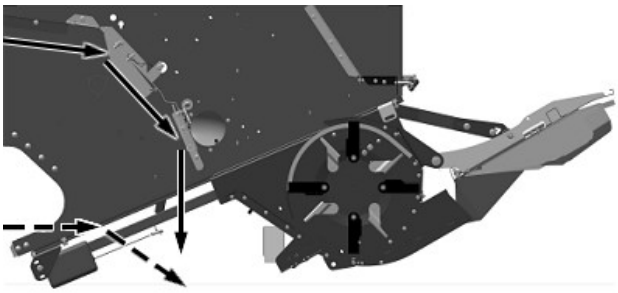
OUO6075,00046EE-19-29MAR17

Residue Material Handling Option (Intermediate/Deluxe Residue)



H125189—UN—15OCT18

Chopping Deluxe



H125190—UN—22OCT18

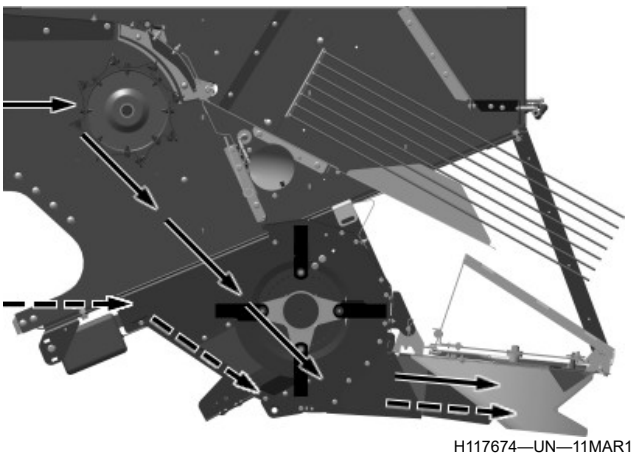
Windrowing Deluxe

NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.

Straw and chaff get laid down together in a windrow.

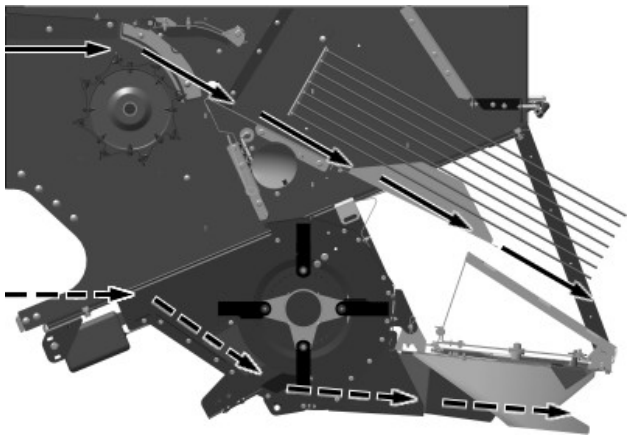
OUO6075,0004A2E-19-15OCT18

Residue Material Handling Option (Premium Residue)



H117674—UN—11MAR16

Chopping Premium



H118033—UN—05APR16

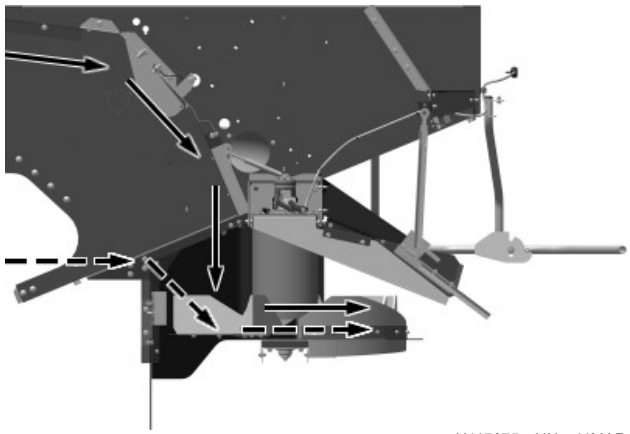
Windrowing Premium

NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.

Drop straw and spread chaff capability.

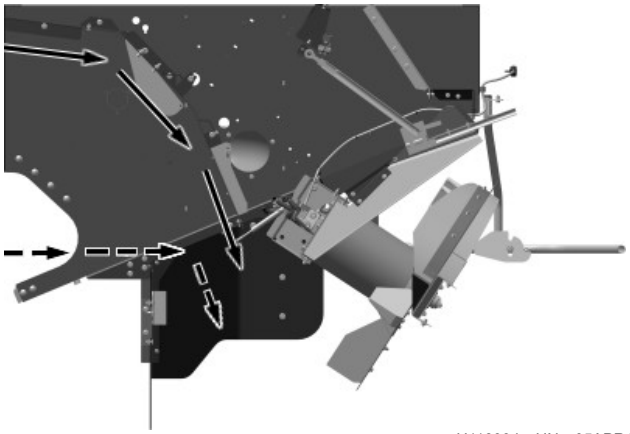
OUO6075,00049BD-19-31MAY18

Residue Material Handling Option (Straw Spreader)



H117675—UN—11MAR16

Spreader Position



H118034—UN—05APR16

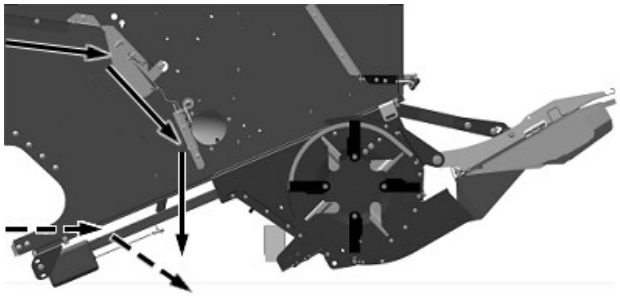
Windrow Position

NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.

Material is spread and not chopped

OUO6075,00049BE-19-31MAY18

General Windrowing Information (Intermediate/Deluxe Residue)



H124423—UN—30MAY18

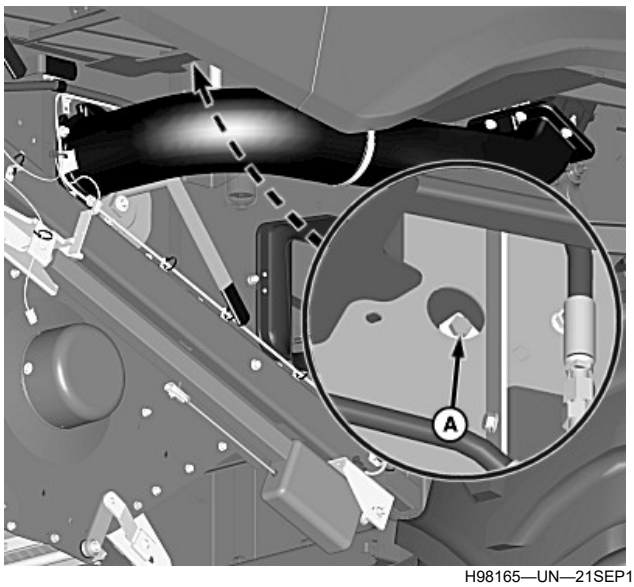
Windrowing Intermediate/Deluxe

NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.

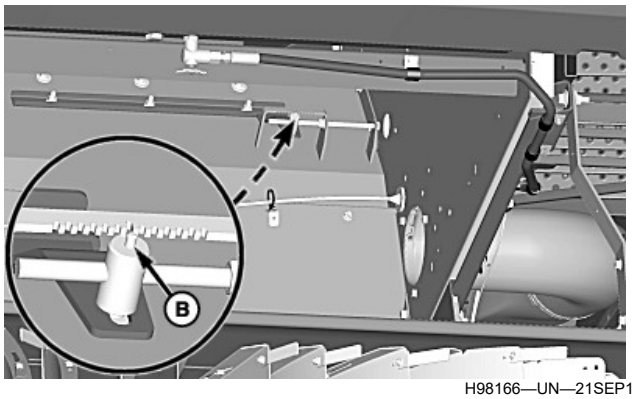
- Raise chopper fully. See Chopper Adjusting switch later in this section.
- Shift chopper drive into neutral position. See Chopper Drive Speeds—Changing later in this section.

OUO6075,00049B9-19-18JUN18

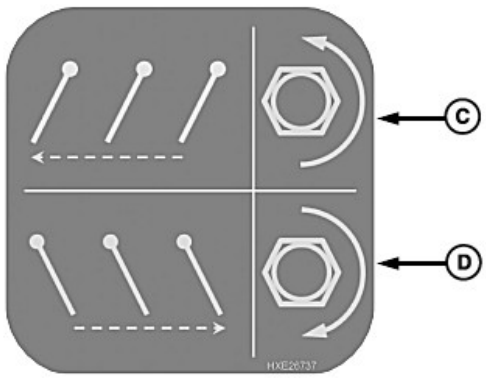
Crop Diverter Vanes—Adjusting



H98165—UN—21SEP10



H98166—UN—21SEP10



H98708—UN—19OCT10

A—Cap Screw
B—Indicator
C—Counterclockwise
D—Clockwise

CAUTION: Shut OFF engine, set parking brake and remove key.

Turning cap screw (A) adjusts indicator (B) and moves crop diverter vanes.

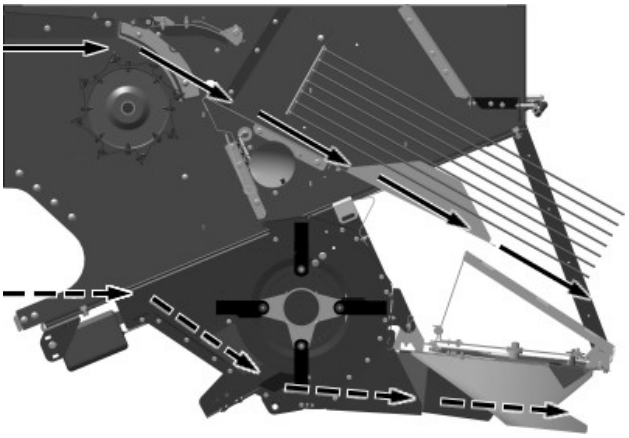
- Counterclockwise (C) - moves vanes towards left-hand side of machine.

- Clockwise (D) - moves vanes towards right-hand side of machine.

NOTE: Adjust vanes until crop material distribution is even across body width.

OUO6075,00009CD-19-17NOV10

General Windrowing Information (Premium Residue)



H118033—UN—05APR16

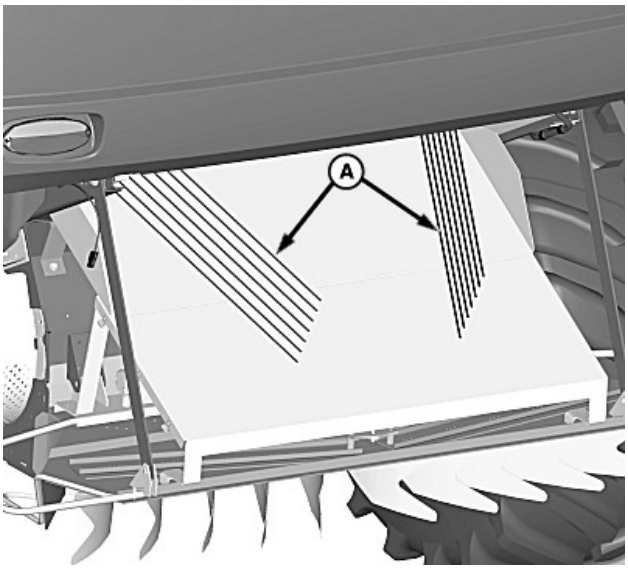
Windrowing Premium

NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.

- To windrow straw and spread chaff, open chop-to-drop door (Premium Model). See Residue Management Application Help or Operator's Station Help for further information.
- If harvesting low straw volume crops, lower cob deflector into corn position. See Crop Diverter in this section for further information.

OUO6075,00046FF-19-05APR17

Windrow Convergence Rakes



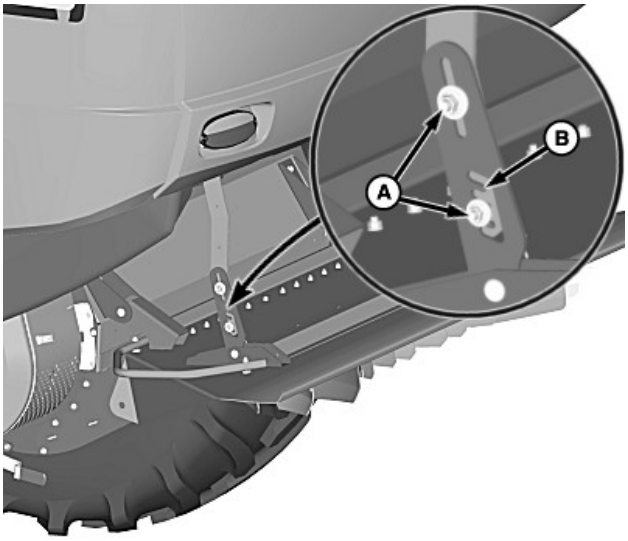
H98368—UN—30SEP10

A—Convergence Rakes

Convergence rakes (A) are used to divert cut straw material into a narrower windrow.

OUO6075,0004700-19-05APR17

Tailboard—Adjusting (Deluxe Residue)



H98131—UN—20SEP10

A—Cap Screws (4 Used)
B—Notches

CAUTION: Shut OFF engine, set park brake and remove key.

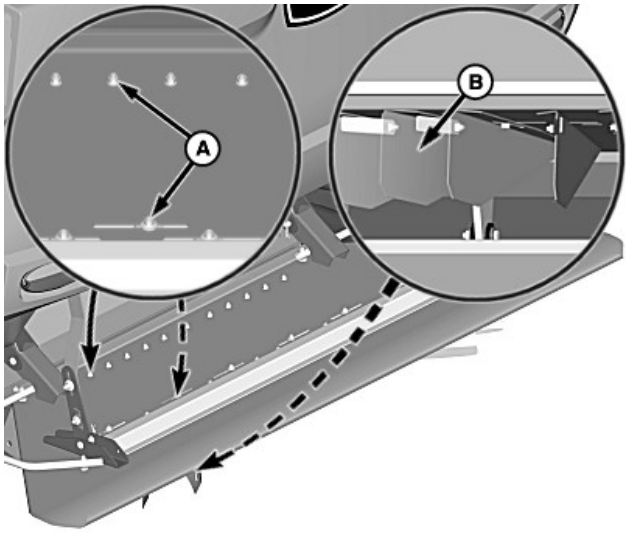
Loosen cap screws (A) on both sides of tailboard.

Adjust tailboard up or down in notches (B) to control straw spread width.

Tighten cap screws on both sides of tailboard to lock into position.

SS43267,000060A-19-04JUN15

Tailboard Vanes (Manual Adjust)—Adjusting (Deluxe Residue)



H98133—UN—20SEP10

A—Nuts
B—Tailboard Vane

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Adjustments can be made to tailboard vanes if factory settings do not produce adequate spread width or even distribution.

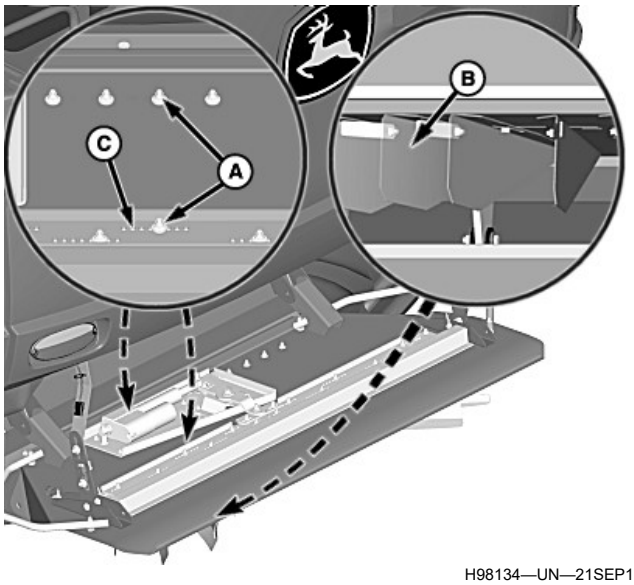
Tailboard vanes are factory set for 9.1 m (30 ft.) platforms.

Loosen nuts (A) and adjust tailboard vane (B) as needed to control distribution of straw spread width. See Tailboard Vanes (Manual Adjust)—Factory Settings later in this section.

Tighten nuts and repeat as needed on remaining tailboard vanes.

SS43267,000060B-19-04JUN15

Tailboard Vanes (Electric Motor)—Adjusting (Deluxe Residue)



H98134—UN—21SEP10

A—Nuts
B—Tailboard Vane
C—Holes

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Adjustments can be made to the tailboard vanes if the factory settings do not produce adequate spread width or even distribution.

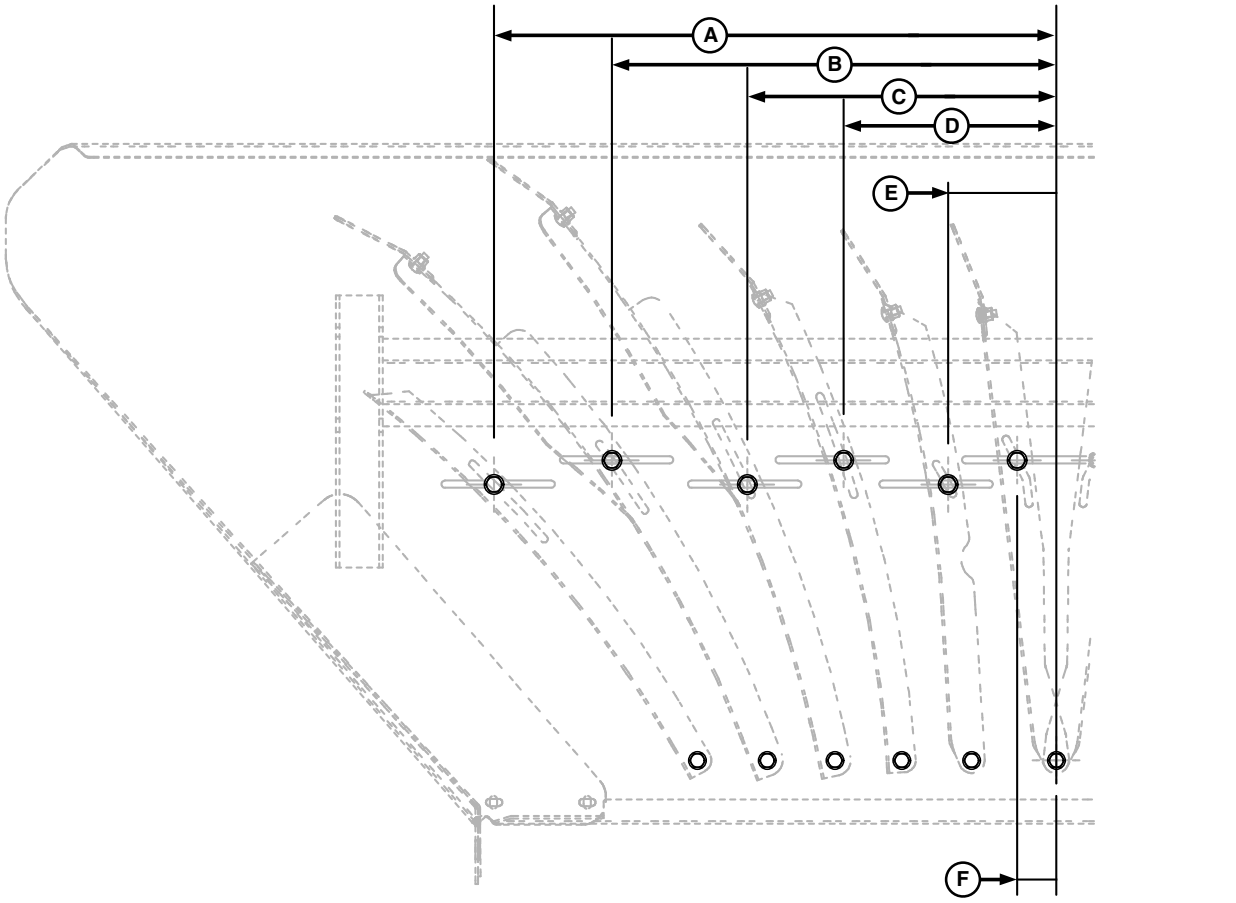
Tailboard vanes are factory set for 9.1 m (30 ft) platforms.

Loosen nuts (A) and adjust the tailboard vane (B) to different holes (C) if needed to control distribution of straw spread width. See Tailboard Vanes (Electrical Adjust)—Factory Settings later in this section.

1. Tighten nuts on tailboard vanes.
2. Loosen nut one complete turn at the front of the tailboard vane.
3. Loosen nut 1-1/2 turns at the rear of the tailboard vane.
4. Verify that the tailboard vane is easily moveable.
5. Repeat as needed on remaining tailboard vanes

OUO6075,0004702-19-05APR17

Tailboard Vanes (Manual Adjust)—Factory Settings (Deluxe Residue)



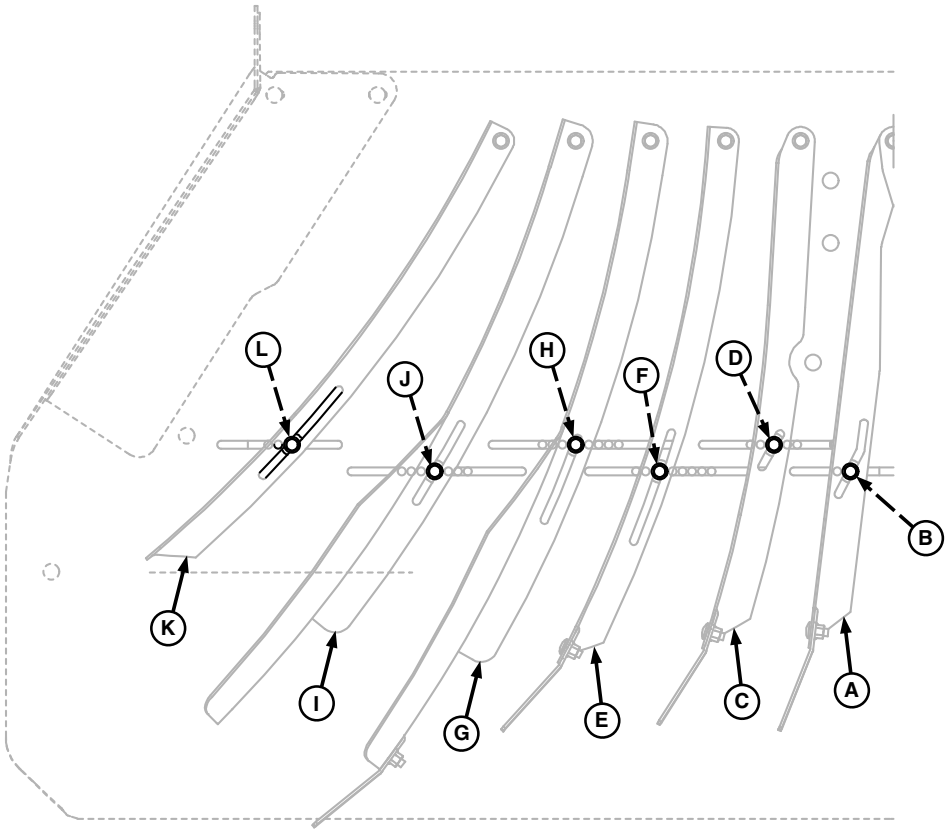
H100407—UN—23FEB11

Tailboard Vane Settings For 9.1 m (30 ft.) Platforms (View From Above Tailboard)

A—693 mm (27.3 in.)
B—548 mm (21.6 in.)
C—382 mm (15 in.)
D—262 mm (10.3 in.)
E—133 mm (5.2 in.)
F—48 mm (1.9 in.)

SS43267,000060D-19-04JUN15

Tailboard Vanes (Electrical Adjust)—Factory Settings (Deluxe Residue)



H100408—UN—23FEB11

Tailboard Vane Settings For 9.1 m (30 ft.) Platforms (View From Below Tailboard)

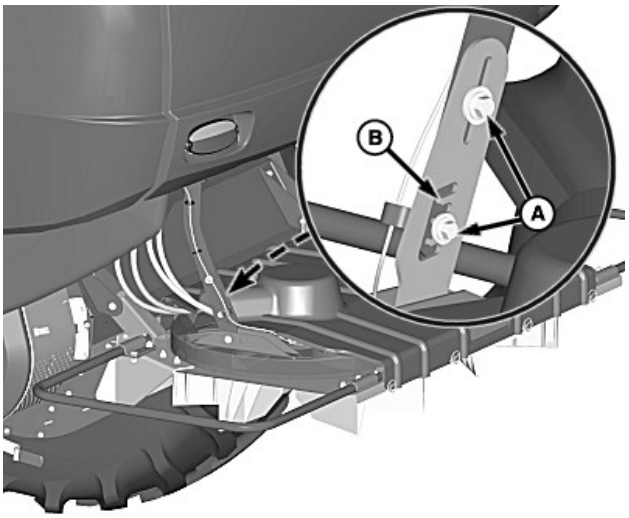
A—Vane 1
B—Second Hole
C—Vane 2
D—Third Hole
E—Vane 3
F—Sixth Hole
G—Vane 4
H—Fifth Hole
I—Vane 5
J—Fourth Hole
K—Vane 6
L—First Hole

NOTE: Hole locations are from center of tailboard outward when adjusting tailboard vanes.

If 7.6 m (25 ft.) spread width pattern is desired, see your John Deere dealer for further information on an optional kit.

SS43267,000060E-19-04JUN15

PowerCast™ Tailboard—Adjusting (Optional)



H98132—UN—20SEP10

A—Cap Screws (4 used)
B—Notches

CAUTION: Do not let anyone stand behind spreading tailboard while it is running. Shut OFF engine, set park brake and remove key before adjusting.

For best performance, PowerCast™ tailboard should always run level or parallel to ground. Depending on tire combinations, it may be necessary to raise or lower tailboard.

Park machine on level ground.

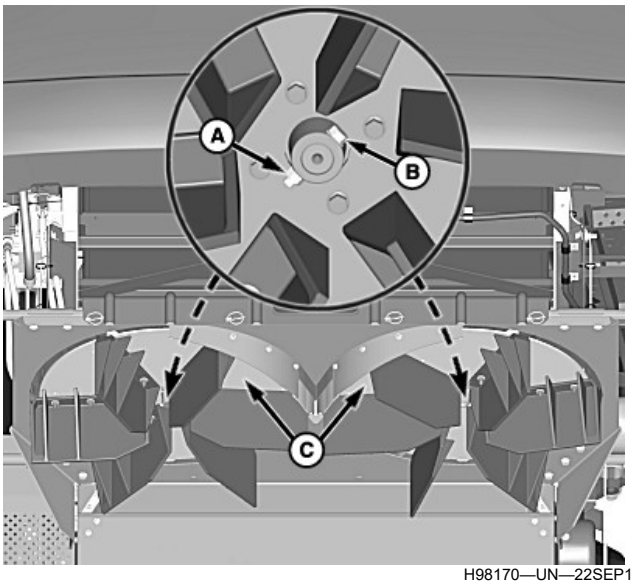
Loosen cap screws (A) on both sides of the PowerCast™ tailboard.

Adjust PowerCast™ tailboard up or down in notches (B) to level the PowerCast™ tailboard.

Tighten cap screws on both sides of the PowerCast™ tailboard to lock into position.

OUO6075,0004701-19-05APR17

PowerCast™ Tailboard Blade—Replacing (Optional)



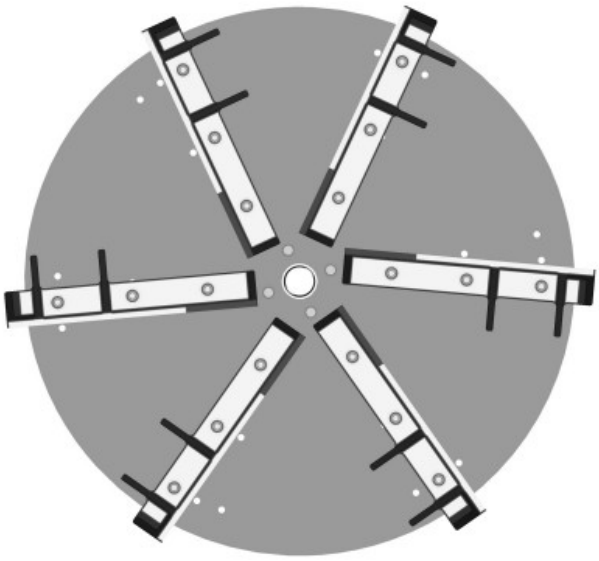
H98170—UN—22SEP10

A—Lock Nut
B—Cap Screw
C—Spreader Disk Assemblies

CAUTION: Disk assemblies weigh approximately 13 kg (29 lb).

IMPORTANT: Disk assemblies are left-handed and right-handed. Mark disk assembly locations before removing.

Remove lock nut (A) and cap screw (B) from spreader disk assemblies (C).



H98171—UN—22SEP10

IMPORTANT: When replacing worn or damaged blades, make sure to replace blades on the opposite sides of the disk at the same time to maintain disk rotational balance.

PowerCast is a trademark of Deere & Company

Blades are oriented in alternating hole patterns to obtain an optimum material spread. Ensure that replacement blades are put back in the same holes as previously removed.

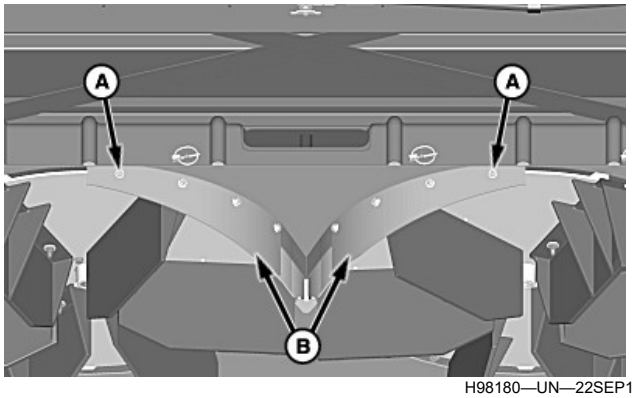
Install replacement blades as needed and tighten hardware to specification.

Specification

Blade Hardware—Torque	22 N·m (16 lb·ft)

OUO6075,0004706-19-05APR17

PowerCast™ Tailboard (Optional) Rear Shrouds



H98180—UN—22SEP10

A—Hardware (8 used)
B—Rear Shrouds

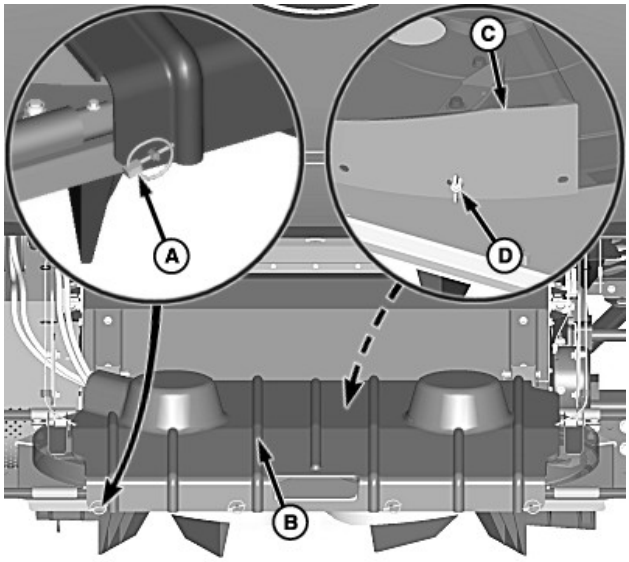
NOTE: Shrouds can be removed to spread more material towards the center of the machine when harvesting in tough or heavy straw conditions.

Front and rear shrouds should always be installed to provide optimal material distribution when harvesting corn.

Field Position

Shrouds are used to manage residue spread width distribution for wider platforms.

Install rear shrouds (B) behind the welded strap as shown and retain with hardware (A).



H98181—UN—22SEP10

A—Quick-Lock Pins
B—Shield
C—Rear Shrouds
D—Wing Nut

Storage Position

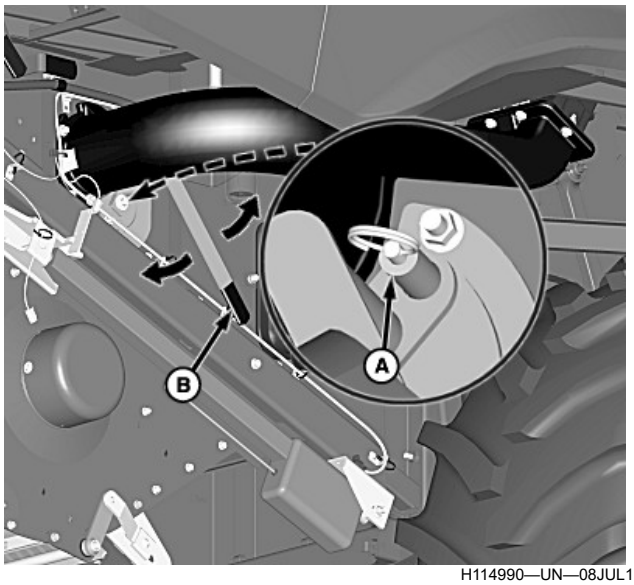
Remove and retain quick-lock pins (A) and shield (B).

Install rear shrouds (C) to weld stud as shown and retain with the wing nut (D).

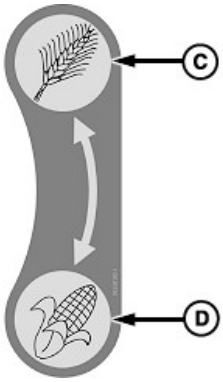
Install previously removed shield and quick-lock pins.

OUO6075,0004707-19-05APR17

Crop Diverter



H114990—UN—08JUL15



H99171—UN—23NOV10

A—Lock-Out Pin
B—Crop Diverter Handle
C—Small Grain Position
D—Large Grain Position

IMPORTANT: To prevent personal injury or machine damage do not move crop diverter handle when machine is running.

Small Grain Position (C):

Pull lockout pin (A) and move crop diverter handle (B) to ”UPPER” position. Crop diverter handle should be placed in ”UPPER” position when servicing cleaning shoe.

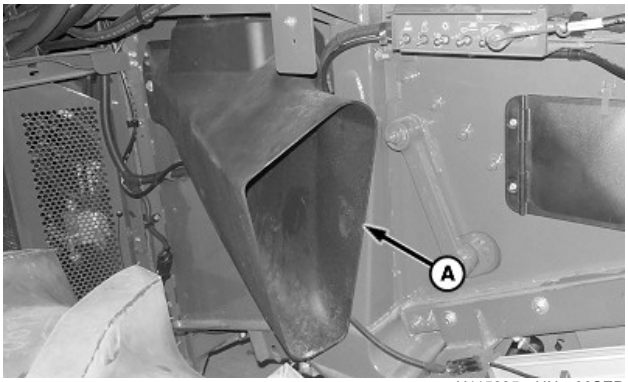
Large Grain Position (D):

NOTE: When harvesting corn or sunflowers, crop diverter handle should be in ”LOWER” position.

Pull lockout pin (A) and move crop diverter handle (B) to ”LOWER” position. Crop diverter protects cleaning shoe from damage by preventing material from being thrown forward.

SS43267,000067D-19-08JUL15

Air Chutes



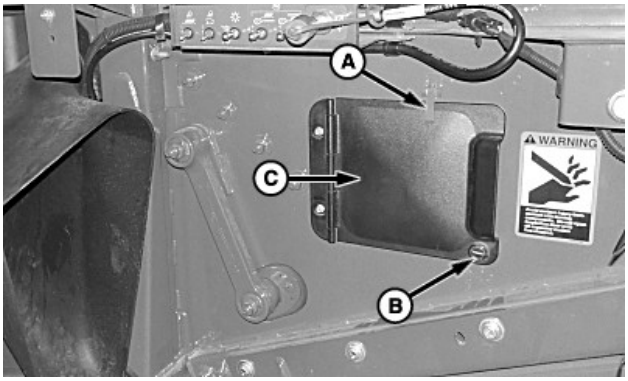
H115835—UN—08SEP15

A—Air Chute

Air chute (A) on both sides of separator side sheet allows cleaning shoe to breathe more freely especially when running on low speed. Depending on harvesting conditions, grain tank quality may be enhanced and feeder house dust reduced.

OUO6075,000417A-19-11APR16

Overshot Beater Floor (If Equipped)—Removing (Premium Residue)



H115544—UN—20AUG15

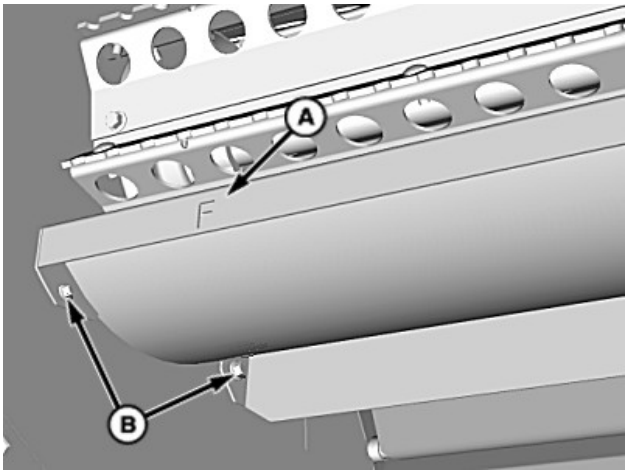
A—Clip
B—Lock
C—Cleaning Shoe Access Door

CAUTION: Shut OFF engine, set park brake, and remove key.

NOTE: See your John Deere dealer for further information on the overshot beater floor.

The overshot beater floor must be installed for corn/large grain and removed for small grain.

1. Open clip (A) and turn lock (B) to open the cleaning shoe access door (C).



H113090—UN—03MAR15

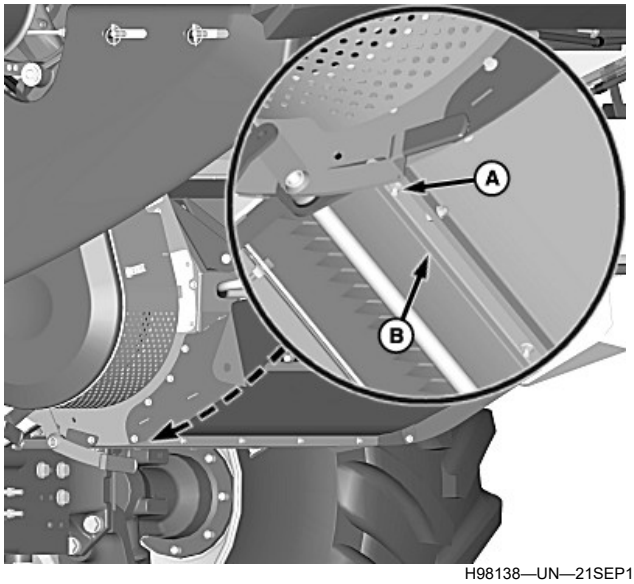
A—Overshot Beater Floor
B—Cap Screw and Nut (2 used)

NOTE: Two people are required to remove the overshot beater floor. One person supports the overshot beater floor, while the other person removes the cap screws and nuts.

2. Support the overshot beater floor (A) and remove cap screws and nuts (B) on both sides of the machine.
3. Close the access door and retain with the lock and clip.

OUO6075,0004E91-19-23JUN20

Chopper Controller Bar (Optional)



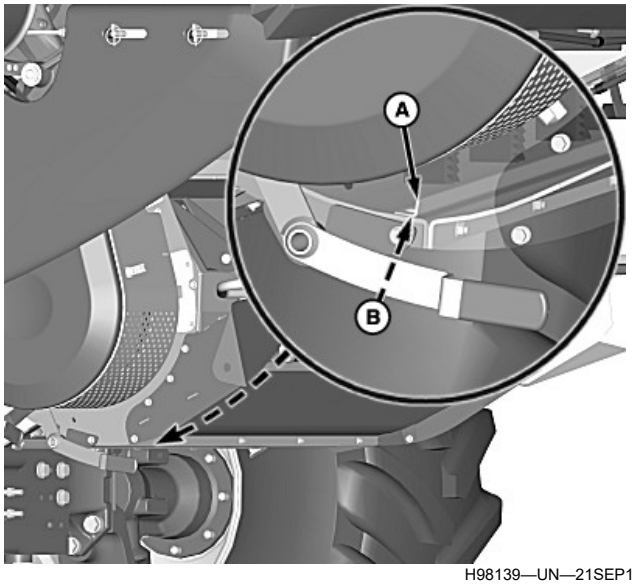
H98138—UN—21SEP10

A—Hardware
B—Controller Bar

IMPORTANT: Controller bar must be removed and placed in storage position when harvesting corn. Failure to remove controller bar can result in chaffer element damage.

Controller bar improves cut quality, distribution, and spread width in tough straw conditions. See your John Deere dealer for further information.

Remove hardware (A) and controller bar (B) from bottom side of chopper.



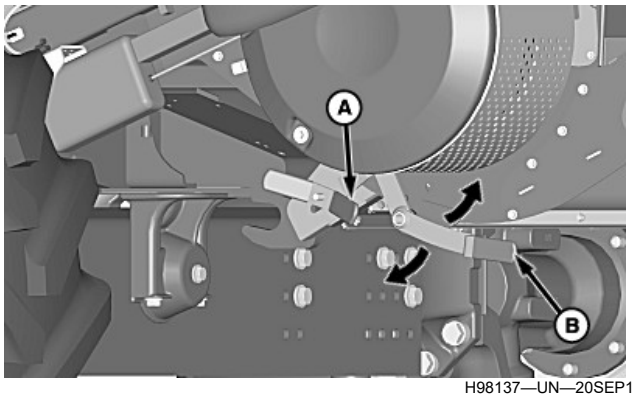
H98139—UN—21SEP10

A—Controller Bar
B—Hardware

Raise chopper fully to install controller bar (A) on inside of chopper as shown and retain with hardware (B).

OUO6075,00009BF-19-21SEP10

Chopper Stationary Knife Bank (Without Electric Actuator)—Adjusting



H98137—UN—20SEP10

Knife Bank Engaged Position

A—Wing Nut
B—Handle

CAUTION: Shut OFF engine, set park brake, and remove key.

IMPORTANT: Knife bank must be fully disengaged for corn.

NOTE: Chopper can be run with knives disengaged. However, cut quality decreases.

Use the position in between the engaged and disengaged positions to optimize power consumption and achieve satisfactory cut length.

Knives can be adjusted to any position. Position of knives determines cut length of material.

Knife Bank Engaged Position:

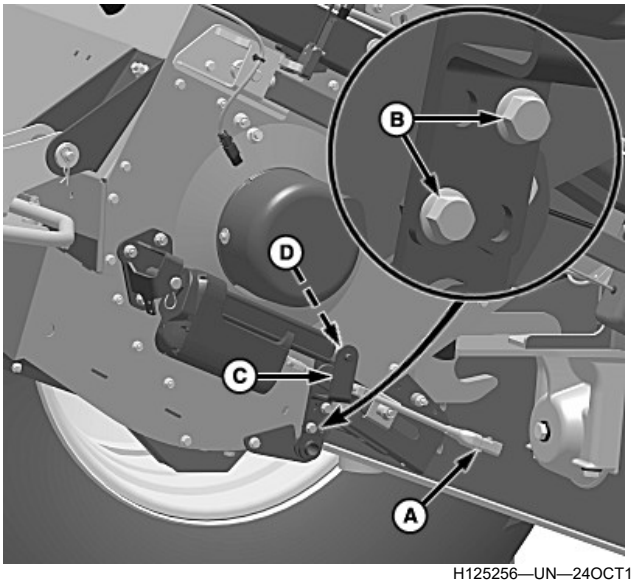
1. Loosen wing nut (A) on chopper.
2. Move adjustment handle (B) downward until the knife bank is at top of the adjustment slot.
3. Tighten wing nut to lock the knife bank into position.

Knife Bank Disengaged Position:

1. Loosen wing nut (A) on chopper.
2. Move adjustment handle (B) upward until the knife bank is at bottom of the adjustment slot.
3. Tighten wing nut to lock the knife bank into position.

OUO6075,0004BAF-19-30MAY19

Chopper Stationary Knife Bank (Electric Actuator)—Removing (If Equipped)

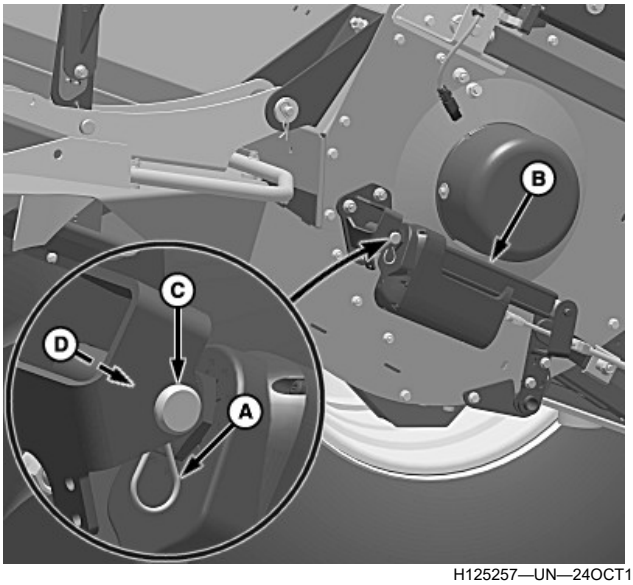


H125256—UN—24OCT18

A—Electrical Connector
B—Cap Screw (2 used)
C—Bracket
D—Washer (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

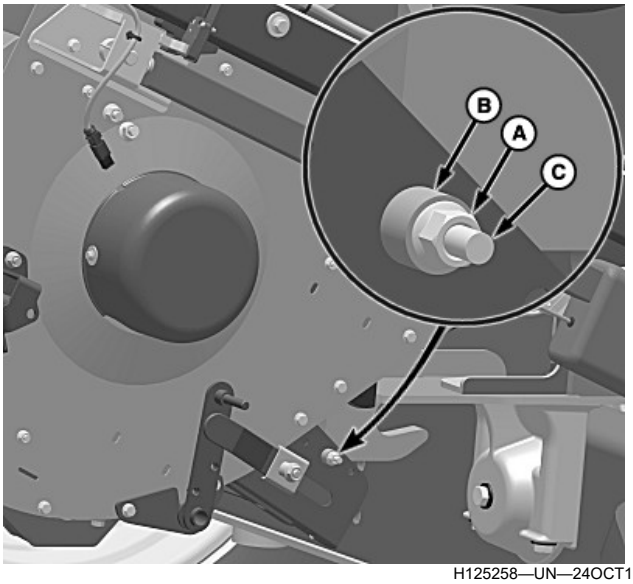
1. Disconnect electrical connector (A).
2. Remove cap screws (B), bracket (C), and washers (D).



H125257—UN—24OCT18

A—Spring Pin
B—Actuator
C—Pin
D—Washer

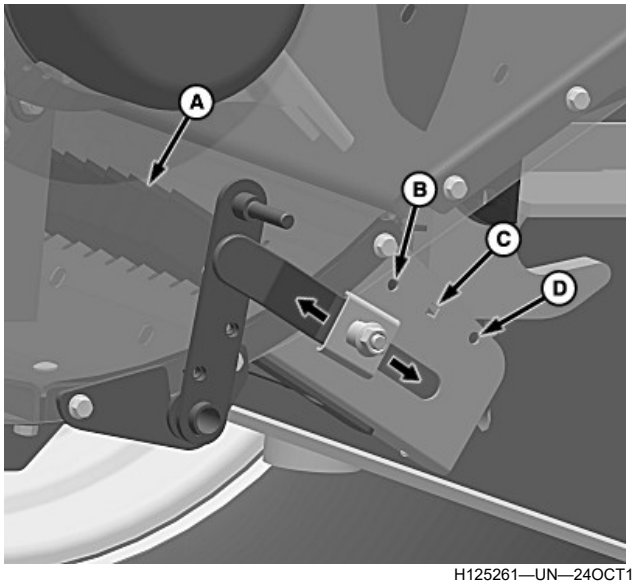
3. Remove spring pin (A).
4. While supporting actuator (B), remove the pin (C) and washer (D).
5. Remove actuator from chopper.



H125258—UN—24OCT18

A—Nut (2 used)
B—Spacer (2 used)
C—Cap Screw (2 used)

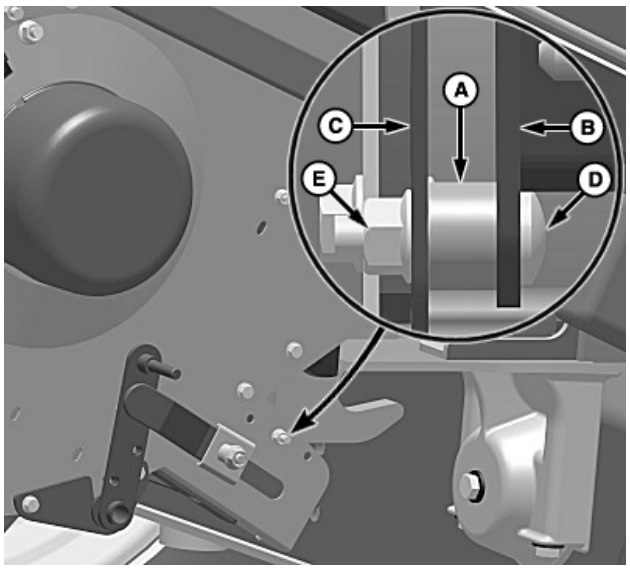
6. Remove nut (A), spacer (B), and cap screw (C) from both sides of the machine.



H125261—UN—24OCT18

A—Knife Bank
B—Hole (100% engaged)
C—Hole (50% engaged)
D—Hole (0% engaged)

7. Align knife bank (A) with desired holes (B—D) in the side sheet on both sides of the machine.
   - Hole (B) - Knife bank 100% engaged.
   - Hole (C) - Knife bank 50% engaged.
   - Hole (D) - Knife bank 0% engaged.



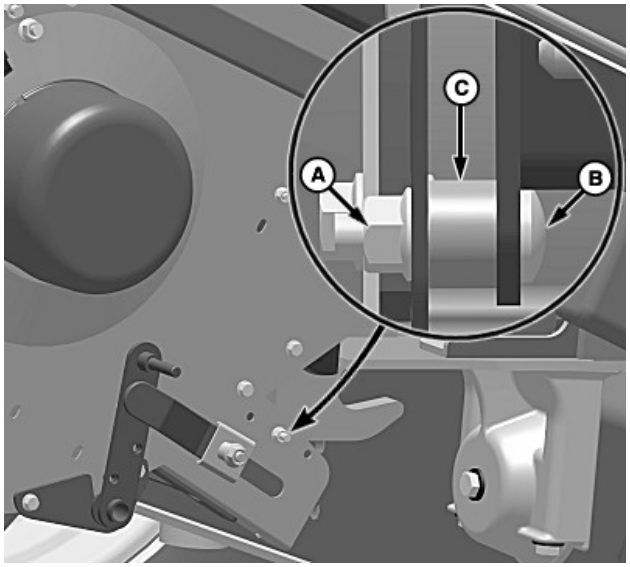
H125260—UN—24OCT18

A—Spacer (2 used)
B—Knife Bank
C—Side Sheet
D—Cap Screw (2 used)
E—Nut (2 used)

8. Install previously removed spacer (A) between the knife bank (B) and the side sheet (C) on both sides of the machine.
9. Install previously removed cap screw (D) and nut (E) on both sides of the machine.

OUO6075,0004BAE-19-30MAY19

Chopper Stationary Knife Bank (Electric Actuator)—Installing (If Equipped)

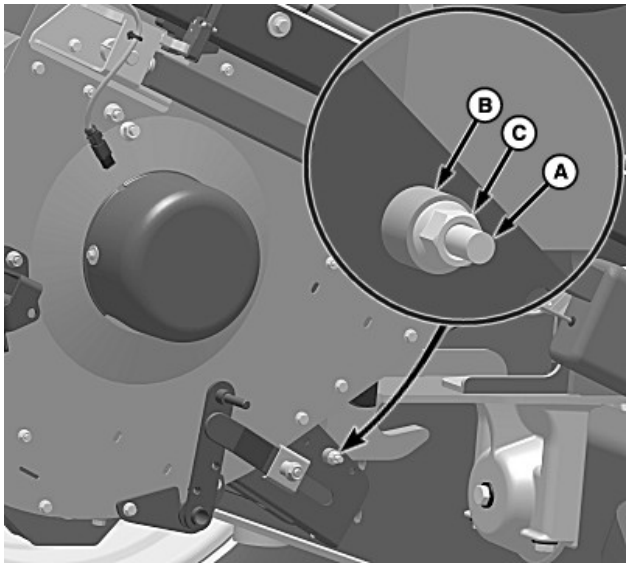


H125262—UN—24OCT18

A—Nut
B—Cap Screw
C—Spacer

CAUTION: Shut OFF engine, set park brake, and remove key.

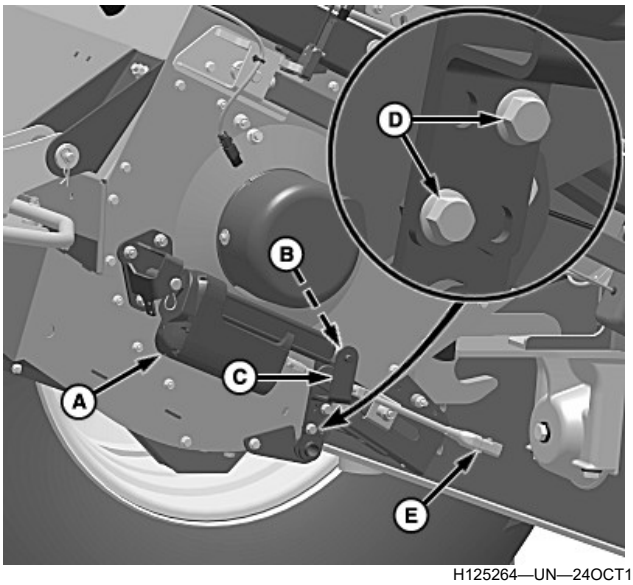
1. Remove nut (A), cap screw (B), and spacer (C) on both sides of the machine.



H125263—UN—24OCT18

A—Cap Screw (2 used)
B—Spacer (2 used)
C—Nut (2 used)

2. Install cap screw (A), spacer (B), and nut (C) in the storage position hole on both sides of the machine.



H125264—UN—24OCT18

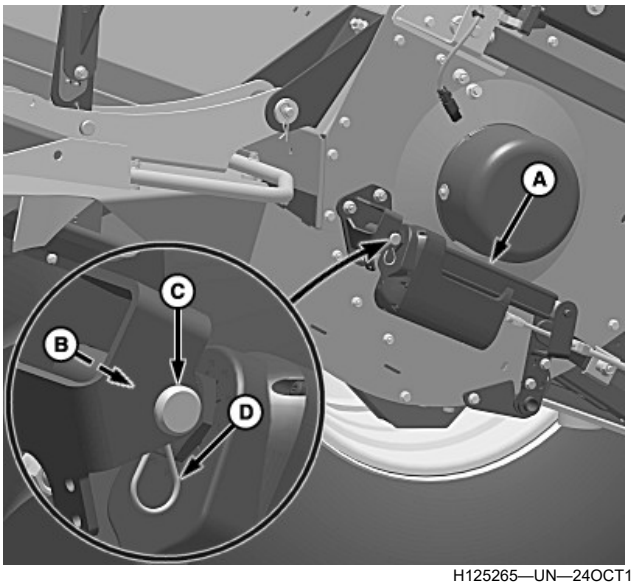
A—Actuator
B—Washer (2 used)
C—Bracket
D—Cap Screw (2 used)
E—Electrical Connector

3. Install actuator (A) as shown.
4. Install washers (B) between actuator and bracket (C) and retain with cap screws (D).
5. Tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 40 N·m (30 lb·ft)

6. Connect electrical connector (E) into machine wiring harness.



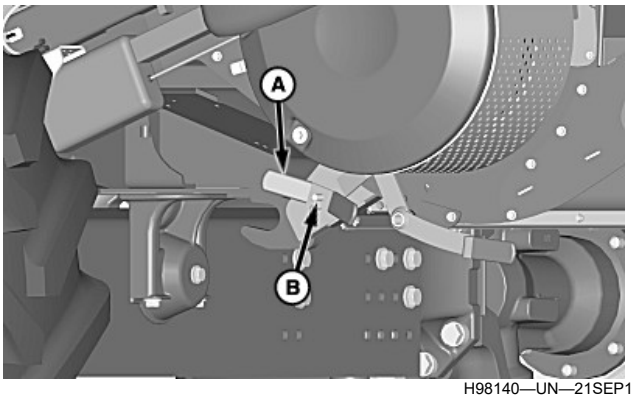
H125265—UN—24OCT18

A—Actuator
B—Washer
C—Pin
D—Spring Pin

7. Raise knife bank until actuator (A) aligns with the hole in the bracket.
8. Install washer (B) between actuator and bracket and retain with pin (C) and spring pin (D) as shown.

OUO6075,0004BB0-19-30MAY19

Chopper Stationary Knives (Without Electric Actuator)—Replacing



H98140—UN—21SEP10

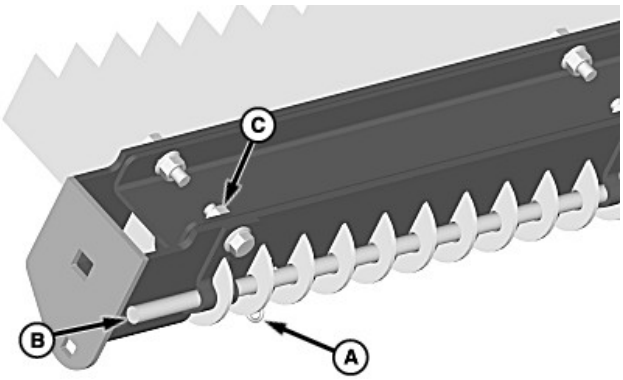
A—Wing Nut
B—Tension Rod

⚠ CAUTION: Shut OFF engine, set park brake, and remove key. Knife blades are sharp.

1. Loosen wing nut (A) on chopper.
2. Move adjustment handle upward until the knife bank is at bottom of the adjustment slot.

NOTE: Retain bushings at outer ends of the knife bank for later assembly.

3. Support knife bank and remove tension rod (B) from the right-hand side of the machine.



H126355—UN—21MAY19

A—Pin
B—Retaining Rod
C—Lock Nut

4. Remove pin (A) from retaining rod (B).

5. Loosen lock nuts (C) on clips holding retaining rod.
6. Slide retaining rod until it clears knives that need replaced.
7. Reverse knives for more usage or replace knives if they are worn on both sides.
8. Align retaining rod with knives.
9. Tighten lock nuts on clips and install pin.

NOTE: Reposition bushings at outer ends of the knife bank.

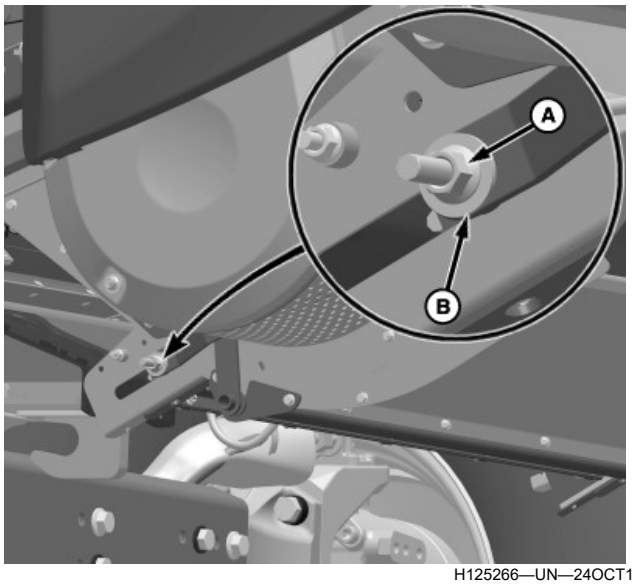
10. Install knife bank and slide tension rod from the right-hand side of the machine.
11. Install wing nut and adjust knife bank to desired position.

IMPORTANT: Knife bank must be fully disengaged for corn.

12. Tighten wing nut to lock knife bank into position.

OUO6075,0004BAD-19-21MAY19

Chopper Stationary Knives (Electric Actuator)—Replacing

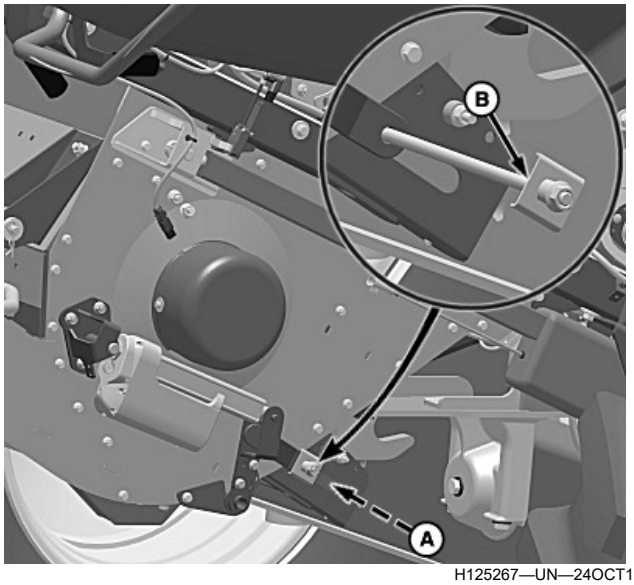


H125266—UN—24OCT18

A—Nut
B—Washer

CAUTION: Shut OFF engine, set park brake, and remove key. Knife blades are sharp.

1. Remove nut (A) and washer (B) from the left-hand side of the knife bank.

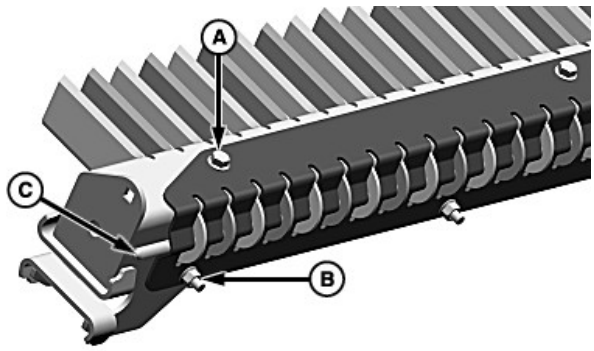


H125267—UN—24OCT18

A—Knife Bank
B—Tension Rod

NOTE: Retain bushings at outer ends of the knife bank for later assembly.

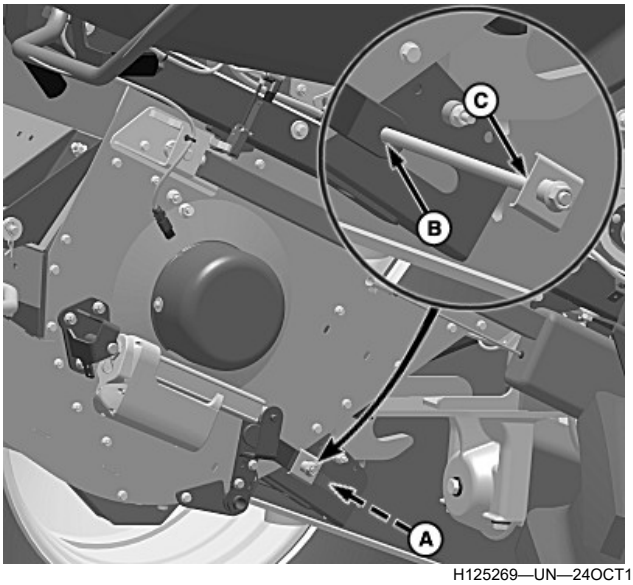
2. While supporting the knife bank (A), remove tension rod (B) from the right-hand side of the machine.



H130611—UN—24JUN20

A—Cap Screw
B—Cap Screw and Lock Nut
C—Retaining Rod

3. Loosen cap screws (A) as needed.
4. Loosen cap screws and lock nuts (B) as needed.
5. Slide the retaining rod (C) until it clears the knives that need replaced.
6. Reverse the knives for more usage or replace the knives if they are worn on both sides.
7. Align the retaining rod with the knives.
8. Tighten the previously loosened cap screws and lock nuts (B) as needed.
9. Tighten the previously loosened cap screws (A) as needed.



H125269—UN—24OCT18

A—Knife Bank
B—Adjustment Arm
C—Tension Rod

10. Install the knife bank (A) and align the hole in the adjustment arm (B) with the knife bank.

NOTE: Reposition the bushings at the outer ends of the knife bank.

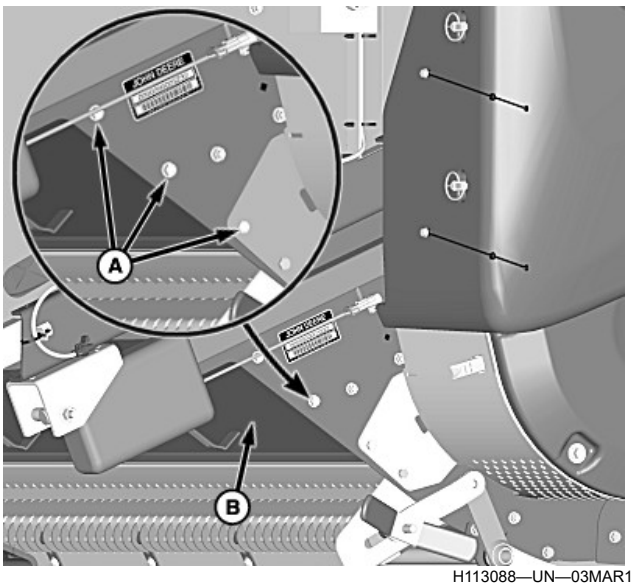
11. Slide the tension rod (C) from the right-hand side of the machine.

IMPORTANT: Knife bank must be fully disengaged for corn.

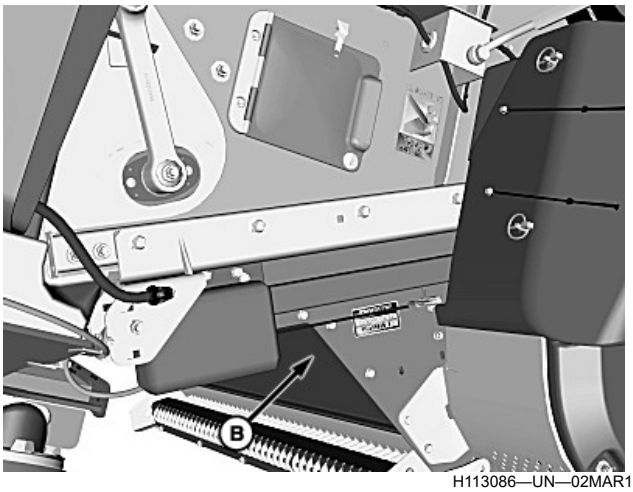
12. On the left-hand side of the machine, install the previously removed washer and retain with the previously removed nut.

OUO6075,0004E9D-19-08JUL20

Chopper Access Door



H113088—UN—03MAR15



H113086—UN—02MAR15

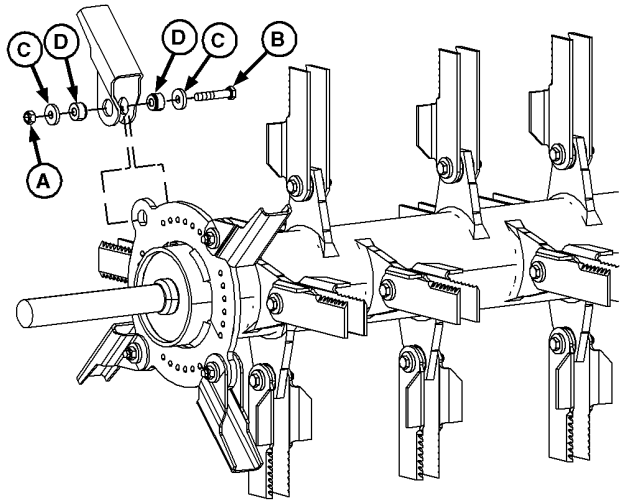
A—Cap Screw (3 used)
B—Access Door

CAUTION: Shut OFF engine, set park brake, and remove key.

1. Remove cap screws (A) from both sides of chopper to remove access door (B).
2. Install the access door before operating the machine.

OUO6075,0004E90-19-17JUN20

Fine Cut Chopper Blades—Replacing and Configuration



H87281—UN—01AUG07

A—Lock Nut
B—Cap Screw
C—Washers
D—Bushings

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Rotor shown illustrates blade replacement examples for both scoop and paddle blades. Always maintain original factory provided blade pattern.

Outer Blades

NOTE: If removing blades or bushings for inspection purposes, be certain to reinstall blades on SAME support from which they were removed. This must be done to maintain balance. It is a good practice to mark each blade before removal.

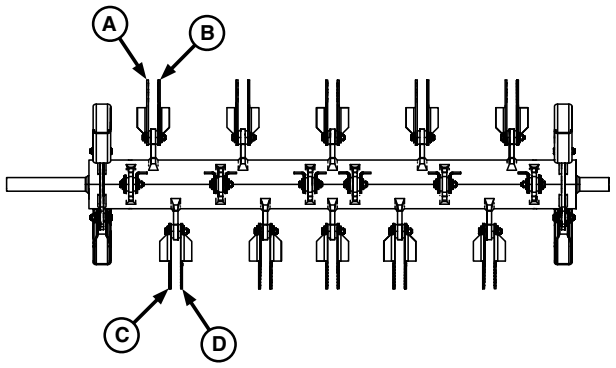
Install new cap screws and lock nuts in the same direction as it was removed when installing or replacing blades.

Remove lock nut (A), cap screw (B), washers (C), and bushings (D).

NOTE: Inspect and replace bushings if worn. Replace lock nuts and cap screws with new hardware.

Replace blades and bushings. Install cap screw, washers, and lock nut. Tighten nut to specification.

Specification	
Chopper Blade Lock Nut—Torque	65 N·m (48 lb·ft)



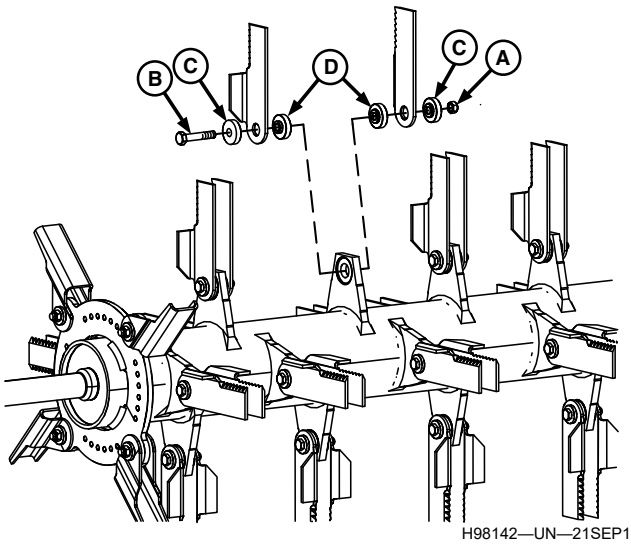
H107307—UN—22MAR13

A—D—Paddle Blades

Blade Configuration

IMPORTANT: Chopper balance MUST be maintained. Replace BOTH blades on single support and BOTH blades on opposite support (180 degrees). Four blades MUST be installed to replace one broken blade, or all blades can be replaced at one time. This MUST be done to maintain balance.

If the blade (A) is broken, replace blades (A—D).



H98142—UN—21SEP10

A—Lock Nut
B—Cap Screw
C—Bushings
D—Bushings

Inner Blades

NOTE: If removing blades or bushings for inspection purposes, be certain to reinstall blades on SAME support from which they were removed. This must be done to maintain balance. It is a good practice to mark each blade before removal.

Install new cap screws and lock nuts in the same direction as it was removed when installing or replacing blades.

Remove lock nut (A) and cap screw (B).

Remove and inspect bushings (C and D).

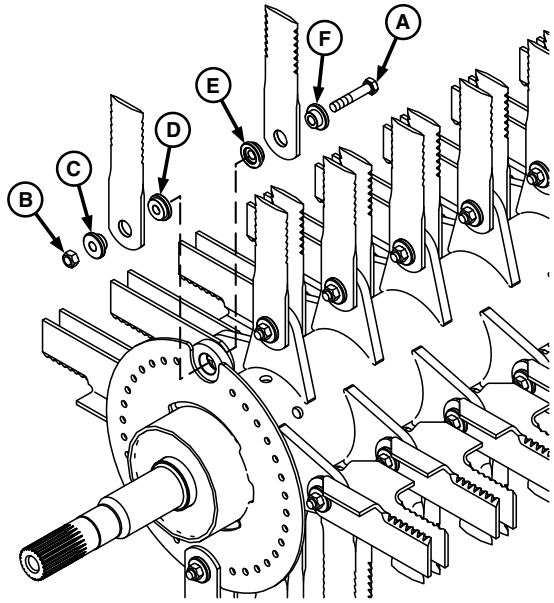
NOTE: Inspect and replace bushings if worn. Replace lock nuts and cap screws with new hardware.

Replace blades and bushings. Install cap screw and lock nut. Tighten nut to specification.

Specification	
Chopper Blade Lock Nut—Torque	65 N·m (48 lb·ft)

OUO6075,0004928-19-29MAR18

Extra Fine Cut Chopper Blades—Replacing and Configuration



H99000—UN—12NOV10

A—Lock Nut
B—Cap Screw
C—Bushing
D—Bushing
E—Bushing
F—Bushing

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Rotor shown illustrates blade replacement examples for both paddle and straight blades. Always maintain original factory provided blade pattern.

Outer Blades

NOTE: If removing blades or bushings for inspection purposes, be certain to reinstall blades on SAME support from which they were removed. This must be done to maintain balance. It is a good practice to mark each blade before removal.

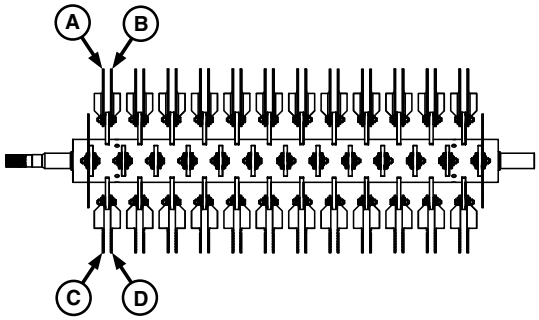
Install new cap screws and lock nuts in the same direction as it was removed when installing or replacing blades.

Remove lock nut (A), cap screw (B), and bushings (C, D, E, F).

NOTE: Inspect and replace bushings if worn. Replace lock nuts and cap screws with new hardware.

Replace blades and bushings. Install cap screw, washer, bushings, and lock nut. Tighten nut to specification.

Specification	
Chopper Blade Lock Nut—Torque	65 N·m (48 lb·ft)



H107308—UN—22MAR13

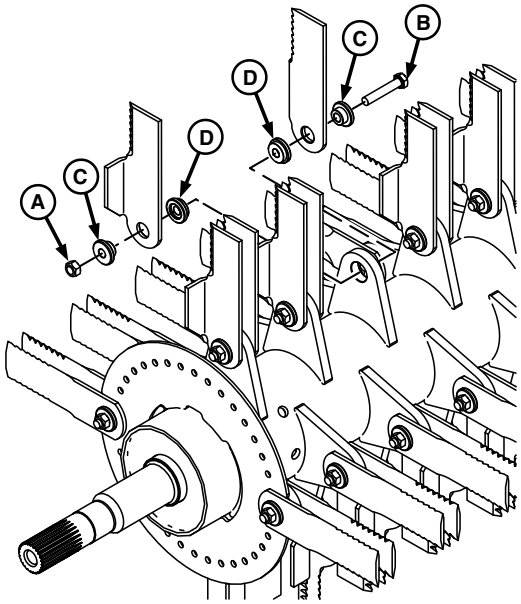
A—D—Paddle Blades

Blade Configuration

IMPORTANT: Chopper balance MUST be maintained. Replace BOTH blades on single support and BOTH blades on opposite support (180 degrees). Four blades MUST be installed to replace one broken blade, or all blades can be replaced at one time. This MUST be done to maintain balance.

If the blade (A) is broken, replace blades (A—D).

IMPORTANT: Verify clearance between rotor blades and stationary knives, by rotating rotor by hand, before running chopper.



H99002—UN—12NOV10

A—Lock Nut
B—Cap Screw
C—Bushings
D—Bushings

Inner Blades

NOTE: If removing blades or bushings for inspection purposes, be certain to reinstall blades on SAME support from which they were removed. This must be done to maintain balance. It is a good practice to mark each blade before removal.

Install new cap screws and lock nuts in the same direction as it was removed when installing or replacing blades.

Remove lock nut (A) and cap screw (B).

Remove and inspect bushings (C and D).

NOTE: Inspect and replace bushings if worn. Replace lock nuts and cap screws with new hardware.

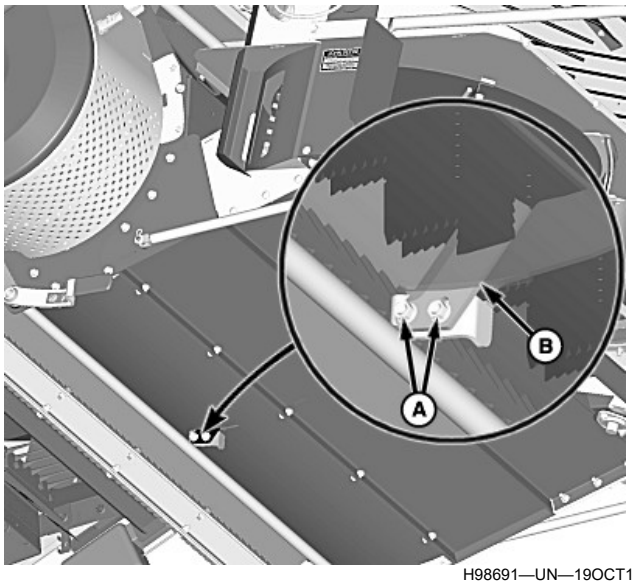
Replace blades and bushings. Install cap screw and lock nut. Tighten nut to specification.

Specification

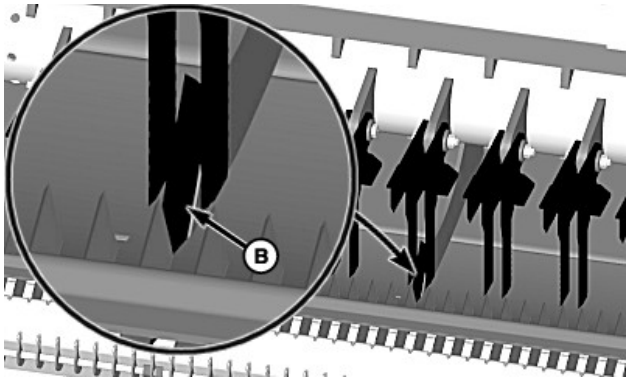
Chopper Blade Lock Nut—Torque	65 N·m (48 lb·ft)

OUO6075,0004929-19-29MAR18

Middle Splitter Knife—Replacing (Advanced PowerCast™ Tailboard)



H98691—UN—19OCT10



H98692—UN—19OCT10

A—Hardware
B—Middle Splitter Knife

⚠ CAUTION: Shut OFF engine, set park brake and remove key. Knife blade is sharp.

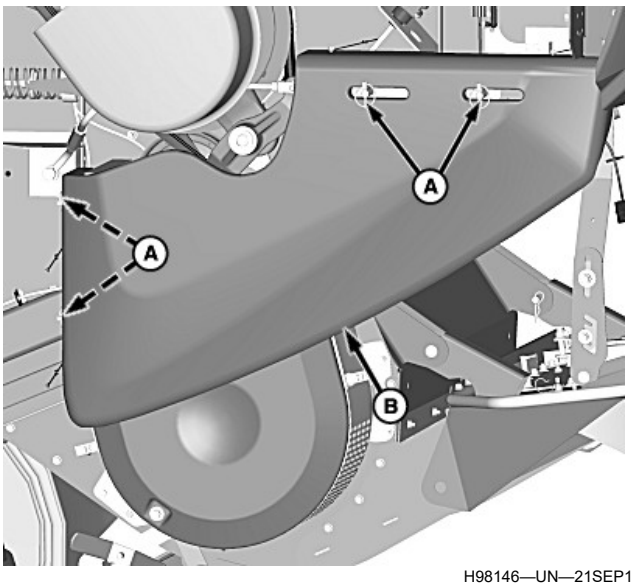
Remove hardware (A) and discard middle splitter knife (B).

NOTE: Knife must be seated against the middle splitter so no gap exists.

Replace middle splitter knife and install previously removed hardware.

OUO6075,00046FE-19-05APR17

Chopper Blades—Centering

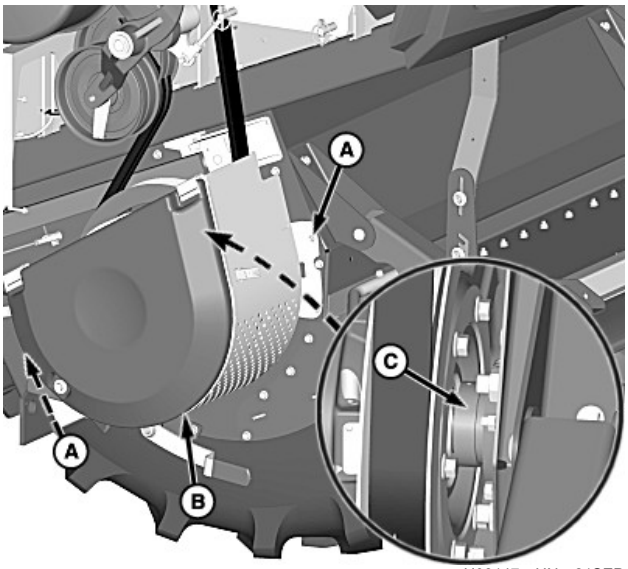


H98146—UN—21SEP10

A—Quick-Lock Pins
B—Shield

⚠ CAUTION: Shut OFF engine, set parking brake and remove key.

Raise chopper fully and remove quick-lock pins (A) and shield (B).

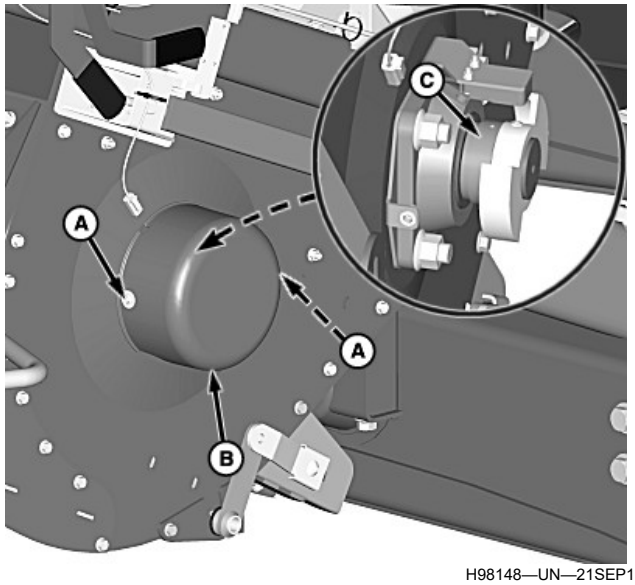


H98147—UN—21SEP10

A—Cap Screws (4 Used)
B—Shield
C—Locking Collar

Remove cap screws (A) and shield (B).

Loosen set screw and locking collar (C) on left-hand side.

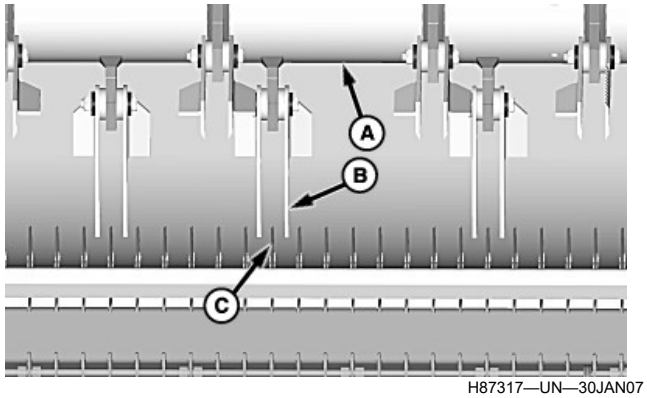


H98148—UN—21SEP10

A—Cap Screws (2 Used)
B—Bearing Cover
C—Locking Collar

Remove cap screws (A) and bearing cover (B).

Loosen set screw and locking collar (C) on right-hand side.



H87317—UN—30JAN07

A—Chopper Rotor
B—Rotor Blades
C—Stationary Knives

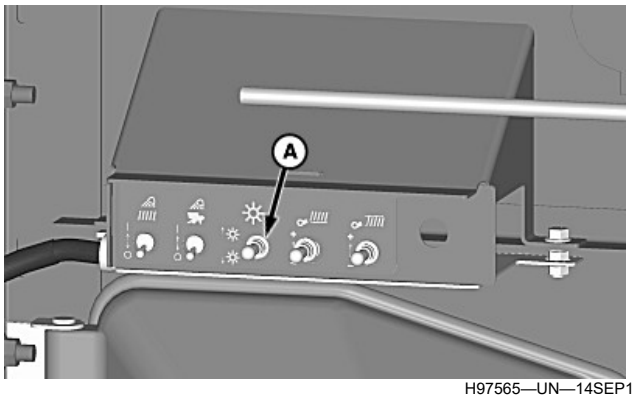
Position chopper rotor (A) right or left to ensure all rotor blades (B) clear stationary knives (C).

Tighten locking collars on both sides in direction of rotation and retain with set screws.

Install bearing cover on right-hand side and chopper shields on left-hand side.

OUO6075,00009C4-19-21SEP10

Chopper Adjusting Switch



H97565—UN—14SEP10

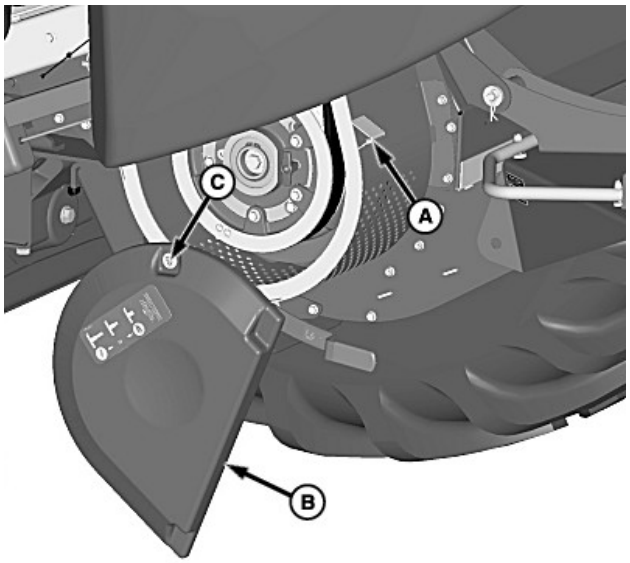
A—Chopper Switch

Chopper adjust switch (A) is located on left-hand side of machine.

Chopper adjust switch allows operator to raise or lower chopper to various positions.

OUO6075,00009C6-19-21SEP10

Chopper Drive Speeds—Changing



H105440—UN—18MAY12

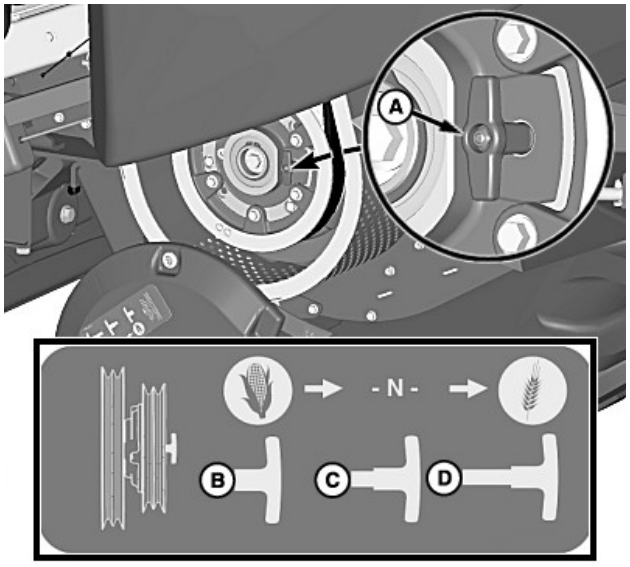
A—Latch
B—Shield
C—Pivot

CAUTION: Shut OFF engine, set parking brake and remove key.

Release latch (A) and rotate shield (B) on pivot (C).

Slow Speed Position:

NOTE: It may be necessary to rotate sheave a small amount while moving shifter handle.



H105441—UN—18MAY12

A—Shifter Handle
B—Slow Speed Position
C—Neutral Position
D—High Speed Position

Move shifter handle (A) to position (B).

- Corn

Neutral Position:

NOTE: It may be necessary to rotate sheave a small amount while moving shifter handle.

Move shifter handle (A) to position (C).

High Speed Position:

NOTE: It may be necessary to rotate sheave a small amount while moving shifter handle.

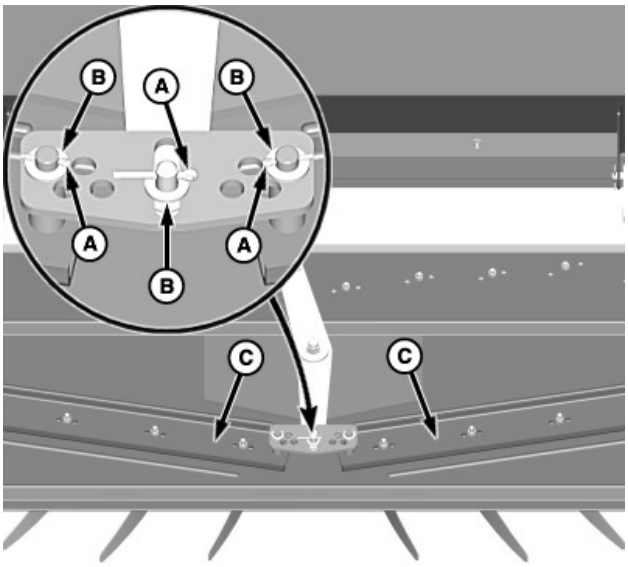
Move shifter handle (A) to position (D).

- Grain

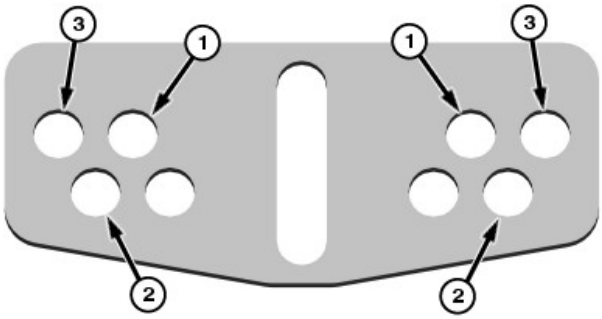
Close shield and retain with latch.

OUO6075,000113F-19-18MAY12

Tailboard Vanes—Adjusting (Intermediate/ Premium Residue)



H98656—UN—19OCT10



H98657—UN—19OCT10

A—Cotter Pins
B—Washers
C—Slide Guides

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Adjustments can be made to tailboard vanes if factory settings do not produce adequate spread width or even distribution.

Tailboard vanes are factory set for 9.1 m (30 ft) platforms.

Remove and retain cotter pins (A) and washers (B).

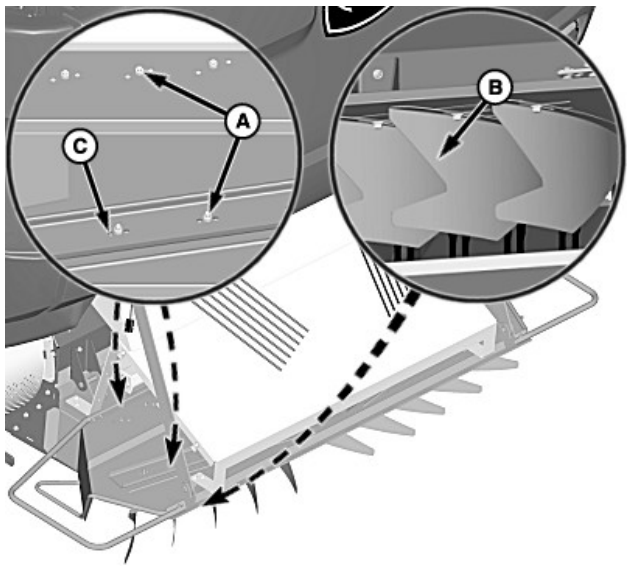
Adjust slide guides (C) to desired holes in the adjustment plate.

- Hole 1: 6.7 m (22 ft) Header Position
- Hole 2: 7.6 m (25 ft) Header Position
- Hole 3: 9.1 m (30 ft) Header Position

Install previously removed washers and cotter pins.

OUO6075,00041D9-19-11APR16

Tailboard Vanes (Electric Motor)—Adjusting (Intermediate/Premium Residue)



H98365—UN—30SEP10

A—Nuts
B—Tailboard Vane
C—Holes

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Adjustments can be made to the tailboard vanes if the factory settings do not produce adequate spread width or even distribution.

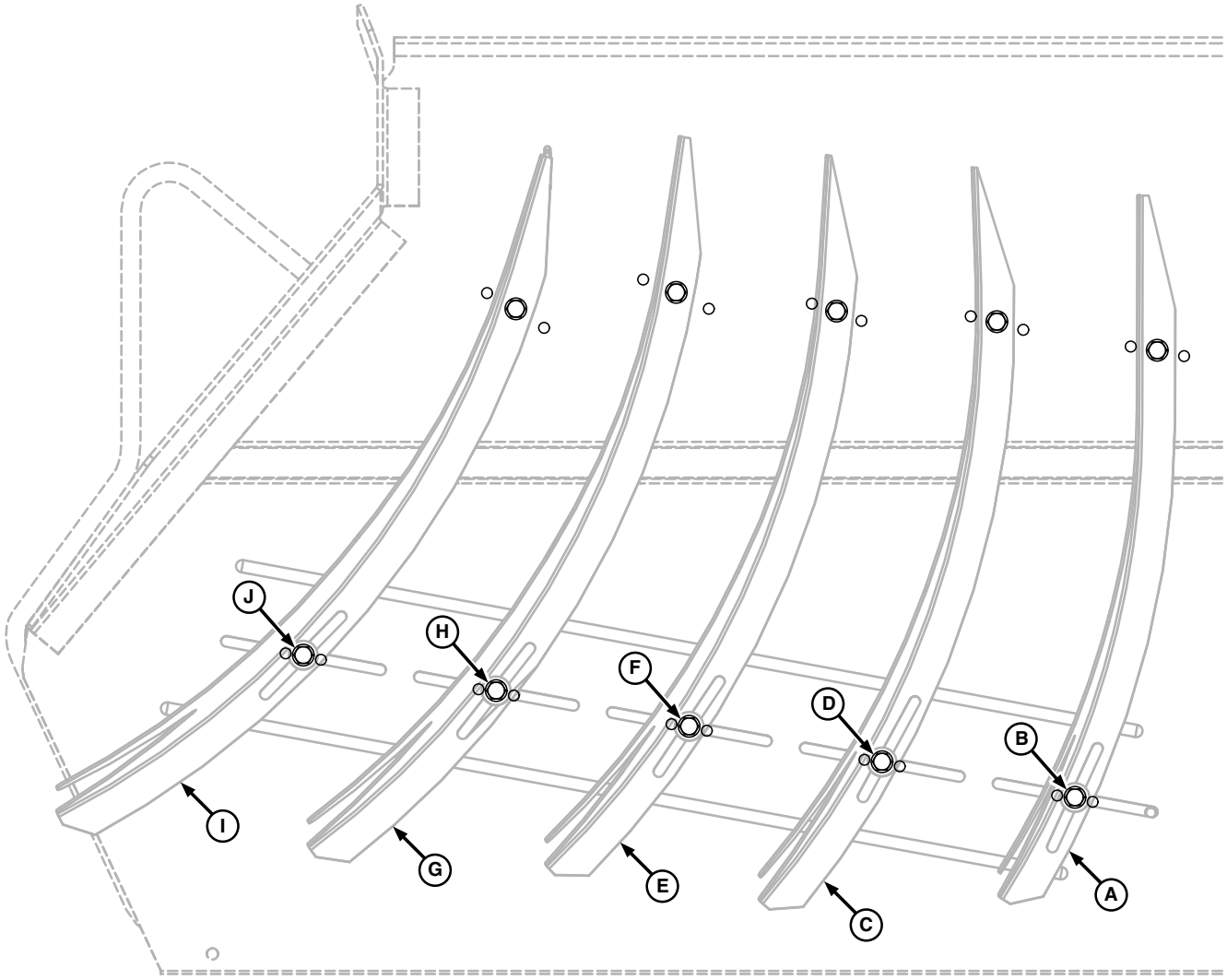
Tailboard vanes are factory set for 9.1 m (30 ft) platforms.

Loosen nuts (A) and adjust the tailboard vane (B) to different holes (C) if needed to control distribution of straw spread width. See Tailboard Vanes (Electrical Adjust)—Factory Settings later in this section.

1. Tighten nuts on tailboard vanes.
2. Loosen nut one complete turn at the front of the tailboard vane.
3. Loosen nut 1-1/2 turns at the rear of the tailboard vane.
4. Verify that the tailboard vane is easily moveable.
5. Repeat as needed on remaining tailboard vanes

OUO6075,0004703-19-05APR17

Tailboard Vanes (Electrical Adjust)—Factory Settings (Intermediate/Premium Residue)



H98343—UN—01OCT10

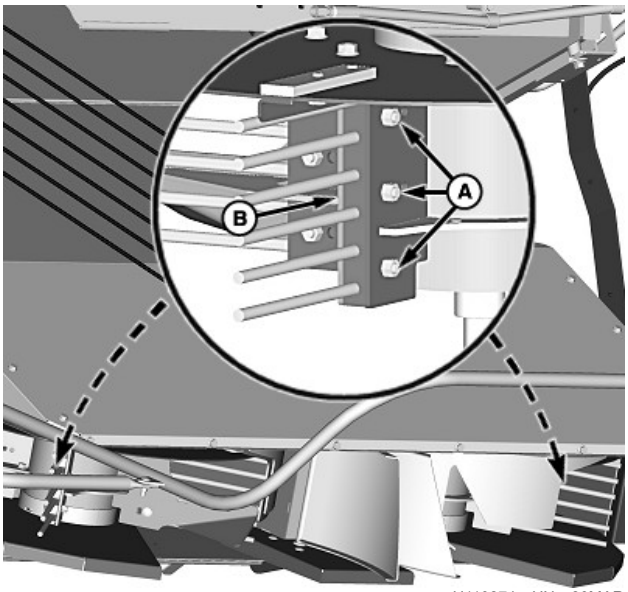
Tailboard Vane Settings For 9.1 m (30 ft) Platforms (View From Below Tailboard)

A—Vane 1
B—Middle Hole
C—Vane 2
D—Middle Hole
E—Vane 3
F—Middle Hole
G—Vane 4
H—Middle Hole
I—Vane 5
J—Middle Hole

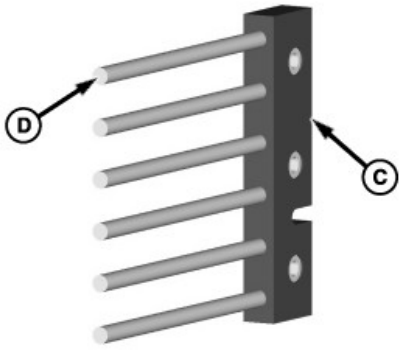
NOTE: Hole locations are from center of tailboard outward when adjusting tailboard vanes.

OUO6075,00041DB-19-21MAR16

Advanced PowerCast Spreader Disks—Replacing



H113274—UN—26MAR15



H98694—UN—19OCT10

A—Hardware
B—Bracket
C—Rubber Support
D—Fingers

⚠ CAUTION: Shut OFF engine, set parking brake and remove key.

Remove hardware (A) and bracket (B).

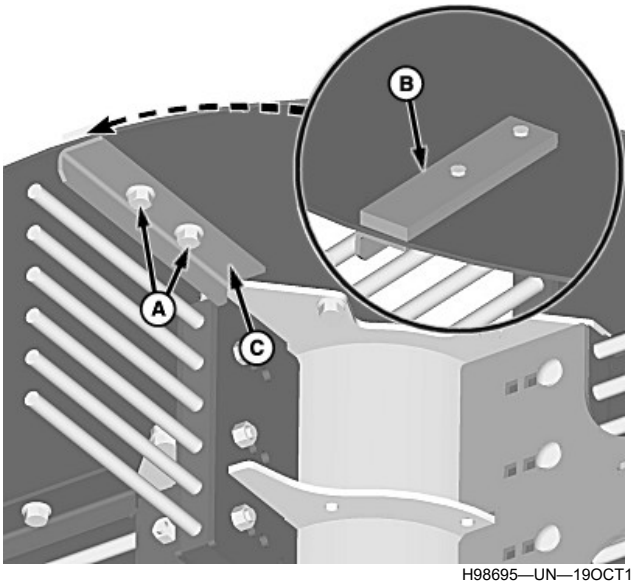
Inspect and replace rubber support (C) and fingers (D) as needed. See your John Deere dealer for replacement parts.

IMPORTANT: Replace all rubber supports to maintain disk rotational balance.

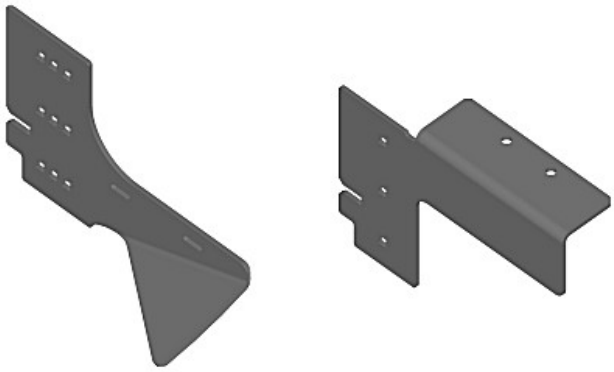
Install replacement rubber support and fingers as needed.

Ensure that rubber support and bracket are put back in the same holes as previously removed.

Tighten hardware and repeat as needed on remaining disk blades.



H98695—UN—19OCT10



H102241—UN—23JUN11

Small Grain Paddle / Corn Paddle

A—Cap Screws
B—Plate
C—Paddle Brackets

Remove cap screws (A) from plate (B).

Inspect and replace paddle bracket (C) as needed. See your John Deere dealer for replacement parts.

IMPORTANT: Replace all paddle brackets to maintain disk rotational balance.

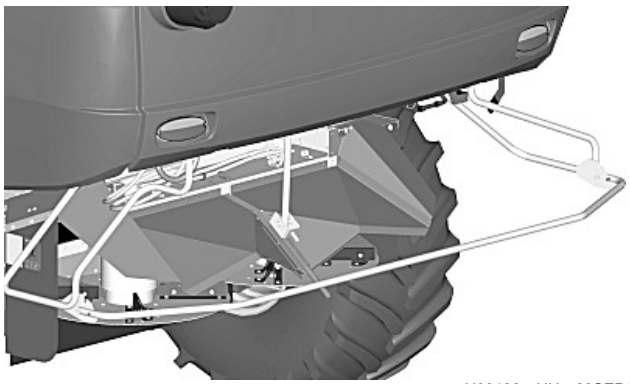
Install replacement paddle bracket as needed.

Tighten hardware and repeat as needed on remaining disk blades.

NOTE: Remove small grain paddles and install corn paddles as needed for crop being harvested.

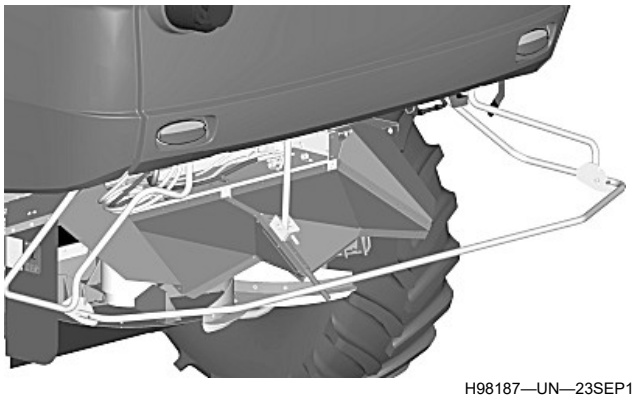
SS43267,0000592-19-26MAR15

Spreader (General Information)



H98186—UN—23SEP10

Single Speed Spreader



H98187—UN—23SEP10

Dual Speed Spreader

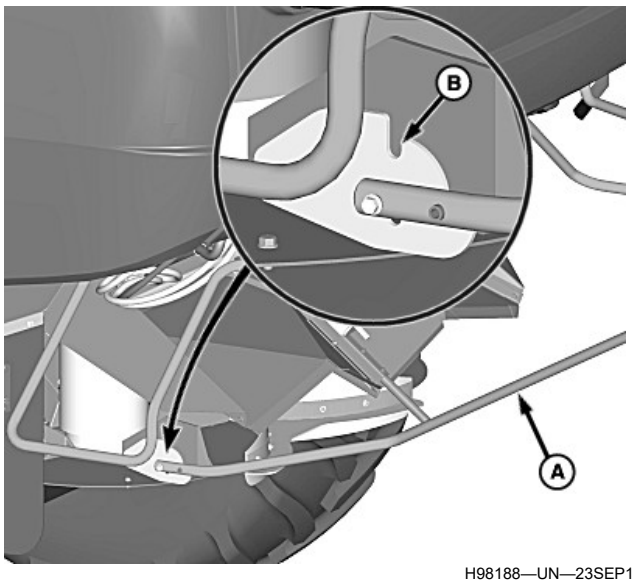
CAUTION: Do not let anyone stand behind the spreader while it is running. Shut OFF engine, set park brake and remove key before adjusting spreader.

Before performing service or maintenance on the raised spreader, fully insert lockout pin into place.

NOTE: See Residue Management Application Help or Operator's Station Help for further information.

OUO6075,000436E-19-19DEC16

Spreader—Windrow Position



H98188—UN—23SEP10

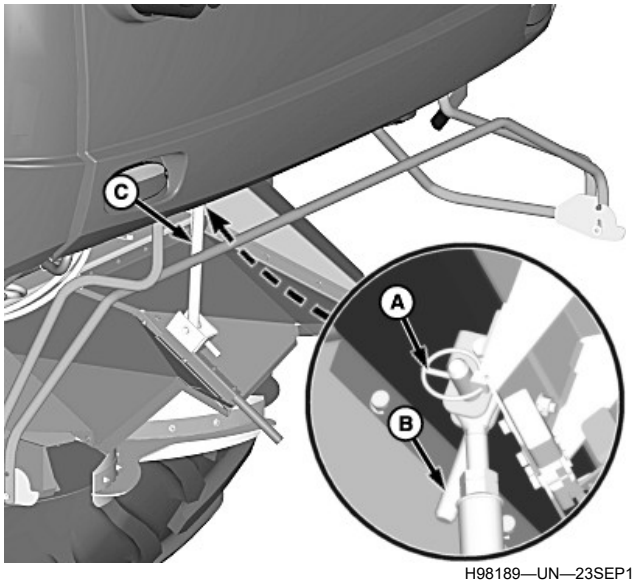
A—Spreader Hoop
B—Notch

CAUTION: Shut OFF engine, set park brake and remove key. Before performing service or maintenance on the raised spreader, fully insert lockout pin into place.

IMPORTANT: Spreader hoop MUST always be in the "down" position as shown when operating.

NOTE: Spreader can be rotated upward to allow material to discharge into a windrow pattern.

Raise spreader hoop (A) until it aligns with notch (B) when accessing or raising spreader to windrow position.

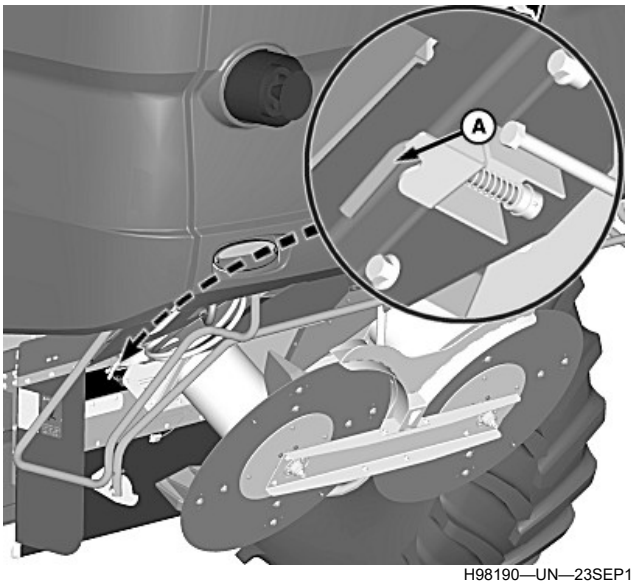


H98189—UN—23SEP10

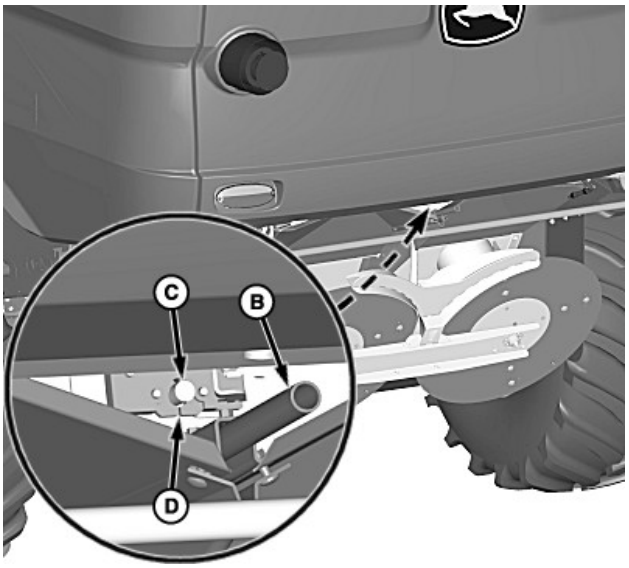
A—Quick-Lock Pin
B—Pin
C—Support Tube

Remove quick-lock pin (A) from pin (B) and lower support tube (C).

NOTE: Place pin back into storage position and retain with quick-lock pin.



H98190—UN—23SEP10



H98191—UN—23SEP10

A—Pin
B—Handle
C—Pin
D—Latch Assembly

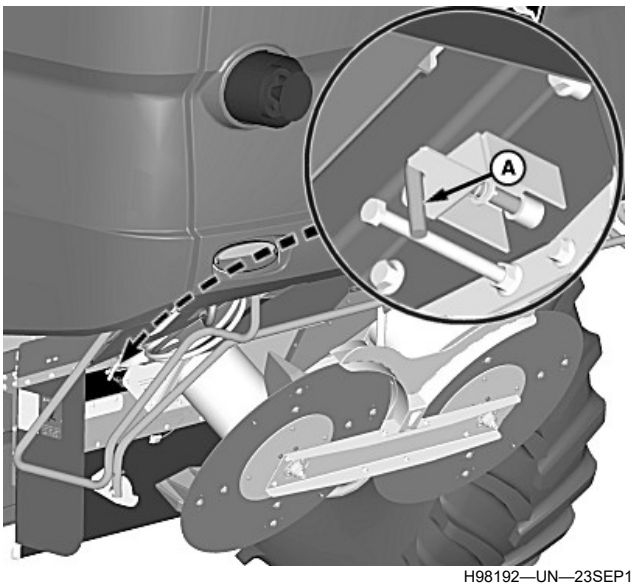
Pull pin (A) to fully raise the spreader.

Raise spreader with handle (B) until the pin (C) fully engages with latch assembly (D).

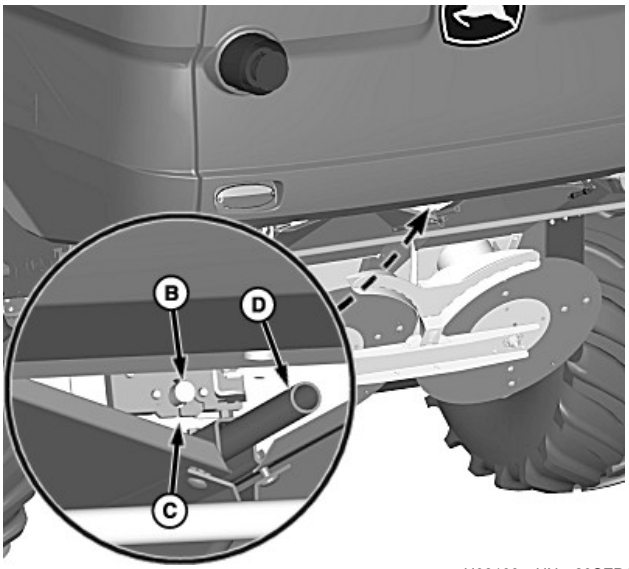
NOTE: Set Spreader speed to zero. See Residue Management Application Help or Operator's Station Help for further information.

OUO6075,000436F-19-19DEC16

Spreader—Lowering



H98192—UN—23SEP10



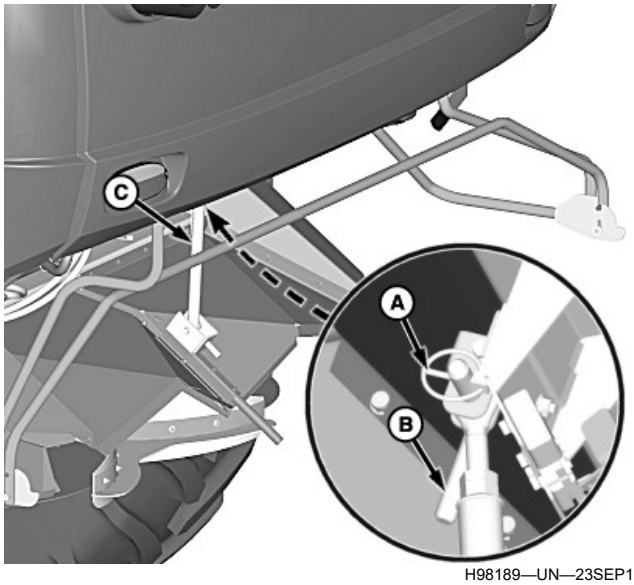
H98193—UN—23SEP10

A—Pin
B—Pin
C—Latch Assembly
D—Handle

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

Rotate and place pin (A) onto the bracket to unlock the spreader.

Release pin (B) from latch assembly (C) and lower spreader with handle (D).



H98189—UN—23SEP10

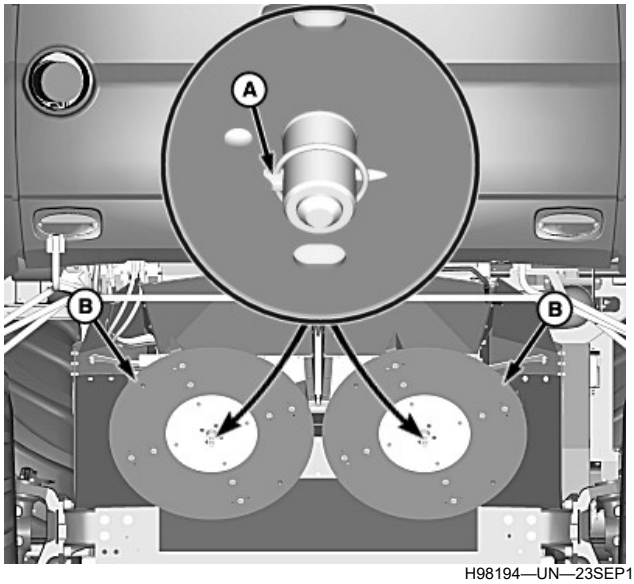
A—Quick-Lock Pin
B—Pin
C—Support Tube

Raise support tube (C) until it aligns with hole and retain with pin (B) and quick-lock pin (A).

NOTE: Increase spreader speed until desired spread width is reached. See Residue Management Application Help or Operator's Station Help for further information.

OUO6075,0004370-19-19DEC16

Spreader Disks (Single Speed)—Replacing



H98194—UN—23SEP10

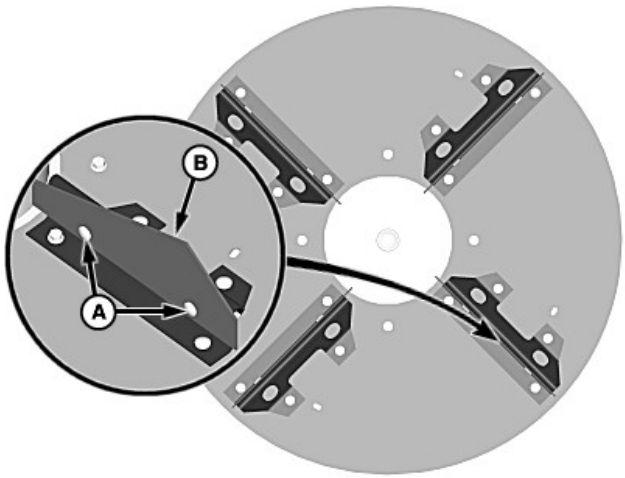
A—Quick-Lock Pin
B—Disk Assemblies

CAUTION: Disk assemblies weigh approximately 25 kg (55 lb).

IMPORTANT: Disk assemblies are left-handed and right-handed. Mark disk assembly locations before removing.

NOTE: Disk assemblies can be removed for service or to provide additional clearance under spreader.

Remove quick-lock pins (A) and disk assemblies (B).



H98197—UN—23SEP10

A—Hardware
B—Blade

IMPORTANT: When replacing worn or damaged blades, make sure to replace blades on opposite sides of disk at the same time to maintain disk rotational balance.

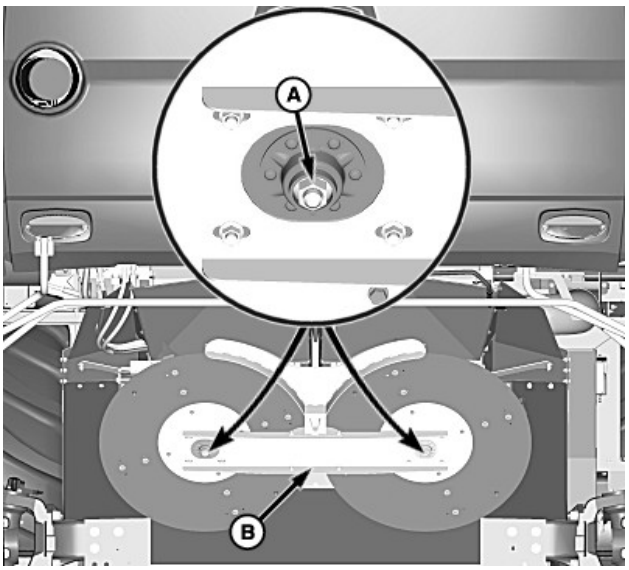
Blades are oriented in alternating hole patterns to obtain an optimum material spread. Ensure that replacement blades are put back in the same holes as previously removed.

Remove hardware (A) and blade (B).

Install replacement blades as needed and tighten hardware.

OUO6075,00009D5-19-23SEP10

Spreader Disks (Dual Speed)—Replacing



H98195—UN—08OCT10

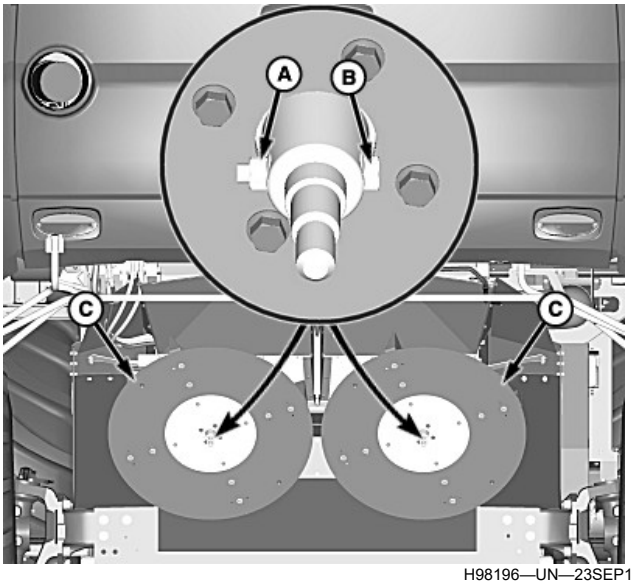
A—Nut
B—Support Shroud

⚠ CAUTION: Disk assemblies weigh approximately 25 kg (55 lb).

IMPORTANT: Disk assemblies are left-handed and right-handed. Mark disk assembly locations before removing.

NOTE: Disk assemblies can be removed for service or to provide additional clearance under spreader.

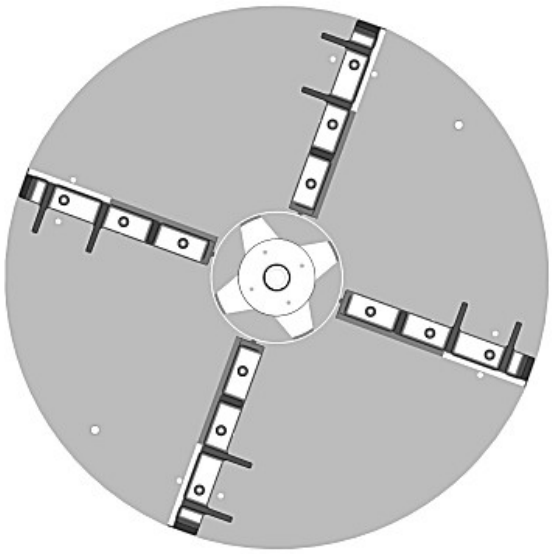
Remove nuts (A) and support shroud (B).



H98196—UN—23SEP10

A—Nut
B—Cap Screw
C—Disk Assemblies

Remove nuts (A) and cap screws (B) from disk assemblies (C).



H98198—UN—23SEP10

IMPORTANT: When replacing worn or damaged blades, make sure to replace blades on opposite sides of disk at the same time to maintain disk rotational balance.

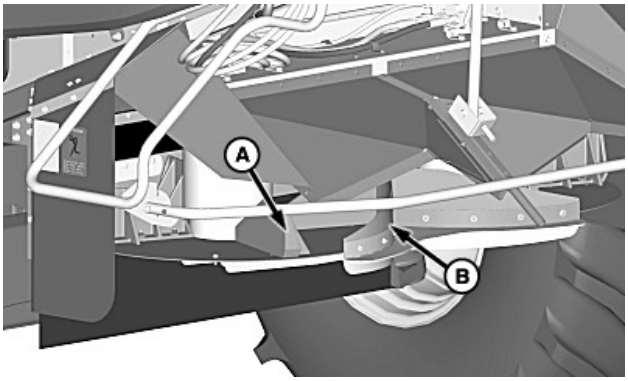
Blades are oriented in alternating hole patterns to obtain an optimum material spread. Ensure that replacement blades are put back in the same holes as previously removed.

Install replacement blades as needed and tighten hardware to specification.

Specification	
Blade Hardware—Torque	22 N·m (16 lb.-ft.)

OUO6075,00009D6-19-23SEP10

Wide Spread Straw Spreader (Optional)



H98199—UN—23SEP10

A—Blades
B—Shrouds

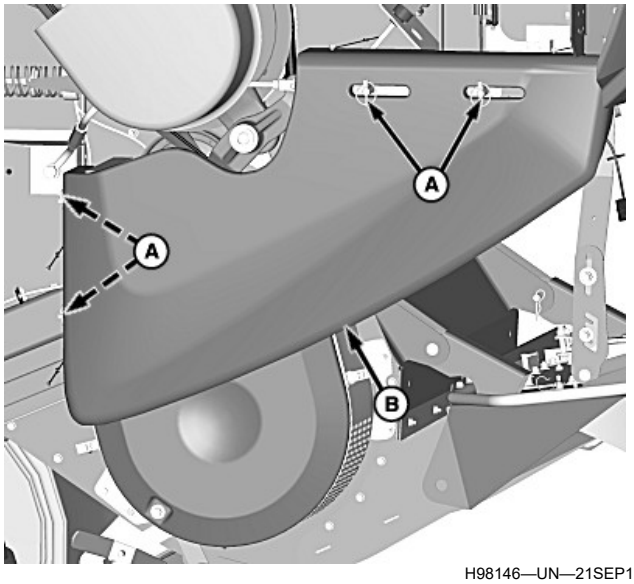
⚠ CAUTION: Do not let anyone stand behind spreader while it is running. Shut OFF engine, set parking brake and remove key before adjusting spreader.

NOTE: Shrouds should be removed when harvesting with headers smaller than 9.1 m (30 ft.) or corn heads smaller than 12 rows to provide optimal material distribution.

When straw spreader blades (A) and shrouds (B) are installed, it increases spread width and provides better material distribution for larger headers. See your John Deere dealer for further information.

OUO6075,00009D9-19-28MAR11

Chopper Drive Belt Tension—Adjusting



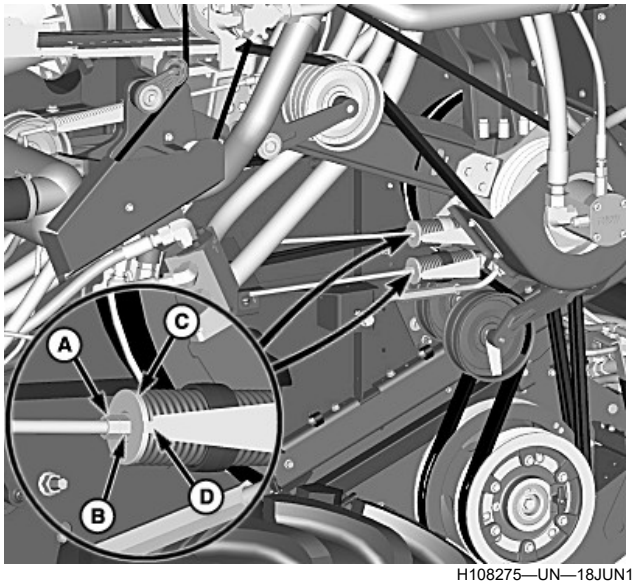
H98146—UN—21SEP10

A—Quick-Lock Pins
B—Shield

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Lower chopper fully to properly tension belts.

Remove quick-lock pins (A) and shield (B).



H108275—UN—18JUN13

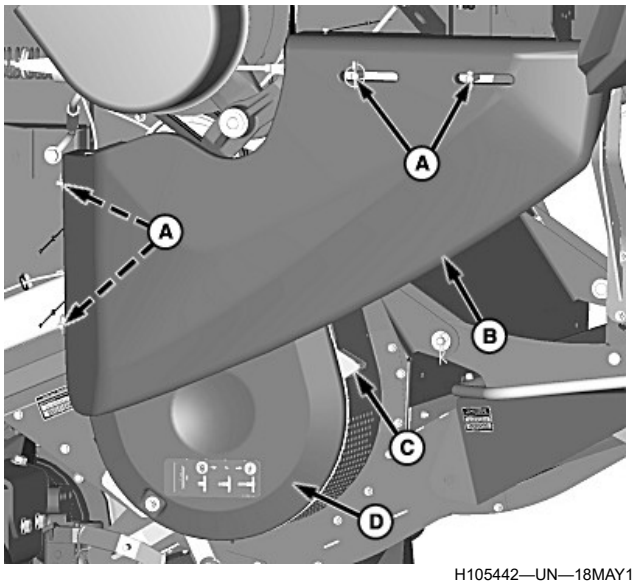
A—Lock Nut
B—Nut
C—Washer
D—Gauge

Loosen lock nut (A) and tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

Install shield and retain with quick-lock pins.

OUO6075,00013DF-19-18JUN13

Chopper Belt—Replacing



H105442—UN—18MAY12

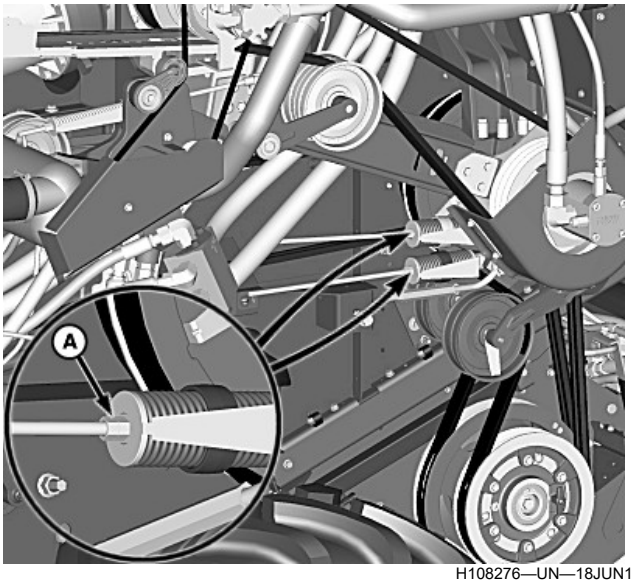
A—Quick-Lock Pins
B—Shield
C—Latch
D—Shield

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Chopper should be moved to middle position for easier belt installation.

Remove quick-lock pins (A) and shield (B).

Release latch (C) and rotate shield (D) to open.

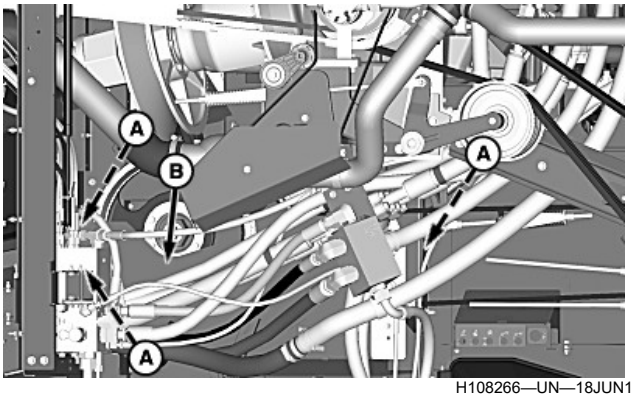


H108276—UN—18JUN13

A—Nuts

NOTE: Mark location of tensioner nuts before loosening to aid in reassembly.

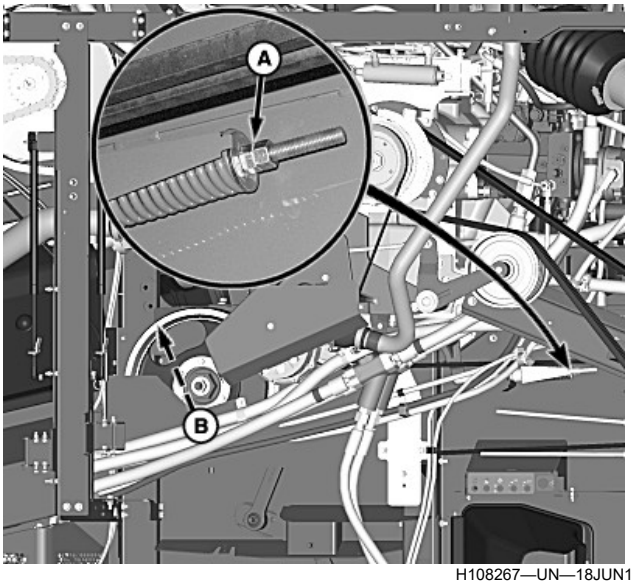
Loosen nuts (A) to relieve belt tension.



H108266—UN—18JUN13

A—Cap Screws
B—Shield

Remove cap screws (A) and shield (B).

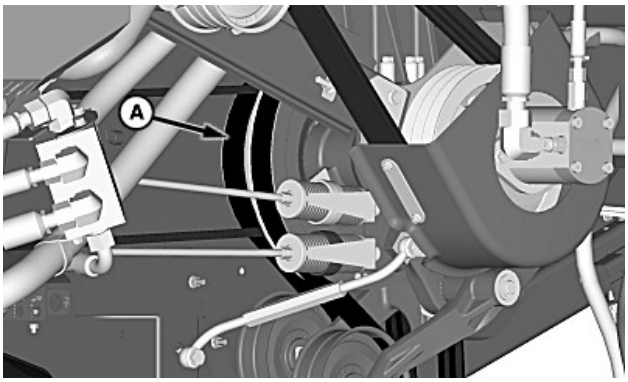


H108267—UN—18JUN13

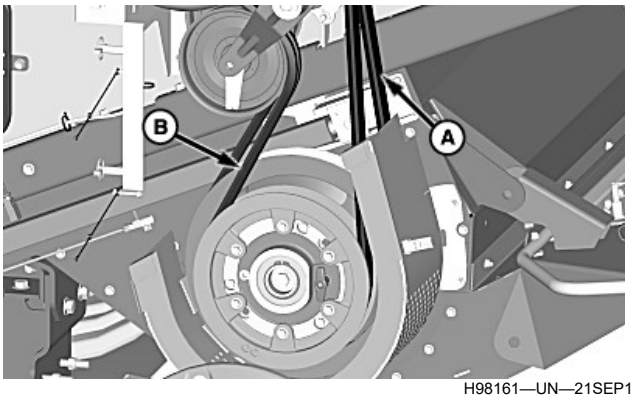
A—Nuts
B—Discharge Beater Belt

Loosen nuts (A) to relieve belt tension from discharge beater belt (B).

Inner Chopper Belt:



H107035—UN—26FEB13



H98161—UN—21SEP10

A—Inner Chopper Drive Belt
B—Outer Chopper Drive Belt

NOTE: Turn belt so it fits between sheave and sidesheet.

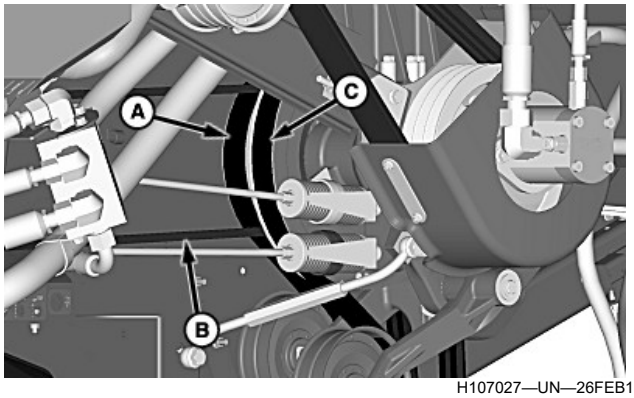
Remove inner chopper drive belt (A) from upper sheaves.

Remove outer chopper drive belt (B) from lower sheaves.

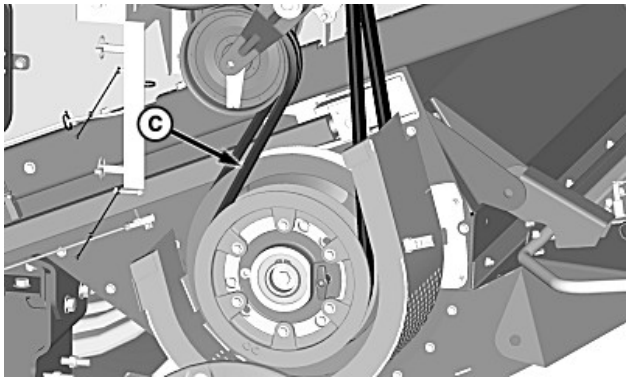
Remove inner chopper drive belt from lower sheaves.

Install replacement belt in reverse order.

Outer Chopper Belt:



H107027—UN—26FEB13



H107028—UN—26FEB13

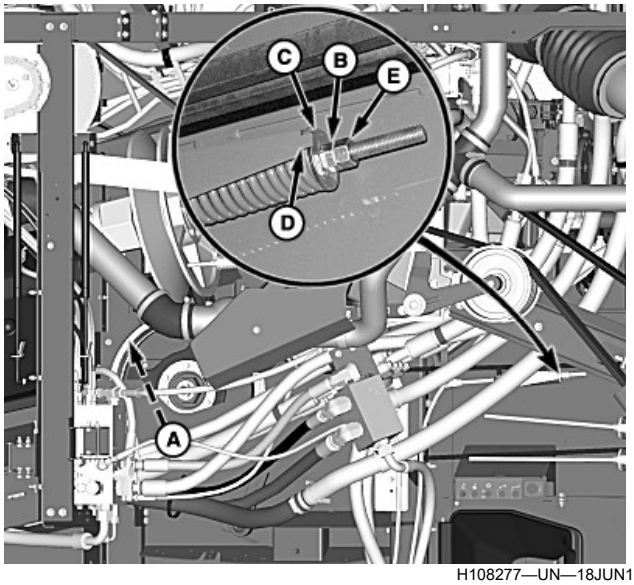
A—Inner Chopper Drive Belt
B—Discharge Beater Belt
C—Outer Chopper Drive Belt

NOTE: Turn belts so they fit between sheave and sidesheet.

Remove inner chopper drive belt (A) and discharge beater belt (B) from upper sheaves.

Remove outer chopper drive belt (C) from upper and lower sheaves.

Install replacement belt in reverse order.

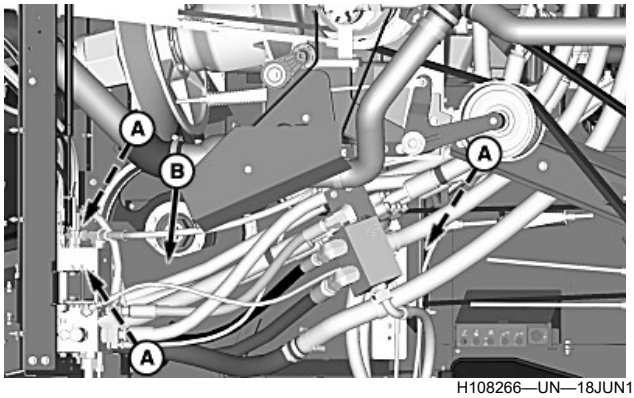


H108277—UN—18JUN13

A—Discharge Beater Belt
B—Nut
C—Washer
D—Gauge
E—Lock Nut

Install discharge beater belt (A) onto sheave.

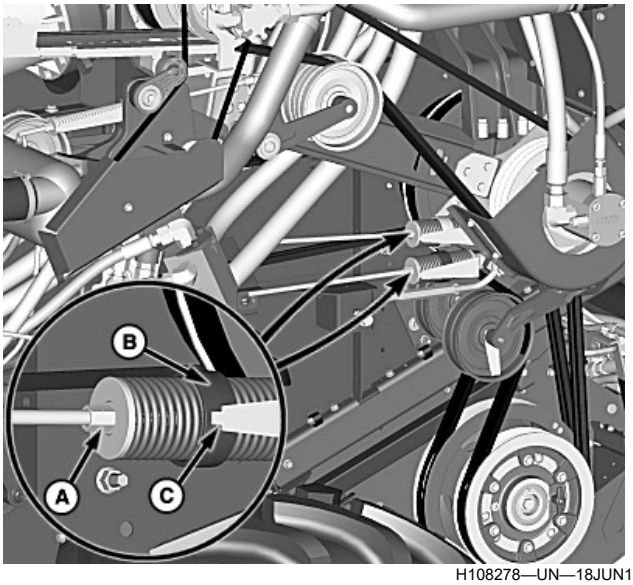
Tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut (E).



H108266—UN—18JUN13

A—Cap Screws
B—Shield

Install shield (B) and retain with cap screws (A).

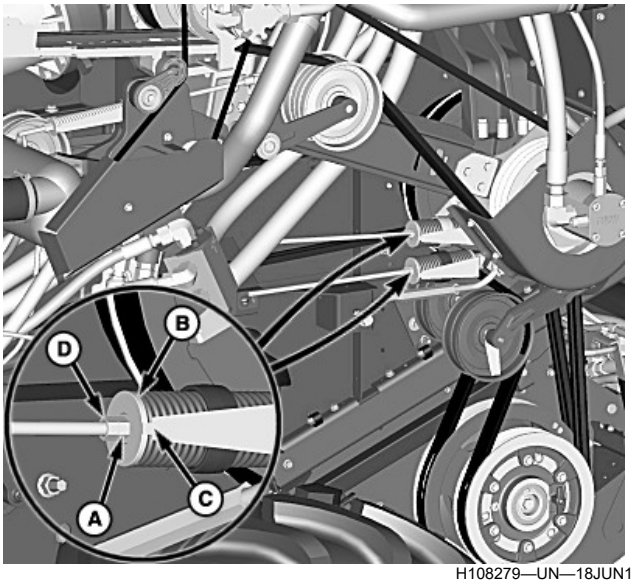


H108278—UN—18JUN13

A—Nuts
B—Spring Guide
C—Gauge

Lower chopper to middle position.

Tighten nuts (A) until spring guide (B) is at end of gauge (C) as shown.



H108279—UN—18JUN13

A—Nut
B—Washer
C—Gauge
D—Lock Nut

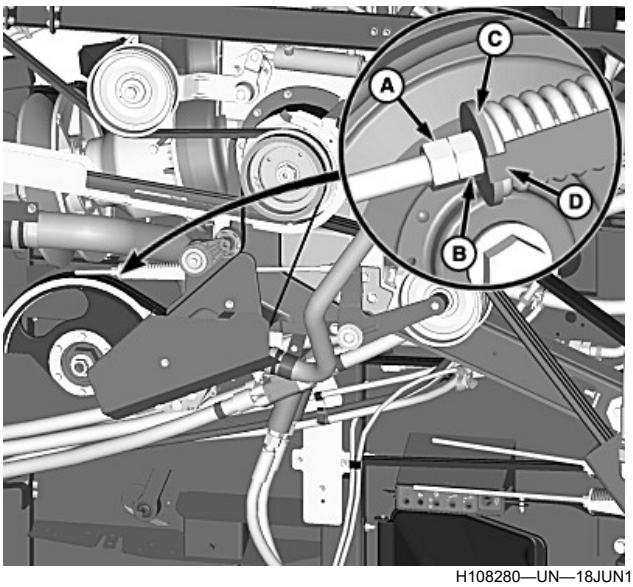
Lower chopper completely to properly tension belt.

Tighten nut (A) until washer (B) is positioned between end of gauge (C) and bottom of step. Tighten lock nut (D).

Install shield and retain with quick-lock pins.

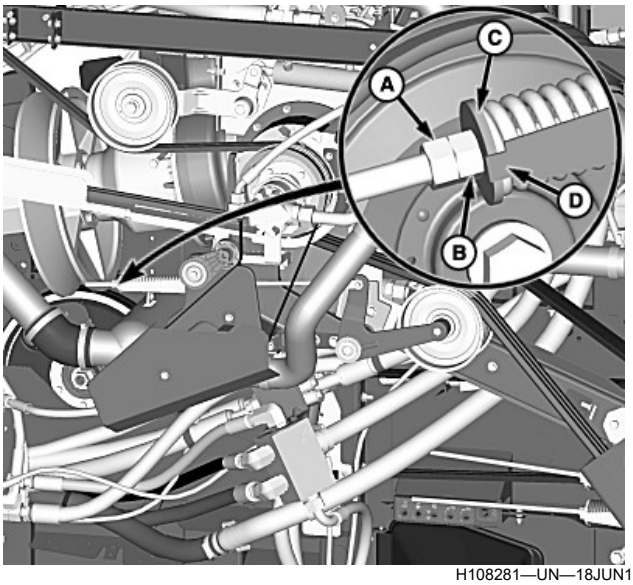
OUO6075,00013E0-19-18JUN13

Chopper Jackshaft Belt—Adjusting



H108280—UN—18JUN13

Style A



H108281—UN—18JUN13

Style B

A—Lock Nut
B—Nut
C—Washer
D—Gauge

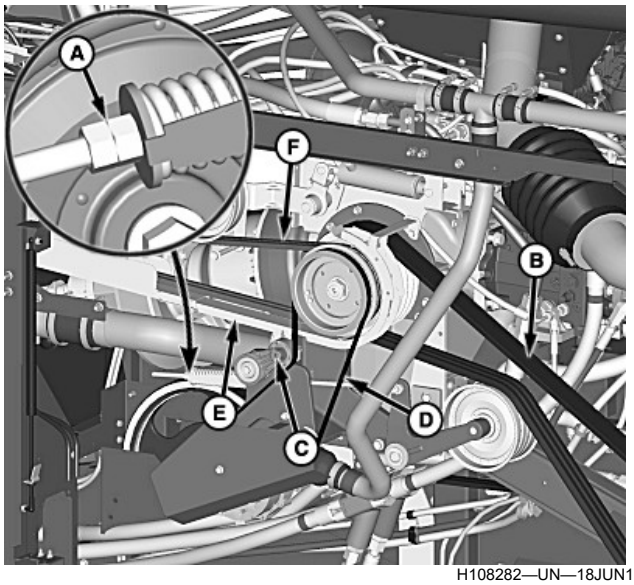
CAUTION: Shut OFF engine, set park brake and remove key.

Chopper jackshaft belt is located on the left-hand side above the chopper.

Loosen lock nut (A) and tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,000436A-19-10OCT16

Chopper Jackshaft Belt—Replacing (Style A)

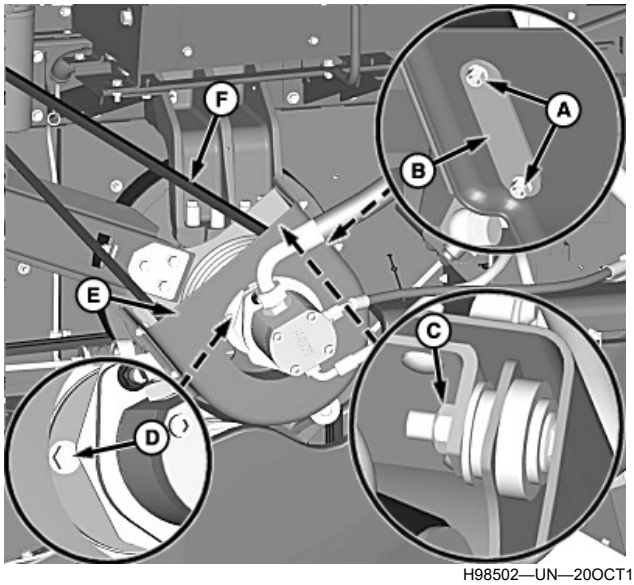


H108282—UN—18JUN13

A—Nuts
B—Chopper Jackshaft Belt
C—Tensioner Arm
D—Engine Debris Management Belt (If Equipped)
E—Belt Trap (2 used)
F—Unloading Auger Drive Belt (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

1. Loosen the nuts (A) to relieve belt tension from the chopper jackshaft belt (B).
2. Use a breaker bar to relieve tension from the tensioner arm (C) to remove the engine debris management belt (D).
3. Remove the cap screws from the belt traps (E).
4. Remove and retain the unloading auger drive belts (F).



H98502—UN—20OCT10

A—Hardware
B—Strap
C—Nut
D—Cap Screw (2 used)
E—Shield
F—Chopper Jackshaft Belt

5. **With Hydraulic Pump**
   a. Remove the hardware (A) and strap (B) on both sides of the shield.
   b. Remove the nut (C) from the pump assembly bracket.

NOTE: Verify that the washers and isolator remain in place when removing. Install the previously removed nut to retain the washers and isolators in place when the assembly is removed.

   c. Remove the cap screws (D) from the pump assembly.
   d. Remove the shield (E) and the pump assembly bracket.
   e. Support the shield and the pump assembly bracket out of the way.
   f. Remove the jackshaft belt (F) from the upper and lower sheaves.
   g. Install the replacement belt in reverse order.

NOTE: Align the shaft key on the pump assembly with the keyway in the sheave. Verify that the washers and isolators remain in place on the pump assembly bracket.

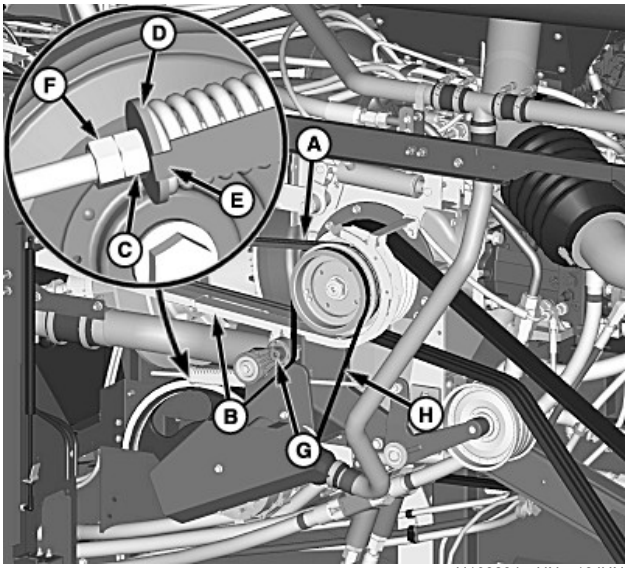
   h. Align the pump assembly with the sheave and tighten the cap screws to specification.

Specification

Cap Screws—Torque	80 N·m (59 lb·ft)

i. Install the shield and the pump assembly bracket and retain with the nut.

j. Install the strap on both sides of the shield and retain with the hardware.



H108284—UN—18JUN13

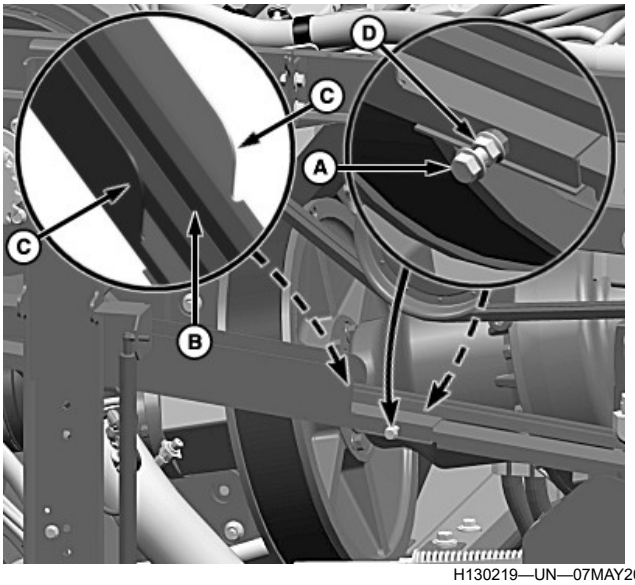
A—Unloading Auger Drive Belt (2 used)
B—Belt Trap (2 used)
C—Nut
D—Washer
E—Gauge
F—Lock Nut
G—Tensioner Arm
H—Engine Debris Management Belt (If Equipped)

k. Install the unloading auger drive belts (A).

l. Install the belt traps (B) and retain with the cap screws.

m. Tighten the nut (C) until the washer (D) is positioned between the end of the gauge (E) and the bottom of the step. Tighten the lock nut (F).

n. Use a breaker bar to relieve tension from the tensioner arm (G) to install the engine debris management belt (H).



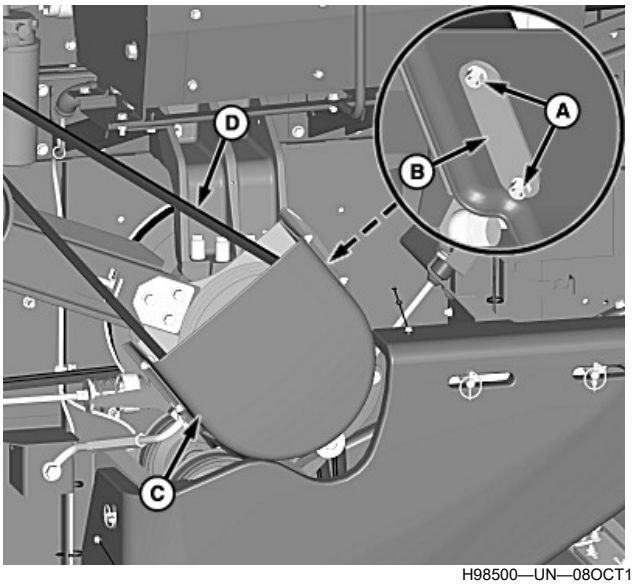
H130219—UN—07MAY20

A—Cap Screw (2 used)
B—Unloading Auger Drive Belt (2 used)
C—Belt Trap
D—Nut (2 used)

NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.

o. Adjust the cap screws (A) to center the unloading auger drive belts (B) between the belt trap (C).

p. Once the unloading auger drive belts are centered between the belt trap, tighten nut (D).



H98500—UN—08OCT10

A—Hardware
B—Strap
C—Shield
D—Chopper Jackshaft Belt

Without Hydraulic Pump

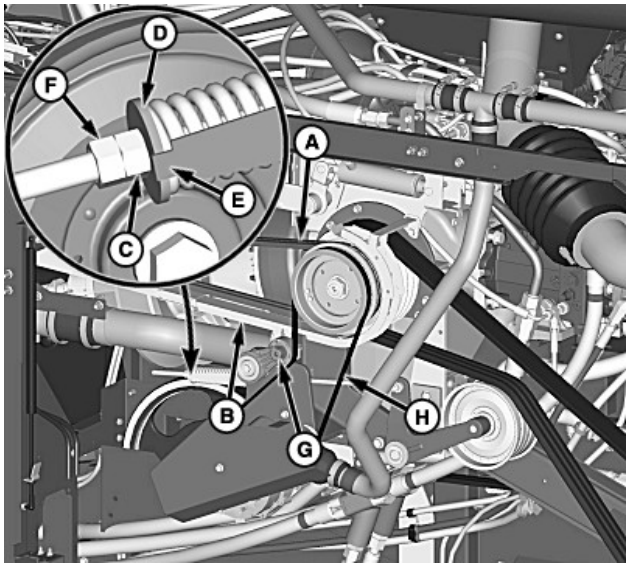
a. Remove the hardware (A) and the strap (B) on both sides of the shield (C).

b. Remove the jackshaft belt (D) from the upper and lower sheaves.

c. Install the replacement belt in reverse order.

d. Align the shield with the bracket holes.

e. Install the strap on both sides of the shield and retain with the hardware.



H108285—UN—18JUN13

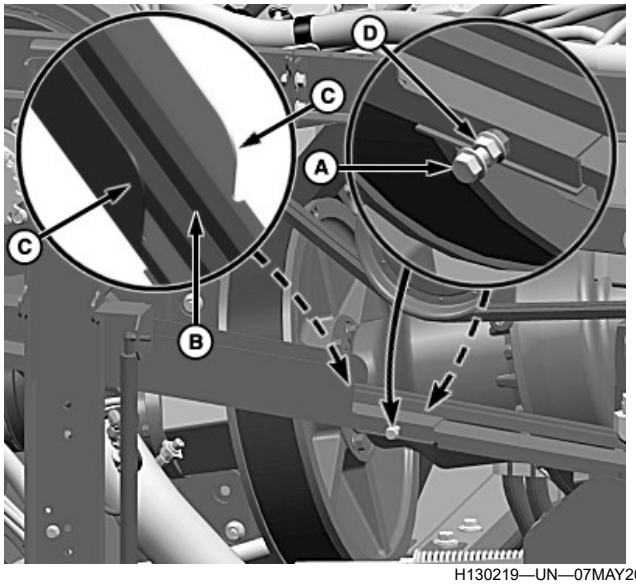
A—Unloading Auger Drive Belt (2 used)
B—Belt Trap (2 used)
C—Nut
D—Washer
E—Gauge
F—Lock Nut
G—Tensioner Arm
H—Engine Debris Management Belt (If Equipped)

f. Install the unloading auger drive belts (A).

g. Install the belt traps (B) and retain with the cap screws.

h. Tighten the nut (C) until the washer (D) is positioned between the end of the gauge (E) and the bottom of the step. Tighten the lock nut (F).

i. Use a breaker bar to relieve tension from the tensioner arm (G) to install the engine debris management belt (H).



H130219—UN—07MAY20

A—Cap Screw (2 used)
B—Unloading Auger Drive Belt (2 used)
C—Belt Trap
D—Nut (2 used)

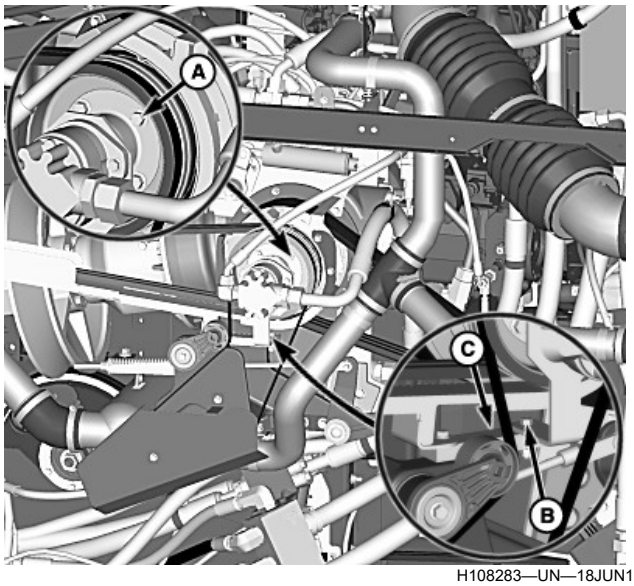
NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.

j. Adjust the cap screws (A) to center the unloading auger drive belts (B) between the belt trap (C).

k. Once the unloading auger drive belts are centered between the belt trap, tighten nut (D).

OUO6075,0004E35-19-08JUL20

Chopper Jackshaft Belt—Replacing (Style B)



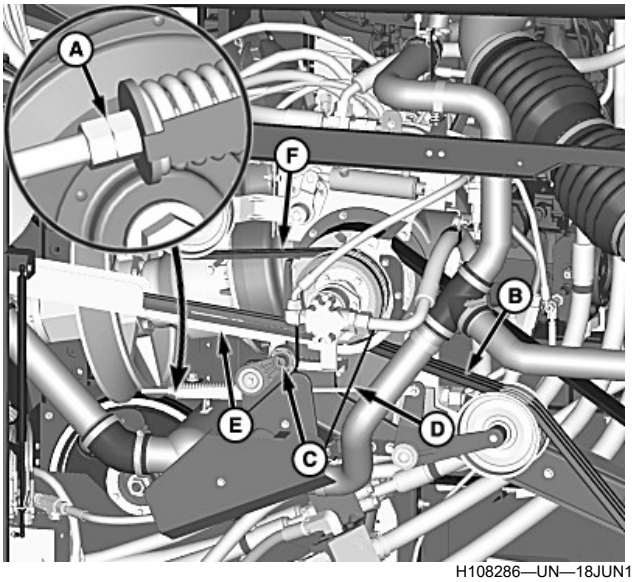
H108283—UN—18JUN13

A—Cap Screw (4 used)
B—Hardware

C—Isolator Strap

CAUTION: Shut OFF engine, set park brake, and remove key.

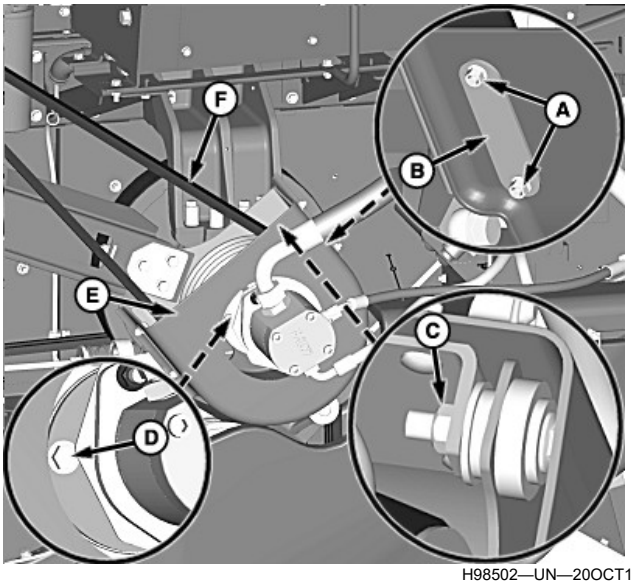
1. Remove the cap screws (A) and the hardware (B) from the isolator strap (C).
2. Remove the pump assembly and support the pump assembly out of the way.



H108286—UN—18JUN13

A—Nuts
B—Chopper Jackshaft Belt
C—Tensioner Arm
D—Engine Debris Management Belt (If Equipped)
E—Belt Trap (2 used)
F—Unloading Auger Drive Belt (2 used)

3. Loosen the nuts (A) to relieve belt tension from the chopper jackshaft belt (B).
4. Use a breaker bar to relieve tension from the tensioner arm (C) to remove the engine debris management belt (D).
5. Remove the cap screws from the belt traps (E).
6. Remove and retain the unloading auger drive belts (F).



H98502—UN—20OCT10

A—Hardware
B—Strap
C—Nut
D—Cap Screw (2 used)
E—Shield
F—Chopper Jackshaft Belt

7. **With Hydraulic Pump**
   a. Remove the hardware (A) and the strap (B) on both sides of the shield.
   b. Remove the nut (C) from the pump assembly bracket.

NOTE: Verify that the washers and isolator remain in place when removing. Install the previously removed nut to retain the washers and isolators in place when the assembly is removed.

   c. Remove the cap screws (D) from the pump assembly.
   d. Remove the shield (E) and the pump assembly bracket.
   e. Support the shield and the pump assembly bracket out of the way.
   f. Remove the jackshaft belt (F) from the upper and lower sheaves.
   g. Install the replacement belt in reverse order.

NOTE: Align the shaft key on the pump assembly with the keyway in the sheave. Verify that the washers and isolators remain in place on the pump assembly bracket.

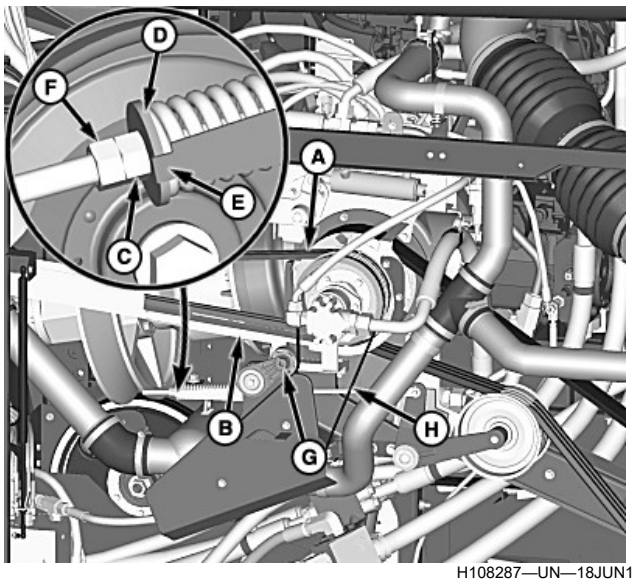
   h. Align the pump assembly with the sheave and tighten the cap screws to specification.

Specification

Cap Screws—Torque	80 N·m (59 lb·ft)

i. Install the shield and the pump assembly bracket and retain with the nut.

j. Install the strap on both sides of the shield and retain with the hardware.



H108287—UN—18JUN13

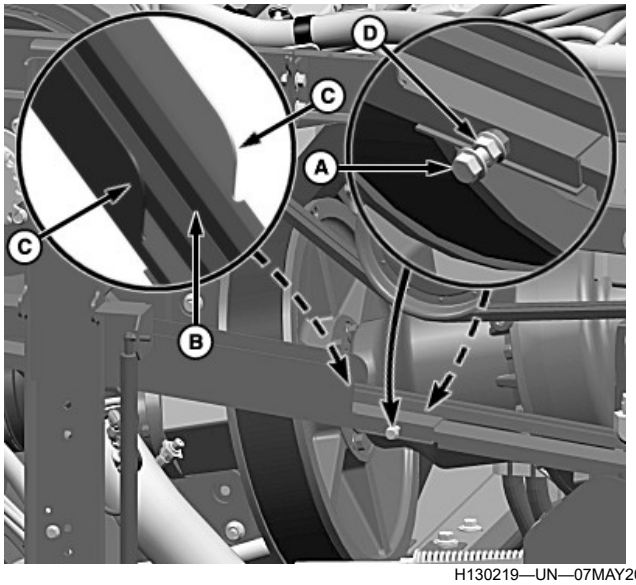
A—Unloading Auger Drive Belt (2 used)
B—Belt Trap (2 used)
C—Nut
D—Washer
E—Gauge
F—Lock Nut
G—Tensioner Arm
H—Engine Debris Management Belt (If Equipped)

k. Install the unloading auger drive belts (A).

l. Install the belt traps (B) and retain with the cap screws.

m. Tighten the nut (C) until the washer (D) is positioned between the end of the gauge (E) and the bottom of the step. Tighten the lock nut (F).

n. Use a breaker bar to relieve tension from the tensioner arm (G) to install the engine debris management belt (H).



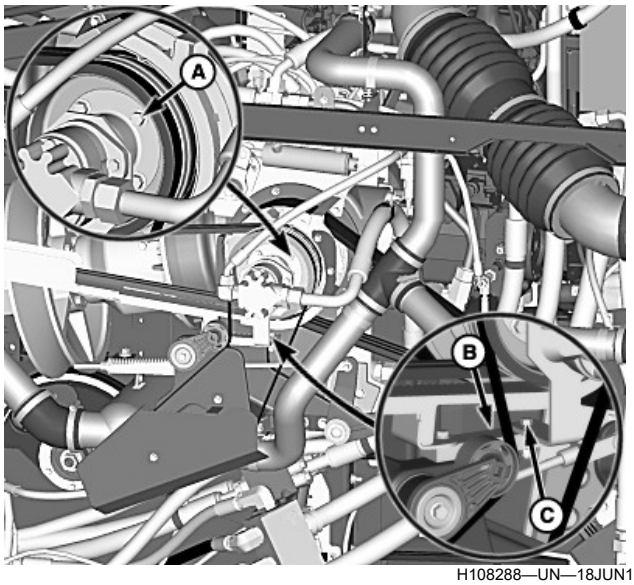
H130219—UN—07MAY20

A—Cap Screw (2 used)
B—Unloading Auger Drive Belt (2 used)
C—Belt Trap
D—Nut (2 used)

NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.

o. Adjust the cap screws (A) to center the unloading auger drive belts (B) between the belt trap (C).

p. Once the unloading auger drive belts are centered between the belt trap, tighten nut (D).



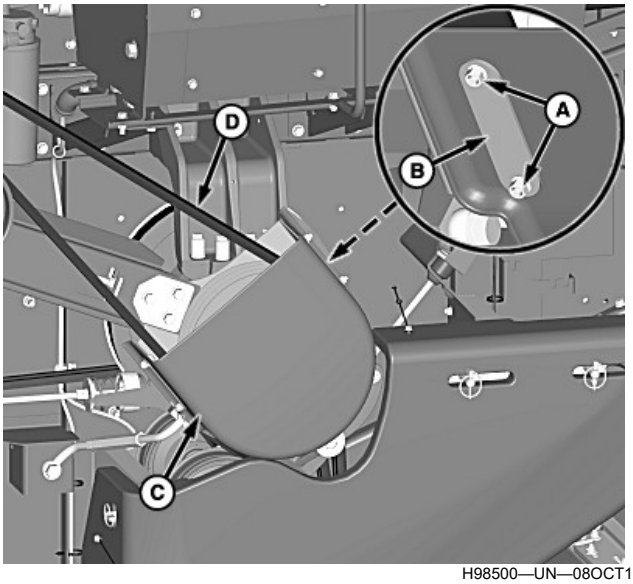
H108288—UN—18JUN13

A—Cap Screw (4 used)
B—Isolator Strap
C—Hardware

q. Align the pump assembly with the sheave and tighten the cap screws (A) to specification.

Specification	
Cap Screws—Torque.	80 N·m (59 lb·ft)

r. Install the isolator strap (B) and retain with the hardware (C).



H98500—UN—08OCT10

A—Hardware
B—Strap
C—Shield
D—Chopper Jackshaft Belt

Without Hydraulic Pump

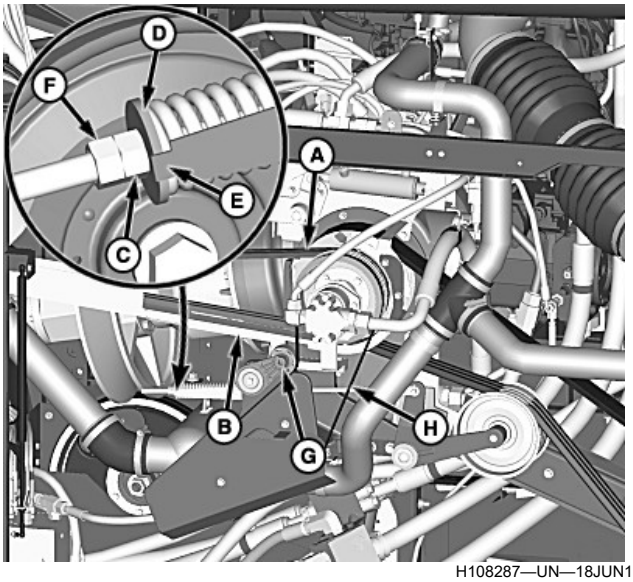
a. Remove the hardware (A) and the strap (B) on both sides of the shield (C).

b. Remove the jackshaft belt (D) from the upper and lower sheaves.

c. Install the replacement belt in reverse order.

d. Align the shield with the bracket holes.

e. Install the strap on both sides of the shield and retain with the hardware.



H108287—UN—18JUN13

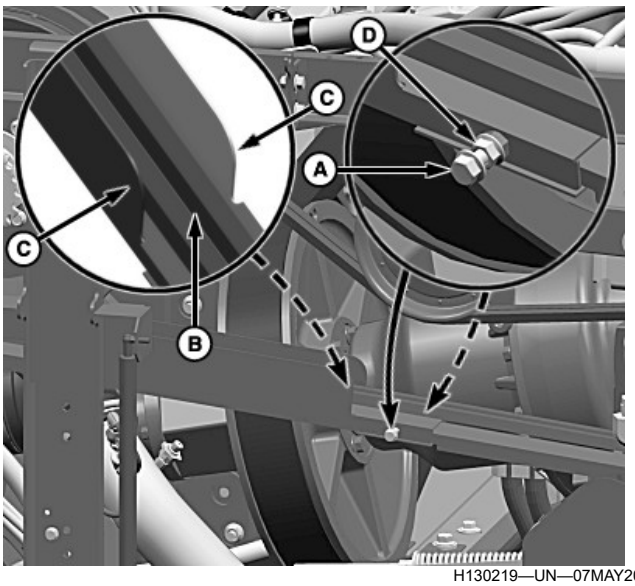
A—Unloading Auger Drive Belt (2 used)
B—Belt Trap (2 used)
C—Nut
D—Washer
E—Gauge
F—Lock Nut
G—Tensioner Arm
H—Engine Debris Management Belt (If Equipped)

f. Install the unloading auger drive belts (A).

g. Install the belt traps (B) and retain with the cap screws.

h. Tighten the nut (C) until the washer (D) is positioned between the end of the gauge (E) and the bottom of the step. Tighten the lock nut (F).

i. Use a breaker bar to relieve tension from the tensioner arm (G) to install the engine debris management belt (H).



H130219—UN—07MAY20

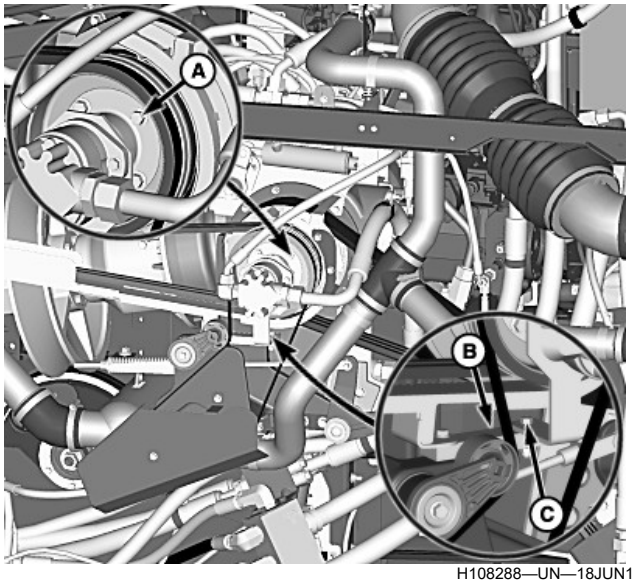
A—Cap Screw (2 used)
B—Unloading Auger Drive Belt (2 used)

C—Belt Trap
D—Nut (2 used)

NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.

j. Adjust the cap screws (A) to center the unloading auger drive belts (B) between the belt trap (C).

k. Once the unloading auger drive belts are centered between the belt trap, tighten nut (D).



H108288—UN—18JUN13

A—Cap Screw (4 used)
B—Isolator Strap
C—Hardware

l. Align the pump assembly with the sheave and tighten the cap screws (A) to specification.

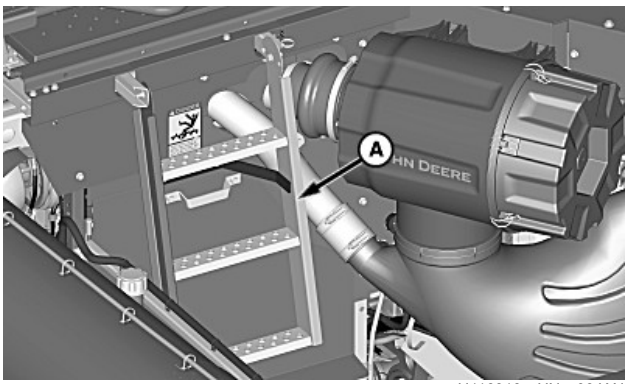
Specification

Cap Screws—Torque. . . . . 80 N·m (59 lb·ft)

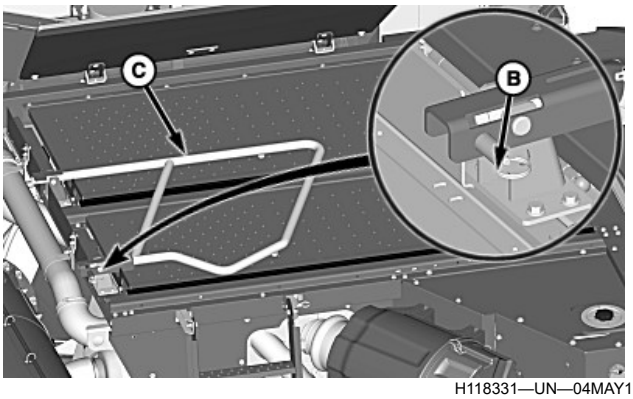
m. Install the isolator strap (B) and retain with the hardware (C).

OUO6075,0004E36-19-08JUL20

Grain Tank/Engine Ladder



H116816—UN—06JAN16



H118331—UN—04MAY16

A—Ladder
B—Lockout Pin
C—Handrail

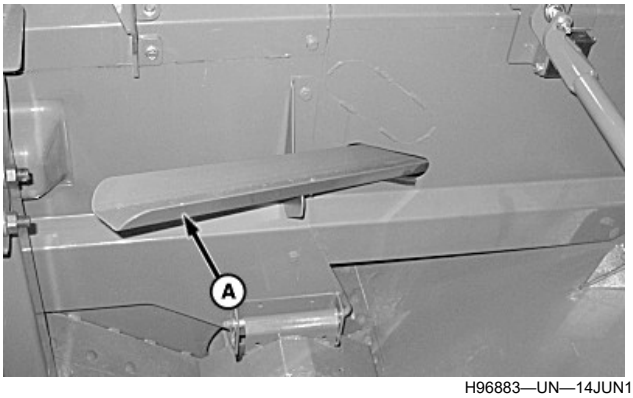
CAUTION: Shut OFF engine, set park brake and remove key.

Use ladder (A) to access grain tank.

Pull lockout pin (B) and rotate handrail (C) up until handrail locks into place.

OUO6075,00041C2-19-04MAY16

Grain Tank Sample Trough



H96883—UN—14JUN10

H96884—UN—14JUN10

A—Sample Trough
B—Door

Grain tank sample trough (A) allows operator to take a sample of the harvested crop from the loading auger without entering the grain tank.

With machine full of the harvested crop, move multi-function lever to neutral position and set the park brake.

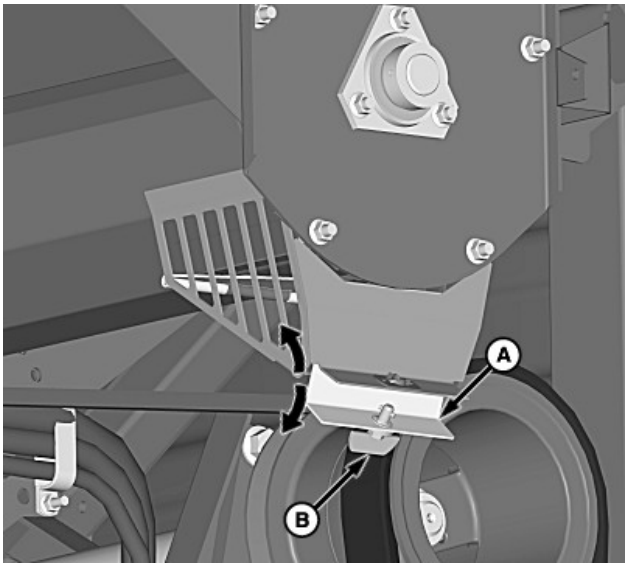
Disengage header, but leave separator engaged.

CAUTION: Do not have a second person check for a grain tank sample.

Open door (B). Lower end of the grain tank trough spills off a sample of the harvested crop.

OUO6075,0004361-19-10JAN17

Grain Tank Cleanout Doors



H125361—UN—16NOV18

A—Cleanout Door (2 used)
B—Latch (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

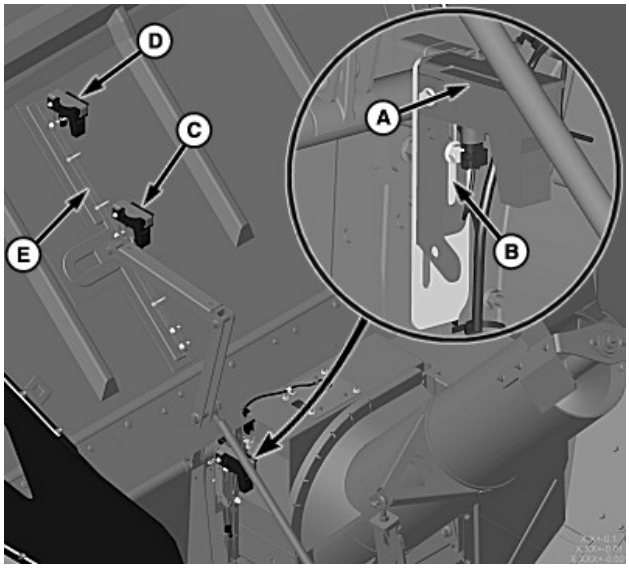
The cleanout doors (A) are on the right-hand end of both grain tank cross augers.

These cleanout doors must be opened during storage or for cleaning the grain tank.

Release latch (B) and lower the cleanout door away from both the cross auger troughs.

OUO6075,0004A4A-19-16NOV18

Grain Tank Fill Sensors—Adjusting



H123556—UN—21FEB18

A—3/4 Full Sensor
B—Slot
C—3/4 Full Sensor (Optional Location)
D—4/4 Full Sensor
E—Holes

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Header drive must be engaged for the buzzer to sound.

Grain Tank 3/4 Full Sensor:

3/4 full sensor (A) is on the front side of the clean grain loading auger or on the right-hand grain tank cover. If operating in low flow crop conditions, grain tank sensor (C) can be moved to bottom hole on right-hand grain tank cover.

Adjust sensor by moving it higher or lower in slot (B) or holes (E) to adjust switch "trip" point. The higher the sensor is positioned, the fuller the grain tank is when the buzzer sounds.

Grain tank 3/4 full icon appears on display when grain reaches the sensor.

When grain tank is 3/4 full, beacon lights illuminate to provide a signal to the grain cart operator that grain tank is nearly full.

Grain Tank 4/4 Full Sensor:

Grain tank 4/4 full sensor (D) is on the right-hand grain tank extension or grain tank cover.

Grain tank 4/4 full icon appears on display when grain reaches the sensor.

Adjust sensor by moving it higher or lower in holes (E) to adjust switch "trip" point. The higher the sensor is positioned, the fuller the grain tank is when the buzzer sounds.

OUO6075,00048B8-19-21FEB18

Grain Tank Covers (If Equipped)—Operating

H96897—UN—15JUN10

H115016—UN—22MAR16

Folding Button

CAUTION: Grain tank covers must be closed and antenna retained with hook on cab roof before transporting machine on roadway. Avoid contact with low hanging power lines and tree limbs.

IMPORTANT: Grain tank must be empty before folding grain tank covers.

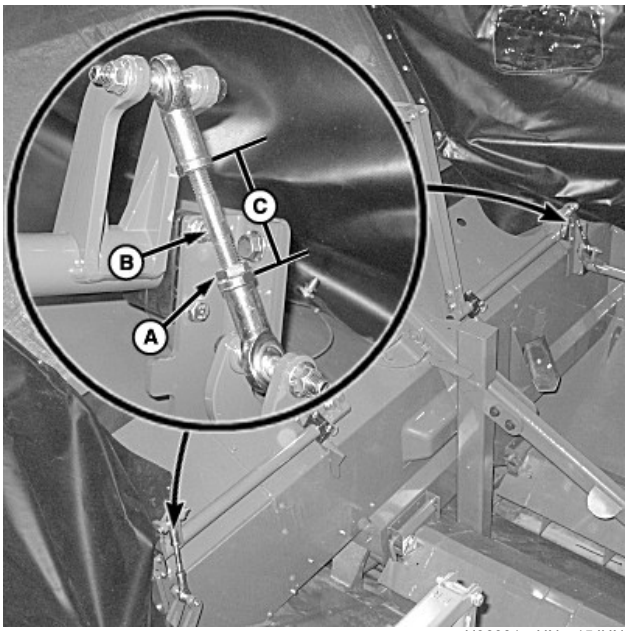
NOTE: Grain tank covers must be opened all the way in order to engage separator.

Clean grain loading auger rises when grain tank covers are opened. Auger swings down when covers are closed.

Press folding button on navigation bar. See Folding Application Help or Operator's Station Help for further information on raising or lowering grain tank covers.

OUO6075,0004373-19-25JAN17

Grain Tank Covers (If Equipped)—Adjusting



H96901—UN—15JUN10

A—Nut
B—Bolt
C—Nominal Distance, 64 mm (2-1/2 in.)

NOTE: Only adjust turnbuckles on left-hand side of machine. Turnbuckles on right-hand side of machine are not adjustable.

Raise grain tank covers fully.

Loosen nut (A) and adjust bolt (B) until a nominal distance (C) is achieved between turnbuckle ends as shown.

NOTE: Increasing turnbuckle distance increases clearance between left cover and front/rear covers.

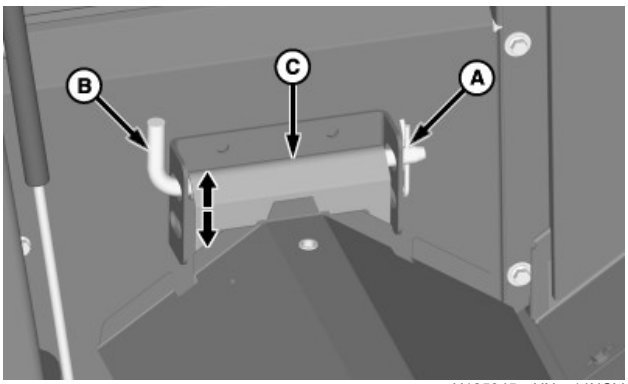
Decreasing turnbuckle distance decreases clearance between left cover and front/rear covers.

Tighten nut when distance is achieved.

Repeat as needed on remaining turnbuckle.

OUO6075,00007F0-19-21OCT10

Grain Tank Cross Auger Covers



H125345—UN—14NOV18

A—Spring Pin (4 used)
B—Pin (4 used)
C—Auger Cover (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

IMPORTANT: If the auger covers are adjusted too far, auger drive shear bolt can break repeatedly, or damage can occur to the augers or the grain tank.

Auger covers are used to adjust the unloading rate. To adjust auger covers:

1. Remove spring pin (A) and pin (B) retaining the ends of the auger cover (C) to the grain tank.
2. Hold cover in the desired position and install the previously removed pin and spring pin.

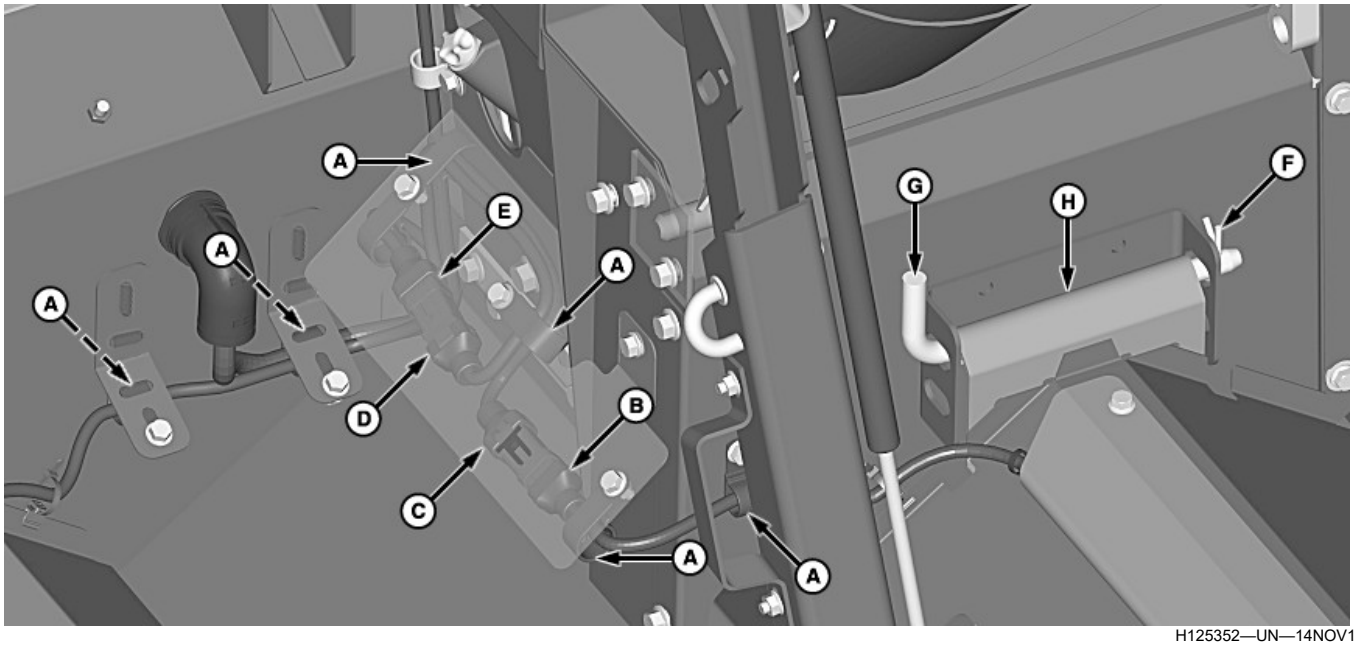
For optimal operation, auger covers must be retained in a level position (if equipped with ActiveYield™) over the entire length of the cross auger.

NOTE: If needed, adjust the cross auger covers up or down to increase or decrease flow rate depending on the crop type and moisture conditions. Adjusting the cross auger covers also affects the unload system power consumption.

OUO6075,0004A4B-19-30MAY19

ActiveYield is a trademark of Deere & Company

ActiveYield™ (If Equipped) Cross Auger Covers—Removing



H125352—UN—14NOV18

A—Clamps
B—Rear Cross Auger Connector (female connector)
C—Grain Tank Connector (male connector)
D—Front Cross Auger Connector (male connector)
E—Grain Tank Connector (female connector)
F—Spring Pin (4 used)
G—Pin (4 used)
H—Auger Cover (2 used)

CAUTION: Shut OFF engine, set park brake, and remove key.

IMPORTANT: Use extra care when removing and installing auger covers. Do not stand on, drop, or allow objects to fall onto sensors.

NOTE: In certain crop conditions and speciality crops, cross auger covers must be removed.

ActiveYield™ system MUST be disabled when cross auger covers are removed. See Calibrations Application Help or Operator's Station Help for further information.

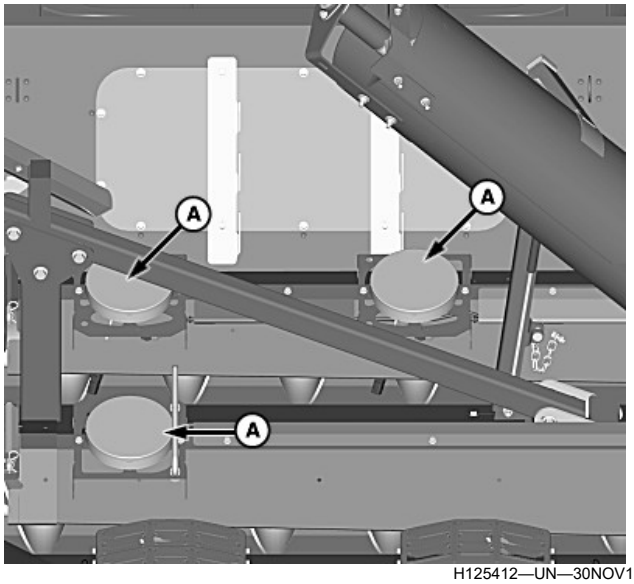
1. Remove wiring harnesses from clamps (A) as needed.
2. Disconnect rear cross auger connector (B) from the grain tank connector (C).
3. Disconnect front cross auger connector (D) from the grain tank connector (E).
4. Connect grain tank connectors (C and E) together and retain with clamps as needed.

IMPORTANT: Connect harnesses together to enable yield monitoring even if ActiveYield™ is disabled. To prevent contact with cross augers, retain wiring harness with clamps.

5. Remove spring pin (F) and pin (G) from both ends of auger cover (H).
6. Remove auger cover from the machine and repeat on remaining auger cover.

OUO6075,0004BC2-19-31MAY19

ActiveYield™ (If Equipped) Sensor Locations



H125412—UN—30NOV18

A—Sensors

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IMPORTANT: Do not stand on, drop or allow objects to fall onto sensors as damage could occur.

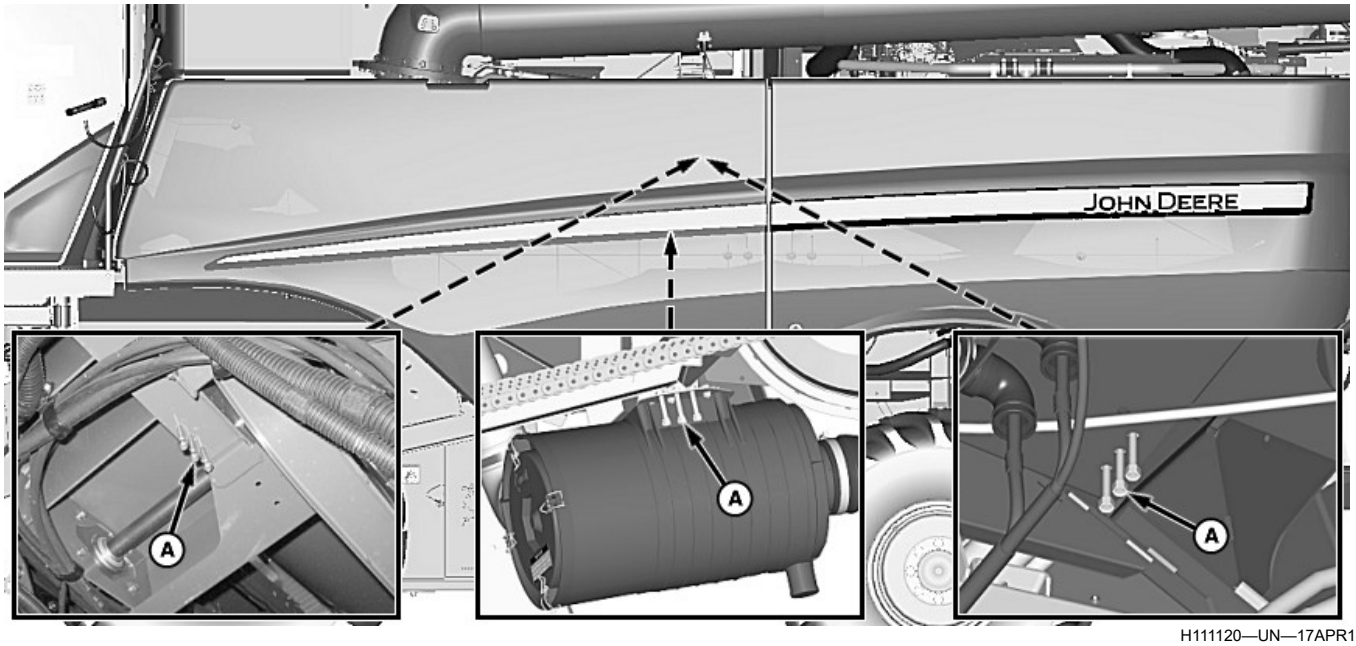
NOTE: Two sensors are on the front cross auger cover and one sensor is on the rear cross auger cover.

ActiveYield™ uses sensors (A) located in the grain tank on the cross auger covers to measure mass of harvested grain.

OUO6075,0004A55-19-30NOV18

ActiveYield is a trademark of Deere & Company

Shear Bolt Location



H111120—UN—17APR14

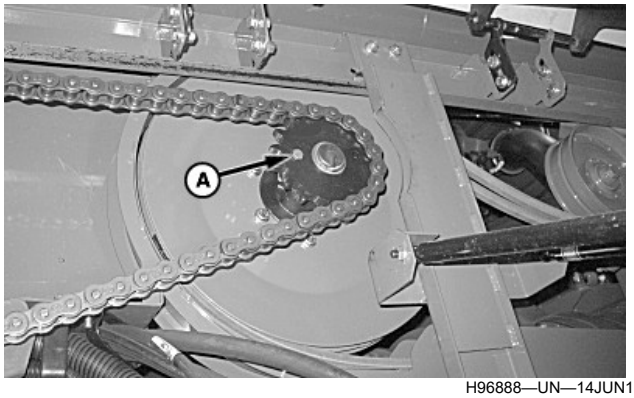
A—Shear Bolt (3 Used)

NOTE: Three extra shear bolts are provided. Locations vary depending on engine size, engine emission levels, and grain tank unload rate.

If unloading auger drive shear bolt breaks, remove and replace with extra shear bolt (A) from location shown.

OUO6075,00017C7-19-17APR14

Unloading Auger Drive Shear Bolt



H96888—UN—14JUN10

A—Shear Bolt

CAUTION: Shut OFF engine, set park brake and remove key.

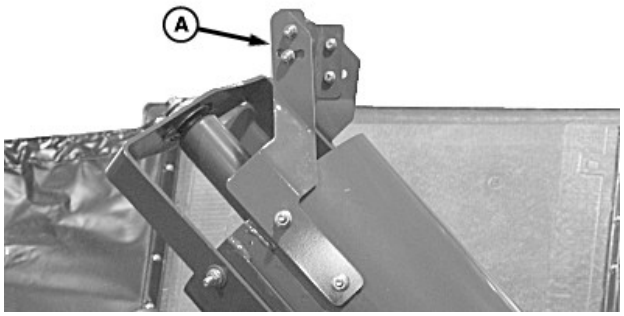
Use only John Deere supplied shear bolt (A) (cap screw through hub), see your John Deere dealer for replacement shear bolts.

Extra shear bolts are provided on machine. Refer to Shear Bolt Location in this section for further information.

IMPORTANT: Do not install a tire inner tube or a sack to end of unloading auger. Any restriction at end of auger can cause damage to unloading auger system and could cause shear bolt failure.

OUO6075,00017C6-19-16APR14

Grain Tank Loading Auger Deflector



H96890—UN—14JUN10

A—Deflector

CAUTION: Shut OFF engine, set park brake and remove key.

Position deflector (A) as needed.

Counterclockwise rotation:

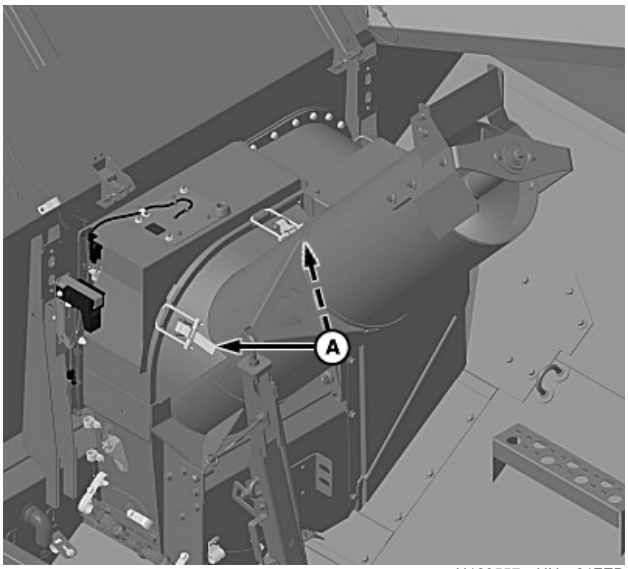
- Windy conditions when harvesting crops like grass seed or rape.
- Corn—Grain tank fills to the left and to the rear.

Clockwise rotation:

- Grain—Grain tank fills to the right and to the front.

OUO6075,0004362-19-07OCT16

Grain Tank Loading Auger (Grain Tank Extensions)—Folding



H123557—UN—21FEB18

A—Clamps

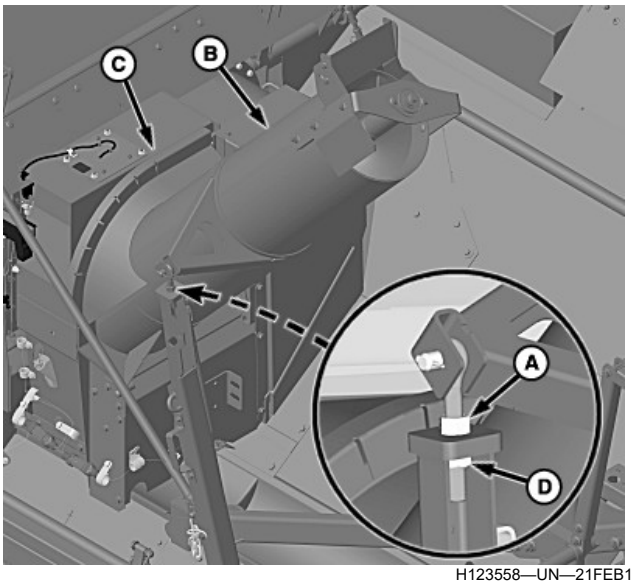
CAUTION: Grain tank loading auger is heavy. Use extra care when raising or lowering auger.

Overall height of the machine is reduced by 0.5 m (1-1/2 ft) when grain tank extensions are lowered.

Hold the top of the auger and release clamps (A). Lower auger onto cross auger cover.

OUO6075,00048B9-19-21FEB18

Grain Tank Loading Auger (Grain Tank Covers)—Adjusting



H123558—UN—21FEB18

A—Nut
B—Grain Tank Loading Auger
C—Transition Housing
D—Nut

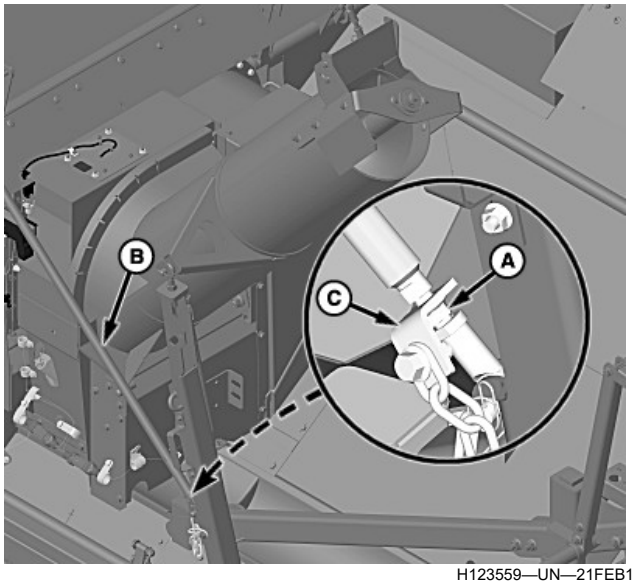
CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: Verify that the grain tank covers are fully raised.

Adjust nut (A) until grain tank loading auger (B) contacts transition housing (C).

Adjust nut (A) an extra 1/2 turn and tighten the nut (D) to lock the eyebolt in place.

NOTE: This keeps the loading auger housing tight against the transition housing making sure the loading auger is fully engaged to the driver on the gearbox.



H123559—UN—21FEB18

A—Nut
B—Turnbuckle
C—Bracket

Loosen nut (A) and adjust the turnbuckle (B) until a slight amount of resistance is felt on the turnbuckle.

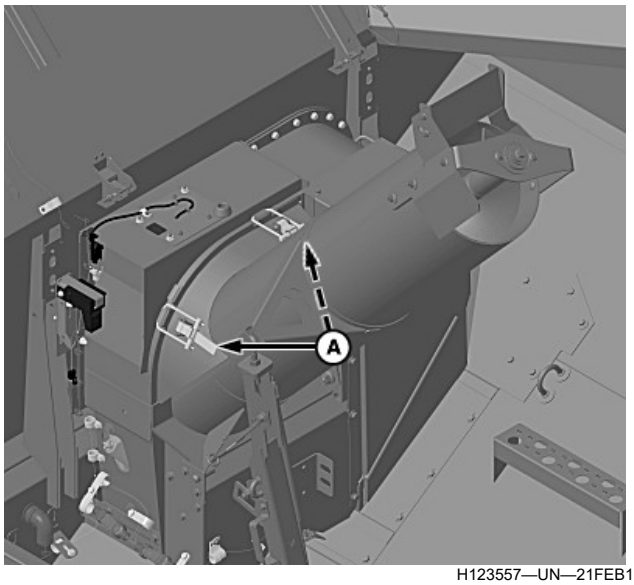
NOTE: Lengthen or shorten the turnbuckle to increase or decrease the gap between the loading auger housing and the transition housing.

The pin at the end of the turnbuckle should rotate freely when properly adjusted.

Verify that bracket (C) faces towards the front of the machine and tighten nut (A) to lock the turnbuckle (B) in place.

OUO6075,00048BA-19-22FEB18

Mass Flow Sensor Plate (Grain Tank Extensions)—Cleaning



H123557—UN—21FEB18

A—Clamps

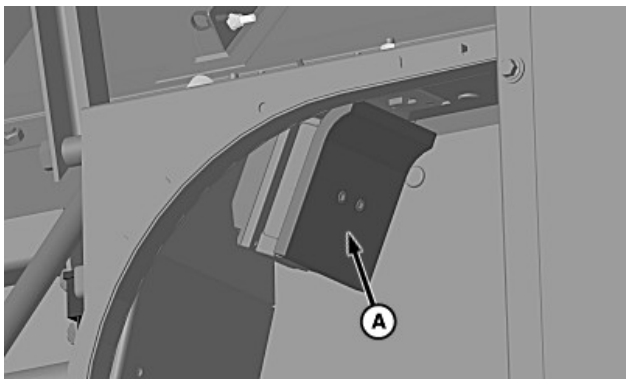
CAUTION: Shut OFF engine, set park brake and remove key.

Grain tank loading auger is heavy. Use extra care when raising or lowering auger.

Remove the grain tank sample trough (if equipped).

Hold the top of the grain tank loading auger and release clamps (A).

Lower grain tank loading auger.



H123560—UN—21FEB18

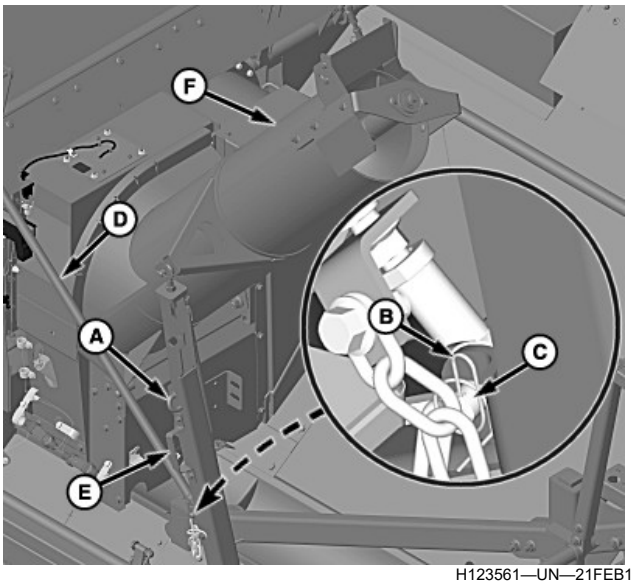
A—Mass Flow Sensor Plate

Clean the mass flow sensor plate (A).

Raise the grain tank loading auger fully against the transition housing and retain with clamps.

OUO6075,00048BB-19-22FEB18

Mass Flow Sensor Plate (Grain Tank Covers)—Cleaning



H123561—UN—21FEB18

A—Pin
B—Quick-Lock Pin
C—Pin
D—Turnbuckle
E—Handle
F—Grain Tank Loading Auger

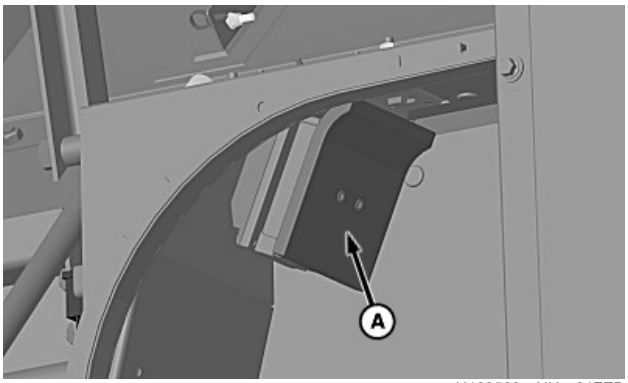
CAUTION: Shut OFF engine, set park brake and remove key.

DO NOT pull or remove pin (A) to lower grain tank loading auger. Removing pin could result in personal injury or machine damage.

Grain tank loading auger is heavy. Use extra care when raising or lowering auger.

Remove quick-lock pin (B) and pin (C) from turnbuckle (D).

Use the handle (E) to help in lowering the grain tank loading auger (F).



H123560—UN—21FEB18

A—Mass Flow Sensor Plate

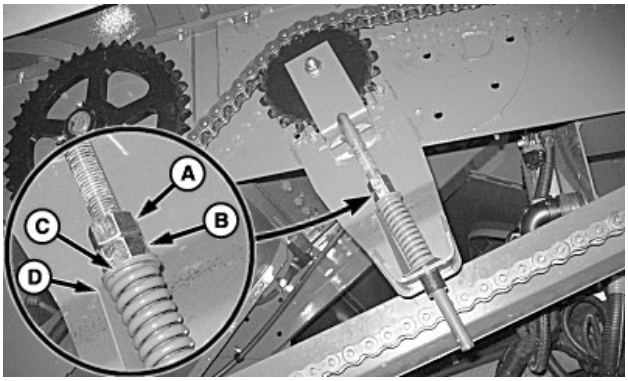
Clean the mass flow sensor plate (A).

Raise the grain tank loading auger fully against the transition housing.

Align the turnbuckle with the hole and retain with pin and quick-lock pin.

OUO6075,00048BC-19-23FEB18

Unloading Auger Drive Chain—Adjusting



H96891—UN—14JUN10

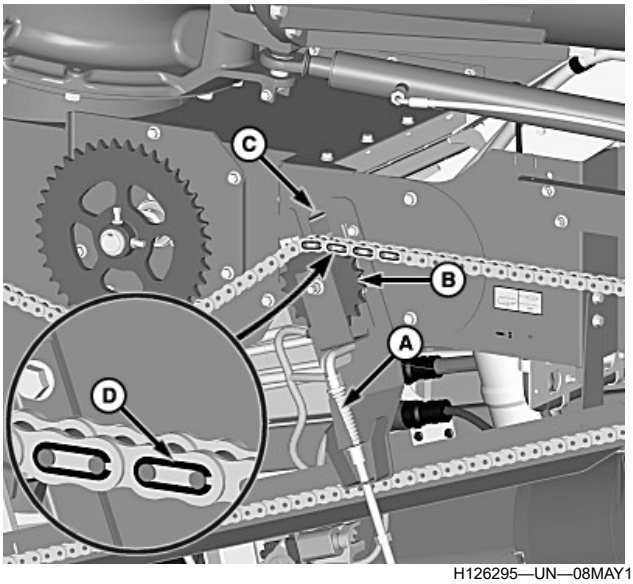
A—Nut
B—Nut
C—Washer
D—End of Gauge

CAUTION: Shut OFF engine, set park brake and remove key.

Loosen nut (A). Tighten nut (B) until the washer (C) aligns with end of gauge (D). Tighten lock nut.

OUO6075,0004364-19-07OCT16

Unloading Auger Drive Chain Links—Removing



H126295—UN—08MAY19

A—Spring Tensioner

B—Sprocket
C—End of Slot
D—Connector Link

It is normal for the drive chain to stretch over time. Extra connector links allow the drive chain to be used longer.

NOTE: When removing connector links, always check sprockets for wear.

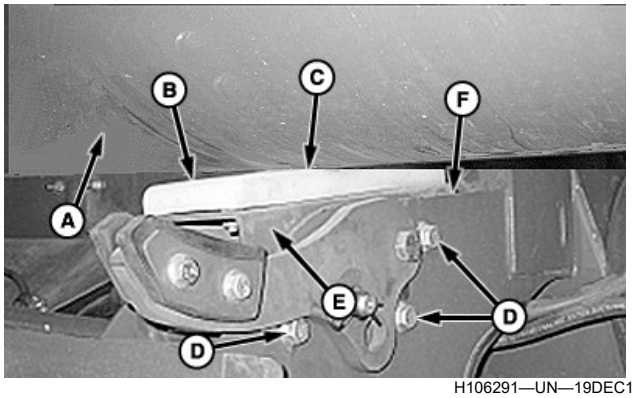
When the spring tensioner (A) can no longer be adjusted, or the sprocket (B) reaches the end of slot (C), remove connector link (D).

See Unloading Auger Drive Chain—Adjusting for further information.

When the final adjustment is used up, the chain is worn out and must be replaced.

OUO6075,0004B92-19-04JUN19

Unloading Auger Cradle Support—Adjusting



H106291—UN—19DEC12

A—Unloading Auger
B—Wear Plate
C—Location
D—Cap Screws
E—Cradle Support
F—Grain Tank Plate

CAUTION: Shut OFF engine, set park brake and remove key.

1. Swing unloading auger to storage or transport position.

NOTE: No gap should exist between the unloading auger (A) and the wear plate (B) at location (C) when adjusted properly.

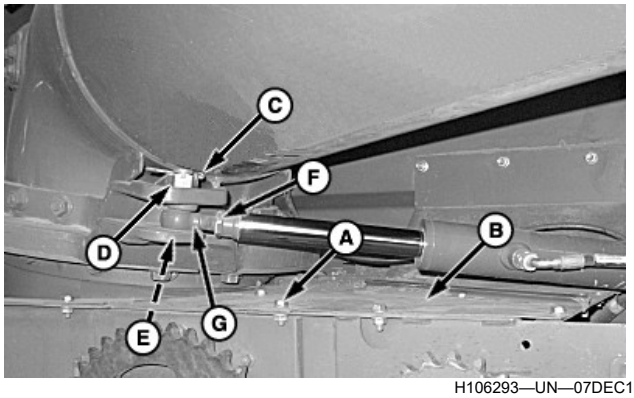
2. If a gap exists between the unloading auger and the wear plate, loosen cap screws (D) and adjust cradle support (E) vertically until wear plate contacts lower surface of unloading auger.

NOTE: Top surface of cradle support (E) MUST be parallel with top of the grain tank plate (F).

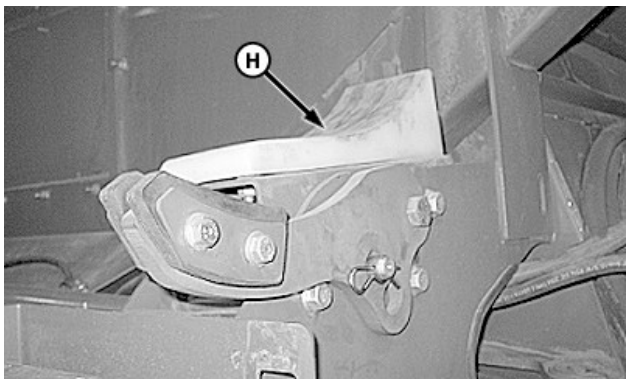
3. Tighten cap screws when cradle is adjusted.

OUO6075,0004367-19-07OCT16

Unloading Auger Position—Adjusting (Style A)



H106293—UN—07DEC12



H106322—UN—11DEC12

A—Cap Screw (8 used)
B—Cover
C—Cotter Pin
D—Nut and Washer
E—Pin
F—Nut
G—Eyebolt
H—Wear Plate

CAUTION: Shut OFF engine, set park brake and remove key.

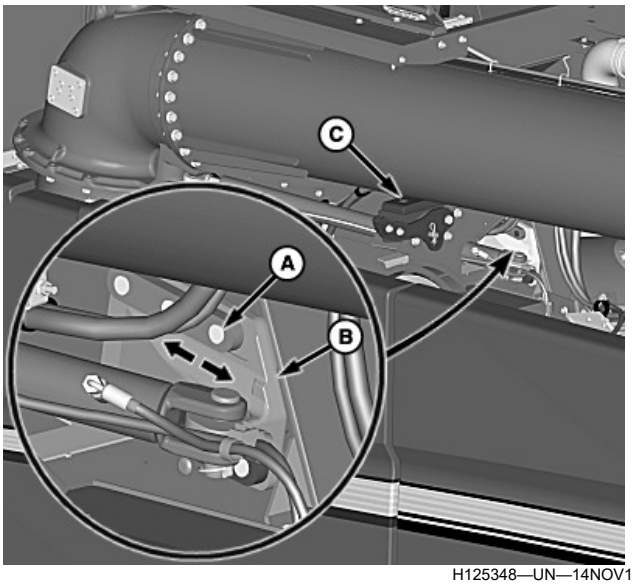
1. Remove cap screws (A) and cover (B).

NOTE: Unloading auger MUST contact wear plate when adjusted properly.

2. Remove cotter pin (C), nut and washer (D), and pin (E).
3. Loosen nut (F) and adjust eyebolt (G) until unloading auger lightly contacts wear plate (H).
4. Install previously removed hardware and cover after unloading auger is adjusted.

OUO6075,0004D3A-19-09JAN20

Unloading Auger Position—Adjusting (Style B)



H125348—UN—14NOV18

A—Cap Screw (6 used)
B—Cylinder Bracket
C—Cradle Support

CAUTION: Shut OFF engine, set park brake, and remove key.

NOTE: Cylinder must be fully retracted to set the correct position.

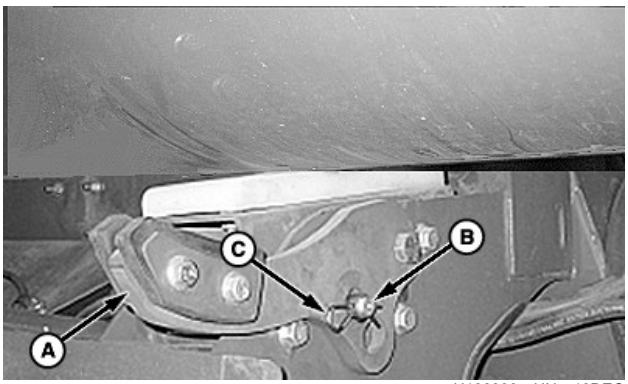
1. Loosen cap screws (A).
2. Adjust unloading auger inward or outward to move the cylinder bracket (B) forward or rearward until the unloading auger sets properly on the cradle support (C).
3. Tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 422 N·m (311 lb·ft)

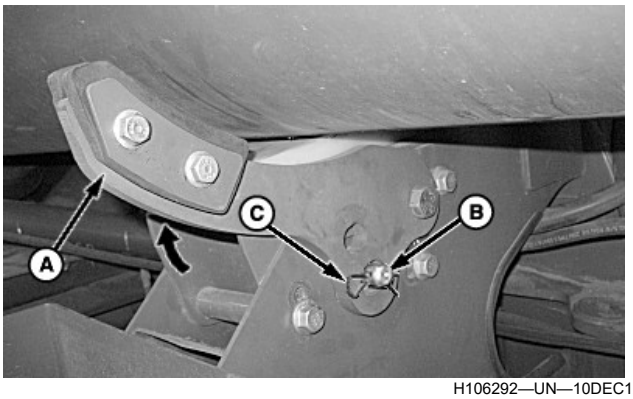
OUO6075,0004D3B-19-09JAN20

Unloading Auger Lock Arm Positions



H106300—UN—10DEC12

Field Position



H106292—UN—10DEC12

Storage Position/Transport Position

A—Lock Arm
B—Pin
C—Spring Pin

CAUTION: Shut OFF engine, set park brake and remove key.

Field Position

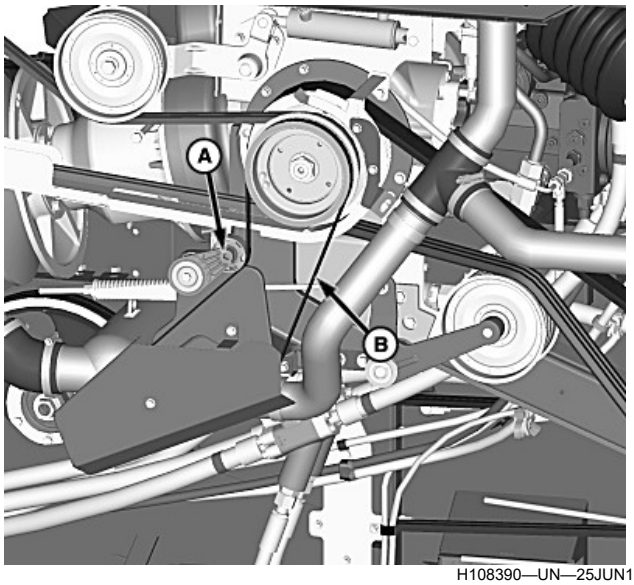
Lower lock arm (A) as shown and install pin (B) and retain with spring pin (C).

Storage/Transport Position

Raise lock arm (A) as shown and install pin (B) and retain with spring pin (C).

OUO6075,0004369-19-20DEC16

Unloading Auger Drive Belt—Replacing (Style A)



H108390—UN—25JUN13

A—Tensioner Arm
B—Engine Debris Management Belt (if equipped)

⚠ CAUTION: Shut OFF engine, set park brake, and remove key.

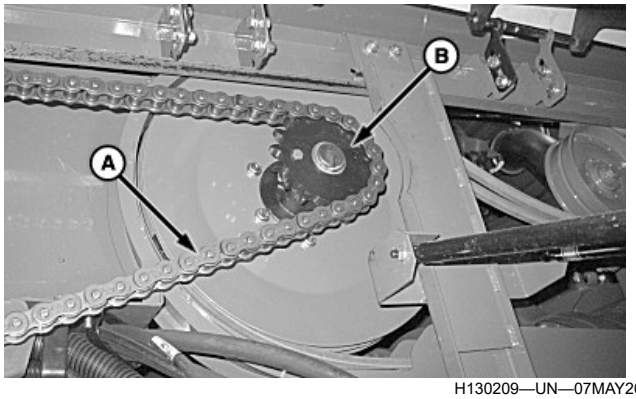
NOTE: Verify that the unloading auger hydraulic cylinder is disengaged and retracted.

1. Use a breaker bar to relieve tension from the tensioner arm (A), then remove the engine debris management belt (B).

H105391—UN—09MAY12

A—Tensioner

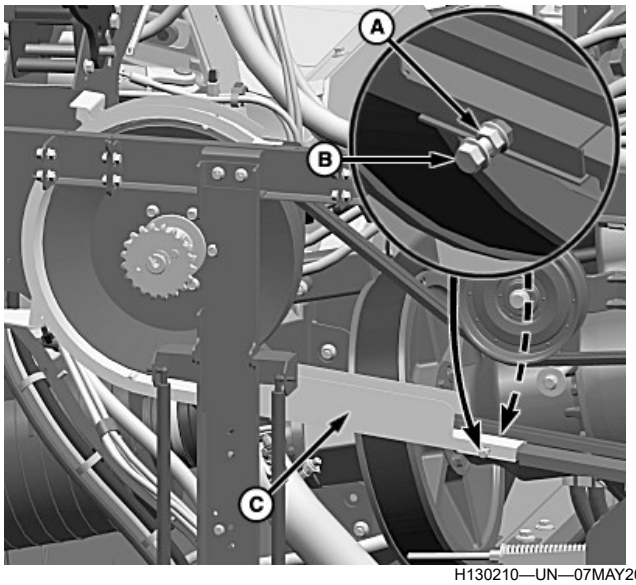
2. Loosen the tensioner (A) on the unloading auger drive chain.



H130209—UN—07MAY20

A—Unloading Auger Drive Chain
B—Sprocket

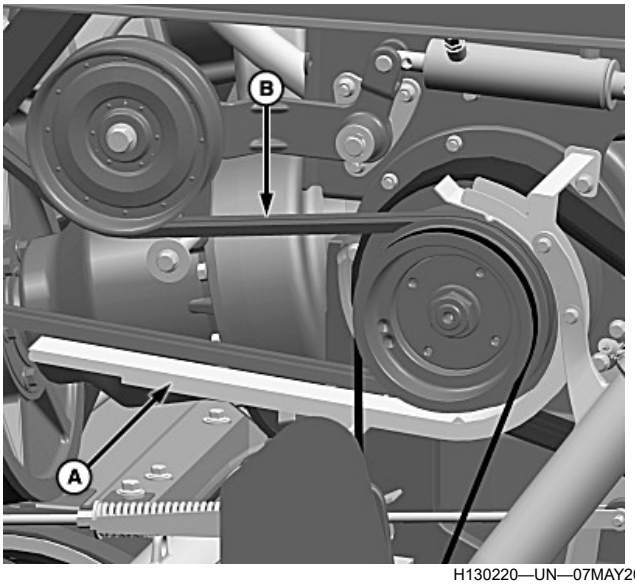
3. Remove the unloading auger drive chain (A) from the sprocket (B).



H130210—UN—07MAY20

A—Nut (2 used)
B—Cap Screw (2 used)
C—Belt Trap

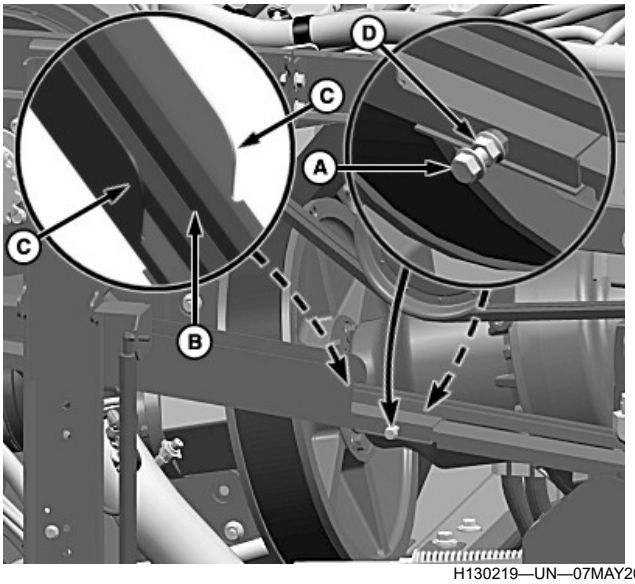
4. Loosen nut (A) and cap screw (B).
5. Remove the cap screws from the belt trap (C).
6. Remove the belt trap from the machine.



H130220—UN—07MAY20

A—Belt Trap
B—Unloading Auger Drive Belt (2 used)

7. Remove the cap screws from the belt trap (A).
8. Remove the belt trap from the machine.
9. Remove the unloading auger drive belts (B).
10. Install the replacement unloading auger drive belts and the previously removed belt traps.



H130219—UN—07MAY20

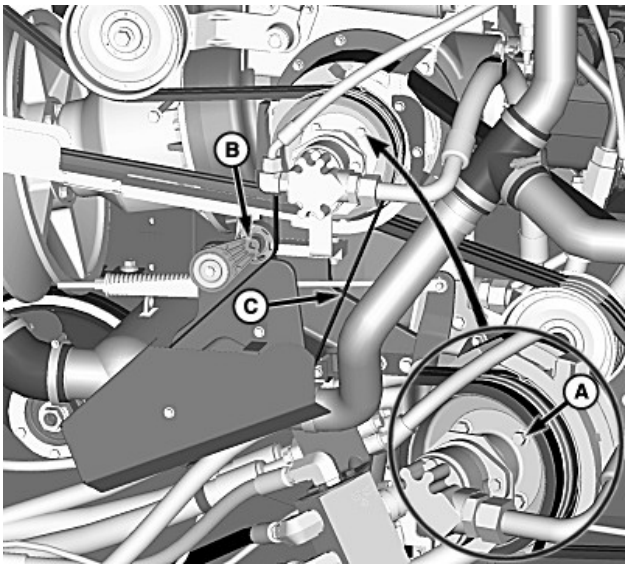
A—Cap Screw (2 used)
B—Unloading Auger Drive Belt (2 used)
C—Belt Trap
D—Nut (2 used)

NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.

11. Adjust the cap screws (A) to center the unloading auger drive belts (B) between the belt trap (C).
12. Once the unloading auger drive belts are centered between the belt trap, tighten nut (D).
13. Use a breaker bar to relieve tension from the tensioner arm, then install the engine debris management belt.
14. Install the shield and retain with the cap screws.
15. Install the drive chain and adjust the tensioner until the washer aligns with the end of the gauge.

OUO6075,0004E31-19-08JUL20

Unloading Auger Drive Belt—Replacing (Style B)



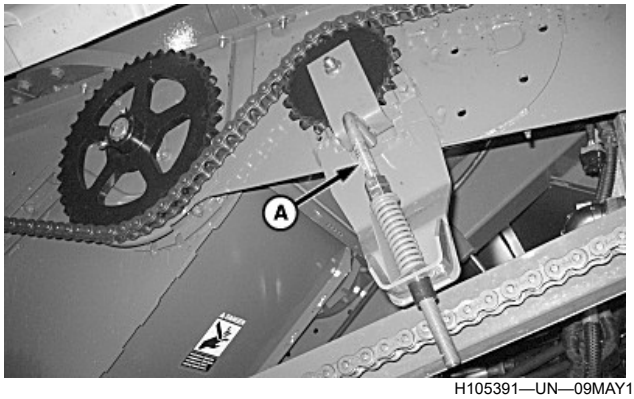
H108393—UN—25JUN13

A—Cap Screw
B—Tensioner Arm
C—Engine Debris Management Belt (if equipped)

CAUTION: Shut OFF engine, set park brake, and remove key.

NOTE: Verify that the unloading auger hydraulic cylinder is disengaged and retracted.

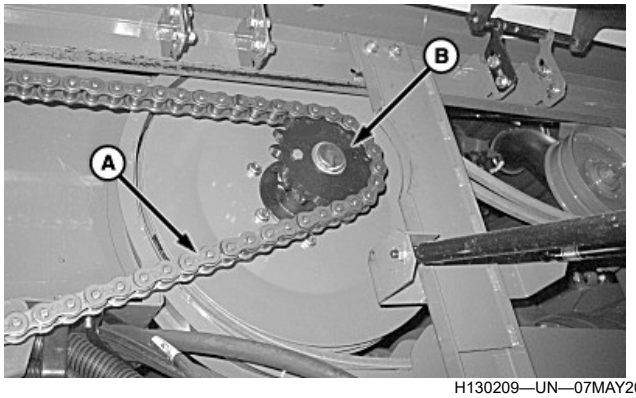
1. Remove the cap screws (A) and support the pump assembly out of the way.
2. Use a breaker bar to relieve tension from the tensioner arm (B), then remove the engine debris management belt (C).



H105391—UN—09MAY12

A—Tensioner

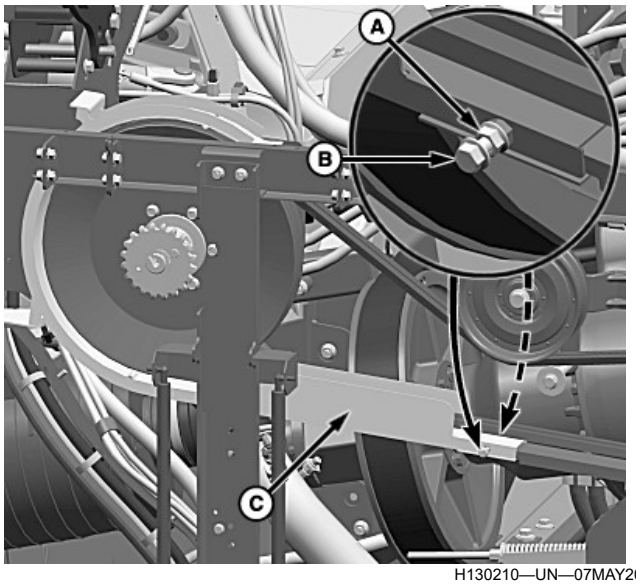
3. Loosen the tensioner (A) on the unloading auger drive chain.



H130209—UN—07MAY20

A—Unloading Auger Drive Chain
B—Sprocket

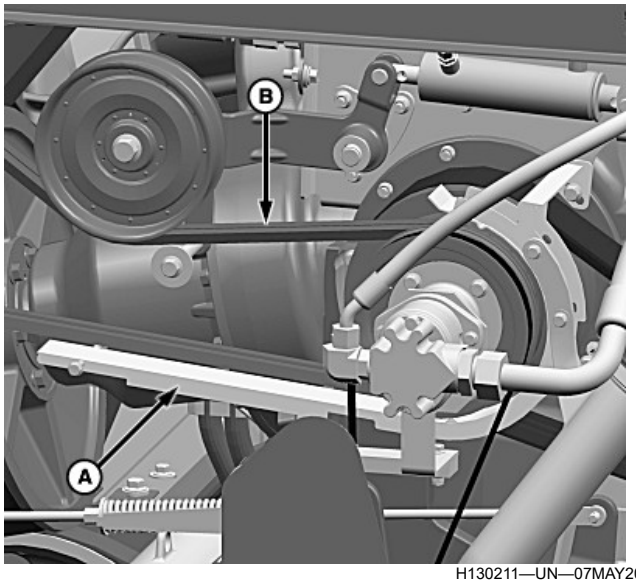
4. Remove the unloading auger drive chain (A) from the sprocket (B).



H130210—UN—07MAY20

A—Nut (2 used)
B—Cap Screw (2 used)
C—Belt Trap

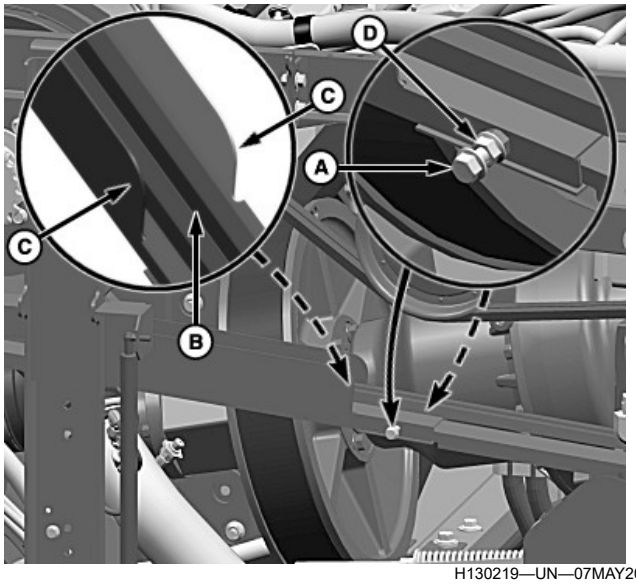
5. Loosen nut (A) and cap screw (B).
6. Remove the cap screws from the belt trap (C).
7. Remove the belt trap from the machine.



H130211—UN—07MAY20

A—Belt Trap
B—Unloading Auger Drive Belt (2 used)

8. Remove the cap screws from the belt trap (A).
9. Remove the belt trap from the machine.
10. Remove the unloading auger drive belts (B).
11. Install the replacement unloading auger drive belts and the previously removed belt traps.



H130219—UN—07MAY20

A—Cap Screw (2 used)
B—Unloading Auger Drive Belt (2 used)
C—Belt Trap
D—Nut (2 used)

NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.

12. Adjust the cap screws (A) to center the unloading auger drive belts (B) between the belt trap (C).
13. Once the unloading auger drive belts are centered between the belt trap, tighten nut (D).
14. Install the pump assembly and tighten the cap screws to specification.

Specification

Cap Screws—Torque	80 N·m (59 lb·ft)

15. Use a breaker bar to relieve tension from the tensioner arm, then install the engine debris management belt.
16. Install the shield and retain with the cap screws.
17. Install the drive chain and adjust the tensioner until the washer aligns with the end of the gauge.

OUO6075,0004E32-19-08JUL20

Welding Near Electronic Control Units

TS953—UN—15MAY90

IMPORTANT: Do not jump-start engines with arc welding equipment. Currents and voltages are too high and may cause permanent damage.

1. Disconnect the negative (-) battery cable(s).
2. Disconnect the positive (+) battery cable(s).
3. Connect the positive and negative cables together. Do not attach to vehicle frame.
4. Clear or move any wiring harness sections away from welding area.
5. Connect welder ground close to welding point and away from control units.
6. After welding, reverse Steps 1—5.

DX,WW,ECU02-19-14AUG09

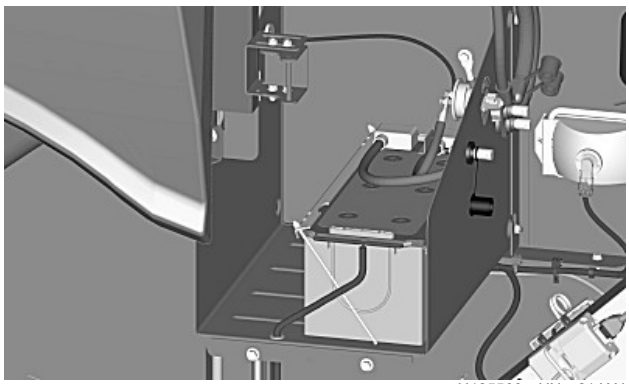
Keep Electronic Control Unit Connectors Clean

IMPORTANT: Do not open control unit and do not clean with a high-pressure spray. Moisture, dirt, and other contaminants may cause permanent damage.

1. Keep terminals clean and free of foreign debris. Moisture, dirt, and other contaminants may cause the terminals to erode over time and not make a good electrical connection.
2. If a connector is not in use, put on the proper dust cap or an appropriate seal to protect it from foreign debris and moisture.
3. Control units are not repairable.
4. Since control units are the components LEAST likely to fail, isolate failure before replacing by completing a diagnostic procedure. (See your John Deere dealer.)
5. The wiring harness terminals and connectors for electronic control units are repairable.

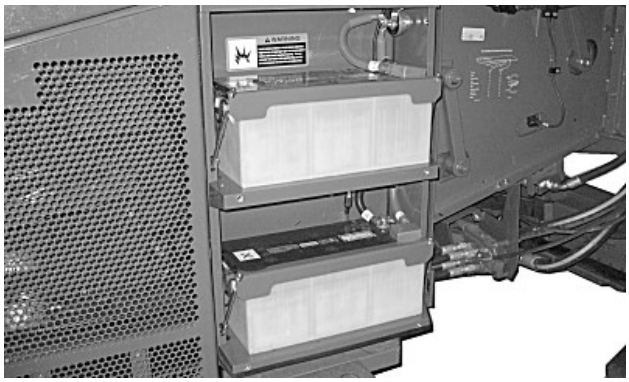
DX,WW,ECU04-19-11JUN09

Observe Electrical Precautions



H125566—UN—21JAN19

Style A



H96581—UN—30JUN10

Style B

CAUTION: Machine must be on a flat surface to check fluid levels. Battery fluid level should be visible at the top of each fill port covering the plates in each cell.

Keep all sparks and flames away from batteries as gas given off by electrolyte is explosive. To avoid sparks, connect ground cable last and disconnect it first. To avoid shocks and burns, turn battery disconnect switch OFF before servicing any part of the electrical system or when removing batteries.

OUO6075,0004A94-19-11JAN19

Basic Electrical Component Handling / Precautions for Vehicles Equipped with Computer Controlled Systems

- Never disconnect the batteries while the key switch is on and the engine is running.

  Why: This can cause electrical voltage spikes that can damage electronic components.

- Do not connect jumper cables while the key switch is on.

Why: This can cause electrical voltage spikes that can damage electronic components.

- Disconnect batteries prior to recharging (if possible)

  Why: Electrical loads in the machine can slow the recharging process. Battery chargers can cause electrical voltage spikes that can damage electronic components.

- Never jump start the machine with a voltage higher than the machine is designed to operate on

  Why: This can damage electronic components

- Do not connect or disconnect electrical connectors while the key switch is on or the machine is running.

  Why: This can cause computer system errors from interrupting a computer program while it is running and electrical voltage spikes that are produced can damage electronic components.

- Do not apply power or ground to any component as a test unless specifically instructed to do so.

  Why: Connecting the wrong voltage to the wrong point of an electronic system can cause electronic component failures.

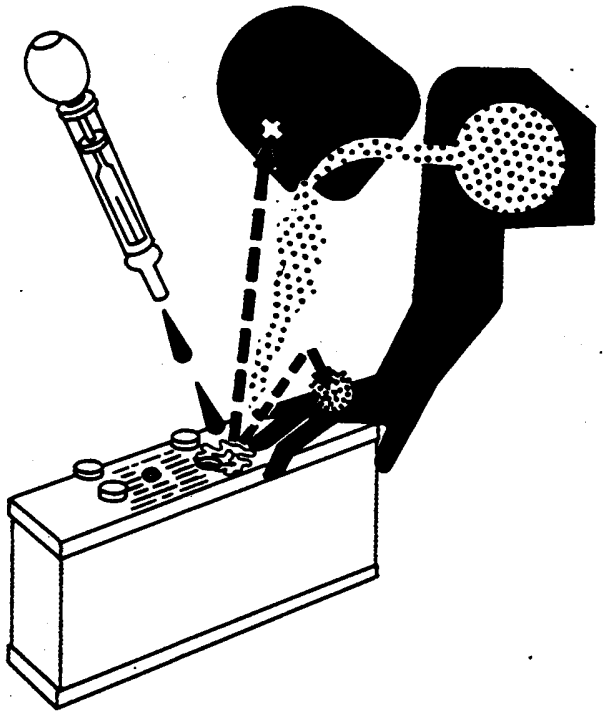
- When welding on the machine, make sure to connect ground lead to the parts being welded. For maximum protection disconnect all electronic controllers before welding.

  Why: The high currents associated with welding can damage wiring harnesses that are involved in the ground path. Welding can also cause electrical voltage spikes that can damage electronic components.

KC01776,00003CF-19-19MAR01

Handling Batteries Safely

TS204—UN—15APR13



TS203—UN—23AUG88

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace grounded clamp last.

Sulfuric acid in battery electrolyte is poisonous and strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid hazards by:

- Filling batteries in a well-ventilated area
- Wearing eye protection and rubber gloves

- Avoiding use of air pressure to clean batteries
- Avoiding breathing fumes when electrolyte is added
- Avoiding spilling or dripping electrolyte
- Using correct battery booster or charger procedure.

If acid is spilled on skin or in eyes:

1. Flush skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush eyes with water for 15—30 minutes. Get medical attention immediately.

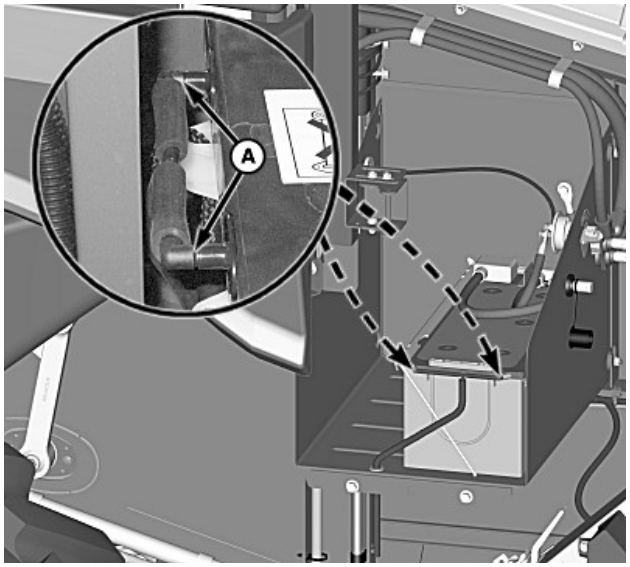
If acid is swallowed:

1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 qt.).
3. Get medical attention immediately.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

DX,WW,BATTERIES-19-02DEC10

Batteries—Safe Installation



H125567—UN—21JAN19

Style A

H96586—UN—30JUN10

Style B

A—Vent Tubes

CAUTION: Machine must be on a flat surface to check fluid levels. Battery fluid level should be visible at the top of each fill port covering the plates in each cell.

Avoid serious injury or death from explosions. High levels of hydrogen gas can accumulate if the battery box is not vented properly. Always reinstall the vent tubes (A) after performing service or maintenance on the batteries or the battery box. Verify that the ventilation hoses are not bent or kinked.

Replacement batteries must have a ventilation fitting suited for ventilation hose attachment. See your John Deere dealer for replacement batteries equipped with ventilation fittings.

If ventilation tubes are not attached to the battery, then the battery lid must remain off whenever the machine engine is running or whenever the batteries are being charged with an external charger.

OUO6075,0004A95-19-11JAN19

Battery Cables—Connecting

CAUTION: BATTERIES ARE NEGATIVE GROUNDED ONLY. Always connect battery ground strap to negative (-) posts of battery. Connect starter cable to positive (+) post of battery. Reversed polarity in battery or alternator connections results in permanent damage to electrical system. Connect ground strap to negative (-) terminal last.

IMPORTANT: Batteries must have same terminal locations.

When connecting batteries:

Turn off all switches and accessories. Clean battery posts and terminals.

QUICKLY TAP ground strap to negative post. Arcing must not occur. If arcing occurs, DO NOT MAKE CONNECTION. Check to see if battery position is reversed.

If arcing still occurs, check again that all switches and accessories are off. Then check for shorts, broken wires and loose or corroded connections.

Connect negative (-) battery ground straps.

OUO6075,00007D7-19-19MAR07

Batteries—Charging

Keep battery fully charged, especially during cold weather. Failure to keep battery fully charged, above 12.50 volts, may result in reduced battery life.

CAUTION: Never charge a frozen battery. Thaw at room temperature before connecting to battery charger. Only charge batteries in a well ventilated area. Disconnect both cables from battery terminals when charging batteries in combine.

IMPORTANT: If batteries are not fully charged electrolyte may freeze.

Determine which battery needs to be charged.

Disconnect both battery cables and connect charger positive cable to "+" terminal and charger negative cable to "-" terminal.

Follow instructions provided with charger. Always charge batteries with a 12-volt charger.

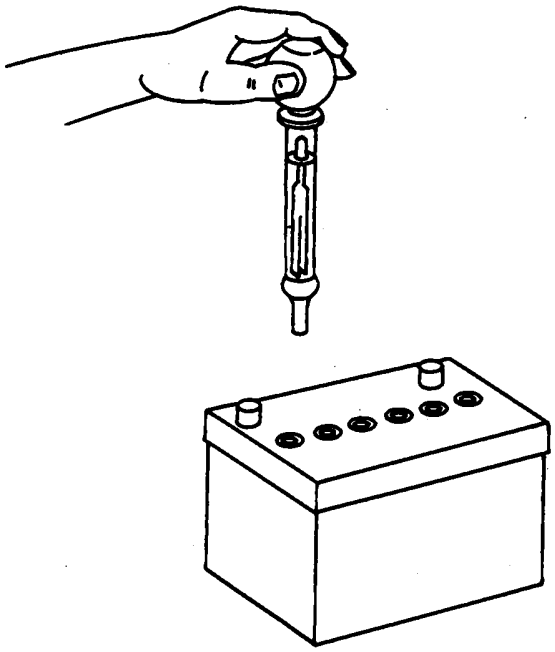
OUO6075,00007D8-19-19MAR07

Batteries—Checking Specific Gravity

CAUTION: Batteries must be on a flat surface to accurately check fluid levels. Battery fluid level should be visible at the top of each fill port covering the plates in each cell.

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.



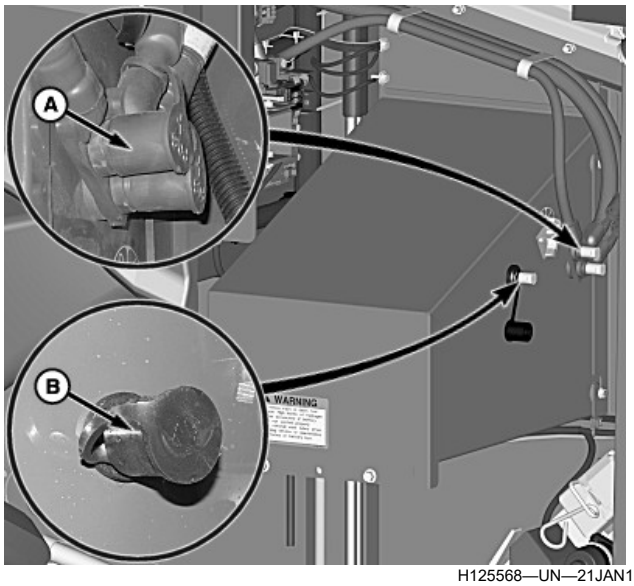
TS182—UN—23AUG88

Check specific gravity of electrolyte in each cell with a battery hydrometer to determine battery condition. Charge battery if reading is below 1.225. Replace battery if difference between cells is more than 0.050.

Always correct specific gravity reading for electrolyte temperature variation. Add 0.004 for every 10°F above 80°F. (Add 0.007 for every 10°C above 27°C.) Subtract at same rate if electrolyte temperature is below 80°F (27°C). Corrected specific gravity of a fully charged battery is 1.265 — 1.280.

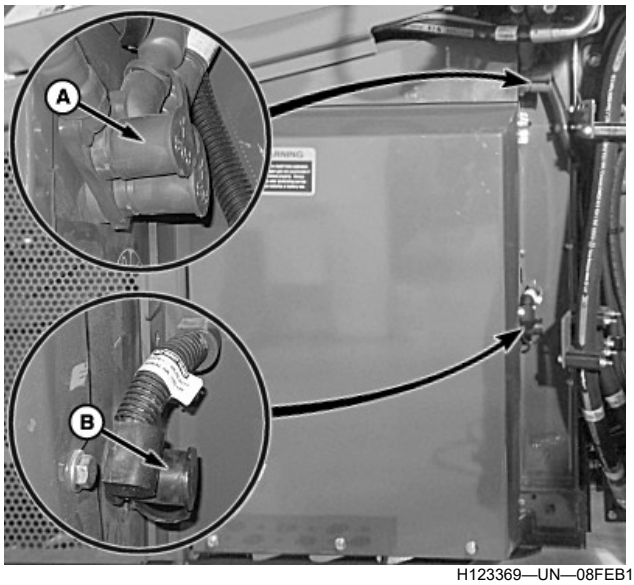
OUO6075,00007D9-19-19MAR07

Batteries—Connecting Booster



H125568—UN—21JAN19

Style A



H123369—UN—08FEB18

Style B

A—Positive (+) Post
B—Negative (-) Post

Cold weather starting can be easier by connecting an extra 12 V battery in parallel.

CAUTION: Gas given off by batteries is explosive. Avoid sparks near batteries.

IMPORTANT: Never connect jumper cables with the key switch or battery disconnect switch ON. Never jump-start with more than 12 V.

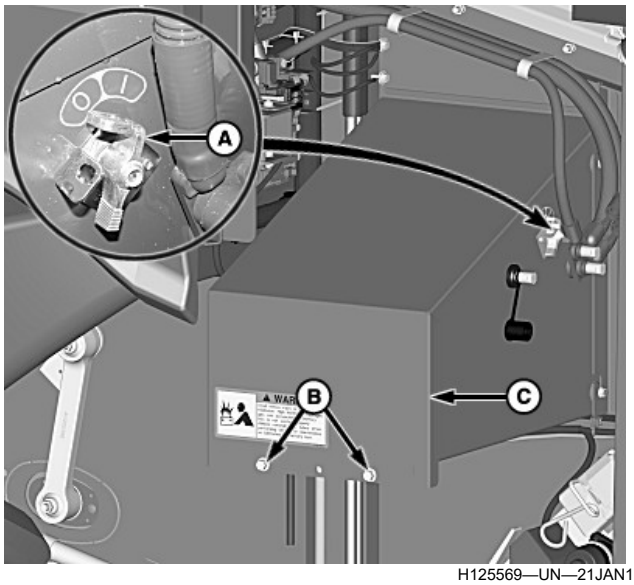
Remove protective caps from posts.

First jumper cable must be connected to positive (+) post on the booster battery. Connect other end to positive (+) post (A) on the machine battery.

Second jumper cable must be connected to negative (-) post on the booster battery. Connect other end to negative (-) post (B) on the machine battery.

OUO6075,0004A96-19-11JAN19

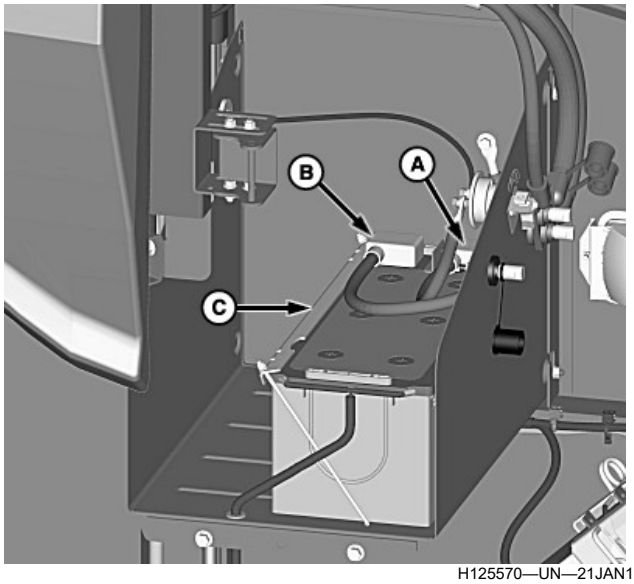
Batteries—Removing and Installing (Style A)



H125569—UN—21JAN19

A—Battery Disconnect Switch
B—Cap Screw (2 used)
C—Cover

1. Turn battery disconnect switch (A) counterclockwise to OFF position.
2. Remove cap screws (B) and cover (C) to access battery.



H125570—UN—21JAN19

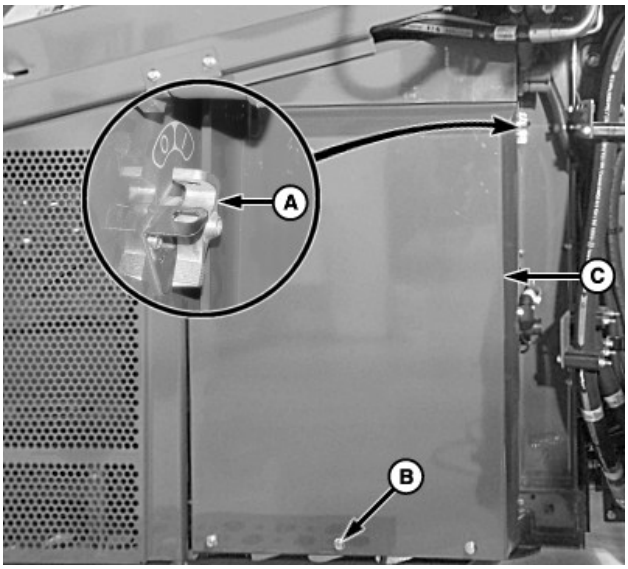
A—Positive Cable

B—Negative Cable
C—Clamp

3. Disconnect positive (+) cable (A) and negative (-) cable (B).
4. Remove clamp (C) and battery vent tubes.
5. Clean battery and battery mounting area.
6. Install battery in the battery box.
7. Clean battery cables and posts, and reconnect battery vent tubes.
8. Attach positive (+) cable and negative (-) cable.
9. Install and tighten the battery clamp.
10. Install cover and retain with previously removed cap screws.
11. Turn battery disconnect switch clockwise to ON position.

OUO6075,0004A97-19-11JAN19

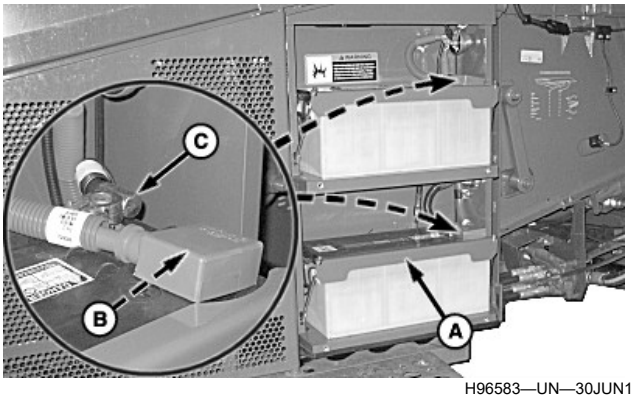
Batteries—Removing and Installing (Style B)



H123348—UN—08FEB18

A—Battery Disconnect Switch
B—Cap Screws (9 used)
C—Cover

1. Turn battery disconnect switch (A) counterclockwise to OFF position.
2. Remove cap screws (B) and cover (C) to access batteries.



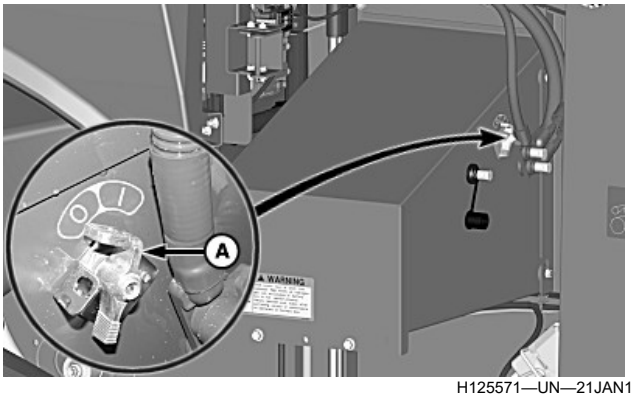
H96583—UN—30JUN10

A—Clamp
B—Positive Cable
C—Negative Cable

3. Remove clamp (A) and battery vent tubes.
4. Disconnect positive (+) cable (B) and negative (-) cable (C).
5. Clean batteries and battery mounting area.
6. Install batteries in the battery box.
7. Clean battery cables, posts, and reconnect battery vent tubes.
8. Attach positive (+) cable and negative (-) cable.
9. Install and tighten the battery clamp.
10. Install cover and retain with previously removed cap screws.
11. Turn battery disconnect switch clockwise to ON position.

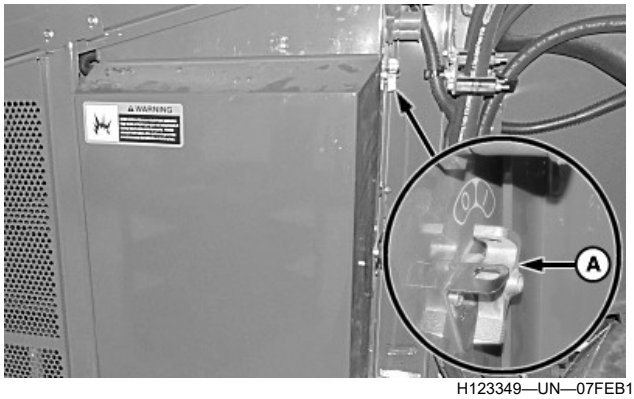
OUO6075,0004898-19-07FEB18

Battery Disconnect Switch



H125571—UN—21JAN19

Style A



H123349—UN—07FEB18

Style B

A—Battery Disconnect Switch

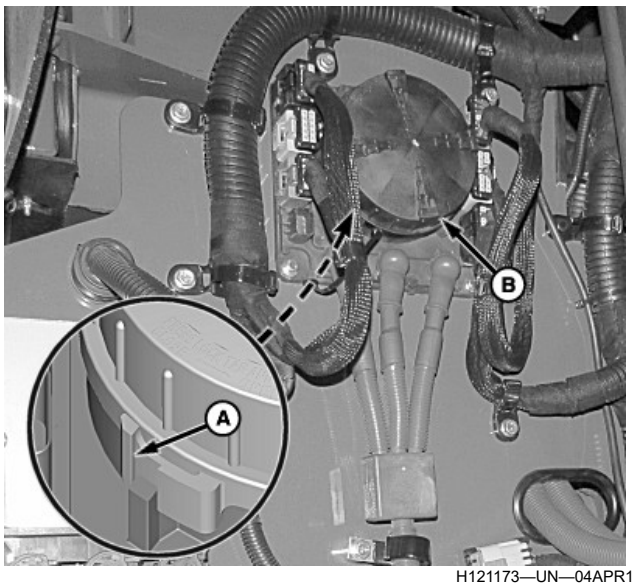
IMPORTANT: Final Tier 4/Stage V: Do not disconnect battery for at least 90 seconds after machine is shut OFF. Selective Catalyst Reduction (SCR) system automatically purges lines of Diesel Exhaust Fluid (DEF) during this time, immediately after machine is shut OFF. If adequate time is not allowed for lines to be purged, any fluid remaining in lines can crystallize and plug lines. Fluid freezes and possibly burst lines in freezing weather conditions.

NOTE: Turn battery disconnect switch OFF if machine is stored longer than 25 days. If storage period is longer than 90 days, remove negative lead to the battery or batteries to minimize load to batteries.

Turn battery disconnect switch (A) clockwise to turn ON machine electrical system or turn switch counterclockwise to turn OFF machine electrical system.

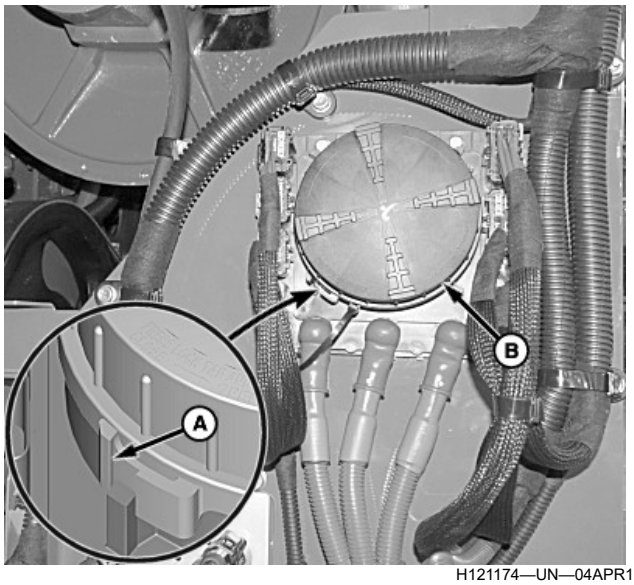
OUO6075,0004A98-19-11JAN19

Machine Fuse Center



H121173—UN—04APR17

Style A



H121174—UN—04APR17

Style B

A—Lock Tab
B—Cover

NOTE: Fuse center is on the right-hand side or the left-hand side depending on the machine model.

Spare fuses and fuse puller are located underneath cover.

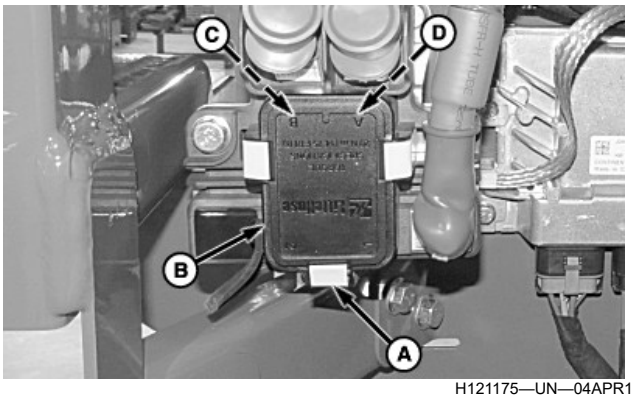
Press lock tab (A) and turn cover (B) counterclockwise to open fuse center.

- F1—F2 Not Used
- F3—(15A) (cc# 0642), Control Unit RC2 Power 1
- F6—(15A) (cc# 0652), Control Unit RC2 Power 2
- F7—(30A) (cc# 0342), Control Unit RC1 Power 1

- F8—Not Used
- F9—(30A) (cc# 0362), Right Power Module 1 (RPM1) Power 5
- F11—(20A) (cc# 0332), Right Power Module 1 (RPM1) Power 3
- F12—(20A) (cc# 0322), Right Power Module 1 (RPM1) Power 2
- F13—F14 Not Used
- F15—(20A) (cc# 0352), Right Power Module 1 (RPM1) Power 4
- F16—Not Used
- F17—(30A) (cc# 0912), Grain Sensing System Power
- F18—(25A) (cc# 0372), Control Unit RC1 Power 2
- F19—F26 Not Used
- F27—(30A) (cc# 0152), Control Unit LC1 Power 2
- F28—F30 Not Used
- F31—(10A) (cc# 0012), Unswitched Battery Power
- F32—(30A) (cc# 0142), Left Power Module 1A (LPM1A) Power 4
- F33—Not Used
- F34—(30A) (cc# 0112), Left Power Module 1A (LPM1A) Power 1
- F35—(30A) (cc# 9232), Knife Bank Actuator Power
- F36—(30A) (cc# 0312), Right Power Module 1 (RPM1) Power 1
- F37—F38 Not Used
- F39—(10A) (cc# 4972), Control Unit SSU/XSC Unswitched Power
- F40—F42 Not Used
- F43—(25A) (cc# 5222), Control Unit ECU Power 3
- F44—(30A) (cc# 0712), Left Power Module 2B (LPM2B) Power 1
- F45—(20A) (cc# 0122), Left Power Module 1A (LPM1A) Power 2
- F46—(30A) (cc# 0132), Left Power Module 1A (LPM1A) Power 3
- F47—Not Used
- F48—(25A) (cc# 5012), Control Unit ECU Power 1
- F49—F50 Not Used
- F51—(30A) (cc# 0162), Control Unit LC1 Power 1
- F52—Not Used
- F54—(10A) (cc# 0422), Control Unit PTP Power
- F55—(25A) (cc# 5022), Control Unit ECU Power 2
- F56—(15A) (cc# 5042), Fuel Transfer Pump
- F57—(30A) (cc# 0222), Left Power Module 2B (LPM2B) Power 2
- F58—F62 Not Used
- F63—(15A) (cc# 5062), Dosing Pump Power
- F64—(20A) (cc# 0212), Left Power Module 2A (LPM2A) Power 1
- F67—Not Used
- F68—(25A) (cc# 0172), Left Power Module 1A (LPM1A) Power 5
- F69—(30A) (cc# 0972), Flex Residue Chopper Power 2
- F70—F71 Not Used
- F73—(30A) (cc# 0252), Control Unit LC2 Power 1
- F74—(30A) (cc# 0972), Flex Residue Chopper Power 1
- F75—F77 Not Used
- F78—(30A) (cc# 0242), Control Unit LC2 Power 1
- F79—Not Used
- F80—(30A) (cc# 0722), Left Power Module 2B (LPM2B) Power 2

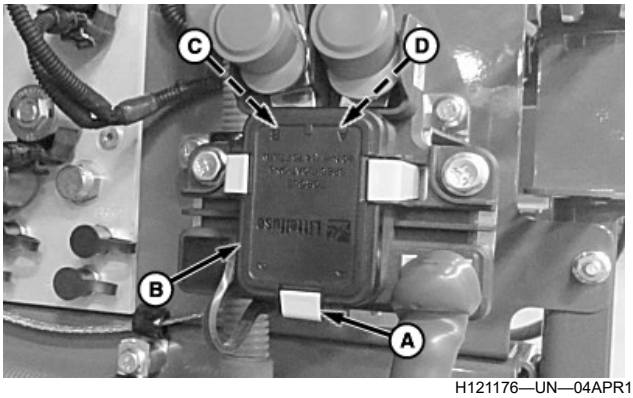
OUO6075,0004A31-19-08NOV18

Inline Fuses



H121175—UN—04APR17

Style A



H121176—UN—04APR17

Style B

A—Latch (3 used)
B—Cover
C—F82—Inline Fuse
D—F92—Inline Fuse

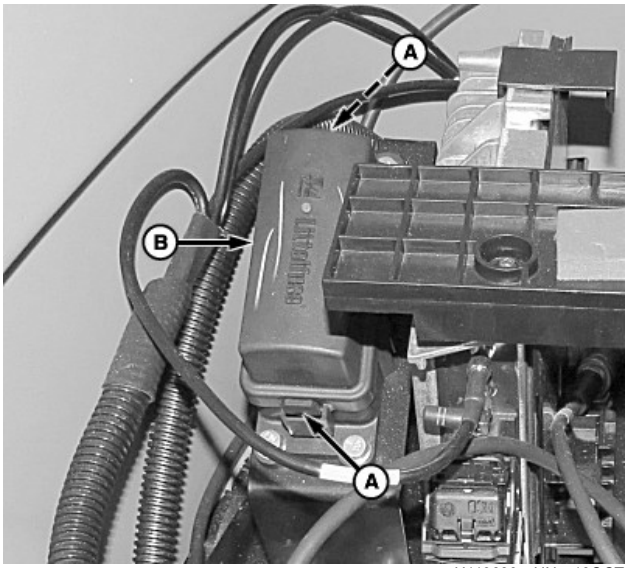
NOTE: Inline fuses are on the right-hand side or the left-hand side depending on the machine model.

Open latches (A) and remove cover (B) to access inline fuses.

- F82—Inline Fuse, (125A) (cc# 8002), Control Unit CAB
- F92—Inline Fuse, (125A) (cc# 8912), Cab Fuse Center

OUO6075,00046FD-19-04APR17

Cab Fuse Center



H119639—UN—13OCT16

A—Lock Tabs
B—Cover

NOTE: Fuse center is located inside the cab within the control unit enclosure which is underneath the armrest console on the cab floor.

Press lock tabs (A) and remove cover (B) to open fuse center.

- F801—(15A) (cc# 8262), ARMC Power
- F802—(10A) (cc# 8802), Server-Monitor Power
- F803—(15A) (cc# 8302), SCL Power
- F804—(15A) (cc# 8072), PDU Power
- F805—(15A) (cc# 8152), Receiver Power
- F806—(15A) (cc# 8162), Miscellaneous Cab Power
- F807—(10A) (cc# 8192), ATC Power
- F808—(20A) (cc# 8082), Recirculation Fan Power 1
- F809—(20A) (cc# 8182), Recirculation Fan Power 2
- F810—(20A) (cc# 8172), Seat Power
- F811—(20A) (cc# 8092), Accessory Power
- F812—(15A) (cc# 8242), Auxiliary Power Outlets
- F813—(20A) (cc# 8252), Auxiliary Power Strip
- F814—(20A) Not Used
- F815—(20A) (cc# 8622), Front Wiper Power
- F816—(10A) (cc# 8312), Radio Power
- F817—(7.5A) (cc# 8322), Armrest APO Power
- F818—(5A) (cc# 0006), Wakeup Power
- F819—(5A) (cc# 8112), USB Charger Power

OUO6075,00045AD-19-31JAN17

Video Safety

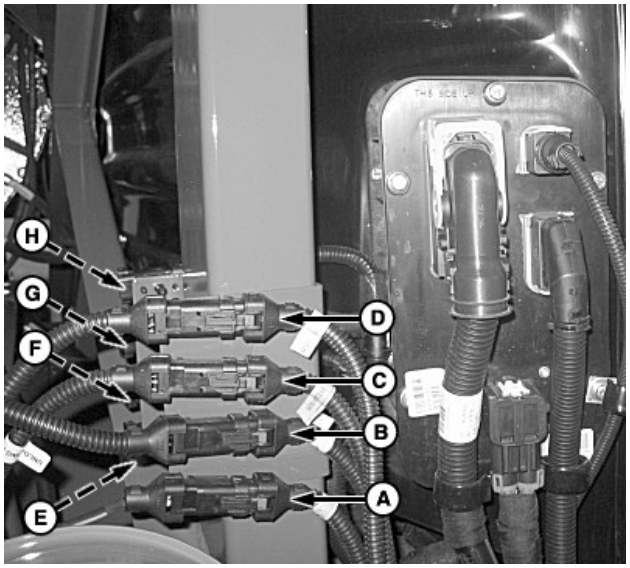
CAUTION: Do not rely on a camera for collision avoidance or bystander detection. To avoid possible injury or death to operator or others, always remain alert and aware of surroundings when operating machine. Read and understand Avoid Backover Accidents in Safety section.

IMPORTANT:

- **Correctly understand whether camera or video application is ”mirrored”.**
- **Mount camera in a sturdy and secure location.**
- **Understand camera's field of view.**
- **Keep camera properly serviced.**
- **Keep camera lens clean.**

OUO6075,00013B2-19-31JAN13

Video Interface Capability



H119626—UN—12OCT16

A—Video Input 1 (Armrest)
B—Video Input 2 (Armrest)
C—Video Input 3 (Armrest)
D—Video Input 4 (Armrest)
E—Video Input 1 (Optional Display)
F—Video Input 2 (Optional Display)
G—Video Input 3 (Optional Display)
H—Video Input 4 (Optional Display)

Machine is equipped with eight camera video inputs

which are located at the right-hand side of operator's station.

Video input (A—D) feeds video signals to the server which then go to the armrest display.

Video input (E—H) feeds video signals to the optional GreenStar™ 3 2630 Display.

See your John Deere dealer for further information on video-compatible camera solutions.

OUO6075,0004684-19-20MAR17

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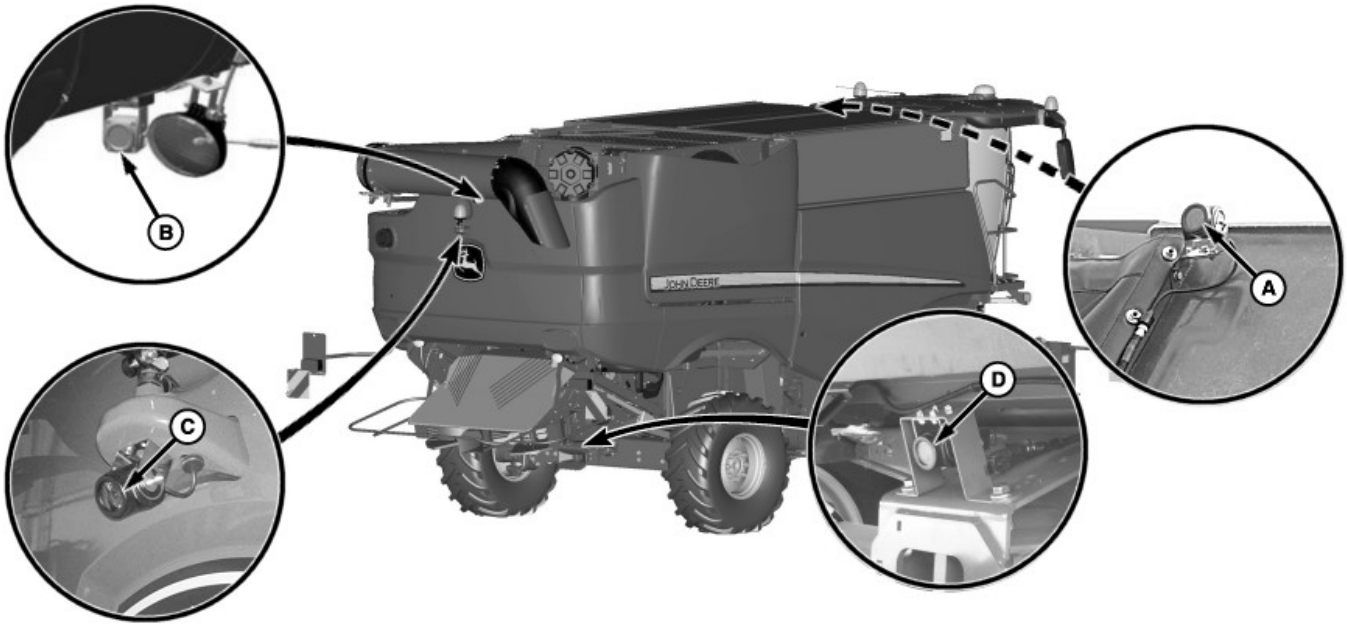
Adjust Cameras (If Equipped)



H116367—UN—25NOV15

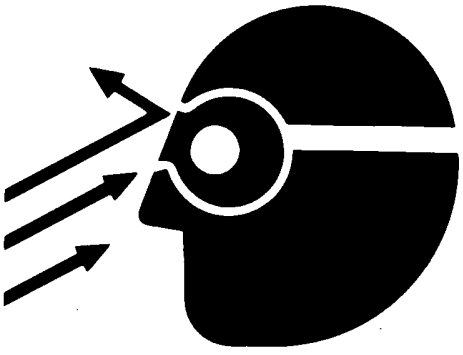
A—Grain Tank Camera
B—Unloading Auger Camera
C—Rear View Camera
D—Hitch Camera

NOTE: Camera styles may vary from what is shown. See your John Deere dealer or qualified service provider for further information.

If machine is equipped with cameras (A—D), adjust cameras as needed.

OUO6075,00041A7-19-28JAN16

Safety Rules When Replacing Halogen Bulbs



TS266—UN—23AUG88

H59774—UN—30AUG99

A—Halogen Bulb

CAUTION: Halogen bulbs (A) contain gas under pressure. Handling a bulb improperly could cause it to shatter into flying fragments. To avoid possible injury:

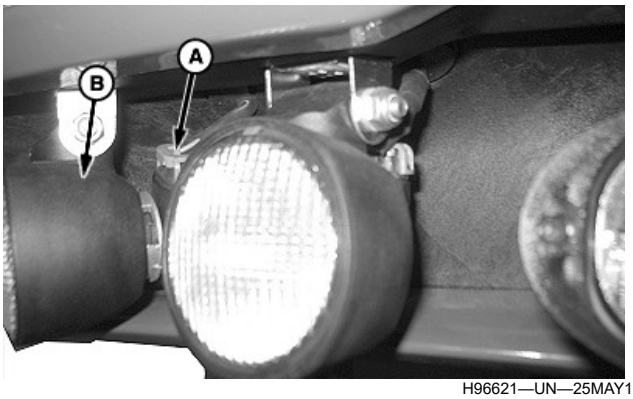
- **Turn light switch OFF and allow bulb to cool before changing bulbs. Leave switch OFF until bulb change is complete.**
- **Wear eye protection when changing bulb.**
- **Handle bulb by its base. Wear protective gloves or avoid touching light bulb surface.**
- **Use a clean cloth and alcohol to remove any fingerprints from glass bulb before installing. Skin oil deposited on bulb will cause overheating and premature failure.**
- **Do not drop or scratch bulb.**
- **Keep moisture away from bulb.**
- **Do not operate bulb outside of its enclosure.**

Bulb has a high internal pressure and if cracked or broken it could explode and cause injury.

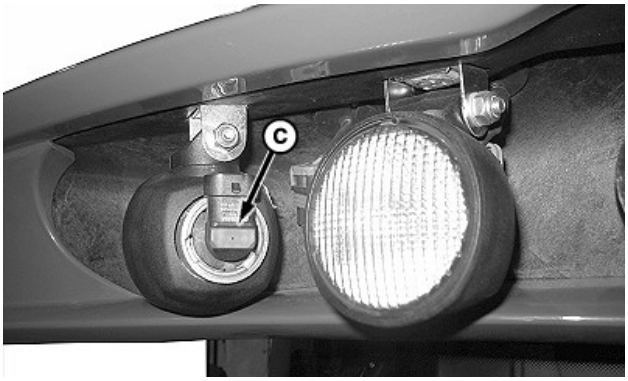
- **Place used bulb in new bulb carton and dispose of properly. Keep out of reach of children.**

OUO6075,0001356-19-12DEC12

Cab Headlight Bulb—Replacing



H96621—UN—25MAY10



H96622—UN—25MAY10

A—Connector
B—Headlight Assembly
C—Bulb Assembly

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

Disconnect wiring harness connector (A) from headlight assembly (B).

Rotate light housing toward outside of cab.

Turn bulb assembly (C) counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Replace bulb.

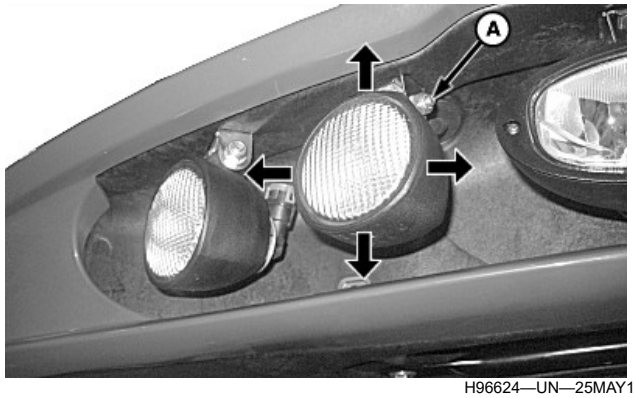
Push in bulb assembly and turn clockwise to install into housing.

Rotate light housing to previous operating position and connect wiring harness.

Repeat on remaining lights as needed.

OUO6075,0000784-19-04NOV10

Cab Headlights—Adjusting



H96624—UN—25MAY10

A—Cap Screw

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

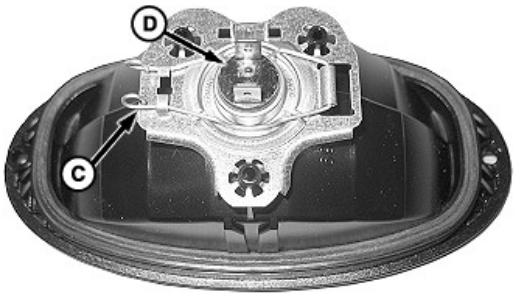
Vertical Adjustment: Loosen cap screw (A). Rotate light assembly up or down to desired position and tighten cap screw. Repeat on remaining lights as needed.

Horizontal Adjustment: Rotate light assembly left or right to desired position. Repeat on remaining lights as needed.

OUO6075,0001052-19-27FEB12

Cab Halogen Light Bulb—Replacing

H96625—UN—25MAY10



H96626—UN—25MAY10

A—Screws
B—Face Plate Lens
C—Clip
D—Bulb Assembly

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

Remove screws (A) and face plate lens (B) from housing.

Squeeze clips (C) to remove bulb assembly (D).

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Remove and replace bulb.

Attach bulb assembly using clips on light bulb base.

Align face plate lens with connector inside housing and retain with screws.

Repeat on remaining lights as needed.

OUO6075,0000787-19-04NOV10

Cab Halogen Lights—Adjusting

H96628—UN—25MAY10

A—Cap Screw

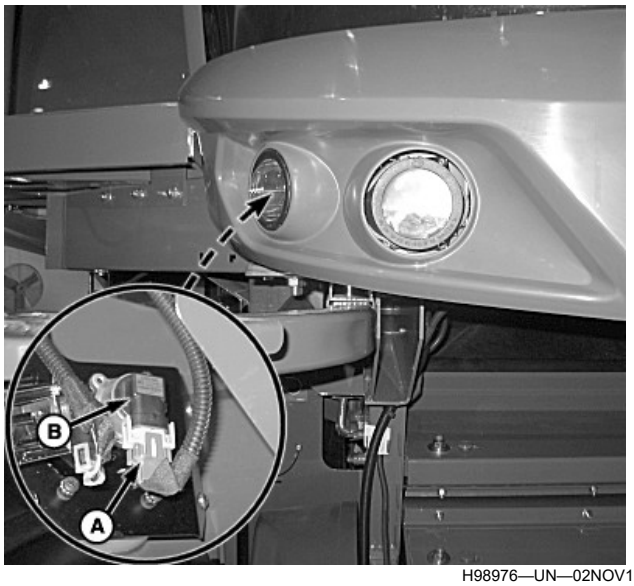
CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

Loosen cap screw (A). Rotate light assembly up or down to desired position and tighten cap screw. Repeat on remaining lights as needed.

OUO6075,0001053-19-27FEB12

Halogen Bulb Fascia Lights (If Equipped)—Replacing



H98976—UN—02NOV10

A—Connector
B—Bulb Assembly

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

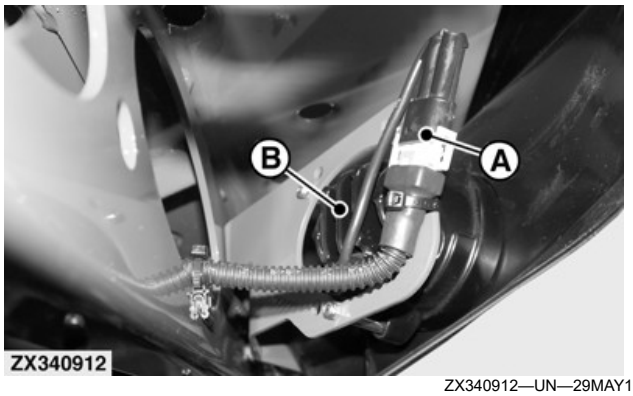
1. Disconnect wiring harness connector (A) from bulb assembly (B).
2. Turn bulb assembly counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

3. Remove and replace the bulb.
4. Push in bulb assembly and turn clockwise to install into housing.
5. Plug the wiring harness connector into the bulb assembly.
6. Repeat on remaining lights as needed.

OUO6075,0004BCC-19-19JUN19

Light Emitting Diode (LED) Fascia Lights (If Equipped)—Replacing



ZX340912—UN—29MAY18

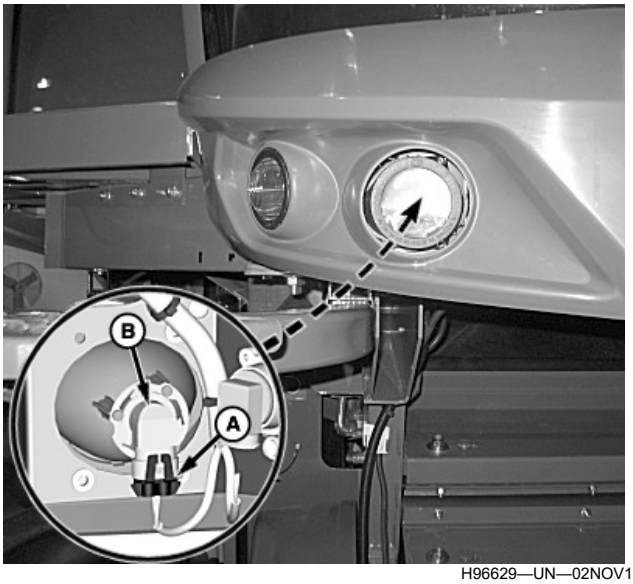
A—Connector
B—Light Assembly

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

1. Disconnect wiring harness connector (A) from light assembly (B).
2. Remove and replace light assembly.
3. Plug the wiring harness connector into the light assembly.
4. Repeat on remaining lights as needed.

OUO6075,0004BCD-19-18JUN19

Lower Driving Light Bulb (If Equipped)—Replacing



H96629—UN—02NOV10

A—Connector
B—Bulb Assembly

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

Disconnect wiring harness connector (A) from bulb assembly (B).

Turn bulb assembly counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

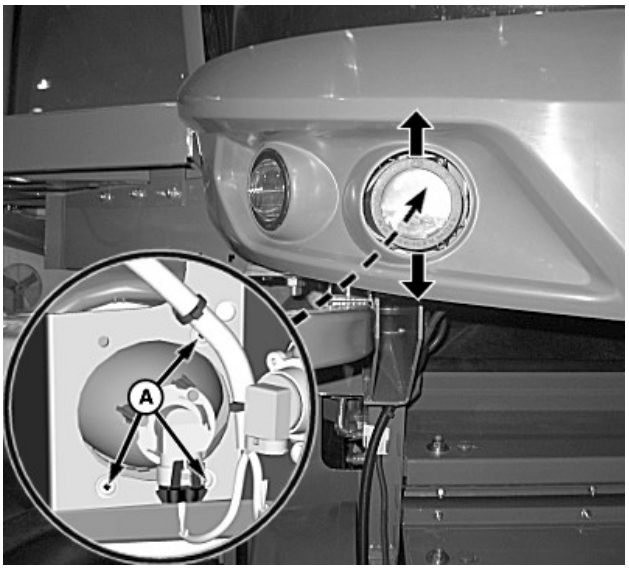
Remove and replace bulb.

Push in bulb assembly and turn clockwise to install into housing and connect wiring harness.

Repeat on remaining lights as needed.

OUO6075,0000A70-19-04NOV10

Lower Driving Light Bulb (If Equipped)—Adjusting



H98977—UN—02NOV10

A—Screws

CAUTION: Lower feeder house fully before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

Adjust screws (A) to rotate light assembly up or down to desired position and tighten screws. Repeat on remaining lights as needed.

OUO6075,0001054-19-27FEB12

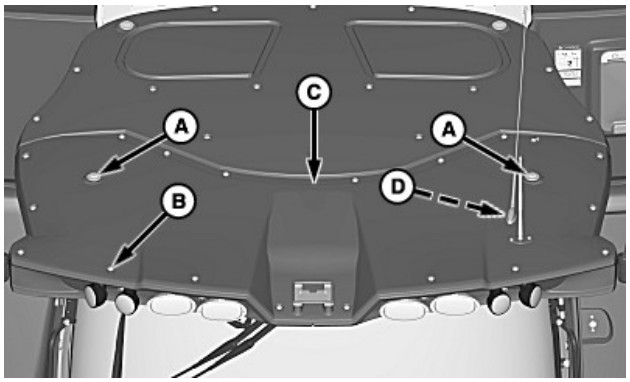
Light Emitting Diode (LED) Lights (Optional)—Replacing

H119680—UN—20OCT16

A—Light Emitting Diode (LED) Lights

CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

Light Emitting Diode (LED) lights (A) are on both sides of cab as shown.



H119681—UN—20OCT16

A—Cap Screw and Washer (2 used)
B—Cap Screw and Washer (19 used)
C—Cab Roof
D—Antenna

NOTE: Remove GreenStar™ position receiver if equipped.

Remove cap screws and washers (A and B).

Lift front left-hand side of cab roof (C) and disconnect the antenna (D).

Remove front portion of cab roof.

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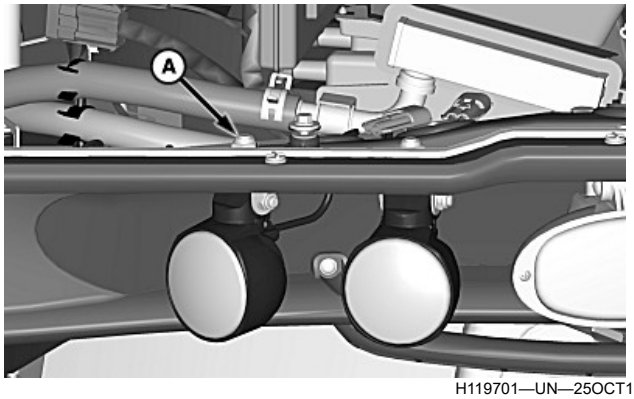
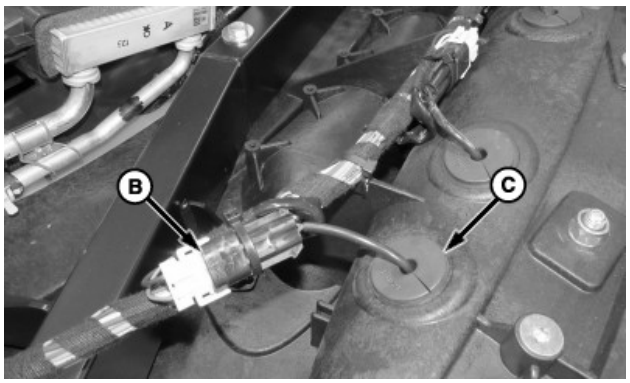


H119701—UN—25OCT16



H119683—UN—20OCT16

A—Cap Screw and Nut
B—Connector
C—Grommet

Remove cap screw and nut (A).

Unplug wiring harness connector (B) and remove grommet (C).

Remove and discard light assembly.

Install light assembly in reverse order.

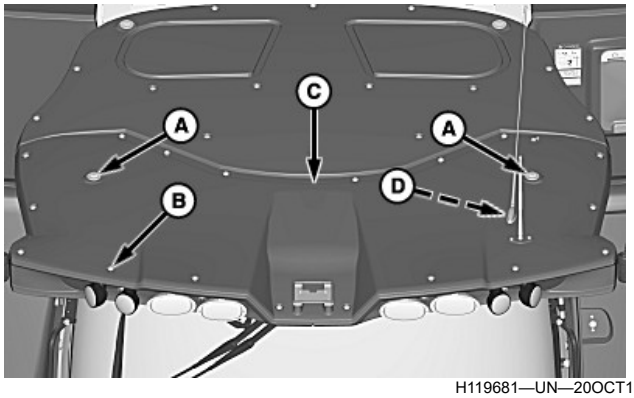
Tighten cap screw and nut to specification.

Specification

Nut—Torque	30 N·m (22 lb·ft)

Rotate light housing to previous operating position.

Repeat on remaining lights as needed.



H119681—UN—20OCT16

A—Cap Screw and Washer (2 used)
B—Cap Screw and Washer (19 used)
C—Cab Roof

D—Antenna

Connect antenna (D) and install the cab roof (C).

Install cap screws (B) and tighten to specification.

Specification

Cap Screws—Torque. . . . . 6 N·m (53 lb·in)

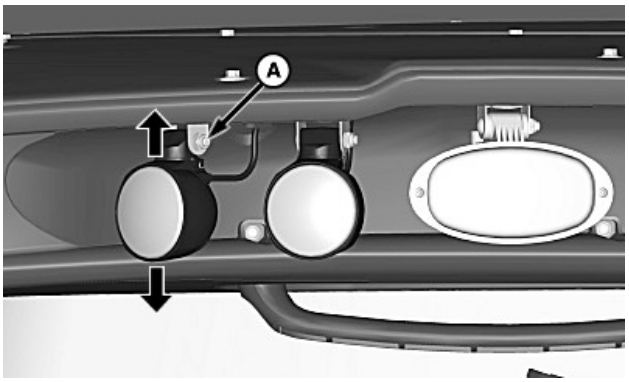
Install cap screws (A) and tighten to specification.

Specification

Cap Screws—Torque. . . . . 10 N·m (89 lb·in)

OUO6075,000435E-19-30JAN17

Light Emitting Diode (LED) Lights (Optional)—Adjusting



H119703—UN—26OCT16

A—Cap Screw

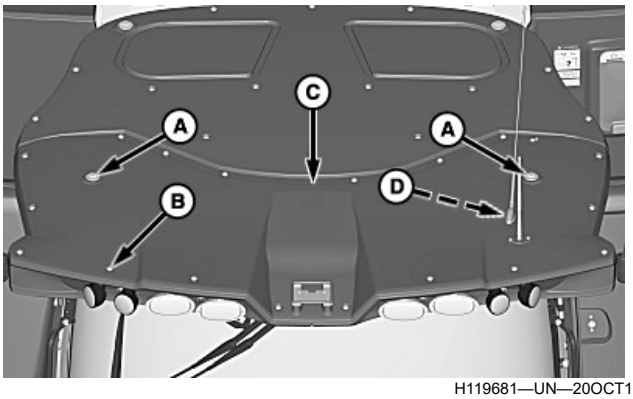
⚠ CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.

NOTE: Light assemblies can be adjusted as needed to achieve correct lighting angles.

Vertical Adjustment

Loosen cap screw (A). Rotate light assembly up or down to desired position and tighten cap screw. Repeat on remaining lights as needed.

Horizontal Adjustment



H119681—UN—20OCT16

A—Cap Screw and Washer (2 used)

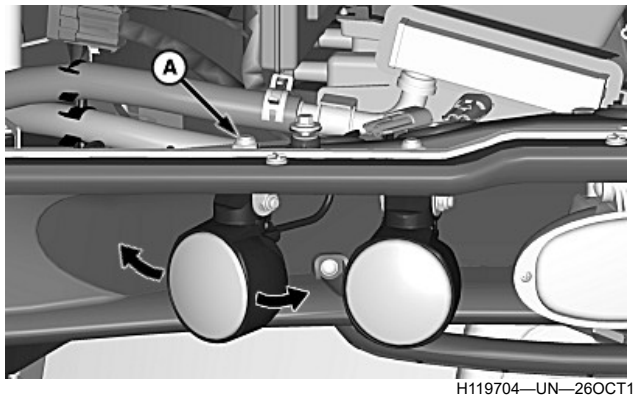
B—Cap Screw and Washer (19 used)
C—Cab Roof
D—Antenna

NOTE: Remove GreenStar™ position receiver if equipped.

Remove cap screws and washers (A and B).

Lift front left-hand side of cab roof (C) and disconnect the antenna (D).

Remove front portion of cab roof.



H119704—UN—26OCT16

A—Cap Screw and Nut

Loosen cap screw and nut (A).

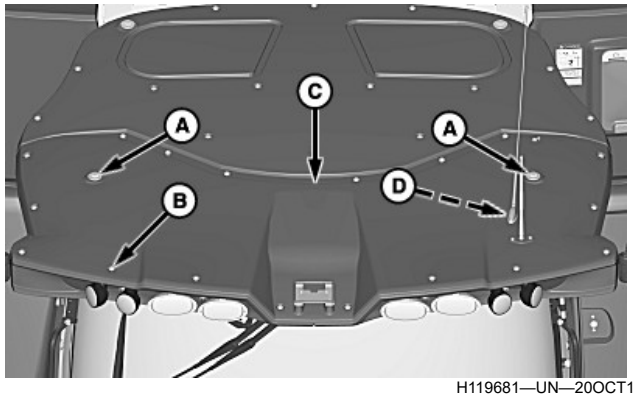
Rotate light assembly left or right to desired position.

Tighten cap screw and nut to specification.

Specification

Nut—Torque. . . . . 30 N·m (22 lb·ft)

Repeat on remaining lights as needed.



H119681—UN—20OCT16

A—Cap Screw and Washer (2 used)
B—Cap Screw and Washer (19 used)
C—Cab Roof
D—Antenna

Connect antenna (D) and install the cab roof (C).

Install cap screws (B) and tighten to specification.

GreenStar is a trademark of Deere & Company

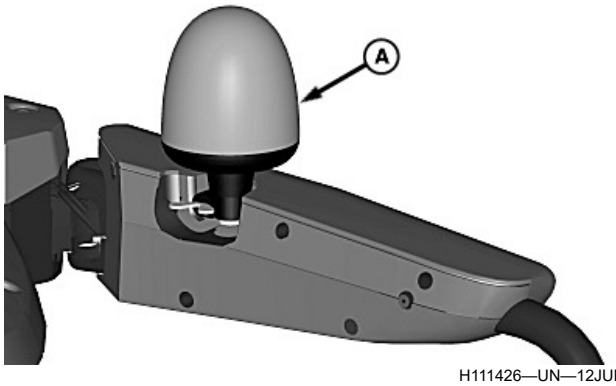
Specification	
Cap Screws—Torque	6 N·m (53 lb·in)

Install cap screws (A) and tighten to specification.

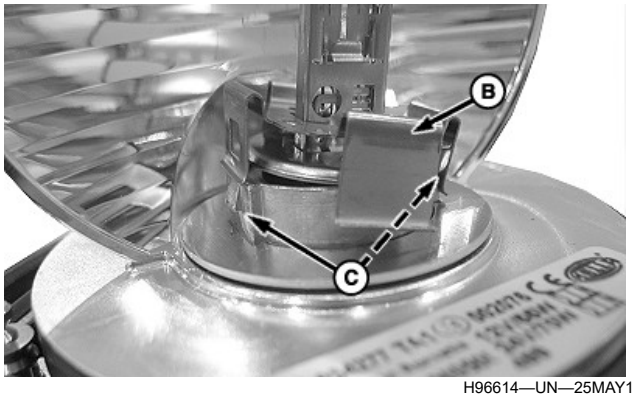
Specification	
Cap Screws—Torque	10 N·m (89 lb·in)

OUO6075,000435F-19-30JAN17

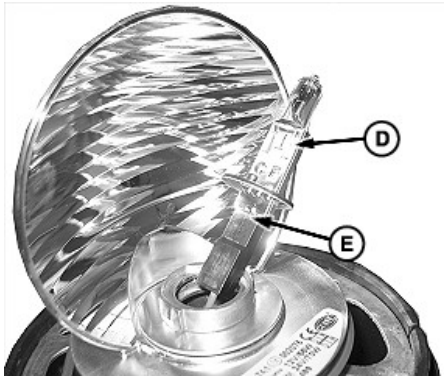
Replace Beacon Lights (Style A)



H111426—UN—12JUN14



H96614—UN—25MAY10



H96615—UN—25MAY10

A—Lens
B—Clip
C—Locking Tab
D—Bulb Assembly
E—Connector

CAUTION: Raise feeder house and lower safety stop before replacing beacon lights.

Push down on lens (A) and turn counterclockwise to remove.

Pry clip (B) from locking tab (C).

Remove bulb assembly (D) from connector (E).

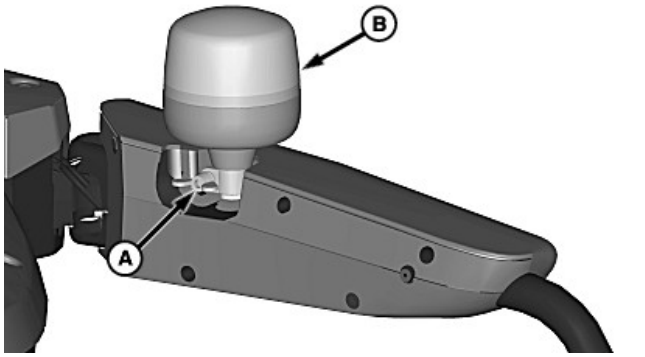
NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Replace bulb and install in reverse order.

Repeat on remaining lights as needed.

OUO6075,0004582-19-18JAN17

Replace Beacon Light (Style B)



H111428—UN—12JUN14

A—Wing Nut
B—Beacon Light

CAUTION: Raise feeder house and lower safety stop before replacing beacon lights.

NOTE: Light emitting diodes are required to meet local and government regulations for road transport height requirements depending on certain tire sizes.

Loosen wing nut (A) and remove beacon light (B) from the electrical outlet.

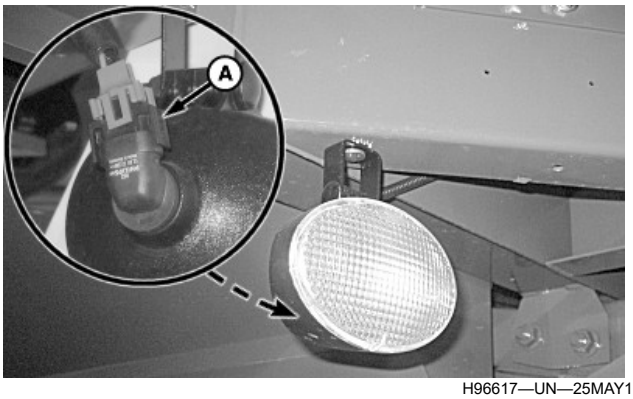
Remove and replace beacon light assembly.

Push down on beacon light assembly to ensure that there is good connection with the electrical outlet and tighten the wing nut.

Repeat on remaining lights as needed.

OUO6075,000478B-19-28JUN17

Halogen Bulb Work Lights (If Equipped)—Replacing



H96617—UN—25MAY10

Right-Hand Stubble Light

A—Connector

NOTE: The procedure shown is for replacing the stubble lights. This procedure is similar for the following lights:

- *Discharge Lights*
- *Auxiliary Field Lights*
- *Access Door Work Lights*
- *Stubble Lights*
- *Grain Tank Light*
- *Unloading Auger Light*

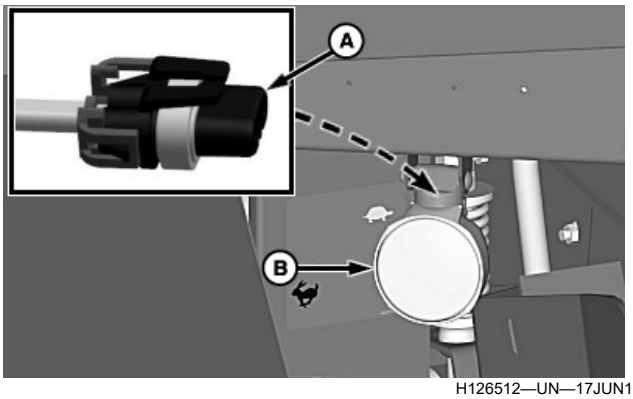
1. Disconnect wiring harness connector (A) from bulb assembly.
2. Turn bulb assembly counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

3. Remove and replace the bulb.
4. Push in bulb assembly and turn clockwise to install into housing.
5. Plug the wiring harness connector into the bulb assembly.
6. Repeat on remaining lights as needed.

OUO6075,0004BCA-19-19JUN19

Light Emitting Diode (LED) Work Lights (If Equipped)—Replacing



H126512—UN—17JUN19

Right-Hand Stubble Light

A—Connector
B—Light Assembly

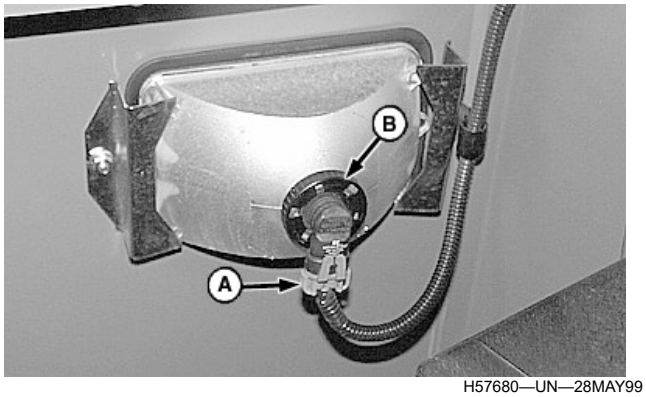
NOTE: The procedure shown is for replacing the stubble lights. This procedure is similar for the following lights:

- *Discharge Lights*
- *Auxiliary Field Lights*
- *Access Door Work Lights*
- *Stubble Lights*
- *Grain Tank Light*
- *Unloading Auger Light*

1. Disconnect wiring harness connector (A) from light assembly (B).
2. Remove and replace light assembly.
3. Plug the wiring harness connector into the light assembly.
4. Repeat on remaining lights as needed.

OUO6075,0004BC8-19-18JUN19

Halogen Bulb Side Finder Lights and Cleaning Shoe Lights (If Equipped)—Replacing



H57680—UN—28MAY99

A—Connector
B—Retainer Ring

NOTE: The procedure shown is for replacing the side finder lights. This procedure is similar for the following:

- *Cleaning Shoe Lights*

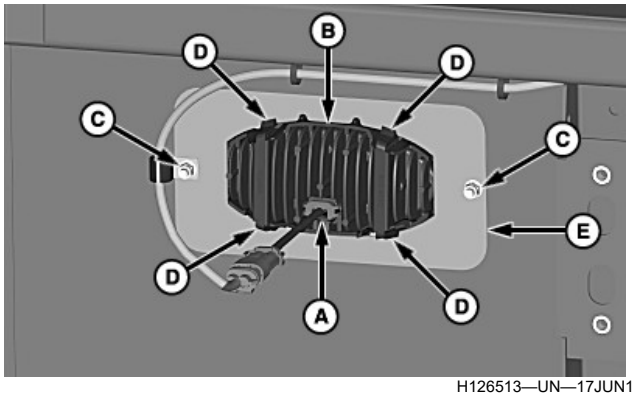
1. Disconnect wiring harness connector (A) from bulb assembly.
2. Push in and twist retainer ring (B) counterclockwise and remove.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

3. Remove and replace the bulb.
4. Install bulb assembly in reverse order.
5. Plug the wiring harness connector into the bulb assembly.
6. Repeat on remaining lights as needed.

OUO6075,0004BCB-19-19JUN19

Light Emitting Diode (LED) Side Finder Lights and Cleaning Shoe Lights (If Equipped)—Replacing



H126513—UN—17JUN19

A—Connector
B—Light Assembly
C—Cap Screw and Nut (2 used)
D—Tab (4 used)
E—Plate

NOTE: The procedure shown is for replacing the side finder lights. This procedure is similar for the following:

- *Cleaning Shoe Lights*

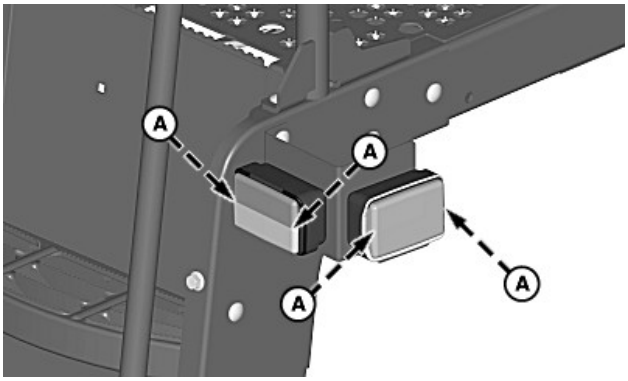
1. Disconnect wiring harness connector (A) from light assembly (B).
2. Remove cap screws and nuts (C).
3. Press tabs (D) and separate the light assembly from plate (E).
4. Remove light assembly from outside of the machine.
5. Install replacement light assembly from outside of the machine.

NOTE: Tabs on light assembly lock the plate into place.

6. Retain light assembly with previously removed plate.
7. Install previously removed cap screws and nuts.
8. Plug the wiring harness connector into the light assembly.
9. Repeat on remaining lights as needed.

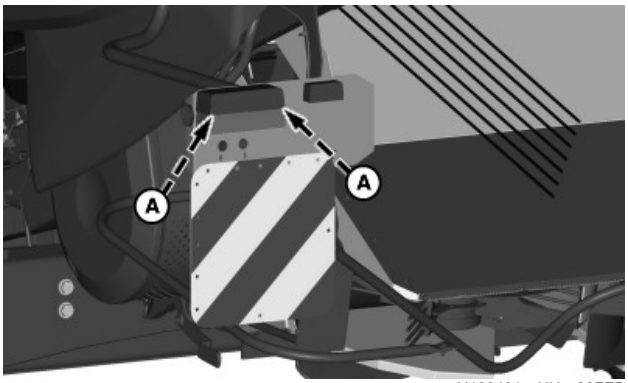
OUO6075,0004BC9-19-18JUN19

Hazard/Marker Lights, Marker/Brake Lights, and Rear Hazard Lights—Replacing



H121705—UN—07JUN17

Hazard/Marker Lights



H100491—UN—28FEB11

Marker/Brake Lights and Rear Hazard Lights

A—Screws

Remove screws (A) from the desired lens cover.

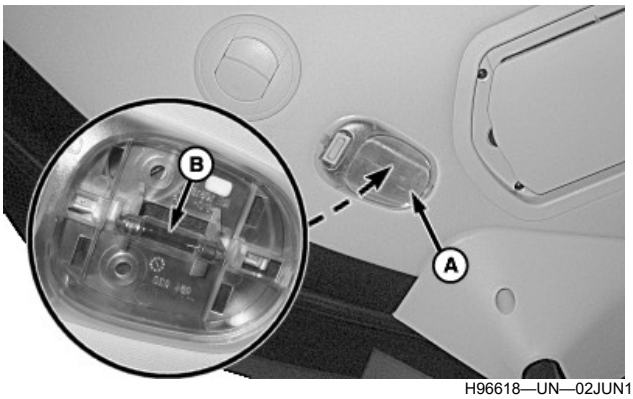
Remove light bulb by pushing in and turning counterclockwise.

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Install bulb and the desired lens cover in reverse order.

OUO6075,0004759-19-07JUN17

Cab Interior Light—Replacing



H96618—UN—02JUN10

A—Lens Cover
B—Bulb

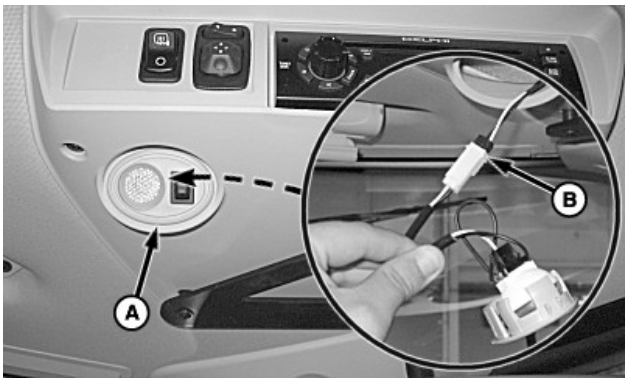
Remove lens cover (A) and replace bulb (B).

NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.

Install bulb and lens cover in reverse order.

OUO6075,0000783-19-04NOV10

Map Light—Replacing



H97965—UN—13SEP10

A—Map Light Assembly
B—Connector

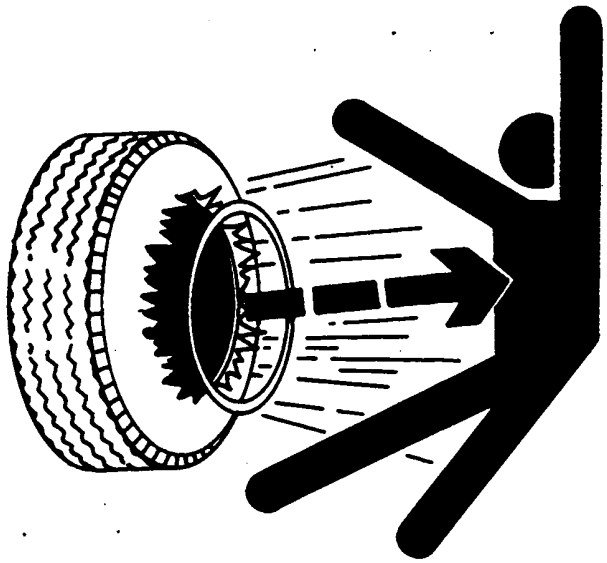
Remove map light assembly (A) and disconnect wiring harness connector (B).

Remove and replace map light assembly.

Install and orient map light assembly in reverse order as shown.

OUO6075,00009AF-19-13SEP10

Service Tires Safely



TS211—UN—15APR13

CAUTION: Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.

Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.

DX,RIM1-19-27OCT08

Roadway Transport with Header Attached

Observe national and local laws regarding operation of the combine on public roadways.

Roadway transport in Germany must be approved by your local TUEV to achieve a road permission.

Apply for allowance at your dealership or at manufacturing factory.

OUO6075,0004673-19-16MAR17

Care and Service of Tires

IMPORTANT: Installing tires that do not meet original equipment tire specifications may cause machine malfunction. Consult your dealer or tire supplier for guidance.

Use of substandard tires or larger than recommended tires will void warranty and may decrease stability, affect steering, result in premature tire failure, or cause other durability or safety issues.

Check tires daily for damage or noticeably low pressure.

At least every 100 hours of operation, check tire pressure. If tires contain liquid ballast, use a special air-water gauge and measure with valve stem at bottom.

A small puncture in a tubeless tire can be temporarily repaired without dismounting the tire, thus avoiding down time during a busy season.

Protect tires from exposure to sunlight, petroleum products, and chemicals.

Drive carefully. Try to avoid rocks and sharp objects.

IMPORTANT: A permanent repair should be made as soon as possible to prevent further tire damage.

NOTE: Tire information and specifications are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice. See the online Combine Ag Sales Manual or your John Deere dealer for further information on Tire Pressure Charts.

Tire pressures listed in charts may differ from the tire pressures shown on the side of the tires.

Header compatibility and specified inflation pressures are based on front axle load of a coarse grain configuration.

Load varies based on configuration. This may not reflect the worst case scenario. Consult your local tire dealer if in doubt.

Not all tires are available on all machines or at all manufacturing facilities.

Onboard Air Compressor (if equipped) - not recommended to inflate tires on the machine or run air tools.

OUO6075,0004635-19-20MAR17

Basic Tire Information

Diagonal Tire (Bias)

16.9 - 28 10PR R1
A B C D E

H125004—UN—25SEP18

The diagonal tire (bias) is identified by conventional nomenclature.

A—Width of the tread of the tire in inches.
B—Indicates that the tire is diagonal.
C—Indicates the diameter of the rim in inches.
D—Ply Rating, indicates the strength of the carcass and not the number of plies.
E—Type and size of lug tire.

Radial Tire

16.9 R 28 R1W
A B C D

H125005—UN—25SEP18

The radial tire can be identified by conventional nomenclature or international system.

Conventional nomenclature

A—Width of the tread of the tire in inches.
B—Indicates that the tire is radial.
C—Indicates the diameter of the rim in inches.
D—Type and size of lug tire.

600 /65 R 28 R1 155 A8
A B C D E F G

H125006—UN—25SEP18

International system

A—Indicates the width of the tire in millimeters.
B—Indicates the height of the tire (side) as a percentage of the width.
C—Indicates that the tire is radial.
D—Indicates the diameter of the rim in inches.
E—Type and size of lug tire.
F—Indicates the index of the tire load capacity.
G—Indicates the maximum speed that the tire is indicated.

High Flotation Tire

850 /60 - 38 R1
A B C D E

H125007—UN—25SEP18

The high flotation tires are identified by a mixed nomenclature.

A—Indicates the width of the tire in millimeters.
B—Indicates the height of the tire (side) as a percentage of the width.
C—Indicates that the tire is diagonal.
D—Indicates the diameter of the rim in inches.
E—Type and size of lug tire.

OUO6075,0004A27-19-08JAN19

Tire Tread Types

H125003—UN—24SEP18

NOTE: Tire tread shape varies depending on tire manufacture.

There are three types of tread and these are the most used on agricultural application.

A—R1 tire. Are most common in agricultural application and suitable for most soil conditions.
B—R1W tire. The lugs are 20% higher than the R1 tire, providing greater durability when used to run on roads.
C—R2 tire. Used in land with muddy, wet and with little support. For example, in irrigated rice field.

OUO6075,0004A28-19-24SEP18

Front Tire Pressure (S760 and S770)

NOTE: See Care and Service of Tires in this section for further information.

IMPORTANT: All road transportation MUST be done at pressure shown in No Head/Transport column. Improper pressure during transport may decrease vehicle stability. Proper pressure results in better fuel economy and longer tire life.

Speed	Transport Speed 40 km/h (25 mph)		Harvest Speed 10 km/h (6 mph)			
Approximate Mass	No Head/ Transport[a]	4500—5500 kg	1500—2500 kg	2500—3500 kg	3500—4500 kg	4500—5500 kg
		9900—12 100 lb	3300—5500 lb	5500—7700 lb	7700—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Front Tire Size	S760 and S770 - Tire Pressure - bar/kPa (psi)					
680/85R32 178A8	1.4/140 (20)	NR	2.4/240 (35)	2.8/280 (41)	3.2/320 (47)	NR
680/85R32 CHO 178A8	1.4/140 (20)	NR	2.0/200 (29)	2.4/240 (35)	3.2/320 (47)	NR
IF 680/85R32 CFO 179A8	1.4/140 (20)	NR	1.6/160 (23)	2.0/200 (29)	2.2/220 (32)	NR
VF 710/70R42 CFO 190B	1.6/160 (23)	NR	1.6/160 (23)	2.0/200 (29)	2.4/240 (35)	NR
800/65R32 172A8-178A8	1.8/180 (26)	NR	2.8/280 (41)	2.8/280 (41)	3.2/320 (47)	NR
IF 800/65R32 CFO 178A8-179A8	1.6/160 (23)	NR	2.0/200 (29)	2.4/240 (35)	NR	NR
800/70R32 CHO 175A8	1.4/140 (20)	NR	1.8/180 (26)	2.0/200 (29)	2.0/200 (29)	NR
IF 800/70R32 CFO 182A8	1.6/160 (23)	NR	1.8/180 (26)	2.0/200 (29)	2.2/220 (32)	NR
800/70R38 173A8-181A8	1.4/140 (20)	NR	2.0/200 (29)	2.0/200 (29)	2.4/240 (35)	NR
IF 800/70R38 CFO 184A8-187A8	1.2/120 (17)	NR	1.4/140 (20)	1.6/160 (23)	1.6/160 (23)	NR
VF 800/70R38 CFO 193A8	1.2/120 (17)	2.6/260 (38)	1.4/140 (20)	1.6/160 (23)	2.0/200 (29)	NR
LSW 800/55R46 CFO 190D	1.2/120 (17)	3.2/320 (47)	1.8/180 (26)	2.4/240 (35)	2.4/240 (35)	NR
900/60R32 176A8	1.2/120 (17)	NR	2.4/240 (35)	2.4/240 (35)	2.8/280 (41)	NR
900/60R38 181A8	1.2/120 (17)	NR	2.0/200 (29)	2.2/220 (32)	2.4/240 (35)	NR
IF 900/65R32 CFO 191A8	1.2/120 (17)	3.2/320 (47)	1.4/140 (20)	1.6/160 (23)	2.6/260 (38)	NR
VF 900/60R32 CFO 193A8	1.2/120 (17)	2.8/280 (41)	1.6/160 (23)	1.8/180 (26)	2.4/240 (35)	NR
VF 900/60R38 CFO+ 193A8	1.2/120 (17)	2.8/280 (41)	1.4/140 (20)	1.4/140 (20)	1.6/160 (23)	NR
LSW 1100/45R46 CFO 190A8	1.2/120 (17)	2.4/240 (35)	1.2/120 (17)	1.4/140 (20)	2.4/240 (35)	NR

Speed	Transport Speed 40 km/h (25 mph)		Harvest Speed 10 km/h (6 mph)			
Approximate Mass	No Head/ Transport[a]	4500—5500 kg	1500—2500 kg	2500—3500 kg	3500—4500 kg	4500—5500 kg
		9900—12 100 lb	3300—5500 lb	5500—7700 lb	7700—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Front Tire Size	S760 and S770 - Tire Pressure - bar/kPa (psi)					
IF 1250/50R32 CFO 201B	1.2/120 (17)	2.4/240 (35)	1.2/120 (17)	1.2/120 (17)	1.4/140 (20)	NR
LSW 1250/35R46 CFO 195A8	1.2/120 (17)	2.4/240 (35)	1.2/120 (17)	1.2/120 (17)	1.4/140 (20)	NR
520/85R42 157A8-165B DUALS	1.2/120 (17)	2.0/200 (29)	1.8/180 (26)	2.0/200 (29)	2.2/220 (32)	NR
IF 520/85R42 CFO 169B DUALS	1.2/120 (17)	1.8/180 (26)	1.4/140 (20)	1.4/140 (20)	2.2/220 (32)	NR
VF 520/85R42 CFO 174A8 DUALS	1.2/120 (17)	1.8/180 (26)	1.4/140 (20)	1.4/140 (20)	2.2/220 (32)	NR
580/85R42 166A8 DUALS	1.2/120 (17)	2.0/200 (29)	1.6/160 (23)	1.6/160 (23)	1.8/180 (26)	NR
650/85R38 173A8 DUALS	1.2/120 (17)	1.8/180 (26)	1.6/160 (23)	1.6/160 (23)	1.6/160 (23)	NR
NR = Not Recommended						

[a] *Indicates road transport configuration (no header, no grain in tank).*

OUO6075,0004E3F-19-07JUL20

Front Tire Pressure (S780, S785, and S790)

NOTE: See Care and Service of Tires in this section for further information.

IMPORTANT: All road transportation MUST be done at pressure shown in No Head/Transport column. Improper pressure during transport may decrease vehicle stability. Proper pressure results in better fuel economy and longer tire life.

Speed	Transport Speed 40 km/h (25 mph)		Harvest Speed 10 km/h (6 mph)			
Approximate Mass	No Head/ Transport[a]	4500—5500 kg	1500—2500 kg	2500—3500 kg	3500—4500 kg	4500—5500 kg
		9900—12 100 lb	3300—5500 lb	5500—7700 lb	7700—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Front Tire Size	S780, S785, and S790 - Tire Pressure - bar/kPa (psi)					
680/85R32 178A8	1.4/140 (20)	NR	2.8/280 (41)	3.2/320 (47)	4.0/400 (58)	NR
680/85R32 CHO 178A8	1.4/140 (20)	NR	2.4/240 (35)	2.8/280 (41)	3.2/320 (47)	4.0/400 (58)
IF 680/85R32 CFO 179A8	1.4/140 (20)	NR	2.2/220 (32)	2.4/240 (35)	NR	NR
VF 710/70R42 CFO 193B	1.6/160 (23)	3.6/360 (52)	2.4/240 (35)	2.4/240 (35)	3.0/300 (44)	NR
IF 800/65R32 CFO 178A8-179A8	1.6/160 (23)	NR	2.4/240 (35)	NR	NR	NR
800/70R32 CHO 175A8	1.6/160 (23)	NR	2.0/200 (29)	2.4/240 (35)	2.4/240 (35)	NR
IF 800/70R32 CFO 182A8	1.6/160 (23)	NR	2.0/200 (29)	2.2/220 (32)	2.6/260 (38)	NR
800/70R38 173A8-181A8	1.6/160 (23)	NR	2.4/240 (35)	2.4/240 (35)	2.8/280 (41)	NR
IF 800/70R38 CFO 184A8-187A8	1.2/120 (17)	NR	1.4/140 (20)	1.6/160 (23)	1.6/160 (23)	NR
VF 800/70R38 CFO 193A8	1.2/120 (17)	2.6/260 (38)	1.6/160 (23)	2.0/200 (29)	2.2/220 (32)	2.6/260 (38)
LSW 800/55R46 CFO 190D	1.2/120 (17)	3.2/320 (47)	2.0/200 (29)	2.6/260 (38)	2.8/280 (41)	3.2/320 (47)
900/60R32 176A8	1.2/120 (17)	NR	2.4/240 (35)	2.8/280 (41)	2.8/280 (41)	NR
900/60R38 181A8	1.2/120 (17)	NR	2.4/240 (35)	2.8/280 (41)	2.8/280 (41)	NR
IF 900/65R32 CFO 191A8	1.2/120 (17)	3.2/320 (47)	1.6/160 (23)	2.0/200 (29)	2.8/280 (41)	2.8/280 (41)
VF 900/60R32 CFO 193A8	1.2/120 (17)	2.8/280 (41)	1.8/180 (26)	2.2/220 (32)	2.6/260 (38)	2.8/280 (41)
VF 900/60R38 CFO+ 193A8	1.2/120 (17)	2.8/280 (41)	1.6/160 (23)	1.6/160 (23)	1.6/160 (23)	1.8/180 (26)
LSW 1100/45R46 CFO 190A8	1.2/120 (17)	2.4/240 (35)	1.4/140 (20)	1.6/160 (23)	2.4/240 (35)	2.4/240 (35)
IF 1250/50R32 CFO 201B	1.2/120 (17)	2.4/240 (35)	1.2/120 (17)	1.2/120 (17)	1.4/140 (20)	1.6/160 (23)

Speed	Transport Speed 40 km/h (25 mph)		Harvest Speed 10 km/h (6 mph)			
Approximate Mass	No Head/ Transport[a]	4500—5500 kg	1500—2500 kg	2500—3500 kg	3500—4500 kg	4500—5500 kg
		9900—12 100 lb	3300—5500 lb	5500—7700 lb	7700—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Front Tire Size	**S780, S785, and S790 - Tire Pressure - bar/kPa (psi)**					
LSW 1250/35R46 CFO 195A8	1.2/120 (17)	2.4/240 (35)	1.2/120 (17)	1.6/160 (23)	1.6/160 (23)	1.6/160 (23)
520/85R42 162A8-165B DUALS	1.2/120 (17)	2.0/200 (29)	2.0/200 (29)	2.4/240 (35)	3.0/300 (44)	3.0/300 (44)
IF 520/85R42 CFO 169B DUALS	1.2/120 (17)	1.8/180 (26)	1.4/140 (20)	1.6/160 (23)	2.6/260 (38)	2.6/260 (38)
VF 520/85R42 CFO 174A8 DUALS	1.2/120 (17)	1.8/180 (26)	1.4/140 (20)	1.6/160 (23)	2.6/260 (38)	2.6/260 (38)
580/85R42 166A8 DUALS	1.2/120 (17)	2.0/200 (29)	1.6/160 (23)	1.8/180 (26)	2.0/200 (29)	2.2/220 (32)
650/85R38 173A8 DUALS	1.2/120 (17)	1.8/180 (26)	1.6/160 (23)	1.6/160 (23)	1.6/160 (23)	2.0/200 (29)
NR = Not recommended						

[a] *Indicates road transport configuration (no header, no grain in tank).*

OUO6075,0004E40-19-07JUL20

Front Tire Pressure (HillMaster™)

NOTE: See Care and Service of Tires in this section for further information.

IMPORTANT: All road transportation MUST be done at pressure shown in No Head/Transport column. Improper pressure during transport may decrease vehicle stability. Proper pressure results in better fuel economy and longer tire life.

Speed	Transport Speed 40 km/h (25 mph)	Harvest Speed 10 km/h (6 mph)				
Approximate Mass	No Head/ Transport[a]	1500—2500 kg	2500—3500 kg	3500—4000 kg	4000—4500 kg	4500—5500 kg
		3300—5500 lb	5500—7700 lb	7700—8800 lb	8800—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F 730D 735X	RD35F RD40F 735D 740D 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Front Tire Size	**S770 HillMaster™ - Tire Pressure - bar/kPa (psi)**					
680/85R32 178A8	1.6/160 (23)	2.4/240 (35)	2.8/280 (41)	3.8/380 (55)	NR	NR
680/85R32 CHO 178A8	1.6/160 (23)	2.4/240 (35)	2.8/280 (41)	3.0/300 (44)	NR	NR
IF 680/85R32 CFO 179A8	1.4/140 (20)	1.6/160 (23)	2.0/200 (29)	2.2/220 (32)	NR	NR
800/70R32 CHO 175A8	1.4/140 (20)	1.8/180 (26)	2.0/200 (29)	2.2/220 (32)	NR	NR
IF 800/70R32 CFO 182A8	1.4/140 (20)	1.6/160 (23)	1.8/180 (26)	2.4/240 (35)	NR	NR
Front Tire Size	**S780, S785, and S790 HillMaster™** - Tire Pressure - bar/kPa (psi)					
680/85R32 178A8	2.0/200 (29)	2.8/280 (41)	2.8/280 (41)	4.0/400 (58)	NR	NR
680/85R32 CHO 178A8	2.0/200 (29)	2.8/280 (41)	2.8/280 (41)	3.2/320 (47)	NR	NR
IF 680/85R32 CFO 179A8	1.4/140 (20)	1.8/180 (26)	2.0/200 (29)	2.2/220 (32)	NR	NR
800/70R32 CHO 175A8	1.4/140 (20)	1.8/180 (26)	2.0/200 (29)	2.2/220 (32)	NR	NR
IF 800/70R32 CFO 182A8	1.4/140 (20)	1.6/160 (23)	1.8/180 (26)	2.4/240 (35)	NR	NR
NR = Not recommended						

HillMaster is a trademark of Deere & Company

[a] *Indicates road transport configuration (no header, no grain in tank).*

OUO6075,0004E7D-19-07JUL20

Rear Tire Pressure (S760 and S770)

NOTE: See Care and Service of Tires in this section for further information.

IMPORTANT: All road transportation MUST be done at pressure shown in No Head/Transport column. Improper pressure during transport may decrease vehicle stability. Proper pressure results in better fuel economy and longer tire life.

Speed	Transport Speed 40 km/h (25 mph)		Harvest Speed 10 km/h (6 mph)			
Approximate Mass	No Head/ Transport[a]	4500—5500 kg	1500—2500 kg	2500—3500 kg	3500—4500 kg	4500—5500 kg
		9900—12 100 lb	3300—5500 lb	5500—7700 lb	7700—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Rear Tire Size	S760 and S770 - Tire Pressure - bar/kPa (psi)					
500/85R24 IMP 181A8	3.6/360 (52)	2.0/200 (29)	2.8/280 (41)	2.4/240 (35)	2.4/240 (35)	NR
500/80R28 IMP 182A8	3.6/360 (52)	2.0/200 (29)	2.4/240 (35)	2.4/240 (35)	2.0/200 (29)	NR
VF520/80R26 CFO+ 168A8	2.8/280 (41)	1.2/120 (17)	1.4/140 (20)	1.4/140 (20)	1.4/140 (20)	NR
600/70R28 161A8-164A8	3.6/360 (52)[b]	1.4/140 (20)	2.4/240 (35)	2.2/220 (32)	2.0/200 (29)	NR
620/70R30 IMP 178A8	2.4/240 (35)	1.2/120 (17)	2.0/200 (29)	1.6/160 (23)	1.6/160 (23)	NR
620/75R26 166A8	3.2/320 (47)[b]	1.2/120 (17)	2.2/220 (32)	2.0/200 (29)	1.6/160 (23)	NR
VF620/70R26 CFO(+) 173A8	2.2/220 (32)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	NR
VF620/75R26 CFO 172A8/B	1.8/180 (26)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	NR
LSW710/60R30 CFO 177D	1.8/180 (26)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	NR
VF710/65R26 177D R-2	1.8/180 (26)	1.2/120 (17)	1.8/180 (26)	1.6/160 (23)	1.2/120 (17)	NR
750/65R26 166A8-169A8	2.8/280 (41)	1.2/120 (17)	1.8/180 (26)	1.6/160 (23)	1.4/140 (20)	NR
VF750/65R26 CFO(+) 177A8/B-180A8	1.6/160 (23)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	NR
NR = Not Recommended						

[a] *Indicates road transport configuration (no header, no grain in tank).*
[b] *30 km/h (19 mph) max speed*

OUO6075,0004E43-19-07JUL20

Rear Tire Pressure (S780, S785, and S790)

NOTE: See Care and Service of Tires in this section for further information.

IMPORTANT: All road transportation MUST be done at pressure shown in No Head/Transport column. Improper pressure during transport may decrease vehicle stability. Proper pressure results in better fuel economy and longer tire life.

Speed	Transport Speed 40 km/h (25 mph)		Harvest Speed 10 km/h (6 mph)			
Approximate Mass	No Head/ Transport[a]	4500—5500 kg 9900—12 100 lb	1500—2500 kg 3300—5500 lb	2500—3500 kg 5500—7700 lb	3500—4500 kg 7700—9900 lb	4500—5500 kg 9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Rear Tire Size	S780, S785, and S790 - Tire Pressure - bar/kPa (psi)					
500/85R24 IMP 181A8	4.0/400 (58)	2.0/200 (29)	3.6/360 (52)	3.2/320 (47)	2.8/280 (41)	2.4/240 (35)
500/80R28 IMP 182A8	3.6/360 (52)	2.0/200 (29)	3.2/320 (47)	2.8/280 (41)	2.4/240 (35)	2.4/240 (35)
620/70R30 IMP 178A8	2.4/240 (35)	1.2/120 (17)	2.4/240 (35)	2.0/200 (29)	2.0/200 (29)	1.6/160 (23)
620/75R26 166A8	3.2/320 (47)[b]	1.4/140 (20)	2.4/240 (35)	2.4/240 (35)	2.2/220 (32)	2.0/200 (29)
VF620/70R26 CFO(+) 173A8	2.4/240 (35)	1.2/120 (17)	1.4/140 (20)	1.4/140 (20)	1.2/120 (17)	1.2/120 (17)
VF620/75R26 CFO 172A8/B	2.0/200 (29)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)
LSW710/60R30 CFO 177D	2.0/200 (29)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)
VF710/65R26 177D R-2	1.8/180 (26)	1.2/120 (17)	2.4/240 (35)	2.0/200 (29)	1.8/180 (26)	1.6/160 (23)
750/65R26 166A8-169A8	3.0/300 (44)	1.2/120 (17)	2.0/200 (29)	1.8/180 (26)	1.8/180 (26)	1.6/160 (23)
VF750/65R26 CFO(+) 177A8/B-180A8	1.6/160 (23)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)	1.2/120 (17)
NR = Not Recommended						

[a] *Indicates road transport configuration (no header, no grain in tank).*
[b] *30 km/h (19 mph) max speed*

OUO6075,0004E44-19-07JUL20

Rear Tire Pressure (HillMaster™)

IMPORTANT: All road transportation MUST be done at pressure shown in No Head/Transport column. Improper pressure during transport may decrease vehicle stability. Proper pressure results in better fuel economy and longer tire life.

NOTE: See Care and Service of Tires in this section for further information.

Speed	Transport Speed 40 km/h (25 mph)	Harvest Speed 10 km/h (6 mph)				
Approximate Mass	No Head/ Transport[a]	1500—2500 kg	2500—3500 kg	3500—4000 kg	4000—4500 kg	4500—5500 kg
		3300—5500 lb	5500—7700 lb	7700—8800 lb	8800—9900 lb	9900—12 100 lb
Belt Pickup/Draper Heads	Not Applicable	BP15 620F 620R 622F 622R 625F 625R	630F 630R 635F 635R 725D 722PF 725PF 722X 725X	RD30F 730D 735X	RD35F RD40F 735D 740D 730PF 735PF	HD35R HD40R HD40X HD45R RD45F 740X 740PF
Rear Tire Size	**S770 HillMaster™ - Tire Pressure - bar/kPa (psi)**					
500/85R24 181A8	3.2/320 (47)	2.4/240 (35)	2.0/200 (29)	1.6/160 (23)	NR	NR
VF520/80R26 165A8	2.4/240 (35)	1.8/180 (26)	1.6/160 (23)	1.4/140 (20)	NR	NR
620/70R30 178A8	2.4/240 (35)	2.6/260 (38)	1.6/160 (23)	1.4/140 (20)	NR	NR
Rear Tire Size	**S780, S785, and S790 HillMaster™ - Tire Pressure - bar/kPa (psi)**					
500/85R24 181A8	4.0/400 (58)	2.8/280 (41)	2.4/240 (35)	2.0/200 (29)	NR	NR
620/70R30 178A8	2.6/260 (38)	2.8/280 (41)	2.4/240 (35)	2.0/200 (29)	NR	NR
NR = Not recommended						

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[a]Indicates road transport configuration (no header, no grain in tank).

OUO6075,0004E7F-19-07JUL20

Front and Rear Tire Information

It will be necessary to recalibrate system if tires or final drives are changed from what was originally shipped from the factory. Verify that correct tire code is entered into memory.

IMPORTANT: When changing drive wheels, tire radius may also change. CAB control unit MUST be set to new tire radius. See your John Deere dealer for further information.

Failure to calibrate system will result in inaccurate Harvest Monitor Yields.

For additional information shown below on front and rear tires, see your John Deere dealer for further information.

Front Tires:

- Tire Sizes
- Header Compatibility
- Row Spacings
- Wheel Spacers
- Axle Spacers
- Wheel Offsets

Rear Tires:

- Tire Sizes
- Axle Types
- Spindle Types
- Axle Positions

- Front to Rear Height Differences

OUO6075,0001113-19-11APR12

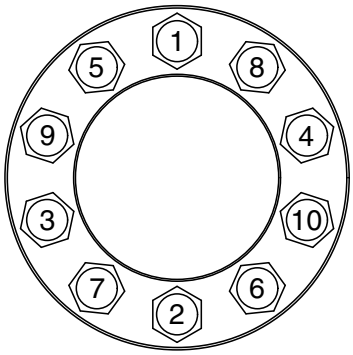
Drive Wheel Starter Stud

H97547—UN—06AUG10

If a wheel is removed, thread wheel starter stud (HXE16110) into axle, then install wheel. This stud can also be used for duals.

OUO6075,00007CC-19-06AUG10

Drive Wheel Bolt Torque



H96863—UN—10JUN10

Style A

H124190—UN—15MAY18

Style B

Each time drive wheels are repositioned or replaced, torque wheel bolts to specification and in a crisscross pattern.

Specification

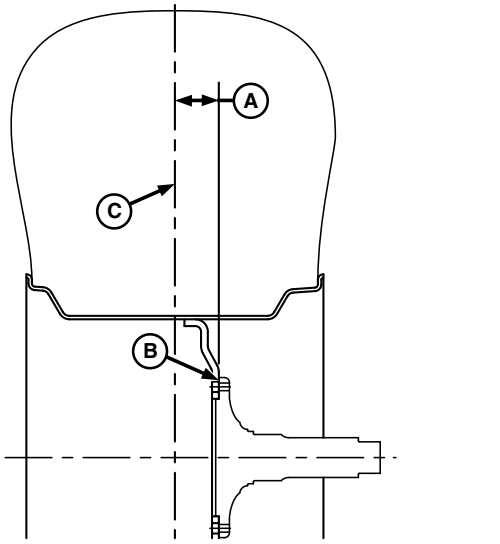
Wheel Bolts—Torque (dry). . . . . 710 N·m (524 lb·ft)

After the first hour of operation and again after every 10 hours of operation, torque wheel bolts to specification until 50 hours of operation is complete. Torque wheel bolts every 100 hours thereafter.

IMPORTANT: For HillMaster™ machines, verify the clearance of wheels and tires to the body of the machine. Do this when the HillMaster™ lift cylinders are extended fully to the right-hand side and fully to the left-hand side. Check clearance at end position.

OUO6075,0004DFD-19-09APR20

Front Drive Wheel Offset



H65047—UN—30OCT00

Single Wheel

A—Dimension
B—Spindle Surface
C—Tire Centerline

CAUTION: Avoid serious injury or death resulting from final drive failure and loss of drive wheel during transport or field operation. Do not exceed maximum wheel offset.

IMPORTANT: Use only John Deere supplied wheels, tires, and spacers. Use of non-John Deere components not meeting specification voids the warranty.

Do not use clamp-on style duals. They do not meet John Deere specification.

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Wheel offset distance severely affects life of final drive parts. When installing drive wheels, ensure that offset dimension (A) measured from spindle surface (B) to centerline (C) is within specification.

Maximum Wheel Offset — Specification

Single Wheel—Distance. . . . . 114.3 mm (4-1/2 in.)

OUO6075,0004919-19-07MAR18

Preparing Dual Wheels for Transport or Service

CAUTION: Do not attempt to operate machine in the field with outer dual wheels removed. Machine damage can occur.

Only move machine short distances with outer duals removed. Before moving machine reduce machine weight by removing header and emptying grain tank.

IMPORTANT: If machine must be transported without outer wheels in place, 5 socket head cap screws and 15 wheel bolts MUST be installed and tightened to specification before lowering front axle to ground. Segmented spacers are omitted for road transport, loading, and unloading.

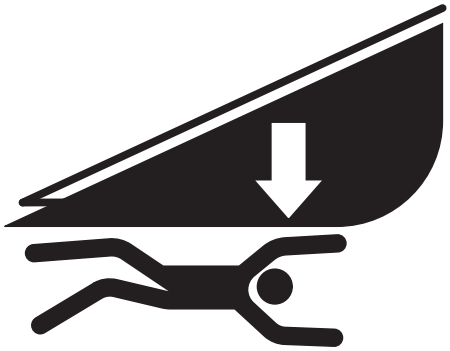
When preparing dual wheels for transport, outer wheels can be removed to reduce transport width.

Refer to the following directions whenever the front wheels (outer and inner) need removed or installed on a dual wheel machine. Inner wheel cannot be removed without first removing outer wheel.

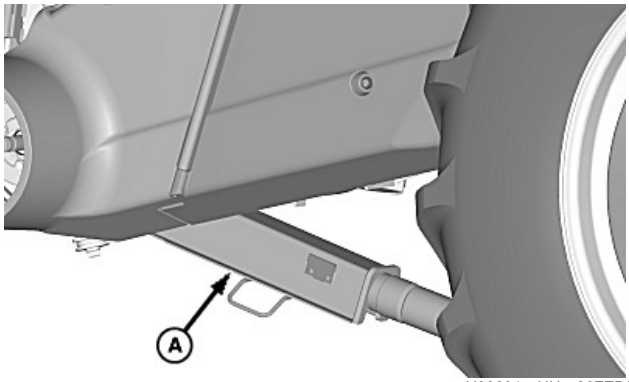
Pay close attention to ”CAUTION” statements as they address your safety, the safety of others and safe operations of the machine.

OUO6075,000491A-19-23MAY18

Remove Front Wheels



H121063—UN—14MAR17



H90891—UN—26FEB08

A—Safety Stop

CAUTION: Grain tank MUST be empty and header attachment removed.

1. Park machine on flat, solid, and level surface.

CAUTION: To avoid injury or death, raise feeder house and lower safety stop. Some assembly requires you to work underneath the feeder house.

Without safety stop engaged, feeder house can suddenly lower, causing serious crushing injury or death.

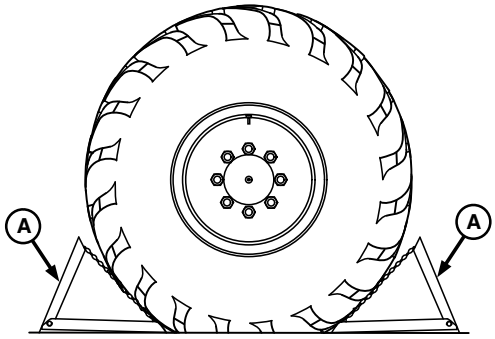
2. **Manual Feeder House Fore/Aft Tilt**

   Raise feeder house completely and lower safety stop (A) onto hydraulic cylinder rod.

   Hydraulic Feeder House Fore/Aft Tilt

   Raise feeder house completely and tilt hydraulic feeder house fore/aft tilt frame fully forward and lower safety stop (A) onto hydraulic cylinder rod.

3. Shut OFF engine, set park brake and remove key.

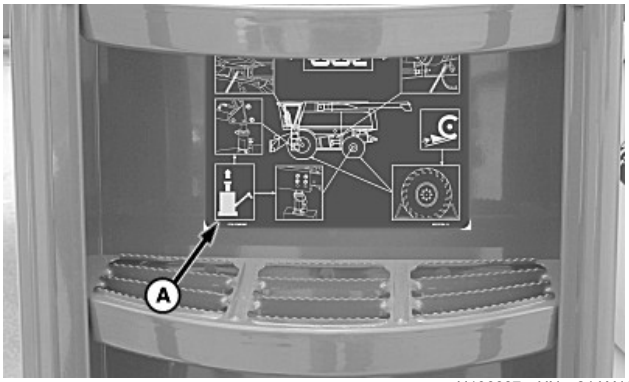


H118221—UN—18APR16

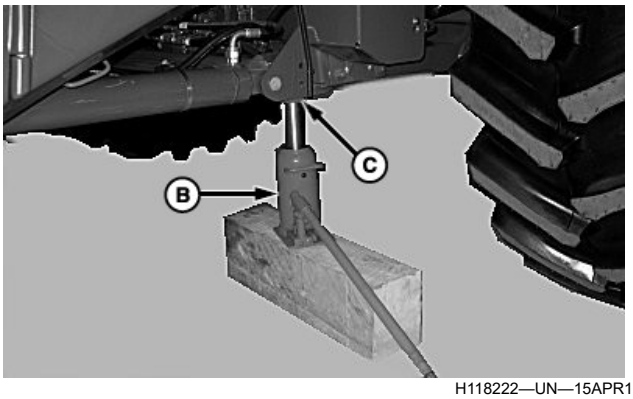
A—Blocks

CAUTION: Block both sides of tires to prevent movement while raising machine.

4. Block front and rear of tires as shown using blocks (A).
5. With front tires on ground, loosen wheel bolts one full turn, but do not remove at this time.



H106687—UN—24JAN13



H118222—UN—15APR16

A—Decal
B—Jack
C—Jack Pocket

CAUTION: Jack MUST have a minimum lifting capacity of 10 886 kg (24 000 lb).

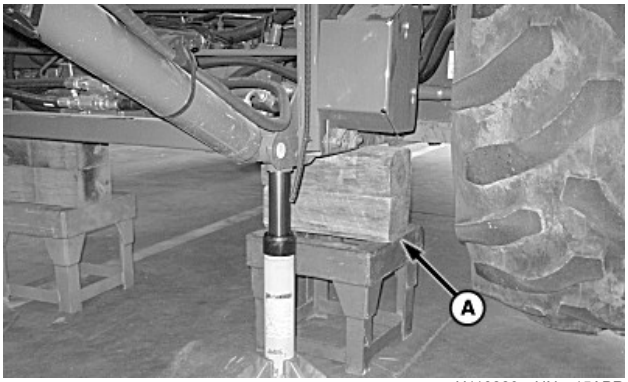
Do not raise machine at any location other than at the jack pockets.

Do not place objects between the jack and the jack pocket. They may cause machine instability. If the jack does not have enough travel length, place block on ground.

Wood blocks must be in good condition to support machine weight.

NOTE: Approved jack pocket locations can be found on decal (A) on the cab ladder.

6. Align jack (B) with the jack pocket (C) on the front axle and raise machine.



H118223—UN—15APR16

A—Blocks

CAUTION: To help prevent personal injury caused by unexpected movement of the machine, be sure that machine is stable after blocking.

Do not support machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work on a machine that is supported solely by a jack.

Wood blocks must be in good condition to support machine weight.

Be sure that the front axle rests on blocking before attempting to remove wheels.

7. Position solid blocking (A) underneath the front axle. Lower machine onto blocking, making sure that no load shift is seen or felt.

H124389—UN—29MAY18

A—Wheel Bolt (10 used)
B—Spacer (10 used)
C—Wheel
D—Wheel Spacer (if required)

8. **Single Wheel Configuration (10 Wheel Bolts):**

CAUTION: Wheels are heavy and are difficult to handle. To avoid personal injury, two people are needed to remove the wheel.

a. Remove wheel bolts (A) and spacers (B).

b. Repeat steps as needed for remaining spacers and wheels bolts.

c. Remove wheel (C) away from machine.

d. Remove wheel spacer (D) (if required) from the drive hub.

e. Repeat steps as needed on the opposite side of the machine.

H124273—UN—15MAY18

A—Wheel Bolt (20 used)
B—Segmented Spacer (5 used)
C—Wheel
D—Wheel Spacer (if required)

9. **Single Wheel Configuration (20 Wheel Bolts):**

CAUTION: Wheels are heavy and are difficult to handle. To avoid personal injury, two people are needed to remove the wheel.

a. Remove **four** wheel bolts (A) and segmented spacer (B).

b. Repeat steps as needed for remaining segment spacers and wheels bolts.

c. Remove wheel (C) away from machine.

d. Remove wheel spacer (D) (if required) from the drive hub.

e. Repeat steps as needed on the opposite side of the machine.

H124224—UN—14MAY18

A—Wheel Bolt (20 used)
B—Segmented Spacer (5 used)
C—Socket Head Cap Screw (5 used)
D—Oversized Hole (5 used)
E—Outer Wheel Assembly

10. **Dual Wheel Configuration (Outer Wheel):**

CAUTION: Wheels are heavy and are difficult to handle. When handling wheels, off-centered weight can suddenly shift making wheel handling awkward and the wheel difficult to control. To avoid personal injury, two people are needed to remove the wheel.

a. Remove **four** wheel bolts (A) and segmented spacer (B).

b. Install **one** socket head cap screw (C) through the oversized hole (D) to retain inner wheel in place.

CAUTION: To avoid personal injury, socket head cap screws MUST be installed to prevent inner wheel from coming off when removing outer wheel.

c. Repeat steps as needed for remaining segment spacers and wheels bolts.

d. Remove outer wheel assembly (E) away from machine.

e. Repeat steps as needed on the opposite side of the machine.

IMPORTANT: If machine must be transported without outer wheels in place, 5 socket head cap screws and 15 wheel bolts MUST be installed and tightened to specification before lowering front axle to ground. Segmented spacers are omitted for road transport, loading, and unloading.

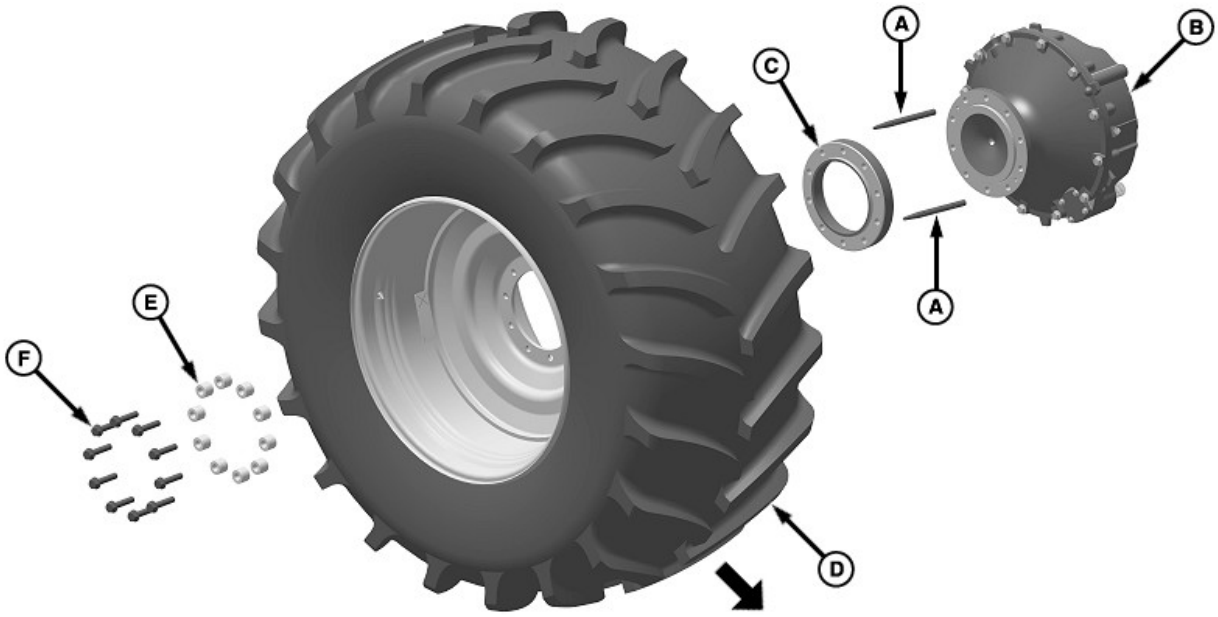
H124225—UN—14MAY18

A—Socket Head Cap Screw (5 used)
B—Inner Wheel Assembly

11. **Dual Wheel Configuration (Inner Wheel):**
    a. Remove socket head cap screws (A).
    b. Remove inner wheel assembly (B) away from machine.
    c. Repeat steps as needed on the opposite side of the machine.

OUO6075,0004DFE-19-09APR20

Install Front Wheels



H124390—UN—29MAY18

A—Pilot Stud (2 used)
B—Drive Hub
C—Wheel Spacer (if required)
D—Wheel
E—Spacer (10 used)
F—Wheel Bolt (10 used)

1. **Single Wheel Configuration (10 Wheel Bolts):**

CAUTION: Wheels are heavy and are difficult to handle. To avoid personal injury, two people are needed to install the wheel.

NOTE: The 10 wheel bolt rims will fit on a 20 wheel bolt drive hub.

Pilot stud HXE16110 is recommended to help guide wheels into position.

a. Install pilot studs (A) in top and bottom holes of the drive hub (B). Stud threads must bottom out in holes.

b. Install wheel spacer (C) (if required) onto the drive hub.

IMPORTANT: Install tire as directed or machine will NOT be drivable.

c. Position the wheel (D) so the tire cleats point towards the front and downward.

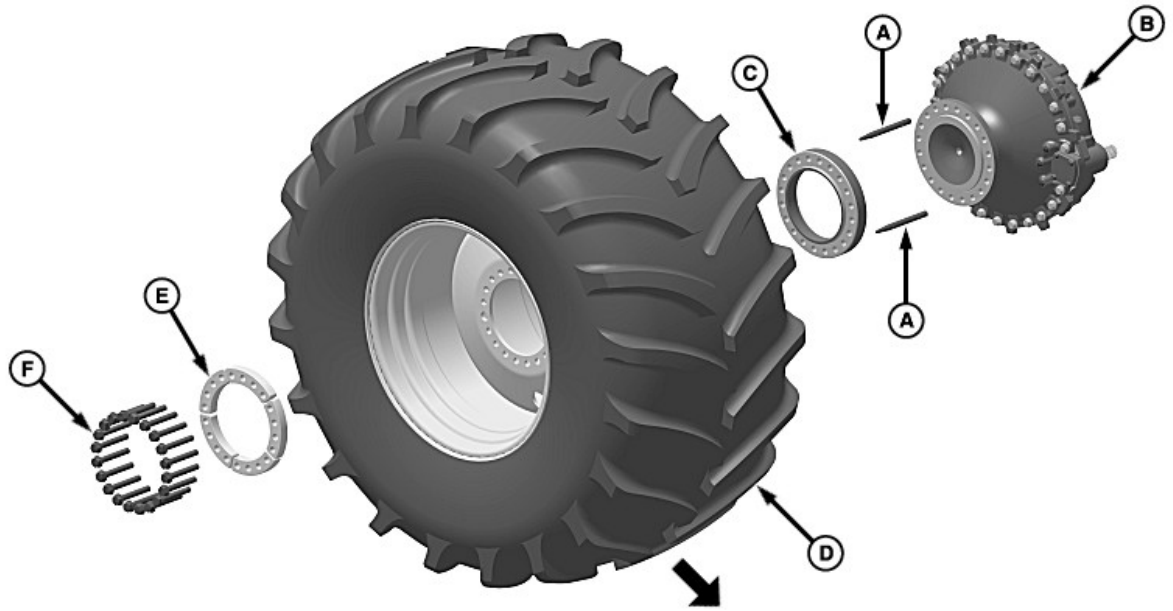
d. Align holes in the rim with pilot studs.

e. Install wheel onto the drive hub.

IMPORTANT: Start wheel bolts by hand to help prevent damage to bolts.

f. Install spacers (E) and retain with wheel bolts (F).

IMPORTANT: Install all wheel bolts and spacers BEFORE lowering front axle to ground.



H124196—UN—14MAY18

A—Pilot Stud (2 used)
B—Drive Hub
C—Wheel Spacer (if required)
D—Wheel
E—Segmented Spacer (5 used)
F—Wheel Bolt (20 used)

2. **Single Wheel Configuration (20 Wheel Bolts):**

CAUTION: Wheels are heavy and are difficult to handle. To avoid personal injury, two people are needed to install the wheel.

NOTE: The 10 wheel bolt rims will fit on a 20 wheel bolt drive hub.

Pilot stud HXE16110 is recommended to help guide wheels into position.

a. Install pilot studs (A) in top and bottom holes of the drive hub (B). Stud threads must bottom out in holes.

b. Install wheel spacer (C) (if required) onto the drive hub.

IMPORTANT: Install tire as directed or machine will NOT be drivable.

c. Position the wheel (D) so the tire cleats point towards the front and downward.

d. Align holes in the rim with pilot studs.

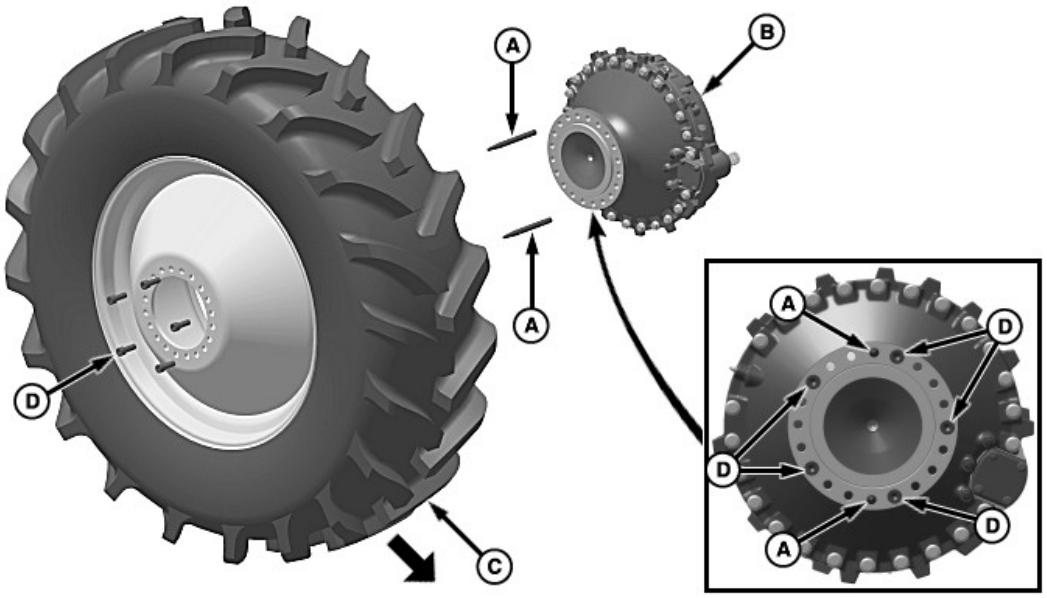
e. Install wheel onto the drive hub.

IMPORTANT: When attaching a 10 wheel bolt rim to a 20 wheel bolt drive hub, always use the same set of threaded holes. The buildup of dirt, debris, and rust in these unused holes prevents adequate clamp force of the wheel bolts. A plug is installed in one of the threaded holes in the drive hub to prevent the additional set of threaded holes from being used.

Start wheel bolts by hand to help prevent damage to bolts.

f. Install segmented spacers (E) and retain with wheel bolts (F).

IMPORTANT: Install all wheel bolts and segmented spacers BEFORE lowering front axle to ground.



H124461—UN—08JUN18

A—Pilot Stud (2 used)
B—Drive Hub
C—Wheel
D—Socket Head Cap Screw (5 used)

3. **Dual Wheel Configuration (Inner Wheel):**

CAUTION: Wheels are heavy and are difficult to handle. When handling wheels, off-centered weight can suddenly shift making wheel handling awkward and the wheel difficult to control. To avoid personal injury, two people are needed to install the wheel.

NOTE: Pilot stud HXE16110 is recommended to help guide wheels into position.

a. Install pilot studs (A) in top and bottom holes of the drive hub (B). Stud threads must bottom out in holes.

IMPORTANT: Install tire as directed or machine will NOT be drivable.

b. Position the wheel (C) so the tire cleats point towards the front and downward.

c. Align holes in the rim with pilot studs.

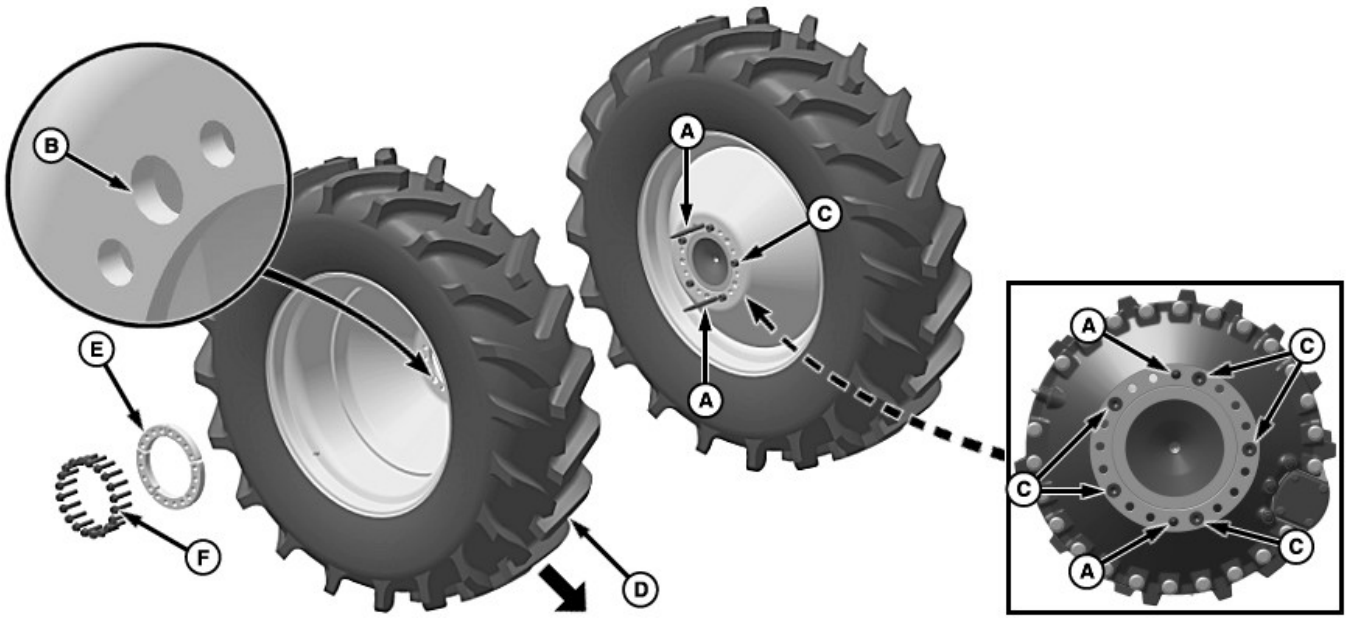
d. Install wheel onto the drive hub.

e. Install socket head cap screws (D) so that they are equally spaced from each other.

f. Tighten socket head cap screws to specification using an M17 hex bit socket.

Specification	
Socket Head Cap Screws—Torque (dry)	450 N·m (332 lb·ft)

IMPORTANT: If machine must be transported without outer wheels in place, 5 socket head cap screws and 15 wheel bolts MUST be installed and tightened to specification before lowering front axle to ground. Segmented spacers are omitted for road transport, loading, and unloading.



H124201—UN—14MAY18

A—Pilot Stud (2 used)
B—Oversized Hole (5 used)
C—Socket Head Cap Screw (5 used)
D—Wheel
E—Segmented Spacer (5 used)
F—Wheel Bolt (20 used)

4. **Dual Wheel Configuration (Outer Wheel):**

CAUTION: Wheels are heavy and are difficult to handle. When handling wheels, off-centered weight can suddenly shift making wheel handling awkward and the wheel difficult to control. To avoid personal injury, two people are needed to install the wheel.

IMPORTANT: Install tire as directed or machine will NOT be drivable.

a. Position the wheel so the tire cleats point towards the front and downward.

b. Align holes in the rim with pilot studs (A).

IMPORTANT: Verify that the oversized holes are aligned with the socket head cap screws. Inner and outer rims are flush with each other.

c. Align oversized holes (B) with previously installed socket head cap screws (C).

d. Install wheel (D) onto the drive hub.

e. Remove **one** socket head cap screw through the oversized hole.

f. Align **one** segmented spacer (E) with **four** rim holes.

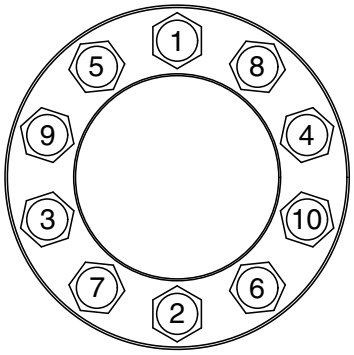
IMPORTANT: Start wheel bolts by hand to help prevent damage to bolts.

g. Install **four** wheel bolts (F) through segmented spacer and into the rim holes.

h. Repeat steps as needed for remaining segment spacers and wheels bolts.

IMPORTANT: Install all wheel bolts and segmented spacers BEFORE lowering front axle to ground.

NOTE: Retain socket head cap screws for future use when removing and installing wheels. Store the socket head cap screws in the toolbox.



H96863—UN—10JUN10

Style A

H124190—UN—15MAY18

Style B

5. Tighten wheel bolts to specification using a crisscross pattern.

Specification

Wheel Bolts—Torque (dry). . . . . 710 N·m (524 lb·ft)

6. Remove pilot studs and replace with wheel bolts.
7. Tighten remaining wheel bolts to specification.

Specification

Wheel Bolts—Torque (dry). . . . . 710 N·m (524 lb·ft)

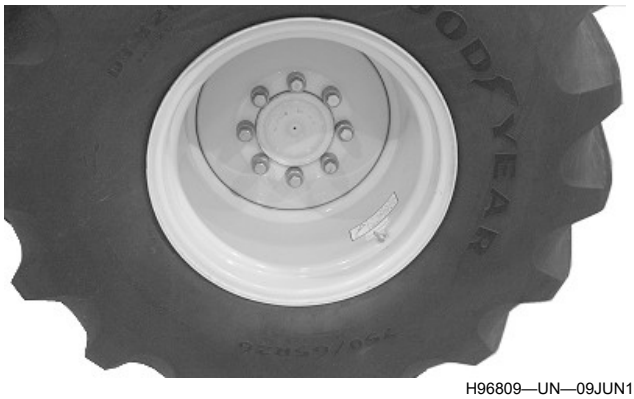
8. Repeat steps on the opposite side of machine and lower to ground.

   After the first hour of operation and again after every 10 hours of operation, torque wheel bolts to specification until 50 hours of operation is complete. Torque wheel bolts every 100 hours thereafter.

9. Check tire pressure and inflate as needed. See Care and Service of Tires in this section for tire inflation pressure.

OUO6075,0004DFF-19-23JUN20

Rear Wheel Bolt Torque



H96809—UN—09JUN10

Each time a rear wheel is removed, torque wheel bolts to specification.

Specification

M16 Wheel Bolts (Regular Duty Two-Wheel Drive)—Torque. . . . . 315 N·m (230 lb·ft)

M22 Wheel Bolts (Extra Heavy-Duty Two-Wheel Drive)—Torque . . . . . 710 N·m (524 lb·ft)

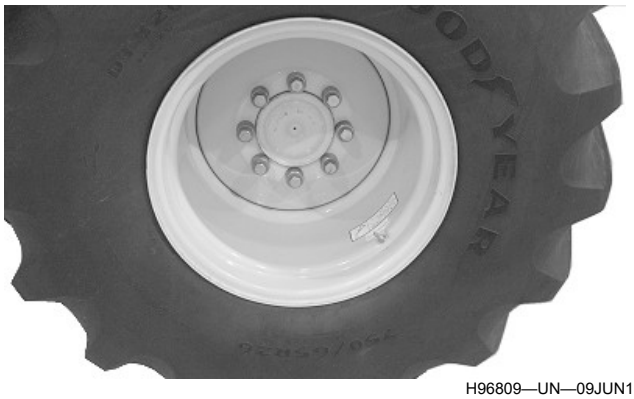
M22 Wheel Bolts (Four-Wheel Drive)—Torque. . . . . 710 N·m (524 lb·ft)

After the first hour of operation and again after every 10 hours of operation, torque wheel bolts to specification until 50 hours of operation is completed. Torque wheel bolts every 100 hours thereafter.

NOTE: Refer to decal on the tire for proper torque sequence.

OUO6075,00042E4-19-02JUN16

Using Liquid Weight



H96809—UN—09JUN10

CAUTION: Installing liquid weight (ballast) requires special equipment and training.

IMPORTANT: Cover rim completely with solution to avoid corrosion, but NEVER fill any tire more than 90 percent full. More solution would leave too little air space to absorb shocks. Damage to tire could occur.

A solution of water and calcium chloride provides a safe and economical ballast. Used properly, it will not damage tires, tubes or rims.

Use calcium chloride to prevent water from freezing. A mixture of 1.6 kg (3-1/2 lb) of calcium chloride per 3.8 L (1 gal) will not freeze solid above -45°C (-50°F).

NOTE: Use of alcohol as liquid ballast is not recommended. Calcium chloride solution is heavier and more economical.

Fill tubeless tires at least to valve level (minimum 75 percent full). Less solution would expose part of rim,

possibly causing corrosion. Tube-type tires may be filled to any level below 90 percent.

OUO6075,00007D0-19-10JUN10

Ballast Requirements

NOTE: Ballast requirements vary based on configuration.

Ballast requirements are based off standard Corn Pricing configuration, 133 L (35 gal) fuel in tank, and full grain tank. This may not reflect all scenarios.

Tires requiring fluid must be filled to 75%.

	Approximate Mass	**1500—2500 kg** **3300—5500 lb**	**2500—3500 kg** **5500—7700 lb**	**3500—4500 kg** **7700—9900 lb**	**4500—5500 kg** **9900—12 100 lb**
	Belt Pickup/Draper Heads	**BP15** **620F** **620R** **622F** **622R** **625F** **625R**	**630F** **630R** **635F** **635R** **725D** **722PF** **725PF** **722X** **725X**	**RD30F** **RD35F** **RD40F** **730D** **735D** **740D** **735X** **730PF** **735PF**	**HD35R** **HD40R** **HD40X** **HD45R** **RD45F** **740X** **740PF**
Model	**Normal Slopes (Flat to 15%)**				
S760 and S770	Two-Wheel Drive	No	No	Yes	NR
	Four-Wheel Drive				
S780, S785, and S790	Two-Wheel Drive	No	No	Yes	Yes
	Four-Wheel Drive				
Model	**Hilly Slopes (15% to 20%)**				
S760 and S770	Two-Wheel Drive	No	Yes	NR	NR
	Four-Wheel Drive				
S780, S785, and S790	Two-Wheel Drive	No	Yes	NR	NR
	Four-Wheel Drive				

No = Ballast not required for any size tires.
Yes = Ballast required for all tire sizes.
NR = Not Recommended. Configuration cannot be ballasted properly.

OUO6075,0004E9B-19-07JUL20

Ballast Requirements (HillMaster™)

NOTE: Ballast requirements vary based on configuration.

Ballast requirements are based off standard Corn Pricing configuration, 133 L (35 gal) fuel in tank, and full grain tank. This may not reflect all scenarios.

Tires requiring fluid must be filled to 75%.

Approximate Mass		**1500—2500 kg**	**2500—3500 kg**	**3500—4500 kg**	**4500—5500 kg**
		3300—5500 lb	**5500—7700 lb**	**7700—9900 lb**	**9900—12 100 lb**
Belt Pickup/Draper Heads		**BP15 620F 620R 622F 622R 625F 625R**	**630F 630R 635F 635R 725D 722PF 725PF 722X 725X**	**RD30F RD35F RD40F 730D 735D 740D 735X 730PF 735PF**	**HD35R HD40R HD40X HD45R RD45F 740X 740PF**
Model	**Normal Slopes (Flat to 15%)**				
S770 HillMaster™	Two-Wheel Drive	No	No	NR	NR
	Four-Wheel Drive				
S780, S785, and S790 HillMaster™	Two-Wheel Drive	No	No	NR	NR
	Four-Wheel Drive				
Model	**Hilly Slopes (15% to 20%)**				
S770 HillMaster™	Two-Wheel Drive	No	Yes	NR	NR
	Four-Wheel Drive				
S780, S785, and S790 HillMaster™	Two-Wheel Drive	No	Yes	NR	NR
	Four-Wheel Drive				
No = Ballast not required for any size tires. Yes = Ballast required for all tire sizes. NR = Not Recommended. Configuration cannot be ballasted properly.					

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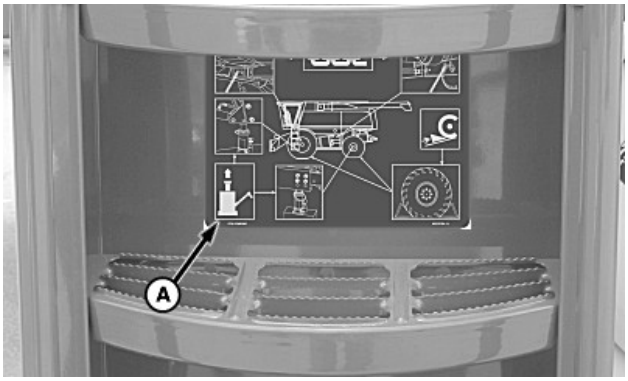
OUO6075,0004E9A-19-07JUL20

Jack Pocket Locations Decal



H106687—UN—24JAN13

A—Jack Pocket Locations Decal

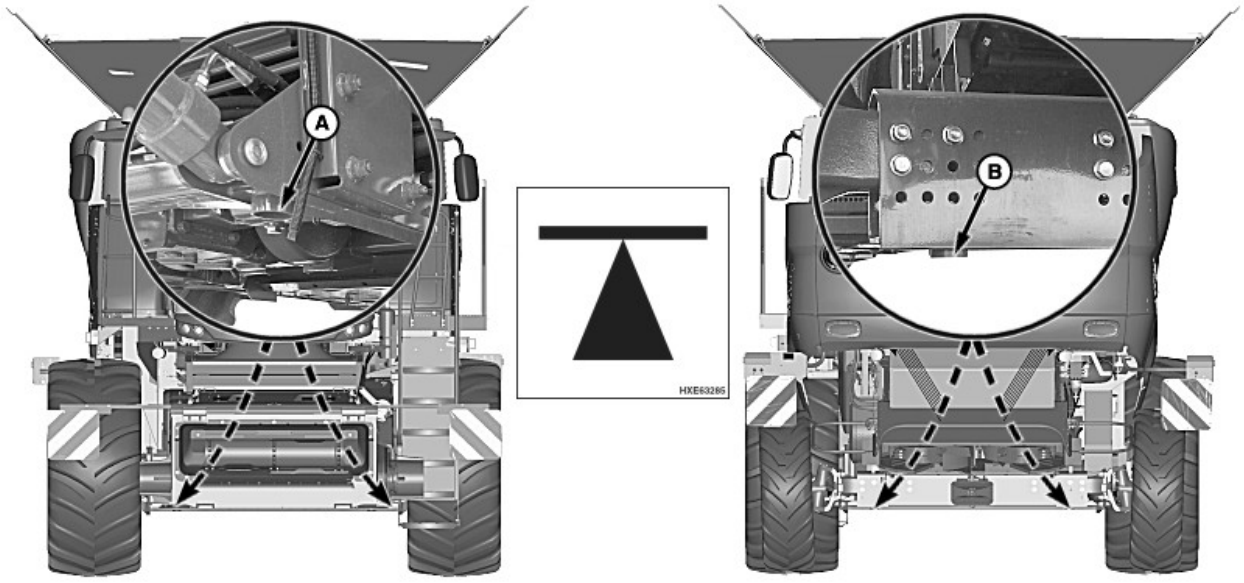
CAUTION: Always empty grain tank before raising machine.

Block both sides of tires to prevent machine movement.

Jack pocket locations decal (A) is located on cab ladder. Decal shows correct locations for raising machine using proper jacks.

OUO6075,0001392-19-24JAN13

Jack Pocket Locations



H105883—UN—24JAN13

A—Jack Pocket Locations (front)

B—Jack Pocket Locations (rear)

CAUTION: Always empty the grain tank before raising the machine.

To prevent machine movement, block both sides of the tires.

NOTE: Jack pocket locations are at the front and rear of the machine and on both sides.

Raise the machine at approved jack pocket locations (A and B).

OUO6075,0004B7B-19-30MAY19

Roadway Transport with Header Attached

Observe national and local laws regarding operation of the combine on public roadways.

This combine can be approved for roadway transport in Germany with a Geringhoff 8-row folding header and a Kemper 8-row folding header. Roadway transport in Germany must be approved by your local TUEV to achieve a road permission.

Apply for allowance at your dealership or at manufacturing factory.

OUO6075,000431D-19-29JUN16

Driving Machine on Roads

H115016—UN—22MAR16

Folding Button

⚠ CAUTION: Avoid power line entanglement. Grain tank covers must be closed before transporting machine.

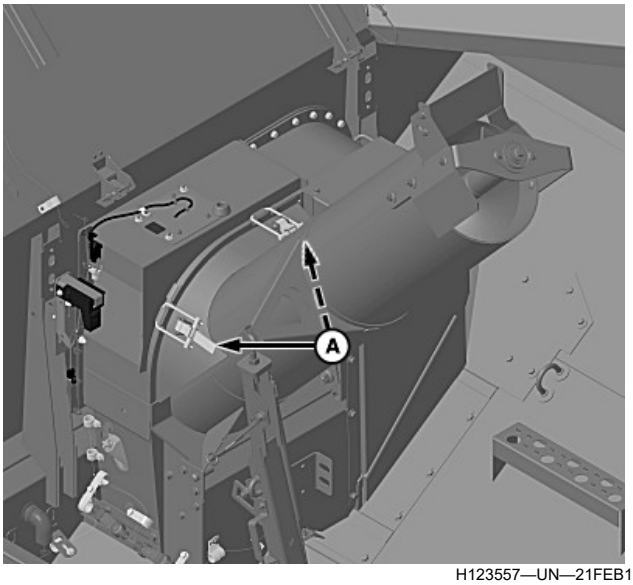
IMPORTANT: Verify that grain tank is unloaded before transporting machine on road.

Verify that folding unloading auger and folding grain tank covers are fully folded before driving machine.

1. Press folding button on navigation bar. See Folding Application Help or Operator's Station Help for further information.

   The following items must be folded to the transport position:

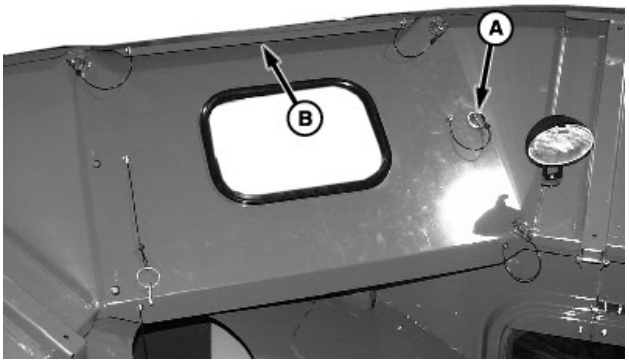
   - Unloading Auger
   - Grain Tank Covers (If Equipped)



H123557—UN—21FEB18

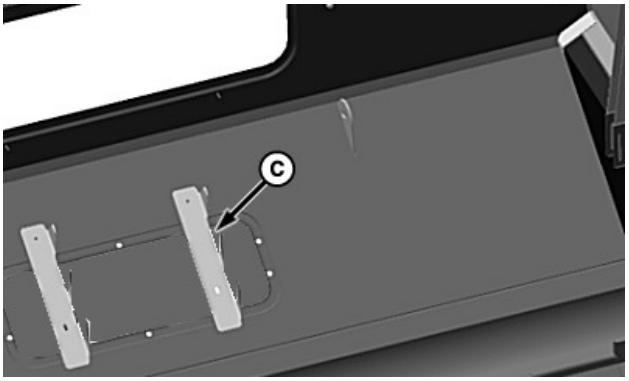
A—Clamps

2. **Manual Fold Clean Grain Auger (If Equipped):** Release clamps (A) and lower auger.



H75331—UN—26FEB03

Front Grain Tank Extension Shown



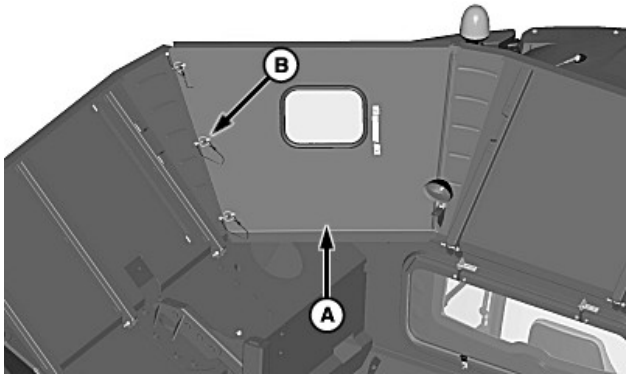
H113135—UN—05MAR15

A—Quick-Lock Pins
B—Grain Tank Corner Extensions
C—Storage Rack

3. **116 L/s (3.3 bu/s) Unload Rate Grain Tank Extensions (If Equipped):** Remove quick-lock pins (A) from the grain tank corner extensions (B). Store corner grain tank extensions in the storage rack (C). Fold grain tank extensions in the following order:

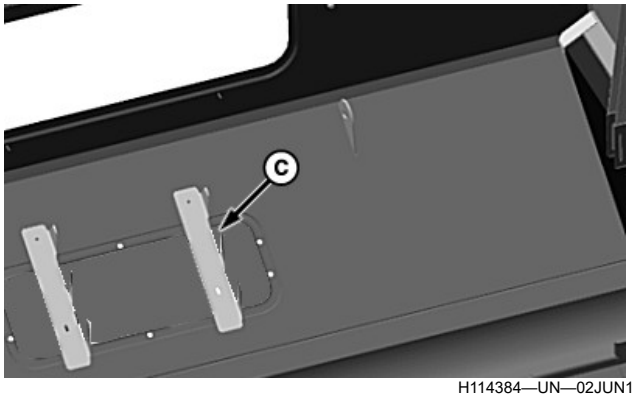
a. Fold front grain tank extension and rear grain tank extension.

b. Fold left-hand grain tank extension and right-hand grain tank extension.



H114383—UN—02JUN15

Front Grain Tank Extension



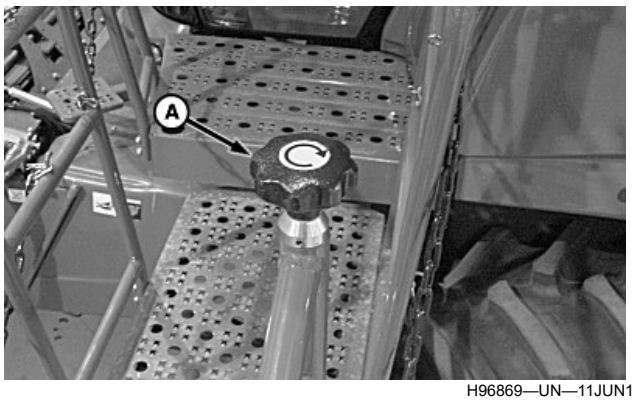
H114384—UN—02JUN15

A—Grain Tank Corner Extensions
B—Quick-Lock Pins
C—Storage Rack

4. **134 L/s (3.8 bu/s) Unload Rate Grain Tank Extensions (If Equipped):** Remove quick-lock pins (B) from the grain tank corner extensions (A). Store corner grain tank extensions storage rack (C). Fold grain tank extensions in the following order:

   a. Fold front grain tank extension and rear grain tank extension.

   b. Fold left-hand grain tank extension and right-hand grain tank extension.



H96869—UN—11JUN10

A—Handle

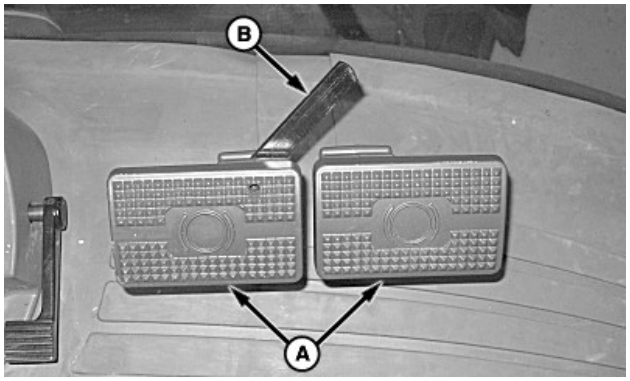
CAUTION: Swing ladder to the full forward position to reduce machine width and to orient marker/hazard light toward oncoming motorists.

IMPORTANT: Travel at a reasonable speed for road or field conditions. Never transport on the road with grain in the tank.

Follow local regulations for equipment size, lighting, and marking before driving on public roadways.

5. Use handle (A) to unlock ladder and swing fully forward.

6. Fold radio antenna down and retain with hook (if equipped). If the hook is not available, retain the antenna to cab roof with tape.



H96681—UN—01JUN10

A—Pedals
B—Lock

7. Lock brake pedals together with lock (B) when driving on roads. Leave pedals (A) unlocked for field operation.

CAUTION: Use seat belt whenever operating machine or riding as an observer.

8. Fasten seat belt.

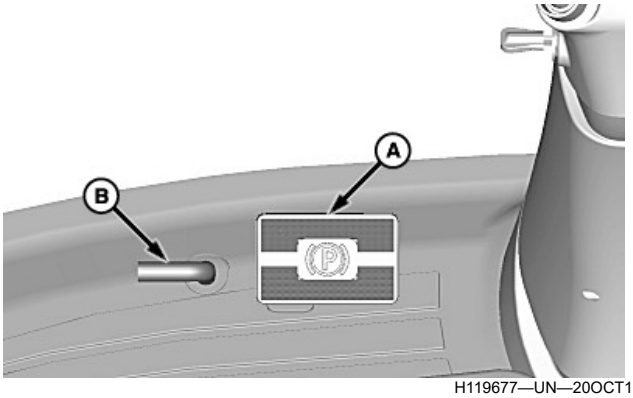
CAUTION: Sound horn before starting engine to clear people away from machine.

9. Sound horn and start engine. Use cold weather starting aid if needed.

H116348—UN—19DEC16

Header Raise/Lower Switch

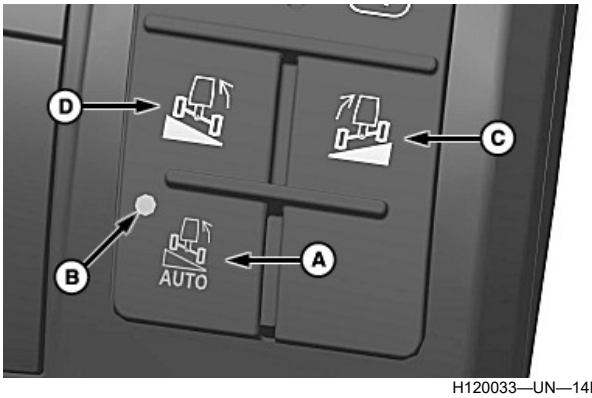
10. Raise header with the header switch.



H119677—UN—20OCT16

A—Park Brake
B—Pedal

11. **Mechanical Shift Transmission:** Disengage park brake (A) with pedal (B).



H120033—UN—14NOV16

HillMaster™ Switches

A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

12. **HillMaster™ Machines:**

CAUTION: Avoid loss of control during road transport and serious injury or death. Never transport machine on a roadway with HillMaster™ leveling system in automatic mode. Never attempt to manually tilt machine while transporting on a roadway.

a. Move machine to level ground.

NOTE: Road transport disconnect switch in field position.

b. Press automatic leveling control switch (A) for **5 seconds** or until indicator light (B) flashes.

c. Push and hold manual tilt right switch (C) to tilt the machine chassis to the right.

d. Push and hold manual tilt left switch (D) to tilt the machine chassis to the left.

H117022—UN—28MAR16

Road Transport Disconnect

NOTE: After transporting machine, press road transport disconnect switch for 2 seconds allowing indicator light to turn OFF and allowing desired switch functions to operate.

13. Engage road transport disconnect switch.

H117885—UN—29MAR16

Hazard Light

CAUTION: When transporting on a road or highway, marker/hazard lights and tail lights on both sides provide a warning to operators of vehicles approaching from the front and rear. These lights must be turned ON when driving machine on public roadways. Swing cab ladder fully forward to orient marker/hazard lights towards oncoming motorists. Do not operate marker/hazard lights if prohibited by law.

14. Turn beacon/hazard light switch ON for both daytime and nighttime road travel. Warning lights automatically operate when hazard lights are ON.

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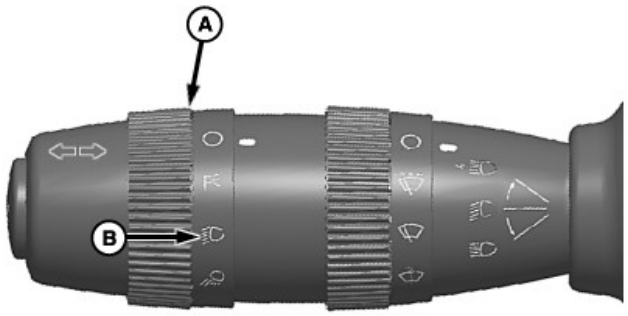


H96014—UN—22JUN11

A—Selection Switch
B—Road Lights Switch

15. Use selection switch (A) to turn ON road lights (B) for nighttime travel.

NOTE: Turn signal indicators on corner post display illuminate to indicate a turn.

16. Use turn signals as needed. They are not self-canceling.

H117021—UN—28MAR16

Engine Speed (Fast Speed)

17. Press engine speed switch for maximum engine speed.

NOTE: For field operation, select a gear according to working conditions.

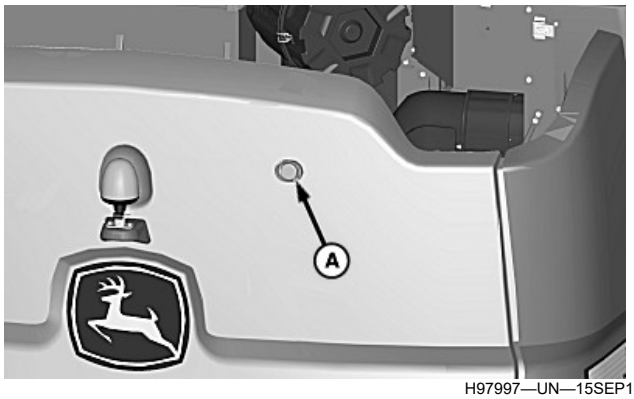
18. **Mechanical Shift Transmission:** Engage third gear for road travel.

CAUTION: If transporting machine with header attached, travel at a reasonable speed to ensure adequate braking performance and control of machine.

19. Slowly move the multi-function lever forward or rearward. When coming to the top of a hill, pull back on the multi-function lever before starting down the other side.

OUO6075,00048BD-19-12APR18

Back-Up Alarm



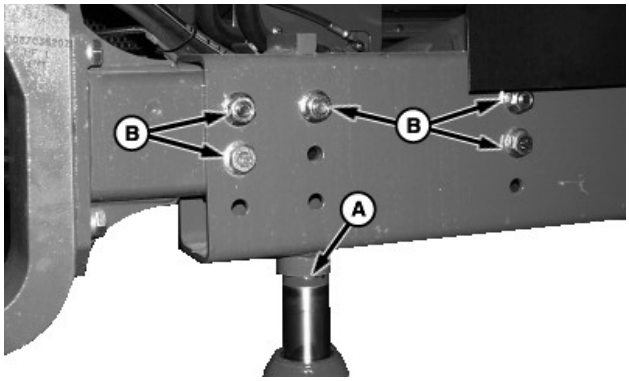
H97997—UN—15SEP10

A—Back-Up Alarm

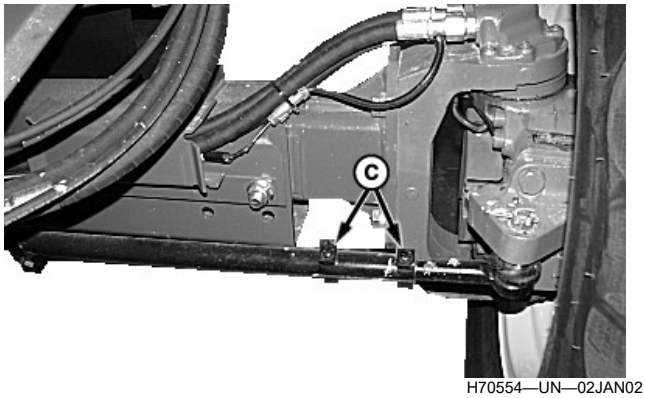
If multi-function lever is moved rearward while engine is running, back-up alarm (A) sends an acoustical signal to warn others around the machine that the operator is backing up.

OUO6075,00016AC-19-22NOV13

Transporting Machine on a Trailer



H70555—UN—02JAN02



H70554—UN—02JAN02

A—Jack Pocket
B—Cap Screw (5 used)
C—Cap Screws

NOTE: See Driving Machine on Roads earlier in this section for additional information that MUST be done before transporting machine on a trailer.

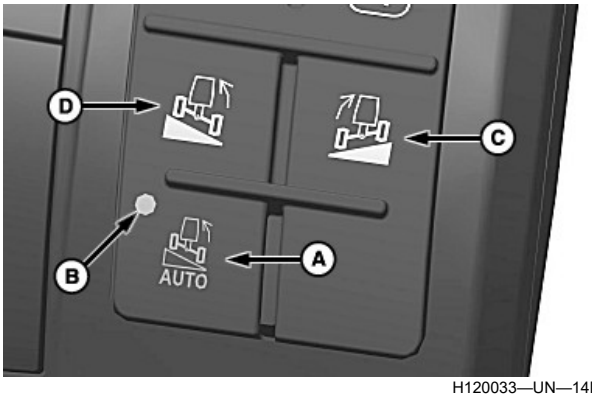
See Ground Drive and Rear Axle section for additional information that MUST be done when removing dual wheels (if equipped).

1. Remove header and outside dual wheels (if equipped).

NOTE: After transporting machine, adjust rear axle spacing to previous width.

2. Locate jack pocket (A) on the rear axle and raise machine.
3. Remove cap screws (B) from rear axle.
4. Remove cap screws (C) from tie rod.
5. Adjust rear axle to narrowest position. Repeat steps as needed on the opposite side.
6. Install previously removed hardware and tighten to specification.

Specification	
Axle Cap Screws—Torque	620 N·m (460 lb·ft)
Tie Rod Cap Screws (Equipped with Two Bolt Outer Tie Rod End)—Torque	70 N·m (50 lb·ft)
Tie Rod Cap Screws (Equipped with Three Bolt Outer Tie Rod End)—Torque	127 N·m (94 lb·ft)



H120033—UN—14NOV16

HillMaster™ Switches

A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

7. **HillMaster™ Machines:**

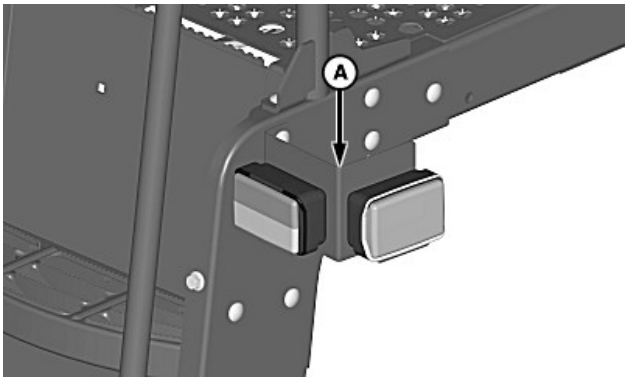
CAUTION: Never drive machine on a trailer with HillMaster™ leveling system in automatic mode. Never attempt to manually tilt machine while on trailer.

a. Move machine to level ground.

NOTE: Road transport disconnect switch in field position.

b. Press automatic leveling control switch (A) for **5 seconds** or until indicator light (B) flashes.
c. Push and hold manual tilt right switch (C) to tilt the machine chassis to the right.
d. Push and hold manual tilt left switch (D) to tilt the machine chassis to the left.

8. Drive machine on trailer and move the multi-function lever to neutral position.
9. **Dual Ladder Landing Configuration:** Lower feeder house onto trailer to allow ladder landing to be swung to transport position.
10. Shut OFF engine, set park brake and remove key.
11. Fold radio antenna down and retain with hook (if equipped). If the hook is not available, retain the antenna to cab roof with tape.



H121713—UN—07JUN17

A—Light Bracket

12. **Single Tire Configuration:** Disconnect wiring harness and remove light bracket (A).

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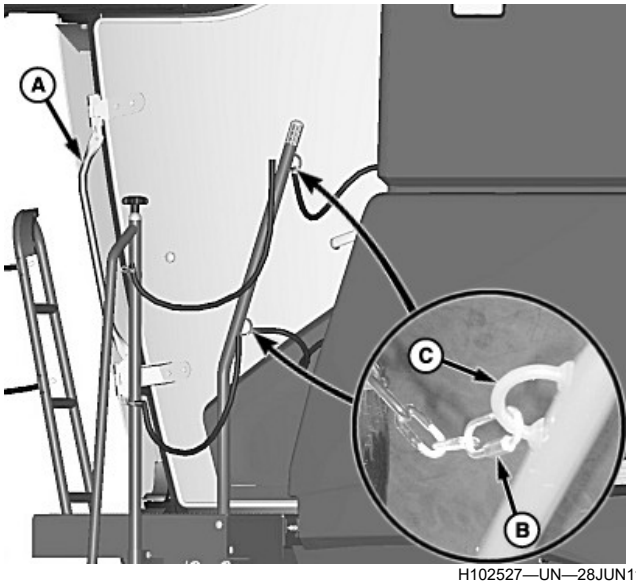


H102527—UN—28JUN11

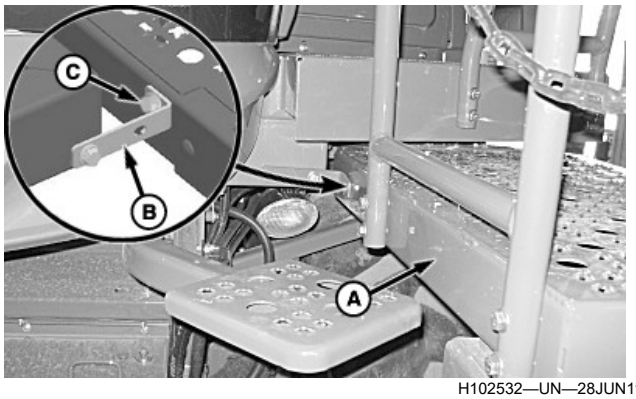
A—Handrail
B—Chain Link
C—Handrail Loops

13. **Single Tire Configuration:** Remove and retain the cab handrail (A).

IMPORTANT: Possible injury to you or others can occur from falling. Be careful when disconnecting safety chains and dismounting ladder landing.

NOTE: Assemble chain back onto existing loops on ladder handrail and loops on the grain tank. This shortens the chain and prevents it from damaging the composite panels.

14. **Single Tire Configuration:** Disconnect and retain closure chain link (B) from handrail loops (C).

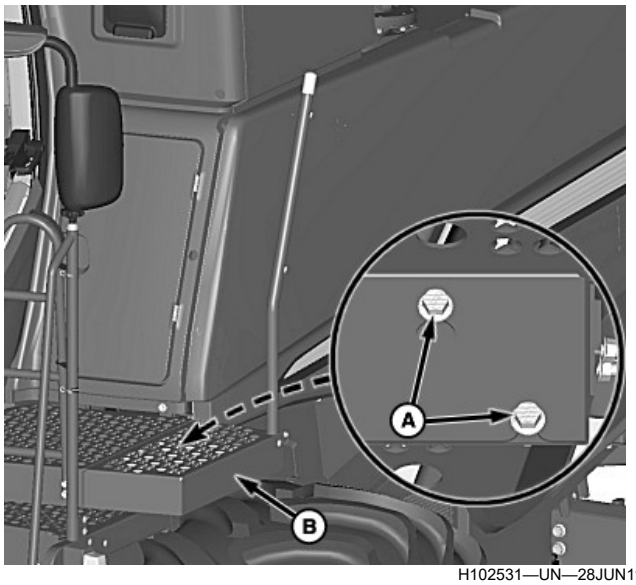


H102532—UN—28JUN11

A—Ladder Landing
B—Shipping Bracket
C—Cap Screw

NOTE: Cab ladder must be swung past innermost detent position to allow ladder landing to contact shipping bracket.

15. **Single Tire Configuration:** Swing ladder landing (A) to transport position until it contacts shipping bracket (B) and install cap screw (C).



H102531—UN—28JUN11

A—Cap Screw (5 used)
B—Ladder Landing

16. **Single Tire Configuration:** Loosen cap screws (A) and remove ladder landing (B).

H102501—UN—27JUN11

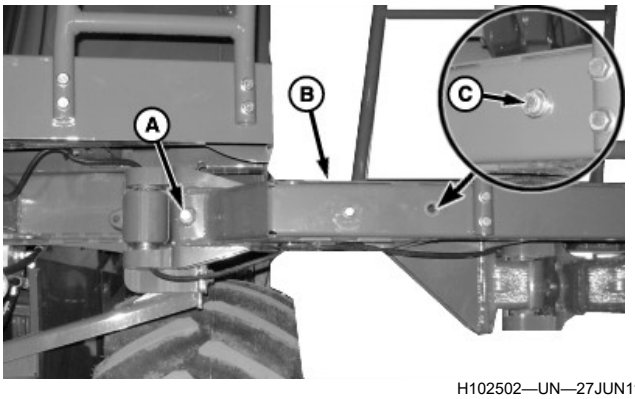
A—Chain Link
B—Handrail Loop

IMPORTANT: Possible injury to you or others can occur from falling. Be careful when disconnecting safety chains and dismounting ladder landing.

NOTE: Assemble chain back onto existing loops on the grain tank. This shortens the chain and prevents it from damaging the composite panels.

17. **Dual Tire Configuration:** Disconnect and retain

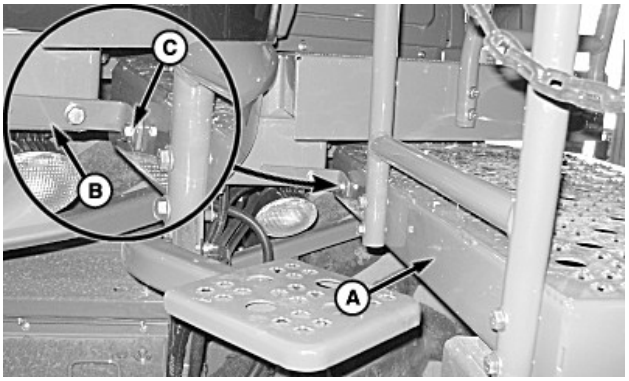
closure chain link (A) from the handrail loop (B) on both sides of handrail.



H102502—UN—27JUN11

A—Cap Screw
B—Ladder Landing
C—Cap Screw

18. **Dual Tire Configuration:** Remove cap screw (A) and swing ladder landing (B) to transport position.
19. **Dual Tire Configuration:** Install previously removed cap screw (C) in storage position as shown.



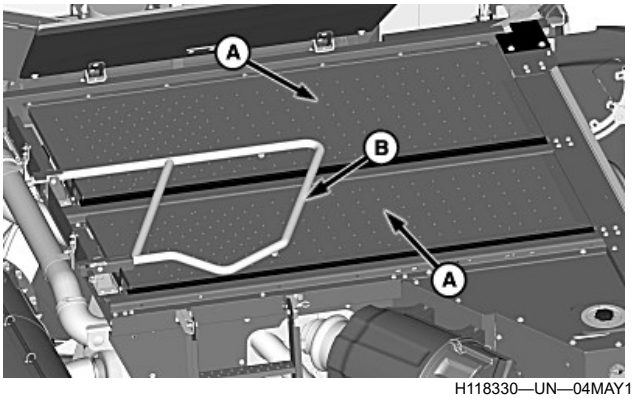
H102503—UN—28JUN11

A—Ladder Landing
B—Shipping Bracket
C—Cap Screw

IMPORTANT: Feeder house MUST be lowered onto trailer to avoid contact between the ladder landing and the feeder house driveshaft when ladder is swung forward.

NOTE: Cab ladder must be swung past innermost detent position to allow ladder landing to contact shipping bracket.

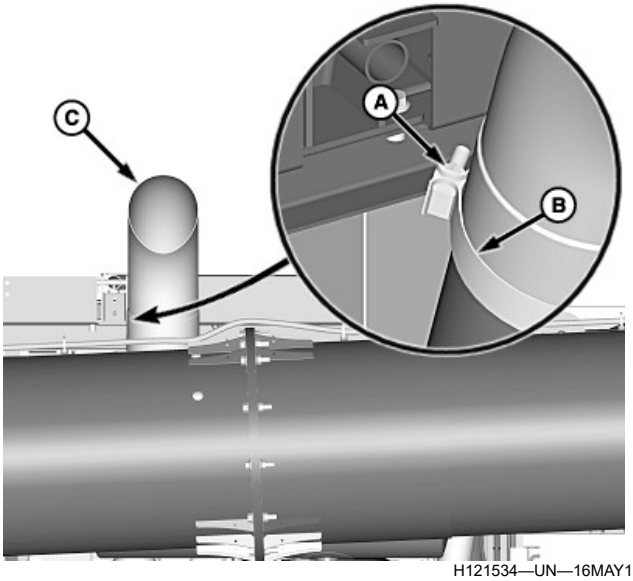
20. **Dual Tire Configuration:** Swing ladder landing (A) to transport position until it contacts shipping bracket (B) and install cap screw (C).



H118330—UN—04MAY16

A—Engine Access Covers
B—Handrail

21. Lower engine access covers (A) and handrail (B) to lock covers into place.



H121534—UN—16MAY17

A—Nut
B—Clamp
C—Muffler Extension

CAUTION: To reduce the risk of electrical shock by overhead power lines, no portion of the machine should exceed a height of 4 m (13 ft 1 in).

Allow exhaust system and components to cool before removing muffler extension and installing exhaust cap.

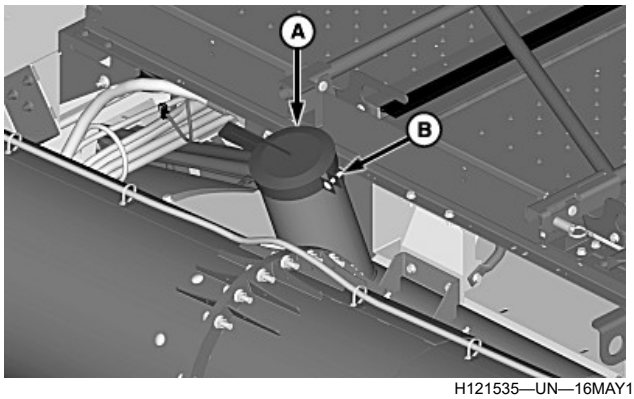
22. **Tier 2/Stage II Engines:** Loosen nut (A) on clamp (B).

NOTE: Muffler extension MUST be removed when transporting machine on a trailer to reduce overall machine height. Retain muffler extension for future field use.

After transporting, install muffler extension and tighten clamp hardware to specification.

Specification	
Clamp Hardware—Torque	80 N·m (59 lb·ft)

23. **Tier 2/Stage II Engines:** Remove and retain muffler extension (C).



H121535—UN—16MAY17

A—Exhaust Cap
B—Nut

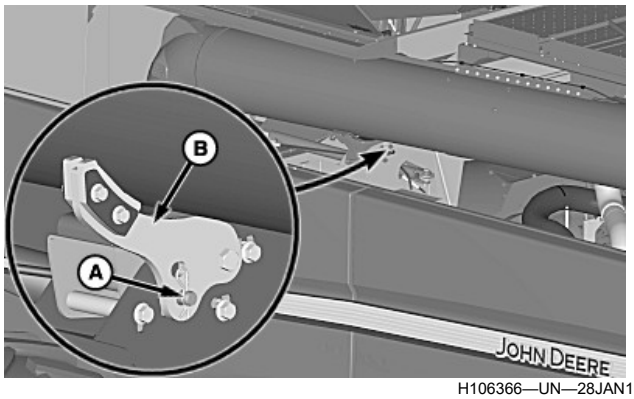
24. **Tier 2/Stage II Engines:** Install exhaust cap (A) as shown.

25. **Tier 2/Stage II Engines:** Tighten nut (B) to specification.

Specification	
Nut—Torque	20 N·m (177 lb·in)

26. **Tier 2/Stage II Engines:** Tape exhaust cap closed to prevent damage to turbocharger.

TS249—UN—23AUG88

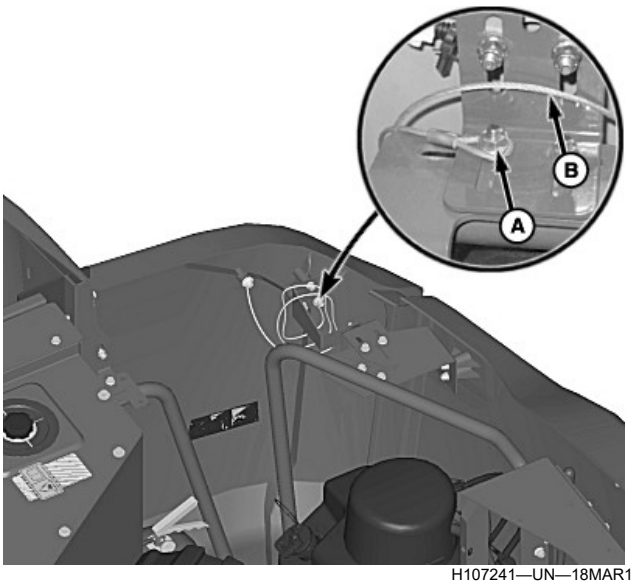


H106366—UN—28JAN13

A—Spring Pin and Pin
B—Unloading Auger Lock Arm

CAUTION: Possible injury or death to you or others can occur from falling. Use a ladder or equivalent with an appropriate load rating to access location when installing unloading auger retaining hardware. Do not attempt to access location from the engine platform.

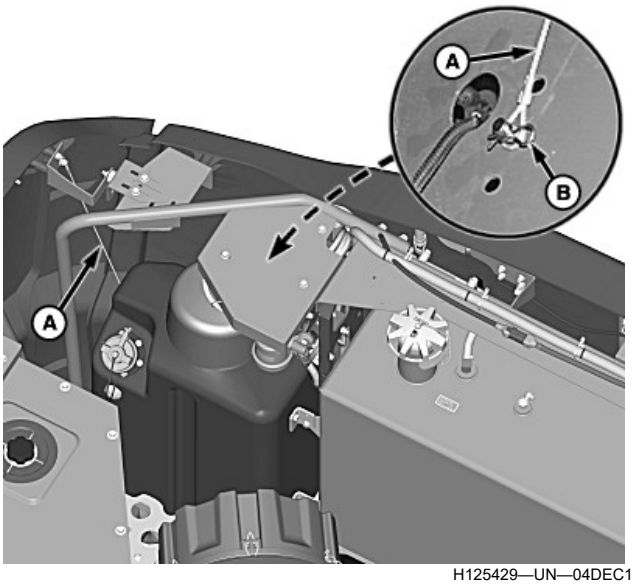
27. **Unloading Auger Lock Arm:**
    a. Remove and retain the spring pin and pin (A).
    b. Raise unloading auger lock arm (B) until holes align.
    c. Install previously removed pin and spring pin.



H107241—UN—18MAR13

A—Hardware
B—Cable

28. Loosen hardware (A) and remove cable (B) from storage position.



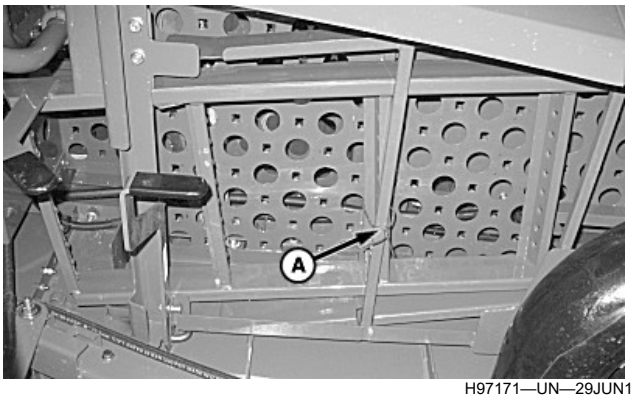
H125429—UN—04DEC18

A—Cable
B—Spring Pin

NOTE: Verify that cable is installed on inside portion of handrail.

Adjust pin to different positions if cable does not reach.

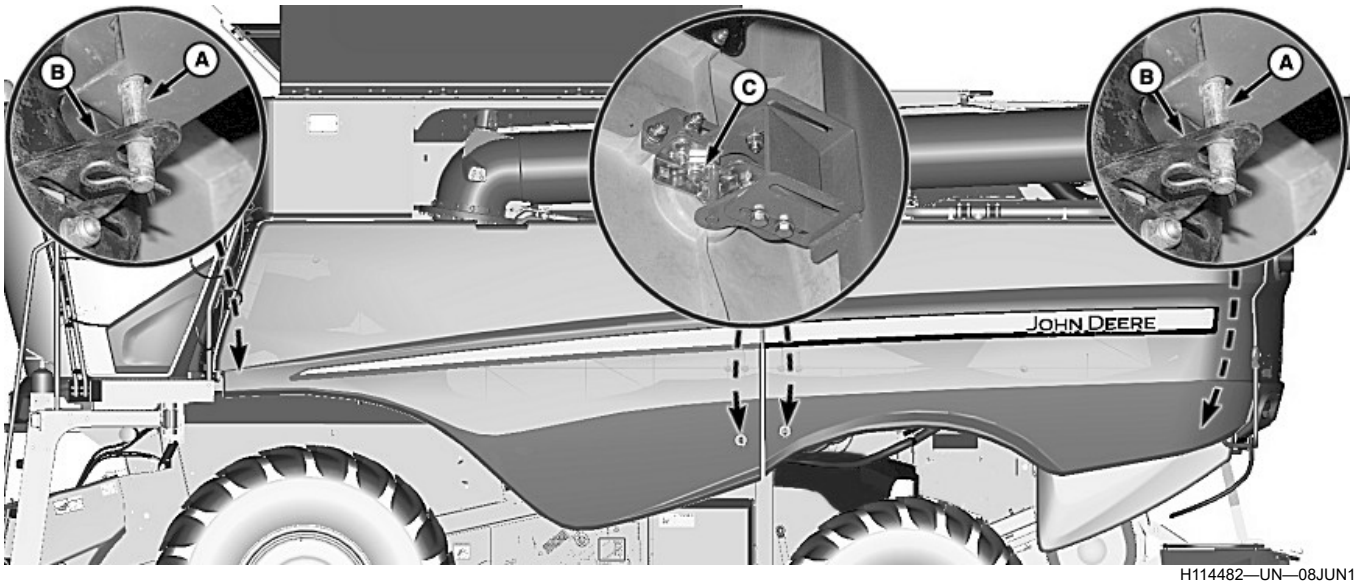
29. Install cable (A) over pin and retain with spring pin (B).



H97171—UN—29JUN10

A—Platform

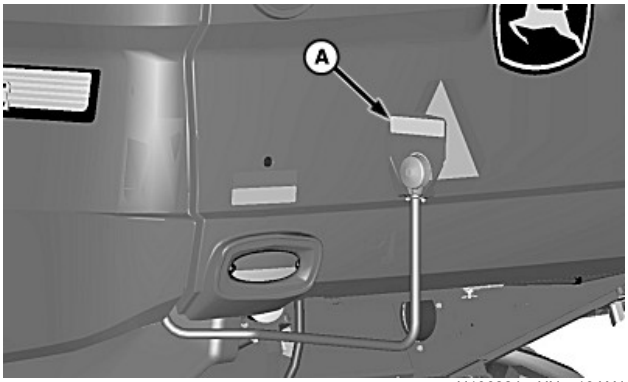
30. Tie the ladder extension to platform (A) using wire.



H114482—UN—08JUN15

A—Pins
B—Locking Plates
C—Latches

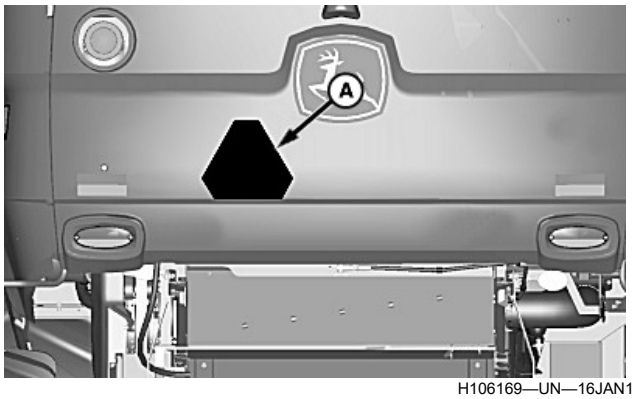
31. Install pins (A) through locking plates (B) and retain with spring pins at front and rear corners of the left-hand gull wing doors. Repeat on the opposite side of machine.
32. Use wire to tie the gull wing doors at latches (C). Repeat on the opposite side of machine.



H106224—UN—16JAN13

A—Hazard Lights

33. Swing left-hand and right-hand hazard lights (A) (if equipped) rearward as shown.



H106169—UN—16JAN13

A—Slow Moving Vehicle Emblem

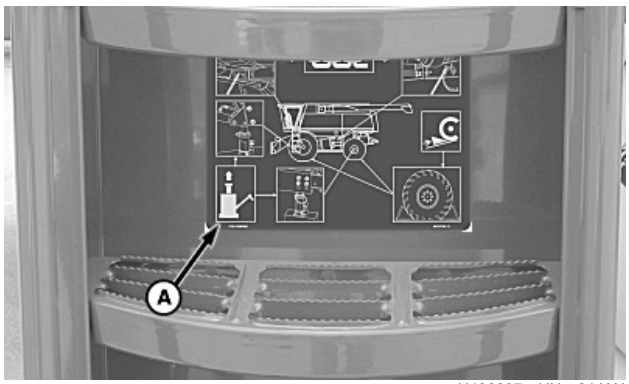
34. Cover up slow moving vehicle emblem (A) if equipped.

IMPORTANT: Fasten machine to trailer with chains.

35. Fasten machine to trailer with chains (see Machine Tie Down Locations Decal on cab ladder for tie-down information).

OUO6075,0004BC3-19-04JUN19

Machine Tie Down Locations Decal



H106687—UN—24JAN13

A—Machine Tie Down Locations Decal

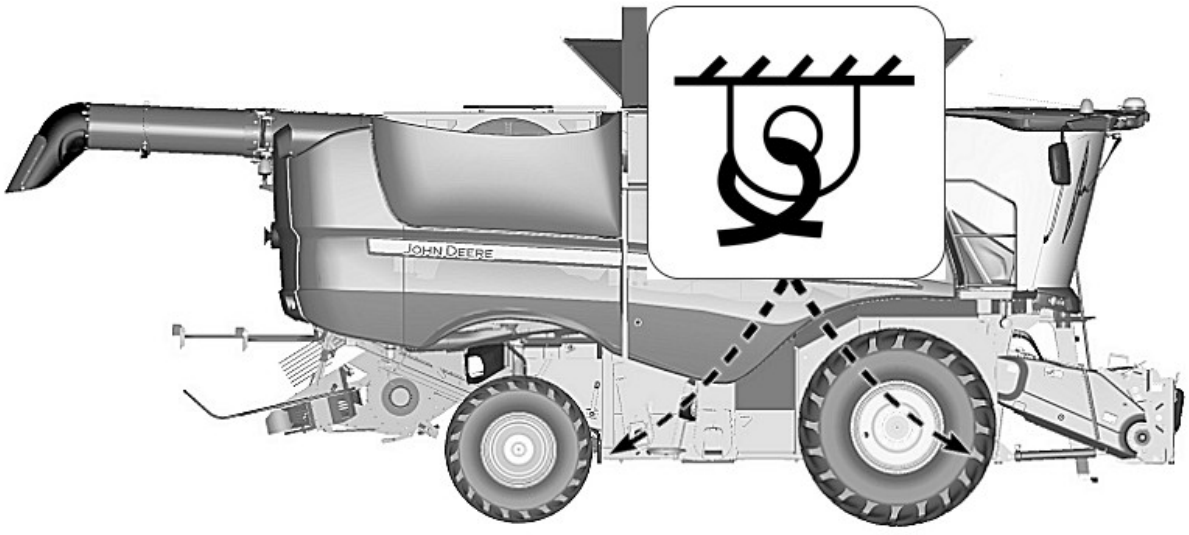
CAUTION: Always empty grain tank before raising machine.

NOTE: Machine tie down locations are on both sides of machine at front and rear.

Machine tie down locations decal (A) is located on cab ladder. Decal shows correct locations for fastening machine with chains.

OUO6075,0001393-19-24JAN13

Machine Tie Down Locations



H105885—UN—24OCT12

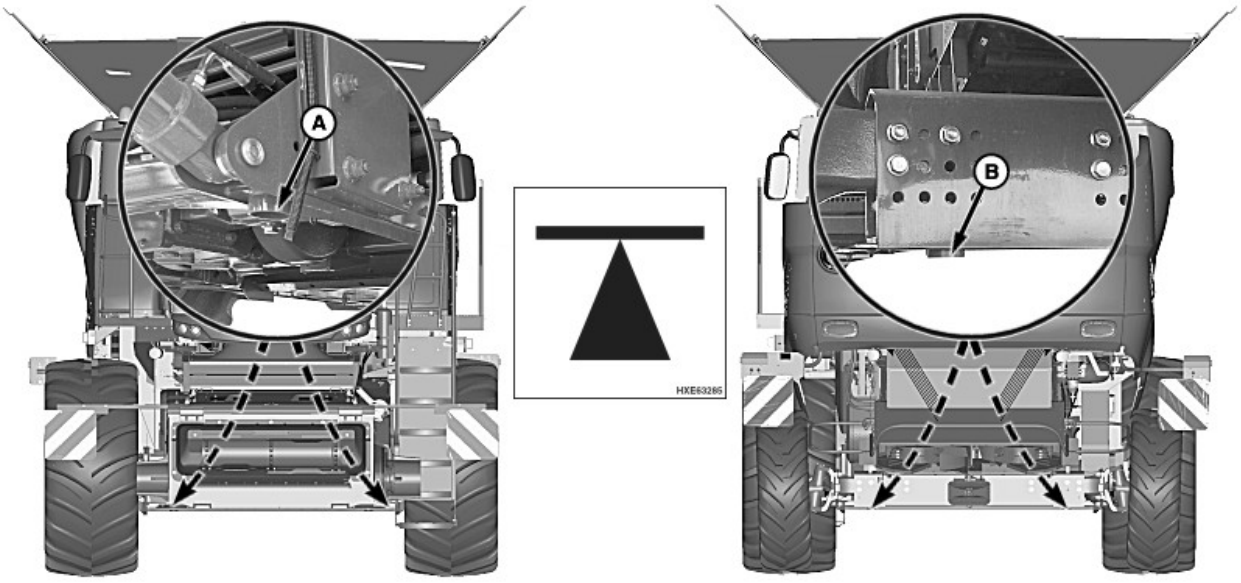
CAUTION: Always empty grain tank before transporting machine.

NOTE: Machine tie down locations are located on both sides of machine at front and rear.

Use provided locations shown on machine to properly tie down machine.

OUO6075,00011DC-19-10FEB16

Jack Pocket Locations



H105883—UN—24JAN13

A—Jack Pocket Locations (front)

B—Jack Pocket Locations (rear)

CAUTION: Always empty the grain tank before raising the machine.

To prevent machine movement, block both sides of the tires.

NOTE: Jack pocket locations are at the front and rear of the machine and on both sides.

Raise the machine at approved jack pocket locations (A and B).

OUO6075,0004B7B-19-30MAY19

Transport Information

CAUTION: To reduce the risk of electrical shock by overhead cables, no portion of machine should exceed a height of 4 m (13 ft 1 in). Grain tank cover must be closed and radio antenna turned to horizontal position before transporting machine.

Avoid electrical line entanglement. Grain tank cover must be closed and radio antenna turned to horizontal position before transporting machine.

Check local governmental regulations regarding driving or towing equipment on public roads. Use auxiliary lights and devices available from your John Deere dealer to warn other road users.

Machine can be transported on a flat bed truck or by towing.

When towing, refer to Towing Machine in this section.

OUO6075,0004318-19-24JUN16

Towing Machine (Mechanical Shift Transmission Machines)

NOTE: For push-button shift transmission machines and ProDrive™ transmission machines, see Transmission Application Help or Operator's Station Help for further information.

CAUTION: Do not tow machine with wire rope. If rope breaks, the whipping action could cause bodily injury.

Avoid electrical line entanglement. Grain extensions must be lowered and radio antenna lowered before transporting.

Check local governmental regulations regarding driving or towing equipment on public roads. Use auxiliary lights and devices available from your John Deere dealer to warn other roadway users.

Do not tow machine except in an emergency for a short distance at 8 km/h (5 mph). To tow machine, proceed as follows:

- Empty grain tank and remove header.

ProDrive is a trademark of Deere & Company

- Swing unloading auger back. Fold grain tank extensions.
- Swing ladder forward and fold down radio antenna.
- Disengage park brake.

CAUTION: Do not remove couplers. When couplers are removed, brakes are disabled.

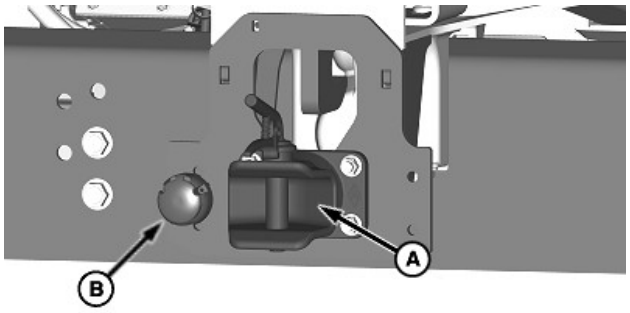
- Place gearshift lever and multi-function lever in neutral position.
- Tow machine in a forward direction by attaching a chain around the main axle. Be certain chain does not damage any hydraulic lines. Have driver in the operator's seat to steer and brake the machine.
- Turn warning lights ON, unless prohibited by law.
- Travel at a safe and reasonable speed, not to exceed 8 km/h (5 mph).

CAUTION: Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use hand signals or turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible and in good working order. Replace or repair lighting and marking that are damaged or lost.

OUO6075,000447D-19-31JAN17

Manual Trailer Hitch—Attaching (Standard)



H118213—UN—14APR16

A—Hitch
B—Electrical Connector

CAUTION: Shut OFF engine, set park brake and remove key before hooking up trailer.

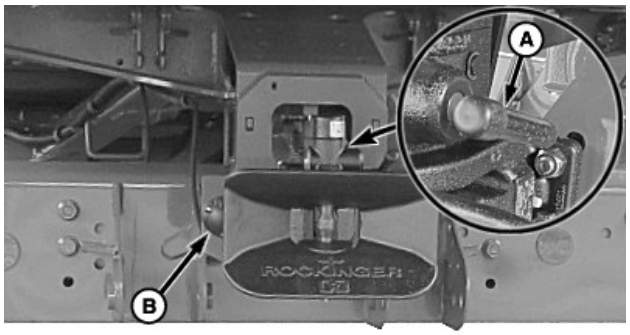
Fully raise the chopper.

Attach trailer to hitch (A) and secure with the trailer hitch pin.

Connect trailer electrical harness to electrical connector (B).

OUO6075,00042C1-19-29JUN16

Semi-Automatic Trailer Hitch—Attaching (Optional)



H111228—UN—12MAY14

A—Handle
B—Electrical Connector

CAUTION: Shut OFF engine, set park brake and remove key before hooking up trailer.

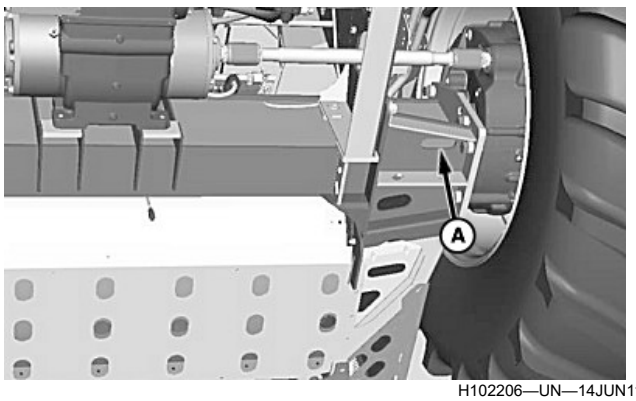
Fully raise the chopper.

Raise handle (A) to open lock pin and attach trailer to the machine. When the trailer hitch aligns with the lock pin, handle lowers automatically locking trailer hitch in place.

Connect trailer electrical harness to electrical connector (B).

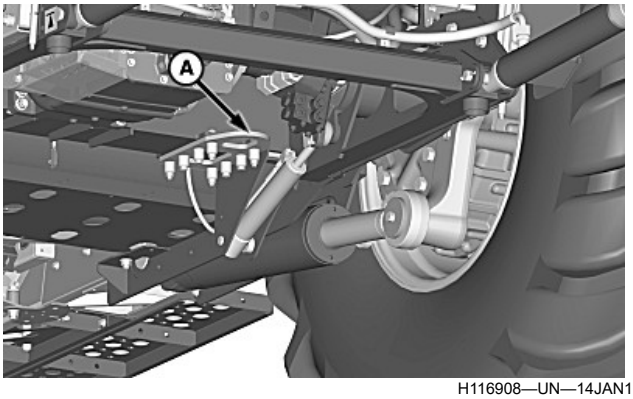
OUO6075,000431B-19-29JUN16

Front Tow Hook



H102206—UN—14JUN11

Front Tow Hook (Non-HillMaster™ machine)



H116908—UN—14JAN16

Front Tow Hook (HillMaster™ machine)

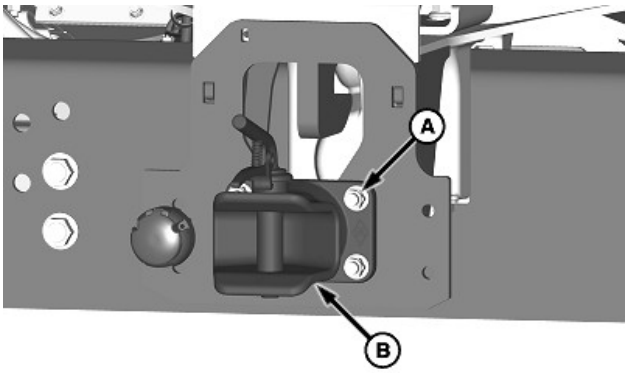
A—Hook

Tow or pull the machine out of mud in a forward direction if necessary by attaching a chain to hook (A) on the front axle. Verify that the chain will not damage any hydraulic lines.

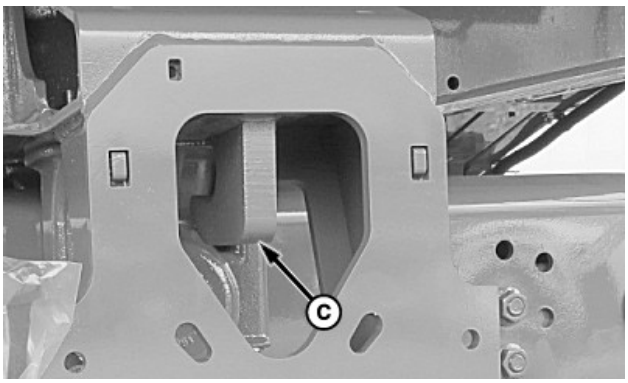
OUO6075,0004ECB-19-09JUL20

Rear Tow Hook

Manual Trailer Hitch



H118216—UN—14APR16



H111232—UN—12MAY14

A—Cap Screw and Nut (4 used)
B—Trailer Hitch
C—Hook

CAUTION: Do not pull out machine by trailer hitch. Only use supplied tow hook. Always use a suitable chain. Do not exceed the breaking strength. Do not mix chain with tow straps or ropes. Energy stored in towing device could cause serious bodily injury if it breaks.

Remove cap screws and nuts (A) from trailer hitch (B).

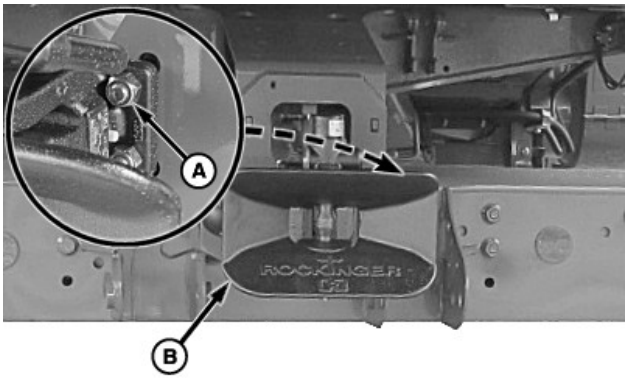
Secure chain to hook (C) and pull out machine. Do not use this hook for pulling a trailer.

Install trailer hitch and retain with cap screws and nuts. Tighten hardware to specification.

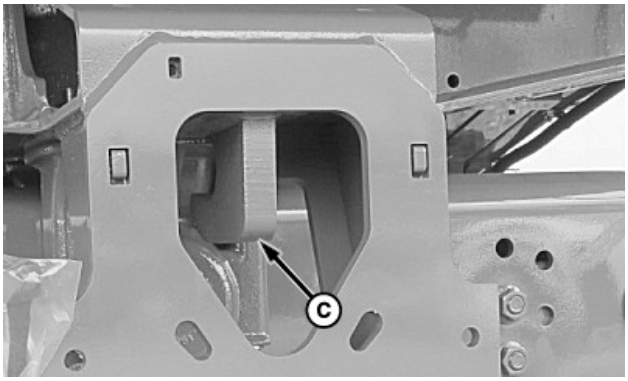
Specification

Trailer Hitch Hardware—Torque. . . . . 205 N·m (151 lb·ft)

Semi-Automatic Trailer Hitch



H111231—UN—12MAY14



H111232—UN—12MAY14

A—Cap Screw and Nut (4 used)
B—Trailer Hitch
C—Hook

CAUTION: Do not pull out machine by trailer hitch. Only use supplied tow hook. Always use a suitable chain. Do not exceed the breaking strength. Do not mix chain with tow straps or ropes. Energy stored in towing device could cause serious bodily injury if it breaks.

Remove cap screws and nuts (A) from trailer hitch (B).

Secure chain to hook (C) and pull out machine. Do not use this hook for pulling a trailer.

Install trailer hitch and retain with cap screws and nuts. Tighten hardware to specification.

Specification	
Trailer Hitch Hardware—Torque	205 N·m (151 lb·ft)

OUO6075,00042C2-19-29JUN16

Harvesting Hints

Operation at Low Temperatures

IMPORTANT: When operating in cold temperatures, verify that proper grade diesel fuel is being used. Warmer grade diesel fuel will gel in fuel lines, fuel filters, and fuel tank. Fuel system requires servicing if diesel fuel gels. See Fuels and Lubricants section for further information.

Combine functions can degrade in low temperatures where snow and ice are present. Special care MUST be taken to ensure that minimal snow is ingested in combine. If snow is ingested, areas such as chaffer, cleaning fan, separator concaves, and separator grates can become obstructed. Operation with these areas obstructed could cause machine damage and significant repairs or result in functional performance degradation. Consult your John Deere dealer prior to operating in cold temperatures.

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Harvesting Tips

Adjust machine to crop being harvested and to field conditions.

Select a ground speed that does not overload machine. Engine must be at full rpm to keep separator at full speed. Select a ground speed for slower travel, but do not slow engine speed.

If concave is set too close for harvested crop, straw will be excessively ground up requiring more horsepower to thresh the crop.

If concave is set too wide for harvested crop, it will not be completely threshed.

After concave is adjusted properly, adjust separator speed to achieve maximum threshing with the least amount of crop damage. If crop damage does occur, do not widen concave clearance. Instead reduce feed accelerator speed. Concave spacing in these crops has very little effect on seed damage.

Crops such as edible beans and peas are easily cracked and can require the use of a slower feed accelerator drive. When harvesting edible beans and peas keep machine full to provide enough material to cushion the crop against cracking.

For potential improvements in straw quality consider that the following can help improve straw quality depending on conditions:

- Slowing feeder house chain speed
- Slowing feed accelerator speed
- Slowing rotor speed
- Opening concave
- Reducing threshing elements
- Installing round bar concaves

For improved performance in sidehill conditions consider, raising auger bed dividers, installing tall chaffer dividers available from your John Deere dealer, and/or improve chaff and grain distribution by installing separator grate covers (if equipped). Each of these can improve chaff and grain distribution to the cleaning shoe that will help improve the machines performance in sidehill conditions.

When using a cutting platform, cut crop as high as possible without loss of low heads. Adjust reel position and speed for even feeding. Keep cutterbar in register and guards in alignment for clean cutting.

When harvesting corn, keep corn head only as low as necessary for ears. Keep it centered in the rows to prevent ear loss.

When using a belt pickup, keep windrow centered so material is fed evenly into feeder house. Grain heads must be lying in one direction. Operate machine so heads are picked up first.

When harvesting soybeans with a row-crop head, keep header as low as possible. When harvesting crops such as milo or sunflowers, operate header just low enough to cut the heads from the stalks.

Adjust chaffer openings to pass grain or seed to the lower sieve in the first two-thirds of the chaffer without admitting too much coarse material.

Use as much air as possible without blowing over clean grain and seed. Heavy crops require more air than light seed crops.

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Auto Header Control Combinations

NOTE: Press and hold activation buttons 1, 2, or 3 on the multi-function lever for 2 seconds to enter desired modes into memory.

A few common modes are shown below, but many combinations exist.

Auto Header Controls (Enabled Modes)	Activation Button 1	Activation Button 2	Activation Button 3
Height Resume	H126436—UN—06JUN19 *Height Resume*		
Height Resume | Height Sensing	H126436—UN—06JUN19 *Height Resume*	H126437—UN—06JUN19 *Height Sensing*	
Height Resume | HydraFlex™ Height Sensing	H126436—UN—06JUN19 *Height Resume*	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*	
Height Resume | Height Sensing | HydraFlex™ Height Sensing [a]	H126436—UN—06JUN19 *Height Resume*	H126437—UN—06JUN19 *Height Sensing*	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*
Height Resume | Height Sensing | HydraFlex™ Height Sensing [b]	H126436—UN—06JUN19 *Height Resume*	H126437—UN—06JUN19 *Height Sensing*	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*
Height Resume | Height Sensing | Active Header Float	H126436—UN—06JUN19 *Height Resume*	H126437—UN—06JUN19 *Height Sensing*	H126447—UN—06JUN19 *Active Header Float*
Height Resume | HydraFlex™ Height Sensing | Active Header Float	H126436—UN—06JUN19 *Height Resume*	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*	H126447—UN—06JUN19 *Active Header Float*
Height Resume | Active Header Float	H126436—UN—06JUN19 *Height Resume*		H126447—UN—06JUN19 *Active Header Float*
Height Sensing	H126437—UN—06JUN19 *Height Sensing*		
HydraFlex™ Height Sensing	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*		

Auto Header Controls (Enabled Modes)	Activation Button 1	Activation Button 2	Activation Button 3
Height Sensing | HydraFlex™ Height Sensing [a]	H126437—UN—06JUN19 *Height Sensing*		H126437—UN—06JUN19 *HydraFlex™ Height Sensing*
Height Sensing | HydraFlex™ Height Sensing [b]	H126437—UN—06JUN19 *Height Sensing*		H126437—UN—06JUN19 *HydraFlex™ Height Sensing*
Height Sensing | HydraFlex™ Height Sensing | Active Header Float [a]	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*		H126447—UN—06JUN19 *Active Header Float*
Height Sensing | Active Header Float	H126437—UN—06JUN19 *Height Sensing*		H126447—UN—06JUN19 *Active Header Float*
HydraFlex™ Height Sensing | Active Header Float	H126437—UN—06JUN19 *HydraFlex™ Height Sensing*		H126447—UN—06JUN19 *Active Header Float*
Active Header Float	H126447—UN—06JUN19 *Active Header Float*		
Reel Position Resume	H126448—UN—06JUN19 *Reel Position Resume*		
Deck Plate Position Resume	H126449—UN—06JUN19 *Deck Plate Position Resume*		
Hydraulic Feeder House Fore/Aft Tilt (If Equipped)	H126450—UN—06JUN19 *Hydraulic Feeder House Fore/Aft Tilt*		
Cutterbar Fore/Aft Position [c]	H126451—UN—06JUN19 *Cutterbar Fore/Aft Position*		

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[a]See your John Deere dealer to enable Height Sensing and HydraFlex Height Sensing. Requires 600F, 600FD, or 700FD with auxiliary height sensors or 600D, or 700D with gauge wheels.
[b]Default mode with 600D and 700D platform, if gauge wheels are unpinned during calibration. Requires 600D or 700D with gauge wheels.
[c]European 600X and 700X Header Platforms.

OUO6075,0004BC5-19-07JUN19

Change Tire Radius Code

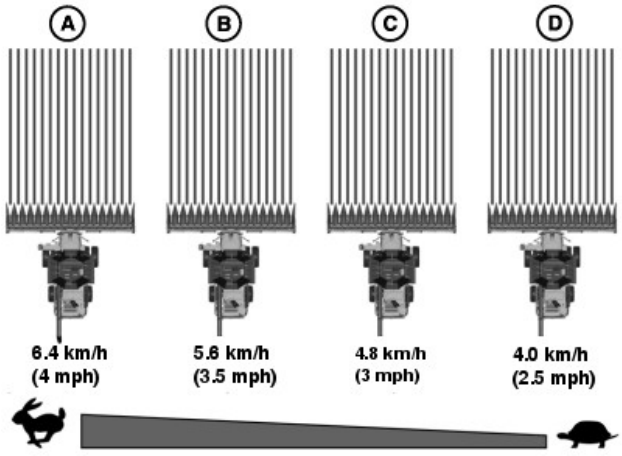
It will be necessary to recalibrate system if tires or final drives are changed from what was originally shipped from the factory. Verify that correct tire code is entered into memory.

IMPORTANT: When changing drive wheels, tire radius may also change. CAB control unit MUST be set to new tire radius. See your John Deere dealer for further information.

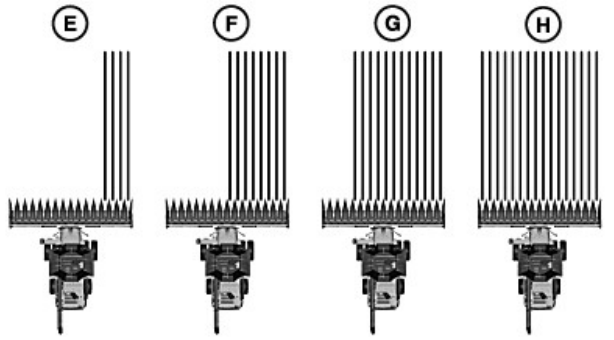
Failure to calibrate system will result in inaccurate Harvest Monitor Yields.

OUO6075,0001111-19-11APR12

Single Point Yield Calibration Or Multi-Point Yield Calibration



H105056—UN—19MAR12



H105057—UN—19MAR12

A—Load 1
B—Load 2
C—Load 3
D—Load 4
E—Minimum Flow
F—Medium Flow
G—Medium Flow
H—Maximum Flow

NOTE: Varying machine ground speed is the best way to vary the flow rate.

The best way to keep the flow rate constant is to monitor the VisionTrak™ display and adjust machine ground speed accordingly.

Single Point Yield Calibration

Single point yield calibration is performed when one or up to three calibration loads are collected.

This type of calibration is suggested when the harvested field has a fairly consistent yield and machine is operated at a constant ground speed with little flow variation.

To collect a calibration load, harvest approximately 2722 kg (6000 lb) at the maximum harvest speed.

Running one or two additional loads is not required, but it may allow the system to average the overall error.

Multi-Point Yield Calibration

Multi-point yield calibration is used when the harvested field is expected to have varying yields or machine is operated at varying speeds with varying grain flows.

This type of calibration collects each calibration load at each expected flow condition.

For each calibration load, harvest approximately 2722 kg (6000 lb).

Run at least **four** calibration loads over various ground speeds (A—D) or at different cut widths to simulate four different flow rates (E—H).

OUO6075,000430B-19-16JUN16

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Crop Settings

Alfalfa / Barley

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Alfalfa	Barley
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	26 Tooth	32 Tooth
Feed Accelerator Speed ***(B)* (J)****	High	High
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	600—800	700—950
Threshing Clearance	0—5	5—22
Concave Type (North America) ***(F)****	Small Wire	Small Wire
Concave Type (Europe) ***(F)****	Small/Small/Large	Small/Small/Large
Separator Grate Covers ***(D)****	Use As Required	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	550—700	850—1100
Adjustable Front Chaffer (If Equipped) (mm)	5—10	24
Chaffer Clearance (mm)	10—20	13—18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	1—4	6—9
Tailings System Concave Position (If Equipped)	Grain	Grain
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,0004985-19-30MAY18

Canola / Chickpeas

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Canola	Chickpeas
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)****	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	32 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)****	High	Low
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	350—550 ***(L)****	400—600
Threshing Clearance	15—40	18—24
Concave Type (North America) ***(F)****	Small Wire	Round Bar/Large Wire
Concave Type (Europe) ***(F)****	Small/Small/Large	Round Bar/Large Wire
Separator Grate Covers ***(D)****	Use As Required	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	600—900	800—1100
Adjustable Front Chaffer (If Equipped) (mm)	5—10	24
Chaffer Clearance (mm)	10—14	15—20
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	2—5	6—10
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,0004986-19-05JUN18

Corn (Dry) / Corn (Wet)

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Corn Dry	Corn Wet
Feeder House Drum Position	Up	Up
Feeder House Conveyor Chain (North America) ***(A)* (B)****	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	26 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)****	Low ***(C)****	Low
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	250—450	350—500
Threshing Clearance	20—35	20—35
Concave Type (North America) ***(F)****	Round Bar	Round Bar
Concave Type (Europe) ***(F)****	Round Bar	Round Bar
Separator Grate Covers ***(D)****	None	None
Separator Grate Spacers	Installed	Installed
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	900—1300	1000—1300
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	15—20 (Premium Corn) 15—20 (Deep-Tooth) 17—22 (General-Purpose)	16—21 (Premium Corn) 16—21 (Deep-Tooth) 18—22 (General-Purpose)
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	10—14 (Deep-Tooth) 11—15 (General-Purpose)	10—14 (Deep-Tooth) 11—15 (General-Purpose)
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Corn	Corn
Knife Bank Engagement	Disengaged Only	Disengaged Only
Chopper Speed	Low	Low

OUO6075,0004994-19-29MAY18

Corn Cob Mix / Edible Beans

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Corn Cob Mix (H)* (M)*	Edible Beans
Feeder House Drum Position	Up	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	22 Tooth ***(P)****
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	26 Tooth	22 Tooth ***(P)****
Feed Accelerator Speed ***(B)* (J)***	Low	Low ***(C)****
Feed Accelerator Wear Strips (North America)	Serrated	Backswept Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Backswept Serrated
Threshing Speed (rpm) ***(B)* (E)***	450—650	300—500 ***(L)****
Threshing Clearance	15—30	15—30
Concave Type (North America) ***(F)****	Large Wire ***(K)****	Round Bar/Large Wire
Concave Type (Europe) ***(F)****	Large Wire ***(K)****	Round Bar/Large Wire
Separator Grate Covers ***(D)****	None	None
Separator Grate Spacers	Either	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Advanced
Fan Speed (rpm)	1000—1300	800—1100
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	22	14 - 18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	Removed	6—10
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Corn	Grain
Knife Bank Engagement	Disengaged Only	Allowed
Chopper Speed	Low	High

OUO6075,0004987-19-29MAY18

Flax / Grass Seed

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Flax	Grass Seed
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	32 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	26 Tooth	32 Tooth
Feed Accelerator Speed ***(B)* (J)***	High	High
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	800—1000	500—850 ***(N)****
Threshing Clearance	0—10	12—25
Concave Type (North America) ***(F)****	Small Wire	Small Wire
Concave Type (Europe) ***(F)****	Small Wire	Small/Small/Large
Separator Grate Covers ***(D)****	Use As Required	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	700—1050	350—600 ***(I)****
Adjustable Front Chaffer (If Equipped) (mm)	24	5—10
Chaffer Clearance (mm)	8—15	12—18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	5—10	5—12
Tailings System Concave Position (If Equipped)	Grain	Grain
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

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Guar (Cluster Beans) / Lentils

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Guar (Cluster Beans)	Lentils
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	26 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)****	Low	Low
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	500—700	350—500
Threshing Clearance	10—15	7—12
Concave Type (North America) ***(F)****	Round Bar	Round Bar/Large Wire
Concave Type (Europe) ***(F)****	Round Bar	Small/Small/Large
Separator Grate Covers ***(D)****	None	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	650—750	800—1000
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	10—15	12—18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	6—10	3—10
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,0004989-19-29MAY18

Lupins / Millet

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Lupins	Millet
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	26 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)****	Low	High
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	400—600	400—500
Threshing Clearance	12—18	10—15
Concave Type (North America) ***(F)****	Round Bar/Large Wire	Small Wire
Concave Type (Europe) ***(F)****	Round Bar/Large Wire	Small/Small/Large
Separator Grate Covers ***(D)****	Use As Required	None
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	900—1100	600—750
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	15—20	10—12
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	4—8	4—6
Tailings System Concave Position (If Equipped)	Corn	Grain
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,000498A-19-29MAY18

Mustard / Navy Beans

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Mustard	Navy Beans
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)****	26 Tooth	22 Tooth ***(P)****
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	26 Tooth	22 Tooth ***(P)****
Feed Accelerator Speed ***(B)* (J)****	High	Low ***(C)****
Feed Accelerator Wear Strips (North America)	Serrated	Backswept Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Backswept Serrated
Threshing Speed (rpm) ***(B)* (E)****	600—900	300—350 ***(L)****
Threshing Clearance	10—20	15—30
Concave Type (North America) ***(F)****	Small Wire	Round Bar
Concave Type (Europe) ***(F)****	Small/Small/Large	Round Bar
Separator Grate Covers ***(D)****	Use As Required	None
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Advanced
Fan Speed (rpm)	500—800	800—1100
Adjustable Front Chaffer (If Equipped) (mm)	5—10	24
Chaffer Clearance (mm)	10—14	14—18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	2—5	6—10
Tailings System Concave Position (If Equipped)	Grain	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,000498B-19-29MAY18

Oats / Peas

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Oats	Peas
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	32 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	32 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)***	High	Low
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	600—900	300—400
Threshing Clearance	15—25	15—30
Concave Type (North America) ***(F)****	Small Wire	Round Bar/Large Wire
Concave Type (Europe) ***(F)****	Small/Small/Large	Round Bar/Large Wire
Separator Grate Covers ***(D)****	Use As Required	None
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Advanced
Fan Speed (rpm)	750—900	850—1050
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	18—22	16—20
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	6—10	6—11
Tailings System Concave Position (If Equipped)	Grain	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,000498C-19-29MAY18

Popcorn / Rape Seed (Dry)

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Popcorn	Rape Seed (Dry)
Feeder House Drum Position	Up	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)****	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	26 Tooth	32 Tooth
Feed Accelerator Speed ***(B)* (J)****	Low	Low
Feed Accelerator Wear Strips (North America)	Smooth	Serrated Tough Crop
Feed Accelerator Wear Strips (Europe) ***(G)****	Smooth	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	210—310	400—700 ***(L)****
Threshing Clearance	15—25	20—40
Concave Type (North America) ***(F)****	Round Bar	Small Wire
Concave Type (Europe) ***(F)****	Round Bar	Small/Small/Large
Separator Grate Covers ***(D)****	None	Use As Required
Separator Grate Spacers	Installed	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	900—1100	620—800
Adjustable Front Chaffer (If Equipped) (mm)	24	5—10
Chaffer Clearance (mm)	14—18	11—14
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	6—8	3—6
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Corn	Grain
Knife Bank Engagement	Disengaged Only	Allowed
Chopper Speed	Low	High

OUO6075,000498D-19-05JUN18

Rape Seed (Green) / Rice

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Rape Seed (Green)	Rice
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	32 Tooth	32 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	32 Tooth	32 Tooth
Feed Accelerator Speed (North America) ***(B)* (J)***	Low	High
Feed Accelerator Speed (Europe) ***(B)* (J)***	High	High
Feed Accelerator Wear Strips (North America)	Serrated Tough Crop	Tine
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Tine
Threshing Speed (rpm) ***(B)* (E)****	500—800 ***(L)****	700—1000 ***(N)****
Threshing Clearance	20—40	15—25
Concave Type (North America) ***(F)****	Small Wire	Large Wire
Concave Type (Europe) ***(F)****	Small/Small/Large	Large Wire
Separator Grate Covers ***(D)****	Use As Required	None
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	700—850	700—900
Adjustable Front Chaffer (If Equipped) (mm)	5—10	24
Chaffer Clearance (mm)	11—14	16—20
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	4—8	5—10
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,000498E-19-05JUN18

Rye / Safflower

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Rye	Safflower
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)****	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	26 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)****	High	Low
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	700—900	300—400
Threshing Clearance	13—26	15—25
Concave Type (North America) ***(F)****	Small Wire	Small Wire
Concave Type (Europe) ***(F)****	Small/Small/Large	Small/Small/Large
Separator Grate Covers ***(D)****	Use As Required	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	750—950	550—750
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	16—18	14—16
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	6—10	4—7
Tailings System Concave Position (If Equipped)	Grain	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,000498F-19-29MAY18

Sorghum / Soybeans

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Sorghum	Soybeans
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	26 Tooth	26 Tooth
Feed Accelerator Speed ***(B)* (J)****	Low	Low
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	550—700	450—650
Threshing Clearance	10—25	15—30
Concave Type (North America) ***(F)****	Round Bar/Large Wire	Round Bar/Large Wire
Concave Type (Europe) ***(F)****	Round Bar/Large Wire	Round Bar/Large Wire
Separator Grate Covers ***(D)****	Use As Required	None
Separator Grate Spacers	In Storage Position	Either
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	900—1100	800—1050
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	14—17	14—18 (General-Purpose) 13—17 (Deep-Tooth)
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	5—8	6—10 (General-Purpose) 5—9 (Deep-Tooth)
Tailings System Concave Position (If Equipped)	Corn	Corn
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,0004990-19-29MAY18

Sunflower / Triticale

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Sunflower	Triticale
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)****	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)****	26 Tooth	32 Tooth
Feed Accelerator Speed ***(B)* (J)****	Low	High
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	200—400	850—1000
Threshing Clearance	25—40	18—24
Concave Type (North America) ***(F)****	Round Bar/Large Wire	Small Wire
Concave Type (Europe) ***(F)****	Round Bar/Large Wire	Small/Small/Large
Separator Grate Covers ***(D)****	Use As Required	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Advanced	Standard
Fan Speed (rpm)	650—850	750—1000
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	10—15	16—18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	3—10	6—10
Tailings System Concave Position (If Equipped)	Corn	Grain
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,0004991-19-29MAY18

Wheat Difficult / Wheat Normal

NOTE: Various crop settings shown are for average conditions. Varying crop and field conditions may require slightly different settings.
** Refer to Footnotes Description Page later in this section for more detailed information.*

	Wheat Difficult	Wheat Normal
Feeder House Drum Position	Down	Down
Feeder House Conveyor Chain (North America) ***(A)* (B)***	26 Tooth	26 Tooth
Feeder House Conveyor Chain (Europe) ***(A)* (B)***	32 Tooth	32 Tooth
Feed Accelerator Speed ***(B)* (J)***	High	High
Feed Accelerator Wear Strips (North America)	Serrated	Serrated
Feed Accelerator Wear Strips (Europe) ***(G)****	Serrated Tough Crop	Serrated Tough Crop
Threshing Speed (rpm) ***(B)* (E)****	800—1000	750—950
Threshing Clearance	3—15	8—16
Concave Type (North America) ***(F)****	Small Wire	Small Wire
Concave Type (Europe) ***(F)****	Small/Small/Large	Small/Small/Large
Separator Grate Covers ***(D)****	Use As Required	Use As Required
Separator Grate Spacers	In Storage Position	In Storage Position
Top Cover Transport Vanes ***(O)**** (If Equipped)	Standard	Standard
Fan Speed (rpm)	900—1250	900—1250
Adjustable Front Chaffer (If Equipped) (mm)	24	24
Chaffer Clearance (mm)	13—18	13—18
Dual Zone Adjust Rear Chaffer Clearance (mm)	5 Level 10 Sidehill	5 Level 10 Sidehill
Sieve Clearance (mm)	3—8	3—8
Tailings System Concave Position (If Equipped)	Grain	Grain
Crop Diverter	Grain	Grain
Knife Bank Engagement	Allowed	Allowed
Chopper Speed	High	High

OUO6075,0004992-19-29MAY18

Footnotes Description Page

(A)* *For poor feeding straw crops due to high volume, green, or windrowed conditions, the 32-tooth drive sprocket is recommended.*

(B)* *For improved straw quality in dry crops and grain quality, use lower speed. For dry, brittle sunflowers a 15-tooth drive sprocket can be used.*

(C)* *For improved grain quality, use slow down kit to 320 rpm.*

(D)* *In shoe overloading conditions in dry crops, with small wire concaves, initially install two rows on right side and three rows on left side of the separator grates. With large wire concaves, initially install three rows on right side and two rows on left side of separator grates. Adjust number and pattern as required by condition.*

(E)* *15 elements is the standard configuration. In most conditions 15 elements will require less power leading to higher capacity, less shoe load, and less straw damage. An additional 9 element locations (Dense Pack) are available on tough crop rotors which can be used in tough material handling conditions.*

(F)* *For improvement in threshing, grain tank sample, and chaff load distribution in small grain, first install concave covers in front concave. Additional covers can be added to other concaves as needed.*

(G)* *Recommendations other than Serrated Tough Crop will require conversion of Feed Beater.*

(H)* *Tailings sump cover recommended.*

(I)* *Cleaning fan slow down kit may be required.*

(J)* *For increased material handling use High speed.*

(K)* *Wires may be removed for increased cob capture.*

(L)* *Discharge paddles can be installed for improved material handling in rotor if using TriStream™ Rotor.*

(M)* *Utilize Corn Cob Mix separator grates.*

(N)* *In extremely tough material handling conditions, threshing tines may be installed in place of threshing elements (threshing performance may be reduced).*

(O)* *Advanced setting may be used for improved straw quality and/or material handling. Note: Separator loss may increase when advanced.*

(P) Available through service parts.*

OUO6075,0001365-19-13DEC12

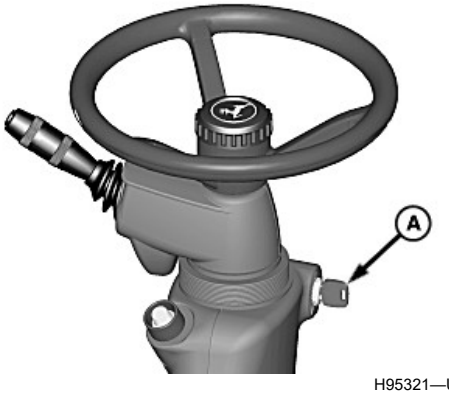
Concave Recommendations

Concave Type	Corn	Soybeans	Wheat Barely Small Grains	Rice	Popcorn Food Corn	Sorghum (Milo) Sunflowers (Confection)	Sunflowers (Oil)	Canola
Small Wire	NR	NR	Best	NR	NR	NR	Average	Best
Large Wire	Good	Good	Good	Best	NR	Best	Best	Good
Round Bar	Best	Best	Average	Good	Best	Average	Best	Average

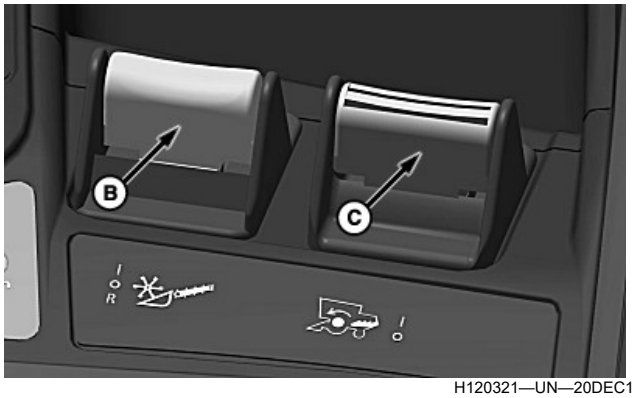
Best = Provides best level of performance.
Good = Provides a good level of performance.
Average = Provides an average level of performance.
NR = Not recommended.

OUO6075,00017DE-19-07MAY14

Power Shutdown Procedure



H95321—UN—02NOV10



H120321—UN—20DEC16

A—Key Switch
B—Header Engage Switch
C—Separator Engage Switch

NOTE: A power shutdown is used to determine the machines performance in the threshing and separating areas by taking a "snap-shot" of the material in the separator. This is valuable in determining where the losses behind the machine are generated and what adjustments can be made to correct the condition.

Verify that crop condition and material intake is similar for each shutdown.

1. Locate engine speed indicator on corner post display and threshing speed readout on armrest display.
2. Lock brake pedals together.
3. Operate machine at optimized throughput levels in desired crop.
4. Move steering wheel forward for free motion (both hands needed).
5. Press low idle engine speed switch on armrest.
6. Depress brake pedals.
   a. **Non-ProDrive™ machines:** Fully depress brake pedals (quickly pulls engine speed down by loading propulsion system).
   b. **ProDrive™ machines:** Lightly depress brake pedals (ProDrive™ attempts to repower and will downshift changing machine dynamics if brakes are fully depressed).
7. As engine speed drops to near low idle speed (1200 rpm), **quickly disengage header (B) and separator engage (C) switches on armrest.**
8. Quickly move the multi-function lever to neutral position.

9. Allow engine to cool for a minute.
10. Turn key switch (A) to shut OFF engine, set park brake and remove key.
11. Inspect for excessive grain damage, kernels left on the cobs, and free grain loss before making any adjustments.
12. Decide what adjustments are needed. Open threshing clearance and engage separator (avoids undue stress to cylinder drive area during cleanout).
13. Adjust machine to desired settings and continue harvesting.
14. Repeat this procedure and verify grain quality and losses behind machine.
15. Once acceptable loss levels are attained, calibrate VisionTrak™ Monitor and continue to harvest.

OUO6075,0004571-19-10JAN17

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Payable Moisture and Density Chart

Crop	Standard Moisture (%)	Crop Density (lbs/bushel)	Crop Density (kg/bushel)
Alfalfa	12.0	60	27
Barley	14.0	48	22
Barley (Winter) [a]	14.5	48	22
Barley (Spring) [a]	14.5	48	22
Canola	10.0	52	24
Chickpeas [a]	12.0	61	27
Corn (Dry or Wet)	15.0	56	25
Edible Beans	14.5	60	27
Flax	7.0	56	25
Grass Seeds	12.0	22	10
Lentils	10.5	60	27
Lupins [a]	12.0	53	24
Millet	11.0	50	23
Mustard	8.0	60	27
Navy Beans	14.5	62	28
Oats	14.0	32	15
Oats [a]	15.0	32	15
Peas	10.5	60	27
Peas [a]	12.0	60	27
Popcorn	14.0	60	27
Popcorn [a]	15.5	60	27
Rape Seed (Dry or Wet) [a]	10.0	52	24
Rice	14.0	45	20
Rye	14.0	56	25
Safflower	6.0	45	20
Sorghum	13.0	56	25
Soybeans	13.0	60	27
Sunflower	14.0	29	11
Sunflower [a]	9.0	20	11
Triticale [a]	14.5	58	26
Wheat (Spring)	13.0	60	27
Wheat (Winter)	13.0	60	27

[a] *European crop listing only.*

OUO6075,0000E89-19-22MAR12

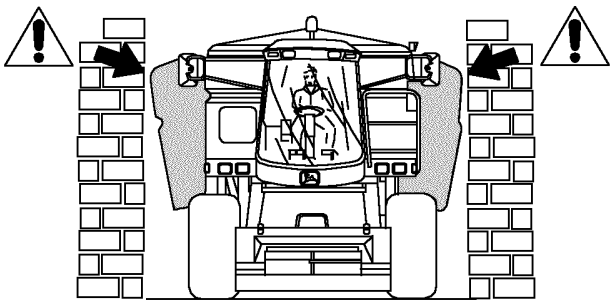
Standard Weights Chart

Unit	Weight (lb)	Weight (kg)
Barrels	162.0	73.5
Sacks	100.0	45.4
Hundred Weight	100.0	45.4
Pounds (lb)	1.0	0.454
Kilograms (kg)	2.204	1.0
Metric Tons	2204.0	1000.0
Tons	2000.0	907.0

OUO6075,0000435-19-15APR10

HillMaster™ Leveling System (If Equipped)

HillMaster™ System (General Information)



ZX 002438

ZX002438—UN—16JUN95

CAUTION: HillMaster™ must only be used in the field. Before driving on public roads, machine must be lowered to transport position, so maximum height is less than 4.0 m.

Care must be taken when turning machine on slopes. Follow these precautions when turning machine on slopes in order to avoid loss of stability and potential rollover of machine:

- **Never turn machine faster than leveling system can keep machine level.**
- **Always turn uphill and never downhill.**
- **Do not move onto steeper grades once maximum tilt limit indicator appears on display.**

Avoid crushing injuries. Always lower the leveling system before getting underneath the machine for service or adjustments. Shut OFF engine, set park brake and remove key.

IMPORTANT: Before actuating manual leveling control switch, verify that parking brake is released.

Do not park machine too close to other machines or building walls. This is important as machine may tilt due to internal loss of oil pressure when parked for long periods of time. This may cause damage to the machine and adjacent machines or walls.

Standard final drives are mounted to the pivoting carrier plates on the front axle. Hydraulic cylinders are used to pivot the carrier plates up and down to tilt the machine. Separator remains level as machine moves over uneven ground.

System is operated manually using HillMaster™ tilt left and right buttons or in automatic mode.

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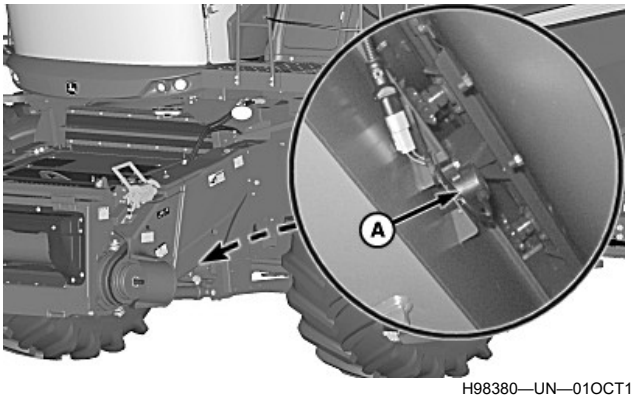


H98380—UN—01OCT10

Tilt Sensor Located on Front Axle

A—Tilt Sensor

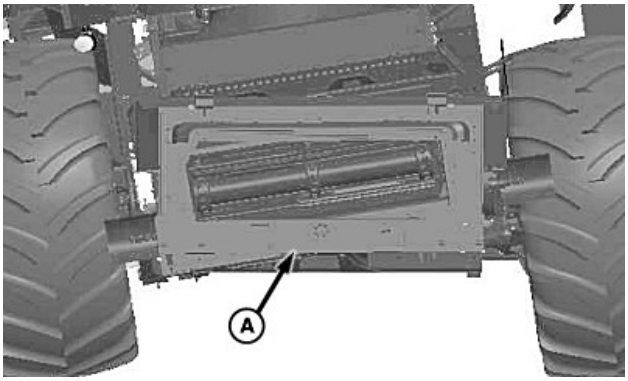
In automatic mode, tilt sensor (A) levels the body of the machine and remains level as the machine moves across the field.

As field slope changes, a pitch sensor measures the angle of tilt and provides a signal to the control unit. At the appropriate time and angle of tilt, the control circuit sends an electronic signal to the right or left tilt solenoid on the tilt leveling control valve.

NOTE: Sensor keeps the separator level within one degree during field operation. When operating on rough or irregular ground, separator level position may exceed this one degree for a short time.

Tilt system keeps separator level on slopes up to 15%. If operated on slopes greater than 15%, maximum tilt limit indicator appears on display.

Lateral Tilt Operation



H84660—UN—07OCT05

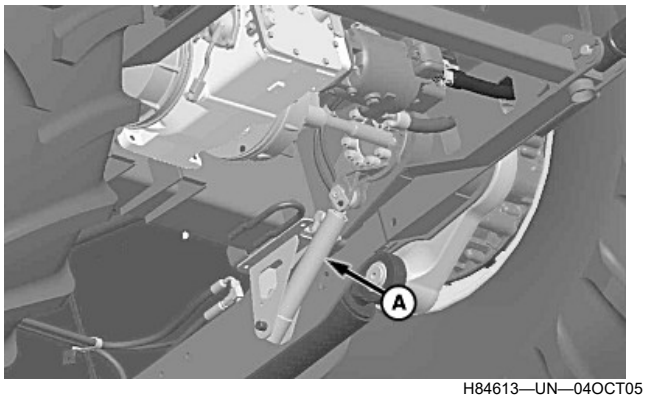
A—Feeder House

Lateral tilt assists in keeping the header parallel with the ground as the machine separator tilts to stay level. The system uses a specially equipped feeder house (A) that enables the header to tilt left and right.

HillMaster™ along with the lateral tilt function allows header to tilt left and right ± 9 degrees. Both systems allow the header to cut properly on slopes up to 15%.

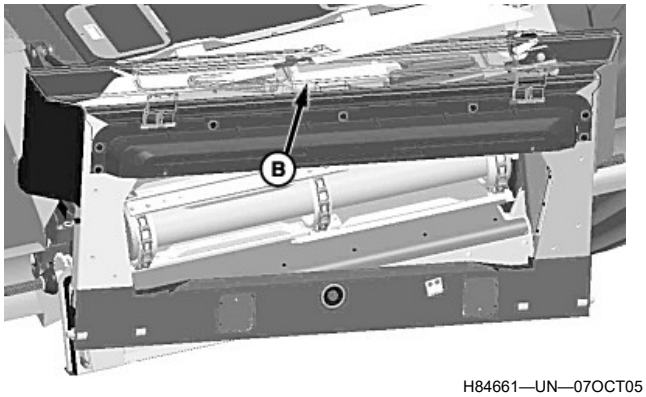
The tilt system uses a double-acting primary/secondary

cylinder arrangement to tilt header with respect to the chassis.



H84613—UN—04OCT05

Primary Cylinder Located on Left-Hand Side



H84661—UN—07OCT05

Header Tilt Secondary Cylinder

A—Header Tilt Primary Cylinder
B—Header Tilt Secondary Cylinder

The header tilt primary cylinder (A) is connected between the front axle and the left final drive carrier plate. The header tilt secondary cylinder (B) is on top of the feeder house and connects the tilt frame to the feeder house. During normal operation, the header automatically stays parallel to ground as separator tilts left or right staying level.

NOTE: Areas around the feeder house tilt frame need cleaned regularly to prevent buildup of material, which could limit full tilt travel.

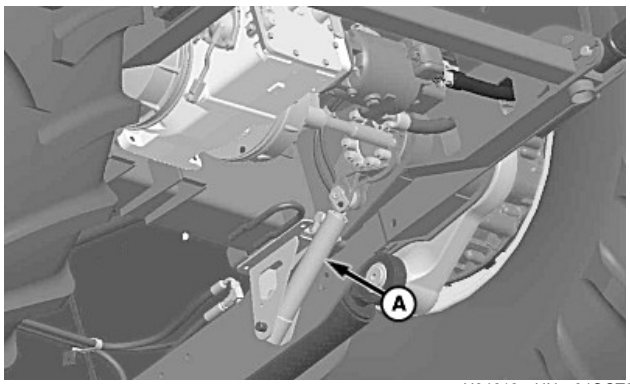
Operator can override automatic header leveling feature by using the lateral tilt switches on the multi-function lever. When the lateral tilt switches are pressed, oil from the main hydraulic valve block is added or removed from the header tilt circuit, allowing it to move independently of the feeder house and chassis.

For automatic operation, the header must be equipped with sensors and calibrated prior to the first use.

Enable the lateral tilt system through the software. System is activated by pressing activation buttons 1, 2 or 3 on the multi-function lever.

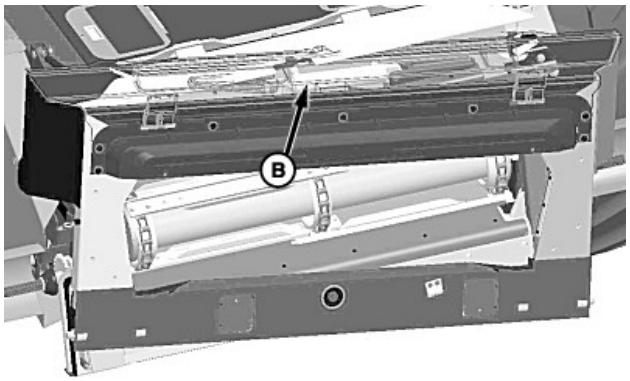
Signals from sensors at both left and right ends are processed and the appropriate hydraulic control valve is energized to level header with respect to ground.

Header Tilt Cylinders



H84613—UN—04OCT05

Primary Cylinder Located on Left-Hand Side



H84661—UN—07OCT05

Header Tilt Secondary Cylinder

A—Header Tilt Primary Cylinder
B—Header Tilt Secondary Cylinder

The header angle is determined by a primary/secondary cylinder arrangement. The primary cylinder (A) is connected between the chassis and the left final drive carrier plate. The secondary cylinder (B) is connected between the feeder house and the tilt frame.

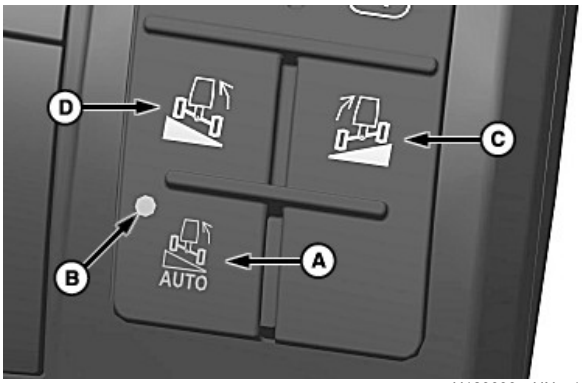
Rod ends of the primary and secondary cylinders are connected to each other and the piston ends of the primary and secondary cylinders are connected to each other. As the left leveling cylinder extends and retracts, the left final drive carrier plate pivots up and down and extends or retracts the header tilt primary cylinder. Movement of the primary cylinder extends and retracts the secondary cylinder.

As the primary cylinder extends through the movement of the final drive carrier plate, oil flows from the rod end of the primary cylinder to the rod end of the secondary cylinder. This causes the secondary cylinder to retract. Oil from the base end of the secondary cylinder flows to the base end of the primary cylinder to fill the additional volume created as the primary cylinder was extended.

When the primary cylinder is retracted by movement of the final drive carrier plate, the opposite occurs.

OUO6075,00044CC-19-10JAN17

HillMaster™ Daily Operation Preparations



H120033—UN—14NOV16

HillMaster™ Switches

A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

CAUTION: Do not attempt to operate HillMaster™ machine unless all of the following operational checks are completed successfully. If one or more of the following checks fail (separator does not tilt or time to reach full tilt is excessive), contact your John Deere dealer for assistance.

Before operating HillMaster™ machine the following three operational checks must be performed (daily).

System Requirements:

- Engine is running.
- Road transport disconnect switch in field position.
- Press automatic leveling control switch (A) to activate automatic leveling system.
- Indicator light (B) turns ON indicating setting is in automatic mode.

Check One: Push and hold manual tilt right switch (C) for approximately 20 seconds to tilt the machine chassis to the right.

Check Two: Push and hold manual tilt left switch (D) for approximately 20 seconds to tilt the machine chassis to the left.

NOTE: Time required to bring machine from maximum left tilt position to maximum right tilt position is approximately 5—7 seconds.

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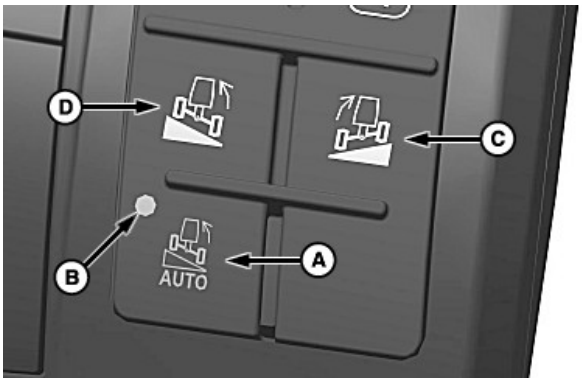
Check Three: Press and hold manual tilt left switch until machine is tilted fully to the left. Push and hold manual tilt right switch until the machine chassis is tilted fully to the right.

OUO6075,00044CD-19-25JAN17

HillMaster™ Leveling Control Switches



H120033—UN—14NOV16

HillMaster™ Switches

A—Automatic Leveling Control Switch
B—Indicator Light
C—Manual Tilt Right Switch
D—Manual Tilt Left Switch

Automatic Leveling

Automatic leveling control switch (A) allows the machine separator to automatically level itself as machine moves over rolling ground.

System Requirements:

- Engine is running.
- Road transport disconnect switch in field position.

1. Press automatic leveling control switch to activate automatic leveling system.
2. Indicator light (B) turns ON indicating setting is in automatic mode.
3. Display shows position of machine chassis body graphically.

A pitch sensor is used to sense the slope of the machine as it moves across the field.

NOTE: With the automatic leveling control system activated, manual tilt switches can be used to overcome automatic functions (machine may be tilted manually left or right).

Manual Leveling

Manual tilt switches allow the machine chassis to be tilted left or right manually as machine moves over rolling ground.

System Requirements:

- Engine is running.
- Road transport disconnect switch in field position.

NOTE: Push-Button Shift Transmission Machines: Push manual tilt right switch (C) or manual tilt left switch (D) to enable HillMaster™ mode. Push park brake switch to disengage park brake.

Push and hold manual tilt right switch (C) to tilt the machine chassis to the right.

Push and hold manual tilt left switch (D) to tilt the machine chassis to the left.

NOTE: When manual desired tilt switch is released, automatic mode takes over and levels machine chassis automatically.

Display shows position of machine chassis body graphically.

A pitch sensor is used to sense the slope of the machine as it moves across the field.

NOTE: With the automatic leveling control system activated, manual tilt switches can be used to overcome automatic functions (machine may be tilted manually left or right).

Road Transport Position

CAUTION: Avoid loss of control during road transport and serious injury or death. Never transport machine on the roadway with HillMaster™ in automatic mode. Never attempt to manually tilt machine while transporting on a roadway.

The following lockouts the HillMaster™ leveling system and ensures that leveling system does not shift during road transport.

System Requirements:

- Engine is running.
- Road transport disconnect switch in field position.

1. Move machine to level ground.
2. Press automatic leveling control switch for **5 seconds** or until indicator light (B) flashes.
3. Push and hold manual tilt right switch (C) to tilt the machine chassis to the right.
4. Push and hold manual tilt left switch (D) to tilt the machine chassis to the left.

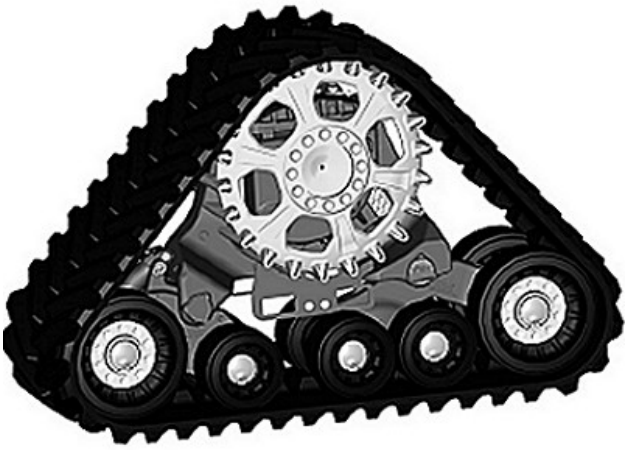
Machine is now in neutral position and can be driven on roadway.

OUO6075,0004941-19-12APR18

HillMaster is a trademark of Deere & Company

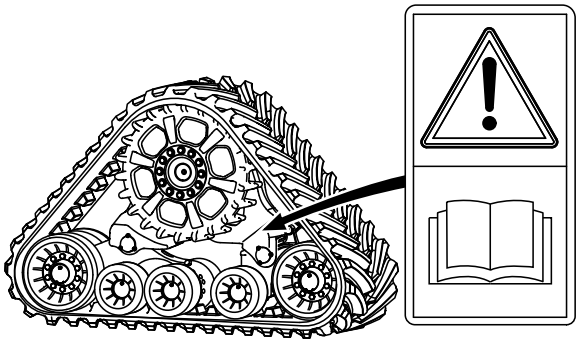
John Deere Tracks (If Equipped)

Machine Photo



H122227—UN—10AUG17
OUO6041,0000C1B-19-25AUG17

Operator's Manual

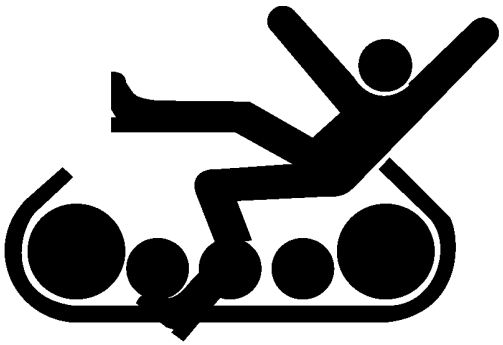


H122407—UN—03OCT17

This operator's manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.

OUO6041,0000CE6-19-13NOV17

Safe Track Operating Practices



H48148—UN—12DEC96

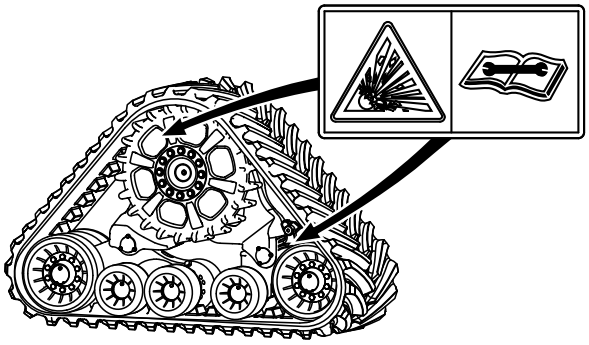
DO NOT stand near tracks when machine is running.

Safe operating practices of track drive machines are no different from wheel drive machines.

ALWAYS refer to your Combine Operator's Manual, and review Safety section before operating machine. The Combine Operator's Manual details safe operating practices that must be followed to protect you and others from accidental death and/or injury.

OUO6075,00014B9-19-03DEC13

Accumulator

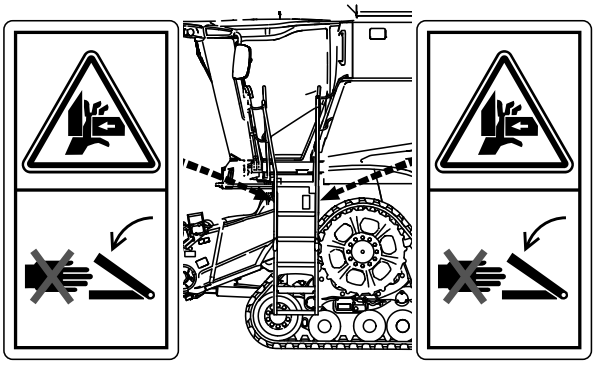


H122408—UN—03OCT17

To avoid injury from machine movement and exposure to fluid under pressure, see dealer for instruction on relieving pressure before servicing hydraulic system.

OUO6041,0000CE5-19-13NOV17

Cab/Platform Access Ladder

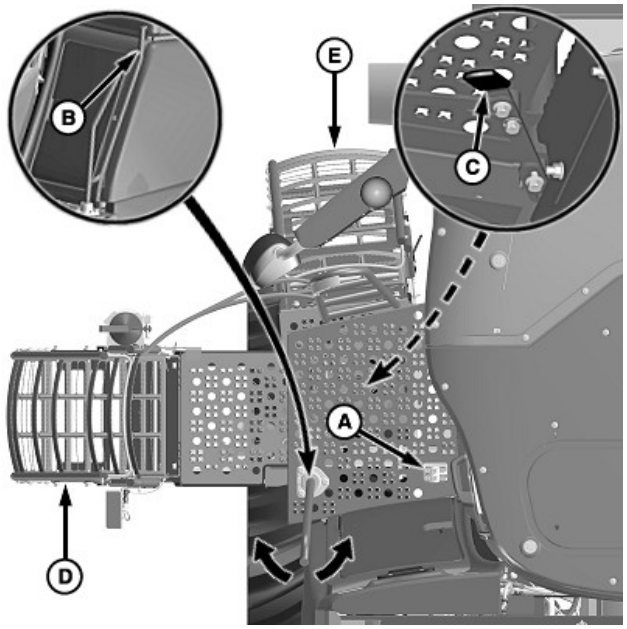


H125749—UN—19MAR19

To avoid injury from crushing, keep hands and fingers away from this area.

OUO6075,0004ABE-19-01MAR19

Cab Ladder Positions (60.9 cm (24 in) Wide Tracks)



H124949—UN—31AUG18

A—Pedal
B—Handle
C—Handle
D—Position (Field)
E—Position (Roadway Driving)

CAUTION: Avoid injury or death. Do not ride or attempt to climb front or rear ladders while machine is moving.

Ladder can be positioned from the ladder landing by stepping on pedal (A) and turning handle (B) simultaneously. Turn the handle in either direction to swing the ladder assembly.

Ladder can be positioned from the ground using handle (C).

If the ladder latch appears loose, clean out latch pin area. Do not use oil or grease in this area.

Swing ladder forward or rearward and lock into these different positions:

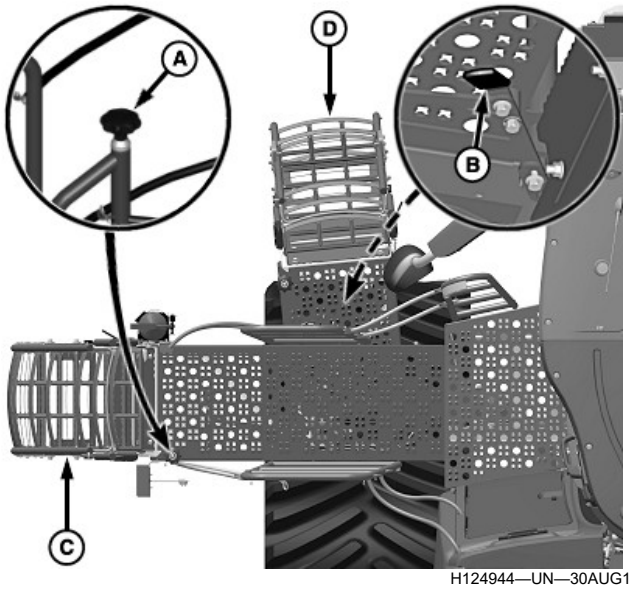
- **Position (D):** For the normal operating field conditions.
- **Position (E):** For transporting the machine on public roadways.

CAUTION: Avoid damage to cab ladder. Always place ladder in the folded position (up position) and swing ladder to position (D) for normal operating field conditions.

Avoid accidents. Always place ladder in the folded position (up position) and swing ladder to position (E) before transporting on public roadways to reduce machine width and to position marker/hazard light towards oncoming motorists.

OUO6075,0004ABF-19-01MAR19

Cab Ladder Positions (76.2 cm (30 in) and 91.4 cm (36 in) Wide Tracks)



H124944—UN—30AUG18

A—Handle
B—Lever
C—Position (Field)
D—Position (Roadway Driving)

CAUTION: Avoid injury or death. Do not ride or attempt to climb front or rear ladders while machine is moving.

Ladder can be positioned from ground or from the ladder landing using handle (A) or lever (B).

If the ladder latch appears loose, clean out latch pin area. Do not use oil or grease in this area.

Swing ladder forward or rearward and lock into these different positions:

- **Position (C):** For the normal operating field conditions.
- **Position (D):** For transporting the machine on public roadways.

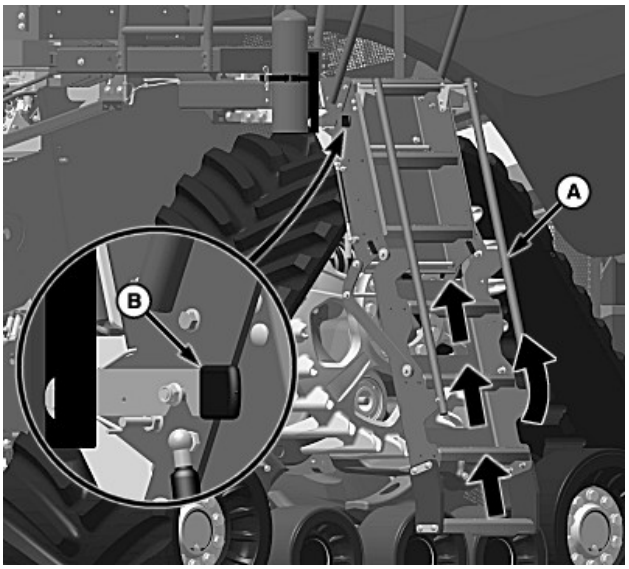
CAUTION: Avoid damage to cab ladder. Always place ladder in the folded position (up position) and swing ladder to position (C) for normal operating field conditions.

Avoid accidents. Always place ladder in the folded position (up position) and swing ladder to position (D) before transporting on public roadways to reduce machine width and to position marker/hazard light towards oncoming motorists.

OUO6075,0004AC0-19-07MAR19

Cab Ladder Positions (Fold/Unfold from Ground)

Fold Ladder



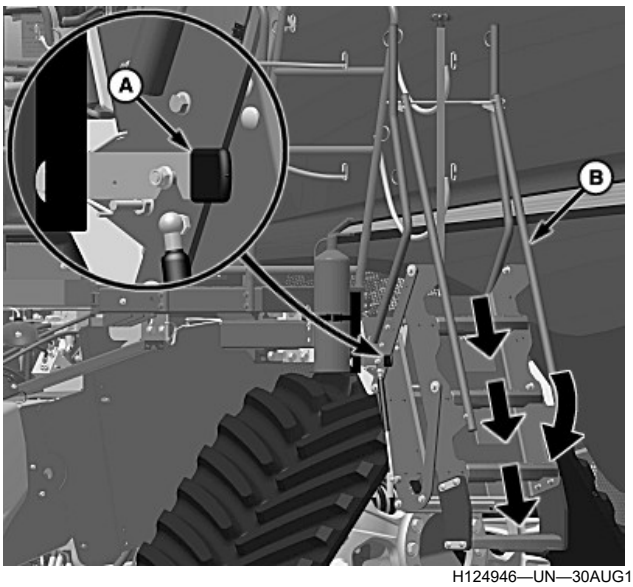
H124945—UN—30AUG18

A—Handrail (2 used)
B—Locking Lever

CAUTION: Avoid injury to you or others. Keep hands away from moving components while folding or unfolding the ladder. Always use the handrails to fold or unfold the ladder.

Push up on handrails (A) to raise ladder in the up position until locking lever (B) latches.

Unfold Ladder



H124946—UN—30AUG18

A—Locking Lever
B—Handrail (2 used)

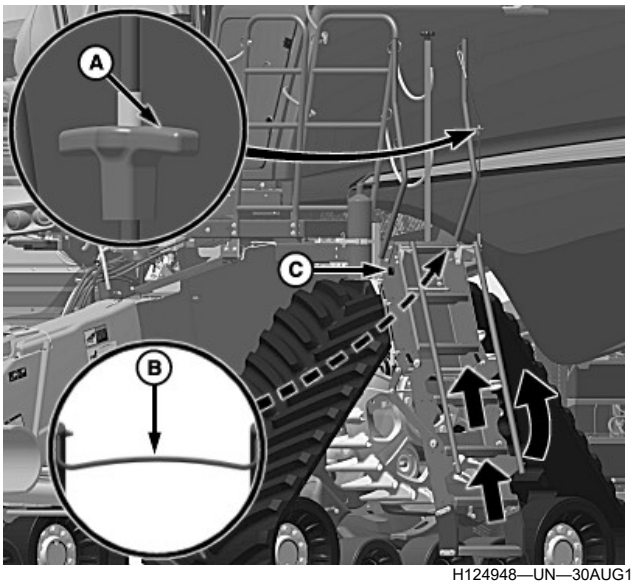
CAUTION: Avoid injury to you or others. Keep hands away from moving components while folding or unfolding the ladder. Always use the handrails to fold or unfold the ladder.

Push up on locking lever (A) and pull down on handrails (B) to lower ladder in the down position.

OUO6075,0004A23-19-06SEP18

Cab Ladder Positions (Fold/Unfold from Cab Landing)

Fold Ladder



H124948—UN—30AUG18

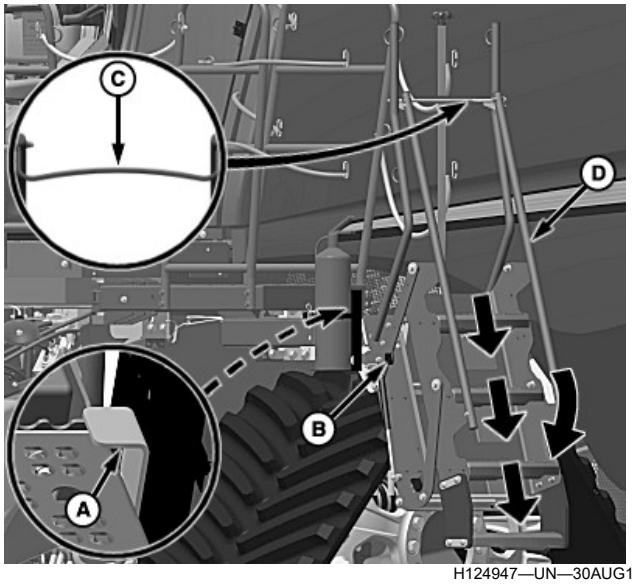
A—Handle
B—Crossbar

C—Locking Lever

CAUTION: Avoid injury to you or others. Keep hands away from moving components while folding or unfolding the ladder. Always use the handrails to fold or unfold the ladder.

1. Pull up on handle (A) until crossbar (B) can be reached.
2. Continue to pull up on crossbar to raise the ladder until locking lever (C) latches and secures the ladder in the up position.

Unfold Ladder



H124947—UN—30AUG18

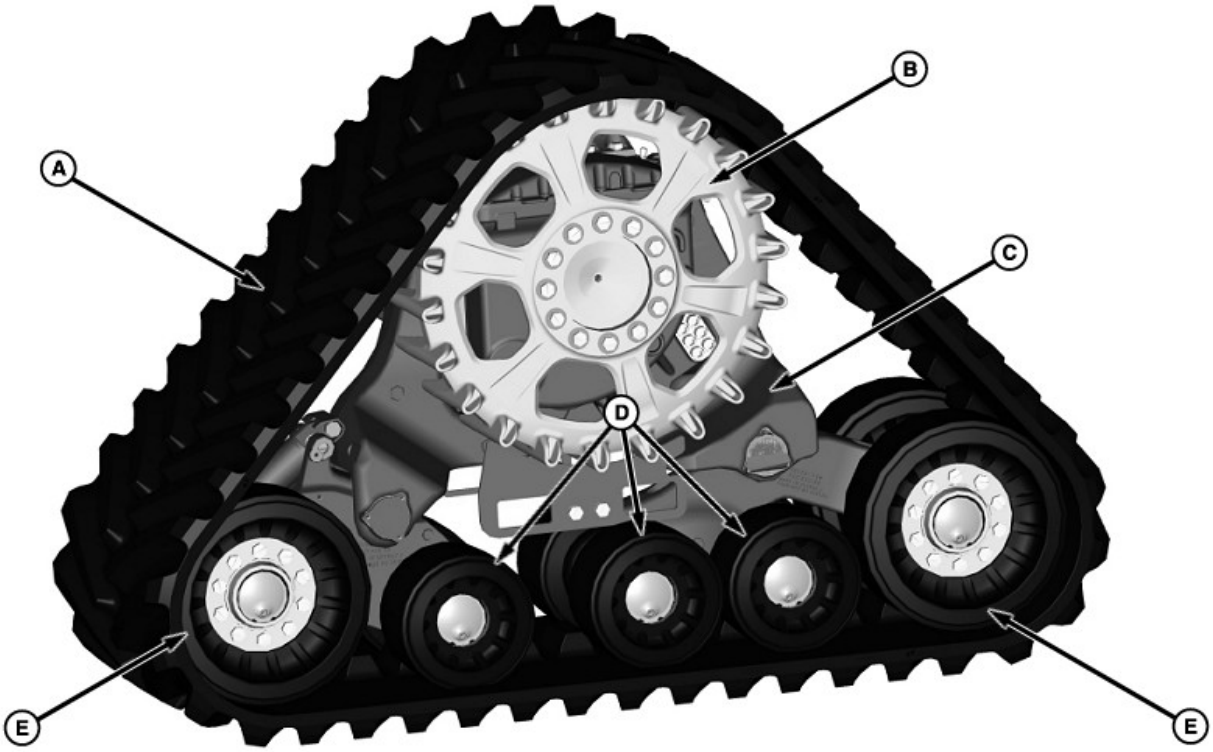
A—Pedal
B—Locking Lever
C—Crossbar
D—Ladder

CAUTION: Avoid injury to you or others. Keep hands away from moving components while folding or unfolding the ladder. Always use the handrails to fold or unfold the ladder.

1. Push down on pedal (A) to unlatch the locking lever (B).
2. Push down on crossbar (C) until it can be reached with your foot.
3. Continue to press down on the crossbar to lower the ladder (D) all the way down.

OUO6075,0004A24-19-06SEP18

Track Components

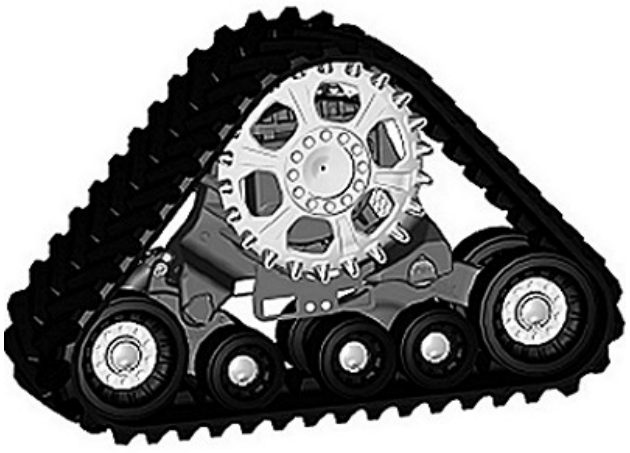


H122226—UN—10AUG17

A—Rubber Track Belt
B—Drive Wheel
C—Main Frame
D—Bogie Wheels
E—Idler Wheels

OUO6041,0000C2E-19-10AUG17

Track Features and Benefits



H122227—UN—10AUG17

Features and benefits of tracks:

- Compaction – reduces compaction
- Flotation – increased flotation in adverse conditions
- Ride Quality– rubberized idlers and bogies cushion ride
- Low Maintenance – zero grease points
- Auto Tension - efficient absorption of impacts or ingestion of debris
- Integrated Track – continuous rubber track minimizes surface damage
- Positive Drive – gently spreads torque on the rubber belt with low rolling resistance
- Speed –equal speed as tires

Tracks are installed on the left-hand and right-hand side of the front axle instead of the normal drive wheels.

Weight force is transmitted from the main frame to the idler wheels and bogie wheels.

Idler wheels and bogie wheels along with the suspension system compensate for uneven ground terrain. This results in even ground pressure over the entire track area.

OUO6041,0000C2F-19-11JAN18

Operate Track Machines

IMPORTANT: High-speed road travel increases tread wear rates and builds excessive heat, which can reduce drive lug life. See Road Transport Speeds later in this section for further information. Road travel should be avoided prior to completing the break-in period, particularly on asphalt roads. If road travel is necessary with new tracks, reduce transport speed and apply dry lubricant to drive lugs to aid in the proper belt conditioning.

NOTE: Driving a machine with tracks is the same as driving a machine with tires. Therefore, instructions on how to drive a combine is given in the Combine Operator's Manual.

There are no differences between operating machines with tracks versus machines with wheels. All controls and shift functions remain the same as a machine with wheels.

Machine behavior on paved roads is similar to behavior of the machine with wheels. On non-paved, poor roads and in field, the machine compensates for uneven ground and is not prone to bounce compared to a machine with wheels.

Refer to Combine Operator's Manual for operational information not related to tracks.

Maximizing Track Life

IMPORTANT: Avoid track and track system component damage, pre-condition tracks.

- **Pre-condition the tracks before driving machine on the road for first time. See Belt Care and Conditioning Break-In for further information.**
- **Avoid traveling at high speeds with a new set of tracks and wheels, especially during the first 100 hours.**

Debris buildup can cause fire from increased friction. Remove debris from the buildup points between track and machine frame.

Avoid operating track in grease, oil, or other petroleum chemicals. Avoid spilling these materials on track and wheels during service.

Track carcasses are designed to exceed tread wear out, so long as integrity of carcass is maintained. It is critical to keep moisture out of the steel carcass and to avoid situations where localized cable overloading could occur. Track machine owners are advised to follow these guidelines to achieve maximum track life and avoid operational problems, all of which results in lower cost per operating hour:

- **Minimize roading. Excessive road travel can increase track wear up to 15 times field wear rates**
  - Minimize transport weight during road transport.
  - Reduce maximum travel speed especially during high ambient conditions.
- **Use correct operational techniques**
  - Avoid skidding and tread bar scrubbing on hard surfaces to reduce track wear.
  - Use care when crossing ditches or transitions while making turns. Diagonal crossing of ditches causes track to become unsupported in the center and with idler hitting opposite embankment, can cause momentary loss of tension that can drop center section down and outside drive or idler wheels, making derailing a much higher risk if in a turn.
  - Do not exceed side operating slope of 10 degrees or fore/aft operating slope of 22 degrees.
- **Maintain correct track tension**
  - Under-tension causes rapid wear on tracks and inside surface of belt due to slippage and potentially cause material buildup.
  - Over-tension adds extra load and stress to undercarriage bearings, internal track cables, and track frame.
- **Keep irregular material out of tracks**

  Sharp hard material inside the track is primary reason for localized track tears and subsequent entry points for moisture into the track carcass.

OUO6041,0000C30-19-14MAY18

Road Transport Speeds

NOTE: Maximum allowed road time to maximize rubber belt/wheels life.

Without Header Attached (All Belt Widths)

Ambient Temperature		Speed				
		25	30	35	40	km/h
°C	°F	15	18	21	25	mph
0	32	>5.0				Hours
5	41					
10	50					
15	59					
20	68	>5.0			4.5	
25	77	>5.0	4.5		4.0	
30	86	4.0		3.5		
35	95	3.5		3.0		
40	104	3.0	2.5		2.0	

With Header Attached (60.9 cm (24 in) Track)

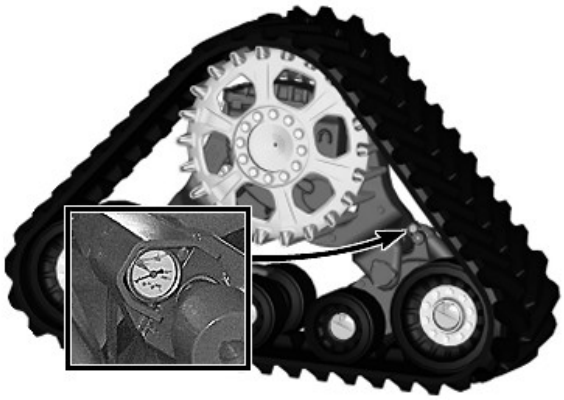
Ambient Temperature		Speed				
		25	30	35	40	km/h
°C	°F	15	18	21	25	mph
0	32	>5.0			1.5	Hours
5	41					
10	50					
15	59	>5.0	4.5		1.0	
20	68	4.5	4.0			
25	77	4.0	3.5			
30	86	3.5	3.0			
35	95	3.0	2.5			
40	104	2.5	2.0	1.5		

With Header Attached (76.2 cm (30 in) Track and 91.4 cm (36 in) Track)

Ambient Temperature		Speed				
		25	30	35	40	km/h
°C	°F	15	18	21	25	mph
0	32	>5.0			1.0	Hours
5	41	>5.0		4.5		
10	50			1.0		
15	59	>5.0	4.5			
20	68	4.5	4.0		0.5	
25	77	4.0	3.5			
30	86	3.5	3.0			
35	95	3.0	2.5			
40	104	2.5	1.5			

OUO6075,0004872-19-14JUN18

Track Tensioning System



H122229—UN—15AUG17

IMPORTANT: Check tension cylinder pressure prior to using the machine.

Nitrogen Pressure

Hydraulic cylinder has an internal nitrogen accumulator which comes pre-charged from the factory. Pressure does not need to be checked unless there is a sudden drop in hydraulic pressure with no sign of fluid loss. See your John Deere dealer for further information.

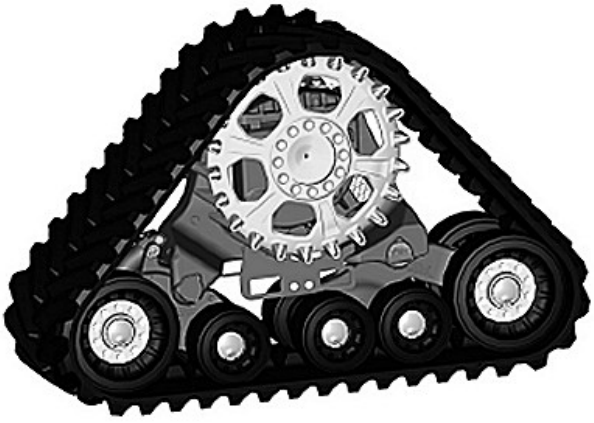
Hydraulic Pressure

Hydraulic pressure gauge is located above the front idler wheels at location shown. Gauge is used to provide a quick visual check to verify that pressure is within recommended operating range.

If pressure is outside of these ranges it must be adjusted. If pressure is too low, this indicates that there is a leak somewhere in the hydraulic system and a closer inspection must be performed. See your John Deere dealer for further information.

OUO6041,0000C31-19-10MAY18

Cleaning Tracks



H122230—UN—15AUG17

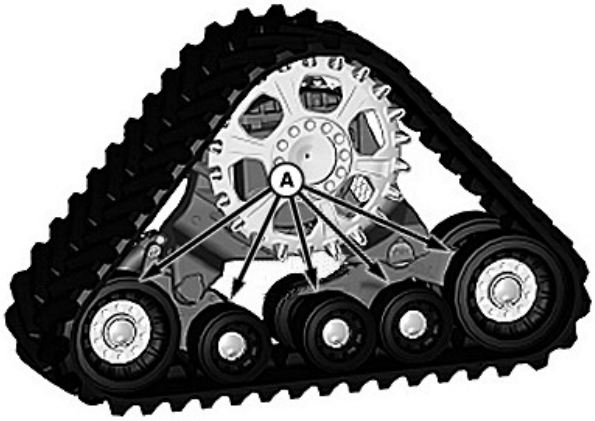
IMPORTANT: Tracks must be cleaned immediately after operation in wet and muddy conditions.

Always keep drive wheel and mainframe clear of dirt and debris.

Mainframe and wheel areas must be cleaned periodically to prevent buildup of dirt and debris. Buildup can cause premature wear on rubber track belt, bogie wheels, and idler wheels.

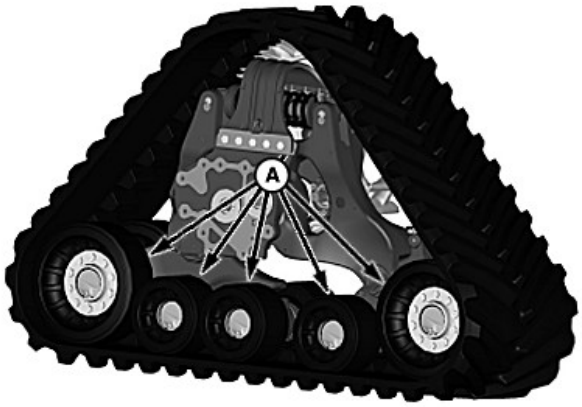
OUO6041,0000C32-19-15AUG17

Track Cleanout Areas



H122231—UN—15AUG17

Outside View



H122232—UN—15AUG17

Inside View

A—Mainframe and Wheel Areas

Mainframe and wheel areas (A) must be cleaned periodically to prevent buildup of dirt and debris. Buildup can cause premature wear on rubber track belt, bogie wheels, and idler wheels.

OUO6041,0000C33-19-16AUG17

Service Interval Chart

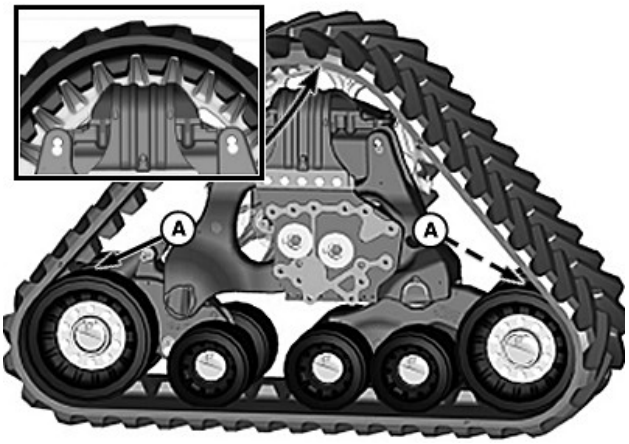
IMPORTANT: Service times are for average conditions. Service more often if machine is used in extreme conditions.

Service	First 10 Hours	Every 10 Hours	First 100 Hours	Every 400 Hours	Every 1000 Hours
Clean Dirt and Debris From Drive Wheels		•			
Clean Dirt and Debris From Mainframe		•			
Check Bogie Hubs Oil Level				•	
Check Idler Hubs Oil Level				•	
Check Pressure Settings			•	•	
Check Belt Tracking			•	•	
Check Bolt Torque	•		•	•	
Check Idler Wheel and Sprocket Bolt Torque	•		•	•	
Change Bogie Hubs Oil					•
Change Idler Hubs Oil					•
Swap Belts Left/Right [a]					•

[a] *Belt swap only required based on traction lug wear.*

OUO6075,0004A25-19-06SEP18

Belt Care and Conditioning Break-In



H122233—UN—16AUG17

A—Front and Rear Drive Wheel Areas

CAUTION: Shut OFF engine, set park brake and remove key.

NOTE: The following break-in procedure is for a modular track system after installation of a new track system, or installation of a new track belt. Prior to operating machine, dry lubricant must be applied to drive lugs of the rubber track belt to aid in the proper belt conditioning.

Pour one cup of dry lubricant to front and rear drive wheel areas (A) as shown.

Move machine forward or in reverse to spread dry lubricant over drive lug teeth.

Verify that guide/drive lugs have the dry lubricant on all surfaces.

Always expose new or clean track to dry and dusty soil conditions as soon as possible.

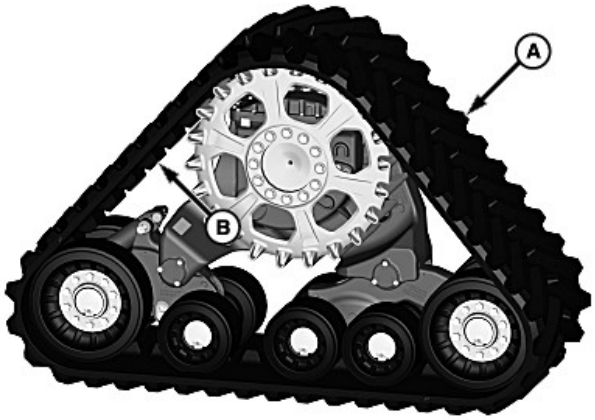
Run machine for approximately 10 hours after installation.

Check hydraulic pressure on the track tensioning system and adjust as needed.

Check track module hardware torque and retighten as needed.

OUO6041,0000C34-19-11OCT17

Track Replacement Criteria



H124521—UN—15JUN18

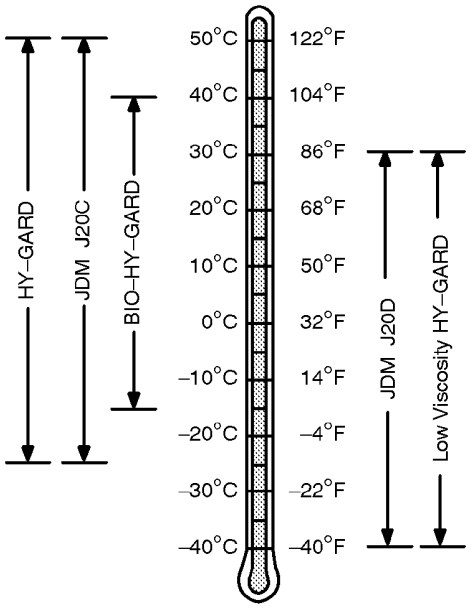
A—Tread Bar
B—Drive Lugs

To prevent damages and/or loss of performance, tracks must be replaced when one of the following criteria is reached:

- Tread bar height (A) is less than 12 mm (0.5 in) for traction tracks
- More than three tread bars are missing in a row
- More than three consecutive drive lugs (B) are missing
- Wear on drive lugs is more than 50%
- De-tracking occurs due to worn-out or missing drive lugs
- Main cables are broken on more than a third (1/3) of the width of the track
- Main cables are visible on the inside surface of the track
- Sprocket is skipping teeth due to missing/worn drive lugs

OUO6041,0000D63-19-15JUN18

Hydraulic Oil



TS1660—UN—10OCT97

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

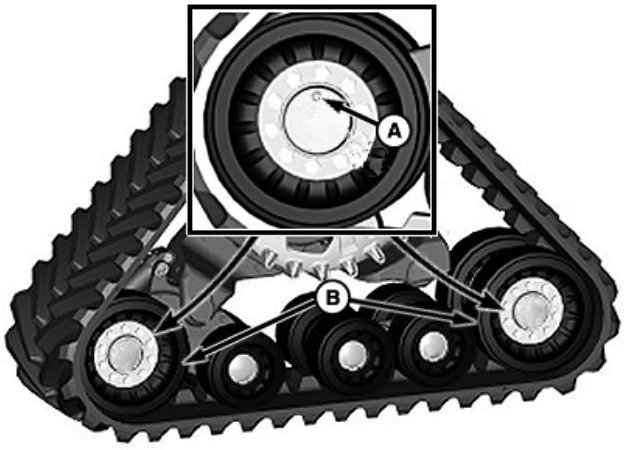
- John Deere Hy-Gard™
- John Deere Low Viscosity Hy-Gard™

Other oils may be used if they meet one of the following:

- John Deere Standard JDM J20C
- John Deere Standard JDM J20D

OUCC002,0005875-19-13JUN18

Check Oil



H122663—UN—25OCT17

A—Drain Plug (2 used)
B—Idler Hub (2 used)

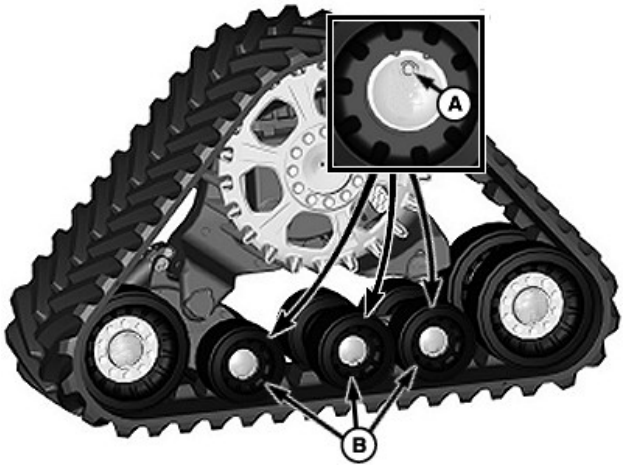
CAUTION: Avoid burn injury. Wear protective gloves or allow components time to cool. Bogie wheels, idler wheels, and rubber track belt normally operate at high temperatures and can be hot to touch.

NOTE: Check oil ONLY on the outer idler hub since the oil sump is common between the outer and inner idler hubs.

Clean area around drain plugs before removing.

Catch any oil in a clean container.

1. Drive the machine forward or backward so the drain plug (A) on the outer idler hub (B) is at the top.
2. Remove drain plug and verify that the oil level is at the bottom of the hole opening. Add oil as required.
3. Install drain plug.
4. Repeat steps for the other idler hubs.



H122664—UN—25OCT17

A—Drain Plug (3 used)
B—Bogie Hub (3 used)

NOTE: Check oil ONLY on the outer bogie hub since the oil sump is common between the outer and inner bogie hubs.

5. Drive the machine forward or backward so the drain plug (A) on the outer bogie hub (B) is at the top.
6. Remove drain plug and verify that the oil level is at the bottom of the hole opening. Add oil as required.
7. Install drain plug.
8. Repeat steps for the other bogie hubs.

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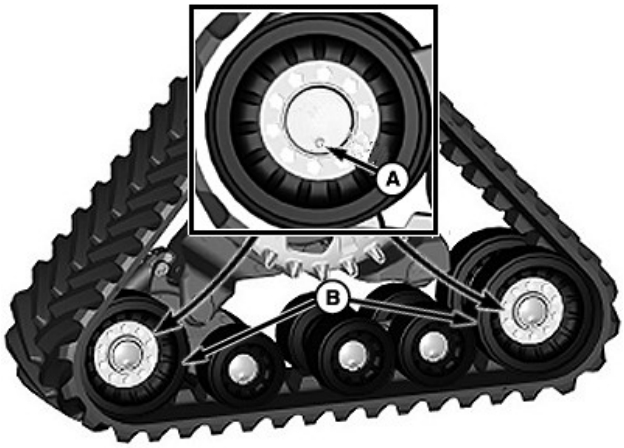
Change Oil



H122234—UN—24OCT17

A—Drain Plug (2 used)
B—Idler Hub (2 used)

CAUTION: Avoid burn injury. Wear protective gloves or allow components time to cool. Bogie wheels, idler wheels, and rubber track belt normally operate at high temperatures and can be hot to touch.

NOTE: Change oil ONLY on the outer idler hubs since the oil sump is common between the outer and inner idler hubs.

Clean area around the drain plugs before removing.

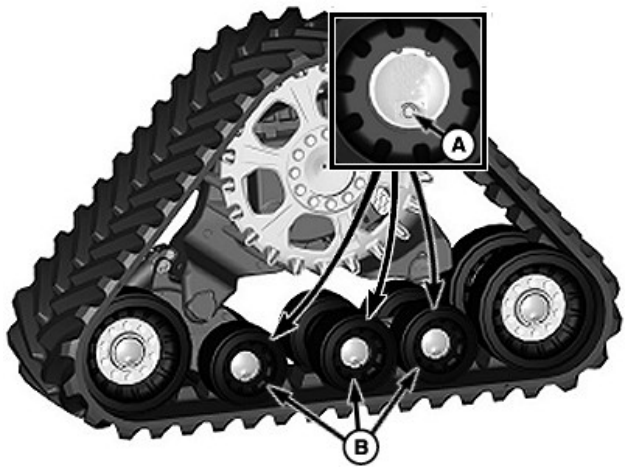
Catch any oil in a clean container.

1. Drive the machine forward or backward so the drain plug (A) on the outer idler hub (B) is at the bottom.
2. Remove drain plug and drain oil.
3. Drive the machine forward or backward so the idler drain plug (A) is at the top.
4. Fill to specification using Hy-Gard™ oil.

Specification	
Idler Hub—Capacity	1300 mL (44 oz)

5. Install drain plug.
6. Repeat steps for the other idler hub.

Hy-Gard is a trademark of Deere & Company



H122253—UN—24OCT17

A—Drain Plug (3 used)
B—Bogie Hub (3 used)

NOTE: Change oil ONLY on the outer bogie hubs since the oil sump is common between the outer and inner bogie hubs.

7. Drive the machine forward or backward so the drain plug (A) on the outer bogie hub (B) is at the bottom.
8. Remove drain plug and drain oil.
9. Drive the machine forward or backward so the bogie drain plug (A) is at the top.
10. Fill to specification using Hy-Gard™ oil.

Specification	
Bogie Hubs—Capacity	1300 mL (44 oz)

11. Install drain plug.
12. Repeat steps for the other bogie hubs.

OUO6041,0000C35-19-11JUL18

Specifications

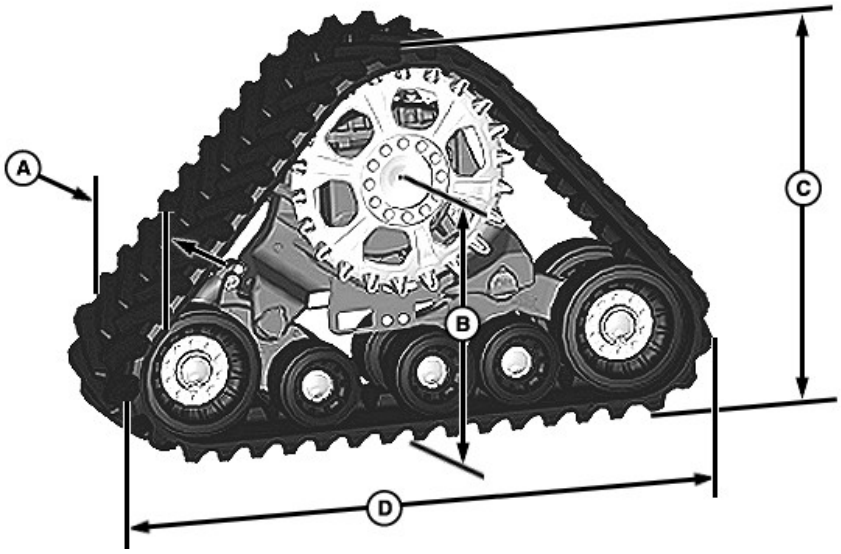
Track Specifications		
Load Capacity	22 650 kg (49 935 lb)	
Weight	60.9 cm (24 in)	2710 kg (5975 lb)
	76.2 cm (30 in)	2840 kg (6262 lb)
	91.4 cm (36 in)	3000 kg (6615 lb)
Rolling Circumference	6032 mm (238 in)	

Capacities	
Idler Hubs	1300 mL (44 oz)
Bogie Hubs	1300 mL (44 oz)
Oil Type	Hy-Gard™ Oils meeting John Deere Standard JDM J20C

Hy-Gard is a trademark of Deere & Company

OUO6041,0000CF7-19-05DEC17

Track Module Dimensions



H122256—UN—19OCT17

Legend	Dimension
A	60.9 cm (24 in) 76.2 cm (30 in) 91.4 cm (36 in)
B	1165 mm (46 in)
C	18 111 mm (71 in)
D	2767 mm (109 in)

OUO6041,0000CF8-19-05DEC17

Combine Dimensions

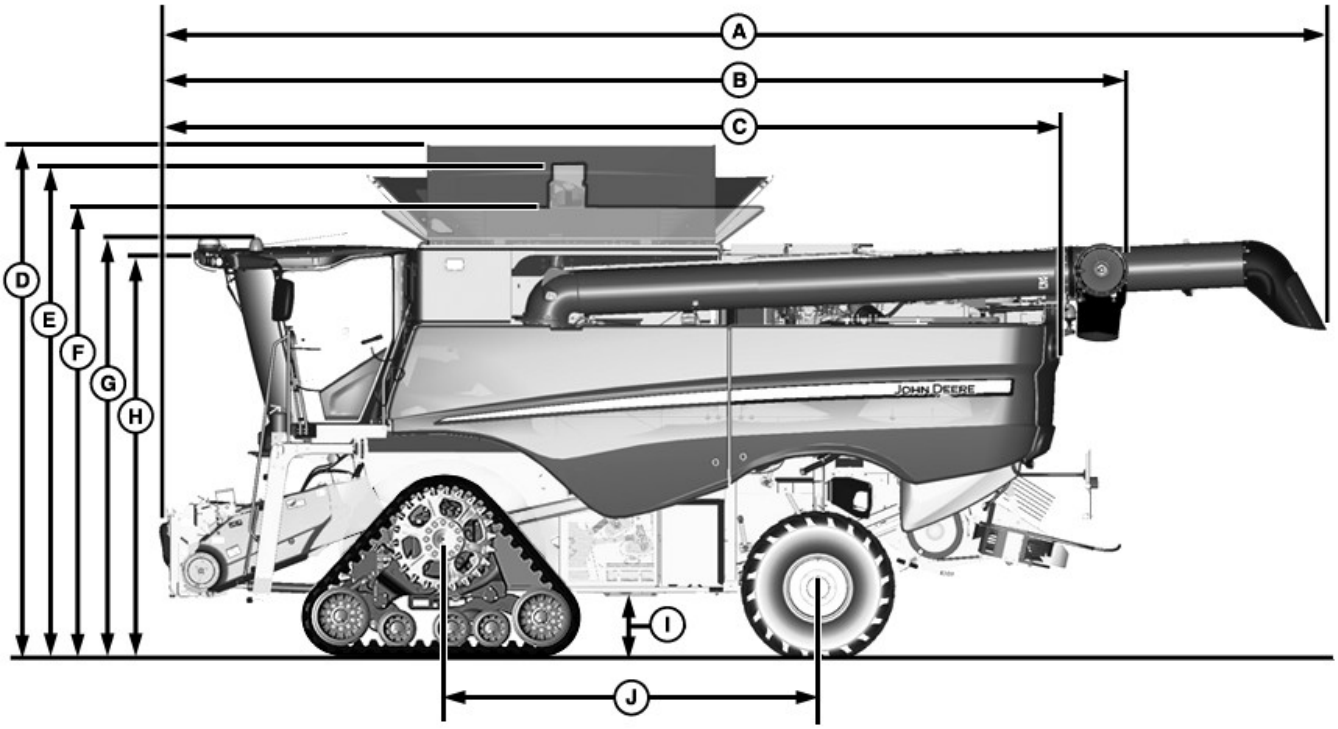
NOTE: Dimensions are approximate and subject to change without notice.

Legend	Dimension
A	11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 11.72 m (38 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 12.46 m (40 ft 11 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
B	9.14 m (30 ft 0 in) with 6.9 m (22 ft 6 in) Power Fold Auger 9.93 m (32 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Auger
C	8.52 m (27 ft 11 in)
D	4.91—4.99 m (16 ft 1 in—16 ft 5 in) with 10 572 L (300 bu) Covers 3.92—3.99 m (12 ft 10 in—13 ft 1 in) with 14 096 L (400 bu) Covers
E	4.61—4.84 m (15 ft 2 in—15 ft 11 in) Clean Grain Loading Auger with 10 572 L (300 bu) Extensions 4.77—4.85 m (15 ft 8 in—15 ft 11 in) Clean Grain Loading Auger with 14 096 L (400 bu) Extensions
F	4.30—4.39 m (14 ft 1 in—14 ft 5 in) with 10 572 L (300 bu) Extensions 4.57—4.65 m (15 ft 0 in—15 ft 3 in) with 14 096 L (400 bu) Extensions
G	4.04—4.13 m (13 ft 3 in—13 ft 7 in)
H	3.96—4.04 m (13 ft 0 in—13 ft 3 in)
I	0.63—0.76 m (2 ft 1 in—2 ft 6 in)
J	3.53 m (11 ft 7 in)
K	7.66 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Rigid Unloading Auger 7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 8.97 m (29 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 9.42 m (30 ft 11 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
L	5.23—5.33 m (17 ft 2 in—17 ft 6 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 5.48—5.58 m (18 ft 0 in—18 ft 4 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 5.42—5.52 m (17 ft 9 in—18 ft 1 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 5.59—5.69 m (18 ft 4 in—18 ft 8 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
M	4.51—4.62 m (14 ft 10 in—15 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 4.61—4.71 m (15 ft 2 in—15 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 4.32—4.65 m (14 ft 2 in—15 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 4.72—4.82 m (15 ft 6 in—15 ft 10 in) with 8.7 m (28 ft 6 in) Unloading Auger
N [a]	4.58—4.69 m (15 ft 0 in—15 ft 5 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 4.91—5.01 m (16 ft 1 in—16 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 4.84—4.95 m (15 ft 11 in—16 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 5.02—5.12 m (16 ft 6 in—16 ft 10 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
O [b]	3.70—4.14 m (12 ft 1 in—13 ft 6 in) Rear Tires
P [b]	3.46 m (11 ft 4 in) without Axle Extensions 60.9 cm (24 in) Tracks 3.59 m (11 ft 7 in) with 65 mm (2-1/2 in) Axle Extensions 60.9 cm (24 in) Tracks 3.75 m (12 ft 3 in) with 65 mm (2-1/2 in) Axle Extensions 76.2 cm (30 in) Tracks 4.40 m (14 ft 4 in) with 394 mm (15-1/2 in) Axle Extensions 76.2 cm (30 in) Tracks 4.54 m (14 ft 9 in) with 394 mm (15-1/2 in) Axle Extensions 91.4 cm (36 in) Tracks

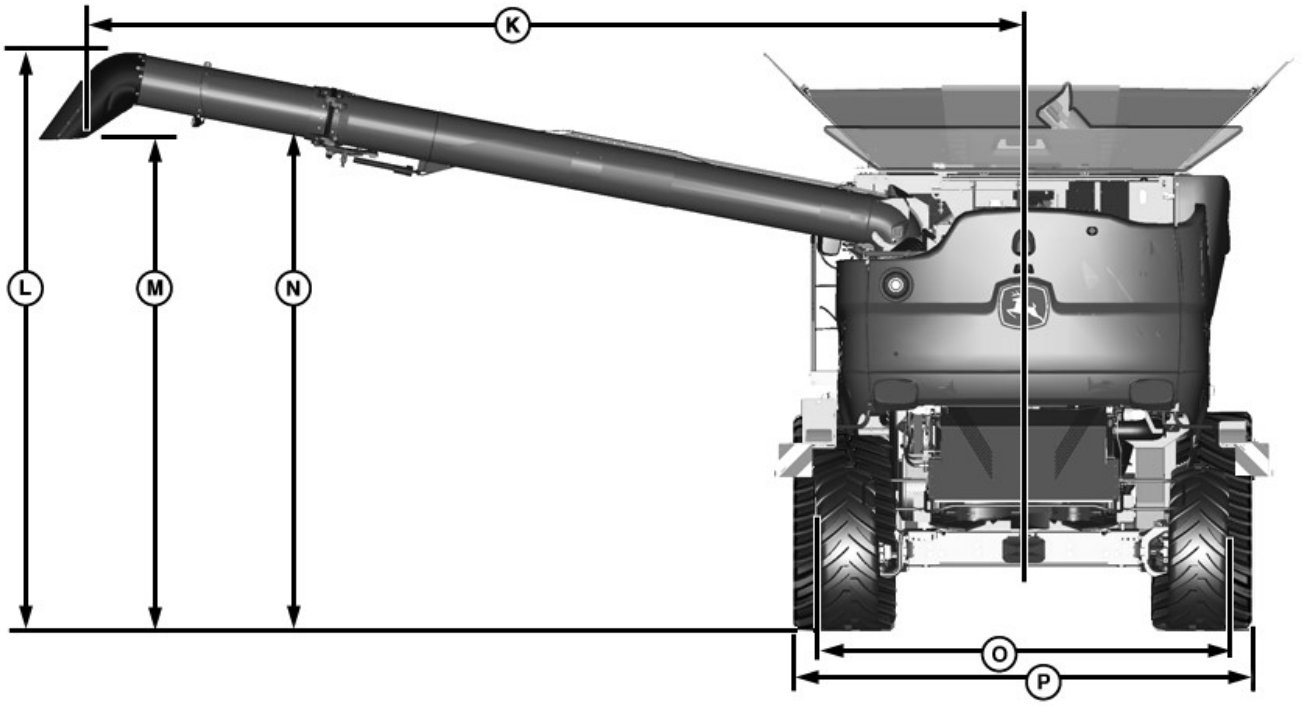
[a] Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.
[b] Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths will vary. Measurements given in chart are for minimum and maximum widths. For more detailed width information, see your John Deere dealer.

OUO6075,0004EBC-19-07JUL20

Dimension Reference Points



H122741—UN—14NOV17



H122742—UN—14NOV17

OUO6041,0000CF5-19-13JUN18

EC Declaration Of Incorporation Of Partly Completed Machinery

EC DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

DIRECTIVE 2006/42/EC, Appendix 2, Part B

Manufacturer:
Soucy International Inc.
5450 rue St-Roch
Drummondville (Quebec) J2B 6W3
CANADA

Technical Contact:
Ryan Black
46 Heralds Close
Wildnes
WA88AS
ENGLAND

Declaration:

Soucy International Inc. hereby certifies that its agricultural track system GTS fulfill all the relevant provisions of the Machinery Directive 2006/42/EC as a partly completed machinery. The system may not be put into service before machinery in which it will be incorporated is declared to comply to the machinery directive 2006/42/EC, Appendix 2, part A.

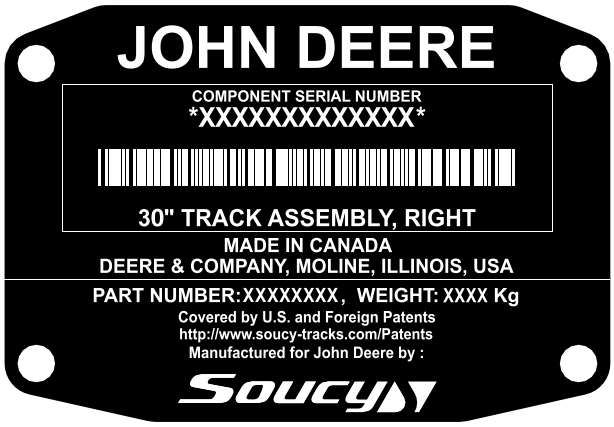
Signed at Drummondville, July 1, 2020

Julie Tremblay

Julie Tremblay

H122667—UN—26OCT17
Engineering Manager, Agricultural

OUO6075,0004EB3-19-06JUL20



H122615—UN—14NOV17
Sample Identification Plate (Right-Hand Track)

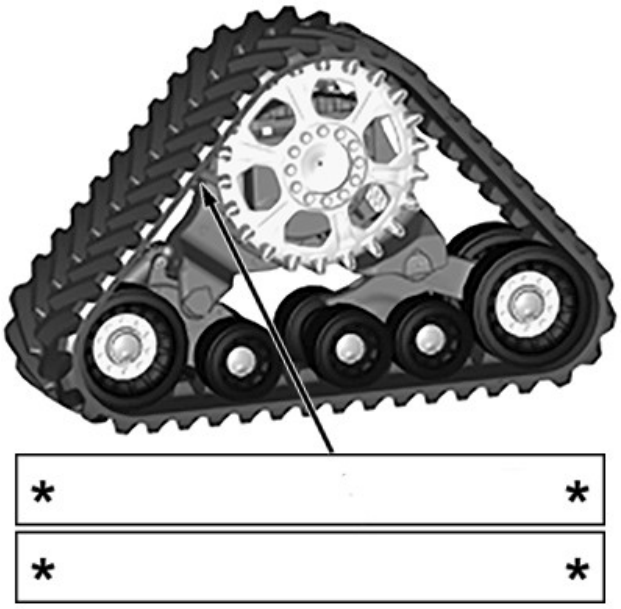
Track Identification Plates

H122614—UN—14NOV17
Sample Identification Plate (Left-Hand Track)

NOTE: 76.2 cm (30 in) track serial number plate shown. 60.9 cm (24 in) and 91.4 cm (36 in) track serial number plates are similar.

OUO6041,0000CFA-19-05DEC17

Identification Plate Location



H122290—UN—06SEP17

Located on inside of each track module.

OUO6041,0000C3C-19-25AUG17

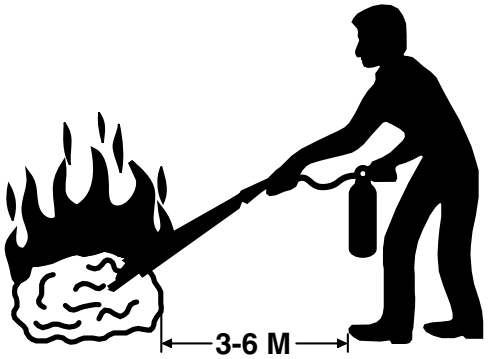
Fire Prevention

Recommended Fire Preventions

The machine must be inspected periodically throughout the harvest day. Buildup of crop material and other debris must be removed to ensure proper machine function and to reduce the risk of fire.

Regular and thorough cleaning of machine combined with other routine maintenance procedures listed in the Operator's Manual greatly reduces the risk of fire, chance of costly downtime, and improve machine performance.

Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set park brake, and remove key.



H90363—UN—05DEC07

Your machine is equipped with general-purpose powder fire extinguisher and a pressurized liquid fire extinguisher. Extinguishers must be checked daily when entering or exiting the cab and when working around machine to ensure that they are in working condition. Fire extinguishers must be replaced or professionally serviced after any usage.

Fire Extinguisher Recommendations:

IMPORTANT: Read label on extinguishers and become familiar with instructions and restrictions to use them.

General-Purpose Powder Fire Extinguisher:

- Use extinguisher for grease, oil, electrical, and chemical fires.

Pressurized Liquid Fire Extinguisher:

- Use extinguisher on crop material buildup or crop debris fires.

Use of a Fire Extinguisher:

The diagram shows the recommended method to extinguish a fire. Always aim towards base of fire.

The following are basic steps for the use of a fire extinguisher:

1. Remove fire extinguisher from bracket and carry to area of fire.

Your machine is equipped with general-purpose powder fire extinguisher and a pressurized liquid fire extinguisher. Extinguishers must be checked daily when entering or exiting the cab and when working around machine to ensure that they are in working condition. Fire extinguishers must be replaced or professionally serviced after any usage.

For further information, refer to Machine Cleanout section.

OUO6075,00042AA-19-15JUN16

Fire Extinguisher Operation

2. Approach area of fire with wind to your back.
3. Pull safety pin from top of extinguisher.
4. Hold extinguisher upright by handles and aim hose at **base** of flames.
5. Squeeze handles to discharge fire extinguisher.
6. Move nozzle back and forth, covering flames with a cloud of powder.

Inspection Checklist:

At least once per month, inspect fire extinguishers and ensure the following:

1. Are fire extinguishers positioned in designated location on cab ladder landing and at rear of machine?
2. Are there any obstructions to proper access or visibility?
3. Are operating instructions on nameplate legible and facing outward?
4. Are safety seals broken or missing?
5. Is extinguisher full? (Determines by weighing or "hefting")
6. Is there any physical damage, corrosion, leakage, or a clogged nozzle?

When inspection of fire extinguisher reveals a deficiency, extinguisher must be serviced or replaced.

OUO6075,00042AB-19-28JUN16

Charge Liquid Fire Extinguisher (Europe, Australia, and New Zealand) (If Required)

H117901—UN—28MAR16

NOTE: Liquid fire extinguisher may be shipped uncharged. Prior to delivery of machine the liquid fire extinguisher must be charged.

When an antifreeze charge is used to freeze protect extinguisher, a complete discharge and maintenance is required.

Fire extinguisher shown may vary depending on country requirements and fire extinguisher manufacturers.

⚠ CAUTION: Before attempting to recharge, ensure that extinguisher is completely depressurized.

1. Refer to information provided with the fire extinguisher to properly fill and charge.
2. Install fire extinguisher on the machine.

OUO6075,0004A04-19-28JUN18

Handle Fuel Safely—Avoid Fires

TS202—UN—23AUG88

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

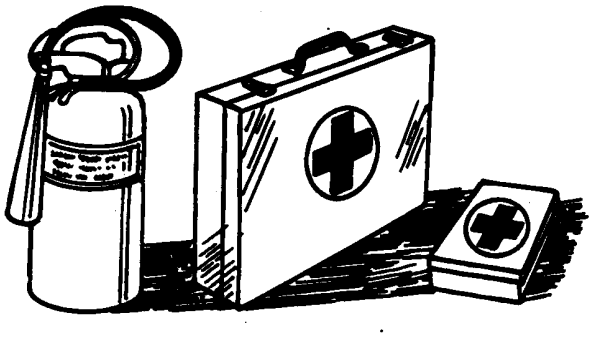
Use only an approved fuel container for transporting flammable liquids.

Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.

Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1-19-12OCT11

Prepare for Emergencies



TS291—UN—15APR13

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.

DX,FIRE2-19-03MAR93

Handle Starting Fluid Safely

TS1356—UN—18MAR92

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.

Do not use starting fluid on an engine equipped with glow plugs or an air intake heater.

DX,FIRE3-19-14MAR14

Remove Accumulated Crop Debris

TS227—UN—15APR13

The build up of chaff and crop debris in the engine compartment, on the engine, and near moving parts is a fire hazard. Check and clean these areas frequently. Before performing any inspection or service, shut off the engine, set the parking brake and remove the key.

HX,9010SA,B-19-23AUG97

Fire Extinguisher (Europe)

H92841—UN—16SEP08

General-Purpose Powder / Liquid Fire Extinguisher

CAUTION: Fire extinguishers must meet local government laws and regulations:

- **A general-purpose powder fire extinguisher that is at least 6 kg (13 lb)**
- **A pressurized liquid fire extinguisher (if equipped) with minimum volume of 8 L (2.1 gal)**

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose powder fire extinguisher and a pressurized liquid fire extinguisher with mounting brackets are installed on your machine.

Read label on extinguishers and become familiar with instructions on how to use and maintain them. Once extinguisher is discharged, no matter for how long, it must be recharged or replaced.

IMPORTANT: Pressurized liquid fire extinguisher must not be exposed to freezing temperatures unless protected with antifreeze. See instructions decal on extinguisher for further information.

OUO6075,00042F6-19-20JUN16

Fire Extinguishers (Australia and New Zealand)

H117754—UN—17MAR16

General-Purpose Powder / Liquid Fire Extinguisher

CAUTION: Fire extinguishers must meet local government laws and regulations:

- **A general-purpose powder fire extinguisher that is at least 4 kg (10 lb)**
- **A pressurized liquid fire extinguisher with minimum volume of 8 L (2.1 gal)**

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose powder fire extinguisher and a pressurized liquid fire extinguisher with mounting brackets are installed on your machine.

Read label on extinguishers and become familiar with instructions on how to use and maintain them. Once extinguisher is discharged, no matter for how long, it must be recharged or replaced.

IMPORTANT: Pressurized liquid fire extinguisher must not be exposed to freezing temperatures unless protected with antifreeze. See instructions decal on extinguisher for further information.

OUO6075,00042F7-19-20JUN16

Fire Extinguishers (Eurasian Economic Union)

H117754—UN—17MAR16

General-Purpose Powder / Liquid-Foam Combination Fire Extinguisher

CAUTION: Fire extinguishers must meet local government laws and regulations:

- **A general-purpose powder fire extinguisher that is at least 6 kg (13 lb)**
- **A pressurized liquid-foam combination fire extinguisher with minimum volume of 8 L (2.1 gal)**

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose powder fire extinguisher and a pressurized liquid-foam combination fire extinguisher with mounting brackets are installed on your machine.

Read label on extinguishers and become familiar with instructions on how to use and maintain them. Once extinguisher is discharged, no matter for how long, it must be recharged or replaced.

IMPORTANT: Pressurized liquid-foam combination fire extinguisher must not be exposed to freezing temperatures. See instructions decal on extinguisher for further information.

OUO6075,00049FE-19-28JUN18

Fire Extinguisher Locations

H123653—UN—02MAR18

Front Fire Extinguisher Location

H123654—UN—02MAR18

Rear Fire Extinguisher Location

NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.

A general-purpose fire extinguisher is on the front ladder platform.

A pressurized liquid fire extinguisher (if equipped) is on the inside of the right-hand rear engine access door.

OUO6075,0004911-19-02MAR18

In Case of Fire

TS227—UN—15APR13

CAUTION: Avoid personal injury.

Stop machine immediately at the first sign of fire. Fire may be identified by the smell of smoke or sight of flames. Because fire grows and spreads rapidly, get off the machine immediately and move safely away from the fire. Do not return to the machine! The number one priority is safety.

Call the fire department. A portable fire extinguisher can put out a small fire or contain it until the fire department arrives; but portable extinguishers have limitations. Always put the safety of the operator and bystanders first. If attempting to extinguish a fire, keep your back to the wind with an unobstructed escape path so you can move away quickly if the fire cannot be extinguished.

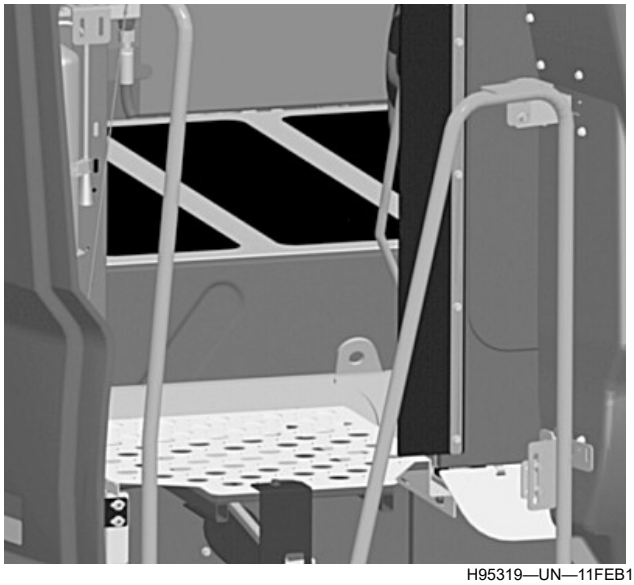
Read the fire extinguisher instructions and become familiar with their location, parts, and operation before a fire starts. Local fire departments or fire equipment distributors may offer fire extinguisher training and recommendations.

If your extinguisher does not have instructions, follow these general guidelines:

1. Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
2. Aim low. Point the extinguisher at the base of the fire.
3. Squeeze the lever slowly and evenly.
4. Sweep the nozzle from side-to-side.

DX,FIRE4-19-22AUG13

Cleaning Engine Compartment



H95319—UN—11FEB10

CAUTION: Do not clean engine or engine compartment with engine running. Dirt, oil, chaff, and crop debris in engine compartment and on engine is a fire hazard. Direction of wind, type of crop and its moisture content can all have an effect on where and how much chaff and debris accumulate. Check and clean this area frequently.

OUO6075,0000575-19-17MAR10

Machine Cleanout

General Cleaning Guidelines

Machine must be inspected periodically throughout the harvest day. Buildup of crop material and other debris must be removed to ensure proper machine function and to reduce the risk of fire. Frequency of inspections and cleanings will vary depending on a number of factors, including operating conditions, machine settings, crop conditions, operating speeds, and weather conditions. Inspections and cleanings may be required multiple times throughout the harvest day, particularly in dry, hot, and windy conditions.

IMPORTANT: Regular and thorough cleaning of machine combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of fire, chance of costly downtime, and improve machine performance.

Crop material and other debris can accumulate in various areas. Direction of wind, type of crop, and crop moisture content can all impact where and how much crop material and debris can accumulate. Be aware of harvest conditions and adjust your cleaning schedule to ensure proper machine function and to reduce the risk of fire. Inspect and clean these areas as needed throughout the harvest day.

Harvesting certain crops can cause special issues. Some crops are very "sticky" and it is often more difficult to clean the machine when harvesting these crops. Examples of these crops include sunflower, canola, and safflower. Take special care in cleaning the machine when harvesting these crops.

Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set parking brake and remove key.

OUO6075,0001167-19-21JUN12

Quick Response (QR) Code

H129714—UN—01APR20
English QR Code

H129715—UN—01APR20
French QR Code

H129716—UN—01APR20
German QR Code

H129717—UN—01APR20
Spanish QR Code

At the top of the Cleaning Guide is a Quick Response (QR) code that links to a short instructional Cleaning Guide video. Access content from the QR code by downloading a QR scanner application to your smart phone. Open the App and aim your phone's camera at the code to connect to the media.

OUO6075,0004DE7-19-01APR20

Cleaning Out Machine (Periodic Cleanout)

The photographs in this section show areas of the machine that require regular inspection and cleaning. While there are other areas that require regular cleaning, frequent attention to these areas provides the greatest impact on fire prevention.

Some of these photographs show accumulations of crop material and other debris prior to cleaning. This type of accumulation is not normal; it was allowed for illustrative purposes only.

IMPORTANT: These areas may require more frequent cleaning, even multiple times per day, depending on harvest conditions. Be aware of harvest conditions and adjust your cleaning schedule to ensure proper machine function and to reduce the risk of fire.

Other areas not covered in this section may also collect crop debris and MUST be cleaned periodically for machine function and appearance. Thoroughly inspect the entire machine on a regular basis throughout the harvest season.

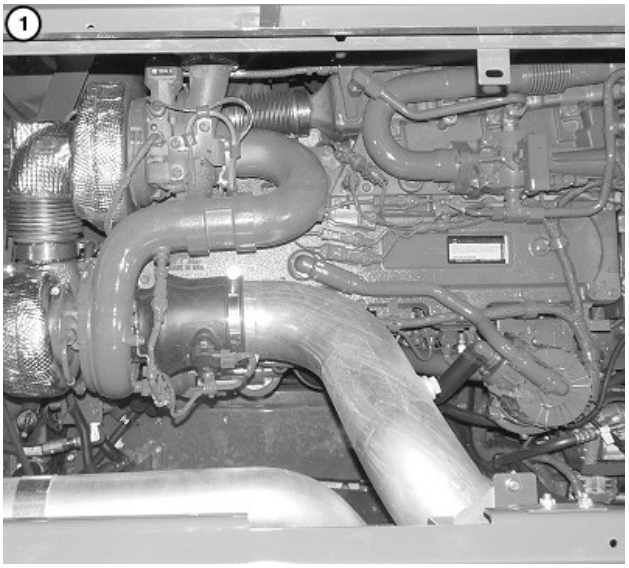
Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set park brake and remove key.

Thoroughly clean machine from top to bottom with compressed air. First clean all areas accessible from the engine deck. Start with engine compartment and work outwards and counterclockwise to other areas around engine compartment, floor underneath engine, top rear of rotor and rear deck, including areas around Exhaust Aftertreatment Enclosure (if equipped). Once top areas of machine are clean, proceed to cleaning areas accessible from the ground level.

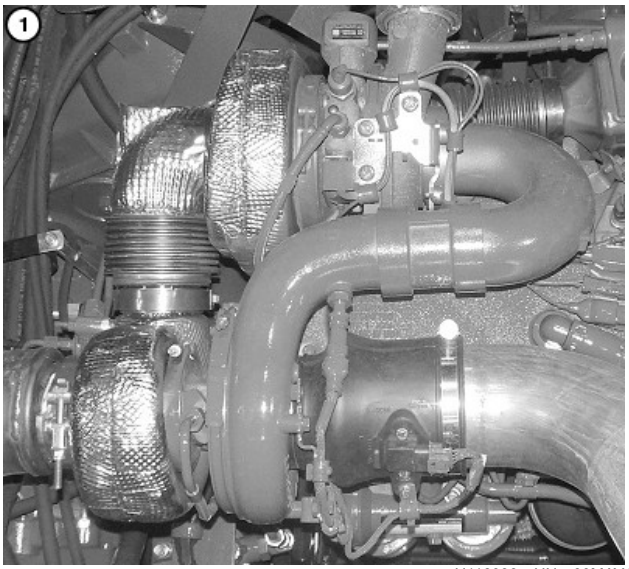
From the ground level, clean rear underside of fuel tank area and top of the rear tailboard of the residue disposal system. Exhaust Aftertreatment Enclosure area (if equipped) will also need to be cleaned from the ground level. Once the cleaning from the ground level is finished, recheck engine compartment for any crop debris that could have blown in from the ground level cleaning.

NOTE: Some shields were removed for photo clarity.

Engine Compartment (Top Areas)



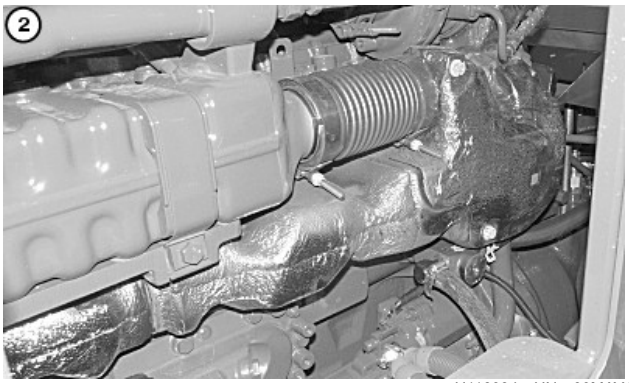
H116932—UN—09MAY16



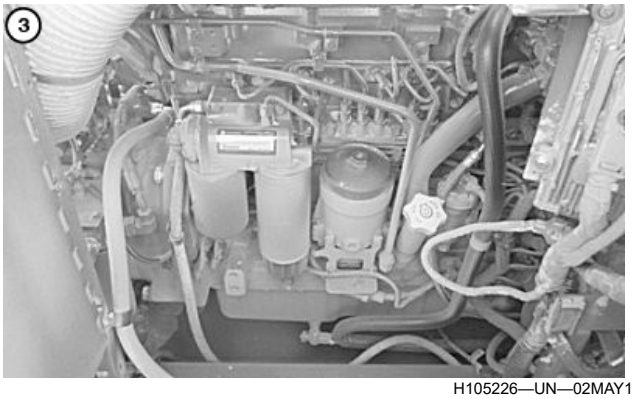
H116933—UN—09MAY16

(1) — Top Area of Engine and Turbochargers

Engine Compartment (Top Areas)



H116934—UN—09MAY16



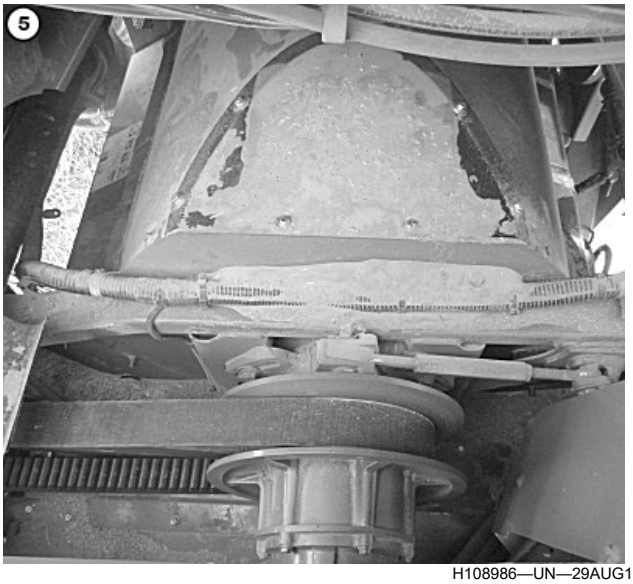
H105226—UN—02MAY12

(2) — Exhaust Manifold and Manifold Shield, Turbo Interstage Tube, Exhaust Gas Recirculation (EGR) Cooler Tube

(3) — Around Engine

Engine Compartment (Top Areas)

H108963—UN—29AUG13

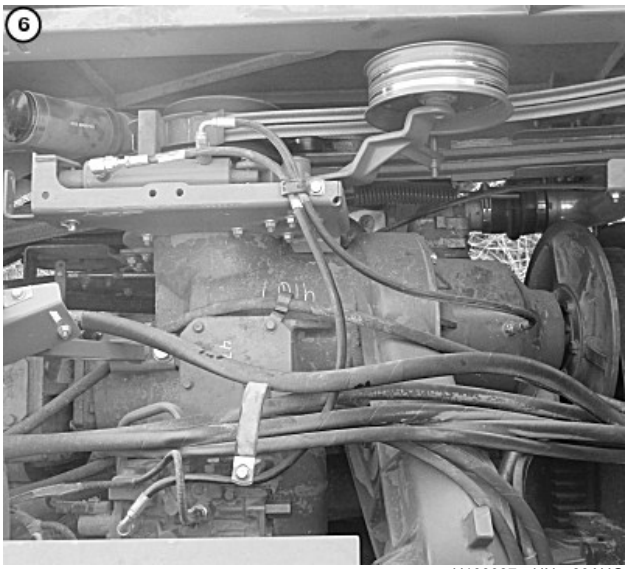


H108986—UN—29AUG13

(4) — Underneath Engine

(5) — Top Rear of Rotor and Areas Around Rotor Drive

Engine Compartment (Top Areas)



H108987—UN—29AUG13

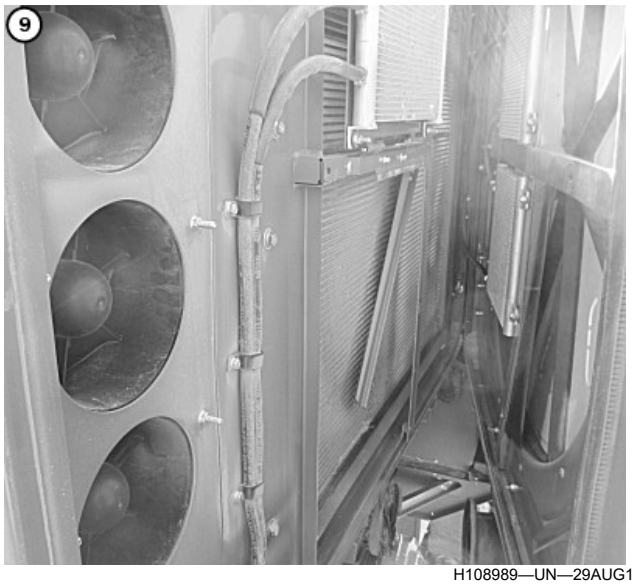
H108988—UN—29AUG13

(6) — Main Engine Gear Case

(7) — Areas around and under Exhaust Aftertreatment Enclosure (If Equipped)

Engine Compartment (Top Areas)

H108990—UN—29AUG13



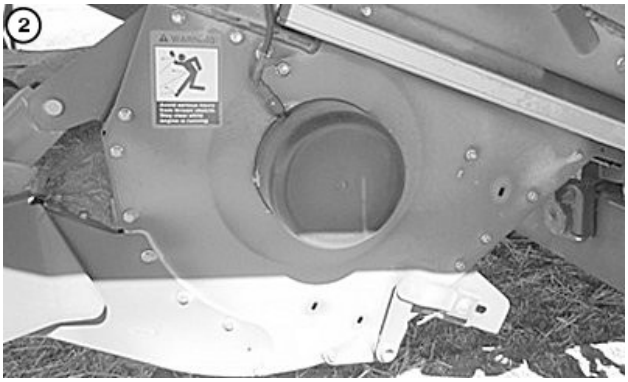
H108989—UN—29AUG13

(8) — On Top of Fuel Tank

(9) — Engine Cooling Package

Ground Accessible (Bottom Areas)

H100574—UN—20JUN11



H105229—UN—19APR12

(1) — Underneath Fuel Tank

(2) — Areas Around Bearings and Bearing Guards (Various locations)

Ground Accessible (Bottom Areas)

H108991—UN—29AUG13

Fuse Center (Style A)

H105230—UN—02MAY12

IMPORTANT: Lubrication decals show the different locations of grease points around the machine. Follow lubrication times provided on decals and refer to hour intervals listed in Lubrication and Maintenance section for further information.

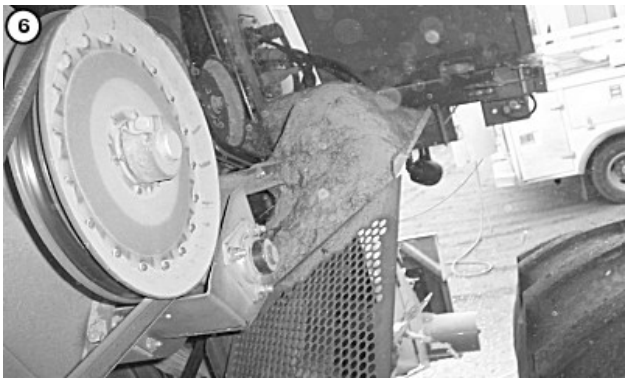
Bearing failures or overheating can result in a fire. To reduce bearing failures or overheating, always refer to lubrication decals on machine.

(3) — Fuse Center and Battery Box Areas

(4) — Clean Grain Elevator Drives

Ground Accessible (Bottom Areas)

H105336—UN—02MAY12



H105231—UN—02MAY12

(5) — Right Side Walk Area

(6) — Right Side Mud Shields

Ground Accessible (Bottom Areas)

H105337—UN—02MAY12

H105338—UN—02MAY12

(7) — Right Side Feeder House Shields

(8) — Left Side Feeder House Shields

Ground Accessible (Bottom Areas)

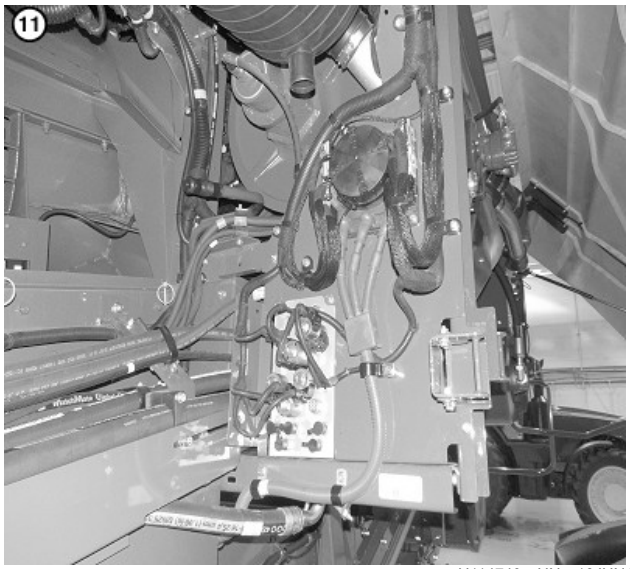
H105232—UN—02MAY12

H105339—UN—02MAY12

(9) — Transmission

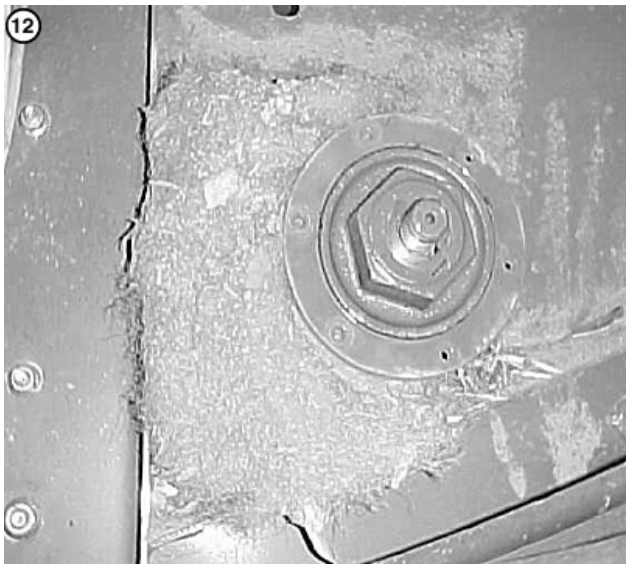
(10) — Left Side Walk Area

Ground Accessible (Bottom Areas)



H114749—UN—18JUN15

Fuse Center (Style B)



H105341—UN—02MAY12

(11) — Fuse Center and Battery Box Areas

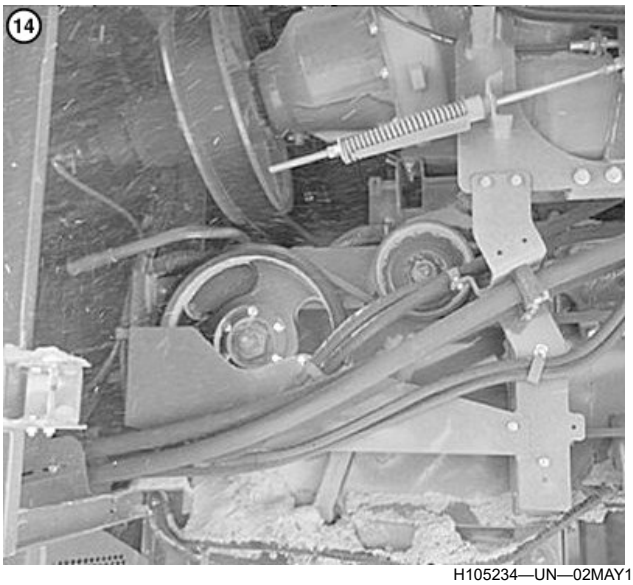
(12) — Discharge Beater Drives

Ground Accessible (Bottom Areas)

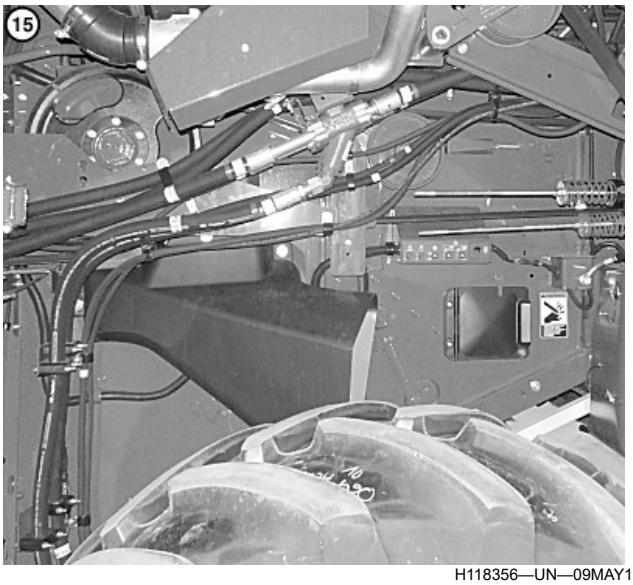
H105233—UN—02MAY12

(13) — Left Side Rotor Area

Ground Accessible (Bottom Areas)



H105234—UN—02MAY12



H118356—UN—09MAY16

(14) — Rotor Drives

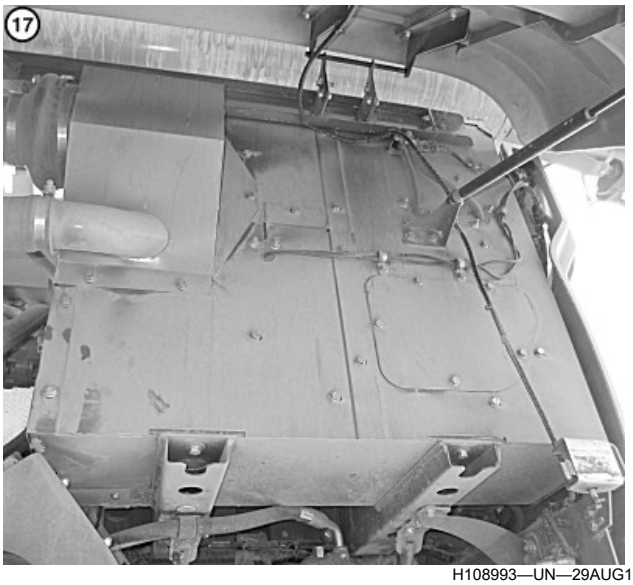
(15) — Left Sidesheet Areas

Ground Accessible (Bottom Areas)

H108951—UN—28AUG13

(16) — Residue Disposal Drives

Ground Accessible (Bottom Areas)

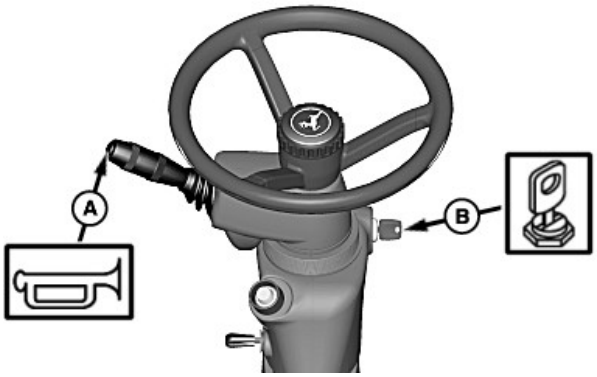


H108993—UN—29AUG13

(17) — Areas around and under Exhaust Aftertreatment Enclosure (If Equipped)

OUO6075,00046CA-19-28MAR17

Cleaning Out Machine (Annual Cleanout and Specialty Crops)



H97186—UN—02NOV10

A—Horn
B—Key Switch

CAUTION: To prevent injury, never clean machine with engine running and separator engaged. Shut OFF engine, set park brake, and remove key.

The following instructions are recommended when cleaning out machine for certified seed crops or when transporting machine inter-state.

CAUTION: Block header safely so it does not move. Lower reel safety stops.

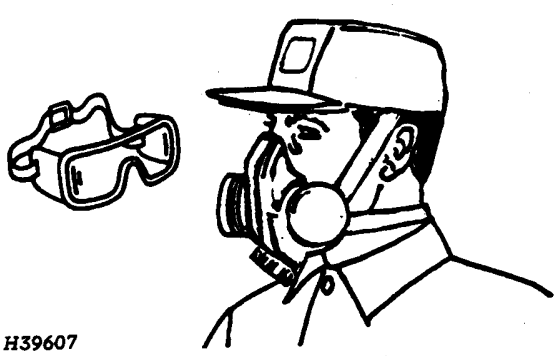
1. Remove header from the machine.
2. Drive machine over end rows or bumps to jar and shake dirt loose.
3. Shut OFF engine, set park brake, and remove key.
4. Open or remove all doors and drain holes.

CAUTION: Sound horn (A) to clear everyone from area. Stay clear of machine when discharging chaff.

5. Turn key switch (B) to start engine.
6. Engage separator until the chaff stops coming out rear of machine.
7. Lower engine rpm to slow speed and engage separator several times. Running the separator at slow speed removes dirt from inside the rotor.

CAUTION: Keep bystanders clear of machine when discharging chaff.

8. Move throttle to high rpm and run for a few minutes. Repeat cycle until chaff no longer comes out of the rear of machine.

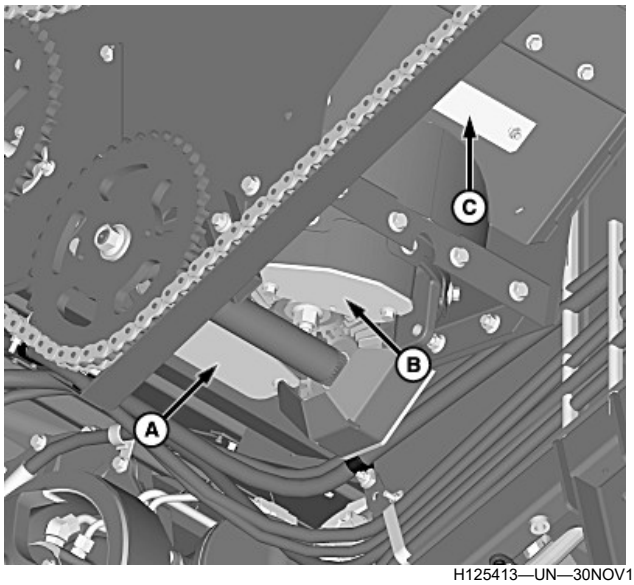


H39607—UN—11OCT88

CAUTION: Shut OFF engine, set park brake, remove key, block wheels, and lower the feeder house safety stop.

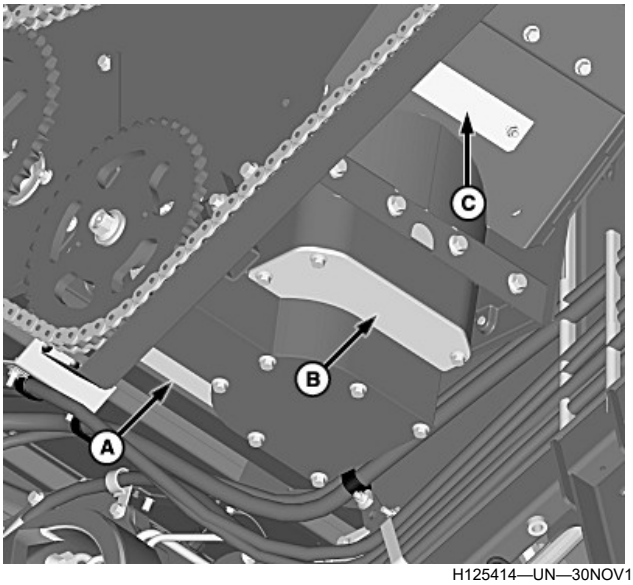
When working with compressed air in dusty conditions, you must wear goggles and dust mask for personal protection.

9. Start at the top of the machine and work down.



H125413—UN—30NOV18

Style A

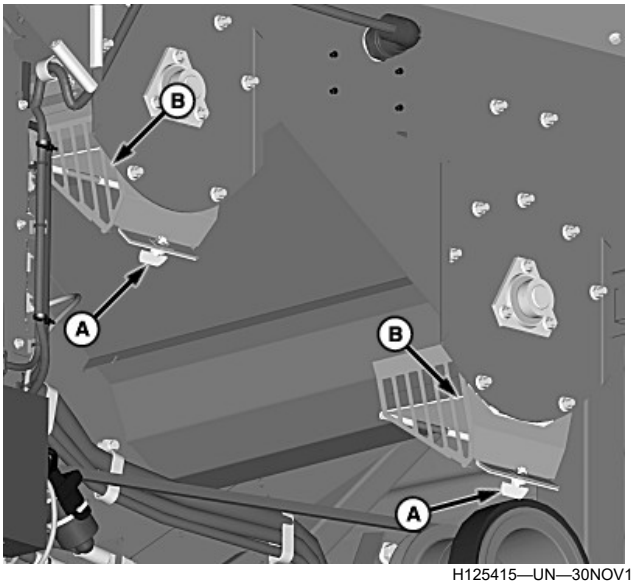


H125414—UN—30NOV18

Style B

A—Cleanout Door
B—Cleanout Door
C—Cleanout Door

10. Open cleanout doors (A—C) on the left-hand side of the machine.

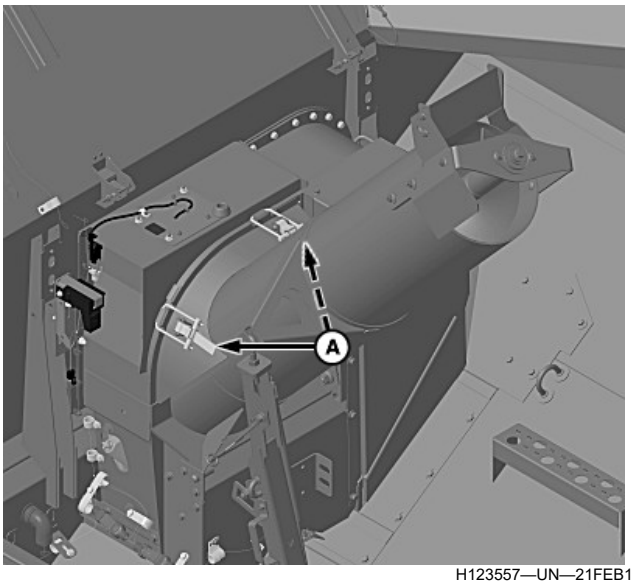


H125415—UN—30NOV18

A—Latch (2 used)
B—Cleanout Door (2 used)

11. Release latches (A) and open cleanout doors (B) on the right-hand end of both grain tank cross augers.
12. Clean grain from under the grain tank cross augers.
13. Clean grain from the edges of the unloading auger sump to the bottom. Grain must be cleaned out from the doors while standing on ground.
14. Depending on the machine option, clean the grain tank loading auger.

Grain Tank Loading Auger (Grain Tank Extensions)

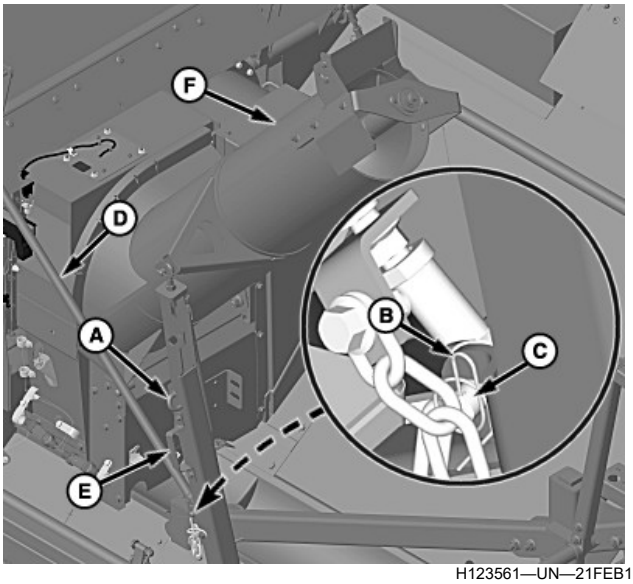


H123557—UN—21FEB18

A—Clamp

1. Release clamps (A) and lower auger.
2. Clean top area and down into the clean grain elevator to the clean elevator chain. Clean all sides.

Grain Tank Loading Auger (Grain Tank Covers)



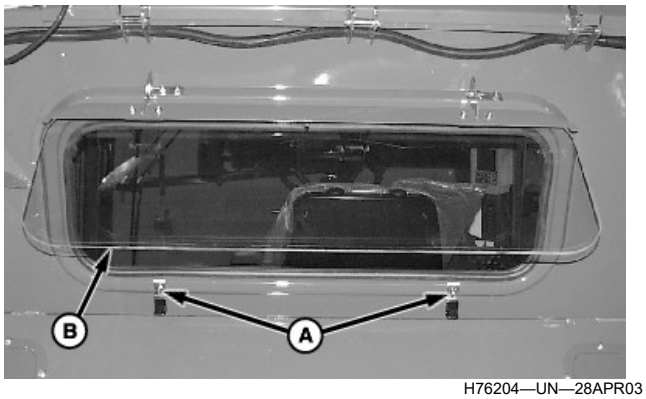
H123561—UN—21FEB18

A—Pin
B—Quick-Lock Pin
C—Pin
D—Turnbuckle
E—Handle
F—Auger

CAUTION: DO NOT pull or remove pin (A) to lower grain tank loading auger. Removing pin could result in personal injury or machine damage.

The grain tank loading auger is heavy. Use extra care when raising or lowering auger.

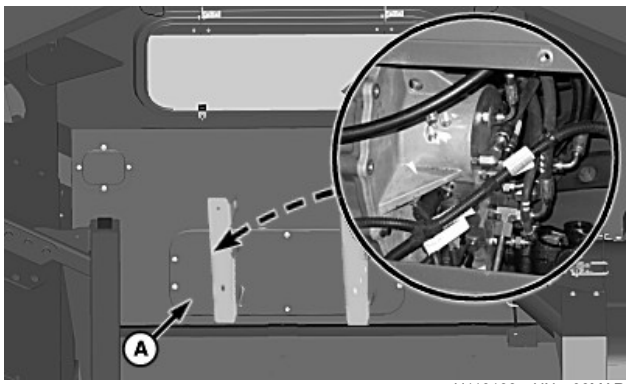
1. Remove quick-lock pin (B) and pin (C) from turnbuckle (D).
2. Use the handle (E) to help in lowering the grain tank loading auger (F).
3. Clean top area and down into the clean grain elevator to the clean elevator chain. Clean all sides.



H76204—UN—28APR03

A—Clamp (2 used)
B—Grain Tank Window

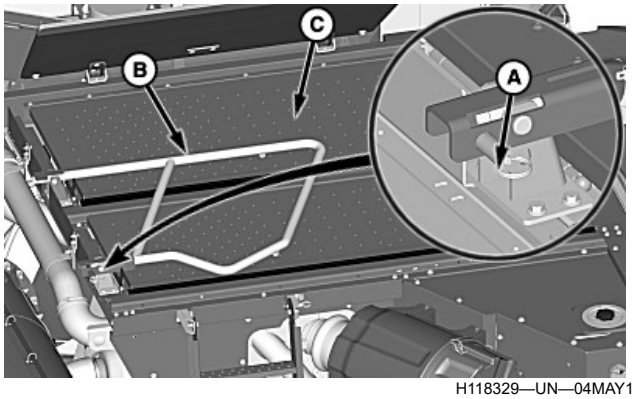
15. Loosen clamps (A) and swing grain tank window (B) up.
16. Clean out area behind cab, around the primary countershaft, and over separator.



H113138—UN—06MAR15

A—Access Door

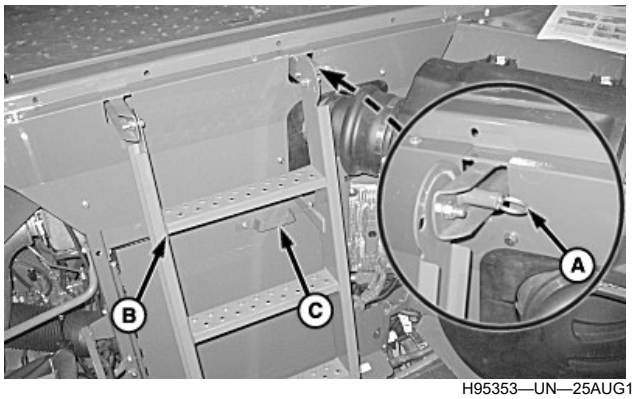
17. Remove access door (A) (if equipped) on the front of the grain tank.
18. Clean out material around the multi-speed feeder house drive gear case (if equipped).



H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Engine Access Cover

19. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place.
20. Open engine access covers (C) and clean the top side of the engine compartment area and around the separator (front side of the engine).
21. Clean entire engine compartment area, especially under engine.
22. Wipe up any oil or grease found on engine area.

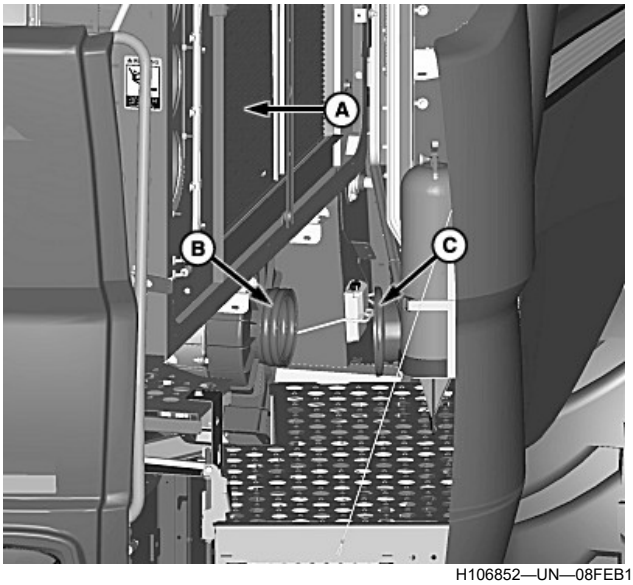


H95353—UN—25AUG10

A—Lockout Pin
B—Ladder
C—Cover

23. Pull lockout pin (A) and rotate ladder (B) up until ladder locks into place.
24. Pull filter access cover (C) open to release from magnet.
25. Clean rear side of engine compartment area.
26. Clean entire engine compartment area, especially under engine.
27. Wipe up any oil or grease found on engine area.
28. Depending on the machine option, clean the radiator and other various areas.

Tier 2/Stage II (Style A)



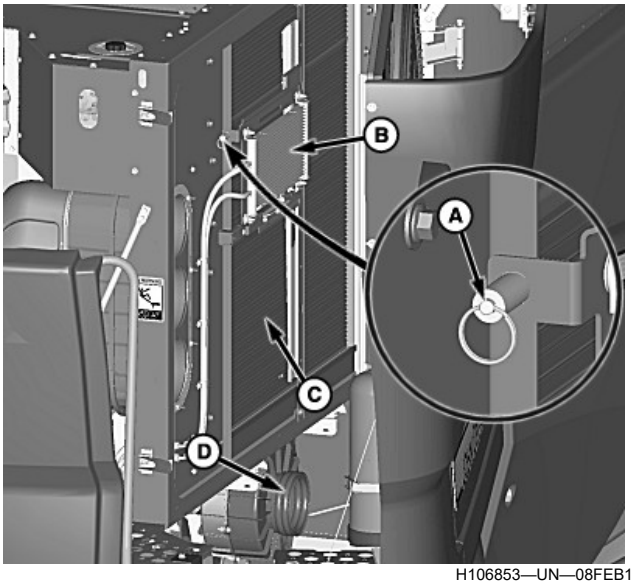
H106852—UN—08FEB13

A—Radiator
B—Vacuum Duct
C—Transfer Duct

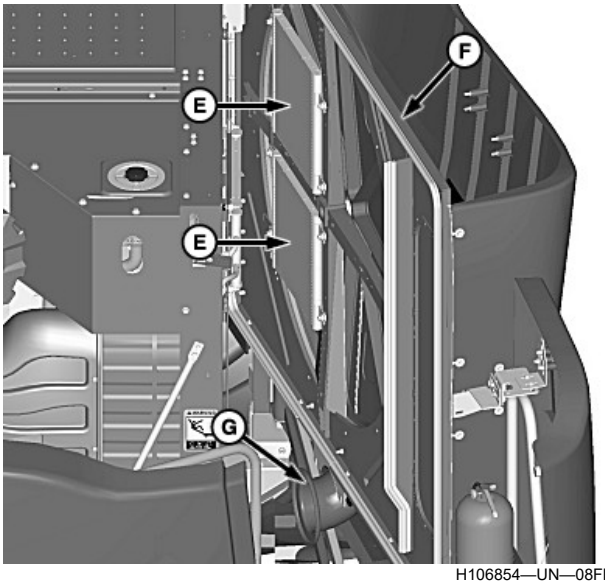
NOTE: Clean areas out with compressed air, blowing from inside out.

1. Open rotary screen door.
2. Clean the following areas from inside out:
   - Radiator (A)
   - Condenser
   - Oil cooler
   - Charge air cooler
3. Clean out dirt from the lower vacuum duct (B) and transfer duct (C).

Tier 2/Stage II (Style B) and Final Tier 4/Stage V



H106853—UN—08FEB13



H106854—UN—08FEB13

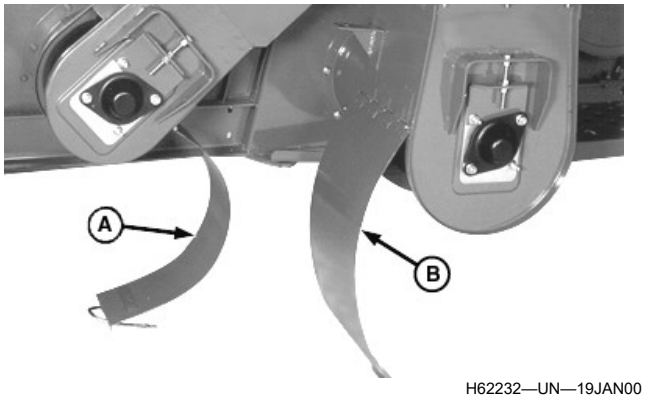
A—Lockout Pin
B—Fuel Cooler
C—Radiator
D—Vacuum Duct
E—Condenser
F—Rotary Screen Door
G—Transfer Duct

NOTE: Clean areas out with compressed air, blowing from inside out.

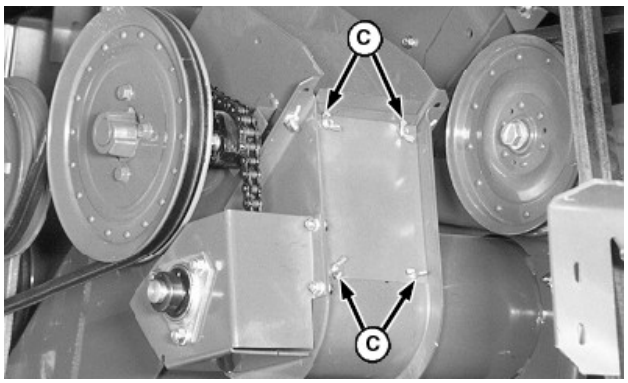
1. Open rotary screen door.
2. Pull lockout pin (A) and rotate fuel cooler (B) to clean.
3. Clean the following areas from inside out:
   - Radiator (C)
   - Oil cooler
   - Charge air cooler
4. Clean out dirt from the lower vacuum duct (D).
5. Clean condensers (E) on rotary screen door (F).
6. Clean out dirt from the transfer duct (G).

29. Depending on the machine option, clean the clean grain elevator and tailings elevator areas.

    Clean Grain Elevator and Tailings Elevator (Style A)



H62232—UN—19JAN00

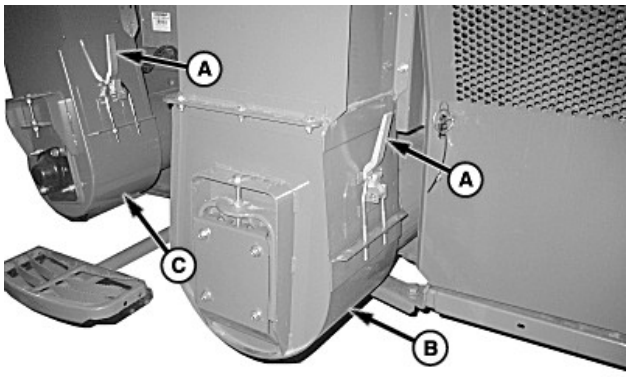


H62233—UN—19JAN00

A—Tailings Elevator Door
B—Clean Grain Elevator Door
C—Wing Nut

1. Open lower tailings elevator door (A) and clean grain elevator door (B).
2. Remove wing nuts (C) and remove door at upper end of the tailings elevator.
3. Remove material as needed and clean sides of elevator.

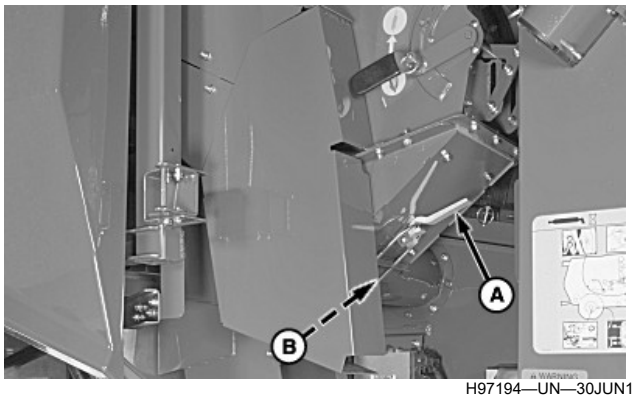
Clean Grain Elevator and Tailings Elevator (Style B)



H97193—UN—30JUN10

A—Handle
B—Clean Grain Elevator Door
C—Tailings System Elevator Door

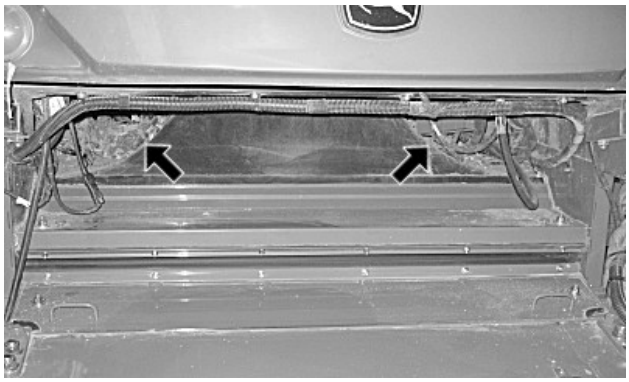
1. Use handles (A) to open clean grain elevator door (B) and the tailings system elevator door (C).
2. Remove material as needed and clean sides of elevator.



H97194—UN—30JUN10

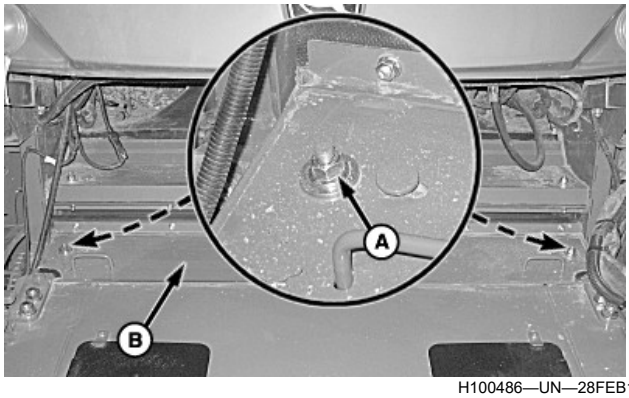
A—Handle
B—Tailings System Auger Door

3. Use handle (A) to open the tailings system auger door (B).
4. Remove material as needed and clean sides of elevator.

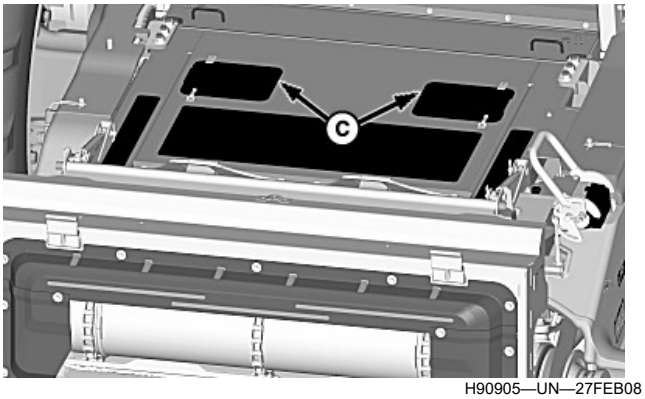


H100541—UN—02MAR11

30. Clean out chaff between separator and sides of machine.



H100486—UN—28FEB11

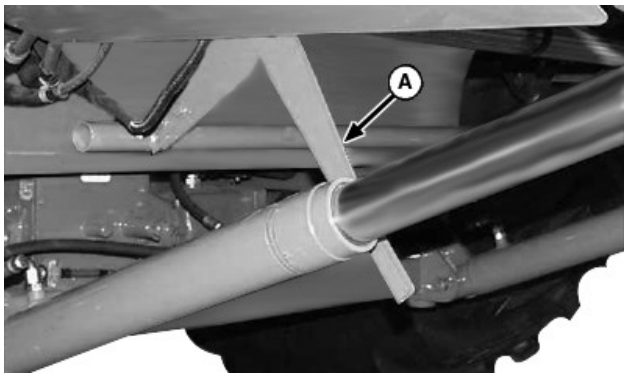


H90905—UN—27FEB08

A—Nut
B—Feeder House Door
C—Feeder House Door

31. Loosen nuts (A) on each side of the feeder house door and push nuts towards center of the feeder house.
32. Pull door forward to remove.
33. Clean feeder house through top doors (B) and (C).
34. Lift conveyor chain and let chain snap back several times while cleaning.
35. Depending on the machine option, clean the feed plate areas.

Feed Plate (Style A)

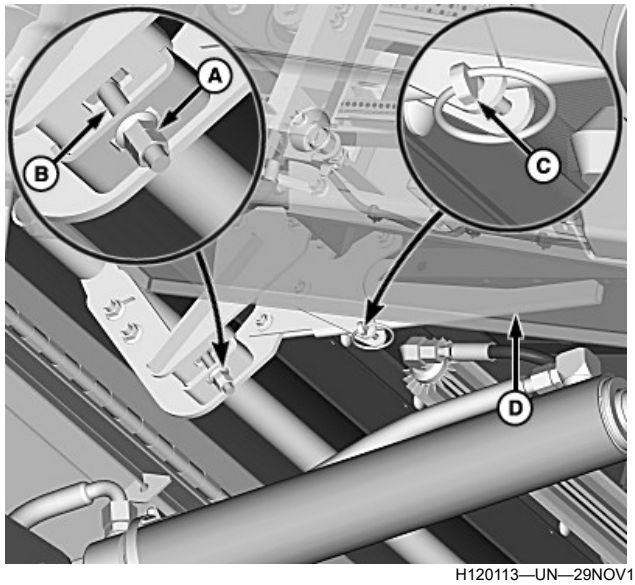


H52761—UN—17MAY99

A—Lever

1. Remove quick-lock pin and move lever (A) down and rearward to open feed plate.
2. Clean out feed plate area.
3. Push lever forward and up to close feed plate. Retain with the previously removed quick-lock pin.

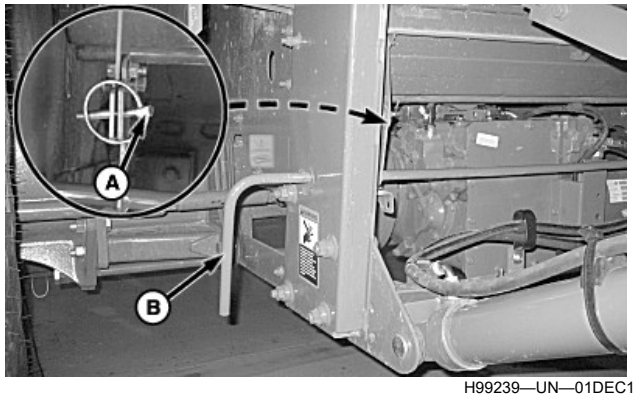
Feed Plate (Style B)



H120113—UN—29NOV16

A—Nut
B—Round-Head Bolt
C—Quick-Lock Pin
D—Lever

1. Remove nuts (A) and round-head bolt (B) on both sides of the machine.
2. Remove quick-lock pin (C) and move lever (D) down and rearward to open feed plate.
3. Clean out feed plate area.
4. Push lever forward and up to close feed plate. Retain with previously removed quick-lock pin.
5. Install previously removed round-head bolt (B) and nuts (A) on both sides of the machine.

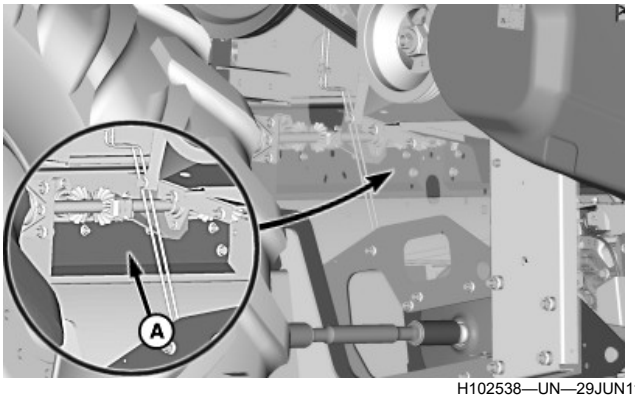


H99239—UN—01DEC10

A—Quick-Lock Pin
B—Lever

36. Remove quick-lock pin (A) and move lever (B) up to open stone trap.
37. Clean out stone trap area.
38. Move lever down to close stone trap. Retain with the quick-lock pin.
39. Depending on the machine option, clean the cleaning shoe auger gear area.

Cleaning Shoe Auger Gears (Style A)

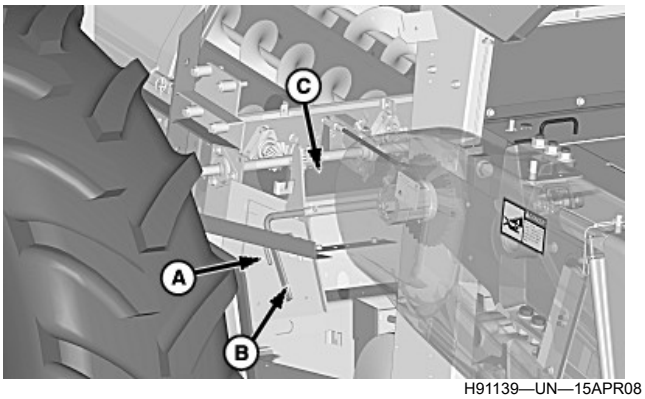


H102538—UN—29JUN11

A—Cleanout Door

1. To clean area, remove cap screws from cleanout doors (A).
2. Install cleanout doors and cap screws when cleaning is complete.

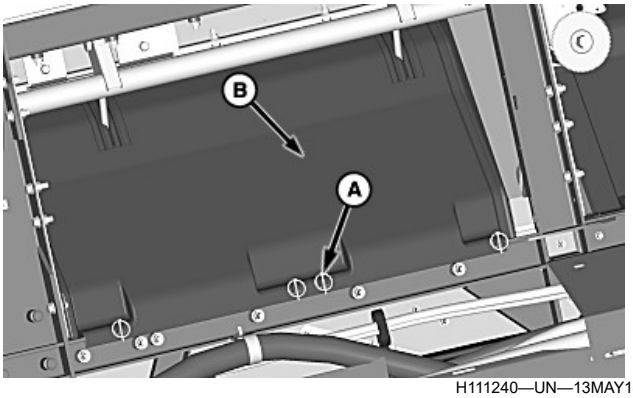
Cleaning Shoe Auger Gears (Style B)



H91139—UN—15APR08

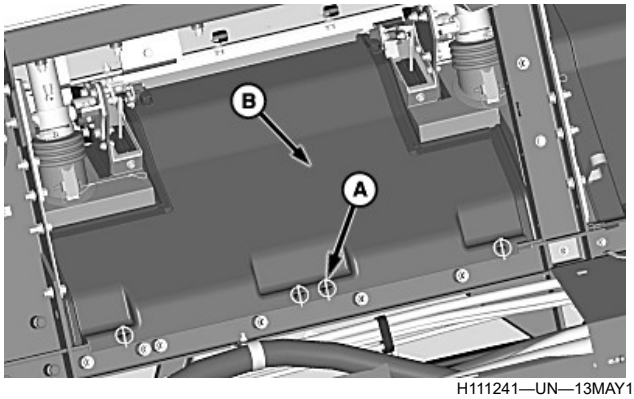
A—Lockout Pin
B—Handle
C—Cleanout Door

1. Pull lockout pin (A) and move handle (B) up to dump cleanout door (C).
2. Move handle down to close and lock cleanout door.



H111240—UN—13MAY14

Inspection Cover (style A)



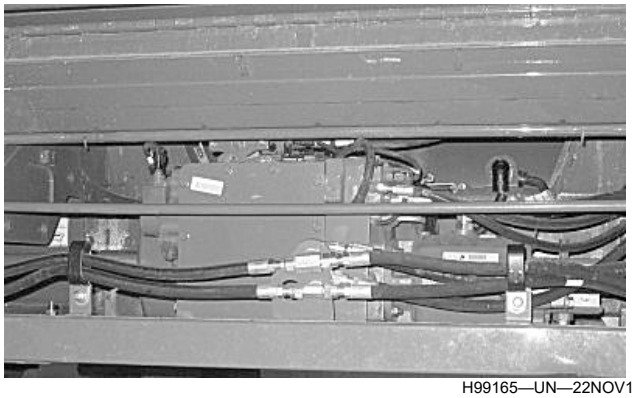
H111241—UN—13MAY14

Inspection Cover (style B)

H52708—UN—23MAR99

A—Quick-Lock Pin
B—Inspection Cover

40. Remove quick-lock pins (A) and inspection cover (B). Use scraper to loosen material, and clean out through sides of machine.



H99165—UN—22NOV10

Push-Button Shift Machine Shown

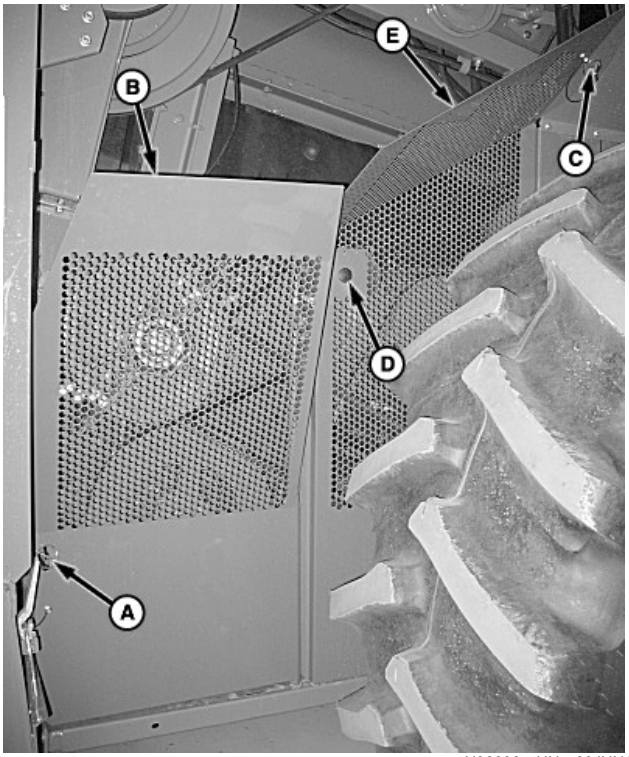
41. Clean off top of axle and transmission.

H115550—UN—20AUG15

42. Open sieve and chaffer as far as possible and clean.

H115551—UN—20AUG15

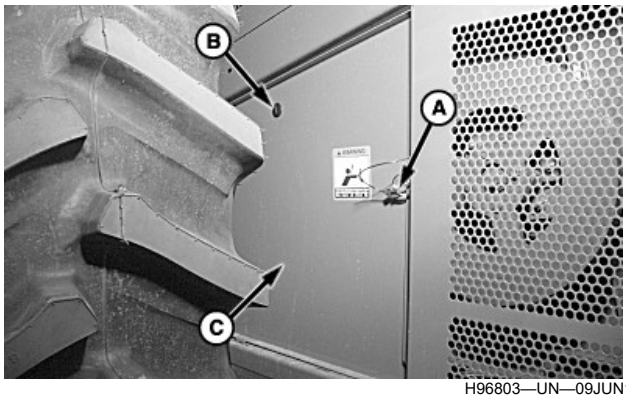
43. Clean rear axle area.



H96806—UN—09JUN10

A—Quick-Lock Pin
B—Shield
C—Quick-Lock Pin
D—Latch
E—Shield

44. Remove quick-lock pin (A) and open shield (B).
45. Remove quick-lock pin (C) and turn latch (D) to unlock.
46. Lift and remove rear shield (B) and middle fan shield (E).
47. Clean out fan area.



H96803—UN—09JUN10

A—Quick-Lock Pin
B—Latch
C—Shield

48. Remove quick-lock pin (A) and turn the latch (B) to remove shield (C).
49. Clean out area.

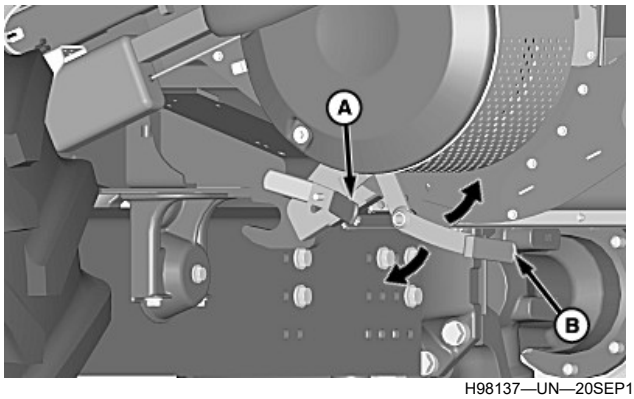
H123359—UN—08FEB18

50. Clean area around fan.

H97565—UN—14SEP10

A—Switch

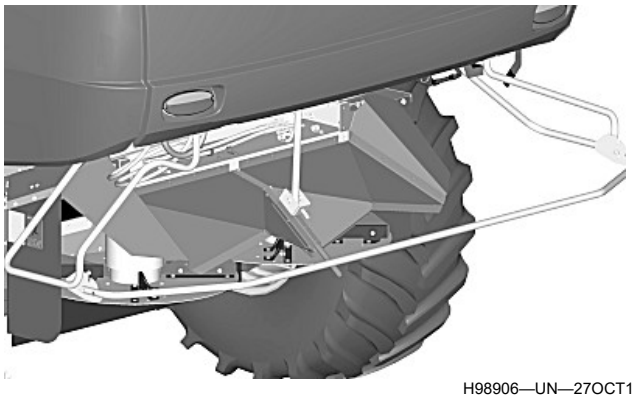
51. Raise chopper (if equipped) with switch (A).



H98137—UN—20SEP10

A—Wing Nut
B—Handle

52. Manual Adjust Knife Bank: Loosen wing nut (A) and use handle (B) to disengage the knife bank and clean chopper.



H98906—UN—27OCT10

53. Clean chaff from spreader (if equipped) drive area and spreader hood.
54. Install all the previously removed shields and close all the previously opened doors before operating the machine.

OUO6075,0004D3C-19-29JUN20

Handle Fuel Safely—Avoid Fires

TS202—UN—23AUG88

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

Use only an approved fuel container for transporting flammable liquids.

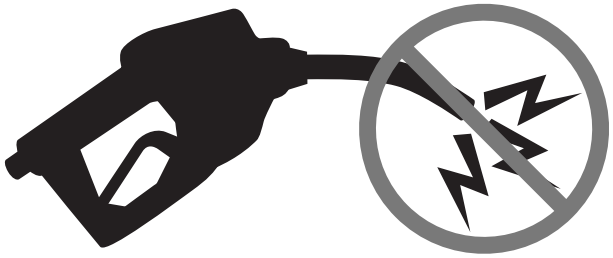
Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.

Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1-19-12OCT11

Avoid Static Electricity Risk When Refueling

RG22142—UN—17MAR14



RG21992—UN—21AUG13

The removal of sulfur and other compounds in Ultra-Low Sulfur Diesel (ULSD) fuel decreases its conductivity and increases its ability to store a static charge.

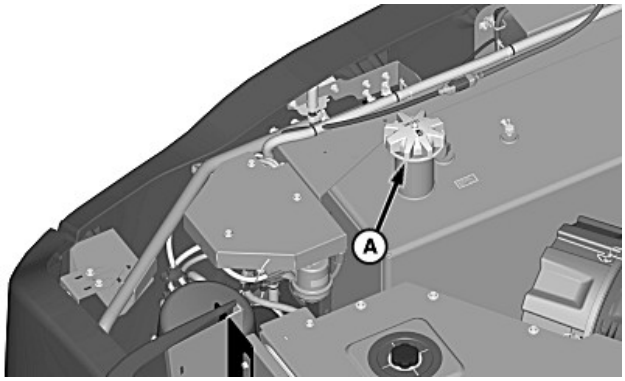
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

Static charges can build up in ULSD fuel while it is flowing through fuel delivery systems. Static electricity discharge when combustible vapors are present could result in a fire or explosion.

Therefore, it is important to ensure that the entire system used to refuel your machine (fuel supply tank, transfer pump, transfer hose, nozzle, and others) is properly grounded and bonded. Consult with your fuel or fuel system supplier to ensure that the delivery system is in compliance with fueling standards for proper grounding and bonding practices.

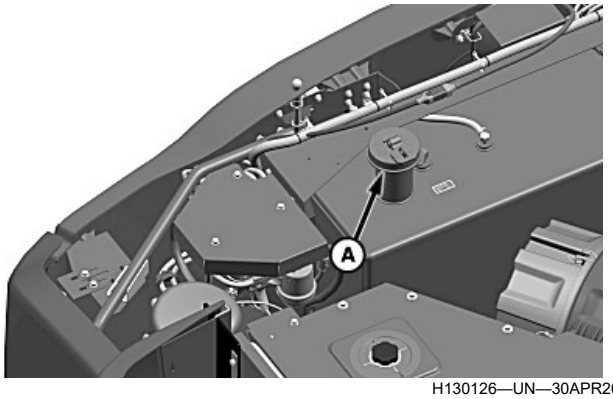
DX,FUEL,STATIC,ELEC-19-12JUL13

Fuel Tank—Filling



H125474—UN—10DEC18

Fuel Tank Cap (Non-Lockable)



H130126—UN—30APR20

Fuel Tank Cap (Lockable)

A—Fuel Tank

CAUTION: Handle fuel carefully. Do not refuel machine while smoking. Shut OFF engine, set park brake, and remove key before filling fuel tank.

Do not overfill fuel tank. Bodily injury can result from fuel splash back. Leakage can result from expansion of fuel. If fuel tank is too full, then left in direct sunlight or if temperature gets too hot, fuel tank will overflow.

IMPORTANT: Final Tier 4/Stage V Engines: Use ONLY ultra low sulfur diesel fuel. See Diesel Fuel and Biodiesel Fuel in this section for further information.

Fill fuel tank (A) at end of each day. This prevents condensation in the fuel tank as moist air cools.

OUO6075,0004E1B-19-30APR20

Handling and Storing Diesel Fuel

CAUTION: Reduce the risk of fire. Handle fuel carefully. DO NOT fill the fuel tank when engine is running. DO NOT smoke while you fill the fuel tank or service the fuel system.

Fill the fuel tank at the end of each day's operation to prevent water condensation and freezing during cold weather.

Keep all storage tanks as full as practicable to minimize condensation.

Ensure that all fuel tank caps and covers are installed properly to prevent moisture from entering. Monitor water content of the fuel regularly.

When using BioDiesel fuel, the fuel filter may require more frequent replacement due to premature plugging.

Check engine oil level daily prior to starting engine. A rising oil level may indicate fuel dilution of the engine oil.

When fuel is stored for an extended period or if there is a slow turnover of fuel, add a fuel conditioner to stabilize the fuel and prevent water condensation. Contact your fuel supplier or John Deere dealer for recommendations.

OUO6075,000163E-19-06SEP13

Diesel Fuel

Consult your local fuel distributor for properties of the diesel fuel available in your area.

In general, diesel fuels are blended to satisfy the low temperature requirements of the geographical area in which they are marketed.

Diesel fuels specified to EN 590 or ASTM D975 are recommended. Renewable diesel fuel produced by hydrotreating animal fats and vegetable oils is basically identical to petroleum diesel fuel. Renewable diesel that meets EN 590, ASTM D975, or EN 15940 is acceptable for use at all percentage mixture levels.

Required Fuel Properties

In all cases, the fuel shall meet the following properties:

Cetane number of 40 minimum. Cetane number greater than 47 is preferred, especially for temperatures below –20 °C (–4 °F) or elevations above 1675 m (5500 ft.).

Cloud Point should be below the expected lowest ambient temperature or **Cold Filter Plugging Point** (CFPP) should be a maximum 10°C (18°F) below the fuel cloud point.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

Diesel fuel quality and sulfur content must comply with all existing emissions regulations for the area in which the engine operates. DO NOT use diesel fuel with sulfur content greater than 10 000 mg/kg (10 000 ppm).

Materials such as copper, lead, zinc, tin, brass and bronze should be avoided in fuel handling, distribution and storage equipment as these metals can catalyze fuel oxidation reactions which can lead to fuel system deposits and plugged fuel filters.

E-Diesel fuel

DO NOT use E-Diesel (Diesel fuel and ethanol blend). Use of E-Diesel fuel in any John Deere machine may void the machine warranty.

CAUTION: Avoid severe injury or death due to the fire and explosion risk from using E-Diesel fuel.

Sulfur Content for Interim Tier 4, Final Tier 4, Stage III A and B, Stage IV, and Stage V Engines Above 560 kW

- Use ONLY diesel fuel with a maximum of 500 mg/kg (500 ppm) sulfur content.

Sulfur Content for Interim Tier 4, Final Tier 4, Stage III B, Stage IV Engines, and Stage V Engines

- Use ONLY ultra low sulfur diesel (ULSD) fuel with a maximum of 15 mg/kg (15 ppm) sulfur content.

Sulfur Content for Tier 3 and Stage III A Engines

- Use of diesel fuel with sulfur content less than 1000 mg/kg (1000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 1000—2000 mg/kg (1000—2000 ppm) REDUCES the oil and filter change interval.
- BEFORE using diesel fuel with sulfur content greater than 2000 mg/kg (2000 ppm), contact your John Deere dealer.

Sulfur Content for Tier 2 and Stage II Engines

- Use of diesel fuel with sulfur content less than 2000 mg/kg (2000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 2000—5000 mg/kg (2000—5000 ppm) REDUCES the oil and filter change interval.[1]
- BEFORE using diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm), contact your John Deere dealer.

Sulfur Content for Other Engines

- Use of diesel fuel with sulfur content less than 5000 mg/kg (5000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm) REDUCES the oil and filter change interval.

IMPORTANT: Do not mix used diesel engine oil or any other type of lubricating oil with diesel fuel.

Improper fuel additive usage may cause damage on fuel injection equipment of diesel engines.

DX,FUEL1-19-13JUL20

Biodiesel Fuel

Biodiesel fuel is comprised of monoalkyl esters of long chain fatty acids derived from vegetable oils or animal fats. Biodiesel blends are biodiesel mixed with petroleum diesel fuel on a volume basis.

[1] *See DX,ENOIL12,OEM, DX,ENOIL12,T2,STD, or DX,ENOIL12,T2,EXT for more information on Engine Oil and Filter Service Intervals.*

Before using fuel containing biodiesel, review the Biodiesel Use Requirements and Recommendations in this Operator's Manual.

Environmental laws and regulations can encourage or prohibit the use of biofuels. Operators should consult with appropriate governmental authorities prior to using biofuels.

John Deere Stage V Engines Operating in the European Union

Where the engine is to be operated within the Union on diesel or non-road gas-oil, a fuel with a FAME content not greater than 8% volume/volume (B8) shall be used.

John Deere Engines with Exhaust Filter Except Stage V Engines Operating in the European Union

Biodiesel blends up to B20 can be used ONLY if the biodiesel (100% biodiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

Biodiesel concentrations above B20 can harm the engine's emission control systems and should not be used. Risks include, but are not limited to, more frequent stationary regeneration, soot accumulation, and increased intervals for ash removal.

John Deere Fuel conditioners or equivalent, which contain detergent and dispersant additives, are required when using biodiesel blends from B10 to B20, and are recommended when using lower biodiesel blends.

John Deere Engines Without Exhaust Filter

Biodiesel blends up to B20 can be used ONLY if the biodiesel (100% biodiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

These John Deere engines can operate on biodiesel blends above B20 (up to 100% biodiesel). Operate at levels above B20 ONLY if the biodiesel is permitted by law and meets the EN 14214 specification (primarily available in Europe). Engines operating on biodiesel blends above B20 might not fully comply with or be permitted by all applicable emissions regulations. Expect up to a 12% reduction in power and an 18% reduction in fuel economy when using 100% biodiesel.

John Deere fuel conditioners or equivalent, which contain detergent and dispersant additives, are required when using biodiesel blends from B10 to B100, and are recommended when using lower biodiesel blends.

Biodiesel Use Requirements and Recommendations

The petroleum diesel portion of all biodiesel blends must meet the requirements of ASTM D975 (US) or EN 590 (EU) commercial standard.

Biodiesel users in the U.S. are strongly encouraged to purchase biodiesel blends from a BQ-9000 Certified

Marketer and sourced from a BQ-9000 Accredited Producer (as certified by the National biodiesel Board). Certified Marketers and Accredited Producers can be found at the following website: http://www.bq9000.org.

Biodiesel contains residual ash. Ash levels exceeding the maximums allowed in either ASTM D6751 or EN14214 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present).

The fuel filter can require more frequent replacement when using biodiesel fuel, particularly if switching from diesel. Check engine oil level daily prior to starting engine. A rising oil level can indicate fuel dilution of the engine oil. Biodiesel blends up to B20 must be used within 90 days of the date of biodiesel manufacture. Biodiesel blends above B20 must be used within 45 days from the date of biodiesel manufacture.

When using biodiesel blends up to B20, the following must be considered:

- Cold-weather flow degradation
- Stability and storage issues (moisture absorption, microbial growth)
- Possible filter restriction and plugging (usually a problem when first switching to biodiesel on used engines)
- Possible fuel leakage through seals and hoses (primarily an issue with older engines)
- Possible reduction of service life of engine components

Request a certificate of analysis from your fuel distributor to ensure that the fuel is compliant with the specifications provided in this Operator's Manual.

Consult your John Deere dealer for John Deere fuel products to improve storage and performance with biodiesel fuels.

The following must also be considered if using biodiesel blends above B20:

- Possible coking or blocked injector nozzles, resulting in power loss and engine misfire if John Deere fuel additives and conditioners or equivalent containing detergent/dispersants are not used
- Possible crankcase oil dilution (requiring more frequent oil changes)
- Possible lacquering or seizure of internal components
- Possible formation of sludge and sediments
- Possible thermal oxidation of fuel at elevated temperatures
- Possible compatibility issues with other materials (including copper, lead, zinc, tin, brass, and bronze) used in fuel handling, distribution, and storage equipment
- Possible reduction in water separator efficiency
- Possible damage to paint if exposed to biodiesel
- Possible corrosion of fuel injection equipment
- Possible elastomeric seal and gasket material degradation (primarily an issue with older engines)
- Possible high acid levels within fuel system
- Because biodiesel blends above B20 contain more ash, using blends above B20 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present)

IMPORTANT: Raw pressed vegetable oils are NOT acceptable for use as fuel in any concentration in John Deere engines. Their use could cause engine failure.

DX,FUEL7-19-13JAN18

Lubricity of Diesel Fuel

Most diesel fuels manufactured in the United States, Canada, and the European Union have adequate lubricity to ensure proper operation and durability of fuel injection system components. However, diesel fuels manufactured in some areas of the world may lack the necessary lubricity.

IMPORTANT: Make sure the diesel fuel used in your machine demonstrates good lubricity characteristics.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

If fuel of low or unknown lubricity is used, add John Deere Fuel-Protect Diesel Fuel Conditioner (or equivalent) at the specified concentration.

Lubricity of BioDiesel Fuel

Fuel lubricity can improve significantly with BioDiesel blends up to B20 (20% BioDiesel). Further increase in lubricity is limited for BioDiesel blends greater than B20.

DX,FUEL5-19-07FEB14

Supplemental Diesel Fuel Additives

Diesel fuel can be the source of performance or other operational problems for many reasons. Some causes include poor lubricity, contaminants, low cetane number, and a variety of properties that cause fuel system deposits. These and others are referenced in other sections of this Operator's Manual.

To optimize engine performance and reliability, closely follow recommendations on fuel quality, storage, and handling, which are found elsewhere in this Operator's Manual.

To further aid in maintaining performance and reliability

of the engine's fuel system, John Deere has developed a family of fuel additive products for most global markets. The primary products include Fuel-Protect Diesel Fuel Conditioner (full feature conditioner in winter and summer formulas) and Fuel-Protect Keep Clean (fuel injector deposit removal and prevention). Availability of these and other products varies by market. See your local John Deere dealer for availability and additional information about fuel additives that might be right for your needs.

DX,FUEL13-19-07FEB14

Testing Diesel Fuel

A fuel analysis program can help to monitor the quality of diesel fuel. The fuel analysis can provide critical data such as calculated cetane index, fuel type, sulfur content, water content, appearance, suitability for cold weather operations, bacteria, cloud point, acid number, particulate contamination, and whether the fuel meets ASTM D975 or equivalent specification.

Contact your John Deere dealer for more information on diesel fuel analysis.

DX,FUEL6-19-13JAN18

Minimizing the Effect of Cold Weather on Diesel Engines

John Deere diesel engines are designed to operate effectively in cold weather.

However, for effective starting and cold-weather operation, a little extra care is necessary. The following information outlines steps that can minimize the effect that cold weather may have on starting and operation of your engine. See your John Deere dealer for additional information and local availability of cold-weather aids.

Use Winter Grade Fuel

When temperatures fall below 0°C (32°F), winter grade fuel (No. 1-D in North America) is best suited for cold-weather operation. Winter grade fuel has a lower cloud point and a lower pour point.

Cloud point is the temperature at which wax begins to form in the fuel. This wax causes fuel filters to plug. **Pour point** is the lowest temperature at which movement of the fuel is observed.

NOTE: On average, winter grade diesel fuel has a lower Btu (heat content) rating. Using winter grade fuel may reduce power and fuel efficiency, but should not cause any other engine performance effects. Check the grade of fuel being used before troubleshooting for low-power complaints in cold-weather operation.

Air Intake Heater

An air intake heater is an available option for some engines to aid cold weather starting.

Ether

An ether port on the intake is available to aid cold weather starting.

CAUTION: Ether is highly flammable. Do not use ether when starting an engine equipped with glow plugs or an air intake heater.

Coolant Heater

An engine block heater (coolant heater) is an available option to aid cold weather starting.

Seasonal Viscosity Oil and Proper Coolant Concentration

Use seasonal grade viscosity engine oil based on the expected air temperature range between oil changes and a proper concentration of low silicate antifreeze as recommended. (See DIESEL ENGINE OIL and ENGINE COOLANT requirements in this section.)

Diesel Fuel Cold Flow Additive

Use John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula), which contains anti-gel chemistry, or equivalent fuel conditioner to treat non-winter grade fuel (No. 2-D in North America) during the cold-weather season. This generally extends operability to about 10° C (18°F) below the fuel cloud point. For operability at even lower temperatures, use winter grade fuel.

IMPORTANT: Treat fuel when outside temperature drops below 0°C (32°F). For best results, use with untreated fuel. Follow all recommended instructions on label.

Biodiesel

When operating with biodiesel blends, wax formation can occur at warmer temperatures. Begin using John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula) or equivalent at 5°C (41°F) to treat biodiesel fuels during the cold-weather season. Use B5 or lower blends at temperatures below 0°C (32°F). Use only winter grade petroleum diesel fuel at temperatures below -10°C (14°F).

Winterfronts

Use of fabric, cardboard, or solid winterfronts is not recommended with any John Deere engine. Their use can result in excessive engine coolant, oil, and charge air temperatures. This can lead to reduced engine life, loss of power and poor fuel economy. Winterfronts may also put abnormal stress on fan and fan drive components potentially causing premature failures.

If winterfronts are used, they should never totally close off the grill frontal area. Approximately 25% area in the

center of the grill should remain open at all times. At no time should the air blockage device be applied directly to the radiator core.

Radiator Shutters

If equipped with a thermostatically controlled radiator shutter system, this system should be regulated in such a way that the shutters are completely open by the time the coolant reaches 93°C (200°F) to prevent excessive intake manifold temperatures. Manually controlled systems are not recommended.

If air-to-air aftercooling is used, the shutters must be completely open by the time the intake manifold air temperature reaches the maximum allowable temperature out of the charge air cooler.

For more information, see your John Deere dealer.

DX,FUEL10-19-13JAN18

Diesel Exhaust Fluid (DEF) — Use in Selective Catalytic Reduction (SCR) Equipped Engines

In order to maintain the emissions performance of the engine, it is essential to use and refill DEF in accordance with the specification.

Diesel exhaust fluid (DEF) is a high purity liquid that is injected into the exhaust system of engines equipped with selective catalytic reduction (SCR) systems. Maintaining the purity of DEF is important to avoid malfunctions in the SCR system. Engines requiring DEF shall use a product that meets the requirements for aqueous urea solution 32 (AUS 32) according to ISO 22241-1.

The use of John Deere Diesel Exhaust Fluid is recommended. John Deere Diesel Exhaust Fluid is available at your John Deere dealer in a variety of package sizes to suit your operational needs.

If John Deere Diesel Exhaust Fluid is not available, use DEF that is certified by the American Petroleum Institute (API) Diesel Exhaust Fluid Certification Program or by the AdBlue™ Diesel Exhaust Fluid Certification Program. Look for the API certification symbol or the AdBlue™ name on the container.

RG30211—UN—08MAR18

In some cases, DEF is referred to by one or more of these names:

- Urea
- Aqueous Urea Solution 32
- AUS 32
- AdBlue™
- NOx Reduction Agent
- Catalyst Solution

DX,DEF-19-13JAN18

Testing Diesel Exhaust Fluid (DEF)

IMPORTANT: Using DEF with the correct concentration is critical to engine and aftertreatment system performance. Extended storage and other conditions can adversely alter the DEF concentration.

If DEF quality is questionable, draw a sample out of the DEF tank or storage tank into a clear container. DEF must be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint, or has a profound ammonia smell, it is likely not within specification. DEF in this condition should not be used. Drain tank, flush with distilled water and refill with new or good DEF. After refilling the tank, check the DEF concentration.

If the DEF passes the visual and smell test, check the DEF concentration with a handheld refractometer calibrated to measure DEF.

DEF concentration should be checked when the engine has been stored for extended periods, or if there is suspicion the engine or packaged DEF fluid has been contaminated with water.

Two approved tools are available through your John Deere dealer:

- JDG11594 Digital DEF Refractometer—A digital tool providing an easy to read concentration measurement
- JDG11684 DEF Refractometer—Low-cost alternative tool providing an analog reading

Follow instructions included with either tool to obtain the measurement.

The correct DEF concentration is 31.8—33.2% urea. If the DEF concentration is not within specification, drain the DEF tank, flush with distilled water and fill with new or good DEF. If packaged DEF is not within specification, dispose of DEF packages and replace with new or good DEF.

DX,DEF,TEST-19-13JUN13

AdBlue is a trademark of VDA, the German Association of the Automotive Industry.

Storing Diesel Exhaust Fluid (DEF)

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: It is unlawful to tamper with or remove any component of the aftertreatment system. Do not use DEF that does not meet the required specifications or operate the engine with no DEF.

Never attempt to create DEF by mixing agricultural grade urea with water. Agricultural grade urea does not meet the necessary specifications and can damage the aftertreatment system.

Do not add any chemicals or additives to DEF in an effort to prevent freezing. Any chemicals or additives added to DEF can damage the aftertreatment system.

Never add water or any other fluid in place of, or in addition to DEF. Operating with a modified DEF or using an unapproved DEF can damage the aftertreatment system.

The following storage information is provided for reference and is to be used as a guideline only.

It is preferred to store DEF out of extreme ambient temperatures. DEF freezes at –11 °C (12 °F). Exposure to temperatures greater than 30 °C (86 °F) can degrade DEF over time.

Dedicated DEF storage containers must be sealed between uses to prevent evaporation and contamination. Containers made of polyethylene, polypropylene, or stainless steel are recommended to transport and store DEF.

Ideal conditions for storage of DEF are:

- Store at temperatures between –5 °C and 30 °C (23 ° F and 86 °F)
- Store in dedicated containers sealed to avoid contamination and evaporation

Under these conditions, DEF is expected to remain useable for a minimum of 18 months. Storing DEF at higher temperatures can reduce its useful life by approximately 6 months for every 5 °C (9 °F) temperature above 30 °C (86 °F).

If unsure how long or under what conditions DEF has been stored, test DEF. See Testing Diesel Exhaust Fluid (DEF).

Long-term storage in the DEF tank (over 12 months) is not recommended. If long-term storage is necessary, test DEF prior to operating engine. See Testing Diesel Exhaust Fluid (DEF).

It is recommended to purchase DEF in quantities that will be consumed within 12 months.

DX,DEF,STORE-19-13JUN13

Refilling Diesel Exhaust Fluid (DEF) Tank

TS1731—UN—23AUG13

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: Use only distilled water to rinse components that are used to deliver DEF. Tap water can contaminate DEF. If distilled water is not available, rinse with clean tap water, then thoroughly rinse with ample amounts of DEF.

If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

If DEF is filled into engine fuel tank or other fluid compartment, do not operate engine until system is properly purged of DEF. Contact your John Deere dealer immediately to determine how to clean and purge the system.

Reasonable care should be taken when refilling the DEF tank. Ensure that the DEF tank cap area is free of debris before removing the cap. Seal containers of DEF between use to prevent contamination and evaporation.

Avoid splashing DEF and do not allow DEF to come into contact with skin, eyes, or mouth.

DEF is not harmful to handle, but DEF can be corrosive to materials such as steel, iron, zinc, nickel, copper,

aluminum, and magnesium. Use suitable containers to transport and store DEF. Containers made of polyethylene, polypropylene, or stainless steel are recommended.

Avoid prolonged contact with skin. In case of accidental contact, wash skin immediately with soap and water.

Keep anything used to store or dispense DEF clean of dirt and dust. Wash and rinse containers or funnels thoroughly with distilled water to remove contaminants.

If an unapproved fluid, such as diesel fuel or coolant is added to the DEF tank, contact your John Deere dealer immediately to determine how to clean and purge the system.

If water has been added to the DEF tank, a tank cleaning is necessary. See Cleaning DEF Tank in this manual. After refilling the tank, check the DEF concentration. See Testing Diesel Exhaust Fluid (DEF).

The operator must maintain appropriate DEF levels at all times. Check the DEF level daily and refill the tank as needed. A typical engine with EGR will consume approximately 40:1 Fuel:DEF and without EGR 15:1 Fuel:DEF (by volume). The filling port is identified by a blue colored cap embossed with the DEF symbol, shown.

DX,DEF,REFILL-19-13JAN18

Disposal of Diesel Exhaust Fluid (DEF)

Although there is little issue with minor spillage of DEF on the ground, large amounts of DEF should be contained. If large spills occur, contact local environmental authorities for assistance with clean-up.

If a substantial quantity of DEF is not within specification, contact the DEF supplier for assistance with disposal. Do not dump substantial quantities of DEF onto the ground or send DEF to wastewater treatment facilities.

DX,DEF,DISPOSE-19-13JUN13

Diesel Engine Coolant (engine with wet sleeve cylinder liners)

Failure to follow applicable coolant standards and drain intervals can result in severe engine damage that may not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere coolants, parts or service.

Preferred Coolants

Failure to follow applicable coolant standards and drain intervals can result in severe engine damage that may not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere coolants, parts, or service.

The following pre-mix engine coolants are preferred:

- **John Deere COOL-GARD™II**
- **John Deere COOL-GARD II PG**

COOL-GARD II pre-mix coolant is available in several concentrations with different freeze protection limits as shown in the following table.

COOL-GARD II Pre-Mix	Freeze Protection Limit
COOL-GARD II 20/80	-9°C (16°F)
COOL-GARD II 30/70	-16°C (3°F)
COOL-GARD II 50/50	-37°C (-34°F)
COOL-GARD II 55/45	-45°C (-49°F)
COOL-GARD II PG 60/40	-49°C (-56°F)
COOL-GARD II 60/40	-52°C (-62°F)

Not all COOL-GARD II pre-mix products are available in all countries.

Use COOL-GARD II PG when a non-toxic coolant formulation is required.

Additional Recommended Coolants

The following engine coolant is also recommended:

- John Deere COOL-GARD II Concentrate in a 40—60% mixture of concentrate with quality water.

IMPORTANT: When mixing coolant concentrate with water, do not use less than 40% or greater than 60% concentration of coolant. Less than 40% gives inadequate additives for corrosion protection. Greater than 60% can result in coolant gelation and cooling system problems.

Other Coolants

Other ethylene glycol or propylene glycol base coolants may be used if they meet the following specification:

- Pre-mix coolant meeting ASTM D6210 requirements
- Are nitrite-free
- Coolant concentrate meeting ASTM D6210 requirements in a 40—60% mixture of concentrate with quality water

If coolant meeting one of these specifications is unavailable, use a coolant concentrate or pre-mix coolant that has a minimum of the following chemical and physical properties:

- Provides cylinder liner cavitation protection according to either the John Deere Cavitation Test Method or a fleet study run at or above 60% load capacity
- Is formulated with a nitrite-free additive package
- Protects the cooling system metals (cast iron,

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aluminum alloys, and copper alloys such as brass) from corrosion

Water Quality

Water quality is important to the performance of the cooling system. Deionized or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

Coolant Drain Intervals

Drain and flush the cooling system and refill with fresh coolant at the indicated interval, which varies with the coolant used.

When COOL-GARD II or COOL-GARD II PG is used, the drain interval is 6 years or 6000 hours of operation.

If a coolant other than COOL-GARD II or COOL-GARD II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.[2]

IMPORTANT: Do not use cooling system sealing additives or antifreeze that contains sealing additives.

Do not mix ethylene glycol and propylene glycol base coolants.

Do not use coolants that contain nitrites.

DX,COOL3-19-13JAN18

John Deere COOL-GARD™ II Coolant Extender

Some coolant additives gradually deplete during engine operation. For COOL-GARD™ II pre-mix and COOL-GARD II Concentrate, replenish coolant additives between drain intervals by adding COOL-GARD II Coolant Extender.

COOL-GARD II Coolant Extender should not be added unless indicated by COOL-GARD II Test Strips. These test strips provide a simple, effective method to check the freeze point, additive levels, and pH of your engine coolant.

Test the coolant solution at intervals of 12 months and whenever excessive coolant is lost through leaks or overheating.

IMPORTANT: Do not use COOL-GARD II Test Strips with COOL-GARD II PG.

COOL-GARD II Coolant Extender is a chemically matched additive system for use with all COOL-GARD II coolants. COOL-GARD II Coolant Extender is not intended for use with nitrite-containing coolants.

IMPORTANT: Do not add a supplemental coolant additive when the cooling system is drained and refilled with any of the following:

- **John Deere COOL-GARD II**
- **John Deere COOL-GARD II PG**

The use of non-recommended supplemental coolant additives can result in additive drop-out, gelation of the coolant, or corrosion of cooling system components.

Add the recommended concentration of COOL-GARD II Coolant Extender. DO NOT add more than the recommended amount.

DX,COOL16-19-15MAY13

Operating in Warm Temperature Climates

John Deere engines are designed to operate using recommended engine coolants.

Always use a recommended engine coolant, even when operating in geographical areas where freeze protection is not required.

IMPORTANT: Water may be used as coolant *in emergency situations only.*

Foaming, hot surface aluminum and iron corrosion, scaling, and cavitation occur when water is used as the coolant, even when coolant conditioners are added.

Drain cooling system and refill with recommended engine coolant as soon as possible.

DX,COOL6-19-17FEB20

Water Quality for Mixing with Coolant Concentrate

Engine coolants are a combination of three chemical components: ethylene glycol (EG) or propylene glycol (PG) antifreeze, inhibiting coolant additives, and quality water.

Water quality is important to the performance of the cooling system. Deionized or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

All water used in the cooling system should meet the following minimum specifications for quality:

Chlorides	<40 mg/L
Sulfates	<100 mg/L

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[2] Coolant analysis may extend the service interval of other "Coolants" to a maximum not to exceed the interval of Cool-Gard II coolants. Coolant analysis means taking a series of coolant samples at 1000 hour increments beyond the normal service interval until either the data indicate the end of useful coolant life or the maximum service interval of Cool-Gard II is reached.

Total solids	<340 mg/L
Total dissolved I hardness	<170 mg/L
pH	5.5—9.0

IMPORTANT: Do not use bottled drinking water because it often contains higher concentrations of total dissolved solids.

Freeze Protection

The relative concentrations of glycol and water in the engine coolant determine its freeze protection limit.

Ethylene Glycol	Freeze Protection Limit
40%	-24°C (-12°F)
50%	-37°C (-34°F)
60%	-52°C (-62°F)
Propylene Glycol	**Freeze Protection Limit**
40%	-21°C (-6°F)
50%	-33°C (-27°F)
60%	-49°C (-56°F)

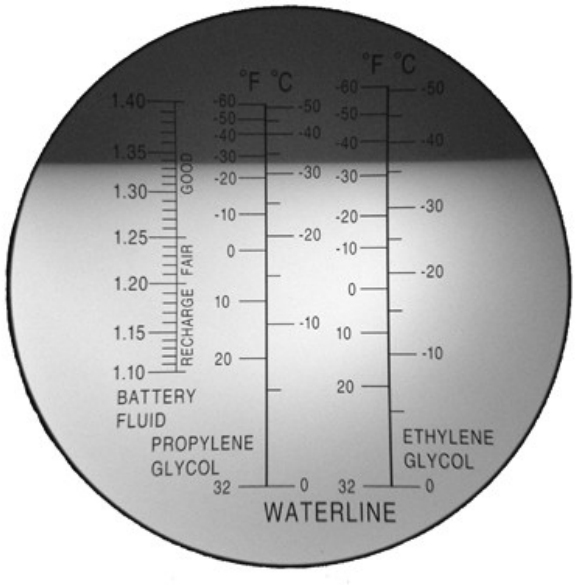
DO NOT use a coolant-water mixture greater than 60% ethylene glycol or 60% propylene glycol.

DX,COOL19-19-13JAN18

Testing Coolant Freeze Point

TS1732—UN—04SEP13

SERVICEGARD™ Part Number 75240



TS1733—UN—04SEP13

Image with a Drop of 50/50 Coolant Placed on the Refractometer Window

The use of a handheld coolant refractometer is the quickest, easiest, and most accurate method to determine coolant freeze point. This method is more accurate than a test strip or a float-type hydrometer which can produce poor results.

A coolant refractometer is available through your John Deere dealer under the SERVICEGARD™ tool program. Part number 75240 provides an economical solution to accurate freeze point determination in the field.

To use this tool:

1. Allow cooling system to cool to ambient temperatures.
2. Open radiator cap to expose coolant.
3. With the included dropper, collect a small coolant sample.
4. Open the lid of the refractometer, place one drop of coolant on the window and close the lid.
5. Look through the eyepiece and focus as necessary.
6. Record the listed freeze point for the type of coolant (ethylene glycol coolant or propylene glycol) being tested.

DX,COOL,TEST-19-13JUN13

Diesel Engine Break-In Oil — Non-Emissions Certified and Certified Tier 1, Tier 2, Tier 3, Stage I, Stage II, and Stage III

New engines are filled at the factory with either John

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Deere Break-In™ or John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In™ or Break-In Plus™ Engine Oil, respectively, as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

If John Deere Break-In™ Engine Oil is used during the initial operation of a new or rebuilt engine, change the oil and filter at a maximum of 100 hours.

If John Deere Break-In Plus™ Engine Oil is used, change the oil and filter at a minimum of 100 hours and a maximum equal to the interval specified for John Deere Plus-50™ II or Plus-50™ oil.

After engine overhaul, fill the engine with either John Deere Break-In™ or Break-In Plus™ Engine Oil.

If John Deere Break-In™ or Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following and change the oil and filter at a maximum of 100 hours of operation:

- API Service Classification CE
- API Service Classification CD
- API Service Classification CC
- ACEA Oil Sequence E2
- ACEA Oil Sequence E1

IMPORTANT: Do not use Plus-50™ II, Plus-50™, or engine oils meeting any of the following for the initial break-in of a new or rebuilt engine:

API CK-4	**ACEA E9**
API CJ-4	**ACEA E7**
API CI-4 PLUS	**ACEA E6**
API CI-4	**ACEA E5**
API CH-4	**ACEA E4**
API CG-4	**ACEA E3**
API CF-4	
API CF-2	
API CF	

These oils do not allow the engine to break in properly.

John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

After the break-in period, use John Deere Plus-50™ II, John Deere Plus-50™, or other diesel engine oil as recommended in this manual.

DX,ENOIL4-19-02NOV16

John Deere Break-In Plus™ Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V

New engines are filled at the factory with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil, as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help seat engine components properly.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and maximum equal to the interval specified for John Deere Plus-50™ II oil.

After engine overhaul, fill the engine with John Deere Break-In Plus™ Engine Oil.

If John Deere Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following:

- API Service Category CK-4
- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

If one of these oils is used during the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 250 hours.

IMPORTANT: Do not use any other engine oils during the initial break-in of a new or rebuilt engine.

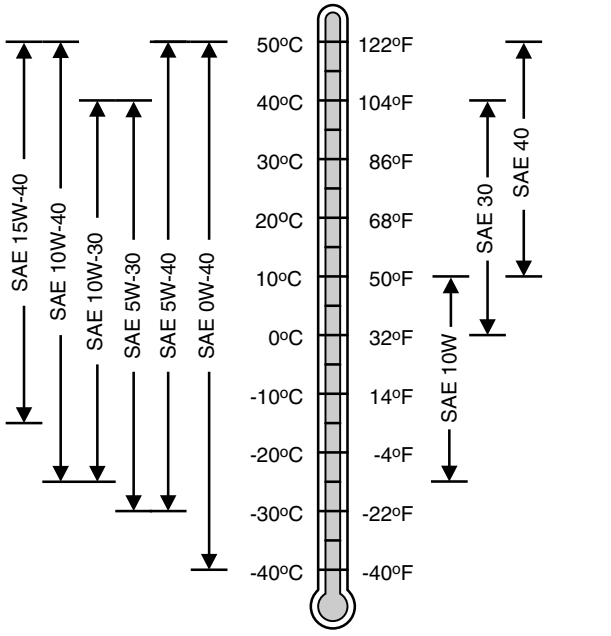
John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

After the break-in period, use John Deere Plus-50™ II or other diesel engine oil as recommended in this manual.

DX,ENOIL16-19-13JAN18

Break-In is a trademark of Deere & Company.
Break-In Plus is a trademark of Deere & Company
Plus-50 is a trademark of Deere & Company.

Diesel Engine Oil — Tier 2 and Stage II



TS1743—UN—25APR19

Oil Viscosities for Air Temperature Ranges

Failure to follow applicable oil standards and drain intervals can result in severe engine damage that might not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere Plus-50™ II oil is preferred.

John Deere Plus-50™ is also recommended.

John Deere Torq-Gard™ is also allowed.

Other oils may be used if they meet one or more of the following standards:

- API Service Category CK-4
- API Service Category CJ-4
- API Service Category CI-4 PLUS
- API Service Category CI-4
- API Service Category CH-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E7
- ACEA Oil Sequence E6
- ACEA Oil Sequence E5
- ACEA Oil Sequence E4

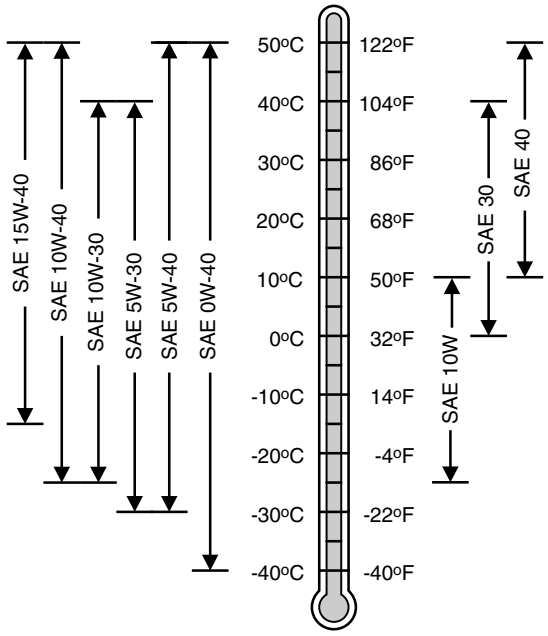
Multi-viscosity diesel engine oils are preferred.

Diesel fuel quality and fuel sulfur content must comply with all existing emissions regulations for the area in which the engine operates.

DO NOT use diesel fuel with sulfur content greater than 10 000 mg/kg (10 000 ppm).

DX,ENOIL7-19-23APR19

Diesel Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V



TS1743—UN—25APR19

Oil Viscosities for Air Temperature Ranges

Failure to follow applicable oil standards and drain intervals can result in severe engine damage that might not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere Plus-50™ II is the recommended engine oil.

Extended service intervals may apply when John Deere Plus-50™ II engine oil is used. Refer to the engine oil drain interval table and consult your John Deere dealer for more information.

If John Deere Plus-50™ II engine oil is not available, engine oil meeting one or more of the following may be used:

- API Service Category CK-4
- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

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Torq-Gard is a trademark of Deere & Company

DO NOT use engine oil containing more than 1.0% sulfated ash, 0.12% phosphorus, or 0.4% sulfur.

Multi-viscosity diesel engine oils are preferred.

Diesel fuel quality and fuel sulfur content must comply with all existing emissions regulations for the area in which the engine operates.

IMPORTANT: Use only ultra low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

DX,ENOIL14-19-23APR19

Diesel Engine Oil Service Interval for Operation at High Altitude

To avoid excessive oil degradation and potential engine damage, reduce oil and filter service intervals to 50% of the original recommended values when operating engines at altitudes above **1675 m (5500 ft)**.

Oil analysis may allow longer service intervals.

Use only approved oil types.

Example of Original Hours	Corresponding High Altitude Hours
125	60
150	75
175	85
200	100
250	125
275	135
300	150
350	175
375	185
400	200
500	250

DX,ENOIL,SERV,HIALT-19-11NOV14

Engine Oil and Filter Service Intervals — Tier 2 and Stage II Engines

Recommended oil and filter service intervals are based on a combination of oil pan capacity, type of engine oil and filter used, and sulfur content of the diesel fuel. Actual service intervals also depend on operation and maintenance practices.

Use oil analysis to evaluate the condition of the oil and to aid in selection of the proper oil and filter service interval. Contact your John Deere dealer or other qualified service provider for more information on engine oil analysis.

Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

Diesel fuel sulfur content affects engine oil and filter service intervals.

- Use of diesel fuel with sulfur content less than 2000 mg/kg (2000 ppm) is RECOMMENDED
- Use of diesel fuel with sulfur content 2000—5000 mg/kg (2000—5000 ppm) REDUCES the oil and filter change interval
- BEFORE using diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm), contact your John Deere dealer or qualified service provider

IMPORTANT: To avoid engine damage:

- **Reduce oil and filter service intervals by 50% when using biodiesel blends greater than B20. Oil analysis may allow longer service intervals**
- **Use only approved oil types**

Approved Oil Types:

- “Plus-50 Oils” include John Deere Plus-50™ II and John Deere Plus-50™
- “Other Oils” include John Deere Torq-Gard™, API CK-4, API CJ-4, API CI-4 PLUS, API CI-4, API CH-4, ACEA E9, ACEA E7, ACEA E6, ACEA E5, and ACEA E4

Engine Oil and Filter Service Intervals	
Fuel Sulfur	Less than 2000 mg/kg (2000 ppm)
Plus-50 Oils	375 hours
Other Oils	250 hours
Fuel Sulfur	2000—5000 mg/kg (2000—5000 ppm)
Plus-50 Oils	275 hours
Other Oils	150 hours
Fuel Sulfur	5000—10 000 mg/kg (5000—10 000 ppm)
Plus-50 Oils	187 hours (See John Deere dealer)
Other Oils	125 hours (See John Deere dealer)
Oil analysis may extend the service interval of “Other Oils”, to a maximum not to exceed the interval for Plus-50 Oils. Oil analysis means taking a series of oil samples at 50-hour increments beyond the normal service interval until either the data indicates the end of useful oil life or the maximum service interval of John Deere Plus-50 oils is reached.	

DX,ENOIL12,T2,STD-19-13JAN18

Engine Oil and Filter Service Intervals — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V Engines

Failure to follow applicable oil standards and drain

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Torq-Gard is a trademark of Deere & Company

intervals can result in severe engine damage that might not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

Recommended oil and filter service intervals are based on a combination of oil pan capacity, type of engine oil and filter used, and sulfur content of the diesel fuel. Actual service intervals also depend on operation and maintenance practices.

Approved Oil Types

- John Deere Plus-50™ II
- "Other Oils" include API CK-4, API CJ-4, ACEA E9, and ACEA E6

Use oil analysis to evaluate the condition of the oil and to aid in selection of the proper oil and filter service interval. Contact your John Deere dealer or other qualified service provider for more information on engine oil analysis.

Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

Diesel fuel sulfur content affects engine oil and filter service intervals. Higher fuel sulfur levels reduce oil and filter service intervals.

Use of diesel fuel with sulfur content less than 15 mg/kg (15 ppm) is REQUIRED.

Engine Oil and Filter Service Intervals	
John Deere Plus-50™ II	400 hours
Other Oils	250 hours
Oil analysis may extend the service interval of "Other Oils" to a maximum not to exceed the interval of Plus-50™ II oils. Oil analysis means taking a series of oil samples at 50-hour increments beyond the normal service interval until either the data indicates the end of useful oil life or the maximum service interval of John Deere Plus-50 II oils is reached.	

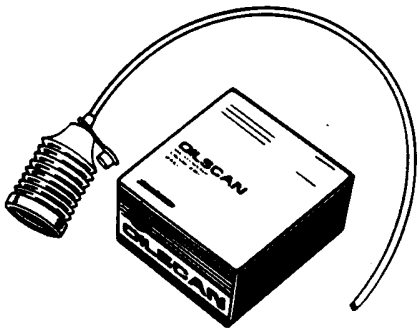
Engine operation at high altitude decreases oil change intervals. See Diesel Engine Oil Service Interval for Operation at High Altitude for additional information.

IMPORTANT: To avoid engine damage:

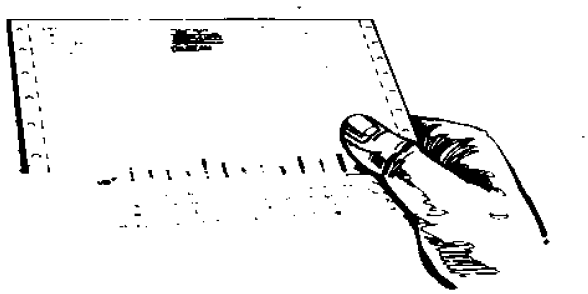
- **Reduce oil and filter service intervals by 50% when using biodiesel blends greater than B20. Oil analysis may allow longer service intervals**
- **Use only approved oil types**

OUO6075,0004926-19-22MAR18

Oilscan™ and CoolScan™



T6828AB—UN—15JUN89



T6829AB—UN—26AUG11

Oilscan™ and CoolScan™ are John Deere sampling programs to help you monitor machine performance and identify potential problems before they cause serious damage.

Oil and coolant samples should be taken from each system before its recommended change interval.

Check with your John Deere dealer for the availability of Oilscan™ and CoolScan™ kits.

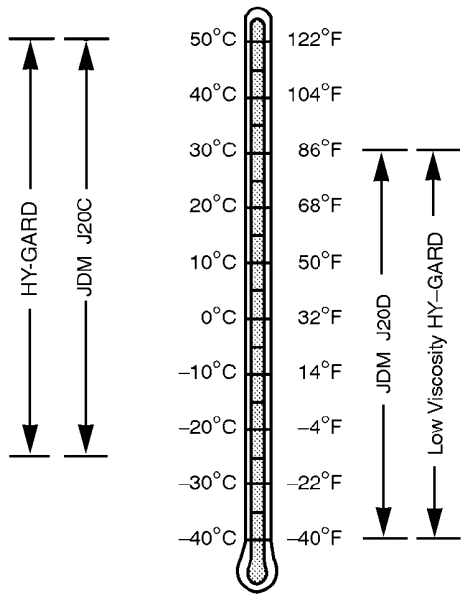
DX,OILSCAN-19-13SEP11

ProDrive™ Transmission, CommandTouch™ Multi-Speed Feeder House Drive, Hydrostatic Drive System, Main Hydraulic System, and Main Engine Gear Case Oils

NOTE: Machines come factory filled with John Deere Hy-Gard™.

Plus-50 is a trademark of Deere & Company

Oilscan is a trademark of Deere & Company
CoolScan is a trademark of Deere & Company
Hy-Gard is a trademark of Deere & Company



ZX1030848—UN—15SEP02

Only the following oils are approved:

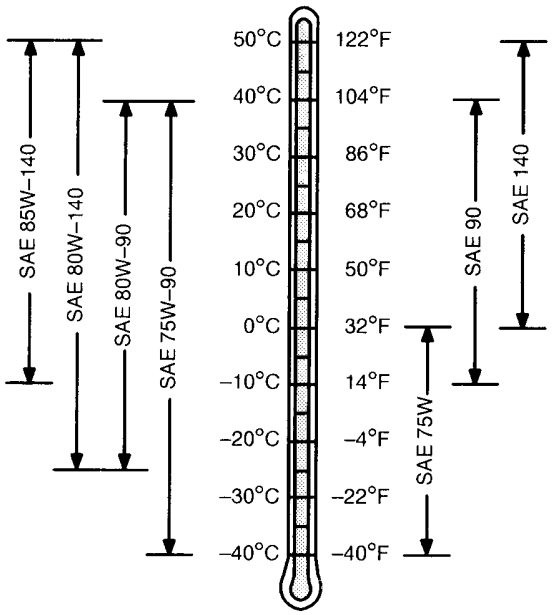
- John Deere Hy-Gard™
- Oils meeting John Deere Standard JDM J20C

NOTE: For usage in extremely low temperatures only the following may be substituted:

- *Low Viscosity Hy-Gard™*
- *Oils meeting John Deere Standard JDM J20D*

OUO6075,00046CB-19-30MAR17

Transmission (Mechanical Shift and Push-Button Shift), Final Drives, Loading Auger, Primary Countershaft, and Two-Speed Separator Drive Gear Case Oils



TS1653—UN—14MAR96

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

- John Deere GL-5 Gear Lubricant
- John Deere EXTREME-GARD™

Other oils may be used if they meet the following:

- API Service Category GL-5

Product Number	Description	Size
TY6252	80W/90 GL5 Gear Lube	16 kg pail (35 lb pail)
TY6296	80W/90 GL5 Gear Lube	0.9 L can (1 qt can)
TY6256	85W/140 GL5 Gear Lube	16 kg pail (35 lb pail)
TY6345	85W/140 GL5 Gear Lube	0.9 L can (1 qt can)

OUO6075,0004924-19-21MAR18

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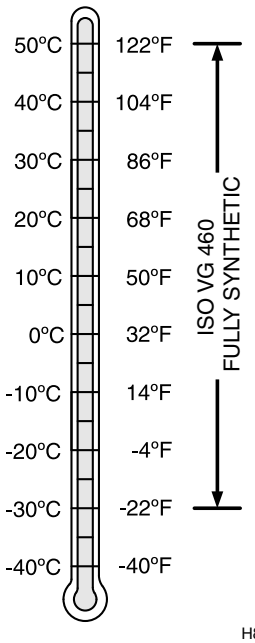
EXTREME-GARD is a trademark of Deere & Company.

Feeder House Reverser Gear Case



H87702—UN—25JUL07

Oil Viscosities for Air Temperature Ranges

The following Gear Oil is recommended:

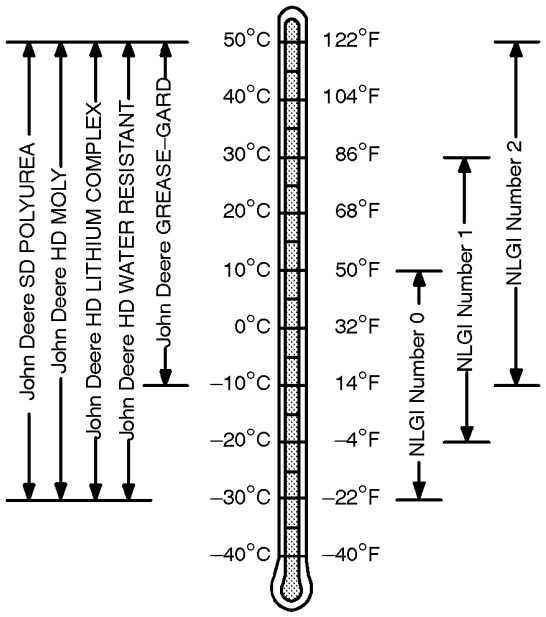
- John Deere ISO VG 460 Fully Synthetic

Other gear oils may be used if they meet all of the following specifications:

- ISO VG 460 Gear Oil per ISO12925-1 type CKD
- ANSI/AGMA 9005-E02 (EP)
- US Steel 224
- DIN 51517-3 (CLP)

OUO6075,00046CD-19-28MAR17

Grease



TS1667—UN—30JUN99

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

The following grease is recommended:

- John Deere SD POLYUREA GREASE (TY6341)

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB

IMPORTANT: John Deere SD POLYUREA GREASE (TY6341) is the required grease for the feeder house torque sensing cams.

Some types of grease thicken and are not compatible with others.

If grease fitting is missing, replace immediately. Clean fittings thoroughly before using grease gun.

Product Number	Description
TY6341	Multi-Purpose, High-Temperature Extreme Pressure Grease, especially effective in rolling contact applications.

HX,AG,SF7350-19-26OCT99

Brake Fluid (If Equipped)

IMPORTANT: When removing reservoir cap, keep contaminants from entering the reservoir.

Fluid should be 6 mm (1/4 in.) from top.

Fill reservoir with SAE J1703d, DOT-3 or DOT-4 hydraulic brake fluid.

OUO6075,0000AE9-19-10DEC10

Oil Filters

Filtration of oils is critically important for proper operation and lubrication. John Deere brand oil filters have been designed and produced specifically for John Deere applications.

John Deere filters adhere to engineering specifications for quality of the filter media, filter efficiency rating, strength of the bond between the filter media and the element end cap, fatigue life of the canister (if applicable), and pressure capability of the filter seal. Non-John Deere branded oil filters might not meet these key John Deere specifications.

Always change oil filters regularly as specified in this manual.

DX,FILT1-19-11APR11

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

DX,FILT2-19-14APR11

Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

The temperature limits and service intervals shown in this manual apply to John Deere branded fluids or fluids that have been tested and/or approved for use in John Deere equipment.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

DX,ALTER-19-13JAN18

Lubricant Storage

Your equipment can operate at top efficiency only when clean lubricants are used.

Use clean containers to handle all lubricants.

Store lubricants and containers in an area protected from dust, moisture, and other contamination. Store containers on their side to avoid water and dirt accumulation.

Make certain that all containers are properly marked to identify their contents.

Properly dispose of all old containers and any residual lubricant they may contain.

DX,LUBST-19-11APR11

Mixing of Lubricants

In general, avoid mixing different brands or types of oil. Oil manufacturers blend additives in their oils to meet certain specifications and performance requirements.

Mixing different oils can interfere with the proper functioning of these additives and degrade lubricant performance.

Consult your John Deere dealer to obtain specific information and recommendations.

DX,LUBMIX-19-18MAR96

Service Interval—Setup or Clearing

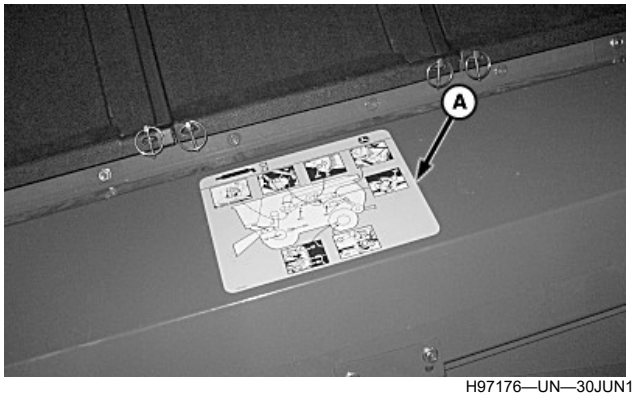
CAUTION: To prevent injury, never lubricate or service machine, header, or engine while it is running. Shut OFF engine, set park brake and remove key.

IMPORTANT: Service times are for average conditions. Service more often if machine is used in extreme conditions.

See Calibrations Application Help or Operator's Station Help for further information on setup or clearing service intervals.

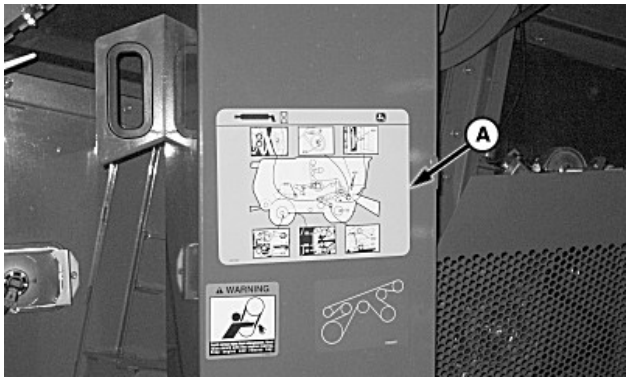
OUO6075,0004552-19-20DEC16

Lubrication Decal Locations



H97176—UN—30JUN10

Left-Hand Lubrication Decal



H97177—UN—30JUN10

Right-Hand Lubrication Decal

A—Lubrication Decals

IMPORTANT: HillMaster Machines: Avoid crushing injuries. Always completely lower machine leveling system before getting underneath for service, adjustments, or repairs. Shut OFF engine, set park brake and remove key.

Lubrication decals (A) show the different locations of grease points around the machine. Follow lubrication times provided on decals and refer to hour intervals listed in this section for further information.

Bearing failures or overheating can result in a fire. To reduce bearing failures or overheating, follow hour intervals listed in this section for further information.

Crop material and other debris may accumulate around bearings and bearing covers. Inspect and clean these areas periodically throughout the harvest day.

OUO6075,00044AF-19-14NOV16

Hydraulic Hose Replacement

Hydraulic hoses should be inspected frequently for leakage, kinking, cuts, cracks, abrasion, corrosion, exposed wire braid, or any other signs of wear or damage. Worn or damaged hose assemblies can fail during use and should be replaced immediately. See your John Deere dealer for replacement hoses.

CAUTION: If incorrectly rated hose is used, machine damage, injury or death could occur.

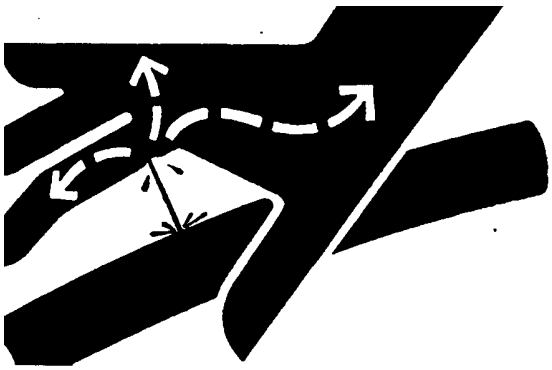
If hoses are to be fabricated, ensure that hoses are the same rating as one being replaced. See your John Deere dealer for correct hose rating replacements.

Incorrect hose length or routing can increase chance of hose wear or damage. Use old hose as guide for length and hose routing.

Incorrect fittings can damage mating parts or cause leaks. Make sure to use steel fittings approved for use with hose manufacture. Use correct size and thread type as replaced hose.

OUO6075,00043CC-19-12OCT16

Hydraulic System Cleanliness



X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene can result. Doctors unfamiliar with this type of injury may call the Deere & Company Medical Department in Moline, Illinois, or other knowledgeable medical source.

Cleanliness

If hydraulic system should be disconnected for service, protect ends of hoses, tubing, and ports of components from contamination with clean, lint-free towels or clean plastic bags.

Before installing any replacement hose, flush the inside with unused diesel fuel or unused commercial petroleum cleaning solvent for 10 seconds minimum. Do not use water, water soluble cleaners, or compressed air.

IMPORTANT: To prevent hydraulic system contamination, clean the hydraulic component surfaces with an electrical contact cleaner.

Remove cover from multicoupler and attach to docking station on header. When coupling to header clean multicoupler surfaces to remove dirt and debris.

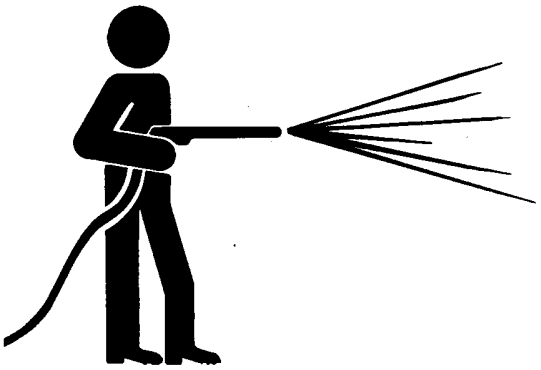
OUO6075,0004897-19-12APR18

Accumulator Pressure

NOTE: Due to temperature differences, accumulator pressures can vary significantly and will need to be adjusted. See your John Deere dealer for further information.

OUO6075,00043CE-19-12OCT16

Using High-Pressure Washers



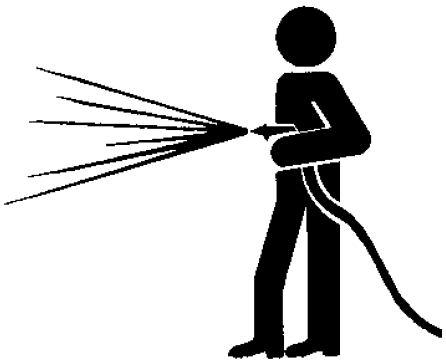
T6642EJ—UN—18OCT88

IMPORTANT: High-pressure washers are an effective means of cleaning the machine. To avoid damage to the machine, do not go closer to 1 m (39 in) and spray at an angle between 45—90 degrees when cleaning sealing surfaces, seals, and decals. Maximum pressure must not exceed 12 000 kPa (120 bar) (1740 psi).

Do not, under any circumstances, spray, or wash components (example; engine) with cold water when hot. Do not use rotary nozzles or water at temperatures over 50°C (122°F), and do not aim at seals. Always keep the water jet moving. Reduce pressure when using high-pressure washer to clean cooling units, bearings, and electronic/electrical equipment. Directing pressurized water at electronic/electrical components or connectors, bearings and hydraulics seals, fuel injection pumps or other sensitive parts and components may cause product malfunctions. Follow the instructions in the high-pressure washer operator's manual and manuals of attached equipment.

OUO6075,0004977-19-17MAY18

Using Pressurized Air



RW56455—UN—30JUN97

IMPORTANT: Directing pressurized air at electronic/ electrical components or connectors, may cause buildup of static electricity and product malfunctions.

OUO6075,0004976-19-17MAY18

Lubrication Symbols

CAUTION: Never lubricate or service corn head while machine engine is running.

Lubricate with John Deere Multipurpose SD Polyurea Grease High Temperature/Extreme Pressure lubricant or an equal SAE Multipurpose High Temperature Grease with Extreme Pressure (EP) performance at hours shown on the symbol.

Lubricate with John Deere SAE 30 oil or heavier oil at hourly intervals indicated on the symbols.

IMPORTANT: Recommended service intervals are for average conditions. Service MORE OFTEN if machine is operated under adverse conditions.

OUO6075,0000852-19-14MAR07

Service Your Machine at Specified Intervals

Perform lubrication, checks, and adjustments at intervals specified in the following tables. Perform service on items at multiples of the original requirement. For example, at 1000 operating hours also service those items listed under every 500 operating hours, every 250 operating hours, every 100 operating hours, and every 25 operating hours or daily.

SS43267,00006D2-19-12AUG15

Important Considerations

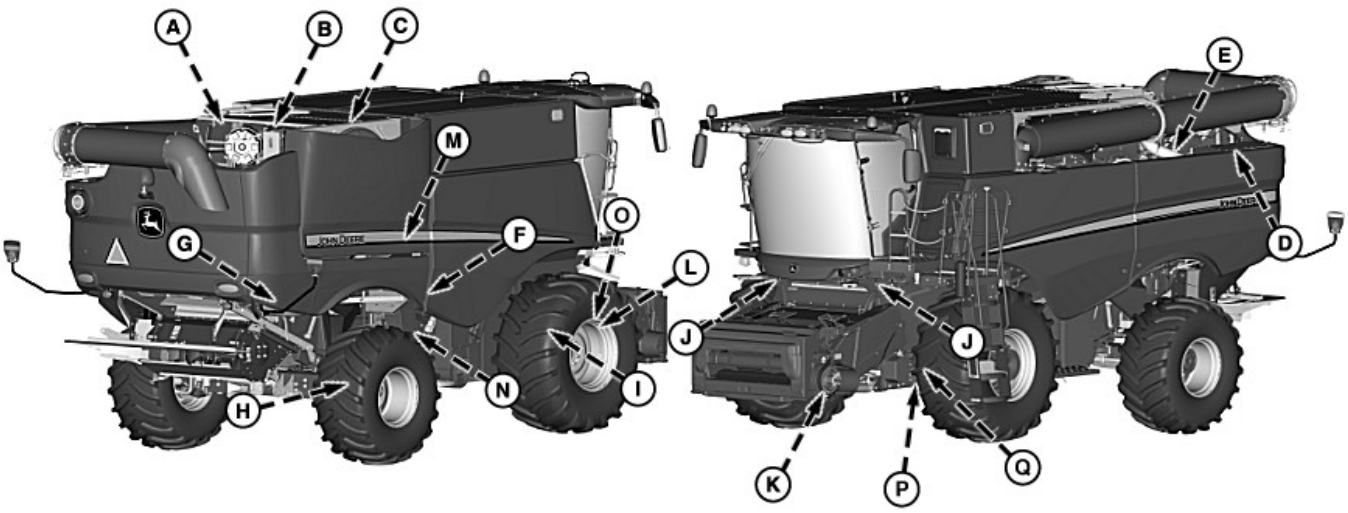
IMPORTANT: Clean fittings before and after applying grease. Replace any damaged or missing fittings immediately.

Lubrication and maintenance intervals are listed in this section.

Locations and procedures are listed in the section for that interval.

OUO6075,00045A8-19-25JAN17

Service Interval Chart—Every 10 Hours



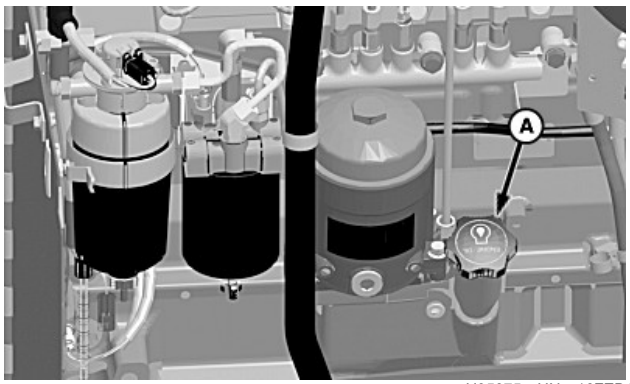
H123312—UN—07FEB18

Legend	Service	Every 10 Hours
A	Check Engine Oil Level	•
B	Check Engine Coolant Level	•
C	Clean Rotary Screen, Oil Cooler, Condenser, Radiator, and Charge Air Cooler	•
D	Check Hydrostatic/Hydraulic Oil	•
E	Check Main Engine Gear Case Oil	•
F	Drain Water from Air Compressor Reservoir (if equipped)	•
G	Inspect Fuel Precleaner Filter	•
H	Grease Two-Speed Four-Wheel Drive Motor Pivots Grease Two-Wheel Drive Heavy-Duty and Extra Heavy-Duty Axle Spindle Bearings/Pivot Pins (Muddy Conditions)	•
I	Grease Final Drive Outer Bearings (Muddy Conditions)	•
J	Clean Air Conditioner Drain Hose	•
K	Grease Variable Speed Feeder House Reverser Drive Gear Case (S760 and S770 Machines) (Severe Conditions)	•
L	Check Stone Trap	•
M	Grease Tailings Elevator Slip Clutch (Tough Crop Conditions) (S780, S785, and S790 Machines)	•
N	Clean ActiveVision™ Tailings System Camera (if equipped)	•
O	Central Lube Bank (if equipped) (HillMaster™ Machines) • Grease Final Drive Pivot • Grease Header Tilt Primary Cylinder Pivot Pin • Grease Leveling Cylinder Barrel	•
P	Without Central Lube Bank (HillMaster™ Machines) • Final Drive Pivot	•
Q	Without Central Lube Bank (HillMaster™ Machines) • Grease Header Tilt Primary Cylinder Pivot Pin • Grease Leveling Cylinder Barrel	•

ActiveVision is a trademark of Deere & Company
HillMaster is a trademark of Deere & Company

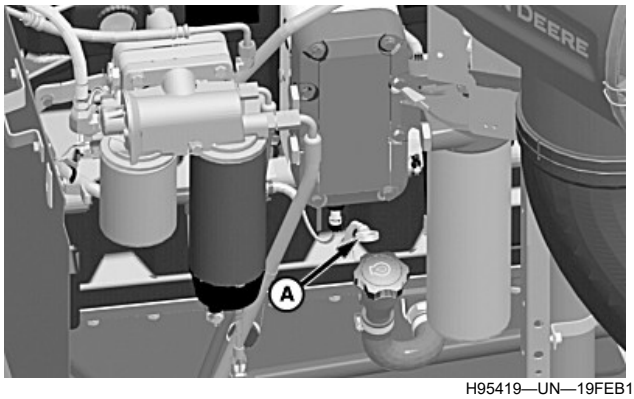
OUO6075,0004B3E-19-10JUN19

Engine Oil Level



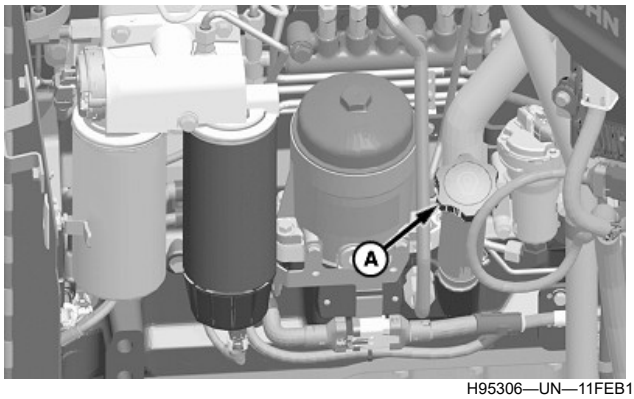
H95375—UN—16FEB10

Tier 2/Stage II (Style A)



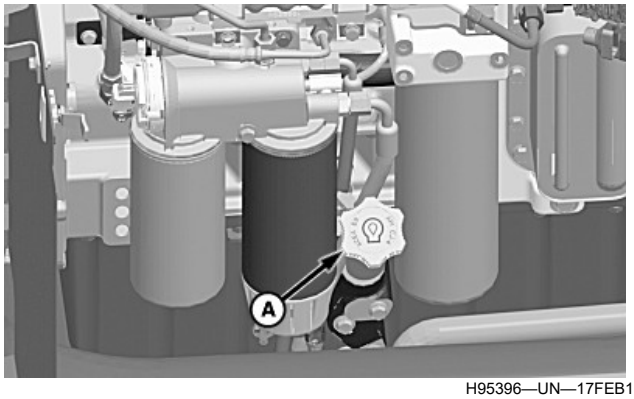
H95419—UN—19FEB10

Tier 2/Stage II (Style B)



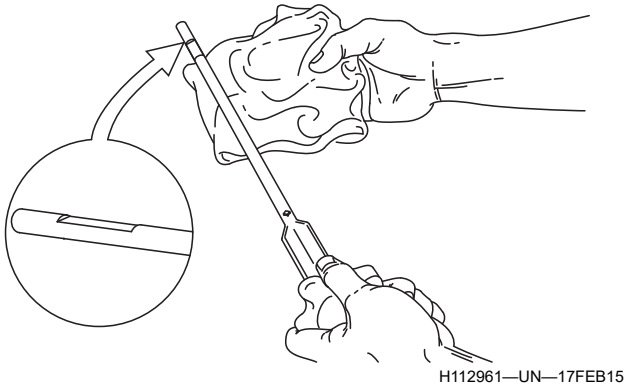
H95306—UN—11FEB10

Final Tier 4/Stage V (Style A)



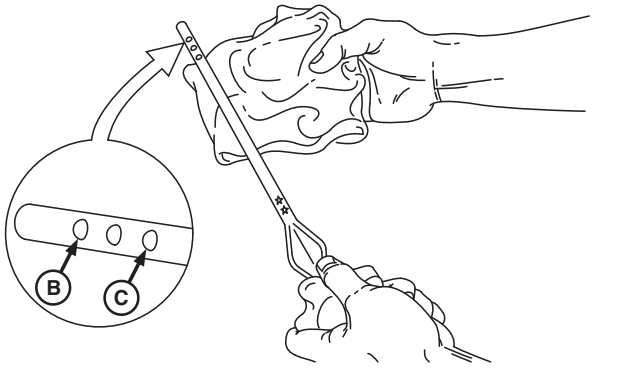
H95396—UN—17FEB10

Final Tier 4/Stage V (Style B)



H112961—UN—17FEB15

Tier 2/Stage II



H113142—UN—11MAR15

Final Tier 4/Stage V

A—Dipstick
B—ADD Mark
C—FULL Mark

IMPORTANT: It is vital to maintain engine oil at correct levels to ensure a long service life. Check oil level with the machine parked on level ground.

NOTE: Verify that dipstick is screwed or pushed completely into housing before removing to check oil level.

Check engine oil level with dipstick (A) daily. Do not operate engine when oil level is below "ADD" mark on dipstick.

Remove dipstick and check oil level. Oil level should be between "ADD" and top of cross-hatch area on dipstick. If oil level is below "ADD" mark, add oil as needed. See Fuel and Lubricants section for oil recommendations.

OUO6075,00047E7-19-13NOV17

Engine Coolant

H115495—UN—19AUG15

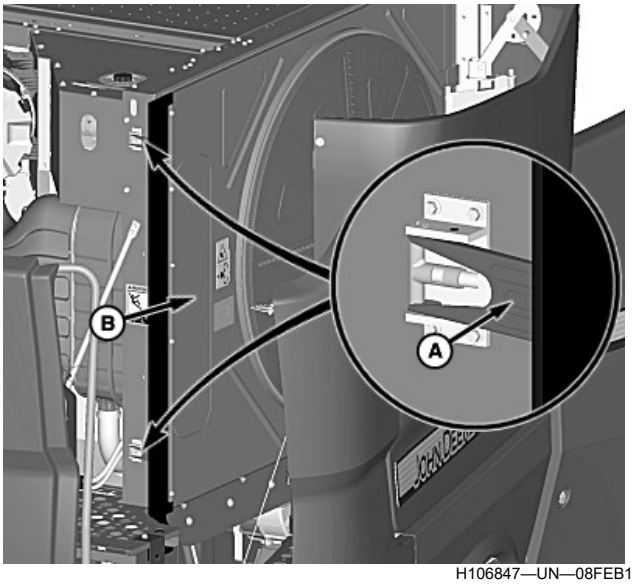
A—Surge Tank

Coolant level must be between "Max Cold" and "Min Cold" lines. Add coolant as needed if coolant is below "Min Cold" line.

Check engine coolant level in the surge tank (A) with engine cold. Level must be up to "Max Cold" line.

OUO6075,00043FB-19-21DEC16

Rotary Screen, Oil Cooler, Condenser, Radiator, and Charge Air Cooler



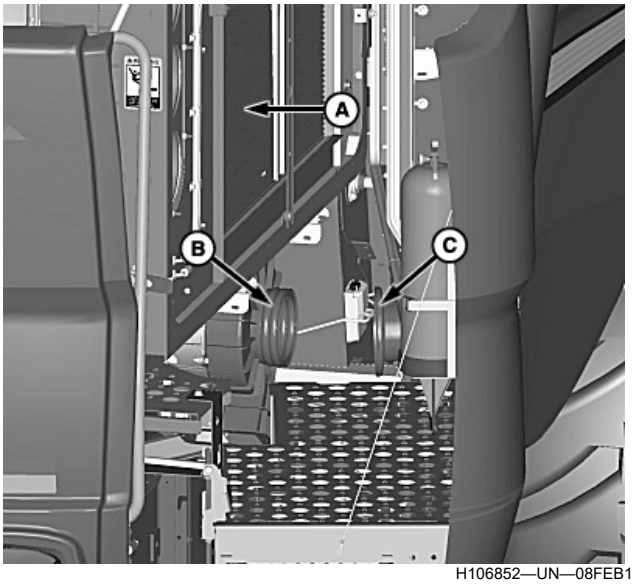
H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

CAUTION: Shut OFF engine, set park brake and remove key.

Pull latches (A) and open rotary screen door (B).

Tier 2/Stage II (Style A)



H106852—UN—08FEB13

A—Condenser
B—Vacuum Duct
C—Transfer Duct

NOTE: Clean areas out with compressed air, blowing from inside out.

Check rotary screen daily to be certain it turns freely.

Clean rotary screen with a brush and compressed air when dirt and chaff build up on or behind screen.

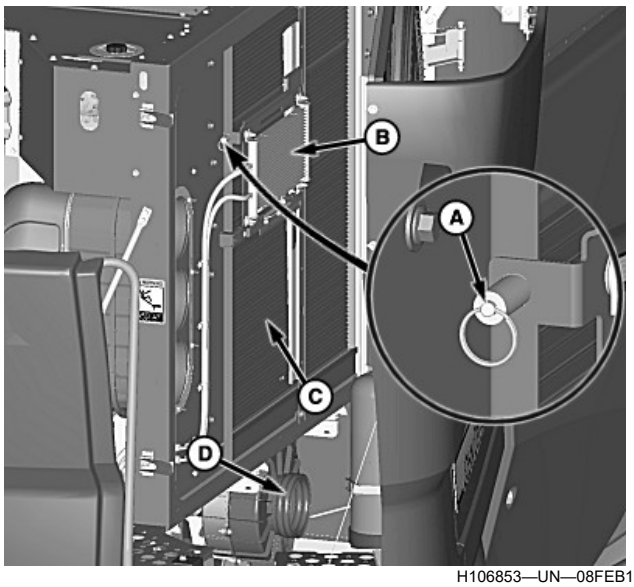
Clean condenser (A), oil cooler, charge air cooler, and radiator.

Clean out dirt from the lower vacuum duct (B) and transfer duct (C).

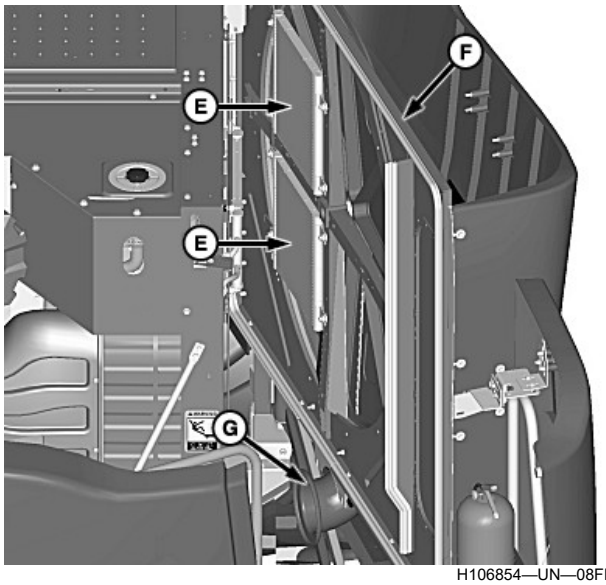
IMPORTANT: Reduce high-pressure washer or pressurized air when cleaning coolers. To prevent damage to fins, direct the water or air straight through the fins to avoid bending them. Use a fin comb to straighten bent fins. Bent fins decrease cooler performance.

Close and latch the rotary screen door.

Tier 2/Stage II (Style B) and Final Tier 4/Stage V



H106853—UN—08FEB13



H106854—UN—08FEB13

A—Lockout Pin
B—Fuel Cooler
C—Radiator
D—Vacuum Duct
E—Condensers
F—Rotary Screen Door
G—Transfer Duct

NOTE: Clean areas out with compressed air, blowing from inside out.

Check rotary screen daily to be certain it turns freely.

Clean rotary screen with a brush and compressed air when dirt and chaff build up on or behind screen.

Pull lockout pin (A) and rotate fuel cooler (B) to clean.

Clean radiator (C), oil cooler, and charge air cooler.

Clean out dirt from the lower vacuum duct (D).

Clean condensers (E) on rotary screen door (F).

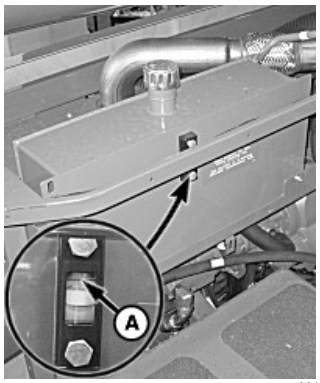
Clean out dirt from the transfer duct (G).

IMPORTANT: Reduce high-pressure washer or pressurized air when cleaning coolers. To prevent damage to fins, direct the water or air straight through the fins to avoid bending them. Use a fin comb to straighten bent fins. Bent fins decrease cooler performance.

Close and latch the rotary screen door.

OUO6075,0004975-19-17MAY18

Hydrostatic/Hydraulic Oil



H115659—UN—28AUG15

A—Sight Glass

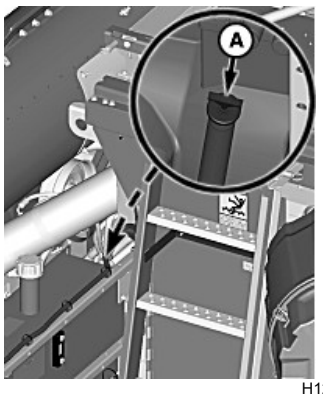
Check with header on ground.

Oil level must be at top of sight glass (A) with the feeder house fully lowered.

Add oil as needed.

OUO6075,0004413-19-21DEC16

Main Engine Gear Case Oil



H121743—UN—12JUN17

A—Dipstick

Shut OFF engine, set park brake and remove key before checking hydraulic oil at engine gear case.

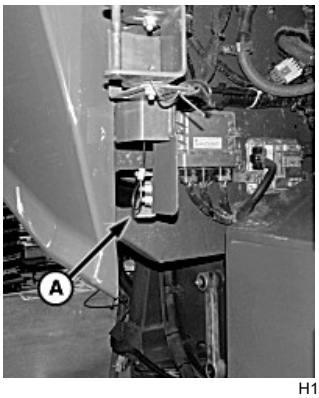
Let machine sit for 5 minutes allowing air to settle from oil.

Oil level must not be below "ADD" mark on dipstick (A).

Add oil as needed.

OUO6075,000493D-19-12APR18

Air Compressor Reservoir (If Equipped)



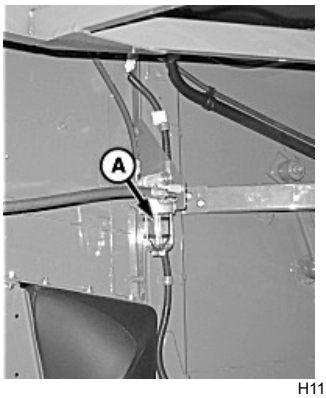
H115497—UN—19AUG15

A—Air Tank Drain Cable

Pull air tank drain cable (A) and drain water from reservoir.

OUO6075,00043FD-19-21DEC16

Fuel Precleaner Filter



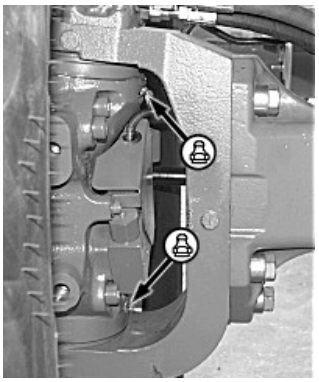
H117746—UN—17MAR16

A—Fuel Precleaner Filter

Inspect fuel precleaner filter (A) for buildup and clean as necessary.

OUO6075,00043FE-19-21DEC16

Two Speed Four-Wheel Drive Motor Pivots (Muddy Conditions)



H115499—UN—19AUG15

NOTE: When operating in mud and water, grease motor pivots every 10 hours. In normal conditions, grease every 50 hours.

Grease fittings until grease purges from top and bottom motor pivot seals.

Grease two fittings (both sides).

OUO6075,0004687-19-22MAR17

Two-Wheel Drive Heavy-Duty and Extra Heavy-Duty Axle Spindle Bearings/Pivot Pins (Muddy Conditions)

H115500—UN—19AUG15

NOTE: When operating in mud and water, grease rear axle spindle bearings and motor pivots every 10 hours. In normal conditions, grease every 50 hours.

Grease fittings until grease purges from top and bottom motor pivot seals.

When operating in mud and water, grease fittings (both sides) every 10 hours.

OUO6075,0004688-19-22MAR17

Final Drive Outer Bearings (Muddy Conditions)

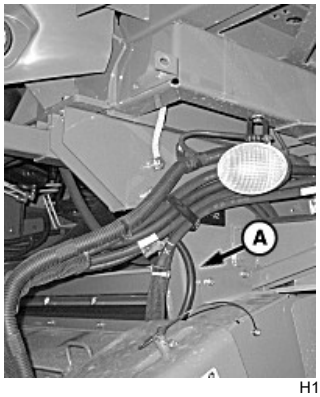
H115501—UN—19AUG15

NOTE: When operating in mud and water, grease final drive outer bearings every 10 hours. In normal conditions, grease every 50 hours.

When operating in mud and water, grease fitting (both sides) every 10 hours.

OUO6075,0004689-19-22MAR17

Air Conditioner Drain Hose



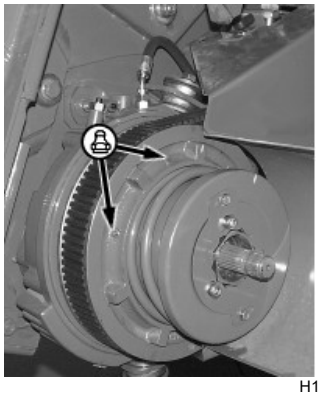
H115502—UN—19AUG15

A—Drain Hose

Clean air conditioner drain hose (A) on both sides of cab.

OUO6075,0004402-19-21DEC16

Variable Speed Feeder House Reverser Drive Gear Case (S760 and S770 Machines) (Severe Conditions)



H115503—UN—19AUG15

NOTE: Use John Deere TY6341 Multi-Purpose SD Polyurea Grease or John Deere TY25744 Synthetic Grease when greasing feeder house reverser drive gear case.

Over greasing can allow grease to purge on belt and cause belt failure.

Turn sheave so fittings are in the twelve and two o'clock positions.

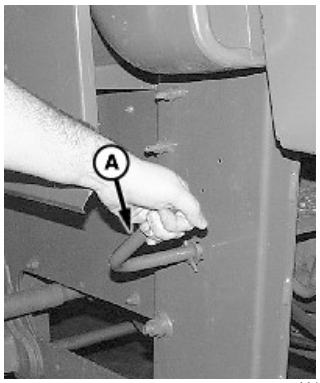
When operating in severe conditions or high yielding corn, grease fitting at twelve o'clock position, 5—8 pumps every 10 hours.

Excess grease purges from under spring.

Grease fitting at two o'clock position, 2—3 pumps every 10 hours.

OUO6075,000493E-19-12APR18

Stone Trap



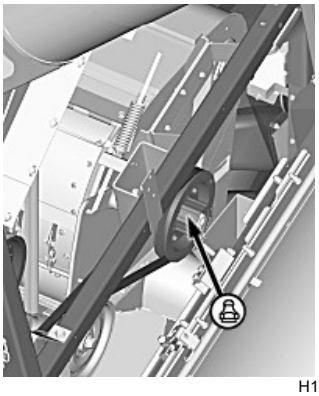
H115496—UN—19AUG15

A—Lever

Remove quick-lock pin and dump stone trap with lever (A). Close stone trap and retain with quick-lock pin.

OUO6075,0004404-19-21DEC16

Tailings Elevator Slip Clutch (Tough Crop Conditions) (S780, S785, and S790 Machines)



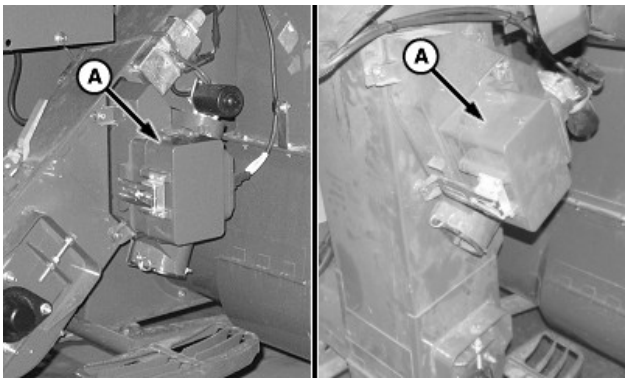
H115504—UN—19AUG15

NOTE: When operating in tough crop conditions, grease tailings elevator slip clutch every 10 hours. In normal conditions, grease every 50 hours.

Grease fitting on tailings elevator slip clutch.

OUO6075,00048A0-19-08FEB18

ActiveVision™ Tailings System Camera (If Equipped)



H119876—UN—01NOV16

Style A / Style B

A—ActiveVision™ Tailings System Camera

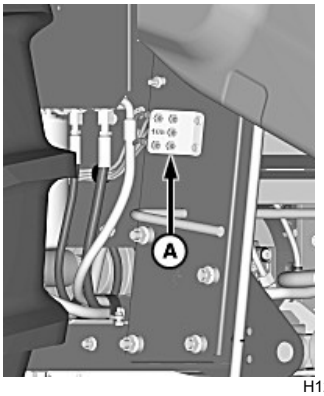
NOTE: Clean the camera lens once per week or as needed. Lens debris indicator in the software alerts the operator when the camera lens needs to be cleaned as system functionality may be reduced.

Cleaning frequency varies depending on a number of factors including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.

Open latch and clean the ActiveVision™ tailings system camera (A).

OUO6075,0004487-19-18JAN17

Central Lube Bank (If Equipped) (HillMaster™ Machines)



H123115—UN—19JAN18

A—Bracket

Grease fittings on bracket (A) provide grease to the following locations:

- Final Drive Pivots (both sides)
- Header Tilt Primary Cylinder Pivot Pin
- Leveling Cylinder Barrels (both sides)

Grease these fittings until the grease purges from those specific areas.

OUO6075,0004B3F-19-07JUN19

Final Drive Pivot (Without Central Lube Bank) (HillMaster™ Machines)

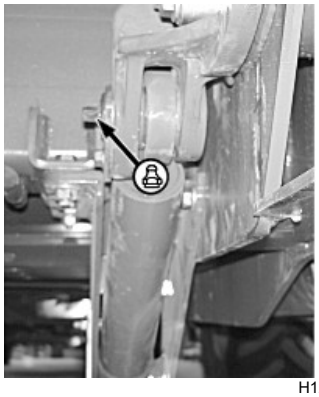
H120022—UN—14NOV16

Grease fitting (both sides) until grease purges.

OUO6075,000488F-19-07FEB18

ActiveVision is a trademark of Deere & Company

Header Tilt Primary Cylinder Pivot Pin (Without Central Lube Bank) (HillMaster™ Machines)

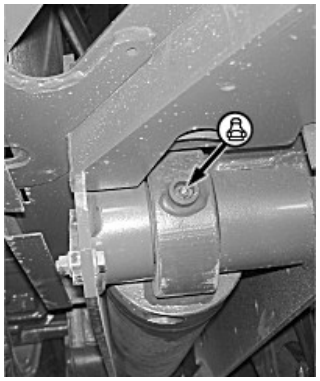


H120023—UN—14NOV16

Grease fitting (both sides) until grease purges.

OUO6075,0004B41-19-09APR19

Leveling Cylinder Barrel (Without Central Lube Bank) (HillMaster™ Machines)

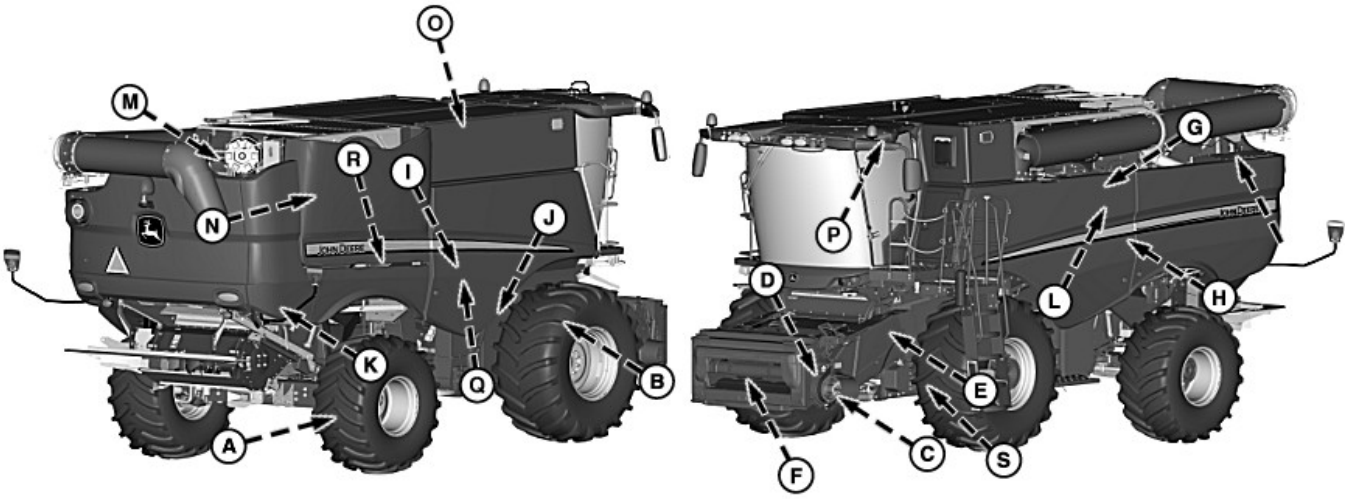


H120024—UN—14NOV16

Grease fitting (both sides) until grease purges.

OUO6075,0004891-19-07FEB18

Service Interval Chart—Every 50 Hours



H123391—UN—08FEB18

Legend	Service	Every 50 Hours
A	Grease Two-Speed Four-Wheel Drive Motor Pivots Grease Two-Wheel Drive Heavy-Duty and Extra Heavy-Duty Axle Spindle Bearings/Pivot Pins (Normal Conditions)	•
B	Grease Final Drive Outer Bearings (Normal Conditions)	•
C	Grease Variable Speed Feeder House Reverser Drive Gear Case (S760 and S770 Machines) (Normal Conditions)	•
D	Check Feeder House Reverser Gear Case Oil	•
E	Grease Variable Speed Feeder House Upper Sheaves (S760 and S770 Machines)	•
F	Check/Clean Lateral Tilt Feeder House	•
G	Cycle Separator Variable Speed Driven/Driver Sheaves	•
H	Grease Separator Variable Speed Driven/Driver Sheaves (S770 Optional, S780, S785, and S790 Machines)	•
I	Grease Cleaning Fan Variable Upper Sheaves	•
J	Grease Cleaning Fan Variable Lower Sheaves	•
K	Inspect Fuel Precleaner Filter	•
L	Check Two-Speed Separator Drive Oil	•
M	Check Water Separator Primary Fuel Filter	•
N	Check Radiator, Charge Air Cooler, Oil Cooler, and Condenser	•
O	Check Mass Flow Sensor	•
P	Clean/Replace Cab Fresh Air Filter	•
Q	ActiveVision™ Clean Grain Elevator Camera (If Equipped)	•
R	Grease Tailings Elevator Slip Clutch (Normal Crop Conditions) (S780, S785, and S790 Machines)	•
S	Grease Final Drive Couplers	•

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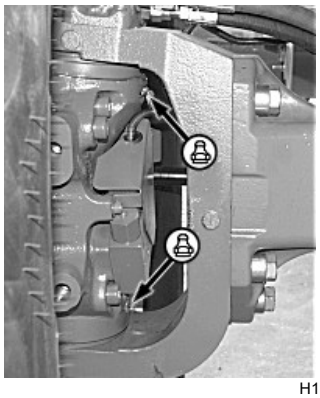
OUO6075,0004893-19-31MAY18

Two Speed Four-Wheel Drive Motor Pivots (Normal Conditions)



H115499—UN—19AUG15

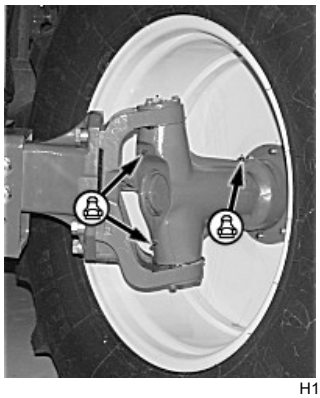
NOTE: When operating in mud and water, grease motor pivots every 10 hours. In normal conditions, grease every 50 hours.

Grease fittings until grease purges from top and bottom motor pivot seals.

Grease two fittings (both sides).

OUO6075,000468A-19-22MAR17

Two-Wheel Drive Heavy-Duty and Extra Heavy-Duty Axle Spindle Bearings and Pivot Pins (Normal Conditions)



H115500—UN—19AUG15

NOTE: When operating in mud and water, grease rear axle spindle bearings and motor pivots every 10 hours. In normal conditions, grease every 50 hours.

Grease fittings until grease purges from top and bottom pivot seals.

When operating in normal conditions, grease fittings (both sides) every 50 hours.

OUO6075,000468B-19-22MAR17

Final Drive Outer Bearings (Normal Conditions)

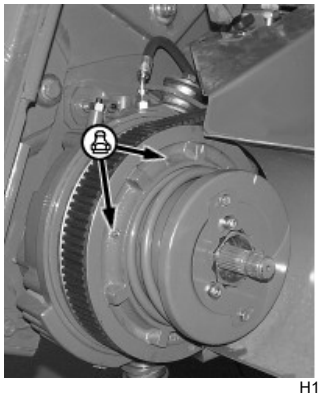
H115501—UN—19AUG15

NOTE: When operating in mud and water, grease final drive outer bearings every 10 hours. In normal conditions, grease every 50 hours.

When operating in normal conditions, grease fitting (both sides) every 50 hours.

OUO6075,000468C-19-22MAR17

Variable Speed Feeder House Reverser Drive Gear Case (S760 and S770 Machines) (Normal Conditions)



H115503—UN—19AUG15

NOTE: Use John Deere TY6341 Multi-Purpose SD Polyurea Grease or John Deere TY25744 Synthetic Grease when greasing feeder house reverser drive gear case.

Over greasing can allow grease to purge on belt and cause belt failure.

Turn sheave so fittings are in the twelve and two o'clock positions.

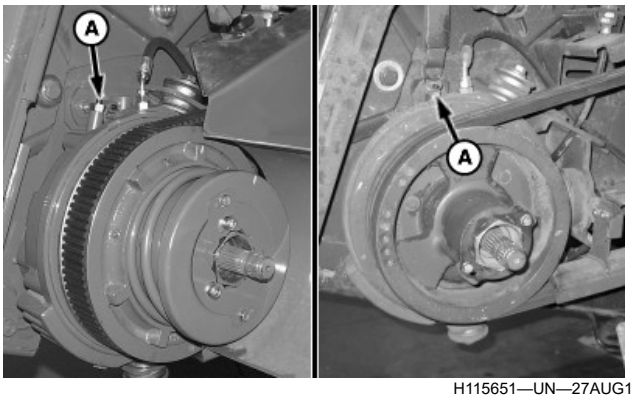
When operating in normal conditions, grease twelve o'clock fitting (10—15 times) and two o'clock fitting (5—8 times) every 50 hours.

After greasing, cycle variable sheaves through speed

range a couple of times to ensure grease spreads evenly over cam surfaces.

OUO6075,000493F-19-12APR18

Feeder House Reverser Drive Gear Case Oil



H115651—UN—27AUG15

Variable Speed/Multi-Speed Reverser Gear Case

A—Dipstick

Raise feeder house and lower safety stop.

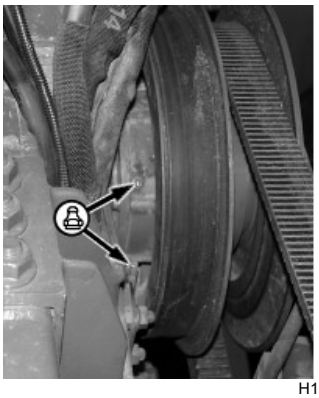
NOTE: Gear cases with an oil cooler require gear case to be run for several minutes. This ensures that the cooler is filled with oil.

Oil level must show on knurled part of dipstick.

Remove dipstick (A) and check oil level.

OUO6075,00046D1-19-28MAR17

Variable Speed Feeder House Upper Sheaves (S760 and S770 Machines)



H115652—UN—27AUG15

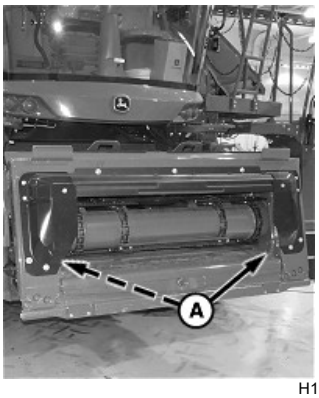
NOTE: It may be necessary to rotate the sheave for access to fittings.

Raise feeder house and lower safety stop.

Lube fittings from the underside of the feeder house.

OUO6075,000440C-19-21DEC16

Lateral Tilt Feeder House



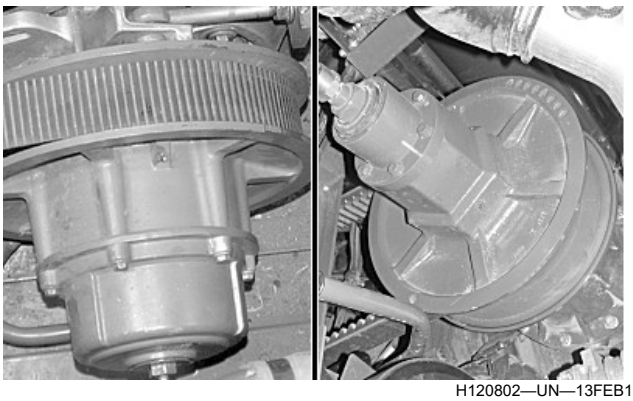
H115653—UN—28AUG15

A—Cleanout Areas

Check cleanout areas (A) for packed material which could prevent header from tilting. Clean out if necessary.

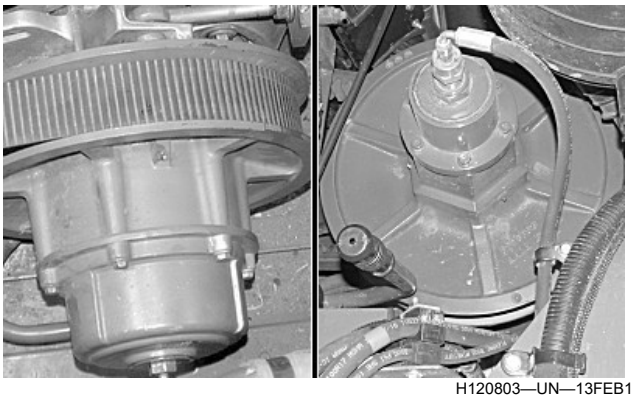
OUO6075,000440D-19-21DEC16

Separator Variable Speed Driven/Driver Sheaves



H120802—UN—13FEB17

Driven Sheaves / Driver Sheaves (Small Diameter)



H120803—UN—13FEB17

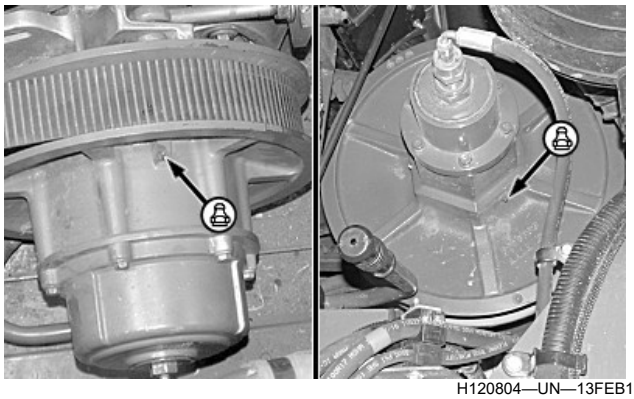
Driven Sheaves / Driver Sheaves (Large Diameter)

Separator Variable Speed Sheaves: Start machine and cycle sheaves through speed range if operated at

high speed all the time. Cycling sheaves helps replenish bushings with grease already inside sheave cavity.

OUO6075,00045D9-19-13FEB17

Separator Variable Speed Driven/Driver Sheaves (S770 Optional, S780, S785, and S790 Machines)



H120804—UN—13FEB17

Driven Sheaves / Driver Sheaves

NOTE: On S770 machines equipped with the optional large diameter driver sheave, the fitting MUST be greased every 50 hours.

IMPORTANT: Separator Variable Speed Driven and Driver Sheaves: Pump 20—25 shots of grease into fitting. DO NOT OVER GREASE.

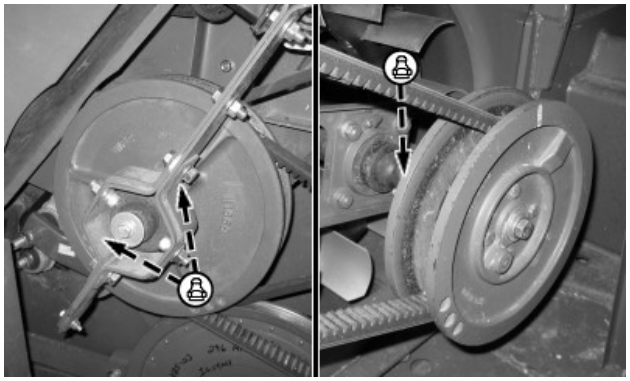
Separator Variable Speed Driven Sheaves: Rotate sheaves to access fitting.

NOTE: Start machine and cycle separator through full speed range a couple of times to distribute grease evenly.

Separator Variable Speed Driver Sheaves: Close sheaves (high speed) before greasing fitting on the outer sheave hub. Rotate sheave to access fitting. Cycle cylinder speed to distribute grease if operated at high speed all the time.

OUO6075,00045DA-19-20MAR17

Cleaning Fan Variable Upper and Lower Sheaves



H115656—UN—28AUG15

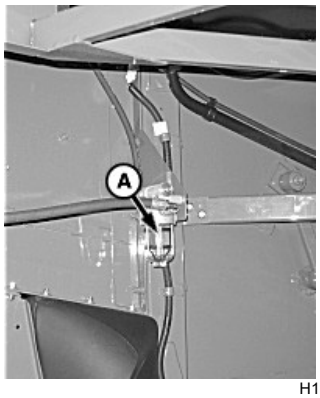
Upper Sheaves / Lower Sheaves

Cleaning Fan Variable Upper Sheaves: Grease both fittings on hub of outer sheave. Rotate sheaves for fitting access.

Cleaning Fan Variable Lower Sheaves: Grease fitting on hub located on inner sheave. Rotate sheaves for fitting access.

OUO6075,0004410-19-21DEC16

Fuel Precleaner Filter



H115657—UN—28AUG15

A—Fuel Precleaner Filter

Visually check fuel precleaner filter (A) and clean if buildup is visible on screen.

Close the fuel tank shutoff valve.

Remove fuel precleaner filter and clean screen.

Install screen and filter. Open the fuel tank shutoff valve to fill. See Fuel Maintenance—As Required (Engine Fluids and Filters) section for further information.

OUO6075,0004411-19-21DEC16

Two-Speed Separator Drive Oil

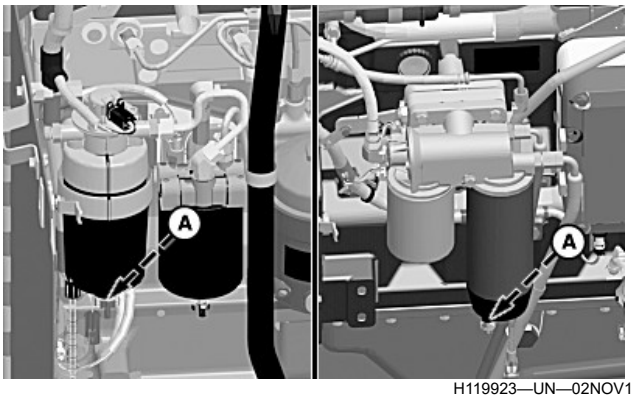
H115658—UN—28AUG15

A—Dipstick

Remove dipstick (A) and check oil level. Add oil as needed to correct level on dipstick.

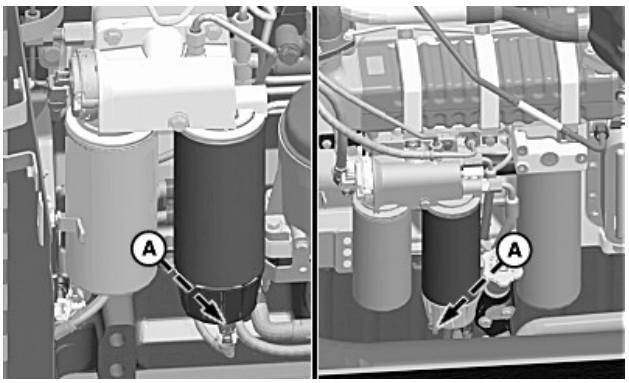
OUO6075,0004412-19-21DEC16

Water Separator Primary Fuel Filter



H119923—UN—02NOV16

Tier 2/Stage II (Style A / Style B)



H119924—UN—02NOV16

Final Tier 4/Stage V (Style A / Style B)

A—Drain

Check separator bowl for water.

Open drain (A) and drain water out separator bowl.

OUO6075,00047EA-19-13NOV17

Radiator, Charge Air Cooler, Oil Cooler, and Condenser

H115662—UN—28AUG15

Clean radiator by blowing compressed air from inside out.

Check areas for chaff buildup and clean if necessary.

OUO6075,0004415-19-21DEC16

Mass Flow Sensor

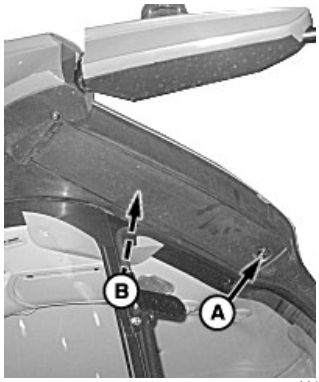
H123564—UN—22FEB18

NOTE: If machine is equipped with grain tank covers, it is necessary to remove bottom support rod hardware to lower the grain tank loading auger.

Lower grain tank loading auger and clean mass flow sensor plate.

OUO6075,0004882-19-22FEB18

Cab Fresh Air Filter



H115664—UN—28AUG15

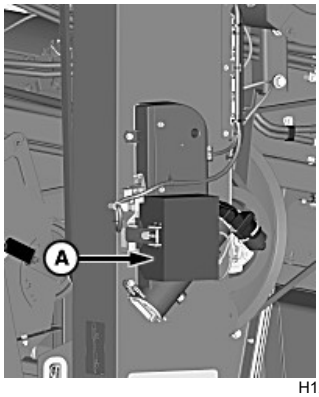
A—Knob
B—Fresh Air Filter

NOTE: Cab fresh air filter may require cleaning sooner in dusty conditions.

Turn knob (A) and lower access cover. Remove fresh air filter (B) to clean or replace.

OUO6075,0004417-19-21DEC16

ActiveVision™ Clean Grain Elevator Camera (If Equipped)



H125313—UN—06NOV18

A—ActiveVision™ Clean Grain Elevator Camera

NOTE: Clean the camera lens once per week or as needed. The lens debris indicator in the software alerts operator when the camera lens needs cleaned, as the system functionality is reduced.

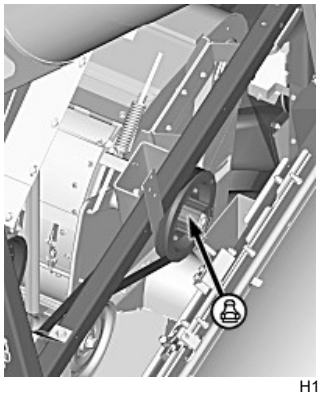
The cleaning frequency varies depending on several factors, including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.

Open latch and clean the ActiveVision™ clean grain elevator camera (A).

OUO6075,0004A41-19-06NOV18

ActiveVision is a trademark of Deere & Company

Tailings Elevator Slip Clutch (Normal Crop Conditions) (S780, S785, and S790 Machines)



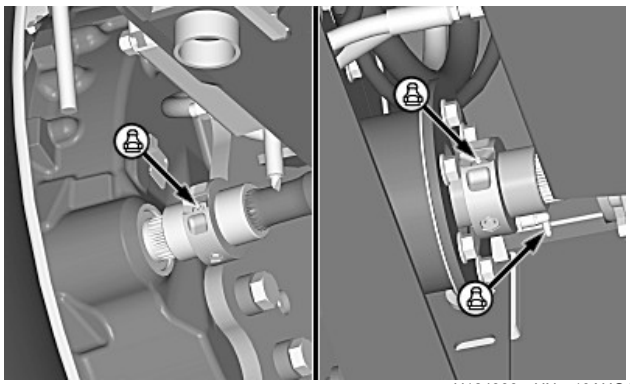
H115504—UN—19AUG15

NOTE: When operating in tough crop conditions, grease tailings elevator slip clutch every 10 hours. In normal conditions, grease every 50 hours.

Grease fitting on tailings elevator slip clutch.

OUO6075,00048A1-19-08FEB18

Final Drive Couplers



H124886—UN—10AUG18

Non-HillMaster™ Machines / HillMaster™ Machines

NOTE: Grease fittings until grease purges from splines.

Non-HillMaster™ machines have one grease fitting per final drive coupler.

HillMaster™ machines have two grease fittings per final drive coupler.

Grease the final drive coupler fittings (both sides).

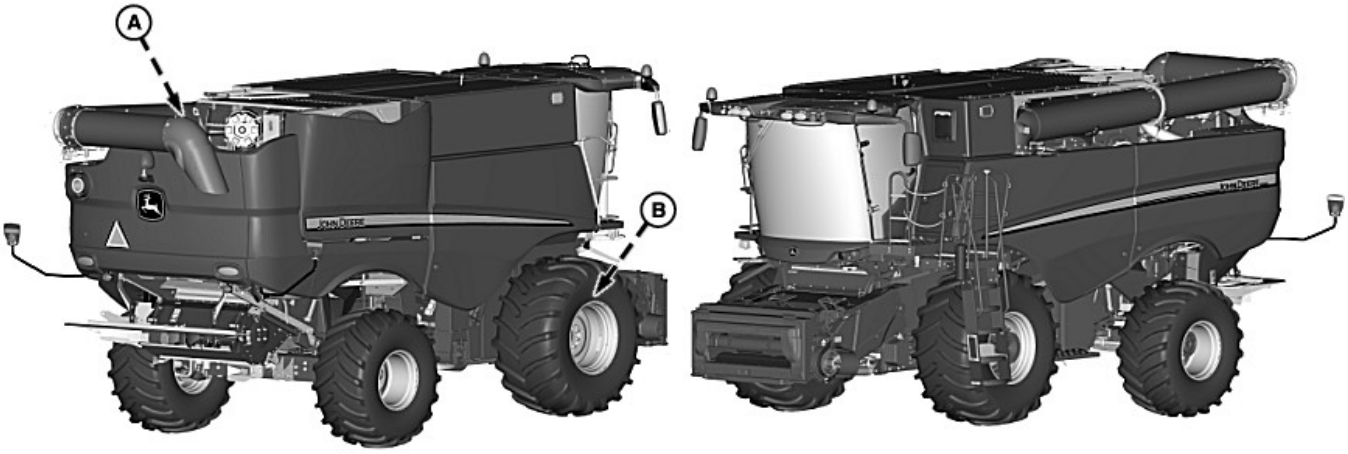
Tighten the hex head cap screw on the final drive coupler (both sides) to specification.

Specification	
Hex Head Cap Screw—Torque	10 N·m (89 lb·in)

OUO6075,0004ECC-19-09JUL20

HillMaster is a trademark of Deere & Company

Service Interval Chart—First 100 Hours



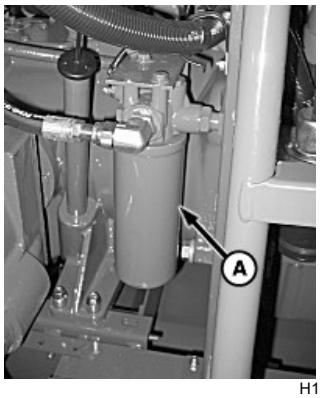
H119631—UN—13OCT16

Legend	Service	First 100 Hours
A	Replace Main Engine Gear Case Filter (S760 and S770 ProDrive™ Machines)	•
B	Replace Main Engine Gear Case Lube Filter (ProDrive™ Machines)	•

ProDrive is a trademark of Deere & Company

OUO6075,00046D2-19-28MAR17

Main Engine Gear Case Filter (S760 and S770 ProDrive™ Machines)



H115506—UN—27AUG15

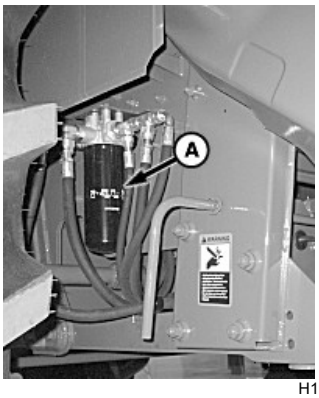
A—Filter

NOTE: It is not necessary to drain system when replacing filter.

Remove and replace filter (A). Coat seal on the filter with oil. Hand tighten, then tighten 1/2 turn more.

OUO6075,00046D3-19-28MAR17

Main Engine Gear Case Lube Filter (ProDrive™ Machines)



H115507—UN—27AUG15

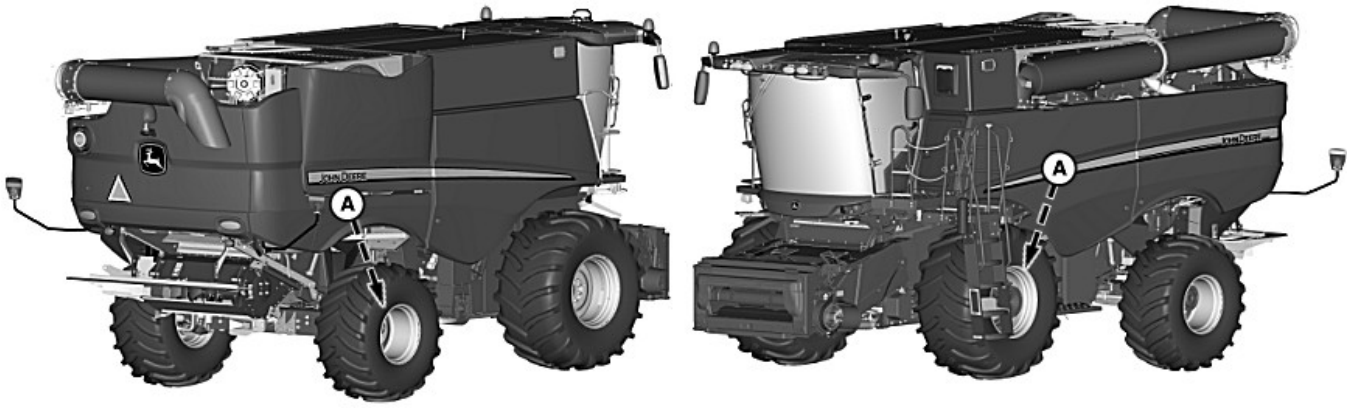
A—Filter

NOTE: It is not necessary to drain system when replacing filter.

Remove and replace filter (A). Coat seal on the filter with oil. Hand tighten, then tighten 1/2 turn more.

OUO6075,00046D4-19-28MAR17

Service Interval Chart—Every 100 Hours



H119634—UN—13OCT16

A—Tire Pressure and Bolt Locations

Legend	Service	Every 100 Hours
A	Check Tire Pressure and Bolt Torque	•

OUO6075,000441C-19-20DEC16

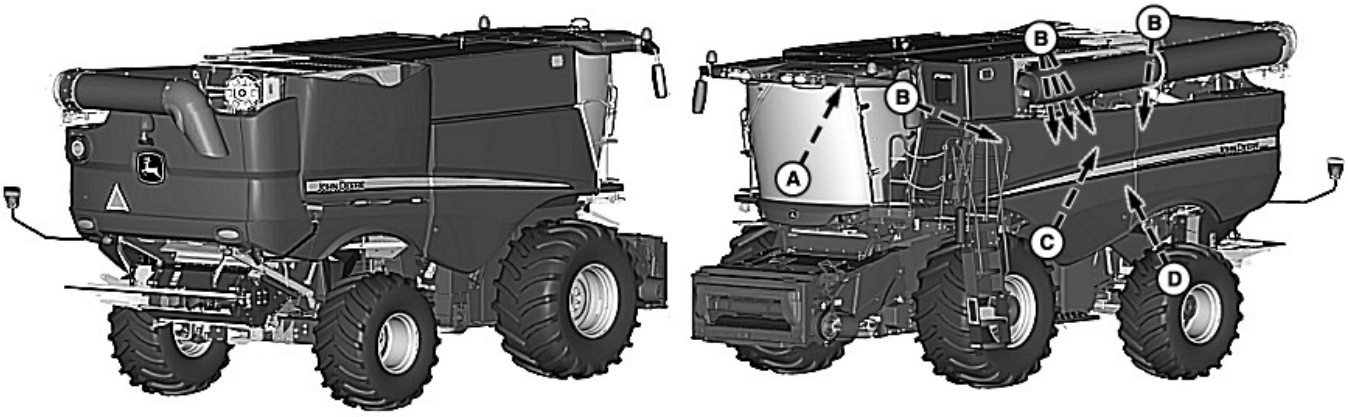
Tire Pressure and Bolt Torque

H115666—UN—28AUG15

Check front and rear tire pressure and wheel bolt torque. See Ground Drive and Rear Axle section for further information.

OUO6075,000441D-19-21DEC16

Service Interval Chart—Every 200 Hours



H119635—UN—13OCT16

Legend	Service	Every 200 Hours
A	Clean/Replace Recirculating Filter	•
B	Grease Primary Countershaft (Multi-Speed Feeder House on S770, S780, S785, and S790 Machines)	•
C and D	Grease Separator Variable Speed Driven/Driver Sheaves (S760 and S770 Machines)	•

OUO6075,00045E0-19-13FEB17

Recirculating Filter

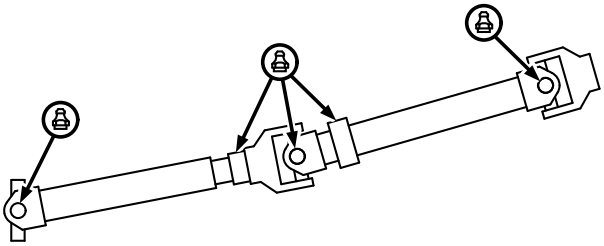
H115668—UN—28AUG15

A—Recirculating Filter

Remove cover to clean or replace recirculating filter (A).

OUO6075,000441F-19-21DEC16

Primary Countershaft (Multi-Speed Feeder House on S770, S780, S785, and S790 Machines)



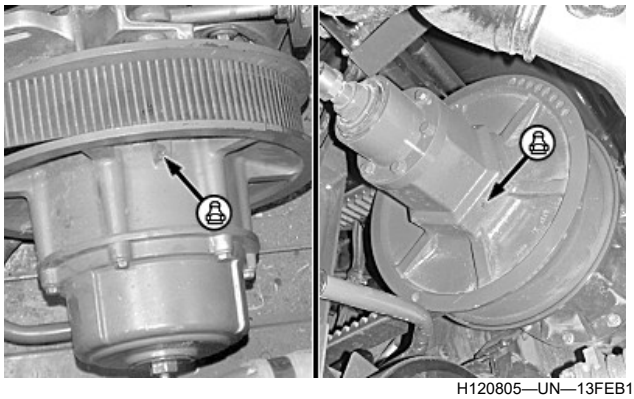
H119656—UN—17OCT16

NOTE: Machines not equipped with the multi-speed feeder house have one grease fitting and should be greased every 400 hours.

Rotate to access five fittings and grease.

OUO6075,00044B8-19-21DEC16

Separator Variable Speed Driven/Driver Sheaves (S760 and S770 Machines)



H120805—UN—13FEB17

Driven Sheaves / Driver Sheaves

NOTE: On S770 machines equipped with the optional large diameter driver sheave, the fitting MUST be greased every 50 hours.

IMPORTANT: Separator Variable Speed Driven and Driver Sheaves: Pump 20—25 shots of grease into fitting. DO NOT OVER GREASE.

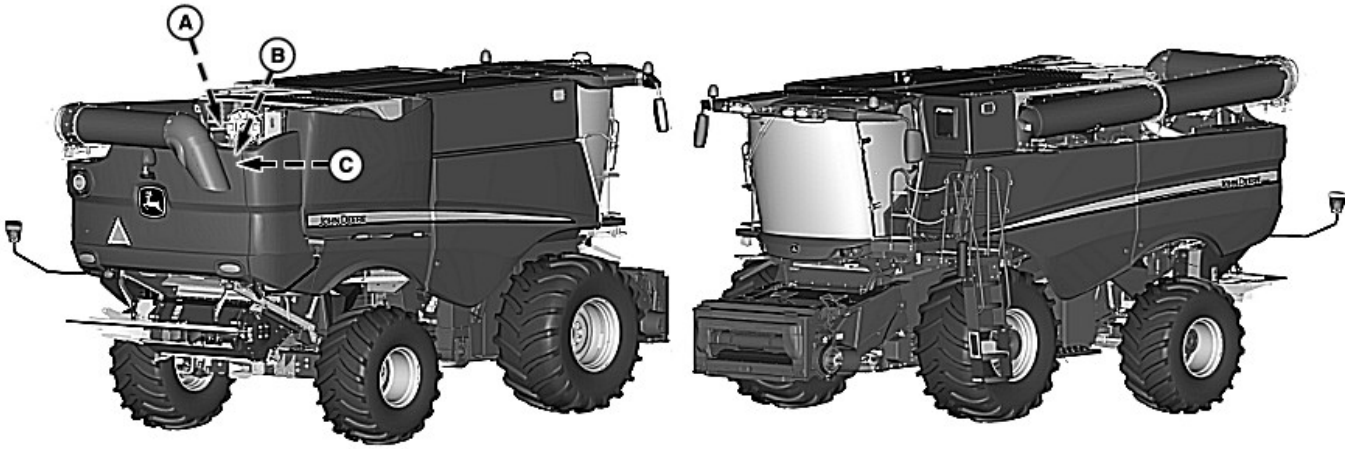
Separator Variable Speed Driven Sheaves: Rotate sheaves to access fitting.

NOTE: Start machine and cycle separator through full speed range a couple of times to distribute grease evenly.

Separator Variable Speed Driver Sheaves: Close sheaves (high speed) before greasing fitting on the outer sheave hub. Rotate sheave to access fitting. Cycle cylinder speed to distribute grease if operated at high speed all the time.

OUO6075,00045DB-19-20MAR17

Service Interval Chart—Every 250 Hours

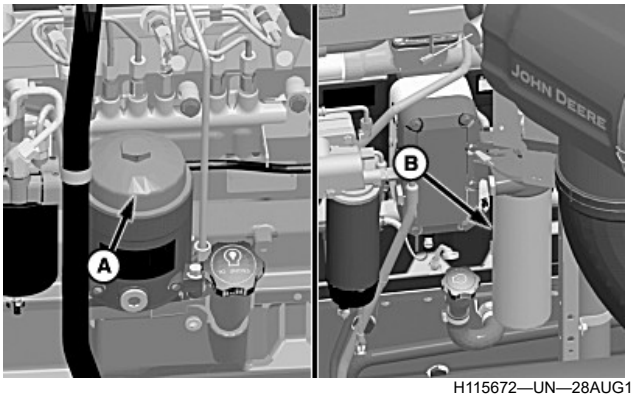


H119636—UN—14OCT16

Legend	Service	Every 250 Hours
A	Change Engine Oil and Filter (Tier 2/Stage II) Change Engine Oil and Filter (Final Tier 4/Stage V)	•
B	Inspect Fuel Tank Breather	•
C	Inspect Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V)	•

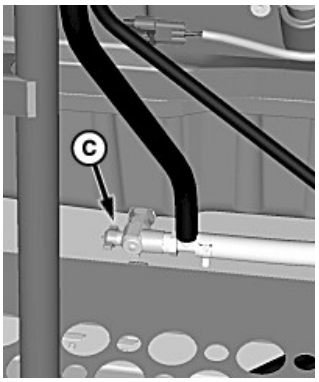
OUO6075,00047ED-19-15NOV17

Engine Oil and Filter (Tier 2/Stage II)

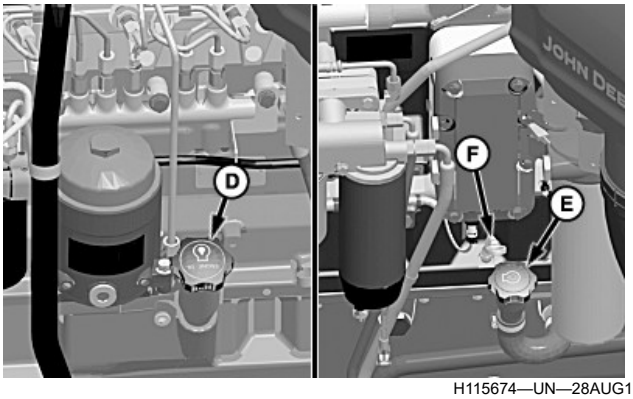


H115672—UN—28AUG15

Style A / Style B



H115673—UN—28AUG15



H115674—UN—28AUG15

Style A / Style B

A—Cap
B—Oil Filter
C—Drain
D—Dipstick
E—Cap
F—Dipstick

IMPORTANT: Change oil every 100 hours if fuel with a high sulfur content is used. See Fuels and Lubricants section for further information on sulfur content.

Fill crankcase with seasonal viscosity grade oil or Torq-Gard™ (250 hours service interval). If using John Deere Plus-50™ or Plus-50™ II engine oil and a John Deere filter, service interval can be extended by 50 percent. Example: 250 hours extends to 375 hours.

1. **Style A:** Engine Crankcase Top Load Oil Filter: Remove cap (A) and remove filter. Replace filter and install cap. Tighten to specification.

Specification

Oil Filter Cap—Torque. . . . . 40 N·m (30 lb·ft)

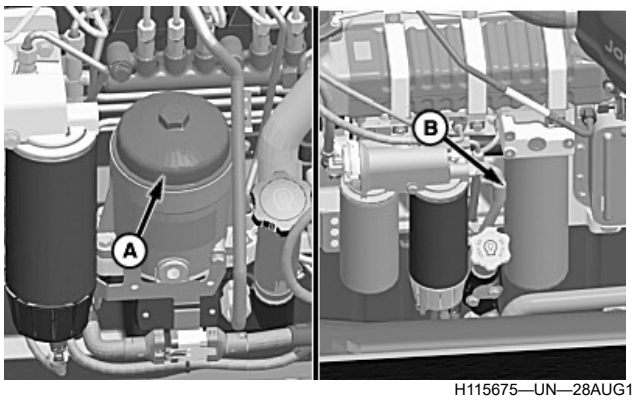
Style B: Engine Crankcase Oil Filter: Remove and replace oil filter (B).

2. Open drain (C) to remove oil.
3. **Style A:** Engine Crankcase Top Load Oil Filter: Remove dipstick (D) to fill and check oil level after filling.

Style B: Engine Crankcase Oil Filter: Remove cap (E) to fill and check oil with dipstick (F) after filling.

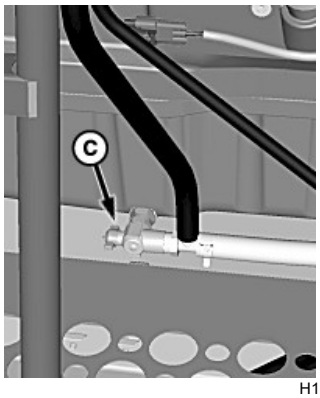
OUO6075,00044BA-19-25JAN17

Engine Oil and Filter (Final Tier 4/Stage V)

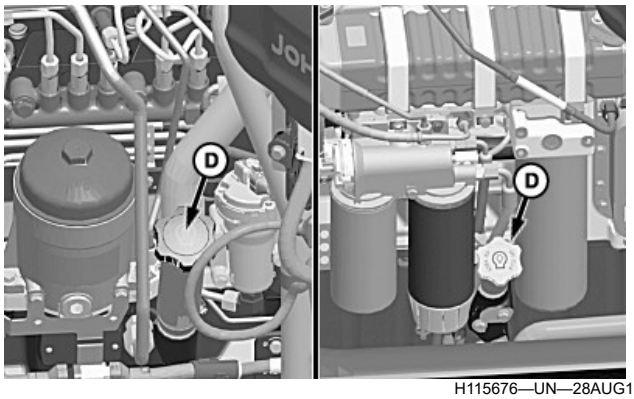


H115675—UN—28AUG15

Style A / Style B



H115673—UN—28AUG15



H115676—UN—28AUG15

A—Cap
B—Oil Filter
C—Drain
D—Dipstick

IMPORTANT: Change oil every 250 hours when using other engine oils as specified in Fuels and Lubricants section.

Change oil every 400 hours when using John Deere Plus-50™ II engine oil and a John Deere filter. See Fuels and Lubricants section for further information.

Final Tier 4/Stage V engines require Plus-50™ II engine oil or a API CK-4, API CJ-4, ACEA E9, ACEA E6 certified oils.

Torq-Gard is a trademark of Deere & Company
Plus-50 is a trademark of Deere & Company

Use only ultra low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

1. **Style A:** Engine Crankcase Top Load Oil Filter: Remove cap (A) and remove filter. Replace filter and install cap. Tighten to specification.

Specification

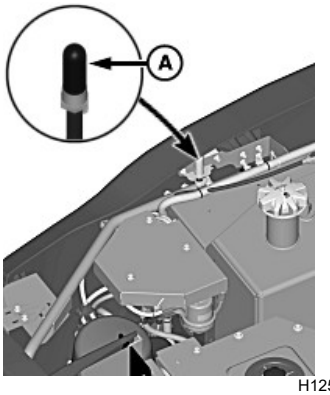
Oil Filter Cap—Torque. . . . . 40 N·m (30 lb·ft)

Style B: Engine Crankcase Oil Filter: Remove and replace oil filter (B).

2. Open drain (C) to remove oil.
3. Remove dipstick (D) to fill and check oil level after filling.

OUO6075,00047EE-19-13NOV17

Fuel Tank Breather



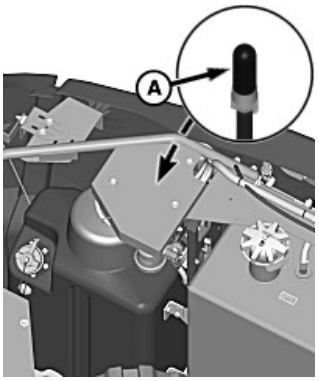
H125430—UN—04DEC18

A—Fuel Tank Breather

Visually inspect fuel tank breather (A). Do not allow debris to collect on breather. Remove breather from hose and clean.

OUO6075,0004A5E-19-04DEC18

Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V)



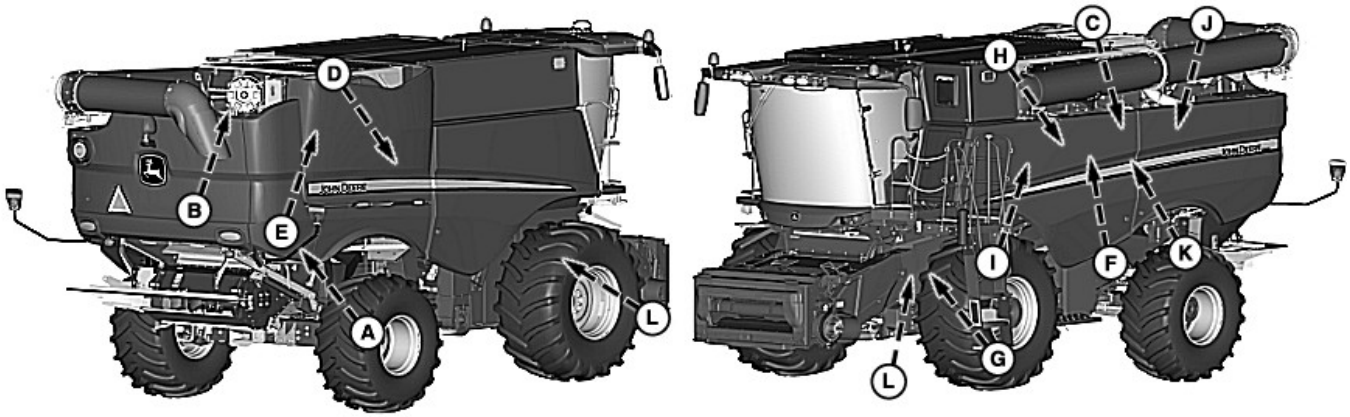
H125431—UN—04DEC18

A—Diesel Exhaust Fluid (DEF) Tank Breather

Visually inspect Diesel Exhaust Fluid (DEF) tank breather (A). Do not allow debris to collect on breather. Remove breather from hose and clean.

OUO6075,0004A5F-19-04DEC18

Service Interval Chart—Every 400 Hours

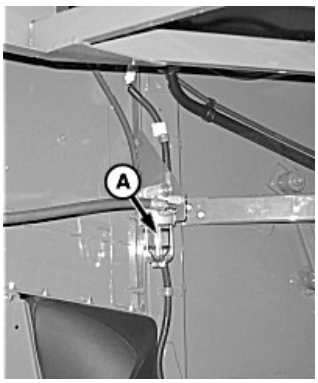


H119653—UN—17OCT16

Legend	Service	Every 400 Hours
A	Clean Fuel Precleaner Filter	•
B	Check Water Separator (S780, S785, and S790 Machines) Replace Primary and Secondary Fuel Filter	•
C, D, E	Grease Variable Speed Driver/Driven Sheaves (Final Tier 4/Stage V S760 and S770 Machines)	•
F	Grease Unloading Auger Upper Gear Case	•
G	Grease Header/Reel Drive Pump Sheave Bearing	•
H	Grease Primary Countershaft Universal Joint Spline (Non-Multi-Speed Feeder House)	•
I	Grease Vertical Unloading Auger Upper Gear Case (S780, S785, and S790 Machines)	•
J	Grease Chopper/Unloading Driveshaft Bearing	•
K	Grease Variable Speed Driver Sheave	•
L	Grease Feed Accelerator Bearings	•

OUO6075,00047F1-19-13NOV17

Fuel Precleaner Filter



H115657—UN—28AUG15

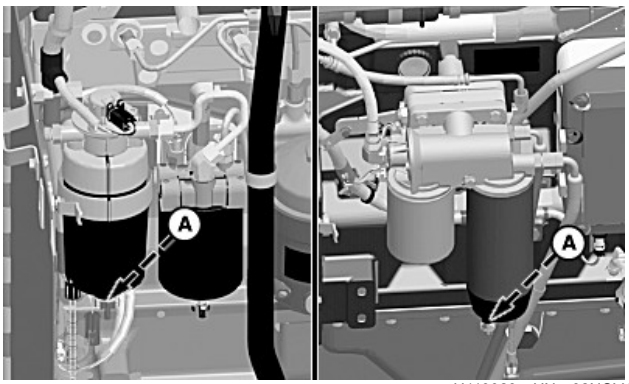
A—Fuel Precleaner Filter

CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work on the fuel filter.

1. Close the fuel tank shutoff valve.
2. Remove fuel precleaner filter (A) and clean screen.
3. Install screen and filter. Open fuel tank shutoff valve to fill. See Maintenance—As Required (Engine Fluids and Filters) section for further information.

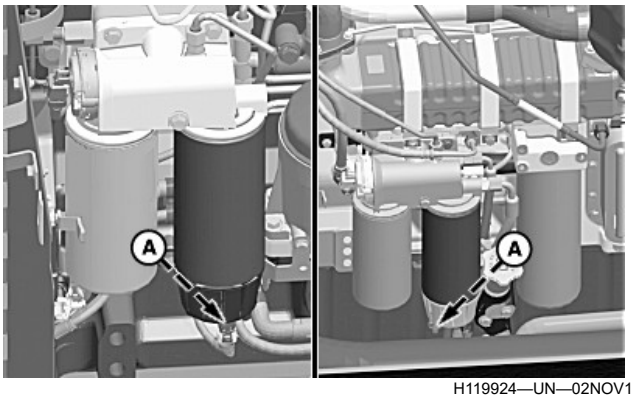
OUO6075,0004428-19-17JAN17

Water Separator



H119923—UN—02NOV16

Tier 2/Stage II (Style A / Style B)



H119924—UN—02NOV16

Final Tier 4/Stage V (Style A / Style B)

A—Drain

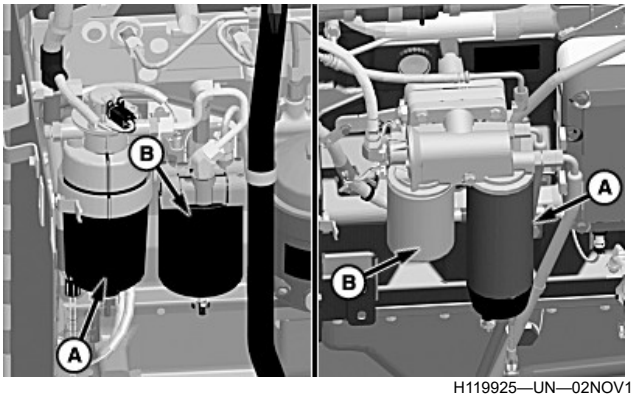
Check water separator (A) for water or when diagnostic trouble code is generated.

Open drain to remove water form separator. See Maintenance—As Required (Engine Fluids and Filters) section for further information.

Remove and retain water separator.

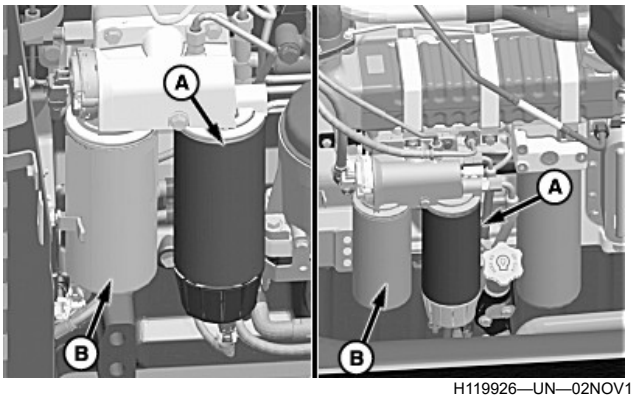
OUO6075,00047F3-19-13NOV17

Primary and Secondary Fuel Filter



H119925—UN—02NOV16

Tier 2/Stage II (Style A / Style B)



H119926—UN—02NOV16

Final Tier 4/Stage V (Style A / Style B)

A—Primary Fuel Filter
B—Secondary Fuel Filter

CAUTION: High-pressure fluid remaining in fuel lines can cause serious injury. Before disconnecting fuel lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system, wait a minimum of 15 minutes after engine is stopped.

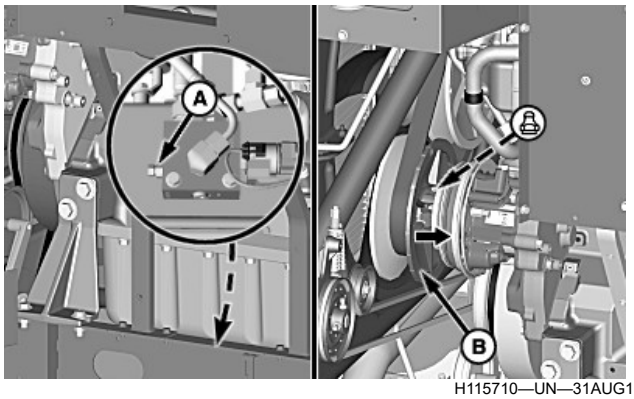
Shut OFF engine, set park brake and remove key before performing maintenance work on the fuel filter.

1. Primary Fuel Filter:
   a. Close fuel tank shutoff valve.
   b. Remove and replace primary fuel filter (A) when performance decline is noticed or diagnostic trouble code is generated.
   c. Disconnect water sensor (if equipped)
   d. Remove fuel from the filter and discard.
   e. Install replacement primary fuel filter.
   f. Open fuel tank shutoff valve, and turn key switch ON to prime the fuel system. See Maintenance —As Required (Engine Fluids and Filters) section for further information.
2. Secondary Fuel Filter:
   a. Close fuel tank shutoff valve.
   b. Remove and replace secondary fuel filter (B) when performance decline is noticed or diagnostic trouble code is generated.
   c. Remove fuel from the filter and discard.
   d. Install replacement secondary fuel filter.
   e. Open fuel tank shutoff valve, and turn key switch ON to prime the fuel system. See Maintenance

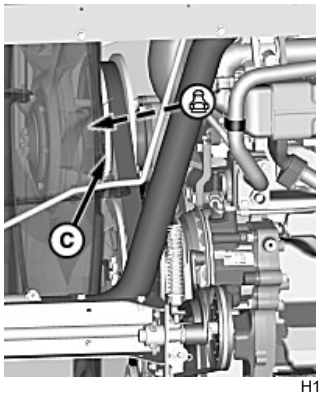
—As Required (Engine Fluids and Filters) section for further information.

OUO6075,00047F5-19-13NOV17

Variable Speed Driver/Driven Sheaves (Final Tier 4/Stage V) (S760 and S770 Machines)



H115710—UN—31AUG15



H115711—UN—31AUG15

A—Bleed Screw
B—Driver Sheave
C—Driven Sheave

NOTE: Variable speed drive bleed valve and sheaves are accessible by opening separator access cover.

1. Variable Speed Drive Bleed Valve - Loosen bleed screw (A) to relieve pressure from sheaves.

IMPORTANT: Inner driver sheave must be fully retracted to obtain proper amount of lubrication.

Sheave movement range can be impaired if sheaves are not fully separated.

2. Variable Speed Driver Sheave - Locate grease fitting on the driver sheave (B). Pull driver sheave towards the engine until completely open. Grease fitting 10—12 pumps. Excess grease purges from the front side of the driver sheave.

IMPORTANT: Driven sheaves must be fully closed to obtain proper amount of lubrication.

Sheave movement range can be impaired if sheaves are not fully closed.

3. Variable Speed Driven Sheave - Locate grease fitting on driven sheave (C). Push driven sheaves together until they are completely closed. Grease fitting 10—12 pumps. Excess grease purges from the front side of the driven sheave.

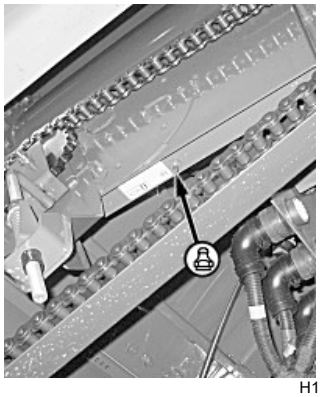
   Tighten bleed screw and nut on the valve to specification.

Specification

Bleed Screw and Nut—Torque. . . . . 23 N·m (17 lb·ft)

OUO6075,00047F6-19-13NOV17

Unloading Auger Upper Gear Case

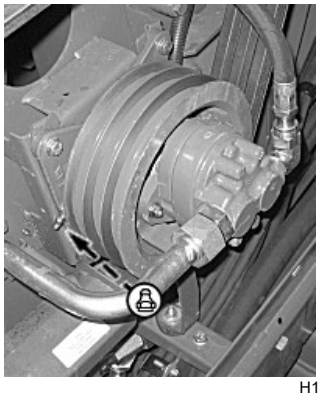


H115712—UN—31AUG15

Grease the fitting.

OUO6075,000468D-19-28MAR17

Header/Reel Drive Pump Sheave Bearing



H115713—UN—31AUG15

Grease the fitting.

OUO6075,000468E-19-20MAR17

Primary Countershaft Universal Joint Spline (Non-Multi-Speed Feeder House)

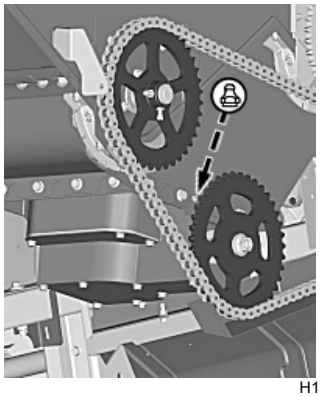
H115714—UN—31AUG15

NOTE: Machines equipped with multi-speed feeder house drive have five grease fittings.

Rotate to access fitting and grease.

OUO6075,000442F-19-17JAN17

Vertical Unloading Auger Upper Gear Case (S780, S785, and S790 Machines)



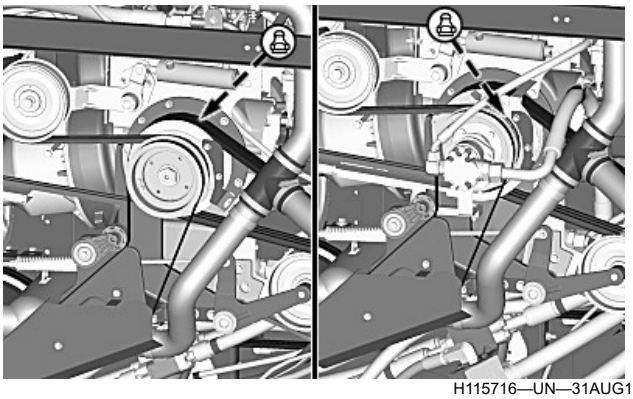
H115715—UN—31AUG15

IMPORTANT: Pump 10 shots of grease into fitting.

Grease the fitting.

OUO6075,000468F-19-28MAR17

Chopper/Unloading Driveshaft Bearing



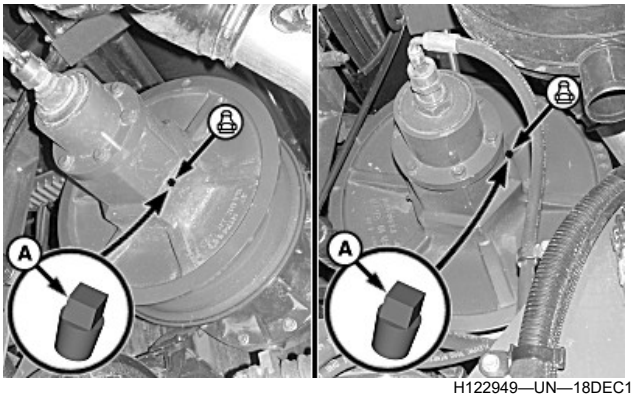
H115716—UN—31AUG15

Style A / Style B

Rotate sheave to access fitting on bottom of the sheave groove, and grease the fitting.

OUO6075,0004690-19-20MAR17

Variable Speed Driver Sheave



H122949—UN—18DEC17

Driver Sheaves (Small Diameter) / Driver Sheaves (Large Diameter)

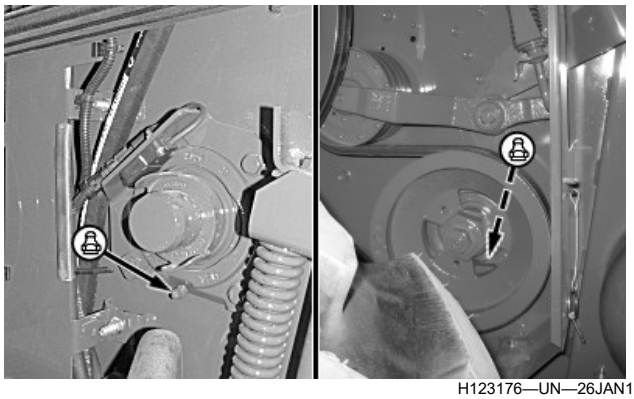
A—Pipe Plug

IMPORTANT: Remove pipe plug (A) and install grease fitting. Pump 40—45 shots of grease into fitting. DO NOT OVER GREASE. Remove grease fitting and reinstall pipe plug.

1. Close sheaves (high speed) before greasing at pipe plug in the outer sheave hub.
2. Rotate sheave for pipe plug access.
3. Cycle cylinder speed to distribute grease if operated at high speed all the time.

OUO6075,0004862-19-18DEC17

Feed Accelerator Bearings



H123176—UN—26JAN18

Left-Hand Side / Right-Hand Side

Rotate sheaves to access and grease fittings.

OUO6075,000488A-19-26JAN18

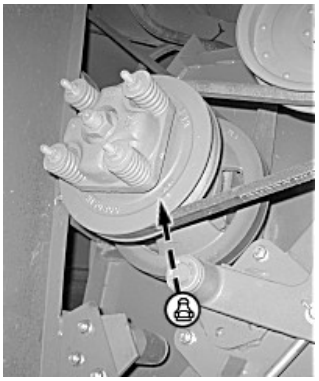
Service Interval Chart—Every 400 Hours (Continued)

H119654—UN—17OCT16

Legend	Service	Every 400 Hours
A	Grease Tailings Auger Drive Slip Clutch (S760 and S770 Machines)	•
B	Grease Conveyor Auger Drive Slip Clutch	•
C	Grease Right-Hand Side Lube Bank	•
D	Grease Overshot Beater Bearings (Optional) (S770, S780, S785, and S790 Machines)	•
E	Grease Discharge Beater Bearings	•
F	Grease Cleaning Fan Shaft Bearings	•
G	Grease Rear Axle Tie Rod	•
H	Grease Spreader Disk (If Equipped)	•
I	Check Overshot Beater Gear Case Oil (Optional) (S770, S780, S785, and S790 Machines)	•
J	Check Separator Drive Oil	•
K	Check Final Drive Oil	•

OUO6075,00049BA-19-30MAY18

Tailings Auger Drive Slip Clutch (S760 and S770 Machines)



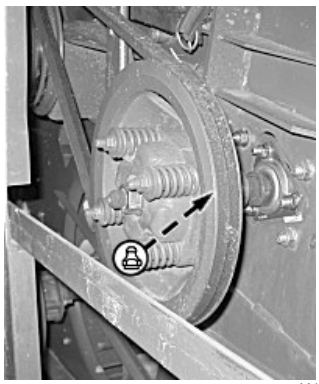
H115720—UN—31AUG15

IMPORTANT: Do not over grease.

Rotate sheave assembly to access fitting.

OUO6075,0004433-19-17JAN17

Conveyor Auger Drive Slip Clutch



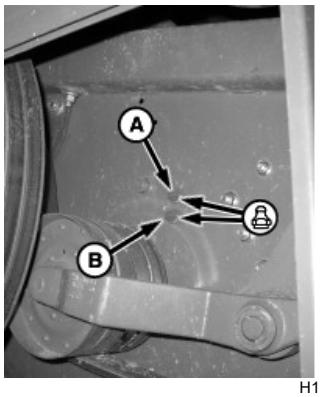
H115721—UN—31AUG15

IMPORTANT: Do not over grease.

Rotate sheave assembly to access fitting.

OUO6075,0004434-19-17JAN17

Right-Hand Side Lube Bank



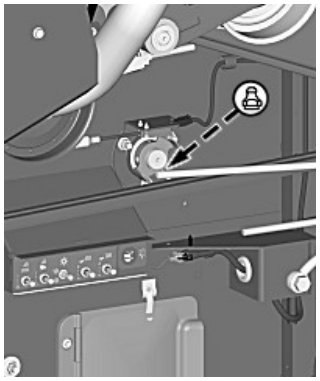
H115722—UN—31AUG15

A—Primary Countershaft Bearing
B—Separator Bearing

Grease fittings to lubricate primary countershaft bearing (A) and separator bearing (B).

OUO6075,0004435-19-17JAN17

Overshot Beater Bearings (Optional) (S770, S780, S785, and S790 Machines)

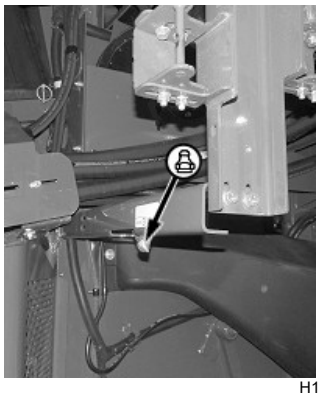


H123397—UN—09FEB18

Grease the fitting (both sides).

OUO6075,00048A7-19-09FEB18

Discharge Beater Bearings

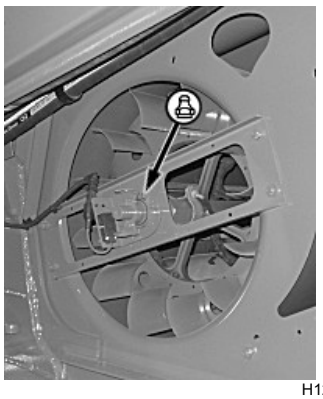


H115724—UN—31AUG15

Grease the fitting (both sides).

OUO6075,0004693-19-21MAR17

Cleaning Fan Shaft Bearings



H123398—UN—09FEB18

Grease the fitting (both sides).

OUO6075,00048A8-19-09FEB18

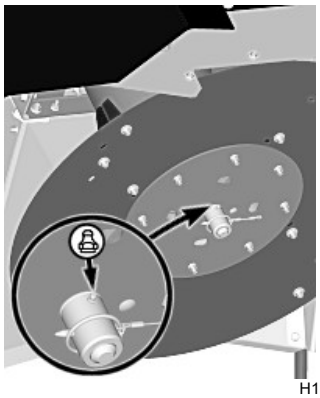
Rear Axle Tie Rod

H115726—UN—31AUG15

Grease the fitting (both sides) on power steering rod end ball joint.

OUO6075,0004695-19-21MAR17

Spreader Disk (If Equipped)

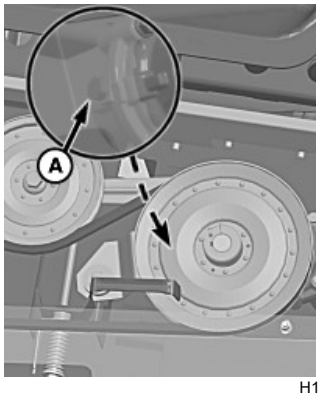


H115727—UN—31AUG15

Grease the fitting (both sides) to prevent hubs from corroding to shafts.

OUO6075,0004696-19-21MAR17

Overshot Beater Gear Case Oil (Optional) (S770, S780, S785, and S790 Machines)



H115728—UN—31AUG15

A—Plug

Remove plug (A) and check oil level. Add oil as needed.

OUO6075,00046D6-19-28MAR17

Separator Drive Oil

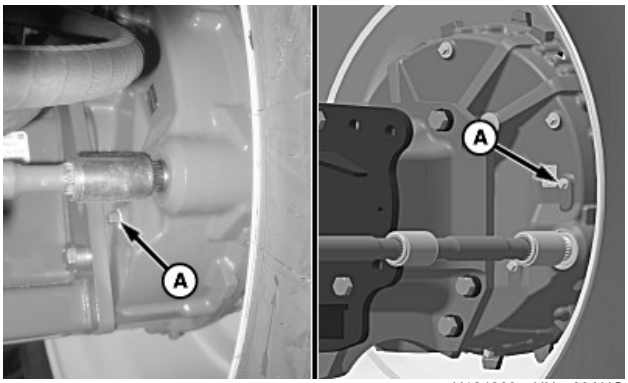
H115729—UN—31AUG15

A—Dipstick

Remove dipstick (A) and check oil level. Oil level should be between grooves on dipstick. Add oil as needed.

OUO6075,000443C-19-17JAN17

Final Drive Oil



H124880—UN—09AUG18

Single Tire Configuration and HillMaster™ (Left) / Dual Tire Configuration (Right)

A—Plug

IMPORTANT: HillMaster™ Machines: When checking final drive oil level, warn bystanders to stay clear of machine while leveling.

NOTE: HillMaster™ Machines: For oil level accuracy, final drives must be positioned so that final drive input shaft is on the same level as the axle driveshaft.

Remove plug (A) and check oil level (both sides). Oil

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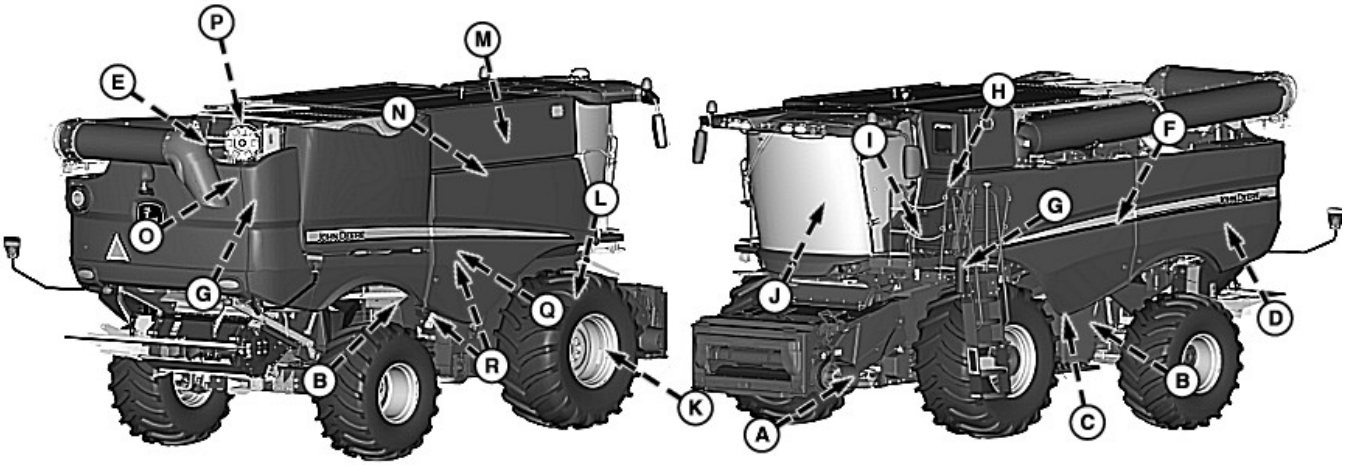
should be within 12 mm (1/2 in) of the bottom of the hole. Add oil as needed.

OUO6075,0004A17-19-15AUG18

Service Interval Chart—Every 400 Hours (Continued)



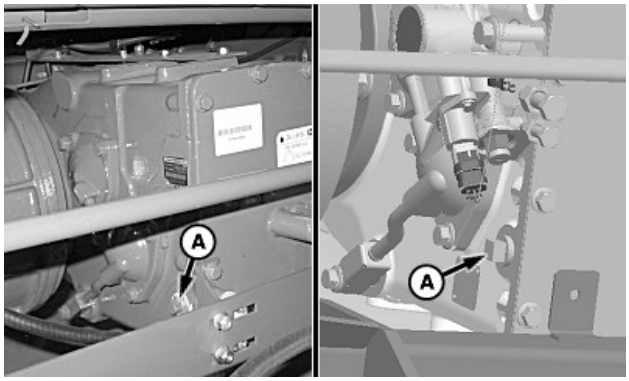
H130443—UN—04JUN20

Legend	Service	Every 400 Hours
A	Check Transmission Oil (S760 and S770 Non-ProDrive™ Machines) Verify Length of Park Brake Cylinder Cables (S760 and S770 Push-Button Shift Transmission Machines)	•
B	Service/Clean Batteries	•
C	Replace Hydraulic/Hydrostatic Filter (S760 and S770 Machines)	•
D	Replace Hydrostatic Charge Filter (S760 and S770 Non-ProDrive™ Machines) Replace Hydrostatic Charge Filter (S760 and S770 ProDrive™ Machines)	•
E	Replace Hydrostatic Charge Filter (S780, S785, and S790 ProDrive™ Machines) Replace Main Engine Gear Case Filter (S760 and S770 Non-ProDrive™ Machines) Replace Main Engine Gear Case Filter (S760 and S770 ProDrive™ Machines)	•
F	Check Engine Debris Management Air Filter (Final Tier 4/Stage V)	•
G	Inspect/Charge/Replace Fire Extinguishers	•
H	Check Primary Countershaft Gear Case Oil (Fixed Speed and Variable Speed Feeder House Drive)	•
I	Check Brake Fluid (S760 and S770 Non-ProDrive™ Machines)	•
J	Inspect Seat Belts	•
K	ProDrive™/Main Engine Gear Case Lube Filter (S760 and S770 ProDrive™ Machines) ProDrive™/Main Engine Gear Case Lube Filter (S780, S785, and S790 ProDrive™ Machines)	•
L	Grease Feeder House Slip Clutch	•
M	Clean Multi-Speed Feeder House Drive Gear Case (S770, S780, S785, and S790 Machines)	•
N	Check Loading Auger Gear Case Oil	•
O	Replace Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V) Replace Fuel Tank Breather	•
P	Check Air Filter Elements	•
Q	Remove and Clean Moisture Sensor (If Equipped)	•
R	Replace ActiveVision™ Clean Grain Elevator Camera and Tailings System Camera Desiccant Cartridge (If Equipped)[a]	•

ProDrive is a trademark of Deere & Company
ActiveVision is a trademark of Deere & Company
[a]*If the harvest season is complete, wait until the beginning of the next harvest season to extend the desiccant cartridge life.*

OUO6075,0004E5E-19-26JUN20

Transmission Oil (S760 and S770 Non-ProDrive™ Machines)



H115752—UN—02SEP15

Mechanical Shift / Push-Button Shift

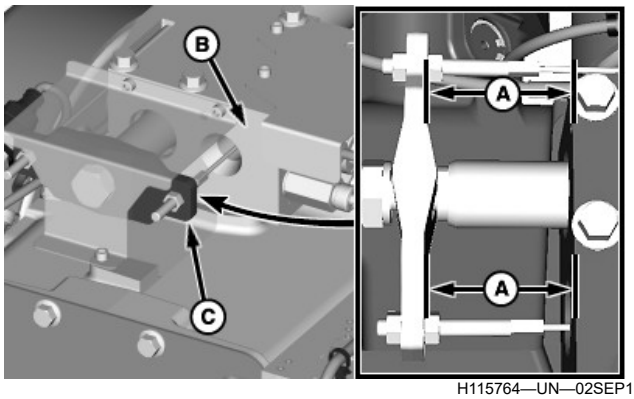
A—Plug

Remove plug (A) and check oil level.

Add oil as needed to within 12 mm (1/2 in) of bottom of hole.

OUO6075,000443F-19-17JAN17

Park Brake Cylinder Cables (S760 and S770 Push-Button Shift Transmission Machines)



H115764—UN—02SEP15

A—Distance
B—Actuator Housing
C—Balancer

NOTE: Engage park brake (piston extended—spring applied).

Measure and verify that distance (A) from the actuator housing (B) to balancer (C) on both sides is within specification.

Specification

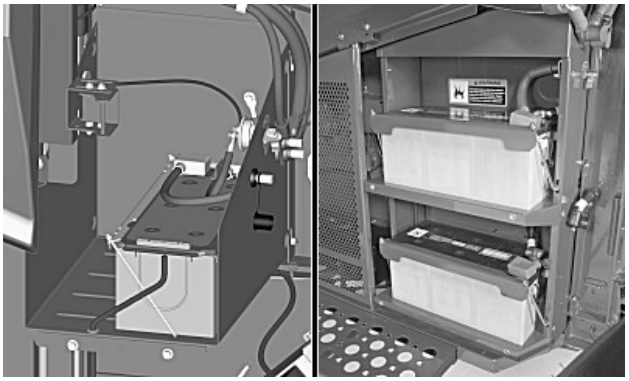
Park Brake Cable—Torque. . . . . 37-1/2 ± 2-1/2 mm (1-31/64 ± 3/32 in)

⚠ CAUTION: Park brake cylinder cables are under extreme pressure. Cables MUST be adjusted by your John Deere dealer.

If cables need adjusted, see your John Deere dealer.

OUO6075,0004440-19-17JAN17

Batteries



H125572—UN—22JAN19

Style A / Style B

NOTE: Batteries are on the right-hand side or the left-hand side depending on the machine model.

1. Clean top of the battery or batteries and check level in each cell.
2. Fill to bottom of the filler neck with distilled water if needed.
3. Clean battery posts, cables, and tighten connections as needed.

OUO6075,0004A99-19-11JAN19

Hydraulic/Hydrostatic Filter (S760 and S770 Machines)

H115753—UN—02SEP15

A—Filter

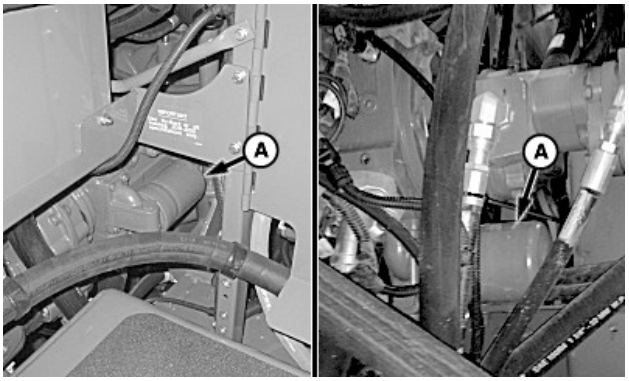
NOTE: It is not necessary to drain system when replacing filters.

1. Remove and replace filter (A).
2. Coat seal of the new filter with oil.

3. Install filter. Hand tighten, then tighten 1/2 turn more.

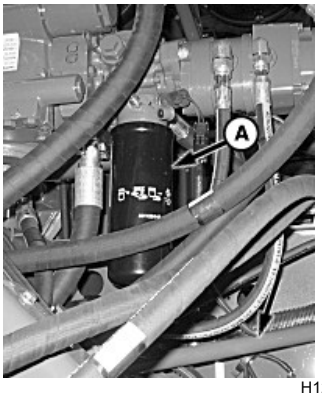
OUO6075,0004E01-19-13APR20

Hydrostatic Charge Filter



H121740—UN—12JUN17

Style A / Style B



H121741—UN—12JUN17

Style C

A—Filter

NOTE: Depending on machine configuration, style and location of hydrostatic charge filter varies.

It is not necessary to drain system when replacing filters.

1. Remove filter (A).
2. Replace filter and coat new seal with oil.
3. **Style A and Style B:** Hand tighten, then tighten to specification.

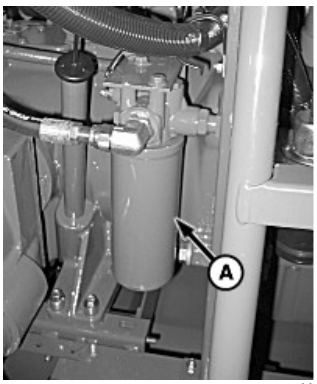
Specification

Hydrostatic Charge Filter—Torque. . . . . 45 N·m (33 lb·ft)

Style C: Hand tighten, then tighten 1/2 turn more.

OUO6075,0004E02-19-26JUN20

Main Engine Gear Case Filter



H115762—UN—02SEP15

A—Filter

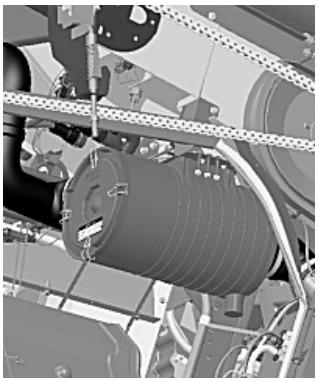
NOTE: Depending on machine configuration, main engine gear case filter is on different areas of the machine. See Service Interval Chart—Every 400 Hours (Continued) for further information.

It is not necessary to drain system when replacing filters.

1. Remove and replace filter (A).
2. Coat new seal on the filter with oil.
3. Install filter by hand tightening, then tighten 1/2 turn more.

OUO6075,00046D8-19-28MAR17

Engine Debris Management Air Filter (Final Tier 4/Stage V)



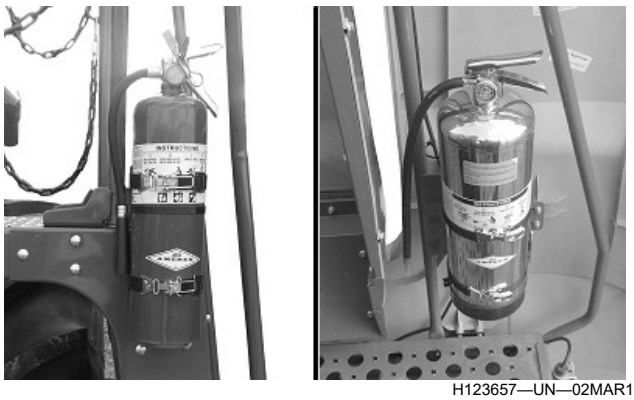
H115760—UN—02SEP15

IMPORTANT: When air filter restricted indicator is shown on display, service primary filter.

Check safety filter for plugging.

OUO6075,00047F9-19-15NOV17

Fire Extinguishers



H123657—UN—02MAR18

CAUTION: Inspect fire extinguisher straps and mounting hardware at least once a year. If fire extinguisher straps or mounting hardware shows any sign of damage or unusual wear, discoloration or abrasion, the entire strap and hardware must be replaced immediately. For your safety, replace fire extinguisher components with replacement parts approved for your machine. See your John Deere dealer.

Inspect fire extinguishers (front and rear) by following maintenance instructions on the fire extinguisher label.

Recharge or replace as necessary.

OUO6075,000490D-19-02MAR18

Primary Countershaft Gear Case Oil (Fixed Speed and Variable Speed Feeder House Drive)

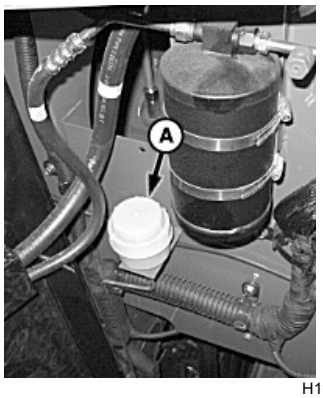
H115761—UN—02SEP15

A—Dipstick

Check primary countershaft gear case oil level with dipstick (A). Add oil as needed.

OUO6075,00046D9-19-29MAR17

Brake Fluid (S760 and S770 Non-ProDrive™ Machines)



H115754—UN—02SEP15

A—Reservoir Cap

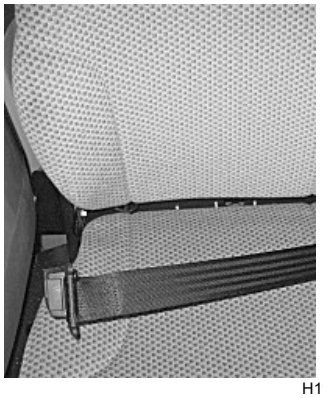
1. Look through the reservoir cap (A) and check brake fluid.

NOTE: Do not let dirt get into brake fluid.

2. Add brake fluid to 6 mm (1/4 in) from top.

OUO6075,0004449-19-16JAN17

Seat Belts



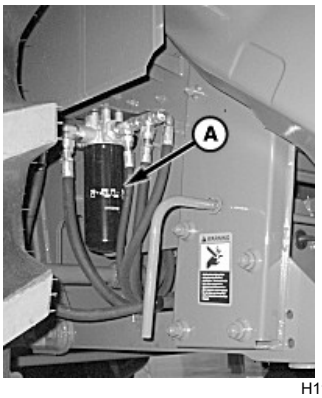
H115757—UN—02SEP15

CAUTION: Inspect seat belt and mounting hardware at least once a year. If seat belt system, including mounting hardware, buckle, belt, or retractor, shows any sign of damage or unusual wear, discoloration or abrasion, the entire seat belt should be replaced immediately. For your safety, replace seat belt system with replacement parts approved for your machine. See your John Deere dealer.

Inspect seat belt for damage.

OUO6075,0004698-19-21MAR17

ProDrive™/Main Engine Gear Case Lube Filter (ProDrive™ Machines)



H115763—UN—02SEP15

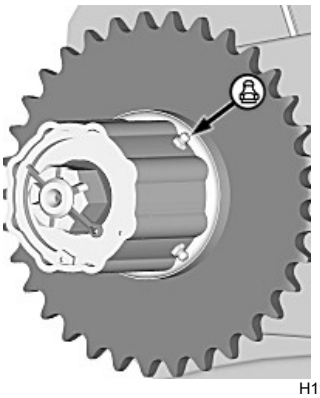
A—Filter

NOTE: It is not necessary to drain system when replacing filters.

1. Remove and replace filter (A).
2. Coat new seal on the filter with oil.
3. Install filter by hand tightening, then tighten 1/2 turn more.

OUO6075,00046DA-19-28MAR17

Feeder House Slip Clutch

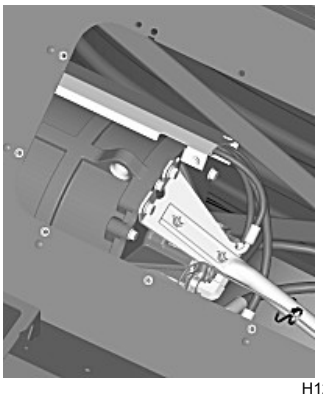


H115747—UN—01SEP15

Grease fitting on the upper feeder house slip clutch, until grease is forced out past seal.

OUO6075,000444C-19-16JAN17

Multi-Speed Feeder House Drive Gear Case (S770, S780, S785, and S790 Machines)



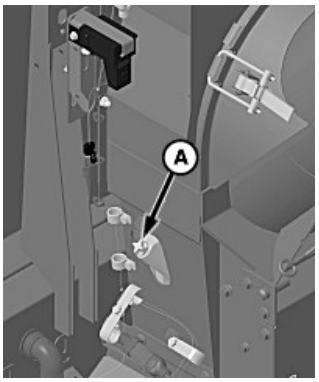
H125585—UN—17JAN19

CAUTION: Dirt, oil, chaff, and crop debris in this area are all fire hazards. Direction of wind, type of crop, and crop moisture content can all have effects on where and how much chaff and debris accumulate. Do not clean area with engine running.

1. Remove storage rack (if equipped) on the front of the grain tank.
2. Remove access door on the front of the grain tank.
3. Clean out material around the multi-speed feeder house drive gear case.
4. Install the access door and storage rack (if equipped).

OUO6075,0004E94-19-17JUN20

Loading Auger Gear Case Oil



H123565—UN—22FEB18

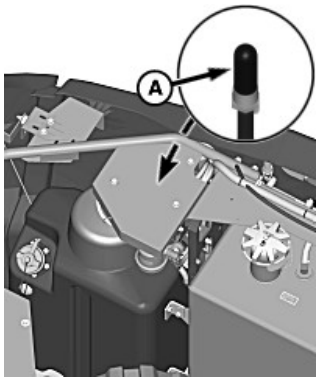
A—Dipstick

NOTE: Loading auger gear case does not need drained.

Check oil level with dipstick (A) and add oil as needed.

OUO6075,00048BF-19-22FEB18

Diesel Exhaust Fluid (DEF) Tank Breather (Final Tier 4/Stage V)



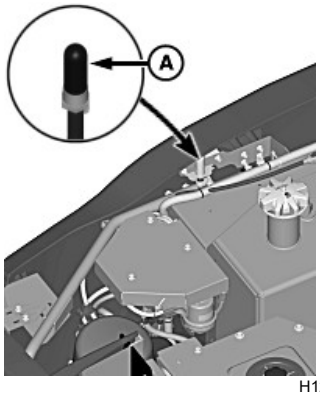
H125431—UN—04DEC18

A—Diesel Exhaust Fluid (DEF) Tank Breather

Remove and replace the Diesel Exhaust Fluid (DEF) tank breather (A).

OUO6075,0004A60-19-04DEC18

Fuel Tank Breather



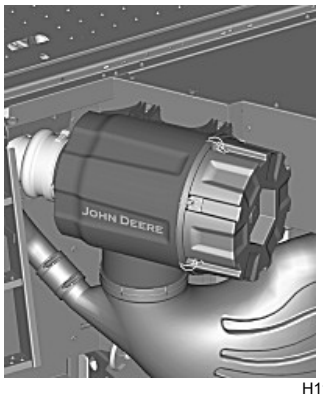
H125430—UN—04DEC18

A—Breather

Remove and replace the fuel tank breather (A).

OUO6075,0004A61-19-04DEC18

Air Filter Elements



H115759—UN—02SEP15

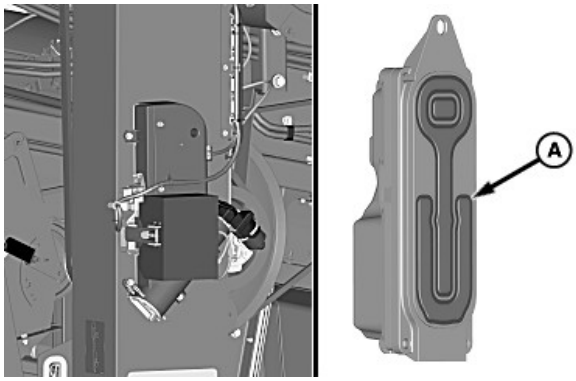
IMPORTANT: When engine air filter restricted indicator is shown on display, service primary air filter.

Check safety filter for plugging.

Check for leaks and for collapse of aspirator tube.

OUO6075,0004451-19-16JAN17

Moisture Sensor (If Equipped)



H125315—UN—06NOV18

A—Moisture Sensor

IMPORTANT: Static electricity can damage to the moisture sensor module. To avoid damage, ensure that a metal surface is touched on the machine with at least one hand or arm before working on or cleaning.

The moisture sensor has internal components, which can loosen when dropped and is not immediately detectable. Handle the moisture sensor with care when working on or cleaning.

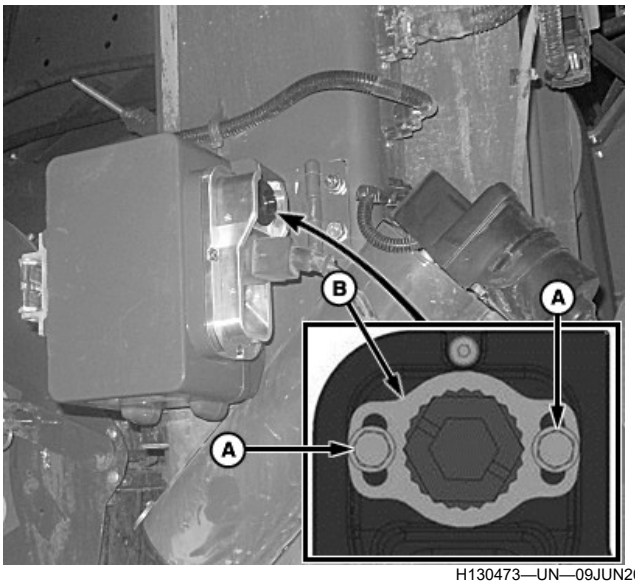
Remove and clean the moisture sensor (A) when operating in weeds, green crops, or small grains (canola).

- Do not use solvents or other cleaners on the sensor face.
- A dry rag is preferred for cleaning. If that does not work, then scrub with just a rag and water.
- Do not power wash the moisture sensor face.

Install moisture sensor and perform a Moisture Sensor calibration. See Calibrations Application Help or Operator's Station Help for further information.

OUO6075,0004A44-19-08NOV18

ActiveVision™ Camera Desiccant Cartridge (If Equipped)



H130473—UN—09JUN20

A—Cap Screw (2 used)
B—Retainer Plate

CAUTION: Shut OFF engine, set park brake, and remove key.

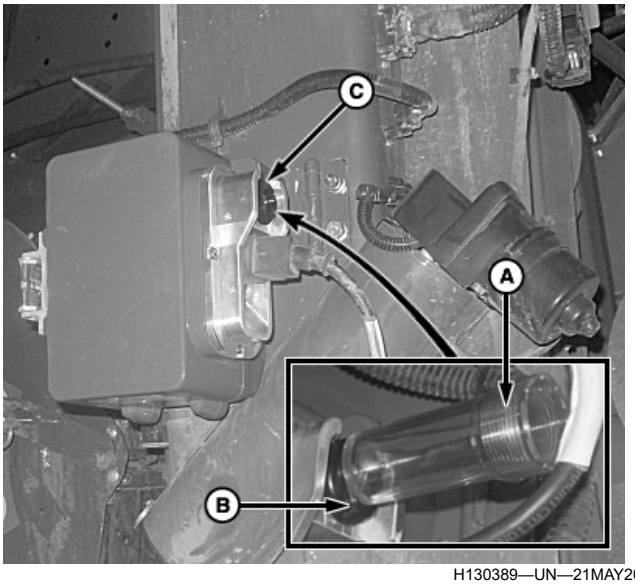
IMPORTANT: Crop material and other debris may accumulate around the desiccant cartridge. Inspect and clean the area around the desiccant cartridge before removing.

NOTE: The ActiveVision™ clean grain elevator camera is shown. The ActiveVision™ tailings system camera is similar.

Replace the desiccant cartridge as needed when the moisture buildup is visible on the interior of the camera lens.

If the harvest season is complete, wait until the beginning of the next harvest season to extend the desiccant cartridge life.

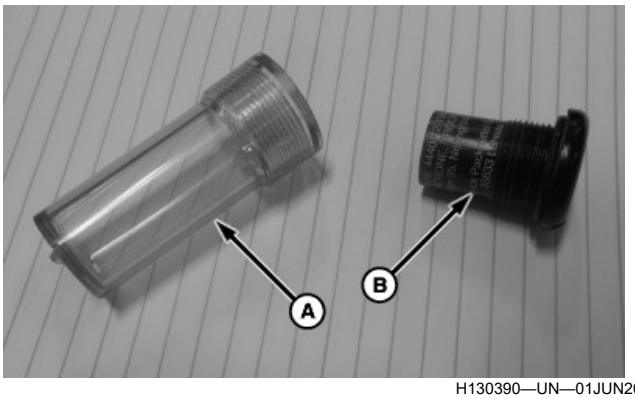
1. Remove cap screws (A) and retainer plate (B).



H130389—UN—21MAY20

A—Desiccant Container (tool)
B—Notch
C—Desiccant Cartridge

2. Align the desiccant container (A) that was included with the replacement desiccant cartridge with notch (B).
3. Remove the desiccant cartridge (C) from the ActiveVision™ camera.
4. Discard the desiccant cartridge.



H130390—UN—01JUN20

Desiccant Container (tool) and Desiccant Cartridge

A—Desiccant Container (tool)
B—Desiccant Cartridge

5. Remove the desiccant container (A) from the replacement desiccant cartridge (B).
6. Install the desiccant cartridge into the ActiveVision™ camera.
7. Align the desiccant tool with the notch.
8. Tighten the desiccant cartridge until it is hand-tight.

NOTE: Verify that the retainer plate fits the hexagon form of the desiccant cartridge.

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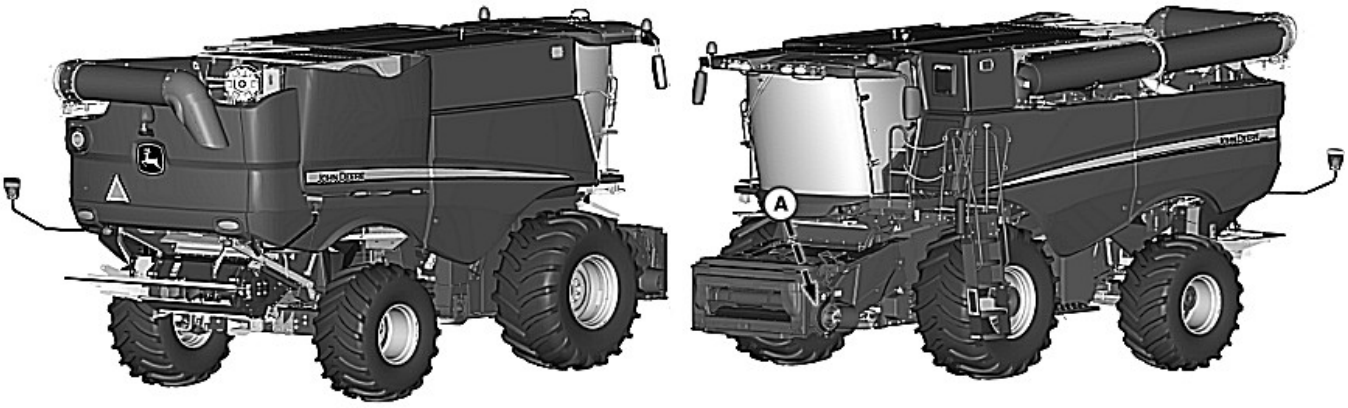
9. Install the retainer plate over the desiccant cartridge and retain with cap screws.
10. Tighten the cap screws to specification.

Specification	
Cap Screws—Torque	6.8 N·m (60 lb·in)

OUO6075,0004E5D-19-26JUN20

Service Interval Chart—Every 800 Hours

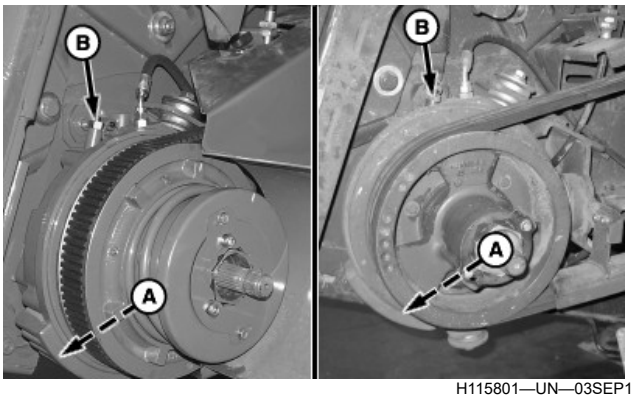


H119640—UN—13OCT16

Legend	Service	Every 800 Hours
A	Change Feeder House Reverser Gear Case Oil	•

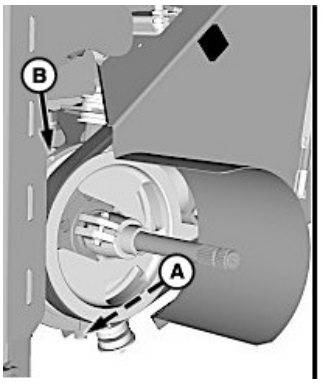
OUO6075,00046DD-19-28MAR17

Feeder House Reverser Gear Case



H115801—UN—03SEP15

Variable Speed / Multi-Speed Reverser Gear Case



H115802—UN—03SEP15

Fixed Speed

A—Plug
B—Dipstick

1. Raise feeder house and lower safety stop.

NOTE: See Fuels and Lubricants section for oil recommendations.

2. Drain oil at plug (A), wipe plug clean and refill dipstick opening (B).

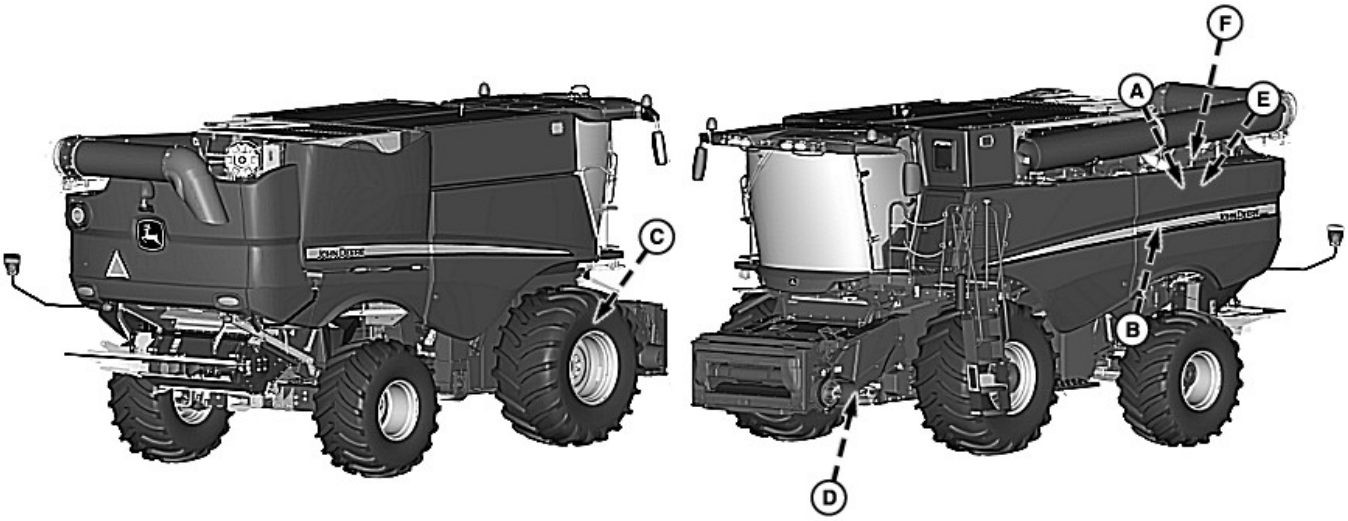
NOTE: Gear cases with an oil cooler require gear case be run for several minutes. This ensures that the cooler is filled with oil.

Oil level must show on knurled part of dipstick.

3. Check oil level with the feeder house raised up.

OUO6075,00046DE-19-28MAR17

Service Interval Chart—Every 1000 Hours (ProDrive™ Machines)

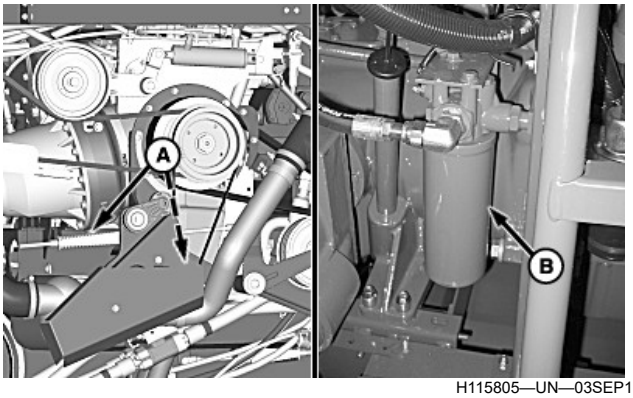


H119641—UN—13OCT16

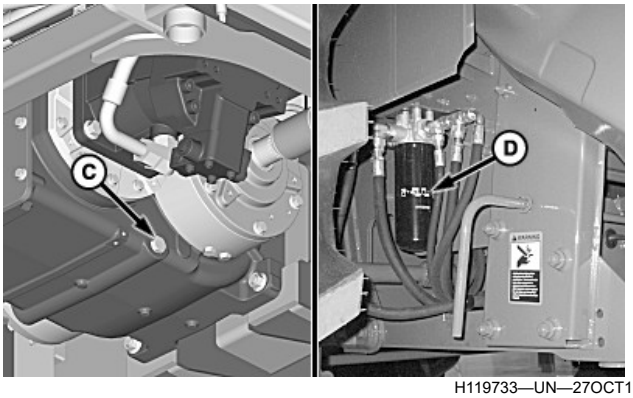
Legend	Service	Every 1000 Hours
A, B, C, D, E	Change Main Engine Gear Case Oil	•
F	Replace Hydraulic Reservoir Filter (S780, S785, and S790 Machines)	•

OUO6075,00046DF-19-28MAR17

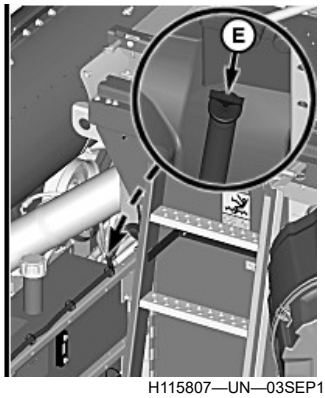
Change Main Engine Gear Case Oil



H115805—UN—03SEP15



H119733—UN—27OCT16



H115807—UN—03SEP15

A—Plugs
B—Filter
C—Plug
D—Filter
E—Dipstick

1. Main Engine Gear Case Oil - Drain oil at plugs (A).
2. **S760 and S770 ProDrive™ Machines:** Remove and replace filter (B). Coat seal on the new filter with oil. Hand tighten, then tighten 1/2 turn more.
3. **ProDrive™ Machines:** Transmission Oil - Drain oil at plug (C).
4. ProDrive™/Main Engine Gear Case Lube Filter -

ProDrive is a trademark of Deere & Company

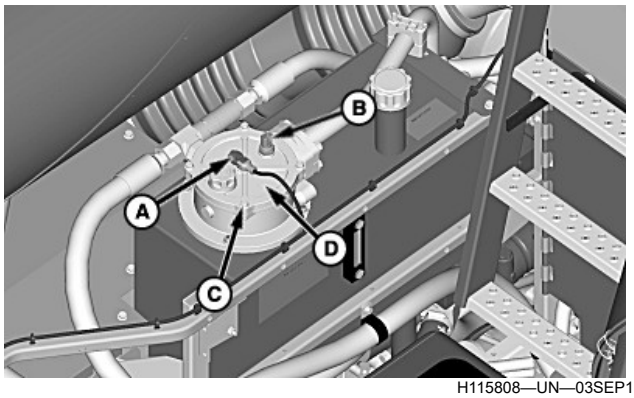
Remove and replace filter (D). Coat seal on the filter with oil. Hand tighten, then tighten 1/2 turn more.

NOTE: Overfilling main engine gear case may cause oil to force dipstick tube out when machine is running.

5. **Fill Main Engine Gear Case**
   1. Fill until oil is at the bottom line on dipstick (E).
   2. Install dipstick and run engine for 1 minute minimum.
   3. Shut OFF engine and let machine sit for 5 minutes allowing air to settle from oil.
   4. Remove dipstick and check oil level. Add oil until oil level is at the top line on dipstick.
   5. Repeat procedures until oil level remains at the top line on dipstick.

OUO6075,0004940-19-12APR18

Hydraulic Reservoir Filter (S780, S785, and S790)



H115808—UN—03SEP15

A—Wiring Harness Connector
B—Sensor
C—Cap Screws
D—Filter Cap

NOTE: Clean area around the filter cap before removing to prevent system contamination. It is not necessary to drain system when replacing filter.

Hydraulic Reservoir Filter - Remove and replace filter when performance decline is noticed or diagnostic trouble code is generated.

1. Disconnect wiring harness connector (A) from sensor (B).

CAUTION: Remove cap screws equally to relieve spring pressure from the filter cap.

NOTE: Inspect and replace O-ring underneath the filter cap as needed.

2. Remove and retain cap screws (C) and filter cap (D).
3. Remove and retain the spring on top of filter.
4. Remove and discard filter.
5. Install replacement filter as shown with previously removed spring.
6. Install previously removed filter cap.
7. Use filter cap to compress spring and install previously removed cap screws.

IMPORTANT: Verify that O-ring remains in place when installing filter cap.

8. Tighten cap screws to specification.

Specification	
Cap Screws—Torque	7 N·m (62 lb·in)

9. Connect wiring harness to sensor.

OUO6075,00044C6-19-22DEC16

Service Interval Chart—Every 2000 Hours

H119642—UN—13OCT16

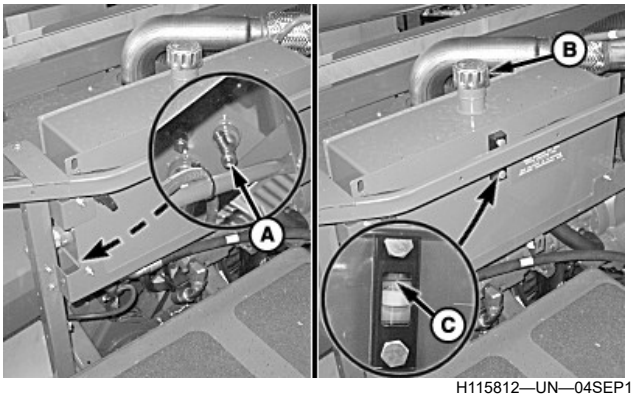
NOTE: SCHEDULED coolant change interval is two years or 2000 hours if John Deere Cool-Gard™ II or Cool-Gard™ II PG is used.

Legend	Service	Every 2000 Hours
A	Change Hydraulic/Hydrostatic Reservoir Oil	•
B	Check Engine Valve Lash[a]	•
C	Check Final Drives Oil (both sides)	•
D	Change Main Engine Gear Case Oil (Non-ProDrive™ Machines)	•
E	Change Separator Drive Oil	•
F	Change Primary Countershaft Gear Case Oil (Fixed Speed and Variable Speed Feeder House)	•
G	Change Transmission Oil (Mechanical Shift and Push-Button Shift Transmission)	•
H	Overshot Beater Gear Case (Optional) (S770, S780, S785, and S790 Machines)	•

ProDrive is a trademark of Deere & Company
[a]*See your John Deere dealer for service.*

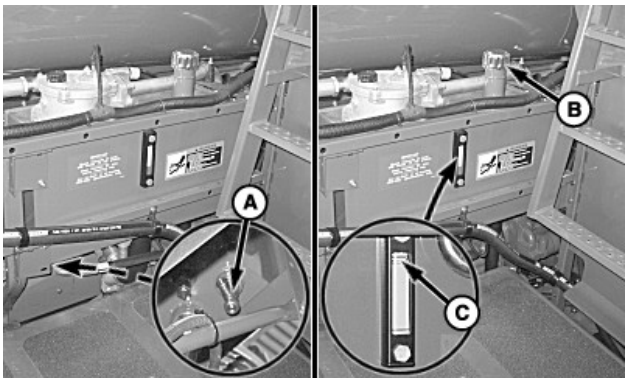
OUO6075,0004DE8-19-02APR20

Hydraulic/Hydrostatic Reservoir Oil



H115812—UN—04SEP15

Style A



H115811—UN—04SEP15

Style B

A—Drain Valve

Cool-Gard is a trademark of Deere & Company

B—Cap
C—Sight Glass

NOTE: Clean hydraulic reservoir area to prevent system contamination. See Specifications section for oil capacity.

1. Open drain valve (A) to drain oil. Close valve once oil is drained.
2. Remove cap (B) and fill hydraulic reservoir until oil level is at top of sight glass (C) with the feeder house fully lowered.

OUO6075,000445A-19-22DEC16

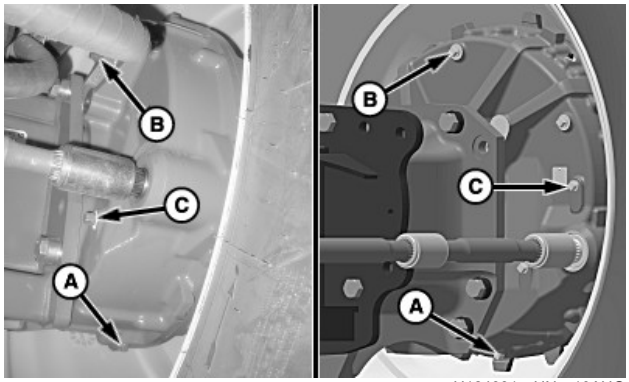
Engine Valve Lash

H115813—UN—04SEP15

Have the engine valve lash checked and adjusted, if necessary, by your John Deere dealer.

OUO6075,0004DE9-19-26JUN20

Final Drive Oil



H124881—UN—10AUG18

Single Tire Configuration and HillMaster™ (Left) / Dual Tire Configuration (Right)

A—Drain Plug
B—Fill Plug
C—Check Hole

IMPORTANT: HillMaster™ Machines: When checking final drive oil level, warn bystanders to stay clear of machine while leveling.

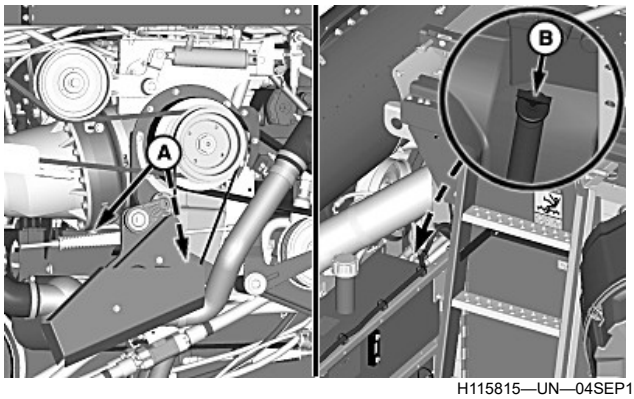
NOTE: HillMaster™ Machines: For oil level accuracy, final drives must be positioned so that final drive input shaft is on the same level as the axle driveshaft.

Remove drain plug (A) on both sides to drain.

Remove fill plug (B) to refill until oil level is within 12 mm (1/2 in) of the bottom check hole (C).

OUO6075,0004A18-19-15AUG18

Main Engine Gear Case Oil (Non-ProDrive™ Machines)



H115815—UN—04SEP15

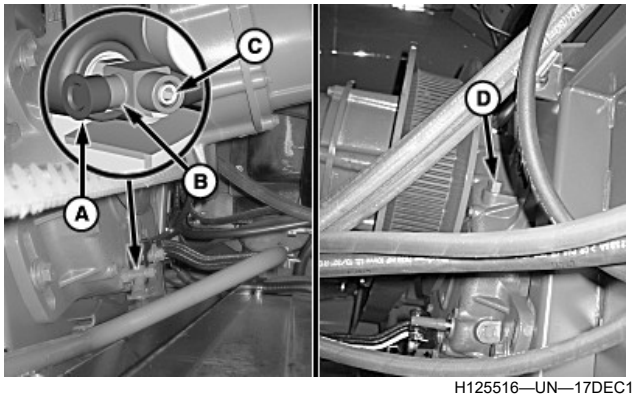
A—Drain Plugs
B—Dipstick

Drain at plugs (A).

Refill and check oil level at dipstick (B).

OUO6075,00046E2-19-28MAR17

Separator Drive Oil



H125516—UN—17DEC18

A—Cap
B—Drain
C—Drain Valve

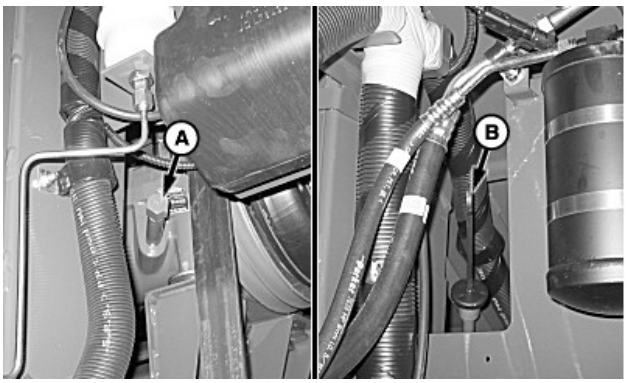
HillMaster is a trademark of Deere & Company

D—Dipstick

1. Remove cap (A) and attach hose to drain (B).
2. Open socket head screw located in drain valve (C) to drain oil.
3. Refill at dipstick (D) as needed.

OUO6075,0004A84-19-17DEC18

Primary Countershaft Gear Case Oil (Fixed Speed and Variable Speed Feeder House)



H115817—UN—04SEP15

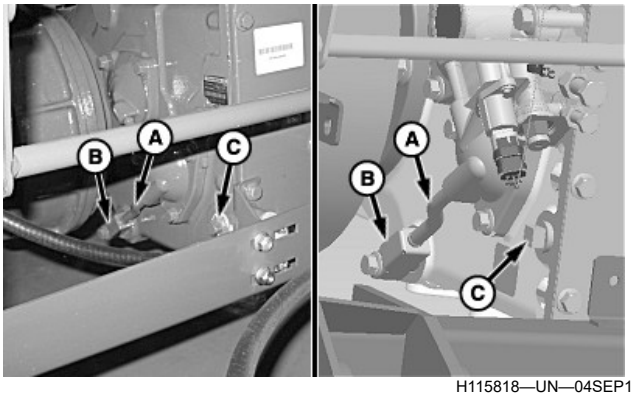
A—Cap
B—Dipstick

Drain at cap (A) and refill at dipstick (B).

Oil level must show on knurled part of dipstick.

OUO6075,00046E3-19-28MAR17

Transmission Oil (Mechanical Shift and Push-Button Shift Transmission)



H115818—UN—04SEP15

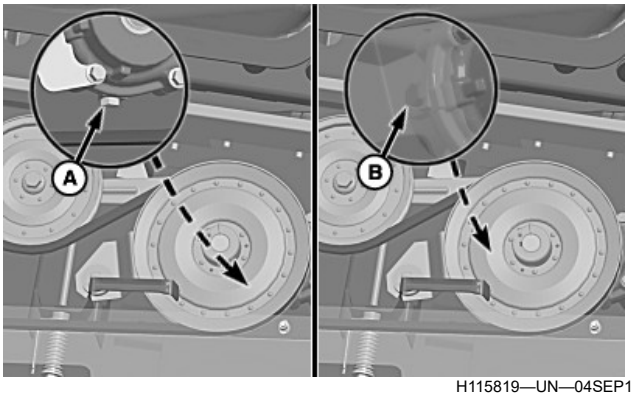
Mechanical Shift / Push-Button Shift

A—Tube
B—Block
C—Check Plug

1. Slide tube (A) out of block (B).
2. Remove block to drain.
3. Remove check plug (C) and refill to within 12 mm (1/2 in) of hole.

OUO6075,0004460-19-22DEC16

Overshot Beater Gear Case Oil (Optional) (S770, S780, S785, and S790 Machines)



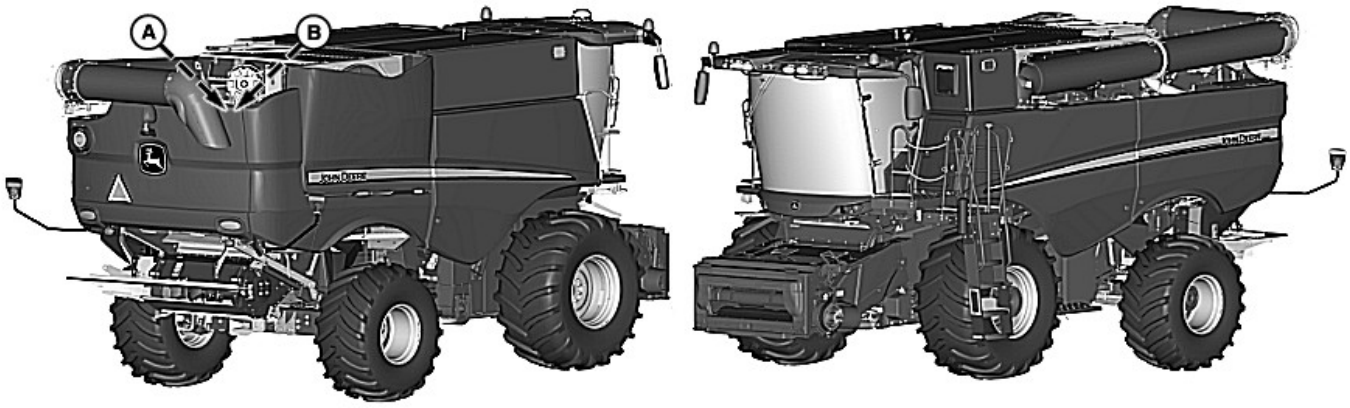
H115819—UN—04SEP15

A—Plug
B—Plug

Drain at plug (A) and refill at plug (B). Oil level must be level with the plug hole on the side of the gear case.

OUO6075,00046E4-19-28MAR17

Service Interval Chart—Every 2000 Hours or Three Years

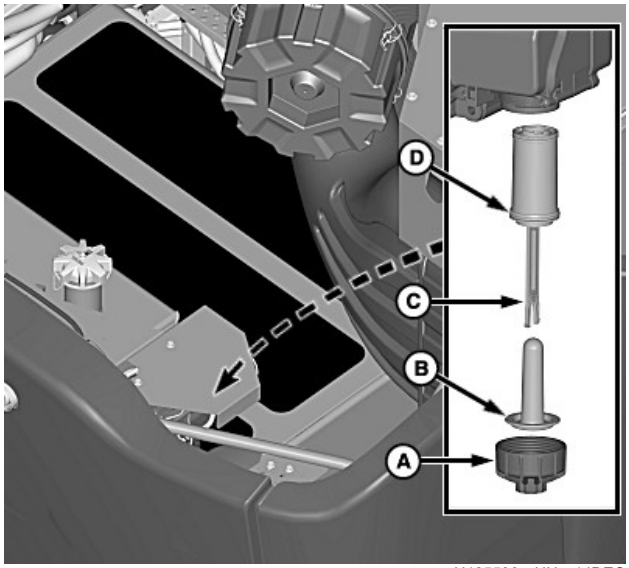


H125475—UN—10DEC18

Legend	Service	Every 2000 Hours or Three Years
A	Replace Diesel Exhaust Fluid (DEF) Dosing Unit Filter (Final Tier 4/Stage V S780, S785, and S790 Machines)	•
B	Replace Diesel Exhaust Fluid (DEF) In-Line Filter (Final Tier 4/Stage V S780, S785, and S790 Machines)	•

OUO6075,0004A6E-19-14DEC18

Changing Diesel Exhaust Fluid (DEF) Dosing Unit Filter (S780, S785, and S790 Machines)



H125506—UN—14DEC18

DEF Dosing Unit Filter

A—Filter Cover
B—Equalizing Element
C—Filter Tool
D—DEF Dosing Unit Filter

CAUTION: Avoid contact with eyes. If contact occurs, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

NOTE: The DEF dosing unit filter and DEF in-line filter must be replaced together every 2000 hours or 36 months, whichever occurs first.

Servicing DEF dosing unit filter requires removing extra covers or components. See Access DEF Dosing Unit for location information.

1. Clear all debris from area around the DEF dosing unit.

NOTE: Wait approximately 5 minutes for DEF to purge from the system.

2. Remove filter cover (A).
3. Remove and discard the equalizing element (B).

NOTE: Filter tool (C) is supplied with the replacement filter.

4. Insert “Black” end of the filter tool (C) into the DEF dosing unit filter (D) until a CLICK is felt or heard, indicating that the filter tool is fully engaged.

NOTE: A tool, such as a screwdriver, can be inserted into the filter tool slot to assist removal.

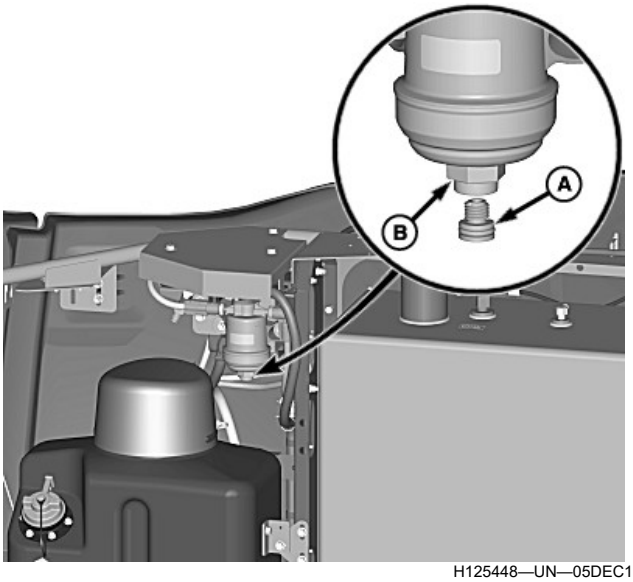
5. Pull filter tool and DEF dosing unit filter from the DEF dosing unit. Discard DEF dosing unit filter and filter tool.
6. Clean DEF dosing unit threads and mating surfaces with distilled water.
7. Lubricate DEF filter O-rings with clean DEF. Carefully insert DEF dosing unit filter into the DEF dosing unit.
8. Install new DEF dosing unit filter equalizing element into the DEF dosing unit filter.
9. Install filter cover and tighten to specification.

Specification

Filter Cover—Torque. . . . . 23 N·m (204 lb·in)

OUO6075,0004BBB-19-30MAY19

Replace Diesel Exhaust Fluid (DEF) In-Line Filter (S780, S785, and S790 Machines)



H125448—UN—05DEC18

A—Drain Plug
B—Filter Cover

CAUTION: Avoid contact with eyes. If contact occurs, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

NOTE: The DEF in-line filter and DEF dosing unit filter must be replaced together every 2000 hours or 36 months, whichever occurs first.

1. Clear all debris from area around in-line DEF filter assembly.

NOTE: Wait approximately 5 minutes for DEF to purge from the system.

2. Remove and discard drain plug (A).
3. Drain DEF fluid into a proper container.
4. Remove filter cover (B).

H125462—UN—06DEC18

A—Filter Assembly
B—Filter

5. Pull filter assembly (A) down from the DEF body.

NOTE: If necessary, tap filter to loosen. Plastic tabs inside the filter cover lock the filter into place.

6. Remove and discard filter (B) from filter cover.
7. Clean assembly threads and mating surfaces with distilled water.

H125463—UN—06DEC18

A—Foam Spacer
B—Seal
C—Filter Cover

8. Remove and discard foam spacer (A) and discard seal (B) from filter cover (C).
9. Install replacement foam spacer and replacement seal into previously removed filter cover.

H125464—UN—06DEC18

A—Filter
B—DEF Body

NOTE: Plastic tabs inside the cover lock the filter into place.

10. Insert replacement filter (A) into filter cover as shown, and then into the DEF body (B).
11. Install filter cover and tighten to specification.

Specification

Filter Cover—Torque. . . . . 25 N·m (221 lb·in)

H125465—UN—06DEC18

A—O-Ring
B—Notch

12. Install replacement O-ring (A) into notch (B) on the replacement drain plug.
13. Install drain plug into filter cover and tighten to specification.

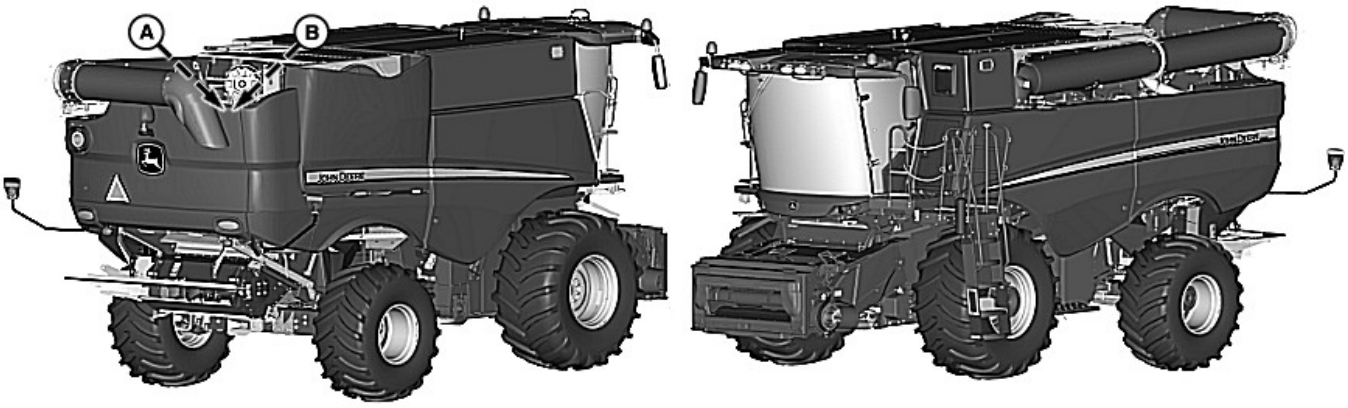
Specification

Drain Plug—Torque. . . . . 4 N·m (35 lb·in)

OUO6075,0004BBC-19-30MAY19

Maintenance—Every 3500 Hours or Three Years

Service Interval Chart—Every 3500 Hours or Three Years

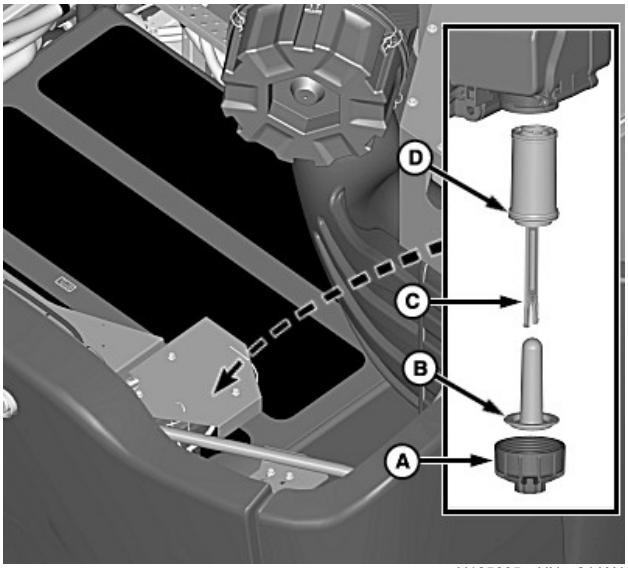


H125475—UN—10DEC18

Legend	Service	Every 3500 Hours or Three Years
A	Replace Diesel Exhaust Fluid (DEF) Dosing Unit Filter (Final Tier 4/Stage V S760 and S770 Machines)	•
B	Replace Diesel Exhaust Fluid (DEF) In-Line Filter (Final Tier 4/Stage V S760 and S770 Machines)	•

OUO6075,0004A6B-19-14DEC18

Changing Diesel Exhaust Fluid (DEF) Dosing Unit Filter (S760 and S770 Machines)



H125605—UN—24JAN19

DEF Dosing Unit Filter

A—Filter Cover
B—Equalizing Element
C—Filter Tool
D—DEF Dosing Unit Filter

CAUTION: Avoid contact with eyes. If contact occurs, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

NOTE: The DEF dosing unit filter and DEF in-line filter must be replaced together every 3500 hours or 36 months, whichever occurs first.

Servicing DEF dosing unit filter requires removing extra covers or components. See Access DEF Dosing Unit for location information.

1. Clear all debris from area around the DEF dosing unit.

NOTE: Wait approximately 5 minutes for DEF to purge from the system.

2. Remove filter cover (A).
3. Remove and discard the equalizing element (B).

NOTE: Filter tool (C) is supplied with the replacement filter.

4. Insert “Black” end of the filter tool (C) into the DEF dosing unit filter (D) until a CLICK is felt or heard, indicating that the filter tool is fully engaged.

NOTE: A tool, such as a screwdriver, can be inserted into the filter tool slot to assist removal.

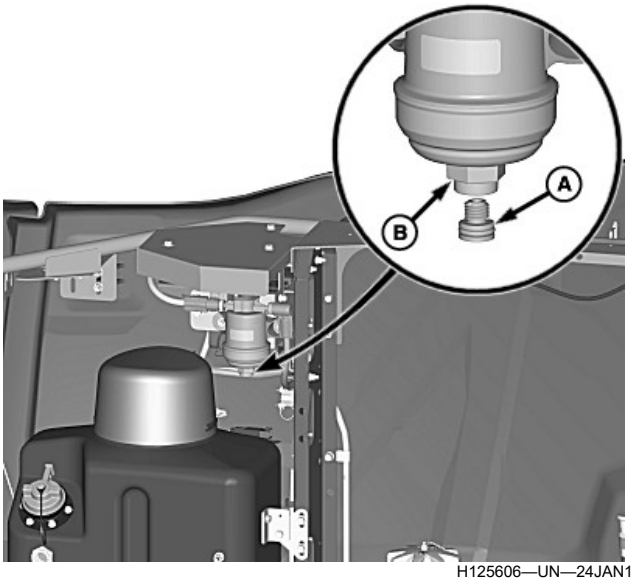
5. Pull filter tool and DEF dosing unit filter from the DEF dosing unit. Discard DEF dosing unit filter and filter tool.
6. Clean DEF dosing unit threads and mating surfaces with distilled water.
7. Lubricate DEF filter O-rings with clean DEF. Carefully insert DEF dosing unit filter into the DEF dosing unit.
8. Install new DEF dosing unit filter equalizing element into the DEF dosing unit filter.
9. Install filter cover and tighten to specification.

Specification

Filter Cover—Torque. . . . . 23 N·m (204 lb·in)

OUO6075,0004BB9-19-30MAY19

Replace Diesel Exhaust Fluid (DEF) In-Line Filter (S760 and S770 Machines)



H125606—UN—24JAN19

A—Drain Plug
B—Filter Cover

CAUTION: Avoid contact with eyes. If contact occurs, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

NOTE: The DEF in-line filter and DEF dosing unit filter must be replaced together every 2000 hours or 36 months, whichever occurs first.

1. Clear all debris from area around in-line DEF filter assembly.

NOTE: Wait approximately 5 minutes for DEF to purge from the system.

2. Remove and discard drain plug (A).
3. Drain DEF fluid into a proper container.
4. Remove filter cover (B).

H125462—UN—06DEC18

A—Filter Assembly
B—Filter

5. Pull filter assembly (A) down from the DEF body.

NOTE: If necessary, tap filter to loosen. Plastic tabs inside the filter cover lock the filter into place.

6. Remove and discard filter (B) from filter cover.
7. Clean assembly threads and mating surfaces with distilled water.

H125463—UN—06DEC18

A—Foam Spacer
B—Seal
C—Filter Cover

8. Remove and discard foam spacer (A) and discard seal (B) from filter cover (C).
9. Install replacement foam spacer and replacement seal into previously removed filter cover.

H125464—UN—06DEC18

A—Filter
B—DEF Body

NOTE: Plastic tabs inside the cover lock the filter into place.

10. Insert replacement filter (A) into filter cover as shown, and then into the DEF body (B).
11. Install filter cover and tighten to specification.

Specification

Filter Cover—Torque. . . . . 25 N·m (221 lb·in)

H125465—UN—06DEC18

A—O-Ring
B—Notch

12. Install replacement O-ring (A) into notch (B) on the replacement drain plug.
13. Install drain plug into filter cover and tighten to specification.

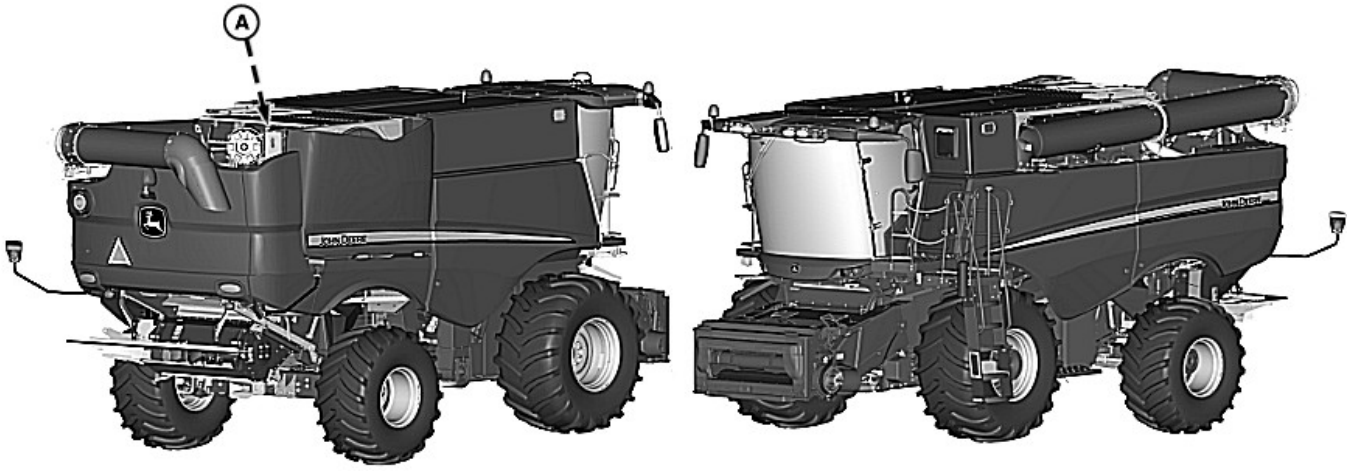
Specification

Drain Plug—Torque. . . . . 4 N·m (35 lb·in)

OUO6075,0004BBA-19-30MAY19

Maintenance—Every 4500 Hours or Five Years

Service Interval Chart—Every 4500 Hours or Five Years

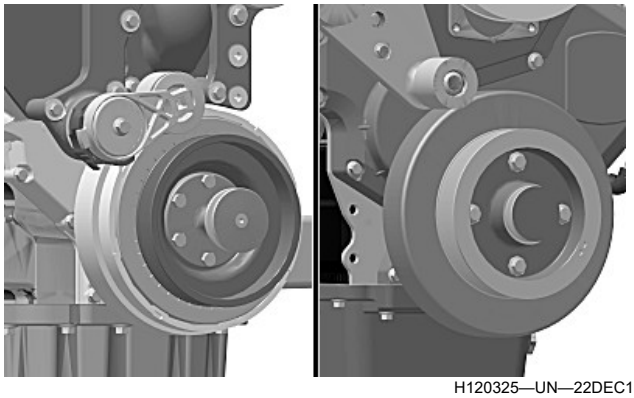


H120324—UN—22DEC16

Legend	Service	Every 4500 Hours or Five Years
A	Replace Front Engine Crankshaft Damper	•

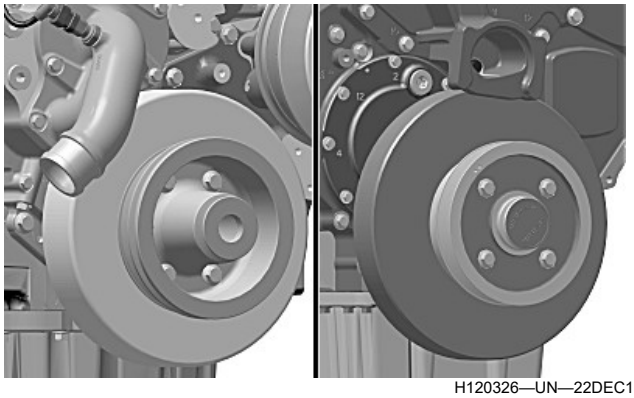
OUO6075,0004575-19-10JUN19

Engine Crankshaft Damper



H120325—UN—22DEC16

Tier 2/Stage II (Style A / Style B)



H120326—UN—22DEC16

Final Tier 4/Stage V (Style A / Style B)

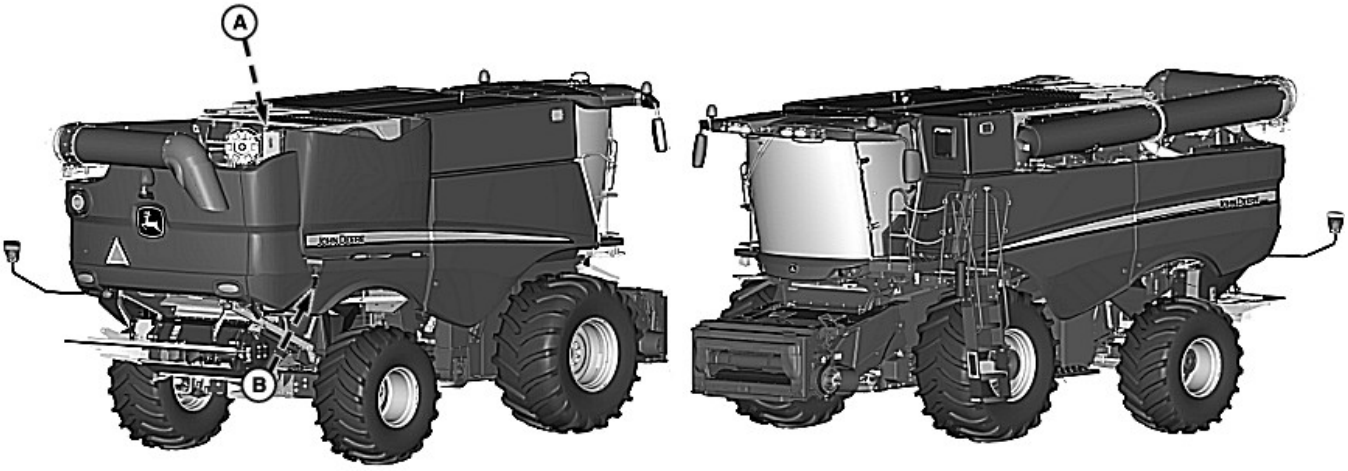
IMPORTANT: Vibration damper assembly is not repairable and should be replaced every five years or 4500 hours, whichever occurs first.

Have your John Deere dealer replace the front engine crankshaft damper.

OUO6075,00047FE-19-13NOV17

Maintenance—Every 6000 Hours or Six years

Service Interval Chart—Every 6000 Hours or Six Years



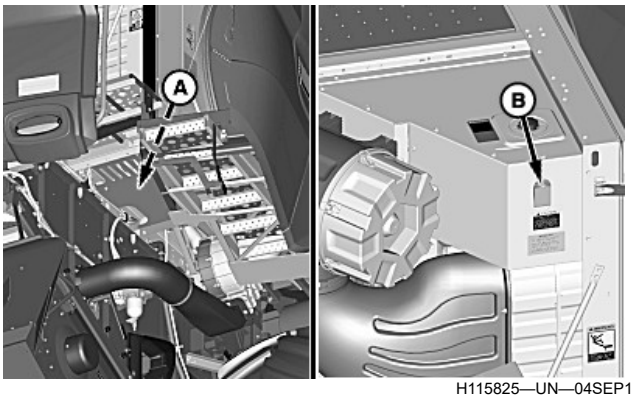
H119645—UN—13OCT16

NOTE: SCHEDULED coolant change interval 6 years or 6000 hours if John Deere Cool-Gard™ II or Cool-Gard™ II PG is used.

Legend	Service	Every 6000 Hours or Six Years
A and B	Drain, Flush, and Refill Engine Cooling System	•

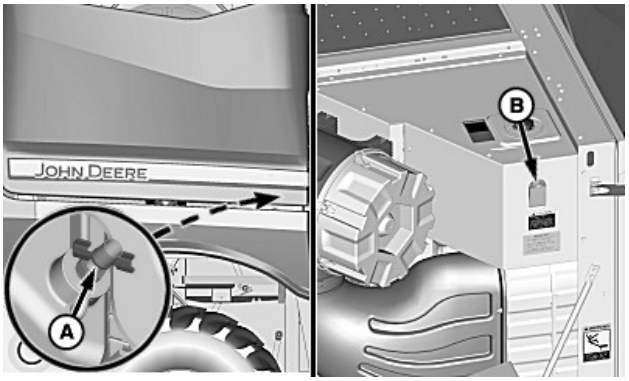
OUO6075,0004465-19-20DEC16

Engine Cooling System



H115825—UN—04SEP15

Tier 2/Stage II (Style A)



H115826—UN—04SEP15

Tier 2/Stage II (Style B) and Final Tier 4/Stage V

A—Drain
B—Surge Tank

NOTE: When Cool-Gard™ II or Cool-Gard™ II PG is used, the drain interval is 6 years or 6000 hours of operation.

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If a coolant other than Cool-Gard™ II or Cool-Gard™ II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.

Open drain (A) to remove coolant from the radiator.

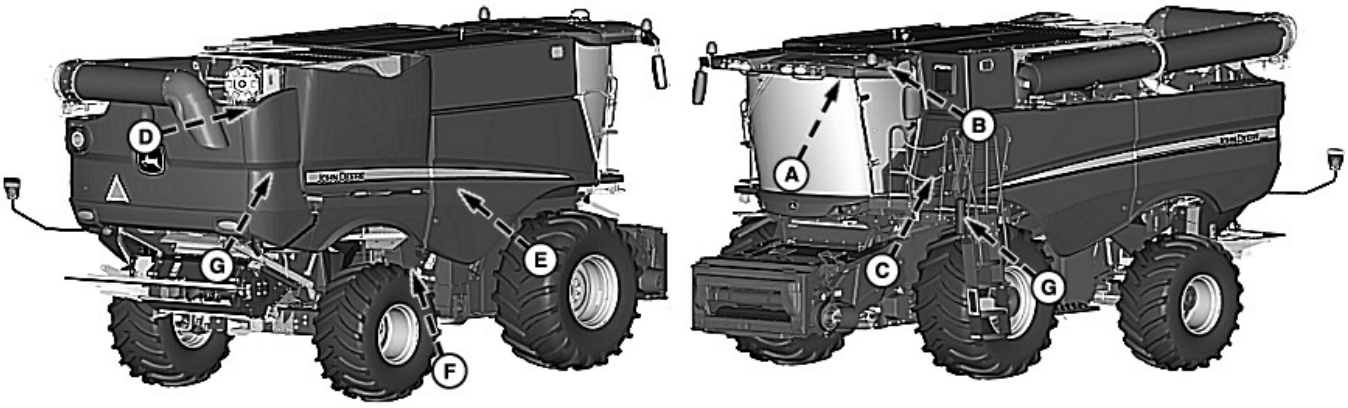
Flush and refill surge tank (B) with correct coolant and conditioner. See Maintenance—As Required (Engine Fluids and Filters) section for further information. See Fuels and Lubricants section for coolant recommendations.

Check engine coolant level in the surge tank with engine cold. Level must be up to the "Max Cold" line.

OUO6075,00047FF-19-13NOV17

Maintenance—As Required

Service Interval Chart—As Required



H124383—UN—29MAY18

Legend	Service	As Required
A	Clean/Replace Recirculating Filter	•
B	Clean/Replace Cab Fresh Air Filter	•
C	Fill Windshield Washer Reservoir	•
D	Clean Alternator Screen	•
E	Clean Moisture Sensor (If Equipped) Clean ActiveVision™ Clean Grain Elevator Camera (If Equipped) Replace ActiveVision™ Clean Grain Elevator Camera Desiccant Cartridge (If Equipped)[a]	•
F	Clean ActiveVision™ Tailings System Camera (If Equipped) Replace ActiveVision™ Tailings System Camera Desiccant Cartridge (If Equipped)[a]	•
G	Inspect/Tighten Fire Extinguisher Bracket Straps (If Equipped)	•

ActiveVision is a trademark of Deere & Company
[a]*If the harvest season is complete, wait until the beginning of the next harvest season to extend the desiccant cartridge life.*

OUO6075,0004E5F-19-16JUN20

Recirculating Filter

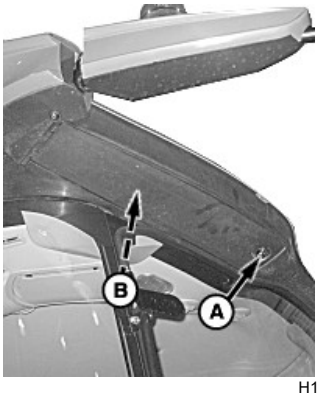
H115668—UN—28AUG15

A—Recirculating Filter

Remove cover to clean or replace recirculating filter (A).

OUO6075,0004468-19-21DEC16

Cab Fresh Air Filter



H115664—UN—28AUG15

A—Knob
B—Fresh Air Filter

NOTE: Cab fresh air filter may require cleaning sooner in dusty conditions.

Turn knob (A) and lower access cover. Remove fresh air filter (B) to clean or replace.

OUO6075,0004469-19-21DEC16

Windshield Washer Reservoir

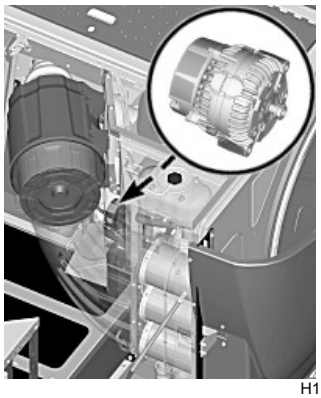
H119647—UN—13OCT16

A—Cap

Open cap (A) and fill windshield washer reservoir.

OUO6075,000446A-19-21DEC16

Alternator Screen

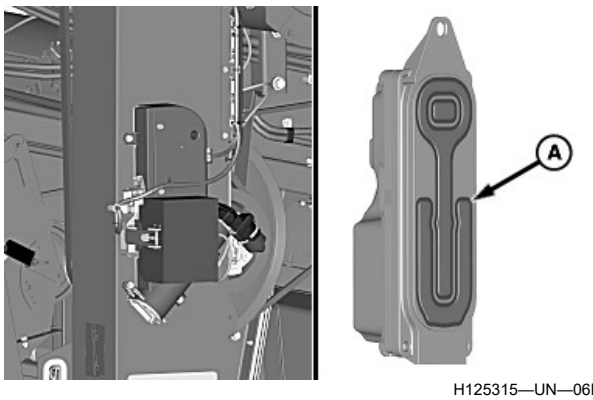


H119648—UN—13OCT16

Clean screen when it is 50% covered with debris

OUO6075,000469C-19-21MAR17

Moisture Sensor (If Equipped)



H125315—UN—06NOV18

A—Moisture Sensor

IMPORTANT: Static electricity can damage to the moisture sensor module. To avoid damage, ensure that a metal surface is touched on the machine with at least one hand or arm before working on or cleaning.

The moisture sensor has internal components, which can loosen when dropped and is not immediately detectable. Handle the moisture sensor with care when working on or cleaning.

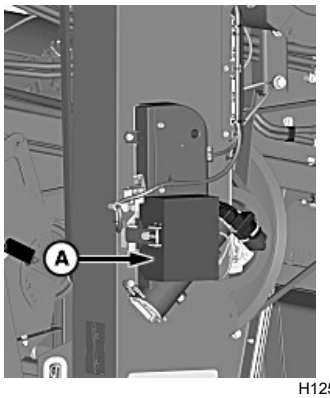
Remove and clean the moisture sensor (A) when operating in weeds, green crops, or small grains (canola).

- Do not use solvents or other cleaners on the sensor face.
- A dry rag is preferred for cleaning. If that does not work, then scrub with just a rag and water.
- Do not power wash the moisture sensor face.

Install moisture sensor and perform a Moisture Sensor calibration. See Calibrations Application Help or Operator's Station Help for further information.

OUO6075,0004A43-19-08NOV18

ActiveVision™ Clean Grain Elevator Camera (If Equipped)



H125313—UN—06NOV18

A—ActiveVision™ Clean Grain Elevator Camera

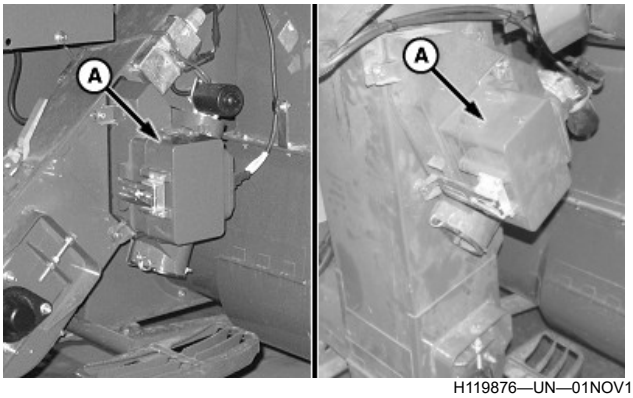
NOTE: Clean the camera lens once per week or as needed. The lens debris indicator in the software alerts operator when the camera lens needs cleaned, as the system functionality is reduced.

The cleaning frequency varies depending on several factors, including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.

Open latch and clean the ActiveVision™ clean grain elevator camera (A).

OUO6075,0004A42-19-06NOV18

ActiveVision™ Tailings System Camera (If Equipped)



H119876—UN—01NOV16

Style A / Style B

A—ActiveVision™ Tailings System Camera

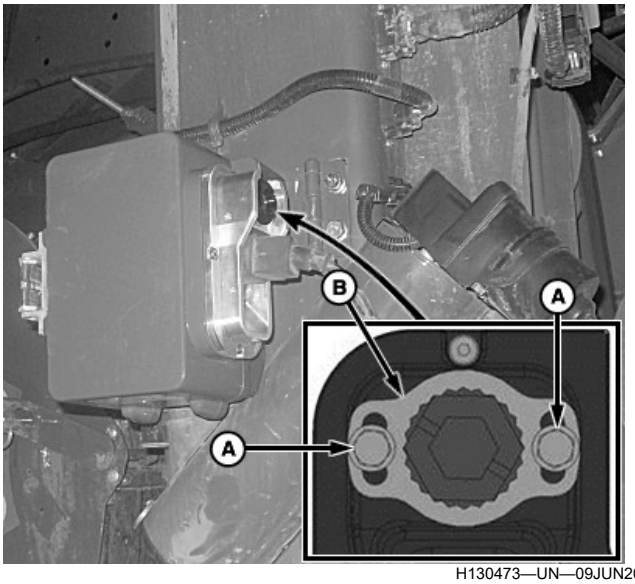
NOTE: Clean the camera lens once per week or as needed. Lens debris indicator in the software alerts the operator when the camera lens needs to be cleaned as system functionality may be reduced.

Cleaning frequency varies depending on a number of factors including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.

Open latch and clean the ActiveVision™ tailings system camera (A).

OUO6075,000448B-19-11JAN17

ActiveVision™ Camera Desiccant Cartridge (If Equipped)



H130473—UN—09JUN20

A—Cap Screw (2 used)
B—Retainer Plate

CAUTION: Shut OFF engine, set park brake, and remove key.

IMPORTANT: Crop material and other debris may accumulate around the desiccant cartridge. Inspect and clean the area around the desiccant cartridge before removing.

NOTE: The ActiveVision™ clean grain elevator camera is shown. The ActiveVision™ tailings system camera is similar.

Replace the desiccant cartridge as needed when the moisture buildup is visible on the interior of the camera lens.

If the harvest season is complete, wait until the beginning of the next harvest season to extend the desiccant cartridge life.

1. Remove cap screws (A) and retainer plate (B).

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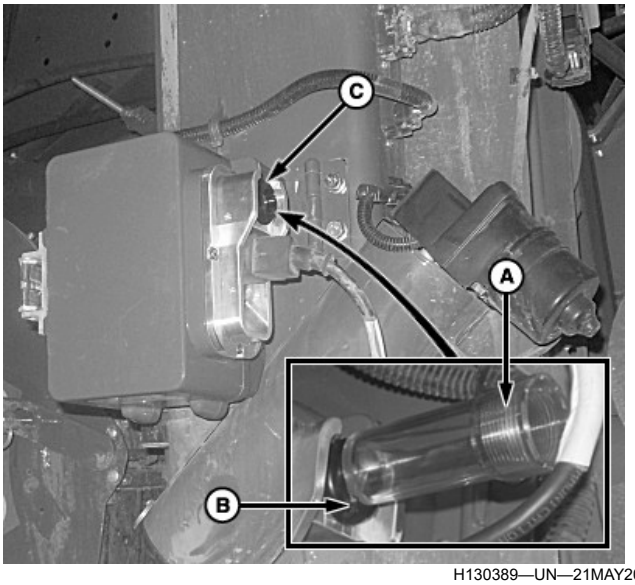
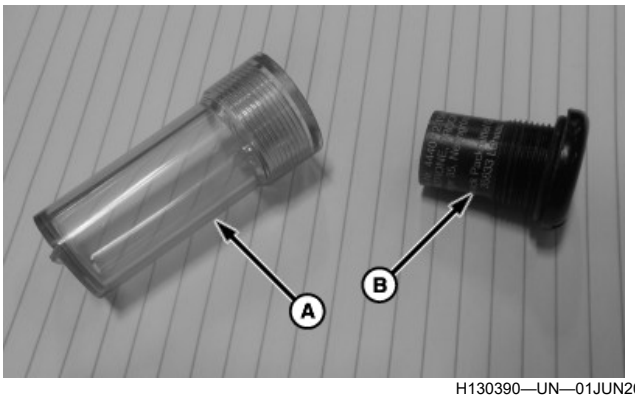


H130389—UN—21MAY20

A—Desiccant Container (tool)
B—Notch
C—Desiccant Cartridge

2. Align the desiccant container (A) that was included with the replacement desiccant cartridge with notch (B).
3. Remove the desiccant cartridge (C) from the ActiveVision™ camera.
4. Discard the desiccant cartridge.



H130390—UN—01JUN20

Desiccant Container (tool) and Desiccant Cartridge

A—Desiccant Container (tool)
B—Desiccant Cartridge

5. Remove the desiccant container (A) from the replacement desiccant cartridge (B).
6. Install the desiccant cartridge into the ActiveVision™ camera.
7. Align the desiccant tool with the notch.
8. Tighten the desiccant cartridge until it is hand-tight.

NOTE: Verify that the retainer plate fits the hexagon form of the desiccant cartridge.

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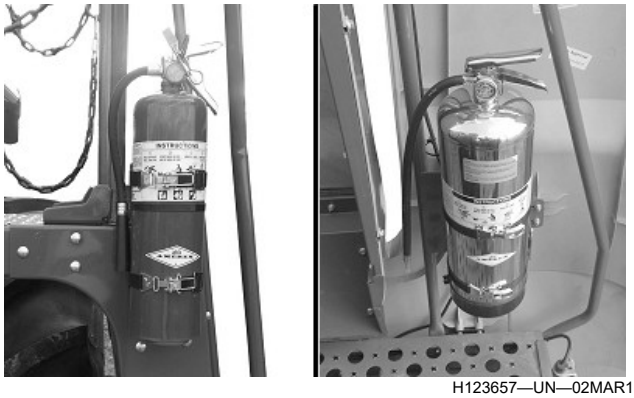
9. Install the retainer plate over the desiccant cartridge and retain with cap screws.
10. Tighten the cap screws to specification.

Specification

Cap Screws—Torque	6.8 N·m (60 lb·in)

OUO6075,0004E3B-19-26JUN20

Fire Extinguisher Bracket Straps (If Equipped)



H123657—UN—02MAR18

CAUTION: Inspect fire extinguisher straps and mounting hardware at least once a year. If fire extinguisher straps or mounting hardware shows any sign of damage or unusual wear, discoloration or abrasion, the entire strap and hardware must be replaced immediately. For your safety, replace fire extinguisher components with replacement parts approved for your machine. See your John Deere dealer.

Inspect fire extinguisher bracket straps.

OUO6075,0004983-19-29MAY18

Maintenance—As Required (Engine Fluids and Filters)

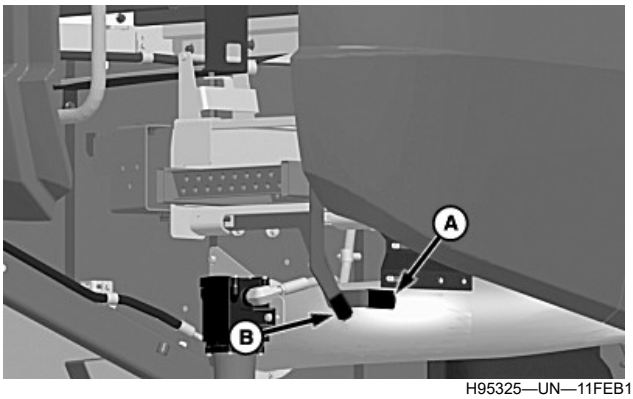
Required Emission-Related Information

Service Provider

A qualified repair shop or person of the owner's choosing may maintain, replace, or repair emission control devices and systems with original or equivalent replacement parts. However, warranty, recall, and all other services paid for by John Deere must be performed at an authorized John Deere service center.

DX,EMISSIONS,REQINFO-19-12JUN15

Rear Ladder and Landing



H95325—UN—11FEB10

A—Handle
B—Handle

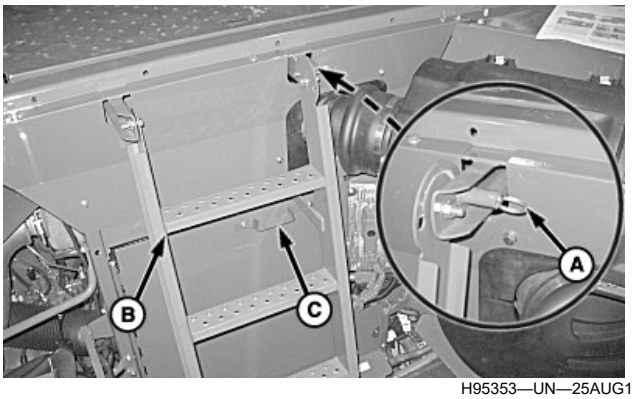
CAUTION: Shut OFF engine, set parking brake and remove key.

Push up on handle (A) and swing ladder out until door latches.

Use handle (B) to pull ladder rearward.

OUO6075,0000588-19-16FEB10

Engine Filter Access Cover



H95353—UN—25AUG10

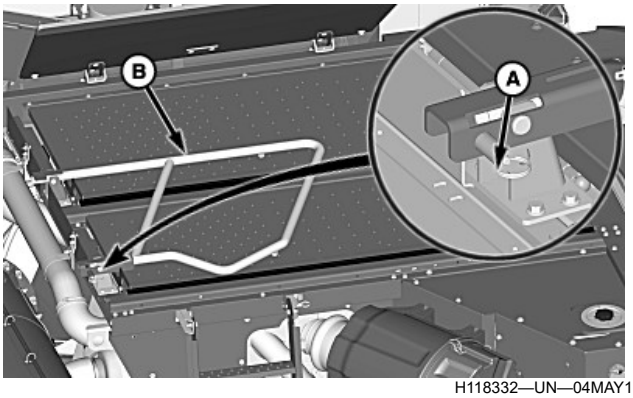
A—Lock-Out Pin
B—Ladder
C—Cover

Pull lock-out pin (A) and rotate ladder (B) up until ladder locks into place.

Pull filter access cover (C) open to release from magnet.

OUO6075,000069B-19-25AUG10

Engine Access Covers



H118332—UN—04MAY16

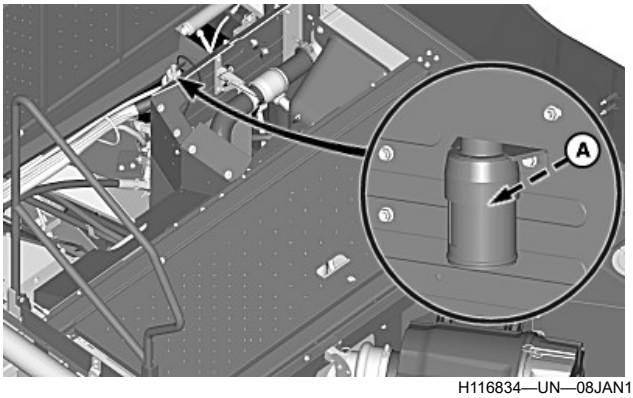
A—Lockout Pin
B—Handrail

Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place.

Open engine access covers.

OUO6075,00042D3-19-04MAY16

Changing Starting Fluid Can



H116834—UN—08JAN16

A—Starting Fluid Can

CAUTION: Starting fluid is highly flammable and can cause injury or death to you or others if accidentally ignited. DO NOT use near fire, sparks, or flames. Read the cautionary information on the container and protect the container against damage.

Open engine access cover. Remove safety cap and spray button from starting fluid can (A). Loosen thumb wheel enough to change cans and then tighten.

IMPORTANT: To avoid drawing dust into engine, always keep can in position.

Protect starting fluid can from extreme heat or damage.

Check for fluid and valve operation by installing and pressing spray nozzle. If no fluid sprays out, replace can.

CAUTION: To prevent possible injury from exploding container, do not carry extra or empty cans inside cab.

OUO6075,00041C6-19-08JAN16

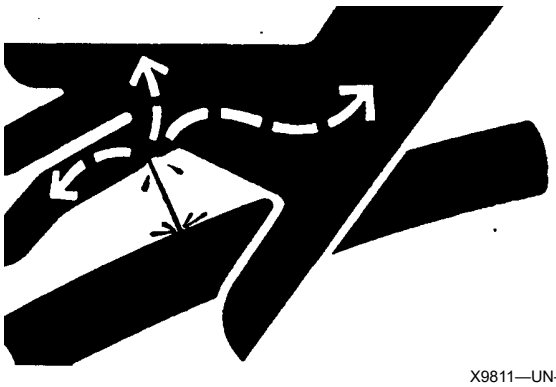
Do Not Modify Engine Power or Fuel/Air System

IMPORTANT: Increasing horsepower, or altering any aspect of fuel and air delivery on emissions certified engines beyond factory settings, will cause emission levels beyond what is allowed by engine emission regulations. Unauthorized adjustments are in violation of the emission regulations applicable to this engine and may result in substantial fines and penalties. Machine warranty will be voided if power level is changed from factory specifications.

Do not attempt to service injection pump or fuel injectors. Special training and special tools are required. See your John Deere dealer.

OUO6075,000058D-19-11FEB10

Fuel System



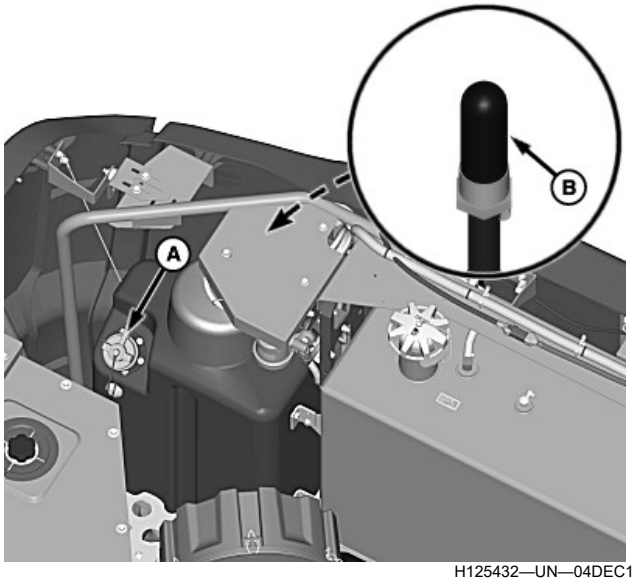
X9811—UN—23AUG88

CAUTION: Escaping diesel fuel under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pin holes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.

OUO6075,000058E-19-11FEB10

Diesel Exhaust Fluid (DEF) Tank—Filling (Final Tier 4/Stage V)



H125432—UN—04DEC18

A—Cap
B—Diesel Exhaust Fluid (DEF) Tank Breather

CAUTION: Diesel Exhaust Fluid (DEF) contains urea. Do not get fluid in eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. In the event DEF is ingested, contact a physician immediately. Reference Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: Using incorrect or unapproved aftertreatment components can damage the vehicle's aftertreatment system and reduce ability of the aftertreatment system to function correctly. Never interchange aftertreatment components between Interim Tier 4/Stage III B and Final Tier 4/Stage V equipped vehicles.

NOTE: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Cap (A) is not vented. Excess air is vented through Diesel Exhaust Fluid (DEF) tank breather (B).

Visually inspect the breather. Do not allow excessive amounts of chaff or debris to collect on breather. If the breather is covered with debris, it does not allow tank to breathe. Remove breather from hose and clean.

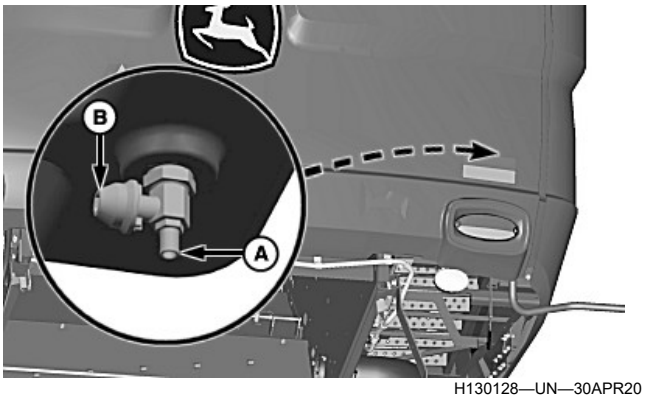
Fill tank every time machine is refueled. If this cannot be done, monitor Diesel Exhaust Fluid (DEF) level indicator on corner post display and refill as necessary. To avoid drastic changes in machine performance, always keep fluid level above the topmost red mark on the level indicator. See Combine Overview Application Help or Operator's Station for further information.

To fill tank:

1. Wash and rinse containers with distilled water to remove contaminants before adding fluid.
2. Wipe area around the cap before removing to reduce chance of contaminating fluid.
3. Using a funnel, carefully pour fluid into the tank, watching level through sight glass.
4. Install previously removed cap.
5. Carefully clean any spills, using distilled water.

OUO6075,0004A62-19-04DEC18

Diesel Exhaust Fluid (DEF) Tank—Draining (Final Tier 4/Stage V)



H130128—UN—30APR20

A—Fitting
B—Hex Head Cap Screw

CAUTION: Shut OFF engine, set park brake, and remove key.

IMPORTANT: Long-term storage of fluids in the vehicle (over 12 months) is not recommended. If long-term storage is necessary, periodic testing of the fluid is recommended to ensure that the urea concentration does not fall out of specification.

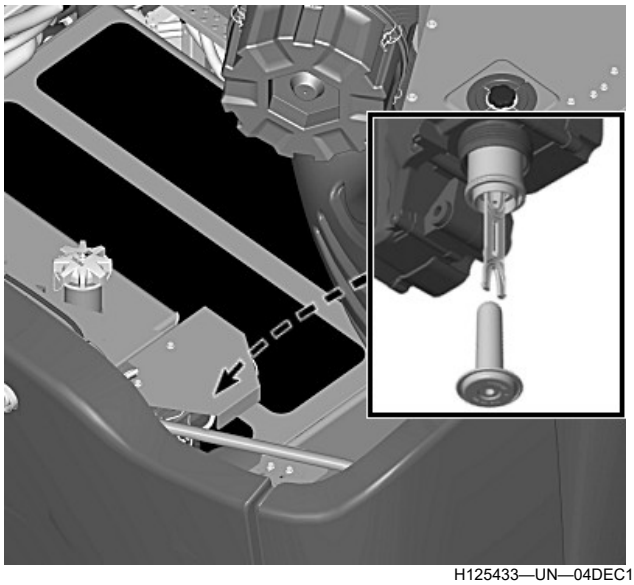
If an unapproved fluid, such as diesel fuel or engine coolant is added, drain the tank and rinse with distilled water, then refill the tank. If the system does not operate correctly after cleaning and refilling, contact your John Deere dealer to determine how to clean and purge the system. If water has been added to the tank, drain tank, flush with distilled water, and refill with Diesel exhaust fluid (DEF). Check the concentration of fluid after filling the tank. See Fuels and Lubricants section for testing.

NOTE: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. Fluid is corrosive to painted surfaces and can distort some plastic and rubber components.

1. Attach a hose to the fitting (A) at the bottom of the tank.
2. Loosen the hex head cap screw (B) to open the drain valve.
3. Close the drain valve and remove the hose once the fluid is drained.

OUO6075,0004E1D-19-07MAY20

Access Diesel Exhaust Fluid (DEF) Dosing Unit Filter (Final Tier 4/Stage V)



H125433—UN—04DEC18

Diesel Exhaust Fluid (DEF) Dosing Unit Filter

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

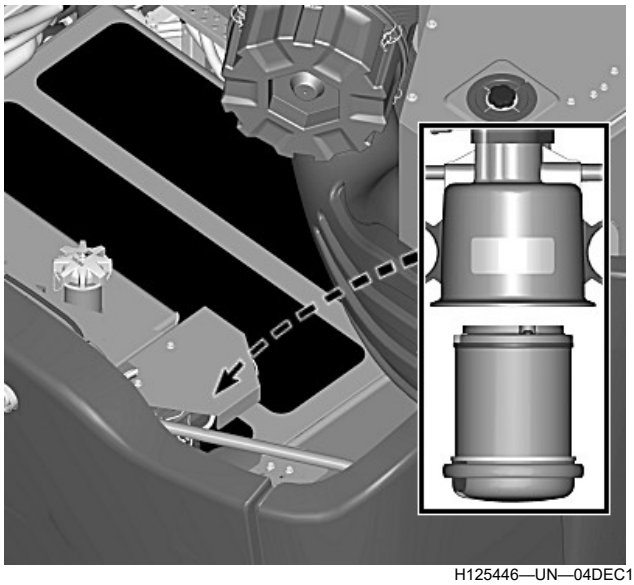
IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

1. Shut OFF engine, set park brake, and remove key.
2. Remove and replace Diesel Exhaust Fluid (DEF) dosing unit filter. See Changing Diesel Exhaust Fluid (DEF) Dosing Unit Filter for further information.

OUO6075,0004A80-19-14DEC18

Access Diesel Exhaust Fluid (DEF) In-Line Filter (Final Tier 4/Stage V)



H125446—UN—04DEC18

Diesel Exhaust Fluid (DEF) In-Line Filter

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

1. Shut OFF engine, set park brake, and remove key.
2. Remove and replace Diesel Exhaust Fluid (DEF) in-line filter. See Replace Diesel Exhaust Fluid (DEF) In-Line Filter for further information.

OUO6075,0004A64-19-04DEC18

Cleaning Diesel Exhaust Fluid (DEF) Tank

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

If foreign material or fluid has been added to the DEF tank, drain the DEF tank, flush, and fill with new DEF.

If DEF quality is in question, pull a sample out of the DEF tank and place into a clear container. DEF should be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint, or has a profound ammonia smell, it is likely not within specification. DEF in this condition should not be used.

1. Remove drain plug (if equipped), and drain or siphon bad DEF from DEF tank.

NOTE: Cleaning can take place with DEF tank installed or removed.

2. Clean DEF tank with new DEF.

   DEF must pass visual, smell, and concentration checks before running the engine. See Diesel Exhaust Fluid (DEF) – For Use In Selective Catalytic Reduction (SCR) Equipped Engines in the Fuels, Lubricants, and Coolants Section for more information.

3. Drain or siphon DEF tank.

NOTE: Repeat steps 2—3 until DEF tank has been cleaned.

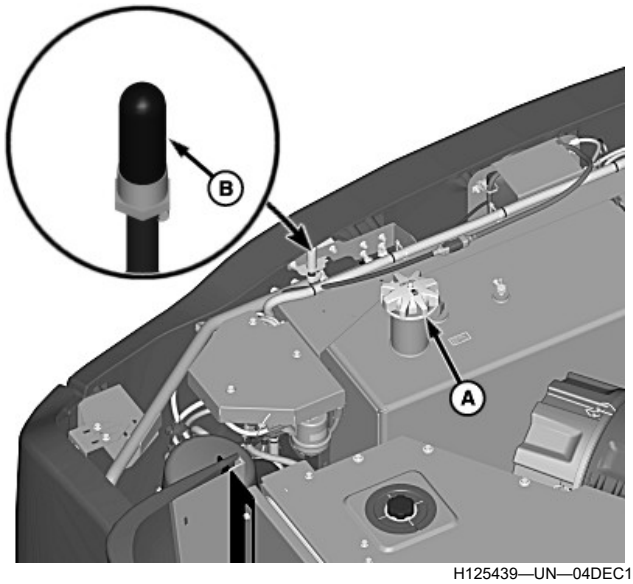
4. **Early version:** Change DEF dosing unit filter and DEF tank header suction screen.

   Later version: Change DEF dosing unit filter and DEF inline filter.

5. If removed, install DEF tank drain plug.
6. If removed, install DEF tank.
7. Fill DEF tank with new DEF.
8. Check DEF concentration with DEF refractometer, such as JDG11594 or JDG11684. The correct DEF concentration is 31.8% — 33.2%. See your authorized dealer for more information.
9. If DEF is not within specification, does not appear clear, or does not have a slight ammonia smell, contact your authorized dealer.

DX,DEF,CLEANTANK-19-18SEP19

Fuel Tank—Filling



H125439—UN—04DEC18

A—Fuel Tank Cap
B—Fuel Tank Breather

CAUTION: Handle fuel carefully. Do not refuel machine while smoking. Shut OFF engine, set park brake and remove key before filling tank.

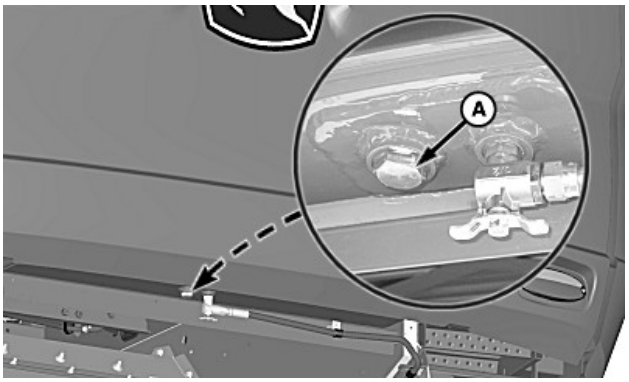
Do not overfill fuel tank. Bodily injury can result from fuel splash back. Leakage can result from expansion of fuel. If tank is too full, then left in direct sunlight or if temperature gets too hot, tank will overflow.

Fuel tank cap (A) is not vented. Excess air is vented through the fuel tank breather (B).

Visually inspect fuel tank breather. Do not allow excessive amounts of chaff or debris to collect on breather. If the breather is covered with debris, it does not allow fuel tank to breathe. Remove fuel tank breather from hose and clean.

OUO6075,0004A65-19-04DEC18

Fuel Tank—Draining



H95330—UN—21JUN11

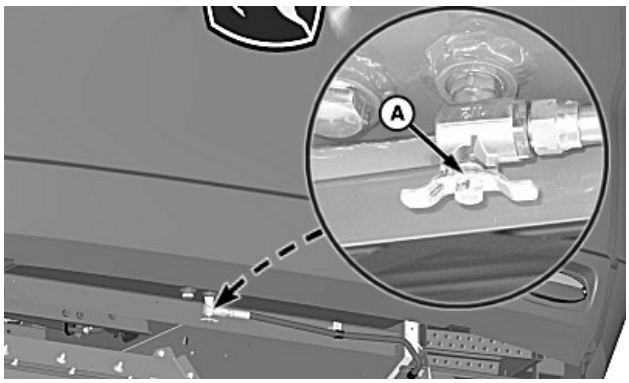
A—Plug

CAUTION: Shut OFF engine, set parking brake and remove key before performing maintenance work.

Remove plug (A) at bottom of fuel tank to drain fuel.

OUO6075,0000591-19-16FEB10

Fuel Tank—Shut-Off Valve



H95332—UN—30SEP10

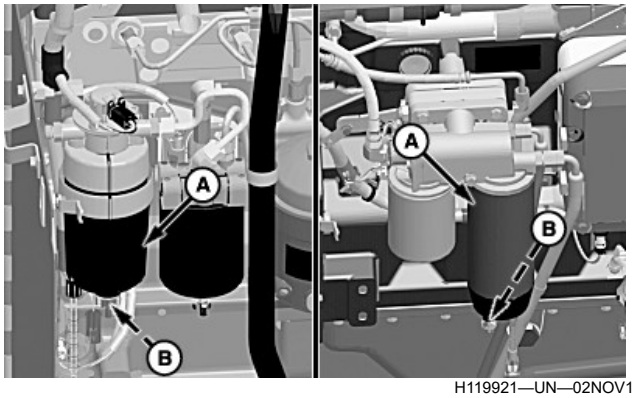
A—Valve

CAUTION: Shut OFF engine, set parking brake and remove key before performing maintenance work.

Close valve (A) at bottom of fuel tank when servicing fuel filters.

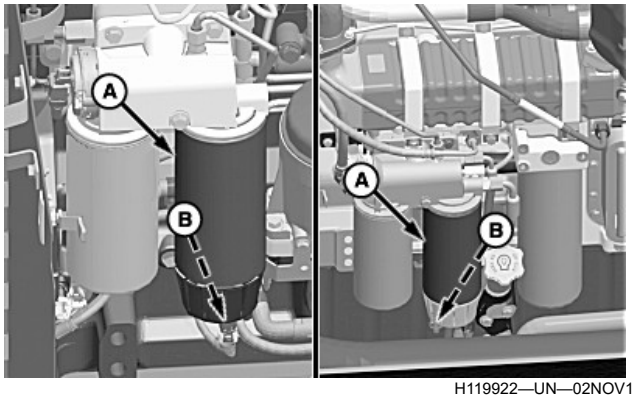
OUO6075,0000913-19-30AUG10

Water Separator Primary Fuel Filter—Draining



H119921—UN—02NOV16

Tier 2/Stage II (Style A / Style B)



H119922—UN—02NOV16

Final Tier 4/Stage V (Style A / Style B)

A—Primary Fuel Filter
B—Drain

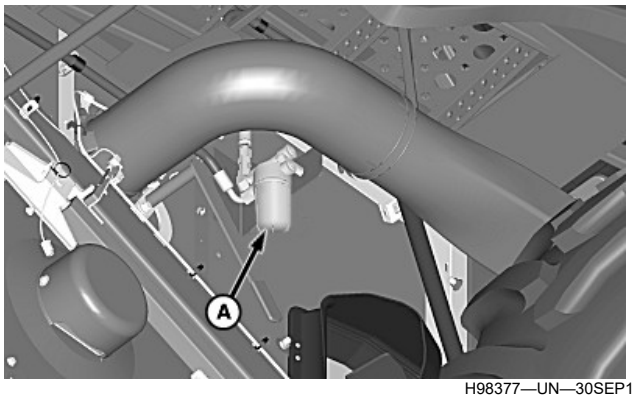
CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work.

When primary fuel filter (A) senses water in the fuel system, a diagnostic trouble code is generated.

If a diagnostic trouble code appears, drain primary filter using drain (B) and reset code.

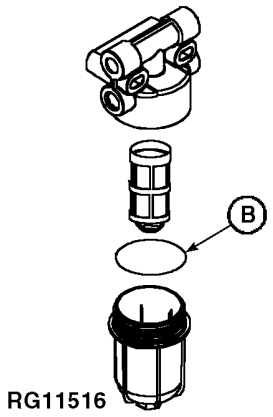
OUO6075,000480C-19-13NOV17

Fuel Precleaner Filter—Cleaning



H98377—UN—30SEP10

Fuel Precleaner Filter



RG11516—UN—10NOV00

Fuel Precleaner Parts

A—Precleaner Bowl
B—O-ring

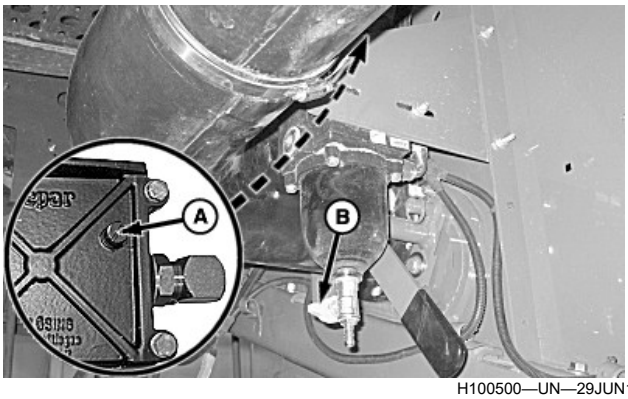
NOTE: Do not clean fuel precleaner and change primary and secondary fuel filters at the same time. Doing so makes it difficult to restart machine. Perform this procedure, then run engine before changing primary and secondary fuel filters.

Clean fuel precleaner filter if buildup is visible on the filter screen or if a diagnostic trouble code appears. Reset code after cleaning filter.

1. Start engine and run 3—5 minutes at low idle if machine had not been previously running.
2. Shut OFF engine and close valve at bottom of the fuel tank to prevent drain back within the supply line.
3. Thoroughly clean fuel precleaner assembly and surrounding area.
4. Remove precleaner bowl (A).
5. Clean filter screen and precleaner bowl. Inspect O-ring (B).
6. Install screen and tighten precleaner bowl.
7. Open valve at bottom of the fuel tank to fill the precleaner.
8. Start engine and run 3—5 minutes at low idle.

OUO6075,000456F-19-20DEC16

Heavy-Duty Fuel Precleaner Filter (Optional)—Flushing



H100500—UN—29JUN11

A—Bleed Screw
B—Drain Valve

NOTE: Do not clean fuel precleaner and change primary and secondary fuel filters at the same time. Doing so makes it difficult to restart machine. Perform this procedure, then run engine before changing primary and secondary fuel filters.

Heavy-duty fuel precleaner should be back flushed whenever bowl is half full of water or when diagnostic code appears. Reset code after cleaning. If code still displays, see Heavy-Duty Fuel Precleaner Filter (Optional)—Replacing and Cleaning.

Filter element can be back flushed up to five times before being replaced.

1. Shut OFF engine and close valve at bottom of the fuel tank.
2. Open bleed screw (A) on top of the water separator. Allow water and dirt to be released from filter element and settle in bottom of bowl.
3. Push in on the drain valve (B) and turn counterclockwise to drain water and dirt from bowl.

NOTE: As fuel, water, and dirt are drained from bowl, more water and dirt are flushed from filter element and collect in bottom of bowl.

4. Close drain valve and allow water and dirt to settle again.
5. Repeat steps 3 and 4 until all dirt and water is removed.
6. Close bleed screw and open valve at bottom of the fuel tank.
7. Turn key switch ON for 60 seconds to allow fuel pump to prime the fuel system and check for leaks.
8. Start engine and run 3—5 minutes at low idle. If

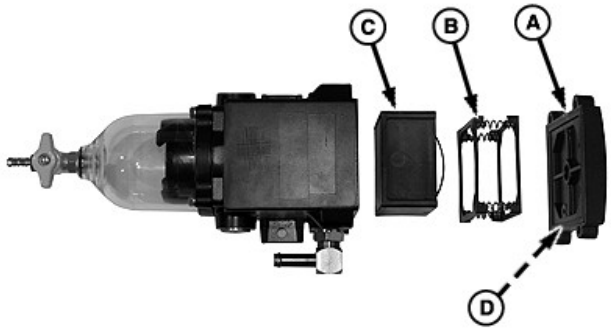
engine does not start or dies, see Primary and Secondary Fuel Filter Element—Replacing.

OUO6075,000469F-19-21MAR17

Heavy-Duty Fuel Precleaner Filter (Optional)—Replacing and Cleaning

Replacing Filter

RXA0084320—UN—26SEP05



H91103—UN—09APR08

A—Lid
B—Spring Cassette
C—Filter Element
D—Gasket

NOTE: After filter element has been back flushed five times, clean filter. Replace filter when light is no longer visible while holding filter up to light.

1. Shut OFF engine and close valve at bottom of the fuel tank.
2. Loosen lid screws evenly in sequence shown.

NOTE: Lid and spring cassette is used again, but a replacement filter element must be installed.

3. Remove lid (A), spring cassette (B), and filter element (C).
4. Install replacement filter element and previously removed spring cassette (B).
5. Inspect lid gasket (D) and replace if necessary.
6. Install lid and tighten in sequence shown.
7. Open valve at bottom of the fuel tank.
8. Turn key switch ON for 60 seconds to allow fuel pump to prime the fuel system and check for leaks.
9. Start engine and run 3—5 minutes at low idle. If engine does not start or dies, see Primary and Secondary Fuel Filter Element—Replacing.

Cleaning Filter

1. Shut OFF engine and close valve at bottom of the fuel tank.

NOTE: Use a catch pan when draining fuel.

2. Open drain valve and drain fuel from bowl.
3. Loosen lid screws evenly in sequence shown.
4. Remove lid (A) and spring cassette (B).
5. Lift out filter element (C) by handle.

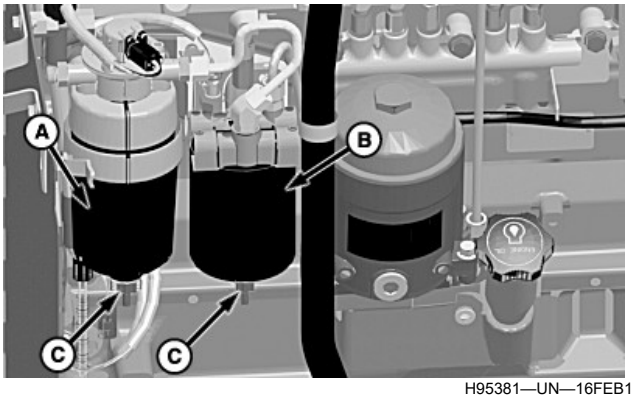
NOTE: Inspect filter for damage. If damaged, install replacement filter.

6. Wash filter in clean diesel fuel or mineral spirits.
7. Install filter element and spring cassette.
8. Inspect lid gasket (D) and replace if necessary.
9. Install lid and cap screws and leave cap screws finger tight.
10. Tighten cap screws in sequence as shown.
11. Open valve at bottom of the fuel tank.
12. Turn key switch ON for 60 seconds to allow fuel pump to prime the fuel system and check for leaks.
13. Start engine and run 3—5 minutes at low idle.

OUO6075,000456E-19-20DEC16

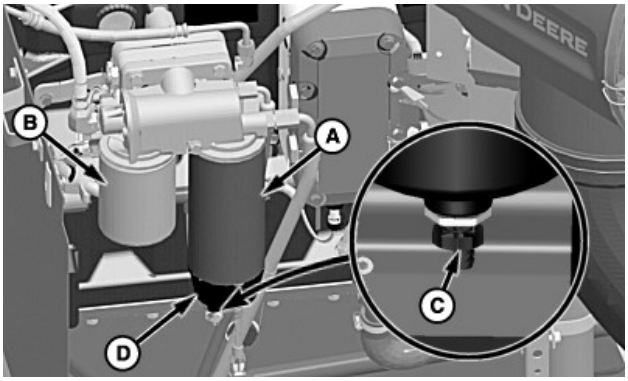
Primary and Secondary Fuel Filter Element —Replacing

TS1343—UN—18MAR92



H95381—UN—16FEB10

Style A



H115841—UN—10SEP15

Style B

A—Primary Fuel Filter
B—Secondary Fuel Filter
C—Drain Valves
D—Separator Bowl

CAUTION: High-pressure fluid remaining in fuel lines can cause serious injury. Only technicians familiar with this type of system should perform repairs. Before disconnecting fuel lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system, wait a minimum of 15 minutes after engine is stopped.

NOTE: Do not clean fuel precleaner and change primary and secondary fuel filter at the same time. Doing so makes it difficult to restart machine. Perform fuel precleaner cleaning procedure then run engine before changing primary and secondary fuel filter.

Change primary and secondary fuel filters if performance decline is noticed or a diagnostic trouble code appears. Reset code after replacing filters.

1. Start engine and run 3—5 minutes at low idle if machine had not been previously operating.
2. Shut OFF engine and close valve at bottom of the fuel tank.
3. Thoroughly clean the exterior of the filter elements and filter mounting areas.

CAUTION: Fuel in filters may be under pressure. Do not remove filters without completing the following step.

NOTE: Use a catch pan when draining fuel and when removing fuel filters.

4. **Style A:** Drain fuel contaminates and relieve pressure from the primary fuel filter (A) and secondary fuel filter (B) by opening drain valves (C). Close drain valves and remove fuel filters.

   Style B: Drain fuel contaminates and relieve pressure from the primary fuel filter (A) by opening drain valve (C). Close drain valve and remove and retain separator bowl (D).

NOTE: Additional fuel drains from filter housings.

5. Remove primary fuel filter and secondary fuel filter.

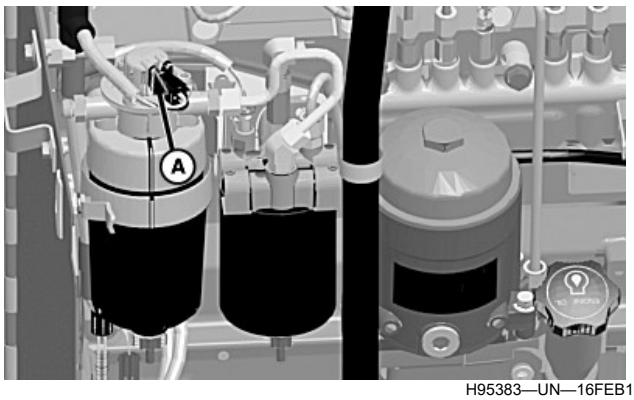
IMPORTANT: Do NOT prefill either fuel filter with fuel.

NOTE: Lube filter seals with diesel fuel before installing.

6. **Style B Only:** Install previously removed separator bowl on the replacement primary fuel filter.
7. Install primary fuel filter (A) assembly on engine. Tighten filter assembly 3/4 of a turn after seal contacts filter housing.
8. Install replacement secondary fuel filter (B). Tighten filter 3/4 of a turn after seal contacts filter housing.
9. Verify that drain valves (C) are closed.
10. Open valve at bottom of the fuel tank.
11. Turn key switch ON for 60 seconds to prime the fuel system.
12. Start engine and run 3—5 minutes at low idle.

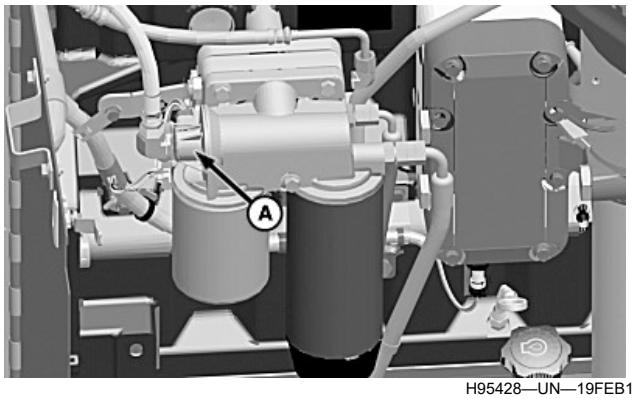
OUO6075,00043C7-19-20DEC16

Fuel System—Bleeding



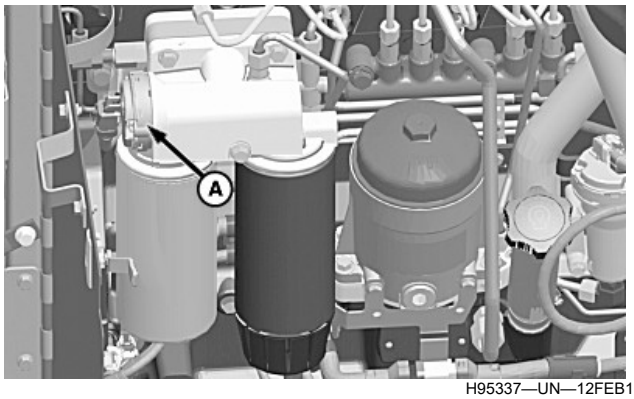
H95383—UN—16FEB10

Tier 2/Stage II (Style A)



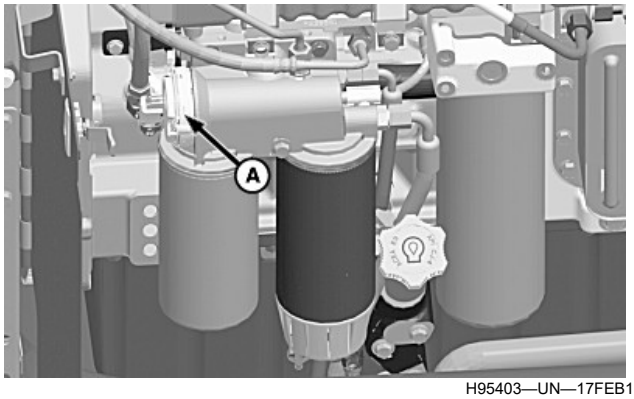
H95428—UN—19FEB10

Tier 2/Stage II (Style B)



H95337—UN—12FEB10

Final Tier 4/Stage V (Style A)



H95403—UN—17FEB10

Final Tier 4/Stage V (Style B)

A—Fuel Pump

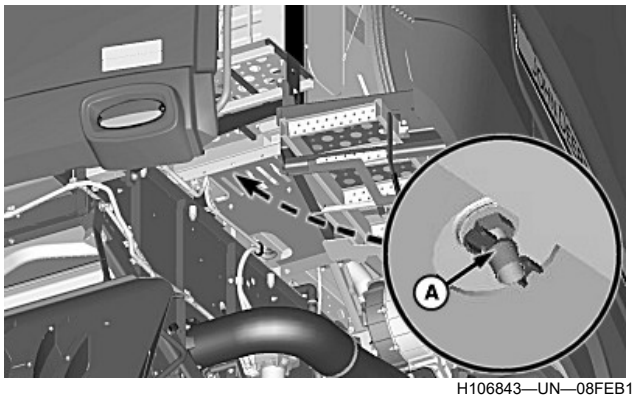
CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work.

Air can enter fuel system when changing fuel filters or when machine has run out of fuel. Air in the fuel system could prevent engine from starting. If engine does not start, turn key switch ON for 60 seconds to allow fuel pump (A) to prime the fuel system.

OUO6075,000480D-19-13NOV17

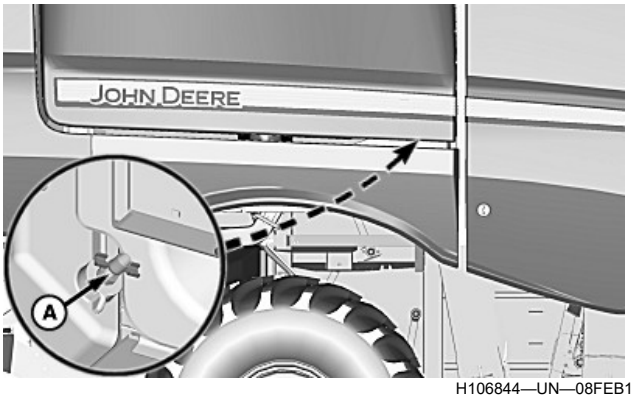
Cooling System—Draining

TS281—UN—15APR13



H106843—UN—08FEB13

Tier 2/Stage II (Style A)



H106844—UN—08FEB13

Tier 2/Stage II (Style B)
Final Tier 4/Stage V

A—Drain Valve

CAUTION: Shut OFF engine, set park brake and remove key. Avoid being scalded when opening surge tank cap. Never open cap when engine is hot. Open cap slowly to relieve pressure.

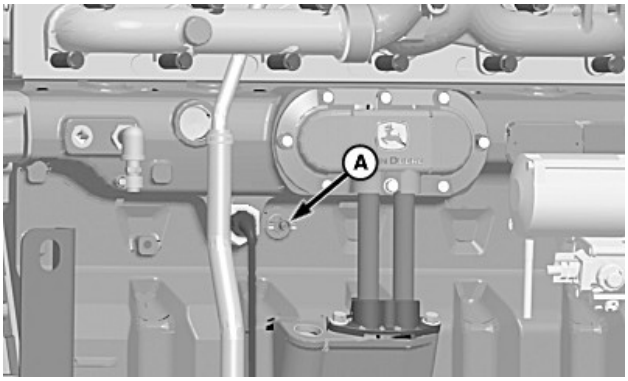
NOTE: Radiator drain is on the front side of radiator.

When Cool-Gard™ II or Cool-Gard™ II PG is used, the drain interval is 6 years or 6000 hours of operation.

If a coolant other than Cool-Gard™ II or Cool-Gard™ II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.

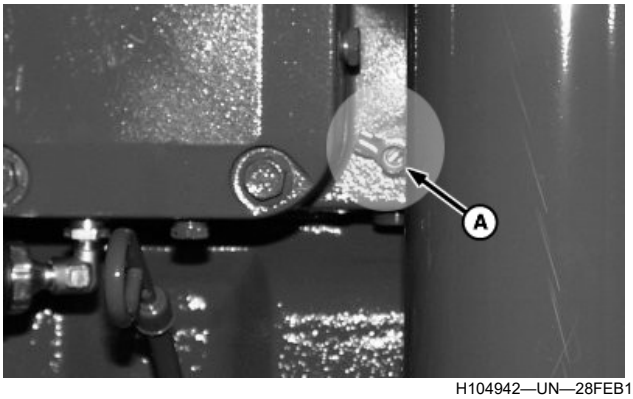
Coolant must be drained and replaced. See Fuels and Lubricants section for engine coolant recommendations.

Open drain valve (A) on radiator.



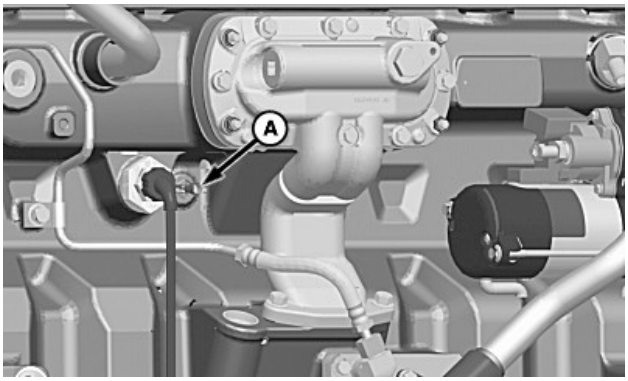
H104941—UN—28FEB12

Front Side of Engine (Tier 2/Stage II) (Style A)



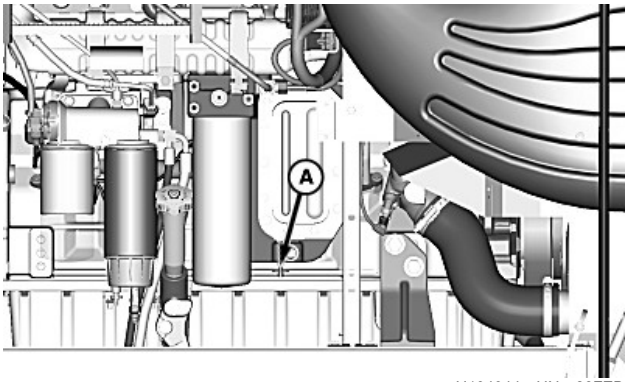
H104942—UN—28FEB12

Above Crankshaft (Tier 2/Stage II) (Style B)



H104943—UN—28FEB12

Front Side of Engine (Final Tier 4/Stage V) (Style A)



H104944—UN—28FEB12

Rear Side of Engine (Final Tier 4/Stage V) (Style B)

A—Drain Valve

Open drain valve (A) on the engine block.

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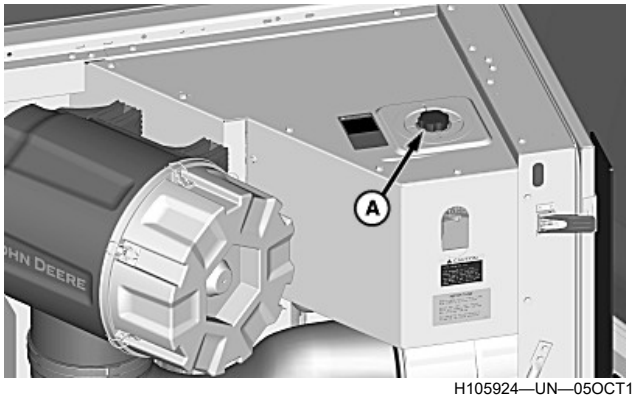


H105924—UN—05OCT12

A—Surge Tank Cap

Open surge tank cap (A) to allow coolant to drain faster.

Close radiator drains and fill system with clean water.

Install surge tank cap and run engine until it reaches operating temperature with heater ON.

Shut OFF engine, carefully remove surge tank cap and drain water out before rust or sediment settles.

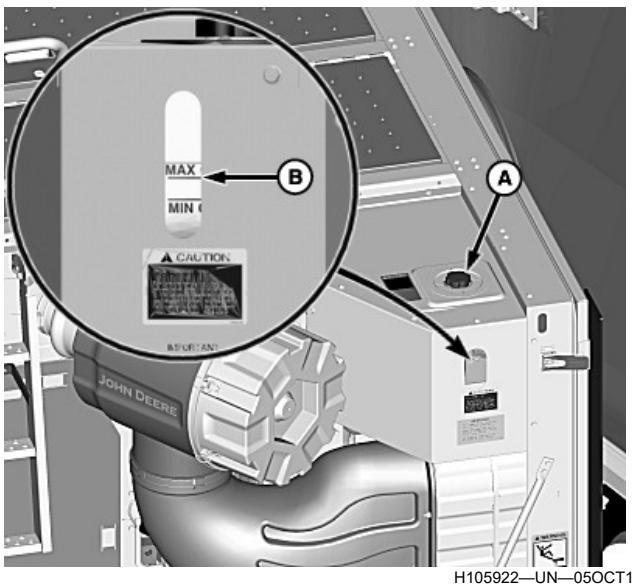
Close radiator drains and refill system with a solution of clean water and John Deere Cooling System Cleaner PT500 or equivalent. Follow instructions with cleaner.

After using cleaner, flush system with clean water and drain.

Close radiator drains and fill system. See Cooling System—Filling in this section for filling procedure. See Fuels and Lubricants section for engine coolant recommendations.

OUO6075,000480E-19-13NOV17

Cooling System—Filling



H105922—UN—05OCT12

A—Surge Tank Cap
B—Max Cold Line

CAUTION: Shut OFF engine, set park brake and remove key. Avoid being scalded when opening surge tank cap. Never open cap when engine is hot and never fill cooling system when engine is overheated. Open cap slowly to relieve pressure. Pour coolant in slowly. Check coolant level when engine is cold.

IMPORTANT: A special cap is used on the surge tank and radiator. If cap is damaged or missing, it must be replaced by an equivalent cap.

Never pour cold water into a hot engine as it might crack cylinder block or head. Do not operate engine without coolant.

Remove surge tank cap (A) and fill until fluid is at "Max Cold" line (B).

Install cap on surge tank, turn ON heater, and run engine until it reaches operating temperature.

Carefully remove cap from surge tank and refill as necessary. Install cap on surge tank.

When engine is cool, coolant level should be at "Max Cold" line.

NOTE: Coolant level must be between "Max Cold" and "Min Cold" lines. Add coolant as needed if coolant is below "Min Cold" line.

OUO6075,00041C9-19-27JAN16

Cooling System—Winterize

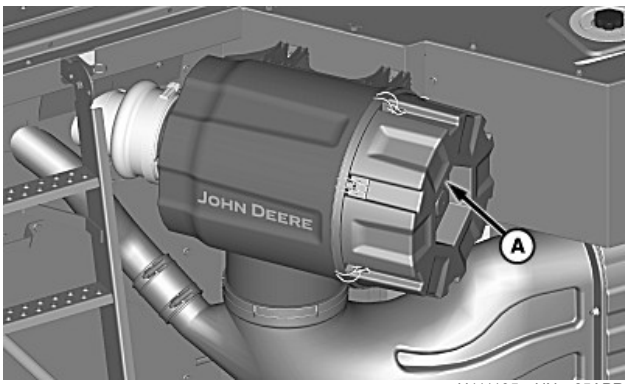
IMPORTANT: Do not drain cooling system to protect against freezing. Heater does not drain completely, so damage would result.

Before cold weather, be sure that cooling system has enough antifreeze. Use a reliable brand of permanent-type ethylene glycol antifreeze which contains a rust inhibitor and water pump lubricant, but does not contain a leak-stopping additive. See Fuels and Lubricants in this manual for correct recommendations.

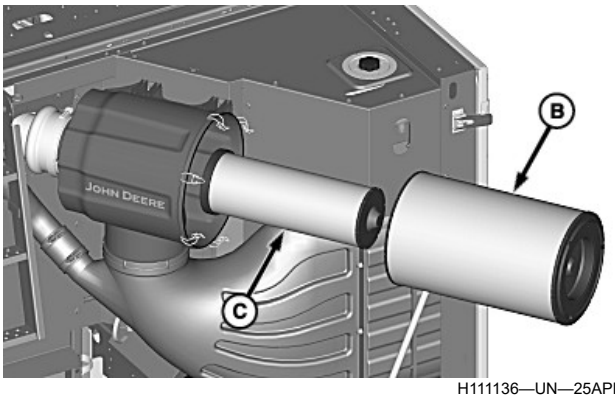
After adding antifreeze, turn heater ON and run engine until it reaches operating temperature. This mixes the solution and circulates it through the system.

OUO6075,00043AF-19-11OCT16

Air Cleaner Filters—Removing



H111135—UN—25APR14



H111136—UN—25APR14

A—Dust Cover
B—Primary Air Filter
C—Safety Filter

IMPORTANT: When servicing filters, shut OFF engine, set park brake and remove key so dirt cannot be pulled into engine.

Service filters only when engine air filter icon is displayed on armrest display.

Unsnap dust cover (A) and remove primary air filter (B).

Unscrew safety filter (C) in a counterclockwise direction to remove. Safety filter stops dirt that would pass through a damaged primary filter.

IMPORTANT: Never wash, brush, or knock elements. If blowing out the primary element, use dry compressed air (500 kPa; 72.5 psi). Clean the element from the inside out making sure that the tip of the air gun does not come in contact with the filter paper.

Never clean the safety element. Replace if dirty.

Never run engine without both filters in place.

Service filters as needed.

Install safety filter and turn in a clockwise direction until hand tight.

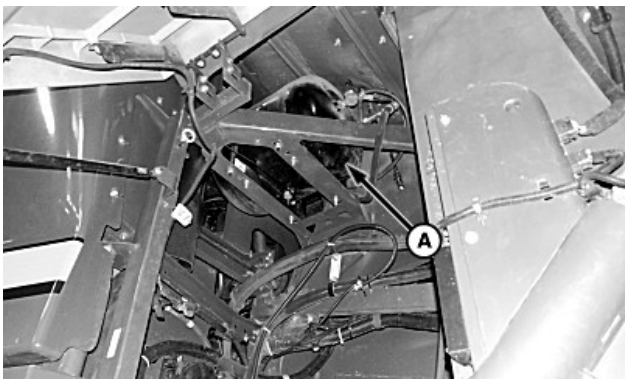
Install primary air filter and dust cover.

Check all connections in the air intake system. Be certain they are tight.

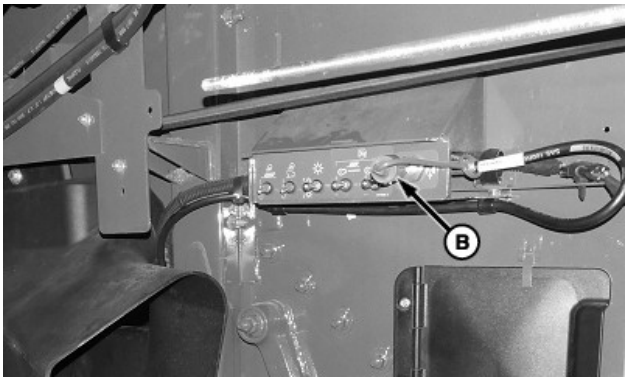
IMPORTANT: Do not use any exhaust flow cleaning unit to blow chaff off combine. Using such a unit can cause air filter failure, followed by engine failure.

OUO6075,00017D4-19-25APR14

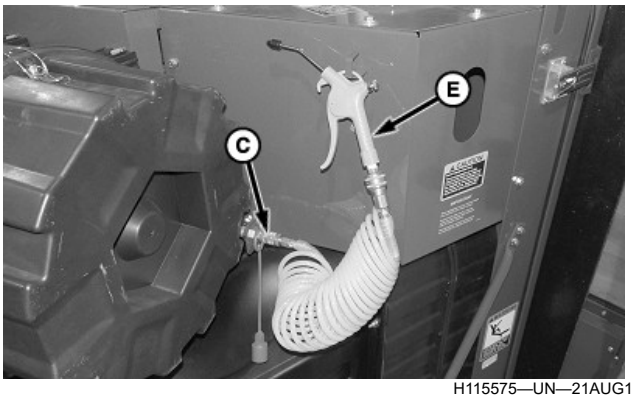
Air Compressor System (If Equipped)



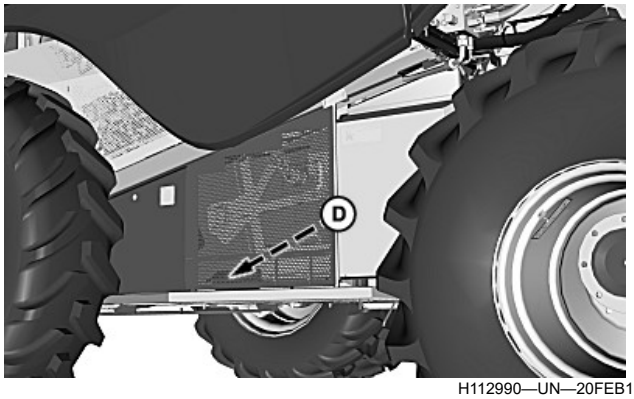
H112987—UN—20FEB15



H115838—UN—09SEP15



H115575—UN—21AUG15



H112990—UN—20FEB15

A—Reservoir
B—Air Compressor Hose Coupler
C—Air Compressor Hose Coupler
D—Air Compressor Hose/Wand
E—Air Compressor Hose/Wand

IMPORTANT: Never clean engine air filters or debris management air filters while machine engine is running.

NOTE: For optimal air compressor performance, engine must be running to provide continuous air supply.

Not recommended to inflate tires on machine or operate air tools.

Not recommended to use both coupler connections simultaneously.

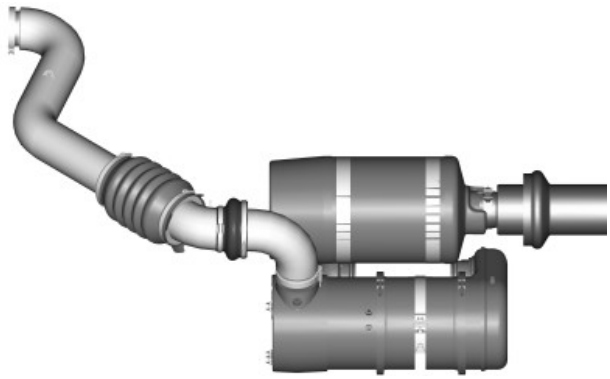
Air compressor is on engine deck and reservoir (A) is on the right-hand side of machine.

Air compressor hose coupler (B) is on left-hand side of machine and air compressor hose coupler (C) is on engine deck.

Air compressor hose/wand (D) is on left-hand side of machine and air compressor hose/wand (E) is on engine deck.

OUO6075,000412E-19-21MAR16

Diesel Particulate Filter Maintenance and Service (Final Tier 4/Stage V)



H115641—UN—27AUG15

The Exhaust Filter includes the Diesel Oxidation Catalyst and Diesel Particulate Filter (DPF). The DPF is designed to retain residual ash, which is a noncombustible result of additives used in crankcase lubrication oils and the fuel. The DPF provides many hours of maintenance free operation. At some point the DPF will require professional service to remove the accumulated ash. The exact number of hours of operation before service is required will vary depending upon the engine's power category, duty cycle and operating conditions, engine oil ash content, and fuel quality. Adhering to John Deere's recommended oil and fuel specifications will maximize the hours of operation before professional DPF service is required.

As the engine owner, you are responsible for performing the required maintenance described in your Operator's Manual. During normal equipment operation the DPF maintenance requirements will depend on the rate at which ash accumulates in it. Generally, DPFs on engines above 175 hp / 130 kW will require servicing at about 4,500 hours. As ash levels rise in the DPF the capacity for soot storage is reduced and the back pressure of the exhaust system will rise more frequently. A diagnostic trouble code will appear indicating when the DPF needs servicing.

The removal of DPF ash must be done by removing the DPF from the machine and placing it into specialized equipment. Do not remove ash by using water or other chemicals. Removing ash by these methods may damage the material securing the DPF in its canister, resulting in the loosening of the DPF element in the canister and subjecting it to damage from vibration.

Failure to follow the approved ash removal methods may violate U.S. federal, state and local hazardous waste laws, along with damage to the DPF resulting in potential denial of the Diesel Exhaust Filter emissions warranty. It is strongly recommended you take the DPF to an authorized John Deere service location or other qualified service provider for servicing.

When AUTO or PARKED cleaning is enabled, the exhaust temperature may be high under no load or light load conditions at certain times during the exhaust filter cleaning cycle.

Disable exhaust filter cleaning system in conditions where it may be unsafe for elevated exhaust temperatures.

Disable the automatic exhaust filter cleaning system only when necessary.

OUO6075,0004808-19-13NOV17

Exhaust Filter / Diesel Particulate Filter Ash Handling and Disposal (Final Tier 4/Stage V)

CAUTION: Under federal, state, and/or local laws or regulations, Diesel Particulate Filter ash may be classified as a hazardous waste. Hazardous wastes must be disposed of in accordance with all applicable federal, state and local laws or regulations governing hazardous waste disposal. Only a qualified service provider should remove ash from the DPF. Personal protective equipment and clothing, maintained in a sanitary and reliable condition, should be used when handling and cleaning a DPF. See your John Deere dealer or qualified service provider for assistance.

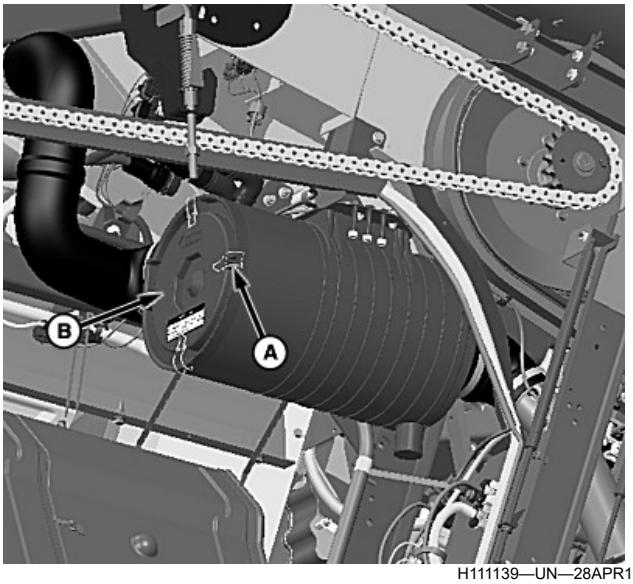
OUO6075,0004809-19-13NOV17

Exhaust Filter Disposal (Final Tier 4/Stage V)

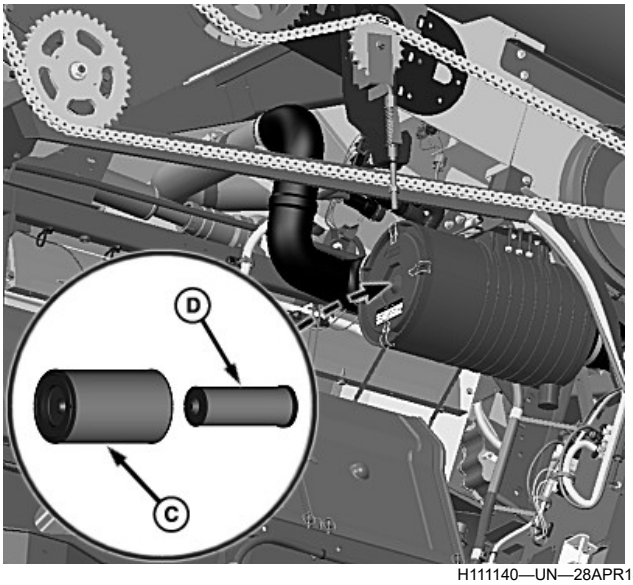
CAUTION: Proper management of an Exhaust Filter that has reached the end of its useful life is required, since the ash or catalyst material in the device may be classified as hazardous waste under federal, state, and/or local laws or regulations. Used Exhaust Filters, which include the Diesel Particulate Filter, may be exchanged at any John Deere dealer or qualified service provider.

OUO6075,000480A-19-13NOV17

Engine Debris Management Air Filter—Removing (Final Tier 4/Stage V)



H111139—UN—28APR14



H111140—UN—28APR14

A—Latches
B—Dust Cover
C—Primary Air Filter
D—Safety Filter

IMPORTANT: When servicing filters, shut OFF engine, set park brake and remove key so dirt cannot be pulled into engine.

Service filter only when engine debris management air filter icon is displayed on armrest display.

Disengage latches (A) and remove dust cover (B).

Remove primary air filter (C).

Remove safety filter (D) in a counterclockwise direction. Safety filter stops dirt that would pass through a damaged primary filter.

IMPORTANT: Never wash, brush, or knock elements. If blowing out the primary element, use dry compressed air (500 kPa; 72.5 psi). Clean the element from the inside out making sure that the tip of the air gun does not come in contact with the filter paper.

Never clean the safety element. Replace if dirty.

Never run engine without both filters in place.

Service filters as needed.

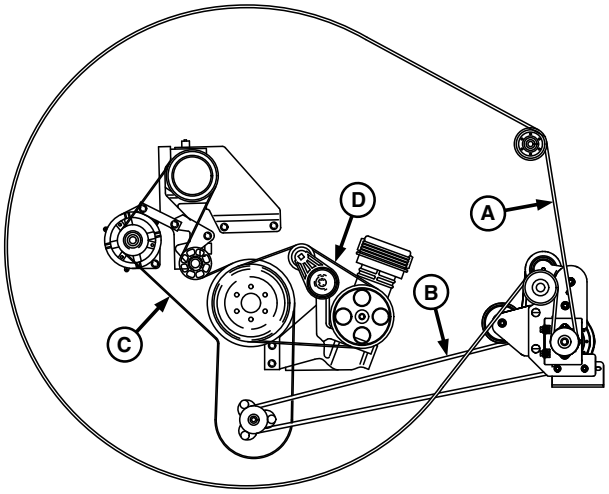
Install safety filter and turn in a clockwise direction until hand tight.

Install primary air filter.

Install cover and engage latches.

OUO6075,000480B-19-13NOV17

Engine Belt—Routing (Tier 2/Stage II)

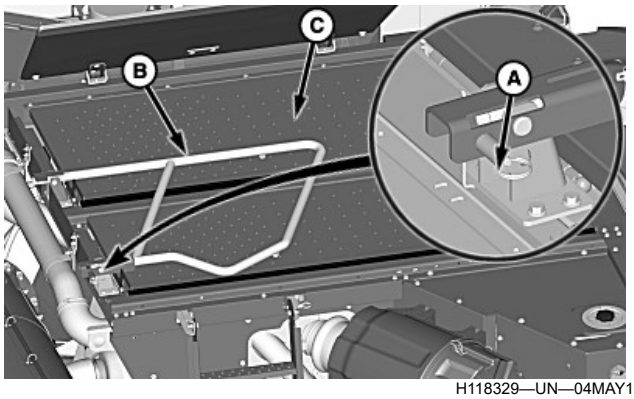


H124552—UN—21JUN18

A—Rotary Screen Drive Belt, Screen Side
B—Rotary Screen Drive Belt, Engine Side
C—Cooling Fan, Air Conditioner, Compressor Belt
D—Air Compressor Belt (If Equipped)

OUO6075,00049EF-19-20JUN18

Engine Accessory/Fan Drive/Air Compressor (If Equipped) Belt—Replacing (Tier 2/Stage II)

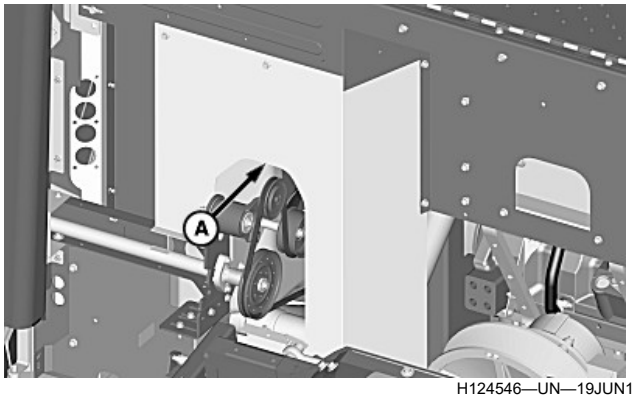


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

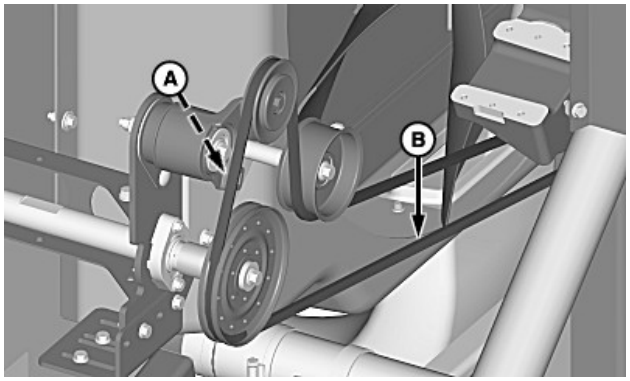


H124546—UN—19JUN18

Front Side Of Engine

A—Shield

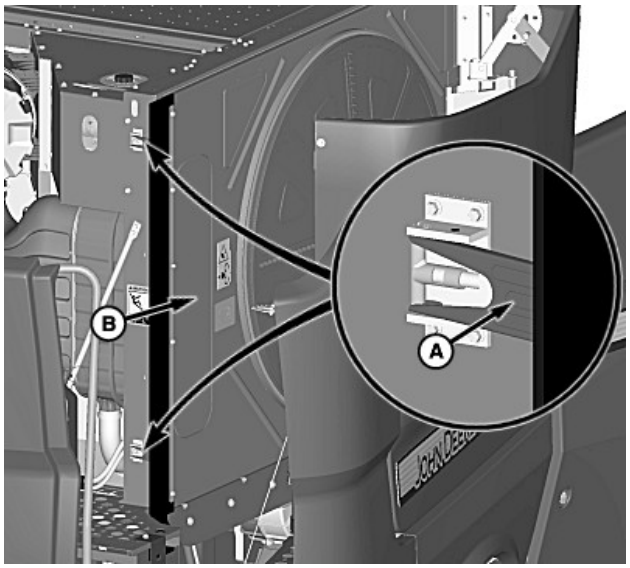
2. Remove shield (A).



H124547—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

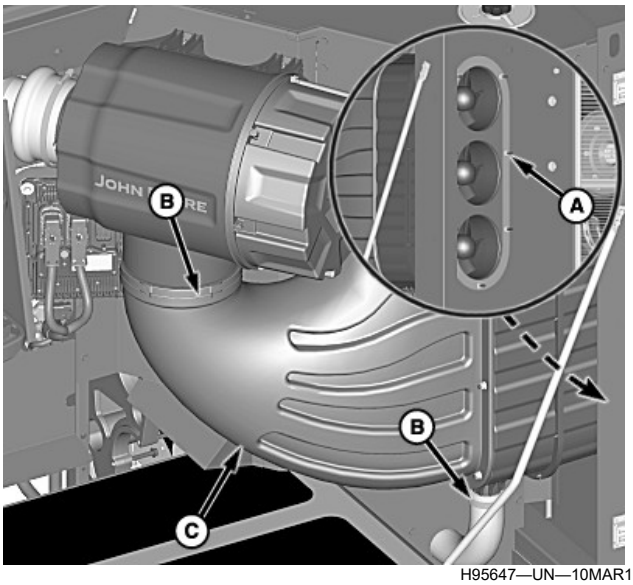
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).



H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

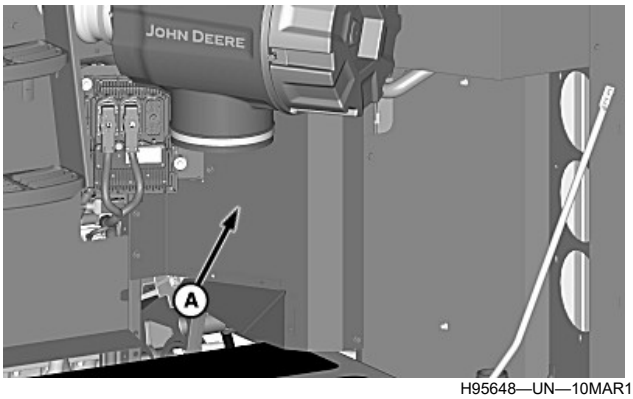
5. Pull latches (A) and open rotary screen door (B).



H95647—UN—10MAR10

A—Nut (7 used)
B—Clamps
C—Air Duct

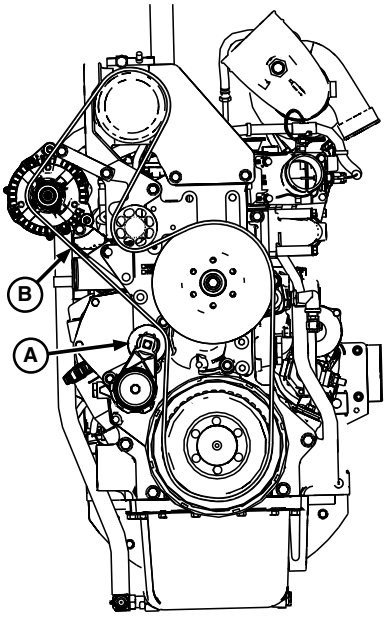
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.



H95648—UN—10MAR10

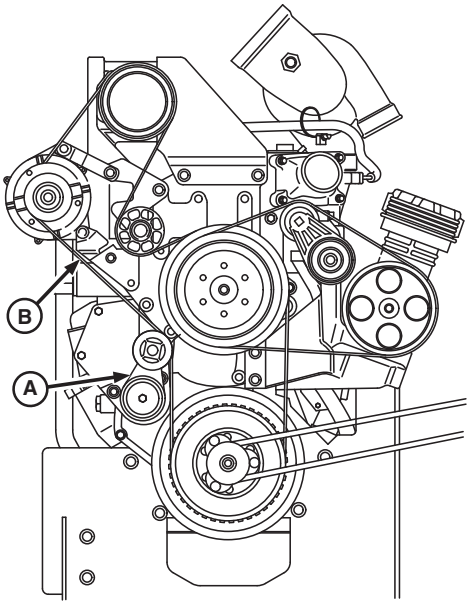
A—Shield

8. Remove shield (A).



H95702—UN—15MAR10

Engine Accessory/Fan Drive Belt Without Air Compressor

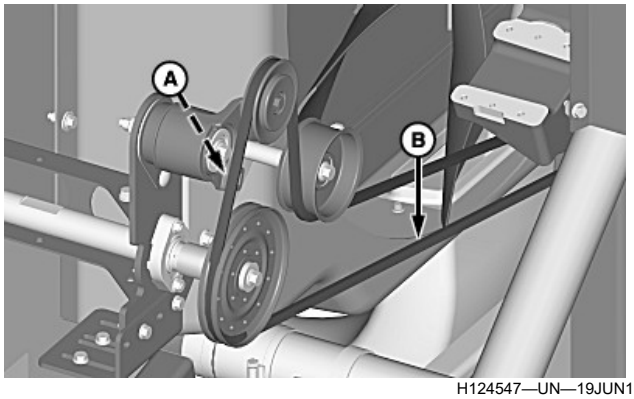


H113079—UN—02MAR15

Engine Accessory/Fan Drive Belt With Air Compressor

A—Tensioner Arm
B—Engine Accessory/Fan Drive Belt

9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.
11. Install replacement belt over the fan blades.
12. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.



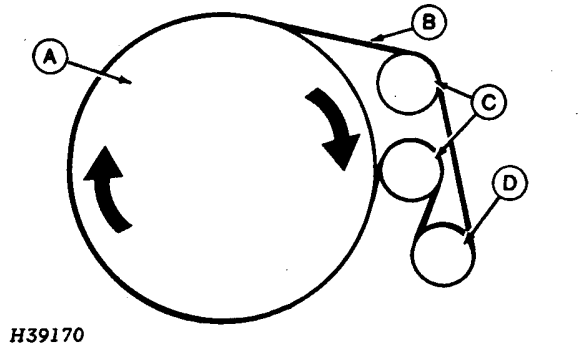
H124547—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

13. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
14. Install previously removed shield (front side).
15. Close separator access cover and lower handrail.
16. Install previously removed shield (rear side) and air duct.
17. Close and latch the rotary screen door.

OUO6075,00049E6-19-20JUN18

Rotary Screen Belt—Routing

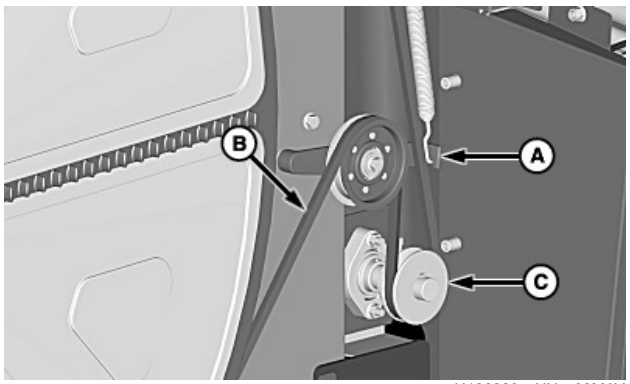


H39170—UN—11OCT88

A—Rotary Screen
B—Belt
C—Idlers
D—Drive Sheave

OUO6075,00006CE-19-05MAR10

Rotary Screen Belt—Replacing



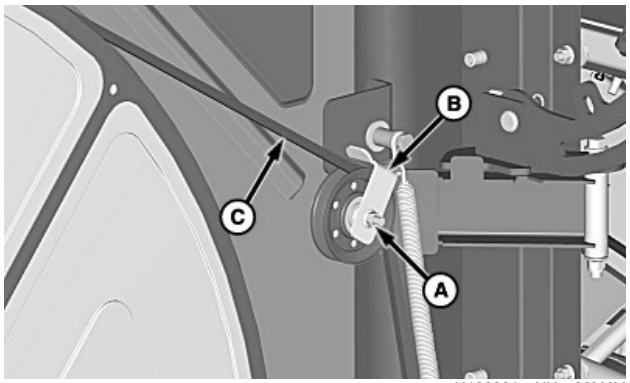
H126280—UN—08MAY19

A—Tensioner Lever
B—Rotary Screen Belt
C—Sheave

CAUTION: Shut OFF engine, set park brake, and remove key.

Prevent injury. Belt is under tension. Slowly release the tensioner lever when belt is removed.

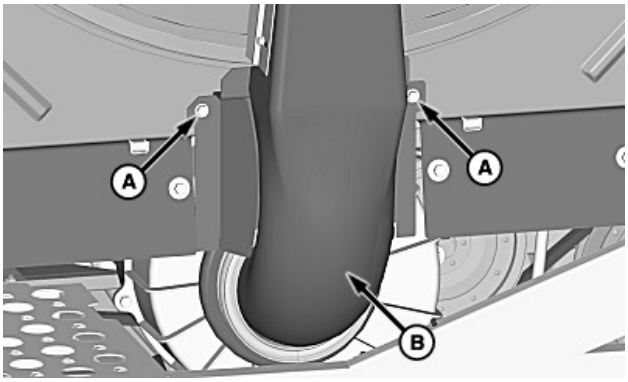
1. Push down on tensioner lever (A) and relieve tension from the rotary screen belt (B).
2. Remove rotary screen belt from sheave (C) and slowly release the lever and spring tension.



H126281—UN—08MAY19

A—Nut
B—Belt Trap
C—Rotary Screen Belt

3. Remove nut (A) and belt trap (B).
4. Remove rotary screen belt (C).



H126282—UN—08MAY19

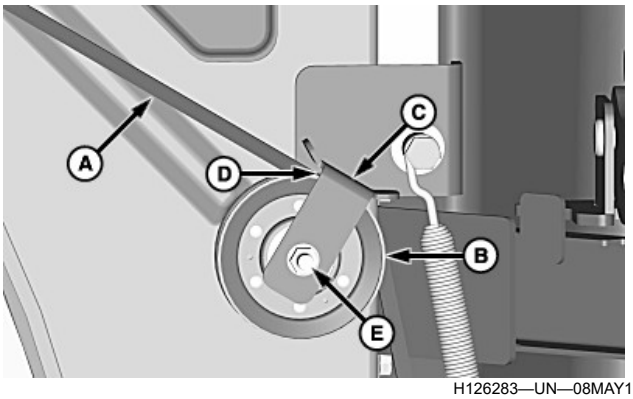
A—Cap Screw and Nut (2 used)
B—Vacuum Duct

NOTE: The rotary screen door must be opened to access the nuts from the inside.

5. Remove cap screws and nuts (A).
6. Pull vacuum duct (B) away from the rotary screen door and remove the rotary screen belt.
7. Pull vacuum duct away from the rotary screen door and install the replacement rotary screen belt.
8. Install cap screws and nuts.

IMPORTANT: To prevent damage, verify that the rotary screen clears the notches in the vacuum duct rake bar. Adjust vacuum duct as needed.

9. Close rotary screen door.



H126283—UN—08MAY19

A—Rotary Screen Belt
B—Pulley
C—Belt Trap
D—Gap
E—Nut

10. Install rotary screen belt (A) around pulley (B) as shown.

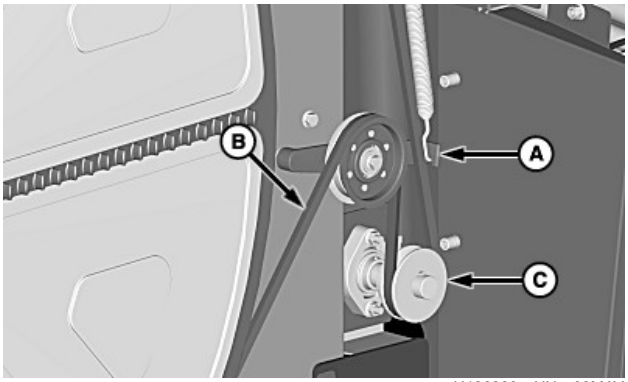
IMPORTANT: To prevent damage, verify that the belt trap is parallel to the rotary screen belt.

11. Install belt trap (C) and adjust to specified gap (D).

Specification

Belt Trap—Gap. . . . . 4 mm (5/32 in)

12. Install and tighten the nut (E), making sure that the belt trap does not move.



H126280—UN—08MAY19

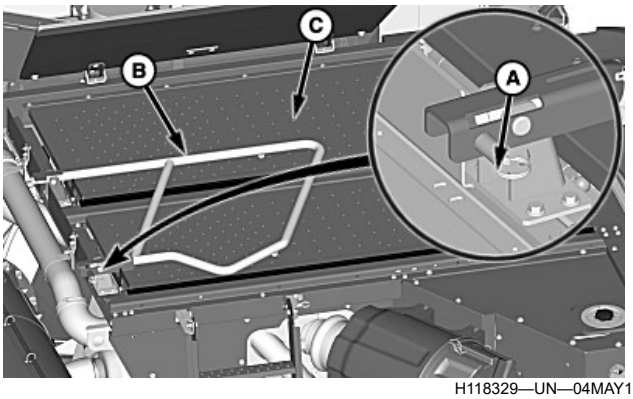
A—Tensioner Lever
B—Rotary Screen Belt
C—Sheave

CAUTION: Prevent injury. Belt is under tension. Slowly release the tensioner lever when the belt is installed.

13. Push down on tensioner lever (A) and relieve tension from the rotary screen belt (B).
14. Install rotary screen belt around sheave (C) as shown and slowly release the lever and spring tension.

OUO6075,0004B91-19-30MAY19

Rotary Screen Drive Belt—Replacing (Tier 2/Stage II)



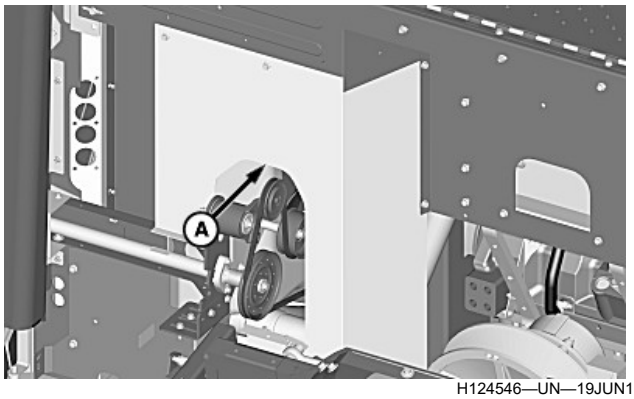
H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until

handrail locks into place to open separator access cover (C).

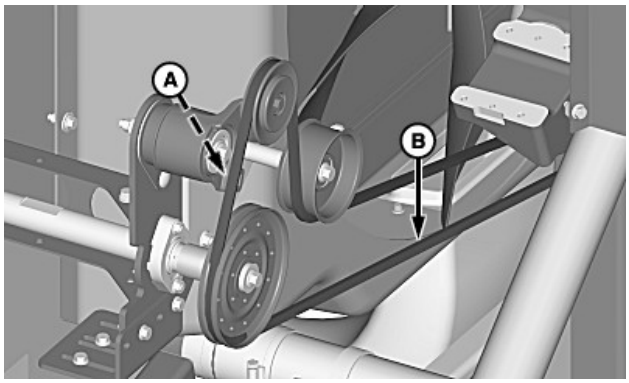


H124546—UN—19JUN18

Front Side Of Engine

A—Shield

2. Remove shield (A).



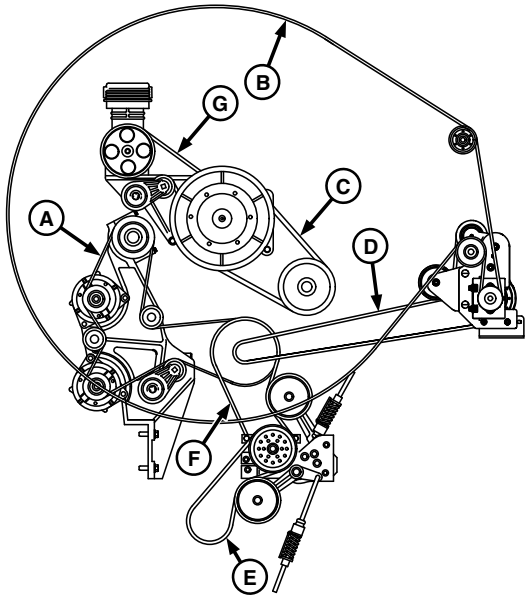
H124547—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).
5. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.
6. Install previously removed shield, close separator access cover, and lower handrail.

OUO6075,00049E7-19-20JUN18

Engine Belt—Routing (Final Tier 4/Stage V)

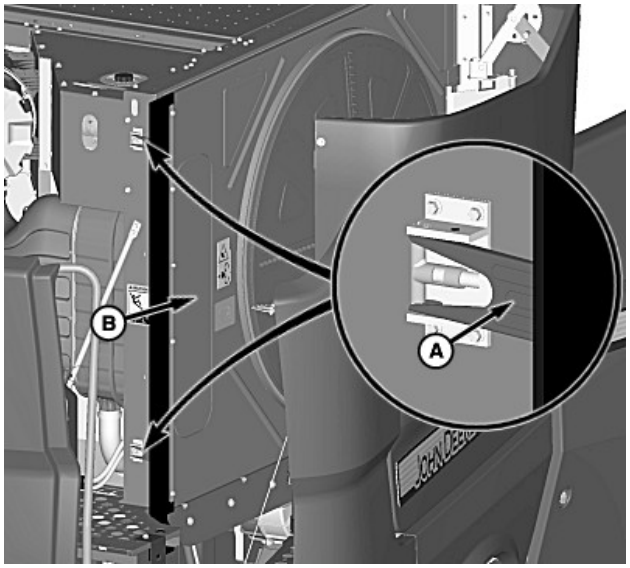


H124553—UN—21JUN18

A—Air Conditioner Compressor, Alternator Belt
B—Rotary Screen Drive Belt, Screen Side
C—Variable Speed Fan Belt
D—Rotary Screen Drive Belt, Engine Side
E—Vacuum Fan Driven Belt, Fan Side
F—Vacuum Fan Drive Belt, Engine Side
G—Air Compressor Belt (If Equipped)

OUO6075,00049EC-19-20JUN18

Air Conditioner Compressor/Alternator Belt —Replacing (Final Tier 4/Stage V)

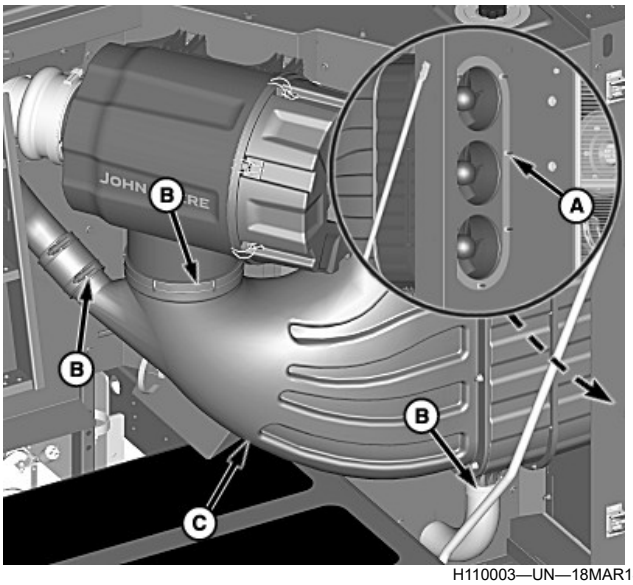


H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

CAUTION: Shut OFF engine, set park brake and remove key.

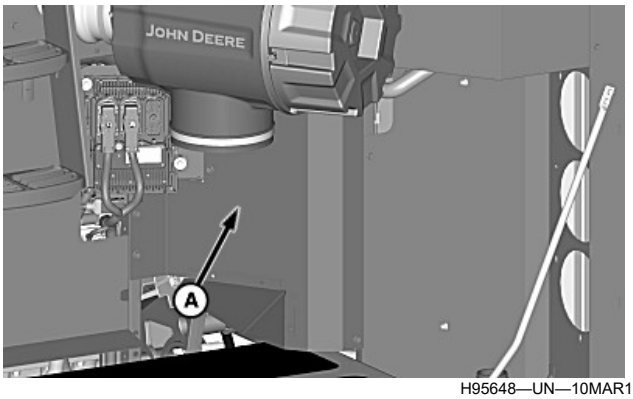
1. Pull latches (A) and open rotary screen door (B).



H110003—UN—18MAR14

A—Nut (7 used)
B—Clamps
C—Air Duct

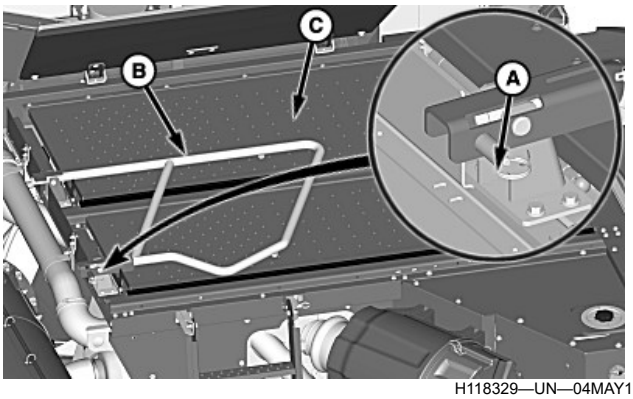
2. Remove nuts (A) and loosen hose clamps (B).
3. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

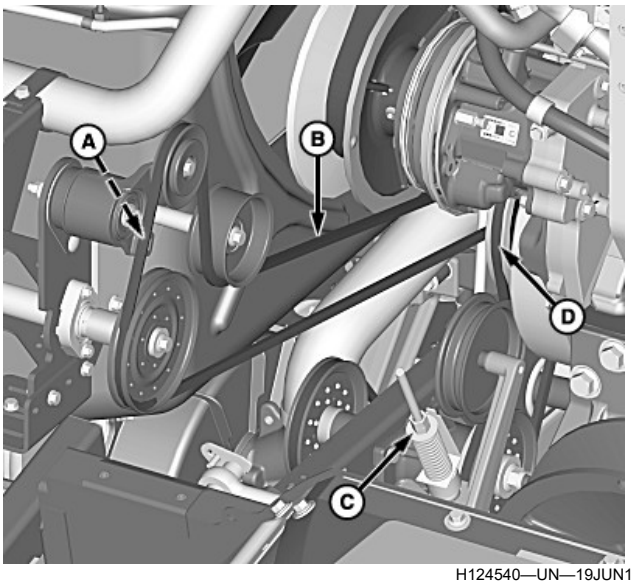
4. Remove shield (A).



H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

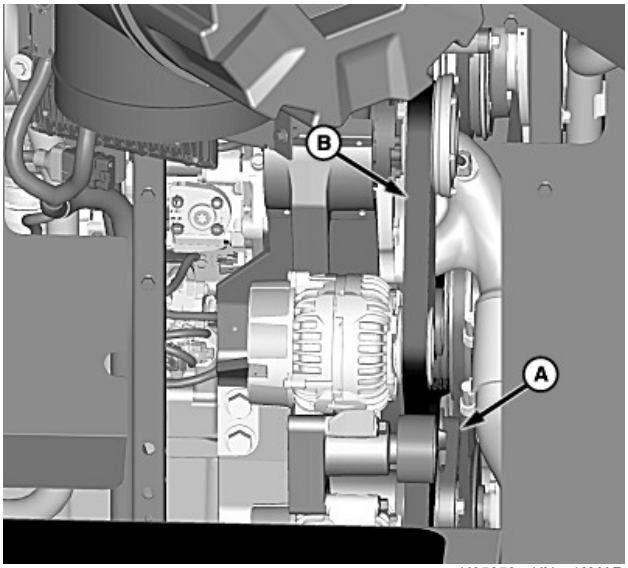
5. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).



H124540—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt
C—Nut (2 used)
D—Vacuum Fan Drive Belt

6. Use breaker bar to relieve belt tension from the tensioner arm (A).
7. Remove rotary screen drive belt (B).
8. Loosen nuts (C) and remove the vacuum fan drive belt (D).

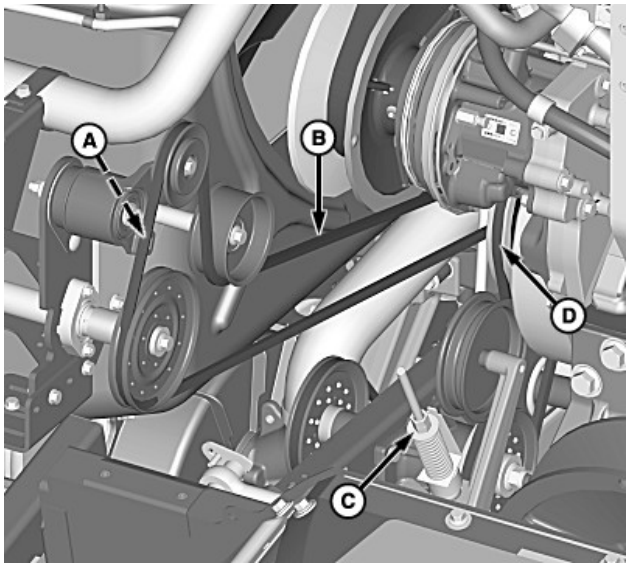


H95656—UN—10MAR10

A—Tensioner Arm
B—Belt

9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.

11. Install replacement belt over the fan blades.
12. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.



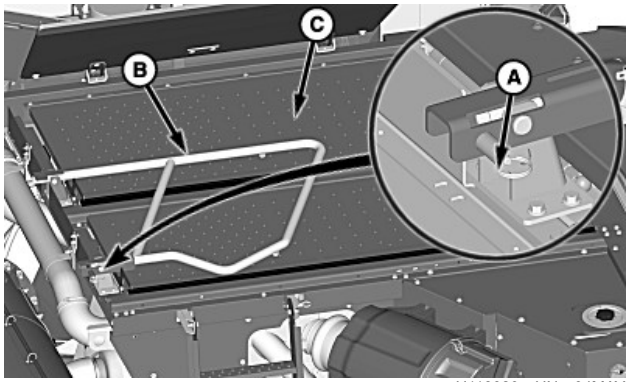
H124540—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt
C—Nut (2 used)
D—Vacuum Fan Drive Belt

13. Install the vacuum fan drive belt (D).
14. Tighten nuts (C) until washer is positioned between end of gauge and bottom of step.
15. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
16. Close separator access cover and lower handrail.
17. Install previously removed shield (rear side) and air duct.
18. Close and latch the rotary screen door.

OUO6075,00049DD-19-20JUN18

Rotary Screen Drive Belt—Replacing (Final Tier 4/Stage V)

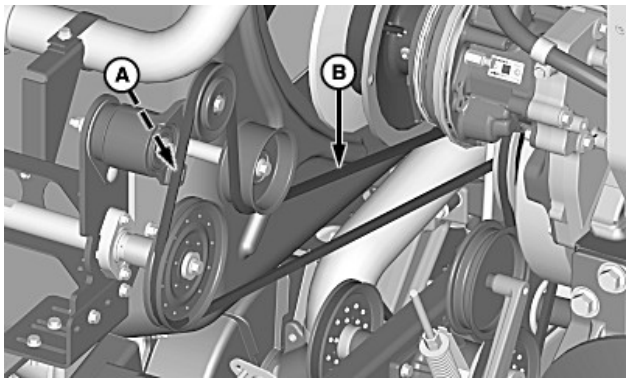


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).



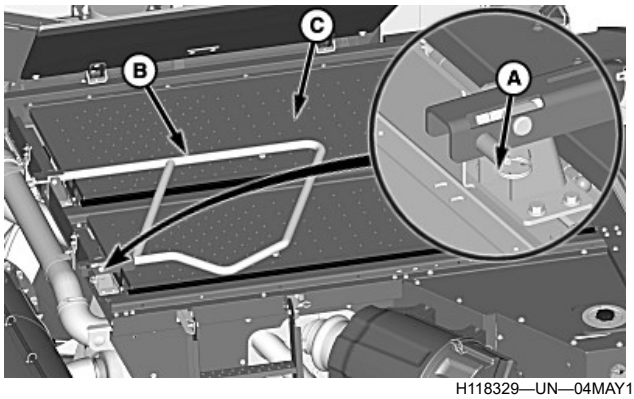
H124541—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

2. Use breaker bar to relieve belt tension from the tensioner arm (A).
3. Remove rotary screen drive belt (B).
4. Use breaker bar to relieve tension from the tensioner arm to install replacement rotary screen drive belt.
5. Close separator access cover and lower handrail.

OUO6075,00049DE-19-20JUN18

Vacuum Fan Drive Belt—Replacing (Final Tier 4/Stage V)

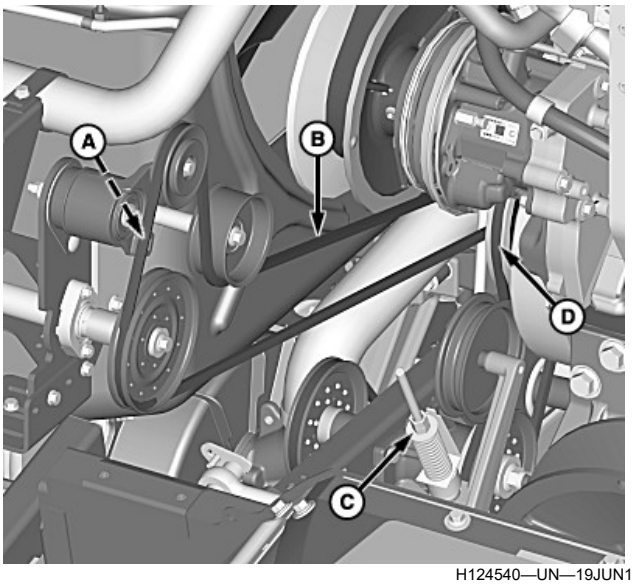


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).



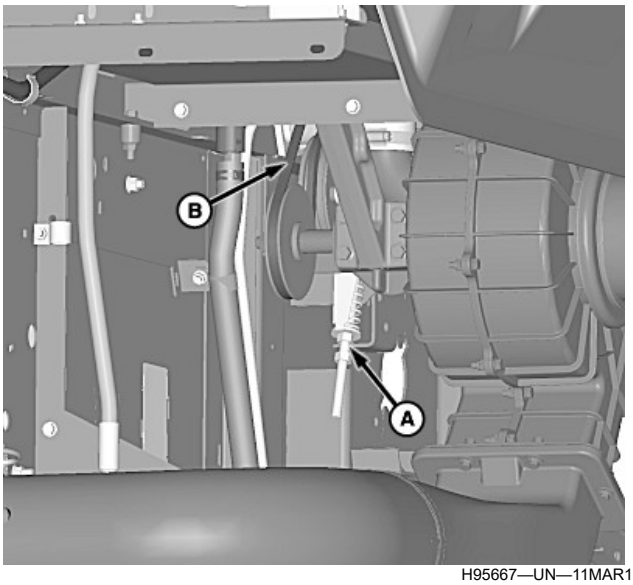
H124540—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt
C—Nut (2 used)
D—Vacuum Fan Drive Belt

2. Use breaker bar to relieve belt tension from the tensioner arm (A).
3. Remove rotary screen drive belt (B).
4. Loosen nuts (C) and remove the vacuum fan drive belt (D).
5. Install the replacement vacuum fan drive belt and tighten nut until washer is positioned between end of gauge and bottom of step.
6. Use breaker bar to relieve tension from the tensioner arm to install rotary screen drive belt.
7. Close separator access cover and lower handrail.

OUO6075,00049DF-19-20JUN18

Vacuum Fan Driven Belt—Replacing (Final Tier 4/Stage V)



H95667—UN—11MAR10

A—Nuts
B—Vacuum Fan Driven Belt

CAUTION: Shut OFF engine, set park brake and remove key.

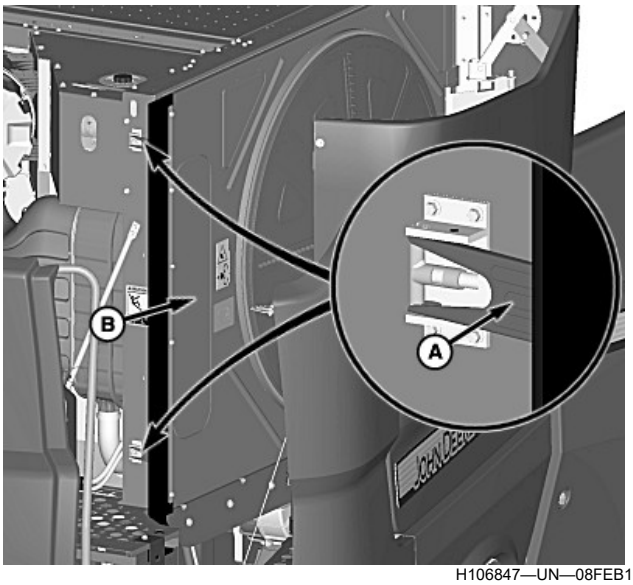
Loosen nuts (A) and remove vacuum fan driven belt (B) located below radiator.

Install replacement vacuum fan driven belt.

Tighten nuts until the washer is positioned between the end of gauge and bottom of step.

OUO6075,0004814-19-14NOV17

Variable Speed Fan Drive Belt—Replacing (Final Tier 4/Stage V)

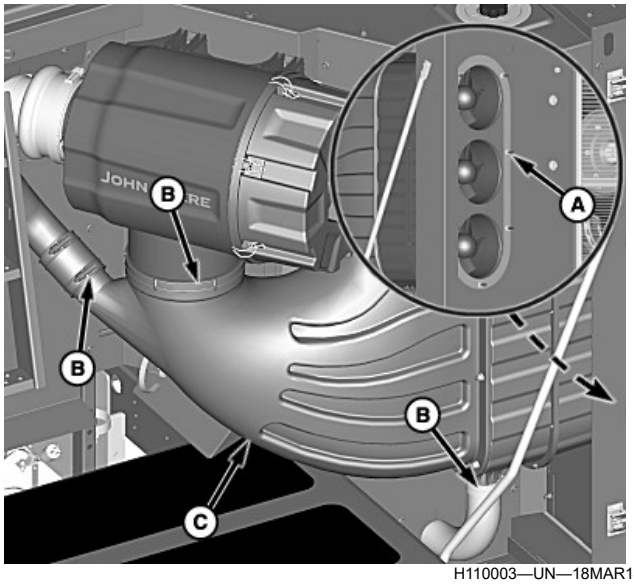


H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

CAUTION: Shut OFF engine, set park brake and remove key.

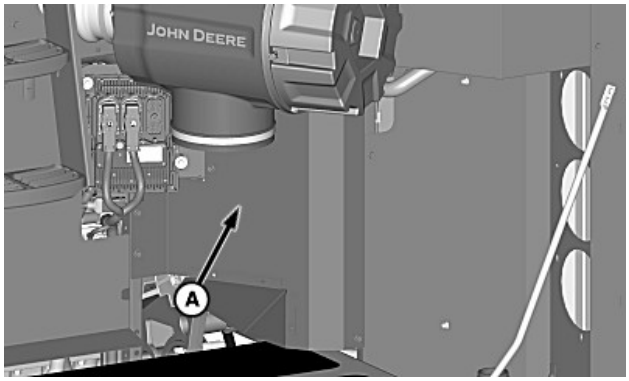
1. Pull latches (A) and open rotary screen door (B).



H110003—UN—18MAR14

A—Nuts (7 Used)
B—Clamps
C—Air Duct

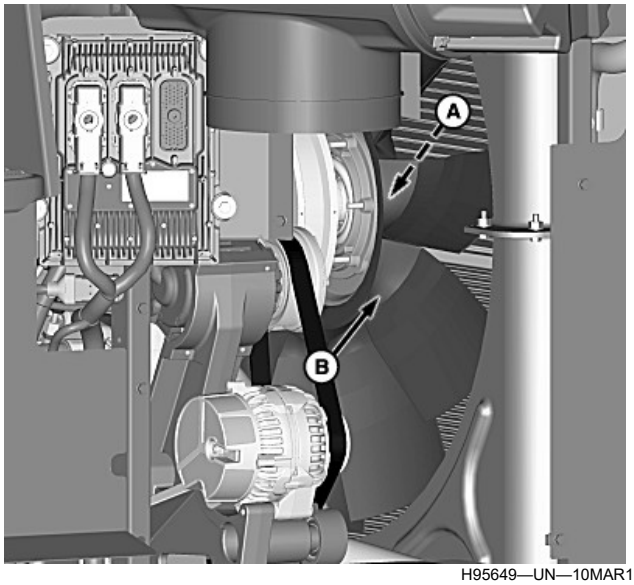
2. Remove nuts (A) and loosen hose clamps (B).
3. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

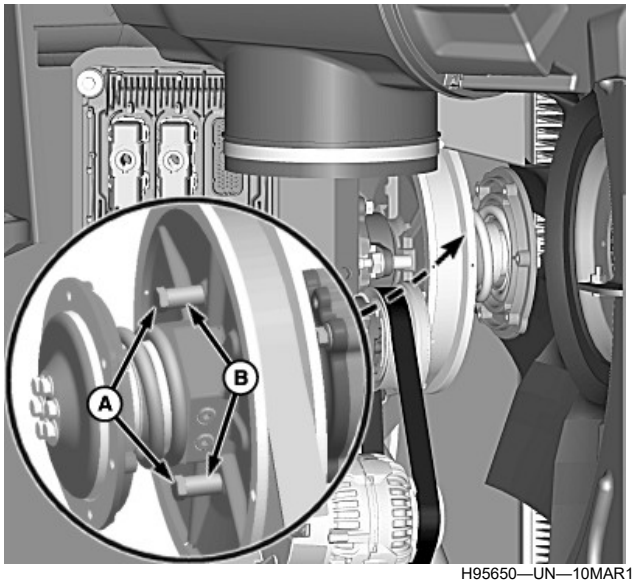
4. Remove shield (A).



H95649—UN—10MAR10

A—Cap Screws (6 Used)
B—Fan Assembly

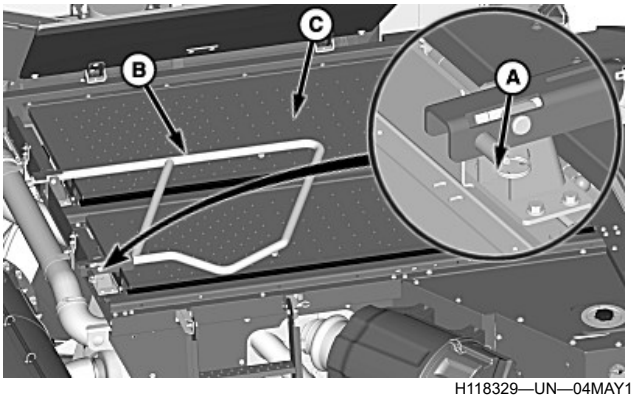
5. Remove cap screws (A) from fan assembly (B).
6. Lay fan assembly out of the way.



H95650—UN—10MAR10

A—Cap Screws
B—Spacers

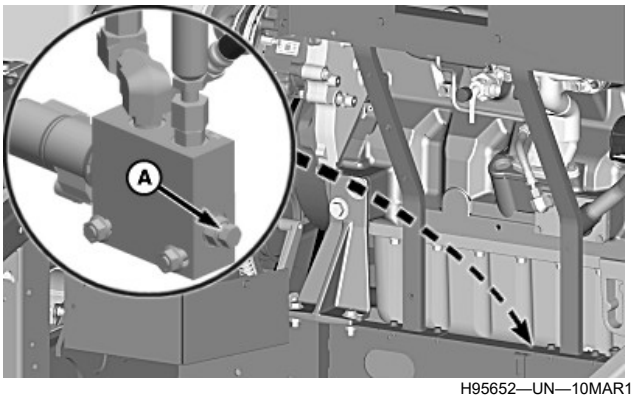
7. Remove cap screws (A) and spacers (B).
8. Install previously removed cap screws until spring is compressed completely.



H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

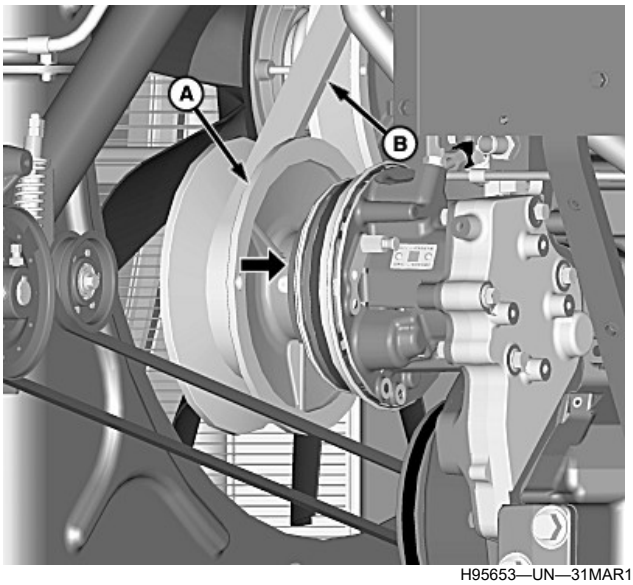
9. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).



H95652—UN—10MAR10

A—Bleed Screw

10. Locate valve on the front side of the support rail and loosen bleed screw (A) to relieve pressure from sheaves.



H95653—UN—31MAR10

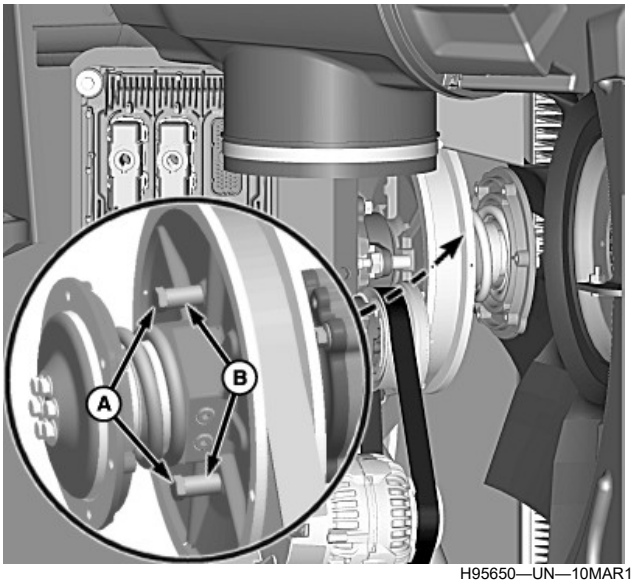
A—Sheave
B—Variable Speed Belt

11. With the bleed screw loose, pull sheave (A) towards engine until completely open.
12. Remove variable speed belt (B).

NOTE: Before installing the replacement variable speed belt, visually inspect air compressor belt (if equipped) for wear. Replace air compressor belt (if equipped) if needed. See Air Compressor Belt (If Equipped)—Replacing (Final Tier 4/Stage V) for further information.

Variable speed belt MUST be installed over the driver sheave first and then over driven sheave.

13. Install the replacement variable speed belt.

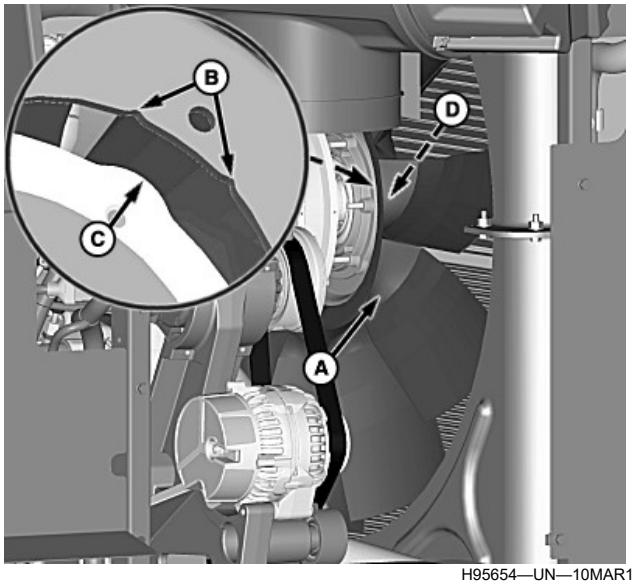


H95650—UN—10MAR10

A—Cap Screws
B—Spacers

IMPORTANT: Spring MUST be uncompressed to allow variable speed fan to adjust speed.

14. With the variable speed belt installed, remove cap screws (A) to uncompress spring and install previously removed spacers (B) as shown.



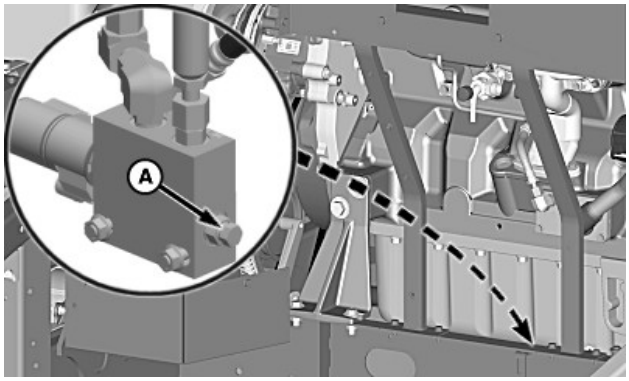
H95654—UN—10MAR10

A—Fan Assembly
B—Index Marks
C—Boss
D—Cap Screws (6 Used)

15. Install fan assembly (A) so index marks (B) are positioned on either side of boss (C).
16. Install previously removed cap screws (D). Tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 40 N·m (30 lb·ft)



H95652—UN—10MAR10

A—Bleed Screw and Nut

17. Locate valve on the front side of the support rail and tighten bleed screw and nut (A) to specification.

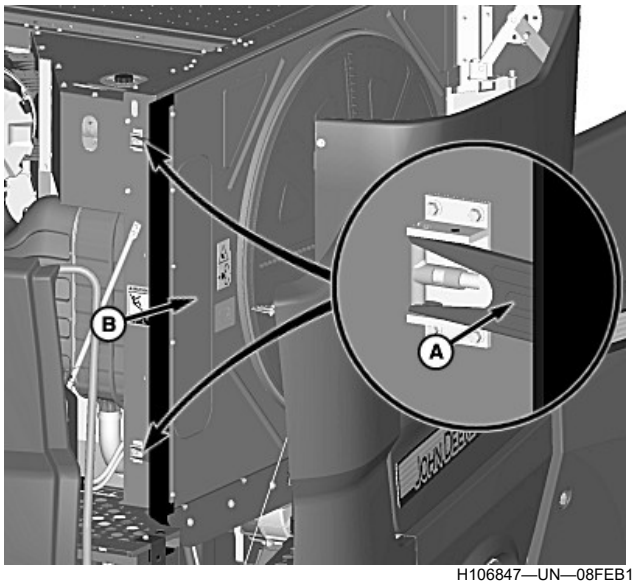
Specification

Bleed Screw and Nut—Torque. . . . . 23 N·m (17 lb·ft)

18. Close separator access cover and lower handrail.
19. Install previously removed shield (rear side) and air duct.
20. Close and latch the rotary screen door.

OUO6075,0004815-19-14NOV17

Air Compressor Belt (If Equipped)—Replacing (Final Tier 4/Stage V)

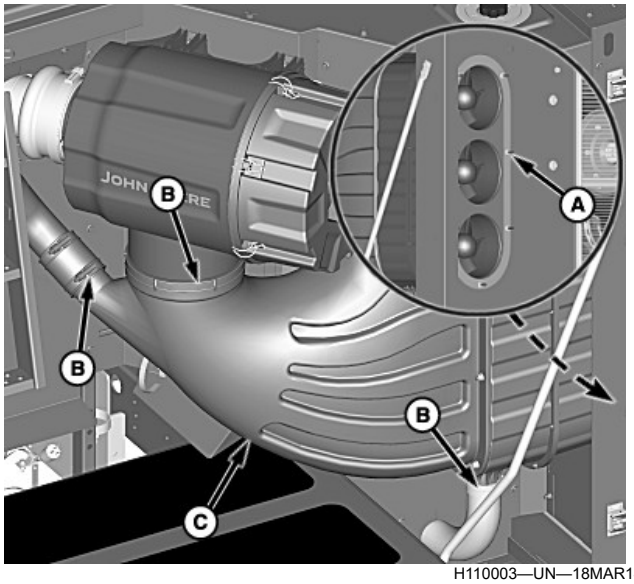


H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

CAUTION: Shut OFF engine, set park brake and remove key.

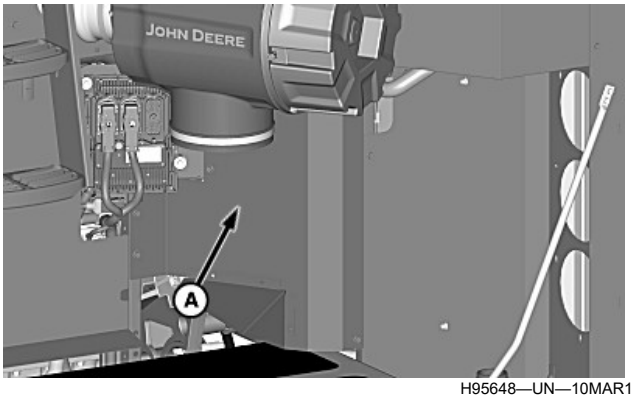
1. Pull latches (A) and open rotary screen door (B).



H110003—UN—18MAR14

A—Nuts (7 Used)
B—Clamps
C—Air Duct

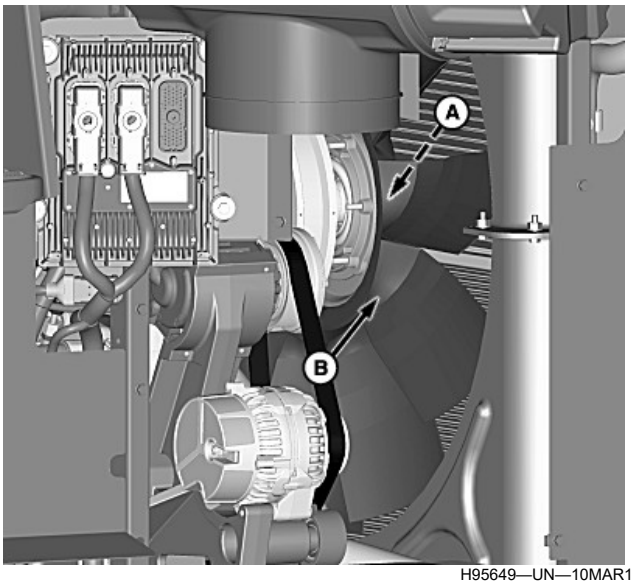
2. Remove nuts (A) and loosen hose clamps (B).
3. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

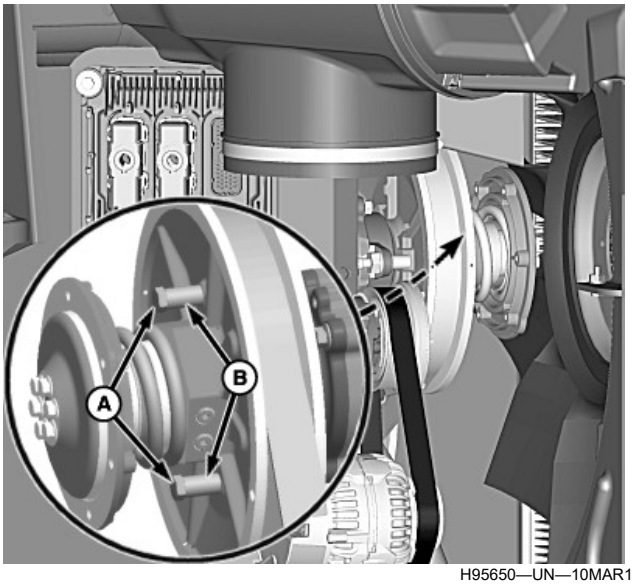
4. Remove shield (A).



H95649—UN—10MAR10

A—Cap Screws (6 Used)
B—Fan Assembly

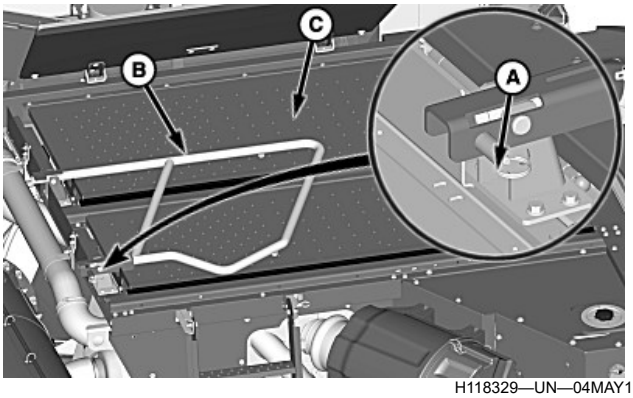
5. Remove cap screws (A) from fan assembly (B).
6. Lay fan assembly out of the way.



H95650—UN—10MAR10

A—Cap Screws
B—Spacers

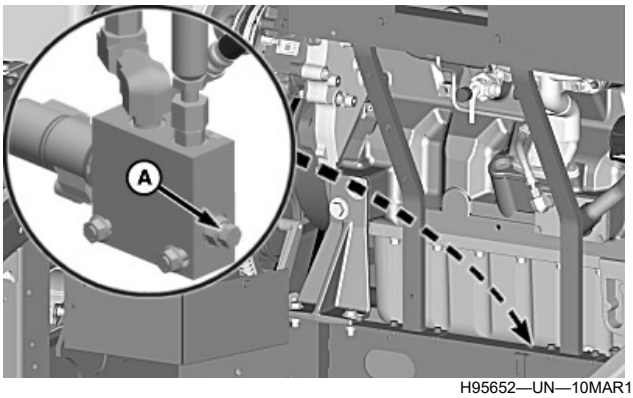
7. Remove cap screws (A) and spacers (B).
8. Install previously removed cap screws until spring is compressed completely.



H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

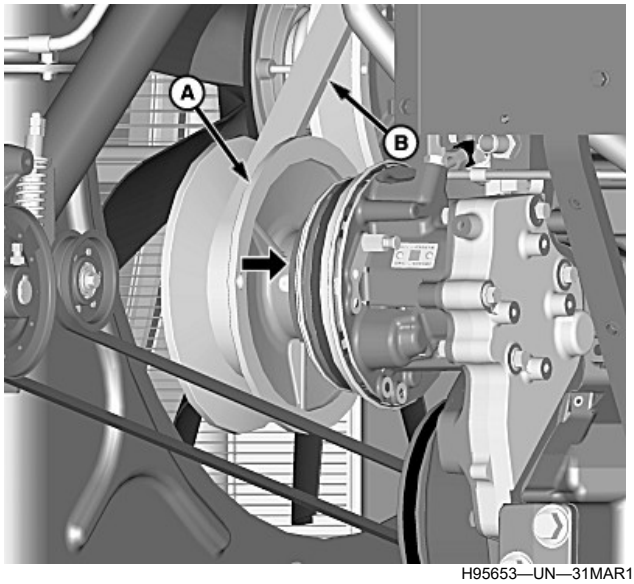
9. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).



H95652—UN—10MAR10

A—Bleed Screw

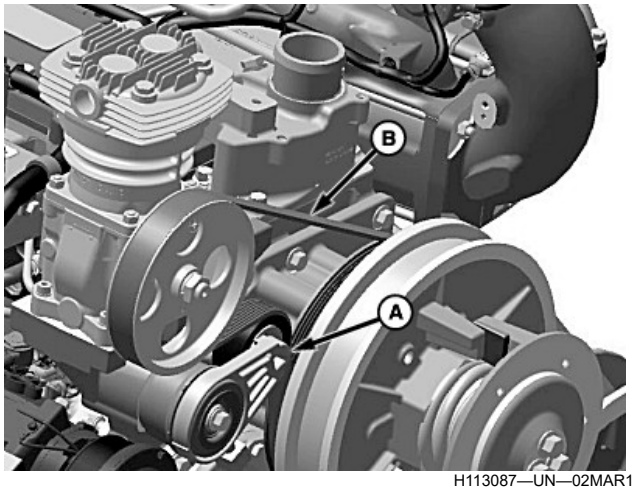
10. Locate valve on the front side of the support rail and loosen bleed screw (A) to relieve pressure from sheaves.



H95653—UN—31MAR10

A—Sheave
B—Variable Speed Belt

11. With the bleed screw loose, pull sheave (A) towards engine until completely open.
12. Remove variable speed belt (B).



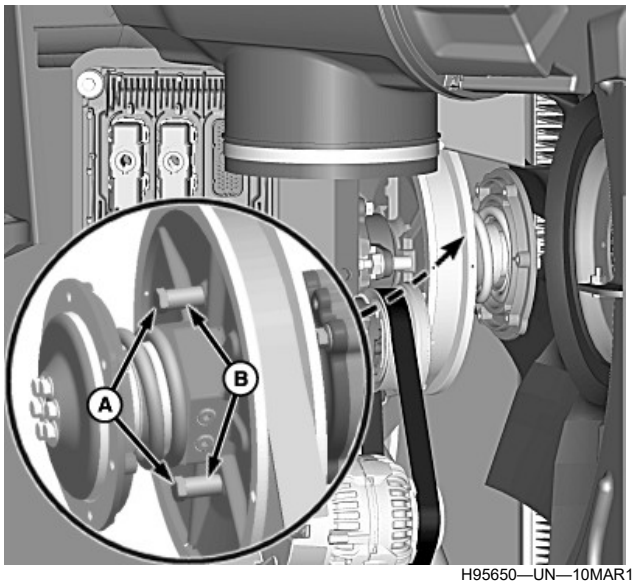
H113087—UN—02MAR15

A—Tensioner Arm
B—Air Compressor Belt

13. Use breaker bar to relieve belt tension from the tensioner arm (A).
14. Remove air compressor belt (B).
15. Install the replacement air compressor belt.

NOTE: Belt MUST be installed over the driver sheave first and then over driven sheave.

16. Install variable speed belt.

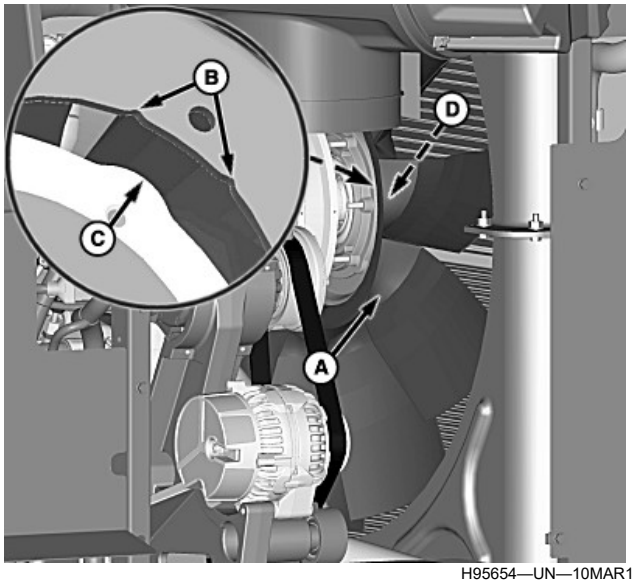


H95650—UN—10MAR10

A—Cap Screws
B—Spacers

IMPORTANT: Spring MUST be uncompressed to allow variable speed fan to adjust speed.

17. With the variable speed belt installed, remove cap screws (A) to uncompress spring and install previously removed spacers (B) as shown.



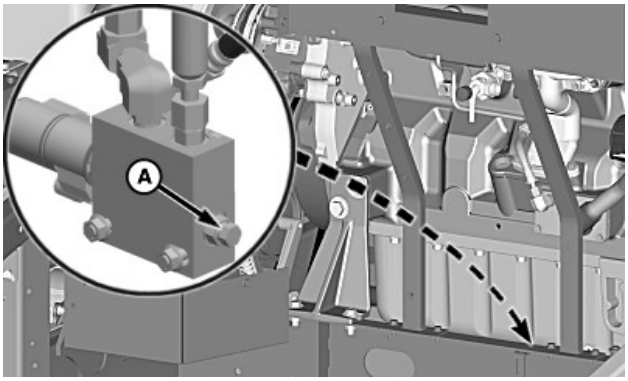
H95654—UN—10MAR10

A—Fan Assembly
B—Index Marks
C—Boss
D—Cap Screws (6 Used)

18. Install fan assembly (A) so index marks (B) are positioned on either side of boss (C).
19. Install previously removed cap screws (D). Tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 40 N·m (30 lb·ft)



H95652—UN—10MAR10

A—Bleed Screw and Nut

20. Locate valve on the front side of the support rail and tighten bleed screw and nut (A) to specification.

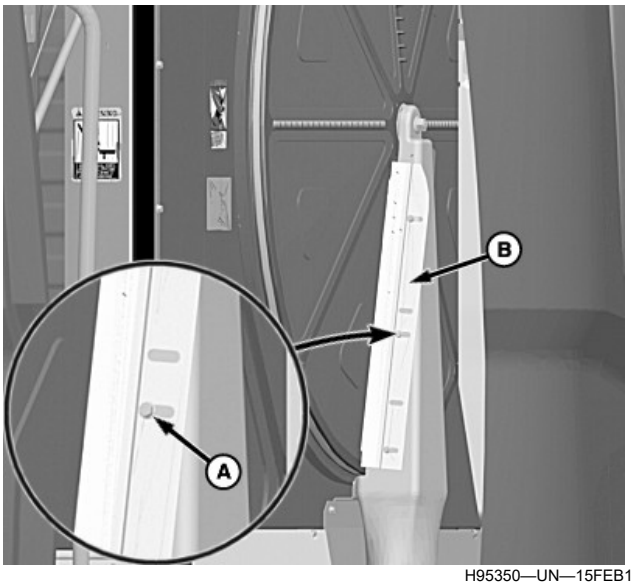
Specification

Bleed Screw and Nut—Torque. . . . . 23 N·m (17 lb·ft)

21. Close separator access cover and lower handrail.
22. Install previously removed shield (rear side) and air duct.
23. Close and latch the rotary screen door.

OUO6075,0004816-19-14NOV17

Rotary Screen Brush—Adjustment



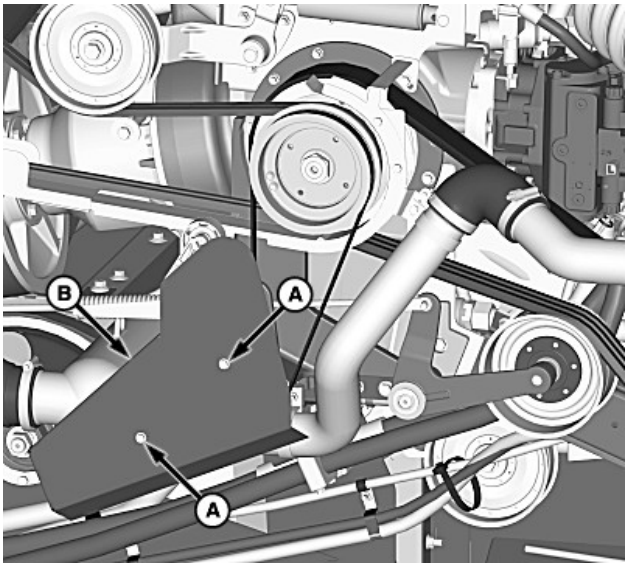
H95350—UN—15FEB10

A—Cap Screws
B—Brush

Loosen cap screws (A) and adjust brush (B) as needed to remove crop debris.

OUO6075,00005A0-19-16FEB10

Engine Debris Management Belt—Replacing (Final Tier 4/Stage V)

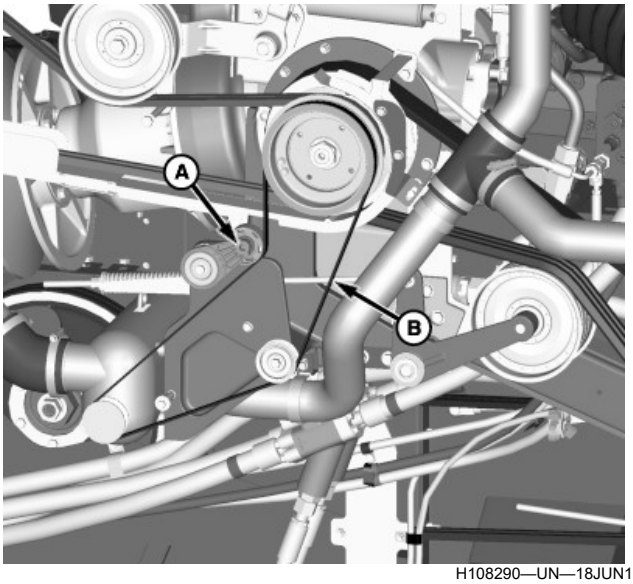


H121347—UN—25APR17

A—Cap Screws
B—Shield

CAUTION: Shut OFF engine, set park brake and remove key.

Remove cap screws (A) and shield (B).



H108290—UN—18JUN13

A—Tensioner Arm
B—Engine Debris Management Belt

Use breaker bar to relieve tension from the tensioner

arm (A) to remove the engine debris management belt (B).

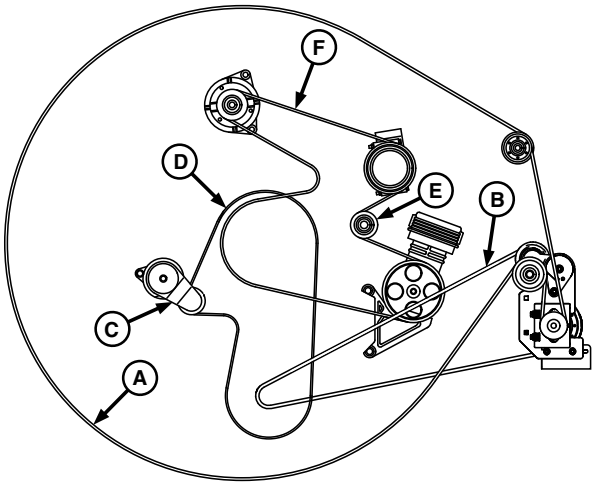
Remove belt and install replacement belt in reverse order.

Use breaker bar to relieve tension from the tensioner arm to install belt.

Install shield and retain with cap screws.

OUO6075,0004817-19-14NOV17

Engine Belt—Routing (Tier 2/Stage II)

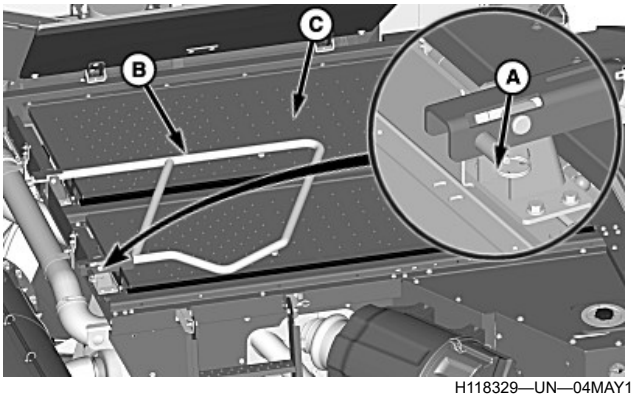


H124554—UN—21JUN18

A—Belt, Rotary Screen (Driven)
B—Belt, Rotary Screen (Drive)
C—Tensioner, Fan
D—Belt, Fan
E—Tensioner, Accessory
F—Belt, Accessory and Air Compressor (If Equipped)

OUO6075,00049F0-19-20JUN18

Engine Accessory/Air Compressor (If Equipped) Belt—Replacing (Tier 2/Stage II)

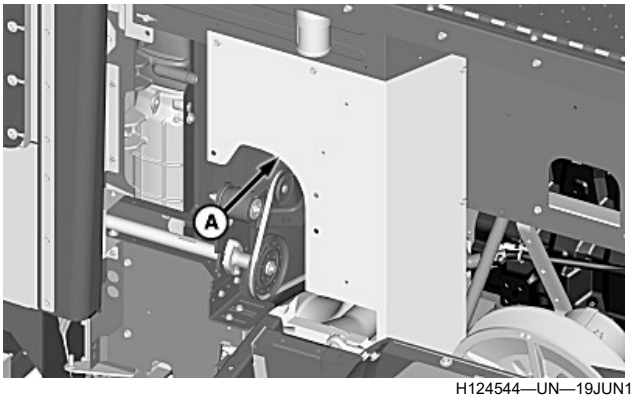


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

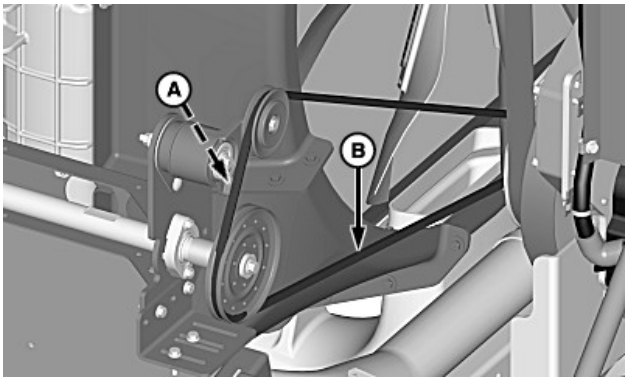


H124544—UN—19JUN18

Front Side Of Engine

A—Shield

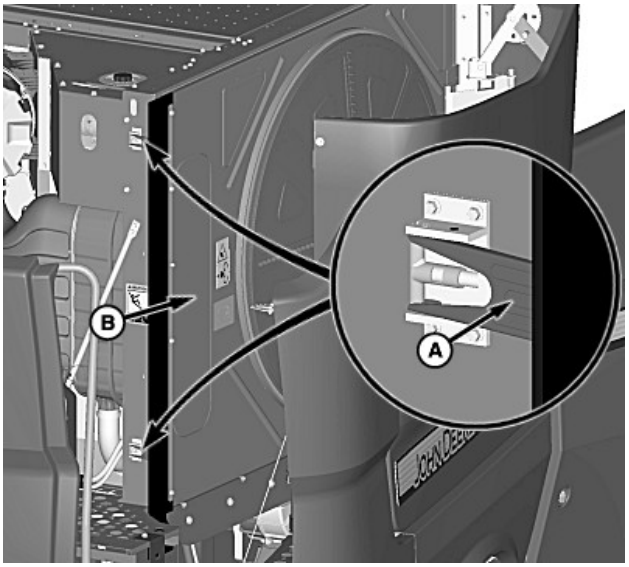
2. Remove shield (A).



H124545—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

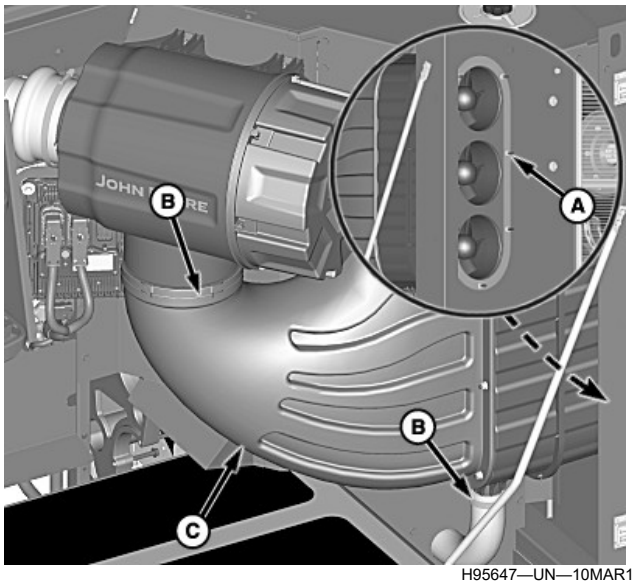
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).



H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

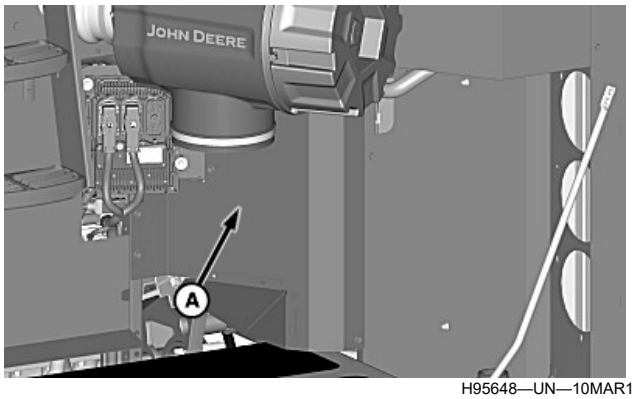
5. Pull latches (A) and open rotary screen door (B).



H95647—UN—10MAR10

A—Nut (7 used)
B—Clamps
C—Air Duct

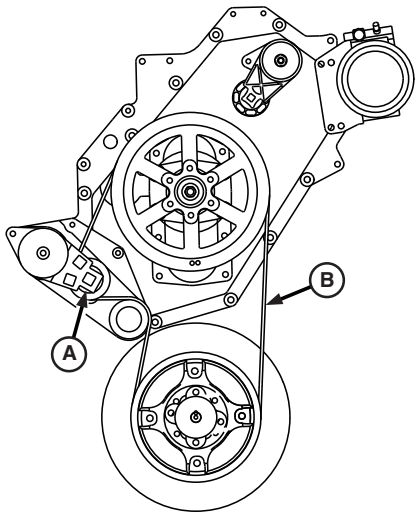
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

8. Remove shield (A).

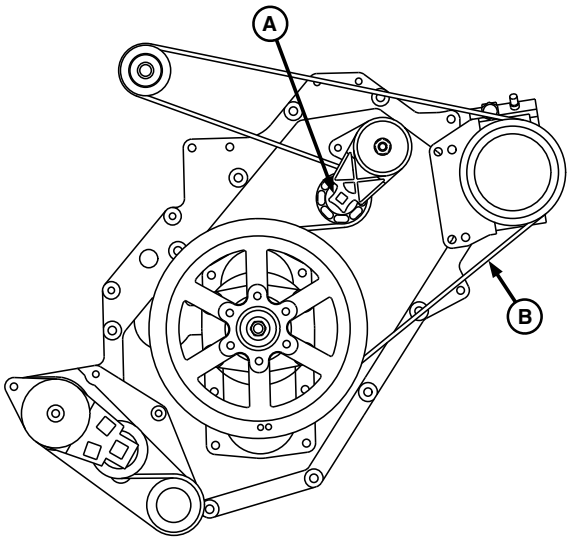


H71844—UN—25APR02

Fan Belt Routing

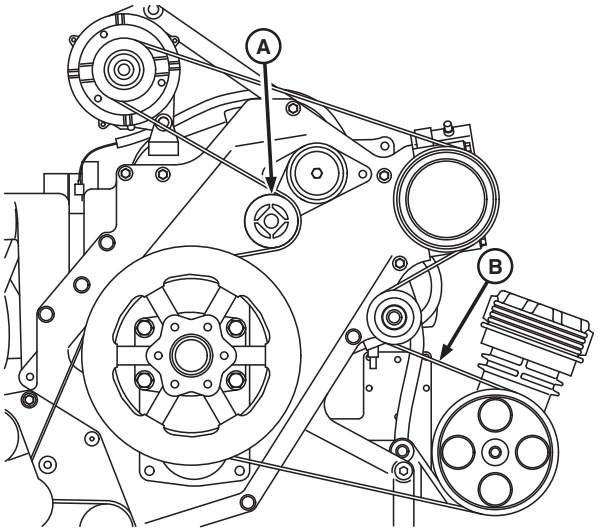
A—Tensioner Arm
B—Fan Belt

9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.



H82475—UN—17FEB05

Accessory Belt Routing Without Air Compressor

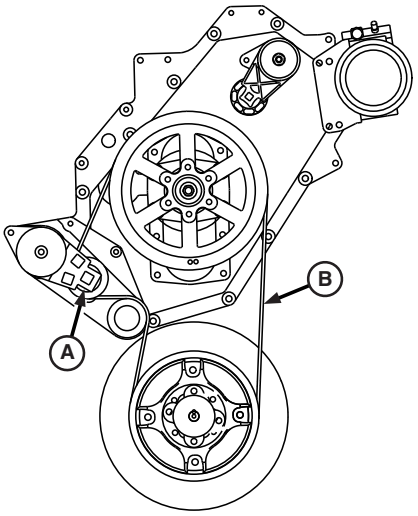


H113080—UN—02MAR15

Accessory Belt Routing With Air Compressor

A—Tensioner Arm
B—Accessory Belt

11. Use breaker bar to relieve belt tension from the tensioner arm (A).
12. Remove belt (B) and work belt over fan blades to remove.
13. Install replacement belt over the fan blades.
14. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.

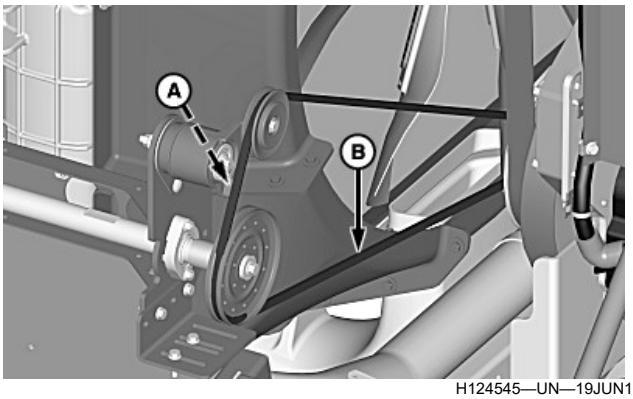


H71844—UN—25APR02

Fan Belt Routing

A—Tensioner Arm
B—Fan Belt

15. Use breaker bar to relieve belt tension from the tensioner arm (A).
16. Install previously removed belt (B) and work belt over fan.



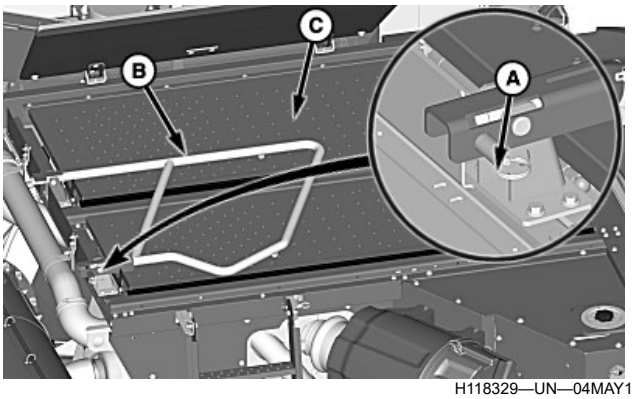
H124545—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

17. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
18. Install previously removed shield (front side).
19. Close separator access cover and lower handrail.
20. Install previously removed shield (rear side) and air duct.
21. Close and latch the rotary screen door.

OUO6075,00049E8-19-20JUN18

Fan Drive Belt—Replacing (Tier 2/Stage II)

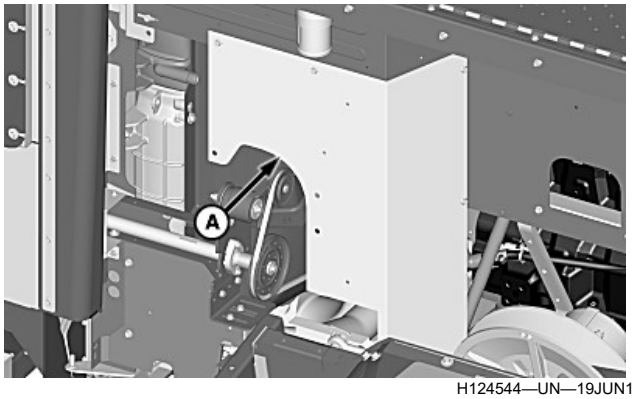


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

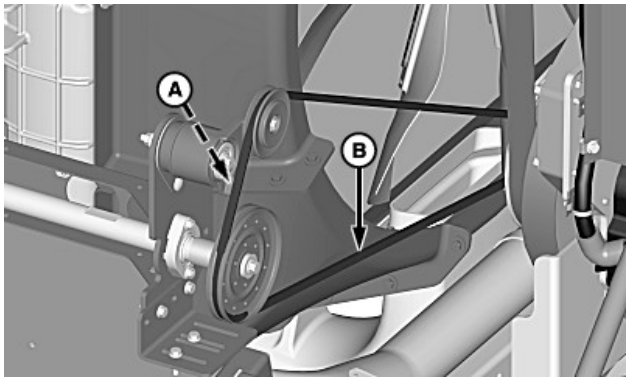


H124544—UN—19JUN18

Front Side Of Engine

A—Shield

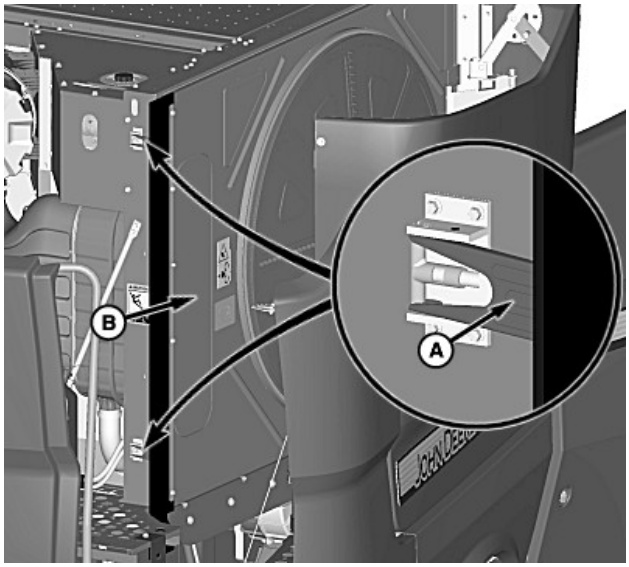
2. Remove shield (A).



H124545—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

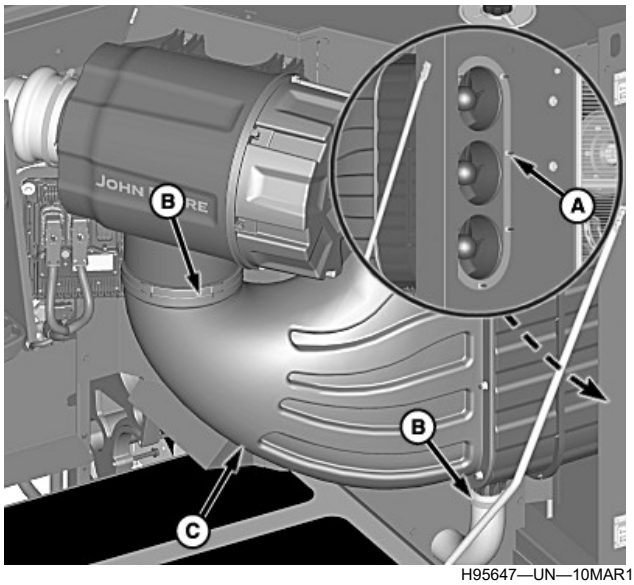
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).



H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

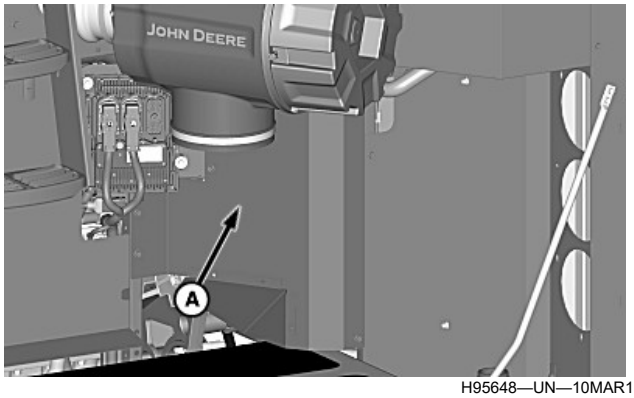
5. Pull latches (A) and open rotary screen door (B).



H95647—UN—10MAR10

A—Nut (7 used)
B—Clamps
C—Air Duct

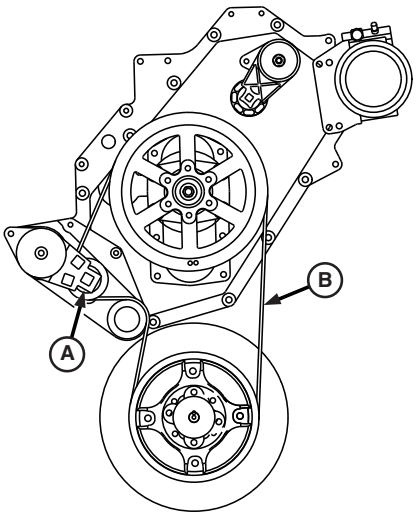
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

8. Remove shield (A).

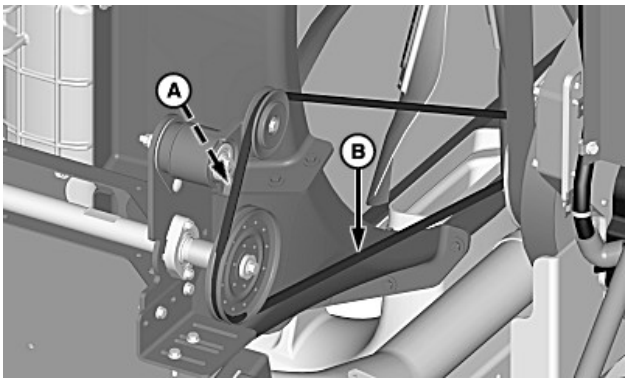


H71844—UN—25APR02

Fan Belt Routing

A—Tensioner Arm
B—Fan Belt

9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.
11. Install replacement belt over the fan blades.
12. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.



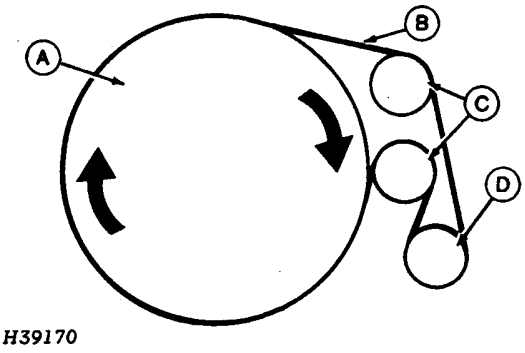
H124545—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

13. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
14. Install previously removed shield (front side).
15. Close separator access cover and lower handrail.
16. Install previously removed shield (rear side) and air duct.
17. Close and latch the rotary screen door.

OUO6075,00049E9-19-20JUN18

Rotary Screen Belt—Routing

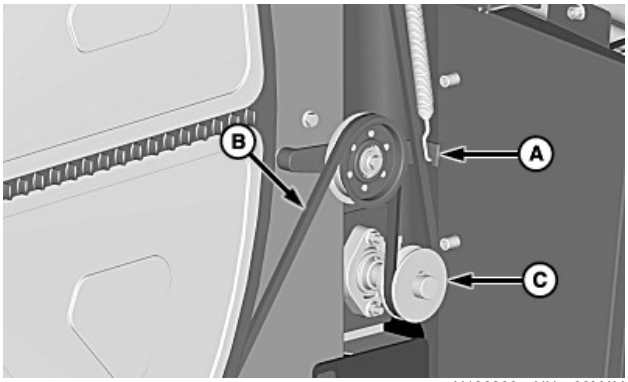


H39170—UN—11OCT88

A—Rotary Screen
B—Belt
C—Idlers
D—Drive Sheave

OUO6075,00006CE-19-05MAR10

Rotary Screen Belt—Replacing



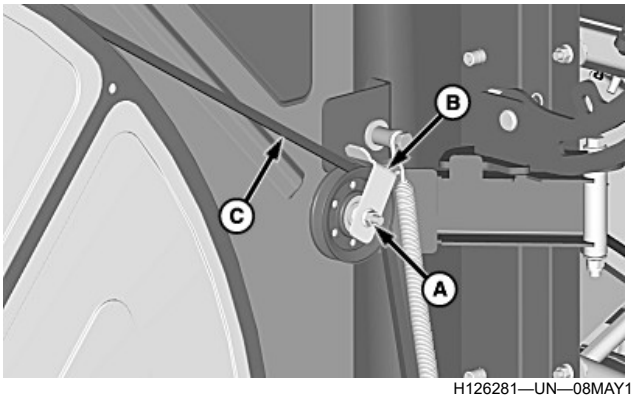
H126280—UN—08MAY19

A—Tensioner Lever
B—Rotary Screen Belt
C—Sheave

CAUTION: Shut OFF engine, set park brake, and remove key.

Prevent injury. Belt is under tension. Slowly release the tensioner lever when belt is removed.

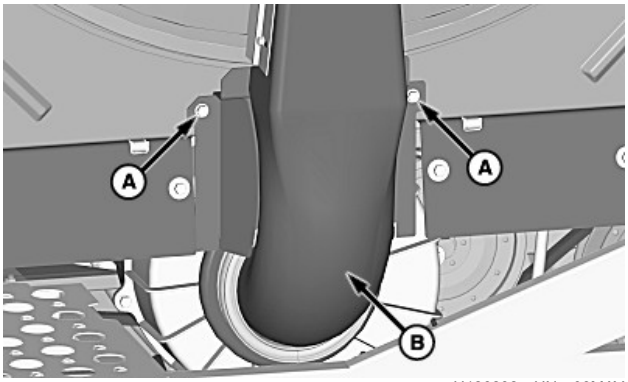
1. Push down on tensioner lever (A) and relieve tension from the rotary screen belt (B).
2. Remove rotary screen belt from sheave (C) and slowly release the lever and spring tension.



H126281—UN—08MAY19

A—Nut
B—Belt Trap
C—Rotary Screen Belt

3. Remove nut (A) and belt trap (B).
4. Remove rotary screen belt (C).



H126282—UN—08MAY19

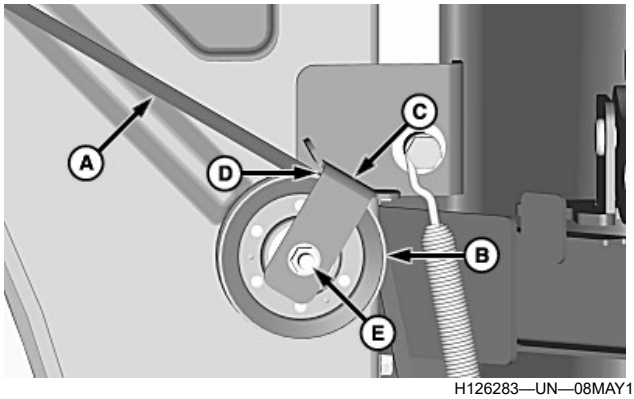
A—Cap Screw and Nut (2 used)
B—Vacuum Duct

NOTE: The rotary screen door must be opened to access the nuts from the inside.

5. Remove cap screws and nuts (A).
6. Pull vacuum duct (B) away from the rotary screen door and remove the rotary screen belt.
7. Pull vacuum duct away from the rotary screen door and install the replacement rotary screen belt.
8. Install cap screws and nuts.

IMPORTANT: To prevent damage, verify that the rotary screen clears the notches in the vacuum duct rake bar. Adjust vacuum duct as needed.

9. Close rotary screen door.



H126283—UN—08MAY19

A—Rotary Screen Belt
B—Pulley
C—Belt Trap
D—Gap
E—Nut

10. Install rotary screen belt (A) around pulley (B) as shown.

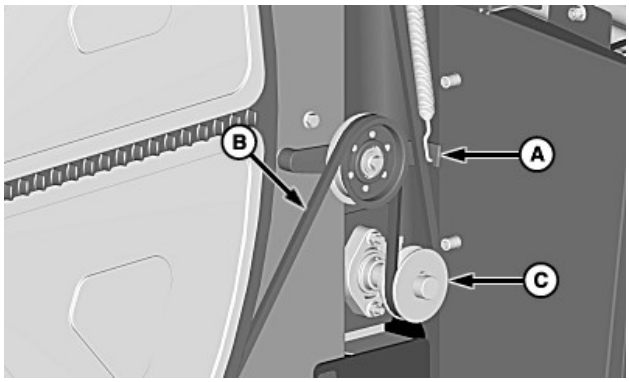
IMPORTANT: To prevent damage, verify that the belt trap is parallel to the rotary screen belt.

11. Install belt trap (C) and adjust to specified gap (D).

Specification

Belt Trap—Gap. . . . . 4 mm (5/32 in)

12. Install and tighten the nut (E), making sure that the belt trap does not move.



H126280—UN—08MAY19

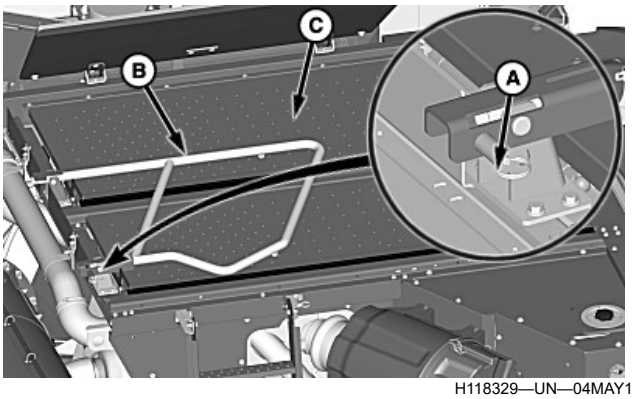
A—Tensioner Lever
B—Rotary Screen Belt
C—Sheave

CAUTION: Prevent injury. Belt is under tension. Slowly release the tensioner lever when the belt is installed.

13. Push down on tensioner lever (A) and relieve tension from the rotary screen belt (B).
14. Install rotary screen belt around sheave (C) as shown and slowly release the lever and spring tension.

OUO6075,0004B91-19-30MAY19

Rotary Screen Drive Belt—Replacing (Tier 2/Stage II)

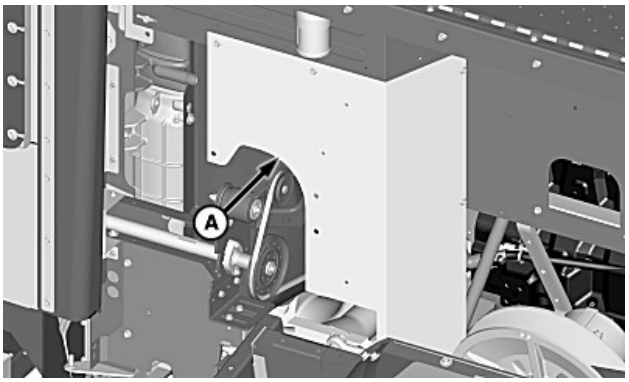


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

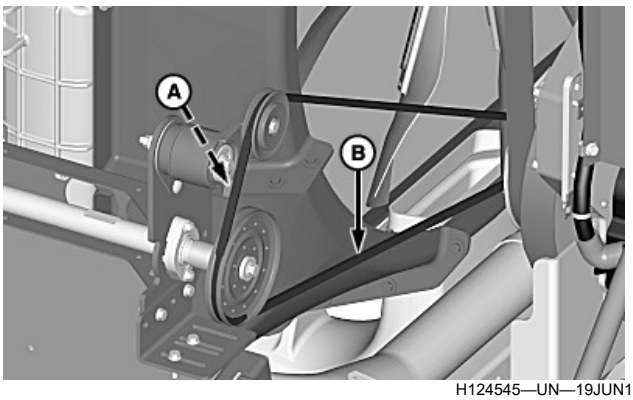


H124544—UN—19JUN18

Front Side Of Engine

A—Shield

2. Remove shield (A).



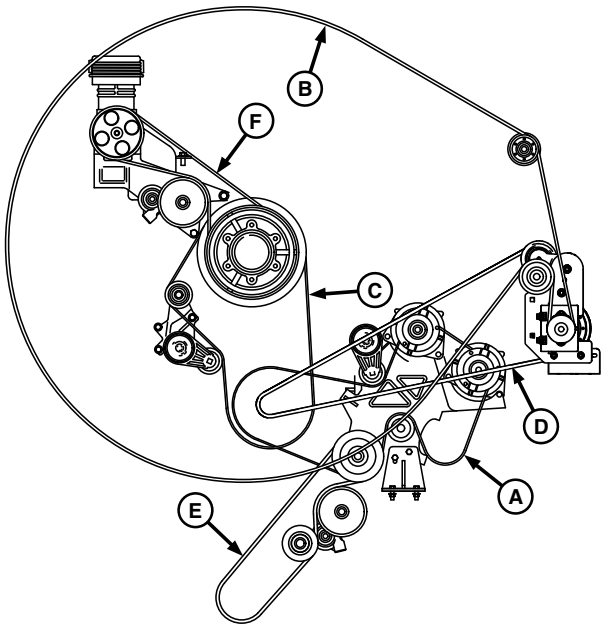
H124545—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).
5. Use breaker bar to relieve tension from the tensioner arm to install replacement rotary screen drive belt.
6. Install previously removed shield, close separator access cover, and lower handrail.

OUO6075,00049EA-19-20JUN18

Engine Belt—Routing (Final Tier 4/Stage V)

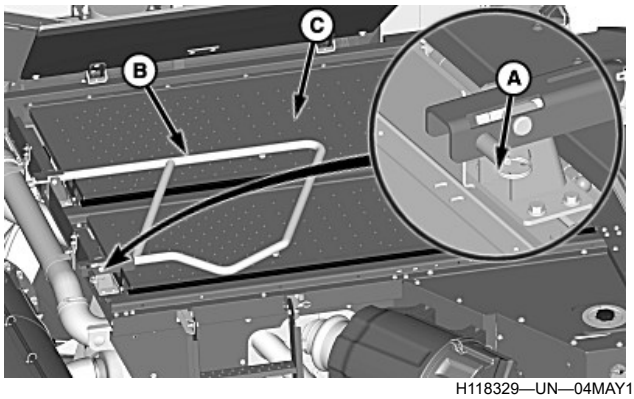


H124555—UN—21JUN18

A—Air Conditioner Compressor, Alternator Belt
B—Rotary Screen Drive Belt, Screen Side
C—Fan Drive Belt
D—Rotary Screen Drive Belt, Engine Side
E—Vacuum Fan Drive Belt
F—Air Compressor Belt (If Equipped)

OUO6075,00049EE-19-20JUN18

Air Conditioner Compressor/Alternator Belt —Replacing (Final Tier 4/Stage V)

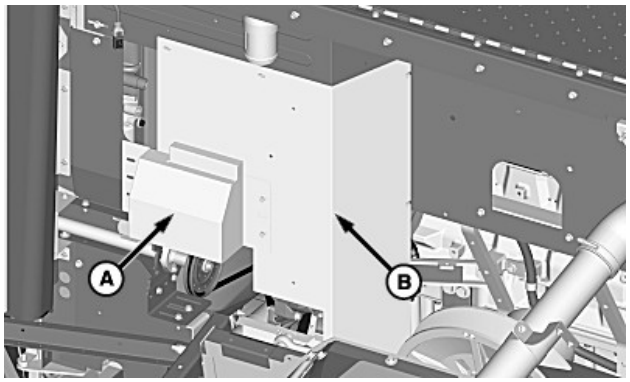


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

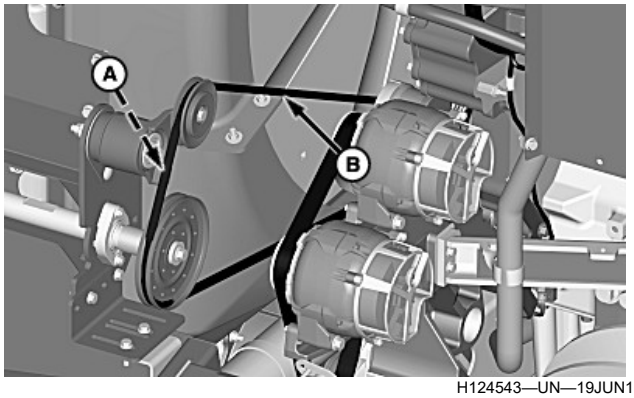


H124542—UN—19JUN18

Front Side Of Engine

A—Shield
B—Shield

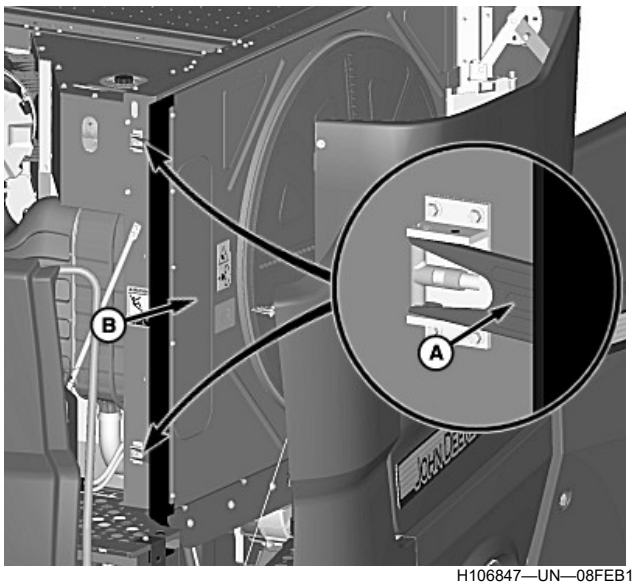
2. Remove shield (A) and shield (B).



H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

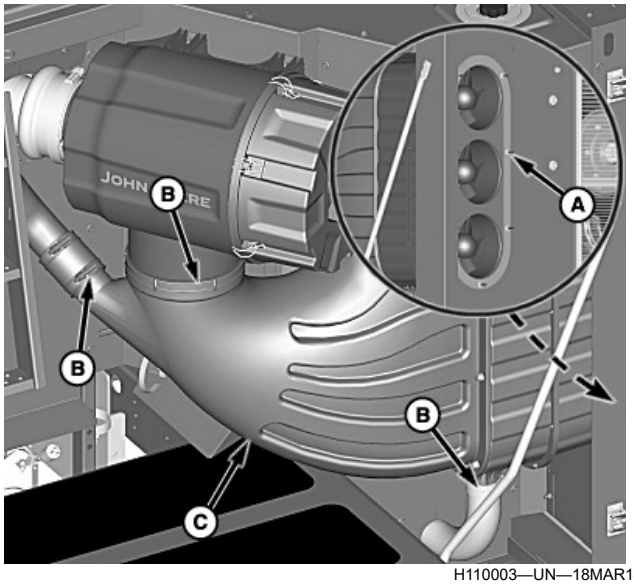
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).



H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

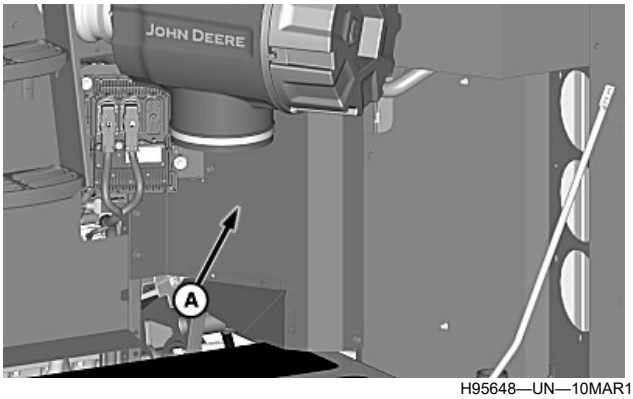
5. Pull latches (A) and open rotary screen door (B).



H110003—UN—18MAR14

A—Nut (7 used)
B—Clamps
C—Air Duct

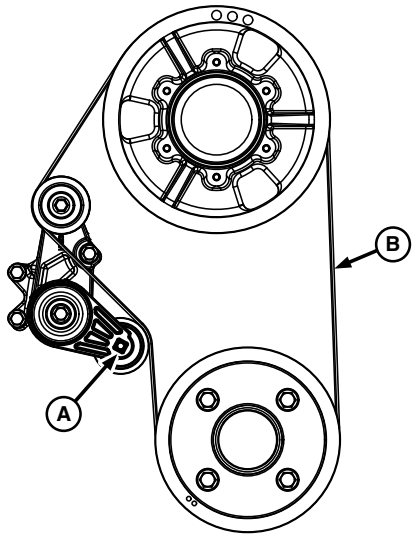
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

8. Remove shield (A).

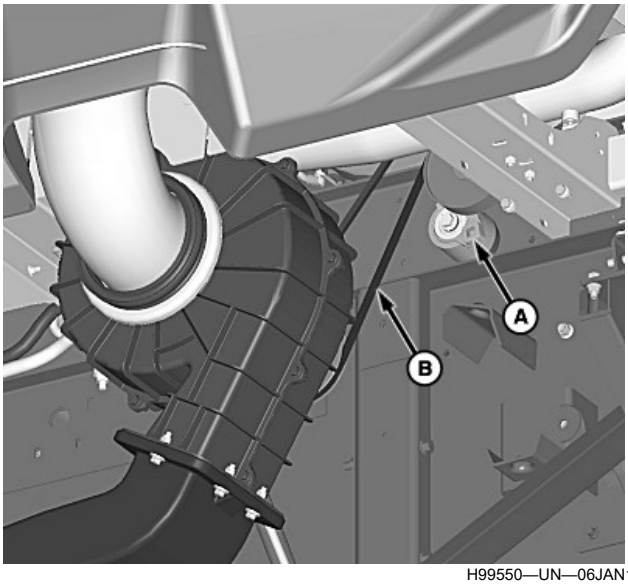


H99551—UN—06JAN11

Fan Belt Routing

A—Tensioner Arm
B—Fan Belt

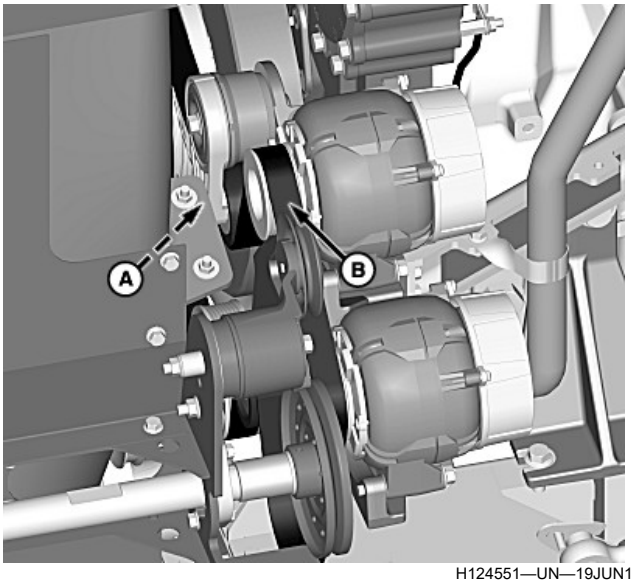
9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.



H99550—UN—06JAN11

A—Tensioner Arm
B—Vacuum Fan Drive Belt

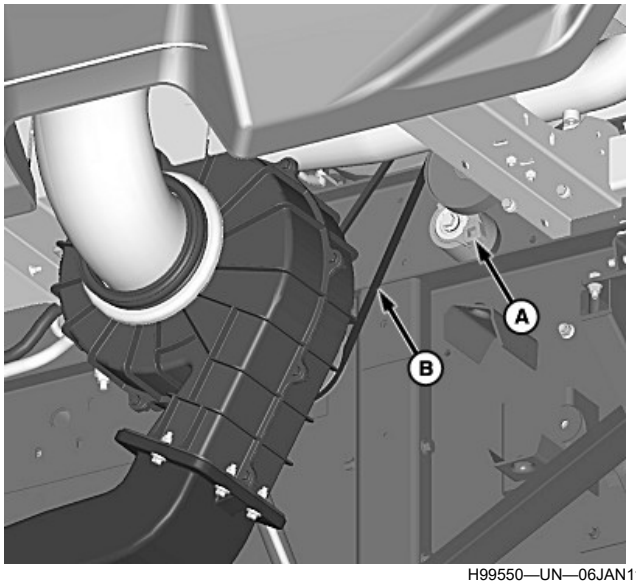
11. Use breaker bar to relieve belt tension from the tensioner arm (A).
12. Remove the vacuum fan drive belt (B) located below radiator.



H124551—UN—19JUN18

A—Tensioner Arm
B—Belt

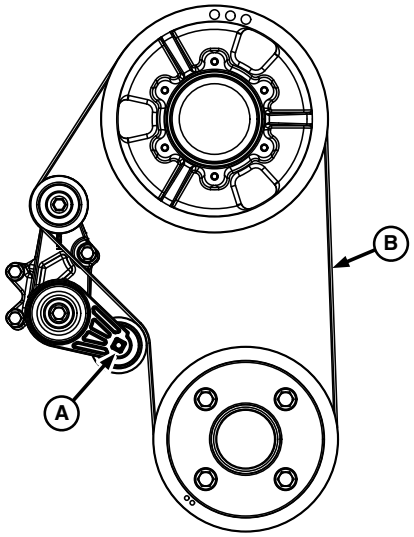
13. Use breaker bar to relieve belt tension from the tensioner arm (A).
14. Remove belt (B) and work belt over fan blades to remove.
15. Install replacement belt over the fan blades.
16. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.



H99550—UN—06JAN11

A—Tensioner Arm
B—Vacuum Fan Drive Belt

17. Install the vacuum fan drive belt (B).
18. Use breaker bar to relieve tension from the tensioner arm (A) to install belt.

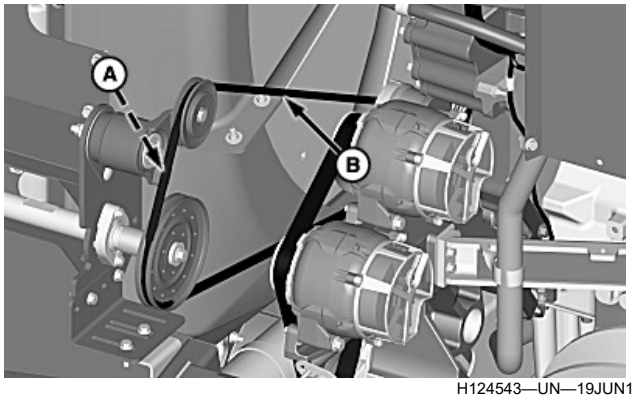


H99551—UN—06JAN11

Fan Belt Routing

A—Tensioner Arm
B—Fan Belt

19. Install belt (B) and work belt over fan blades.
20. Use breaker bar to relieve tension from the tensioner arm (A) to install belt.



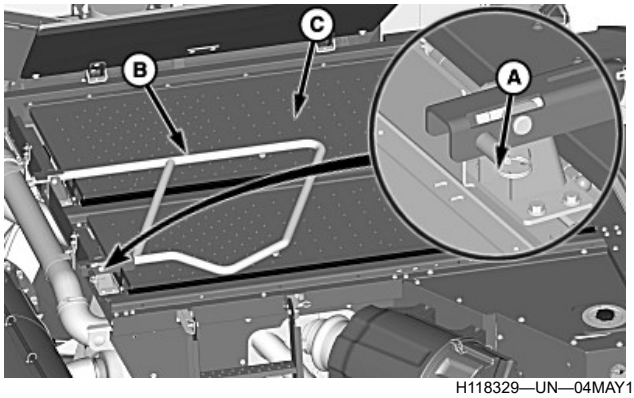
H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

21. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
22. Install previously removed shields (front side).
23. Close separator access cover and lower handrail.
24. Install previously removed shield (rear side) and air duct.
25. Close and latch the rotary screen door.

OUO6075,00049E0-19-20JUN18

Rotary Screen Drive Belt—Replacing (Final Tier 4/Stage V)

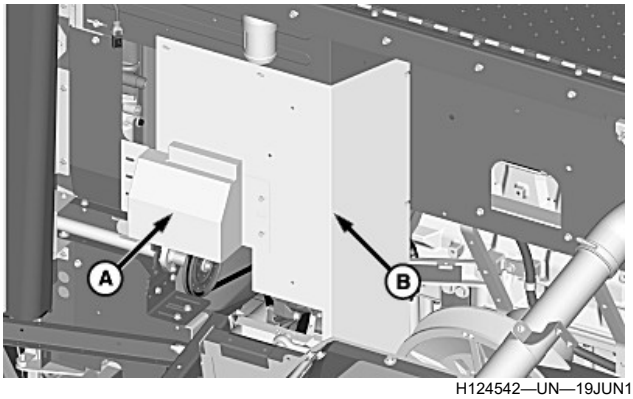


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

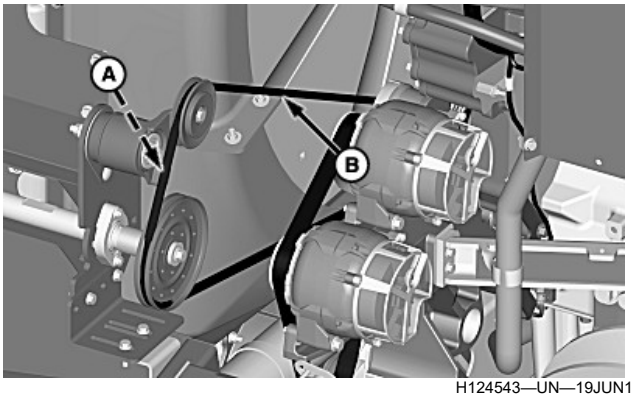


H124542—UN—19JUN18

Front Side Of Engine

A—Shield
B—Shield

2. Remove shield (A) and shield (B).



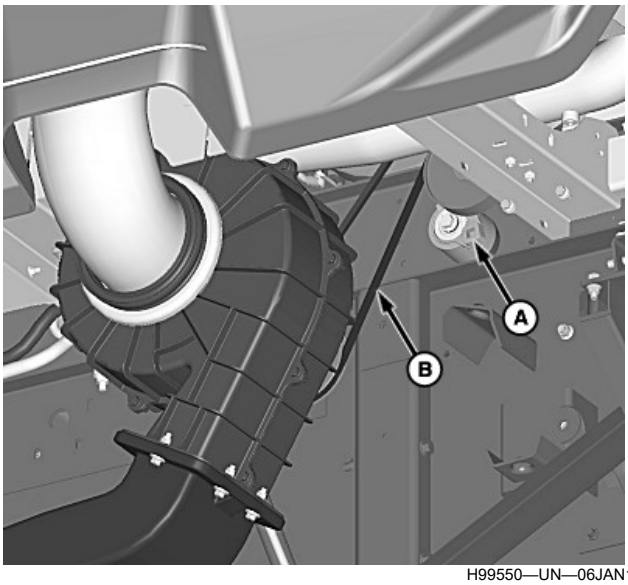
H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).
5. Use breaker bar to relieve tension from the tensioner arm to install replacement rotary screen drive belt.
6. Install previously removed shields, close separator access cover, and lower handrail.

OUO6075,00049E1-19-20JUN18

Vacuum Fan Drive Belt—Replacing (Final Tier 4/Stage V)



H99550—UN—06JAN11

A—Tensioner Arm
B—Vacuum Fan Drive Belt

CAUTION: Shut OFF engine, set park brake and remove key.

Use breaker bar to relieve belt tension from the tensioner arm (A).

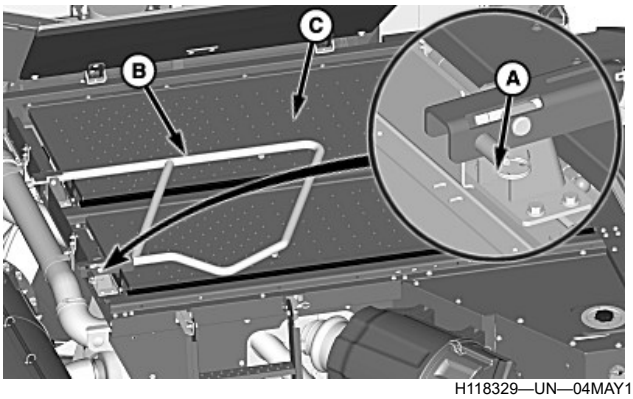
Remove the vacuum fan drive belt (B) located below the radiator.

Install the replacement vacuum fan drive belt.

Use breaker bar to relieve tension from the tensioner arm to install belt.

OUO6075,000481B-19-14NOV17

Air Compressor Belt (If Equipped)—Replacing (Final Tier 4/Stage V)

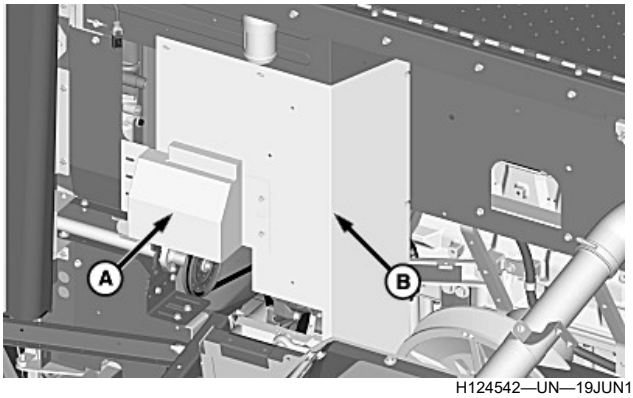


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

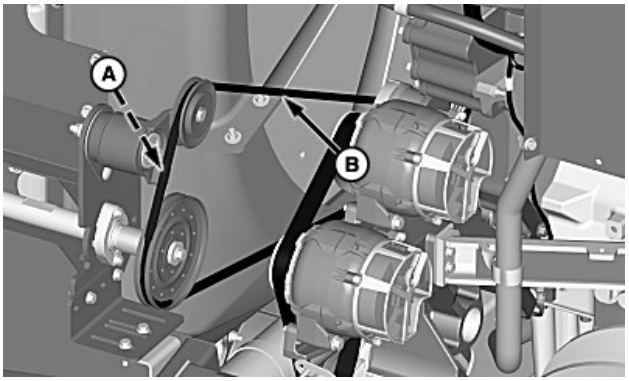


H124542—UN—19JUN18

Front Side Of Engine

A—Shield
B—Shield

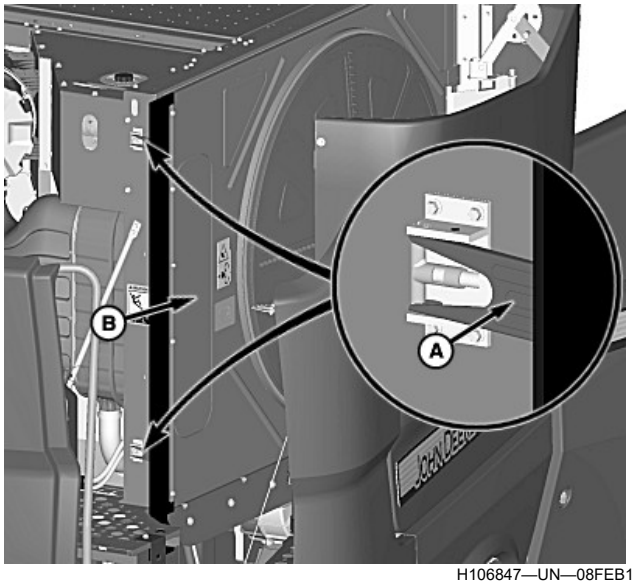
2. Remove shield (A) and shield (B).



H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

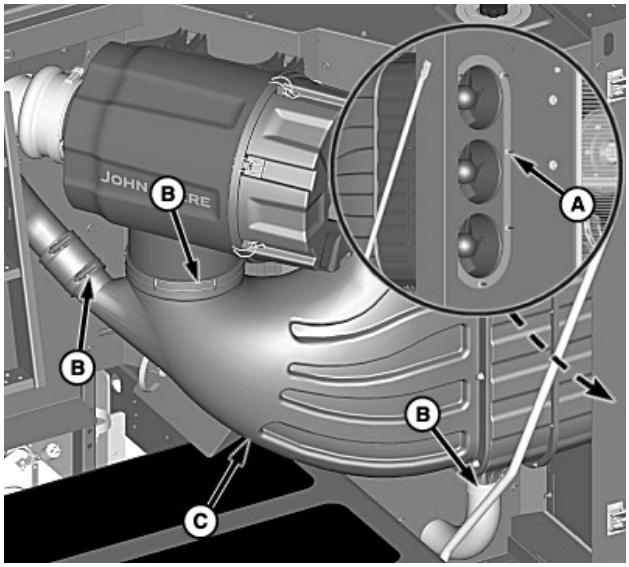
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).



H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

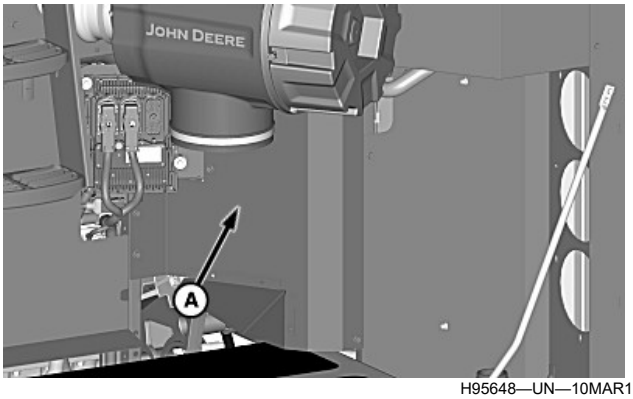
5. Pull latches (A) and open rotary screen door (B).



H110003—UN—18MAR14

A—Nut (7 used)
B—Clamps
C—Air Duct

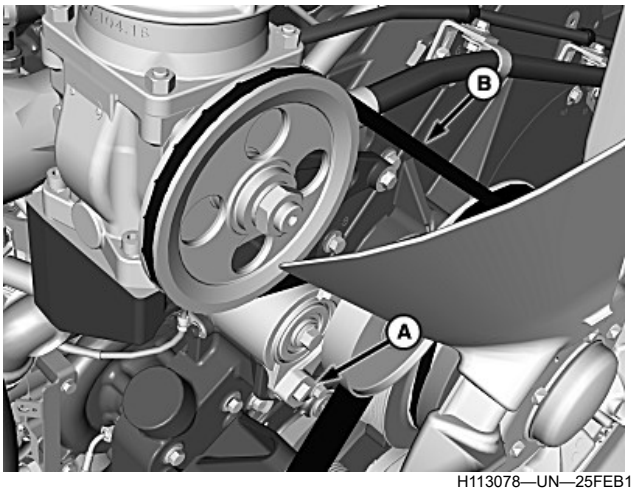
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

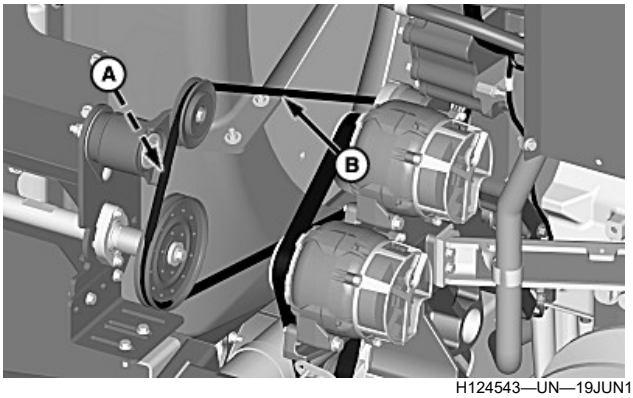
8. Remove shield (A).



H113078—UN—25FEB15

A—Tensioner Arm
B—Belt

9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.
11. Install replacement belt over the fan blades.
12. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.



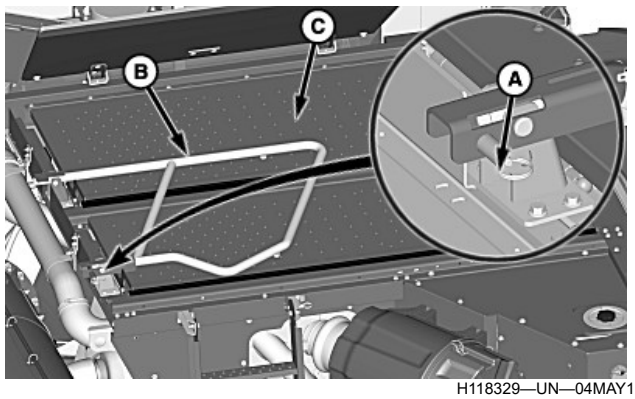
H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

13. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
14. Install previously removed shields (front side).
15. Close separator access cover and lower handrail.
16. Install previously removed shield (rear side) and air duct.
17. Close and latch the rotary screen door.

OUO6075,00049E2-19-20JUN18

Fan Drive Belt—Replacing (Final Tier 4/ Stage V)

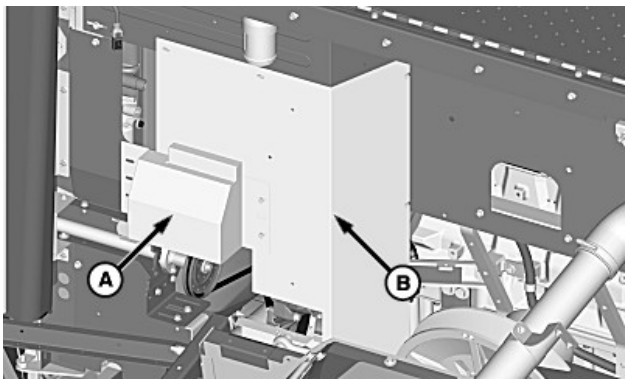


H118329—UN—04MAY16

A—Lockout Pin
B—Handrail
C—Separator Access Cover

⚠ CAUTION: Shut OFF engine, set park brake and remove key.

1. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).

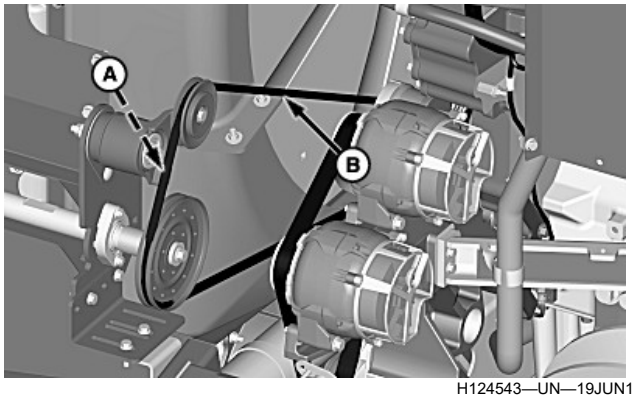


H124542—UN—19JUN18

Front Side Of Engine

A—Shield
B—Shield

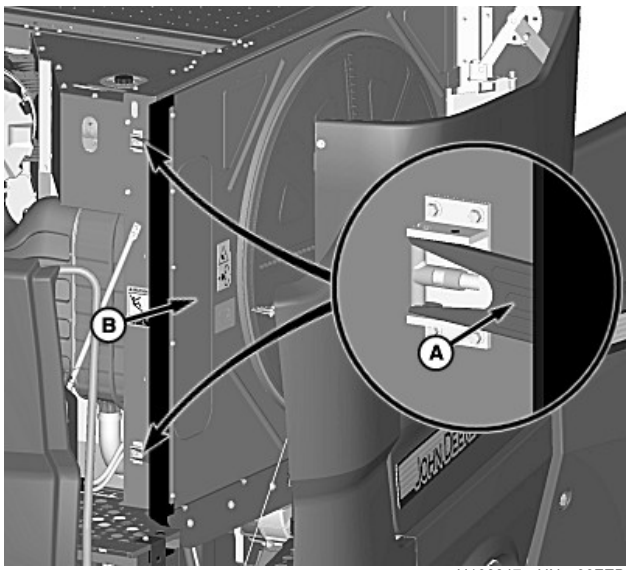
2. Remove shield (A) and shield (B).



H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

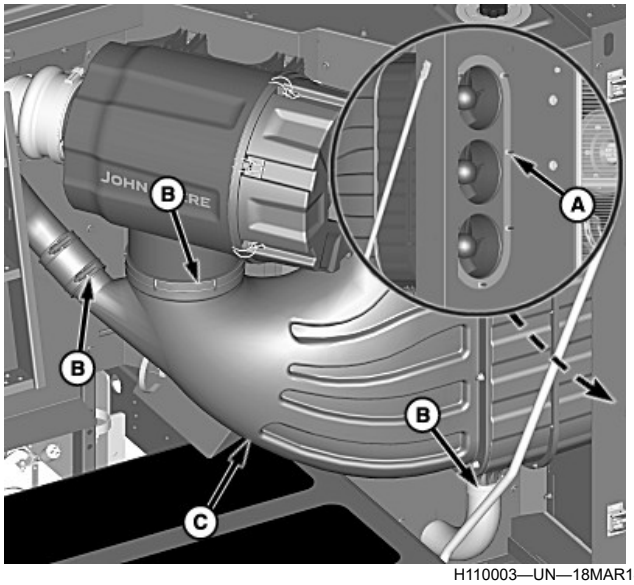
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).



H106847—UN—08FEB13

A—Latches
B—Rotary Screen Door

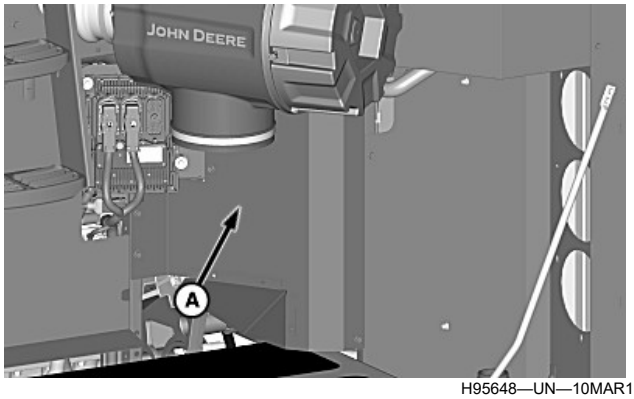
5. Pull latches (A) and open rotary screen door (B).



H110003—UN—18MAR14

A—Nuts (7 used)
B—Clamps
C—Air Duct

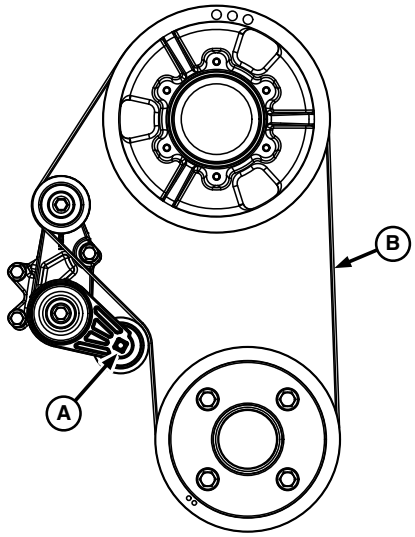
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.



H95648—UN—10MAR10

A—Shield

8. Remove shield (A).



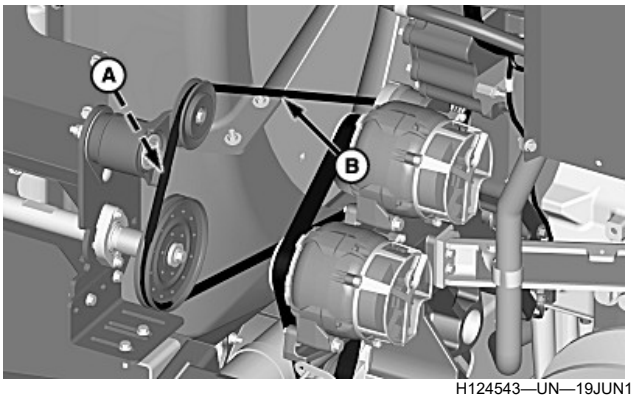
H99551—UN—06JAN11

Fan Belt Routing

A—Tensioner Arm
B—Fan Belt

NOTE: Air compressor belt must be removed to replace fan belt. See Air Compressor Belt (If Equipped)—Replacing (Final Tier 4/Stage V) for further information.

9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.
11. Install replacement belt over the fan blades.
12. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.



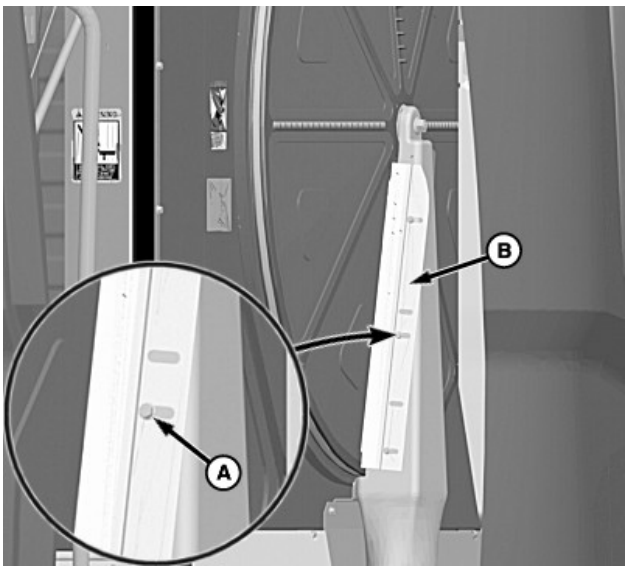
H124543—UN—19JUN18

A—Tensioner Arm
B—Rotary Screen Drive Belt

13. Use breaker bar to relieve tension from the tensioner arm (A) to install rotary screen drive belt (B).
14. Install previously removed shields (front side).
15. Close separator access cover and lower handrail.
16. Install previously removed shield (rear side) and air duct.
17. Close and latch the rotary screen door.

OUO6075,00049E3-19-20JUN18

Rotary Screen Brush—Adjustment



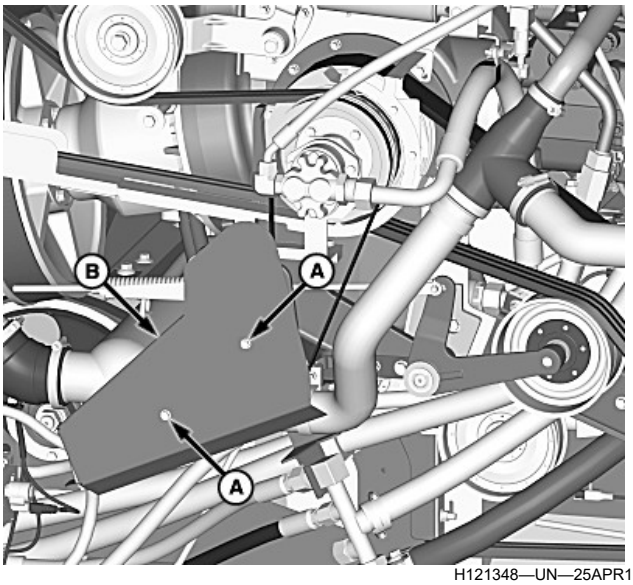
H95350—UN—15FEB10

A—Cap Screws
B—Brush

Loosen cap screws (A) and adjust brush (B) as needed to remove crop debris.

OUO6075,00005A0-19-16FEB10

Engine Debris Management Belt—Replacing (Final Tier 4/Stage V)



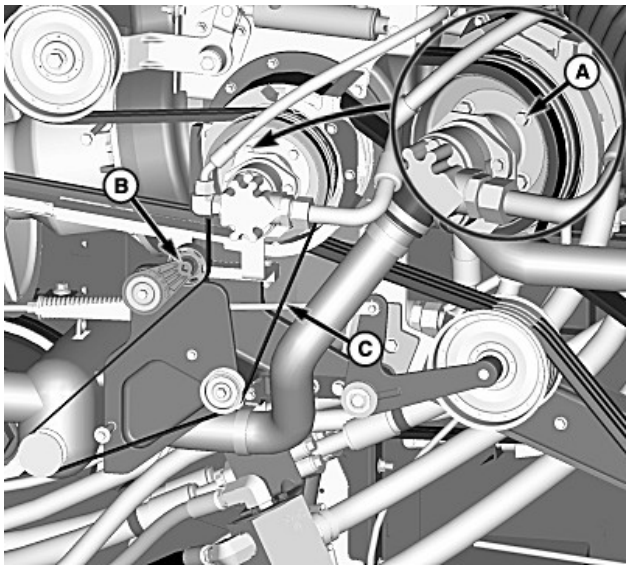
H121348—UN—25APR17

A—Cap Screws

B—Shield

CAUTION: Shut OFF engine, set park brake and remove key.

Remove cap screws (A) and shield (B).



H108293—UN—18JUN13

A—Cap Screws
B—Tensioner Arm
C—Engine Debris Management Belt

Remove cap screws (A) and support pump assembly out of the way.

Remove belt and install replacement belt in reverse order.

Align pump assembly with sheave and tighten cap screws to specification.

Specification

Cap Screws—Torque. . . . . 80 N·m (59 lb·ft)

Use breaker bar to relieve tension from the tensioner arm (B) to install the engine debris management belt (C).

Install shield and retain with cap screws.

OUO6075,000481E-19-14NOV17

Feeder House

Symptom	Problem	Solution
Uneven or bunched feeding of crop to rotor.	Header auger too high.	Adjust auger down and back. See header operator's manual.
	Buildup of grain on cutterbar.	Lower reel and set fore-and aft position as close as possible to cutterbar and auger. See platform operator's manual.
	Drum arms bind up to sidesheet on one side.	Loosen and tension chain again. Straighten or replace bent parts.
	Feeder conveyor chain too tight and holds drum up.	Adjust conveyor chain to correct tension.
	Header drive belt slipping.	Spring-loaded idler must be free and tight against belt.
	Auger too far ahead of stripper.	Adjust auger back to stripper. See header operator's manual.
	Feeder conveyor drive chain not on correct sprocket.	Place chain on correct sprocket.
	Feeder conveyor slats bowed up.	Straighten or replace bent slats.
	Dirt and sap buildup on feeder house bottom.	Clean bottom.
	Too great a distance between platform auger and feeder house front drum.	Add links to feeder house chain.
Header or Reel Will Not Lift Correctly	Air in hydraulic system.	Tighten clamps on leaking lines or hoses. Bleed reel lift system. See Platform operator's manual.

OUO6075,0000B5B-19-02MAR11

Separator

Symptom	Problem	Solution
Slugging or Overloading of Separator.	Single tine separator variable drive belt is slipping at slow speed.	Adjust sheave gap.
	Separator speed too slow for crop.	Increase separator speed.
Backfeeding of Feed Accelerator.	Separator speed too slow for crop.	Increase separator speed.
	Accelerator speed in slow speed position.	Change accelerator speed to high-speed position.

Symptom	Problem	Solution
Grain Not Threshed.	Separator speed too slow for crop.	Increase separator speed in increments of 50—100 rpm. After separator speed adjustment check grain quality.
	Concave clearance too wide.	Tighten threshing clearance in increments of 5—10 mm. After threshing clearance adjustment check grain quality.
	Concave clearance not even from front to rear.	Adjust to specifications. See Concave Leveling in Separator section for further information.
	Not enough material entering combine for proper threshing.	Increase ground speed.
Too Much Cracked Grain in Tank.	Separator speed too fast for crop.	Decrease separator speed in increments of 10 rpm.
	Concave clearance too tight.	Open threshing clearance in 2 mm increments.
	Feed beater speed too fast for crop.	Decrease feed accelerator speed by switching to low speed.
	Excessive grain in tailings.	Open sieve in increments of 2 mm to reduce tailings.
	Not enough material entering machine.	Increase ground speed.
	Active tailings system (if equipped) concave position incorrectly set.	Set active tailings system concave position. See Crop Settings section for further information.
Separator Grain Loss	Separator overloaded due to incomplete threshing or late threshing at concave.	Reduce separator to concave spacing and/or increase separator speed to increase threshing action.
	Separator covers installed.	See Crop Settings section for further information.
		Remove covers to increase open area while maintaining even shoe loading.
	Separator top cover vanes (if equipped) are in the advanced position.	Move vanes to standard position. See Residue Management Application Help or Operator's Station Help for further information.
Dirty Grain Tank (Unthreshed Heads).	Separator not threshing enough.	Increase separator speed in increments of 50—100 rpm.

Symptom	Problem	Solution
		Decrease threshing clearance in increments of 2 mm.
		Check concave level. See Concave Leveling in Separator section for further information.
		Active tailings system machines: install concave covers in the first concave.
		Non-active tailings system machines: install concave covers in the second concave.
		Add concave interrupters to the first concave.
	Active tailings system (if equipped) concave position incorrectly set.	Verify that active tailings system concave position is correct for crop harvested.
		Check active tailings system concave position for correct zero position. See Tailings System Wear Strips and Rasp Bars—Adjusting in Separator section for further information.
Dirty Grain Tank (Mostly Chaff).	Fan speed too slow.	Increase fan speed.
	Residue system crop diverter door in incorrect position.	Verify that door position matches harvested crop.
Dirty Grain Tank (Small Pieces of Cob).	Broken cob pieces in grain tank.	*NOTE: Spacers should be used in corn and soybeans only. Remove spacers for all other crops.*
		Install separator grate spacers.
	Check threshing clearance. If clearance is less than bare cob diameter, rotor may break up cob.	*NOTE: For active tailings system machine spacers should not be installed in fourth grate.*
		Install separator grate spacers.
Damaged chaffer/sieve elements.	Crop diverter door in incorrect position.	Verify that door position matches harvested crop.
Loss of Grain Over Cleaning Shoe.	Incorrect chaffer/sieve clearance.	Check and calibrate chaffer/sieve clearance.

Symptom	Problem	Solution
	Incorrect distribution of chaff/grain on cleaning shoe.	Adjust separator grate blanks and auger bed dividers as required. See Power Shutdown Procedure in Crop Settings section for further information.
VisionTrak™ Performance Monitor not reading.	Cleaning shoe loss increases at low feed rate.	Reduce fan speed.
	Cleaning shoe loss increases at high feed rate.	Open chaffer.
		Increase fan speed.
	Sensor not reading.	Check crop sensitivity settings.
		Check that sensors are connected.
		Check that sensors are not block by material.
Undesirable Straw Quality.	Excessive material handling.	Decrease rotor speed and increase threshing clearance to increase straw quality and balance threshing performance.
		Decrease material handling speed (feeder house and feed accelerator) to balance straw quality and material handling performance.
		Advance separator top cover vanes (if equipped). See Residue Management Application Help or Operator's Station Help for further information.

OUO6075,00046A1-19-21MAR17

Hydrostatic Ground Drive

Symptom	Problem	Solution
Speed Range Selector Will Not Go in Reverse (Non-ProDrive™ Machines).	Bent or broken parts in control linkage.	Repair or replace as required.
Linkages Binding (Non-ProDrive™ Machines).	Frozen or worn ball joints on the control cable.	Lubricate or replace.
	Bell crank or pivots binding.	Lubricate or replace.
	Control cable kinked or frozen.	Replace if needed.

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ProDrive is a trademark of Deere & Company

Symptom	Problem	Solution
System Overheats.	Oil cooler or radiator plugged.	Blow air through core and clean.
	Lack of charge oil flow.	See your John Deere dealer.
	Engine fan belt slipping or broken.	Check for worn or broken belt.
	Plugged oil filter.	Change filter.
	Exceeding relief valve pressure.	Shift to lower gear.
	Relief valve stuck closed.	See your John Deere dealer.
	By-pass valve fails to close.	See your John Deere dealer.
High Oil Loss.	Loose connections or leaking hydraulic lines, hoses, or O-rings.	Tighten connections or replace damaged lines, hoses, or O-rings.
	Oil leaking into the main engine gear case (Non-ProDrive™ Machines).	Replace hydrostatic pump shaft seal.
	Oil leaking into the main engine gear case (ProDrive™ Machines).	Replace hydrostatic motor shaft seal or park brake seals in transmission, see your John Deere dealer.
	Worn or damaged triple pump seals (Non-ProDrive™ Machines).	Check triple pump cavities between the valve stack pump and steering pump. Both pump cavities should contain no oil. If oil is found between pump cavity sections, replace pump shaft seals on the valve stack pump and steering pump before replacing both pumps.
	Worn or damaged quadruple pump seals (ProDrive™ Machines).	Check quadruple pump cavities between the valve stack pump and ProDrive™ lube supply pump. Both pump cavities should contain no oil. If oil is found between pump cavities sections, replace pump shaft seals on the valve stack pump and ProDrive™ lube pump before replacing both pumps.
Machine Will Not Move Forward or Reverse.	Transmission out of gear (Non-ProDrive™ Machines).	Shift transmission.
	System detects ground drive faults (ProDrive™ Machines).	See your John Deere dealer.
	Low on oil.	Check for leaks and correct. Fill reservoir.
	Air leak in system.	Tighten connections.

Symptom	Problem	Solution
	Control linkages broken or loose (Non-ProDrive™ Machines).	Tighten loose linkages or replace as needed.
	Lack of charge flow or charge pressure.	See your John Deere dealer.
	Plugged filter.	Change filter.
	Exceeding maximum operating pressure setting (Non-ProDrive™ Machines).	Shift to lower gear.
	Exceeding maximum operating pressure setting (ProDrive™ Machines).	See your John Deere dealer.
	Drive system unable to build up pressure.	See your John Deere dealer.
	Relief valve open.	See your John Deere dealer.
Ground Travel Speed Erratic.	Low oil.	Check for leaks and correct. Fill reservoir.
	Plugged filter.	Change hydrostatic charge filter.
	Exceeding maximum operating pressure setting (Non-ProDrive™ Machines).	Shift to lower gear or engage four-wheel drive.
	Exceeding maximum operating pressure setting (ProDrive™ Machines).	See your John Deere dealer.
	Multi-function lever creeps toward neutral.	See your John Deere dealer.
	System unable to keep charge pressure.	See your John Deere dealer.
Machine Will Not Stop When Speed Range Selector is in Neutral Position (Non-ProDrive™ Machines).	Control cable out of adjustment.	Adjust cable for neutral position.
Lack of Power or Lost Power. Machine Not Responding to Speed Range Selector.	Low on oil.	Check for leaks and correct. Fill reservoir.
	Plugged filter.	Change hydrostatic charge filter.
	Lack of charge flow or charge pressure.	See your John Deere dealer.
	Dirty fuel filter.	Replace fuel filter.

Symptom	Problem	Solution
	Water in separator bowl.	Drain water from separator bowl.
	Drive system unable to keep or build up pressure.	See your John Deere dealer.
	System detects ground drive faults.	See your John Deere dealer.

OUO6075,00046A2-19-28MAR17

Four-Wheel Drive (Optional)

Symptom	Problem	Solution
Machine Will Not Move When Four-Wheel Drive Is Engaged.	One or both rear wheels in spin-out condition.	Increase hydrostatic pump flow by moving the multi-function lever forward.
	Bad electrical control switch on console.	See your John Deere dealer
	Bad solenoid valve on the control valve.	See your John Deere dealer.
	Spool will not move in the control valve.	See your John Deere dealer.
Machine Will Not Move When Four-Wheel Drive Is Disengaged.	Faulty line or connection between the main system and rear wheel drive control valve.	Repair or replace parts as needed.
Four-Wheel Drive Will Not Disengage.	Bad electrical control switch on console.	See your John Deere dealer
	Bad solenoid valve on the control valve.	See your John Deere dealer.
	Spool will not work in the control valve.	See your John Deere dealer.
Rear Wheels Wander During Transport Speeds.	Toe-in out of adjustment.	Adjust toe-in.

OUO6075,000457A-19-10JAN17

Steering

Symptom	Problem	Solution
Rear Wheels Wander During Transport Speeds.	Toe-in out of adjustment.	Adjust toe-in.
Steering Arms Do Not Contact Stops at Full Turns.	Steering cylinder out of adjustment.	Adjust cylinder.
Hard Steering.	Low oil level in the engine gear case reservoir.	Add oil.

OUO6075,00046F0-19-29MAR17

Brakes

Symptom	Problem	Solution
Spongy Brake Pedal Pressure.	Low brake fluid level (Non ProDrive Machines).	Add brake fluid.
	Brake pedal push rods out of adjustment (ProDrive Machines).	Adjust jam nut on brake pedal push rods.
	Air in system.	See your John Deere dealer.
Loss of Braking Power.	Glazed linings (Non ProDrive Machines).	See your John Deere dealer.
	Inadequate pressure (ProDrive Machines).	See your John Deere dealer.
	Worn linings.	See your John Deere dealer.
Parking Brake Not Holding.	Park brake not adjusted properly (Non ProDrive Machines).	Adjust park brake.
	Lack of spring force (ProDrive Machines).	See your John Deere dealer.
	Glazed linings (Non ProDrive Machines).	See your John Deere dealer.
	Worn brake linings (ProDrive Machines).	See your John Deere dealer.
	Machine was manual overridden to move machine (ProDrive Machines).	Remove cap screws from transmission.

OUO6075,00000F7-19-29APR08

Engine

Symptom	Problem	Solution
Engine Will Not Crank	Weak battery	Charge or replace battery.
	Corroded or loose battery connections	Clean battery terminals and connections.
	Defective main switch or start safety switch	Repair switch as required.
	Starter solenoid defective	Replace solenoid.
	Starter defective	Replace starter.
Engine Hard to Start or Will Not Start	Starting system problem	Starting system not strong enough to start engine

Symptom	Problem	Solution
		Perform steps found in Engine Will Not Crank.
	Poor fuel quality	Drain fuel and replace with quality fuel of the proper grade.
	Slow cranking speed	Check for problem in the charging/ starting system.
	Too high viscosity crankcase oil	Drain crankcase oil and replace with correct viscosity oil.
	Electronic control system problem or basic engine problem	See your John Deere dealer.
Engine Misfiring or Runs Irregularly	Poor fuel quality	Drain fuel and replace with quality fuel of the proper grade.
	Electronic control system problem or basic engine problem	See your John Deere dealer.
Lack of Engine Power	Poor fuel quality	Drain fuel and replace with quality fuel of the proper grade.
	Plugged fuel filter	Replace fuel filters.
	Engine overloaded	Reduce engine load.
	Improper crankcase oil	Drain crankcase oil and replace with correct viscosity oil.
	Electronic control system problem or basic engine problem	See your John Deere dealer.
	Engine is in derate because of an active diagnostic trouble code	See your John Deere dealer.
	Engine is in derate because exhaust filter cleaning is required.	Engage exhaust filter auto cleaning mode and request a manual exhaust filter cleaning.
Engine Emits Black or Gray Smoke	Engine overloaded	Reduce engine load.
	Improper type of fuel.	Use proper fuel.
	Air cleaner restricted or dirty	Replace air cleaner element as required.
	Defective muffler/exhaust piping (causing backpressure)	Replace muffler or defective piping.
	Electronic control system problem or basic engine problem	See your John Deere dealer.

Symptom	Problem	Solution
	Fuel injectors dirty.	See your John Deere dealer.
	High-pressure fuel pump out of time.	See your John Deere dealer.
	Turbocharger not functioning.	See your John Deere dealer.
	Exhaust filter is cracked or damaged.	See your John Deere dealer.
Engine Emits White Smoke	Engine compression too low	Determine cause of low compression and repair as required. See your John Deere dealer.
	Improper type of fuel.	Use proper fuel.
	Low engine temperature.	Warm up engine to normal operating temperature.
	Defective thermostat(s)	Test thermostats; replace thermostats as required.
	Coolant entering combustion chamber (failed cylinder head gasket or cracked cylinder head)	Repair or replace as required. See your John Deere dealer.
	Electronic control system problem or basic engine problem	See your John Deere dealer.
	Defective fuel injectors.	See your John Deere dealer.
	High-pressure fuel pump out of time.	See your John Deere dealer.
Engine Idles Poorly	Poor fuel quality	Drain fuel and replace with quality fuel of the proper grade.
	Air leak on suction side of air intake system.	Check hose and pipe connections for tightness; repair as required.
	Electronic control system problem or basic engine problem	See your John Deere dealer.
Excessive Fuel Consumption	Poor fuel quality	Drain fuel and replace with quality fuel of the proper grade.
	Engine overloaded	Reduce engine load.
	Air cleaner restricted or dirty	Replace air cleaner element as required.
	Compression too low	Determine cause of low compression and repair as required.
	Leaks in fuel supply system	Locate source of leak and repair as required.

Symptom	Problem	Solution
	Improper type of fuel.	Use proper type of fuel.
	Poor fuel quality	Drain fuel and replace with quality fuel of the proper grade.
	Improper valve clearance.	See your John Deere dealer.
	Fuel injectors defective.	See your John Deere dealer.
	High-pressure fuel pump out of time.	See your John Deere dealer.
	Improper turbocharger operation.	Inspect turbocharger. See your John Deere dealer.
	Low engine temperature.	Check thermostats.
Fuel in Oil	Cracked cylinder head	Locate crack, repair/replace components as required. See your John Deere dealer.
	Cracked or worn electronic unit injector O-ring	Remove suspected electronic unit injector and replace O-ring as required. See your John Deere dealer.
Low Fuel Pressure	Plugged fuel filter	Replace fuel filter.
	Restricted fuel line	Locate restriction, repair as required.
	Faulty fuel transfer pump	Remove fuel transfer pump; repair/ replace pump as required. See your John Deere dealer.
Fuel Aeration	Electronic unit injector hold-down clamp loose	Tighten hold-down clamp cap screw to proper torque. See your John Deere dealer.
	Cracked or worn electronic unit injector O-ring	Remove suspected electronic unit injector and replace O-ring as required. See your John Deere dealer.
Low Oil Pressure	Low crankcase oil level	Fill crankcase to proper oil level.
	Crankcase oil level too high	Fill crankcase to proper oil level.
	Faulty pressure sensor	Replace sensor. See your John Deere dealer.
	Clogged oil cooler or filter	Remove and inspect oil cooler. See your John Deere dealer.
	Excessive oil temperature	Remove and inspect oil cooler. See your John Deere dealer.

Symptom	Problem	Solution
	Defective oil pump	Remove and inspect oil pump. See your John Deere dealer.
	Incorrect oil	Drain crankcase and refill with correct oil.
	Oil pressure regulating valve failure	Remove and inspect oil pressure regulating valve. See your John Deere dealer.
	Broken piston spray nozzle	Replace piston spray nozzle. See your John Deere dealer.
	Clogged oil pump screen or cracked pick-up tube	Remove oil pan and clean screen/ replace pick-up tube.
	Excessive main or connecting rod bearing clearance	Determine bearing clearance. See your John Deere dealer.
High Oil Pressure	Improper oil classification	Drain crankcase and refill with correct oil.
	Faulty pressure sensor	Replace sensor. See your John Deere dealer.
	Oil pressure regulating valve bushing loose (wanders)	Remove and inspect oil pressure regulating valve. See your John Deere dealer.
	Improperly operating regulating valve	Remove and inspect oil pressure regulating valve. See your John Deere dealer.
	Plugged piston spray nozzle	Replace piston spray nozzle. See your John Deere dealer.
	Stuck or damaged filter bypass valve	Remove and inspect filter bypass valve. See your John Deere dealer.
	Stuck or damaged oil cooler bypass valve	Remove and inspect oil cooler bypass valve. See your John Deere dealer.
Excessive Oil Consumption	Too low viscosity crankcase oil	Drain crankcase and refill with correct viscosity oil.
	Crankcase oil level too high	Drain oil until oil level is correct.
	External oil leak(s)	Determine source of oil leak(s) and repair as required.
	Oil control rings not seated	See your John Deere dealer.
	Oil control rings worn or broken	Replace piston rings. See your John Deere dealer.

Symptom	Problem	Solution
	Scored cylinder liners or pistons	Remove and inspect cylinders and liners; replace as required. See your John Deere dealer.
	Worn valve guides or stems	Inspect and measure valve stems and valve guides; repair as required. See your John Deere dealer.
	Excessive oil pressure	See High Oil Pressure earlier in this section.
	Piston ring grooves excessively worn	Remove and inspect pistons. See your John Deere dealer.
	Piston rings sticking in ring grooves	Remove and inspect pistons. See your John Deere dealer.
	Insufficient piston ring tension	Remove and inspect pistons. See your John Deere dealer.
	Piston ring gaps not staggered	Remove and inspect pistons. See your John Deere dealer.
	Front and/or rear crankshaft oil seal faulty	Replace oil seals. See your John Deere dealer.
Abnormal Engine Noise [1]	Worn main or connecting rod bearings	Determine bearing clearance. See your John Deere dealer.
	Excessive crankshaft end play	Check crankshaft end play. See your John Deere dealer.
	Loose main bearing caps	Check bearing clearance; replace bearings and bearing cap screws as required. See your John Deere dealer.
	Worn connecting rod bushings and piston pins	Inspect piston pins and bushings. See your John Deere dealer.
	Scored pistons	Inspect pistons. See your John Deere dealer.
	Worn timing gears or excess backlash	Check timing gear backlash. See your John Deere dealer.
	Excessive valve clearance	Check and adjust valve clearance. See your John Deere dealer.
	Worn camshaft lobes	Replace camshaft. See your John Deere dealer.

[1] *NOTE: Variable geometry turbocharger recycles after starting engine, causing a momentary revving sound in engine. This is normal. Do not confuse whine heard during run down with noise which indicates a bearing failure.*

Symptom	Problem	Solution
	Worn rocker arm shaft(s)	Replace rocker arm shafts. See your John Deere dealer.
	Insufficient engine lubrication	See Lubrication System Troubleshooting, later in this section.
	Turbocharger noise	See Air Intake System Troubleshooting, later in this section.
Turbocharger "Whistles"	Air leak in intake manifold.	Check intake manifold gasket and manifold; repair as required. See your John Deere dealer.
Turbocharger Noise or Vibration [2]	Bearings not lubricated (insufficient oil pressure)	Determine cause of lack of lubrication; repair as required. See your John Deere dealer.
	Air leak in engine intake or exhaust manifold	Check intake and exhaust manifold gaskets and manifolds; repair as required. See your John Deere dealer.
	Improper clearance between turbine wheel and turbine housing	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Broken blades (or other wheel failures)	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
Oil on Turbocharger Compressor Wheel or in Compressor Housing (Oil Being Pushed or Pulled through Center Housing)	Excessive crankcase pressure.	Determine cause of excessive crankcase pressure; repair as required. See your John Deere dealer.
	Air intake restriction	Determine cause of intake restriction; repair as required. See your John Deere dealer.
	Drain tube restriction	Determine cause of drain tube restriction; repair as required. See your John Deere dealer.
Oil in Intake Manifold or Dripping from Turbocharger Housing	Excessive crankcase pressure	Determine cause of excessive crankcase pressure; repair as required. See your John Deere dealer.
	Air intake restriction	Determine cause of intake restriction; repair as required. See your John Deere dealer.

[2] *NOTE: Variable geometry turbocharger recycles after starting engine, causing a momentary revving sound in engine. This is normal. Do not confuse whine heard during run down with noise which indicates a bearing failure.*

Symptom	Problem	Solution
	Drain tube restriction	Determine cause of drain tube restriction; repair as required. See your John Deere dealer.
	Damaged or worn housing bearings	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Unbalance of rotating assembly	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Damage to turbine or compressor wheel or blade	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Dirt or carbon build-up on wheel or blade	Check for air intake leaks (post air filter). Inspect turbocharger; repair/ replace as required. See your John Deere dealer.
	Bearing wear	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Oil starvation or insufficient lubrication	Determine cause of lack of lubrication; repair as required. See your John Deere dealer.
	Shaft seals worn	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
Turbocharger Turbine Wheel Drag	Carbon build-up behind turbine wheel caused by coked oil or combustion deposits	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Dirt build-up behind compressor wheel caused by air intake leaks	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
	Bearing seizure or dirty, worn bearings	Inspect turbocharger; repair/replace as required. See your John Deere dealer.
Engine Overheats	Engine overloaded.	Reduce engine load.
	Low coolant level.	Fill cooling system to proper level, check radiator, and hoses for loose connections or leaks.
	Defective surge tank cap	Replace surge tank cap as required.
	Loose or defective fan belt	Replace fan belt as required. Check belt tensioner.

Symptom	Problem	Solution
	Low engine oil level.	Check oil level. Add oil as required.
	Cooling system needs flushing.	Flush cooling system.
	Defective thermostat(s)	Remove and check thermostats as required.
	Defective temperature gauge or sender.	Check coolant temperature with thermometer and replace, if necessary.
	Incorrect grade of fuel.	Use correct grade of fuel.
	Radiator core dirty	Clean radiator as required.
	Too low crankcase oil level	Fill crankcase to proper oil level.
	Damaged cylinder head gasket	Replace cylinder head gasket. See your John Deere dealer.
	Defective coolant pump	Replace coolant pump. See your John Deere dealer.
Coolant in Crankcase	Cylinder head gasket defective	Replace cylinder head gasket. See your John Deere dealer.
	Cylinder head or block cracked	Locate crack, repair/replace components as required.
	Cylinder liner seals leaking	Remove and inspect cylinder liners. See your John Deere dealer.
	Leaking oil cooler	Pressure test oil cooler; repair/replace as required. See your John Deere dealer.
	Defective oil cooler O-rings	Remove and inspect oil cooler O-rings; replace as required. See your John Deere dealer.
	Faulty coolant pump seal; weep hole plugged; coolant leaking through bearing	Replace coolant pump seals. See your John Deere dealer.
Coolant Temperature Below Normal	Defective thermostat(s)	Test thermostats; replace thermostats as required.

OUO6075,0000C98-19-20JUN11

Electrical

Symptom	Problem	Solution
Undercharged system	Excessive electrical load from added accessories.	Remove accessories or install higher output alternator.

Symptom	Problem	Solution
	Excessive engine idling.	Increase engine rpm when heavy electrical load is used.
	Poor electrical connections on battery, ground strap, starter, or alternator.	Inspect and clean as necessary.
	Defective battery.	Test batteries.
	Defective alternator.	Test charging system.
Battery used too much water	Cracked battery case.	Check for moisture and replace as necessary.
	Battery charging rate too high.	Test charging system.
Batteries will not charge	Loose or corroded connections.	Clean and tighten connections.
	Sulfated or worn-out batteries.	See your John Deere dealer.
	Stretched belt or defective belt tensioner.	Adjust belt tension or replace belts.
Starter will not crank	Engine drivelines engaged.	Disengage engine drivelines.
	Loose or corroded connections.	Clean and tighten loose connections.
	Low battery output voltage or discharged battery.	Charge or replace batteries.
	Faulty start circuit relay.	See your John Deere dealer.
	Blown fuse.	Replace fuse.
		Clean battery terminals and connections.
	Defective main switch or start safety switch	Repair switch as required.
	Starter solenoid defective	Replace solenoid.
	Starter defective	Replace starter.
Starter cranks slowly	Low battery output.	Charge batteries.
	Crankcase oil too heavy.	Use proper viscosity oil.
	Loose or corroded connections.	Clean and tighten loose connections.
Entire electrical system does not function	Faulty battery connection.	Clean and tighten connections.
	Sulfated or worn-out batteries.	Replace batteries.

Symptom	Problem	Solution
	Blown fuse.	Replace fuse.

OUO6075,0000C99-19-20JUN11

Heater

Symptom	Problem	Solution
Heater Not Blowing Warm Air.	Dirty recirculating filter.	Clean filter.
	No thermostat in water outlet manifold.	See your John Deere dealer.
	Defective thermostat in water outlet manifold.	See your John Deere dealer.
	Heater temperature control defective.	Replace control.
	Kinked heater hose. Defective heater valve.	Straighten or replace. Replace valve.

OUO6075,0000B24-19-14MAR07

Air Conditioner

Symptom	Problem	Solution
Lack Of Or Insufficient Cooling	Temperature control in OFF position.	Turn Air Conditioner to ON position.
	Compressor belt off or broken.	Replace belt.
	Compressor not functioning (if both the large and small hoses in the left-hand access panel are at the same temperature).	See your John Deere dealer.
	Temperature control is not responding (temperature door broken resulting in warm air).	See your John Deere dealer.
	Low-pressure warning (system lost refrigerant).	See your John Deere dealer.
	High-pressure warning (system is overcharged).	See your John Deere dealer.
Compressor clutch cycles excessively or compressor stays OFF up to 15 minutes.	Evaporator icing.	Adjust controls correctly. See Combine Overview Application Help or Operator's Station Help for further information. Open louvers. Clean filters. Move control to a warmer setting.

Symptom	Problem	Solution
Bad smell (foul odor) in cab.	Plugged drain tube. Dirty filters. Dirty cab.	Blow out condensate tube and clean pan under evaporator. Clean filters. Vacuum out cab. Be certain weep valve in the condensate drain tube is installed.

OUO6075,0004572-19-19JAN17

Moisture Sensor (If Equipped)

Symptom	Problem	Solution
Moisture is too high.	Green plant sap or weed seed buildup on moisture sensor plate.	Clean moisture sensor plate.
Moisture is consistently high or low.	Moisture correction needs adjustment.	Change moisture correction.
Moisture does not change or is constantly low.	Obstructed sensor.	Inspect elevator mount unit and clean as needed.
Moisture reading is inaccurate.	Incorrect crop selected.	Select correct crop.
	Moisture sensor out of adjustment.	Change moisture correction.
Moisture always zero.	Recording problems.	Check if recording status comes ON when harvesting.

OUO6075,0000A75-19-03NOV10

Mass Flow Sensor (If Equipped)

Symptom	Problem	Solution
Yield is constantly too high or low.	System is out of calibration.	Change yield calibration.
	Incorrect header width.	Change header width.
	Incorrect crop selection.	Select correct crop.
	Dirt, mud, or debris on impact plate.	Clean impact plate.
Yield is zero.	No ground speed.	See your John Deere dealer.
	Clean grain elevator speed is too low.	See your John Deere dealer.
	Recording problems.	Check if recording status comes ON when harvesting.

OUO6075,0000A76-19-03NOV10

Storage

Preparing Machine for Storage

Swing out condenser and oil cooler and clean radiator with air, water, or a vacuum cleaner.

Clean condenser and oil cooler after cleaning radiator. Clean charge air cooler.

Every 60—90 days start engine and turn air conditioning ON. Run engine at low idle for several minutes for compressor seal lubrication. Outside temperature should be above 5°C (40°F) for proper air conditioning operation.

Clean the surfaces of the engine with a safe solvent.

CAUTION: Do not use gasoline.

Clean inside the air cleaner and install new elements.

Drain the engine crankcase, while the engine is warm. Replace filter and fill with correct oil. Add 0.66 L (22 oz) of a corrosion inhibitor to the engine crankcase. Run engine to circulate.

Drain, flush, and refill cooling system with 50/50 mixture of antifreeze and water.

IMPORTANT: Long-term storage in vehicle (over 12 months) is not recommended. If long-term storage is necessary, periodic testing of Diesel Exhaust Fluid (DEF) is recommended to ensure that urea concentration does not fall out of specification.

Final Tier 4/Stage V: Diesel Exhaust Fluid (DEF) has a limited shelf life, but may be stored in the vehicle for as long as 12 months, depending upon storage conditions. See Storing Diesel Exhaust Fluid (DEF) and Refilling Diesel Exhaust Fluid (DEF) Tank in Fuels and Lubricants section for further information. See Diesel Exhaust Fluid (DEF) Tank—Filling and Diesel Exhaust Fluid (DEF) Tank—Draining in Maintenance—As Required (Engine Fluids and Filters) section for further information.

IMPORTANT: Final Tier 4/Stage V: Do not disconnect battery for at least 90 seconds after machine is shut OFF. Selective Catalyst Reduction (SCR) system automatically purges lines of Diesel Exhaust Fluid (DEF) during this time, immediately after machine is shut OFF. If adequate time is not allowed for lines to be purged, any fluid remaining in lines can crystallize and plug lines. Fluid freezes and possibly burst lines in freezing weather conditions.

NOTE: Turn battery disconnect switch OFF if machine is stored longer than 25 days. If storage period is longer than 90 days, remove negative lead to batteries to minimize load to batteries.

Charge batteries completely. Specific gravity equals 1.260 volts. To minimize load to the batteries, remove the negative lead to the batteries.

Drain water separator.

Clean machine inside and out. Leave elevator doors and drain covers open.

Cycle concave up and down several times to prevent material buildup in the concave area.

IMPORTANT: Directing pressurized water at electronic/electrical components or connectors, bearings and hydraulic seals, fuel injection pumps or other sensitive parts and components may cause product malfunctions. Reduce pressure, and spray at a 45 to 90 degree angle.

Repaint areas where needed.

NOTE: It is not necessary to wax the machine. However, if desired, use a good clear wax that contains no abrasives. These types of waxes usually do not contain cleaners.

Lubricate machine and grease adjusting bolt threads.

Perform all 400 hours (yearly) service.

To prevent condensation, fill fuel tank.

IMPORTANT: To stabilize the fuel and prevent water condensation, add fuel conditioner when the following occurs:

- **Fuel is stored in the fuel tanks (machine or farm storage) for extended periods of time. See your John Deere dealer for recommendations.**
- **A slow turn over of fuel is being used. See your John Deere dealer for recommendations.**

For prolonged machine storage, the best practice is to drain biodiesel and fill machine with regular petroleum diesel fuel. Otherwise use biodiesel stabilizer (anti-oxidant) additives or fully formulated biodiesel conditioners. See your John Deere dealer for recommendations.

If machine is to be stored for a long period, remove and clean the batteries. Store them in a cool, dry place and keep them fully charged.

Before storing the machine, the air compressor reservoir (if equipped) MUST be drained of water.

OUO6075,0004A72-19-10DEC18

Removing Machine from Storage

Reconnect and/or charge batteries.

Charge batteries completely. Specific gravity equals 1.260 volts. To minimize load to the batteries, remove negative lead to the batteries.

Check oil and coolant levels. Inspect for leaks and add oil and coolant if needed.

Final Tier 4/Stage V: If diesel exhaust fluid (DEF) tank was not drained, test urea concentration. See Testing Diesel Exhaust Fluid (DEF) in Fuels and Lubricants section for further information. If concentration is not within specifications, drain and replace with new diesel exhaust fluid (DEF). If diesel exhaust fluid (DEF) tank was drained, fill tank. See Diesel Exhaust Fluid (DEF) Tank—Filling in Maintenance—As Required (Engine Fluids and Filters) section for further information.

Replace the ActiveVision™ clean grain elevator camera and tailings system camera desiccant cartridge (if equipped). See ActiveVision™ Camera Desiccant Cartridge in Maintenance—Every 400 Hours section for further information.

Close elevator doors and drain hole.

Check tension of drive belts. Adjust spring-loaded idlers until the washer is positioned between the end of the gauge and the bottom of the step.

Check tire inflation and review machine Operator's Manual.

Inspect fire extinguishers (front and rear) by following maintenance instructions on the fire extinguisher label. Recharge or replace as necessary.

OUO6075,0004E61-19-08JUL20

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Specifications

Operating Speeds (S760 and S770)

Speeds shown are average and can vary from machine to machine.

NOTE: Operating speed specifications and design subject to change without notice.

Engine Speeds	9.0 L Tier 2/Stage II Engine	9.0 L Final Tier 4/Stage V Engine
Slow Speed (Separator Off)	1200 rpm	1200 rpm
Medium Speed (Separator Off)	1690 rpm	1690 rpm
Fast Speed (Separator Off)	2340 rpm	2340 rpm
Rated Speed (Separator On)	2200 rpm	2200 rpm

Separator Drive Shaft Speed	1453 rpm

Main Countershaft Speed	1453 rpm

Separator Speeds	
High Range	400—1000 rpm
Low Range	210—530 rpm

Feeder House Lower Shaft Speeds	
Fixed Speed (If Equipped)	490 rpm
Heavy-Duty Variable Speed (If Equipped)	490—750 rpm
High Torque Variable Speed (If Equipped)	490—750 rpm
Multi-Speed (If Equipped)	First Gear: 480 rpm Second Gear: 535 rpm Third Gear: 590 rpm Fourth Gear: 665 rpm Fifth Gear: 735 rpm

Feed Accelerator Speeds	
Feed Accelerator (Standard Speed)	430/780 rpm
Feed Accelerator (Optional Slow Speed)	310/770 rpm
Feed Accelerator (High-Speed High Capacity)	520/970 rpm

Discharge Beater Speed	S760	S770
	998 rpm	995 rpm

Jackshaft Speeds	
Front Right-Hand Jackshaft	518 rpm
Rear Right-Hand Jackshaft	518 rpm

Cleaning Fan Speeds	
Standard Speed	620—1350 rpm
Special Slow Speed	250—500 rpm

Elevator Speeds	S760	S770
Clean Grain Elevator	417 rpm	415 rpm
Clean Grain Loading Auger	448 rpm	445 rpm
Tailings Elevator, Lower Auger	395 rpm	
Tailings Elevator, Upper Auger	625 rpm	
Shoe Drive	298 rpm	
Conveyor Augers	420 rpm	

Unloading System Speeds (Separator Engaged)	
Unloading System Countershaft	1000 rpm
Unloading Auger Gearbox, Input Shaft	460 rpm, 116 L/s (3.3 bu/s) Unload Rate
Unloading Vertical Auger	460 rpm, 116 L/s (3.3 bu/s) Unload Rate
Unloading Outer Auger	460 rpm, 116 L/s (3.3 bu/s) Unload Rate
Grain Tank Horizontal Augers (Front and Rear)	330 rpm, 116 L/s (3.3 bu/s) Unload Rate

Chopper Speeds	**Deluxe Residue**	**Intermediate Residue**	**Premium Residue**
Chopper/Discharge Beater Jackshaft	1880 rpm	2045 rpm	2045 rpm
Chopper (Two-Speed)	1505/2350 rpm	1400/2995 rpm	1400/2995 rpm
Overshot Beater	Not Applicable	Not Applicable	995 rpm

OUO6075,0004BBE-19-30MAY19

Operating Speeds (S780, S785, and S790)

Speeds shown are average and can vary from machine to machine.

NOTE: Operating speed specifications and design subject to change without notice.

Engine Speeds	13.5 L Tier 2/Stage II Engine	13.5 L Final Tier 4/Stage V Engine
Slow Speed (Separator Off)	1200 rpm	1200 rpm
Medium Speed (Separator Off)	1690 rpm	1690 rpm
Fast Speed (Separator Off)	2240 rpm	2240 rpm
Rated Speed (Separator On)	2100 rpm	2100 rpm

Separator Drive Shaft Speed	1466 rpm

Main Countershaft Speed	1466 rpm

Separator Speeds	
High Range	400—1000 rpm
Low Range	210—530 rpm

Tailings System Speed	880 rpm

Feeder House Lower Shaft Speeds	
Fixed Speed (If Equipped)	490 rpm
Multi-Speed (If Equipped)	First Gear: 480 rpm Second Gear: 535 rpm Third Gear: 590 rpm Fourth Gear: 665 rpm Fifth Gear: 735 rpm

Feed Accelerator Speeds	
Feed Accelerator (Standard Speed)	430/780 rpm
Feed Accelerator (Optional Slow Speed)	310/770 rpm
Feed Accelerator (High-Speed High Capacity)	520/970 rpm

Discharge Beater Speed	995 rpm

Jackshaft Speeds	
Front Right-Hand Jackshaft	520 rpm
Rear Right-Hand Jackshaft	520 rpm

Cleaning Fan Speeds	
Standard Speed	620—1350 rpm
Special Slow Speed	250—500 rpm

Elevator Speeds	
Clean Grain Elevator	415 rpm
Clean Grain Loading Auger	450 rpm
Tailings Elevator, Lower Auger	490 rpm
Tailings Elevator, Upper Auger	580 rpm
Shoe Drive	300 rpm
Conveyor Augers	425 rpm

Unloading System Speeds (Separator Engaged)	S780, S785, and S790	S780 HillMaster™, S785 HillMaster™, and S790 HillMaster™
Unloading System Countershaft	1005 rpm	
Unloading Auger Gearbox, Input Shaft	460 rpm	465 rpm

Unloading System Speeds (Separator Engaged)	S780, S785, and S790	S780 HillMaster™, S785 HillMaster™, and S790 HillMaster™
Unloading Vertical Auger	460 rpm	465 rpm
Unloading Outer Auger	460 rpm	465 rpm
Grain Tank Horizontal Augers (Front and Rear)	450 rpm	335 rpm

HillMaster is a trademark of Deere & Company

Chopper Speeds	Deluxe Residue	Intermediate Residue	Premium Residue
Chopper/Discharge Beater Jackshaft	1880 rpm	2045 rpm	2045 rpm
Chopper (Two-Speed)	1505/2350 rpm	1400/2995 rpm	1400/2995 rpm
Overshot Beater	Not Applicable	Not Applicable	995 rpm

OUO6075,0004BBF-19-30MAY19

Specifications (S760 and S770)

NOTE: Specifications and design subject to change without notice.

Engine		
Make	John Deere	
Model	6090HH006 (9.0 L Tier 2/Stage II) 6090HH029 (9.0 L Final Tier 4/Stage V)	
Type	Six-Cylinder, In-Line, Valve-in-Head (Four Valves), Air-to-Air Aftercooled Diesel Turbocharged	
	S760	**S770**
Rated Power (Tier 2/Stage II)	239 kW (320 hp)	278 kW (373 hp)
Rated Power (Final Tier 4/Stage V)	249 kW (334 hp)	292 kW (392 hp)
Rated Speed	2200 rpm	2200 rpm
Power Boost at Rated Speed	25 kW (34 hp)	25 kW (34 hp)
Peak Power (Tier 2/Stage II)	272 kW (365 hp)	317 kW (425 hp)
Peak Power (Final Tier 4/Stage V)	285 kW (382 hp)	335 kW (449 hp)
Peak Power Speed (Rated Speed -200 rpm)	2000 rpm	
Displacement	9.0 L (549 in^3)	
Firing Order	1-5-3-6-2-4	
Air Cleaner	Dry Type with Safety Element	

Electrical System	
Battery Voltage	12 Volts
Battery Terminal Grounded	Negative
Alternator (Tier 2/Stage II) Alternators (Final Tier 4/Stage V)	200 A

Transmission	
Speeds (Mechanical Shift Machines)	Three Speeds
Speeds (Push-Button Shift Machines)	Three Speeds
Speeds (ProDrive™ Machines)	Two-Speed Auto-Shift

ProDrive is a trademark of Deere & Company

Brakes	
Type (Mechanical Shift Machines)	Hydraulic Shoe
Type (Push-Button Shift Machines)	Hydraulic Shoe
Type (ProDrive™ Machines)	Multiple Wet Discs

Feed Accelerator	**S760 and S770**	**S770 HillMaster™**
Number of Wings	Standard: 10 Tough Crop: 8 Rice: 5	Tough Crop: 8

HillMaster is a trademark of Deere & Company

Separator Elements	
Threshing Elements (TriStream™ Rotor)	Corn/Small Grain: 15
Threshing Elements (Variable Stream Rotor)	Corn/Small Grain: 15 Rice Option: 15 Elements and 12 Threshing Tines in Dense Pack Locations
Tines (TriStream™ Rotor)	24
Tines (Variable Stream Rotor)	20

TriStream is a trademark of Deere & Company

Concave	
Number of Concaves	3
Number of Bars Per Concave	Grain—Front 25, Mid/Rear 25; Corn 31

Separator	
Number of Grates	4

Discharge Grate	
Number of Grates	3

Discharge Beater	**S760 and S770**	**S770 HillMaster™**
Number of Wings	Standard: 5 Tough Crop: 8	Tough Crop: 8

Grain Tank	
Capacity	10 572 L (300 bu) Extensions 10 572 L (300 bu) Covers
Average Unloading Rate, 116 L/s (3.3 bu/s) Unload Rate	6977 L/min (198 bu/min)
Maximum Unloading Rate, 116 L/s (3.3 bu/s) Unload Rate	7612 L/min (216 bu/min)

Turning Radius	
Rear Wheel Tread Width	3.35 m (10 ft 10 in)
Turning Radius (Non-Powered Axles)	8.02 m (26 ft 3 in)
Turning Radius (Powered Axles)	7.73 m (25 ft 4 in)

Capacities	**S760**	**S770**
Fuel Tank	950 L (250 gal)	
Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage V)	52.2 L (13.8 gal)	
Cooling System with Heater (Tier 2/Stage II)	53 L (56 qt)	
Cooling System with Heater (Final Tier 4/Stage V)	53 L (56 qt)	
Engine Crankcase with Filter (Tier 2/Stage II)	27.5 L (29 qt) [a]	
Engine Crankcase with Filter (Final Tier 4/Stage V)	27.5 L (29 qt) [a]	
Transmission (Mechanical Shift and Push-Button Shift Machines)	9.6 L (10 qt)	
Final Drives	8 L (8.5 qt) Single Wheel Configuration 23.0 L (24.3 qt) Dual Wheel Configuration	
Final Drives (HillMaster™)	Not Applicable	7 L (7.4 qt)
Heavy-Duty Feeder House Reverser Gear Case without Cooler	2.3 L (4.75 pt)	
Heavy-Duty Feeder House Reverser Gear Case with Cooler	3.5 L (7.4 pt)	Not Applicable
Extra Heavy-Duty Feeder House Reverser Gear Case with Cooler	4.9 L (10.4 pt)	
Multi-Speed Feeder House Reverser Gear Case with Cooler	Not Applicable	5.2 L (11 pt)
Premium Overshot Beater Gear Case (If Equipped)	Not Applicable	0.2 L (6.75 oz)
Primary Countershaft Drive Gear Case	1.9 L (2.04 qt)	
Loading Auger Gear Case	3.8 L (4 qt)	
Two-Speed Separator Drive Gear Case	4.7 L (5 qt)	
Engine Gear Case with Transfer (Mechanical Shift and Push-Button Shift Machines)	21.3 L (22.5 qt)	
Engine Gear Case with Transfer (ProDrive™ Machines)	51 L (54 qt)	
Hydraulic/Hydrostatic Reservoir	31 L (33 qt)	

[a] It is vital to maintain engine oil at correct levels. Always verify that oil level is at correct location on dipstick when servicing.

Air Compressor (If Equipped)		
Reservoir Size	60 L (16 gal)	
Maximum Reservoir Pressure	827 kPa (8.27 bar) (120 psi)	
Air Compressor Flow	Slow Engine Speed	250 L/min (8.8 ft³/min)
	High Engine Speed	450 L/min (15.8 ft³/min)

OUO6075,0004B93-19-31MAY19

Specifications (S780, S785, and S790)

NOTE: Specifications and design subject to change without notice.

Engine		
Make	John Deere	
Model	6135HH004 (13.5 L Tier 2/Stage II) 6135HH011 (13.5 L Final Tier 4/Stage V)	
Type	Six-Cylinder, In-Line, Valve-in-Head, Air-to-Air Aftercooled Diesel Turbocharged	
	S780	**S785**
Rated Power (Tier 2/Stage II)	353 kW (473 hp)	373 kW (500 hp)
Rated Power (Final Tier 4/Stage V)	353 kW (473 hp)	373 kW (500 hp)
Rated Speed	2100 rpm	2100 rpm
Power Boost at Rated Speed	37 kW (50 hp)	37 kW (50 hp)
Peak Power (Tier 2/Stage II)	402 kW (540 hp)	425 kW (570 hp)
Peak Power (Final Tier 4/Stage V)	402 kW (540 hp)	425 kW (570 hp)
Peak Power Speed (Rated Speed -200 rpm)	1900 rpm	
Displacement	13.5 L (824 in³)	
Firing Order	1-5-3-6-2-4	
Air Cleaner	Dry Type with Safety Element	
	S790	
Rated Power (Tier 2/Stage II)	405 kW (543 hp)	
Rated Power (Final Tier 4/Stage V)	405 kW (543 hp)	
Rated Speed	2100 rpm	
Power Boost at Rated Speed (Tier 2/Stage II)	23 kW (31 hp)	
Power Boost at Rated Speed (Final Tier 4/ Stage V)	37 kW (50 hp)	
Peak Power (Tier 2/Stage II)	458 kW (614 hp)	
Peak Power (Final Tier 4/Stage V)	460 kW (617 hp)	
Peak Power Speed (Rated Speed -200 rpm)	1900 rpm	
Displacement	13.5 L (824 in³)	
Firing Order	1-5-3-6-2-4	
Air Cleaner	Dry type with safety element	

Electrical System	
Battery Voltage	12 Volts
Battery Terminal Grounded	Negative
Alternator (Tier 2/Stage II) Alternators (Final Tier 4/Stage V)	200 A

Transmission	
Speeds	Two-Speed Auto-Shift

Brakes	
Type	Multiple Wet Discs

Feed Accelerator	**S780, S785, and S790**	**S780 HillMaster™, S785 HillMaster™, and S790 HillMaster™**
Number of Wings	Standard: 10 Tough Crop: 8 Rice: 5	Tough Crop: 8

HillMaster is a trademark of Deere & Company

Separator Elements	
Threshing Elements (TriStream™ Rotor)	Corn/Small Grain: 15
Threshing Elements (Variable Stream Rotor)	Corn/Small Grain: 15 Rice Option: 15 Elements and 12 Threshing Tines in Dense Pack Locations
Tines (TriStream™ Rotor)	24
Tines (Variable Stream Rotor)	20

TriStream is a trademark of Deere & Company

Concave	
Number of Concaves	3
Number of Bars Per Concave	Grain—Front 25, Mid/Rear 25; Corn 31

Separator	
Number of Grates	4

Discharge Grate	
Number of Grates	1

Discharge Beater	**S780, S785, and S790**	**S780 HillMaster™, S785 HillMaster™, and S790 HillMaster™**
Number of Wings	Standard: 10 Tough Crop: 8	Tough Crop: 8

Grain Tank	**S780, S785, and S790**
Capacity	14 096 L (400 bu) Extensions 14 096 L (400 bu) Covers
Average Unloading Rate, 134 L/s (3.8 bu/s) Unload Rate	8035 L/min (228 bu/min)
Maximum Unloading Rate, 134 L/s (3.8 bu/s) Unload Rate	8670 L/min (246 bu/min)

Grain Tank	**HillMaster™ Machines**
Capacity	10 572 L (300 bu) Extensions 10 572 L (300 bu) Covers
Average Unloading Rate, 116 L/s (3.3 bu/s) Unload Rate	6977 L/min (198 bu/min)
Maximum Unloading Rate, 116 L/s (3.3 bu/s) Unload Rate	7612 L/min (216 bu/min)

Turning Radius	
Rear Wheel Tread Width	3.35 m (10 ft 10 in)
Turning Radius (Non-Powered Axles)	8.02 m (26 ft 3 in)
Turning Radius (Powered Axles)	7.73 m (25 ft 4 in)

Capacities	
Fuel Tank	950 L (250 gal) Optional 1250 L (330 gal) Standard
Diesel Exhaust Fluid (DEF) Tank (Final Tier 4/Stage V)	52.2 L (13.8 gal)
Cooling System with Heater (Tier 2/Stage II)	61.2 L (65 qt)
Cooling System with Heater (Final Tier 4/Stage V)	85 L (90 qt)
Engine Crankcase with Filter (Tier 2/Stage II)	39 L (41 qt) [a]
Engine Crankcase with Filter (Final Tier 4/Stage V)	43 L (45.5 qt) [a]
Final Drives	8 L (8.5 qt) Single Wheel Configuration 23.0 L (24.3 qt) Dual Wheel Configuration 7 L (7.4 qt) HillMaster™ Machines
Extra Heavy-Duty Feeder House Reverser Gear Case without Cooler	3.6 L (7.7 pt)
Multi-Speed Feeder House Reverser Gear Case with Cooler (Optional)	5.2 L (11 pt)
Premium Overshot Beater Gear Case (If Equipped)	0.2 L (6.75 oz)
Primary Countershaft Drive Gear Case (Non-Multi-Speed)	1.9 L (2.04 qt)

Capacities	
Loading Auger Gear Case	3.8 L (4 qt)
Two-Speed Separator Drive Gear Case	4.7 L (5 qt)
Engine Gear Case with Transfer	51 L (54 qt)
Hydraulic/Hydrostatic Reservoir	47 L (50 qt)

[a] *It is vital to maintain engine oil at correct levels. Always verify that oil level is at correct location on dipstick when servicing.*

Air Compressor (If Equipped)		
Reservoir Size	60 L (16 gal)	
Maximum Reservoir Pressure	827 kPa (8.27 bar) (120 psi)	
Air Compressor Flow	Slow Engine Speed	250 L/min (8.8 ft^3/min)
	High Engine Speed	450 L/min (15.8 ft^3/min)

OUO6075,0004B94-19-31MAY19

Dimensions (S760 and S770)

NOTE: Dimensions are approximate and subject to change without notice.

Dimension	S760 and S770
A	9.80 m (32 ft 2 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 11.72 m (38 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 12.46 m (40 ft 11 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
B	9.14 m (30 ft 0 in) with 6.9 m (22 ft 6 in) Power Fold Auger 9.93 m (32 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Auger
C	8.52 m (27 ft 11 in)
D	4.91—4.99 m (16 ft 1 in—16 ft 5 in) with 10 572 L (300 bu) Covers
E	4.61—4.84 m (15 ft 2 in—15 ft 11 in) Clean Grain Loading Auger
F	4.30—4.39 m (14 ft 1 in—14 ft 5 in) with 10 572 L (300 bu) Extensions
G	4.04—4.13 m (13 ft 3 in—13 ft 7 in)
H	3.96—4.04 m (13 ft 0 in—13 ft 3 in)
I	0.63—0.76 m (2 ft 1 in—2 ft 6 in)
J	3.53 m (11 ft 7 in)
K	6.52 m (21 ft 5 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 7.66 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Rigid Unloading Auger 7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 8.97 m (29 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 9.42 m (30 ft 11 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
L	4.72—5.05 m (15 ft 6 in—16 ft 7 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 5.23—5.33 m (17 ft 2 in—17 ft 6 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 5.48—5.58 m (18 ft 0 in—18 ft 4 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 5.42—5.52 m (17 ft 9 in—18 ft 1 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 5.59—5.69 m (18 ft 4 in—18 ft 8 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
M	4.01—4.33 m (13 ft 2 in—14 ft 3 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 4.51—4.62 m (14 ft 10 in—15 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 4.61—4.71 m (15 ft 2 in—15 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 4.32—4.65 m (14 ft 2 in—15 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 4.72—4.82 m (15 ft 6 in—15 ft 10 in) with 8.7 m (28 ft 6 in) Unloading Auger
N [a]	4.08—4.40 m (13 ft 5 in—14 ft 5 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 4.58—4.69 m (15 ft 0 in—15 ft 5 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 4.91—5.01 m (16 ft 1 in—16 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 4.84—4.95 m (15 ft 11 in—16 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 5.02—5.12 m (16 ft 6 in—16 ft 10 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
O [b]	3.47—4.34 m (11 ft 5 in—14 ft 3 in) Rear Tires
P [b]	3.49—5.36 m (11 ft 5 in—17 ft 7 in) Front Tires

[a] Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.
[b] Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths vary. Measurements given in chart are for minimum and maximum widths. For more detailed width information, see your John Deere dealer.

OUO6075,0004E58-19-01JUN20

Dimensions (S770 HillMaster™)

NOTE: Dimensions are approximate and subject to change without notice.

Dimension	S770 HillMaster™
A	9.80 m (32 ft 2 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
B	9.14 m (30 ft 0 in) with 6.9 m (22 ft 6 in) Power Fold Auger 9.93 m (32 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Auger
C	8.52 m (27 ft 11 in)
D	4.91—5.00 m (16 ft 1 in—16 ft 5 in) with 10 572 L (300 bu) Covers
E	4.62—4.71 m (15 ft 2 in—15 ft 5 in) Clean Grain Loading Auger
F	4.31—4.40 m (14 ft 2 in—14 ft 5 in) with 10 572 L (300 bu) Extensions
G	4.05—4.14 m (13 ft 4 in—13 ft 7 in)
H	3.97—4.06 m (13 ft 0 in—13 ft 4 in)
I	0.69—0.78 m (2 ft 3 in—2 ft 7 in)
J	3.53 m (11 ft 7 in)
K	6.52 m (21 ft 5 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
L	4.82—5.07 m (15 ft 10 in—16 ft 8 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 5.10—5.35 m (16 ft 9 in—17 ft 7 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 5.30—5.54 m (17 ft 5 in—18 ft 2 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
M	4.11—4.35 m (13 ft 6 in—13 ft 3 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 4.39—4.63 m (14 ft 5 in—15 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 4.42—4.67 m (14 ft 6 in—15 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
N [a]	4.18—4.42 m (13 ft 9 in—14 ft 6 in) with 5.6 m (18 ft 6 in) Rigid Unloading Auger 4.46—4.71 m (14 ft 8 in—15 ft 5 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 4.72—4.96 m (15 ft 6 in—16 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
O [b]	3.48—3.70 m (11 ft 5 in—12 ft 2 in) Rear Tires
P [b]	3.48—3.78 m (11 ft 5 in—12 ft 5 in) Front Tires

[a] Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.
[b] Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths vary. Measurements given in chart are for minimum and maximum widths. For more detailed width information, see your John Deere dealer.

OUO6075,0004E59-19-01JUN20

Dimensions (S780, S785, and S790)

NOTE: Dimensions are approximate and subject to change without notice.

Dimension	S780, S785, and S790
A	11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 11.72 m (38 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 12.46 m (40 ft 11 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
B	9.14 m (30 ft 0 in) with 6.9 m (22 ft 6 in) Power Fold Auger 9.93 m (32 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Auger
C	8.52 m (27 ft 11 in)
D	3.92—3.99 m (12 ft 10 in—13 ft 1 in) with 14 096 L (400 bu) Covers
E	4.77—4.85 m (15 ft 8 in—15 ft 11 in) Clean Grain Loading Auger
F	4.57—4.65 m (15 ft 0 in—15 ft 3 in) with 14 096 L (400 bu) Extensions
G	4.04—4.13 m (13 ft 3 in—13 ft 7 in)
H	3.96—4.04 m (13 ft 0 in—13 ft 3 in)
I	0.63—0.76 m (2 ft 1 in—2 ft 6 in)
J	3.53 m (11 ft 7 in)
K	7.66 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Rigid Unloading Auger 7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 8.97 m (29 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 9.42 m (30 ft 11 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
L	5.23—5.33 m (17 ft 2 in—17 ft 6 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 5.48—5.58 m (18 ft 0 in—18 ft 4 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 5.42—5.52 m (17 ft 9 in—18 ft 1 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 5.59—5.69 m (18 ft 4 in—18 ft 8 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
M	4.51—4.62 m (14 ft 10 in—15 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 4.61—4.71 m (15 ft 2 in—15 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 4.32—4.65 m (14 ft 2 in—15 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 4.72—4.82 m (15 ft 6 in—15 ft 10 in) with 8.7 m (28 ft 6 in) Unloading Auger
N [a]	4.58—4.69 m (15 ft 0 in—15 ft 5 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger 4.91—5.01 m (16 ft 1 in—16 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger 4.84—4.95 m (15 ft 11 in—16 ft 3 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger 5.02—5.12 m (16 ft 6 in—16 ft 10 in) with 8.7 m (28 ft 6 in) Rigid Unloading Auger
O [b]	3.39—4.34 m (11 ft 2 in—14 ft 3 in) Rear Tires
P [b]	3.49—5.36 m (11 ft 5 in—17 ft 7 in) Front Tires

[a]Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.
[b]Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths vary. Measurements given in chart are for minimum and maximum widths. For more detailed width information, see your John Deere dealer.

OUO6075,0004E5A-19-01JUN20

Dimensions (S780 HillMaster™, S785 HillMaster™ and S790 HillMaster™)

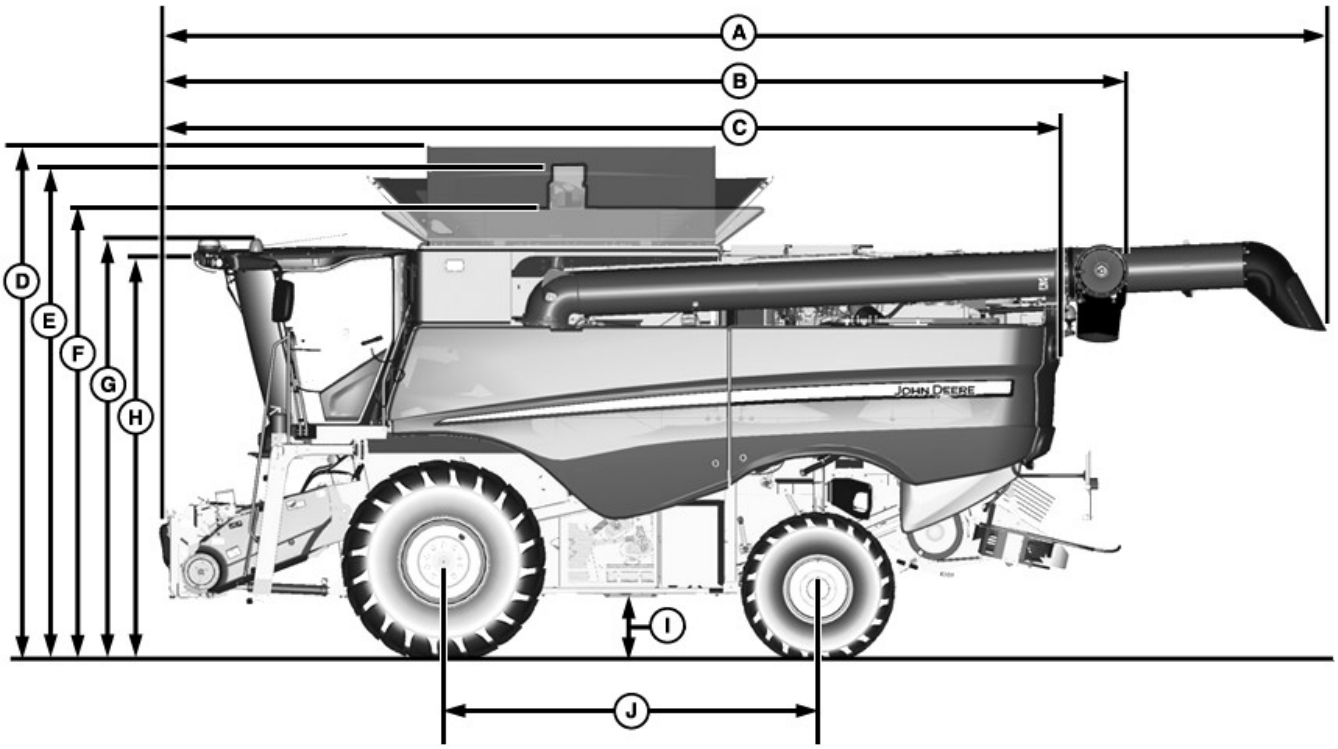
NOTE: Dimensions are approximate and subject to change without notice.

Dimension	S780 HillMaster™, S785 HillMaster™ and S790 HillMaster™
A	11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
B	9.14 m (30 ft 0 in) with 6.9 m (22 ft 6 in) Power Fold Auger 9.93 m (32 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Auger
C	8.52 m (27 ft 11 in)
D	4.90—4.91 m (16 ft 1 in—16 ft 2 in) with 10 572 L (300 bu) Covers
E	4.62—4.76 m (15 ft 2 in—15 ft 7 in) Clean Grain Loading Auger
F	4.30—4.31 m (14 ft 1 in—14 ft 2 in) with 10 572 L (300 bu) Extensions
G	4.04—4.05 m (13 ft 3 in—13 ft 4 in)
H	3.96—3.97 m (13 ft 0 in—13 ft 1 in)
I	0.68—0.69 m (2 ft 2 in—2 ft 3 in)
J	3.53 m (11 ft 7 in)
K	7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
L	5.10—5.35 m (16 ft 9 in—17 ft 7 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 5.30—5.54 m (17 ft 5 in—18 ft 2 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
M	4.39—4.63 m (14 ft 5 in—15 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 4.42—4.67 m (14 ft 6 in—15 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
N [a]	4.59—4.61 m (15 ft 1 in—15 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger 4.84—4.87 m (15 ft 11 in—16 ft 0 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger
O [b]	3.48—3.68 m (11 ft 5 in—12 ft 1 in) Rear Tires
P [b]	3.47—3.80 m (11 ft 5 in—12 ft 6 in) Front Tires

[a] Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.
[b] Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths vary. Measurements given in chart are for minimum and maximum widths. For more detailed width information, see your John Deere dealer.

OUO6075,0004E5B-19-01JUN20

Dimension Reference Points



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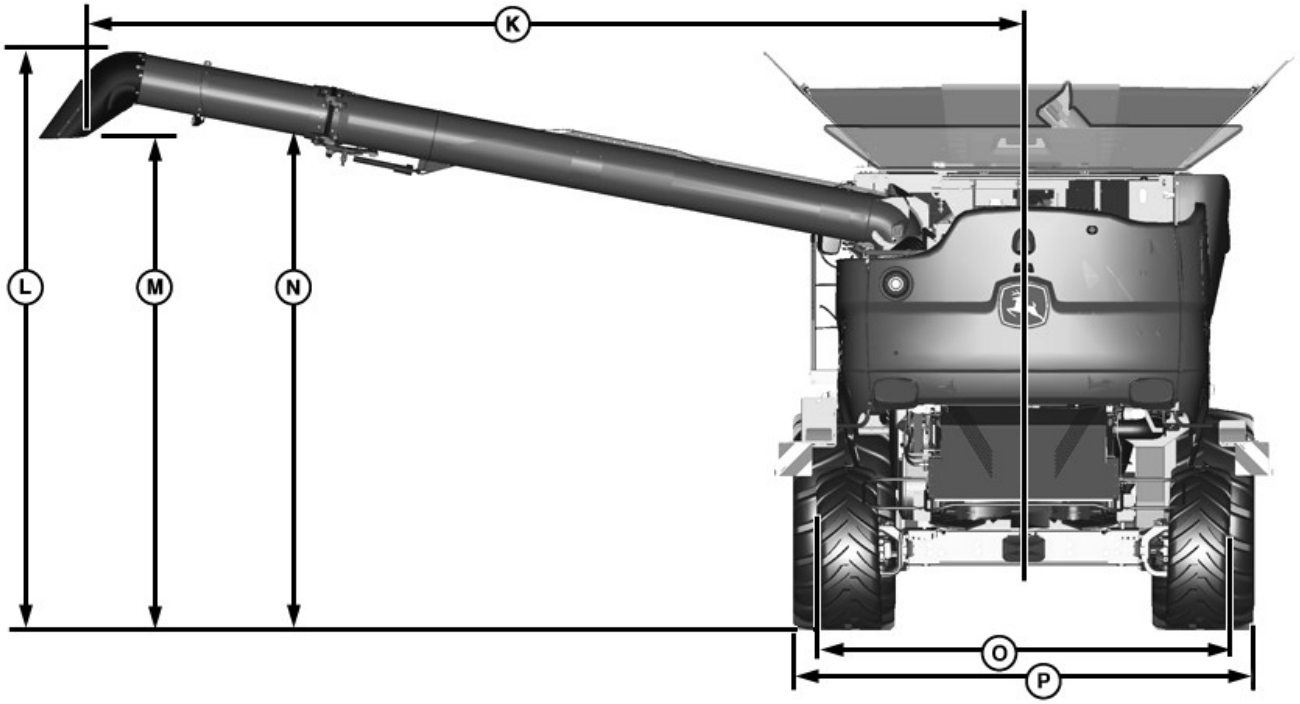

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OUO6075,00049AB-19-30MAY18

Whole Body Vibration

The weighted root mean square acceleration to which the whole body is subjected to ranges from 0.51 to 0.73 m/s^2 as measured on a representative machine during typical operations and analyzed in accordance with ISO 2631. During the same operations, the weighted root mean square hand-arm vibration was less than 2.5 m/s^2 when analyzed in accordance with ISO 5349. These acceleration values depend on the roughness of the ground, the speeds at which the combine is operated, the operator's experience, weight and driving habits.

OUO6075,0000AA6-19-17NOV10

Sound Level

The sound level inside the operator's cab ranges from 72.8 to 77.0 dB(A) as measured on several representative machines in accordance with ISO 4254-7:2017. The sound level depends upon the engine speed and load, function settings, field and crop conditions, and the type of header used.

OUO6075,0004BAB-19-16MAY19

Safety Note Regarding the Subsequent Installation of Electrical and Electronic Appliances and/or Components

The machine is equipped with electronic components whose function may be influenced by electromagnetic radiation from other appliances. Such influences may be hazardous, so take the following safety instructions into account:

If electrical and electronic appliances are subsequently installed on the machine and connected to the on board system, the user must verify whether the installation affects the electronics or other components. This applies particularly to:

- Area counter
- Personal Computer
- GPS (Global Positioning System) receiver

In particular, subsequently installed electrical/electronic components must comply with the relevant edition of EMC Directive 89/336/EEC, and be CE marked.

If mobile communication systems (e.g. radio communication, telephone) are to be installed subsequently, the following extra requirements must be met:

- Only devices with an approval complying with the valid national regulation (i.e. BZT approval in Germany) shall be installed;
- The device shall be installed securely;
- Portable or mobile devices may be operated in the vehicle only if connected to a fixed outside antenna;
- Transmitters shall be installed separately from the vehicle's electronics;
- The antenna must be installed in a professional manner, with a good ground connection between the antenna and the vehicle ground.

Wiring, installation and maximum permissible current supply must be as stated in the installation instructions of the machine manufacturer.

OUO6075,0000AA8-19-17NOV10

EU Declaration of Conformity

Deere & Company
Moline, Illinois U.S.A.

The undersigned hereby declares that:

Machine Type: S700
Model(s): S760, S770, S780, S785, S790, S770 HillMaster™, S780 HillMaster™, S785 HillMaster™, and S790 HillMaster™

fulfill(s) all relevant provisions and essential requirements of the following directives:
HillMaster is a trademark of Deere & Company

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self certified
Electromagnetic Compatibility Directive (EMC)	2014/30/EU	Self certified

The product is in conformity with the following EMC standards and/or other normative documents:

ISO 14982:1998
CISPR 12
JDQ 203:2013

Name and address of the person in the European Community authorized to compile the technical construction file:

Brigitte Birk
John Deere GmbH & Co. KG
Mannheim Regional Center
John Deere Strasse 70
D-68163 Mannheim, Germany

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Place of Declaration: Zweibruecken, Germany
Date of Declaration: March 3, 2018
Manufacturing Unit: John Deere GmbH & Co. KG John Deere Werk Zweibrücken

Name: Dr.-Ing. Martin Büermann
Title: Engineering Manager Combines - Region 2

CE

DXCE01—UN—28APR09
OUO6075,00049DC-19-14JUN18

Eurasian Economic Union

EAC

TS1738—UN—26APR16

EAC Marking

This information applies only to products which bear the EAC conformity mark of the Eurasian Economic Union member states.

Manufacturer:
Deere & Company, Moline, Illinois U.S.A.

Name of the authorized representative in the Eurasian Economic Union:
Limited Liability Company
“John Deere Rus”

Address of the authorized representative:
142050, Russia, Moscow region, Domodedovo district, Domodedovo, Beliye Stolbi micro district, vladenye “Warehouse 104”, Building 2

For technical support, contact your dealer.

Date of manufacture is denoted by the product marking on or near the serial number plate.

DX,EAC-19-27APR16

Machine Design Life

This machine is designed and manufactured to provide a long life of productive operation, however actual attainable life depends on a number of factors including the severity of working conditions and completion of recommended maintenance. (See the Service section of this manual.)

Periodically inspect and review the machine in conjunction with your John Deere dealer. The review may result in recommendations for service, component repair, remanufacture or replacement, or, if at the end of life, that the machine be removed from operation. (See separate decommissioning section of this manual for information on disposal and recycling of machine components.)

No machine should be operated if safety-related components are missing or in need of service. All missing or damaged safety-related components, including safety signs, should be repaired or replaced before operating.

DX,MACH,DESIGN,LIFE-19-14SEP15

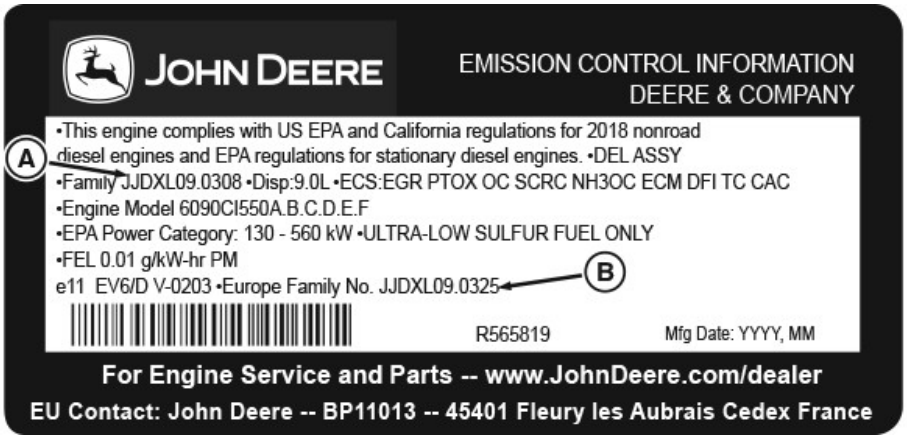
Fluorinated Greenhouse Gas

Air Conditioner System contains Fluorinated Greenhouse Gas (F-Gas)	
Type of F-Gas:	R-134a
F-Gas Mass (kg):	2.7
CO_2 Equivalent (tonnes):	3.86
Global Warming Potential (GWP):	1430

NOTE: Cab refrigerator (if equipped) contains approximately 0.040 kg of refrigerant.

OUO6075,00045E8-19-21FEB17

Carbon Dioxide Emissions (CO_2)



RG29997—UN—27FEB18

Engine Emissions Label

A—Family

NOTE: If your engine emissions label lists both a family number (A) and a Europe family number (B), reference the Europe family number using the chart.

NOTE: The first letter of the family number is not utilized for family identification on the chart.

B—Europe Family

To identify the carbon dioxide (CO_2) output, locate the engine emissions label. Find the appropriate family on the emissions label and reference the chart.

Emissions Label Family	CO_2 Result
_JDXL02.9323	952 g/kW-hr
_JDXL02.9327	784 g/kW-hr

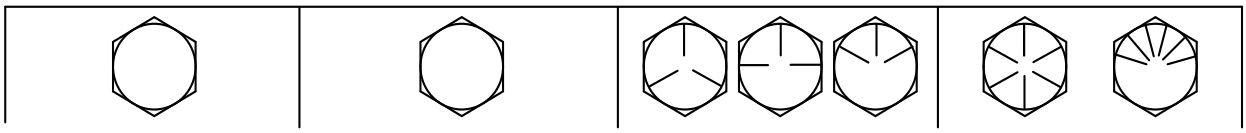
Emissions Label Family	CO_2 Result
_JDXL04.5337	819 g/kW-hr
_JDXL04.5338	682 g/kW-hr
_JDXL04.5304	1004 g/kW-hr
_JDXN04.5174	792 g/kW-hr
_JDXL06.8324	720 g/kW-hr
_JDXL06.8328	683 g/kW-hr
_JDXL06.8336	701 g/kW-hr
_JDXN06.8175	771 g/kW-hr
_JDXL09.0319	646 g/kW-hr
_JDXL09.0325	695 g/kW-hr
_JDXL09.0329	657 g/kW-hr

Emissions Label Family	CO_2 Result
_JDXL13.5326	684 g/kW-hr
_JDXL13.6320	651 g/kW-hr
_JDXL13.6339	604 g/kW-hr

This CO_2 measurement results from testing over a fixed test cycle under laboratory conditions a(n) (parent) engine representative of the engine type (engine family) and shall not imply or express any guarantee of the performance of a particular engine.

DX,EMISSIONS,CO2-19-23APR20

Unified Inch Bolt and Screw Torque Values



TS1671—UN—01MAY03

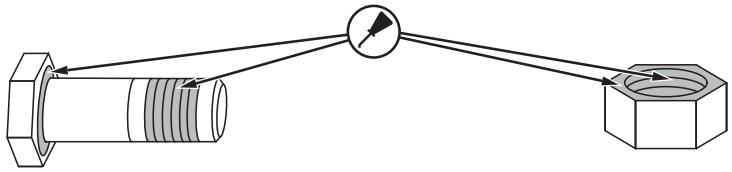
Bolt or Screw Size	SAE Grade 1[a]				SAE Grade 2[b]				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
1/4	3.1	27.3	3.2	28.4	5.1	45.5	5.3	47.3	7.9	70.2	8.3	73.1	11.2	99.2	11.6	103
													N·m	lb·ft	N·m	lb·ft
5/16	6.1	54.1	6.5	57.7	10.2	90.2	10.9	96.2	15.7	139	16.8	149	22.2	16.4	23.7	17.5
									N·m	lb·ft	N·m	lb·ft				
3/8	10.5	93.6	11.5	102	17.6	156	19.2	170	27.3	20.1	29.7	21.9	38.5	28.4	41.9	30.9
					N·m	lb·ft	N·m	lb·ft								
7/16	16.7	148	18.4	163	27.8	20.5	30.6	22.6	43	31.7	47.3	34.9	60.6	44.7	66.8	49.3
	N·m	lb·ft	N·m	lb·ft												
1/2	25.9	19.1	28.2	20.8	43.1	31.8	47	34.7	66.6	49.1	72.8	53.7	94	69.3	103	75.8
9/16	36.7	27.1	40.5	29.9	61.1	45.1	67.5	49.8	94.6	69.8	104	77	134	98.5	148	109
5/8	51	37.6	55.9	41.2	85	62.7	93.1	68.7	131	96.9	144	106	186	137	203	150
3/4	89.5	66	98	72.3	149	110	164	121	230	170	252	186	325	240	357	263
7/8	144	106	157	116	144	106	157	116	370	273	405	299	522	385	572	422
1	216	159	236	174	216	159	236	174	556	410	609	449	785	579	860	634
1-1/8	305	225	335	247	305	225	335	247	685	505	751	554	1110	819	1218	898
1-1/4	427	315	469	346	427	315	469	346	957	706	1051	775	1552	1145	1703	1256
1-3/8	564	416	618	456	564	416	618	456	1264	932	1386	1022	2050	1512	2248	1658
1-1/2	743	548	815	601	743	548	815	601	1665	1228	1826	1347	2699	1991	2962	2185

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

Bolt or Screw Size	SAE Grade 1[a]		SAE Grade 2[b]		SAE Grade 5, 5.1 or 5.2		SAE Grade 8 or 8.2	
	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]

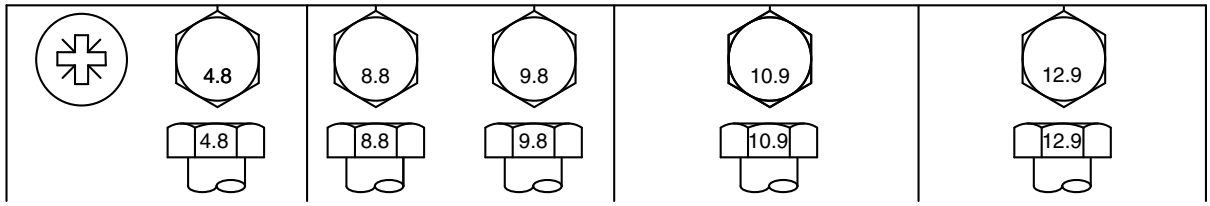


TS1741—UN—22MAY18

[a]*Grade 1 applies for hex cap screws over 6 in (152 mm) long, and for all other types of bolts and screws of any length.*
[b]*Grade 2 applies for hex cap screws (not hex bolts) up to 6 in (152 mm) long.*
[c]*Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.*
[d]*Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.*

DX,TORQ1-19-30MAY18

Metric Bolt and Screw Torque Values



TS1742—UN—31MAY18

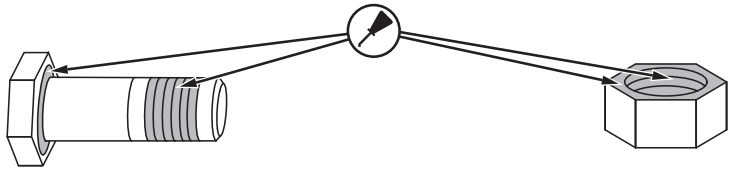
Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
M6	3.6	31.9	3.9	34.5	6.7	59.3	7.3	64.6	9.8	86.7	10.8	95.6	11.5	102	12.6	112
									N·m	lb·ft	N·m	lb·ft	N·m	lb·ft	N·m	lb·ft
M8	8.6	76.1	9.4	83.2	16.2	143	17.6	156	23.8	17.6	25.9	19.1	27.8	20.5	30.3	22.3
			N·m	lb·ft	N·m	lb·ft	N·m	lb·ft								
M10	16.9	150	18.4	13.6	31.9	23.5	34.7	25.6	46.8	34.5	51	37.6	55	40.6	60	44.3
	N·m	lb·ft														
M12	—	—	—	—	55	40.6	61	45	81	59.7	89	65.6	95	70.1	105	77.4
M14	—	—	—	—	87	64.2	96	70.8	128	94.4	141	104	150	111	165	122
M16	—	—	—	—	135	99.6	149	110	198	146	219	162	232	171	257	190
M18	—	—	—	—	193	142	214	158	275	203	304	224	322	245	356	263
M20	—	—	—	—	272	201	301	222	387	285	428	316	453	334	501	370
M22	—	—	—	—	365	263	405	299	520	384	576	425	608	448	674	497
M24	—	—	—	—	468	345	518	382	666	491	738	544	780	575	864	637
M27	—	—	—	—	683	504	758	559	973	718	1080	797	1139	840	1263	932
M30	—	—	—	—	932	687	1029	759	1327	979	1466	1081	1553	1145	1715	1265
M33	—	—	—	—	1258	928	1398	1031	1788	1319	1986	1465	2092	1543	2324	1714
M36	—	—	—	—	1617	1193	1789	1319	2303	1699	2548	1879	2695	1988	2982	2199

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.

Bolt or Screw Size	Class 4.8		Class 8.8 or 9.8		Class 10.9		Class 12.9	
	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]
• Properly start thread engagement.								



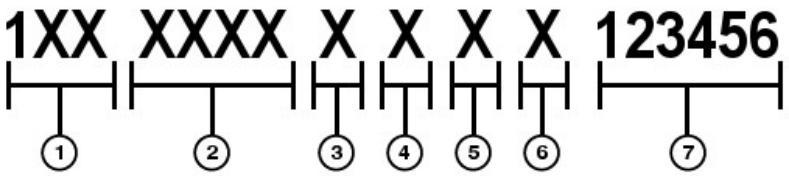
TS1741—UN—22MAY18

[a]Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.
[b]Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ2-19-30MAY18

Machine Identification Numbers

Interpreting Machine Serial Number



H105725—UN—22AUG12

1	Manufacturer Code	Harvesting Manufacturing Facilities	
		CQ - John Deere Horizontina H0 - John Deere Harvester Works JZ - John Deere Domodedovo KM - Machinenfabrik Kemper GmbH & Co. KG PY - John Deere India Pvt. Ltd	SA - SABO Maschinenfabrik GmbH YC - John Deere (Jiamusi) Agricultural Machinery Co., Ltd. YH - John Deere (Harbin) Agriculture Machinery Co., Ltd Z0 - John Deere Werke Zweibrucken
2	Machine Model Identifier		
3	Model Identifier Suffix Machine Configuration Code Additional Machine Information		Example: N, T, W, etc.
4	Check Letter		Example: A, B, C, D, etc.
5	Calendar Year of Manufacture		Refer to Year of Manufacture Code table
6	Additional Information		
7	Manufacturing Serial Number		Example: 000001, 000127, etc.

Year of Manufacture Code							
Year	**Code**	**Year**	**Code**	**Year**	**Code**	**Year**	**Code**
2008	8	2018	J	2028	W	2038	8
2009	9	2019	K	2029	X	2039	9
2010	A	2020	L	2030	Y	2040	A
2011	B	2021	M	2031	1	2041	B
2012	C	2022	N	2032	2	2042	C
2013	D	2023	P	2033	3	2043	D
2014	E	2024	R	2034	4	2044	E
2015	F	2025	S	2035	5	2045	F
2016	G	2026	T	2036	6	2046	G
2017	H	2027	V	2037	7	2047	H

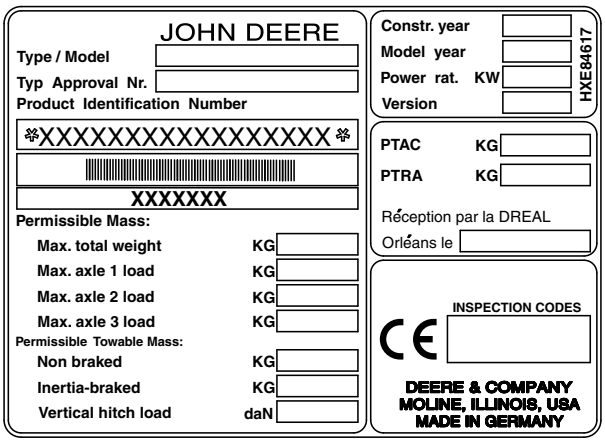
OUO6075,000431C-19-29JUN16

Identification Numbers

Your machine has these various identification plates. The letters and numbers stamped on these plates identify a component or assembly. ALL of these characters are needed when ordering parts or identifying a machine or component for any John Deere product support program. Also, they are needed for law enforcement to trace your machine if it is ever stolen. ACCURATELY record these characters in the spaces provided in each of the following photographs.

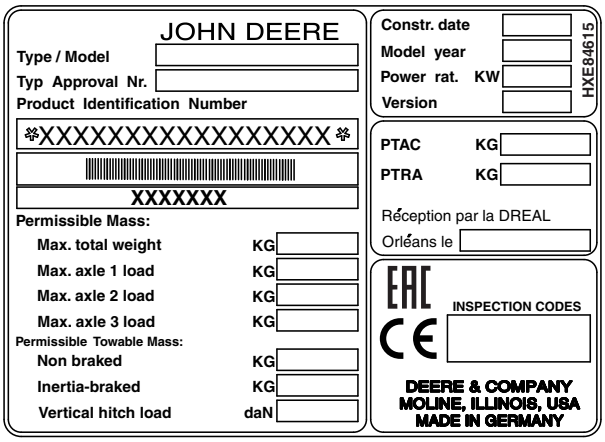
OUO6075,0000BE0-19-04MAY11

Machine Identification Plate



H111480—UN—08JUL14

Sample Identification Plate



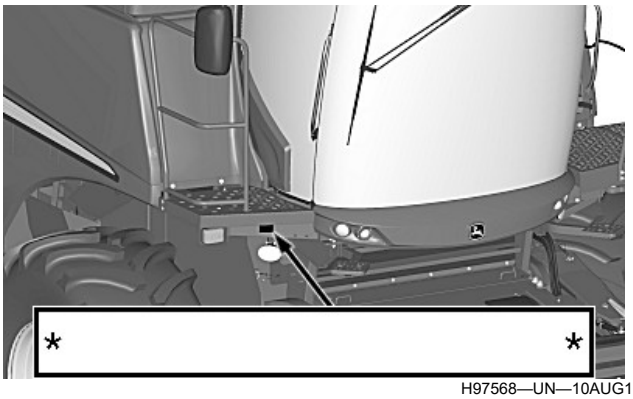
H111516—UN—09JUL14

Sample Identification Plate

NOTE: Machine identification plate varies depending on where machine is shipped. Locate identification plate on machine and compare with information shown here.

OUO6075,0001877-19-08JUL14

Machine Identification Plate Location

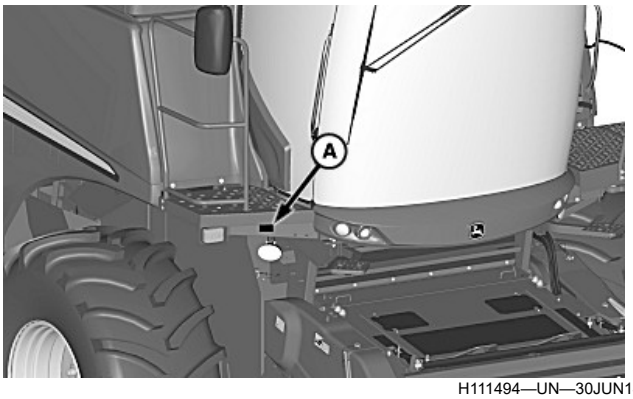


H97568—UN—10AUG10

Located on right-hand side of cab handrail landing.

OUO6075,0000BE1-19-04MAY11

Eurasian Economic Union Compliance Label Location



H111494—UN—30JUN14

A—Compliance Label

NOTE: This information applies only to products which bear the EAC conformity mark of the Eurasian Economic Union member states.

Compliance label (A) is located on right-hand side of cab handrail landing.

OUO6075,00041B8-19-12NOV15

Interpreting Engine Serial Number

H112201—UN—06NOV14

Sample Engine Serial Number Plate

Each engine has a 13 digit John Deere engine serial number identifying the producing factory, engine model designation, and a 6 digit sequential number.

Engine Serial Number (A)

9.0 L Example (RG6090U123456)
13.5 L Example (RG6135U123456)

RG . . . . . Factory Code Producing Engine
- RG . . . . . Waterloo, Iowa, USA

6090 . . . . . Number of Cylinders and Total Displacement
- 6090 . . . . . 6 Cylinders, 9.0 liters

6135 . . . . . Number of Cylinders and Total Displacement
- 6135 . . . . . 6 Cylinders, 13.5 liters

U . . . . . Emission Certification
- B . . . . . Non-Certified
- C . . . . . Tier 1/Stage 1
- D . . . . . Tier 2/Stage II
- L . . . . . Tier 3/Stage III A
- R . . . . . Interim Tier 4/Stage III B
- U or V . . . . . Final Tier 4/Stage IV and Stage V

123456 . . . . . Engine Serial Number

Engine Model Number (B)

9.0 L Example (6090HFC09)
13.5 L Example (6135HFC09)

6090 . . . . . Number of Cylinders and Total Displacement
- 6090 . . . . . 6 Cylinders, 9.0 liters

6135 . . . . . Number of Cylinders and Total Displacement
- 6135 . . . . . 6 Cylinders, 13.5 liters

H . . . . . Engine Aspiration
- D . . . . . Naturally aspirated
- T . . . . . Turbocharged
- A . . . . . Turbocharged and aftercooled, air-to-coolant
- H . . . . . Turbocharged and aftercooled, air-to-air
- S . . . . . Turbocharged and aftercooled, air-to-sea water

F . . . . . User Type
- F . . . . . OEM (John Deere Power Systems

9.0 L Example (6090HFC09)
13.5 L Example (6135HFC09)

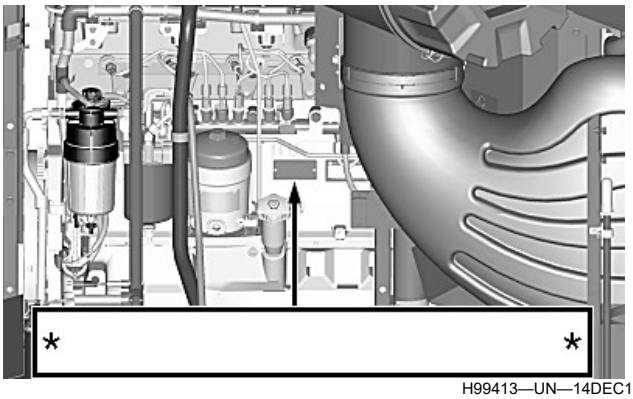
- XX . . . Other letters are used to identify John Deere Equipment manufacturing locations

C . . . . . Industrial
- C . . . . . Industrial
- G . . . . . Gen-Set

09 . . . . . Engine Configuration
- 09 . . . . . PSS (Series Turbochargers, DOC/DPF and SCR)
- 94 . . . . . PVX (Single VGT Turbocharger)
- 95 . . . . . PSX (Series Turbochargers and Aftertreatment)

OUO6075,0004A29-19-25SEP18

Engine Serial Number (Tier 2/Stage II)



H99413—UN—14DEC10

Style A

H99437—UN—14DEC10

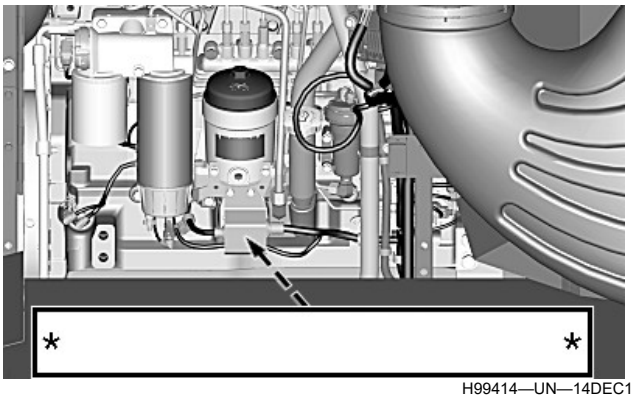
Style B

Style A: located on rear side of engine.

Style B: located on front side of engine above starter.

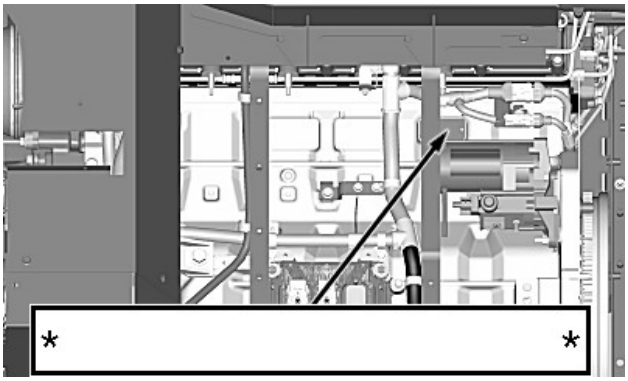
OUO6075,00044A4-19-14NOV16

Engine Serial Number (Final Tier 4/Stage V)



H99414—UN—14DEC10

Style A



H99415—UN—14DEC10

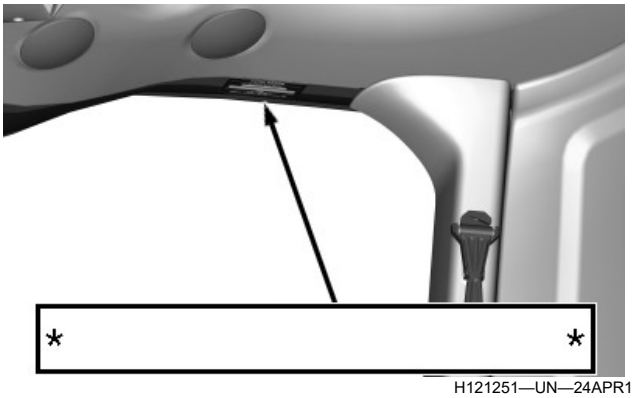
Style B

Style A: located on the rear side of the engine.

Style B: located on the front side of the engine above the starter.

OUO6075,000482A-19-14NOV17

Cab Serial Number

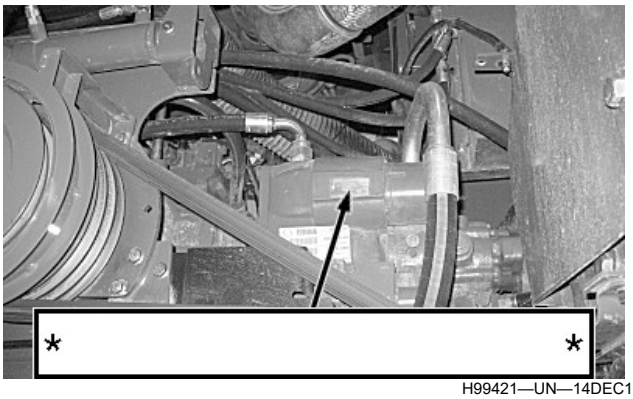


H121251—UN—24APR17

Located in the upper rear right-hand corner of the cab.

OUO6075,0004716-19-13APR17

Hydrostatic Drive Unit Pump



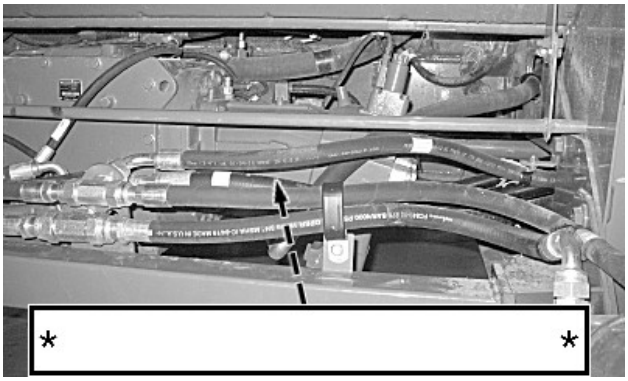
H99421—UN—14DEC10

Mechanical Shift and Push Button Shift Machines Shown

Located on side of hydrostatic drive pump.

OUO6075,0001059-19-27FEB12

Hydrostatic Drive Unit Motor



H99424—UN—14DEC10

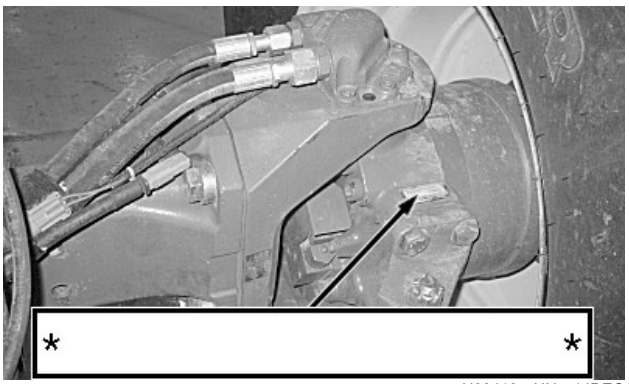
ProDrive Machine Shown

Mechanical Shift and Push Button Shift Machines: located on top side of hydrostatic drive motor.

ProDrive Machines: located on bottom side of hydrostatic drive motor.

OUO6075,0001058-19-27FEB12

Two Speed Four-Wheel Drive Motor

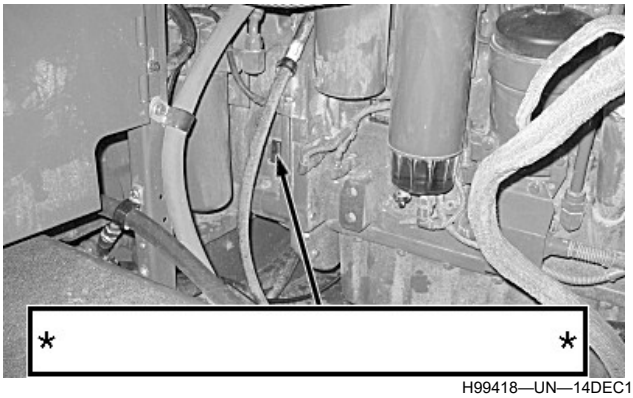


H99419—UN—14DEC10

Located on top side of four-wheel drive motor.

OUO6075,0000AF4-19-14APR11

Engine Gear Case

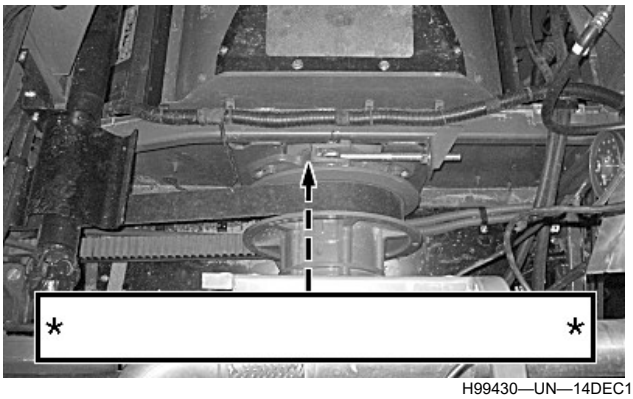


H99418—UN—14DEC10

Located on the rear side of the engine gear case.

OUO6075,00046E7-19-28MAR17

Rotor Drive Gear Case

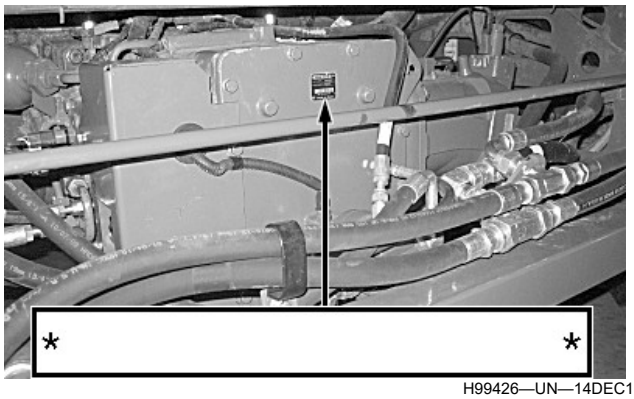


H99430—UN—14DEC10

Located on the left-hand side of the rotor drive gear case.

OUO6075,00046E8-19-28MAR17

Transmission



H99426—UN—14DEC10

ProDrive Transmission Shown

Mechanical Shift and Push Button Shift Machines: located on side of transmission

ProDrive Machines: located on front of transmission

OUO6075,0001056-19-27FEB12

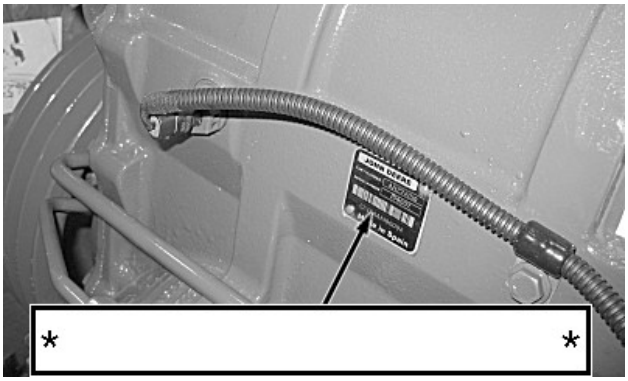
Feeder House Reverser

H99432—UN—14DEC10

Located on top side of feeder house reverser.

OUO6075,0000AF9-19-14DEC10

Multi-Speed Feeder House Gear Case (If Equipped)

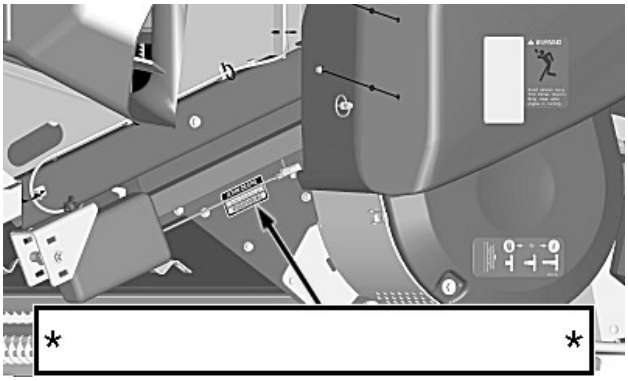


H99431—UN—14DEC10

Located on the rear side of the multi-speed feeder house gear case.

OUO6075,00046E9-19-28MAR17

Chopper (If Equipped)

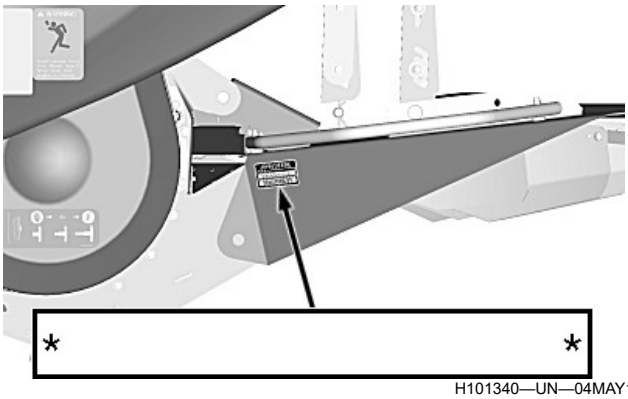


H101339—UN—04MAY11

Located on left-hand side of chopper.

OUO6075,0000C27-19-04MAY11

Vane Tailboard (Deluxe, Intermediate and Premium Residue)



H101340—UN—04MAY11

Located on left-hand side of vane tailboard.

OUO6075,0001820-19-28MAY14

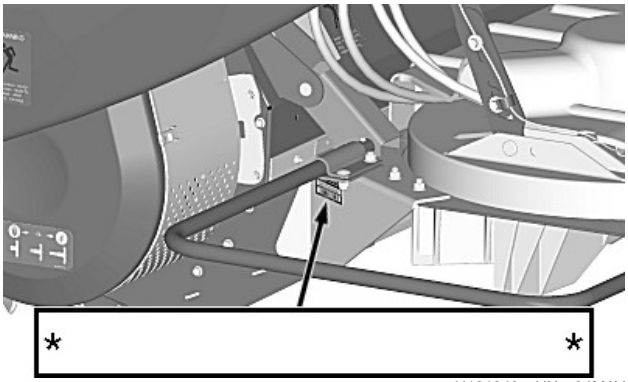
Advanced PowerCast™ Tailboard (Intermediate and Premium Residue)

H101342—UN—04MAY11

Located on left-hand side of Advanced PowerCast™ tailboard.

OUO6075,0001821-19-28MAY14

PowerCast Tailboard (Deluxe Residue)



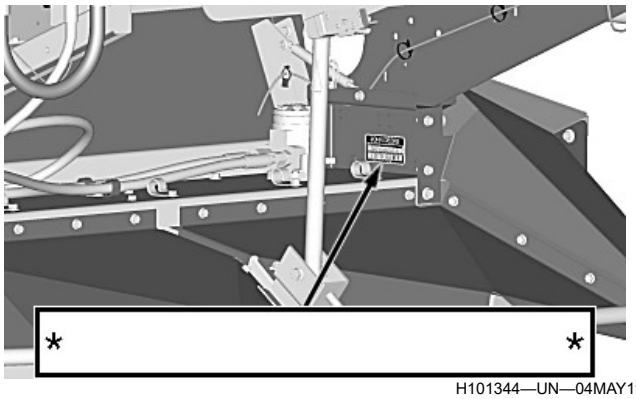
H101343—UN—04MAY11

Located on left-hand side of PowerCast tailboard.

OUO6075,0000C2A-19-04MAY11

PowerCast is a trademark of Deere & Company

Spreader (Deluxe Residue)



H101344—UN—04MAY11

Located on right-hand inside of spreader.

OUO6075,0000C2B-19-04MAY11

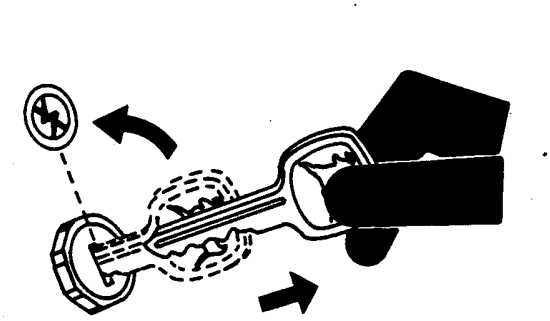
Keep Proof of Ownership

TS1680—UN—09DEC03

1. Maintain in a secure location an up-to-date inventory of all product and component serial numbers.
2. Regularly verify that identification plates have not been removed. Report any evidence of tampering to law enforcement agencies and order duplicate plates.
3. Other steps you can take:
   - Mark your machine with your own numbering system
   - Take color photographs from several angles of each machine

DX,SECURE1-19-18NOV03

Keep Machines Secure



TS230—UN—24MAY89

1. Install vandal-proof devices.
2. When machine is in storage:
   - Lower equipment to the ground
   - Set wheels to widest position to make loading more difficult
   - Remove any keys and batteries
3. When parking indoors, put large equipment in front of exits and lock your storage buildings.
4. When parking outdoors, store in a well-lighted and fenced area.
5. Make note of suspicious activity and report any thefts immediately to law enforcement agencies.
6. Notify your John Deere dealer of any losses.

DX,SECURE2-19-18NOV03

Index

A

Access audio 45-N-1
Access calibrations and procedures..... 45-L-1
Access Combine Advisor™ 45-O-1
Access door work lights
  Replacing..... 80-18
Access engine 45-G-1
Access folding..... 45-E-1
Access grain handling..... 45-D-1
Access harvest settings..... 45-F-1
Access header 45-C-1
Access HVAC 45-H-1
Access lights 45-J-1
Access phone 45-K-1
Access residue management 45-A-1, 45-B-1
Access transmission..... 45-I-1
Accessory belt
  Replacing (Tier 2/Stage II)
    9.0 L 130-Q-1
    13.5 L..... 130-R-1
Accumulator
  Pressure 130-2
Accumulator decal..... 110-1
Active concave isolation (aci) air removal 45-L-22
Active concave isolation (aci) air removal calibration procedure..... 45-L-23
Active concave isolation (aci) leveling 45-L-23
Active concave isolation (aci) leveling calibration procedure..... 45-L-23
Active Terrain Adjustment active adjustments 45-O-5
Active Terrain Adjustment History 45-O-4
Active Terrain Adjustments completed adjustments ... 45-O-6
Active Terrain Adjustment™ settings..... 45-O-13
Active Terrain Adjustment™ status..... 45-O-16
ActiveYield™ 45-L-12
  Removing cross auger covers 75-4
  Sensor locations..... 75-4
ActiveYield™
  advanced settings 45-L-13
  reset..... 45-L-13
  status indicator..... 45-L-12
Add favorite page..... 45-K-2
Adjusting steering wheel..... 45-M-13
Adjustment details 45-O-8
Adjustment states..... 45-F-12
Advanced PowerCast
  Replacing
    Spreader disks..... 70-23
Advanced settings
  Audio application 45-N-6
  Phone 45-K-3
Aftertreatment indicators overview..... 35-2
Air chutes 70-9
Air cleaner filters
  Removing..... 130-P-13
Air compressor 45-G-6
  Maintenance
    Drain water from reservoir 130-A-5
  Replacing
    Belt (Final Tier 4/Stage V)
      9.0 L 130-Q-11
      13.5 L..... 130-R-11
    Belt (Tier 2/Stage II)
      9.0 L 130-Q-1
      13.5 L..... 130-R-1
  Reservoir 130-P-13
Air Compressor
  Wand
    Hose 130-P-13
Air compressor status 45-G-7
Air compressor system..... 130-P-13
Air conditioner
  Clean drain hose 130-A-6
  Troubleshooting..... 135-18
Air conditioner belt (Final Tier 4/Stage V)
  Replacing
    9.0 L 130-Q-5
    13.5 L..... 130-R-8
Air conditioning..... 45-H-3
Air filter
  Removing
    Engine debris management (Final Tier 4/Stage V)..... 130-P-15
Air flow mode 45-H-3
Air scoop
  Extended field position..... 30-6
  Positions..... 30-4
  Standard field position 30-5
  Transport position 30-7
Air system
  Do not modify..... 130-P-2
Alarm
  Back-up..... 90-4
Alfalfa
  Crop settings..... 100-1
Alternator belt (Final Tier 4/Stage V)
  Replacing
    9.0 L 130-Q-5
    13.5 L..... 130-R-8
Alternator screen
  Cleaning 130-O-2
AM, FM, weather channel tab..... 45-N-3
Amber flasher 45-L-22
Amber flasher calibration procedure 45-L-22
Antenna..... 20-2
Application
  Video
    Adjusting cameras..... 80-11
    Safety..... 80-9
    Video interface capability..... 80-9
Application assignments 45-A-6

Applications
Phone 45-K-1
Armrest
Camera
Adjusting 80-11
Display
Payable moisture and density chart 100-18
Standard weights chart 100-18
Yield calibration
Change tire radius code 95-4
Multi-point 95-4
Single point 95-4
Switches
HillMaster™ leveling control 105-3
Video application
Safety 80-9
Video interface capability 80-9
Audio application
Access 45-N-1
Advanced settings 45-N-6
AM, FM, weather channel tab 45-N-3
Main page 45-N-1
Premium radio
Auxiliary page 45-N-2
Bluetooth® page 45-N-2
CD tab 45-N-5
USB tab 45-N-4
Augers
Adjusting
Grain tank loading auger (Grain tank covers) 75-7
Upper tailings drive chain 65-64
Auger bed dividers 65-37
Cleanout door
Cleaning shoe auger gears (if equipped) 65-48
Folding grain tank loading auger (Grain tank extensions) 75-7
Grain tank cross auger covers 75-3
ActiveYield™ 75-4
Loading auger deflector 75-6
Manual cleanout door
Cleaning shoe auger gears 65-47
AUTO exhaust filter cleaning 45-G-3
Auto header control 45-C-11
Combinations 95-2
Auto maintain Active active adjustments 45-O-5
Auto maintain completed adjustments 45-O-6
Auto maintain history 45-O-4
Auto maintain response aggressiveness 45-O-28
Auto maintain settings 45-O-28
Auto maintain status 45-O-17
Auto swap 45-B-7
Automation status 45-O-9
AutoTrac™ resume button (if equipped) 45-M-33
Auxiliary field lights
Replacing 80-18
Avoid crushing 110-1
Avoid static electricity risk when fueling 10-5, 125-1
Axle
Drives
Change final drive oil 130-J-2
Check final drive oil 130-G-8
Grease final drive couplers 130-B-6
Grease final drive outer bearings 130-A-6, 130-B-2
Grease final drive pivot (HillMaster™ machines) 130-A-7
Grease header tilt primary cylinder pivot pin (HillMaster™ machines) 130-A-8
Grease leveling cylinder barrel (HillMaster™ machines) 130-A-7, 130-A-8
Grease master cylinder pivot pin (HillMaster™ machines) 130-A-7
Grease rear axle tie rods 130-G-8
Grease two-speed four-wheel drive motor pivots 130-A-5, 130-B-2
Grease two-wheel drive extra heavy-duty spindle bearings and pivot pins 130-A-5, 130-B-2
Grease two-wheel drive heavy-duty spindle bearings and pivot pins 130-A-5, 130-B-2

B

Back-up alarm 90-4
Backshaft speed 45-C-29
Ballast
Liquid weight 85-21
Requirements 85-23, 85-24
Barley
Crop settings 100-1
Basic tire information 85-2
Batteries
Charging 80-4
Check batteries 130-G-11
Checking specific gravity 80-4
Connecting booster 80-5
Connecting cables 80-3
Disconnect switch 80-6
Removing and installing 80-5, 80-6
Safe installation 80-3
Battery Handling, Safety
Safety, Battery Handling 10-14, 80-2
Beacon
Replacing
Light 80-17
Light bulb 80-17
Belt
Adjusting
Chopper drive 70-28
Chopper jackshaft 70-31
Clean grain elevator 65-58
Cleaning fan 65-48
Cleaning shoe 65-48
CommandTouch multi-speed feeder house drive 55-21

Conveyor auger 65-48
Countershaft right-hand front 65-46
Countershaft right-hand rear 65-46
Discharge beater 65-38
Feed accelerator 65-6
Feeder house fixed speed drive 55-19
Feeder house variable speed drive 55-13
First 50 hours 25-3
Header reel/belt pickup pump (CommandTouch multi-speed feeder house) 55-23
Header reel/belt pickup pump (Fixed speed feeder house) 55-21
Header reel/belt pickup pump (Variable speed feeder house) 55-18
Overshot beater (if equipped) 65-43
Tailings elevator 65-63
Tailings system 65-64
Engine routing (Final Tier 4/Stage V)
9.0 L 130-Q-5
13.5 L 130-R-7
Engine routing (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L 130-R-1
Left-hand drive belts 65-70
Replacing
Accessory (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L 130-R-1
Air compressor (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L 130-R-1
Air compressor belt (Final Tier 4/Stage V)
9.0 L 130-Q-11
13.5 L 130-R-11
Air conditioner (Final Tier 4/Stage V)
9.0 L 130-Q-5
13.5 L 130-R-8
Alternator (Final Tier 4/Stage V)
9.0 L 130-Q-5
13.5 L 130-R-8
Chopper 70-28
Chopper jackshaft 70-32, 70-34
Clean grain elevator 65-58
Cleaning fan 65-48, 65-50
Cleaning shoe 65-48
CommandTouch multi-speed feeder house drive 55-21
Conveyor auger 65-48
Countershaft right-hand front 65-46
Countershaft right-hand rear 65-47
Discharge beater 65-38
Engine debris management belt (Final Tier 4/Stage V) 130-Q-14
13.5 L 130-R-15
Fan drive (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L 130-R-3
Fan drive belt (Final Tier 4/Stage V)
13.5 L 130-R-13
Feeder house fixed speed drive 55-18
Feeder house variable speed drive 55-11
Header reel/belt pickup pump (CommandTouch multi-speed feeder house) 55-22
Header reel/belt pickup pump (Fixed speed feeder house) 55-19
Header reel/belt pickup pump (Variable speed feeder house) 55-15
High speed high capacity feed accelerator .. 65-5
Overshot beater (if equipped) 65-44
Rotary screen belt 130-Q-3, 130-R-5
Rotary screen drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L 130-R-10
Rotary screen drive belt (Tier 2/Stage II)
9.0 L 130-Q-4
13.5 L 130-R-7
Standard speed high capacity feed accelerator . 65-5
Tailings system 65-64
Unloading auger drive 75-12, 75-13
Vacuum fan drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L 130-R-11
Vacuum fan driven belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Variable drive 65-37
Variable speed fan drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Right-hand drive belts 65-71
Routing
Rotary screen belt 130-Q-3, 130-R-5
Seat belts 45-M-19
Belt care and conditioning 110-9
Belt pickup cleanout 45-M-26
Biodiesel fuel 125-3
Bleeding
Fuel system 130-P-10
Bluetooth®
Pairing device 45-K-4
Bolt and screw torque values
Metric 145-19
Unified inch 145-18
Brake fluid (If equipped) 125-16
Brake lights
Replacing 80-20
Brakes
Check brake fluid 130-G-13
Check park brake cylinder cables 130-G-11
Troubleshooting 135-8
Break-in engine oil
Interim tier 4, final tier 4, stage IIIB, stage IV, and stage V 125-11

Non-Emissions certified and certified tier 1, tier 2, tier 3, stage I, stage II, and stage III 125-10
Break-in service
Check after 100 hours (Tier 2/Stage II)..... 25-4
Check after 400 hours (Final Tier 4/Stage V) . 25-4
Check before first 100 hours..... 25-3
Engine 25-1
Broken grain..... 45-O-23
Broken grain sensitivity 45-O-29

C

Cab
After market radios..... 20-1
Air conditioner
Clean drain hose 130-A-6
Camera
Adjusting..... 80-11
Clean fresh air filter 130-B-6, 130-O-1
Clean recirculating filter..... 130-E-1, 130-O-1
Corner post
VisionTrak™ operational checks 65-60
Display
Payable moisture and density chart..... 100-18
Standard weights chart 100-18
Yield calibration
Change tire radius code..... 95-4
Multi-point 95-4
Single point 95-4
Handrails 20-7
Inspect seat belts..... 130-G-13
Ladder positions 20-4
Fold/unfold from ground (Track machines).. 110-3
Fold/unfold from landing (Track machines) . 110-3
Track machines (Swing)..... 110-2
Lighting locations
Auto beacon lights 50-2
Beacon lights 50-1
Engine compartment service lights (optional) 50-7
Exit lights..... 50-3, 50-7
Field lights..... 50-2, 50-4
Front stubble lights..... 50-2
Gull wing service lights (optional) 50-5
Hazard lights..... 50-1
Marker/Brake lights 50-3
Rear discharge lights 50-3
Road lights..... 50-1
Shoe service lights..... 50-5
Radio
Antenna..... 20-2
CB mounting..... 20-3
CB wiring..... 20-2
Radio controls..... 20-2
Radio frequency 20-1
Radio types (optional)..... 20-1
Right-hand landing 20-7
Switches
HillMaster™ leveling control 105-3
Lighting delay/Timeout..... 50-8
Video application
Safety..... 80-9
Video interface capability..... 80-9
Windshield washer reservoir
Filling reservoir 130-O-2
Cab interior light
Replacing..... 80-20
Calibration
Yield
Change tire radius code..... 95-4
Multi-point 95-4
Single point 95-4
Calibrations
Access calibrations and procedures 45-L-1
Active concave isolation (aci) air removal... 45-L-22
Active concave isolation (aci) air removal calibration procedure..... 45-L-23
Active concave isolation (aci) leveling 45-L-23
Active concave isolation (aci) leveling calibration procedure..... 45-L-23
ActiveYield™ 45-L-12
ActiveYield™
advanced settings..... 45-L-13
reset..... 45-L-13
status indicator 45-L-12
Amber flasher..... 45-L-22
Amber flasher calibration procedure 45-L-22
Calibrations and procedures overview..... 45-L-1
Chassis tilt calibration procedure..... 45-L-14
Concave air removal..... 45-L-22
Concave air removal calibration procedure . 45-L-23
Concave leveling 45-L-23
Concave leveling calibration procedure..... 45-L-23
Deck plate spacing..... 45-L-15
Procedure 45-L-16
Extendable platform header self-test..... 45-L-17
Extendable platform header self-test calibration procedure..... 45-L-17
Feeder house lateral tilt range..... 45-L-18
Feeder house lateral tilt range calibration procedure 45-L-19
Feeder house lateral tilt speed 45-L-19
Feeder house lateral tilt speed calibration procedure..... 45-L-19
Feeder house raise speed 45-L-16
Feeder house raise speed calibration procedure ... 45-L-16
Feeder house tilt fore/aft range..... 45-L-18
Feeder house tilt fore/aft range calibration procedure..... 45-L-18
Folding corn head 45-L-20
Folding corn head calibration procedure 45-L-20
Header calibration..... 45-L-17

Header calibration procedure 45-L-17
Mass flow vibration 45-L-1
Mass flow vibration calibration procedure 45-L-2
Moisture sensor
Procedure 45-L-2
Moisture sensor procedure 45-L-2
Reel and cutterbar position 45-L-20
Reel and cutterbar position calibration procedure .. 45-L-21
Reel position 45-L-21
Reel position calibration procedure 45-L-21
Threshing clearance (active concave isolation) 45-L-14
Threshing clearance (active concave isolation) calibration procedure 45-L-14
Threshing clearance (standard concave adjust) 45-L-3
Threshing clearance (standard concave adjust) calibration procedure 45-L-3
Unloading auger engage 45-L-15
Unloading auger engage calibration procedure 45-L-15
Wings 45-L-20
Wings calibration procedure 45-L-20
Yield
Delete unused samples 45-L-11
Yield
advanced edit 45-L-11
advanced settings 45-L-7
calibration quality 45-L-4
calibration quality indicator 45-L-7
collected sample status 45-L-8
edit/select calibration 45-L-10
mass flow rate 45-L-8
match scale weight 45-L-6
record sample 45-L-5
recording status 45-L-9
reset 45-L-9
status indicator 45-L-5
weight indicator 45-L-9
Yield calibration 45-L-4
Calibrations
Chassis tilt 45-L-13
Reel and cutterbar calibration procedure 45-L-21
Calibrations and procedures overview 45-L-1
Camera
Adjusting 80-11
Camera lens debris 45-O-8
Cannot maintain target 45-O-20
Canola
Crop settings 100-2
Carbon Dioxide Emissions 145-17
CB
Radio mounting 20-3
Radio wiring 20-2
Chaffer
Adjusting
Dual zone adjust 65-53
Front chaffer 65-50
Motor 65-57
Adjusting switch 65-53
Deep-tooth chaffer 65-52
Fixed front chaffer 65-50
General-purpose chaffer 65-51
High-performance chaffer 65-52
Installing
Elements 65-55
Measuring 65-51
Premium corn chaffer 65-52
Removing
Elements 65-55
Chaffer adjust 45-M-28
Chaffer clearance 45-F-9
Chaffer/sieve/return pan assemblies
Non-serviceable 65-57
Charge air cooler
Cleaning 130-A-3, 130-B-5
Chassis tilt 45-L-13
Chassis tilt calibration procedure 45-L-14
Chickpeas
Crop settings 100-2
Chopper
Access door 70-15
Adjusting
Chopper drive belt tension 70-28
Chopper jackshaft belt 70-31
Crop diverter vanes 70-2
PowerCast™ tailboard (optional) 70-7
Stationary knife bank (without electric actuator) . 70-10
Tailboard 70-3
Tailboard vane settings 70-5, 70-6, 70-22
Tailboard vanes 70-4, 70-21
Adjusting switch 70-20
Centering
Chopper blades 70-19
Changing
Speeds 70-20
Cleaning
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Controller bar (optional) 70-10
Crop diverter 70-8
Installing
Stationary knife bank (electric actuator) 70-12
PowerCast™ tailboard (optional)
Rear shrouds 70-8
Removing
Stationary knife bank (electric actuator) 70-11

Replacing
Advanced PowerCast spreader disks..... 70-23
Belt..... 70-28
Chopper blades..... 70-16, 70-17
Chopper jackshaft belt..... 70-32, 70-34
Middle splitter knife 70-18
PowerCast™ tailboard blades (optional) 70-7
Stationary knives (electric actuator)..... 70-14
Stationary knives (without electric actuator) 70-13
Windrow convergence rakes..... 70-3
Windrowing general information (Premium Residue)..... 70-3
Clean grain elevator
Adjusting
Belt..... 65-58
Conveyor chain..... 65-59
Cleaning
Camera..... 65-61
Maintenance
Camera desiccant..... 130-G-16, 130-O-3
Clean camera..... 130-B-6, 130-O-3
Clean moisture sensor..... 130-G-15, 130-O-2
Replacing
Belt..... 65-58
Wear plates and door..... 65-60
Cleaning
Machine cleanout
Qucik response (QR) code..... 120-1
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout)..... 120-1
Cleaning fan..... 45-F-9
Adjusting
Belt..... 65-48
Maintenance
Grease cleaning fan bearings 130-G-7
Grease cleaning fan variable lower sheave130-B-4
Grease cleaning fan variable upper sheave 130-B-4
Replacing
Belt..... 65-48, 65-50
Cleaning fan (Active Terrain Adjustment)
Adjusting
Actuator..... 65-49
Cleaning fan (Non—Active Terrain Adjustment)
Adjusting
Actuator..... 65-49
Cleaning fan speed adjust..... 45-M-27
Cleaning shoe
Access door..... 65-47
Adjusting
Belt..... 65-48
Air chutes..... 65-47
Cleanout door
Auger gears (if equipped)..... 65-48
Manual cleanout door
Auger gears..... 65-47
Replacing
Belt..... 65-48
Cleaning shoe lights
Replacing..... 80-19
Cleaning tracks 110-8
Cleanout areas..... 110-8
Cleanout doors
Grain tank 75-1
Codes
Changing tire radius..... 95-4
Cold weather
Coolant heater 35-6
Staring fluid operation..... 35-6
Starting fluid..... 130-P-1
Starting fluid safety..... 35-6
Combine Advisor™
Access Combine Advisor™ 45-O-1
Active adjustmets..... 45-O-5
Active Terrain Adjustment™ settings..... 45-O-13
Active Terrain Adjustment™ status..... 45-O-16
Adjustment details..... 45-O-8
Advanced settings..... 45-O-3
Auto maintain settings 45-O-28
Auto maintain status 45-O-17
Automation status 45-O-9
Broken grain 45-O-23
Broken grain sensitivity 45-O-29
Camera lens debris 45-O-8
Cannot maintain target..... 45-O-20
Combine Advisor™ main page 45-O-1
Completed adjustments..... 45-O-6
Downhill sensitivity 45-O-14
Engine power target..... 45-O-12
Excess tailings..... 45-O-24
Foreign material sensitivity..... 45-O-29
Grain loss sensitivity 45-O-28
Grain system video..... 45-O-3
Ground speed adjustment..... 45-O-25
HarvestSmart™ automation..... 45-O-11
HarvestSmart™ settings..... 45-O-9
HarvestSmart™ status..... 45-O-15
Heavy foreign material..... 45-O-23
History 45-O-4
Lens debris..... 45-O-8
Light foreign material..... 45-O-23
Offset details 45-O-7
Offset tuning chaffer..... 45-O-18
Offset tuning cleaning fan 45-O-21
Offset tuning sieve 45-O-19
Optimize performance 45-O-18
Out-of-cab adjustments..... 45-O-26
Performance issues 45-O-22
Performance monitor..... 45-O-4
Response aggressiveness 45-O-11, 45-O-28

Separator losses....45-O-23
Separator vane adjustments....45-O-25
Set performance target....45-O-21
Shoe losses....45-O-23
Solutions....45-O-24
Speed limit....45-O-10
Straw quality issues....45-O-24
Unthreshed losses....45-O-23
Unthreshed material....45-O-23
Uphill sensitivity....45-O-14
Combine Advisor™ advanced settings....45-O-3
Combine Advisor™ main page....45-O-1
Combine overview
Adjusting steering wheel....45-M-13
AutoTrac™ resume button (if equipped)....45-M-33
Belt pickup cleanout....45-M-26
Chaffer adjust....45-M-28
Cleaning fan speed adjust....45-M-27
Combine overview....45-M-1
ComfortCommand™ operators seat (basic seat)....45-M-15
ComfortCommand™ operators seat (premium cloth seat)....45-M-16
ComfortCommand™ operators seat (premium leather seat)....45-M-18
CommandARM™ console and display....45-M-6
Console and display....45-M-24
Corner post display....45-M-3
Diesel exhaust fluid (DEF) level indicator....45-M-31
Differential lock (if equipped)....45-M-30
Engine and ground drive....45-M-23
Exhaust filter cleaning indicator....45-M-31
Feeder house backshaft speed and adjustable corn head deck plates (if equipped)....45-M-33
Feeder house reverser....45-M-25
Four-wheel drive (if equipped)....45-M-30
Front console....45-M-2
Fuel level indicator....45-M-31
Harvesting controls....45-M-20
Header activation buttons....45-M-34
Header engage....45-M-26
Header raise lower and tilt (if equipped) switch....45-M-33
HVAC....45-M-22
Instructional seat....45-M-20
Key switch....45-M-12
Left-hand cab items....45-M-11
Lights....45-M-24
Multi-function lever....45-M-6
Navigation bar....45-M-8
Operate ether injection (if equipped)....45-M-15
Operate lights....45-M-13
Operate turn signals, horn, and high and low beam 45-M-14
Operate windshield wiper and washer....45-M-15
Overhead controls....45-M-12
Park brake....45-M-30
ProDrive™ (if equipped)....45-M-29
Push button shift gear (if equipped)....45-M-29
Quick stop switch....45-M-31
Radio....45-M-22
Reel raise and lower and reel fore and aft (if equipped)....45-M-33
Right-hand cab items....45-M-9
Road transport disconnect....45-M-29
Seat belts....45-M-19
Seat controls....45-M-12
Seek....45-M-28
Separator engage....45-M-26
Sieve adjust....45-M-28
Threshing clearance adjust....45-M-26
Threshing speed adjust....45-M-27
Unloading auger drive switch....45-M-32
Unloading auger swing switch....45-M-32
Combine Overview....45-M-1
ComfortCommand™ operators seat (basic seat)....45-M-15
ComfortCommand™ operators seat (premium cloth seat)....45-M-16
ComfortCommand™ operators seat (premium leather seat)....45-M-18
CommandARM™....45-A-4
CommandARM™ console and display....45-M-6
CommandARM™ controls setup....45-A-3
CommandCenter™ display
Audio application
Access....45-N-1
Advanced settings....45-N-6
AM, FM, weather channel tab....45-N-3
Main page....45-N-1
Premium radio
Auxiliary page....45-N-2
Bluetooth® page....45-N-2
CD tab....45-N-5
USB tab....45-N-4
Calibrations application
Access calibrations and procedures....45-L-1
Active concave isolation (aci) air removal 45-L-22
Active concave isolation (aci) air removal calibration procedure....45-L-23
Active concave isolation (aci) leveling....45-L-23
Active concave isolation (aci) leveling calibration procedure....45-L-23
ActiveYield™ advanced settings....45-L-13
Amber flasher....45-L-22
Deck plate spacing Procedure....45-L-16
Extendable platform header self-test....45-L-17
Extendable platform header self-test calibration procedure....45-L-17
Feeder house raise speed....45-L-16

Feeder house raise speed calibration procedure 45-L-16
Folding corn head calibration procedure . 45-L-20
Mass flow vibration 45-L-1
Mass flow vibration calibration procedure . . 45-L-2
Moisture sensor
Procedure 45-L-2
Moisture sensor calibration 45-L-2
Reel and cutterbar calibration procedure . 45-L-21
Reel position 45-L-21
Reel position calibration procedure 45-L-21
Unloading auger engage 45-L-15
Unloading auger engage calibration procedure . 45-L-15
Yield
Delete unused samples 45-L-11
Yield
calibration quality 45-L-4
match scale weight 45-L-6
reset 45-L-9
status indicator 45-L-5
Yield calibration 45-L-4
Combine Advisor™
Access Combine Advisor™ 45-O-1
Advanced settings 45-O-3
Broken grain 45-O-23
Straw quality issues 45-O-24
Unthreshed material 45-O-23
Combine Advisor™
Active adjustments 45-O-5
Active Terrain Adjustment™ settings 45-O-13
Active Terrain Adjustment™ status 45-O-16
Adjustment details 45-O-8
Auto maintain settings 45-O-28
Auto maintain status 45-O-17
Automation status 45-O-9
Broken grain sensitivity 45-O-29
Cannot maintain target 45-O-20
Combine Advisor™ main page 45-O-1
Completed adjustments 45-O-6
Downhill sensitivity 45-O-14
Engine power target 45-O-12
Excess tailings 45-O-24
Foreign material sensitivity 45-O-29
Grain loss sensitivity 45-O-28
Grain system video 45-O-3
Ground speed adjustment 45-O-25
HarvestSmart™ automation 45-O-11
HarvestSmart™ settings 45-O-9
HarvestSmart™ status 45-O-15
Heavy foreign material 45-O-23
History 45-O-4
Lens debris 45-O-8
Light foreign material 45-O-23
Offset details 45-O-7
Offset tuning chaffer 45-O-18
Offset tuning cleaning fan 45-O-21
Offset tuning sieve 45-O-19
Optimize performance 45-O-18
Out-of-cab adjustments 45-O-26
Performance issues 45-O-22
Performance monitor 45-O-4
Response aggressiveness 45-O-11, 45-O-28
Separator losses 45-O-23
Separator vane adjustments 45-O-25
Set performance target 45-O-21
Shoe losses 45-O-23
Solutions 45-O-24
Speed limit 45-O-10
Unthreshed losses 45-O-23
Uphill sensitivity 45-O-14
Controls setup application
Access residue management 45-A-1
Application assignments 45-A-6
CommandARM™ 45-A-4
CommandARM™ controls setup 45-A-3
Controls setup overview 45-A-1
Create dual position assignments 45-A-5
Create single position assignments 45-A-4
Function assignments 45-A-6
Multi-function lever 45-A-2
Multi-function lever controls setup 45-A-2
Scroll button 45-A-5
Engine application
Air compressor 45-G-6
Air compressor status 45-G-7
AUTO exhaust filter cleaning 45-G-3
Debris management filter capacity 45-G-6
Engine power 45-G-2
Folding application
Extendable platform 45-E-5
Folding corn head
Non-John Deere models 45-E-7
Grain handling application
Advanced settings 45-D-2
Custom level alarm 45-D-3
Grain level 45-D-3
Harvest settings application
Access harvest settings 45-F-1
Adjustment states 45-F-12, 45-F-13
Chaffer clearance 45-F-9
Cleaning fan 45-F-9
Custom preset 45-F-6
Effects of crop change 45-F-7
Factory default 45-F-6
Harvest settings main page 45-F-1
Outside configuration 45-F-11
Performance target 45-F-14
Preset 45-F-3
Save preset 45-F-6
Separator resolution 45-F-13
Shoe resolution 45-F-14

Sieve clearance 45-F-10
Straw conditions 45-F-5
Threshing clearance 45-F-7
Threshing conditions 45-F-4
Threshing speed 45-F-8
Harvest settings display
Load harvest settings 45-F-2
Header application
Auto header control 45-C-11
Control preview 45-C-11
Limp home mode 45-C-33
Phone application
Advanced settings 45-K-3
Edit favorite page 45-K-3
Favorites page 45-K-4
Main page 45-K-1
Manage devices 45-K-3
Pairing Bluetooth® device 45-K-4
Recent calls 45-K-5
Residue management application
Auto swap 45-B-7
Knife bank 45-B-6
Transmission application
Transmission main page 45-I-1
CommandCenter™ display
Calibrations application
ActiveYield™ 45-L-12
ActiveYield™
reset 45-L-13
status indicator 45-L-12
Amber flasher calibration procedure 45-L-22
Calibrations and procedures overview 45-L-1
Chassis tilt 45-L-13
Chassis tilt calibration procedure 45-L-14
Deck plate spacing 45-L-15
Feeder house lateral tilt range 45-L-18
Feeder house lateral tilt range calibration procedure 45-L-19
Feeder house lateral tilt speed 45-L-19
Feeder house lateral tilt speed calibration procedure 45-L-19
Feeder house tilt fore/aft range 45-L-18
Feeder house tilt fore/aft range calibration procedure 45-L-18
Folding corn head 45-L-20
Header calibration 45-L-17
Header calibration procedure 45-L-17
Reel and cutterbar position 45-L-20
Threshing clearance (active concave isolation) . 45-L-14
Threshing clearance (active concave isolation) calibration procedure 45-L-14
Threshing clearance (standard concave adjust) . 45-L-3
Threshing clearance (standard concave adjust) calibration procedure 45-L-3
Yield
advanced edit 45-L-11
advanced settings 45-L-7
calibration quality indicator 45-L-7
collected sample status 45-L-8
edit/select calibration 45-L-10
mass flow rate 45-L-8
record sample 45-L-5
recording status 45-L-9
weight indicator 45-L-9
Engine application
Access engine 45-G-1
Engine main page 45-G-1
Folding application
Access folding 45-E-1
Folding corn head
John Deere models 45-E-6
Folding main page 45-E-1
Folding unloading auger 45-E-3
Fountain auger 45-E-4
Grain tank covers 45-E-2
Grain handling application
Access grain handling 45-D-1
Grain handling main page 45-D-1
Grain level auto beacon 45-D-2
Moisture alarm 45-D-4
Moisture correction 45-D-4
Moisture settings 45-D-3
Status center 45-D-5
Tank unloading offset 45-D-2
Header application
Access 45-C-1
Advanced settings 45-C-32
Backshaft speed 45-C-29
Cutterbar position 45-C-30, 45-C-31
Cutterbar position wizard 45-C-33
Cutterbar tilt 45-C-28
Deck plate position resume 45-C-24
Deck plate spacing 45-C-28
Dial-A-Speed™ resume 45-C-20
Draper belt speed 45-C-26
Draper float position 45-C-27
Feeder house float 45-C-17
Fore/aft resume 45-C-22
Fore/aft tilt 45-C-10
Header 45-C-1
Header automation 45-C-12
Header details 45-C-3
Height resume 45-C-12
Height sensing off ground 45-C-14
Height sensing on ground 45-C-15
Height sensitivity 45-C-8
Hours 45-C-6
HydraFlex™ pressure 45-C-25
Lateral tilt 45-C-19
Minimum reel speed 45-C-5

Raise/lower speed 45-C-6
Reel position resume 45-C-23
Resume preferences 45-C-20
Row width 45-C-5
Tilt sensitivity 45-C-9
Tilt speed 45-C-7
Width 45-C-4
Width corn head 45-C-4
Work recording 45-C-5
HVAC application
Access HVAC 45-H-1
Air conditioning 45-H-3
Air flow mode 45-H-3
Fan speed 45-H-2
Heating, ventilation, and air conditioning (HVAC) main page 45-H-1
Outside temperature 45-H-3
Set temperature 45-H-2
Lights application
Access lights 45-J-1
Exit lights 45-J-4
Worklight controls 45-J-4
Worklights preset 1—high-beam 45-J-3
Worklights preset 1—low-beam 45-J-2
Worklights preset 2—high-beam 45-J-3
Worklights preset 2—low-beam 45-J-2
Phone application
Access 45-K-1
Add favorite page 45-K-2
Residue management application
Access residue management 45-B-1
Direction 45-B-5
Out of cab adjustments 45-B-6
Residue management 45-B-1
Residue mode 45-B-2
Separator vane 45-B-3
Speed 45-B-4
Swap 45-B-6
Width 45-B-3
Transmission application
Access transmission 45-I-1
Max speed 1 and 2 ..... 45-I-2
CommandCenter™ display applications 45-1
Engine
Disable auto exhaust filter cleaning 45-G-5
Engine cool down in progress 45-G-5
Exhaust filter system overview 45-G-3
Parked filter cleaning 45-G-4
Lights application
Lights main page 45-J-1
Concave
Different types 65-8
Grate covers (If equipped) 65-9
Grate Interrupter locations (If equipped) 65-11
Grate Interrupters (If equipped) 65-10
Grate spacers 65-9
Installing
Sections (Active Concave Isolation) 65-16
Sections (Standard Concave Adjust) 65-13
Leveling (Active Concave Isolation) 65-24
Leveling (Standard Concave Adjust) 65-22
Recommendations 65-8
Removing
Sections (Active Concave Isolation) 65-16
Sections (Standard Concave Adjust) 65-13
Sector gear shear bolts (Standard Concave Adjust) 65-12
Separator grate types 65-9
Concave air removal 45-L-22
Concave air removal calibration procedure 45-L-23
Concave leveling 45-L-23
Concave leveling calibration procedure 45-L-23
Condenser
Cleaning 130-A-3, 130-B-5
Console and display 45-M-24
Control preview 45-C-11
Controller bar (optional) 70-10
Controls setup
Access residue management 45-A-1
Application assignments 45-A-6
Auto header control combinations 95-2
CommandARM™ 45-A-4
CommandARM™ controls setup 45-A-3
Controls setup overview 45-A-1
Create dual position assignments 45-A-5
Create single position assignments 45-A-4
Function assignments 45-A-6
Multi-function lever 45-A-2
Multi-function lever controls setup 45-A-2
Scroll button 45-A-5
Controls setup overview 45-A-1
Conveyor auger
Adjusting
Belt 65-48
Grease slip clutch 130-G-7
Replacing
Belt 65-48
Conveyor chain
Adjusting 55-7
Drive chain 55-11
Removing
Links 55-8
Conveyor drive chain
Removing
Links 55-10
Conveyor speed
Changing 55-9
Coolant
Diesel engine
Engine with wet sleeve cylinder liners 125-8
Heater 35-6
John deere COOL-GARD II coolant extender 125-9

Mixing with concentrate, water quality 125-9
Testing freeze point 125-10
Warm temperature climates 125-9
Cooling system
Adjusting
Rotary screen brush 130-Q-14, 130-R-15
Check coolant level 30-2
Draining 130-P-10
Filling 130-P-12
Maintenance
Change engine coolant 130-N-1
Clean charge air cooler 130-A-3, 130-B-5
Clean condenser 130-A-3, 130-B-5
Clean oil cooler 130-A-3, 130-B-5
Clean radiator 130-A-3, 130-B-5
Clean rotary screen 130-A-3, 130-B-5
Inspect engine coolant 130-A-3
Replacing
Fan drive belt (Final Tier 4/Stage V)
13.5 L 130-R-13
Rotary screen belt 130-Q-3, 130-R-5
Rotary screen drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L 130-R-10
Rotary screen drive belt (Tier 2/Stage II)
9.0 L 130-Q-4
13.5 L 130-R-7
Vacuum fan drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L 130-R-11
Vacuum fan driven belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Variable speed drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Routing
Rotary screen belt 130-Q-3, 130-R-5
Winterize 130-P-12
CoolScan 125-14
Corn (Dry)
Crop settings 100-3
Corn (Wet)
Crop settings 100-3
Corn Cob Mix
Crop settings 100-4
Corner post
Display
VisionTrak™ operational checks 65-60
Corner post display 45-M-3
Coupler
Air compressor 130-P-13
Cover
Engine access 130-P-1
Engine filter access 130-P-1
Covers
Grain tank
Operating 75-2
Crankshaft damper
Inspect 130-M-1
Create dual position assignments 45-A-5
Create single position assignments 45-A-4
Crop
Density chart 100-18
Payable moisture chart 100-18
Weights chart 100-18
Crop diverter 70-8
Crop diverter vanes
Adjusting 70-2
Crop settings
Alfalfa 100-1
Barley 100-1
Canola 100-2
Chickpeas 100-2
Concave recommendations 100-16
Corn (Dry) 100-3
Corn (Wet) 100-3
Corn Cob Mix 100-4
Edible Beans 100-4
Flax 100-5
Footnotes description page 100-15
Grass Seed 100-5
Guar (Cluster Beans) 100-6
Lentils 100-6
Lupins 100-7
Millet 100-7
Mustard 100-8
Navy Beans 100-8
Oats 100-9
Peas 100-9
Popcorn 100-10
Rape Seed (Dry) 100-10
Rape Seed (Green) 100-11
Rice 100-11
Rye 100-12
Safflower 100-12
Sorghum 100-13
Soybeans 100-13
Sunflower 100-14
Triticale 100-14
Wheat Difficult 100-15
Wheat Normal 100-15
Custom level alarm 45-D-3
Custom preset 45-F-6
Cutterbar position 45-C-30, 45-C-31
Cutterbar position wizard 45-C-33
Cutterbar tilt 45-C-28

D

Debris management filter capacity 45-G-6
Decal
Lubrication locations 130-1
Deck plate position resume 45-C-24

Deck plate spacing 45-C-28, 45-L-15
Procedure 45-L-16
DEF
DEF in-line filter, replace 130-K-2, 130-L-2
Disposal 125-8
Dosing unit filter, changing 130-K-1, 130-L-1
Storing 125-7
Tank, cleaning..... 130-P-4
Tank, refilling 125-7
Testing 125-6
Use in SCR equipped engines..... 125-6
DEF dosing unit filter
Changing 130-K-1, 130-L-1
DEF in-line filter
Replace..... 130-K-2, 130-L-2
DEF tank
Cleaning 130-P-4
Deluxe residue
Chopper
Windrowing general information..... 70-2
Dial-A-Speed™ resume..... 45-C-20
Diesel engine oil
Interim tier 4, final tier 4, stage IIIB, stage IV, and stage V 125-12
Service interval for operation at high altitude 125-13
Tier 2 and stage II..... 125-12
Diesel engines, cold weather effect 125-5
Diesel exhaust fluid (DEF) level indicator 45-M-31
Diesel Exhaust Fluid (DEF) tank
Access
Dosing unit filter (Final Tier 4/Stage V)... 130-P-4
In-line filter (Final Tier 4/Stage V)..... 130-P-4
Checking breather..... 30-4
Clean breather..... 130-F-3
Draining..... 130-P-3
Filling..... 130-P-2
Replace breather 130-G-15
Diesel fuel 125-2
Supplemental additives 125-4
Diesel fuel, testing..... 125-5
Diesel Particulate Filter
Maintenance and Service 130-P-14
Diesel Particulate Filter Maintenance and Service 130-P-14
Differential lock (if equipped)..... 45-M-30
Dimensions
Machine..... 110-14
Reference points 110-15, 145-14
S760 and S770 145-10
S770 HillMaster™ 145-11
S780 HillMaster™, S785 HillMaster™ and S790 HillMaster™ 145-13
S780, S785 and S790 145-12
Track module..... 110-13
Direction 45-B-5
Disable auto exhaust filter cleaning 45-G-5
Discharge beater
Adjusting
Belt..... 65-38
Grease bearings..... 130-G-7
Replacing
Belt..... 65-38
Wear strips..... 65-41
Unplugging 65-72
Discharge beater (Standard)
Replacing
Wear strips..... 65-42
Discharge beater (Tough Crop)
Replacing
Wear strips..... 65-43
Discharge lights
Replacing..... 80-18
Display
Corner post
VisionTrak™ operational checks 65-60
Yield calibration
Change tire radius code..... 95-4
Multi-point 95-4
Single point 95-4
Disposal, Exhaust Filter..... 130-P-15
Downhill sensitivity 45-O-14
Draper belt speed 45-C-26
Draper float position..... 45-C-27
Drive wheel starter stud..... 85-11
Driveshaft
Maintenance
Grease primary countershaft..... 130-E-1
Grease primary countershaft universal joint spline 130-G-4
Driving machine
Header attached..... 85-1, 90-1
Road transporting 90-1

E

Edible Beans
Crop settings..... 100-4
Edit favorite page..... 45-K-3
Effect of cold weather on diesel engines 125-5
Effects of crop change 45-F-7
Electrical
Component handling precautions..... 80-1
Troubleshooting..... 135-16
Electrical system
Adjusting
Cab halogen lights 80-13
Cab headlights..... 80-12
Light Emitting Diode (LED) lights..... 80-16
Lower driving light bulb (If equipped)..... 80-14
Battery disconnect switch 80-6
Charging batteries..... 80-4
Check batteries 130-G-11
Checking specific gravity 80-4

Cleaning
Machine cleanout (Periodic cleanout) 120-1
Connecting booster..... 80-5
Connecting cables..... 80-3
Fuse center 80-7, 80-9
Halogen bulb safety rules 80-11
Inline fuses 80-8
Maintenance
Clean alternator screen..... 130-O-2
Precautions..... 80-1
Removing and installing batteries 80-5, 80-6
Replacing
Access door work lights 80-18
Auxiliary field lights..... 80-18
Beacon light..... 80-17
Beacon light bulb..... 80-17
Cab halogen light bulb..... 80-12
Cab headlight bulb 80-12
Cab interior light..... 80-20
Cleaning shoe lights 80-19
Discharge lights 80-18
Fascia lights (if equipped)..... 80-13, 80-14
Grain tank light 80-18
Hazard/Marker lights..... 80-20
Light Emitting Diode (LED) lights..... 80-15
Lower driving light bulb (If equipped)..... 80-14
Map light..... 80-20
Marker/Brake lights 80-20
Rear hazard lights..... 80-20
Side finder lights..... 80-19
Stubble lights 80-18
Unloading auger light 80-18
Emissions
Required language
EPA 130-P-1
Emissions Performance
Tampering 3
Engine
Access 45-G-1
Access cover..... 130-P-1
Adjusting
Rotary screen brush 130-Q-14, 130-R-15
Air compressor..... 45-G-6
Air compressor status..... 45-G-7
Air scoop
Extended field position..... 30-6
Positions..... 30-4
Standard field position 30-5
Transport position 30-7
AUTO exhaust filter cleaning..... 45-G-3
Belt
Routing (Final Tier 4/Stage V)
9.0 L 130-Q-5
13.5 L..... 130-R-7
Routing (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L..... 130-R-1
Break-in check before first 100 hours..... 25-3
Break-in service after 100 hours (Tier 2/Stage II) .. 25-4
Break-in service after 400 hours (Final Tier 4/Stage V)..... 25-4
Breaking-in 25-1
Change engine oil and filter..... 130-F-1, 130-F-2
Check engine oil..... 130-A-2
Check oil..... 30-1
Cleaning
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Coolant heater 35-6
Debris management filter capacity 45-G-6
Disable auto exhaust filter cleaning 45-G-5
Engine cool down in progress 45-G-5
Engine main page 45-G-1
Engine power 45-G-2
Engine speed management
ProDrive™ machines 35-5
Exhaust filter system overview..... 45-G-3
Filter access cover 130-P-1
Maintenance
Change engine coolant..... 130-N-1
Change main engine gear case oil130-I-1, 130-J-2
Check air filter elements..... 130-G-15
Check engine debris management air filter..... 130-G-12
Check engine valve lash 130-J-2
Check water separator..... 130-G-2
Clean alternator screen..... 130-O-2
Clean charge air cooler..... 130-A-3, 130-B-5
Clean condenser 130-A-3, 130-B-5
Clean Diesel Exhaust Fluid (DEF) tank breather 130-F-3
Clean fuel precleaner filter 130-B-4, 130-G-1
Clean fuel tank breather..... 130-F-3
Clean oil cooler..... 130-A-3, 130-B-5
Clean radiator..... 130-A-3, 130-B-5
Clean rotary screen 130-A-3, 130-B-5
Clean water separator primary fuel filter . 130-B-5
Drain water from air compressor reservoir130-A-5
Grease variable speed driven sheaves... 130-G-3
Grease variable speed driver sheaves ... 130-G-3
Inspect coolant level 130-A-3
Inspect crankshaft damper 130-M-1
Inspect fuel precleaner filter 130-A-5
Replace Diesel Exhaust Fluid (DEF) tank breather 130-G-15
Replace fuel tank breather..... 130-G-15
Replace hydraulic/hydrostatic charge filter..... 130-G-11
Replace hydrostatic charge filter 130-G-12

Replace main engine gear case filter.... 130-C-1, 130-G-12
Replace main engine gear case lube filter130-C-1, 130-G-14
Replace primary fuel filter.....130-G-2
Replace secondary fuel filter.....130-G-2
Object detection sensor (Final Tier 4/Stage V) 35-4
Parked filter cleaning..... 45-G-4
Replacing
Accessory belt (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L.....130-R-1
Air compressor belt (Final Tier 4/Stage V)
9.0 L 130-Q-11
13.5 L.....130-R-11
Air compressor belt (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L.....130-R-1
Air conditioner belt (Final Tier 4/Stage V)
9.0 L 130-Q-5
13.5 L.....130-R-8
Alternator belt (Final Tier 4/Stage V)
9.0 L 130-Q-5
13.5 L.....130-R-8
Engine debris management belt (Final Tier 4/Stage V)..... 130-Q-14
13.5 L..... 130-R-15
Fan belt (Tier 2/Stage II)
9.0 L 130-Q-1
13.5 L.....130-R-3
Fan drive belt (Final Tier 4/Stage V)
13.5 L..... 130-R-13
Rotary screen belt.....130-Q-3, 130-R-5
Rotary screen drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L..... 130-R-10
Rotary screen drive belt (Tier 2/Stage II)
9.0 L 130-Q-4
13.5 L.....130-R-7
Vacuum fan drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L.....130-R-11
Vacuum fan driven belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Variable speed fan drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Routing
Rotary screen belt.....130-Q-3, 130-R-5
Starting fluid..... 130-P-1
Starting fluid operation..... 35-6
Starting fluid safety..... 35-6
Starting information..... 35-4
Stopping information 35-5
Troubleshooting.....135-8
Engine and ground drive.....45-M-23
Engine cool down in progress..... 45-G-5
Engine debris management
Replacing
Drive belt (Final Tier 4/Stage V)..... 130-Q-14
13.5 L..... 130-R-15
Engine deck
Air compressor system 130-P-13
Engine main page 45-G-1
Engine oil
Break-In
Interim tier 4, final tier 4, stage IIIB, stage IV, and stage V 125-11
Non-Emissions certified and certified tier 1, tier 2, tier 3, stage I, stage II, and stage III.... 125-10
Change engine oil and filter..... 130-F-1, 130-F-2
Check engine oil..... 130-A-2
Diesel
Interim tier 4, final tier 4, stage IIIB, stage IV, and stage V 125-12
Service interval for operation at high altitude 125-13
Tier 2 and stage II..... 125-12
Engine oil and filter service intervals
Interim tier 4, final tier 4, stage IIIB, stage IV, and stage V
0.10 - 0.119 L/kW oil pan..... 125-13
Operation at high altitude..... 125-13
Tier 2 and stage II
Standard drain oil pan 125-13
Engine power 45-G-2
Engine Power
Do not modify 130-P-2
Engine power target.....45-O-12
Engine speed management
ProDrive™ machines 35-5
Engine valve lash
Check 130-J-2
Ether
Safety 35-6
Eurasian Economic Union compliance label location . 155-2
Excess tailings 45-O-24
Exhaust Filter
Ash Handling and Disposal 130-P-15
Exhaust Filter Ash Handling and Disposal
Diesel Particulate Filter Ash Handling and Disposal 130-P-15
Exhaust filter cleaning indicator.....45-M-31
Exhaust Filter Disposal 130-P-15
Exhaust filter system overview..... 45-G-3
Exhaust Filter, Safety
Safety, Exhaust Filter 10-15, 35-1
Exit lights 45-J-4
Extendable platform 45-E-5
Extendable platform header self-test..... 45-L-17
Extendable platform header self-test calibration procedure..... 45-L-17

F

Factory default 45-F-6
Fan belt
  Replacing (Tier 2/Stage II)
    9.0 L 130-Q-1
    13.5 L 130-R-3
Fan speed 45-H-2
Favorites page 45-K-4
Feed accelerator
  Adjusting
    Belt 65-6
  Changing
    High speed high capacity feed accelerator speed 65-7
    Standard speed high capacity feed accelerator speed 65-7
  Comb floor (Rice machines) 65-2
  Maintenance
    Grease feed accelerator bearings 130-G-5
  Removing
    Comb floor (Rice machines) 65-3
  Replacing
    High speed high capacity feed accelerator belt . 65-5
    Standard speed high capacity feed accelerator belt 65-5
    Wear strips (Standard) 65-1
    Wear strips (Tine) 65-2
    Wear strips (Tough Crop) 65-1
  Top access door 55-2
  Unplugging 65-72
Feed plate
  Seal support 55-3
Feeder house
  Adjusting
    CommandTouch multi-speed feeder house drive belt 55-21
    Conveyor chain 55-7
    Conveyor drive chain 55-11
    Fixed speed drive belt 55-19
    Fore/aft tilt frame (Manual tilt) 55-5
    Header reel/belt pickup pump belt (CommandTouch multi-speed feeder house) . 55-23
    Header reel/belt pickup pump belt (Fixed speed feeder house) 55-21
    Header reel/belt pickup pump belt (Variable speed feeder house) 55-18
    Lower cable end (level land) 55-27
    Shims (level land) 55-28
    Single-point latching 55-26
    Variable speed drive belt 55-13
  Attaching
    Header 55-25
    Multicoupler and single-point latching 55-24
  Bottom door 55-3
  Changing
    Conveyor speed 55-9
  Cleaning
    Latching pins 55-28
    Machine cleanout (Annual cleanout and Specialty Crops) 120-7
    Machine cleanout (Periodic cleanout) 120-1
  Cylinder safety stop 55-1
  Detaching
    Header 55-25
  Doors 55-2
  Feed accelerator top access door 55-2
  Feed plate seal support 55-3
  Maintenance
    Change feeder house reverser gear case oil 130-H-1
    Check feeder house reverser drive gear case oil 130-B-3
    Clean lateral tilt feeder house 130-B-3
    Clean multi-speed feeder house drive gear case 130-G-14
    Clean stone trap 130-A-6
    Grease feeder house slip clutch 130-G-14
    Grease variable speed feeder house reverser drive gear case 130-A-6, 130-B-2
    Grease variable speed feeder house upper sheaves 130-B-3
  Manual tilt indicator 55-23
  Removing
    Conveyor chain links 55-8
    Conveyor drive chain links 55-10
  Replacing
    CommandTouch multi-speed feeder house drive belt 55-21
    Fixed speed drive belt 55-18
    Header reel/belt pickup pump belt (CommandTouch multi-speed feeder house) . 55-22
    Header reel/belt pickup pump belt (Fixed speed feeder house) 55-19
    Header reel/belt pickup pump belt (Variable speed feeder house) 55-15
    Variable speed drive belt 55-11
  Set
    Fore/aft tilt frame (Manual tilt) 55-5
    Fore/aft tilt frame zero point (Hydraulic tilt) .. 55-6
  Shear screw location 55-29
  Side shields 55-1
  Stone trap 55-4
  Top shaft sprockets 55-11
  Troubleshooting 135-1
  Unlatching
    Pins 55-28
Feeder house (Hydraulic tilt)
  Adjusting
    Drum height 55-9

Feeder house (Manual tilt)
Adjusting
Drum height 55-8
Feeder house backshaft speed and adjustable corn head deck plates (if equipped) 45-M-33
Feeder house float 45-C-17
Feeder house lateral tilt range 45-L-18
Feeder house lateral tilt range calibration procedure . 45-L-19
Feeder house lateral tilt speed 45-L-19
Feeder house lateral tilt speed calibration procedure . 45-L-19
Feeder house raise speed 45-L-16
Feeder house raise speed calibration procedure 45-L-16
Feeder house reverser 45-M-25
Feeder house tilt fore/aft range 45-L-18
Feeder house tilt fore/aft range calibration procedure 45-L-18
Filter
Access
Diesel Exhaust Fluid (DEF) dosing unit filter (Final Tier 4/Stage V) 130-P-4
Diesel Exhaust Fluid (DEF) tank in-line filter (Final Tier 4/Stage V) 130-P-4
Check
Air filter elements 130-G-15
Engine debris management air filter 130-G-12
Water separator 130-G-2
Clean
Diesel Exhaust Fluid (DEF) tank breather 130-F-3
Fuel precleaner filter 130-B-4, 130-G-1
Fuel tank breather 130-F-3
Water separator primary fuel filter 130-B-5
Cleaning
Heavy-duty fuel precleaner (optional) 130-P-8
Precleaner 130-P-6
Draining
Water separator primary filter 130-P-6
Flushing
Heavy-duty fuel precleaner (optional) 130-P-7
Inspect
Fuel precleaner filter 130-A-5
Maintenance
Change hydraulic reservoir filter 130-I-2
Clean cab fresh air filter 130-B-6, 130-O-1
Clean recirculating filter 130-E-1, 130-O-1
Removing
Air cleaner filters 130-P-13
Engine debris management air filter (Final Tier 4/Stage V) 130-P-15
Replace
Diesel Exhaust Fluid (DEF) tank breather 130-G-15
Engine oil filter 130-F-1, 130-F-2
Fuel tank breather 130-G-15
Hydraulic/Hydrostatic charge filter 130-G-11
Hydrostatic charge filter 130-G-12
Main engine gear case filter .. 130-C-1, 130-G-12
Main engine gear case lube filter 130-C-1, 130-G-14
Primary fuel filter 130-G-2
Replace secondary fuel filter 130-G-2
Replacing
Heavy-duty fuel precleaner (optional) 130-P-8
Primary and secondary fuel filter 130-P-8
Filters, Oil
Oil Filters 125-17
Final drives
Change
Oil 130-J-2
Check
Oil 130-G-8
Grease
Bearings 130-A-6, 130-B-2
Final drive couplers 130-B-6
Final drive pivot (HillMaster™ machines) 130-A-7
Fire extinguisher 20-5, 20-6, 115-3, 115-4
Charge 115-2
Checklist 115-1
Inspect 130-G-13
Inspect straps 130-O-4
Mounting 20-6, 115-5
Operating 115-1
Recommended fire preventions 115-1
Flax
Crop settings 100-5
Fluorinated greenhouse gas, specifications 145-17
Folding
Access folding 45-E-1
Extendable platform 45-E-5
Folding corn head
John Deere models 45-E-6
Non-John Deere models 45-E-7
Folding main page 45-E-1
Folding unloading auger 45-E-3
Fountain auger 45-E-4
Grain tank covers 45-E-2
Folding corn head 45-L-20
John Deere models 45-E-6
Non-John Deere models 45-E-7
Folding corn head calibration procedure 45-L-20
Folding main page 45-E-1
Folding unloading auger 45-E-3
Fore/aft resume 45-C-22
Fore/aft tilt 45-C-10
Foreign material sensitivity 45-O-29
Fountain auger 45-E-4
Four-wheel drive (if equipped) 45-M-30
Four-wheel drive (optional)
Troubleshooting 135-7

Front chaffer
Adjusting....65-50
Front console....45-M-2
Front wheels
Installing....85-17
Removing....85-13
Fuel
Biodiesel....125-3
Bleeding system....130-P-10
Checking Diesel Exhaust Fluid (DEF) tank breather (Final Tier 4/Stage V)....30-4
Checking fuel tank breather....30-4
Checking system....30-3
Cleaning
Heavy-duty fuel precleaner filter (optional)130-P-8
Precleaner....130-P-6
Diesel....125-2
Draining
Diesel Exhaust Fluid (DEF) tank (Final Tier 4/ Stage V)....130-P-3
Water separator primary filter....130-P-6
Draining tank....130-P-5
Filling
Diesel Exhaust Fluid (DEF) tank (Final Tier 4/ Stage V)....130-P-2
Filling tank....125-1, 130-P-5
Flushing
Heavy-duty fuel precleaner filter (optional)130-P-7
Handling and storing....125-2
Lubricity....125-4
Replacing
Heavy-duty fuel precleaner filter (optional)130-P-8
Primary and secondary fuel filter....130-P-8
Shut-off valve....130-P-6
Fuel Filters
Filters, Fuel....125-17
Fuel level indicator....45-M-31
Fuel system....130-P-2
Bleeding....130-P-10
Check water separator....130-G-2
Checking....30-3
Clean Diesel Exhaust Fluid (DEF) tank breather ... 130-F-3
Clean fuel precleaner filter....130-B-4, 130-G-1
Clean fuel tank breather....130-F-3
Clean water separator primary fuel filter....130-B-5
Do not modify....130-P-2
Inspect fuel precleaner filter....130-A-5
Replace Diesel Exhaust Fluid (DEF) tank breather 130-G-15
Replace fuel tank breather....130-G-15
Replace primary fuel filter....130-G-2
Replace secondary fuel filter....130-G-2
Fuel tank
Checking breather....30-4
Cleaning
Machine cleanout (Periodic cleanout)....120-1
Draining....130-P-5
Filling....125-1, 130-P-5
Shut-off valve....130-P-6
Function assignments....45-A-6
Fuse
Center....80-7, 80-9
Inline....80-8

G

Gear case
Maintenance
Change feeder house reverser gear case oil 130-H-1
Change main engine gear case oil130-I-1, 130-J-2
Change overshot beater gear case oil....130-J-3
Change primary countershaft gear case oil130-J-3
Check loading auger gear case oil....130-G-14
Check overshot beater gear case oil....130-G-8
Check primary countershaft gear case oil130-G-13
Clean multi-speed feeder house drive gear case 130-G-14
Grease unloading auger upper gear case130-G-3
Grease vertical unloading auger upper gear case 130-G-4
Oil recommendations....125-14, 125-16
ProDrive™ machines
Oil recommendations....125-14
Grain
Broken grain....45-O-23
Grain handling
Access grain handling....45-D-1
Advanced settings....45-D-2
Custom level alarm....45-D-3
Grain handling main page....45-D-1
Grain level....45-D-3
Grain level auto beacon....45-D-2
Moisture alarm....45-D-4
Moisture correction....45-D-4
Moisture settings....45-D-3
Status center....45-D-5
Tank unloading offset....45-D-2
Grain handling main page....45-D-1
Grain level....45-D-3
Grain level auto beacon....45-D-2
Grain loss sensitivity....45-O-28
Grain system video....45-O-3
Grain tank
Adjusting
Covers (If equipped)....75-3
Fill sensor indicator....75-2
Loading auger (Grain tank covers)....75-7
Unloading auger cradle support....75-10
Unloading auger drive chain....75-9
Unloading auger position....75-10, 75-11

Cleaning
Mass flow sensor (Grain tank covers) 75-9
Mass flow sensor (Grain tank extensions) ... 75-8
Cleaning grain tank and removal of blockages safely. 10-9
Cleanout doors. 75-1
Cross auger covers 75-3
ActiveYield™ 75-4
Engine ladder 75-1
Loading auger deflector. 75-6
Loading auger folding (Grain tank extensions) 75-7
Maintenance
Check loading auger gear case oil 130-G-14
Clean mass flow sensor 130-B-5
Grease chopper driveshaft bearing 130-G-4
Grease unloading auger upper gear case 130-G-3
Grease unloading driveshaft bearing 130-G-4
Grease vertical unloading auger upper gear case 130-G-4
Operating
Covers (If equipped) 75-2
Removing
Unloading auger drive chain links 75-9
Replacing
Unloading auger drive belt 75-12, 75-13
Sample trough 75-1
Sensor locations
ActiveYield™ 75-4
Unloading auger
Lock arm positions 75-11
Unloading auger drive shear bolt 75-6
Location 75-6
Grain tank covers 45-E-2
Grain tank light
Replacing 80-18
Grass Seed
Crop settings 100-5
Grate covers (If equipped) 65-9
Grate interrupter locations (If equipped) 65-11
Grate interrupters (If equipped) 65-10
Grate spacers 65-9
Grate types 65-9
Grease
Extreme pressure and multipurpose 125-16
Ground speed adjustment 45-O-25
Guar (Cluster Beans)
Crop settings 100-6

H

Hardware torque values
Metric 145-19
Unified inch 145-18
Harvest settings
Access harvest settings 45-F-1
Adjustment states 45-F-12
Advanced settings 45-F-13
Chaffer clearance 45-F-9
Cleaning fan 45-F-9
Custom preset 45-F-6
Effects of crop change 45-F-7
Factory default 45-F-6
Harvest settings main page 45-F-1
Load harvest settings 45-F-2
Outside configuration 45-F-11
Performance target 45-F-14
Preset 45-F-3
Save preset 45-F-6
Separator resolution 45-F-13
Shoe resolution 45-F-14
Sieve clearance 45-F-10
Straw conditions 45-F-5
Threshing clearance 45-F-7
Threshing conditions 45-F-4
Threshing speed 45-F-8
Harvest settings main page 45-F-1
Harvesting controls 45-M-20
Harvesting hints
Operation at low temperatures 95-1
Harvesting tips 95-1
HarvestSmart™ automation 45-O-11
HarvestSmart™ response aggressiveness 45-O-11
HarvestSmart™ settings 45-O-9
HarvestSmart™ speed limit 45-O-10
HarvestSmart™ status 45-O-15
Hazard lights
Replacing 80-20
Header 45-C-1
Access 45-C-1
Advanced settings 45-C-32
Attaching 55-25
Auto header control 45-C-11
Auto header control combinations 95-2
Backshaft speed 45-C-29
Control preview 45-C-11
Cutterbar position 45-C-30, 45-C-31
Cutterbar position wizard 45-C-33
Cutterbar tilt 45-C-28
Deck plate position resume 45-C-24
Deck plate spacing 45-C-28
Detaching 55-25
Dial-A-Speed™ resume 45-C-20
Draper belt speed 45-C-26
Draper float position 45-C-27
Feeder house float 45-C-17
Fore/aft resume 45-C-22
Fore/aft tilt 45-C-10
Header 45-C-1
Header automation 45-C-12
Header details 45-C-3
Height resume 45-C-12
Height sensing off ground 45-C-14
Height sensing on ground 45-C-15

Height sensitivity 45-C-8
Hours 45-C-6
HydraFlex™ pressure 45-C-25
Lateral tilt 45-C-19
Limp home mode 45-C-33
Minimum reel speed 45-C-5
Raise/lower speed 45-C-6
Reel position resume 45-C-23
Resume preferences 45-C-20
Row width 45-C-5
Tilt sensitivity 45-C-9
Tilt speed 45-C-7
Transport safety 10-3
Width 45-C-4
Width corn head 45-C-4
Work recording 45-C-5
Header activation buttons 45-M-34
Header automation 45-C-12
Header calibration 45-L-17
Header calibration procedure 45-L-17
Header details 45-C-3
Header engage 45-M-26
Header pump
Grease header drive pump sheave bearing 130-G-3
Header raise lower and tilt (if equipped) switch 45-M-33
Header tilt primary cylinder
Grease
Pivot pin (HillMaster™ machines) 130-A-8
Headlights
Adjusting 80-12
Cab halogen lights 80-13
Light Emitting Diode (LED) lights 80-16
Lower driving light bulb (If equipped) 80-14
Replacing
Bulb 80-12
Cab halogen light bulb 80-12
Fascia lights (if equipped) 80-13, 80-14
Light Emitting Diode (LED) lights 80-15
Lower driving light bulb (If equipped) 80-14
Heater
Troubleshooting 135-18
Heating, ventilation, and air conditioning (HVAC) main page 45-H-1
Heavy foreign material 45-O-23
Height resume 45-C-12
Height sensing off ground 45-C-14
Height sensing on ground 45-C-15
Height sensitivity 45-C-8
HillMaster™
Daily operation preparations 105-3
General information 105-1
Switches
Leveling control 105-3
Hitch
Manual (standard) 90-12
Semi-AutoMatic (optional) 90-12
Hours 45-C-6
HVAC 45-M-22
Access HVAC 45-H-1
Air conditioning 45-H-3
Air flow mode 45-H-3
Fan speed 45-H-2
Heating, ventilation, and air conditioning (HVAC) main page 45-H-1
Outside temperature 45-H-3
Set temperature 45-H-2
HydraFlex™ pressure 45-C-25
Hydraulic oil 110-10
Hydraulic system
Accumulator pressure 130-2
Check reservoir oil 30-2
Cleaning
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Cleanliness 130-1
Hose replacement 130-1
Maintenance
Change hydraulic reservoir filter 130-I-2
Change hydraulic reservoir oil 130-J-1
Check hydraulic reservoir oil level 130-A-4
Check main engine gear case oil level ... 130-A-4
Hydraulics
Tensioning system 110-8
Hydrostatic ground drive
Troubleshooting 135-4

I

Indicator
Adjusting
Fill sensors 75-2
Feeder house tilt 55-23
Indicators overview 35-2
Instructional seat 45-M-20
Interval chart
As required 130-O-1
Every 10 hours 130-A-1
Every 50 hours 130-B-1
Every 100 hours 130-D-1
Every 200 hours 130-E-1
Every 250 hours 130-F-1
Every 400 hours 130-G-1, 130-G-6, 130-G-10
Every 800 hours 130-H-1
Every 1000 hours 130-I-1
Every 2000 hours 130-J-1, 130-K-1
Every 3500 hours 130-L-1
Every 4500 hours 130-M-1
Every 6000 hours 130-N-1
Every five years 130-M-1
Every six years 130-N-1
Every three years 130-K-1, 130-L-1

First 100 hours 130-C-1

J

Jack pocket
Locations 85-25, 90-11
Locations decal 85-24

K

Key switch 45-M-12
Knife bank 45-B-6

L

Ladder
Engine 75-1
Grain tank 75-1
Positions 20-4
Fold/unfold from ground (Track machines) .. 110-3
Fold/unfold from landing (Track machines) . 110-3
Track machines (Swing) 110-2
Rear 130-P-1
Lateral tilt 45-C-19
Left-hand cab items 45-M-11
Lens debris 45-O-8
Lentils
Crop settings 100-6
Leveling concave
Active Concave Isolation 65-24
Standard Concave Adjust 65-22
Leveling cylinder
Grease
Leveling cylinder barrel (HillMaster™ machines) 130-A-7, 130-A-8
Light foreign material 45-O-23
Lights 45-M-24
Access lights 45-J-1
Adjusting
Cab halogen lights 80-13
Cab headlights 80-12
Light Emitting Diode (LED) lights 80-16
Lower driving light bulb (If equipped) 80-14
Exit lights 45-J-4
Lighting delay/Timeout 50-8
Lighting locations
Auto beacon lights 50-2
Beacon lights 50-1
Engine compartment service lights (optional) 50-7
Exit lights 50-3, 50-7
Field lights 50-2, 50-4
Front stubble lights 50-2
Gull wing service lights (optional) 50-5
Hazard lights 50-1
Marker/Brake lights 50-3
Rear discharge lights 50-3
Road lights 50-1
Shoe service lights 50-5
Lights main page 45-J-1
Replacing
Access door work lights 80-18
Auxiliary field lights 80-18
Beacon light 80-17
Beacon light bulb 80-17
Cab halogen light bulb 80-12
Cab headlight bulb 80-12
Cab interior light 80-20
Cleaning shoe lights 80-19
Discharge lights 80-18
Fascia lights (if equipped) 80-13, 80-14
Grain tank light 80-18
Halogen bulb safety rules 80-11
Hazard/Marker lights 80-20
Light Emitting Diode (LED) lights 80-15
Lower driving light bulb (If equipped) 80-14
Map light 80-20
Marker/Brake lights 80-20
Rear hazard lights 80-20
Side finder lights 80-19
Stubble lights 80-18
Unloading auger light 80-18
Worklight controls 45-J-4
Worklights preset 1—high-beam 45-J-3
Worklights preset 1—low-beam 45-J-2
Worklights preset 2—high-beam 45-J-3
Worklights preset 2—low-beam 45-J-2
Lights main page 45-J-1
Limp home mode 45-C-33
ProDrive™ transmission 45-I-3
Load harvest settings 45-F-2
Effects of crop change 45-F-7
Preset 45-F-3
Save preset 45-F-6
Custom preset 45-F-6
Factory default 45-F-6
Straw conditions 45-F-5
Threshing conditions 45-F-4
Loading auger deflector 75-6
Loading auger folding (Grain tank extensions) .. 75-7
Lubricant
Mixing 125-17
Lubricant Storage
Storage, Lubricant 125-17
Lubricants, safety 125-17
Lubrication and maintenance
2000 hours
Replace DEF in-line filter 130-K-2
2000 Hours/36 Months
Changing DEF dosing unit filter 130-K-1, 130-L-1
4500 hours
Replace DEF in-line filter 130-L-2
As required
Cleaning DEF tank 130-P-4

Lubrication and Maintenance
Hydraulic oil 110-10
Lubricity of diesel fuel 125-4
Lupins
Crop settings 100-7

M

Machine
Jack pocket locations 85-25, 90-11
Jack pocket locations decal 85-24
Road transporting 90-1
Header attached 85-1, 90-1
Tie down locations 90-10
Tie down locations decal 90-10
Towing 90-11
Trailer transporting 90-4
Transport information 90-11
Machine design life 145-17
Machine identification numbers 155-1
Advanced PowerCast™ tailboard (Intermediate and Premium residue) 155-6
Cab 155-4
Chopper (If equipped) 155-6
Engine (Final Tier 4/Stage V) 155-4
Engine (Tier 2/Stage II) 155-3
Engine gear case 155-5
Feeder house reverser 155-5
Hydrostatic drive motor 155-4
Hydrostatic drive pump 155-4
Interpreting engine serial number 155-3
Multi-speed feeder house gear case (If equipped) 155-6
PowerCast tailboard (Deluxe residue) 155-6
Rotor drive gear case 155-5
Spreader (Deluxe residue) 155-7
Transmission 155-5
Two speed four-wheel drive motor 155-5
Vane tailboard (Deluxe, Intermediate and Premium residue) 155-6
Machine identification plate 110-16, 155-2
Eurasian Economic Union compliance label location 155-2
Machine identification plate location 110-17, 155-2
Machine operation 110-6
Machine settings
Changing chopper speeds 70-20
Chopper controller bar (optional) 70-10
Concave recommendations 100-16
Crop diverter 70-8
Crop settings
Alfalfa 100-1
Barley 100-1
Canola 100-2
Chickpeas 100-2
Corn (Dry) 100-3
Corn (Wet) 100-3
Corn Cob Mix 100-4
Edible Beans 100-4
Flax 100-5
Footnotes description page 100-15
Grass Seed 100-5
Guar (Cluster Beans) 100-6
Lentils 100-6
Lupins 100-7
Millet 100-7
Mustard 100-8
Navy Beans 100-8
Oats 100-9
Peas 100-9
Popcorn 100-10
Rape Seed (Dry) 100-10
Rape Seed (Green) 100-11
Rice 100-11
Rye 100-12
Safflower 100-12
Sorghum 100-13
Soybeans 100-13
Sunflower 100-14
Triticale 100-14
Wheat Difficult 100-15
Wheat Normal 100-15
Drum height (Hydraulic tilt) 55-9
Drum height (Manual tilt) 55-8
Harvesting tips 95-1
Operation at low temperatures 95-1
Power shutdown procedure 100-16
Stationary knife bank (without electric actuator) 70-10
Tailboard vanes 70-5, 70-6, 70-22
Machine stop warning, required 35-3
Machine storage
Preparing machine 140-1
Removing machine from storage 140-1
Winterize cooling system 130-P-12
Machine tie down locations decal 90-10
Main engine gear case
Change oil 130-I-1, 130-J-2
Main page
Audio 45-N-1
Phone 45-K-1
Maintenance
Access
Diesel Exhaust Fluid (DEF) dosing unit filter (Final Tier 4/Stage V) 130-P-4
Diesel Exhaust Fluid (DEF) tank in-line filter (Final Tier 4/Stage V) 130-P-4
Accumulator pressure 130-2
Adjusting
Belt first 50 hours 25-3
Clean grain elevator conveyor chain 65-59
Grain tank covers (If equipped) 75-3
Grain tank loading auger (Grain tank covers) 75-7

Unloading auger cradle support 75-10
Unloading auger drive chain 75-9
Unloading auger position 75-10, 75-11
Air conditioner
Clean drain hose 130-A-6
Basic tire information 85-2
Belt care 110-9
Bleeding fuel system 130-P-10
Break-in check before first 100 hours 25-3
Break-in service after 100 hours (Tier 2/Stage II) .. 25-4
Break-in service after 400 hours (Final Tier 4/Stage V) 25-4
Breaking-in engine 25-1
Cab
Clean fresh air filter 130-B-6, 130-O-1
Clean recirculating filter 130-E-1, 130-O-1
Fill windshield washer reservoir 130-O-2
Inspect seat belts 130-G-13
Care and service of tires 85-1
Centering
Chopper blades 70-19
Check coolant level 30-2
Check engine oil 30-1
Check hydraulic reservoir oil 30-2
Check hydrostatic oil 30-2
Checking
Diesel Exhaust Fluid (DEF) tank breather (Final Tier 4/Stage V) 30-4
Checking fuel system 30-3
Checking fuel tank breather 30-4
Checking tire pressure 85-3, 85-5, 85-8, 85-9
HillMaster™ 85-7, 85-10
Clean grain elevator
Camera desiccant 130-G-16, 130-O-3
Clean camera 130-B-6, 130-O-3
Clean moisture sensor 130-G-15, 130-O-2
Wear plates and door 65-60
Cleaning
Clean grain elevator camera 65-61
Fuel precleaner 130-P-6
Heavy-duty fuel precleaner filter (optional) 130-P-8
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Mass flow sensor (Grain tank covers) 75-9
Mass flow sensor (Grain tank extensions) ... 75-8
Qucik response (QR) code 120-1
Tailings system elevator camera 65-61
Tailings system elevator sensors 65-62
Cleaning engine compartment 30-8, 115-5
Cleaning fan
Grease cleaning fan bearings 130-G-7
Grease cleaning fan variable lower sheave 130-B-4
Grease cleaning fan variable upper sheave 130-B-4
Cleaning tracks 110-8
Cleanout areas 110-8
Conditioning 110-9
Conveyor auger
Grease conveyor auger slip clutch 130-G-7
Daily 110-10
Discharge beater
Grease discharge beater bearings 130-G-7
Draining
Diesel Exhaust Fluid (DEF) tank (Final Tier 4/Stage V) 130-P-3
Water separator primary filter 130-P-6
Draining cooling system 130-P-10
Draining fuel tank 130-P-5
Drive wheel bolt torque 85-11
Drives
Change final drive oil 130-J-2
Check final drive oil 130-G-8
Grease final drive couplers 130-B-6
Grease final drive outer bearings 130-A-6, 130-B-2
Grease final drive pivot (HillMaster™ machines) 130-A-7
Grease header tilt primary cylinder pivot pin (HillMaster™ machines) 130-A-8
Grease leveling cylinder barrel (HillMaster™ machines) 130-A-7, 130-A-8
Grease master cylinder pivot pin (HillMaster™ machines) 130-A-7
Grease rear axle tie rods 130-G-8
Grease two-speed four-wheel drive motor pivots 130-A-5, 130-B-2
Grease two-wheel drive extra heavy-duty spindle bearings and pivot pins 130-A-5, 130-B-2
Grease two-wheel drive heavy-duty spindle bearings and pivot pins 130-A-5, 130-B-2
Electrical
Check batteries 130-G-11
Engine
Change engine coolant 130-N-1
Change engine oil and filter 130-F-1, 130-F-2
Change main engine gear case oil 130-I-1, 130-J-2
Check air filter elements 130-G-15
Check engine debris management air filter 130-G-12
Check engine oil 130-A-2
Check engine valve lash 130-J-2
Check water separator 130-G-2
Clean alternator screen 130-O-2
Clean charge air cooler 130-A-3, 130-B-5
Clean condenser 130-A-3, 130-B-5
Clean Diesel Exhaust Fluid (DEF) tank breather 130-F-3
Clean fuel precleaner filter 130-B-4, 130-G-1
Clean fuel tank breather 130-F-3

Clean oil cooler 130-A-3, 130-B-5
Clean radiator 130-A-3, 130-B-5
Clean rotary screen 130-A-3, 130-B-5
Clean water separator primary fuel filter . 130-B-5
Drain water from air compressor reservoir 130-A-5
Grease variable speed driven sheaves ... 130-G-3
Grease variable speed driver sheaves ... 130-G-3
Inspect coolant level 130-A-3
Inspect crankshaft damper 130-M-1
Inspect fuel precleaner filter 130-A-5
Replace Diesel Exhaust Fluid (DEF) tank breather 130-G-15
Replace fuel tank breather 130-G-15
Replace hydraulic/hydrostatic charge filter 130-G-11
Replace hydrostatic charge filter 130-G-12
Replace main engine gear case filter 130-C-1, 130-G-12
Replace main engine gear case lube filter 130-C-1, 130-G-14
Replace primary fuel filter 130-G-2
Replace secondary fuel filter 130-G-2
Every 1000 hours 110-11
Feed accelerator
Grease feed accelerator bearings 130-G-5
Feeder house
Change feeder house reverser gear case oil 130-H-1
Check feeder house reverser drive gear case oil 130-B-3
Clean lateral tilt feeder house 130-B-3
Clean multi-speed feeder house drive gear case 130-G-14
Clean stone trap 130-A-6
Grease feeder house slip clutch 130-G-14
Grease variable speed feeder house reverser drive gear case 130-A-6, 130-B-2
Grease variable speed feeder house upper sheaves 130-B-3
Filling
Diesel Exhaust Fluid (DEF) tank (Final Tier 4/ Stage V) 130-P-2
Filling cooling system 130-P-12
Filling fuel tank 125-1, 130-P-5
Fire extinguisher 115-1
Charge 115-2
Inspect fire extinguisher 130-G-13
Inspect fire extinguisher straps 130-O-4
Fire preventions 115-1
Flushing
Heavy-duty fuel precleaner filter (optional) 130-P-7
Fuel tank shut-off valve 130-P-6
Grain tank
Check loading auger gear case oil 130-G-14
Clean mass flow sensor 130-B-5
Grease chopper driveshaft bearing 130-G-4
Grease unloading auger upper gear case 130-G-3
Grease unloading driveshaft bearing 130-G-4
Grease vertical unloading auger upper gear case 130-G-4
Header pump
Grease header drive pump sheave bearing 130-G-3
Hydraulic system
Change hydraulic reservoir filter 130-I-2
Change hydraulic reservoir oil 130-J-1
Check hydraulic reservoir oil level 130-A-4
Check main engine gear case oil level ... 130-A-4
Hydraulic system cleanliness 130-1
Interval chart 110-9
Lubrication decal location 130-1
Lubrication symbols 130-3
Overshot beater
Change overshot beater gear case oil 130-J-3
Check overshot beater gear case oil 130-G-8
Grease overshot beater bearings 130-G-7
Primary countershaft
Change primary countershaft gear case oil 130-J-3
Check primary countershaft gear case oil 130-G-13
Grease primary countershaft 130-E-1
Grease primary countershaft bearing 130-G-7
Grease primary countershaft universal joint spline 130-G-4
Rear wheel bolt torque 85-21
Reel pump
Grease reel drive pump sheave bearing . 130-G-3
Removing
Air cleaner filters 130-P-13
Engine debris management air filter (Final Tier 4/ Stage V) 130-P-15
Tine feed accelerator comb floor (Rice machines) 65-3
Unloading auger drive chain links 75-9
Replacing
Advanced PowerCast spreader disks 70-23
Chopper blades 70-16, 70-17
Discharge beater wear strips 65-41
Disk assemblies (Dual speed) 70-27
Disk assemblies (Single speed) 70-26
Heavy-duty fuel precleaner filter (optional) 130-P-8
Hydraulic hose 130-1
Middle splitter knife 70-18
Primary and secondary fuel filter 130-P-8
Standard discharge beater wear strips 65-42
Standard feed accelerator wear strips 65-1
Standard overshot beater wings (if equipped) ... 65-44
Stationary knives (electric actuator) 70-14
Stationary knives (without electric actuator) 70-13
Tine feed accelerator wear strips 65-2
Tough crop discharge beater wear strips 65-43
Tough crop feed accelerator wear strips 65-1

Tough crop overshot beater wings (if equipped) 65-45
Separator
Change separator drive oil 130-J-2
Check separator drive oil 130-G-8
Check two-speed separator drive oil 130-B-5
Cycle separator variable speed driven sheave .. 130-B-3
Cycle separator variable speed driver sheave ... 130-B-3
Grease separator bearing 130-G-7
Grease separator variable speed driven sheave 130-B-4, 130-E-2
Grease separator variable speed driver sheave 130-B-4, 130-E-2
Grease variable speed driver sheave 130-G-4
Separator wear liners 65-12
Service interval
Clearing 130-1
Setup 130-1
Service interval chart
As required 130-O-1
Every 10 hours 130-A-1
Every 50 hours 130-B-1
Every 100 hours 130-D-1
Every 200 hours 130-E-1
Every 250 hours 130-F-1
Every 400 hours 130-G-1, 130-G-6, 130-G-10
Every 800 hours 130-H-1
Every 1000 hours 130-I-1
Every 2000 hours 130-J-1, 130-K-1
Every 3500 hours 130-L-1
Every 4500 hours 130-M-1
Every 6000 hours 130-N-1
Every five years 130-M-1
Every six years 130-N-1
Every three years 130-K-1, 130-L-1
First 100 hours 130-C-1
Spreader
Grease spreader disk 130-G-8
Tailings augers
Grease tailings auger drive slip clutch 130-G-6
Tailings elevator
Grease tailings elevator slip clutch 130-A-7, 130-B-6
Tailings system
Camera desiccant 130-G-16, 130-O-3
Clean tailings system camera .. 130-A-7, 130-O-3
Tires
Check bolt torque 130-D-1
Check tire pressure 130-D-1
Track Replacement 110-10
Transmission
Change transmission oil 130-J-3
Check brake fluid 130-G-13
Check park brake cylinder cables 130-G-11
Check transmission oil 130-G-11
Winterize cooling system 130-P-12
Maintenance
Replacement Criteria 110-10
Manage devices
Phone 45-K-3
Map light
Replacing 80-20
Marker lights
Replacing 80-20
Mass flow sensor
Maintenance
Cleaning mass flow sensor 130-B-5
Troubleshooting 135-19
Mass flow vibration 45-L-1
Mass flow vibration calibration procedure 45-L-2
Master cylinder
Grease
Master cylinder pivot pin (HillMaster™ machines) 130-A-7
Max speed 1 and 2 ..... 45-I-2
Metric bolt and screw torque values 145-19
Millet
Crop settings 100-7
Minimum reel speed 45-C-5
Mixing lubricants 125-17
Moisture
Payable moisture and density chart 100-18
Moisture alarm 45-D-4
Moisture correction 45-D-4
Moisture sensor
Cleaning 130-G-15, 130-O-2
Procedure 45-L-2
Troubleshooting 135-19
Moisture sensor calibration 45-L-2
Moisture settings 45-D-3
Multi-function lever 45-A-2, 45-M-6
Auto header control combinations 95-2
Multi-function lever controls setup 45-A-2
Multicoupler
Attaching 55-24
Mustard
Crop settings 100-8

N

Navigation bar 45-M-8
Navy Beans
Crop settings 100-8
Non-serviceable
Chaffer/sieve/return pan assemblies 65-57

O

Oats
Crop settings 100-9
Object detection sensor (Final Tier 4/Stage V) .. 35-4

Offset details 45-O-7
Offset tuning chaffer 45-O-18
Offset tuning cleaning fan 45-O-21
Offset tuning sieve 45-O-19
Oil
  Engine
    Interim tier 4, final tier 4, stage IIIB, stage IV, and stage V 125-12
    Tier 2 and stage II 125-12
Oil cooler
  Cleaning 130-A-3, 130-B-5
Oilscan 125-14
Operate
  Track benefits 110-5
  Track components 110-5
  Track features 110-5
  Track machines 110-6
  Track tensioning system 110-8
Operate ether injection (if equipped) 45-M-15
Operate lights 45-M-13
Operate turn signals, horn, and high and low beam .. 45-M-14
Operate windshield wiper and washer 45-M-15
Operating speeds (S760 and S770) 145-1
Operating speeds (S780, S785 and S790) 145-3
Operation at low temperatures 95-1
Operator's manual 110-1
Operator's station
  Cab ladder positions 20-4
    Fold/unfold from ground (Track machines) .. 110-3
    Fold/unfold from landing (Track machines) . 110-3
    Swing (Track machines) 110-2
  Handrails 20-7
  Right-hand landing access 20-7
Optimize performance 45-O-18
Out of cab adjustments 45-B-6
Out-of-cab adjustments 45-O-26
Outside configuration 45-F-11
Outside temperature 45-H-3
Overhead controls 45-M-12
Overshot beater
  Adjusting
    Belt (if equipped) 65-43
  Change overshot beater gear case oil 130-J-3
  Check overshot beater gear case oil 130-G-8
  Grease bearings 130-G-7
  Removing
    Floor (if equipped) 70-9
  Replacing
    Belt (if equipped) 65-44
    Standard wings (if equipped) 65-44
    Tough crop wings (if equipped) 65-45

P

Pairing Bluetooth® device 45-K-4
Panels
  Feeder house 55-1
  Gull wing doors 60-1
    Cylinder adjustment 60-2
  Left-hand side 60-2
  Right-hand side 60-4
  Separator covers 60-4
  Toolbox (If Equipped) 60-2
Park brake 45-M-30
Parked filter cleaning 45-G-4
Peas
  Crop settings 100-9
Performance check
  Power shutdown 100-16
Performance issues 45-O-22
Performance monitor 45-O-4
Performance target 45-F-14
Phone
  Access 45-K-1
  Add favorite page 45-K-2
  Advanced settings 45-K-3
  Edit favorite page 45-K-3
  Favorites page 45-K-4
  Main page 45-K-1
  Manage devices 45-K-3
  Pairing Bluetooth® device 45-K-4
  Recent calls 45-K-5
Popcorn
  Crop settings 100-10
Posi-Torq
  Speed ranges 65-35
Power shutdown procedure 100-16
PowerCast™ tailboard (optional)
  Adjusting 70-7
  Rear shrouds 70-8
PowerCast™ tailboard blade (optional)
  Replacing 70-7
Premium radio
  Auxiliary page 45-N-2
  Bluetooth® page 45-N-2
  CD tab 45-N-5
  USB tab 45-N-4
Preset 45-F-3
Pressure
  Care and service of tires 85-1
  Checking tires 85-3, 85-5, 85-8, 85-9
    HillMaster™ 85-7, 85-10
Preview 45-1
Primary countershaft
  Change primary countershaft gear case oil .. 130-J-3
  Check primary countershaft gear case oil . 130-G-13
  Grease bearing 130-G-7
ProDrive™ (if equipped) 45-M-29

ProDrive™ transmission
Advanced settings ProDrive™ limp home mode ... 45-I-3
Advanced settings ProDrive™ tow mode.....45-I-2
Engine speed management..... 35-5
Gear case
Oil recommendations 125-14
Limp home mode.....45-I-2
Tow mode 45-I-2
Push button shift gear (if equipped).....45-M-29
Push button transmission
Tow mode 45-I-4

Q

Quick stop switch.....45-M-31

R

Radiator
Adjusting
Rotary screen brush 130-Q-14, 130-R-15
Check coolant level 30-2
Cleaning 130-A-3, 130-B-5
Draining system.....130-P-10
Filling system 130-P-12
Maintenance
Change engine coolant..... 130-N-1
Replacing
Fan drive belt (Final Tier 4/Stage V)
13.5 L..... 130-R-13
Rotary screen belt.....130-Q-3, 130-R-5
Rotary screen drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L..... 130-R-10
Rotary screen drive belt (Tier 2/Stage II)
9.0 L 130-Q-4
13.5 L..... 130-R-7
Vacuum fan drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L.....130-R-11
Vacuum fan driven belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Variable speed drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Routing
Rotary screen belt.....130-Q-3, 130-R-5
Winterize system 130-P-12
Radio.....20-1, 45-M-22
After market radios..... 20-1
Antenna..... 20-2
CB mounting 20-3
CB wiring 20-2
Controls..... 20-2
Frequency 20-1
Seek.....45-M-28
Raise/lower speed..... 45-C-6
Raising machine
Jack pocket locations decal.....85-24
Pocket locations 85-25, 90-11
Rape Seed (Dry)
Crop settings..... 100-10
Rape Seed (Green)
Crop settings..... 100-11
Rear ladder and landing 130-P-1
Recent calls 45-K-5
Reel and cutterbar calibration procedure 45-L-21
Reel and cutterbar position..... 45-L-20
Reel and cutterbar position calibration procedure 45-L-21
Reel position 45-L-21
Reel position calibration procedure..... 45-L-21
Reel position resume..... 45-C-23
Reel pump
Grease reel drive pump sheave bearing 130-G-3
Reel raise and lower and reel fore and aft (if equipped) 45-M-33
Refueling, avoid static electricity risk..... 10-5, 125-1
Required machine stop warning 35-3
Residue management.....45-B-1
Access residue management 45-B-1
Auto swap 45-B-7
Direction 45-B-5
Grease spreader disk 130-G-8
Intermediate/Deluxe residue 70-1
Knife bank.....45-B-6
Out of cab adjustments.....45-B-6
Premium residue 70-1
Residue management.....45-B-1
Residue mode 45-B-2
Separator vane 45-B-3
Speed.....45-B-4
Straw spreader..... 70-1
Swap.....45-B-6
Width.....45-B-3
Residue material handling option
Intermediate/Deluxe residue 70-1
Premium residue 70-1
Straw spreader..... 70-1
Residue mode.....45-B-2
Response aggressiveness
Auto maintain 45-O-28
HarvestSmart™ 45-O-11
Resume preferences 45-C-20
Rice
Crop settings..... 100-11
Right-hand cab items..... 45-M-9
Road transport disconnect.....45-M-29
Road transport speed
Specifications 110-7
Road transporting..... 90-1
Header attached..... 85-1, 90-1

Rotary screen
Adjusting
Brush....130-Q-14, 130-R-15
Cleaning 130-A-3, 130-B-5
Replacing
Belt....130-Q-3, 130-R-5
Drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L.... 130-R-10
Drive belt (Tier 2/Stage II)
9.0 L 130-Q-4
13.5 L.... 130-R-7
Routing
Belt....130-Q-3, 130-R-5
Rotor
Installing
Threshing elements (TriStream rotor).....65-28
Threshing elements (Variable Stream rotor) 65-32
Threshing tines (TriStream rotor).....65-28
Threshing tines (Variable Stream rotor) 65-32
Removing
Threshing elements (TriStream rotor).....65-28
Threshing elements (Variable Stream rotor) 65-32
Threshing tines (TriStream rotor).....65-28
Threshing tines (Variable Stream rotor) 65-32
Separator tine location (TriStream rotor dense pack configuration) 65-31
Separator tine location (TriStream rotor tough grain rotor configuration) 65-30
Separator tine location (Variable Stream rotor dense pack configuration).....65-35
Separator tine location (Variable Stream rotor standard configuration) 65-34
Threshing element location (TriStream rotor dense pack configuration).....65-31
Threshing element location (TriStream rotor tough grain rotor configuration) 65-30
Threshing element location (Variable Stream rotor dense pack configuration).....65-35
Threshing element location (Variable Stream rotor standard configuration) 65-34
Row width 45-C-5
Rye
Crop settings..... 100-12

S

Safety
Back-up alarm 90-4
Battery safe installation..... 80-3
Decals
Jack pocket locations 85-24
Machine tie down locations 90-10
Feeder house stop 55-1
Fire extinguisher..... 20-5, 20-6, 115-3, 115-4
Charge..... 115-2
Checklist..... 115-1
Locations 20-6, 115-5
Operating..... 115-1
Recommended fire preventions 115-1
Halogen bulb safety rules 80-11
Header transport..... 10-3
Heated and ventilated operator's seat 10-7
Jack pocket locations 85-25, 90-11
Machine features 05-1
Machine tie down locations 90-10
Operator ability..... 10-2
Safe maintenance, practice 10-8
Tires, service safely 10-11
Safety signs
Accumulator decal..... 110-1
Safety Signs
Cab/platform access ladder 110-1
Operator's manual..... 110-1
Safety, Avoid High-Pressure Fluids
Avoid High-Pressure Fluids 10-10
Safety, Handle Fuel Safely, Avoid Fires
Avoid Fires, Handle Fuel Safely ..10-4, 115-2, 125-1
Safety, lubricants..... 125-17
Safflower
Crop settings..... 100-12
Save preset.....45-F-6
Scroll button.....45-A-5
Seat belts.....45-M-19
Inspect 130-G-13
Seat controls 45-M-12
Seek.....45-M-28
Sensor
ActiveYield™ 75-4
Adjusting
Grain tank fill..... 75-2
Separator
Adjusting
Chaffer motor 65-57
Chaffer switch.....65-53
Clean grain elevator belt 65-58
Clean grain elevator conveyor chain.....65-59
Cleaning fan actuator (Active Terrain Adjustment) 65-49
Cleaning fan actuator (Non—Active Terrain Adjustment) 65-49
Cleaning fan belt 65-48
Cleaning shoe belt 65-48
Conveyor auger belt 65-48
Countershaft right-hand front belt 65-46
Countershaft right-hand rear belt.....65-46
Discharge beater belt 65-38
Dual zone adjust rear chaffer 65-53
Feed accelerator belt 65-6

Front chaffer 65-50
Overshot beater belt (if equipped) 65-43
Sheave drive gap..... 65-36
Sieve motor 65-57
Sieve switch..... 65-53
Speeds 65-35
Tailings elevator drive belt..... 65-63
Tailings system drive belt..... 65-64
Tailings system drive chain..... 65-65
Tailings system elevator paddle chain 65-63
Tailings system elevator paddles..... 65-63
Tailings system rasp bars 65-68
Tailings system return concave..... 65-69
Tailings system wear strips..... 65-68
Upper tailings auger drive chain..... 65-64
Air chutes..... 70-9
Auger bed dividers 65-37
Chaffer/sieve/return pan assemblies
Non-serviceable 65-57
Changing
High speed high capacity feed accelerator speed 65-7
Standard speed high capacity feed accelerator speed 65-7
Cleaning
Clean grain elevator camera..... 65-61
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Tailings auger..... 65-69
Tailings system elevator camera 65-61
Tailings system elevator sensors..... 65-62
Cleaning shoe access door 65-47
Cleaning shoe air chutes 65-47
Cleaning shoe auger gears
Cleanout door (if equipped)..... 65-48
Manual cleanout door..... 65-47
Concave recommendations 65-8
Concave sector gear shear bolts (Standard Concave Adjust) 65-12
Concave types..... 65-8
Covers 60-4
Deep-tooth chaffer..... 65-52
Deep-tooth sieve 65-53
Fixed front chaffer 65-50
General purpose sieve..... 65-53
General-purpose chaffer..... 65-51
Grate covers (If equipped) 65-9
Grate interrupter locations (If equipped)..... 65-11
Grate interrupters (If equipped)..... 65-10
Grate spacers..... 65-9
Grate types..... 65-9
Grease separator bearing 130-G-7
High-performance chaffer..... 65-52
Installing
Chaffer elements 65-55
Concave sections (Active Concave Isolation) ... 65-16
Concave sections (Standard Concave Adjust) .. 65-13
Sieve elements 65-55
Tailings system rasp bars 65-66
Tailings system wear strips..... 65-66
Threshing elements (TriStream rotor)..... 65-28
Threshing elements (Variable Stream rotor) 65-32
Threshing tines (TriStream rotor)..... 65-28
Threshing tines (Variable Stream rotor) 65-32
Left-hand drive belts 65-70
Leveling
Concave (Active Concave Isolation)..... 65-24
Concave (Standard Concave Adjust)..... 65-22
Maintenance
Change separator drive oil..... 130-J-2
Check separator drive oil..... 130-G-8
Check two-speed separator drive oil..... 130-B-5
Cycle separator variable speed driven sheave .. 130-B-3
Cycle separator variable speed driver sheave ... 130-B-3
Grease separator variable speed driven sheave 130-B-4, 130-E-2
Grease separator variable speed driver sheave 130-B-4, 130-E-2
Grease variable speed driver sheave..... 130-G-4
Measuring
Chaffer..... 65-51
Sieve..... 65-51
Posi-Torq
Speed ranges..... 65-35
Premium corn chaffer 65-52
Rail liners..... 65-12
Removing
Chaffer elements 65-55
Concave sections (Active Concave Isolation) ... 65-16
Concave sections (Standard Concave Adjust) .. 65-13
Overshot beater floor (if equipped)..... 70-9
Sieve elements 65-55
Tailings system rasp bars 65-66
Tailings system wear strips..... 65-66
Threshing elements (TriStream rotor)..... 65-28
Threshing elements (Variable Stream rotor) 65-32
Threshing tines (TriStream rotor)..... 65-28
Threshing tines (Variable Stream rotor) 65-32
Tine feed accelerator comb floor (Rice machines) 65-3
Replacing
Clean grain elevator belt 65-58
Cleaning fan belt 65-48, 65-50

Cleaning shoe belt 65-48
Conveyor auger belt 65-48
Countershaft right-hand front belt 65-46
Countershaft right-hand rear belt 65-47
Discharge beater belt 65-38
Discharge beater wear strips 65-41
Discharge beater wear strips (Tough Crop) . 65-43
High speed high capacity feed accelerator belt . 65-5
Overshot beater belt (if equipped) 65-44
Standard discharge beater wear strips 65-42
Standard feed accelerator wear strips 65-1
Standard overshot beater wings (if equipped) ... 65-44
Standard speed high capacity feed accelerator belt 65-5
Tailings system drive belt 65-64
Tailings system drive chain 65-65
Tine feed accelerator wear strips 65-2
Tough crop feed accelerator wear strips 65-1
Tough crop overshot beater wings (if equipped) 65-45
Variable drive belt 65-37
Right-hand drive belts 65-71
Separator tine location (TriStream rotor dense pack configuration) 65-31
Separator tine location (TriStream rotor tough grain rotor configuration) 65-30
Separator tine location (Variable Stream rotor dense pack configuration) 65-35
Separator tine location (Variable Stream rotor standard configuration) 65-34
Threshing element location (TriStream rotor dense pack configuration) 65-31
Threshing element location (TriStream rotor tough grain configuration) 65-30
Threshing element location (Variable Stream rotor dense pack configuration) 65-35
Threshing element location (Variable Stream rotor standard configuration) 65-34
Tine feed accelerator comb floor (Rice machines) . 65-2
Top cover vanes (If equipped) 65-28
Troubleshooting 135-1
Unplugging 65-72
Discharge beater 65-72
Feeder accelerator 65-72
Separator
Dual-range
Speeds 65-35
Separator engage 45-M-26
Separator losses 45-O-23
Separator resolution 45-F-13
Separator vane 45-B-3
Separator vane adjustments 45-O-25
Serial number identification 110-16, 110-17, 155-1, 155-2
Advance PowerCast™ tailboard (Intermediate and Premium residue) 155-6
Cab 155-4
Chopper (If equipped) 155-6
Engine (Final Tier 4/Stage V) 155-4
Engine (Tier 2/Stage II) 155-3
Engine gear case 155-5
Feeder house reverser 155-5
Hydrostatic drive motor 155-4
Hydrostatic drive pump 155-4
Interpreting engine serial number 155-3
Multi-speed feeder house gear case (If equipped) . 155-6
PowerCast tailboard (Deluxe residue) 155-6
Rotor drive gear case 155-5
Spreader (Deluxe residue) 155-7
Transmission 155-5
Two speed four-wheel drive motor 155-5
Vane tailboard (Deluxe, Intermediate and Premium residue) 155-6
Service
2000 hours
Replace DEF in-line filter 130-K-2
2000 Hours/36 Months
Changing DEF dosing unit filter 130-K-1, 130-L-1
4500 hours
Replace DEF in-line filter 130-L-2
Access
Diesel Exhaust Fluid (DEF) dosing unit filter (Final Tier 4/Stage V) 130-P-4
Diesel Exhaust Fluid (DEF) tank in-line filter (Final Tier 4/Stage V) 130-P-4
Accumulator pressure 130-2
Adjusting
Belt first 50 hours 25-3
Clean grain elevator conveyor chain 65-59
Grain tank covers (If equipped) 75-3
Grain tank loading auger (Grain tank covers) 75-7
Unloading auger cradle support 75-10
Unloading auger drive chain 75-9
Unloading auger position 75-10, 75-11
Air conditioner
Clean drain hose 130-A-6
As required
Cleaning DEF tank 130-P-4
Basic tire information 85-2
Belt care and conditioning 110-9
Bleeding fuel system 130-P-10
Break-in check before first 100 hours 25-3
Break-in service after 100 hours (Tier 2/Stage II) .. 25-4
Break-in service after 400 hours (Final Tier 4/Stage V) 25-4
Breaking-in engine 25-1

Cab
Clean cab fresh air filter 130-B-6, 130-O-1
Clean recirculating filter 130-E-1, 130-O-1
Fill windshield washer reservoir 130-O-2
Inspect seat belts..... 130-G-13
Care and service of tires 85-1
Centering
Chopper blades..... 70-19
Check coolant level 30-2
Check engine oil..... 30-1
Check hydraulic reservoir oil..... 30-2
Check hydrostatic oil..... 30-2
Checking
Diesel Exhaust Fluid (DEF) tank breather (Final Tier 4/Stage V) 30-4
Checking fuel system 30-3
Checking fuel tank breather..... 30-4
Checking tire pressure..... 85-3, 85-5, 85-8, 85-9
HillMaster™ 85-7, 85-10
Clean grain elevator
Camera desiccant..... 130-G-16, 130-O-3
Clean camera..... 130-B-6, 130-O-3
Clean moisture sensor..... 130-G-15, 130-O-2
Wear plates and door..... 65-60
Cleaning
Clean grain elevator camera..... 65-61
Fuel precleaner..... 130-P-6
Heavy-duty fuel precleaner filter (optional)130-P-8
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Mass flow sensor (Grain tank covers)..... 75-9
Mass flow sensor (Grain tank extensions) ... 75-8
Qucik response (QR) code..... 120-1
Tailings system camera..... 65-61
Cleaning engine compartment 30-8, 115-5
Cleaning fan
Grease cleaning fan bearings 130-G-7
Grease cleaning fan variable lower sheave130-B-4
Grease cleaning fan variable upper sheave 130-B-4
Cleaning tracks 110-8
Cleanout areas..... 110-8
Conveyor auger
Grease conveyor auger slip clutch..... 130-G-7
Daily..... 110-10
Discharge beater
Grease discharge beater bearings..... 130-G-7
Draining
Diesel Exhaust Fluid (DEF) tank (Final Tier 4/ Stage V)..... 130-P-3
Water separator primary filter..... 130-P-6
Draining cooling system 130-P-10
Draining fuel tank..... 130-P-5
Drive wheel bolt torque 85-11
Drives
Change final drive oil 130-J-2
Check final drive oil 130-G-8
Grease final drive couplers..... 130-B-6
Grease final drive outer bearing 130-A-6, 130-B-2
Grease final drive pivot (HillMaster™ machines) 130-A-7
Grease header tilt primary cylinder pivot pin (HillMaster™ machines)..... 130-A-8
Grease leveling cylinder barrel (HillMaster™ machines) 130-A-7, 130-A-8
Grease master cylinder pivot pin (HillMaster™ machines) 130-A-7
Grease rear axle tie rods..... 130-G-8
Grease two-speed four-wheel drive motor pivots 130-A-5, 130-B-2
Grease two-wheel drive extra heavy-duty spindle bearings and pivot pins..... 130-A-5, 130-B-2
Grease two-wheel drive heavy-duty spindle bearings and pivot pins..... 130-A-5, 130-B-2
Electrical
Check batteries..... 130-G-11
Engine
Change engine coolant..... 130-N-1
Change engine oil and filter..... 130-F-1, 130-F-2
Change main engine gear case oil130-I-1, 130-J-2
Charge air cooler..... 130-A-3, 130-B-5
Check air filter elements..... 130-G-15
Check engine debris management air filter..... 130-G-12
Check engine oil..... 130-A-2
Check engine valve lash 130-J-2
Check water separator..... 130-G-2
Clean alternator screen..... 130-O-2
Clean condenser 130-A-3, 130-B-5
Clean Diesel Exhaust Fluid (DEF) tank breather 130-F-3
Clean fuel precleaner filter 130-B-4, 130-G-1
Clean fuel tank breather..... 130-F-3
Clean oil cooler..... 130-A-3, 130-B-5
Clean radiator..... 130-A-3, 130-B-5
Clean rotary screen 130-A-3, 130-B-5
Clean water separator primary fuel filter . 130-B-5
Drain water from air compressor reservoir130-A-5
Grease variable speed driven sheaves... 130-G-3
Grease variable speed driver sheaves ... 130-G-3
Inspect coolant level 130-A-3
Inspect crankshaft damper..... 130-M-1
Inspect fuel precleaner filter 130-A-5
Replace Diesel Exhaust Fluid (DEF) tank breather 130-G-15
Replace fuel tank breather..... 130-G-15
Replace hydraulic/hydrostatic charge filter..... 130-G-11
Replace hydrostatic charge filter 130-G-12

Replace main engine gear case filter.... 130-C-1, 130-G-12
Replace main engine gear case lube filter130-C-1, 130-G-14
Replace primary fuel filter..... 130-G-2
Replace secondary fuel filter..... 130-G-2
Every 1000 hours..... 110-11
Feeder house
Change feeder house reverser gear case oil 130-H-1
Check feeder house reverser drive gear case oil 130-B-3
Clean lateral tilt feeder house 130-B-3
Clean multi-speed feeder house drive gear case 130-G-14
Clean stone trap..... 130-A-6
Grease feeder house slip clutch..... 130-G-14
Grease variable speed feeder house reverser drive gear case..... 130-A-6, 130-B-2
Grease variable speed feeder house upper sheaves 130-B-3
Filling
Diesel Exhaust Fluid (DEF) tank (Final Tier 4/ Stage V)..... 130-P-2
Filling cooling system 130-P-12
Filling fuel tank..... 125-1, 130-P-5
Fire extinguisher..... 115-1
Charge..... 115-2
Inspect fire extinguisher 130-G-13
Inspect fire extinguisher straps 130-O-4
Fire preventions 115-1
Flushing
Heavy-duty fuel precleaner filter (optional)130-P-7
Fuel tank shut-off valve..... 130-P-6
Grain tank
Check loading auger gear case oil..... 130-G-14
Clean mass flow sensor..... 130-B-5
Grease chopper driveshaft bearing 130-G-4
Grease unloading auger upper gear case 130-G-3
Grease unloading driveshaft bearing 130-G-4
Grease vertical unloading auger upper gear case 130-G-4
Header pump
Grease header drive pump sheave bearing 130-G-3
Hydraulic system
Change hydraulic reservoir filter..... 130-I-2
Change hydraulic reservoir oil 130-J-1
Check hydraulic reservoir oil level 130-A-4
Check main engine gear case oil level... 130-A-4
Hydraulic system cleanliness 130-1
Installing front wheels..... 85-17
Interval
Clearing..... 130-1
Setup..... 130-1
Interval chart 110-9
As required..... 130-O-1
Every 10 hours 130-A-1
Every 50 hours 130-B-1
Every 100 hours..... 130-D-1
Every 200 hours..... 130-E-1
Every 250 hours..... 130-F-1
Every 400 hours..... 130-G-1, 130-G-6, 130-G-10
Every 800 hours..... 130-H-1
Every 1000 hours 130-I-1
Every 2000 hours 130-J-1, 130-K-1
Every 3500 hours 130-L-1
Every 4500 hours 130-M-1
Every 6000 hours 130-N-1
Every five years 130-M-1
Every six years 130-N-1
Every three years 130-K-1, 130-L-1
First 100 hours 130-C-1
Overshot beater
Change overshot beater gear case oil..... 130-J-3
Check overshot beater gear case oil 130-G-8
Grease discharge beater bearings..... 130-G-7
Preparing dual wheels 85-12
Primary countershaft
Change primary countershaft gear case oil130-J-3
Check primary countershaft gear case oil130-G-13
Grease primary countershaft..... 130-E-1
Grease primary countershaft bearing..... 130-G-7
Grease primary countershaft universal joint spline 130-G-4
Rear wheel bolt torque..... 85-21
Reel pump
Grease reel drive pump sheave bearing . 130-G-3
Removing
Air cleaner filters 130-P-13
Engine debris management air filter (Final Tier 4/ Stage V)..... 130-P-15
Tine feed accelerator comb floor (Rice machines)..... 65-3
Unloading auger drive chain links..... 75-9
Removing front wheels 85-13
Replacing
Advanced PowerCast spreader disks..... 70-23
Chopper blades..... 70-16, 70-17
Discharge beater wear strips 65-41
Disk assemblies (Dual speed)..... 70-27
Disk assemblies (Single speed)..... 70-26
Heavy-duty fuel precleaner filter (optional)130-P-8
Hydraulic hose..... 130-1
Middle splitter knife 70-18
Primary and secondary fuel filter..... 130-P-8
Standard discharge beater wear strips 65-42
Standard feed accelerator wear strips..... 65-1
Standard overshot beater wings (if equipped) ... 65-44
Stationary knives (electric actuator)..... 70-14

Stationary knives (without electric actuator) 70-13
Tine feed accelerator wear strips 65-2
Tough crop discharge beater wear strips 65-43
Tough crop feed accelerator wear strips 65-1
Tough crop overshot beater wings (if equipped) 65-45
Separator
Change separator drive oil 130-J-2
Check separator drive oil 130-G-8
Check two-speed separator drive oil 130-B-5
Cycle separator variable speed driven sheave 130-B-3
Cycle separator variable speed driver sheave 130-B-3
Grease separator bearing 130-G-7
Grease separator variable speed driven sheave 130-B-4, 130-E-2
Grease separator variable speed driver sheave 130-B-4, 130-E-2
Grease variable speed driver sheave 130-G-4
Separator rail liners 65-12
Spreader
Grease spreader disk 130-G-8
Tailings auger
Grease feed accelerator bearings 130-G-5
Grease tailings auger drive slip clutch 130-G-6
Tailings elevator
Grease tailings elevator slip clutch 130-A-7, 130-B-6
Tailings system
Camera desiccant 130-G-16, 130-O-3
Clean tailings system camera 130-A-7, 130-O-3
Tires
Check bolt torque 130-D-1
Check tire pressure 130-D-1
Track Replacement 110-10
Transmission
Change transmission oil 130-J-3
Check brake fluid 130-G-13
Check park brake cylinder cables 130-G-11
Check transmission oil 130-G-11
Winterize cooling system 130-P-12
Set performance target 45-O-21
Set temperature 45-H-2
Settings
Ballast requirements 85-23, 85-24
Changing chopper speeds 70-20
Chopper controller bar (optional) 70-10
Concave recommendations 100-16
Crop
Alfalfa 100-1
Barley 100-1
Canola 100-2
Chickpeas 100-2
Corn (Dry) 100-3
Corn (Wet) 100-3
Corn Cob Mix 100-4
Edible Beans 100-4
Flax 100-5
Footnotes description page 100-15
Grass Seed 100-5
Guar (Cluster Beans) 100-6
Lentils 100-6
Lupins 100-7
Millet 100-7
Mustard 100-8
Navy Beans 100-8
Oats 100-9
Peas 100-9
Popcorn 100-10
Rape Seed (Dry) 100-10
Rape Seed (Green) 100-11
Rice 100-11
Rye 100-12
Safflower 100-12
Sorghum 100-13
Soybeans 100-13
Sunflower 100-14
Triticale 100-14
Wheat Difficult 100-15
Wheat Normal 100-15
Crop diverter 70-8
Drum height (Hydraulic tilt) 55-9
Drum height (Manual tilt) 55-8
Front and rear tire information 85-10
Harvesting tips 95-1
Operation at low temperatures 95-1
Power shutdown procedure 100-16
Stationary knife bank (without electric actuator) 70-10
Tailboard vanes 70-5, 70-6, 70-22
Tailings system return concave 65-69
Shear bolt
Unloading auger drive 75-6
Location 75-6
Shear screw location
Single point latching 55-29
Shield
Cleaning
Machine cleanout (Annual cleanout and Specialty Crops) 120-7
Machine cleanout (Periodic cleanout) 120-1
Shields
Feeder house 55-1
Feeder house doors 55-2
Gull wing doors 60-1
Cylinder adjustment 60-2
Left-hand side 60-2
Right-hand side 60-4
Separator covers 60-4
Toolbox (If Equipped) 60-2
Shoe losses 45-O-23

Shoe resolution 45-F-14
Side finder lights
Replacing 80-19
Sieve
Adjusting
Motor 65-57
Adjusting switch 65-53
Deep-tooth sieve 65-53
General purpose sieve 65-53
Installing
Elements 65-55
Measuring 65-51
Removing
Elements 65-55
Sieve adjust 45-M-28
Sieve clearance 45-F-10
Signal words, understand 10-1
Single point
Adjusting
Lower cable end (level land) 55-27
Cleaning
Latching pins 55-28
Shear screw location 55-29
Unlatching
Pins 55-28
Single-point
Adjusting
Latching 55-26
Latching 55-24
Slip clutch
Grease feeder house slip clutch 130-G-14
Solutions 45-O-24
Sorghum
Crop settings 100-13
Sound level 145-15
Soybeans
Crop settings 100-13
Specifications 110-12
Dimension reference points 110-15, 145-14
Dimensions (S760 and S770) 145-10
Dimensions (S770 HillMaster™) 145-11
Dimensions (S780 HillMaster™, S785 HillMaster™ and S790 HillMaster™) 145-13
Dimensions (S780, S785 and S790) 145-12
Machine dimensions 110-14
Machine specifications (S760 and S770) 145-5
Machine specifications (S780, S785, and S790) ... 145-7
Operating speeds (S760 and S770) 145-1
Operating speeds (S780, S785 and S790) 145-3
Road speeds 110-7
Sound level 145-15
Track module dimensions 110-13
Whole body vibration 145-15
Speed 45-B-4
Speed limit 45-O-10
Spreader
General information 70-24
Grease spreader disk 130-G-8
Lowering 70-25
Replacing
Advanced PowerCast spreader disks 70-23
Disk assemblies (Dual speed) 70-27
Disk assemblies (Single speed) 70-26
Wide spread straw spreader (optional) 70-27
Windrow position 70-24
Standard weights chart 100-18
Starting fluid
Changing 130-P-1
Operation 35-6
Safety 35-6
Stationary knife bank
Adjusting (without electric actuator) 70-10
Installing (electric actuator) 70-12
Removing (electric actuator) 70-11
Replacing knives (electric actuator) 70-14
Replacing knives (without electric actuator) .. 70-13
Status center 45-D-5
Steering
Troubleshooting 135-7
Stone trap 55-4
Clean 130-A-6
Storage
Preparing machine 140-1
Removing machine from storage 140-1
Winterize cooling system 130-P-12
Storing fuel 125-2
Straw conditions 45-F-5
Straw quality issues 45-O-24
Stubble lights
Replacing 80-18
Sunflower
Crop settings 100-14
Swap 45-B-6
Switch
Battery disconnect 80-6
Chaffer adjusting 65-53
Chopper adjusting 70-20
Lighting delay/Timeout 50-8
Sieve adjusting 65-53
Switches
HillMaster™ leveling control 105-3

T

Tailboard
Adjusting 70-3
PowerCast™ (optional) 70-7
Vane settings 70-5, 70-6, 70-22
Vanes 70-4, 70-21
PowerCast™ (optional)
Rear shrouds 70-8

Replacing
PowerCast™ blades (optional) 70-7
Tailings auger
Maintenance
Grease tailings auger drive slip clutch.... 130-G-6
Tailings elevator
Adjusting
Drive belt 65-63
Upper drive chain 65-64
Camera 65-61
Maintenance
Grease tailings elevator slip clutch..... 130-A-7, 130-B-6
Sensors 65-62
Tailings system
Adjusting
Drive belt 65-64
Drive chain 65-65
Elevator paddles..... 65-63
Rasp bars 65-68
Return concave..... 65-69
Tailings elevator paddle chain 65-63
Wear strips 65-68
Cleaning
Auger cleanout 65-69
Tailings elevator camera..... 65-61
Tailings elevator sensors 65-62
Installing
Rasp bars 65-66
Wear strips 65-66
Maintenance
Camera desiccant 130-G-16, 130-O-3
Clean tailings system camera .. 130-A-7, 130-O-3
Removing
Rasp bars 65-66
Wear strips 65-66
Replacing
Drive belt 65-64
Drive chain 65-65
Tank unloading offset..... 45-D-2
Tensioning system 110-8
Testing diesel fuel 125-5
Threshing clearance..... 45-F-7
Threshing clearance (active concave isolation) 45-L-14
Threshing clearance (active concave isolation) calibration procedure..... 45-L-14
Threshing clearance (standard concave adjust) 45-L-3
Threshing clearance (standard concave adjust) calibration procedure..... 45-L-3
Threshing clearance adjust..... 45-M-26
Threshing conditions 45-F-4
Threshing elements
Location (TriStream rotor dense pack configuration) 65-31
Location (TriStream rotor tough grain rotor configuration) 65-30
Location (Variable Stream rotor dense pack configuration) 65-35
Location (Variable Stream rotor standard configuration) 65-34
Threshing elements (TriStream rotor)
Installing 65-28
Removing..... 65-28
Threshing elements (Variable Stream rotor)
Installing 65-32
Removing..... 65-32
Threshing speed 45-F-8
Threshing speed adjust 45-M-27
Threshing tines
Location (TriStream rotor dense pack configuration) 65-31
Location (TriStream rotor tough grain rotor configuration) 65-30
Location (Variable Stream rotor dense pack configuration) 65-35
Location (Variable Stream rotor standard configuration) 65-34
Threshing tines (TriStream rotor)
Installing 65-28
Removing..... 65-28
Threshing tines (Variable Stream rotor)
Installing 65-32
Removing..... 65-32
Threshing vanes
Top cover vanes (If equipped) 65-28
Tie down machine locations..... 90-10
Tie rods
Grease rear axle tie rods 130-G-8
Tilt frame
Adjusting
Feeder house (Manual tilt) 55-5
Set
Feeder house (Manual tilt) 55-5
Tilt frame zero point
Set
Feeder house (Hydraulic tilt)..... 55-6
Tilt indicator
Feeder house 55-23
Tilt sensitivity 45-C-9
Tilt speed 45-C-7
Tires
Ballast requirements 85-23, 85-24
Basic tire information..... 85-2
Care and service of tires 85-1
Change tire radius code 95-4
Checking pressure
Front tire..... 85-3, 85-5
HillMaster™ 85-7, 85-10
Rear tire 85-8, 85-9
Drive wheel bolt torque 85-11
Drive wheel starter stud 85-11
Front drive wheel offset..... 85-11

Front tire information 85-10
Installing
Front wheels 85-17
Liquid weight 85-21
Preparing dual wheels for service 85-12
Preparing dual wheels for transporting 85-12
Rear tire information 85-10
Rear wheel bolt torque 85-21
Removing
Front wheels 85-13
Tires, service safely 10-11
Toolbox 60-2
Torque charts
Metric 145-19
Unified inch 145-18
Tow hook
Front 90-12
Rear 90-13
Tow mode
ProDrive™ transmission 45-I-2
Towing
Machine 90-11
Machine forward 90-12
Machine rearward 90-13
Track Replacement Criteria 110-10
Tracks
Benefits 110-5
Components 110-5
Features 110-5
Trailer hitch
Manual (standard) 90-12
Semi-Automatic (Optional) 90-12
Transmission
Access transmission 45-I-1
Advanced settings ProDrive™ 45-I-2
Limp home mode 45-I-2
Tow mode 45-I-2
Advanced settings push button 45-I-4
Tow mode 45-I-4
Change transmission oil 130-J-3
Check brake fluid 130-G-13
Check park brake cylinder cables 130-G-11
Check transmission oil 130-G-11
Max speed 1 and 2 ..... 45-I-2
Transmission main page 45-I-1
Transmission main page 45-I-1
Transport
Road speed specifications 110-7
Transport information 90-11
Transporting machine
Hauling 90-4
Preparing dual wheels 85-12
Tie down locations 90-10
Tie down locations decal 90-10
Triticale
Crop settings 100-14
Troubleshooting
Air conditioner 135-18
Brakes 135-8
Electrical 135-16
Engine 135-8
Feeder house 135-1
Four-wheel drive (optional) 135-7
Heater 135-18
Hydrostatic ground drive 135-4
Mass flow sensor (If equipped) 135-19
Moisture sensor (If equipped) 135-19
Separator 135-1
Steering 135-7

U

Unified inch bolt and screw torque values 145-18
Unloading auger
Adjusting
Auger position 75-10, 75-11
Cradle support 75-10
Drive chain 75-9
Lock arm positions 75-11
Maintenance
Grease unloading auger upper gear case 130-G-3
Grease vertical unloading auger upper gear case 130-G-4
Removing
Drive chain links 75-9
Replacing
Drive belt 75-12, 75-13
Shear bolt 75-6
Location 75-6
Unloading auger drive switch 45-M-32
Unloading auger engage 45-L-15
Unloading auger engage calibration procedure 45-L-15
Unloading auger light
Replacing 80-18
Unloading auger swing switch 45-M-32
Unthreshed losses 45-O-23
Unthreshed material 45-O-23
Uphill sensitivity 45-O-14

V

Vacuum fan
Replacing
Drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-7
13.5 L 130-R-11
Driven belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Vanes
Adjusting
Crop diverter 70-2

Variable speed fan
Maintenance
Grease variable speed driven sheaves... 130-G-3
Grease variable speed driver sheaves ... 130-G-3
Replacing
Drive belt (Final Tier 4/Stage V)
9.0 L 130-Q-8
Video application
Adjusting cameras..... 80-11
Safety 80-9
Video interface capability..... 80-9
VisionTrak™
Operational checks..... 65-60

W

Wheat Difficult
Crop settings..... 100-15
Wheat Normal
Crop settings..... 100-15
Wheel offset
Front tires..... 85-11
Whole body vibration..... 145-15
Width 45-B-3, 45-C-4
Width corn head 45-C-4
Windrow convergence rakes 70-3
Windshield washer reservoir
Filling reservoir..... 130-O-2
Wings 45-L-20
Wings calibration procedure..... 45-L-20
Work recording..... 45-C-5
Worklight controls..... 45-J-4
Worklights preset 1—high-beam..... 45-J-3
Worklights preset 1—low-beam..... 45-J-2
Worklights preset 2—high-beam..... 45-J-3
Worklights preset 2—low-beam..... 45-J-2

Y

Yield
Delete unused samples.....45-L-11
Yield
advanced edit.....45-L-11
advanced settings 45-L-7
calibration quality 45-L-4
calibration quality indicator 45-L-7
collected sample status..... 45-L-8
edit/select calibration..... 45-L-10
mass flow rate 45-L-8
match scale weight..... 45-L-6
record sample..... 45-L-5
recording status..... 45-L-9
reset..... 45-L-9
status indicator..... 45-L-5
weight indicator 45-L-9
Yield calibration 45-L-4
Change tire radius code 95-4
Multi-point 95-4
Single point..... 95-4

John Deere Service Literature Available

Technical Information

Technical information can be purchased from John Deere. Publications are available in print or CD-ROM format.

Orders can be made using one of the following:

- John Deere Technical Information Store: **www.JohnDeere.com/TechInfoStore**
- Call 1-800-522-7448
- Contact your John Deere dealer

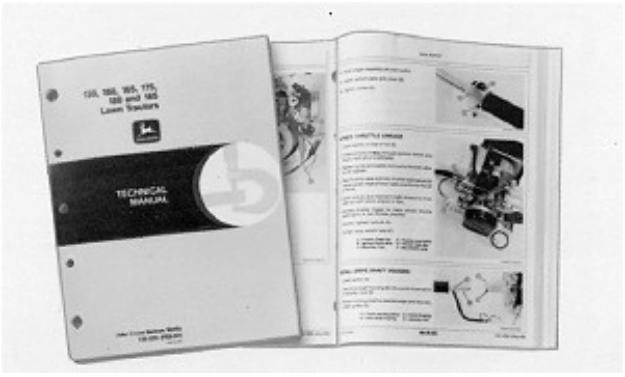
Available information includes:

TS189—UN—17JAN89

PARTS CATALOGS list service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.

TS191—UN—02DEC88

OPERATOR'S MANUALS providing safety, operating, maintenance, and service information.



TS224—UN—17JAN89

TECHNICAL MANUALS outlining service information for your machine. Included are specifications, illustrated assembly and disassembly procedures, hydraulic oil flow diagrams, and wiring diagrams. Some products have separate manuals for repair and diagnostic information. Some components, such as engines, are available in a separate component technical manual.

TS1663—UN—10OCT97

EDUCATIONAL CURRICULUM including five comprehensive series of books detailing basic information regardless of manufacturer:

- Agricultural Primer series covers technology in farming and ranching.
- Farm Business Management series examines "real-world" problems and offers practical solutions in the areas of marketing, financing, equipment selection, and compliance.
- Fundamentals of Services manuals show you how to repair and maintain off-road equipment.
- Fundamentals of Machine Operation manuals explain machine capacities and adjustments, how to improve machine performance, and how to eliminate unnecessary field operations.
- Fundamentals of Compact Equipment manuals provide instruction in servicing and maintaining equipment up to 40 PTO horsepower.

DX,SERVLIT-19-07DEC16

John Deere Service Keeps You on the Job

John Deere Parts

TS100—UN—23AUG88

We help minimize downtime by putting genuine John Deere parts in your hands in a hurry.

That's why we maintain a large and varied inventory—to stay a jump ahead of your needs.

DX,IBC,A-19-04JUN90

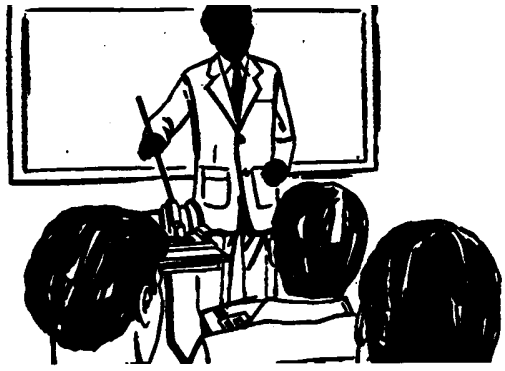
The Right Tools

TS101—UN—23AUG88

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly . . . to save you time and money.

DX,IBC,B-19-04JUN90

Well-Trained Technicians



TS102—UN—23AUG88

School is never out for John Deere service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result?

Experience you can count on!

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Prompt Service

TS103—UN—23AUG88

Our goal is to provide prompt, efficient care when you want it and where you want it.

We can make repairs at your place or at ours, depending on the circumstances: see us, depend on us.

JOHN DEERE SERVICE SUPERIORITY: We'll be around when you need us.

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