

V451M and V461M ISOBUS Round Balers



JOHN DEERE

OPERATOR'S MANUAL

V451M and V461M ISOBUS Round Balers

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John Deere Arc-lès-Gray

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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 the implement will travel when going forward.

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specifications or Serial Number 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.

BEFORE DELIVERING THIS MACHINE, your dealer performed a predelivery inspection. After operating for the first 100 hours, schedule an after-sale inspection with your dealer to ensure best performance.

THIS ROUND BALER 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 ROUND BALER 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 round baler 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 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, and select the dealer of your choice.

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Predelivery Inspection

The following checks, adjustments and service jobs were performed prior to delivery of the machine:

1. ☐ Wheel nuts have been tightened to specified torque. See Check Wheel Nut Torque in Preparing the Baler section.
2. ☐ Tire pressure has been checked and adjusted (if necessary). See Tire Inflation in Preparing the Baler section.
3. ☐ Tongue frame and trailer hitch fixing screws have been tightened to specified torque. See Every 100 Hours or Yearly: Check Tongue Frame and Hitch in Lubrication and Maintenance section.
4. ☐ Gear case oil level checked and topped up (if necessary). See Lubrication and Maintenance section.
5. ☐ All grease fittings lubricated. See Lubrication and Maintenance section.
6. ☐ Chains are correctly tensioned and lubricated.
7. ☐ Tracking of belts checked. See Adjust Tracking of Belts in Service section.
8. ☐ Baler belts are in contact with lower gate roll.
9. ☐ Switches and sensors correctly adjusted. See Service section.
10. ☐ Hydraulic hoses and connections have been checked and are free of leaks.
11. ☐ Paint and decals are smooth and neat.
12. ☐ Net roll tensioning springs set to 20.5 mm (3/4 in). See Check Net Feed Roll Pressure (Test 3) in Service section.
13. ☐ The net knife has been wiped.
14. ☐ Talc to rubber coated net roll has been applied.
15. ☐ Battery harness has been installed (if necessary).
16. ☐ Test run of the machine has been made.
17. ☐ Gate opens and closes freely.
18. ☐ Monitor is functioning properly.
19. ☐ Hydraulic gate lock device is functioning properly.
20. ☐ The precutter device is functioning properly.
21. ☐ Operator's manual has been given to customer.
22. ☐ All controls and safety rules have been explained to the customer.

Date:

Signature Dealer/Service Technician:

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Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

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John Deere Service Literature Available

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Identification View

Identification View



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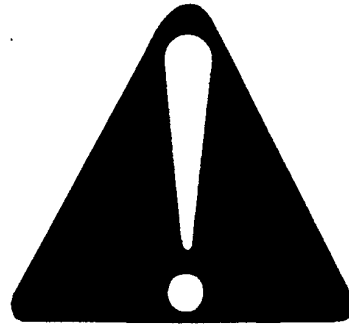
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Safety

Recognize Safety Information

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.



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DX,ALERT -19-03OCT22-1/1

Follow Safety Instructions

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.



TS201 —UN—15APR13

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

DX,READ -19-01AUG22-1/1

Understand Signal Words

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 -19-05OCT16-1/1

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Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.



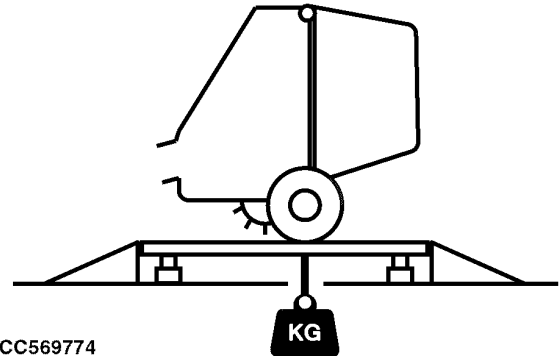
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FX,ROAD -19-01MAY91-1/1

Machine Weight

Any modification of the machine may impact the conformity of the machine to meet local traffic regulation.

Do not modify the machine nor add any non-genuine John Deere parts onto the machine.



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Store Attachments Safely

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.



TS219 — UN—23AUG88

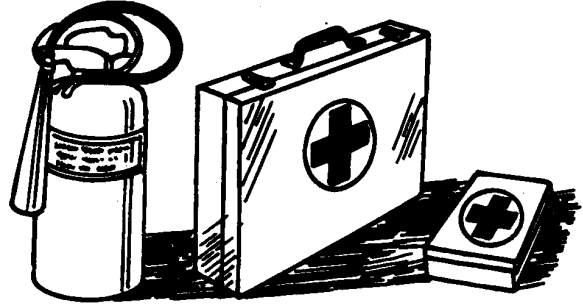
DX,STORE -19-03MAR93-1/1

Prepare for Emergencies

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.



TS291 —UN—15APR13

DX,FIRE2 -19-03MAR93-1/1

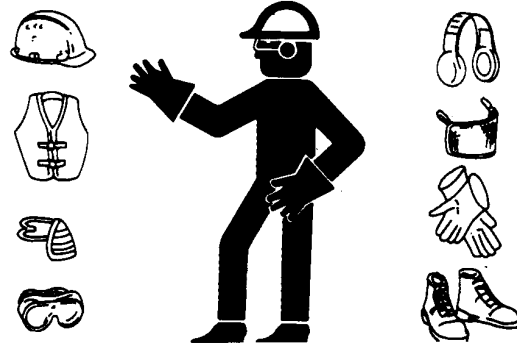
Wear Protective Clothing

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

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

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

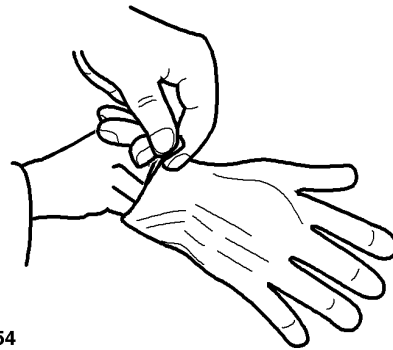


TS206 —UN—15APR13

DX,WEAR -19-10SEP90-1/1

Handle Knives

Prevent personal injury by wearing safety gloves to handle knives.



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Check Machine Safety

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

FX,READY -19-28FEB91-1/1

Stay Clear of Rotating Drivelines

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Only use power take-off driveshafts with adequate guards and shields.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

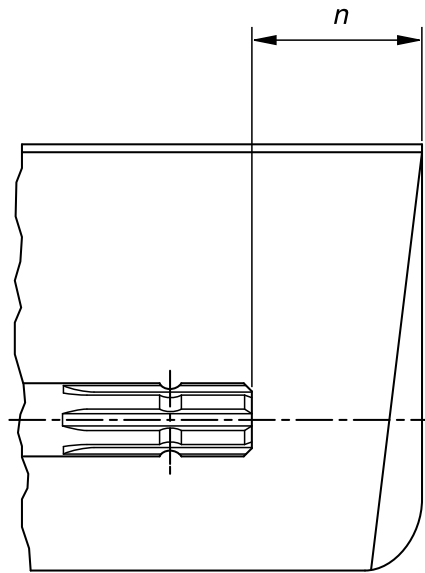
Do not install any adapter device between the tractor and the primary implement PTO driveshaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

The angle at which the primary implement PTO driveshaft can be inclined may be reduced depending on the shape and size of the tractor master shield and the shape and size of the guard of the primary implement PTO driveshaft.

Do not raise implements high enough to damage the tractor master shield or guard of primary implement PTO driveshaft. Detach the PTO driveline shaft if it is necessary to increase implement height. (See Attching/Detaching PTO Driveline)

When using Type 3/4 PTO, inclination and turning angles may be reduced depending on type of PTO master shield and coupling rails.



PTO Type	Diameter	Splines	$n \pm 5 \text{ mm (0.20 in.)}$
1	35 mm (1.378 in.)	6	85 mm (3.35 in.)
2	35 mm (1.378 in.)	21	85 mm (3.35 in.)
3	45 mm (1.772 in.)	20	100 mm (4.00 in.)
4	57.5 mm (2.264 in.)	22	100 mm (4.00 in.)

DX,PTO -19-28FEB17-1/1

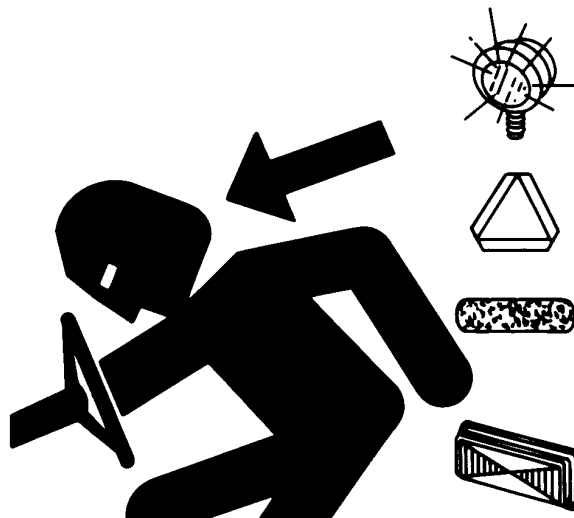
TS1644 —UN—22AUG95

H96219 —UN—29APR10

Use Safety Lights and Devices

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. An implement safety lighting kit is available from your John Deere dealer.



TS951 —UN—12APR90

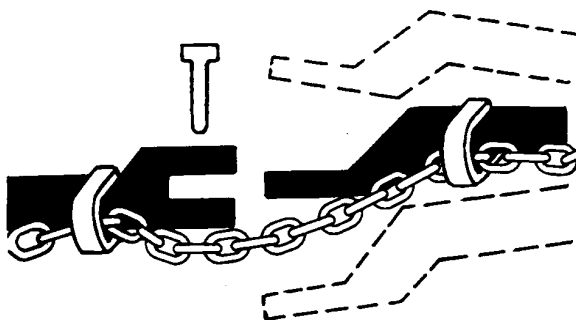
DX,FLASH -19-07JUL99-1/1

Use a Safety Chain

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

See your John Deere dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.



TS217 —UN—23AUG88

DX,CHAIN -19-03MAR93-1/1

Observe Maximum Transport Speed

IMPORTANT: Maximum transport speed is determined by local road traffic regulations and speed capability of this implement.

Always observe local road traffic regulations when driving on public roads.

NOTE: See your John Deere dealer for more information.

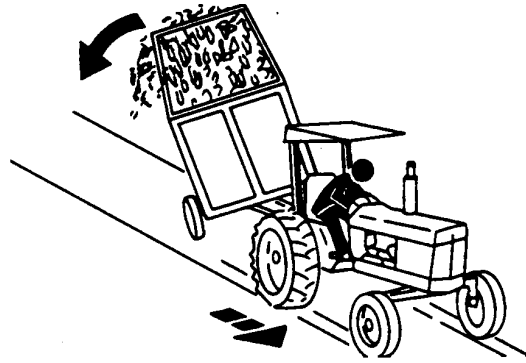
Do not exceed implement gross weight (PTAC) when towing this implement at transport speed.

Some tractors can operate at speeds that exceed the maximum transport speed capability of this implement. Regardless of the maximum speed capability of the tractor being used to tow this implement, do not exceed the implement maximum transport speed.

Maximum transport speed capability for this implement is 40 km/h (25 mph).

For machine equipped with a single-line hydraulic brake system, it is recommended not to exceed 25 km/h (15.5 mph).

Exceeding the implement maximum transport speed can result in:



- Loss of control of the tractor/implement combination
- Reduced or no braking ability
- Implement tire failure
- Damage to the implement structure or its components

Use additional caution and reduce speed when towing under adverse surface conditions, when turning, and when on inclines.

CC03745,000131F -19-26NOV20-1/1

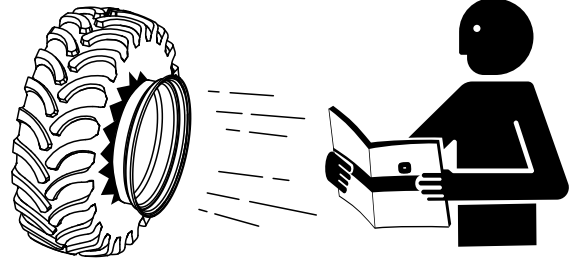
TS216—UN—23AUG88

Follow Tire Recommendations

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 -19-19MAY14-1/1

H111235—UN—13MAY14

Service Tires Safely

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.

RXA0103438 —UN—11 JUN09

DX,WW,RIMS -19-28FEB17-1/1

Check Ballast, Wheel Spacing and Tire Inflation

Make sure ballast, wheel spacing and tire inflation are sufficient to ensure tractor and machine stability in all conditions, especially when operating on hilly fields or in other adverse conditions. Refer to the tractor operator's manual.



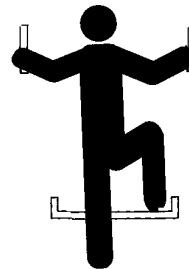
CC1031622 —UN—29MAY09

OUCC006,0001546 -19-29MAY09-1/1

Use Steps and Handholds Correctly

Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.



T133468 —UN—15APR13

DX,WW,MOUNT -19-12OCT11-1/1

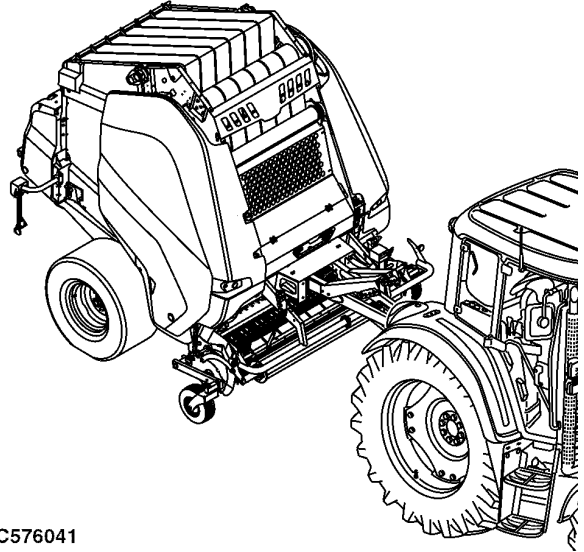
Operate Baler Safely

To avoid injury or death by being pulled into the machine:

DO NOT attempt to feed crop or twine into baler or unplug feed area WHILE BALER IS RUNNING. The baler feeds material faster than you can release it.

Disengage PTO and shut off engine.

Stand clear of baler at all times when machine is operating.



CC576041

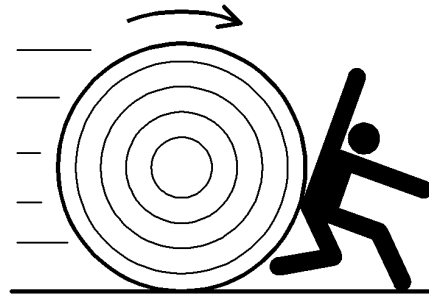
CC576041 —UN—23JUN23

U81334,1687527930084 -19-23JUN23-1/1

Operate Baler Safely on Slopes

Be especially careful when operating on hillsides. The baler may tip sideways if it strikes a hole, ditch, or other irregularity.

To prevent injury or damage from a rolling bale, discharge bales on level ground or in such a manner that the bale will not roll.



CC1038683

CC1038683 —UN—19NOV12

OUECC006,00019C8 -19-16NOV12-1/1

Prevent Fire

To reduce risk of fire, follow these guidelines, especially in dry crop conditions:

- Clean the machine several times during the baling day depending on baling conditions, see [Clean the Machine to Prevent Fire](#) in Operating the Baler—General Purposes section.
 - Do not smoke around the baler or in the fields.
 - Never stop baling with crop material in the bale chamber.
 - Promptly eject bales after they have been tied.
 - Do not use the machine to transport bales.
 - Use extreme care if it is necessary to park the machine in a field. Whenever possible, park the machine on bare ground or in an area surrounded by bare ground.
 - Before leaving the machine which has been operating, verify that there are no areas which are hot enough to start a fire.
 - Do not leave the machine unattended near bales which have been baled wet, because spontaneous combustion can occur.
- Check regularly the condition of bearings, see [Daily: Prevent Fire](#) in Lubrication and Maintenance section.



TS227 —UN—15APR13

If noticeable changes in machine performance occur which indicate a part is beginning to fail, stop baling immediately and investigate the cause of any sounds, smells, or sights which are unusual.

- Equip the machine an extinguisher.
- Follow the fire prevention guidelines for service work, see [Prevent Fire at Each Service](#) in Service section.

GA87848,00009F9 -19-13NOV18-1/1

In Case of Fire

Stop work immediately at first sign of trouble. This may be a scorched smell, an unusual sound, or the sight of smoke or flame.

⚠ CAUTION: Do not risk personal injury. If a fire is too far advanced, do not try to extinguish it. Evacuate as fast as possible the area. Call the fire department.

If you can safely extinguish the fire:

- Position the tractor upwind from the machine to prevent the fire from overtaking the tractor.
- Open the baler gate to eject any crop material from the bale chamber, and drive away from this material.
- Use pressurized water tank or other source of extinguishing agent and direct extinguishing agent at



TS227 —UN—15APR13

the base of the flames, and also cool adjacent parts. Do not position yourself under an open baler gate. It may fall if the machine is on fire.

DC82261,00004DA -19-13AUG14-1/1

Secure Gate Safely

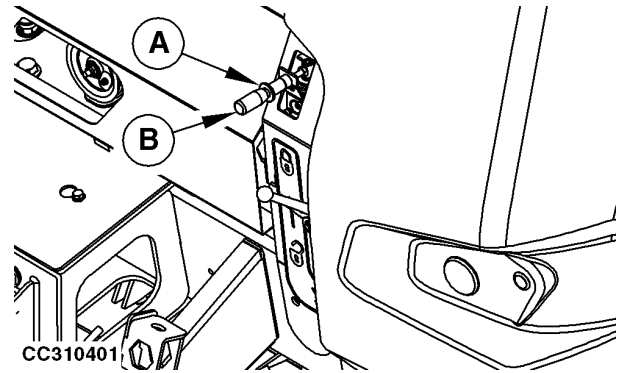
IMPORTANT: Never travel with an open gate at a speed higher than 2 km/h (1.2 mph). Damage to the gate could occur.

Position gate lock device lever (B) in locked position by pulling the lock bushing (A), before working on or around the baler with gate in raised position. Refer to Gate Lock Valve in Operating the Baler-General Purposes section.

To avoid injury, stay clear of gate while it is being raised and lowered.

Make sure area is clear of bystanders before operating the gate.

Remove foreign objects from machine.



A—Lock Bushing

B—Gate Lock Device Lever

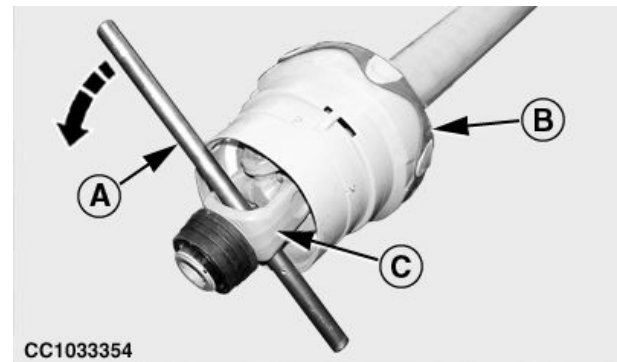
GA87848,00006ED -19-02JUL18-1/1

Service Machine Safely

CAUTION: Never use any type of tool or spanner to turn baler by hand while tractor engine is running. Disengage the PTO, place transmission in PARK, engage park brake, shut off engine, remove ignition key and wait for moving parts to come to a standstill. Always remove tool as soon as you have finished using it.

To aid in servicing the baler, rotate the baler with one of the following method:

- With a prybar (A):
 - a. Disconnect telescoping hook-up (B) from the tractor PTO shaft.
 - b. Insert prybar (A) between yoke (C) and U-joint.
 - c. Use prybar (A) to rotate the baler as shown.
 - d. When process is finished, remove prybar (A).



A—Prybar

B—Telescoping Hook-Up

C—Yoke

ga87848,1678438350545 -19-26APR23-1/2

- With a spanner:
 - a. Disconnect telescoping hook-up from the tractor PTO shaft.
 - b. Install a spanner in the nut (A).
 - c. Use the spanner to rotate the baler.
 - d. When the process is finished, remove the spanner.

A—Nut



ga87848,1678438350545 -19-26APR23-2/2

Maximum Hydraulic Operating Pressure

The baler is designed for a maximum hydraulic operating pressure of 21000 kPa (210 bar, 3045 psi).

Do not connect baler to a tractor with a maximum hydraulic operating pressure over 21000 kPa (210 bar, 3045 psi).

GA87848,0000472 -19-23OCT17-1/1

Practice Safe Maintenance

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.



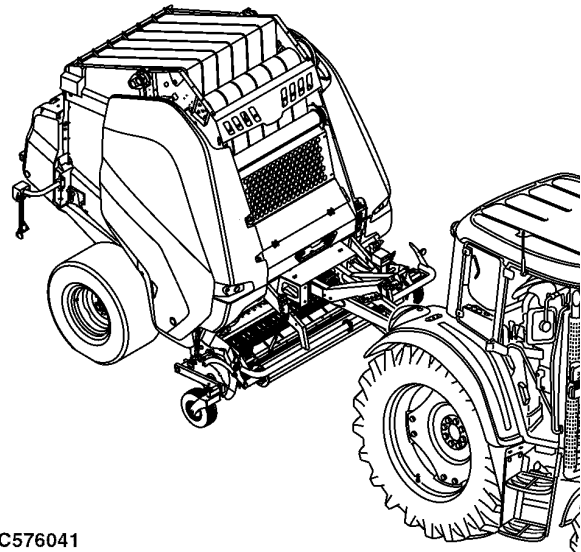
TS218 —UN—23AUG88

DX,SERV -19-28FEB17-1/1

Protect People and Animals

Never allow anyone to walk or work near a running machine.

Be sure that people, livestock or pets are not standing in the working area of the machine while operating.



CC576041

CC576041 —UN—23JUN23

tl81334,1687527998265 -19-23JUN23-1/1

Avoid High-Pressure Fluids

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.

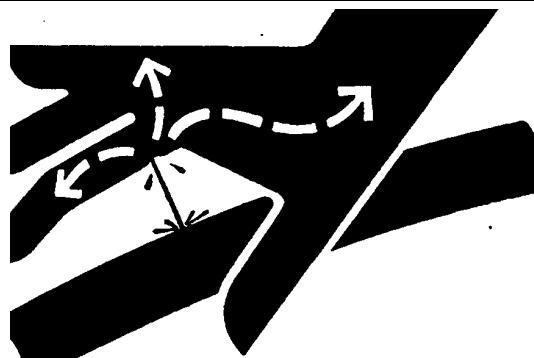
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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.

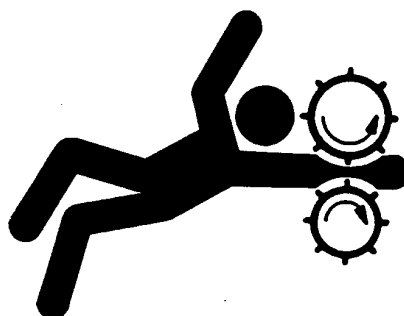
DX,FLUID -19-12OCT11-1/1

X9811 —UN—23AUG88

Service Machines Safely

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



DX,LOOSE -19-04JUN90-1/1

TS228 —UN—23AUG88

Remove Paint Before Welding or Heating

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 -19-24JUL02-1/1

TS220 —UN—15APR13

Avoid Heating Near Pressurized Fluid Lines

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.



TS953 —UN—15MAY90

DX,TORCH -19-10DEC04-1/1

Service Accumulator Systems Safely

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.



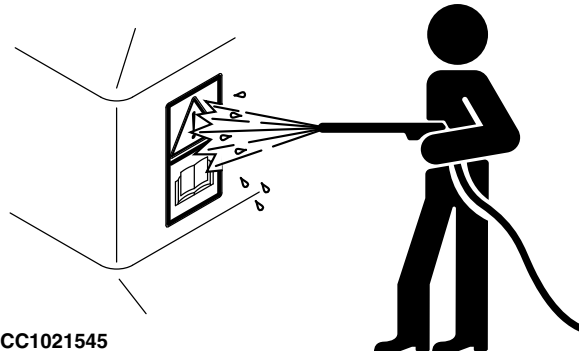
TS281 —UN—15APR13

DX,WW,ACCLA2 -19-22AUG03-1/1

Avoid High-Pressure Jet on Safety Signs

Pressurized water can remove or damage safety signs. Avoid to direct high-pressure jet on safety signs.

Immediately replace missing or damaged safety signs. Replacement safety signs are available from your John Deere dealer.



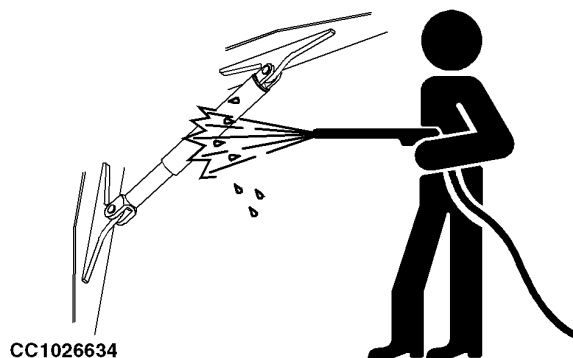
CC1021545

CC1021545 —UN—23APR02

CC03745,0001031 -19-23JUN11-1/1

Avoid High-Pressure Jet on Cylinders

Pressurized water can damage cylinders. Avoid to direct high-pressure jet on cylinders.



CC1026634

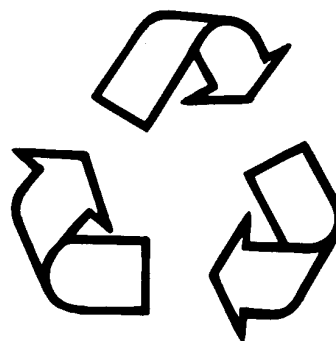
CC1026634 —UN—03DEC04

CC03745,0000FD3 -19-08SEP09-1/1

Decommissioning — Proper Recycling and Disposal of Fluids and Components

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);



TS1133 —UN—15APR13

- 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 -19-01JUN15-1/1

Safety Signs

Pictorial Safety Signs

At several important places of this machine safety signs are affixed intended to signify potential danger. 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.

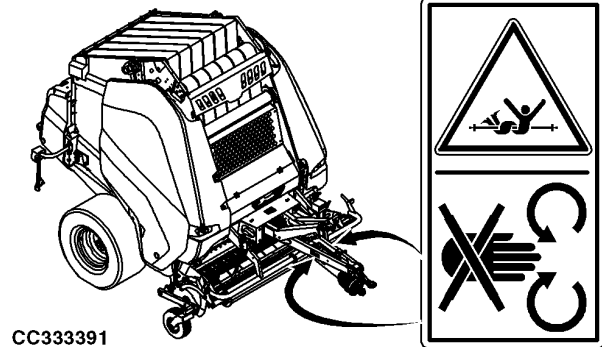


TS231 —19—07OCT88

FX,WBZ -19-19NOV91-1/1

Baler Drive Line

Stay clear of rotating drive line to avoid personal injury.



CC333391

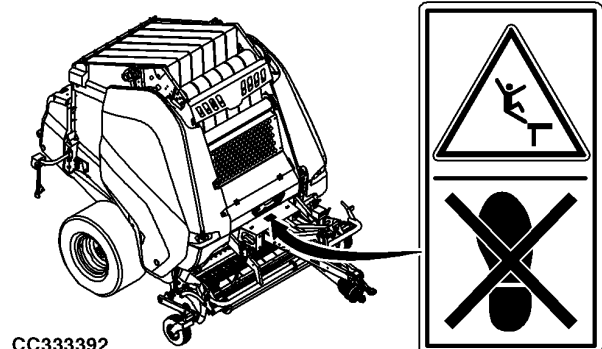
CC333391 —UN—02OCT17

GA87848,000040F -19-02OCT17-1/1

Avoid Fall

When accessing, cleaning or servicing the machine do not climb on the machine.

To prevent fall or slip do not step up on the machine.



CC333392

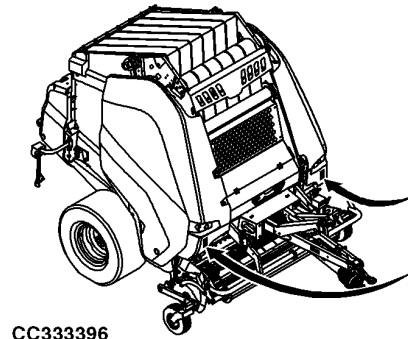
CC333392 —UN—02OCT17

aysdjz,1683635026336 -19-09MAY23-1/1

Pickup

Rotating pickup can catch you faster than you can move away.

Stay clear of rotating pickup as it may result in death or serious injury.



CC333396

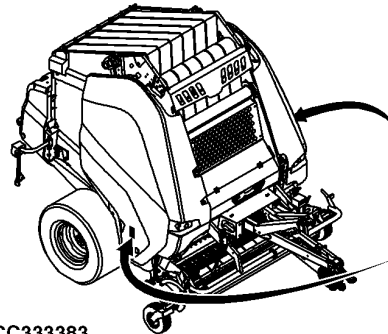


CC333396 —UN—02OCT17

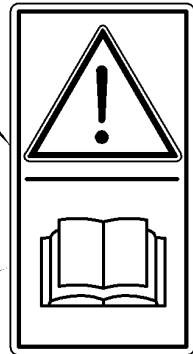
GA87848,000041A -19-02OCT17-1/1

Operator's Manual

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



CC333383

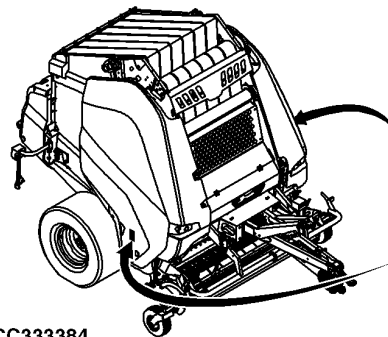


CC333383 —UN—02OCT17

GA87848,000040D -19-02OCT17-1/1

Repair and Maintenance

Before carrying out repair and maintenance work, shut off tractor engine and remove key.



CC333384

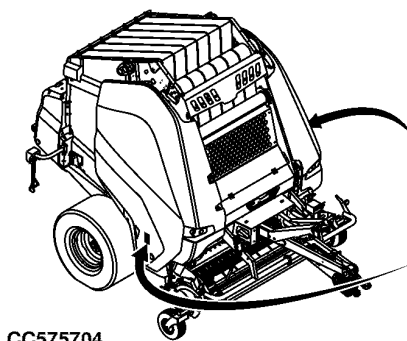


CC333384 —UN—02OCT17

GA87848,000040E -19-02OCT17-1/1

Drive Chains

Do not open or remove guard when the baler is running.



CC575704

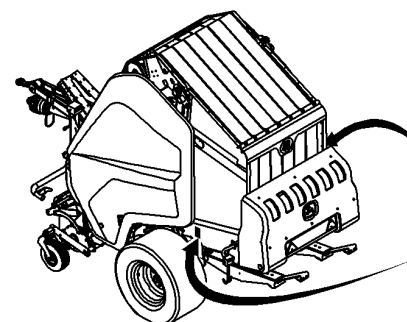


CC575704 —UN—02MAY23

aysdijz,1683017216366 -19-02MAY23-1/1

Belt

Stay clear from belt while machine is running.



CC333388



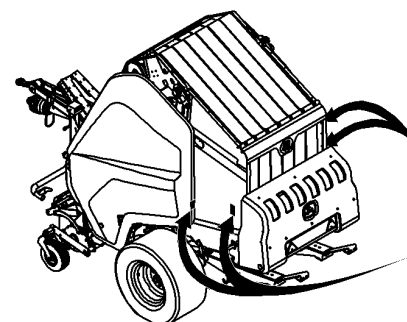
CC333388 —UN—02OCT17

GA87848,0000418 -19-06OCT17-1/1

Gate Safety Lock

Always engage the gate safety lock before working under or around the gate in raised position.

Stand clear before unlocking the gate safety lock.



CC333387



CC333387 —UN—02OCT17

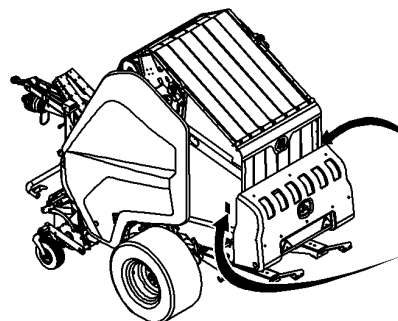
GA87848,0000413 -19-02OCT17-1/1

Raised Gate

Do not allow anyone to walk or work under a raised gate.

Stay clear of raised gate as it could close faster than you can move away and may result in death or serious injury.

Always engage safety lock before working on or around baler with gate in raised position.



CC333386



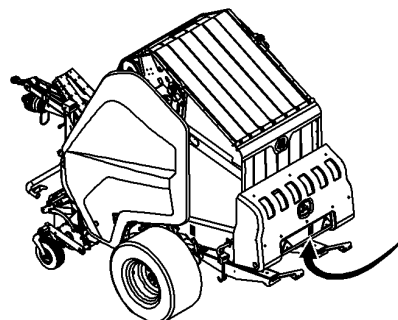
CC333386 —UN—02OCT17

GA87848,0000412 -19-02OCT17-1/1

Bale Unload

Do not allow anyone to walk or work at the rear of the baler.

Stay clear of rear of the baler while a bale is dumped as it may result in serious injury or death.



CC333389



CC333389 —UN—02OCT17

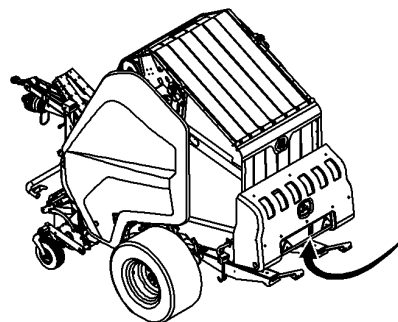
GA87848,0000419 -19-02OCT17-1/1

Opened Gate

Do not allow anyone to walk or work at the rear of the machine.

Stay clear of rear of the baler while the gate is raising.

The gate opens faster than you can move away which may result in death or serious injury.



CC333390

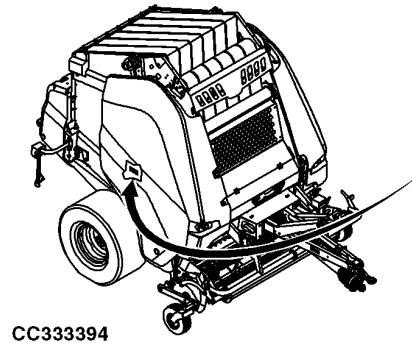


CC333390 —UN—02OCT17

aysdijz,1683636522752 -19-09MAY23-1/1

Compressed Air Tank

The compressed air tank is under pressure. Have the tank removed and repaired by a John Deere dealer only.



CC333394



CC333394 —UN—03OCT17

GA87848,0000416 -19-02OCT17-1/1

Preparing the Tractor

Adjust Drawbar

CAUTION: Before adjustment, always make sure the PTO is switched off, the tractor engine is shut off and the ignition key is removed.

IMPORTANT: Before attaching baler, be sure to adjust drawbar. Make sure that is no interference between PTO shields and hitch device.

Vertically align drawbar hitch pin hole with centerline of tractor PTO shaft.

NOTE: Consider the other types of hitch as drawbar hitch.

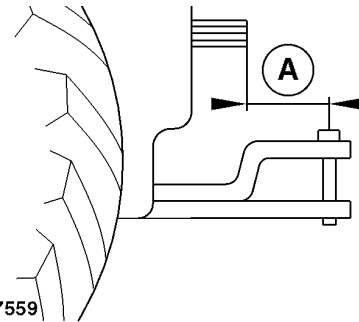
Set drawbar to the following specification:

Specification	
End of PTO	
Shaft-to-Drawbar	
Hitch Pin Hole Axis	
(A)—Distance.....	350 mm maximum (1 ft. 2 in.)

CC577559

A—350 mm (1 ft. 2 in.)

If specification cannot be obtained, see your John Deere dealer.



CC577559—UN—10MAY23

tl81334,1683722581257 -19-10MAY23-1/1

Select Tractor PTO Speed

NOTE: Refer to tag on the front of baler to select tractor PTO speed.

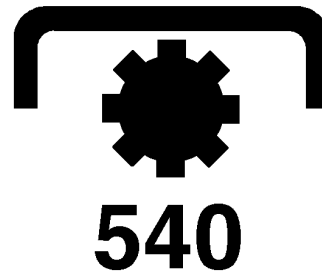
IMPORTANT: Under no circumstances should a baler equipped for 540 rpm PTO drive be operated with a tractor at 750 or 1000 rpm PTO speed.

The tractor PTO shaft size must be 3.5 cm (1-3/8 in).

Always operate the baler with tractor PTO speed at 540 rpm.

Refer to the tractor Operator's Manual to install the appropriate PTO shaft and set the PTO speed.

CC1020007



CC1020007—UN—09JUL01

GA87848,0000421 -19-25OCT17-1/1

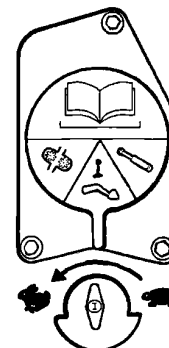
Adjust the Tractor SCV Flow

Set tractor selective control valves to the maximum flow. This flow should allow the gate to open within approximately 5 seconds. See your tractor operator's manual to make adjustments.

Make sure the SCV lever is in neutral position when SCV is not used.

For tractors with detent time, set detent time to 0.

CC000833

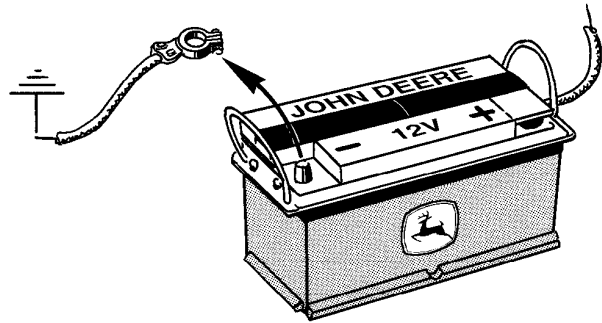


CC000833—UN—05APR95

ga87848,1683116240202 -19-26JUN23-1/1

Round Baler Electrical Circuit and Control Power Supply Requirement

The round baler electrical circuit and control are designed for use on 12 V electrical systems with negative ground.



CC1020363

CC1020363 —UN—23AUG01

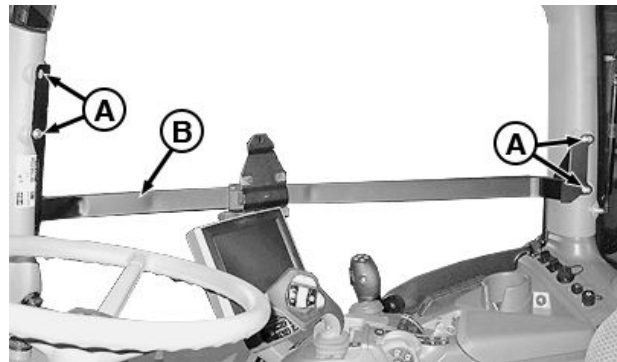
CC03745,0000288 -19-23AUG01-1/1

Install Monitor Support (6000, 6M, 6R, 7000 and 7R Tractors Series)

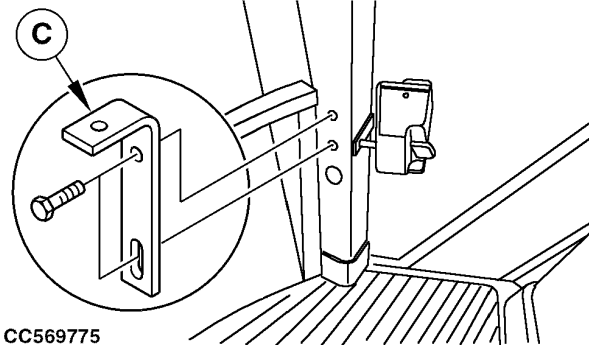
To install monitor to the mounting rail (B) or mounting strap (C), see your tractor Operator's Manual.

A—Mounting Point
B—Mounting Rail

C—Mounting Strap



Mounting Rail



CC569775

Mounting Strap

LX372914 —UN—10JUL20

CC569775 —UN—06APR23

aysdijz,1683710185617 -19-10MAY23-1/1

Install Battery Wiring Harness for Connecting Control Monitor

It is a **MUST** to connect the control monitor to the convenience outlet (A) and special battery harness (B) furnished with the monitor. This will avoid any electrical interferences that could be generated by using only the convenience outlet provided by the tractor. The special harness (B) must be directly connected to the battery straps.

Proceed as follows:

1. Drill a hole into the side wall of the tractor cab, at any convenient place, to install convenience outlet (A).
2. Connect the wires (C), (D), and (E) to the outlet (A) as shown opposite.
3. Route wiring harness (B) through the cab up to the battery.
4. Clamp relevant pins (F), (G), and (H) to the wires. Connect red wire (H) to the positive strap of the battery, red wire (F) to the "ON" position of the dashboard main switch, and black wire (G) to the negative strap of the battery.

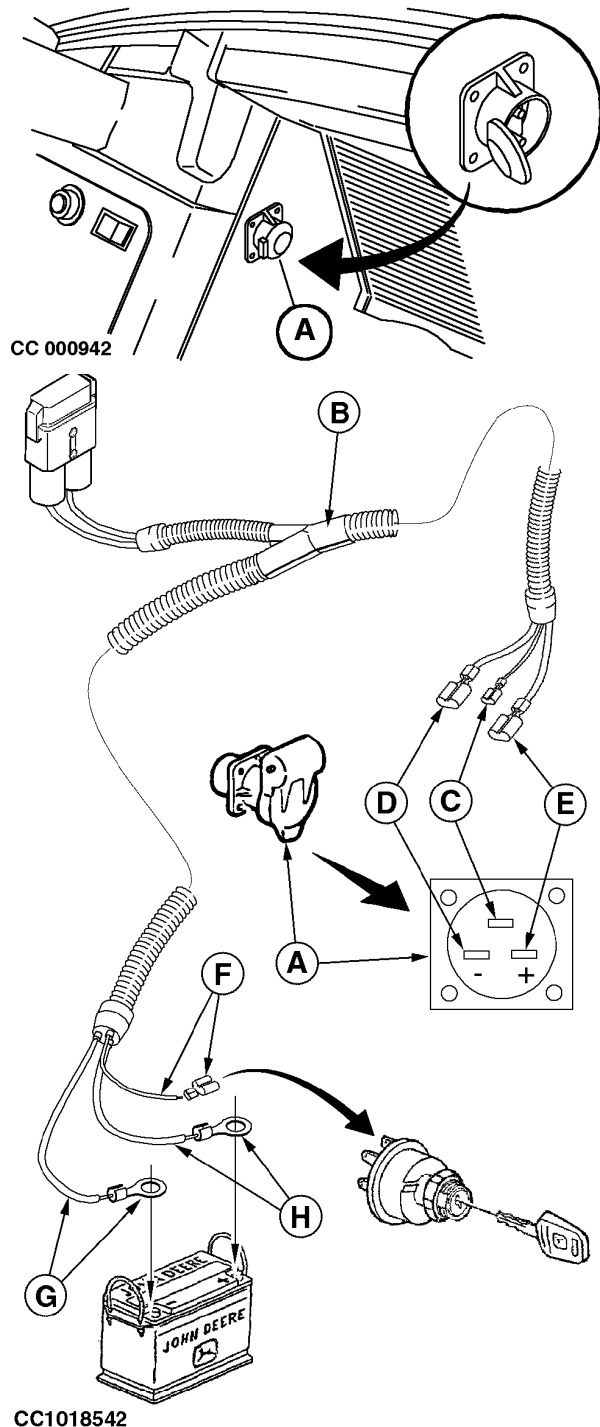
IMPORTANT: Do not connect the positive wires (F) and (H) (RED) to the starter motor solenoid!

NOTE: The special harness (B) is also available as an option for further tractor installation.

NOTE: Disconnect battery wiring harness and monitor wiring harness connector when welding on machine.

A—Convenience Outlet
B—Battery Harness
C—Red Wire (1.5 mm²)
D—Black Wire (6.0 mm²)

E—Red Wire (6.0 mm²)
F—Red (Positive) Wire (1.5 mm²)
G—Black (Negative) Wire (6.0 mm²)
H—Red (Positive) Wire (6.0 mm²)



CC000942 —JUN—05APR95

CC1018542 —JUN—23OCT00

aysdijz,1683706581712 -19-20JUN23-1/1

Install Virtual Terminal (Display) Portable Harness (If Equipped)

IMPORTANT: The convenient power outlet (I) must be connected to the tractor as required.

Make sure tractor convenient power outlet (I) is correctly wired. Wire (B) must be connected to the tractor ignition plus signal.

Connect the virtual terminal (display) portable harness (D) to the following equipment:

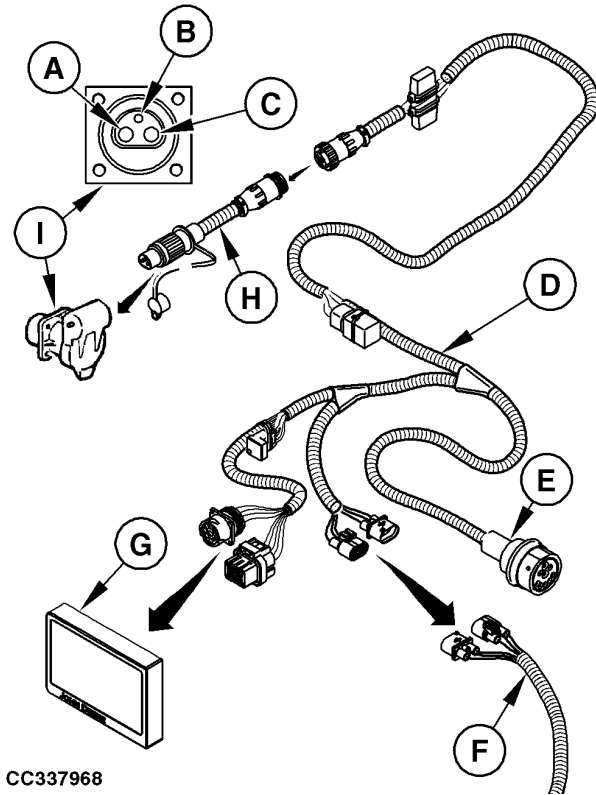
- Power harness (F).
- Monitor (G).
- North America—Europe adapter (H).

Connect the North America—Europe adapter (H) to the convenient power outlet (I).

Place the connector for machine wiring harness (E) out of the cab.

IMPORTANT: Before disconnecting the virtual terminal (display) portable harness, wait that the monitor is fully shut down.

- | | |
|---|--------------------------------|
| A—Red Wire (6 mm ²) | F—Power Harness |
| B—Red (Positive) Wire (1.5 mm ²) | G—Monitor |
| C—Black (Negative) Wire (6 mm ²) | H—North America—Europe Adapter |
| D—Virtual Terminal (Display) Portable Harness | I—Convenient Power Outlet |
| E—Connector for Machine Wiring Harness | |



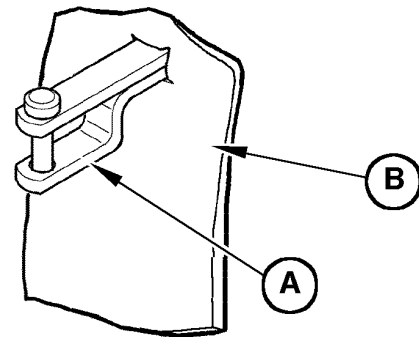
CC337968

CC337968 —UN—06FEB18

aysdijz,1683640036208 -19-09MAY23-1/1

Using Drawbar Shield

If a tractor drawbar (A) catches and disturbs the windrow under the tractor, a drawbar shield (B) can be used.



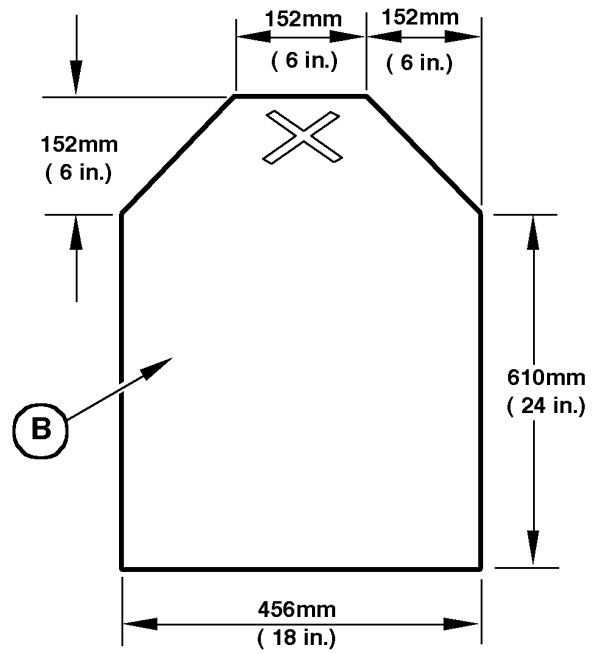
CC007918

CC007918 —UN—12DEC96

Continued on next page

CC,570RB 003439 -19-15SEP98-1/2

Use the sketch opposite as an example to make a shield (B) using 2 or 4 ply belting.



CC007919

CC007919 —UN—25NOV96

CC,570RB 003439 -19-15SEP98-2/2

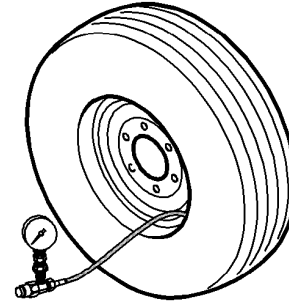
Preparing the Baler

Tire Inflation

Refer to the following table to obtain the correct tire pressure.

IMPORTANT: Always observe local road traffic regulations when driving on public roads. See Observe Maximum Transport Speed in Safety section.

IMPORTANT: Tire size modification requires brake adjustment. See your John Deere dealer.



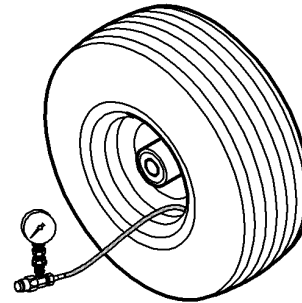
CC1030245

CC1030245—UN—27SEP07

Tire type	Pressure	
	With maximum transport speed of 25 km/h (15 mph)	With maximum transport speed of 40 km/h (25 mph)
15/55-17 134 A8	180 kPa (1.8 bar; 26 psi)	230 kPa (2.3 bar; 33 psi)
500/50-17 140 A8	110 kPa (1.1 bar; 16 psi)	150 kPa (1.5 bar; 22 psi)
500/55-20 150 A8	100 kPa (1 bar; 15 psi)	140 kPa (1.4 bar; 20 psi)
620/40 R22.5 148D	120 kPa (1.2 bar; 17 psi)	120 kPa (1.2 bar; 17 psi)

ga87848,1683015497105 -19-05JUN23-1/2

Inflate pickup gauge wheels to specified pressure:



CC1030246

CC1030246—UN—01OCT07

	Pressure
Pickup gauge wheel	140 kPa (1.4 bar; 20 psi)

ga87848,1683015497105 -19-05JUN23-2/2

Set Machine Angle

IMPORTANT: The machine angle must be set properly with the tractor used with the baler.

Follow the steps hereafter to set the correct angle of the baler and then adjust the hitch to match with the tractor:

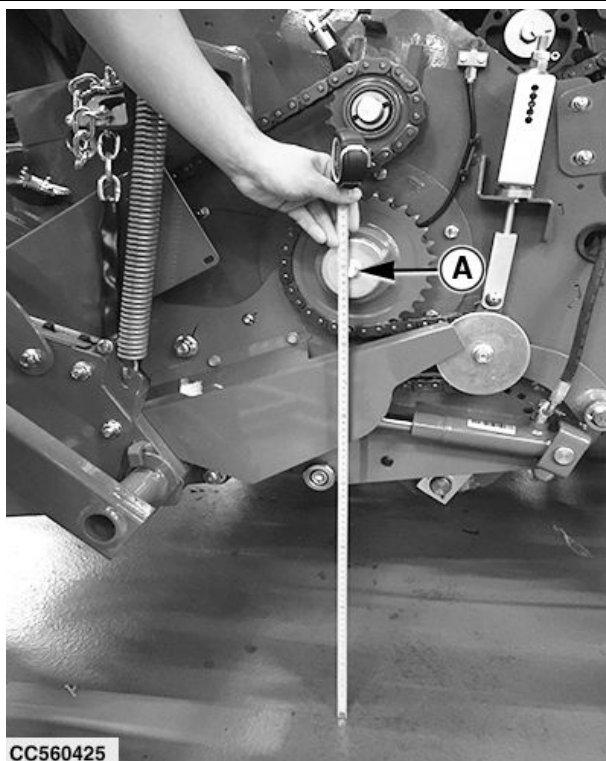
1. Park the baler on flat surface.
2. Adjust the jackstand until the rotor axle (A) reaches the following height:

Tire type	Height
15/55-17	710—740 mm (2 ft 4 in—2 ft 5-1/8 in)
500/50-17	
500/55-20	720—750 mm (2 ft 4-3/8 in—2 ft 5-4/8 in)
620/40-R22.5	

NOTE: The height range is measured from the center of the nut to the ground level.

Aim for the top of the range or a bit above to take tractor tire deflection into account.

A—Rotor Axle



CC560425

CC560425 —UN—20MAR23

ga87848,1683015225577 -19-26JUN23-1/1

Adjust Tongue

The tongue has to be adjusted using both the hitch bolt and the bolts between the tongue and the baler frame to match the tractor configuration.

IMPORTANT: Before adjusting the tongue, make sure that the tractor tire inflation is correct.

The machine angle must be set before adjusting the tongue, do not change the jackstand position. See [Set Machine Angle](#) in this section.

1. Move back the tractor close to baler. Align tractor hitch in front of baler tongue.
2. Set tongue position to match with tractor coupling device.
3. Set hitch (A) as horizontal as possible.
4. Check that the two tongue frames are at the same level.
5. Slightly tighten tongue frame fixing nuts (D), lock nuts (E), hitch fixing nut (C).

IMPORTANT: Make sure that all ring teeth are **FULLY engaged (not standing tip to tip)** when tightening nuts (C), (D), and (E).

6. Tighten tongue frame fixing nuts (D), lock nuts (E), and hitch fixing nut (C) to specified torque.

Specification

Tongue Frame Fixing	
Nuts—Torque.....	700 N·m (516 lb·ft)
Tongue Frame Lock	
Nut—Torque.....	300 N·m (221 lb·ft)
Hitch Fixing	
Nut—Torque.....	620 N·m (450 lb·ft)

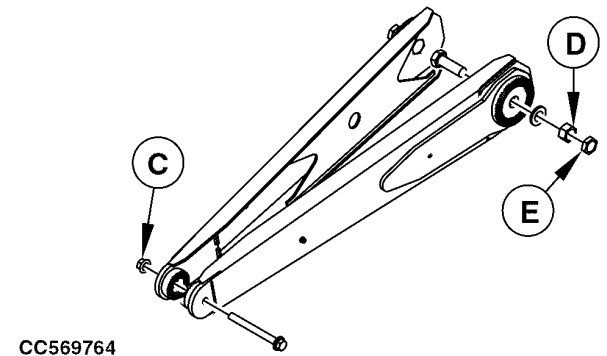
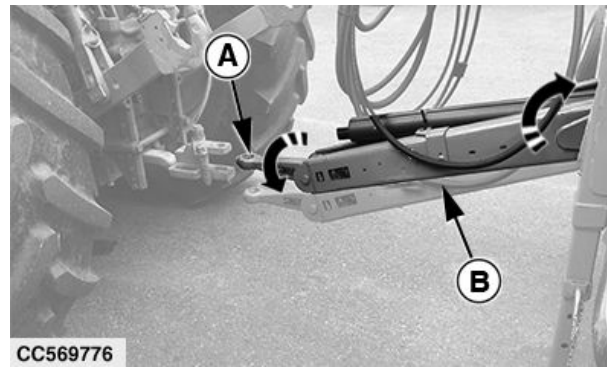
7. Attach baler to the tractor.

IMPORTANT: Always attach the baler to the tractor correctly before driving on road and/or field. See [Attach Baler to Tractor](#) in Attaching section.

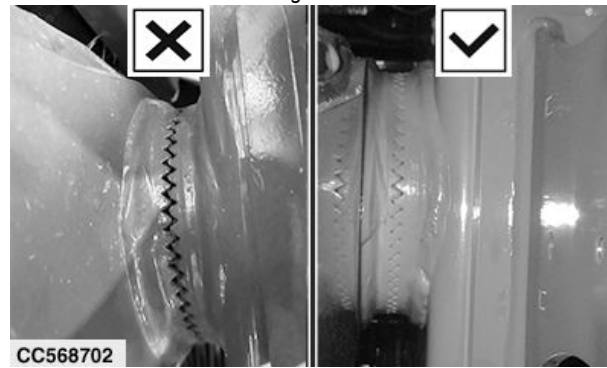
8. Fold the jackstand.
9. Check the height of the rotor axle is within the given range. See [Set Machine Angle](#) in this section.

If not, go to step 2 to change the tongue setting.

NOTE: Once the correct machine angle is confirmed, the pickup working height has to be adjusted by



Tongue Nut



Tongue Tighten Error

A—Hitch
B—Tongue Frame
C—Hitch Fixing Nut

D—Tongue Frame Fixing Nut
E—Tongue Frame Lock Nut

using the gauge wheels. See [Adjust Pickup Gauge Wheels](#) in [Operating the Baler](#) section.

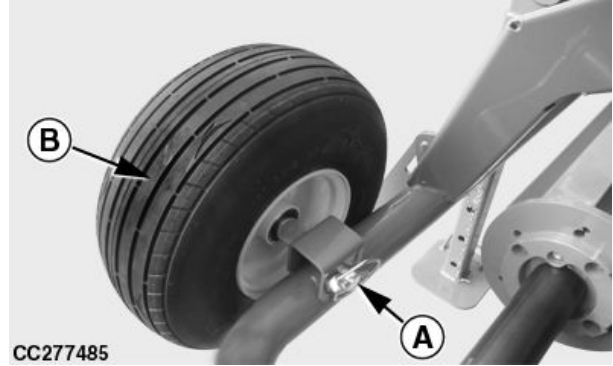
ga87848,1679991710200 -19-06APR23-1/1

Install Standard Gauge Wheels in Working Position

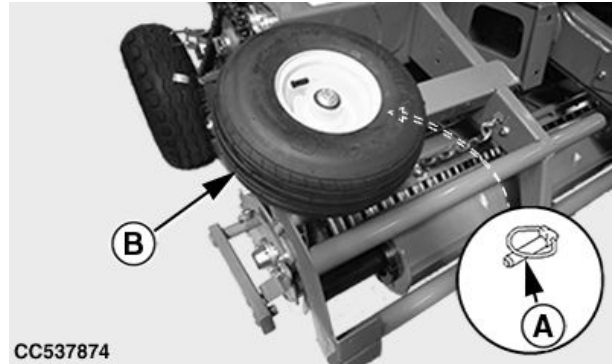
1. Remove quick-lock pin (A).
2. Remove gauge wheel (B) from its bracket.
3. Position gauge wheel (B) on pickup as shown. Secure it with quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin

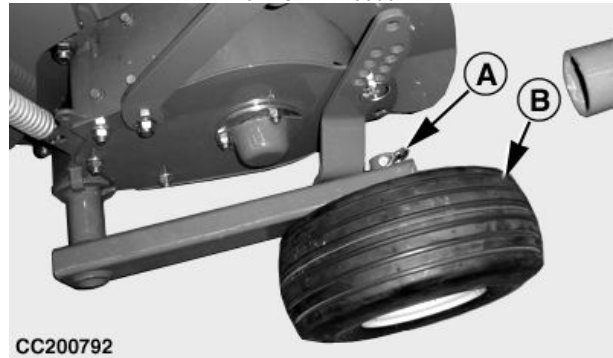
B—Gauge Wheel



Up To S.N. 219999



From S.N. 220000



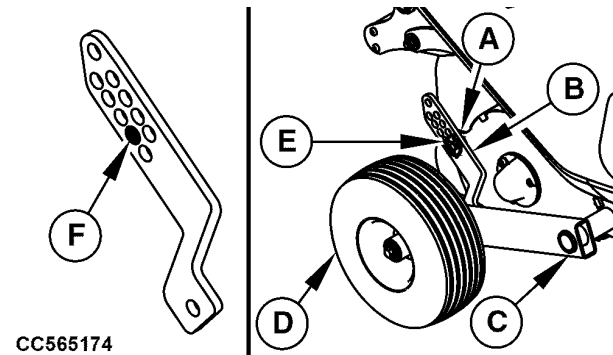
ga87848,1681390273440 -19-31MAY23-1/2

Initial Setup of the Standard Gauge Wheels:

1. Remove quick-lock pin (A) and pin (E).
2. Select hole position (F) on support (B) as starting position.
3. Install quick-lock pin (A) and pin (E).
4. Repeat procedure on the opposite side.

A—Quick-Lock Pin
B—Support
C—Wheel Arm

D—Gauge Wheel
E—Pin
F—Hole Position



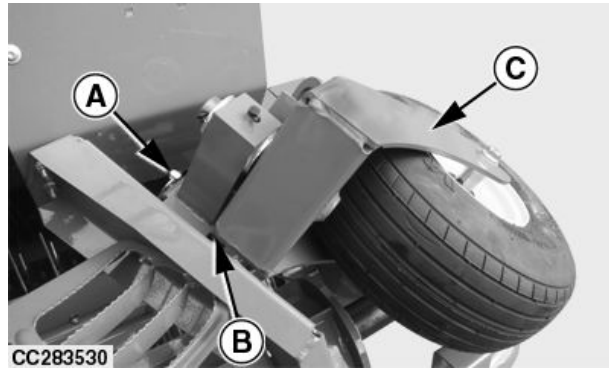
ga87848,1681390273440 -19-31MAY23-2/2

Install Caster Gauge Wheels in Working Position

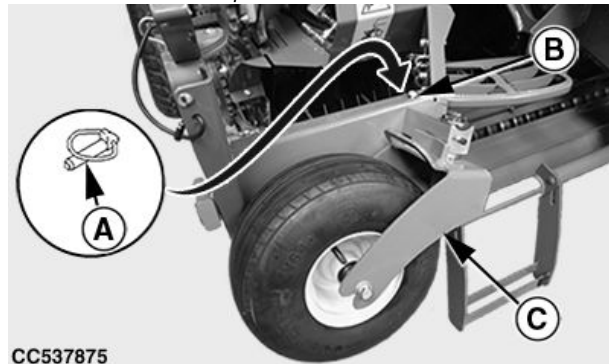
1. Remove quick-lock pin (A) and pin (B).
2. Remove caster gauge wheel (C) from its bracket.
3. Position caster gauge wheel (C) on pickup with handle (D) as shown and secure it with pin (B) and quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin
B—Pin

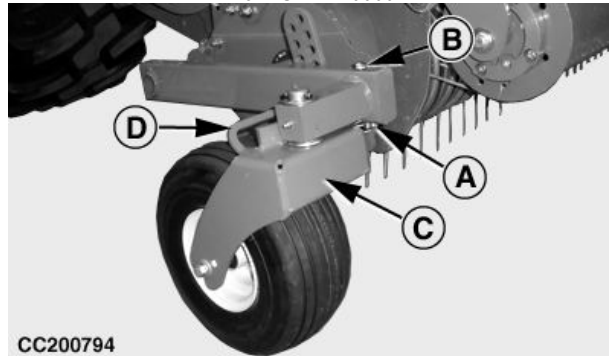
C—Caster Gauge Wheel
D—Caster Gauge Wheel Handle



Up To S.N. 219999



From S.N. 220000



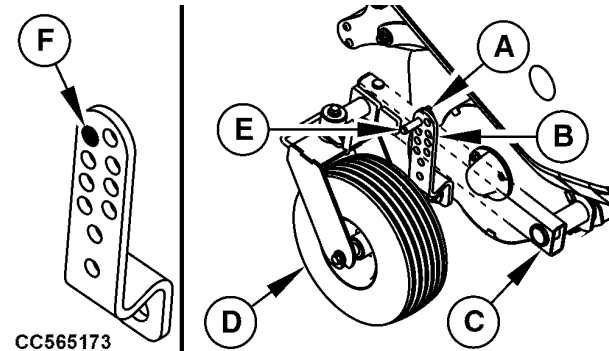
ga87848,1681390273533 -19-31MAY23-1/2

Initial Setup of the Gauge Wheels:

1. Remove quick-lock pin (A) and pin (E).
2. Select hole position (F) on support (B) as starting position.
3. Install quick-lock pin (A) and pin (E).
4. Repeat procedure on the opposite side.

A—Quick-Lock Pin
B—Support
C—Wheel Arm

D—Gauge Wheel
E—Pin
F—Hole Position



ga87848,1681390273533 -19-31MAY23-2/2

Select Net Roll

In order to achieve optimum performance, we recommend the use of **John Deere** net roll:

Net type:	Material width (A)	Core width (B)
Standard	1215—1235 mm (3 ft 11-7/8 in—4 ft 5/8 in)	Maximum 1255 mm (4 ft 1-3/8 in)
CoverEdge™	1285—1305 mm (4 ft 2-1/2 in—4 ft 3-1/2 in)	Maximum 1320 mm (4 ft 4 in)
John Deere B-Wrap™	1260 mm (49-5/8 in)	Maximum 1320 mm (52 in)

NOTE: To use John Deere B-Wrap™ system, John Deere B-Wrap™ kit must be installed. See your John Deere Dealer.

IMPORTANT: Net roll diameter must not exceed 30 cm (11-3/4 in).

The number of net turns can be adjusted, except for John Deere B-Wrap™.

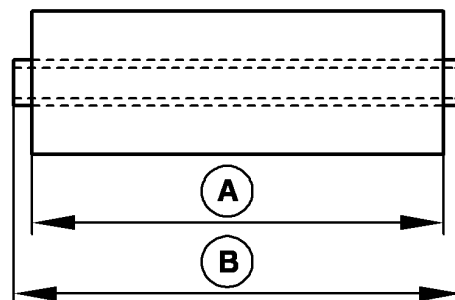
A—Material Width

B—Core Width

CoverEdge is a trademark of Deere & Company
John Deere B-Wrap is a trademark of Tama Plastic Industry



CC421116



CC1033200

CC421116 —UN—22OCT20

CC1033200 —UN—05AUG10

GA87848,00010A6 -19-08JAN21-1/1

Care of Net Roll

IMPORTANT: Protect net roll material from moisture and damage. Do not remove protective covering until ready for use. Snags can cause erratic

performance and affect bale weatherability. Do not use sticky tape directly on net.

Store in a cool, dry place, away from direct sunlight.

CC03745,000023B -19-05JUL01-1/1

Care of Net Binding Device

Before operating the baler proceed as follows:

Wipe off feed rolls and check for any sticky material. NEVER use aggressive cleaning agents such as petrol, benzine, turpentine oil or similar cleaning solvents to clean rubber feed roll.

It is recommended to use:

- Water
- Soap water

Apply talcum powder to rubber feed roll.

ga87848,1683268972312 -19-31MAY23-1/1

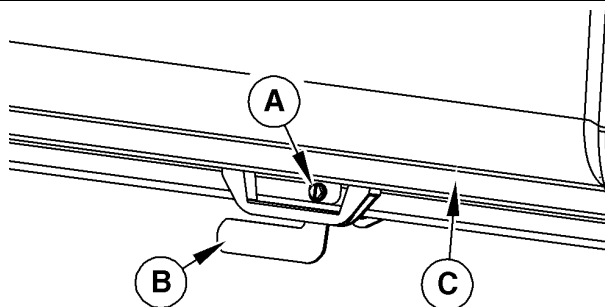
Load Net Roll

⚠ CAUTION: Cover is spring loaded, and moves up quickly when released.

1. Engage tractor park lock, shut off tractor engine, and remove key.
2. Unlock net binding cover (C) by lock (A) with a suitable tool (13 mm across flats).

Hold cover (C) in position then open it by pull on latch (B).

3. Remove all package material (staples, tape, etc.) from net roll before installing.



CC310414

A—Lock
B—Latch

C—Net Binding Cover

CC310414—UN—18APR17

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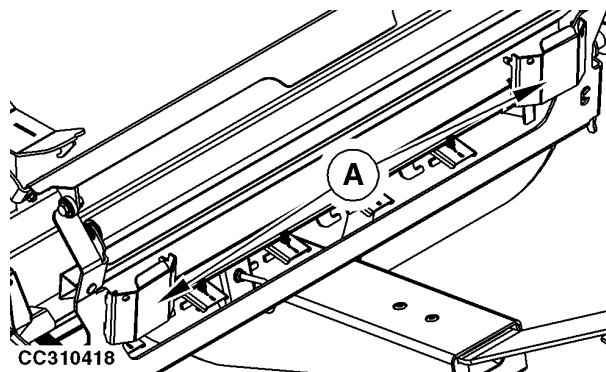
GA87848,0000C3C -19-03JUL19-1/7

4. Install net roll:

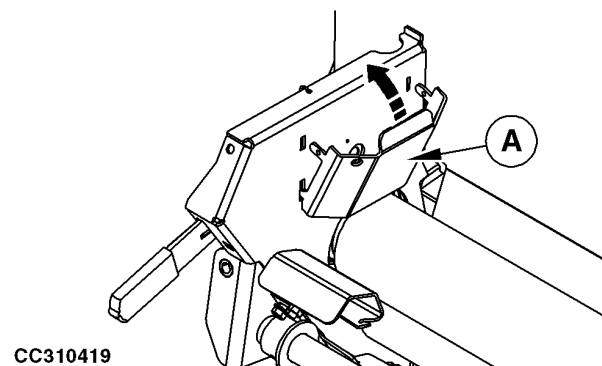
- For standard net roll, remove stops (A) from their bracket, and install them on each side as shown. Secure stops (A) on each side with spring locking pin (B).
- For CoverEdge™, and John Deere B-Wrap™ roll, go to next step.

A—Stops

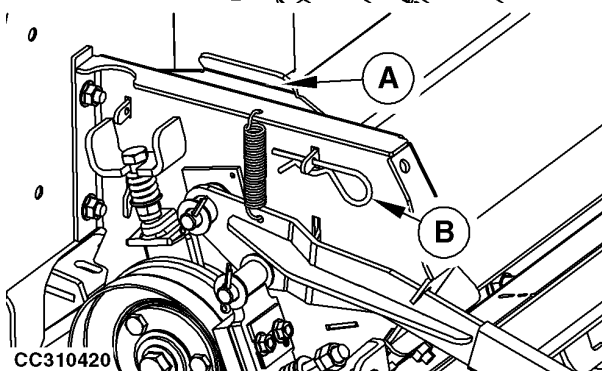
B—Spring Locking Pin



CC310418 —UN—19APR17



CC310419 —UN—19APR17



CC310420 —UN—19APR17

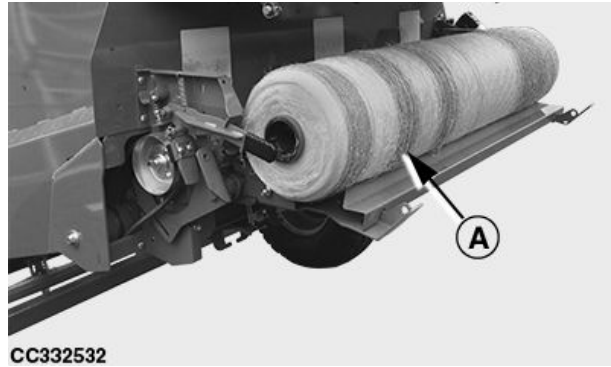
CoverEdge is a trademark of Deere & Company
John Deere B-Wrap is a trademark of Tama Plastic Industry

Continued on next page

GA87848,0000C3C -19-03JUL19-2/7

5. Swing lower tension arm out.
6. Place net roll to loading position as shown:
 - For standard net, and CoverEdge™ roll, place the two colored stripes on the left side of the machine.
 - For John Deere B-Wrap™ roll, place the blue, and white stripes on core (B) on the right side of the machine.

A—Loading Position



CC332532 —UN—03 OCT 17

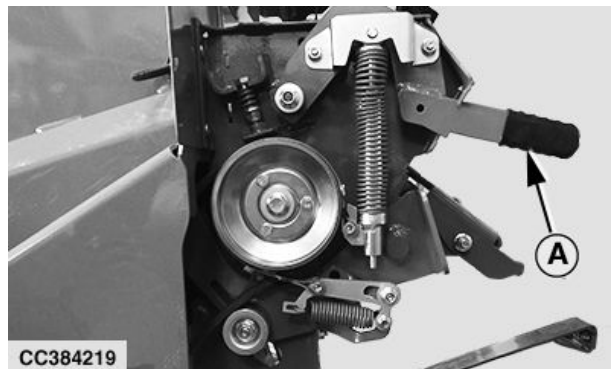
John Deere B-Wrap is a trademark of Tama Plastic Industry

GA87848,0000C3C -19-03JUL19-3/7

7. Release net feed roll brake:
Pull lever (A) down, and out, then raise it to disengage the brake.

NOTE: Once unlocked, hold lever (A) in upper position.

A—Lever



CC384219 —UN—03 JUL 19

Continued on next page

GA87848,0000C3C -19-03JUL19-4/7

8. Unroll net, and gather the loose ends of net.
9. Fold net (C) back on itself to form a loop. Thread loop of net between rubber roll (A), and steel roll (B) as illustrated. Rotate feed rolls slightly by hand to feed material between rolls.

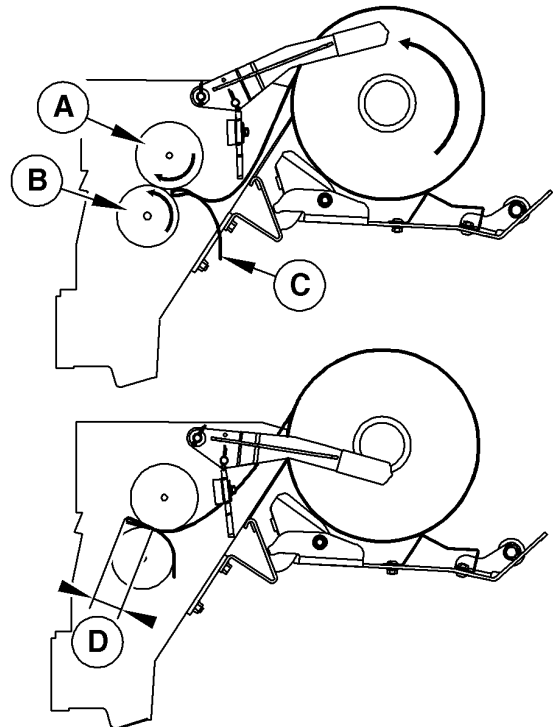
IMPORTANT: Do not thread more than 25 mm (1 in) of loop (D) between the two rolls as it causes material to wrap around the rolls.

A—Rubber Roll
B—Steel Roll

C—Net
D—25 mm (1 in)



CC332533 —UN—03OCT17



CC332530

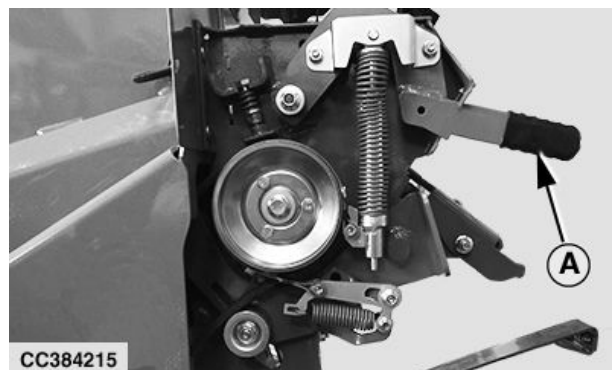
CC332530 —UN—03OCT17

GA87848,0000C3C -19-03JUL19-5/7

10. Pull lever (A) down to engage net feed roll brake. Feed rolls should not be able to rotate.

IMPORTANT: If feed rolls can still be rotated with brake, see **Check Net Feed Roll Brake (Test 6)** in Service section.

A—Brake Lever



CC384215 —UN—03JUL19

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GA87848,0000C3C -19-03JUL19-6/7

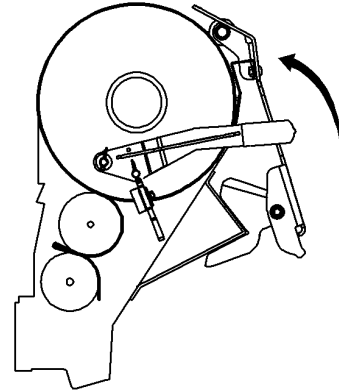
11. Swing lower tension arm up, and lift the net roll on the rubber roll, against the stainless steel plates.
12. Rotate net roll to remove slack.
13. Cut off excessive material.
14. Rear net box can contain two net rolls. One for the net binding process (B), and an additional net roll (A) stored on the top.
15. To close cover, pull it down until latch is engaged.

IMPORTANT: Take off net from rubber roll by turning net roll at the end of each day! It prevents net material incrustation in rubber feed roll, thus avoiding net binding starting problems.

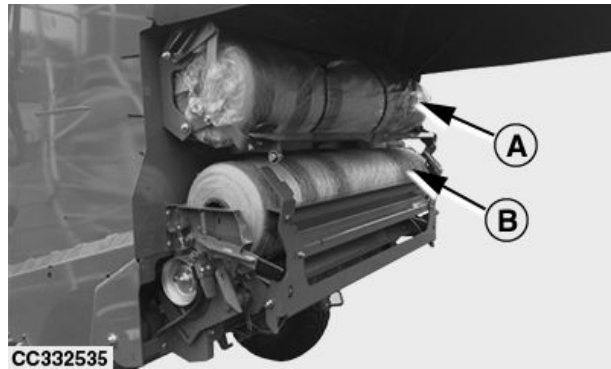
This procedure must also be done each time baler is used for twine binding mode.

A—Additional Net Roll

B—Net for Binding Process



CC332531



CC332535

CC332531 —UN—03OCT17

CC332535 —UN—03OCT17

GA87848,0000C3C -19-03JUL19-7/7

Select Twine

John Deere twine 1000 or 750 is recommended for optimum performance.

Twine quality plays a critical part in proper baler operation.

Twine of good tensile strength and uniformity in size should be selected for proper baling operation. This will also help prevent twine from breaking during handling and transporting of bales.



CC421118

CC421118 —UN—22OCT20

GA87848,00010A7 -19-08JAN21-1/1

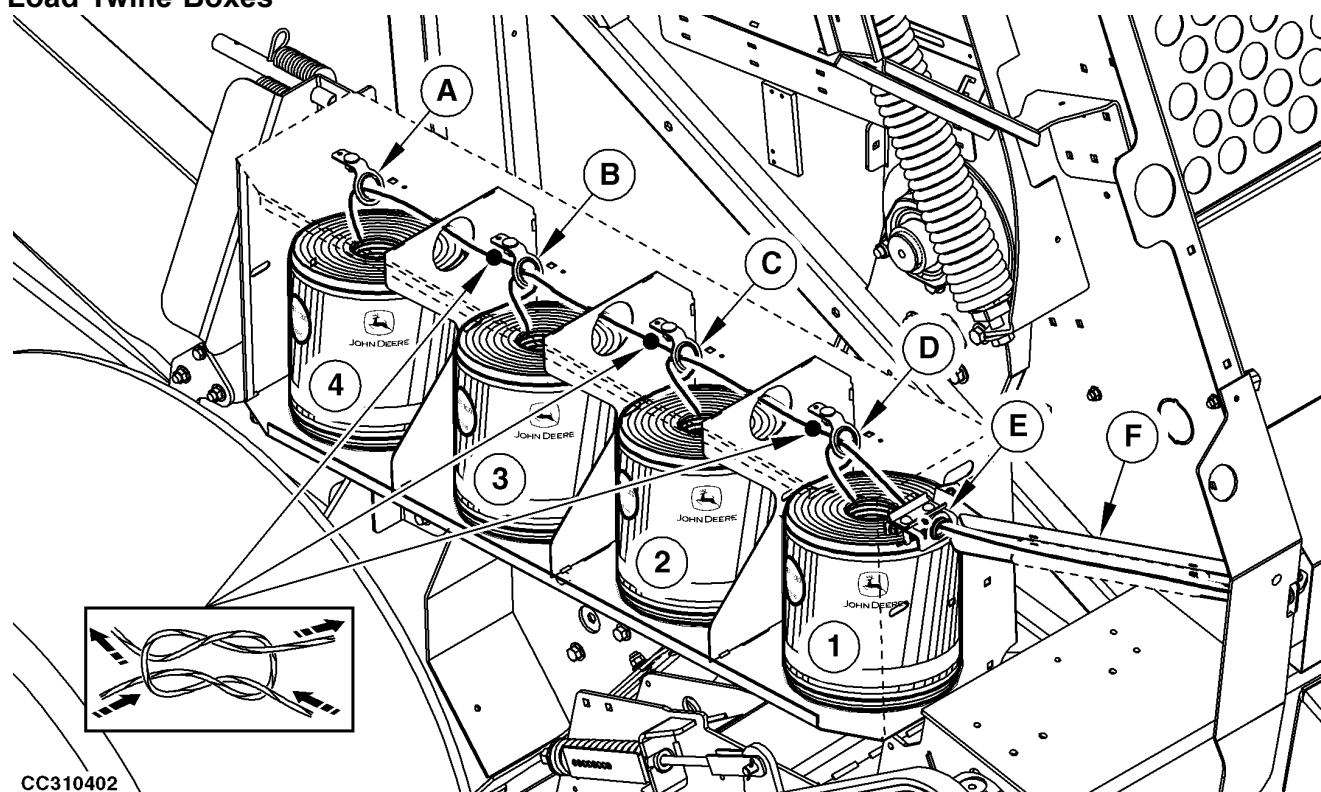
Care of Twine Ball

IMPORTANT: Protect twine ball material from moisture and damage. Do not remove protective covering until ready for use.

Store in a cool, dry place, away from direct sunlight.

DC82261,000040D -19-23JAN14-1/1

Load Twine Boxes



A—Twine Guide
B—Twine Guide

C—Twine Guide
D—Twine Guide

E—Twine Guide
F—Square Tube

Place one ball of good quality twine in each compartment of the twine box. Be sure twine is pulled from end of the ball marked "top".

1. Open side door.
2. Place one ball of good quality twine in each compartment of the twine box. Be sure twine is pulled from end of the ball marked "top".
3. Route twine through twine guides as shown.
4. Join twine by binding the inside end of ball (4) to the outside of ball (3), then inside end of ball (3) to the outside end of ball (2), then inside end of ball (2) to outside end of ball (1).

To join the twine ends, use a modified square knot with sisal twine and a sheet bend knot with plastic twine.

5. Route inside end of ball (1) through twine guide (E) and square tube (F).
6. Trim loose ends of twine as close to knot as possible.
7. Attach balls with elastic tensioner.
8. Close side door.
9. Repeat procedure to the other side.

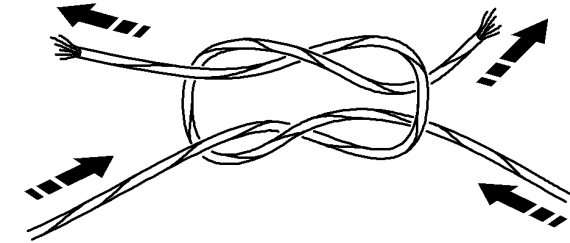
NB02380,0000507 -19-04OCT17-1/1

Knot for Twine

IMPORTANT: The knot must be small enough to pass through the guides and twine arm.

We recommend to bind twine balls together with a square or modified square knot as shown. If needed bind twine balls together with a sheet bend knot as shown.

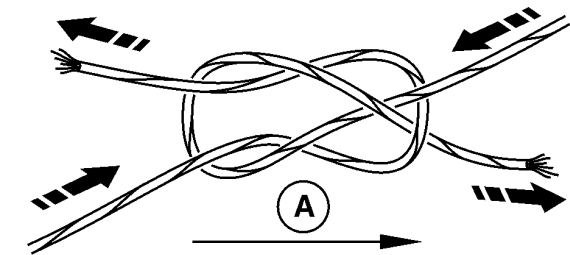
A—Flow Direction of Twine



CC1034420

Modified Square Knot

CC1034420 —UN—15SEP11



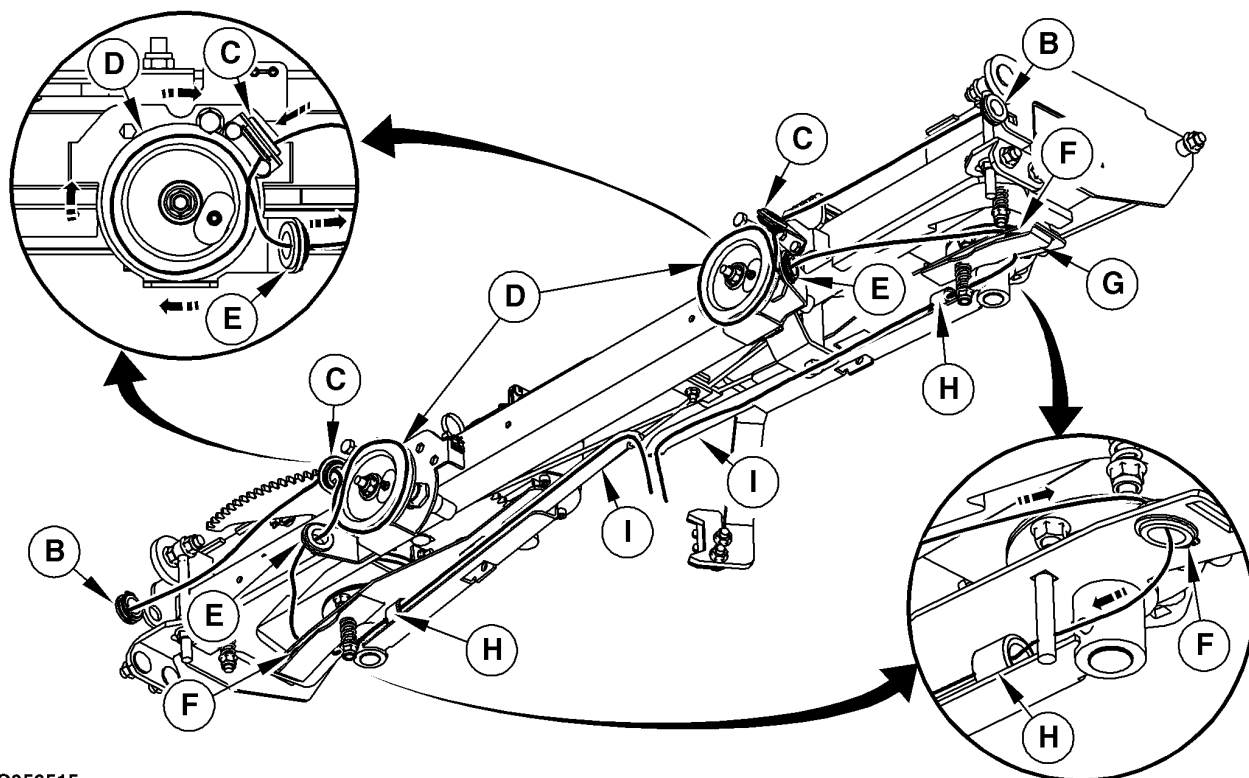
CC1034421

Sheet Bend Knot

CC1034421 —UN—08DEC11

NB02380,000050E -19-04OCT17-1/1

Route Twine from Twine Box to Twine Arms (Tube Arms)



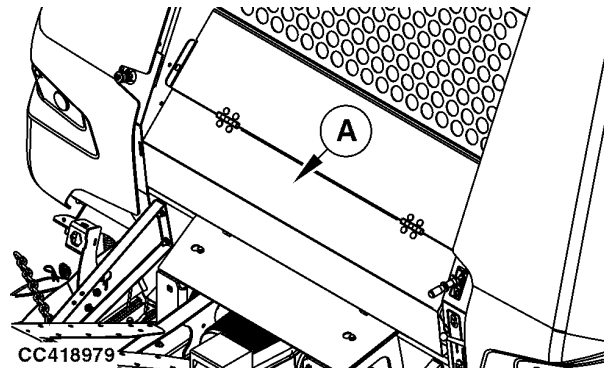
CC356515

1. Open twine binding system cover (A).
2. Route twine from twine guide (B) to pulley upper twine guide (C).
3. Loop twine around pulley (D) as shown.
4. Route twine through pulley lower twine guide (E).
5. Pull then pivot twine tension plate (G) to disengage it.
6. Route twine through twine guide (F).
7. Route twine below tension plate (G).
8. Route twine through arm twine guide (H).
9. Thread it through twine arm tube (I).
10. Pull on twine to obtain specified distance (K) from the end of twine arm to twine end.

Specification

End of Twine Arm-to-
Twine End—Distance..... 150 mm
(6 in)

11. Re-engage twine tension plate (G).



A—Twine Binding System
Cover
B—Twine Guide
C—Pulley Upper Twine Guide
D—Pulley
E—Pulley Lower Twine Guide

F—Twine Guide
G—Twine Tension Plate
H—Arm Twine Guide
I—Twine Arm

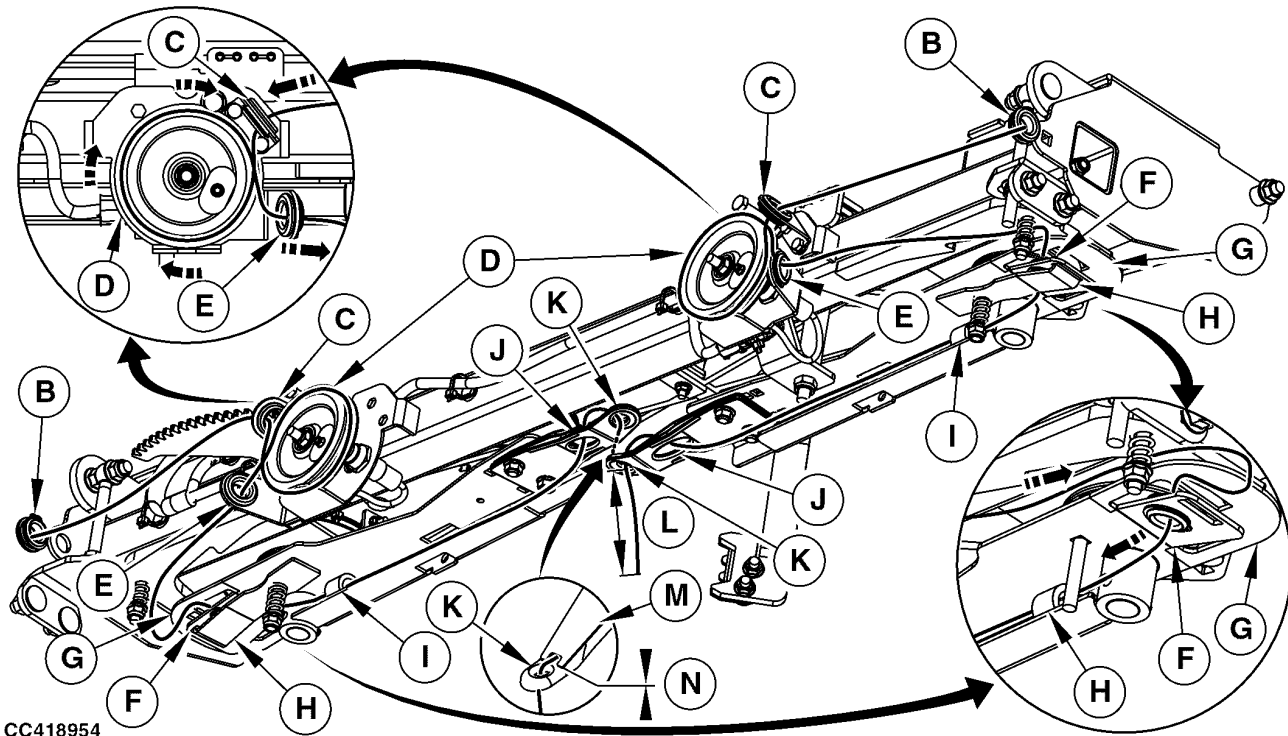
12. Close twine cover (A).

GA87848,0001081 -19-23DEC20-1/1

CC356515 —UN—05JUL18

CC418979 —UN—18DEC20

Route Twine from Twine Box to Twine Arms (Adjustable Arms)



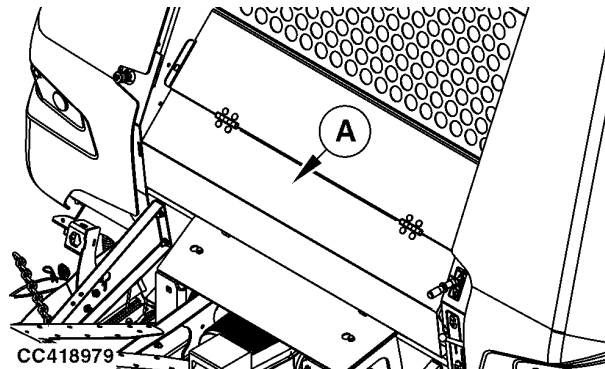
CC418954

CC418954 —UN—16DEC20

1. Open twine binding system cover (A).
2. Route twine from twine guide (B) to pulley upper twine guide (C).
3. Loop twine around pulley (D) as shown.
4. Route twine through pulley lower twine guide (E).
5. Pull then pivot twine tension plate (H) to disengage it.
6. Route the twine between the twine guide (F) and the twine deflector (H).

NOTE: Do not route twine through twine deflector (H) hole.

7. Route twine through twine guide (F).
8. Route twine below twine tension plate (H).
9. Route twine through arm twine guide (I).
10. Route twine through twine arm hole (J) and below spring plate (M).
11. Route twine through twine arm hole (K).
12. Make sure that the fork-shaped end of spring plate (M) is in contact (distance (N)) with twine extension arms (K) as shown.
13. Pull on twine to obtain specified distance (L) from the end of twine arm to twine end.



CC418979

CC418979 —UN—18DEC20

- | | |
|------------------------------|-----------------------|
| A—Twine Binding System Cover | H—Twine Tension Plate |
| B—Twine Guide | I— Arm Twine Guide |
| C—Pulley Upper Twine Guide | J— Twine Arm Hole |
| D—Pulley | K—Twine Arm Hole |
| E—Pulley Lower Twine Guide | L—Distance |
| F— Twine Guide | M—Spring Plate |
| G—Twine Deflector | N—Distance |

Specification

End of Twine Arm-to-Twine End—Distance.....	150 mm (6 in)
---	------------------

14. Re-engage twine tension plate (H).

GA87848,0001082 -19-23DEC20-1/1

Check Wheel Nut Torque

IMPORTANT: Whenever a wheel has been removed and installed, check wheel nut torque at intervals specified in Break-In Period section.

Tighten wheel nuts diagonally to the following specification:

	Specification
Wheel Nuts—Torque.....	270 N·m (200 lb·ft)



CC575701 —UN—28APR23

ga87848,1683269243176 -19-31MAY23-1/1

Attaching

Use Only Approved Hitch

CAUTION: Only use a hitch approved for your machine in combination with the appropriate tractor coupling device.

Always check that your hitch complies with local regulation.

Approved Hitches for Round Balers	
Hitches	Recommended tongue position
DC217306	Low
DC221194	Low
DC223340	Low
DC223342	High
DC223344	Low
DC223909	Low
DC224136	Low
DC225809	Low
DC226463	Low
DC239698	Low

Hitches are designed for hitching on the following tractor hitches:

Ball-Type Hitch: DC217306; for tractor 80 mm ball coupling device (ISO24347).

Clevis Hitch: DC221194; for tractor drawbar (ISO6489-3).

Straight Hitch with 40 mm Eye: DC223340; for tractor tractor trailer hitch (ISO6489-2) or drawbar cat2 (ISO6489-3).

Angled Hitch with 40 mm Eye : DC223342; for tractor trailer hitch (ISO6489-2) or tractor drawbar cat2 (ISO6489-3).

Straight Hitch with 50 mm Eye: DC223344; for tractor pickup hitch (ISO6489-1) or piton-fix hitch (ISO6489-4).

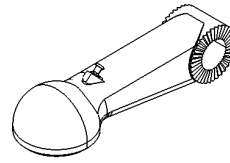
Turnable Hitch with 35 mm Eye: DC223909; for tractor non-swivel trailer hitch (ISO6489-5), piton-fix hitch (ISO6489-4), or tractor drawbar cat3 (ISO6489-3).

Turnable Hitch with 50 mm Eye: DC224136; for tractor non-swivel trailer hitch (ISO6489-5), piton-fix hitch (ISO6489-4), or tractor drawbar cat3 (ISO6489-3).

Straight Hitch with 33 mm Ball Eye: DC225809; for tractor drawbar cat2 (ISO6489-3).

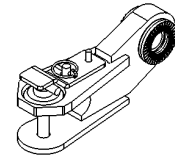
Straight Hitch with 42 mm Ball Eye: DC226463; for tractor drawbar cat3 (ISO6489-3).

CC404700 —UN—16APR20



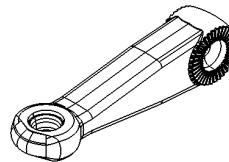
DC217306

CC574297 —UN—12APR23



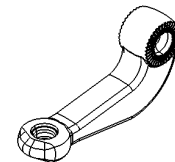
DC221194

CC404697 —UN—16APR20



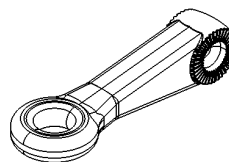
DC223340

CC574299 —UN—13APR23



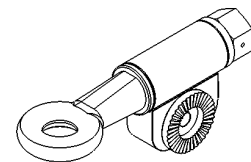
DC223342

CC574298 —UN—13APR23



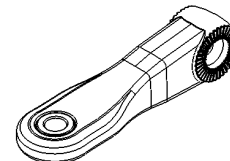
DC223344

CC404702 —UN—16APR20



DC223909, DC224136

CC565104 —UN—22FEB23



DC225809, DC226463

CC565114 —UN—28FEB23

ga87848,1679649110541 -19-13APR23-1/1

Attach Baler to Tractor

1. Adjust drawbar, see [Adjust Drawbar](#) in Preparing the Tractor section.
2. Back up tractor to baler. Align tractor hitch with front of baler tongue.
3. Engage tractor park lock, shut off engine, and remove ignition key.
4. Attach the baler to tractor. See tractor Operator's Manual.
5. Fold jackstand, see [Fold Jackstand](#) in this section.
6. Connect telescoping driveline to tractor PTO shaft, see [Connect Telescoping Driveline to Tractor PTO Shaft](#) in this section.
7. Connect safety chain, see [Connect Safety Chain](#) in this section.
8. Connect to tractor hydraulic system, see [Connect to Tractor Hydraulic System](#) in this section.
9. Connect trailer socket, see [Connect Seven-Terminal Trailer Socket](#) in this section.
10. Connect machine wiring harness, see [Connect Machine Wiring Harness](#) in this section.
11. If equipped, connect video camera harness, see [Connect Video Camera Harness\(es\) \(If Equipped\)](#) in this section.
12. Connect brakes, see [Connect Hydraulic Brakes \(If Equipped\)](#) or [Connect Air Brakes \(If Equipped\)](#) in this section.
13. Disengage machine park brake, see [Disengage Machine Park Brake \(Baler with Hydraulic Brakes\)](#) or [Disengage Machine Park Brake \(Baler with Air Brakes\)](#) in this section.



CC565106 —UN—19APR23

ga87848,1677166146807 -19-19APR23-1/1

Fold Jackstand

After attaching baler to tractor, secure jackstand (A) in its storage position as shown.

Secure jackstand (A) with pin (B) as follows:

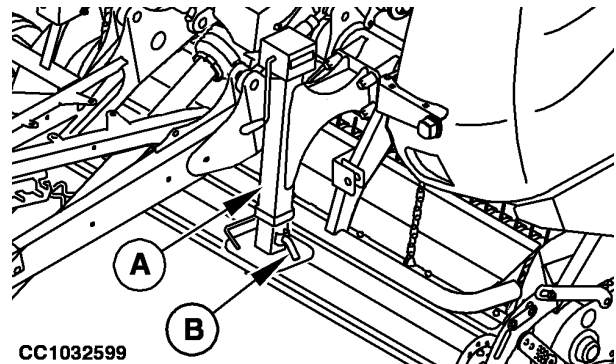
1. Insert pin (B) as shown in step (I).
2. Turn pin (B) as shown in step (II) to secure jackstand in storing position.

IMPORTANT: Make sure that cotter pin (C) is correctly inserted.

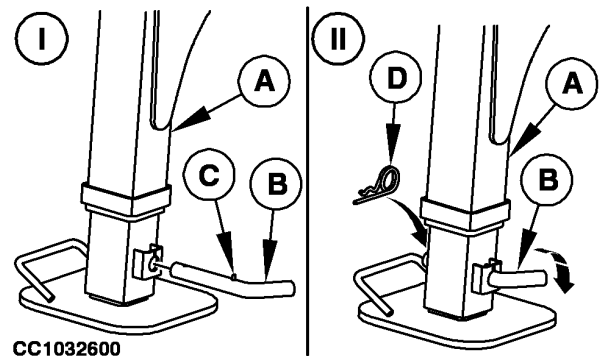
3. Insert spring locking pin (D) in pin (B) as shown in step (II).

A—Jackstand
B—Pin

C—Cotter Pin
D—Spring Locking Pin



CC1032599 —UN—14SEP10



CC1032600 —UN—14SEP10

NB02380,0000473 -19-22JUN17-1/1

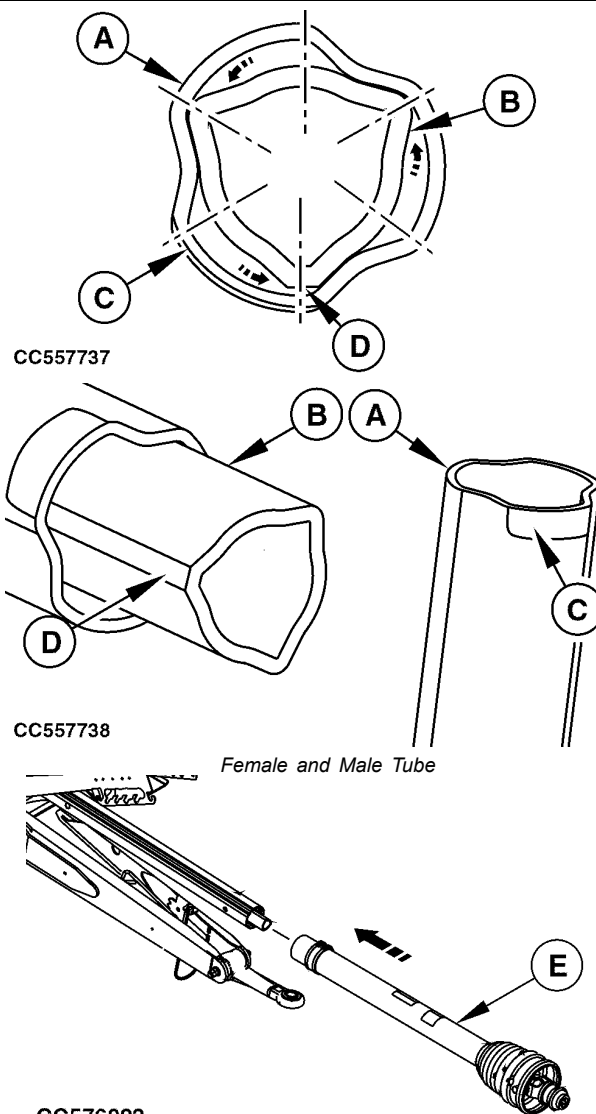
Install Telescoping Driveline

Intall PTO shaft by assembling male tube (B) in female tube (A) by aligning flat corner (D) with crushed face (C).

IMPORTANT: Male tube (B) can rotate inside female tube (A) freely about 30 degrees.

A—Female Tube
B—Male Tube
C—Crushed Face

D—Flat Corner
E—Shield



CC557737 —UN—03MAR23

CC557738 —UN—05APR23

CC576093 —UN—26APR23

ga87848,1679988549568 -19-26APR23-1/1

Connect Telescoping Driveline to Tractor PTO Shaft

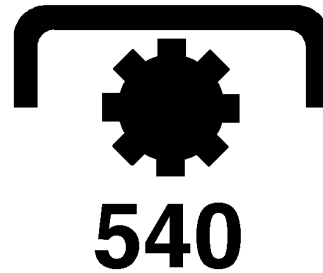
CAUTION: Never attach telescoping driveline while the tractor is running.

Never use a steel hammer to connect or disconnect the driveline on PTO shaft.

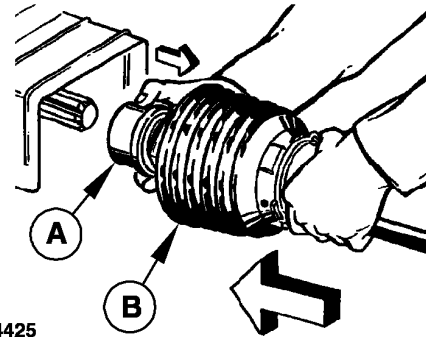
IMPORTANT: Keep driveline and PTO shaft splines free from paint, dirt, chaff and burrs.

1. Disengage the PTO, engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
2. Pull back on locking collar (A). Locking collar (A) will "click" and remains in open position.
3. Connect telescoping driveline to tractor 540 rpm PTO shaft. Refer to tag on baler to select tractor PTO speed. Push telescoping driveline onto tractor PTO shaft until locking collar (A) snaps forward. Locking collar (A) will "click".
4. To check if telescoping driveline is latched, pull back on guard (B). Do not pull on locking collar (A), as this will release latch.

NOTE: Refer to the basic telescoping driveline Operator's Manual to properly connect telescoping driveline to the tractor PTO shaft.



CC1020007



CC1034425

A—Locking Collar

B—Guard

NB02380,00003CA -19-20APR17-1/1

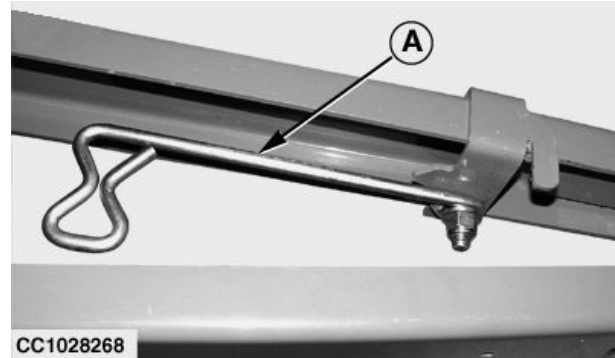
CC1020007—UN—09JUL01

CC1034425—UN—15SEP11

Telescoping Driveline Support

During baler operation store support (A) along the side tongue frame as shown.

A—Support



CC1028268

OUC006,0001AD9 -19-03SEP13-1/1

CC1028268—UN—21SEP06

Connect Safety Chain

If machine is equipped with a safety chain, route safety chain through the loop on drawbar (if equipped) and connect to tractor drawbar supporting structure, as shown. Do not fasten to drawbar. Remove all slack except what is needed for turns.

IMPORTANT: Always observe local road traffic regulations when driving on public roads.



CC565106 —UN—19APR23

1181334,1687177134758 -19-21JUN23-1/1

Connect to Tractor Hydraulic System

CAUTION: Maximum working pressure of baler hydraulic hoses is about 21000 kPa (210 bar; 3045 psi). To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

Before connecting hydraulic system, disengage PTO, engage park brake, shut off tractor engine and, remove key.

IMPORTANT: All hydraulic couplers must be clear of debris, dust and sand. Use protective caps on fluid openings until ready to make connection. Foreign material can damage the hydraulic system.

1. Connect gate lift hydraulic hoses

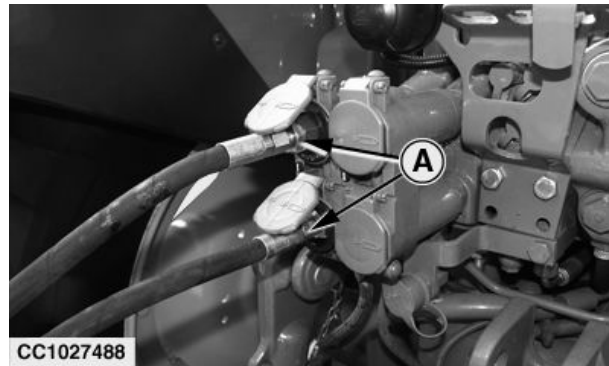
Connect gate hydraulic hoses (A) to a double-acting SCV to operate the gate.

Check to be sure symbols (B) on covers, indicating cylinder movement, match symbols (C) on hose identification plate (D).

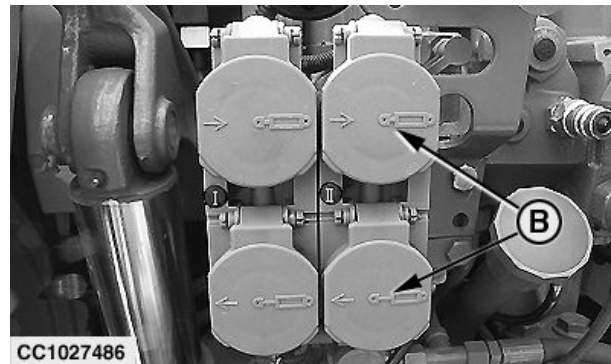
Push hoses firmly into tractor receptacles.

A—Gate Hydraulic Hoses
B—SCV Symbols

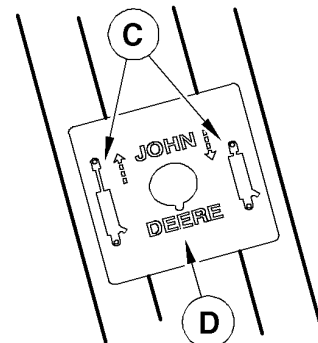
C—Identification Plate Symbols
D—Hose Identification Plate



CC1027488 —UN—11JUL05



CC1027486 —UN—11JUL05



CC1026711

CC1026711 —UN—03DEC04

Continued on next page

ga87848,1687437809891 -19-22JUN23-1/2

2. Connect pickup control valve hydraulic hoses

NOTE: Refer to your tractor Operator's Manual to connect pickup hydraulic hose to the recommended outlet.

Connect pickup control valve hydraulic hoses (A) to a double-acting SCV to operate the pickup lift.

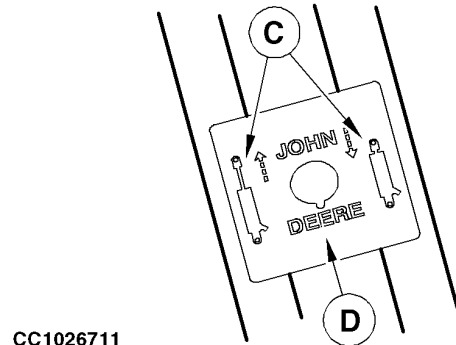
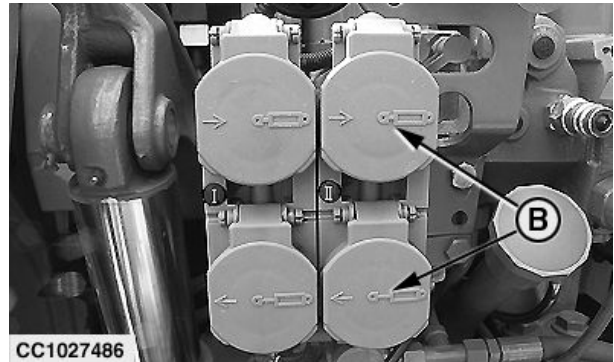
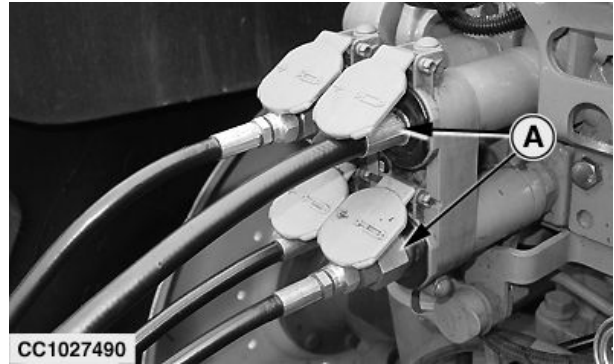
NOTE: Precutter knife and drop floor management uses the same selective control valve as the pickup raise or lower function.

Check to be sure symbols (B) on covers, indicating cylinder movement, match symbols (C) on hose identification plate (D).

Push hoses firmly into tractor receptacles.

A—Pickup Hydraulic Hose
B—SCV Symbol

C—Identification Plate Symbol
D—Hose Identification Plate



CC1027490 —UN—11JUL05

CC1027486 —UN—11JUL05

CC1026711 —UN—03DEC04

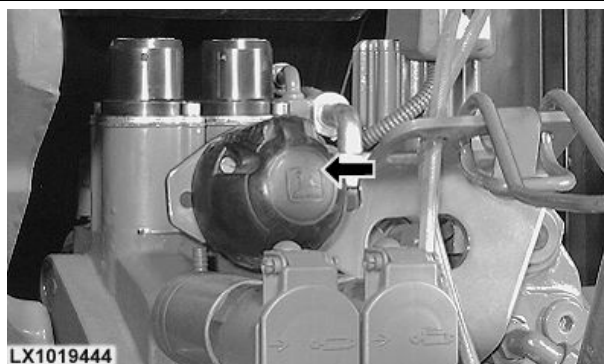
ga87848,1687437809891 -19-22JUN23-2/2

Connect Seven-Terminal Trailer Socket

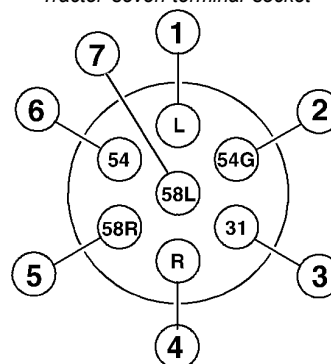
Connect road light plug to seven terminal socket of the tractor.

The road light wiring harness of this machine complies with 1724 ISO standard.

Terminal	Function	Reference
1	Left-Hand Turn Signal Light	L
2	—	54G
3	Ground	31
4	Right-Hand Turn Signal Light	R
5	Right-hand rear position and marker lights	58R
6	Brake Lights	54
7	Left-hand rear position and marker lights	58L



Tractor seven-terminal socket



CC017032

GA87848,0000423 -19-05OCT17-1/1

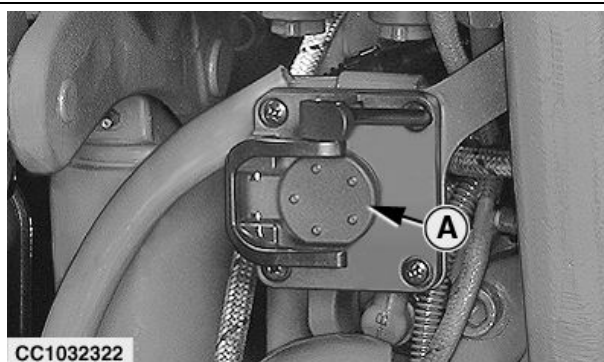
LX1019444 —UN—17SEP99

CC017032 —UN—25FEB00

Connect Machine Wiring Harness

Connect machine wiring harness plug to the ISOBUS implement breakaway connector (A).

**A—ISOBUS Implement
Breakaway Connector**



CC1032322

NB02380,0000233 -19-05DEC16-1/1

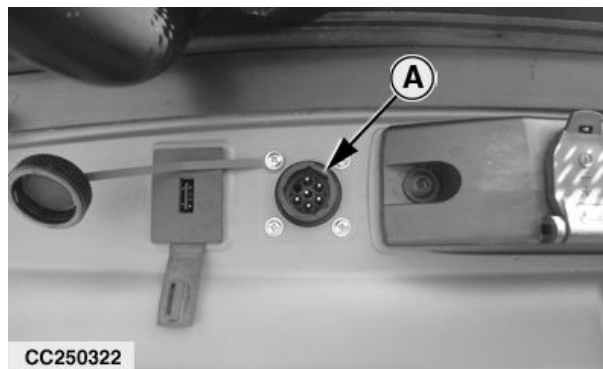
CC1032322 —UN—17DEC09

Connect Video Camera Harness(es) (If Equipped)

Connected video camera from the tractor camera socket (A) or from the external monitor socket (B). See your tractor Operator's Manual to locate it.

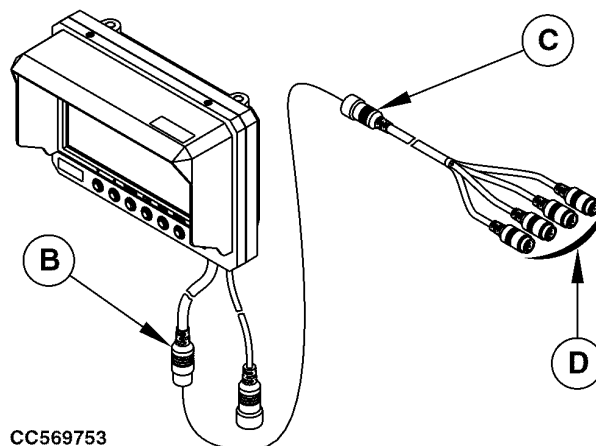
A—Socket - Tractor Video Camera
B—Plug - External Monitor Video Camera

C—Plug - Extention to Monitor
D—Plug - Extention to Camera



CC250322 —UN—30SEP15

Connect Video Camera Harness - Tractor



CC569753 —UN—09MAR23

Connect Video Camera Harness - External Monitor

ga87848,1677243495187 -19-11MAY23-1/1

Connect Hydraulic Brakes (If Equipped)

Remove cap from trailer brake coupler (A) and connect pressure hose, making sure connections are absolutely clean.

Press down on brake pedals to operate hydraulic trailer brake. The braking effect depends on pressure applied to the brake pedals.

IMPORTANT: To prevent undue wear on the brakes, observe the following:

Make sure that the pressure hose is connected.

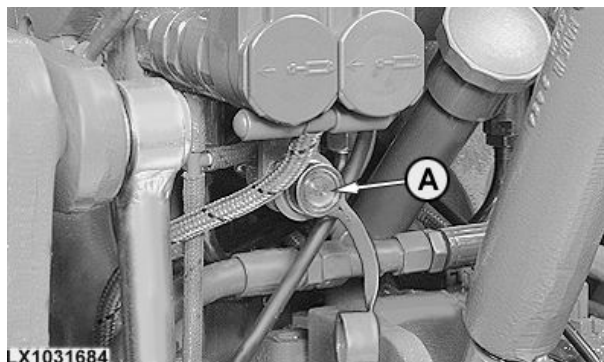
When driving downhill, select the same gear you would for driving uphill.

Check the hydraulic trailer brake regularly to make sure that it is functioning correctly.

Connect safety rope (B) to tractor. The safety rope engages the park brake in case the machine accidentally detaches from the tractor.

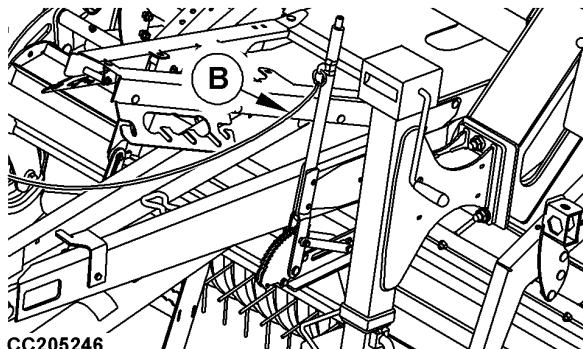
A—Trailer Brake Coupler

B—Safety Rope



LX1031684

LX1031684 —UN—03APR03



CC205246

CC205246 —UN—16OCT13

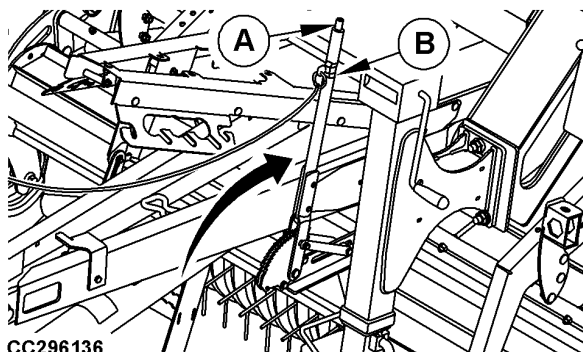
OUCC006,0001AD6 -19-02SEP13-1/1

Disengage Machine Park Brake (Baler with Hydraulic Brakes)

To disengage park brake, pull lever (B), push button (A) then release lever.

A—Button

B—Lever



CC296136

CC296136 —UN—07OCT16

NB02380,00001B7 -19-07OCT16-1/1

Connect Air Brakes (If Equipped)

IMPORTANT: Pay attention to the colors of the couplers.

NOTE: Couplers and colors comply with 1728 ISO standard.

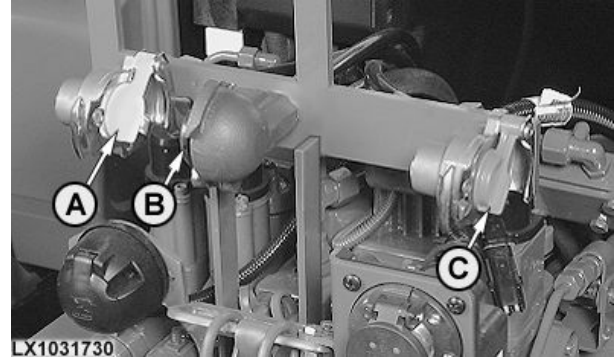
Ensure that the connections are clean before joining the pressure hoses. Seal the connections with the dust caps whenever the hoses are disconnected.

Connect yellow hose at connection (A) then red hose at connection (C). Disconnect in reverse order.

IMPORTANT: To prevent undue wear on the brakes, observe the following:

- Make sure that the pressure hoses are connected.
- When driving downhill, select the same gear you would for driving uphill.
- Check the air brake on the trailer regularly to make sure that it is functioning correctly.

NOTE: When the brake hoses are disconnected from the tractor brake system, the brakes of the machine are



A—Yellow (Dual-Line Brake)
B—Black (Single-Line Brake)

C—Red (Dual-Line Brake, Supply)

automatically engaged. See Park the Machine (Baler with Air Brakes) in Transporting and Parking section.

NOTE: When the pressure is too low, the brakes of the machine are automatically engaged.

DC82261,000059C -19-09JAN15-1/1

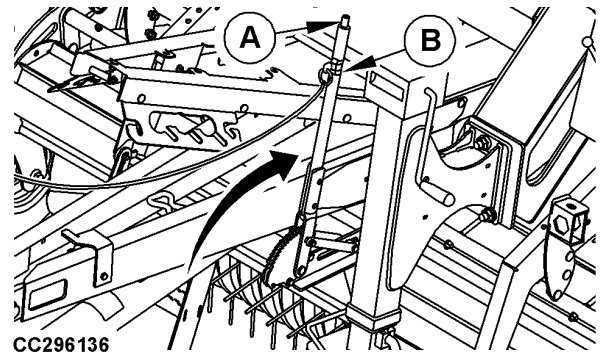
Disengage Machine Park Brake (Baler with Air Brakes)

Park Brake Lever

To disengage park brake, pull lever (B), push button (A) then release lever.

A—Button

B—Lever



CC296136

ga87848,1680788637659 -19-06APR23-1/2

Air Brake Valve

When the air brake hoses are not connected or accidentally disconnected from the tractor, the round baler brakes are automatically engaged.

To release round baler brakes manually, press on button (A).

The round baler brakes are automatically released when the air brake hoses are reconnected to the tractor brake system.

A—Button



CC565109

ga87848,1680788637659 -19-06APR23-2/2

Detaching

Detach Baler from Tractor

CAUTION: To prevent personal injury caused by unexpected movement:

- Park machines on a level surface.
- Engage tractor park brake and place transmission in PARK.
- Disengage PTO.
- Shut off tractor engine and remove key.

1. Park baler on a level surface.
2. Engage tractor park lock, shut off engine and remove ignition key.
3. Engage machine park brake, see Engage Machine Park Brake (Baler with Hydraulic Brakes), or Engage Machine Park Brake (Baler with Air Brakes) in this section.
4. Disconnect brake, see Disconnect Hydraulic Brakes (If Equipped) or Disconnect Air Brakes (If Equipped) in this section.

5. Disconnect video camera wiring harness. See Disconnect Video Camera Harness(es) (If Equipped) in this section.
6. Disconnect machine wiring harness, see Disconnect Machine Wiring Harness in this section.
7. Disconnect trailer socket, see Disconnect Seven-Terminal Trailer Socket in this section.
8. Disconnect tractor hydraulic system, see Disconnect from Tractor Hydraulic System in this section.
9. Disconnect telescoping driveline to tractor PTO shaft, see Disconnect Telescoping Driveline from Tractor PTO Shaft in this section.
10. Unfold jackstand, see Unfold Jackstand in this section.
11. Detach safety chain from the tractor.
12. Detach the baler.
13. Carefully drive tractor away from baler.

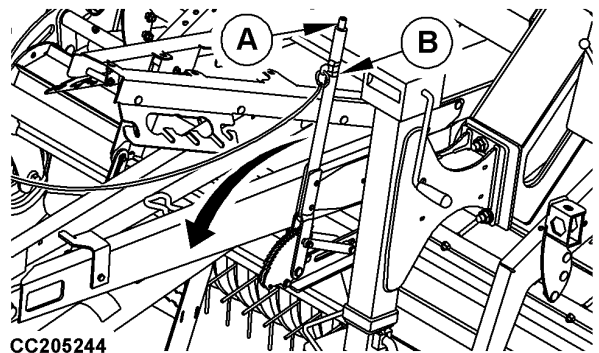
ga87848,1678972367503 -19-30MAY23-1/1

Engage Machine Park Brake (Baler with Hydraulic Brakes)

Pull lever (B) to engage park brake.

A—Button

B—Lever



CC205244—UN—16OCT13

NB02380,00001B4 -19-26JUL16-1/1

Disconnect Hydraulic Brakes (If Equipped)

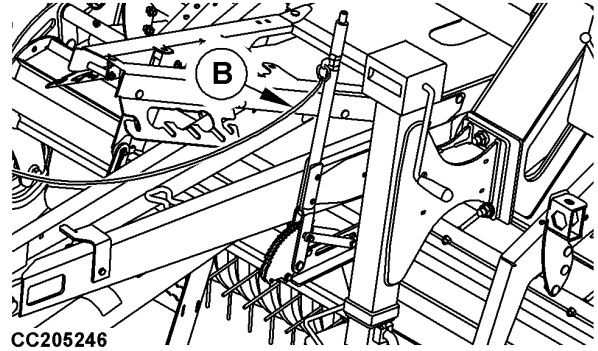
Disconnect safety rope (B) from tractor.

Disconnect pressure hose and install cap to trailer brake coupler (A).

Store hydraulic brake connector on the brake hose storage (C) as shown.

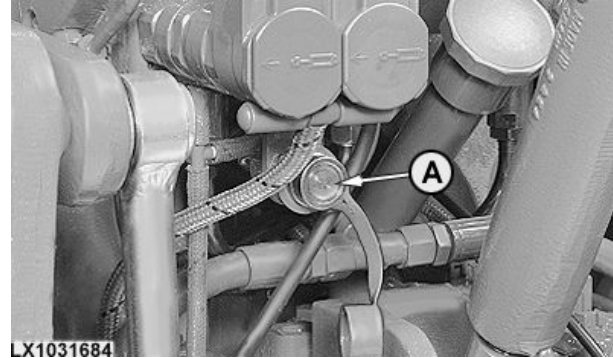
A—Trailer Brake Coupler
B—Safety Rope

C—Brake Hose Storage



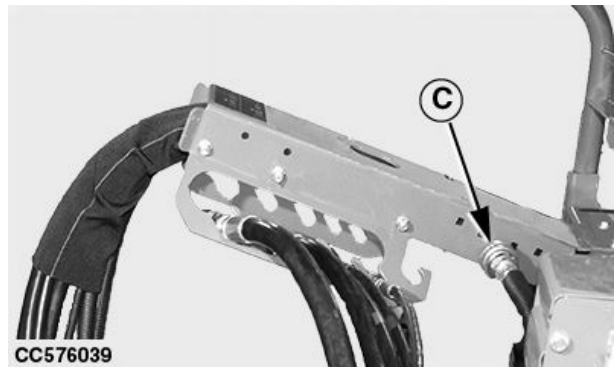
CC205246

CC205246 —UN—16OCT13



LX1031684

LX1031684 —UN—03APR03



CC576039

CC576039 —UN—21JUN23

1181334,1687357582410 -19-21JUN23-1/1

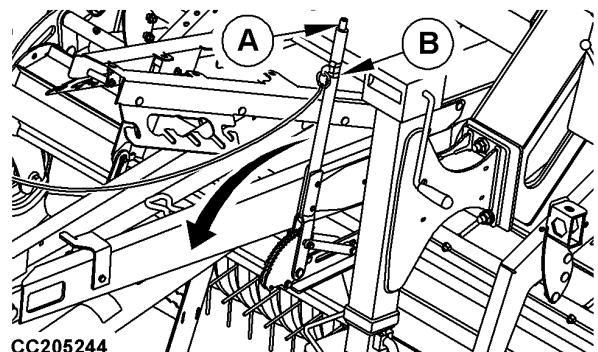
Engage Machine Park Brake (Baler with Air Brakes)

Park Brake Lever

Pull lever (B) to engage park brake.

A—Button

B—Lever



CC205244

CC205244 —UN—16OCT13

Continued on next page

ga87848,1683110867319 -19-03MAY23-1/2

Air Brake Valve

When the air brake hoses are not connected or accidentally disconnected from the tractor, the round baler brakes are automatically engaged.

To release round baler brakes manually, press on button (A).

The round baler brakes are automatically released when the air brake hoses are reconnected to the tractor brake system.

A—Button



CC565109—UN—04MAY23

ga87848,1683110867319 -19-03MAY23-2/2

Disconnect Air Brakes (If Equipped)

IMPORTANT: Pay attention to the colors of the couplers.

NOTE: Couplers and colors comply with 1728 ISO standard.

Disconnect red hose from connection (C) then yellow hose from connection (A).

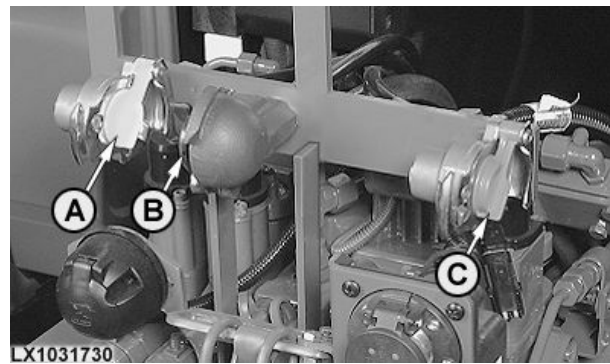
Seal the connections with the dust caps whenever the hoses are disconnected.

Store air brake connectors on the hoses storage (D).

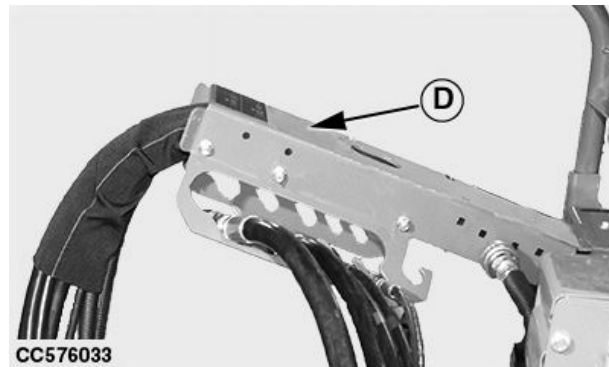
NOTE: When the brake hoses are disconnected from the tractor brake system, the brakes of the machine are automatically engaged. See [Park the Machine \(Baler with Air Brakes\)](#) in [Transporting and Parking](#) section.

A—Yellow (Dual-Line Brake)
B—Black (Single-Line Brake)

C—Red (Dual-Line Brake, Supply)
D—Hose Storage



LX1031730—UN—13AUG03



CC576033—UN—21JUN23

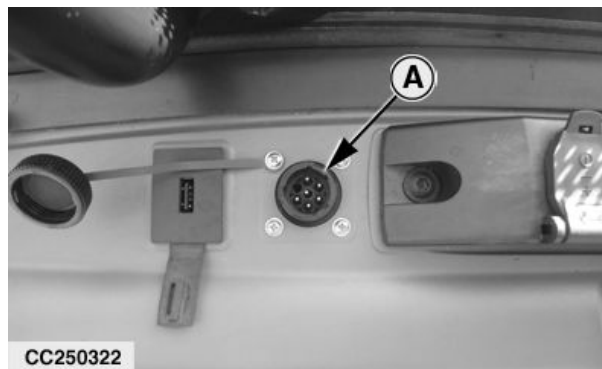
ti81334,1687357722707 -19-21JUN23-1/1

Disconnect Video Camera Harness(es) (If Equipped)

Disconnect video camera from the tractor camera socket (A) or from the external monitor socket (B). See your tractor Operator's Manual to locate it.

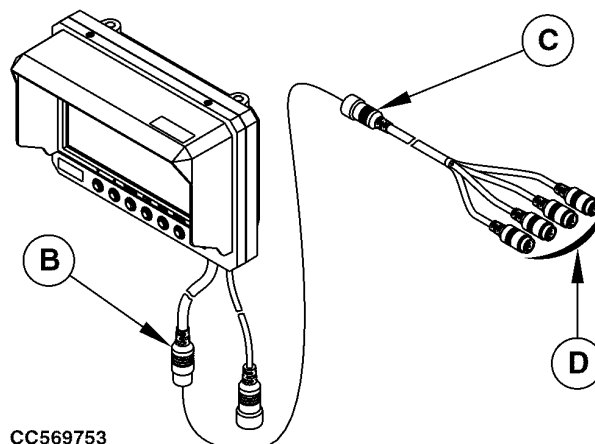
A—Socket - Tractor Video Camera
B—Plug - External Monitor Video Camera

C—Plug - Extension to Monitor
D—Plug - Extension to Camera



CC250322 —UN—30SEP15

Connect Video Camera Harness - Tractor



CC569753 —UN—09MAR23

Connect Video Camera Harness - External Monitor

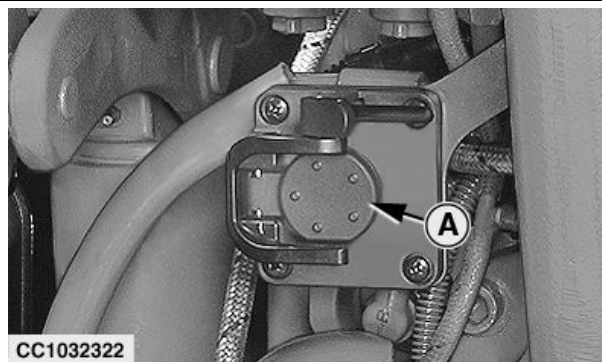
ga87848,1678372040760 -19-10MAY23-1/1

Disconnect Machine Wiring Harness

NOTE: Switch power OFF before disconnecting the wiring harness.

Disconnect machine wiring harness from the ISOBUS implement breakaway connector (A).

A—ISOBUS Implement Breakaway Connector

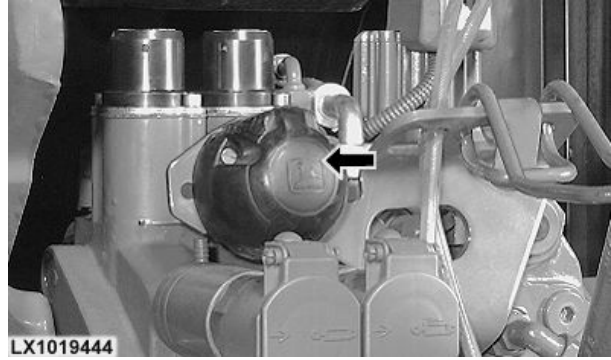


CC1032322 —UN—17DEC09

ga87848,1681994486668 -19-25APR23-1/1

Disconnect Seven-Terminal Trailer Socket

Disconnect road light plug from seven terminal socket of the tractor.



LX1019444

Tractor Seven-Terminal Socket

LX1019444 —UN—17SEP99

NB02380,0000161 -19-31MAY16-1/1

Disconnect from Tractor Hydraulic System

CAUTION: Maximum working pressure of baler hydraulic hoses is about 21000 kPa (210 bar; 3045 psi). To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

Before disconnecting hydraulic system, disengage PTO, engage park brake, shut off tractor engine and, remove key.

IMPORTANT: All hydraulic couplers must be clear of debris, dust and sand. Use protective caps on fluid openings until ready to make connection. Foreign material can damage the hydraulic system.

1. Disconnect pickup control valve hydraulic hoses

Disconnect pickup control valve hydraulic hoses (A) from double-acting SCV.



CC1027490

A—Pickup Hydraulic Hose

Pull hoses firmly from tractor receptacles.

CC1027490 —UN—11JUL05

ga87848,1687443316879 -19-22JUN23-1/2

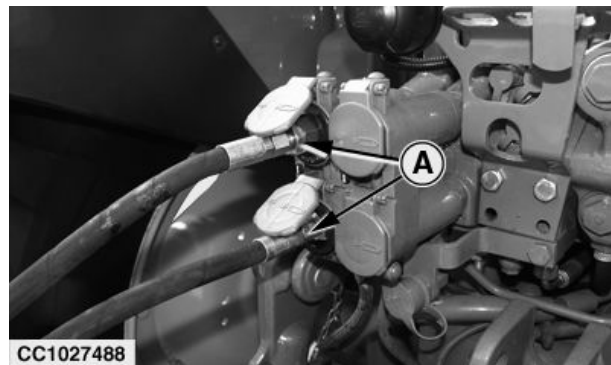
2. Disconnect gate lift hydraulic hoses

Disconnect gate lift hydraulic hoses (A) from double-acting SCV.

Pull hoses firmly from tractor receptacles.

3. Store hydraulic hoses, see [Store Hydraulic Hoses](#) in this Section.

A—Gate Hydraulic Hose



CC1027488

CC1027488 —UN—11JUL05

ga87848,1687443316879 -19-22JUN23-2/2

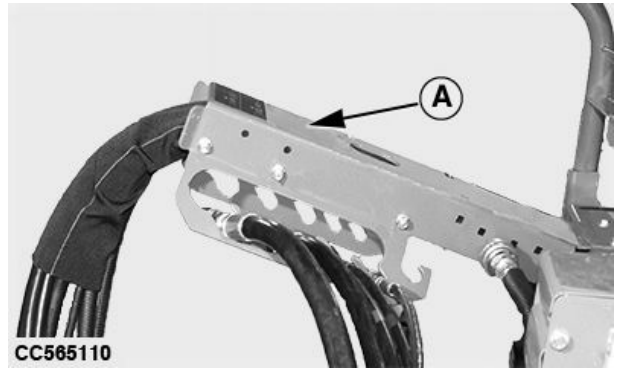
Store Hydraulic Hoses

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines.

Disconnect hydraulic hoses and install protective caps on couplers.

Store hydraulic hoses in the provided support (A) to keep them clean by avoiding contact with the ground.

A—Support



CC565110—UN—19APR23

ga87848,1677246335484 -19-24FEB23-1/1

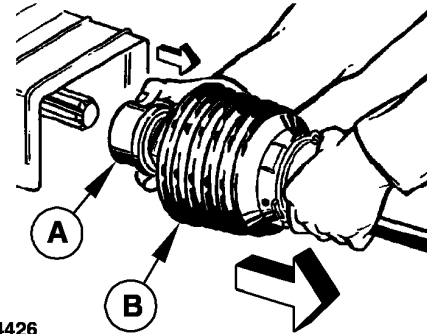
Disconnect Telescoping Driveline from Tractor PTO Shaft

CAUTION: Never detach telescoping driveline while the tractor is running.

Never use a steel hammer to connect or disconnect the driveline on PTO shaft.

IMPORTANT: Keep driveline and PTO shaft splines free from paint, dirt, chaff and burrs.

1. Disengage the PTO, engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
2. Hold guard (B) and pull back on locking collar (A). Slide telescoping driveline off tractor PTO shaft.
3. Store telescoping driveline, see [Store Telescoping Driveline](#) in this Section.
4. Reinstall all shields, if removed.



CC1034426

A—Locking Collar

B—Guard

NOTE: Refer to the basic telescoping driveline Operator's Manual to properly detach telescoping driveline from the tractor PTO shaft.

CC1034426—UN—15SEP11

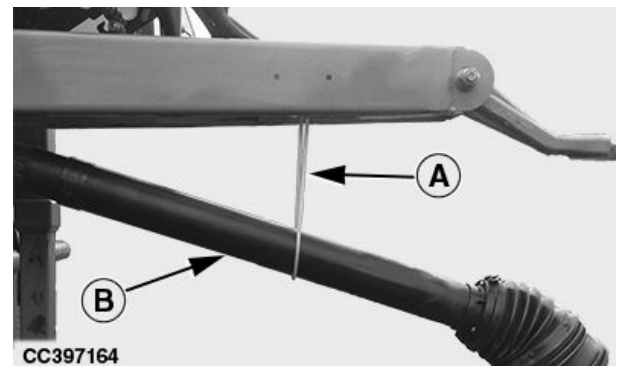
NB02380,000015C -19-25APR23-1/1

Store Telescoping Driveline

When baler tongue is adjusted in high position, install yellow cable as shown so that telescoping driveline can be stored on it.

A—Wire

B—Telescoping Driveline



CC397164—UN—27NOV19

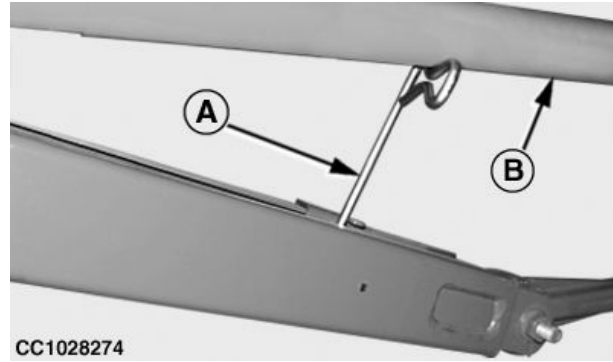
Continued on next page

tl81334,1687181258122 -19-19JUN23-1/2

When baler tongue is adjusted in low position, use support (A) as shown so that telescoping driveline (B) can be stored on it.

A—Support

B—Telescoping Driveline



1181334,1687181258122 -19-19JUN23-2/2

CC1028274 —UN—21SEP06

Unfold Jackstand

Before detaching baler from tractor, remove jackstand (A) from storage position and place it in position as shown.

Secure jackstand (A) with pin (B) as follows:

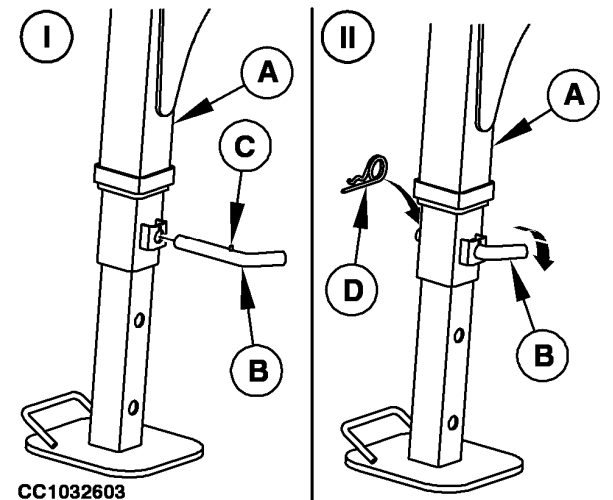
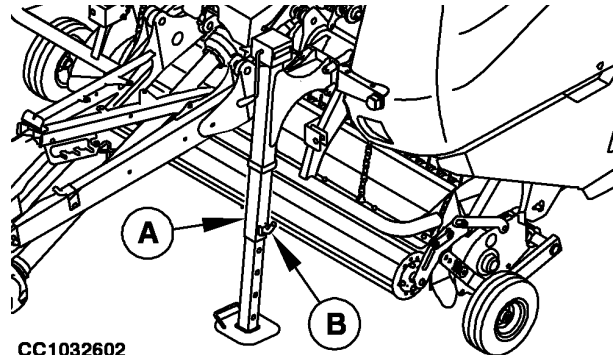
1. Insert pin (B) as shown in step (I).
2. Turn pin (B) as shown in step (II) to secure jackstand.

IMPORTANT: Make sure that cotter pin (C) is correctly inserted.

3. Insert spring locking pin (D) in pin (B) as shown in step (II).

A—Jackstand
B—Pin

C—Cotter Pin
D—Spring Locking Pin



NB02380,0000481 -19-23JUN17-1/1

CC1032602 —UN—14SEP10

CC1032603 —UN—14SEP10

Lock Mechanical Coupling

A lock (B) for the mechanical coupling shall protect the machine against unauthorized use:

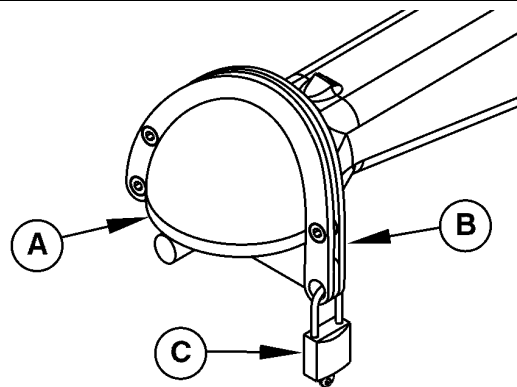
- Tow ball coupling: A lock is provided. The lower section of the lock fits firmly into the cavity of the coupling. Once this lower section is placed into the coupling, the upper bracket of the lock can be pivoted over the top of the ball coupling.
- Tow eye coupling: A chain is provided which fits through the coupling.

The lock, once placed onto the coupling shall be secured with padlock (C).

A—Towing Device
B—Tow Lock

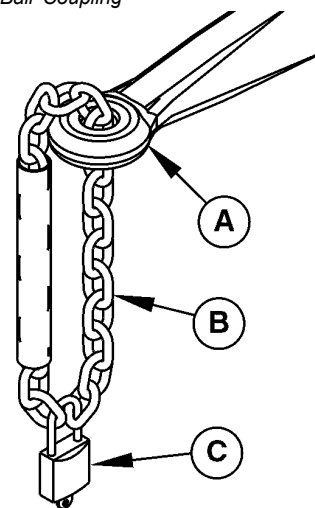
C—Padlock

CC550630



Tow Ball Coupling

CC550631



Tow Eye Coupling

ti81334,1665997396733 -19-18OCT22-1/1

CC550630 — UN — 18OCT22

CC550631 — UN — 18OCT22

Transporting and Parking

Tow Baler on Public Roads

CAUTION: Use care when towing baler at transport speeds. Reduce speed if the weight of baler exceeds weight of tractor. Baler must be empty when towing it on roads.

IMPORTANT: Do not make sharp turns when towing baler. Damage could result if tongue strikes tractor tire.

IMPORTANT: Maximum transport speed is determined by local road traffic regulations and speed capability of the implement. To determine the appropriate tire pressure, see Tire Inflation in Preparing the Baler section.

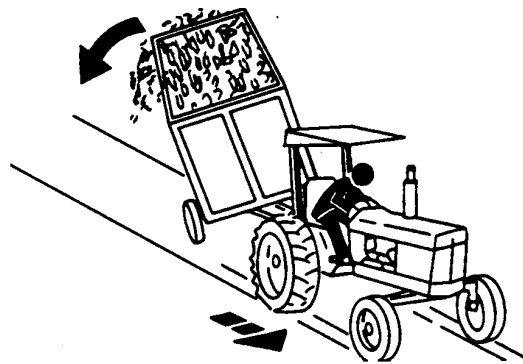
Always observe local road traffic regulations when driving on public roads.

Before towing the baler on public roads:

1. Close the gate
2. Raise pickup
3. Check the road lighting system

Use of beacon light is recommended.

When transporting baler at high speeds, a rocking motion may occur. Reduce speed until rocking stops.



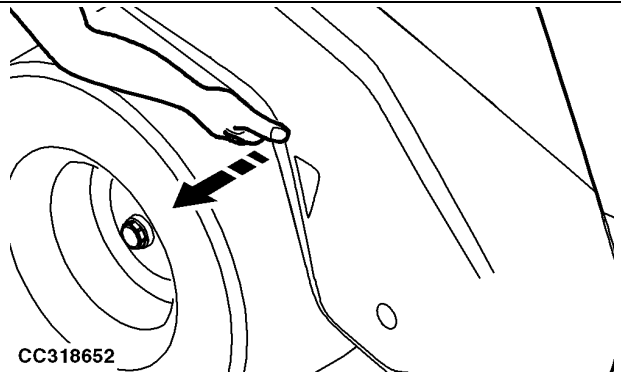
ga87848,1683103458730 -19-23MAY23-1/1

H28930 —UN—30JUN89

TS216 —UN—23AUG88

Check Side Doors Are Locked

CAUTION: Pull on side doors to make sure they are locked.



CC318652

NB02380,000041A -19-07JUN17-1/1

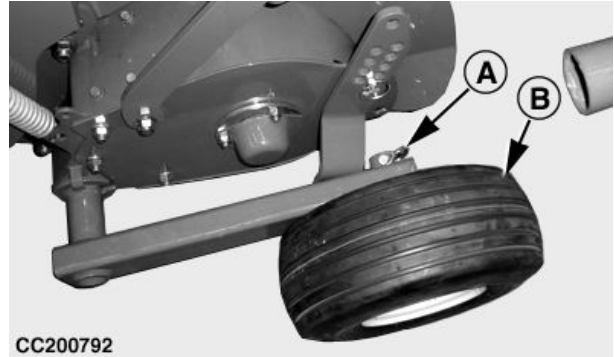
CC318652 —UN—06JUN17

Put Standard Gauge Wheels in Transport Position

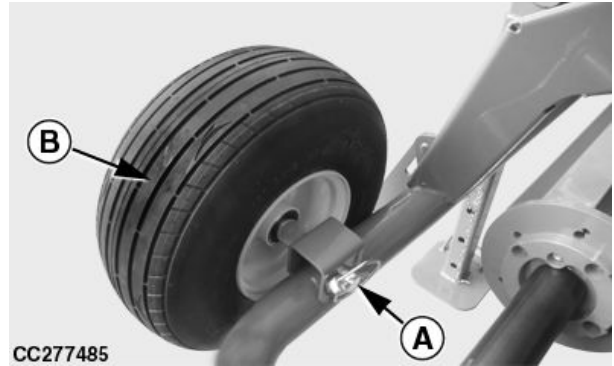
1. Remove quick-lock pin (A).
2. Remove gauge wheel (B) from pickup.
3. Position gauge wheel (B) on bracket as shown. Secure it with quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin

B—Gauge Wheel

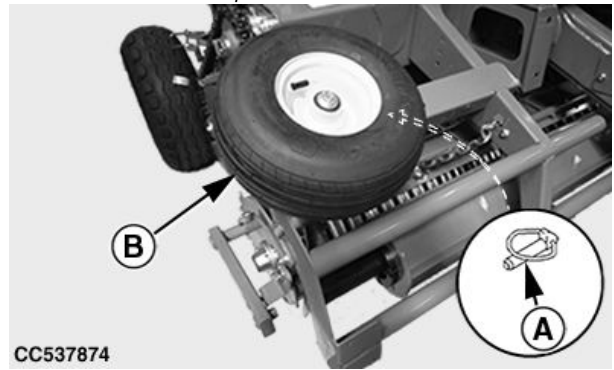


CC200792—JUN—12APR13



CC277485—JUN—18JUL16

Up To S.N. 219999



CC537874—JUN—01JUN22

From S.N. 220000

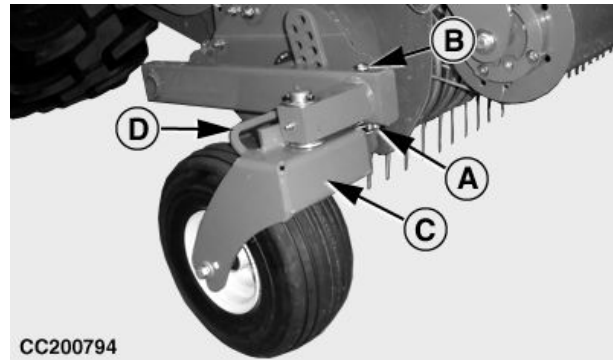
tl81334,1652785041405 -19-01JUN22-1/1

Put Caster Gauge Wheels in Transport Position

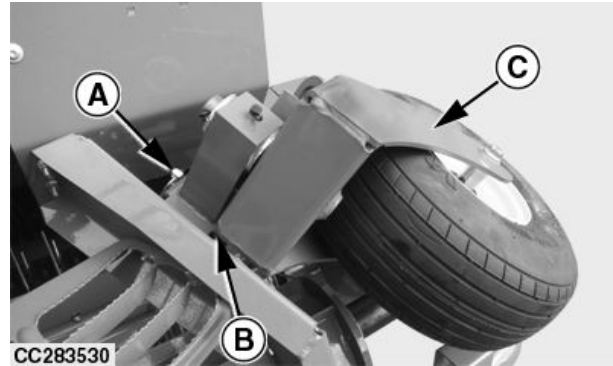
1. Remove quick-lock pin (A) and pin (B).
2. Remove caster gauge wheel (C) from pickup by using handle (D).
3. Position caster gauge wheel (C) on bracket as shown and secure it with pin (B) and quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin
B—Pin

C—Caster Gauge Wheel
D—Caster Gauge Wheel Handle

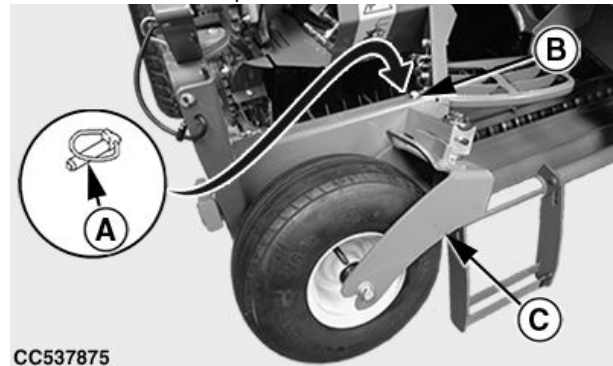


CC200794 —UN—12APR13



CC283530 —UN—18JUL16

Up To S.N. 219999



CC537875 —UN—01JUN22

From S.N. 220000

1181334,1652785854533 -19-01JUN22-1/1

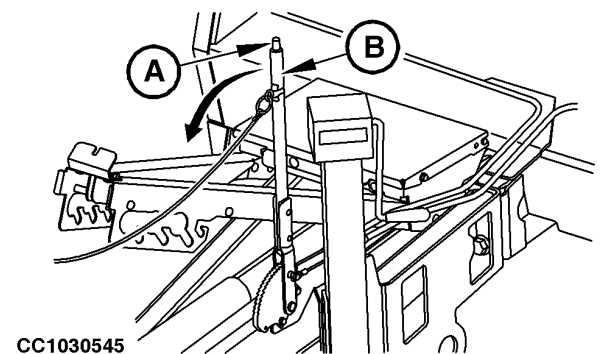
Park the Machine (Baler with Hydraulic Brakes)

Pull lever (B) to engage parking brake.

To disengage parking brake, pull lever (B), push button (A) then release lever.

A—Button

B—Lever



CC1030545 —UN—22OCT08

OUCC006,00013BF -19-13FEB08-1/1

Park the Machine (Baler with Air Brakes)

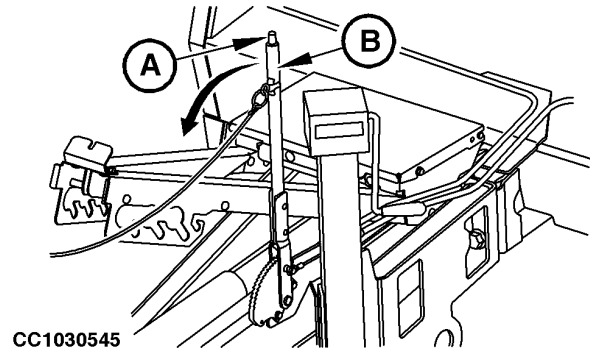
Parking brake

Pull lever (B) to engage parking brake.

To disengage parking brake, pull lever (B), push button (A) then release lever.

A—Button

B—Lever



CC1030545 —UN—22OCT08

ga87848,1683103916331 -19-30MAY23-1/2

Air Brake Valve

When the air brake hoses are not connected or accidentally disconnected from the tractor, the round baler brakes are automatically engaged.

To release round baler brakes manually, press on button (A).

The round baler brakes are automatically released when the air brake hoses are reconnected to the tractor brake system.

A—Button



CC565109 —UN—04MAY23

ga87848,1683103916331 -19-30MAY23-2/2

Break-In Period

Break In Baler

IMPORTANT: If machine torque limiter disengages during operation, disengage PTO and re-engage at low idle until torque limiter re-engages, then operate again at rated PTO speed

Consider period of approximately first fifty bales as the break-in period, i.e. until paint inside bale chamber has worn off.

aysdijz,1683183701738 -19-04MAY23-1/1

After the First 10 Hours: Check Wheel Nut Torque

Check wheel nut torque. See [Check Wheel Nut Torque](#) in Preparing the Baler section.

IMPORTANT: Repeat the procedure each time a wheel has been removed and installed.



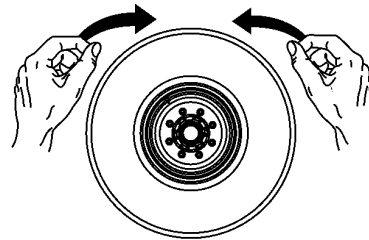
CC575701 —UN—28APR23

aysdijz,1681395389561 -19-26MAY23-1/1

After the First 10 Hours: Check End Play of Wheel Hub Bearing

Check the wheel have no play:

1. Lift the wheel from the ground. See [Remove and Install Wheel](#) in Service section.
2. Rotate slowly the wheel on both directions to detect jam or hard point.
3. Rotate the wheel faster and check any sound or any hard point.
4. Push and pull the wheel on all directions. The wheels should not be wobbly.



CC574077

CC574077 —UN—19APR23

If necessary, see your John Deere dealer.

aysdijz,1681894083926 -19-25APR23-1/1

After the First 50 Hours: Drain and Refill Gear Case

Change the oil in the gear case after the first 50 hours of operation. See [Every 500 Hours or Yearly: Drain and Refill Gear Case](#) in Lubrication and Maintenance section.

ga87848,1684914700495 -19-24MAY23-1/1

Break-in Period: After the First 500 Bales - Check Net Feed Roll Brake

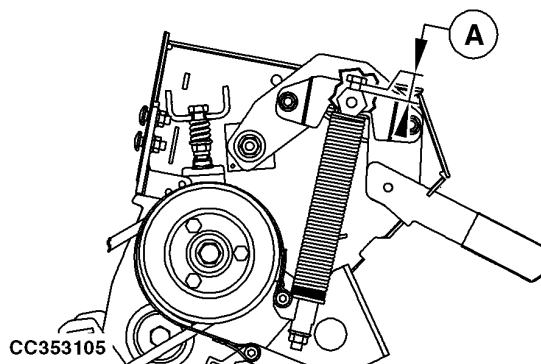
Check that distance (A) is within specification:

Specification

Screw-to-
Bracket—Distance.....3—5 mm
(1/8—3/16 in)

If necessary, see Check Net Feed Roll Brake (Test 6) in
Service section.

A—Distance



CC353105 —UN—17MAY18

ga87848,1685626280402 -19-01JUN23-1/1

Operating the Baler—General Purposes

Before Each Use of the Baler

IMPORTANT: Belt and drive loads increase as the bale size approaches maximum diameter. Frequent forming of oversize bales can lead to premature failures.

Check the Baler:

1. Check that there is no wrapped crop around bale chamber rolls, recheck as frequently as required. See [As Required: Clean Bale Chamber Rolls](#) in Lubrication and Maintenance section.
2. Check that belt hooks and hook wires are clean, recheck as frequently as required. See [As Required: Clean Belt Hooks and Hook Wires](#) in Lubrication and Maintenance section.
3. If equipped, retract or engage precutter knives. See [Retract or Engage Precutter Knives Function](#) in Operating Baler Application section.

Adjust the Baler:

1. Adjust the pickup gauge wheels. See [Adjust Pickup Gauge Wheels](#) in this section.
2. Adjust the pickup float spring. See [Adjust Pickup Float Spring](#) in this section.
3. Adjust windrow compressor sheet or windrow compressor roll. See [Adjust Windrow Compressor Sheet \(If Equipped\)](#), or [Adjust Windrow Compressor Roll \(If Equipped\)](#) in this section.
4. Install net or twine roll. See [Load Net Roll](#), or [Load Twine Boxes](#), [Route Twine from Twine Box to Twine Arms \(Tube Arms\)](#) and [Route Twine from Twine Box to Twine Arms \(Adjustable Arms\)](#) in Preparing the Baler section.

Lubricate the Baler:

1. Refill the automatic greasing system. See [As Required: Replace Automatic Greasing System Cartridge \(If Equipped with Cartridge-Type Pump\)](#) in Lubrication and Maintenance section.

2. Refill the chain oiling system reservoir. See [As Required: Refill Multiluber Chain Oiling System Reservoir](#) in Lubrication and Maintenance section.

Set Control Monitor Functions:

1. Adjust the bale diameter. See [Set Bale Diameter](#) in Operating Baler Application section.
2. Adjust the bale density. See [Adjust Bale Density](#) in Operating Baler Application section.
3. Select the binding system. See [Select Binding System](#) in Operating Baler Application section.
4. Select the binding start mode. See [Select Binding Start Mode](#) in Operating Baler Application section.
5. Adjust net and twine binding system. See [Adjust Net Binding](#) and [Adjust Twine Binding](#) in Operating Baler Application section.
6. Adjust the soft core diameter and density. See [Operate Soft Core System](#) in Operating Baler Application section.
7. If equipped, select the number of precutter knives. See [Retract or Engage Precutter Knives Function](#) in Operating Baler Application section.
8. Select the customer and field number. See [Customer and Field Counters](#) in Operating Baler Application section.

Beginning of Baling:

IMPORTANT: When the monitor is switched off for an extended period of time, the gate will unlatched. The gate has to be latched again before bailing.

1. Raise then close the gate. Check that the gate is latched correctly.
2. Check that the drop floor is in raised position. See [Baler Main Page Display Description](#) in Operating Baler Application section.

ga87848,1682584128416 -19-16JUN23-1/1

Clean the Machine to Prevent Fire

CAUTION: Before working on the machine, disengage PTO, engage parking brake, shut off tractor engine and remove key. Wait for all moving parts to come to a standstill.

IMPORTANT: Pressurized water can damage safty signs, cylinders, seals, and roll bearings.

Avoid to direct high-pressure jet on safty signs, cylinders, seals, and roll bearings.

Use compressed air to clean the machine.

To reduce risk of fire, clean the machine several times per day, adjust cleaning frequency based on baling conditions.

Remove buildup of crop material and other debris by hand or using any other available tools, especially near bearings and moving parts.

tl81334,1687246489709 -19-20JUN23-1/1

In Case of Fire Take Following Action

Stop baling immediately at the first sign of flames, smoke, scorched smell, or an unusual sound.

CAUTION: Do not risk personal injury. Burning tires and heated gas springs can explode unexpectedly. Avoid burns or smoke inhalation. Do not attempt to extinguish a fire that is too far advanced, move safely away from the fire.

If the fire can be extinguished or contained safely, proceed carefully and follow these guidelines.

1. Position the tractor upwind from the baler to avoid the fire overtaking the tractor.
2. Open the baler gate, eject any crop material from the bale chamber, drive away from the material.
3. Disengage PTO, engage parking brake, shut off tractor engine and remove key.
4. Pull the draw pin, detach safety chains, disconnect electrical harness.
5. Drive the tractor away from the baler (letting the driveline, and hydraulic connections pull free).
6. Call the fire department and give them your location.
7. Do not position yourself under an open baler gate. It may fall if the baler is on fire.
8. Stay upwind of the fire; follow instructions on your fire extinguisher when available.



TS227—JUN—15APR13

CC03745,000114C -19-25SEP14-1/1

Crop Preparation

Windrow Size

Good, uniform bales are made by feeding either full pickup width windrows or narrow windrows having a width of half or less than half of the pickup width.

Avoid medium-sized windrows. As the operator crosses this size windrow to crowd material into the ends of the pickup, material is continuously being fed to the center. As a result, more material will be fed into the center of the bale than in the ends. This results in barrel-shaped bales with low density at the ends and high density in the center.

Preparing the Hay Crops for Baling

The crop to be baled can be prepared in a number of ways, depending on your preference and equipment available. The most desirable bales are produced when the crop is cut, conditioned and then raked into windrows of the proper size. This allows the operator to weave and properly position the material in the baler, producing compact, uniform bales. See Windrow Size above.

If moisture content is too high, spoilage can be expected.

If moisture content is too low, excessive leaf loss and shatter will occur.

Cut the crop as long as possible. In most crops, longer material is easier to bale and results in smoother finished, more weather-resistant bales.

Do not overcondition the material, particularly legume-type crops such as alfalfa and clover.

Overconditioning will cause the leaves to dry too quickly and break off where they are damaged, resulting in losses. If the bales are to be stored outside, excessive shattering of stems will invite moisture absorption.

Underconditioning can also cause spoilage, particularly when baling cane-type crops and other heavy-stemmed materials.

NOTE: Excessively dry, slippery material sometimes encountered in maize stalks, certain grasses, and various types of grain straws can be successfully baled provided the material is of sufficient length to hold the bale together.

Preparing the Silage Crops for Baling

The crop can be cut and prepared with the usual equipment such as mower or a mower-conditioner and a tedder rake.

Produce uniform windrows. A flat, full windrow is desirable. The best results for conservation are obtained when the crop is baled at a dry matter content between 40 and 50%.

Preparing the Straw Crops for Baling

If at all possible, ensure at the time of combining a grain crop, that the straw is not chopped excessively by the combine's threshing mechanism. Do not stir up the windrow prior to baling if the straw is already very dry and short. A properly sized, full windrow, produced by a large combine will give better results than a very small windrow.

OUC006,0001A54 -19-03APR13-1/1

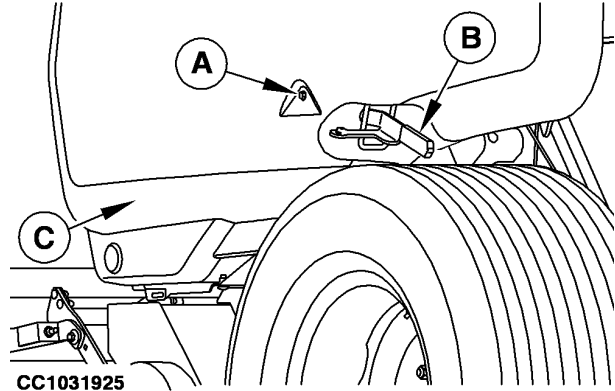
Open and Close the Side Door

1. Turn lock (A).
2. Pull latch (B).
3. Open the side door (C).

After closing a side door, pull on door to make sure it is locked.

A—Lock
B—Latch

C—Door



CC1031925 —UN—30NOV09

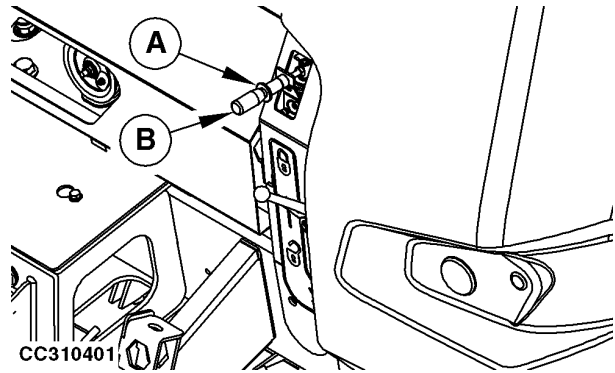
GA87848,0000474 -19-24OCT17-1/1

Gate Lock Valve

CAUTION: Before working inside or around the baler with an open gate, gate lock lever (B) must be moved to locked position by pulling the lock bushing (A). Always use this safety feature when gate is open. Close gate when leaving baler unattended.

IMPORTANT: Never travel with an open gate at a speed higher than 2 km/h (1.2 mph). Damage to the gate could occur.

To engage gate lock, pull bushing (A) and move lever (B) in lock position. The gate can be locked in any position by means of the gate lock valve.



A—Lock Bushing

B—Gate Lock Lever

CC310401 —UN—18APR17

ga87848,1682585111254 -19-27APR23-1/1

Operate Precutter Knives Lock Valve

Machine Equipped with 13 Knives Precutter:

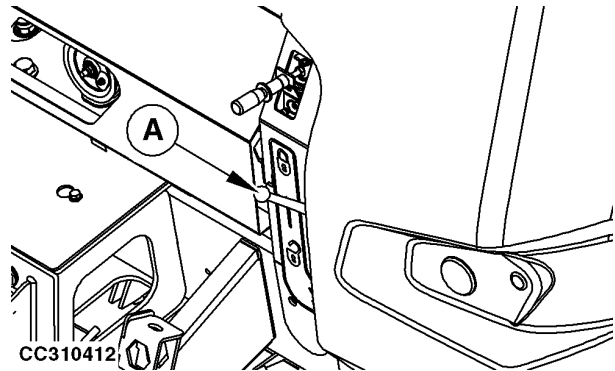
Move lock lever (A) to lock the precutter knives in their current position.

Machine Equipped with 25 Knives Precutter:

Move lock lever (A) to lock both precutter knives set in their current position.

NOTE: It is not recommended to work with precutter knives set 1 and 2 engaged at the same time. Ground speed will be highly reduced.

A—Lock Lever



CC310412 —UN—18APR17

GA87848,00010F4 -19-01FEB21-1/1

Adjust Pickup Float Spring

1. Unlock nut (A).
2. Adjust the pickup float spring by tightening screw (B) into spring plug until distance (C) is obtained.

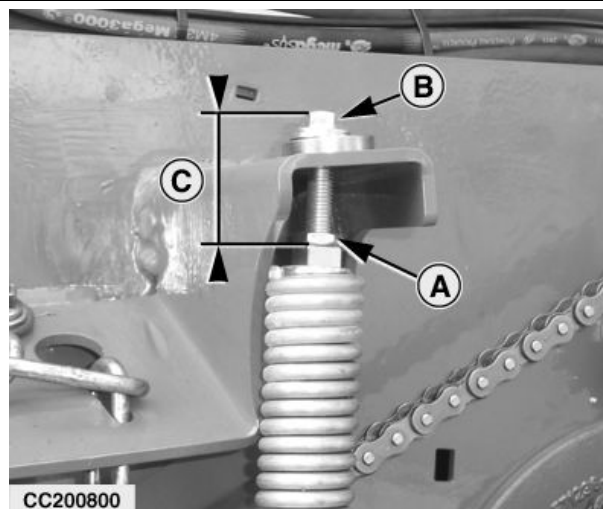
Specification

Pickup Float
Spring—Distance.....49—53 mm
(1-15/16 in—2-3/32 in)

3. Lock nut (A).
4. Repeat procedure on opposite side.

This setting should allow the pickup to drop completely when lowered. If not, slightly reduce spring setting.

NOTE: When operating at heights other than the extreme down position, additional spring force will be required to obtain adequate float.



A—Nut
B—Screw

C—Distance

ga87848,1670490078966 -19-11APR23-1/1

Adjust Pickup Gauge Wheels

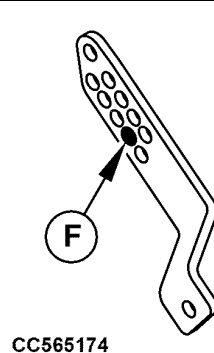
Depending on crop and field conditions, the initial gauge wheel setting may need to be reconsidered whether there is crop left on the ground or pickup teeth too close to the ground. Adjust to next available hole as required.

Adjust Pickup Standard Gauge Wheels:

1. Remove quick-lock pin (A) and pin (E).
2. Select a hole position (F) on support (B).

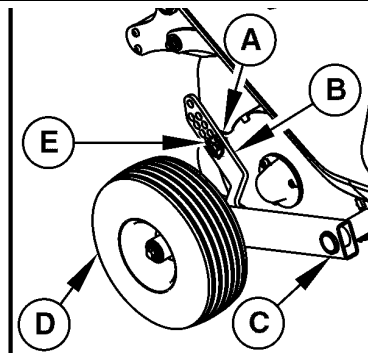
NOTE: Hole position (F) shown on the illustration is the recommended starting position.

3. Install quick-lock pin (A) and pin (E).
4. Repeat procedure on the opposite side.



CC565174

A—Quick-Lock Pin
B—Support
C—Wheel Arm



D—Gauge Wheel
E—Pin

Continued on next page

ga87848,1680177753351 -19-30MAR23-1/2

Adjust Pickup Caster Gauge Wheels:

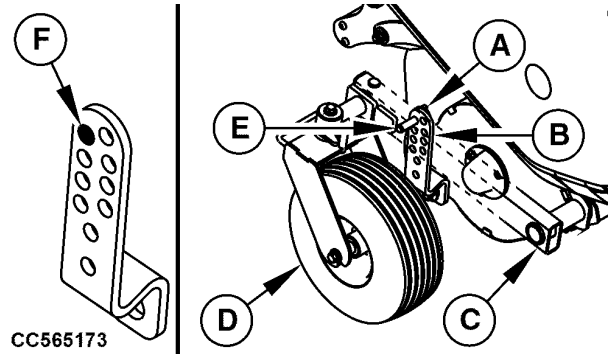
1. Remove quick-lock pin (A) and pin (E).
2. Select hole position (F) on support (B).

NOTE: Hole position (F) shown on the illustration is the recommended starting position.

3. Install quick-lock pin (A) and pin (E).
4. Repeat procedure on the opposite side.

A—Quick-Lock Pin
B—Support
C—Wheel Arm

D—Gauge Wheel
E—Pin
F—Hole Position



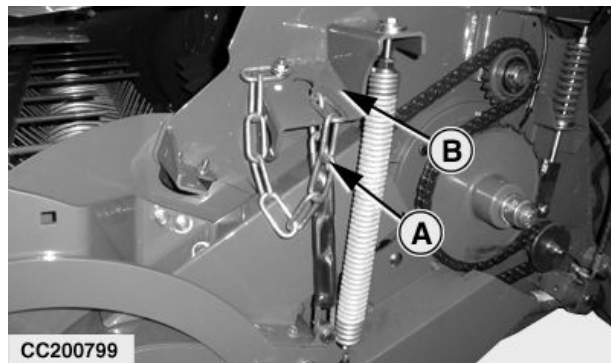
CC565173—UN—13MAR23

ga87848,1680177753351 -19-30MAR23-2/2

Adjust Pickup Downstops

NOTE: Gauge wheels must be used as down stop. However chain can replaced gauge wheels in case of extreme rough conditions

1. Fully raise the pickup with selective control valve lever.
2. Remove chain (A) from anchor (B) on the left side.
3. Lower the pickup until the desired pickup height is reached.
4. Attach chain (A) on anchor (B) leaving the minimum of chain links (A) hanging.
5. Act on selective control valve lever to fully lower the pickup.
6. Check pickup height.
7. Repeat procedure until the desired height is reached.



A—Chain

B—Anchor

CC200799—UN—12APR13

ga87848,1682425584846 -19-25APR23-1/1

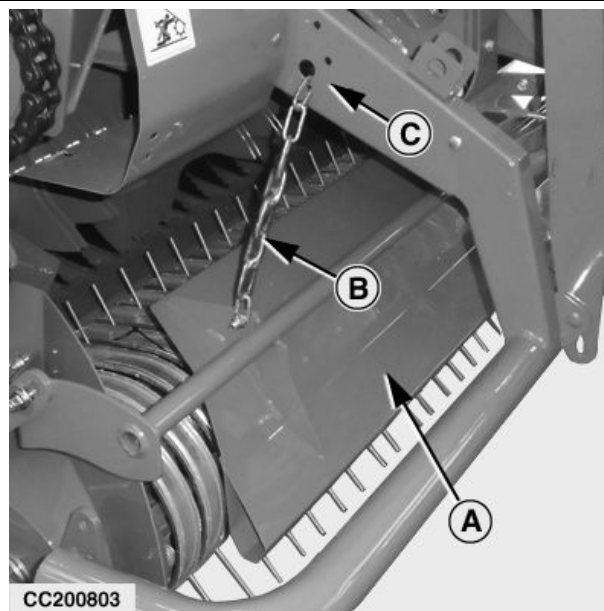
Adjust Windrow Compressor Sheet (If Equipped)

Adjust height of windrow compressor sheet (A) as follows:

1. Adjust the pickup height. See [Adjust Pickup Gauge Wheels](#) in this section.
2. Hold windrow compressor sheet (A) by hand, then remove chain (B) from bracket (C) on both sides.
3. Position windrow compressor sheet (A) in order to obtain the desired space between tip of pickup teeth, and windrow compressor sheet (A) depending on the windrow thickness.
4. Attach chain (B) to bracket (C) as shown, leaving the minimum of chain links (B) hanging.

NOTE: Check that the number of chain links (B) is the same on both sides.

5. Let the windrow compressor sheet (A) fall down.
6. Check height of windrow compressor sheet (A), and repeat procedure if needed.



A—Windrow Compressor Sheet
B—Chain

C—Bracket

aysdijz,1684138522825 -19-15MAY23-1/1

CC200803—UN—12APR13

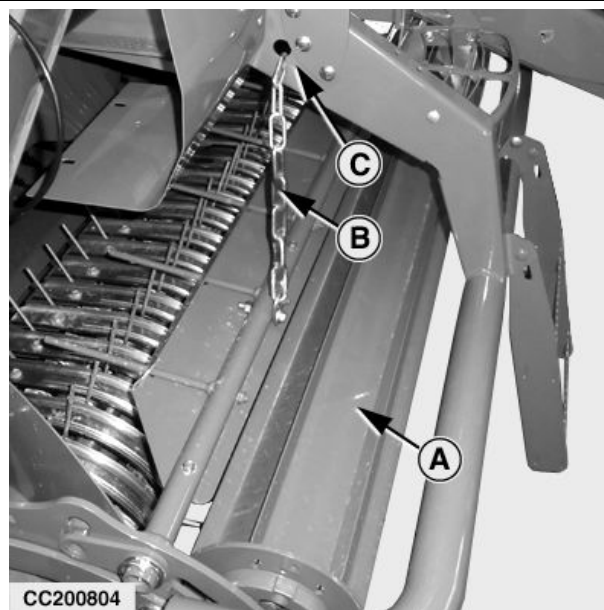
Adjust Windrow Compressor Roll (If Equipped)

Adjust height of windrow compressor roll (A) as follows:

1. Fully raise the pickup with selective control valve lever.
2. Remove chain (B) from bracket (C) on both sides.
3. Slowly lower the pickup until the middle of windrow compressor roll (A) and the top of the windrow are aligned.
4. Attach chain (B) to bracket (C) as shown, leaving the minimum of chain links (B) hanging.

NOTE: Check that the number of chain links (B) is the same on both sides.

5. Fully lower the pickup.
6. Check height of windrow compressor roll (A), repeat procedure, if needed.



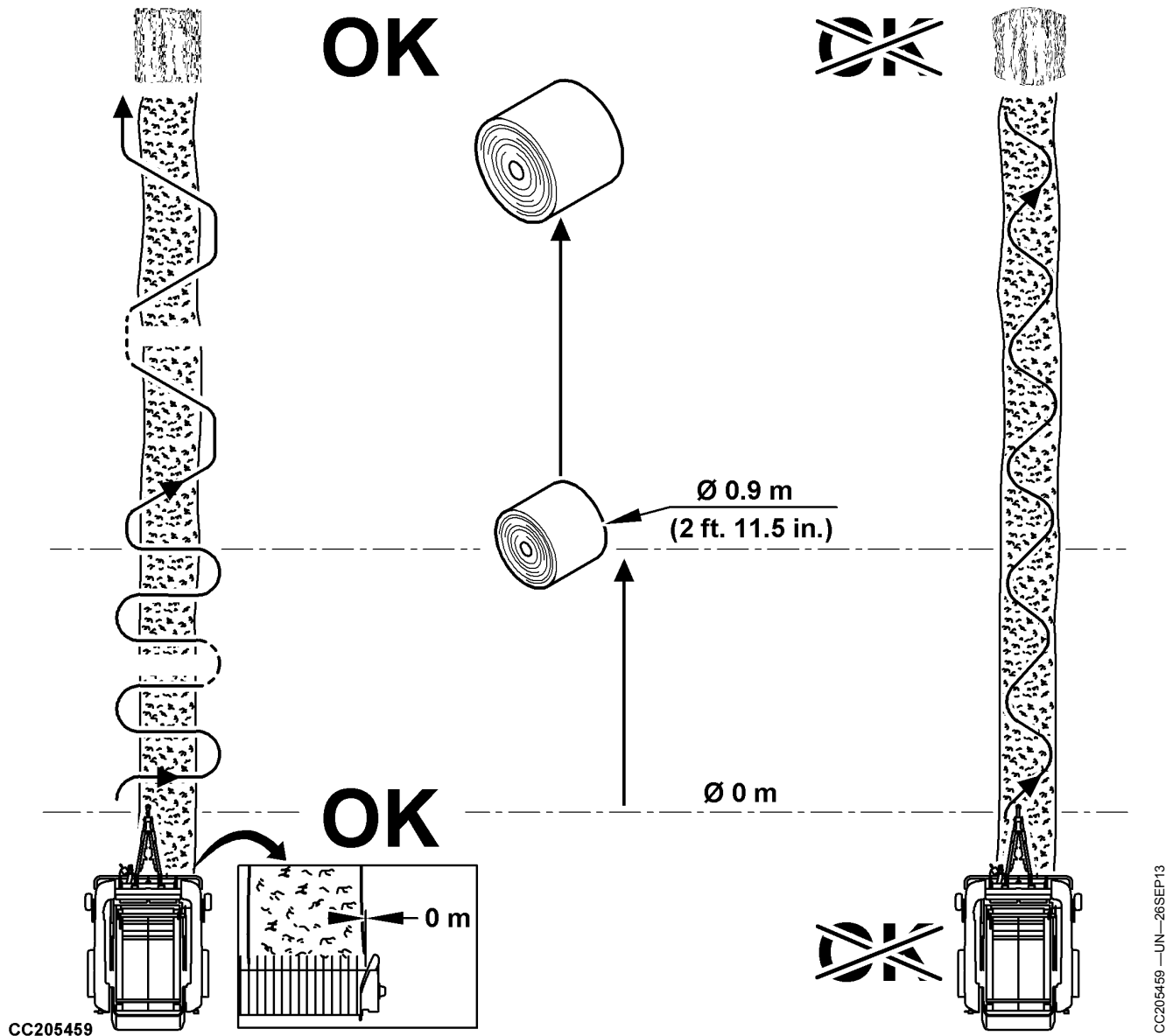
A—Windrow Compressor Roll
B—Chain

C—Bracket

OUC006,0001A56 -19-10APR13-1/1

CC200804—UN—12APR13

Guidelines to Form a Good Bale



CC205459

CC205459 —UN—26SEP13

1. Start feeding windrow.

NOTE: When baling in hillside conditions, always feed in first the downstream side of the machine. See *Operate Baler Safely on Slopes* in Safety section.

2. Move quickly to one side feeding the baler for several meters, as close as possible to the sidesheet, without leaving hay in the field.

NOTE: Weaving back and forth across the windrow should be done quickly in a zigzag fashion to balance crop intake side-to-side.

3. Move quickly to the other side feeding the baler for several meters, as close as possible to the sidesheet, without leaving hay in the field.

Continued on next page

1181334,1680854409427 -19-07APR23-1/2

4. Move quickly back to the other side feeding the baler, as close as possible to the sidesheet. Continue feeding in this manner until bale shape indicator (A) or (B) corresponding to feeding side rises, and a bale diameter of 0.9 m (2 ft. 11.5 in.) is obtained.
5. Then drive to the other side by reducing weaving frequency across the windrow until bale shape indicator (A) or (B) corresponding to feeding side rises.
6. Continue to feed in this manner until the near full indicator is displayed. Then, finish up the bale by feeding one side of the baler, taking care that both bale shape indicators are at the same height.

NOTE: If bale shape indicators display incorrect information about the bale formation, see [Calibrate Bale Shape Potentiometers RB321 and RB322](#) in Baler Application Service section.

Full pickup width windrows:

This is the ideal windrow width.

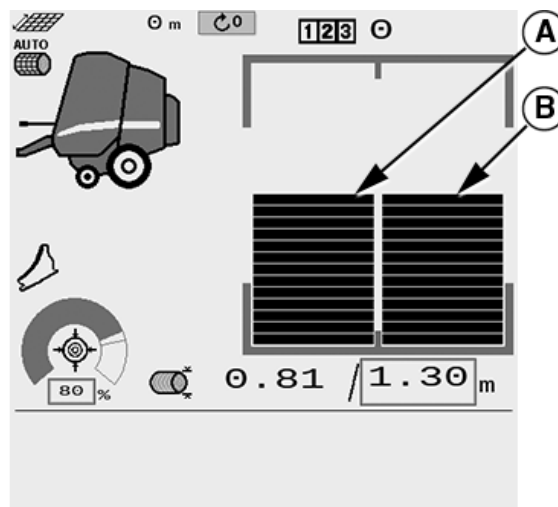
This windrow must be even with little or no crown. Too much crown will result in barrel-shaped bales.

Full-width windrows are desirable since no weaving or crossing the windrow is necessary.

Narrow windrows:

Once the core is formed (after 2 to 3 m; 8 to 10 ft. of forward travel), start the weaving pattern to feed material alternately into the sides of the pickup.

Bales formed in this way will be more uniform than bales formed by continuously driving the tractor in a weaving pattern, so that belt tracking problems, and potential net weaknesses will be avoided.



CC571134

A—Left Bale Shape Indicator

B—Right Bale Shape Indicator

It is preferable to work in full pickup width windrows.

Medium-sized windrows:

Whenever possible, avoid medium-sized windrows.

When the operator crosses this type of windrow to feed the ends of the pickup, material continues to be fed into the center. As a result, more material will be fed into the center of the bale than at the ends. Avoid barrel-shaped bales, belt tracking problems and potential net weaknesses by working in full pickup width windrows.

t81334,1680854409427 -19-07APR23-2/2

In Case of Plugging

In case of plugging, try one or more of the following methods:

- Raise pickup as high as needed.
- Reduce tractor PTO speed.
- Reduce working speed.

- Reduce bale density as necessary.
- Reduce bale diameter setting.
- Make larger windrows (rake together as necessary).
- Replace broken pickup teeth.
- It may be necessary to reduce number of precutter knives or to remove them.

ga87848,1679048543742 -19-06APR23-1/1

Set Net Guide Based on Field Condition

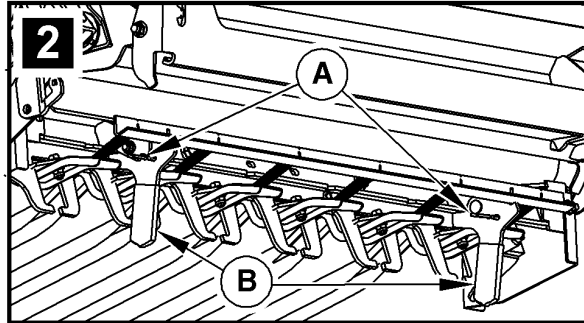
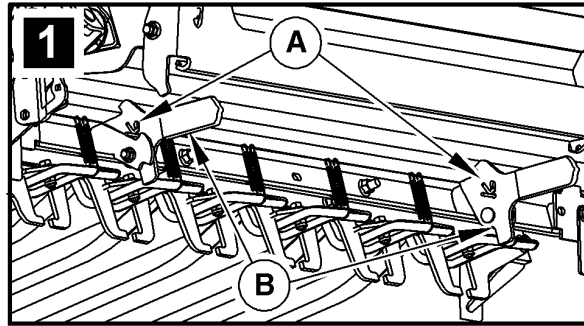
To avoid net from jamming, set net guide based on field condition.

Proceed as follows:

1. Remove pins (A).
2. Move levers (B) in the relevant position.
3. Install pins (A).

1— Dry Crop Condition
2— Wet and Sticky Crop Condition

A—Pin
B—Lever



CC334396

CC334396 —UN—30OCT17

TL81334,0000FCE -19-07JUL21-1/1

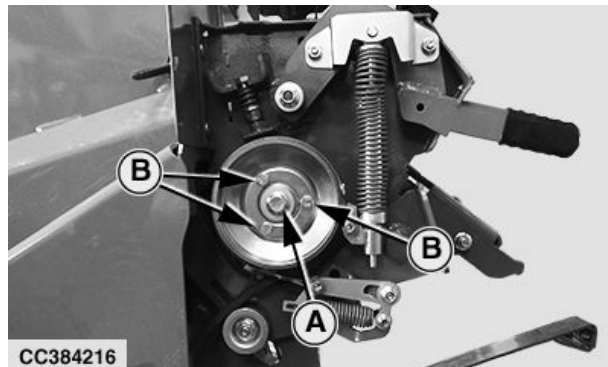
Adjust Net Binding Stretch

To adjust net binding stretch, proceed as follows:

1. Loosen cap screws (A) and (B).

A—Cap Screw

B—Cap Screw



CC384216

CC384216 —UN—03JUL19

GA87848,0000CB6 -19-25JUN19-1/5

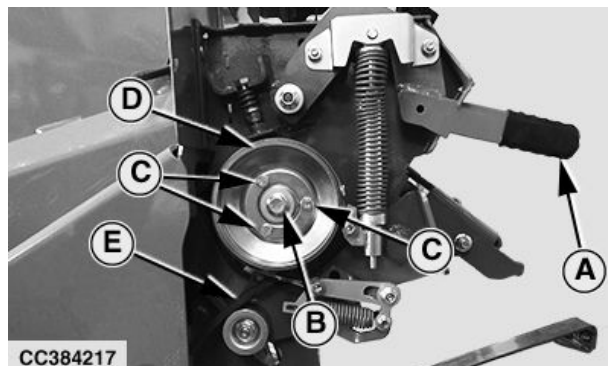
2. Remove cap screw (B) with washers (C).
3. Release net feed roll brake lever (A). Push lever (A) down and out, then raise it to disengage.

NOTE: Once unlocked, lever (B) is kept in upper position.

4. Remove sheave (D) and belt (E).

A—Brake Lever
B—Cap Screw
C—Washer

D—Sheave
E—Belt



CC384217

CC384217 —UN—03JUL19

Continued on next page

GA87848,0000CB6 -19-25JUN19-2/5

5. Remove cap screws (B) and separate sheave (A).

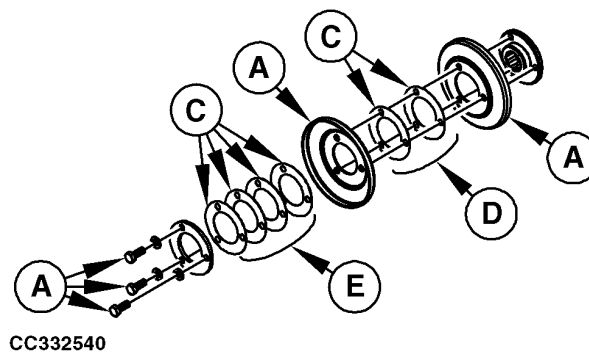
NOTE: During removal, record number and location of shims (C).

6. Net binding stretch depends on number of shims (C) in position (D).

- To increase net binding stretch, transfer shims (C) from position (D) to position (E).
- To decrease net binding stretch, transfer shims (C) from position (E) to position (D).

NOTE: Factory setting is two shims (C) in position (D).

Once the number of shims is adjusted, reassemble sheave.



A—Sheave
B—Cap Screws
C—Shims

D—Adjustment Position
E—Storage Position

GA87848,0000CB6 -19-25JUN19-3/5

7. Reinstall sheave (D) and belt (E).

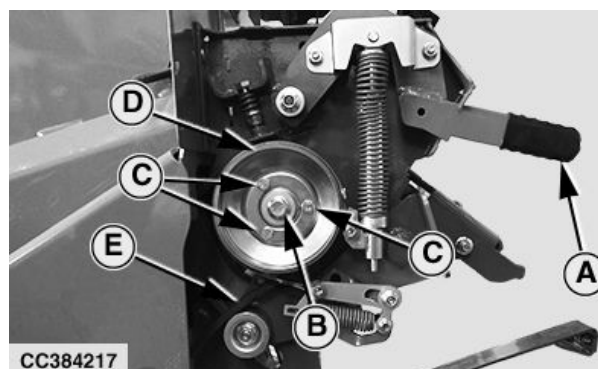
8. Apply net feed roll brake lever (A).

Pull lever (A) up and out, then lower.

9. Install cap screw (B) with washers (C).

A—Brake Lever
B—Cap Screw
C—Washer

D—Sheave
E—Belt



GA87848,0000CB6 -19-25JUN19-4/5

10. Tighten cap screws (B).

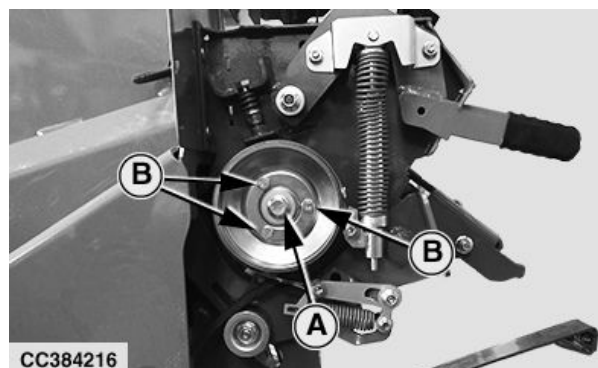
11. Tighten screw (A) to specified torque.

Specification

Net Binding System
Pulley Screw—Torque..... 140 N·m
(103 lb·ft)

A—Cap Screw

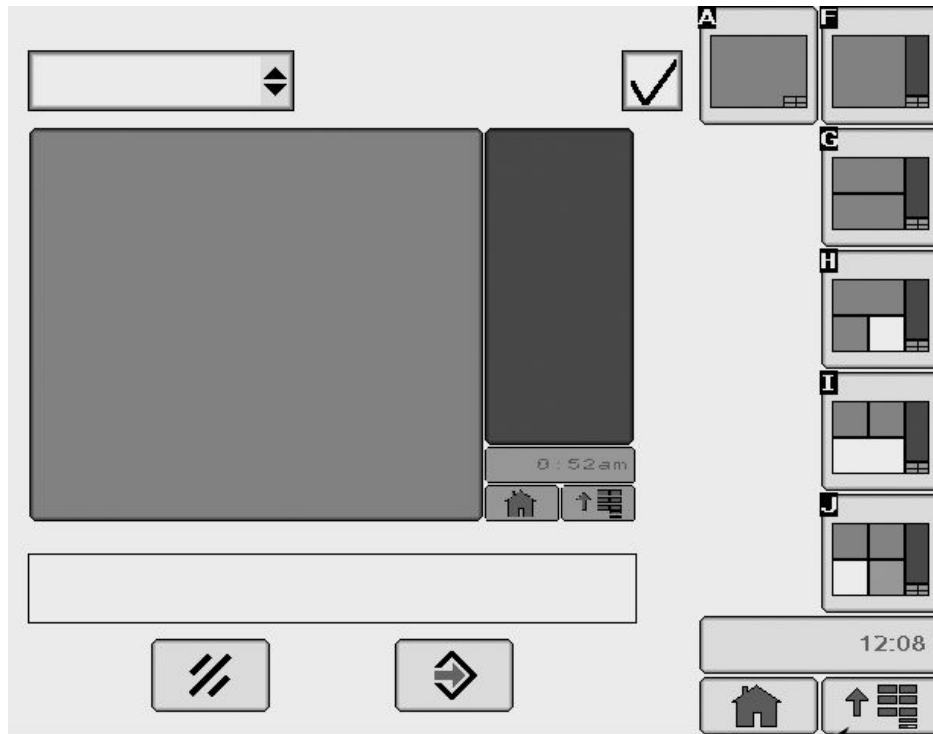
B—Cap Screw



GA87848,0000CB6 -19-25JUN19-5/5

Operating Baler Application

Baler Application Access



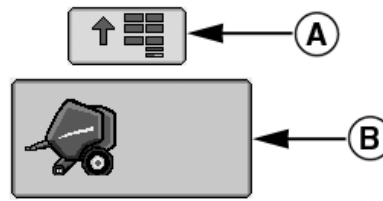
CC1032323

GreenStar 2600 Display Shown

CC295830 —UN—22SEP16

CC1032323 —UN—21DEC09

CC295830



Baler Application Access

A—Display Menu Softkey or Button

B—Baler Application Softkey

NOTE: John Deere monitors are automatically switched ON when the ignition key is turned ON.

The first time baler is connected to the monitor or after a software update, it is required to wait until the baler application is loaded (8 to 10 minutes).

If the baler application is not automatically displayed, select display menu softkey or button (A), then select baler application softkey (B).

NOTE: For more information about the display, see your monitor operator's manual.

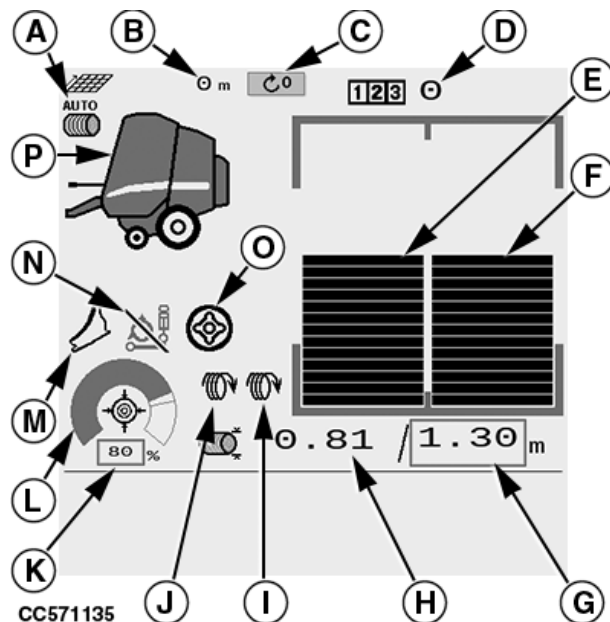
JC87117,0000283 -19-28NOV16-1/1

Units of Measure

In the baler application, units of measure depend on the monitor settings. Refer to your monitor operator's manual to select the desired units of measure.

OUC006,00015A0 -19-15DEC09-1/1

Baler Main Page Display Description



Baler Main Page Display with Other Display

- | | |
|--|------------------------------------|
| A—Binding Mode Symbol | E—Left Bale Shape Indicator |
| B—Net Binding Consumption Counter | F—Right Bale Shape Indicator |
| C—Reset Net Binding Consumption Counter Button | G—Target Bale Diameter |
| D—Current Field Bale Counter | H—Actual Bale Diameter |
| | I—Right Twine Pulley Status Symbol |

NOTE: Screen layout can change depending on the monitor.

The main page allows the main baler functions to be controlled and monitored while operating in the field.

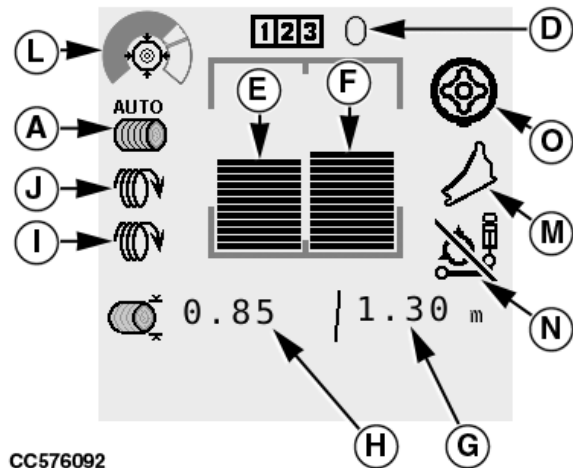
Binding Mode symbol (A) indicates the selected binding mode: net binding, John Deere B-Wrap™ binding, or twine binding. Symbol (A) also indicates the selected binding mode: Automatic or Manual. Symbol (A) is crossed out when the selected binding start mode is automatic but unavailable. See [Select Binding System](#) and [Select Binding Start Mode](#) in this section.

The Net Binding Consumption counter (B) indicates the actual consumption of net binding. The unit of the counter is in meter (m). Reset the counter (B) by pressing button (C).

Current Field Bale counter (D) indicates the total number of bales done for the selected field. See [Customer and Field Counters](#) in this section.

Bale shape indicators (E) and (F) allow the bale shape to be visualized on both sides. See [Guidelines to Form a Good Bale](#) in Operating the Baler - General Purpose section and [Make a Bale with Bale Shape Indicators](#) in this section.

Input box (G) is used to adjust the bale diameter. See [Set Bale Diameter](#) in this section.



CC576092

Baler Main Page Display with Implement Display 1100

CC571135 —UN—11APR23

CC576092 —UN—26APR23

- | | |
|-----------------------------------|------------------------------|
| J—Left Twine Pulley Status Symbol | N—Drop Floor Position Symbol |
| K—Bale Density Pressure Setting | O—Soft Core Status Symbol |
| L—Bale Density Indicator | P—Baler Status |
| M—Precut Knives Status Symbol | |

Actual bale diameter (H) indicates the bale diameter measured during bale formation (no value are displayed below 0.8 m (2 ft 7-1/2 in.)).

Symbols (I) and (J) are used to monitor the rotation of twine pulleys and indicate if twine is fed during the twine binding cycle. Symbols (I) and (J) are not displayed if twine pulley sensors are disabled. See [Adjust Twine Binding](#) in this section.

Bale Density Pressure setting (K) is used to set the desired bale density. Bale density indicator (L) indicates the relative pressure in bale chamber. See [Adjust Bale Density](#) in this section.

Symbol (M) indicates the precut knives position: retracted or engaged. Symbol (M) is crossed out when all precut knives are not engaged. See [Retract or Engage Precut Knives Function](#) in this section.

Drop Floor Position symbol (N) indicates that drop floor is down. When the drop floor is lowered, the symbol (N) is displayed until the drop floor is raised. When the drop floor is raised, the symbol (M) is not displayed. See [Unplug Pickup](#) in this section.

Symbol (O) is displayed only if soft core function is enabled. See [Operate Soft Core System](#) in this section.

Baler status (P) is used to monitor the bale size, the binding processes, and the rear gate position.

Continued on next page

1181334,1680855079511 -19-23MAY23-1/2

John Deere B-Wrap is a trademark of Tama Plastic Industry

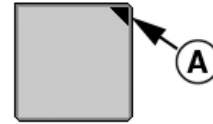
tl81334,1680855079511 -19-23MAY23-2/2

Softkey Description

CC1032341 —UN—15JAN10

In the baler application, softkeys allows to navigate, start a process and enable or disable an associated function.

NOTE: Some softkeys have a triangle (A) on the upper right corner. This triangle (A) indicates that a new page will be displayed if this softkey is activated.



CC1032341

A—Triangle

OUCC006,00015C0 -19-15JAN10-1/1

Baler Application Softkey Designation

CC277965 —UN—22SEP16

"Main Page" softkey.

This softkey provides direct access to baler application main page. See [Baler Main Page Display Description](#) in this section.

NOTE: This softkey is available on each page of the baler application.



CC277965

tl81334,1680855907495 -19-23MAY23-1/34

"Soft Core" softkey.

CC1031617 —UN—16SEP09

See [Operate Soft Core System](#) in this section.



CC1031617

tl81334,1680855907495 -19-23MAY23-2/34

"Counters" softkey.

CC324600 —UN—14SEP17

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.

NOTE: This softkey is available on each page of the baler application.



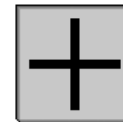
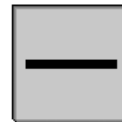
CC324600

tl81334,1680855907495 -19-23MAY23-3/34

"Remove Bales" and "Add Bales" softkeys.

CC1031852 —UN—30SEP09

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.



CC1031852

Continued on next page

tl81334,1680855907495 -19-23MAY23-4/34

"Clear Current Field Counter" softkey.

CC324601 —UN—14SEP17

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.



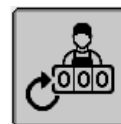
CC324601

†81334,1680855907495 -19-23MAY23-5/34

"Clear Customers Counters" softkey.

CC324602 —UN—14SEP17

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.



CC324602

†81334,1680855907495 -19-23MAY23-6/34

"Clear Season Counter" softkey.

CC324604 —UN—14SEP17

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.



CC324604

†81334,1680855907495 -19-23MAY23-7/34

"Customer and Field Counter" softkey.

CC324603 —UN—14SEP17

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.



CC324603

†81334,1680855907495 -19-23MAY23-8/34

"Season and Total Counter" softkey.

CC324605 —UN—14SEP17

See [Customer and Field Counters](#) and [Season and Machine Total Counters](#) in this section.



CC324605

†81334,1680855907495 -19-23MAY23-9/34

"Start Net Binding Cycle" softkey.

CC321713 —UN—29JUN17

See [Manual Start of Binding Cycle](#) in this section.



CC321713

Continued on next page

†81334,1680855907495 -19-23MAY23-10/34

"Start John Deere B-Wrap™ Binding Cycle" softkey.
See [Manual Start of Binding Cycle](#) in this section.

CC334597 —UN—11DEC17



CC334597

John Deere B-Wrap is a trademark of Tama Plastic Industry

†181334,1680855907495 -19-23MAY23-11/34

"Start Twine Binding Cycle" softkey.
See [Manual Start of Binding Cycle](#) in this section.

CC351782 —UN—29MAY18

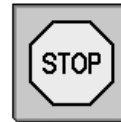


CC351782

†181334,1680855907495 -19-23MAY23-12/34

"Stop Binding Cycle" softkey.
See [Manual Start of Binding Cycle](#) in this section.

CC1031890 —UN—19OCT09



CC1031890

†181334,1680855907495 -19-23MAY23-13/34

"Net Binding Start Mode" softkey.
See [Select Binding Start Mode](#) in this section.

CC321714 —UN—29JUN17



CC321714

†181334,1680855907495 -19-23MAY23-14/34

"John Deere B-Wrap™ Binding Start Mode" softkey.
See [Select Binding Start Mode](#) in this section.

CC342456 —UN—31JAN18



CC342456

John Deere B-Wrap is a trademark of Tama Plastic Industry

†181334,1680855907495 -19-23MAY23-15/34

"Twine Binding Start Mode" softkey.
See [Select Binding Start Mode](#) in this section.

CC351783 —UN—29MAY18



CC351783

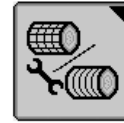
Continued on next page

†181334,1680855907495 -19-23MAY23-16/34

"Binding Settings" softkey.

CC351755 —UN—24APR18

See [Adjust Net Binding](#) in this section.



CC351755

tl81334,1680855907495 -19-23MAY23-17/34

"Retract Actuator" and "Extend Actuator" softkeys.

CC1031854 —UN—30SEP09



CC1031854

tl81334,1680855907495 -19-23MAY23-18/34

"Drop Floor and Precutter Knives Management" softkey.

CC1031618 —UN—16SEP09

See [Retract or Engage Precutter Knives Function](#) and [Unplug Pickup](#) in this section.



CC1031618

tl81334,1680855907495 -19-23MAY23-19/34

"Drop Floor and Precutter Knives" softkey.

CC1031805 —UN—16SEP09

See [Unplug Pickup](#) in this section.



CC1031805

tl81334,1680855907495 -19-23MAY23-20/34

"Drop Floor" softkey.

CC1031806 —UN—16SEP09

See [Unplug Pickup](#) in this section.



CC1031806

tl81334,1680855907495 -19-23MAY23-21/34

"Precutter Knives Set 1" softkey.

CC1031807 —UN—16SEP09

See [Retract or Engage Precutter Knives Function](#) in this section.



CC1031807

Continued on next page

tl81334,1680855907495 -19-23MAY23-22/34

"Precutter Knives Set 2" softkey.

CC1032652 —UN—24NOV10

See [Retract or Engage Precutter Knives Function](#) in this section.



CC1032652

ti81334,1680855907495 -19-23MAY23-23/34

"Settings" softkey.

CC277966 —UN—22SEP16

See this section, Operating Baler in Automatic Tailgate Mode, and Baler Application Service section.

NOTE: This softkey is available on each page of the baler application.



CC277966

ti81334,1680855907495 -19-23MAY23-24/34

"Next Page" and "Previous Page" softkeys.

CC277967 —UN—22SEP16



CC277967

ti81334,1680855907495 -19-23MAY23-25/34

"Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09

See Baler Application Service section.



CC1031614

ti81334,1680855907495 -19-23MAY23-26/34

"Input Test" softkey.

CC277969 —UN—22SEP16

See [Test Sensors and Switches](#) in Baler Application Service section.



CC277969

ti81334,1680855907495 -19-23MAY23-27/34

"Output Test" softkey.

CC277970 —UN—22SEP16

See [Test Electro-Hydraulic Components](#) in Baler Application Service section.



CC277970

Continued on next page

ti81334,1680855907495 -19-23MAY23-28/34

Operating Baler Application

"Baler Calibration" softkey.

CC1031658 —UN—16SEP09

See Baler Application Service section.



CC1031658

tl81334,1680855907495 -19-23MAY23-29/34

"Twine Actuator Calibration" softkey.

CC341041 —UN—08JAN18

See Calibrate Twine Binding Actuator MB421 in Baler Application Service section.



CC341041

tl81334,1680855907495 -19-23MAY23-30/34

"Bale Diameter Calibration" softkey.

CC341042 —UN—09JAN18

See Calibrate Bale Diameter Potentiometer RB311 in Baler Application Service section.



CC341042

tl81334,1680855907495 -19-23MAY23-31/34

"Bale Shape Calibration" softkey.

CC341045 —UN—09JAN18

See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.



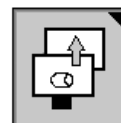
CC341045

tl81334,1680855907495 -19-23MAY23-32/34

"Select Virtual Terminal" softkey.

CC277988 —UN—22SEP16

See Switch Baler Application from Current Virtual Terminal (Display) to Another in Baler Application Service section.



CC277988

tl81334,1680855907495 -19-23MAY23-33/34

"Advanced Settings" softkey.

CC1034498 —UN—07JUL11

See your John Deere dealer.



CC1034498

tl81334,1680855907495 -19-23MAY23-34/34

Set Bale Diameter

NOTE: When John Deere B-Wrap™ binding is enabled, do not make bale with diameter above 1.70 m (68 in) to ensure a good bale forage protection.

This adjustment determines the diameter at which the binding cycle will automatically start.

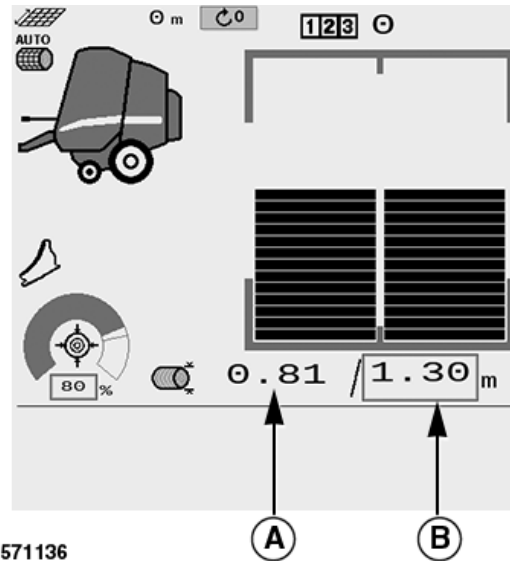
- On the main page, select input box (B) and set bale diameter:
 - From 1 to 1.63 m (2 ft 11-3/8 in to 5 ft 5 in) for V451M baler.
 - From 1 to 1.83 m (2 ft 11-3/8 in to 6 ft 0-7/8 in) for V461M baler.

The actual bale diameter (A) allows the measured bale diameter to be monitored while baling.

NOTE: If bale diameter (B) is modified while baling, the new value is applied instantaneously.

A—Bale Diameter (Actual) B—Bale Diameter (Target)

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CC571136

CC571136 —UN—11APR23

1181334,1680855927520 -19-01JUN23-1/4

- The bale diameter may also be adjusted on the baler settings page. From the baler application main page, select "Settings" softkey.

CC277966 —UN—22SEP16



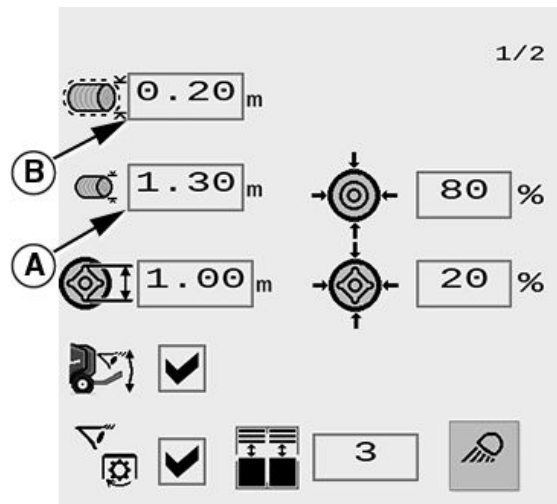
CC277966

1181334,1680855927520 -19-01JUN23-2/4

- Select input box (A) and set bale diameter:
 - From 1 to 1.63 m (2 ft 11-3/8 in to 5 ft 5 in) for V451M baler.
 - From 1 to 1.83 m (2 ft 11-3/8 in to 6 ft 0-7/8 in) for V461M baler.

NOTE: On the baler settings page, use input box (B) to adjust the near full alarm offset. See [Adjust Near Full Alarm Offset](#) in this section.

A—Bale Diameter B—Near Full Alarm Offset



CC571137

CC571137 —UN—11APR23

Continued on next page

1181334,1680855927520 -19-01JUN23-3/4

4. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680855927520 -19-01JUN23-4/4

Adjust Near Full Alarm Offset

CC277966 —UN—22SEP16

The near full alarm offset represents the distance below the preset bale diameter at which the near full symbol is displayed.



CC277966

1. From the baler application main page, select "Settings" softkey.

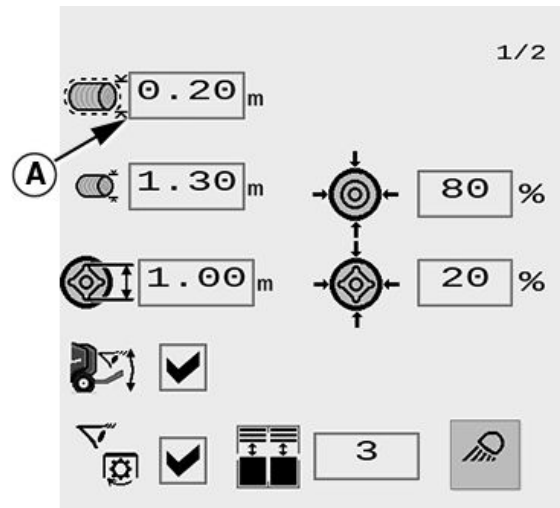
tl81334,1680855945518 -19-11APR23-1/3

2. Select input box (A) and set distance from 0 to 0.3 m (0 to 11.8 in.).

NOTE: The initial factory value is 0.2 m (7.9 in.).

See [Automatic Start of Binding Cycle](#) in this section for more information about near full symbol.

A—Near Full Alarm Offset



CC571138

CC571138 —UN—11APR23

tl81334,1680855945518 -19-11APR23-2/3

3. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680855945518 -19-11APR23-3/3

Select Binding System

CC351755 —UN—24APR18

NOTE: John Deere B-Wrap™ binding system is only available on baler equipped with John Deere B-Wrap™ kit.



Binding Settings Softkey

CC351755

1. From the baler application main page, select "Binding Settings" softkey.

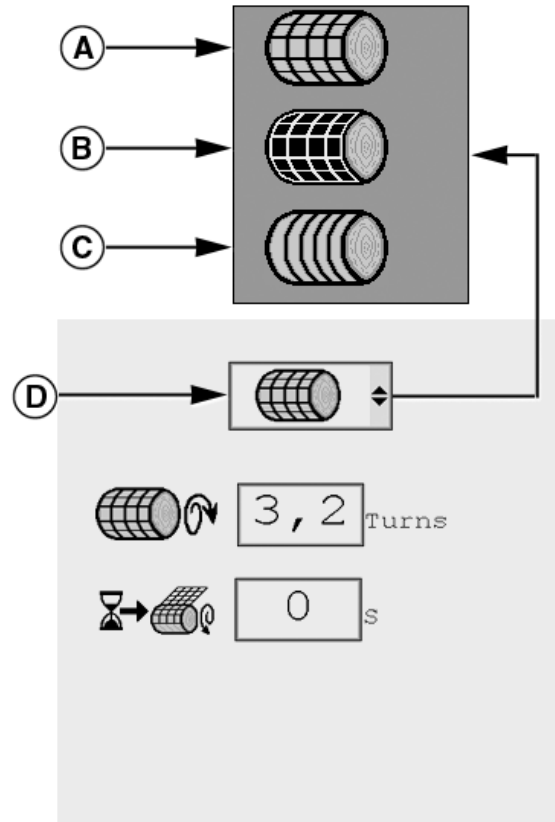
John Deere B-Wrap is a trademark of Tama Plastic Industry

†181334,1680855967352 -19-11APR23-1/4

2. Select and activate the binding system selection drop-down list (D). Select the desired binding system.

A—Net Binding System
B—John Deere B-Wrap™
Binding System

C—Twine Binding System
D—Binding System Selection



CC571139

CC571139 —19—24MAY23

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†181334,1680855967352 -19-11APR23-2/4

3. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

Continued on next page

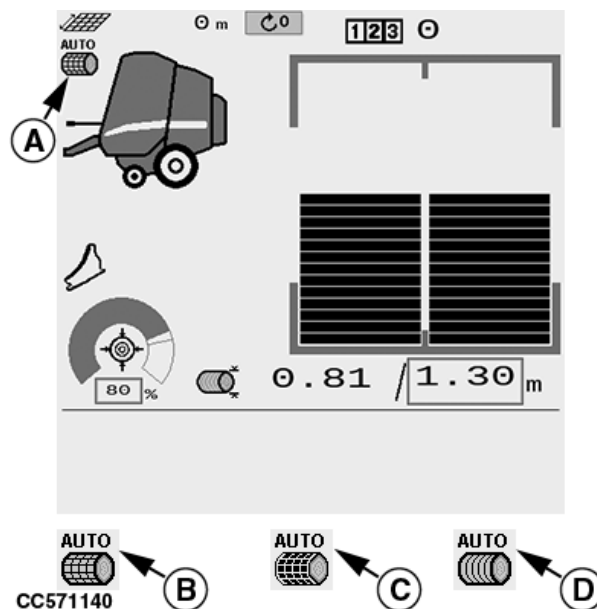
†181334,1680855967352 -19-11APR23-3/4

4. On the main page, symbol (A) indicates the selected binding system.

- Symbol (B) indicates that net binding system is selected.
- Symbol (C) indicates that John Deere B-Wrap™ binding system is selected.
- Symbol (D) indicates that twine binding system is selected.

A—Binding System Symbol
B—Net Binding Symbol

C—B-Wrap Binding Symbol
D—Twine Binding Symbol



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tl81334,1680855967352 -19-11APR23-4/4

Select Binding Start Mode

CC321714 —UN—29JUN17

1. From the baler application main page, select and activate "Net Binding Start Mode", "John Deere B-Wrap™ Binding Start Mode", or "Twine Binding Start Mode" softkey to choose between automatic and manual mode.

NOTE: See *Select Binding System* in this section to select the desired binding system.



CC321714

Net Binding Start Mode Softkey

CC342456 —UN—31JAN18



CC342456

John Deere B-Wrap™ Binding Start Mode Softkey

CC351783 —UN—29MAY18



CC351783

Twine Binding Start Mode Softkey

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Continued on next page

tl81334,1680856195392 -19-05JUN23-1/2

2. Symbol (A) indicates the selected binding start mode.

If automatic is selected, the binding cycle starts automatically when the adjusted bale diameter is reached. See [Automatic Start of Binding Cycle](#) in this section.

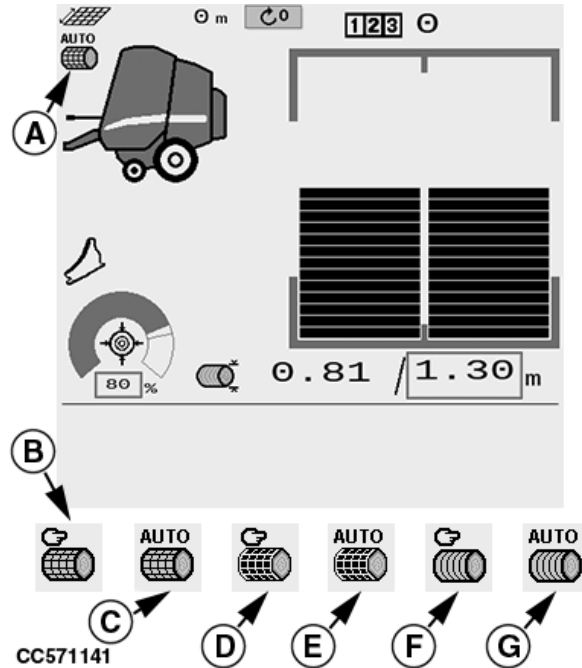
NOTE: Symbol (A) is crossed out when the selected binding start mode is automatic but unavailable if any of the following conditions exist:

- Automatic binding cycle is already running.
- Baler gate is not closed and latched.
- Diagnostic trouble code relating to the gate or the selected binding system is active.

If manual is selected, the binding cycle must be started manually. See [Manual Start of Binding Cycle](#) in this section.

A—Binding Start Mode
B—Manual Start (Net Binding)
C—Automatic Start (Net Binding)
D—Manual Start (B-Wrap Binding)

E—Automatic Start (B-Wrap Binding)
F—Manual Start (Twine Binding)
G—Automatic Start (Twine Binding)



1181334,1680856195392 -19-05JUN23-2/2

Adjust Net Binding

CC351755 —UN—24APR18

NOTE: Before adjusting the net binding system, see [Select Binding System](#) in this section to select net binding system.



CC351755

1. From the baler application main page, select "Binding Settings" softkey.

Continued on next page

1181334,1680856211297 -19-11APR23-1/3

2. Set net binding as follows:

a. **Number of Net Turns (A):**

Set number of net turns between 1.2 and 10 net turns in input box (A).

The minimum recommended number of net turns is 2.2.

The number of net turns depends on crop material, harvesting condition (temperature, crop moisture), bale density, and net manufacturer. Adjust the number of net turns according to the field conditions.

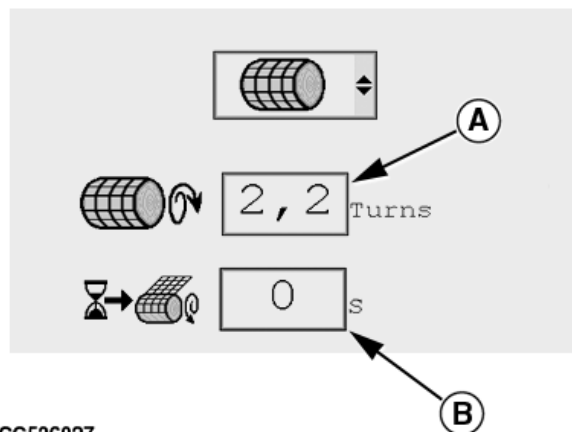
NOTE: To ensure a correct overlap of each net turn, we recommend to use decimal values between X.3 and X.5.

In any of the following conditions, set the number of net turns to a minimum of 3.2:

- Density is over 65%.
- Baling hay or straw.

b. **Net Binding Delay (B):**

Set net binding delay between 0 and 9 seconds in input box (B). The net binding delay is the time between the binding start indication on the monitor and the activation of the net actuator. The net binding delay provides time to stop tractor forward



CC526027

A—Number of Net Turns

B—Net Binding Delay

travel and to avoid crop getting trapped between net layers.

NOTE: The initial factory setting is 0 seconds.

tl81334,1680856211297 -19-11APR23-2/3

3. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680856211297 -19-11APR23-3/3

Adjust B-Wrap Binding

CC351755 —UN—24APR18

NOTE: Before adjusting the John Deere B-Wrap™ binding system, see Select Binding System in this section to select John Deere B-Wrap™ binding system.

1. From the baler application main page, select "Binding Settings" softkey.

John Deere B-Wrap is a trademark of Tama Plastic Industry



CC351755

Continued on next page

tl81334,1680856226121 -19-11APR23-1/5

2. Adjust John Deere B-Wrap™ net cut length:

Press "PLUS" (C) or "MINUS" (A) button to respectively extend or reduce net cut length after VELCRO®. Net cut length adjustment bar (B) indicates current setting.

Net should be cut off around 25 cm (10 in) after VELCRO® (E).

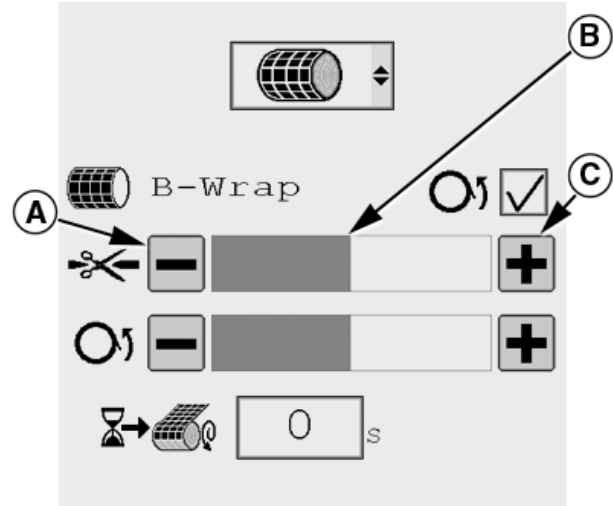
A—Net Cut Length MINUS button

B—Net Cut Length Adjustment Bar

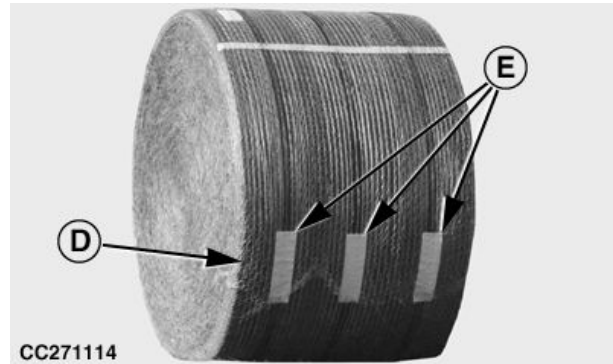
C—Net Cut Length PLUS button

D—B-Wrap Net

E—VELCRO



CC571142



CC271114

CC571142 —UN—11APR23

CC271114 —UN—26FEB16

John Deere B-Wrap is a trademark of Tama Plastic Industry
VELCRO is a trademark of Velcro Industries B.V.

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tl81334,1680856226121 -19-11APR23-2/5

3. Adjust bale orientation help:

Check box (A) is used to enable or disable the bale orientation help.

- Tick checkbox (A) to enable the bale orientation help.
- Do not tick checkbox (A) to disable the bale orientation help.

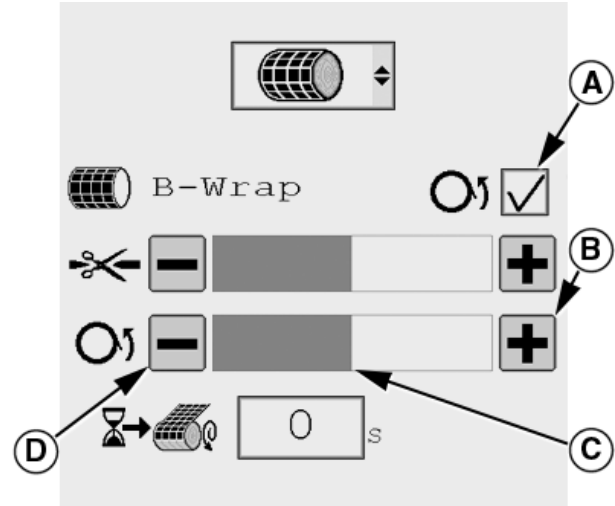
To ensure that bale is correctly oriented, John Deere B-Wrap™ material seam (F) should be below metal strip (E). John Deere B-Wrap™ material seam (E) ideal position is at the 3 o'clock position when looking at the left-hand side. A good material seam position prevents water from running into the bale.

To orientate John Deere B-Wrap™ material seam (F) forward (rotate counterclockwise looking at left-hand side of bale), increase bale orientation help value by pressing "PLUS" button (B).

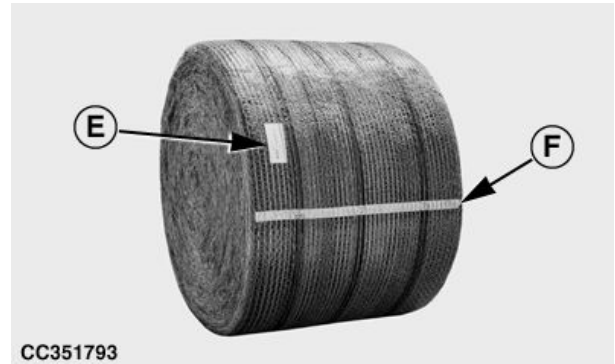
To orientate John Deere B-Wrap™ material seam (F) backward (rotate clockwise looking at left-hand side of bale), decrease bale orientation help value by pressing "MINUS" button (D).

Bale orientation help adjustment bar (C) indicates current setting.

- | | |
|---|--|
| A—Bale Orientation Help
Checkbox | D—Bale Orientation Help
MINUS Softkey |
| B—Bale Orientation Help PLUS
Softkey | E—Metal Strip |
| C—Bale Orientation Help
Adjustment Bar | F—B-Wrap Material Seam |



CC571143



CC351793

John Deere B-Wrap is a trademark of Tama Plastic Industry

1181334,1680856226121 -19-11APR23-3/5

4. John Deere B-Wrap™ Binding Delay (A):

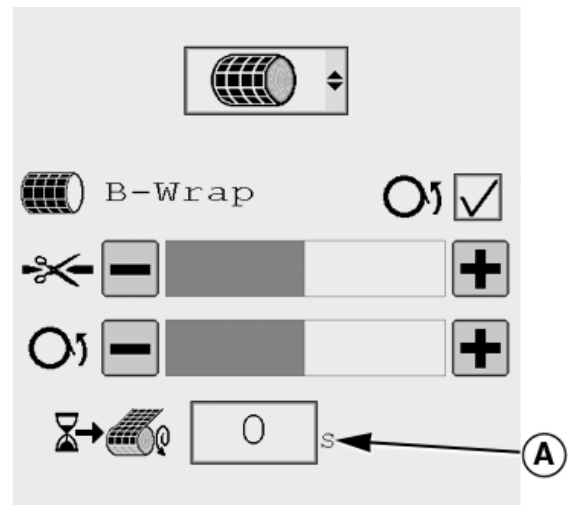
The John Deere B-Wrap™ binding delay is the time between the binding start indication on the monitor and the activation of the net actuator.

The John Deere B-Wrap™ binding delay provides time to stop the tractor forward travel, to avoid crop from getting trapped between net layers.

Set John Deere B-Wrap™ binding delay from 0 through 9 seconds in the input box (A).

NOTE: The factory setting is 0 second.

- A—John Deere B-Wrap Delay



CC571144

John Deere B-Wrap is a trademark of Tama Plastic Industry

Continued on next page

1181334,1680856226121 -19-11APR23-4/5

5. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680856226121 -19-11APR23-5/5

Adjust Twine Binding

CC351755 —UN—24APR18

*NOTE: Before adjusting the twine binding system, see **Select Binding System** in this section to select twine binding system.*



CC351755

1. From the baler application main page, select "Binding Settings" softkey.

Continued on next page

tl81334,1680856240763 -19-11APR23-1/3

2.

• **Twine Spacing (A):**

Set value between 2 and 20 cm (0-13/16, and 8 in.) in input box (A).

NOTE: We recommend setting twine spacing value (A) to 8 cm (3 in.) for all crop types.

• **Number of Twine Coils on Sides (B):**

Set value between 1 and 7 turns in input box (B).

• **Distance of Binding Ends on Sides (C):**

Set value between 8 and 25 cm (3 and 10 in.) in input box (C).

• **Number of Twine Coils in the Middle (D):**

Set value between 1 and 7 turns in input box (D).

• **Distance of Twine Overlap in the Middle (E):**

Set value between 2 and 8 cm (0-13/16 and 3-1/8 in.) in input box (E). This setup is not used.

Two other specific twine binding modes are available:

• **Re-Extension Binding Mode (F):**

Set the desired re-extension distance in drop-down list (F) to 0 or 20 cm (0 or 8 in.). Do not set re-extension distance to 40 or 60 cm (16 or 24 in.). When the re-extension distance value is 0, the mode is disabled.

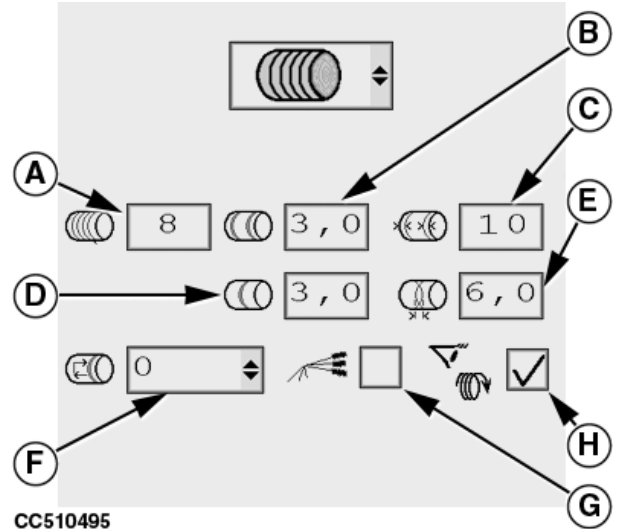
This mode is used to have more twine coils at the end of the bale binding and may help prevent twine unrolling. After the set number at binding end has been applied, the twine arms are extended again towards the center of the bale to the set distance and then, they are retracted.

• **Dry Straw Binding Mode (G):**

Check box (G) is used to enable or disable dry straw binding mode.

When baling dry straw, it may be desirable to quickly place twine across full width of bale to prevent straw from flaking off in the baler. This mode provides full speed twine arm movement from center to edge, then from edge to center. Then, the twine arms come back to the edge, pause to place the set number at binding start, and continue to apply twines as set in the monitor.

3. Check box (H) is used to enable or disable the twine pulley sensors. Disabling the twine pulley sensors allows the baler to be operated with a defective sensor. Before disabling this function, check adjustment of sensors. See [Adjust Twine Pulley Sensors SB421](#) and [SB422](#) in Service section.



A—Twine Spacing

B—Number of Twine Coils on Sides

C—Distance of Binding Ends on Sides

D—Number of Twine Coils in the Middle

E—Distance of Twine Overlap in the Middle

F—Re-Extension Binding Mode

G—Dry Straw Binding Mode

H—Twine Pulley Sensors

IMPORTANT: The twine pulley sensors must be activated. Operating the baler with twine pulley sensors disabled may cause malfunctions. See your John Deere dealer to replace defective parts as soon as possible.

4. The following table shows the recommended settings:

Twine Binding Recommended Settings			
	Silage	Hay	Straw
Twine Spacing (A)	5 cm (2 in.)	5 cm (2 in.)	8 cm (3 in.)
Number of Twine Coils on Sides (B)	4 turns	2 turns	3 turns
Distance of Binding Ends on Sides (C)	8 cm (3 in.)	8 cm (3 in.)	10cm (4 in.)
Number of Twine Coils in the Middle (D)	4 turns	2 turns	3 turns

tt81334,1680856240763 -19-11APR23-2/3

5. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tt81334,1680856240763 -19-11APR23-3/3

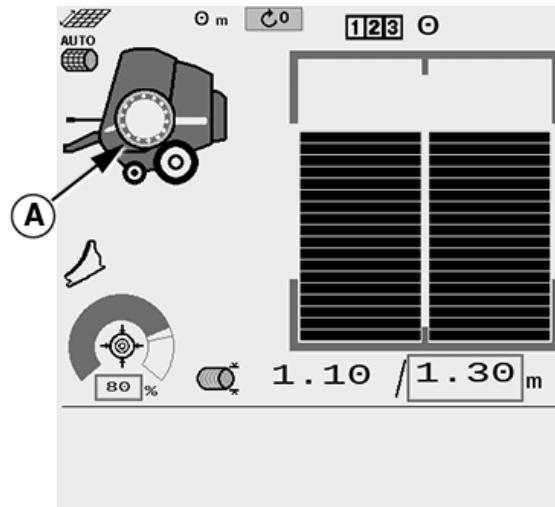
Automatic Start of Binding Cycle

NOTE: To allow automatic start of binding cycle, binding start mode must be automatic. See [Select Binding Start Mode](#) in this section.

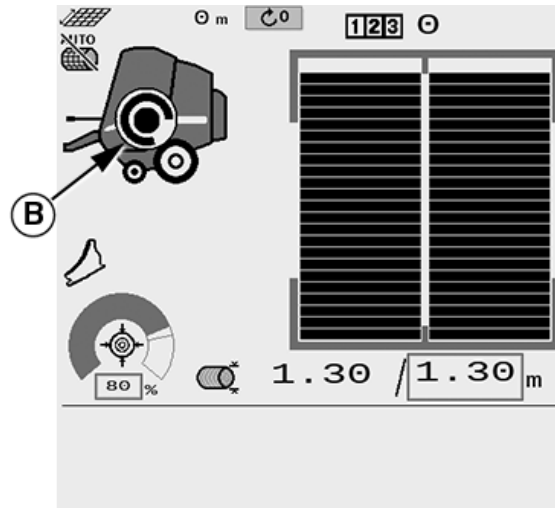
1. Just before the bale diameter is reached, the near full symbol (A) is displayed and the monitor beeps twice. To adjust near full alarm offset, see [Adjust Near Full Alarm Offset](#) in this section.
2. When the adjusted bale diameter is reached, the monitor beeps continuously for 3 seconds. Immediately stop the tractor. The binding process symbol (B) indicates that the net or twine actuator is moving.

A—Near Full Symbol

B—Binding Process Symbol



CC571145



CC571146

Continued on next page

tt81334,1680856261644 -19-05JUN23-1/4

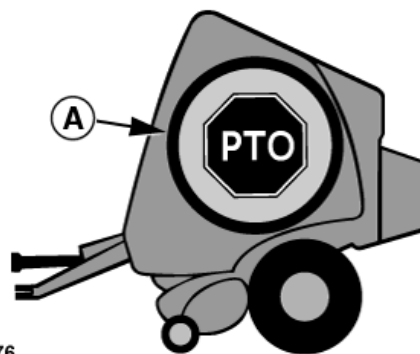
CC571145—UN—11APR23

CC571146—UN—11APR23

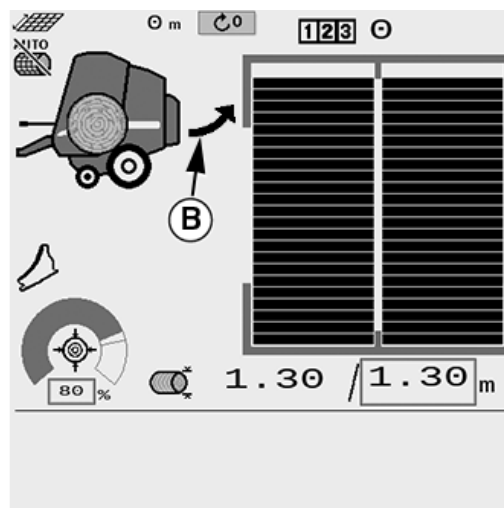
3. When the binding cycle is completed:
 - a. For baler with bale orientation enabled (John Deere B-Wrap™):
 1. Three short beeps sound with a visual count down.
 2. When stop PTO symbol (A) is displayed with a long beep, disengage PTO.
 - b. The bale ejection symbol (B) is displayed and the monitor beeps four times.
4. Open the rear gate of the baler with the tractor selective control valve lever to dump the bale. Use the display to monitor the rear gate position.

A—Stop PTO Symbol

B—Bale Ejection Symbol



CC274176

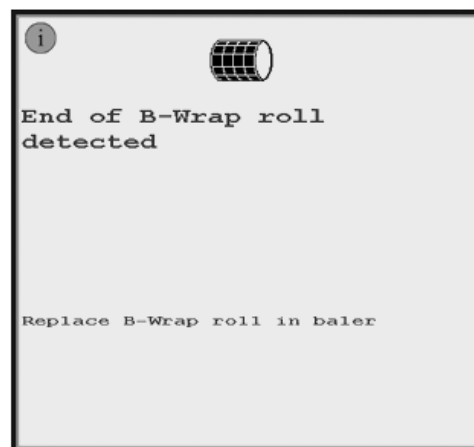


CC571147

John Deere B-Wrap is a trademark of Tama Plastic Industry

1181334,1680856261644 -19-05JUN23-2/4

5. In John Deere B-Wrap™ binding, an information window is displayed when roll is empty. See [Load Net Roll](#) in Prepare the Baler section.



CC274178

John Deere B-Wrap is a trademark of Tama Plastic Industry

Continued on next page

1181334,1680856261644 -19-05JUN23-3/4

6. If a problem occurs during binding cycle, select "Stop Binding Cycle" softkey to interrupt binding cycle and retract actuator.

CC1031890 —UN—19OCT09



CC1031890

†181334,1680856261644 -19-05JUN23-4/4

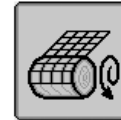
Manual Start of Binding Cycle

CC321713 —UN—29JUN17

An automatic net, John Deere B-Wrap™, or twine binding cycle can be manually started at any time.

NOTE: If binding start mode is automatic, the binding cycle starts automatically when the adjusted bale diameter is reached. See Automatic Start of Binding Cycle in this section.

1. To start an automatic binding cycle, select "Start Net Binding Cycle", "Start John Deere B-Wrap™ Binding Cycle", or "Start Twine Binding Cycle" softkey from the baler application main page.



CC321713

Start Net Binding Cycle Softkey

CC334597 —UN—11DEC17



CC334597

Start B-Wrap Binding Cycle Softkey

CC351782 —UN—29MAY18



CC351782

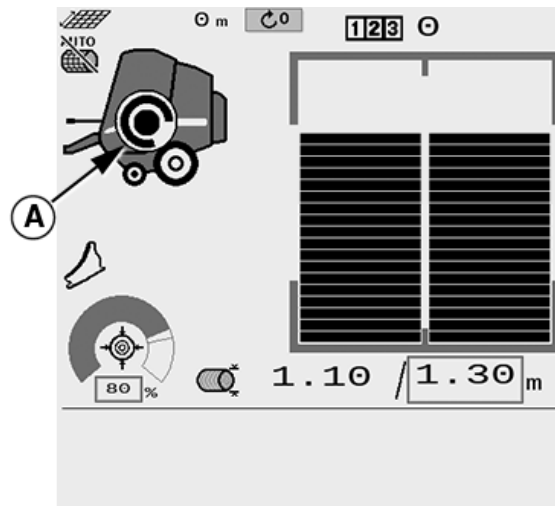
Start Twine Binding Cycle Softkey

John Deere B-Wrap is a trademark of Tama Plastic Industry

†181334,1680856302224 -19-05JUN23-1/6

2. Binding process symbol (A) allows the binding cycle to be monitored.

A—Binding Process Symbol



CC571148

CC571148 —UN—12APR23

Continued on next page

†181334,1680856302224 -19-05JUN23-2/6

3. If a problem occurs during binding cycle, select "Stop Binding Cycle" softkey to interrupt binding cycle and retract actuator.

CC1031890 —UN—19OCT09



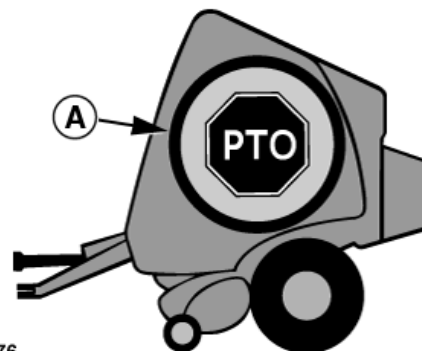
CC1031890

†181334,1680856302224 -19-05JUN23-3/6

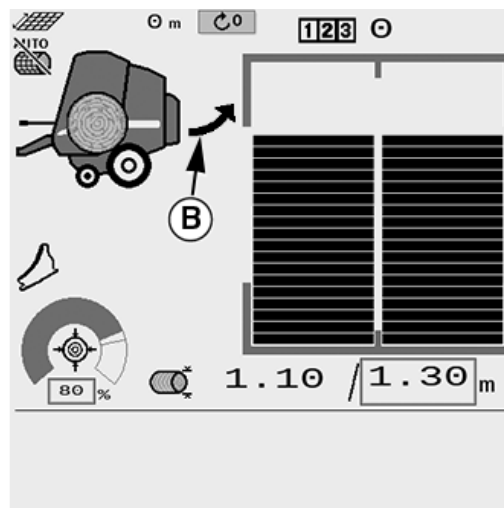
4. When the binding cycle is completed:
 - a. For baler with bale orientation enabled (John Deere B-Wrap™):
 1. Three short beeps sound with a visual count down.
 2. When stop PTO symbol (A) is displayed with a long beep, disengage PTO.
 - b. The bale ejection symbol (B) is displayed and the monitor beeps four times.
5. Open the rear gate of the baler with the tractor selective control valve lever to dump the bale. Use the display to monitor the rear gate position.

A—Stop PTO Symbol

B—Bale Ejection Symbol



CC274176



CC571149

John Deere B-Wrap is a trademark of Tama Plastic Industry

Continued on next page

†181334,1680856302224 -19-05JUN23-4/6

CC274176 —UN—29FEB16

CC571149 —UN—12APR23

6. In John Deere B-Wrap™ binding, an information window is displayed when roll is empty. See [Load Net Roll](#) in Prepare the Baler section.



CC274178

CC274178 —19—14APR16

John Deere B-Wrap is a trademark of Tama Plastic Industry

†181334,1680856302224 -19-05JUN23-5/6

7. If a problem occurs during binding cycle, select "Stop Binding Cycle" softkey to interrupt binding cycle and retract actuator.

CC1031890 —UN—19OCT09



CC1031890

†181334,1680856302224 -19-05JUN23-6/6

Operate Soft Core System

CC1031617 —UN—16SEP09

With soft core system enabled, the proportional density solenoid valve applies the soft core density setting until the soft core diameter setting is reached.

When bale size reaches core diameter setting, the proportional density solenoid valve applies the bale density setting. The bale is finished at adjusted bale density, forming tighter, and denser outer layers. This results in a lower density at the center of the bale. See [Adjust Bale Density](#) in this section to adjust the bale density.

Enable or Disable Soft Core System:



CC1031617

1. From the baler application main page, select and activate "Soft Core" softkey to enable soft core system.

Continued on next page

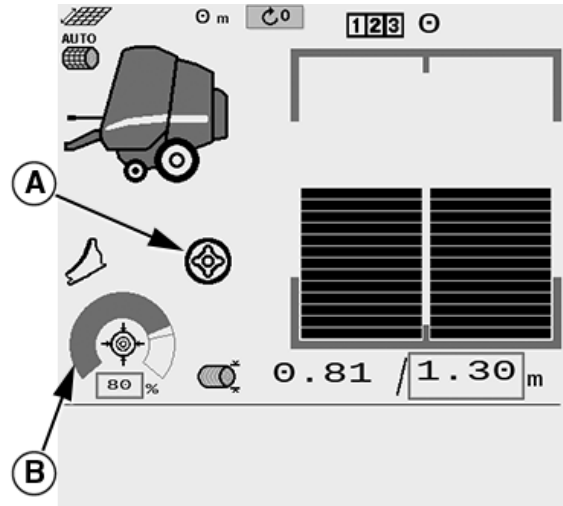
†181334,1680856317832 -19-12APR23-1/5

- The soft core symbol (A) is displayed when the soft core system is enabled.
- Select again "Soft Core" softkey to disable soft core system. The soft core symbol (A) disappears.

NOTE: Bale density indicator (B) indicates the relative pressure within the hydraulic bale tensioning system while forming a bale.

A—Soft Core Symbol

B—Bale Density Indicator



CC571150

CC571150—UN—12APR23

†81334,1680856317832 -19-12APR23-2/5

Adjust Soft Core Diameter and Density:

CC277966 —UN—22SEP16

- From the baler application main page, select "Settings" softkey.



CC277966

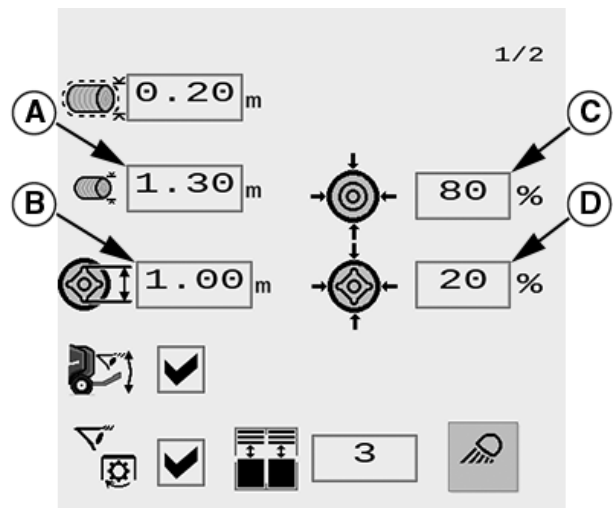
†81334,1680856317832 -19-12APR23-3/5

- Select input box (B) and set desired soft core diameter from 0.8 m (2 ft. 7.5 in.) up to the adjusted bale diameter (A).
- Select input box (D) and set desired soft core density from 0 % (minimum density) to 100 % (maximum density).

NOTE: The initial factory setting is 20 %. To obtain a lower density at the center of the bale, soft core density value (D) must be less than bale density value (C).

A—Bale Diameter
B—Soft Core Diameter

C—Bale Density
D—Soft Core Density



CC574227

CC574227—UN—12APR23

Continued on next page

†81334,1680856317832 -19-12APR23-4/5

4. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680856317832 -19-12APR23-5/5

Adjust Bale Density

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



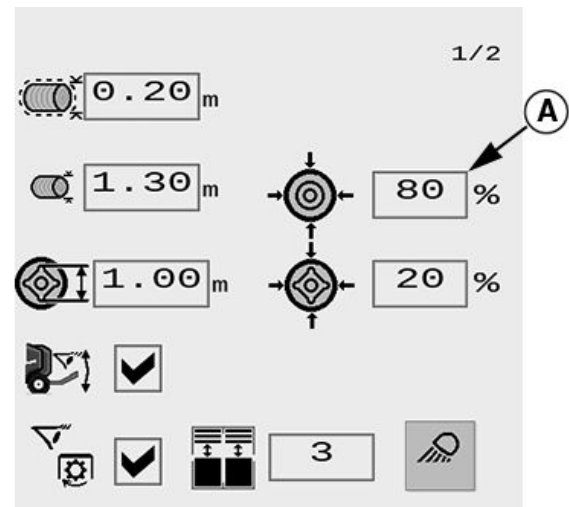
CC277966

tl81334,1680856375494 -19-12APR23-1/4

2. Select input box (A) and set the bale density from 0 % (minimum density) to 100 % (maximum density).

NOTE: The initial factory setting is 80 %. Bale density setting is limited to 80 % if density pressure sensor is defective or disconnected.

A—Bale Density



CC574228

CC574228 —UN—12APR23

tl81334,1680856375494 -19-12APR23-2/4

3. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

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tl81334,1680856375494 -19-12APR23-3/4

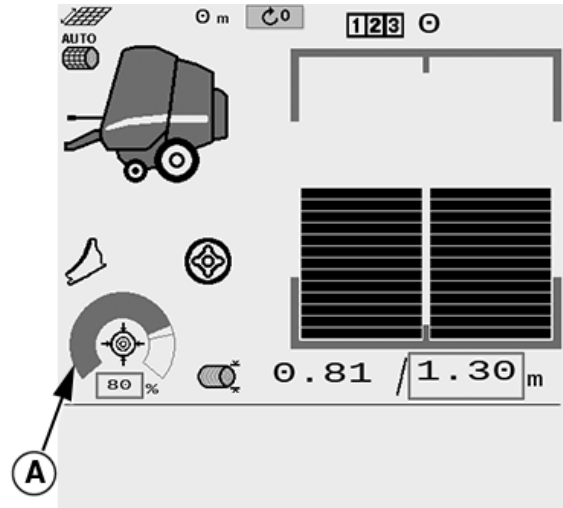
4. On the main page, indicator (A) indicates the relative pressure within the hydraulic bale tensioning system while forming a bale.

NOTE: Indicator (A) will not display a higher density setting until more material is fed into the baler.

Indicator (A) remains green while the baler is in normal operating pressure range.

Indicator (A) turns from green to red as soon as the baler exceeds the normal operating pressure range. In this case, reduce bale density.

A—Bale Density Indicator



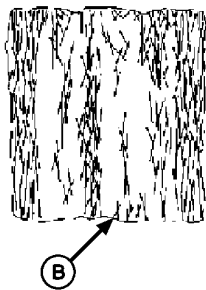
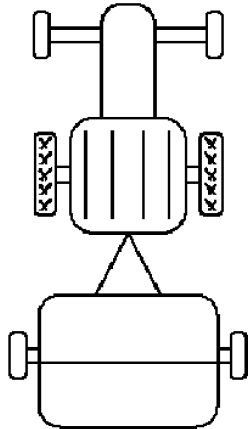
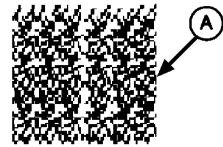
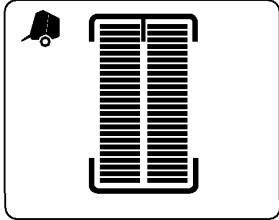
CC574229

CC574229 —UN—12APR23

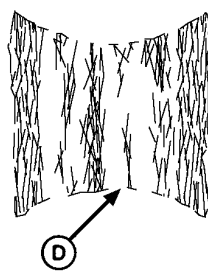
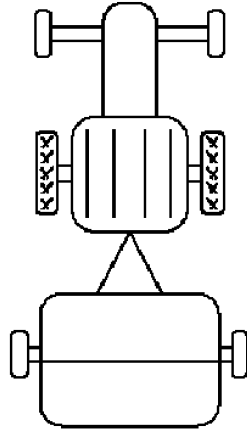
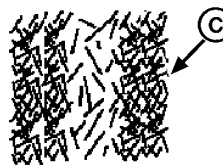
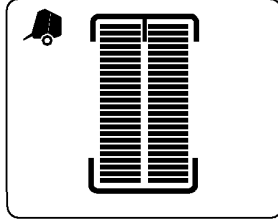
t81334,1680856375494 -19-12APR23-4/4

Make a Bale with Bale Shape Indicators

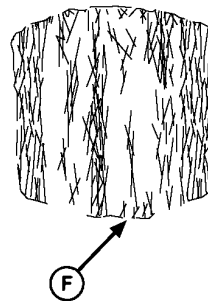
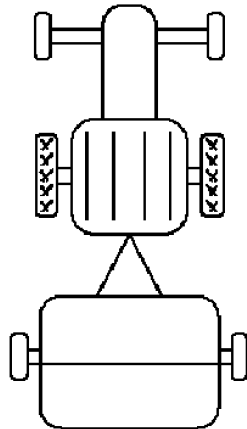
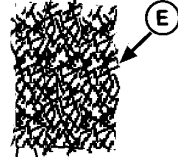
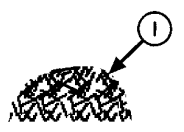
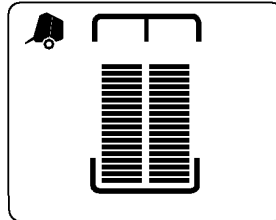
I



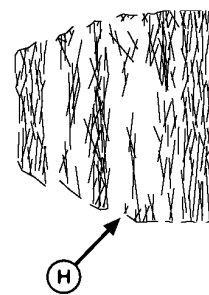
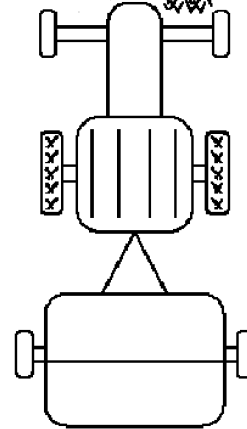
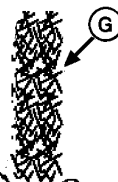
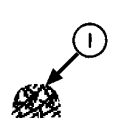
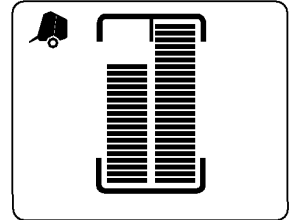
II



III



IV



E47515 —UN—07JAN00

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tt81334,1680856525822 -19-12APR23-1/2

A—Correct Shape Windrow
B—Correct Shape Bale
C—Curve-Shaped Windrow

D—Hourglass-Shaped Bale
E—Round-Shaped Windrow
F—Barrel-Shaped Bale

G—Half Windrow
H—Cone-Shaped Bale
I— Top of the Windrow

The illustration on the facing page and the following information describe the relationship between the monitor-controller display, windrow variations, and current bale shape.

To ensure optimum bale shape and maximum bale density, the top bar is shown on both sides of the bale shape indicator display, as shown in Example I. The top bar is displayed when bale is being bound. See Guidelines to Form a Good Bale in Operating the Baler - General Purpose section.

I— Correct shape bale (B) is formed when correct shape windrow (A) has a uniform side-to-side density and bale width is the same as bale chamber width. Weaving is not necessary.

If this is not practical, create windrows up to one-half the width of the bale chamber and follow the bale shape bars. See Guidelines to Form a Good Bale in Operating the Baler - General Purpose section.

II— If curve-shaped windrow (C) is heavy on the edges and light at the center, an hourglass-shaped bale (D) is formed even though bale shape bars are balanced and all lit.

If possible, weaving back and forth across windrow helps fill the middle of the bale. Otherwise, proper windrow formation (raking, etc.) is needed.

III— The bale shape bars will not reach maximum height and a barrel-shaped bale (F) is formed if any of the following conditions exist:

- Windrow width is approximately 2/3—3/4 the width of the baler.

- Windrow is correct but the operator is not weaving over far enough.
- Windrow width is full but density in the middle of the windrow is greater.
- Weaving back and forth too frequently.

If windrow is almost as wide as bale chamber, reduce tractor rpm and increase ground speed to spread material across pickup.

Windrow preparation is less than one-half of the bale chamber width or as large as the bale chamber. If necessary, rake windrow to obtain correct width.

The bale shape bar will not reach maximum height when operating at reduced bale density and/or using variable core option. This is also true when operating in certain crops such as third cut grass or short wheat straw, because ends of bale are soft.

IV— If half windrow (G) is baled without weaving back and forth, a cone-shaped bale (H) is formed. The same result is obtained if operator feeds one side more than other.

Weave back and forth across the narrow windrow to keep bale shape bars as high as possible.

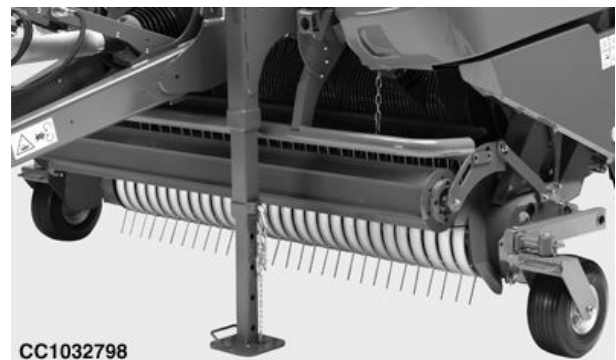
NOTE: *Bale shape bars may not reach maximum height when operating at reduced bale density and when the soft core option is enabled. This is also true when operating in certain crops such as third cut grass or short wheat straw, because ends of bale are soft.*

t181334,1680856525822 -19-12APR23-2/2

Raise or Lower the Pickup Function

CAUTION: To help prevent personal injury caused by unexpected movement, disengage PTO, engage park brake, shut off the tractor engine, and remove key. Wait for all moving part to come standstill. The pickup is still able to move downwards.

The pickup raise or lower function is automatically selected. Actuate tractor selective control valve lever to raise or lower the pickup.



CC1032798

CC1032798 —UN—23NOV10

t181334,1680077535591 -19-30MAR23-1/1

Retract or Engage Precutter Knives Function

CC1031618 —UN—16SEP09

The precutter knives device is used to chop the crop.

NOTE: It is not recommended to work with precutter knives set 1 and 2 engaged at the same time. Ground speed will be highly reduced.



CC1031618

1. From the baler application main page, select "Drop Floor and Precutter Knives Management" softkey.

t181334,1680856560192 -19-23MAY23-1/4

2. Select "Precutter Knives Set 1" or "Precutter Knives Set 2" (if equipped) softkeys, to activate the retract or engage knives function for the desired precutter knives set.

CC1031807 —UN—16SEP09



CC1031807

NOTE: The precutter knives set 1 includes 13 precutter knives and the precutter knives set 2 includes 12 precutter knives.

Distance between knives is 40 mm (1-9/16 in) with 25 knives engaged and 80 mm (3-2/16 in) with 12 or 13 knives engaged.

CC1032652 —UN—24NOV10



CC1032652

Precutter Knives Set 2 Softkey

t181334,1680856560192 -19-23MAY23-2/4

3. Actuate tractor selective control valve lever to retract or engage the selected set of precutter knives.

NOTE: Retract or engage knives function uses the same selective control valve as raise or lower the pickup.

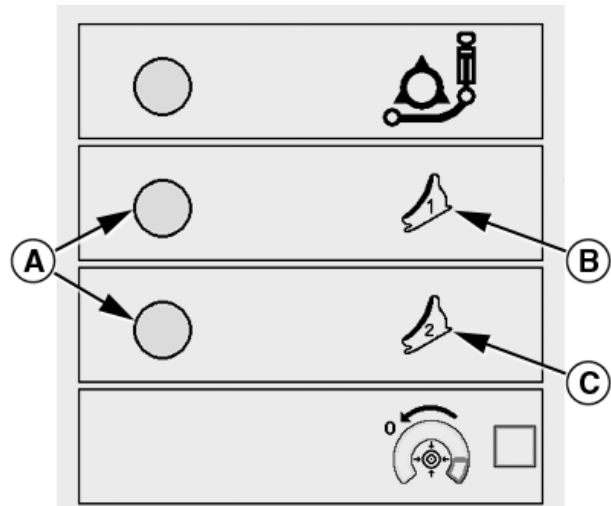
The retract or engage knives function status (A) is displayed green, to indicate that the retract or engage knives function is activated for the precutter knives sets.

The retract or engage knife function status (A) is displayed red, to indicate that the retract or engage knives function is deactivated for the precutter knives sets.

4. Knives position symbol (B) and (C) are crossed out when precutter knives set is not engaged.

IMPORTANT: Retract and engage precutter knives several times after each working day to prevent from jamming.

NOTE: When using baler with precutter knives retracted for a long time, it is recommended to remove knives, and install fillers to plug the knife slot. See Replace Precutter Knives in Service section.



CC353861

Baler with Precutter, 25 Knives Shown

CC353861 —UN—31MAY18

A—Retract or Engage Knives Function Status
B—Precutter Knives Set 1 Position Symbol

C—Precutter Knives Set 2 Position Symbol

Continued on next page

t181334,1680856560192 -19-23MAY23-3/4

5. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16

NOTE: When you return to baler application main page, the raise or lower the pickup function is automatically selected.



CC277965

ti81334,1680856560192 -19-23MAY23-4/4

Unplug Pickup

CC1031618 —UN—16SEP09

Whenever it is necessary to unplug the baler, lower the drop floor to increase the empty space beneath the rotary feeder.



CC1031618

1. Stop tractor and disengage the PTO.
2. From the baler application main page, select "Drop Floor and Precutter Knives Management" softkey.

Continued on next page

ti81334,1680856580374 -19-23MAY23-1/3

IMPORTANT: Checkbox (K) should never be activated otherwise gate latch opening could occurs. This functionality is hidden on software version higher than 12.84a.

3. Select the "Drop Floor" softkey to activate the raise or lower drop floor function only. If needed, select "Drop Floor and Precutter Knife" softkey to activate the raise or lower drop floor, and the retract or engage knife functions at the same time.

NOTE: "Raise or lower the drop floor function" uses the same selective control valve as raise or lower the pickup.

Drop floor function status (A) is displayed green to indicate that the "Raise or Lower Drop Floor" function is activated. Precutter knife function status (C) is automatically displayed green if precutter knife function is selected too.

4. Actuate selective control valve lever to lower the drop floor and retract precutter knives (if engaged) at the same time.

Drop floor lowered symbol (G) and precutter knives retracted symbol (H) and (J), indicate that the drop floor is lowered and the precutter knives are retracted.

5. When the drop floor is lowered, slowly engage the PTO at slow tractor idle until rotary feeder turns freely.
6. When the machine is unplugged, Actuate selective control valve lever to raise the drop floor, and engage precutter knives (if activated).
7. Put the selective control valve lever to neutral position.

- | | |
|--|---|
| A—Drop Floor Function Status | F—Precutter Knives Set 2 Engaged Symbol |
| B—Drop Floor Raised Symbol | G—Drop Floor Lowered Symbol |
| C—Precutter Knives Set 1 Function Status | H—Precutter Knives Set 1 Retracted Symbol |
| D—Precutter Knives Set 1 Engaged Symbol | J—Precutter Knives Set 2 Retracted Symbol |
| E—Precutter Knives Set 2 Function Status | K—DO NOT TICK |

CC1031806 —UN—16SEP09



CC1031806

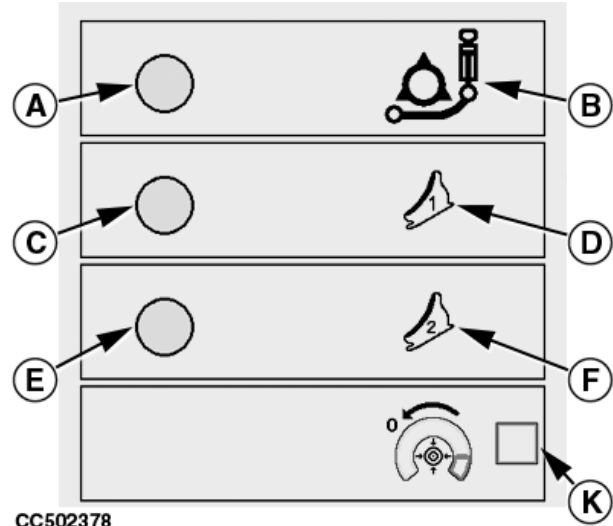
Drop Floor Softkey

CC1031805 —UN—16SEP09



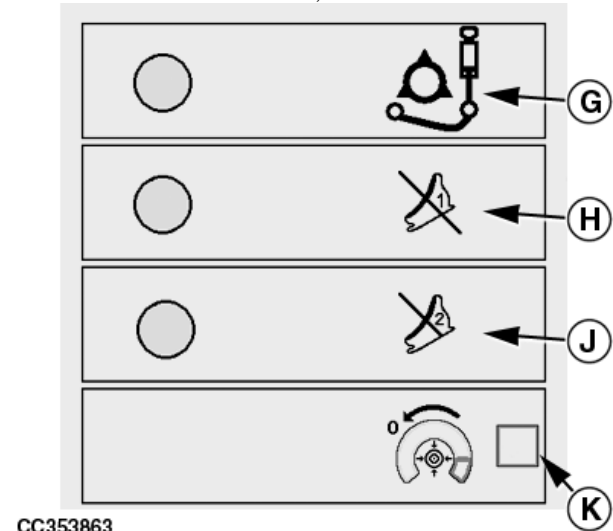
CC1031805

Drop Floor and Precutter Knives Softkey



CC502378

Baler with Precutter, 25 knives Shown



CC353863

Baler with Precutter, 25 knives Shown

Continued on next page

1181334,1680856580374 -19-23MAY23-2/3

8. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

NOTE: When you return to baler application main page, the raise or lower the pickup function is automatically selected.

tl81334,1680856580374 -19-23MAY23-3/3

Customer and Field Counters

CC324600 —UN—14SEP17

The counter function includes 10 possible customers and a list of 10 field counters per customer. These counters can be used to store daily number of bales or number of bales per field.

The bale must be bound, and the rear gate must be fully opened and closed to add a bale to the current field counter.

1. From the baler application main page, select "Counters" softkey.

2. Select Customer and Field Number:

Select customer:

- a. Select and activate drop-down list (B).
- b. Select the desired customer name (10 customer name are available).
- c. The list shows the number of bales per fields and shows the total number of the 10 fields for the selected customer.

Select field number:

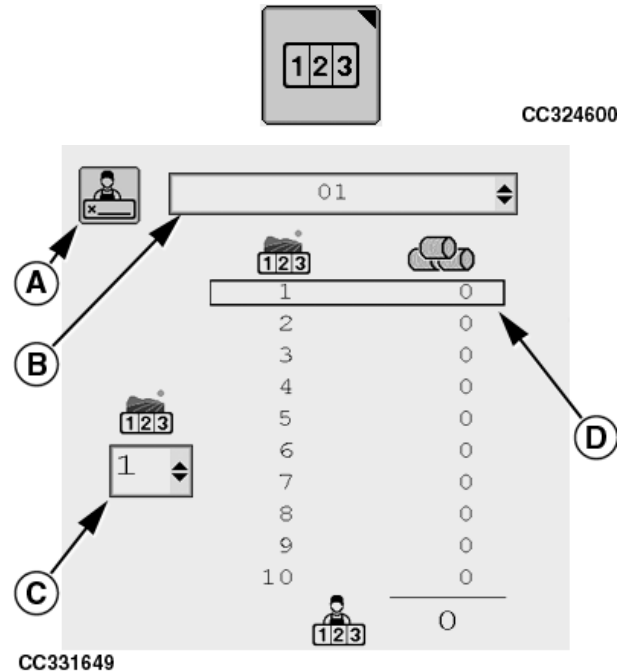
- a. Select and activate drop-down list (C).
- b. Select the desired field number from 1 to 10.

NOTE: Current field indicator (D) is displayed to indicate which field number is selected.

The bale counter of the current field is also displayed on the main page. See [Baler Main Page Display Description](#) in this section.

Rename Customer name:

NOTE: The "Rename Customer" button (A) is not available with the Implement Display 1100 monitor.



A—Rename Customer Name Button
B—Customer Name

C—Field Selection
D—Current Field Indicator

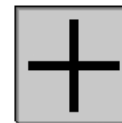
- a. Select the desired customer name in the drop-down list (B).
- b. Press the button (A).
- c. Use keys and softkeys which correspond to alphabetical characters.

tl81334,1681293693671 -19-12APR23-1/7

3. Add or Remove Bales in Current Field Counters:

CC1031852 —UN—30SEP09

If needed, select "Remove Bales" or "Add Bales" softkey to adjust the total number of bales for the current field counter.



CC1031852

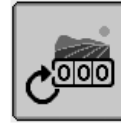
Continued on next page

tl81334,1681293693671 -19-12APR23-2/7

4. Clear Current Field Counter:

CC324601 —UN—14SEP17

Select "Clear Current Counter" softkey to clear the current field bale counter.



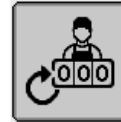
CC324601

ti81334,1681293693671 -19-12APR23-3/7

5. Clear Current Customer Counters:

CC324602 —UN—14SEP17

Select "Clear Current Customer Counters" softkey to clear information about all fields of the selected customer.



CC324602

ti81334,1681293693671 -19-12APR23-4/7

6. Customer and Field Counters Softkey:

CC324603 —UN—14SEP17

Select "Customer and Field Counters" softkey to go to the customer and field counters page.



CC324603

ti81334,1681293693671 -19-12APR23-5/7

7. Season and Total Counters Softkey:

CC324605 —UN—14SEP17

Select "Season and Total Counters" softkey to go to the season and total counters page.



CC324605

ti81334,1681293693671 -19-12APR23-6/7

8. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

ti81334,1681293693671 -19-12APR23-7/7

Season and Machine Total Counters

CC324600 —UN—14SEP17

1. From the baler application main page, select "Counters" softkey.



CC324600

Continued on next page

ti81334,1680856614623 -19-12APR23-1/8

2. From the counter page, select "Season and Total Counters" softkey.

CC324605 —UN—14SEP17

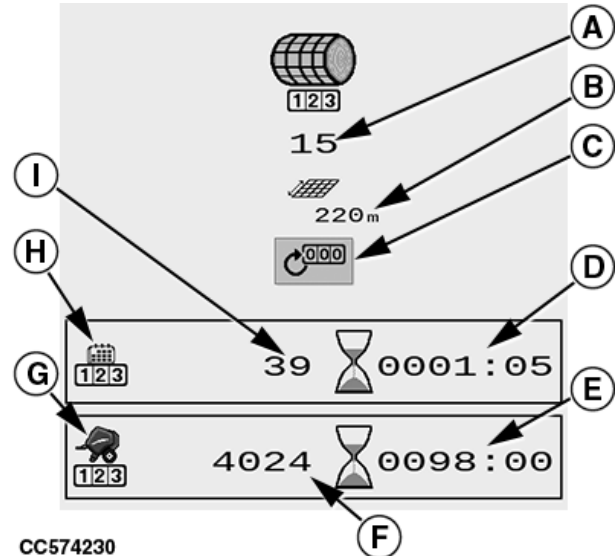


CC324605

†81334,1680856614623 -19-12APR23-2/8

3. Read and reset season and machine total counters:

- Bale with net binding counters:**
The bale with net binding counter (A) shows the total number of bales bound with the net binding device for the season. The net binding season consumption counter (B) shows the season consumption of the net binding. Use the button (C) to reset counters (A) and (B).
- Season counter (H):**
The season counter (H) shows total number of bales for season (I) and total time of season (D).
- Machine total counters (G):**
The machine total counters (G) shows the total number of bales done by the machine (F) and the total time done by the machine (E).



- | | |
|--|---|
| A—Bale with Net Binding Counter | F—Total Number of Bales Done by the Machine |
| B—Net Binding Season Consumption Counter | G—Machine Total Counter |
| C—Reset Bale with Net Binding Counter Button | H—Season Counter |
| D—Total Time of Season | I—Total Number of Bales for Season |
| E—Total Time done by the Machine | |

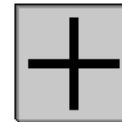
CC574230 —UN—04MAY23

†81334,1680856614623 -19-12APR23-3/8

4. Add or Remove Bales in Season Counters:

CC1031852 —UN—30SEP09

Select "Remove Bales" or "Add Bales" softkey to adjust if necessary the total number of bales for season counter.



CC1031852

NOTE: Changing the total number of bales for season does not modify the current field bale counter.

†81334,1680856614623 -19-12APR23-4/8

5. Clear Season Counters:

CC324604 —UN—14SEP17

Select "Clear Current Counters" softkey to clear the total number of bales for season and total time of season.



CC324604

Continued on next page

†81334,1680856614623 -19-12APR23-5/8

6. Customer and Field Counters Softkey:

CC324603 —UN—14SEP17

Select "Customer and Field Counters" softkey to go to the customer and field counters page.



CC324603

tl81334,1680856614623 -19-12APR23-6/8

7. Season and Total Counters Softkey:

CC324605 —UN—14SEP17

Select "Season and Total Counters" softkey to go to the season and total counters page.



CC324605

tl81334,1680856614623 -19-12APR23-7/8

8. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680856614623 -19-12APR23-8/8

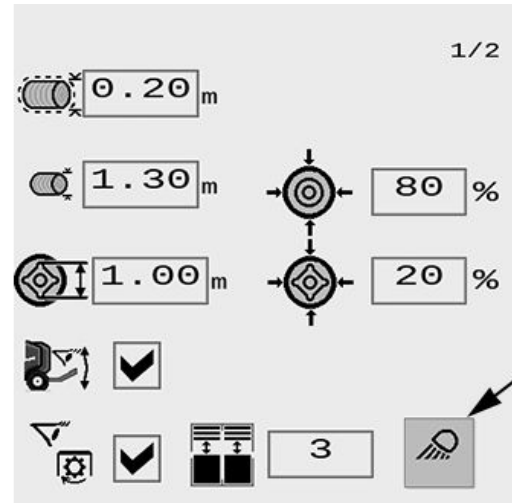
Operate Side Door Lights (If Equipped)

Different lights can be turned ON or OFF from the virtual terminal.

- From the baler application main page, select "Settings" softkey.
- Select "Side Door Lights" button to active or deactivate the side door lights.

Button background is yellow when the side door lights are activated or gray when lights are deactivated.

A—Side Door Lights Button



CC574231

CC574231 —UN—12APR23

Continued on next page

tl81334,1681305964707 -19-12APR23-1/3

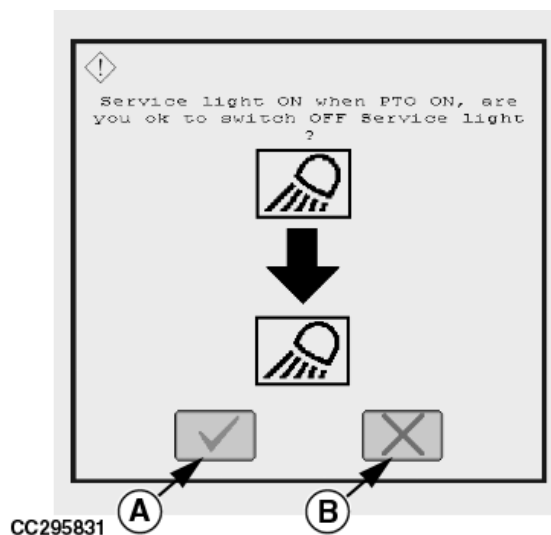
- If the operator engages the PTO whereas side door lights are ON, a message is displayed to ask if lights should be switched OFF.

Select "Accept" button to switch OFF side door lights or "Cancel" button to keep side door lights ON.

NOTE: The user cannot activate side door lights when PTO is ON.

A—Accept Button

B—Cancel Button



†81334,1681305964707 -19-12APR23-2/3

- Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

†81334,1681305964707 -19-12APR23-3/3

Video Application

PC15312 —UN—15MAY13

The video application is used to observe areas around the machine that are difficult to see from the operator's station. See your tractor Operator's Manual.



DC82261,0000647 -19-15SEP15-1/1

Operating Baler in Automatic Tailgate Mode

Automatic Tailgate Description

The Automatic Tailgate is a function that allows to open and close the gate automatically without actuate tractor SCV each time. This function has several modes of use between the Automatic mode, Manual mode, and Stop mode. For more information, see [Operate Baler in Automatic Tailgate Mode](#) in this section.

The Automatic tailgate is compatible with all tractor brands and models. The function needs some condition from the baler to be functional:

- The baler must be equipped with the Automatic Tailgate system which is used with continuous hydraulic oil flow.
- The baler must be equipped with the bale discharging ramp and it sensor. See [Enable or Disable Bale Discharging Ramp Sensor \(If Equipped\)](#) in Baler Application Service section.
- The gate latch and gate latch sensors must be correctly adjusted. See [Adjust Gate Latch](#) and [Adjust Gate Latch Sensors SB3310 and SB3311](#) in Service section.

ti81334,1681309493469 -19-23MAY23-1/1

Operate Baler in Automatic Tailgate Mode Safely

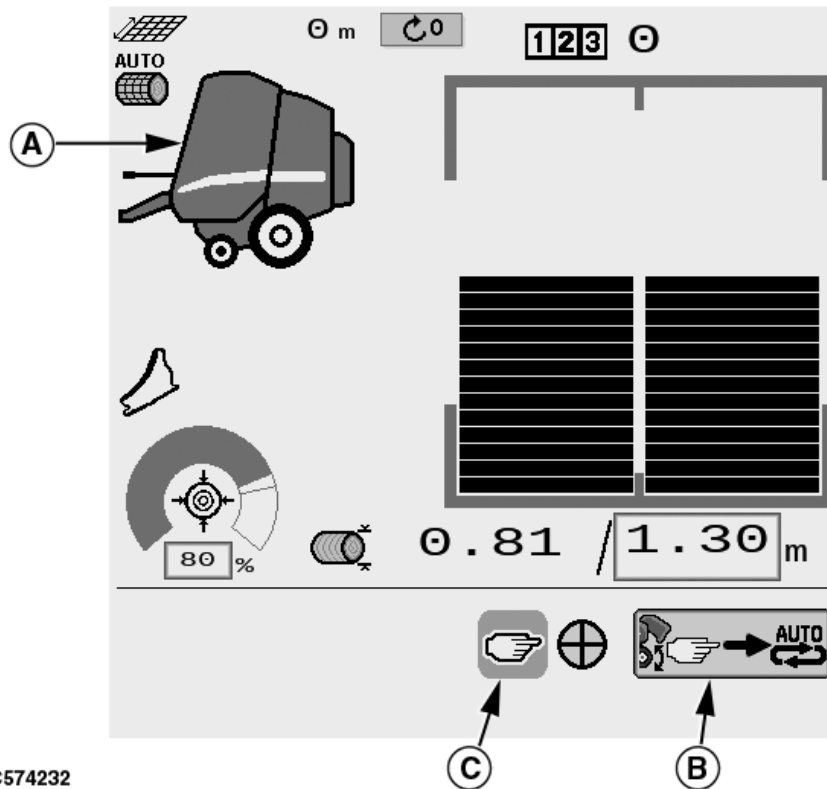
The Baler Automatic Tailgate system is intended to aid the operator in performing field operations more efficiently. The operator is always responsible for controlling the path of the machine and behavior as well as the behavior of

the bale. To prevent injury to the operator and bystanders, always remain alert and pay attention to the surrounding environment. Do not rely on the system to stop vehicle when an obstacle or bystander is present.

Read and understand Operating Baler in Automatic Tailgate Mode before using the Automatic Tailgate.

ti81334,1680078316825 -19-31MAR23-1/1

Baler Automatic Tailgate Main Page Display Description



CC574232

A—Baler Status
B—Automatic Tailgate Mode Button

C—Automatic Tailgate Status

The main page allows the baler automatic tailgate mode to be monitored and controlled while operating in the field.

Baler status symbol (A) is used to monitor the binding processes and the gate position.

The "Automatic Tailgate Mode" button (B) is used to select the automatic tailgate mode between the Automatic mode, Manual Mode, and Stop mode.

The automatic tailgate status symbol (C) is used to monitor the automatic tailgate mode or request from the baler.

tl81334,1681309533964 -19-13APR23-1/1

Automatic Tailgate Softkey Designation

CC1034499 —UN—07JUL11

"Automation Settings" softkey.

See this section.



CC1034499

TL81334,000036C -19-02MAY18-1/1

Operate Baler in Automatic Tailgate Mode

The automatic tailgate mode has several modes: Stop, Manual, Automatic, and Pause.

The automatic tailgate status (D) indicates the current mode.

NOTE: There is no symbol for the Pause mode.

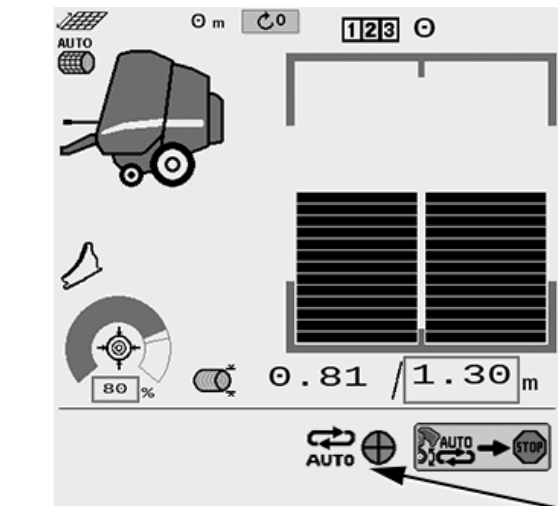
A—Stop Mode Symbol
B—Manual Mode Symbol

C—Automatic Mode Symbol
D—Automatic Tailgate Status

CC351762 —UN—13JUN18



CC351762



CC574233

CC574233 —UN—13APR23

Continued on next page

1181334,1681309646497 -19-13APR23-1/11

1. Stop Mode:

Stop mode locks any movement of the gate without stopping hydraulic and mechanical power supplied by the tractor.

The system has two buttons: "Automatic Mode to Stop Mode" or "Manual Mode to Stop Mode". Only one of these buttons is available during the Automatic mode and during the Manual to the Automatic mode procedure.

- Activating Stop mode during an opening or a closing cycle interrupt the cycle.
- If the tractor SCV is in the continuous flow position when the Stop mode is active, the symbol (B) replaces the button (A). The button (A) is displayed when the tractor SCV is in neutral or floating position.
- If an external event activates Stop mode, clear the external event. Disengage the tractor SCV before switch Stop mode to Manual mode.

CAUTION: Before working inside or around the baler, do the following: Disengage the PTO and the tractor SCV, place transmission in PARK, engage park brake, shut off engine, and remove the ignition key.

A—Stop to Manual Mode Button

B—Request for Tractor SCV in Neutral or Floating Position Symbol

CC351764 —UN—13JUN18



CC351764

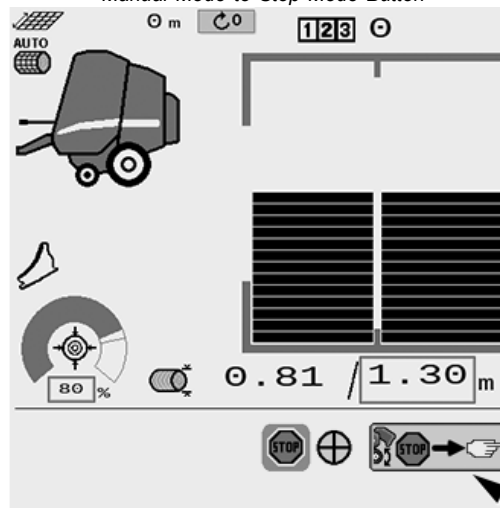
Automatic Mode to Stop Mode Button

CC353872 —UN—13JUN18



CC353872

Manual Mode to Stop Mode Button



CC574234

Stop Mode Main Page

CC356293 —UN—13SEP18



CC356293

Request for Tractor SCV in Neutral, or Floating Position

1181334,1681309646497 -19-13APR23-2/11

2. Switch from Stop to Manual Mode:

The tractor SCV must be in neutral or floating position to allow the switch in Manual mode. To access Manual mode, select and activate "Stop Mode to Manual Mode" button. "Stop Mode to Manual Mode" button is available in Stop mode.

CC351766 —UN—13JUN18



CC351766

Stop Mode to Manual Mode Button

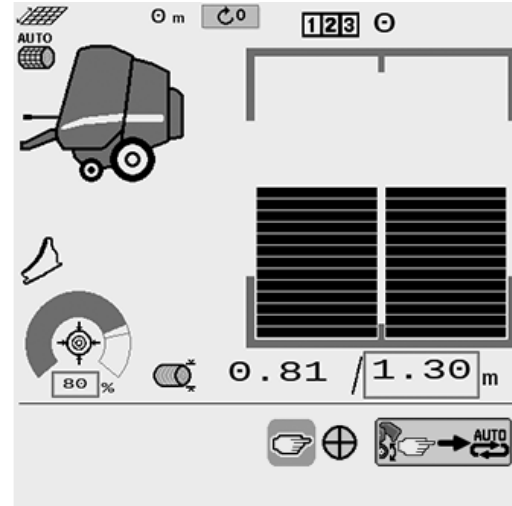
Continued on next page

1181334,1681309646497 -19-13APR23-3/11

3. Manual Mode:

This mode is used to move the gate manually by using the tractor SCV. The operator can operate normally in field in Manual mode.

NOTE: Each time the ignition is switched ON, Manual mode is activated by default.



CC574235

Manual Mode Main Page

tl81334,1681309646497 -19-13APR23-4/11

4. Switch from Manual to Automatic Mode:

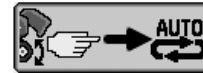
CC351768 —UN—13JUN18

The following conditions are required to switch from Manual to Automatic mode:

- The gate must be correctly calibrated.
- The PTO must be engaged.
- The gate must be fully closed.

To activate the Automatic mode, proceed as follows:

- Select and activate the "Manual Mode to Automatic Mode" button.



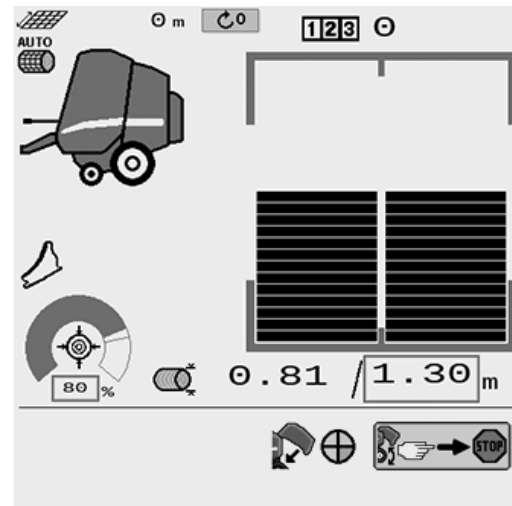
CC351768

Manual Mode to Automatic Mode Button

tl81334,1681309646497 -19-13APR23-5/11

- If the Gate is not close, the monitor request to close the gate.

NOTE: If the gate is not close within 6 seconds, the baler returns to Manual mode.



CC574236

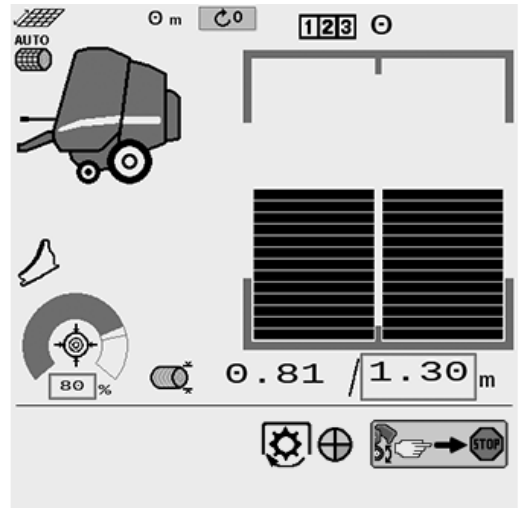
Manual Mode to Automatic Mode Close Gate Request

Continued on next page

tl81334,1681309646497 -19-13APR23-6/11

- c. If the PTO is not engaged, the monitor request to engage the PTO.

NOTE: If the PTO is not engaged within 6 seconds, the baler returns to Manual mode.



CC574237

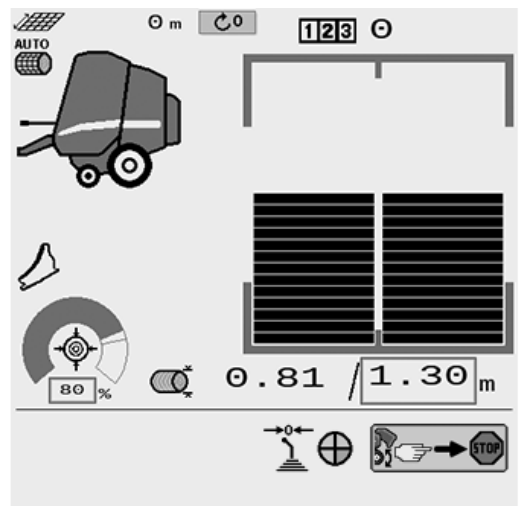
Manual Mode to Automatic Mode Engage PTO Request

1181334,1681309646497 - 19-13APR23-7/11

CC574237 —UN—13APR23

- d. If the tractor SCV is already continuous flow position, the monitor requests to deactivate the tractor SCV.

NOTE: If the tractor SCV is not deactivated within 10 seconds, the baler returns to Manual mode.



CC574238

Manual to Automatic Mode Deactivate SCV Request

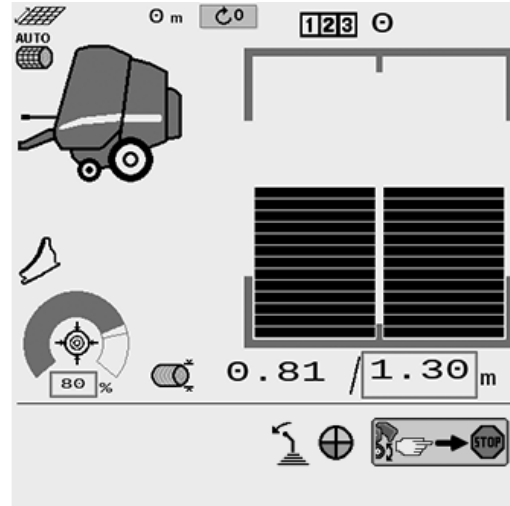
Continued on next page

1181334,1681309646497 - 19-13APR23-8/11

CC574238 —UN—13APR23

- e. Put the tractor SCV in the continuous flow position when the monitor request it. See your tractor Operator's Manual.

NOTE: If the tractor SCV is not activated within 10 seconds, the baler returns to Manual mode.



CC574239

Manual to Automatic Mode Activate SVC Request

tl81334,1681309646497 -19-13APR23-9/11

CC574239 —UN—13APR23

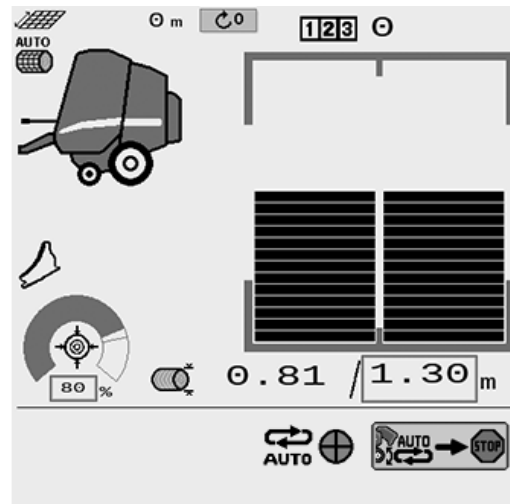
5. Automatic Mode:

This mode allows the baler to open and close the gate automatically according to this process:

- a. At the end of the binding cycle, the baler opens the gate to unloading the bale.
- b. When the bale has left the discharging ramp, the baler closes the gate.

6. Switch from Automatic to Pause Mode:

The baler switch from Automatic mode to Pause mode when the PTO is disengaged without interrupt the hydraulic flow. Before disengaging the PTO, ensure that gate is correctly closed.



CC574240

Automatic Mode Main Page

Continued on next page

tl81334,1681309646497 -19-13APR23-10/11

CC574240 —UN—13APR23

7. Pause Mode:

This mode allows the baler to be in standby for the transit between two fields. This mode is automatically set when the PTO is disengaged without interrupt the hydraulic flow.

When the PTO is engaged, the baler asks the operator to go in Automatic mode or in Manual mode. Press button (A) to go in Automatic mode or press button (B) to go in Manual mode.

The baler switches from Pause mode to Stop mode when:

- The operator selects and activates the "Automatic Mode to Stop Mode" button.
- The gate is not fully closed.
- There is a DTC related to the automatic tailgate function.

The baler switch from Pause mode to Manual mode when:

- The tractor SCV is used by the operator.
- The hydraulic flow has been interrupted.

8. Switch from Automatic to Stop Mode or Manual Mode:

The baler switches from Automatic mode to Stop mode when:

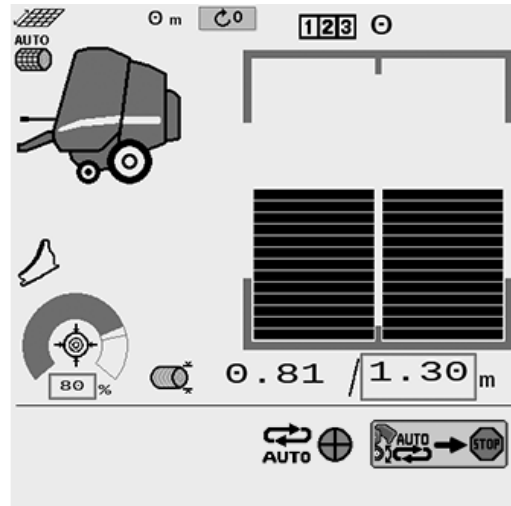
- The operator selects and activates the "Automatic Mode to Stop Mode" button.
- The binding cycle is too long and is not finished.
- There is a DTC related to the automatic tailgate function.

The baler switch from Automatic mode to Manual mode when:

- The tractor SCV is used by the operator.
- The hydraulic flow has been interrupted.

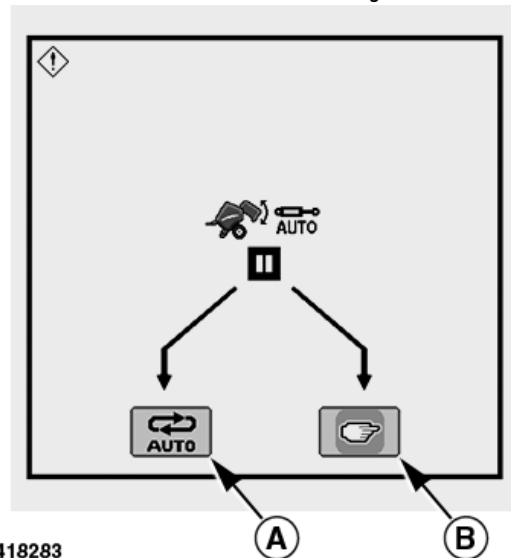
A—Go to Automatic Mode Button

B—Go to Manual Mode Button



CC574240

Automatic Mode Main Page



CC418283

Returns to Automatic Mode Request Page

tl81334,1681309646497 -19-13APR23-11/11

Select Automatic Tailgate Mode

CC277966 —UN—22SEP16

1. From the baler application main page, Select "Settings" softkey.



CC277966

Continued on next page

tl81334,1680078370893 -19-25APR23-1/4

2. Select "Automation Settings" softkey.

CC1034499 —UN—07JUL11



CC1034499

ti81334,1680078370893 -19-25APR23-2/4

3. Select and activate drop-down list (E) then the desired automatic tailgate mode:

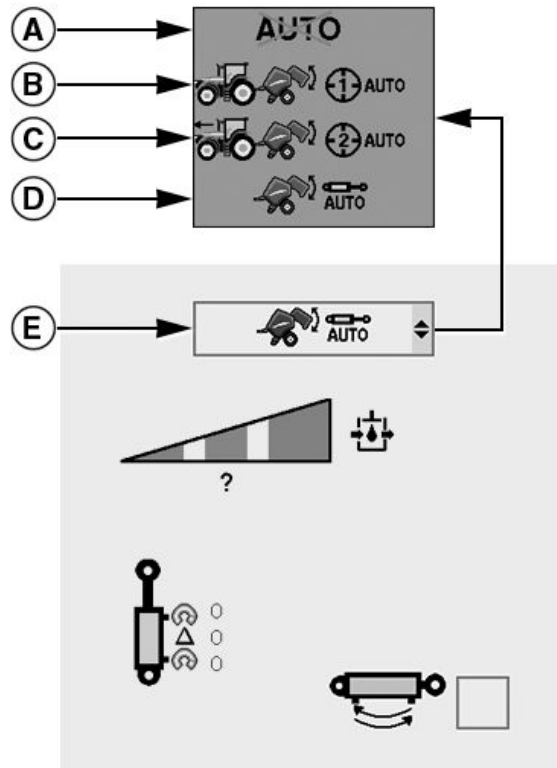
- **Automation OFF (A)** - No automation mode or automatic tailgate mode is enabled. The gate is not controlled automatically.
- **Automation level 1 (B)** - See Operating Baler in Automation Mode section.
- **Automation level 2 (C)** - See Operating Baler in Automation Mode section.
- **Automatic Tailgate mode** - Select this mode to use the automatic tailgate mode. After the end of binding cycle, the baler opens and closes the gate automatically to unload the bale.

NOTE: The baler rotation speed sensor and the discharging ramp sensor must be equipped to select this mode. See Enable or Disable Baler Rotation Speed Sensor (If Equipped) and Enable or Disable Bale Discharging Ramp Sensor (If Equipped) in Baler Application Service section.

The baler rotation speed sensor must be activated.
The discharging ramp sensor must be activated.

A—No Automatic Control of Gate
B—Automation Level 1
C—Automation Level 2

D—Automatic Tailgate Mode
E—Automation Drop-Down List



CC571121

CC571121 —UN—03APR23

ti81334,1680078370893 -19-25APR23-3/4

4. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

ti81334,1680078370893 -19-25APR23-4/4

Set Automatic Tailgate Hydraulic Flow

CC277966 —UN—22SEP16

1. From baler application main page, select "Settings" softkey.



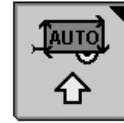
CC277966

Continued on next page

ti81334,1680078381182 -19-05APR23-1/5

2. Select "Automation Settings" softkey.

CC1034499 —UN—07JUL11



CC1034499

Continued on next page

1181334,1680078381182 -19-05APR23-2/5

3. Hydraulic Flow Indicator:

The Hydraulic Flow indicator allows the operator to monitor and set the hydraulic flow.

In Manual mode, the Indicator (D) is displayed under the graph. In Automatic or Stop mode, the indicator (E) is displayed and show the current hydraulic flow on the system.

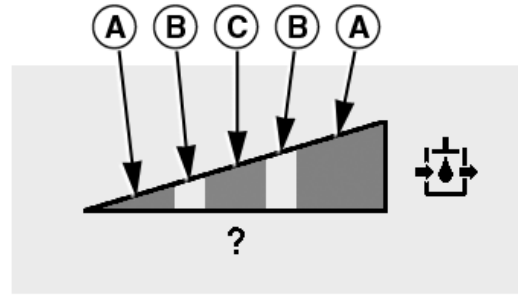
For a good performance in the field, the indicator (E) must be in the green zone (C). The tractor must provide a sufficient hydraulic flow. Proceed as follow to provide a sufficient hydraulic flow:

1. Switch the baler in Stop or Automatic mode.
2. Adjust the hydraulic flow with the corresponding command. See your relevant tractor Operator's manual.
3. The indicator (E) must be in the green zone (C) and near the right yellow zone (B) to ensure good performance during the cycle.

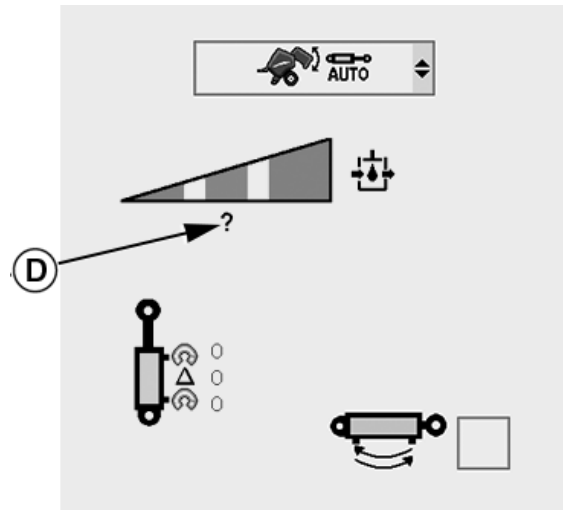
NOTE: Set the hydraulic flow with engine at working speed and PTO engaged.

A—Red Zone
B—Yellow Zone
C—Green Zone

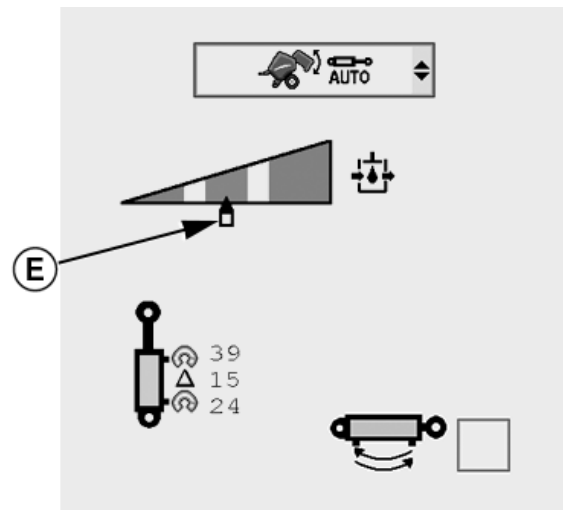
D—Unknown Hydraulic Flow Indicator
E—Hydraulic Flow Indicator



CC351773



CC571122



CC571123

Continued on next page

1181334,1680078381182 -19-05APR23-3/5

CC351773 —UN—27 JUN18

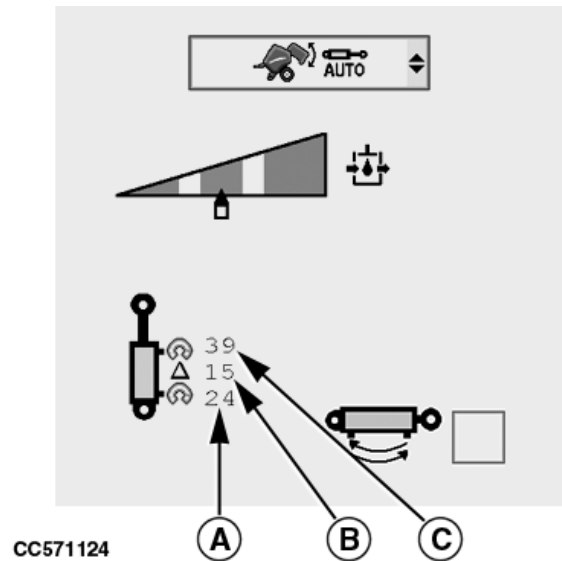
CC571122 —UN—03APR23

CC571123 —UN—03APR23

4. Hydraulic Pressure Indicator:

The Hydraulic pressure Indicator is a diagnostic aid. The indicator (A) indicates the oil pressure that enters in the baler. The indicator (B) indicates the difference in pressure between the indicators (A) and (C). The indicator (C) indicates the oil pressure that returns to the tractor.

A—High-Pressure Oil Indicator
B—Difference of Pressure Indicator
C—Return Pressure Oil Indicator



CC571124—UN—03APR23

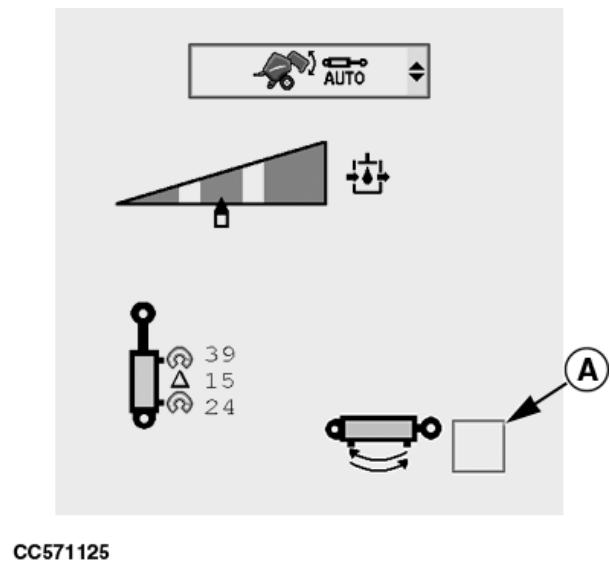
t181334,1680078381182 -19-05APR23-4/5

5. Reverse Hydraulic Flow:

Depending on how the hydraulic hose is connected to the tractor, the gate can move in the wrong direction when the tractor SCV is used. The check box (A) can resolve the problem.

- Tick checkbox (A) to enable the reversal of hydraulic flow.
- Do not tick checkbox (A) to disable the reversal of hydraulic flow.

A—Reverse Hydraulic Flow Checkbox



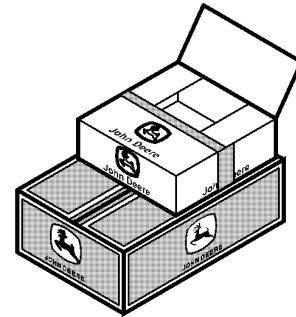
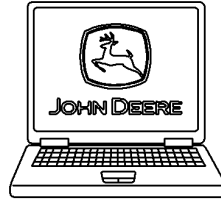
CC571125—UN—03APR23

t181334,1680078381182 -19-05APR23-5/5

Attachments

Find Attachments

See your John Deere dealer or the John Deere online attachment website to check the attachments suitable for your machine.



CC208612

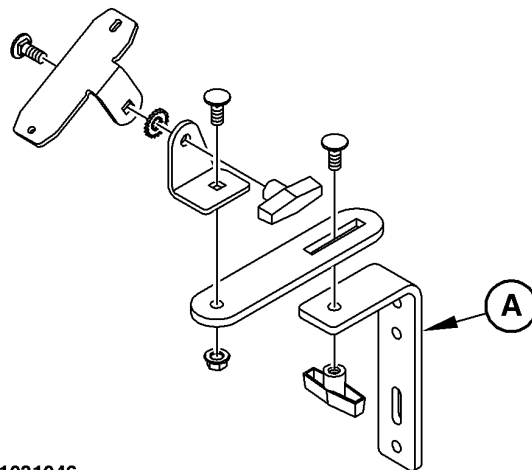
CC208612 —UN—14APR14

DC82261,0000447 -19-18OCT14-1/1

Monitor Support

Depending on the tractor cab, different monitor supports can be obtained from your John Deere dealer.

A—Angle



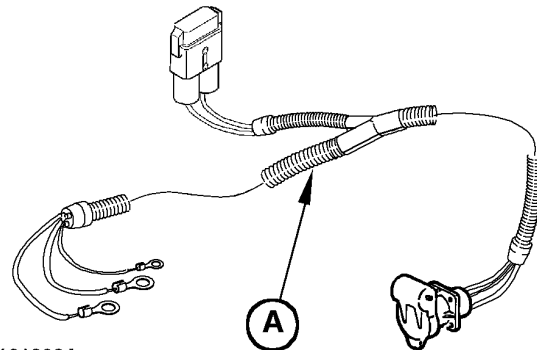
CC1031046

CC1031046 —UN—28OCT08

OUCC006,0001B47 -19-28OCT13-1/1

Battery Harness for Monitor

Whenever necessary, a battery harness (A) is available as an attachment to be installed on tractors not being equipped with any convenience outlet.



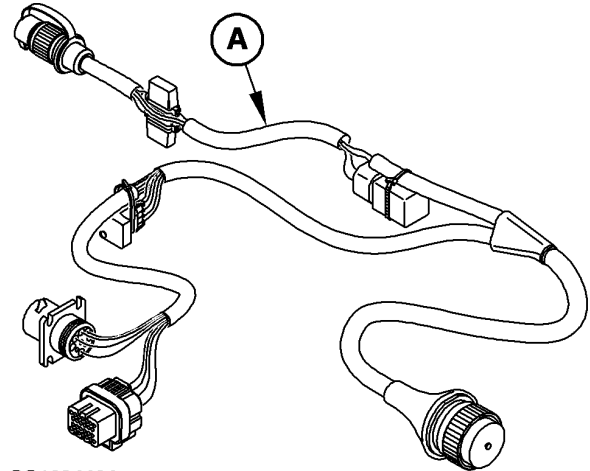
CC1018634

CC1018634 —UN—24OCT00

OUCC006,00014A0 -19-07OCT08-1/1

Cab Wiring Harness for Monitor

A cab wiring harness (A) for virtual terminal (display) is available from your John Deere dealer.



CC1034494

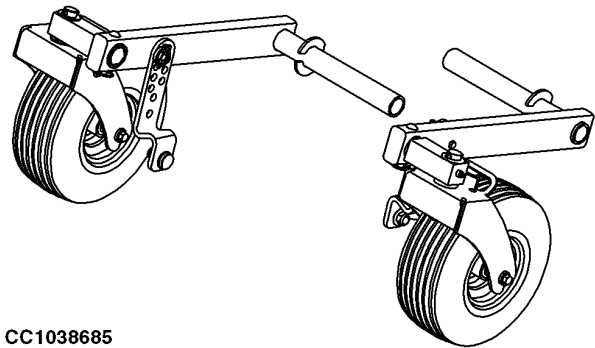
OUCC006,00017E7 -19-27JUN11-1/1

CC1034494 —UN—06JUL11

Caster Gauge Wheels

Caster gauge wheels allow the pickup to follow the ground contour more easily and avoid sideslip and soil damage.

Contact your John Deere dealer.



CC1038685

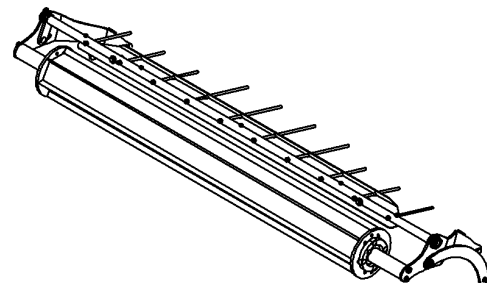
OUCC006,00019CA -19-19NOV12-1/1

CC1038685 —UN—19NOV12

Pickup Roll Compressor

Pickup roll compressor is available as an attachment to improve the feeding flow.

Contact your John Deere dealer.



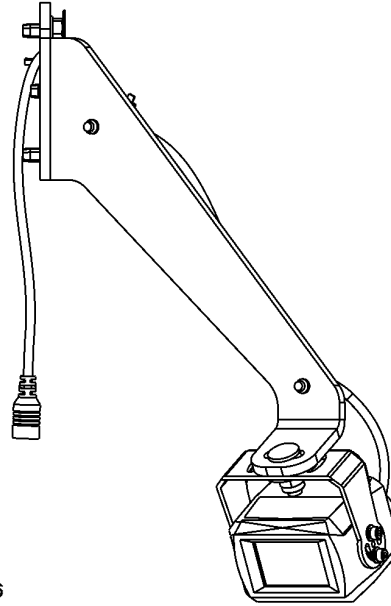
CC286973

NB02380,00001BB -19-28JUL16-1/1

CC286973 —UN—03AUG16

Camera

A camera is available to monitor the discharge of the bale.
Contact your John Deere dealer.



CC576436

CC576436 —UN—04MAY23

ga87848,1683122980694 -19-04MAY23-1/1

Lubrication and Maintenance

Lubricate and Maintain Machine Safely

CAUTION: This machine feature automatic sequence with dwelling positions: the machine may seem to be stopped and restart unexpectedly.

Do not lubricate or maintain the machine while it is in motion.

To avoid bodily injury or death always:

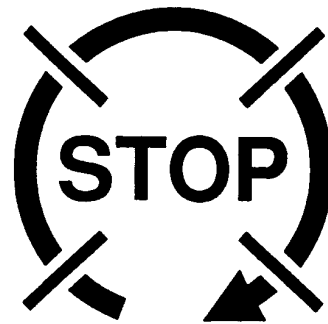
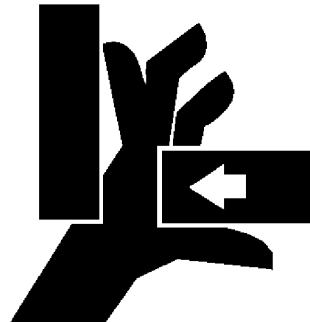
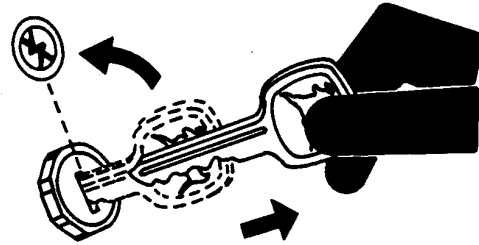
- Disengage PTO
- Engage tractor parking brake and/or place transmission in "Park"
- Shut off tractor engine
- Remove main switch key
- Relieve hydraulic pressure
- Lock gate. See Secure Gate Safely in Safety section.
- Engage parking lock
- Apply handbrake
- Wait until all moving parts have stopped
- Let all components cool

before servicing the machine.

To help prevent personal injury caused by unexpected movement, be sure to service machine on a level surface.

If machine is detached from tractor, block wheels to prevent movement.

IMPORTANT: Disconnect power supply to all electronic components when welding on machine. Over-voltage can damage electronic controls.



LX002 510

TS230 —UN—24MAY89

E41125 —UN—25OCT96

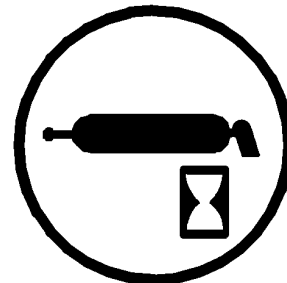
LX002510 —UN—17JAN95

ga87848,1676292421631 -19-17MAR23-1/1

Observe Service Intervals

Using tractor hour meter as a guide, perform services at the hourly intervals indicated on following pages.

IMPORTANT: Recommended service intervals are for average conditions. Service **MORE OFTEN** if baler is operated in adverse conditions.



CC 000934

CC000934 —UN—05APR95

CC03745,00002A9 -19-27AUG01-1/1

Perform Lubrication and Maintenance

Clean lubrication fittings before using grease gun. Replace any lost or broken fittings immediately. If a new fitting fails to take grease, remove and check for failure of adjoining parts.

Carefully perform lubrication and maintenance at hour intervals provided in this section to ensure optimum performance and avoid premature failure.

Bearing failures or overheating can result in a fire. To reduce bearing failures or overheating, thoroughly lubricate all greasing points of the machine:

- After each time the machine is washed.
- When placing the machine in storage.
- Just before using the machine after it has been stored.

Regularly check that grease is coming out of bearings while greasing them.

Crop material and other debris may accumulate around bearings and bearing covers. Inspect and clean these areas periodically throughout the working day.

DC82261,0000538 -19-18OCT14-1/1

Grease for Lubrication

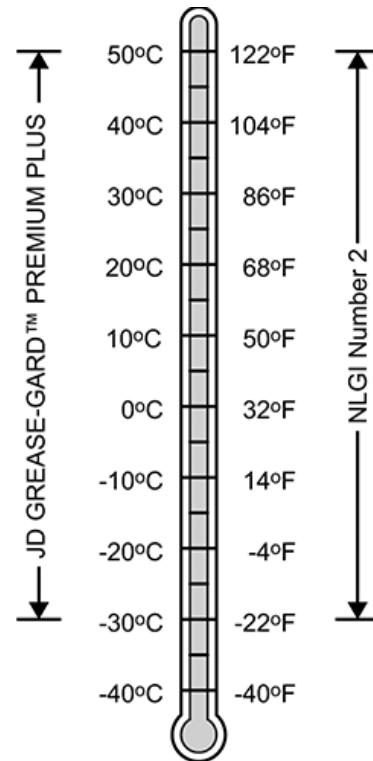
The following grease is recommended:

- John Deere Grease-Gard™ Premium Plus

Other greases may be used if they meet the following:

- NLGI 2 Classification
- ISO-L-X-BDHB 2 or DIN KP 2 N-10 Lithium Complex, Non-Synthetic Base Oil (160 to 220 mm²/s @ 40°C)
- With Extreme Pressure Additive

IMPORTANT: Some types of thickeners, base oils, and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.



Greases for Air Temperature Ranges

CC390496—UN—24SEP19

Grease-Gard is a trademark of Deere & Company

GA87848,0001049 -19-25NOV20-1/1

Grease for Automatic Greasing System

IMPORTANT: Grease lubricants containing solid lubricants must not be used. Moly grease will plug the distributors and should not be used (Lubricants like graphite or MoS₂ on request).

The system is designed for commercially available multi-purpose grease lubricants up to NLGI Class 2 for use in summer and wintertime.

Use greases with high-pressure additives (EP greases).

Use only greases of same kind of saponification.

For specification see "Grease" in this section.

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Gear Oil

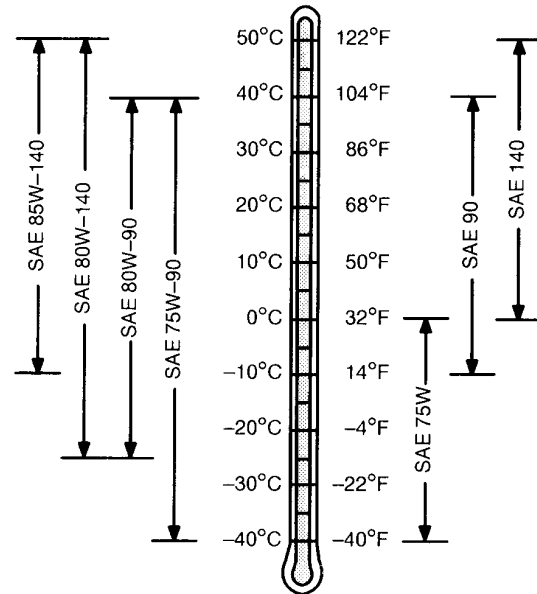
Use oil viscosity based on the expected air temperature range during the period between oil changes.

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



Oil Viscosities for Air Temperature Ranges

EXTREME-GARD is a trademark of Deere & Company

DX,GEOIL -19-14APR11-1/1

Multiluber Chain Oil

Use the following oil for the multiluber chain oiling system:

John Deere BIO-MULTILUBER-OIL¹

Other equivalent biodegradable oils may also be used.

IMPORTANT: Never use mineral oil for this application.

¹John Deere BIO-MULTILUBER-OIL meets or exceeds minimum biodegradability of 80% within 21 days according to CEC-L-33-T-82 test method. BIO-MULTILUBER-OIL must not be mixed with mineral oil.

NOTE: John Deere BIO-MULTILUBER-OIL is available at the John Deere dealer.

- DC43300: BIO-MULTILUBER-OIL 5 liters

OUC006,00019AE -19-09NOV12-1/1

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 -19-13JAN18-1/1

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 -19-11APR11-1/1

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 -19-18MAR96-1/1

Automatic Greasing System General Information (If Equipped with Cartridge-Type Pump)

Automatic greasing function

The system provides a grease pump driven by hydraulic pressure, greasing lines and grease distributors. Each time the rear gate is opened and closed, a piston inside the pump is actuated by hydraulic pressure and an adjustable quantity of grease is delivered.

IMPORTANT: Depending on the machine equipment, some greasing points are not connected to the automatic greasing system. See this section to know which greasing points are connected or not to the automatic greasing system.

Service

NOTE: All system components are maintenance-free. If blockage occurs at a grease nipple or in a greasing line, see *Automatic Greasing System (If Equipped with Cartridge-Type Pump)* in *Troubleshooting* section.

During the first few weeks of operation, periodically check the system and following points:

- Sufficient grease at bearing points.
- Broken or leaking lines.



CC510508 —UN—08JUL21

TL81334,0000FD0 -19-08JUL21-1/1

Adjust Automatic Greasing System Flow Rate (If Equipped with Cartridge-Type Pump)

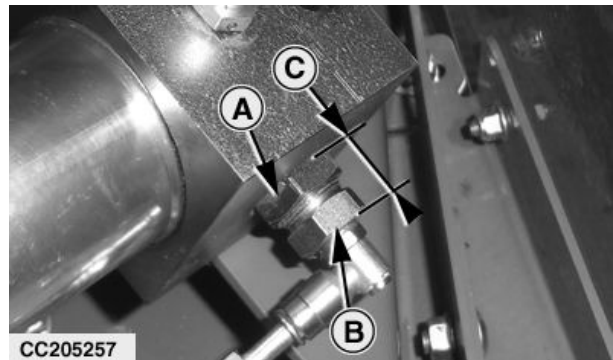
The grease pump flow rate can be set progressively by modifying distance (C) using adjusting screw (B). To adjust flow rate, proceed as follows:

1. Unscrew lock nut (A).
2. Adjust screw (B) to obtain the desired distance (C).

Specification

Flow Rate, Factory	
Adjustment—Distance.....	17 mm (43/64 in.)
Flow Rate, Minimum	
Adjustment—Distance.....	15 mm (19/32 in.)
Flow Rate, Maximum	
Adjustment—Distance.....	24 mm (15/16 in.)

3. Tighten lock nut (A).



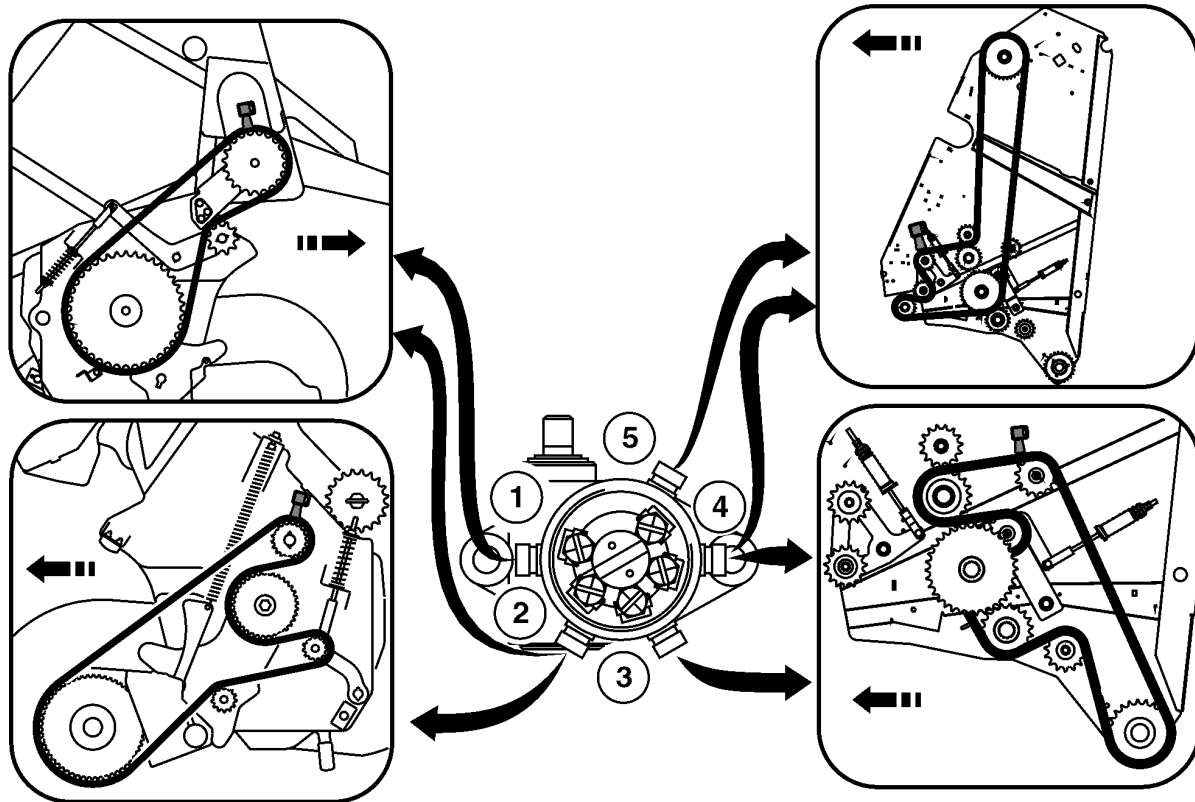
CC205257 —UN—25OCT13

A—Lock Nut
B—Flow Rate Adjusting Screw
C—Distance

NOTE: A cartridge lasts between 1200 and 1700 bales.

ga87848,1685001476751 -19-25MAY23-1/1

Chain Oiling Component Location



CC397166

- | | | |
|--|---|----------------------------------|
| 1—Rotary Feeder Drive Chain (Green Ring) | 3—Frame Roll Drive Chain (Blue Ring) | 5—Main Drive Chain (Orange Ring) |
| 2—Pickup Drive Chain (Red Ring) and Rotary Feeder Drive Chain (Green Ring) | 4—Main Drive Chain (Orange Ring) and Frame Roll Drive Chain (Blue Ring) | |

NOTE: Each hose is identified on pump and brush side with a number on a color ring.

ga87848,1682587892909 -19-27APR23-1/1

CC397166—UN—28NOV19

Adjust Oil Flow

The oil flow can be adjusted for each chain.

1. Unscrew and remove cover.
2. Identify the screw allowing the oil flow of the relevant brush(es) to be adjusted.
3. Turn the screw clockwise to increase oil flow and counterclockwise to decrease oil flow.

NOTE: When the screw is totally screwed in (maximum flow), the minimum flow will be obtained by unscrewing four turns.

For screw of brush location, see Chain Oiling Component Location in this section.

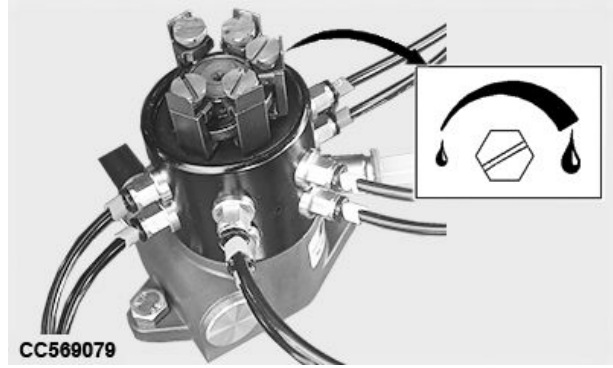
1 turn = 6 clicks

To apply initial factory settings, proceed as follows:

Fully screw in the relevant screw.

For screw of brush 1, unscrew 1 turn and 4 clicks.

For screw of brush 2, unscrew 3 turns.



A—Pump Cover

For screw of brush 3, unscrew 2 turn and 3 clicks.

For screw of brush 4, unscrew 2 turns and 3 clicks.

For screw of brush 5, unscrew 1 turn and 1 click.

4. Install cover.

ga87848,1685022691900 -19-25MAY23-1/1

CC569079—UN—10MAY23

As Required: Refill Multiluber Chain Oiling System Reservoir

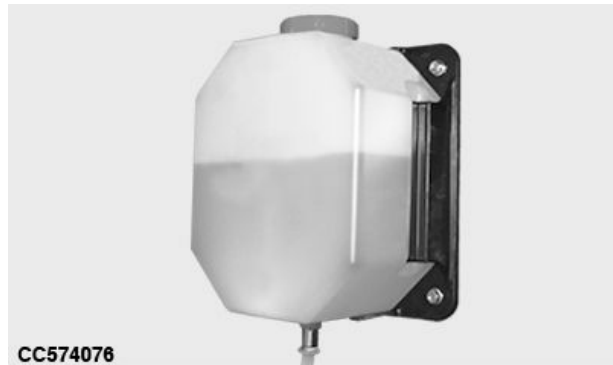
Depending on the pump flow adjustment, refill reservoir as required.

Specification

Oil Reservoir—Capacity..... 4 l
(1 US gal.)

Use oil specified under Multiluber Chain Oil in this section.

IMPORTANT: Never use any other type of oil.



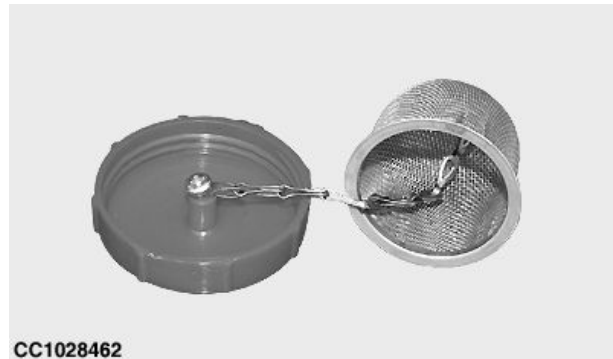
CC574076

ga87848,1681216226114 -19-13APR23-1/1

CC574076—UN—19APR23

As Required: Clean Oil Reservoir Filter

Clean oil reservoir filter as necessary.



CC1028462

ga87848,1681396385370 -19-23MAY23-1/1

CC1028462—UN—21SEP06

As Required: Clean Hydraulic Coupler Filters

Clean coupler filter as follows:

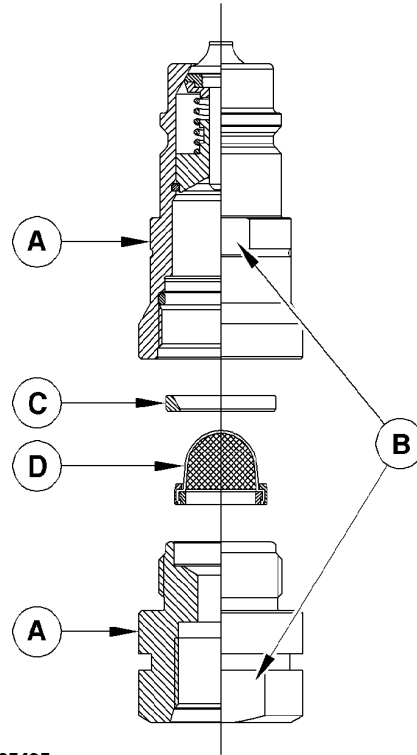
1. Disassemble coupler (A) using flat surfaces (B).
2. Remove spacer ring (C) and filter (D).
3. Clean filter (D), using clean solvent.
4. Assemble coupler (A) in reverse order of disassembly.
5. Tighten coupler (A) to the following specification:

Specification

Pressure Line
Coupler—Torque.....90 N·m
(66 lb.-ft.)

A—Coupler
B—Flat Surface

C—Spacer Ring
D—Filter



CC1025485

CC1025485 —UN—15MAR04

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As Required: Replace Automatic Greasing System Cartridge (If Equipped with Cartridge-Type Pump)

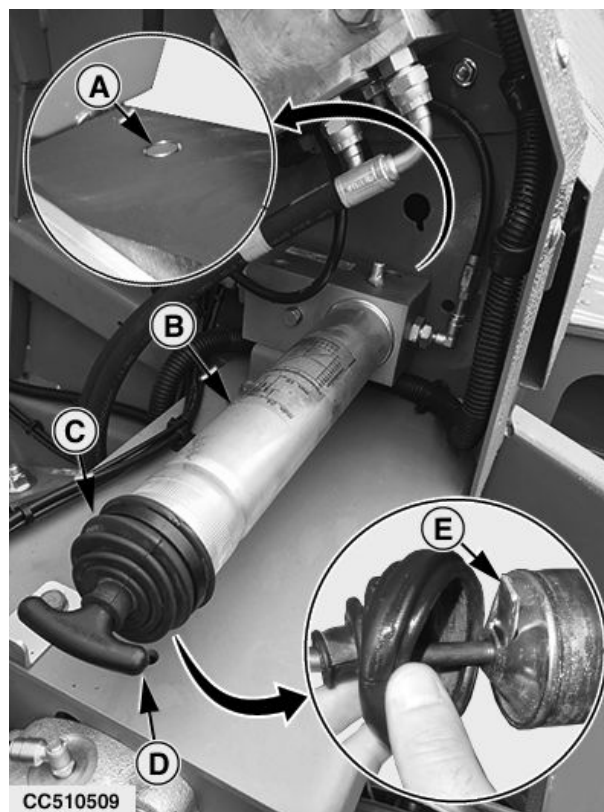
Grease cartridge replacement

On the top of the grease pump, indicator (A) extends to indicate that the grease cartridge is empty. To replace the grease cartridge, proceed as follows:

1. Pull handle (D) fully downward.
2. Unscrew tube (B).
3. Replace empty grease cartridge by a new one.
4. Reinstall and tighten tube (B).
5. Press lock (E) located below rubber boot (C), then fully push up handle (D).
6. Bleed the grease pump. See [Bleed Automatic Greasing System \(If Equipped with Cartridge-Type Pump\)](#) in Service section.

A—Empty Cartridge Indicator
B—Grease Cartridge Tube
C—Rubber Boot

D—Handle of Follower Piston
E—Lock of Follower Piston Rod



CC510509 —UN—09JUL21

ga87848,1684831761133 -19-23MAY23-1/1

As required: Check Accumulators Gas Pre-charge

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

Accumulators gas pre-charge can diminish over time. If a hydraulic function does not behave as expected, check the gas pre-charge. See [Service Hydraulic Accumulator Device](#) in Service section.



CC1022636

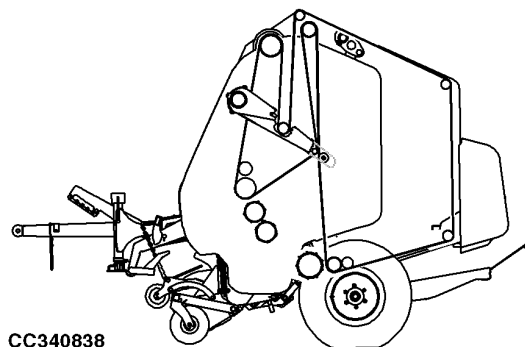
Accumulator Explosion

ga87848,1676301926895 -19-14FEB23-1/1

CC1022636 —UN—15JAN03

As Required: Clean Bale Chamber Rolls

Remove wrapped crop from the bale chamber rolls.



CC340838 —UN—14DEC17

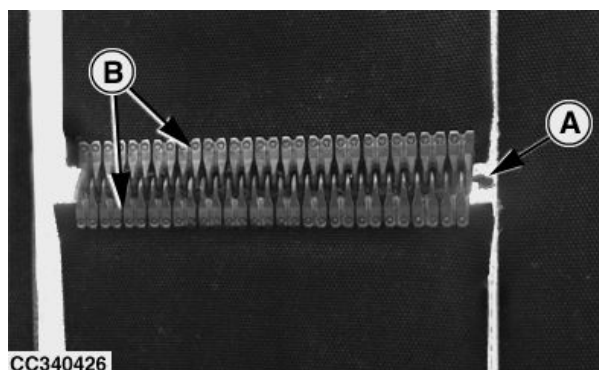
GA87848,0000520 -19-15DEC17-1/1

As Required: Clean Belt Hooks and Hook Wires

Remove crop from hooks (B) and hook wires (A).

A—Hook Wire

B—Belt Hook



CC340426 —UN—14DEC17

GA87848,0000521 -19-15DEC17-1/1

Daily: Prevent Fire

Use compressed air to remove buildup of crop material and to keep the machine clean.

Avoid high-pressure power-washing next to the bearings to prevent damaging seals.

Check bearings for early signs of damage, and replace as indicated. Turn off power to baler and check for unusual noises, hot parts, smells of scorching, and discolored paint or metal.

Check condition of bearings:

- Open the gate and lock it. see [Secure Gate Safely](#) in Safety section.
- With the belts slackened, rotate each of the rollers by hand, paying attention to dry, noises, or rough rotation.
- Push, pull, or gently pry to check bearing radial play.
- Watch and feel for looseness in the bearings. Replace worn or damaged bearings. Just after operation, check the temperature of each bearing, if one or some are hotter than the others replace the bearings.

ga87848,1676297506102 -19-13FEB23-1/1

Daily: Check Precutter Knives and Drop Floor

CAUTION: Be careful when working around the knives. Knives are sharp and can cause serious injury.

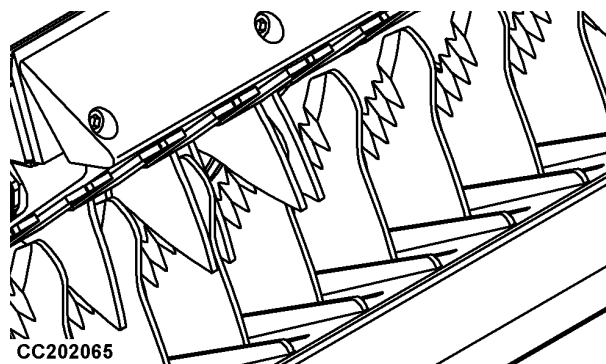
Check Precutter Knives:

1. Fully open the gate.

NOTE: Make sure that the bale kicker is fully raised. Maintain gate opening button as long as necessary.

2. Engage tractor park brake or place transmission in PARK, shut off tractor engine and remove key.
3. Lock gate, see [Secure Gate Safely](#) in Safety section.

Keep each precutter knife very sharp. Knives must be checked daily or each 200 bales, whichever comes first.



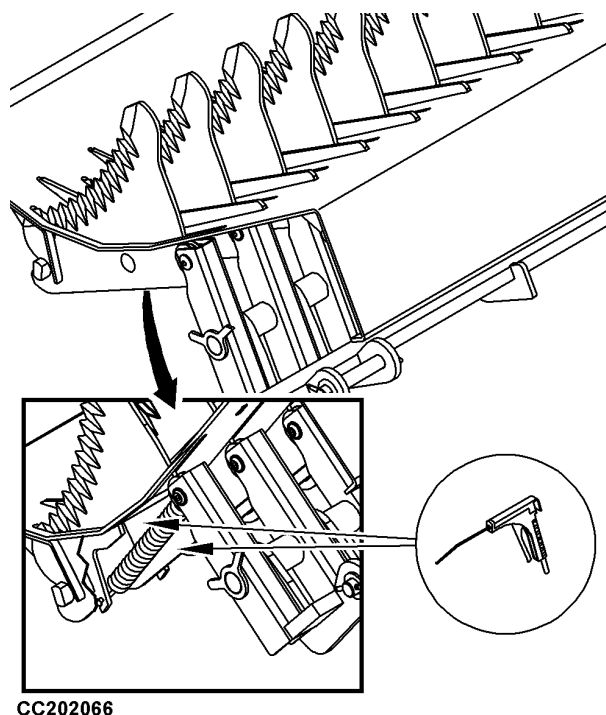
To remove the knives, see [Replace Precutter Knives](#) in Service section and to sharpen knives, see [Sharpen Precutter Knives](#) in Service section.

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Clean Drop Floor:

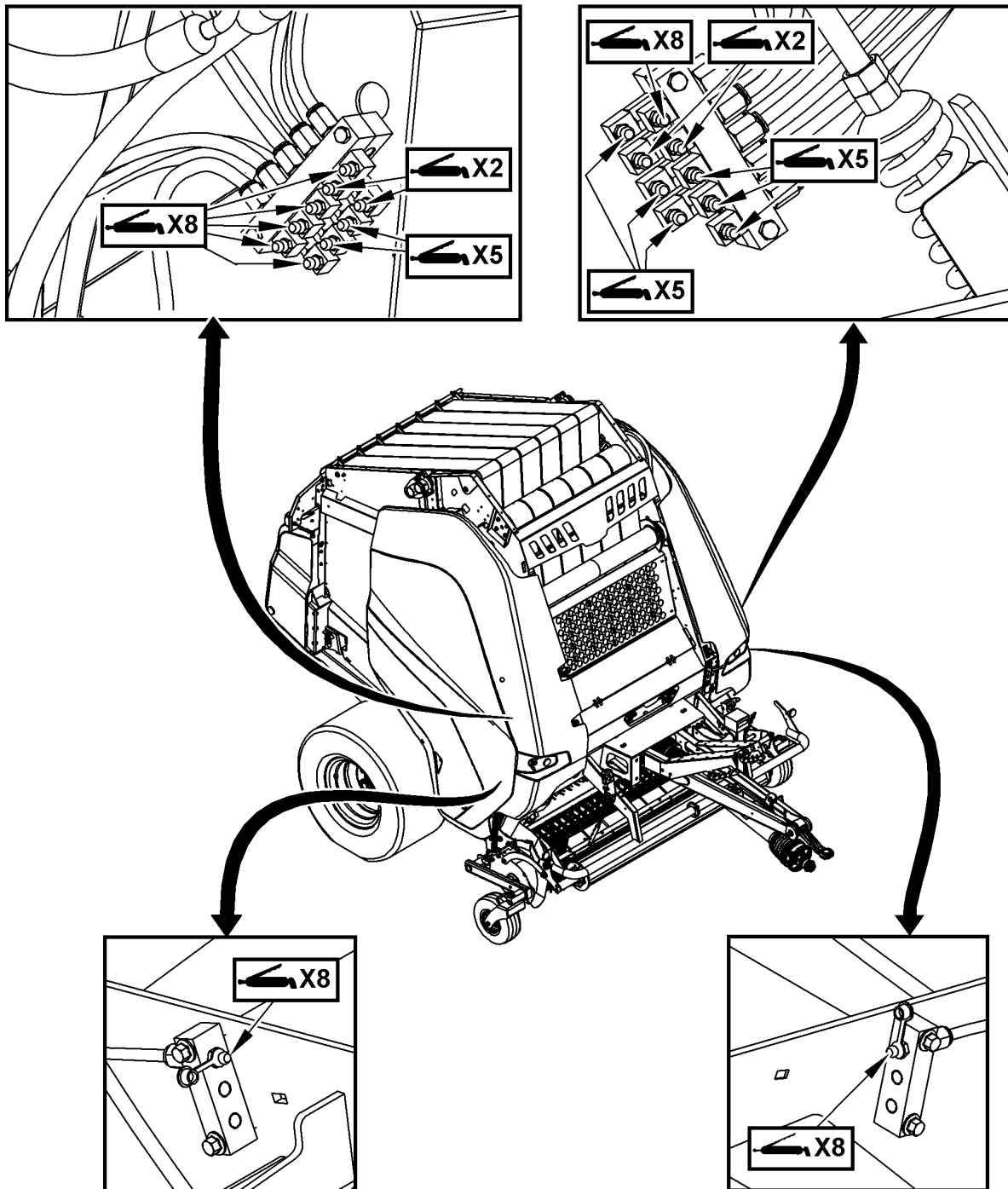
1. Lower the drop floor. See [Unplug Pickup](#) in Operating Baler Application section.
2. Engage and retract knives several times. See [Retract or Engage Precutter Knives Function](#) in Operating Baler Application section.
3. Engage tractor park brake or place transmission in PARK, shut off tractor engine and remove key.
4. Close the knife shutoff valve(s).
5. Remove material with an air gun or any suitable tool.

NOTE: Material is easier to remove when knives are engaged.



ga87848,1687763574908 -19-27JUN23-2/2

Every 10 Hours: Lubricate Baler without Automatic Greasing System



CC310409

IMPORTANT: Lubricate all roll grease nipples after each working day while bearings are still warm.

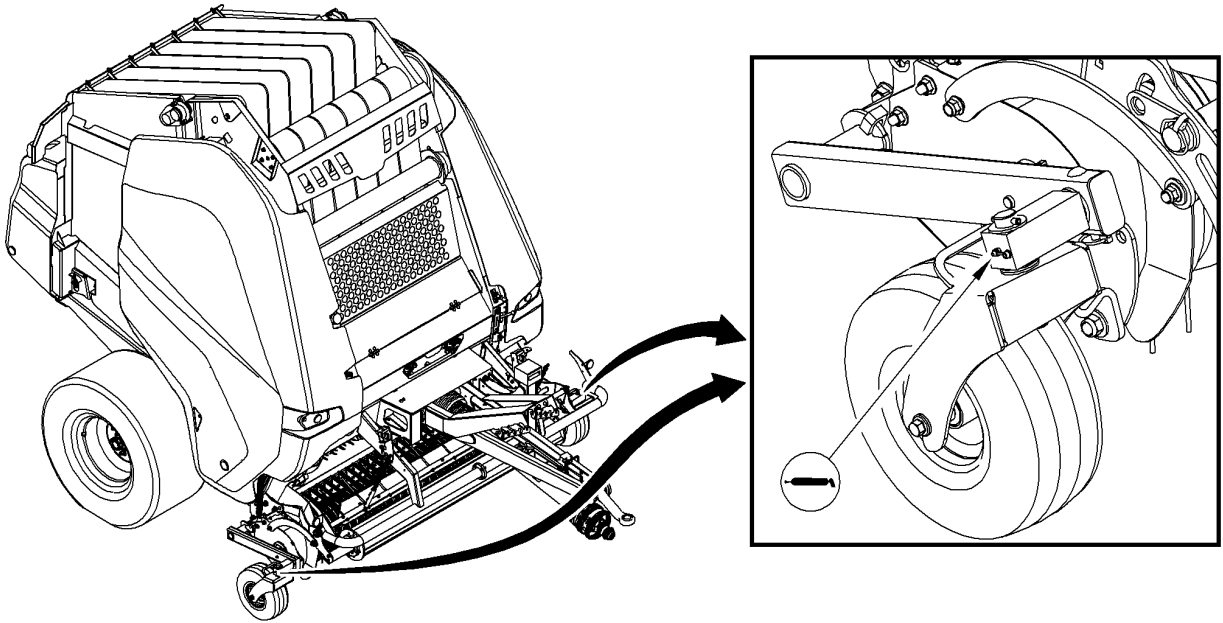
Grease-Gard is a trademark of Deere & Company

Lubricate with John Deere Grease-Gard™ Premium Plus.

ga87848,1682604520912 -19-27APR23-1/1

CC310409 —UN—18APR17

Every 10 Hours: Lubricate Pickup Caster Gauge Wheels (If Equipped)



CC329276

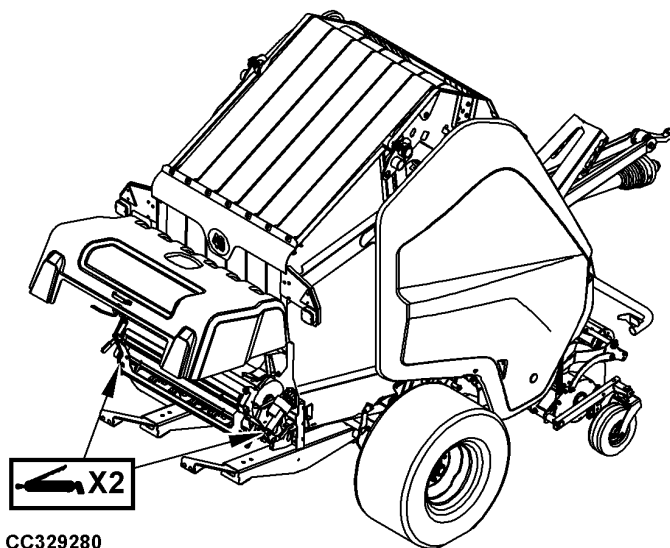
Lubricate with John Deere Grease-Gard™ Premium Plus.

Grease-Gard is a trademark of Deere & Company

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CC329276—UN—01SEP17

Every 30 Hours: Lubricate Net Binding Pivots



CC329280

Lubricate with John Deere Grease-Gard™ Premium Plus.

Grease-Gard is a trademark of Deere & Company

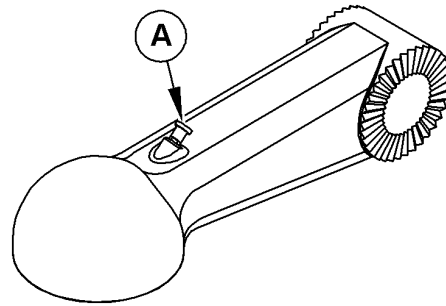
ga87848,1682604825115 -19-27APR23-1/1

CC329280—UN—01SEP17

Every 50 Hours: Lubricate Ball Type Hitch (If Equipped)

Lubricate with John Deere Grease-Gard™ Premium Plus.

A—Grease Fitting



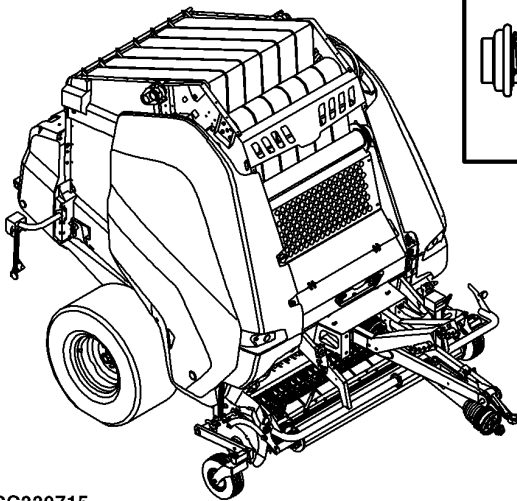
CC205925

CC205925 —UN—29OCT13

Grease-Gard is a trademark of Deere & Company

GA87848,0000FDC -19-02NOV20-1/1

Every 50 Hours: Lubricate Telescoping Driveline



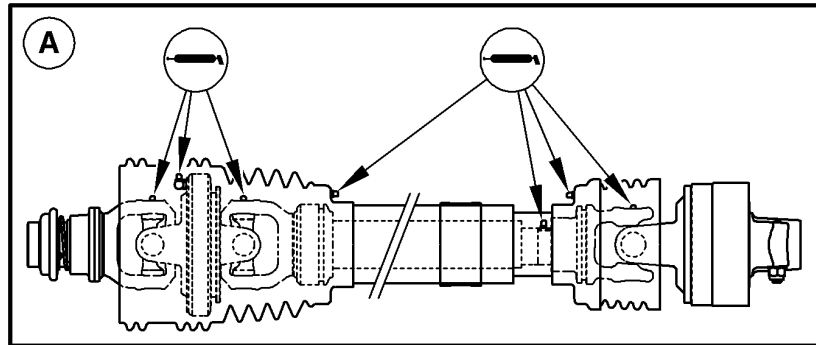
CC330715

A—Grease Fittings

Lubricate grease fittings with John Deere Grease-Gard™ Premium Plus.

Refer to the basic telescoping driveline Operator's Manual to lubricate telescoping driveline correctly.

Grease-Gard is a trademark of Deere & Company



NOTE: The quantity of grease delivered at each grease gun pump stroke is average 1 g (0.035 oz.).

CC330715 —UN—27SEP17

GA87848,000108D -19-04JAN21-1/1

Every 50 Hours: Check Chain Tension

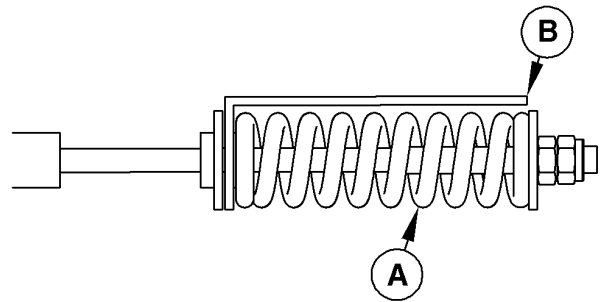
Check for all tensioner that length of spring (A) and strap (B) are the same.

If necessary, see Service section to adjust chain.

If the length of spring (A) cannot be adjusted to match the length of strap (B), replace the chain. See your John Deere dealer.

A—Spring

B—Strap

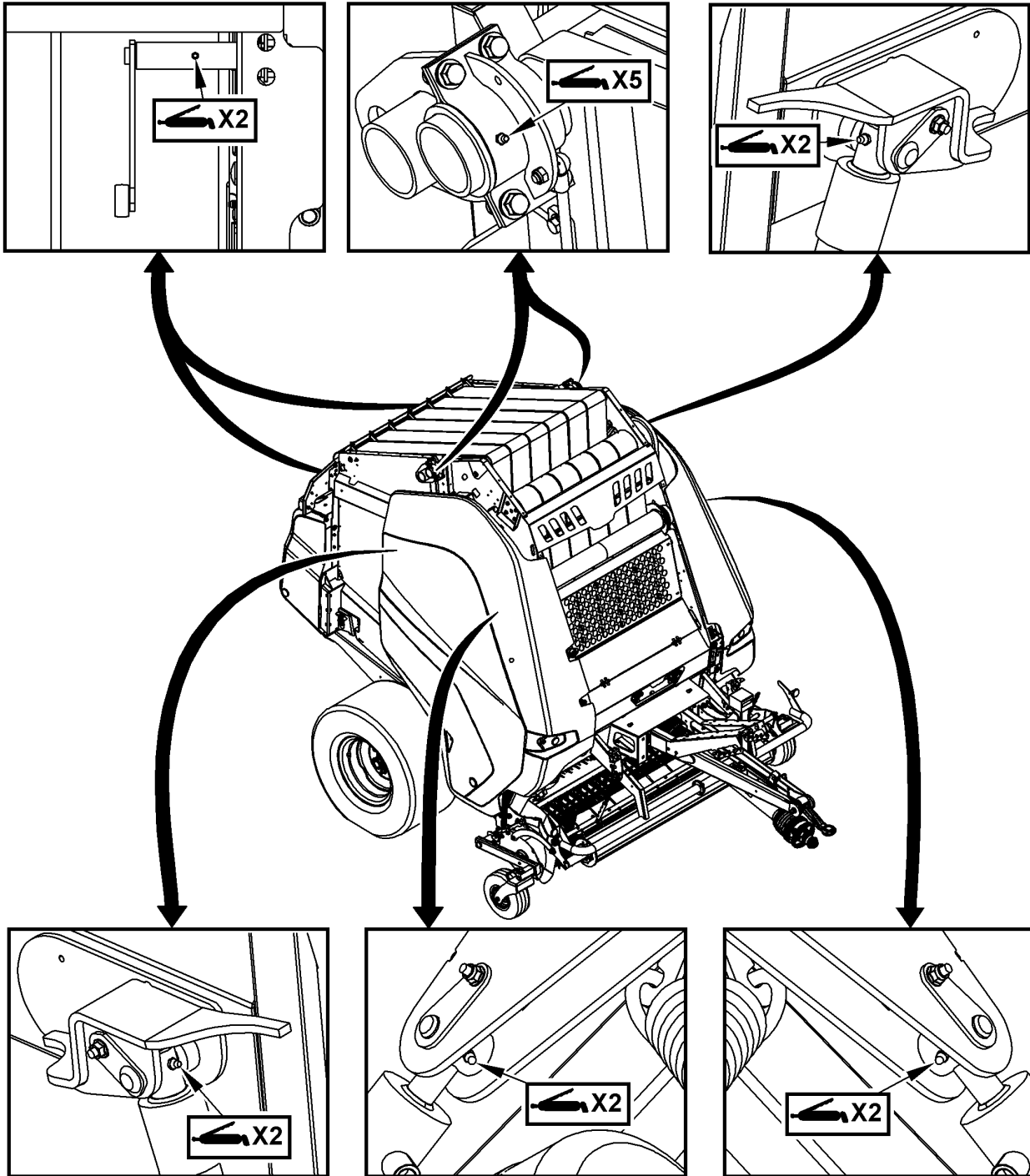


CC286971

CC286971 —UN—01SEP16

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Every 50 Hours: Lubricate Door Hinges, Hydraulic Cylinders, and Bale Shape Sensor Pins



CC310415

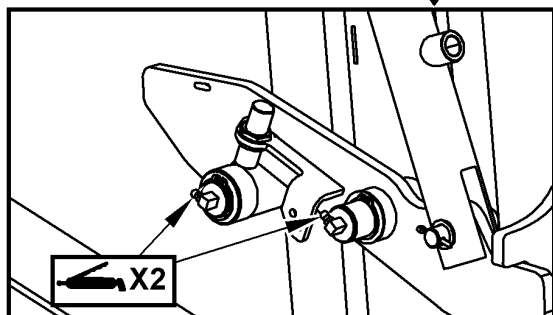
Lubricate with John Deere Grease-Gard™ Premium Plus.

Grease-Gard is a trademark of Deere & Company

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CC310415—UN—18APR17

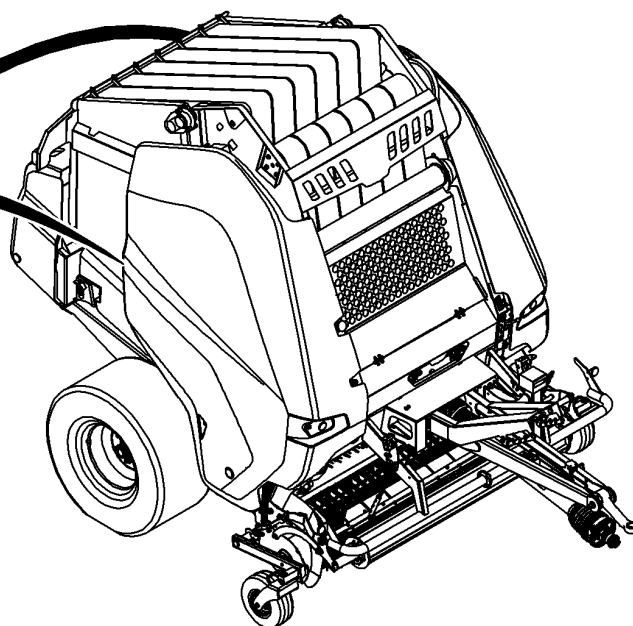
Every 50 Hours: Lubricate Gate latches



CC329279

Lubricate with John Deere Grease-Gard™ Premium Plus.

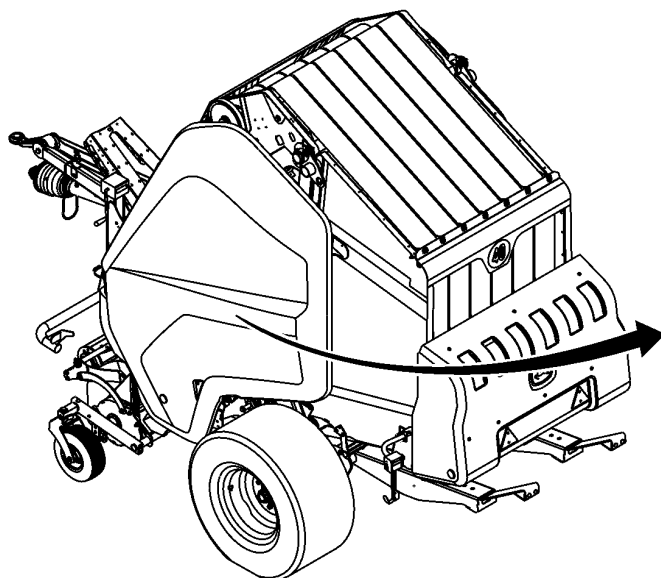
Grease-Gard is a trademark of Deere & Company



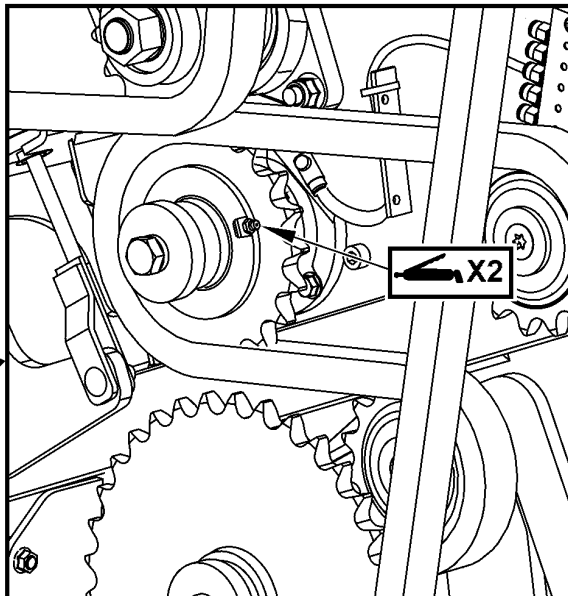
CC329279 —UN—01SEP17

ga87848,1682604976496 -19-27APR23-1/1

Every 50 Hours: Lubricate Lower Belt Drive Roll (With 2nd Drive Roll)



CC516887



CC516887 —UN—07JUL21

Lubricate with John Deere Grease-Gard™ Premium Plus.

Grease-Gard is a trademark of Deere & Company

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Weekly: Check Gear Case Oil Level

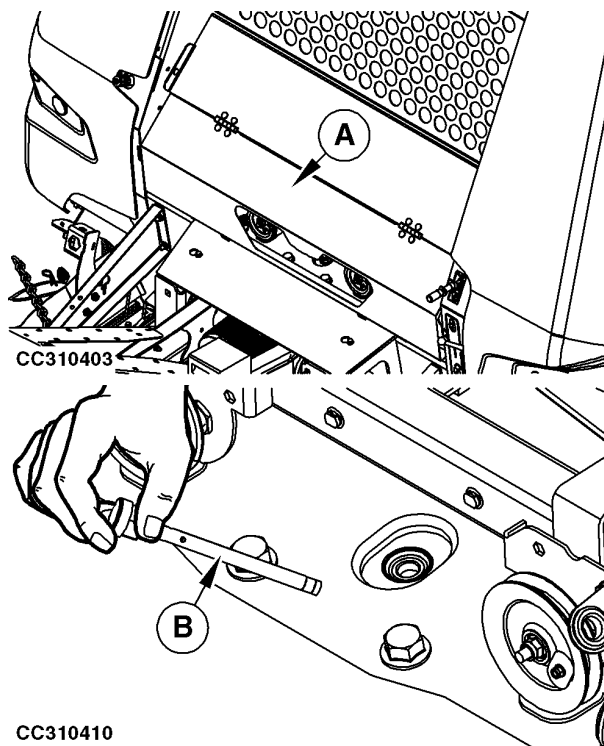
1. Open twine binding system cover (A).
2. Use dipstick (B) to check gear case oil level.

IMPORTANT: Check level of lubricant weekly using dipstick (B) and refill as necessary.

Do not overfill gear case as this will result in overheating and oil leakage.

A—Twine Binding System Cover

B—Dipstick



CC310403

CC310410

CC310403 —UN—18APR17

CC310410 —UN—17AUG17

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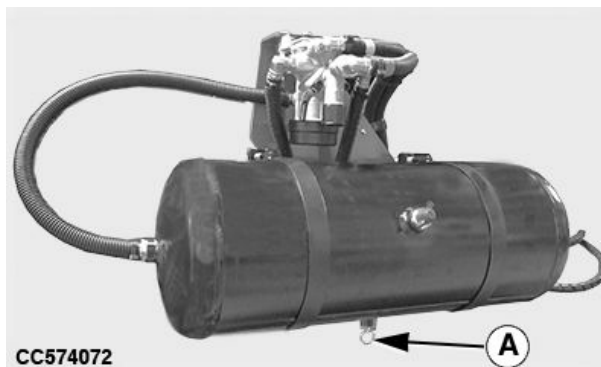
Weekly: Check and Drain Air Brake Tank

CAUTION: Before draining condensed water from the compressed air tank, make sure that the machine is secured against rolling away. Engage the park brake and place wheel chocks under the wheels.

Pull ring (A) to drain water from the air tank.

Condensation in brake system may cause malfunctions.

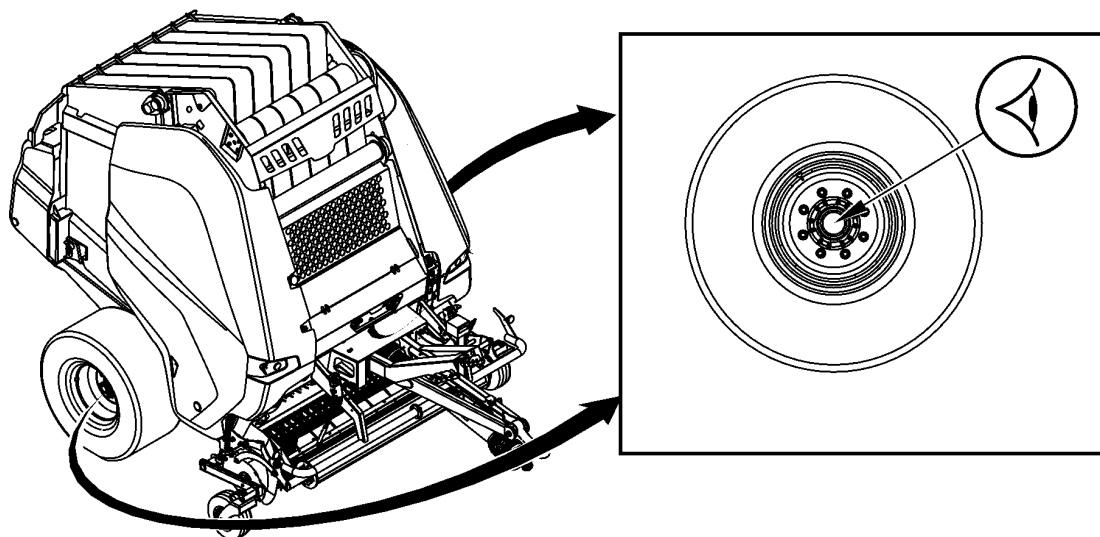
A—Ring



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Weekly: Check Wheel Hub Cap



CC574087

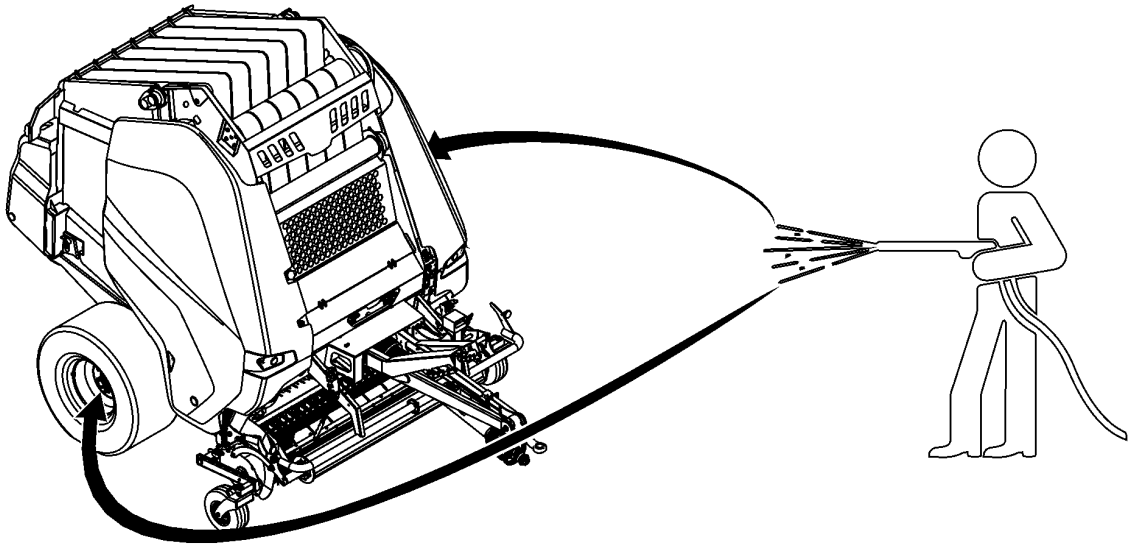
Check wheel hub cap is correctly installed on both machine sides.

Check wheel hub cap for leaks on both machine sides. If necessary, see your John Deere dealer.

aysdijz,1681894690872 -19-25APR23-1/1

CC574087 —UN—25MAY23

Weekly: Clean and Check Brake



CC574088 —UN—25MAY23

CC574088

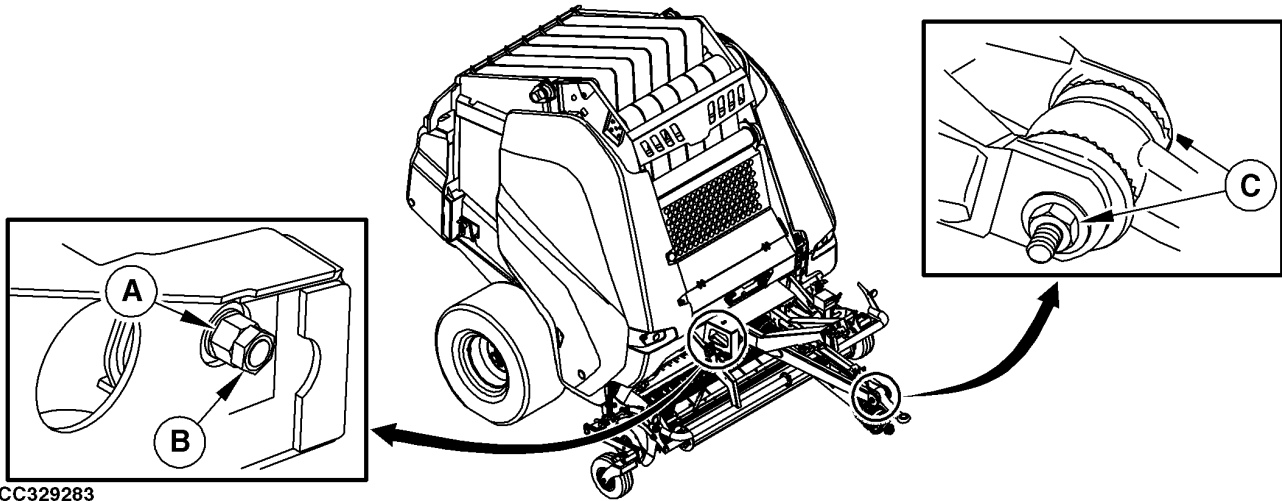
IMPORTANT: Pressurized water can damage brake parts. Avoid to direct high-pressure jet on brake hoses, cylinders and seals.

sure that there is no leaks. If necessary, see your John Deere dealers.

Clean that the brakes are in good condition. See Avoid High-Pressure Jet on Cylinders in Safety section. Make

aysdijz,1681894690895 -19-31MAY23-1/1

Every 100 Hours or Yearly: Check Tongue Frame and Hitch



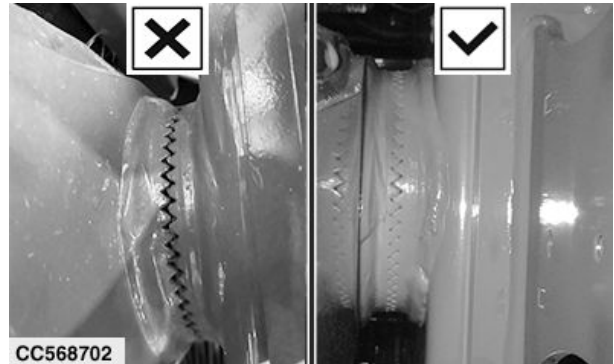
CC329283

IMPORTANT: Make sure that all ring teeth are **FULLY engaged (not standing tip to tip)** when tightening nuts (A), (B), and (C).

Retighten tongue frame fixing nuts (A), lock nuts (B) and hitch fixing screw (C) to specified torque:

Specification

Tongue Frame Fixing	
Nut—Torque.....	700 N·m (516 lb-ft)
Tongue Frame Lock	
Nut—Torque.....	300 N·m (221 lb-ft)
Hitch Fixing	
Nut—Torque.....	620 N·m (450 lb-ft)



Tongue Tighten Error

A—Tongue Frame Fixing Nut
B—Tongue Frame Lock Nut

C—Hitch Fixing Nut

ga87848,1682670818211 -19-23JUN23-1/1

CC329283 —UN—01SEP17

CC568702 —UN—08MAR23

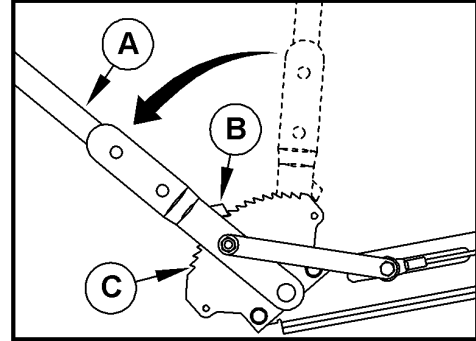
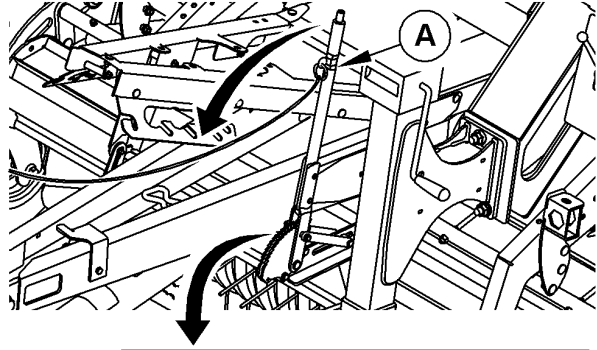
Every 100 Hours or Yearly: Check Park Brake

Pull lever (A) at the maximum to engage park brake then check that latch (B) is not positioned on latest remaining notch (C).

If not, see your John Deere dealer.

A—Park Brake Lever
B—Park Brake Latch

C—Remaining Notch



CC205667

CC205667 —UN—16OCT13

ga87848,1682431028358 -19-25APR23-1/1

Every 100 Hours or Yearly: Check Wheel Nut Torque

Check wheel nut torque. See [Check Wheel Nut Torque](#) in Preparing the Baler section.

IMPORTANT: Repeat the procedure each time a wheel has been removed and installed.

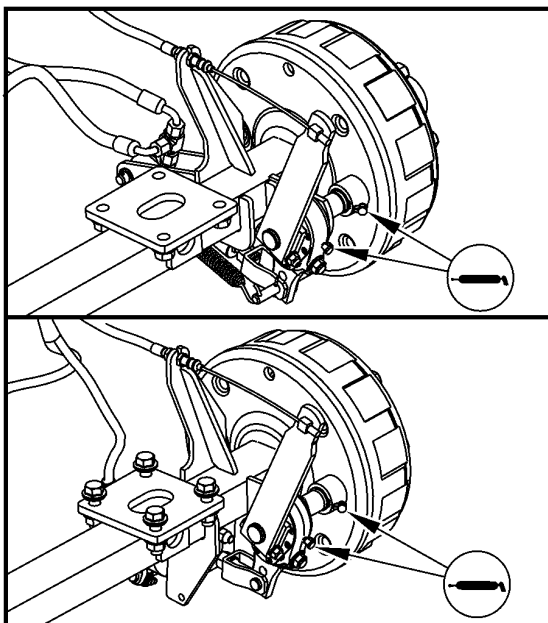


CC575701

CC575701 —UN—28APR23

aysdijz,1681395389627 -19-26APR23-1/1

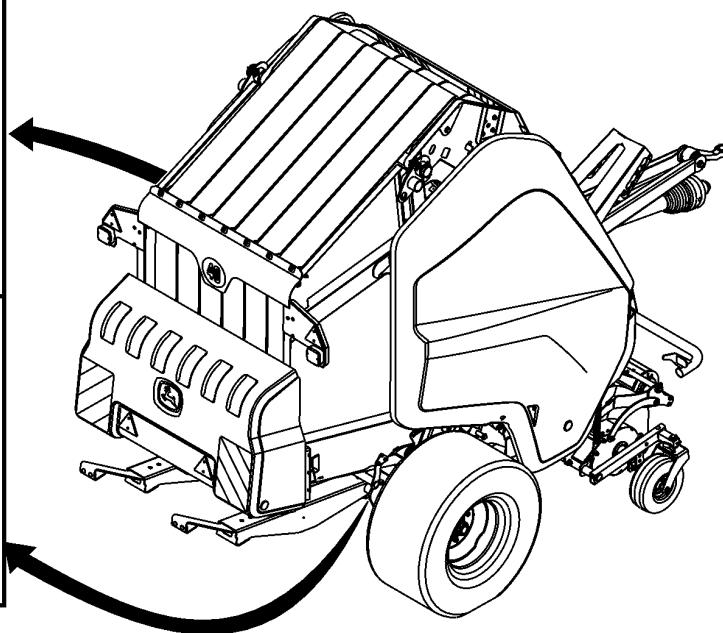
Every 100 Hours or Yearly: Lubricate Brake Shafts



CC574100

Lubricate with John Deere Grease-Gard™ Premium Plus on both machine sides.

Grease-Gard is a trademark of Deere & Company



CC574100 —UN—21APR23

aysdijz,1681895000050 -19-25APR23-1/1

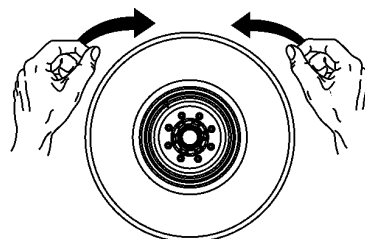
Every 100 Hours or Yearly: Check End Play of Wheel Hub Bearing

Check the wheels have no play:

1. Lift the wheel from the ground. See Remove and Install Wheel in Service section.
2. Rotate slowly the wheel on both directions to detect jam or hard point.
3. Rotate the wheel faster and check any sound or any hard point.
4. Push and pull the wheel on all directions. The wheels should not be wobbly.

If necessary, see your John Deere dealer.

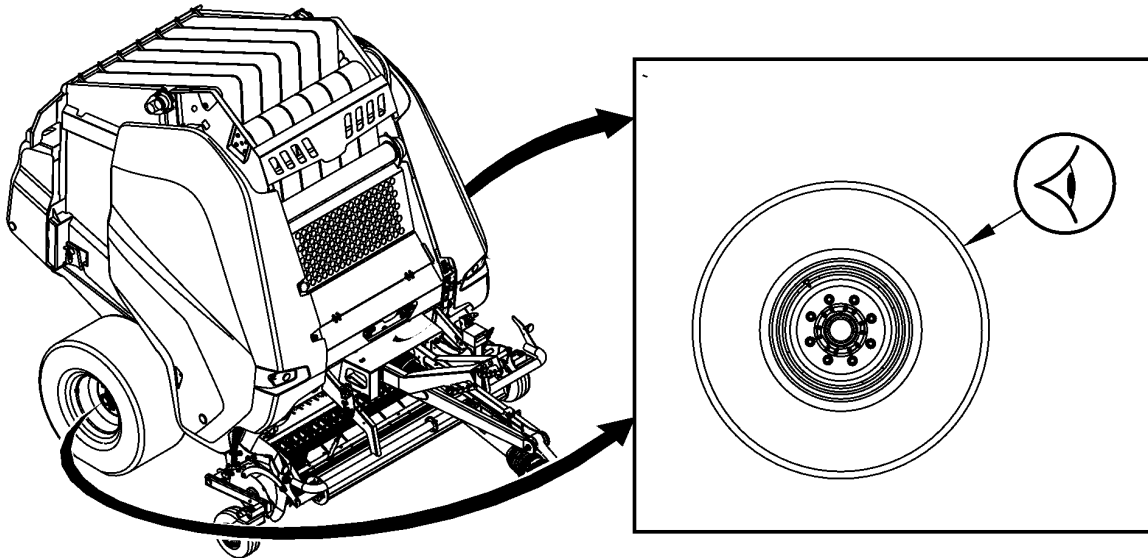
CC574077



CC574077 —UN—19APR23

aysdijz,16818950000103 -19-25APR23-1/1

Twice a Year: Check Tire



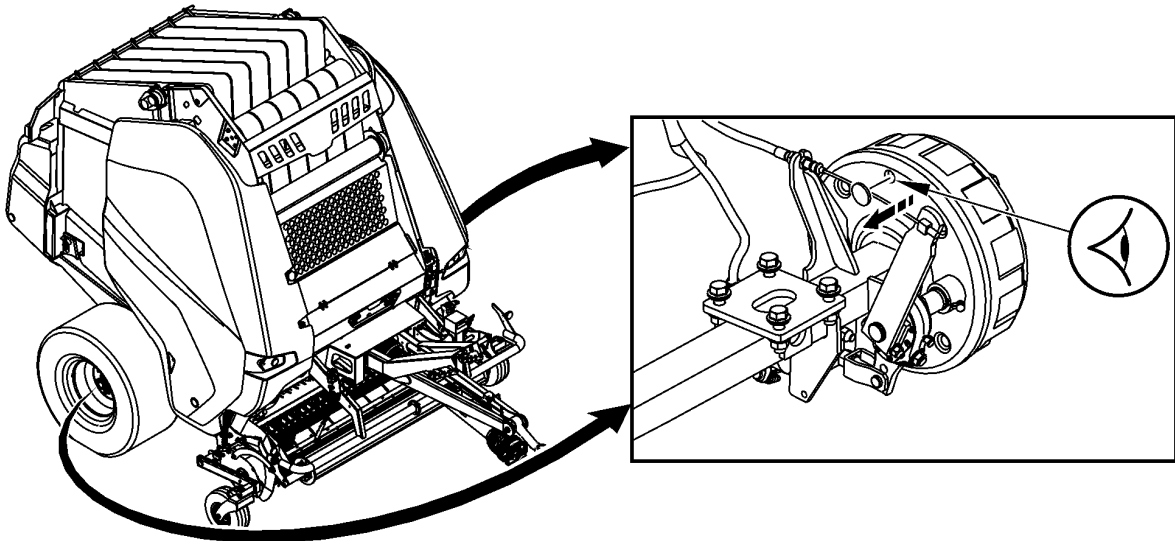
CC574101

Check tire conditions on both machine sides. If necessary, see your John Deere dealer.

aysdijz,1681895043328 -19-31MAY23-1/1

CC574101 —UN—25MAY23

Every 500 Hours: Check Brake Shoes



CC575679

Air Brake Shown

On both machine sides, check that thickness of brake linings is greater than the following specification:

If not, see your John Deere dealer for brake shoe replacement.

Specification

Brake Lining—Minimum
Thickness..... 2 mm
(5/64 in)

aysdijz,1681895063783 -19-31MAY23-1/1

CC575679 —UN—25MAY23

Every 500 Hours or Yearly: Drain and Refill Gear Case

1. Open twine binding system cover (A).
2. Drain oil while it is warm (i.e. after operation).
Remove dipstick (B) and drain plug (C), then drain oil into a suitable receptacle.
3. Clean then reinstall drain plug (C) and tighten to specified torque:

Specification

Drain Plug—Torque.....30 N·m
(22 lb·ft)

4. Refill gear case with John Deere Extreme-Gard™ or equivalent. See [Gear Oil](#) in this section.

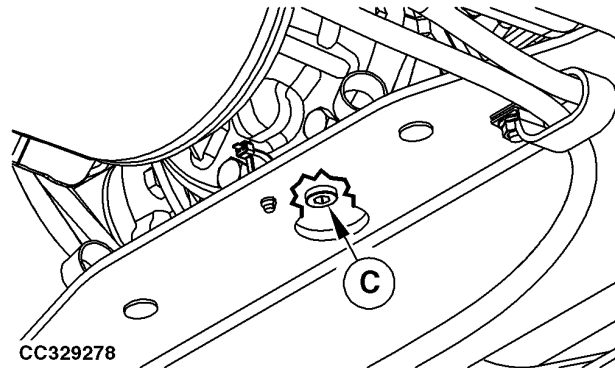
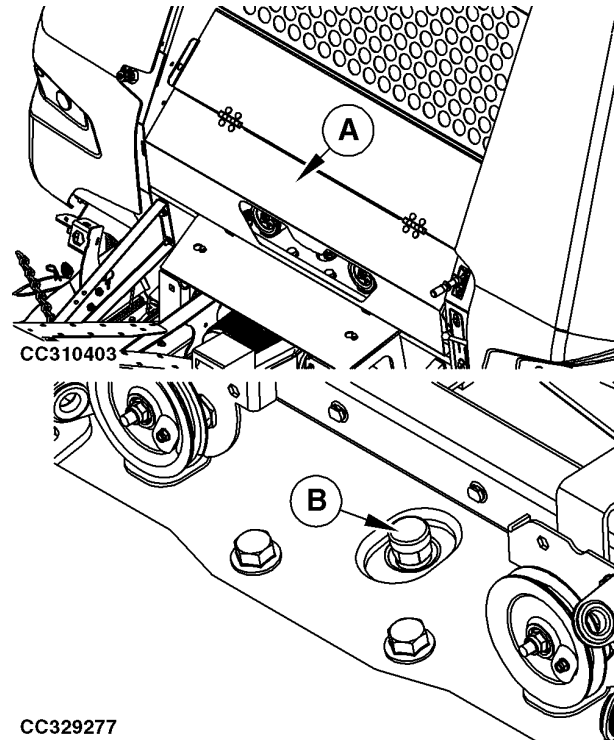
Specification

Gear Case—Capacity..... 1.9 L
(0.5 gal)

5. Check oil level with dipstick (B) before reinstalling.
6. Close twine binding cover (A).

A—Twine Binding System
Cover
B—Dipstick

C—Drain Plug

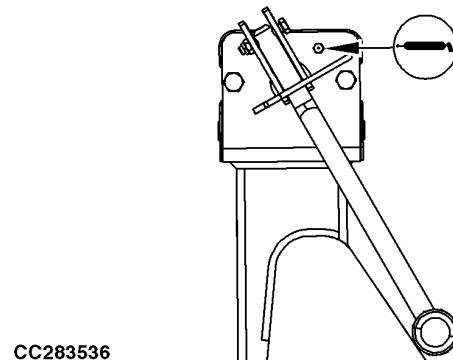


Extreme-Gard is a trademark of Deere & Company

ga87848,1682671470117 -19-28APR23-1/1

Every 500 Hours or Yearly: Lubricate Jackstand

Lubricate with John Deere Grease-Gard™ Premium Plus.



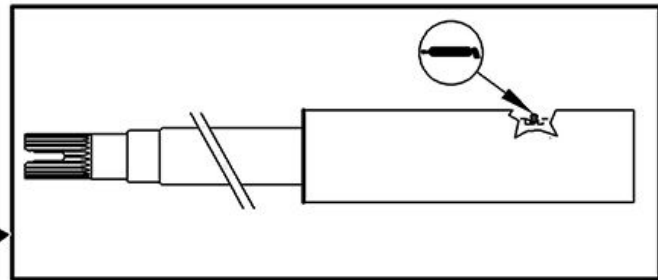
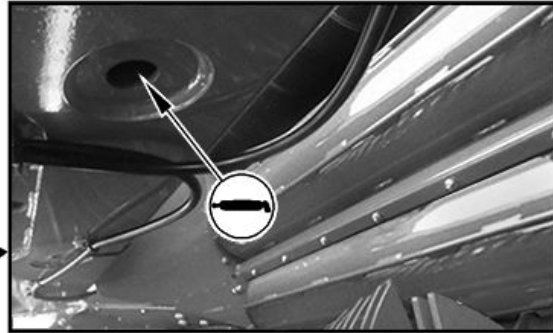
Grease-Gard is a trademark of Deere & Company

ga87848,1679386792278 -19-21MAR23-1/1

Every 500 Hours or Yearly: Lubricate Extension Shaft



CC516891



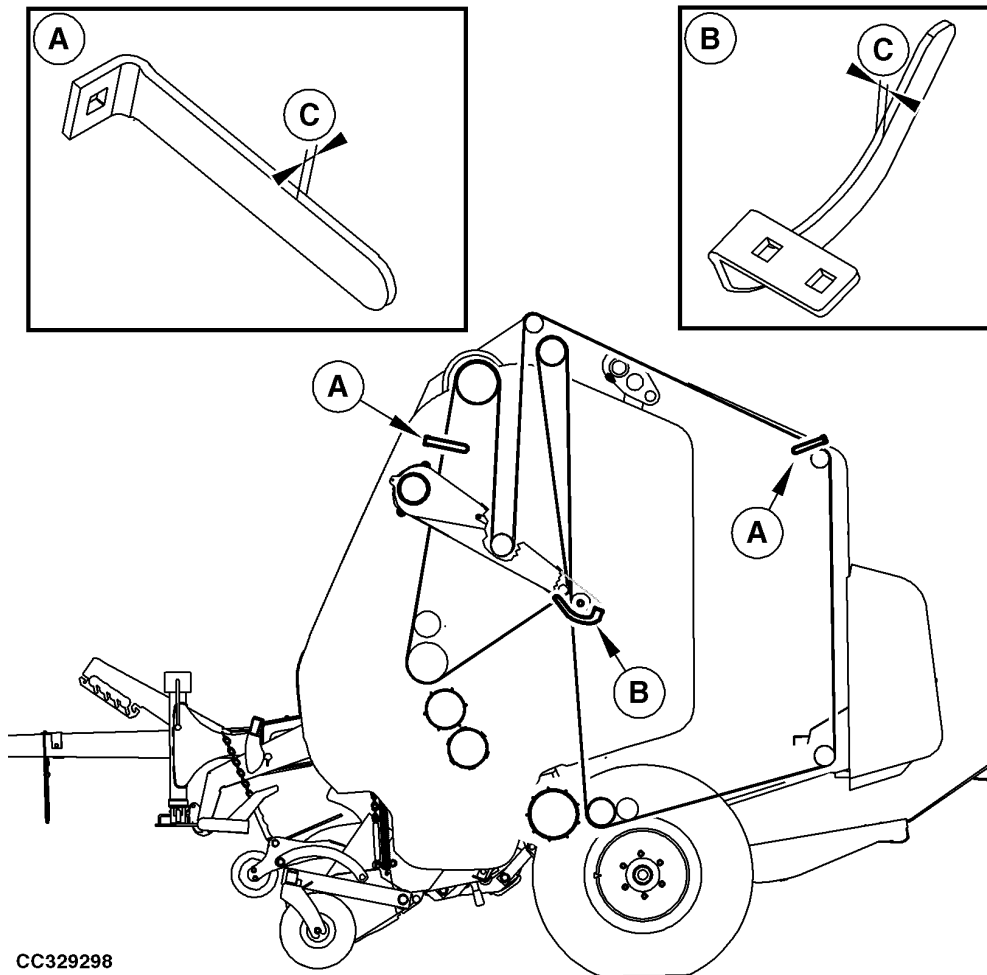
CC516891 —UN—09JUL21

Lubricate with John Deere Grease-Gard™ Premium Plus.

Grease-Gard is a trademark of Deere & Company

ga87848,1683286596825 -19-05MAY23-1/1

Every 500 Hours or Yearly: Check Belt Guides Wear



CC329298

A—Belt Guide Type 1

B—Belt Guide Type 2

C—Distance

Check if distance (C) on belt guides (A) and (B) is greater than specification.

If distance (C) is less than specification, see your John Deere dealer.

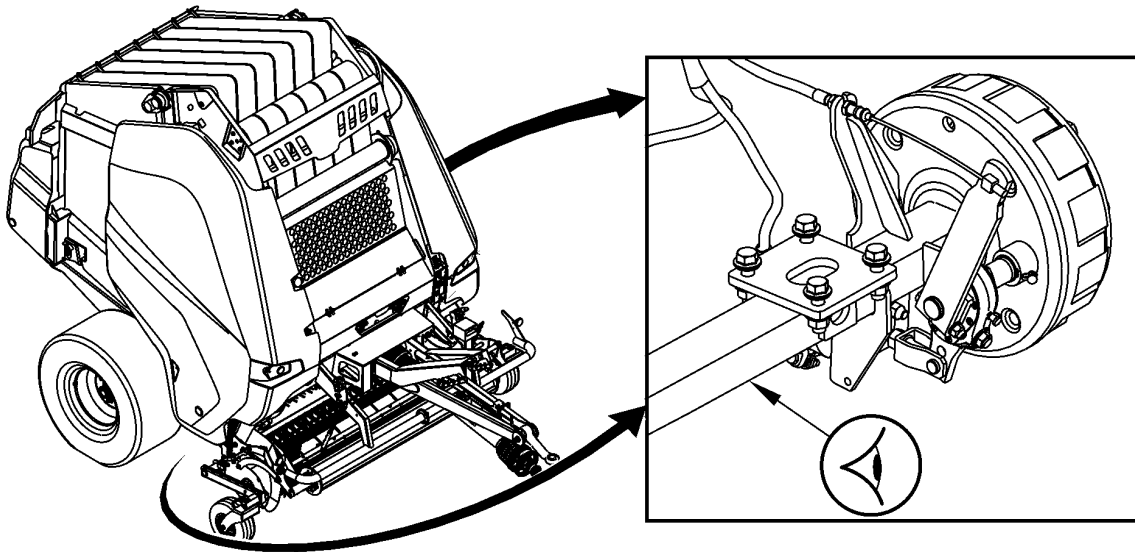
Specification

Belt Guide—Distance..... 2.5 mm
(3/32 in)

ga87848,1682671739417 -19-05MAY23-1/1

CC329298 —UN—21SEP17

Yearly: Check Axle Wear



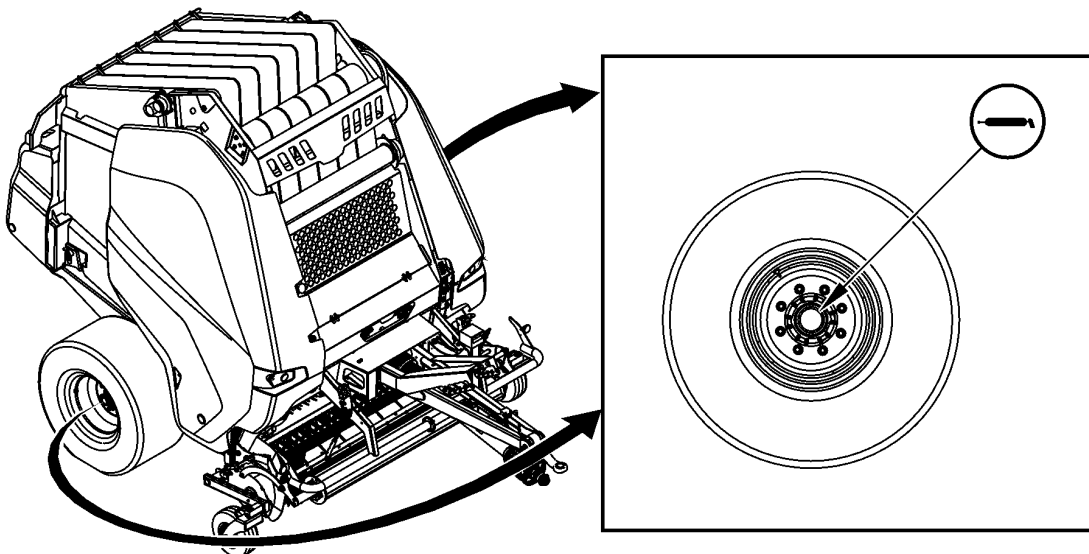
CC575686

Check axle worn condition. If necessary, see your John Deere dealer.

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CC575686 —UN—25MAY23

Yearly: Clean, Check and Lubricate Wheel Bearing



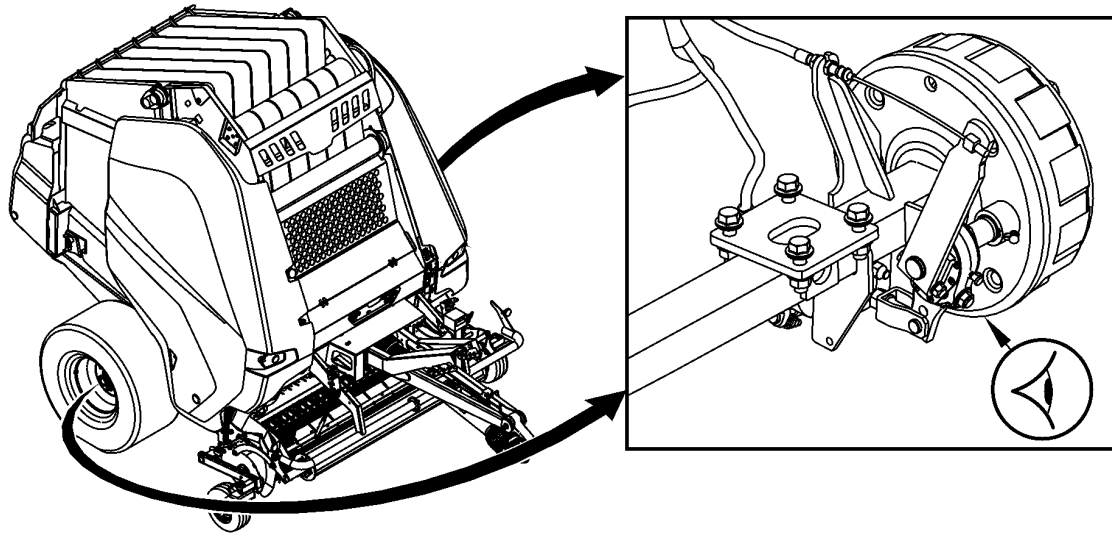
CC575678

To clean, check and lubricate the wheel bearings, see your John Deere dealer.

aysdijz,1681895063854 -19-02MAY23-1/1

CC575678 —UN—25MAY23

Yearly: Clean and Check Drum Wear



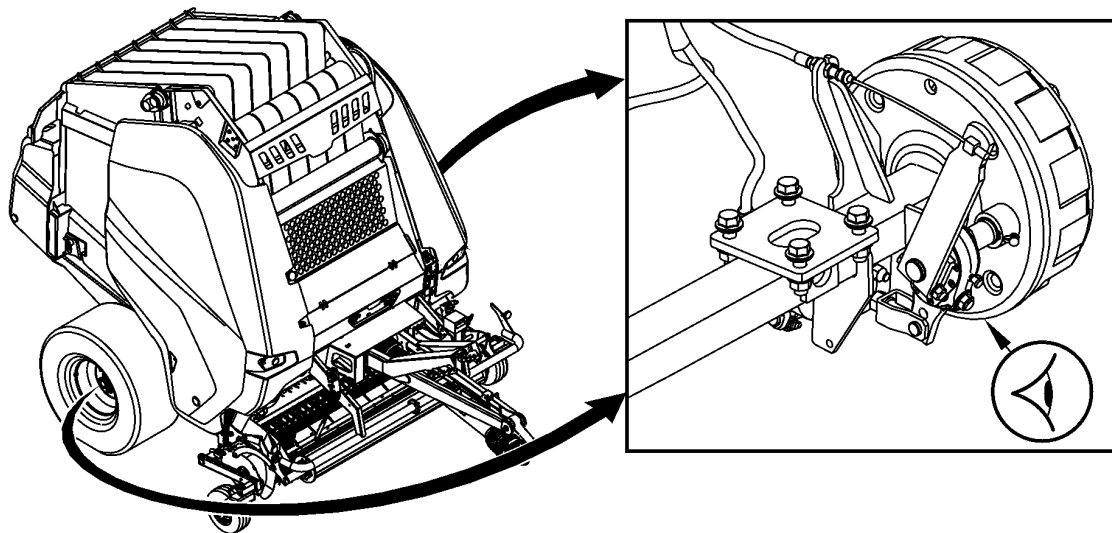
CC575680

To clean and check drum wear, see your John Deere dealer.

aysdijz,1681895063829 -19-31MAY23-1/1

CC575680 —UN—25MAY23

Yearly: Clean Drum and Shoes Assembly



CC575680

To clean drum and shoes assembly, see your John Deere dealer.

aysdijz,1683030947992 -19-31MAY23-1/1

CC575680 —UN—25MAY23

Yearly: Check Thickness of Wear Plates

1. Open the gate and secure it with safety lock device.
2. Check that thickness (B) is with specification, see your John Deere dealer.

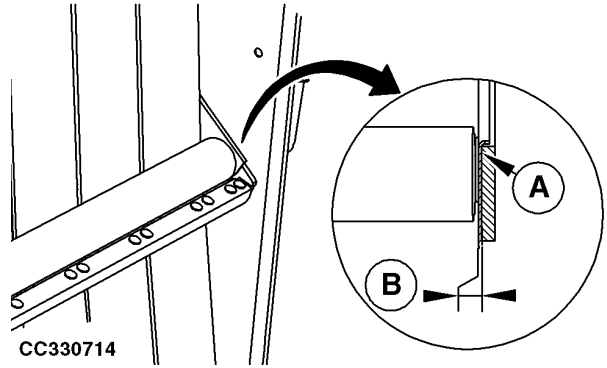
Specification
Wear Plate—Thickness.....0—3 mm
(0—1/8 in)

IMPORTANT: Tension arm can be damaged if thickness (B) is less than specification.

3. Repeat procedure on opposite side.

A—Wear Plate

B—Thickness



CC330714

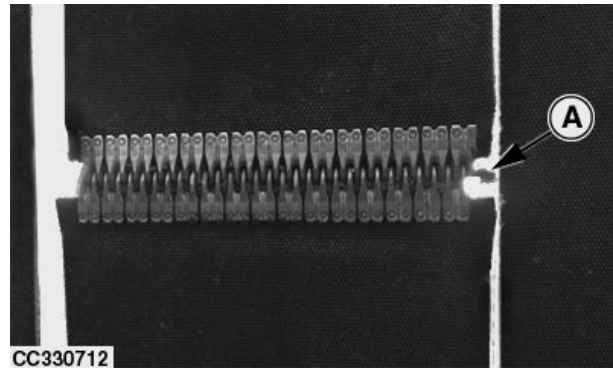
CC330714 —UN—28SEP17

GA87848,00003F5 -19-02NOV17-1/1

Yearly: Replace Belt Wires

Belt wires (A) must be changed every year. See [Install Belts](#) in Service section.

A—Wire



CC330712

CC330712 —UN—27SEP17

ga87848,1682671130654 -19-28APR23-1/1

Yearly: Check Accumulator

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

1. Check the accumulator for corrosion.
 - a. As required, replace the accumulator.
2. Check that connections are tight and leak-free.
3. Check the mounting elements.



CC1022636

Accumulator Explosion

CC1022636 —UN—15JAN03

ga87848,1676036265828 -19-13FEB23-1/1

Every 3000 Bales or Yearly: Check Net Feed Roll Brake

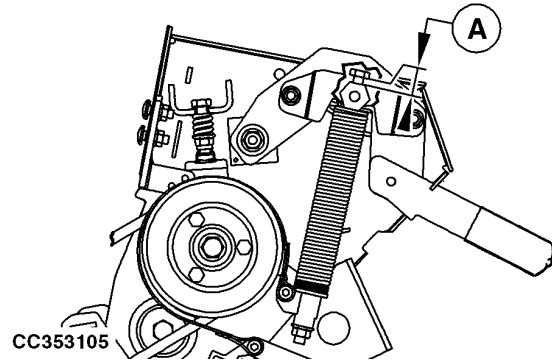
Check that distance (A) is within specification:

Specification

Screw-to-
Bracket—Distance.....3—5 mm
(1/8—3/16 in)

If necessary, see [Check Net Feed Roll Brake \(Test 6\)](#) in Service section.

A—Distance

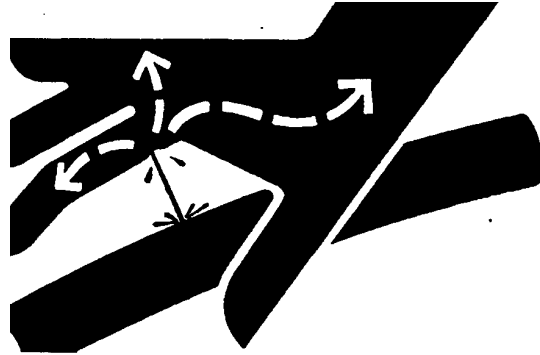


CC353105 —UN—17MAY18

GA87848,00012A9 -19-02JUL21-1/1

Every 6 Years: Replace Hydraulic Hoses

Due to wear on hydraulic hoses over time, it is recommended to change hydraulic hoses every 6 years.



X9811 —UN—23AUG88

AP00976,000018D -19-13FEB23-1/1

Every 6 Years: Replace Density Accumulator

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

Density accumulator shall be replaced 6 years. The date of manufacture is marked on the accumulator: MM - YY. See [Service Hydraulic Accumulator Device](#) in Service section.



CC1022636

Accumulator Explosion

CC1022636 —UN—15JAN03

ga87848,1681816726950 -19-18APR23-1/1

Every 6 Years: Replace Hydraulic Brake Accumulators (If Equipped)

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

Hydraulic brake accumulators shall be replaced 6 years. The date of manufacture is marked on the accumulator: MM - YY. See Service Hydraulic Accumulator Device in Service section.



CC1022636

Accumulator Explosion

ga87848,1681816707983 -19-18APR23-1/1

CC1022636 —UN—15JAN03

Troubleshooting

Pickup and Feed Difficulties

Symptom	Problem	Solution
Clutch disengagement during bale formation.	Crop accumulation front or behind the rotor.	Install center starter roll (No. 2) scraper. See Install Roll No. 2 Scraper in Service section. Check if knives are well sharpened, if necessary see Sharpen Precutter Knives in Service section.
	Windrow compressor sheet or windrow compressor roll too low.	Raise windrow compressor sheet or windrow compressor roll. See Adjust Windrow Compressor Sheet (If Equipped) or Adjust Windrow Compressor Roll (If Equipped) in Operating the Baler—General Purposes section.
	Machine angle not set properly.	Check machine angle. See Set Machine Angle in Preparing the Baler section.
Not picking up hay cleanly.	Pickup set too high.	Lower pickup. See Adjust Pickup Gauge Wheels in Operating the Baler—General Purposes section.
	Poor pickup flotation.	Check float spring adjustment. See Adjust Pickup Float Spring in Operating the Baler—General Purposes section.
	Tongue set too low.	Check tongue adjustment. See Adjust Tongue in Preparing the Baler section.
	Windrow compressor sheet or windrow compressor roll too high.	Lower windrow compressor sheet or windrow compressor roll. See Adjust Windrow Compressor Sheet (If Equipped) or Adjust Windrow Compressor Roll (If Equipped) in Operating the Baler—General Purposes section.
	Windrows too light.	Rake heavier windrows. See Operating the Baler—General Purposes section.
	Pickup teeth bent or broken.	Straighten or replace teeth, see Replace Pickup Tooth in Service section.
	Ground speed too high.	Reduce ground speed.

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ga87848,1684832091249 -19-27JUN23-1/3

Symptom	Problem	Solution
Pickup does not float or drops freely.	Excess or insufficient float assist.	Adjust float springs. See Adjust Pickup Float Spring in Operating the Baler—General Purposes section.
		Check there is no crop accumulation between pickup frame and precutter frame, or between pickup frame and drop floor (if equipped).
Pickup teeth do not revolve.	Pickup drive chain not enough tensioned or broken.	Adjust tension of pickup drive chain, see Adjust Pickup Drive Chain in Service section.
		Replace chain.
Pickup teeth digging in ground.	Broken cam.	Replace cam. See your John Deere dealer.
	Pickup set too low.	Raise pickup. See Adjust Pickup Gauge Wheels in Operating the Baler—General Purposes section.
Pickup tooth breakage.	Poor pickup flotation.	Check float spring adjustment. See Adjust Pickup Float Spring in Operating the Baler—General Purposes section.
	Pickup set too low.	Raise pickup. See Adjust Pickup Gauge Wheels in Operating the Baler—General Purposes section.
Inside of strippers worn.	Foreign material inside and/or broken teeth.	Remove material and/or replace teeth, see Replace Pickup Tooth in Service section.
	Baling cornstalks.	Raise pickup. Higher tooth breakage can be expected. See Adjust Pickup Gauge Wheels in Operating the Baler—General Purposes section.
Inside of strippers worn.	Strippers bent up hitting tooth coils.	Check for binding at flares.
		Check teeth and stripper position.
		Increase float. See Adjust Pickup Float Spring in Operating the Baler—General Purposes section.

Continued on next page

ga87848,1684832091249 -19-27JUN23-2/3

Symptom	Problem	Solution
		Raise pickup. See Adjust Pickup Gauge Wheels in Operating the Baler—General Purposes section.
Plugging at flares.	Over-crowding ends.	Reduce crowding.
	Pickup set too low.	Raise pickup. See Adjust Pickup Gauge Wheels in Operating the Baler—General Purposes section.
Plugging at rotary feeder.	Ground speed too high.	Reduce ground speed. To unplug rotary feeder, see Unplug Pickup in Operating the Baler—General Purposes.
		Check drop floor adjustment.
	Bale density too high.	Decrease density. See Adjust Bale Density in Operating Baler Application section.
Plugging at pickup.		Adjust rotor auger scrapers. See Adjust Rotor Auger Scrapers in Service section.
	Windrow compressor sheet or windrow compressor roll too high.	Lower windrow compressor sheet or windrow compressor roll. See Adjust Windrow Compressor Sheet (If Equipped) or Adjust Windrow Compressor Roll (If Equipped) in Operating the Baler—General Purposes section.
	Bad tongue adjustment.	Check tongue adjustment, see Adjust Tongue in Attaching section.
	Excessive windrow size.	Reduce windrow size.
	Ground speed too high.	Reduce ground speed.
Noise in the rotor.	Deformed tooth of rotor.	See your John Deere dealer.
	Foreign body inside rotor.	Remove foreign body from inside of rotor.
	Bad stripper adjustment.	Check stripper adjustment.
	Interference between knives and teeth.	Check there is no interference between knife and teeth.

ga87848,1684832091249 -19-27JUN23-3/3

Troubleshooting

Symptom

Problem

Solution

Loss of knife.

Knife locking bar unlocked.

Lock bar.

Knife locking bar worn.

Replace knife locking bar. See your John Deere dealer.

Knife slot worn.

Replace worn knife.

ga87848,1684832091249 -19-27JUN23-4/3

Bale Quality

Symptom	Problem	Solution
Barrel or cone shaped bales. Monitor shows a well shaped bale.	Bale shape potentiometers not correctly calibrated.	Reset and calibrate bale shape potentiometers. See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.
	Outer belts not of the same length.	Shorten belts to the same length within 38 mm (1-1/2 in). See Service section.
	Broken bale shape indicator spring.	Replace spring.
Well shaped bales. Monitor shows a cone shaped bale.	Bale shape potentiometers not correctly calibrated.	Reset and calibrate bale shape potentiometers. See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.
Twine or net binding settings not constant with different sized bales.	Baler rotation speed sensor not connected, defective or not correctly adjusted.	Reconnect or readjust sensor SB365. Replace if necessary. See Adjust Baler Rotation Speed Sensor SB365 in Service section.
	Bale diameter potentiometer not connected, defective or not correctly calibrated.	Reconnect or calibrate potentiometer. Replace if necessary. See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.
	Net binding system belt not tight.	Check net belt tension, see Check Drive Belt Tension (Test 5) in Service section.
Baler does not make dense bales.	Internal leak in belt tension hydraulic cylinder.	See your John Deere dealer.
	Dirty or defective relief valve.	See your John Deere dealer.
	Bale ends not filled tightly.	Feed more crop in ends of baler. See Guidelines to Form a Good Bale in Operating the Baler—General Purposes section.
	Density control adjusted for light bales.	Adjust for heavier bales. See Adjust Bale Density in Operating Baler Application section.
	Bale forming belts too short.	Check length and correct. See Service section.

Continued on next page

ga87848,1684833241039 -19-23MAY23-1/2

Symptom	Problem	Solution
Peripheral density of bale insufficient.	Not enough net turns.	Adjust number of net turns. See Adjust Twine Binding in Operating Baler Application section.
	Gate latch sensor not correctly adjust or faulty	Adjust gate latch sensor. See Adjust Gate Latch Sensors SB3310 and SB3311 in Service section.
		See your John Deere dealer.
Baler will not make full size bale.	Faulty density valve.	See your John Deere dealer
	Actual bale diameter displayed is greater than target bale diameter.	Increase near full alarm offset value. See Adjust Near Full Alarm Offset in Operating Baler Application section.
	Bale diameter not adjusted to desired bale diameter.	Adjust bale diameter. See Set Bale Diameter in Operating Baler Application section.
	Bad calibration of bale diameter potentiometer.	Reset and calibrate bale diameter potentiometer. See Calibrate Bale Diameter Potentiometer RB311 in Baler Application Service section.
	Bale forming belts are too short.	Increase belt length to recommended length. See Service section.
	Bale density set to low.	Increase bale density. See Adjust Bale Density in Operating Baler Application section.
Desired bale diameter cannot be achieved.	Bale diameter potentiometer not correctly calibrated.	Calibrate bale diameter potentiometer. See Calibrate Bale Diameter Potentiometer RB311 in Baler Application Service section.

ga87848,1684833241039 -19-23MAY23-2/2

General Baler Difficulties

Symptom	Problem	Solution
Gates opens while baling the first bale of the day.	Gate latches open when the monitor is switched OFF.	IMPORTANT: When the monitor is switched off for a extended period of time the gate will unlatched. The gate has to be latched again before baling. Open then close the gate. Check that the gate is correctly latched.
Gate opens while baling.	Gate not latched.	When closing gate, hold selective control valve lever of tractor a few seconds after the gate is closed. Adjust gate latch. See Adjust Gate Latch in Service section.
	Gate latch sensor not correctly adjust or faulty.	Adjust latch sensor. See Adjust Gate Latch Sensors SB3310 and SB3311 in Service section. See your John Deere dealer
Gate not latched before baling.	Gate latches open when the monitor is switched OFF.	IMPORTANT: When the monitor is switched off for a extended period of time the gate will unlatch. The gate has to be latched again before baling. Open then close the gate. Check that the bale is correctly latched.
Gate not latched.	Obstruction between gate and frame.	Remove obstruction.
	Crop buildup on belts in some crop conditions.	Remove buildup. Operate PTO while closing gate.
Gate latched but displayed not latched.	Gate latch sensor not correctly adjust or faulty.	Adjust latch sensor. See Adjust Gate Latch Sensors SB3310 and SB3311 in Service section. See your John Deere dealer
	Gate latch not correctly adjust.	Adjust gate latch. See Adjust Gate Latch in Service section.

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ga87848,1684833469938 -19-27JUN23-1/4

Symptom	Problem	Solution
Noise during gate closing.	Tension arm not lubricated.	Lubricate tension arm. See <u>Every 10 Hours: Lubricate Baler without Automatic Greasing System</u> or, <u>As Required: Refill Multiluber Chain Oiling System Reservoir</u> , <u>As Required: Replace Automatic Greasing System Cartridge (If Equipped with Cartridge-Type Pump)</u> in Lubrication and Maintenance section.
	Door hinges not lubricated.	Lubricate door hinges. See <u>Every 50 Hours: Lubricate Door Hinges, Hydraulic Cylinders, and Bale Shape Sensor Pins</u> in Lubrication and Maintenance section.
	Gate latch not lubricated	Lubricate gate latches. See <u>Every 50 Hours: Lubricate Gate Latches</u> in Lubrication and Maintenance section.
	Faulty gate hydraulic cylinder shock-absorber.	See your John Deere dealer
Bale density indicator reading in red.	Hydraulic circuit overload.	Reduce ground speed. Reduce bale density. See <u>Adjust Bale Density</u> in Operating the Baler—General Purposes section.
	Bale density valve defective.	Repair or replace valve. See your John Deere dealer.
Belts do not track properly.	Lower rear gate roll out of adjustment.	Adjust roll. See <u>Adjust Tracking of Belts</u> in Service section.
	Belts not routed correctly.	See <u>Route Belts Through the Baler</u> in Service section.
	Accumulation on baler rolls.	Remove buildup.
	Belts not cut square when splicing.	Resplice belt. See <u>Repair Belts</u> Service section.
Bale forming belts rubbing.	Belt tension arm not fully down.	Fully open then close gate.

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ga87848,1684833469938 -19-27JUN23-2/4

Symptom	Problem	Solution
		Lubricate tension arm. See <u>Every 10 Hours: Lubricate Baler without Automatic Greasing System</u> or, <u>As Required: Refill Multiluber Chain Oiling System Reservoir</u> , <u>As Required: Replace Automatic Greasing System Cartridge (If Equipped with Cartridge-Type Pump)</u> in Lubrication and Maintenance section.
		Adjust tension arm spring. See <u>Adjust Tension Arm Spring</u> in Service section.
	Hydraulic valve defective.	See your John Deere dealer.
	Belts not routed properly.	See <u>Route Belts Through the Baler</u> in Service section.
Starter rolls 1 and, 2 wraps with hay.	Scraper not correctly adjusted.	Adjust scraper. See <u>Adjust Bottom Starter Roll (No. 1) Scraper</u> , and <u>Install Roll No. 2 Scraper</u> in Service section.
Bale sticks in chamber.	New baler.	Reduce density until baler has made several bales to polish side sheets.
		Unload bale without PTO engaged.
	Baler in downhill.	Unload bale on a flat surface.
	Bale oversize.	Do not make oversize bale.
	Bale density too high.	Reduce bale density. See <u>Adjust Bale Density</u> in Operating Baler Application section.
	Tongue not correctly adjust.	Adjust tongue. See <u>Adjust Tongue</u> in Preparing the Baler section.
Belt lacing failure.	Belts are not the same length.	Belts must be the same length within 38 mm (1-1/2 in). See Service section.
	Improper belt splice hooks or poor quality splice.	See <u>Repair Belts</u> in Service section.
	Crop accumulation on rolls or belt guides.	Remove crop accumulation.

Continued on next page

ga87848,1684833469938 -19-27JUN23-3/4

Symptom	Problem	Solution
Belts slipping or not turning.	Belt tension arm not returning all the way to tension belts.	Check that tension arm tightens belts. Fully open then close gate. Lubricate tension arm. See Lubrication and Maintenance section.
	Belts too long.	Cut belts to proper length. See Service section.
	Bale density valve defective.	Repair or replace valve. See your John Deere dealer.
	Broken Chain.	Replace Chain.
Excessive shear screw breakage.	Incorrect PTO speed	Set correct PTO speed. See <u>Select Tractor PTO Speed</u> in Preparing the Tractor section.
	Wrong size or grade of shear screw.	Replace with recommended shear screw.
	Bale density and/or ground speed to high.	Reduce ground speed and/or bale density. See <u>Adjust Bale Density</u> in Operating Baler Application section.
	Pick up aperture angle to low.	Adjust tongue. See <u>Adjust Tongue</u> in Preparing the Baler section.
Oversize alarm at smaller bale diameter than the maximum.	Hay wrapped around starter roll.	Adjust scraper. See <u>Adjust Bottom Starter Roll (No. 1) Scraper</u> , and <u>Install Roll No. 2 Scraper</u> in Service section.
	Accumulation on switch.	Clean oversize switch area.
	Oversize switch block in oversize position.	Unblock oversize switch, replace if necessary.
Soft core solenoid is not power supplied.	Gate latch sensor not correctly adjust or faulty.	Adjust latch sensor. See <u>Adjust Gate Latch Sensors SB3310 and SB3311</u> in Service section.
		See your John Deere dealer

ga87848,1684833469938 -19-27JUN23-4/4

Troubleshooting

Symptom	Problem	Solution
	Gate latch not correctly adjust.	Adjust gate latch. See Adjust Gate Latch in Service section.
Excessive tractor power requirements during operation with precutter knives engaged.	Precutter knives are worn.	Sharpen or replace precutter knives. See Sharpen Precutter Knives in Service section.

ga87848,1684833469938 -19-27JUN23-5/4

Silage Equipment Operation Difficulties

Symptom	Problem	Solution
Crop accumulation at starter roll.	Scraper too far from starter roll.	Adjust scraper. See Adjust Bottom Starter Roll (No. 1) Scraper , and Install Roll No. 2 Scraper in Service section.
Belt(s) slipping.	Too heavy silage bales.	Reduce bale diameter.
		Reduce bale density. See Adjust Bale Density
	Wet conditions.	Install second drive roll kit. See your John Deere dealer.
Difficulties when starting a bale (wet crop due to rain).	Core does not start to turn.	Retract precutter knives, activate soft core system, and reduce bale density. See Retract or Engage Precutter Knives Function , Operate Soft Core System , and Adjust Bale Density in Operating the Baler—General Purposes and Operating Baler Application section.
Plugging the baler by feeding a too large bunch of silage.	Irregular windrows.	Re-engage PTO at low engine rpm. If unsuccessful, lower the drop floor and retract precutter knives. See Unplug Pickup in Operating the Baler—General Purposes section.

ga87848,1684838137778 -19-27JUN23-1/1

Net Binding Equipment Difficulties

Symptom	Problem	Solution
Bale not bind (with slow intermittent beep / with warning screen).	Net drive belt too short.	Replace drive belt. See <u>Remove And Install Net Feed Roll Drive Belt</u> in Service section.
	Lower net guide not in contact with belts.	See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
	Burrs on lower net guide channels.	Remove burrs.
	Net roll empty.	Install a new net roll.
	Net feed rolls not engaged.	Check, or replace drive belt. See <u>Check Net Binding Device</u> in Service section. Check belt tension when cycle starts. See <u>Check Drive Belt Tension (Test 5)</u> in Service section. Check that net roll diameter is not greater than 320 mm (1 ft 1/2 in).
	Net rolled up around rubber roll.	Shut off tractor PTO. Open the net cover and release net feed roll brake. Unroll net by pulling on it. Never attempt to cut net with a knife against rubber roll.
	Net rolled up around rubber roll after the first bale of the day.	Disengage net from net feed rolls if baler must stand over night or more than 10 hours without operation.
	Net feed roll pressure too high, or too low.	Adjust net roll pressure. See Service section.
	Net not engaged properly (new roll).	Restart net installation. See Preparing the Baler section.
	Net not engaged properly.	Adjust net feed roll brake. See <u>Check Net Feed Roll Brake (Test 6)</u> in Service section.
	Rubber roll damaged or sticky.	Change rubber roll, clean it, and apply talc to roll.
	Net sticky from packaging.	Cut off sticky area.
Bale not bind (with four quick intermittent beeps).	Net around starter roll of baler.	Remove burrs on starter roll.

Continued on next page

ga87848,1684838766394 -19-27JUN23-1/4

Symptom	Problem	Solution
Bale bind (with slow intermittent beeps).	Net around sticky rolls of baler.	Clean the relevant rolls and adjust scrapers. See Service section.
	Belt lacing aggressive.	Change relevant belt lacing.
	Net sensor defective, bent or not correctly adjusted.	Check, and/or replace sensor. See Service, and Operating Baler Application Service section.
Net rolled up around rubber roll.	Spring missing on switch actuating stud.	Replace spring.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See Check Net Feed Roll Brake (Test 6) in Service section.
Net torn.	Brake force out of adjustment.	Increase net binding stretch, see Adjust Net Binding Stretch in Operating the Baler—General Purposes section.
Insufficient net extended.	Brake force out of adjustment.	Decrease net binding stretch, see Adjust Net Binding Stretch in Operating the Baler—General Purposes section.
Net around the bale, but lacerated or net stays behind pickup.	Net lower guide deformed.	Check guide at the level of lower gate roll No. 10. See Check Lower Net Guide Position (Test 7) in Service section.
	1.81 m (5 ft 11 in) pickup feeder forks too aggressive.	Check that 1.81 m (5 ft 11 in) pickup feeder forks are set in position "1". See Operating the Baler-General Purposes section.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See Check Net Feed Roll Brake (Test 6) in Service section.
	Belt lacing aggressive.	Change relevant belt lacing.
	Welding spots or marks on starter roll.	Remove spots and marks.
	Too hard contact between lower net guide and belts.	Correct contact. See Check Lower Net Guide Position (Test 7) in Service section.
	Net around the rotor.	Remove roll n° 2 scraper. See Remove Roll No. 2 Scraper in Service section.
	Crop accumulation between the scraper and roll n° 2.	

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ga87848,1684838766394 -19-27JUN23-2/4

Symptom	Problem	Solution
Bale not uniformly bind or not bind.	Plugging between lower net guide and gate roll No. 9. See <u>Baler Roll Numbering</u> in Service section.	Clean this area.
	Guide of gate roll No. 10 bent.	See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See <u>Check Net Feed Roll Brake (Test 6)</u> in Service section.
	Lower net guide panel not in contact with belts.	Correct contact. See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
	Net drive belt too long.	Replace drive belt. See <u>Remove And Install Net Feed Roll Drive Belt</u> in Service section.
	Net binding cover not closed.	Cover must be closed and latched for best results.
	Net roll is installed backwards in box.	Install net roll correctly. See <u>Preparing the Baler</u> section.
	Net binding cover gas spring(s) weak.	Check springs on both sides of the net binding cover. Replace if necessary.
Net loose around bale.	Crop accumulation between the scraper and roll n° 2.	Remove roll n° 2 scraper. See <u>Remove Roll No. 2 Scraper</u> in Service section.
	Too many turns applied.	Normally no more than three turns are needed. Excess wraps may appear to be loose.
Net not cut.	Weak gas spring(s).	Check spring(s) for proper force.
	Specified net quality not used.	Use recommended net quality.
	Electrical components defective.	Check and/or replace parts.
	Dull knife.	Sharpen knife. See Service section.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See <u>Check Net Feed Roll Brake (Test 6)</u> in Service section.

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ga87848,1684838766394 -19-27JUN23-3/4

Symptom	Problem	Solution
	Counterknife not all across the width in contact with net knife.	Reinstall correctly. See Check Knife and Counterknife Position (Test 1) in Service section.
	Net knife not parallel.	Reinstall correctly.
Buzzer stays on after net is cut.	Spring missing on switch actuating stud.	Replace spring.
Net not tight around bale.	Net drive belt too long.	Replace drive belt. See Remove And Install Net Feed Roll Drive Belt in Service section.
Cover does not stay open.	Weak gas spring(s).	Replace gas spring(s).
John Deere B-Wrap™ net drags on the ground.	John Deere B-Wrap™ net cut too short.	Increase John Deere B-Wrap™ net cut length. See Adjust B-Wrap Binding in Operating Baler Application section.
	VELCRO® damaged, or missing.	See your John Deere dealer.
Metal strip not detected during John Deere B-Wrap™ binding cycle.	John Deere B-Wrap™ roll not correctly installed.	See Load Net Roll in Preparing the Baler section.
	John Deere B-Wrap™ sensor defective, or not connected.	Reconnect John Deere B-Wrap™ sensor. See Test Sensors and Switches in Baler Application Service section to test John Deere B-Wrap™ sensor. Replace sensor if necessary.
	John Deere B-Wrap™ sensor not correctly adjusted.	See Adjust B-Wrap Sensor SB416 (if Equipped) in Service section.
	John Deere B-Wrap™ roll is out of time after wrong John Deere B-Wrap™ binding cycle.	Roll out John Deere B-Wrap™ roll, and cut net approximately 25 cm (10 in) after next VELCRO®. See Load Net Roll in Preparing the Baler section.
John Deere B-Wrap™ net cut length too long after VELCRO®.	John Deere B-Wrap™ net cut length needs to be adjusted.	See Adjust B-Wrap Binding in Operating Baler Application section to adjust John Deere B-Wrap™ net cut length.

*John Deere B-Wrap is a trademark of Tama Plastic Industry
VELCRO is a trademark of Velcro Industries B.V.*

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Twine Binding Equipment Difficulties

Symptom	Problem	Solution
Twine partially around the bale and the rotor or twine around the rotor entire width.	Crop accumulation between the deflector and roll No 2.	Install twine deflector. See Install Center Starter Roll (No. 2) Twine Deflector in Service section.
Twine too tight or twine breaks while binding.	Wrong twine routing.	Check for correct routing. See Route Twine from Twine Box to Twine Arms (Tube Arms) , or Route Twine from Twine Box to Twine Arms (Adjustable Arms) in Preparing the Baler section.
Twine too loose on bale.	Bad twine, knots in twine, new ball with tight core, wet twine.	Pull out bad twine or replace twine.
	Wrong twine tension plate pin or springs.	Replace with correct parts.
	Broken or missing twine tension spring.	Replace spring.
	Wrong tension spring pin.	Replace pin.
Twine spacing not constant.	Worn twine tension plates.	Replace worn parts.
	PTO rpm change during binding.	Keep PTO rpm constant.
No twine on bale or twine not caught by bale.	Twine from end of twine arms too short.	With tractor engine shut off, pull out twine until 150 mm (6 in) is exposed from end of twine arms. See Route Twine from Twine Box to Twine Arms (Tube Arms) , or Route Twine from Twine Box to Twine Arms (Adjustable Arms) in Preparing the Baler section. Check twine knife adjustment. See Adjust Twine Cut Length , and/or Replace Twine Binding Knife in Service section.
	Twine from end of twine arms too long.	Check twine knife adjustment. See Adjust Twine Cut Length , and/or Replace Twine Binding Knife in Service section.
	Twine tension too high.	See Twine too tight or twine breaks while binding above.
	Twine tension too high at the beginning of binding cycle.	Calibrate twine actuator. See Calibrate Twine Binding Actuator MB421 in Baler Application Service section.
	Twine quality.	Replace twine. See Select Twine in Preparing the Baler section.

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Symptom	Problem	Solution
	Twine not fed in with crop.	Do not stop forward travel of tractor. Allow a few seconds for twine to be fed in with crop.
	Baler out of twine.	Add twine. See Load Twine Boxes and Knot for Twine in Preparing the Baler section.
Twine too close to both edges of bale.	Twine binding actuator not calibrated.	Calibrate twine binding actuator. See Calibrate Twine Binding Actuator MB421 in Baler Application Service section.
	Barrel shaped bales.	Fill ends of bale by crowding windrow. See Guidelines to Form a Good Bale in Operating Baler Application section.
Twine too close to one edge of bale.	Cone shaped bales.	Fill ends of bale by crowding windrow. See Guidelines to Form a Good Bale in Operating Baler Application section.
Twine not cut.	PTO disengaged before twine is cut.	Check twine to ensure that it has stopped moving before disengaging PTO.
	Twine knife out of adjustment.	Adjust twine knife arm. See Adjust Twine Cut Length in Service section.
	Dull twine knife.	Remove twine knife and reinstall it in reversed position, or replace twine knife. See Replace Twine Binding Knife in Service section.
Twine arm goes through cycle prematurely and binds small bale.	Obstruction causing twine not to be guided against knife.	Remove obstruction.
	Incorrect twine routing or bad ball of twine causing high twine tension.	Correct cause of high tension.
	Bale diameter adjusted for small bale diameter.	Readjust to desired bale diameter from the monitor. See Operating Baler Application section.
Twine binding cycle start few seconds after request.	Electric intensity too low.	See your John Deere dealer to have the current of the twine actuator adjusted.
Twine arms move too slowly.	Battery charge level to low.	Check battery charge (at least 20 A).
	Resistance in linkage.	Find cause of resistance and correct.

Continued on next page

ga87848,1684838766225 -19-23MAY23-2/3

Troubleshooting

Symptom	Problem	Solution
Twine arms do not move.	Poor electrical power.	Check electrical connection (ISOBUS implement breakaway connector, battery harness, connector of actuator, etc.). Reduce electrical power consumption of tractor.
	Defective twine binding actuator.	Repair or replace as necessary.
	Defective control unit.	Replace as necessary.
Noise at the beginning of binding cycle.	Binding arms out of adjustment causing contact with bale chamber rolls.	Adjust twine binding arms. See <u>Adjust Twine Arm Position (Tube Arms)</u> , or <u>Adjust Twine Arm Position (Adjustable Arms)</u> in Service section.

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Chain Oiling System

Symptom	Problem	Solution
Oil consumption too high.	Main line interrupted.	Repair or replace.
	Oil too light.	Use a type of oil specified in Lubrication and Maintenance section. Reduce oil flow. See Adjust Oil Flow in Lubrication and Maintenance section.
Oil consumption too low.	Oil too heavy.	Use a type of oil specified in Lubrication and Maintenance section. Increase oil flow. See Adjust Oil Flow in Lubrication and Maintenance section.
	Pump not correctly driven.	Machine running, check rotation of the pump by removing pump cover. If pump is not driven, replace connecting tube. Repair, adjust or replace pump.
Machine dry.	Faulty pump.	Repair, adjust or replace.
	Main line interrupted.	Repair or replace.
	No oil in system.	Refill as necessary with specified oil. See Lubrication and Maintenance section.
	Air lock or pump empty.	Bleed pump.
	Heavy contamination resulting in blocked system.	Clean system and replace all metering valves.
	Line trapped.	Repair line.

GA87848,0000C38 -19-13MAY19-1/1

Baler Application Display

Symptom	Problem	Solution
Bale shape indicators are not displayed while bale formation.	Faulty calibration of bale shape potentiometers.	Reset and calibrate bale shape potentiometers. See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.
Bale shape indicators on monitor and real bale shape do not match.	Faulty calibration of bale shape potentiometers.	Reset and calibrate bale shape potentiometers. See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.
Right and left bale shape indicators provide different information with empty chamber.	No problem.	Normal situation.
No settings saved after power down.	A wrong harness is used.	Replace by the relevant harness, see your John Deere dealer.

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Automatic Greasing System (If Equipped with Cartridge-Type Pump)

the other grease nipples. Pressure rises then no grease emerges from the cartridge-type pump.

NOTE: If blockage occurs at a grease nipple or in a grease line, the supply of grease is stopped for all

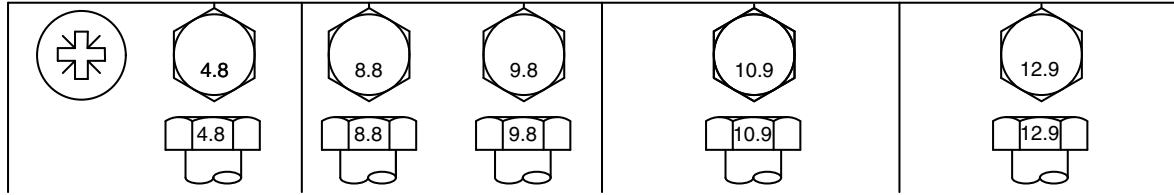
Symptom	Problem	Solution
Machine not greased	Blockage at grease nipple or in grease line.	Open lines between the primary and secondary distributors, one at a time. The blockage lies behind the secondary distributor with the line from which the most grease is emerging. Clear the blockage by placing a commercially available grease gun (pressure up to 40000 Pa; 400 bar; 5800 psi) at the relevant secondary distributor.
	Grease cartridge empty.	Replace grease cartridge. See Lubrication and Maintenance section.
	The pump does not work.	Bleed pump. See Service section. Check pump. See your John Deere dealer.
Nipple not greased	Leak occurs in a greasing line.	Replace damaged greasing line. See your John Deere dealer.

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Service

Metric Bolt and Screw Torque Values

TS1742 —UN—31MAY18



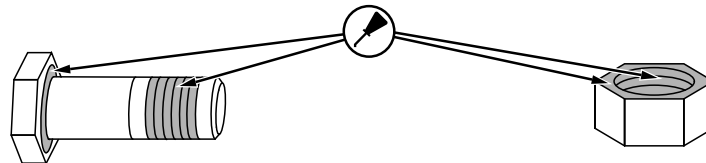
Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Hex Head ^a		Flange Head ^b		Hex Head ^a		Flange Head ^b		Hex Head ^a		Flange Head ^b		Hex Head ^a		Flange Head ^b	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
M6	3.6	31.9	3.9	34.5	6.7	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.
- Properly start thread engagement.

TS1741 —UN—22MAY18



^aHex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.

^bHex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ2 -19-09MAY22-1/1

Prevent Fire at Each Service

Keep foreign material (crop, chaff, twine, net binding material, etc.) from building up on the machine near potentially hot areas, such as bearings and slip clutch. Remove this buildup as part of the regular service operations.

Avoid high-pressure power-washing adjacent to the bearings to prevent damaging seals.

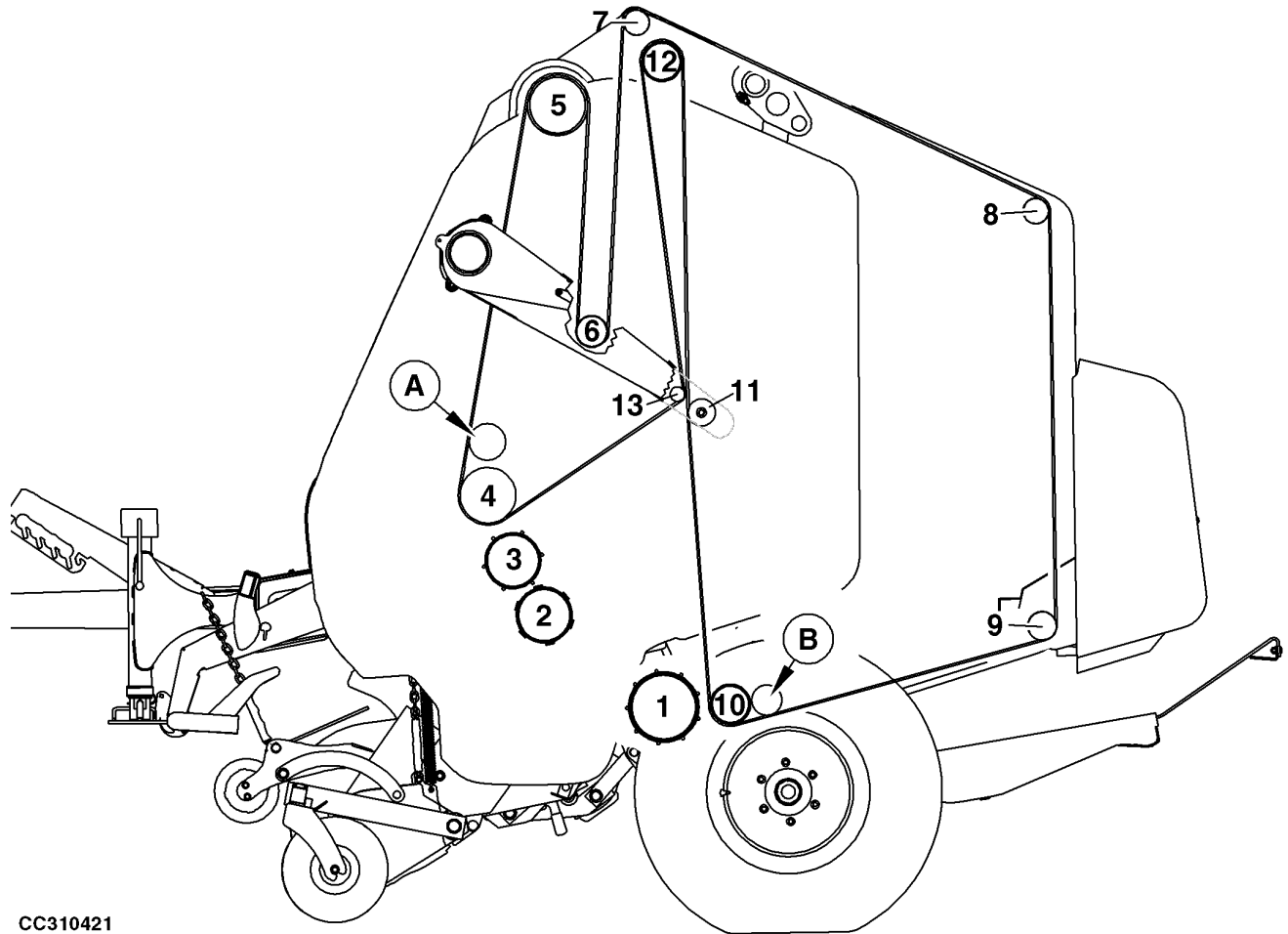
Check bearings regularly for early signs of failure, replace as necessary. Turn off power to baler and check for unusual noises, hot parts, smells of scorching, and discolored paint or metal. Check condition of bearings. (See Daily: Prevent Fire in Lubrication and Maintenance section.

Follow these guidelines if the use of welder, cutting torch or grinder is required for service work:

1. Park baler on pavement or bare ground.
2. Remove chaff to avoid exposure of flammable material to sparks; if chaff cannot be removed, soak it thoroughly with water before starting. Protect hoses and belts from exposure to sparks, arcs, or flames.
3. Have a source of extinguishing agent ready for immediate use.
4. Use an assistant to check for fire while welding, cutting, or grinding.
5. After welding, cutting or grinding allow parts to cool down before starting to bale. Verify that no fire has started before leaving service area.

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Baler Roll Numbering



CC310421

A—Front Cleaning Roll
 B—Gate Cleaning Roll (if
 Equipped)
 1—Bottom Starter Roll
 2—Center Starter Roll

3—Upper Starter Roll
 4—Lower Belt Drive Roll
 5—Upper Belt Drive Roll
 6—Front Tension Arm Idler Roll

7—Upper Front Roll
 8—Upper Rear Gate Roll
 9—Lower Rear Gate Roll
 10—Lower Front Gate Roll
 11—Rear Tension Arm Idler Roll

12—Top Idler Roll
 13—Center Tension Arm Idler
 Roll

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CC310421—UN—01SEP17

Practice Safe Service Procedures

CAUTION: This machine feature automatic sequence with dwelling positions: the machine may seem to be stopped and restart unexpectedly.

To avoid bodily injury or death always:

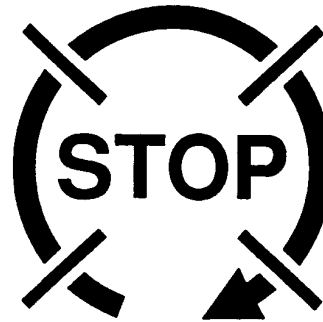
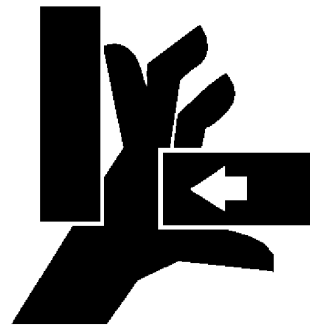
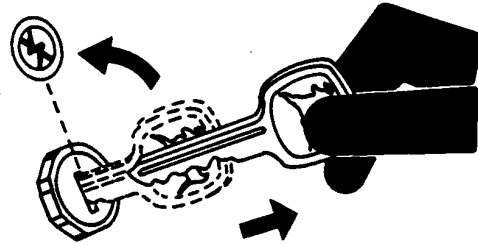
- Disengage PTO
- Engage tractor parking brake and/or place transmission in "Park"
- Shut off tractor engine
- Remove main switch key
- Relieve hydraulic pressure
- Lock gate. See Secure Gate Safely in Safety section.
- Engage parking lock
- Apply handbrake
- Wait until all moving parts have stopped
- Let all components cool

before servicing the machine.

To help prevent personal injury caused by unexpected movement, be sure to service machine on a level surface.

If machine is detached from tractor, block wheels to prevent movement.

IMPORTANT: Disconnect power supply to all electronic components when welding on machine. Over-voltage can damage electronic controls.



LX002 510

TS230 —UN—24MAY89

E41125 —UN—25OCT96

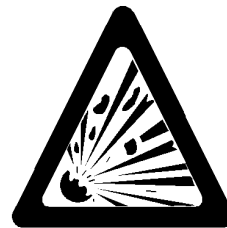
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Service Hydraulic Accumulator Device

CAUTION: Accumulators cannot be repaired.
Escaping fluid or gas from pressurized hydraulic accumulator systems can cause serious injury.

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.



CC1022636

Accumulator Warning

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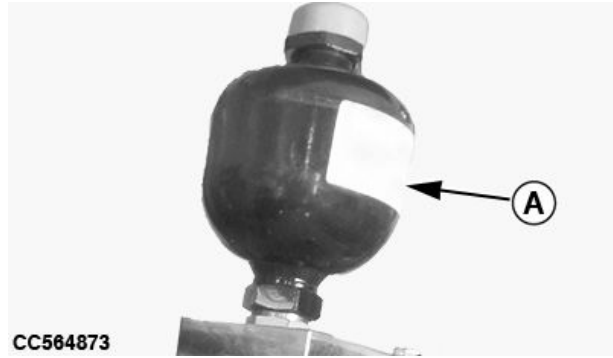
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The following information shall be given either on accumulators or on a label on accumulators:

- Name and brief address of the manufacturer/supplier
- Product identification of the manufacturer/supplier
- Warning note, to read: "Caution - Pressurized Vessel, Discharge pressure prior to disassembly!"
- Gas-charge pressure XX bar
- Warning note, to read: "Hydraulic accumulators must only be charged with nitrogen"

A—Label



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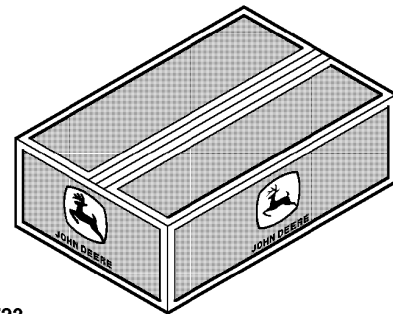
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Use Genuine John Deere Parts

Genuine John Deere parts have been specifically designed for John Deere machines.

Other parts are neither examined nor released by John Deere. Installation and use of such products could have negative effects upon the design characteristics of the machine and thereby affect its safety.

Avoid this risk by using only genuine John Deere parts.



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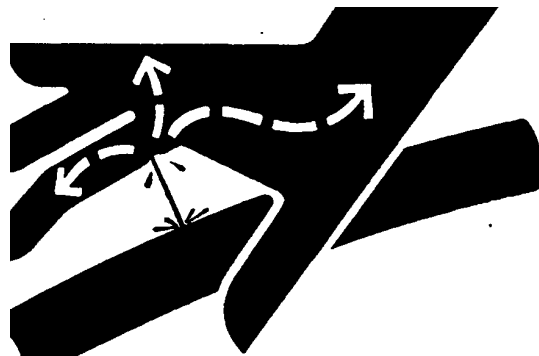
Replacing Hydraulic Components

⚠ 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.

Always relieve hydraulic pressure before servicing hydraulic components.

To prevent twisting the hydraulic tubes, use two wrenches when removing or connecting hoses to tubes.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within

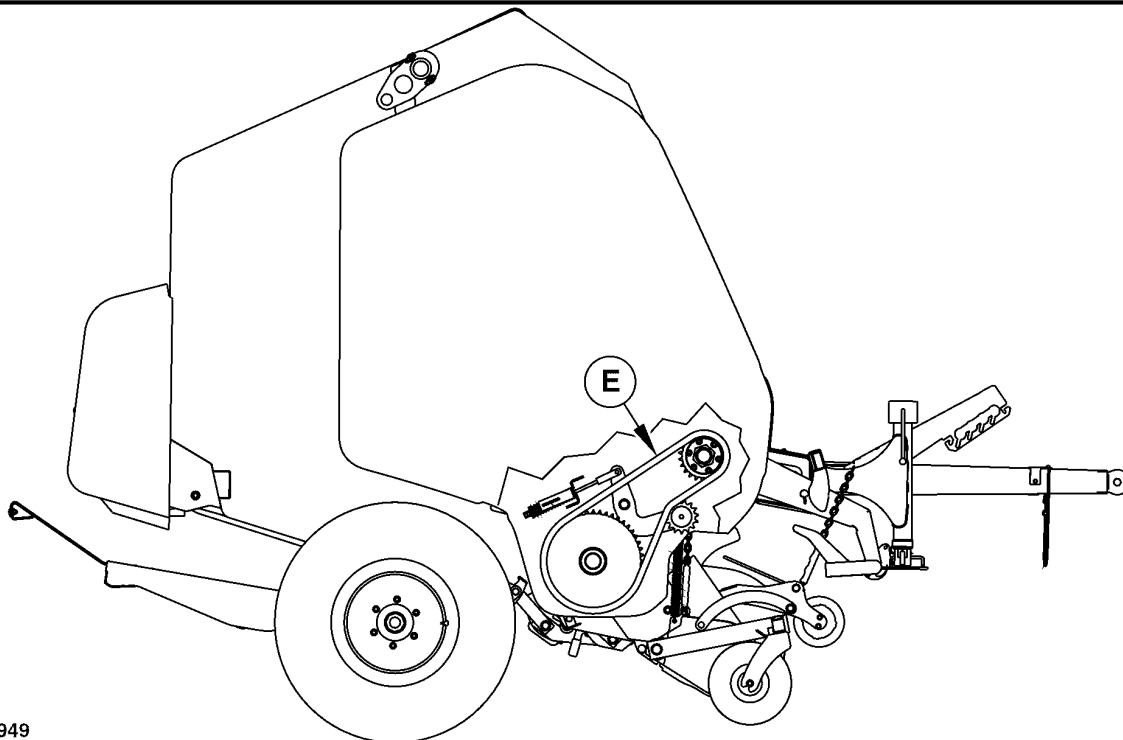
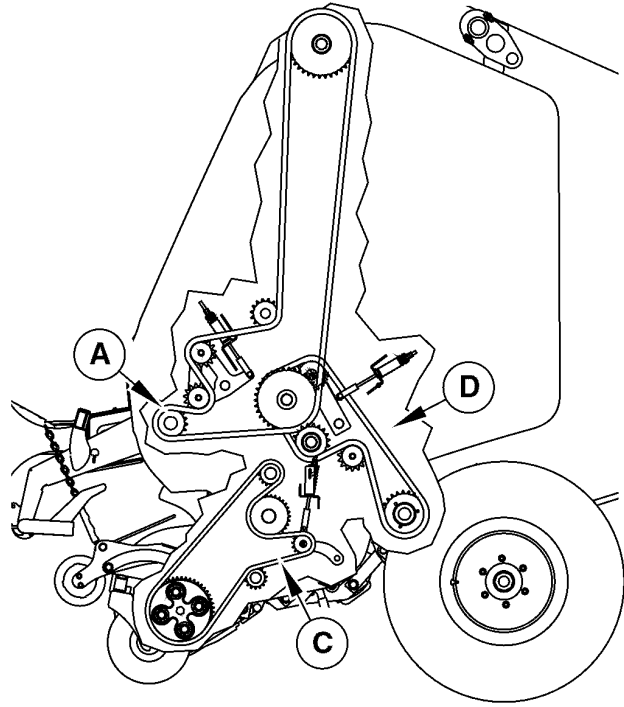
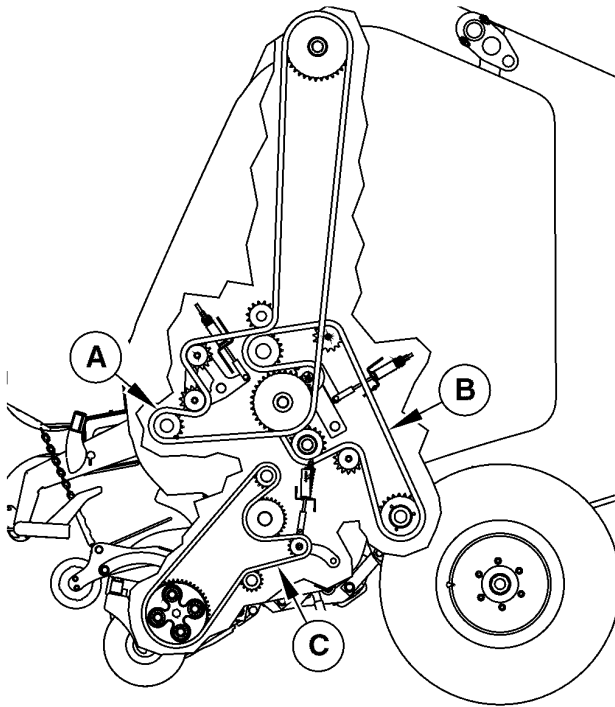


a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

CC03745,0000286 -19-23AUG01-1/1

X9811 —UN—23AUG88

Baler Chain Identification



CC518949

A—Main Drive Chain

B—Starter Roll Drive Chain (with
2nd Drive Roll)

C—Pickup Drive Chain

D—Starter Roll Drive Chain
(without 2nd Drive Roll)

E—Rotary Feeder Drive Chain

GA87848,00013C3 -19-25AUG21-1/1

CC518949—UN—01SEP21

Adjust Ball-Type Hitch

When ball-type hitch is used, it can be necessary to adjust the clearance between the lock (C) and the ball-type hitch (E).

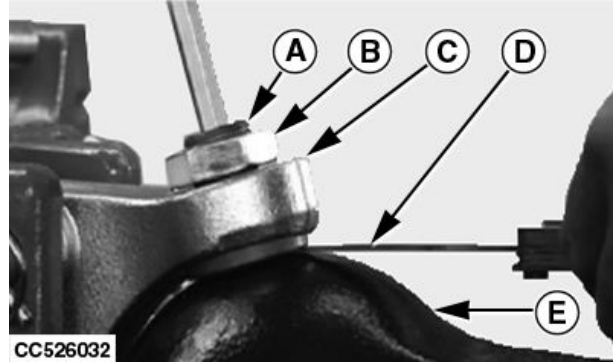
1. Attach the machine to the tractor.
2. Place the lock (C) in locking position.
3. Check clearance between screw (A) and ball-type hitch (E) by using shim (D). It should be within specification:

Specification

Screw-to-Ball-Type
Hitch—Clearance..... 0.5 mm max.
(0-1/32 in)

If the clearance is more than the specification, go to next check.

4. Loosen lock nut (B).
5. Tighten screw (A) until obtain the above specification.
6. Tighten lock nut (B)



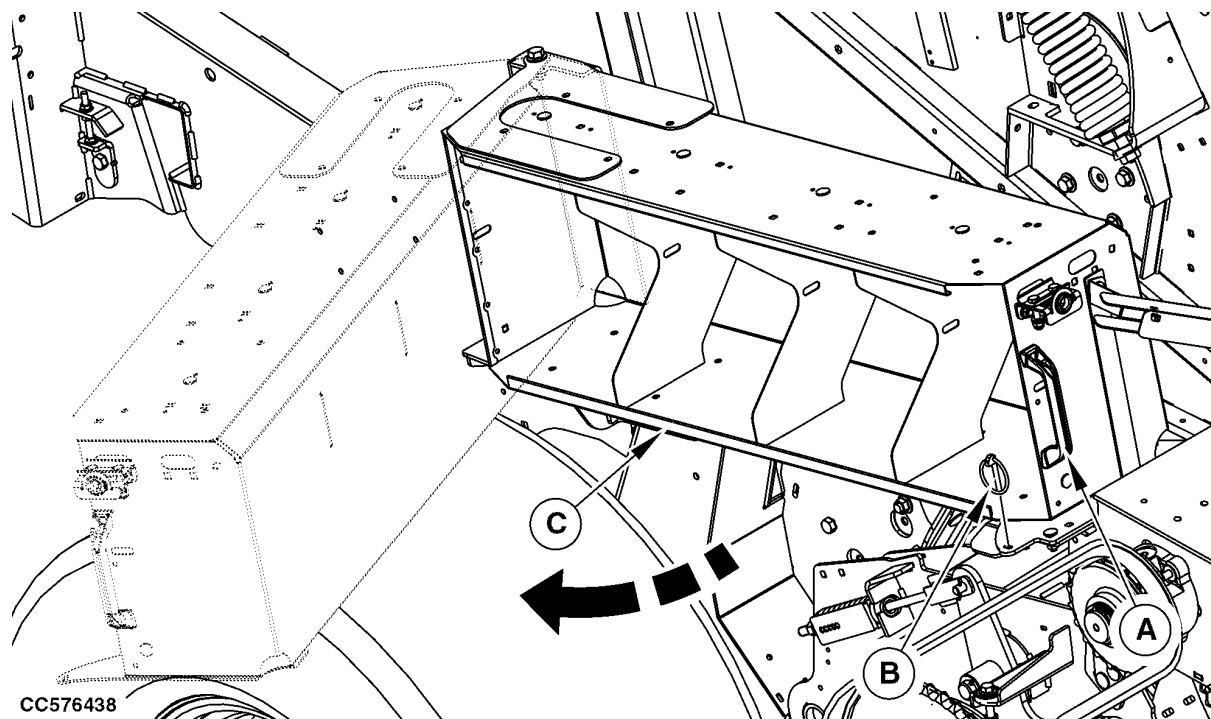
A—Screw
B—Counter-Nut
C—Lock

D—Shim
E—Ball-Type Hitch

TL81334,00010A2 -19-19MAY22-1/1

CC526032—UN—10MAY22

Operate Pivoting Twine Boxes (If Equipped)



A—Handle

B—Pin

C—Twine Box

The twine boxes (C) on both side of the machine can be opened to gain access to parts of the machine behind the twine boxes (C).

To open the twine boxes (C), proceed as follows:

1. Remove pin (B).
2. Pull handle (A) until the twine box (C) is fully open.

After that the servicing of the machine is done, close the twine boxes:

1. Push handle (A) until the twine box (C) is fully closed.
2. Install pin (B) to lock the twine box (C) in the baler frame.

ga87848,1683296201799 -19-05MAY23-1/1

CC576438 —UN—05MAY23

Adjust Pickup Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of pickup drive chain (A) as follows:

1. Loosen lock nut (D).
2. Adjust tension of pickup drive chain (A) by means of the nut (C) so that length of spring (B) should be within specification.

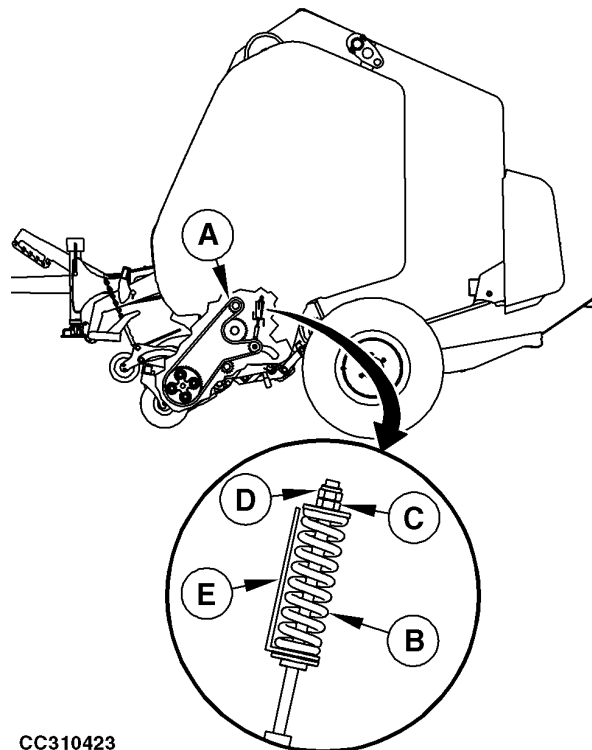
Specification

Gate Roll Drive
Chain—Spring Length.....124—128 mm
(4-7/8—5-1/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (D).

A—Pickup Drive Chain
B—Spring
C—Nut

D—Lock Nut
E—Strap



CC310423

aysdijz,1683209645498 -19-05MAY23-1/1

CC310423—UN—01SEP17

Adjust Main Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of main drive chain (A) as follows:

1. Loosen lock nut (D).
2. Adjust tension of main drive chain (A) by means of the nut (C) so that length of spring (B) should be within specification.

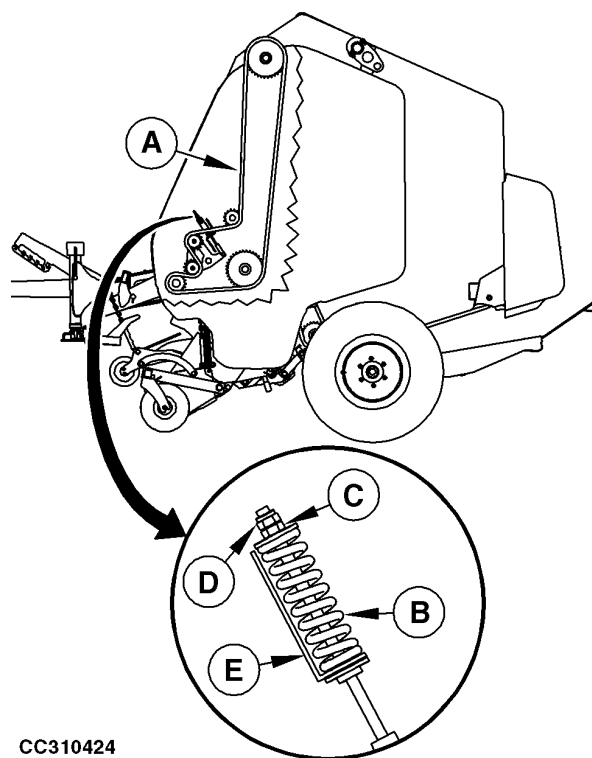
Specification

Main Drive
Chain—Spring Length.....108—112 mm
(4-1/4—4-13/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (D).

A—Main Drive Chain
B—Spring
C—Nut

D—Lock Nut
E—Strap



CC310424

aysdijz,1683209645451 -19-05MAY23-1/1

CC310424—UN—01SEP17

Adjust Starter Roll Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of starter roll drive chain (A) or (B) as follows:

1. Loosen lock nut (E).
2. Adjust tension of starter roll drive chain (A) or (B) by means of the nut (D) so that length of spring (C) should be within specification.

Specification

Starter Roll Drive Chain

(A) (with 2nd Drive

Roll)—Spring Length..... 107
(4-7/32 in)

Starter Roll Drive Chain

(B) (without 2nd Drive

Roll)—Spring Length..... 120
(4-23/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (E).

**A—Starter Roll Drive Chain
(with 2nd Drive Roll)**

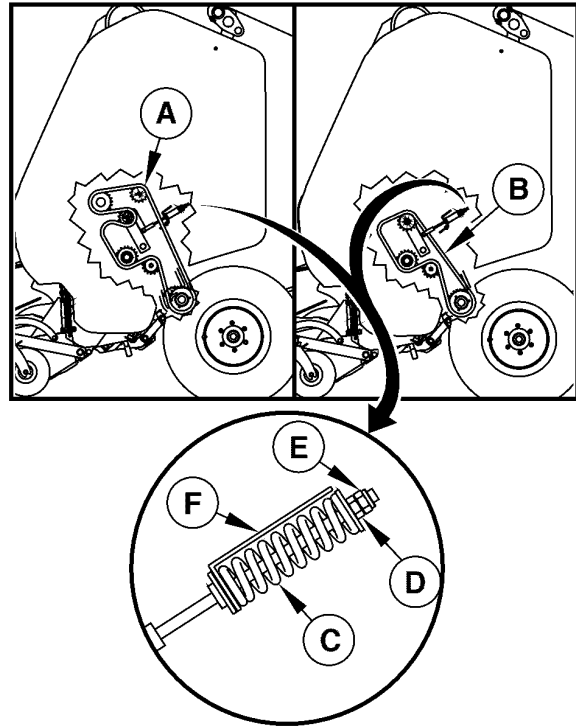
**B—Starter Roll Drive Chain
(without 2nd Drive Roll)**

C—Spring

D—Nut

E—Lock Nut

F—Strap



CC575705 —UN—04MAY23

aysdijz,1683209645397 -19-05MAY23-1/1

Adjust Rotary Feeder Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of rotary feeder drive chain (A) as follows:

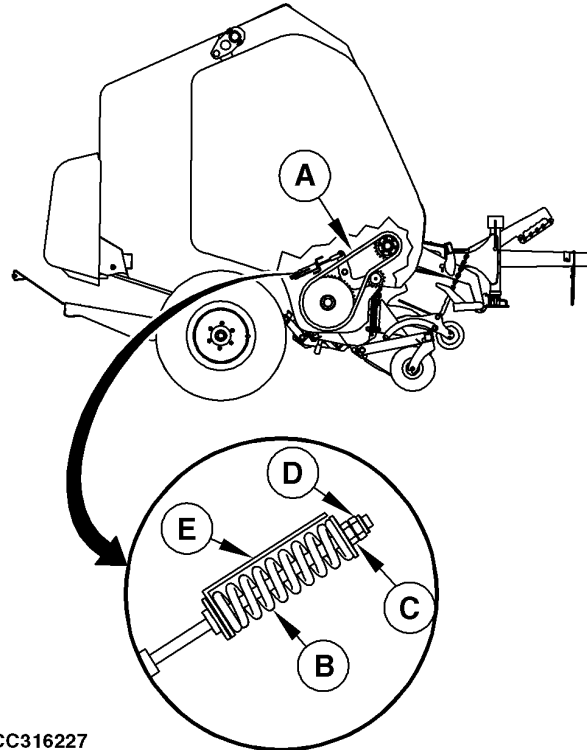
1. Loosen lock nut (D).
2. Adjust tension of rotary feeder drive chain (A) by means of the nut (C) so that length of spring (B) should be within specification.

Specification

Rotary Feeder Drive
Chain—Spring Length.....124—128 mm
(4-7/8—5-1/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (D).

A—Rotary Feeder Drive Chain D—Lock Nut
B—Spring E—Strap
C—Nut



CC316227

CC316227 —UN—01SEP17

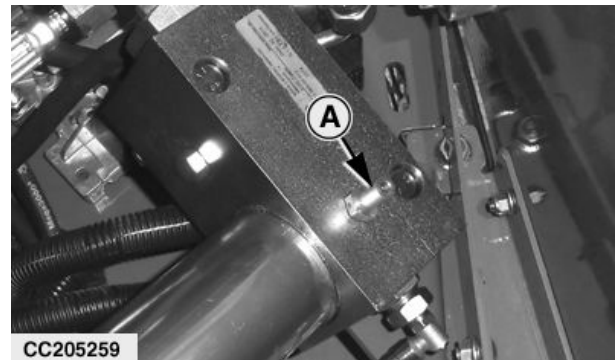
aysdijz.1683209645305 -19-05MAY23-1/1

Bleed Automatic Greasing System (If Equipped with Cartridge-Type Pump)

NOTE: Each time the grease cartridge is replaced, bleed the system as follows.

Press the ball on the vent fitting (A) and actuate selective control valve to open and close the rear gate. Repeat until the grease emerging is free of air bubbles.

A—Vent Fitting



CC205259

CC205259 —UN—10OCT13

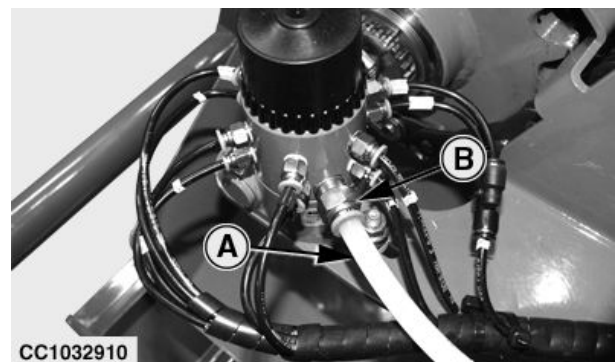
OUCC006,0001AEB -19-06SEP13-1/1

Bleed Chain Oiling System Pump

NOTE: It is necessary to bleed chain oiling system circuit if oil reservoir was totally empty.

1. Disconnect inlet pipe (A).
2. Wait until air of inlet pipe (A) is completely bled before reconnecting inlet pipe (A) into coupling (B).
3. Run the baler until oil drains continuously from brushes.

A—Inlet Pipe B—Coupling



CC1032910

CC1032910 —UN—14SEP10

OUCC849,0000133 -19-09NOV10-1/1

Adjust Brushes

- Adjust position of brushes according to the number of brushes used to lubricate one chain:
 - When one brush is used to lubricate the chain, align the center line of brush (A) with one of the plates located inside of chain (B).
 - When two brushes are used to lubricate the chain, align the center line of each brush (A) with the plates located inside of chain (B).
- Adjust each brush (A) to obtain specified overlap length (C) with chain (B).

Specification

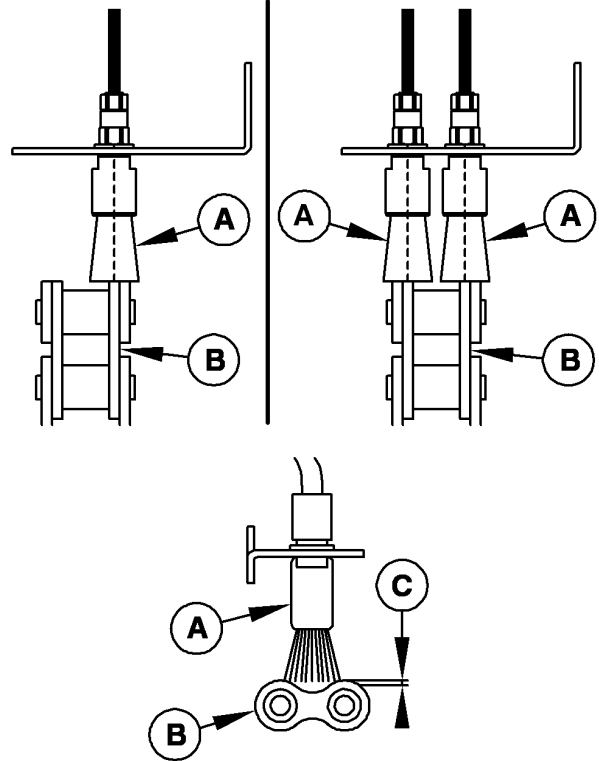
Brush to Chain—Overlap

Length.....0—2 mm
(0—0.08 in.)

This adjustment is necessary to clean and lubricate the drive chain correctly. Other adjustments may lead to chain premature wear.

A—Brush
B—Chain

C—Brush to Chain Overlap
Length



CC1035277

CC1035277 —UN—23SEP11

OUCC006,000181D -19-11OCT11-1/1

Replace Precutter Knives

CAUTION: To avoid injury or death by being cut by a knife, always move shutoff valve lever (A) in lock position before replacing knives.

Always wear gloves to handle knives.

NOTE: Each knife (D) can be separately removed or replaced.

To replace a knife, proceed as follows:

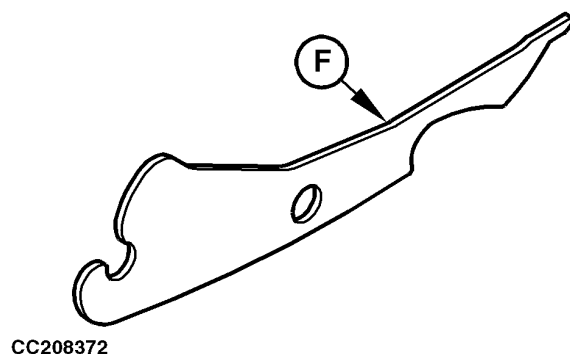
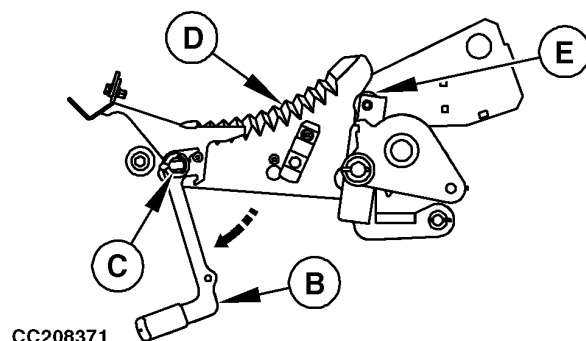
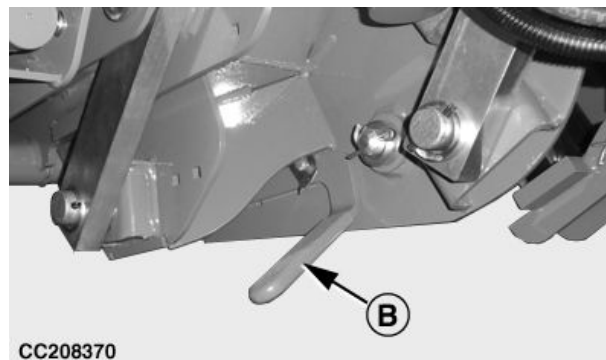
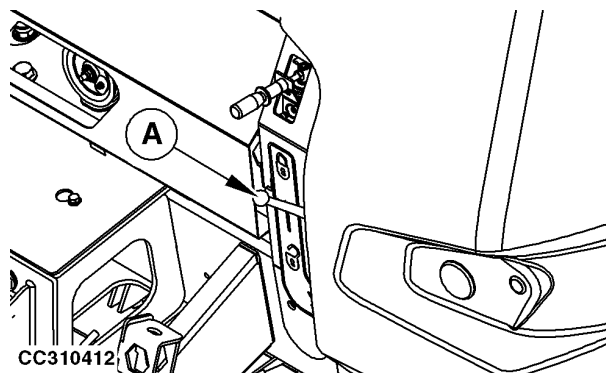
1. Retract knives. See [Retract or Engage Precutter Knives Function](#) in Operating Baler Application section.
2. Lower the drop floor. See [Unplug Pickup](#) in Operating Baler Application section.
3. Fully open the gate.
4. Lock gate. See [Secure Gate Safely](#) in Safety section.
5. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
6. Close knife shutoff valve using lever (A).
7. On left side, pull the lever (B) out of its locking pin and lower it.
8. Pull on knife (D) to remove it from guide (E) and bar (C).
9. To install a knife, simply insert knife (D) first on the bar (C), then place it in guide (E).

IMPORTANT: When a knife is no longer required, it is recommended to install the knife slot filler (F) instead. This will avoid crop accumulation in the missing knife slot.

10. Raise and secure lever (B) in the locking pin.
11. Lower the gate.
12. Open knife shutoff valve by positioning lever (A) downwards and raise drop floor.

A—Precutter Knife Shutoff
Valve Lever
B—Lever
C—Bar

D—Knife
E—Guide
F—Knife Slot Filler



ga87848,1685626615436 -19-01JUN23-1/1

CC310412—UN—18APR17

CC208370—UN—09DEC13

CC208371—UN—09DEC13

CC208372—UN—09DEC13

Sharpen Precutter Knives

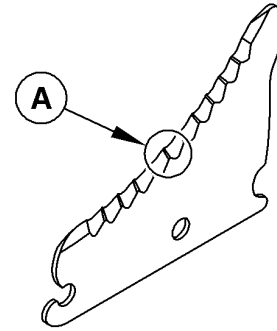
CAUTION: Prevent personal injury by wearing gloves to handle knives.

Remove knives from the machine. See [Replace Precutter Knives](#) in this section.

Clamp knives to a bench or table.

Draw-file the smooth bevelled edge maintaining a 12° angle. See your John Deere dealer for more information on the knife sharpener device.

IMPORTANT: Heating precutter knives during sharpening process may reduce precutter knife life. If tooth profile (A) disappears, replace knife.



CC1029106

A—Tooth Profile

ga87848,1677760226410 -19-02MAR23-1/1

CC1029106—UN—08JAN07

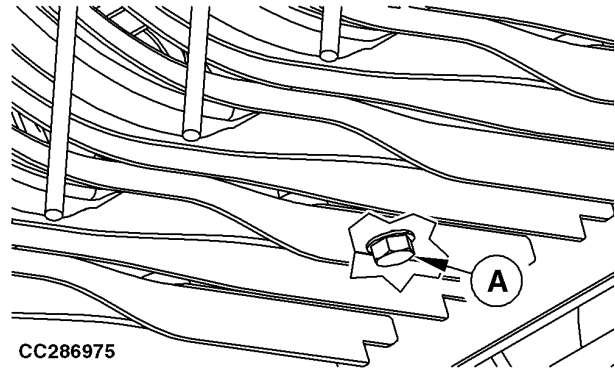
Replace Pickup Tooth

CAUTION: Before working on the baler, disengage the PTO, place transmission in PARK, engage park brake, shut off engine, remove ignition key and wait for moving parts to come to a standstill.

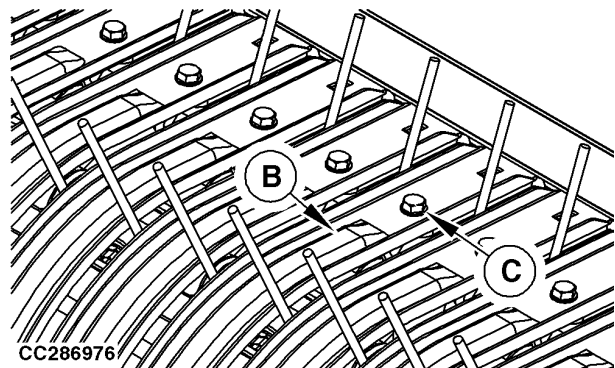
1. Remove bottom screw (A).
2. Remove upper screw (C) then remove stripper (B).

A—Bottom Screw
B—Stripper

C—Upper Screw



CC286975



CC286976

Continued on next page

NB02380,00001BC -19-07OCT16-1/3

CC286975—UN—03AUG16

CC286976—UN—03AUG16

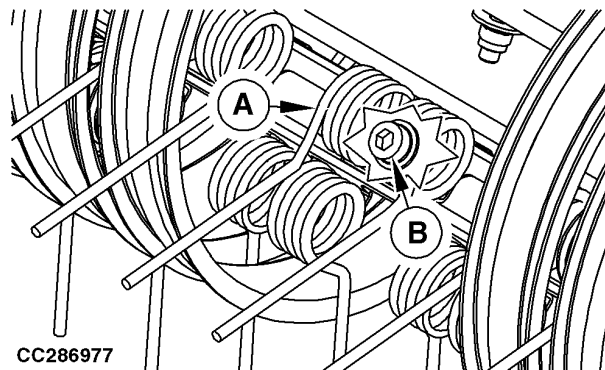
3. Remove screw (B).
4. Replace damaged pickup tooth (A). Pickup tooth must be fitted as shown.
5. Install and tighten screw (B) to specified torque.

Specification

Tooth Screw—Torque.....64 N·m
(47 lb·ft)

A—Tooth

B—Screw



CC286977

NB02380,00001BC -19-07OCT16-2/3

CC286977—UN—03AUG16

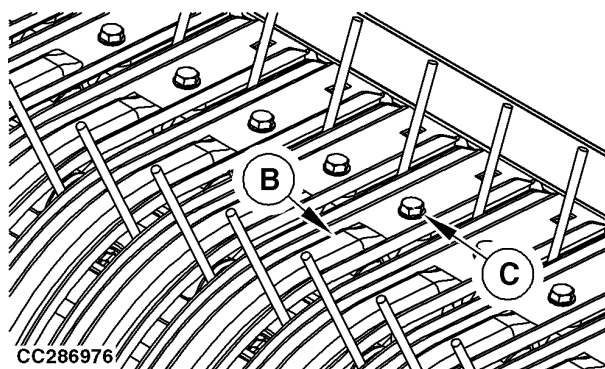
6. Replace stripper (B) if necessary. Install the stripper as shown.
7. Install upper screw (C) then bottom screw (A).
8. Tighten screws (A) and (C) to specified torque.

Specification

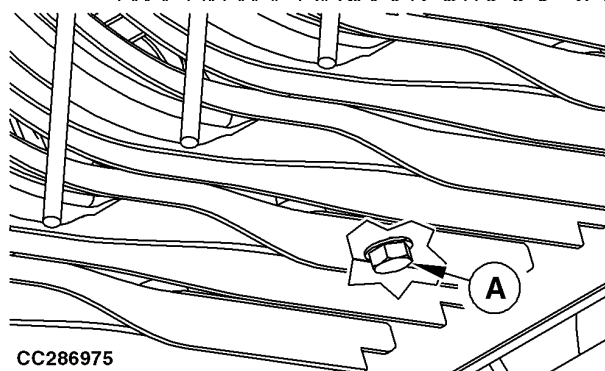
Stripper
Screws—Torque.....25 N·m
(18 lb·ft)

A—Bottom Screw
B—Stripper

C—Upper Screw



CC286976



CC286975

NB02380,00001BC -19-07OCT16-3/3

CC286976—UN—03AUG16

CC286975—UN—03AUG16

Adjust Tension Arm Spring

If spring has been replaced or screws has been removed, adjust spring as follows:

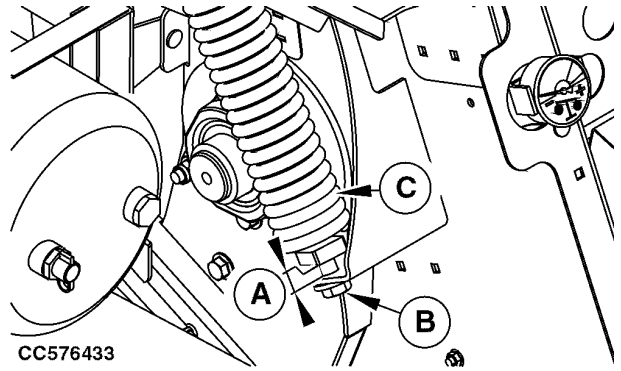
Tighten or loosen screw (B) until specified distance (A) is obtained.

Specification

Tension Arm Spring	
Bracket-to-Bottom	
of Tension Arm	
Spring—Distance.....	16—24 mm
	(5/8—1 in)

A—Distance
B—Screw

C—Spring



CC576433 —UN—04MAY23

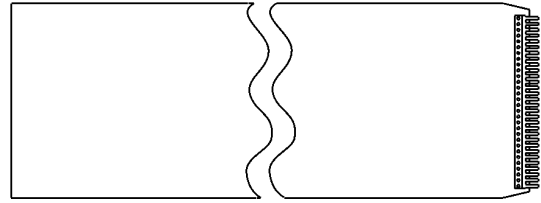
ga87848,1682679990202 -19-28APR23-1/1

Prepare Belt: New Belt

NOTE: John Deere belt spare parts are delivered longer than recommended length and with only a hook on the chamfer side.

Accordingly the belt must to be cut and hooked at the specified recommended length.

1. Unroll belt on a flat ground.



CC423768

CC423768 —UN—03DEC20

GA87848,000106F -19-22DEC20-1/4

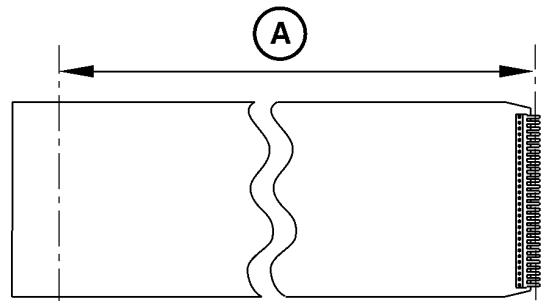
IMPORTANT: Belt length (A) is measured from pin to pin axis as if installed on the machine.

2. Measure belt length specification as specified:

Specification	
V451G Belt—Length.....	11.650 ± 0.015 m
	(38 ft 2-21/32 in ± 19/32 in)
V451M Belt—Length.....	11.650 ± 0.015 m
	(38 ft 2-21/32 in ± 19/32 in)
V461M Belt—Length.....	12.845 ± 0.015 m
	(42 ft 45/64 in ± 19/32 in)

3. Mark the belt so it matches specified belt length (A).

A—Specified Length



CC423769

CC423769 —UN—03DEC20

GA87848,000106F -19-22DEC20-2/4

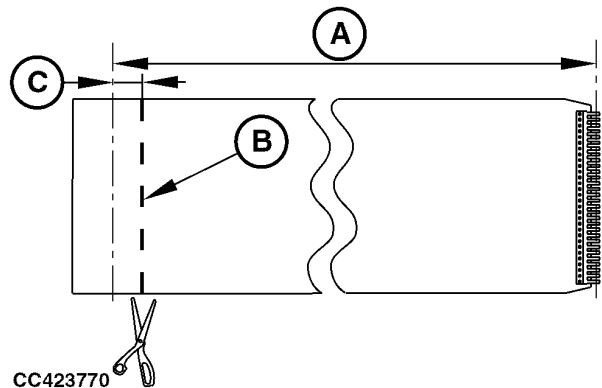
4. Make a new mark (B) 5 mm (3/16 in) from the previous mark as shown.

NOTE: Offset correspond to the distance (C) between rubber end and the pin axis.

5. Cut the belt on mark (B) using belt cut tool.

A—Specified Length
B—Cutting Mark

C—Distance



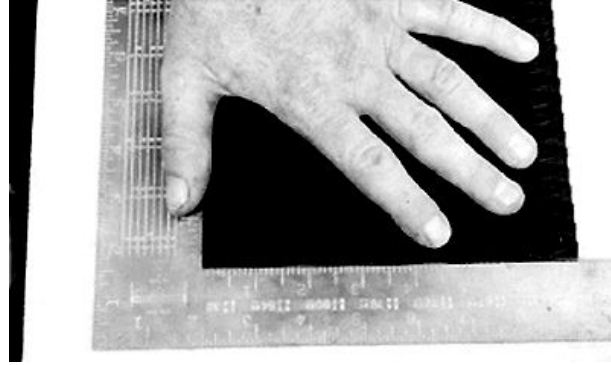
CC423770

CC423770 —UN—03DEC20

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GA87848,000106F -19-22DEC20-3/4

6. Check belt to make sure that it is cut squarely as shown.
7. Install belt hook. See [Install Belt Hooks](#) in this section.



E21798 —UN—24JUN99

GA87848,000106F -19-22DEC20-4/4

Repair Belts

IMPORTANT: Belts may fray at the edges or cut. Trim the frayed cords as they appear. Avoid the risk of frayed cords being caught or wrapped around rolls as the bale is formed, causing additional fraying or damage to the belts.

NOTE: If belts are shorter than the specified dimensions, add a belt extension kit.

Replace both side of hooks when repairing belts.

Proceed as follows for emergency or recommended repair:

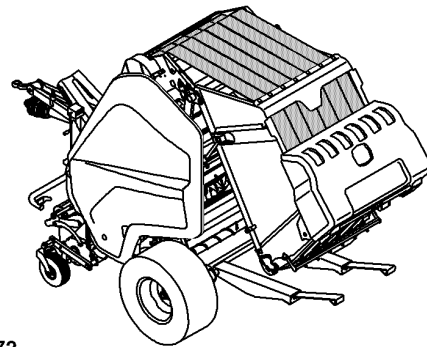
- Emergency repair: Repair quickly one or several belts while working in the field. Need to proceed to recommended repair as soon as possible.
- Recommended repair: Repair the 6 belts and replace all hooks of each belt. Need to be done after an emergency repair or if at least one or more belt, or belt hooks are damaged.

Emergency Repair:

1. Remove damaged belt. See [Remove Belts](#) in this section.
2. Measure damaged belt length.

NOTE: Belt length before and after repair must be the same.

3. Cut the belt so that it matches the same length with a belt extension kit. See [Prepare Belt: Emergency Repair](#) in this section.
4. Install hooks. See [Install Belt Hooks](#) in this section.
5. Install belt. See [Route Belts Through the Baler and Install Belts](#) in this section.



CC368972

CC368972 —UN—15JAN19

6. Adjust tracking of belts. See [Adjust Tracking of Belts](#) in this section.
7. As soon as possible, apply recommended repair procedure. See the following recommended repair procedure.

Recommended Repair:

1. Remove all belts. See [Remove Belts](#) in this section.
2. Cut belts to remove hooks on both ends and ensure that belts length matches specification. See [Prepare Belt: Recommended Repair](#) in this section.
3. Install hooks. See [Install Belt Hooks](#) in this section.
4. Install belt. See [Route Belts Through the Baler and Install Belts](#) in this section.
5. Adjust tracking of belts. See [Adjust Tracking of Belts](#) in this section.

GA87848,00010E2 -19-20JAN21-1/1

Remove Belts

1. Start tractor engine and switch on the monitor.
2. Make sure that the gate latch sensors are correctly powered (LED light ON when the gate is closed).
3. Fully open gate and secure it with safety lock device.

CAUTION: Make sure that gate is locked. If gate is not locked while performing this procedure, the gate could close suddenly causing injury or death.



TS688 —UN—21SEP89

GA87848,000106D -19-22DEC20-1/3

4. Insert M16 screw in hole (A) on both side.
5. Position a magnet in front of one of the gate sensors.
6. Disconnect the hydraulic hose for gate opening.
7. Actuate SCV as to close the gate until the tension arm is fully raised.
8. Shut off tractor engine and monitor.

A—Hole



CC406013

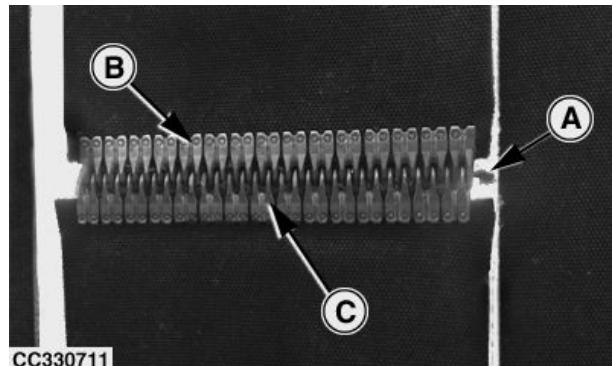
CC406013 —UN—04MAR20

GA87848,000106D -19-22DEC20-2/3

9. Rotate pin (A) with pliers and pull it from the lacing.
10. Remove belt.
11. Check belt hooks (B) and (C) for wear or damage. Replace worn or damaged parts.

A—Splice Pin
B—Belt Hook

C—Belt Hook



CC330711

CC330711 —UN—26SEP17

GA87848,000106D -19-22DEC20-3/3

Prepare Belt: Emergency Repair

Belt Cut Tool

To remove damaged belts area, it is recommended to use a cut tool as shown. See your John Deere dealer.



CC368967

Belt Cut Tool—MC464300012

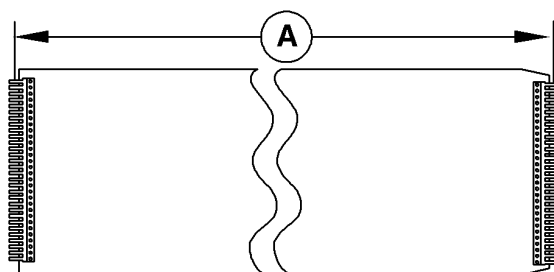
CC368967 —UN—21DEC18

GA87848,0001070 -19-22DEC20-1/4

IMPORTANT: Make sure that the distance between two hooks is at least 2 m.

NOTE: Belt length (A) is measured from pin to pin axis as if installed on the machine.

A—Length



CC368973

CC368973 —UN—21JAN19



CC368968

CC368968 —UN—23JAN19

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GA87848,0001070 -19-22DEC20-2/4

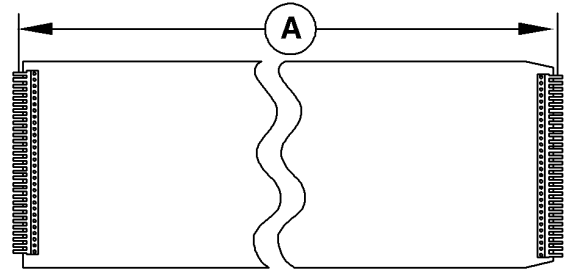
1. Measure belt length (A).
2. Cut the belt so that it matches the measured length (A) with a belt extension kit.

Specification

Belt Extension
Kit—Minimum Length..... 2 m
(6 ft 7 in)

3. Check belt to make sure that it is cut squarely as shown.
4. Check that belt length (A) with belt extension is the same as the measured length.

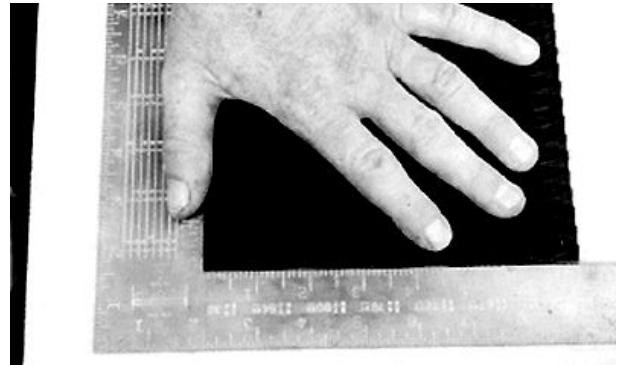
A—Length



CC368973



CC368968



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GA87848,0001070 -19-22DEC20-3/4

CC368973—UN—21JAN19

CC368968—UN—23JAN19

E21798—UN—24JUN99

**IMPORTANT: Cut belts trim trailing end ONLY
in the travel direction.**

DO NOT vary from these dimensions.

5. Cut belts so trim trailing end is within specification:

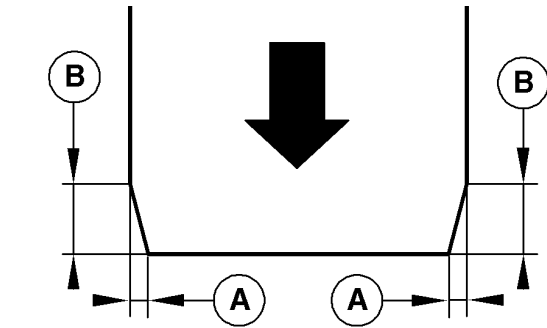
Specification

A—Trim Trailing End
Width—Distance..... 6 mm
(1/4 in)

Specification

B—Trim Trailing End
Height—Distance..... 25—26 mm
(63/64 in—1-1/32 in)

6. Install belt hook. See Install Belt Hooks in this section.



CC368965

A—Distance

B—Distance

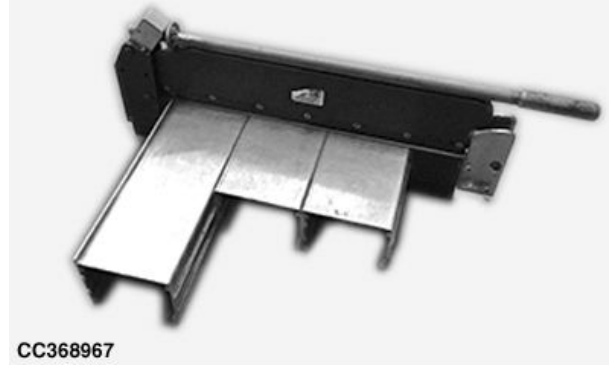
CC368965—UN—17/JAN/19

GA87848,0001070 -19-22DEC20-4/4

Prepare Belt: Recommended Repair

Belt Cut Tool

To remove damaged belts area, it is recommended to use a cut tool as shown. See your John Deere dealer.



Belt Cut Tool—MC464300012

GA87848,0001071 -19-22DEC20-1/3

CC368967 —UN—21DEC18

IMPORTANT: As a recommended repair, replace all hooks of each 6 machine belts.

Make sure that the distance between two hooks is at least 2 m.

NOTE: To replace hooks, cut the belt at the end of the hooks.

1. Check that belt length (A) is within specification.
 - If belt length (A) is longer than specification: Mark the belt at belt length specification.
 - If belt length (A) is shorter than belt length specification: Mark the belt so it matches belt length specification with a belt extension kit.

Specification

Belt Extension
Kit—Minimum Length..... 2 m
(6 ft 7 in)

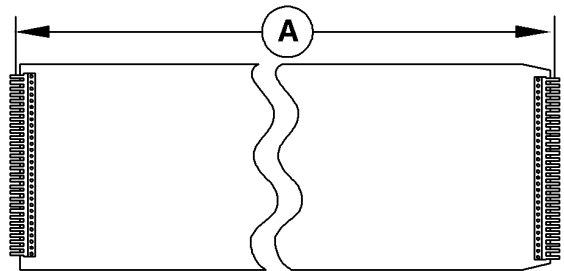
NOTE: Belt length (A) is measured from pin to pin axis as if installed on the machine.

Specification

V451G Belt—Length..... 11.650 ± 0.015 m
(38 ft 2-1/2 in $\pm$ 19/32 in)
V451M Belt—Length..... 11.650 ± 0.015 m
(38 ft 2-1/2 in $\pm$ 19/32 in)
V461M Belt—Length..... 12.845 ± 0.015 m
(42 ft 45/64 in $\pm$ 19/32 in)

2. Cut the belt at the define length (A).
3. Check belt to make sure that it is cut squarely as shown.

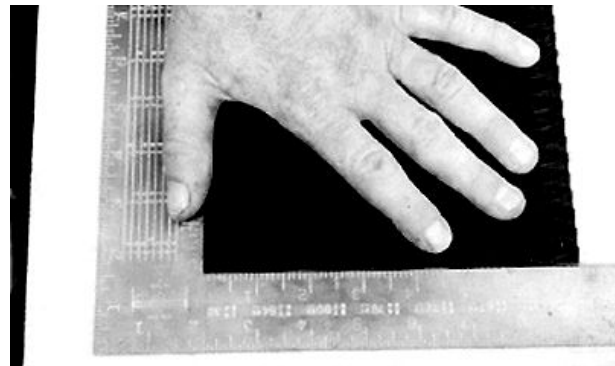
A—Length



CC368973



CC368968



CC368973 —UN—21JAN19

CC368968 —UN—23JAN19

E21788 —UN—24JUN99

Continued on next page

GA87848,0001071 -19-22DEC20-2/3

IMPORTANT: Cut belts trim trailing end ONLY in the travel direction.

DO NOT vary from these dimensions.

4. Cut belts so trim trailing end is within specification:

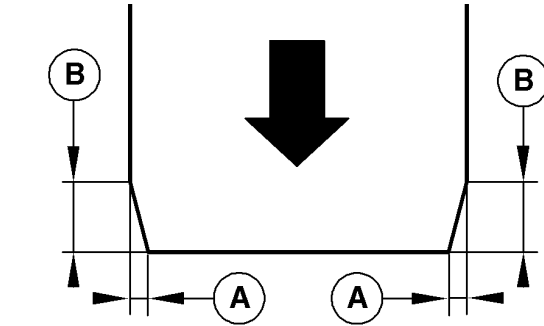
Specification

A—Trim Trailing End
Width—Distance..... 6 mm
(1/4 in)

Specification

B—Trim Trailing End
Height—Distance..... 25—26 mm
(63/64 in—1-1/32 in)

5. Install belt hook. See Install Belt Hooks in this section.



CC368965

A—Distance

B—Distance

GA87848,0001071 -19-22DEC20-3/3

CC368965—UN—17JAN19

Install Belt Hooks

Belt Lacing Tools

To fasten lacings segments to bale forming belts, it is recommended to use a belt lacing tool with a punch or a pneumatic hammer as shown.

The belt lacing tool requires a vice being installed on a desk.

See you John Deere dealer.



CC368964

Belt Lacing Tool—MC411295872

E40772 —UN—08AUG96



Pneumatic Hammer—MC411295806

Continued on next page

GA87848,0001072 -19-22DEC20-1/7

CC368964—UN—09JAN19

1. Put belt lacing tool (A) in a vice with holes (B) toward the operator. The lacer shoulder should rest on jaws of vise.

A—Belt lacing tool

B—Hole



CC423775 —UN—01DEC20

GA87848,0001072 -19-22DEC20-2/7

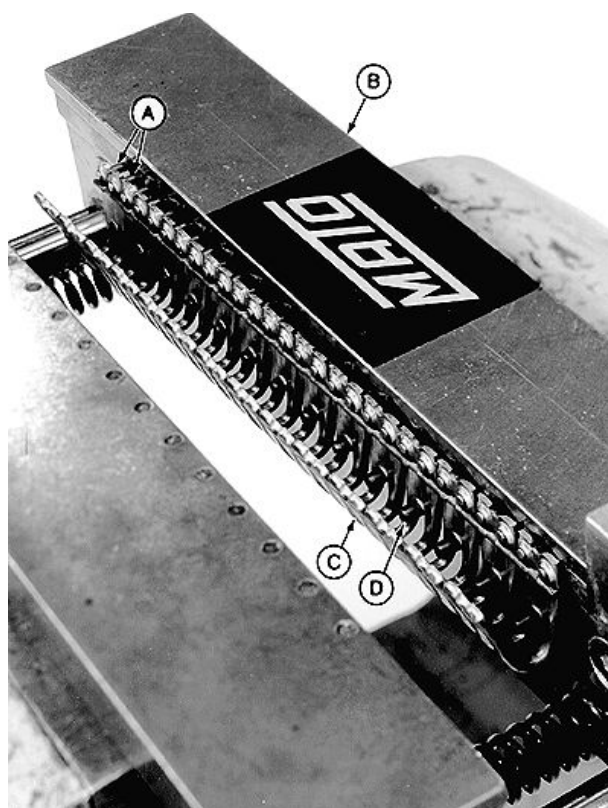
2. Install lacing strip (C) in lacing tool (B). Make sure that two rivet pins (A) of each lacing segment is inserted into each of the tool's 15 holes. The lacing segments should rest against stop pins (D).
3. Tighten vice until the lacing strip is lightly gripped and the belt can be easily inserted.

A—Pin

B—Lacing Tool

C—Strip

D—Stop pin



E40774 —UN—08AUG96

Continued on next page

GA87848,0001072 -19-22DEC20-3/7

IMPORTANT: Hook has a lateral offset inside lacing tool. Hooks must be installed as shown to ensure belt ends alignment.

When only one hook needs to be installed, observe first hook position to determine belt side into the lacing tool. If necessary, flip belt.

When both hooks need to be installed, belt must be flipped between first and second clinch.

IMPORTANT: Check that belt side is pressed along stop plate (A). Belt edges must be aligned when hooks are assembled.

4. Install belt (D) in lacing strip while holding edge of belt against stop plate (C), uniformly push belt down to the stop pins. Make sure that lacing strip is against stop pins.

NOTE: The lacing tool is equipped with a stop, do not tighten the vice too much to keep an evenly distribute pressure on the belt.

5. Make sure that belt and lacing are positioned squarely in lacer tool. Close vice on belt and lacing until distance between lacer jaws equals width of belt.

IMPORTANT: If using a hand punch (E), using too large of a hammer or striking punch too hard can damage lacing tool or belt lacing.

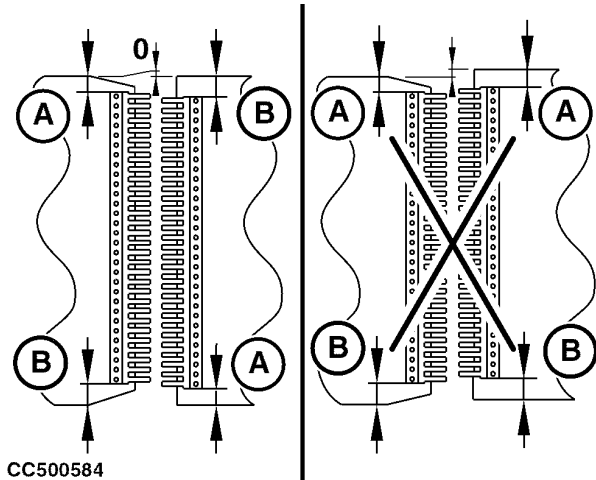
If using a pneumatic hammer (F), too high air pressure and/or too long riveting time can damage lacing tool or belt lacing.

6. Drive the rivets through the belt using punch (E) or pneumatic hammer (F).

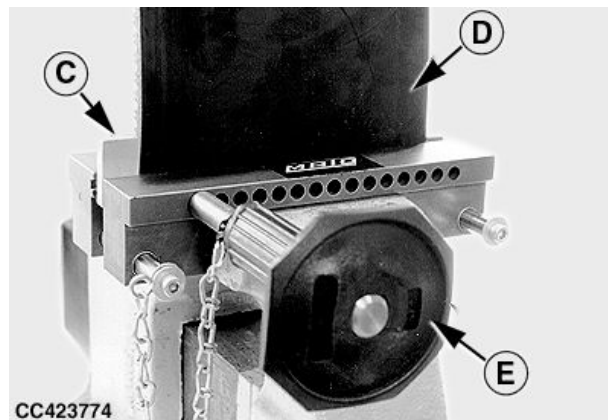
For proper installation, use the following instructions:

Rivet both outer lacing segments first, then, working from the outside to the inside, rivet the rest of the lacing segments.

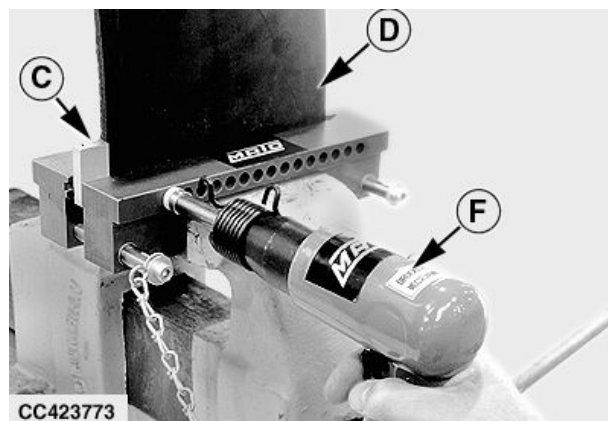
- If using punch (E), drive rivets until shoulder on punch contacts lacing tool jaw. Hit punch an additional time to ensure contact between shoulder and lacing tool jaw.
- If using pneumatic hammer (F), set air pressure to 500—600 kPa (5—6 bar) (72.5—87 psi). Operate hammer for 1—2 seconds for each rivet. Re-riveting is usually not necessary.



CC500584 —UN—14DEC20



CC423774 —UN—11DEC20



CC423773 —UN—11DEC20

C—Stop Plate
D—Belt

E—Hand Punch
F—Pneumatic Hammer

Continued on next page

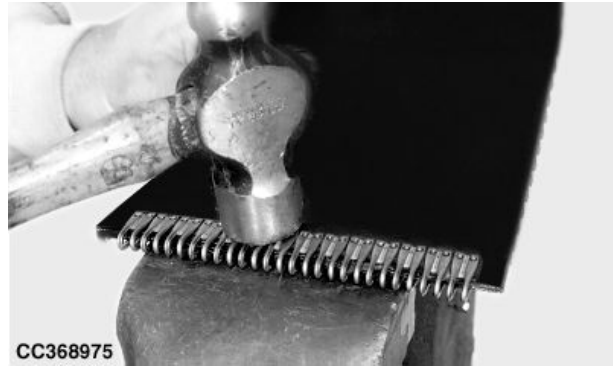
GA87848,0001072 -19-22DEC20-4/7

7. Remove belt from vice and inspect hooks. All rivets should be driven through belt and show punch marks in center of rivet.

IMPORTANT: Do not hit the loop area of the fastener when using hammer to flatten heads of rivets.

Do not hit rivets too hard or they may buckle and damage joints.

8. Put belt with hooks on a solid base. Flatten heads of rivets using the flat face of a small hammer. Strike several rivets at a time using a light "tapping" motion. Rivets should be flush with splice.



CC368975 —UN—23JAN19

GA87848,0001072 -19-22DEC20-5/7

9. Check hook (A) perpendicularity with belt (D) as shown.
- a. Position try square (C) 5 cm (2 in) away from the belt end.

IMPORTANT: Press the thicker side of try square (C) along the side of belt (D) as shown.

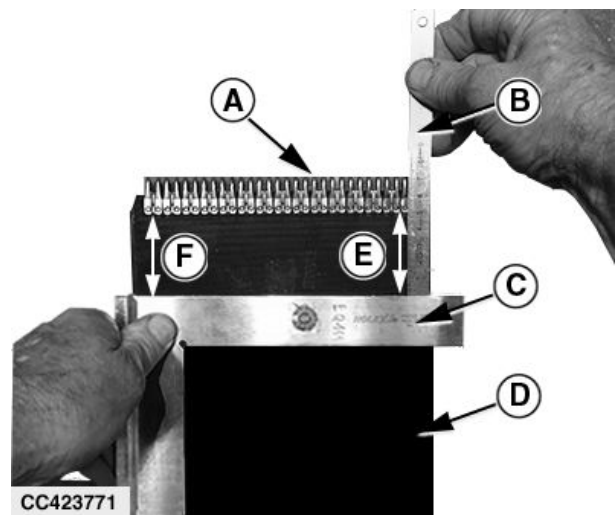
- b. Measure distance (E) and (F) on each hook extremities. Distances (E) and (F) must be the same.

Specification

E - F—Distance..... $0 \pm 1 \text{ mm}$
($0 \pm 1/32 \text{ in}$)

- c. Repeat this step for the second hook.

- If OK, go to next step.
- If not OK, repeat procedure. See [Prepare Belt: Recommended Repair](#) in this section.



CC423771 —UN—10DEC20

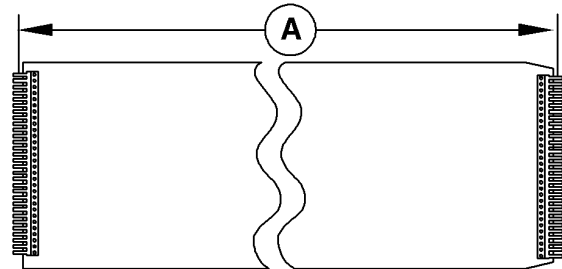
A—Hook
B—Ruler
C—Try Square

D—Belt
E—Distance
F—Distance

GA87848,0001072 -19-22DEC20-6/7

10. Recheck belt length (A).
11. Install belt. See [Install Belts](#) in this section.

A—Specified Length

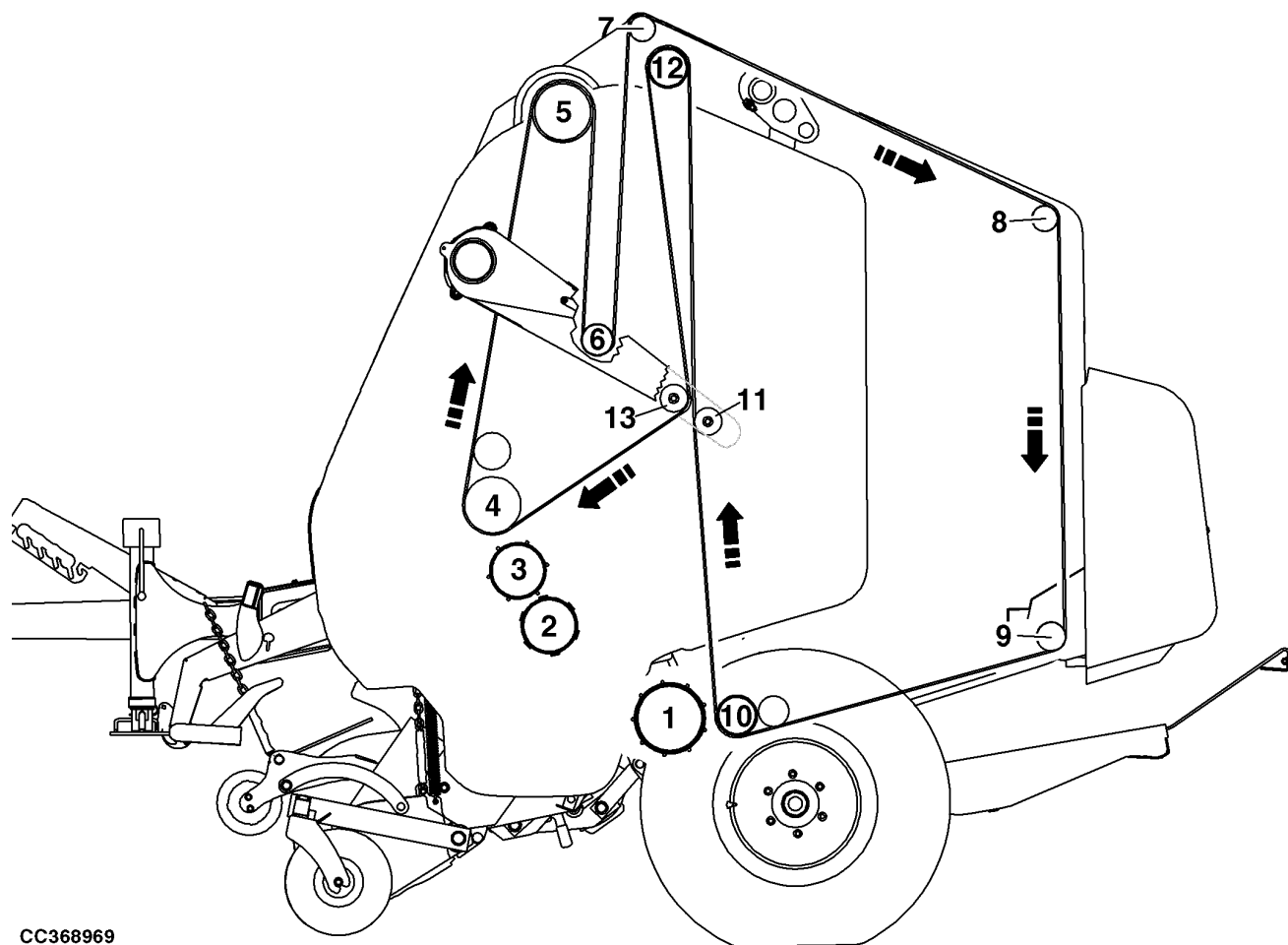


CC368973

CC368973 —UN—21JAN19

GA87848,0001072 -19-22DEC20-7/7

Route Belts Through the Baler



CC368969

Route belts as shown in illustration, passing them through the individual guides. See Install Belts in this section.

CC368969 —UN—20DEC18

GA87848,0001074 -19-08JAN21-1/1

Install Belts

1. Loosen belt, see [Remove Belts](#) in this section.

IMPORTANT: Belts must be installed so the trimmed end moves in normal direction of travel (large arrows shown).

2. Make sure that belts are installed through the individual guides. Check belt routing. See [Route Belts Through the Baler](#) in this section.
3. Route belts so the belt end with square corners (D) leads the trimmed corner (E) as belt moves in normal direction of travel (large arrows).

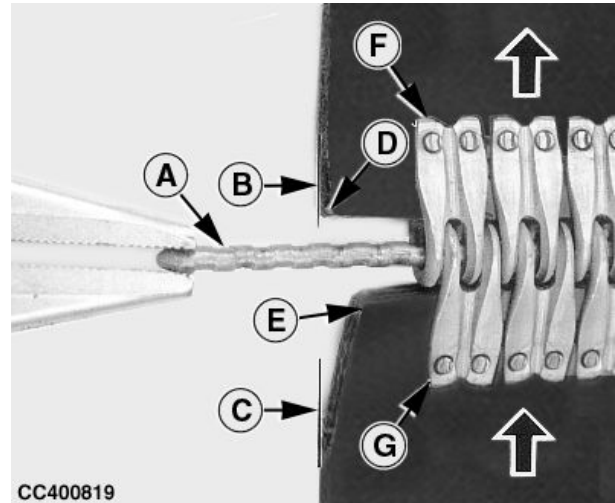
IMPORTANT: The placement (interlocking) of lacing segments will affect belt edge alignment. Belt edges must align or damage to belts will occur.

4. Interlock lacing segments making sure belt edge (B) aligns with belt edge (C). If belt edges do not align, reposition the interlocking segments by moving one belt end left (or right) one lacing notch relative to the opposite belt end.

NOTE: The splice pin is shown rotated 90° (locking position) for illustration purposes only. Pin should be rotated to this position only after pin is fully inserted.

NOTE: It is recommended to replace splice pins at least once a year or in case of wear or breakage.

5. With notches (A) facing toward back side and front side of belts, insert splice pin. Be careful not to deform ends of pin while installing pin. Rotate pin 90° after pin is fully inserted. Make sure lacing segments seat in pin notches.
6. Remove magnet.
7. Remove M16 screws on both side.
8. Connect the hydraulic hose for gate opening.



A—Notches in splice pin
B—Belt edge (squared end)
C—Belt edge (trimmed end)
D—Square corner

E—Trimmed corner
F—Outer segment (squared end)
G—Outer segment (trimmed end)

9. Start tractor engine.

IMPORTANT: Before closing the gate, tension arm must be in lower position to avoid belt damage.

10. Actuate SCV to open the gate then actuate SCV to close the gate in order to raise the lower tension arm.
11. Unlock gate.
12. Close the gate.
13. Check belt tracking visually if necessary. See [Adjust Tracking of Belts](#) in this section.

GA87848.00010E1 -19-20JAN21-1/1

CC400819 —UN—27FEB20

Adjust Tracking of Belts

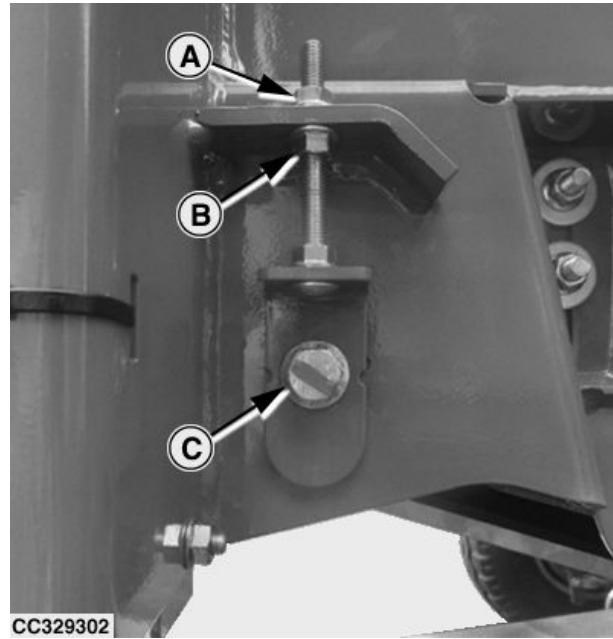
NOTE: Soft core function must be disabled.

NOTE: Baler must be empty, gate closed, and density set to the maximum.

Observe belt tracking at roll No. 5, 8 and 11 gate upper belt guides by using relevant lifting device.

If belts do not track correctly, use the following procedure:

1. With baler on a level surface, engage PTO and run at nominal speed.
2. Hold tractor SCV lever in gate closing position to apply tension to belts while checking.
3. Shut off tractor engine.
4. Check belt tracking:
 - If belts are centered in the gate guide and in the tension arm guide, belt tracking is OK, go to step 11.
 - If outer belts are slightly in contact with outer guides and inner belts are centered in the guides, belt tracking is OK, go to step 11.
 - If all belts deviate from the same side, go to next step.
5. Start tractor engine
6. Open the gate.
7. Shut off tractor engine.
8. Close the gate with SCV in floating position to relieve hydraulic pressure
9. Loosen counter-nut (B) then loosen or tighten nut (A) to lower or raise lower gate roll (C).
 - If belts track to the right, lower right-hand end of lower gate roll (C).



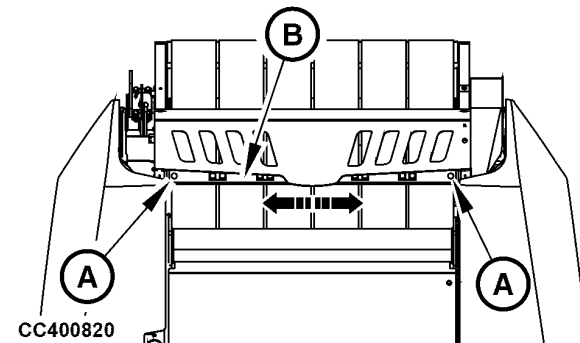
A—Nut
B—Counter-nut

C—Lower Gate Roll

- If belts track to the left, raise right-hand end of lower gate roll (C).
10. Observe belt tracking, then go to step 1.
 11. Check front belt guide:
 - If gate guide and tension arm guide are centered with belts, result is OK, go to 15.
 - If gate guide and tension arm guide are not centered, adjust frame belt guide, go to next step.

GA87848,00010E0 -19-20JAN21-1/2

12. Loosen screws (A).
13. Move belt guides bracket (B) so that belt guides are not pressed against the belt.
14. Tighten screws (A).
15. Run baler to ensure that belt do not run against the belt guide.
16. Calibrate bale diameter potentiometer RB311. See [Calibrate Bale Diameter Potentiometer RB311](#) in Baler Application Service section.
17. Calibrate bale shape potentiometers RB321 and RB322. See [Calibrate Bale Shape Potentiometers RB321 and RB322](#) in Baler Application Service section.



A—Screw

B—Belt Guide Bracket

GA87848,00010E0 -19-20JAN21-2/2

Adjust Bottom Starter Roll (No. 1) Scraper

1. Fully open the gate.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Lock gate, see Secure Gate Safely in Safety Section.

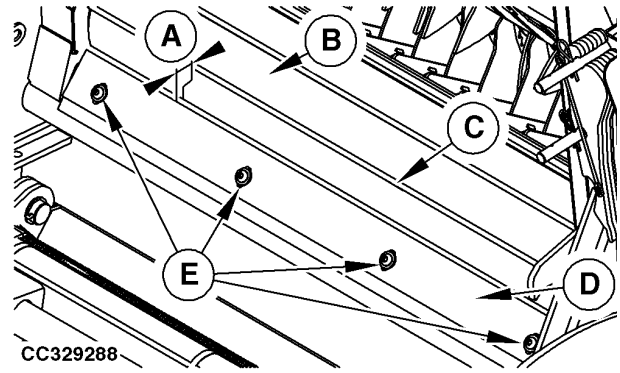
CAUTION: Make sure gate is locked. If gate is not locked while performing this procedure, the gate may close suddenly causing injury or death.

4. Open right-hand side door.
5. Remove starter roll drive chain, see Baler Chain Identification in this section to locate chain.
6. Loosen nuts (E).
7. Select the bar (C) for which distance (A) between the bar and scraper (D) is the smallest.
8. Adjust scraper (D) on selected bar (C) to the following specification:

Specification

Scraper to Bar on
Roll—Distance.....2—3 mm
(3/32—1/8 in)

9. Rotate roll (B) to check there is no interference between scraper (D) and roll (B).



A—Distance
B—Bottom Starter Roll (No. 1)
C—Bar
D—Scraper
E—Nut

IMPORTANT: Scraper (D) must not rub on lower starter roll (B).

10. On both side, tighten fixing nuts (E) to specified torque:

Specification

Fixing Nuts—Torque.....65 N·m
(48 lb·ft)

11. Install starter roll drive chain.

NB02380,00004D7 -19-05SEP17-1/1

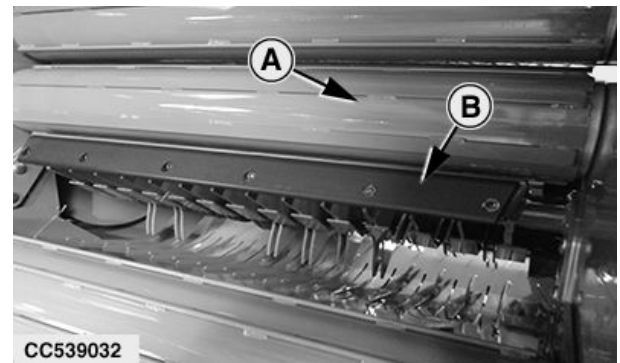
Install Roll No. 2 Scraper

The recommended factory configuration is only with plastic deflector (B) installed in the chamber.

Only when crop sticks around roll n°2 (A) in difficult condition, the machine can be equipped with a scraper.

A—Roll No. 2

B—Deflector



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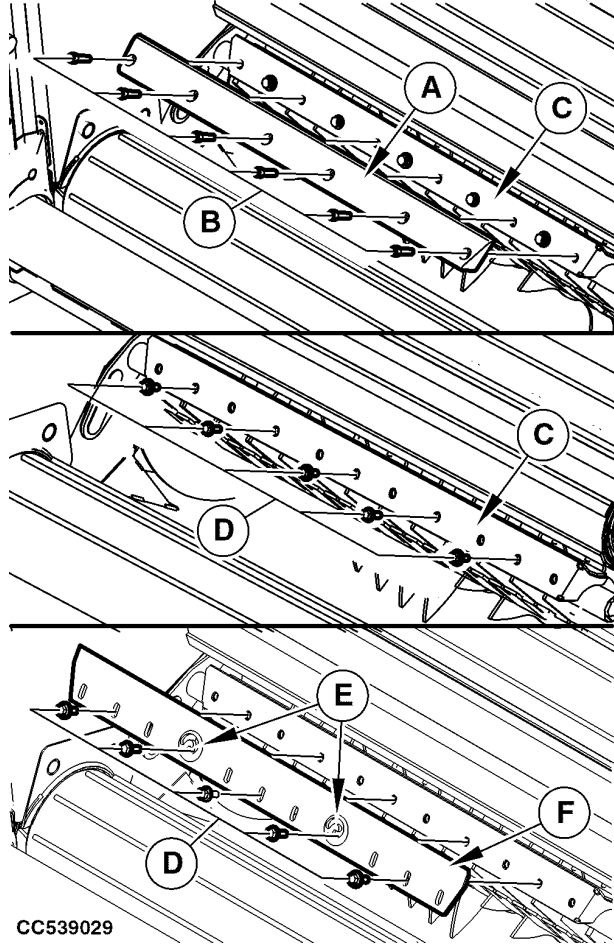
To install the scraper, proceed as follows:

1. Fully open the gate.
2. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
3. Lock gate. See Secure Gate Safely in Safety section.
4. Remove screws (B).
5. Remove deflector (A).
6. Remove screws (D).
7. Remove scraper (F) from storage. See Store Roll No. 2 Scraper in this section
8. Install scraper (F) and eccentric (E) on rotor stripper (C).
9. Install screw (D).

NOTE: Do not tight screw to adjust the scraper.

A—Deflector
B—Screw
C—Rotor Stripper

D—Screw
E—Eccentric
F—Scraper



CC539029

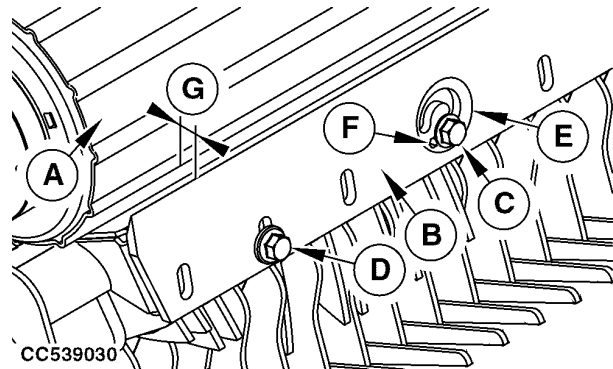
ga87848,1687263736773 -19-28JUN23-2/4

CC539029 —UN—29JUN22

10. Adjust scraper (B) as close as possible to roll (A) by turning eccentrics (E) clockwise by using appropriate tool in hexagonal shapes (F). Leave enough space (G) to avoid any contact with roll (A).
11. Manually rotate baler to check that there is no interference between roll (A) and scraper (B). See Service Machine Safely in Safety section.
12. Tighten scraper fixing screws (C) then (D) to specified torque:

Specification

Scraper Fixing
Screws—Torque..... 111 N·m
(82 lb·ft)



CC539030

A—Upper Starter Roll
B—Scraper
C—Scraper Fixing Screw
D—Scraper Fixing Screw

E—Eccentric
F—Hexagonal Shape
G—Space

Continued on next page

ga87848,1687263736773 -19-28JUN23-3/4

CC539030 —UN—29JUN22

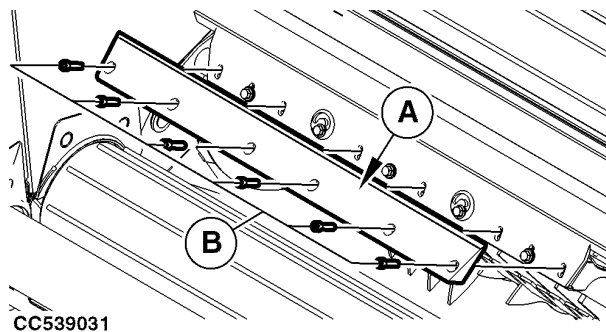
13. Install deflector (A).

14. Install and tighten screws (B) to specified torque:

Specification	
Deflector	
Screws—Torque.....	111 N·m (82 lb·ft)

A—Deflector

B—Screw



CC539031 —UN—29JUN22

ga87848,1687263736773 -19-28JUN23-4/4

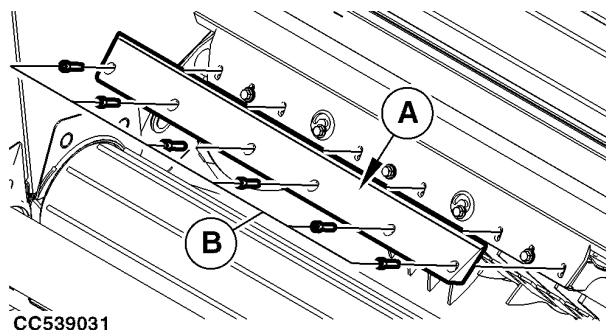
Remove Roll No. 2 Scraper

If the net wraps around the rotor, or if crop accumulates on top of the scraper, remove the scraper as follows:

1. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
2. Lock gate. see Secure Gate Safely in Safety section.
3. Remove screws (B).
4. Remove deflector (A).

A—Deflector

B—Screw



CC539031 —UN—29JUN22

Continued on next page

ga87848,1687264271209 -19-27JUN23-1/2

5. Remove screws (A).
6. Remove scraper (C) and eccentric (B).
7. Store scraper (C) and eccentric (B). See Store Roll No. 2 Scraper in this section.
8. Install tighten screws (A) to specified torque:

Specification

Deflector
Screws—Torque..... 111 N·m
(82 lb·ft)

9. Install deflector (F).

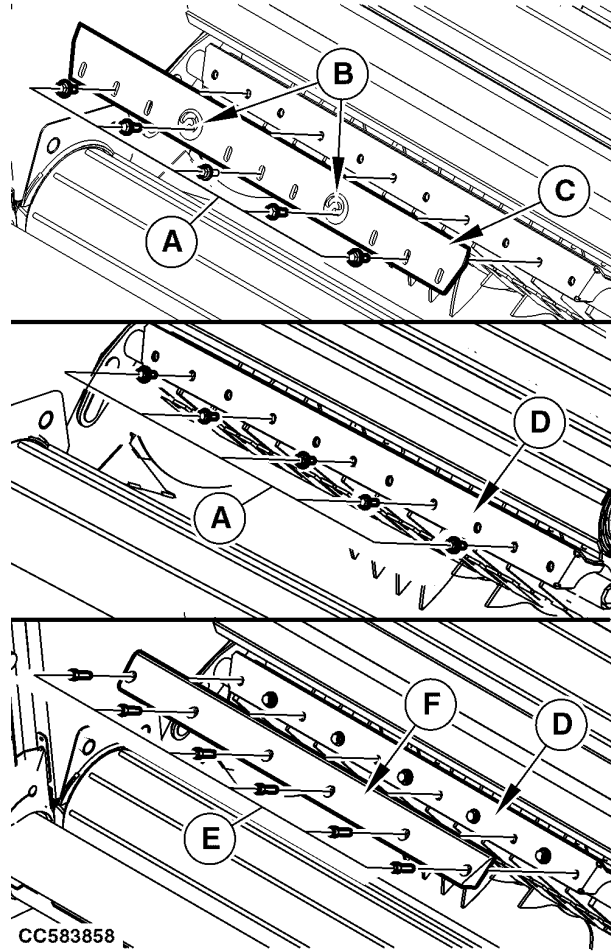
10. Install and tighten screws (E) to specified torque:

Specification

Deflector
Screws—Torque..... 111 N·m
(82 lb·ft)

A—Screw
B—Eccentric
C—Scraper

D—Rotor Stripper
E—Screw
F—Deflector



ga87848,1687264271209 -19-27JUN23-2/2

CC583858 —UN—21JUN23

Store Roll No. 2 Scraper

For machine equipped with twine binding system, store scraper (F) on the twine box (G).

For machine not equipped with twine binding system, store scraper (F) on the front cover (H).

To remove the scraper from storage position, proceed as follows:

1. Remove nuts (A).
2. Remove screws (D).
3. Remove scraper (E) and eccentric (F).
4. Remove washers (B).
5. Remove washers (C).

To store the scraper, proceed as follows:

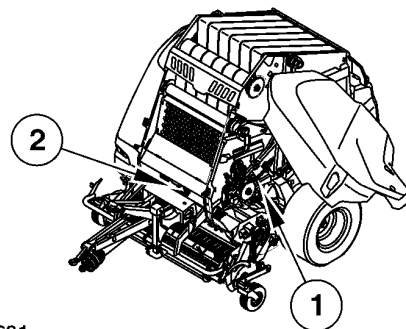
1. Install washers (C).
2. Install washers (B).
3. Install scraper (E) and eccentric (H).
4. Install screws (D).
5. Install nuts (A).

1—Storage Location for
Machine Equipped with
Twine Binding System

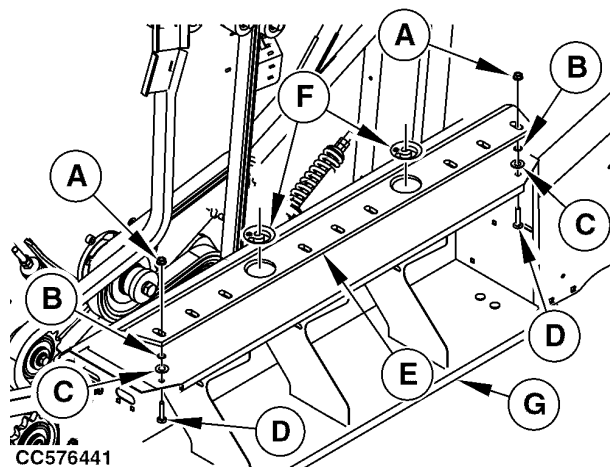
2—Storage Location for
Machine Not Equipped with
Twine Binding System

A—Nut
B—Washer
C—Washer

D—Screw
E—Scraper
F—Eccentric
G—Twine Box
H—Front Cover

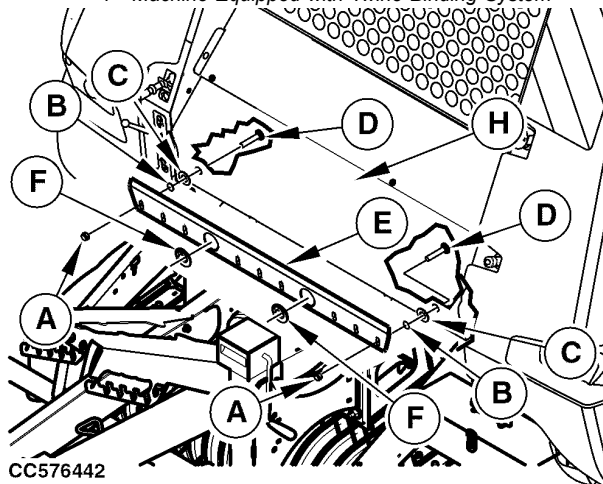


CC398691



CC576441

1—Machine Equipped with Twine Binding System



CC576442

2—Machine Not Equipped with Twine Binding System

ga87848,1684761744990 -19-27JUN23-1/1

CC398691 —UN—09JAN20

CC576441 —UN—22MAY23

CC576442 —UN—22MAY23

Install Center Starter Roll (No. 2) Twine Deflector

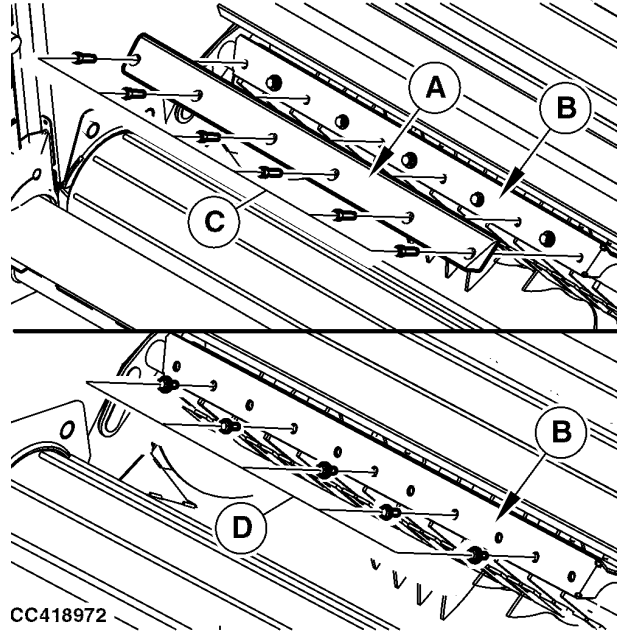
install the twine deflector if the twine is wrapped around the rotor. Proceed as follows:

1. Fully open the gate and secure it.

⚠ CAUTION: Make sure that gate is locked. If gate is not locked while performing this procedure, the gate could close suddenly causing injury or death.

2. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove the key.
3. Open left-hand side door.
4. Remove center starter roll (No. 2) drive chain.
5. Remove screws (C).
6. Remove deflector (A).
7. Remove screws (D).

NOTE: Remove scrapper if equipped.



CC418972

A—Deflector
B—Rotor Stripper

C—Screw
D—Screw

CC418972 —UN—16DEC20

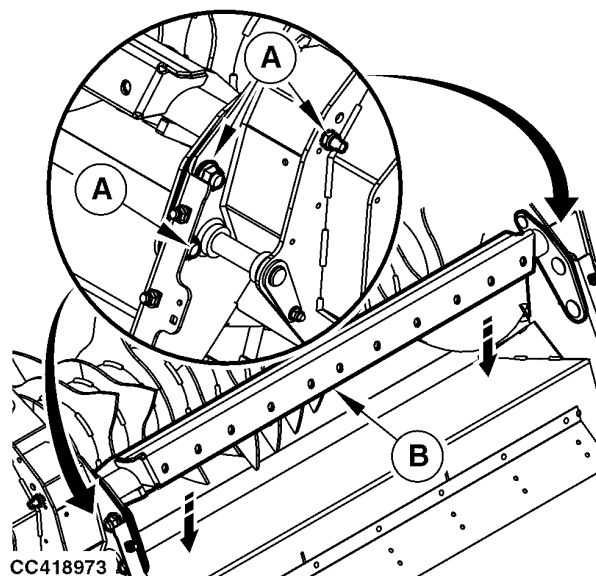
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GA87848,0001314 -19-09JUL21-1/4

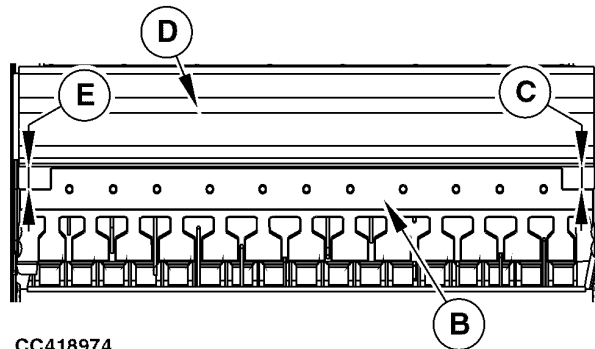
8. Loosen screw (A).
9. Fully lower rotor stripper (B).
10. Make sure that the distance (C) and (E) are the same on both side of the machine.
11. Tighten screw (A).

A—Screw
B—Rotor Stripper
C—Distance

D—Center Starter Roll (No. 2)
E—Distance



V451M, V461M Rotor Stripper Shown



V451M, V461M Rotor Stripper Shown

Continued on next page

GA87848,0001314 -19-09JUL21-2/4

CC418973 —UN—16DEC20

CC418974 —UN—16DEC20

12. Install twine deflector (A) on rotor stripper (B).
13. Install screws (C) until the head is in contact with twine deflector (A).
14. Use a tool to push and maintain the twine deflector to obtain the maximal possible gap (E) between the twine deflector (A) and center starter roll (No. 2) (D).

Specification

Twine Deflector-to-
Center Starter Roll (No.
2)—Gap..... Maximum Possible

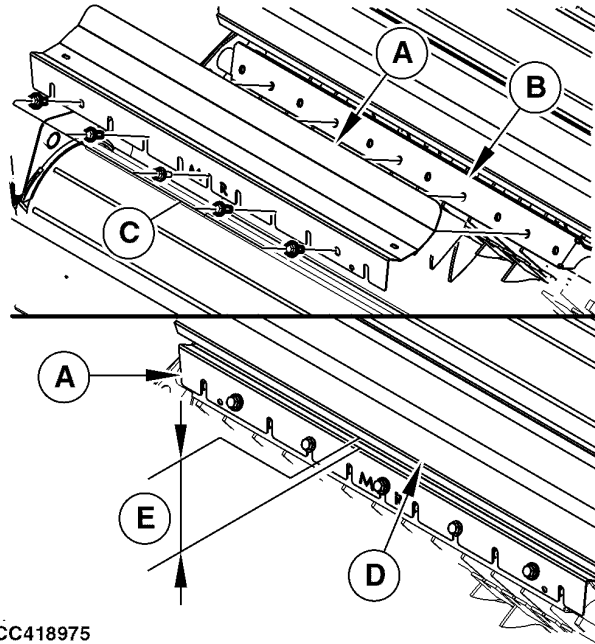
15. Tighten screws (C) to the specified torque:

Specification

Deflector
Screw—Torque..... 111 N·m
(82 lb·ft)

A—Twine Deflector
B—Rotor Stripper
C—Screw

D—Center Starter Roll (No. 2)
E—Gap



CC418975

CC418975—UN—16DEC20

GA87848,0001314 -19-09JUL21-3/4

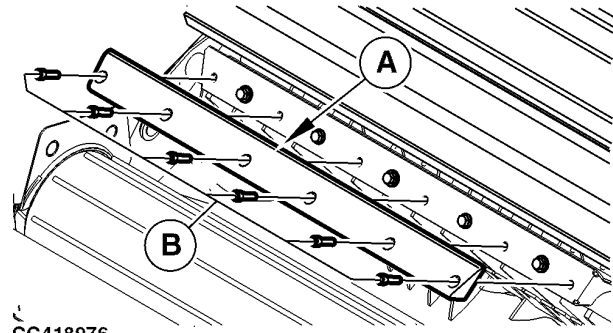
16. Install deflector (A).
- NOTE: Do not install the scrapper.*
17. Install and tighten screws (B) to the specified torque:

Specification

Deflector
Screw—Torque..... 111 N·m
(82 lb·ft)

A—Deflector

B—Screw



CC418976

CC418976—UN—16DEC20

GA87848,0001314 -19-09JUL21-4/4

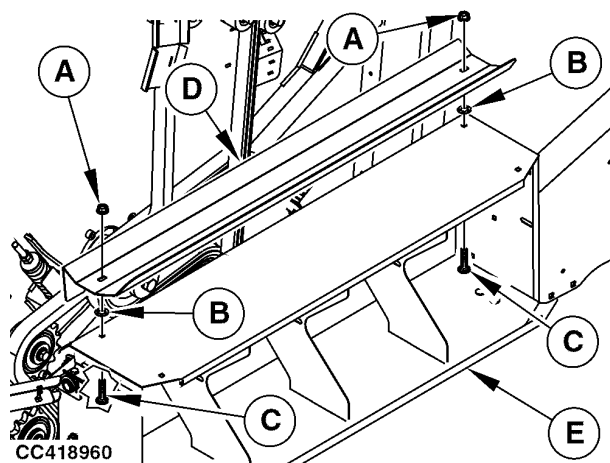
Store Center Starter Roll (No. 2) Twine Deflector

To remove twine deflector (D) from its storage, proceed as follows:

1. Remove nuts (A).
2. Remove screws (C).
3. Remove twine deflector (D).
4. Install screws (C) on twine box (E).
5. Install nuts (A) on screws (C).

To store twine deflector (D), proceed as follows:

1. Remove nut (A).
2. Remove screw (C).
3. Install washer (B) on twine box (D).
4. Install twine deflector (D) on twine box (E) as shown.
5. Install screws (C).
6. Install nuts (A).



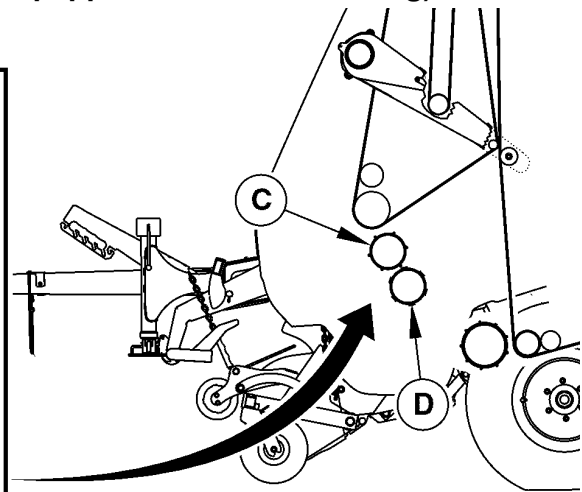
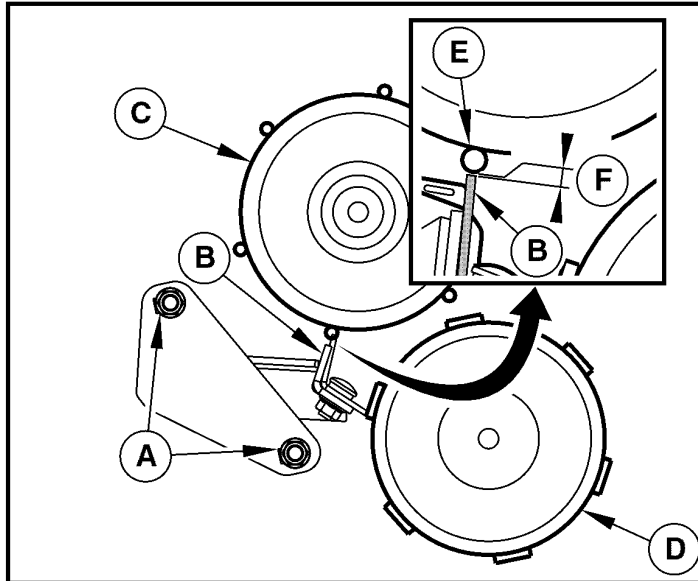
A—Nut
B—Washer
C—Screw

D—Twine Deflector
E—Twine Box

GA87848,0000F9E -19-07SEP20-1/1

CC418960 —UN—14DEC20

Adjust Upper Starter Roll (No. 3) Scraper (Machine Equipped with Twine Binding)



CC516998 —UN—09JUL21

CC516998

A—Nut
B—Scraper
C—Upper Starter Roll

D—Lower Starter Roll
E—Upper Starter Roll Bar

F—Distance

1. Engage park brake and/or place transmission in PARK. Shut off the engine of the tractor and remove the key.
2. Remove the starter roll drive chain. See [Baler Chain Identification](#) in this section to locate the chain.
3. Lower the pickup and remove the chains. See [Adjust Pickup Downstops](#) in Operating the Baler—General Purposes.
4. If equipped, remove roller baffle.
5. Loosen nuts (A) on both side.
6. Move scraper (B) as close as possible to upper starter roll bar (C) and maintain it.
7. Tighten nuts (A).
8. Check that distance (F) between upper starter roll bar (C) and scraper (B) is within specification among its entire width:

Specification

Upper Starter Roll-to-
Scraper—Distance.....As close as possible without contact.

9. Fully rotate upper starter roll (C) to check for contacts. Go to step 3 as required.
10. If equipped, install roller baffle.
11. Install pickup chains. See [Adjust Pickup Downstops](#) in Operating the Baler—General Purposes.
12. Install the starter roll drive chain.

GA87848,0001315 -19-09JUL21-1/1

Adjust Lower Rear Gate Roll (No. 9) Scraper

To adjust scraper proceed as follows:

1. Check if distance (D) on both end of scraper (B). If it is OK go to step 5, otherwise go to next step.
2. Loosen screws (C) on both side.
3. Move scraper bracket to obtain the same distance (D) on both scraper (B) end.
4. Tighten screws (C) on right hand side then on left hand side to following specification.

Specification

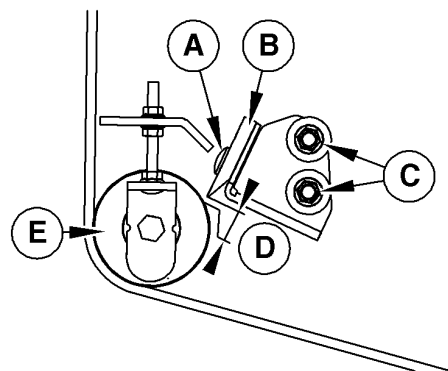
Lower Rear Gate Roll	
(No. 9) Scraper Bracket	
Screws—Torque.....	65 N·m
	(48 lb·ft)

5. Check if distance (D) is within specification, if necessary go to next step to adjust distance (D).

Specification

Lower Rear Gate Roll	
(No. 9) Scraper-to-Roll	
(No. 9)—Distance.....	2—3 mm
	(3/32—1/8 in)

6. Loosen screws (A).
7. Move scraper (B) to obtain the specified distance (D) between scraper (B) and roll (E).



CC329290

A—Screw
B—Scraper
C—Screw

D—Distance
E—Lower Rear Gate Roll (No. 9)

8. Tighten screws (A) to the following specification.

Specification

Lower Rear Gate Roll (No. 9)	
Scraper-to-Bracket	
Screws—Torque.....	65 N·m
	(48 lb·ft)

NB02380,00004D9 -19-31AUG17-1/1

CC329290—UN—05SEP17

Adjust Rotor Auger Scrapers

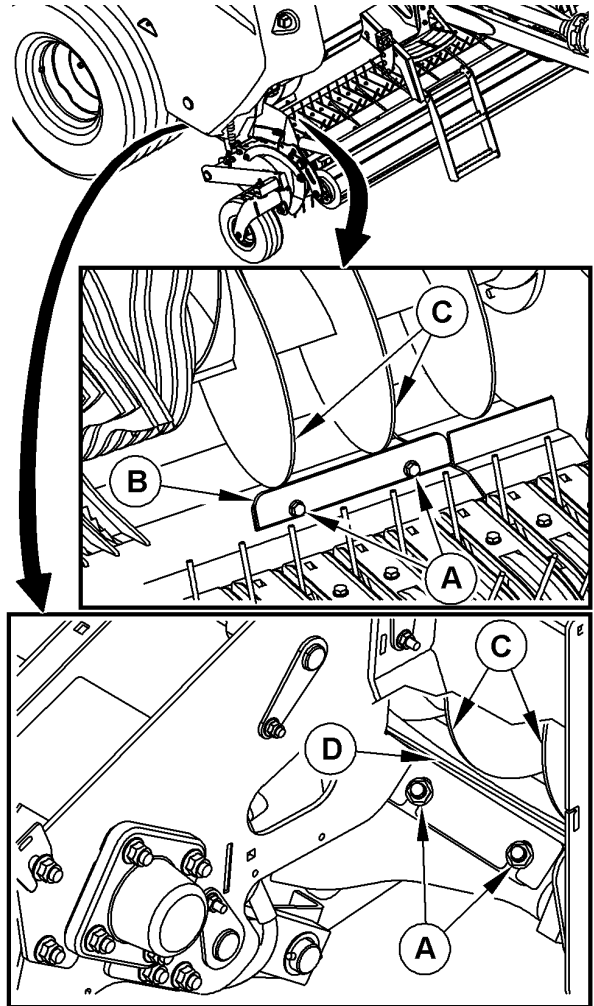
1. Fully raise the drop floor. See Unplug Pickup in Operating Baler Application section.
2. Loosen screws (A).
3. Position and maintain scrapers (B) and (D) as close as possible to rotor auger (C) without contact.
4. Rotate baler to check for no interference between rotor auger (C) and scrapers (B) and (D).
5. Tighten screws (A).
6. Repeat procedure on the other side.

A—Screw

B—Front Scraper of Rotor Auger

C—Rotor Auger

D—Rear Scraper of Rotor Auger



CC202090

CC202090 —UN—18APR13

ga87848,1682686214702 -19-31MAY23-1/1

Sharpen Net Binding Knife

CAUTION: Prevent personal injury by wearing gloves to handle knife.

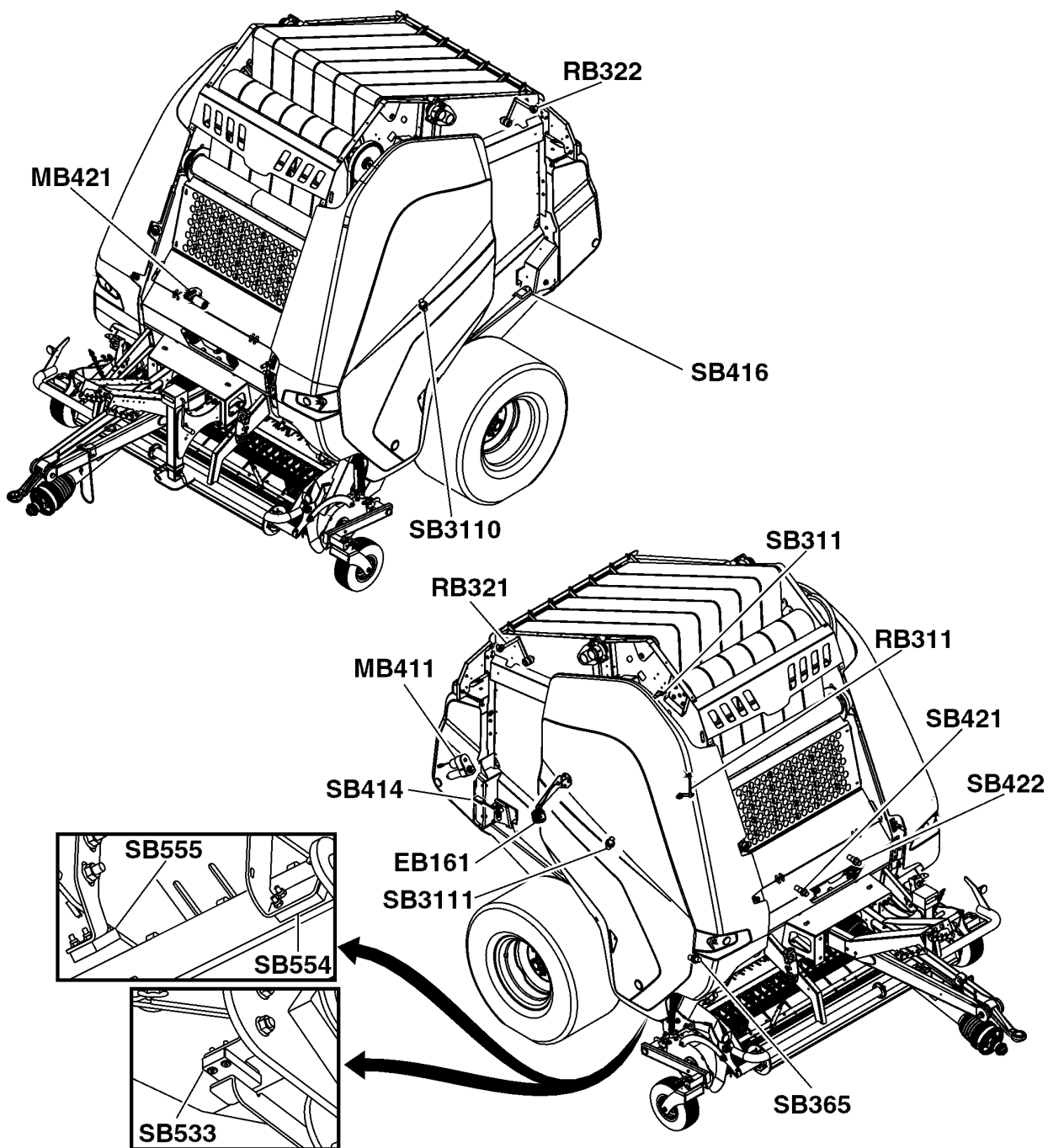
1. Remove any residue from beveled edge.
2. Clamp knife to a bench or table.
3. Draw-file the beveled edge maintaining a 25° angle.
4. Keep the sharpened edge straight, within 1 mm (0.04 in.).



E36336 —UN—18DEC91

ga87848,1680270381989 -19-31MAR23-1/1

Locate Machine Electrical Components



CC576437

EB161—Rear Gate Camera
 MB411—Net Actuator
 MB421—Twine Actuator
 RB311—Bale Diameter Potentiometer
 RB321—Left Bale Shape Potentiometer

RB322—Right Bale Shape Potentiometer
 SB311—Bale Oversize Switch
 SB3110—Left Gate Latch Sensor
 SB3111—Right Gate Latch Sensor

SB365—Baler Rotation Speed Sensor
 SB414—Net Cut Sensor
 SB416—B-Wrap Sensor (If Equipped)
 SB421—Left Twine Pulley Sensor
 SB422—Right Twine Pulley Sensor

SB533—Drop Floor Sensor
 SB554—Precutter Knife Sensor
 SB555—Precutter Knife Sensor

ga87848,1683010497929 -19-23MAY23-1/1

CC576437 —UN—04MAY23

Identify Sensor Detection Area

To ensure a proper detection of the target by the sensor, check that sensor detection area (C) is correctly oriented to the target. Sensor detection area (C) is located only on the same side as both spot facings (B).

If sensor has been replaced or cap screws (A) have been removed, tighten cap screws (A) to specified torque:

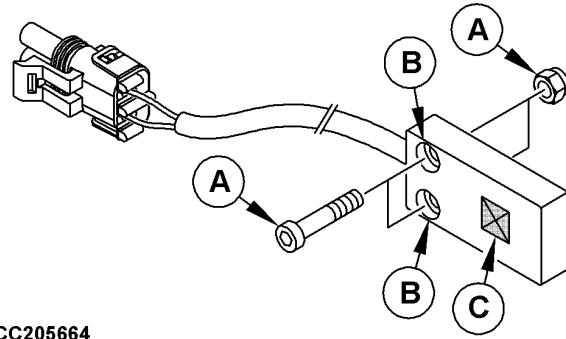
Specification

Cap Screws—Torque..... 1.2—1.8 N·m
(0.9—1.3 lb.-ft.)

A—Cap Screw
B—Spot Facing

C—Sensor Detection Area

CC205664



CC205664 —UN—10OCT13

NB02380,0000417 -19-24MAY17-1/1

Identify B-Wrap Sensor Detection Area (if Equipped)

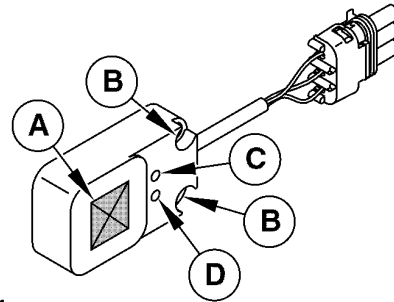
To ensure a proper detection of the target by the sensor, check that sensor detection area (A) is correctly oriented to the target. Sensor detection area (A) is located only the same side as both bores (B). When installed, sensor must be oriented face to the belt.

John Deere B-Wrap™ sensor is equipped with an Orange LED (C), and a green LED (D). Green LED (D) indicates that sensor is powered, and orange LED (C) indicates that the sensor detects the target.

A—B-Wrap Sensor Detection Area
B—Bores

C—Orange LED
D—Green LED

CC230304



CC230304 —UN—19FEB16

John Deere B-Wrap is a trademark of Tama Plastic Industry

TL81334,00003B5 -19-28JUN18-1/1

Adjust Twine Pulley Sensors SB421 and SB422

1. Raise dust shield to provide access.
2. Adjust nut (A) to obtain specified distance (B) between twine pulley (C) and bracket (D):

Specification

Twine Pulley-to-
Bracket—Distance (B).....40—42 mm
(1-9/16 — 1-21/32 in)

3. Rotate pulley (C) so that magnet (F) is aligned with sensor (E).
4. Loosen lock nuts (H), then slide sensor (E) to obtain specified distance (G):

Specification

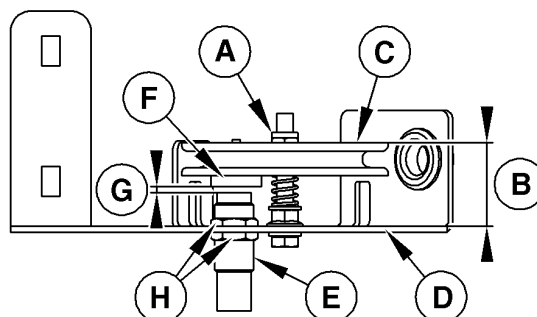
Sensor-to-
Magnet—Distance (G).....2—4 mm
(5/64—10/64 in)

5. Tighten lock nuts (H) to the following specification:

Specification

Lock Nuts—Torque.....2 N·m
(1.5 lb·ft)

6. Rotate pulley (C) several times to check that there is no interference between sensor (E) and magnet (F).



CC1035274

A—Nut
B—Distance
C—Twine Pulley
D—Bracket

E—Sensor
F—Magnet
G—Distance
H—Lock Nuts

7. Repeat procedure on the opposite side.
8. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.

TL81334,000069B -19-28MAY19-1/1

CC1035274 —UN—10FEB12

Adjust Drop Floor Sensor SB533

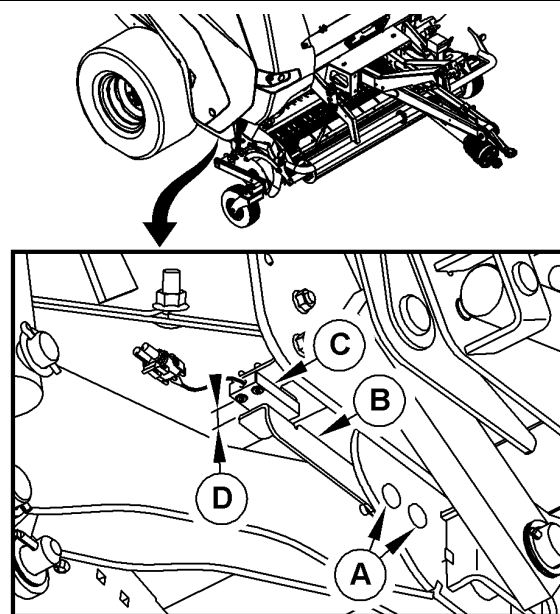
To adjust drop floor sensor (C), proceed as follows:

1. Fully raise drop floor.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine and remove key.
3. Check that sensor (C) is mounted properly. See [Identify Sensor Detection Area](#) in this section.
4. Loosen cap screws (A).
5. Position and maintain target (B) in order to obtain specified distance (D) between sensor (C) and target (B).

Specification

Sensor-to-
Target—Distance.....0.5—2 mm
(1/64—3/32 in)

6. Tighten cap screws (A).
7. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.



CC330695

A—Cap Screw
B—Target

C—Drop Floor Sensor
D—Distance

TL81334,000069C -19-28MAY19-1/1

CC330695 —UN—22SEP17

Adjust Precutter Knife Sensors SB554 and SB555

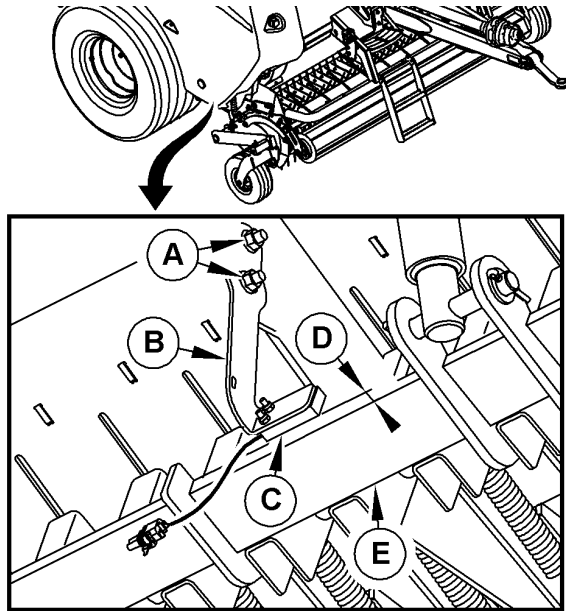
Sensor for Precutter Knife Set 1 (Baler with Precutter, 13 or 25 Knives):

1. Engage precutter knives. See [Retract or Engage Precutter Knives Function](#) in Operating Baler Application section.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine and remove key.
3. Close precutter knife shut-off valves. See [Replace Precutter Knives](#) in this section.
4. Check that sensor (C) is mounted properly. See [Identify Sensor Detection Area](#) in this section.
5. Loosen cap screws (A).
6. Position and maintain sensor bracket (B) in order to obtain specified distance (D) between sensor (C) and bar (E).

Specification

Sensor to
Bar—Distance.....0.5—2 mm
(1/32—3/32 in)

7. Retighten cap screws (A).
8. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.



CC205234

Precutter Knife Set 1 with 13 Knives

- | | |
|----------------------------------|---------------------------------|
| A—Cap Screw | D—Distance |
| B—Sensor Bracket | E—Precutter Knife Selection Bar |
| C—Precutter Knife Sensor (Set 1) | |

CC205234 —UN—10OCT13

Continued on next page

ga87848,1682412164764 -19-25APR23-1/2

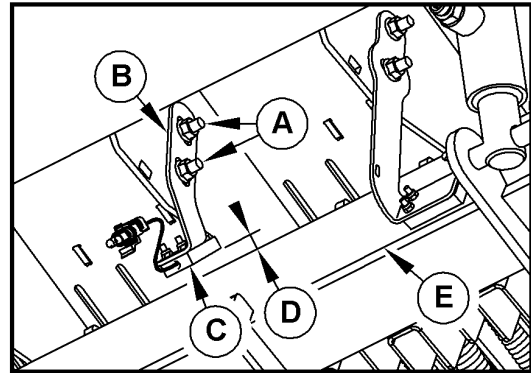
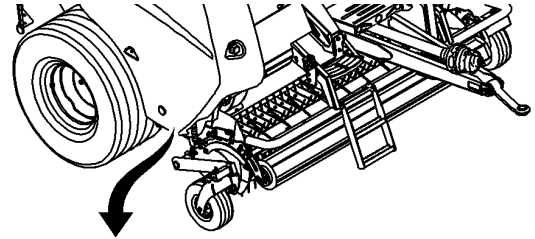
Sensor for Precutter Knife Set 2 (Baler with Precutter, 25 Knives only):

1. Engage precutter knives. See Retract or Engage Precutter Knives Function in Operating Baler Application section.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine and remove key.
3. Close precutter knife shut-off valves. See Replace Precutter Knives in this section.
4. Check that sensor (C) is mounted properly. See Identify Sensor Detection Area in this section.
5. Loosen cap screws (A).
6. Position and maintain sensor bracket (B) in order to obtain specified distance (D) between sensor (C) and tube (E).

Specification

Sensor to
Tube—Distance.....0.5—2 mm
(1/32—3/32 in)

7. Retighten cap screws (A).
8. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC205235

Precutter Knife Set 2 with 25 Knives

A—Cap Screw
B—Sensor Bracket
C—Precutter Knife Sensor (Set 2)

D—Distance
E—Precutter Knife Selection Tube

ga87848,1682412164764 -19-25APR23-2/2

CC205235 —UN—10OCT13

Adjust Baler Rotation Speed Sensor SB365

1. Rotate baler by hand so that gear (A) is in position shown. See Service Machine Safely in Safety section.
2. Loosen lock nuts (B) then slide sensor (C) until specified distance (D) is achieved.

Specification

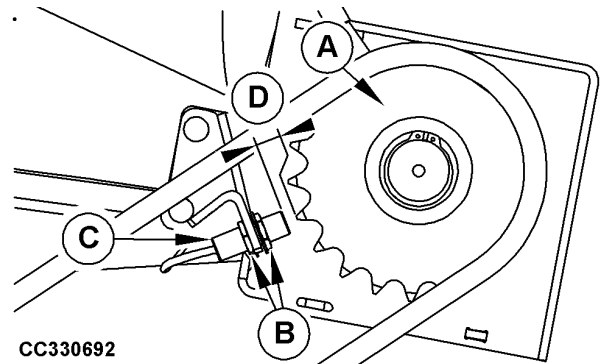
Sensor to
Gear—Distance.....2—4 mm
(5/64—10/64 in)

3. Check that center line of sensor (C) is aligned with center line of gear (A).
4. Tighten lock nuts (B) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
(17 lb·ft)

5. Rotate baler several times to check that there is no interference between sensor (C) and gear (A).
6. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC330692

A—Gear
B—Lock Nut

C—Baler Rotation Speed Sensor
D—Distance

ga87848,1684839459837 -19-23MAY23-1/1

CC330692 —UN—08SEP17

Adjust Gate Latch

IMPORTANT: To avoid gate opening during baler operation, gate latch (G) must be correctly adjust.

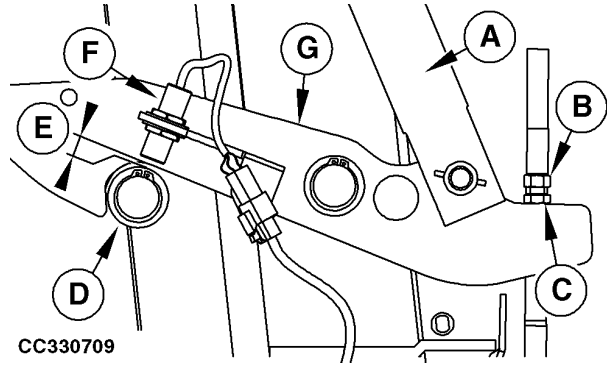
1. Fully close gate. Gate hydraulic cylinders must be fully retracted.
2. If necessary, remove net roll and/or twine balls compartment to provide access.
3. Check that distance (E) is within specification. If necessary, proceed as follows.

Specification

Gate Latch-to-Gate Latch

Bushing—Distance.....1—2 mm
(3/64—5/64 in)

4. Loosen counter-nut (B).
5. Adjust nut (C) to obtain specified distance (E).
6. Tighten counter-nut (B).
7. Check that gate latch sensor is correctly adjusted. See [Adjust Gate Latch Sensors SB3310 and SB3311](#) in this section.



A—Gate Cylinder
B—Counter-Nut
C—Nut
D—Gate Latch Bushing

E—Distance
F—Sensor
G—Gate Latch

8. Repeat procedure on the opposite side.
9. If removed, reinstall net roll and/or twine balls compartment.

GA87848,00006E7 -19-28JUN18-1/1

Adjust Gate Latch Sensors SB3310 and SB3311

1. Fully close gate. Gate hydraulic cylinders must be fully retracted.
2. If necessary, remove net roll and/or twine balls compartment to provide access.
3. Check that gate is correctly latched. If necessary, adjust gate latch. See [Identify Sensor Detection Area](#) in this section.
4. Loosen lock nuts (A) then slide sensor (D) until specified distance (F) is achieved.

Specification

Sensor-to-

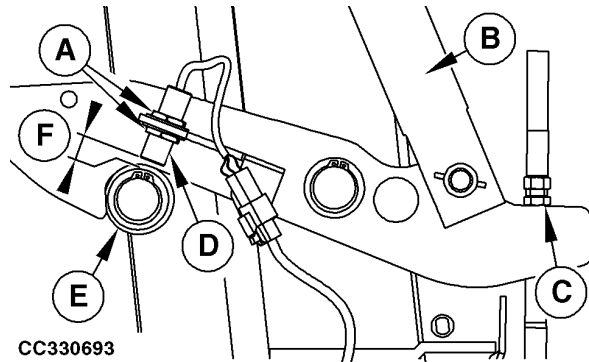
Bushing—Distance.....1—2 mm
(3/64—5/64 in)

5. Check that center line of sensor (D) is aligned with bushing (E).
6. Tighten lock nuts (A) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
(17 lb·ft)

7. Repeat procedure on the opposite side.



A—Lock Nut
B—Gate Cylinder
C—Adjust Screw

D—Sensor
E—Gate Latch Bushing
F—Distance

8. Check sensors detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.
9. If removed, reinstall net roll and/or twine balls compartment.

ga87848,1683287204613 -19-05MAY23-1/1

Adjust Net Cut Sensor SB414

1. Remove net binding cover to provide access.
2. Loosen nuts (B) then slide sensor (C) to specified distance (A).

Specification

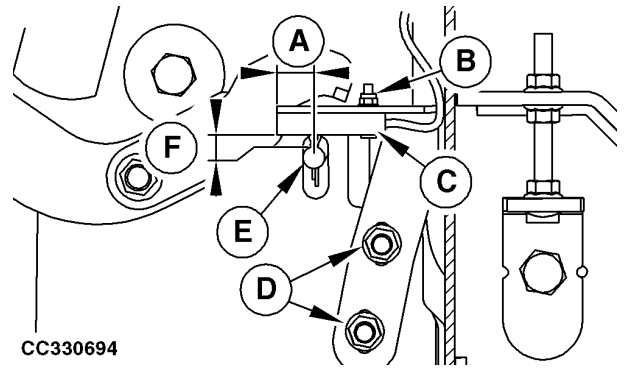
Sensor to Net Binding
Rod—Distance.....15—19 mm
(19/32—3/4 in)

3. Tighten nuts (B).
4. Loosen nuts (D) then slide sensor (C) to specified distance (F).

Specification

Sensor to Net Binding
Rod—Distance.....0.5—2 mm
(1/64—3/32 in)

5. Tighten nuts (D).
6. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



A—Distance
B—Nut
C—Net Cut Sensor

D—Nut
E—Net Binding Rod
F—Distance

7. Install net binding cover.

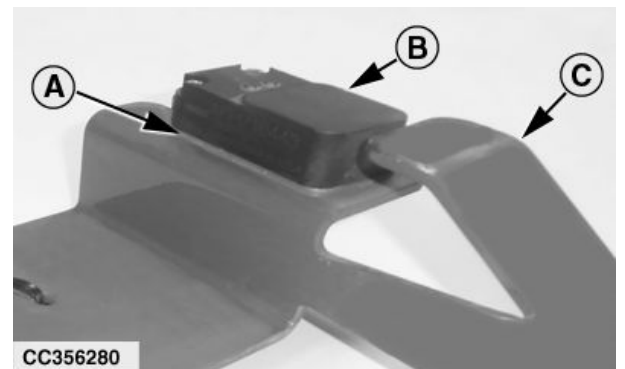
TL81334,0000698 -19-28MAY19-1/1

Adjust B-Wrap Sensor SB416 (If Equipped)

Sensor (B) is mounted on bracket (C) using screws, lock nuts, and Shims (A). When installed, sensor (B) must be oriented face to belt.

A—Shim
B—Sensor

C—Bracket



TL81334,00003B7 -19-02AUG18-1/2

Distance (C) between top of sensor (B), and belt (A) should be within specification:

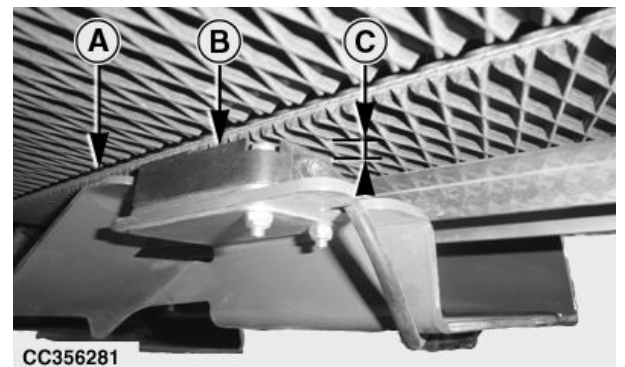
Specification

Sensor to
Belt—Distance.....4—8 mm (0.16—0.31 in)

Add, or remove Shims between sensor (B), and bracket as needed to obtain specified distance.

A—Belt
B—Sensor

C—Distance



TL81334,00003B7 -19-02AUG18-2/2

Adjust Bale Discharging Ramp Sensor SB343

1. Loosen lock nuts (A).
2. Slide sensor (B) until specified distance (C) is achieved.

Specification

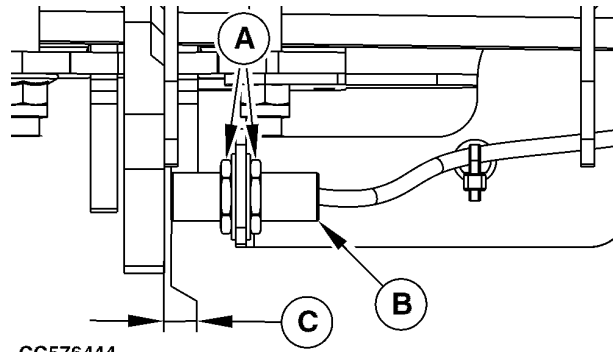
Sensor to
Target—Distance.....1.5—3.5 mm
(1/16—1/8 in)

3. Tighten lock nuts (A) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
(17 lb·ft)

4. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.



CC576444

A—Lock Nut
B—Bale Discharging Ramp
Sensor

C—Distance

ga87848,1684845442118 -19-23MAY23-1/1

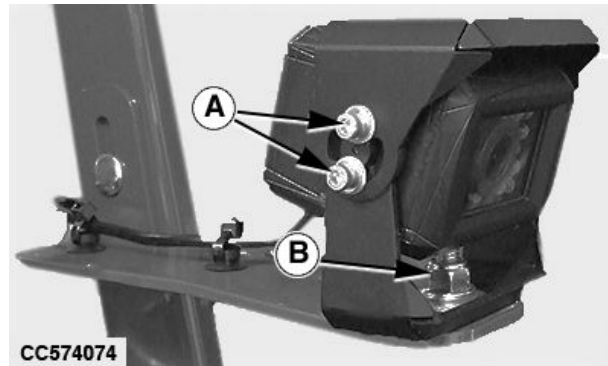
CC576444 —UN—23MAY23

Adjust Orientation of Camera EB161

1. Loosen screws (B) and (A) on both sides.
2. Adjust the orientation of the camera.
3. Tighten screws (B) and (A) on both sides.

A—Screw

B—Screw



CC574074

ga87848,1682080626799 -19-21APR23-1/1

CC574074 —UN—19APR23

Twine Binding System Adjustment List

The following adjustments should be carried out when twine binding problems occur during field operation.

- Adjust twine system arm position.
- Adjust twine system actuator position.
- Adjust twine tension plate clamp.
- Adjust twine tension plate.
- Adjust pulley scraper.
- Replace twine system knife.
- Adjust twine cut length.
- Twine binding actuator calibration: see [Calibrate Twine Binding Actuator MB421](#) in Baler Application Service section.

GA87848,0000FA2 -19-10SEP20-1/1

Adjust Twine Arm Position (Tube Arms)

1. Open twine binding cover (A).
2. With twine arm (E) and (G) retracted, check if distance (F) is within specification.

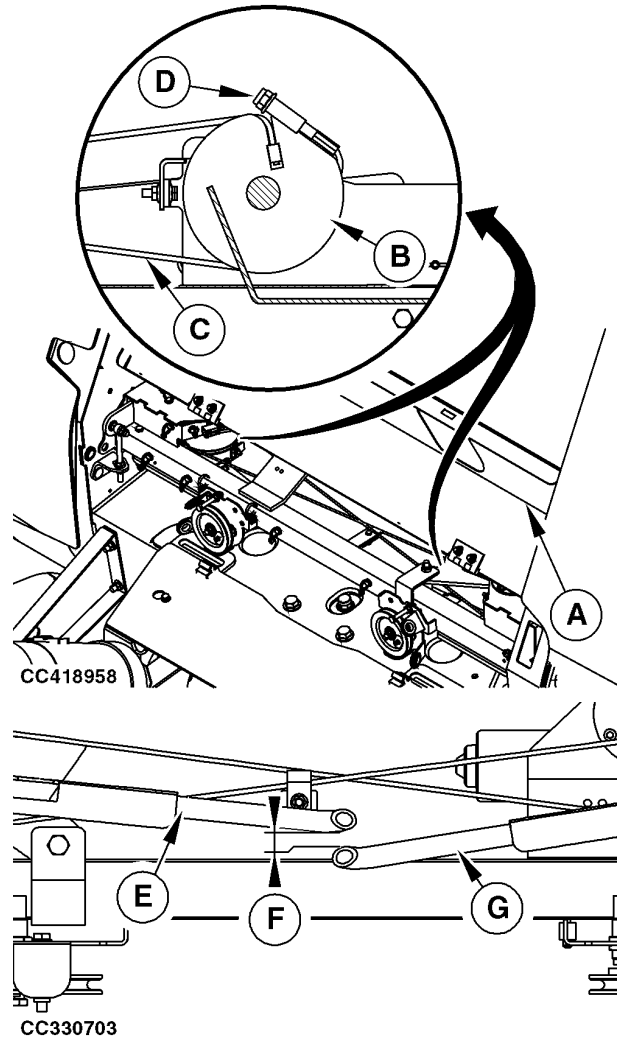
Specification

Left-Twine-Arm-to-Right-Twine-Arm—Distance.....10—14 mm
(25/64—35/64 in)

- If OK, go to step 5
 - If not OK, go to next step
3. • If distance (F) is less than specification, proceed as follows.
 - a. Loosen nut (D) on right-hand side.
 - b. Tighten nut (D) on left-hand side to adjust distance (F).
 - c. Tighten nut (D) on right-hand side.
 - If distance (F) is more than specification, proceed as follows.
 - a. Loosen nut (D) on left-hand side.
 - b. Tighten nut (D) on right-hand side to adjust distance (F).
 - c. Tighten nut (D) on left-hand side.
 4. Check that distance (F) is within specification.
 - If OK, go to next step
 - If not OK, go to step 2

A—Twine Binding Cover
B—Pulley
C—Cable
D—Nut

E—Right Arm
F—Distance
G—Left Arm



CC418958 —UN—14DEC20

CC330703 —UN—22SEP17

Continued on next page

GA87848,0001077 -19-23DEC20-1/3

5. Fully extend twine arm (F).
6. Check that distance (E) follows specification:

Specification

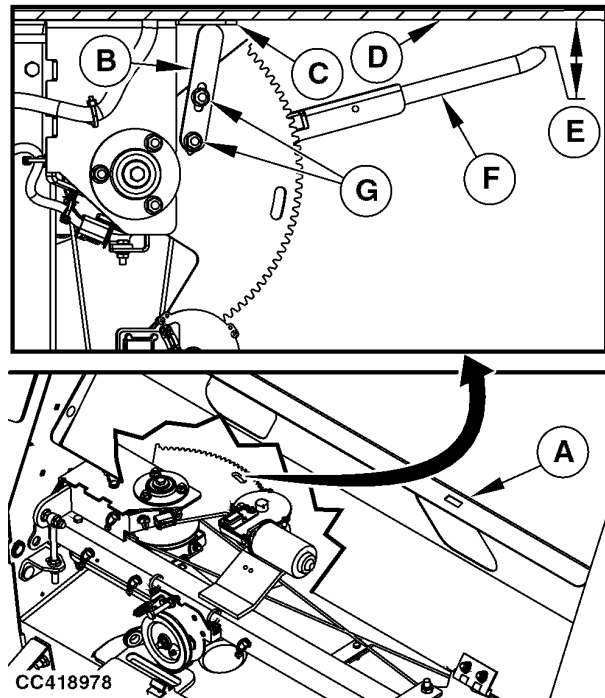
Twine Arm-to-
Bale Chamber
Frame—Distance.....25—35 mm
(1—1-3/8 in)

- If OK: Go to step 10.
- If not OK: Go to next step.

7. Loosen nuts (G).
8. Retract or extend twine arm to obtain specified distance (E).
9. Move stop (B) until contact with bracket (C).
10. Tighten nuts (G).
11. Calibrate twine motor. See [Calibrate Twine Binding Actuator MB421](#) in Baler Application Service section.

A—Twine Binding Cover
B—Stop
C—Twine Binding Bracket
D—Bale Chamber Frame

E—Distance
F—Twine Arm
G—Nut



CC418978

CC418978 —UN—16DEC20

GA87848,0001077 -19-23DEC20-2/3

12. Check that arm (B) is as close as possible to upper starter roll (No. 3) (C) without contact.

Specification

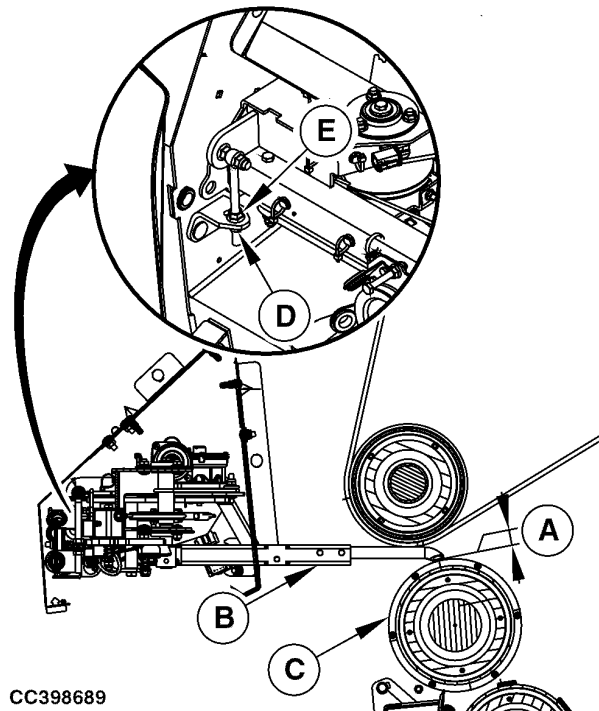
Twine Arm-to-Upper
Starter Roll (No.
3)—Distance.....As close as possible without contact

13. If distance (A) is not within specification, proceed as follows on both side of the twine binding system:

- To increase the distance:
 - a. Loosen screw (E).
 - b. Tighten screw (D).
 - c. Tighten screw (E).
- To decrease the distance:
 - a. Loosen screw (D).
 - b. Tighten screw (E).
 - c. Tighten screw (D).

A—Distance
B—Twine Arm
C—Upper Starter Roll (No. 3)

D—Nut
E—Nut



CC398689

CC398689 —UN—16JAN20

GA87848,0001077 -19-23DEC20-3/3

Adjust Twine Arm Position (Adjustable Arms)

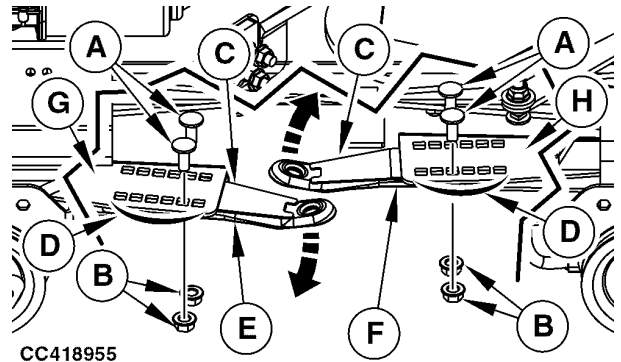
1. Open the gate and secure it.
2. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
3. Open twine binding cover.
4. Remove nuts (B).
5. Remove screws (A).
6. Align holes of spring plates (C) and twine arms extension (E) and (F) with the desired holes (D) of twine arms (G) and (H).

NOTE: Factory setting shown on the illustration:

- *Right-Hand Side Twine Arm (G): 2nd hole from the arm end as shown.*
- *Left-Hand Side Twine Arm (H): 3rd hole from the arm end as shown.*

7. Install screws (A) and nuts (B).

8. Pull twine arm extension (E) and tighten nut (B).



A—Screw
B—Nut
C—Spring Plate
D—Hole

E—Twine Arm Extension
F—Twine Arm Extension
G—Right-Hand Side Twine Arm
H—Left-Hand Side Twine Arm

9. Push twine arm extension (F) and tighten nut (B).

GA87848,0001078 -19-23DEC20-1/4

10. Fully extend twine arms with the monitor.

11. Check that distance (A) is within specification:

Specification

Right-Hand Side Twine

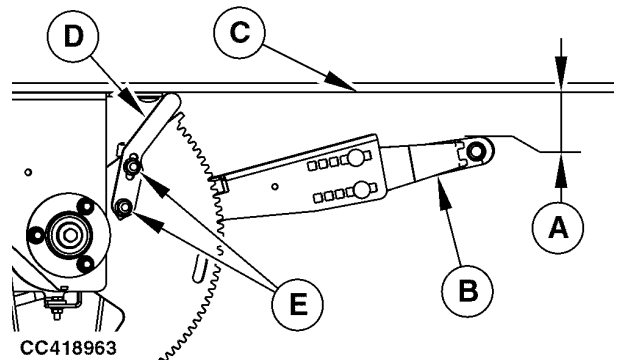
Arm-to-Bale Chamber

Frame—Distance.....25—35 mm
(1—1-3/8 in)

- If OK: Go to step 15.
- If not OK: Go to next step.

12. Adjust distance (A) as follows:

- a. Loosen nuts (E).
- b. Retract or extend twine arm (B) to obtain specified distance (A).
- c. Move stop (D) in contact with baler chamber frame (C).
- d. Tighten nuts (E).



A—Distance
B—Twine Arm
C—Bale Chamber Frame

D—Stop
E—Nut

Continued on next page

GA87848,0001078 -19-23DEC20-2/4

13. Measure distance (B).

NOTE: Distance (B) depends on distance (A).

14. Check that distance (B) is within 0—15 mm of distance (A).

Example of Distance (B) in Relation to Distance (A)

Distance (A)	Distance (B)
25 mm	10—25 mm
30 mm	15—30 mm
35 mm	20—35 mm

- If OK: Go to step 18.
- If not OK: Go to next step.

15. Adjust distance (B) as follows:

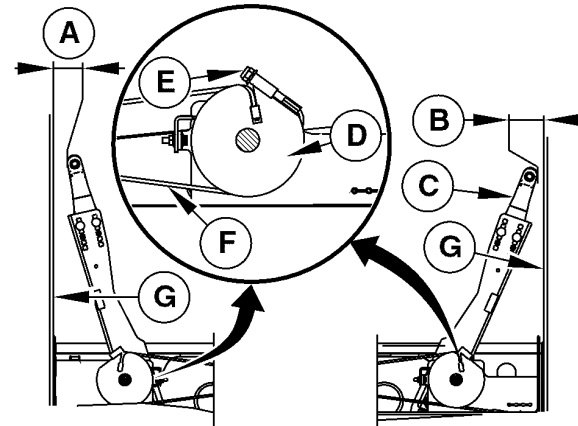
- If distance (B) is less than specification, proceed as follows.

1. Loosen nut (E) on the right-hand side.
2. Tighten nut (E) on the left-hand side to adjust distance (B).
3. Tighten nut (E) on the right-hand side.

- If distance (B) is more than specification, proceed as follows.

1. Loosen nut (E) on the left-hand side.
2. Tighten nut (E) on the right-hand side to adjust distance (B).
3. Tighten nut (E) on the left-hand side.

16. Check that twine arms do not overlap during the binding cycle.



CC418964

A—Distance
B—Distance
C—Twine Arm
D—Pulley

E—Nut
F—Cable
G—Bale Chamber Frame

NOTE: Especially at the end of the cycle.

- If OK: Go to next step.
- If not OK: Increase distance (B). Go to step 15.

17. Calibrate twine motor. See Calibrate Twine Binding Actuator MB421 in Baler Application Service section.

Continued on next page

GA87848,0001078 -19-23DEC20-3/4

CC418964—UN—14DEC20

18. Check that arm (B) is as close as possible to upper starter roll (No. 3) (C) without contact.

Specification

Twine Arm-to-Upper

Starter Roll (No.

3)—Distance.....As close as possible without contact

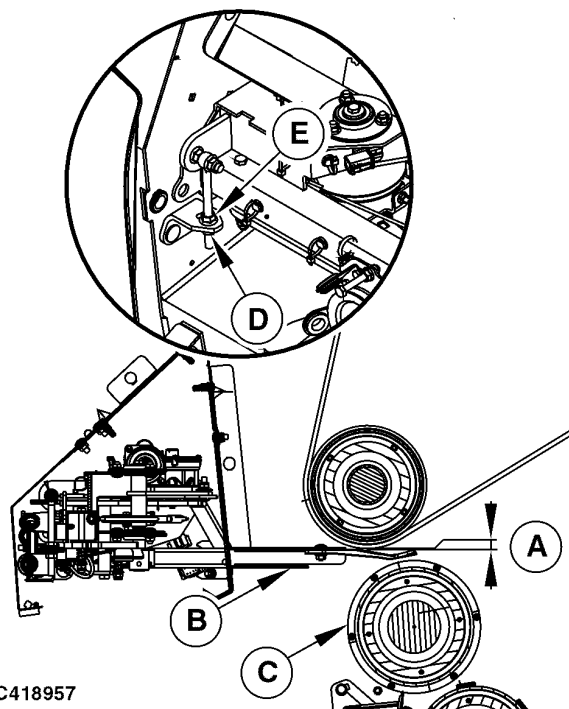
19. If distance (A) is not within specification, proceed as follows on both side of the twine binding system:

- To increase distance (A):
 - a. Loosen screw (E).
 - b. Tighten screw (D).
 - c. Tighten screw (E).
- To decrease distance (A):
 - a. Loosen screw (D).
 - b. Tighten screw (E).
 - c. Tighten screw (D).

20. Close twine binding cover (A).

A—Distance
B—Twine Arm
C—Upper Starter Roll (No 3)

D—Nut
E—Nut



CC418957

GA87848,0001078 -19-23DEC20-4/4

CC418957 —UN—14DEC20

Adjust Twine Binding Actuator Position

1. Open twine binding cover (A).
2. Check if screw (E) is tightened at specified torque.

Specification

Twine-Binding-Sprocket-
Screw—Torque..... 2—4 N·m
(1.5—3 lb·ft)

If necessary, tighten screw (E) to specified torque.

3. Loosen screw (C).
4. Push twine actuator (F) until sprocket tooth (B) is in contact with bottom of rack tooth (D).
5. Tighten screw (C) to specified value.

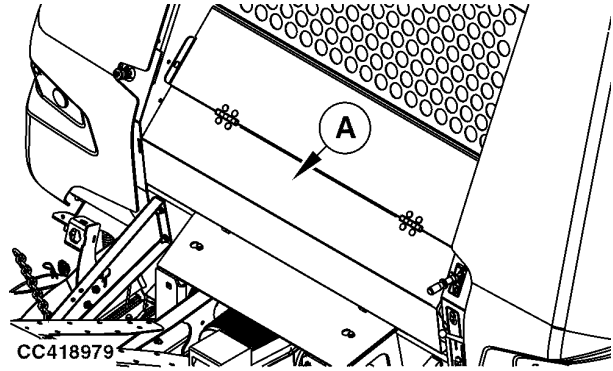
Specification

Twine Binding Actuator
Screw—Torque..... 8—10 N·m
(6—7.5 lb·ft)

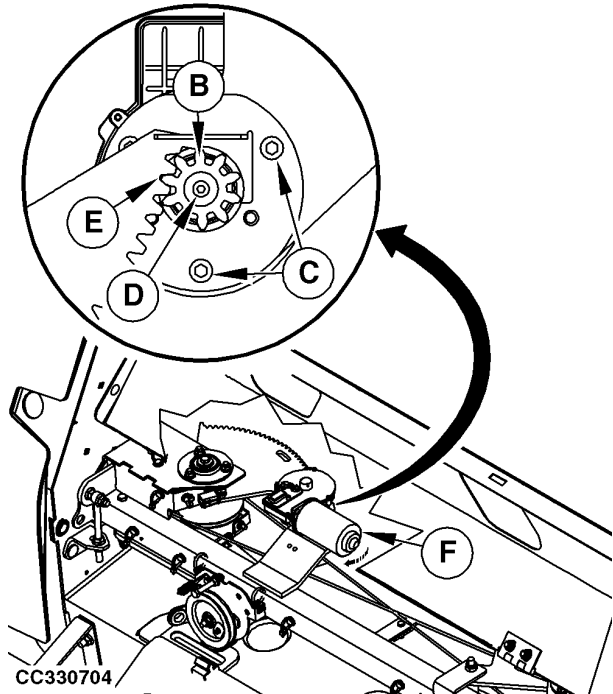
6. Close twine binding cover (A).

A—Twine Binding Cover
B—Sprocket Tooth
C—Screw

D—Screw
E—Bottom of Rack Tooth
F—Twine Motor



CC418979 —UN—18DEC20



CC330704 —UN—28SEP17

GA87848,000107A -19-18JAN21-1/1

Adjust Twine Binding Tension Plate Clamp

1. Open twine binding cover (A).
2. Check if distance (C) is within specification.

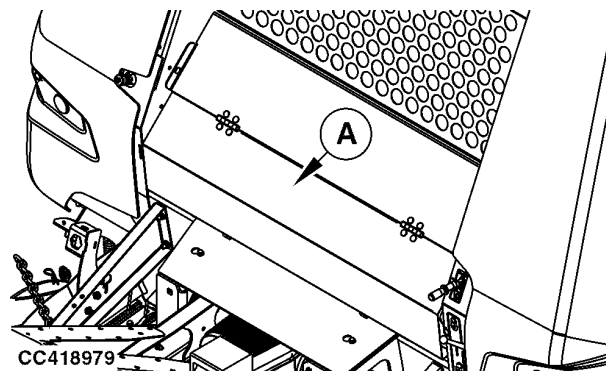
Specification

Twine Binding
Clamp—Distance.....23—25 mm
(29/32—1-1/16 in)

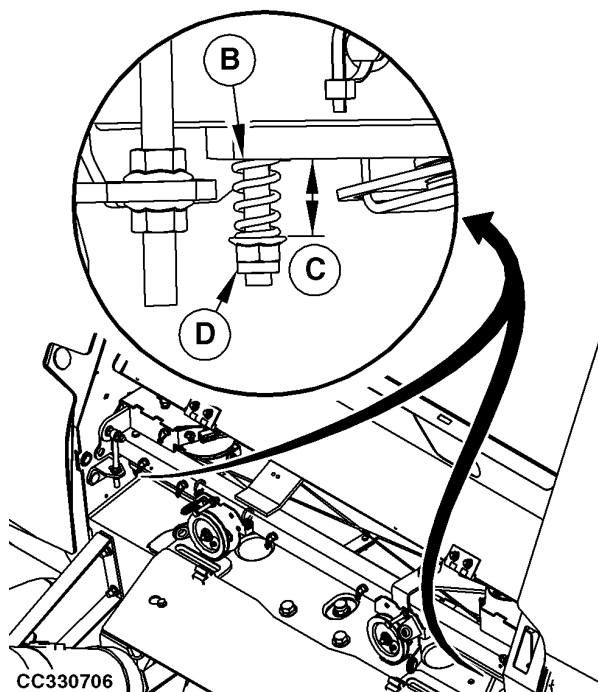
3.
 - If distance (C) is less than specified value, loosen nut (D).
 - If distance (C) is more than specified value, tighten nut (D).
4. Close twine binding cover (A).

A—Twine Binding Cover
B—Spring

C—Distance
D—Nut



CC418979 —UN—18DEC20



CC330706 —UN—28SEP17

GA87848,000107B -19-18JAN21-1/1

Adjust Twine Binding Tension Plate

1. Open twine binding cover (A).
2. Check if distance (C) is within specification.

Specification

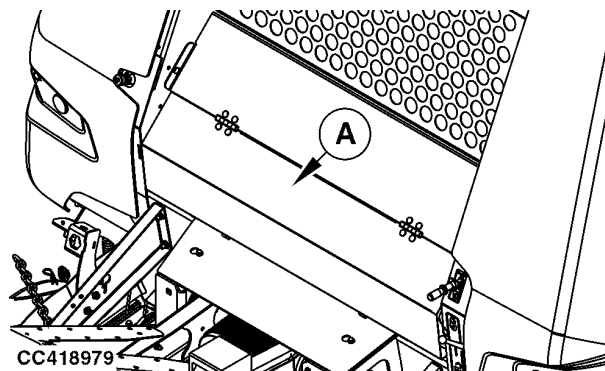
Twine Tension
Plate—Distance.....31—33 mm
(1-1/4—1-5/16 in)

3. • If distance (C) is less than specified value, loosen nut (D).
• If distance (C) is more than specified value, tighten nut (D).

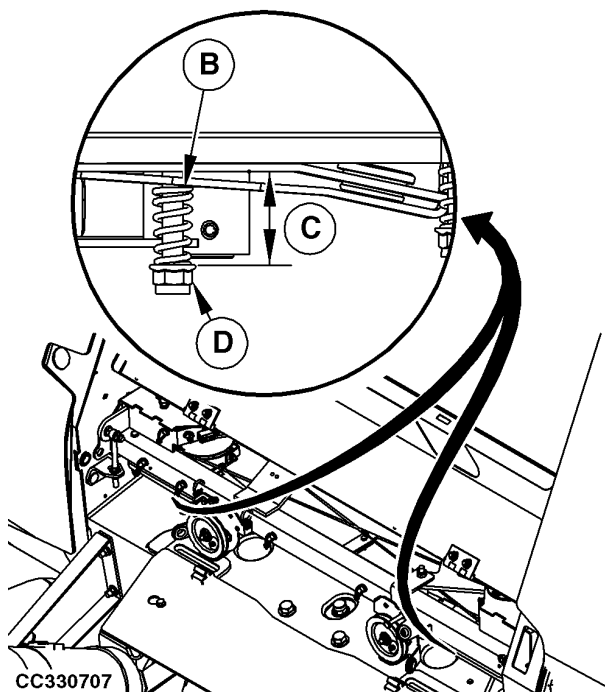
4. Close twine binding cover (A).

A—Twine Binding Cover
B—Spring

C—Distance
D—Nut



CC418979 —UN—18DEC20



CC330707 —UN—28SEP17

GA87848,000107C -19-18JAN21-1/1

Adjust Twine Binding Pulley Scraper

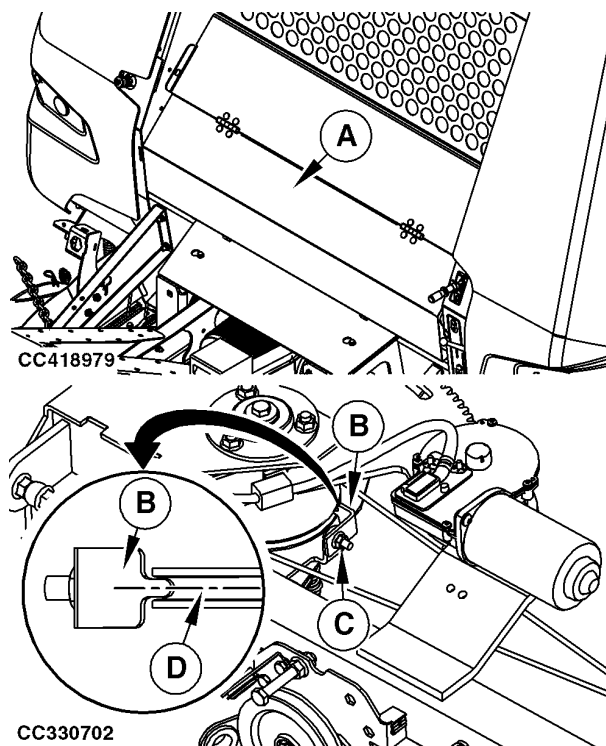
1. Open twine binding cover (A).
2. Check if pulley scraper (B) is in the middle of pulley groove (D). If not proceed as follow.
3. Loosen nut (C).
4. Move pulley scraper in the middle of pulley groove (D).

IMPORTANT: Make sure scraper finger (B) does not touch pulley groove (D).

5. Tighten nut (C).
6. Close twine binding cover (A).

A—Twine Binding Cover
B—Pulley Scraper

C—Nut
D—Pulley Groove



CC418979 —UN—18DEC20

CC330702 —UN—22SEP17

GA87848,000107D -19-18JAN21-1/1

Replace Twine Binding Knife

1. Open twine binding cover (A).
2. Retract twine binding arm.

⚠ CAUTION: Prevent personal injury by wearing gloves to handle twine binding knife.

3. Loosen nuts (C).
4. Replace knife (E).

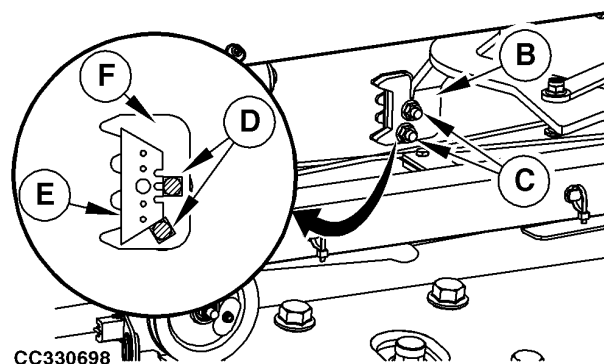
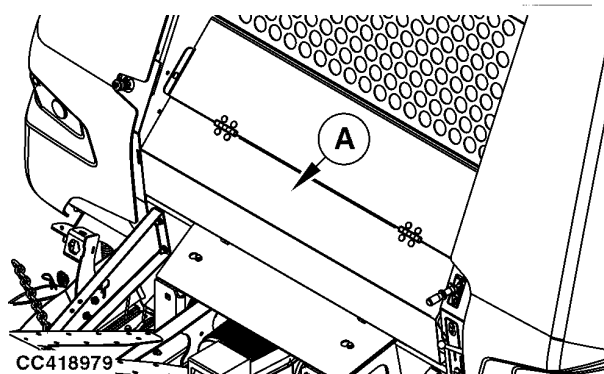
IMPORTANT: Screws (D) must be correctly plugged into brackets (B) and (F).

Knife (E) must be in contact with screw (D).

5. Tighten nuts (C).
6. Close twine binding cover (B).

A—Twine Binding Cover
B—Bracket
C—Nut

D—Screw
E—Knife
F—Bracket



TS268 —UN—23AUG88

CC418979 —UN—18DEC20

CC330698 —UN—22SEP17

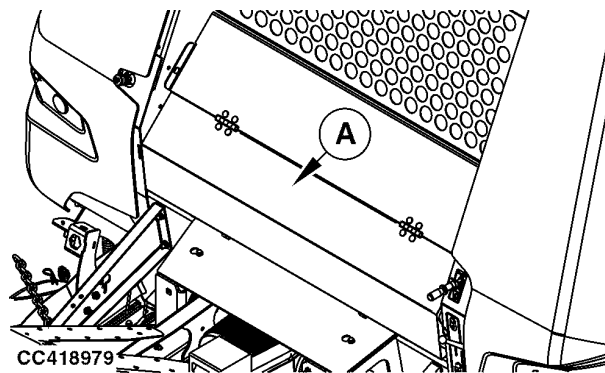
GA87848,000107E -19-18JAN21-1/1

Adjust Twine Cut Length

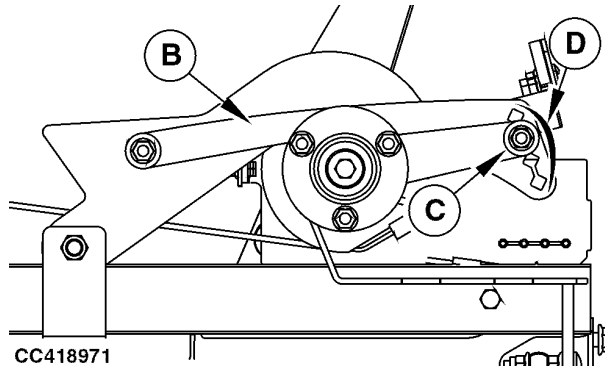
1. Open twine binding cover (A).
2. Check that screw (B) is in the second hole (D) of the knife rod (B) as shown.
 - If OK: Twine cutting length is OK.
 - If not OK: Go to next step.
3. Remove screw (C).
4. Move knife rod (B) as shown.
5. Tighten screw (C).
6. Close twine binding cover (A).

A—Twine Binding Cover
B—Knife Rod

C—Screw (Factory Setting)
D—Hole



CC418979—UN—18DEC20



CC418971—UN—17DEC20

GA87848,000107F -19-18JAN21-1/1

Check Net Binding Device

The following procedure should be carried out when net cut or net binding problems occur during field operation.

The check procedure includes different tests to carry out:

- Test 1 - Check knife and counterknife position
- Test 2 - Check free motion of swinging bar
- Test 3 - Check net feed roll pressure

- Test 4 - Check No. 9 roll position
- Test 5 - Check drive belt tension
- Test 6 - Check net feed roll brake
- Test 7 - Check lower net guide position

NOTE: When all test results are OK, the net binding device is optimized for good field operation.

NB02380,00004F2 -19-04OCT17-1/1

Check Knife and Counterknife Position (Test 1)

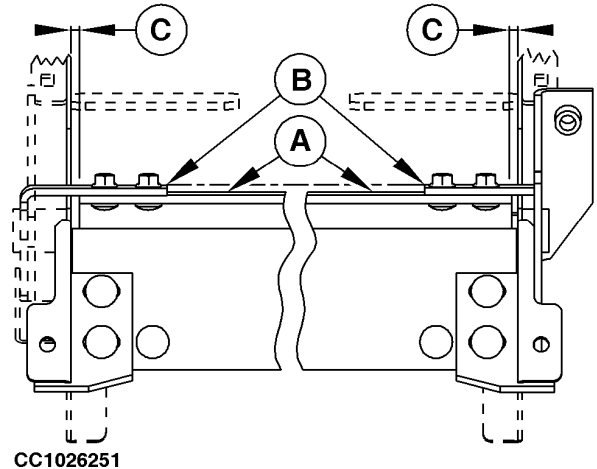
CAUTION: Prevent personal injury by wearing gloves when working on knife and counterknife.

NOTE: The counterknife position (in relation to the knife) must be checked if serious net cut problems occur during field operation.

1. Keep the net actuator retracted.
2. Check that the two counterknife supports (B) are aligned.
3. Center counterknife (A) between lateral supports to obtain specified distance (C) on both sides.

Specification

Counterknife-to-Lateral
Support—Distance..... 5 ± 2 mm
($3/16 \pm 5/64$ in)



A—Counterknife
B—Counterknife support

C—Distance

Continued on next page

tt81334,1687770699647 -19-26JUN23-1/3

CC1026251 —UN—27OCT04

4. Check that counterknife (A) is against net knife (D) all across its width.

IMPORTANT: Contact should occur on the medium area of the sharp side of the knife as shown.

The gap (E) in not touching area should not exceed the following specifications:

Specification

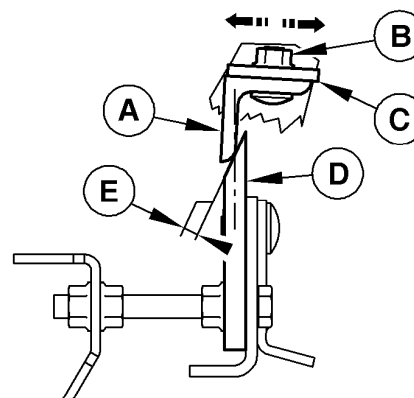
Counterknife to
Knife—Gap.....0.5 mm maximum
(1/64 in maximum)

If necessary, adjust the gap (E) as follows:

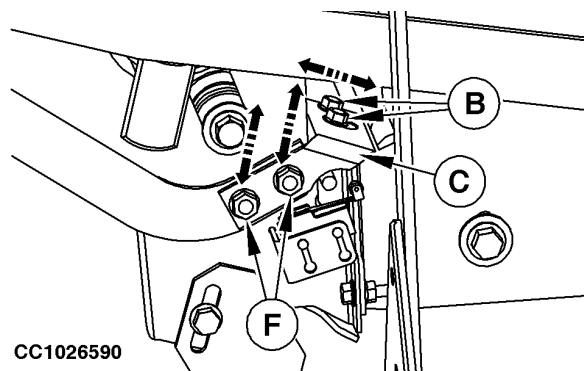
- Loosen nuts (B) and (F).
- Move counterknife (A) and counterknife support (C) to obtain specified gap (E).
- Tighten nuts (B) and (F).

A—Counterknife
B—Nuts
C—Counterknife Support

D—Knife
E—Gap
F—Nuts



CC1026591



CC1026590

tl81334,1687770699647 -19-26JUN23-2/3

CC1026591—UN—27OCT04

CC1026590—UN—27OCT04

5. If counterknife (A) is not fully in contact all across the knife (B) width, complete the adjustment of gap (E) as follows:

- Loosen lock nut (C).
- Tighten nut (D) to bend the knife (B) to obtain the specified gap (E).

Specification

Counterknife to
Knife—Gap.....0.5 mm maximum
(1/64 in maximum)

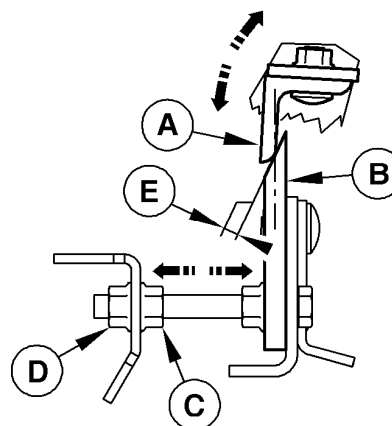
- Tighten lock nut (C) after adjustment.

6. Extend and retract net actuator. Check gap (E) and repeat the procedure if necessary.

Proceed to test 2.

A—Counterknife
B—Knife
C—Lock Nut

D—Nut
E—Gap

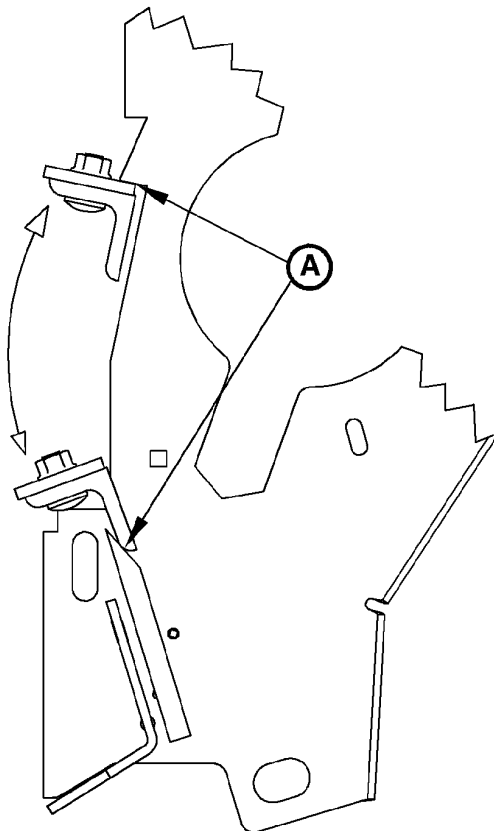


CC1026592

tl81334,1687770699647 -19-26JUN23-3/3

CC1026592—UN—27OCT04

Check Free Motion of Swinging Bar (Test 2)



CC1019126

CC1019126 —UN—09FEB01

A—Stops

IMPORTANT: Prior to carry out this test, make sure that test 1 results are “OK”. Proceed to the relevant tests described in this Section.

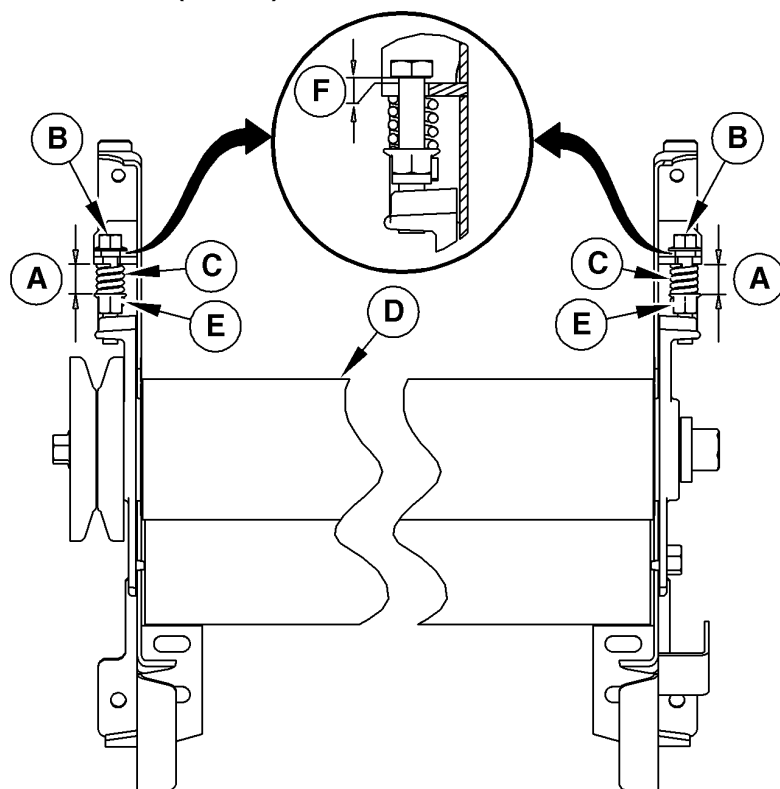
Proceed as follows:

With actuator decoupled, check that swinging bar motions are free without contact with lateral supports between its two stops (A).

Proceed to test 3

NB02380,00004F3 -19-20SEP17-1/1

Check Net Feed Roll Pressure (Test 3)



CC329305

A—Length
B—Screw
C—Spring

D—Rubber roll
E—Spring Adjusting Nut

F—Distance

IMPORTANT: Prior to carrying out this test, make sure that test 1 and 2 are OK. Proceed to the relevant tests described in this section.

Proceed as follows:

1. Release net feed roll brake, see Load Net Roll in Preparing the Baler section.
2. Adjust distance (F) to specification by loosening or tightening screw (B).

Specification

Screw-to-
Angle—Distance..... 2 mm
(3/32 in)

3. Adjust net feed roll pressure by loosening or tightening spring adjusting nuts (E) until length (A) of springs (C) is within specification.

Specification

Spring—Length..... 20.5 ± 0.5 mm
(0.8 ± 0.02 in)

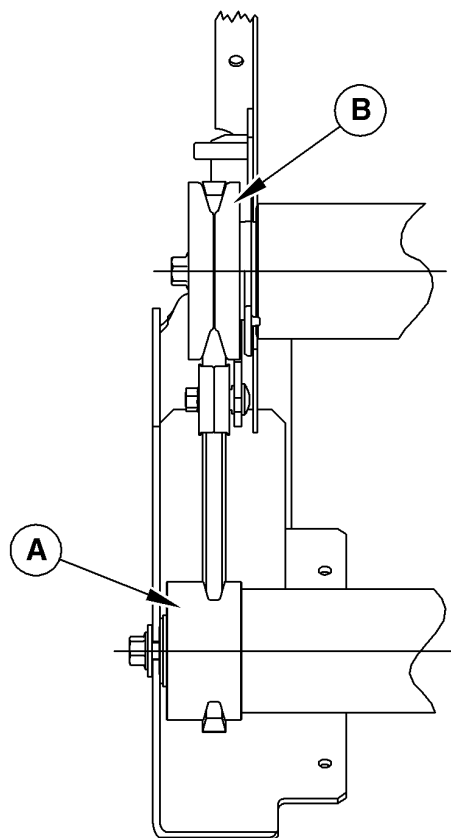
IMPORTANT: Make sure that rubber roll and plated roll rotate freely by hand in both directions.

4. Remove any foreign material or net from between the feed rolls.

Proceed to test 4.

NB02380,00004F5 -19-23OCT17-1/1

CC329305—UN—23OCT17

Check No. 9 Roll Position (Test 4)

CC333381

A—Roll No. 9

B—Rubber Roll Pulley

IMPORTANT: Prior to carrying out this test, make sure that test 1 to 3 are OK. Proceed to the relevant tests described in this section.

IMPORTANT: Check the position of roll No. 9 (A) after each drive belt replacement.

Proceed as follows:

Check that axial clearance of roll No. 9 (A) is between 0.5 to 1.5 mm (1/64 to 1/16 in) and that rubber roll (B) and No. 9 roll pulleys are aligned within ± 5 mm (2 in).

Add or remove washers on each sides of roll No. 9 (A) as necessary.

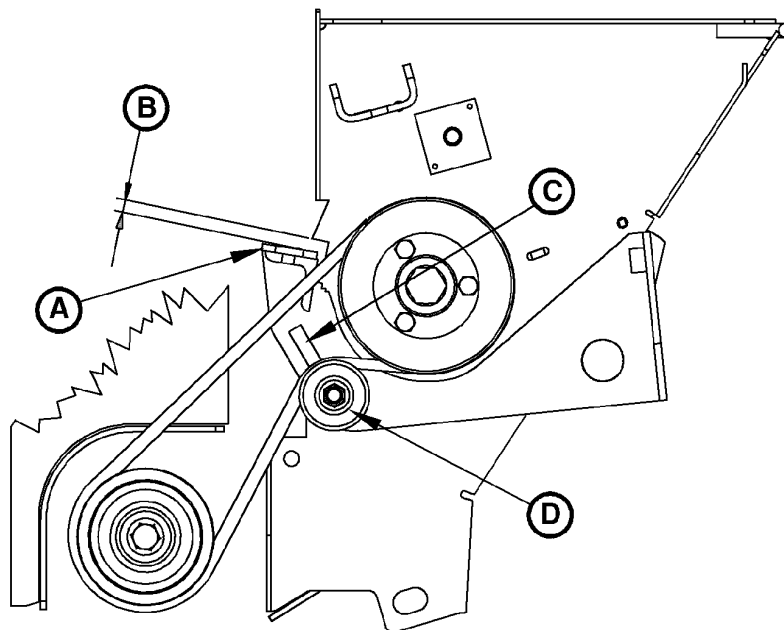
Reinstall net feed roll drive belt. See Remove And Install Net Feed Roll Drive Belt in this section.

Proceed to test 5.

CC333381 —UN—28SEP17

NB02380,00004F8 -19-28SEP17-1/1

Check Drive Belt Tension (Test 5)



CC1019129

A—Counterknife Support

B—Distance
C—Oblong Hole

D—Idler Pulley

IMPORTANT: Prior to carry out this test, make sure that test 1 to 4 results are “OK”. Proceed to the relevant tests described in this section.

IMPORTANT: After each drive belt replacement, it is essential to check that the new belt has a length which allows a good net binding drive timing.

Proceed as follows:

1. Fully extend actuator.
2. Adjust idler pulley (D) in the oblong hole (C) so that distance (B) between counterknife support (A) and the cut in side wall is to 10 mm (3/8 in).

3. Run the belt drive for 15 seconds at full speed.
4. Fully extend and retract actuator several times.
5. Completely extend actuator.
6. Readjust distance (B) to 3.5 ± 1.5 mm ($2/16 \pm 1/16$ in.).

IMPORTANT: With actuator in extended position, operator should not be able to turn the net feed rolls.

Proceed to test 6.

TL81334.0000FCF -19-07JUL21-1/1

CC1019129 —UN—09FEB01

Check Net Feed Roll Brake (Test 6)

IMPORTANT: Prior to this test, make sure that tests 1 to 5 results are "OK". Proceed to the relevant tests described in this section.

IMPORTANT: The net feed roll brake adjustment must be performed when the net rolls up around the rubber roll and/or the galvanized roll.

Proceed as follows:

1. Fully retract net actuator.

2. Adjust band stop (A):

a. Loosen screws (B).

NOTE: At least one hole must be tangent to brake band (D) when brake is engaged.

b. Align edges of holes (C) with the brake band (D).

c. Tighten screws (B).

3. Check that distance (E) is within specification:

Specification

Screw-to-	
Bracket—Distance.....	3—5 mm (1/8—3/16 in)

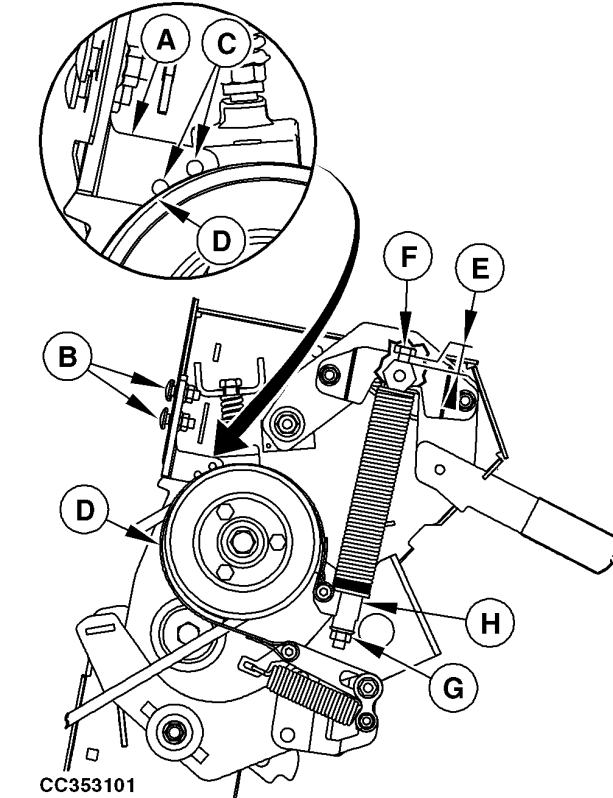
If necessary, adjust timing screw (F):

IMPORTANT: Do not adjust timing screw (F) before loosening nut (G), or damage to the brake can result.

a. Loosen nut (G) while holding the tension tube (H).

b. Turn timing screw (F) until distance (E) is within specification.

c. Tighten nut (G) while holding the tension tube (H).



A—Band Stop
B—Screw
C—Hole
D—Band

E—Distance
F—Timing Screw
G—Nut
H—Tension Tube

4. Turn the pulley clockwise using a wrench. The head of timing screw (F) must not be in contact with the head of the tension tube (H).

Continued on next page

GA87848,00010F7 -19-27JAN21-1/2

CC353101 —UN—17MAY18

5. Check that net binding material is feeding properly.

- When the brake timing is correct, the net material (A) is snug against the steel roll as shown in Photo 1
- If the brake timing is too late, a loop of net can develop above the counterknife (B). The material can get pinched between the front sheet and the rubber roll and cause feeding issues as shown in Photo 2. Adjust the timing bolt to specification, go to step 2.
- If the brake timing is too soon, net snap back can occur and can result in feeding issues as shown in Photo 3. Adjust the timing bolt to specification, go to step 2.

A—Net Binding Material

B—Counterknife



Photo 1: Timing is Correct

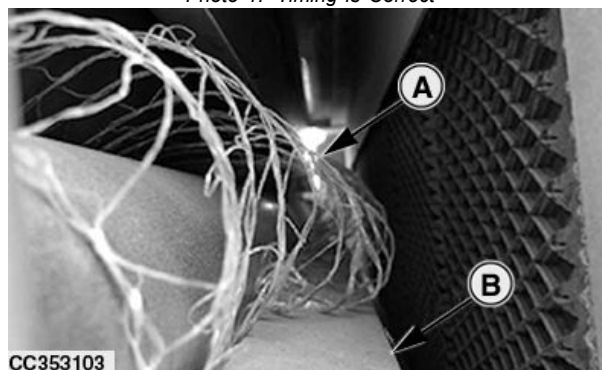


Photo 2: Timing is Late

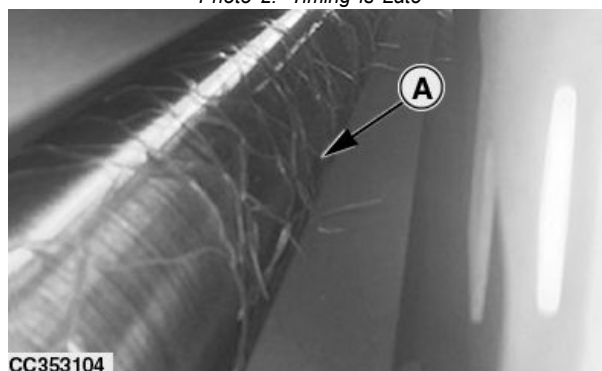


Photo 3: Timing is Early

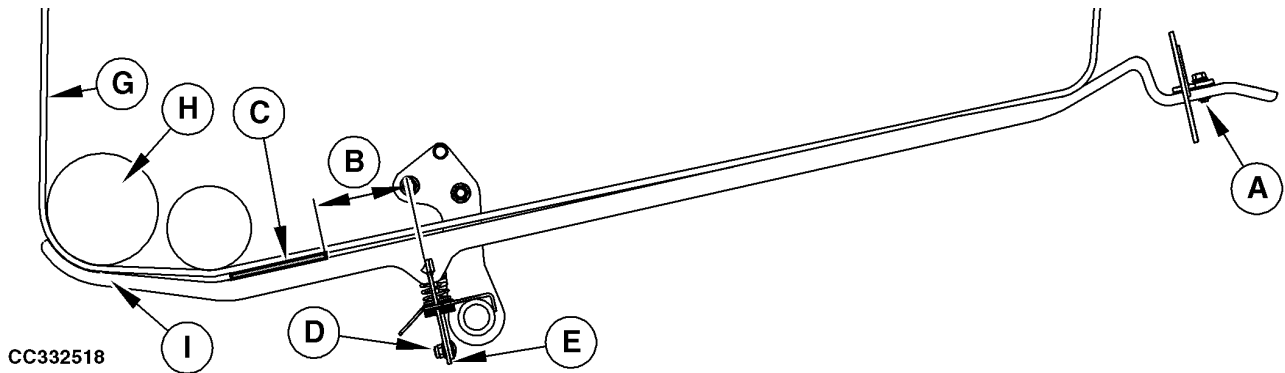
GA87848,00010F7 -19-27JAN21-2/2

CC353102 —UN—15MAY18

CC353103 —UN—15MAY18

CC353104 —UN—15MAY18

Check Lower Net Guide Position (Test 7)



CC332518 —UN—21SEP17

To adjust net guides position proceed as follows:

IMPORTANT: Make sure that net guides are set in normal field condition position. See Set Net Guide Based on Field Condition in Operating the Baler-General Purpose section.

1. Loosen nuts (A) and (D) on all guides.
2. Place metal sheet (C) to the specified distance (B) between runners (I) and belts (G) over the entire width of the baler.

Specification

Metal Sheet
Position—Distance..... 83 mm
(3-1/4 in)

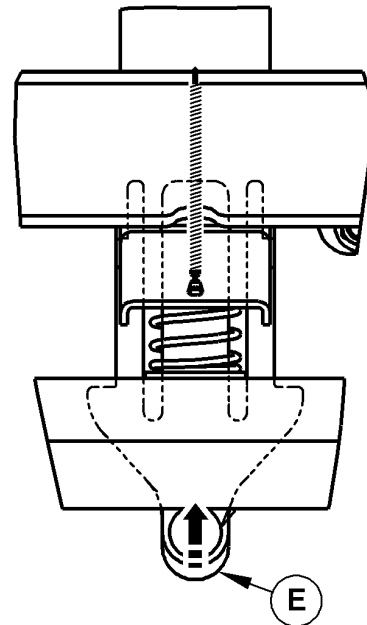
3. Push up runner front fixing lock (E) so that it is in contact with the support.
4. Tighten screw (E).
5. Repeat step 3 and 4 on all other guides.
6. Remove metal sheet (C).
7. Adjust position of runner (I) to obtain the specified distance (F) between runner and belt.

Specification

Front Runner
End-to-Belt—Distance..... 2 mm
(5/64 in)

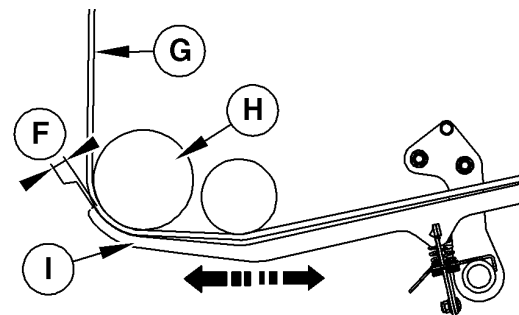
8. Tighten screw (A).
9. Repeat step 7 and 8 on all other guides.
10. Check if the all rear ends of runners can move up and down freely.

A—Nut
B—Distance
C—Metal Sheet 1200 X 150 X
1.5 mm (3 ft 11-1/4 in X 5-7/8
in X 1/16 in)
D—Nut
E—Runner Front Fixing Lock
F—Distance
G—Belt
H—Roll No. 10
I—Runner



CC332519

CC332519 —UN—21SEP17



CC332520

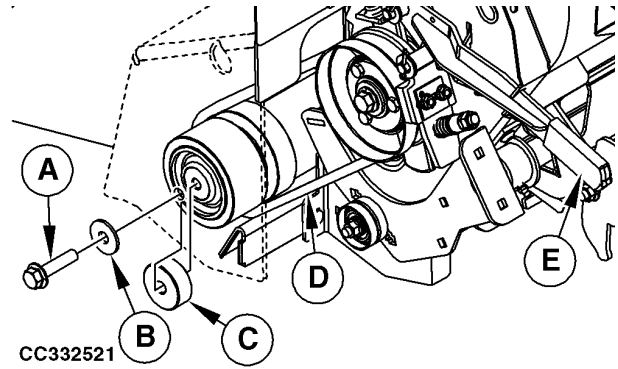
CC332520 —UN—21SEP17

ga87848,1683288014252 -19-31MAY23-1/1

Remove and Install Net Feed Roll Drive Belt

Remove net feed roll drive belt as follows:

1. Fully retract net actuator with monitor.
2. Open net system cover.
3. Slightly open gate to release pressure on baler belts.
4. Remove gate roll No. 9 fixing screw (A) and washer (B).
5. Remove spacer ring (C).
6. Release brake lever (E).
7. Remove drive belt (D).
8. Reverse removal procedure to install drive belt back in place.
9. Close the gate and check belt tracking. See Adjust Tracking of Belts in this section.



A—Screw
B—Washer
C—Spacer Ring

D—Belt
E—Brake Lever

GA87848,0000C59 -19-05JUN19-1/1

Remove and Install Net Knife

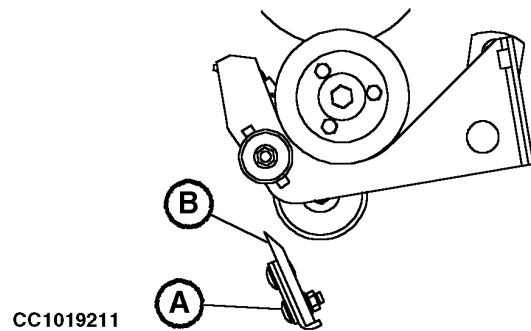
CAUTION: Prevent personal injury by wearing gloves to handle net knife.

1. Note position of knife cutting edge for reinstallation.
2. Open net binding cover.
3. Fully extend net actuator and disconnect actuator plug.
4. Remove fixing screws (A) of knife (B), then remove knife (B) from its brackets.
5. Install knife (B) on its brackets in the same position as before removal.
6. Install and tighten screws to specified torque.

Specification

Net Knife Fixing
Screw—Torque.....55 N·m
(40 lb·ft)

7. Reconnect actuator plug and retract actuator. Close net binding cover.



A—Fixing screw

B—Knife

IMPORTANT: Always carry out “Test 1” of net binding device check procedure after having installed net knife, see Check Knife and Counterknife Position (Test 1) in this section.

NB02380,00004FC -19-09OCT17-1/1

Remove Binding Materials Wrapped Around Feed Rolls

⚠ CAUTION: Avoid injury from entanglement in moving rolls. Disengage PTO and shut off tractor before servicing.

If net wraps around the rubber roll:

Open net binding cover.

Release feed roll brake.

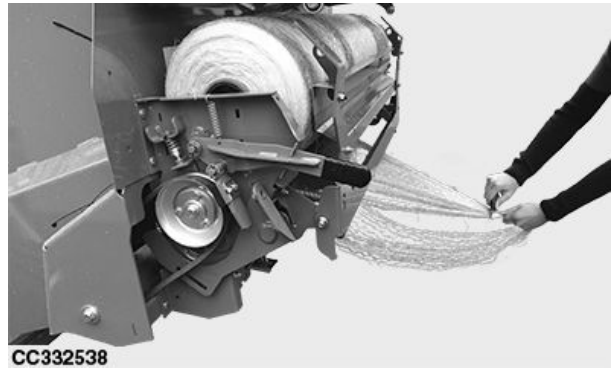
IMPORTANT: Do not cut net material from rubber roll. Any knife cuts in the rubber roll covering may result in more frequent wrapping around the rolls and may require roll replacement.

Pull net material away from the supply roll. Cut net material.

Gather the free end of the net and lay over the top roll of wrap material.

Remove and discard all of the wrapped material, including all strings, staples, etc.

Wipe off feed rolls and check for any sticky material. If necessary, roll may be washed with soap and water. NEVER use solvents to clean rubber feed roll. Allow roll to dry before threading or wrappage may occur again.



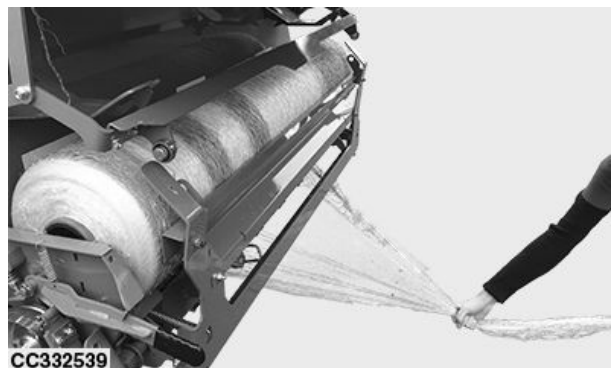
CC332538

CC332538 —UN—03OCT17



CC332533

CC332533 —UN—03OCT17



CC332539

CC332539 —UN—03OCT17

ga87848,1683010390400 -19-02MAY23-1/1

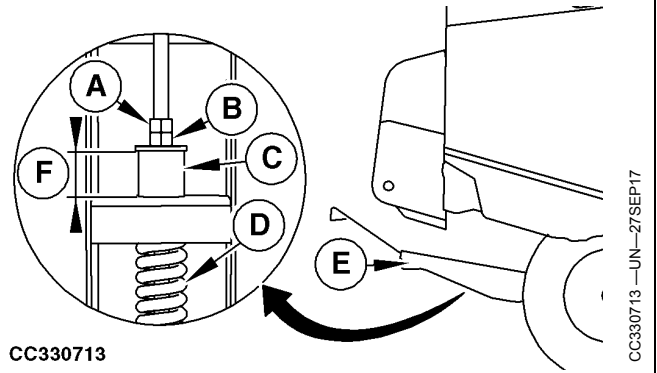
Adjust Bale Discharging Ramp

1. Park baler on level ground.
2. Check if distance (F) is within specification. If necessary, proceed as follow.

Specification

Bale Discharging
Bushing—Distance.....38.5—41.5 mm
(1-1/2—1-5/8 in)

3. Loosen counter nut (A).
4. Adjust nut (B) to obtain specified distance (F).
5. Tighten counter nut (A).



CC330713

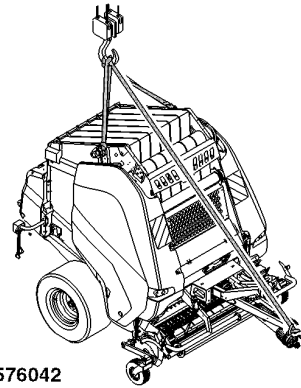
A—Counter Nut
B—Nut
C—Bushing

D—Spring
E—Bale Discharging Ramp
F—Distance

ga87848,1684852141951 -19-23MAY23-1/1

Round Baler Hanging Points

If you need to lift the machine, use the hanging points shown.



CC576042



CC576042 —UN—26JUN23

tl81334,1687773239605 -19-26JUN23-1/1

Remove and Install Wheel

1. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
2. Slightly loosen wheel nuts.
3. Position jack (A) close the decal (B) under axle as shown.
4. Raise wheel off ground with jack (A).
5. Install stand to secure baler.
6. Remove wheel nuts and wheel.
7. Install the new wheel and nuts . Slightly tighten nuts by hand.
8. Remove stand, lower the baler and remove jack (A).
9. Tighten wheel nuts diagonally to the following specification:

Specification

Wheel Nut—Torque.....270 N·m
(200 lb.-ft.)

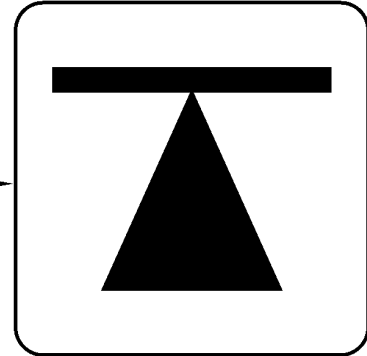
10. Check tire inflation. See [Tire Inflation](#) in Preparing the Baler section.

IMPORTANT: Whenever a wheel has been removed and installed, check wheel nut torque at specified intervals in Break-In Period section.



CC1035369

(B)



CC576043

A—Jack

B—Jack Point Decal

1181334,1687778226671 -19-26JUN23-1/1

CC1035369—UN—11OCT11

CC576043—UN—26JUN23

Repair Gauge Wheel

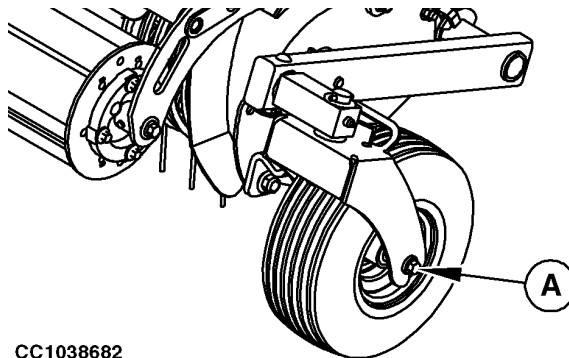
If gauge wheel fixing screw (A) is loosened for standard or caster gauge wheel repair, replace fixing screw (A). See your John Deere dealer to obtain appropriate screw (A).

Tighten gauge wheel fixing screw to the following specification:

Specification

Gauge Wheel Fixing
Screw—Torque.....110 N·m
(81 lb.-ft.)

A—Gauge Wheel Fixing Screw



CC1038682

Caster Gauge Wheel Shown

OUCC006,00019BA -19-14NOV12-1/1

CC1038682—UN—14NOV12

Baler Application Service

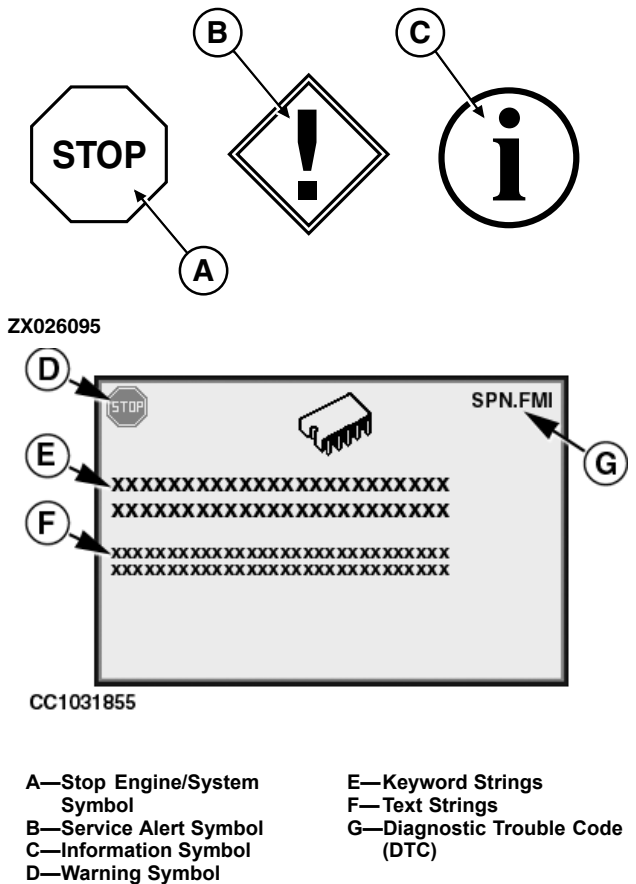
Warning Screens

The monitor supports caution and warning messages to inform about certain behaviors or error conditions in the system. Warning screens allow monitoring of the system operational problems.

WARNING:

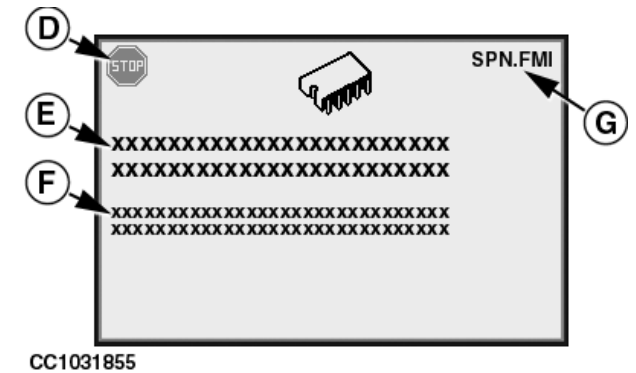
A WARNING covers the full screen and is used to inform about critical malfunctions in the system which requires the full attention of the operator. The screen is designed as follows:

1. Symbol (D) and the associated tone define the importance of the warning:
 - Symbol (A) indicates that the machine has detected a serious malfunction which requires immediate action or damage to the machine may occur. Stop engine or system immediately.
 - Symbol (B) indicates that the machine has detected a problem which requires action. The machine may be damaged or have significant performance reduction if it is not serviced or repaired.
 - Symbol (C) indicates that the machine has detected a fault in a system or component. The machine can continue to operate without damage, however there may be degraded performance of certain functions.
2. Keyword strings (E) help to determine the importance and the cause of the warning and briefly define the area of malfunction.



tt81334,1680078470501 -19-06APR23-1/2

3. The Diagnostic Trouble Code (G) in the upper right corner is made of SPN.FMI (Suspect Parameter Number.Failure Mode Identifier). This code is a language independent code which helps to identify more details for the active warning. Refer to the Diagnostic Trouble Code List to get specific operational problem and recommended corrective action. See Diagnostic Trouble Code List in this section.Text strings (F) provide more details about the cause of the warning and possible corrective action.
4. The warning screen will disappear automatically when the machine detects the correction of the malfunction.



tt81334,1680078470501 -19-06APR23-2/2

Recent Problems

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



CC277966

ti81334,1680078487545 -19-06APR23-1/5

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

ti81334,1680078487545 -19-06APR23-2/5

3. Select "Next Page" or "Previous Page" softkey to access alternative pages (2/X, 3/X, etc.).

CC277967 —UN—22SEP16



CC277967

ti81334,1680078487545 -19-06APR23-3/5

4. In the recent problem page, the history of the DTCs is updated each time a new DTC is generated. Recent problem text (B) gives a brief description of the problem.

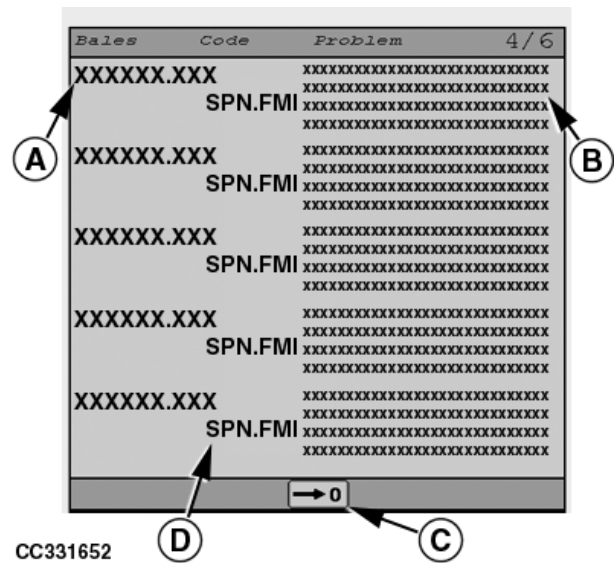
Up to 15 DTCs can be stored and are displayed in historical order. If a 16th DTC needs to be stored, the oldest DTC is deleted.

The number of bale (A) is the timestamp of when the DTC appears (number before dot) and the order of the DTC for this bale (number after dot).

NOTE: For example: If the number of bale (A) field is 3520.002 for a DTC, the given DTC appears at the 3520th bale and it is the second DTC for this bale.

The DTC (D) defines the issue. It is made of SPN.FMI (D) (Suspect Parameter Number.Failure Mode Indicator). See [Diagnostic Trouble Code List](#) in this section.

5. On last DTC page, select "Clear recent Problem List" button (C) to clear the recent problem list.



CC331652

CC331652 —19—12OCT17

A—Bale Number
B—Recent Problem Text

C—Clear Recent Problem List
D—Diagnostic Trouble Code (DTC)

Continued on next page

ti81334,1680078487545 -19-06APR23-4/5

6. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1680078487545 -19-06APR23-5/5

Test Tractor Battery Voltage

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



CC277966

TL81334,000064C -19-23MAY19-1/5

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

TL81334,000064C -19-23MAY19-2/5

3. Select "Next Page", or "Previous Page" softkey to access page 5/6.

CC277967 —UN—22SEP16



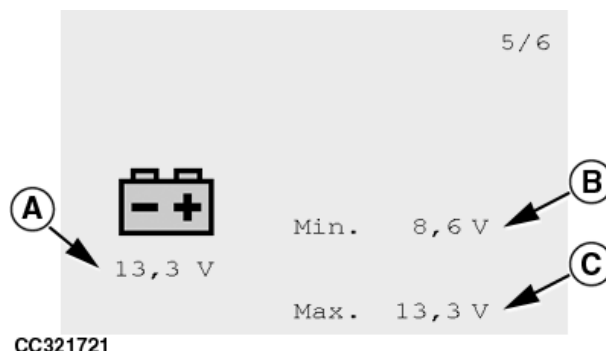
CC277967

TL81334,000064C -19-23MAY19-3/5

4. On page 5/6, values (A), (B), and (C) indicate the tractor battery voltage. The minimum (B), and maximum (C) battery voltage values are re-initialized each time the monitor is switched off.

A—Current Battery Voltage
B—Minimum Battery Voltage

C—Maximum Battery Voltage



CC321721

CC321721 —19—30JUN17

TL81334,000064C -19-23MAY19-4/5

5. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

TL81334,000064C -19-23MAY19-5/5

Diagnostic Trouble Code List

Suspect parameter numbers and failure mode indicators (SPN.FMI) are given in the following table:

Each time a diagnostic trouble code about a solenoid valve is displayed, the component is deactivated until next power cycle.

NOTE: If a diagnostic trouble code displayed is not listed below, see your John Deere dealer.

SPN.FMI	Description	Comment
RBC 000168.16	Battery voltage too high (above 15.8 volts).	Check tractor battery and alternator. See Test Tractor Battery Voltage in this section.
RBC 000168.18	Battery voltage too low (below 11.2 volts).	Check wires and connectors. Check tractor battery and alternator. See Test Tractor Battery Voltage in this section.
RBC 000186.15	PTO is not disengaged in time.	PTO is not disengaged by the operator when the monitor request it. Disengage PTO within 10 beep sequence of the monitor at end of binding cycle.
RBC 001563.12	Control unit ID error.	This control unit cannot be installed on this machine. Check if proper control unit is installed. Check proper harness connection to control unit. See your John Deere dealer.
RBC 003509.03	Sensor supply voltage too high.	Check wires and connectors.
RBC 003509.04	Sensor supply voltage too low.	Check wires and connectors.
RBC 003755.16	Baler drive roll speed above proper operation.	Binding process stopped due to high drive roll speed. Ensure that baler is operated at appropriate PTO speed.
RBC 003755.18	Baler drive roll speed below proper operation.	Binding process stopped due to low drive roll speed. Ensure that baler is operated at appropriate PTO speed. Check sensor adjustment. See Adjust Baler Rotation Speed Sensor SB365 in Service section. If baler rotation speed sensor is faulty, see Enable or Disable Baler Rotation Speed Sensor (If Equipped) in this section to disable the sensor.
RBC 003761.03	Drop floor solenoid valve open load or short to battery.	Check wires and connectors. Check drop floor solenoid valve.
RBC 003761.04	Drop floor solenoid valve short to ground.	Check wires and connectors. Check drop floor solenoid valve.
RBC 003762.03	Solenoid valve for precutter knives set 1 open load or short to battery.	Check wires and connectors. Check solenoid valve for precutter knives set 1.
RBC 003762.04	Solenoid valve for precutter knives set 1 short to ground.	Check wires and connectors. Check solenoid valve for precutter knives set 1.
RBC 003763.03	Pickup lift solenoid valve open load or short to battery.	Check wires and connectors. Check pickup lift solenoid valve.
RBC 003763.04	Pickup lift solenoid valve short to ground.	Check wires and connectors. Check pickup lift solenoid valve.
RBC 003764.07	No movement of the net actuator. Net actuator faulty or jammed.	Check net actuator. See your John Deere dealer.
RBC 003764.11	Net actuator broken.	Check net actuator. See your John Deere dealer.
RBC 003764.14	Net actuator stalled.	Check net binding device. Check net actuator. See your John Deere dealer.
RBC 003766.07	No movement of the twine actuator. Twine actuator faulty or jammed.	Check twine actuator. See your John Deere dealer.
RBC 003766.12	Twine actuator broken.	Check twine actuator. See your John Deere dealer.
RBC 003766.14	Twine actuator stalled.	Check twine binding device. Check twine actuator. See your John Deere dealer.

Continued on next page

†181334,1681377892662 -19-23MAY23-1/5

Baler Application Service

SPN.FMI	Description	Comment
RBC 003774.11	Gate ajar. The gate is in an unknown position.	Check the gate status. Check gate Adjust Gate Latch Sensors SB3310 and SB3311 in Service section. Check wires and connectors.
RBC 003776.07	Bale stuck in the chamber.	Check that the bale is not in the chamber. Check the ramp sensor SB343. See your John Deere dealer.
RBC 003776.14	Bale stuck on ramp.	Check that the bale is not in the chamber. Check the ramp sensor SB343. See your John Deere dealer.
RBC 003778.14	Unexpected movement of the precutter knives set 1 from the previous state.	Check that precutter knives are in the desired position. Check sensor for precutter knives set 1.
RBC 003779.05	Unexpected oversize alarm.	Bind and eject current bale as soon as possible. Check bale oversize switch. See Test Sensors and Switches in this section. Check bale diameter potentiometer calibration. See Calibrate Bale Diameter Potentiometer RB311 in this section.
RBC 003779.14	Oversize bale.	Bind and eject current bale as soon as possible. Check bale diameter potentiometer calibration. See Calibrate Bale Diameter Potentiometer RB311 in this section.
RBC 003781.07	No net feeding.	Replace net roll. Check net routing. See Load Net Roll in Preparing the Baler section. Check wires and connectors. Check net feeding sensor adjustment. See Adjust Net Cut Sensor SB414 in Service section.
RBC 003781.14	Net not cut.	Extend and then retract actuator to manually cut net. Check net binding counterknife position. See Check Knife and Counterknife Position (Test 1) in Service section.
RBC 003782.07	One or both twine not feeding. One or both twine balls are empty. Twine missing around the bale.	Replace twine balls. Check twine routing. See Load Twine Boxes , and Route Twine from Twine Box to Twine Arms (Tube Arms) or Route Twine from Twine Box to Twine Arms (Adjustable Arms) in Preparing the Baler section. Calibrate twine actuator. See Calibrate Twine Binding Actuator MB421 in Baler Application Service section. Check twine pulley sensor adjustment. See Adjust Twine Pulley Sensors SB421 and SB422 in Service section. If one or both twine pulley sensors are faulty, see Adjust Twine Binding in Operating Baler Application section to disable these sensors.
RBC 003782.11	Twine feeding unexpectedly.	Check that twine actuator is fully retracted.
RBC 003782.14	Twine not cut.	If twine is really not cut, extend and then retract twine actuator to manually cut twine. Adjust or replace twine knife. See Adjust Twine Cut Length and Replace Twine Binding Knife in Service section. If twine is correctly cut, adjust twine pulley. See Adjust Twine Pulley Sensors SB421 and SB422 in Service section.
RBC 517003.04	John Deere B-Wrap™ sensor supply short to ground.	Check wires and connectors.
RBC 517003.05	John Deere B-Wrap™ sensor supply open load.	Check wires and connectors.
RBC 517004.04	John Deere B-Wrap™ sensor is short to ground.	Check wires and connectors.
RBC 517005.07	John Deere B-Wrap™ sensor does not detect metal strip during binding cycle.	See Metal strip not detected during John Deere B-Wrap™ binding cycle in Net Binding Equipment Difficulties in Troubleshooting section.
RBC 517006.14	End of John Deere B-Wrap™ roll detected.	Change John Deere B-Wrap™ roll. See Load Net Roll in Preparing the Baler section.
RBC 517433.05	Side door lights relay open load.	Check wires and connectors. Check side door lights relay.
RBC 517434.04	Side door lights relay short to ground.	Check wires and connectors. Check side door lights relay.

Continued on next page

ti81334,1681377892662 -19-23MAY23-2/5

Baler Application Service

SPN.FMI	Description	Comment
RBC 517597.03	Open gate solenoid valve open load or short to battery.	Check wires and connectors. Check open gate solenoid valve.
RBC 517597.04	Open gate solenoid valve short to ground.	Check wires and connectors. Check open gate solenoid valve.
RBC 517598.03	Close gate solenoid valve open load or short to battery.	Check wires and connectors. Check open gate solenoid valve.
RBC 517598.04	Close gate solenoid valve short to ground.	Check wires and connectors. Check open gate solenoid valve.
RBC 517599.01	Hydraulic flow badly adjusted.	Check the hydraulic hose connection. Check the hydraulic flow. See Adjust the Tractor SCV Flow in Preparing the Tractor section. See your John Deere dealer.
RBC 517599.02	Hydraulic flow stopped in Automatic mode.	Check the hydraulic hose connection. Check the hydraulic flow. See Adjust the Tractor SCV Flow in Preparing the Tractor section. See your John Deere dealer.
RBC 517600.01	Binding Successful Time-out.	Check the bale is correctly bound. Check the bale is unloaded. See your John Deere dealer.
RBC 517601.01	Automatic to Stop mode transition.	Check baler rotation speed sensor adjustment. See Adjust Baler Rotation Speed Sensor SB365 in Service section. Check the binding system. Check the gate. Check the gate latches. Check the ramp sensor SB343. Check the hydraulic hose connection. Check the hydraulic flow. See Adjust the Tractor SCV Flow in Preparing the Tractor section. See your John Deere dealer.
RBC 517602.01	Automatic to Manual mode transition.	Engage the PTO and go in Automatic mode. Check the hydraulic hose connection. Check the hydraulic flow. See Adjust the Tractor SCV Flow in Preparing the Tractor section. See your John Deere dealer.
RBC 521075.03	Solenoid valve for precutter knives set 2 open load or short to battery.	Check wires and connectors. Check solenoid valve for precutter knives set 2.
RBC 521075.04	Solenoid valve for precutter knives set 2 short to ground.	Check wires and connectors. Check solenoid valve for precutter knives set 2.
RBC 521075.14	Unexpected movement of the precutter knives set 2 from the previous state.	Check that precutter knives are in the desired position. Check sensor for precutter knives set 2.
RBC 521078.11	Drop floor down.	Check drop floor position. Check the Drop Floor Sensor SB533.
RBC 521078.14	Unexpected movement of the drop floor from the previous state.	Check that drop floor is in desired position. Check drop floor sensor.
RBC 521079.03	Proportional density solenoid valve open load or short to battery.	Check wires and connectors. Check proportional density solenoid valve.
RBC 521079.04	Proportional density solenoid valve short to ground.	Check wires and connectors. Check proportional density solenoid valve.
RBC 521083.03	Right bale shape potentiometer shorted high.	Check wires and connectors.
RBC 521083.04	Right bale shape potentiometer shorted to ground.	Check wires and connectors.
RBC 521083.13	Right bale shape potentiometer not calibrated.	Check potentiometer calibration. See Calibrate Bale Shape Potentiometers RB321 and RB322 in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.
RBC 521083.16	Right bale shape potentiometer out of range high.	Check potentiometer mounting.
RBC 521083.18	Right bale shape potentiometer out of range low.	Check potentiometer mounting.

Continued on next page

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SPN.FMI	Description	Comment
RBC 521084.03	Left bale shape potentiometer shorted high.	Check wires and connectors.
RBC 521084.04	Left bale shape potentiometer shorted to ground.	Check wires and connectors.
RBC 521084.13	Left bale shape potentiometer not calibrated.	Check potentiometer calibration. See Calibrate Bale Shape Potentiometers RB321 and RB322 in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.
RBC 521084.16	Left bale shape potentiometer out of range high.	Check potentiometer mounting.
RBC 521084.18	Left bale shape potentiometer out of range low.	Check potentiometer mounting.
RBC 521086.03	Bale size potentiometer shorted high.	Check wires and connectors.
RBC 521086.04	Bale size potentiometer shorted to ground.	Check wires and connectors.
RBC 521086.13	Bale diameter potentiometer not calibrated.	Check potentiometer calibration. See Calibrate Bale Diameter Potentiometer RB311 in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.
RBC 521086.14	Bale in chamber at power-up.	Automatic binding cycle disabled for the current bale. Start binding cycle manually at desired bale diameter.
RBC 521086.16	Bale size potentiometer out of range high.	Check potentiometer mounting.
RBC 521086.18	Bale size potentiometer out of range low.	Check potentiometer mounting.
RBC 521127.03	Density pressure sensor shorted high.	Check wires and connectors. Bale density setting is limited to 80 %.
RBC 521127.04	Density pressure sensor shorted low.	Check wires and connectors. Bale density setting is limited to 80 %.
RBC 522016.07	Ramp sensor failure.	Check the ramp sensor SB343. See your John Deere dealer.
RBC 522022.02	Calibration mirror EEPROM, checksum failure on last power down.	Calibration EEPROM reset to default. Baler setup and calibration may be required.
RBC 522023.02	Field mirror EEPROM, checksum failure on last power down.	Field EEPROM reset to default. Baler setup and calibration may be required.
RBC 522024.02	User mirror EEPROM, checksum failure on last power down.	User EEPROM reset to default. Baler setup and calibration may be required.
RBC 522025.02	Automation mirror EEPROM, checksum failure on last power down.	Automation EEPROM reset to default. Baler setup and calibration may be required. See your John Deere dealer.
RBC 522026.02	Dealer mirror EEPROM, checksum failure on last power down.	Dealer EEPROM reset to default. Baler setup and calibration may be required. See your John Deere dealer.
RBC 522027.02	Factory mirror EEPROM, checksum failure on last power down.	Factory EEPROM reset to default. Baler setup and calibration may be required. See your John Deere dealer.
RBC 522028.02	Calibration EEPROM, checksum failure.	No further action required, failure corrected.
RBC 522028.12	Calibration EEPROM, checksum failure on last power down.	No further action required, failure corrected.
RBC 522029.02	Field EEPROM, checksum failure.	No further action required, failure corrected.
RBC 522029.12	Field EEPROM, checksum failure on last power down.	No further action required, failure corrected.
RBC 522030.02	User EEPROM, checksum failure.	No further action required, failure corrected.
RBC 522030.12	User EEPROM, checksum failure on last power down.	No further action required, failure corrected.
RBC 522031.02	Automation EEPROM, checksum failure.	No further action required, failure corrected.
RBC 522031.12	Automation EEPROM, checksum failure on last power down.	No further action required, failure corrected.
RBC 522032.02	Dealer EEPROM, checksum failure.	No further action required, failure corrected.
RBC 522032.12	Dealer EEPROM, checksum failure on last power down.	No further action required, failure corrected.

Continued on next page

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Baler Application Service

SPN.FMI	Description	Comment
RBC 522033.02	Factory EEPROM, checksum failure.	No further action required, failure corrected.
RBC 522033.12	Factory EEPROM, checksum failure on last power down.	No further action required, failure corrected.
RBC 523108.13	Control unit output problem relating to net or twine binding device.	Net or twine operation may have reduced performance. Replace control unit at earliest convenience. See your John Deere dealer.
RBC 524063.03	Net actuator short to battery.	Check wires and connectors.
RBC 524063.04	Net actuator short to ground.	Check wires and connectors.
RBC 524063.05	Net actuator open load.	Check wires and connectors.
RBC 524093.03	Twine actuator short to battery.	Check wires and connectors.
RBC 524093.04	Twine actuator short to ground.	Check wires and connectors.
RBC 524093.05	Twine actuator open load.	Check wires and connectors.

John Deere B-Wrap is a trademark of Tama Plastic Industry

tl81334,1681377892662 -19-23MAY23-5/5

Test Sensors and Switches

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



CC277966

tl81334,1681377926164 -19-14APR23-1/12

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

tl81334,1681377926164 -19-14APR23-2/12

3. Select "Input Test" softkey.

CC277969 —UN—22SEP16



CC277969

tl81334,1681377926164 -19-14APR23-3/12

4. The Input Test function is used to test sensors and switches.

For sensor location, see [Locate Machine Electrical Components](#) in Service section.

Description:

- Symbol (A) shows the sensor or the switch status (deactivated or activated).
- Counter (B) informs the operator if a sensor or a switch has detected its target during a cycle.

Test Procedures:

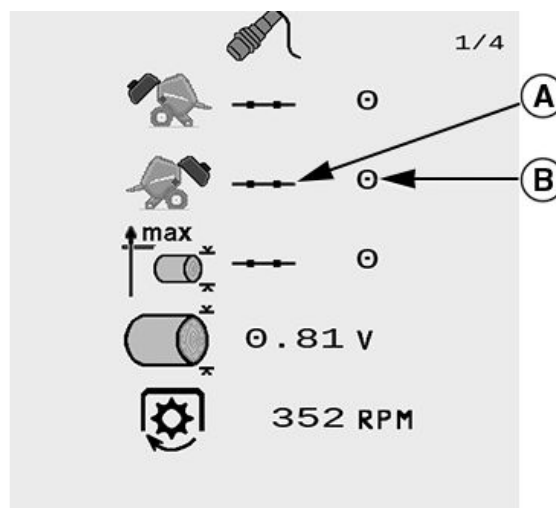
Check all sensors and targets are clean. Check the distance between sensor and target is correct. Activate sensors by placing a piece of steel in front of the sensor. The counter (B) is increased by one each time the sensor is activated or deactivated.

NOTE: Counter (B) is reset after each page switching.

NOTE: An LED located at the rear of some sensors lights up when sensors are activated.

If the test is not OK:

- Check that the pins of connectors are functional.
- Swap the failed sensor with another sensor on the machine (preferably the net feed sensor or the baler rotation speed sensor).



CC574241

A—Status Symbol

B—Counter

- If the two previous tests are not OK, see your John Deere dealer.

Continued on next page

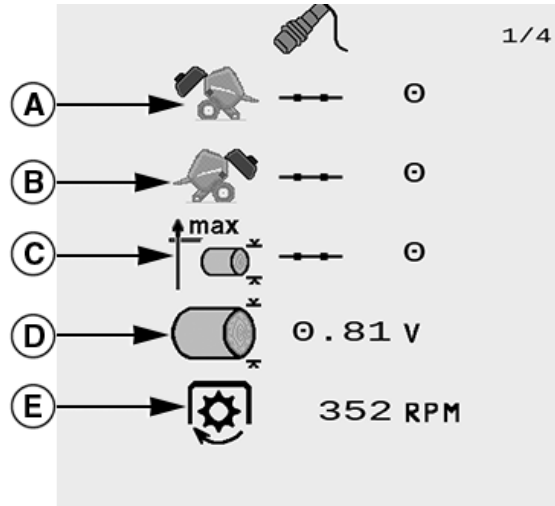
tl81334,1681377926164 -19-14APR23-4/12

CC574241 —UN—13APR23

5. Page 1:

- The test (A) is the test of right gate latch sensor.
- The test (B) is the test of left gate latch sensor.
- The test (C) is the test of oversize bale switch.
- The test (D) is the test of bale diameter potentiometer.
The unit of value is in volts (V).
- The test (E) is the test of baler rotation speed sensor.
The unit of value is in rotations per minutes (rpm).

A—Right Gate Latch Sensor Test
B—Left Gate Latch Sensor Test
C—Oversize Bale Switch Test
D—Bale Diameter Potentiometer Test
E—Baler Rotation Speed Sensor Test



CC574242

†81334,1681377926164 -19-14APR23-5/12

CC574242 —UN—13APR23

6. Select "Next Page" or "Previous Page" softkey to switch from one page to another.

CC277967 —UN—22SEP16



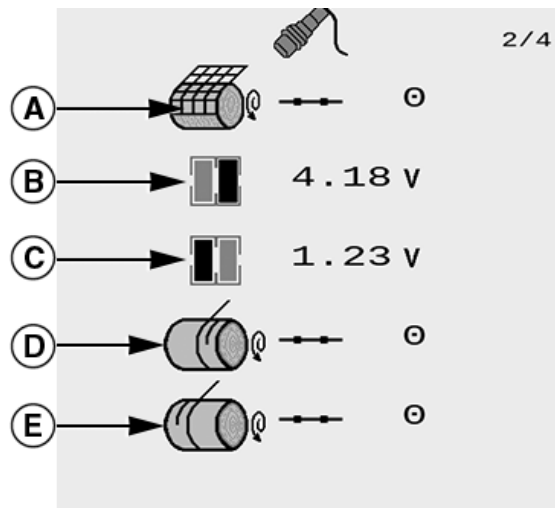
CC277967

†81334,1681377926164 -19-14APR23-6/12

7. Page 2:

- The test (A) is the test of net cut sensor.
- The test (B) is the test of right bale shape potentiometer.
The unit of value is in volts (V).
- The test (C) is the test of left bale shape potentiometer.
The unit of value is in volts (V).
- The test (D) is the test of right twine pulley sensor.
- The test (E) is the test of left twine pulley sensor.

A—Net Cut Sensor Test
B—Right Bale Shape Potentiometer Test
C—Left Bale Shape Potentiometer Test
D—Right Twine Pulley Sensor Test
E—Left Twine Pulley Sensor Test



CC574243

Continued on next page

†81334,1681377926164 -19-14APR23-7/12

CC574243 —UN—13APR23

8. Select "Next Page" or "Previous Page" softkey to switch from one page to another.

CC277967 —UN—22SEP16



CC277967

ti81334,1681377926164 -19-14APR23-8/12

9. **Page 3:**

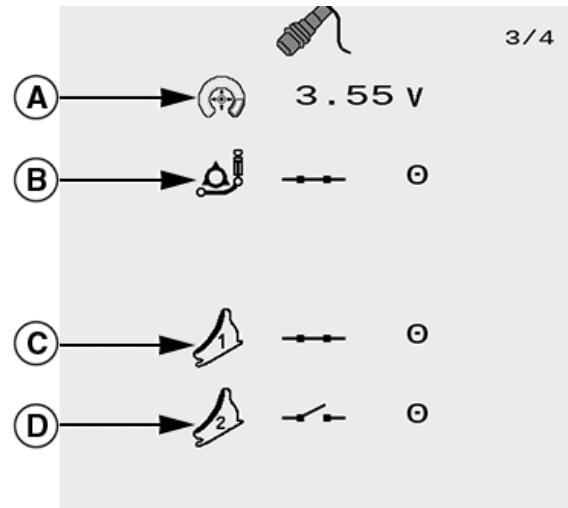
- The test (A) is the test of density pressure sensor. The unit of value is in volts (V).
- The test (B) is the test of drop floor sensor.
- The test (C) is the test of precutter knives set 1 sensor.
- The test (D) is the test of precutter knives set 2 sensor.

A—Density Pressure Sensor Test

B—Drop Floor Sensor Test

C—Precutter Knives Set 1 Sensor Test

D—Precutter Knives Set 2 Sensor Test



CC574244

CC574244 —UN—13APR23

ti81334,1681377926164 -19-14APR23-9/12

10. Select "Next Page" or "Previous Page" softkey to switch from one page to another.

CC277967 —UN—22SEP16



CC277967

Continued on next page

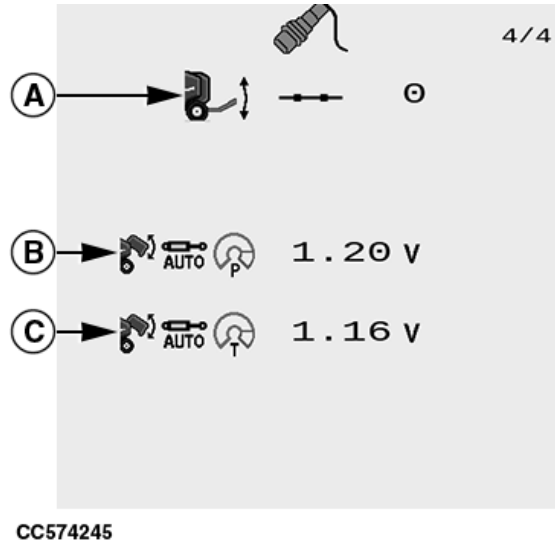
ti81334,1681377926164 -19-14APR23-10/12

11. Page 4:

- The test (A) is the test of bale discharging ramp sensor.
- The test (B) is the test of automatic tailgate pressure sensor P.
The unit of value is in volts (V).
- The test (C) is the test of automatic tailgate pressure sensor T.
The unit of value is in volts (V).

A—Bale Discharging Ramp
Sensor Test
B—Automatic Tailgate
Pressure Sensor P Test

C—Automatic Tailgate
Pressure Sensor T Test



tl81334,1681377926164 -19-14APR23-11/12

CC574245 —UN—13APR23

12. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1681377926164 -19-14APR23-12/12

Test Electro-Hydraulic Components

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



CC277966

tl81334,1681377940347 -19-02MAY23-1/9

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

Continued on next page

tl81334,1681377940347 -19-02MAY23-2/9

3. Select "Output Test" softkey.

CC277970 —UN—22SEP16

CAUTION: During the test of electrohydraulic components, parts of the machine move. Before performing a test, ensure that operating area of the machine is clear from people or foreign objects.



CC277970

IMPORTANT: If one of these tests is not OK, see your John Deere dealer.

4. The Output Test function is used to test electro-hydraulic components. To activate component, select and activate the desired button.

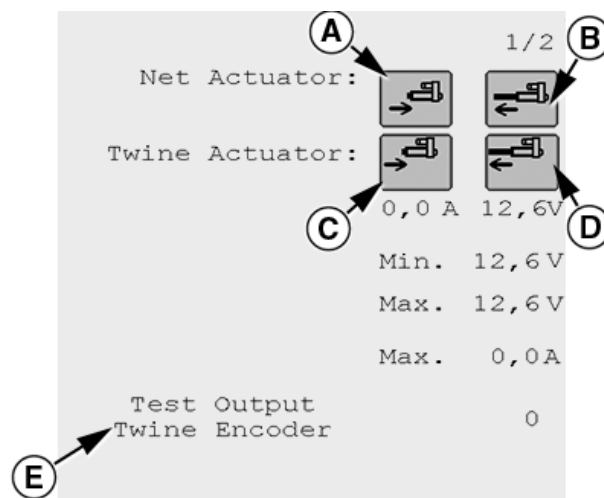
tl81334,1681377940347 -19-02MAY23-3/9

5. Page 1:

- Button (A) is used to retract the net actuator.
- Button (B) is used to extend the net actuator.
- Button (C) is used to retract the twine arms.
- Button (D) is used to extend the twine arms.
- Value (E) is used to test the encoder of the twine actuator.

A—Retract Net Actuator
B—Extend Net Actuator
C—Retract Twine Arms

D—Extend Twine Arms
E—Twine Encoder



CC380429

CC380429 —19—28NOV19

tl81334,1681377940347 -19-02MAY23-4/9

6. Select "Next Page" or "Previous Page" softkey to switch from one page to another.

CC277967 —UN—22SEP16



CC277967

Continued on next page

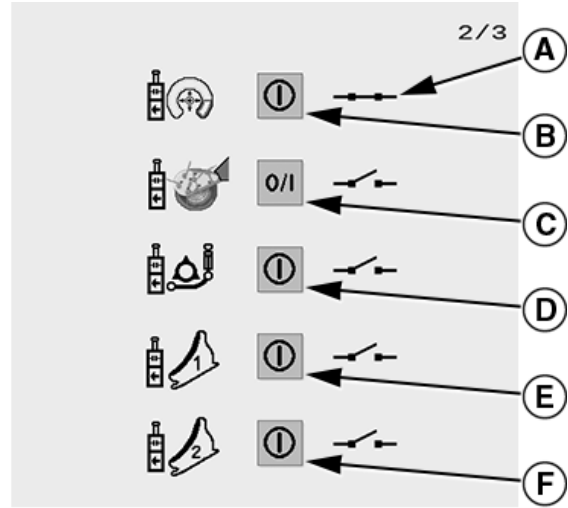
tl81334,1681377940347 -19-02MAY23-5/9

7. Page 2:

- Status symbol (A) shows the component status (deactivated or activated).
 - Button (B) is used to test the density solenoid valve.
 - Button (C) is used to test the pickup lift solenoid valve.
- When the symbol (A) is open, the pickup is controlled. When the symbol (A) is close, the function below are controlled.
- Button (D) is used to test the drop floor solenoid valve.
 - Button (E) is used to test the precutter knives set 1 solenoid valve.
 - Button (F) is used to test the precutter knives set 2 solenoid valve.

A—Status Symbol
B—Density Solenoid Valve Button
C—Pickup Lift Solenoid Valve Button

D—Drop Floor Solenoid Valve Button
E—Precutter Knives Set 1 Solenoid Valve Button
F—Precutter Knives Set 2 Solenoid Valve Button



CC562611

CC562611 —UN—22FEB23

ti81334,1681377940347 -19-02MAY23-6/9

8. Select "Next Page" or "Previous Page" softkey to switch from one page to another.

CC277967 —UN—22SEP16



CC277967

ti81334,1681377940347 -19-02MAY23-7/9

9. Page 3:

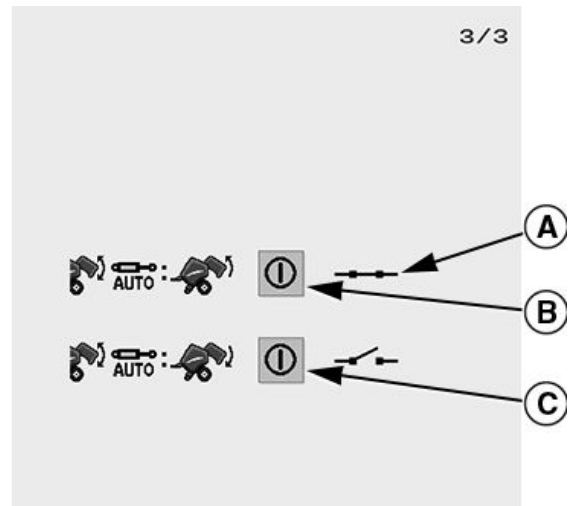
- Button (B) is used to test the open gate solenoid valve.
- Button (C) is used to test the close gate solenoid valve.

NOTE: Buttons (B) and (C) are available if the machine is equipped with the automatic tailgate function.

For buttons (B) and (C), it is possible that they are reversed depending on the connection of the hydraulic hoses to the tractor.

A—Status Symbol
B—Open Gate Solenoid Valve Button

C—Close Gate Solenoid Valve Button



CC574246

CC574246 —UN—14APR23

Continued on next page

ti81334,1681377940347 -19-02MAY23-8/9

10. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1681377940347 -19-02MAY23-9/9

Test Actuator Electrical Consumption

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



CC277966

TL81334,0000FA6 -19-18JUN21-1/5

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

TL81334,0000FA6 -19-18JUN21-2/5

3. Select "Output Test" softkey.

CC277970 —UN—22SEP16



CC277970

Continued on next page

TL81334,0000FA6 -19-18JUN21-3/5

4. Select "Retract Actuator" (A) or "Extend Actuator" (B) button, to extend or retract the actuator of the desired binding system.

Amperage value (C) indicates the amperage reading of the net actuator or twine arms.

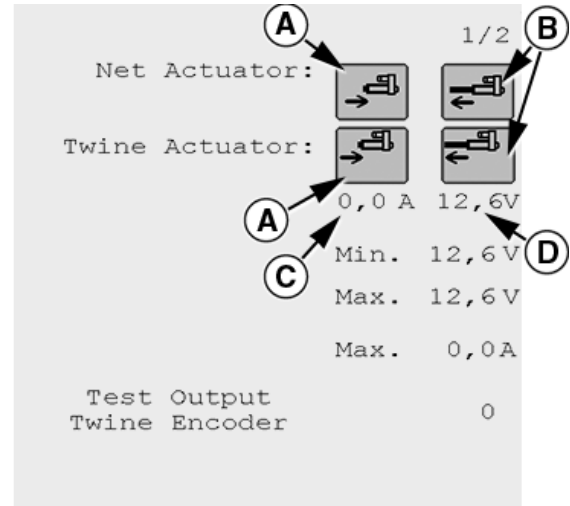
During net actuator extension, amperage value (C) must be between 2 and 12 amperes.

During twine actuator extension, amperage value (C) must be between 2 and 8 amperes.

Continue to activate the actuator to full stroke position. When net actuator is fully extended or retracted, display must show stall amperage between 16 and 25 amperes. When the twine actuator is fully extended or retracted, display must show stall amperage between 18 and 25 amperes.

- Readings below normal indicate low tractor voltage, poor, or corroded harness connections.
- Readings above normal indicate binding mechanical problem, faulty harness, or faulty actuator.
- Amperage spike reading indicates binding mechanical obstruction.

Value (D) indicates the voltage in the electrical circuit.



CC380430

A—Retract Actuator
B—Extend Actuator

C—Amperage Value
D—Voltage Value

TL81334,0000FA6 -19-18JUN21-4/5

5. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

TL81334,0000FA6 -19-18JUN21-5/5

Calibrate Bale Diameter Potentiometer RB311

CC277966 —UN—22SEP16

IMPORTANT: Before calibrating the bale diameter potentiometer, ensure that baler rotation speed sensor is correctly adjusted and activated. See Adjust Baler Rotation Speed Sensor SB365 in Service section, and Enable or Disable Baler Rotation Speed Sensor (If Equipped) in Baler Application Service section.



CC277966

The bale diameter potentiometer is automatically calibrated. Depending on the crop baled, the measured bale diameter might not correspond to the desired diameter adjusted on monitor. The monitor can be fine-tuned to recover the real bale diameter as follows:

1. Start tractor engine.
2. Select "Settings" softkey.

Continued on next page

tl81334,1681377963125 -19-28JUN23-1/13

3. Select "Baler Calibration" softkey.

CC1031658 —UN—16SEP09



CC1031658

†81334,1681377963125 -19-28JUN23-2/13

4. Select "Bale Diameter Calibration" softkey.

CC341042 —UN—09JAN18



CC341042

†81334,1681377963125 -19-28JUN23-3/13

5. Engage tractor PTO and run at rated PTO speed for a few seconds.

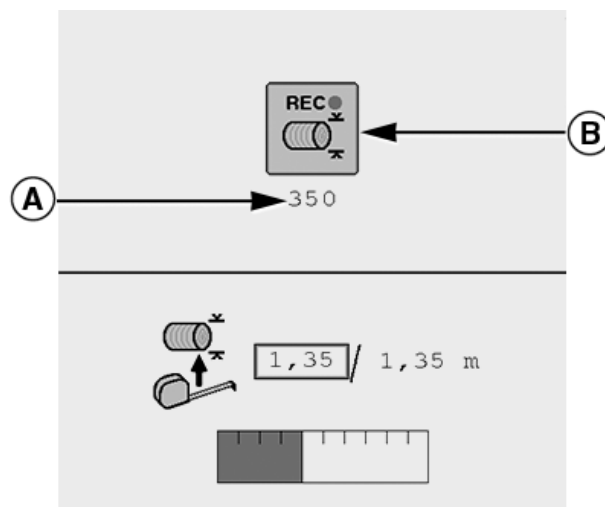
NOTE: Bale diameter potentiometer calibration value (A) can be modified when tractor PTO is engaged.

6. Select button (B) to reset the bale diameter potentiometer calibration.

NOTE: Bale chamber must be empty and gate closed when resetting bale diameter potentiometer calibration. The softcore device must be inactivated.

A—Bale Diameter
Potentiometer Calibration
Value

B—Reset Bale Diameter
Potentiometer Calibration
Button



CC510497

CC510497 —UN—17JUN21

†81334,1681377963125 -19-28JUN23-4/13

7. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

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†81334,1681377963125 -19-28JUN23-5/13

8. Adjust target bale diameter (B) to the desired bale diameter.

NOTE: For the first calibration, we recommend to not exceed 1.40 m (4ft 7-2/16in.) for V451M and 1.50 (4ft 11-1/16in.) for V461M, to avoid to reach oversize alarm.

9. Make a bale to check the bale diameter potentiometer calibration. Before unloading bale, record actual bale diameter (A) value.

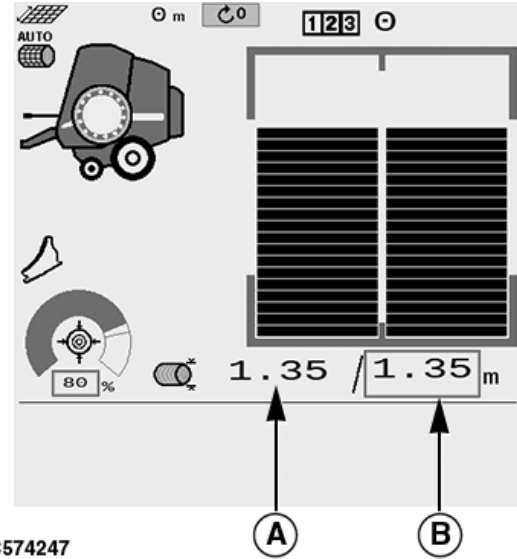
10. Measure bale diameter.

NOTE: To check bale diameter, measure the bale horizontally and vertically on both ends. Add the four measurements together and divide by four to determine average bale diameter.

11. Compare actual bale diameter (A) previously recorded and measured bale diameter. If difference is less than 3 cm (1-3/16 in), bale diameter potentiometer is correctly calibrated. If not, continue procedure to precisely calibrate the bale diameter potentiometer.

NOTE: This fine-tune procedure may need to be repeat if the desired bale diameter or crop is changed.

12. Make 2—3 bales taking care to reach the bale diameter target (B) with a margin of 3 cm (1-3/16 in).



CC574247

A—Bale Diameter (Actual)

B—Bale Diameter (Target)

13. Measure each bale horizontally and vertically on both ends, then determine the average bale diameter.

tt81334,1681377963125 -19-28JUN23-6/13

14. Select "Settings" softkey.

CC277966 —UN—22SEP16



CC277966

tt81334,1681377963125 -19-28JUN23-7/13

15. Select "Baler Calibration" softkey.

CC1031658 —UN—16SEP09



CC1031658

tt81334,1681377963125 -19-28JUN23-8/13

16. Select "Bale Diameter Calibration" softkey.

CC341042 —UN—09JAN18



CC341042

Continued on next page

tt81334,1681377963125 -19-28JUN23-9/13

17.

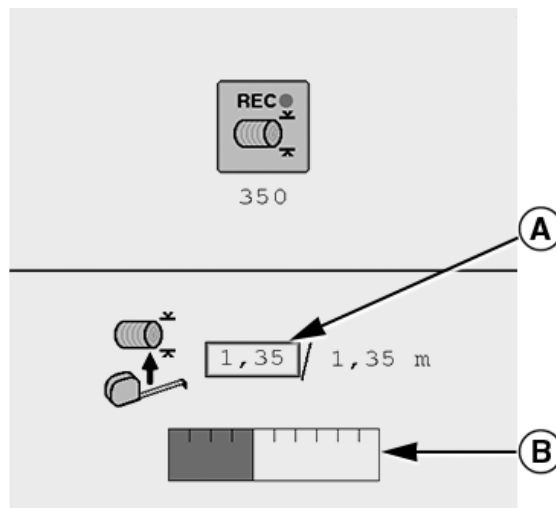
IMPORTANT: For RBC software version up to 14.01:

The average bale diameter measured under step 13 must be entered in metric unit, even if the monitor is set in imperial unit.

Enter the average bale diameter measured value determined under step 13 in input box (A).

A—Bale Diameter Measured

B—Bale Diameter Correction Value Graphic



CC510498

CC510498 —UN—17JUN21

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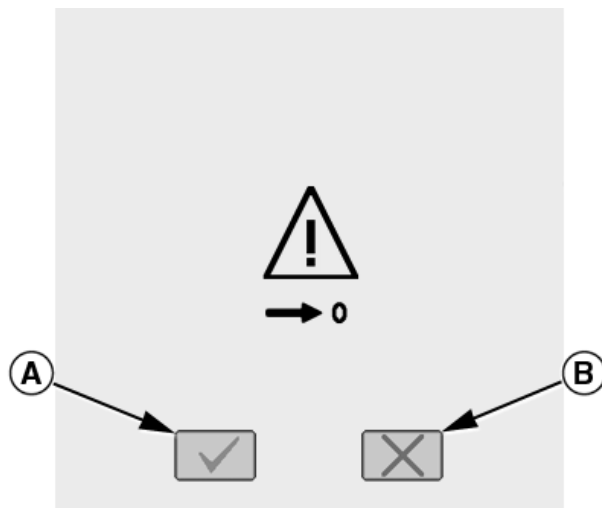
t181334,1681377963125 -19-28JUN23-10/13

18. Select "Accept" button (A) to validate the correction or select the "Cancel" button (B) to abort the correction.

After the validation of the correction, the graphic (C) indicates a new correction value.

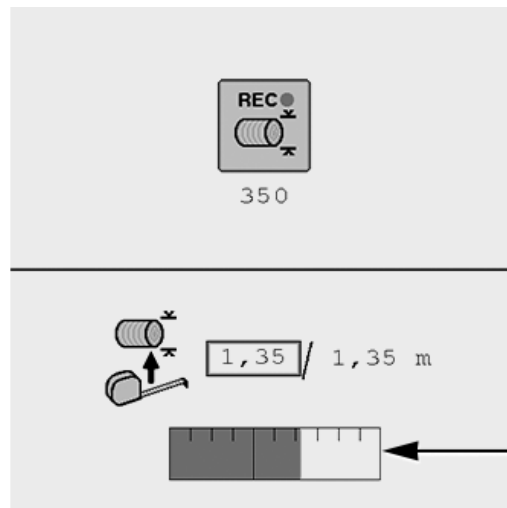
A—Accept Button
B—Cancel Button

C—Bale Diameter Correction Value Graphic



CC341047

CC341047 —UN—09JAN18



CC510499

CC510499 —UN—17JUN21

†81334,1681377963125 -19-28JUN23-11/13

19. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

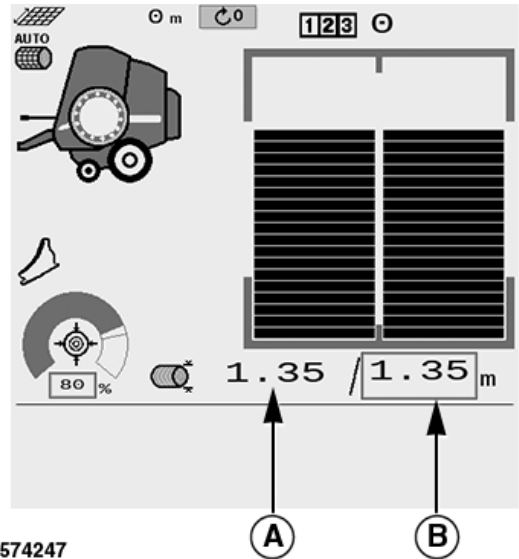
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†81334,1681377963125 -19-28JUN23-12/13

20. Make a bale to check the bale diameter potentiometer calibration. Before unloading bale, record actual bale diameter (A) value.
21. Measure bale diameter before binding of the bale.
22. Compare actual bale diameter (A) previously recorded and measured bale diameter. If difference is less than 3 cm (1-3/16 in), bale diameter potentiometer is correctly calibrated. If not repeat procedure from step 9.
23. If bale diameter potentiometer calibration is not correct, repeat procedure from the beginning or see your John Deere dealer.

A—Bale Diameter (Actual)

B—Bale Diameter (Target)



CC574247

CC574247 —UN—14APR23

t81334,1681377963125 -19-28JUN23-13/13

Calibrate Bale Shape Potentiometers RB321 and RB322

IMPORTANT: It is normal for right and left bale shape indicators to provide no informations with empty chamber. They indicate information when the bale in chamber has a minimum diameter of 0.8 m (2 ft 7-1/2 in).

IMPORTANT: Before calibrating the bale shape potentiometers, ensure that baler rotation speed sensor is correctly adjusted and activated. See [Adjust Baler Rotation Speed Sensor SB365](#) in Service section.

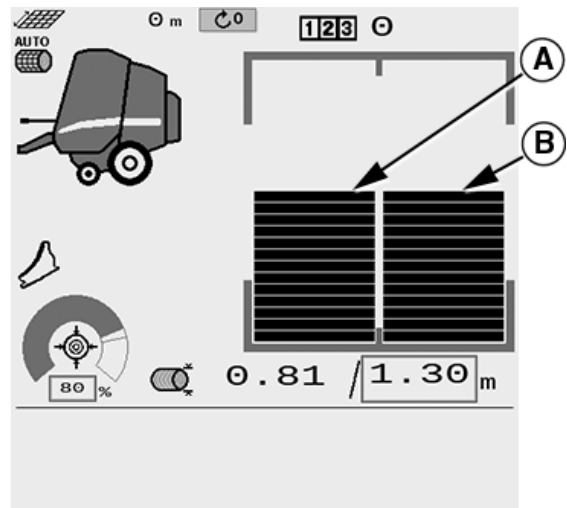
Do not shut off tractor engine before the calibration procedure of the bale shape potentiometers is finished.

Reset calibration of bale shape potentiometers if:

- Bale shape indicators on monitor and real bale shape do not match.
- Bale shape indicators on monitor are not displayed when the chamber is not empty.

If a calibration was necessary, follow this procedure:

1. Start tractor engine.
2. Bale three bales following the bale shape indicator graphs (A) and (B) to have a similar bar height on both sides.



CC574248

CC574248 —UN—14APR23

A—Left Bale Shape Indicator Graph

B—Right Bale Shape Indicator Graph

Continued on next page

t81334,1681377978622 -19-14APR23-1/13

3. Select "Settings" softkey.

CC277966 —UN—22SEP16



CC277966

†81334,1681377978622 -19-14APR23-2/13

4. Select "Baler Calibration" softkey.

CC1031658 —UN—16SEP09



CC1031658

†81334,1681377978622 -19-14APR23-3/13

5. Select the "Bale Shape Calibration" softkey.

CC341045 —UN—09JAN18



CC341045

†81334,1681377978622 -19-14APR23-4/13

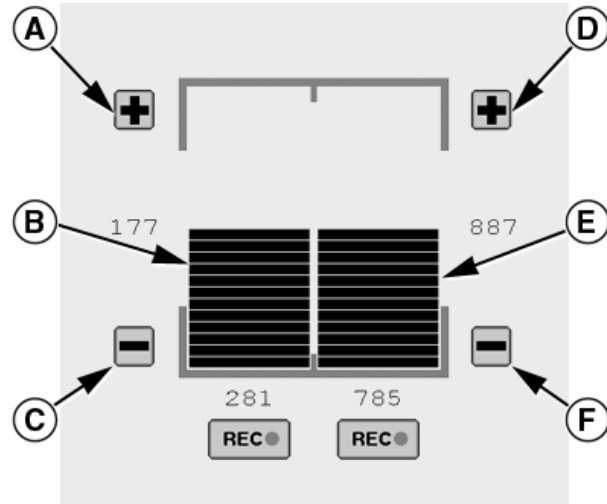
6. Check that bale shape indicator graphs on monitor before ejecting the bale, check that bale shape indicators graph on monitor and real bale shape match. If not match, use the "PLUS" button (A) and (D), or "MINUS" button (C) and (F) until to correct the calibration of the bale shape potentiometer compare to real bale shape.

NOTE: One pulse on buttons increases or decrease bar by one.

- For the left bale shape indicator graph (B): Press the "PLUS" button (A) to add bars of the bale shape indicator graph. Press the "MINUS" button (C) to remove bars on the bale shape indicator graph.
- For the right bale shape indicator graph (E): Press the "PLUS" button (D) to add bars on the bale shape indicator graph. Press the "MINUS" button (F) to remove bars on the bale shape indicator graph.

For example: In case of a conic bale which is bigger on the right side, add bars on the left bale shape indicator graph or remove bars on the right bale shape indicators (maximum 1 to 3 bars).

NOTE: If bale shape indicator graphs are to the maximum size of graph, remove bars on both indicators (maximum 1 to 3 bars).



CC380374

A—Left Bale Shape PLUS Button
B—Left Bale Shape Indicator Graph
C—Left Bale Shape MINUS Button

D—Right Bale Shape PLUS Button
E—Right Bale Shape Indicator Graph
F—Right Bale Shape MINUS Button

CC380374 —UN—29MAY19

Continued on next page

†81334,1681377978622 -19-14APR23-5/13

7. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

8. Bale three bales following the bale shape indicators graph to have the similar bar height on both sides.

9. Check that bale shape indicator graphs on monitor before ejecting the bale and real bale shape match.

- If OK, procedure is ended.

• If not OK, it can be necessary to repeat the procedure from the step 2, two or three times. If calibration stills not OK, go to next step.

ti81334,1681377978622 -19-14APR23-6/13

10. Select "Settings" softkey.

CC277966 —UN—22SEP16



CC277966

ti81334,1681377978622 -19-14APR23-7/13

11. Select "Baler Calibration" softkey.

CC1031658 —UN—16SEP09



CC1031658

ti81334,1681377978622 -19-14APR23-8/13

12. Select the "Bale Shape Calibration" softkey.

CC341045 —UN—09JAN18



CC341045

Continued on next page

ti81334,1681377978622 -19-14APR23-9/13

13.

IMPORTANT: Bale chamber must be empty and gate closed when resetting bale shape potentiometer calibration. The softcore device must be inactivated.

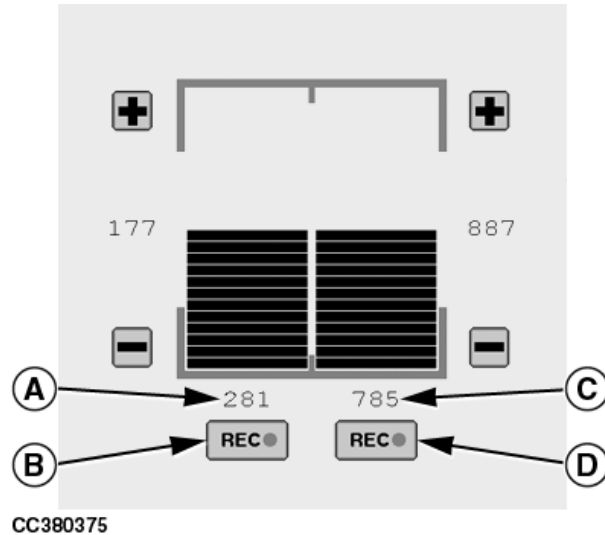
Reset calibration of left and right bale shape potentiometers:

- a. Select button (B) to reset the calibration of the left bale shape potentiometer. Select button (D) to reset the calibration of the right bale shape potentiometer.

NOTE: Calibration values (A) and (C) of the left and right bale shape potentiometers can be modified.

A—Left Bale Shape Potentiometer Calibration Value
B—Reset Left Bale Shape Potentiometer Calibration Button

C—Right Bale Shape Potentiometer Calibration Value
D—Reset Right Bale Shape Potentiometer Calibration Button



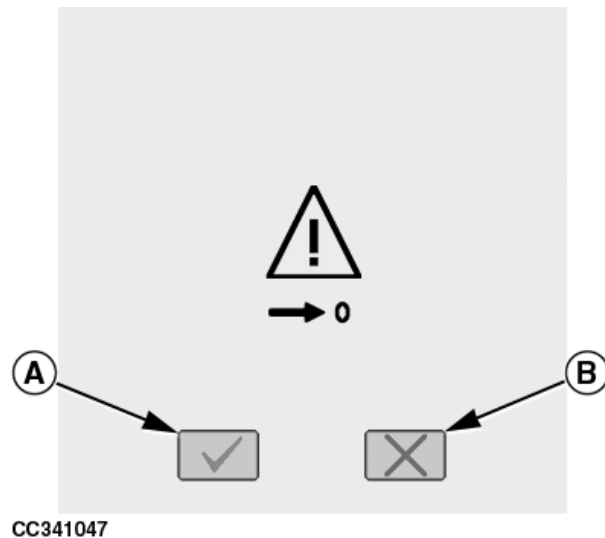
CC380375 —UN—29MAY19

†181334,1681377978622 -19-14APR23-10/13

- b. Select "Accept" button (A) to validate and reset calibration, or select the "Cancel" button (B) to abort the reset calibration of the bale shape.

A—Accept Button

B—Cancel Button



CC341047 —UN—09JAN18

†181334,1681377978622 -19-14APR23-11/13

14. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16

15. Set the bale density to 100 % (maximum density) and disable Soft Core System. See [Adjust Bale Density](#), and [Operate Soft Core System](#) in Operating Baler Application section.

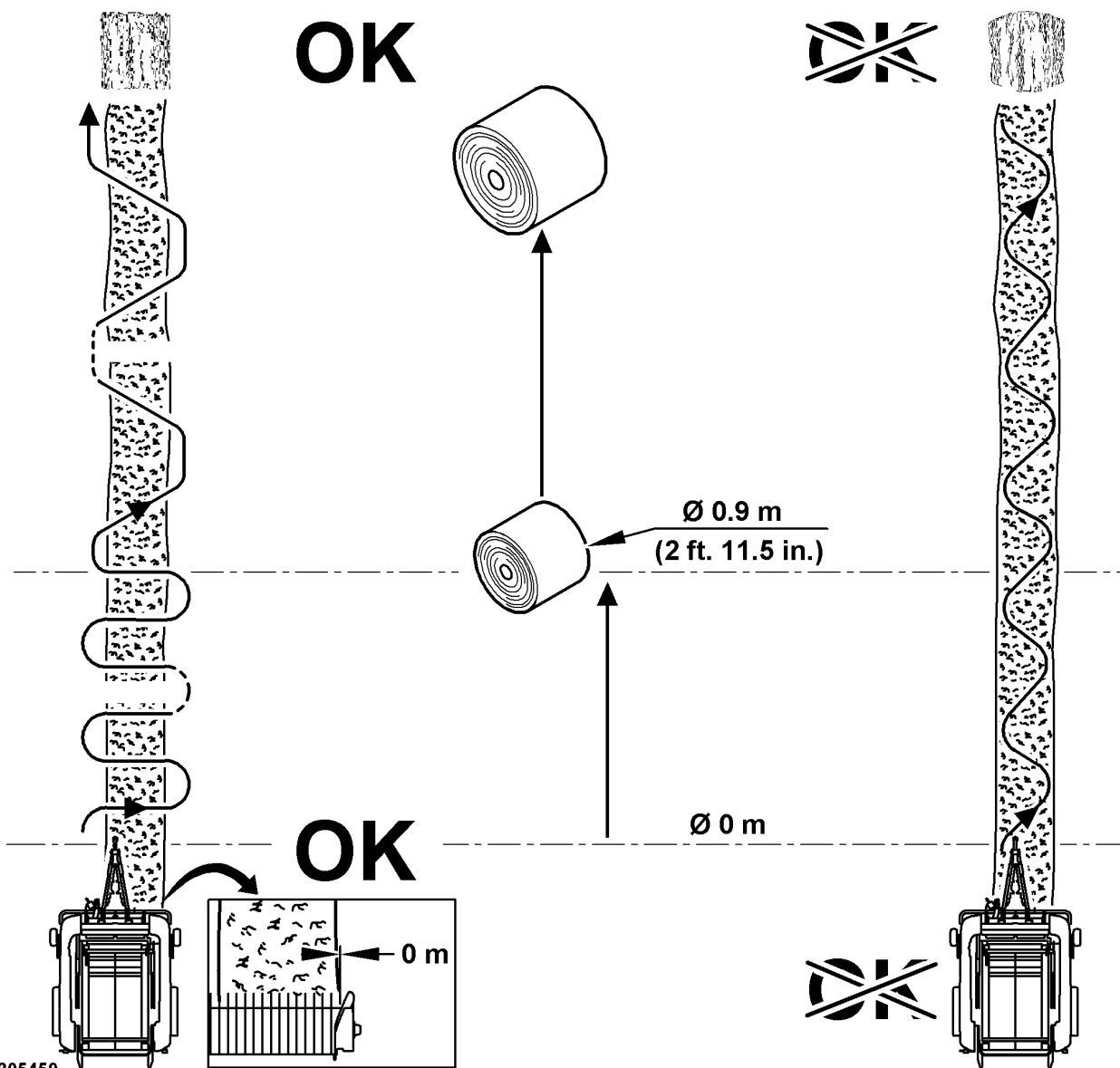


CC277965

16. Set bale shape sensitivity to 5 (high sensitivity). See [Adjust Bale Shape Sensitivity](#) in this section.

Continued on next page

†181334,1681377978622 -19-14APR23-12/13



CC205459

17. Bale three bales as follows:

IMPORTANT: Do not follow bale shape indicators on the monitor while baling these three bales.

- Bale by feeding both sides of the baler and by weaving (slaloming) quickly until a bale diameter of 0.9 m (2 ft 11-1/2 in) is reached.

NOTE: To correctly feed each side of the baler, feed all the pickup width alternatively in order to balance crop on the rotor auger.

- To obtain desired bale diameter, finish the bale by feeding more each side of the baler to reduce weaving (slaloming).

18. Then bale several bales by following the procedure described under Guidelines to Form a Good Bale in Operating Baler Application section.

19. If the bale shape indicators on monitor and real bale shape still do not match, see your John Deere dealer.

tt81334,1681377978622 -19-14APR23-13/13

CC205459 —JUN—26SEP13

Calibrate Twine Binding Actuator MB421

CC277966 —UN—22SEP16

NOTE: In order to calibrate the twine binding actuator, see Select Binding System in Operating Baler Application section to select twine binding system.

The calibration of the twine actuator is not available if the twine binding system is not selected or not installed on the baler.



CC277966

1. From the baler application main page, select “Settings” softkey.

TL81334,0000FA8 -19-18JUN21-1/5

2. Select “Baler Calibration” softkey.

CC1031658 —UN—16SEP09



CC1031658

TL81334,0000FA8 -19-18JUN21-2/5

3. Select “Net or Twine Actuator Calibration” softkey.

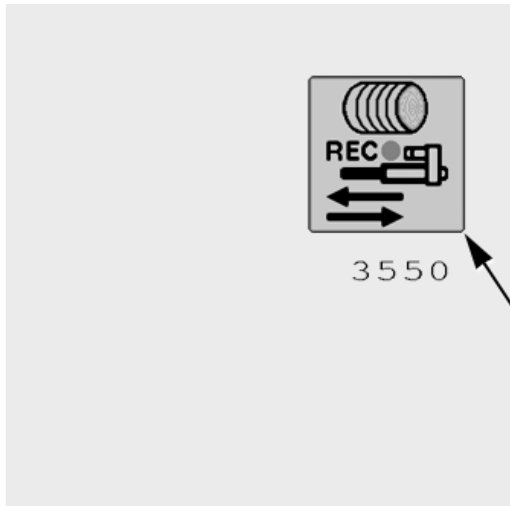
CC341041 —UN—08JAN18



CC341041

Continued on next page

TL81334,0000FA8 -19-18JUN21-3/5



CC380369

CC380369 —UN—29MAY19

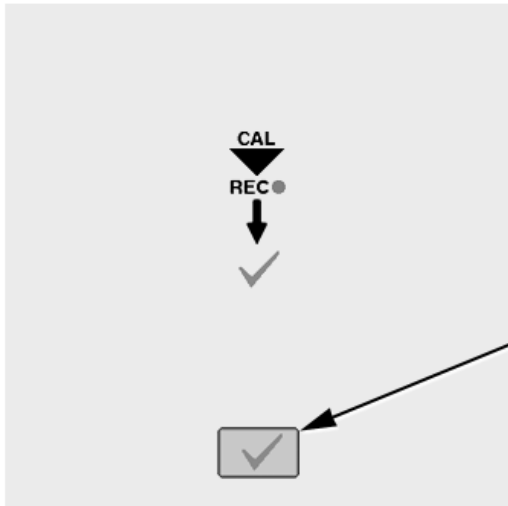
the calibration, use button (A) to abort calibration process and use "Cancel" button (C) to confirm.

The twine actuator extends and the retracts twine arms. The monitor beeps continuously during 3 seconds and displays a confirmation screen when the twine actuator is correctly calibrated. Use "Accept" button (B) to finish calibration.

If the twine actuator is not correctly calibrated, the monitor displays calibration failed screen. Use "Cancel" button (C) to confirm. See your John Deere dealer.

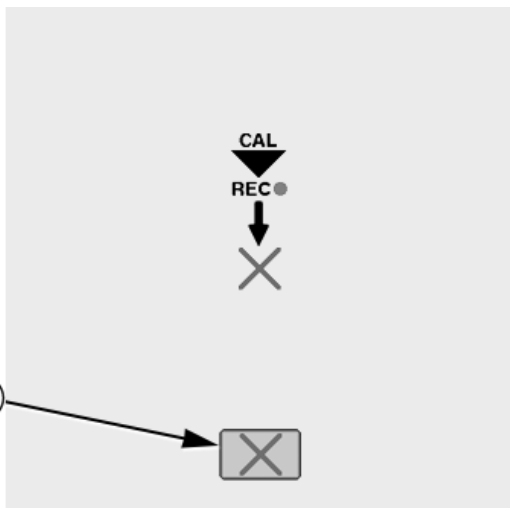
A—Twine Binding Actuator Calibration Button
B—Accept Button

C—Cancel Button



CC342451

CC342451 —UN—24JAN18



CC418313

CC418313 —UN—06MAY21

4. Select "Twine Binding Actuator Calibration" button (A) to start calibration of the twine binding actuator. During

5. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,0000FA8 -19-18JUN21-5/5

Adjust Bale Shape Sensitivity

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



CC277966

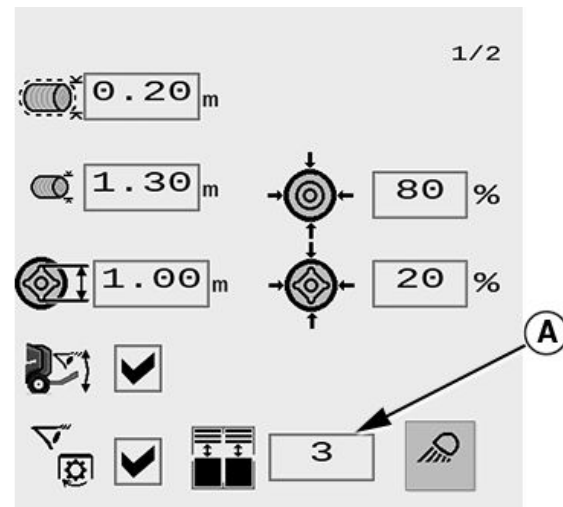
tl81334,1681378028089 -19-14APR23-1/3

2. Select input box (A) and set the bale shape sensitivity from 1 (low sensitivity) to 5 (high sensitivity).

IMPORTANT: Never set the bale shape sensitivity to 0.

NOTE: The initial factory setting is 3.

A—Bale Shape Sensitivity



CC574249

CC574249 —UN—14APR23

tl81334,1681378028089 -19-14APR23-2/3

3. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1681378028089 -19-14APR23-3/3

Enable or Disable Baler Rotation Speed Sensor (If Equipped)

CC277966 —UN—22SEP16



CC277966

IMPORTANT: Operating the baler with the baler rotation speed sensor disabled may cause malfunctions. See your John Deere dealer to replace defective parts as soon as possible.

1. From the baler application main page, select "Settings" softkey.

†81334,1681378041088 -19-17APR23-1/3

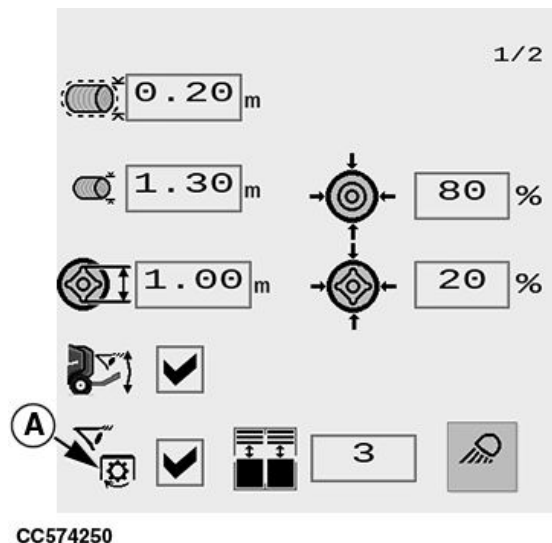
2. Checkbox (A) is used to enable or disable the baler rotation speed sensor.

NOTE: Disabling the baler rotation speed sensor allows the baler to be operated with a defective sensor.

- Tick checkbox (A) to enable the baler rotation speed sensor.
- Do not tick checkbox (A) to disable the baler rotation speed sensor.

3. Before deactivating this function, check sensor adjustment. See [Adjust Baler Rotation Speed Sensor SB365](#) in Service section.

A—Baler Rotation Speed Sensor



CC574250

CC574250 —UN—11MAY23

†81334,1681378041088 -19-17APR23-2/3

4. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

†81334,1681378041088 -19-17APR23-3/3

Enable or Disable Bale Discharging Ramp Sensor (If Equipped)

CC277966 —UN—22SEP16



CC277966

IMPORTANT: Operating the baler with the bale discharging ramp sensor disabled may cause malfunctions in automation, and automatic tailgate mode. See your John Deere dealer to replace defective parts as soon as possible.

1. From the baler application main page, select "Settings" softkey.

Continued on next page

†81334,1681378072818 -19-17APR23-1/3

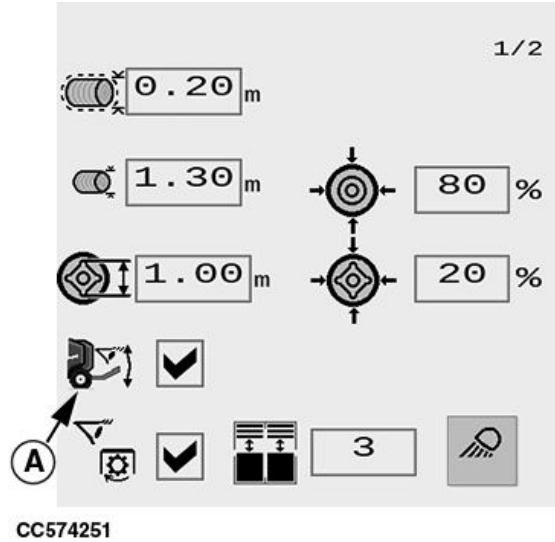
2. Checkbox (A) is used to enable or disable the bale discharging ramp sensor.

NOTE: Enable the bale discharging ramp sensor allows the baler to be operated in automation and automatic tailgate mode.

- Tick checkbox (A) to enable the bale discharging ramp sensor.
- Do not tick checkbox (A) to disable the bale discharging ramp sensor.

3. Before activating this function, check sensor adjustment. See Adjust Bale Discharging Ramp Sensor SB343 in Service section.

A—Bale Discharging Ramp Sensor



CC574251 —UN—11MAY23

tl81334,1681378072818 -19-17APR23-2/3

4. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

tl81334,1681378072818 -19-17APR23-3/3

Switch Baler Application from Current Virtual Terminal (Display) to Another

CC277966 —UN—22SEP16

1. From the baler application main page, select "Settings" softkey.



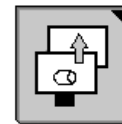
CC277966

TL81334,0000656 -19-24MAY19-1/4

2. Select "Switch Baler Application from current Virtual Terminal to another Virtual Terminal" softkey

CC277988 —UN—22SEP16

NOTE: Softkey is available when at least 2 virtual terminals are connected.



CC277988

Continued on next page

TL81334,0000656 -19-24MAY19-2/4

3. Select button (A) to switch baler application from the current virtual terminal to another virtual terminal.

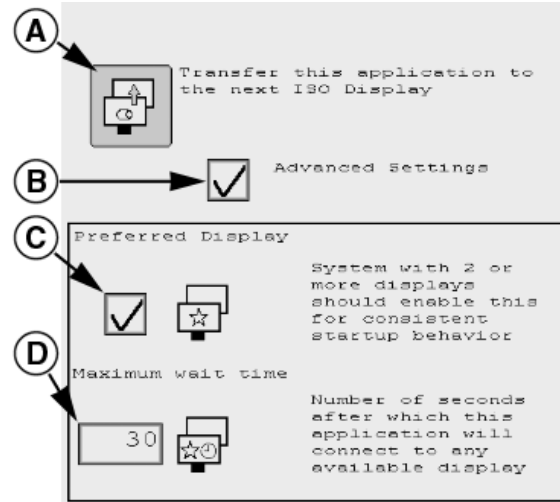
Tick advanced settings checkbox (B) to display preferred virtual terminal (C), and start up waiting time (D) settings.

Preferred virtual terminal checkbox (C) allows operator to choose the virtual terminal that should display baler application at start up. Tick the checkbox (C) when the application is displayed on desired virtual terminal.

Start up waiting time (D) is the time after which the baler application is displayed on the default virtual terminal if expected virtual terminal is not available.

A—Switch to Another Virtual Terminal Button
B—Advanced Settings

C—Preferred Virtual Terminal
D—Start Up Waiting Time



CC277989

CC277989 —19-21DEC16

TL81334,0000656 -19-24MAY19-3/4

4. Select "Main Page" softkey to return to baler application main page.

CC277965 —UN—22SEP16



CC277965

TL81334,0000656 -19-24MAY19-4/4

Periodic Maintenance

CC277966 —UN—22SEP16

1. From the Baler Application Main Page, select the "Settings" softkey.



CC277966

tl81334,1681378111671 -19-17APR23-1/5

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

tl81334,1681378111671 -19-17APR23-2/5

3. Select "Next Page" or "Previous Page" softkey to access page 6/6.

CC277967 —UN—22SEP16



CC277967

Continued on next page

tl81334,1681378111671 -19-17APR23-3/5

4. On page 6/6, the counter (A) indicates when it necessary to drain and refill gear case. See Every 500 Hours or Yearly: Drain and Refill Gear Case in Lubrication and Maintenance section.

The counter (B) indicates when it necessary to check wheel nut torque. See Check Wheel Nut Torque in Preparing the Baler section.

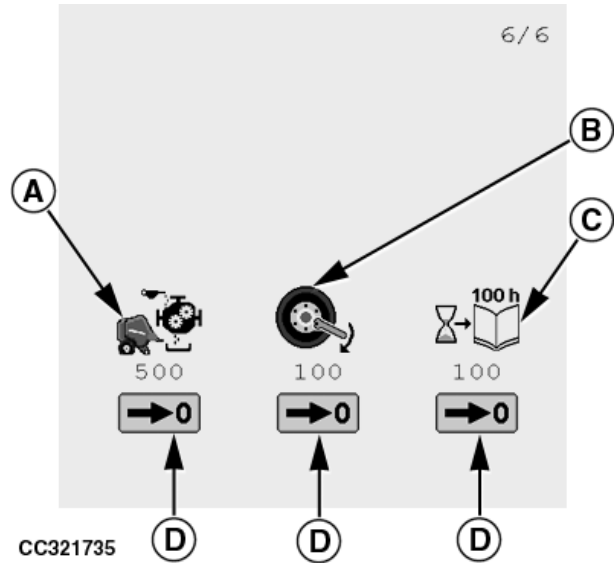
The counter (C) indicates when it necessary to make the 100 hours or yearly revision. See in Lubrication and Maintenance section.

Select the "Clear Counter" button (D) to reinitialize required counter.

When the counters are nearby zero hours, a pop-up message appears to remember the operator that periodic maintenance is needed. Use the button (E) to acknowledge the remembering message.

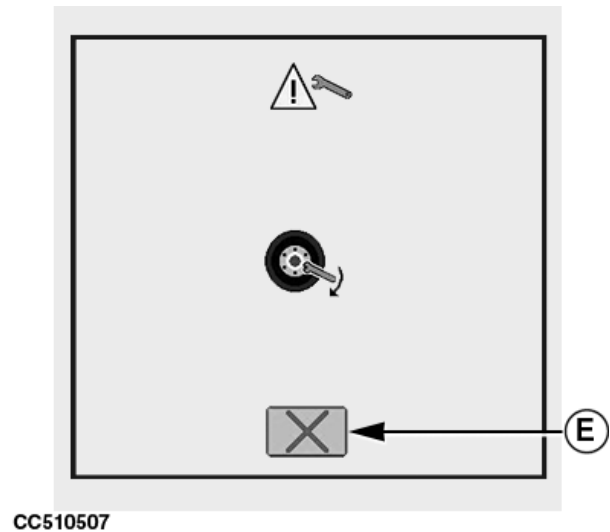
NOTE: The counters must be cleared after every periodic maintenance.

- | | |
|--------------------------------------|------------------------|
| A—Drain and Refill Gear Case counter | D—Clear Counter Button |
| B—Wheel Nut Torque counter | E—Cancel Button |
| C—100 h or Yearly revision counter | |



CC321735

CC321737 —19—06JUL17



CC510507

CC510507 —UN—21JUL21

1181334,1681378111671 -19-17APR23-4/5

5. Select "Main Page" softkey to return to Baler Application Main Page.

CC277965 —UN—22SEP16



CC277965

1181334,1681378111671 -19-17APR23-5/5

Storage

Prepare the Baler for Storage

Remove bindings rolls and store them in a cool and dry place.

Release belt tension.

Clean baler thoroughly inside and out. Trash and dirt will draw moisture and cause rust.

Clean binding frame(s) thoroughly.

IMPORTANT: If the net binding device is going to be stored for a long period of time, avoid the rubber feed roll being deformed by releasing feed roll pressure and placing feed roll brake into unlocked position. Place a piece of cardboard between feed rolls, all across their width.

NOTE: Should a high-pressure washer be used to clean the baler, do not direct pressurized water on the bearings or electrical components.

Sharpen and grease knives.

Check that all rolls are working freely. If one of them is hard to rotate, remove it, clean bearing housing and replace bearing, if necessary.

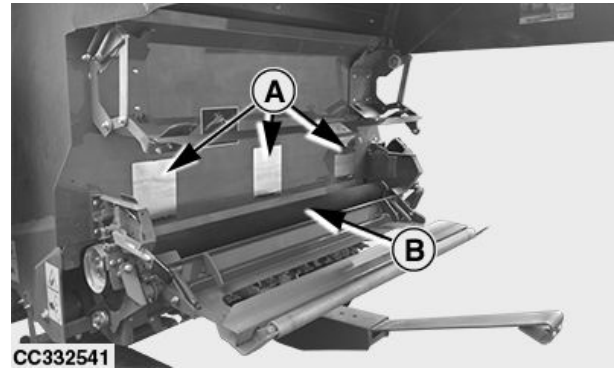
Thoroughly lubricate complete machine. See Lubrication and Maintenance section. This excess of grease will collect moisture and protect bearings against humidity.

Coat exposed cylinder rods with grease to prevent rusting.

Apply a few drops of oil to all pivot points and linkages.

Apply a thin layer of grease to threads of all adjusting bolts.

Grease powerline guard tubes (A) at the beginning of the winter season to prevent freezing.



A—Guard Tube

All parts from which the paint has been worn should be painted or coated with oil.

Clean all chains. Dry thoroughly and coat with a heavy oil.

Protect electrical connectors against corrosion with adequate fluid.

List the replacement parts that will be needed and order them.

Store baler in a dry sheltered place. If stored outside, cover with waterproof material.

Block up baler, taking load off tires. Do NOT deflate tires. If exposed to light, grease and oil, cover tires for protection.

ga87848,1683028620519 -19-31MAY23-1/1

CC332541—UN—04OCT17

Prepare for Beginning of Season

Check and fill gear case up to check plug level. See Weekly: Check Gear Case Oil Level in Lubrication and Maintenance section.

Lubricate complete machine. See Lubrication and Maintenance section. This lubrication will force any collected moisture out of the bearings.

Check tires for correct air pressure. See Tire Inflation in Preparing the Baler section.

Tighten all nuts and screws. See Service section.

Check all belt hooks, then replace as necessary. See Install Belt Hooks in Service section.

Replace all belt splice pins. See Install Belts in Service section.

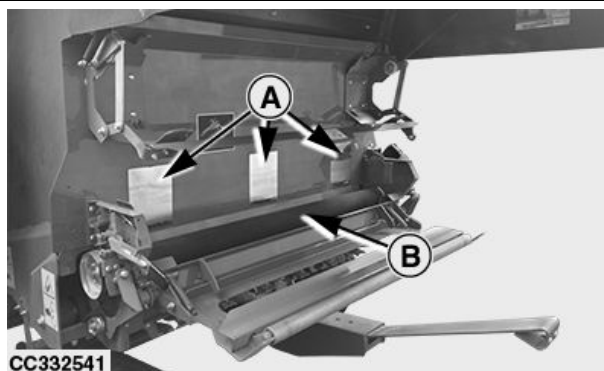
Check adjustments of baler as described in Service section.

Review this operator's manual.

Check that control monitor is working properly.

Wipe off feed rolls (B) and check for any sticky material. If necessary, rolls may be washed with soap and water. NEVER use solvents to clean rubber feed roll.

Apply talcum powder to rubber feed roll.



A—Steel net roll supports

B—Feed rolls

Check areas which will contact net roll. These areas must be clean and smooth to help prevent net wrapping on rubber coated roll. Remove excessive dust or crop material from feed rolls (B) and stainless steel net roll supports (A) with a dry cloth.

Check adjustments of net binding, mainly net feed roll pressure. See Check Net Binding Device in Service section.

Check that net knife is sharp.

TL81334,00006A4 -19-05JUN19-1/1

Handle Round Bales With B-Wrap

Do not snag or tear the wrapping material. Snags or tears in the net wrapping can reduce durability of bales and detract from hay quality when bales are stored outside.

Orientate breathable material seam so that water is shed after moving (between noon and six o'clock) and the seam overlap faces down, preventing water from getting in.

JC87117,0000227 -19-29FEB16-1/1

Specifications

Specifications for V451M Baler

Size of Bale Chamber

Bale chamber diameter	0.9 to 1.65 m (3 to 5.4 ft)
Bale chamber width	1.21 m (4 ft)

Baler

Shipping weight empty ^a	4350 kg (9590 lb)
Length, gate closed	5.15 m (16 ft 11 in)
Length, gate open	5.85 m (19 ft 1/4 in)
Height, gate closed	3.1m (10 ft 2 in)
Height, gate open	4.2 m (13 ft 11-1/4 in)
Width (with 500/55 - 20 tires)	2.75 m (9 ft 1/4 in)

^aWeight without consumables, may vary depending on equipment.

2.00 m (6 ft 6-3/4 in) Pickup with Drop Floor

Pickup width	2.00 m (6 ft 6-3/4 in)
Width (between outer teeth)	1.66 m (5 ft 5-1/4 in)
Tooth bars	10 (2 x 5)
Number of teeth	130
Tooth spacing	66 mm (2-1/2 in)
Stripper diameter	340 mm (1 ft 1-1/2 in)

2.20 m (7 ft 3 in) Pickup with Drop Floor

Pickup width	2.20 m (7 ft 3 in)
Width (between outer teeth)	1.92 m (6 ft 4 in)
Tooth bars	10 (2 x 5)
Number of teeth	150
Tooth spacing	66 mm (2-1/2 in)
Stripper diameter	340 mm (1 ft 1-1/2 in)

Precutter Device with 13 Knives

Number of knives	13
Knife spacing	80 mm (3-1/8 in) (with 13 knives engaged)

Precutter Device with 25 Knives (If Equipped)

Number of knives	25
Knife spacing	40 mm (1-9/16 in.) (with 25 knives engaged)

Brake System (If Equipped)

Type	Hydraulic or pneumatic
------------	------------------------

Miscellaneous

PTO shaft speed	540 rpm (balers with 540 rpm gear case)
Drive protection	Cam-type cut-out clutch
Powerline	Constant velocity powerline
Maximum tractor weight	10000 kg (22050 lb)
Minimum tractor horsepower	82 kW (110 hp) at PTO

Continued on next page

ga87848,1683288354533 -19-01JUN23-1/2

Specifications

Miscellaneous

Tire type.....	15/55-17 134 A8 500/50-17 140 A8 500/55-20 150 A8 620/40R22 148D
Tongue	Adjustable

Sound Level

Max. sound level in accordance with EN1553; measurement method in accordance with ISO3744 (average value)	85 dB(A)
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ga87848,1683288354533 -19-01JUN23-2/2

Specifications for V461M Baler

Size of Bale Chamber

Bale chamber diameter	0.9 to 1.85 m (3 to 6 ft)
Bale chamber width	1.21 m (4 ft)

Baler

Shipping weight empty ^a	4450 kg (9810 lb)
Length, gate closed	5.15 m (16 ft 11 in)
Length, gate open	5.85 m (19 ft 1/4 in)
Height, gate closed	3.3 m (10 ft 10 in)
Height, gate open	4.2 m (13 ft 11-1/4 in)
Width (with 500/55 - 20 tires)	2.75 m (9 ft 1/4 in)

^aWeight without consumables, may vary depending on equipment.

2.00 m (6 ft 6-3/4 in) Pickup with Drop Floor

Pickup width	2.00 m (6 ft 6-3/4 in)
Width (between outer teeth)	1.66 m (5 ft 5-1/4 in)
Tooth bars	10 (2 x 5)
Number of teeth	130
Tooth spacing	66 mm (2-1/2 in)
Stripper diameter	340 mm (1 ft 1-1/2 in)

2.20 m (7 ft 3 in) Pickup with Drop Floor

Pickup width	2.20 m (7 ft 3 in)
Width (between outer teeth)	1.92 m (6 ft 4 in)
Tooth bars	10 (2 x 5)
Number of teeth	150
Tooth spacing	66 mm (2-1/2 in)
Stripper diameter	340 mm (1 ft 1-1/2 in)

Precutter Device with 13 Knives

Number of knives	13
Knife spacing	80 mm (3-1/8 in) (with 13 knives engaged)

Precutter Device with 25 Knives (If Equipped)

Number of knives	25
Knife spacing	40 mm (1-9/16 in.) (with 25 knives engaged)

Brake System (If Equipped)

Type	Hydraulic or pneumatic
------------	------------------------

Miscellaneous

PTO shaft speed	540 rpm (balers with 540 rpm gear case)
Drive protection	Cam-type cut-out clutch
Powerline	Constant velocity powerline
Maximum tractor weight	10000 kg (22050 lb)
Minimum tractor horsepower	82 kW (110 hp) at PTO

Continued on next page

ga87848,1683288354328 -19-01JUN23-1/2

Specifications

Miscellaneous

Tire type.....	15/55-17 134 A8 500/50-17 140 A8 500/55-20 150 A8 620/40R22 148D
Tongue	Adjustable

Sound Level

Max. sound level in accordance with EN1553; measurement method in accordance with ISO3744 (average value)	85 dB(A)
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ga87848,1683288354328 -19-01JUN23-2/2

**EC Declaration of Conformity: V451M, and
V461M Round Balers****Deere & Company**
Moline, Illinois USA

The person who signed this certificate declares that:

Machine type: Round Baler**Models:** V451M, and V461M**From serial numbers:** 1CCV451HAHM179001-
1CCV451LAHM179001-
1CCV451NAHM179001-
1CCV451PAHM179001-
1CCV461HAHM179001-
1CCV461LAHM179001-
1CCV461NAHM179001-
1CCV461PAHM179001-

fulfills all relevant provisions and essential requirements of the following directive:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-certification

The product is in conformity with the following standards and/or other normative documents:

ISO 4254-1 ISO 4254-11

Name and address of the person in the European Community authorized to compile the technical construction file:

Brigitte Birk
John Deere GmbH and 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:** Arc-lès-Gray, France**Date of declaration:** 15 November 2017**Manufacturing unit:** John Deere, Arc-lès-Gray, France**Name:** Didier DELPHIGUÉ**Title:** Manager Product Engineering

CC03745,0001258 -19-15NOV17-1/1

CC213594 —UN—09OCT14

EU Declaration of Conformity: V451M and V461M Round Balers

Deere & Company
Moline, Illinois USA

The person who signed this certificate declares that:

Machine type: Round Baler

Models: V451M and V461M

From serial numbers: 1CCV451HALM210001- 1CCV461HALM210001-
1CCV451NALM210001- 1CCV461NALM210001-
1CCV451PALM210001- 1CCV461PALM210001-

fulfills all relevant provisions and essential requirements of the following directive:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-certification

The product is in conformity with the following standards and/or other normative documents:

ISO 4254-1 ISO 4254-11

The party in the European Community authorized to compile the technical construction file is:

John Deere Walldorf GmbH and Co. KG
Customer Support
Impexstraße 3
D-69190 Walldorf, Germany
EUConformity@JohnDeere.com

This declaration of conformity is issued under the sole responsibility of the manufacturer.



CC414332—UN—24JUN21

Place of declaration: Arc-lès-Gray, France

Date of declaration: 1 August 2020

Manufacturing unit: John Deere Arc-lès-Gray, France

Name: Frédéric PERROTIN

Title: Engineering Manager

GA87848,0001188 -19-01AUG20-1/1

EU Declaration of Conformity: V451M and V461M Round Balers**Deere & Company**
Moline, Illinois USA

The person who signed this certificate declares that:

Machine type: Round Baler**Models:** V451M and V461M**From serial numbers:** 1CCV451HAMM220001- 1CCV461HAMM220001-
1CCV451NAMM220001- 1CCV461NAMM220001-
1CCV451PAMM220001- 1CCV461PAMM220001-

fulfills all relevant provisions and essential requirements of the following directive:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-certification

The product is in conformity with the following standards and/or other normative documents:

EN ISO 4254-1

EN ISO 4254-11 + A1

The party in the European Community authorized to compile the technical construction file is:

John Deere Walldorf GmbH and Co. KG
Customer Support
Impexstraße 3
D-69190 Walldorf, Germany
EUConformity@JohnDeere.com

This declaration of conformity is issued under the sole responsibility of the manufacturer.

**Place of declaration:** Arc-lès-Gray, France**Date of declaration:** 1 July 2021**Manufacturing unit:** John Deere Arc-lès-Gray, France**Name:** Frédéric PERROTIN**Title:** Engineering Manager

GA87848,00012BB -19-01JUL21-1/1

CC414332—UN—24JUN21

UK Declaration of Conformity: V451M and V461M Round Balers

Deere & Company
Moline, Illinois USA

The person who signed this certificate declares that:

Machine type: Round Baler

Models: V451M and V461M

From serial numbers: 1CCV451HAMM220001- 1CCV461HAMM220001-
1CCV451NAMM220001- 1CCV461NAMM220001-
1CCV451PAMM220001- 1CCV461PAMM220001-

fulfills all relevant provisions and essential requirements of the following UK regulation:

REGULATION	NUMBER	CERTIFICATION METHOD
Supply of Machinery (Safety) Regulations 2008	S.I. 2008/1597	Self-certification

The product is in conformity with the following standards and/or other normative documents:

EN ISO 4254-1

EN ISO 4254-11 + A1

The party authorized to compile the technical construction file is:

John Deere Ltd
Harby Road
Langar
Nottinghamshire
NG13 9HT
United Kingdom
EUConformity@JohnDeere.com

This declaration of conformity is issued under the sole responsibility of the manufacturer.



CC511493 —UN—19MAY21

Place of declaration: Arc-lès-Gray, France

Date of declaration: 1 July 2021

Manufacturing unit: John Deere Arc-lès-Gray, France

Name: Frédéric PERROTIN

Title: Engineering Manager

GA87848,000118F -19-01JUL21-1/1

Eurasian Economic Union

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.



EAC Marking

Date of manufacture is denoted by the product marking on or near the serial number plate.

TS1738 —UN—26APR16

DX,EAC -19-27APR16-1/1

Serial Numbers

Serial Number Plate

Serial number identifying the baler is stamped on factory product identification serial number plate or European vehicle identification number plate.

These numbers and letters are required when ordering baler or attachment replacement parts.

To ensure that you have these numbers at hand, enter the appropriate serial number in the table provided under the illustration.

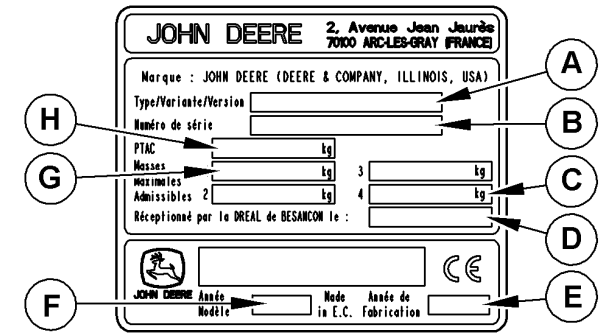
GA87848,00006F8 -19-09JUL18-1/1

Serial Number Plate Description

Based on local regulation, machine is equipped with one of the following identification number plate:

Product Identification Number Plate

- | | |
|---|------------------------------------|
| A—Model Designation | E—Year of Production |
| B—Identification Number | F—Model Year |
| C—Maximum Load at Hitch | G—Maximum Load on Axle |
| D—Date of Acceptance or homologation number | H—Maximum Permissible Total Weight |



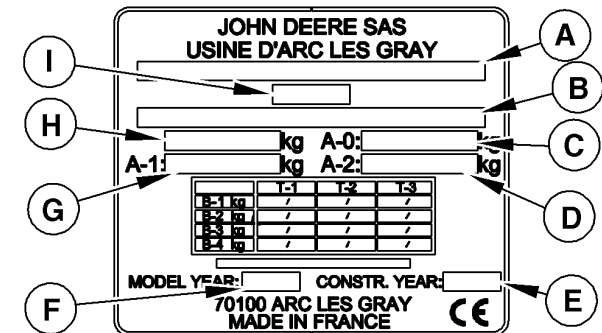
CC206124

CC206124—UN—30OCT13

GA87848,00006EF -19-03AUG18-1/2

European Vehicle Identification Number Plate

- | | |
|---|---|
| A—EU Type Approval Number | F—Model Year |
| B—Identification Number | G—Technically Permissible Maximum Mass for Axle 1 |
| C—Vertical Load (S) on Coupling Point | H—Technically Permissible Maximum Laden Mass |
| D—Technically Permissible Maximum Mass for Axle 2 | I—European Vehicle Category |
| E—Year of Construction | |

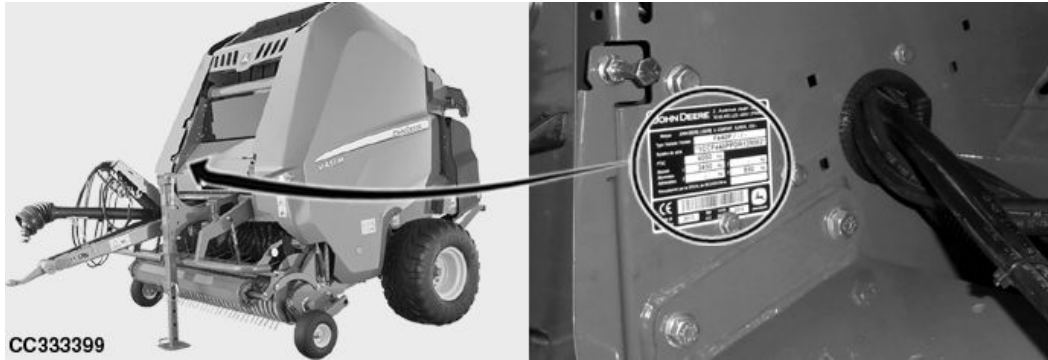


CC356514

CC356514—UN—04JUL18

GA87848,00006EF -19-03AUG18-2/2

Round Baler Identification Number



The round baler identification number plate is located on the right-hand side of the baler, behind the hinged protection screen.

Record the serial number in the table below.

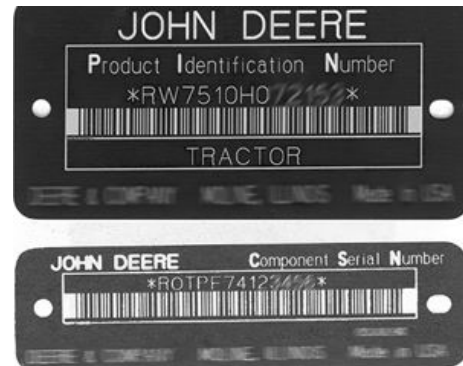
Serial Number																	
*																	*

GA87848,0000427 -19-11OCT17-1/1

CC333399 —UN—06OCT17

Keep Proof of Ownership

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

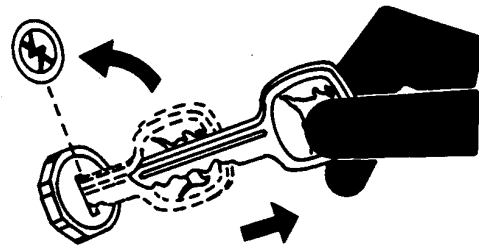


DX,SECURE1 -19-18NOV03-1/1

TS1680 —UN—09DEC03

Keep Machines Secure

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 -19-18NOV03-1/1

TS230 —UN—24MAY89

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:

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.



TS189 —UN—17JAN89

DX,SERVLIT -19-07DEC16-1/4

OPERATOR'S MANUALS providing safety, operating, maintenance, and service information.



TS191 —UN—02DEC88

DX,SERVLIT -19-07DEC16-2/4

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.



TS224 —UN—17JAN89

Continued on next page

DX,SERVLIT -19-07DEC16-3/4

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.



TS1663 —UN—10OCT97

DX,SERVLIT -19-07DEC16-4/4

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John Deere Service Keeps You on the Job

John Deere Parts

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 -19-04JUN90-1/1

TS100 —UN—23AUG88

The Right Tools

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly . . . to save you time and money.



DX,IBC,B -19-04JUN90-1/1

TS101 —UN—23AUG88

Well-Trained Technicians

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 -19-04JUN90-1/1

TS102 —UN—23AUG88

Prompt Service

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 -19-04JUN90-1/1

TS103 —UN—23AUG88

