# 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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**John Deere GmbH & Co. KG**
**John Deere Werke Zweibrücken**
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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.

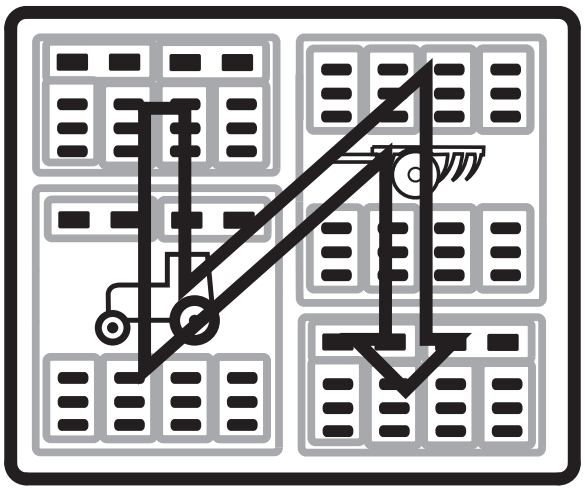
OUO6075,000174F-19-31JAN14

## 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.

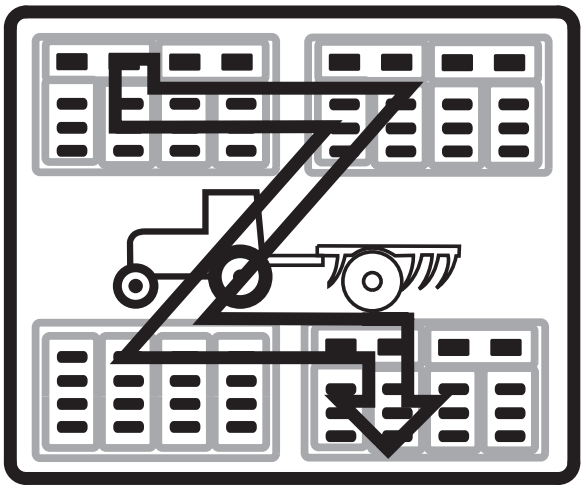
Information in this manual is divided into sections. The section names are identified in the table of contents and at the top of each page. Each section has a unique number and page count. Specific information within each section is organized into topics identified with bold headings.

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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The topic content flows down the left-hand side, then over and down the right-hand side, and repeats on the next page. Images precede the related text in the flow.



A100768—UN—07JUN18

The flow can divide both before and after the images and tables that span the width of a page.

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

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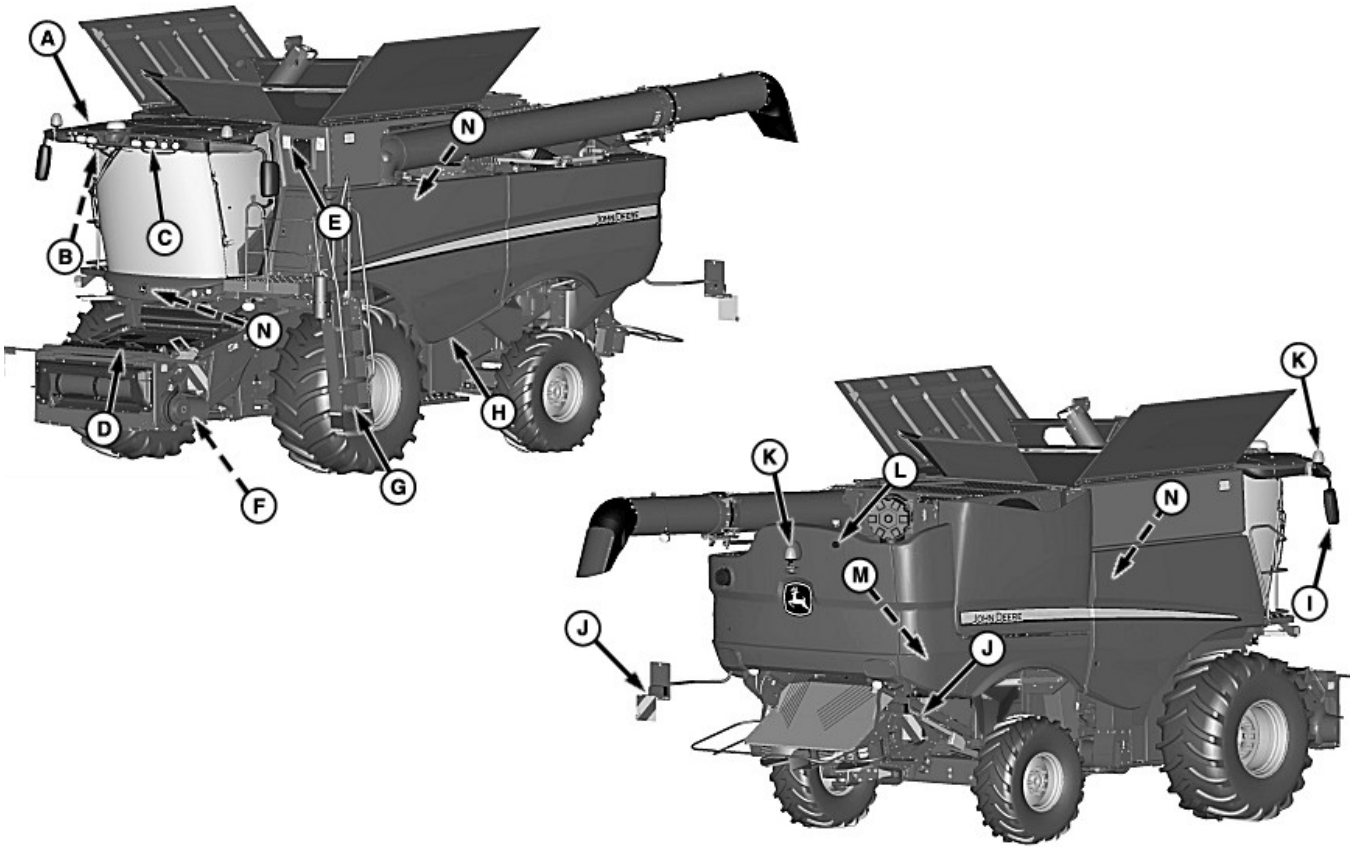
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## Machine Safety Features




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.

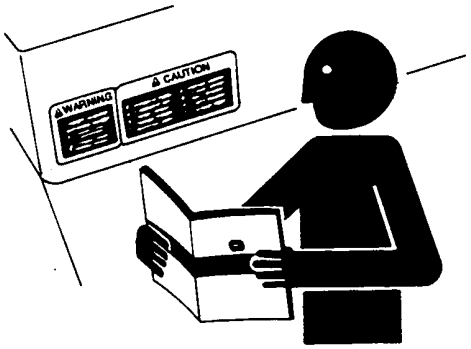
**WARNING**; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**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.

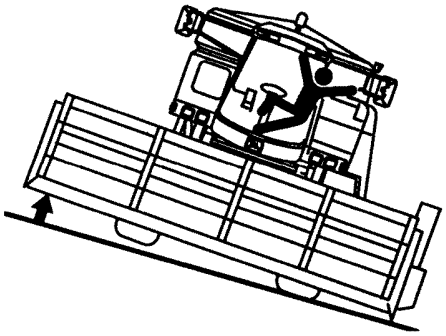
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

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

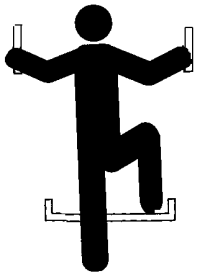
Always check the road and general operating safety of the machine before using.

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.

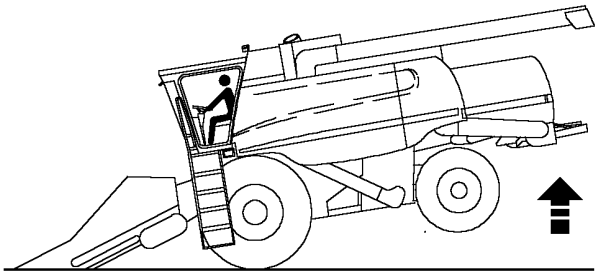
Riders are subject to injury such as being thrown off the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

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

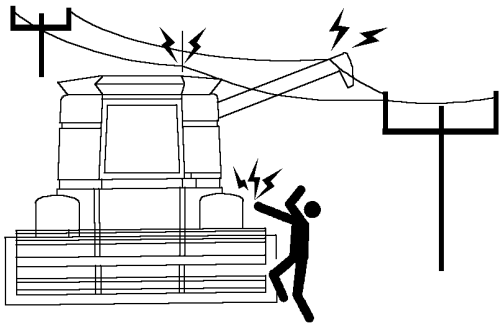
Observe national and local laws regarding operation of the combine on public roadways.

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



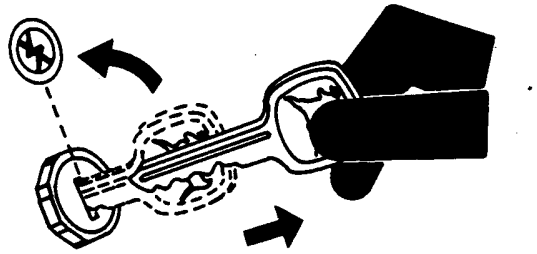
H52022—UN—14APR99

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.

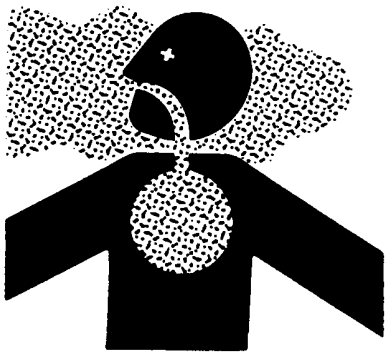
Before leaving the machine, disengage the header and separator. Move the multi-function lever to the neutral position and shut OFF the machine. Apply the park brake, remove key, and lock the operator's cab.

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.

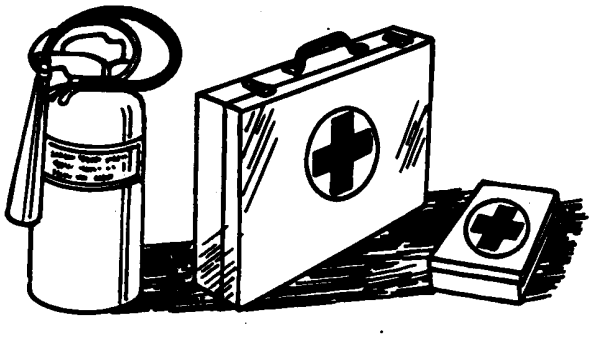
Use only an approved fuel container for transporting flammable liquids.

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:

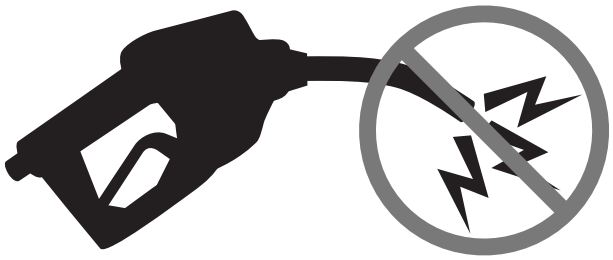
1. Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
2. Aim low. Point the extinguisher at the base of the fire.
3. Squeeze the lever slowly and evenly.
4. Sweep the nozzle from side-to-side.

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.

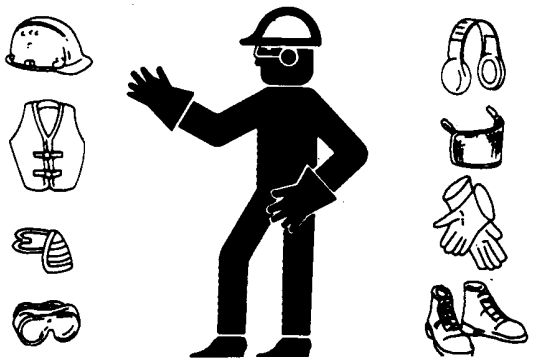
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

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

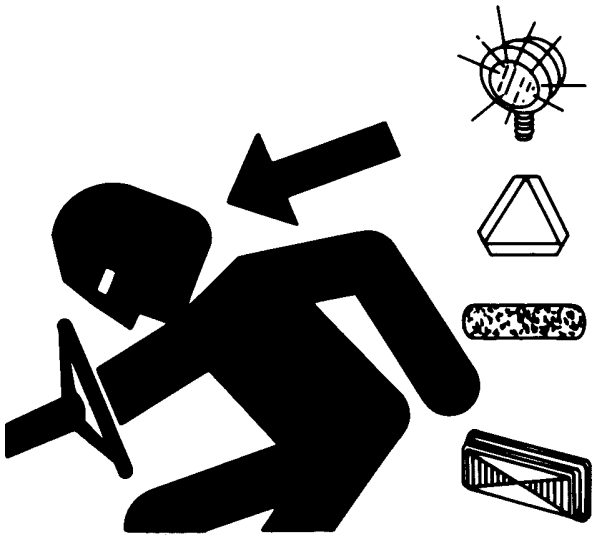



ES118704—UN—21MAR95

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

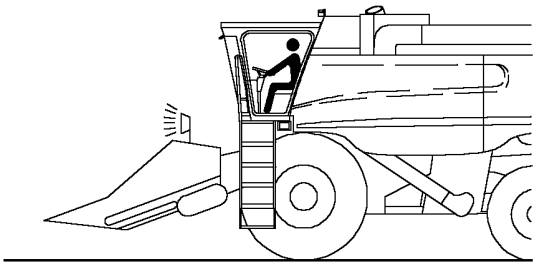


H124189—UN—11MAY18

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



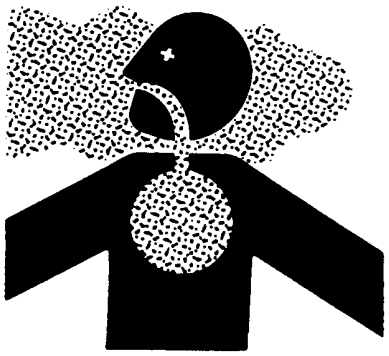
TS953—UN—15MAY90

**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

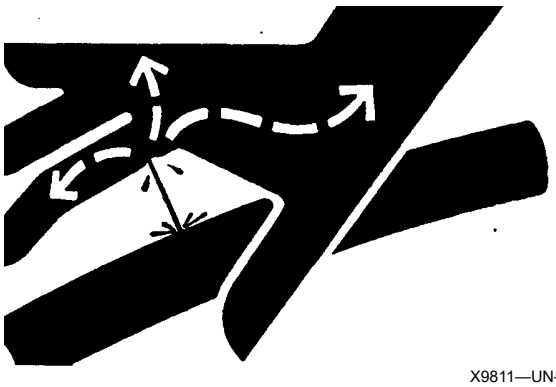
Rotating fans, belts, pulleys, and drives can cause serious injury.

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



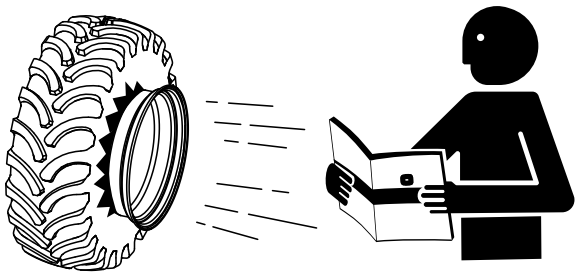
TS1343—UN—18MAR92

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.

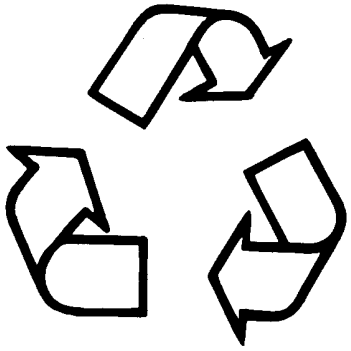
When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

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



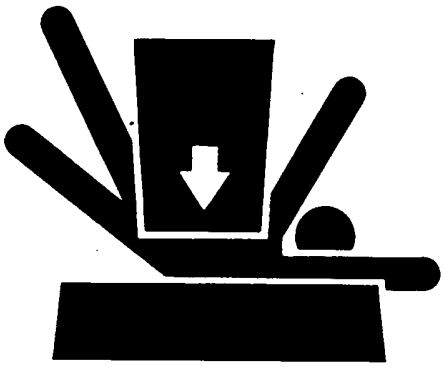
TS219—UN—23AUG88

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

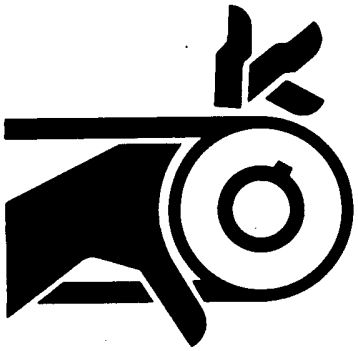
Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

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



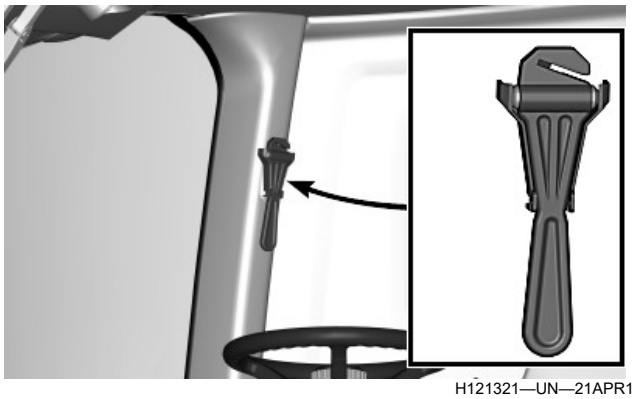
PC10857XW—UN—15APR13

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

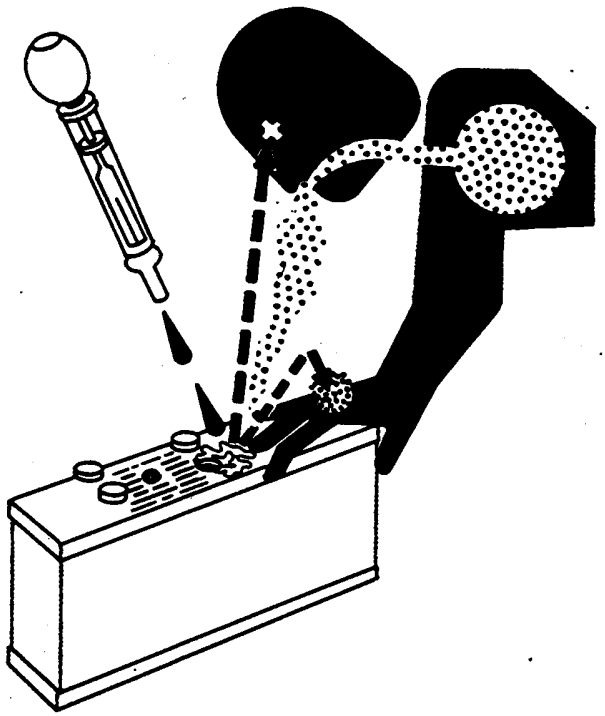
Seat belt may be cut and window glass broken with hammer to exit cab in an emergency.

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.

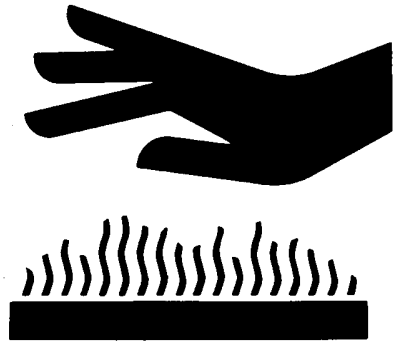
**WARNING:** Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

DX,WW,BATTERIES-19-02DEC10

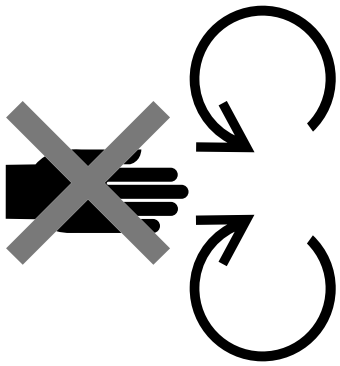
## Clean Exhaust Filter Safely



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



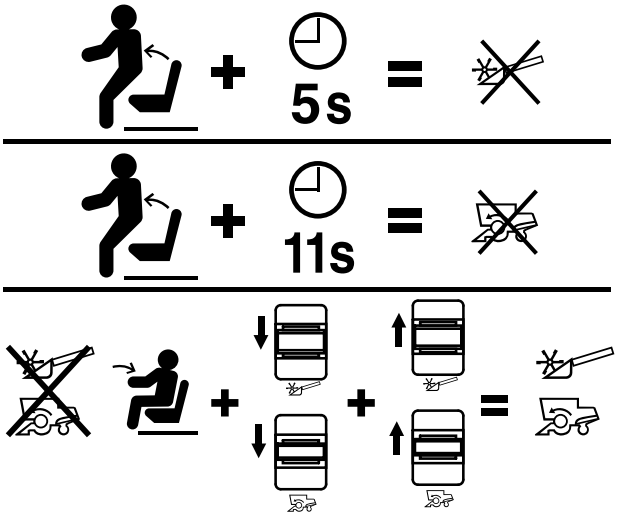
RG17488—UN—21AUG09

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

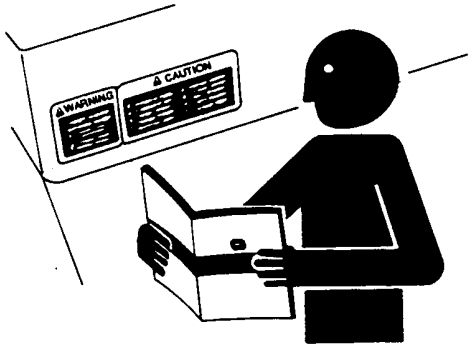



TS231—19—07OCT88

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



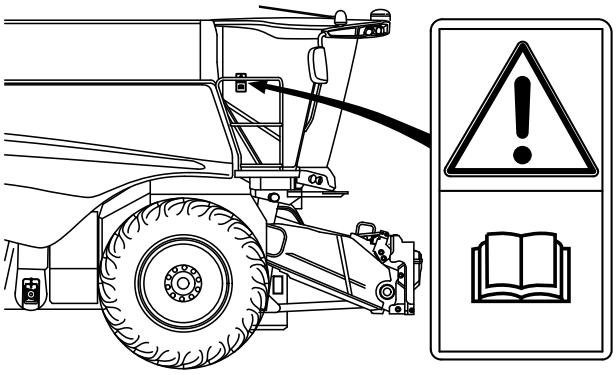

TS201—UN—15APR13

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

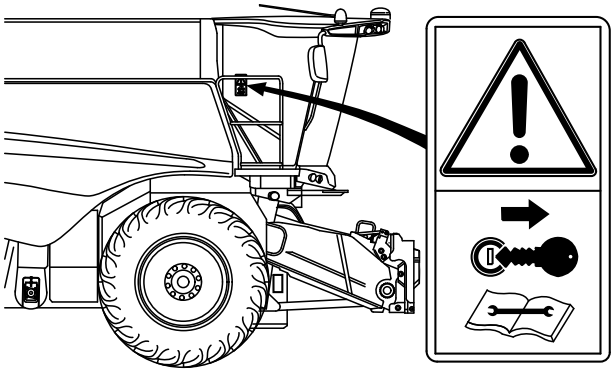


H97195—UN—14JUN11

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

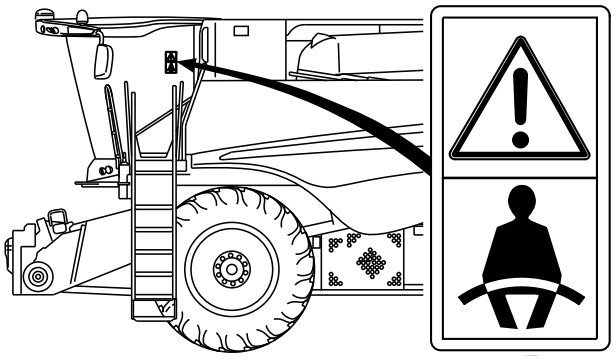


H97196—UN—13JUN11

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



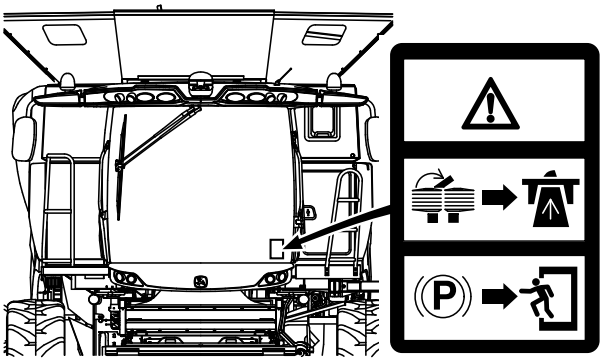
H97197—UN—13JUN11

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



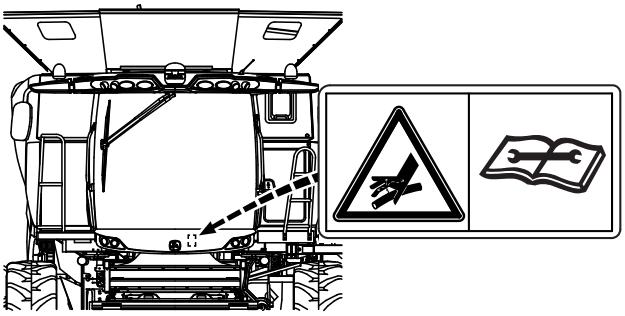
H104579—UN—25JAN12

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.

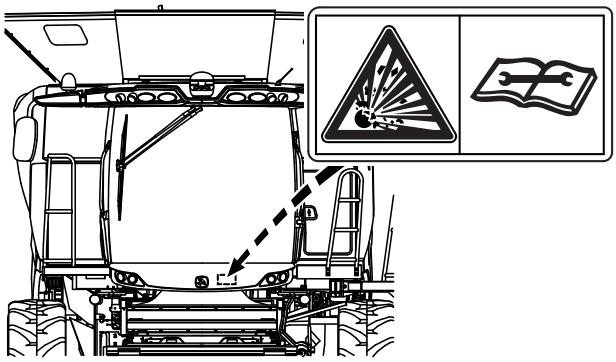
Before removing hydraulic components, disassembling or charging accumulators:

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

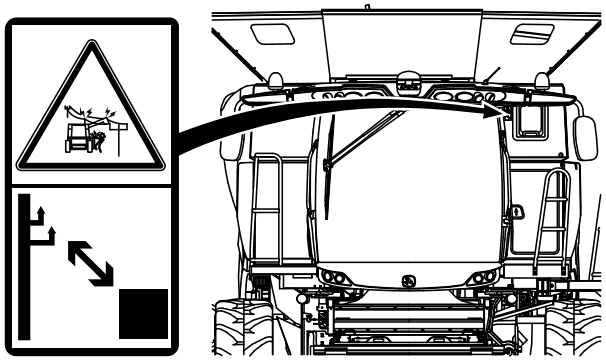
*NOTE: Decal is located on cab support and is only on ProDrive™ transmission machines.*

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



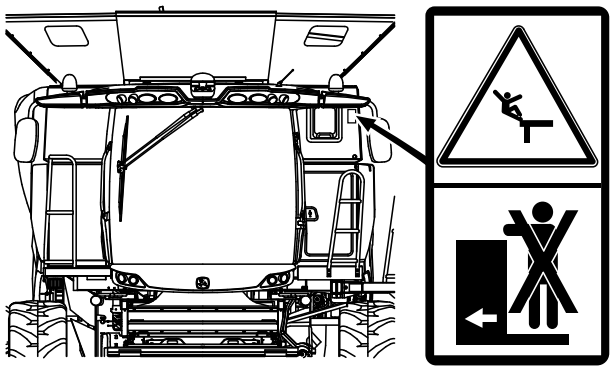
H96811—UN—03AUG10

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

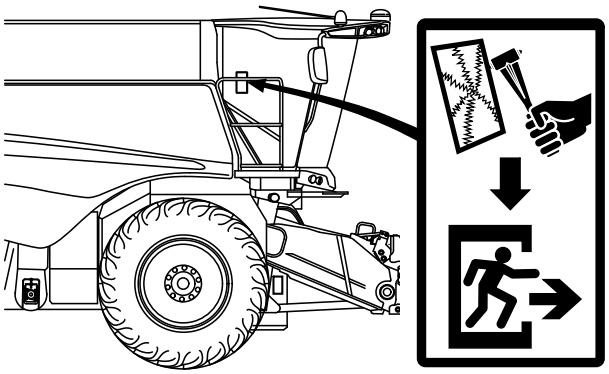


H96812—UN—02SEP10

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

OUO6041,00003F7-19-03SEP10

## Emergency Exit

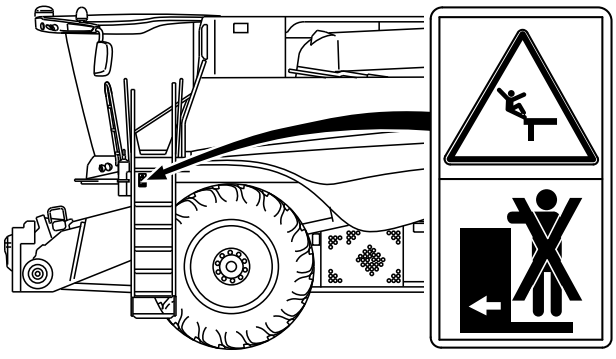


H97852—UN—13JUN11

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

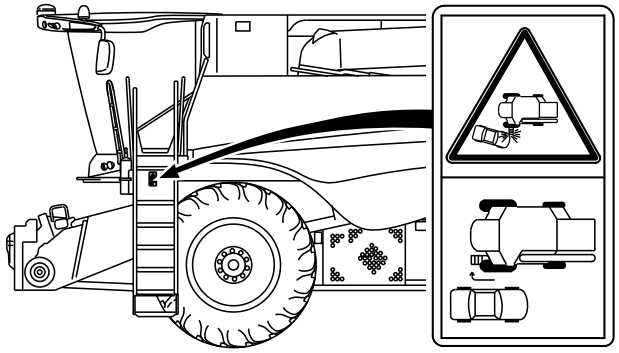


H96816—UN—03AUG10

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

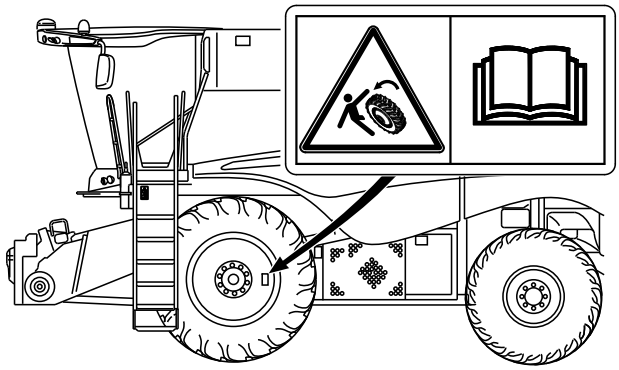


H96815—UN—03AUG10

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)



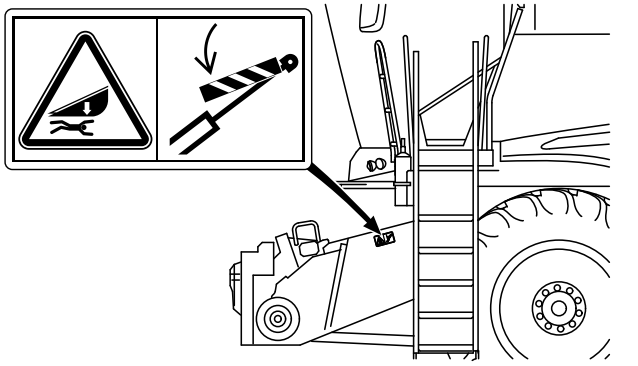
H125689—UN—13MAR19

*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



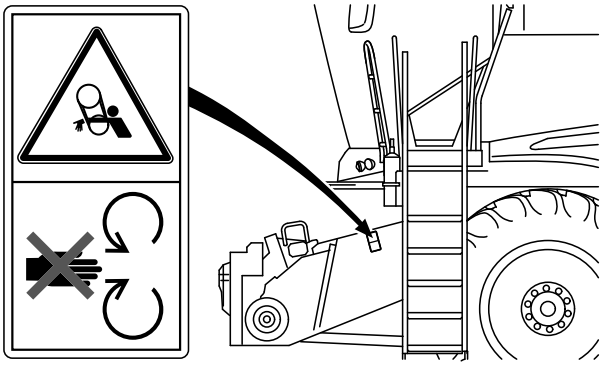
H120945—UN—21JUN17

*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

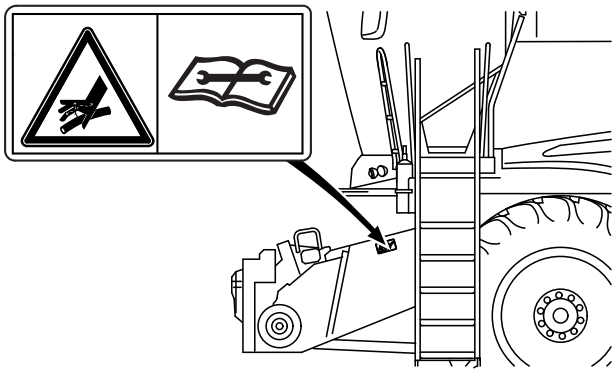


H126161—UN—22APR19

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.

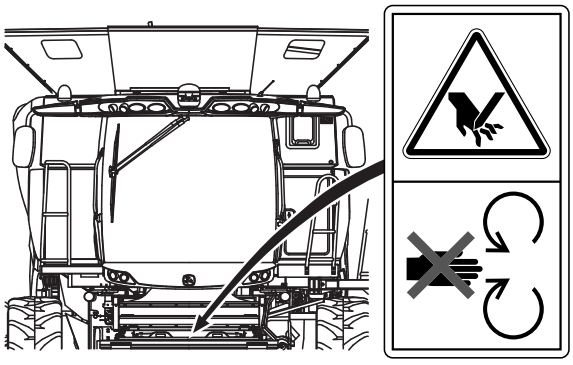
Before removing hydraulic components, disassembling or charging accumulators:

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



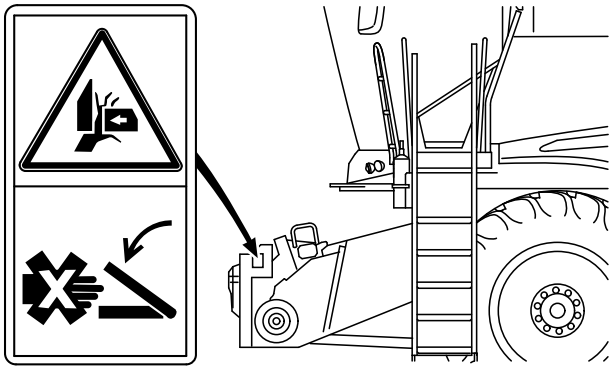
H124082—UN—10MAY18

*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



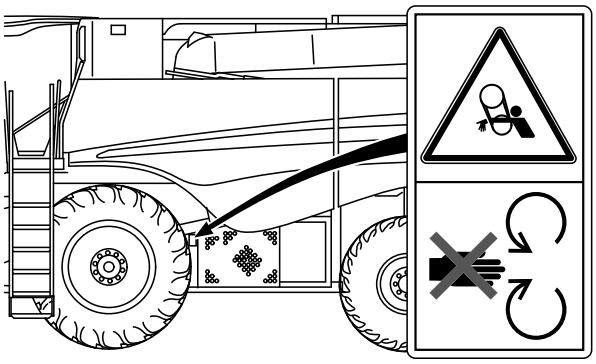
H96813—UN—03AUG10

*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

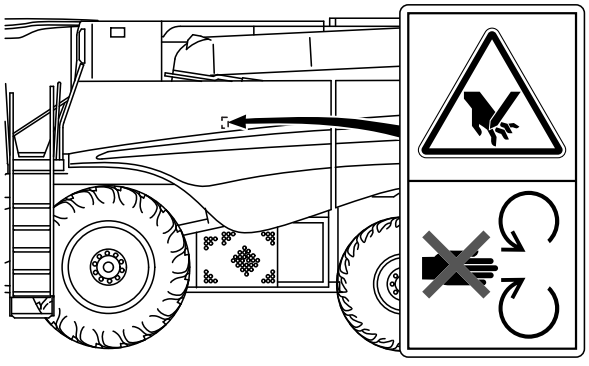


H126162—UN—22APR19

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

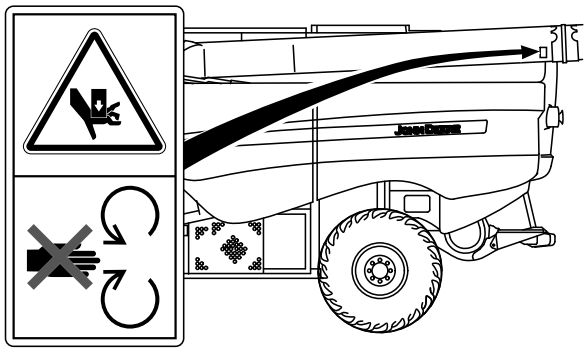


H125971—UN—28MAR19

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

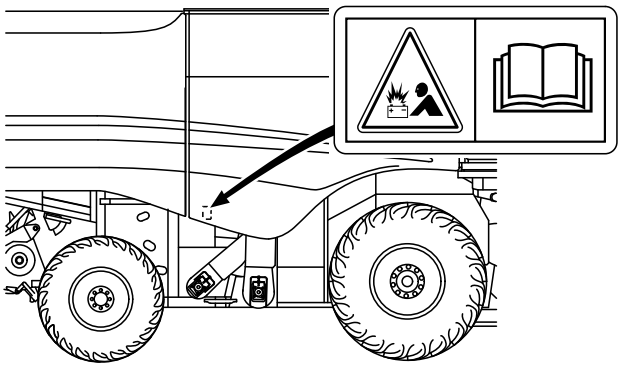
If unloading auger actuator should fail, place unloading auger lock-out pin in locked position (see Grain Tank section).

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.

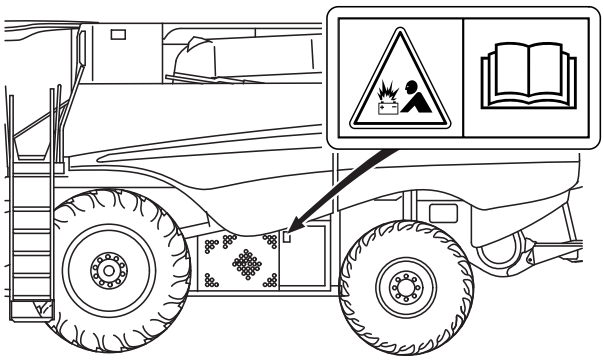
OUO6075,0004AD1-19-22MAR19

## Battery Box



H124084—UN—09MAY18

*Style A*



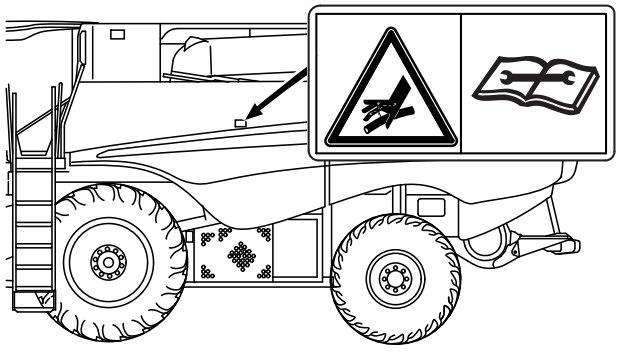
H124085—UN—09MAY18

*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.

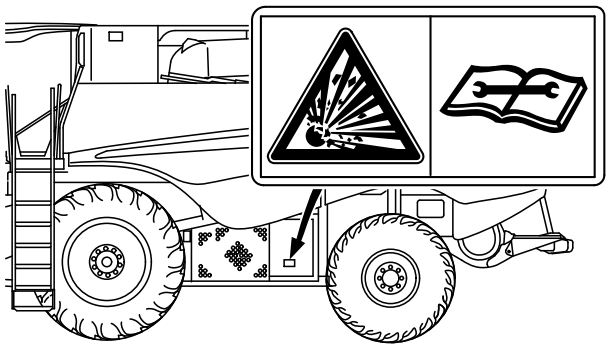
Before removing hydraulic components, disassembling or charging accumulators:

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

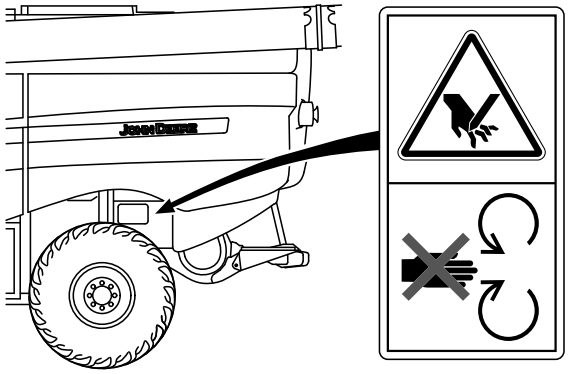
*S760 and S770*

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

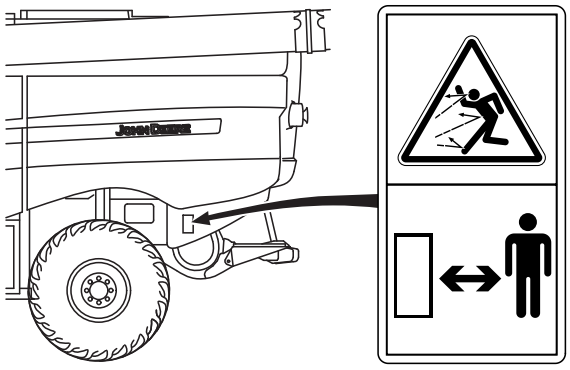


H125977—UN—29MAR19

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



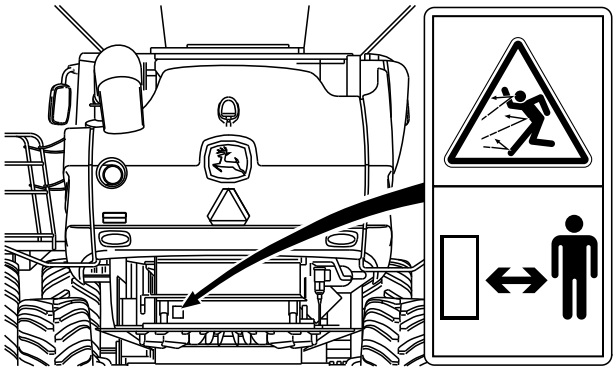
H124086—UN—09MAY18

*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

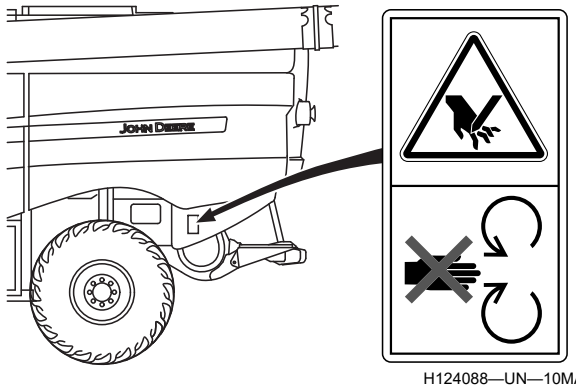


H124087—UN—09MAY18

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

OUO6075,0004A87-19-17DEC18

## Chopper Blades



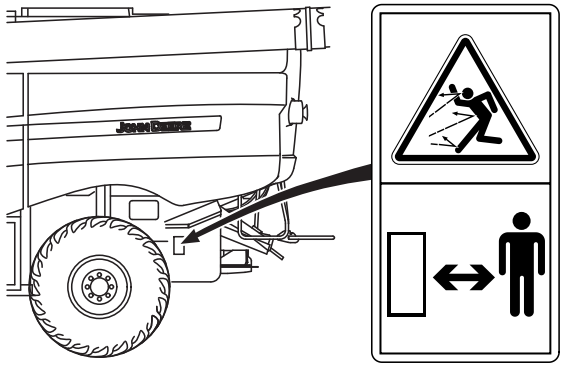
H124088—UN—10MAY18

*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



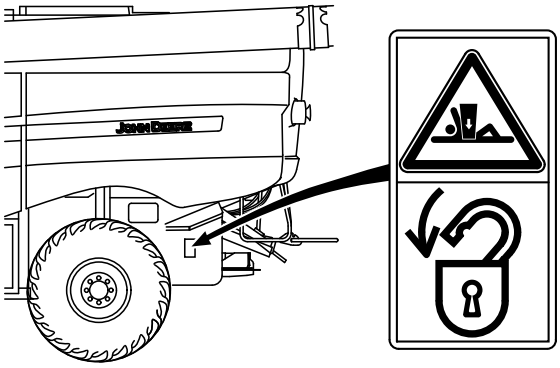
H124089—UN—09MAY18

*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



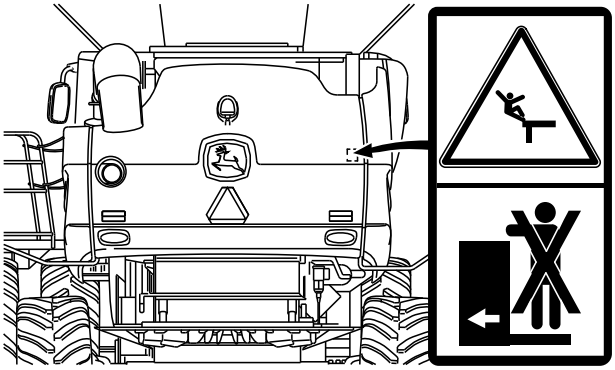
H125979—UN—29MAR19

*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

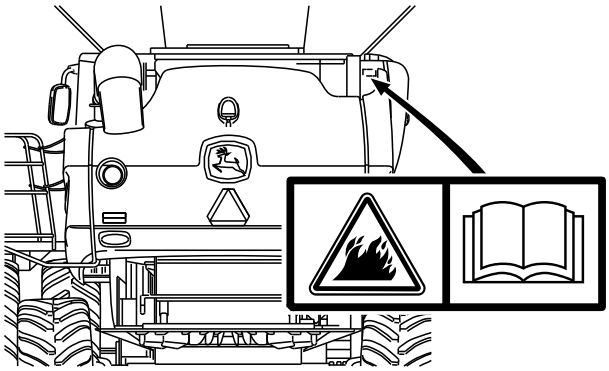


H96847—UN—04AUG10

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

OUO6041,00003FB-19-03SEP10

## Avoid Fires

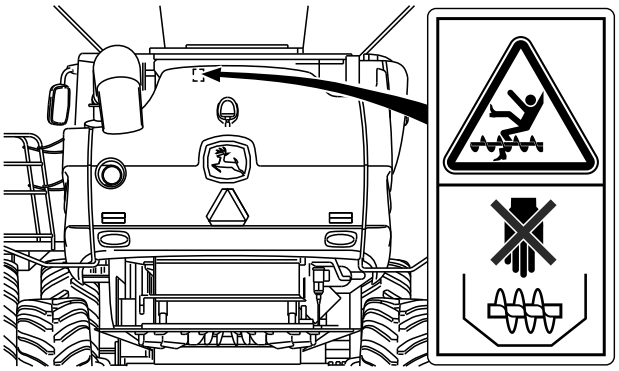


H108698—UN—08AUG13

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

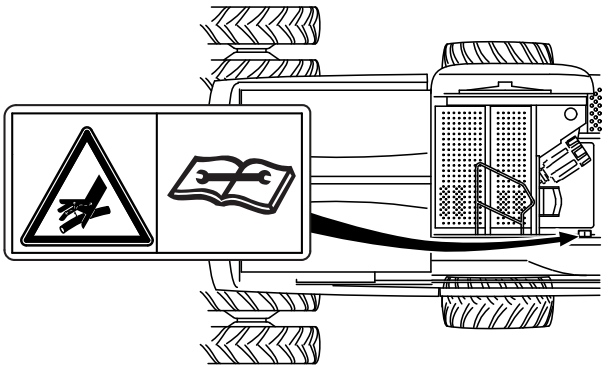


H120946—UN—21JUN17

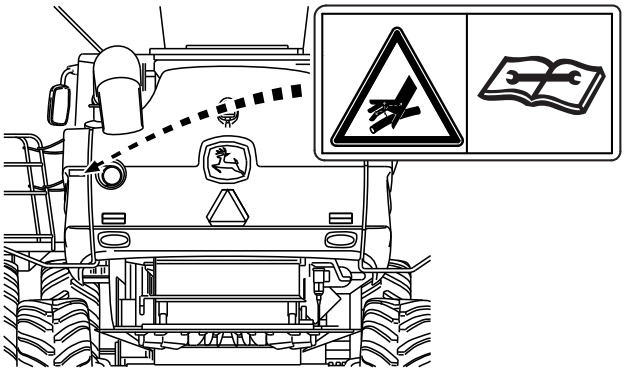
Avoid serious injury or death from entanglement. Do not enter grain tank when engine is running.

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.

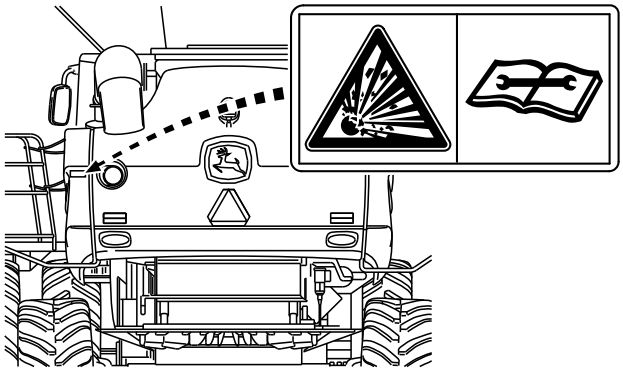
Before removing hydraulic components, disassembling or charging accumulators:

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

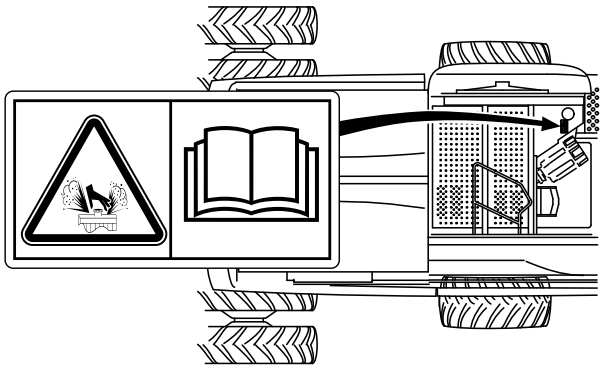
*S780, S785, and S790*

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

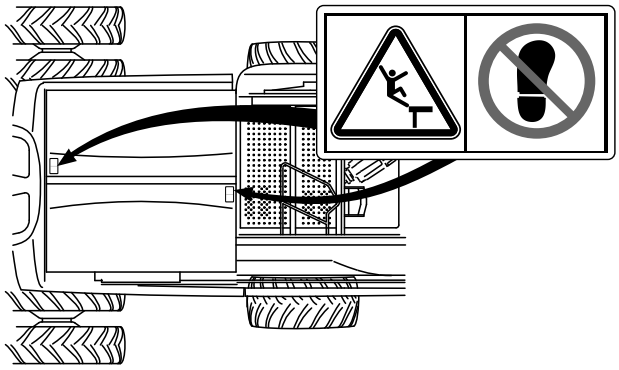


H120947—UN—21JUN17

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

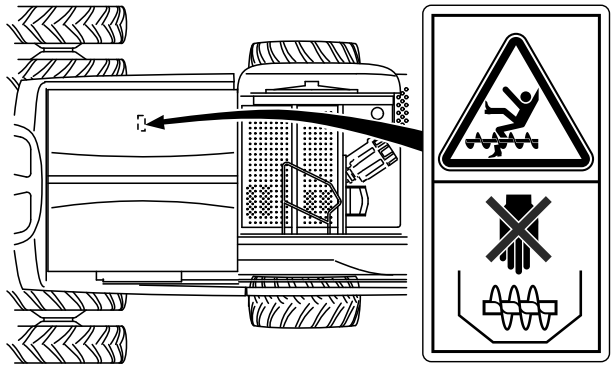


H120948—UN—22JUN17

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

OUO6075,0004735-19-26APR17

## Avoid Clean Grain Loading Auger

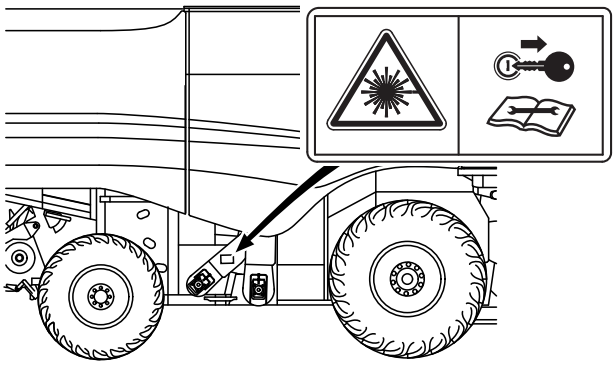


H120949—UN—22JUN17

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

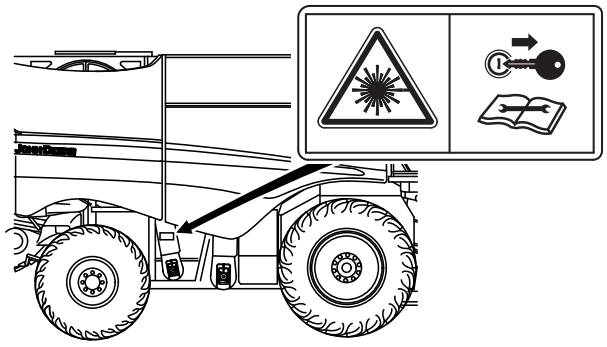
OUO6075,0004736-19-26APR17

## Tailings Elevator Sensor Laser



H126519—UN—18JUN19

*Style A*



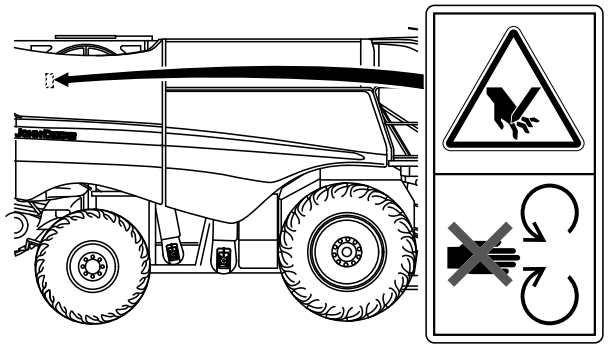
H125985—UN—18JUN19

*Style B*

Avoid eye exposure. Key off during service.

OUO6075,0004AD5-19-18JUN19

## Rotary Screen Door and Radiator Fan

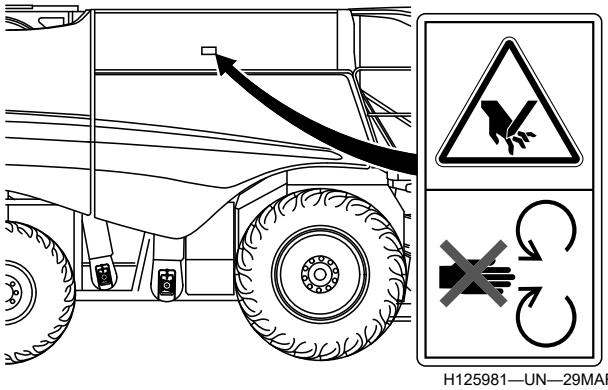


H126128—UN—16APR19

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

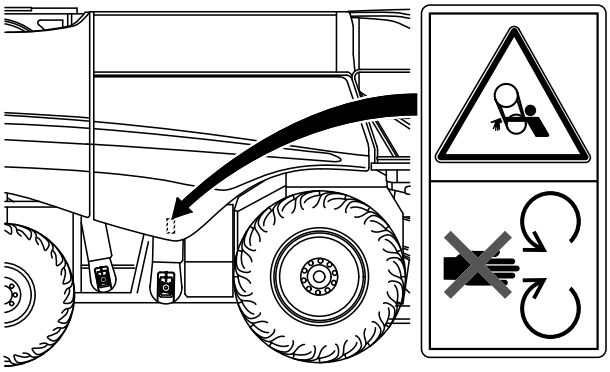
Avoid bodily injury from rotating auger and components:

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

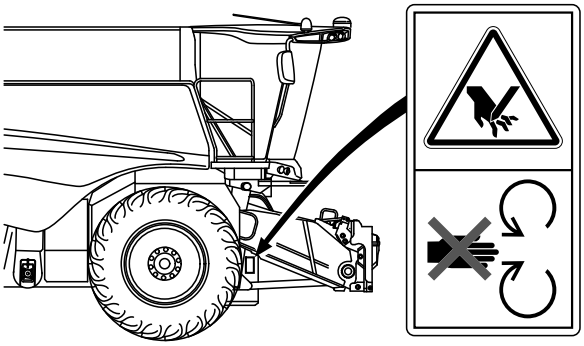


H126164—UN—22APR19

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

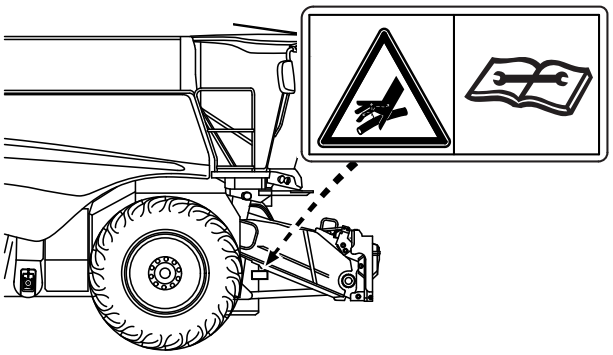


H125983—UN—29MAR19

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.

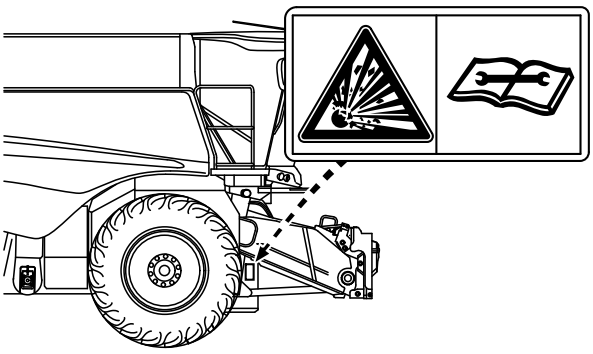
Before removing hydraulic components, disassembling or charging accumulators:

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

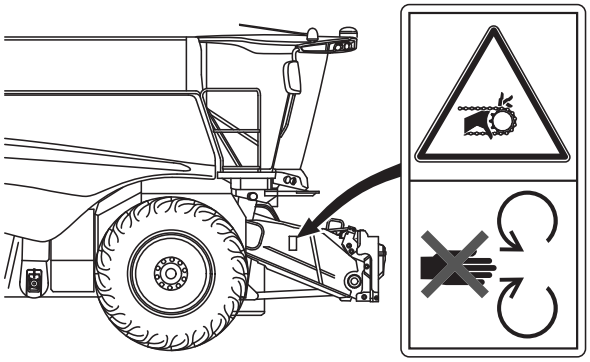
*NOTE: Decal is only on ProDrive™ transmission machines.*

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

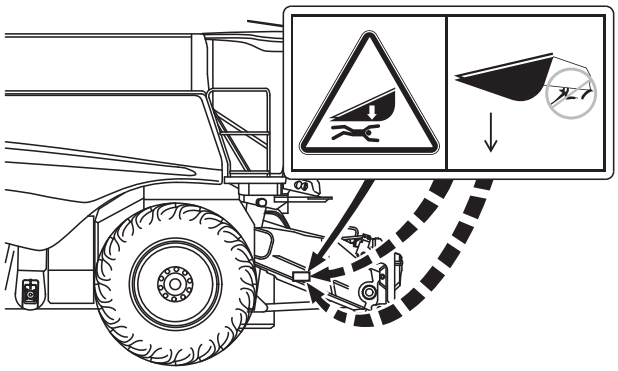


H126165—UN—23APR19

Do not open the guard when the engine is running.

OUO6075,0004B72-19-29APR19

## Feeder House Feed Plate Latch



H127682—UN—17OCT19

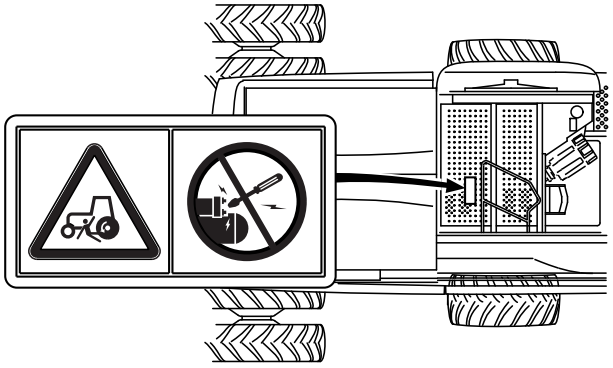
*NOTE: Safety sign is located on the inside and outside of the feeder house shield and by the feed plate lever.*

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



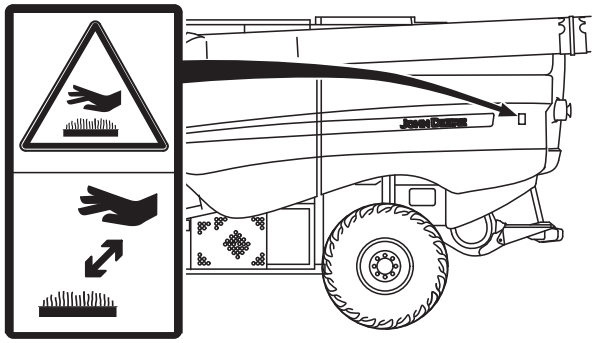
H97206—UN—05AUG10

*NOTE: Decal is located on starter.*

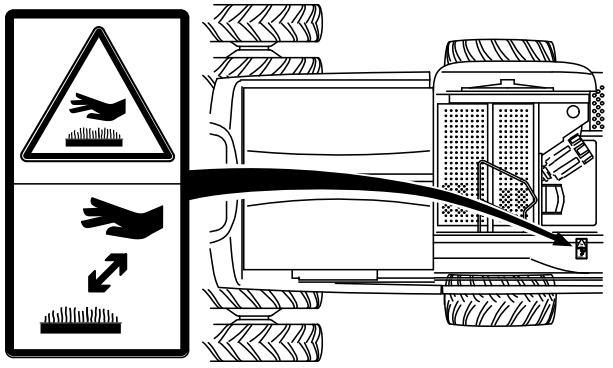
Do not start engine by shorting across starter or solenoid terminals. Machine or components may move if normal circuitry is bypassed.

OUO6075,00015D0-19-31JUL13

## Exhaust Temperature (Final Tier 4/Stage V)



H114552—UN—17JUN15



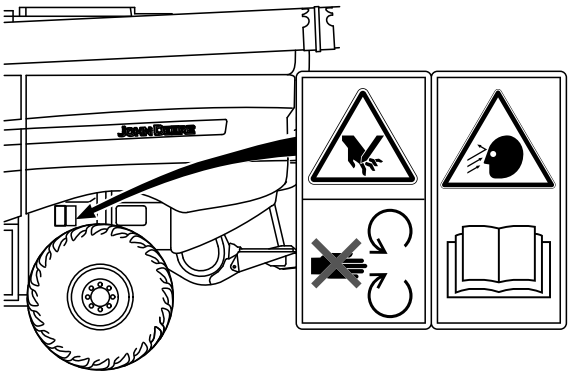
H108092—UN—06JUN13

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

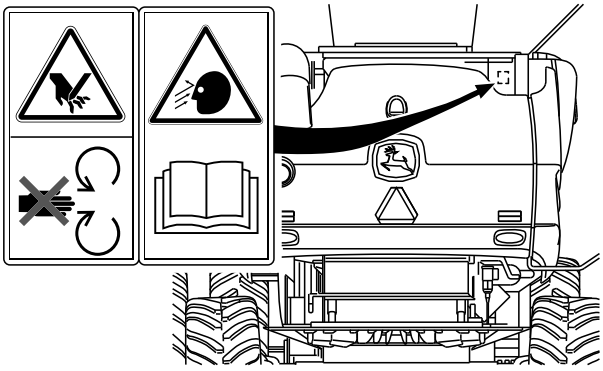
Exhaust system components may be hot. To avoid severe burns, keep away from exhaust system components.

OUO6075,00047D2-19-10NOV17

## Air Compressor System (If Equipped)



H125989—UN—01APR19



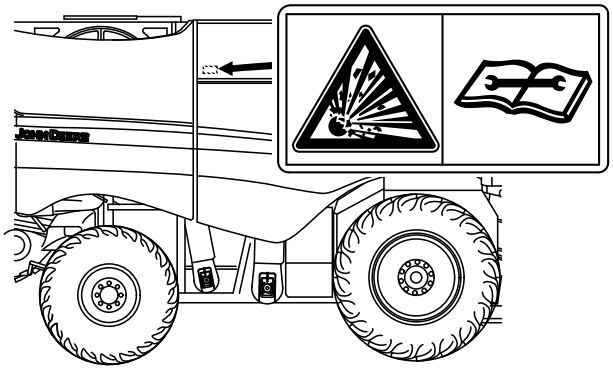
H125991—UN—01APR19

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)

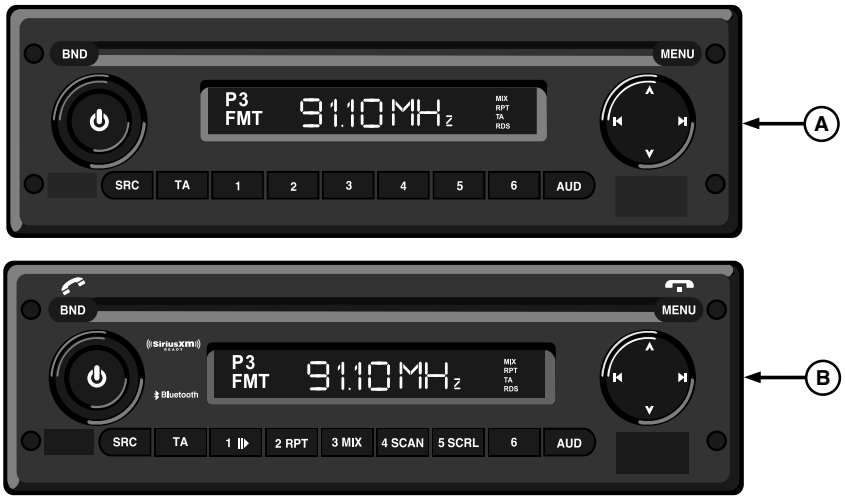


H125993—UN—01APR19

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

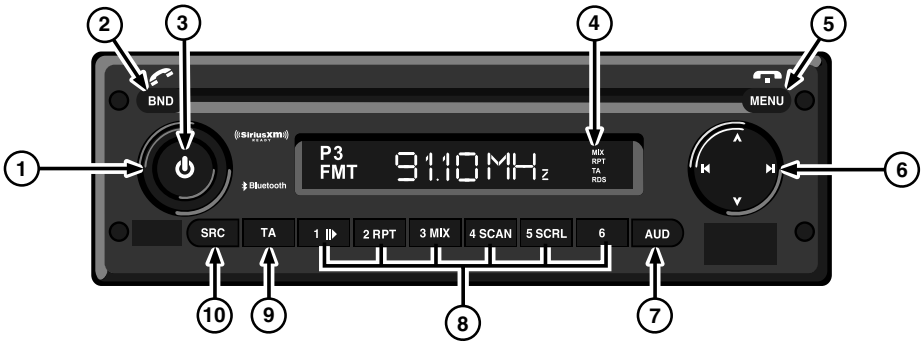
## Program Radio for Local Area Frequency

*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



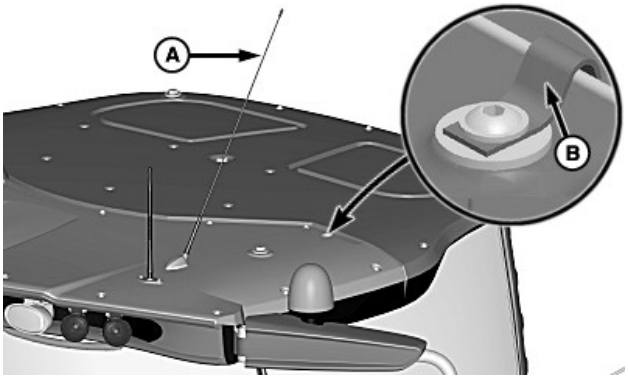

H120834—UN—17FEB17

**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

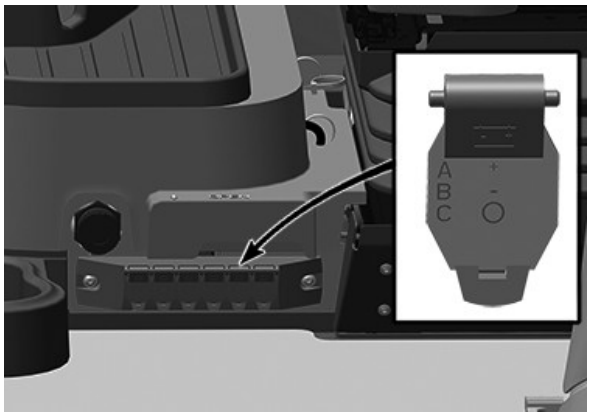
**A—Radio Antenna**
**B—Clip**

**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).

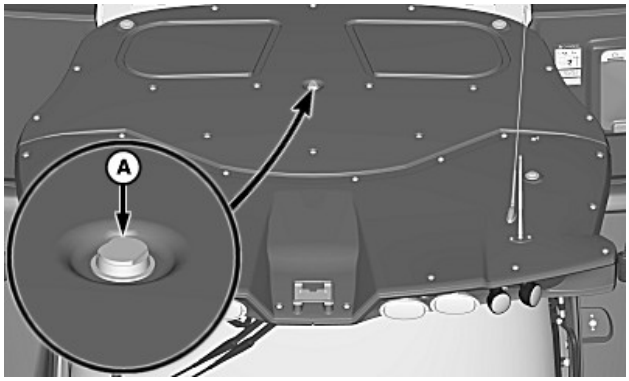
It is recommended to use spade terminals (A) and (B) to provide power and ground to the 2-way radio with high current draw. This requires the operator to manually power off the 2-way radio or utilize the battery disconnect switch at the end of the day.

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.

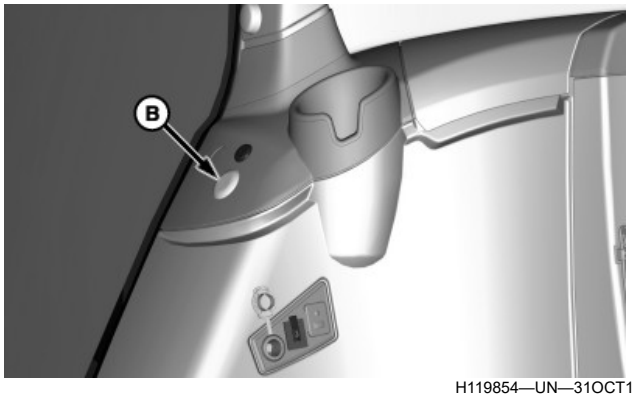
For additional information, see your John Deere dealer.

OUO6075,0004895-19-07FEB18

## Communications/CB Radio Mounting

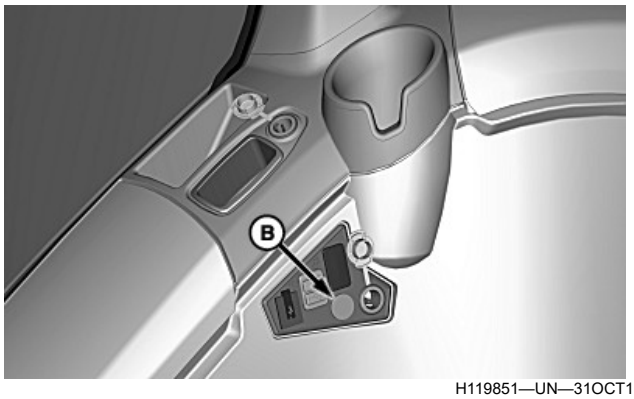



H119749—UN—31OCT16




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.

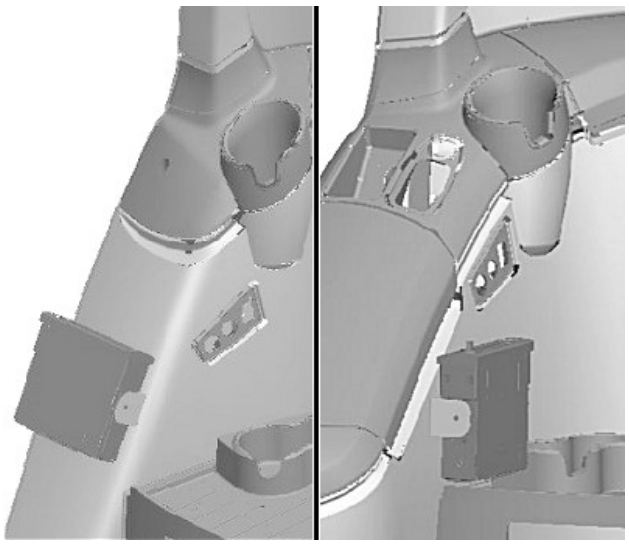
Antenna cable is located inside the right-hand console.

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*

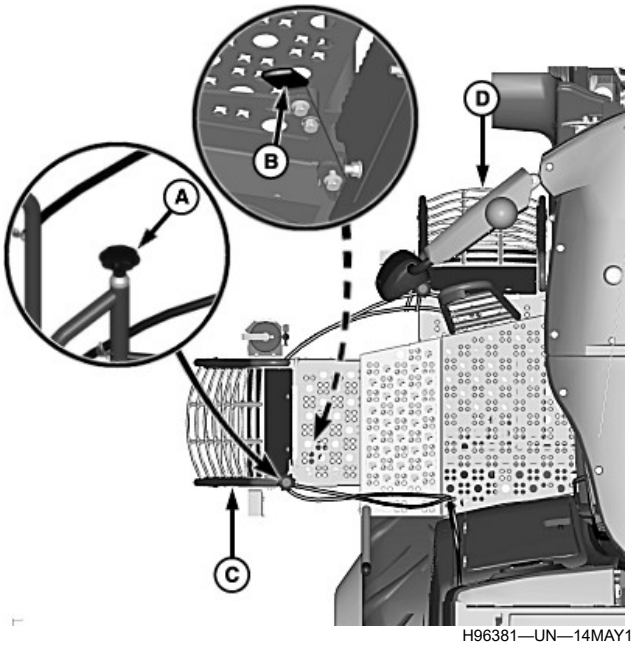
**IMPORTANT: Corner post cover must be removed before drilling. Be careful not to damage wiring harnesses and coolant hoses in locations shown when drilling holes or installing hardware.**

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.*

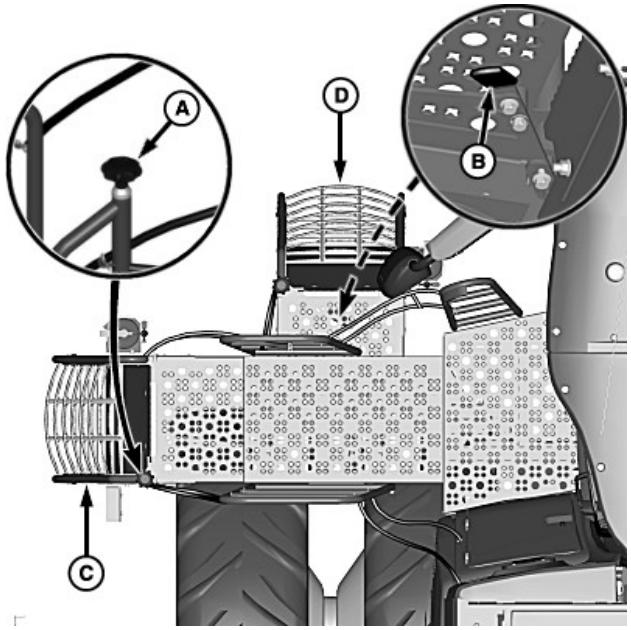
OUO6075,000439C-19-31OCT16

## 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*

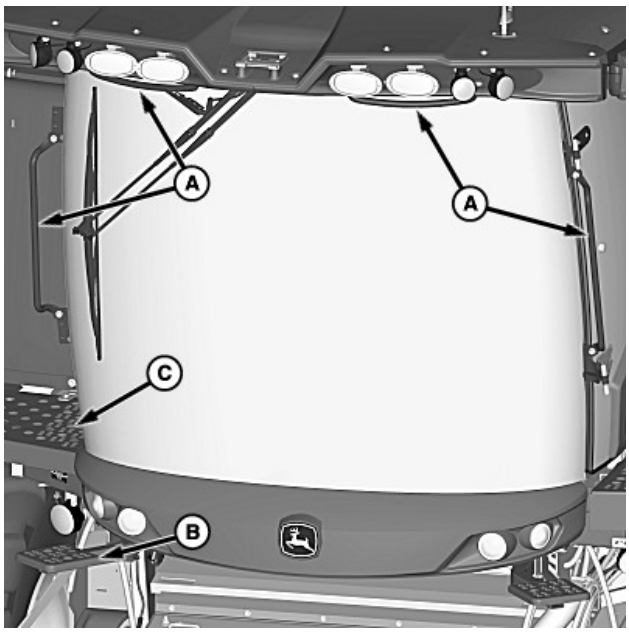
*NOTE: Fire extinguishers shown may vary depending on country requirements and fire extinguisher manufacturers.*

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.

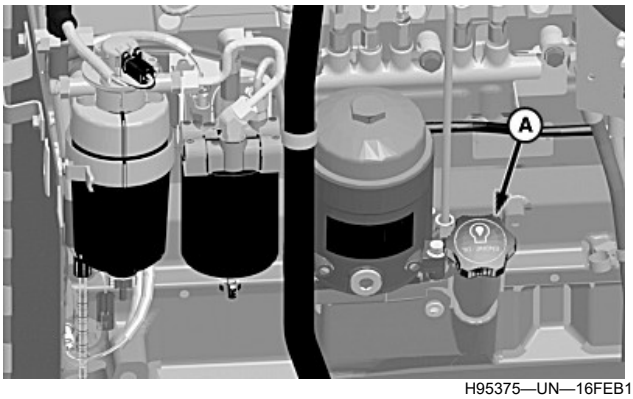
Stand on the raised feeder house to clean front cab window and service headlights or wiper.

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

OUO6075,000439D-19-15DEC16

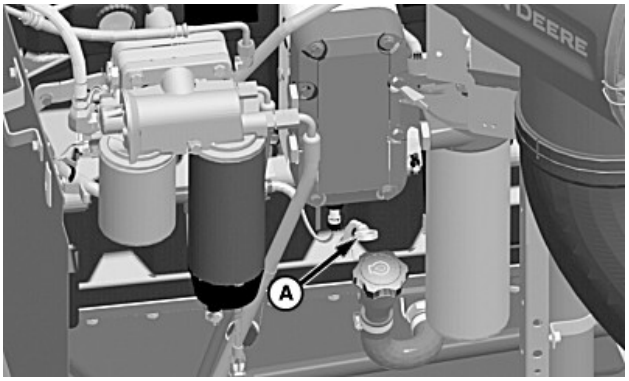
## Breaking-In Engine

**Tier 2/Stage II**



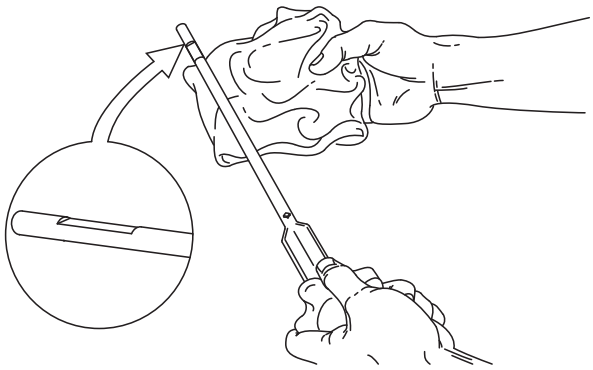

H95375—UN—16FEB10

*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.*

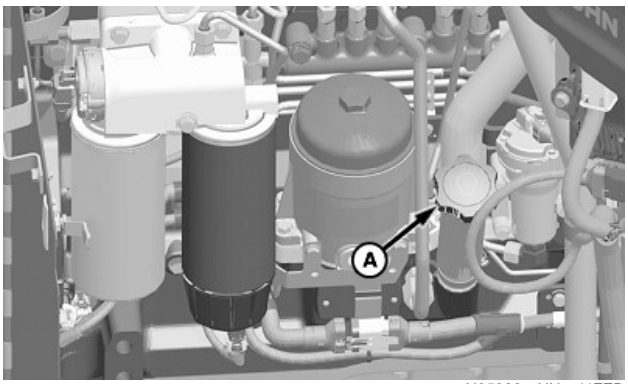
Remove dipstick (A) and check the oil level daily. The oil level should be between the ADD and the top of cross-hatch area on the dipstick. If the oil level is below the ADD mark, add oil as needed. See the Fuel and Lubricants section for oil recommendations.

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

*Break-In Plus is a trademark of Deere & Company*

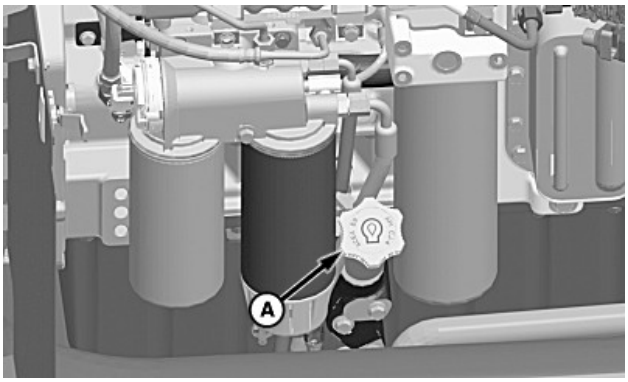
*Plus-50 is a trademark of Deere & Company*

**Final Tier 4/Stage V**



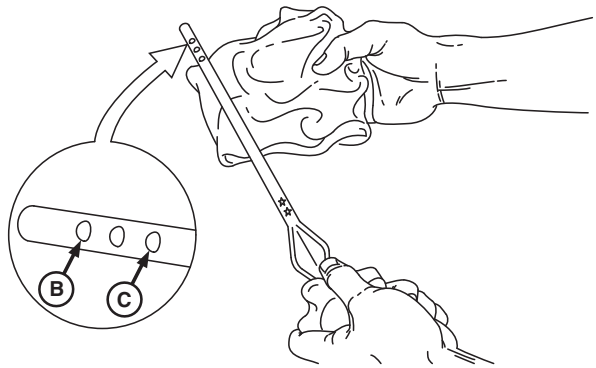

H95306—UN—11FEB10

*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-

*Break-In Plus is a trademark of Deere & Company*

*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

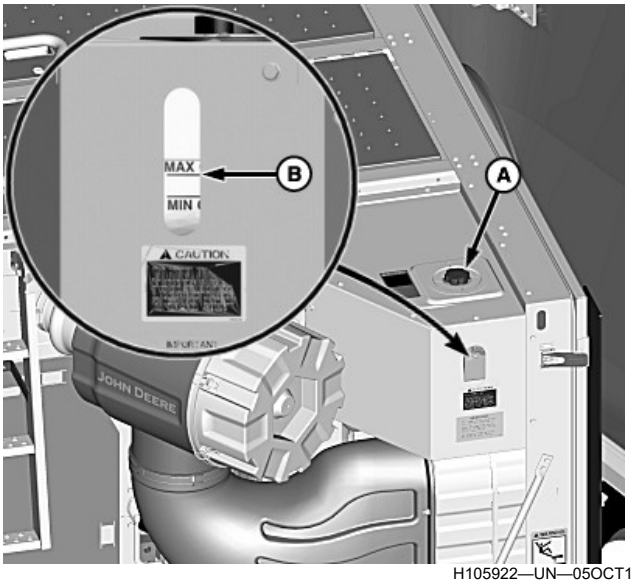
*Temperature Indicator*

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.

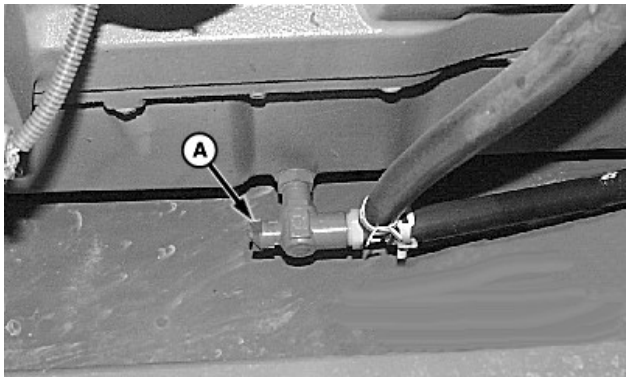
Check the engine oil level (if needed, add John Deere Break-In™ Plus Oil) and the coolant level frequently and watch for signs of leaks.

Check engine air intake system hoses and clamps for tightness.

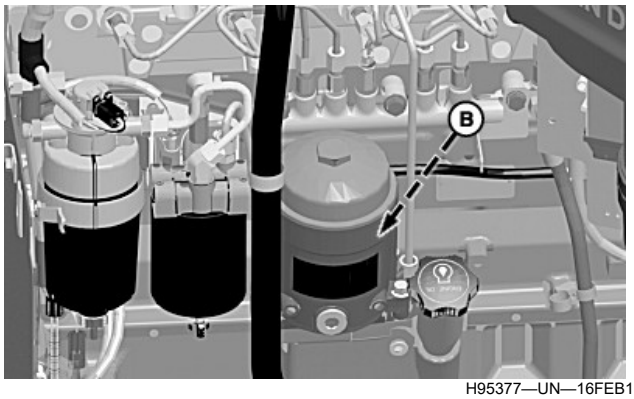
OUO6075,0004DAB-19-18FEB20

*Break-In is a trademark of Deere & Company*

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

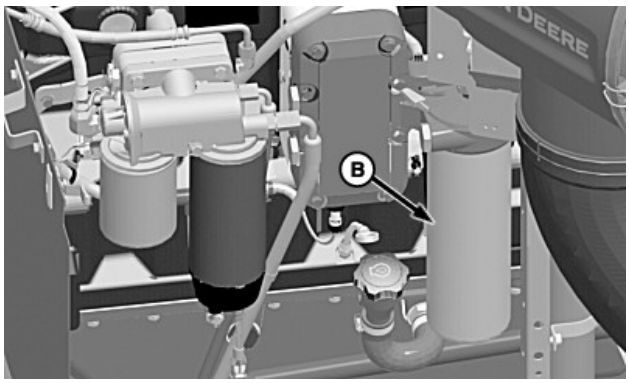



H81205—UN—15JUN04




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.

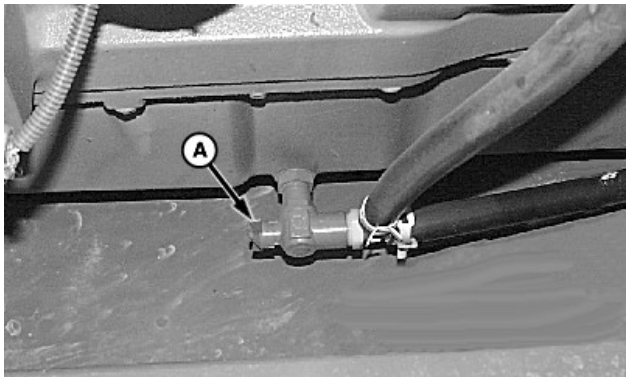
Remove and retain cap and dispose of the oil filter (B) properly.

Install oil filter and retain with cap.

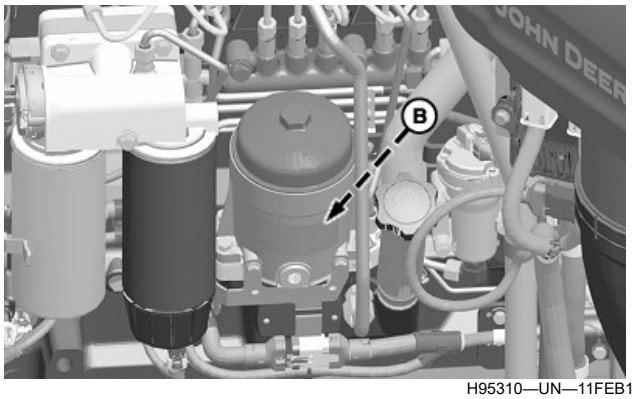
Fill crankcase with the proper amount of engine oil. See Fuel and Lubricants section for oil recommendations. See Specifications section for oil capacity.

OUO6075,00044D4-19-19DEC16

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

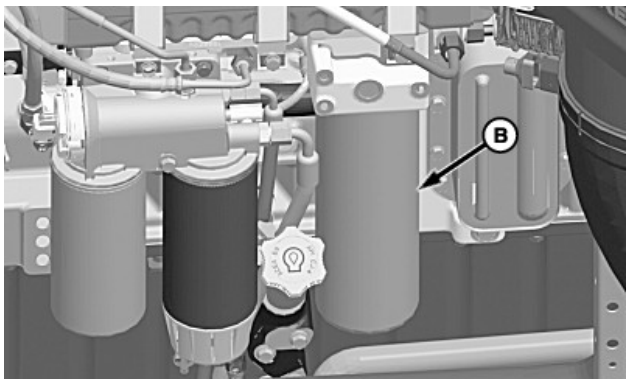



H81205—UN—15JUN04




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.

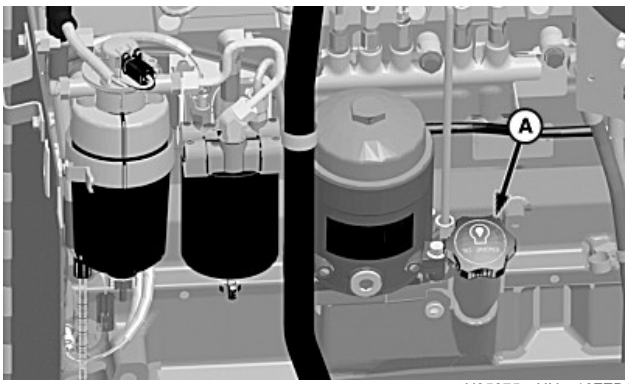
Remove and retain cap and dispose of the oil filter (B) properly.

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.

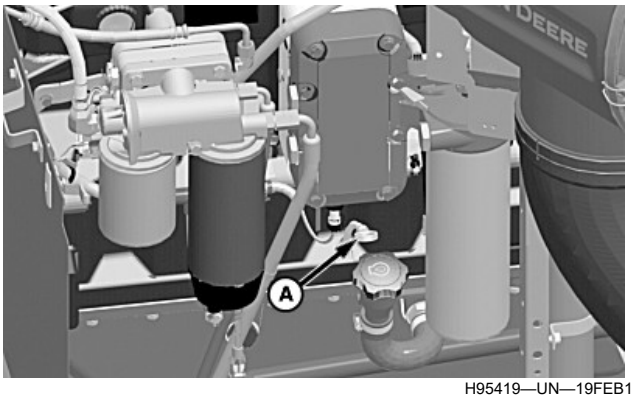
OUO6075,00047D7-19-10NOV17

## Engine Oil Level



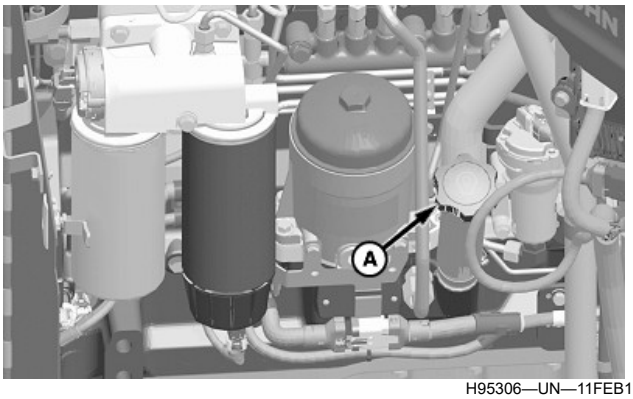

H95375—UN—16FEB10

*Tier 2/Stage II (Style A)*



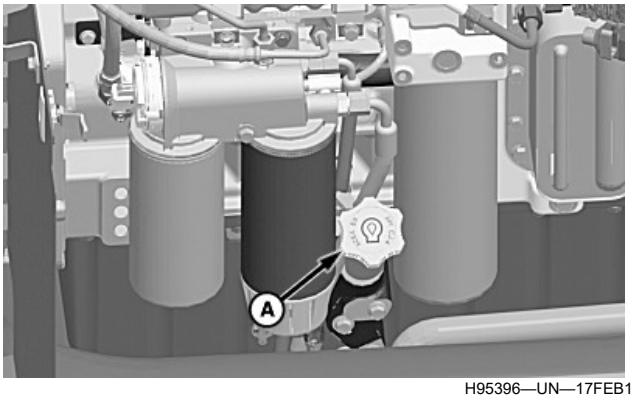

H95419—UN—19FEB10

*Tier 2/Stage II (Style B)*



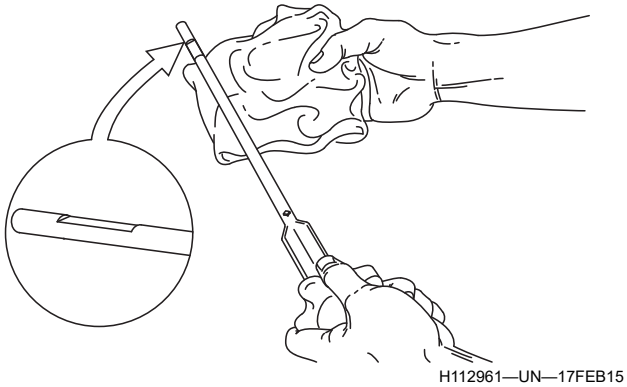

H95306—UN—11FEB10

*Final Tier 4/Stage V (Style A)*



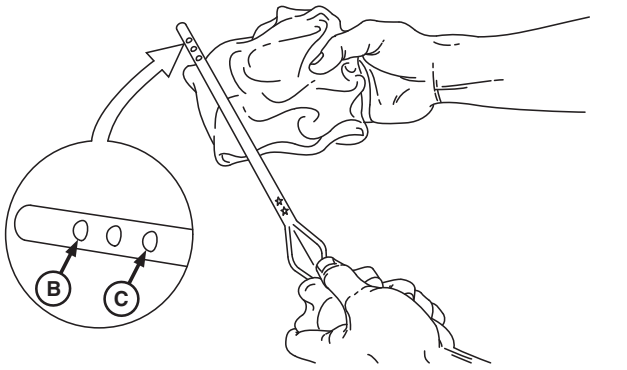

H95396—UN—17FEB10

*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.**

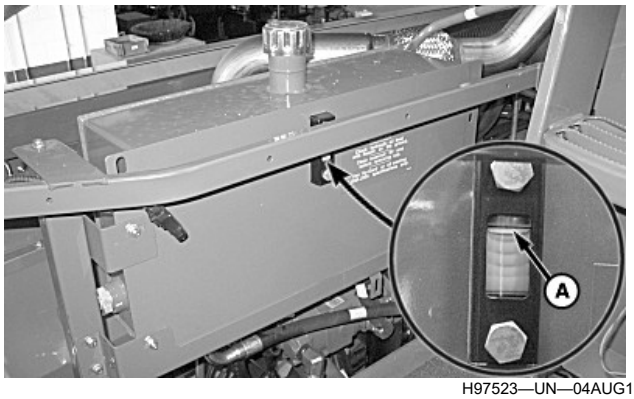
*NOTE: Verify that dipstick is screwed or pushed completely into housing before removing to check oil level.*

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.

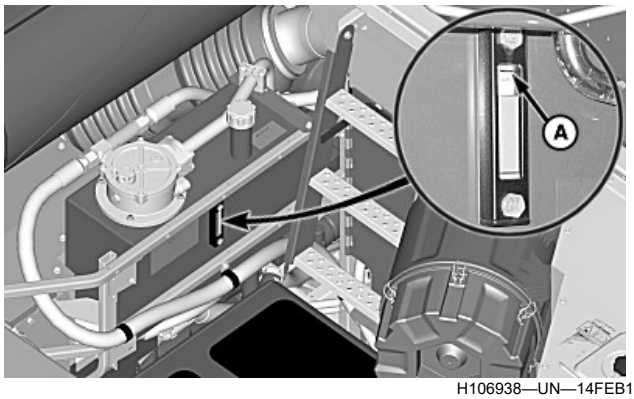
OUO6075,00047DB-19-13NOV17

## Hydrostatic/Hydraulic Oil Level



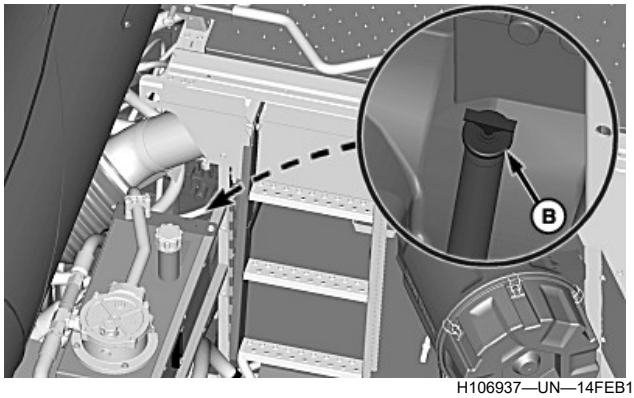

H97523—UN—04AUG10

*Style A*




H106938—UN—14FEB13

*Style B*




H106937—UN—14FEB13

*Hydraulic Oil Level (Engine Gear Case)*

**A—Sight Glass**
**B—Dipstick**

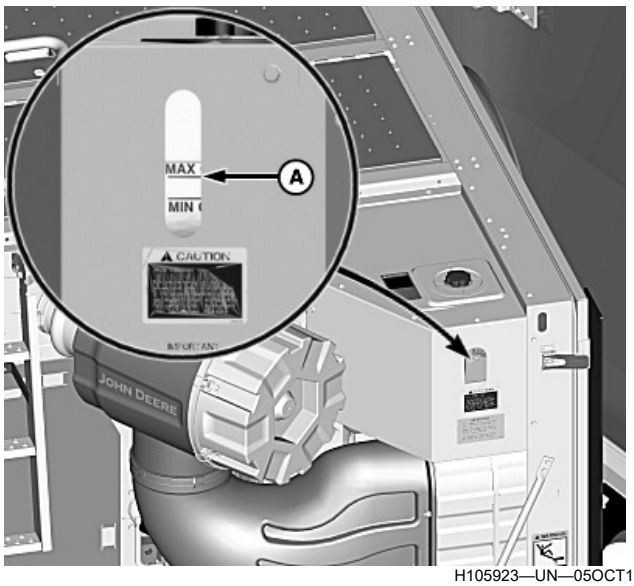
Check hydrostatic/hydraulic oil level with header on ground and all cylinders retracted. Oil level must be at top of sight glass (A) with the feeder house fully lowered. Add oil as needed, but do not overfill.

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.**

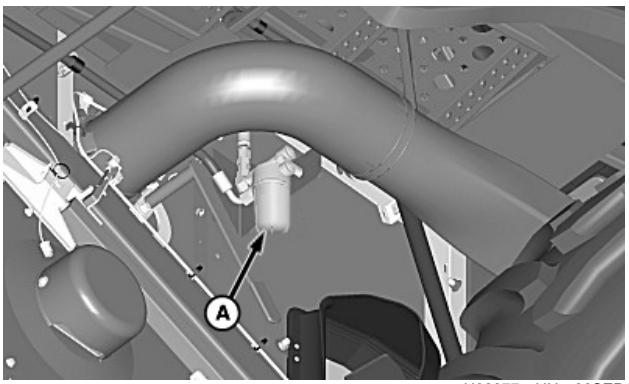
Allow engine to cool. Coolant level in the surge tank should be at "Max Cold" line (A).

*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**

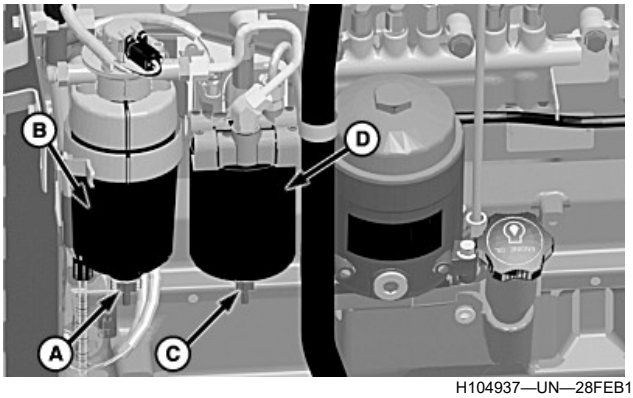
**⚠ CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work on fuel filters.**

*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.

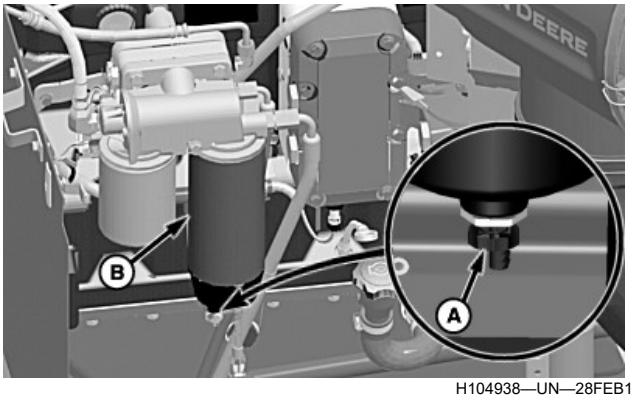
Remove precleaner bowl (A) and clean screen if dirty fuel was used.

### Tier 2/Stage II




H104937—UN—28FEB12

*Style A*




H104938—UN—28FEB12

*Style B*

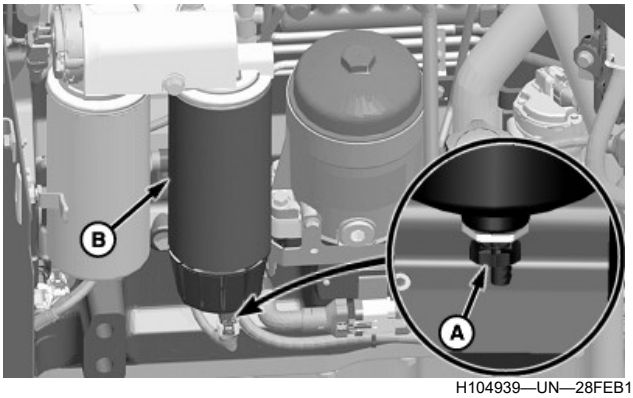
**A—Drain**
**B—Primary Fuel Filter**
**C—Drain**
**D—Secondary Fuel Filter**

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).

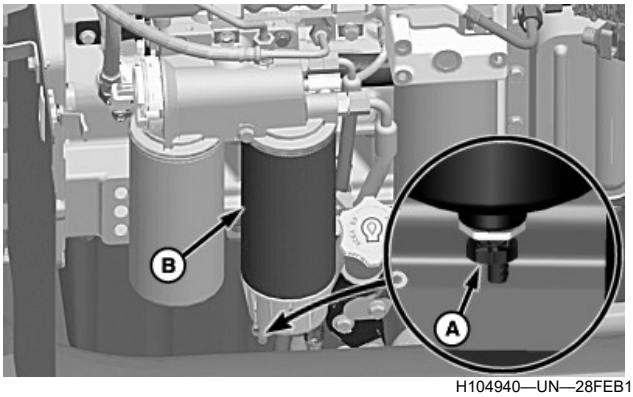
If the problem persists, change fuel filters. See Maintenance—As Required (Engine Fluids and Filters) section for further information.

### Final Tier 4/Stage V




H104939—UN—28FEB12

*Style A*




H104940—UN—28FEB12

*Style B*

**A—Drain**

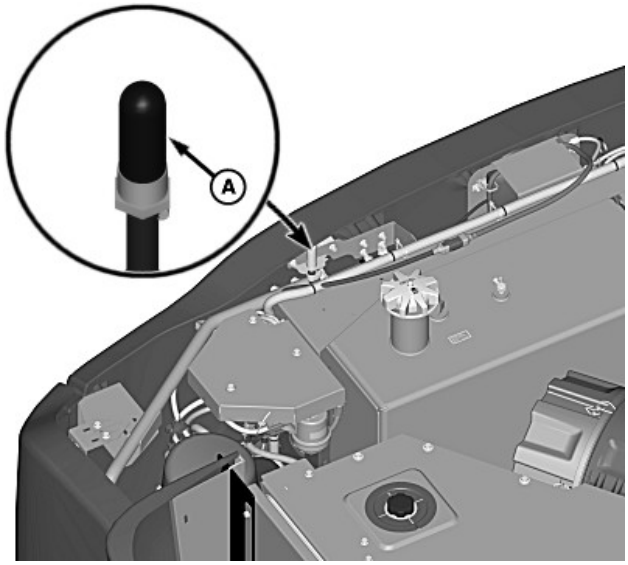
**B—Primary Fuel Filter**

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



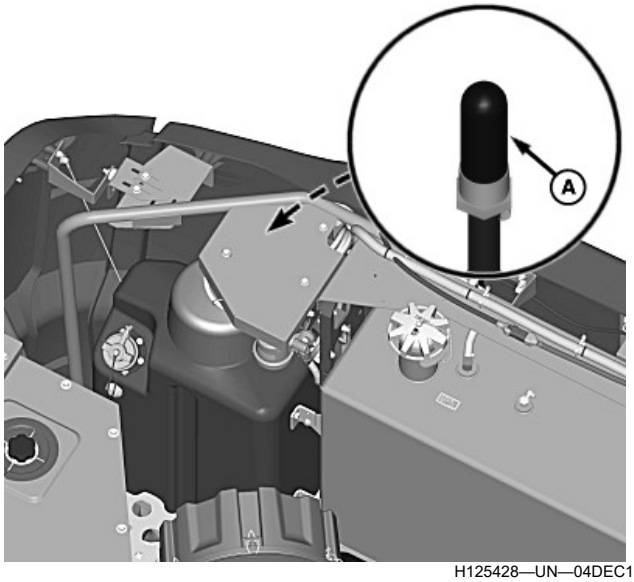

H125427—UN—04DEC18

**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)



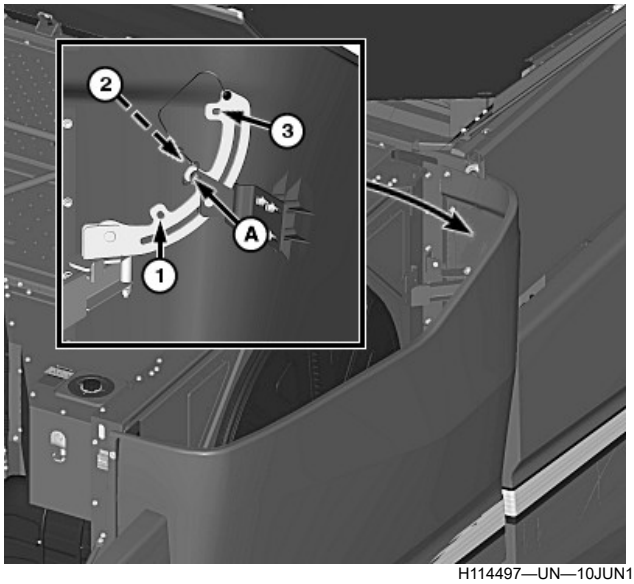

H125428—UN—04DEC18

**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.

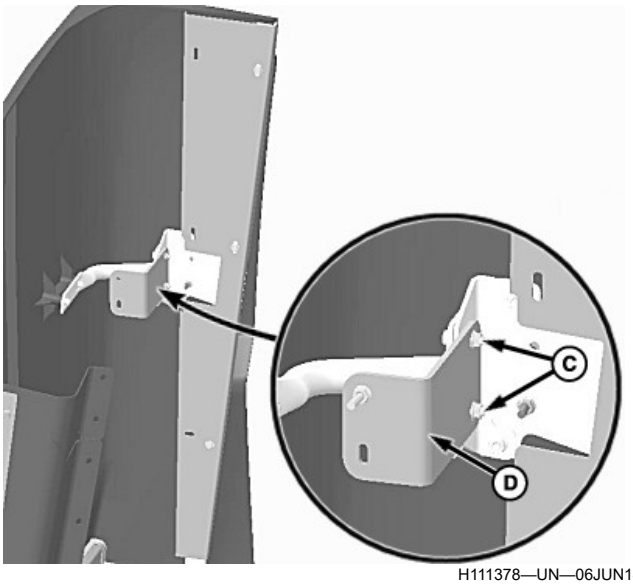
Refer to Position Engine Air Scoop (Extended Field Position) in this section for further information.

SS43267,000061F-19-10JUN15

## Position Engine Air Scoop (Standard Field Position)




H114498—UN—10JUN15




H111378—UN—06JUN14

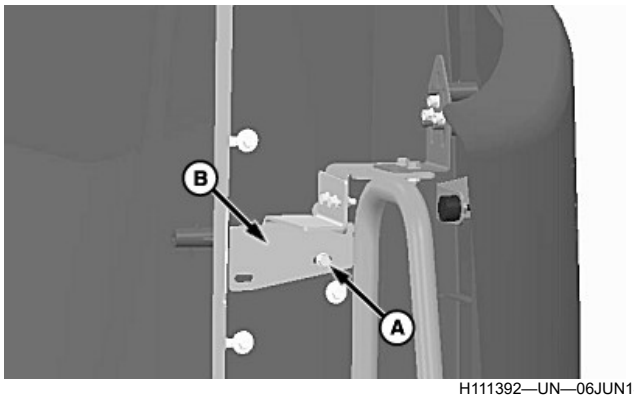
*Transport Position*

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

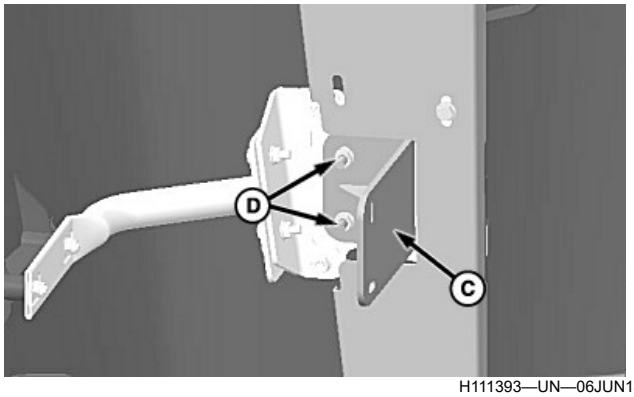
**IMPORTANT: Engine air scoop must be placed into standard field position when harvesting to prevent overheating of engine.**

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)**

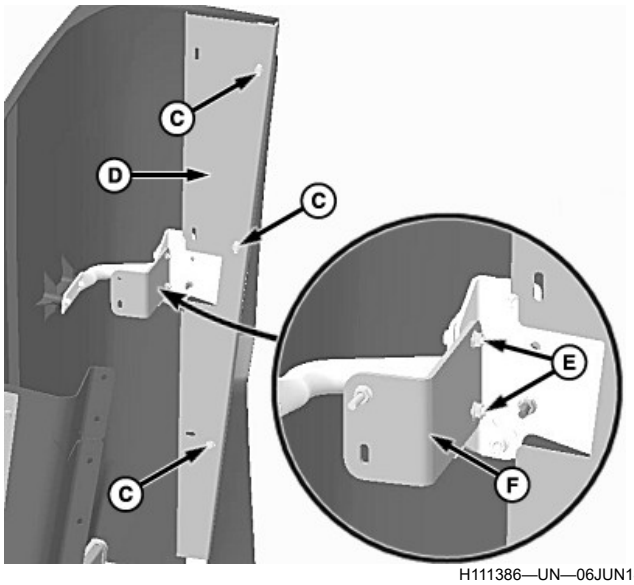
5. Move air scoop outward and install cap screw (A) through bracket (B) as shown.
6. Install bracket (C) as shown and retain with nuts (D).

SS43267,0000620-19-10JUN15

## Position Engine Air Scoop (Extended Field Position)




H114499—UN—10JUN15




H111386—UN—06JUN14

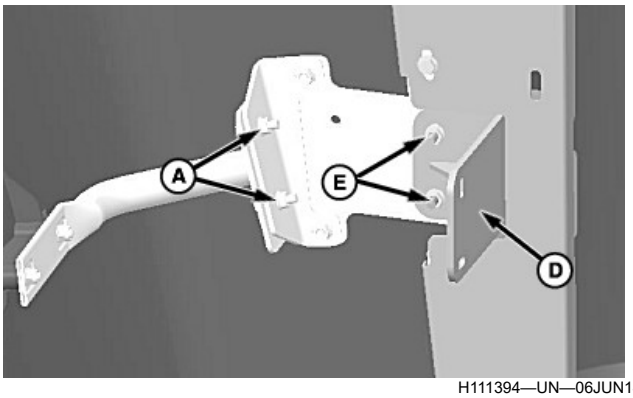
*Transport Position*

**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.**

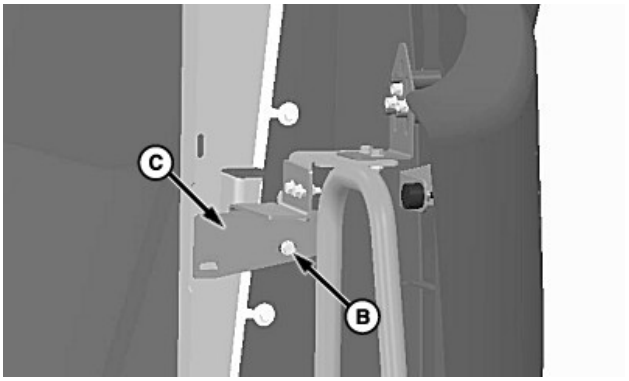
1. Remove lock-out pin (A) and move air scoop outward until hole (B) align.

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

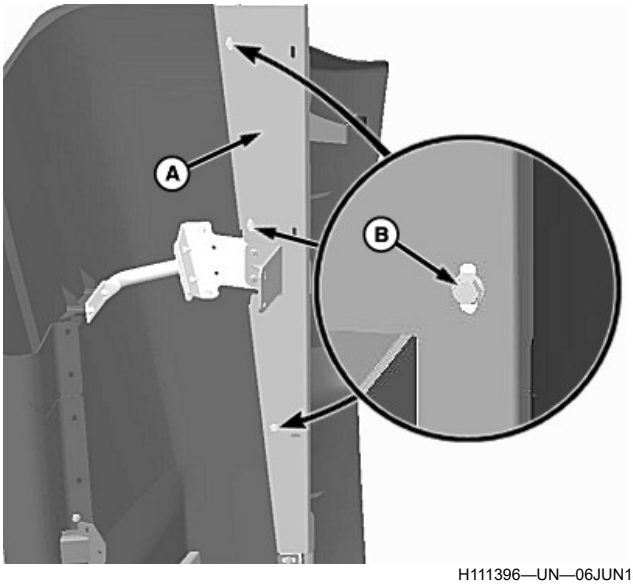
*Extended Field Position*




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)**

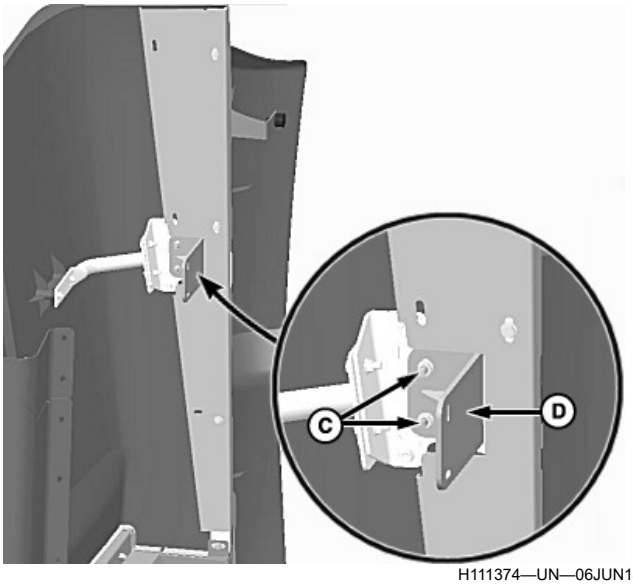
8. Install previously removed panel (A) and retain with cap screws (B).

SS43267,0000621-19-10JUN15

## Position Engine Air Scoop (Transport Position)




H114500—UN—10JUN15




H111374—UN—06JUN14

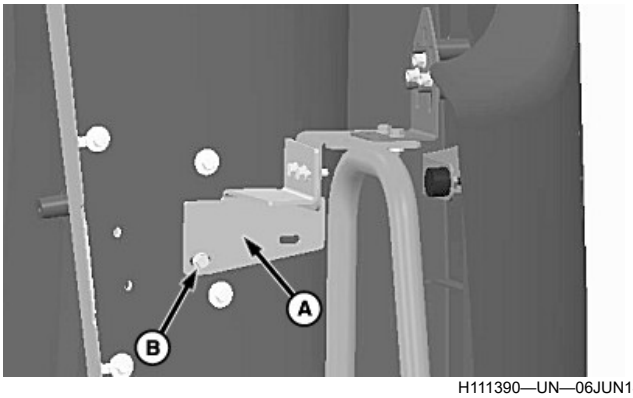
*Standard Field Position*

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

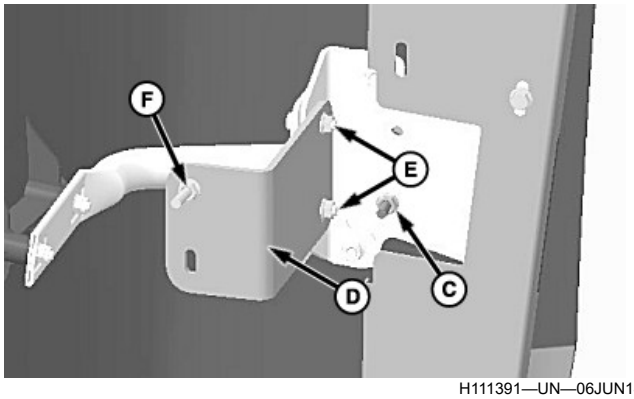
**IMPORTANT: Engine air scoop must be placed into transport position when local roadway restrictions apply. Follow your local country regulations.**

*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

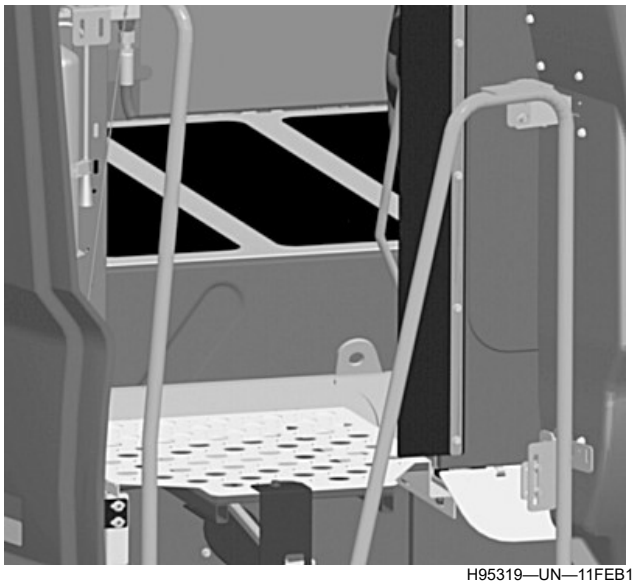
*Transport Position*

**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

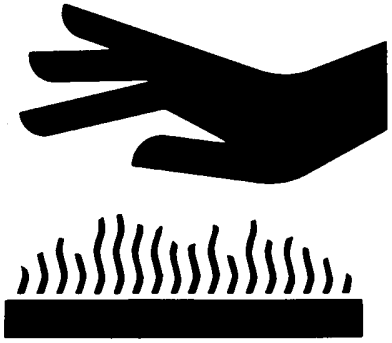
**CAUTION: Do not clean engine or engine compartment with engine running. Dirt, oil, chaff, and crop debris in engine compartment and on engine is a fire hazard. Direction of wind, type of crop and its moisture content can all have an effect on where and how much chaff and debris accumulate. Check and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

OUO6075,0000575-19-17MAR10

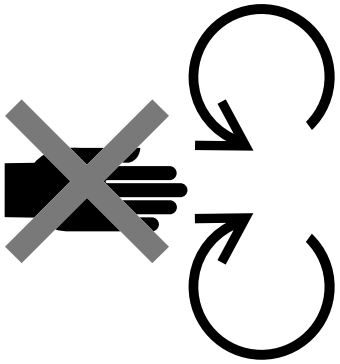
## Clean Exhaust Filter Safely



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.

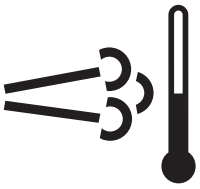
DX,EXHAUST-19-20AUG09

## Aftertreatment Indicators Overview



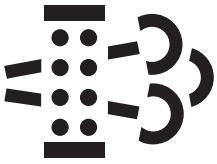
RG22487—UN—21AUG13

*Diesel Exhaust Fluid Indicator*



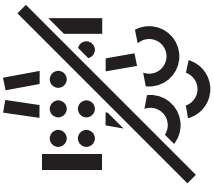
RG22488—UN—21AUG13

*Engine Emissions Temperature Indicator*



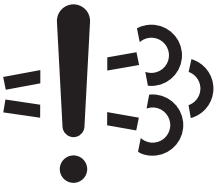
RG22489—UN—21AUG13

*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.

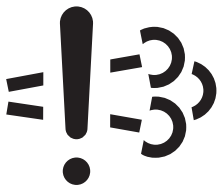
The engine emissions system malfunction indicator illuminates when engine emissions are outside of normal operating range or engine emissions system fault. Follow DTC procedure or see your authorized servicing dealer.

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

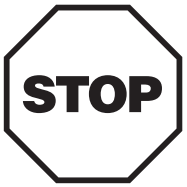
**IMPORTANT: In some situations, machine engine power may be reduced as described. On notification, immediately place the machine in a safe state and or move it to a safe location. A mandated machine stop can only be removed by a service technician.**

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



RG22492—UN—21AUG13

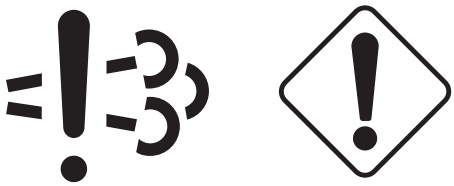
Warning Indicator illuminates when a condition exists which requires operator action.




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.

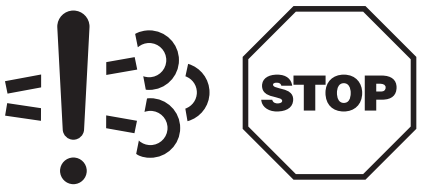
- Engine power is normal.
- Machine operation is normal.
- Place machine in a safe state.
- Contact service provider.




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

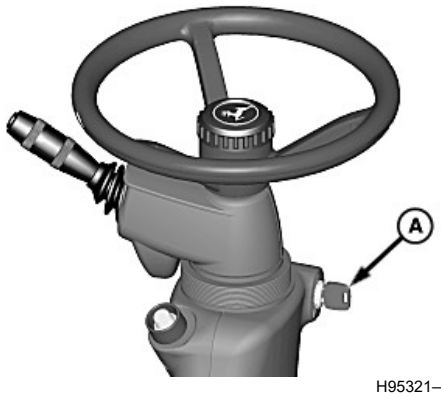
**A—Multi-Function Lever**
**B—Header Engage Switch**
**C—Separator Engage Switch**

**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:

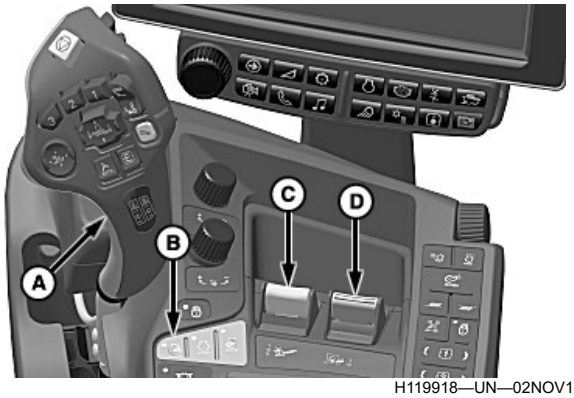
| | |
|---|---|
| First Position | Accessories |
| Second Position | OFF |
| Third Position | Run |
| Fourth Position | Start |

*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.**

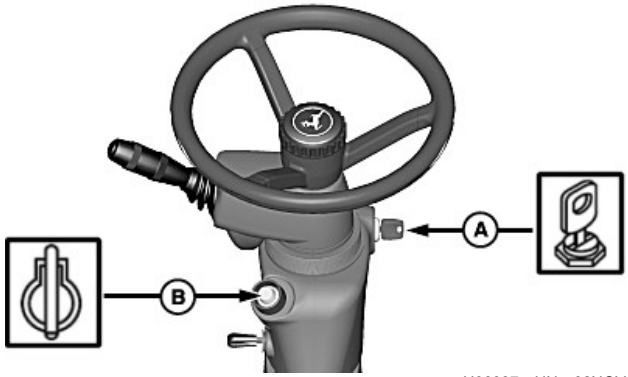
If starting fluid is not used for several days, remove can. Check fluid and valve operation by reinstalling and depressing spray nozzle. If no fluid is emitted, use a new can.

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).

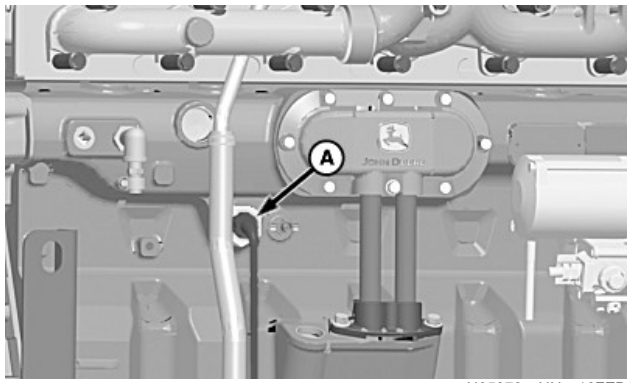
When engine starts, release key, and starting aid button.

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



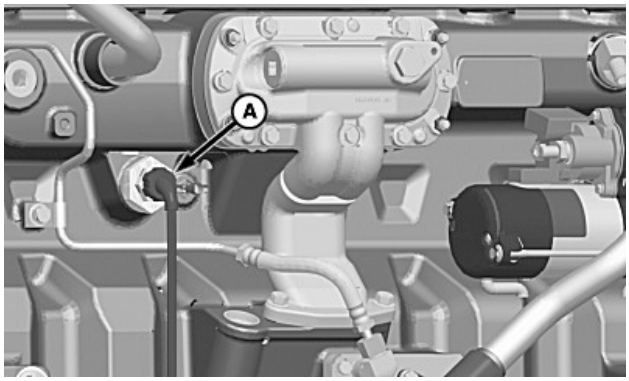

H95379—UN—16FEB10

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



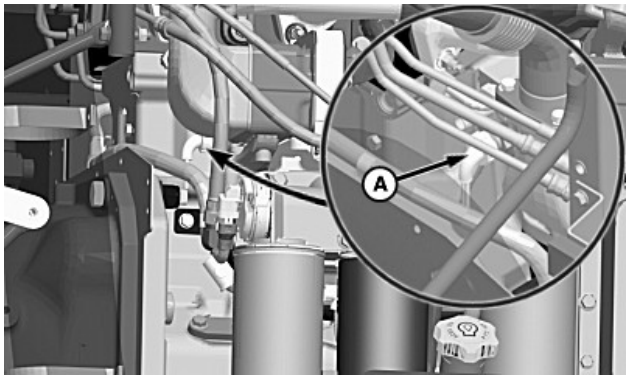

H71689—UN—18APR02

*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:



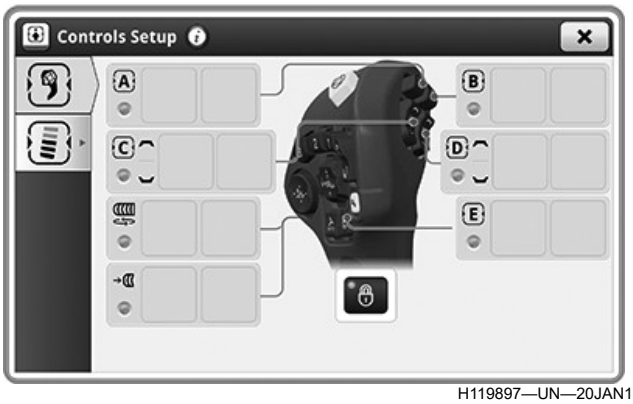
H118151—UN—20JAN17

*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.

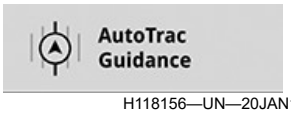



H118506—UN—20JAN17

*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

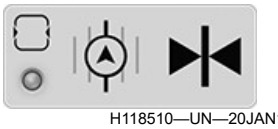
*AutoTrac™ Guidance Selected*

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

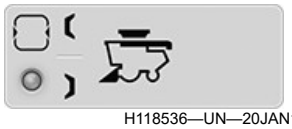
*Remove Assignment*

*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

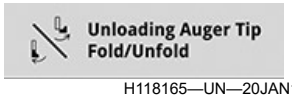
*Folding*



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*

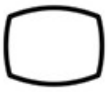
**Residue Management**— allows you to access the residue management functions.



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

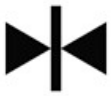
The programmable and Scroll buttons allow you to make function assignments, select from multiple positions, to increase or decrease a value, or to make a

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.

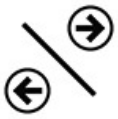
**Display**



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*

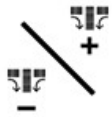
**Reel Speed**— select to change the speed of the reel or the belt pickup as needed.



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*

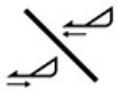
**Draper Belt Speed Slow Down**— select to slow down the draper belt speed.



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:



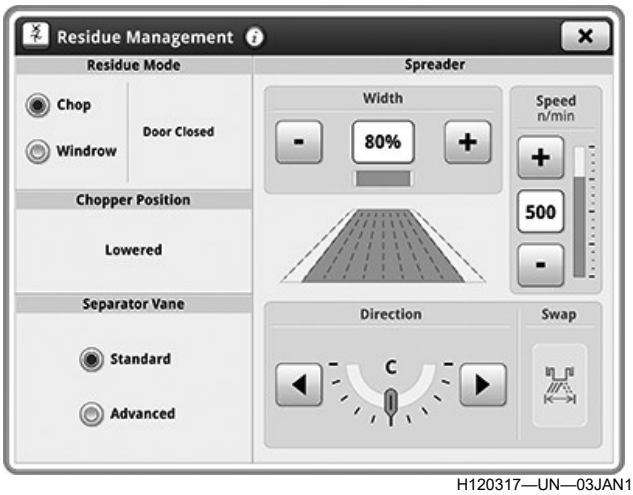
H116635—UN—03JAN17

*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*

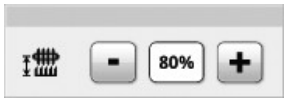
Direction— changes chaff and straw spreading direction.



H118304—UN—03JAN17

*Swap*

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




H126977—UN—26SEP19

*Knife Bank*

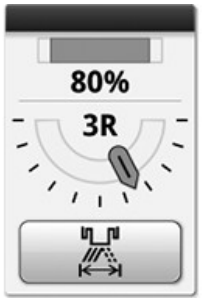
Knife Bank— slides in and out for better chopping quality of residue or to conserve machine power.

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.

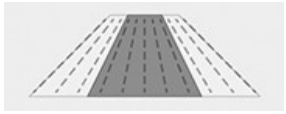



H116988—UN—03JAN17

*Width*

*NOTE: Current setting is displayed by bar gauge.*

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



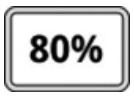
H118119—UN—03JAN17

*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.

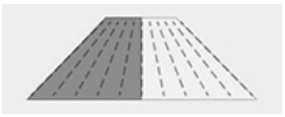
*NOTE: When changes are made to the spread direction, the spreader diagram changes as well.*

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




H118133—UN—03JAN17

*Direction*



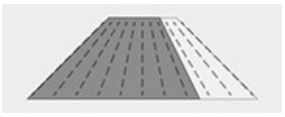
H118128—UN—03JAN17

*Width*



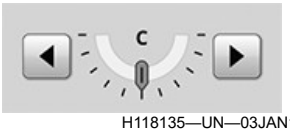

H118134—UN—03JAN17

*Direction*



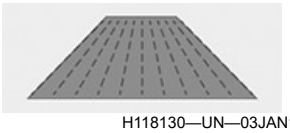
H118129—UN—03JAN17

*Width*



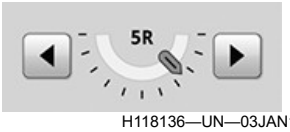

H118135—UN—03JAN17

*Direction*



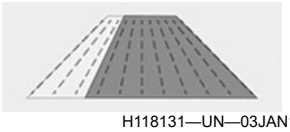
H118130—UN—03JAN17

*Width*



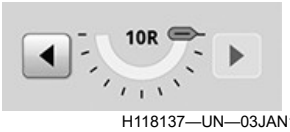

H118136—UN—03JAN17

*Direction*



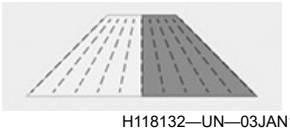
H118131—UN—03JAN17

*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

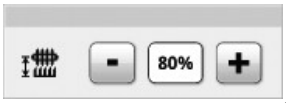
Knife Bank is an optional, in-cab adjustable system which slides knife bank in-and-out for better chopping quality or to save machine power.

**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:



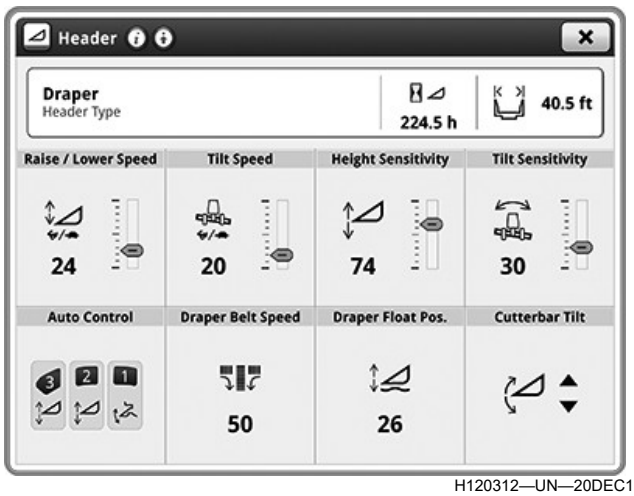
H117904—UN—22JAN20

*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*

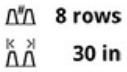
**Hours**— number of hours per header type recorded by the combine.




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*

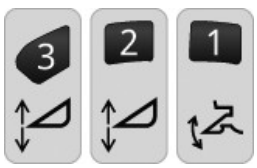
Height Sensitivity— controls sensitivity to changes in terrain of header raise/lower in automatic mode.



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*

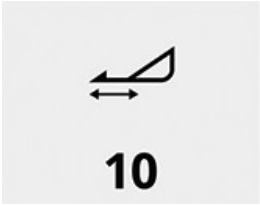
Draper Float Position— controls the pressure in the cylinders for the gauge wheel float arms.



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

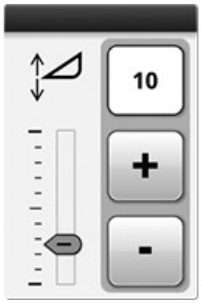
*Backshaft Speed*

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.

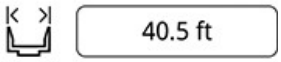
**Procedure to Modify:**




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.

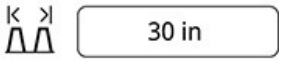
**Procedure to Modify:**




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.

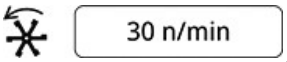
**Procedure to Modify:**




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

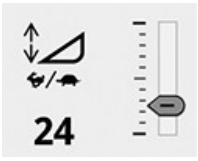
Raise/Lower Speed controls the speed which the feeder house raises or lowers when using the manual raise/lower buttons on the multi-function lever.

**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.

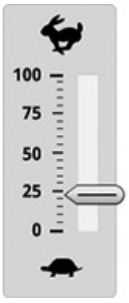
**Procedure to Modify:**




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.

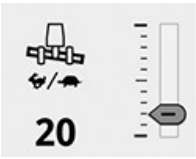
*NOTE: Manual Tilt Speed function only works on closed center hydraulic machines equipped with lateral tilt feeder house.*

**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

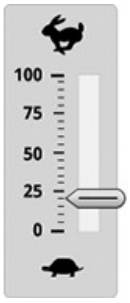
**Procedure to Modify:**




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

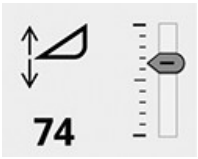
Height Sensitivity controls the speed of which the feeder house will raise/lower in automatic mode to accommodate the terrain.

*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.

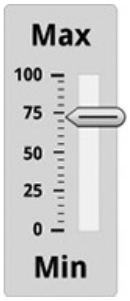
**Procedure to Modify:**




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

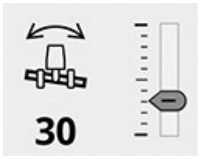
Tilt Sensitivity controls the speed at which the feeder house tilts to accommodate changes in terrain. Increasing sensitivity causes feeder house to react faster.

*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.

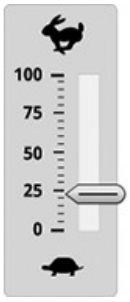
**Procedure to Modify:**




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*

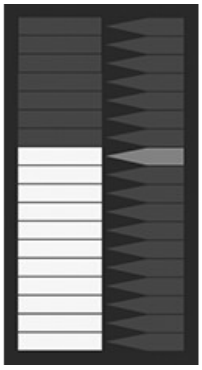
Activation number on the corner post display indicates which button was selected.



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*

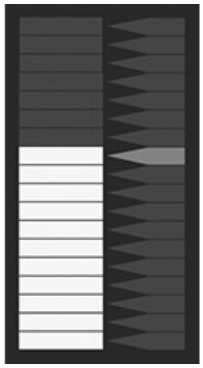
Activation number on the corner post display indicates which button was selected.



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.

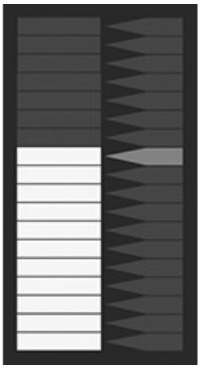


H116347—UN—20DEC16

*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*

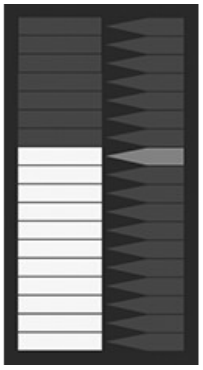
Activation number on the corner post display indicates which button was selected.



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™*

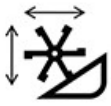
Dial-A-Speed™— automatic control of reel or belt pickup speed relative to ground speed.



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:**

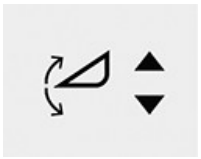
**Tilt the cutterbar forward:**

- 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.

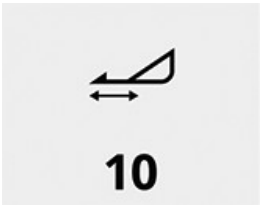


H116168—UN—19DEC16

*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:



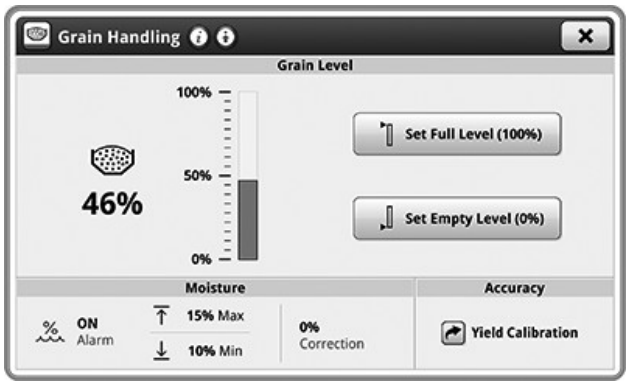
H114775—UN—10JAN17

*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:

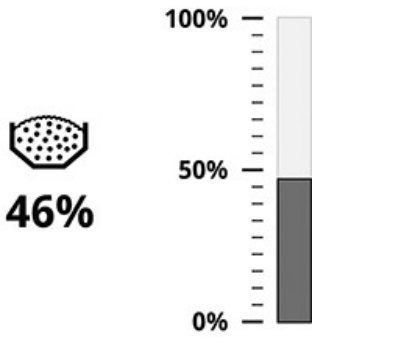
Moisture— enable or disable moisture alarm, set maximum and minimum moisture alarm settings, and set moisture correction.




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.

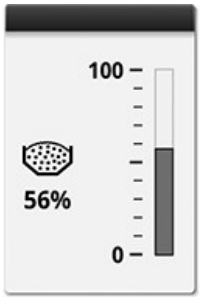


N118004—UN—22OCT15

*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*

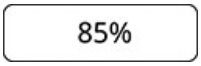
Tank Unloading Offset— adjust grain tank empty level if all grain is not emptied from grain tank or unloading auger continues to run after grain tank is empty.




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.

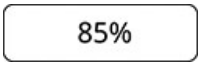



H114769—UN—22OCT15

*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.

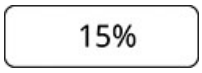



H113848—UN—04JAN17

*ON/OFF*

**Items accessible on Moisture Settings page:**

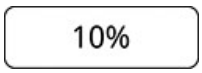
ON/OFF— enable or disable Moisture Alarm.




H119131—UN—10JAN17

*Maximum Moisture Value*

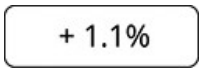
Maximum Moisture— upper limit to activate the moisture alarm.




H119130—UN—10JAN17

*Minimum Moisture Value*

Minimum Moisture— lower limit to activate the moisture alarm.




H119132—UN—10JAN17

*Correction Value*

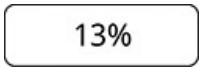
Correction— amount of correction needed to match a certified moisture measurement.



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.

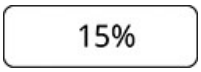



H114769—UN—22OCT15

*ON/OFF*

**Procedure to Modify:**

- Select to enable or disable Moisture Alarm.



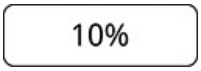

H119131—UN—10JAN17

*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.



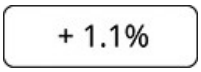
H114785—UN—10JAN17

*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:



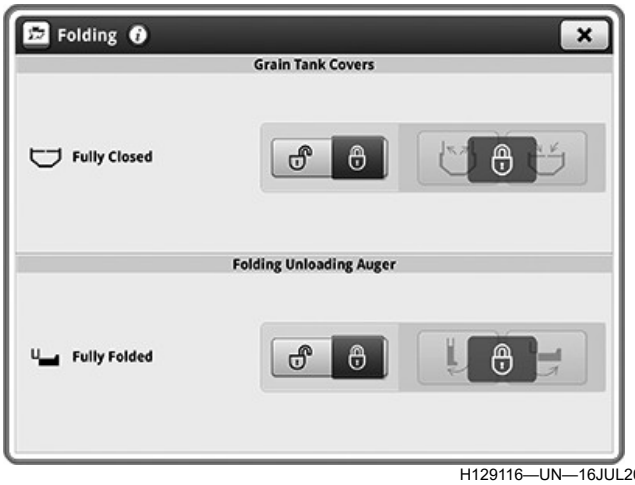
H115016—UN—22MAR16

*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.

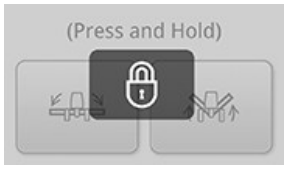
**Folding Corn Head (John Deere Models):**



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*

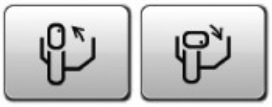
- Select to fully lower fountain auger.



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

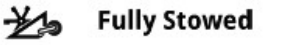
*Deployed/Stowed*

*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*



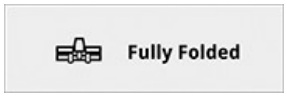

H116121—UN—06JAN17

*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

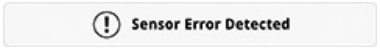
Manual Control displays subsystem features that are malfunctioning or have been placed into manual control mode.

*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

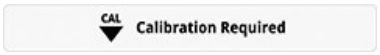
may appear on subsystems experiencing an issue. Subsystems not experiencing an issue will still be displayed, but without the sensor error or calibration required attention frames.




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:



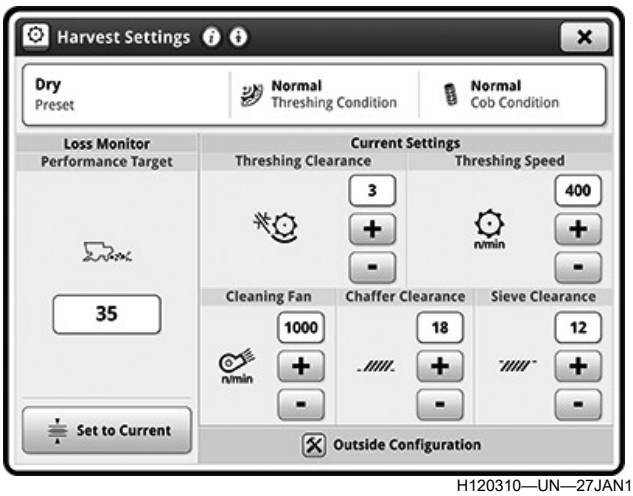
H116102—UN—27JAN17

*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

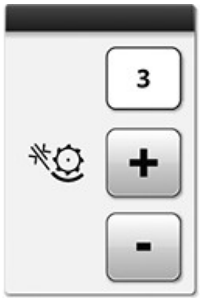
*Sieve Clearance*

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:**

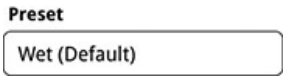



H126455—UN—07JUN19

*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.*

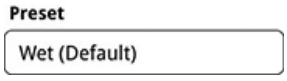
**Procedure to Delete:**




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.*

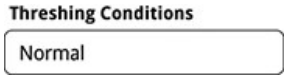
**Procedure to Modify:**




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.*

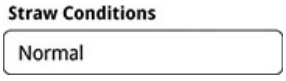
**Procedure to Modify:**




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.*

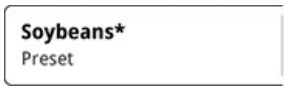



H116106—UN—27JAN17

*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.

*VisionTrak is a trademark of Deere & Company*

**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:**

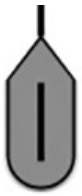


N118004—UN—22OCT15

*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*

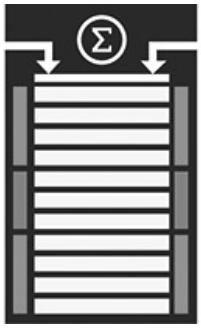
Select to open number pad and manually enter desired value.

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:



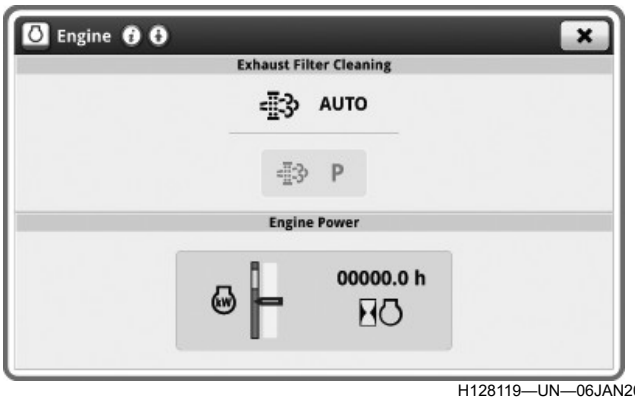
H113709—UN—04JAN17

*Engine Application Button*

Press Engine button on navigation bar below display.

N0LMWLO,000036F-19-16JUL20

## Engine Main Page




H128119—UN—06JAN20

*Engine*

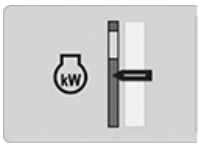
*NOTE: Underscored text identifies that additional information is available within this section or another section of this publication.*

*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*

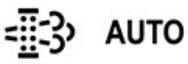
Engine Power— amount of power the engine is using.




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.

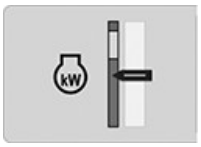
N0LMWLO,0000370-19-16JUL20

## 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

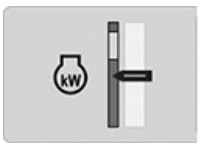
*Engine Hours*

**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.

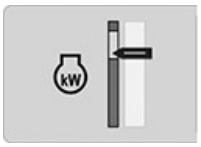
**Power Meter**




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.

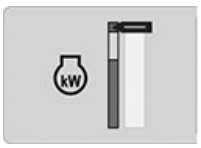



H113551—UN—04JAN17

*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.**

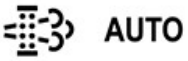
Operating in the following conditions increases power consumption:

- 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*

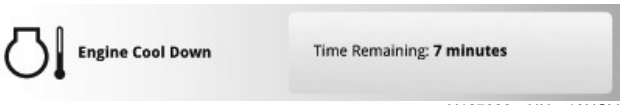
2. Select OK on Engine Cool Down In Progress alert.




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

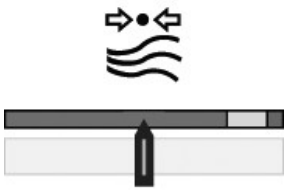
*OK*

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

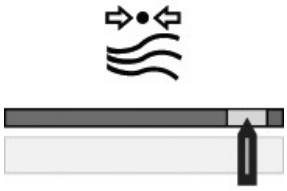
An indicator that allows you to view the debris management filter capacity.



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:



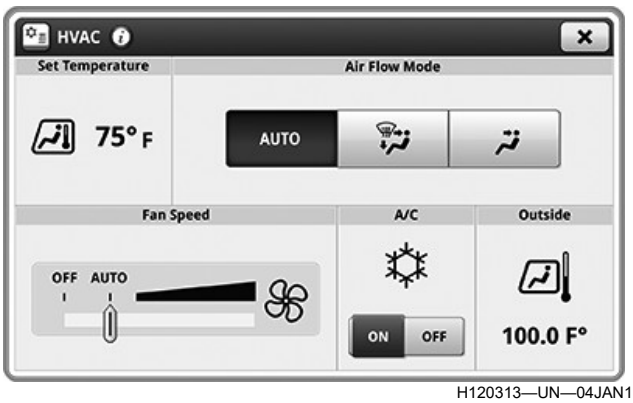
H114794—UN—17MAR16

*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*



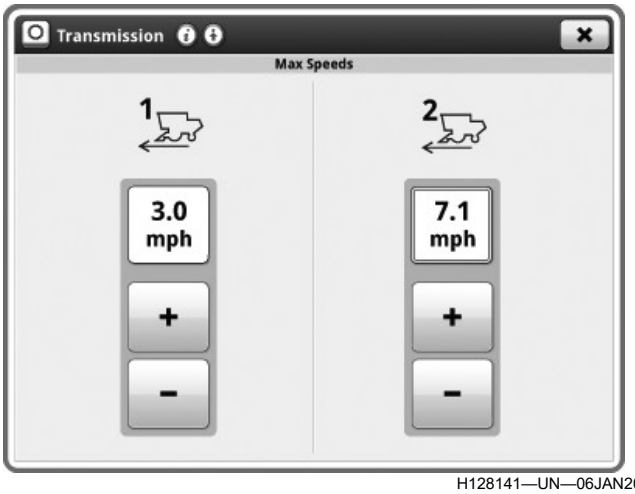
H113843—UN—30OCT15

*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.

*ProDrive is a trademark of Deere & Company*

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

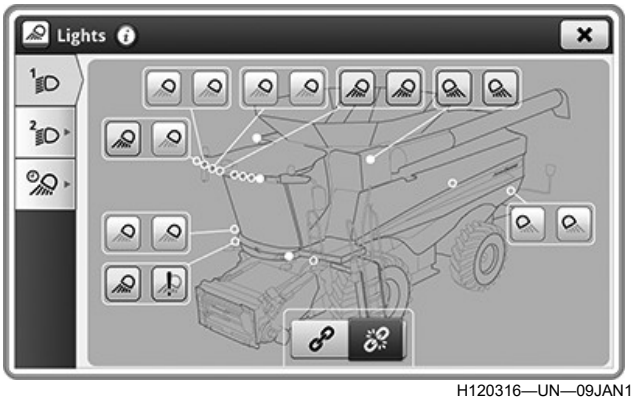
*Lights*

### 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*

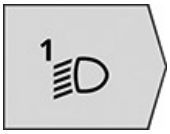
Worklights Preset 2—High-Beam— lights that will illuminate in Preset 2—High-Beam mode.



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:**



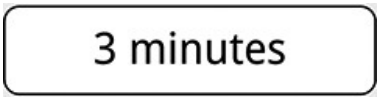

H125409—UN—01FEB19

*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*

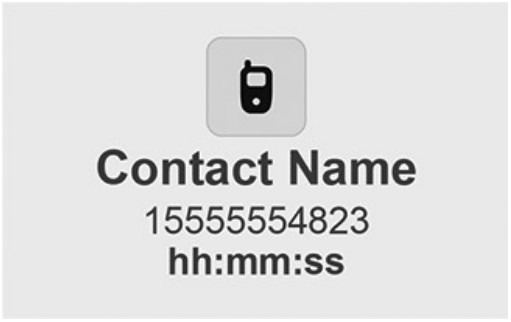
Press Phone button on navigation bar below display.

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*

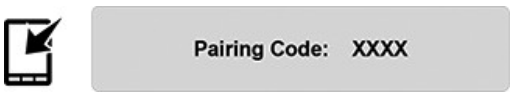
Initiating message should appear.




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*

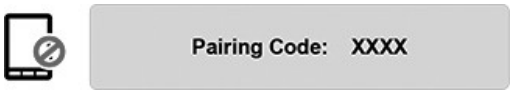
2. Enter the pairing code into the device after the connection is established.




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*

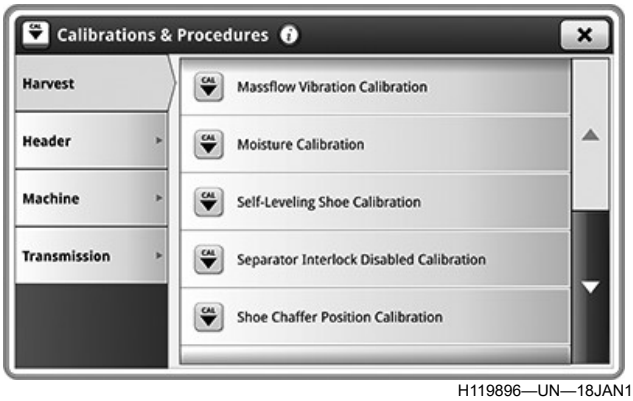
3. Calibrations & Procedures

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

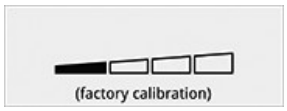
This procedure calibrates the estimated yield. Calibration is done by matching recorded samples with corresponding scale weight measurements.

*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*

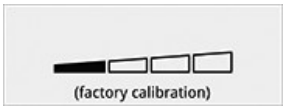
Advanced Settings—access further adjustments and less common settings.

*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

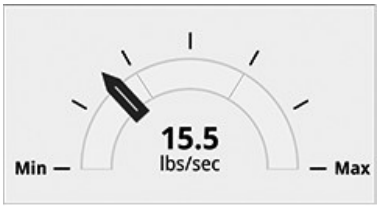
*Gray*

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.

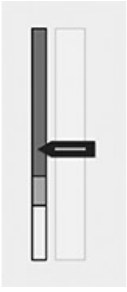
*NOTE: Low flow rate is displayed using dashes.*




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*

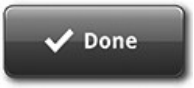
Delete—deletes the current sample data.




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*

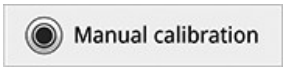
Reset—reset the system to the factory default.




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

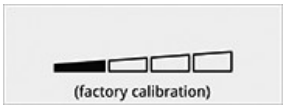
*Delete Unused Samples*

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.

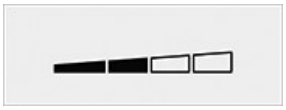



H119365—UN—18JAN17

*Factory Calibration*

Factory Calibration—indicates that factory calibration is in use. No adjustments have been made.

*ActiveYield is a trademark of Deere & Company*



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

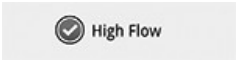
Collected Sample Status indicates the criteria met, by the current sample set. When a criterion is met a checkmark is displayed next to it.




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

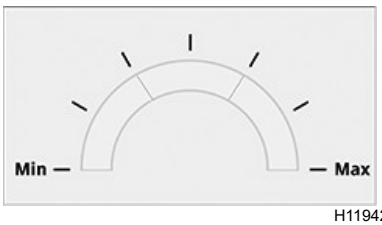
Mass Flow Rate indicates the flow of crop being harvested.



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

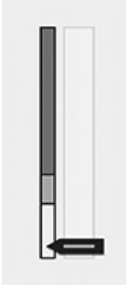
Weight Indicator displays when enough crop has been harvested to perform the calibration.



H119403—UN—18JAN17

*Current Weight*

Current Weight—current calculated weight of the sample.



H119404—UN—18JAN17

*Gray Zone*

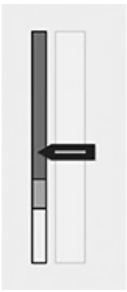
Gray Zone—sample is too small for calibration to occur.



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

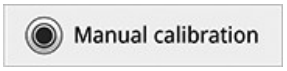
## Yield | Edit/Select Calibration

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.

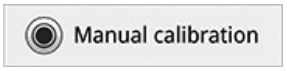


N118434—UN—22JAN20

*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:**

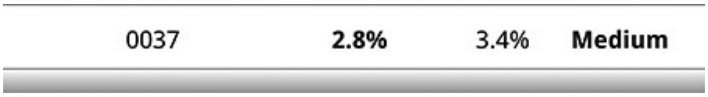
1. Select Manual Calibration.




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*

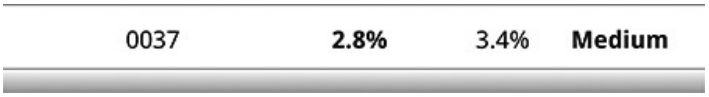
6. Select Save button to confirm.



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

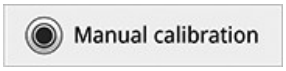
*Save*

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:**

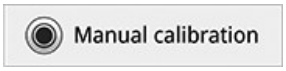
1. Select Manual Calibration.




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.*

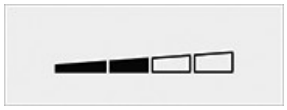
**Items Accessible on ActiveYield™ Page:**




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.

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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<br>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<br>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*

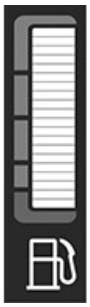
Engine Power Meter Indicator— indicates the percentage of power the engine is using at any given time.



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*

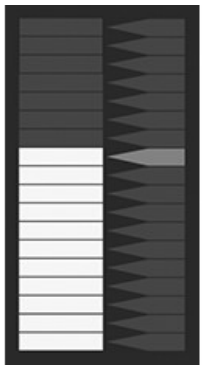
Vehicle Speed Indicator— indicates the machine speed (km/h or mph).




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*

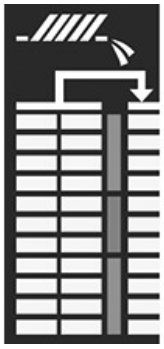
Active Header Float— illuminates when the active header float is active.



H116359—UN—19DEC16

*Lateral Tilt Display*

Lateral Tilt Display— indicates position of the feeder house frame.

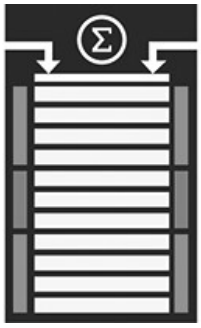


H117835—UN—22DEC16

*Shoe Loss Indicator*

Shoe Loss Indicator— indicates grain loss from shoe.

*NOTE: Shoe Loss Indicator is part of the VisionTrak™ system.*

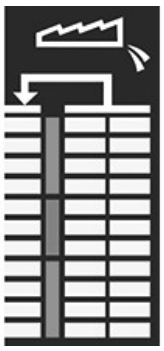


H117836—UN—22DEC16

*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.*

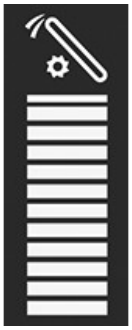


H117837—UN—22DEC16

*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*

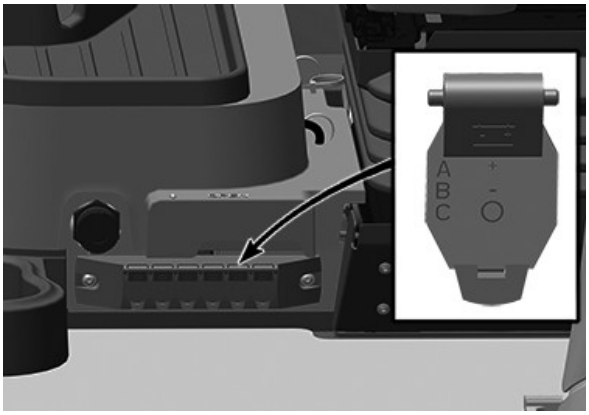
4600 Extended Monitor Port— used to connect a 4600 extended monitor for a secondary display.



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).

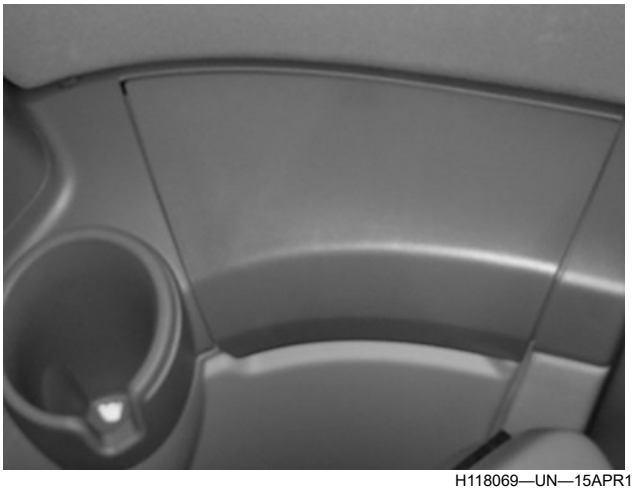


H121414—UN—18MAY17

*Emergency Exit*

Emergency Exit— allows you to exit the combine in case of emergency.

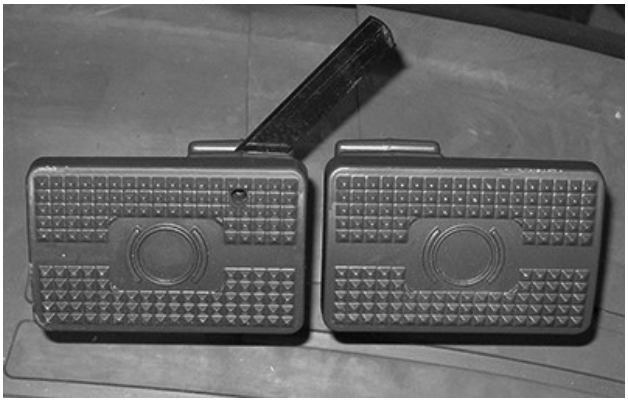
- Pull down to remove the emergency exit device.
- Use the hammer to break the window and exit cab if doors do not open.
- Use the knife in the handle to cut seat belts if they do not unbuckle.



H118069—UN—15APR16

*Manual Storage Location*

Manual Storage Location— compartment located along rear cab wall that stores the Operator's Manual.

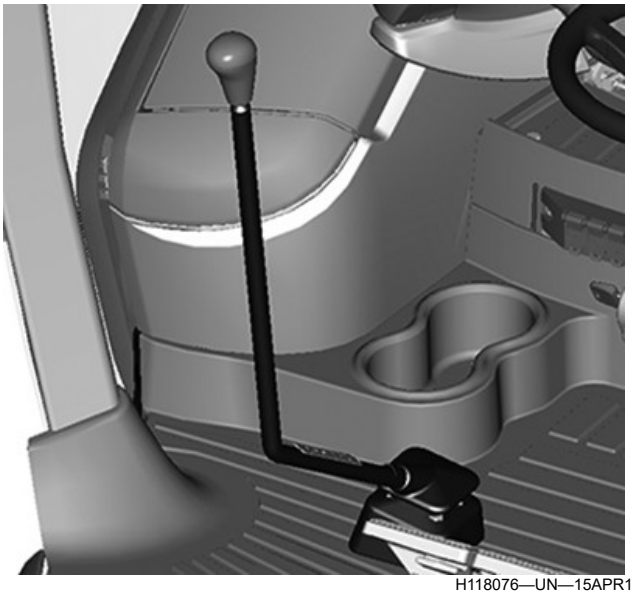


H118068—UN—15APR16

*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*

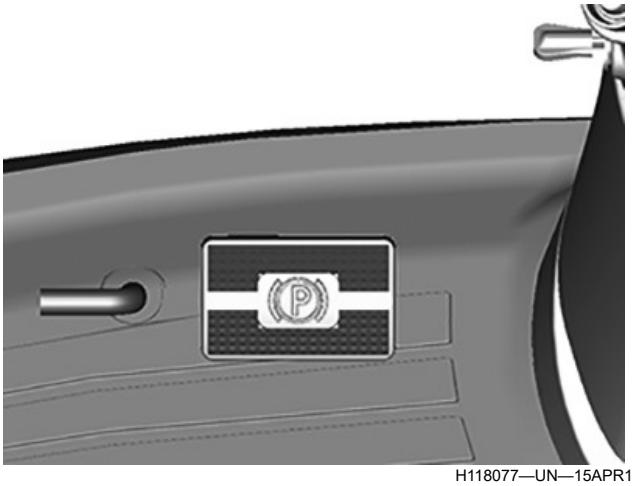
Gearshift Lever (If Equipped)— allows you to manually shift gears.

**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.*



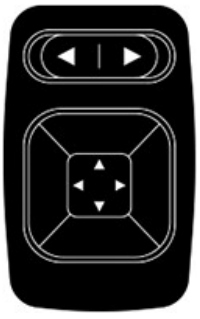
H118065—UN—22DEC16

*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

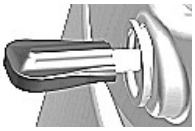
## Adjusting Steering Wheel



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*

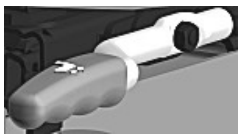
Ether Injection— press while cranking the engine to aid in cold weather starting. Release button after the engine starts.

**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.



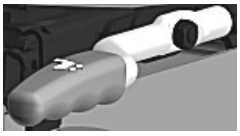
H121071—UN—18MAY17

*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*

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.



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.



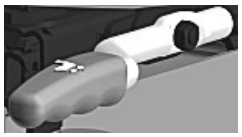
H117047—UN—28MAR16

*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

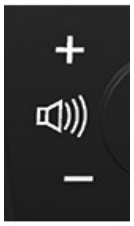
## Radio



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.



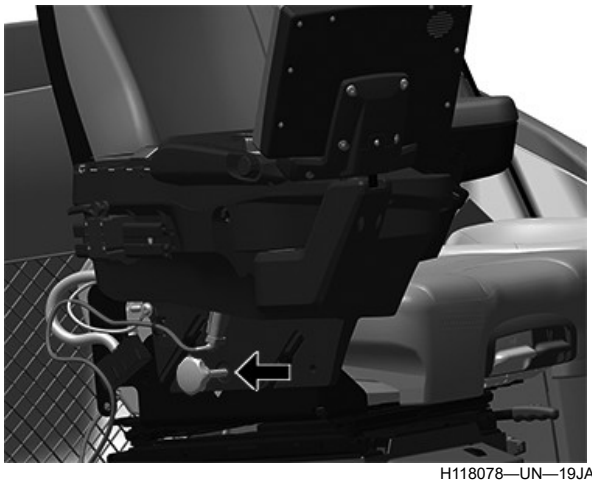
H117885—UN—29MAR16

*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

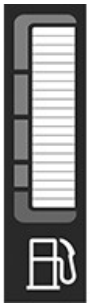
*Exhaust Filter Cleaning Indicator*

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

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## 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™

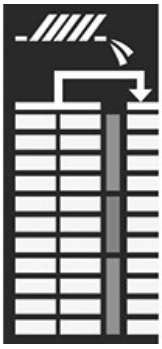
VisionTrak™ monitor checks grain loss by measuring a representative sample of losses over the cleaning shoe and through the separator. VisionTrak™ continuously monitors machine performance to enable you to use maximum machine capacity. A change in loss rate is indicated by the indicators.

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*

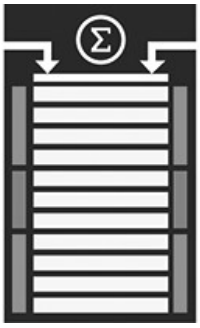
**Loss Range Indicators**—indicates whether loss levels are at an acceptable rate. The green range in the center of the bar graph indicates acceptable loss levels. The orange ranges above and below the green range indicate that losses are not within an acceptable level.



H126289—UN—06JUN19

*Summation Symbol*

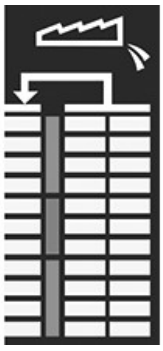
**Summation Symbol**—displays above the Total Loss Indicator.



H117836—UN—22DEC16

*Total Loss Indicator*

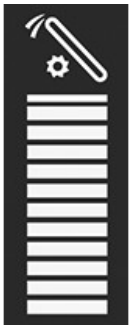
**Total Loss Indicator**—shows an average of grain loss from the shoe and separator areas.



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.*

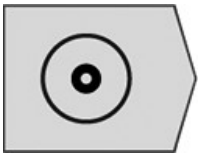


N144954—UN—24MAY19

*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.*

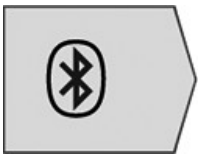



N144965—UN—24MAY19

*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*

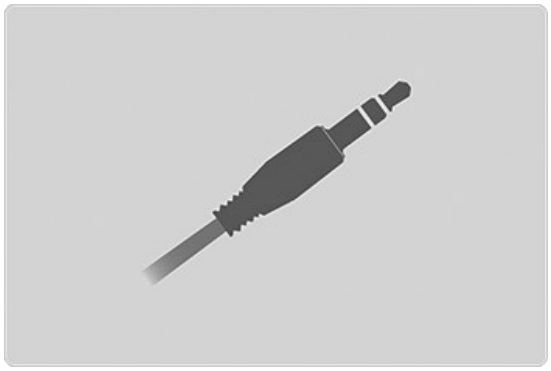
Advanced Settings— access further adjustments and less common settings.

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.

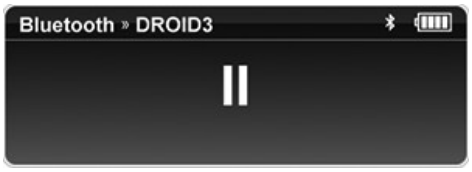
N0LMWLO,000005A-19-28MAY19

## 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™.

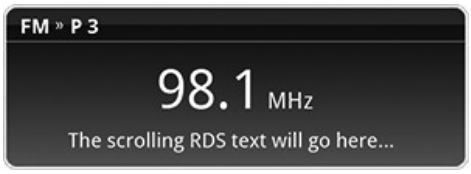
N0LMWLO,000005B-19-28MAY19

## 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*

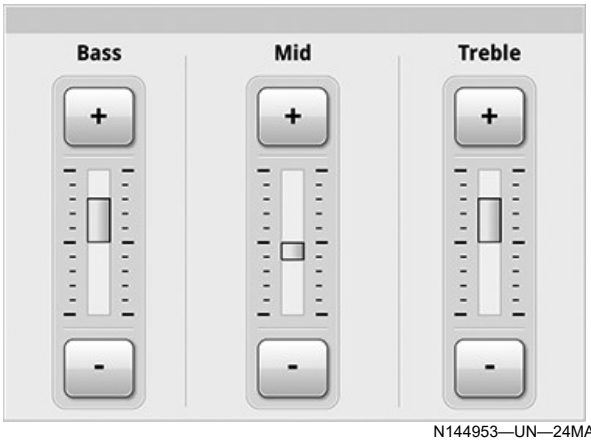
Select to close.

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™

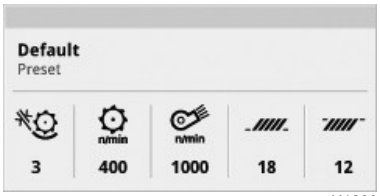
AZ06166,00005F5-19-21NOV19

## 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:**

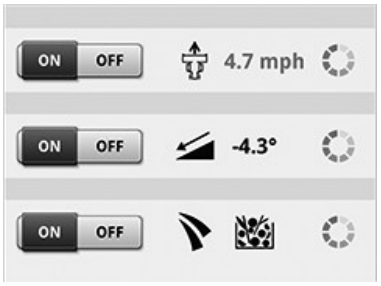
*NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.*




H126941—UN—26SEP19

*Current Settings*

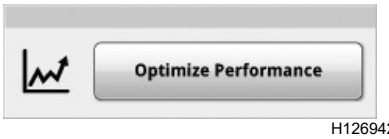
**Current Settings**—select Current Settings screen area to access Harvest Settings Application.




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*

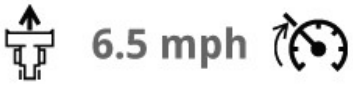
*NOTE: Blue text indicates that HarvestSmart™ is controlling the ground speed. Black text indicates that the user is controlling the ground speed.*




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**

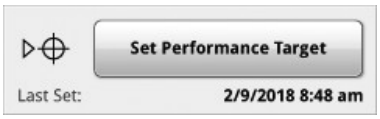


H125041—UN—05FEB19

*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*

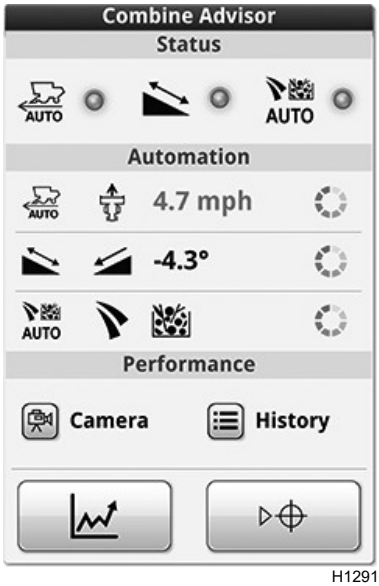
Set Performance Target—allows you to set a new performance target at existing loss, grain quality, and engine power levels.

*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.*

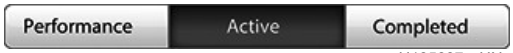
**Items Accessible on History Page:**




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.*

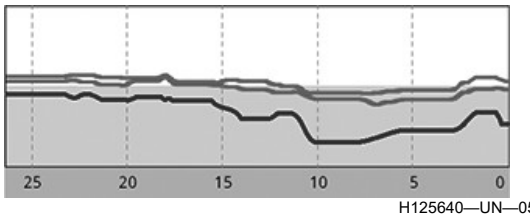
**Items Accessible on Performance Monitor Page:**




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.



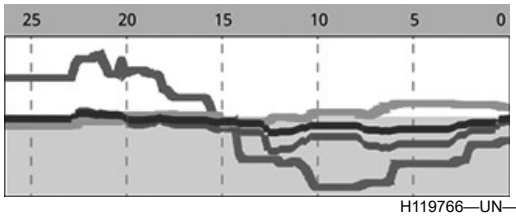

H125640—UN—05FEB19

*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

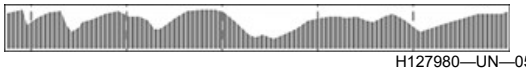
*Quality Performance*

**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.*

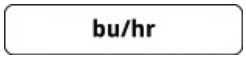
*NOTE: If a parameter is operating in the white area of the chart it indicates that it is not within the performance target. Auto Maintain then adjusts to correct the issue to bring it into the green area.*



H127980—UN—05NOV19

*Field/Machine Performance Graph*

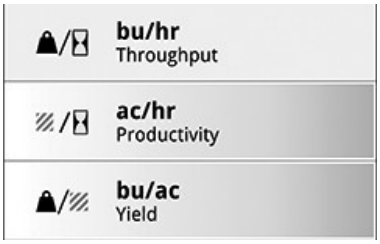
**Field/Machine Performance Graph**—displays Throughput, Productivity, or Yield over a 30 minute time.




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.

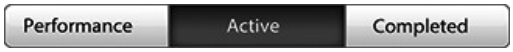
N0LMWLO,0000394-19-16JUL20

## 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:**

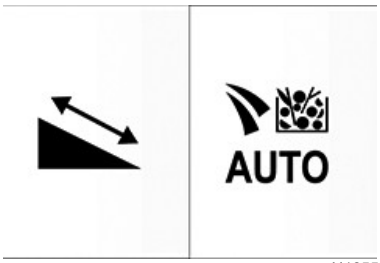
*NOTE: Some of the following items displayed are only listed if machine is equipped with the associated option.*




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.

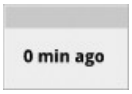
**Items Accessible on the Offset Details Page for Completed Adjustments:**




H125594—UN—01FEB19

*Active Offset*

**Maximum Offset**—shows the maximum offset made to each setting for the corresponding reason.

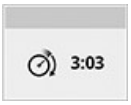



H127981—UN—05NOV19

*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

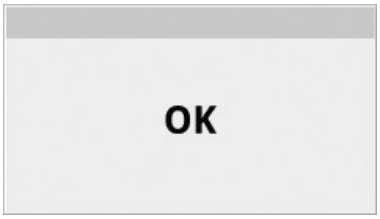
## Lens Debris

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*

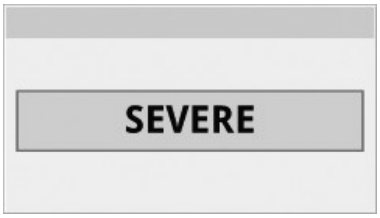
**OK**—indicates that there is little to no debris on the lens.




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

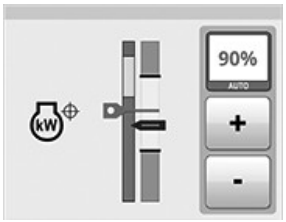
*Auto Maintain Status*

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.

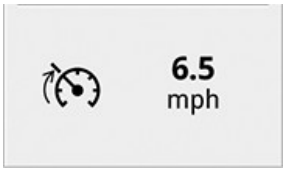



H127982—UN—05NOV19

*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.*

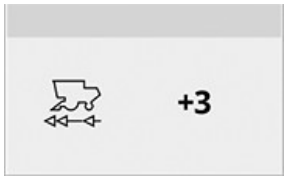



H118568—UN—20JAN17

*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.

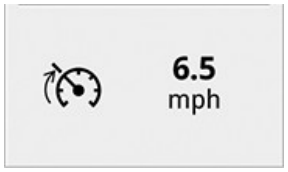
**Modify When:**

- 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:**

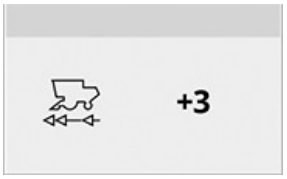
**Increase When:**

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.

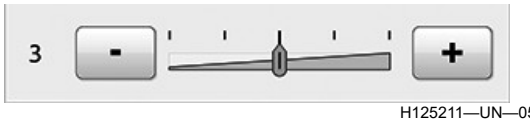
**Procedure to Modify:**




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:**

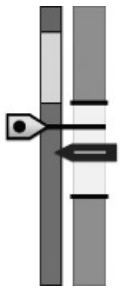
- The multi-function lever is moved.
- The ground speed is lowered below 2 km/h (1.2 mph).
- The brake pedals are pressed.

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*

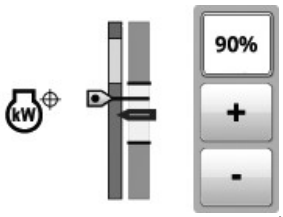
**Usage Indicator**— shows current engine power usage.

**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%

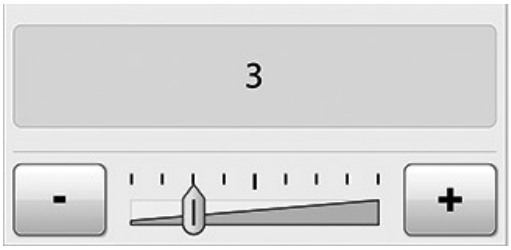
N0LMWLO,000039F-19-16JUL20

## 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:**

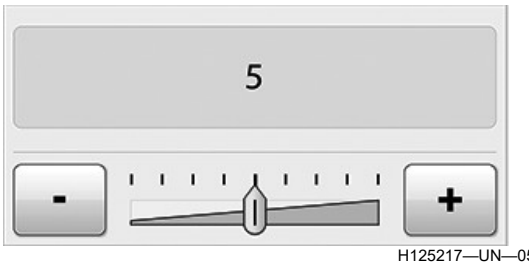
*Active Terrain Adjustment is a trademark of Deere & Company*




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*

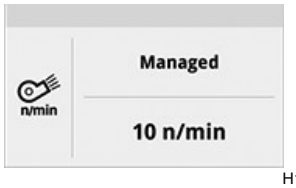
Offset Tuning | Chaffer—this feature allows changes to the size of adjustments made by Active Terrain Adjustment™ to the chaffer.




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:**

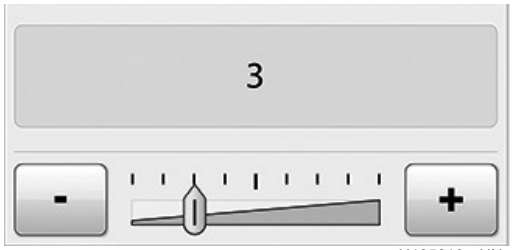
- Active Terrain Adjustment™ system is adjusting too soon or too late, causing grain loss or tailings to be higher while harvesting uphill than on level land.
- Grain tank is not clean while harvesting uphill. Adjust the sensitivity lower.
- Cleaning shoe loss or tailings levels are elevated while harvesting 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:**

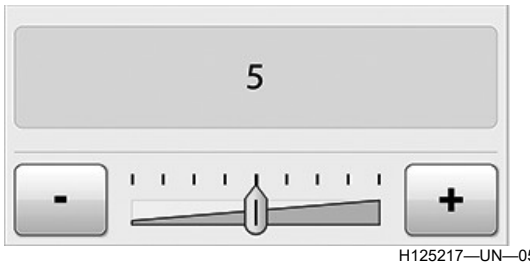
- Active Terrain Adjustment™ system is adjusting too soon or too late, causing grain loss or tailings to be higher while harvesting downhill than on level land.
- Cleaning shoe loss or tailings levels are elevated while harvesting downhill. Adjust the sensitivity lower.
- Grain tank is not clean while 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*

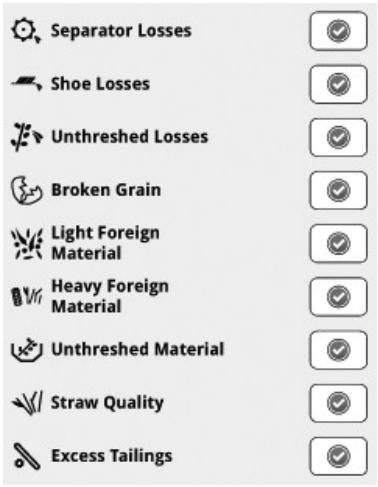
Select to close.

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.*

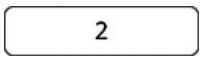
**Increasing Step Size:**

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

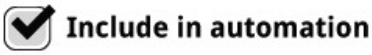
Offset Tuning | Sieve adjusts the Step Size amount to the sieve when commanded by the Active Terrain Adjustment™ system.

**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.*

*Active Terrain Adjustment is a trademark of Deere & Company*

*NOTE: Step sizes are individual increments, not the total range of the adjustments or number of adjustments.*

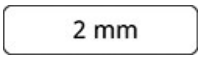
**Increasing Step Size:**

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.*

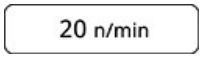
**Increasing Step Size:**

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:**

*Active Terrain Adjustment is a trademark of Deere & Company*

*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

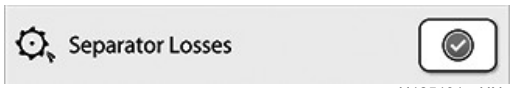



H125177—UN—01FEB19

*Major*

Major

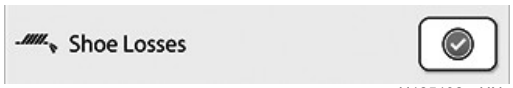
**Types of Performance Issues:**




H125191—UN—05FEB19

*Separator Losses*

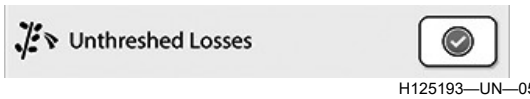
Separator Losses—select if large amounts of free grain are at the rear of the grain return pan.




H125192—UN—05FEB19

*Shoe Losses*

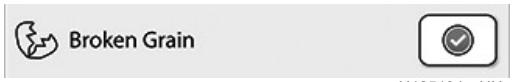
Shoe Loss—select if grain is exiting the machine through the cleaning shoe.




H125193—UN—05FEB19

*Unthreshed Losses*

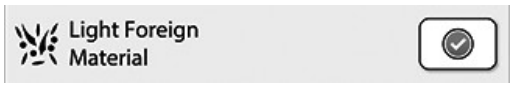
Unthreshed Loss—select if grain on the ground is remaining attached to the plant material.




H125194—UN—05FEB19

*Broken Grain*

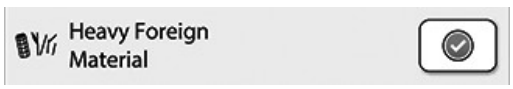
Broken Grain—select if damaged or broken grain is in the grain tank.




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*

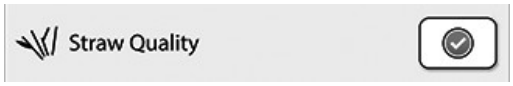
Heavy Foreign Material—select if pieces of cob or short sections of stem/stalk are in the grain tank.




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

*VisionTrak is a trademark of Deere & Company*

## 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

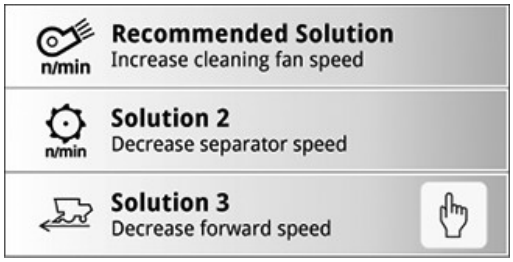
*Right*

**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.

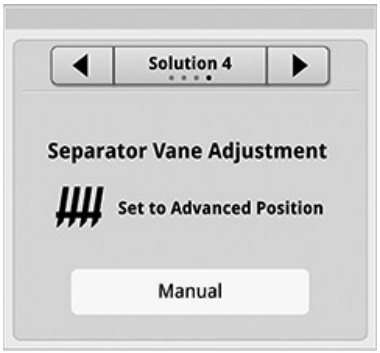
*NOTE: Optimize Performance will resume in the same place when you open the application again after closing.*

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.

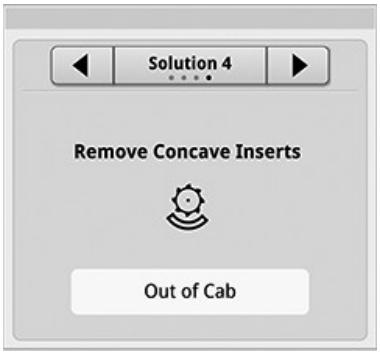
*NOTE: Optimize Performance will resume in the same place when you reenter after closing.*

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.

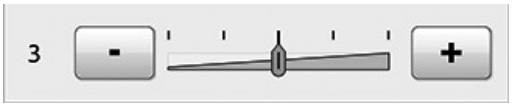
*NOTE: Acquiring performance targets is always enabled, allowing the system to set Grain Loss, HarvestSmart™, or Auto Maintain targets at any time.*



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:**



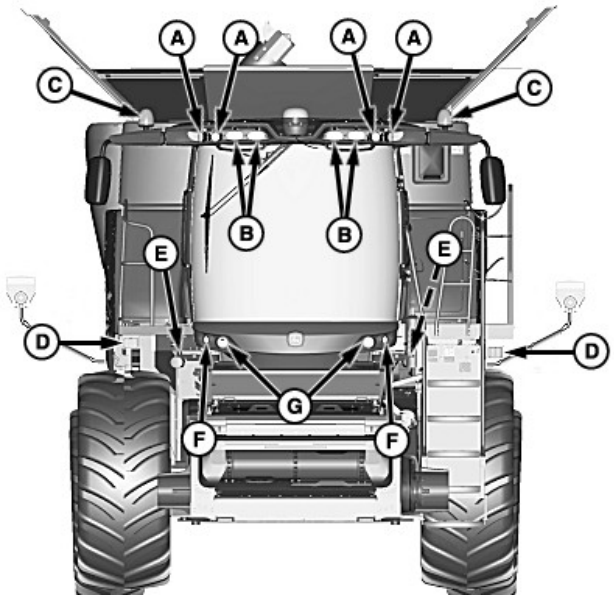
H125219—UN—01FEB19

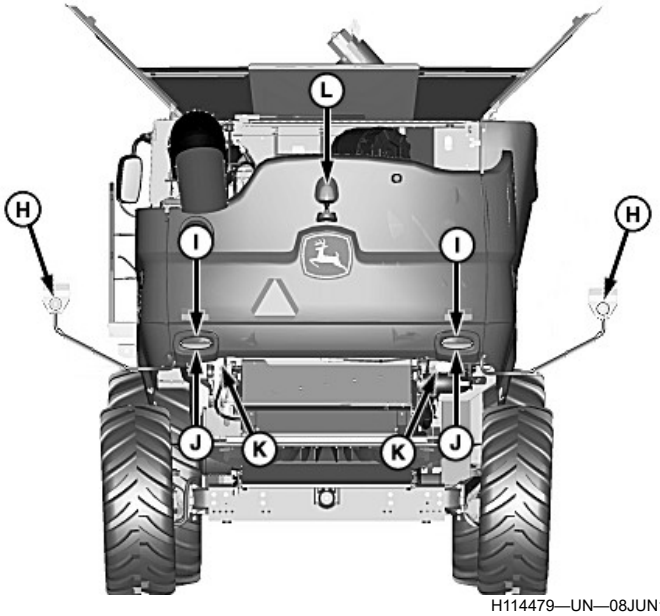
*Sensitivity*

Select Plus (+) button to increase and Minus (-) button to decrease.

N0LMWLO,00003B3-19-16JUL20

## Lighting Locations (Front and Rear View Lights)




H114479—UN—08JUN15

**A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights**
**B—Cab Headlights (High/Low Beam)**
**C—Beacon Lights**
**D—Marker/Hazard Lights**
**E—Stubble Lights**
**F—Fascia Lights (if equipped)**
**G—Lower Driving Lights (if equipped)**
**H—Rear Hazard Lights**
**I—Rear Hazard Lights**
**J—Marker/Brake Lights**
**K—Rear Discharge Lights**
**L—Beacon Light**

### 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), marker/hazard lights (D), rear hazard lights (H, I), cab headlights (B), and marker/brake lights (J) (if engine is running).
- Hazard lights are on both sides of the machine at front and rear. These lights warn other drivers when transporting on roadways.

### Road Lights

**CAUTION: Lights must be turned ON when transporting. Swing cab ladder forward to orient marker/hazard light towards oncoming motorists.**

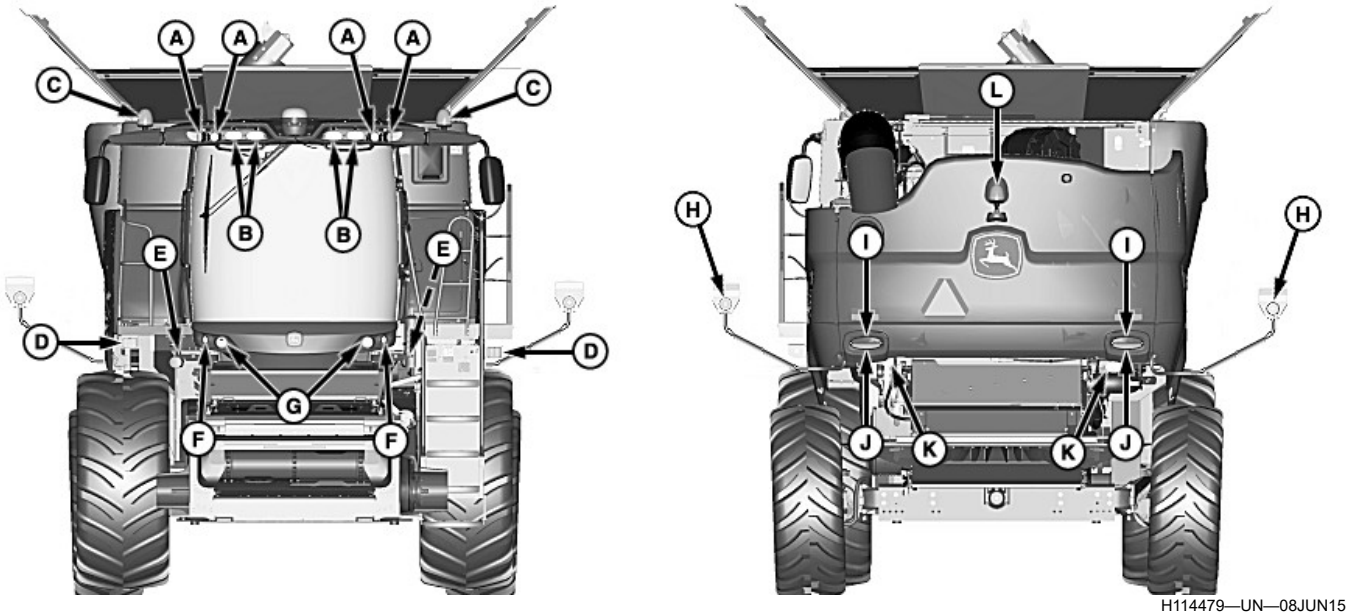
*NOTE: When road lights are ON and no header is connected, lower driving lights turn ON and cab headlights turn OFF. When a header is connected, lower driving lights turn OFF and cab headlights turn ON.*

*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/hazard lights (D), rear hazard lights (H, I), lower driving lights (G), and marker/brake lights (J).
- Beacon lights and hazard lights warn to other drivers when transporting on roadways.

OUO6075,00049B2-19-31MAY18

## Lighting Locations (Front and Rear View Lights Continued)




H114479—UN—08JUN15

**A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights**
**B—Cab Headlights (High/Low Beam)**
**C—Beacon Lights**
**D—Marker/Hazard Lights**
**E—Stubble Lights**
**F—Fascia Lights (if equipped)**
**G—Lower Driving Lights (if equipped)**
**H—Rear Hazard Lights**
**I—Rear Hazard Lights**
**J—Marker/Brake Lights**
**K—Rear Discharge Lights**
**L—Beacon Light**

### 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 will 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/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.**

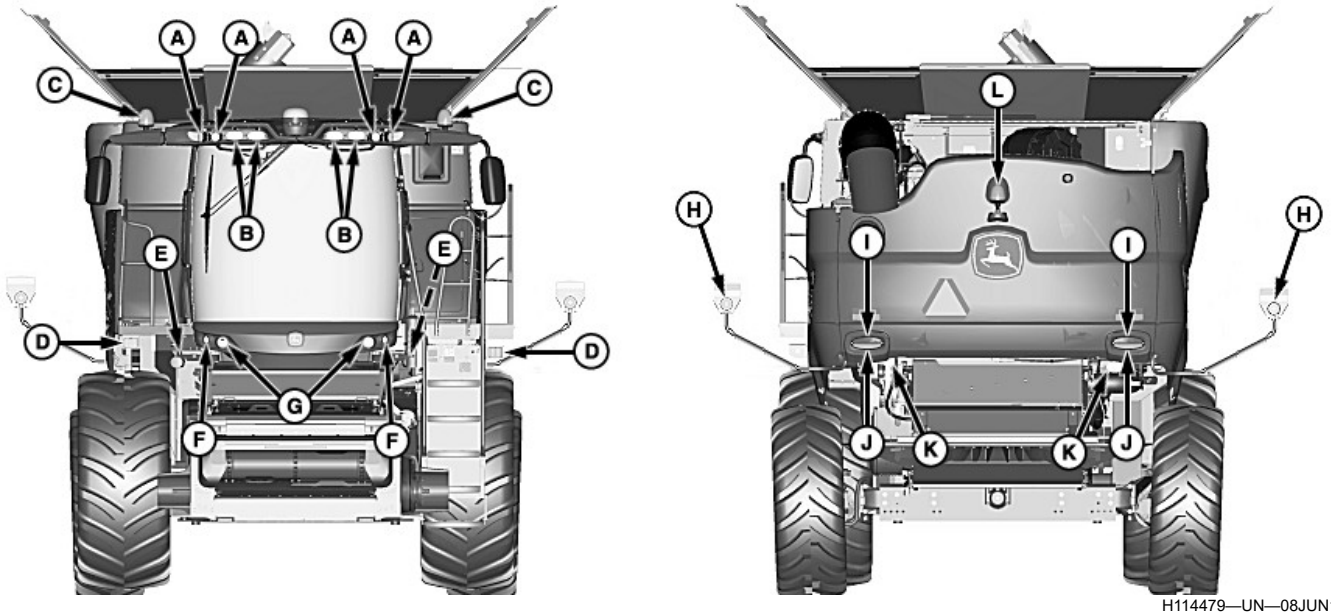
*NOTE: If operator leaves seat after separator is engaged, front stubble lights flash and will continue to flash until separator speed reaches zero.*

- Controls stubble lights (E) and fascia lights (F).
- 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.

OUO6075,00049B3-19-01JUN18

[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)




H114479—UN—08JUN15

**A—Halogen Cab Headlights or Light Emitting Diode (LED) (Optional) Cab Headlights**
**B—Cab Headlights (High/Low Beam)**
**C—Beacon Lights**
**D—Marker/Hazard Lights**
**E—Stubble Lights**
**F—Fascia Lights (if equipped)**
**G—Lower Driving Lights (if equipped)**
**H—Rear Hazard Lights**
**I—Rear Hazard Lights**
**J—Marker/Brake Lights**
**K—Rear Discharge Lights**
**L—Beacon Light**

### 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 (K).
- Rear discharge lights provide operator with rear area lighting for night operation and low light conditions.[2]

### Marker/Brake Lights

- Marker/Brake lights (J) come ON when machine senses a deceleration. Lights stay on for a minimum of 2 seconds.
- 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, while opposite light stays on (not flashing).

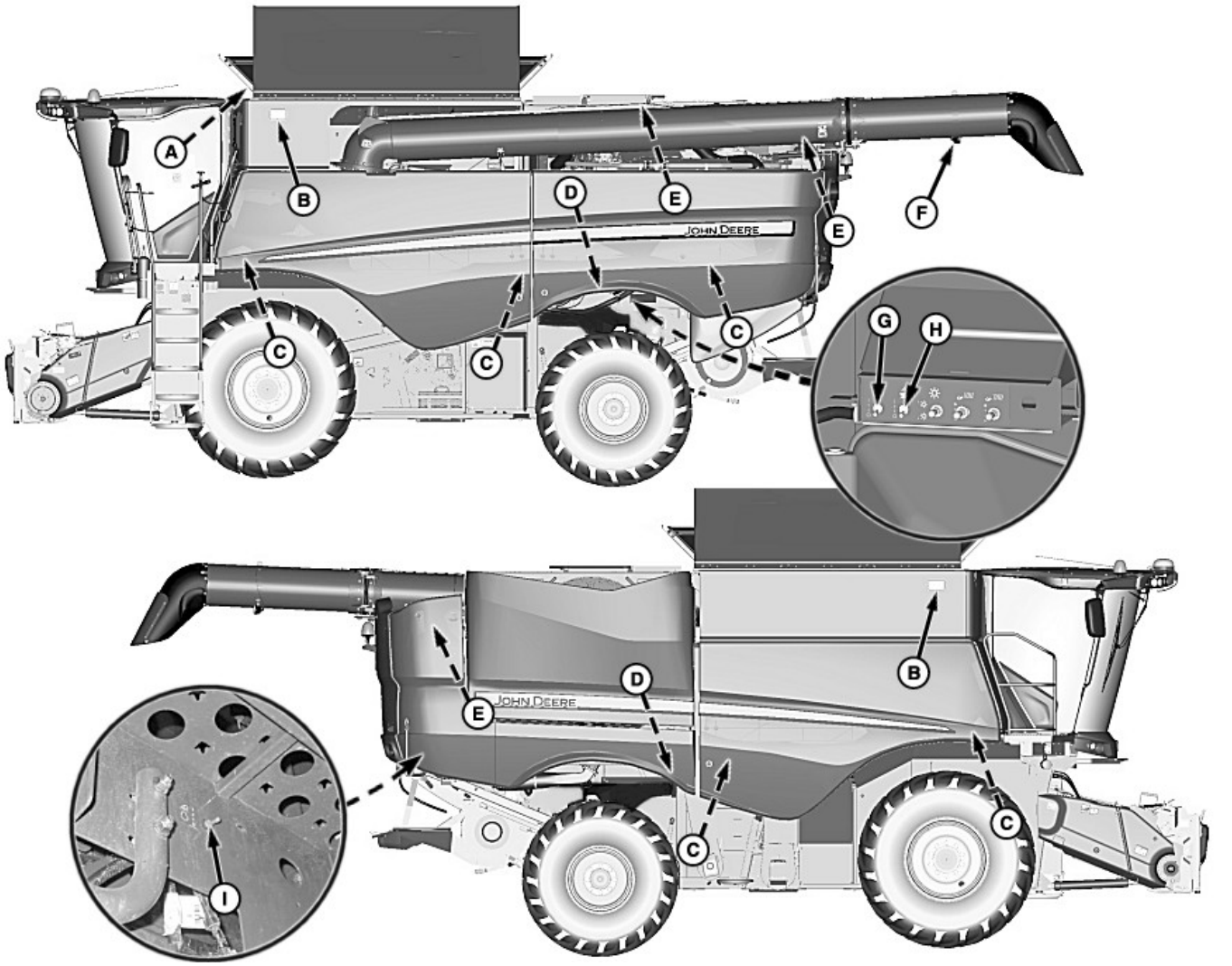
### Exit Lighting

- 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).

OUO6075,00049B4-19-01JUN18

[2] *If road lights are ON and machine is in Road Mode, stubble lights, fascia lights, and rear discharge lights cannot be turned ON.*

## Lighting Locations (Left and Right Side View Lights)




H114480—UN—08JUN15

**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

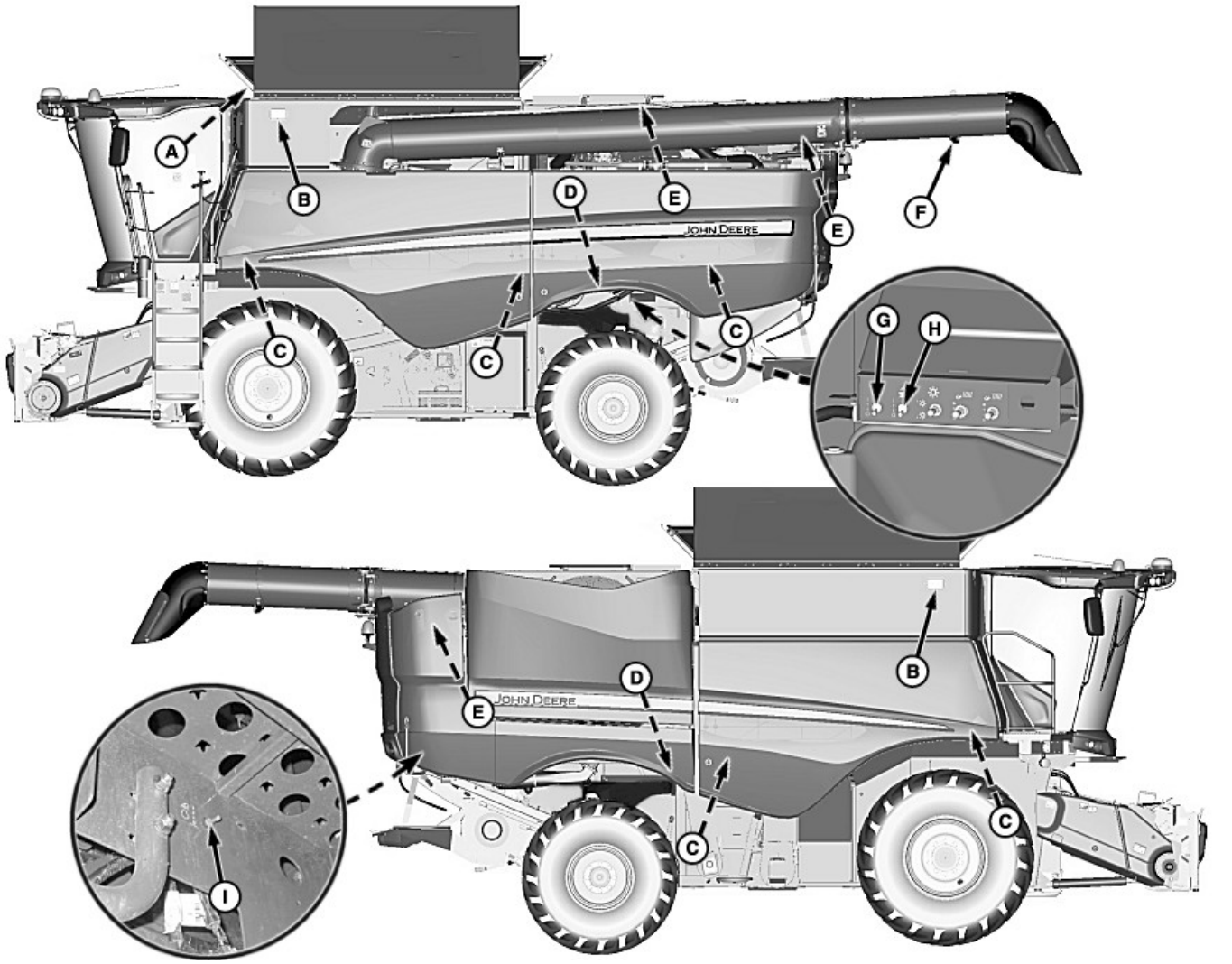
- Controls grain tank light (A), row finder lights (B) (with the turn signal lever), unloading auger light (F), and marker/hazard lights.
- Row finder lights provide operator with area lighting on each side of the machine for night operation and low light conditions.

*NOTE: With Field Lights ON, use turn signal lever to actuate either right or left side row finder light. Leaving signal lever in neutral position allows both sides to be ON.*

- Grain tank light provides operator with lighting in the grain tank for night operation and low light conditions.
- 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.

OUO6075,00049B5-19-31MAY18

## Lighting Locations (Left and Right Side View Lights Continued)




H114480—UN—08JUN15

**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.**

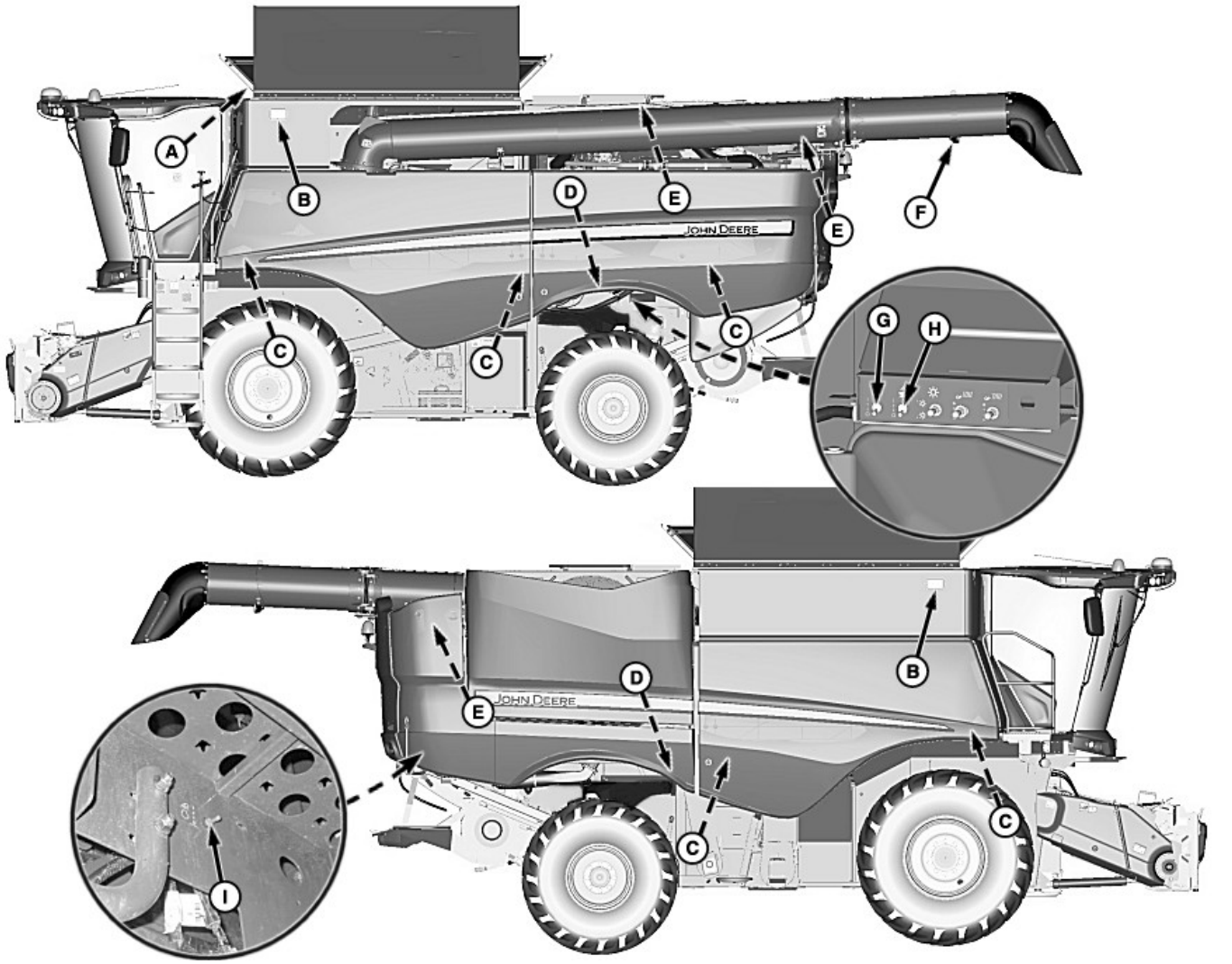
*NOTE: If operator leaves seat after separator is engaged, gull wing service lights flash and will continue to flash until separator speed reaches zero.*

- 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.

OUO6075,00049B6-19-31MAY18

## Lighting Locations (Left and Right Side View Lights Continued)




H114480—UN—08JUN15

**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 or both sides leaving lever in neutral position.

OUO6075,00049B7-19-31MAY18

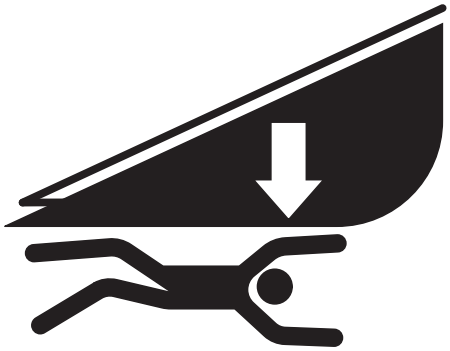
## Lighting Delay/Timeout

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.

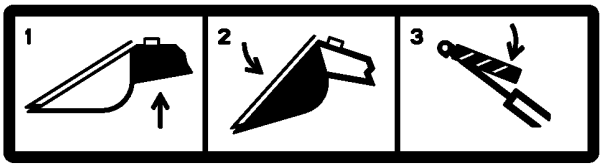
*NOTE: After Cleaning Shoe Lights, Service Lights or Engine Compartment Service Lights are ON for over 10 minutes lights flash, then turn OFF momentarily, then back ON for 20 seconds. This cycle continues for 3 minutes, then lights turn OFF until switch is cycled. If lights do not come back on after 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

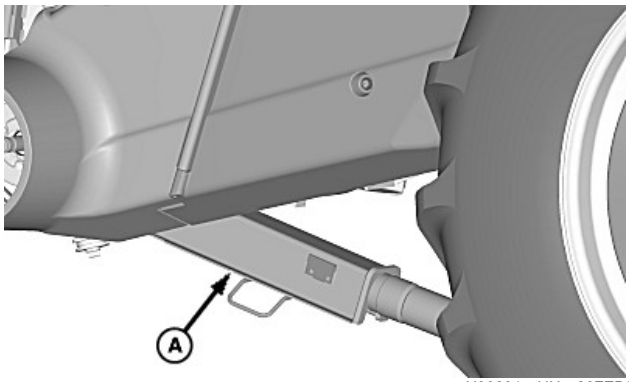
## Hydraulic Cylinder Safety Stop



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.

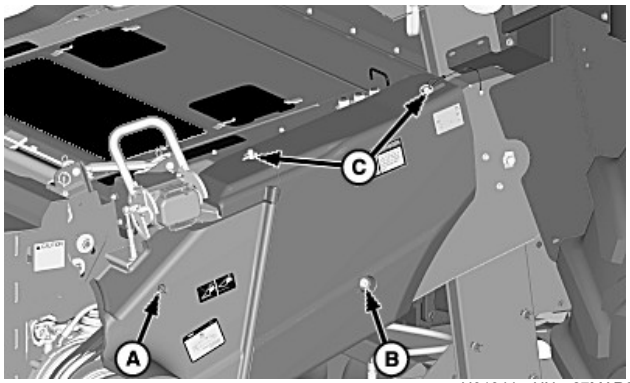
Shut OFF engine, set park brake and remove key.

*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.*

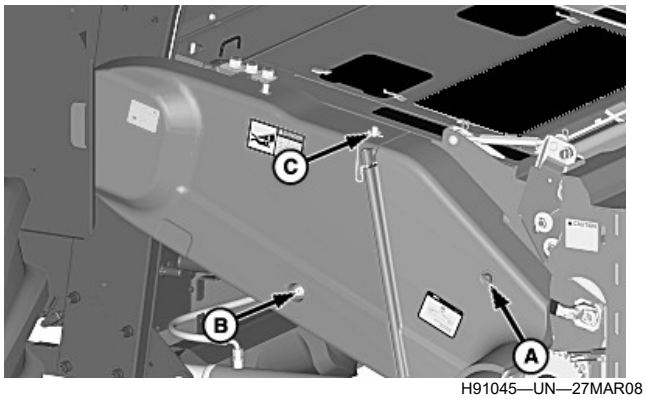
*When the header is disengaged, feeder house fore/aft tilt automatically moves forward upon raising. Feeder house fore/aft tilt will not return to last known position when lowering.*

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.**

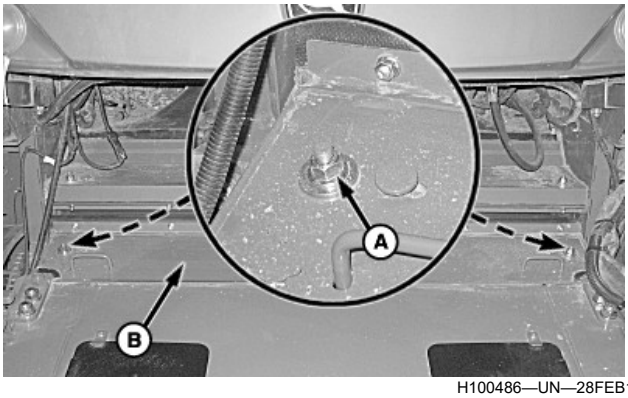
The feeder house shields have a front and rear shield.

1. Turn latch (A) and swing the front shield open for service.

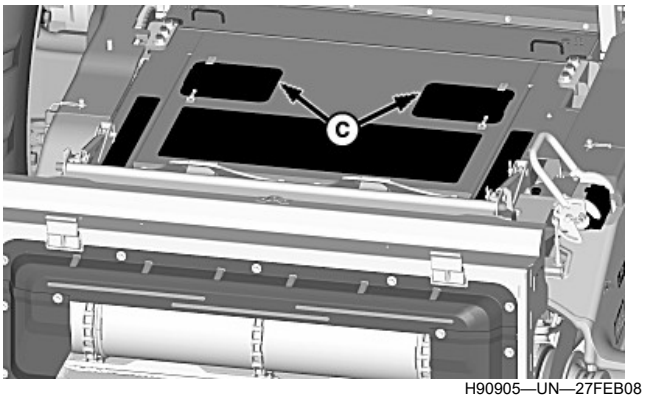
2. Turn latch (B) and remove quick-lock pins (C) to remove the rear shield.
3. Install and close the shields before operating the machine.

OUO6075,0004E85-19-16JUN20

## Feeder House Doors




H100486—UN—28FEB11




H90905—UN—27FEB08

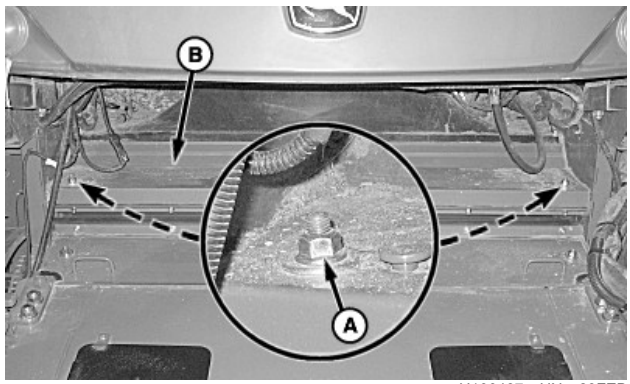
**A—Nut (2 used)**
**B—Door**
**C—Door (2 used)**

**CAUTION: Shut OFF engine, set park brake, and remove key.**

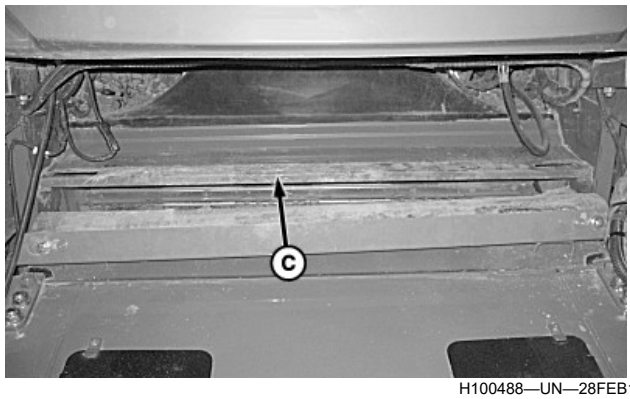
1. Loosen nuts (A) on each side of the door and push nuts towards the center of the feeder house.
2. Pull the door (B) forward to remove.
3. Lift doors (C) to access the inside of the feeder house.
4. Close the doors before operating the machine.

OUO6075,0004E86-19-16JUN20

## Feed Accelerator Top Access Door




H100487—UN—28FEB11




H100488—UN—28FEB11

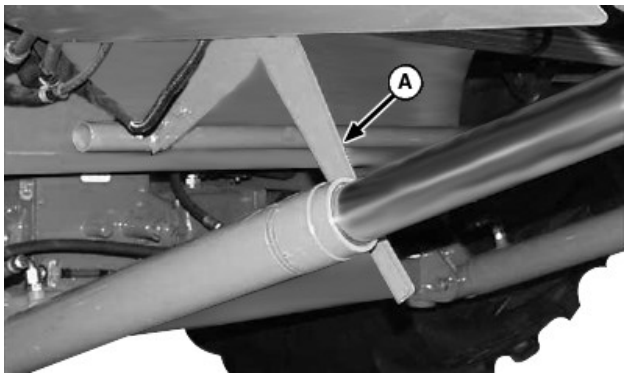
**A—Nut (2 used)**
**B—Door**
**C—Door**

**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

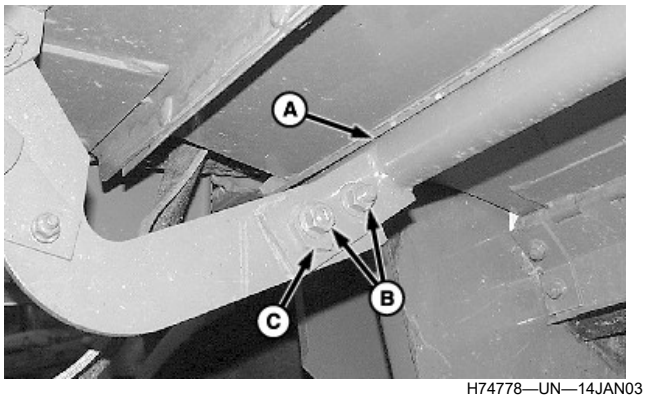
**A—Lever**

**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.

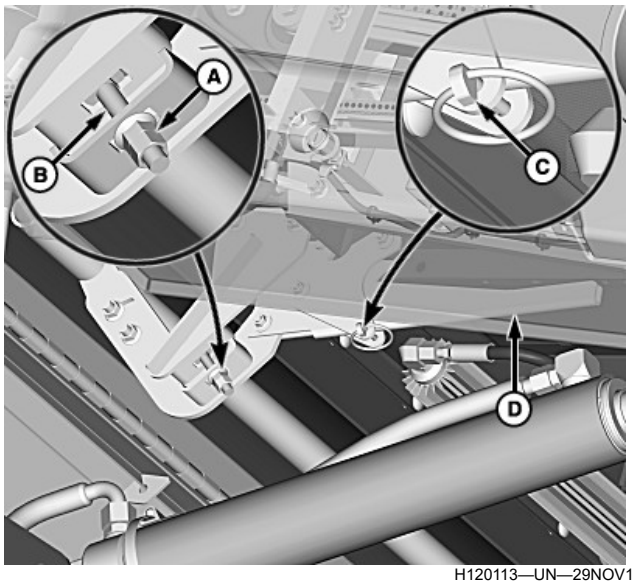
Turn eccentric (C).

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.**

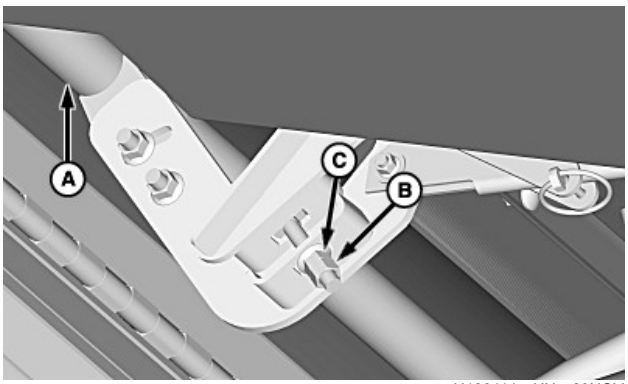
1. Remove nuts (A) and round head bolt (B) on both sides of the machine.
2. Remove quick-lock pin (C) and move lever (D) down and rearward.

**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.

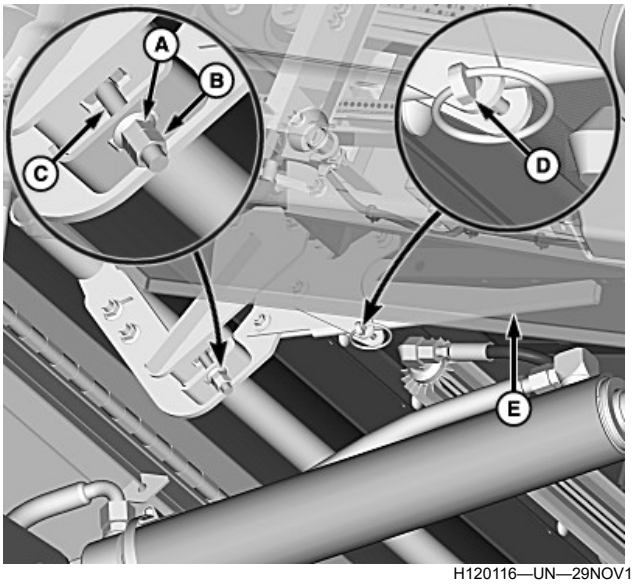
## Feed Plate Adjustment



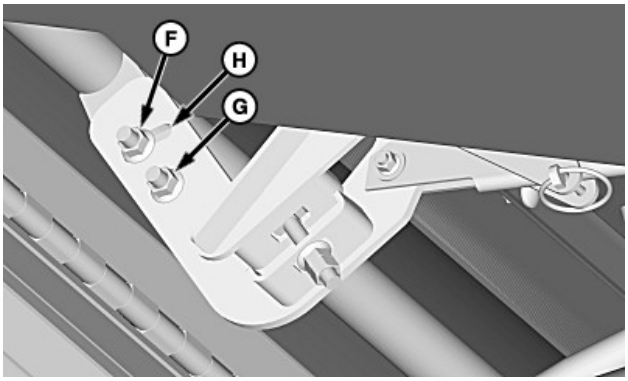

H120114—UN—29NOV16

**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**

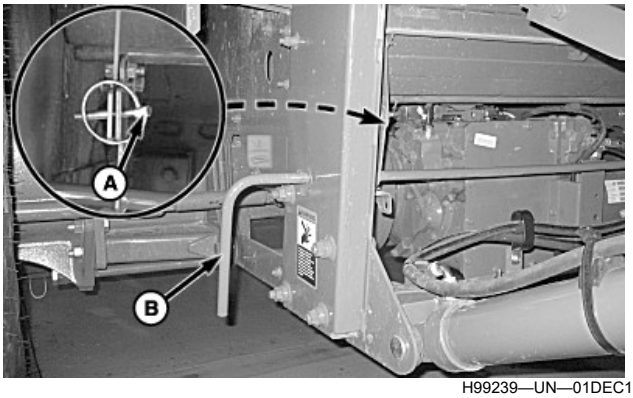
4. If further adjustment is needed, remove nuts (A and B) from the round head bolt (C) on both sides of the machine.
5. Remove quick-lock pin (D) and move lever (E) down and rearward.
6. Loosen nuts (F and G) and adjust crossbar support as needed in slot (H).
7. Tighten previously loosened nuts (F and 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.**

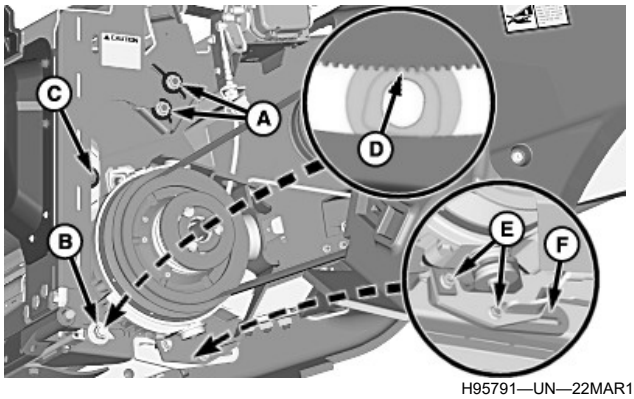
Stone trap protects the cylinder and concave from rock or stone damage.

Remove quick-lock pin (A) and move lever (B) up to open stone trap.

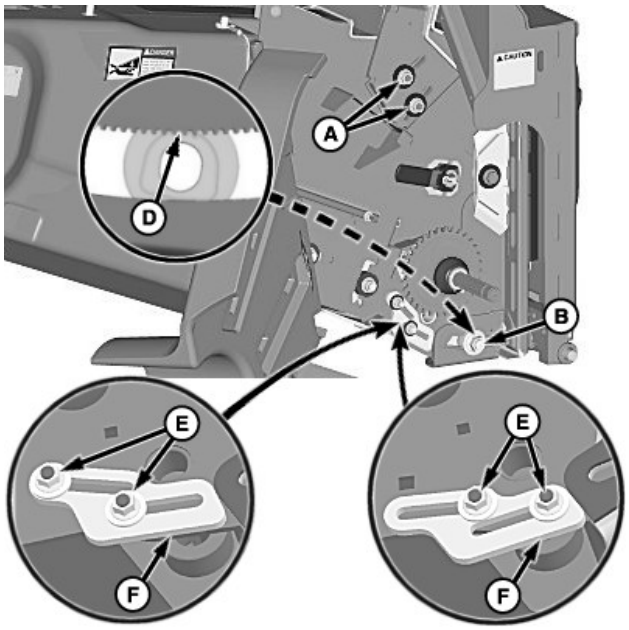
Move lever down to close stone trap. Retain with quick-lock pin.

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.

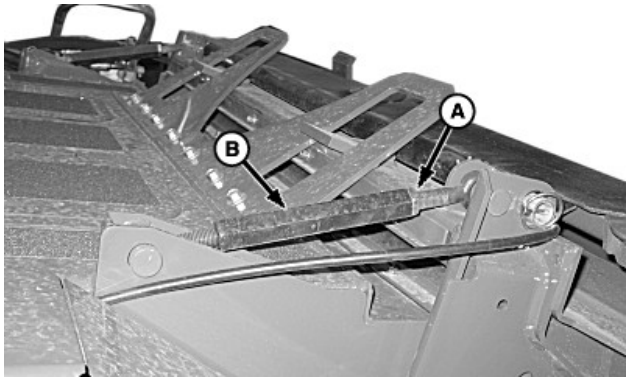
Loosen tilt frame nuts (A) and nut (B) on both sides.

**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.



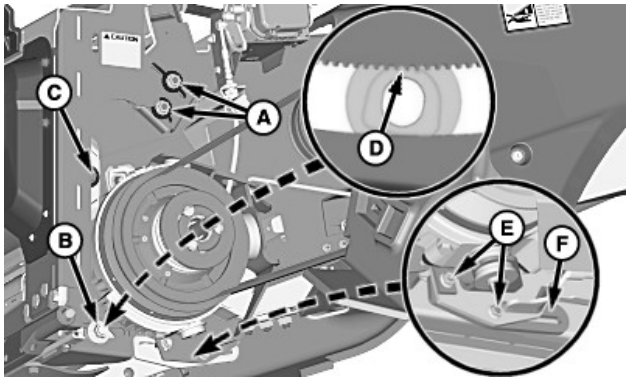

H105751—UN—05SEP12

**A—Nut**
**B—Turnbuckle**

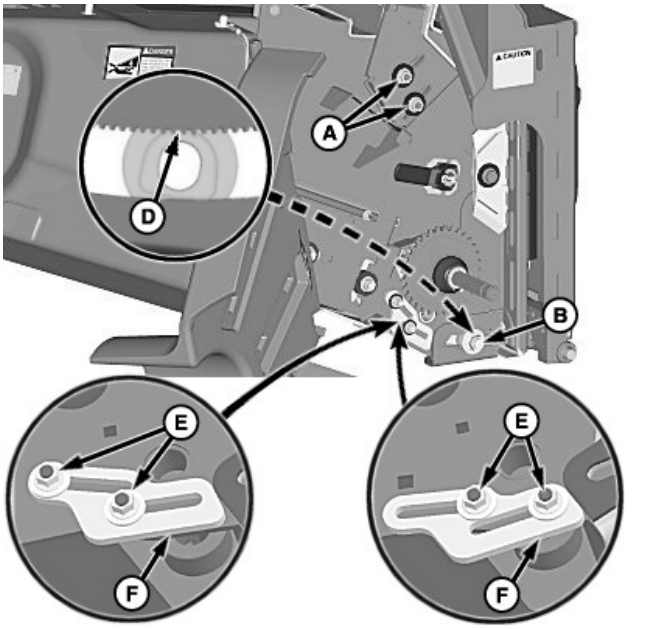
**IMPORTANT: Hose clamp on multi-coupler may need to be repositioned when adjusting fore/aft tilt frame.**

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.)

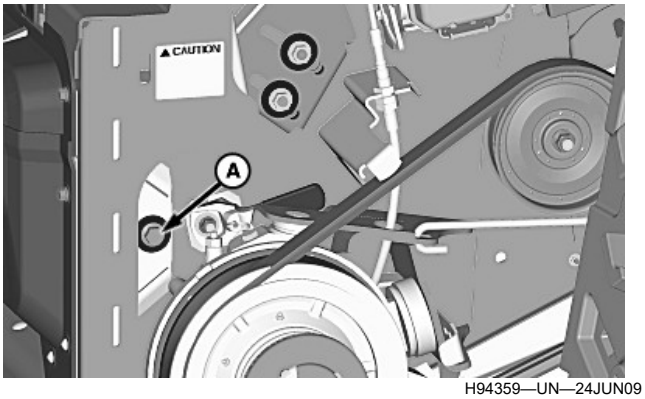
**IMPORTANT: No gap should exist between stop plates and fore/aft tilt frame after tightening nuts.**

*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.

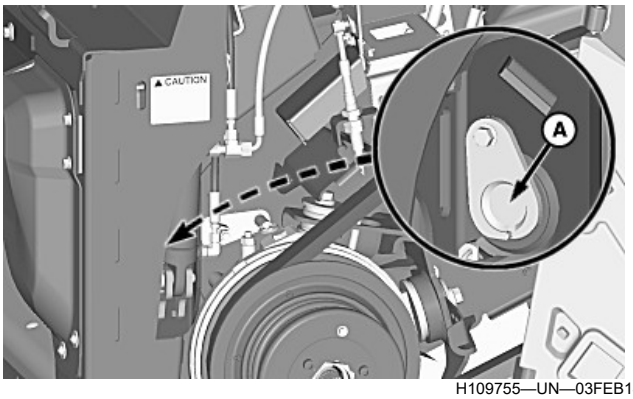
**Specification**

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.

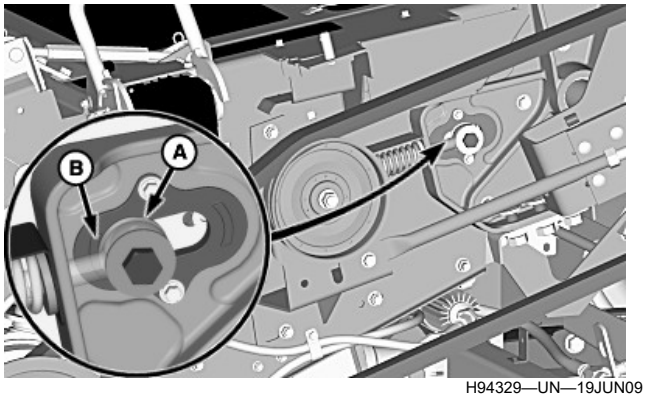
*NOTE: This fore/aft frame adjustment changes the pivot pin to ground distance from 1016 mm (40 in) to the desired specification distance.*

**Specification**

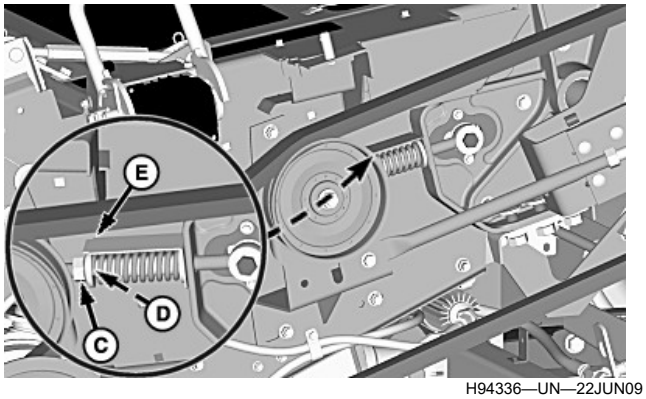
Pivot Pin To Ground—Distance. . . . . 903 mm (35-1/2 in.)

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.

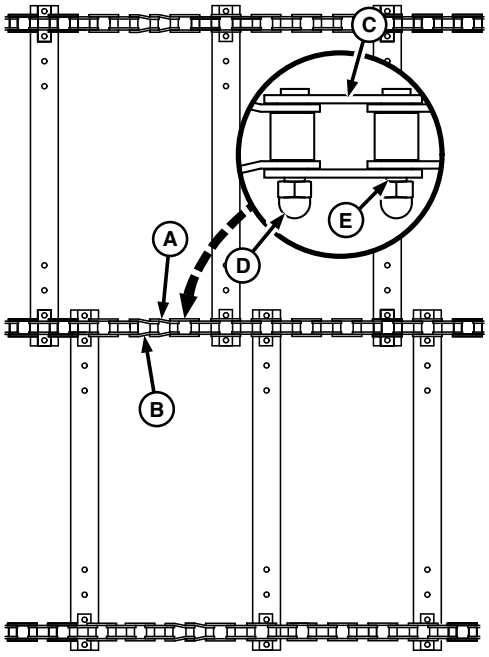
*NOTE: Check tension on both sides every 25 hours for the first 100 hours.*

- 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.

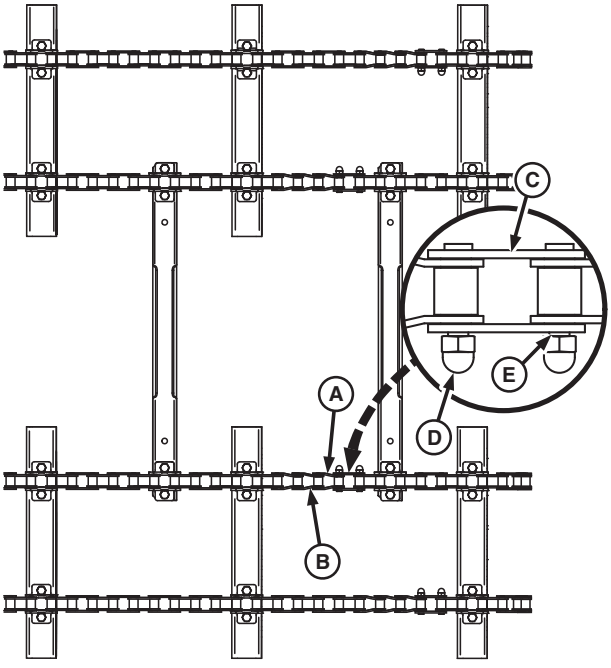
OUO6075,000067C-19-22NOV10

## 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.

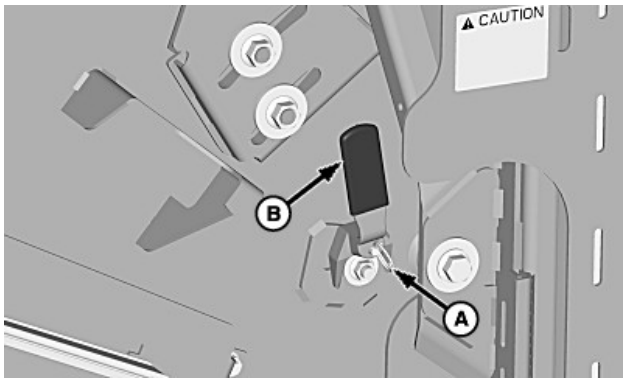
| Specification | |
|---|---|
| "U" Slat M10 Hardware—Torque | 73 N·m (54 lb.-ft.) |
| Chain Link M8 Cap Nuts—Torque | 25 N·m (18 lb.-ft.) |

**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.**

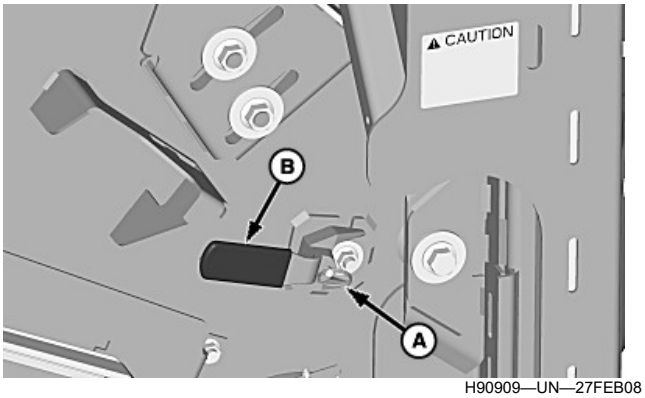
OUO6075,0001755-19-03FEB14

## 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.**

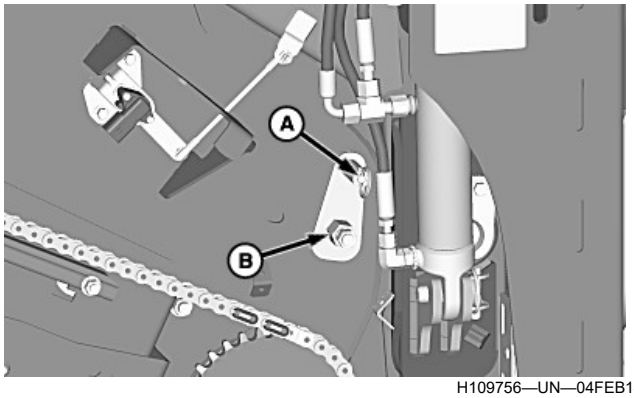
Open feeder house shields.

Pull and hold pin (A) while rotating handle (B) to desired crop position on both sides.

Close feeder house shields.

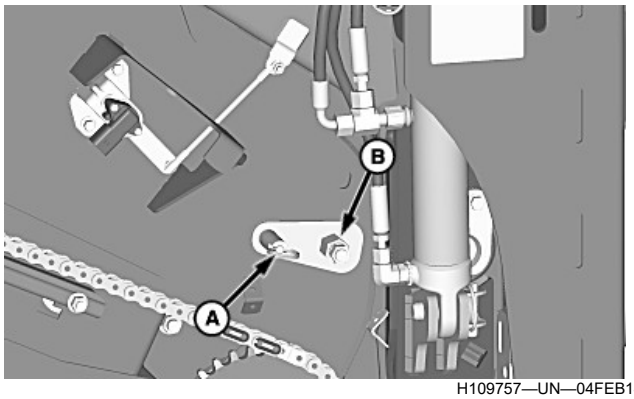
SS43267,0000377-19-18FEB14

## 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.

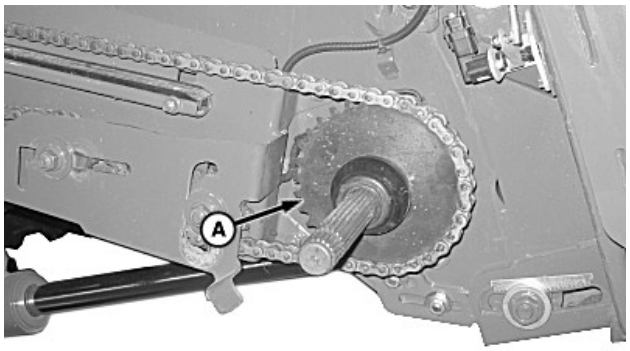
Pull and hold pin (A) while rotating drum height handle (B) to desired crop position on both sides.

*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.

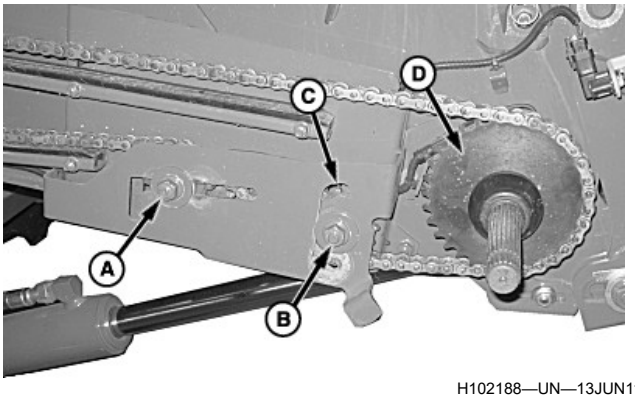
**Recommended for conditions when feeding is poor due to following crops and conditions:**

- **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.

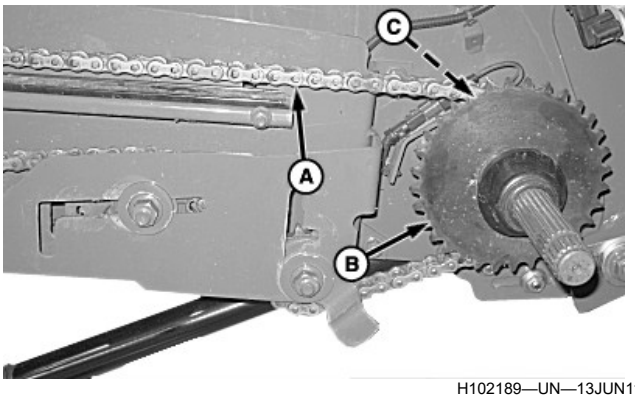
Use small sprocket for slow speed and large sprocket for high speed.




H102188—UN—13JUN11

**A—Nut**
**B—Nut**
**C—Upper Position**
**D—Sprocket**

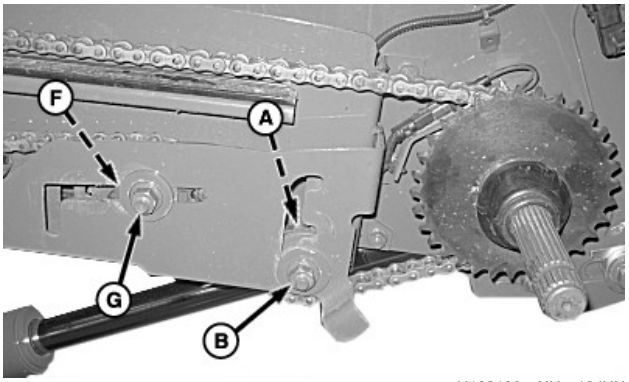
1. **To move drive chain to smaller sprocket:** Open right-hand front shield.
2. Loosen nut (A) and push sprocket rearward.
3. Loosen nut (B) and move sprocket to upper position (C).
4. Push in on coupler and move sprocket (D) outward until it engages detent.



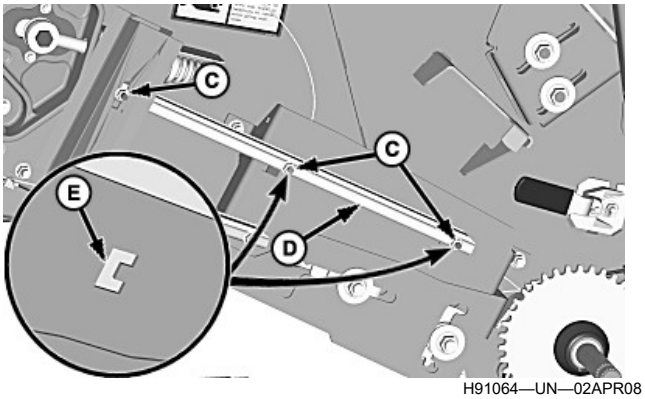

H102189—UN—13JUN11

**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**

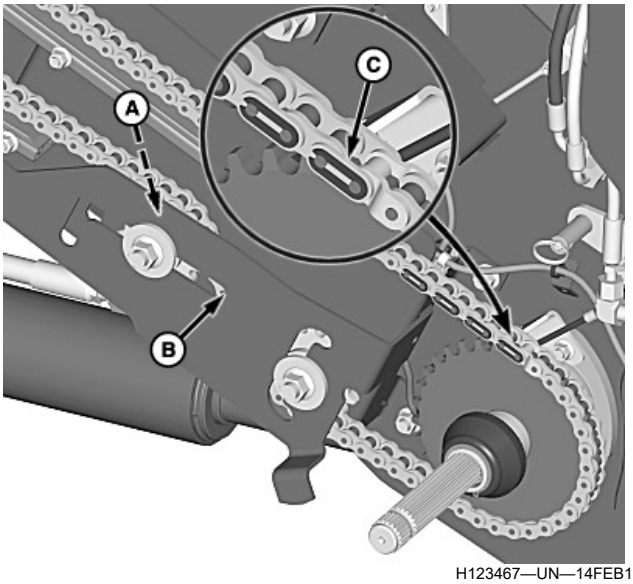
6. Move sprocket (A) to lower position and tighten nut (B).
7. Loosen nuts (C) and slide chain guide (D) into desired notches (E) and tighten nuts.

*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.*

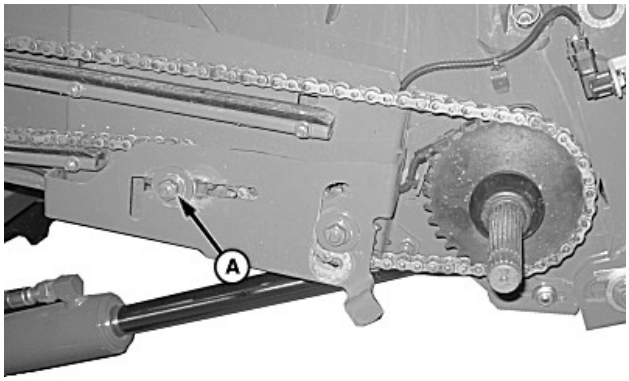
When the sprocket (A) reaches the end of slot (B) remove connector link (C).

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.

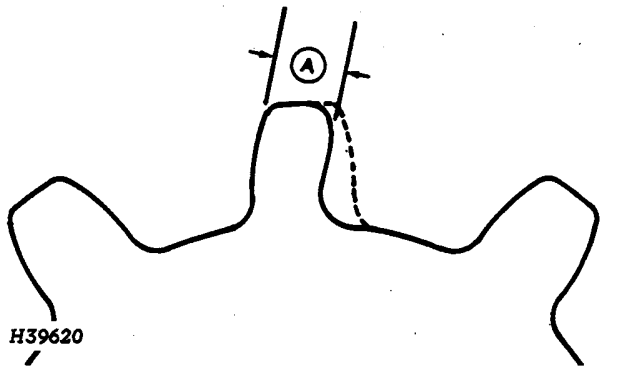
*NOTE: Do not over tighten feeder conveyor drive chain. It is acceptable for chain to ride on plastic guide.*

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

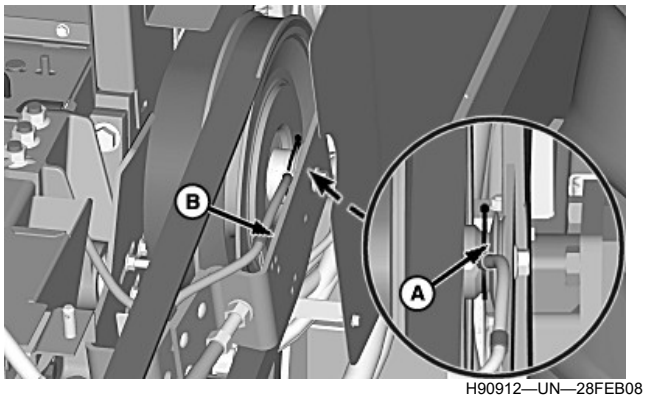
**A—Dimension 12 mm (1/2 in.)**

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.**

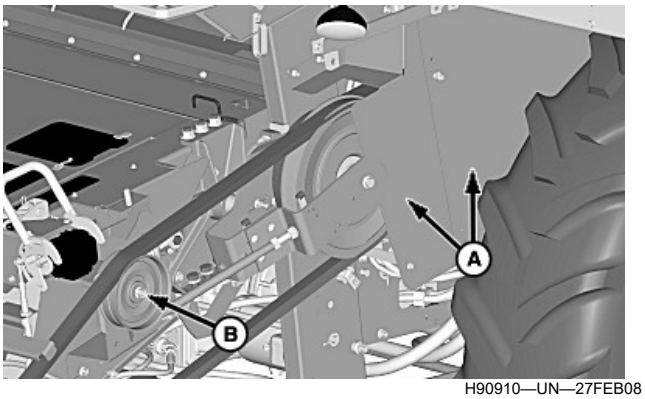
**CAUTION: Shut OFF engine, set parking brake and remove key.**

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).

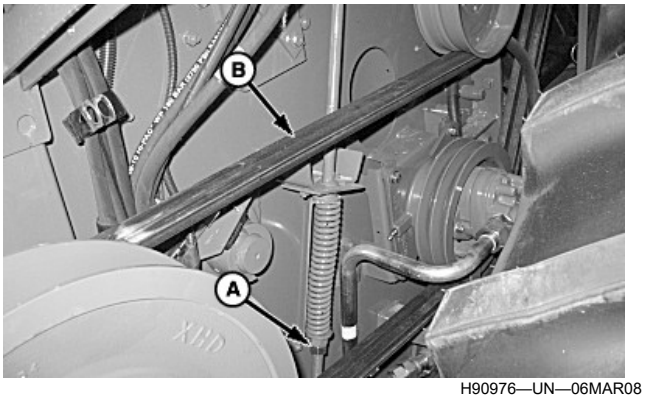



H90910—UN—27FEB08

**A—Shields**
**B—Nut**

Remove shields (A).

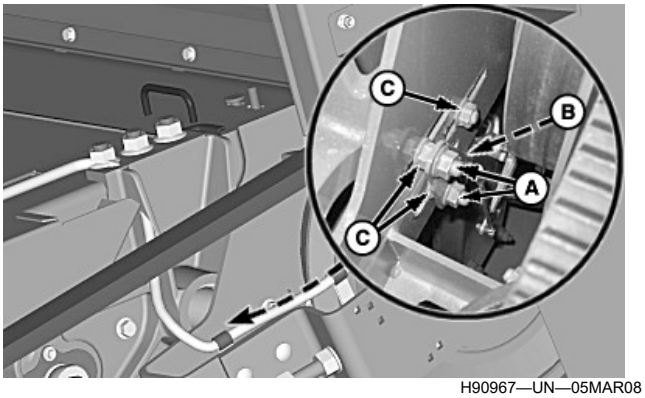
Loosen idler nut (B) to relieve drive belt tension.




H90976—UN—06MAR08

**A—Nut**
**B—Drive Belt**

Loosen nuts (A) to relieve tension on reel drive belt (B).

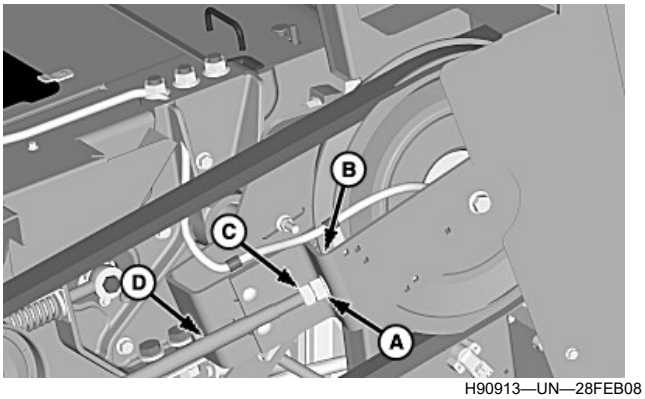



H90967—UN—05MAR08

**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**

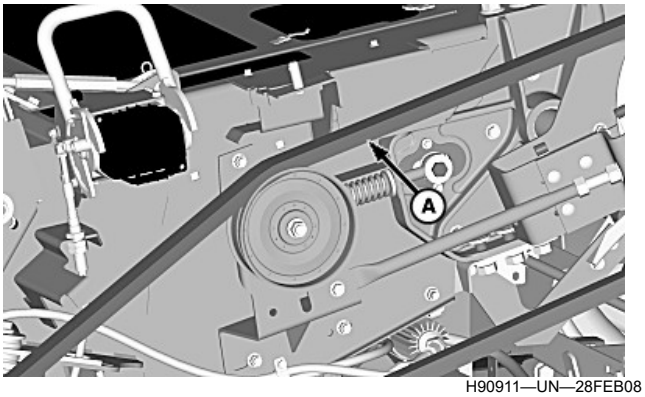
*NOTE: Nut (C) must be moved and jammed against nut (A). Together these nuts can be used to turn tensioner bolt.*

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**

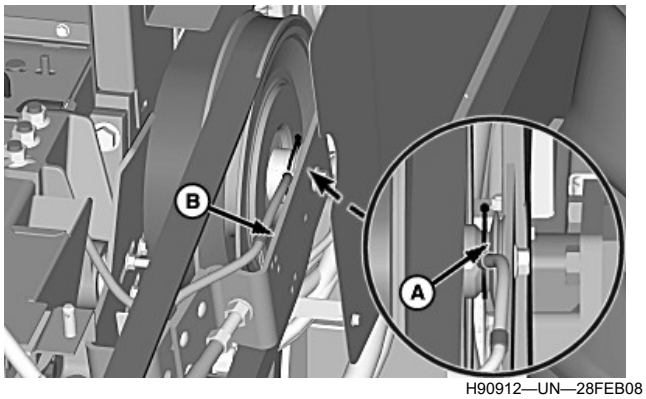
Remove drive belt (A) from sheaves.

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**

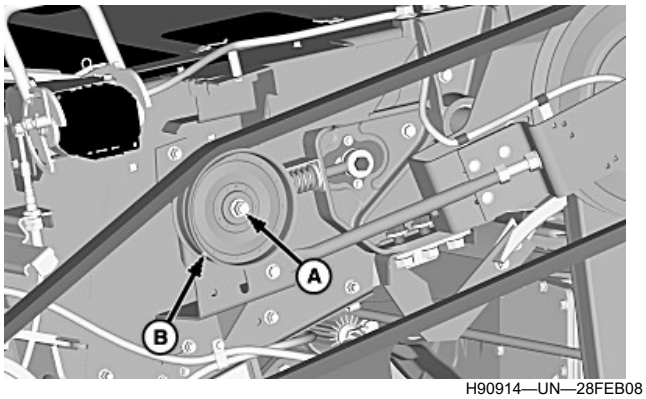
*NOTE: Minor adjustments can be made to variable speed belt by raising idler. If a 3 mm (1/8 in.) gap cannot be reached by raising idler, proceed to next step.*

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.

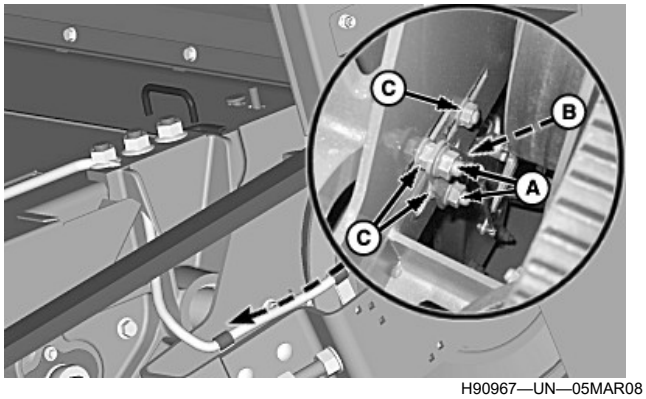
Look under rubber boot (A) to verify if upper sheaves are fully open. At low speed position, outer sheave half bulb is against bracket (B).




H90914—UN—28FEB08

**A—Nut**
**B—Idler**

Loosen nut (A) to adjust idler (B) to lower position.

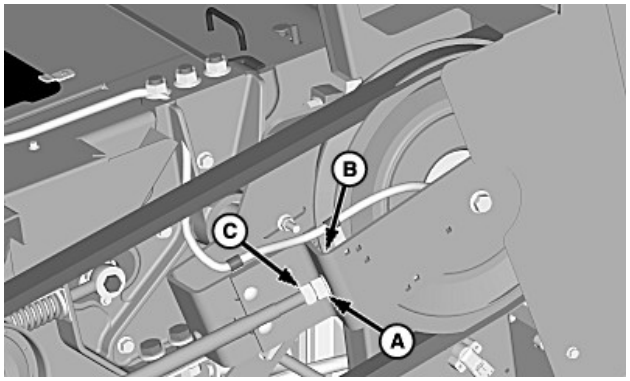



H90967—UN—05MAR08

**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.



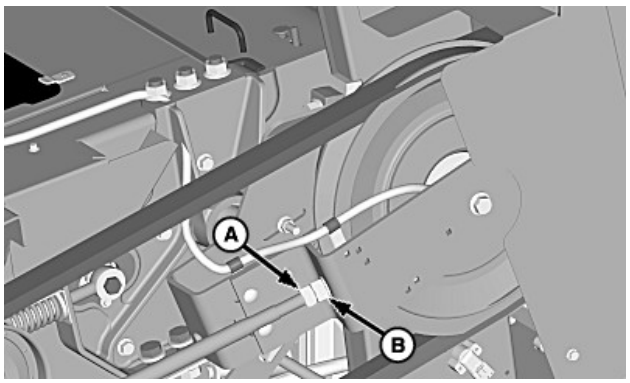

H90915—UN—28FEB08

**A—Nut**
**B—Bracket**
**C—Nut**

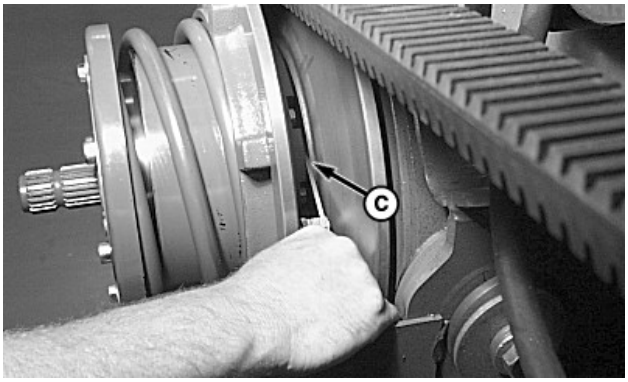
*NOTE: Nut (C) must be moved and jammed against nut (A). Together these nuts can be used to turn tensioner bolt.*

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

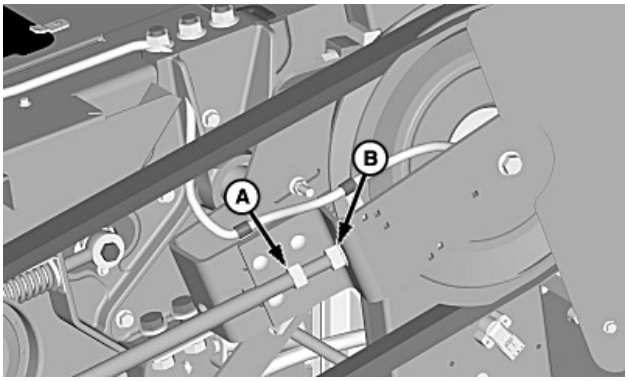
**A—Nut**
**B—Bolt**
**C—Gap, 3 mm (1/8 in.)**

**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).

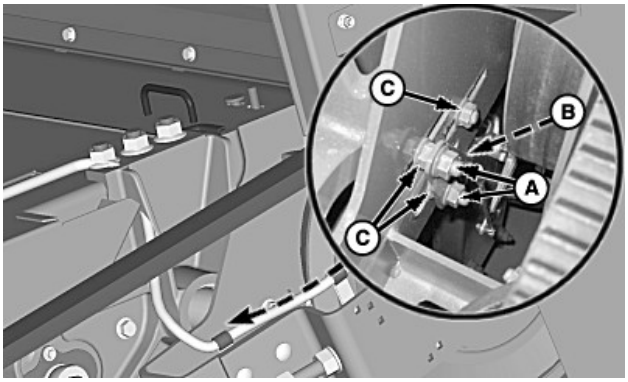
Move upper variable sheaves with bolt until a 3 mm (1/8 in.) gap exists between lower sheave halves or upper sheave assembly reaches end of slots.




H90917—UN—28FEB08

**A—Nut**
**B—Nut**

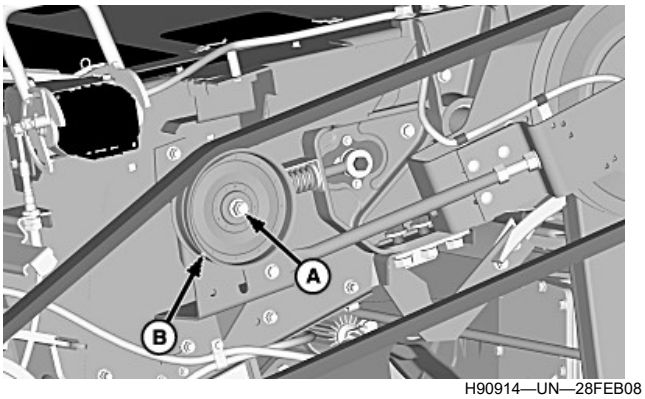
Tighten nut (A) first and then nut (B).




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).



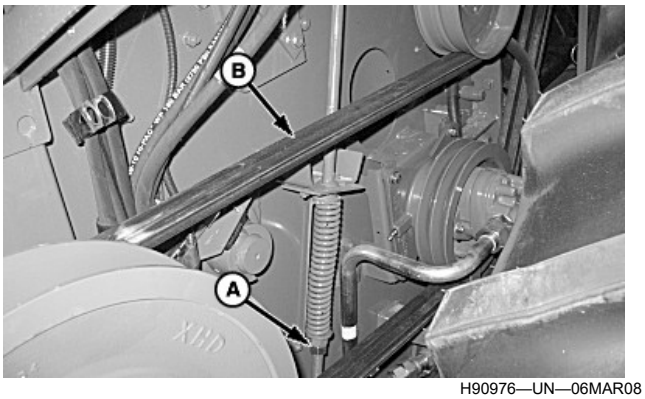

H90914—UN—28FEB08

**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**

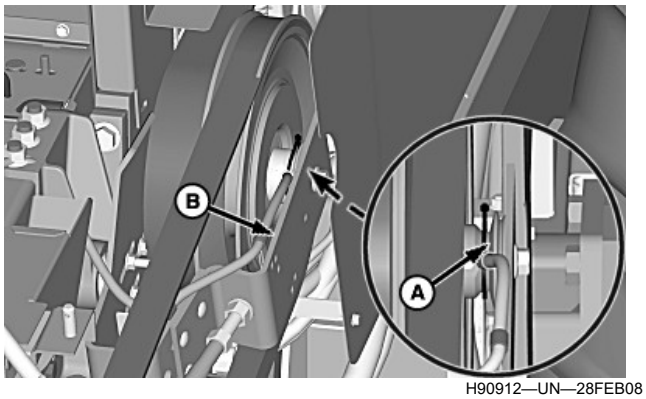
Tighten adjusting nut (A) to position washer between

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

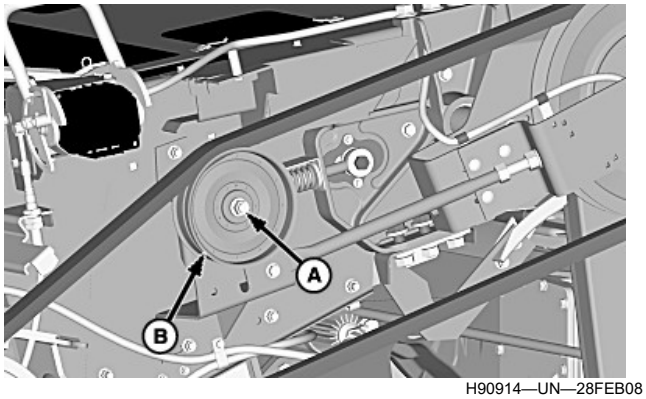
**A—Rubber Boot**
**B—Bracket**

**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.**

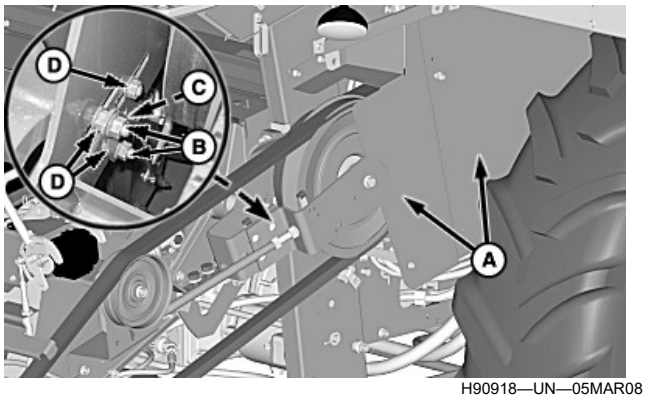
4. Disengage the separator, stop the engine, and remove the key.
5. Lower the safety stop and remove the left-hand feeder house shields.
6. Look under the rubber boot (A) to verify if the upper sheaves are fully open. At the low speed position, the outer sheave half bulb is against bracket (B).




H90914—UN—28FEB08

**A—Idler Nut**
**B—Sheave**

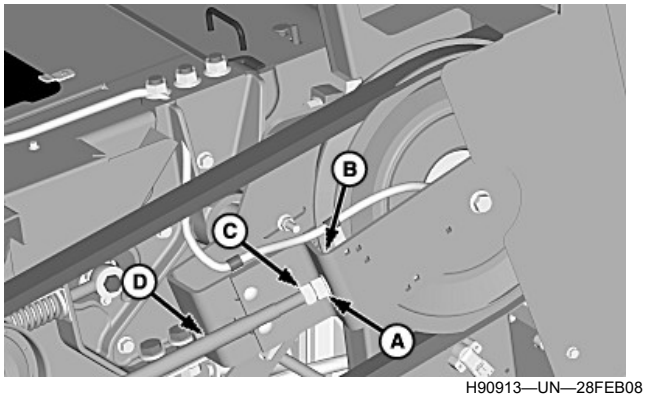
7. Loosen idler nut (A) and slide the sheave (B) down to release the tension on the drive belt.




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

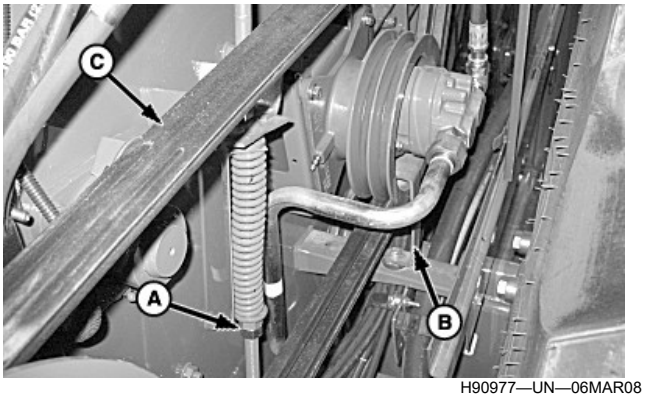
**A—Nut**
**B—Bracket**
**C—Nut**
**D—Tensioner Rod**

*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.*

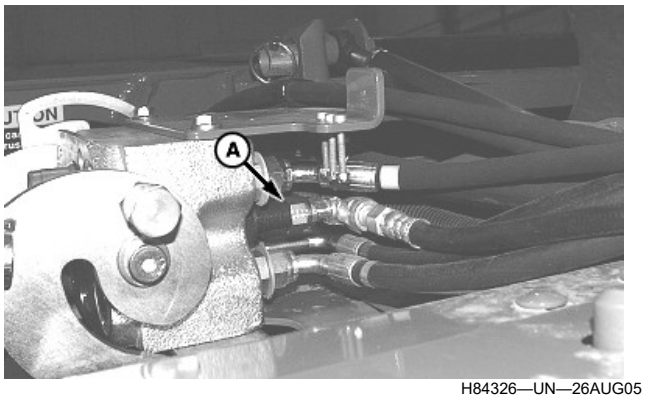
12. Use nut (A) to screw the threaded bolt into the tensioner rod (D).




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.

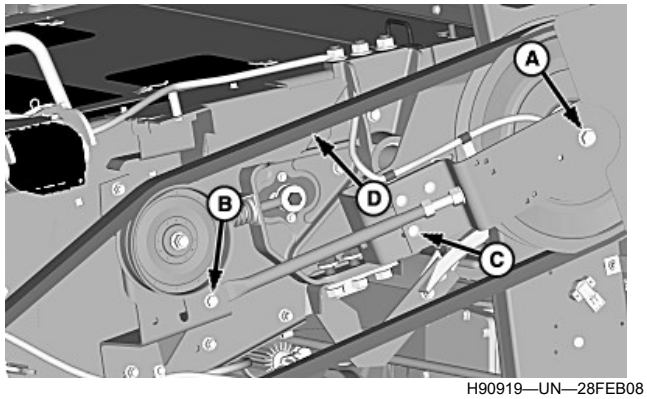



H84326—UN—26AUG05

**A—Hydraulic Hose**

*NOTE: Cap the hydraulic hose to prevent system contamination and fluid loss.*

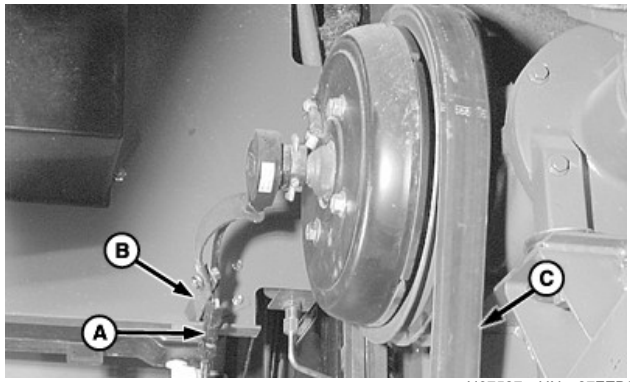
15. Disconnect the hydraulic hose (A) from the multicoupler.




H90919—UN—28FEB08

**A—Cap Screw**
**B—Cap Screw and Nut**
**C—Round Head Bolt (3 used)**
**D—Drive Belt**

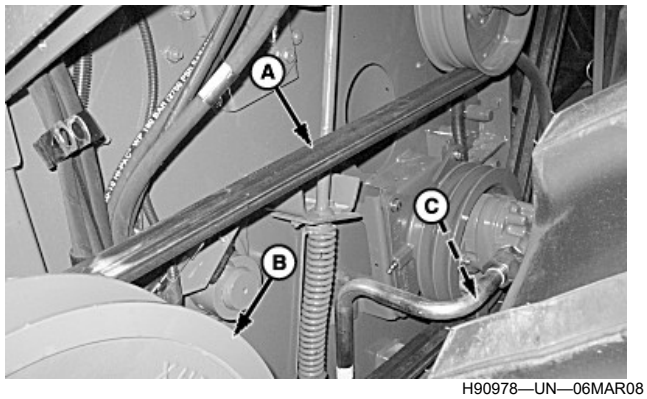
16. Remove cap screw (A), cap screw and nut (B) and round head bolts (C).
17. Remove drive belt (D) from the rear sheave.




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.

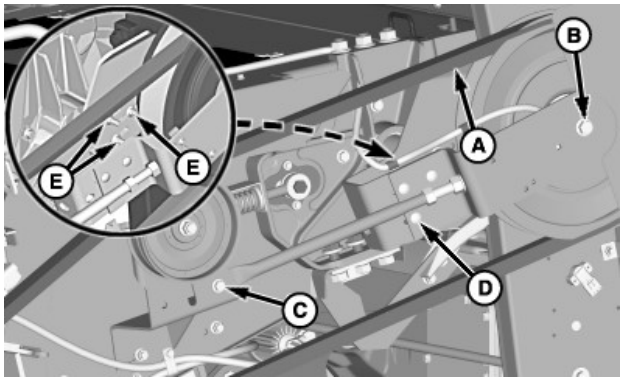



H90978—UN—06MAR08

**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

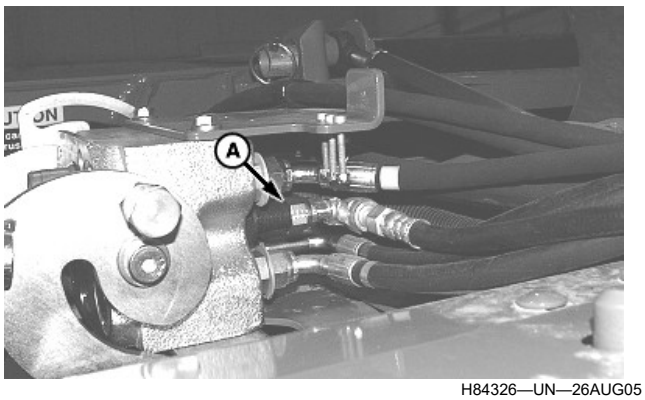
**A—Drive Belt**
**B—Cap Screw**
**C—Cap Screw and Nut**
**D—Round Head Bolt (3 used)**
**E—Nut (3 used)**

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)

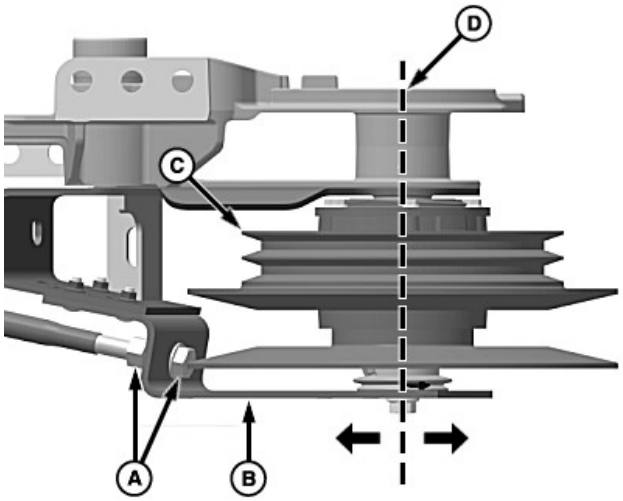
26. Tighten cap screw and nut (C).
27. Leave the round head bolts (D) loose at this time.
28. Tighten nuts (E) to prevent the upper sheave assembly from moving.




H84326—UN—26AUG05

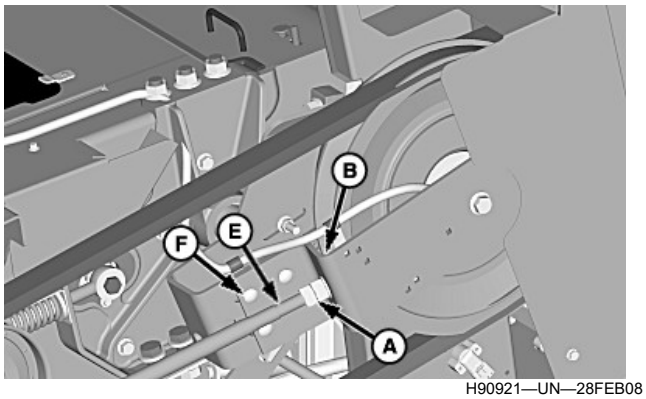
**A—Hydraulic Hose**

29. Connect the hydraulic hose (A) to the multicoupler.




H122740—UN—15JAN18

*Top View*




H90921—UN—28FEB08

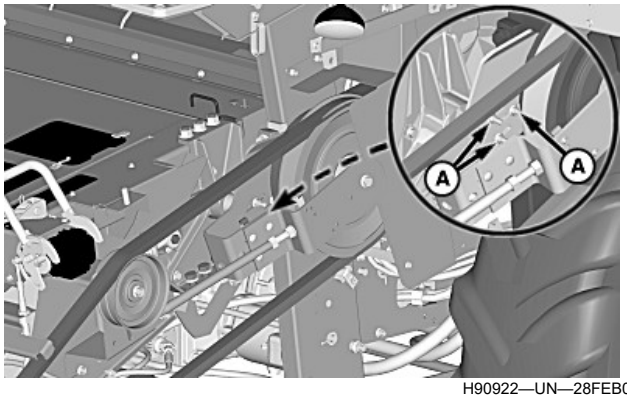
**A—Nut (2 used)**
**B—Outer Strap**
**C—Sheave (2 used)**
**D—Side Sheet**
**E—Tensioner Rod**
**F—Round Head Bolt (3 used)**

*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)



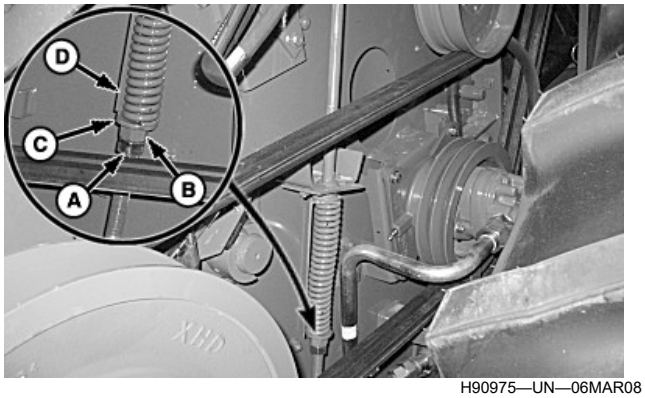

H90922—UN—28FEB08

**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



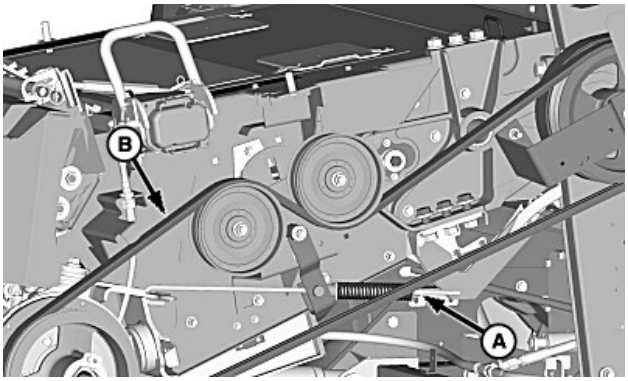

H90923—UN—28FEB08

**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.

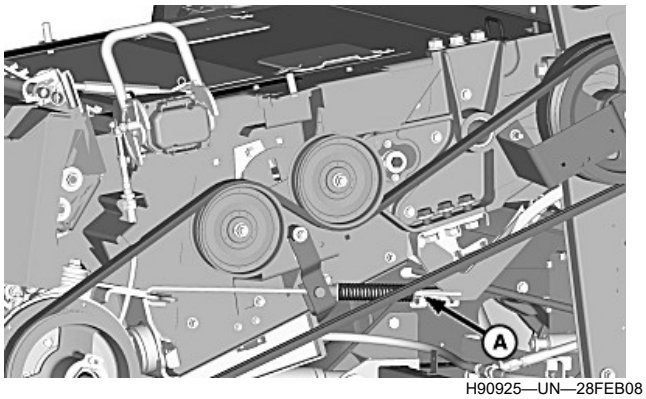
Install replacement drive belt and tighten nuts to position washer between end of gauge and bottom of step.

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



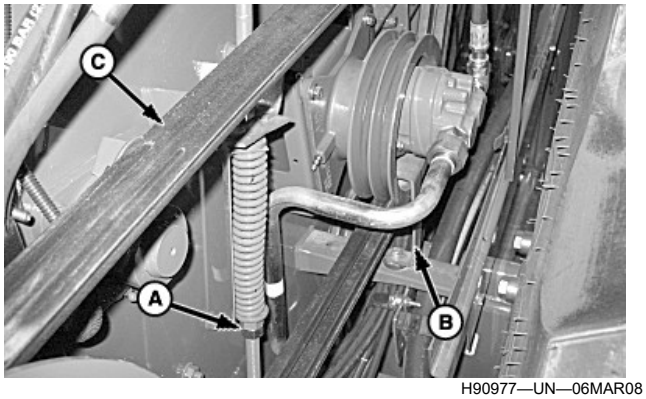

H90923—UN—28FEB08

**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).

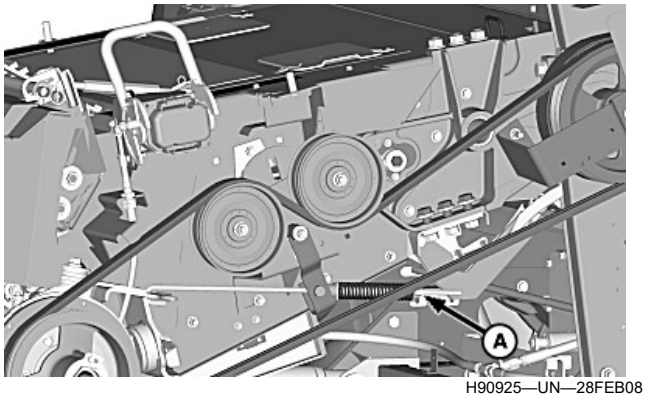



H90977—UN—06MAR08

**A—Nuts**
**B—Brace**
**C—Drive Belt**

Loosen nuts (A) to relieve tension from drive belt.

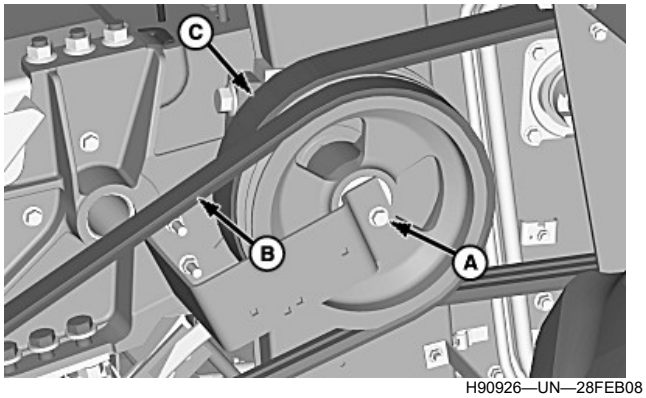
Remove cap screw and nut to move reel pump brace (B) out of way so drive belt (C) can be removed.




H90925—UN—28FEB08

**A—Nuts**

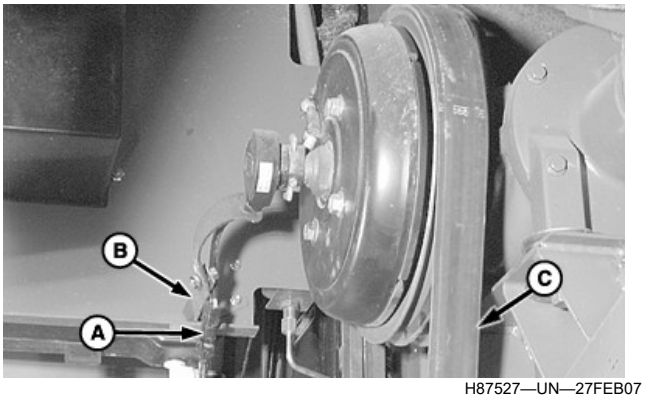
Loosen nuts (A) to relieve tension on drive belt.




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).



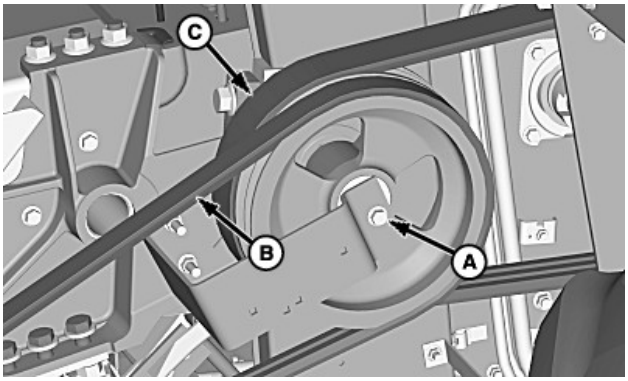

H87527—UN—27FEB07

**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

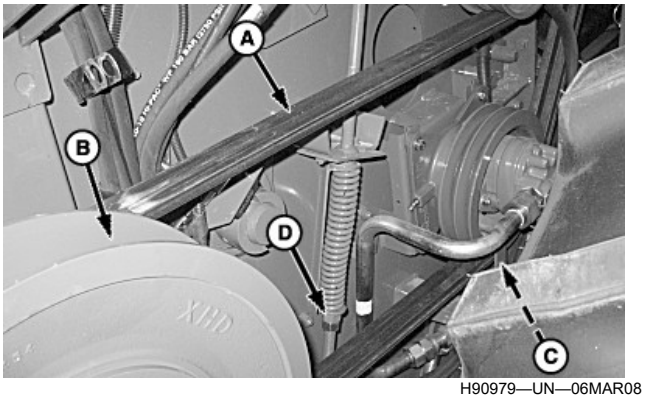
**A—Cap Screw**
**B—Fixed Speed Drive Belt**
**C—Header Reel/Belt Pickup Pump Belt**

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)



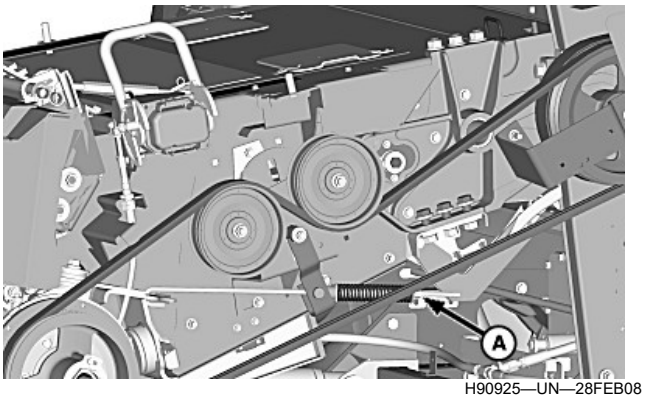

H90979—UN—06MAR08

**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

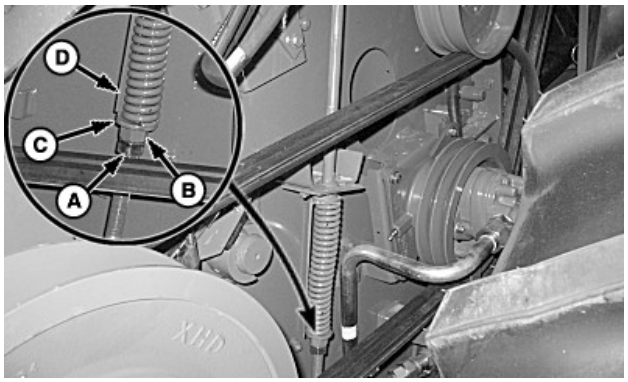
**A—Nuts**

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**

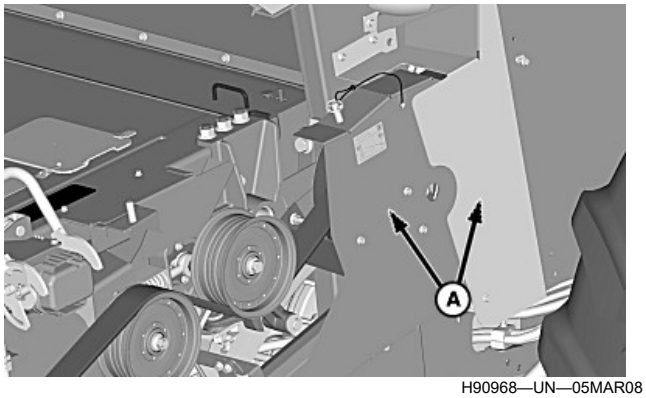
**CAUTION: Shut OFF engine, set parking brake and remove key.**

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



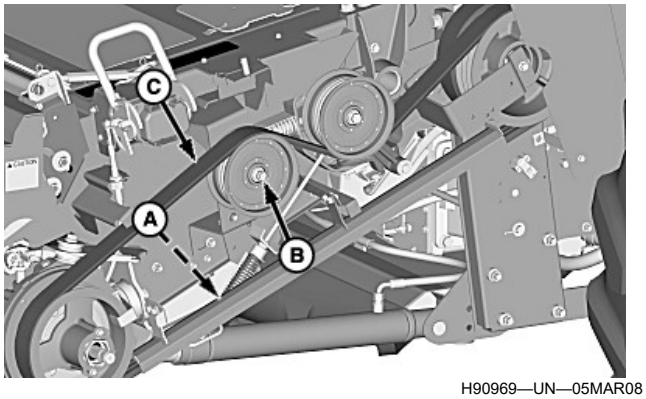

H90968—UN—05MAR08

**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.

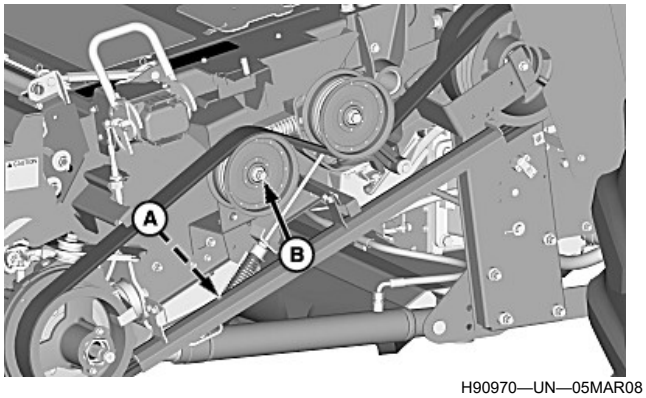
Install replacement drive belt and move idler to 3/4 of way up slot and tighten idler nut.

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.

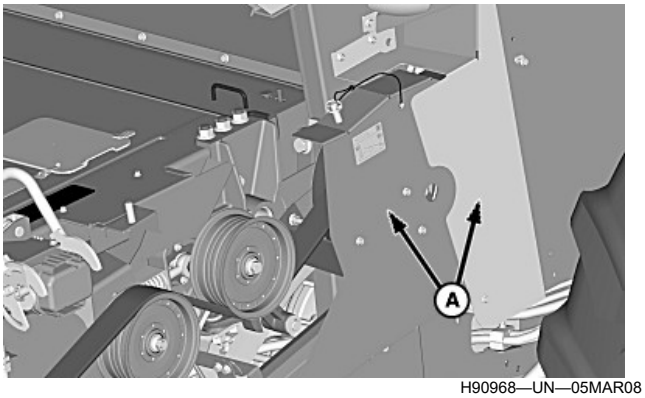
Tighten nuts (A) to position washer between end of gauge and bottom of step.

*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



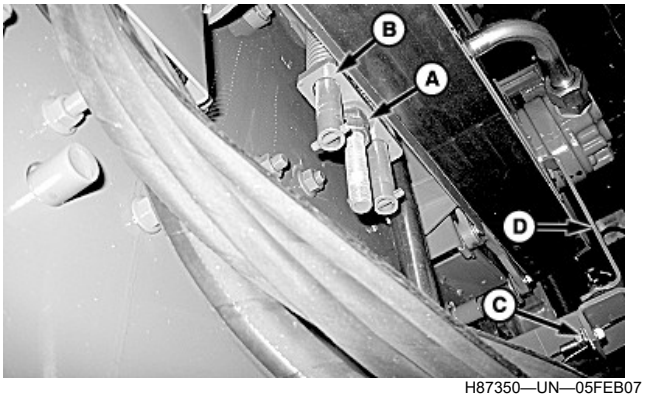

H90968—UN—05MAR08

**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).

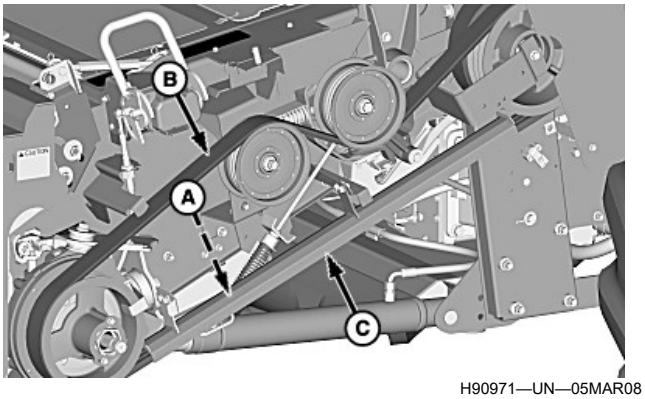



H87350—UN—05FEB07

**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.

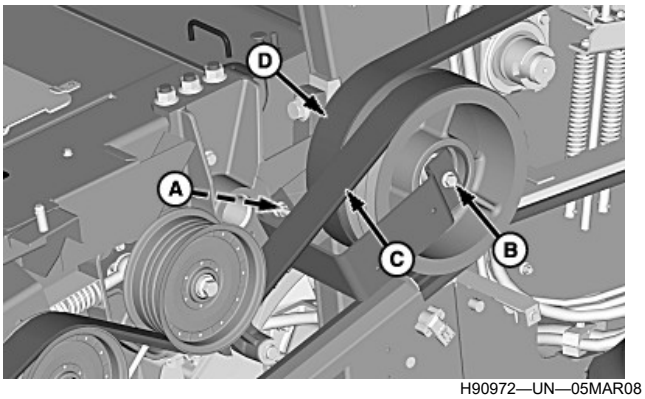
Remove cap screw and nut (C) to move reel pump brace (D) out of way.




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).

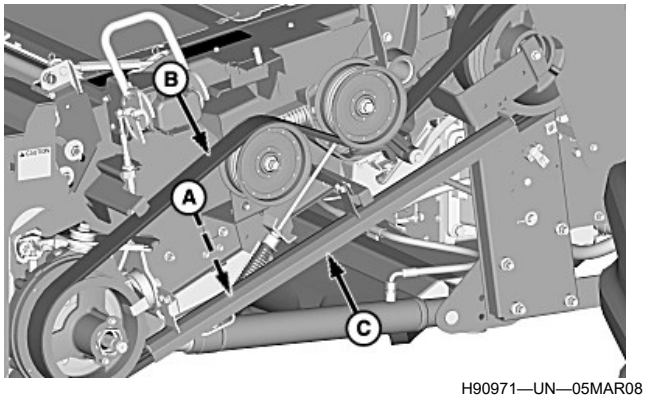
Remove feeder house drive belt (C) from sheaves and header reel/belt pickup pump belt (D).

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) |

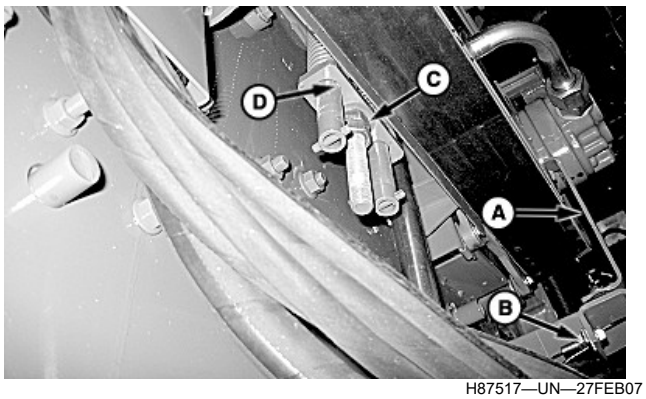



H90971—UN—05MAR08

**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

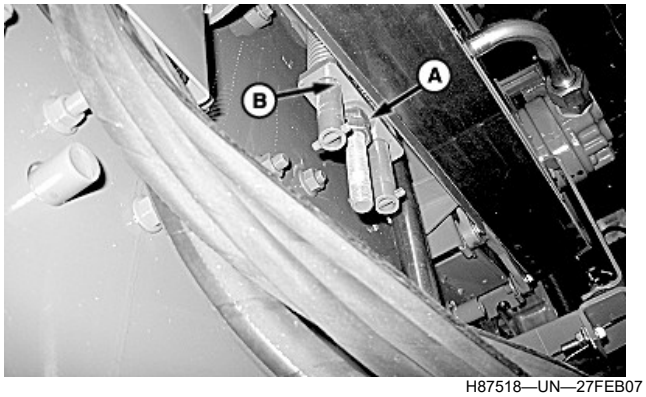
**A—Brace**
**B—Cap Screw and Nut**
**C—Nuts**
**D—Holes**

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

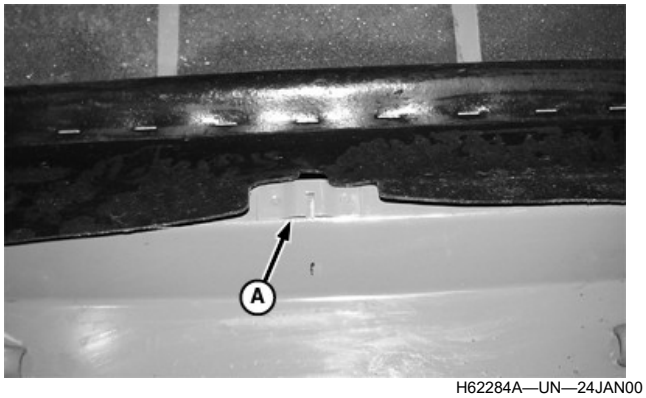
**A—Nuts**
**B—Holes**

**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.

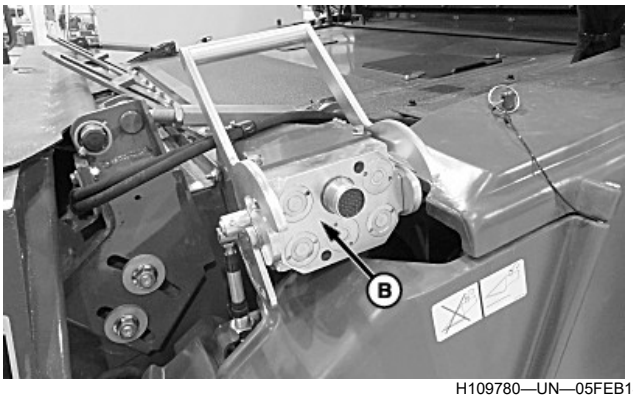
When notch (A) is in center of rubber seal, the header is approximately level with the machine body. Indicator may also be useful as a reference during operation.

OUO6075,000066E-19-02FEB10

## Attach Multicoupler and Single-Point Latching




H109779—UN—05FEB14



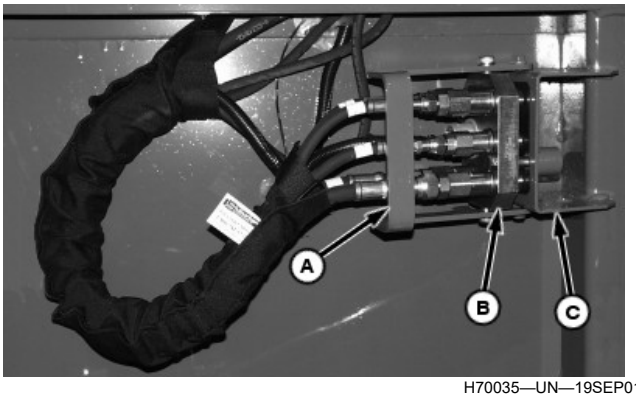

H109780—UN—05FEB14

**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.**

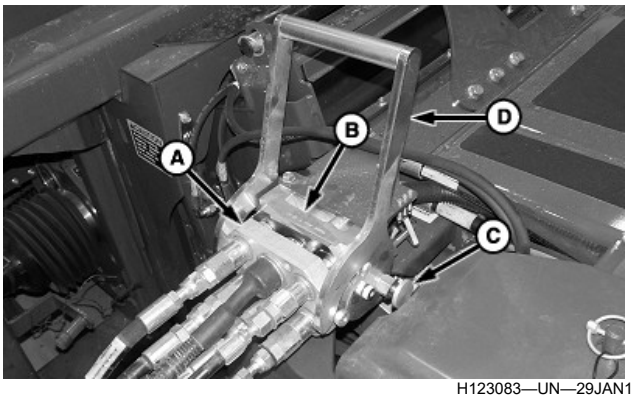
1. Remove the cover (A) and clean the multicoupler face (B).




H70035—UN—19SEP01

**A—Handle**
**B—Multicoupler**
**C—Storage Bracket**

2. Open handle (A) and remove the multicoupler (B) from the storage bracket (C).



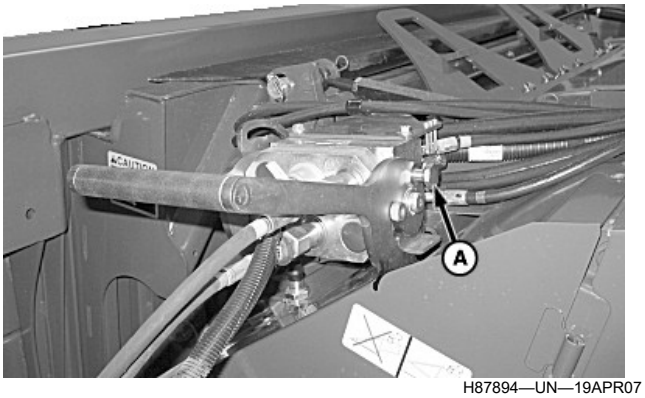

H123083—UN—29JAN18

**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).

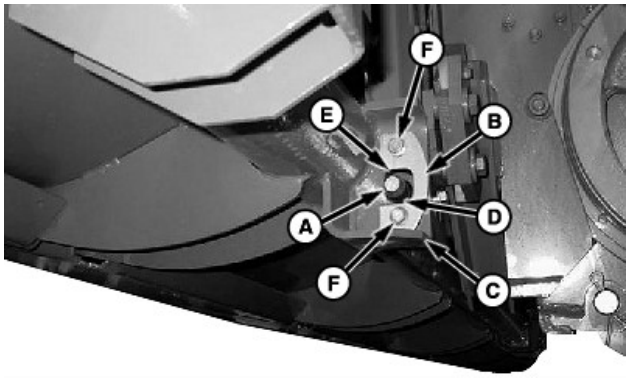



H87894—UN—19APR07

**A—Knob**

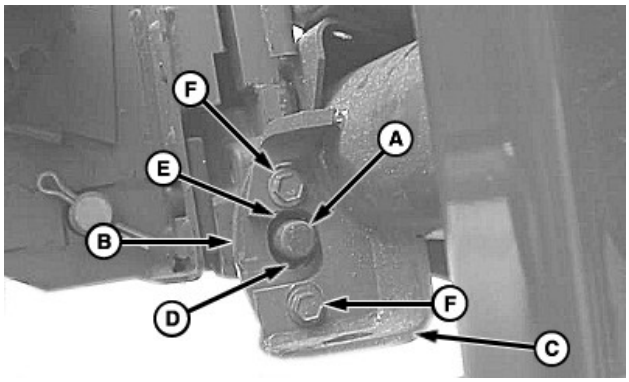
**IMPORTANT: Failure to close the multicoupler fully so the knob can engage could result in the header falling off while harvesting or transporting.**

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

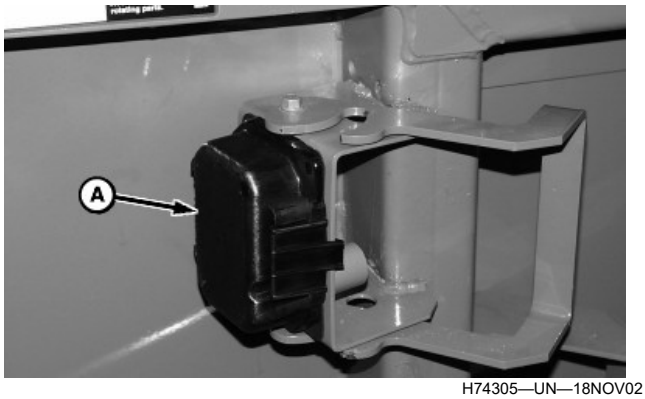
*Outside Latch Plate (M12 Cap Screws)*

**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) |



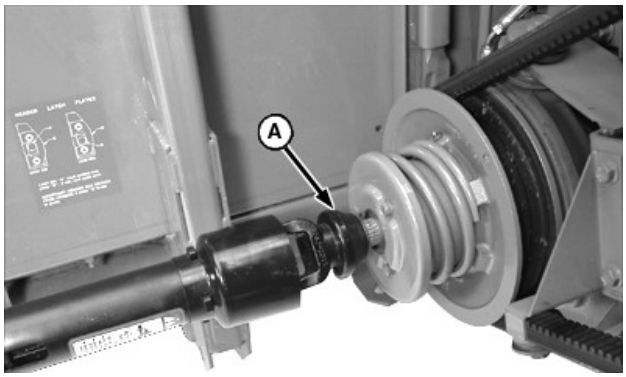

H74305—UN—18NOV02

**A—Cover**

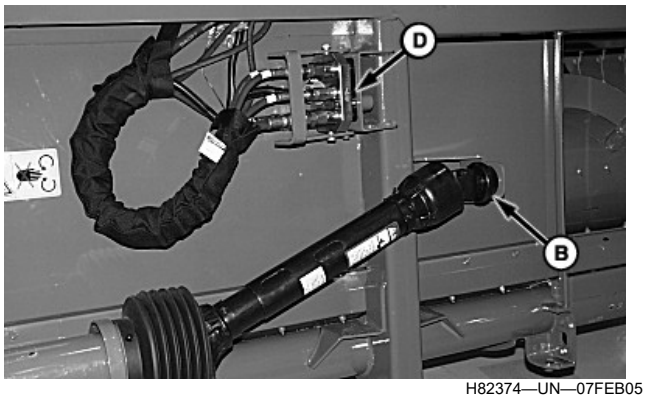
9. Install the cover (A) onto the platform storage position.
10. Remove the telescopic shaft from the storage position and install onto the feeder house backshaft, making sure the locking collar lock fully.

OUO6075,0004EB9-19-06JUL20

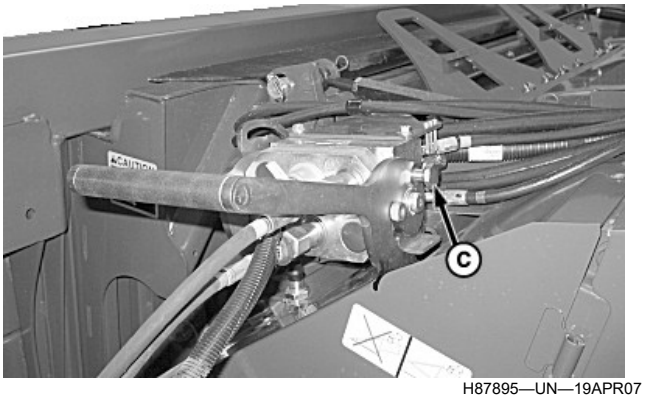
## Attaching and Detaching Header from Feeder House




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).

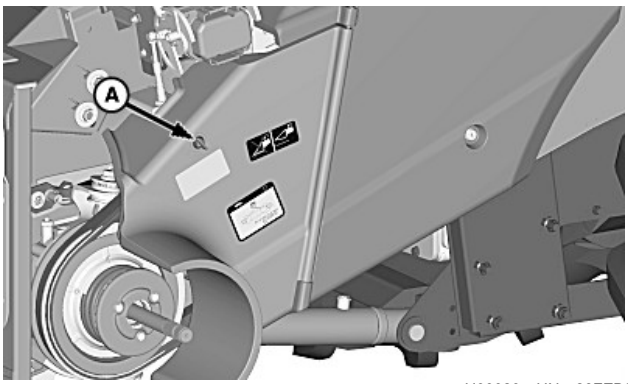
**IMPORTANT: Latch pins are not to be actuated with the header on the ground. If multicoupler must be actuated with the header on the ground, unhook the cable from the handle.**

*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.*

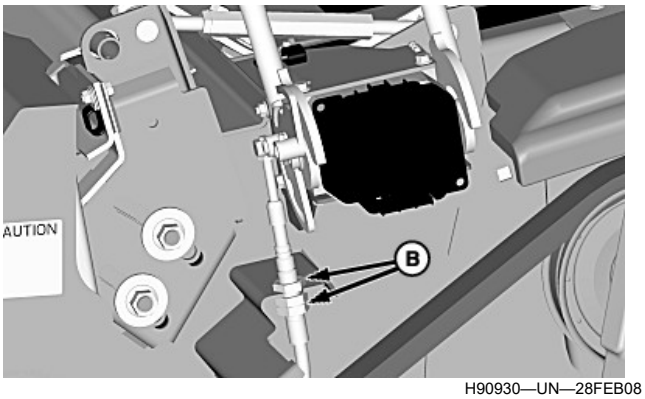
3. Pull and hold knob (C) to release the lock while raising handle to disconnect the multicoupler.
4. Remove the multicoupler cover from the storage position on the header and place the cover on the machine multicoupler.
5. Place and lock multicoupler in storage position (D).

OUO6075,0004EBA-19-06JUL20

## Single-Point Latching—Adjusting




H90929—UN—28FEB08




H90930—UN—28FEB08

**A—Shield**
**B—Lock Nut (2 used)**

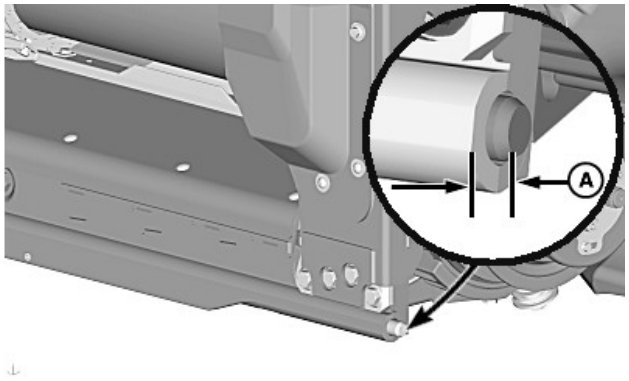
**CAUTION: Shut OFF engine, set park brake, and remove key.**

*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

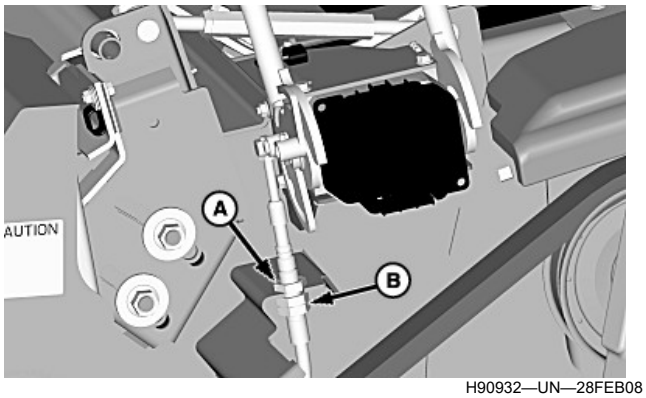
*Left-Hand Latching Pin*

**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.*

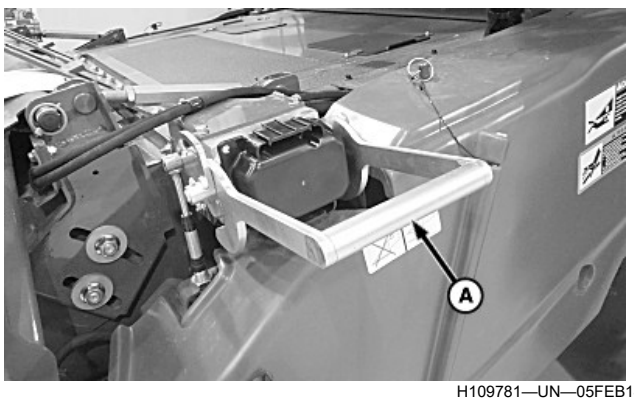
4. Adjust the cable in the bracket as needed for proper pin adjustment:
   - Left-hand latching pin must be flush to +/- 2 mm (0.08 in) (A).



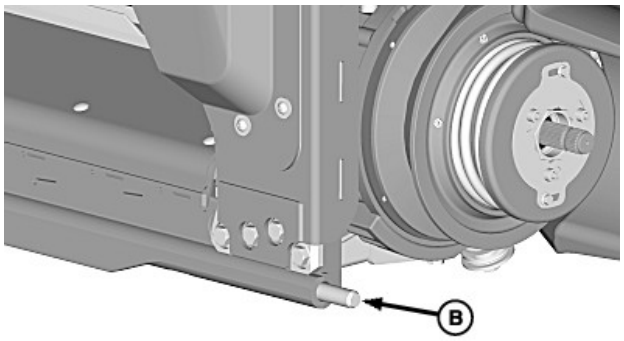

H90932—UN—28FEB08

**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.**

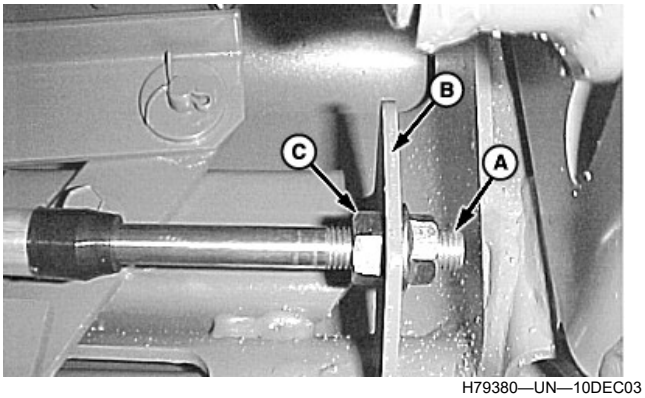
6. Fully lower the multicoupler handle (A) and verify that the pins (B) (both sides) are set to specification. Readjust if not set to specification.

| Specification | |
|---|---|
| Feeder House Pins—Distance | 45—52 mm (1-3/4—2 in) |

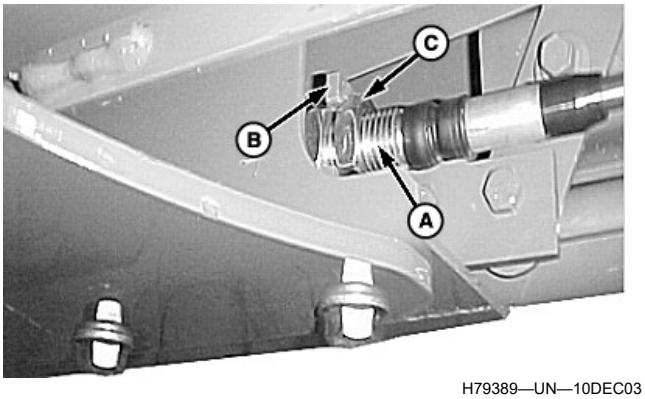
7. Close the left-hand feeder house shield.

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**

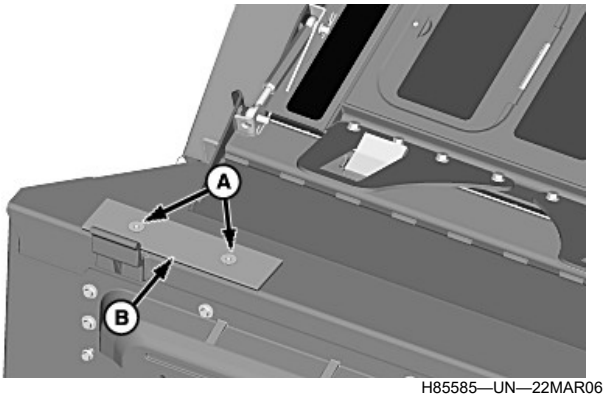
Adjustments should be made to lower end of latching cable if threads (A) are not centered in bracket (B).

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.

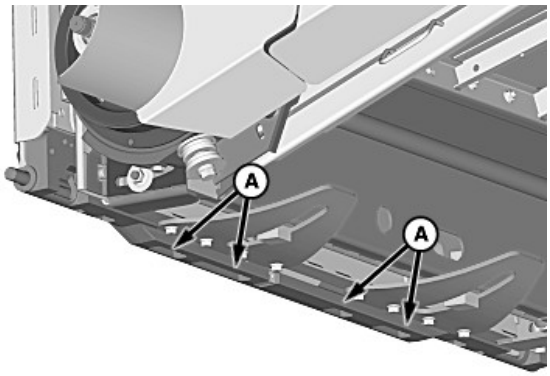
Take a position approximately 5 m (15 ft.) in front of header.

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)



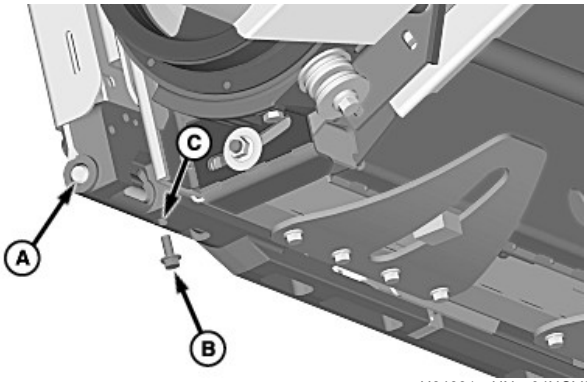

H84880—UN—04NOV05

**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



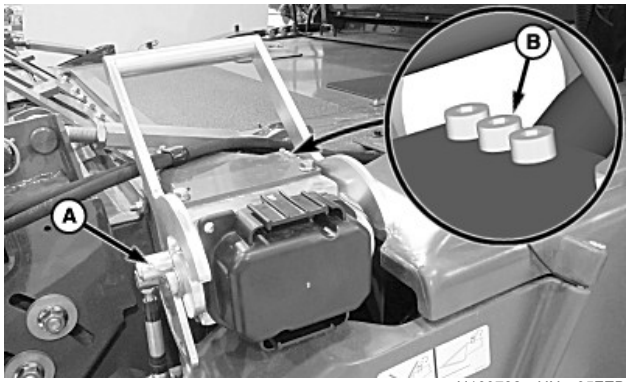

H84881—UN—04NOV05

**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

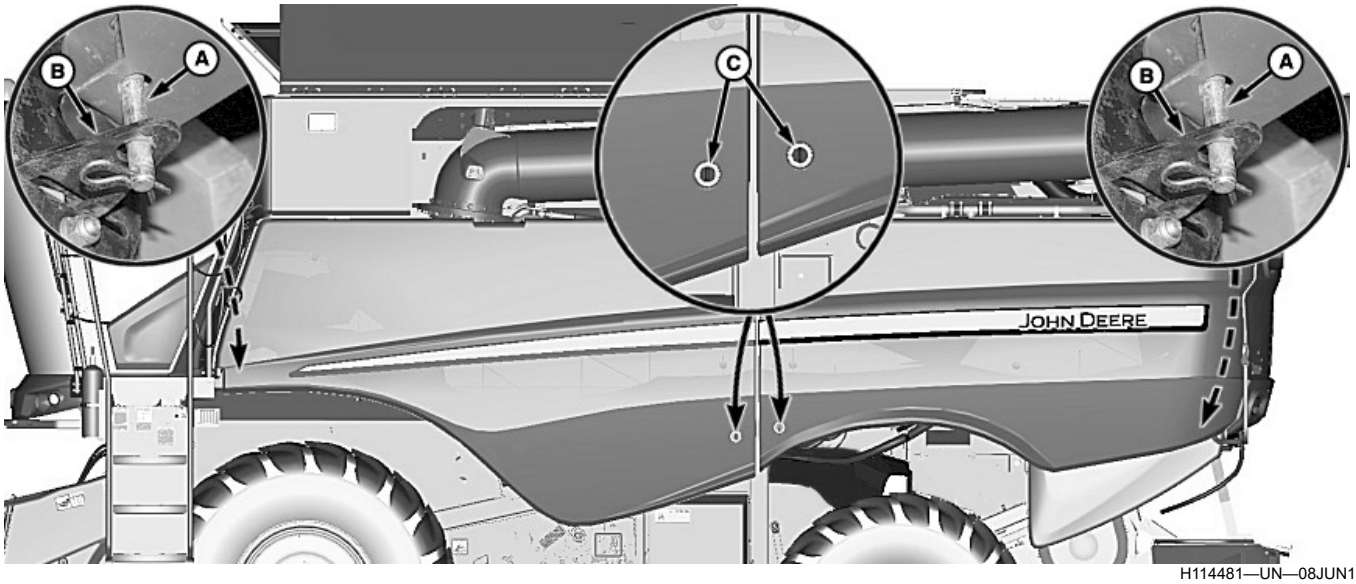
**A—Shear Screw**
**B—Extra Shear Screws**

*NOTE: Three extra shear screws are provided.*

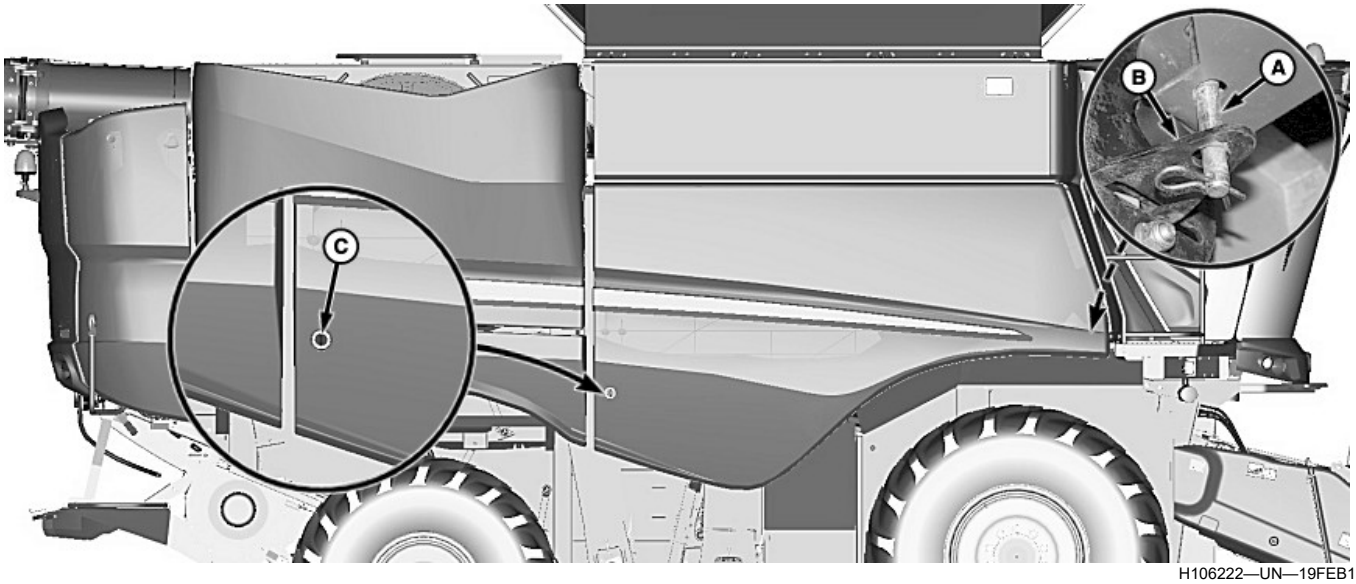
If shear screw (A) breaks, remove and replace with extra shear screw (B).

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.

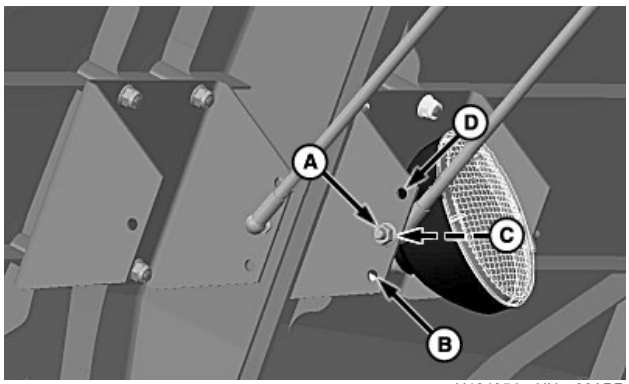
OUO6075,0004942-19-26APR18

### 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

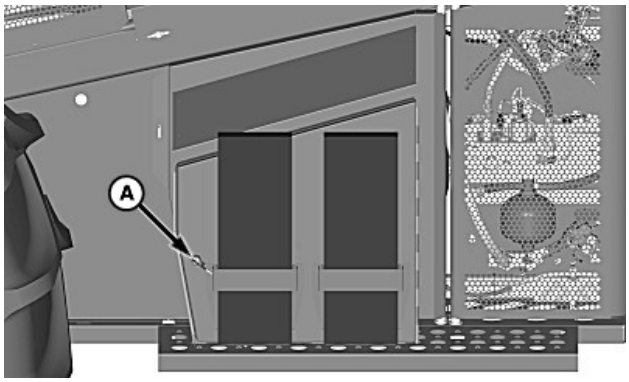
**A—Nut**
**B—Bottom Hole**
**C—Middle Hole**
**D—Upper Hole**

*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

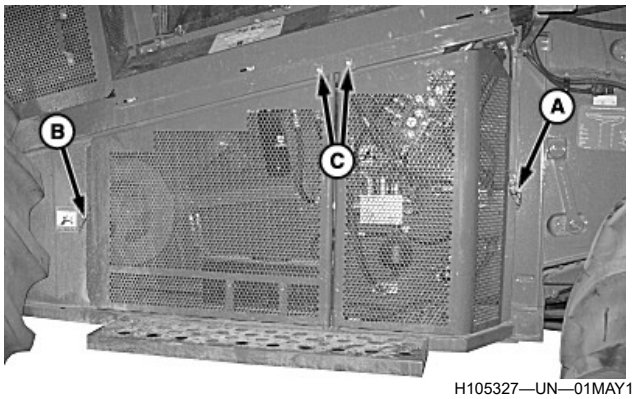
**A—Latch**

Turn latch (A) to open the toolbox door.

OUO6075,00041E3-19-11APR16

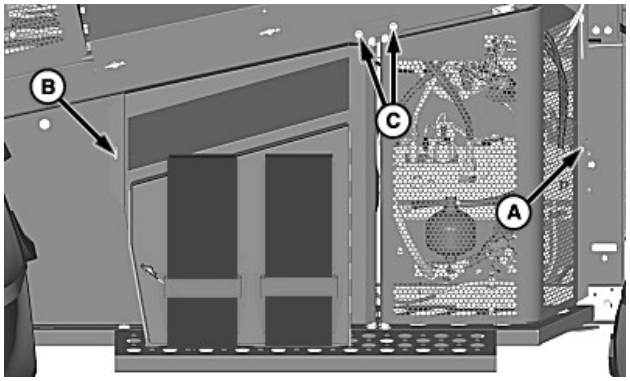
## Left-Hand Side Shields

### Side Shields (Style A)




H105327—UN—01MAY12

*Shields (Without Toolbox)*




H116913—UN—14JAN16

*Shields (With Toolbox)*

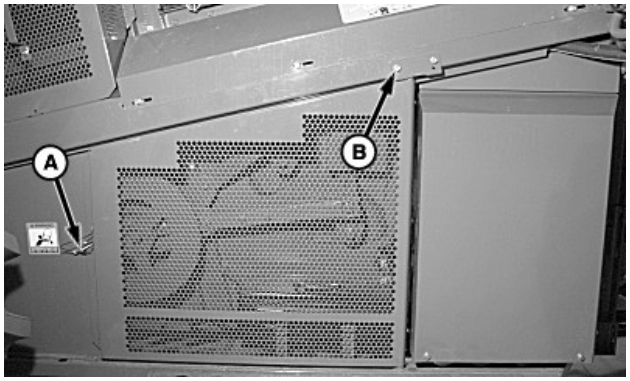
**A—Quick-Lock Pin**
**B—Quick-Lock Pin**
**C—Cap Screws**

**CAUTION: Shut OFF engine, set park brake and remove key.**

Remove quick-lock pin (A and B) to open shields.

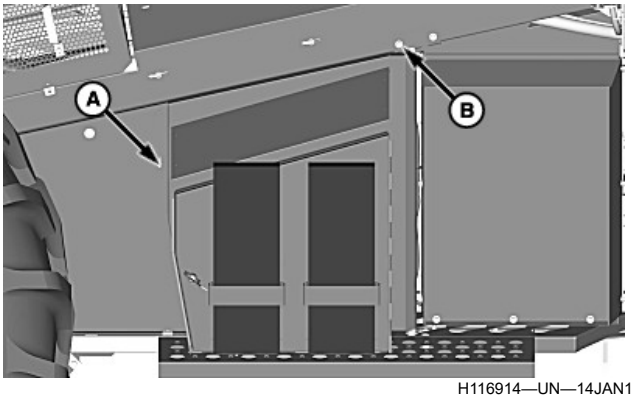
Remove cap screws (C) and lift shields to remove.

### Side Shields (Style B)




H96802—UN—09JUN10

*Shields (Without Toolbox)*




H116914—UN—14JAN16

*Shields (With Toolbox)*

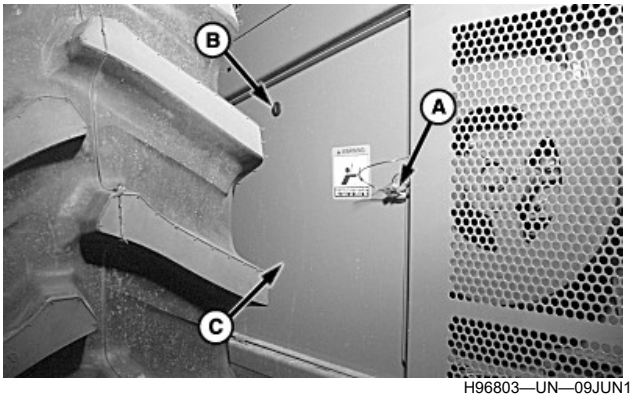
**A—Quick-Lock Pin**
**B—Cap Screws**

**⚠ 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

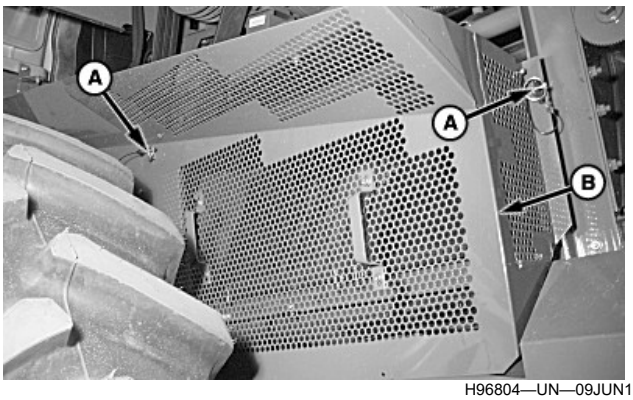



H96803—UN—09JUN10

**A—Quick-Lock Pin**
**B—Latch**
**C—Shield**

Remove quick-lock pin (A) and turn latch (B) to remove shield (C).

### Upper Separator Shield

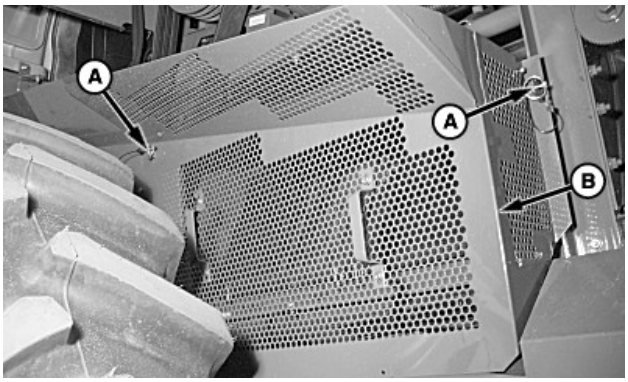



H96804—UN—09JUN10

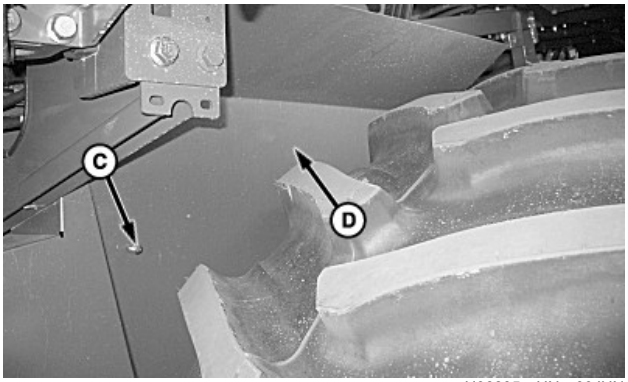
**A—Quick-Lock Pins**
**B—Shield**

Remove quick-lock pins (A) and remove shield (B).

### Front Separator Shield




H96804—UN—09JUN10




H96805—UN—09JUN10

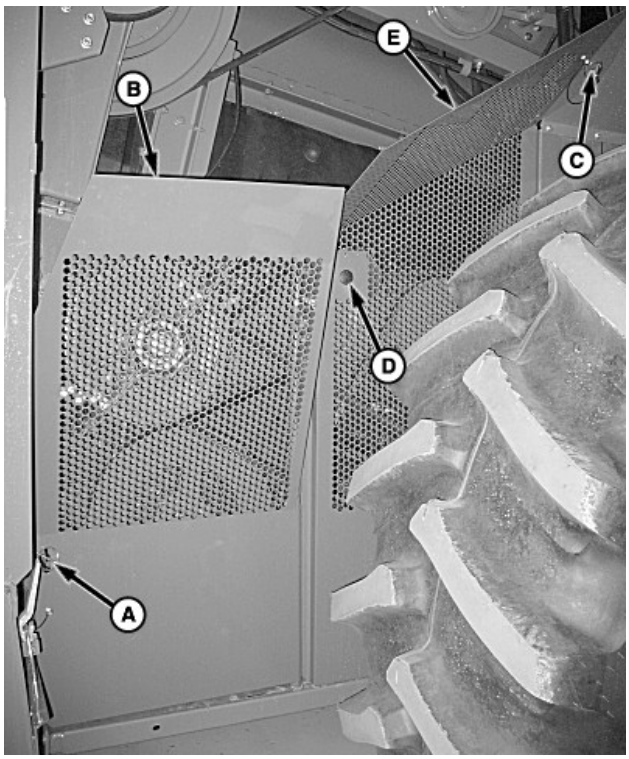
**A—Quick-Lock Pins**
**B—Shield**
**C—Cap Screw**
**D—Shield**

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

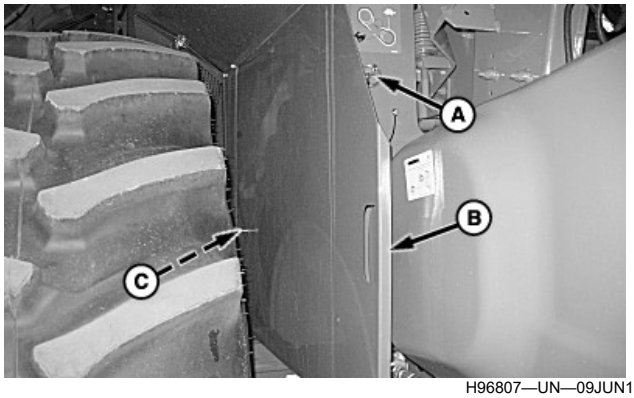
**A—Quick-Lock Pin**
**B—Shield**
**C—Quick-Lock Pin**
**D—Latch**
**E—Shield**

**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

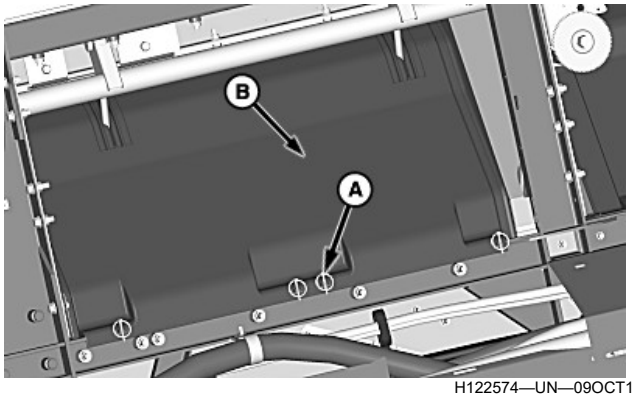
**A—Quick-Lock Pin**
**B—Shield**
**C—Cap Screw**

**Front Separator Shield—** Remove quick-lock pin (A) and pull shield (B) forward.

Remove cap screw (C) and remove shield.

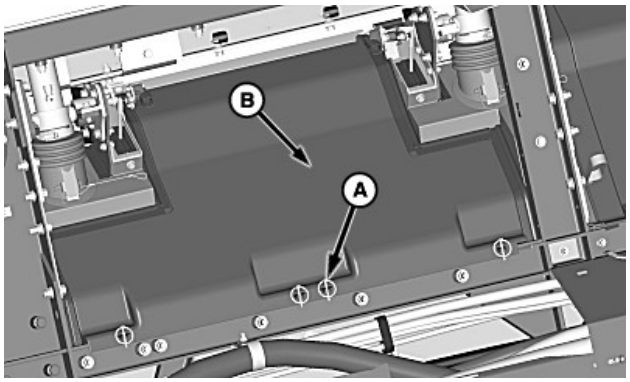
OUO6075,00007C7-19-28SEP10

## Separator Covers



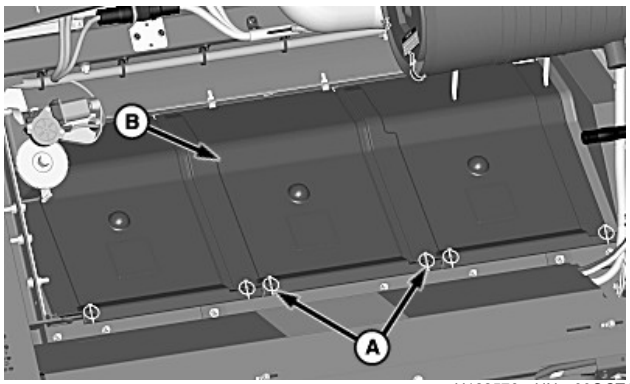

H122574—UN—09OCT17

*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.**

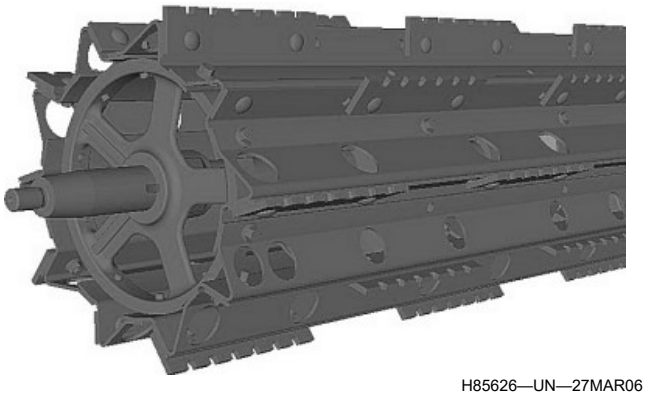
*NOTE: One cover on the left-hand side of the machine and two covers on the right-hand side of the machine are used to seal the threshing section. Three covers on both sides of the machine are used to seal the separating section.*

Quick-lock pins (A) are used to retain covers (B).

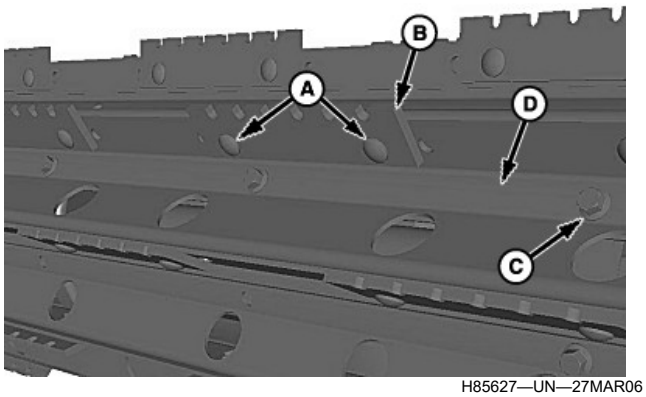
Remove quick-lock pins and remove covers.

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)

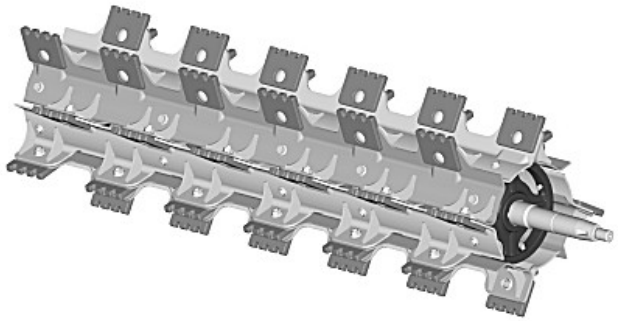
Remove cap screws (C) and replace feed accelerator wings (D) as required. Tighten cap screws to specification.

**Specification**

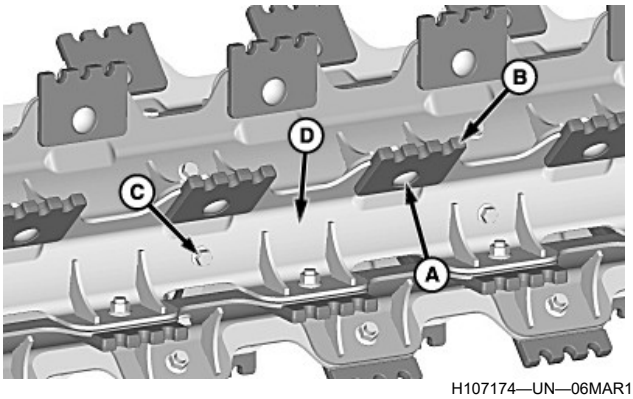
Feed Accelerator Wing Cap
Screws—Torque. . . . . 70 N·m (52 lb-ft)

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)

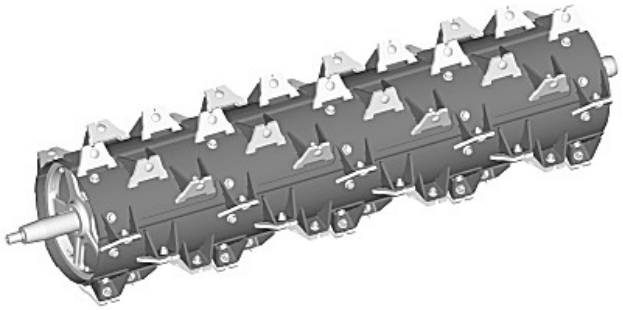
Remove cap screws (C) and replace feed accelerator wings (D) as required. Tighten cap screws to specification.

**Specification**

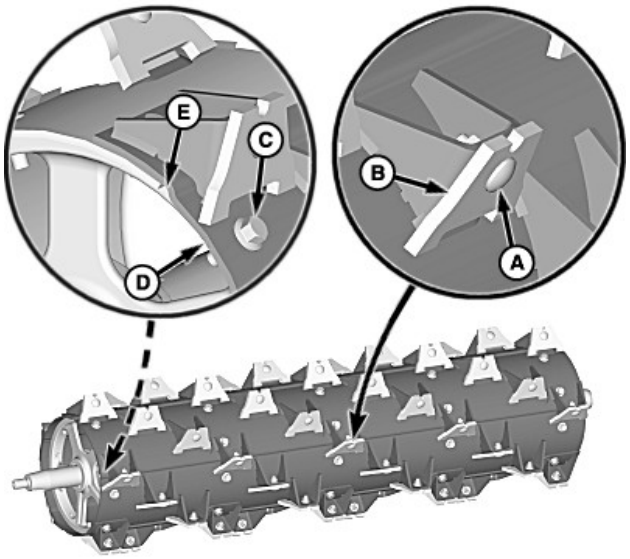
Feed Accelerator Wing Cap
Screws—Torque. . . . . 70 N·m (52 lb·ft)

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.**

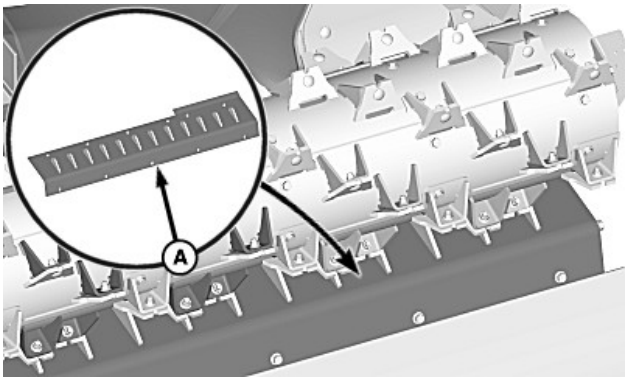
Install wing assembly so it overlaps at location (E) as shown. Tighten cap screws to specification.

**Specification**

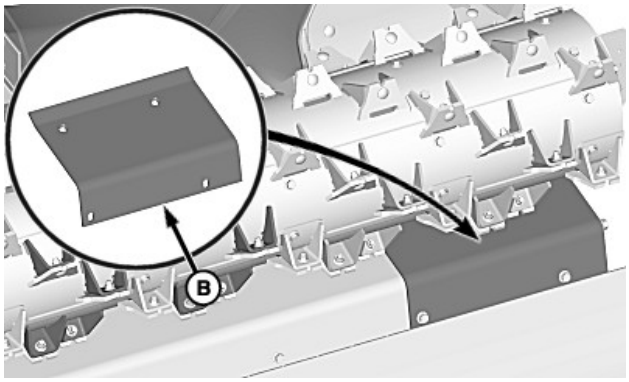
Feed Accelerator Wing
Assembly Cap Screws—Torque. . . . . 73 N·m (54 lb.-ft.)

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.*

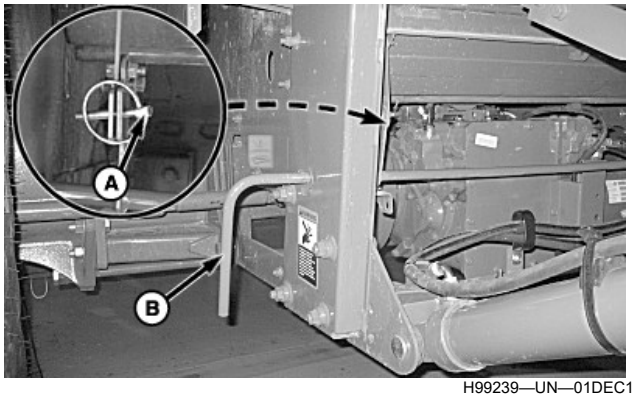
When the comb floor (A) is removed for harvest, the smooth liner plate (B) which was shipped with the machine must be installed (left side of the machine).

**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



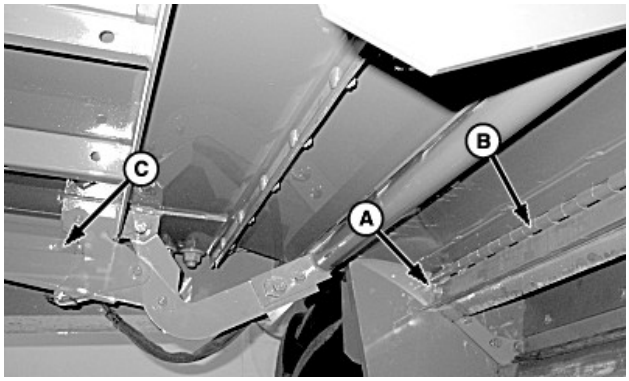

H99239—UN—01DEC10

**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

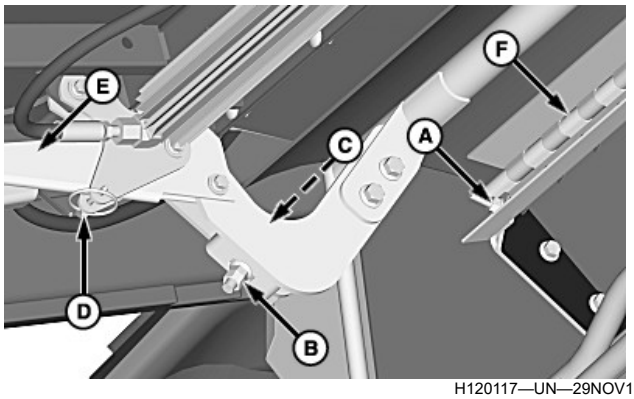
**A—Cap Screws and Nuts**
**B—Feed Plate Assembly**
**C—Lever**

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.

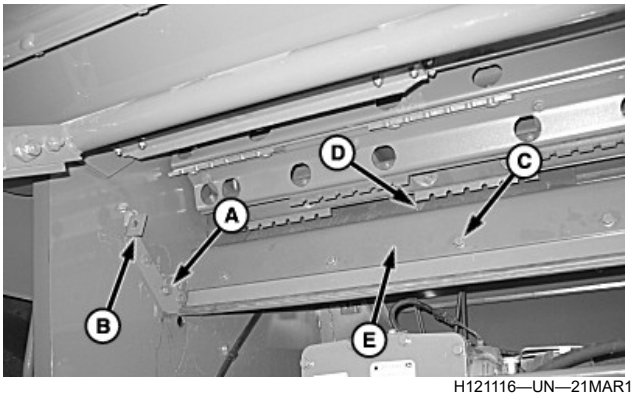
Remove nuts (B) and round head bolt (C) on both sides of the machine.

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).



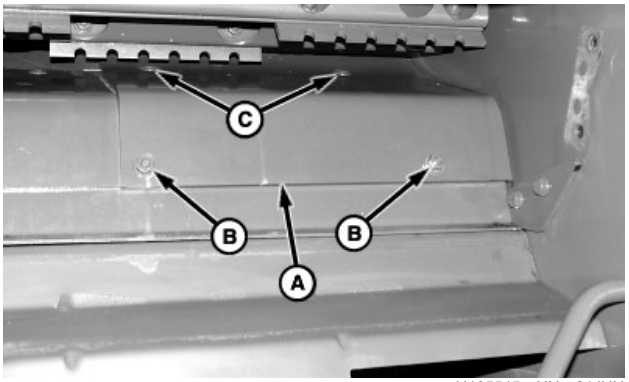

H121116—UN—21MAR17

**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).



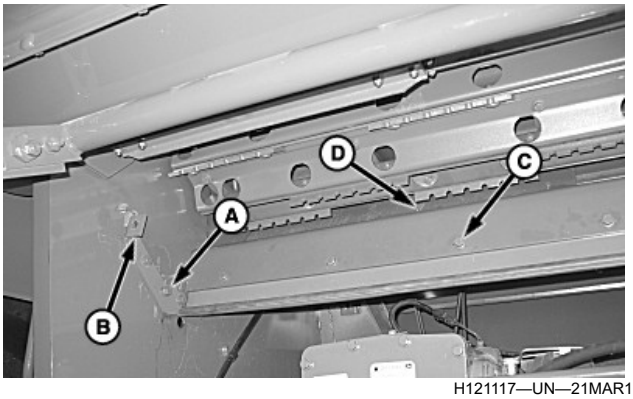

H105545—UN—21JUN12

**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)**

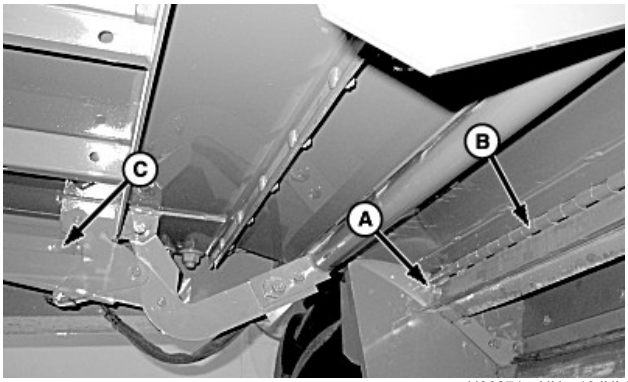
*NOTE: Plow bolt must be installed in holes that previously held comb floor to prevent grain loss.*

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

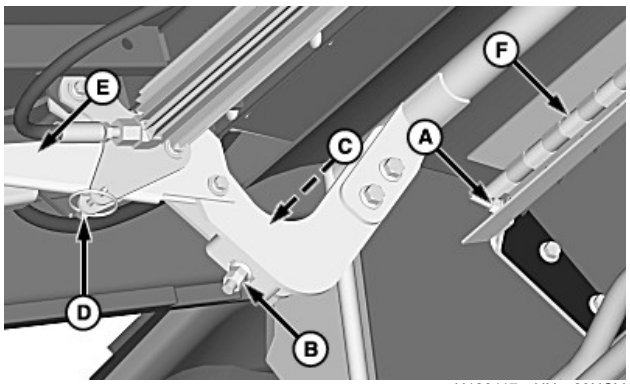
**A—Cap Screws and Nuts**
**B—Feed Plate Assembly**
**C—Lever**

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**

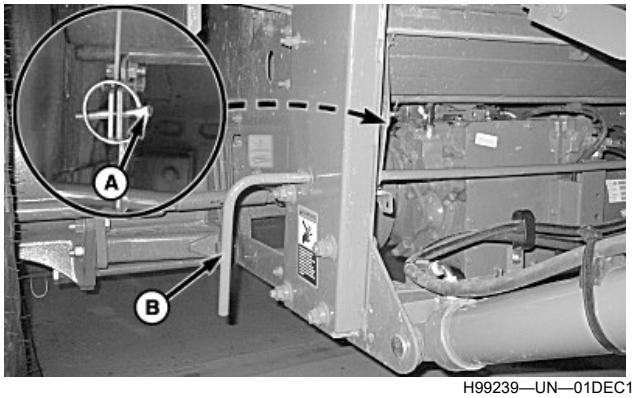
Remove nuts (B) and round head bolt (C) on both sides of the machine.

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).



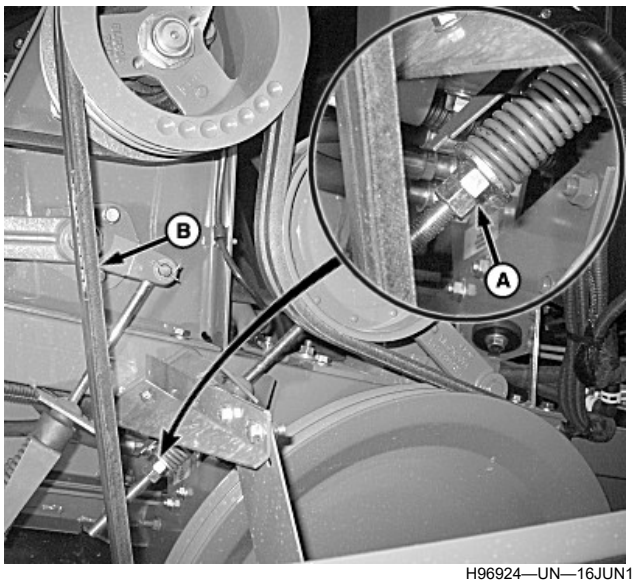

H99239—UN—01DEC10

**A—Quick-Lock Pin**
**B—Lever**

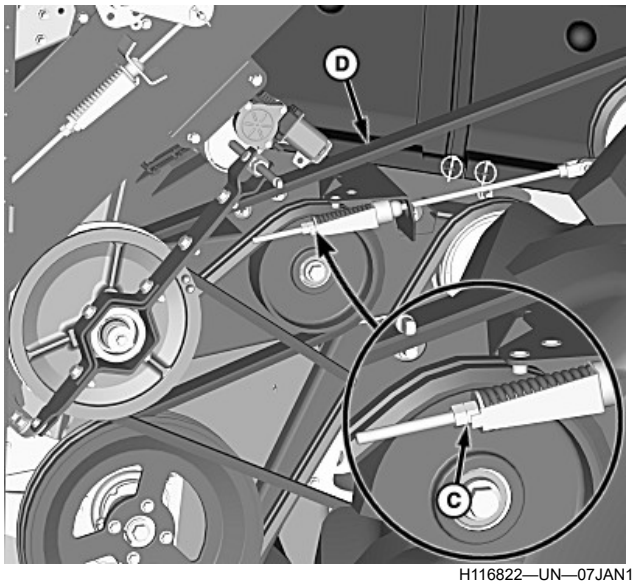
Move lever (B) down to close stone trap and retain with quick-lock pin (A).

OUO6075,00046A7-19-21MAR17

## Feed Accelerator Belt—Replacing




H96924—UN—16JUN10




H116822—UN—07JAN16

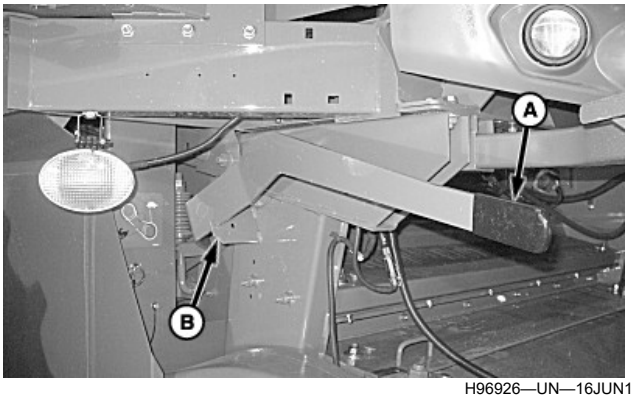
**A—Nuts**
**B—Front Jackshaft Belt**
**C—Nuts**
**D—Belt**

**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).

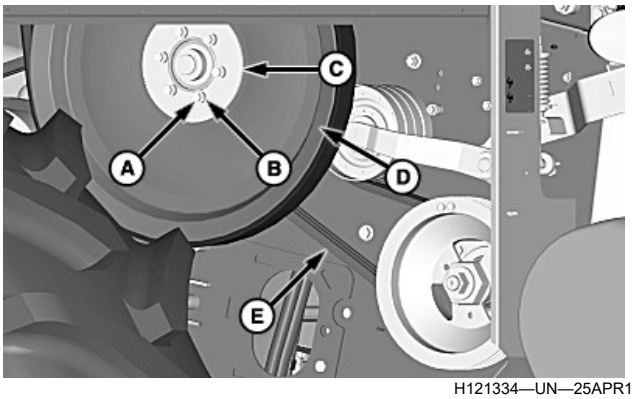
Remove both belts to allow removal of the feed accelerator belt.




H96926—UN—16JUN10

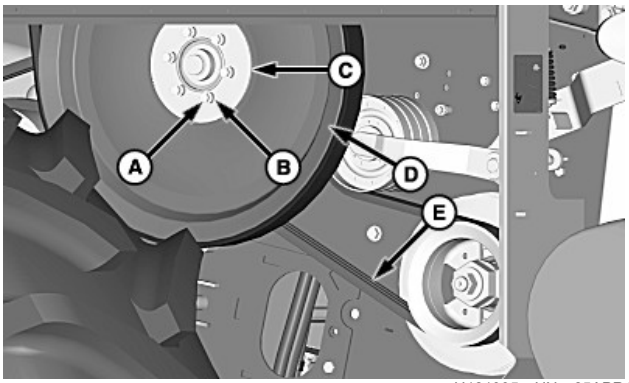
**A—Lever**
**B—Bracket**

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.

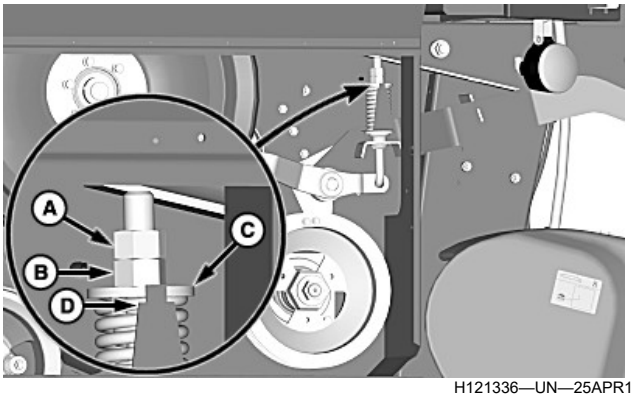
Adjust feed accelerator belt tension so washer is positioned between end of gauge and bottom of step.

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**

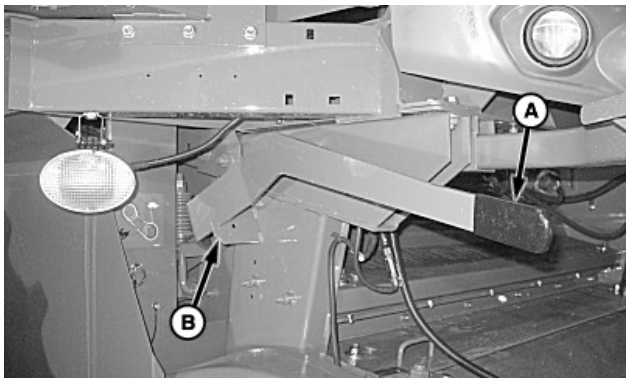
**CAUTION: Shut OFF engine, set park brake and remove key.**

Feed accelerator belt idler is on the right-hand side of the machine behind the feeder house pivot.

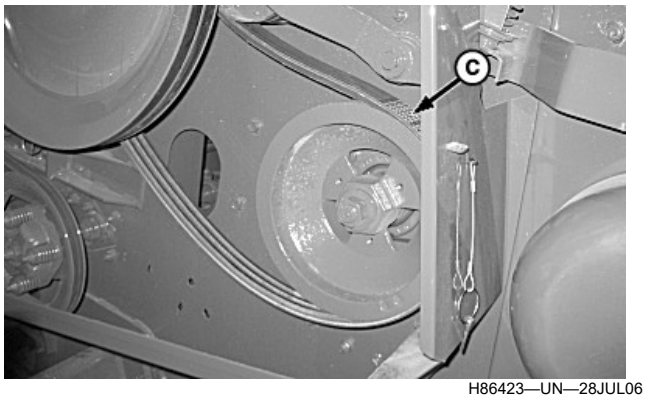
Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

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.*

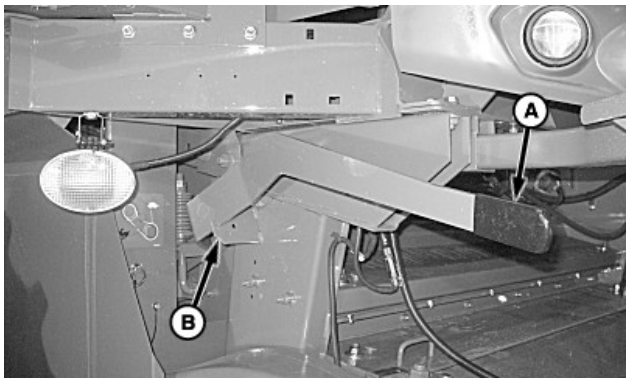
*When changing separator speeds make sure to cycle power ON and OFF to recognize new speed range.*

To change feed accelerator speed to high speed position:

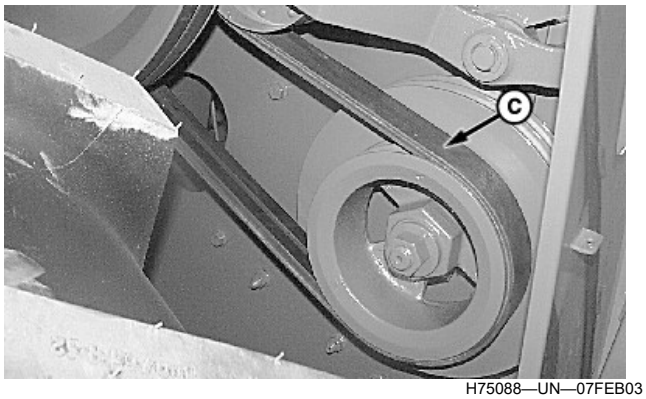
- Push lever (A) up and out of notch in bracket (B) to relieve belt tension.
- Move belt (C) to inside sheave grooves on both sheaves for high speed.
- Push lever up and into notch in bracket to reset belt tension.

OUO6075,00007F2-19-27OCT10

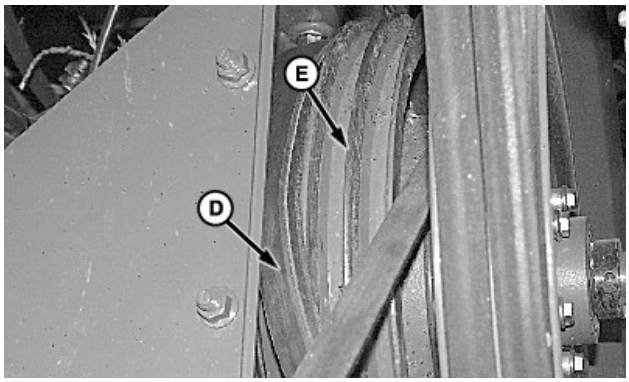
## High Speed High Capacity Feed Accelerator—Changing To Slow Speed




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

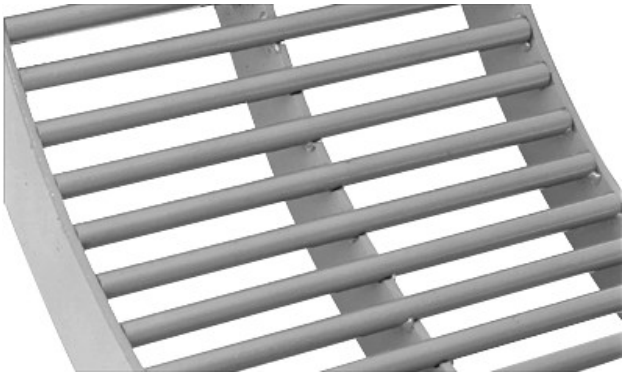
## Concave Recommendations

*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.<br>Good = Provides a good level of performance.<br>Average = Provides an average level of performance.<br>NR = Not recommended. | | | | | | | | |

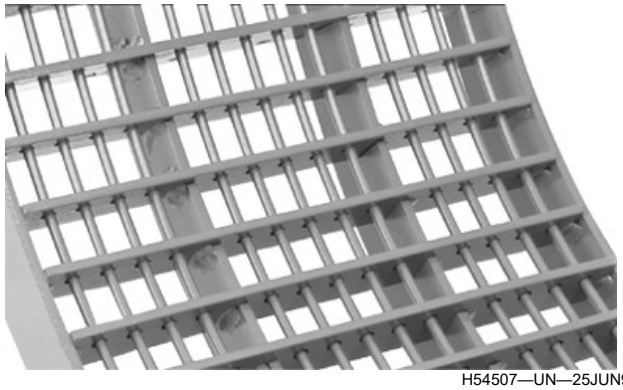
OUO6075,00017E2-19-07MAY14

## Concave Types



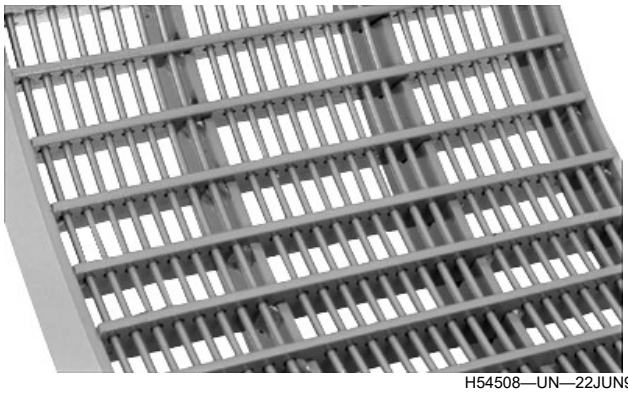
H54506—UN—23MAR99

*Round Bar Multi Crop Concave*



H54507—UN—25JUN99

*Large Wire Concave*



H54508—UN—22JUN99

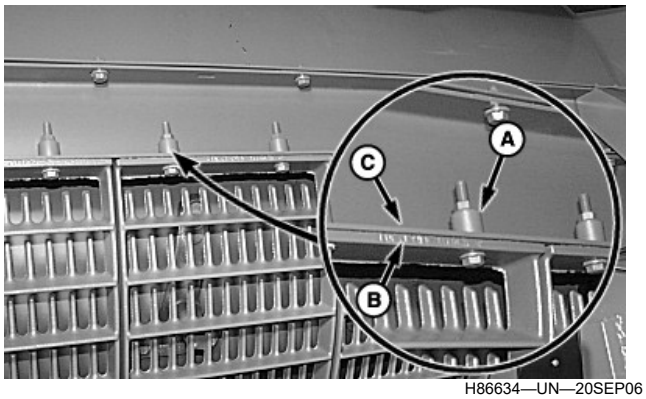
*Small Wire Concave*

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

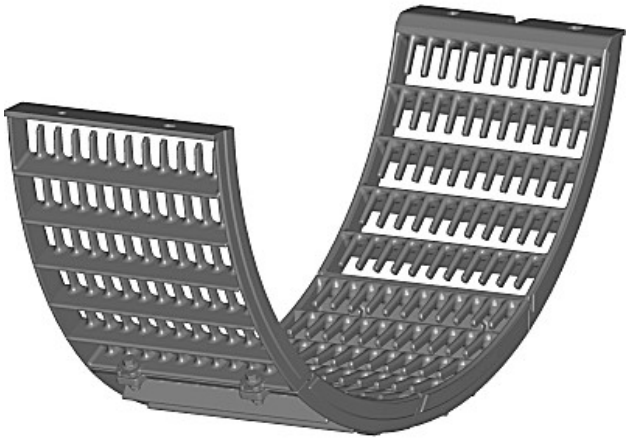
*Heavy-Duty Separator Grate*

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

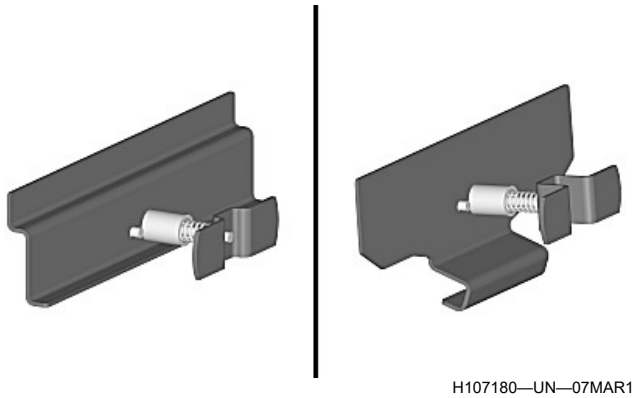
## Separator Grate Types



H107177—UN—06MAR13

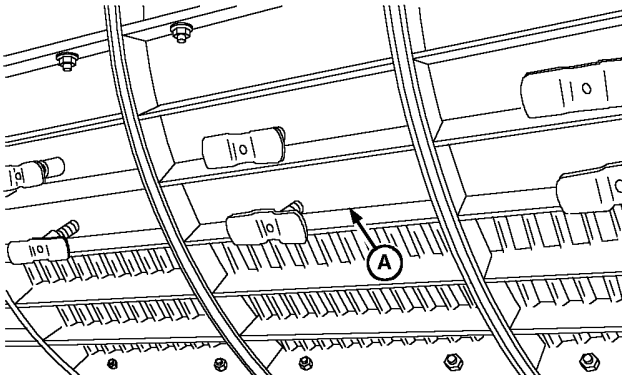
*Standard Cast Separator Grate*

## 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)



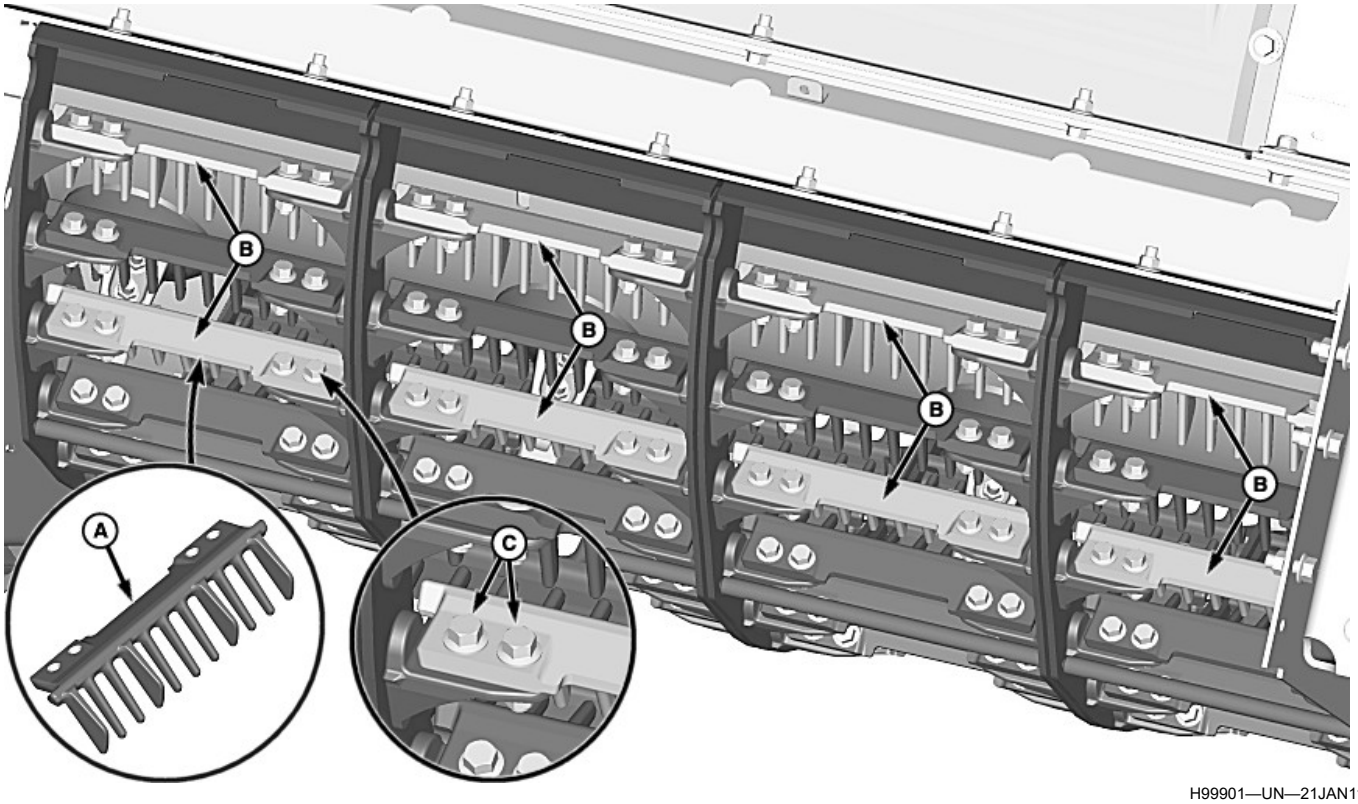
H99873—UN—27JAN11

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.**

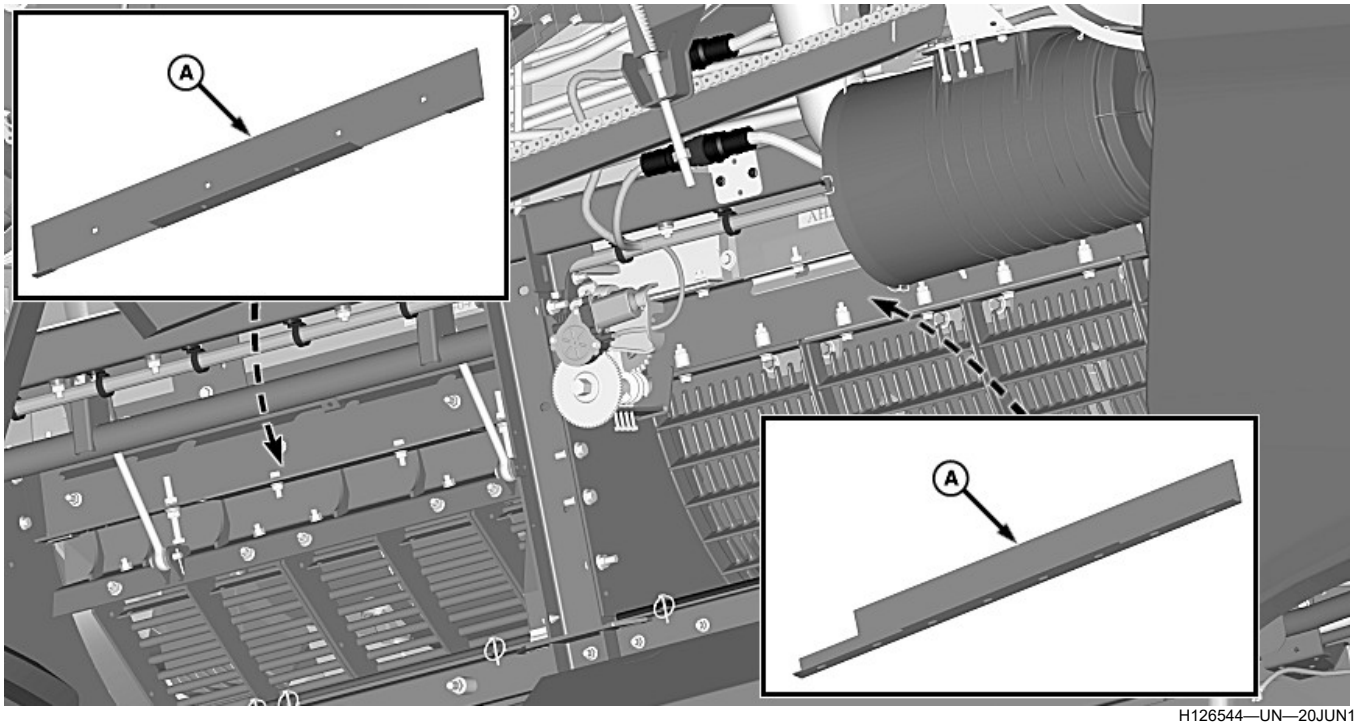
1. Separator grate interrupters (A) MUST be installed in locations (B) as shown.
2. Retain separator grate interrupters with cap screws and nuts (C).
3. Tighten cap screws to specification.

**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.*

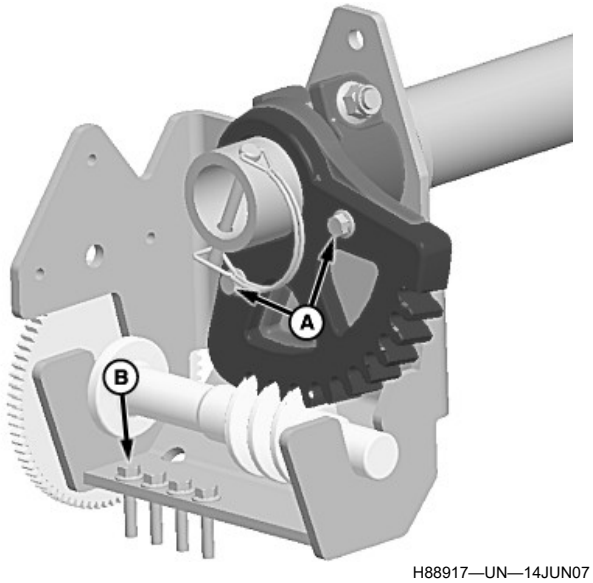
The separator rail liners (A) provide protection to the separator rail when harvesting abrasive crops.

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.

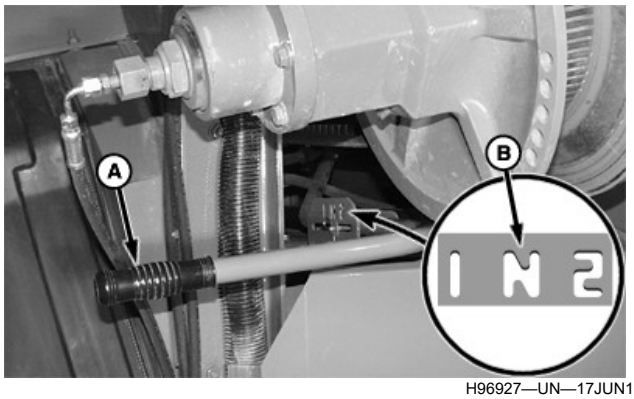
Tighten shear bolts to specification.

**Specification**

Shear Bolts—Torque. . . . . 15 N·m (133 lb-in.)

OUO6075,0001800-19-13MAY14

## Concave Sections (Standard Concave Adjust)—Remove and Install



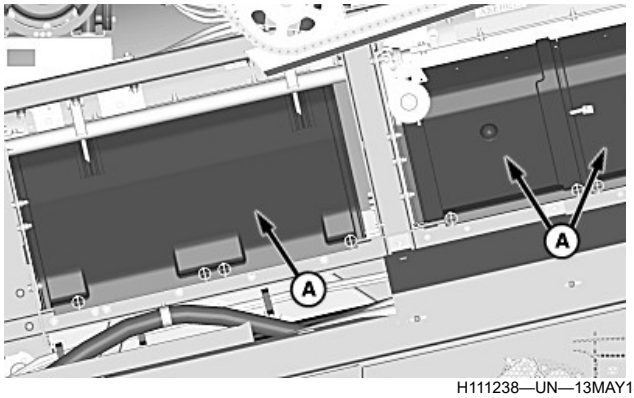

H96927—UN—17JUN10

**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).

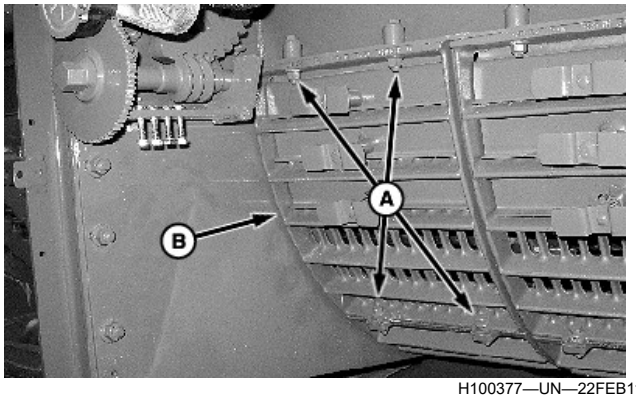



H111238—UN—13MAY14

**A—Separator Covers**

*NOTE: Remove shielding as needed to access separator inspection covers.*

2. Remove separator inspection covers (A).

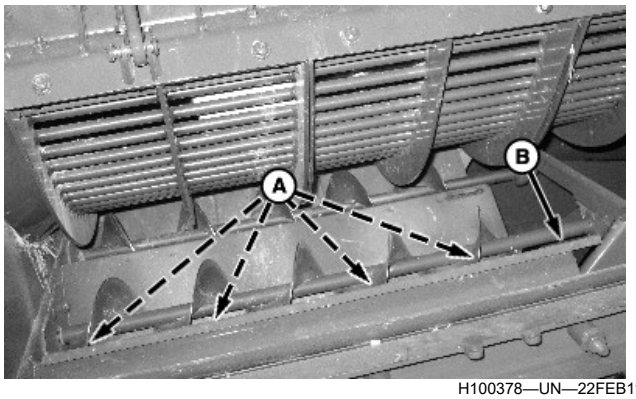



H100377—UN—22FEB11

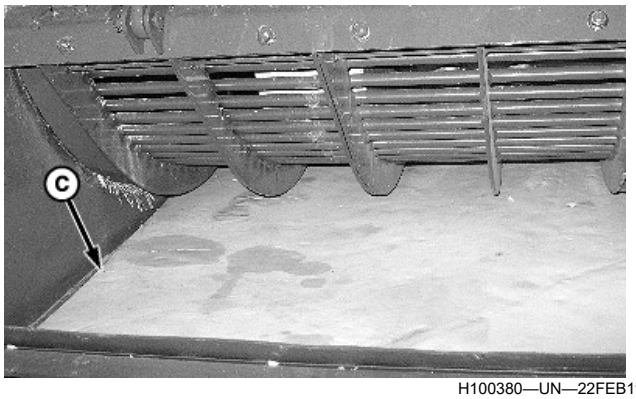
**A—Cap Screws**
**B—Separator Grate**

*NOTE: Removing separator grate provides access for rotating rotor.*

3. Remove cap screws (A) and separator grate (B).



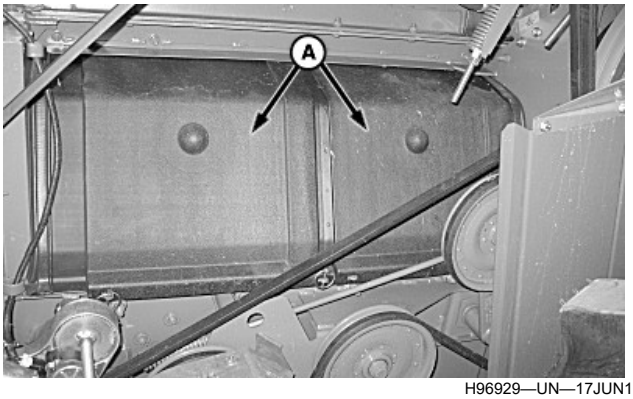

H100378—UN—22FEB11




H100380—UN—22FEB11

**A—Cap Screws (4 used)**
**B—Diverter**
**C—Cardboard**

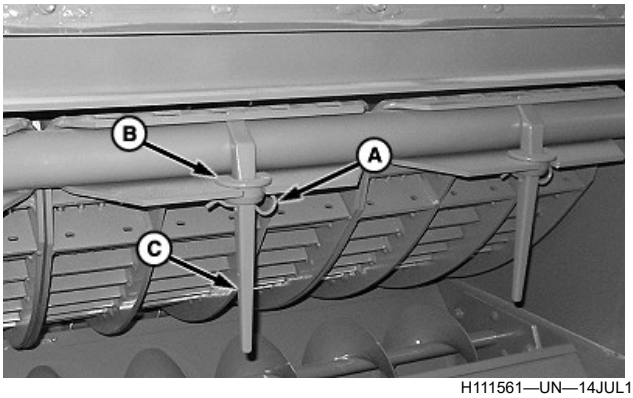
4. Loosen cap screws (A) and remove left-hand sheet metal diverter (B).
5. Place a piece of cardboard (C) or poly over conveyor augers. This provides protection for the augers and allows a smooth surface to remove the concaves.




H96929—UN—17JUN10

**A—Separator Cover (2 used)**

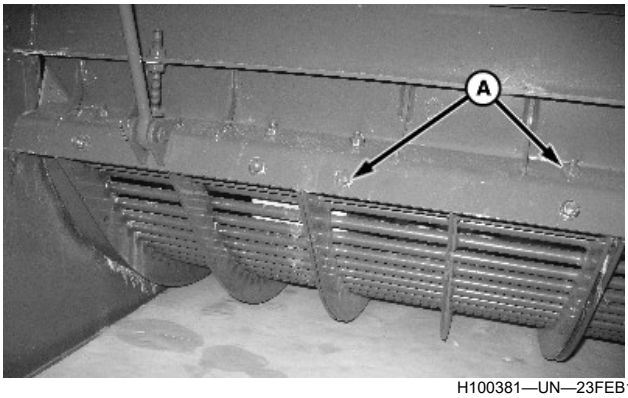
6. Remove shielding as needed to access separator inspection covers.
7. Remove quick-lock pins and front two separator covers (A) on the right-hand side of the machine.




H111561—UN—14JUL14

**A—Spring Pin**
**B—Concave Retainer**
**C—Handle**

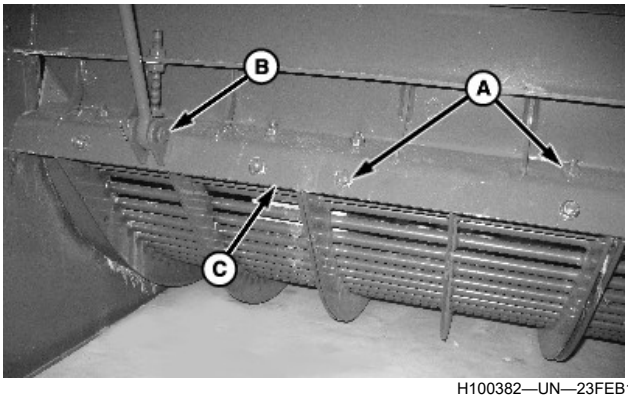
8. Remove spring pin (A) from the concave retainer (B).
9. Lift concave retainer (B) and remove the handle (C) from each concave section.




H100381—UN—23FEB11

**A—Cap Screws (12 used)**

10. Loosen cap screws (A).

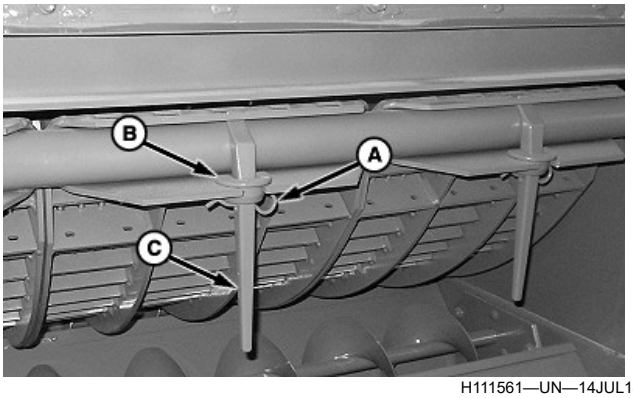



H100382—UN—23FEB11

**A—Cap Screws (12 used)**
**B—Pins (2 used)**
**C—”Z” Bar**

**CAUTION: To prevent damage, carefully lower concave onto the auger bed.**

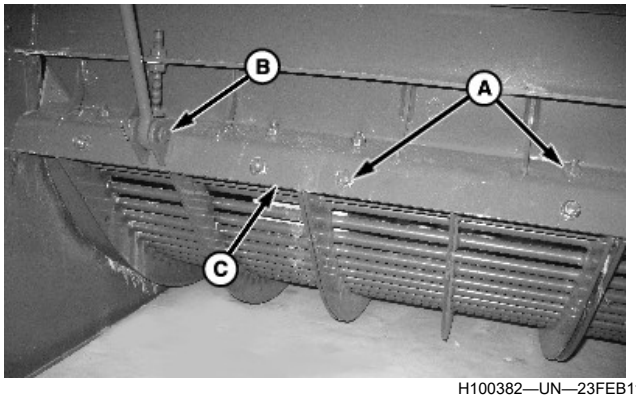
11. Remove cap screws (A).
12. Remove cotter pins, pins (B) and ”Z” bar (C).
13. Rotate rotor such that a gap in the threshing element pattern occurs at mid concave.
14. Remove center concave section.
15. Slide rear concave to the center position and remove.
16. Slide front concave to the center position 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**

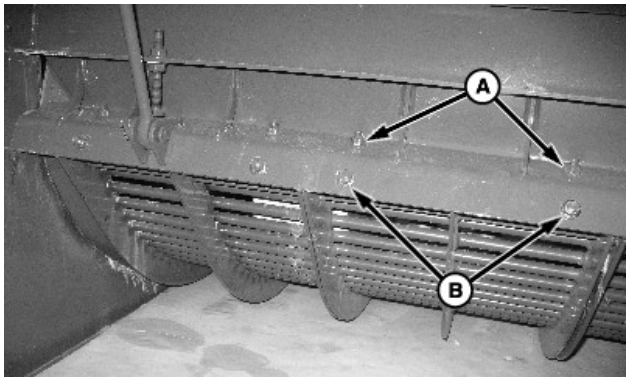
19. Install handle (C), concave retainer (B), and spring pin (A) on concave sections.




H100382—UN—23FEB11

**A—Cap Screws (12 used)**
**B—Pins (2 used)**
**C—"Z" Bar**

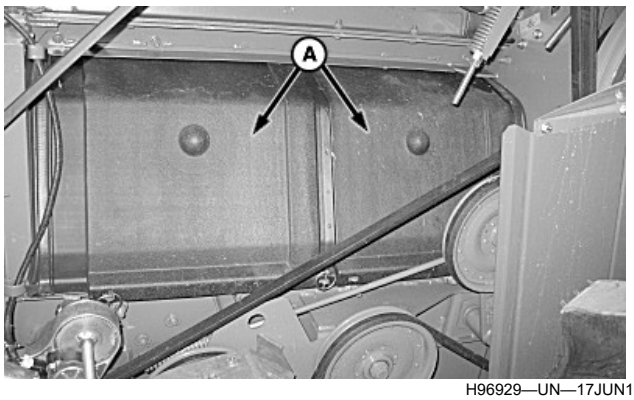
20. Position "Z" bar (C) over end of concaves and install cap screws, but do not tighten.
21. Install pins (B).




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.

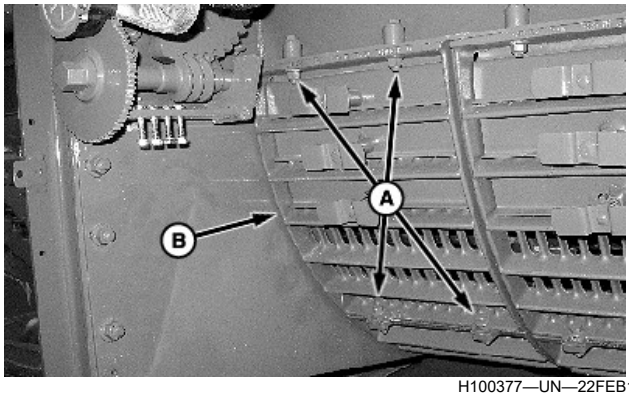



H96929—UN—17JUN10

**A—Separator Covers**

*NOTE: Verify that top edge of separator cover is under clips.*

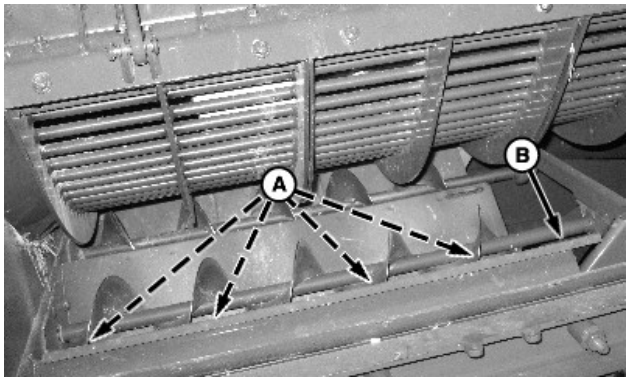
25. Install separator covers (A).
26. Install shielding previously removed to access separator inspection covers.



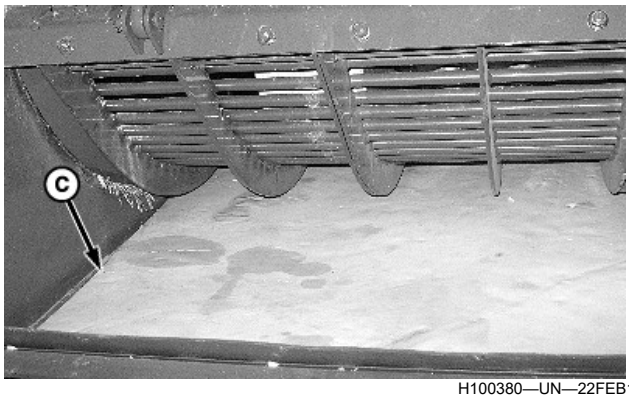

H100377—UN—22FEB11

**A—Cap Screws (4 used)**
**B—Separator Grate**

27. Install separator grate (B) and retain with cap screws (A).



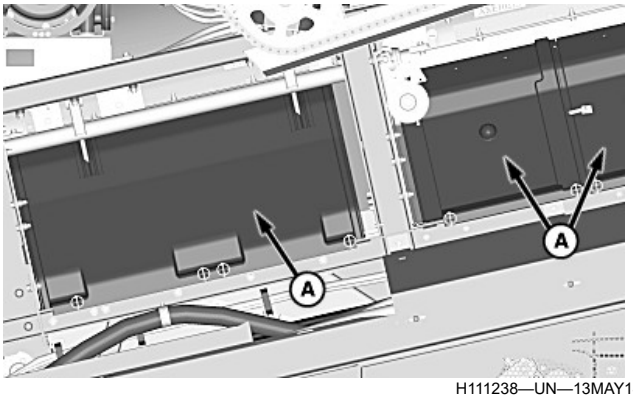

H100378—UN—22FEB11




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

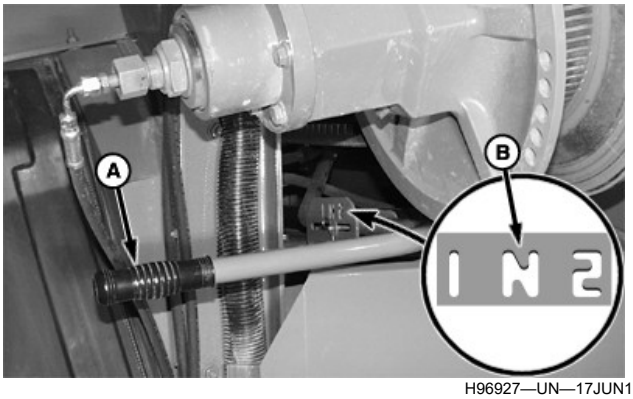
*Threshing Clearance Adjust*

**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.*

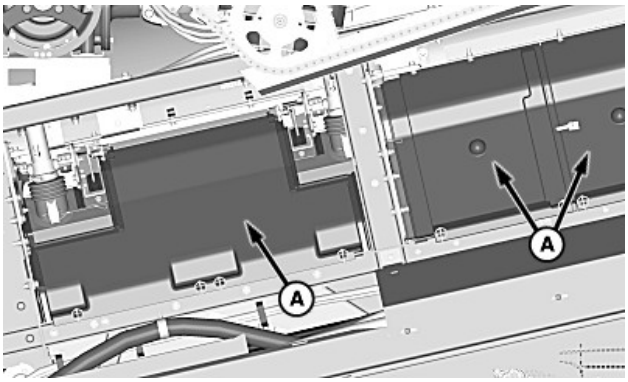
3. Shut OFF engine, set park brake and remove key.




H96927—UN—17JUN10

**A—Handle**
**B—Neutral Position**

4. Move handle (A) to shift the rotor gear case in neutral position (B).

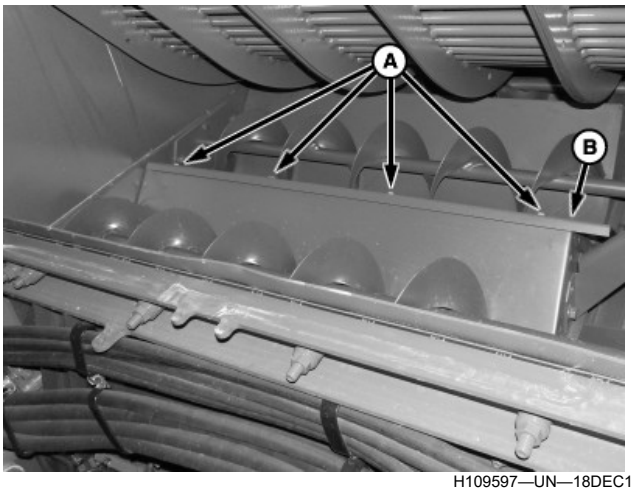



H111239—UN—13MAY14

**A—Separator Covers**

*NOTE: Remove shielding as needed to access separator inspection covers.*

5. Remove separator inspection covers (A).

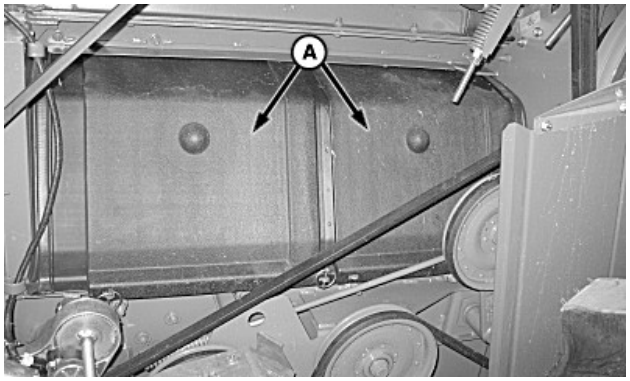



H109597—UN—18DEC13

**A—Cap Screws**
**B—Diverter**

6. Loosen cap screws (A) and remove left-hand sheet metal diverter (B).

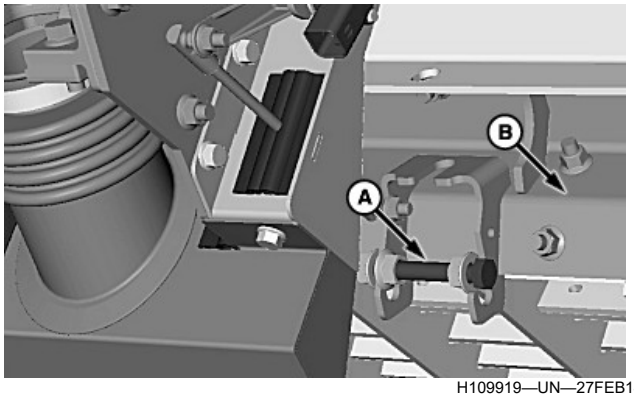
*NOTE: Place a piece of cardboard or poly over conveyor augers. This provides protection for the augers and allows a smooth surface to remove the concaves.*



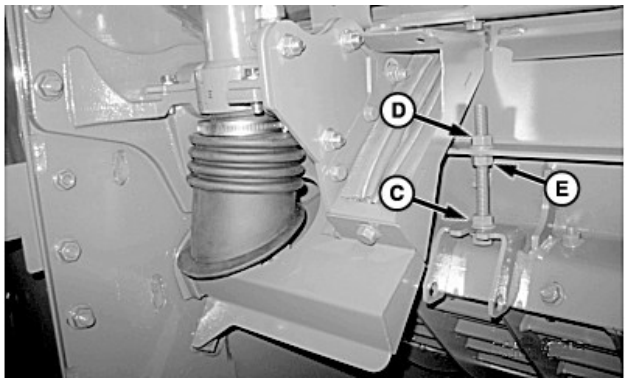

H96929—UN—17JUN10

**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

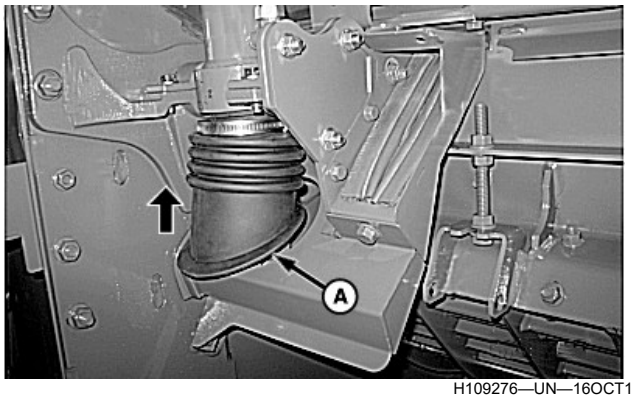



H109920—UN—27FEB14

**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.

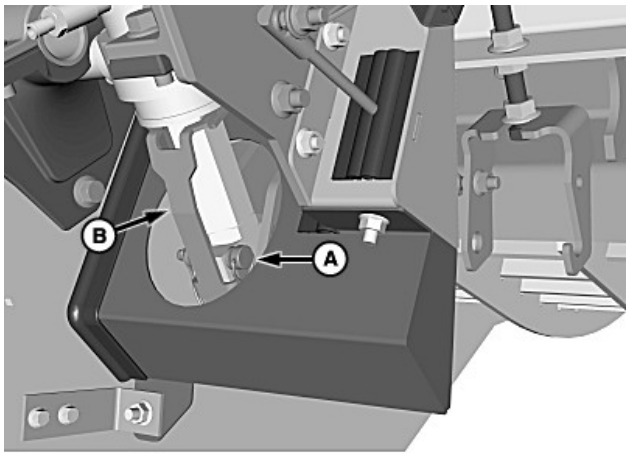
*NOTE: Verify that there is adequate space between nut (E) and rail for zeroing adjustments. Do NOT tighten the nut against the rail.*




H109276—UN—16OCT13

**A—Rubber Seal (2 used)**

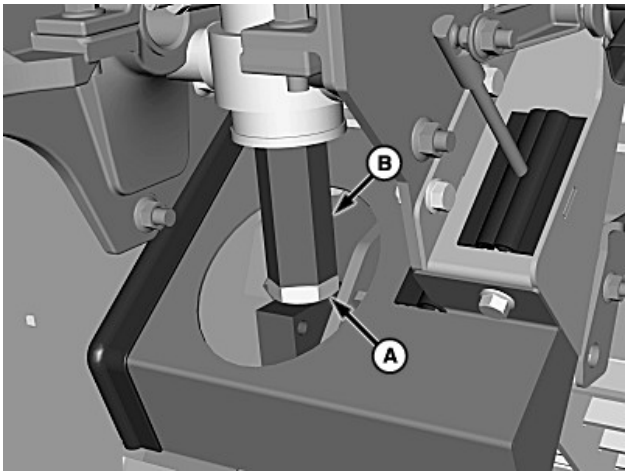
11. Remove base of the rubber seal (A) and lift upward on both cylinders.




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.

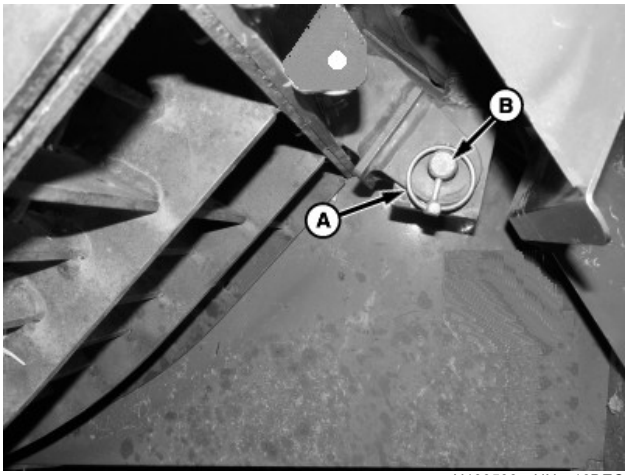



H109683—UN—22JAN14

**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.

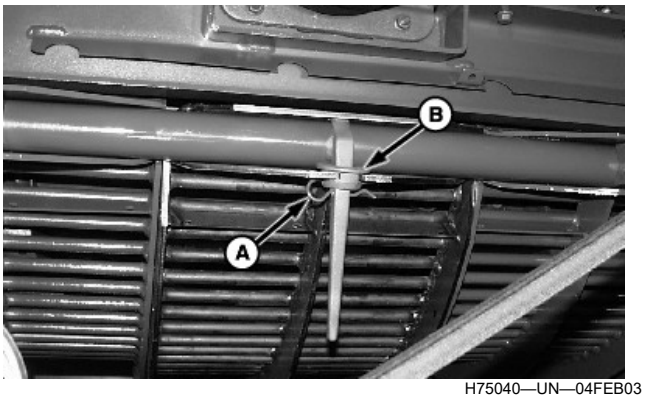
*NOTE: Jam nut and stop must be lowered at least 15 mm (19/32 in) from current location.*




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.

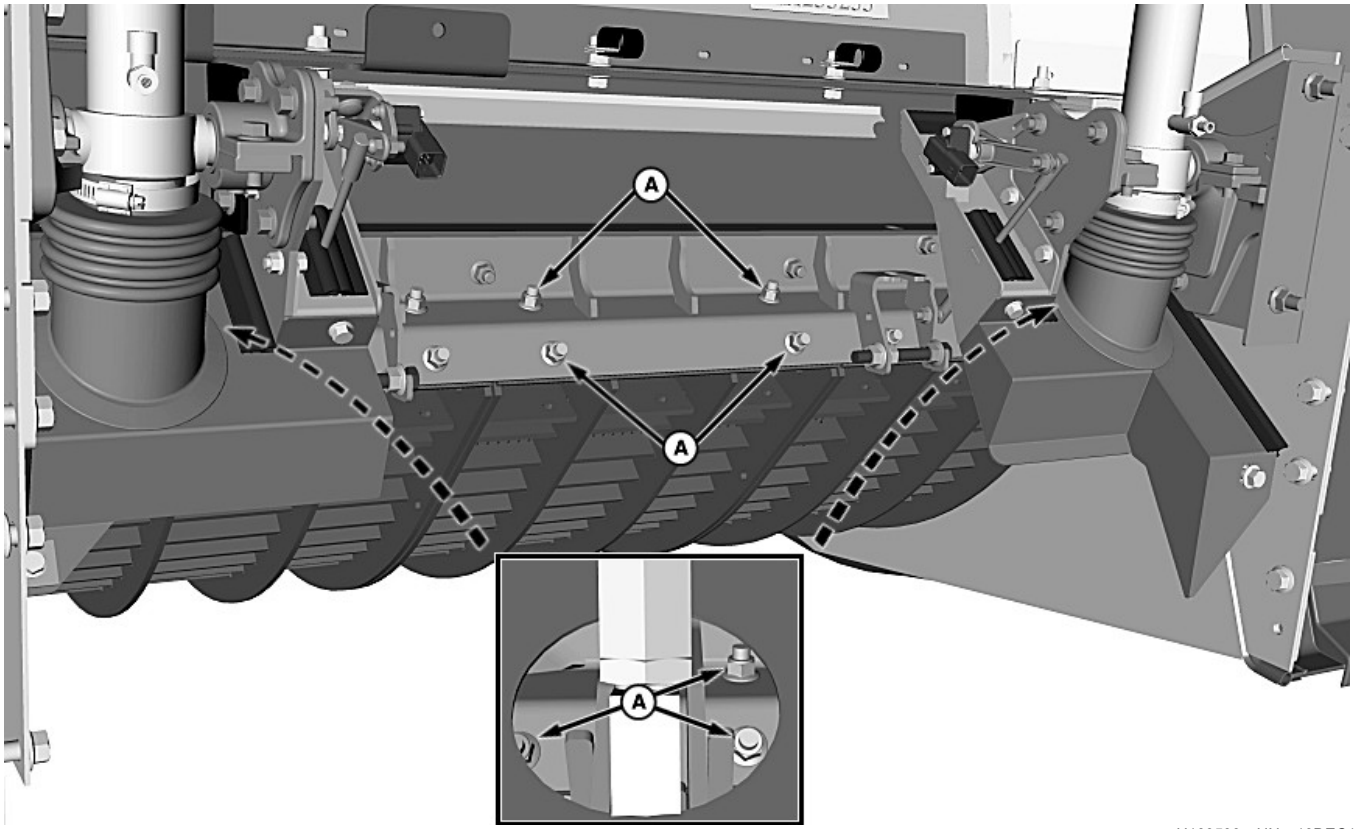



H75040—UN—04FEB03

*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.



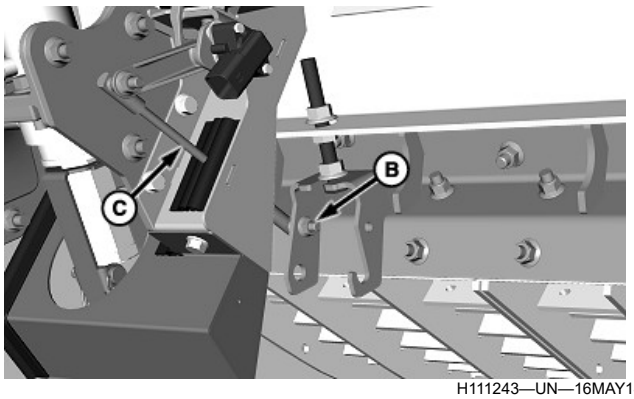

H109599—UN—19DEC13

**A—Cap Screw (14 used)**

17. Loosen cap screws (A).




H109677—UN—21JAN14



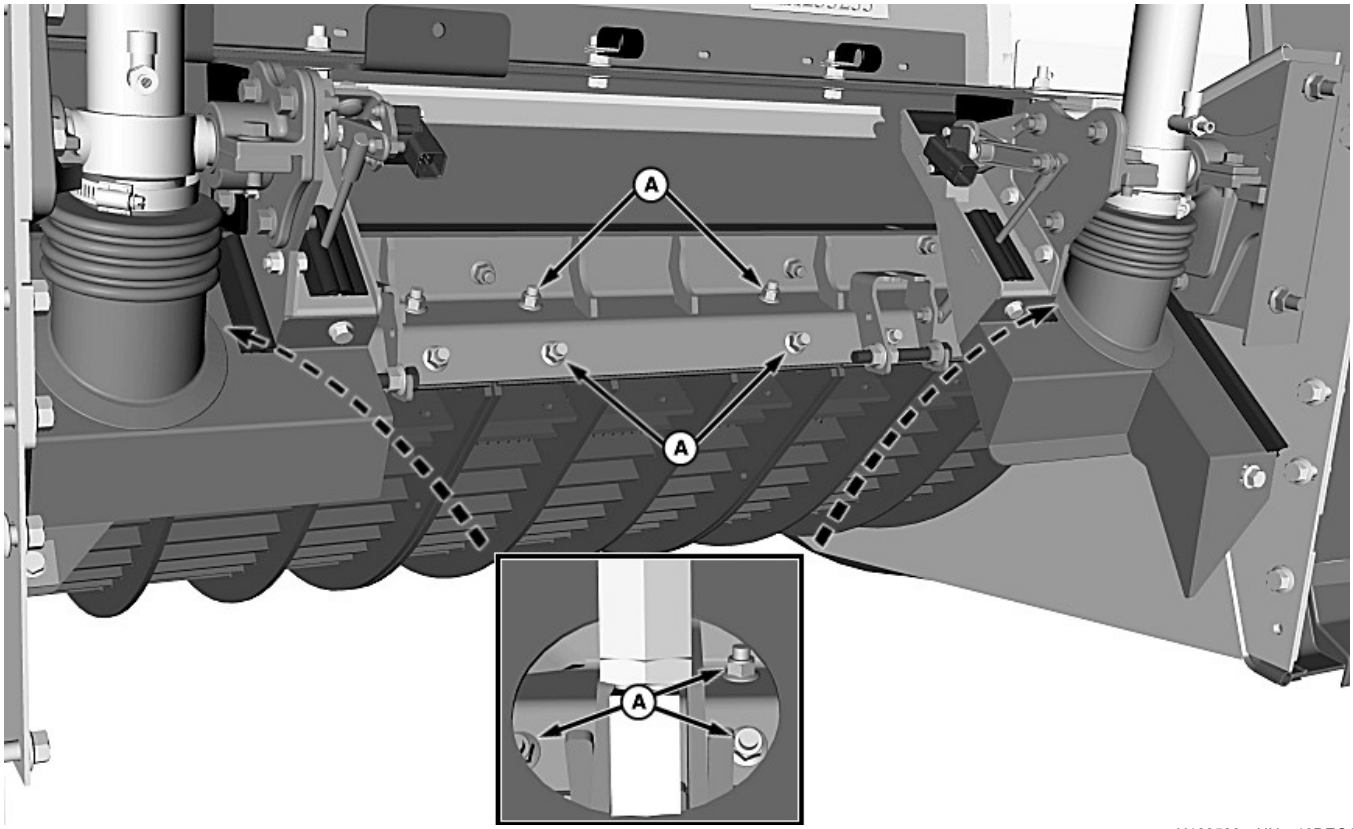

H111243—UN—16MAY14

**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).



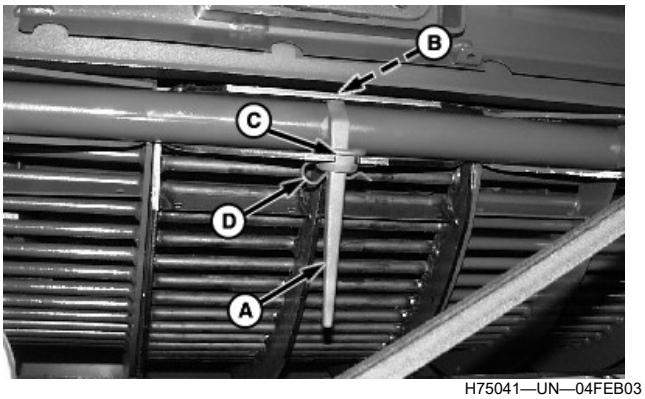

H109599—UN—19DEC13

**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.*

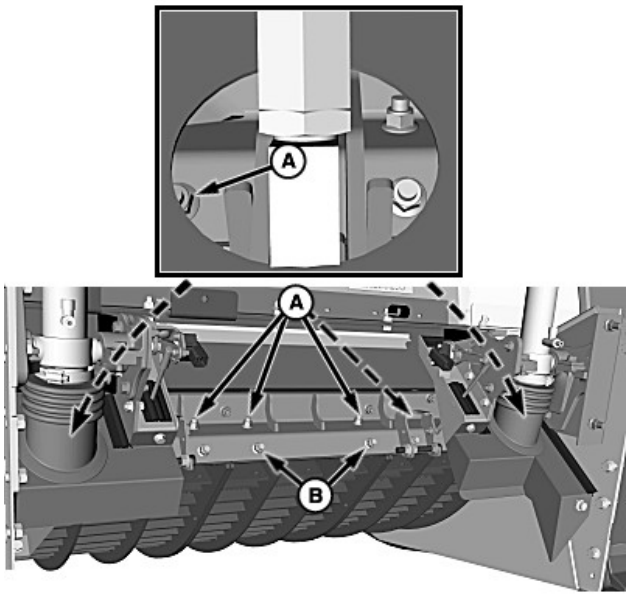
21. Remove center concave section.
22. Slide rear concave to the center position and remove.
23. Slide front concave to the center position and remove.
24. Inspect wear on concave sections, threshing elements and threshing tines using KXE10110 Clearance Gauge.
25. Install concaves in reverse order.



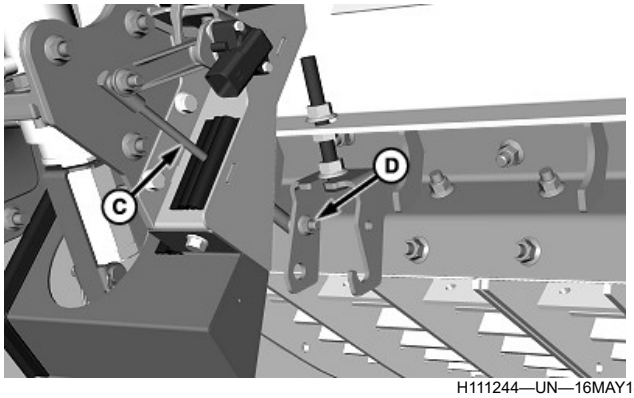

H75041—UN—04FEB03

**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

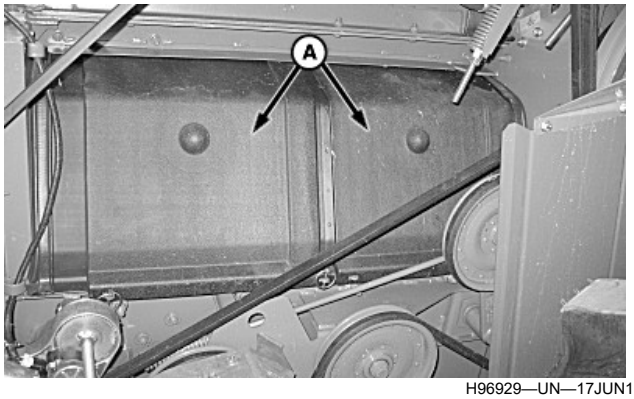
**A—Cap Screw and Nut (6 used)**
**B—Cap Screw and Nut (8 used)**
**C—Linkage Arm (2 used)**
**D—Nut (2 used)**

*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.



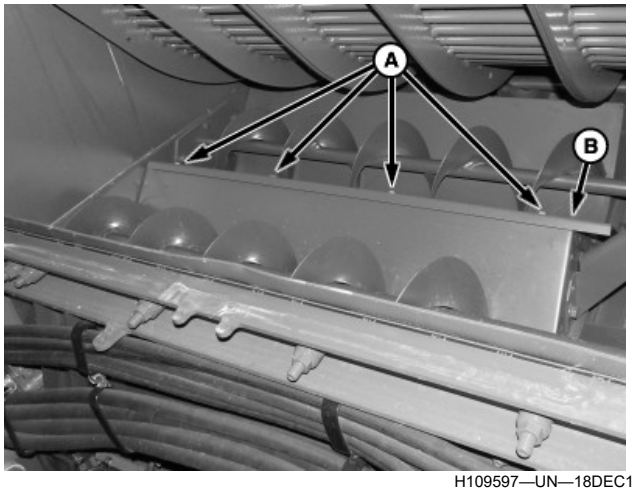

H96929—UN—17JUN10

**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.

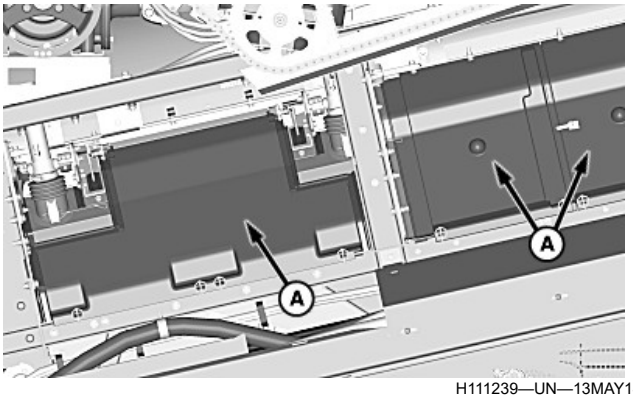
*NOTE: Remove cardboard or poly from conveyor augers.*




H109597—UN—18DEC13

**A—Cap Screw (4 used)**
**B—Diverter**

35. Install diverter (B) to original position and tighten cap screws (A).



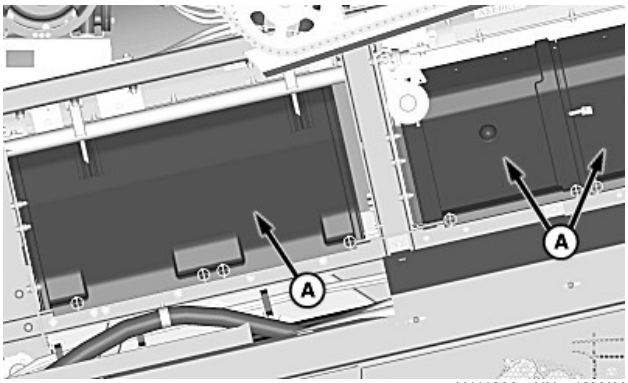

H111239—UN—13MAY14

**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)

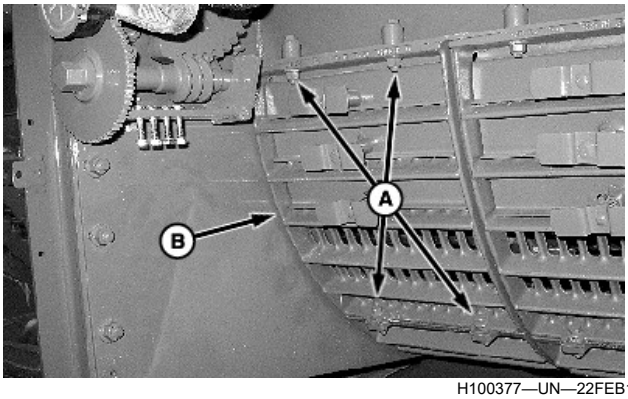



H111238—UN—13MAY14

**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).

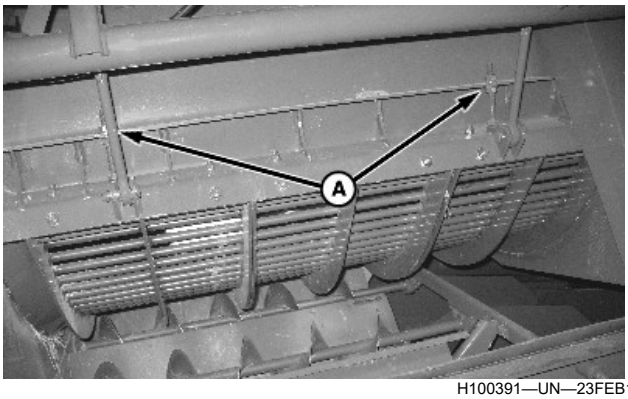



H100377—UN—22FEB11

**A—Cap Screw (4 used)**
**B—Separator Grate**

*NOTE: Removing separator grate provides access for rotating rotor.*

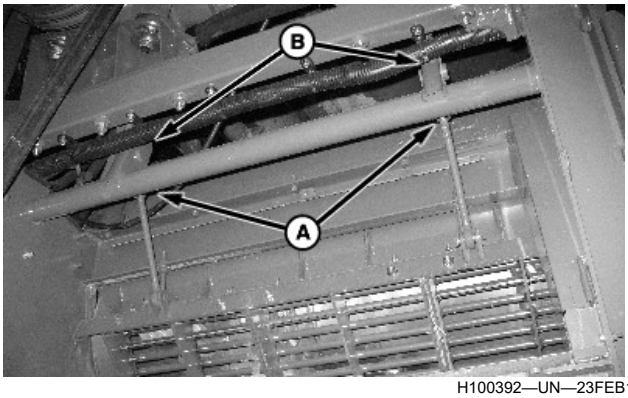
3. Remove cap screws (A) and separator grate (B).




H100391—UN—23FEB11

**A—Stop Bolts (2 used)**

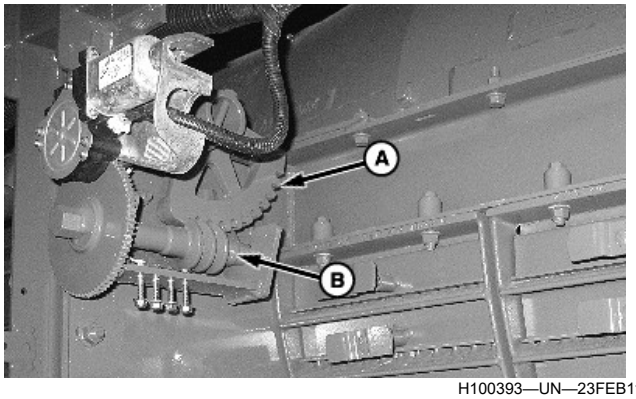
4. Back off stop bolts (A).




H100392—UN—23FEB11

**A—Bottom Nut (2 used)**
**B—Top Nut (2 used)**

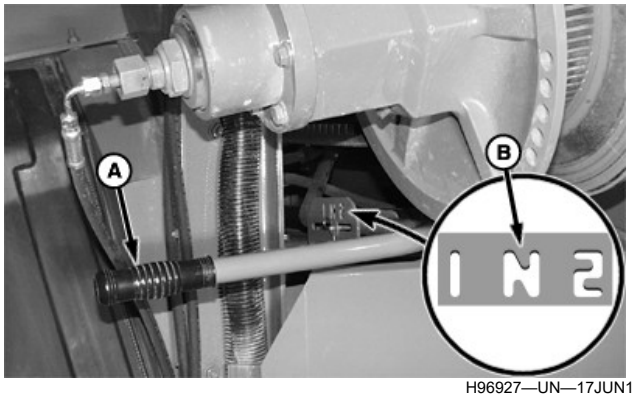
5. Loosen lock nuts (A) and back off nuts (B) five turns each.




H100393—UN—23FEB11

**A—Sector Gear**
**B—Worm Gear**

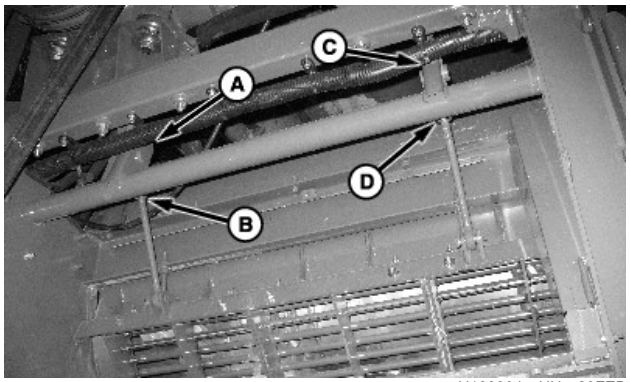
6. Adjust concave to closed position using switch in cab until the worm gear (B) and sector gear (A) are bottomed out in up position.




H96927—UN—17JUN10

**A—Handle**
**B—Neutral Position**

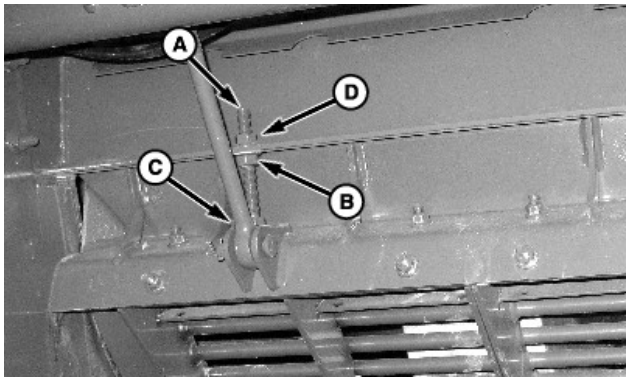
7. Move handle (A) to shift the rotor gear case in neutral position (B).




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).

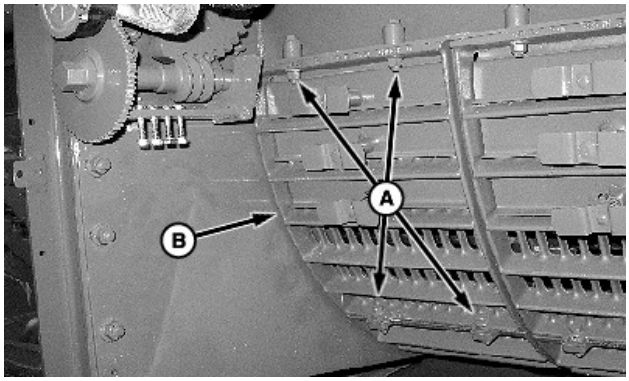



H100395—UN—23FEB11

*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

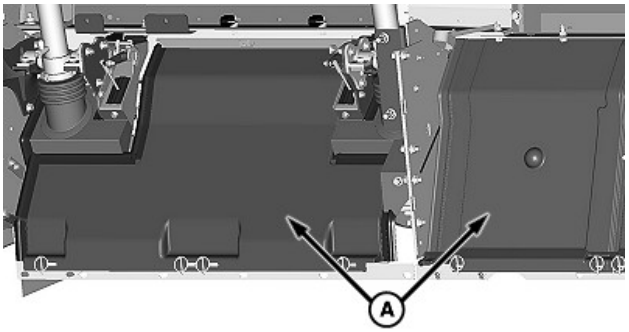
*Threshing Clearance Adjust*

*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.*

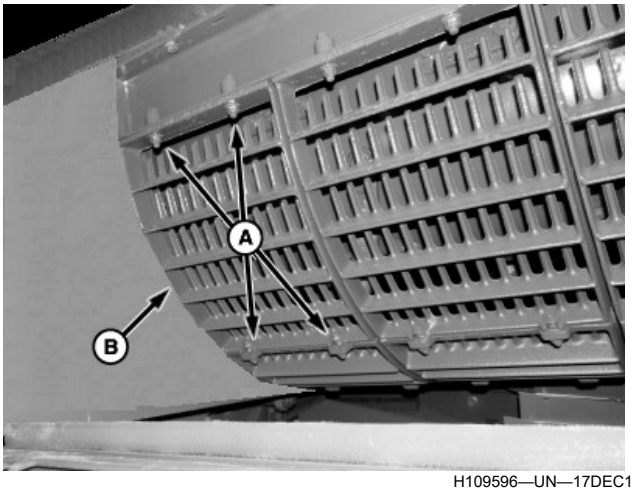
3. Shut OFF engine, set park brake and turn key switch ON.




H113295—UN—23MAR15

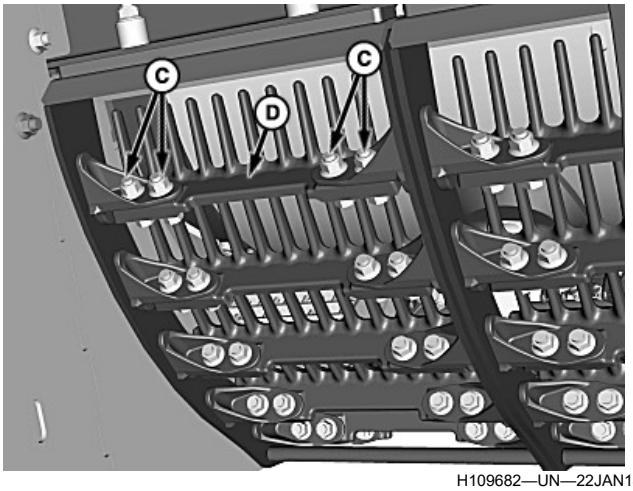
**A—Separator Inspection Covers**

4. Remove separator inspection covers (A).




H109596—UN—17DEC13

*Standard Cast Separator Grates*




H109682—UN—22JAN14

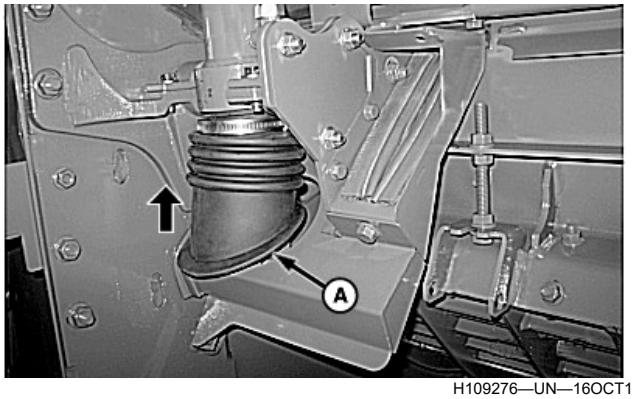
*Heavy-Duty Separator Grates*

**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).

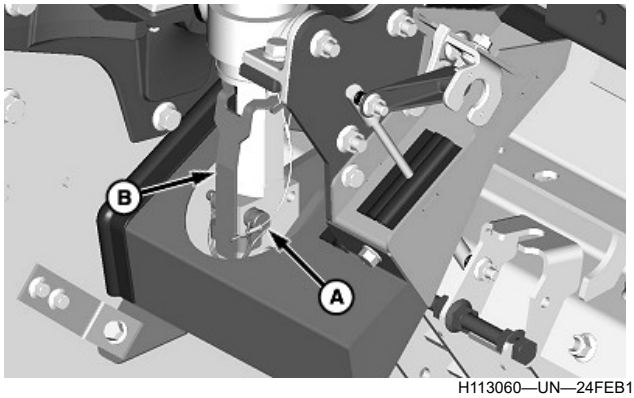
*NOTE: It may be necessary to remove two or more separator grate fingers to allow access for rotating rotor.*




H109276—UN—16OCT13

**A—Rubber Seal (2 used)**

7. Remove base of the rubber seal (A) and lift upward on both cylinders.

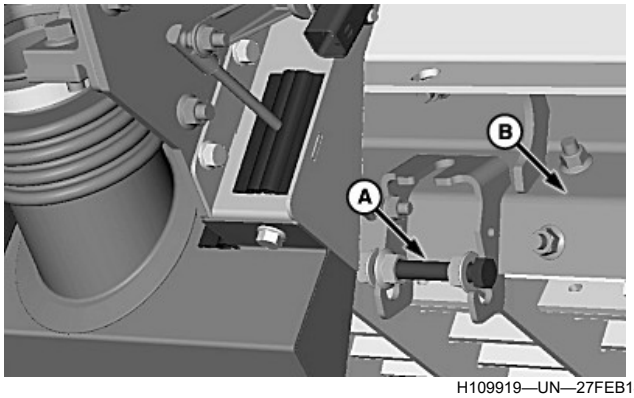



H113060—UN—24FEB15

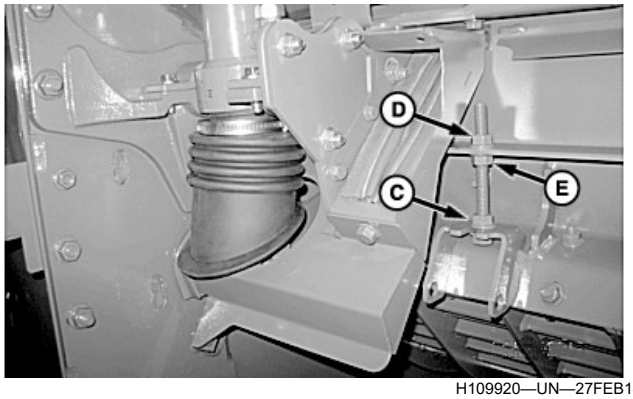
**A—Pin (2 used)**
**B—Cylinder Lock (2 used)**

*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

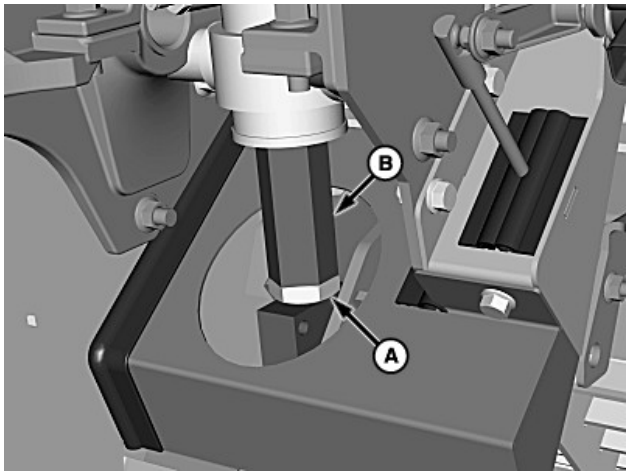



H109920—UN—27FEB14

**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.*

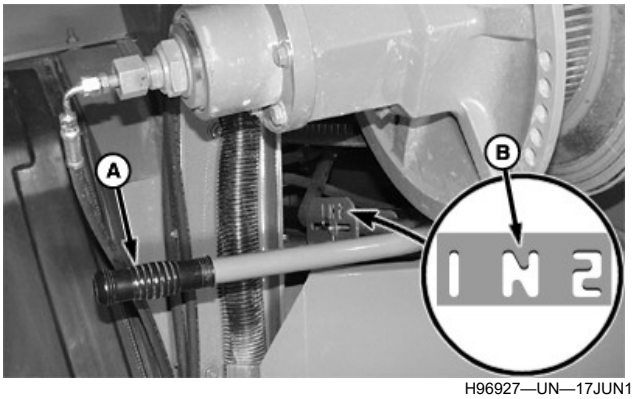



H109683—UN—22JAN14

**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**

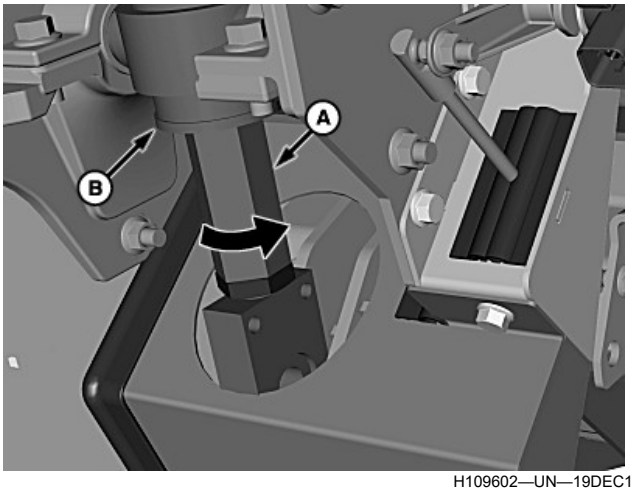
13. Move handle (A) to shift the rotor gear case in neutral position (B).
14. Spin rotor counterclockwise and tighten rear leveling cap screw, pulling concave upward until elements “tick”. Once “ticking” occurs, back off leveling cap screw three complete turns.
15. Spin rotor counterclockwise and tighten 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.



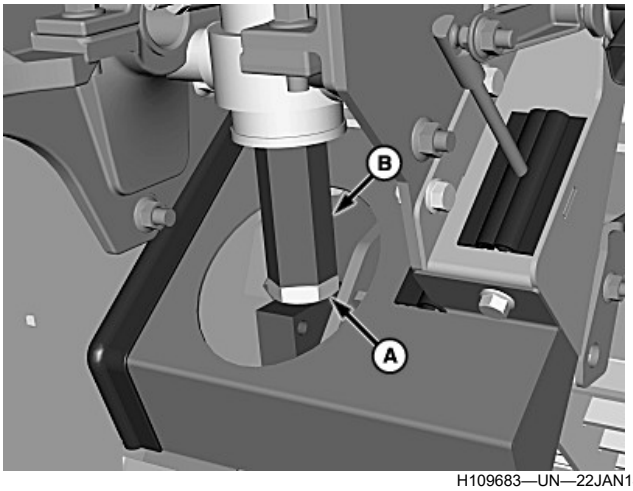

H109602—UN—19DEC13

**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

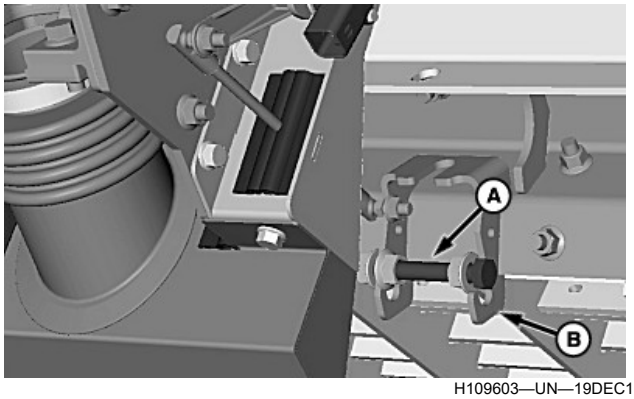
**A—Jam Nut (2 used)**
**B—Cylinder Stop (2 used)**

*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.

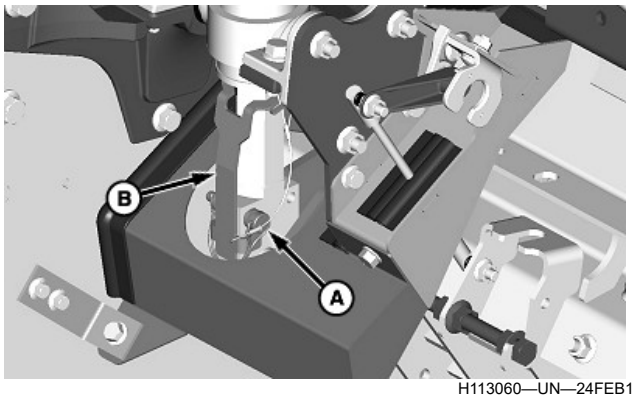



H109603—UN—19DEC13

**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.

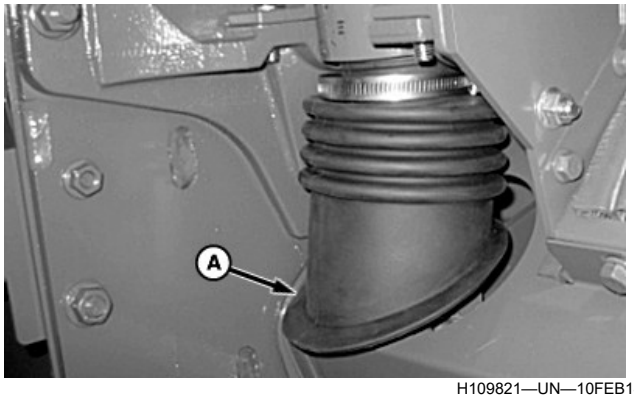
**IMPORTANT: A warning message may appear on display stating to abort the calibration because the system has detected a concave zero position that does not match concave leveling position. If this occurs, abort Concave Leveling Calibration, repeat the Concave Leveling procedure, and calibrate Threshing Clearance Calibration (Hydraulic) again.**




H113060—UN—24FEB15

**A—Pin (2 used)**
**B—Cylinder Lock (2 used)**

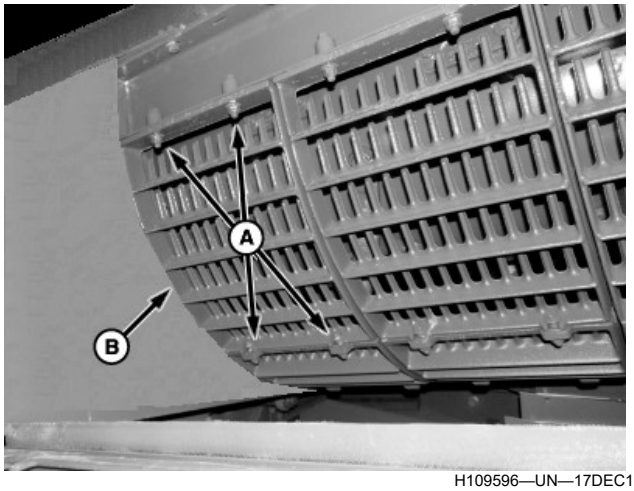
26. Open concave to 35 and install previously removed cylinder locks (B) and pins (A) on each cylinder.




H109821—UN—10FEB14

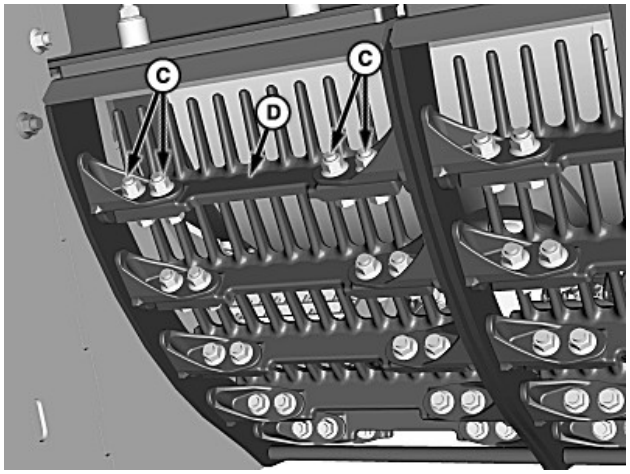
**A—Rubber Seal (2 used)**

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).

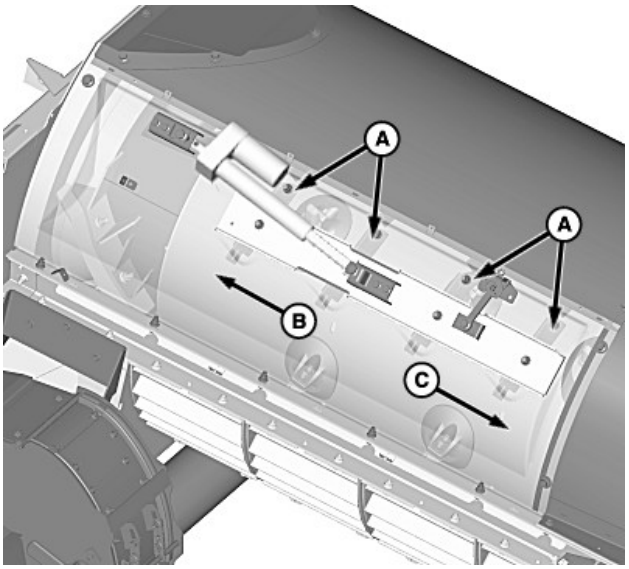
29. On machines equipped with heavy-duty separator grates, install separator grate fingers (D) using cap screws and nuts (C). Tighten to specification.

| 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.

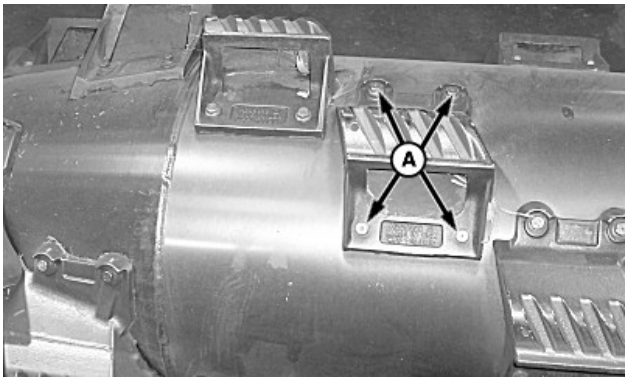
*NOTE: Running separator vanes in the advanced position may increase grain losses in certain crop and conditions. Crop dwell time in separator is reduced to improve straw quality.*

- (B)—Advanced Position
- (C)—Standard Position

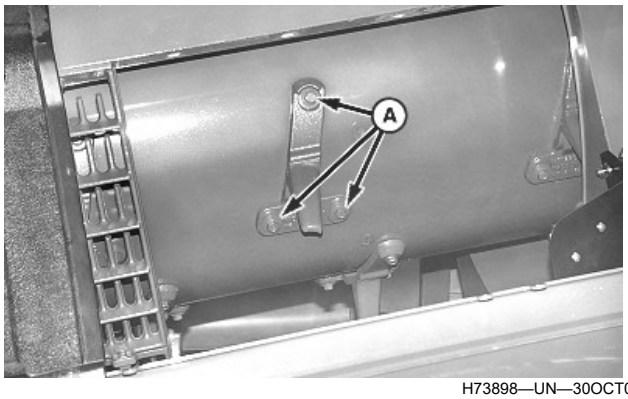
See Residue Management Application Help or Operator's Station Help for further information.

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.**

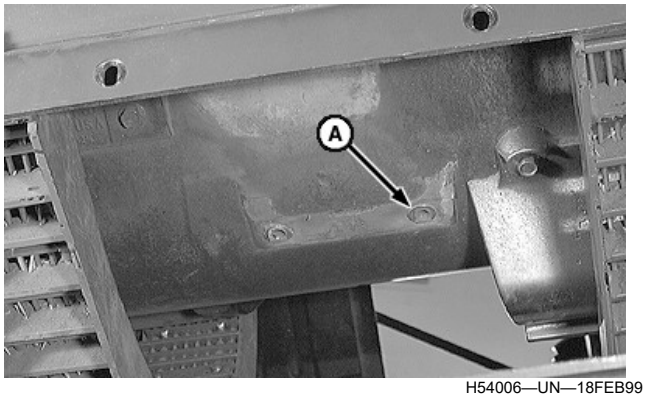
**Make sure to clean out tailings and front cross auger if tine replacement is due to broken or damaged tines. Failure to do so before initial start-up may allow broken tines to recirculate and cause tine damage to reoccur.**

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**

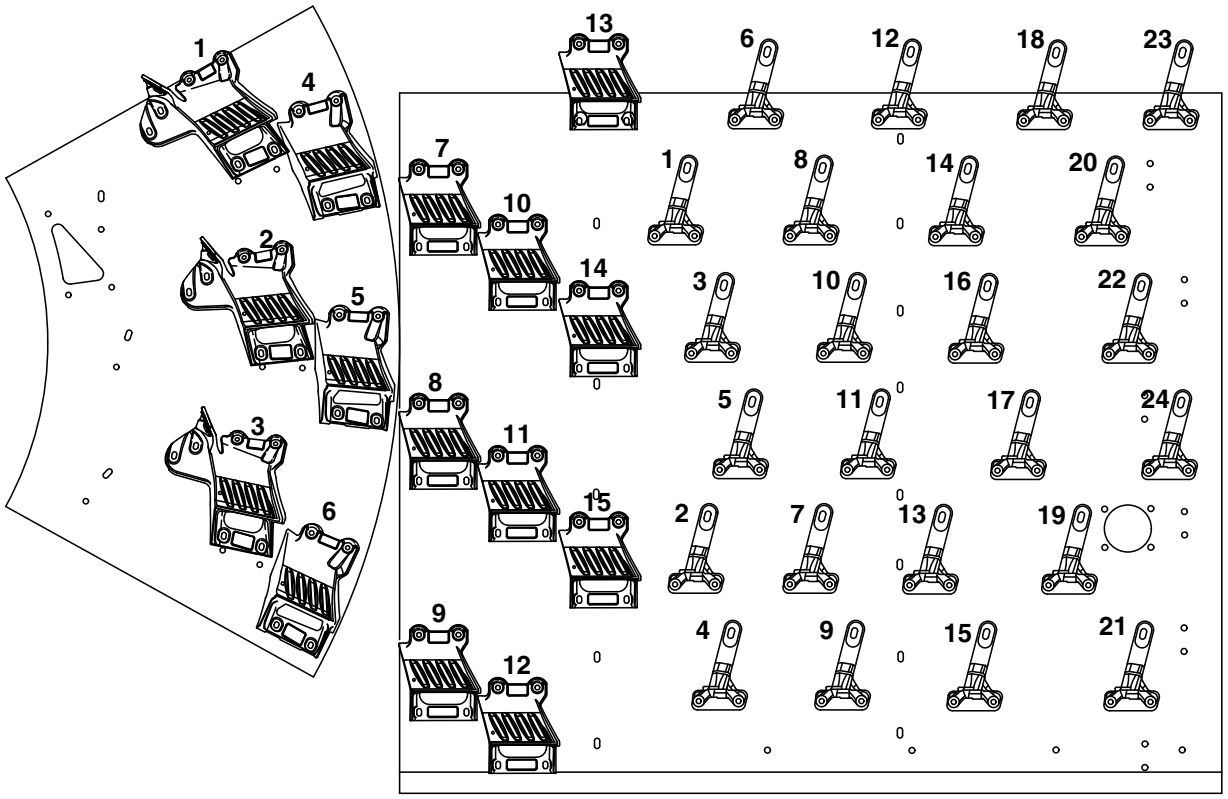
5. Inspect RIVNUT® threaded inserts (A). Replace if damaged.
6. If one element or tine needs replaced, replace all in the group. Example: If element 2 needs to be replaced, replace elements 1 and 3 also.
7. Use Threshing Elements and Separator Tine Location diagram for identifying elements and tines.
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

*RIVNUT is a trademark of RIVNUT Engineered Products Inc.*

## Threshing Element and Separator Tine Location (TriStream™ Rotor Standard Configuration) (S760 and S770) (Australia and New Zealand Only)

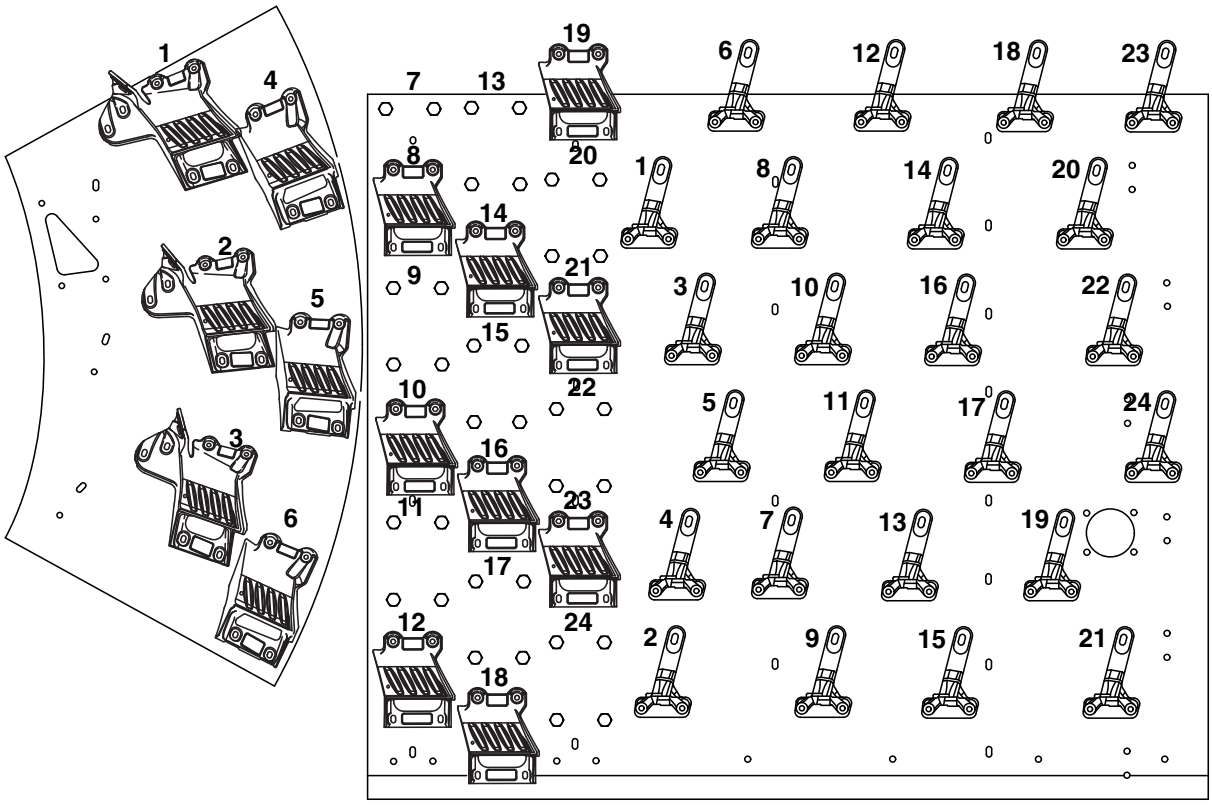



H82365—UN—03FEB05

| Threshing Element Groups (Standard Rotor Configuration) | Separator Tine Groups (Standard 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, 8, 9 | **Group 3 Tines =** 8, 9, 11 |
| **Group 4 Elements =** 10, 11, 12 | **Group 4 Tines =** 7, 10, 12 |
| **Group 5 Elements =** 13, 14, 15 | **Group 5 Tines =** 13, 16, 18 |
| | **Group 6 Tines =** 14, 15, 17 |
| | **Group 7 Tines =** 19, 22, 23 |
| | **Group 8 Tines =** 20, 21, 24 |

OUO6075,00044A2-19-11NOV16

## Threshing Element and Separator Tine Location (TriStream Rotor Tough Grain Configuration)



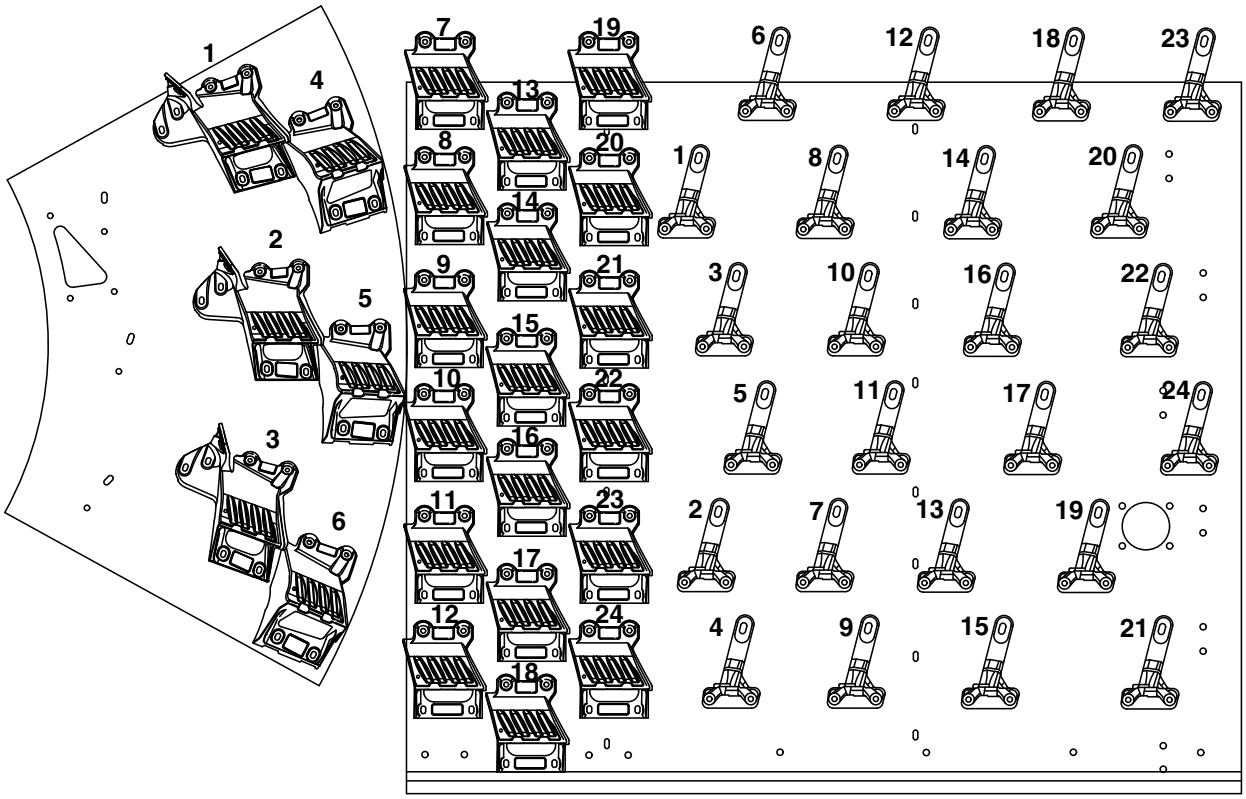

H82830—UN—23MAR05

*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

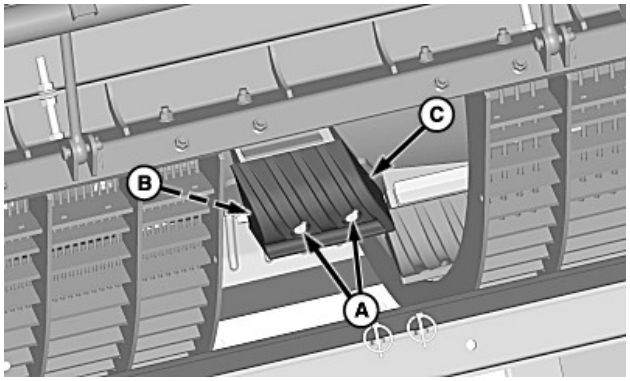
*NOTE: Dense pack configuration is field conversion only.*

| 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**

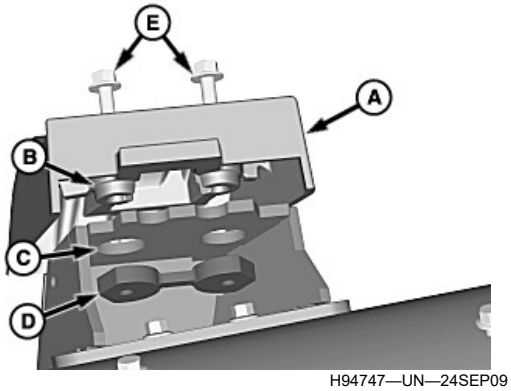
**IMPORTANT: Rotor is a balanced assembly. Elements must be replaced in groups of three to maintain balance. When installing more than one kit, do not mix and match elements. Replacement kits are available through service parts and include cap screws with pre-applied Thread Lock and Sealer. Always use 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.

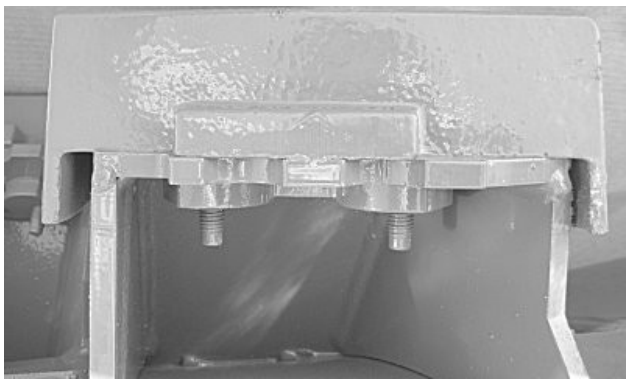
*NOTE: Depending on machine option, refer to the following in this section:*

- *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.

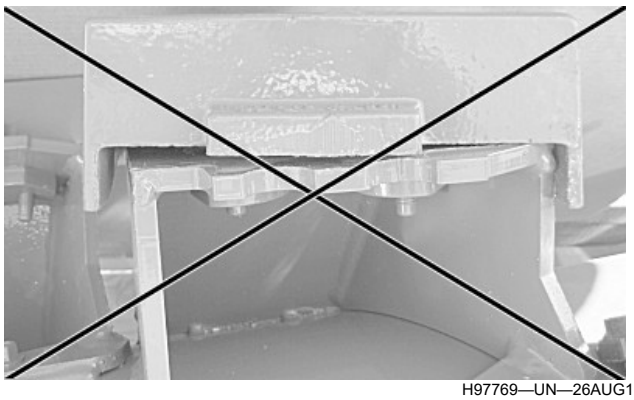



H94747—UN—24SEP09



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.**

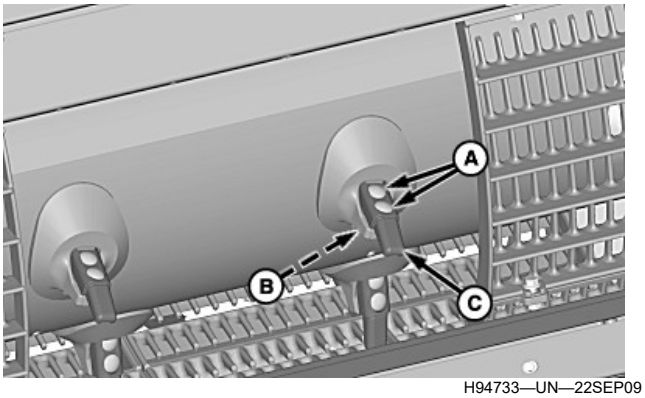
**Rice threshing elements are taller than corn/grain threshing elements. Concave level must be adjusted.**

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.

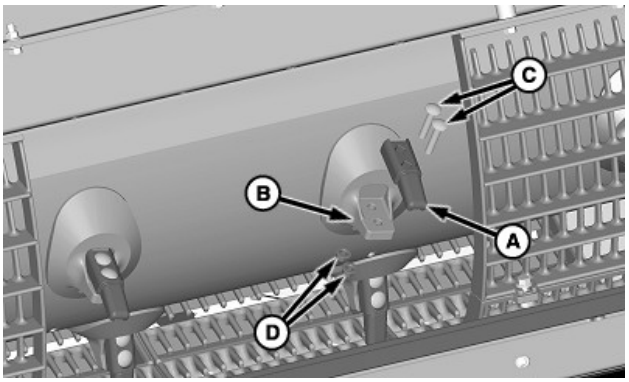
*NOTE: Depending on machine option, refer to the following in this section:*

- *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 |

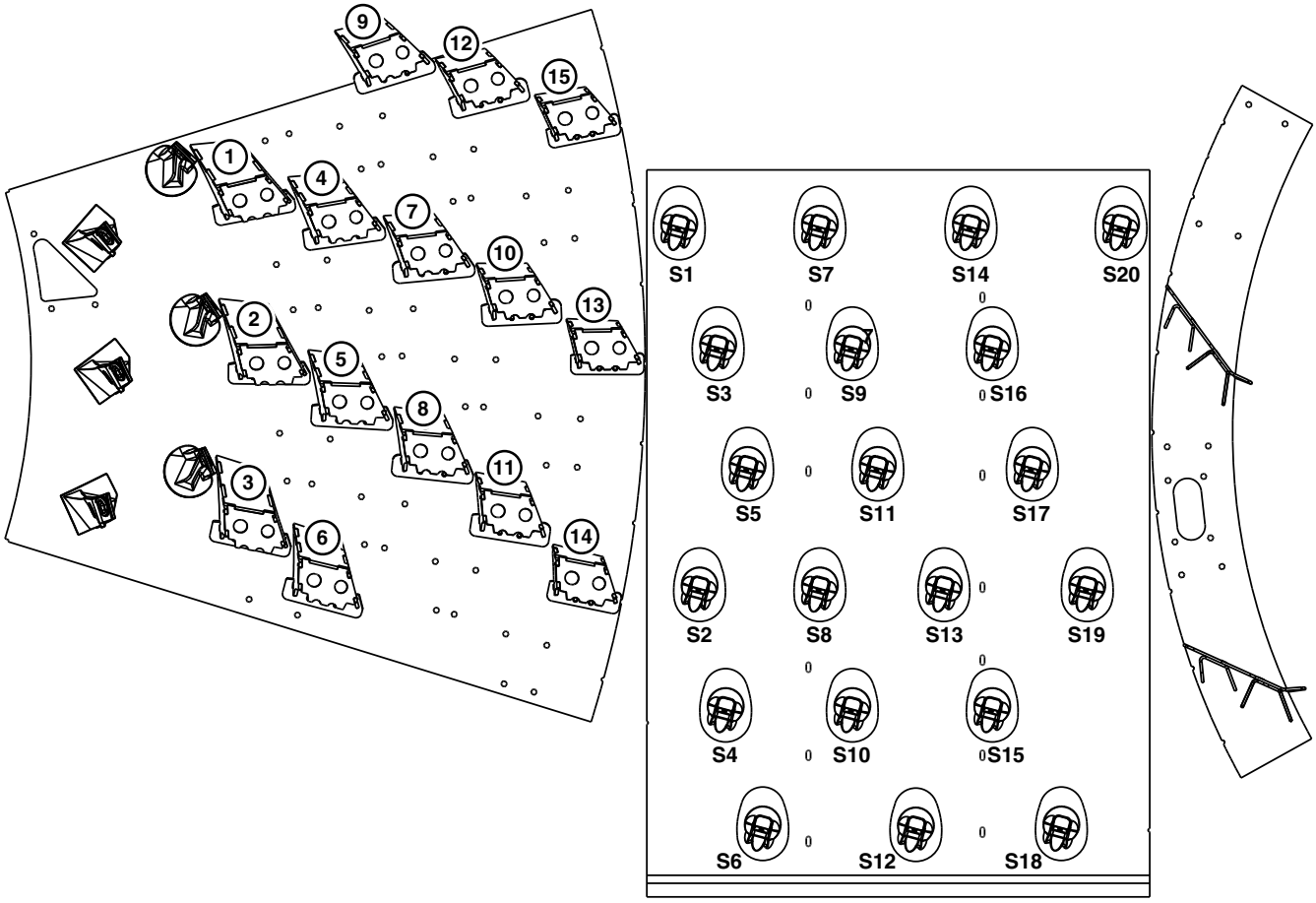
4. Install supplied separator tine (A) onto rotor base (B). (Use Separator Tine location diagram to identify separator tines).
5. Install supplied round head cap screws (C) and retain with nuts (D).
6. Tighten nuts to specification.

**Specification**

Tine Cap Screws—Torque. . . . . 75 ± 11 N·m (55 ± 8 lb.-ft.)

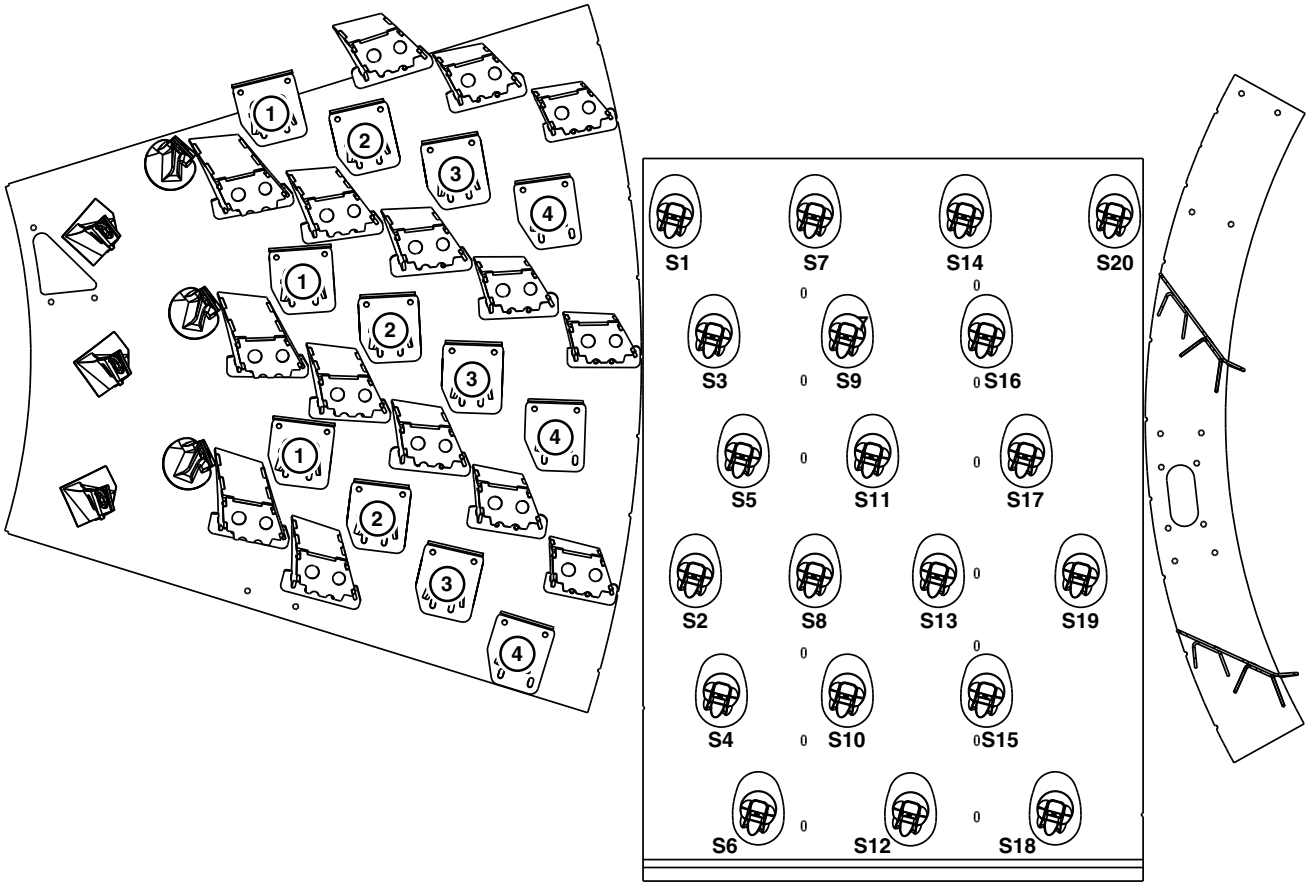
OUO6075,0001805-19-13MAY14

## Threshing Element and Separator Tine Location (Variable Stream Rotor Standard Configuration)



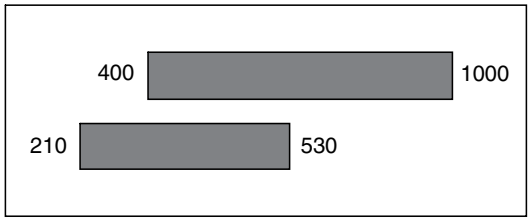

H94731—UN—09MAR10
OUO6075,0000B83-19-07APR11

## Threshing Element and Separator Tine Location (Variable Stream Rotor Dense Pack Configuration)

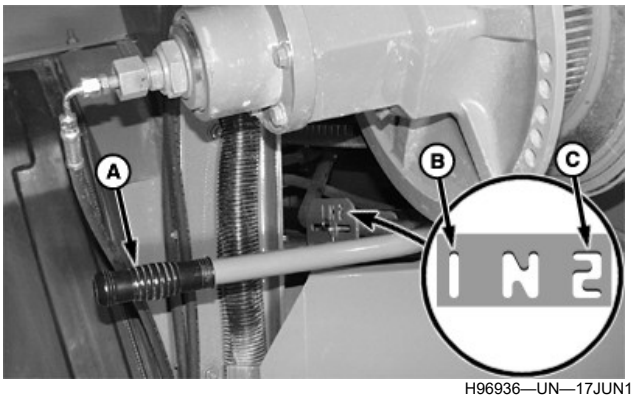



H94748—UN—08MAR10
OUO6075,0000B84-19-07APR11

## 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.

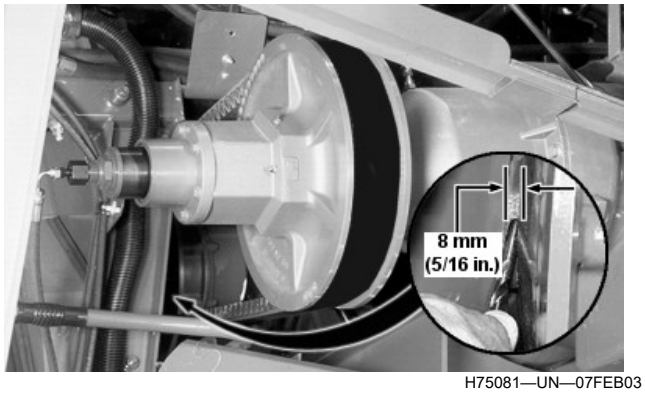
*NOTE: Verify that gears are fully engaged.*

*When changing separator speeds, make sure to cycle power ON and OFF to recognize new speed range.*

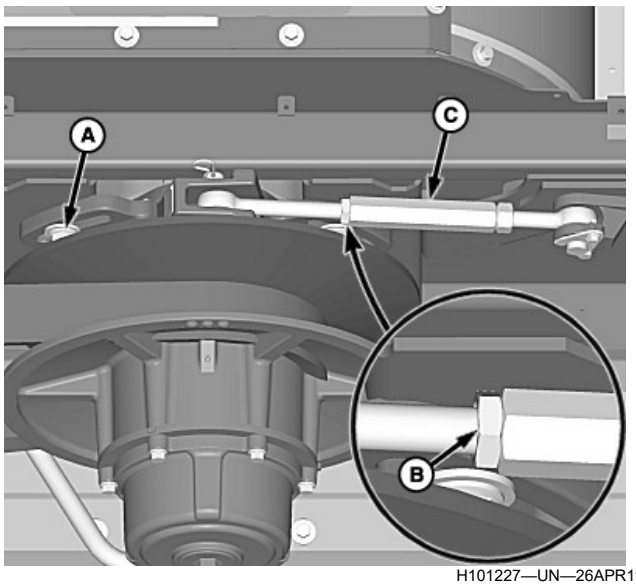
*Shift to low speed if operating below 530 rpm for extended periods.*

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**

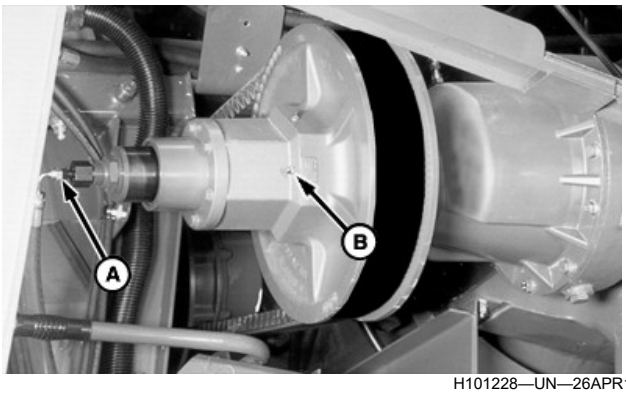
Sheaves—Gap. . . . . 8 mm (5/16 in)

Tighten nut (B) and cap screws (A).

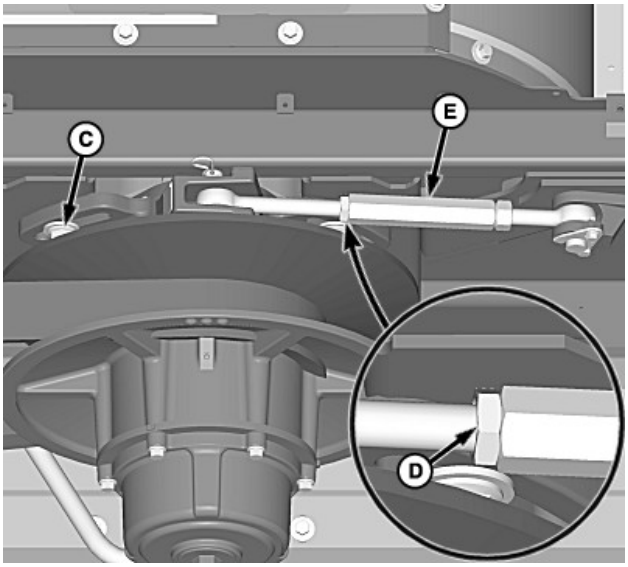
Shift gear case to desired speed range.

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.

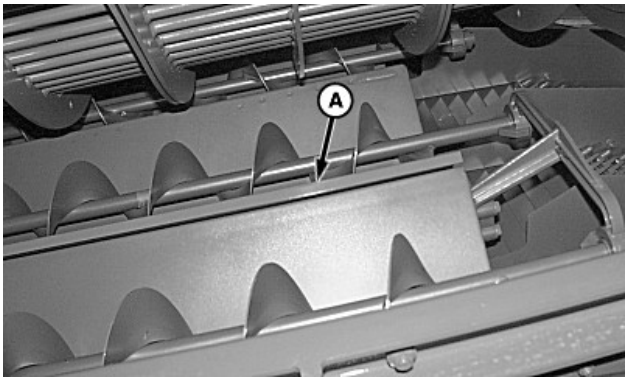
Shift gear case to desired speed range.

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



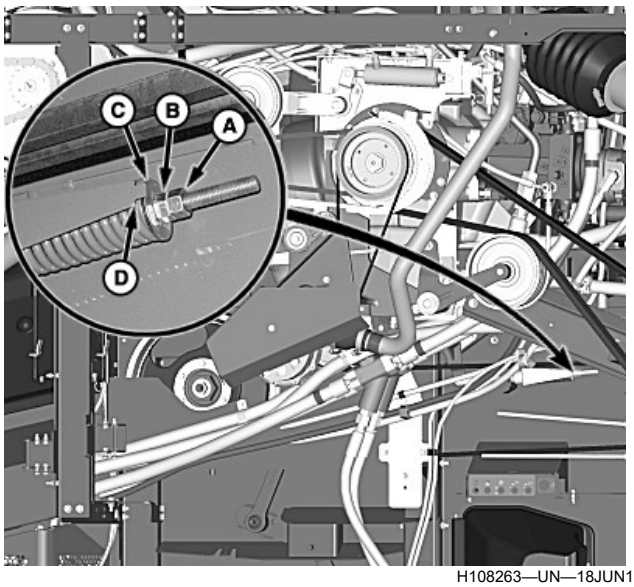

H83545—UN—20MAY05

**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.

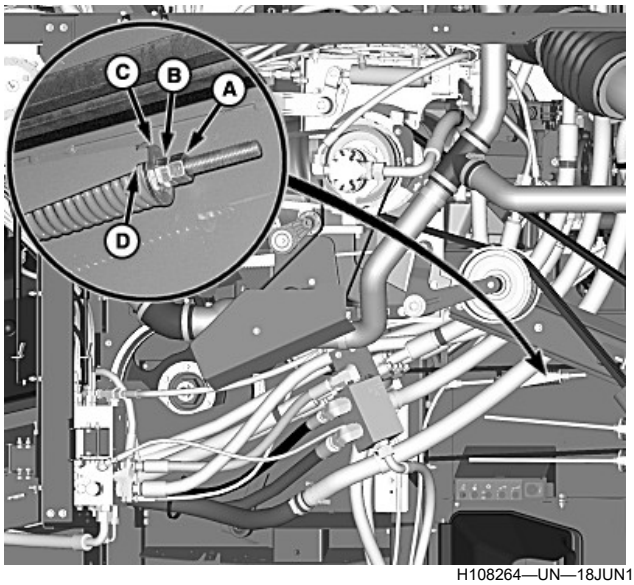
OUO6075,0000755-19-20MAR07

## Discharge Beater Belt—Adjusting




H108263—UN—18JUN13

*Style A*




H108264—UN—18JUN13

*Style B*

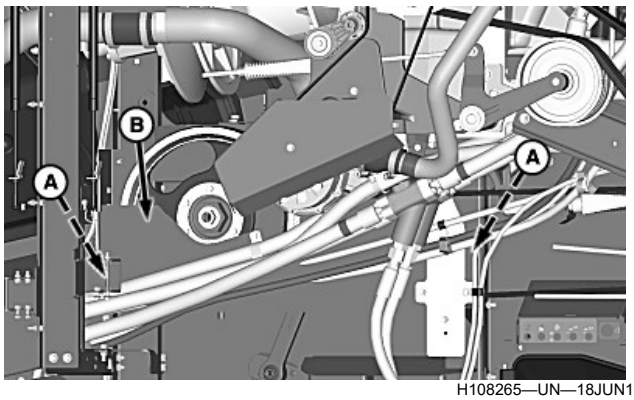
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**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.

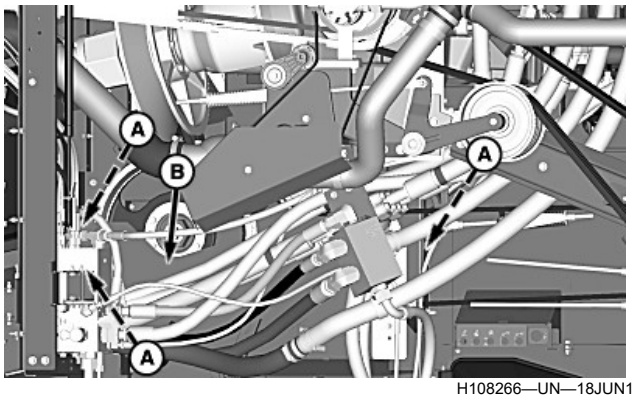
OUO6075,000438F-19-10OCT16

## Discharge Beater Belt—Replacing




H108265—UN—18JUN13

*Style A*



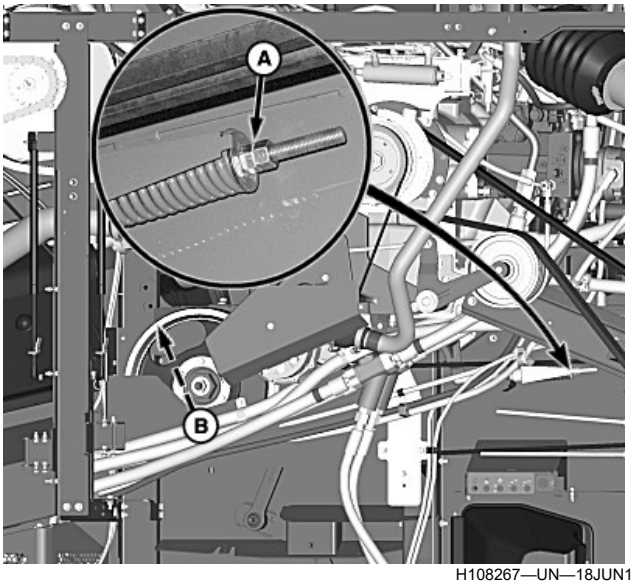

H108266—UN—18JUN13

*Style B*

**A—Cap Screws**
**B—Shield**

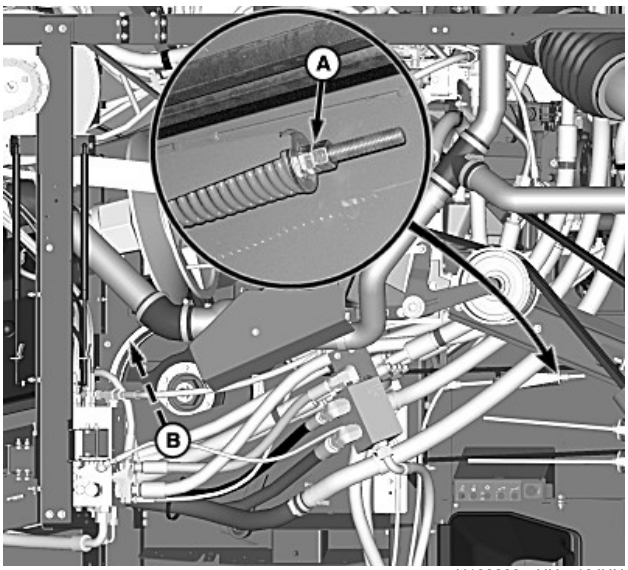
**CAUTION: Shut OFF engine, set park brake and remove key.**

Remove cap screws (A) and shield (B) from left-hand rear of machine.




H108267—UN—18JUN13

*Style A*



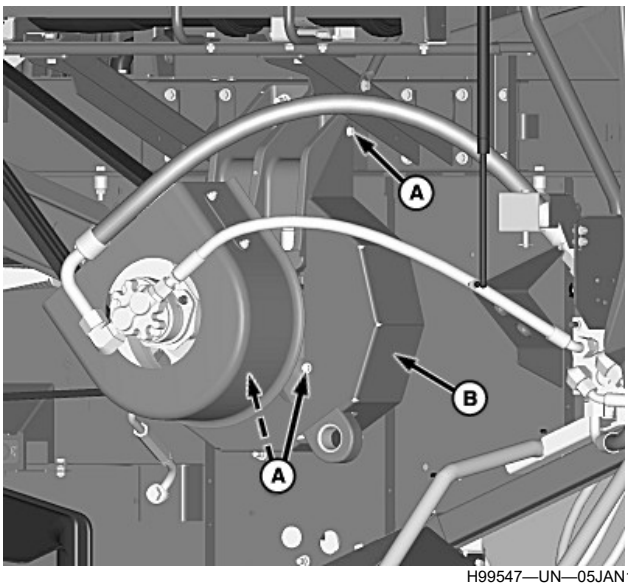

H108268—UN—18JUN13

*Style B*

**A—Nuts**
**B—Discharge Beater Belt**

Loosen nuts (A) and remove belt (B) from sheave.

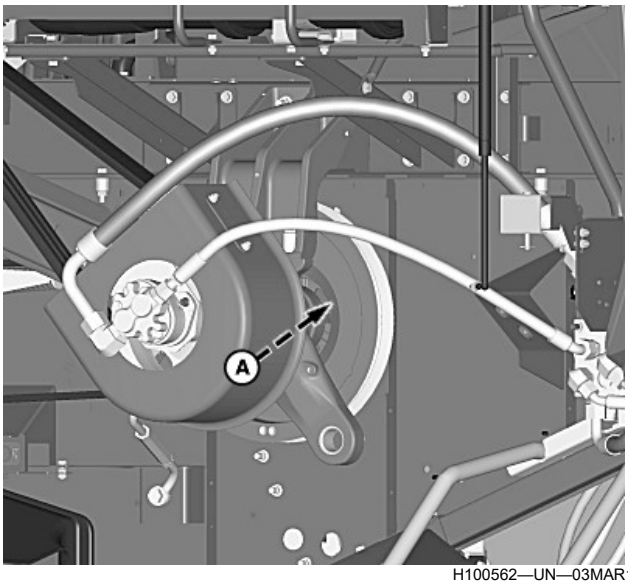
**Spreader Equipped Machines**




H99547—UN—05JAN11

**A—Cap Screws**
**B—Shield**

Remove cap screws (A) and shield (B).




H100562—UN—03MAR11

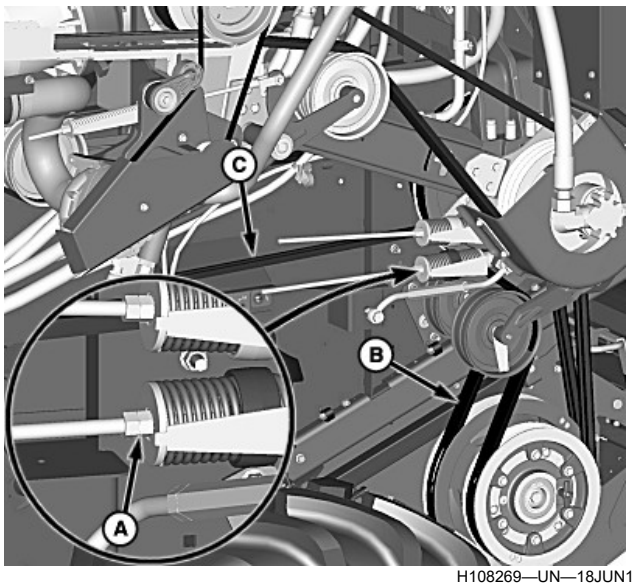
**A—Discharge Beater Belt**

Remove and discard belt (A) from jackshaft.

Install replacement discharge beater belt onto jackshaft.

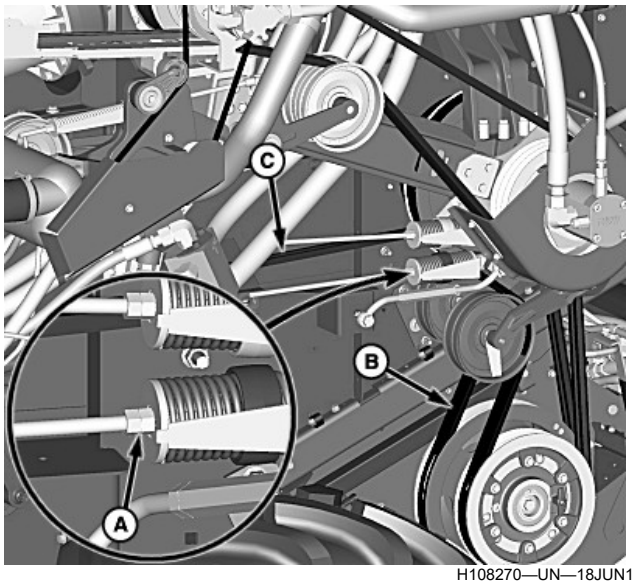
Install previously removed shield and cap screws.

**Chopper Equipped Machines**




H108269—UN—18JUN13

*Style A*




H108270—UN—18JUN13

*Style B*

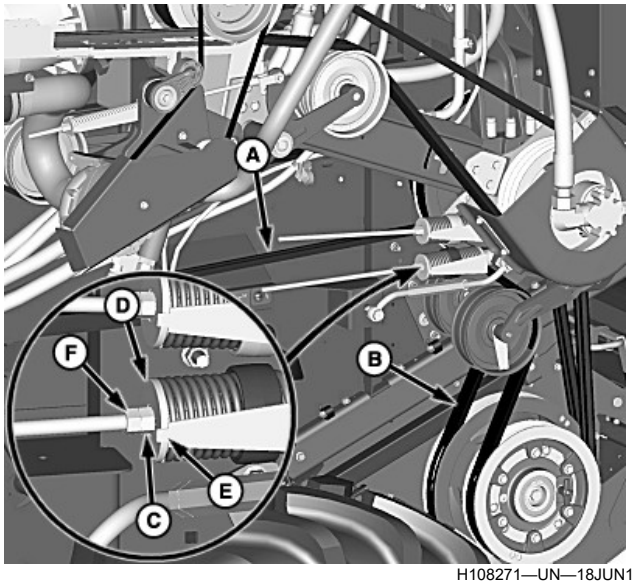
**A—Nuts**
**B—Inner Chopper Drive Belt**
**C—Discharge Beater Belt**

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.*

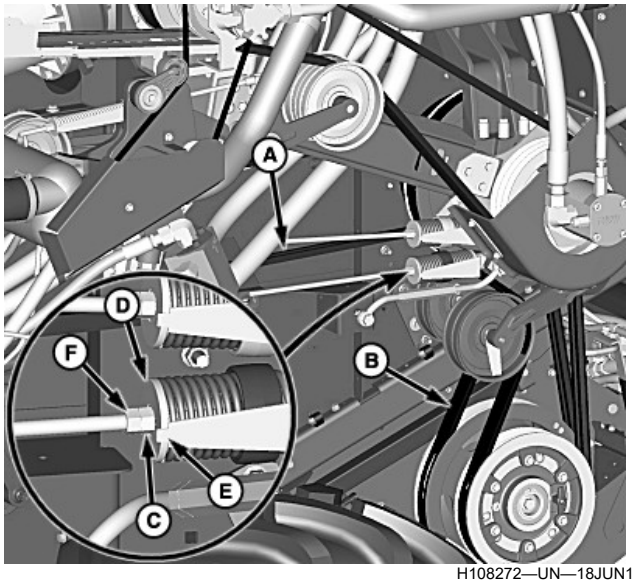
Loosen nuts (A) and remove inner belt (B) from sheave.

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**

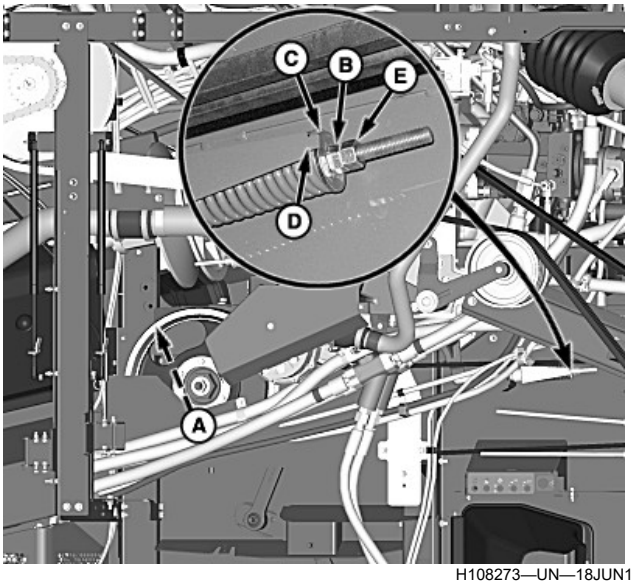
Install replacement discharge beater belt (A) onto chopper jackshaft.

Install inner belt (B) and verify that belt aligns with sheaves.

Lower chopper assembly fully with switch on the left-hand side sheet.

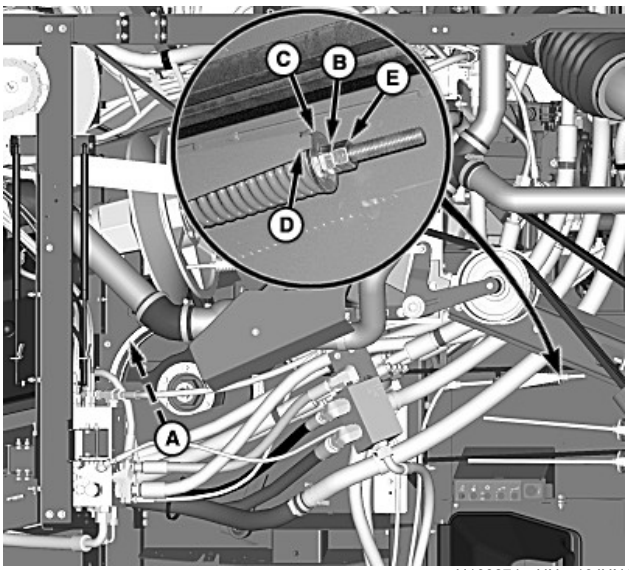
Tighten nut (C) until washer (D) is positioned between end of gauge (E) and bottom of step. Tighten lock nut (F).

Install previously removed chopper shields.




H108273—UN—18JUN13

*Style A*



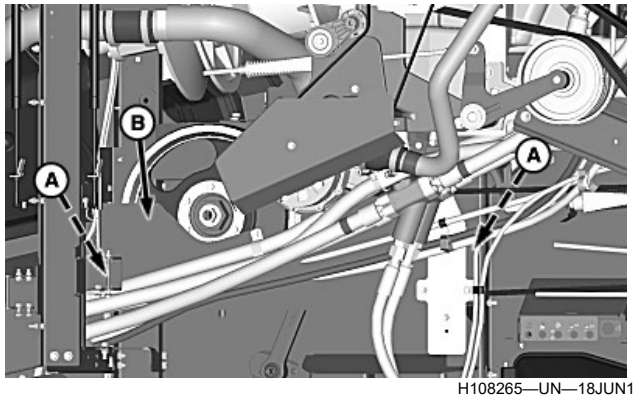

H108274—UN—18JUN13

*Style B*

**A—Discharge Beater Belt**
**B—Nut**
**C—Washer**
**D—Gauge**
**E—Lock Nut**

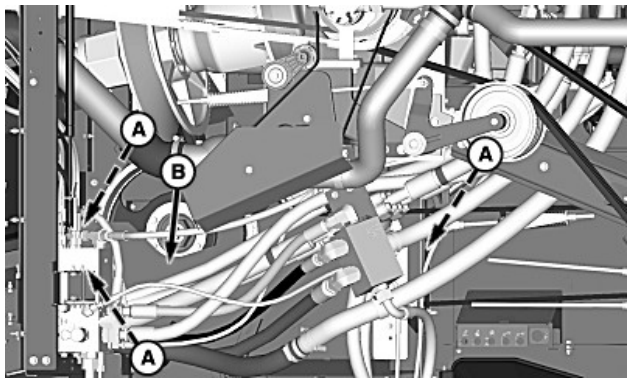
Install discharge beater belt (A) onto sheave.

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

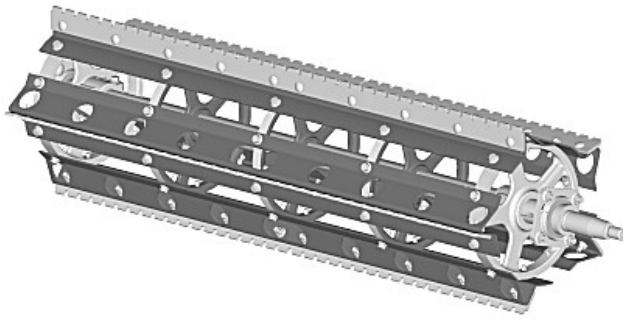
*Style B*

**A—Cap Screws**
**B—Shield**

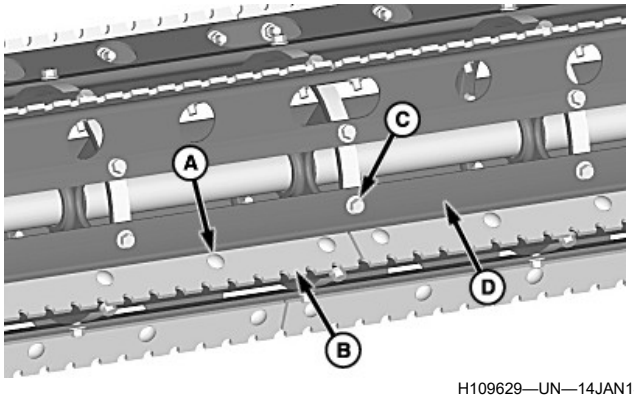
Install shield (B) and retain with cap screws (A).

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)

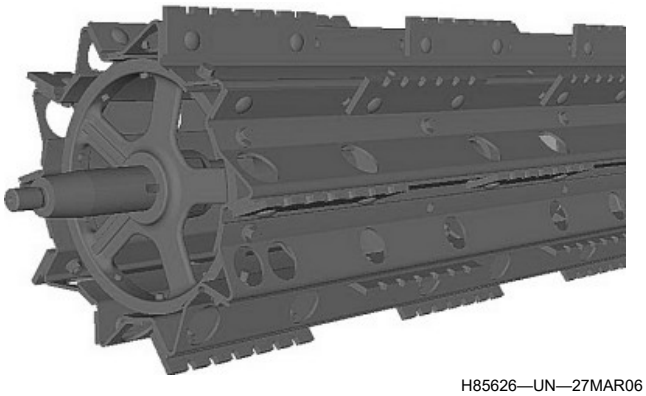
Remove cap screws (C) and replace discharge beater wings (D) as required. Tighten cap screws to specification.

**Specification**

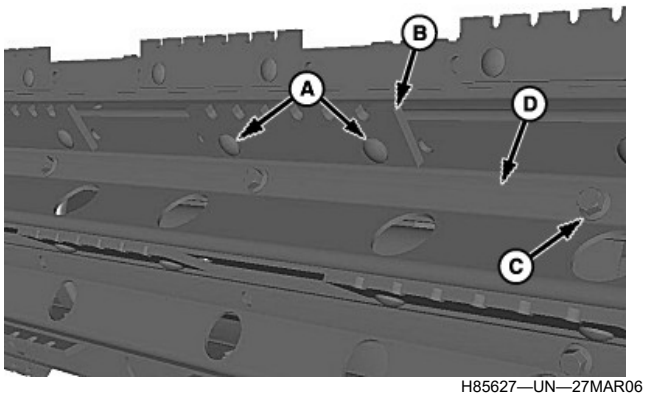
Discharge Beater Wing Cap
Screws—Torque. . . . . 70 N·m (52 lb·ft)

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**

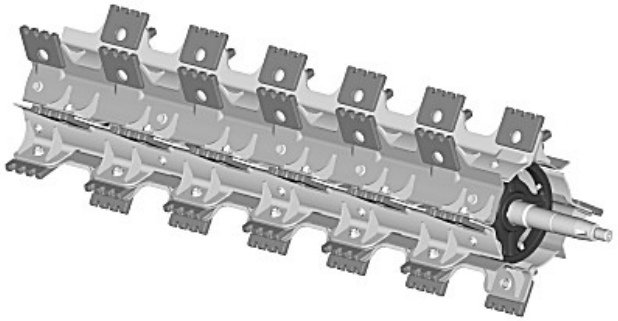
Discharge Beater Wear Strip
Round Head Bolts—Torque. . . . . 70 N·m (52 lb·ft)

Remove cap screws (C) and replace discharge beater wings (D) as required. Tighten cap screws to specification.

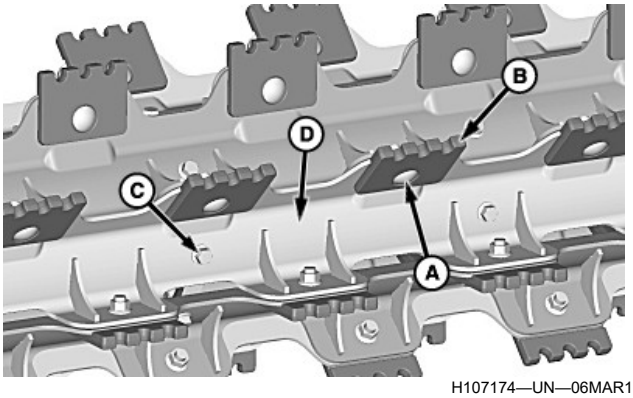
| Specification | |
|---|---|
| Discharge Beater Wing Cap Screws—Torque | 70 N·m (52 lb·ft) |

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.

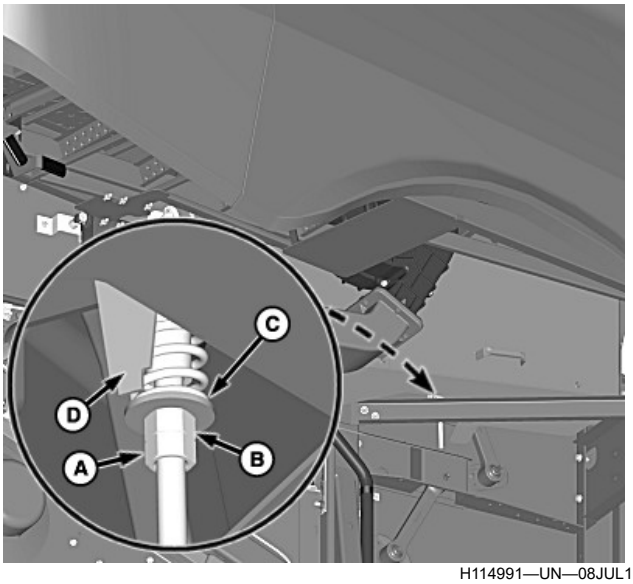
| Specification | |
|---|---|
| Discharge Beater Wear Strip Round Head Cap Screws—Torque | 107 N·m (79 lb·ft) |

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

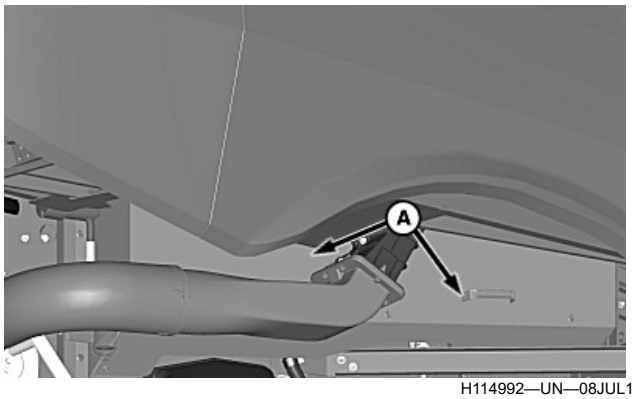
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**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

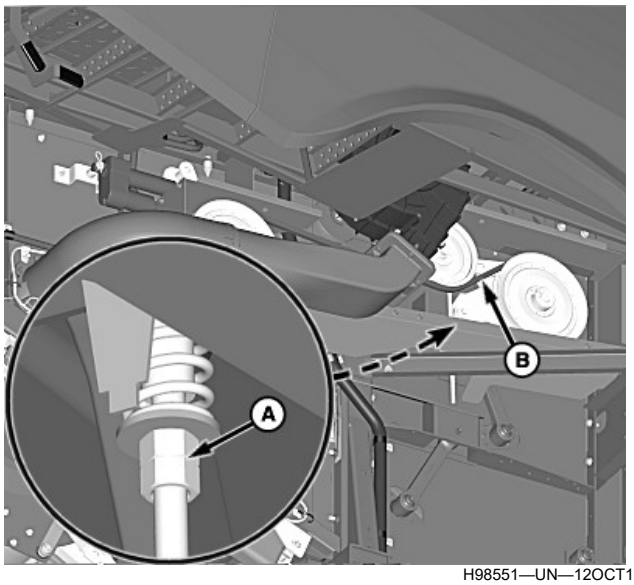



H114992—UN—08JUL15

**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**

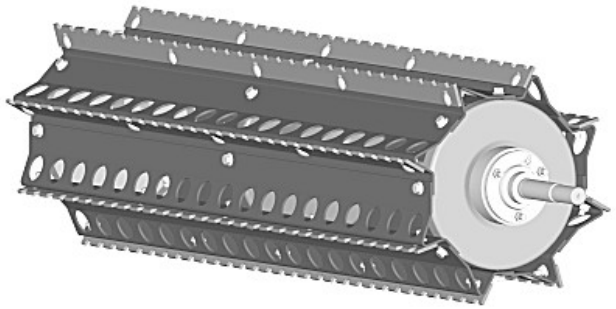
Loosen nuts (A) and remove belt (B) from sheave.

Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step. Tighten lock nut.

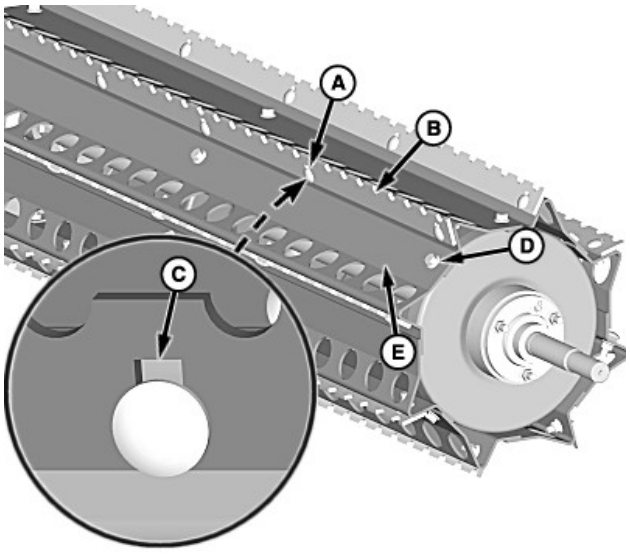
Install shields and retain with cap screws.

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)

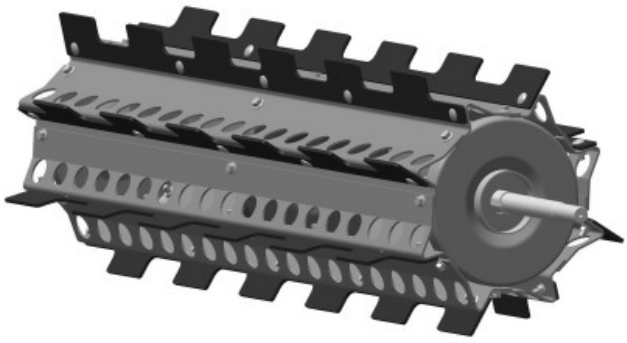
Remove cap screws (D) and replace overshot beater wings (E) as required. Tighten cap screws to specification.

**Specification**

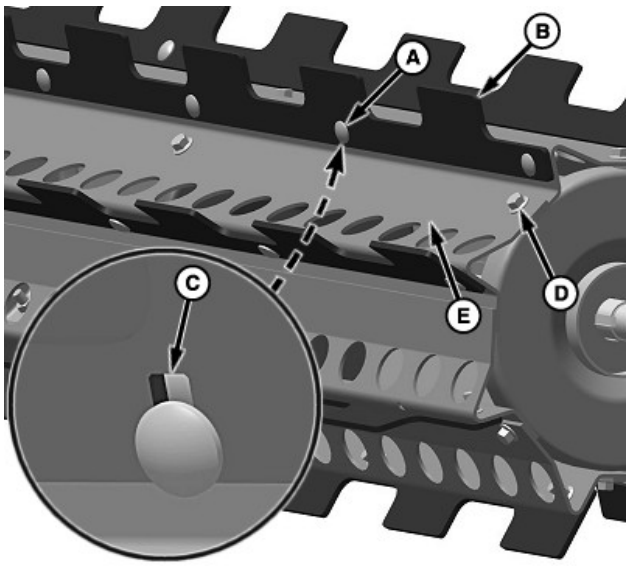
Overshot Beater Wing Cap
Screws—Torque. . . . . 79 N·m (58 lb·ft)

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)

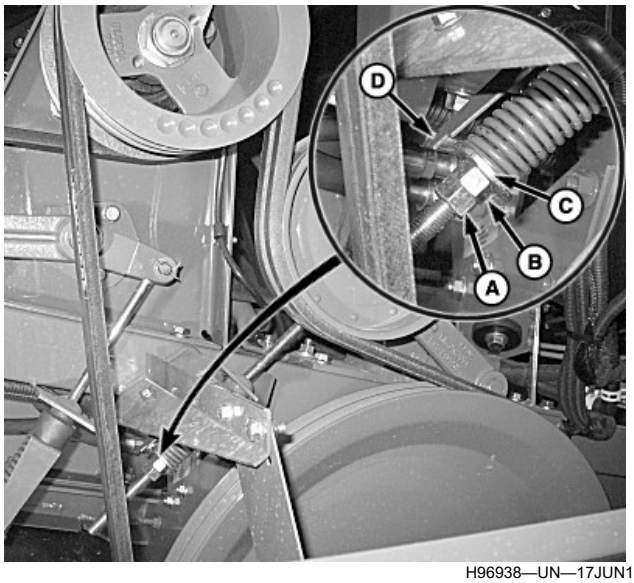
Remove cap screws (D) and replace overshot beater wings (E) as required. Tighten cap screws to specification.

**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

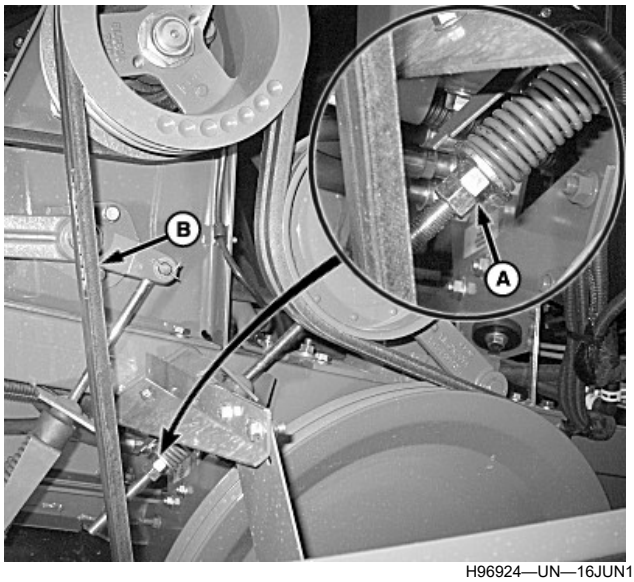
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**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**

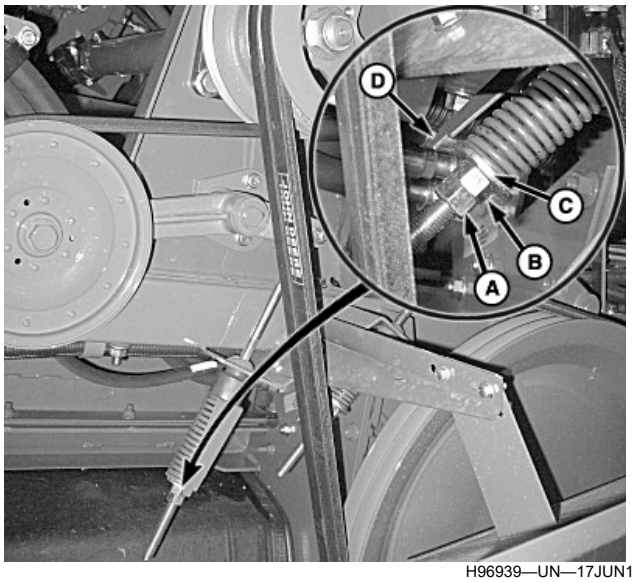
**CAUTION: Shut OFF engine, set parking brake and remove key.**

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

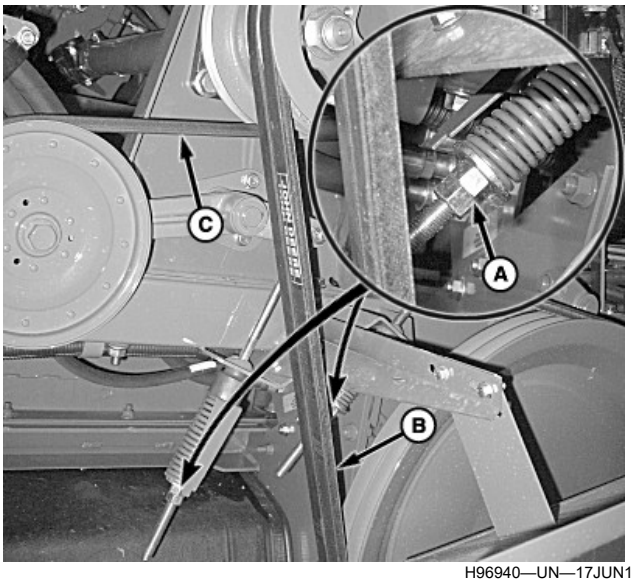
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**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).

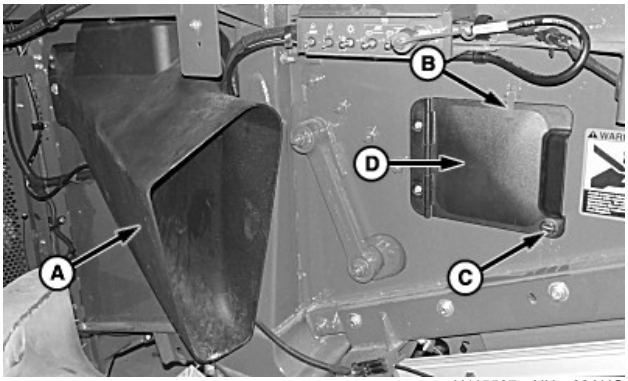
Loosen nuts (A) and remove rear countershaft belt (C).

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.*

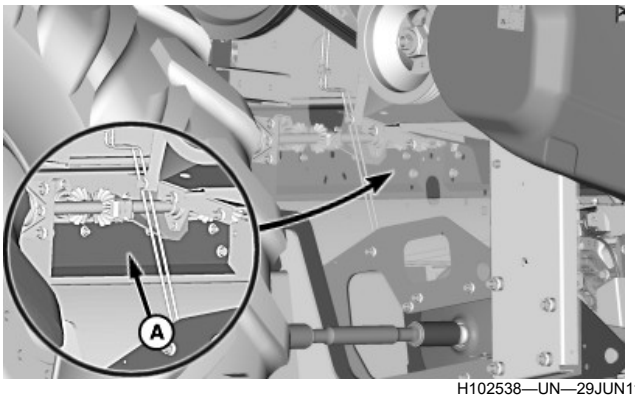
Open clip (B) and turn lock (C) to open the cleaning shoe access door (D).

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**

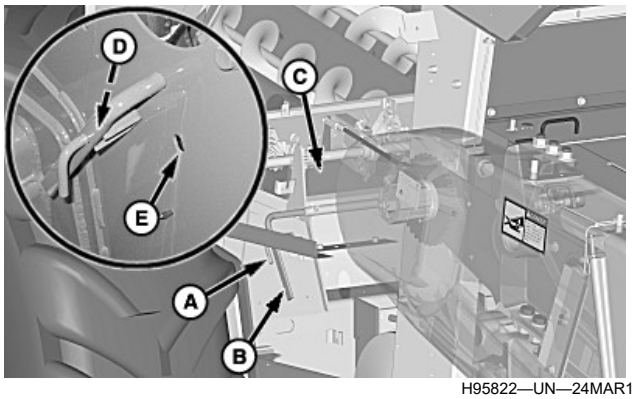
**CAUTION: Shut OFF engine, set park brake, and remove key.**

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.

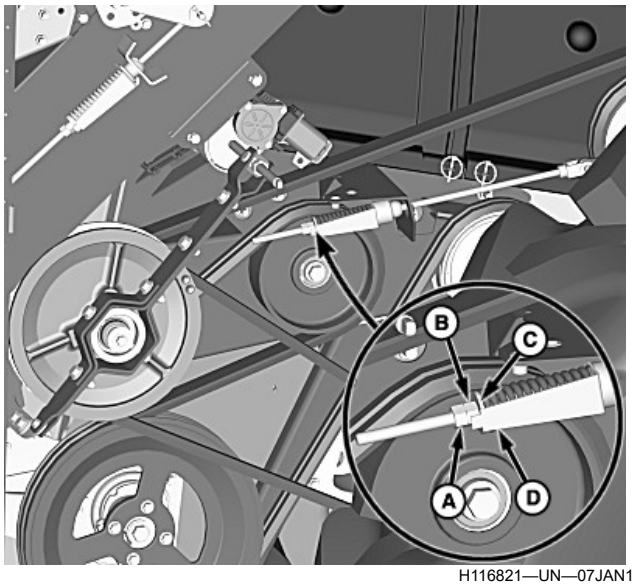
Pull lock-out pin (A) and move handle (B) to open or close cleanout door (C).

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*

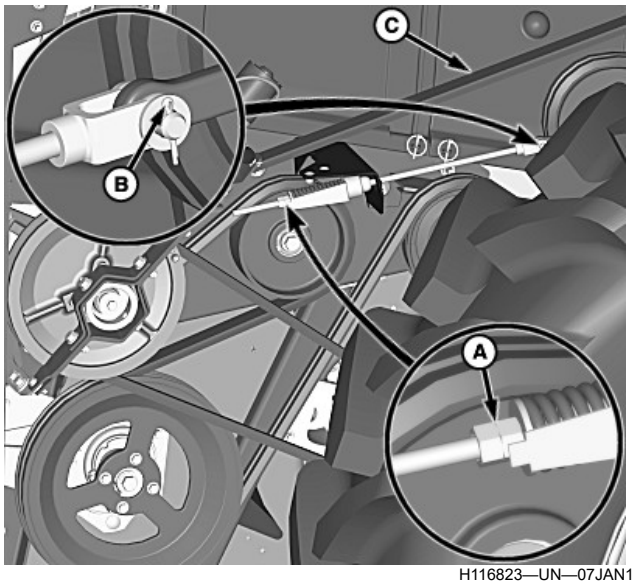
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**CAUTION: Shut OFF engine, set park brake and remove key.**

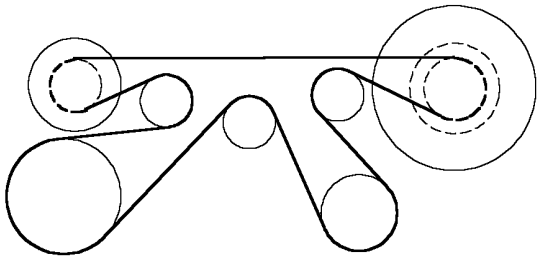
Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

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).

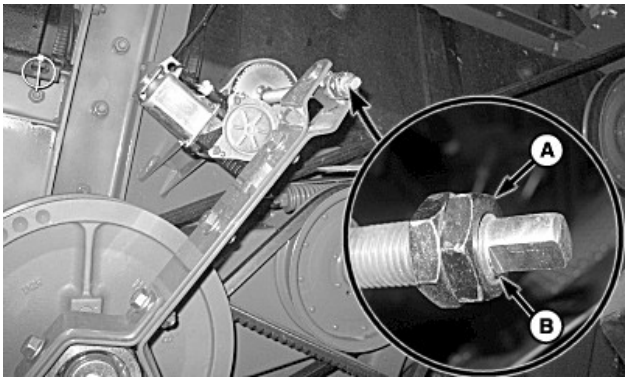
Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step.

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**

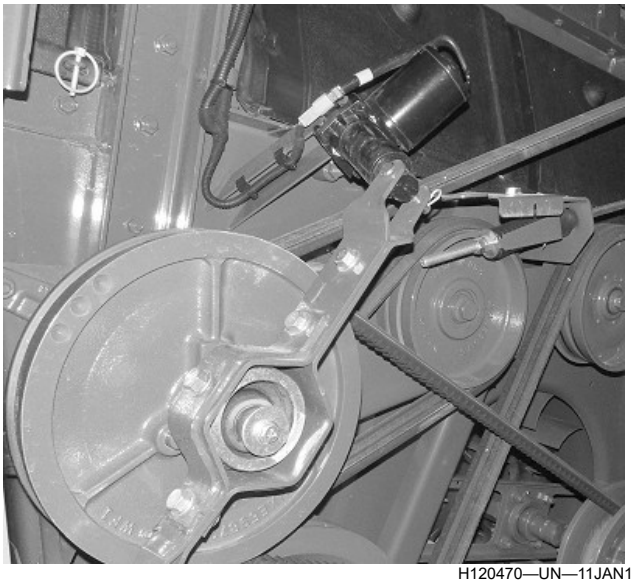
**CAUTION: Shut OFF engine, set park brake and remove key.**

*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

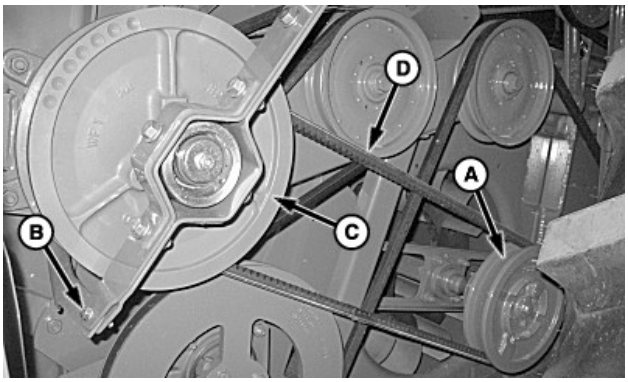


H120470—UN—11JAN17

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.

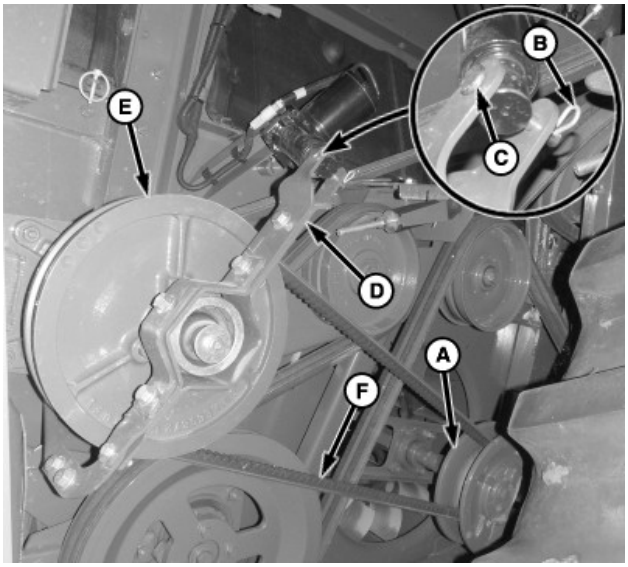
Remove upper sheave (C) and pull belt (D) over lower sheave.

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.

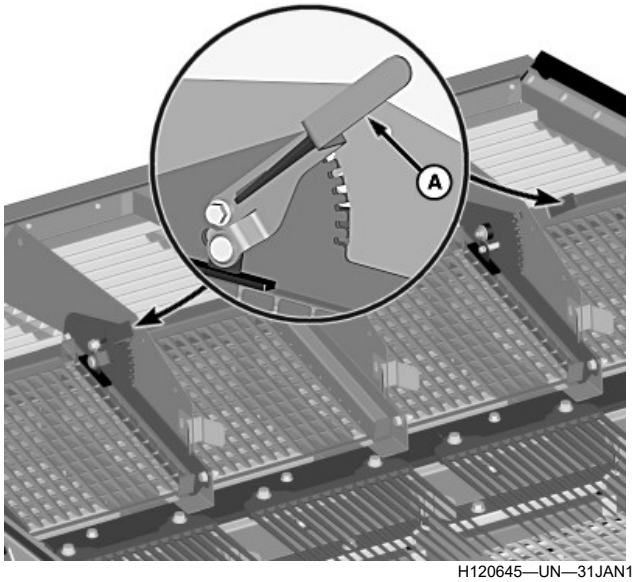
Install replacement belt, remove the wedge, and connect the support arms.

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.**

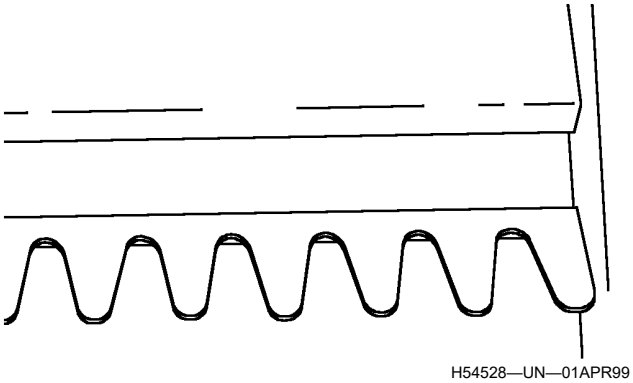
Remove separator covers to access the front chaffer.

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

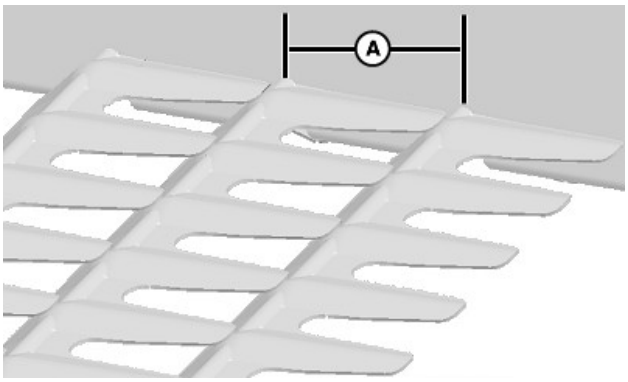
Fixed front chaffer is set at 24 mm (15/16 in).

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

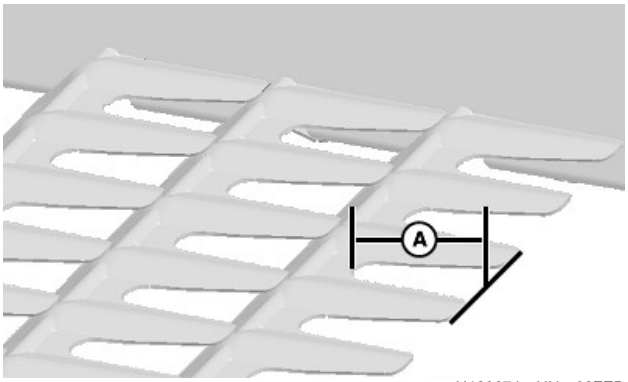
**A—Wire-To-Wire**

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

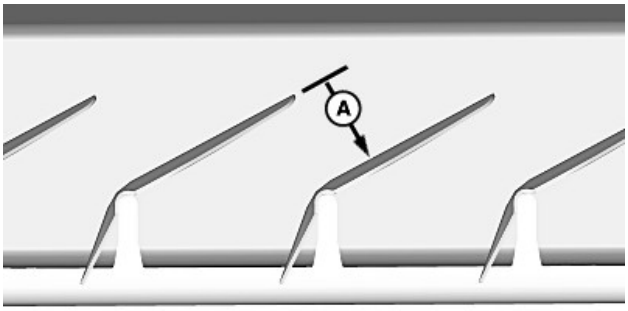
**A—Louver Depth**

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

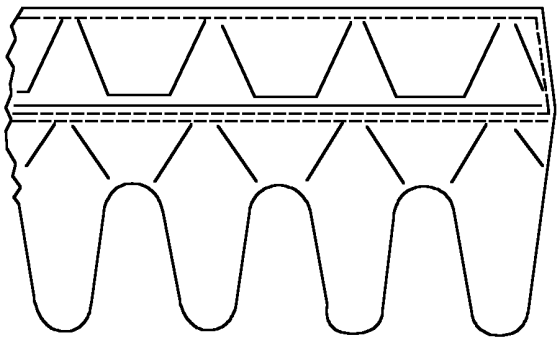
**A—Louver-To-Louver**

*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

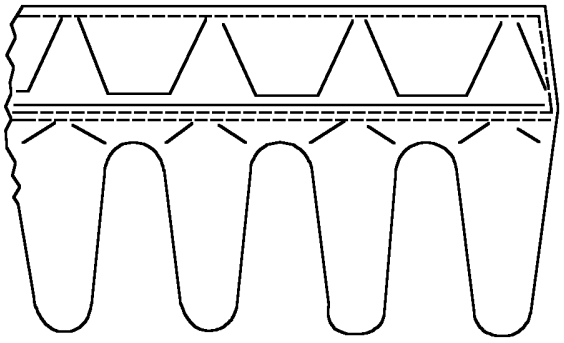
*NOTE: Dimension shown is wire-to-wire spacing.*

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

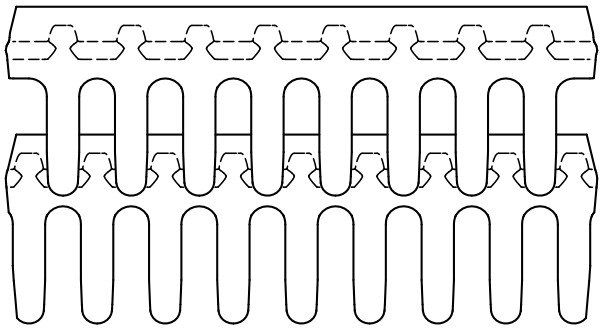
*NOTE: Dimension shown is wire-to-wire spacing.*

*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.*

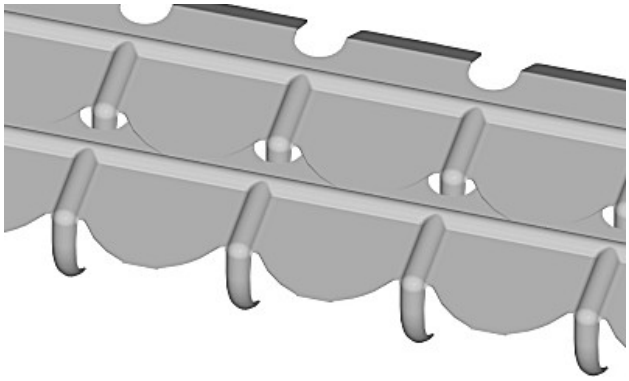
The Premium Corn chaffer has been designed for best performance when harvesting corn. The longer louver design featured on the chaffer provides a larger opening and increased grain-capturing capacity, especially in high-yielding corn or when harvesting on slopes where the larger louver opening of these 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

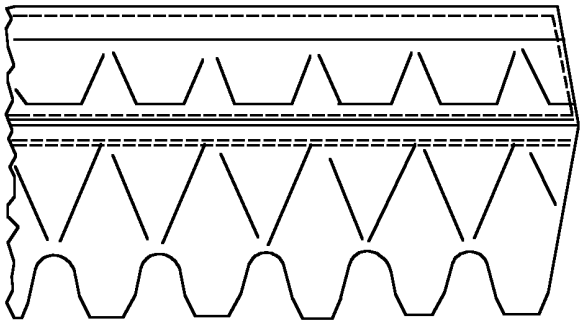
*NOTE: Dimension shown is wire-to-wire spacing.*

*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)



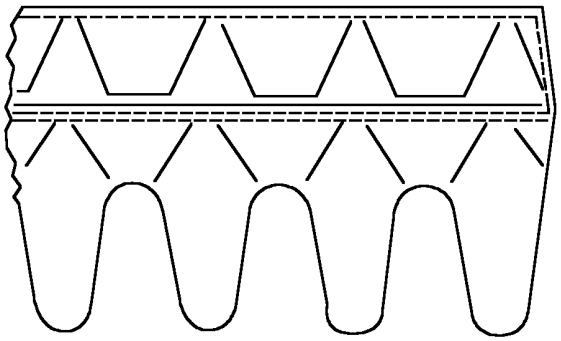
H54527—UN—01APR99

*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.*

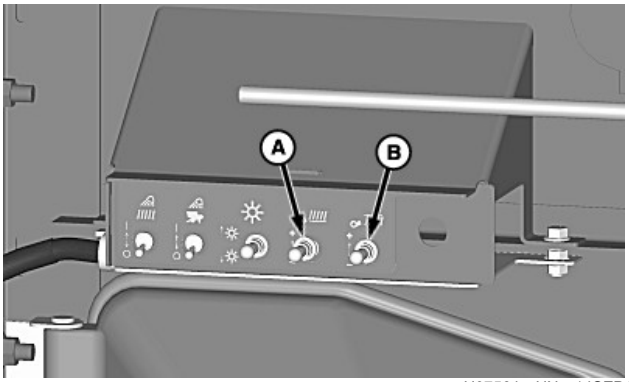
*Not recommended for use in small grains, food corn, or popcorn.*

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**

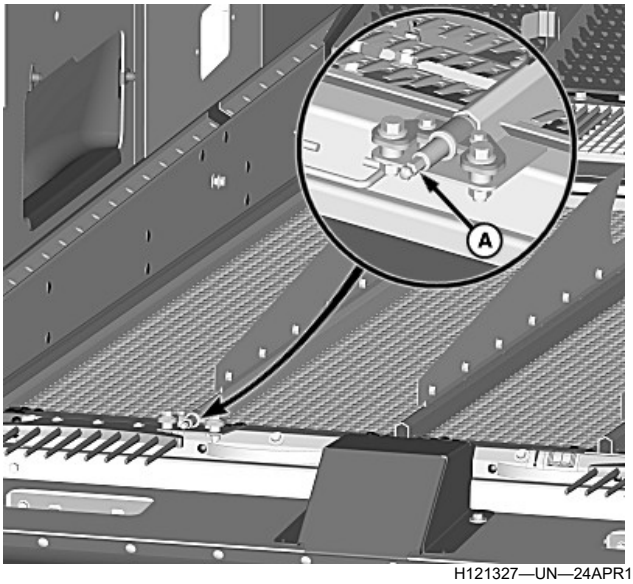
**IMPORTANT: Close chaffer/sieve louvers completely to prevent louver damage while removing chaffer/sieve.**

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.

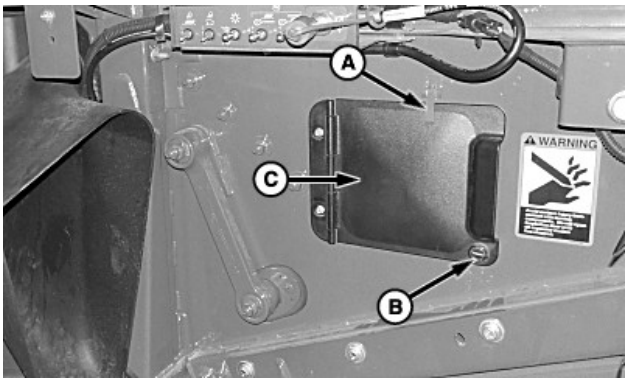
Close chaffer louvers past the desired set point and then open louvers to the desired set point to remove play.

*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.**

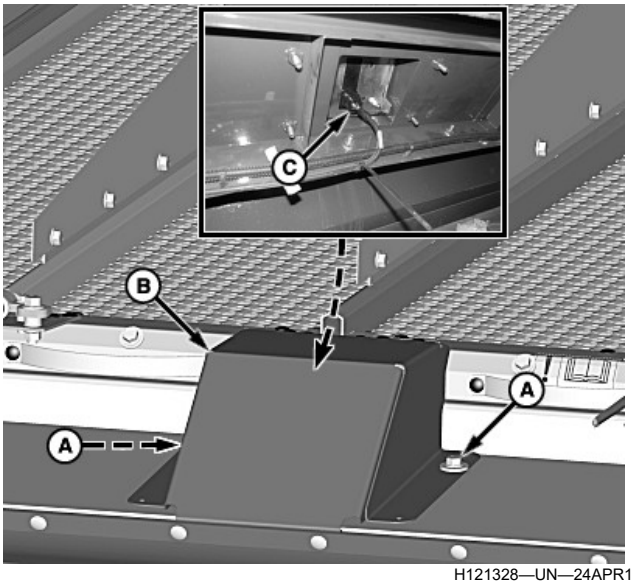
**IMPORTANT: To avoid damage chaffer/sieve elements, completely close the louvers before removing the elements from the machine.**

*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).

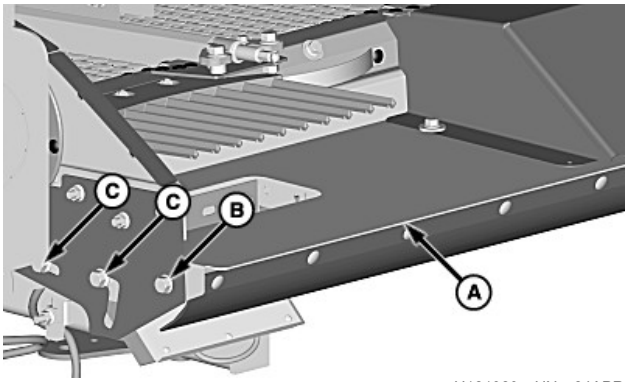



H121328—UN—24APR17

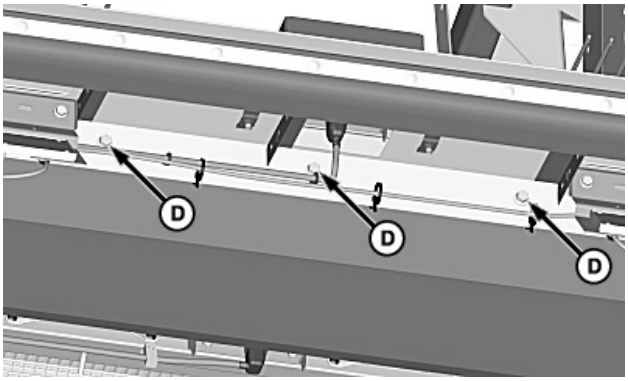
**A—Cap Screw (2 used)**
**B—Cover**
**C—Electrical Harness**

*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

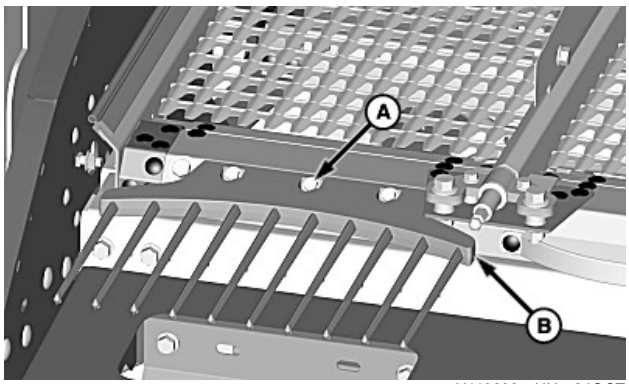



H119692—UN—24OCT16

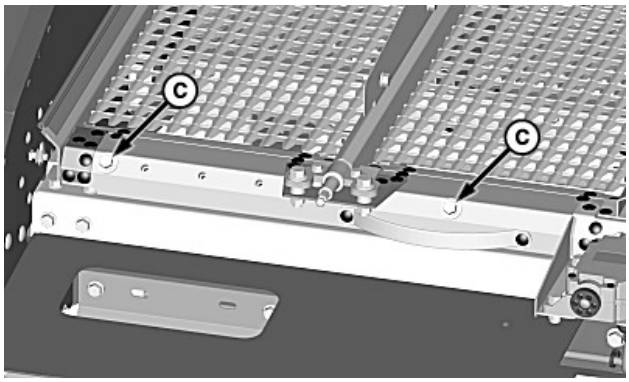
**A—Tailboard**
**B—Cap Screw and Nut (2 used)**
**C—Cap Screw (4 used)**
**D—Cap Screw and Nut (3 used)**

*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.



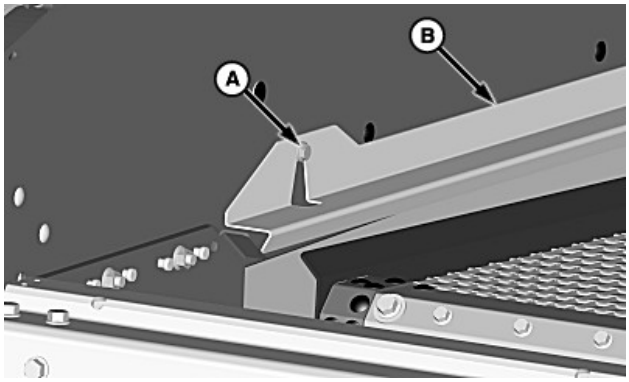
H119693—UN—24OCT16



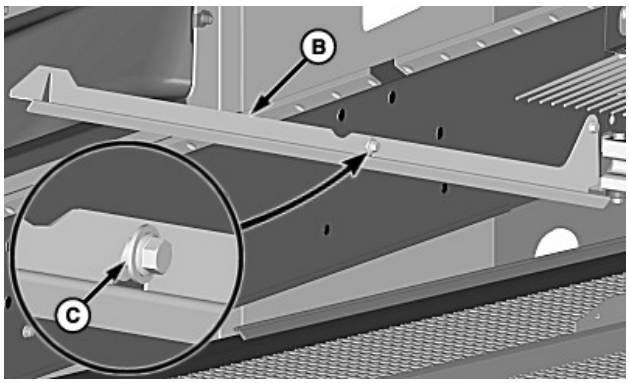
H119913—UN—02NOV16

**A—Cap Screw (6 used)**
**B—Plastic Finger (2 used)**
**C—Cap Screw (4 used)**

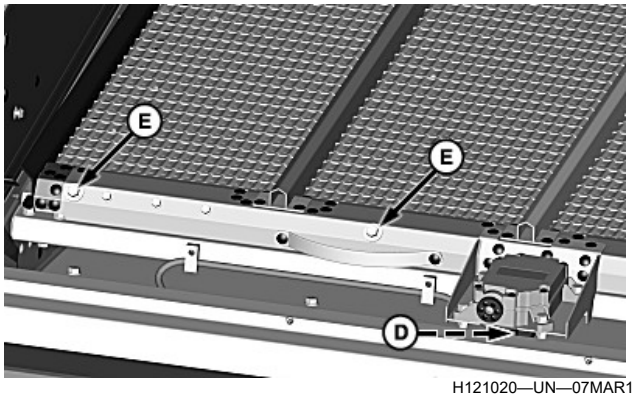
5. **Chaffer Removal:**
   a. Remove cap screws (A) and plastic fingers (B) from both sides of the machine.
   b. Remove cap screws (C) from both sides of the machine.
   c. Slide chaffer element through rear of the machine.
   d. Inspect grain seals on chaffer element and repair or replace as needed.



H119696—UN—24OCT16



H119695—UN—24OCT16



H121020—UN—07MAR17

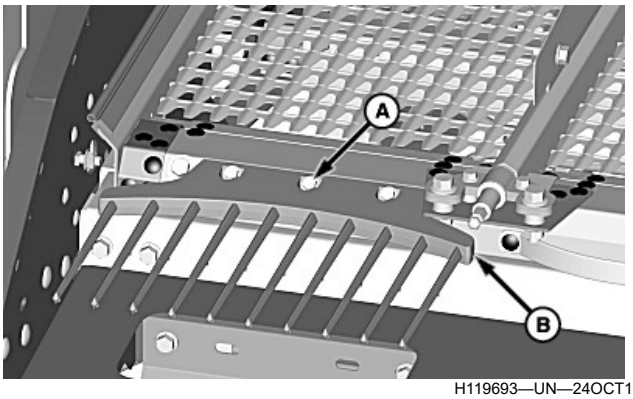
**A—Cap Screw**
**B—Rail**
**C—Bushing**
**D—Electrical Harness**
**E—Cap Screw (4 used)**

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.

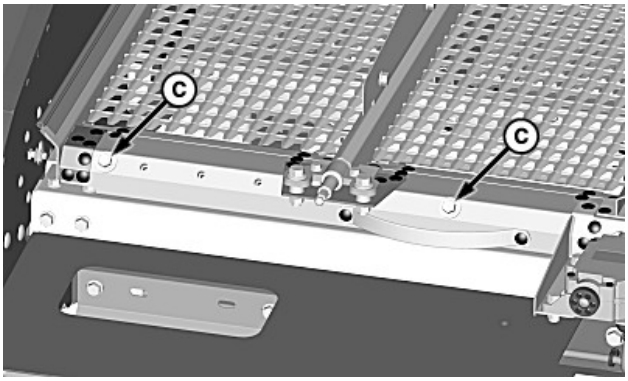
7. **Sieve Installation:**
   a. Install sieve element through the rear of the machine.
   b. Lower rails and install electrical harness.
   c. Tighten cap screws to specification.

**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

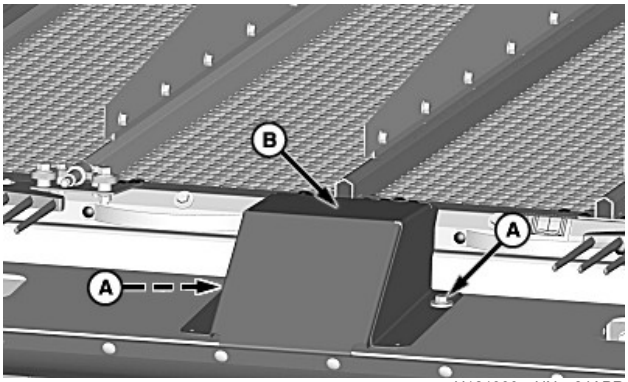
The following assemblies contain non-serviceable structural fasteners and are not repairable:

- 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



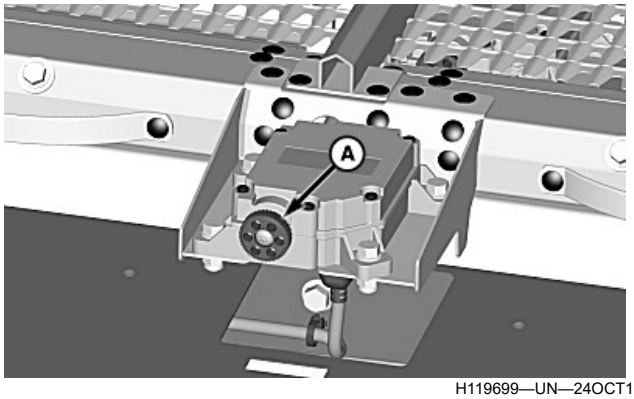

H121330—UN—24APR17

**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

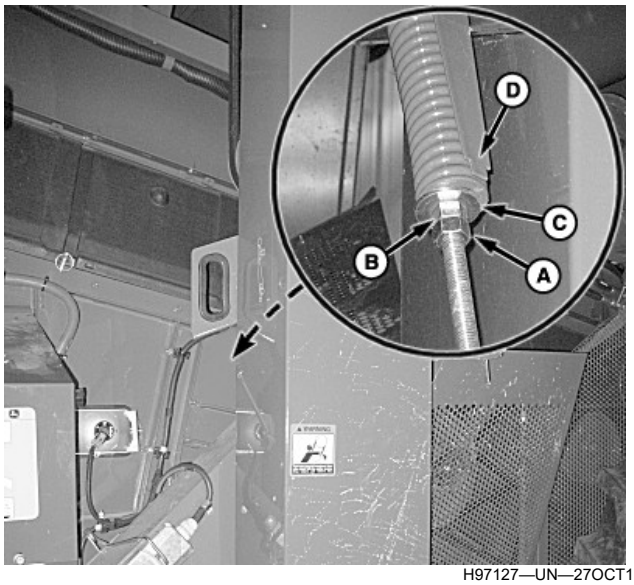
**A—Knob**

**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.

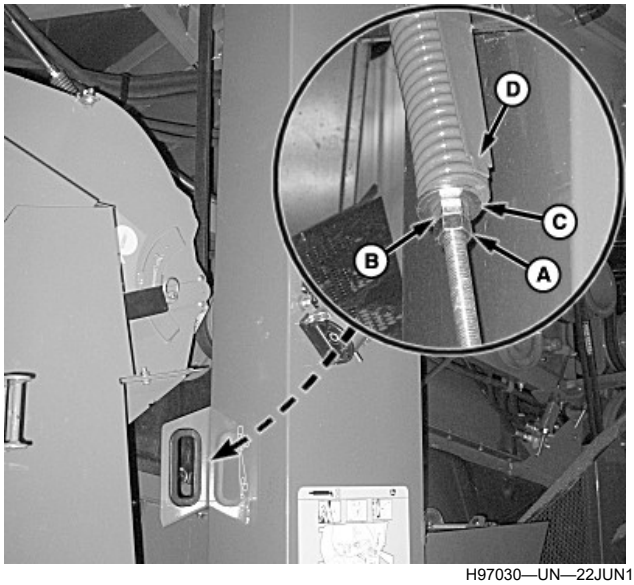
OUO6075,000467E-19-24APR17

## Clean Grain Elevator Belt—Adjusting




H97127—UN—27OCT10

*Style A*




H97030—UN—22JUN10

*Style B*

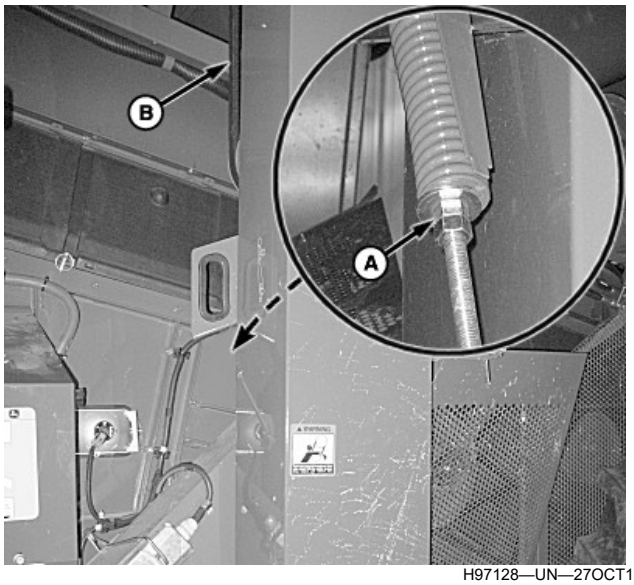
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**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.

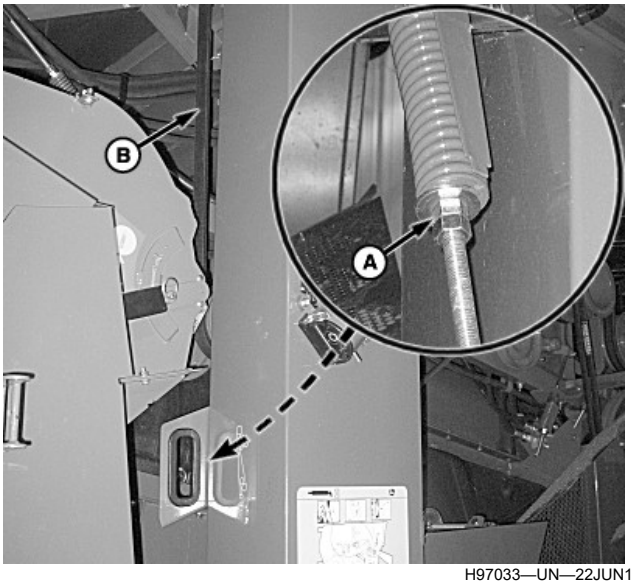
OUO6075,0004385-19-10OCT16

## Clean Grain Elevator Belt—Replacing




H97128—UN—27OCT10

*Style A*



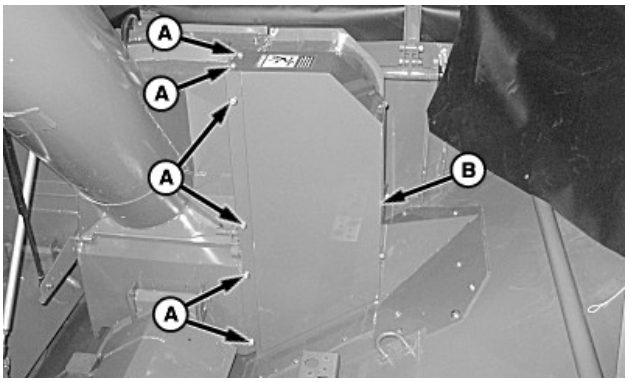

H97033—UN—22JUN10

*Style B*

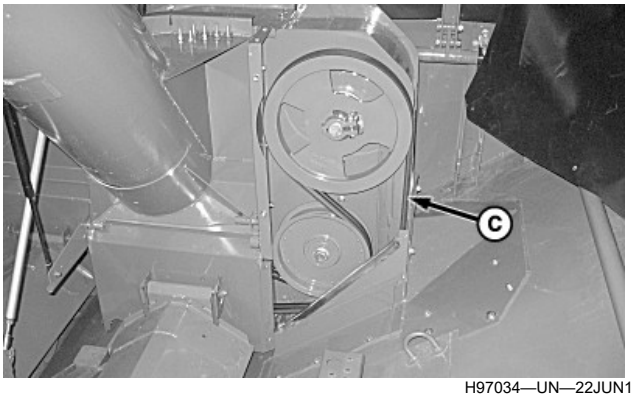
**A—Nuts**
**B—Clean Grain Elevator Belt**

**⚠ 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).

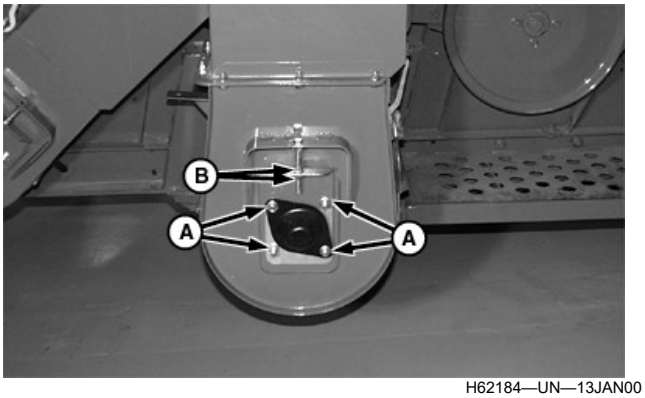
Remove clean grain elevator belt (C) from pulleys.

Install replacement belt and adjust the tensioner until washer is positioned between end of gauge and bottom of step. Tighten lock nut.

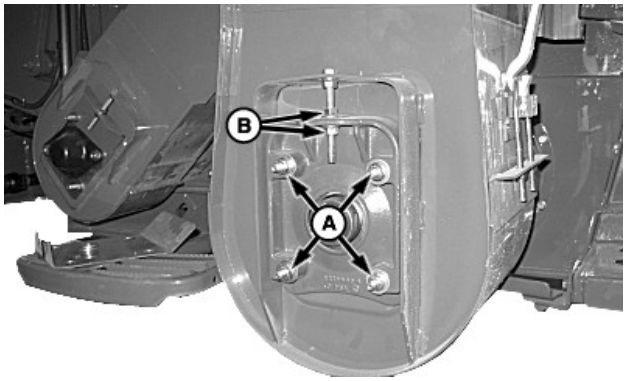
Install previously removed cover and retain with cap screws.

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.**

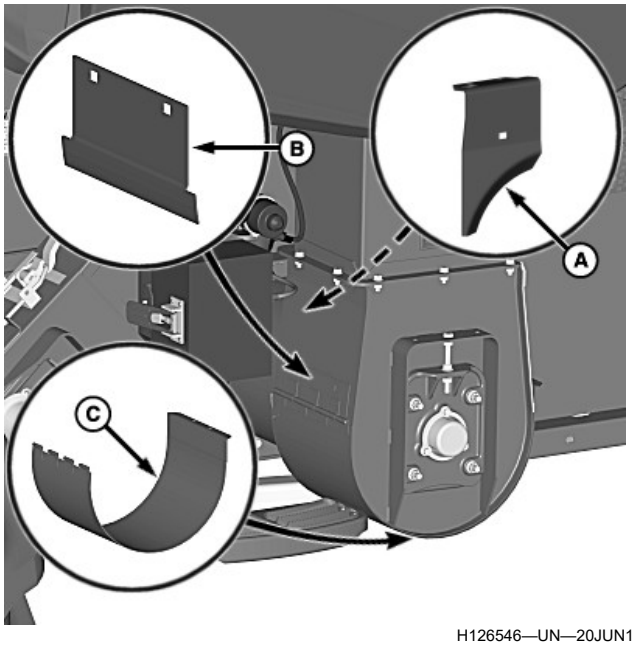
1. Release the latch and open the lower door.
2. Remove the nuts from the bearing cover (if equipped).
3. Loosen nuts (A) and use nuts (B) to adjust the chain. Move the bearing carrier downward to tighten the chain.
4. The elevator chain is adjusted properly when the lower end of the chain can be moved 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:

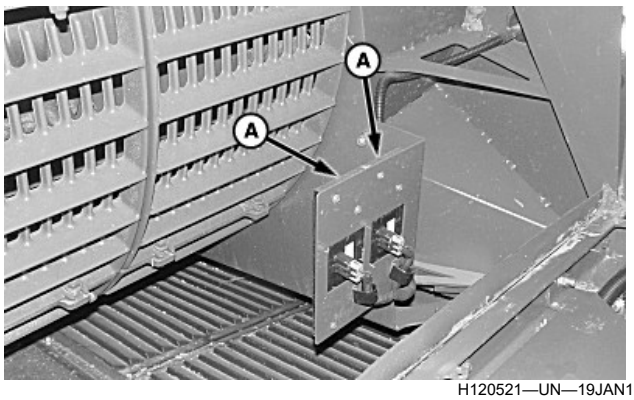
- Rear Wear Plate (A)
- Wear Plate (B)
- Door (C)

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.

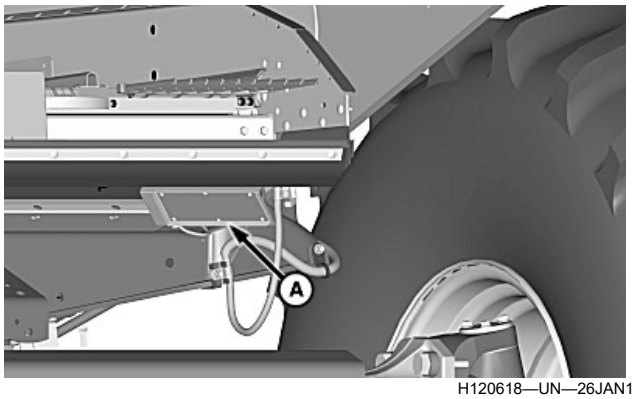
OUO6075,0004BD0-19-20JUN19

## 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.

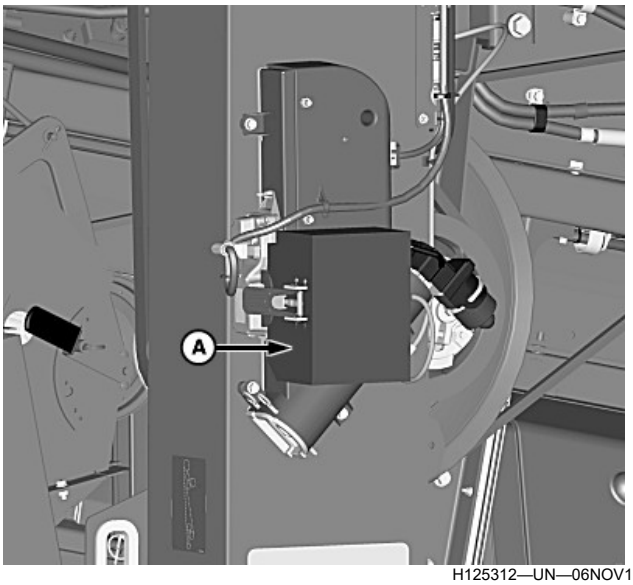
*NOTE: Return grain loss calibration value to original value or perform another crop calibration.*

*VisionTrak is a trademark of Deere & Company*

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.**

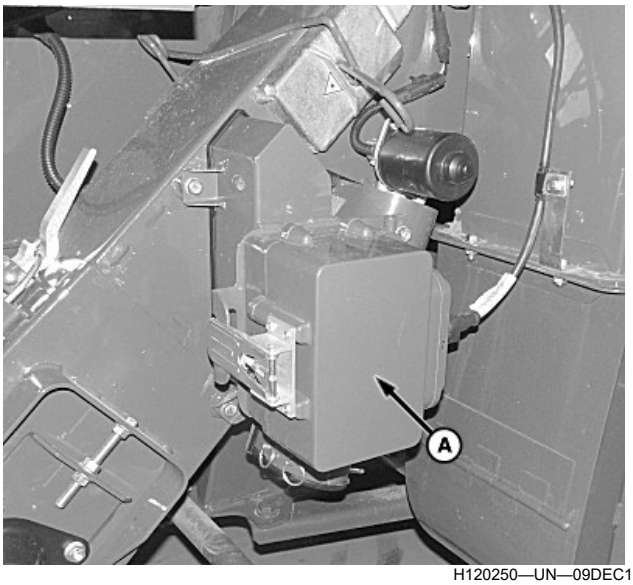
*NOTE: The lens debris indicator in the software alerts operator when the camera lens needs cleaned, as the system functionality is reduced.*

*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).

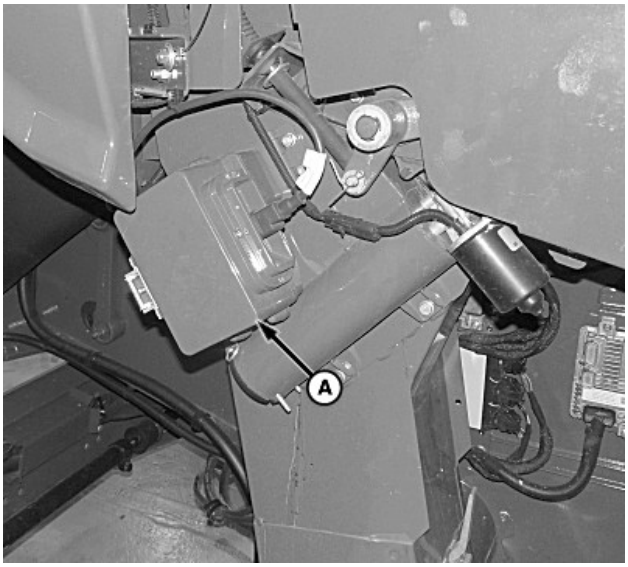
OUO6075,0004A40-19-06NOV18

## 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.*

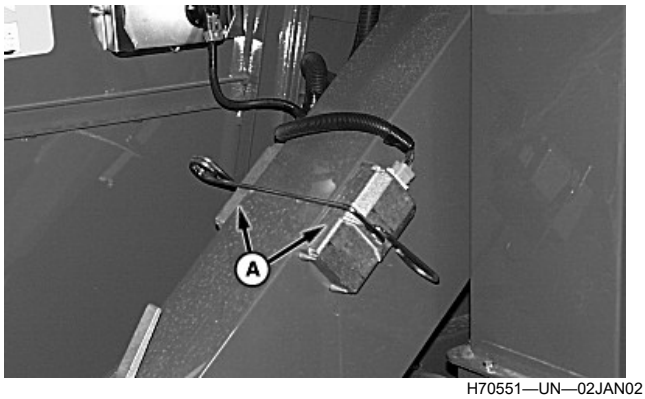
*Cleaning frequency varies depending on a number of factors including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.*

*ActiveVision is a trademark of Deere & Company*

Open latch and clean the ActiveVision™ tailings system camera (A).

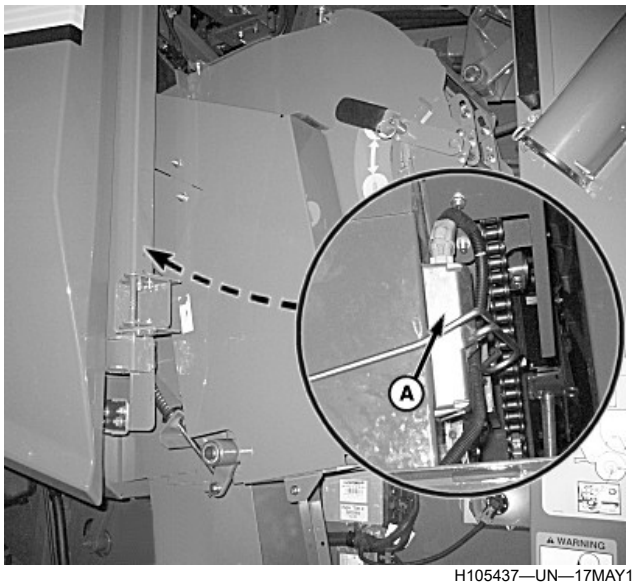
OUO6075,0004567-19-24JAN17

## 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.

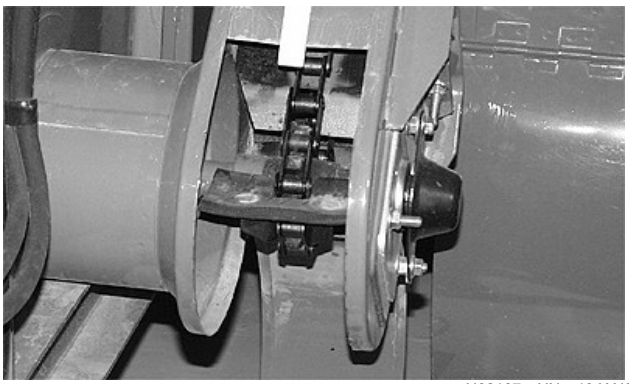
**CAUTION: Failure to install plastic cover prior to replacement of sensors on elevator may cause malfunction, incorrect harvest readings, or sensor damage, and could allow for potentially hazardous eye exposure when sensor is removed.**

4. Install sensor and test system.
5. If display continues to read full or empty, contact your John Deere dealer.

OUO6075,0004568-19-12DEC16

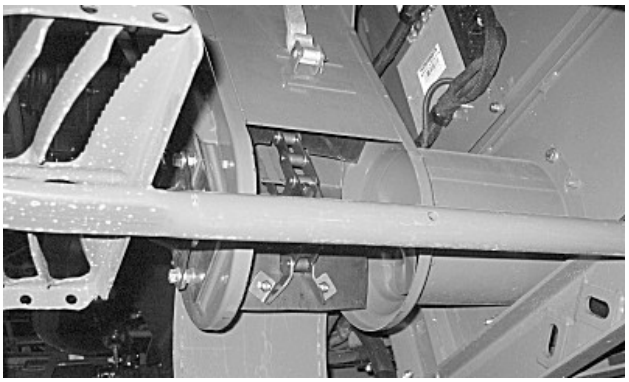
*ActiveVision is a trademark of Deere & Company*

## Tailings System Elevator Paddles



H62187—UN—13JAN00

*Style A*



H97055—UN—22JUN10

*Style B*

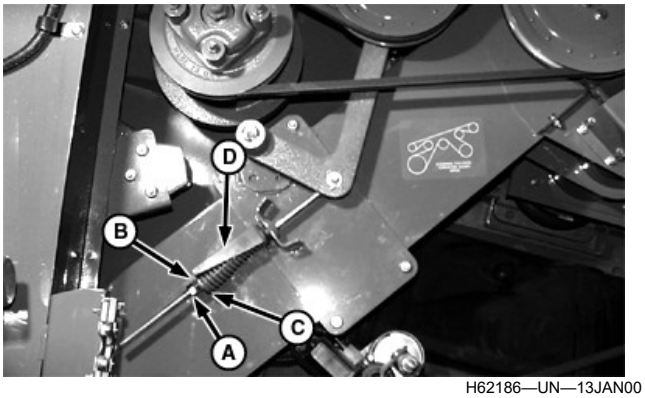
**CAUTION: Shut OFF engine, set park brake and remove key.**

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**

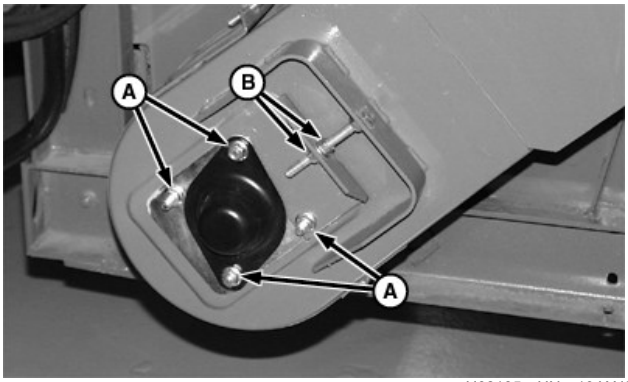
**CAUTION: Shut OFF engine, set park brake and remove key.**

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.

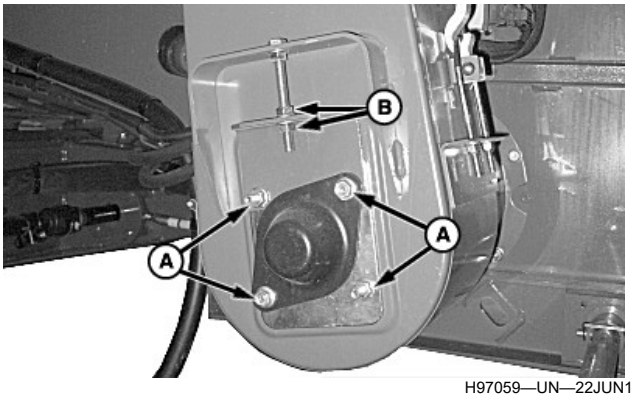
OUO6075,0004381-19-26JAN17

## 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.**

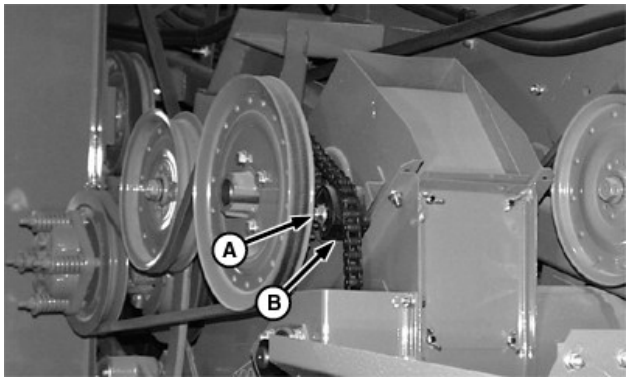
1. Release the latch and open the lower door.
2. Remove the nuts from the bearing cover.
3. Loosen nuts (A) and use nuts (B) to adjust the chain.

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

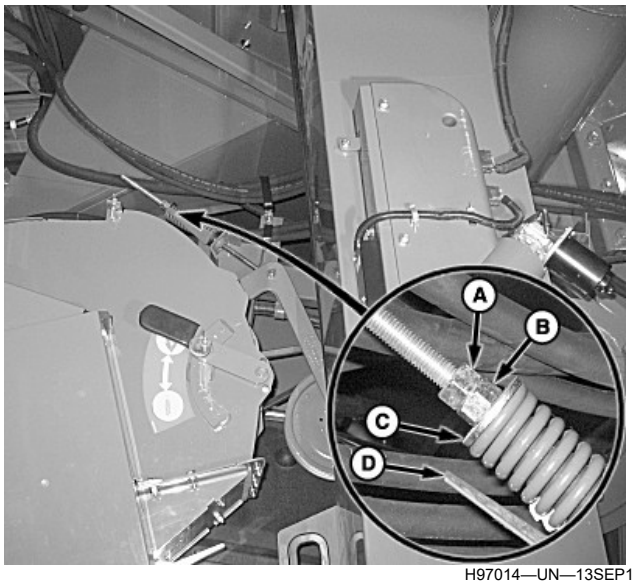
**A—Cap Screw**
**B—Block**

**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

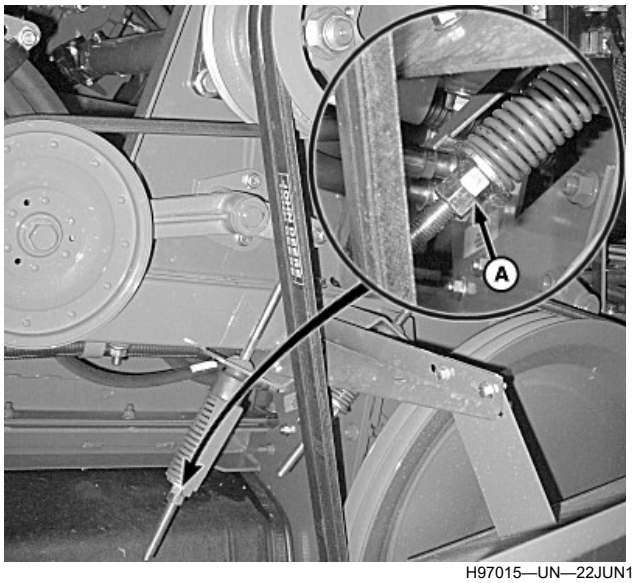
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**CAUTION: Shut OFF engine, set park brake and remove key.**

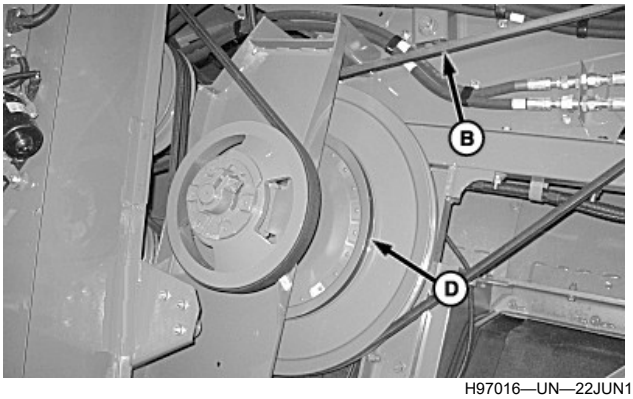
Loosen nut (A) and tighten the nut (B) until the washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut.

OUO6075,0004377-19-26JAN17

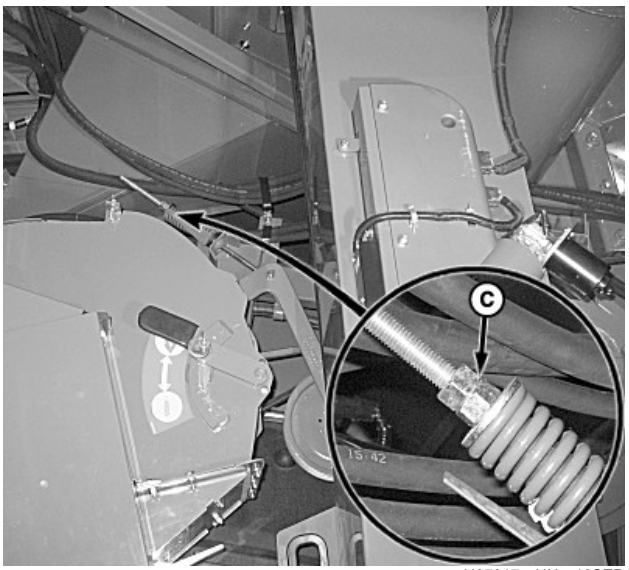
## Tailings System Drive Belt—Replacing (Style B)




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.

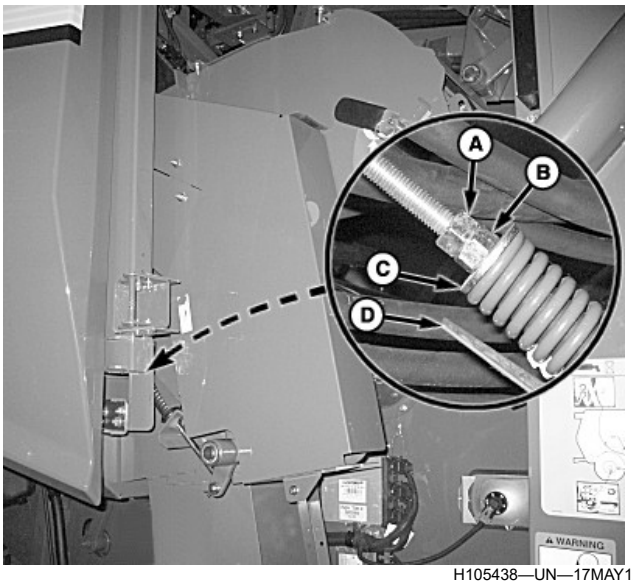
Loosen nuts (C) and remove tailings system drive belt (D).

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

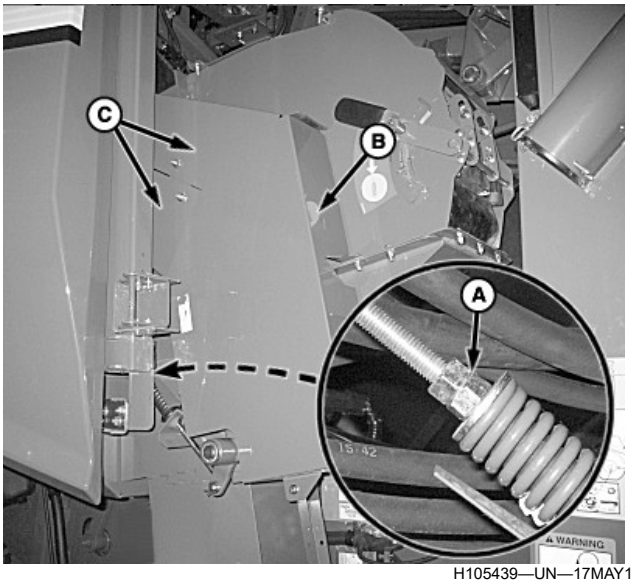
**A—Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

**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)



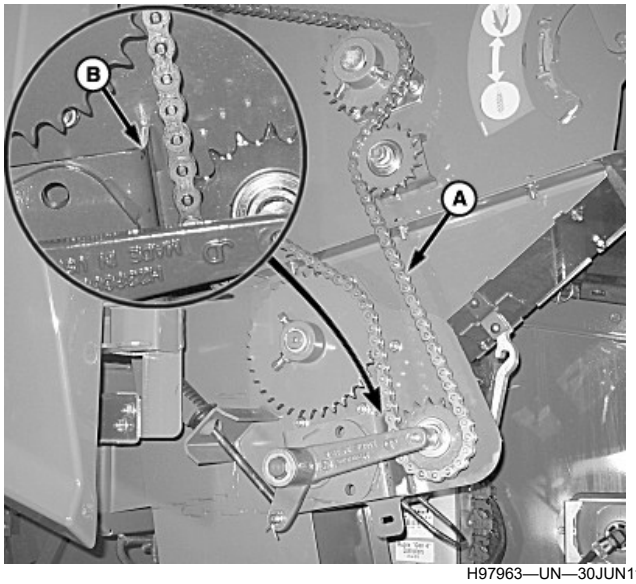

H105439—UN—17MAY12

**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**

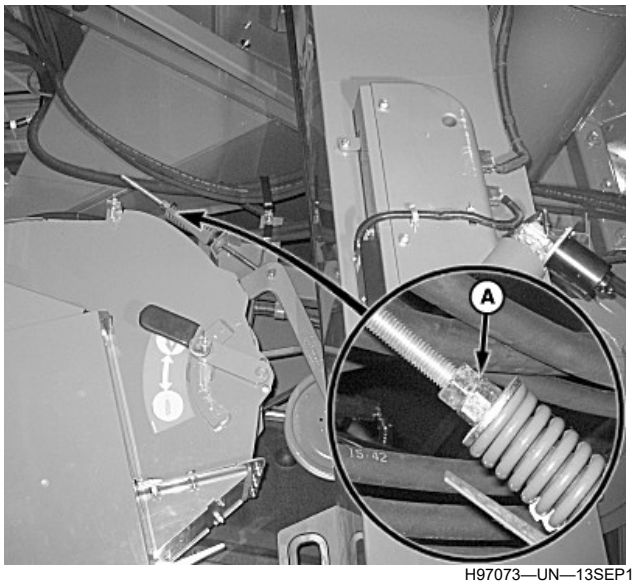
Replace if fully tensioned chain (A) contacts or is less than 3 mm (1/8 in) away from bracket (B).

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)

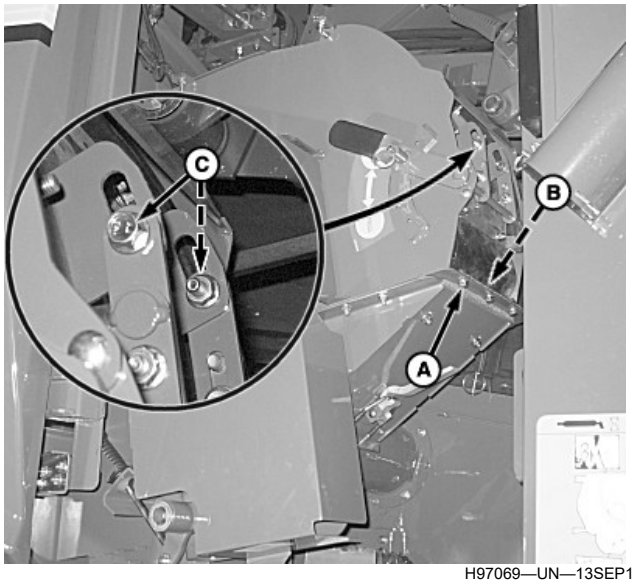



H97073—UN—13SEP10

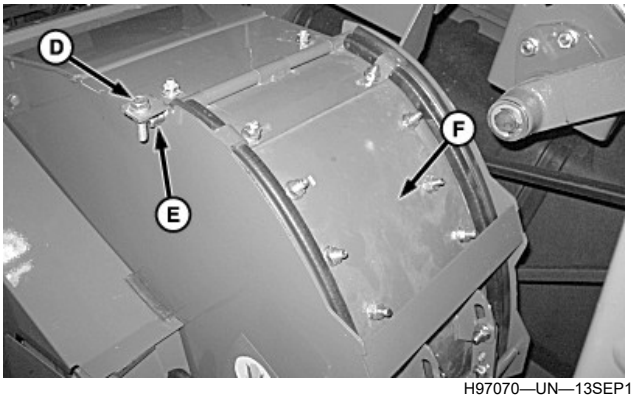
**A—Nuts**

**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

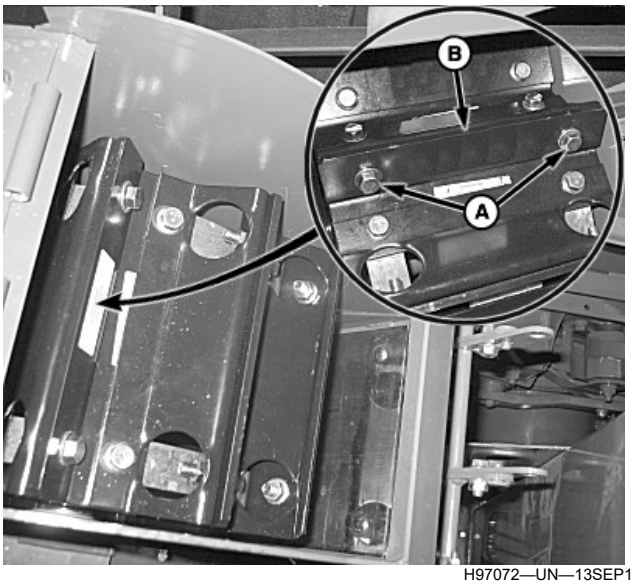



H97070—UN—13SEP10

**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**

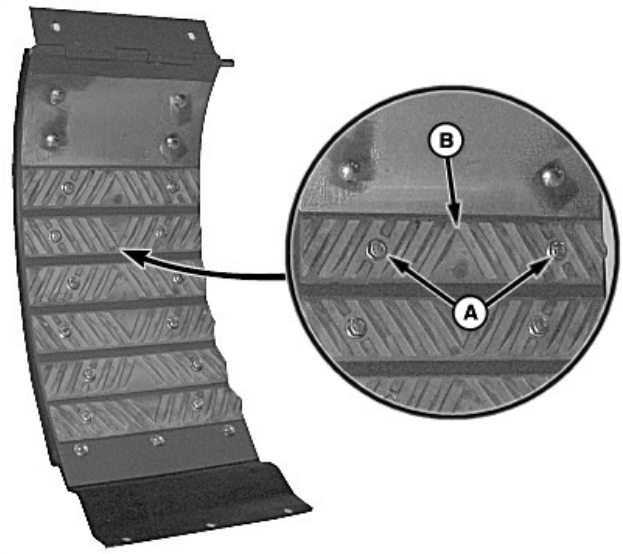
Remove cap screws and nuts (A) from wear strips.

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.*

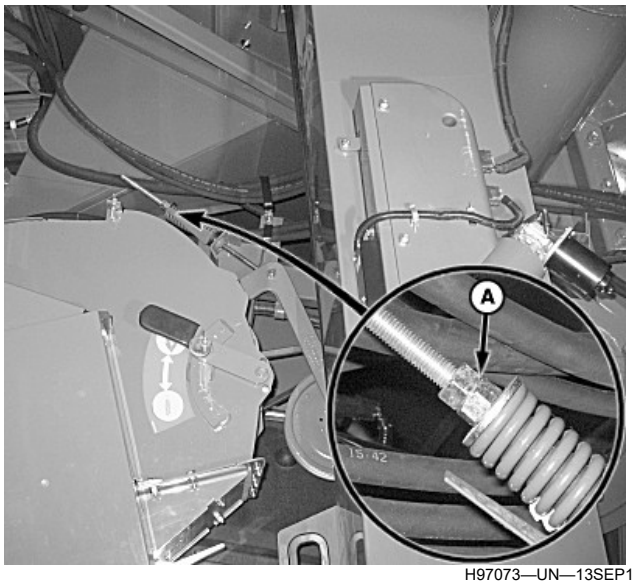
Install access cover and retain with rod and cap screw.

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)

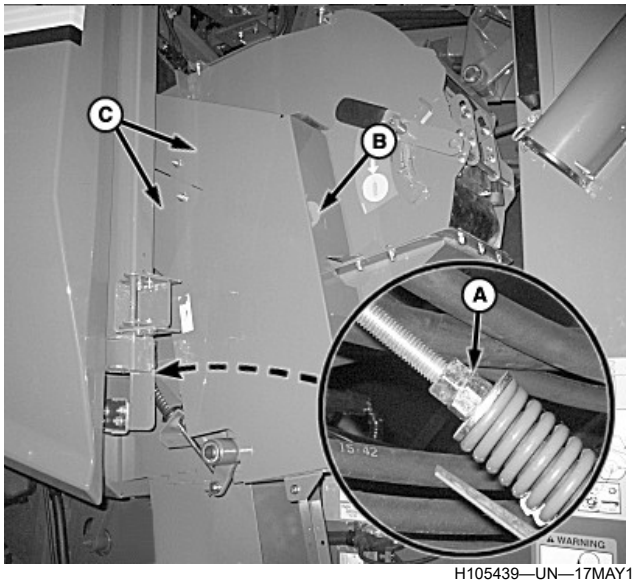



H97073—UN—13SEP10

**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.

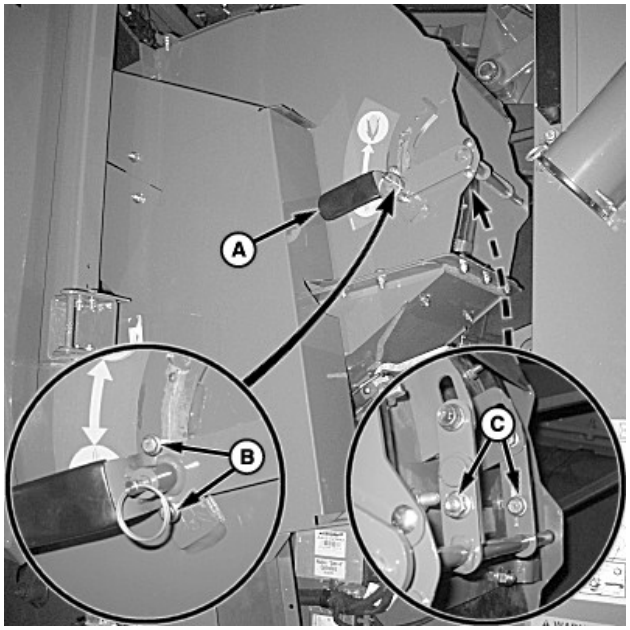



H105439—UN—17MAY12

**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.

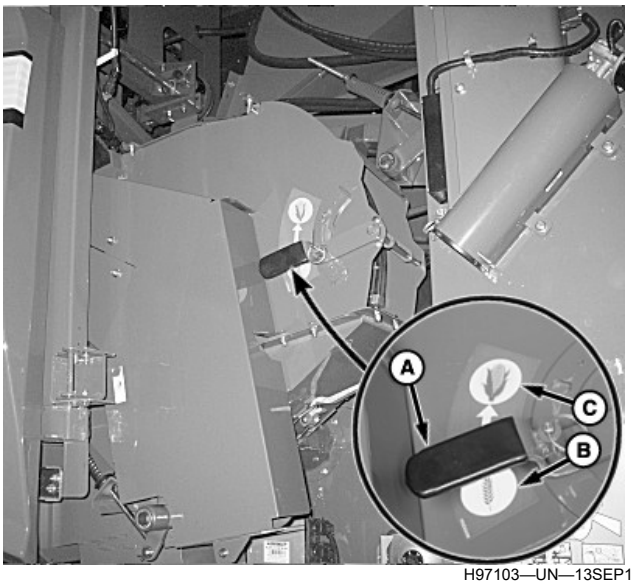
Adjust tailings system drive belt tensioner until washer is positioned between end of gauge and bottom of step.

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):**

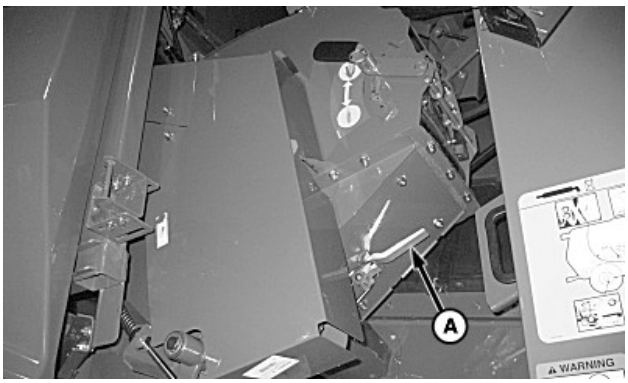
Crop selection handle (A) should be in ”LOWER” position, when harvesting small grain crops.

**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

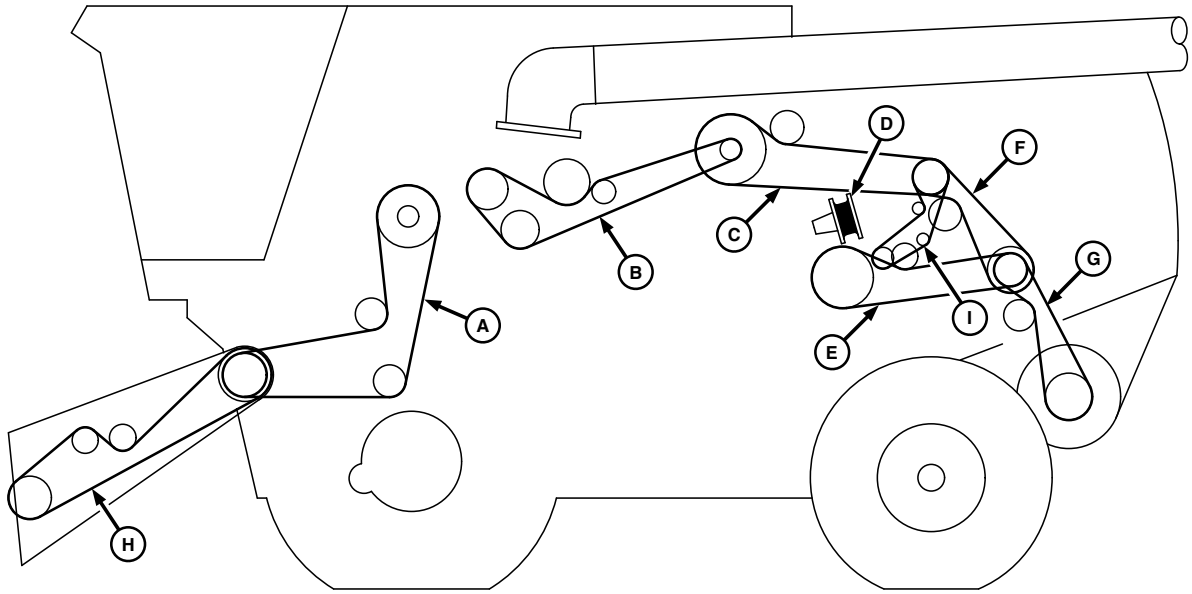
**A—Handle**

**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



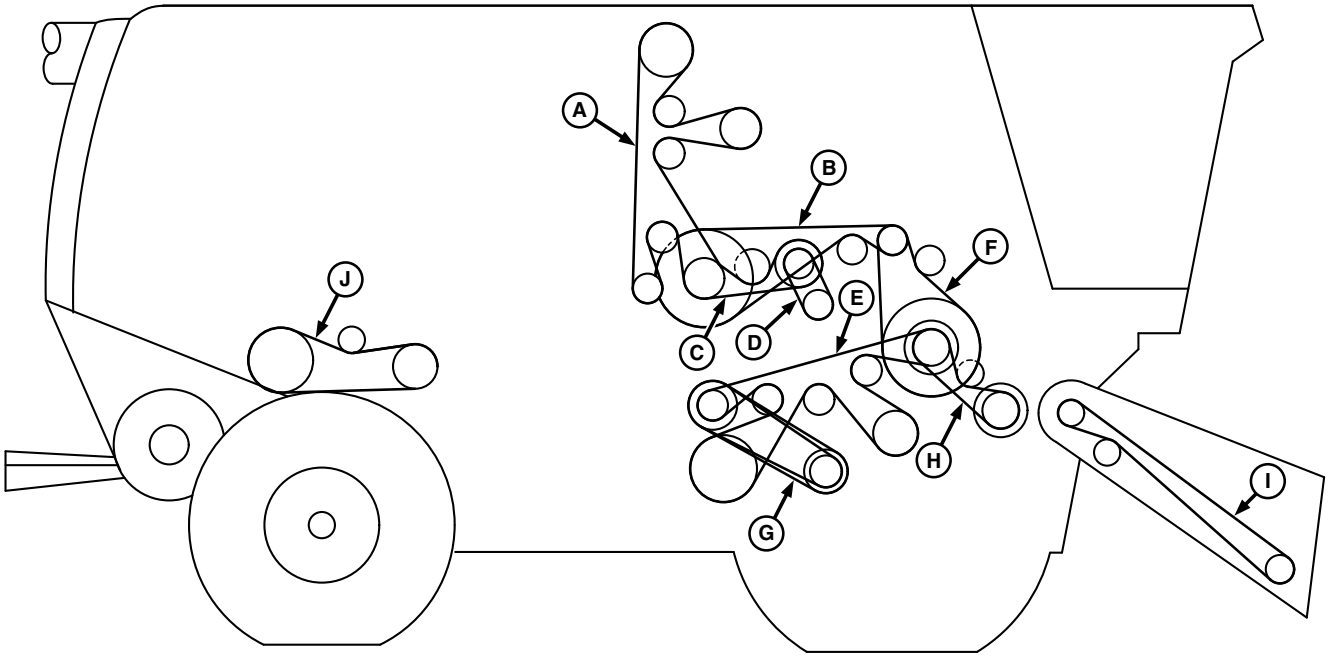

H107018—UN—25FEB13

| | | | |
|---|---|---|---|
| **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<br>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)<br>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)<br>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<br>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)

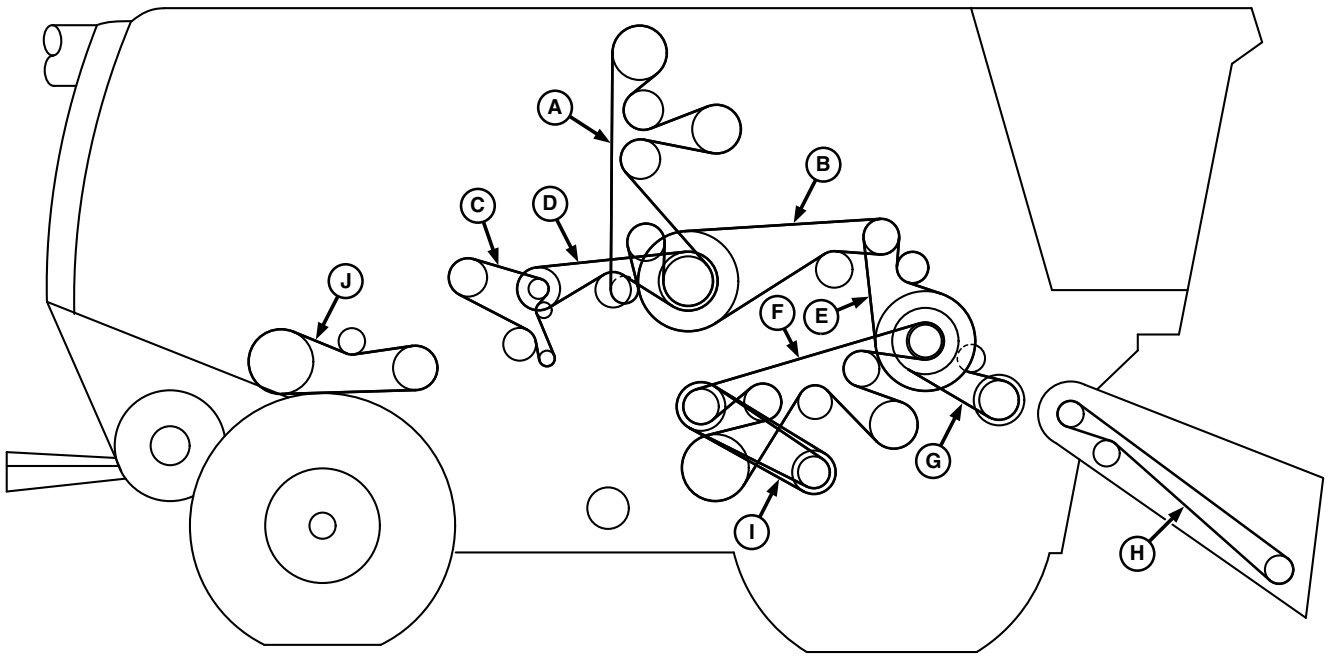



H99322—UN—10DEC10

**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.*

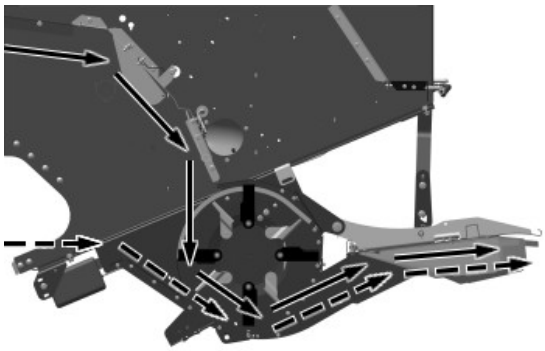
1. Disengage header and separator.

*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.

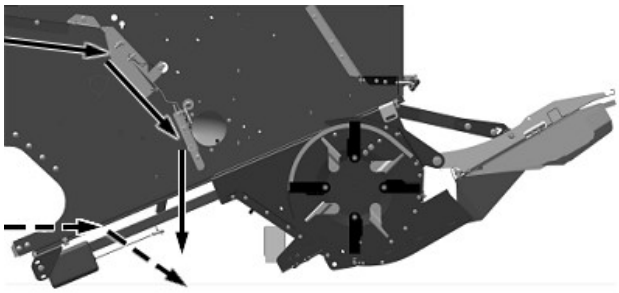
OUO6075,00046EE-19-29MAR17

## Residue Material Handling Option (Intermediate/Deluxe Residue)



H125189—UN—15OCT18

*Chopping Deluxe*



H125190—UN—22OCT18

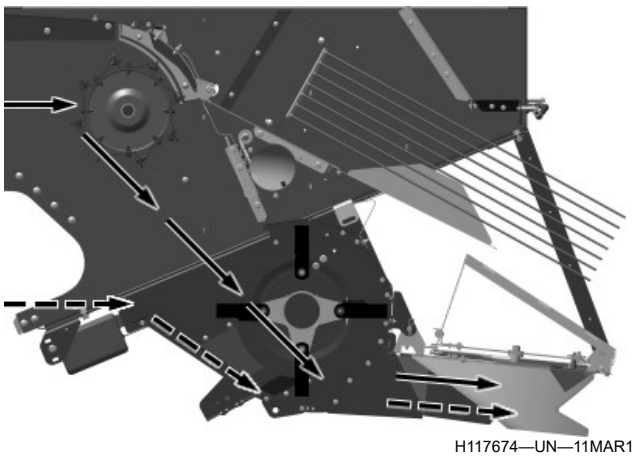
*Windrowing Deluxe*

*NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.*

Straw and chaff get laid down together in a windrow.

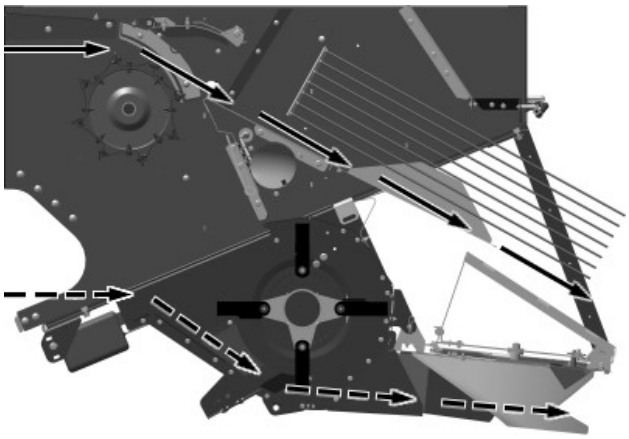
OUO6075,0004A2E-19-15OCT18

## Residue Material Handling Option (Premium Residue)



H117674—UN—11MAR16

*Chopping Premium*



H118033—UN—05APR16

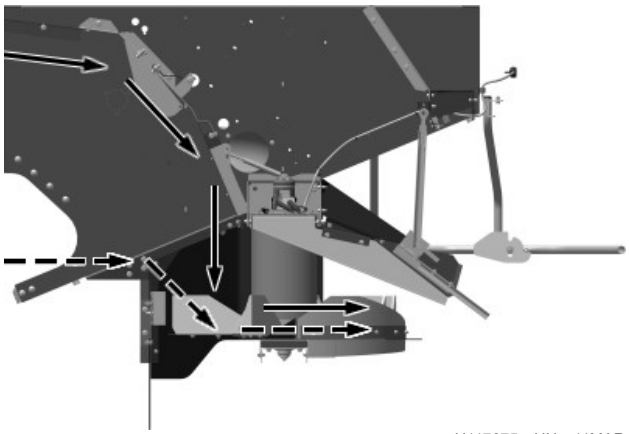
*Windrowing Premium*

*NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.*

Drop straw and spread chaff capability.

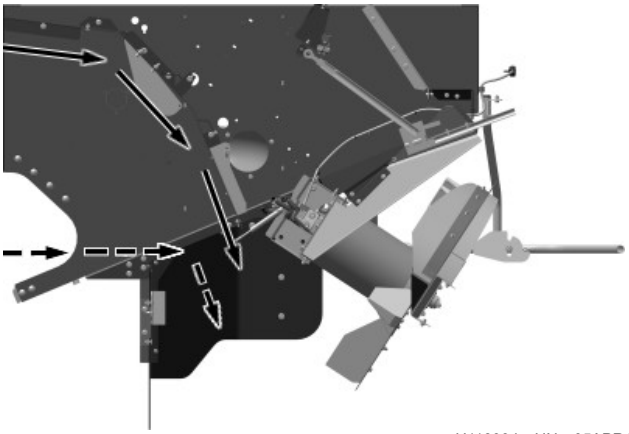
OUO6075,00049BD-19-31MAY18

## Residue Material Handling Option (Straw Spreader)



H117675—UN—11MAR16

*Spreader Position*



H118034—UN—05APR16

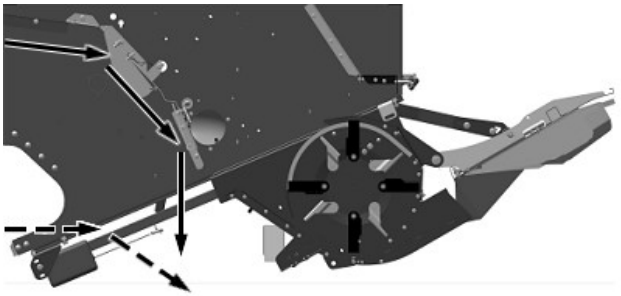
*Windrow Position*

*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

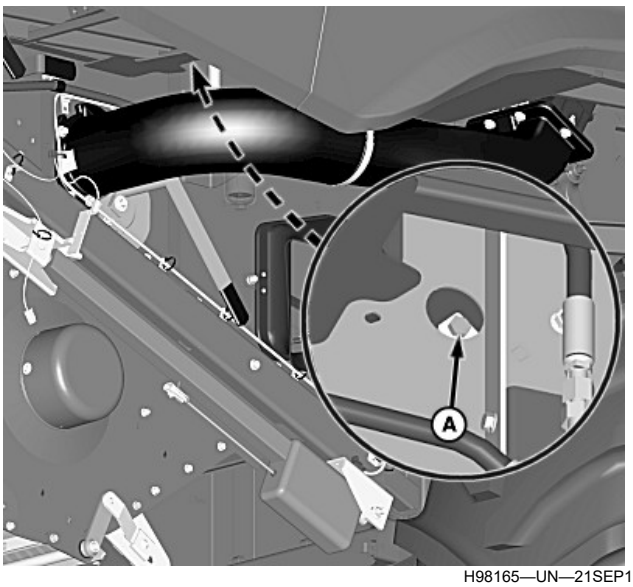
*Windrowing Intermediate/Deluxe*

*NOTE: Solid arrows represent flow of straw. Dashed arrows represent flow of chaff.*

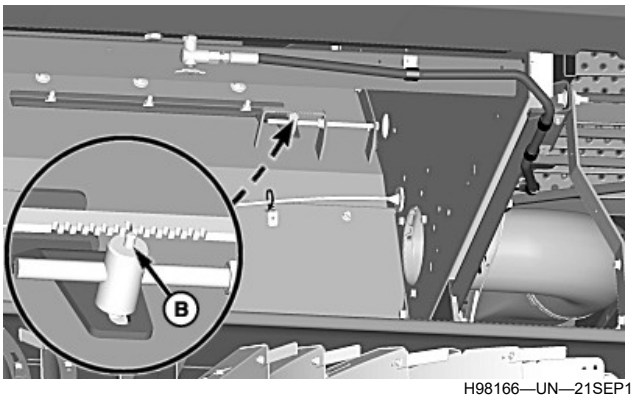
- Raise chopper fully. See Chopper Adjusting switch later in this section.
- Shift chopper drive into neutral position. See Chopper Drive Speeds—Changing later in this section.

OUO6075,00049B9-19-18JUN18

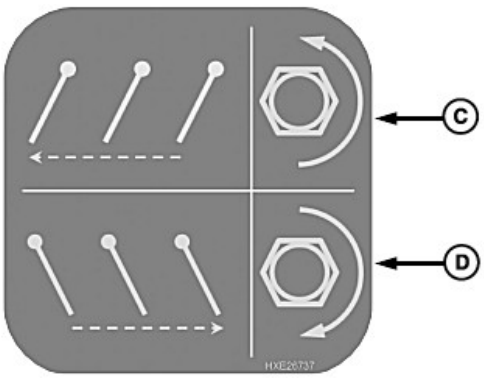
## Crop Diverter Vanes—Adjusting




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.

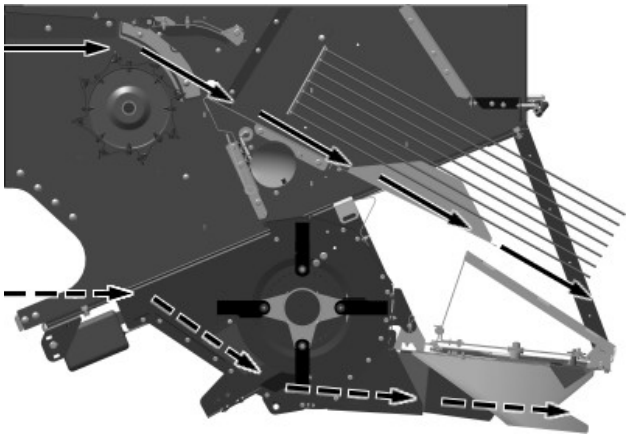
- Counterclockwise (C) - moves vanes towards left-hand side of machine.

- 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

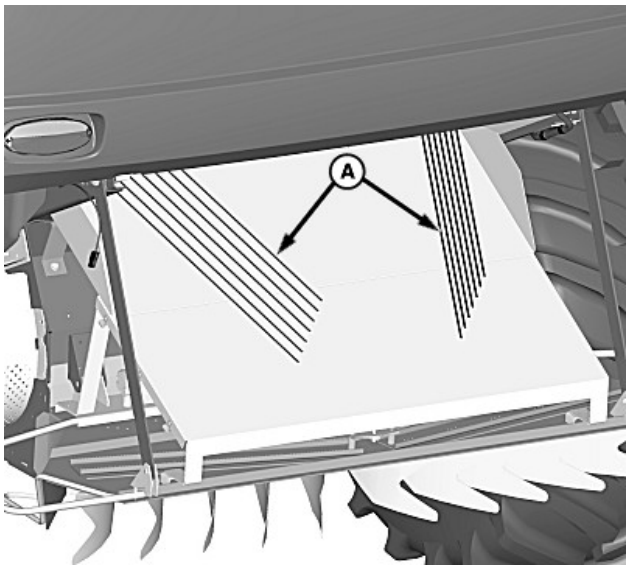
*Windrowing Premium*

*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



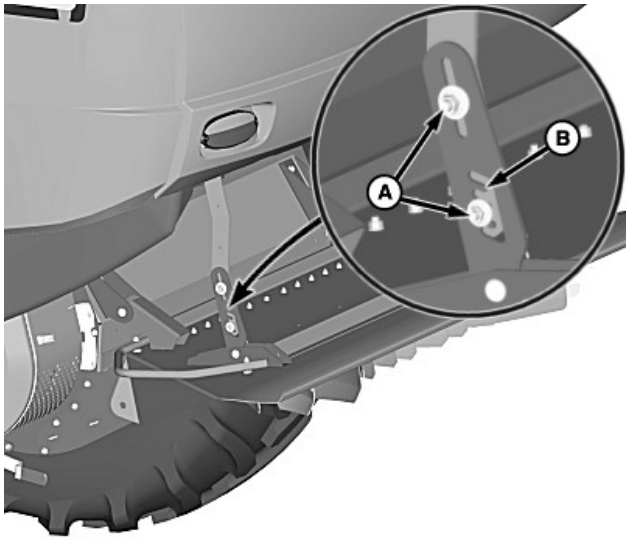

H98368—UN—30SEP10

**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.**

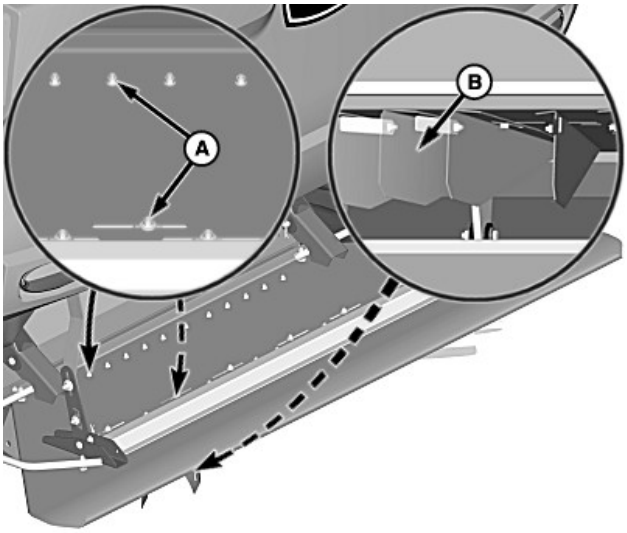
Loosen cap screws (A) on both sides of tailboard.

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.*

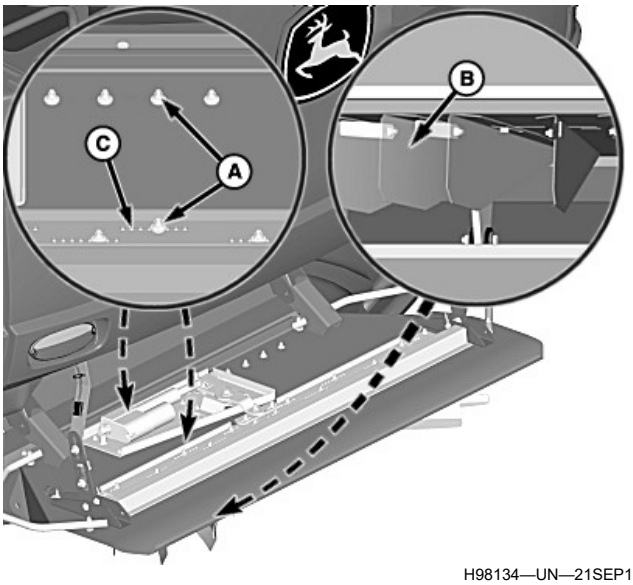
*Tailboard vanes are factory set for 9.1 m (30 ft.) platforms.*

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.*

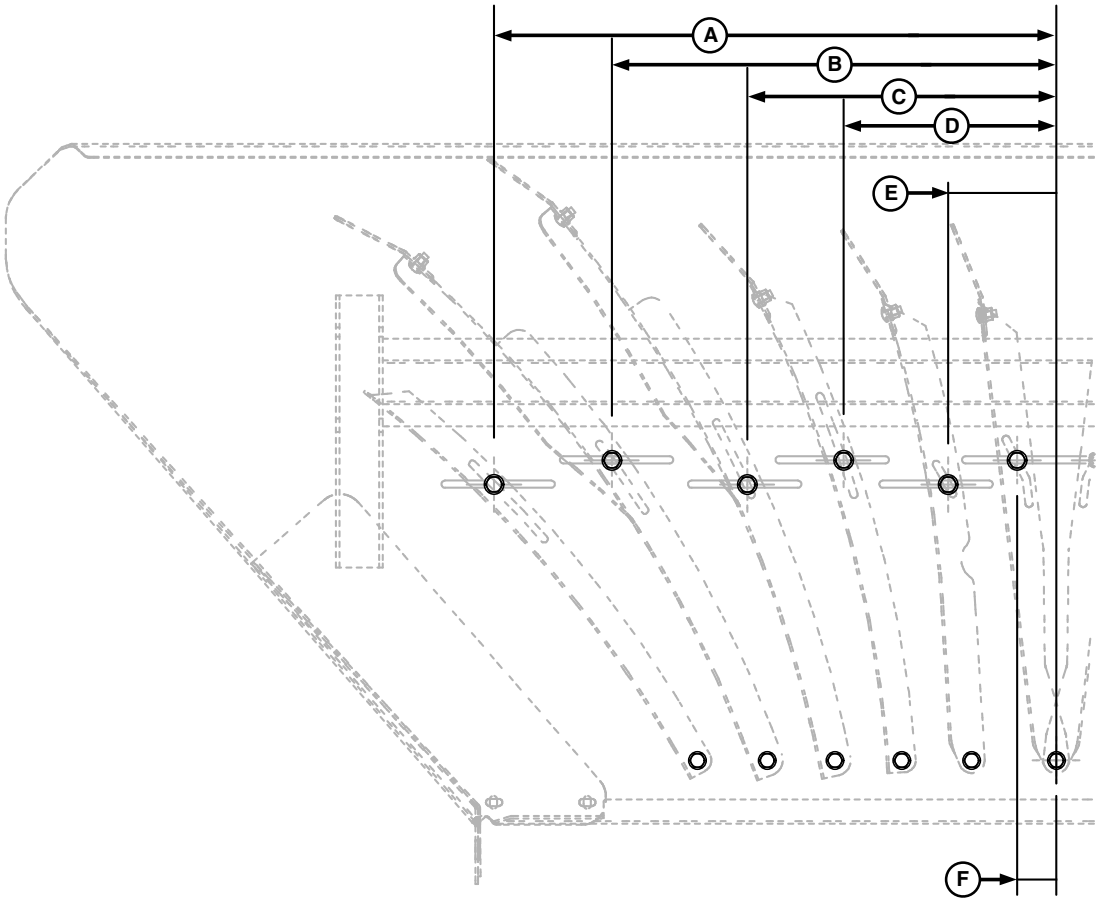
*Tailboard vanes are factory set for 9.1 m (30 ft) platforms.*

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)



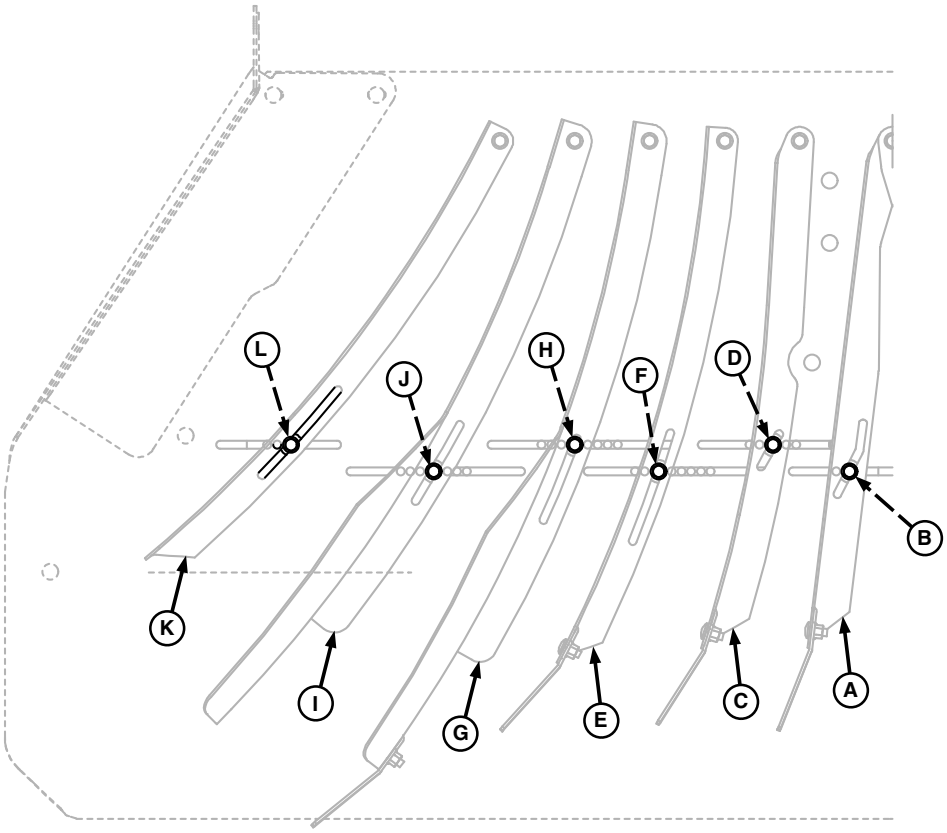

H100407—UN—23FEB11

*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)*

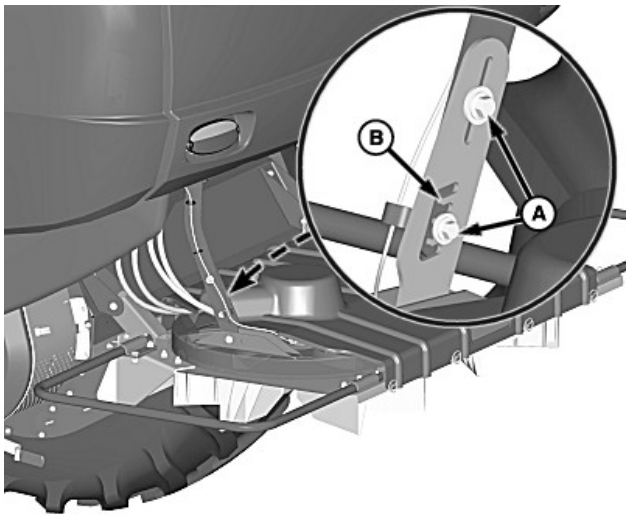
**A—Vane 1**
**B—Second Hole**
**C—Vane 2**
**D—Third Hole**
**E—Vane 3**
**F—Sixth Hole**
**G—Vane 4**
**H—Fifth Hole**
**I—Vane 5**
**J—Fourth Hole**
**K—Vane 6**
**L—First Hole**

*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.

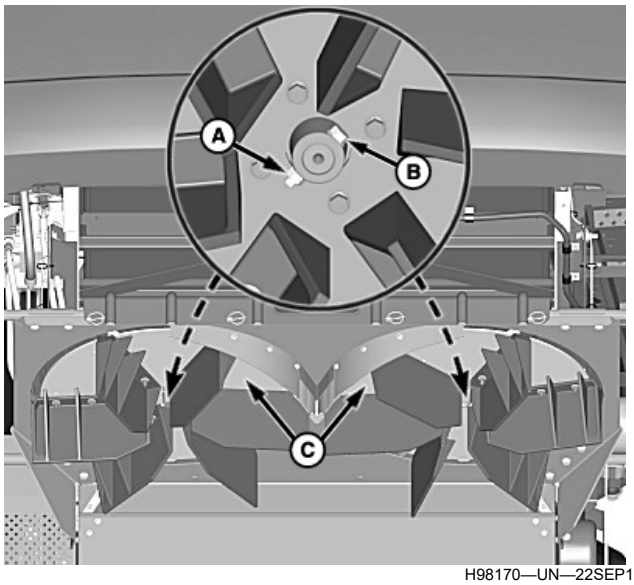
Loosen cap screws (A) on both sides of the PowerCast™ tailboard.

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)



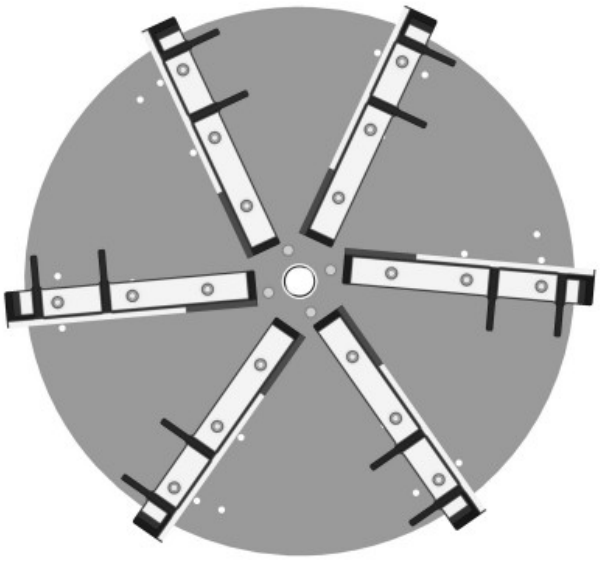

H98170—UN—22SEP10

**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*

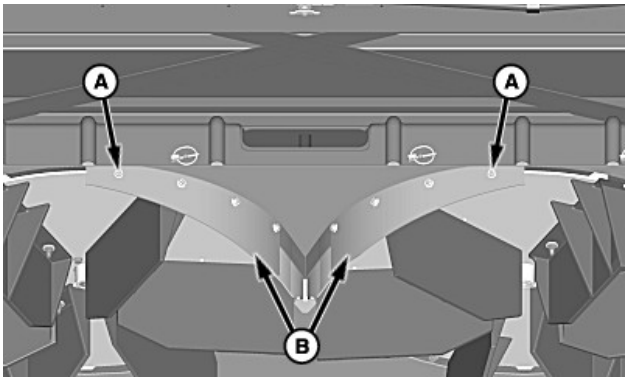
Blades are oriented in alternating hole patterns to obtain an optimum material spread. Ensure that replacement blades are put back in the same holes as previously removed.

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**

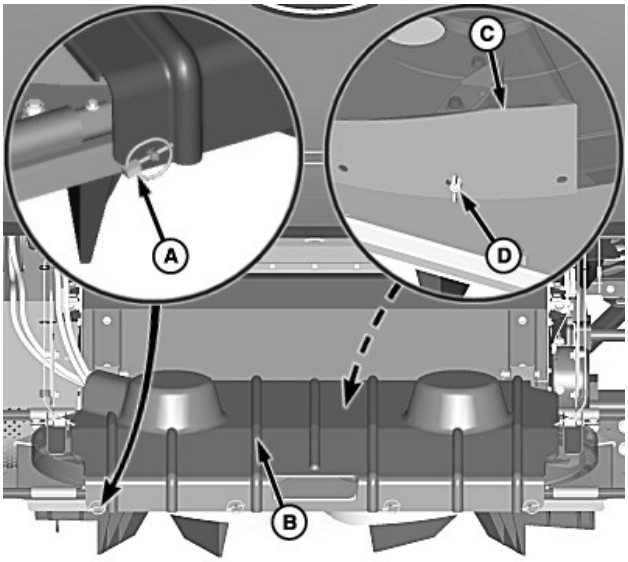
*NOTE: Shrouds can be removed to spread more material towards the center of the machine when harvesting in tough or heavy straw conditions.*

*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

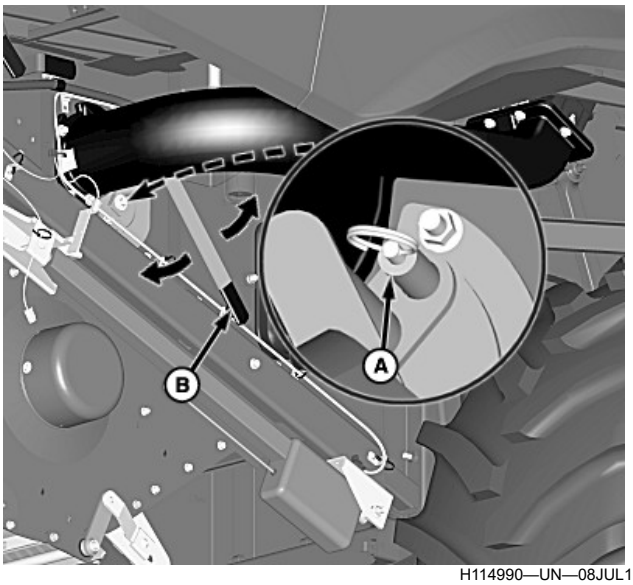
Remove and retain quick-lock pins (A) and shield (B).

Install rear shrouds (C) to weld stud as shown and retain with the wing nut (D).

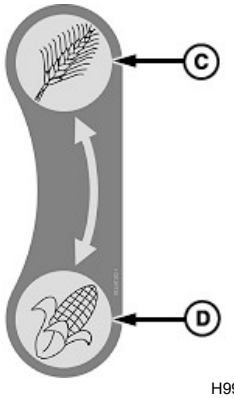
Install previously removed shield and quick-lock pins.

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.

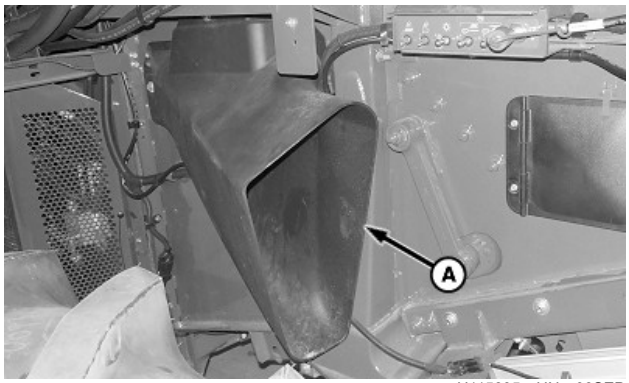
**Large Grain Position (D):**

*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



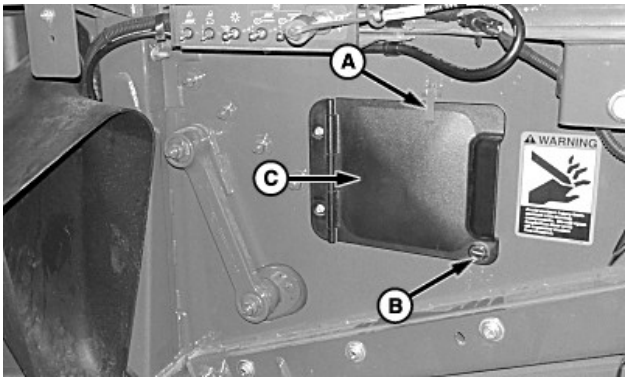

H115835—UN—08SEP15

**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

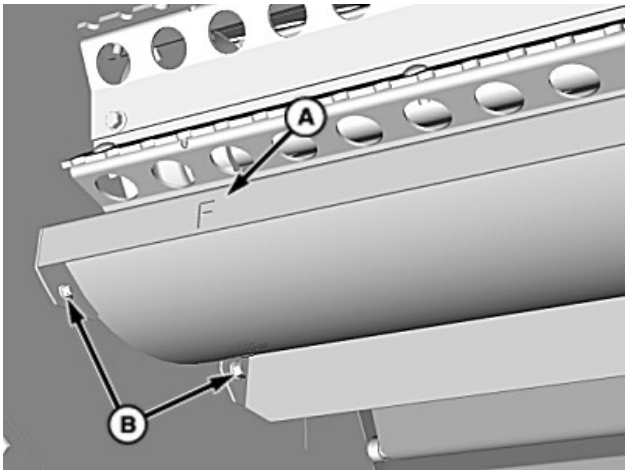
**A—Clip**
**B—Lock**
**C—Cleaning Shoe Access Door**

**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

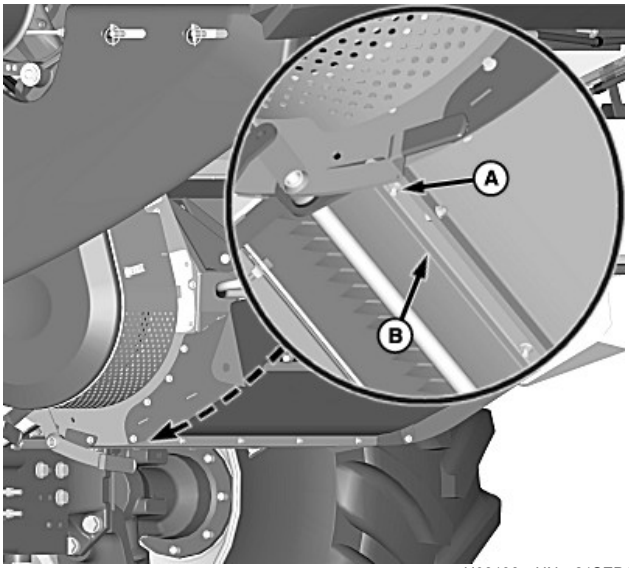
**A—Overshot Beater Floor**
**B—Cap Screw and Nut (2 used)**

*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)



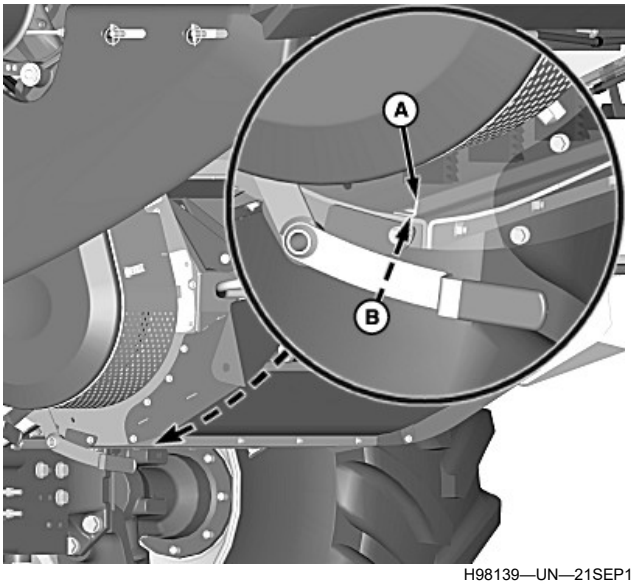

H98138—UN—21SEP10

**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.



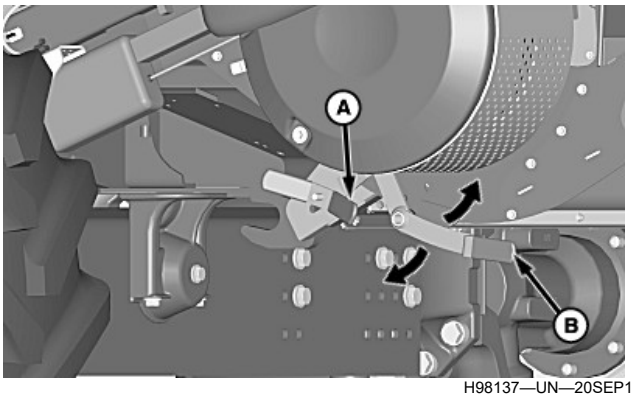

H98139—UN—21SEP10

**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:**

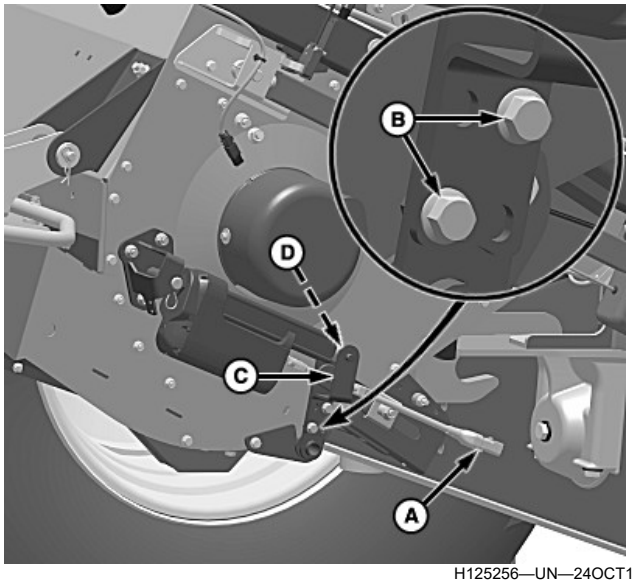
1. Loosen wing nut (A) on chopper.
2. Move adjustment handle (B) downward until the knife bank is at top of the adjustment slot.
3. Tighten wing nut to lock the knife bank into position.

**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)

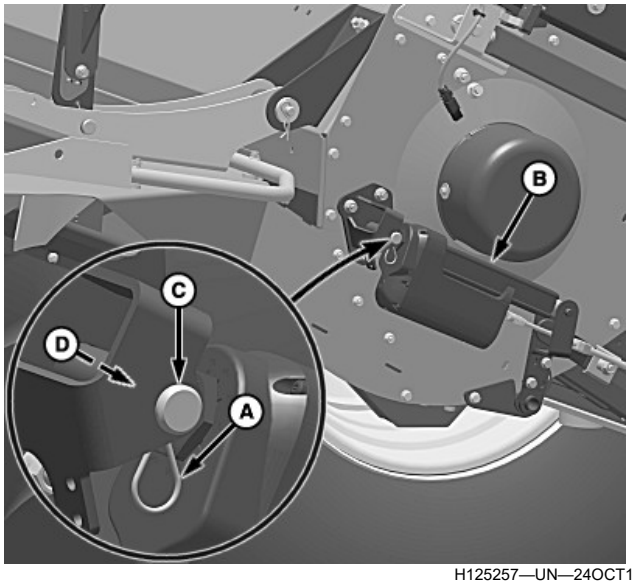



H125256—UN—24OCT18

**A—Electrical Connector**
**B—Cap Screw (2 used)**
**C—Bracket**
**D—Washer (2 used)**

**CAUTION: Shut OFF engine, set park brake, and remove key.**

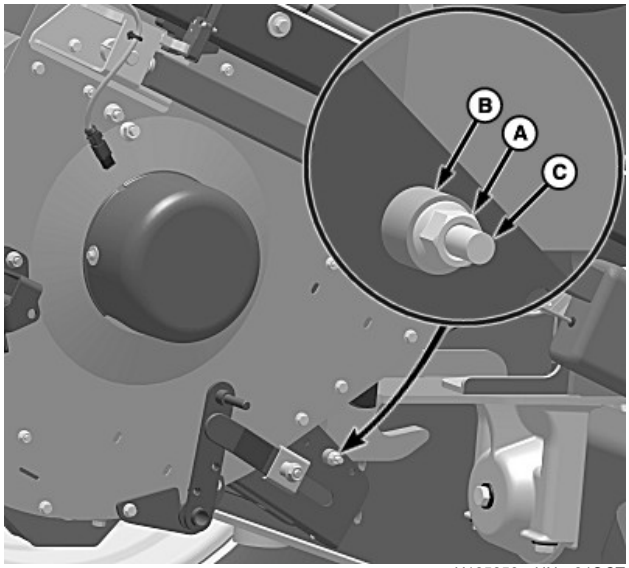
1. Disconnect electrical connector (A).
2. Remove cap screws (B), bracket (C), and washers (D).




H125257—UN—24OCT18

**A—Spring Pin**
**B—Actuator**
**C—Pin**
**D—Washer**

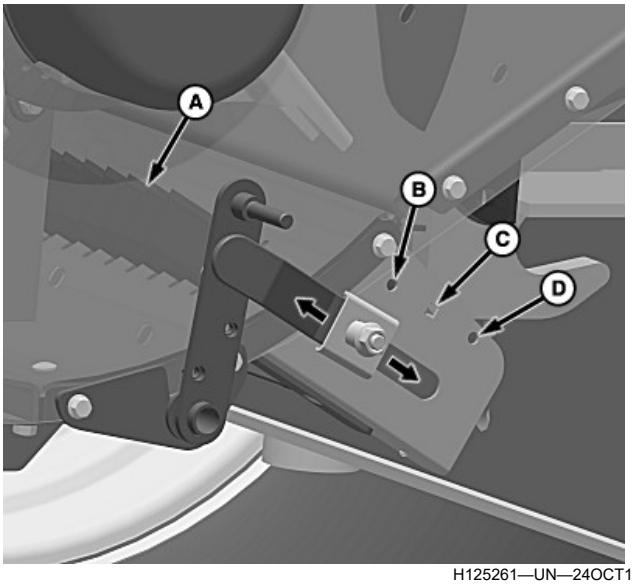
3. Remove spring pin (A).
4. While supporting actuator (B), remove the pin (C) and washer (D).
5. Remove actuator from chopper.




H125258—UN—24OCT18

**A—Nut (2 used)**
**B—Spacer (2 used)**
**C—Cap Screw (2 used)**

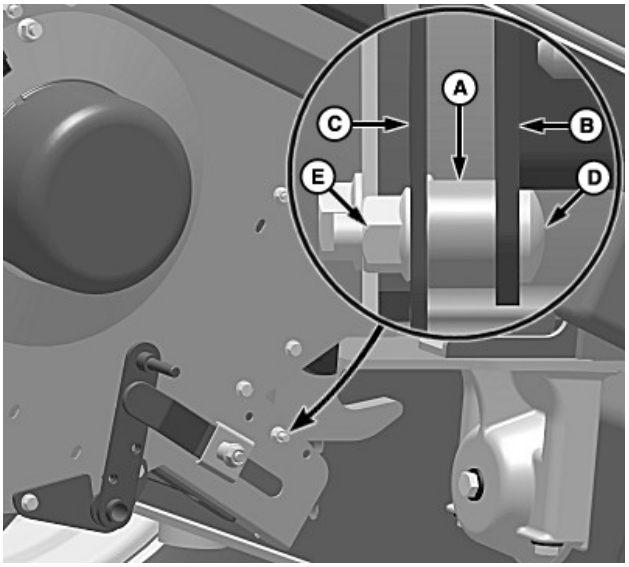
6. Remove nut (A), spacer (B), and cap screw (C) from both sides of the machine.




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.



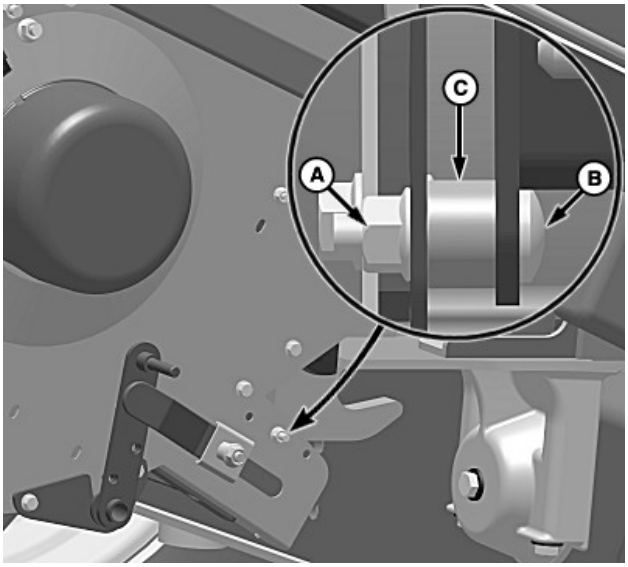

H125260—UN—24OCT18

**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)

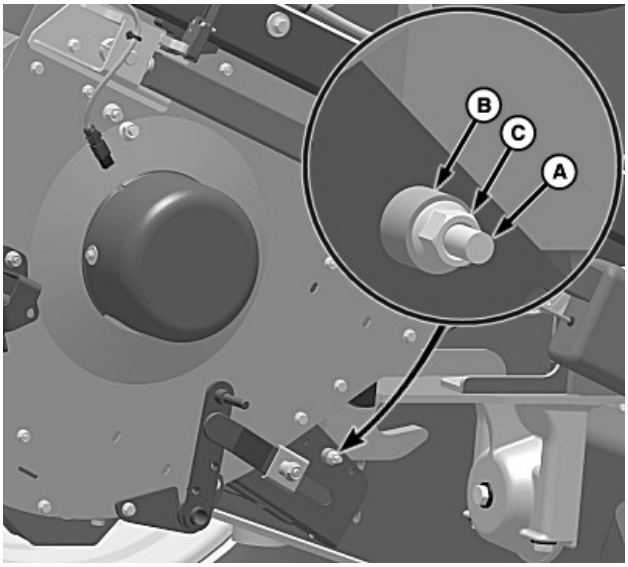



H125262—UN—24OCT18

**A—Nut**
**B—Cap Screw**
**C—Spacer**

**CAUTION: Shut OFF engine, set park brake, and remove key.**

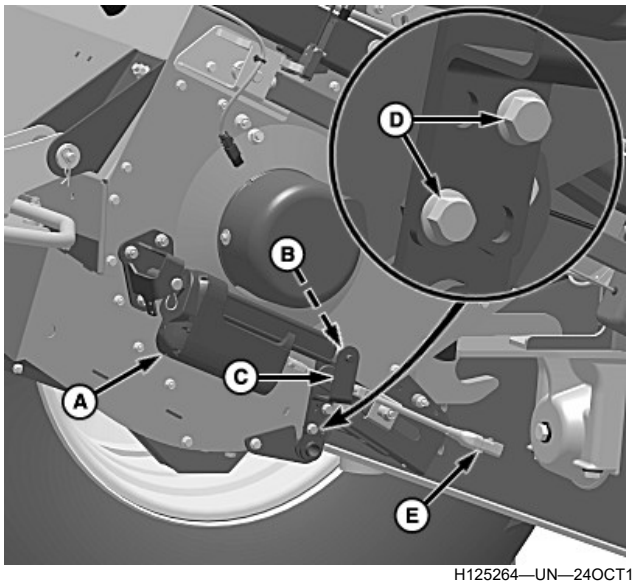
1. Remove nut (A), cap screw (B), and spacer (C) on both sides of the machine.




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

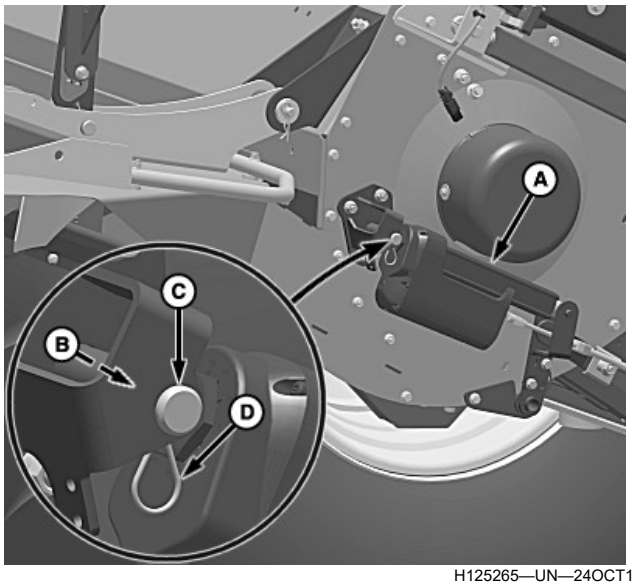
**A—Actuator**
**B—Washer (2 used)**
**C—Bracket**
**D—Cap Screw (2 used)**
**E—Electrical Connector**

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.



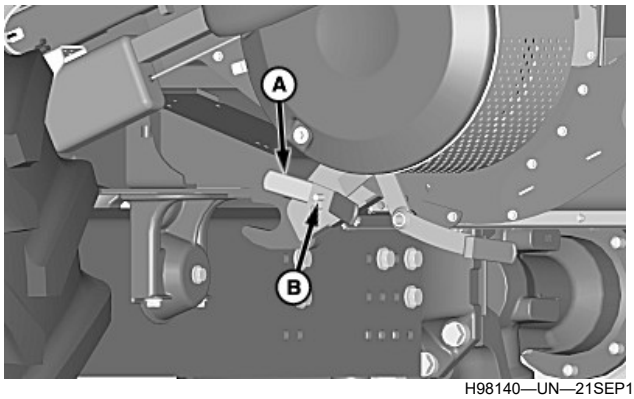

H125265—UN—24OCT18

**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

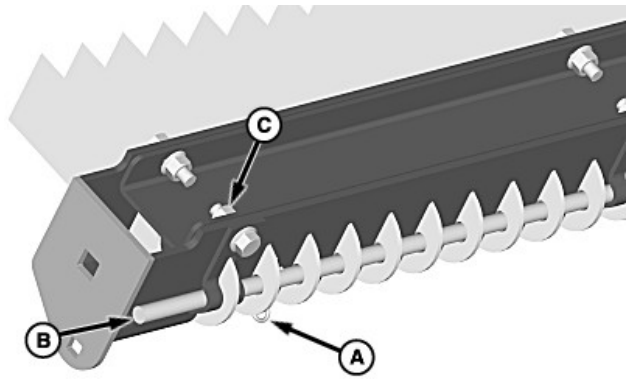
**A—Wing Nut**
**B—Tension Rod**

**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.*

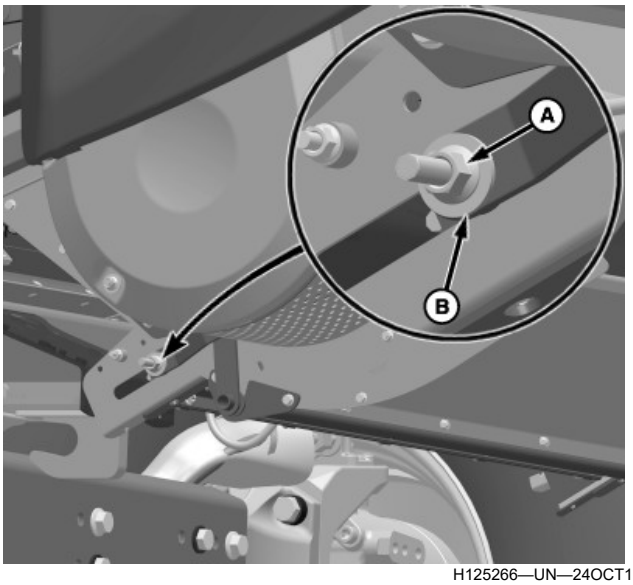
10. Install knife bank and slide tension rod from the right-hand side of the machine.
11. Install wing nut and adjust knife bank to desired position.

**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

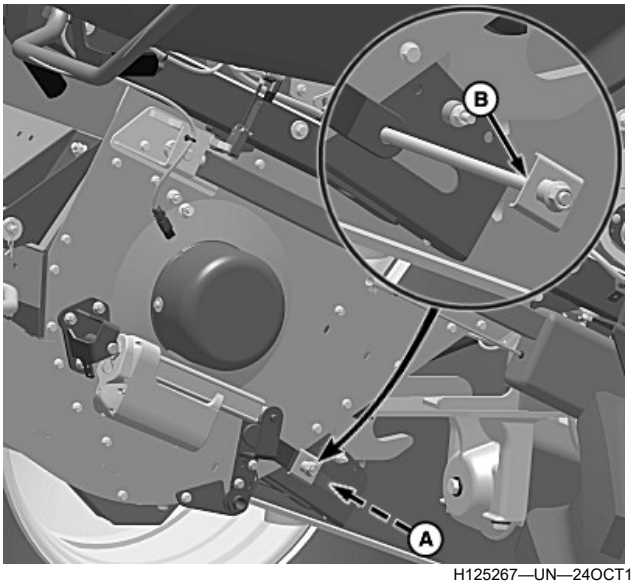



H125266—UN—24OCT18

**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.

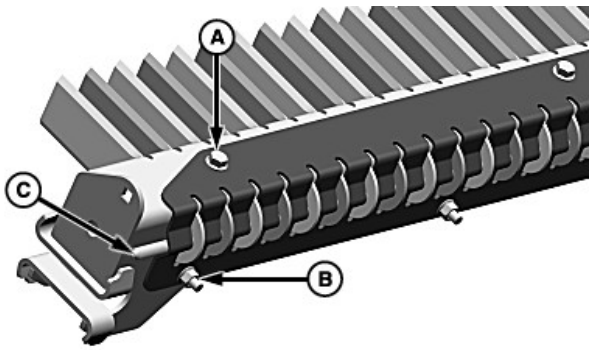



H125267—UN—24OCT18

**A—Knife Bank**
**B—Tension Rod**

*NOTE: Retain bushings at outer ends of the knife bank for later assembly.*

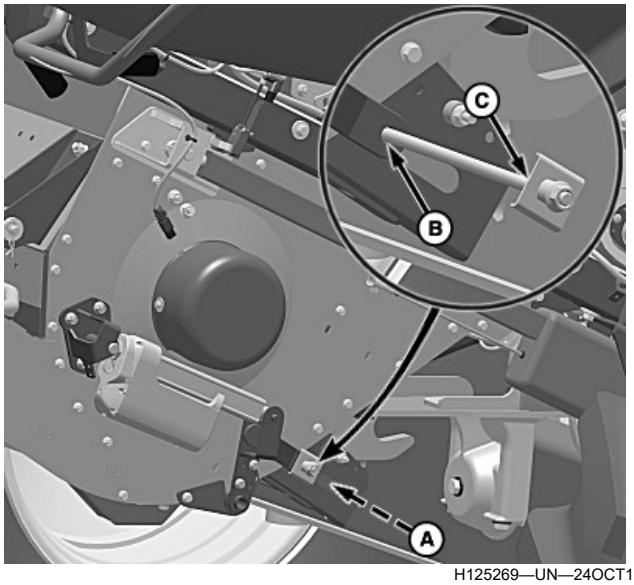
2. While supporting the knife bank (A), remove tension rod (B) from the right-hand side of the machine.




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.*

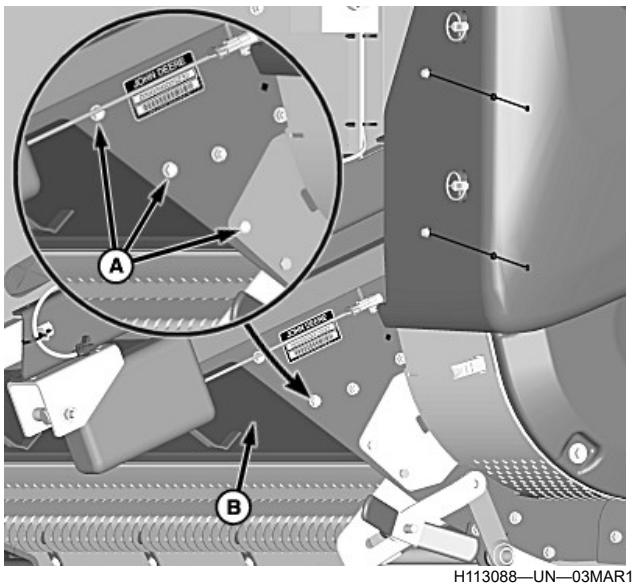
11. Slide the tension rod (C) from the right-hand side of the machine.

**IMPORTANT: Knife bank must be fully disengaged for corn.**

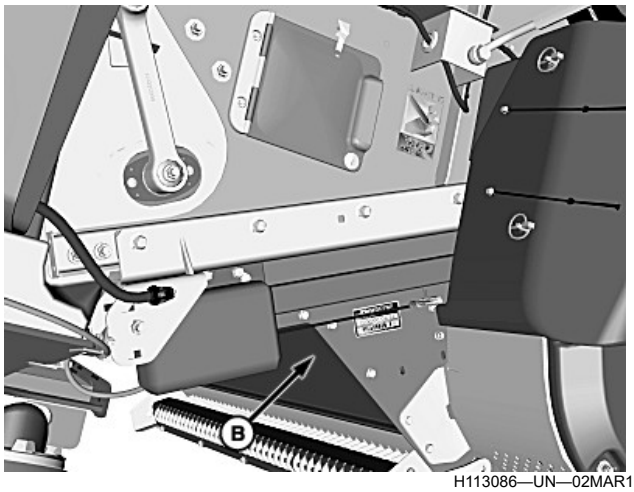
12. On the left-hand side of the machine, install the previously removed washer and retain with the previously removed nut.

OUO6075,0004E9D-19-08JUL20

## Chopper Access Door




H113088—UN—03MAR15




H113086—UN—02MAR15

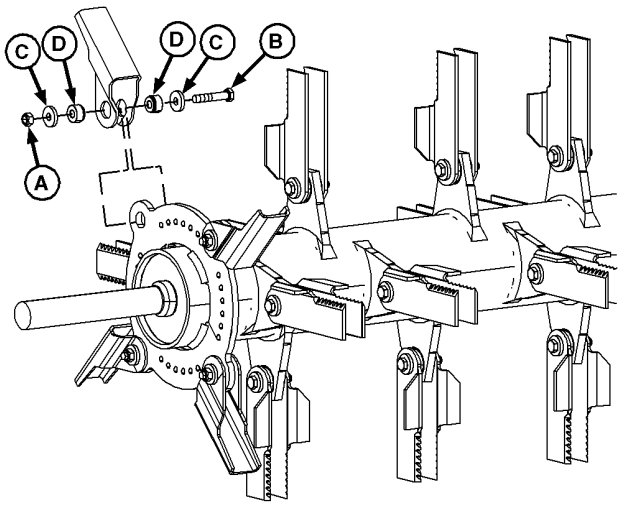
**A—Cap Screw (3 used)**
**B—Access Door**

**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.*

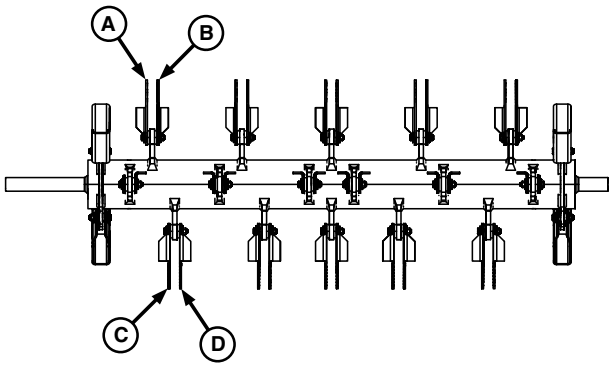
*Install new cap screws and lock nuts in the same direction as it was removed when installing or replacing blades.*

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) |



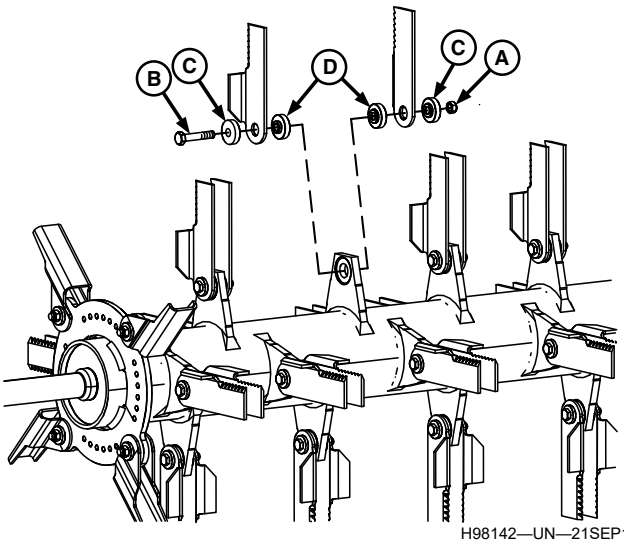

H107307—UN—22MAR13

**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).

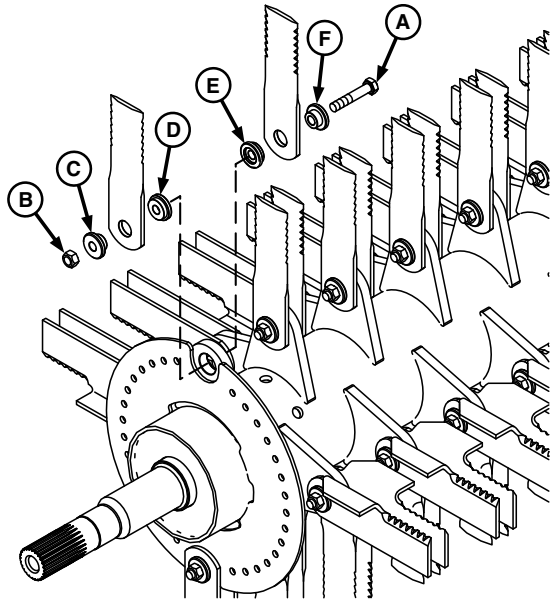
*NOTE: Inspect and replace bushings if worn. Replace lock nuts and cap screws with new hardware.*

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.*

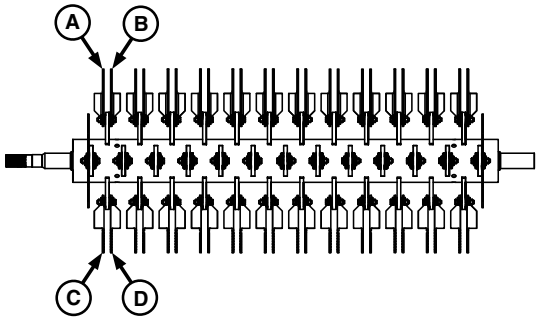
*Install new cap screws and lock nuts in the same direction as it was removed when installing or replacing blades.*

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

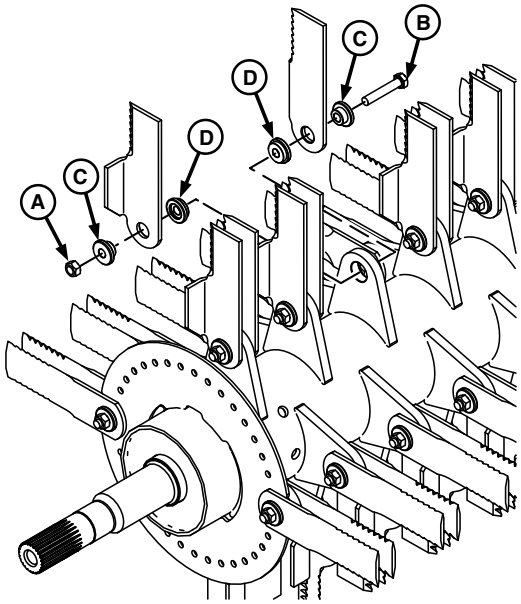
**A—D—Paddle Blades**

### 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).

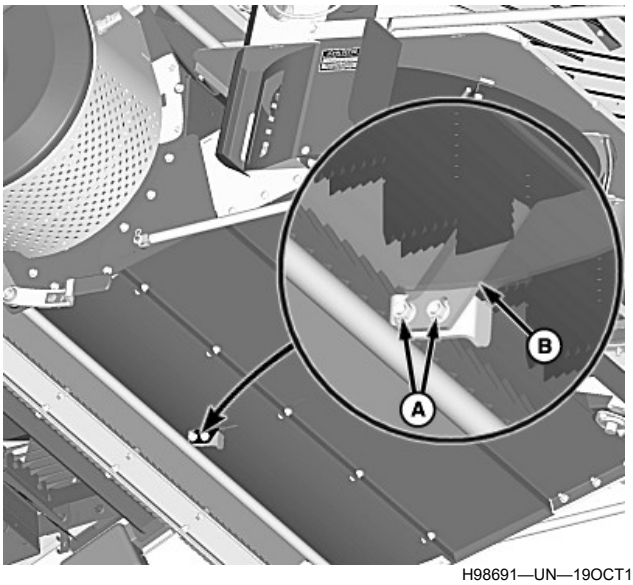
*NOTE: Inspect and replace bushings if worn. Replace lock nuts and cap screws with new hardware.*

Replace blades and bushings. Install cap screw and lock nut. Tighten nut to specification.

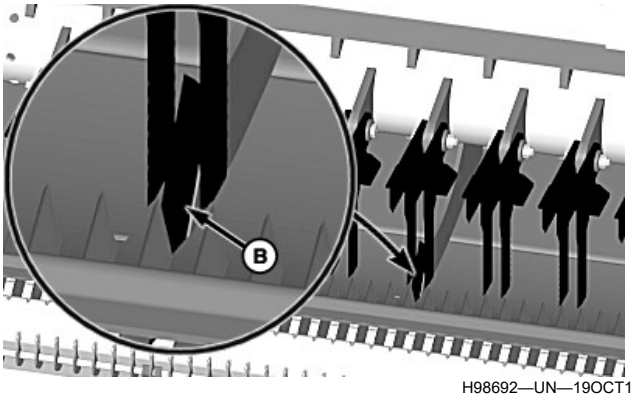
| Specification | |
|---|---|
| Chopper Blade Lock Nut—Torque | 65 N·m (48 lb·ft) |

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.**

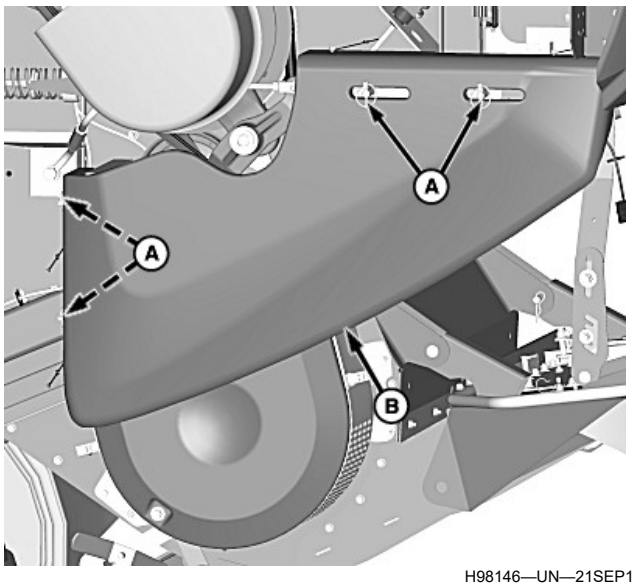
Remove hardware (A) and discard middle splitter knife (B).

*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

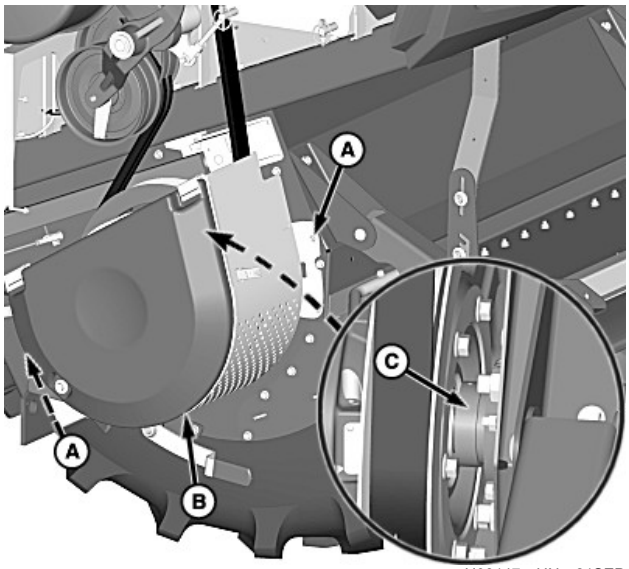



H98146—UN—21SEP10

**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).

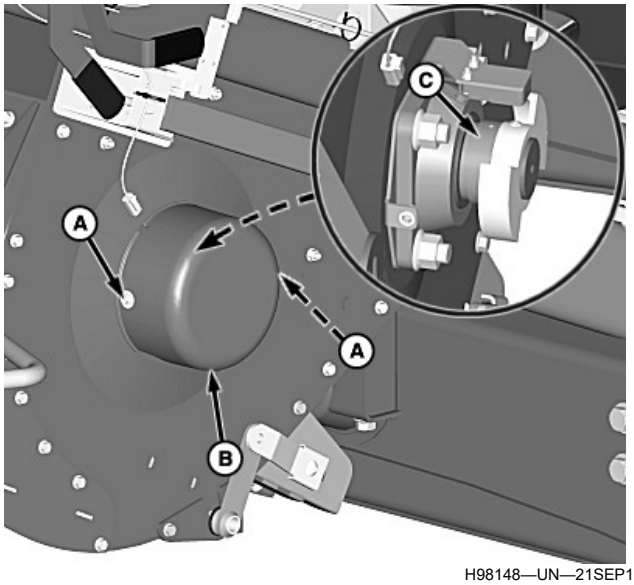



H98147—UN—21SEP10

**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.

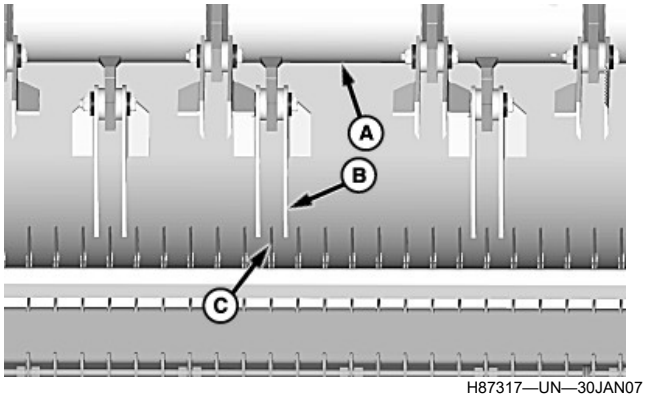



H98148—UN—21SEP10

**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**

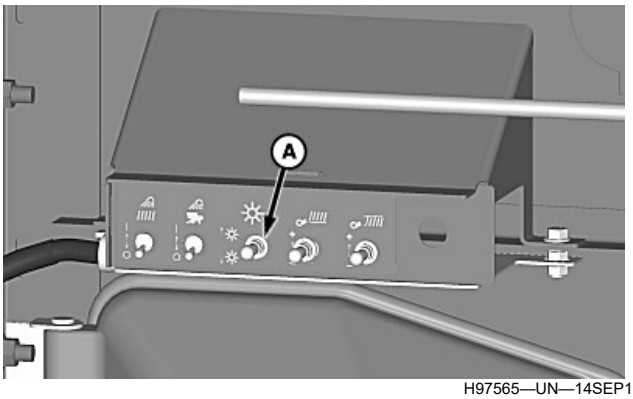
Position chopper rotor (A) right or left to ensure all rotor blades (B) clear stationary knives (C).

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

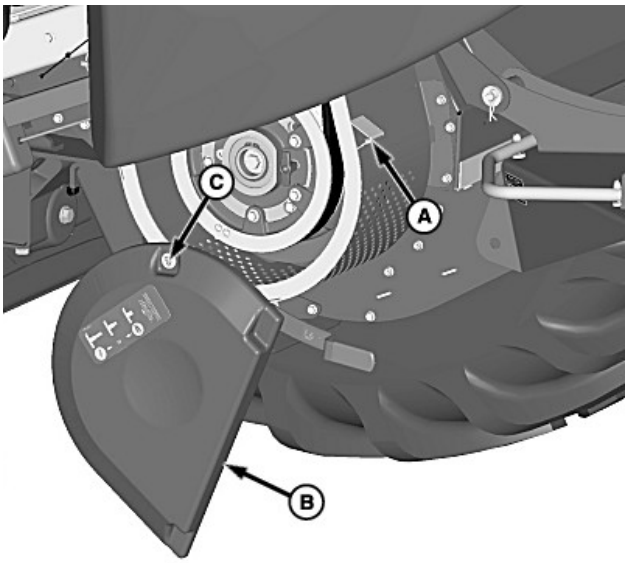
**A—Chopper Switch**

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

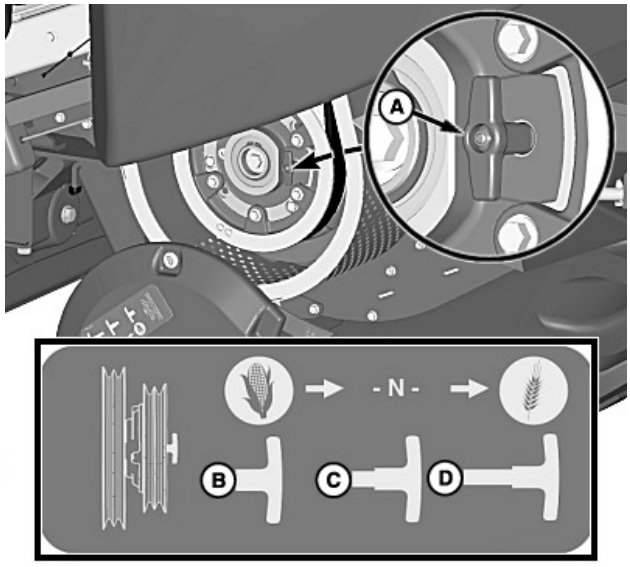
**A—Latch**
**B—Shield**
**C—Pivot**

**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.*

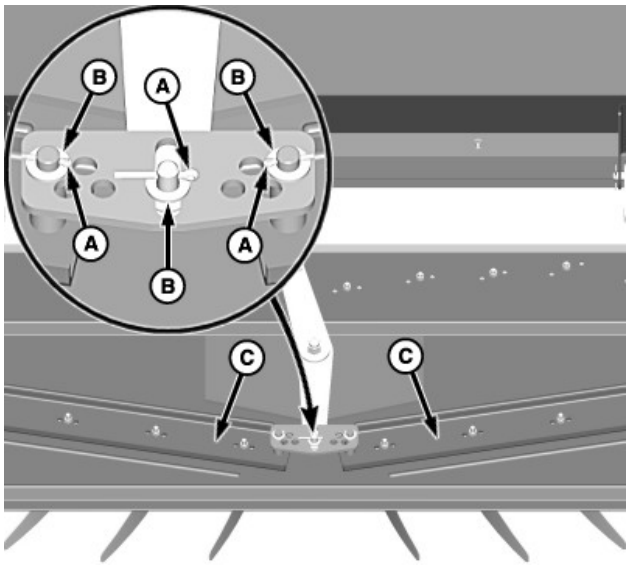
Move shifter handle (A) to position (D).

- Grain

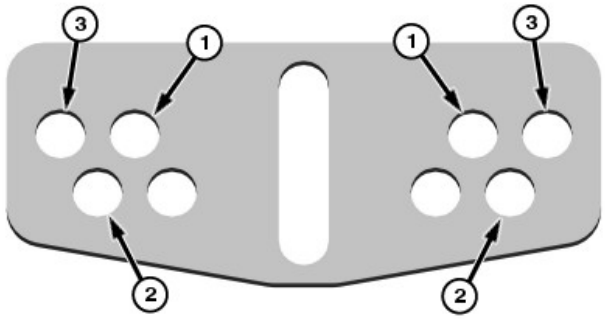
Close shield and retain with latch.

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).

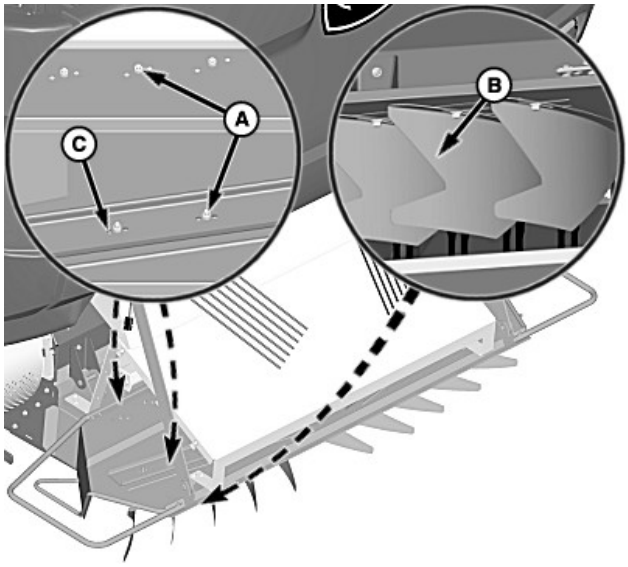
Adjust slide guides (C) to desired holes in the adjustment plate.

- 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.*

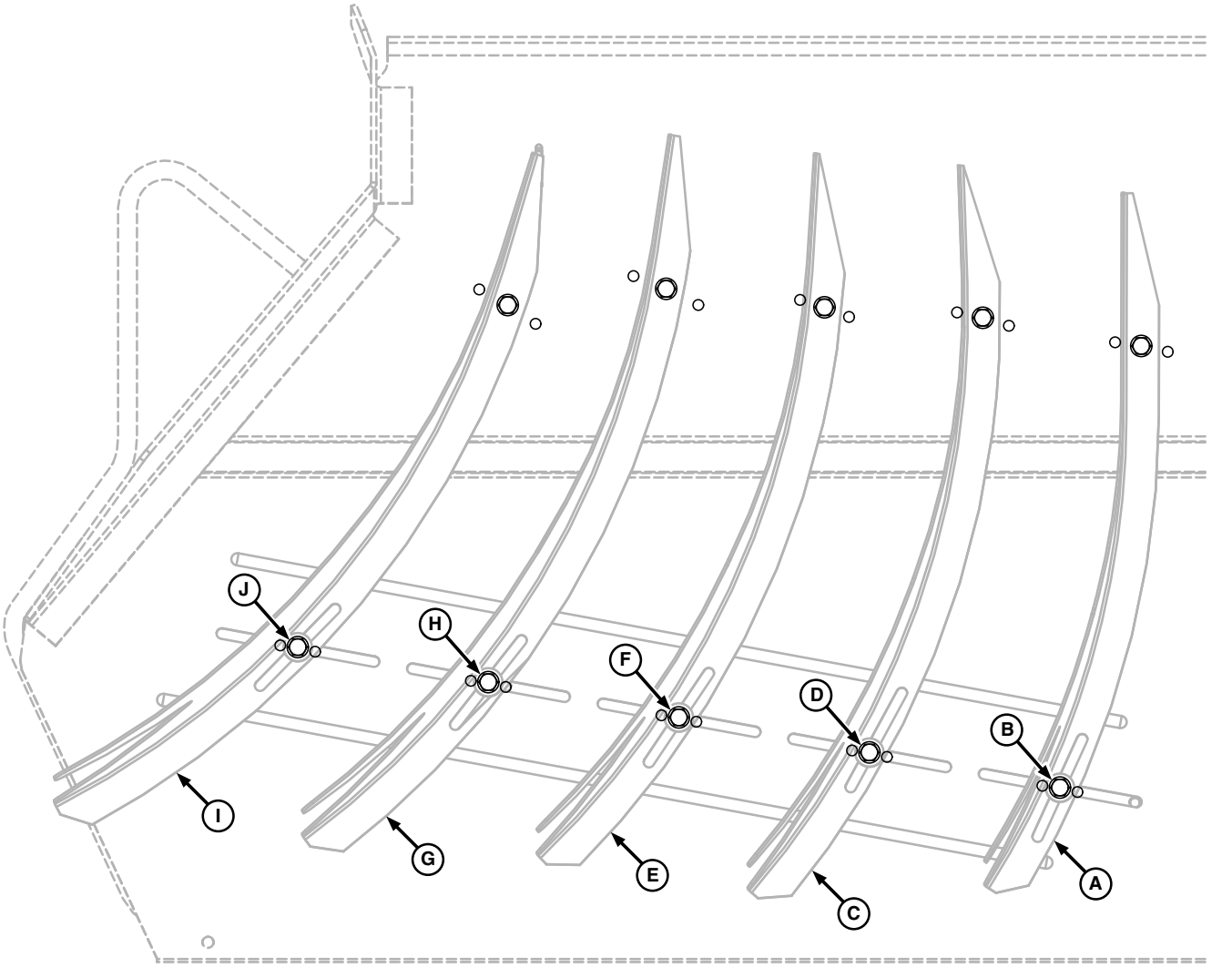
*Tailboard vanes are factory set for 9.1 m (30 ft) platforms.*

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

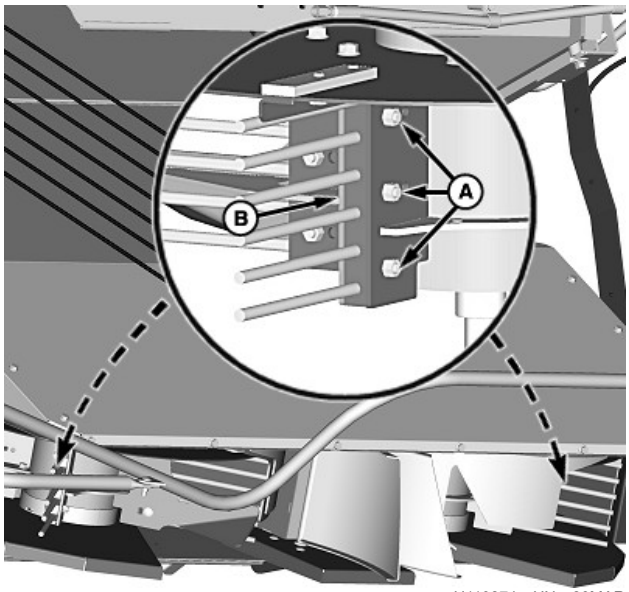
*Tailboard Vane Settings For 9.1 m (30 ft) Platforms (View From Below Tailboard)*

**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**

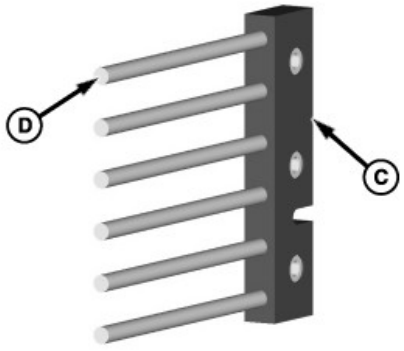
*NOTE: Hole locations are from center of tailboard outward when adjusting tailboard vanes.*

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).

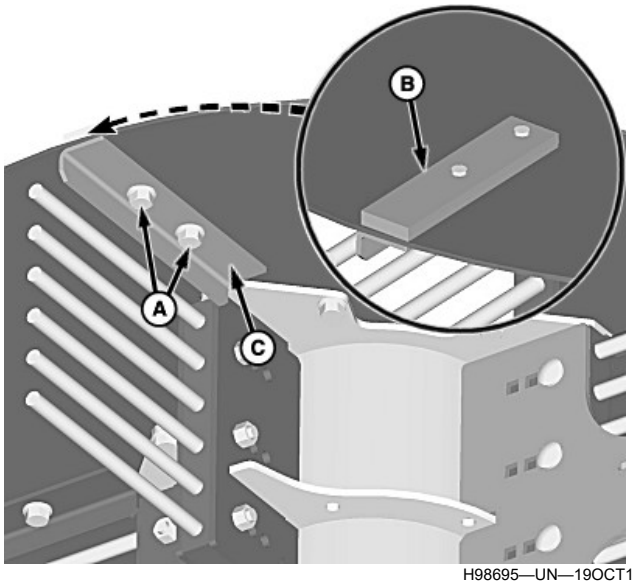
Inspect and replace rubber support (C) and fingers (D) as needed. See your John Deere dealer for replacement parts.

**IMPORTANT: Replace all rubber supports to maintain disk rotational balance.**

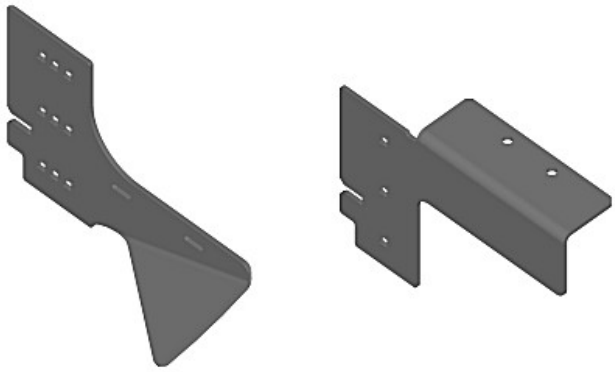
Install replacement rubber support and fingers as needed.

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.**

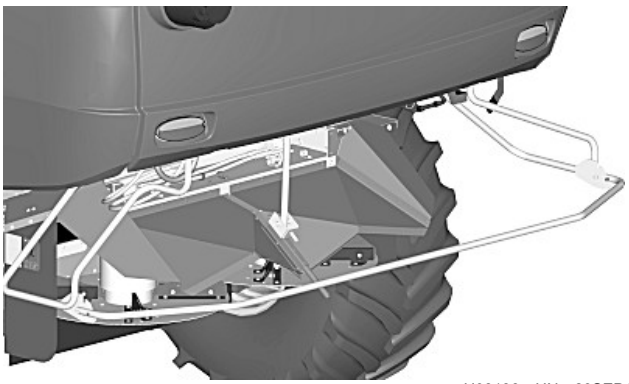
Install replacement paddle bracket as needed.

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.*

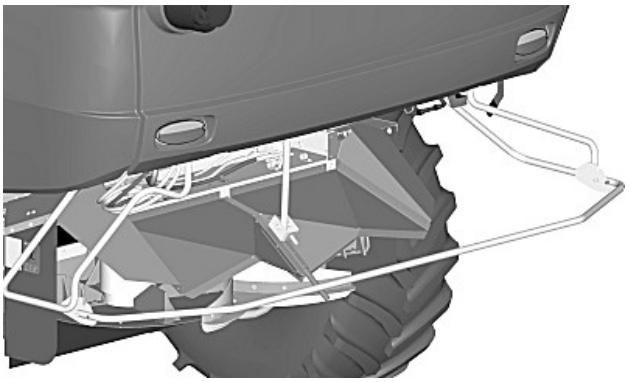
SS43267,0000592-19-26MAR15

## Spreader (General Information)



H98186—UN—23SEP10

*Single Speed Spreader*



H98187—UN—23SEP10

*Dual Speed Spreader*

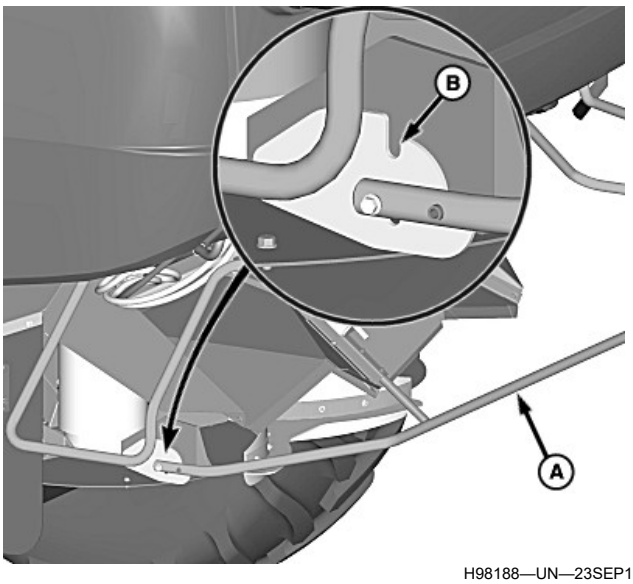
**CAUTION: Do not let anyone stand behind the spreader while it is running. Shut OFF engine, set park brake and remove key before adjusting spreader.**

**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

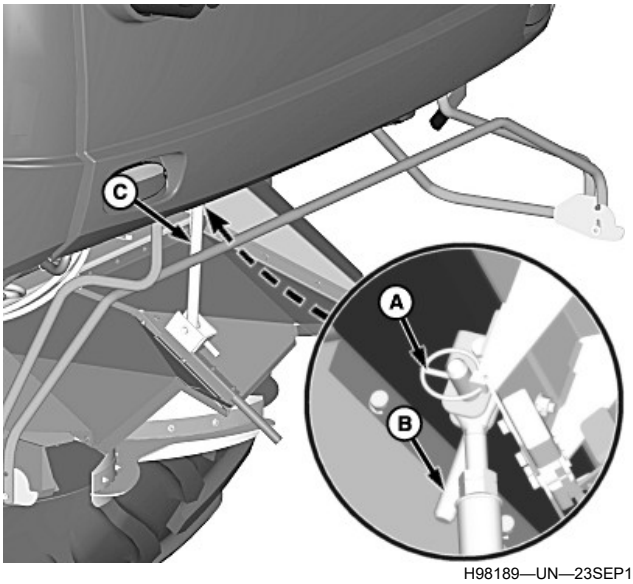
**A—Spreader Hoop**
**B—Notch**

**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.

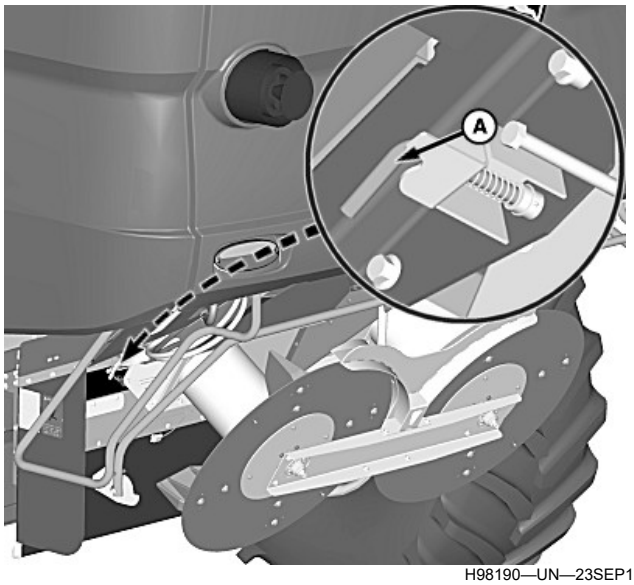



H98189—UN—23SEP10

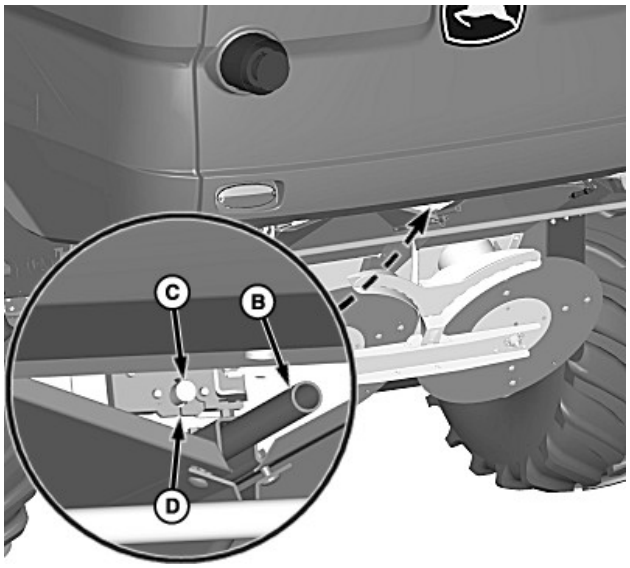
**A—Quick-Lock Pin**
**B—Pin**
**C—Support Tube**

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**

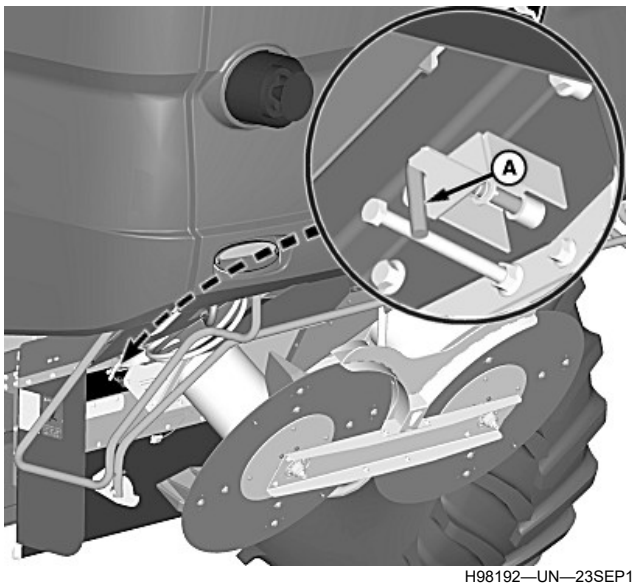
Pull pin (A) to fully raise the spreader.

Raise spreader with handle (B) until the pin (C) fully engages with latch assembly (D).

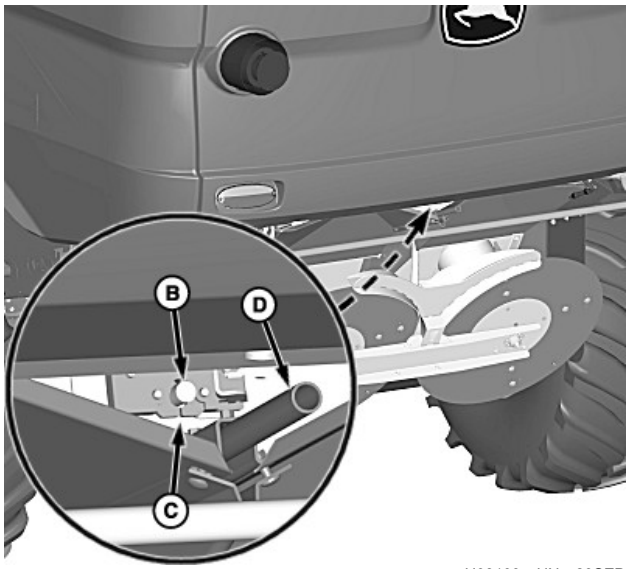
*NOTE: Set Spreader speed to zero. See Residue Management Application Help or Operator's Station Help for further information.*

OUO6075,000436F-19-19DEC16

## Spreader—Lowering




H98192—UN—23SEP10



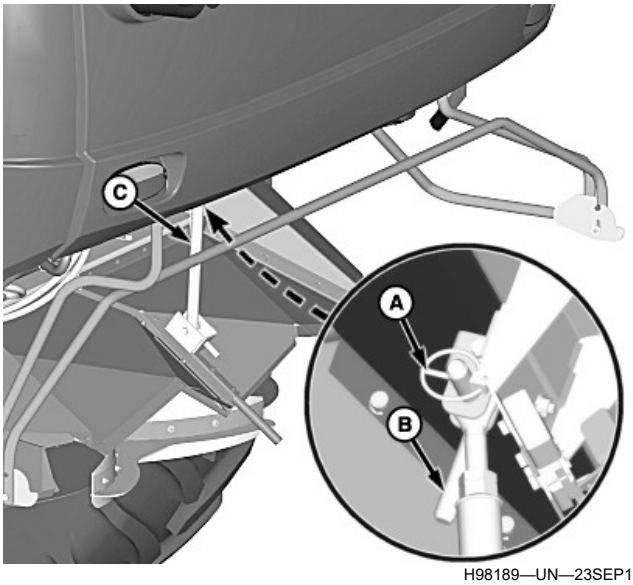

H98193—UN—23SEP10

**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

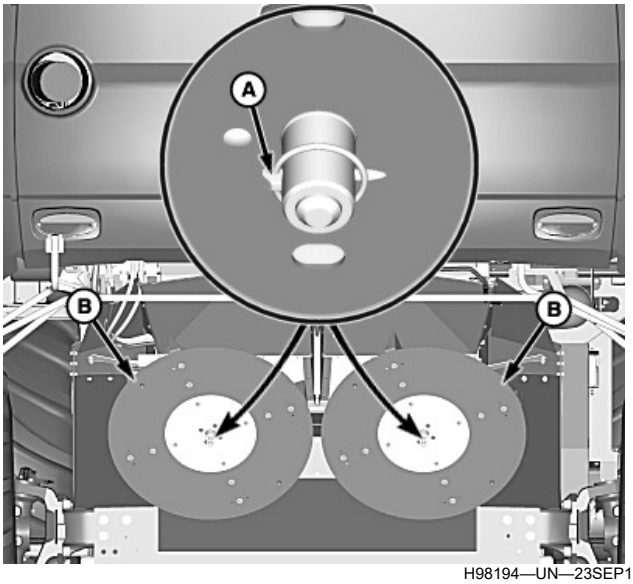
**A—Quick-Lock Pin**
**B—Pin**
**C—Support Tube**

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

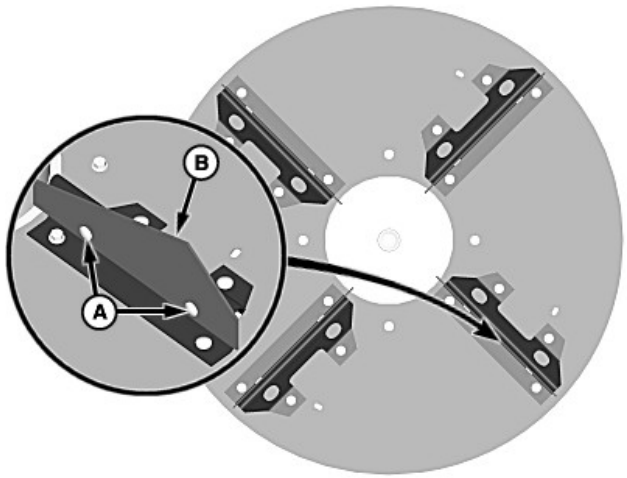
**A—Quick-Lock Pin**
**B—Disk Assemblies**

**⚠ 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.**

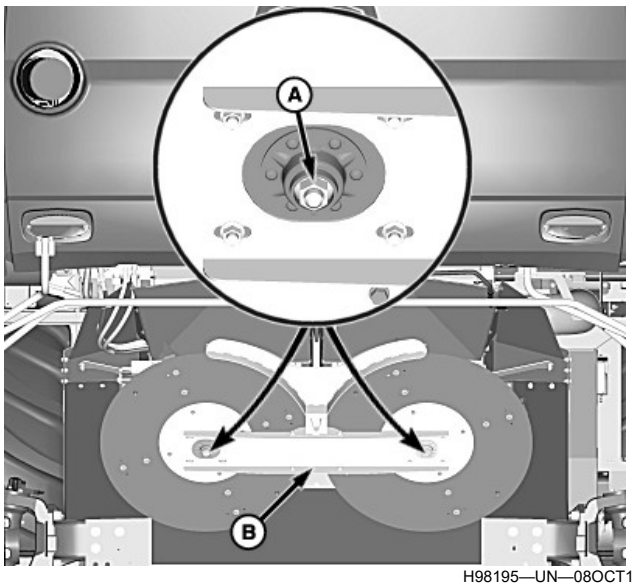
Blades are oriented in alternating hole patterns to obtain an optimum material spread. Ensure that replacement blades are put back in the same holes as previously removed.

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

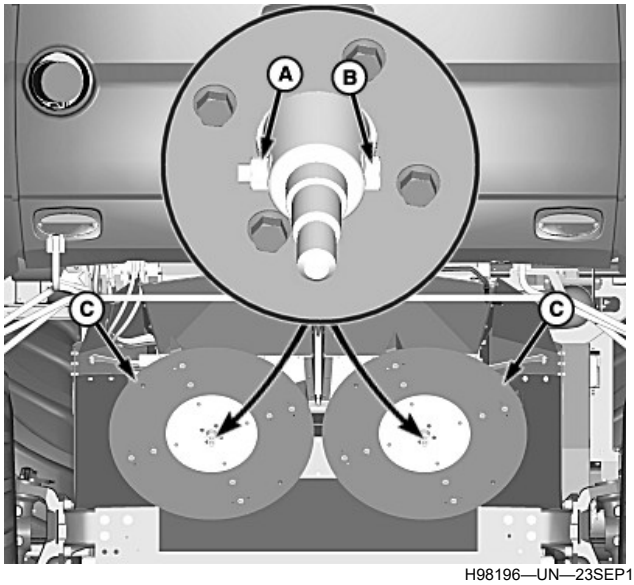
**A—Nut**
**B—Support Shroud**

**⚠ 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.*

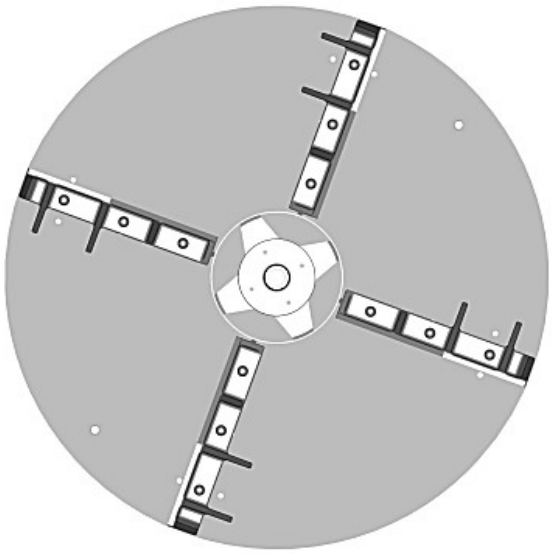
Remove nuts (A) and support shroud (B).




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.**

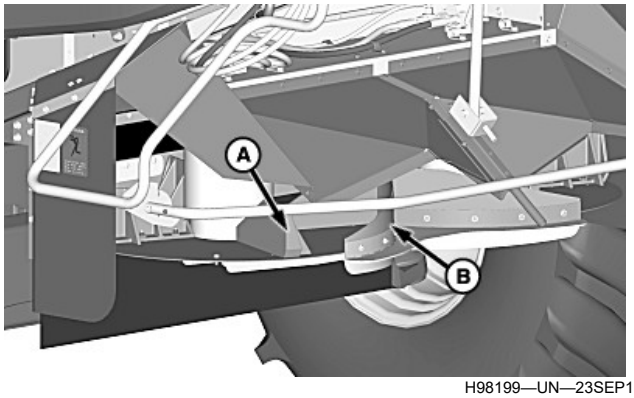
Blades are oriented in alternating hole patterns to obtain an optimum material spread. Ensure that replacement blades are put back in the same holes as previously removed.

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**

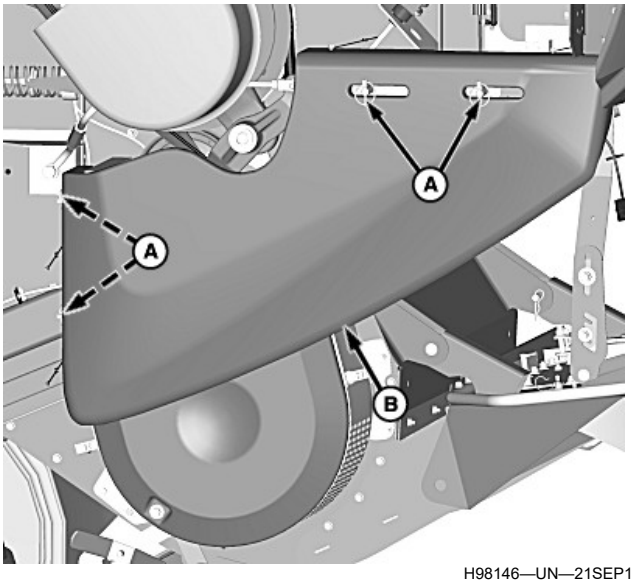
**⚠ CAUTION: Do not let anyone stand behind spreader while it is running. Shut OFF engine, set parking brake and remove key before adjusting spreader.**

*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



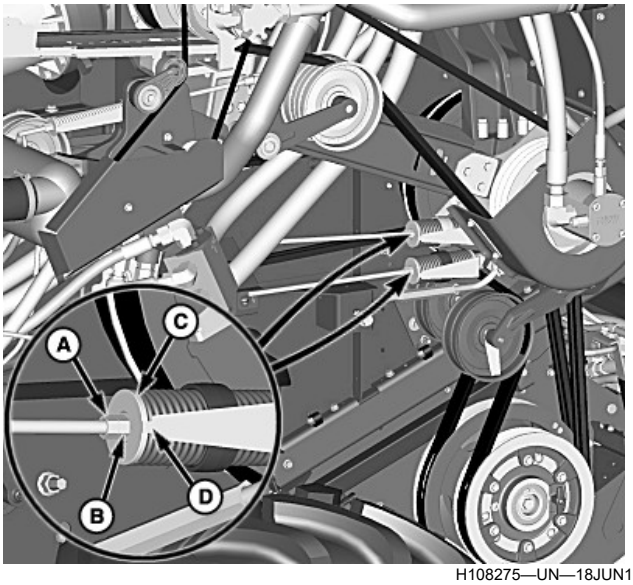

H98146—UN—21SEP10

**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

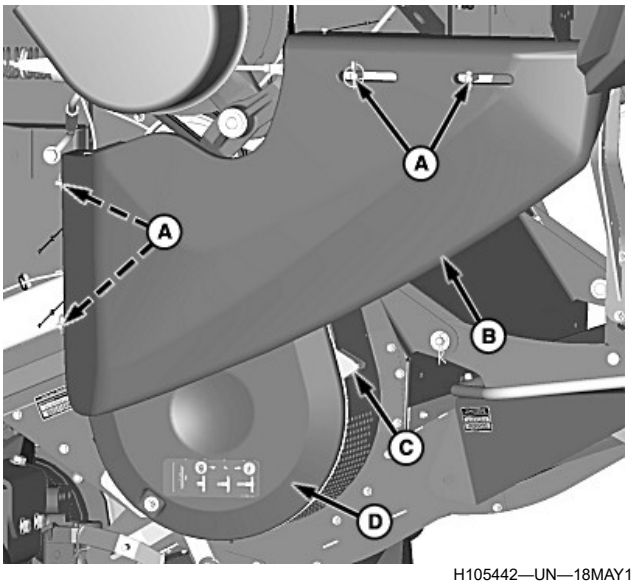
**A—Lock Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

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

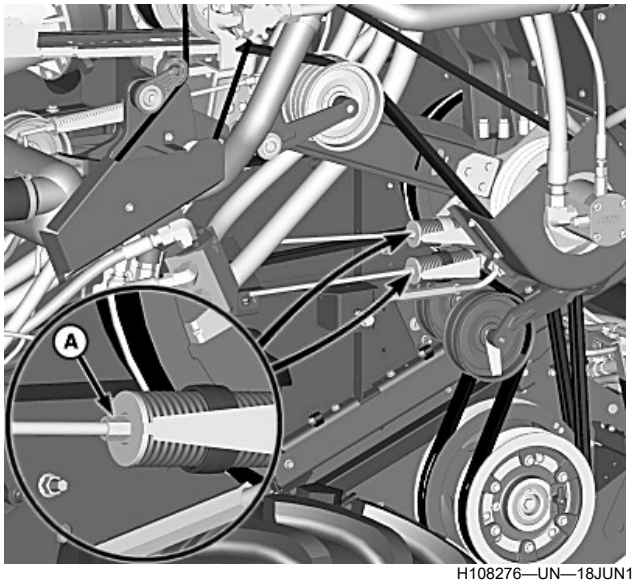
**A—Quick-Lock Pins**
**B—Shield**
**C—Latch**
**D—Shield**

**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.

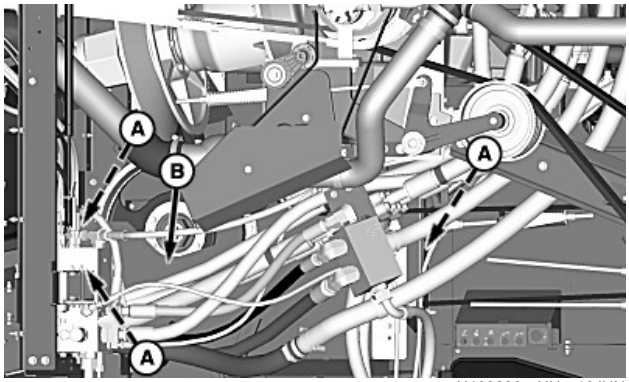



H108276—UN—18JUN13

**A—Nuts**

*NOTE: Mark location of tensioner nuts before loosening to aid in reassembly.*

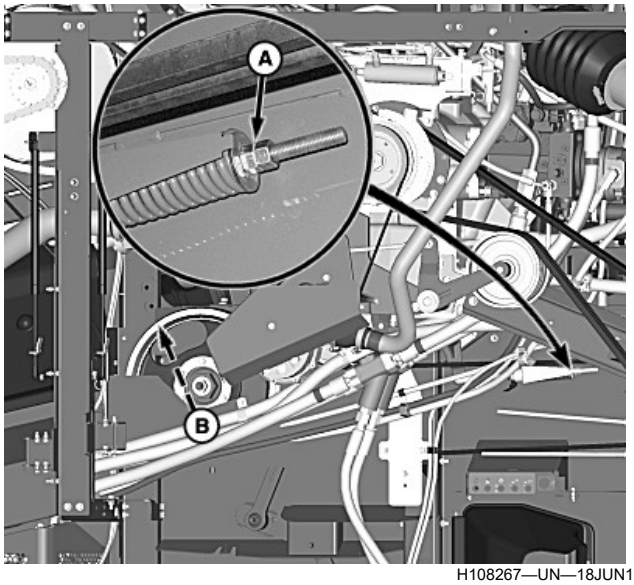
Loosen nuts (A) to relieve belt tension.




H108266—UN—18JUN13

**A—Cap Screws**
**B—Shield**

Remove cap screws (A) and shield (B).

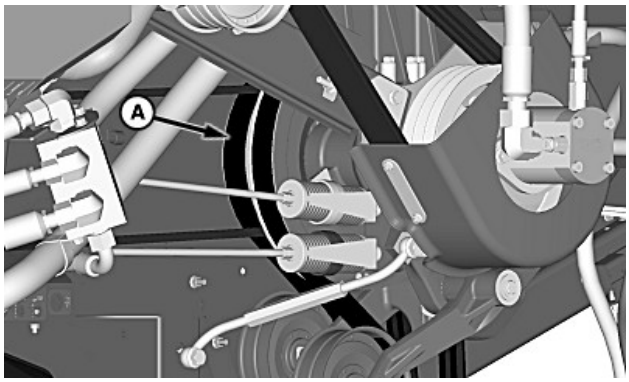



H108267—UN—18JUN13

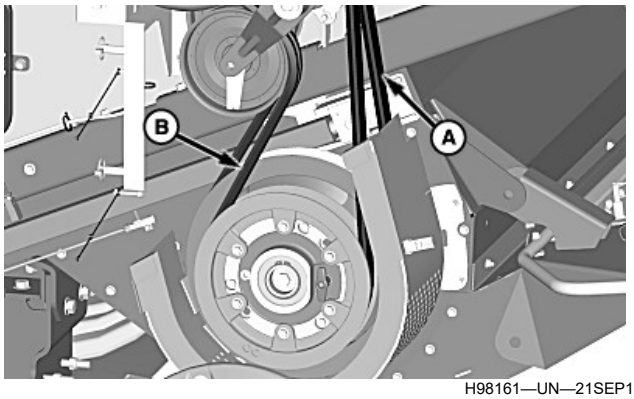
**A—Nuts**
**B—Discharge Beater Belt**

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.*

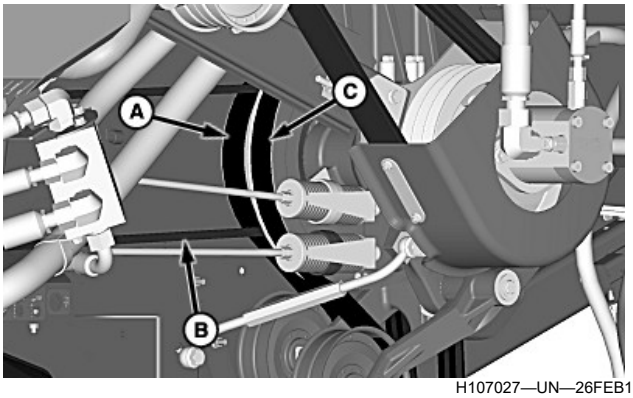
Remove inner chopper drive belt (A) from upper sheaves.

Remove outer chopper drive belt (B) from lower sheaves.

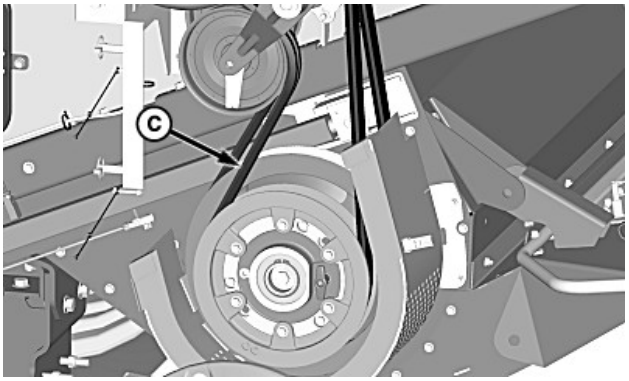
Remove inner chopper drive belt from lower sheaves.

Install replacement belt in reverse order.

**Outer Chopper Belt:**




H107027—UN—26FEB13




H107028—UN—26FEB13

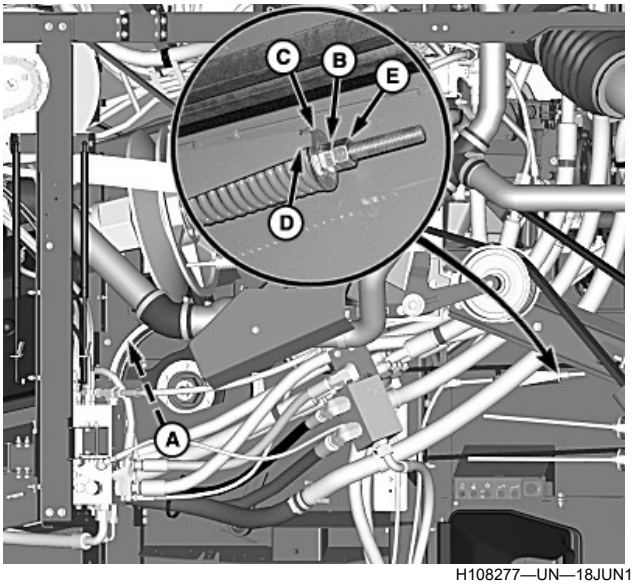
**A—Inner Chopper Drive Belt**
**B—Discharge Beater Belt**
**C—Outer Chopper Drive Belt**

*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.

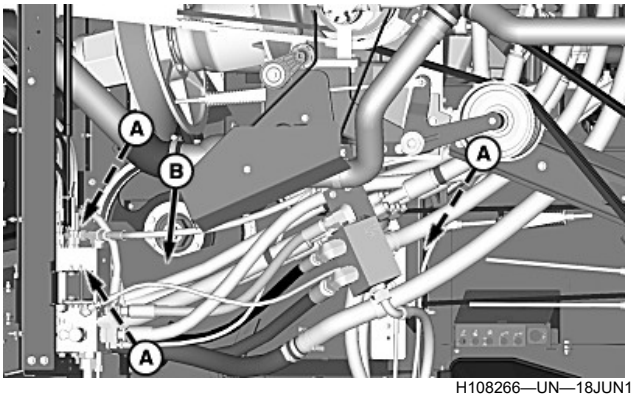



H108277—UN—18JUN13

**A—Discharge Beater Belt**
**B—Nut**
**C—Washer**
**D—Gauge**
**E—Lock Nut**

Install discharge beater belt (A) onto sheave.

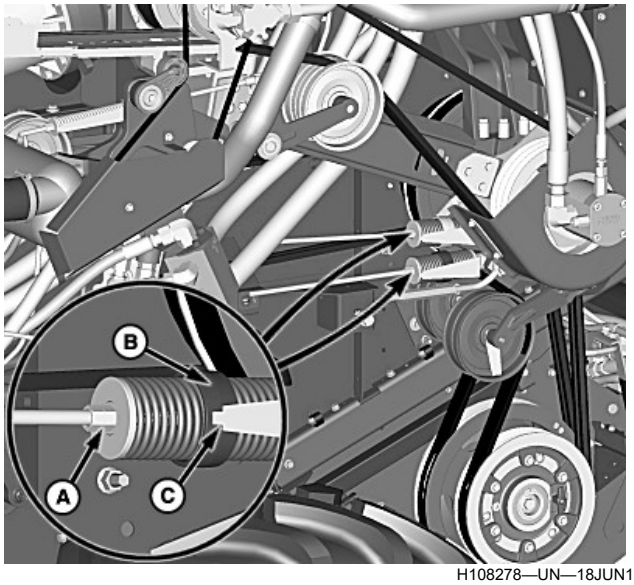
Tighten nut (B) until washer (C) is positioned between end of gauge (D) and bottom of step. Tighten lock nut (E).




H108266—UN—18JUN13

**A—Cap Screws**
**B—Shield**

Install shield (B) and retain with cap screws (A).

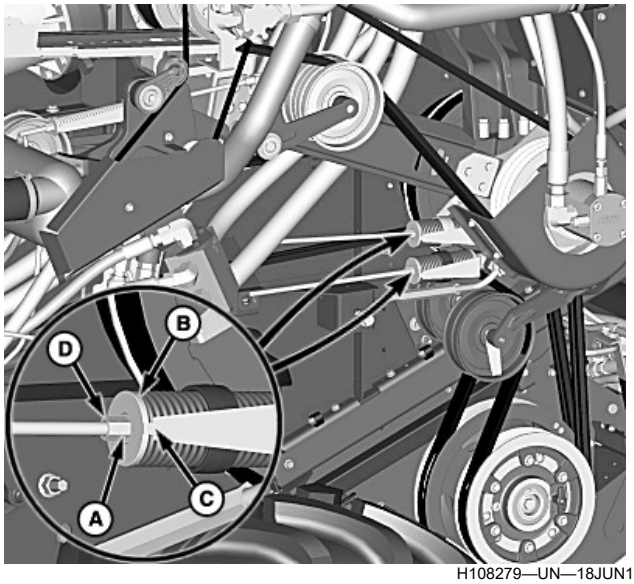



H108278—UN—18JUN13

**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**

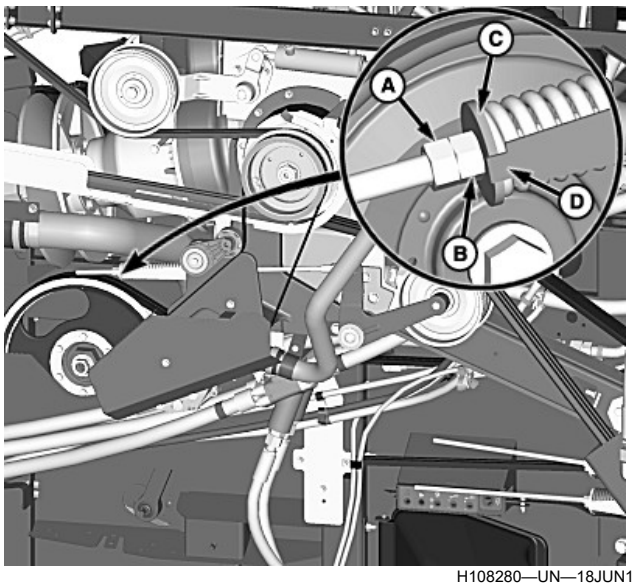
Lower chopper completely to properly tension belt.

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.

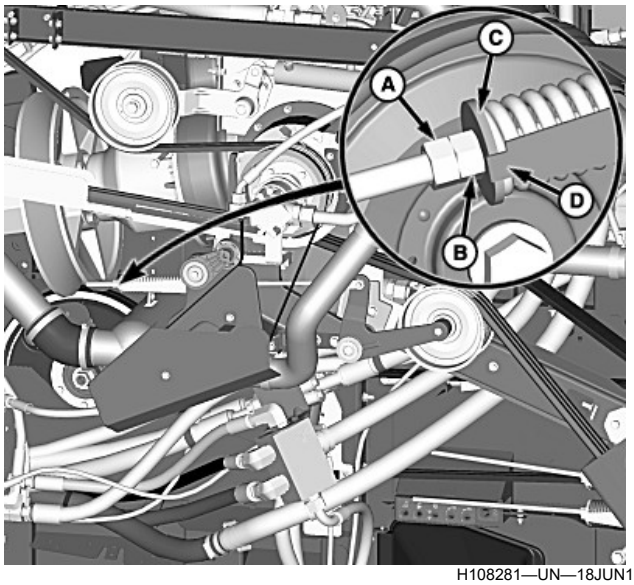
OUO6075,00013E0-19-18JUN13

## Chopper Jackshaft Belt—Adjusting




H108280—UN—18JUN13

*Style A*




H108281—UN—18JUN13

*Style B*

**A—Lock Nut**
**B—Nut**
**C—Washer**
**D—Gauge**

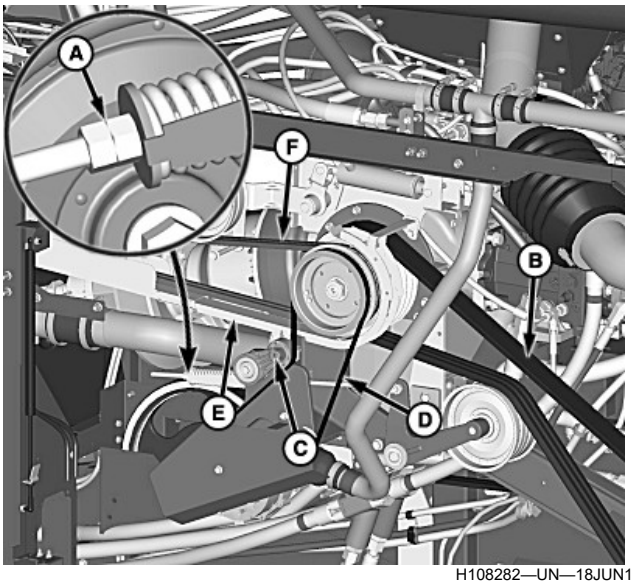
**CAUTION: Shut OFF engine, set park brake and remove key.**

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)

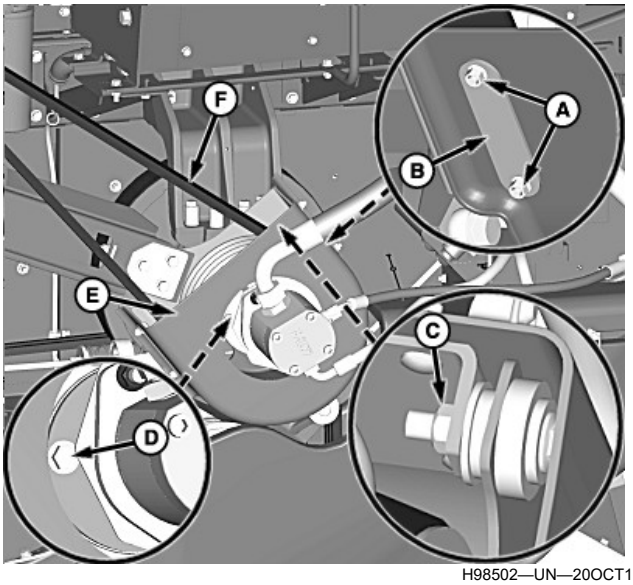



H108282—UN—18JUN13

**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.*

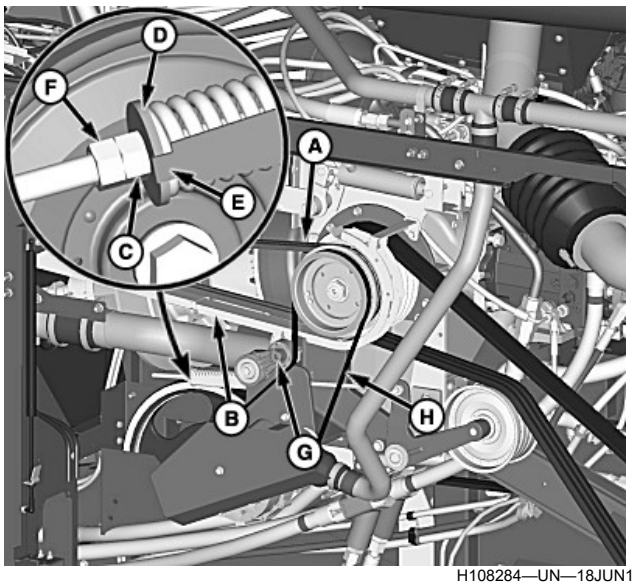
   h. Align the pump assembly with the sheave and tighten the cap screws to specification.

**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

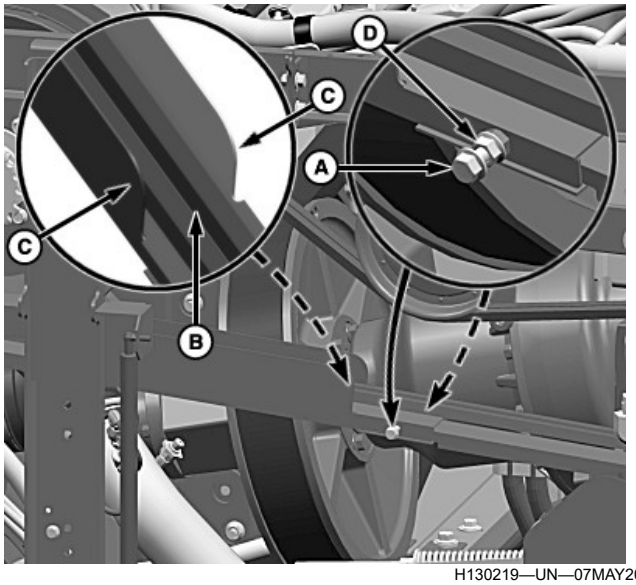
**A—Unloading Auger Drive Belt (2 used)**
**B—Belt Trap (2 used)**
**C—Nut**
**D—Washer**
**E—Gauge**
**F—Lock Nut**
**G—Tensioner Arm**
**H—Engine Debris Management Belt (If Equipped)**

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).



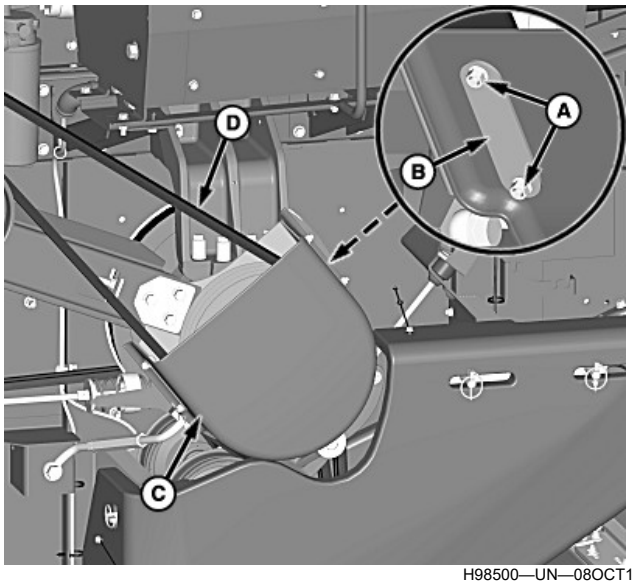

H130219—UN—07MAY20

**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**

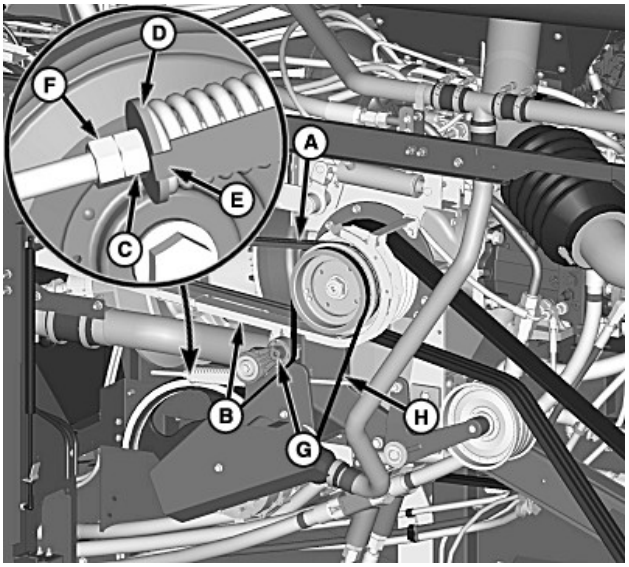
a. Remove the hardware (A) and the strap (B) on both sides of the shield (C).

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

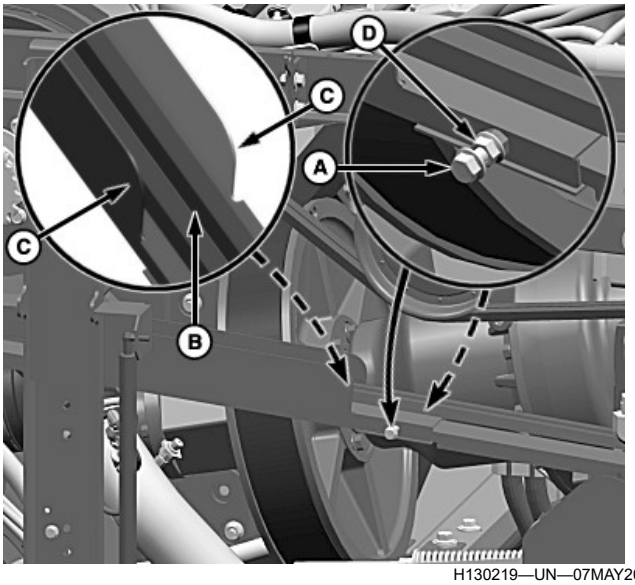
**A—Unloading Auger Drive Belt (2 used)**
**B—Belt Trap (2 used)**
**C—Nut**
**D—Washer**
**E—Gauge**
**F—Lock Nut**
**G—Tensioner Arm**
**H—Engine Debris Management Belt (If Equipped)**

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)**

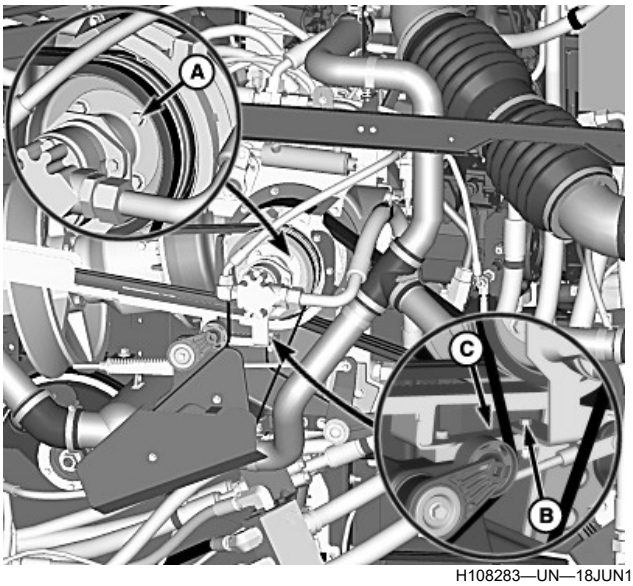
*NOTE: Apply thread lock and sealer (medium strength) to the welded nuts on the belt trap.*

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)



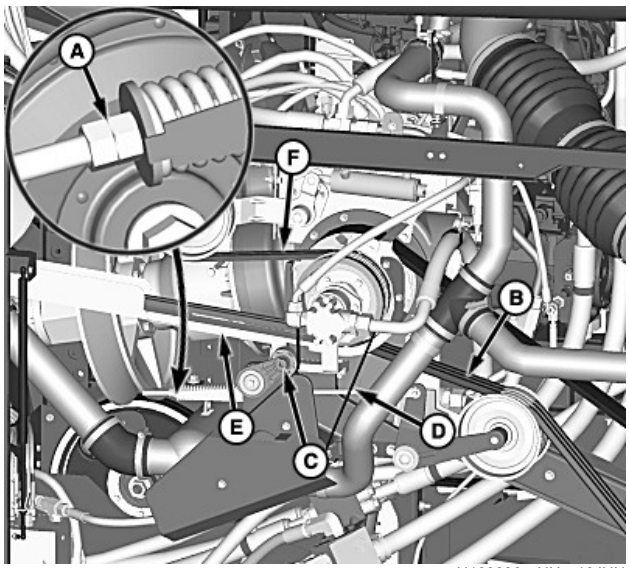

H108283—UN—18JUN13

**A—Cap Screw (4 used)**
**B—Hardware**

**C—Isolator Strap**

**CAUTION: Shut OFF engine, set park brake, and remove key.**

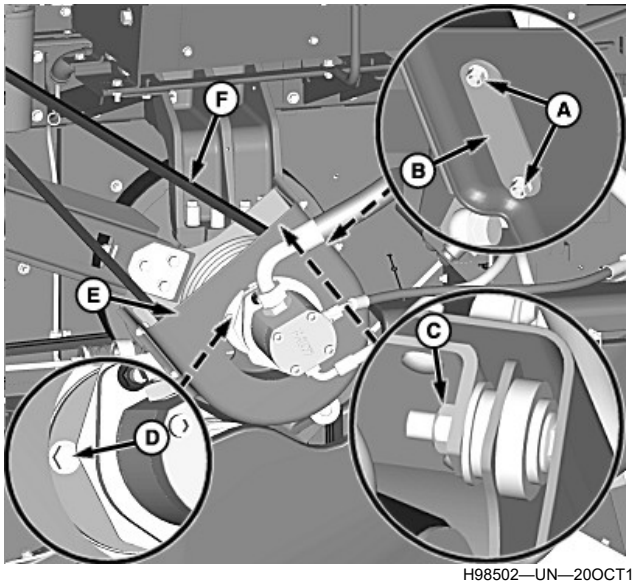
1. Remove the cap screws (A) and the hardware (B) from the isolator strap (C).
2. Remove the pump assembly and support the pump assembly out of the way.




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.*

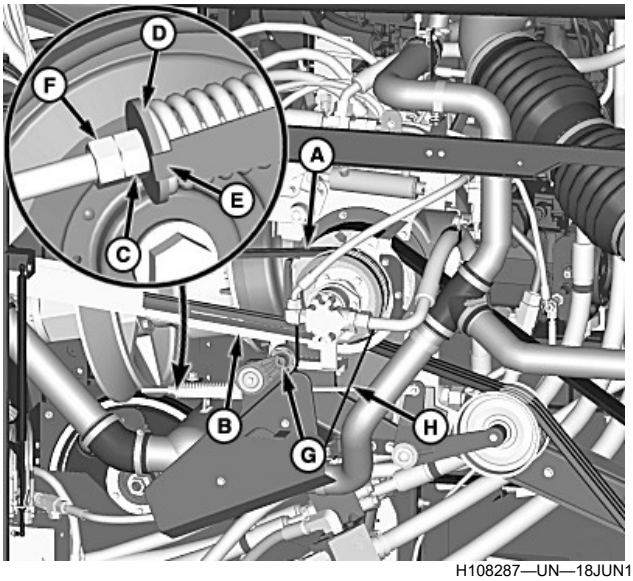
   h. Align the pump assembly with the sheave and tighten the cap screws to specification.

**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

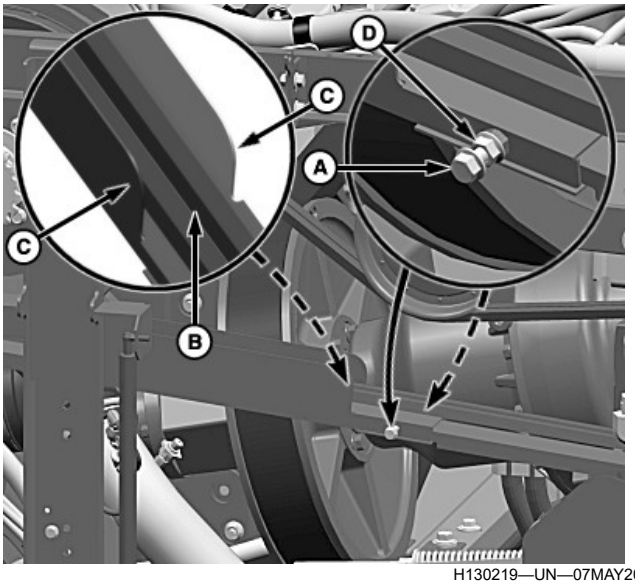
**A—Unloading Auger Drive Belt (2 used)**
**B—Belt Trap (2 used)**
**C—Nut**
**D—Washer**
**E—Gauge**
**F—Lock Nut**
**G—Tensioner Arm**
**H—Engine Debris Management Belt (If Equipped)**

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).



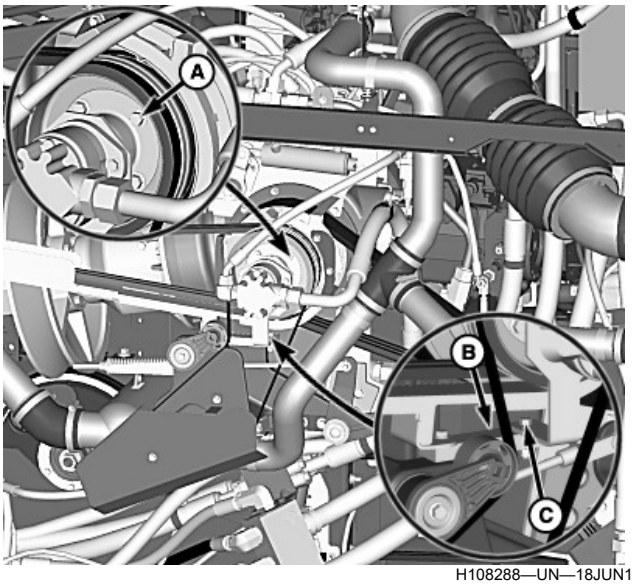

H130219—UN—07MAY20

**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).



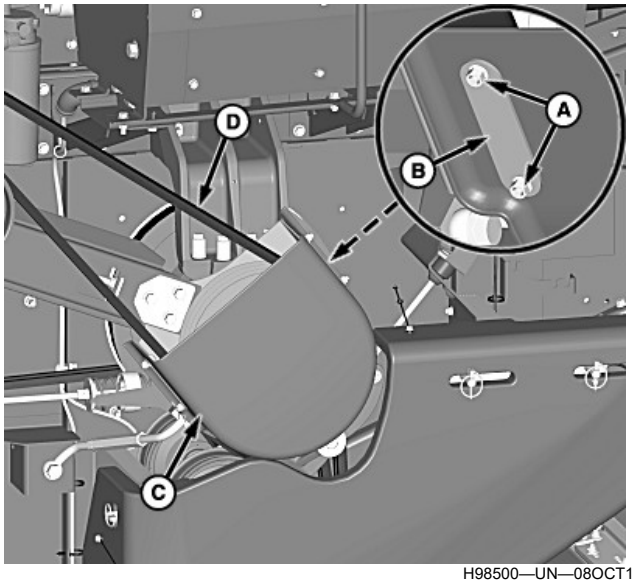

H108288—UN—18JUN13

**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

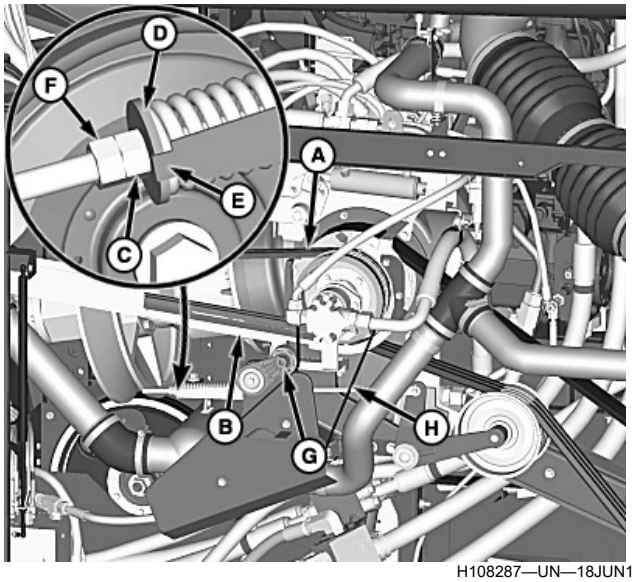
a. Remove the hardware (A) and the strap (B) on both sides of the shield (C).

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

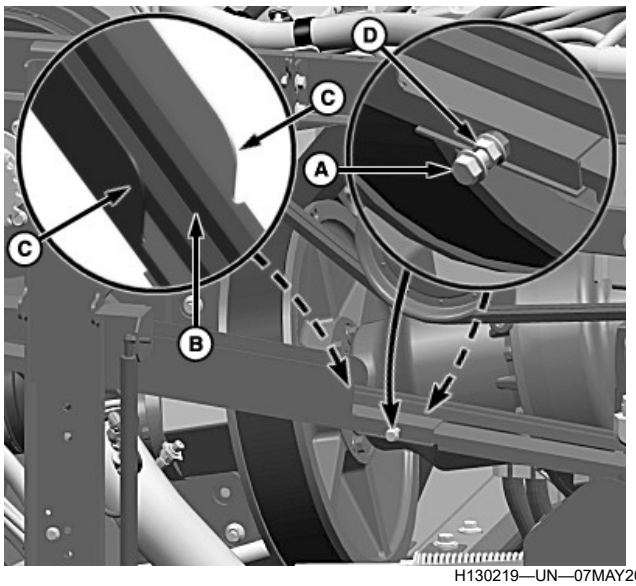
**A—Unloading Auger Drive Belt (2 used)**
**B—Belt Trap (2 used)**
**C—Nut**
**D—Washer**
**E—Gauge**
**F—Lock Nut**
**G—Tensioner Arm**
**H—Engine Debris Management Belt (If Equipped)**

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

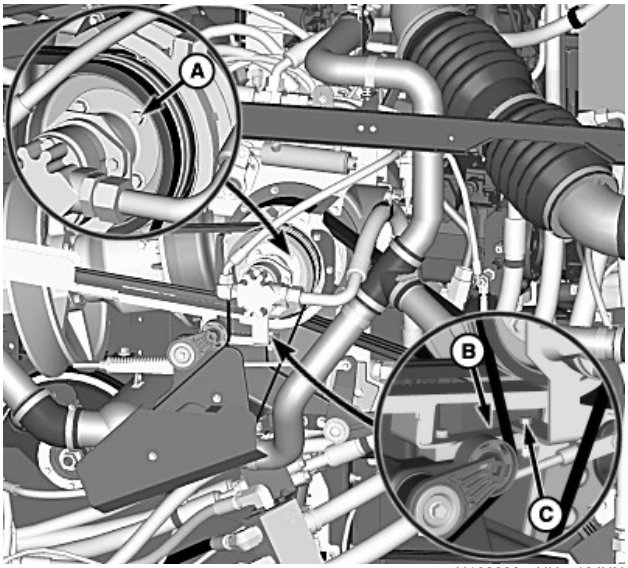
**A—Cap Screw (2 used)**
**B—Unloading Auger Drive Belt (2 used)**

**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.

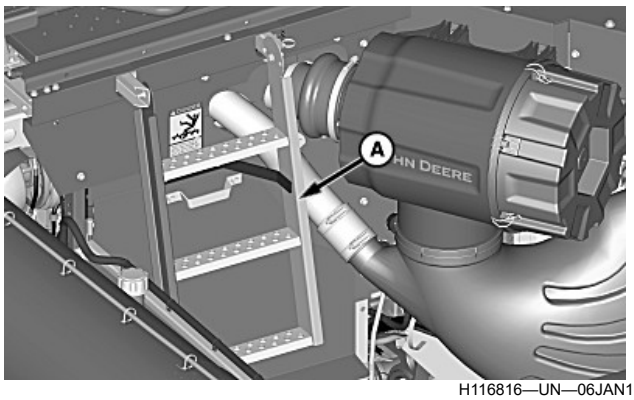
**Specification**

Cap Screws—Torque. . . . . 80 N·m (59 lb·ft)

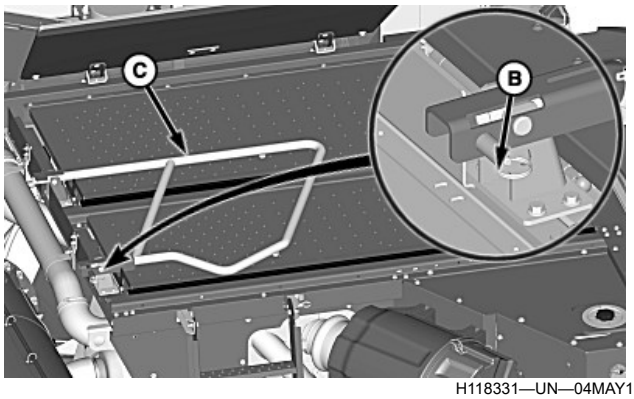
m. Install the isolator strap (B) and retain with the hardware (C).

OUO6075,0004E36-19-08JUL20

## Grain Tank/Engine Ladder




H116816—UN—06JAN16




H118331—UN—04MAY16

**A—Ladder**
**B—Lockout Pin**
**C—Handrail**

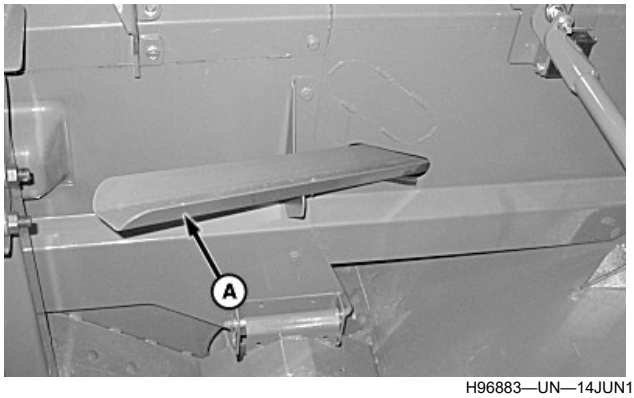
**CAUTION: Shut OFF engine, set park brake and remove key.**

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.

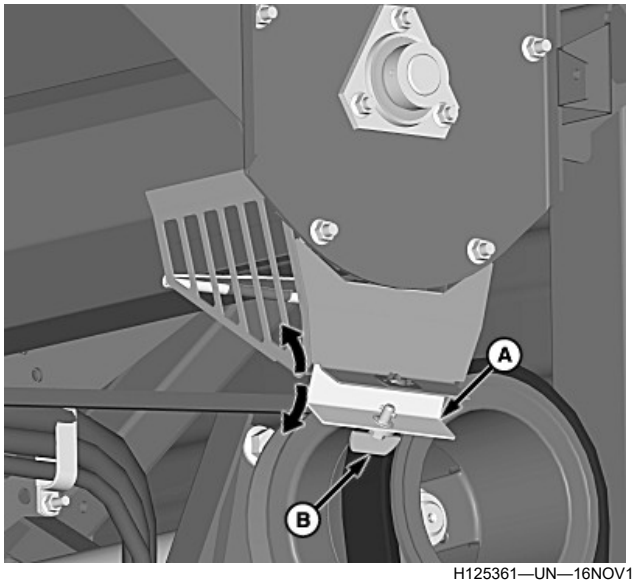
Disengage header, but leave separator engaged.

**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.**

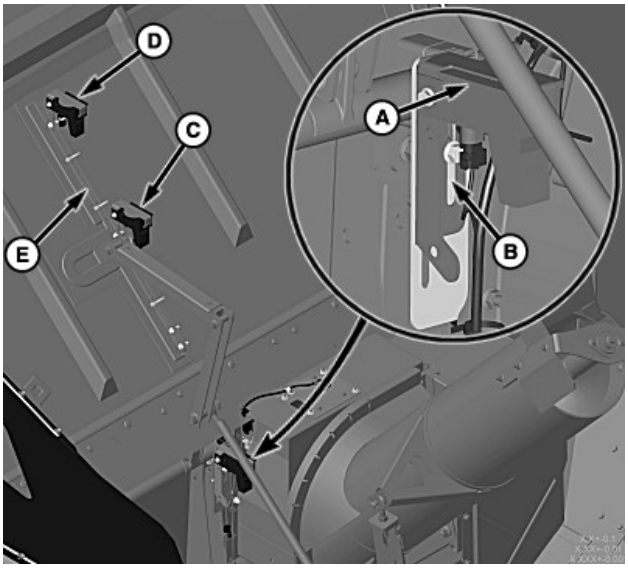
The cleanout doors (A) are on the right-hand end of both grain tank cross augers.

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.**

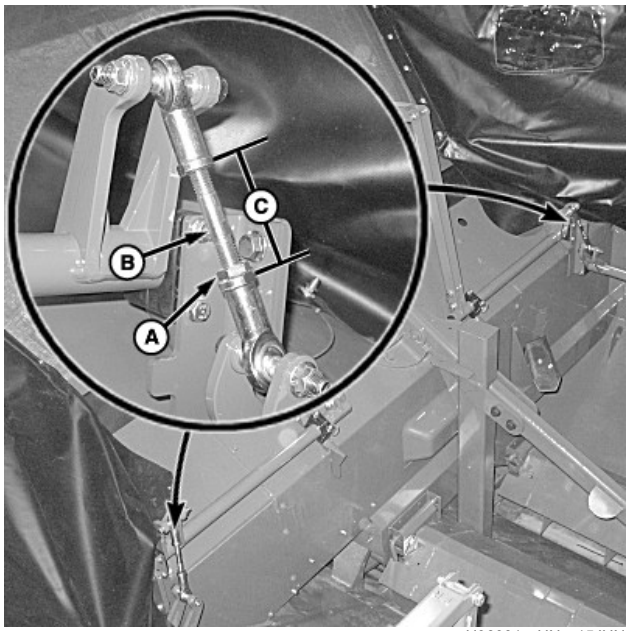
*NOTE: Grain tank covers must be opened all the way in order to engage separator.*

*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.*

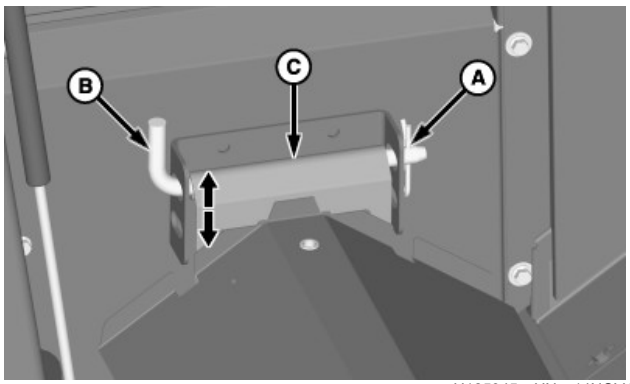
*Decreasing turnbuckle distance decreases clearance between left cover and front/rear covers.*

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.

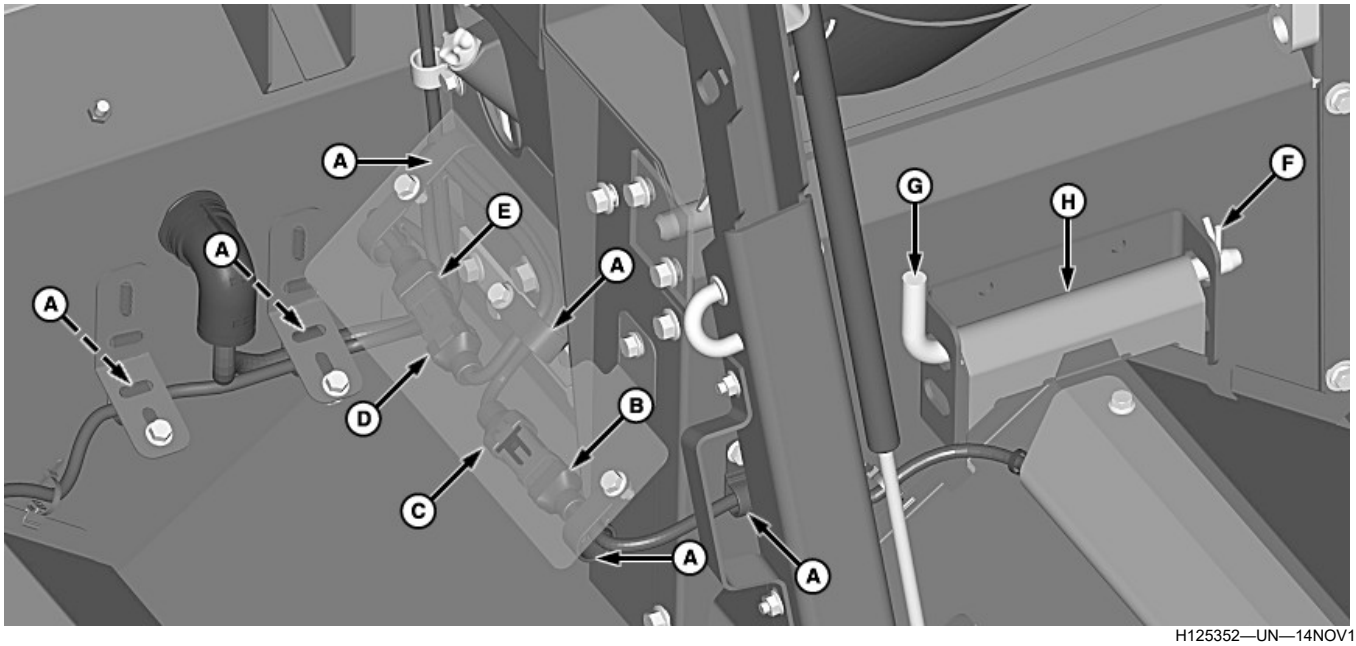
For optimal operation, auger covers must be retained in a level position (if equipped with ActiveYield™) over the entire length of the cross auger.

*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.*

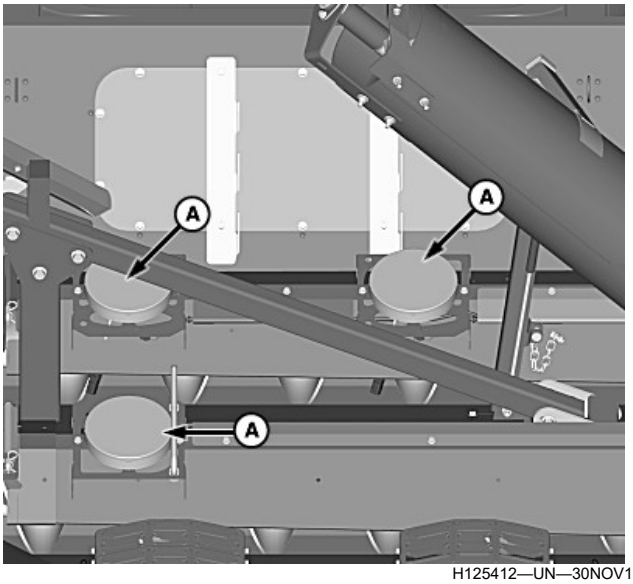
1. Remove wiring harnesses from clamps (A) as needed.
2. Disconnect rear cross auger connector (B) from the grain tank connector (C).
3. Disconnect front cross auger connector (D) from the grain tank connector (E).
4. Connect grain tank connectors (C and E) together and retain with clamps as needed.

**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**

*ActiveYield is a trademark of Deere & Company*

**IMPORTANT: Do not stand on, drop or allow objects to fall onto sensors as damage could occur.**

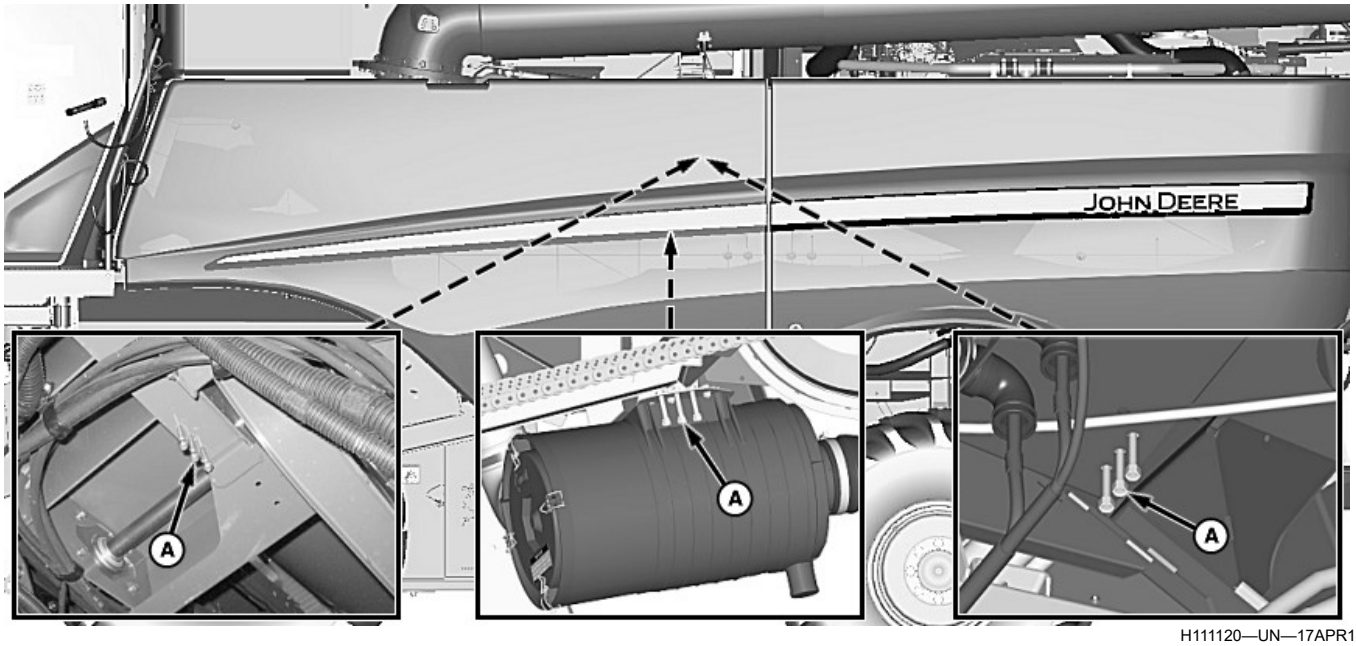
*NOTE: Two sensors are on the front cross auger cover and one sensor is on the rear cross auger cover.*

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

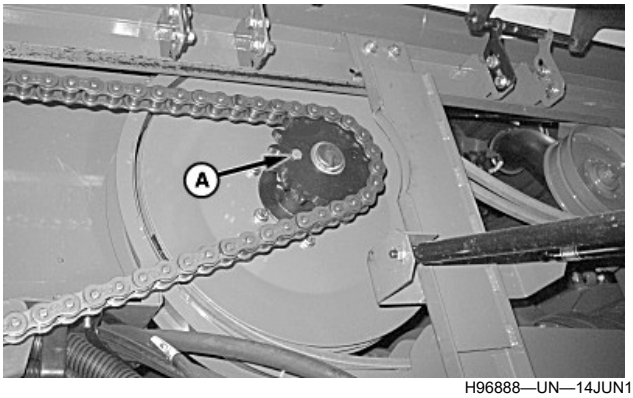
**A—Shear Bolt (3 Used)**

*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.**

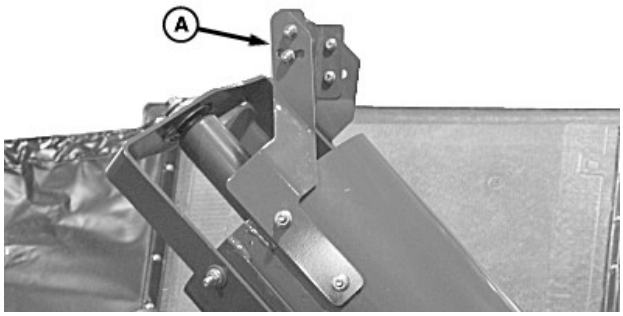
Use only John Deere supplied shear bolt (A) (cap screw through hub), see your John Deere dealer for replacement shear bolts.

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:

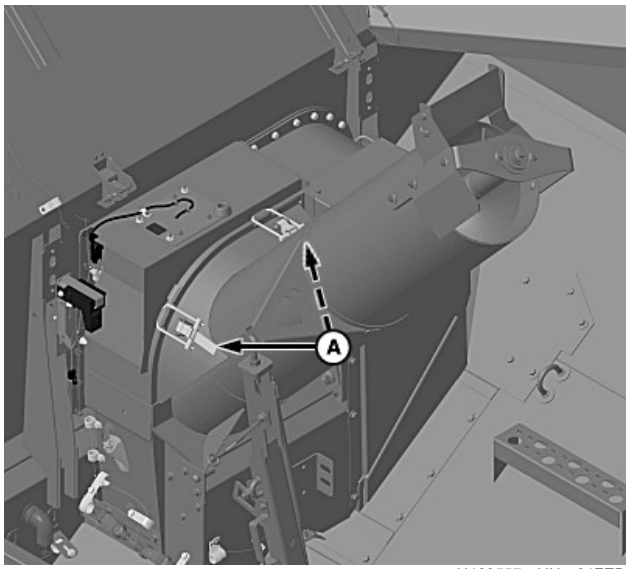
- Windy conditions when harvesting crops like grass seed or rape.
- Corn—Grain tank fills to the left and to the rear.

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**

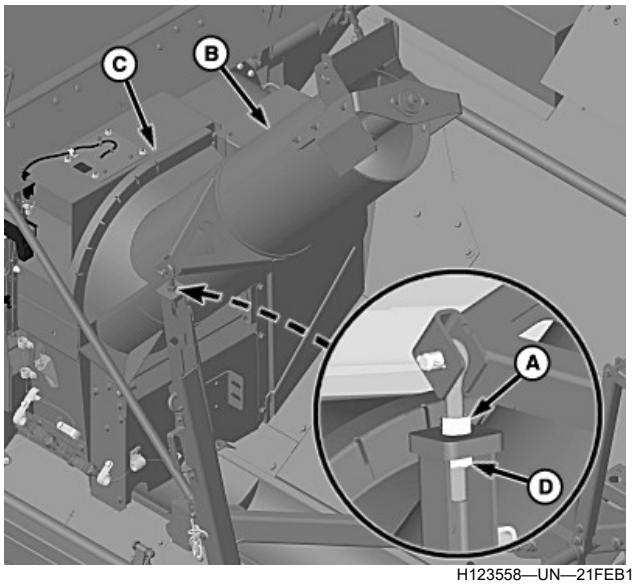
**CAUTION: Grain tank loading auger is heavy. Use extra care when raising or lowering auger.**

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**

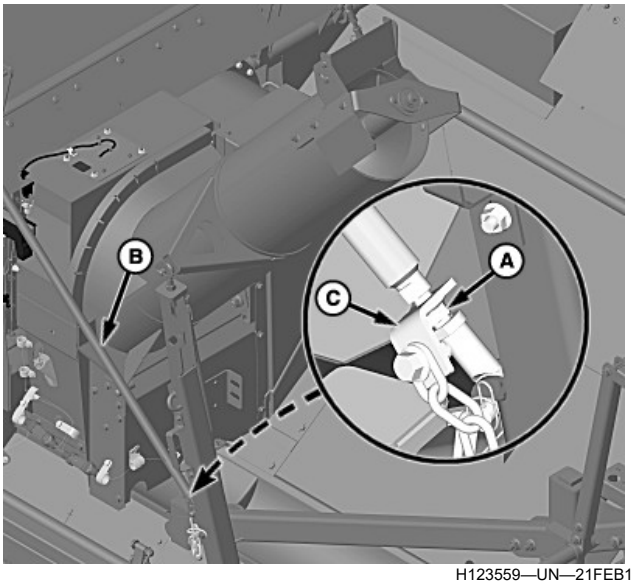
**CAUTION: Shut OFF engine, set park brake and remove key.**

*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.

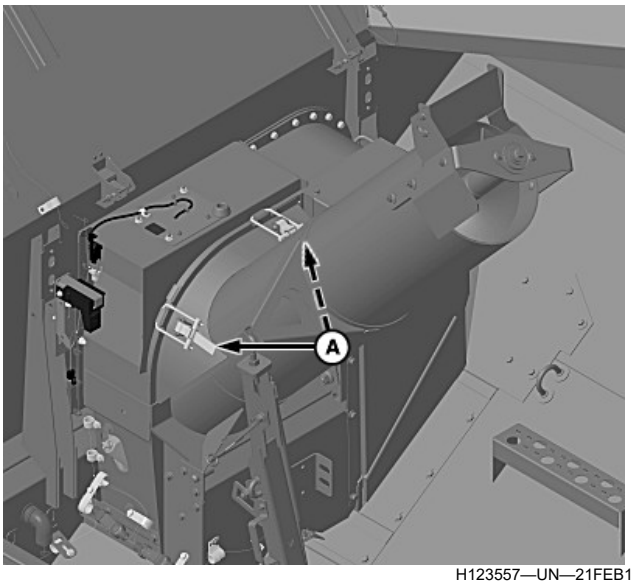
*NOTE: Lengthen or shorten the turnbuckle to increase or decrease the gap between the loading auger housing and the transition housing.*

*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**

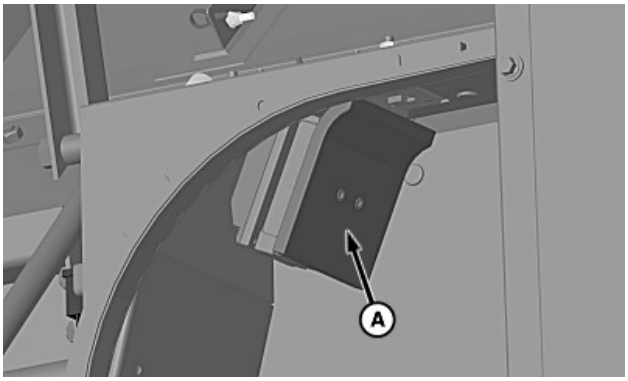
**CAUTION: Shut OFF engine, set park brake and remove key.**

**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

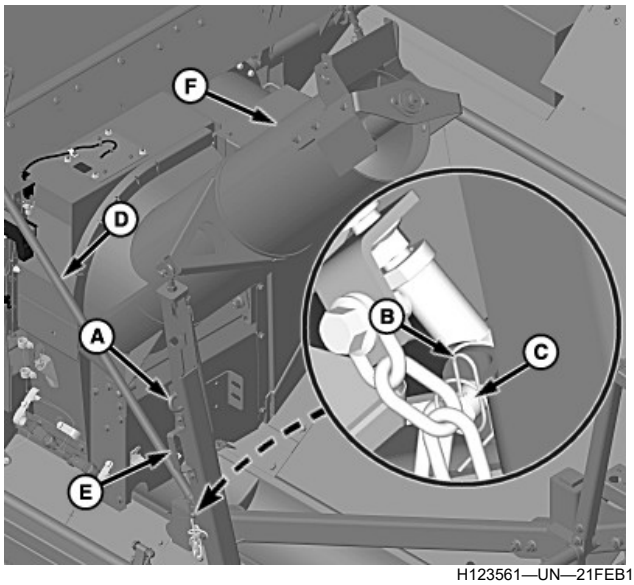
**A—Mass Flow Sensor Plate**

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**

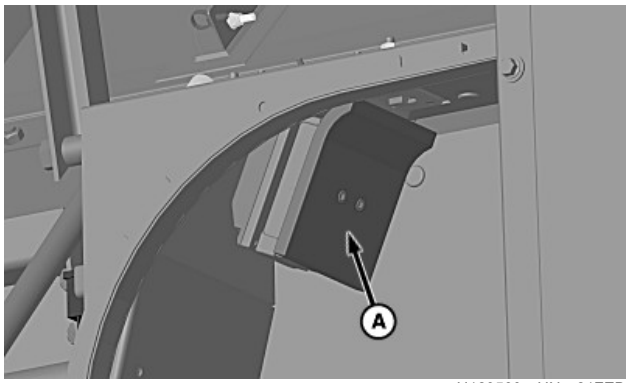
**CAUTION: Shut OFF engine, set park brake and remove key.**

**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**

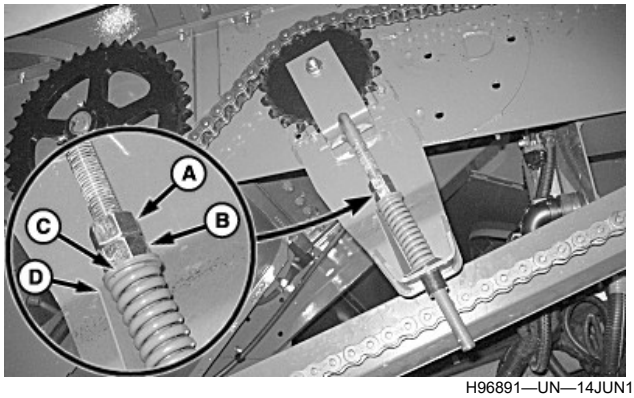
Clean the mass flow sensor plate (A).

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

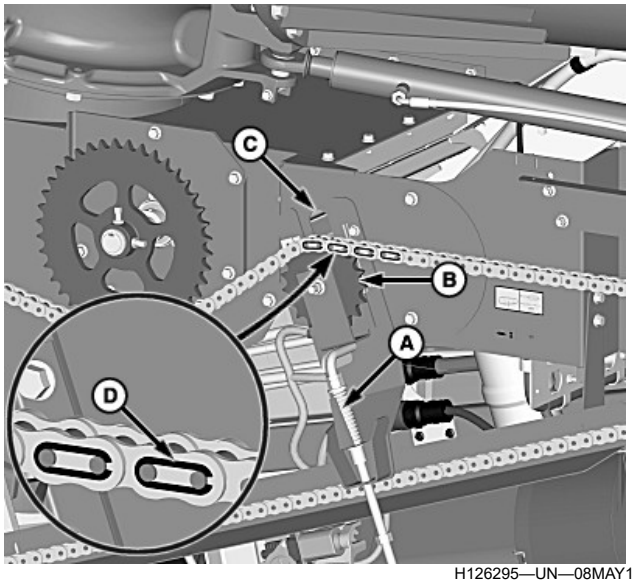
**A—Nut**
**B—Nut**
**C—Washer**
**D—End of Gauge**

**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.*

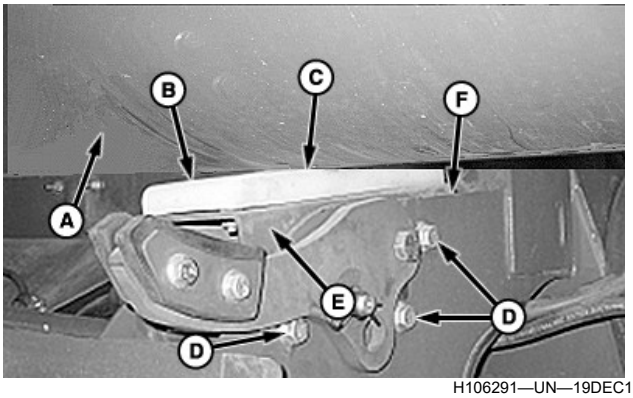
When the spring tensioner (A) can no longer be adjusted, or the sprocket (B) reaches the end of slot (C), remove connector link (D).

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.*

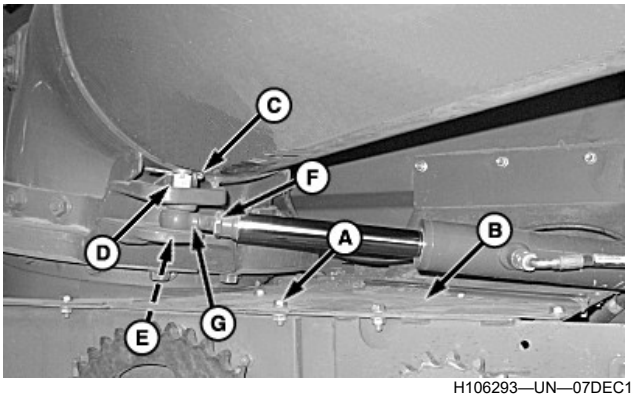
2. If a gap exists between the unloading auger and the wear plate, loosen cap screws (D) and adjust cradle support (E) vertically until wear plate contacts lower surface of unloading auger.

*NOTE: Top surface of cradle support (E) MUST be parallel with top of the grain tank plate (F).*

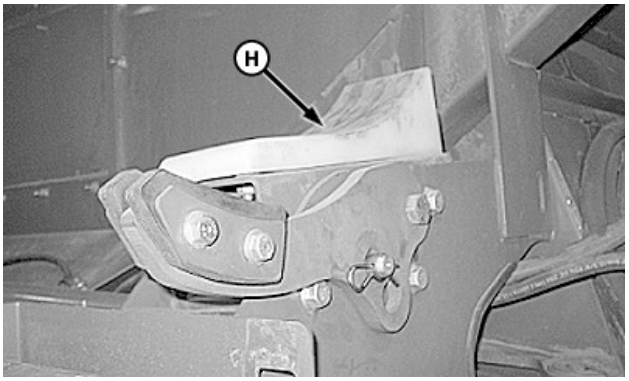
3. Tighten cap screws when cradle is adjusted.

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.**

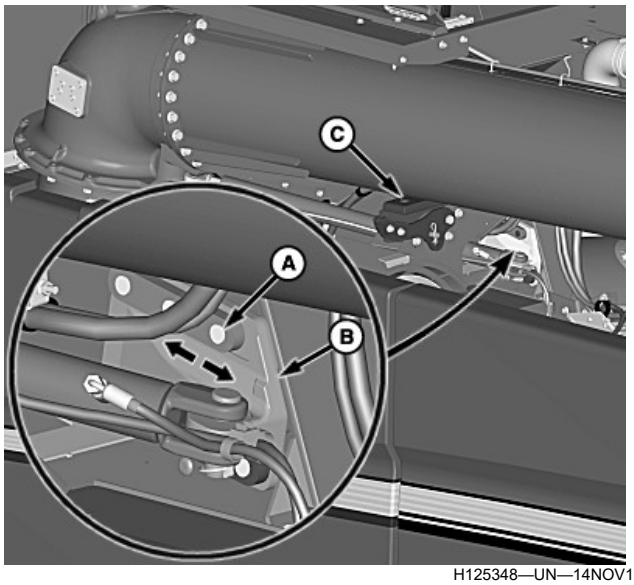
1. Remove cap screws (A) and cover (B).

*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.*

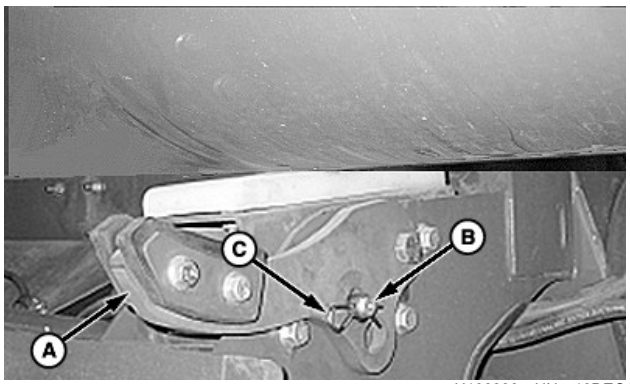
1. Loosen cap screws (A).
2. Adjust unloading auger inward or outward to move the cylinder bracket (B) forward or rearward until the unloading auger sets properly on the cradle support (C).
3. Tighten cap screws to specification.

**Specification**

Cap Screws—Torque. . . . . 422 N·m (311 lb·ft)

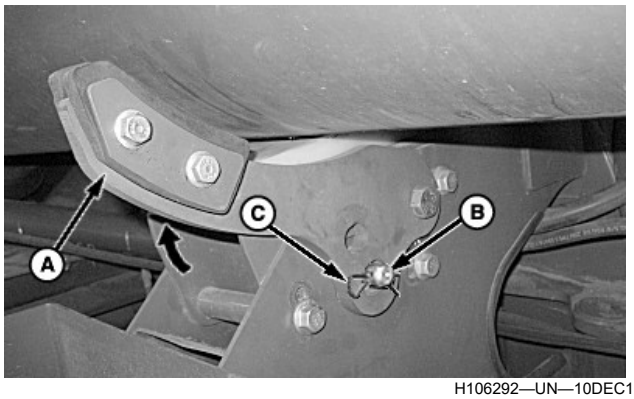
OUO6075,0004D3B-19-09JAN20

## 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

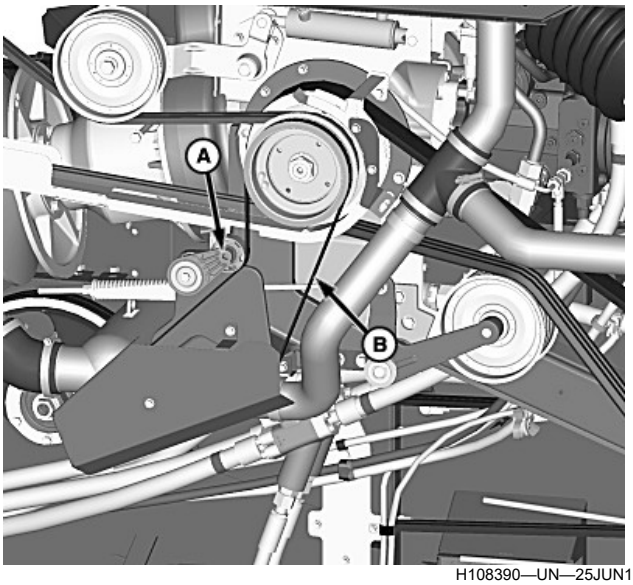
Lower lock arm (A) as shown and install pin (B) and retain with spring pin (C).

### 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.*

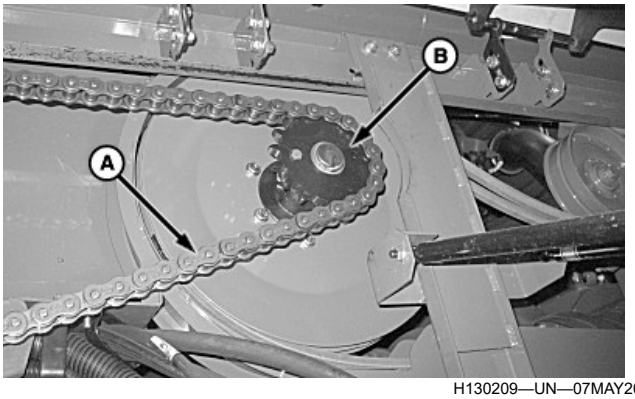
1. Use a breaker bar to relieve tension from the tensioner arm (A), then remove the engine debris management belt (B).




H105391—UN—09MAY12

**A—Tensioner**

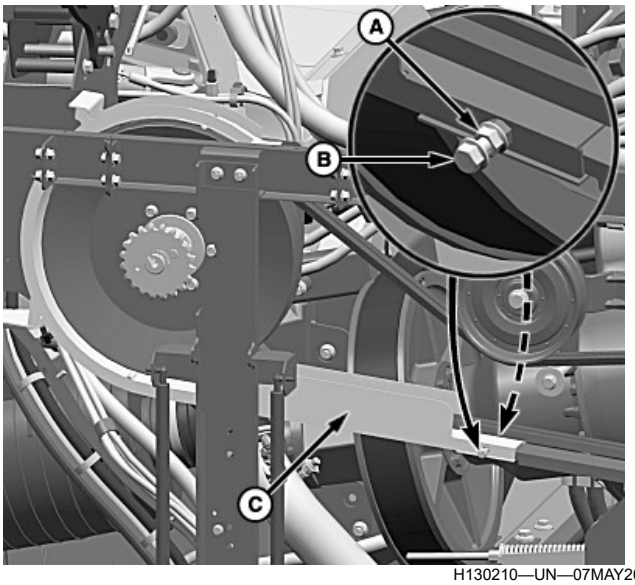
2. Loosen the tensioner (A) on the unloading auger drive chain.




H130209—UN—07MAY20

**A—Unloading Auger Drive Chain**
**B—Sprocket**

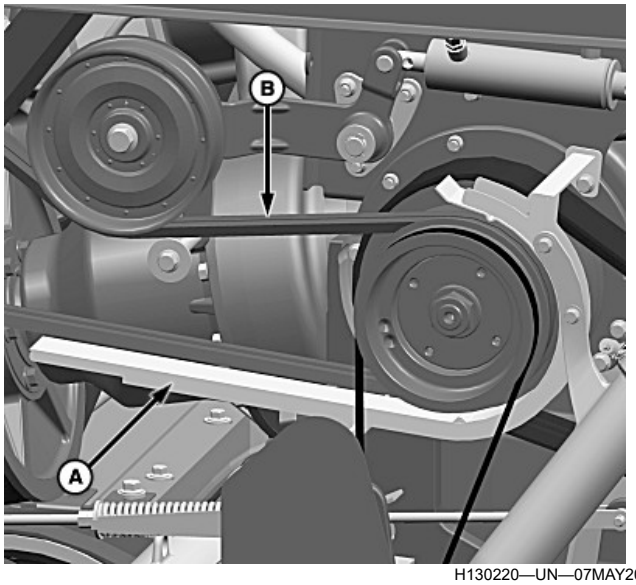
3. Remove the unloading auger drive chain (A) from the sprocket (B).




H130210—UN—07MAY20

**A—Nut (2 used)**
**B—Cap Screw (2 used)**
**C—Belt Trap**

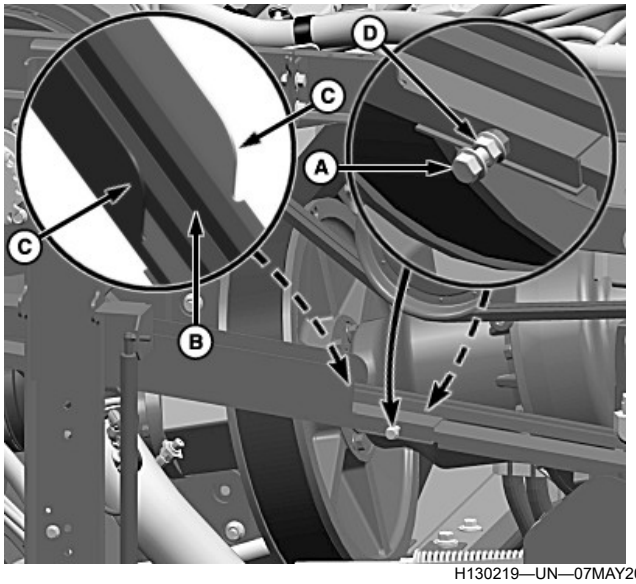
4. Loosen nut (A) and cap screw (B).
5. Remove the cap screws from the belt trap (C).
6. Remove the belt trap from the machine.




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

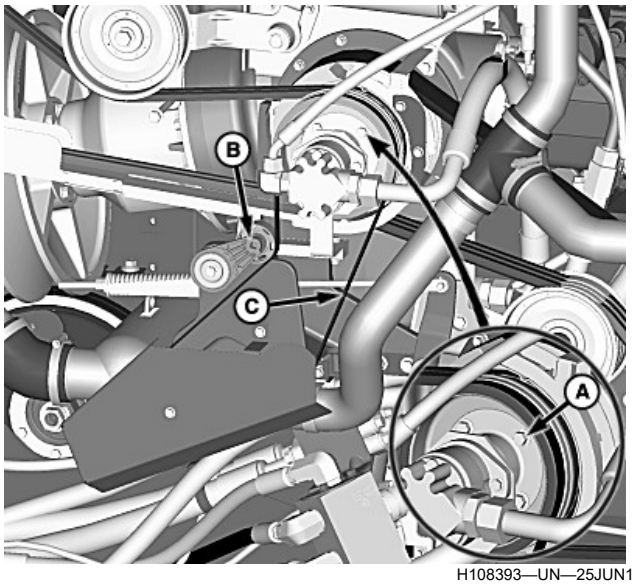
**A—Cap Screw (2 used)**
**B—Unloading Auger Drive Belt (2 used)**
**C—Belt Trap**
**D—Nut (2 used)**

*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.*

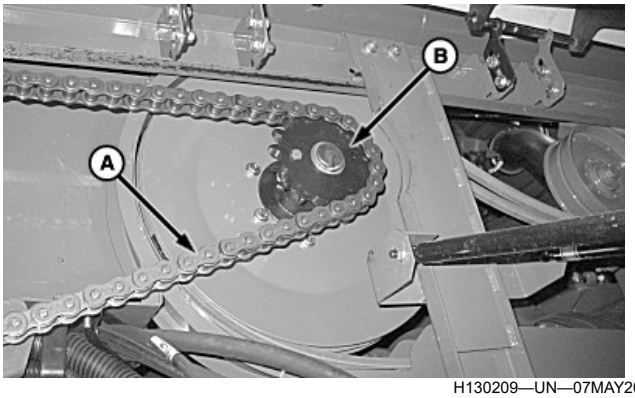
1. Remove the cap screws (A) and support the pump assembly out of the way.
2. Use a breaker bar to relieve tension from the tensioner arm (B), then remove the engine debris management belt (C).




H105391—UN—09MAY12

**A—Tensioner**

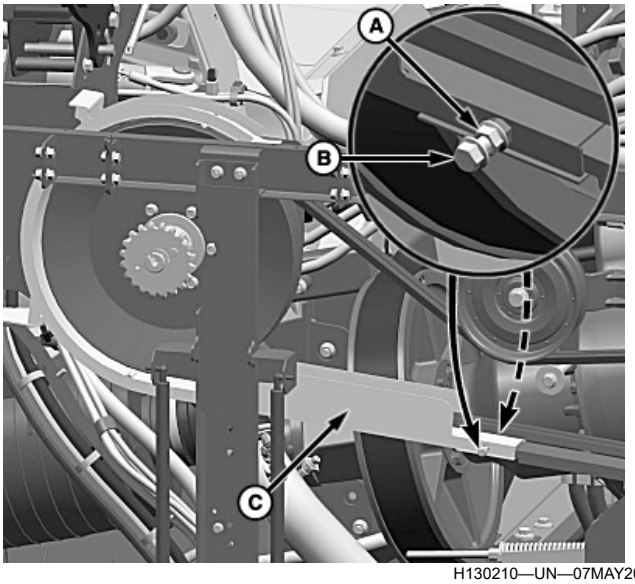
3. Loosen the tensioner (A) on the unloading auger drive chain.




H130209—UN—07MAY20

**A—Unloading Auger Drive Chain**
**B—Sprocket**

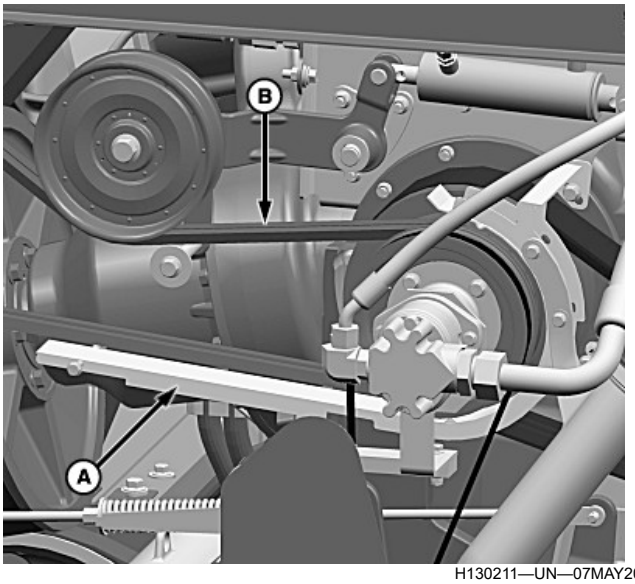
4. Remove the unloading auger drive chain (A) from the sprocket (B).




H130210—UN—07MAY20

**A—Nut (2 used)**
**B—Cap Screw (2 used)**
**C—Belt Trap**

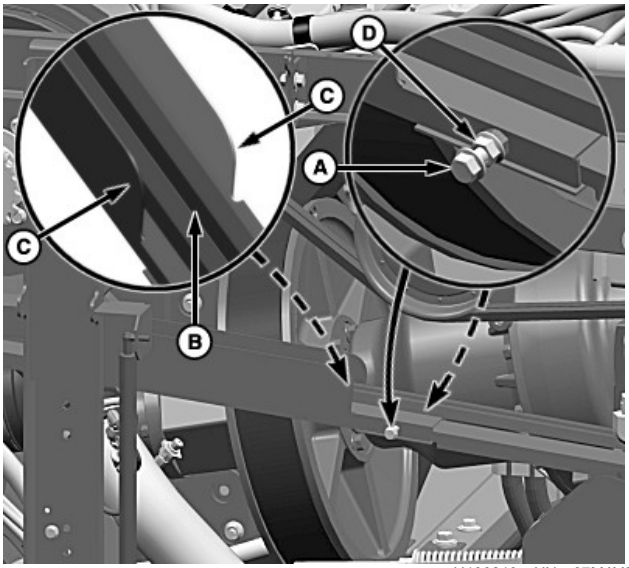
5. Loosen nut (A) and cap screw (B).
6. Remove the cap screws from the belt trap (C).
7. Remove the belt trap from the machine.




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

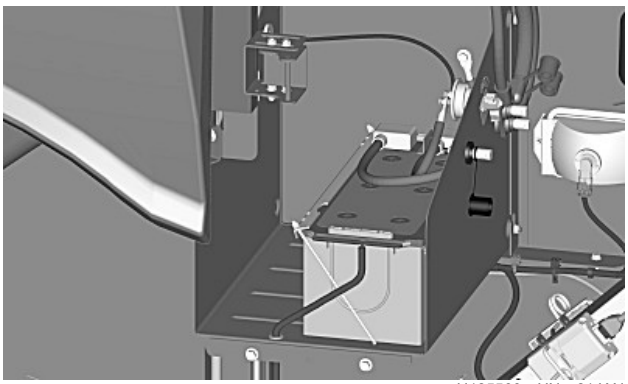
## Keep Electronic Control Unit Connectors Clean

**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.

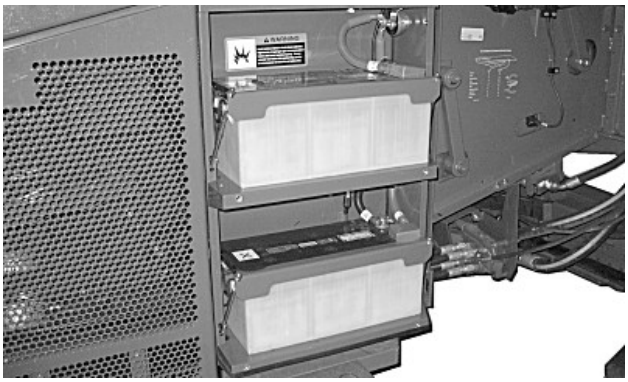
DX,WW,ECU04-19-11JUN09

## 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.

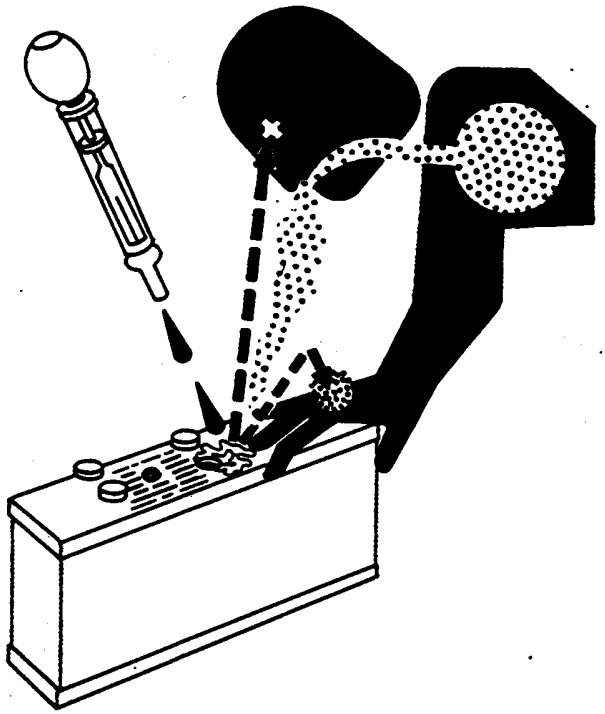
  Why: The high currents associated with welding can damage wiring harnesses that are involved in the ground path. Welding can also cause electrical voltage spikes that can damage electronic components.

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.

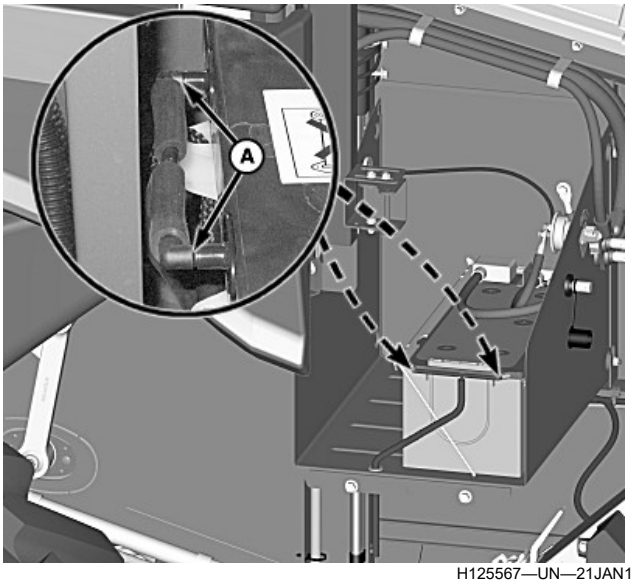
**If acid is swallowed:**

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.

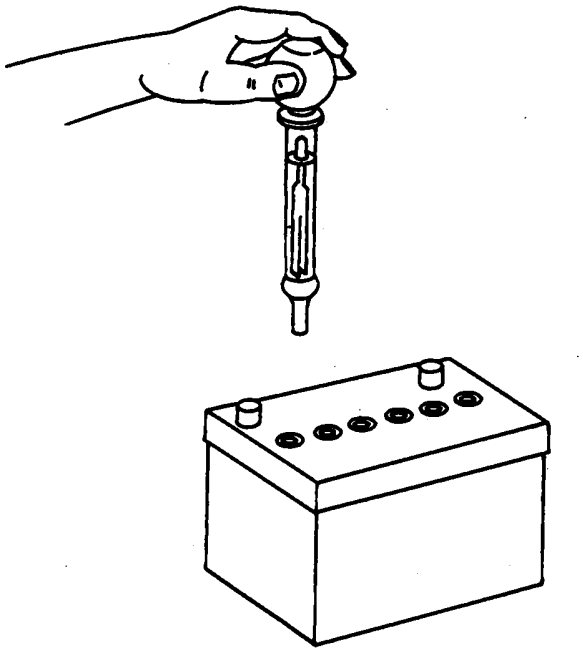
OUO6075,00007D8-19-19MAR07

## 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.**



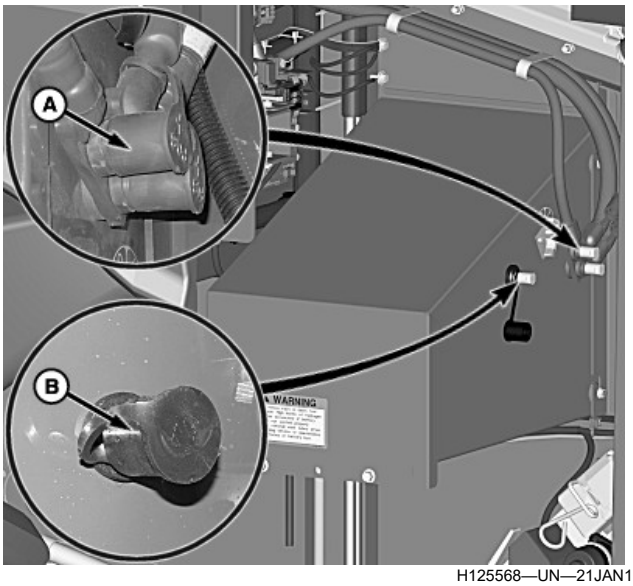
TS182—UN—23AUG88

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.

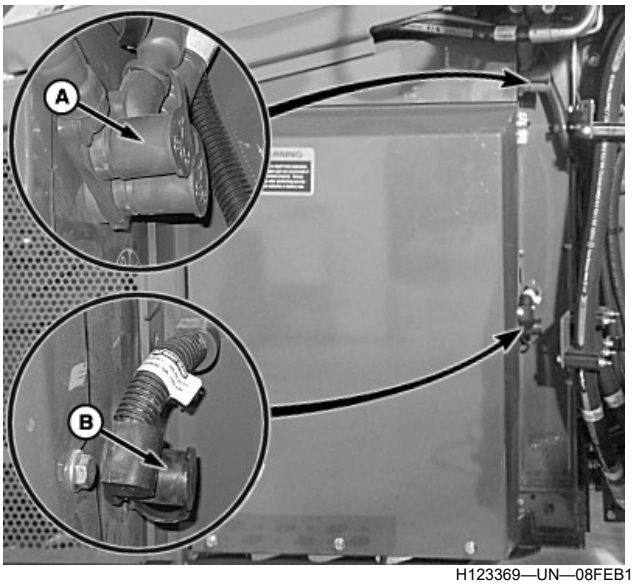
OUO6075,00007D9-19-19MAR07

## 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.**

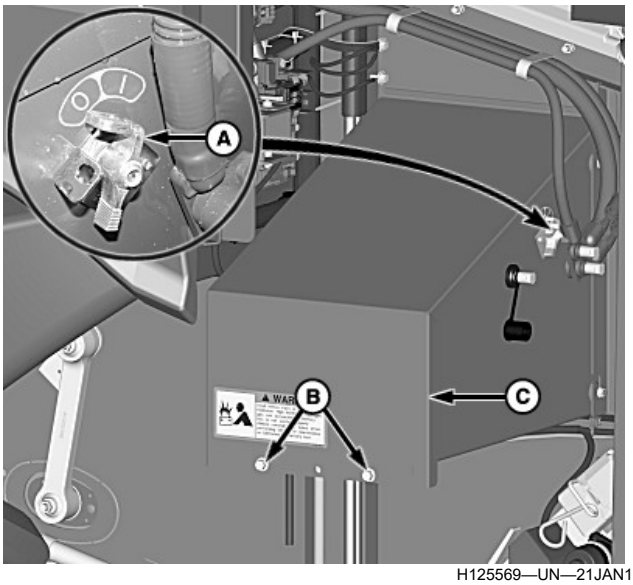
Remove protective caps from posts.

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

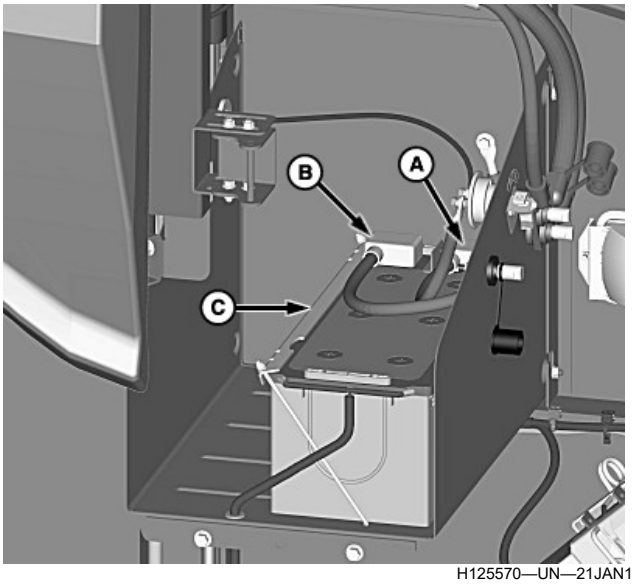
## Batteries—Removing and Installing (Style A)




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

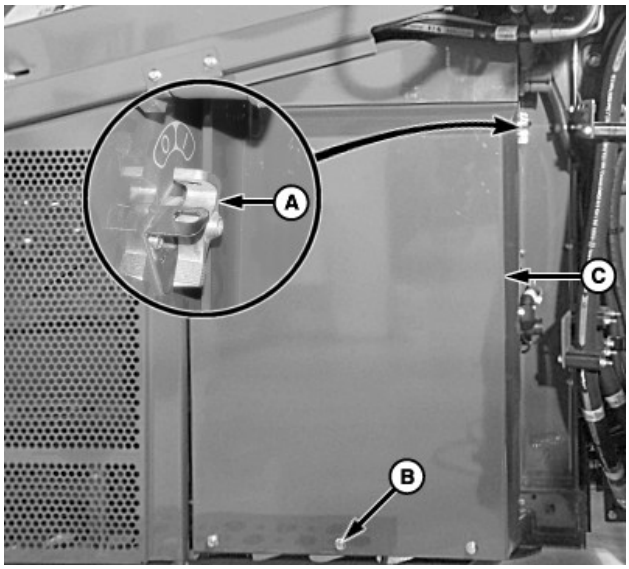
**A—Positive Cable**

**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

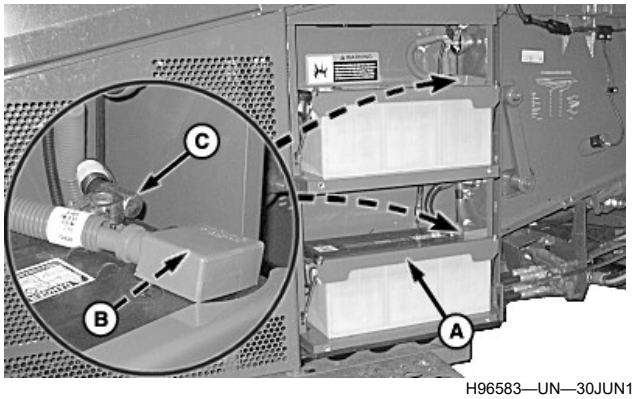
## Batteries—Removing and Installing (Style B)




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.



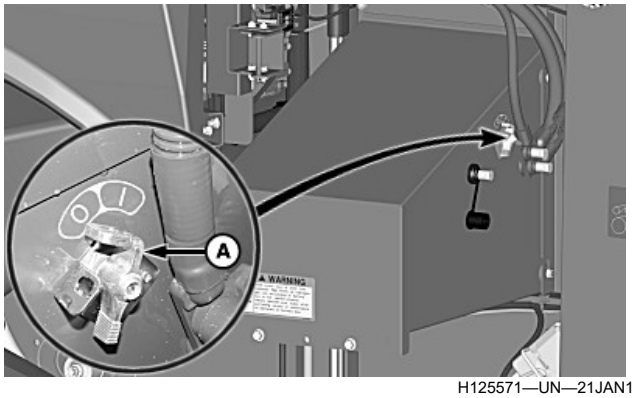

H96583—UN—30JUN10

**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.

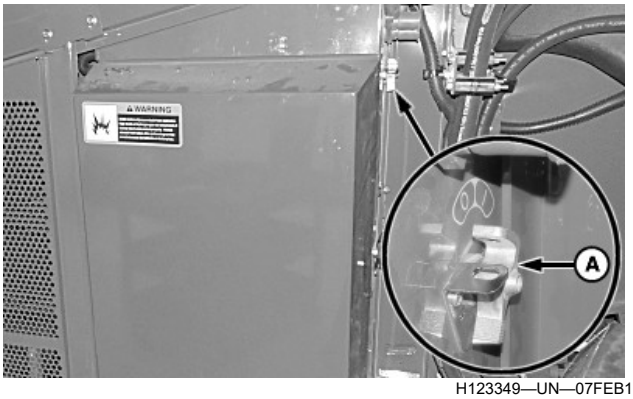
OUO6075,0004898-19-07FEB18

## Battery Disconnect Switch




H125571—UN—21JAN19

*Style A*




H123349—UN—07FEB18

*Style B*

**A—Battery Disconnect Switch**

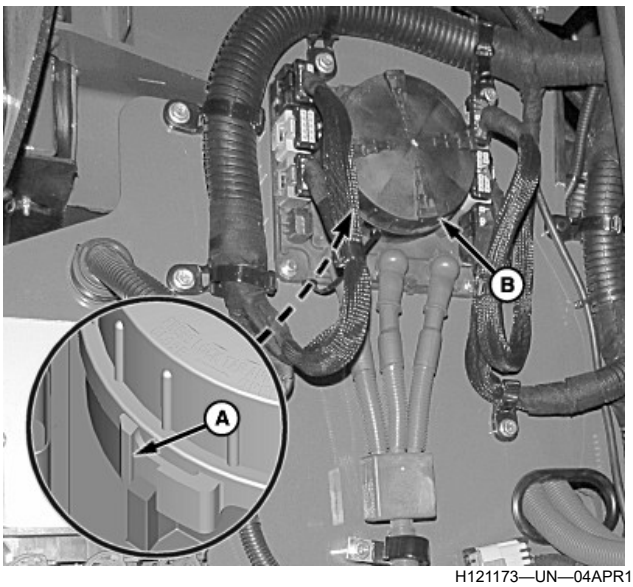
**IMPORTANT: Final Tier 4/Stage V: Do not disconnect battery for at least 90 seconds after machine is shut OFF. Selective Catalyst Reduction (SCR) system automatically purges lines of Diesel Exhaust Fluid (DEF) during this time, immediately after machine is shut OFF. If adequate time is not allowed for 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.

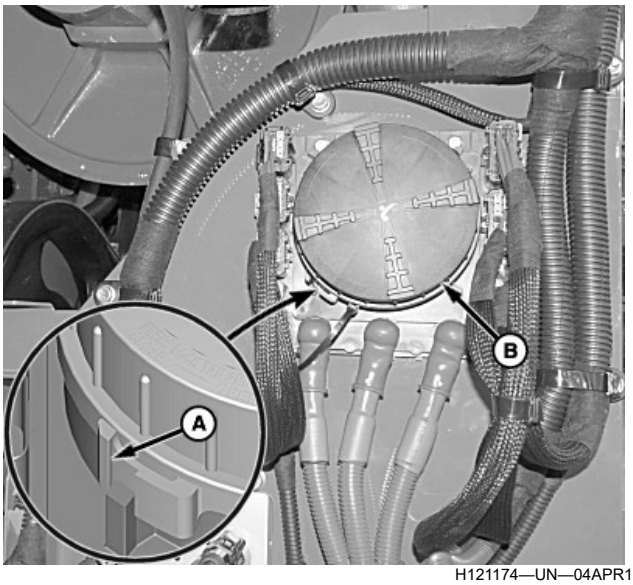
OUO6075,0004A98-19-11JAN19

## 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.*

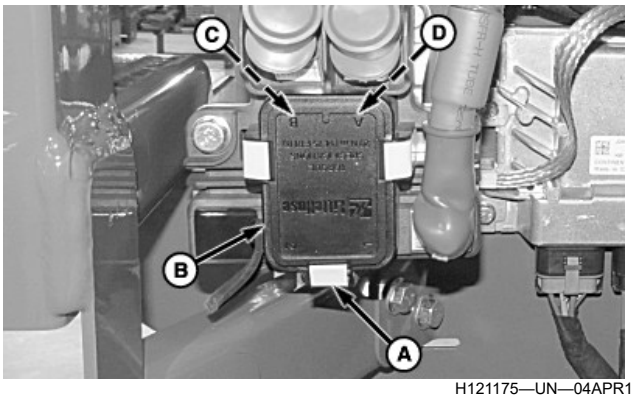
Press lock tab (A) and turn cover (B) counterclockwise to open fuse center.

- 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

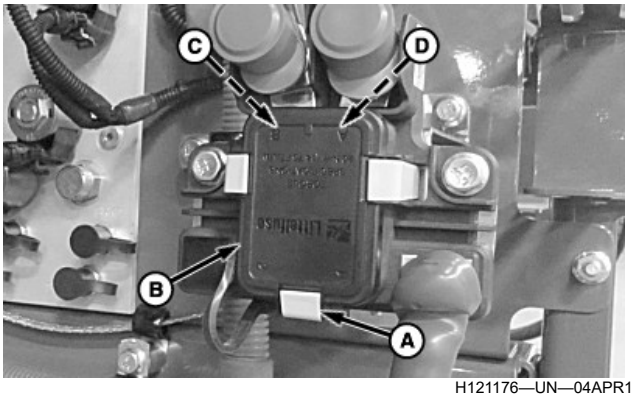
OUO6075,0004A31-19-08NOV18

## 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**

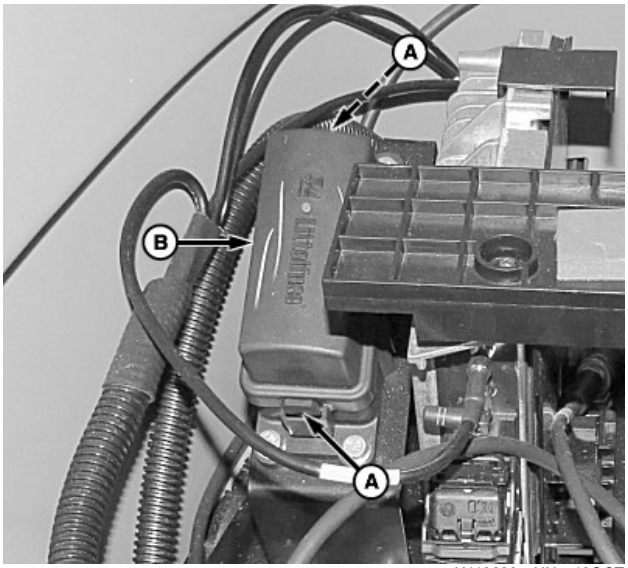
*NOTE: Inline fuses are on the right-hand side or the left-hand side depending on the machine model.*

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

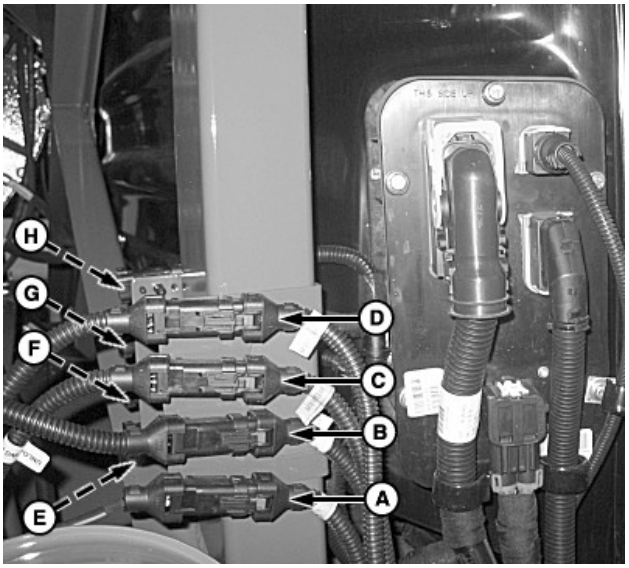
**CAUTION: Do not rely on a camera for collision avoidance or bystander detection. To avoid possible injury or death to operator or others, always remain alert and aware of surroundings when operating machine. Read and understand Avoid Backover Accidents in Safety section.**

**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.

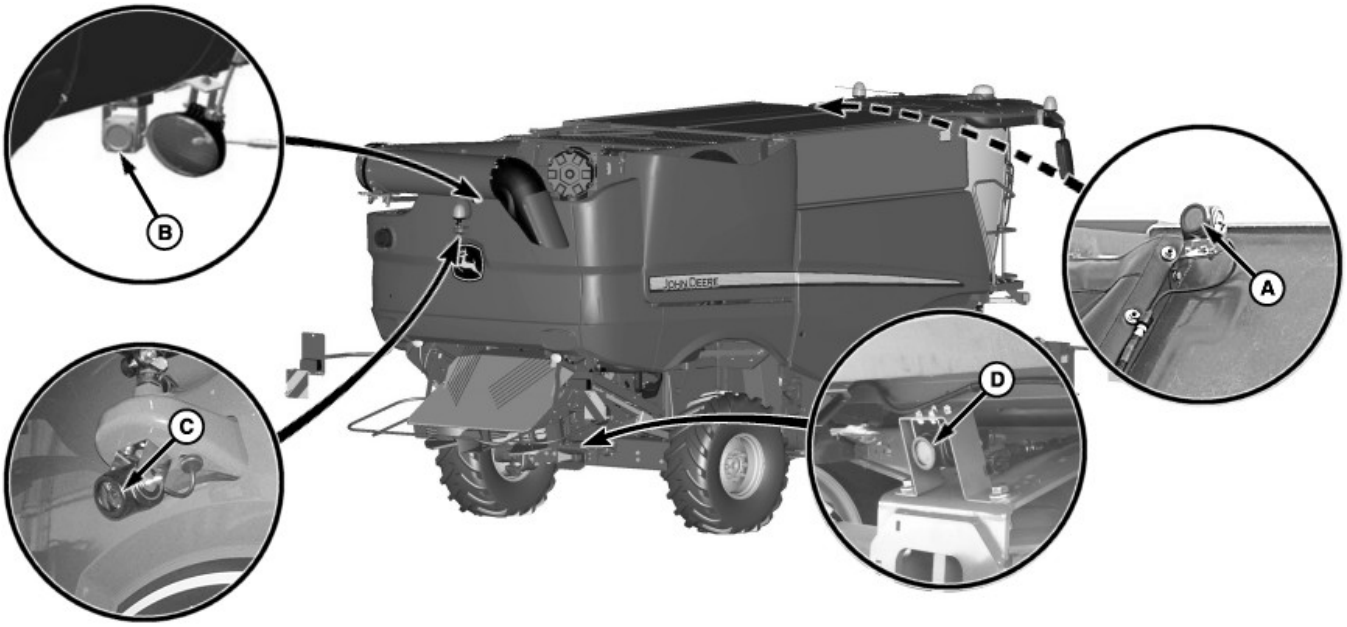
Video input (E—H) feeds video signals to the optional GreenStar™ 3 2630 Display.

See your John Deere dealer for further information on video-compatible camera solutions.

OUO6075,0004684-19-20MAR17

*GreenStar is a trademark of Deere & Company*

## Adjust Cameras (If Equipped)




H116367—UN—25NOV15

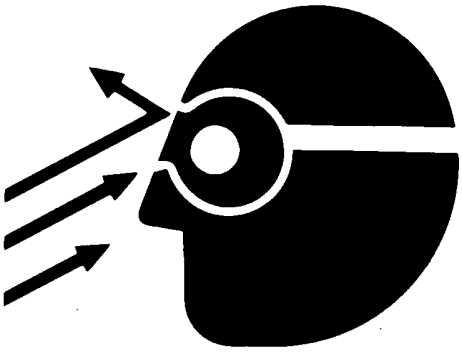
**A—Grain Tank Camera**
**B—Unloading Auger Camera**
**C—Rear View Camera**
**D—Hitch Camera**

*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:**

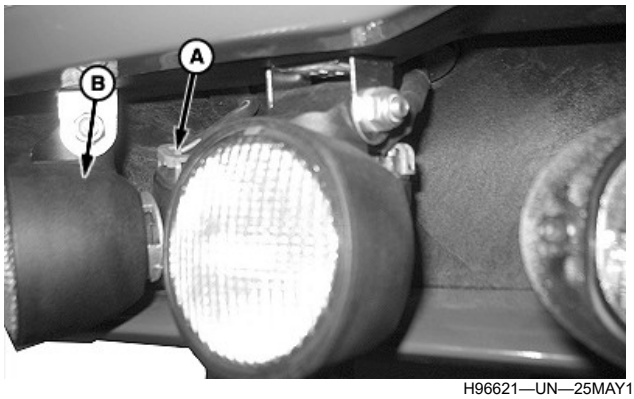
- **Turn light switch OFF and allow bulb to cool before changing bulbs. Leave switch OFF until bulb change is complete.**
- **Wear eye protection when changing bulb.**
- **Handle bulb by its base. Wear protective gloves or avoid touching light bulb surface.**
- **Use a clean cloth and alcohol to remove 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.**

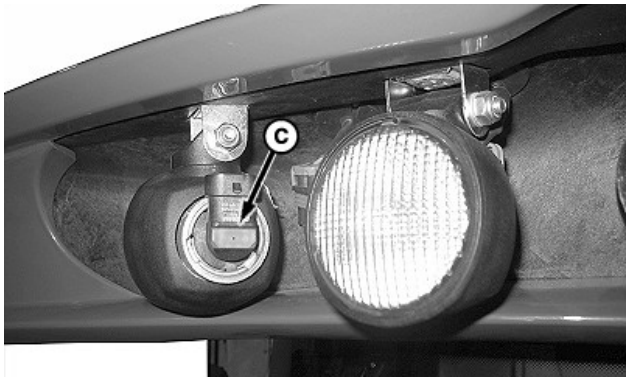
- **Place used bulb in new bulb carton and dispose of properly. Keep out of reach of children.**

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.

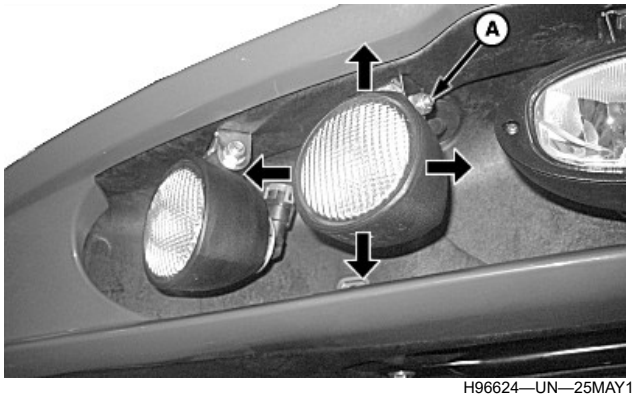
Push in bulb assembly and turn clockwise to install into housing.

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.

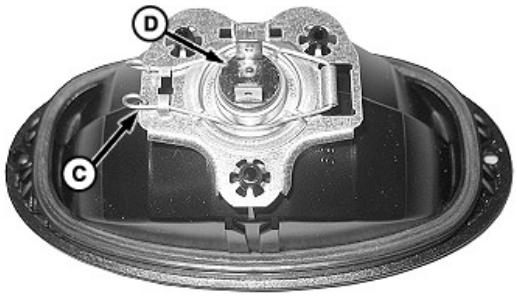
**Horizontal Adjustment:** Rotate light assembly left or right to desired position. Repeat on remaining lights as needed.

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.

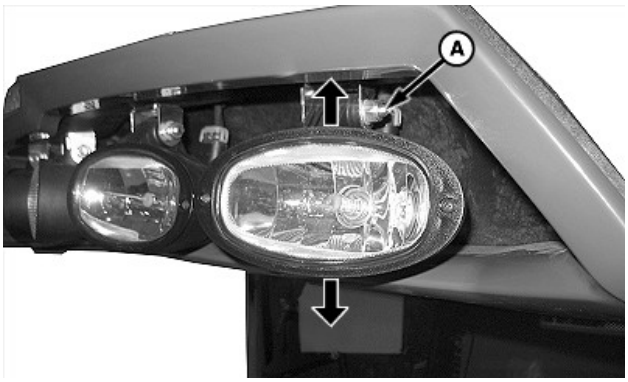
Attach bulb assembly using clips on light bulb base.

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**

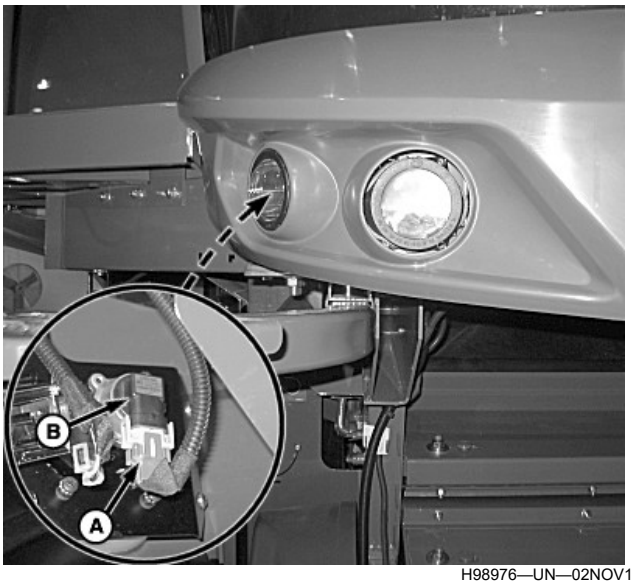
**CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.**

*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

## Fascia Light Bulb (If Equipped)—Replacing




H98976—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.*

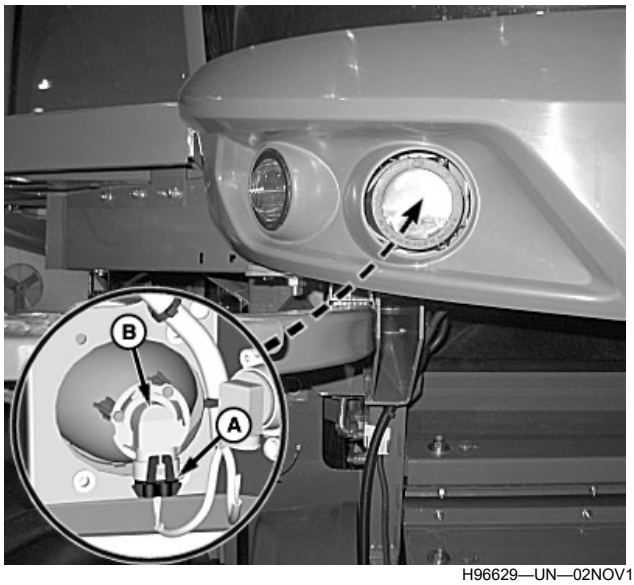
Remove and replace bulb.

Push in bulb assembly and turn clockwise to install into housing and connect wiring harness.

Repeat on remaining lights as needed.

OUO6075,0000A6F-19-04NOV10

## 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.*

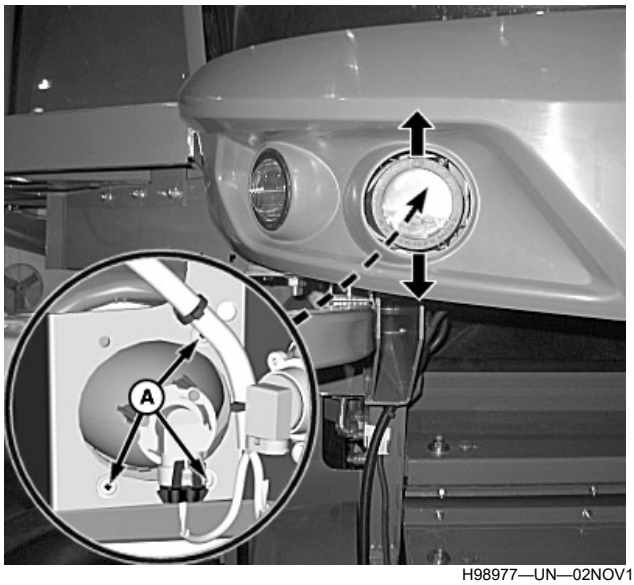
Remove and replace bulb.

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**

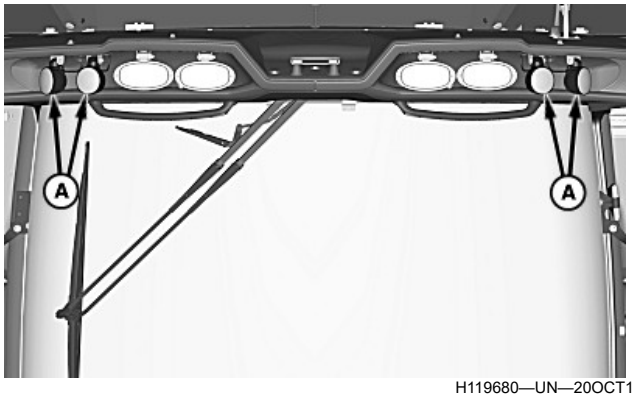
**CAUTION: Lower feeder house fully before replacing or adjusting headlights.**

*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

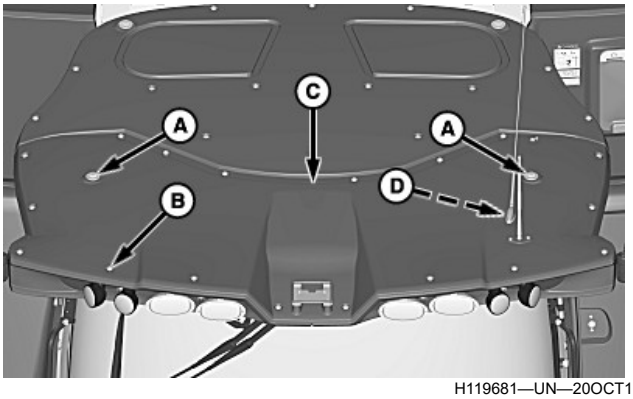



H119680—UN—20OCT16

**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

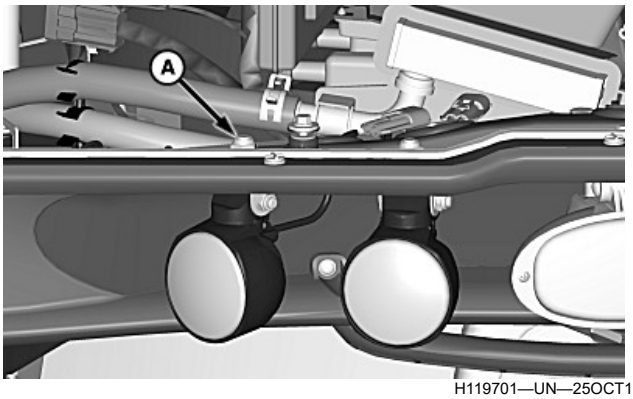
**A—Cap Screw and Washer (2 used)**
**B—Cap Screw and Washer (19 used)**
**C—Cab Roof**
**D—Antenna**

*NOTE: Remove GreenStar™ position receiver if equipped.*

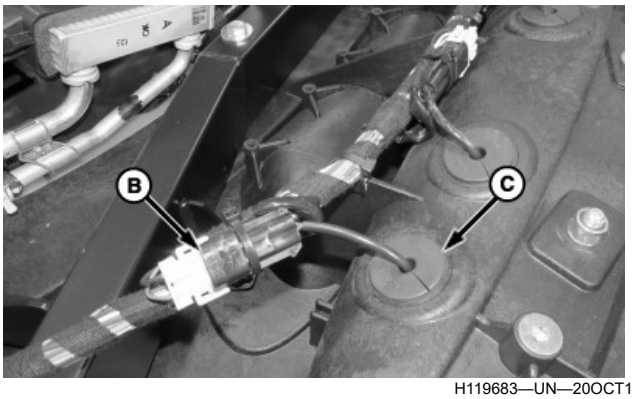
Remove cap screws and washers (A and B).

Lift front left-hand side of cab roof (C) and disconnect the antenna (D).

Remove front portion of cab roof.




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.

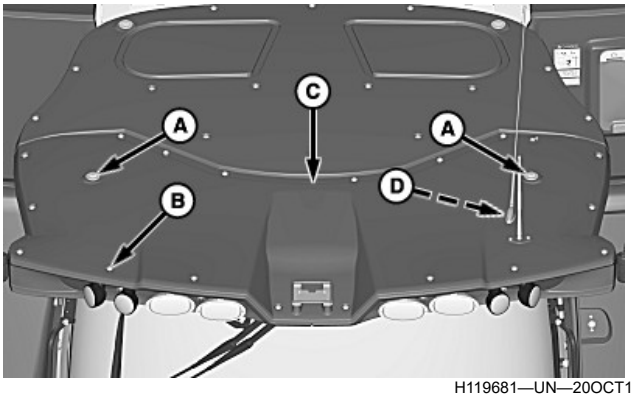
Tighten cap screw and nut to specification.

**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)

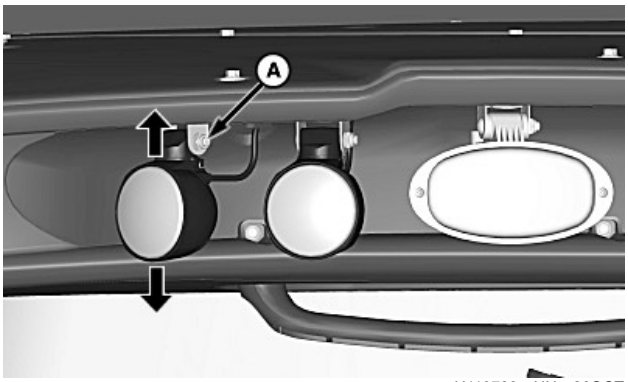
Install cap screws (A) and tighten to specification.

**Specification**

Cap Screws—Torque. . . . . 10 N·m (89 lb·in)

OUO6075,000435E-19-30JAN17

## Light Emitting Diode (LED) Lights (Optional)—Adjusting




H119703—UN—26OCT16

*GreenStar is a trademark of Deere & Company*

**A—Cap Screw**

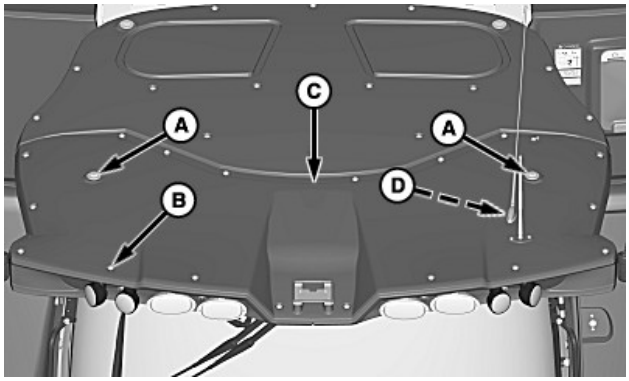
**CAUTION: Raise feeder house and lower safety stop before replacing or adjusting headlights.**

*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

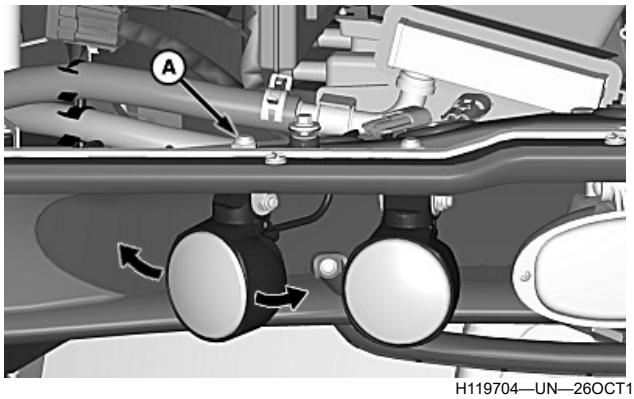
**A—Cap Screw and Washer (2 used)**
**B—Cap Screw and Washer (19 used)**
**C—Cab Roof**
**D—Antenna**

*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).

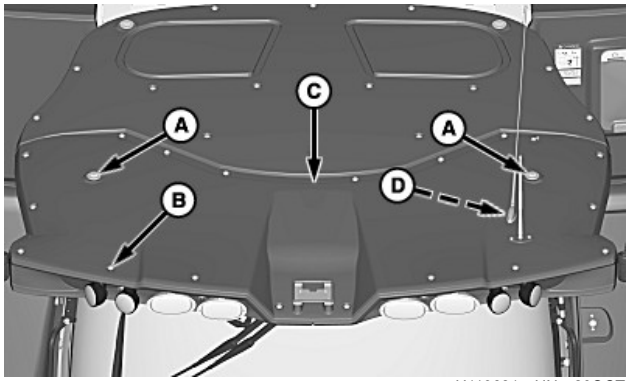
Rotate light assembly left or right to desired position.

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.

**Specification**

Cap Screws—Torque. . . . . 6 N·m (53 lb·in)

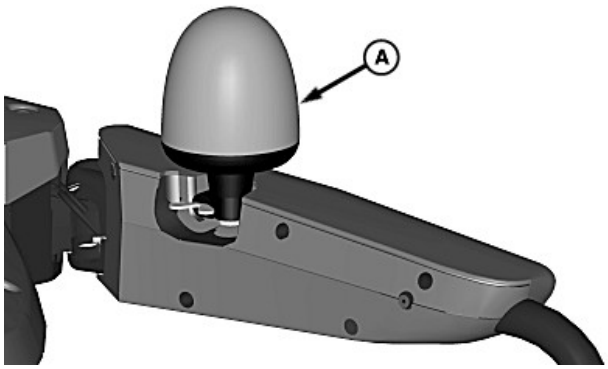
Install cap screws (A) and tighten to specification.

**Specification**

Cap Screws—Torque. . . . . 10 N·m (89 lb·in)

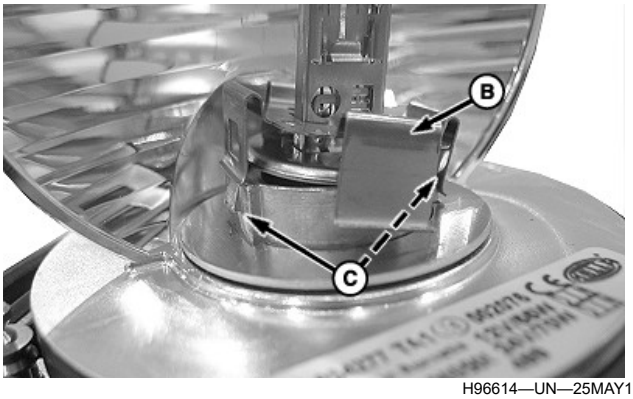
OUO6075,000435F-19-30JAN17

## Replace Beacon Lights (Style A)

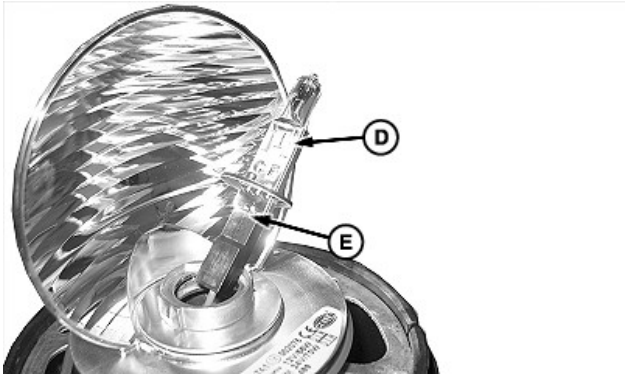



H111426—UN—12JUN14

*GreenStar is a trademark of Deere & Company*




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).

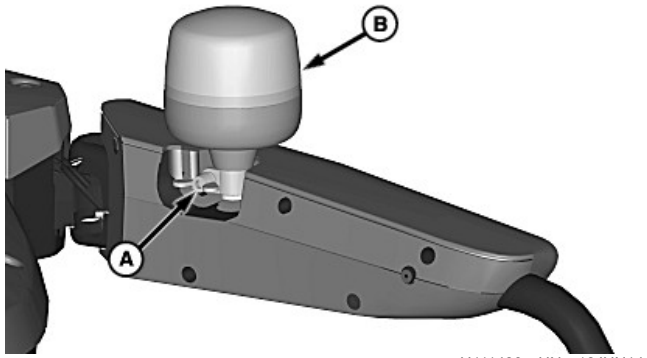
*NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.*

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.

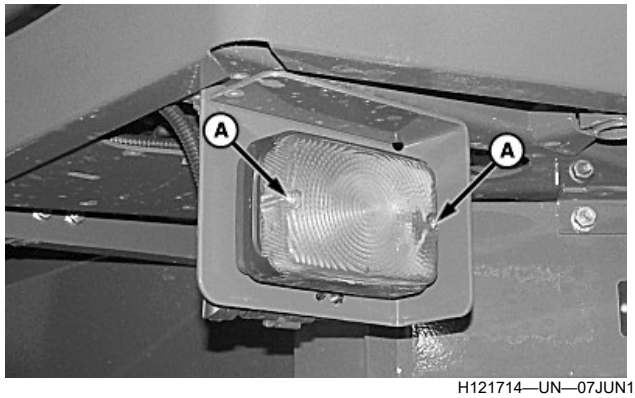
Remove and replace beacon light assembly.

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

## Warning Lights—Replacing




H121714—UN—07JUN17

*Right-Hand Front Warning Light*

**A—Bulb Assembly**

Remove screws (A) from lens cover.

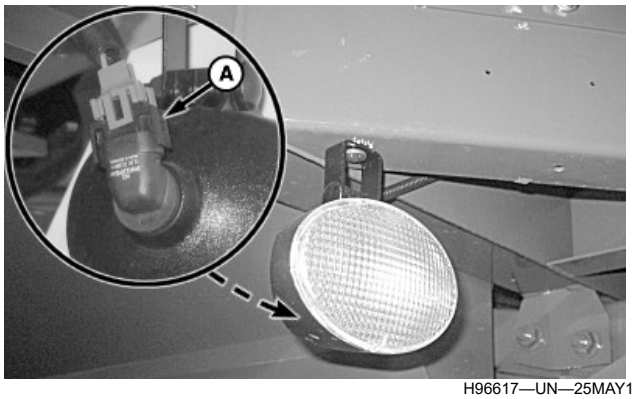
Remove light bulb by pushing in and turning counterclockwise.

*NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.*

Install bulb and lens cover in reverse order.

OUO6075,000475A-19-27JUN17

## Discharge Lights, Auxiliary Field Lights, Access Door Work Lights, Stubble Lights, Grain Tank and Unloading Auger Light—Replacing




H96617—UN—25MAY10

*Right-Hand Stubble Light*

**A—Connector**

Disconnect wiring harness connector (A) from bulb assembly.

Turn bulb assembly counterclockwise and remove.

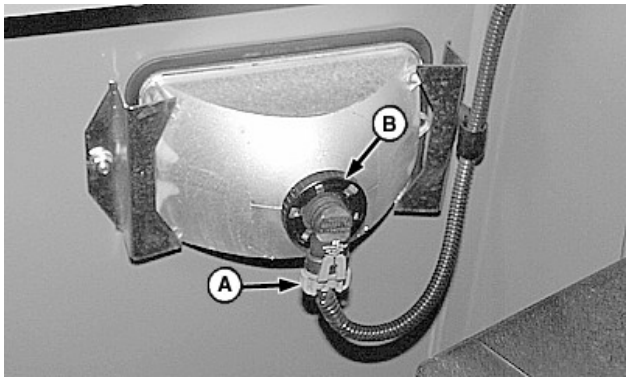
Remove and replace bulb.

*NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.*

Push in bulb assembly and turn clockwise to install into housing and connect wiring harness.

OUO6075,0000781-19-04NOV10

## Side Finder Lights and Cleaning Shoe Lights—Replacing




H57680—UN—28MAY99

**A—Connector**
**B—Retainer Ring**

Disconnect wiring harness connector (A) from bulb assembly.

Push in and twist retainer ring (B) counterclockwise and remove.

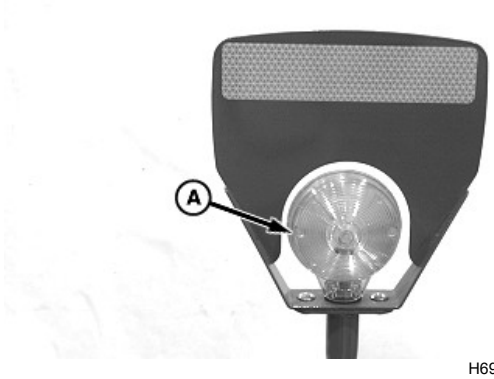
Remove and replace bulb.

*NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.*

Install bulb assembly in reverse order and connect wiring harness.

OUO6075,0000782-19-04NOV10

## Warning Lights—Replacing




H69242—UN—12JUL01

**A—Lens Cover**

Pry off lens cover (A).

Remove bulb by pushing in and turning counterclockwise.

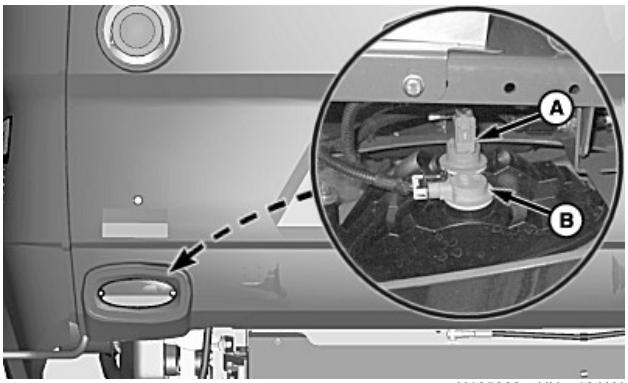
Remove and replace bulb.

*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.

OUO6075,0000A80-19-04NOV10

## Rear Hazard Lights and Marker/Brake Lights—Replacing




H105998—UN—16JAN13

**A—Hazard Light**
**B—Marker/Brake Light**

Turn bulb of hazard light (A) or marker/brake light (B) counterclockwise and remove.

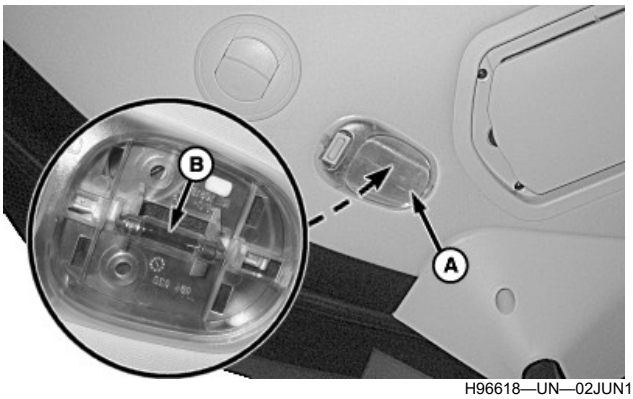
Remove and replace bulb.

*NOTE: Replacement light bulbs are sensitive to skin contact. Wear protective gloves or avoid touching light bulb surface.*

Push in bulb assembly and turn clockwise to install into housing.

OUO6075,00012C9-19-23OCT12

## Cab Interior Light—Replacing




H96618—UN—02JUN10

**A—Lens Cover**
**B—Bulb**

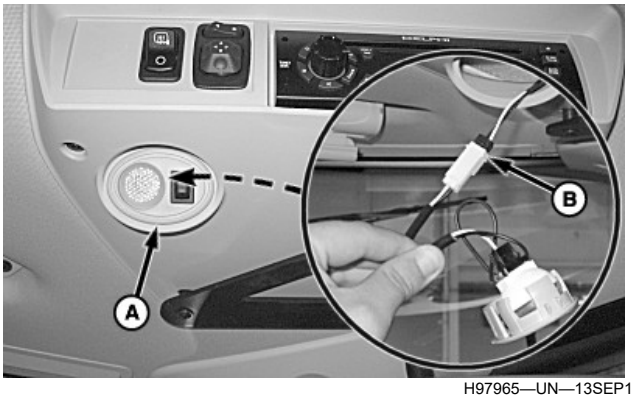
Remove lens cover (A) and replace bulb (B).

*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**

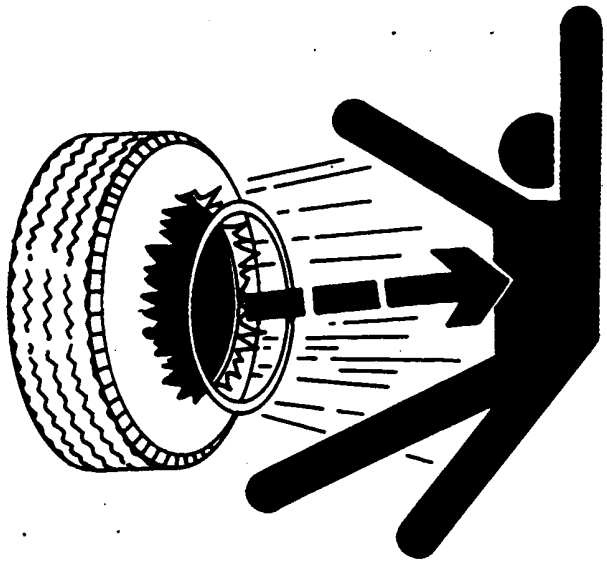
Remove map light assembly (A) and disconnect wiring harness connector (B).

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<br>9900—12 100 lb | 1500—2500 kg<br>3300—5500 lb | 2500—3500 kg<br>5500—7700 lb | 3500—4500 kg<br>7700—9900 lb | 4500—5500 kg<br>9900—12 100 lb |
| Belt Pickup/Draper Heads | Not Applicable | Not Applicable | BP15<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C8F<br>C12F | C6R | C8R | C8F<br>C12R | C12F<br>C16R<br>C18R |
| 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 |

| 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<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C8F<br>C12F | C6R | C8R | C8F<br>C12R | C12F<br>C16R<br>C18R |
| Front Tire Size | S760 and S770 - Tire Pressure - bar/kPa (psi) | | | | | |
| 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 |
| 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).*

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## 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<br>9900—12 100 lb | 1500—2500 kg<br>3300—5500 lb | 2500—3500 kg<br>5500—7700 lb | 3500—4500 kg<br>7700—9900 lb | 4500—5500 kg<br>9900—12 100 lb |
| Belt Pickup/Draper Heads | Not Applicable | Not Applicable | BP15<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C8F<br>C12F | C6R | C8R | C8F<br>C12R | C12F<br>C16R<br>C18R |
| 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) |

| 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<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C8F<br>C12F | C6R | C8R | C8F<br>C12R | C12F<br>C16R<br>C18R |
| Front Tire Size | S780, S785, and S790 - 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) | 1.6/160 (23) |
| 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).*

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## 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<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>730D<br>735X | RD35F<br>RD40F<br>735D<br>740D<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C6R | C8R | C8F | C12R | C12F<br>C16R<br>C18R |
| **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).*

OUO6075,0004E81-19-07JUL20

## 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<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C8F<br>C12F | C6R | C8R | C8F<br>C12R | C12F<br>C16R<br>C18R |
| 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*

OUO6075,0004E55-19-07JUL20

## 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<br>9900—12 100 lb | 1500—2500 kg<br>3300—5500 lb | 2500—3500 kg<br>5500—7700 lb | 3500—4500 kg<br>7700—9900 lb | 4500—5500 kg<br>9900—12 100 lb |
| Belt Pickup/Draper Heads | Not Applicable | Not Applicable | BP15<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C8F<br>C12F | C6R | C8R | C8F<br>C12R | C12F<br>C16R<br>C18R |
| 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*

OUO6075,0004E56-19-07JUL20

## 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<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R | 630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X | RD30F<br>730D<br>735X | RD35F<br>RD40F<br>735D<br>740D<br>730PF<br>735PF | HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF |
| Corn Heads | Not Applicable | C6R | C8R | C8F | C12R | C12F<br>C16R<br>C18R |
| **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 | | | | | | |

*HillMaster is a trademark of Deere & Company*
[a]*Indicates road transport configuration (no header, no grain in tank).*

OUO6075,0004E82-19-07JUL20

## 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:**

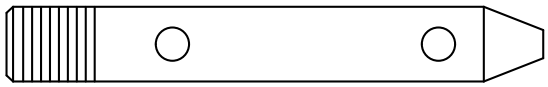
- Tire Sizes
- Header Compatibility
- Row Spacings
- Wheel Spacers
- Axle Spacers
- Wheel Offsets

**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




H124190—UN—15MAY18

*Torque Sequence*

Each time drive wheels are repositioned or replaced, torque wheel bolts to specification and in a criss/cross pattern.

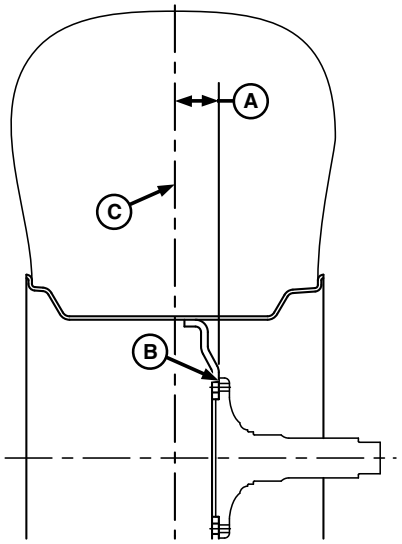
**Specification**

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.

OUO6075,0004918-19-29MAY18

## 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.**

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.**

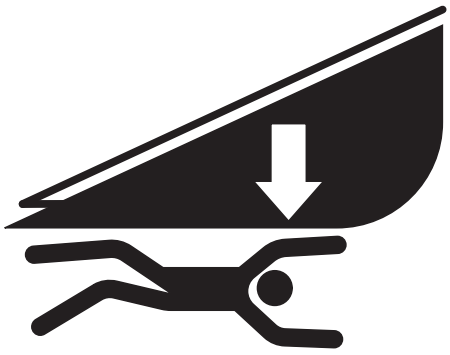
When preparing dual wheels for transport, outer wheels can be removed to reduce transport width.

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.

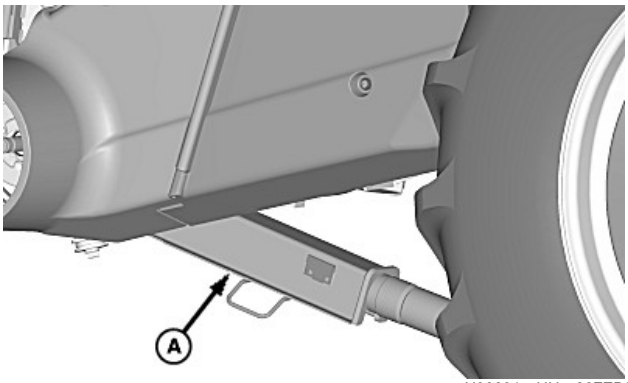
Pay close attention to ”CAUTION” statements as they address your safety, the safety of others and safe operations of the machine.

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.**

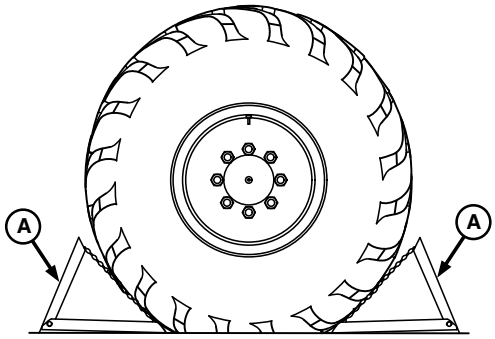
2. **Manual Feeder House Fore/Aft Tilt**

   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.

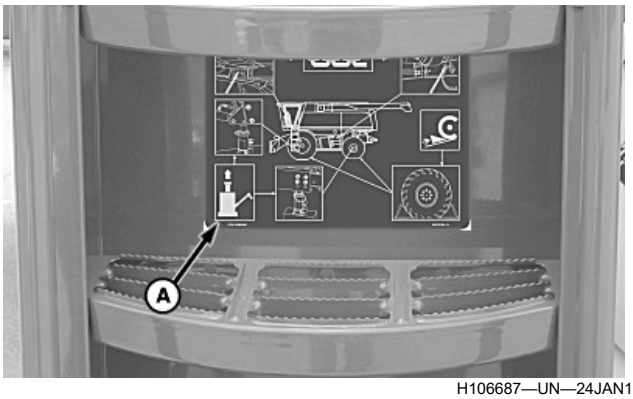



H118221—UN—18APR16

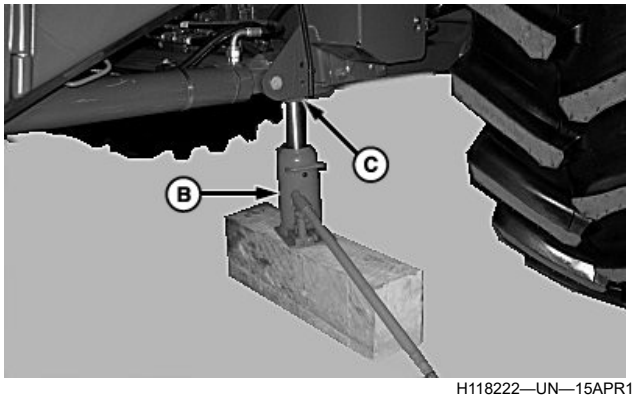
**A—Blocks**

**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).**

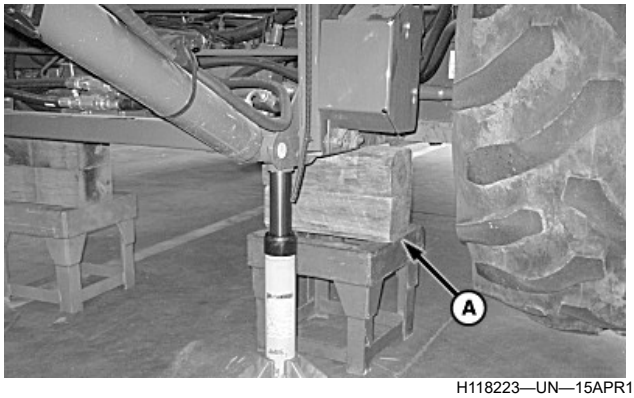
**Do not raise machine at any location other than at the jack pockets.**

**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.




H124273—UN—15MAY18

**A—Wheel Bolt (20 used)**
**B—Segmented Spacer (5 used)**
**C—Wheel**
**D—Wheel Spacer (if required)**

8. **Single Wheel Configuration:**

**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**

9. **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**

10. **Dual Wheel Configuration (Inner Wheel):**

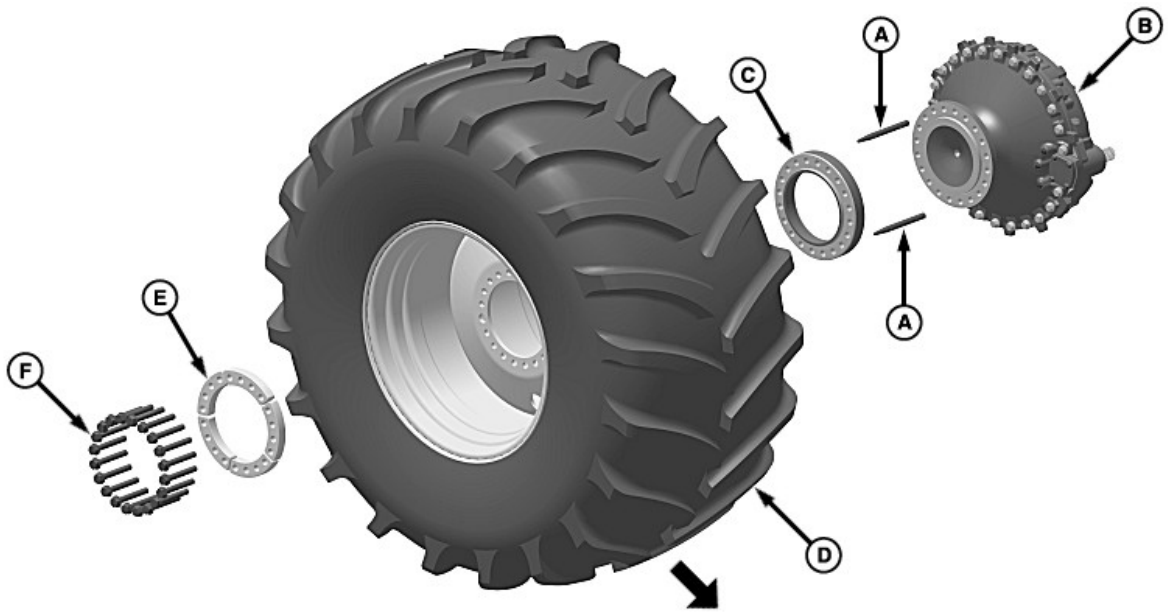
a. Remove socket head cap screws (A).

b. Remove inner wheel assembly (B) away from machine.

c. Repeat steps as needed on the opposite side of the machine.

OUO6075,0004915-19-23MAY18

## Install Front Wheels




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)**

1. **Single Wheel Configuration:**

**⚠ CAUTION: Wheels are heavy and are difficult to handle. 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.

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.

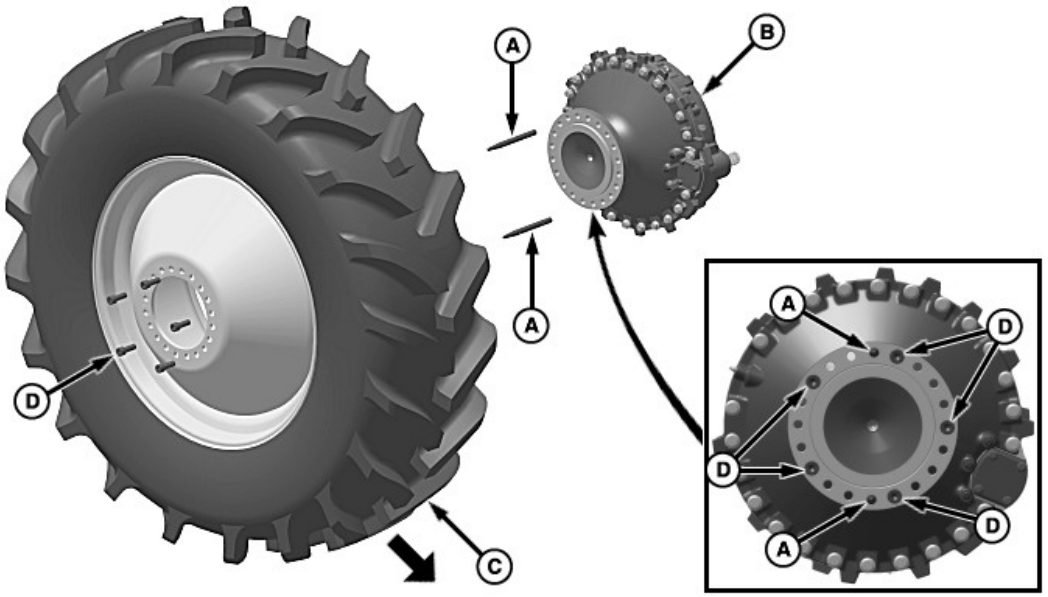
d. Align holes in the rim with pilot studs.

e. Install wheel onto the drive hub.

**IMPORTANT: Start wheel bolts by hand to help prevent damage to bolts.**

f. Install 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)**

2. **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.

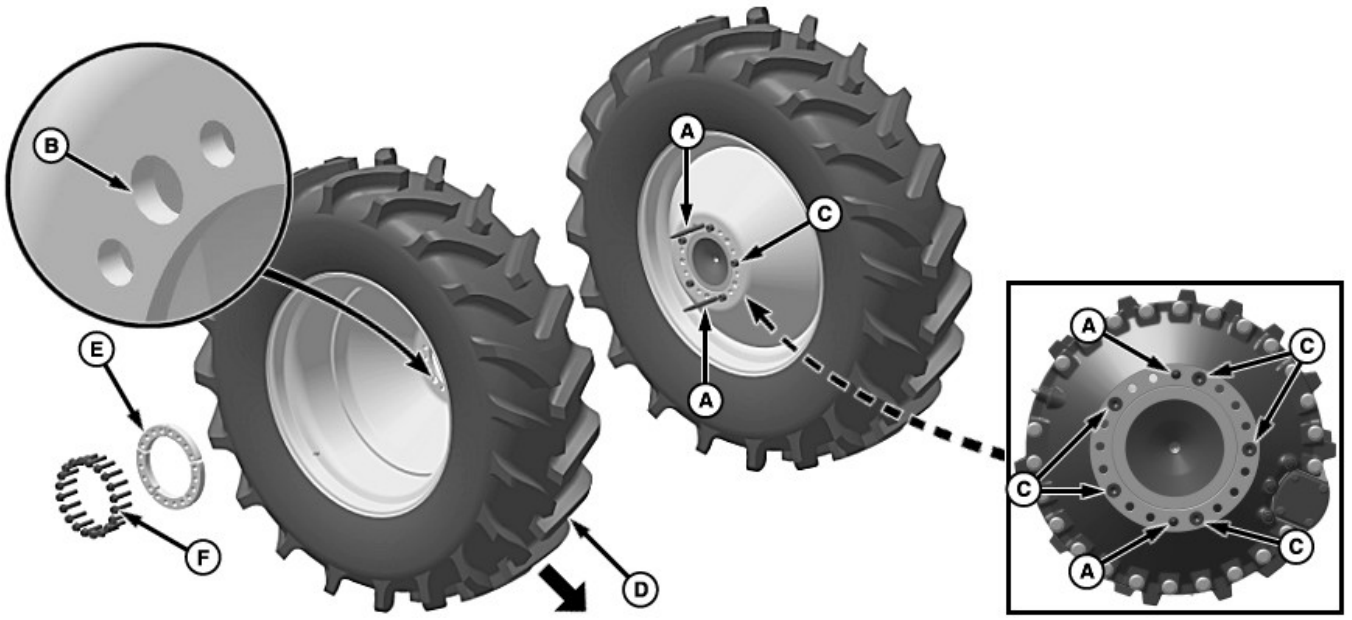
d. Install wheel onto the drive hub.

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)**

3. **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.*




H124190—UN—15MAY18

*Torque Sequence*

4. Tighten wheel bolts to specification using a criss/cross pattern.

| Specification | |
|---|---|
| Wheel Bolts—Torque (dry) | 710 N·m (524 lb·ft) |

5. Remove pilot studs and replace with wheel bolts.
6. Tighten remaining wheel bolts to specification.

| Specification | |
|---|---|
| Wheel Bolts—Torque (dry) | 710 N·m (524 lb·ft) |

7. 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.
8. Check tire pressure and inflate as needed. See Care and Service of Tires in this section for tire inflation pressure.

OUO6075,0004916-19-08JUN18

## 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**<br>**3300—5500 lb** | **2500—3500 kg**<br>**5500—7700 lb** | **3500—4500 kg**<br>**7700—9900 lb** | **4500—5500 kg**<br>**9900—12 100 lb** |
| | **Belt Pickup/Draper Heads** | **BP15<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R** | **630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X** | **RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF** | **HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF** |
| | **Corn Heads** | **C6R** | **C8R** | **C8F<br>C12R** | **C12F<br>C16R<br>C18R** |
| **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.

OUO6075,0004E63-19-07JUL20

## 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%.*

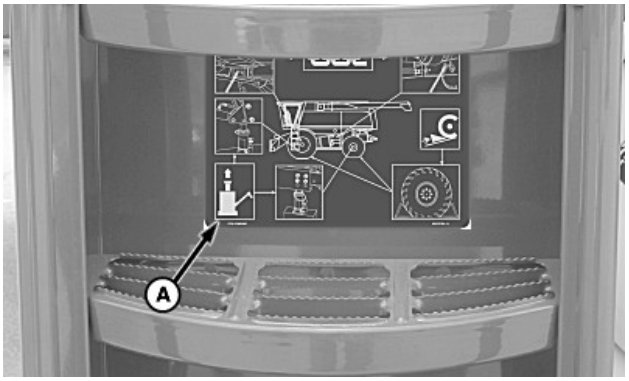
| | | | | | |
|---|---|---|---|---|---|
| | **Approximate Mass** | **1500—2500 kg**<br>**3300—5500 lb** | **2500—3500 kg**<br>**5500—7700 lb** | **3500—4500 kg**<br>**7700—9900 lb** | **4500—5500 kg**<br>**9900—12 100 lb** |
| | **Belt Pickup/Draper Heads** | **BP15<br>620F<br>620R<br>622F<br>622R<br>625F<br>625R** | **630F<br>630R<br>635F<br>635R<br>725D<br>722PF<br>725PF<br>722X<br>725X** | **RD30F<br>RD35F<br>RD40F<br>730D<br>735D<br>740D<br>735X<br>730PF<br>735PF** | **HD35R<br>HD40R<br>HD40X<br>HD45R<br>RD45F<br>740X<br>740PF** |
| | **Corn Heads** | **C6R** | **C8R** | **C8F<br>C12R** | **C12F<br>C16R<br>C18R** |
| **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.

*HillMaster is a trademark of Deere & Company*

OUO6075,0004E9C-19-07JUL20

## Jack Pocket Locations Decal




H106687—UN—24JAN13

**A—Jack Pocket Locations Decal**

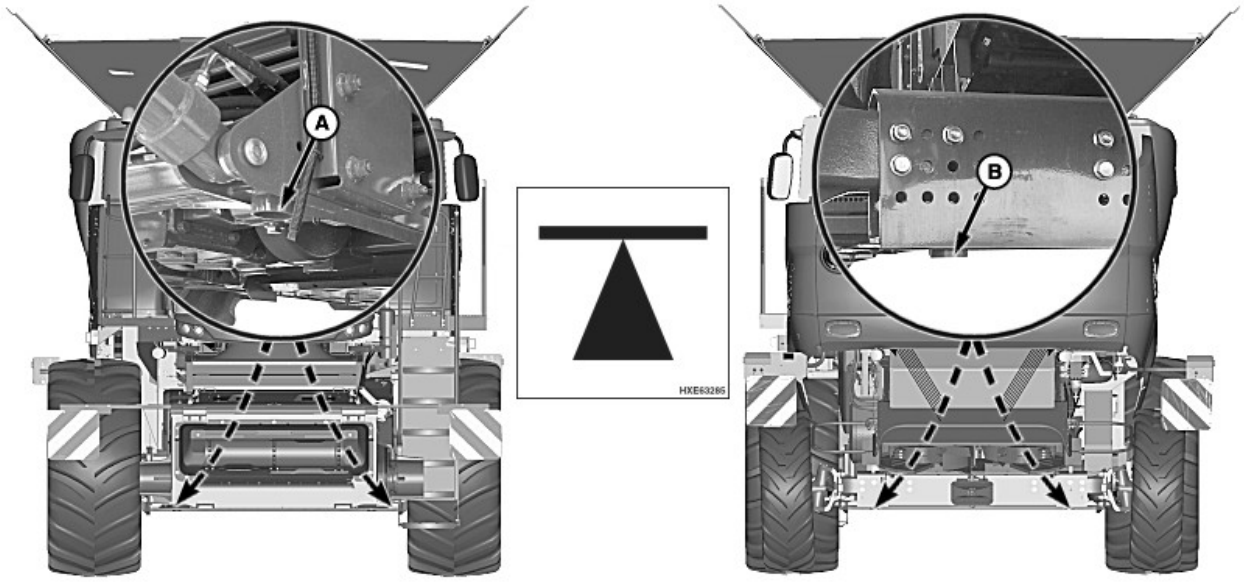
**CAUTION: Always empty grain tank before raising machine.**

**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.**

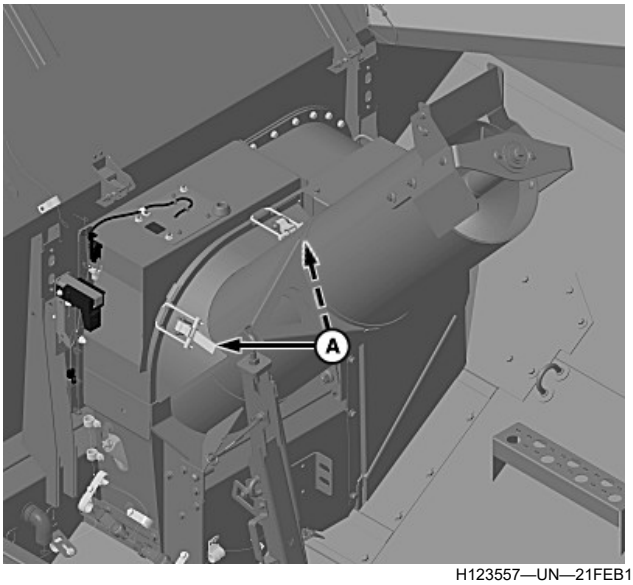
**IMPORTANT: Verify that grain tank is unloaded before transporting machine on road.**

**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:

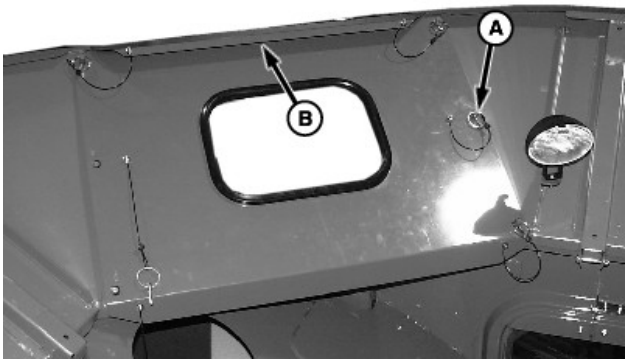
   - Unloading Auger
   - Grain Tank Covers (If Equipped)




H123557—UN—21FEB18

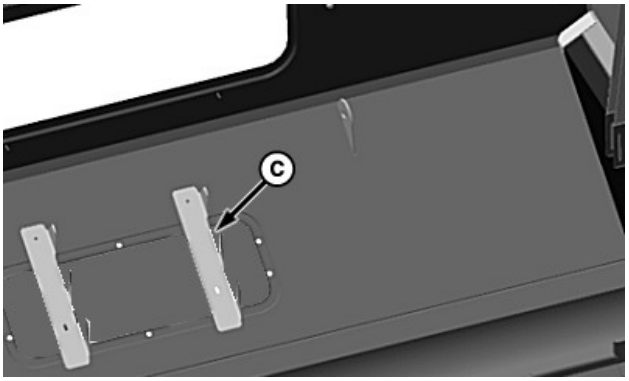
**A—Clamps**

2. **Manual Fold Clean Grain Auger (If Equipped):** Release clamps (A) and lower auger.




H75331—UN—26FEB03

*Front Grain Tank Extension Shown*



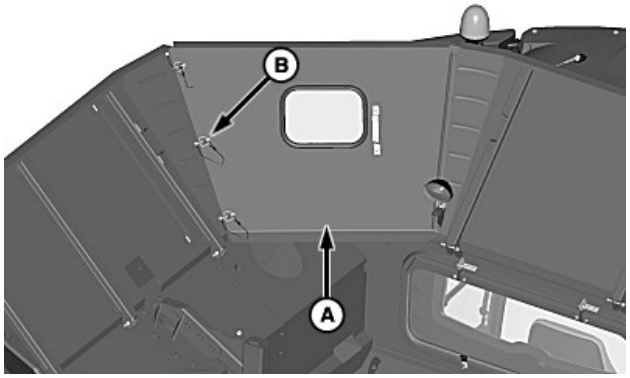

H113135—UN—05MAR15

**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:

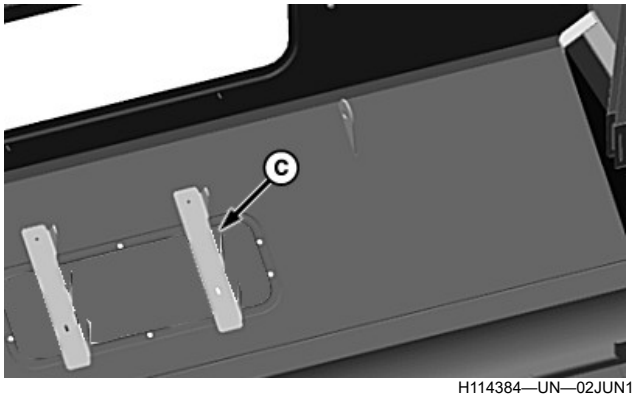
a. Fold front grain tank extension and rear grain tank extension.

b. Fold left-hand grain tank extension and right-hand grain tank extension.




H114383—UN—02JUN15

*Front Grain Tank Extension*



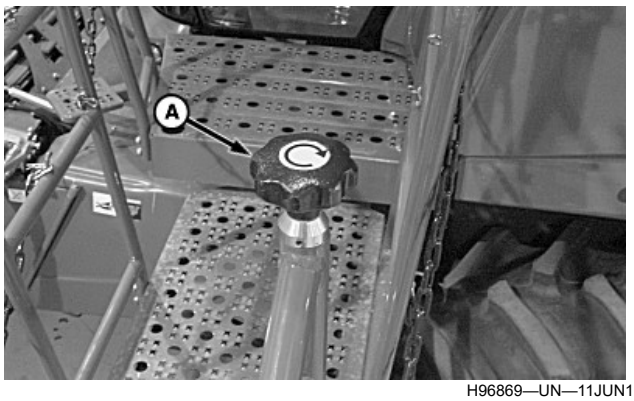

H114384—UN—02JUN15

**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**

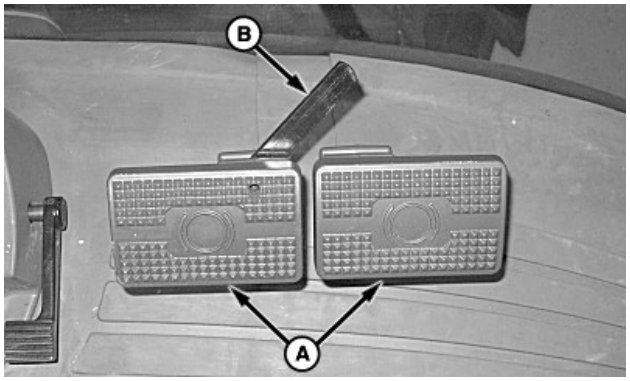
**CAUTION: Swing ladder to the full forward position to reduce machine width and to orient marker/hazard light toward oncoming motorists.**

**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.**

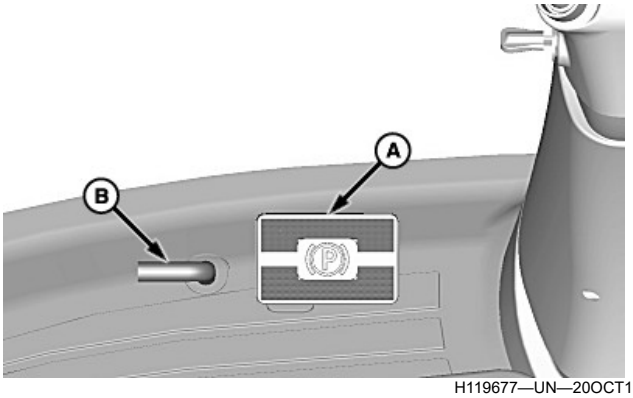
9. Sound horn and start engine. Use cold weather starting aid if needed.



H116348—UN—19DEC16

*Header Raise/Lower Switch*

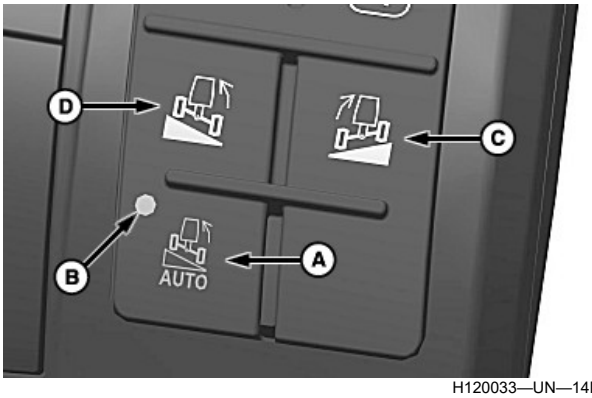
10. Raise header with the header switch.




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.



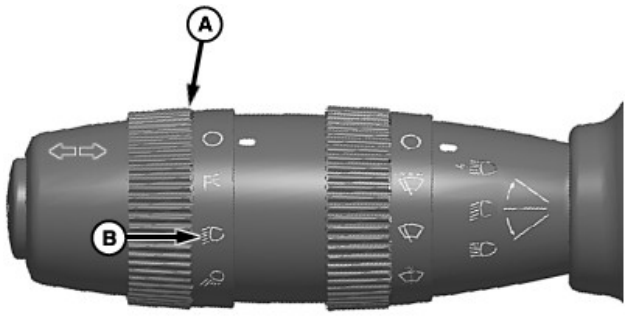
H117885—UN—29MAR16

*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.

*HillMaster is a trademark of Deere & Company*




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.*

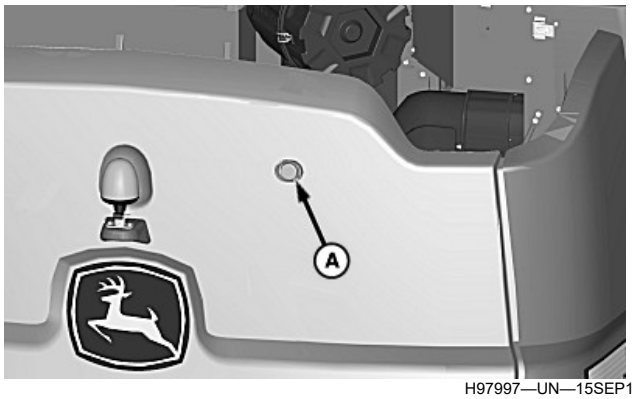
18. **Mechanical Shift Transmission:** Engage third gear for road travel.

**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



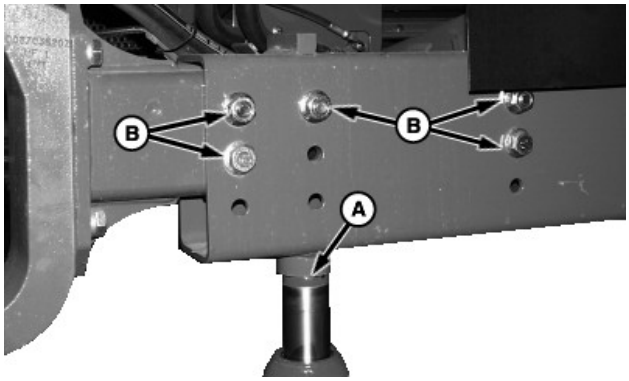

H97997—UN—15SEP10

**A—Back-Up Alarm**

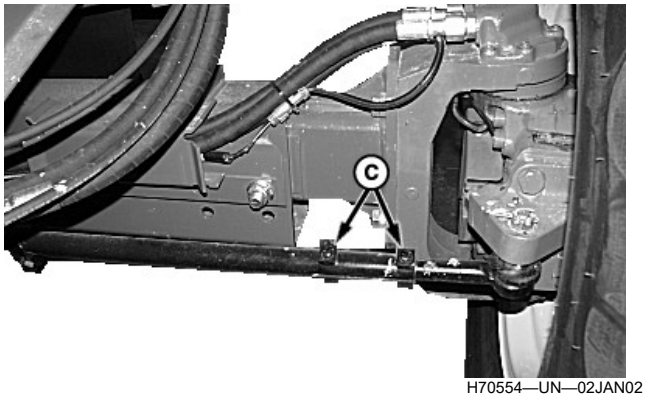
If multi-function lever is moved rearward while engine is running, back-up alarm (A) sends an acoustical signal to warn others around the machine that the operator is backing up.

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.*

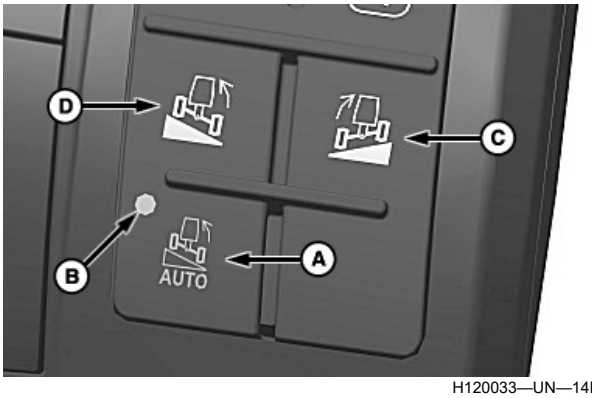
*See Ground Drive and Rear Axle section for additional information that MUST be done when removing dual wheels (if equipped).*

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:**

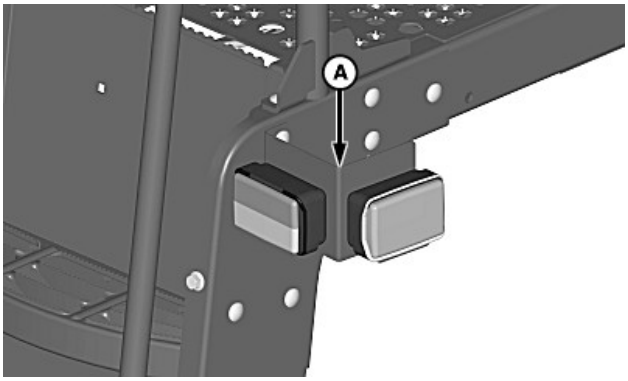
**CAUTION: Never drive machine on a trailer with HillMaster™ leveling system in automatic mode. Never attempt to manually tilt machine while on trailer.**

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.

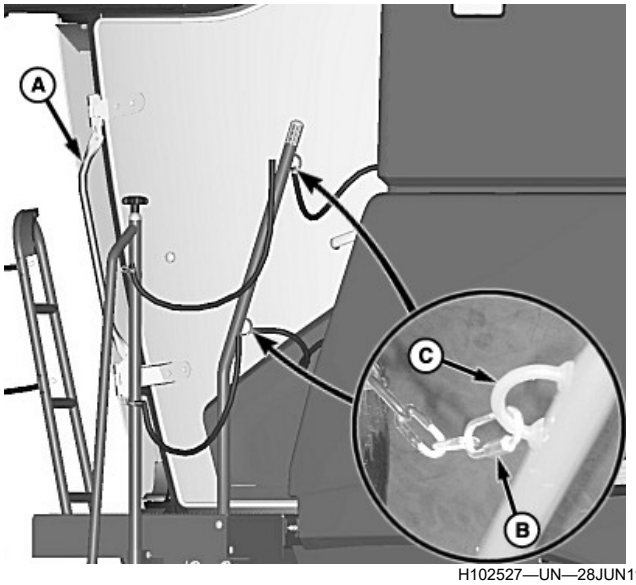



H121713—UN—07JUN17

**A—Light Bracket**

12. **Single Tire Configuration:** Disconnect wiring harness and remove light bracket (A).

*HillMaster is a trademark of Deere & Company*




H102527—UN—28JUN11

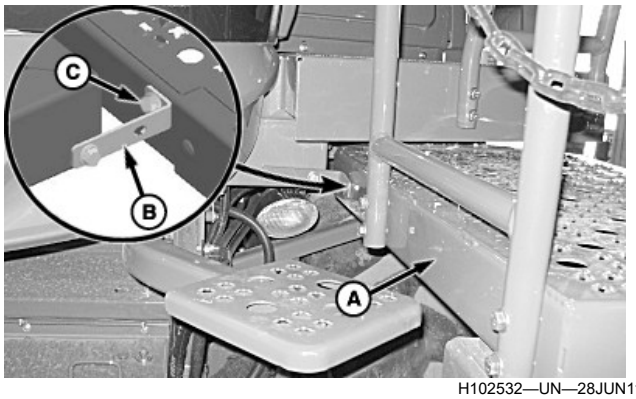
**A—Handrail**
**B—Chain Link**
**C—Handrail Loops**

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).

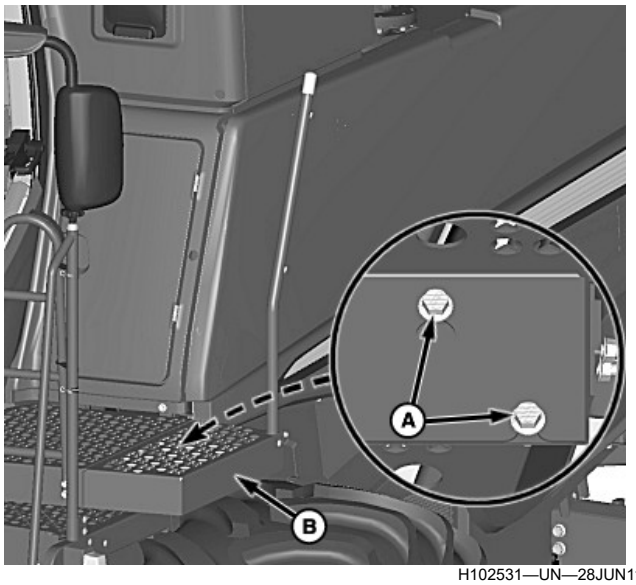



H102532—UN—28JUN11

**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

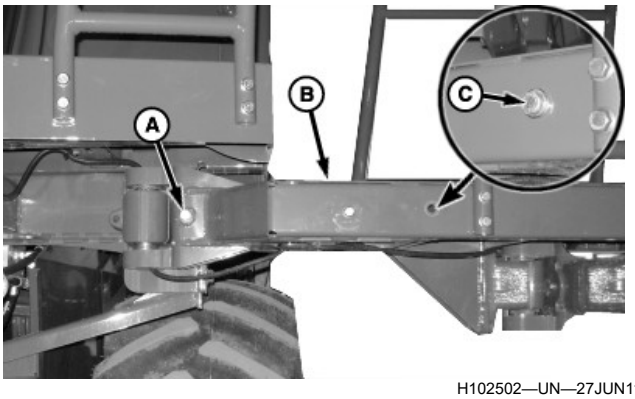
**A—Chain Link**
**B—Handrail Loop**

**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

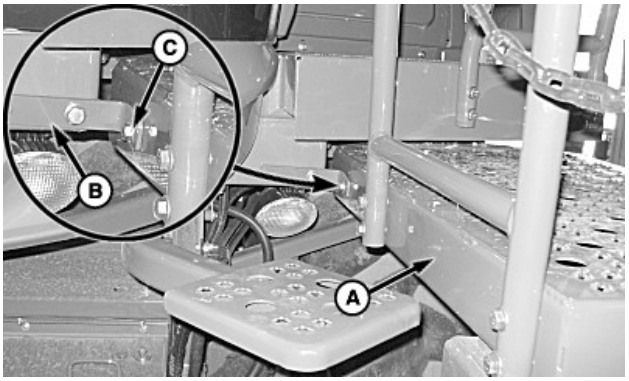
closure chain link (A) from the handrail loop (B) on both sides of handrail.




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.



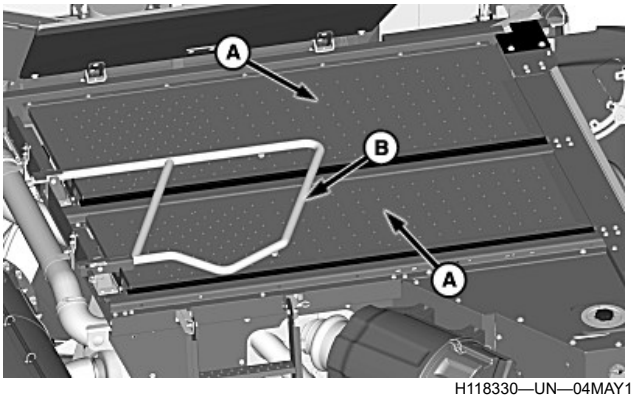

H102503—UN—28JUN11

**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.*

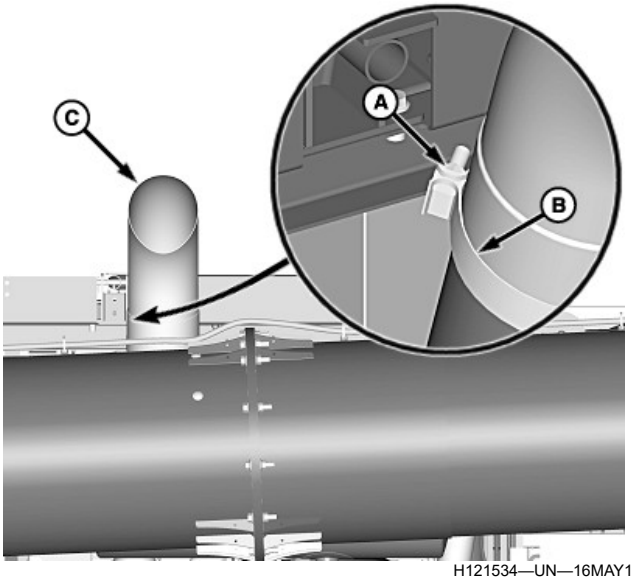
20. **Dual Tire Configuration:** Swing ladder landing (A) to transport position until it contacts shipping bracket (B) and install cap screw (C).




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.**

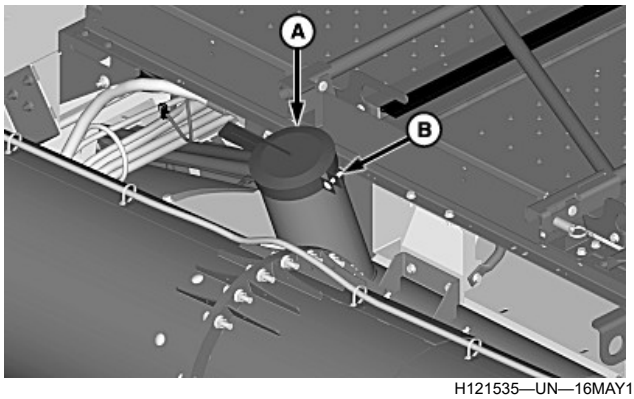
22. **Tier 2/Stage II Engines:** Loosen nut (A) on clamp (B).

*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.

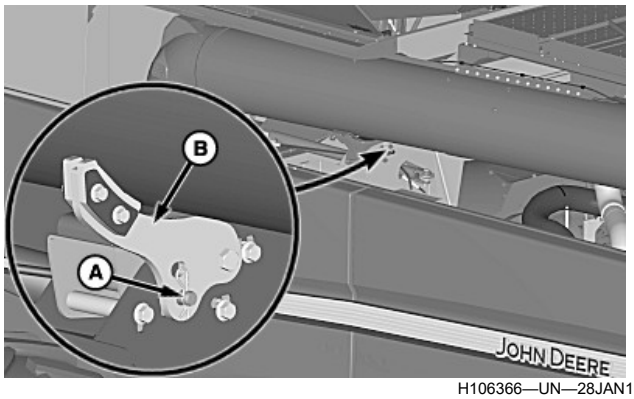
25. **Tier 2/Stage II Engines:** Tighten nut (B) to specification.

| 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

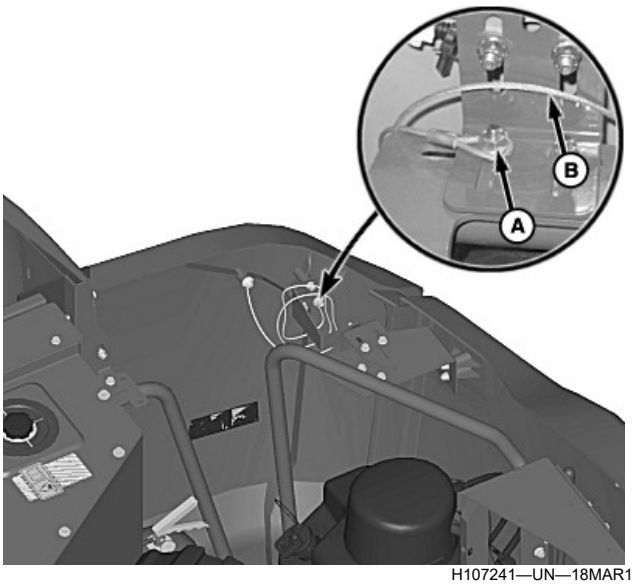



H106366—UN—28JAN13

**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.**

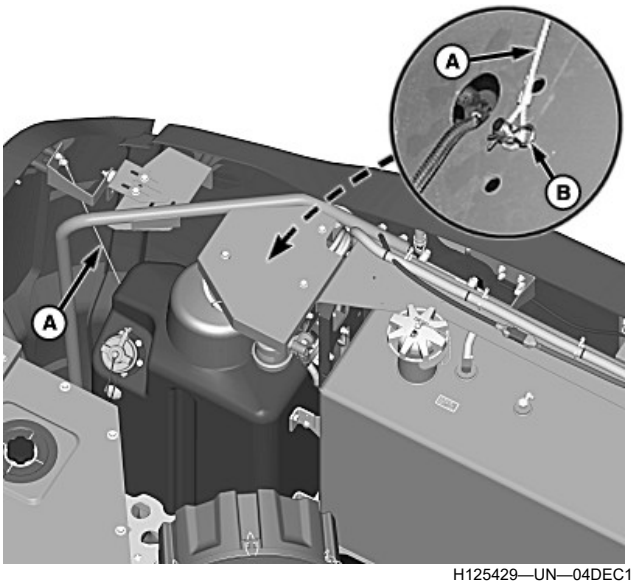
27. **Unloading Auger Lock Arm:**
    a. Remove and retain the spring pin and pin (A).
    b. Raise unloading auger lock arm (B) until holes align.
    c. Install previously removed pin and spring pin.




H107241—UN—18MAR13

**A—Hardware**
**B—Cable**

28. Loosen hardware (A) and remove cable (B) from storage position.



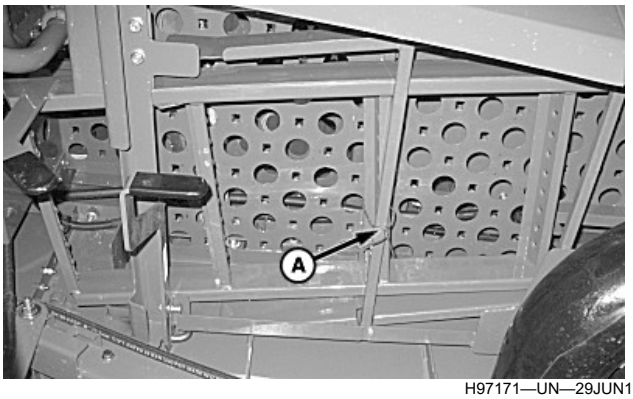

H125429—UN—04DEC18

**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.*

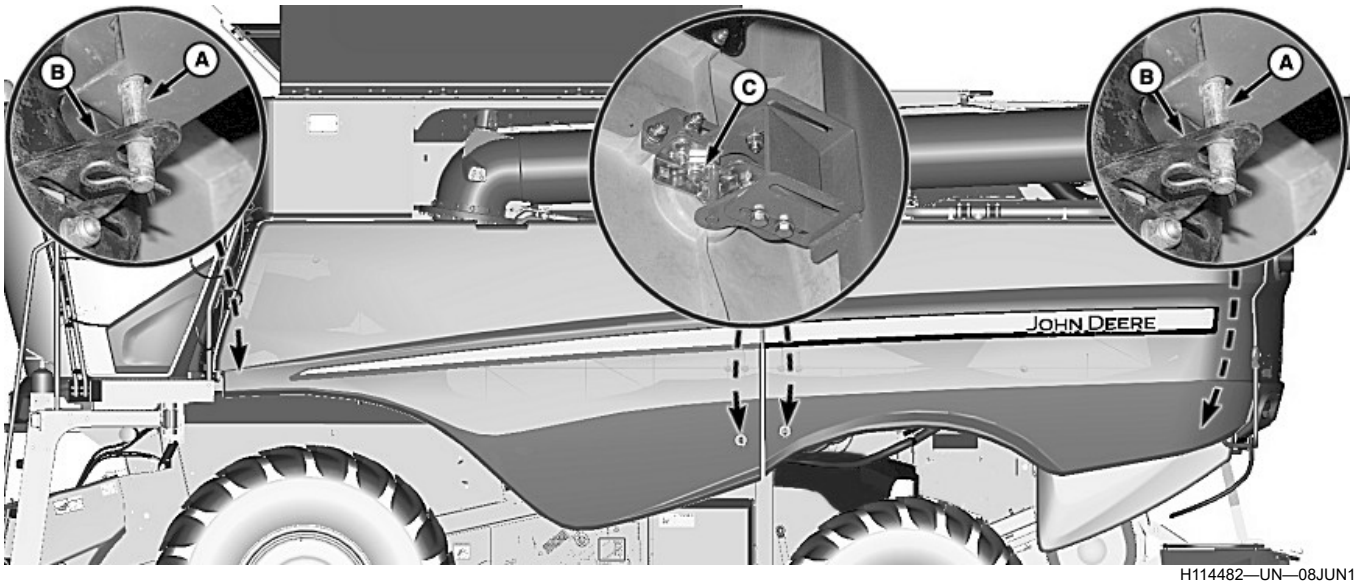
29. Install cable (A) over pin and retain with spring pin (B).




H97171—UN—29JUN10

**A—Platform**

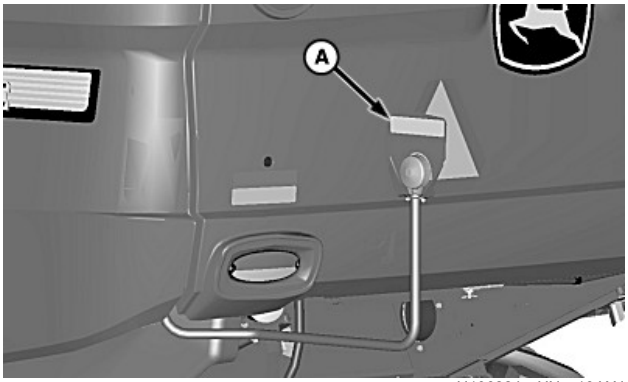
30. Tie the ladder extension to platform (A) using wire.




H114482—UN—08JUN15

**A—Pins**
**B—Locking Plates**
**C—Latches**

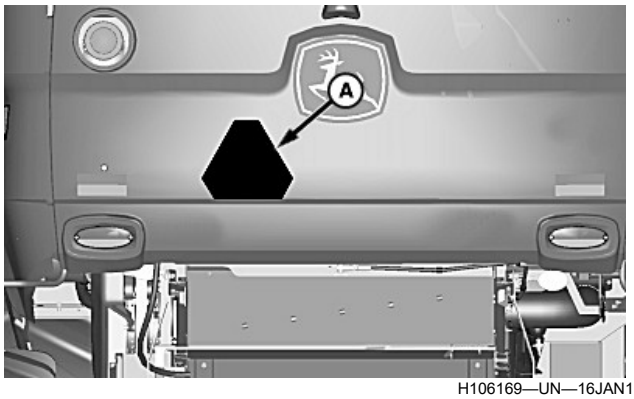
31. Install pins (A) through locking plates (B) and retain with spring pins at front and rear corners of the left-hand gull wing doors. Repeat on the opposite side of machine.
32. Use wire to tie the gull wing doors at latches (C). Repeat on the opposite side of machine.




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**

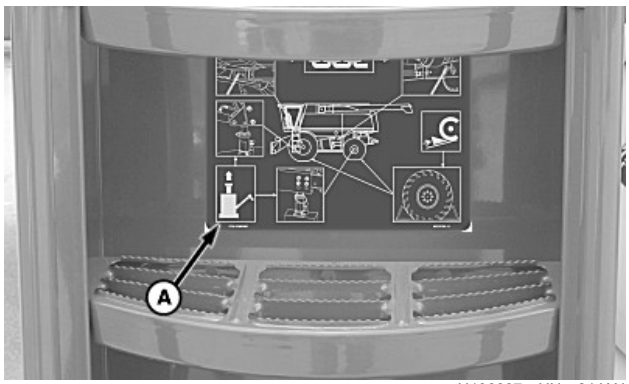
34. Cover up slow moving vehicle emblem (A) if equipped.

**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**

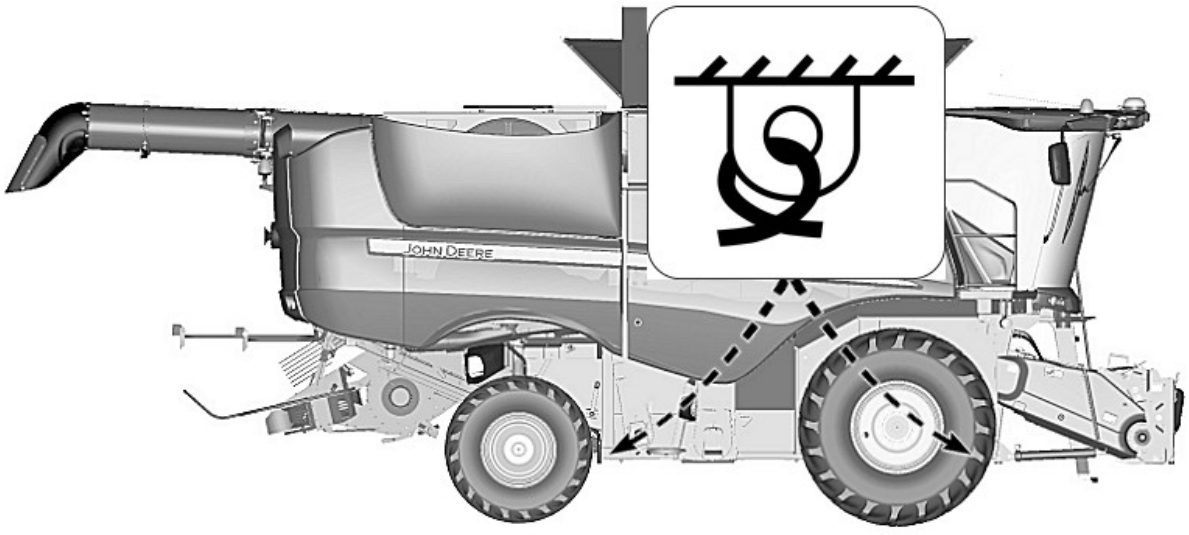
**CAUTION: Always empty grain tank before raising machine.**

*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

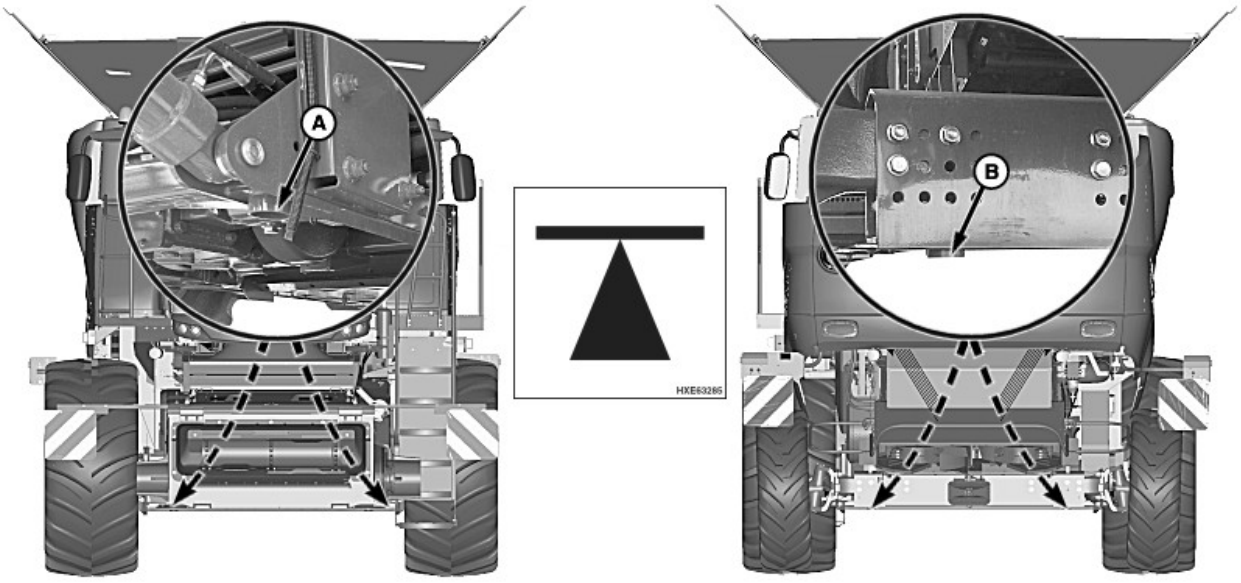
**CAUTION: Always empty grain tank before transporting machine.**

*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.**

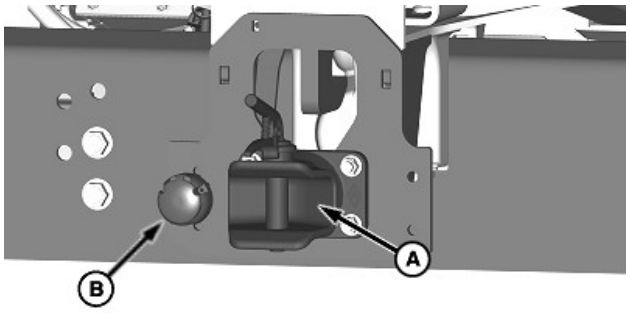
- Place gearshift lever and multi-function lever in neutral position.
- Tow machine in a forward direction by attaching a chain around the main axle. Be certain chain does not damage any hydraulic lines. Have driver in the operator's seat to steer and brake the machine.
- Turn warning lights ON, unless 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.**

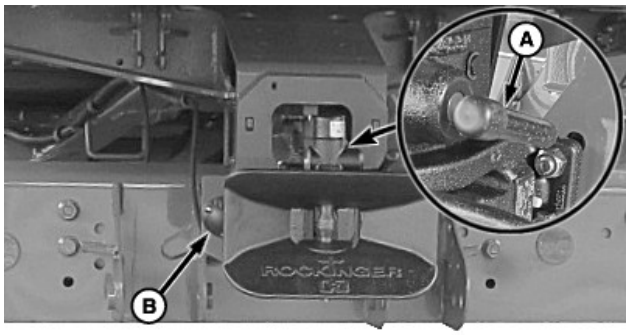
Fully raise the chopper.

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.**

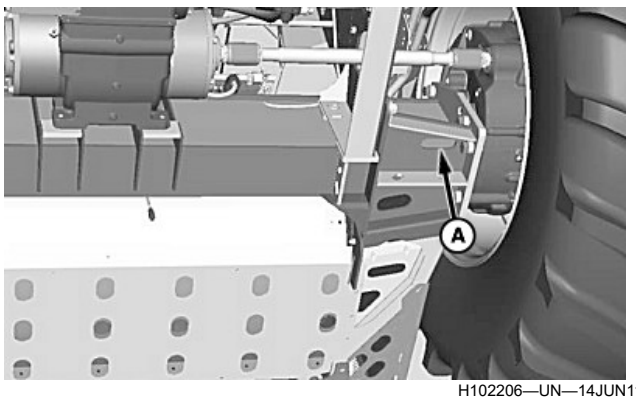
Fully raise the chopper.

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).

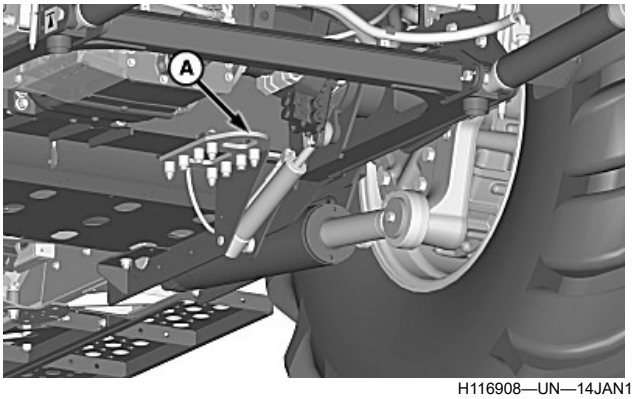
OUO6075,000431B-19-29JUN16

## Front Tow Hook




H102206—UN—14JUN11

*Front Tow Hook (Non-HillMaster™ machine)*




H116908—UN—14JAN16

*Front Tow Hook (HillMaster™ machine)*

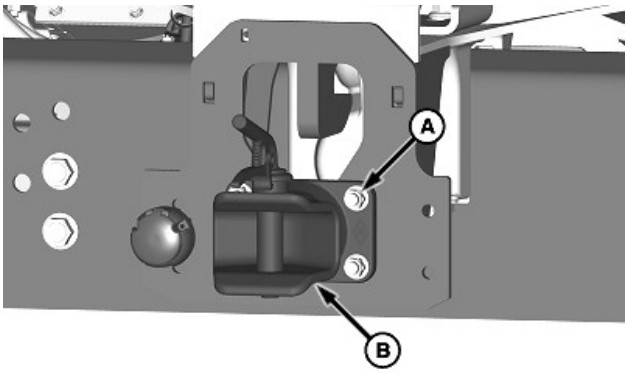
**A—Hook**

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.

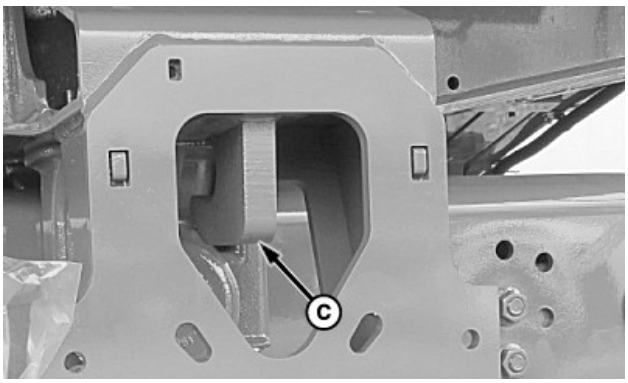
OUO6075,0004ECB-19-09JUL20

## 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).

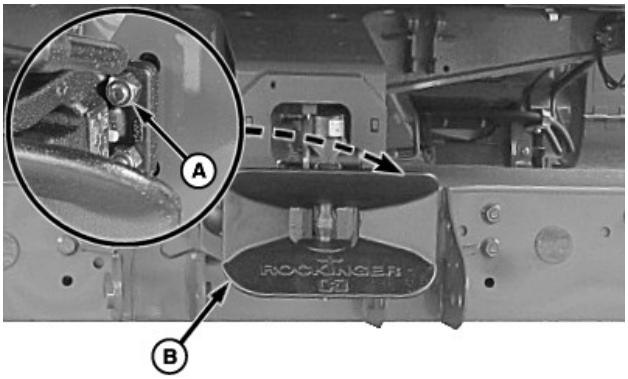
Secure chain to hook (C) and pull out machine. Do not use this hook for pulling a trailer.

Install trailer hitch and retain with cap screws and nuts. Tighten hardware to specification.

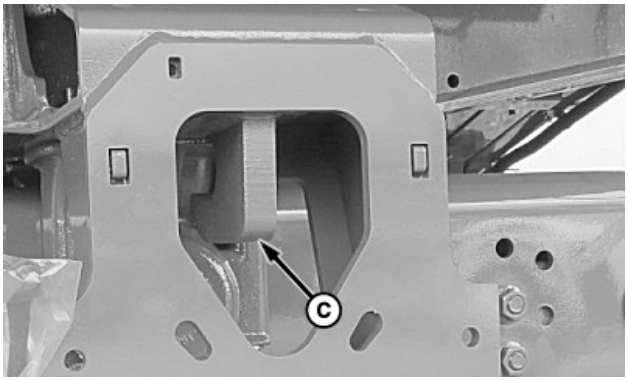
**Specification**

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.

OUO6075,0004574-19-31JAN17

## 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.

SS43267,00004E6-19-03FEB15

## 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* | | |

*HydraFlex is a trademark of Deere & Company*
*[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

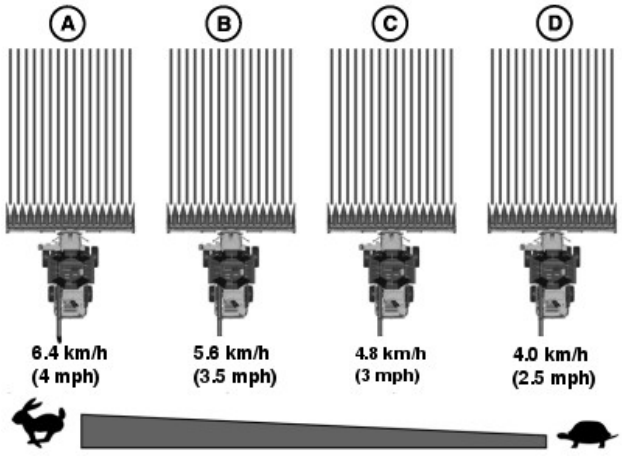
It will be necessary to recalibrate system if tires or final drives are changed from what was originally shipped from the factory. Verify that correct tire code is entered into memory.

**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.**

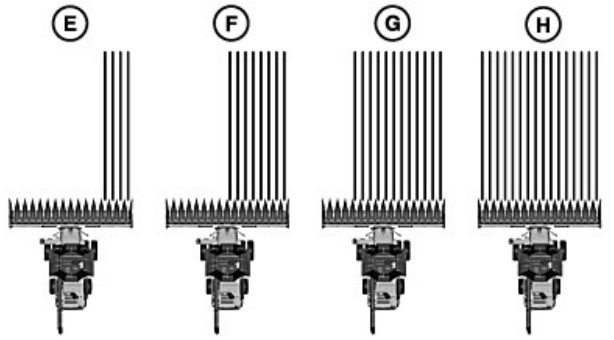
**Failure to calibrate system will result in inaccurate Harvest Monitor Yields.**

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

*VisionTrak is a trademark of Deere & Company*

# 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<br>10 Sidehill | 5 Level<br>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<br>10 Sidehill | 5 Level<br>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 |

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## 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)<br>15—20 (Deep-Tooth)<br>17—22 (General-Purpose) | 16—21 (Premium Corn)<br>16—21 (Deep-Tooth)<br>18—22 (General-Purpose) |
| Dual Zone Adjust Rear Chaffer Clearance (mm) | 5 Level<br>10 Sidehill | 5 Level<br>10 Sidehill |
| Sieve Clearance (mm) | 10—14 (Deep-Tooth)<br>11—15 (General-Purpose) | 10—14 (Deep-Tooth)<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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)<br>13—17 (Deep-Tooth) |
| Dual Zone Adjust Rear Chaffer Clearance (mm) | 5 Level<br>10 Sidehill | 5 Level<br>10 Sidehill |
| Sieve Clearance (mm) | 5—8 | 6—10 (General-Purpose)<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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 |

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## 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<br>10 Sidehill | 5 Level<br>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

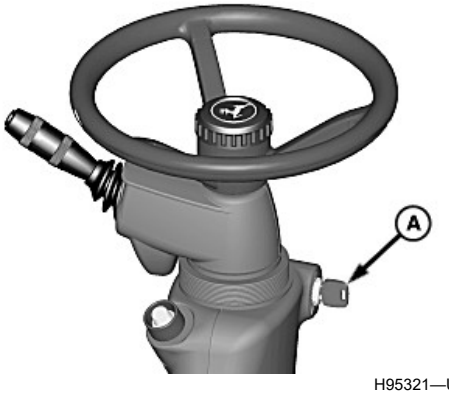
## Concave Recommendations

| 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 |

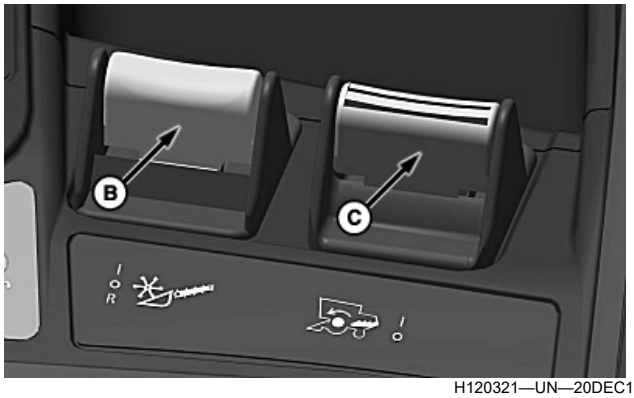
Best = Provides best level of performance.
Good = Provides a good level of performance.
Average = Provides an average level of performance.
NR = Not recommended.

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

*VisionTrak is a trademark of Deere & Company*

## 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

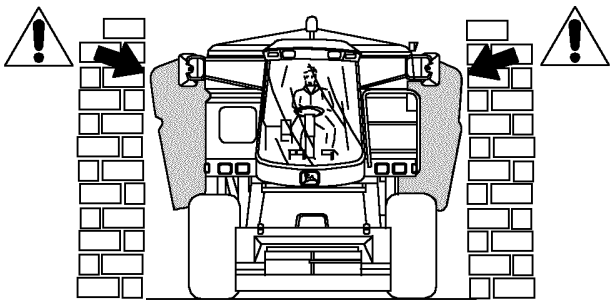
## Standard Weights Chart

| 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.**

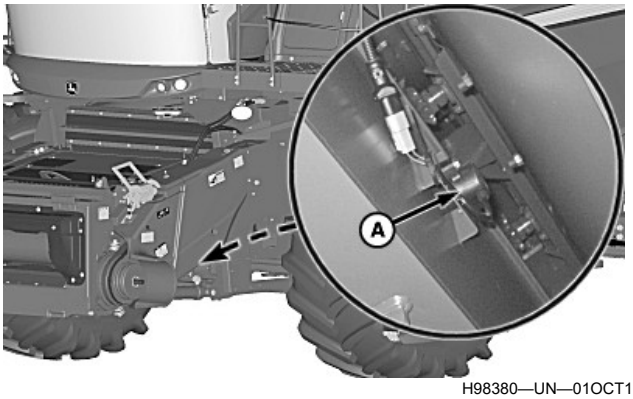
**IMPORTANT: Before actuating manual leveling control switch, verify that parking brake is released.**

**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.

*HillMaster is a trademark of Deere & Company*




H98380—UN—01OCT10

*Tilt Sensor Located on Front Axle*

**A—Tilt Sensor**

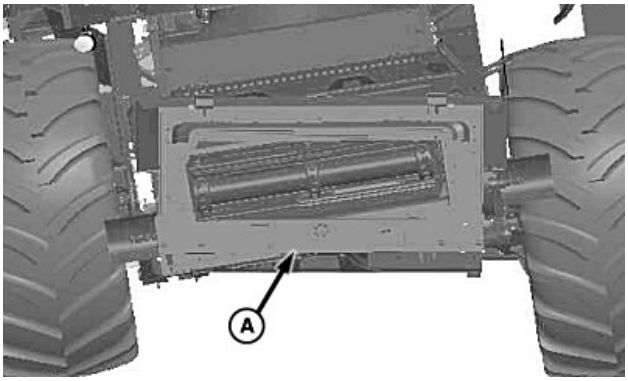
In automatic mode, tilt sensor (A) levels the body of the machine and remains level as the machine moves across the field.

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

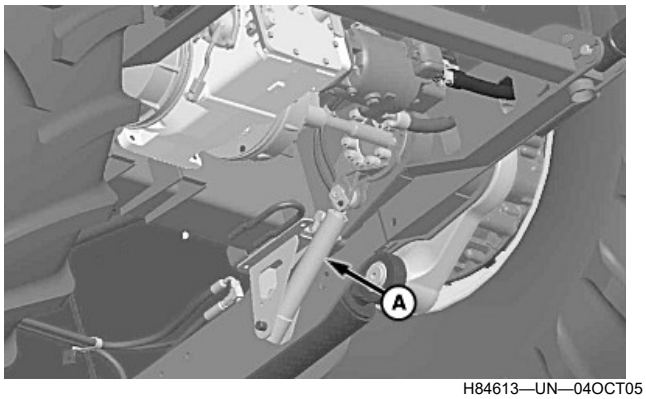
**A—Feeder House**

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%.

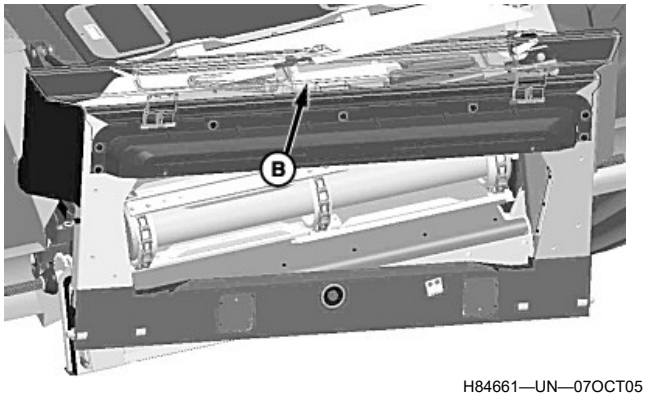
The tilt system uses a double-acting primary/secondary

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.*

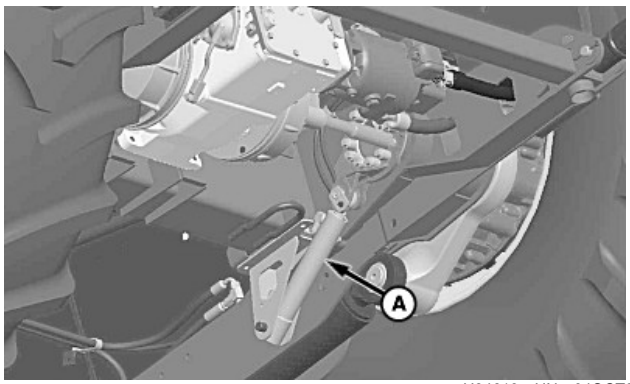
Operator can override automatic header leveling feature by using the lateral tilt switches on the multi-function lever. When the lateral tilt switches are pressed, oil from the main hydraulic valve block is added or removed from the header tilt circuit, allowing it to move independently of the feeder 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.

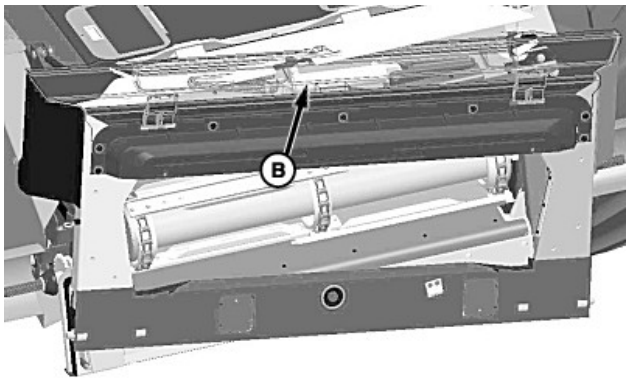
Signals from sensors at both left and right ends are processed and the appropriate hydraulic control valve is energized to level header with respect to ground.

**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.

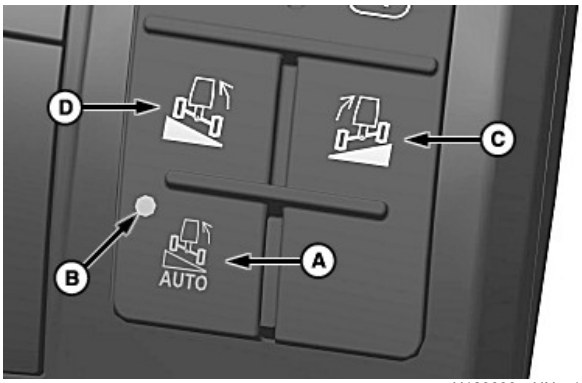
Rod ends of the primary and secondary cylinders are connected to each other and the piston ends of the primary and secondary cylinders are connected to each other. As the left leveling cylinder extends and retracts, the left final drive carrier plate pivots up and down and extends or retracts the header 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.

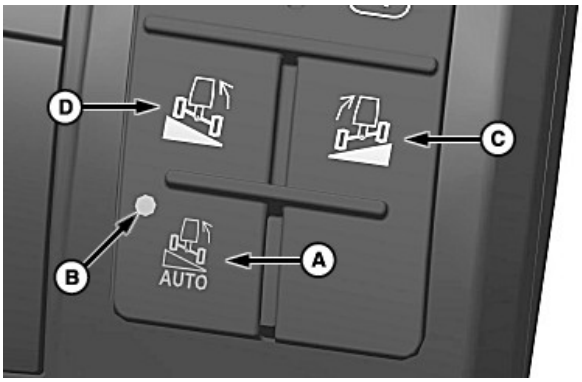
*NOTE: Time required to bring machine from maximum left tilt position to maximum right tilt position is approximately 5—7 seconds.*

*HillMaster is a trademark of Deere & Company*

**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.

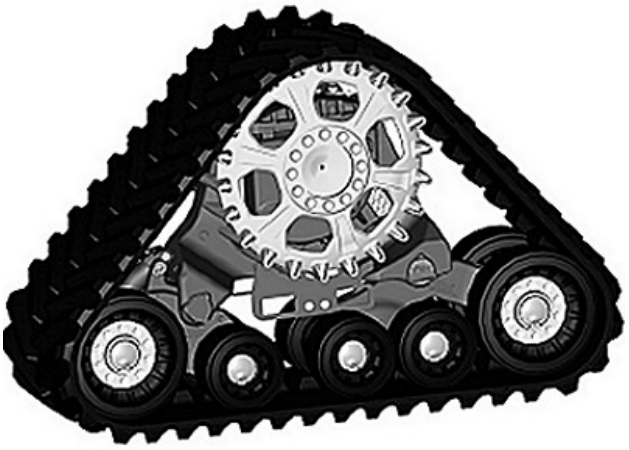
Machine is now in neutral position and can be driven on roadway.

OUO6075,0004941-19-12APR18

*HillMaster is a trademark of Deere & Company*

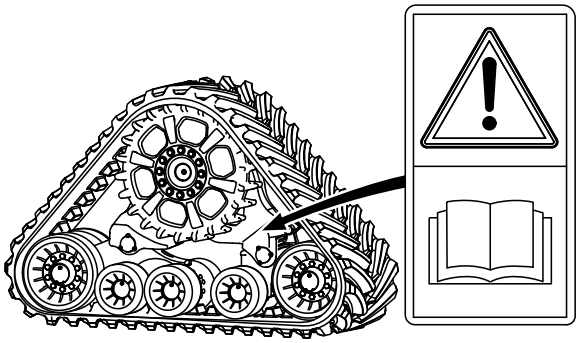
# John Deere Tracks (If Equipped)

## Machine Photo



H122227—UN—10AUG17
OUO6041,0000C1B-19-25AUG17

## Operator's Manual

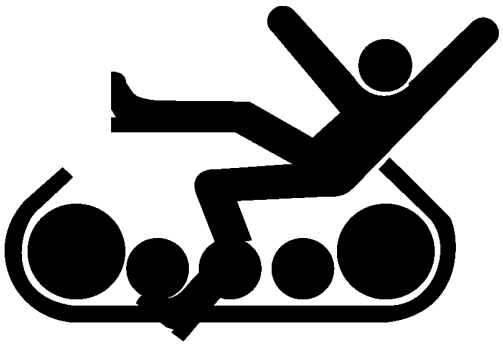


H122407—UN—03OCT17

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

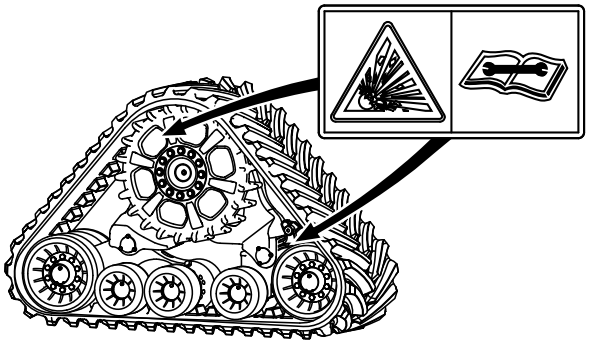
DO NOT stand near tracks when machine is running.

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

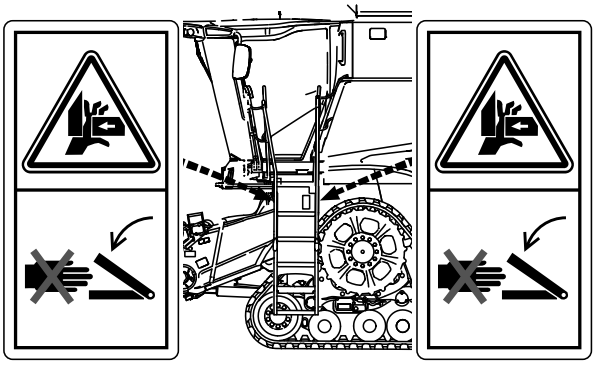


H122408—UN—03OCT17

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

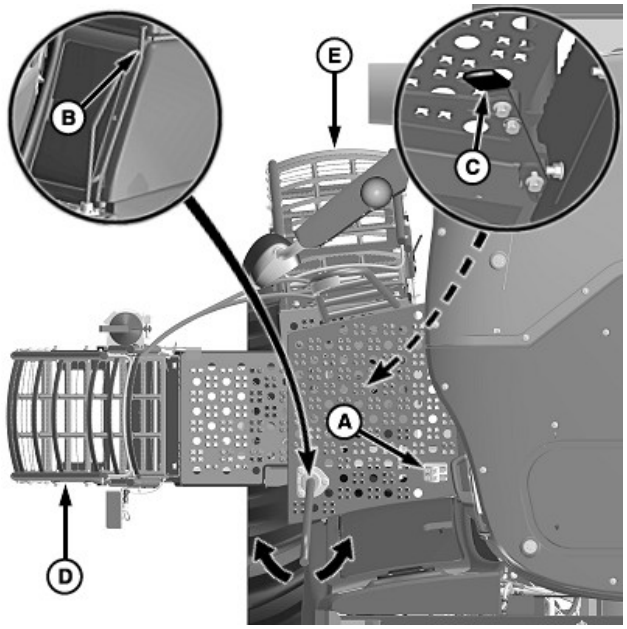


H125749—UN—19MAR19

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:

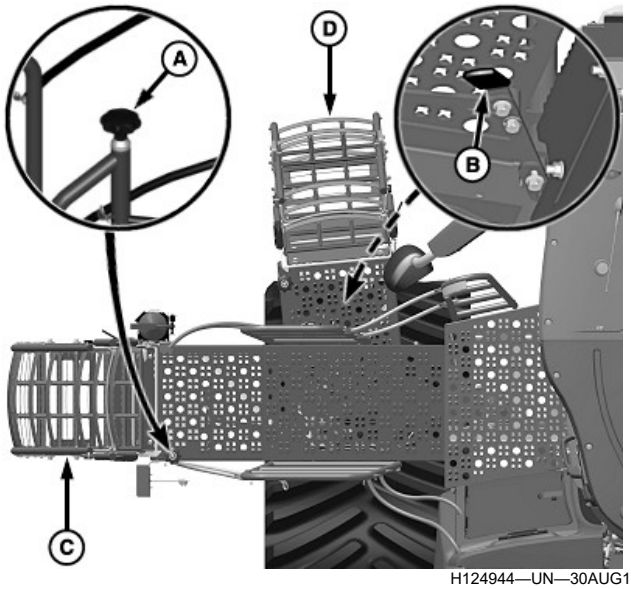
- **Position (D):** For the normal operating field conditions.
- **Position (E):** For transporting the machine on public roadways.

**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.

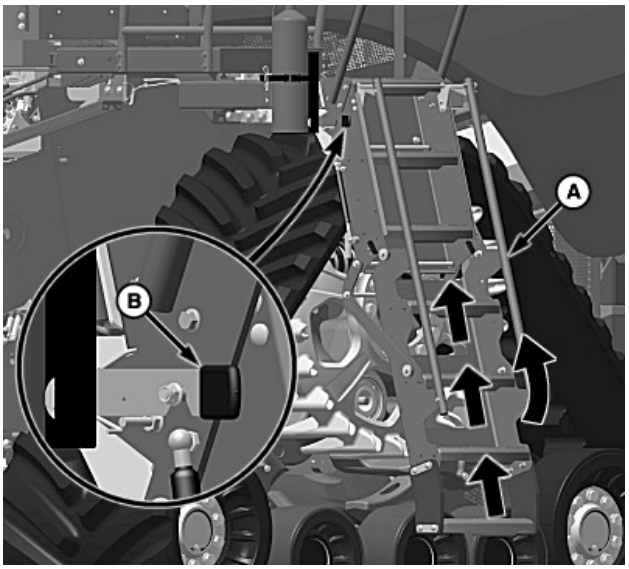
**CAUTION: Avoid damage to cab ladder. Always place ladder in the folded position (up position) and swing ladder to position (C) for normal operating field conditions.**

**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



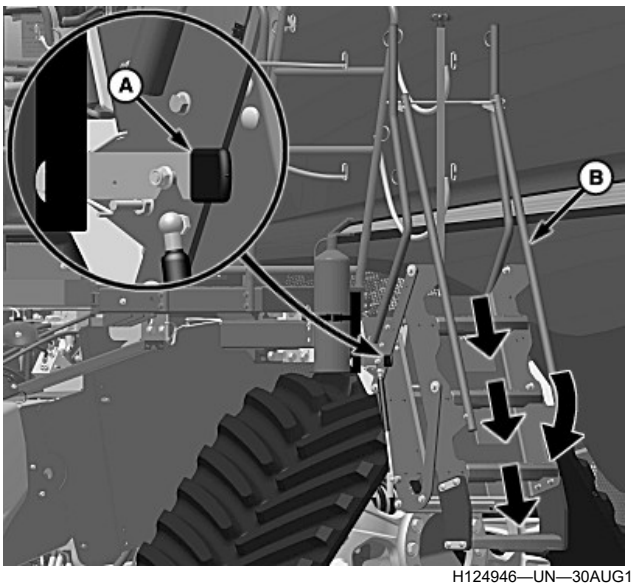

H124945—UN—30AUG18

**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)**

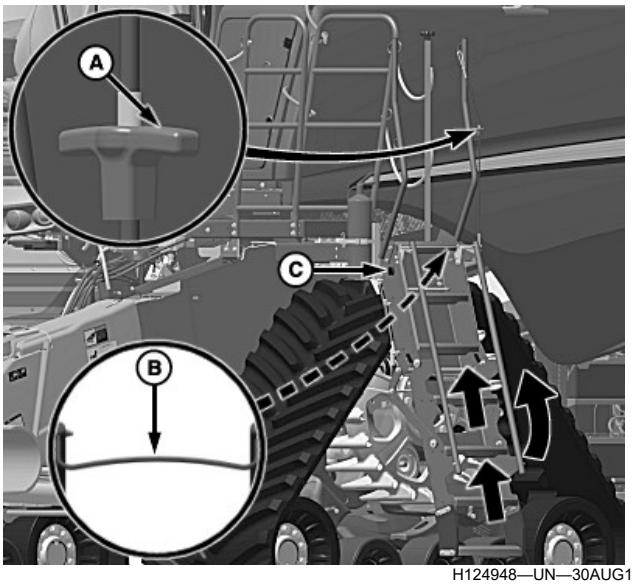
**CAUTION: Avoid injury to you or others. Keep hands away from moving components while folding or unfolding the ladder. Always use the handrails to fold or unfold the ladder.**

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

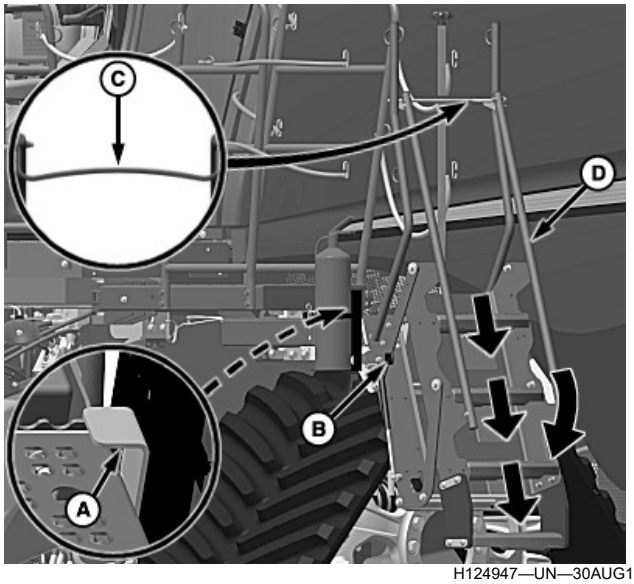
**A—Handle**
**B—Crossbar**

**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

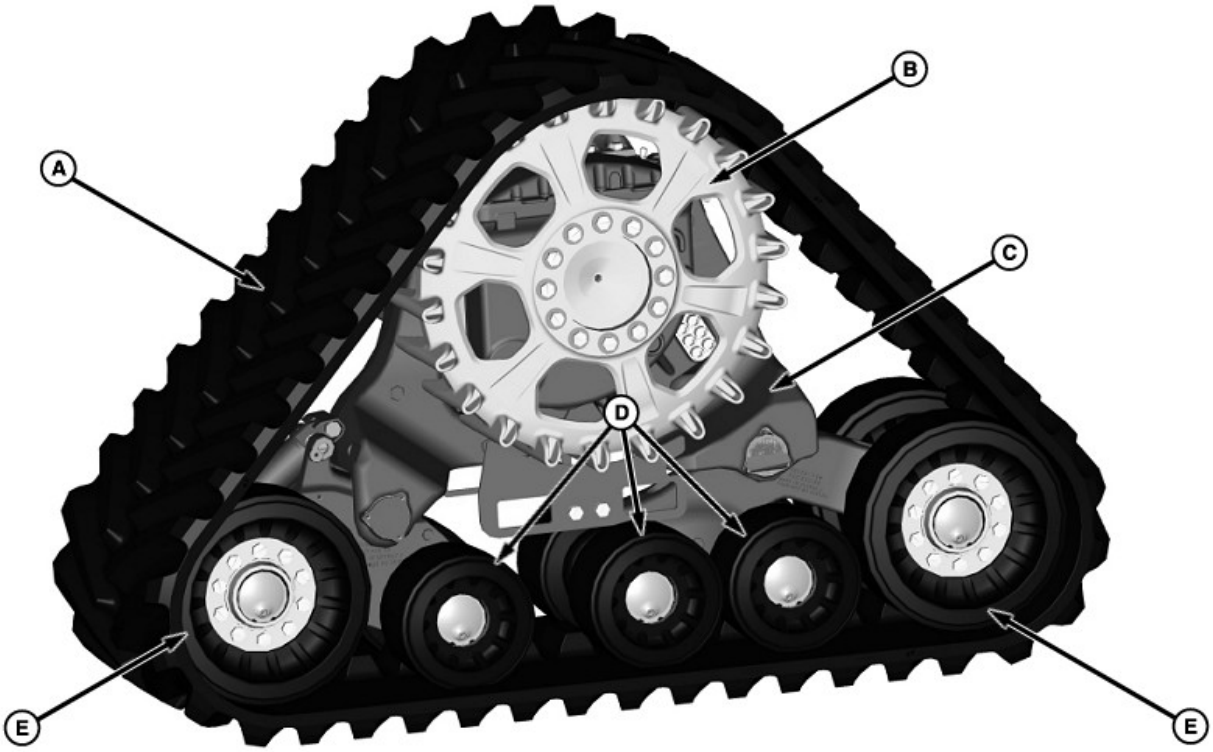
**A—Pedal**
**B—Locking Lever**
**C—Crossbar**
**D—Ladder**

**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

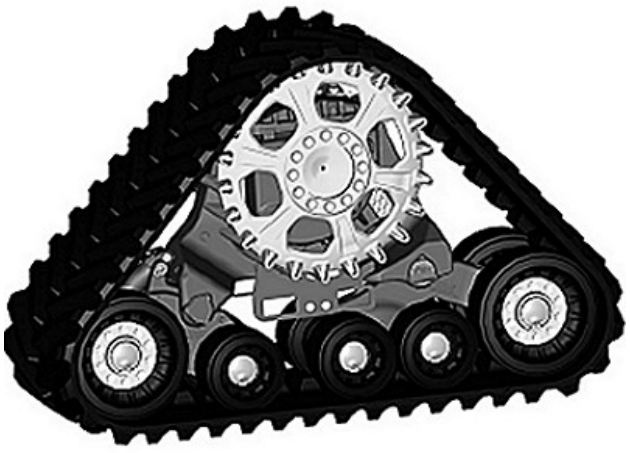



H122226—UN—10AUG17

**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)**

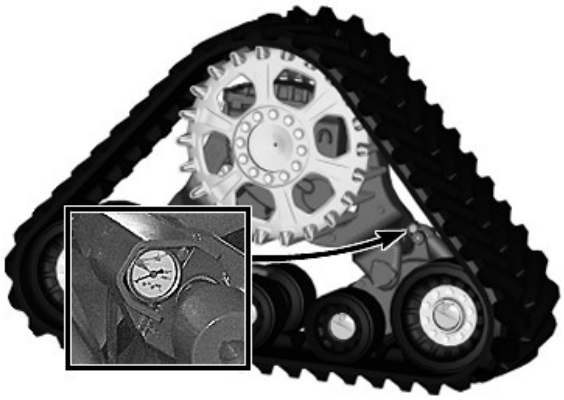
| Ambient Temperature | | Speed | | | | |
|---|---|---|---|---|---|---|
| | | 25 | 30 | 35 | 40 | km/h |
| °C | °F | 15 | 18 | 21 | 25 | mph |
| 0 | 32 | >5.0 | | | 1.5 | Hours |
| 5 | 41 | | | | | |
| 10 | 50 | | | | | |
| 15 | 59 | >5.0 | 4.5 | | 1.0 | |
| 20 | 68 | 4.5 | 4.0 | | | |
| 25 | 77 | 4.0 | 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.

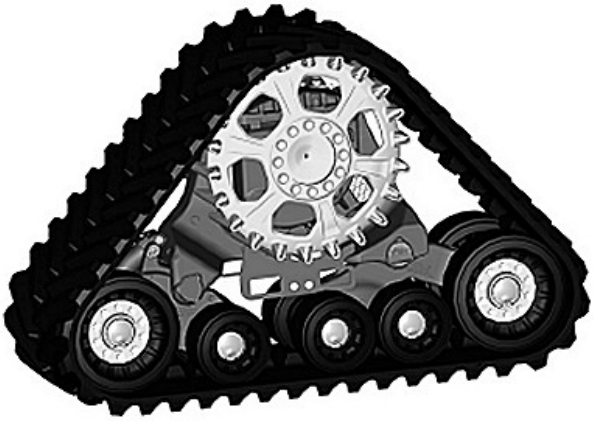
### Hydraulic Pressure

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

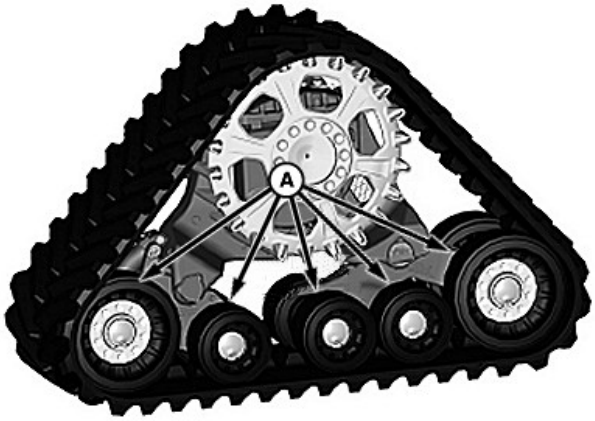
**IMPORTANT: Tracks must be cleaned immediately after operation in wet and muddy conditions.**

**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.

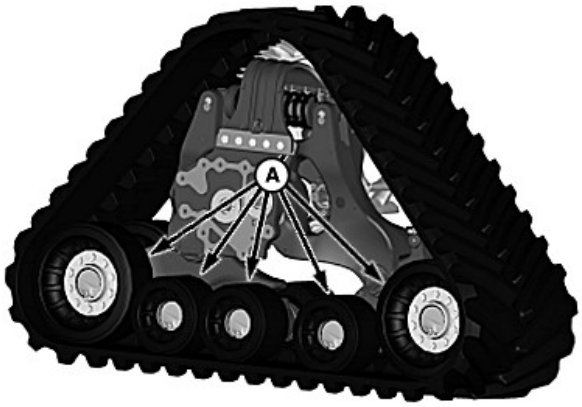
OUO6041,0000C32-19-15AUG17

## 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

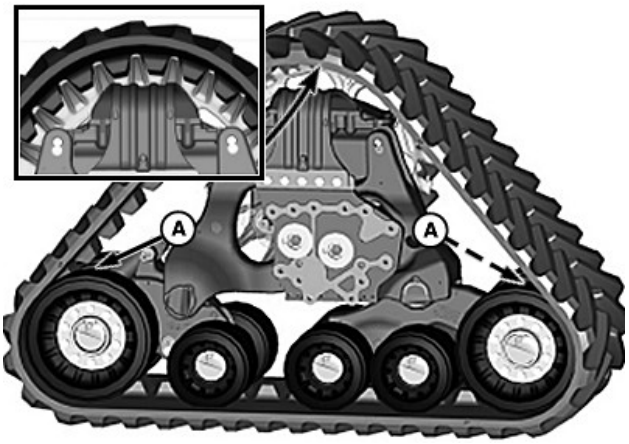
**IMPORTANT: Service times are for average conditions. Service more often if machine is used in extreme conditions.**

| 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.

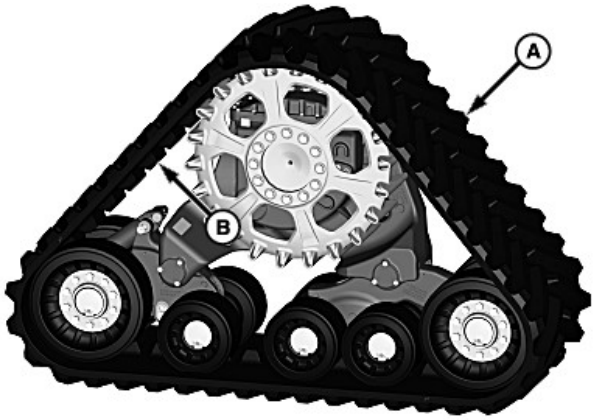
Run machine for approximately 10 hours after installation.

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

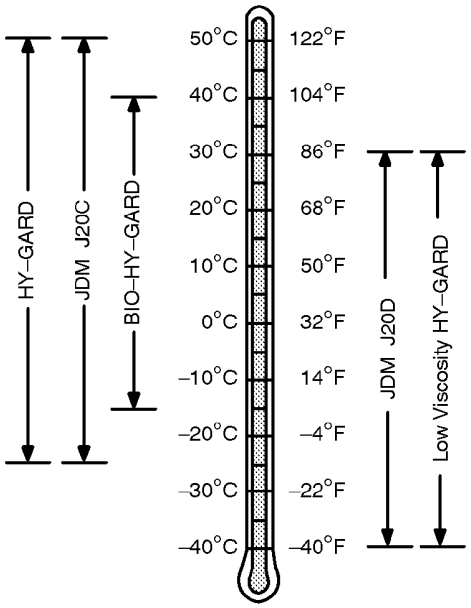
**A—Tread Bar**
**B—Drive Lugs**

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:

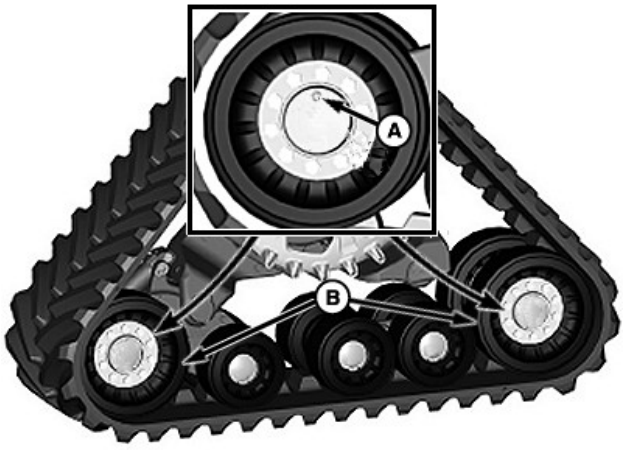
- John Deere Hy-Gard™
- John Deere Low Viscosity Hy-Gard™

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)**

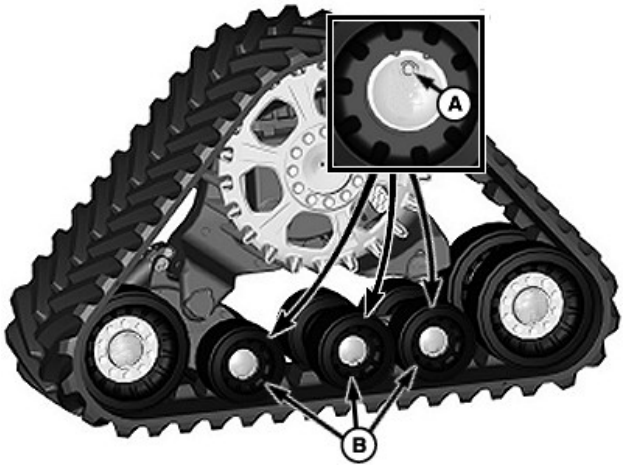
**CAUTION: Avoid burn injury. Wear protective gloves or allow components time to cool. Bogie wheels, idler wheels, and rubber track belt normally operate at high temperatures and can be hot to touch.**

*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

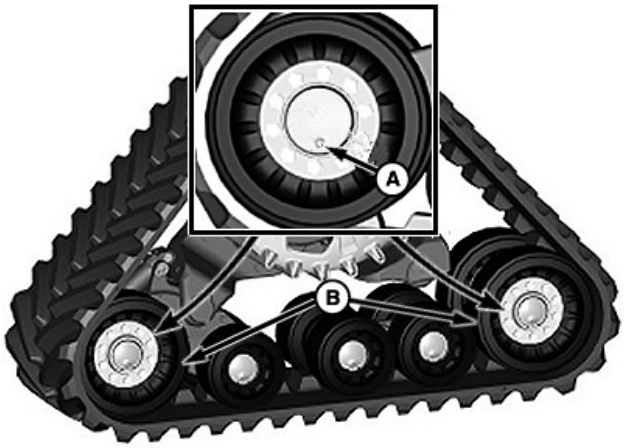
**A—Drain Plug (3 used)**
**B—Bogie Hub (3 used)**

*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.

OUO6041,0000C7B-19-18APR18

## 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.*

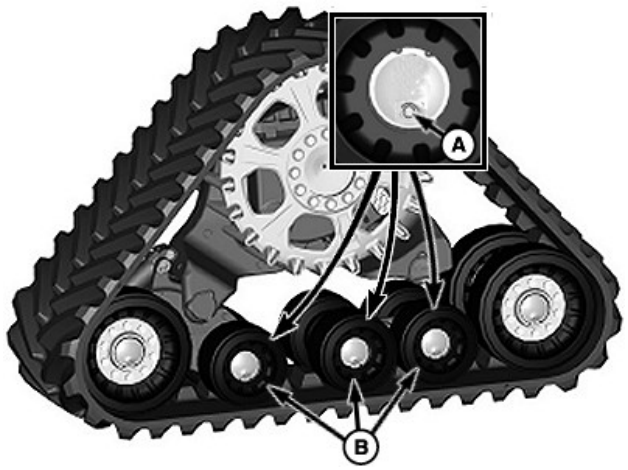
*Catch any oil in a clean container.*

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

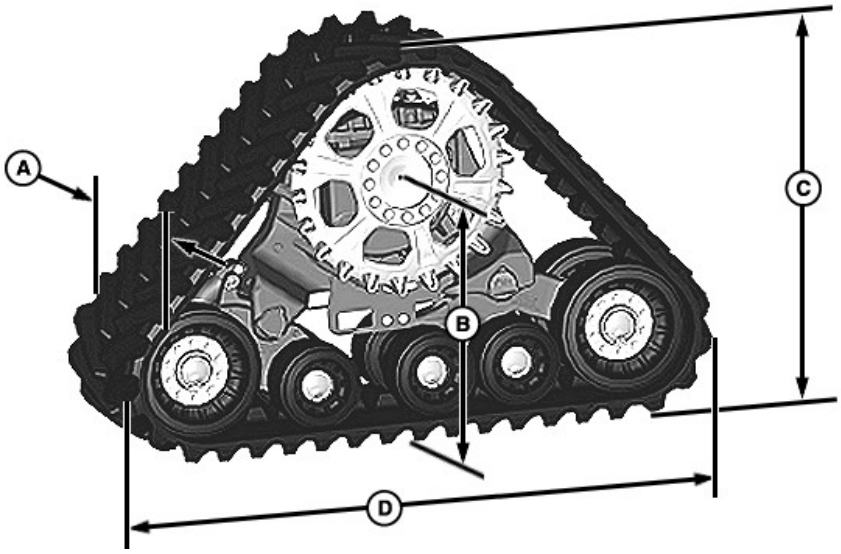
| Track Specifications | | |
|---|---|---|
| Load Capacity | 22 650 kg (49 935 lb) | |
| Weight | 60.9 cm (24 in) | 2710 kg (5975 lb) |
| | 76.2 cm (30 in) | 2840 kg (6262 lb) |
| | 91.4 cm (36 in) | 3000 kg (6615 lb) |
| Rolling Circumference | 6032 mm (238 in) | |

| Capacities | |
|---|---|
| Idler Hubs | 1300 mL (44 oz) |
| Bogie Hubs | 1300 mL (44 oz) |
| Oil Type | Hy-Gard™<br>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)<br>76.2 cm (30 in)<br>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

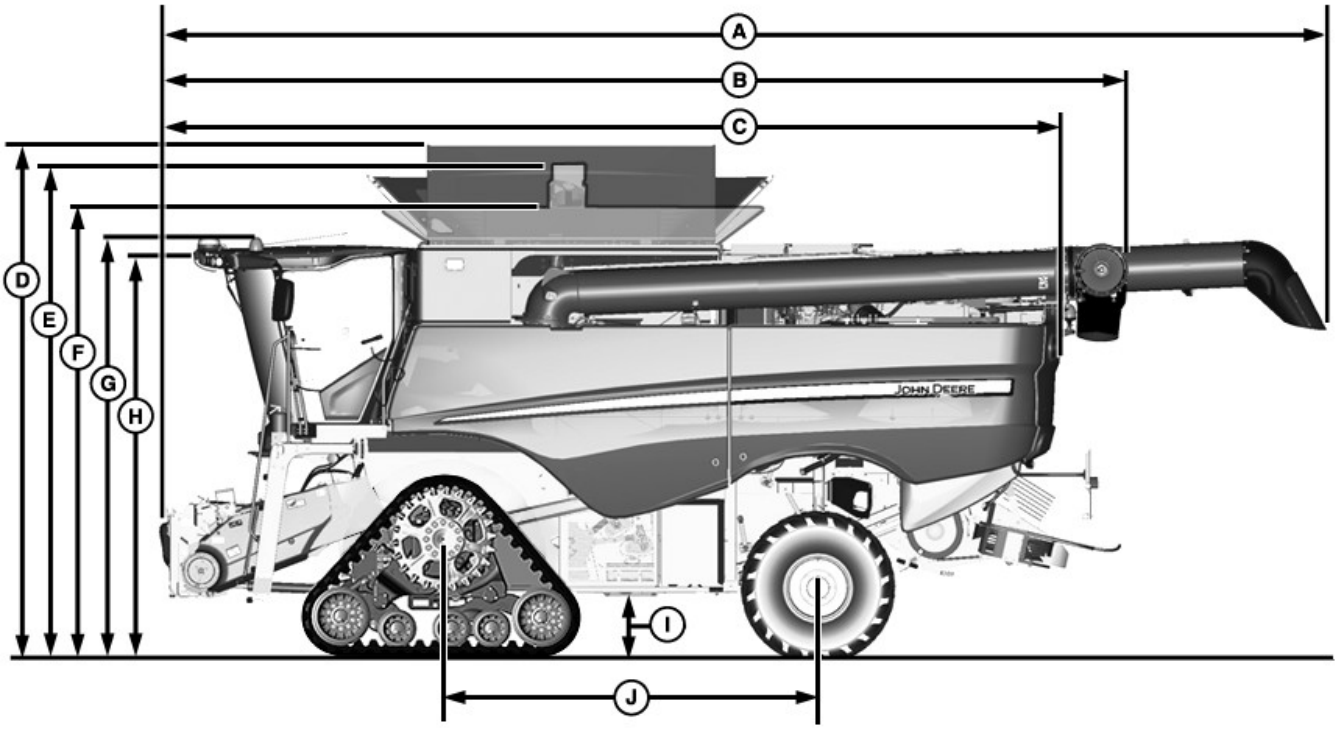
*NOTE: Dimensions are approximate and subject to change without notice.*

| Legend | Dimension |
|---|---|
| A | 11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger<br>11.72 m (38 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger<br>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<br>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<br>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<br>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<br>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<br>7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger<br>8.97 m (29 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger<br>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<br>5.48—5.58 m (18 ft 0 in—18 ft 4 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>4.61—4.71 m (15 ft 2 in—15 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>4.91—5.01 m (16 ft 1 in—16 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>60.9 cm (24 in) Tracks<br>3.59 m (11 ft 7 in) with 65 mm (2-1/2 in) Axle Extensions<br>60.9 cm (24 in) Tracks<br>3.75 m (12 ft 3 in) with 65 mm (2-1/2 in) Axle Extensions<br>76.2 cm (30 in) Tracks<br>4.40 m (14 ft 4 in) with 394 mm (15-1/2 in) Axle Extensions<br>76.2 cm (30 in) Tracks<br>4.54 m (14 ft 9 in) with 394 mm (15-1/2 in) Axle Extensions<br>91.4 cm (36 in) Tracks |

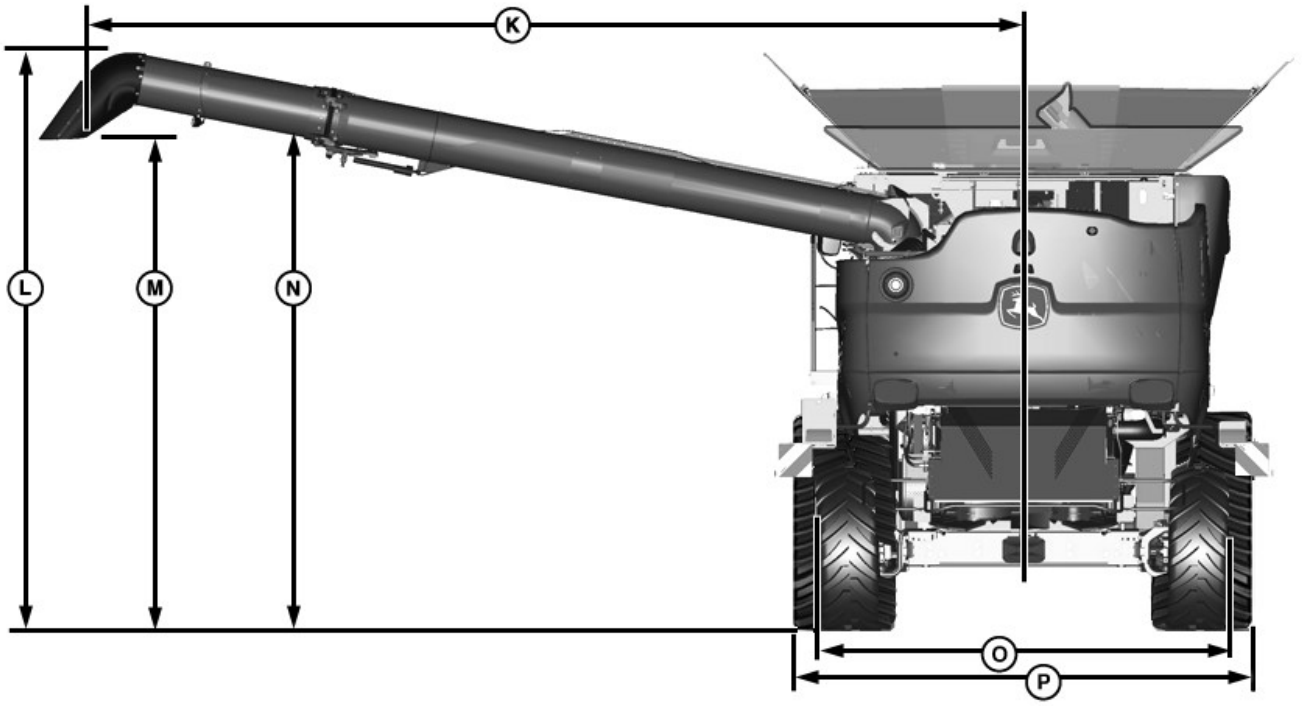
*[a] Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.*
*[b] Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths will vary. Measurements 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.

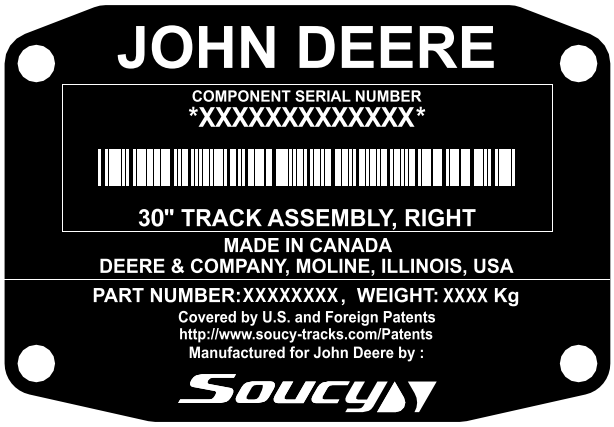
Signed at Drummondville, July 1, 2020

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

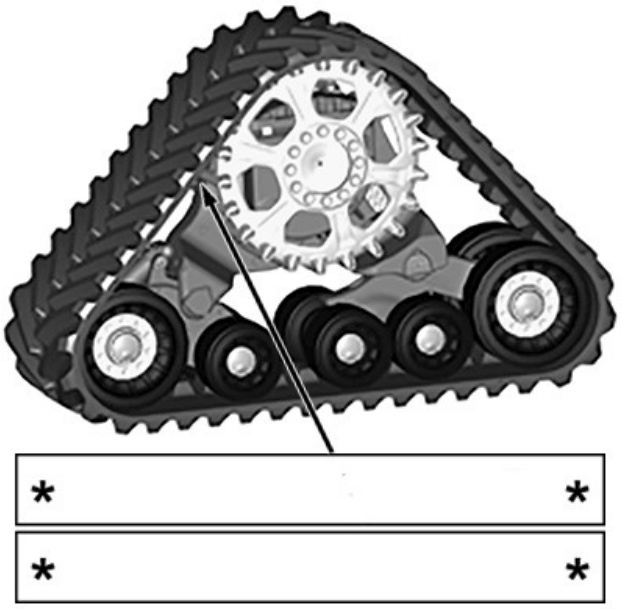



H122614—UN—14NOV17
*Sample Identification Plate (Left-Hand Track)*

*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

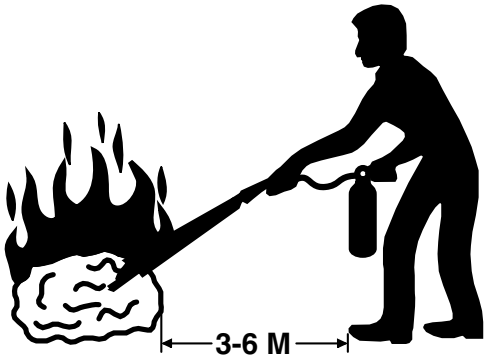
# Fire Prevention

## 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.

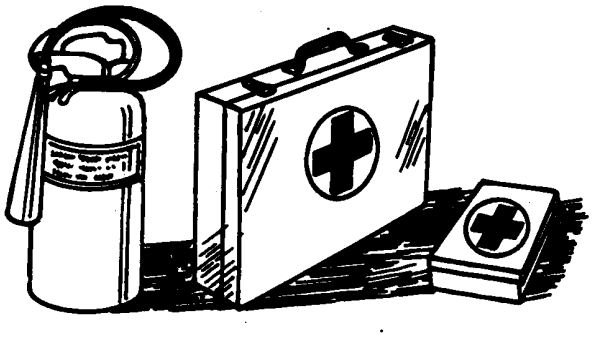
Use only an approved fuel container for transporting flammable liquids.

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.

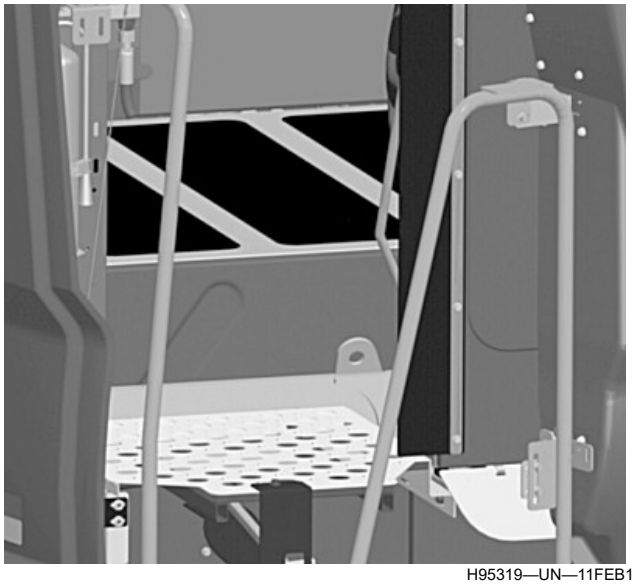
Read the fire extinguisher instructions and become familiar with their location, parts, and operation before a fire starts. Local fire departments or fire equipment distributors may offer fire extinguisher training and recommendations.

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.**

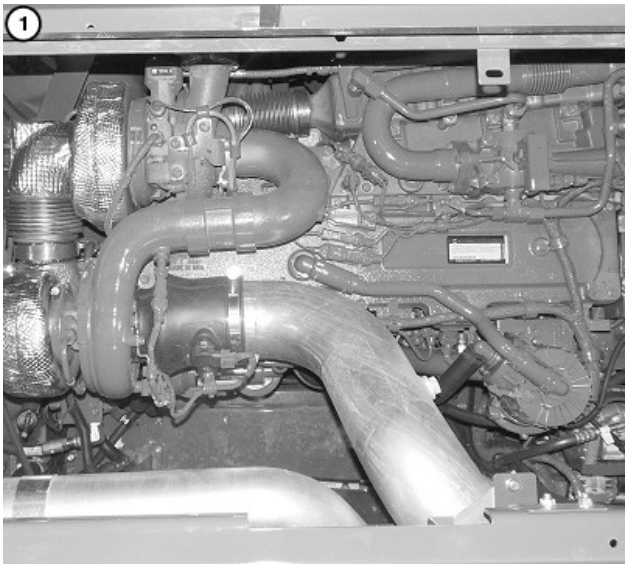
Always follow all safety procedures posted on the machine and in the Operator's Manual. Before carrying out any inspection or cleaning, always shut OFF engine, set park brake and remove key.

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.

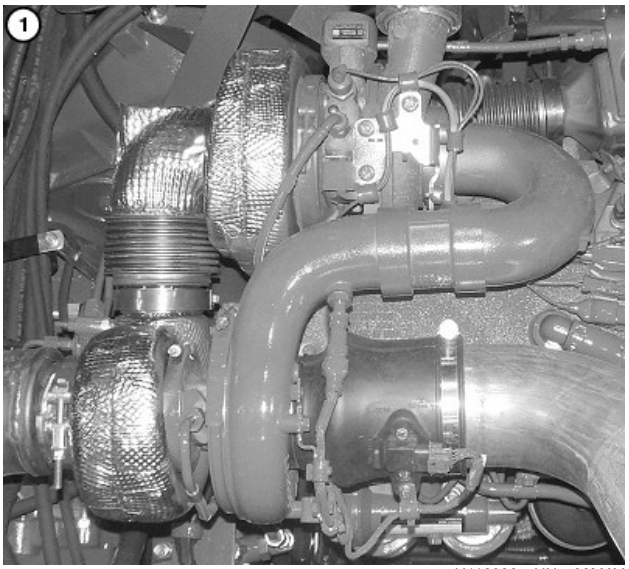
From the ground level, clean rear underside of fuel tank area and top of the rear tailboard of the residue disposal system. Exhaust Aftertreatment Enclosure area (if equipped) will also need to be cleaned from the ground level. Once the cleaning from the ground level is finished, recheck engine compartment 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)**



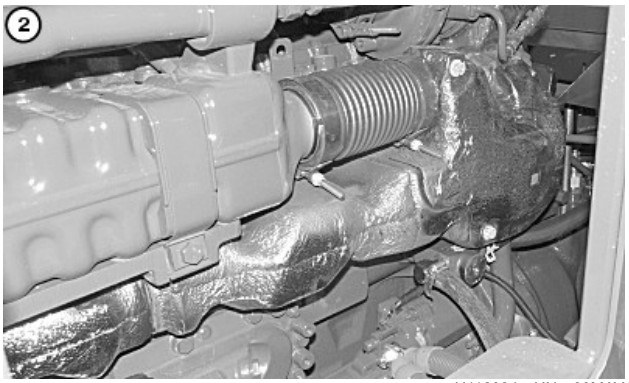

H116932—UN—09MAY16



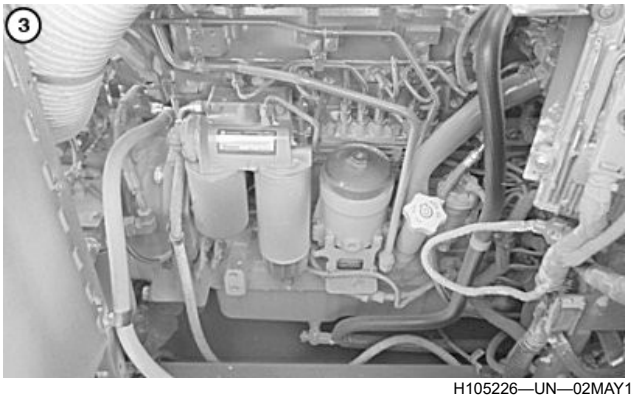

H116933—UN—09MAY16

(1) — Top Area of Engine and Turbochargers

**Engine Compartment (Top Areas)**




H116934—UN—09MAY16




H105226—UN—02MAY12

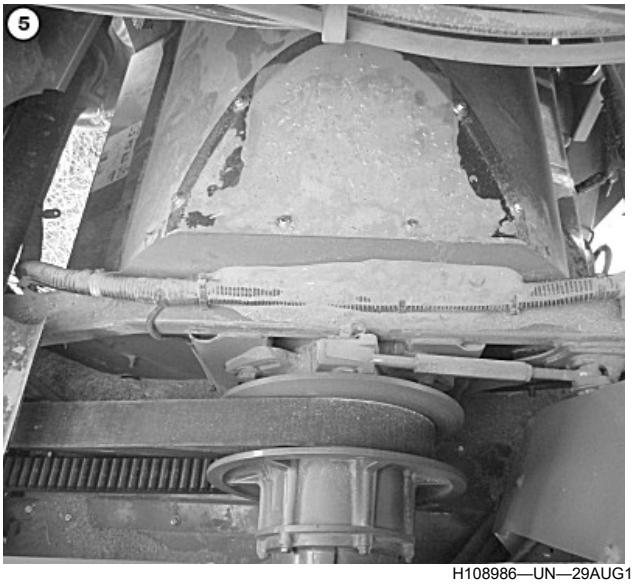
(2) — Exhaust Manifold and Manifold Shield, Turbo Interstage Tube, Exhaust Gas Recirculation (EGR) Cooler Tube

(3) — Around Engine

**Engine Compartment (Top Areas)**




H108963—UN—29AUG13

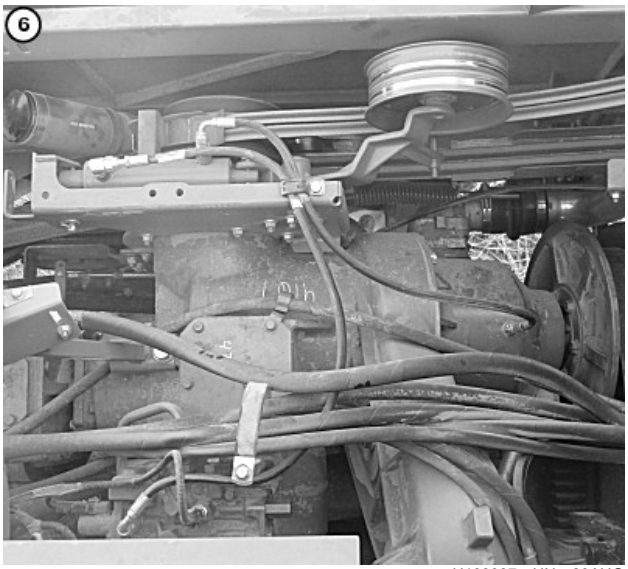



H108986—UN—29AUG13

(4) — Underneath Engine

(5) — Top Rear of Rotor and Areas Around Rotor Drive

**Engine Compartment (Top Areas)**




H108987—UN—29AUG13




H108988—UN—29AUG13

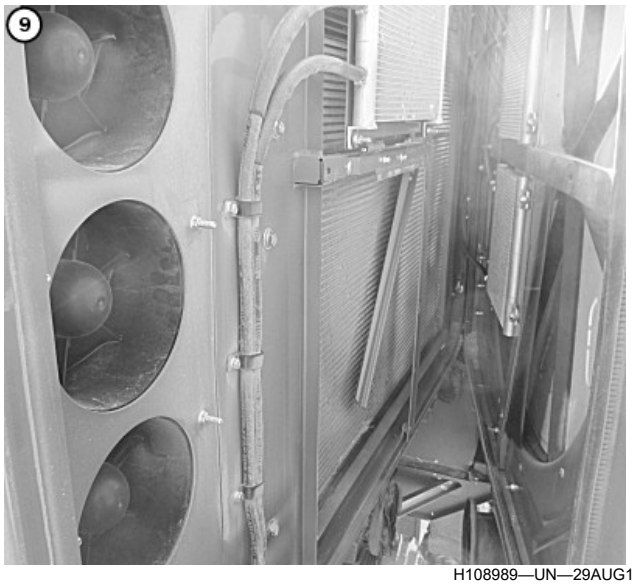
(6) — Main Engine Gear Case

(7) — Areas around and under Exhaust Aftertreatment Enclosure (If Equipped)

**Engine Compartment (Top Areas)**




H108990—UN—29AUG13




H108989—UN—29AUG13

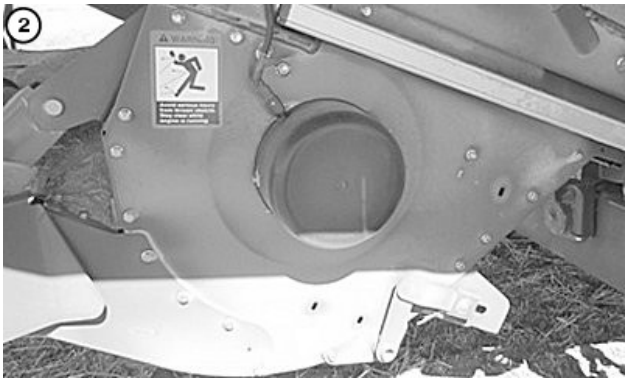
(8) — On Top of Fuel Tank

(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.**

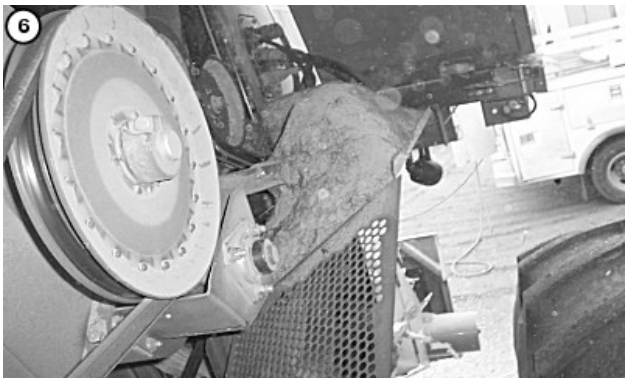
(3) — Fuse Center and Battery Box Areas

(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

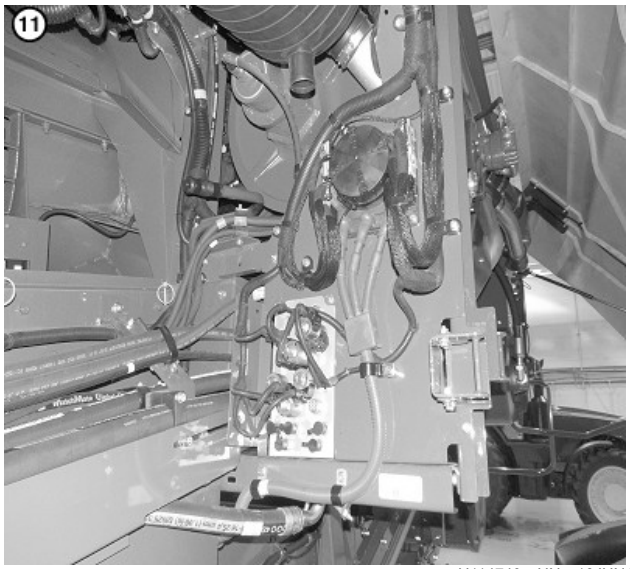



H105339—UN—02MAY12

(9) — Transmission

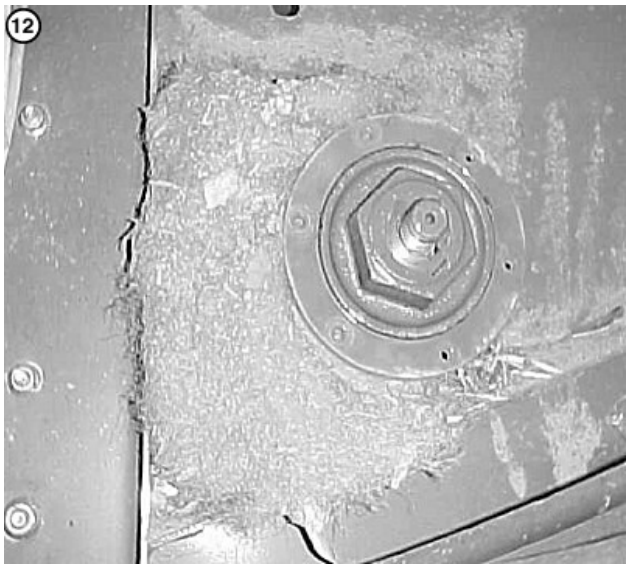
(10) — Left Side Walk Area

**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

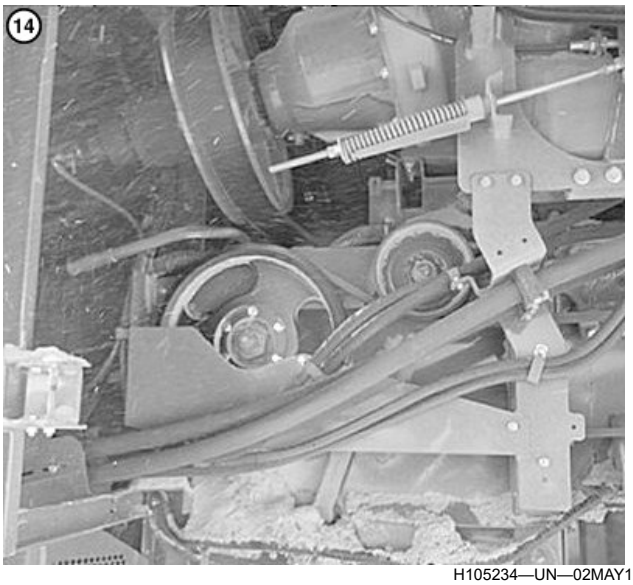
**Ground Accessible (Bottom Areas)**



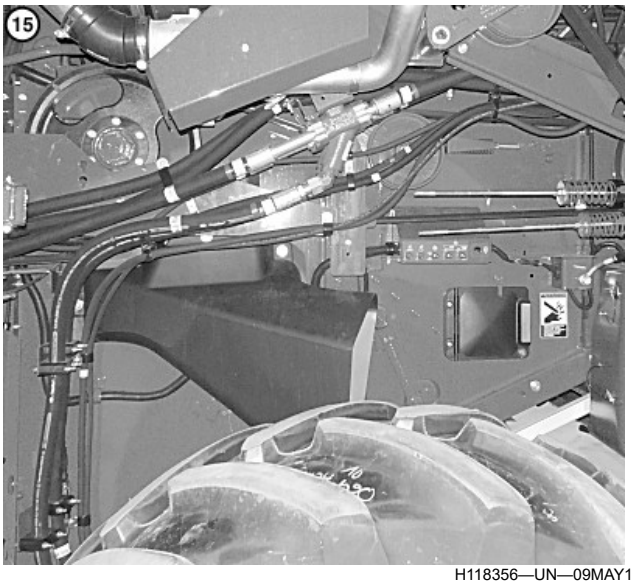

H105233—UN—02MAY12

(13) — Left Side Rotor Area

**Ground Accessible (Bottom Areas)**




H105234—UN—02MAY12




H118356—UN—09MAY16

(14) — Rotor Drives

(15) — Left Sidesheet Areas

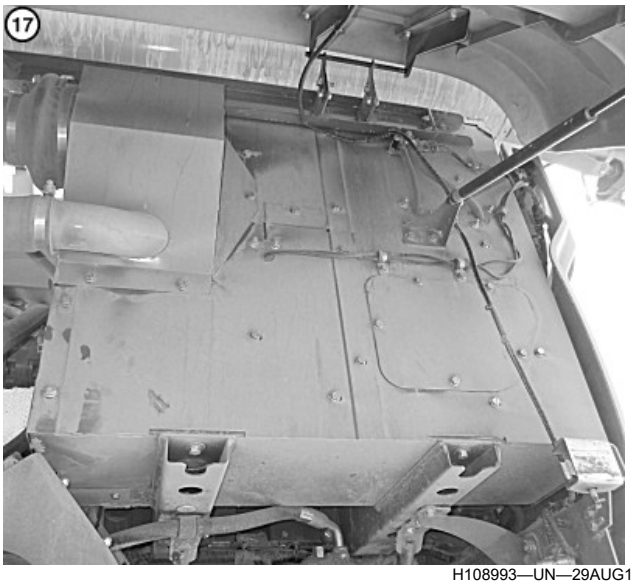
**Ground Accessible (Bottom Areas)**




H108951—UN—28AUG13

(16) — Residue Disposal Drives

**Ground Accessible (Bottom Areas)**

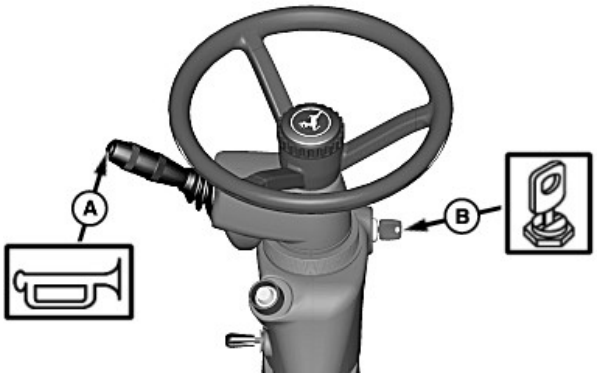



H108993—UN—29AUG13

(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.**

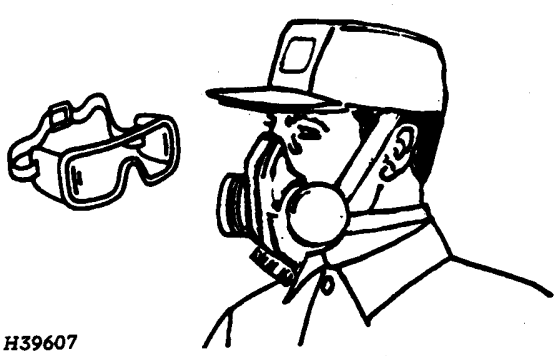
1. Remove header from the machine.
2. Drive machine over end rows or bumps to jar and shake dirt loose.
3. Shut OFF engine, set park brake, and remove key.
4. Open or remove all doors and drain holes.

**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.

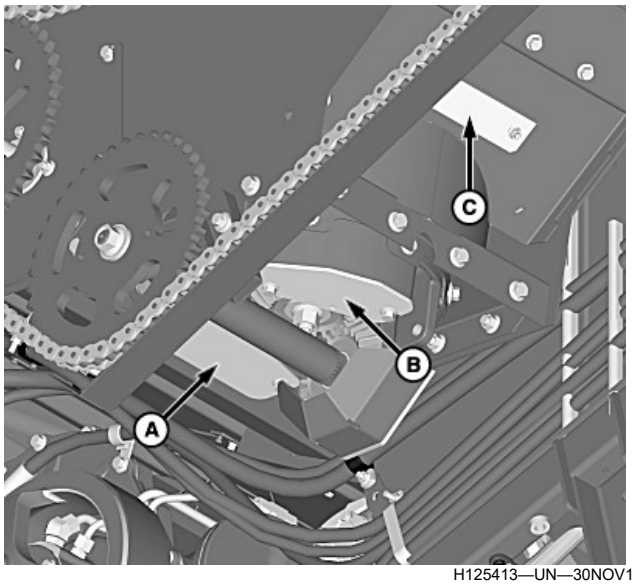



H39607—UN—11OCT88

**CAUTION: Shut OFF engine, set park brake, remove key, block wheels, and lower the feeder house safety stop.**

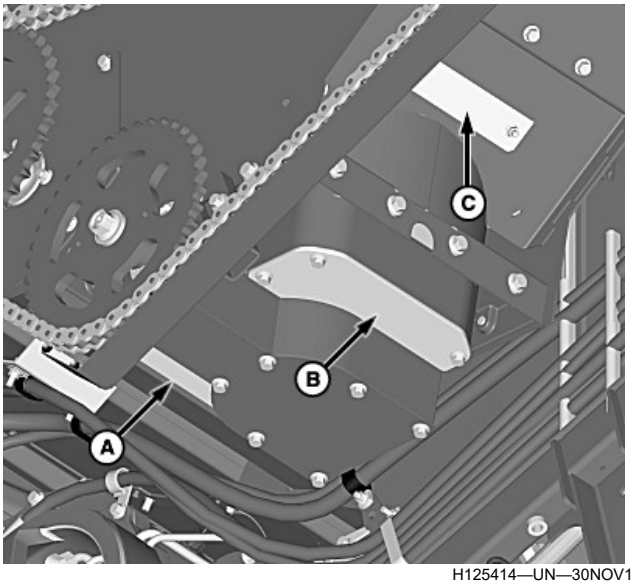
**When working with compressed air in dusty conditions, you must wear goggles and dust mask for personal protection.**

9. Start at the top of the machine and work down.




H125413—UN—30NOV18

*Style A*

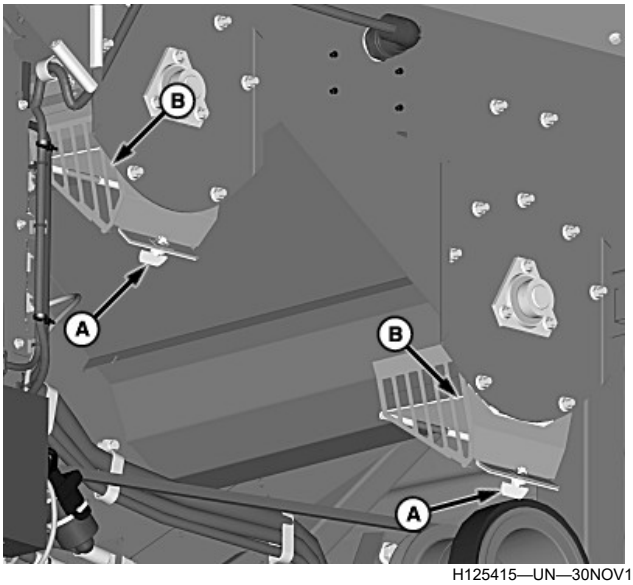



H125414—UN—30NOV18

*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.

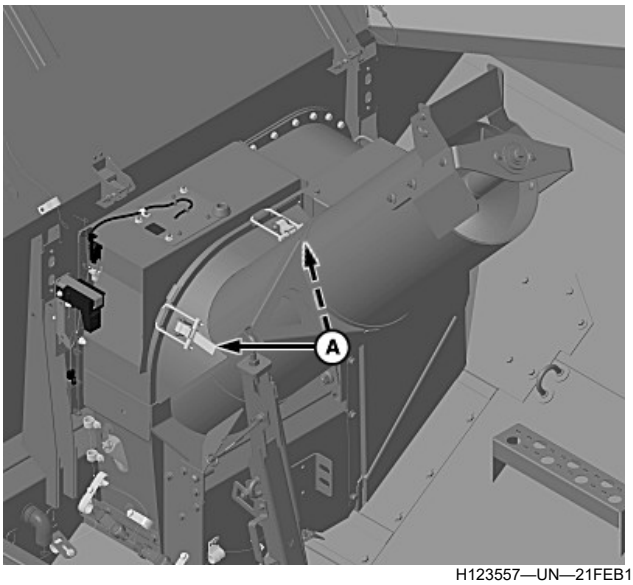



H125415—UN—30NOV18

**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)**

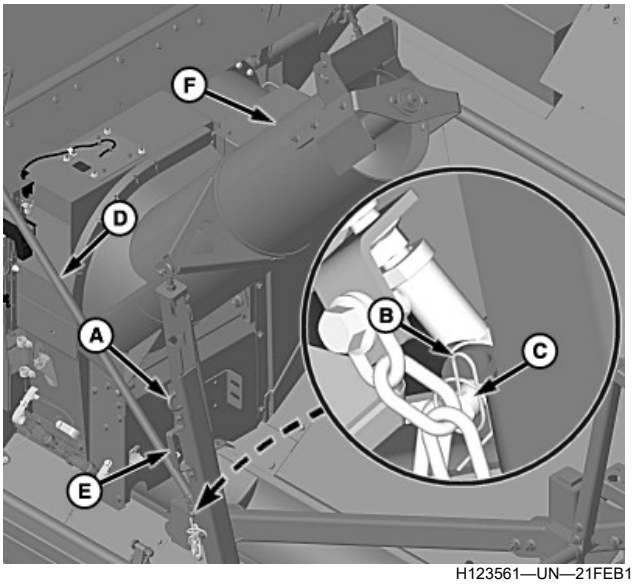



H123557—UN—21FEB18

**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)**



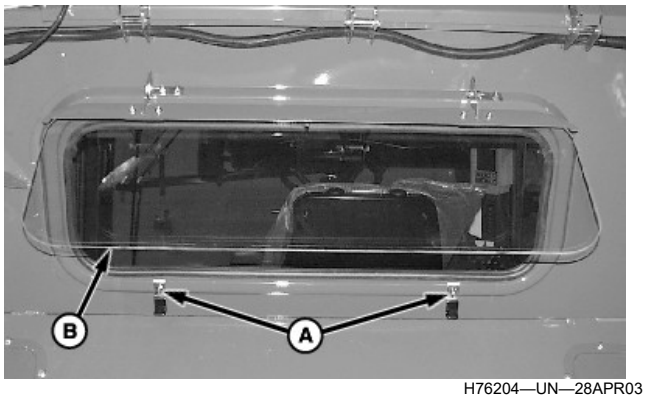

H123561—UN—21FEB18

**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.**

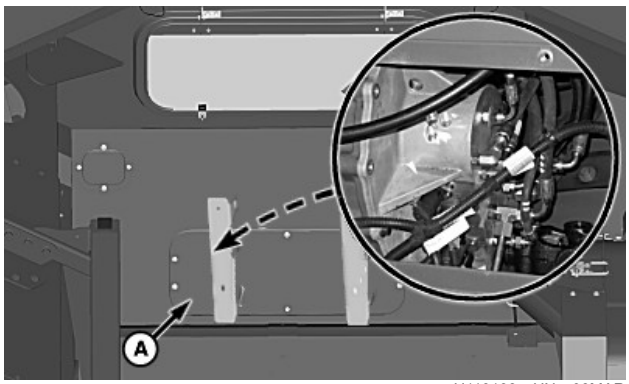
1. Remove quick-lock pin (B) and pin (C) from turnbuckle (D).
2. Use the handle (E) to help in lowering the grain tank loading auger (F).
3. Clean top area and down into the clean grain elevator to the clean elevator chain. Clean all sides.




H76204—UN—28APR03

**A—Clamp (2 used)**
**B—Grain Tank Window**

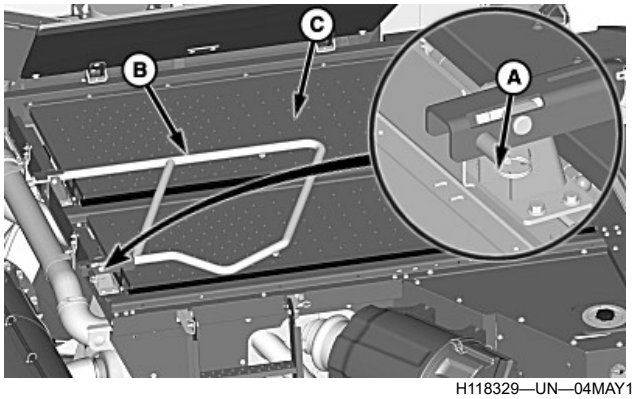
15. Loosen clamps (A) and swing grain tank window (B) up.
16. Clean out area behind cab, around the primary countershaft, and over separator.




H113138—UN—06MAR15

**A—Access Door**

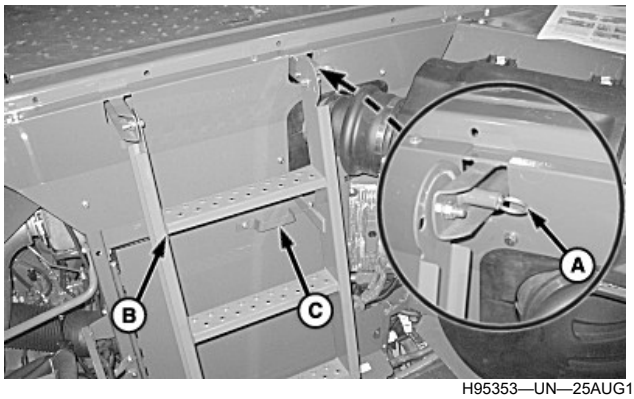
17. Remove access door (A) (if equipped) on the front of the grain tank.
18. Clean out material around the multi-speed feeder house drive gear case (if equipped).




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.

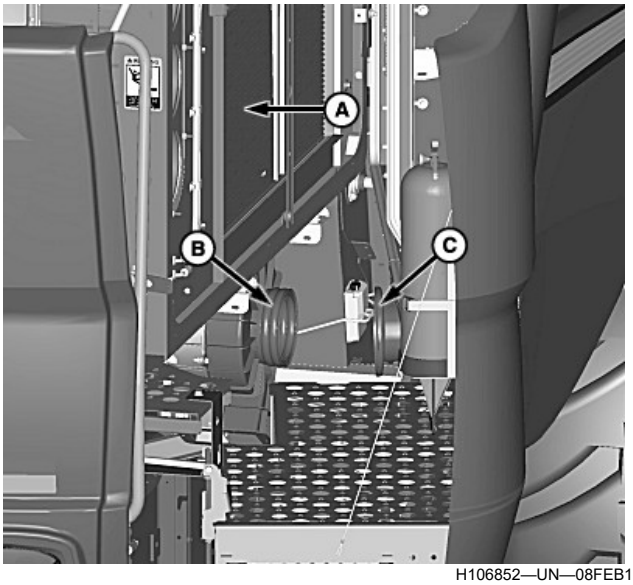



H95353—UN—25AUG10

**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)**



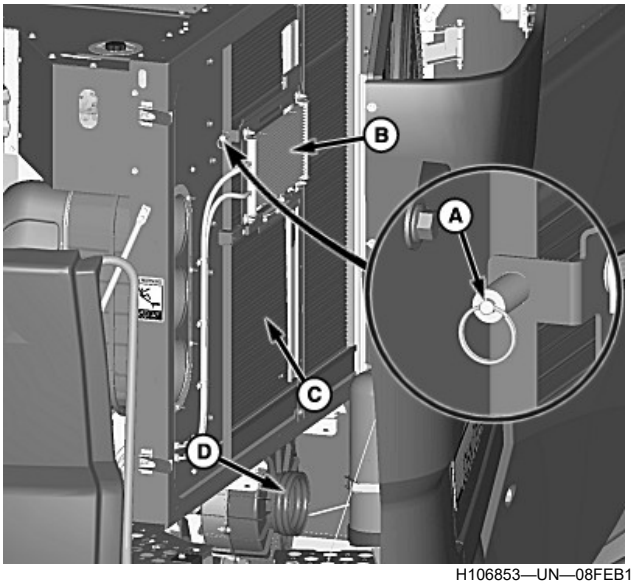

H106852—UN—08FEB13

**A—Radiator**
**B—Vacuum Duct**
**C—Transfer Duct**

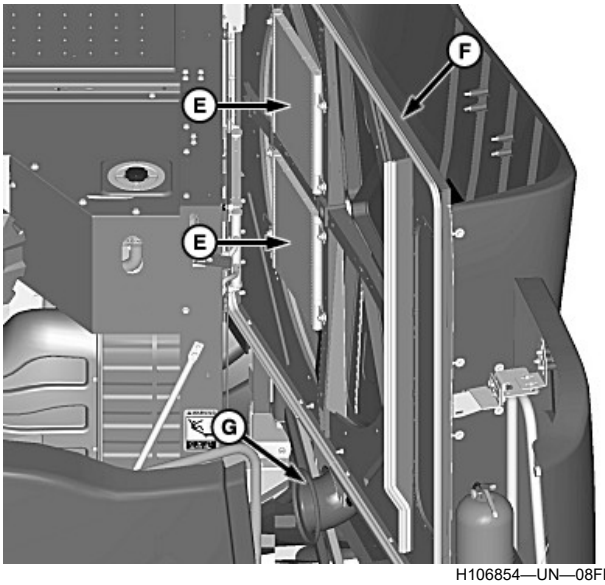
*NOTE: Clean areas out with compressed air, blowing from inside out.*

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

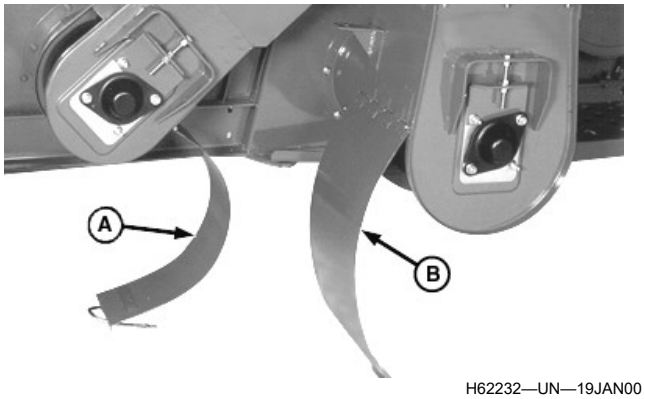
**A—Lockout Pin**
**B—Fuel Cooler**
**C—Radiator**
**D—Vacuum Duct**
**E—Condenser**
**F—Rotary Screen Door**
**G—Transfer Duct**

*NOTE: Clean areas out with compressed air, blowing from inside out.*

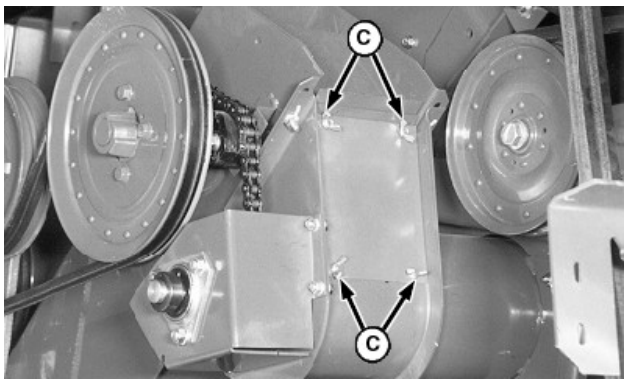
1. Open rotary screen door.
2. Pull lockout pin (A) and rotate fuel cooler (B) to clean.
3. Clean the following areas from inside out:
   - Radiator (C)
   - Oil cooler
   - Charge air cooler
4. Clean out dirt from the lower vacuum duct (D).
5. Clean condensers (E) on rotary screen door (F).
6. Clean 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

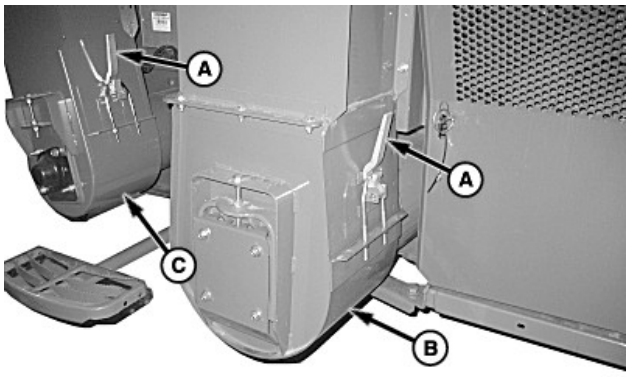



H62233—UN—19JAN00

**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.

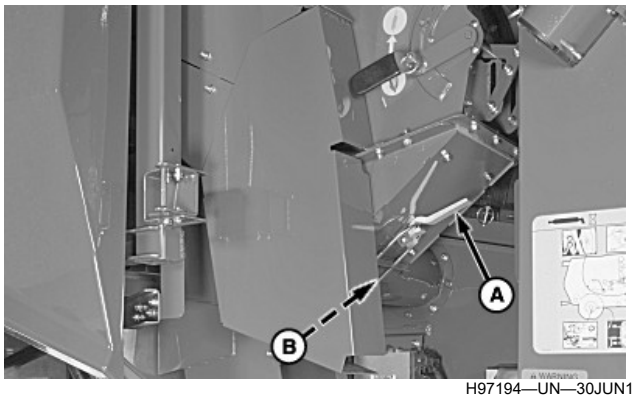
### Clean Grain Elevator and Tailings Elevator (Style B)




H97193—UN—30JUN10

**A—Handle**
**B—Clean Grain Elevator Door**
**C—Tailings System Elevator Door**

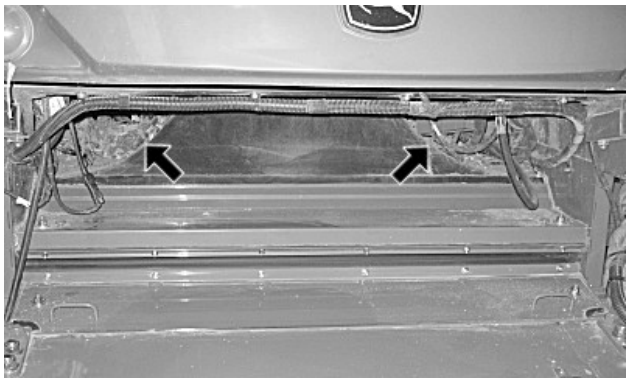
1. Use handles (A) to open clean grain elevator door (B) and the tailings system elevator door (C).
2. Remove material as needed and clean sides of elevator.




H97194—UN—30JUN10

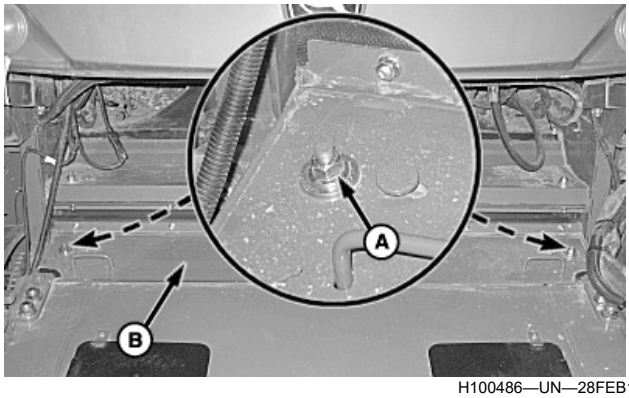
**A—Handle**
**B—Tailings System Auger Door**

3. Use handle (A) to open the tailings system auger door (B).
4. Remove material as needed and clean sides of elevator.

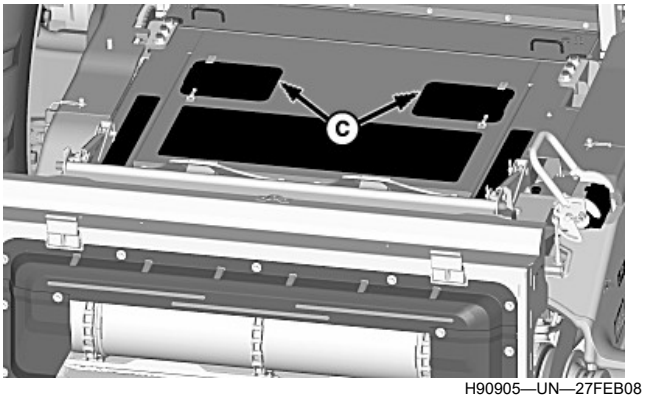


H100541—UN—02MAR11

30. Clean out chaff between separator and sides of machine.




H100486—UN—28FEB11

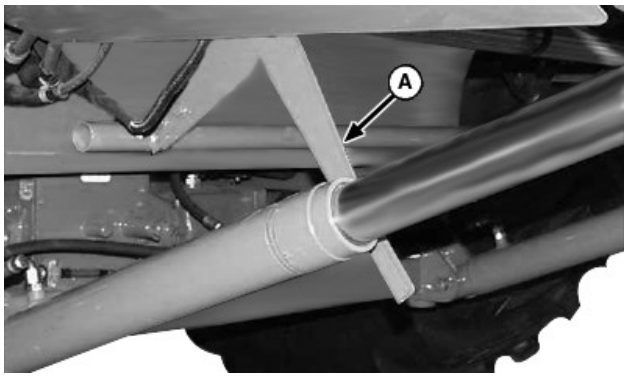



H90905—UN—27FEB08

**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)**

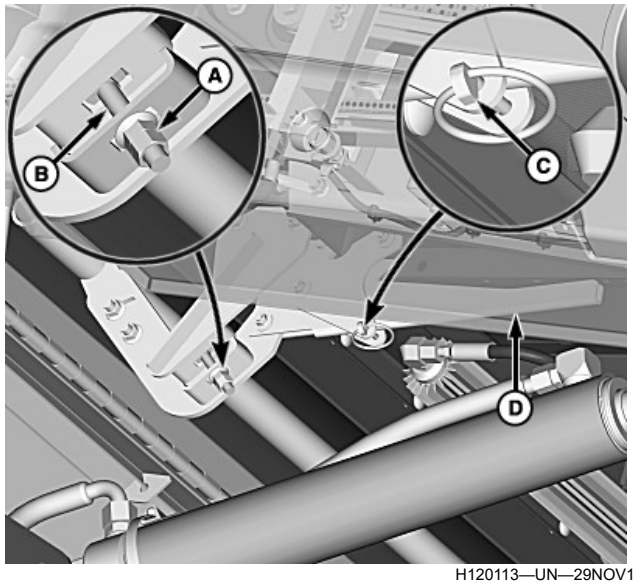



H52761—UN—17MAY99

**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.

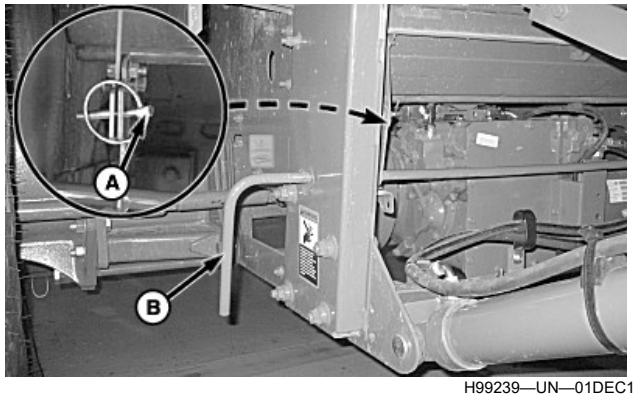
**Feed Plate (Style B)**




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.

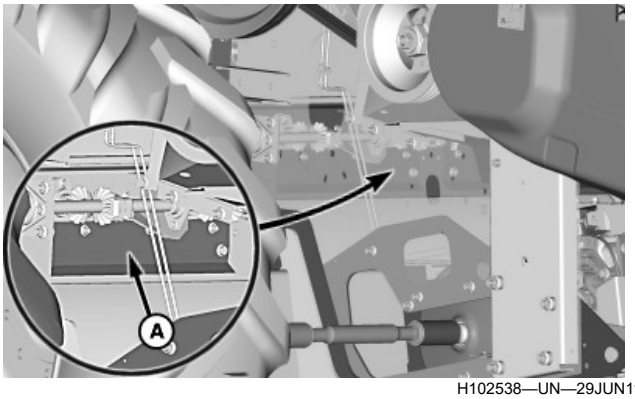



H99239—UN—01DEC10

**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)**

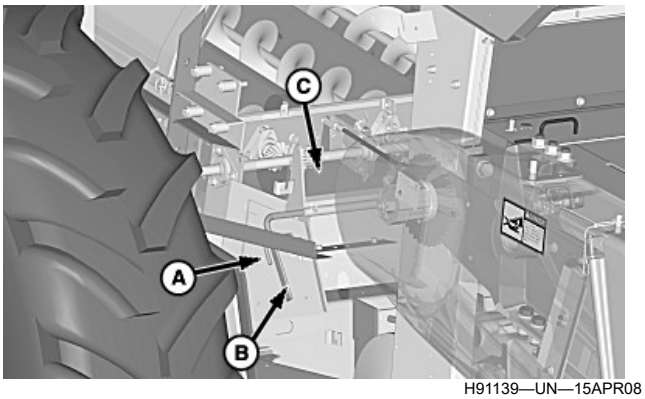



H102538—UN—29JUN11

**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.

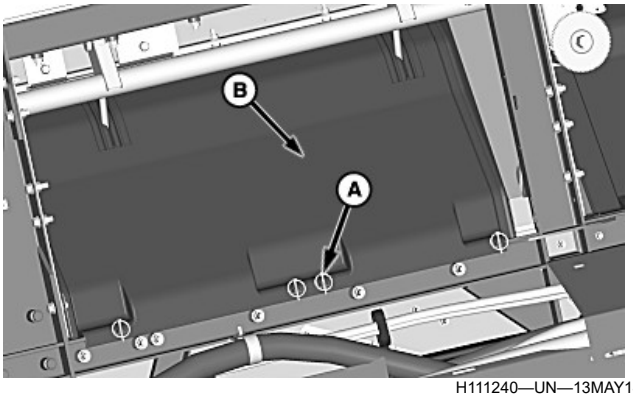
### Cleaning Shoe Auger Gears (Style B)




H91139—UN—15APR08

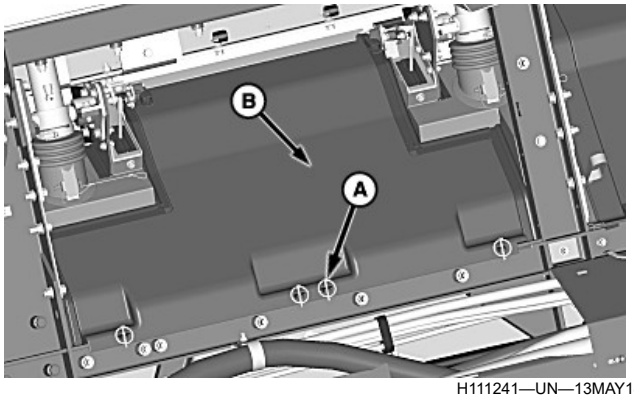
**A—Lockout Pin**
**B—Handle**
**C—Cleanout Door**

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

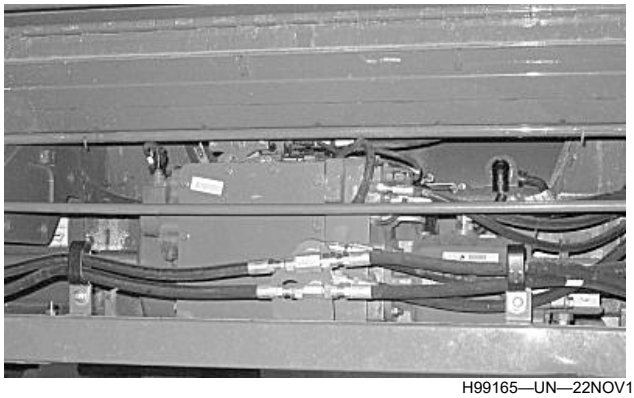
*Inspection Cover (style B)*



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.



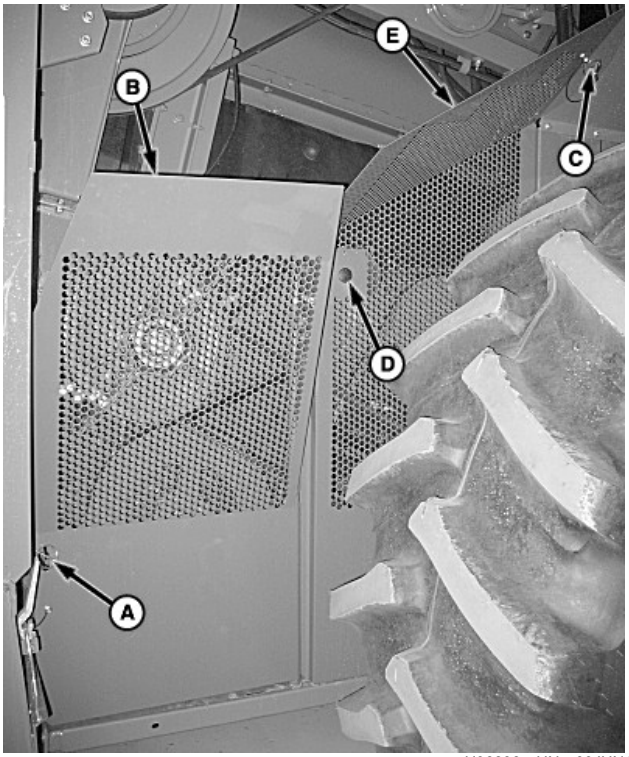
H115550—UN—20AUG15

42. Open sieve and chaffer as far as possible and clean.



H115551—UN—20AUG15

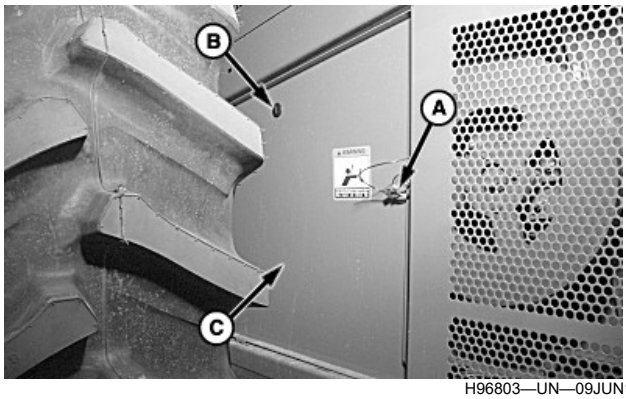
43. Clean rear axle area.




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

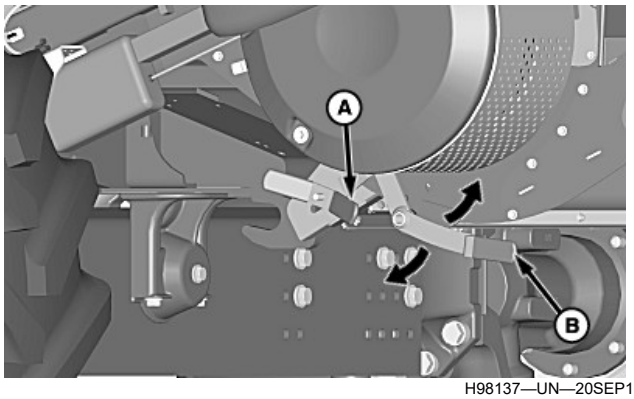
50. Clean area around fan.




H97565—UN—14SEP10

**A—Switch**

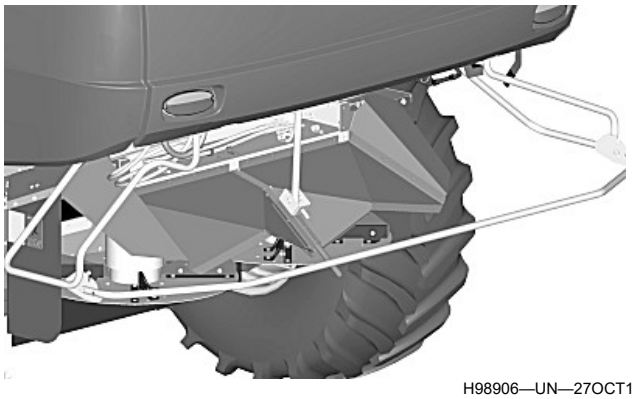
51. Raise chopper (if equipped) with switch (A).




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.

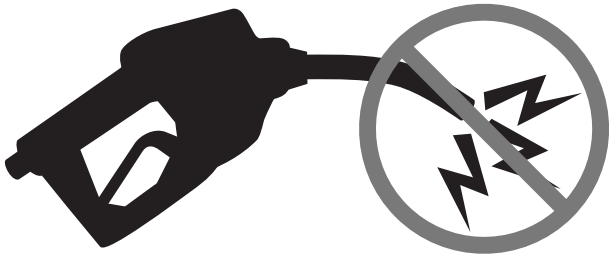
Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

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.

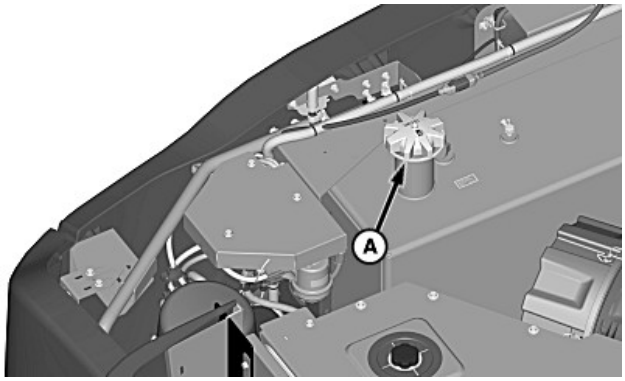
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

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.

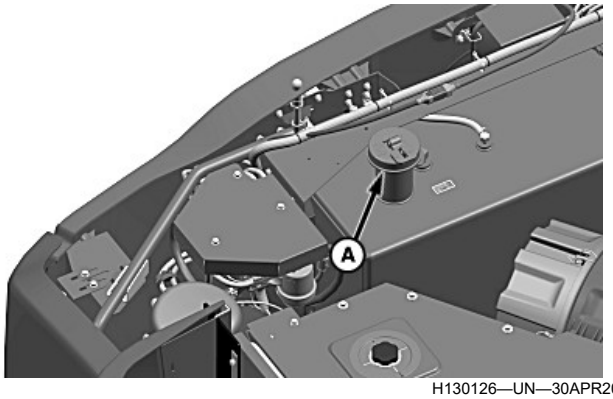
DX,FUEL,STATIC,ELEC-19-12JUL13

## 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,

*COOL-GARD is a trademark of Deere & Company*

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 |

*COOL-GARD is a trademark of Deere & Company*

*[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.

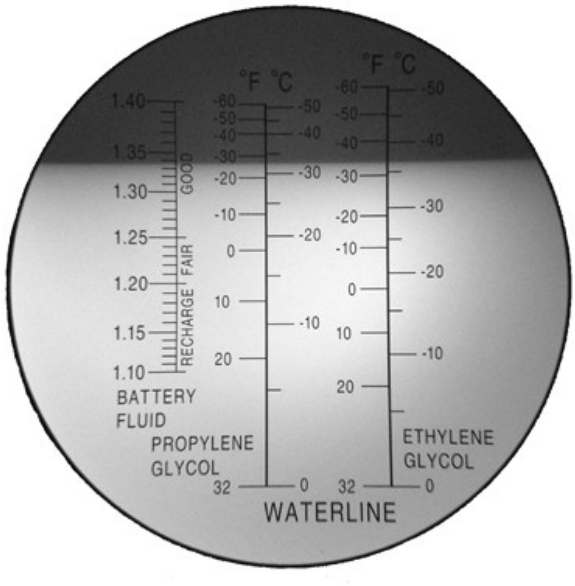
DX,COOL19-19-13JAN18

## 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

*SERVICEGARD is a trademark of Deere & Company*

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.**

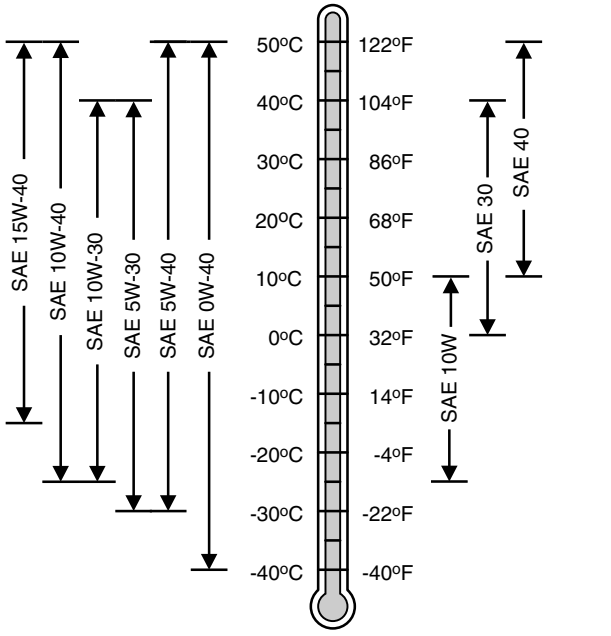
John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

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

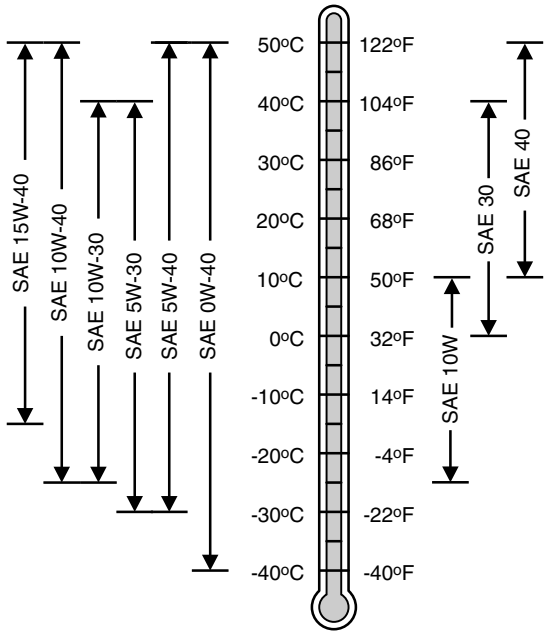
**Multi-viscosity diesel engine oils are preferred.**

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

*Plus-50 is a trademark of Deere & Company*
*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. | |

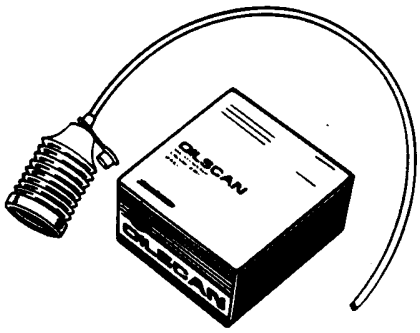
**Engine operation at high altitude** decreases oil change intervals. See Diesel Engine Oil Service Interval for Operation at High Altitude for additional information.

**IMPORTANT: To avoid engine damage:**

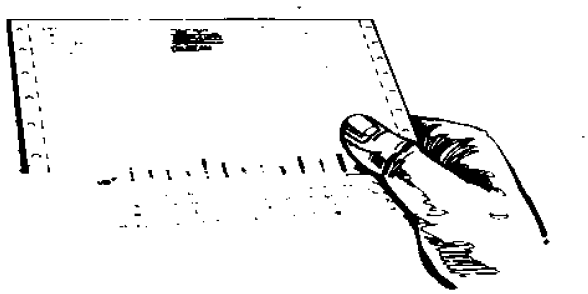
- **Reduce oil and filter service intervals by 50% when using biodiesel blends greater than B20. Oil analysis may allow longer service intervals**
- **Use only approved oil types**

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.

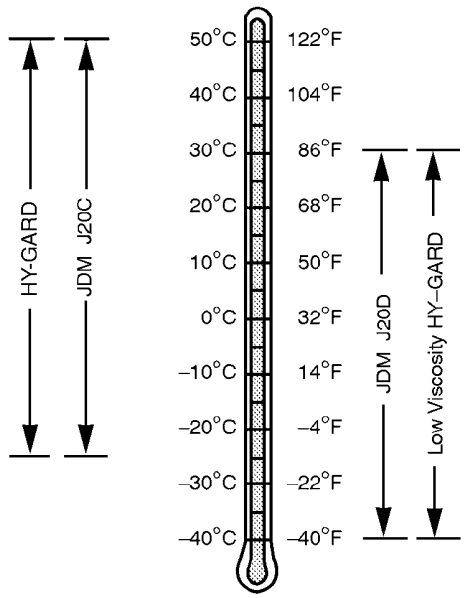
DX,OILSCAN-19-13SEP11

## 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:

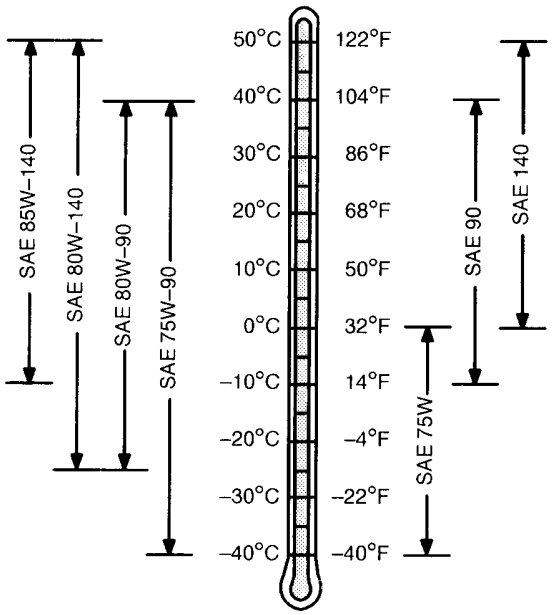
- John Deere Hy-Gard™
- Oils meeting John Deere Standard JDM J20C

*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

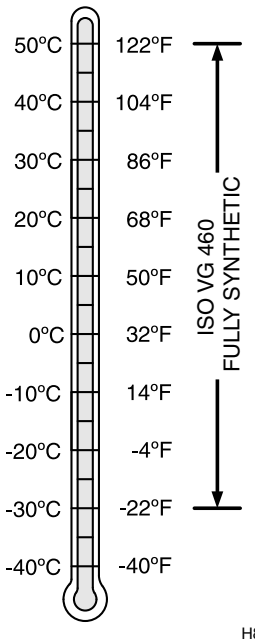
| Product Number | Description | Size |
|---|---|---|
| TY6252 | 80W/90 GL5 Gear Lube | 16 kg pail (35 lb pail) |
| TY6296 | 80W/90 GL5 Gear Lube | 0.9 L can (1 qt can) |
| TY6256 | 85W/140 GL5 Gear Lube | 16 kg pail (35 lb pail) |
| TY6345 | 85W/140 GL5 Gear Lube | 0.9 L can (1 qt can) |

OUO6075,0004924-19-21MAR18

*Hy-Gard is a trademark of Deere & Company*

*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:

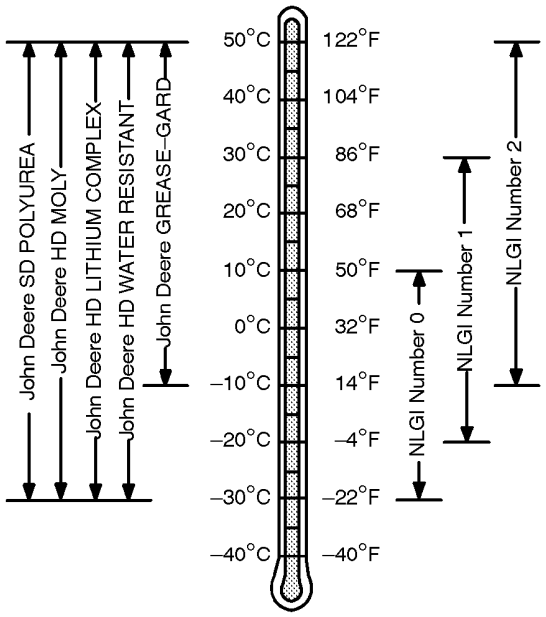
- John Deere ISO VG 460 Fully Synthetic

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

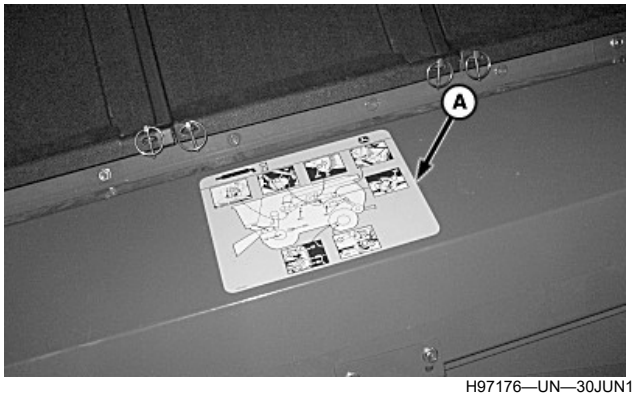
**CAUTION: To prevent injury, never lubricate or service machine, header, or engine while it is running. Shut OFF engine, set park brake and remove key.**

**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.

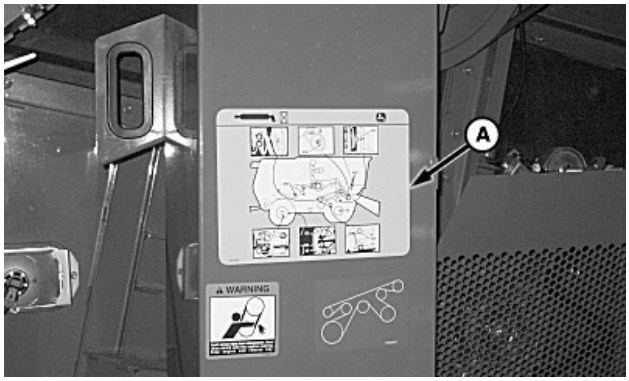
OUO6075,0004552-19-20DEC16

## 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.**

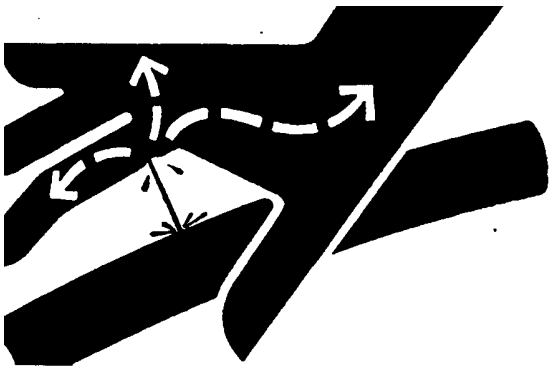
If hoses are to be fabricated, ensure that hoses are the same rating as one being replaced. See your John Deere dealer for correct hose rating replacements.

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.

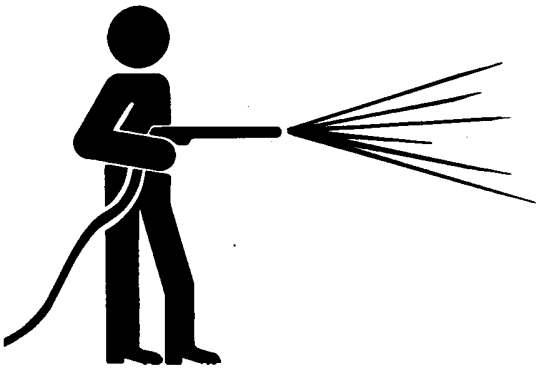
OUO6075,0004897-19-12APR18

## 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



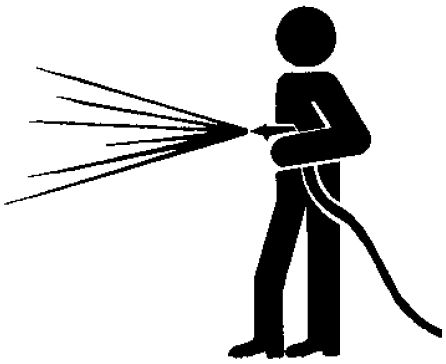
T6642EJ—UN—18OCT88

**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

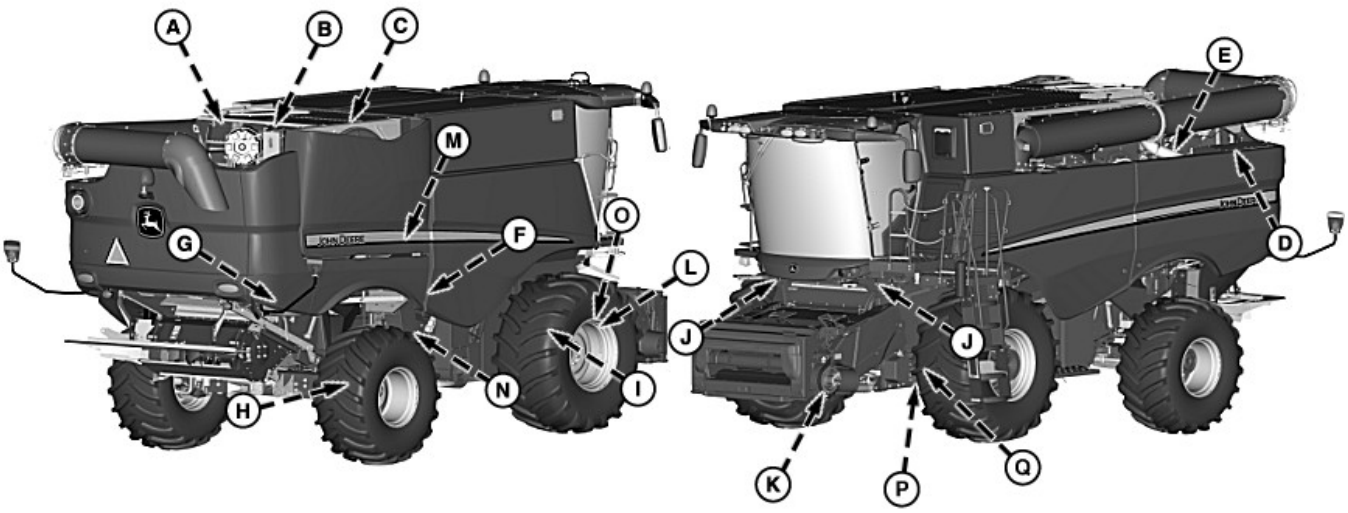
**IMPORTANT: Clean fittings before and after applying grease. Replace any damaged or missing fittings immediately.**

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



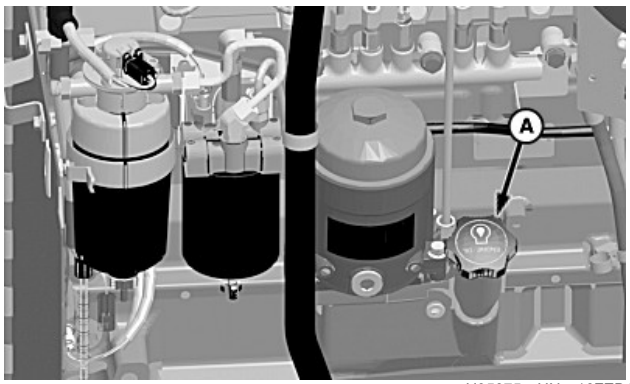

H123312—UN—07FEB18

| 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<br>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)<br>• Grease Final Drive Pivot<br>• Grease Header Tilt Primary Cylinder Pivot Pin<br>• Grease Leveling Cylinder Barrel | • |
| P | Without Central Lube Bank (HillMaster™ Machines)<br>• Final Drive Pivot | • |
| Q | Without Central Lube Bank (HillMaster™ Machines)<br>• Grease Header Tilt Primary Cylinder Pivot Pin<br>• Grease Leveling Cylinder Barrel | • |

*ActiveVision is a trademark of Deere & Company*
*HillMaster is a trademark of Deere & Company*

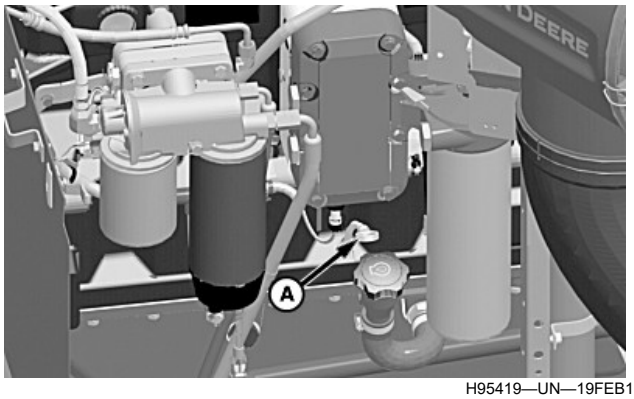
OUO6075,0004B3E-19-10JUN19

## Engine Oil Level



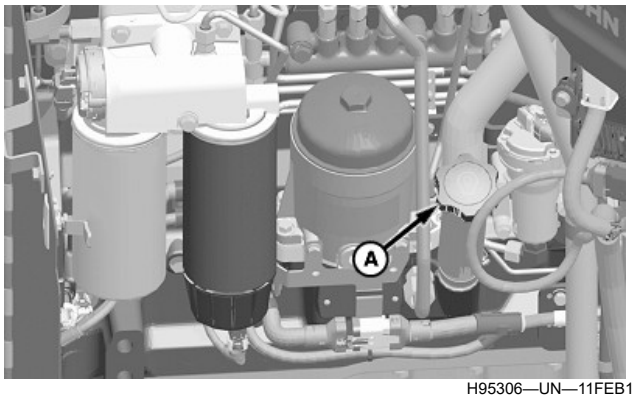

H95375—UN—16FEB10

*Tier 2/Stage II (Style A)*



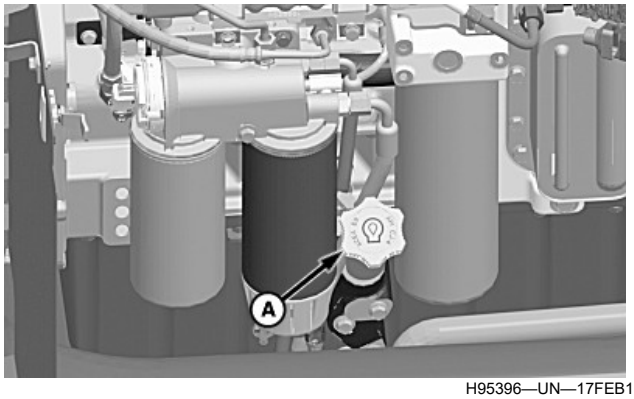

H95419—UN—19FEB10

*Tier 2/Stage II (Style B)*



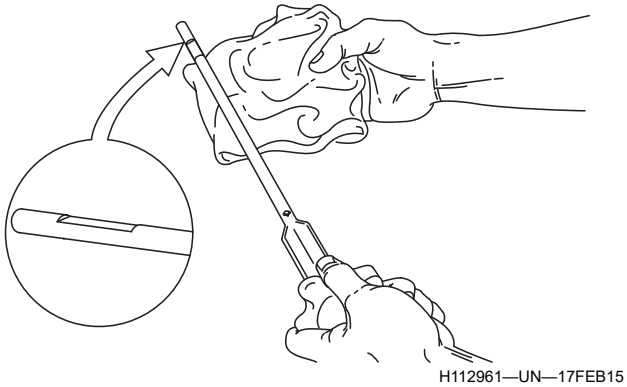

H95306—UN—11FEB10

*Final Tier 4/Stage V (Style A)*



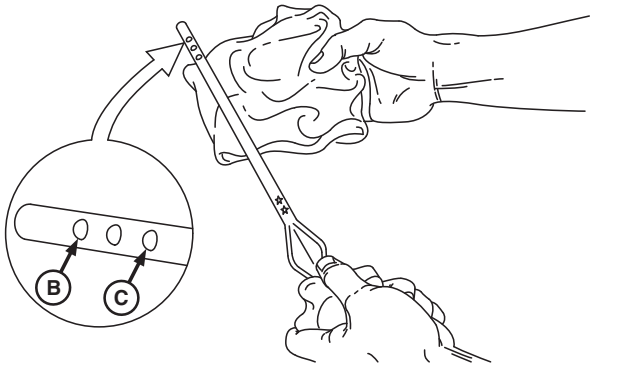

H95396—UN—17FEB10

*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

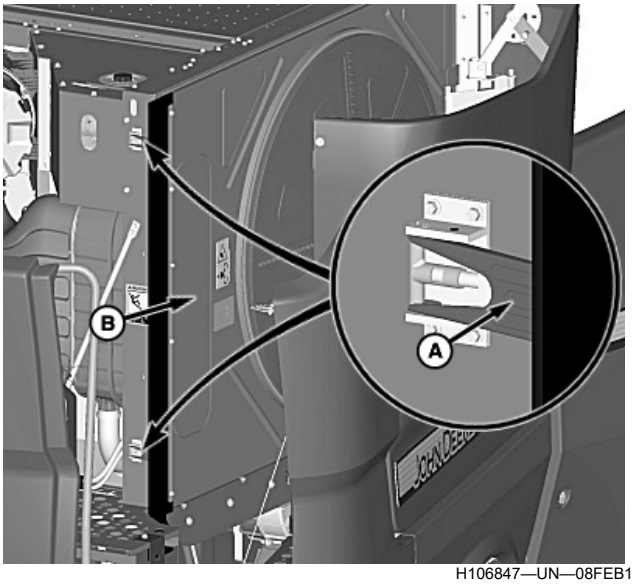
**A—Surge Tank**

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



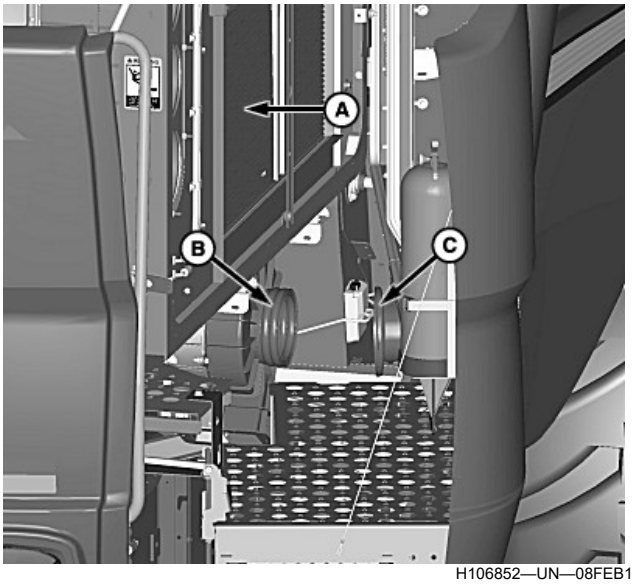

H106847—UN—08FEB13

**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.

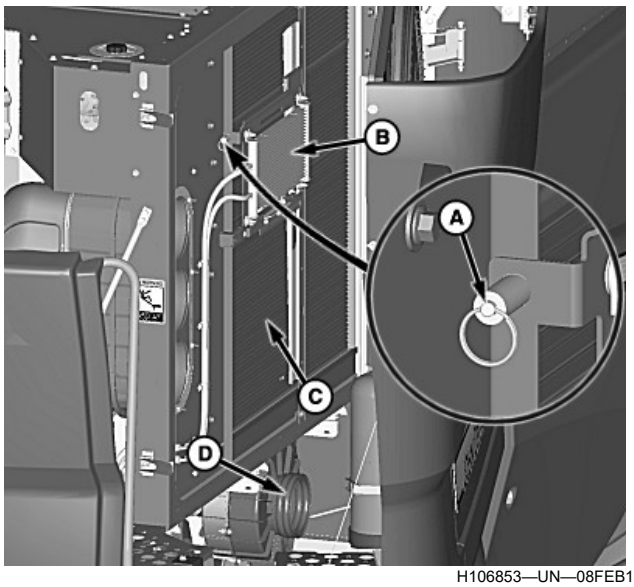
Clean condenser (A), oil cooler, charge air cooler, and radiator.

Clean out dirt from the lower vacuum duct (B) and transfer duct (C).

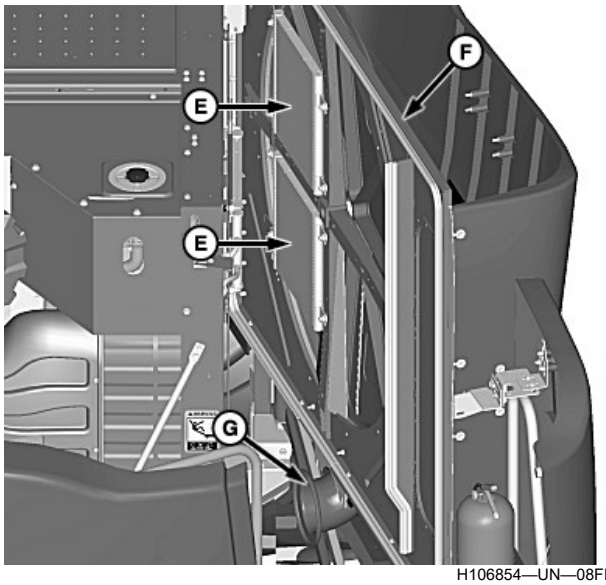
**IMPORTANT: Reduce high-pressure washer or pressurized air when cleaning coolers. To prevent damage to fins, direct the water or air straight through the fins to avoid bending them. Use a fin comb to straighten bent fins. Bent fins decrease cooler performance.**

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).

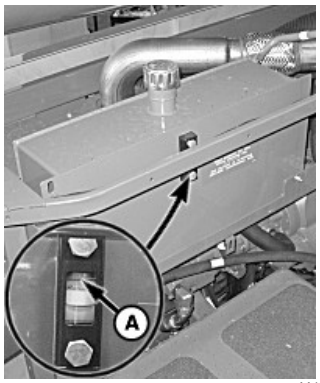
Clean out dirt from the transfer duct (G).

**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**

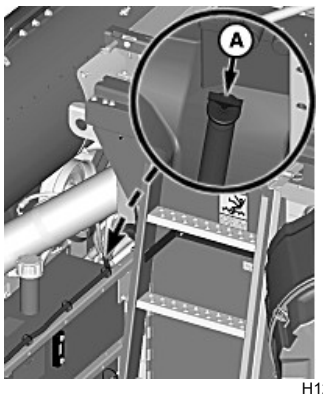
Check with header on ground.

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.

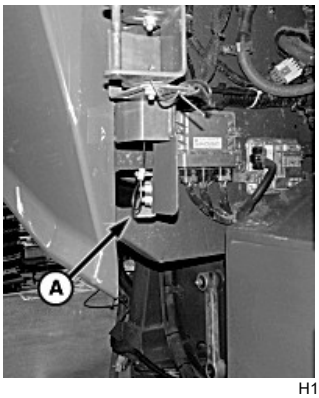
Let machine sit for 5 minutes allowing air to settle from oil.

Oil level must not be below "ADD" mark on dipstick (A).

Add oil as needed.

OUO6075,000493D-19-12APR18

## Air Compressor Reservoir (If Equipped)



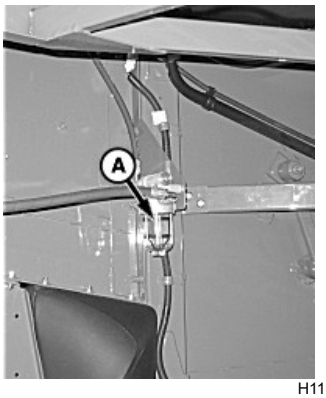

H115497—UN—19AUG15

**A—Air Tank Drain Cable**

Pull air tank drain cable (A) and drain water from reservoir.

OUO6075,00043FD-19-21DEC16

## Fuel Precleaner Filter



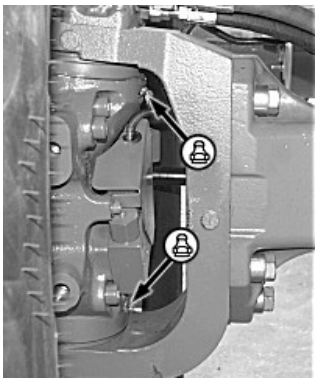

H117746—UN—17MAR16

**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)



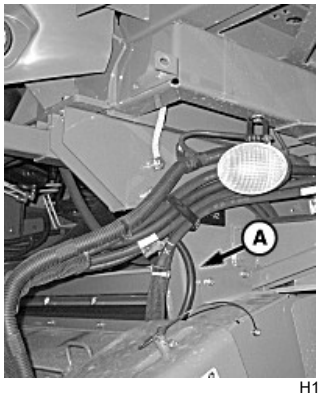
H115501—UN—19AUG15

*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



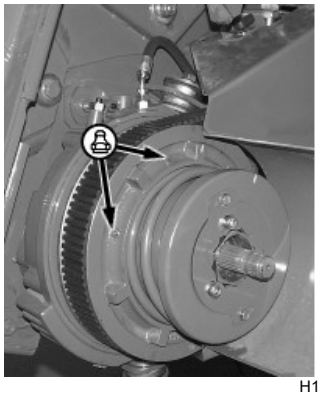

H115502—UN—19AUG15

**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.

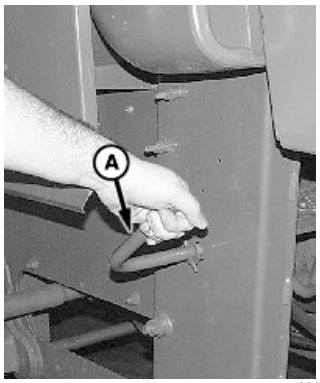
When operating in severe conditions or high yielding corn, grease fitting at twelve o'clock position, 5—8 pumps every 10 hours.

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



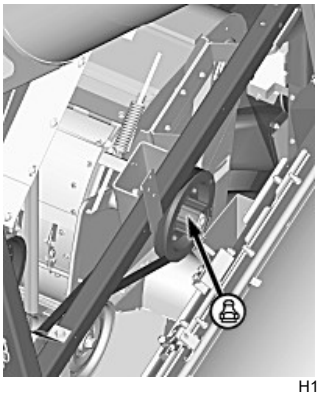

H115496—UN—19AUG15

**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)



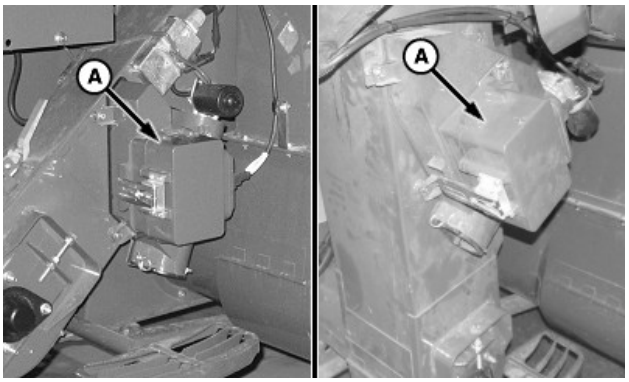
H115504—UN—19AUG15

*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**

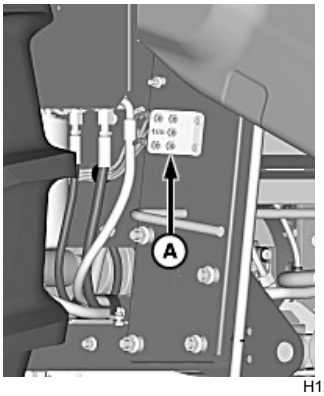
*NOTE: Clean the camera lens once per week or as needed. Lens debris indicator in the software alerts the operator when the camera lens needs to be cleaned as system functionality may be reduced.*

*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)



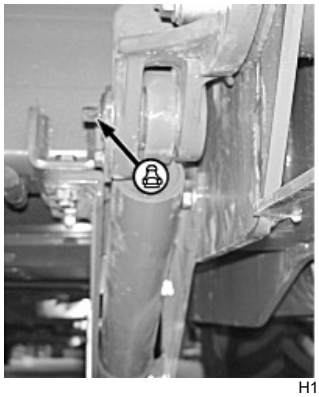

H120022—UN—14NOV16

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)

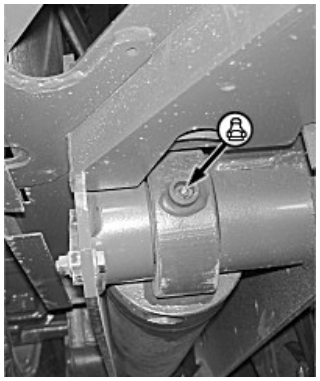


H120023—UN—14NOV16

Grease fitting (both sides) until grease purges.

OUO6075,0004B41-19-09APR19

## Leveling Cylinder Barrel (Without Central Lube Bank) (HillMaster™ Machines)

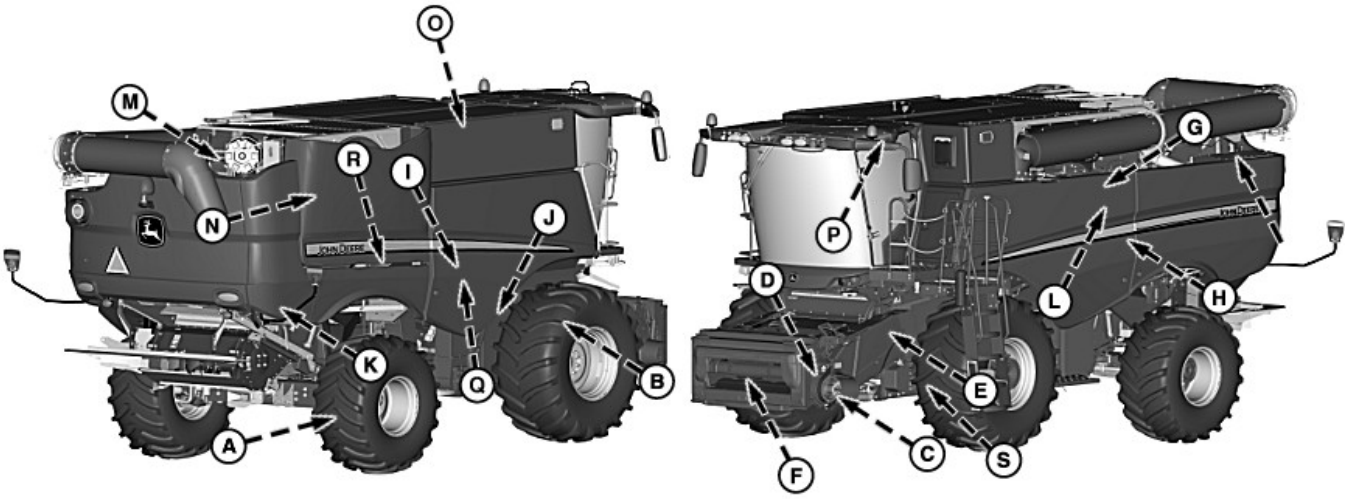


H120024—UN—14NOV16

Grease fitting (both sides) until grease purges.

OUO6075,0004891-19-07FEB18

## Service Interval Chart—Every 50 Hours



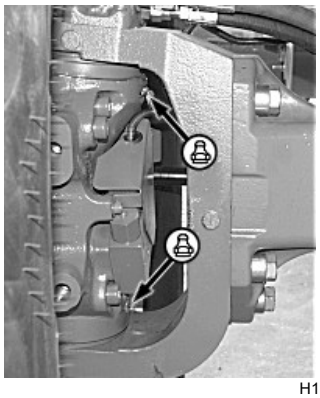

H123391—UN—08FEB18

| Legend | Service | Every 50 Hours |
|---|---|---|
| A | Grease Two-Speed Four-Wheel Drive Motor Pivots<br>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 | • |

*ActiveVision is a trademark of Deere & Company*

OUO6075,0004893-19-31MAY18

## Two Speed Four-Wheel Drive Motor Pivots (Normal Conditions)



H115499—UN—19AUG15

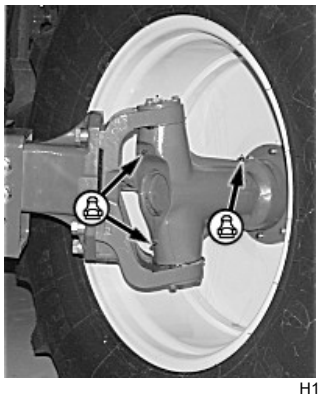
*NOTE: When operating in mud and water, grease motor pivots every 10 hours. In normal conditions, grease every 50 hours.*

*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)



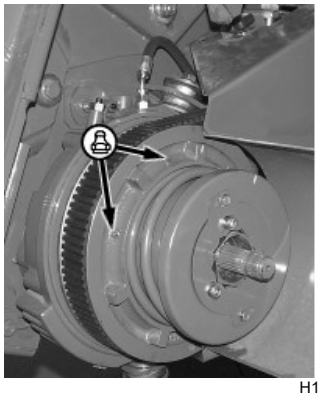
H115501—UN—19AUG15

*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.

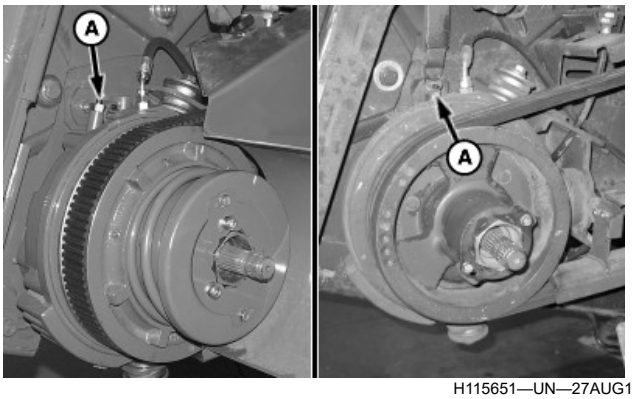
When operating in normal conditions, grease twelve o'clock fitting (10—15 times) and two o'clock fitting (5—8 times) every 50 hours.

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.

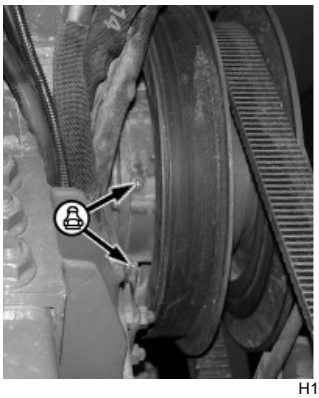
*NOTE: Gear cases with an oil cooler require gear case to be run for several minutes. This ensures that the cooler is filled with oil.*

*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

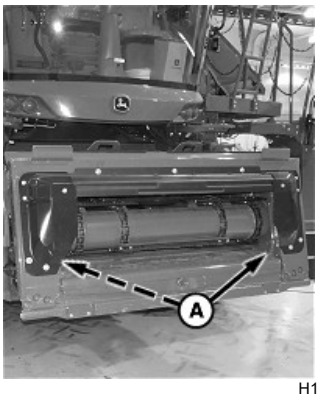
*NOTE: It may be necessary to rotate the sheave for access to fittings.*

Raise feeder house and lower safety stop.

Lube fittings from the underside of the feeder house.

OUO6075,000440C-19-21DEC16

## Lateral Tilt Feeder House



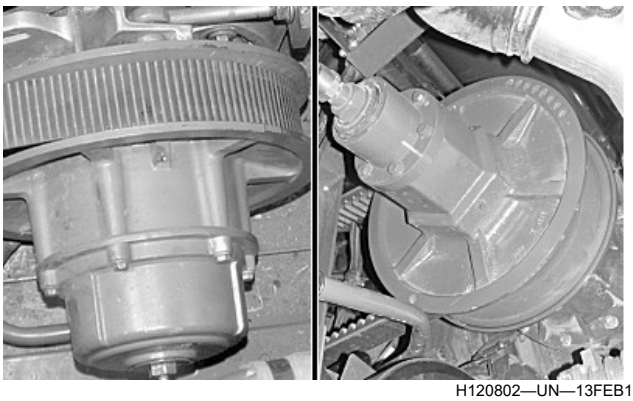

H115653—UN—28AUG15

**A—Cleanout Areas**

Check cleanout areas (A) for packed material which could prevent header from tilting. Clean out if necessary.

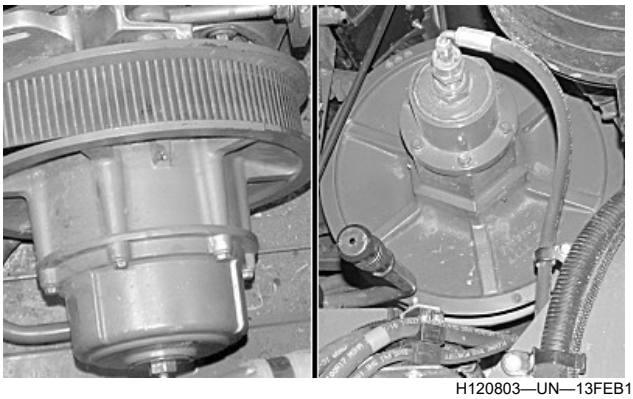
OUO6075,000440D-19-21DEC16

## Separator Variable Speed Driven/Driver Sheaves



H120802—UN—13FEB17

*Driven Sheaves / Driver Sheaves (Small Diameter)*



H120803—UN—13FEB17

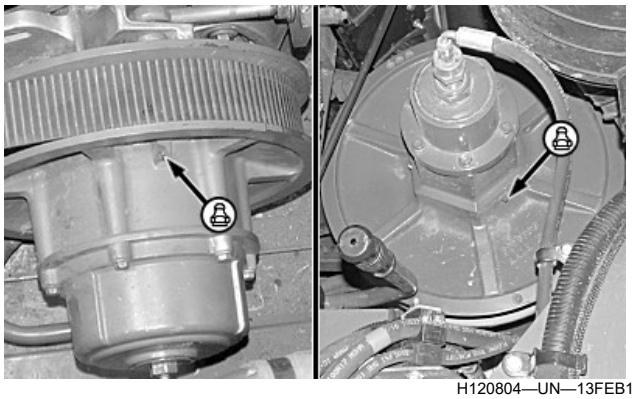
*Driven Sheaves / Driver Sheaves (Large Diameter)*

**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.**

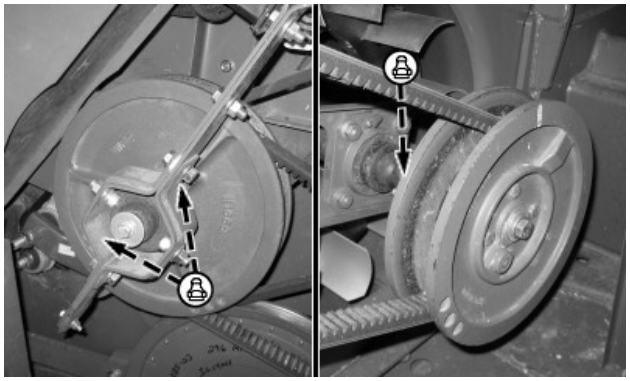
**Separator Variable Speed Driven Sheaves:** Rotate sheaves to access fitting.

*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

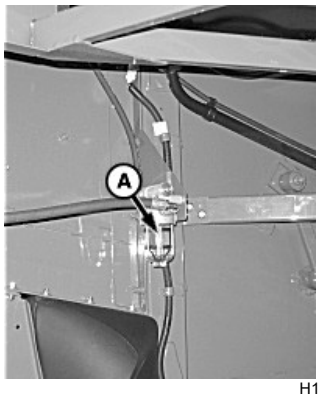
*Upper Sheaves / Lower Sheaves*

**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



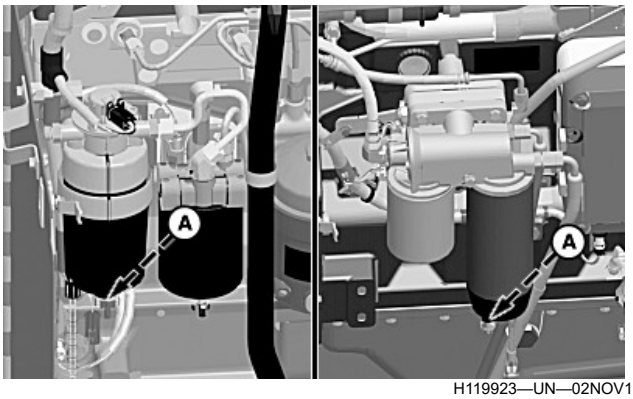

H115658—UN—28AUG15

**A—Dipstick**

Remove dipstick (A) and check oil level. Add oil as needed to correct level on dipstick.

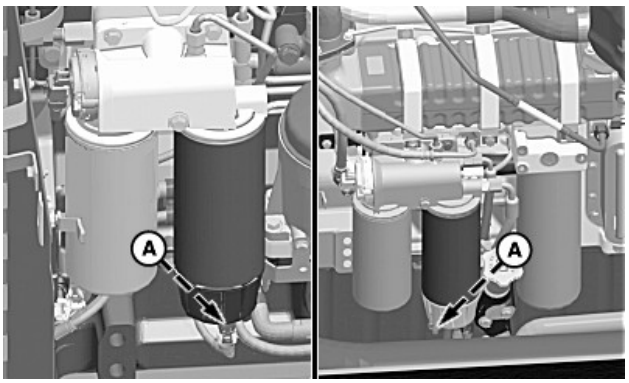
OUO6075,0004412-19-21DEC16

## 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



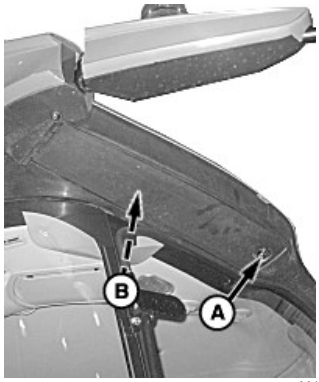
H123564—UN—22FEB18

*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

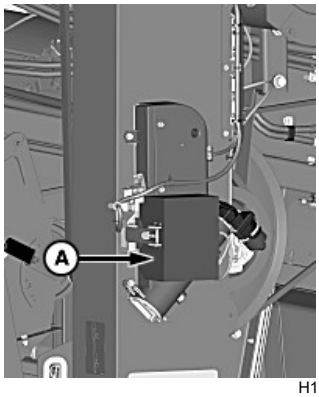
**A—Knob**
**B—Fresh Air Filter**

*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.*

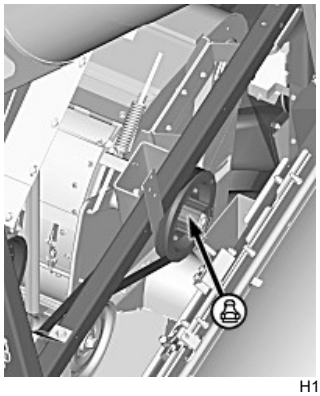
*The cleaning frequency varies depending on several factors, including operating conditions, weather, and crop conditions. Clean camera lens using a soft, moistened cloth.*

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)



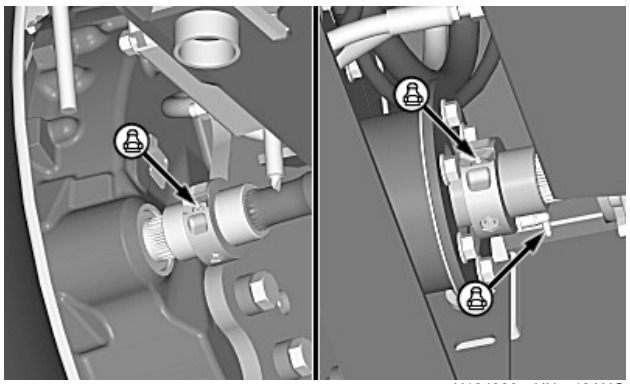
H115504—UN—19AUG15

*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).

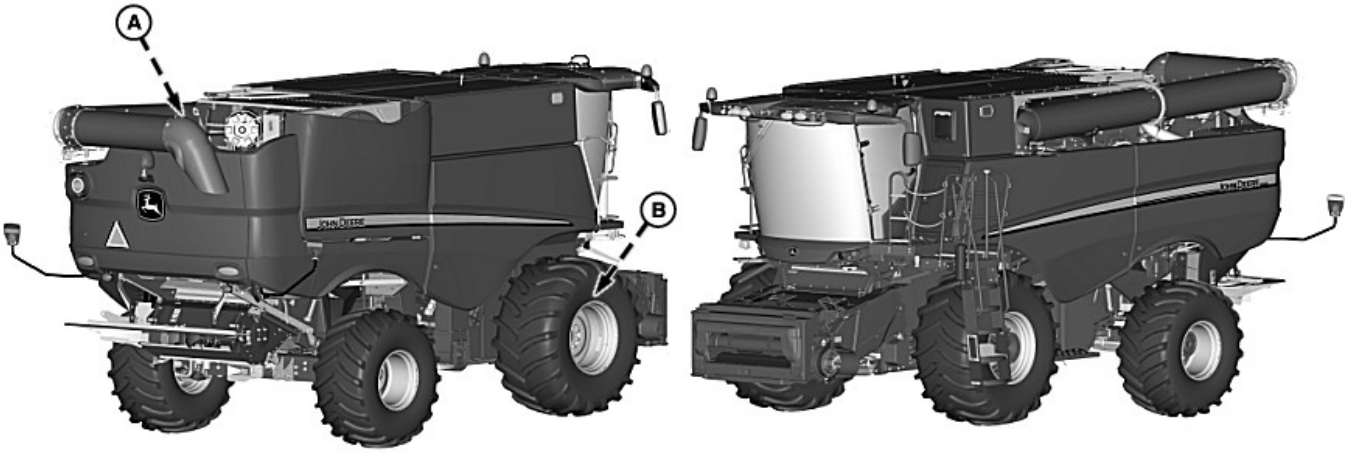
Tighten the hex head cap screw on the final drive coupler (both sides) to specification.

| 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



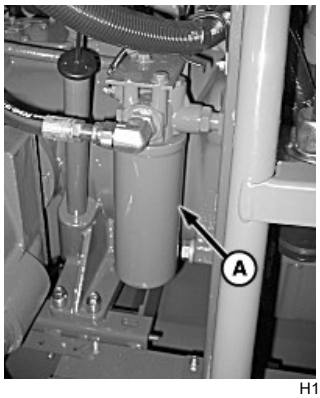

H119631—UN—13OCT16

| 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

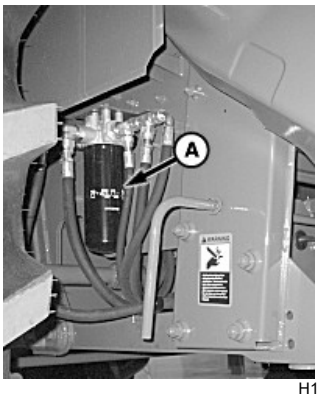
**A—Filter**

*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

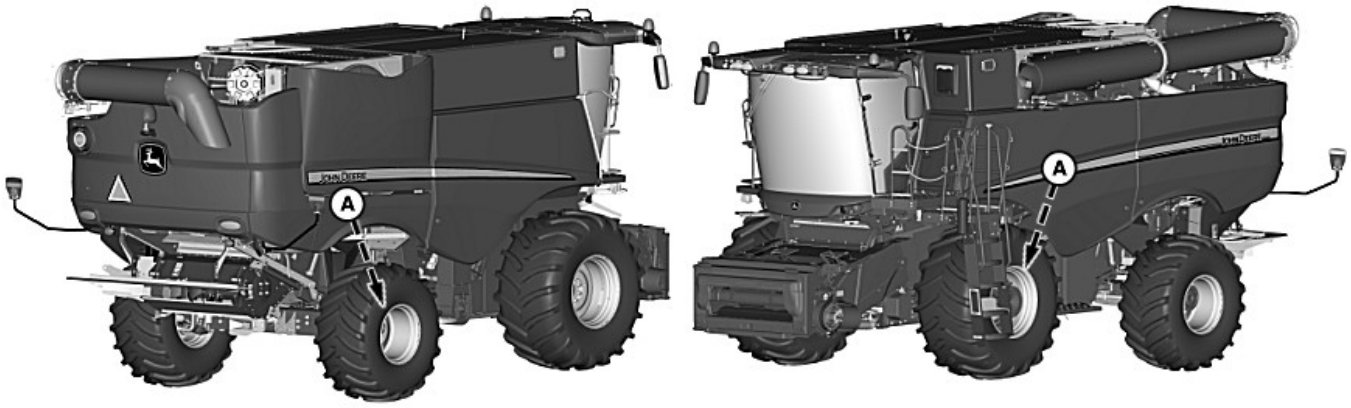
**A—Filter**

*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

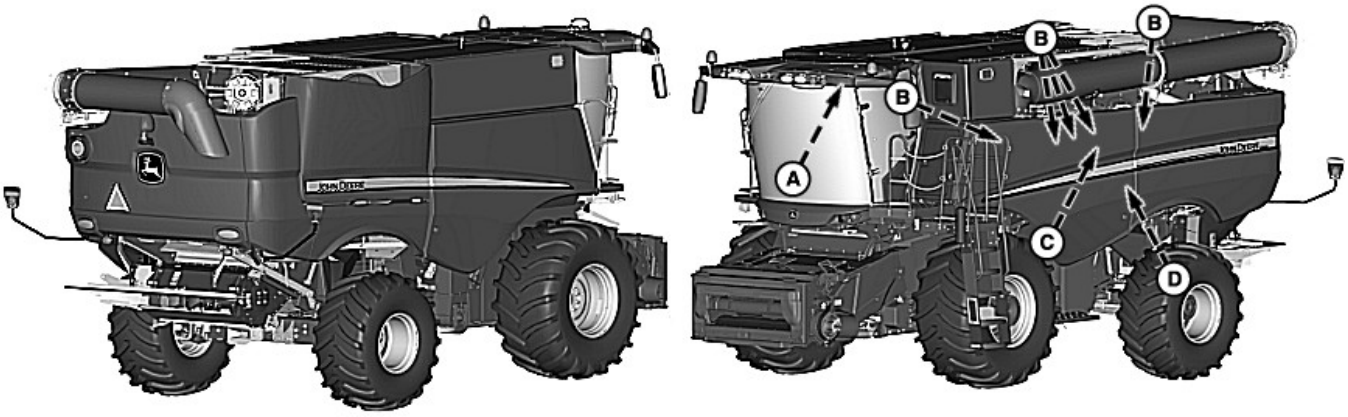


H115666—UN—28AUG15

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



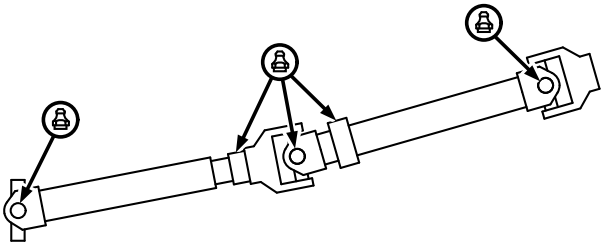

H115668—UN—28AUG15

**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)



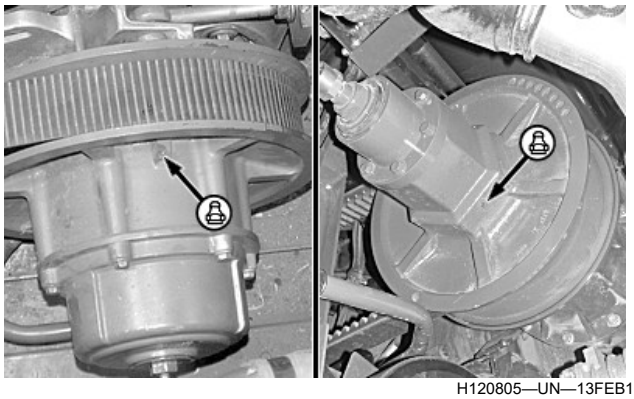
H119656—UN—17OCT16

*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.**

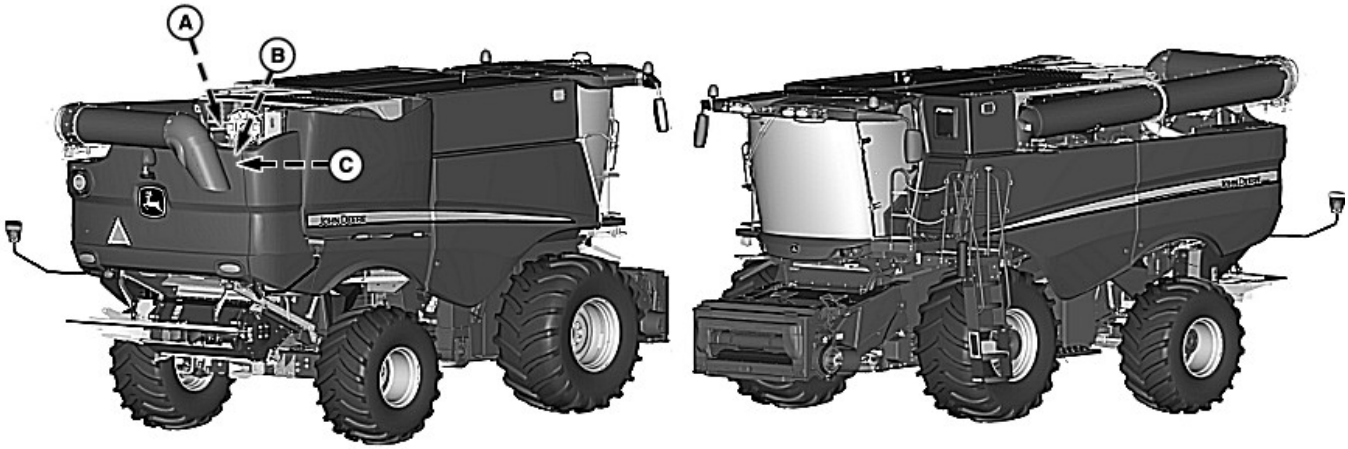
**Separator Variable Speed Driven Sheaves:** Rotate sheaves to access fitting.

*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

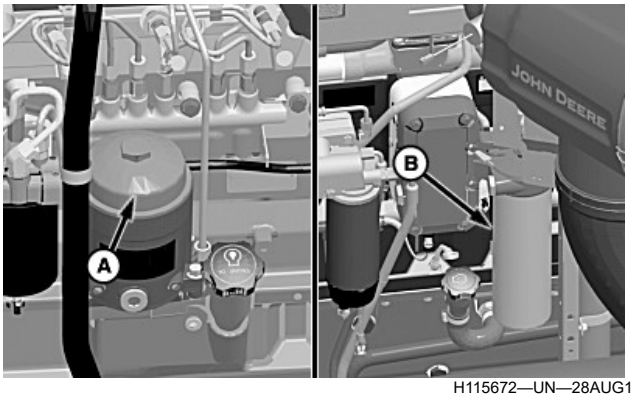



H119636—UN—14OCT16

| Legend | Service | Every 250 Hours |
|---|---|---|
| A | Change Engine Oil and Filter (Tier 2/Stage II)<br>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) | • |

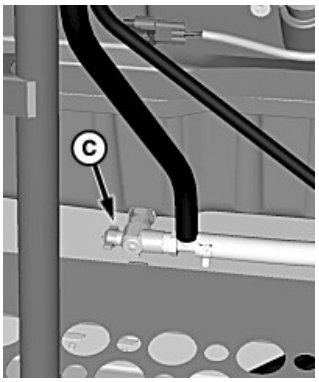
OUO6075,00047ED-19-15NOV17

## Engine Oil and Filter (Tier 2/Stage II)

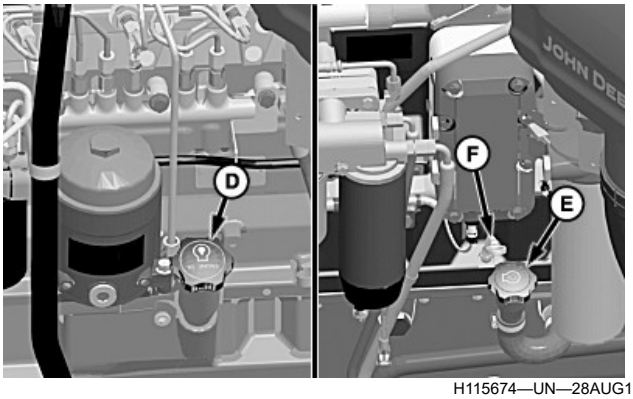



H115672—UN—28AUG15

*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)

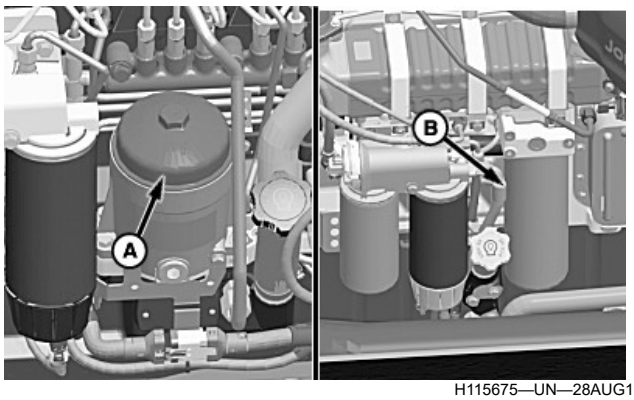
**Style B:** Engine Crankcase Oil Filter: Remove and replace oil filter (B).

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.

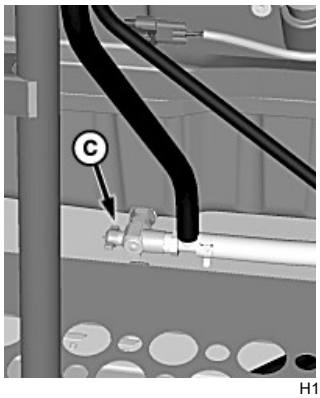
OUO6075,00044BA-19-25JAN17

## Engine Oil and Filter (Final Tier 4/Stage V)

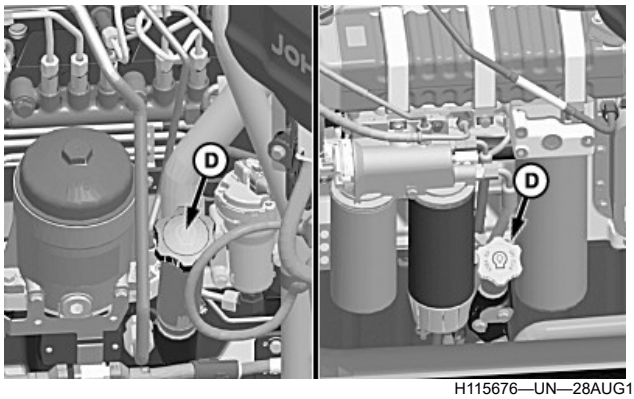



H115675—UN—28AUG15

*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**

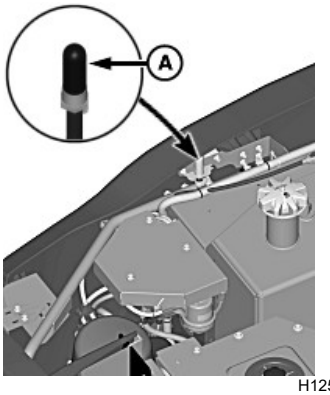
Oil Filter Cap—Torque. . . . . 40 N·m (30 lb·ft)

**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



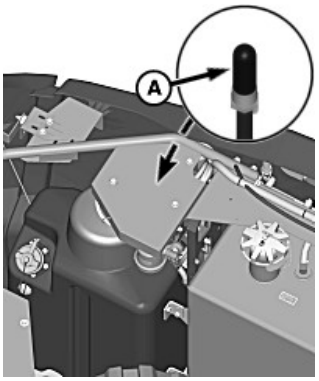

H125430—UN—04DEC18

**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)



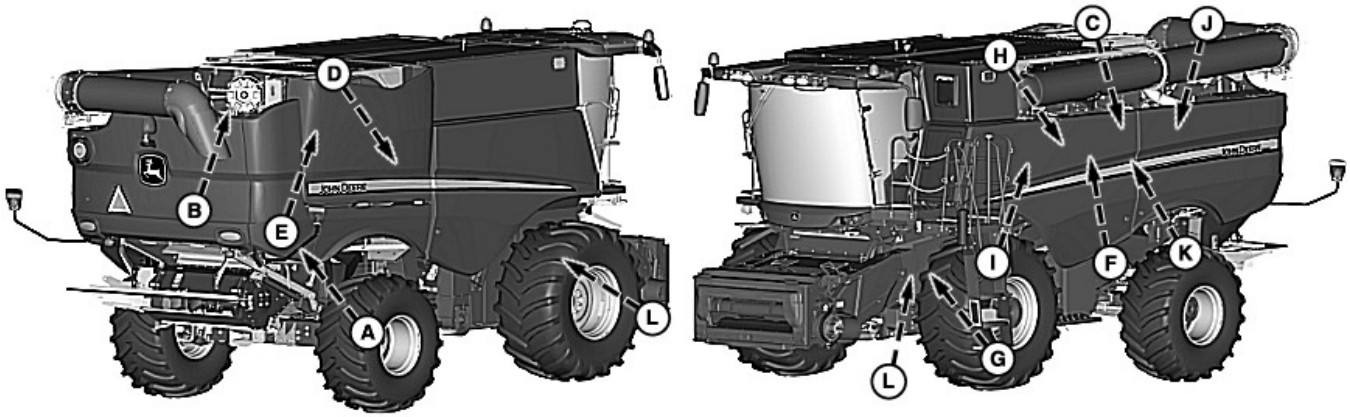

H125431—UN—04DEC18

**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

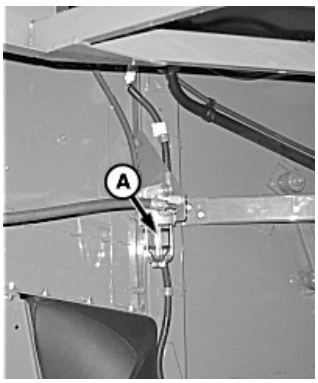



H119653—UN—17OCT16

| Legend | Service | Every 400 Hours |
|---|---|---|
| A | Clean Fuel Precleaner Filter | • |
| B | Check Water Separator (S780, S785, and S790 Machines)<br>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

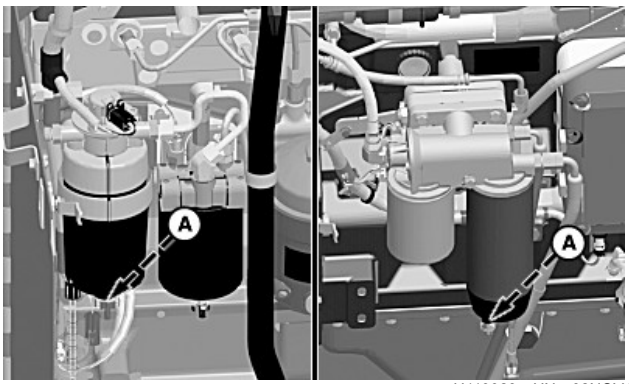
**A—Fuel Precleaner Filter**

**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.

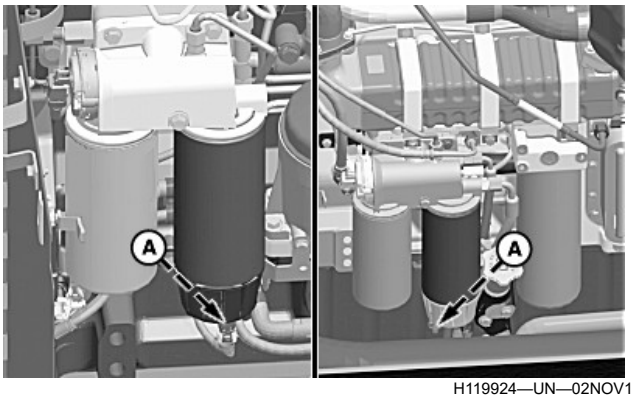
OUO6075,0004428-19-17JAN17

## 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**

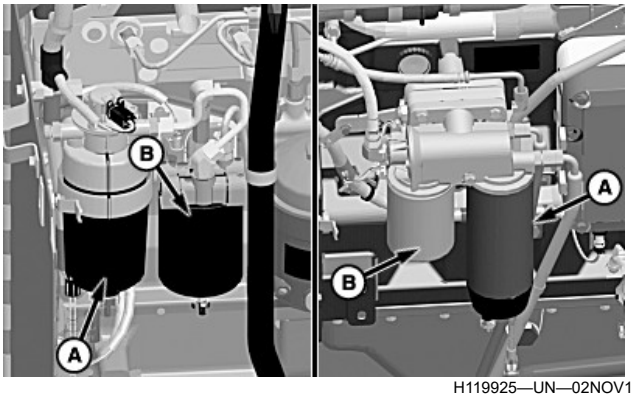
Check water separator (A) for water or when diagnostic trouble code is generated.

Open drain to remove water form separator. See Maintenance—As Required (Engine Fluids and Filters) section for further information.

Remove and retain water separator.

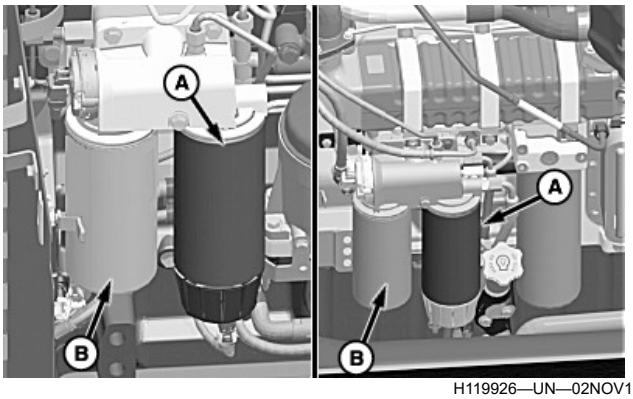
OUO6075,00047F3-19-13NOV17

## 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.**

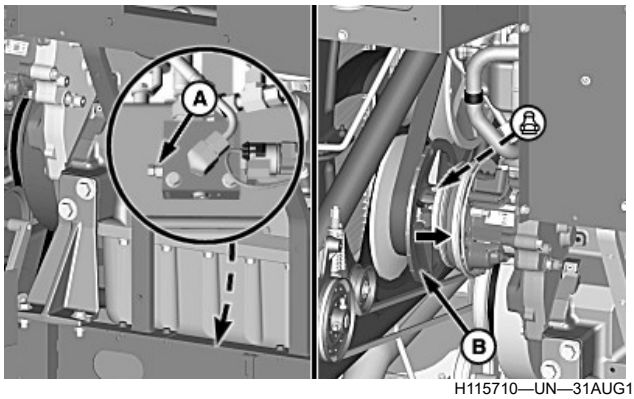
**Shut OFF engine, set park brake and remove key before performing maintenance work on the fuel filter.**

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

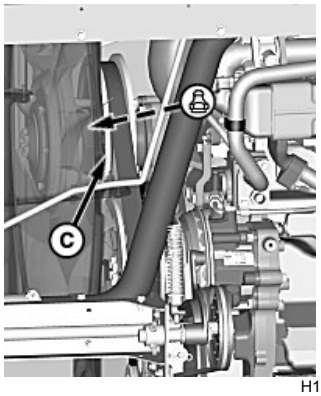
—As Required (Engine Fluids and Filters) section for further information.

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.

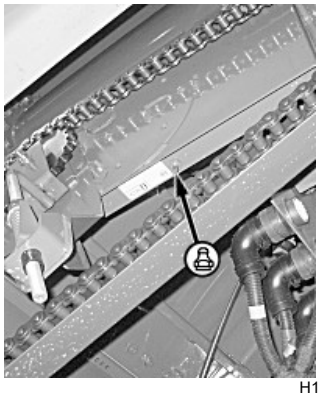
   Tighten bleed screw and nut on the valve to specification.

**Specification**

Bleed Screw and Nut—Torque. . . . . 23 N·m (17 lb·ft)

OUO6075,00047F6-19-13NOV17

## Unloading Auger Upper Gear Case

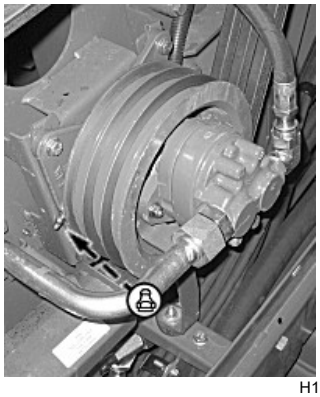


H115712—UN—31AUG15

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)



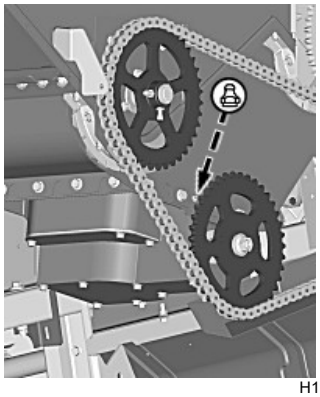
H115714—UN—31AUG15

*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)



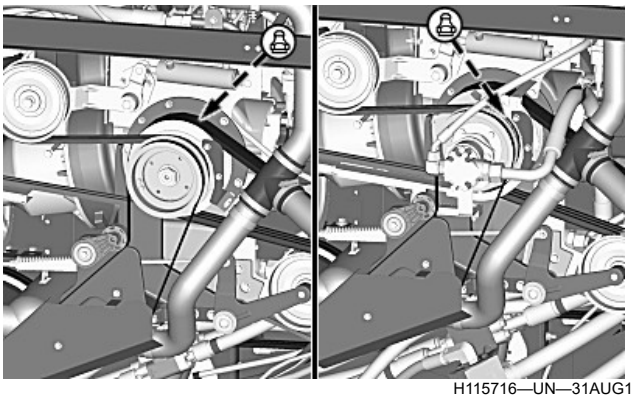
H115715—UN—31AUG15

**IMPORTANT: Pump 10 shots of grease into fitting.**

Grease the fitting.

OUO6075,000468F-19-28MAR17

## Chopper/Unloading Driveshaft Bearing



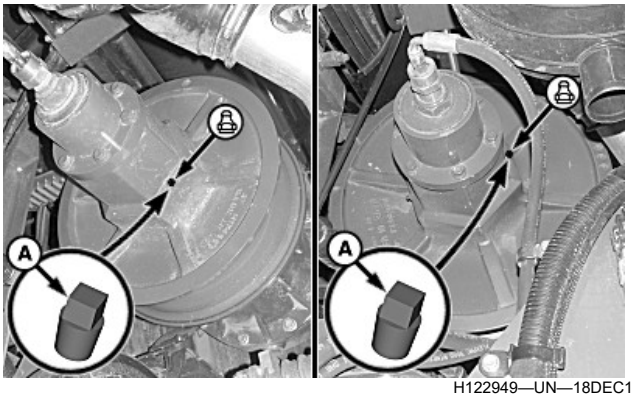
H115716—UN—31AUG15

*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)*

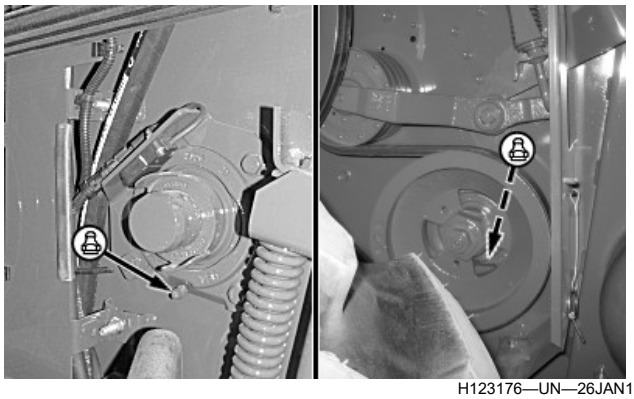
**A—Pipe Plug**

**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)

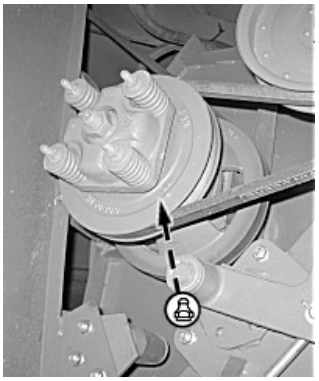



H119654—UN—17OCT16

| 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)



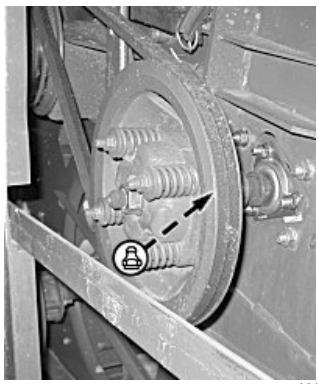
H115720—UN—31AUG15

**IMPORTANT: Do not over grease.**

Rotate sheave assembly to access fitting.

OUO6075,0004433-19-17JAN17

## Conveyor Auger Drive Slip Clutch



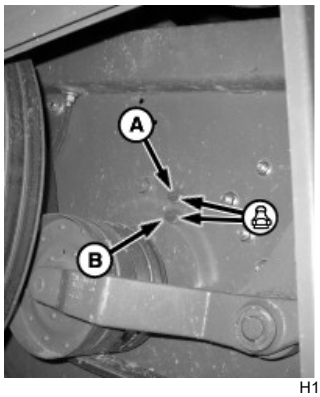
H115721—UN—31AUG15

**IMPORTANT: Do not over grease.**

Rotate sheave assembly to access fitting.

OUO6075,0004434-19-17JAN17

## Right-Hand Side Lube Bank



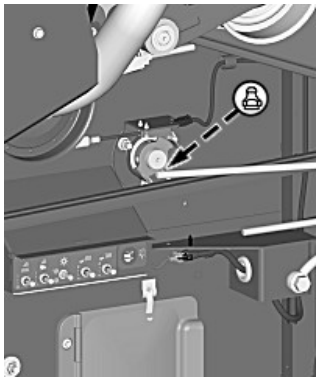

H115722—UN—31AUG15

**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)

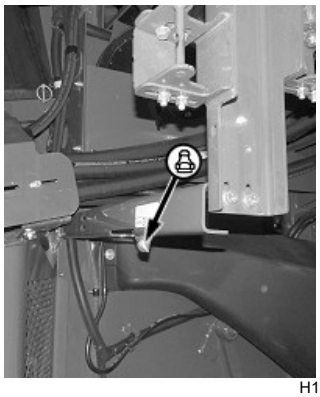


H123397—UN—09FEB18

Grease the fitting (both sides).

OUO6075,00048A7-19-09FEB18

## Discharge Beater Bearings

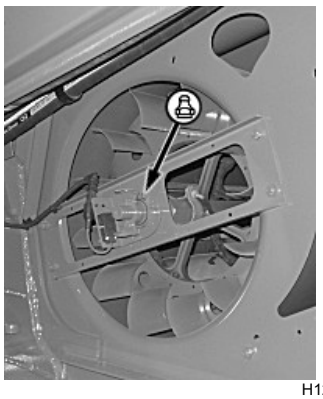


H115724—UN—31AUG15

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

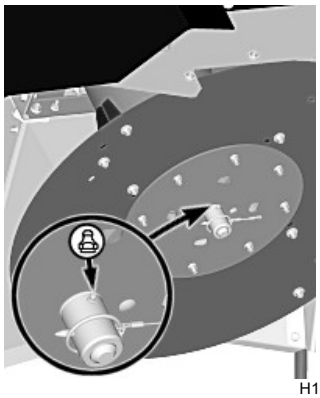


H115726—UN—31AUG15

Grease the fitting (both sides) on power steering rod end ball joint.

OUO6075,0004695-19-21MAR17

## Spreader Disk (If Equipped)

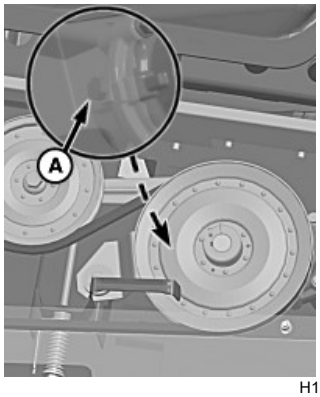


H115727—UN—31AUG15

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



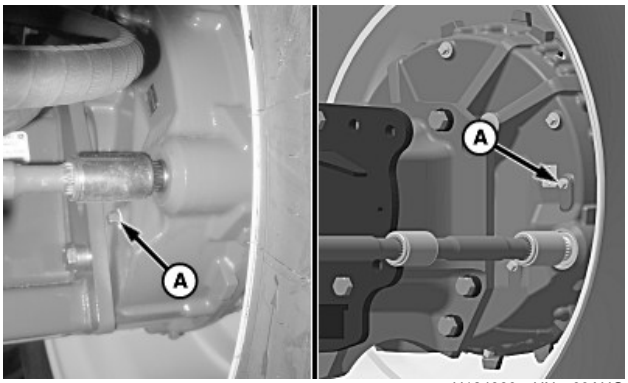

H115729—UN—31AUG15

**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.*

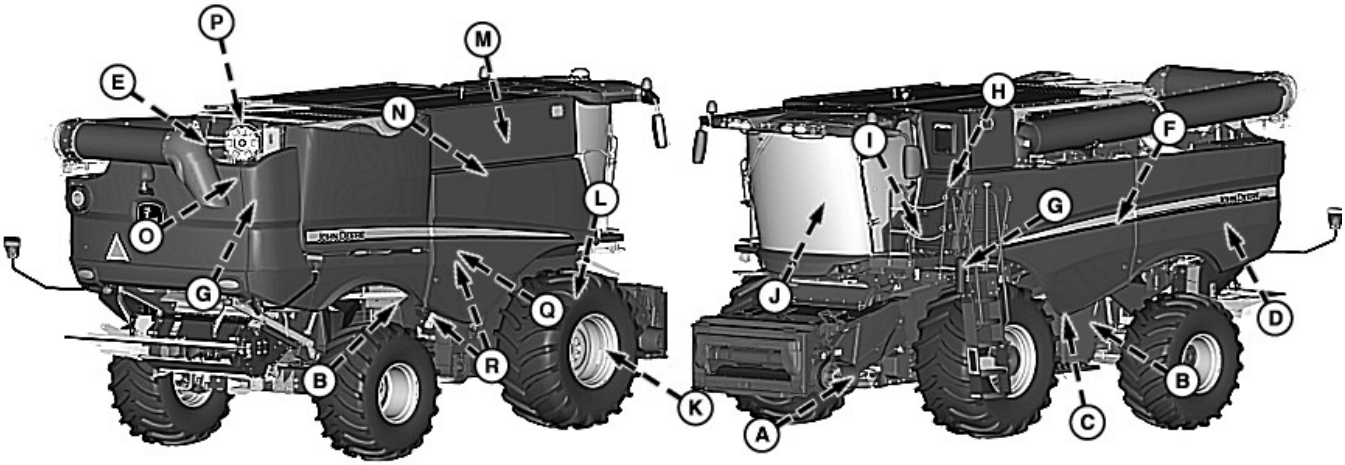
Remove plug (A) and check oil level (both sides). Oil

*HillMaster is a trademark of Deere & Company*

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)



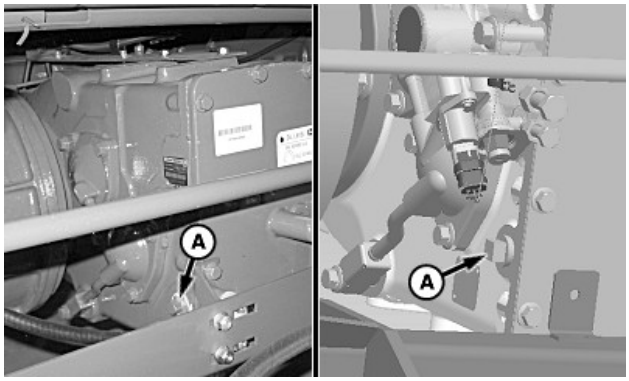

H130443—UN—04JUN20

| Legend | Service | Every 400 Hours |
|---|---|---|
| A | Check Transmission Oil (S760 and S770 Non-ProDrive™ Machines)<br>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)<br>Replace Hydrostatic Charge Filter (S760 and S770 ProDrive™ Machines) | • |
| E | Replace Hydrostatic Charge Filter (S780, S785, and S790 ProDrive™ Machines)<br>Replace Main Engine Gear Case Filter (S760 and S770 Non-ProDrive™ Machines)<br>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)<br>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)<br>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*

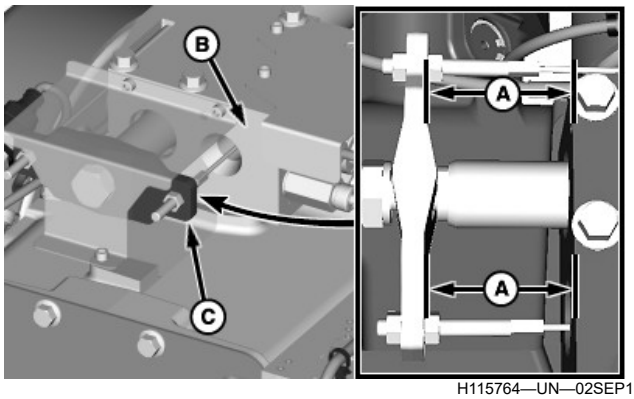
**A—Plug**

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**

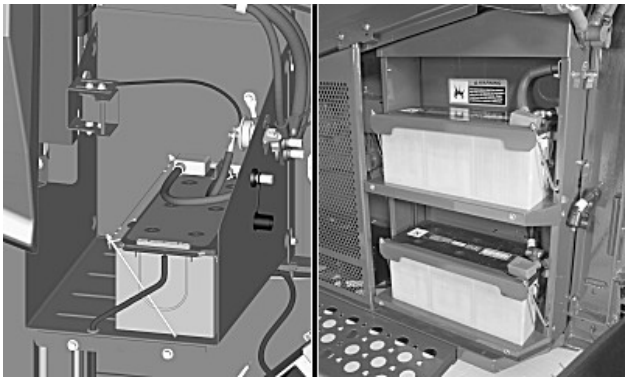
Park Brake Cable—Torque. . . . . 37-1/2 ± 2-1/2 mm (1-31/64 ± 3/32 in)

**⚠ 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**

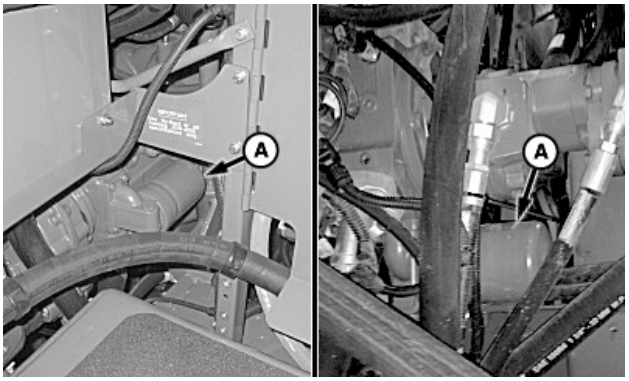
*NOTE: It is not necessary to drain system when replacing filters.*

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.

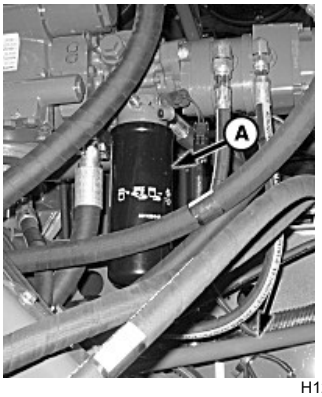
OUO6075,0004E01-19-13APR20

## 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.

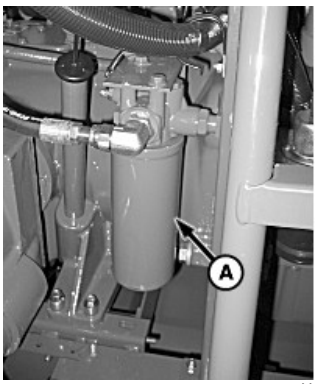
**Specification**

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**

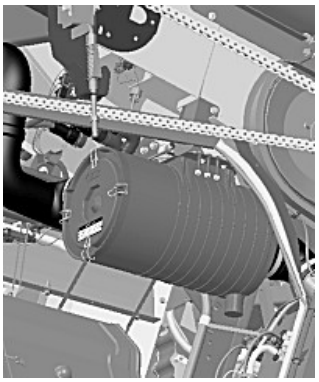
*NOTE: Depending on machine configuration, main engine gear case filter is on different areas of the machine. See Service Interval Chart—Every 400 Hours (Continued) for further information.*

*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)



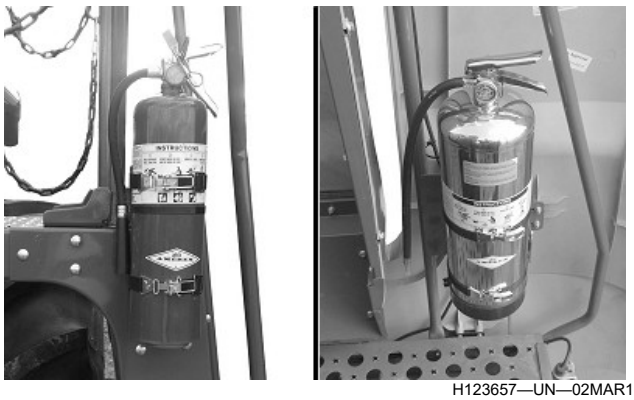
H115760—UN—02SEP15

**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)



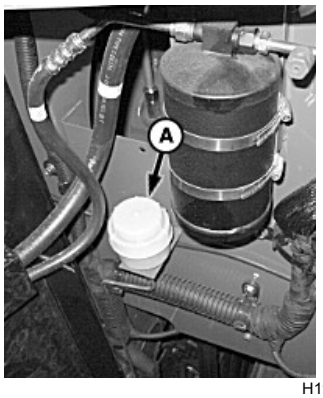

H115761—UN—02SEP15

**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**

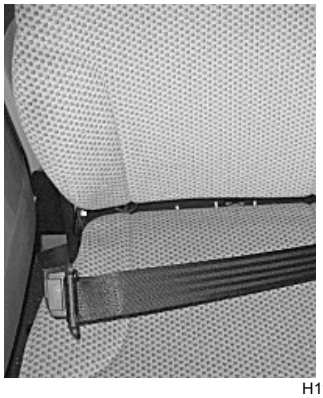
1. Look through the reservoir cap (A) and check brake fluid.

*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



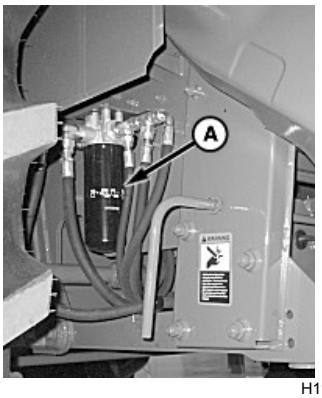
H115757—UN—02SEP15

**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

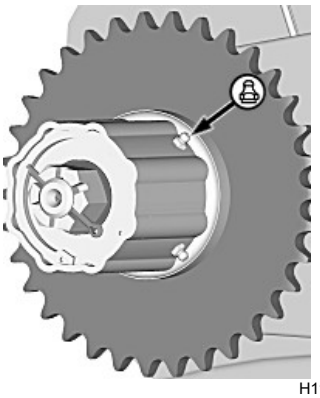
**A—Filter**

*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

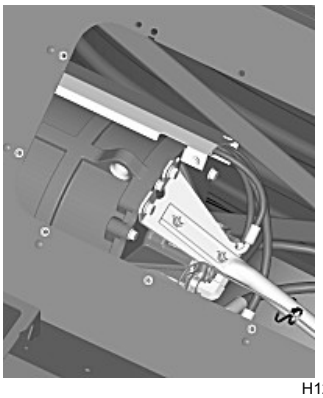


H115747—UN—01SEP15

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)



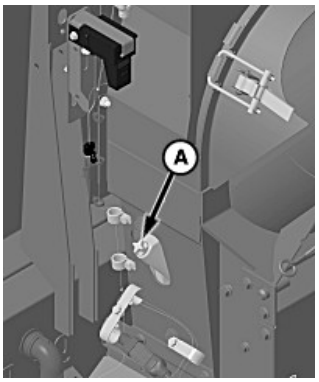
H125585—UN—17JAN19

**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

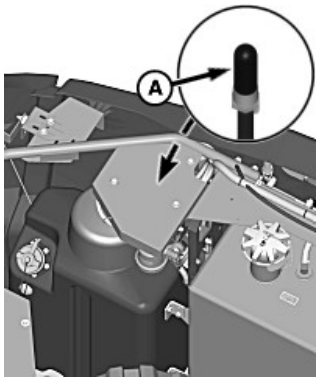
**A—Dipstick**

*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)



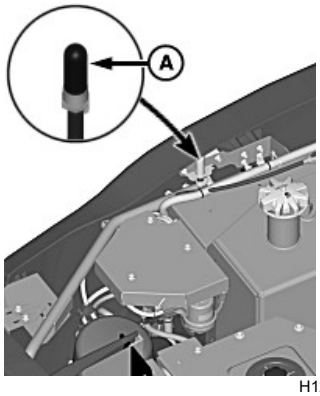

H125431—UN—04DEC18

**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



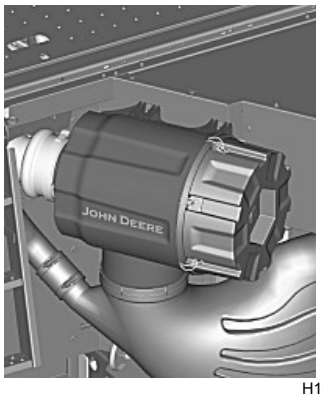

H125430—UN—04DEC18

**A—Breather**

Remove and replace the fuel tank breather (A).

OUO6075,0004A61-19-04DEC18

## Air Filter Elements




H115759—UN—02SEP15

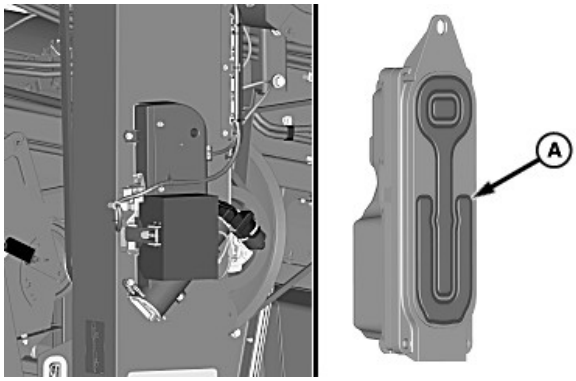
**IMPORTANT: When engine air filter restricted indicator is shown on display, service primary air filter.**

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.**

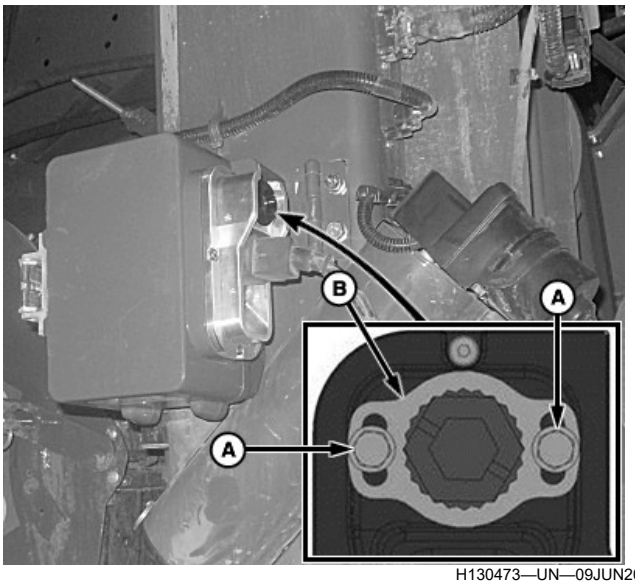
Remove and clean the moisture sensor (A) when operating in weeds, green crops, or small grains (canola).

- 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.**

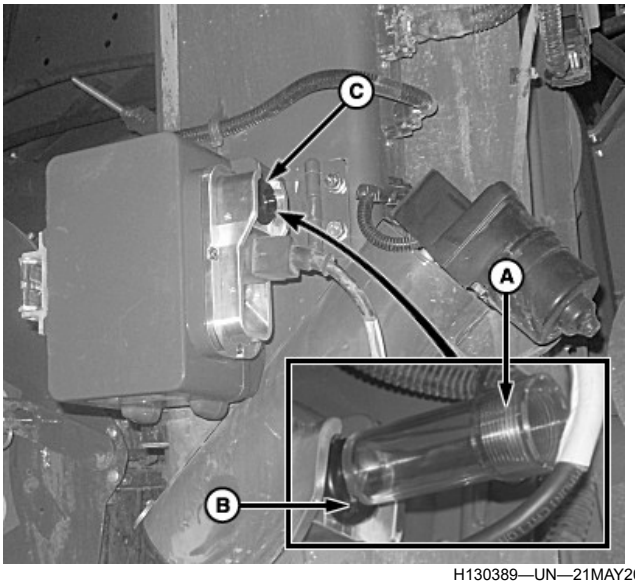
**IMPORTANT: Crop material and other debris may accumulate around the desiccant cartridge. Inspect and clean the area around the desiccant cartridge before removing.**

*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.*

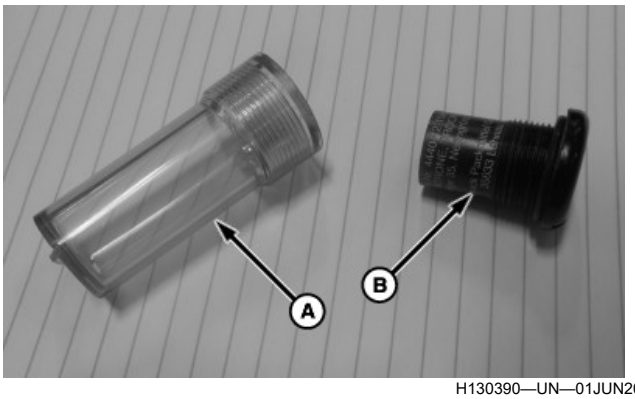
1. Remove cap screws (A) and retainer plate (B).




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.*

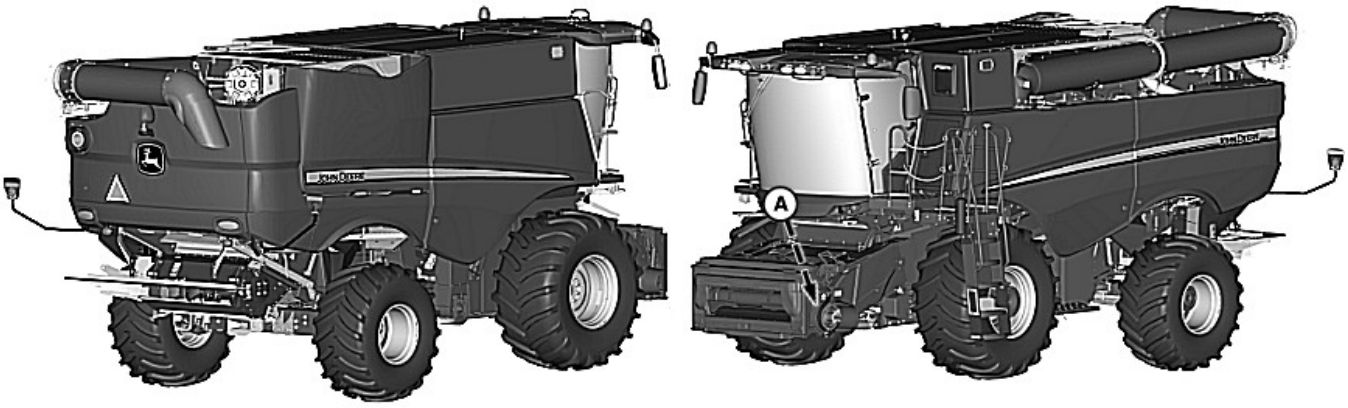
*ActiveVision is a trademark of Deere & Company*

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

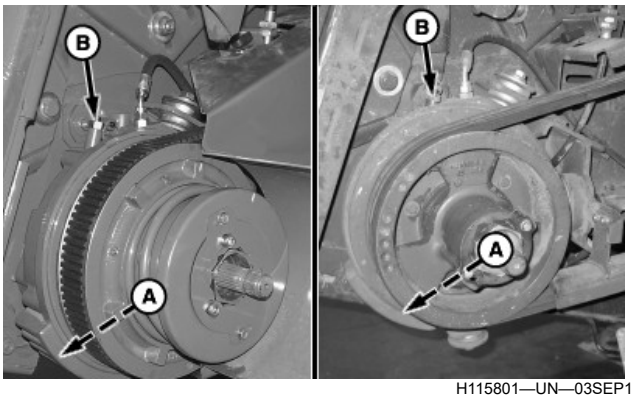



H119640—UN—13OCT16

| Legend | Service | Every 800 Hours |
|---|---|---|
| A | Change Feeder House Reverser Gear Case Oil | • |

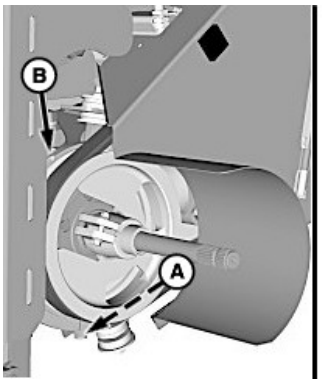
OUO6075,00046DD-19-28MAR17

## 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).

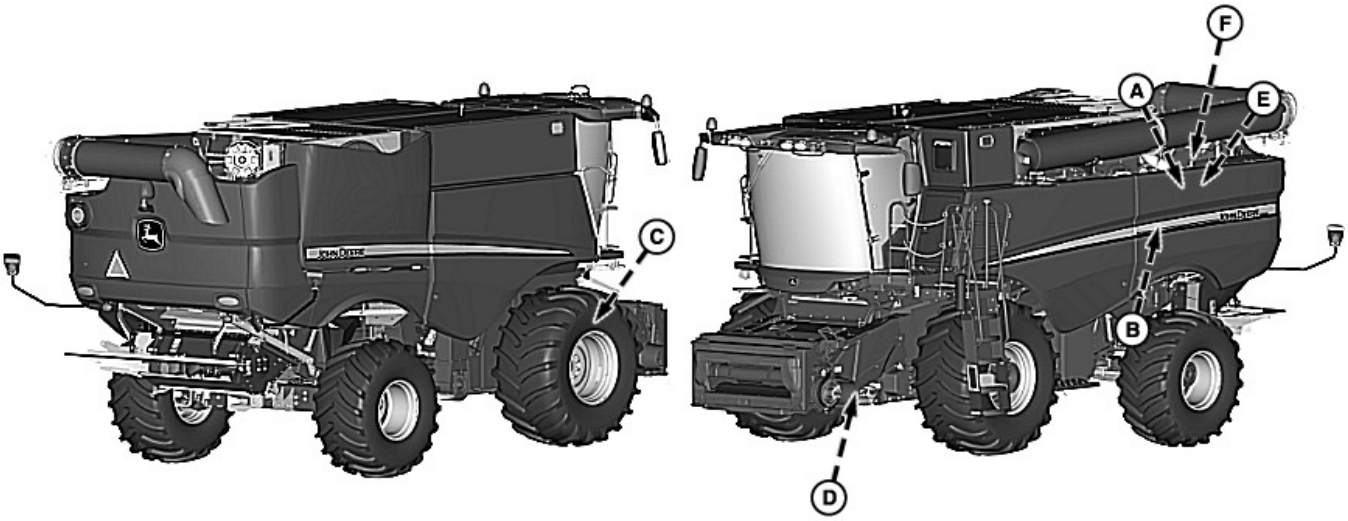
*NOTE: Gear cases with an oil cooler require gear case be run for several minutes. This ensures that the cooler is filled with oil.*

*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)

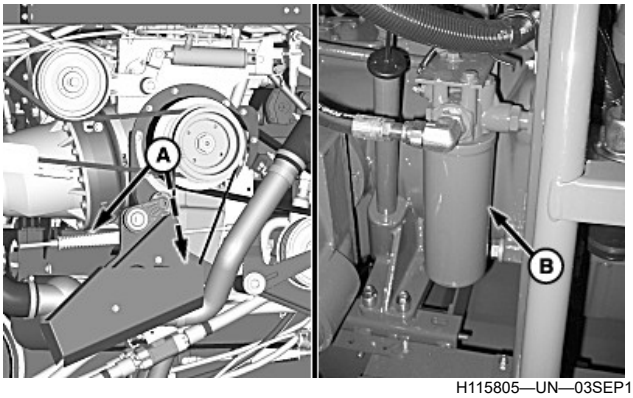



H119641—UN—13OCT16

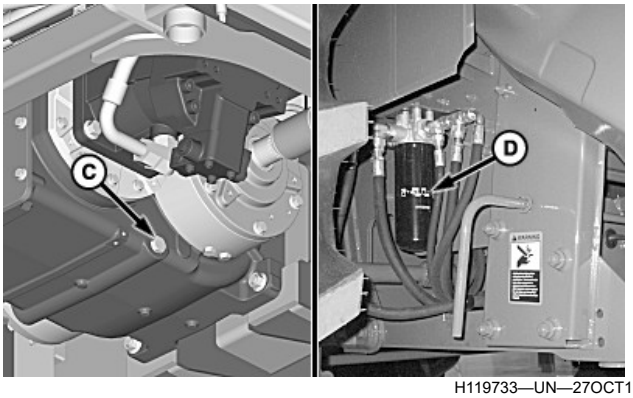
| Legend | Service | Every 1000 Hours |
|---|---|---|
| A, B, C, D, E | Change Main Engine Gear Case Oil | • |
| F | Replace Hydraulic Reservoir Filter (S780, S785, and S790 Machines) | • |

OUO6075,00046DF-19-28MAR17

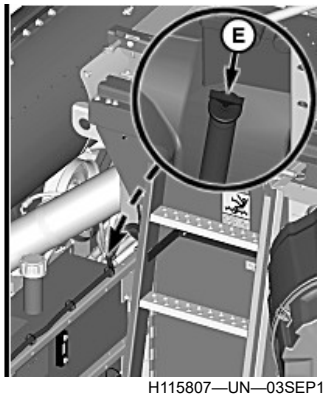
## Change Main Engine Gear Case Oil




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*

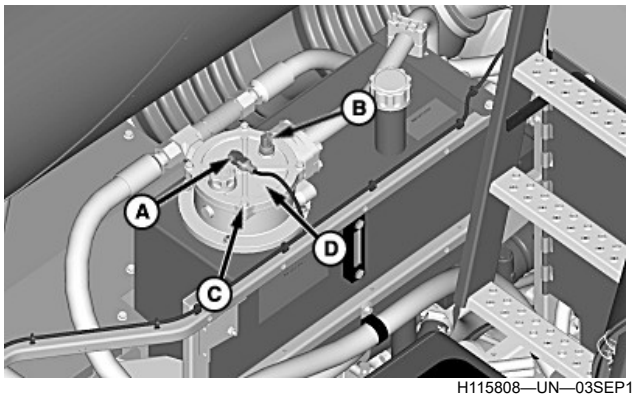
Remove and replace filter (D). Coat seal on the filter with oil. Hand tighten, then tighten 1/2 turn more.

*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

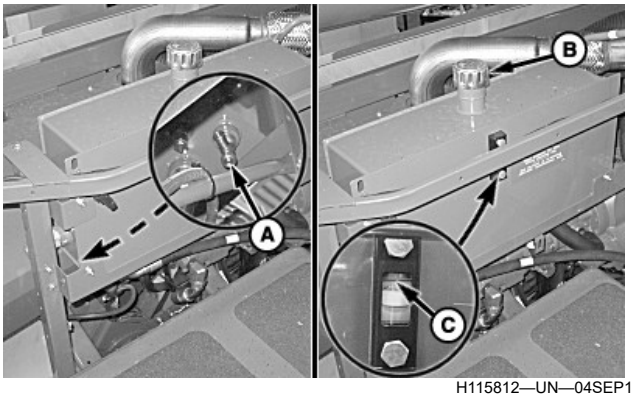
*NOTE: SCHEDULED coolant change interval is two years or 2000 hours if John Deere Cool-Gard™ II or Cool-Gard™ II PG is used.*

| 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.*

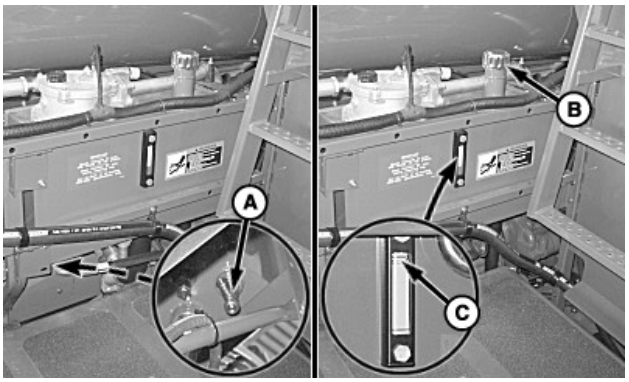
OUO6075,0004DE8-19-02APR20

## 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

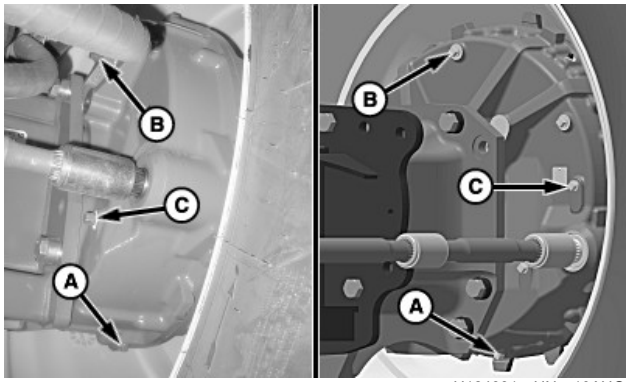


H115813—UN—04SEP15

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.**

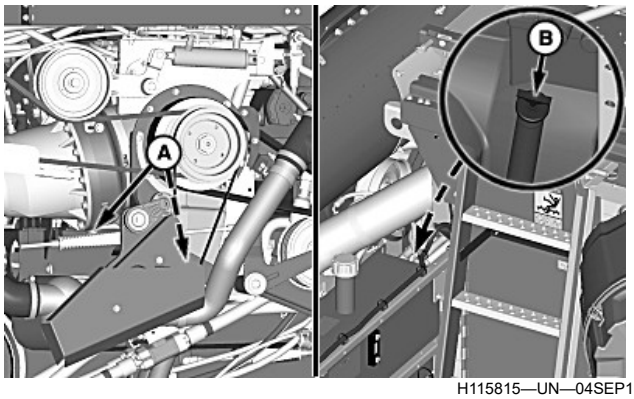
*NOTE: HillMaster™ Machines: For oil level accuracy, final drives must be positioned so that final drive input shaft is on the same level as the axle driveshaft.*

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

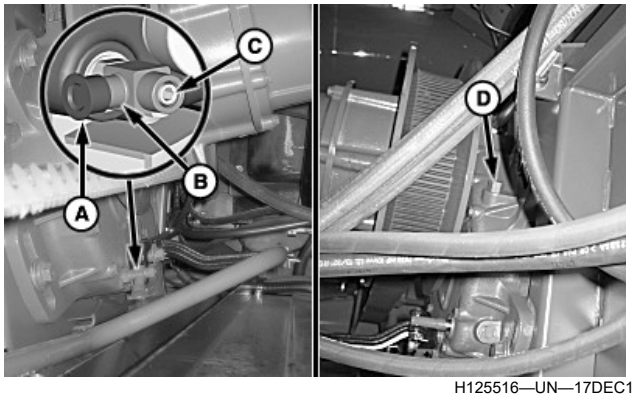
**A—Drain Plugs**
**B—Dipstick**

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**

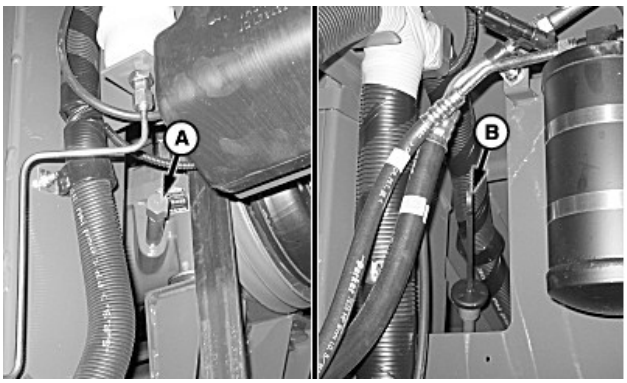
*HillMaster is a trademark of Deere & Company*

**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

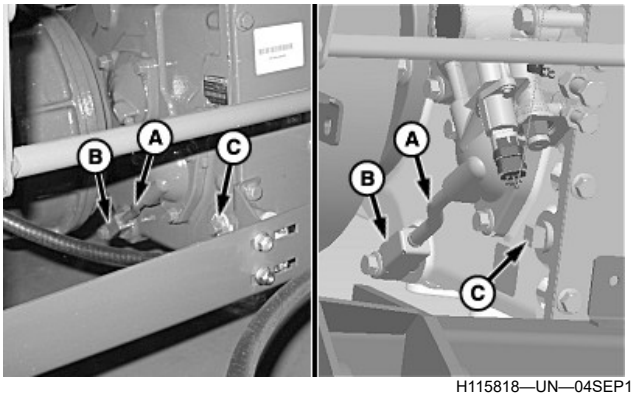
**A—Cap**
**B—Dipstick**

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

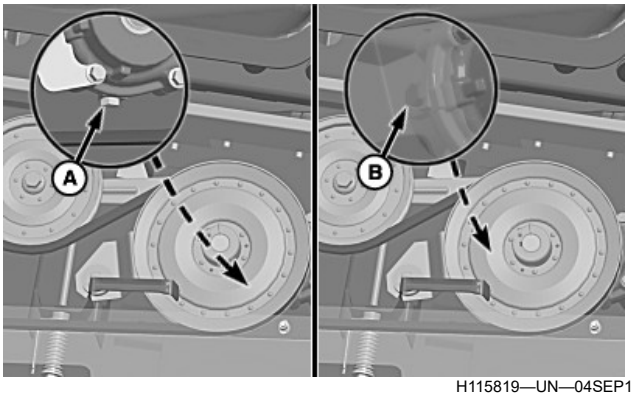
*Mechanical Shift / Push-Button Shift*

**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)



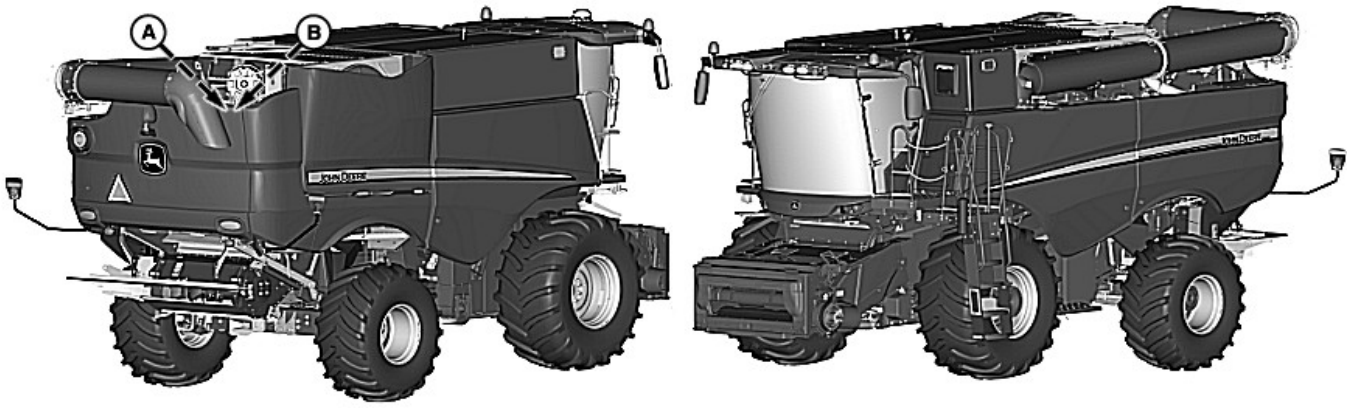

H115819—UN—04SEP15

**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

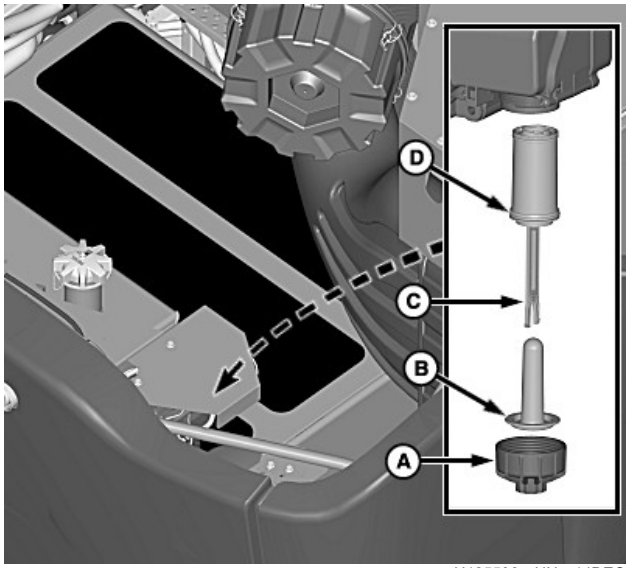



H125475—UN—10DEC18

| 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.*

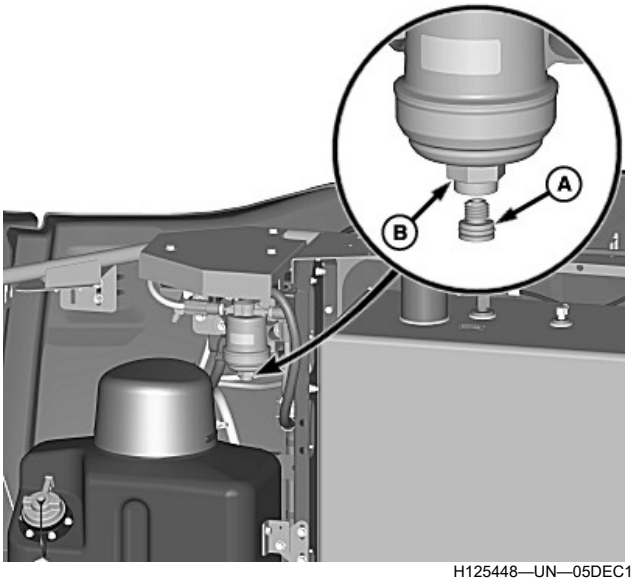
5. Pull filter tool and DEF dosing unit filter from the DEF dosing unit. Discard DEF dosing unit filter and filter tool.
6. Clean DEF dosing unit threads and mating surfaces with distilled water.
7. Lubricate DEF filter O-rings with clean DEF. Carefully insert DEF dosing unit filter into the DEF dosing 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.

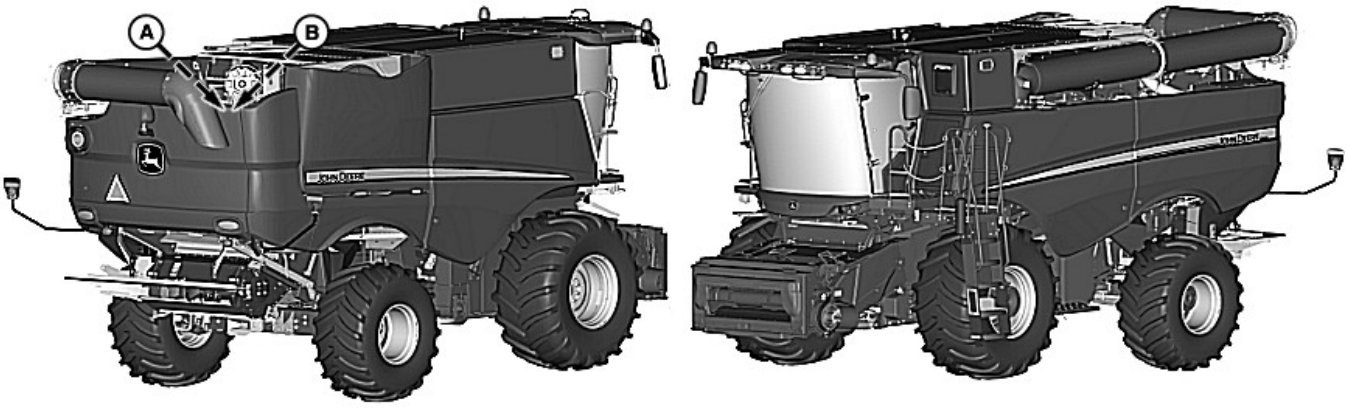
**Specification**

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

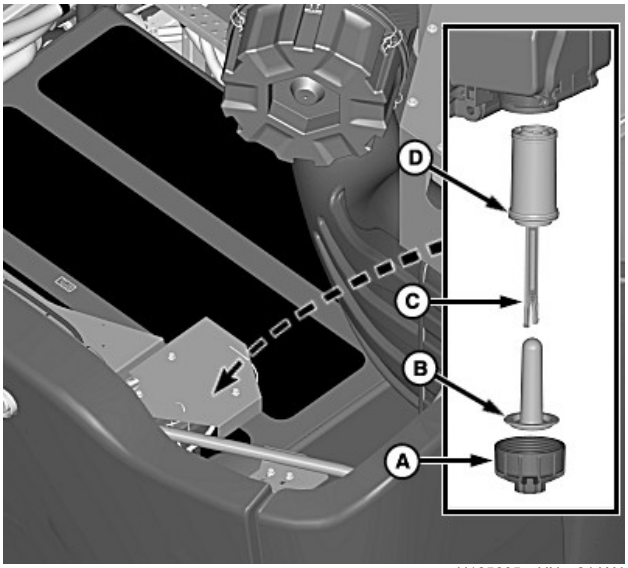



H125475—UN—10DEC18

| 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.*

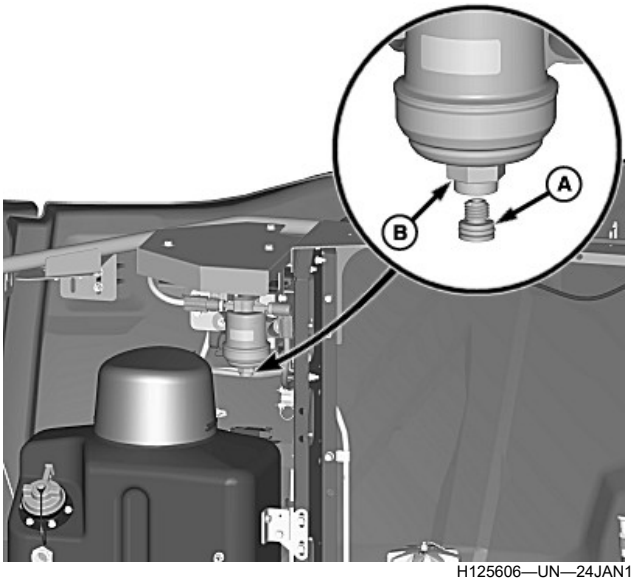
5. Pull filter tool and DEF dosing unit filter from the DEF dosing unit. Discard DEF dosing unit filter and filter tool.
6. Clean DEF dosing unit threads and mating surfaces with distilled water.
7. Lubricate DEF filter O-rings with clean DEF. Carefully insert DEF dosing unit filter into the DEF dosing 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.

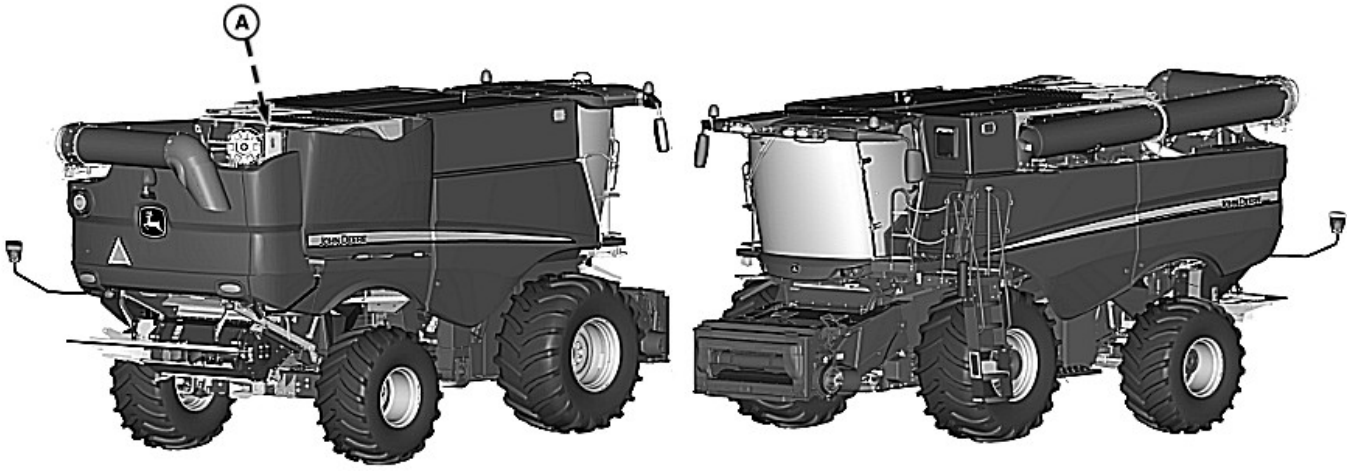
**Specification**

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

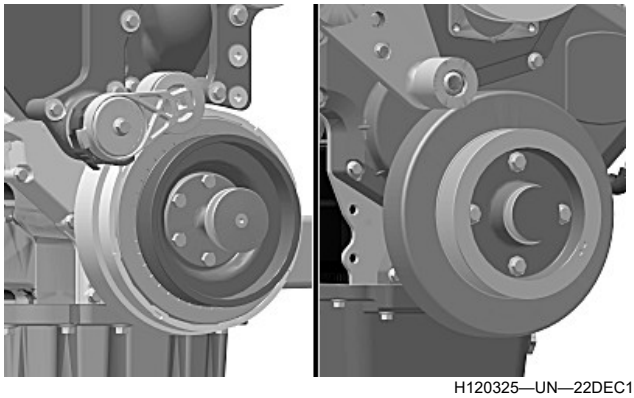



H120324—UN—22DEC16

| Legend | Service | Every 4500 Hours or Five Years |
|---|---|---|
| A | Replace Front Engine Crankshaft Damper | • |

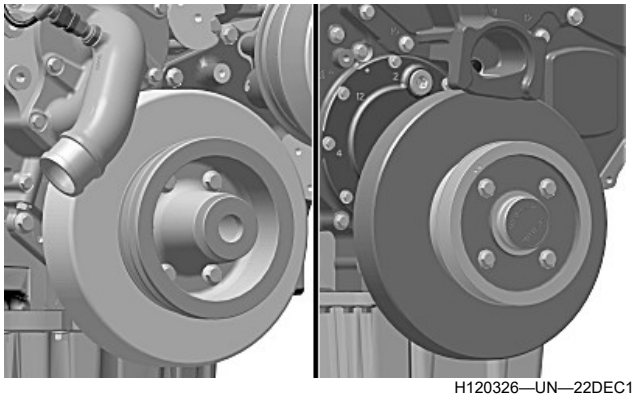
OUO6075,0004575-19-10JUN19

## 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)*

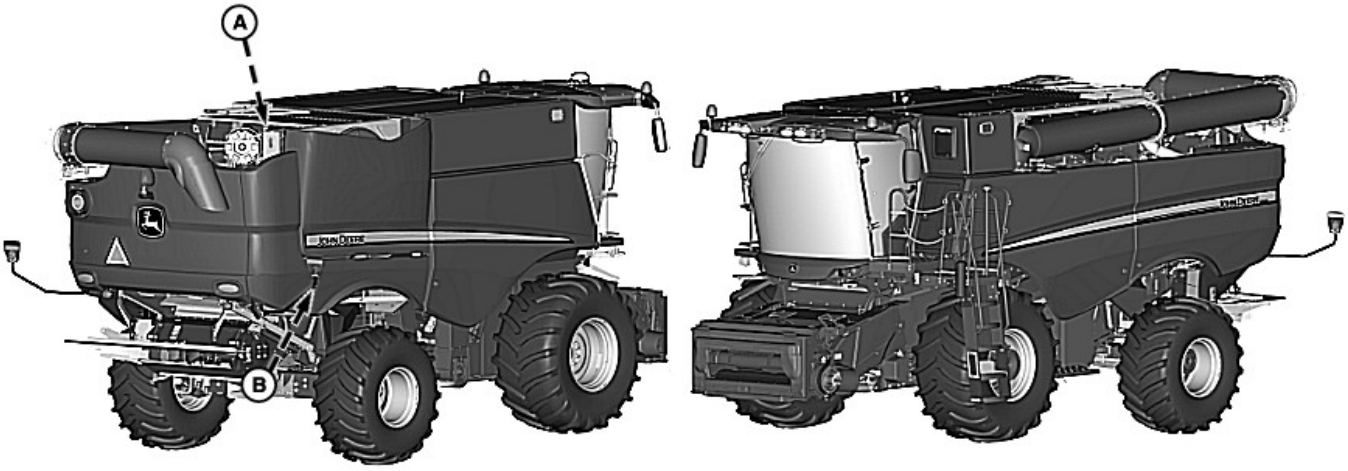
**IMPORTANT: Vibration damper assembly is not repairable and should be replaced every five years or 4500 hours, whichever occurs first.**

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



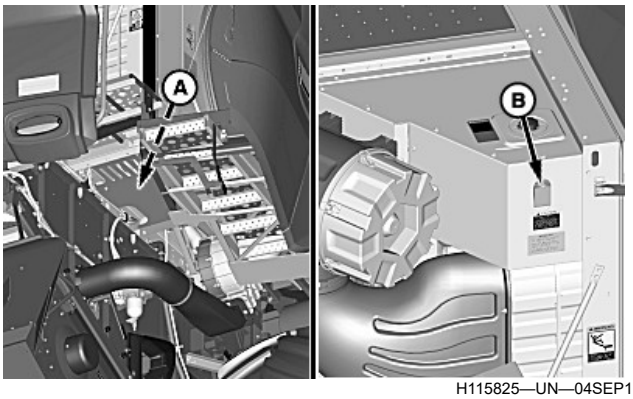

H119645—UN—13OCT16

*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 | • |

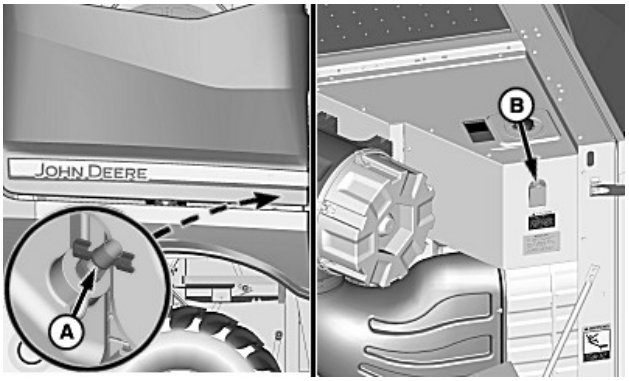
OUO6075,0004465-19-20DEC16

## 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.*

*Cool-Gard is a trademark of Deere & Company*

*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.

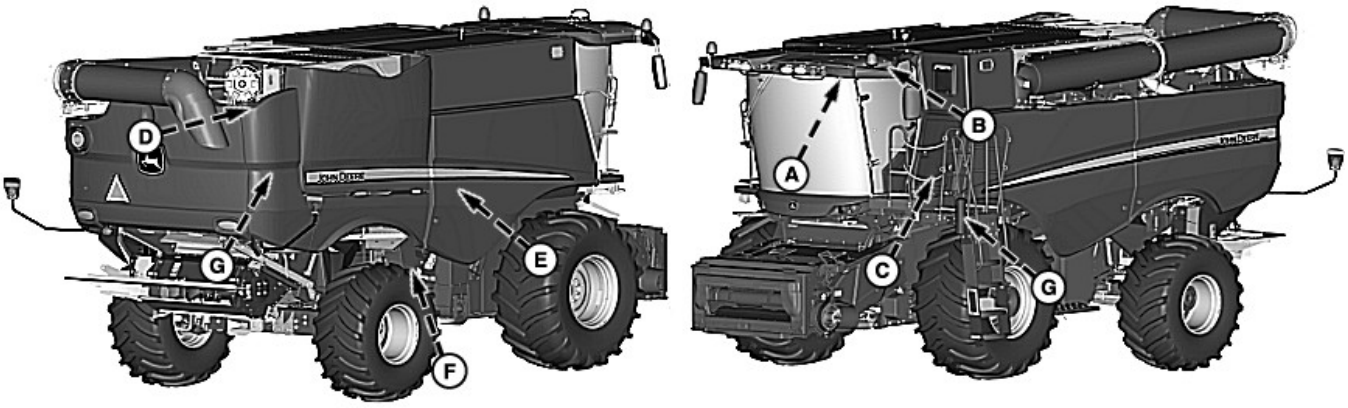
Flush and refill surge tank (B) with correct coolant and conditioner. See Maintenance—As Required (Engine Fluids and Filters) section for further information. See Fuels and Lubricants section for coolant recommendations.

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)<br>Clean ActiveVision™ Clean Grain Elevator Camera (If Equipped)<br>Replace ActiveVision™ Clean Grain Elevator Camera Desiccant Cartridge (If Equipped)[a] | • |
| F | Clean ActiveVision™ Tailings System Camera (If Equipped)<br>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



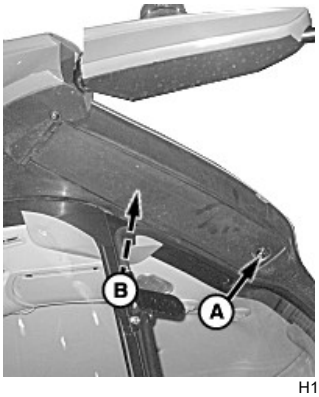

H115668—UN—28AUG15

**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



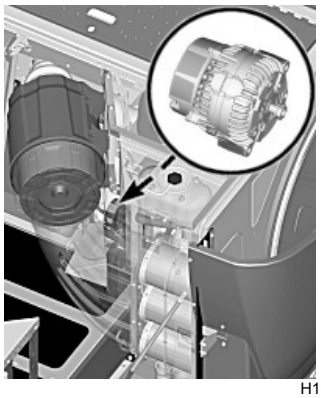

H119647—UN—13OCT16

**A—Cap**

Open cap (A) and fill windshield washer reservoir.

OUO6075,000446A-19-21DEC16

## Alternator Screen

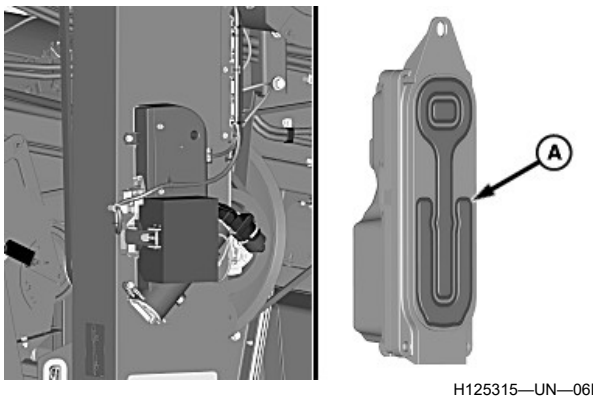


H119648—UN—13OCT16

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.**

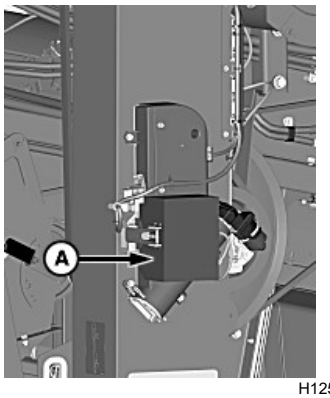
Remove and clean the moisture sensor (A) when operating in weeds, green crops, or small grains (canola).

- 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**

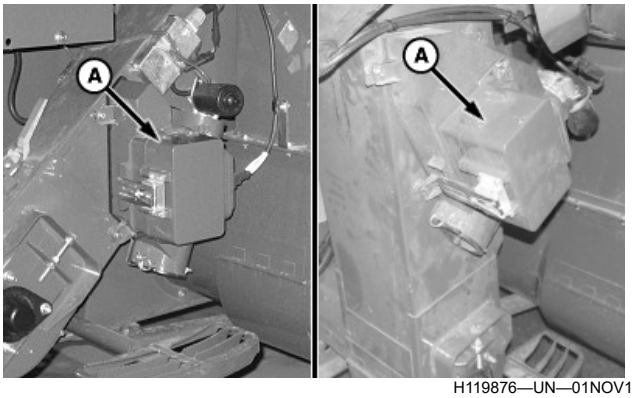
*NOTE: Clean the camera lens once per week or as needed. The lens debris indicator in the software alerts operator when the camera lens needs cleaned, as the system functionality is reduced.*

*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**

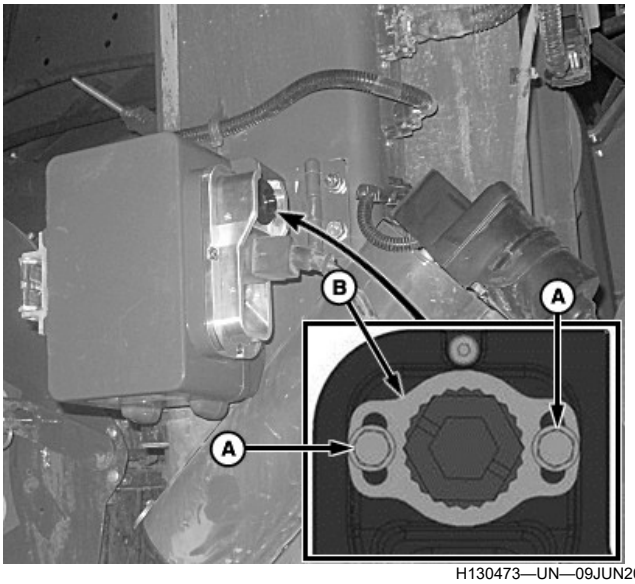
*NOTE: Clean the camera lens once per week or as needed. Lens debris indicator in the software alerts the operator when the camera lens needs to be cleaned as system functionality may be reduced.*

*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.**

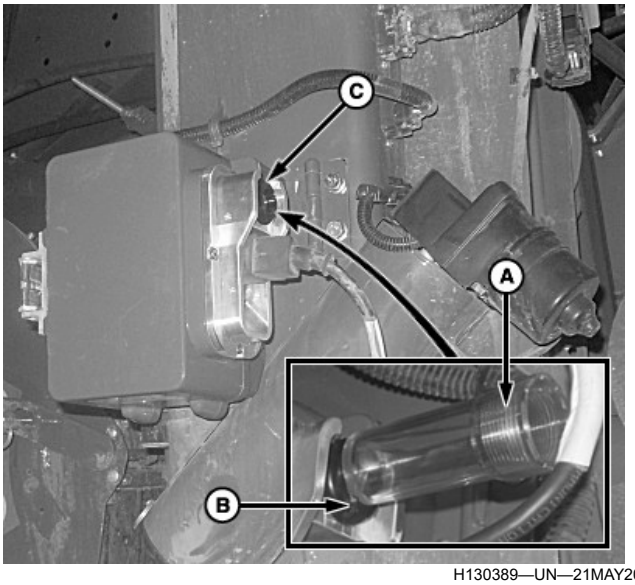
*NOTE: The ActiveVision™ clean grain elevator camera is shown. The ActiveVision™ tailings system camera is similar.*

*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).

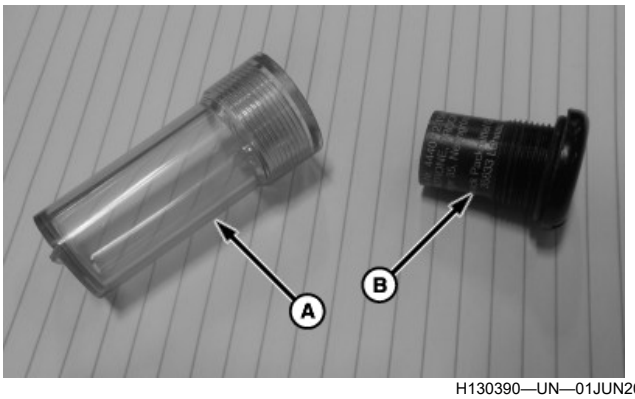
*ActiveVision is a trademark of Deere & Company*




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.*

*ActiveVision is a trademark of Deere & Company*

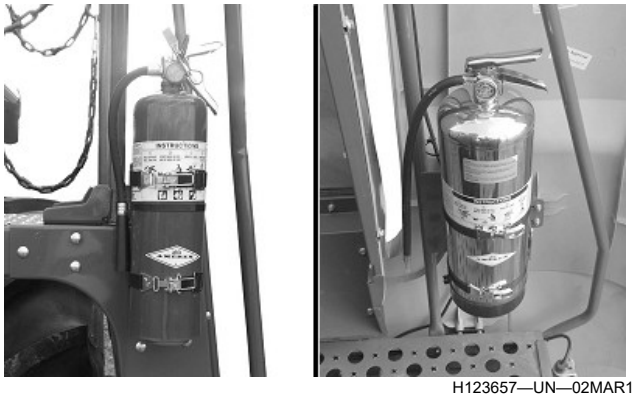
9. Install the retainer plate over the desiccant cartridge and retain with cap screws.
10. Tighten the cap screws to specification.

**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)

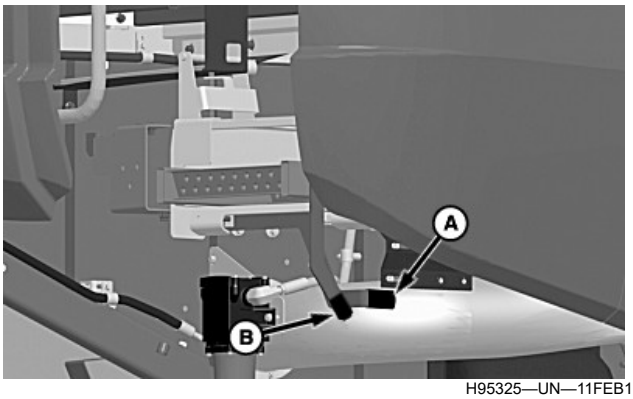
## Required Emission-Related Information

### 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**

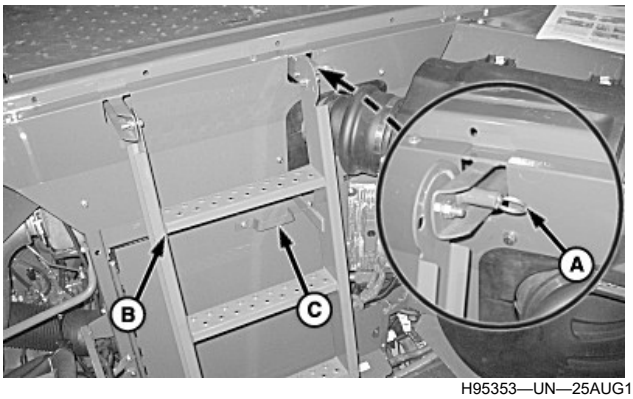
**CAUTION: Shut OFF engine, set parking brake and remove key.**

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

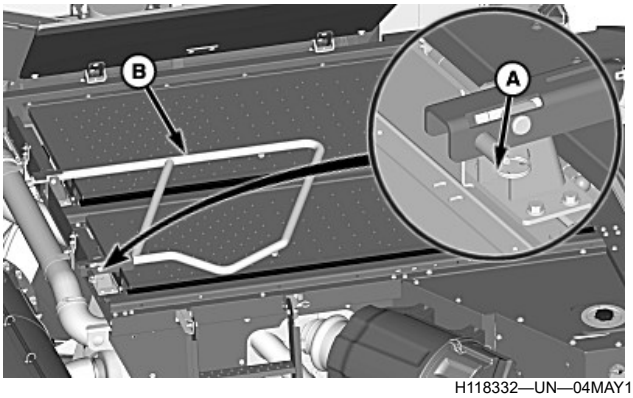
**A—Lock-Out Pin**
**B—Ladder**
**C—Cover**

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

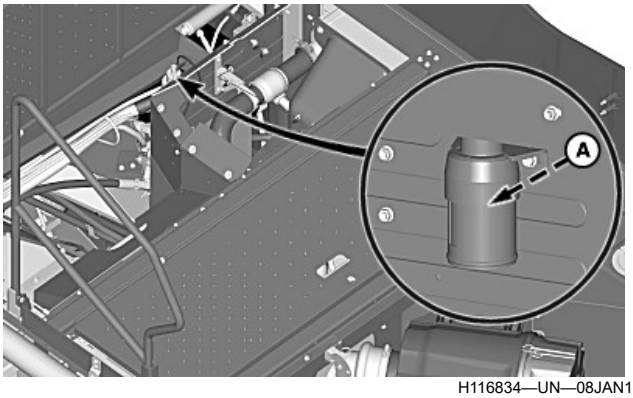
**A—Lockout Pin**
**B—Handrail**

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

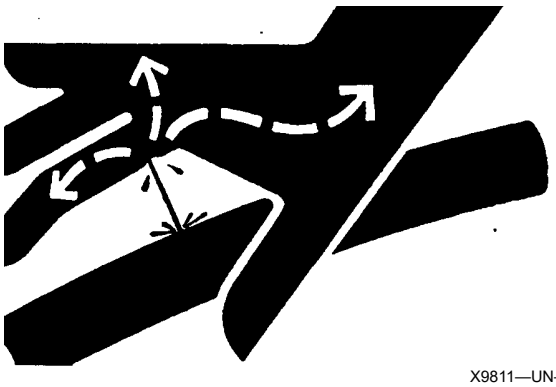
## Do Not Modify Engine Power or Fuel/Air System

**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



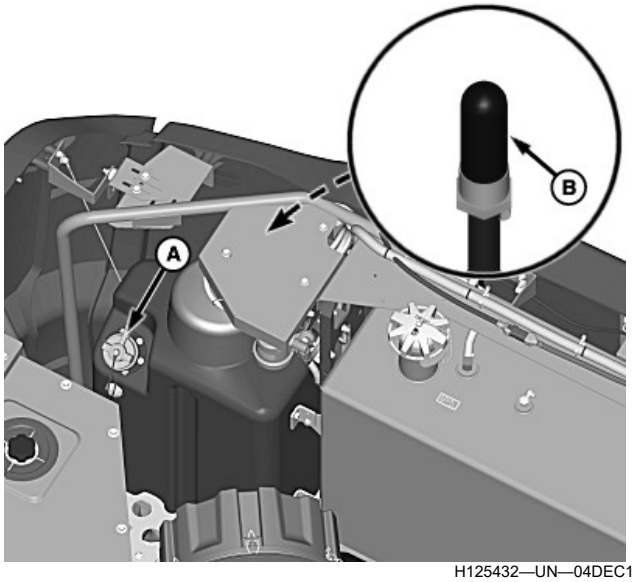
X9811—UN—23AUG88

**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.

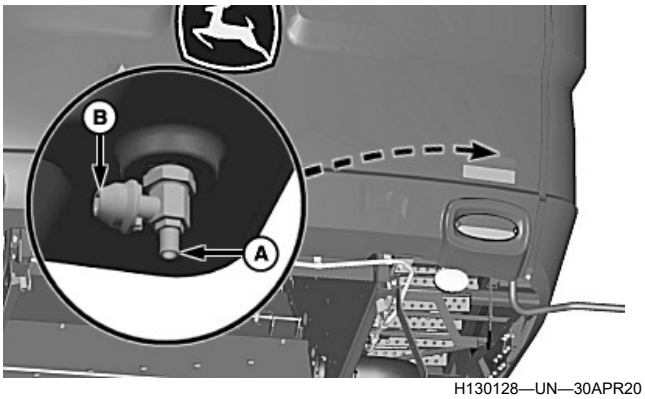
Fill tank every time machine is refueled. If this cannot be done, monitor Diesel Exhaust Fluid (DEF) level indicator on corner post display and refill as necessary. To avoid drastic changes in machine performance, always keep fluid level above the topmost red mark on the level indicator. See Combine 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.**

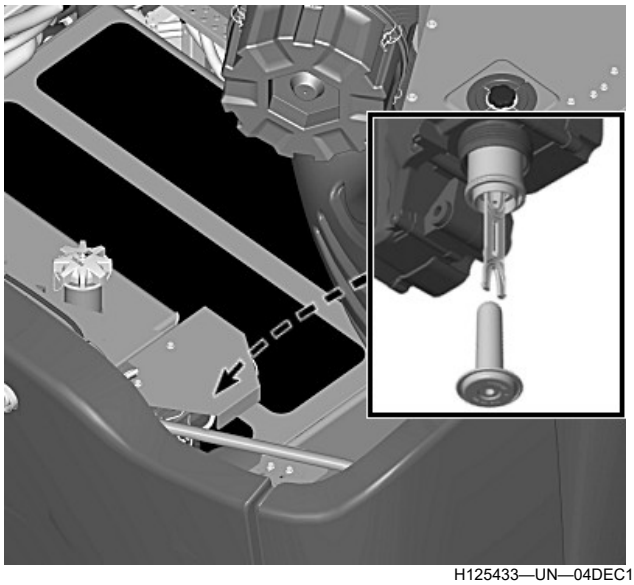
**If an unapproved fluid, such as diesel fuel or engine coolant is added, drain the tank and rinse with distilled water, then refill the tank. If the system does not operate correctly after cleaning and refilling, contact your John Deere dealer to determine how to clean and purge the system. If water 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.**

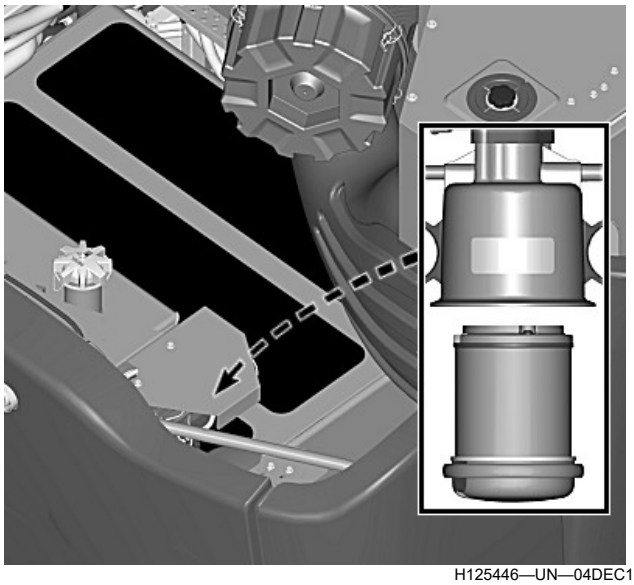
**IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.**

**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.*

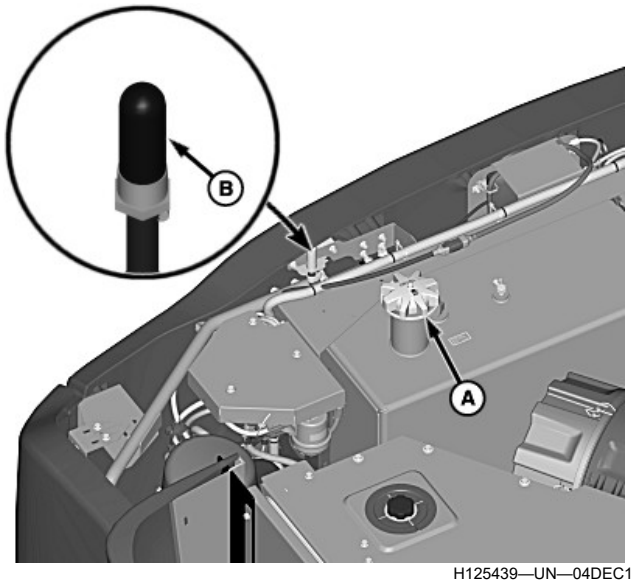
4. **Early version:** Change DEF dosing unit filter and DEF tank header suction screen.

   **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.**

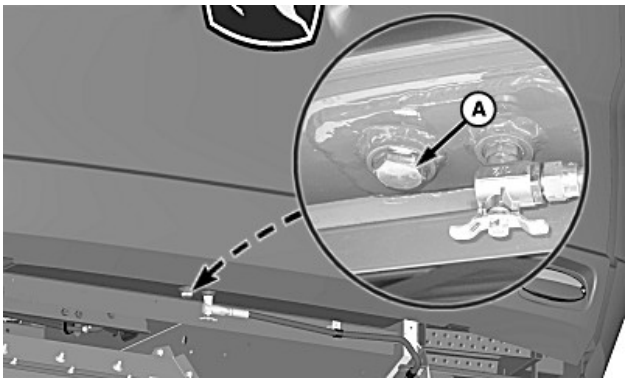
**Do not overfill fuel tank. Bodily injury can result from fuel splash back. Leakage can result from expansion of fuel. If tank is too full, then left in direct sunlight or if temperature gets too hot, tank will overflow.**

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

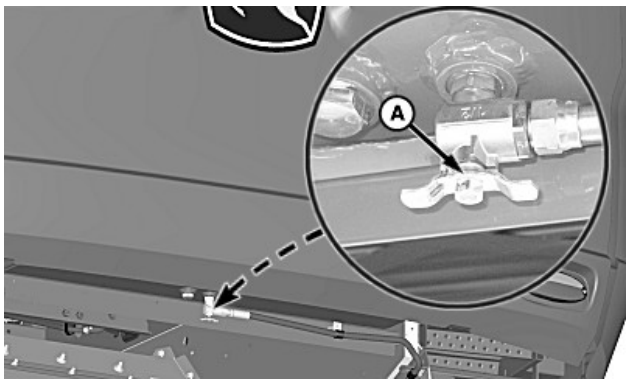
**A—Plug**

**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

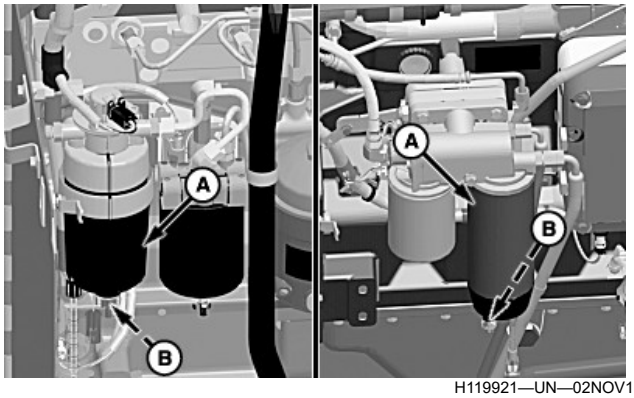
**A—Valve**

**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.

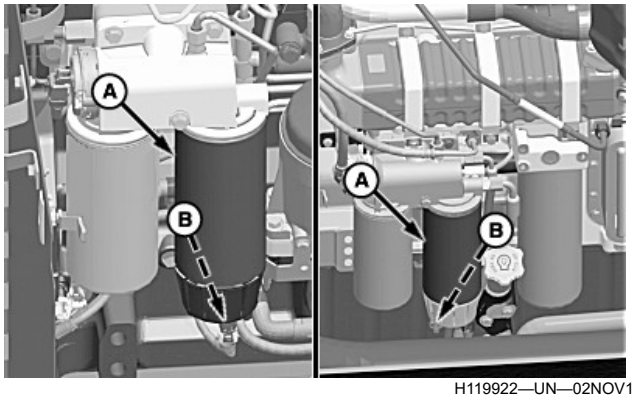
OUO6075,0000913-19-30AUG10

## 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**

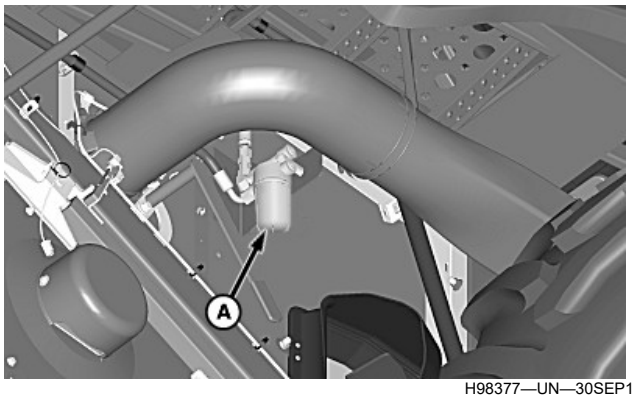
**CAUTION: Shut OFF engine, set park brake and remove key before performing maintenance work.**

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.

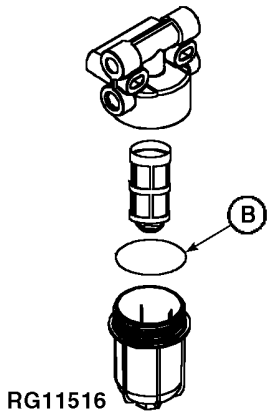
OUO6075,000480C-19-13NOV17

## Fuel Precleaner Filter—Cleaning




H98377—UN—30SEP10

*Fuel Precleaner Filter*




RG11516—UN—10NOV00

*Fuel Precleaner Parts*

**A—Precleaner Bowl**
**B—O-ring**

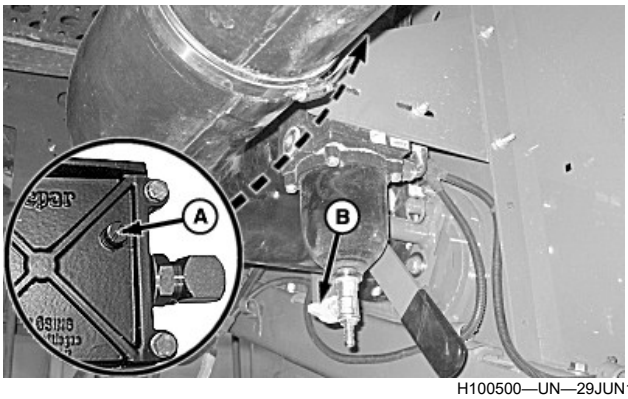
*NOTE: Do not clean fuel precleaner and change primary and secondary fuel filters at the same time. Doing so makes it difficult to restart machine. Perform this procedure, then run engine before changing primary and secondary fuel filters.*

*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.

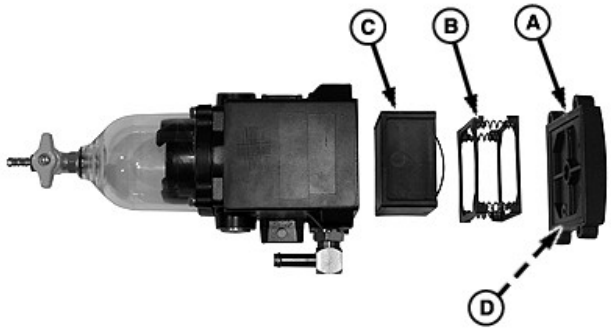
OUO6075,000469F-19-21MAR17

## 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.*

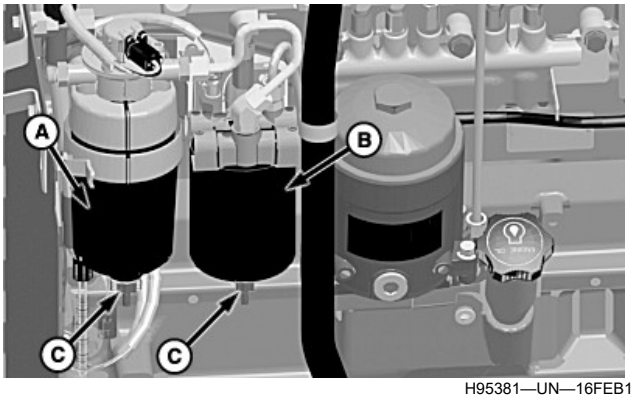
6. Wash filter in clean diesel fuel or mineral spirits.
7. Install filter element and spring cassette.
8. Inspect lid gasket (D) and replace if necessary.
9. Install lid and cap screws and leave cap screws finger tight.
10. Tighten cap screws in sequence as shown.
11. Open valve at bottom of the fuel 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

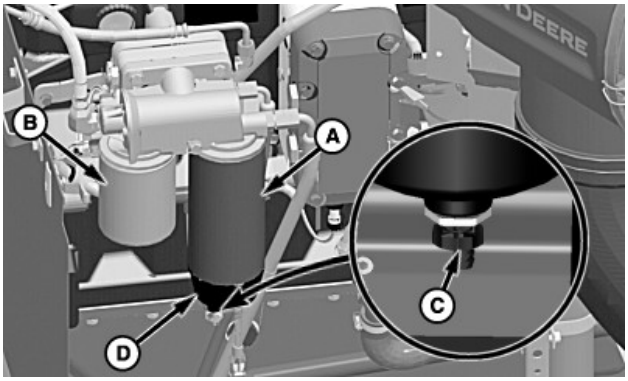


TS1343—UN—18MAR92




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.

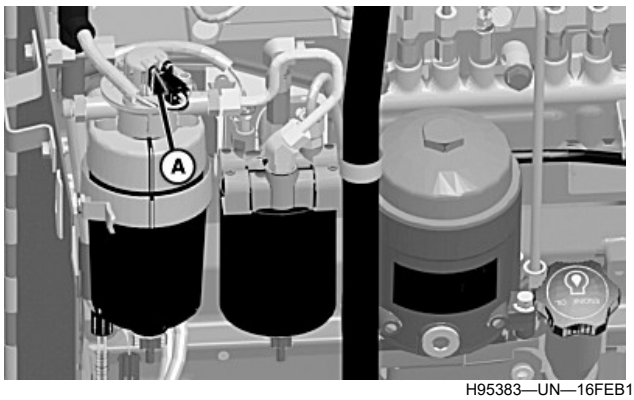
**IMPORTANT: Do NOT prefill either fuel filter with fuel.**

*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.

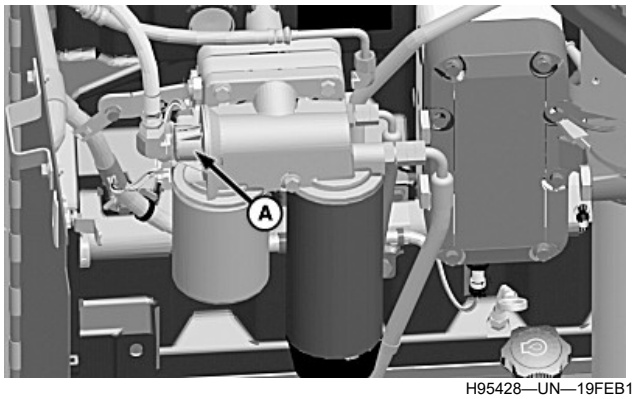
OUO6075,00043C7-19-20DEC16

## Fuel System—Bleeding



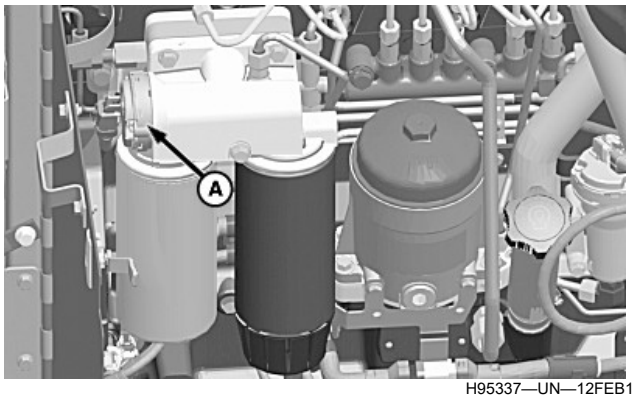

H95383—UN—16FEB10

*Tier 2/Stage II (Style A)*



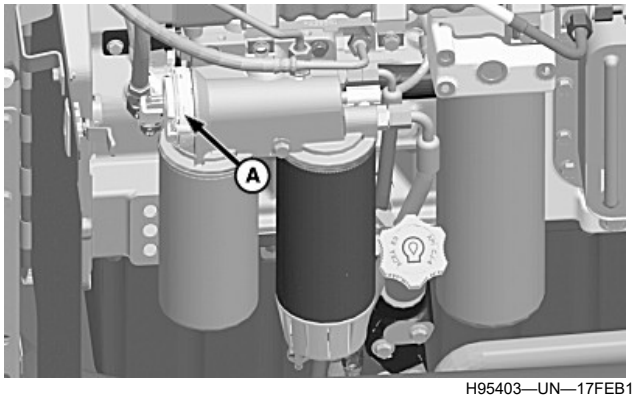

H95428—UN—19FEB10

*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.**

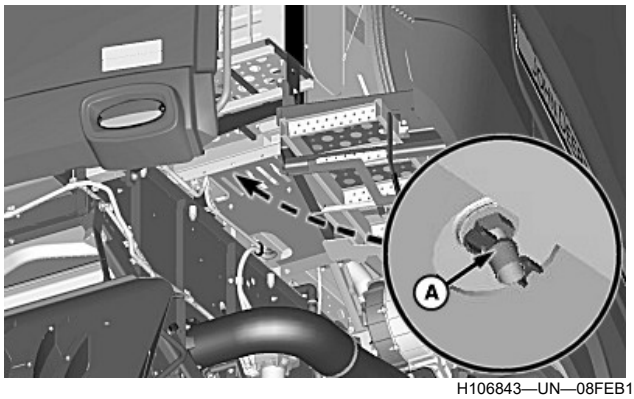
Air can enter fuel system when changing fuel filters or when machine has run out of fuel. Air in the fuel system could prevent engine from starting. If engine does not start, turn key switch ON for 60 seconds to allow fuel pump (A) to prime the fuel system.

OUO6075,000480D-19-13NOV17

## Cooling System—Draining

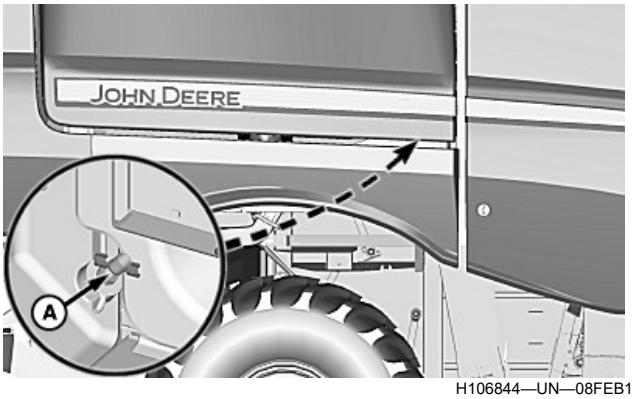


TS281—UN—15APR13




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.**

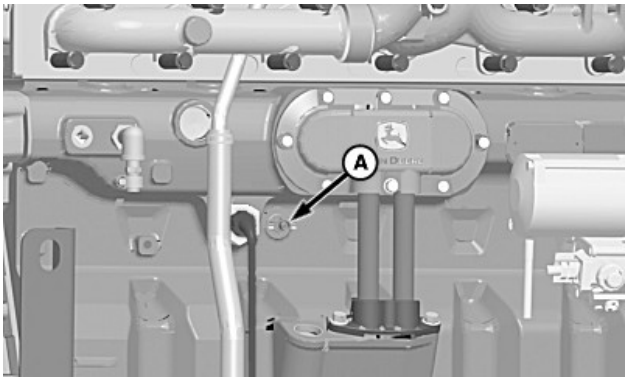
*NOTE: Radiator drain is on the front side of radiator.*

*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.*

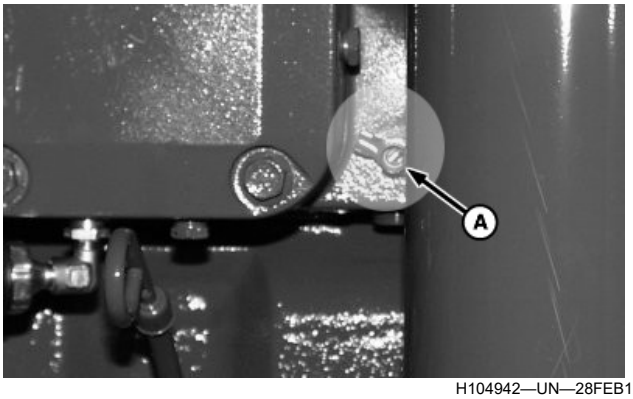
Coolant must be drained and replaced. See Fuels and Lubricants section for engine coolant recommendations.

Open drain valve (A) on radiator.



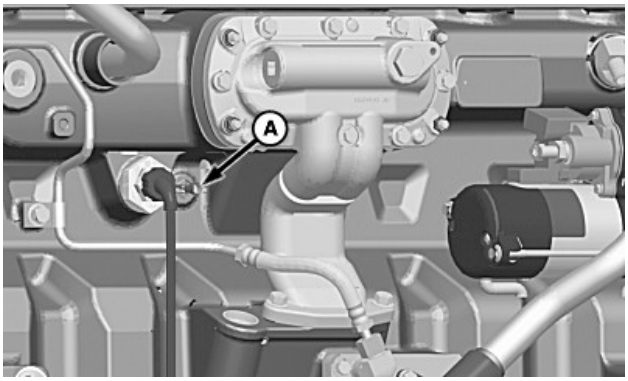

H104941—UN—28FEB12

*Front Side of Engine (Tier 2/Stage II) (Style A)*



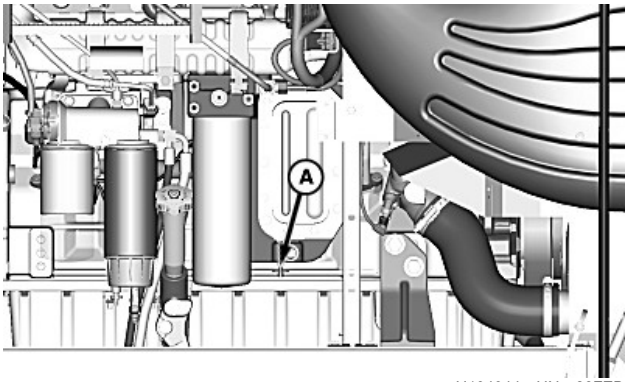

H104942—UN—28FEB12

*Above Crankshaft (Tier 2/Stage II) (Style B)*




H104943—UN—28FEB12

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



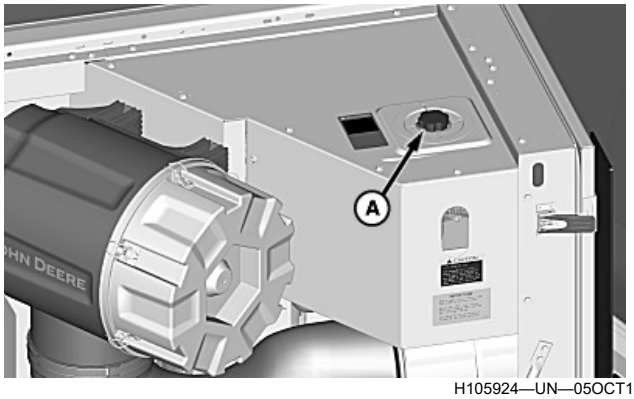

H104944—UN—28FEB12

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

**A—Drain Valve**

Open drain valve (A) on the engine block.

*Cool-Gard is a trademark of Deere & Company*




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.

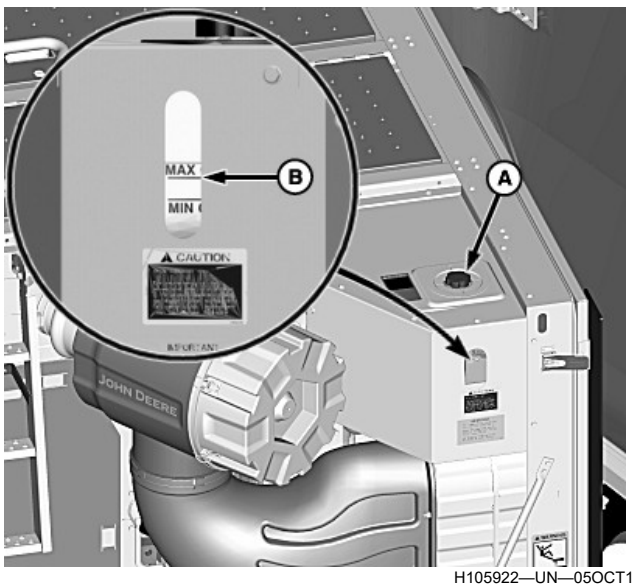
Close radiator drains and refill system with a solution of clean water and John Deere Cooling System Cleaner PT500 or equivalent. Follow instructions with cleaner.

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

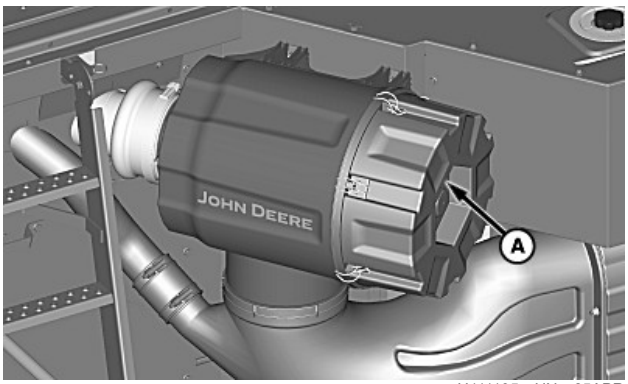
**IMPORTANT: Do not drain cooling system to protect against freezing. Heater does not drain completely, so damage would result.**

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.

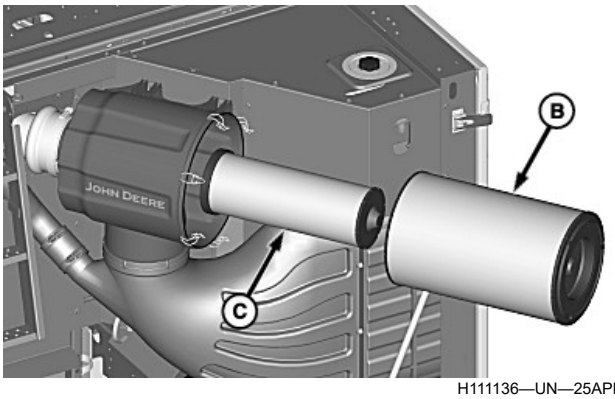
After adding antifreeze, turn heater ON and run engine until it reaches operating temperature. This mixes the solution and circulates it through the system.

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.

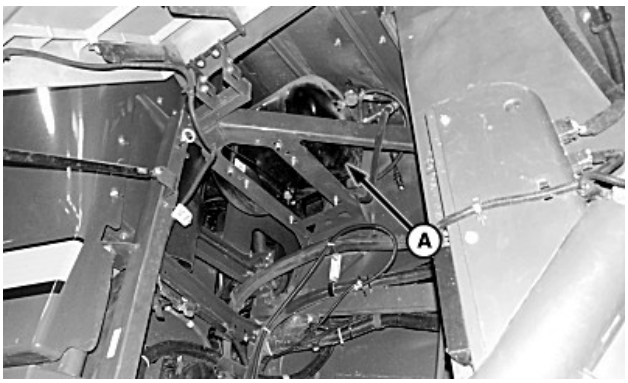
Install primary air filter and dust cover.

Check all connections in the air intake system. Be certain they are tight.

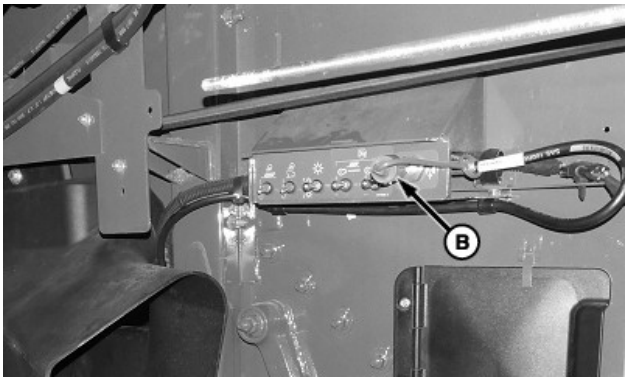
**IMPORTANT: Do not use any exhaust flow cleaning unit to blow chaff off combine. Using such a unit can cause air filter failure, followed by engine failure.**

OUO6075,00017D4-19-25APR14

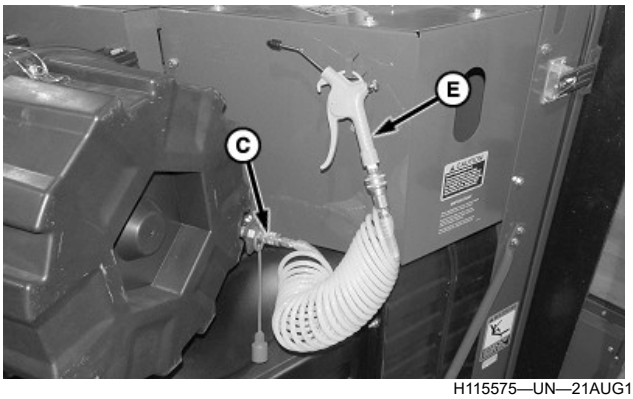
## Air Compressor System (If Equipped)



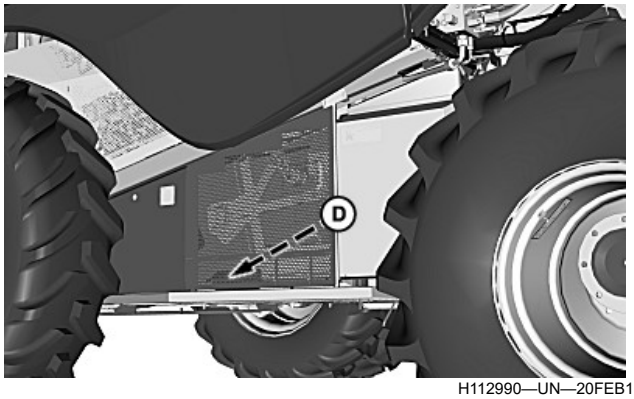

H112987—UN—20FEB15




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.*

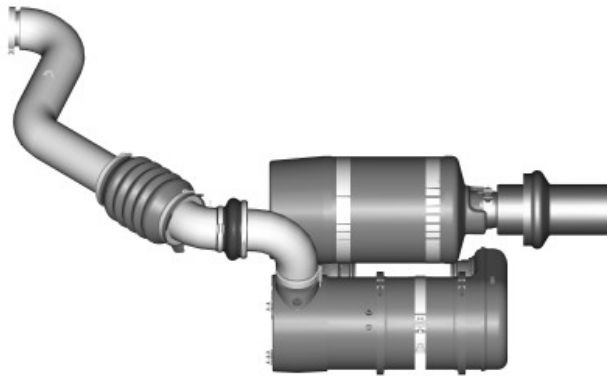
Air compressor is on engine deck and reservoir (A) is on the right-hand side of machine.

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.**

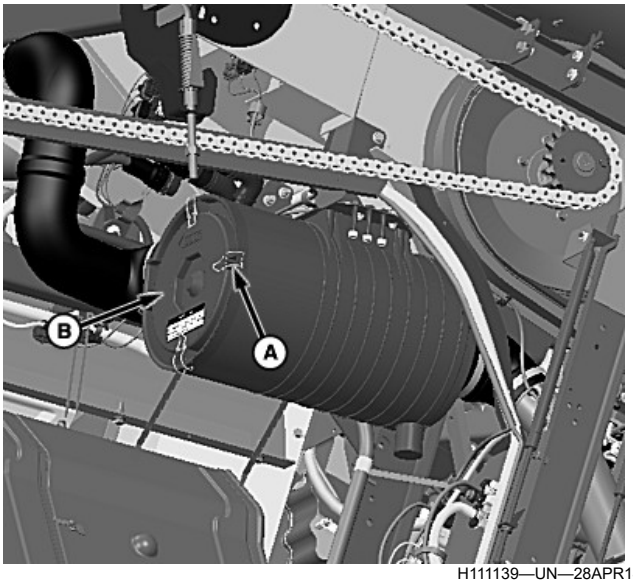
OUO6075,0004809-19-13NOV17

## Exhaust Filter Disposal (Final Tier 4/Stage V)

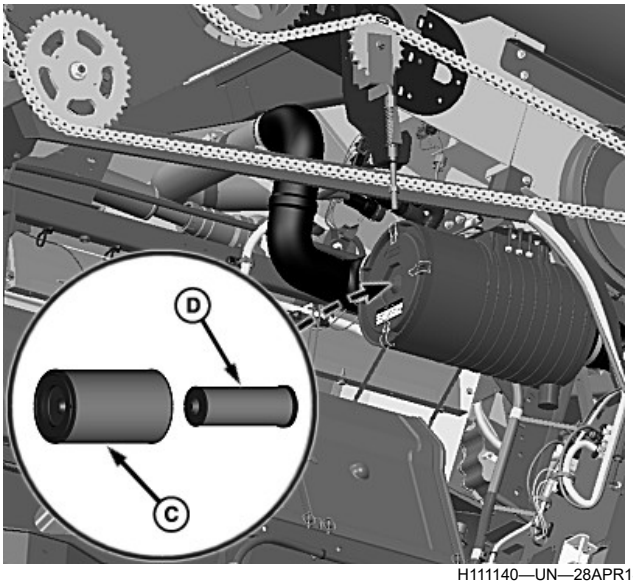
**CAUTION: Proper management of an Exhaust Filter that has reached the end of its useful life is required, since the ash or catalyst material in the device may be classified as hazardous waste under federal, state, and/or local laws or regulations. Used Exhaust Filters, which include the Diesel Particulate 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.

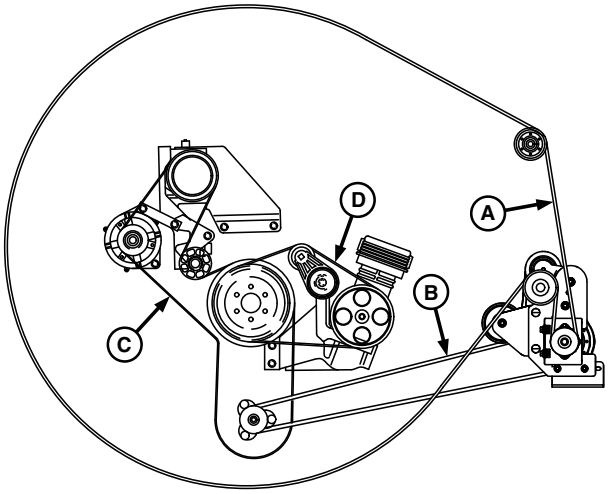
Install safety filter and turn in a clockwise direction until hand tight.

Install primary air filter.

Install cover and engage latches.

OUO6075,000480B-19-13NOV17

## Engine Belt—Routing (Tier 2/Stage II)

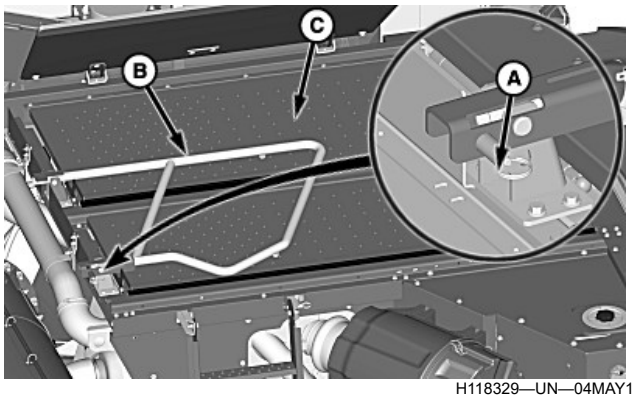



H124552—UN—21JUN18

**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)

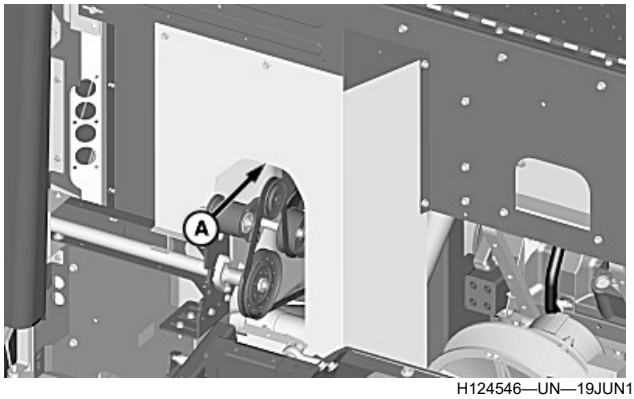



H118329—UN—04MAY16

**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).

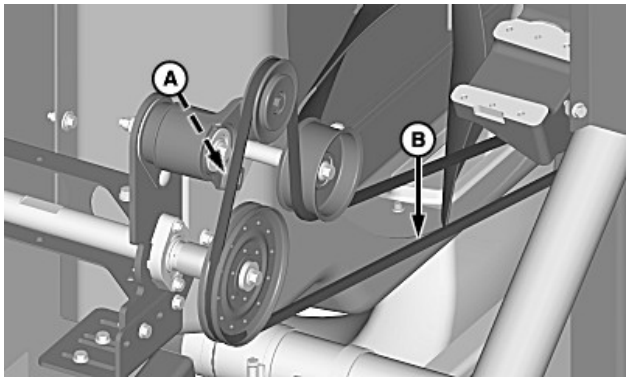



H124546—UN—19JUN18

*Front Side Of Engine*

**A—Shield**

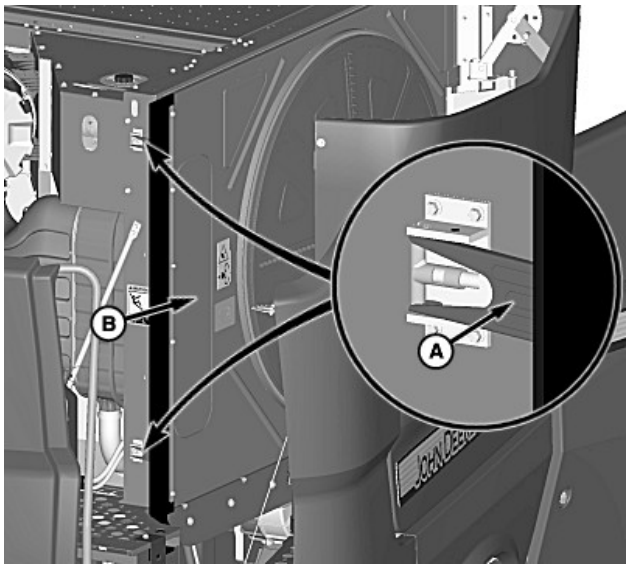
2. Remove shield (A).




H124547—UN—19JUN18

**A—Tensioner Arm**
**B—Rotary Screen Drive Belt**

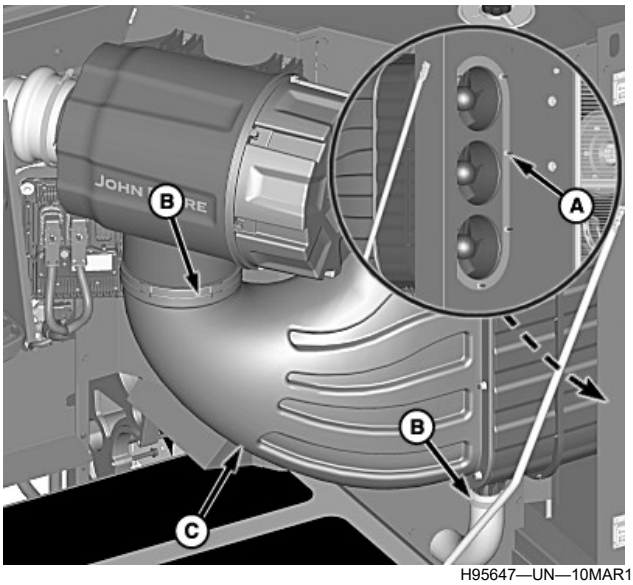
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).




H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

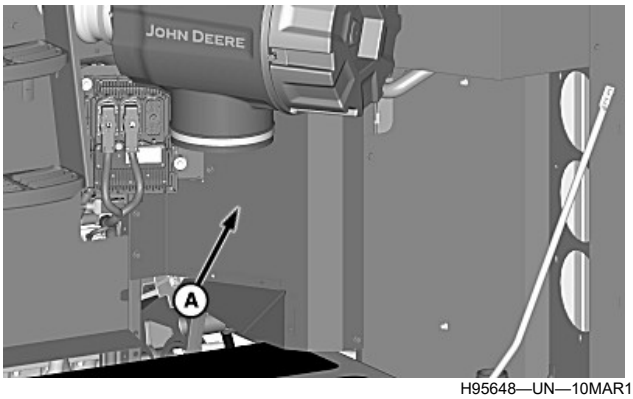
5. Pull latches (A) and open rotary screen door (B).




H95647—UN—10MAR10

**A—Nut (7 used)**
**B—Clamps**
**C—Air Duct**

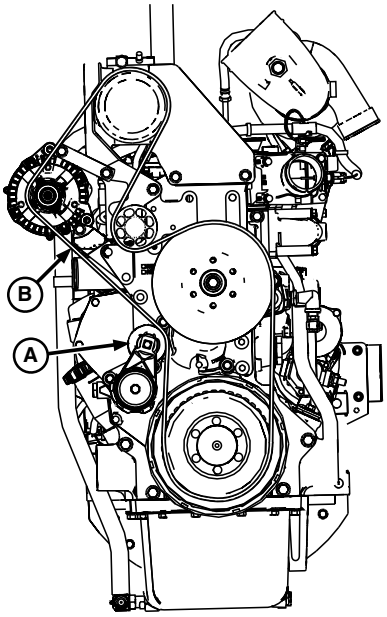
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.




H95648—UN—10MAR10

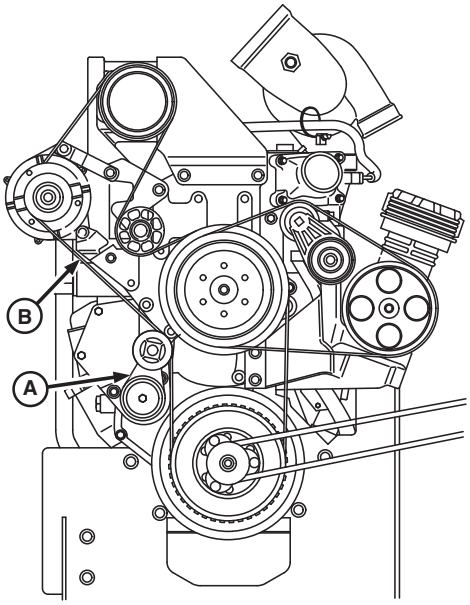
**A—Shield**

8. Remove shield (A).




H95702—UN—15MAR10

*Engine Accessory/Fan Drive Belt Without Air Compressor*

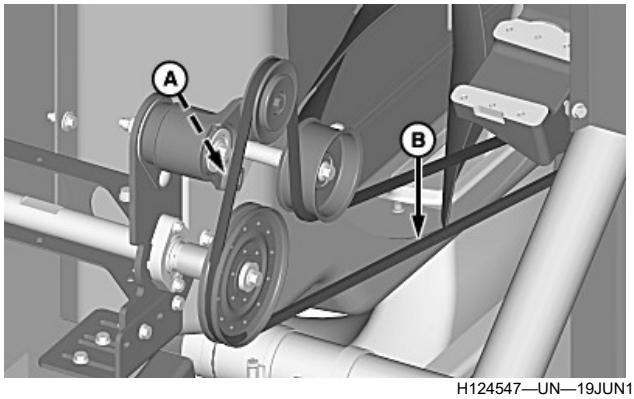



H113079—UN—02MAR15

*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.



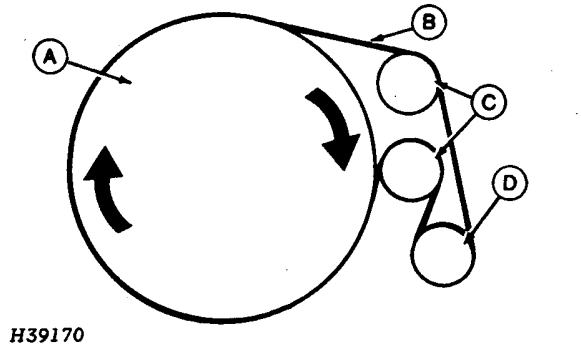

H124547—UN—19JUN18

**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

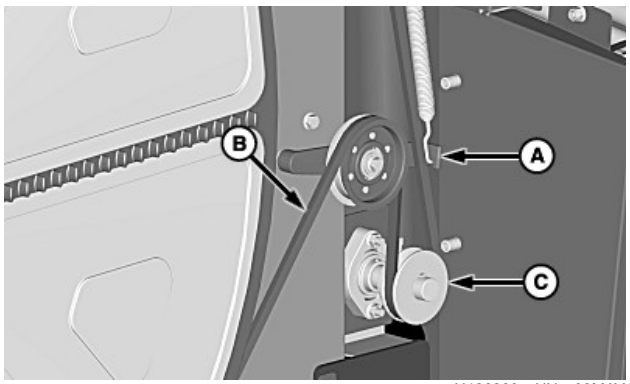



H39170—UN—11OCT88

**A—Rotary Screen**
**B—Belt**
**C—Idlers**
**D—Drive Sheave**

OUO6075,00006CE-19-05MAR10

## Rotary Screen Belt—Replacing



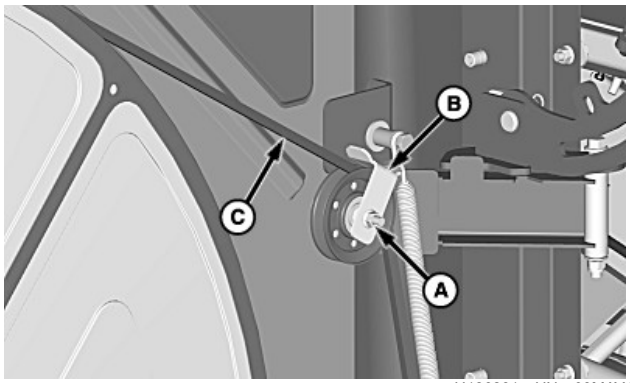

H126280—UN—08MAY19

**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.**

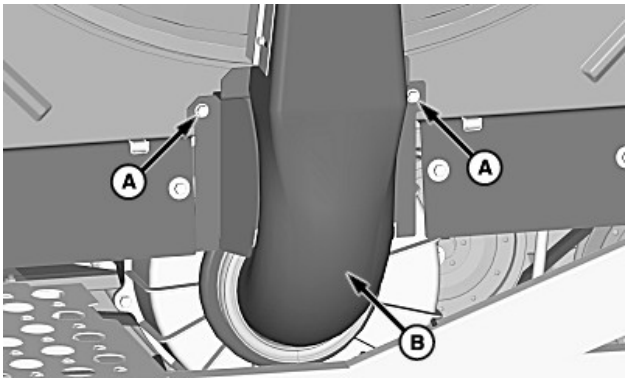
1. Push down on tensioner lever (A) and relieve tension from the rotary screen belt (B).
2. Remove rotary screen belt from sheave (C) and slowly release the lever and spring tension.




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

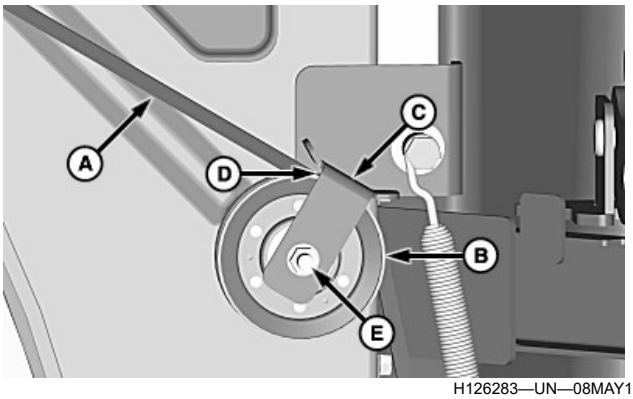
**A—Cap Screw and Nut (2 used)**
**B—Vacuum Duct**

*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.

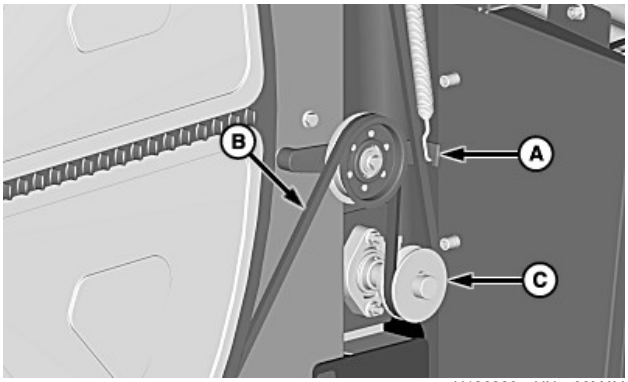
**IMPORTANT: To prevent damage, verify that the belt trap is parallel to the rotary screen belt.**

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

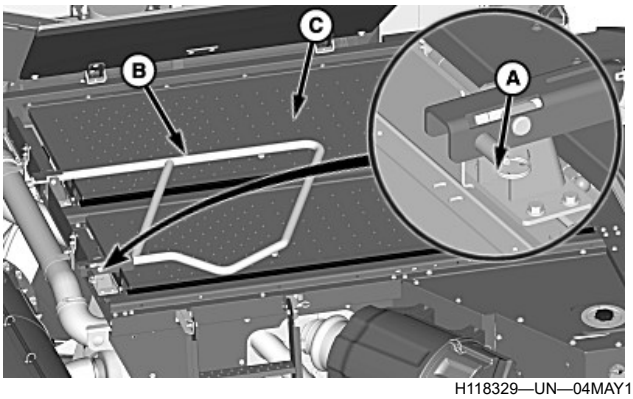
**A—Tensioner Lever**
**B—Rotary Screen Belt**
**C—Sheave**

**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)



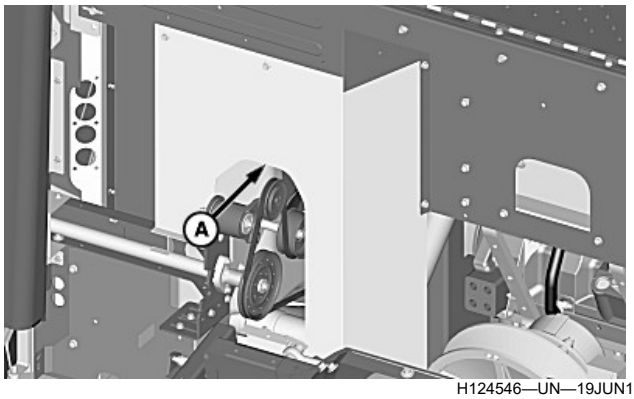

H118329—UN—04MAY16

**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).

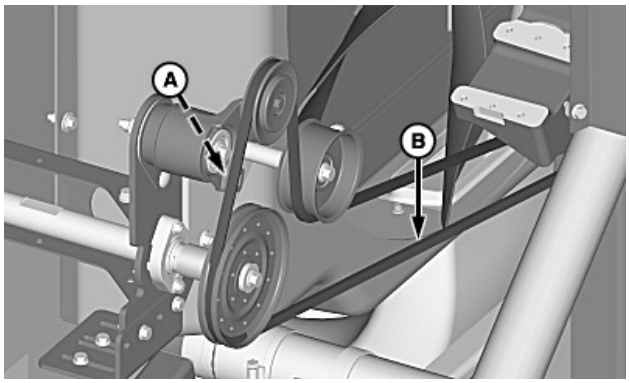



H124546—UN—19JUN18

*Front Side Of Engine*

**A—Shield**

2. Remove shield (A).



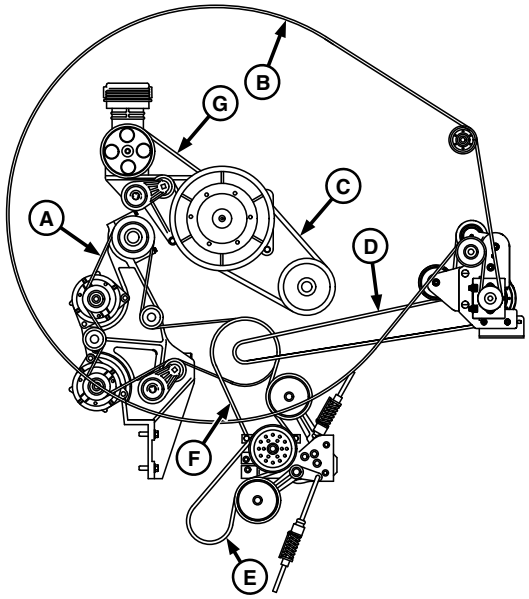

H124547—UN—19JUN18

**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)

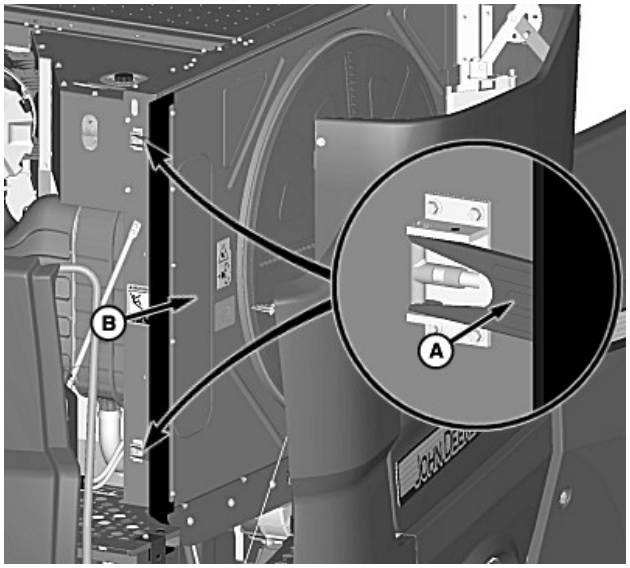



H124553—UN—21JUN18

**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)

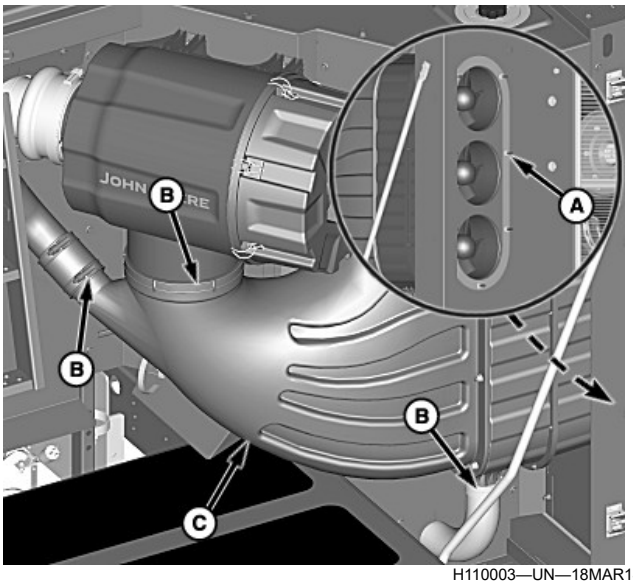



H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

**CAUTION: Shut OFF engine, set park brake and remove key.**

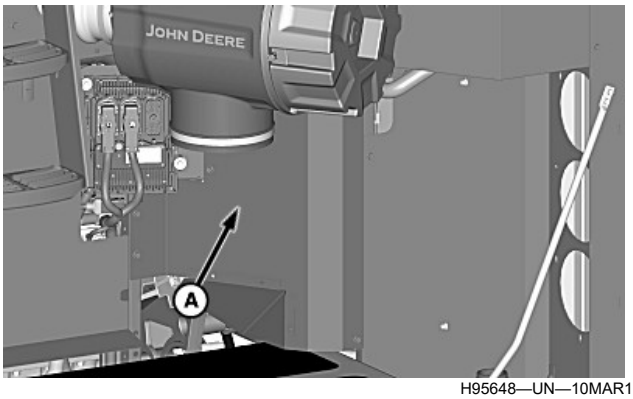
1. Pull latches (A) and open rotary screen door (B).




H110003—UN—18MAR14

**A—Nut (7 used)**
**B—Clamps**
**C—Air Duct**

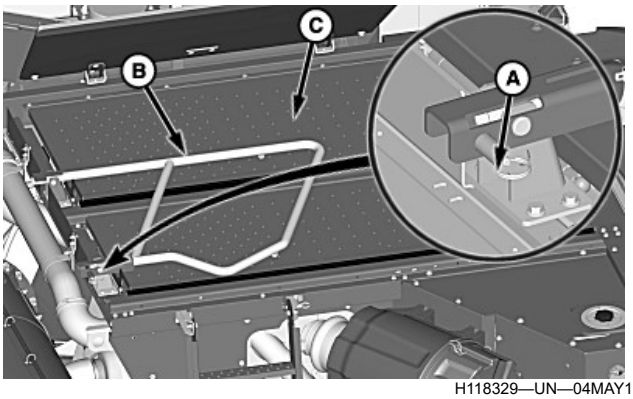
2. Remove nuts (A) and loosen hose clamps (B).
3. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

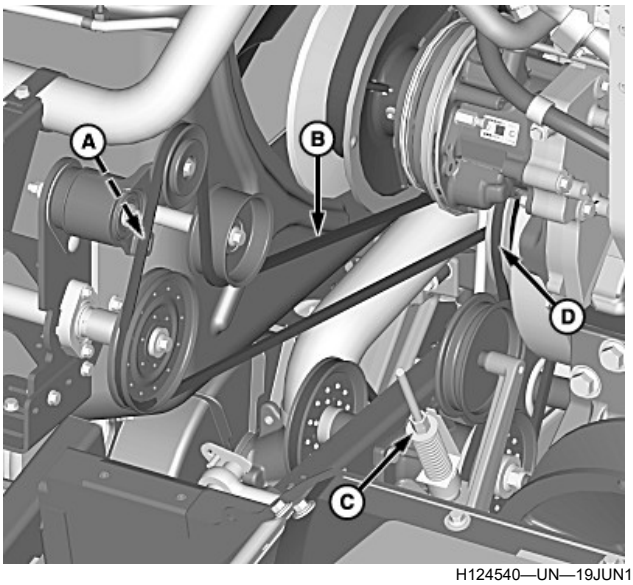
4. Remove shield (A).




H118329—UN—04MAY16

**A—Lockout Pin**
**B—Handrail**
**C—Separator Access Cover**

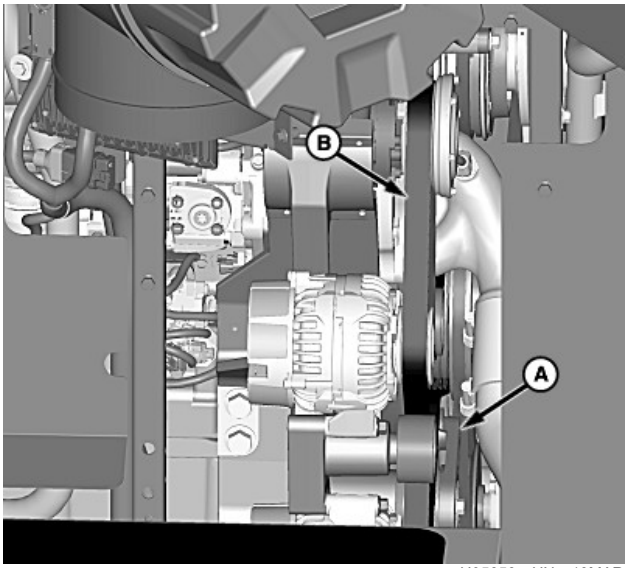
5. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).




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).

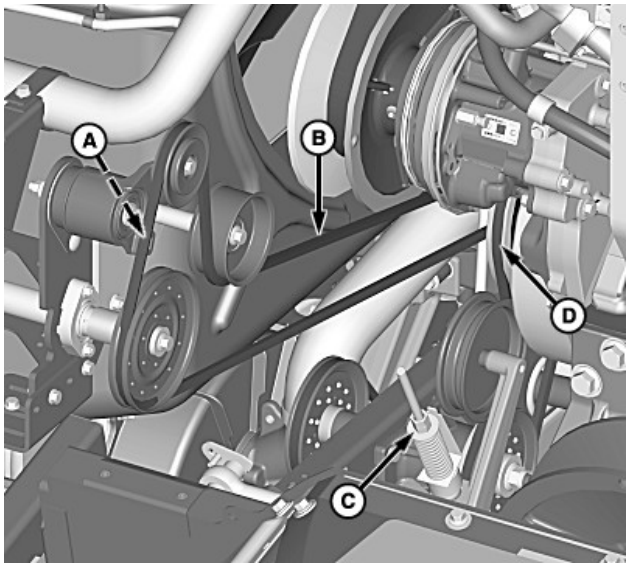



H95656—UN—10MAR10

**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.



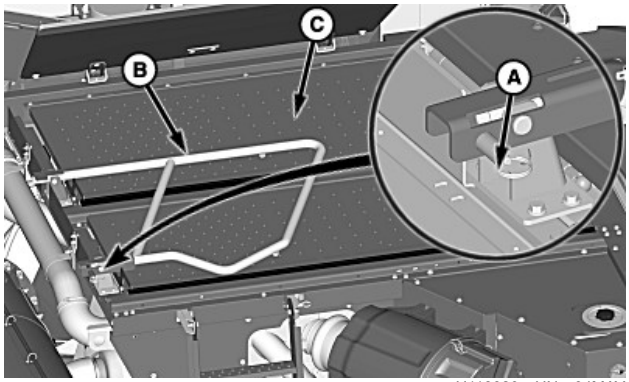

H124540—UN—19JUN18

**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)

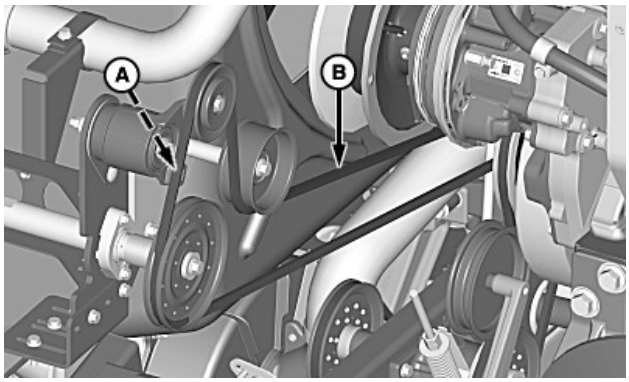



H118329—UN—04MAY16

**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).



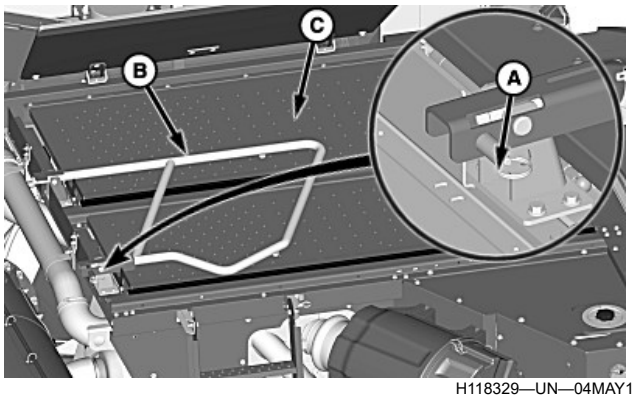

H124541—UN—19JUN18

**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)

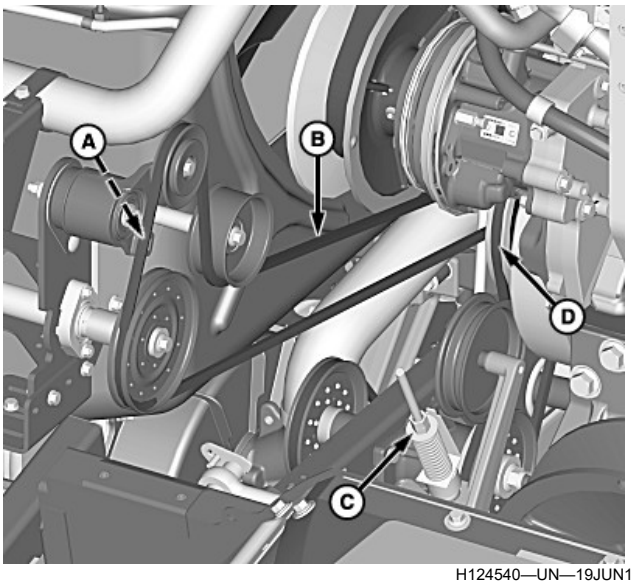



H118329—UN—04MAY16

**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).



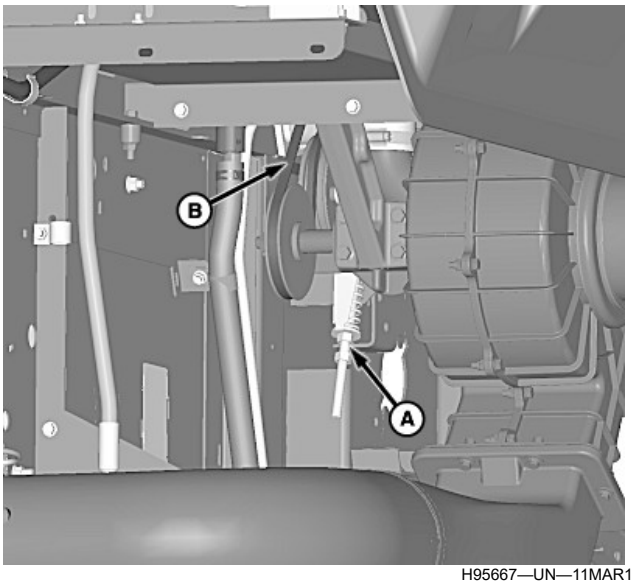

H124540—UN—19JUN18

**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.**

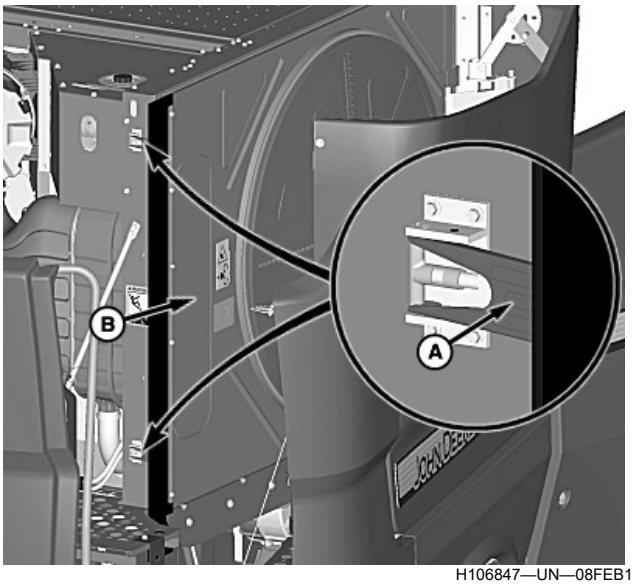
Loosen nuts (A) and remove vacuum fan driven belt (B) located below radiator.

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)

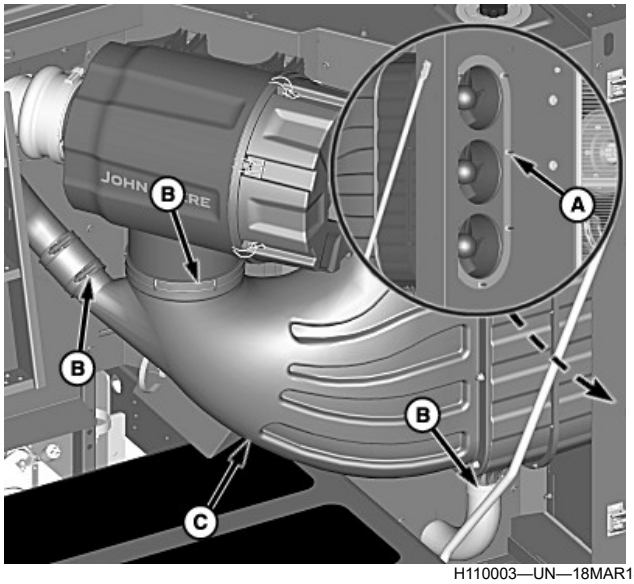



H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

**CAUTION: Shut OFF engine, set park brake and remove key.**

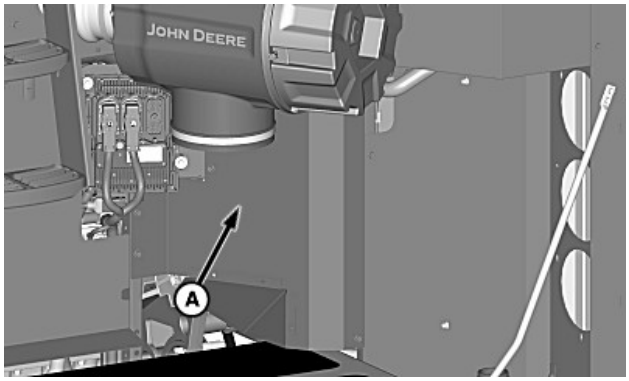
1. Pull latches (A) and open rotary screen door (B).




H110003—UN—18MAR14

**A—Nuts (7 Used)**
**B—Clamps**
**C—Air Duct**

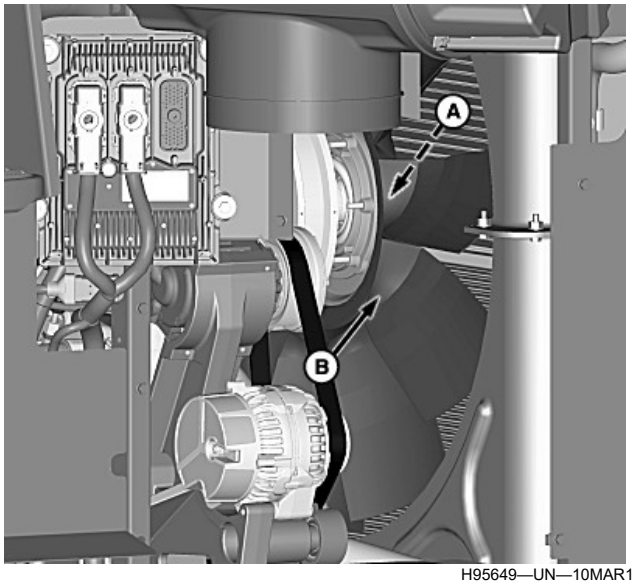
2. Remove nuts (A) and loosen hose clamps (B).
3. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

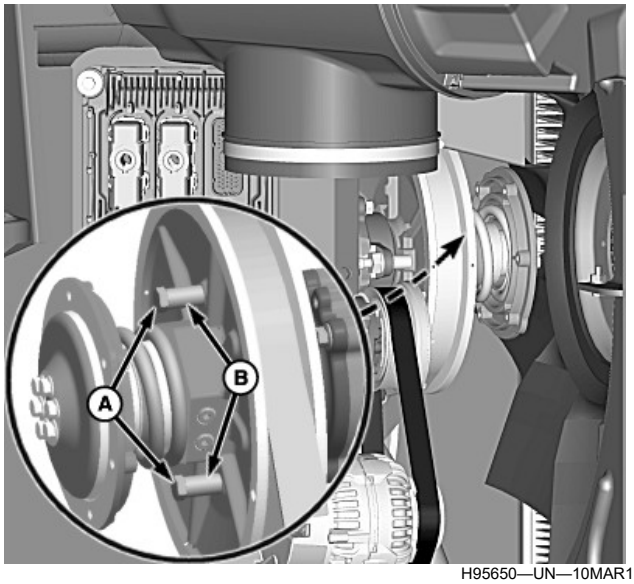
4. Remove shield (A).




H95649—UN—10MAR10

**A—Cap Screws (6 Used)**
**B—Fan Assembly**

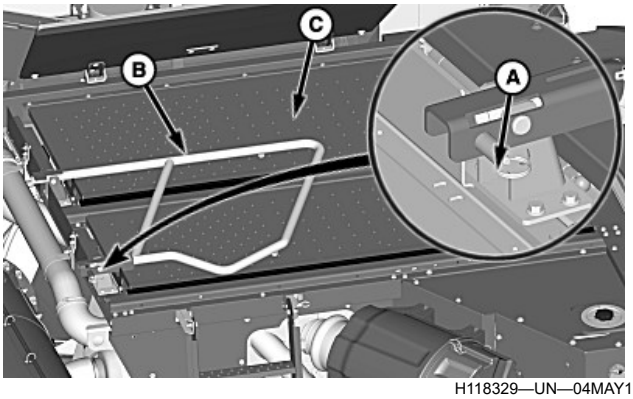
5. Remove cap screws (A) from fan assembly (B).
6. Lay fan assembly out of the way.




H95650—UN—10MAR10

**A—Cap Screws**
**B—Spacers**

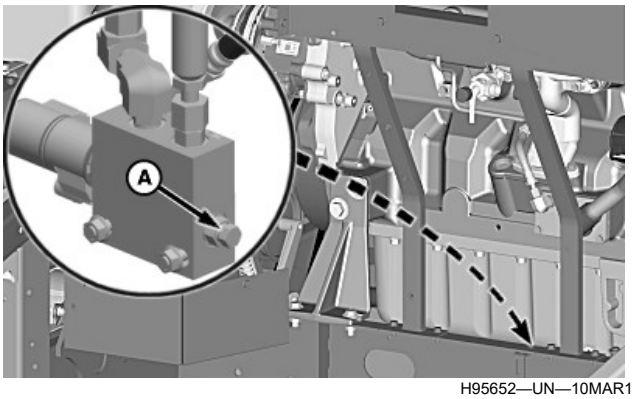
7. Remove cap screws (A) and spacers (B).
8. Install previously removed cap screws until spring is compressed completely.




H118329—UN—04MAY16

**A—Lockout Pin**
**B—Handrail**
**C—Separator Access Cover**

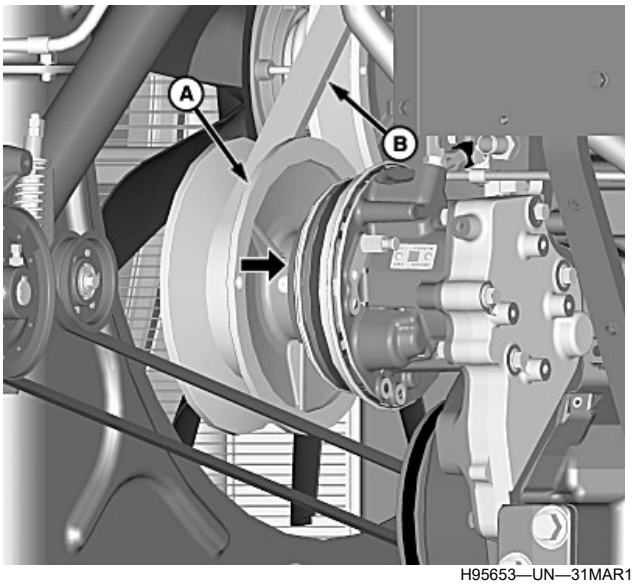
9. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).




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

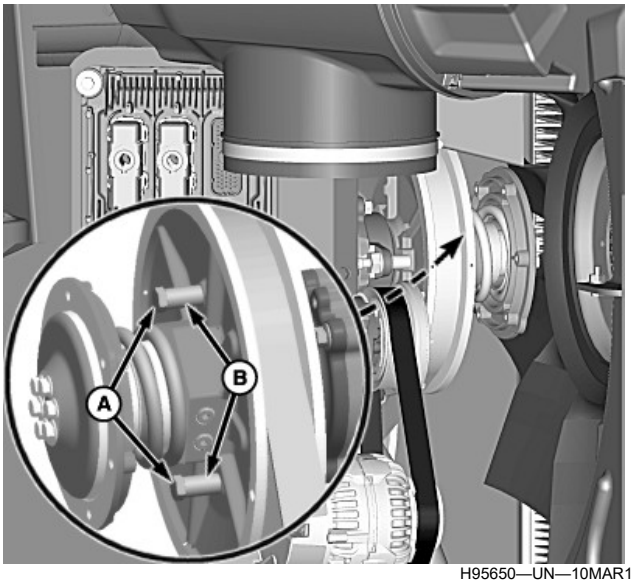
**A—Sheave**
**B—Variable Speed Belt**

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.

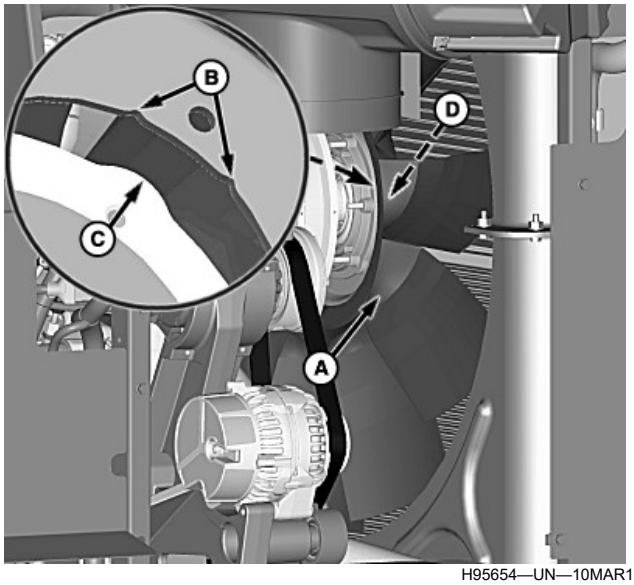



H95650—UN—10MAR10

**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.



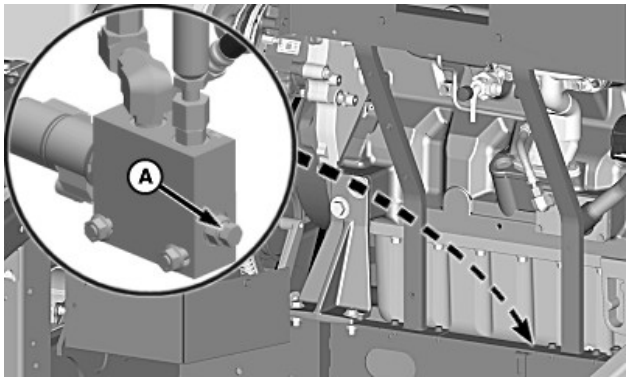

H95654—UN—10MAR10

**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.

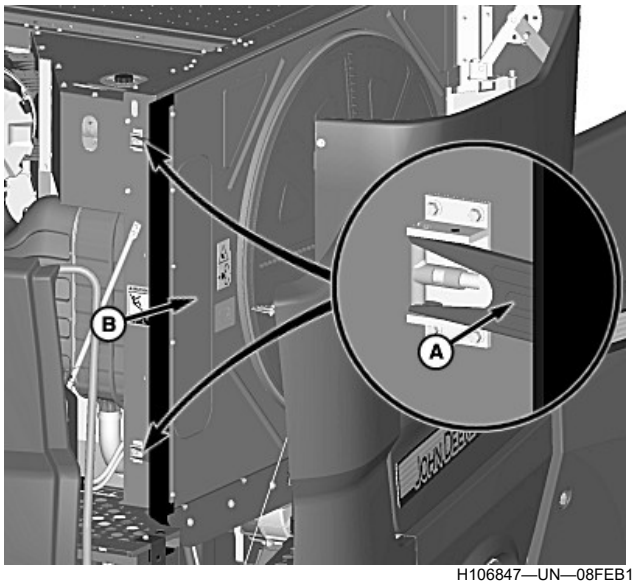
**Specification**

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)

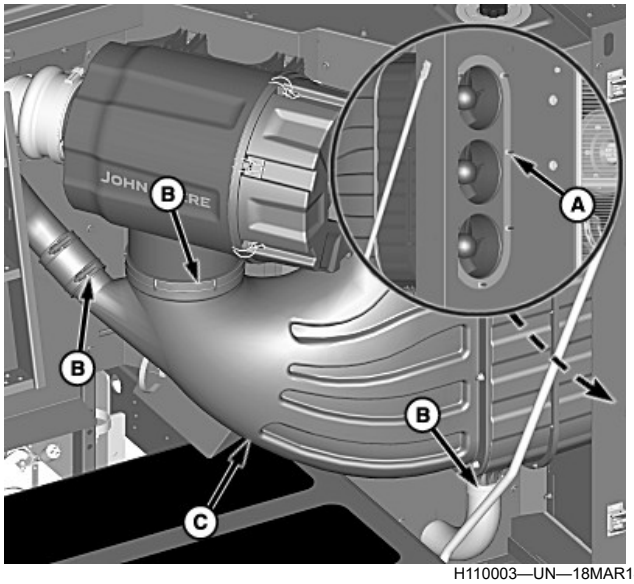



H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

**CAUTION: Shut OFF engine, set park brake and remove key.**

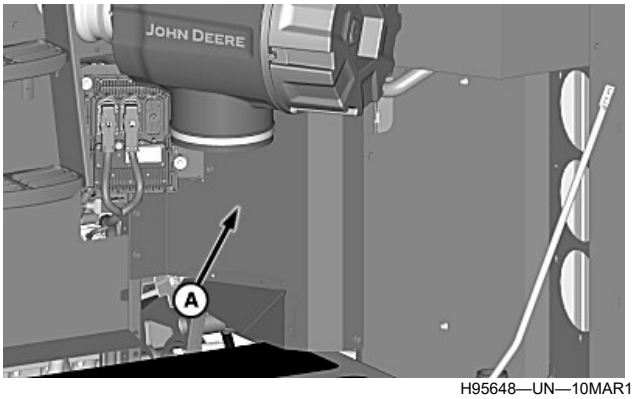
1. Pull latches (A) and open rotary screen door (B).




H110003—UN—18MAR14

**A—Nuts (7 Used)**
**B—Clamps**
**C—Air Duct**

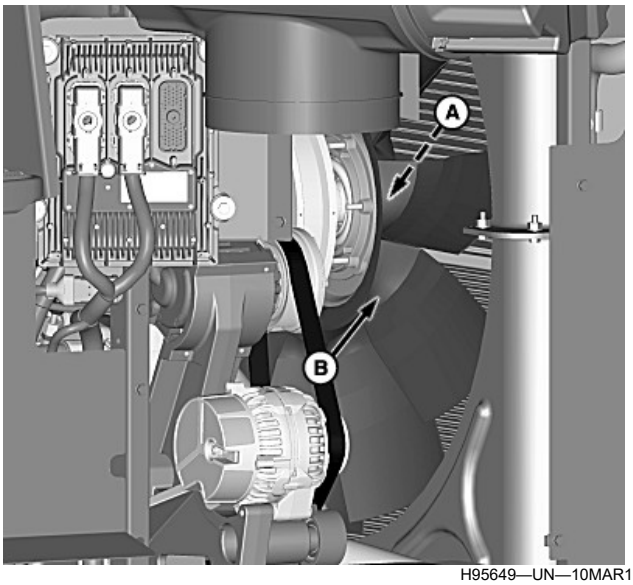
2. Remove nuts (A) and loosen hose clamps (B).
3. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

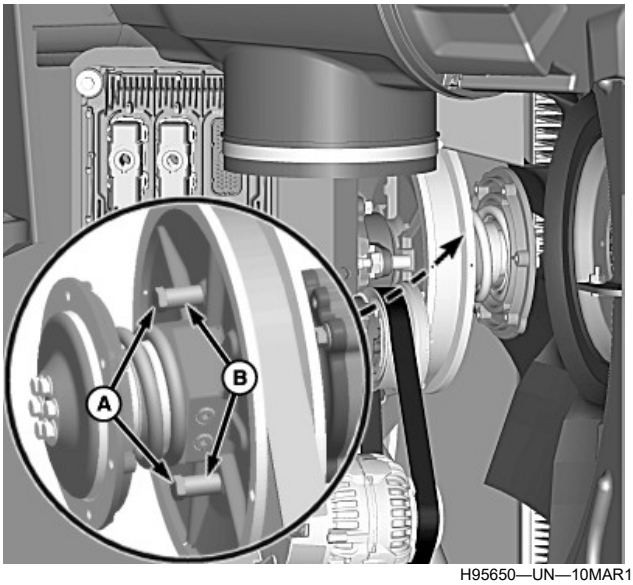
4. Remove shield (A).




H95649—UN—10MAR10

**A—Cap Screws (6 Used)**
**B—Fan Assembly**

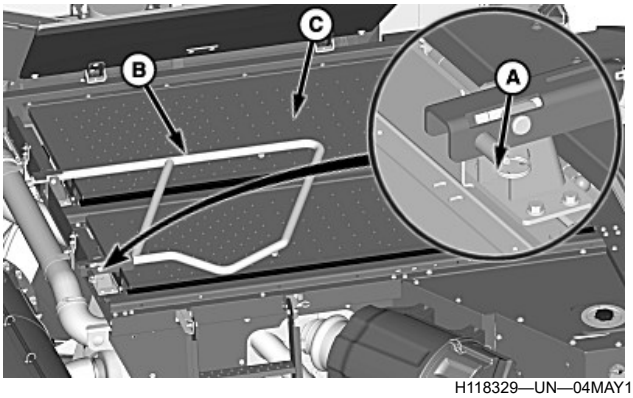
5. Remove cap screws (A) from fan assembly (B).
6. Lay fan assembly out of the way.




H95650—UN—10MAR10

**A—Cap Screws**
**B—Spacers**

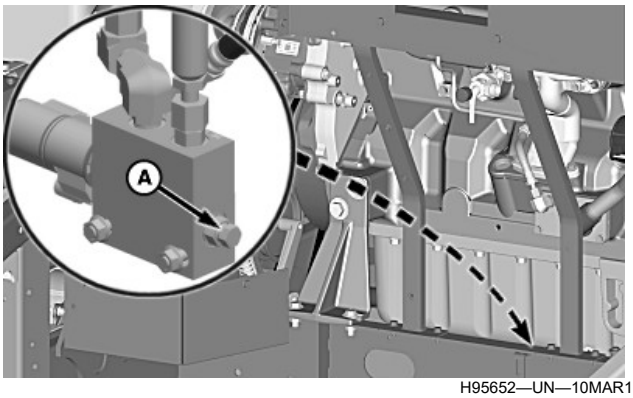
7. Remove cap screws (A) and spacers (B).
8. Install previously removed cap screws until spring is compressed completely.




H118329—UN—04MAY16

**A—Lockout Pin**
**B—Handrail**
**C—Separator Access Cover**

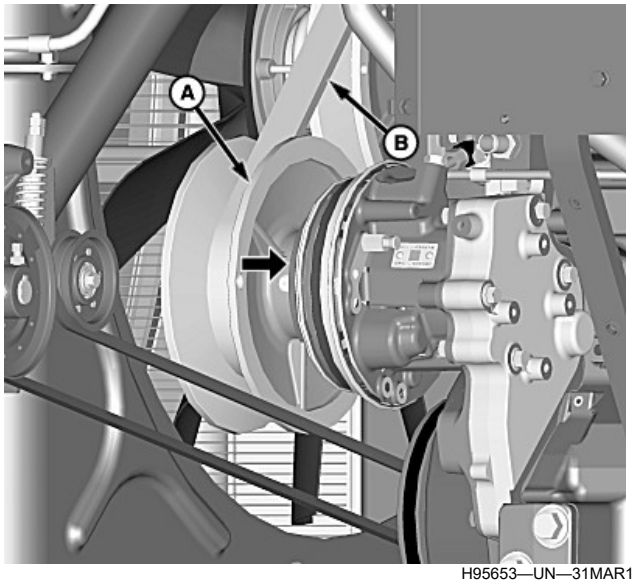
9. Pull lockout pin (A) and rotate handrail (B) up until handrail locks into place to open separator access cover (C).




H95652—UN—10MAR10

**A—Bleed Screw**

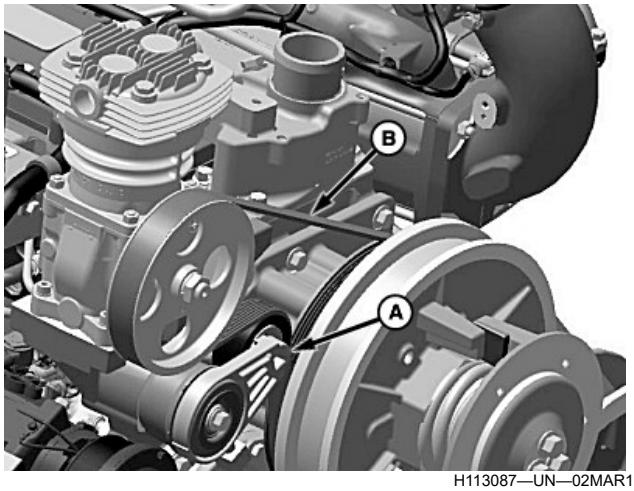
10. Locate valve on the front side of the support rail and loosen bleed screw (A) to relieve pressure from sheaves.




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).



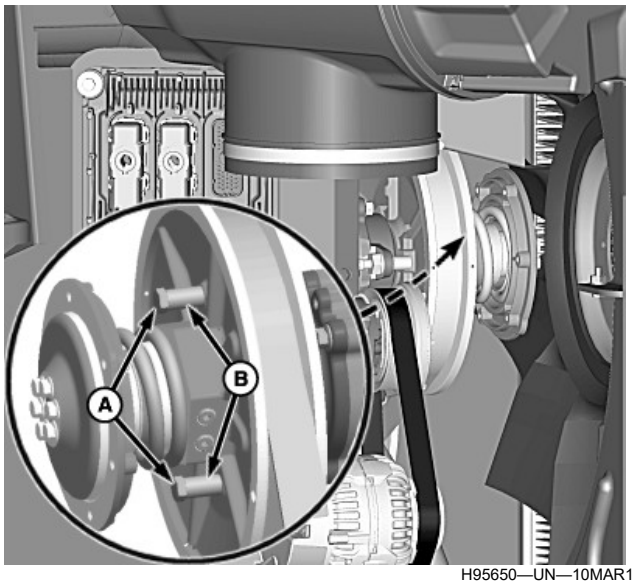

H113087—UN—02MAR15

**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.

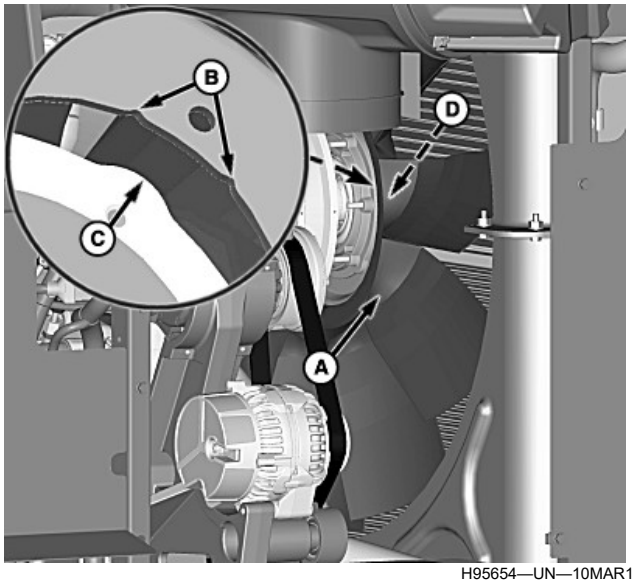



H95650—UN—10MAR10

**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.



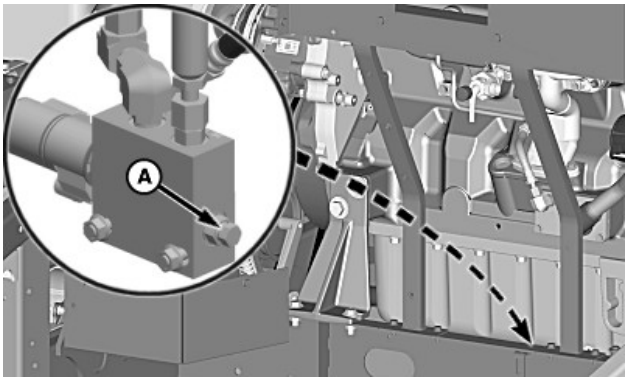

H95654—UN—10MAR10

**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.

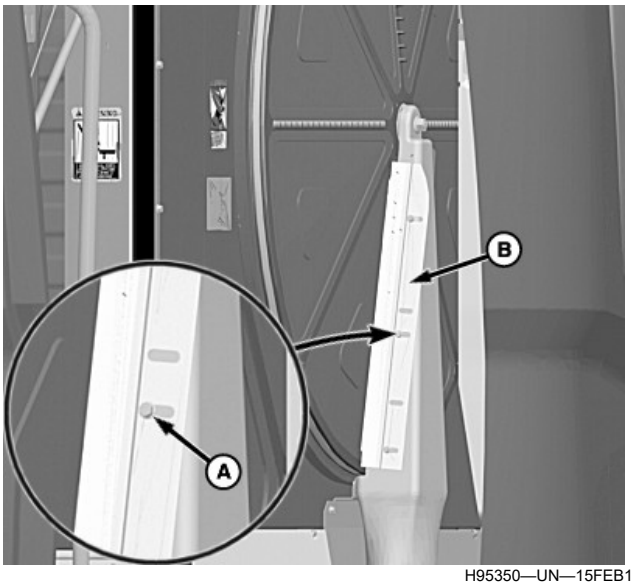
**Specification**

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



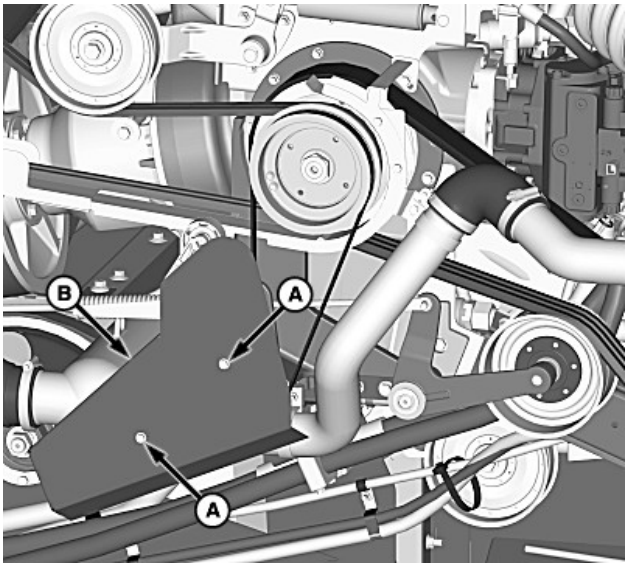

H95350—UN—15FEB10

**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)

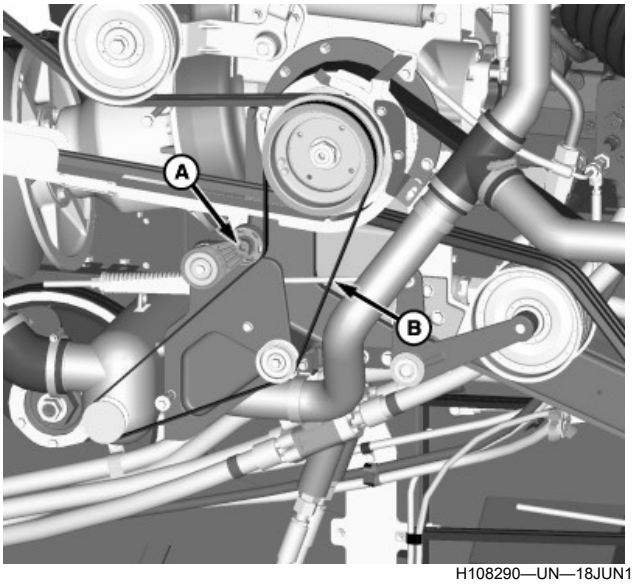



H121347—UN—25APR17

**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).

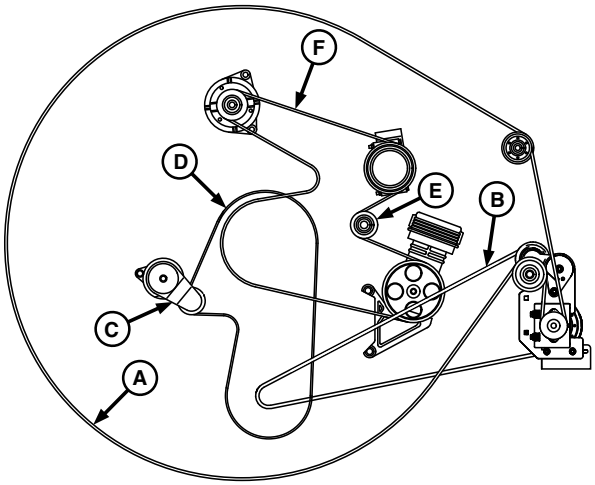
Remove belt and install replacement belt in reverse order.

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)

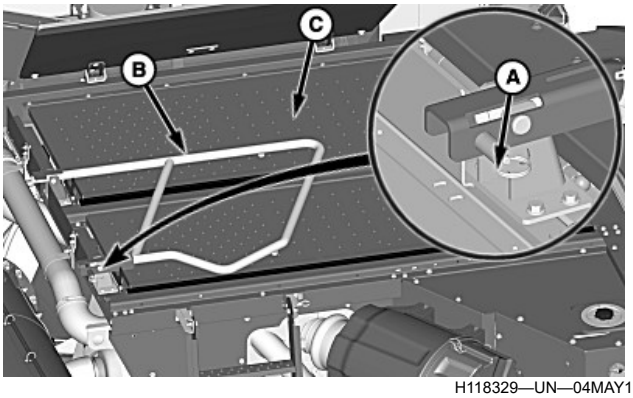



H124554—UN—21JUN18

**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)

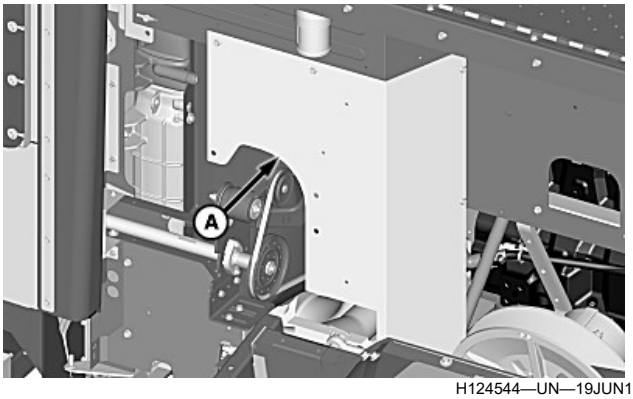



H118329—UN—04MAY16

**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).

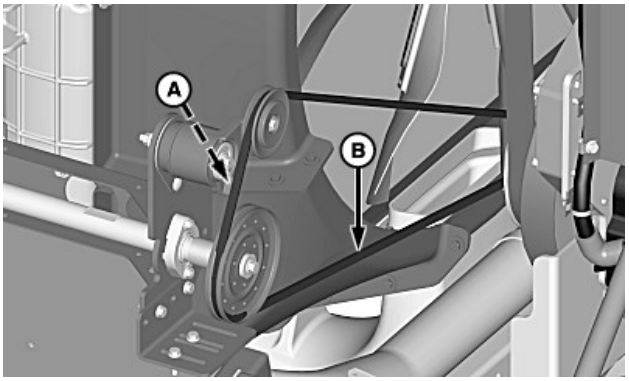



H124544—UN—19JUN18

*Front Side Of Engine*

**A—Shield**

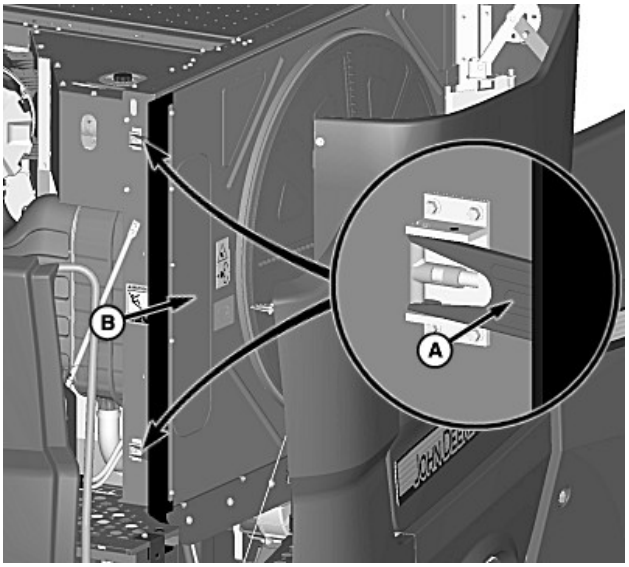
2. Remove shield (A).




H124545—UN—19JUN18

**A—Tensioner Arm**
**B—Rotary Screen Drive Belt**

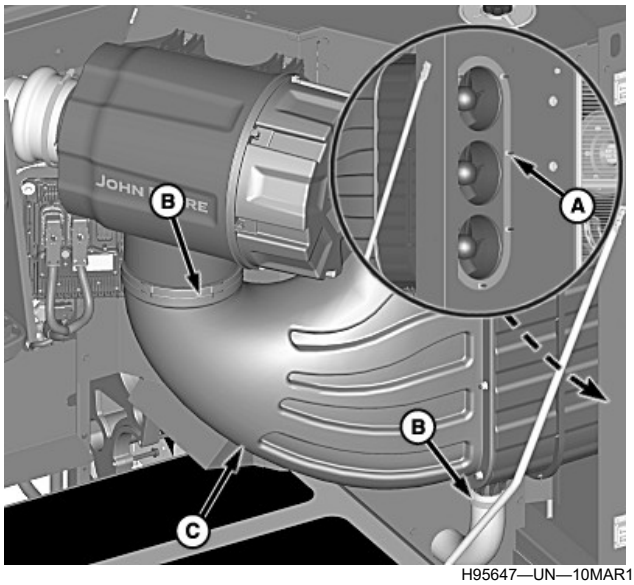
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).




H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

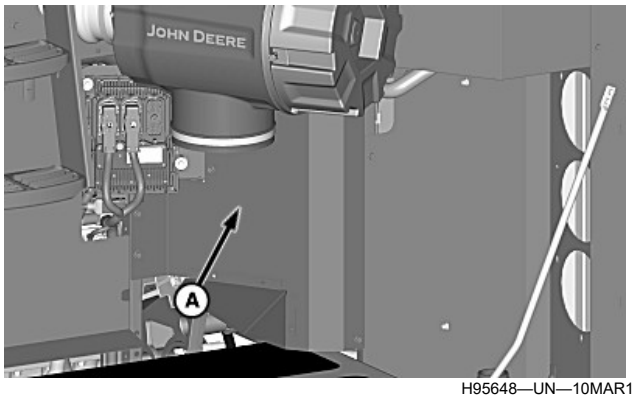
5. Pull latches (A) and open rotary screen door (B).




H95647—UN—10MAR10

**A—Nut (7 used)**
**B—Clamps**
**C—Air Duct**

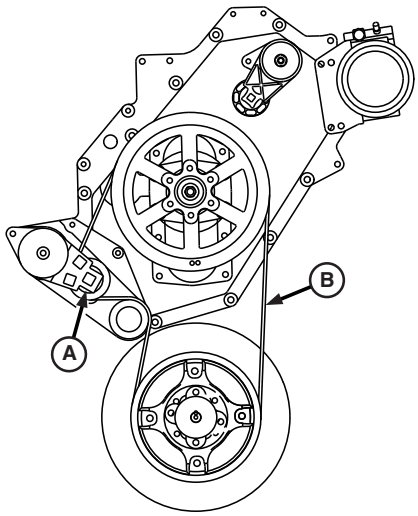
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

8. Remove shield (A).

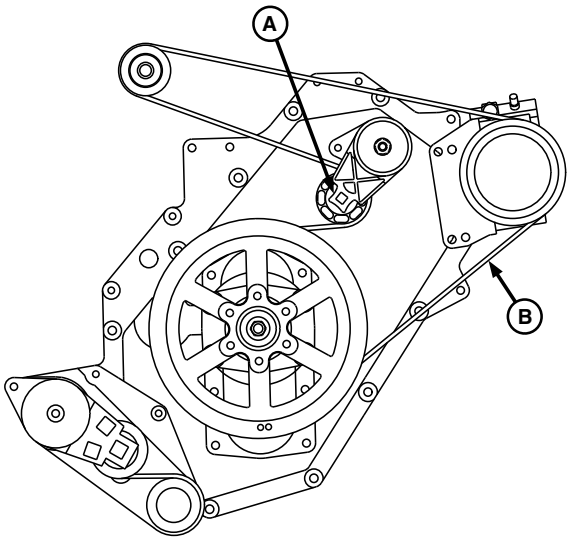



H71844—UN—25APR02

*Fan Belt Routing*

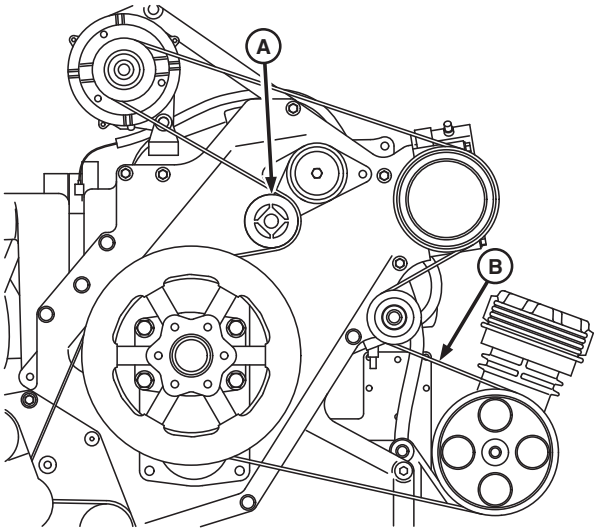
**A—Tensioner Arm**
**B—Fan Belt**

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*

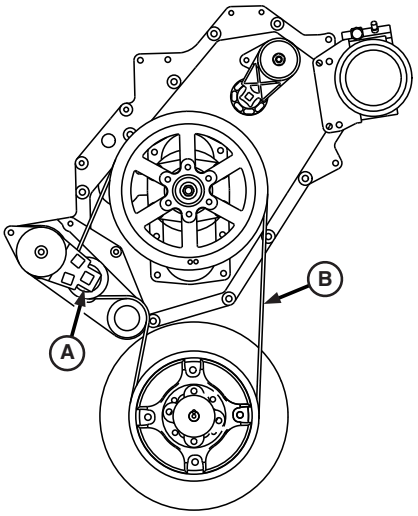



H113080—UN—02MAR15

*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.

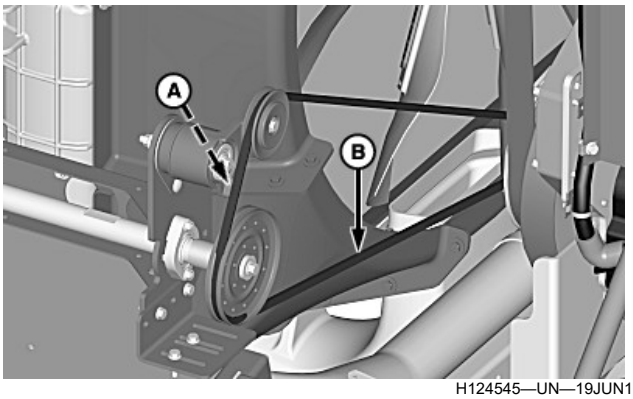



H71844—UN—25APR02

*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.



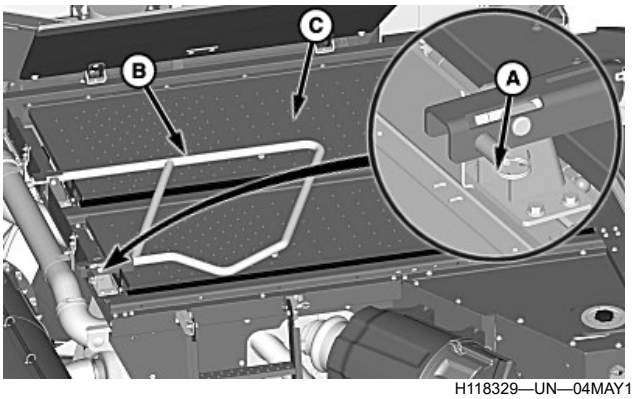

H124545—UN—19JUN18

**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)

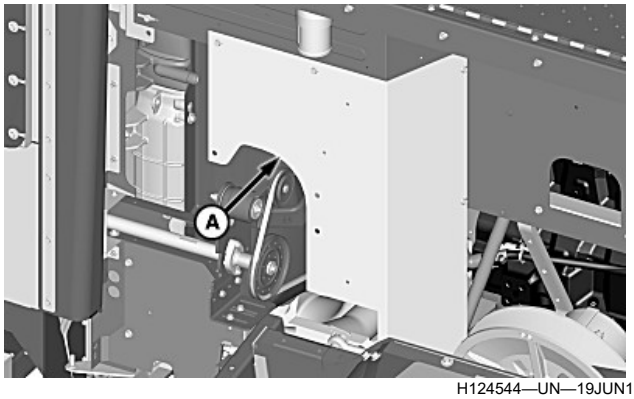



H118329—UN—04MAY16

**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).

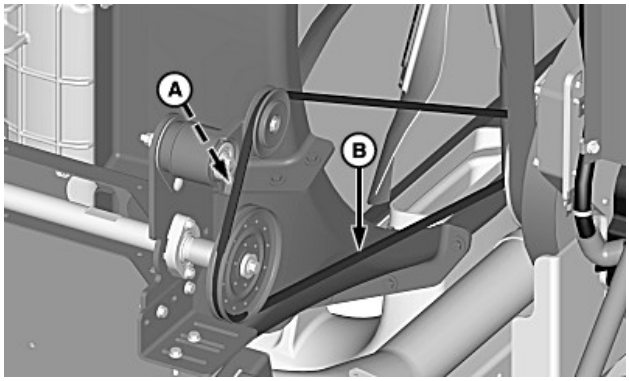



H124544—UN—19JUN18

*Front Side Of Engine*

**A—Shield**

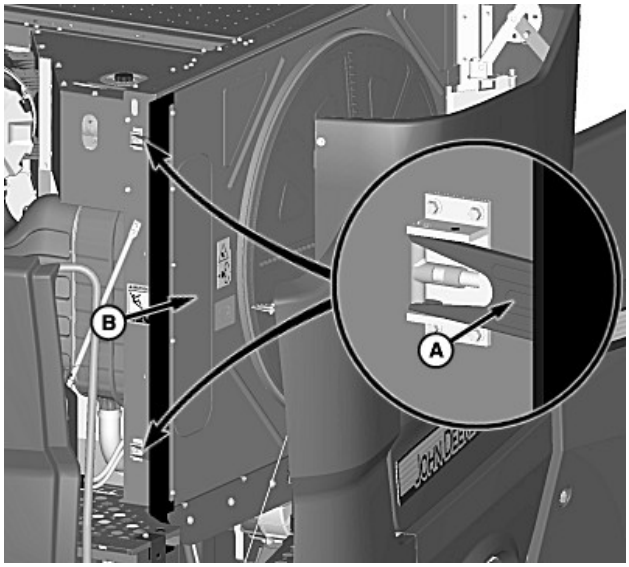
2. Remove shield (A).




H124545—UN—19JUN18

**A—Tensioner Arm**
**B—Rotary Screen Drive Belt**

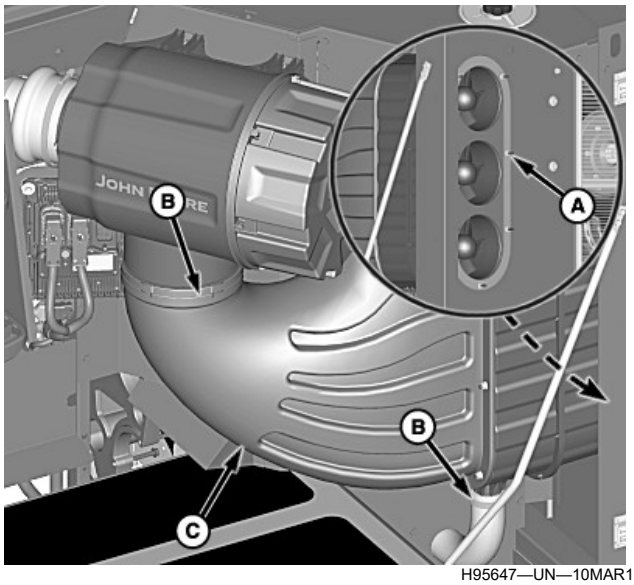
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).




H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

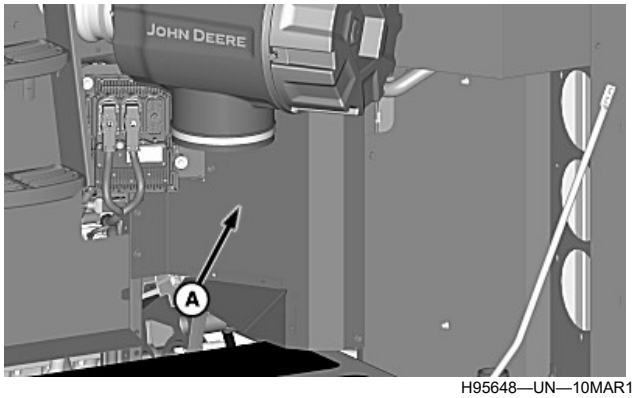
5. Pull latches (A) and open rotary screen door (B).




H95647—UN—10MAR10

**A—Nut (7 used)**
**B—Clamps**
**C—Air Duct**

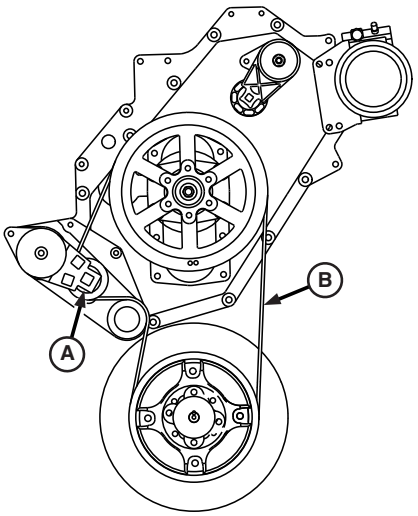
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

8. Remove shield (A).

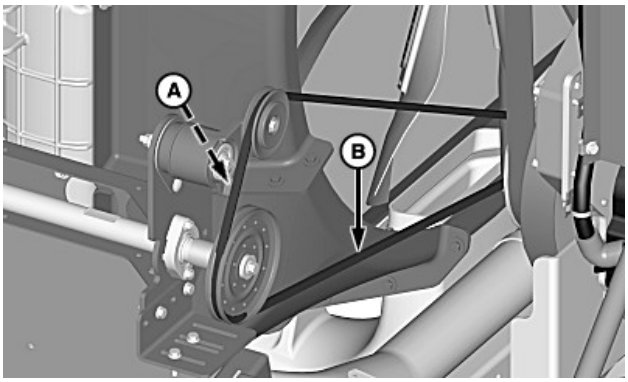



H71844—UN—25APR02

*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.



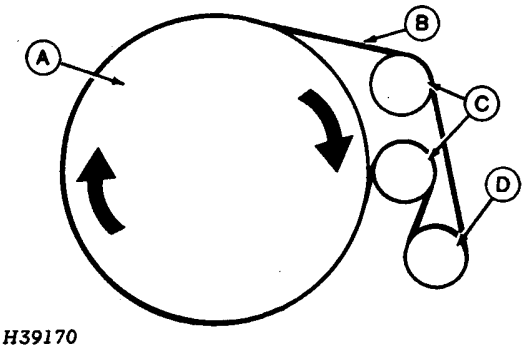

H124545—UN—19JUN18

**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

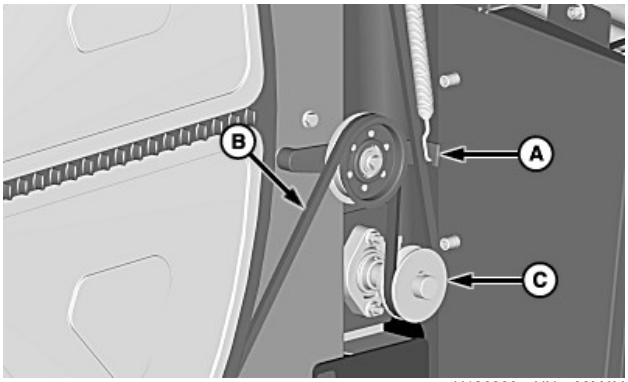



H39170—UN—11OCT88

**A—Rotary Screen**
**B—Belt**
**C—Idlers**
**D—Drive Sheave**

OUO6075,00006CE-19-05MAR10

## Rotary Screen Belt—Replacing



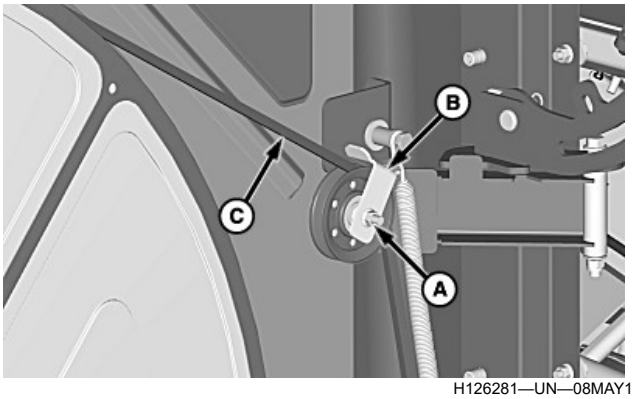

H126280—UN—08MAY19

**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.**

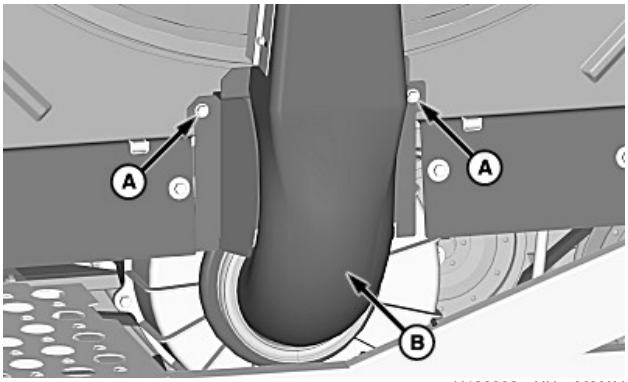
1. Push down on tensioner lever (A) and relieve tension from the rotary screen belt (B).
2. Remove rotary screen belt from sheave (C) and slowly release the lever and spring tension.




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

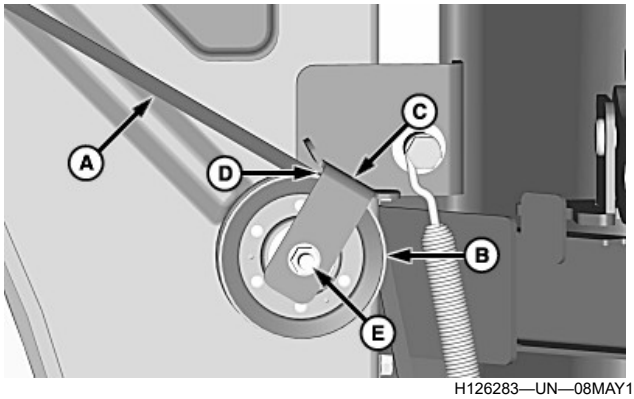
**A—Cap Screw and Nut (2 used)**
**B—Vacuum Duct**

*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.

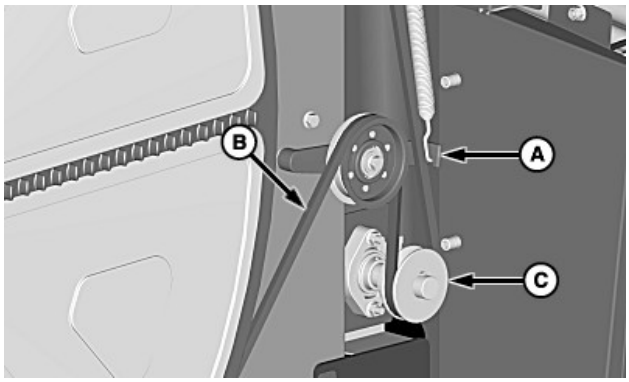
**IMPORTANT: To prevent damage, verify that the belt trap is parallel to the rotary screen belt.**

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

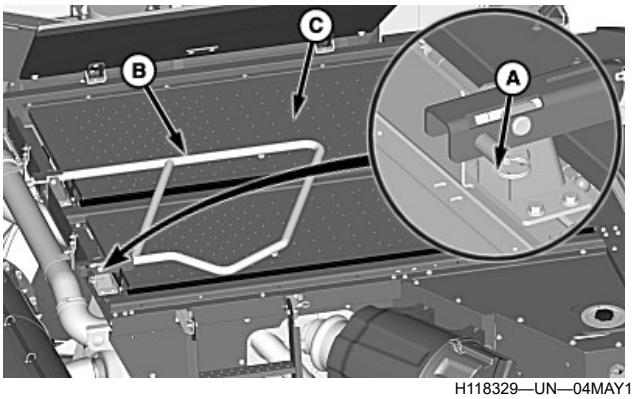
**A—Tensioner Lever**
**B—Rotary Screen Belt**
**C—Sheave**

**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)

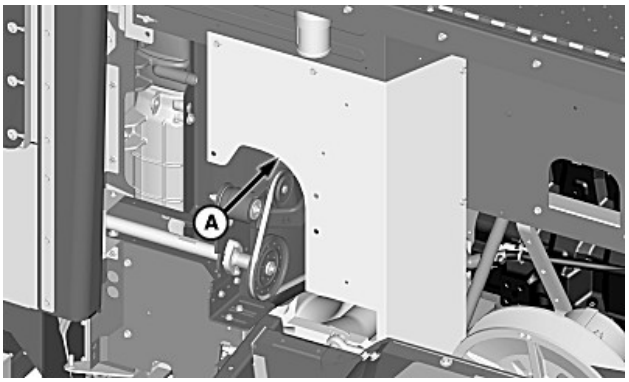



H118329—UN—04MAY16

**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).

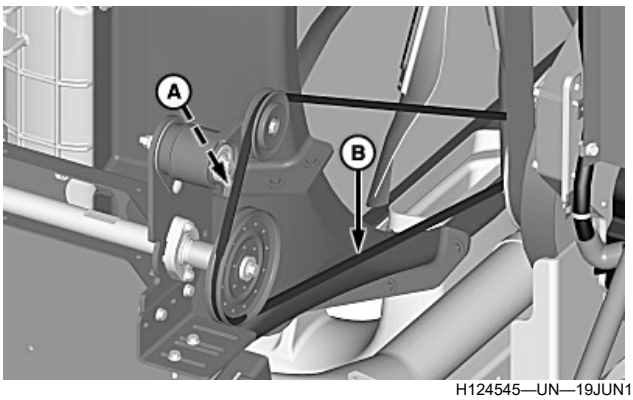



H124544—UN—19JUN18

*Front Side Of Engine*

**A—Shield**

2. Remove shield (A).



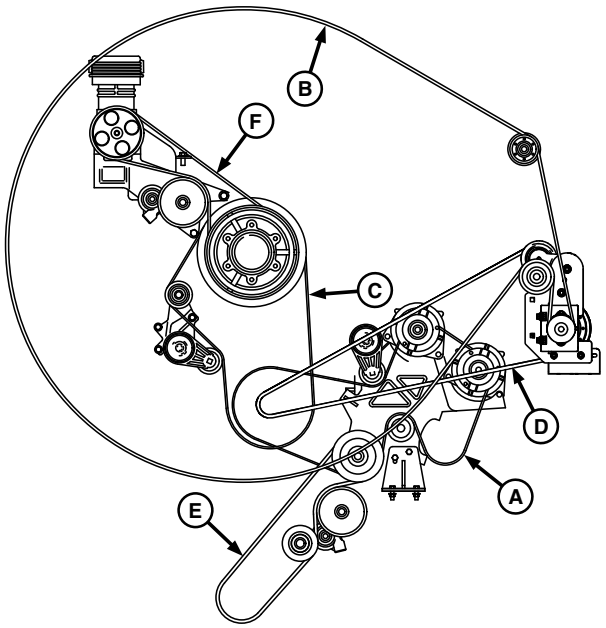

H124545—UN—19JUN18

**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)

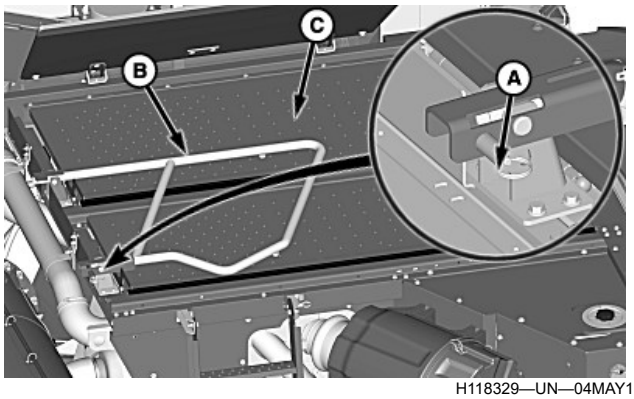



H124555—UN—21JUN18

**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)

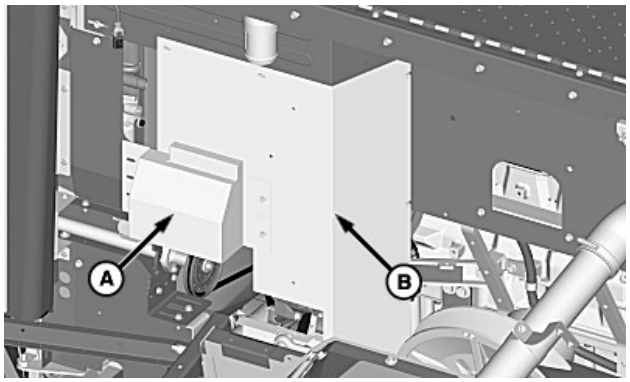



H118329—UN—04MAY16

**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).

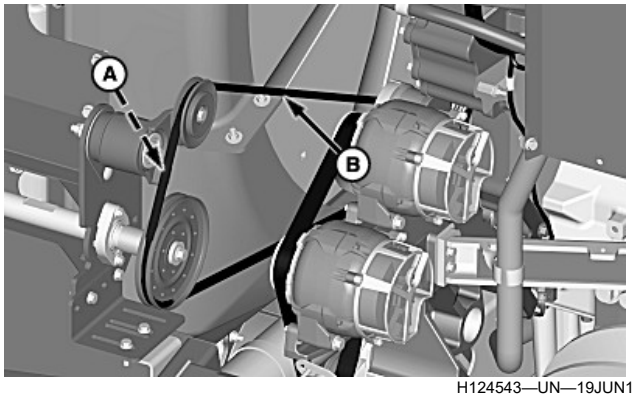



H124542—UN—19JUN18

*Front Side Of Engine*

**A—Shield**
**B—Shield**

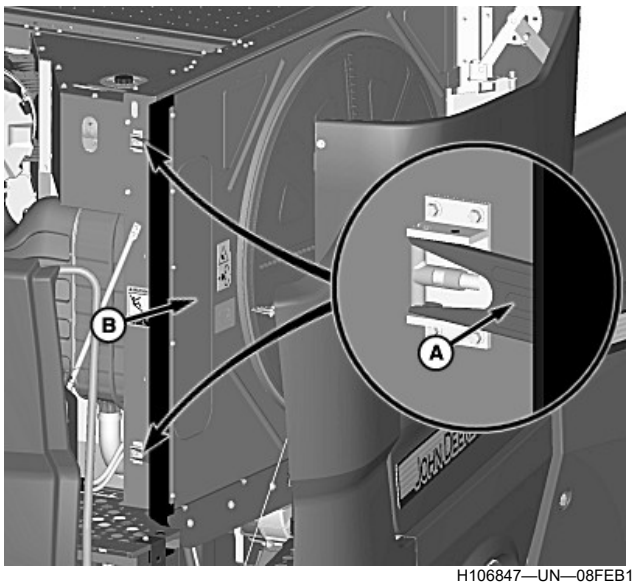
2. Remove shield (A) and shield (B).




H124543—UN—19JUN18

**A—Tensioner Arm**
**B—Rotary Screen Drive Belt**

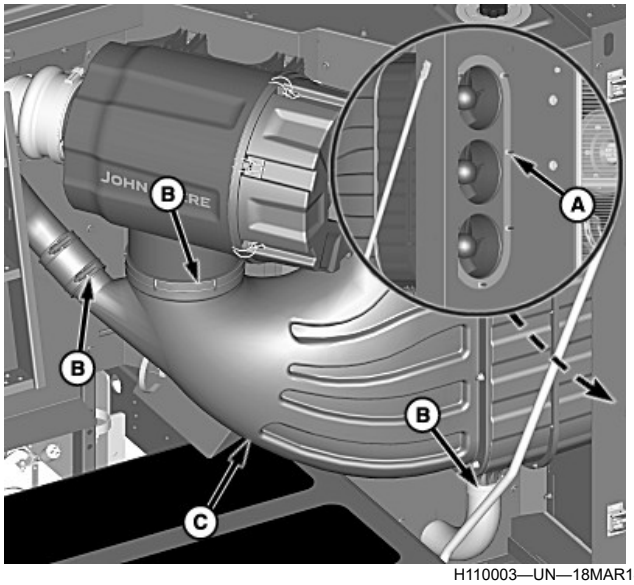
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).




H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

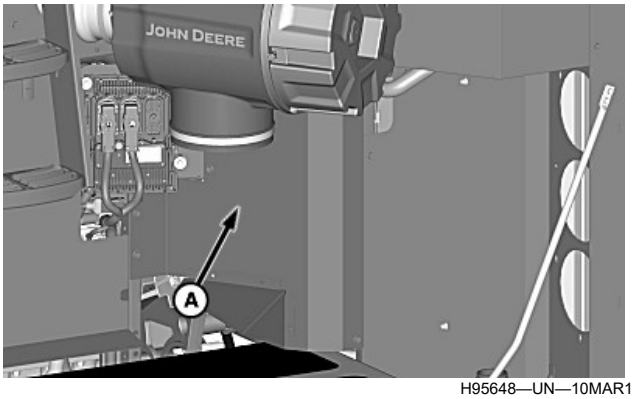
5. Pull latches (A) and open rotary screen door (B).




H110003—UN—18MAR14

**A—Nut (7 used)**
**B—Clamps**
**C—Air Duct**

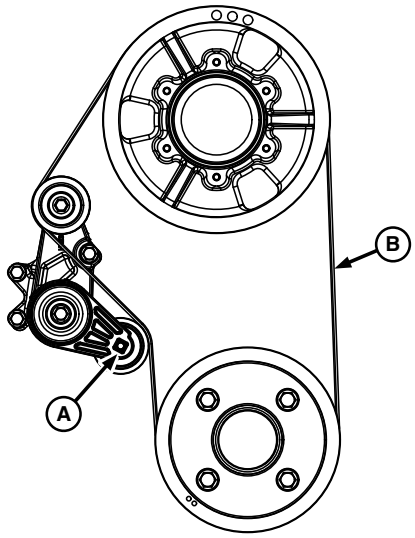
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

8. Remove shield (A).

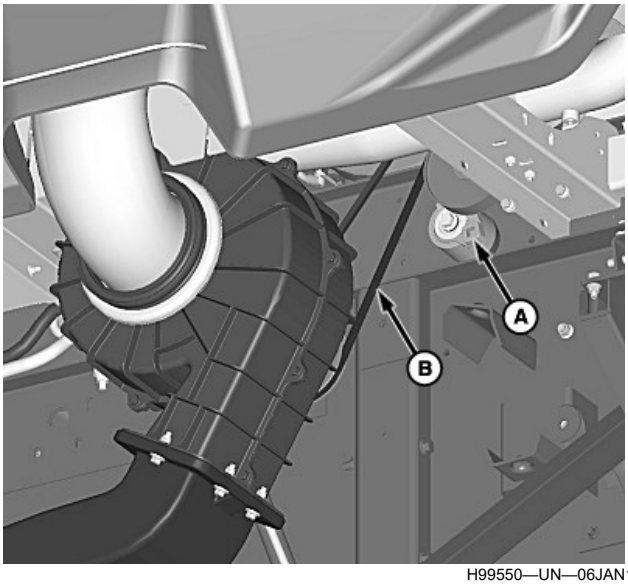



H99551—UN—06JAN11

*Fan Belt Routing*

**A—Tensioner Arm**
**B—Fan Belt**

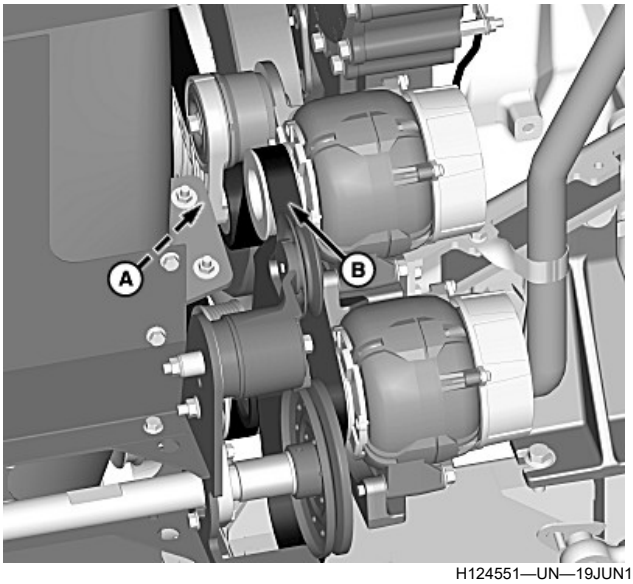
9. Use breaker bar to relieve belt tension from the tensioner arm (A).
10. Remove belt (B) and work belt over fan blades to remove.




H99550—UN—06JAN11

**A—Tensioner Arm**
**B—Vacuum Fan Drive Belt**

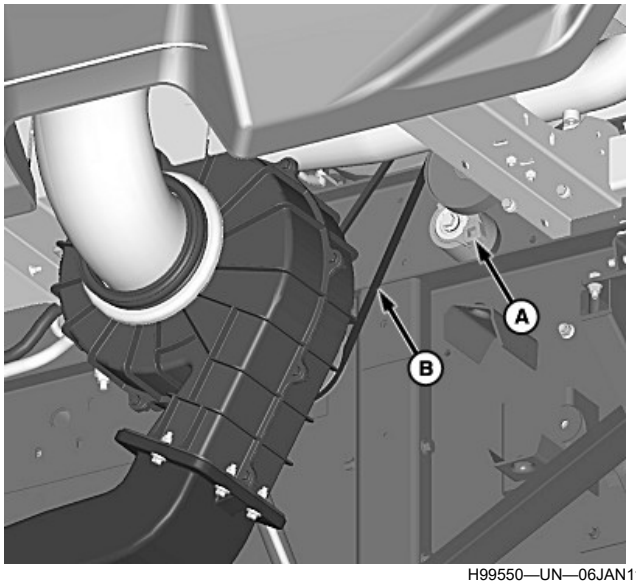
11. Use breaker bar to relieve belt tension from the tensioner arm (A).
12. Remove the vacuum fan drive belt (B) located below radiator.




H124551—UN—19JUN18

**A—Tensioner Arm**
**B—Belt**

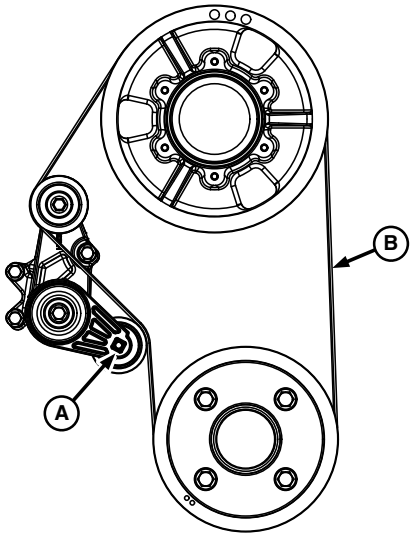
13. Use breaker bar to relieve belt tension from the tensioner arm (A).
14. Remove belt (B) and work belt over fan blades to remove.
15. Install replacement belt over the fan blades.
16. Use breaker bar to relieve tension from the tensioner arm to install replacement belt.




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.

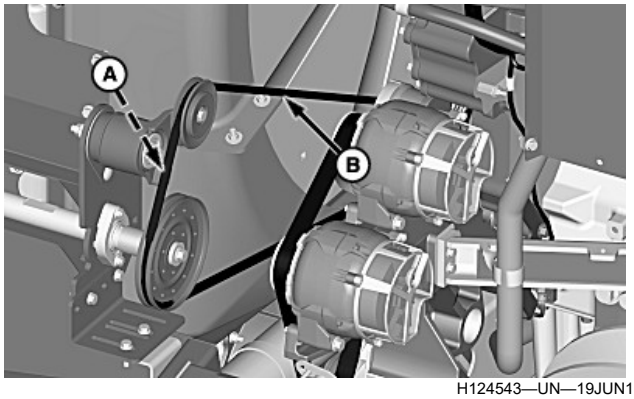



H99551—UN—06JAN11

*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.



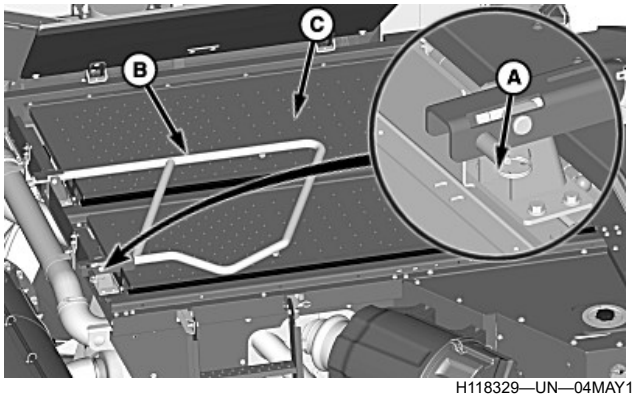

H124543—UN—19JUN18

**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)

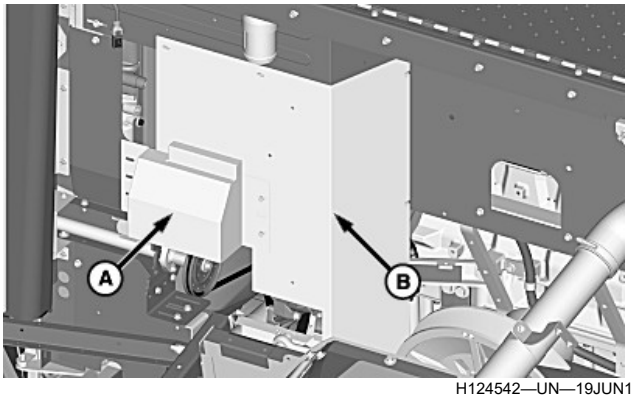



H118329—UN—04MAY16

**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).

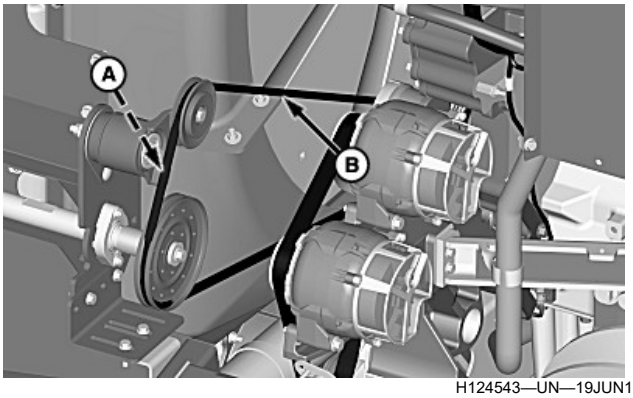



H124542—UN—19JUN18

*Front Side Of Engine*

**A—Shield**
**B—Shield**

2. Remove shield (A) and shield (B).



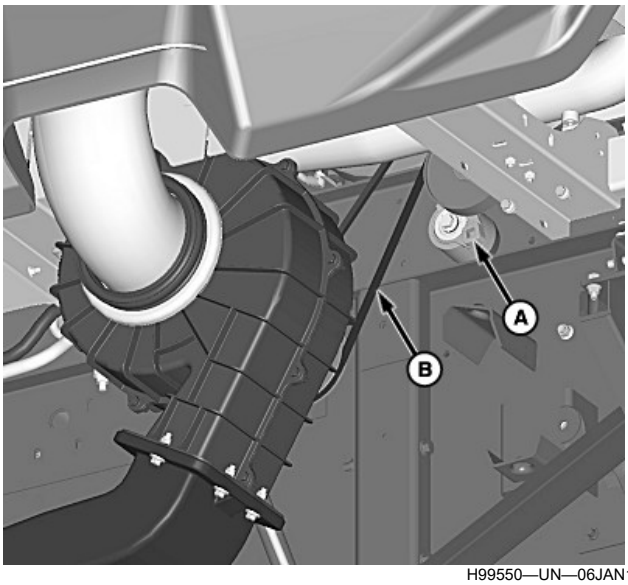

H124543—UN—19JUN18

**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).

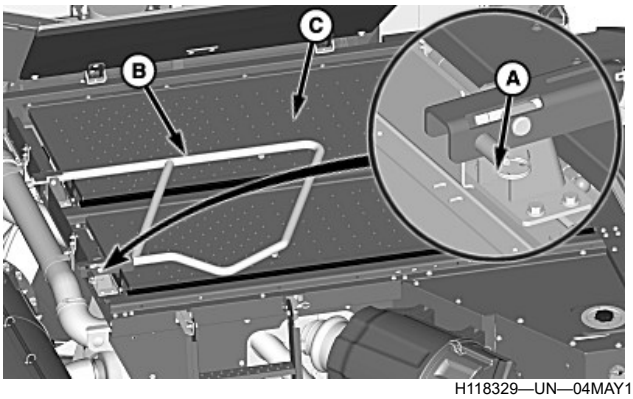
Remove the vacuum fan drive belt (B) located below the radiator.

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)

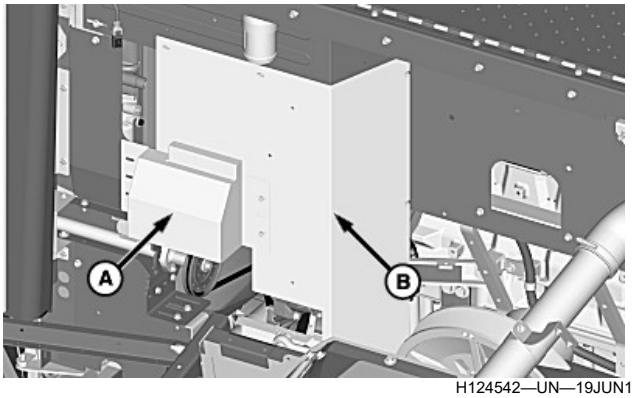



H118329—UN—04MAY16

**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).

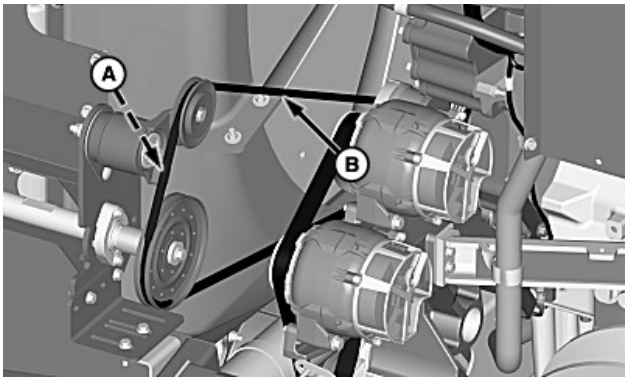



H124542—UN—19JUN18

*Front Side Of Engine*

**A—Shield**
**B—Shield**

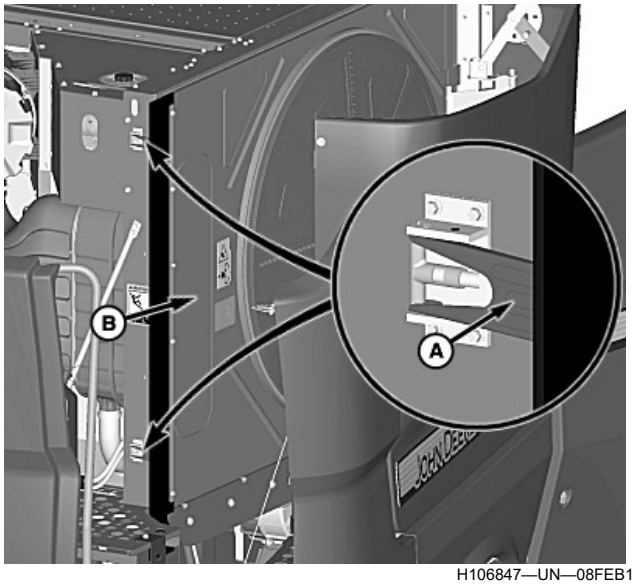
2. Remove shield (A) and shield (B).




H124543—UN—19JUN18

**A—Tensioner Arm**
**B—Rotary Screen Drive Belt**

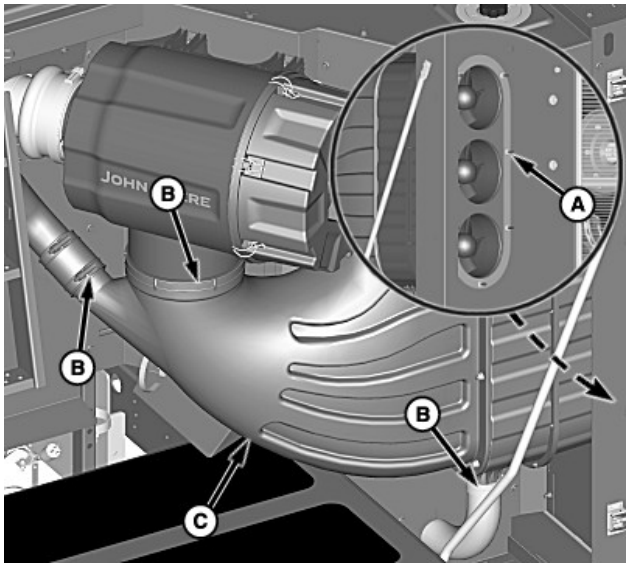
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).




H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

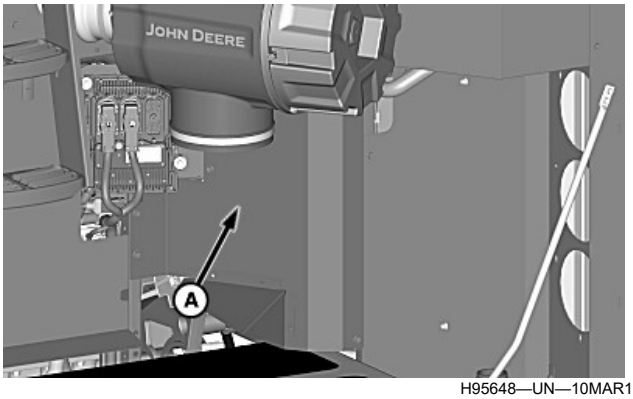
5. Pull latches (A) and open rotary screen door (B).




H110003—UN—18MAR14

**A—Nut (7 used)**
**B—Clamps**
**C—Air Duct**

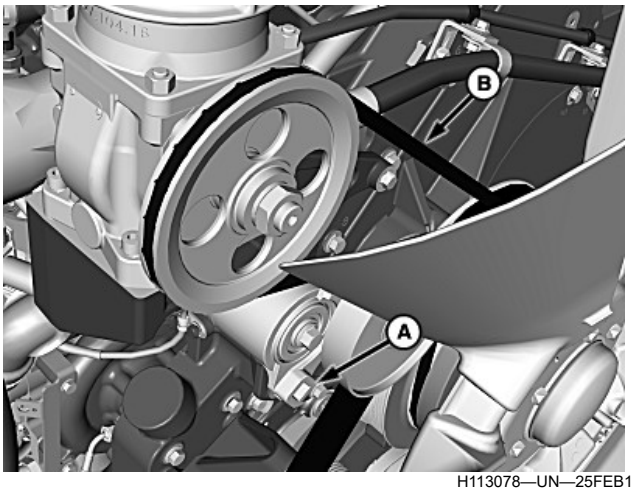
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

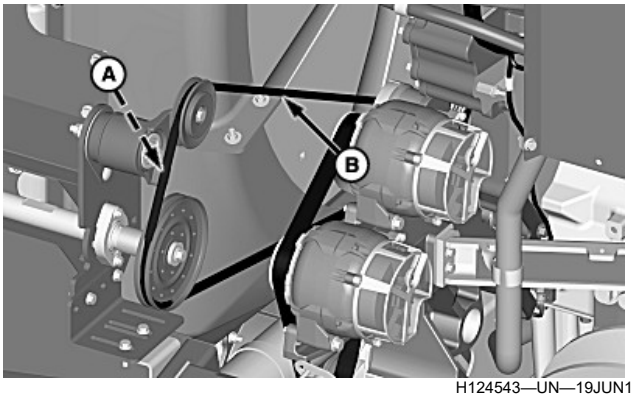
8. Remove shield (A).




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.



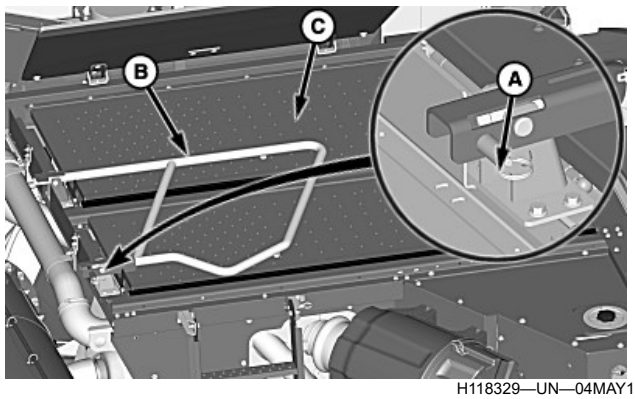

H124543—UN—19JUN18

**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)

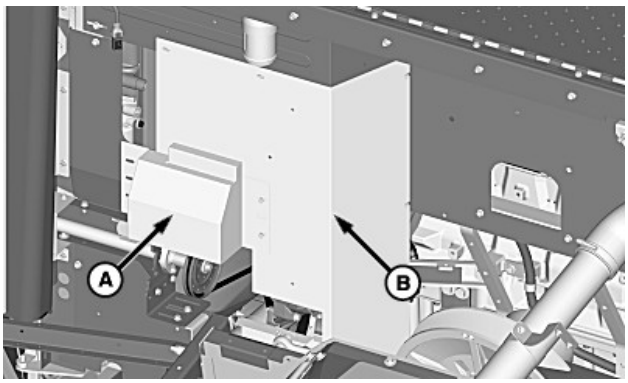



H118329—UN—04MAY16

**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).

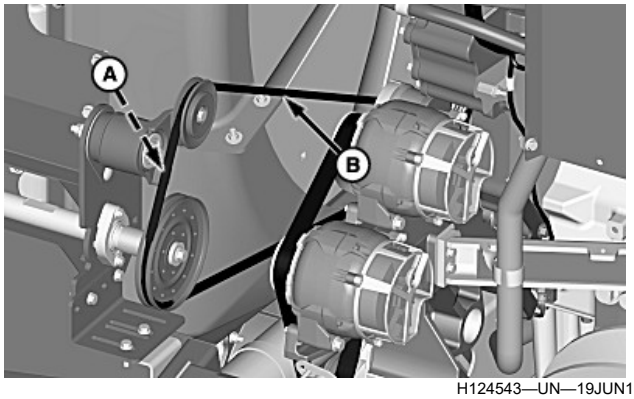



H124542—UN—19JUN18

*Front Side Of Engine*

**A—Shield**
**B—Shield**

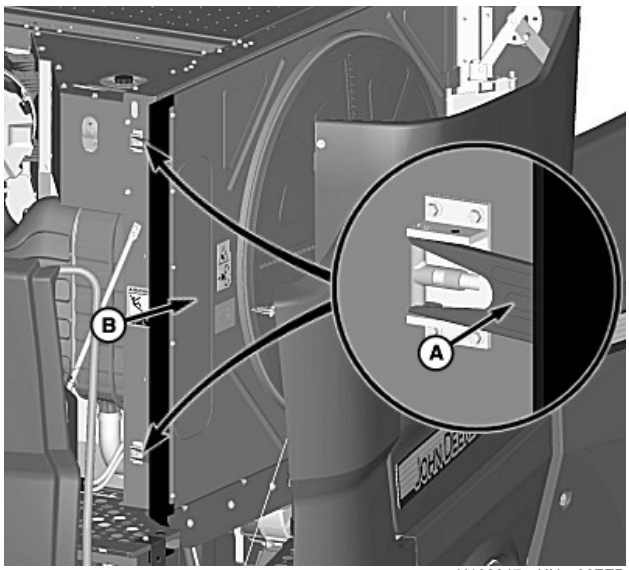
2. Remove shield (A) and shield (B).




H124543—UN—19JUN18

**A—Tensioner Arm**
**B—Rotary Screen Drive Belt**

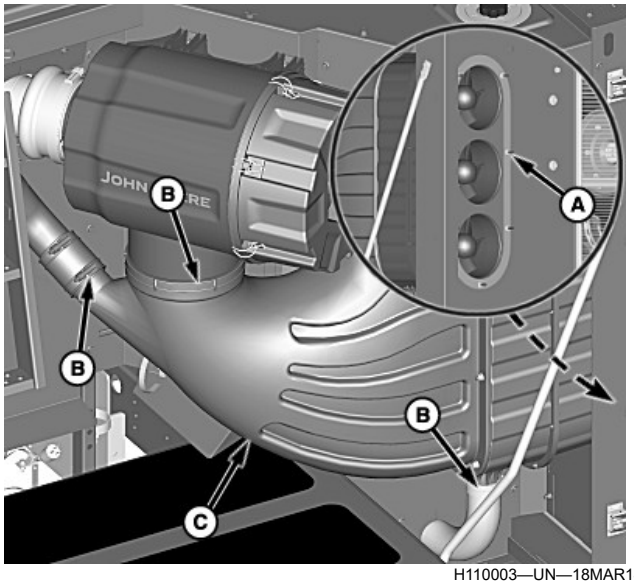
3. Use breaker bar to relieve belt tension from the tensioner arm (A).
4. Remove rotary screen drive belt (B).




H106847—UN—08FEB13

**A—Latches**
**B—Rotary Screen Door**

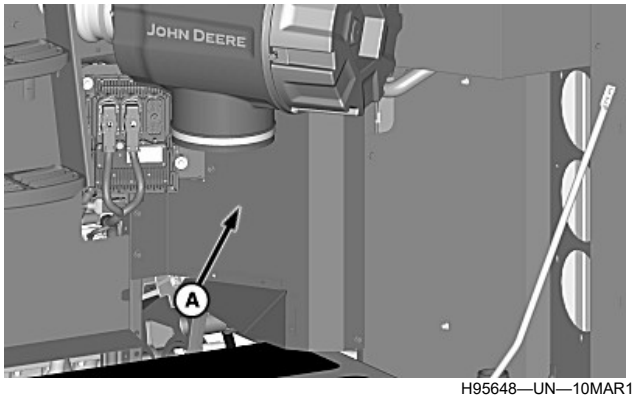
5. Pull latches (A) and open rotary screen door (B).




H110003—UN—18MAR14

**A—Nuts (7 used)**
**B—Clamps**
**C—Air Duct**

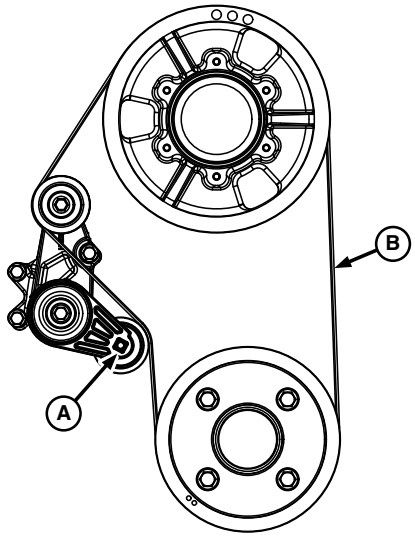
6. Remove nuts (A) and loosen hose clamps (B).
7. Lay air duct (C) out of the way.




H95648—UN—10MAR10

**A—Shield**

8. Remove shield (A).



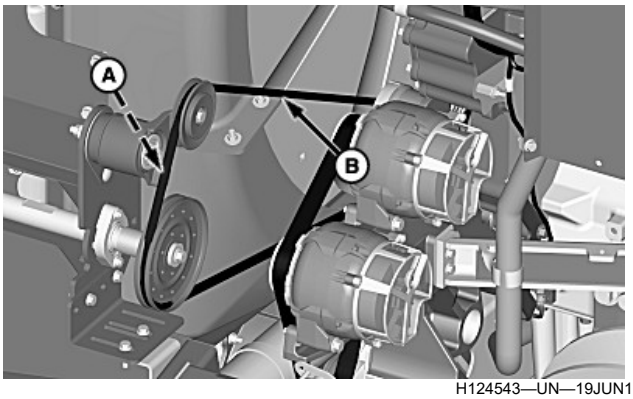

H99551—UN—06JAN11

*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.



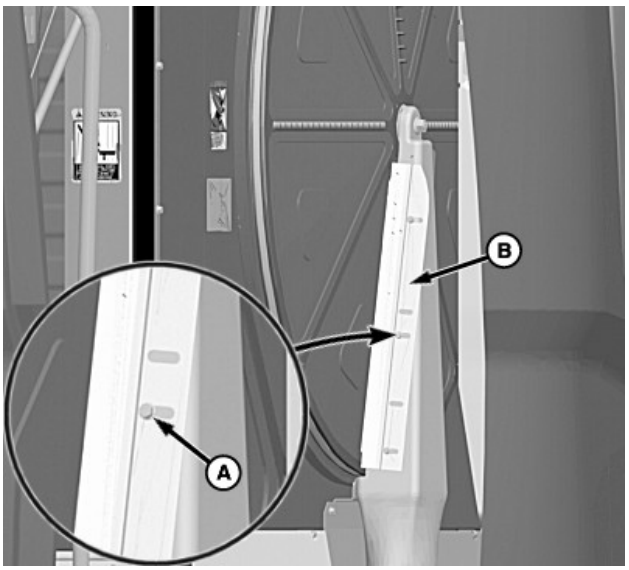

H124543—UN—19JUN18

**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



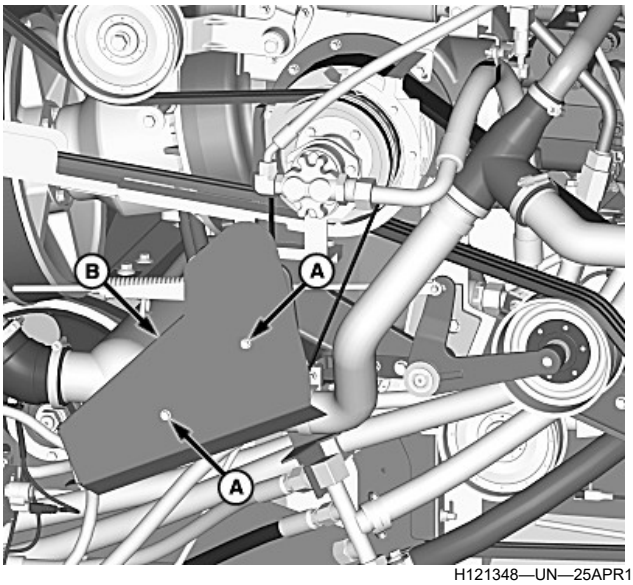

H95350—UN—15FEB10

**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)



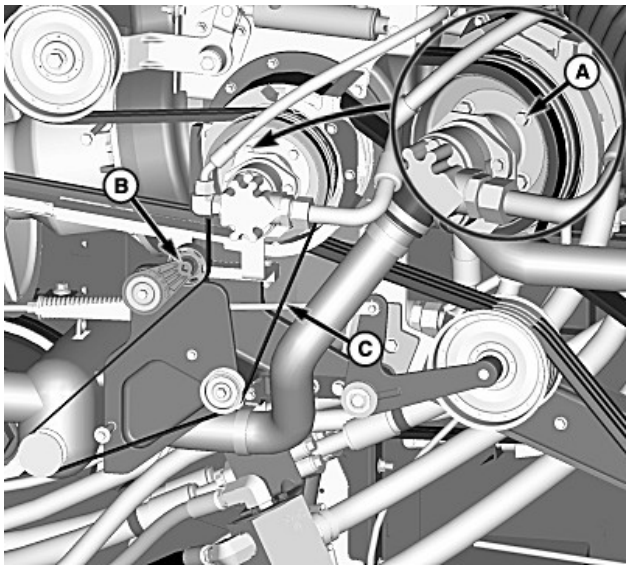

H121348—UN—25APR17

**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. |

*VisionTrak is a trademark of Deere & Company*
*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. |

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## 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. |

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## 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.<br><br>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. |

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## 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.

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## 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<br>Tier 2/Stage II Engine | 9.0 L<br>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<br>Second Gear: 535 rpm<br>Third Gear: 590 rpm<br>Fourth Gear: 665 rpm<br>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 |

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## 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<br>Second Gear: 535 rpm<br>Third Gear: 590 rpm<br>Fourth Gear: 665 rpm<br>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)<br>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)<br>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<br>Tough Crop: 8<br>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<br>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<br>Tough Crop: 8 | Tough Crop: 8 |

| **Grain Tank** | |
|---|---|
| Capacity | 10 572 L (300 bu) Extensions<br>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<br>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)<br>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)<br>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<br>Tough Crop: 8<br>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<br>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<br>Tough Crop: 8 | Tough Crop: 8 |

| **Grain Tank** | **S780, S785, and S790** |
|---|---|
| Capacity | 14 096 L (400 bu) Extensions<br>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<br>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<br>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<br>23.0 L (24.3 qt) Dual Wheel Configuration<br>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<br>11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Rigid and Power Fold Unloading Auger<br>11.72 m (38 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger<br>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<br>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<br>7.66 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Rigid Unloading Auger<br>7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger<br>8.97 m (29 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger<br>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<br>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<br>5.48—5.58 m (18 ft 0 in—18 ft 4 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>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<br>4.61—4.71 m (15 ft 2 in—15 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>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<br>4.91—5.01 m (16 ft 1 in—16 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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.*

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## 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<br>11.02 m (36 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger<br>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<br>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<br>7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger<br>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<br>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<br>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<br>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<br>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<br>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<br>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<br>11.72 m (38 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>11.98 m (39 ft 4 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger<br>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<br>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<br>7.67 m (25 ft 2 in) with 6.9 m (22 ft 6 in) Power Fold Unloading Auger<br>8.97 m (29 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>8.72 m (28 ft 7 in) with 7.9 m (26 ft 0 in) Power Fold Unloading Auger<br>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<br>5.48—5.58 m (18 ft 0 in—18 ft 4 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>4.61—4.71 m (15 ft 2 in—15 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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<br>4.91—5.01 m (16 ft 1 in—16 ft 5 in) with 7.9 m (26 ft 0 in) Rigid Unloading Auger<br>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<br>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™)

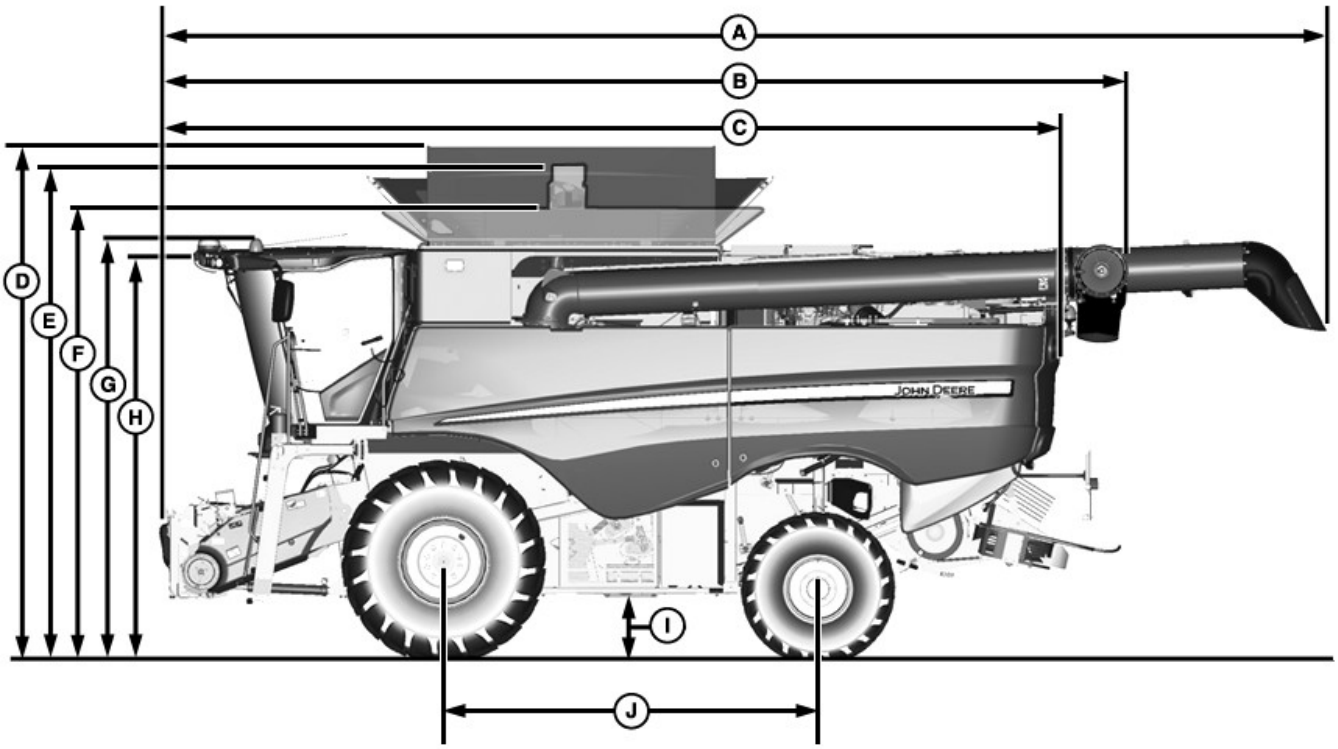
*NOTE: Dimensions are approximate and subject to change without notice.*

| 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<br>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<br>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<br>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<br>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<br>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<br>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 |

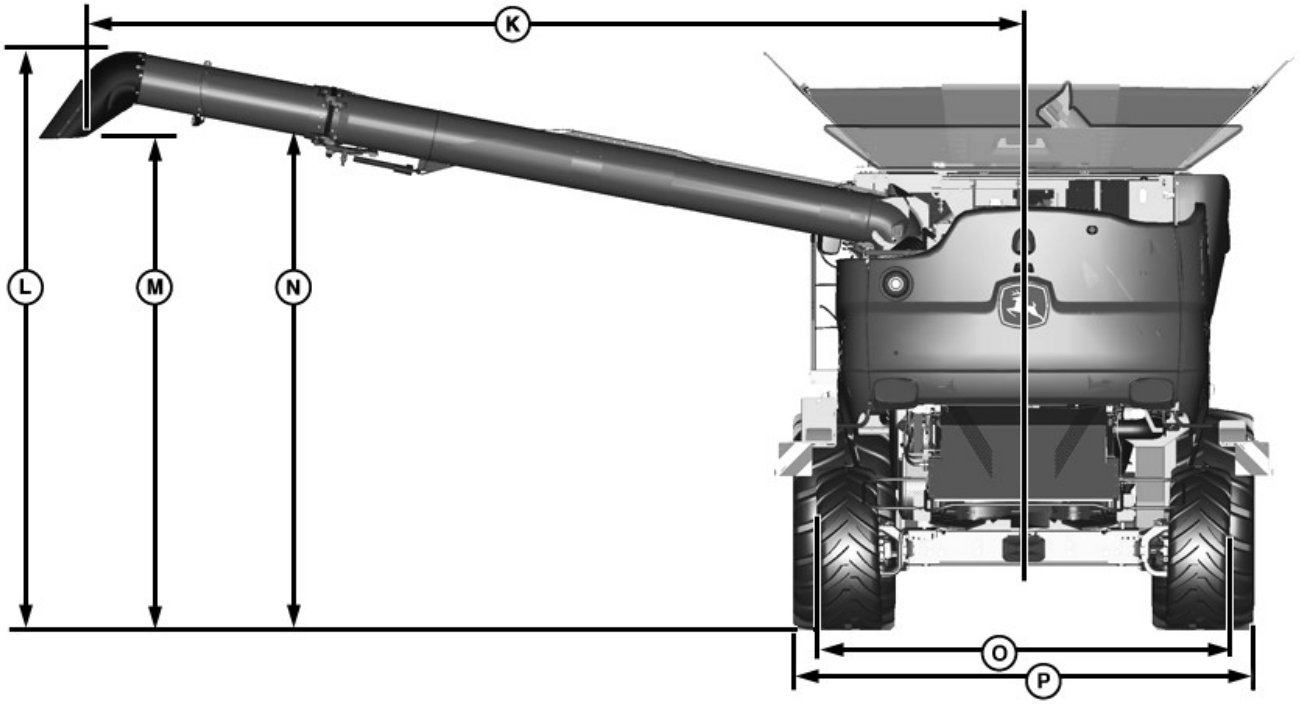
*[a] Dimension is measured 1.22 m (4 ft) from the grain spill point. This represents the unloading auger when centered over the grain cart.*
*[b] Due to the different tire configurations, row spacings, axle configurations, wheel offsets, axle positions, and spindles types, machine widths vary. Measurements 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




H107111—UN—28FEB13




H107112—UN—28FEB13
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

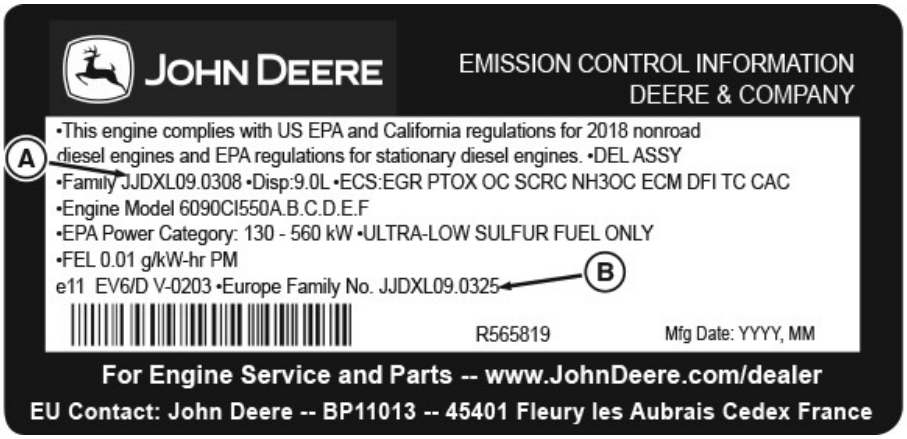
## Fluorinated Greenhouse Gas

| 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 |

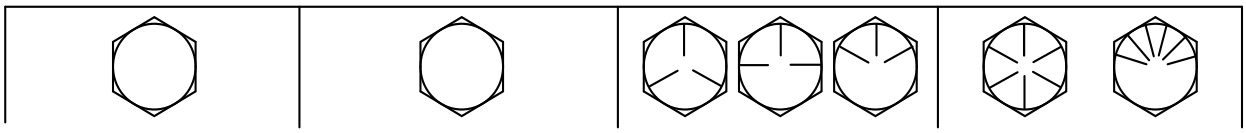
| Emissions Label Family | $CO_2$ Result |
|---|---|
| _JDXL04.5337 | 819 g/kW-hr |
| _JDXL04.5338 | 682 g/kW-hr |
| _JDXL04.5304 | 1004 g/kW-hr |
| _JDXN04.5174 | 792 g/kW-hr |
| _JDXL06.8324 | 720 g/kW-hr |
| _JDXL06.8328 | 683 g/kW-hr |
| _JDXL06.8336 | 701 g/kW-hr |
| _JDXN06.8175 | 771 g/kW-hr |
| _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

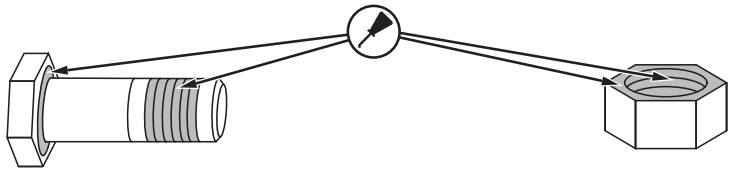
| Bolt or Screw Size | SAE Grade 1[a] | | | | SAE Grade 2[b] | | | | SAE Grade 5, 5.1 or 5.2 | | | | SAE Grade 8 or 8.2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hex Head[c] | | Flange Head[d] | | Hex Head[c] | | Flange Head[d] | | Hex Head[c] | | Flange Head[d] | | 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] |

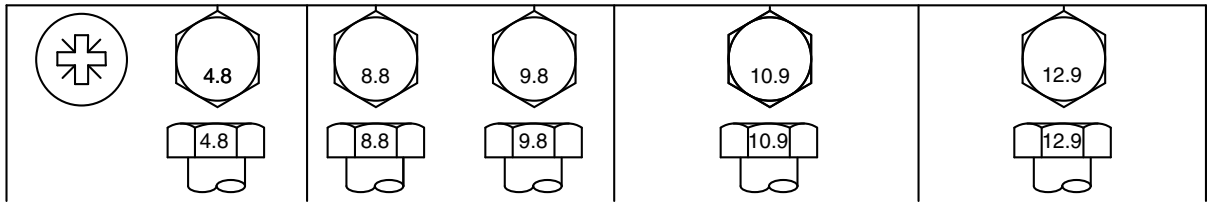


TS1741—UN—22MAY18

[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

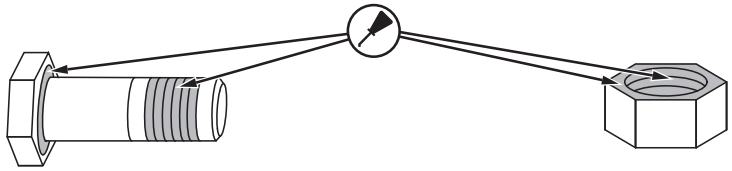
| Bolt or Screw Size | Class 4.8 | | | | Class 8.8 or 9.8 | | | | Class 10.9 | | | | Class 12.9 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hex Head[a] | | Flange Head[b] | | Hex Head[a] | | Flange Head[b] | | Hex Head[a] | | Flange Head[b] | | Hex Head[a] | | Flange 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. | | | | | | | | |



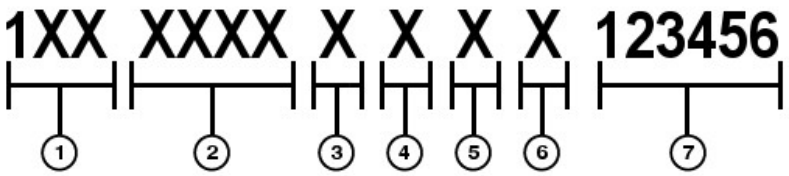
TS1741—UN—22MAY18

*[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<br>H0 - John Deere Harvester Works<br>JZ - John Deere Domodedovo<br>KM - Machinenfabrik Kemper GmbH & Co. KG<br>PY - John Deere India Pvt. Ltd | SA - SABO Maschinenfabrik GmbH<br>YC - John Deere (Jiamusi) Agricultural Machinery Co., Ltd.<br>YH - John Deere (Harbin) Agriculture Machinery Co., Ltd<br>Z0 - John Deere Werke Zweibrucken |
| 2 | Machine Model Identifier | | |
| 3 | Model Identifier Suffix<br>Machine Configuration Code<br>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 |

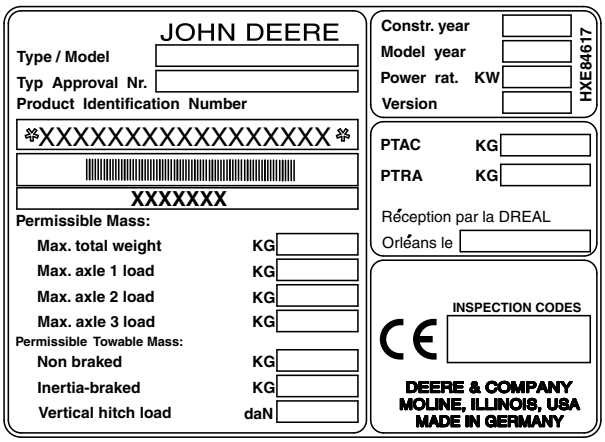
OUO6075,000431C-19-29JUN16

## 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.

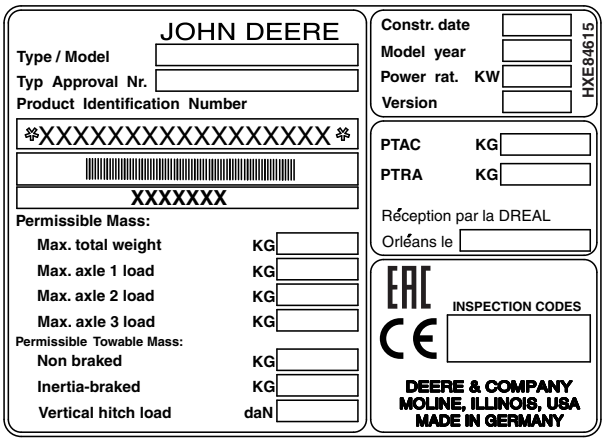
OUO6075,0000BE0-19-04MAY11

## Machine Identification Plate




H111480—UN—08JUL14

*Sample Identification Plate*



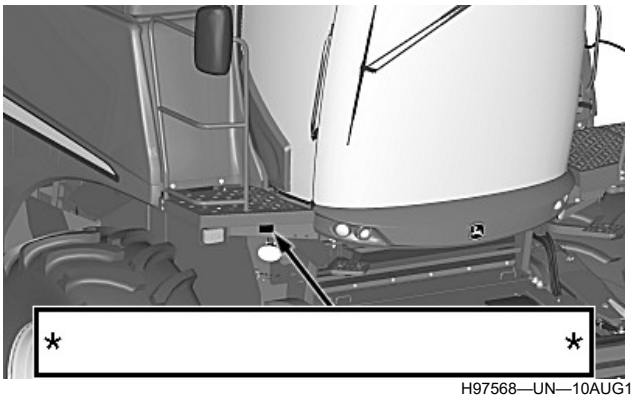

H111516—UN—09JUL14

*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

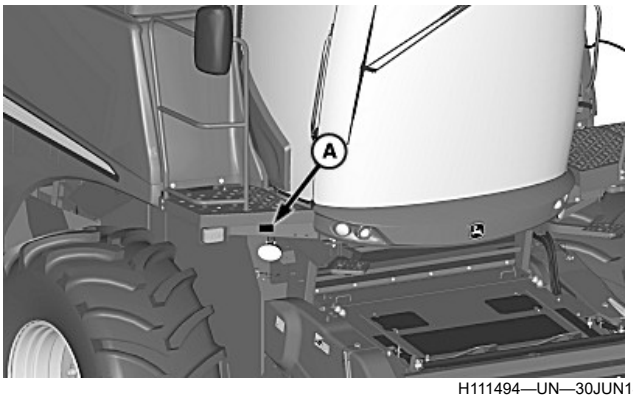


H97568—UN—10AUG10

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)**

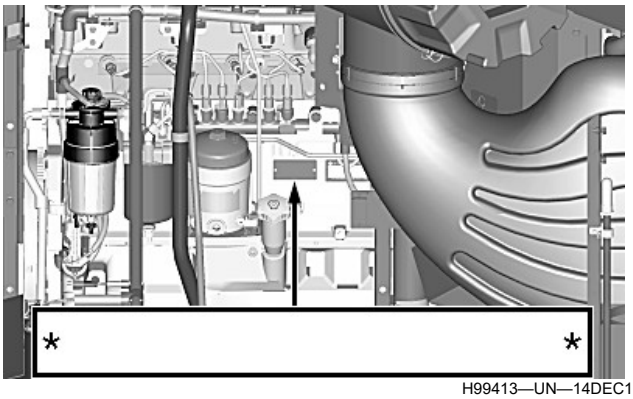
- XX . . . Other letters are used to identify John Deere Equipment manufacturing locations

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

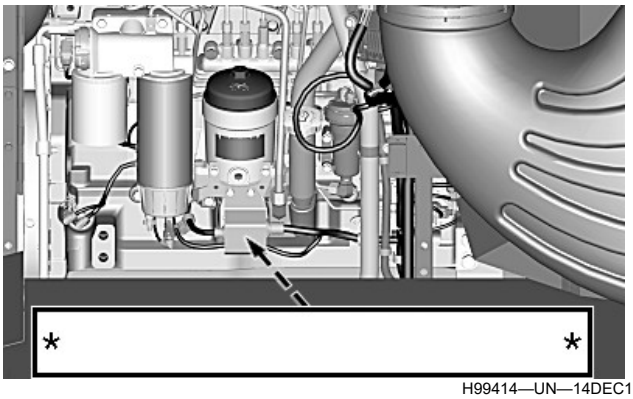
*Style B*

Style A: located on rear side of engine.

Style B: located on front side of engine above starter.

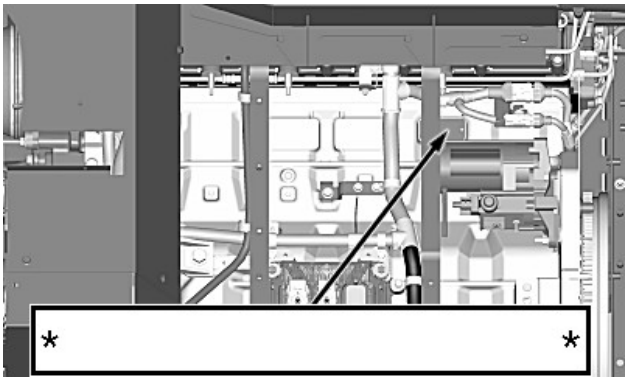
OUO6075,00044A4-19-14NOV16

## Engine Serial Number (Final Tier 4/Stage V)



H99414—UN—14DEC10

*Style A*



H99415—UN—14DEC10

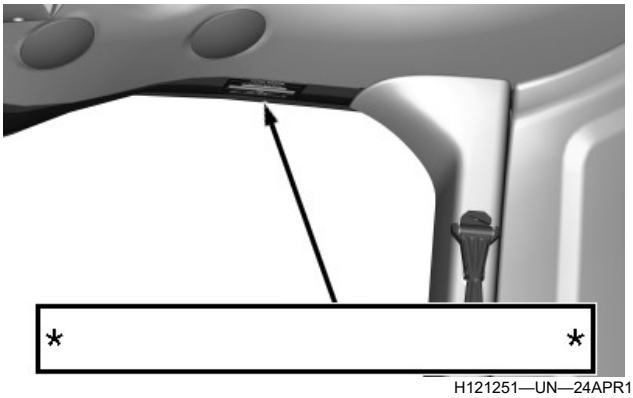
*Style B*

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

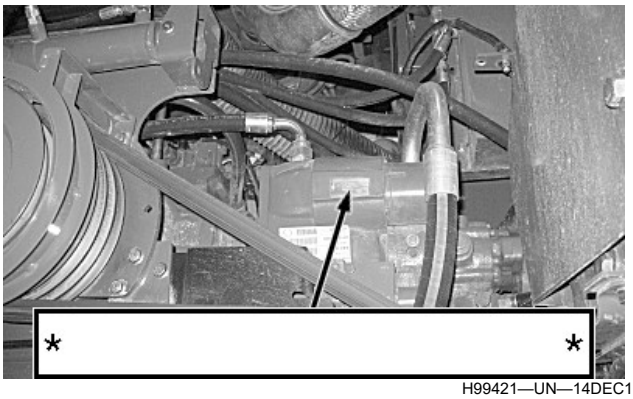


H121251—UN—24APR17

Located in the upper rear right-hand corner of the cab.

OUO6075,0004716-19-13APR17

## Hydrostatic Drive Unit Pump



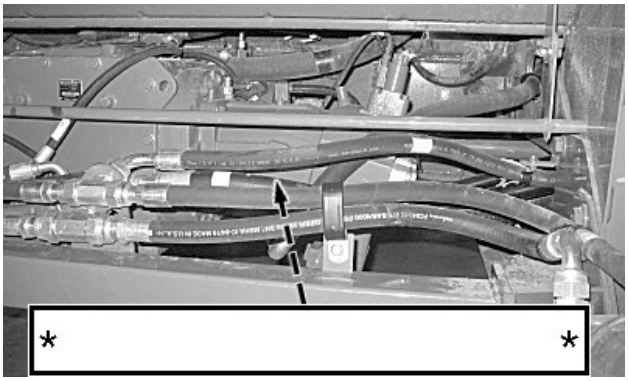
H99421—UN—14DEC10

*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

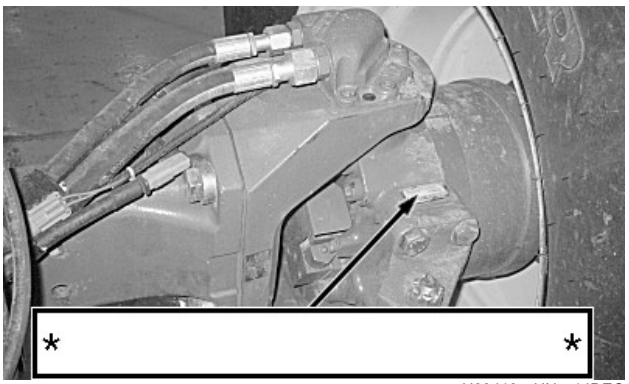
*ProDrive Machine Shown*

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

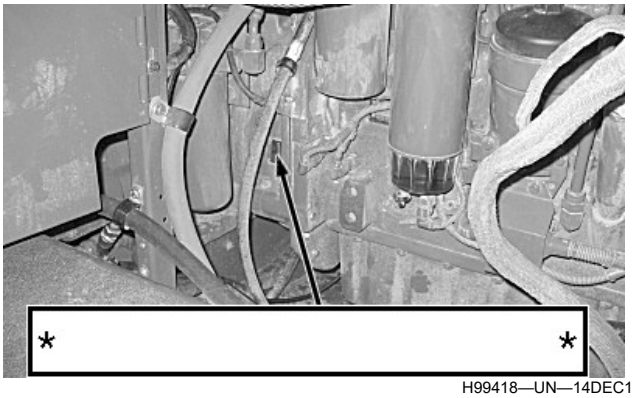


H99419—UN—14DEC10

Located on top side of four-wheel drive motor.

OUO6075,0000AF4-19-14APR11

## Engine Gear Case

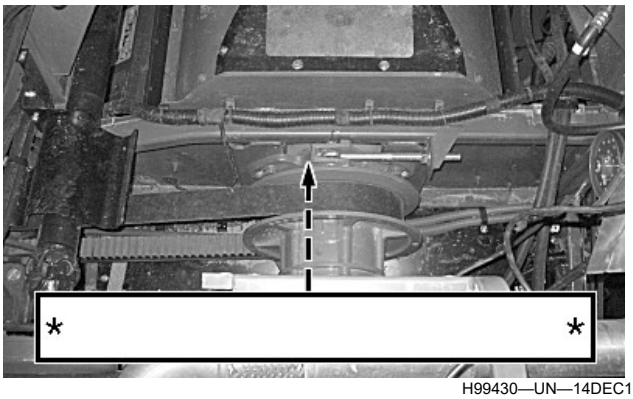


H99418—UN—14DEC10

Located on the rear side of the engine gear case.

OUO6075,00046E7-19-28MAR17

## Rotor Drive Gear Case

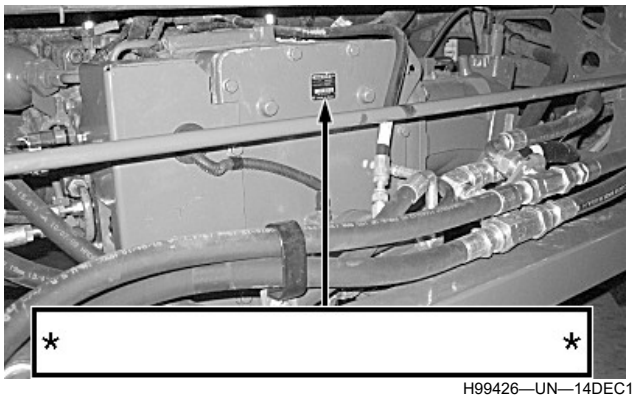


H99430—UN—14DEC10

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

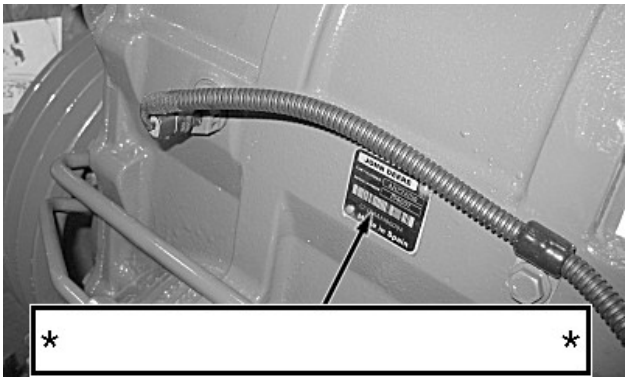


H99432—UN—14DEC10

Located on top side of feeder house reverser.

OUO6075,0000AF9-19-14DEC10

## Multi-Speed Feeder House Gear Case (If Equipped)

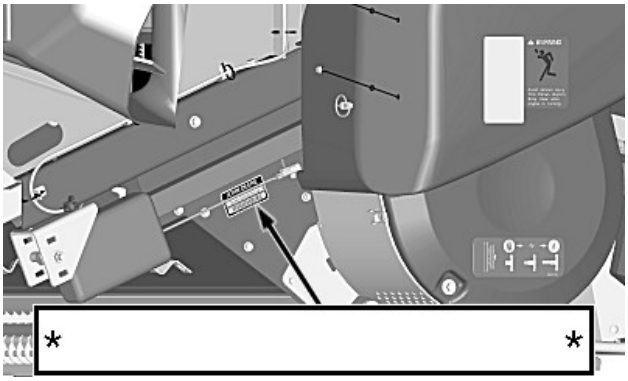


H99431—UN—14DEC10

Located on the rear side of the multi-speed feeder house gear case.

OUO6075,00046E9-19-28MAR17

## Chopper (If Equipped)

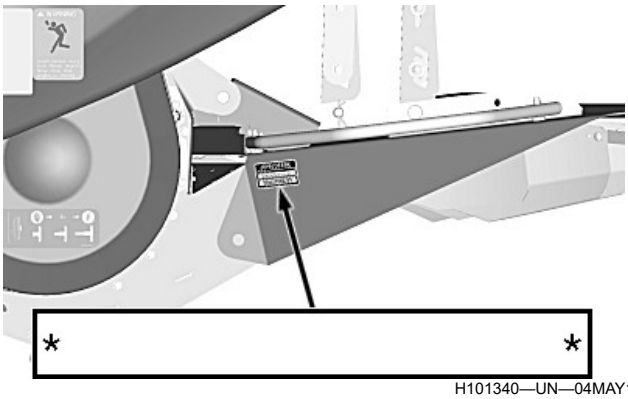


H101339—UN—04MAY11

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)

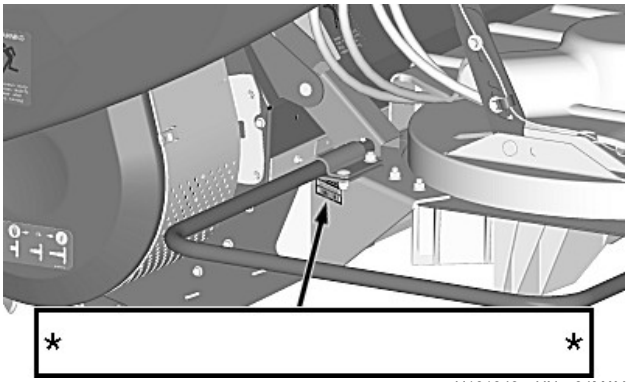


H101342—UN—04MAY11

Located on left-hand side of Advanced PowerCast™ tailboard.

OUO6075,0001821-19-28MAY14

## PowerCast Tailboard (Deluxe Residue)



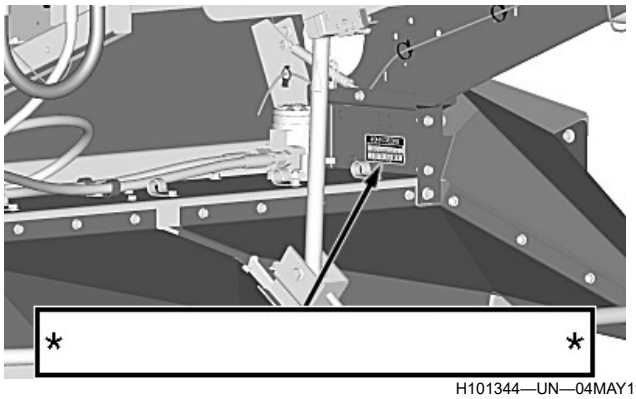
H101343—UN—04MAY11

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

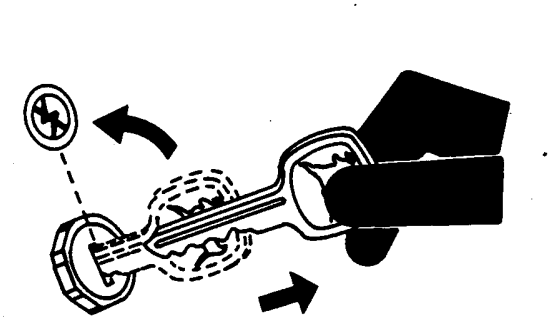



TS1680—UN—09DEC03

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

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# 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:



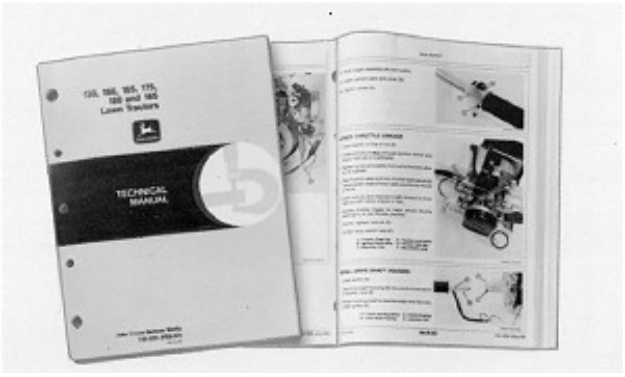
TS189—UN—17JAN89

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

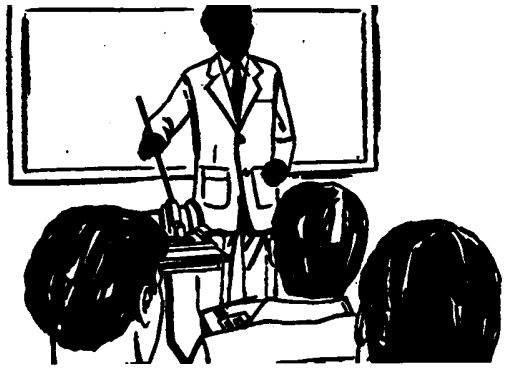


TS101—UN—23AUG88

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!

DX,IBC,C-19-04JUN90

## 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.

DX,IBC,D-19-04JUN90