

960, and 990 Round Balers



OPERATOR'S MANUAL
960, and 990 Round Balers
OMCC59865 ISSUE C6 (ANGLAIS)

John Deere Arc-lès-Gray
European Edition
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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.

CC03745,0001132 -19-19NOV13-1/1

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. Trailer hitch fixing screw has been tightened to specified torque. See Check Trailer Hitch Fixing Screw 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. See Lubrication and Maintenance and Service section.
7. Belt tracking checked. See Adjust Belt Tracking in Service section.
8. Switches and sensors correctly adjusted. See Service section.
9. Hydraulic hoses and connections have been checked and are free of leaks.
10. Paint and decals are smooth and neat.
11. The net knife has been wiped.
12. Battery harness has been installed (if necessary).
13. Test run of the machine has been made.
14. Gate opens and closes freely.
15. Monitor is functioning properly.
16. Hydraulic gate lock device is functioning properly.
17. The precutter device is functioning properly.
18. Operator's manual has been given to customer.
19. All controls and safety rules have been explained to the customer.

Date:

Signature Dealer/Service Technician:

OUC006,0001972 -19-25OCT12-1/1

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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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Identification Views

Identification Views



CC1032342

960 Round Baler



CC1032343

990 Round Baler

CC1032342 —UN—23NOV10

CC1032343 —UN—23NOV10

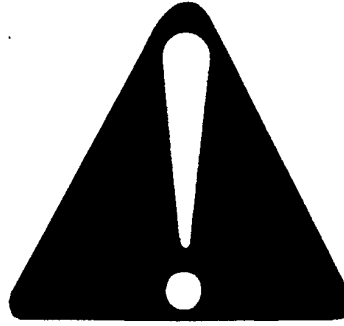
OUC006,0001615 -19-29MAR10-1/1

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.



TB1389 —UN—28JUN13

DX,ALERT -19-29SEP98-1/1

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 -19-16JUN09-1/1

Understand Signal Words

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.



TS187 —19—30SEP88

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

Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.



H28930 —UN—30JUN89

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

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

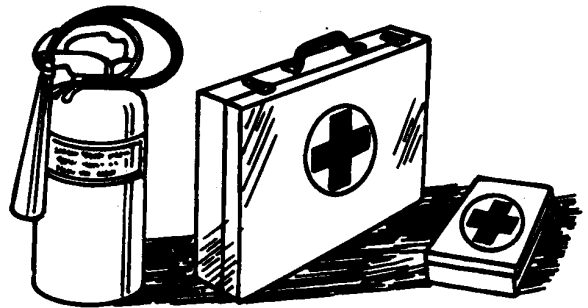
DX,STORE -19-03MAR93-1/1

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

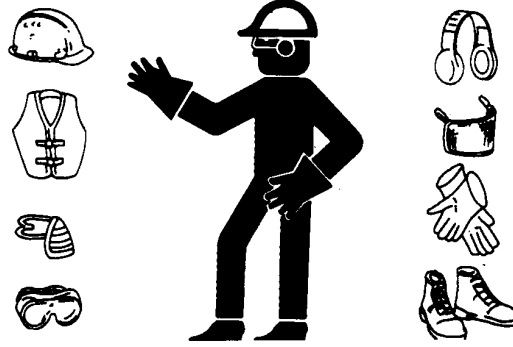
Wear Protective Clothing

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.

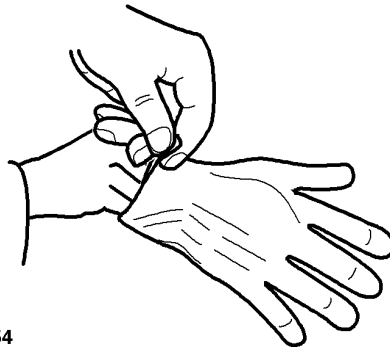


T5206 —UN—15APR13

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

Handling of Knives

Prevent personal injury by wearing safety gloves to handle knives.



CC1026954

CC1026928 —UN—26JAN05

OUC006,0000DB6 -19-04JAN05-1/1

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.

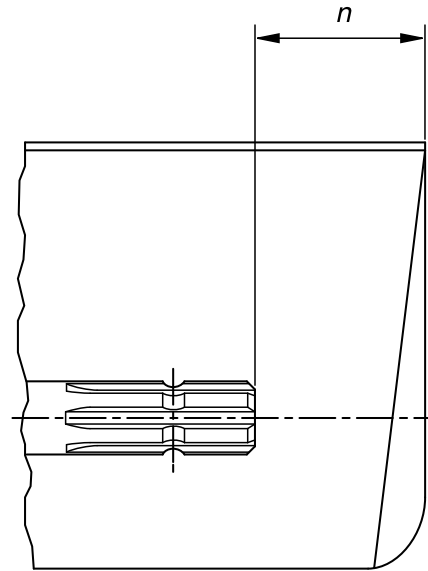
Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

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 drive shaft 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.

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.)



TS1644—UN—22AUG95

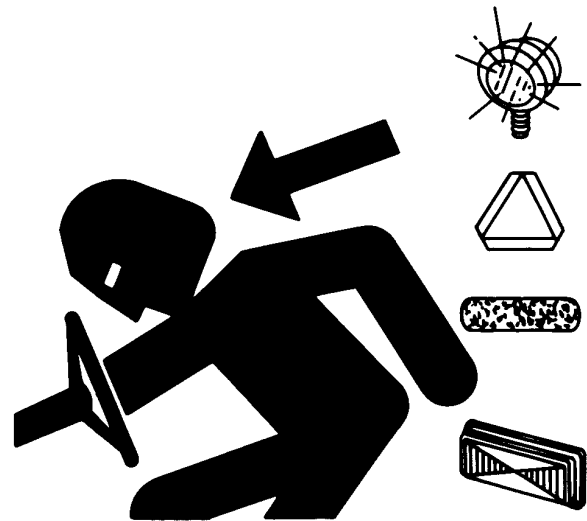
H96219—UN—29APR10

DX,PTO -19-30JUN10-1/1

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

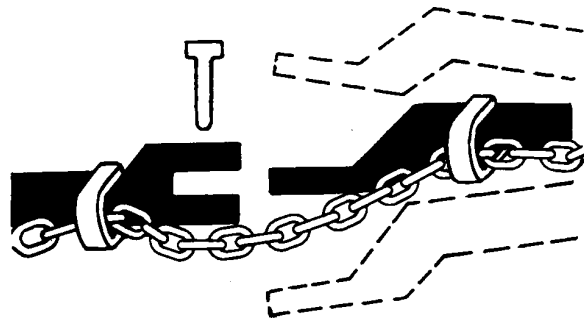
DX,FLASH -19-07JUL99-1/1

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.



TSS217 —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.

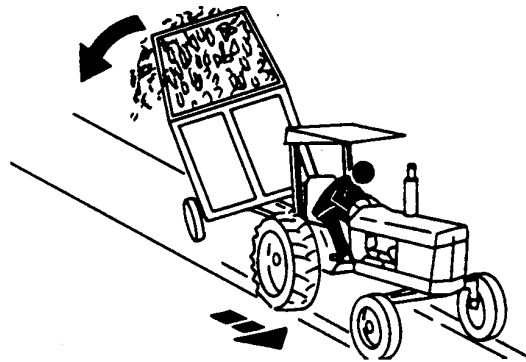
NOTE: See your John Deere dealer for more information.

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

Some tractors are capable of operating 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's maximum transport speed.

Exceeding the implement's 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.

TSS216 —UN—23AUG88

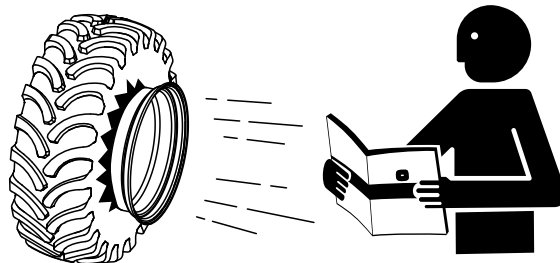
OUC007,00018D5 -19-15DEC10-1/1

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.



H111235 —UN—13MAY14

DX,TIRE,INFO -19-19MAY14-1/1

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.



RX-A0103438 —UN—11 JUN09

DX,WW,RIMS -19-19AUG09-1/1

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

OUC006,0001546 -19-29MAY09-1/1

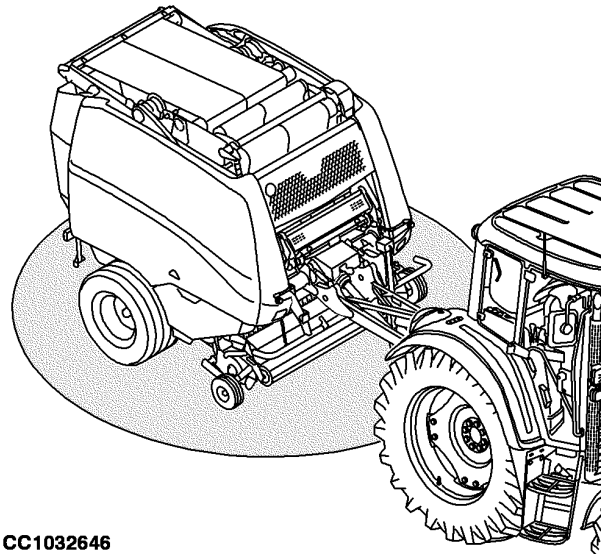
Operate Baler Safely

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

DO NOT attempt to feed crop, twine or net 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.



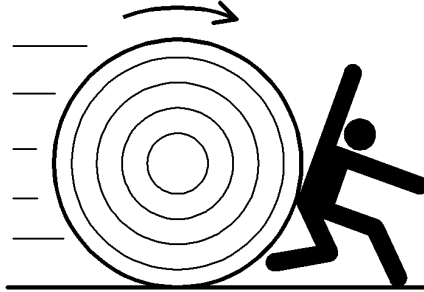
CC1032646 —UN—09AUG10

AP00976,00000F5 -19-09AUG10-1/1

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

OUC006,00019C8 -19-16NOV12-1/1

Operate Baler in Automation Mode Safely

The Baler Automation system is intended to aid the operator in performing field operations more efficiently. The operator is always responsible for controlling the machine's path and behavior as well as the behavior of the bale. To prevent injury to operator and bystanders, always remain alert and pay attention to the surrounding

environment. Do not rely on the system to stop the vehicle when an obstacle or bystander is present. When working in automation mode at an incline where the bale can roll downhill, always activate "manual bale unloading" function.

Read and understand Operating Baler in Automation Mode section before using automation.

OUC006,00019C7 -19-16NOV12-1/1

Fire Prevention

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 - Fire Prevention](#) 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 with 9.5 L or more pressurized water tank, see [Operate Pressurized Water Tank](#) in Operating the Baler—General Purposes section.
- Follow the fire prevention guidelines for service work, see [Prevent Fire at Each Service](#) in Service section.

CC03745,0001157 -19-06NOV14-1/1

In Case of Fire

CAUTION: Avoid personal injury.

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

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

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

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



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

DX,FIRE4 -19-22AUG13-1/1

TSS27 —UN—15APR13

Secure Gate Safely

Position gate lock device lever (A) in locked position before working on or around baler with gate in raised position. Refer to Operating the Baler—General Purposes section for gate stop instructions.

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—Gate Lock Device Lever



960 and 990 Gate Lock Device

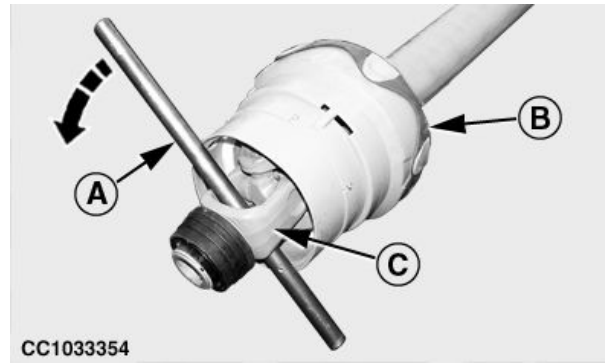
OUC006,0001617 -19-29MAR10-1/1

CC1032345 —UN—04AUG10

Service Machine Safely

To aid in servicing the baler, use a prybar (A) to rotate the baler as follows:

1. Disconnect telescoping hook-up (B) from the tractor PTO shaft.
2. Insert prybar (A) between yoke (C) and U-joint.
3. Use prybar (A) to rotate the baler as shown.
4. When process is finished, remove prybar (A).
5. Connect telescoping hook-up (B) to the tractor PTO shaft.



A—Prybar
B—Telescoping Hook-Up
C—Yoke

CC1033354

CC1033354—UN—09DEC10

OUCC006,0001618 -19-22NOV10-1/1

Maximum Hydraulic Operating Pressure

The baler is designed for a maximum hydraulic operating pressure of 20000 kPa (200 bar, 2900 psi).

Do not connect baler to a tractor with a maximum hydraulic operating pressure over 20000 kPa (200 bar, 2900 psi).

OUCC006,0000487 -19-05SEP01-1/1

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 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.



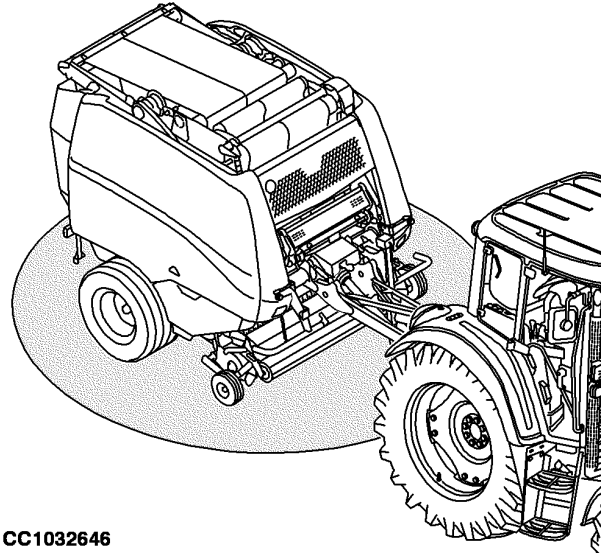
TS218—UN—23AUG88

DX.SERV -19-17FEB99-1/1

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.



CC1032646

CC1032646 —UN—09AUG10

OUC006.0001619 -19-08SEP10-1/1

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.

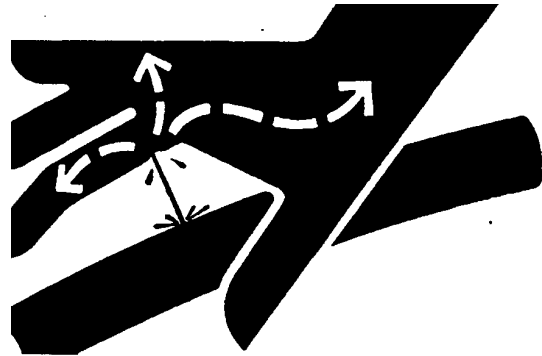
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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



X9811 —UN—23AUG88

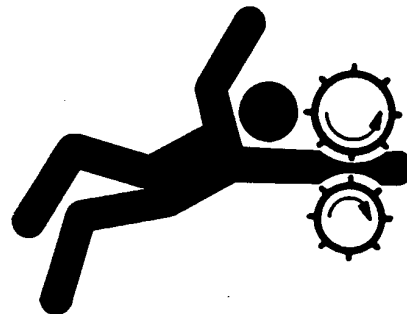
a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

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

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.



TS228 —UN—23AUG88

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

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.



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

TS953 —UN—15MAY90

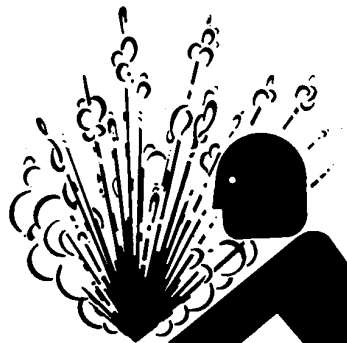
Service Accumulator Systems Safely

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.



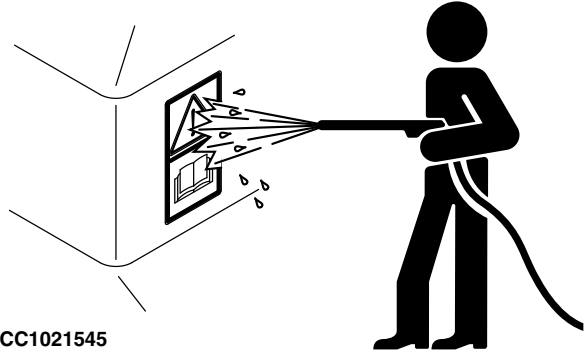
DX,WW,ACCLA2 -19-22AUG03-1/1

TS281 —UN—15APR13

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.



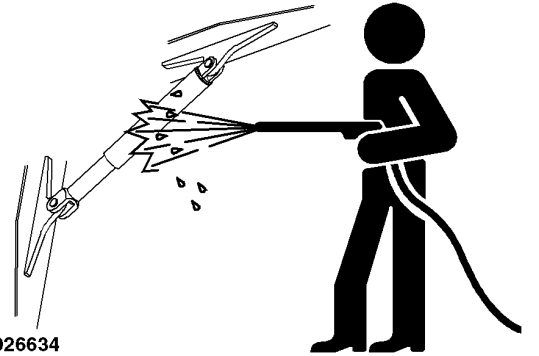
CC1021545

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

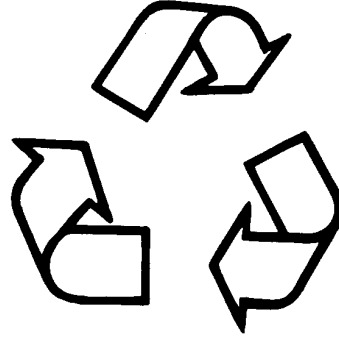
CC1026634 —UN—03DEC04

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);



- 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.

TS1133 —JUN—15APR13

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.

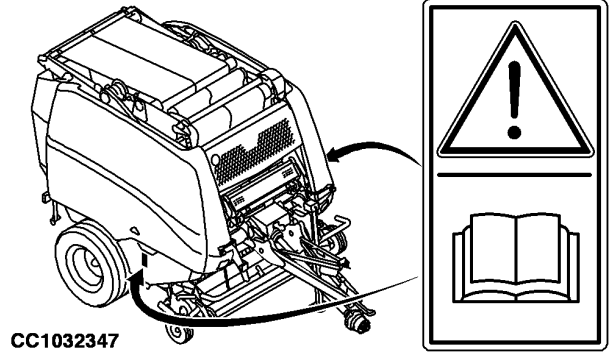


T5231 -19-07OCT88

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

Operator's Manual

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



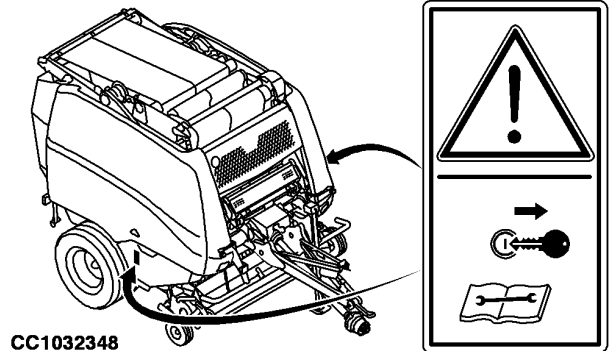
CC1032347

CC1032347 -UN-05AUG10

OUCC006,000161A -19-29MAR10-1/1

Repair and Maintenance

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



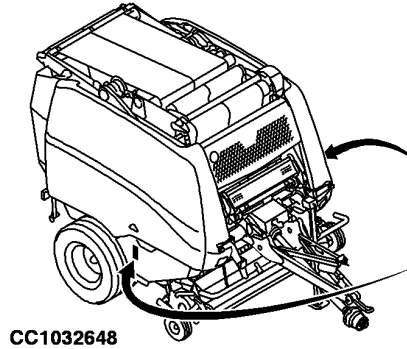
CC1032348

CC1032348 -UN-05AUG10

OUCC006,000161B -19-29MAR10-1/1

Drive Chains

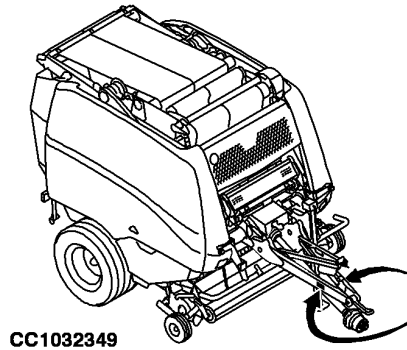
Do not open or remove guard when the baler is running.



OUCC006,0001621 -19-29MAR10-1/1

Baler Drive Line

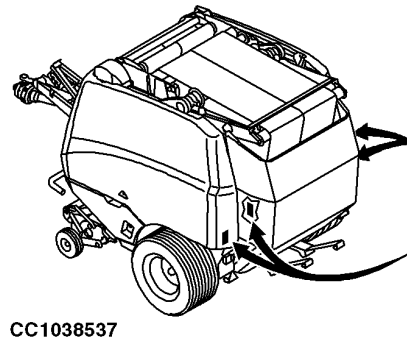
Stay clear of rotating drive line to avoid personal injury.



OUCC006,000161C -19-29MAR10-1/1

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.

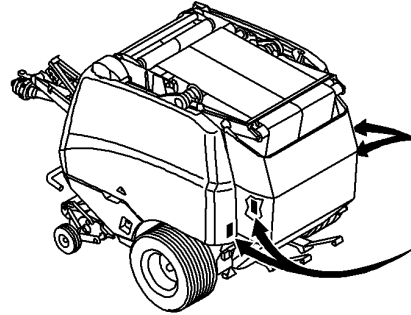


OUCC006,0001978 -19-12OCT12-1/1

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.



CC1032645



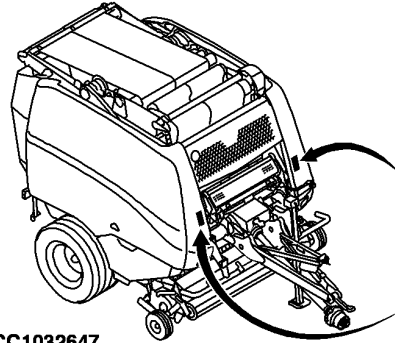
CC1032645—UN—05AUG10

OUC006,000161E -19-29MAR10-1/1

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.



CC1032647

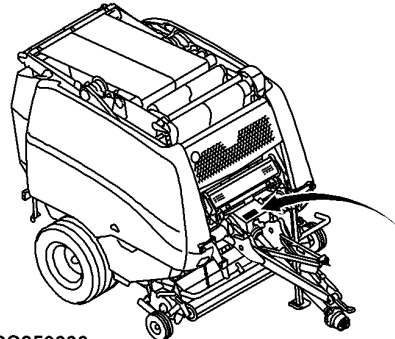


CC1032647—UN—05AUG10

OUC006,0001620 -19-29MAR10-1/1

540 rpm (If Equipped)

Work with the relevant speed of PTO.



CC250333

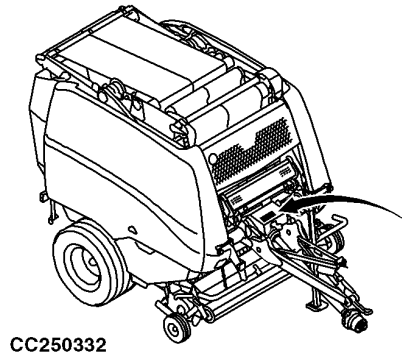


CC250333—UN—30SEP15

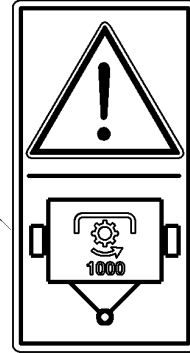
DC82261,0000662 -19-19OCT15-1/1

1000 rpm (If Equipped)

Work with the relevant speed of PTO.



CC250332

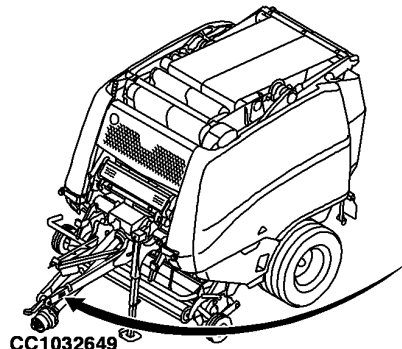


CC250332 —UN—30SEP15

DC82261,0000663 -19-19OCT15-1/1

Hitch Plate Attaching Screw

Retighten hitch plate attaching screw at specified intervals.



CC1032649

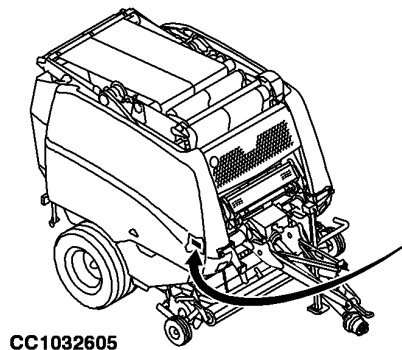


CC1032649 —UN—05AUG10

OUC006,0001622 -19-29MAR10-1/1

Hydraulic Accumulators

The hydraulic accumulators are under pressure. Have the accumulators removed and maintained by your John Deere dealer only. The dealer must follow the instructions in the Technical Manual.



CC1032605

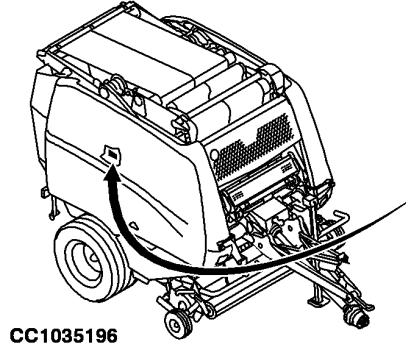


CC1032605 —UN—05AUG10

OUC849,0000155 -19-21MAY10-1/1

Compressed Air Tank

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



CC1035196



CC1035196—UN—23SEP11

OUC006,000180D -19-05SEP11-1/1

Preparing the Tractor

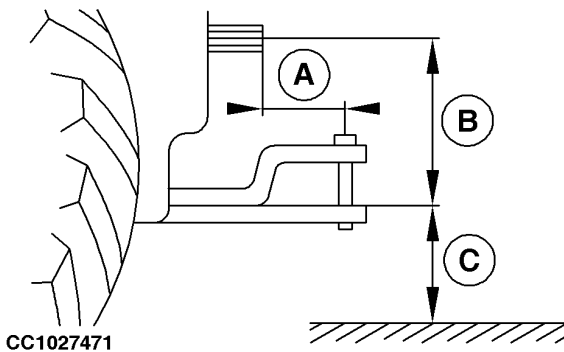
Adjust Drawbar

IMPORTANT: Before attaching baler, be sure to adjust drawbar. Re-install all shields.

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

Set drawbar to the following specifications:

	Specification
End of PTO Shaft to Drawbar Hitch Pin Hole Axis (A)—Distance.....	350 mm (1 ft. 2 in.)
PTO Shaft Centerline to Drawbar Upper Face (B)—Distance.....	150—305 mm (6—12 in.)
Ground to Drawbar Upper Face (C)—Minimum—Distance.....	465 mm (1 ft. 6 in.)



CC1027471

A—350 mm (1 ft. 2 in.) C—465 mm (1 ft. 6 in.)
B—150—305 mm (6—12 in.)

CC1027471 —JUN—11JUL05

DC82261,000042E -19-26FEB14-1/1

Select Tractor PTO Speed

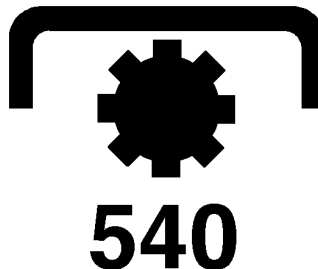
NOTE: Refer to tag on the front of the baler to select tractor PTO speed.

Baler with 540 rpm gear case:

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. Always run tractor at rated PTO speed. Overspeed will damage baler.

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.



CC1020007

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

OUCC006,00019B9 -19-13NOV12-1/2

CC1020007 —JUN—09JUL01

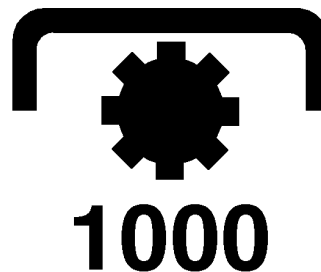
Baler with 1000 rpm gear case:

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

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

Always operate the baler with tractor PTO speed at 1000 rpm.

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



CC007602

OUCC006,00019B9 -19-13NOV12-2/2

CC007602 —JUN—02OCT96

Adjust Tractor Selective Control Valves

Set tractor selective control valves at maximum flow. This flow allows the gate to open in less than 2 seconds. See tractor operator's manual to make adjustments.

For 5000 Series tractors, do not push SCV lever fully forward to allow lever to return to neutral when released.

For 6000 and 7000 Series tractors, adjust SCV lever for no detent, so lever returns to neutral when released.

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



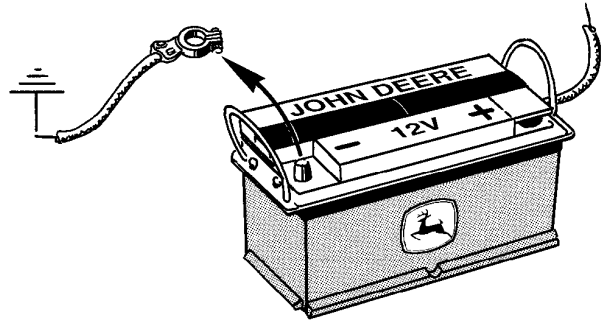
CC000833

CC000833—UN—05APR95

AP00976,00000EF -19-15NOV10-1/1

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 Virtual Terminal (Display) Portable Harness (If Equipped)

IMPORTANT: The battery harness (C) must be connected to the tractor as shown.

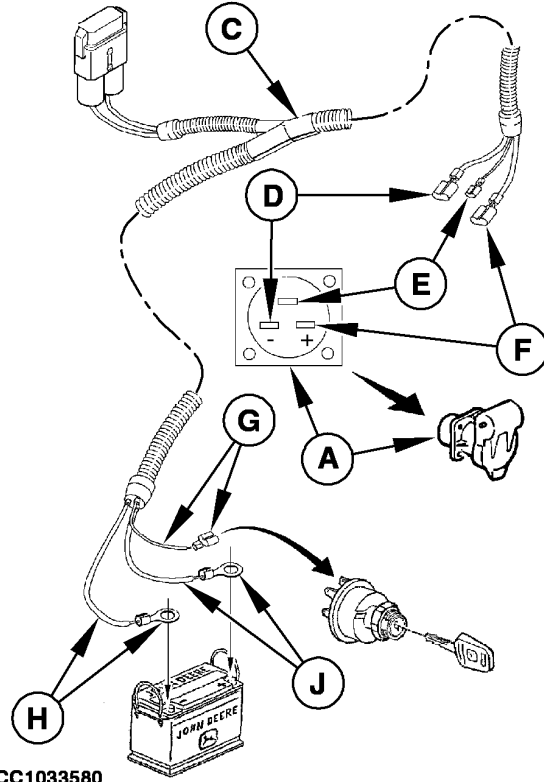
If the tractor is not equipped with the convenient power outlet (A), see your John Deere dealer.

Connect the virtual terminal (display) to the portable harness.

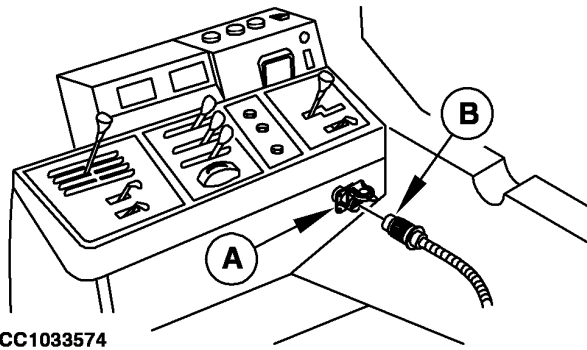
Connect portable harness plug (B) to the convenient power outlet (A).

Place the connector for the machine harness out of the cab.

- | | |
|--------------------------------|--|
| A—Convenience Power Outlet | F—Red (6.0 mm ²) |
| B—Portable Harness Plug | G—Red (Positive) Wire (1.5 mm ²) |
| C—Battery Harness | H—Black (Negative) Wire (6.0 mm ²) |
| D—Black (6.0 mm ²) | J—Red (Positive) Wire (6.0 mm ²) |
| E—Red (1.5 mm ²) | |



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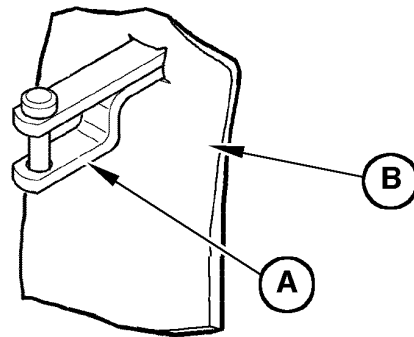


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Using Drawbar Shield

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

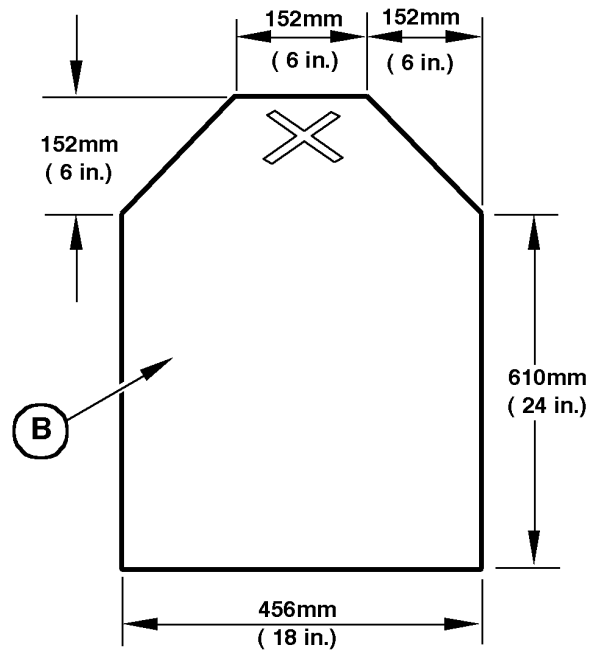


CC007918—UN—12DEC06

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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

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 (47-7/8—48-5/8 in)	Maximum 1255 mm (49-3/8 in)
CoverEdge™	1285—1305 mm (50-3/8—51-3/8 in)	Maximum 1320 mm (52 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).

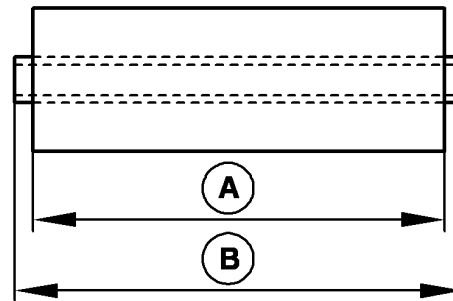
The number of net turns can be adjusted, except for John Deere B-Wrap™.

A—Material Width

B—Core Width



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CC1033200

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

DC82261,0000669 -19-01MAR16-1/1

CC1033931—UN—15SEP11

CC1033200—UN—05AUG10

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.

CC,570RB 001466 -19-15SEP98-1/1

Care of Net Tying Device

Before operating the baler, proceed as follows:

Wipe out 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.

IMPORTANT: Never apply talcum on rubber roll.

It is recommended to use:

- Water
- Soap water

OUC223,000017B -19-23OCT07-1/1

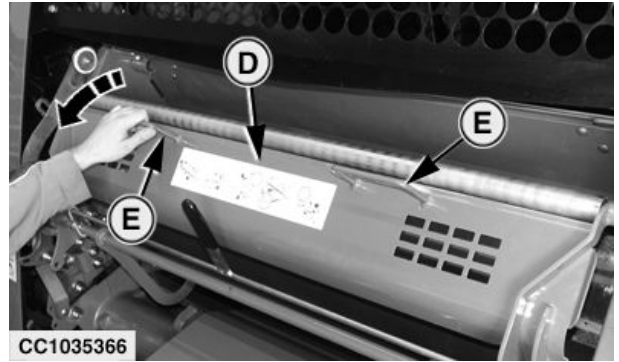
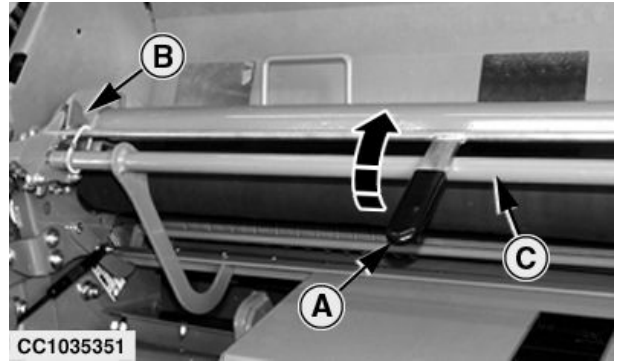
Load Net Roll

CAUTION: Disengage PTO, engage park brake and/or place transmission in PARK, shut off tractor engine and remove key before opening net roll loading device.

1. Rotate lock (A) backward until notch (B) is positioned on rod (C) on both sides.
2. Swing net roll loading device (D) out by using handles (E).
3. Remove all package material (staples, tape, etc.) from net roll before installing.

A—Net Tying Lock
B—Notch
C—Rod

D—Net Roll Loading Device
E—Handles



DC82261,000066A -19-29FEB16-1/7

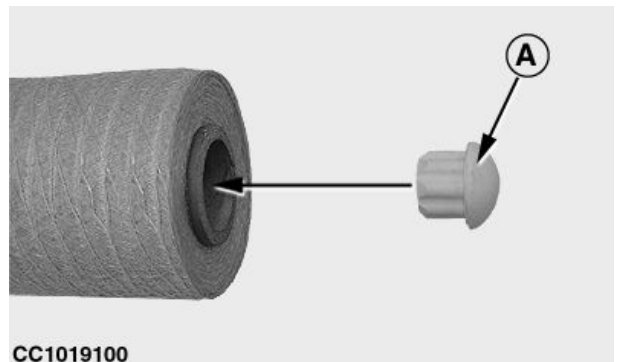
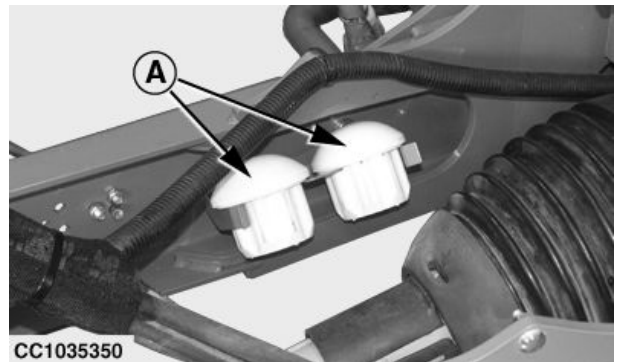
CC1035351—UN—10OCT11

CC1035366—UN—10OCT11

4. Install net roll:

- For standard net roll, remove stops (A) from their bracket and install them on each side of the net roll.
- For CoverEdge™ or John Deere B-Wrap™ roll go to next step.

A—Stops



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

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DC82261,000066A -19-29FEB16-2/7

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CC1019100—UN—09FEB01

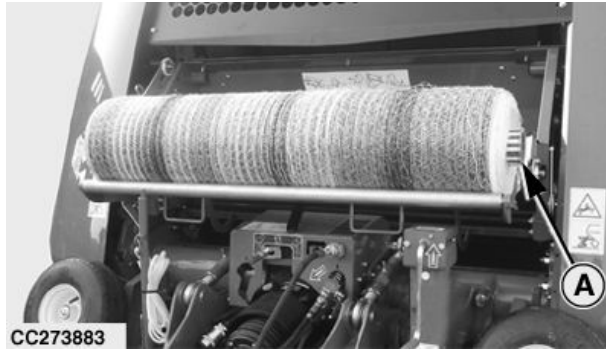
Preparing the Baler

5. Place net roll to loading position as shown:
 - For standard net roll and CoverEdge™ roll, place the two colored stripes on the left side of the machine.
 - For John Deere B-Wrap™ roll, place the core striped end (A) on the left side of the machine.
6. Unroll net and gather the loose ends of net together.

A—Core Striped End



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CC273883 —UN—22FEB16

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

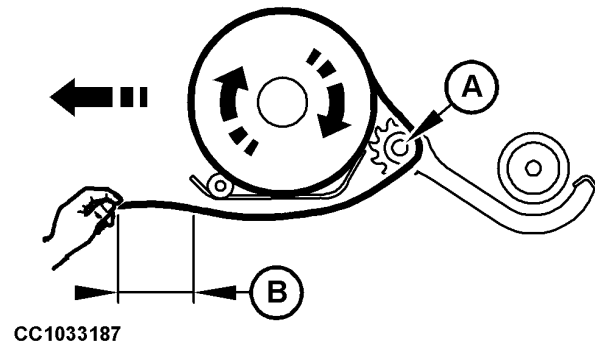
DC82261,000066A -19-29FEB16-3/7

7. Route net behind pressure arm rod (A) then in forward direction until specified length (B) is obtained.

Specification
Net—Length..... 150 mm
(6 in)

A—Pressure Arm Rod

B—Net Length



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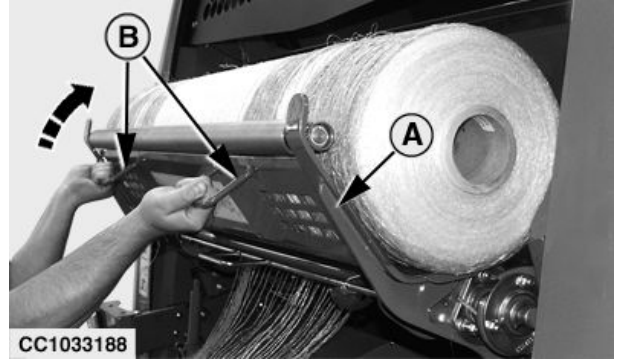
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DC82261,000066A -19-29FEB16-4/7

Preparing the Baler

8. Use handles (B) to swing net roll loading device (A) up and lift the net roll on the rubber roll, against the stainless steel plates.

A—Net Roll Loading Device B—Handles



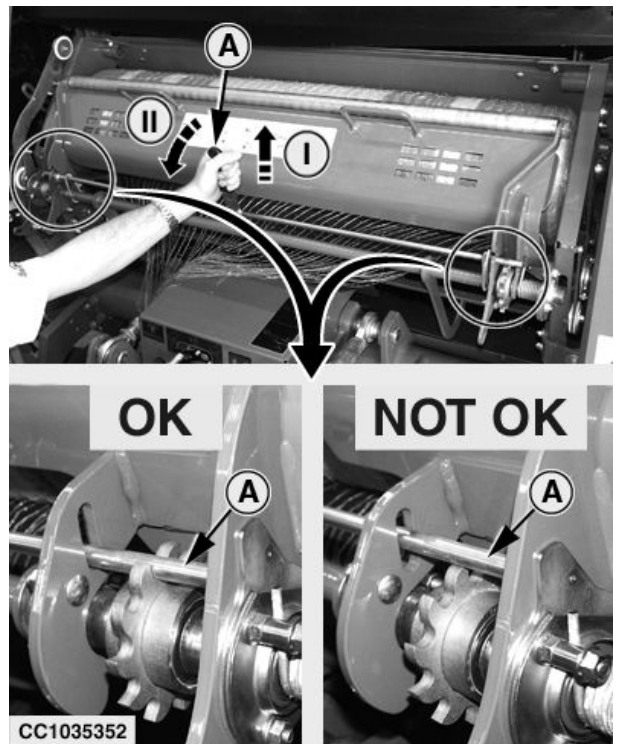
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DC82261,000066A -19-29FEB16-5/7

9. Raise and pull lock (A) forward.

IMPORTANT: Check that lock (A) is correctly latched on both sides as shown.

A—Net Tying Lock



CC1035352—UN—10OCT11

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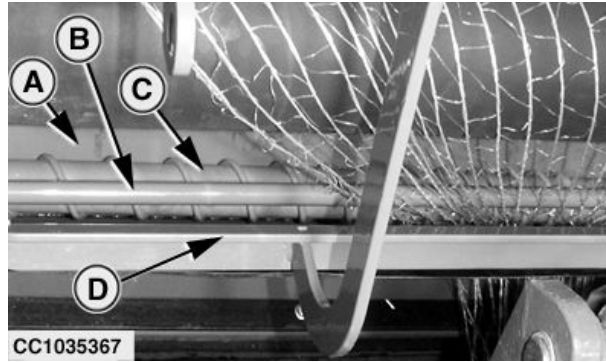
DC82261,000066A -19-29FEB16-6/7

10. Route net behind pressure arm (D).
11. Push upper sheet (A) and route net under bar (B) and roll (C) then through the net tying duck bill as shown.

IMPORTANT: Do not thread more than 150 mm (6 in) of net behind the net tying duck bill.

12. Release upper sheet (A).

A—Net Tying Duck Bill Upper Sheet	C—Net Distributing Roll
B—Bar	D—Pressure Arm



CC1035367 —UN—10OCT11

DC82261,000066A -19-29FEB16-7/7

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.



CC1033931 —UN—15SEP11

DC82261,000040A -19-21JAN14-1/1

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.

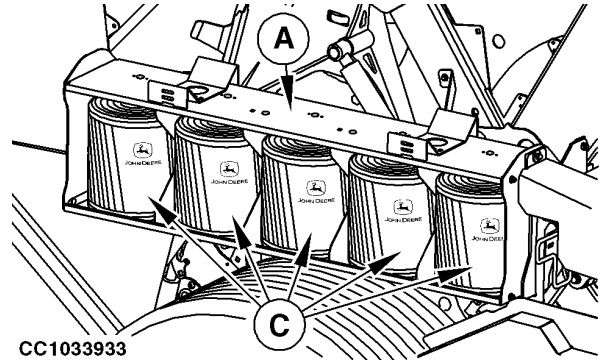
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Load Twine Boxes

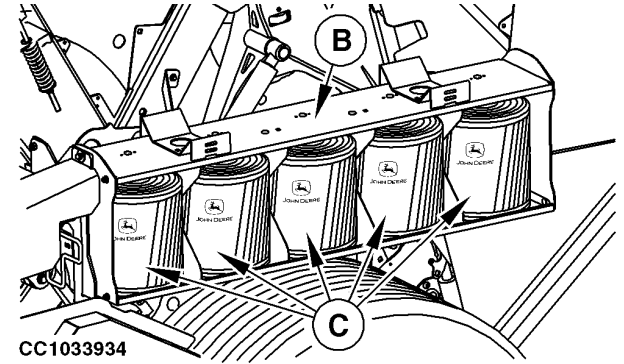
1. Open right and left side doors.
2. Place one ball of good quality twine in each compartment of the twine box: Five balls (C) in right side twine box (A) and five balls (C) in left side twine box (B). Be sure twine is pulled from end of the ball marked "top".
3. To route twine correctly, see Route Twine out of Twine Boxes in this section.

A—Right Side Twine Box
B—Left Side Twine Box

C—Twine Ball



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CC1033934—UN—15FEB12

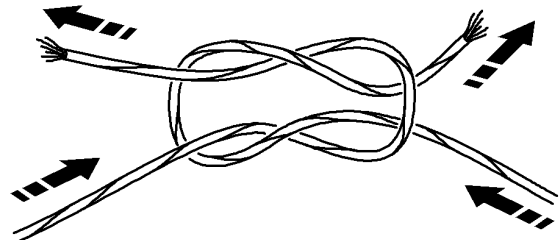
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Knot for Twine

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

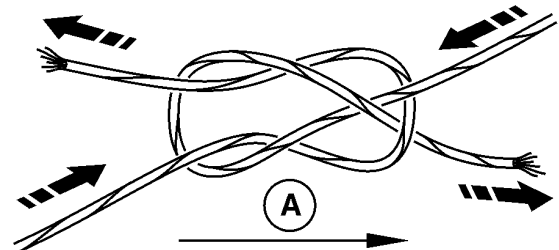
We recommend to tie twine balls together with a square or modified square knot as shown. If needed tie twine balls together with a sheet bend knot as shown.

A—Flow Direction of Twine



CC1034420

Modified Square Knot



CC1034421

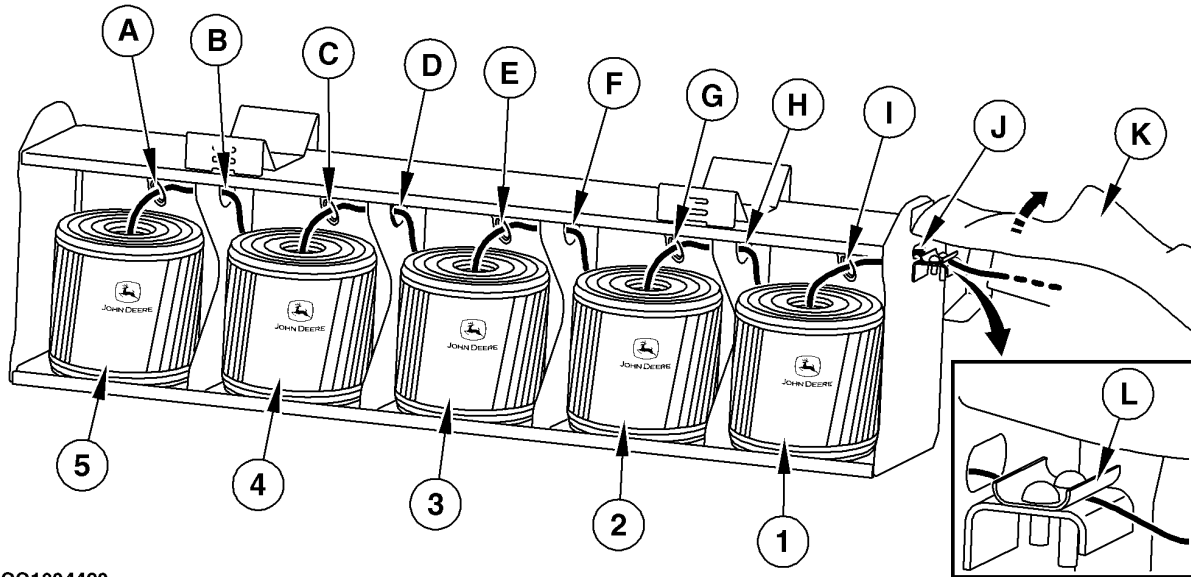
Sheet Bend Knot

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OUC006,00017BC -19-21APR11-1/1

Route Twine out of Twine Boxes



CC1034423

A—Guide
B—Opening
C—Guide
D—Opening
E—Guide
F—Opening

G—Guide
H—Opening
I—Guide
J—Opening
K—Dust Shield

L—Twine Tension Plate
1—First Ball
2—Second Ball
3—Third Ball

4—Fourth Ball
5—Fifth Ball

NOTE: Join twine by tying the inside end of one ball to the outside of the other ball. To join the twine ends, use a modified square knot or a sheet bend knot. See *Knot for Twine* in this section. Trim loose ends of twine as close to knot as possible.

1. Pull inside twine end of the fifth ball through guide (A) and opening (B) then join it to the outside twine end of the fourth ball.
2. Pull inside twine end of the fourth ball through guide (C) and opening (D) then join it to the outside twine end of the third ball.
3. Pull inside twine end of the third ball through guide (E) and opening (F) then join it to the outside twine end of the second ball.

4. Pull inside twine end of the second ball through guide (G) and opening (H) then join it to the outside twine end of the first ball.
5. Raise dust shield (K) to provide access.
6. Pull inside twine end of the first ball through guide (I), opening (J) and under twine tension plate (L).
7. Repeat procedure on opposite side.
8. See *Route Twine from Twine Box to Twine Arms* in this section to route twine until twine arms.

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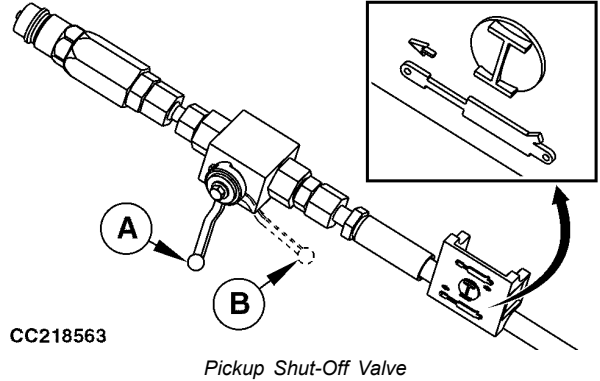
Route Twine from Twine Box to Twine Arms

CAUTION: DO NOT TAKE CHANCES. To avoid injury or death, disengage PTO, shut off tractor engine and close the pickup shut-off valve (A) before routing twine through twine arms.

1. Engage tractor park lock, shut off tractor engine, remove key and close pickup shut-off valve (A).

A—Pickup Shut-Off Valve Closed Position

B—Pickup Shut-Off Valve Open Position

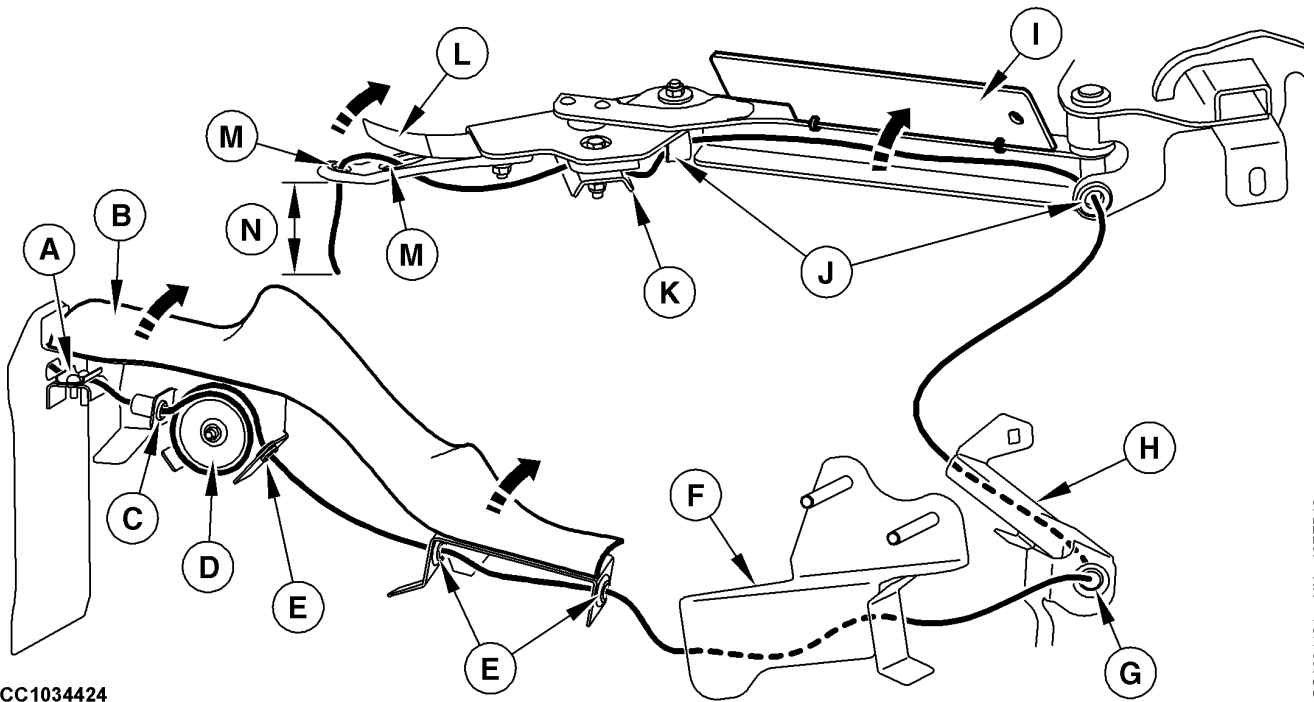


CC218563

Pickup Shut-Off Valve

JC87117,000017F -19-22OCT14-1/2

CC218563 —UN—13OCT14



CC1034424

A—Twine Tension Plate
B—Dust Shield
C—Twine Guide

D—Pulley
E—Twine Guides
F—Reinforcement
G—Twine Guide

H—Shield
I—Plate
J—Twine Guides
K—Twine Tension Plate

L—Leaf Spring
M—Opening
N—Length

2. Raise dust shield (B) to provide access.
3. From twine tension plate (A), route twine through twine guide (C) and loop twine around pulley (D).
4. Route twine through twine guides (E) and behind reinforcement (F).
5. Route twine through twine guide (G) and behind shield (H).
6. Raise plate (I) and route twine through twine guides (J) then behind twine tension plate (K).

7. Raise leaf spring (L) and route twine through opening (M).

8. Length (N) of twine exposed from end of twine arm must be within specification:

Specification	
Twine Exposed from End of Twine Arm—Length.....	150—200 mm (6—8 in.)

9. Repeat procedure on opposite side.
10. Open pickup shut-off valve.

JC87117,000017F -19-22OCT14-2/2

CC1034424 —UN—10FEB12

Adjust Bale Discharging Ramp

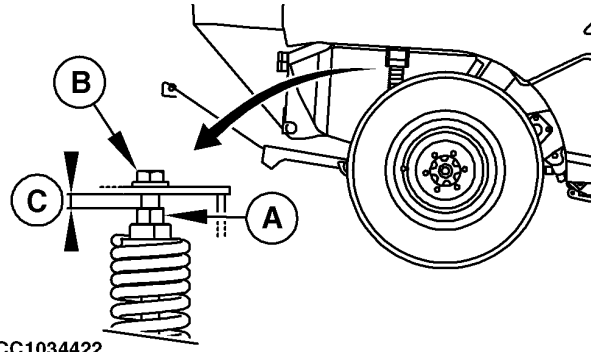
1. If required, remove net roll and/or twine balls compartment to provide access.
2. Unlock nut (A).
3. Adjust screw (B) until specified distance (C) is obtained:

Specification

Bale Discharging	
Ramp—Distance.....	1—5 mm (0.04—0.2 in.)

4. Lock nut (A).
5. Reinstall net roll and/or twine balls compartment, if removed.

NOTE: In case of bale unloading difficulties with light bale, increase specified distance (C). With a modified distance (C), check that bale discharging ramp is fully raised after bale unloading.



A—Nut
B—Screw

C—Distance

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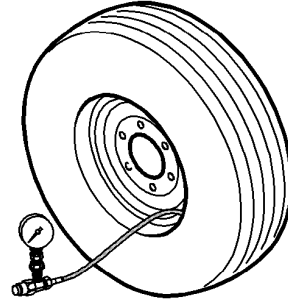
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Tire Inflation

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 needs brake adjustment. See your John Deere dealer.



CC1030245

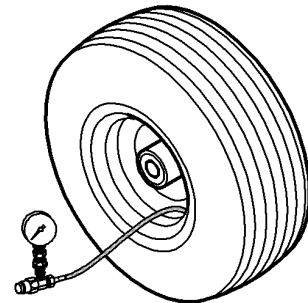
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Tire type	Pressure		
	With maximum transport speed of 30 km/h (19 mph)	With maximum transport speed of 40 km/h (25 mph)	With maximum transport speed of 50 km/h (31 mph)
15/70 - 18 (12 PR)	170 kPa (1.7 bar; 25 psi)	200 kPa (2 bar; 29 psi)	240 kPa (2.4 bar; 35 psi)
15/70 - 18 (151A8)	575 kPa (5.75 bar; 83 psi)	575 kPa (5.75 bar; 83 psi)	575 kPa (5.75 bar; 83 psi)
16/70 - 20 (12 PR)	120 kPa (1.2 bar; 17 psi)	140 kPa (1.4 bar; 20 psi)	170 kPa (1.7 bar; 25 psi)
400/70 - 20 (150A8)	340 kPa (3.4 bar; 50 psi)	340 kPa (3.4 bar; 50 psi)	340 kPa (3.4 bar; 50 psi)
500/55 - 20 (150A8)	120 kPa (1.2 bar; 17 psi)	160 kPa (1.6 bar; 23 psi)	180 kPa (1.8 bar; 26 psi)
500/60 - 22.5 (155D, 166A8)	160 kPa (1.6 bar; 23 psi)	160 kPa (1.6 bar; 23 psi)	160 kPa (1.6 bar; 23 psi)
520/55 - 22.5 (154D)	120 kPa (1.2 bar; 17 psi)	120 kPa (1.2 bar; 17 psi)	145 kPa (1.45 bar; 21 psi)
600/50 - 22.5 (156A8)	80 kPa (0.8 bar; 12 psi)	90 kPa (0.9 bar; 13 psi)	100 kPa (1.0 bar; 15 psi)

DC82261.000063F -19-26OCT15-1/2

Inflate pickup gauge wheels to specified pressure:

	Pressure
Pickup Gauge Wheels	140 kPa (1.4 bar; 20 psi)



CC1030246

CC1030246—UN—01OCT07

DC82261.000063F -19-26OCT15-2/2

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.)



CC1035309—UN—23SEP11

OUCC006,0001824 -19-06OCT11-1/1

Attaching and Detaching

Adjust Tongue

The tongue can be adjusted either at the articulation of the hitch plate or at the tongue base articulation to meet all tractor configurations.

NOTE: It is better to attach equipment on tractor trailer hitch in order to increase clearance between ground and baler tongue. This position is convenient when baling thick windrows.

IMPORTANT: Before adjusting the tongue, be sure that the tire inflation is correct. See [Tire Inflation in Preparing the Baler](#) section.

1. Attach baler to tractor.
2. Park tractor and baler on a firm and level ground. Engage tractor park lock, shut off tractor engine and remove key.
3. Adjust distance (A) to the following specification by using the setting of gauge wheel.

See [Adjust Pickup Standard Gauge Wheels](#) or [Adjust Pickup Caster Gauge Wheels](#) in [Operating the Baler—General Purposes](#) section.

Specification

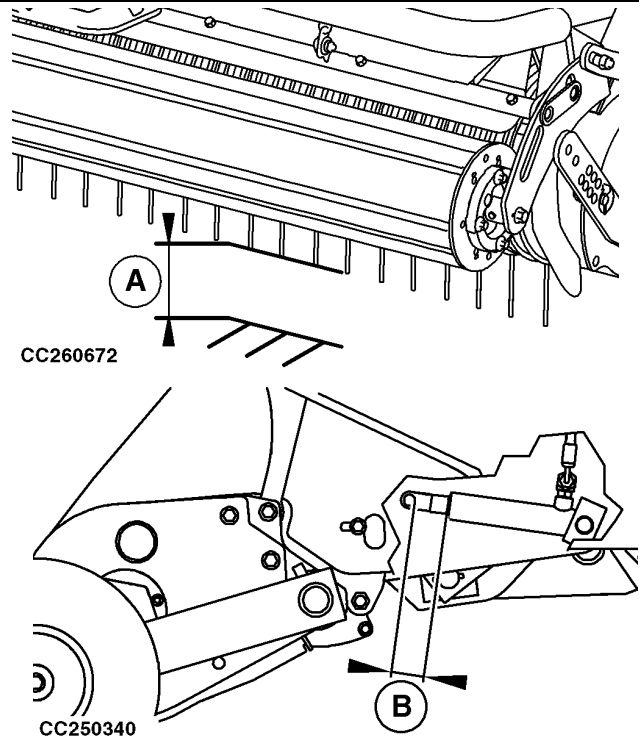
Ground to
Teeth—Distance..... 20 mm
(0.8 in)

4. Place tractor pickup selective control valve lever in floating position.
5. Install jackstand so that it just touches the ground without changing the position of the baler. See [Use Jackstand](#) in this section.
6. Check that distance (B) on pickup hydraulic cylinder is close to the following specification:

Specification

Pickup Hydraulic
Cylinder—Distance..... 49 mm
(1.93 in)

- If distance (A) is OK, go to step 8.
- If distance (A) is NOT OK, go to next step.



A—Distance

B—Distance

Continued on next page

DC82261,0000657 -19-26OCT15-1/3

CC260672—UN—26OCT15

CC250340—UN—26OCT15

7. Adjust adjustable rods (B) and (C):
 - a. Unlock nut (G) on both sides.
 - b. Lightly raise the front of the baler using jackstand (D) to be able to remove pin (F).
 - c. Remove snap ring (E) and pin (F).
 - d. Adjust jackstand (D) and adjustable rod (C) simultaneously to obtain specified distance (A).

Specification

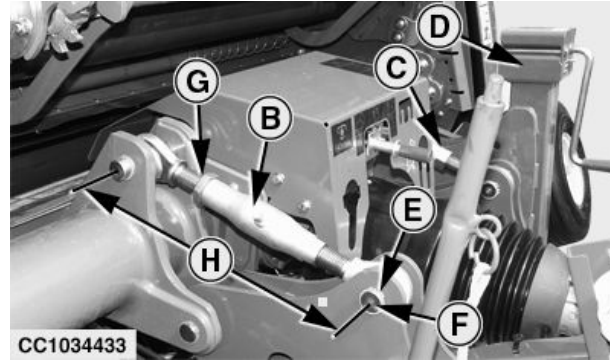
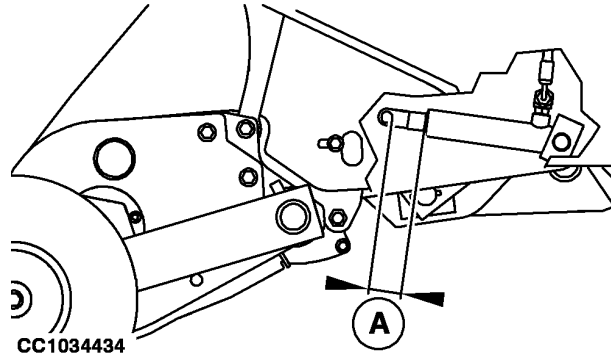
Pickup Hydraulic
 Cylinder—Distance..... 49 mm
 (1.93 in)

- e. Install pin (F) and snap ring (E).
- f. Set adjustable rod (B) to obtain the same length (H) on both sides.

IMPORTANT: To avoid baler damage, length (H) must be the same on both sides.

- g. Lock nut (G) on both sides.

- | | |
|------------------|-------------|
| A—Distance | E—Snap Ring |
| B—Adjustable Rod | F—Pin |
| C—Adjustable Rod | G—Nut |
| D—Jackstand | H—Distance |



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CC1034433 —UN—15SEP11

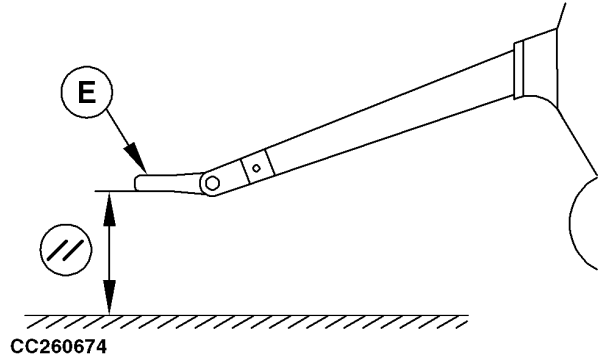
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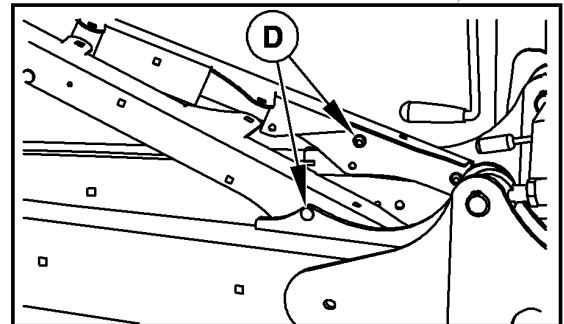
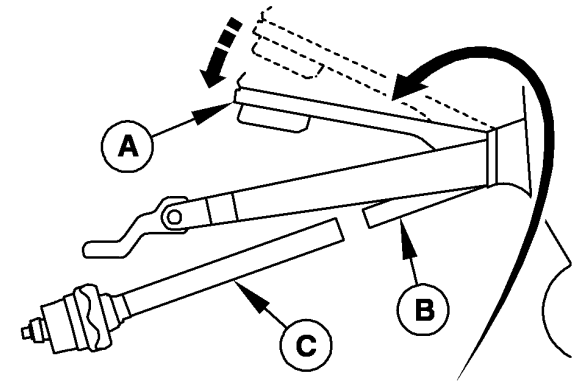
8. Set hitch (E) as horizontal as possible and check that the two tongue frames are at the same level.
9. If necessary, adjust support in low position and move powerline under the tongue as follows:
 - a. Detach baler from tractor.
 - b. Remove screws (D).
 - c. Install screws (D) to set support (A) in low position as shown.
 - d. Remove half powerline (C) from half powerline (B).
 - e. Place half powerlines (B) and (C) down as shown.
 - f. Assemble half powerline (C) and half powerline (B).
10. Adjust bale discharging ramp. See [Adjust Bale Discharging Ramp](#) in Preparing the Baler section.

IMPORTANT: Slowly and carefully perform a short test with baler attached to the tractor. Check that there is no interference between tongue frame and telescoping driveline in short turns. Major damage to telescoping driveline could occur.

- | | |
|------------------|---------|
| A—Support | D—Screw |
| B—Half Powerline | E—Hitch |
| C—Half Powerline | |



CC260674 —UN—26OCT15



CC1033249 —UN—17DEC10

DC82261,0000657 -19-26OCT15-3/3

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 remain in open position.
3. Connect telescoping driveline to tractor 540 or 1000 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".

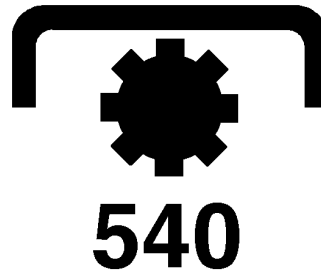
IMPORTANT: For Walterscheid telescoping driveline only, locking collar (A) must rotate freely to indicate that the telescoping driveline is correctly latched to the tractor PTO shaft.

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.

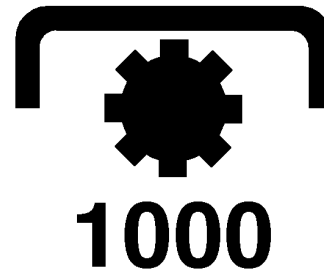
NOTE: Refer to the basic telescoping driveline Operator's Manual to properly connect telescoping driveline to the tractor PTO shaft.

A—Locking Collar

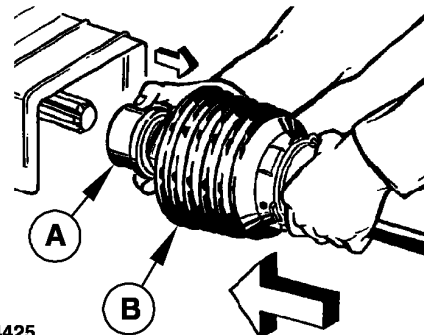
B—Guard



CC1020007



CC007602



CC1034425

OUCC006,00019A3 -19-15NOV12-1/1

CC1020007—UN—09JUL01

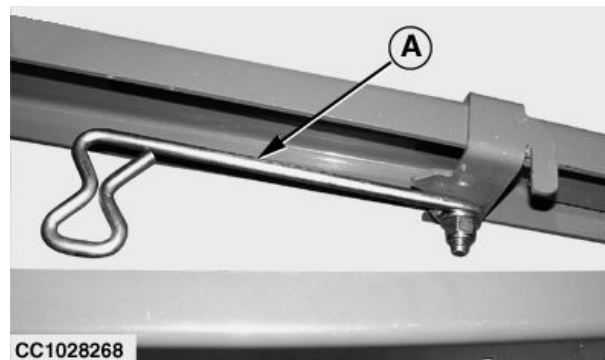
CC007602—UN—02OCT96

CC1034425—UN—15SEP11

Telescoping Driveline Support

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

A—Support



CC1028268

OUCC006,0001AD9 -19-03SEP13-1/1

CC1028268—UN—21SEP06

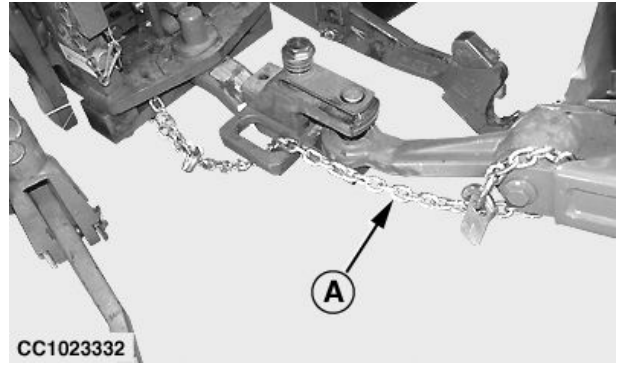
Connecting Safety Chain

If machine is equipped with a safety chain (A), connect and fasten safety chain (A) to tractor. Leave only slack needed for turns.

CAUTION: The chain must prevent the tongue from hitting the ground in case the baler accidentally detaches from the tractor.

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

A—Safety chain



CC1023332 —UN—04AUG03

OUC006,0000DB0 -19-31JAN05-1/1

Store Jackstand

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

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

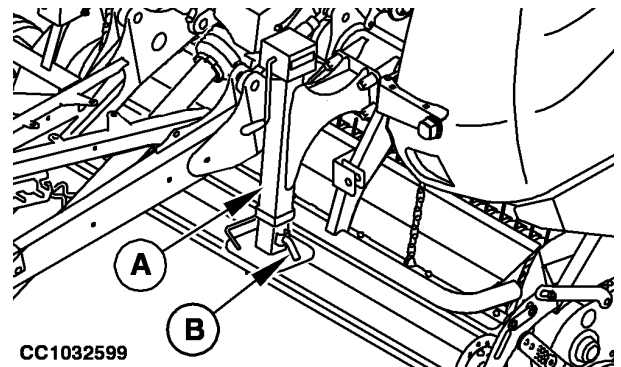
1. Insert pin (B) as shown in step (I).
2. Turn pin (B) as shown in step (II) to secure jackstand in storing position.

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

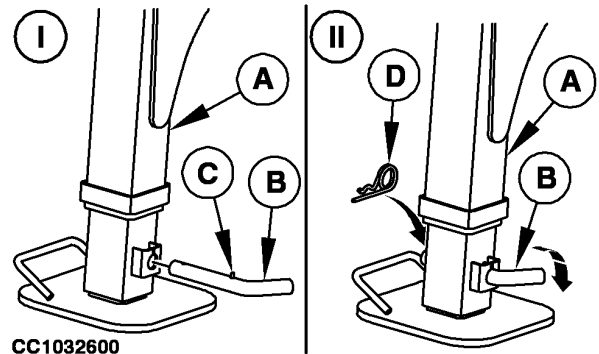
3. Insert spring locking pin (D) in pin (B) as shown in step (II).

A—Jackstand
B—Pin

C—Cotter Pin
D—Spring Locking Pin



CC1032599 —UN—14SEP10



CC1032600 —UN—14SEP10

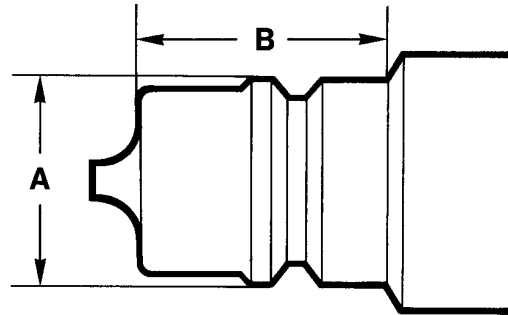
OUC849,0000126 -19-15NOV10-1/1

Connect to Tractor Hydraulic System

CAUTION: Maximum working pressure of baler hydraulic hoses is about 20000 kPa (200 bar; 2900 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.

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.

NOTE: ISO hydraulic couplers are standard with the baler. If they do not fit the tractor, see your John Deere dealer for correct coupler.



LX 006613

A—Diameter

B—Length

B—Length..... 24 mm
(0.945 in.)

Specification

A—Diameter.....23.66 — 23.74 mm
(0.931 — 0.934 in.)

OUCC849,000012B -19-20DEC10-1/4

LX006613—UN—15AUG94

1. Lock tractor SCV

- Tractor with mechanical selective control valves: If equipped, push tractor SCV (Selective Control Valve) lever lockouts (A) to the right (transport lock) before attaching an implement to prevent implement movement and possible personal injury.
- Tractor with electrically-actuated selective control valves (E-SCVs): Press E-SCVs transport lock button (B) to lock all SCV (transport lock) before attaching an implement to prevent implement movement and possible personal injury.

A—SCV Lever Lockouts

B—E-SCVs Transport Lock Button



Mechanical SCV



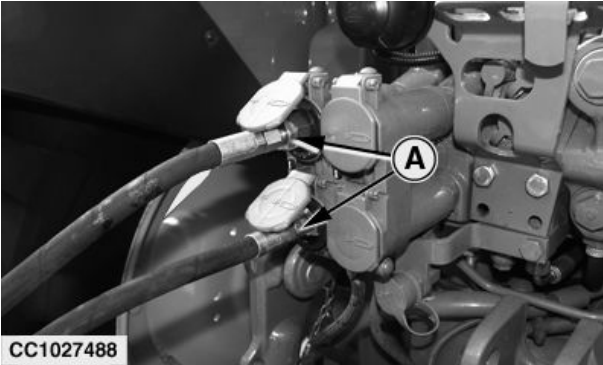
Electrically-Actuated SCV

Continued on next page

OUCC849,000012B -19-20DEC10-2/4

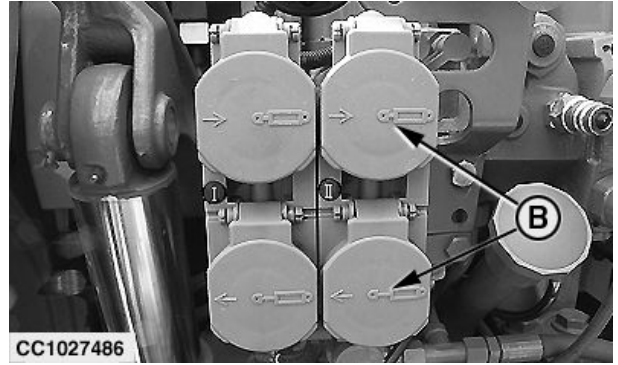
CC1032321—UN—17DEC09

CC1032320—UN—17DEC09



CC1027488

CC1027488—UN—11JUL05



CC1027486

CC1027486—UN—11JUL05

2. Connect gate lift hydraulic hoses

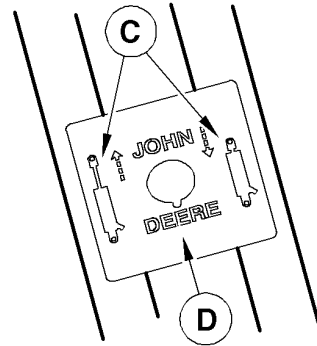
Connect gate hydraulic hoses (A) to a double-acting SCV to operate the gate.

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



CC1026711

CC1026711—UN—03DEC04

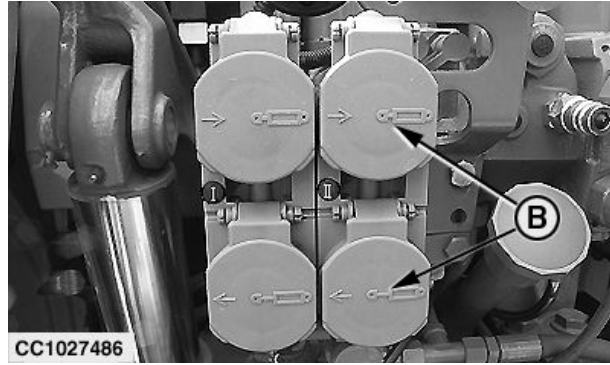
Continued on next page

OUC849,000012B -19-20DEC10-3/4



CC1027490

CC1027490 —UN—11JUL05



CC1027486

CC1027486 —UN—11JUL05

3. Connect pickup control valve hydraulic hoses

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

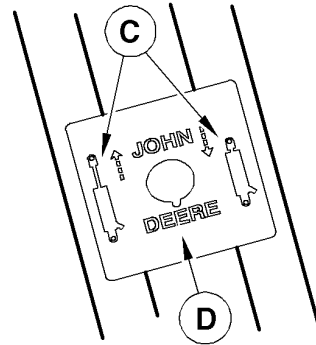
NOTE: Precutter knives and drop floor management use the same selective control valve as raise or lower the pickup.

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 Hoses
B—SCV Symbols

C—Identification Plate Symbols
D—Hose Identification Plate



CC1026711

CC1026711 —UN—03DEC04

OUC849,000012B -19-20DEC10-4/4

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.

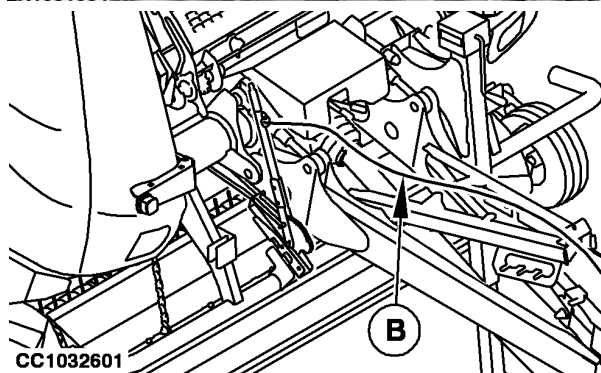
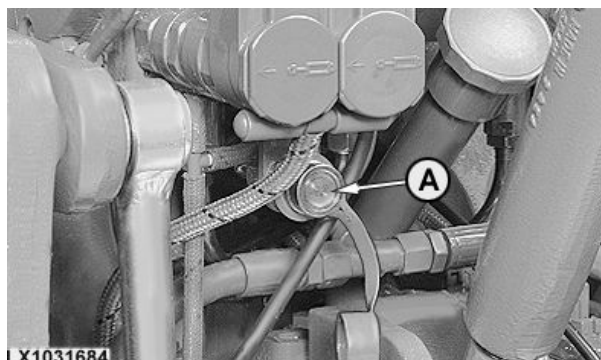
When driving downhill, select the same gear you would for driving uphill.

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—UN—03APR03

CC1032601—UN—14SEP10

OUC849,0000127 -19-21DEC10-1/1

Connect Air Brakes (If Equipped)

IMPORTANT: Pay attention to the colors of the couplers.

NOTE: Couplers and colors comply with 1728 ISO standard.

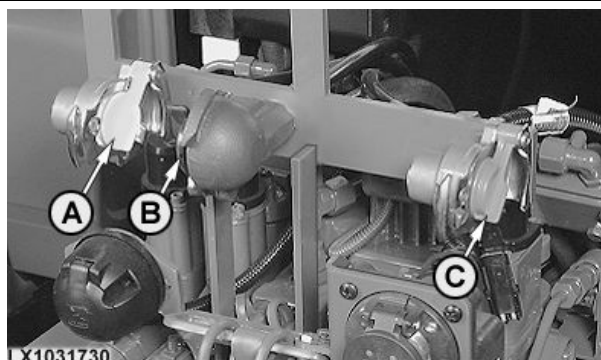
Ensure that the connections are clean before joining the pressure hoses. Seal the connections with the dust caps whenever the hoses are disconnected.

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



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

C—Red (Dual-Line Brake, Supply)

are automatically engaged. See Park the Machine in Transporting and Parking section.

LX1031730—UN—13AUG03

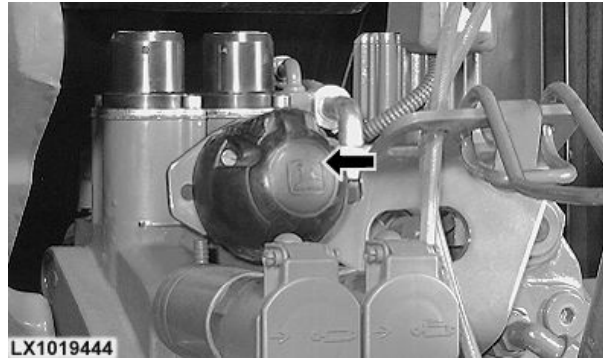
OUC006,00017AF -19-18APR11-1/1

Connecting Seven-Terminal Trailer Socket

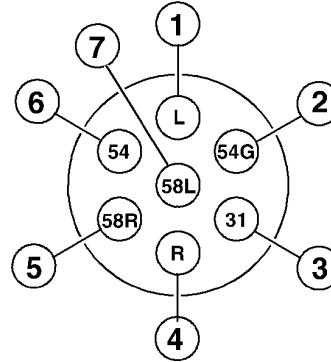
Connect road light plug to seven terminal socket of the tractor.

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

OUCC006,00010BA -19-22SEP06-1/1

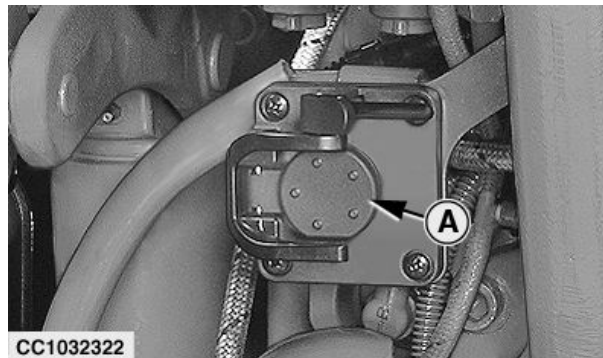
LX1019444—UN—17SEP99

CC017032—UN—25FEB00

Connect Round Baler Wiring Harness

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

A—ISOBUS Implement Breakaway Connector



CC1032322

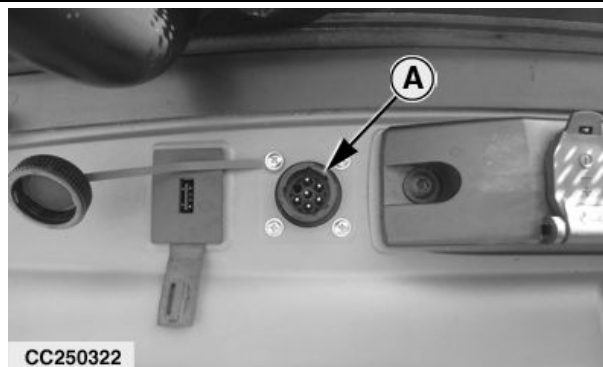
OUCC849,000014B -19-16DEC10-1/1

CC1032322—UN—17DEC09

Connect Video Camera Harness (If Equipped)

A video camera can be connected to the socket (A). See your tractor Operator's Manual to locate it.

A—Video Camera Socket



CC250322

DC82261,0000646 -19-15SEP15-1/1

CC250322—UN—30SEP15

Detach Telescoping Driveline from Tractor PTO Shaft

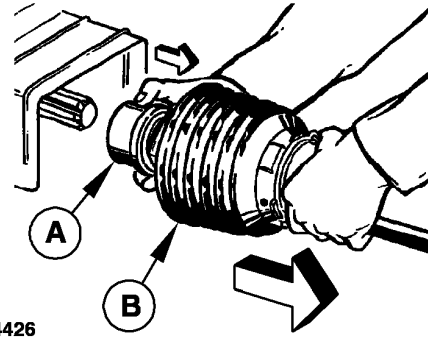
CAUTION: Never detach telescoping driveline while the tractor is running.

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. Reinstall all shields, if removed.

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



CC1034426

A—Locking Collar

B—Guard

CC1034426—UN—15SEP11

OUC006,00017BF -19-24OCT11-1/1

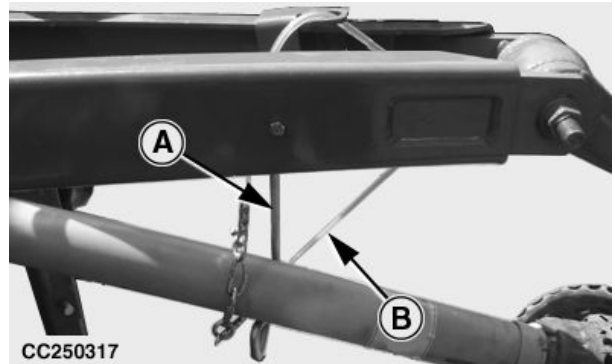
Store Telescoping Driveline

Depending on the tractor hitch used:

- For tractor trailer hitch, position support (A) as shown so that telescoping driveline can be stored on it. Secure it with strap (B).

A—Support

B—Strap



CC250317

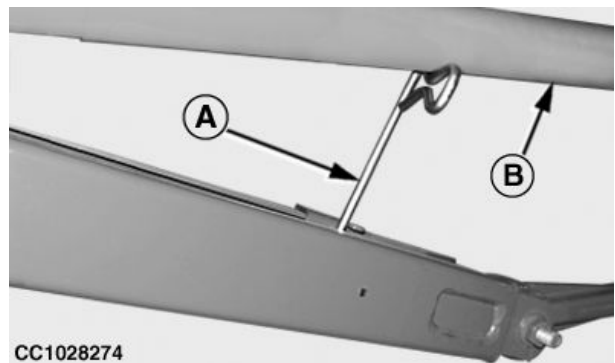
CC250317—UN—01OCT15

DC82261,0000642 -19-07OCT15-1/2

- For tractor drawbar, position support (A) as shown so that telescoping driveline (B) can be stored on it.

A—Support

B—Telescoping Driveline



CC1028274

CC1028274—UN—21SEP06

DC82261,0000642 -19-07OCT15-2/2

Use 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:

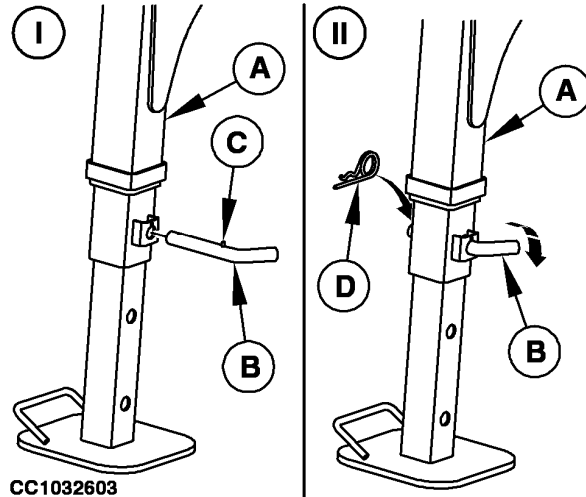
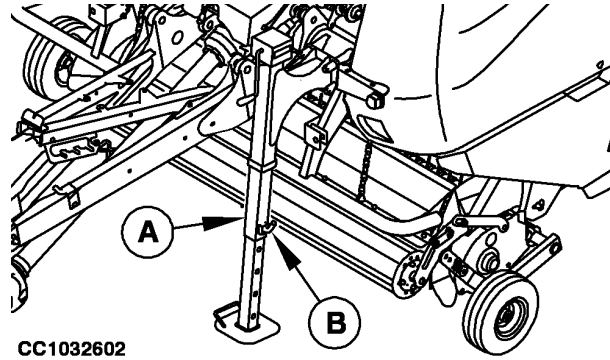
1. Insert pin (B) as shown in step (I).
2. Turn pin (B) as shown in step (II) to secure jackstand.

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



CC1032602—UN—14SEP10

CC1032603—UN—14SEP10

OUC849,0000129 -19-08DEC10-1/1

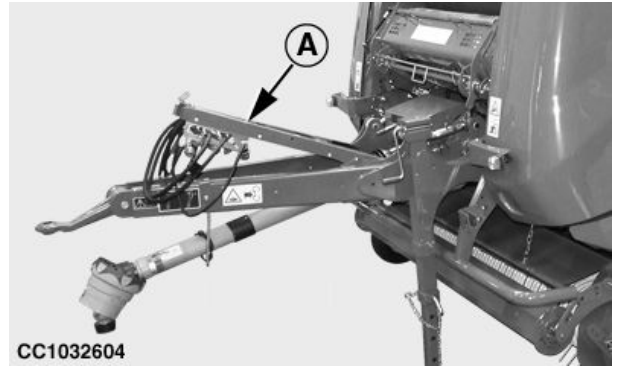
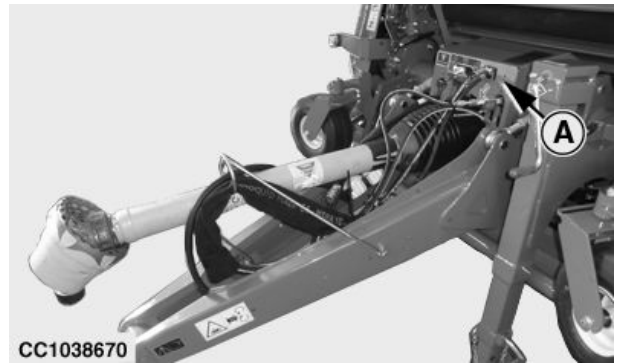
Store Hydraulic Hoses

⚠ 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



CC1038670—UN—26OCT12

CC1032604—UN—14SEP10

OUC006,0001998 -19-26OCT12-1/1

Transporting and Parking

Tow Baler on Public Roads

CAUTION: Use of flashing warning lights and turn signals is recommended when towing this equipment on public roads. An implement safety lighting kit is available from your John Deere dealer.

Before towing the baler at transport speed, close gate and raise pickup.

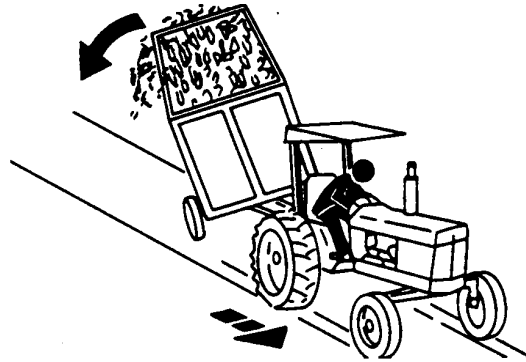
CAUTION: Use care when towing baler at transport speeds. Reduce speed if the weight of baler exceeds weight of tractor. Baler must be empty when towing it on roads.

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.

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



H2B930 —UN—30JUN89

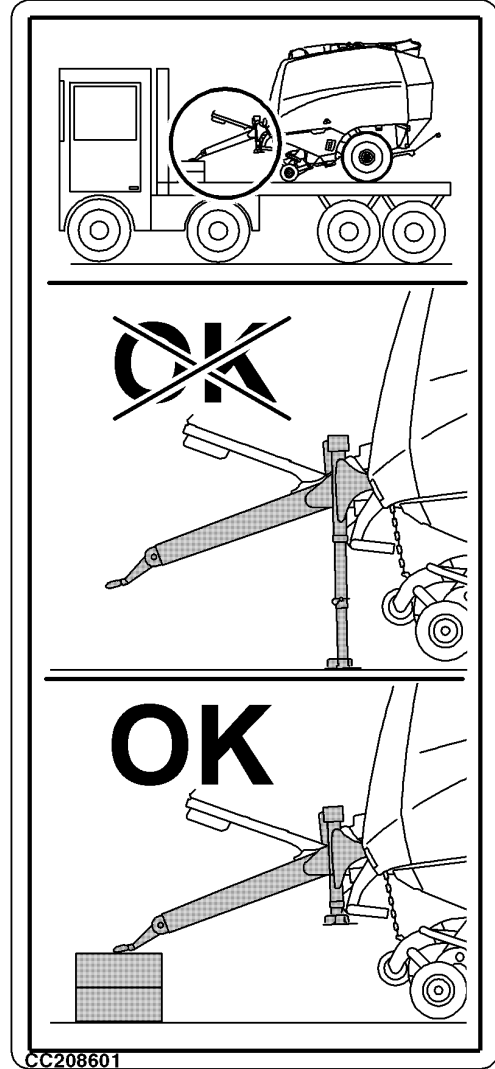
T5216 —UN—23AUG88

OUCC007.00018D6 -19-22DEC10-1/1

Transport Baler on Truck

IMPORTANT: Never use jackstand during baler transportation. Secure baler tongue with wedges as shown.

Safely secure baler on truck.



CC208601

CC208601—UN—28JAN14

DC82261,000040C -19-28JAN14-1/1

Recommended Warning Lights

⚠ CAUTION: Use of flashing warning lights and turn signals is recommended when towing the machine on public roads.



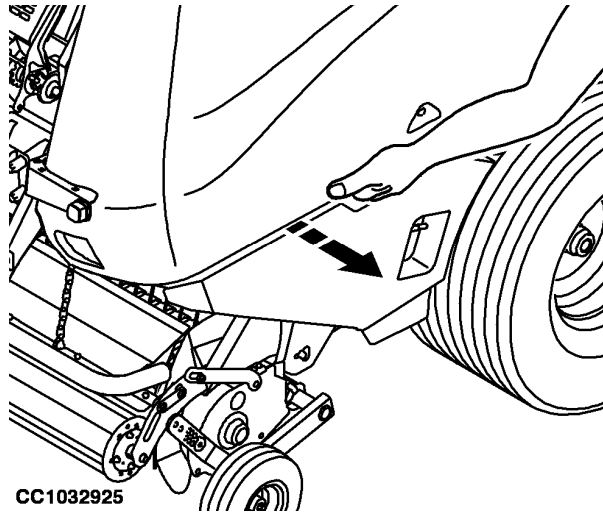
CC1032924

CC1032924 —UN—14SEP10

OUCC849,0000142 -19-16DEC10-1/1

Check Side Doors Are Locked

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



CC1032925

CC1032925 —UN—14SEP10

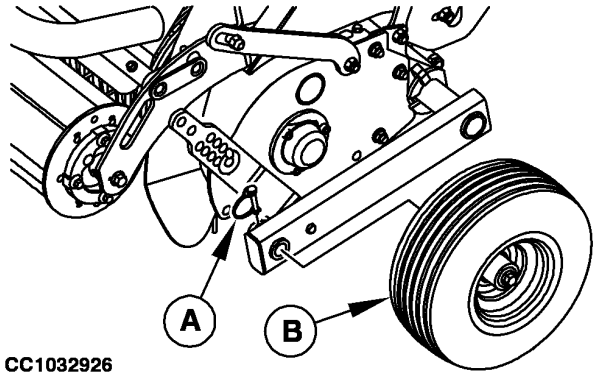
OUCC849,0000143 -19-12MAY10-1/1

Put Standard Gauge Wheels in Transport Position

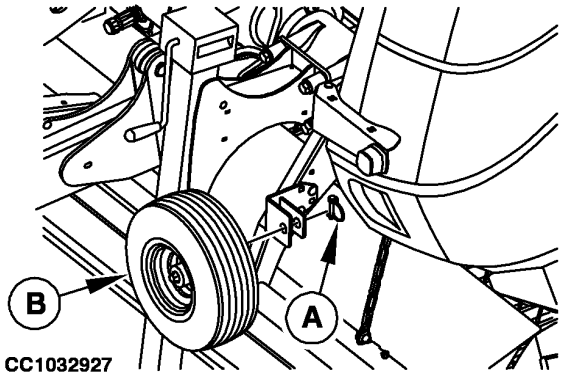
1. Remove shaft locking pin (A).
2. Remove gauge wheel (B).
3. Position gauge wheel (B) as shown. Secure it with shaft locking pin (A).
4. Repeat procedure on opposite side.

A—Shaft Locking Pin

B—Gauge Wheel



CC1032926



CC1032927

OUCC849,0000145 -19-16DEC10-1/1

CC1032926 —UN—14SEP10

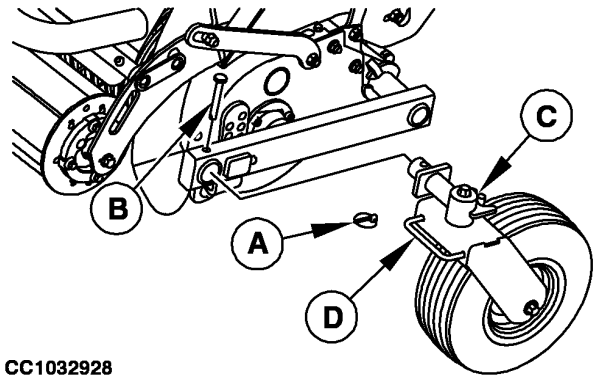
CC1032927 —UN—14SEP10

Put Caster Gauge Wheels in Transport Position

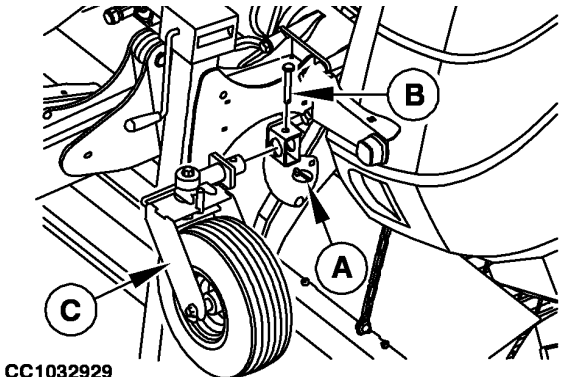
1. Remove quick-lock pin (A) and pin (B).
2. Remove caster gauge wheel (C) by using handle (D).
3. Position caster gauge wheel (C) as shown and secure it with pin (B) and quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin
B—Pin

C—Caster Gauge Wheel
D—Caster Gauge Wheel Handle



CC1032928



CC1032929

OUCC849,0000146 -19-13AUG10-1/1

CC1032928 —UN—14SEP10

CC1032929 —UN—14SEP10

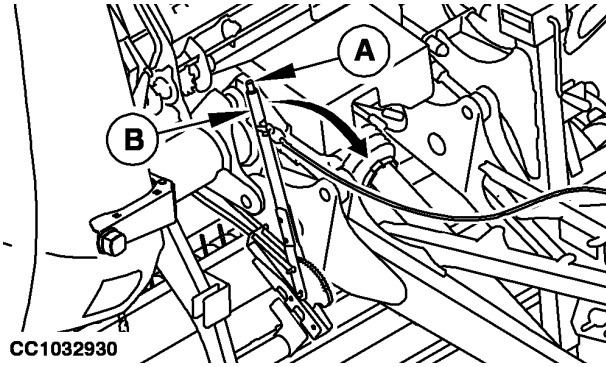
Park the Machine (Baler with Hydraulic Brakes)

Pull lever (B) to engage park brake.

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

A—Button

B—Lever



CC1032930—UN—15NOV10

OUCC849,0000147 -19-12MAY10-1/1

Park the Machine (Baler with Air Brakes)

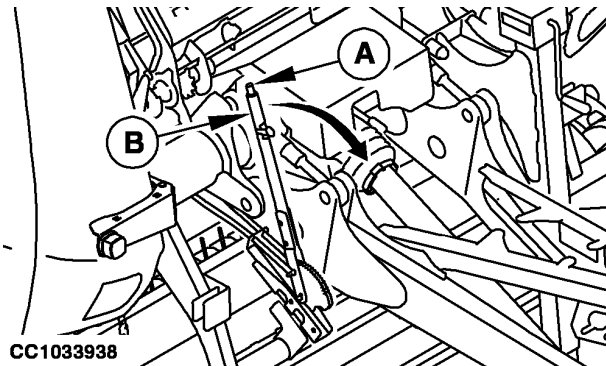
Park brake

Pull lever (B) to engage park brake.

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

A—Button

B—Lever



CC1033938—UN—15SEP11

OUCC006,00017B0 -19-18APR11-1/2

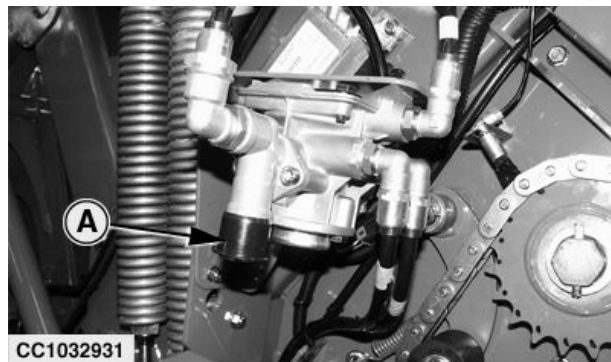
Air brake valve

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



CC1032931—UN—14SEP10

OUCC006,00017B0 -19-18APR11-2/2

Break-In Period

Break In Baler

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

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

Before operation, lubricate members of telescoping driveline liberally.

IMPORTANT: If slippage occurs during action on cam-type cut out clutch, disengage PTO and re-engage at low idle until cam clutch re-engages, then operate again at rated PTO speed.

OUCC006,0001977 -19-15OCT12-1/1

After the First 10 Hours - Wheel Nut Torque

Check wheel nut torque after the first 10 hours of use. See Check Wheel Nut Torque in Preparing the Baler section.

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

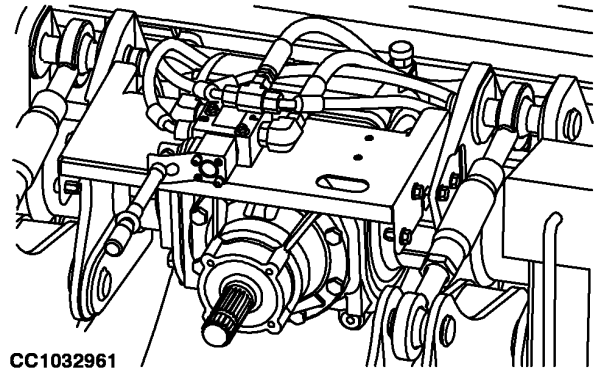


CC1035309—UN—23SEP11

OUCC006,0001821 -19-06OCT11-1/1

After the First 50 Hours - 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.



CC1032961—UN—14SEP10

OUCC006,000181E -19-21SEP11-1/1

After the First 50 Hours - Wheel Nut Torque

Check wheel nut torque after the first 50 hours of use. See Check Wheel Nut Torque in Preparing the Baler section.

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



CC1035309—UN—23SEP11

OUCC006,000183A -19-06OCT11-1/1

Operating the Baler—General Purposes

Before Each Use of the Baler

Check the belts:

NOTE: Belts are designed specifically for this machine and are tested to withstand a normal usage of the baler.

Due to the belt path, a loud whistling noise may be heard when baler is running with empty bale chamber. This whistling noise is normal and does not influence baler performance. As soon as material is fed into the baler or when the rear gate is slightly opened, this whistling noise should disappear. If not, contact your John Deere dealer.

Due to the different environments, the belts may have been damaged by foreign bodies. This damage generally does not generate any functional or reliability issues. However, if the damage is located in the bale shape sensor path, contact your John Deere dealer to prevent any additional damage to the belt.

Fraying of belts is possible. If necessary, cut the wires and melt to ensure that the belt becomes smooth. In case belt sides are heavily worn, check tracking adjustment. See Adjust Belt Tracking in Service section.

IMPORTANT: Prior to melting belts, ensure that bale chamber is empty and cleaned.

For any question regarding how to repair or maintain belts, contact you John Deere dealer.

Adjust the baler:

1. Adjust the pickup height. See Adjust Pickup Height in this section.
2. Adjust the pickup float spring. See Adjust Pickup Float Spring in this section.
3. Adjust the pickup gauge wheels. See Adjust Pickup Standard Gauge Wheels or Adjust Pickup Caster Gauge Wheels in this section.


4. Adjust the windrow compressor roll height. See Adjust Windrow Compressor Roll Height in this section.

Set control monitor functions:

1. Adjust the bale diameter. See Set Bale Diameter in Operating Baler Application section.
2. Select the tying system. See Select Tying System in Operating Baler Application section.
3. Select the tying start mode. See Select Tying Start Mode in Operating Baler Application section.
4. Adjust net and/or twine tying system. See Adjust Net Tying and/or Adjust Twine Tying in Operating Baler Application section.
5. Check that the drop floor is in raised position. See Baler Main Page Display Description in Operating Baler Application section.
6. Adjust the soft core diameter and density. See Operate Soft Core System in Operating Baler Application section.
7. Adjust the bale density. See Adjust Bale Density in Operating Baler Application section.
8. If equipped, select the number of precutter knives. See Retract or Engage Precutter Knives in Operating Baler Application section.
9. Select the customer and field number. See Customer and Field Counters in Operating Baler Application section.

OUC006,0001976 -19-19NOV12-1/1

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.**

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.

DC82261,00004F8 -19-12AUG14-1/1

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.



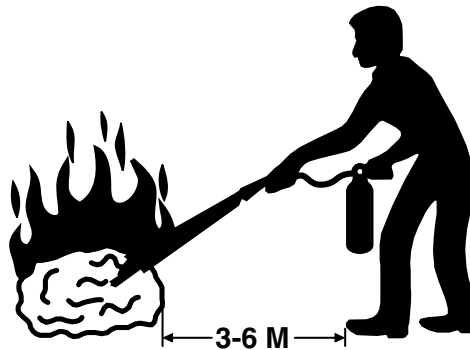
If the fire can be extinguished or contained safely, proceed carefully and follow these guidelines.

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.

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

T5227 —UN—15APR13

Operate Pressurized Water Tank



⚠ CAUTION: Do not risk personal injury. If a fire is too far advanced, do not try to extinguish it.

If a fire can be safely extinguished, proceed carefully and follow these guidelines:

1. Remove water pressurized tank from bracket and carry to area of fire.
2. Approach area of fire with wind to your back.
3. Pull the safety pin out of the actuating lever.
4. Hold water pressurized tank upright and aim hose at base of flames.
5. Squeeze lever of pressurized water tank to direct water on fire.
6. Move hose to cover the source of the fire evenly with water.

After each use, refill pressurized water tank, see [Charge Pressurized Water Tank](#) in Service section.

DC82261,00004D9 -19-13AUG14-1/1

H90363 —UN—05DEC07

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 type of grain straws can be successfully baled provided the material is of sufficient length to hold the bale together.

NOTE: Difficulties can be experienced, especially when forming the core, if the material is excessively dry and the fibres too short. If baling this type material, best results can be obtained by reducing the PTO speed to approximately 1/2 while the core is being formed and then increasing the speed as the bale grows.

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%.

OUCC006,00019B0 -19-21NOV12-1/1

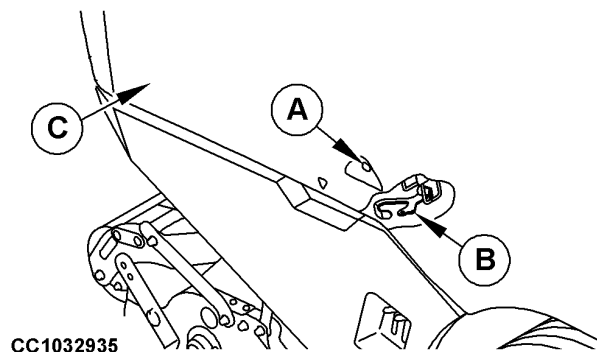
Open and Close the Side Door

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—Side Door



OUCC849,0000150 -19-19AUG10-1/1

Open and Close the Gate Curtain

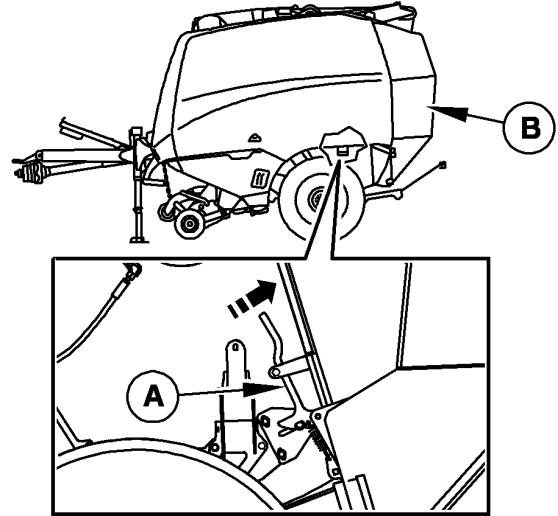
To open gate curtain (B), pull locking lever (A) as shown.

To close gate curtain (B), drop gate curtain.

If the gate curtain does not lock itself with the gate fully closed, see Adjust Gate Curtain Lock in Service section.

A—Locking Lever

B—Gate Curtain



CC1033250

CC1033250—UN—30SEP10

AP00976,00000F8 -19-21DEC10-1/1

Gate Lock Valve

CAUTION: Before working inside or around baler with an open gate, gate lock lever (A) must be moved to locked position. Use this safety feature any time gate is open. Close gate when leaving baler unattended.

The gate lock valve locks each gate lift cylinder independently with the gate in any position.

A—Gate Lock Lever



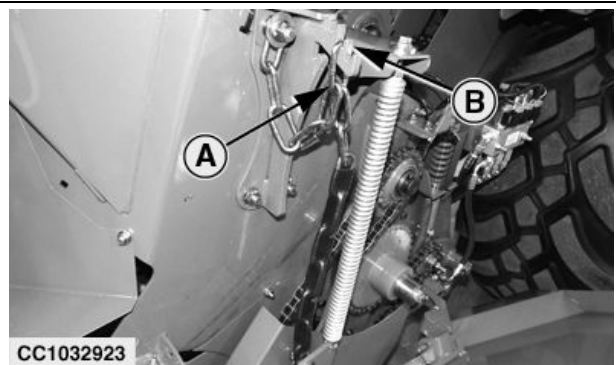
CC1032936

CC1032936—UN—14SEP10

OUC849,0000151 -19-19MAY10-1/1

Adjust Pickup Height

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.



CC1032923

A—Chain

B—Anchor

CC1032923—UN—14SEP10

OUC849,0000141 -19-08DEC10-1/1

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

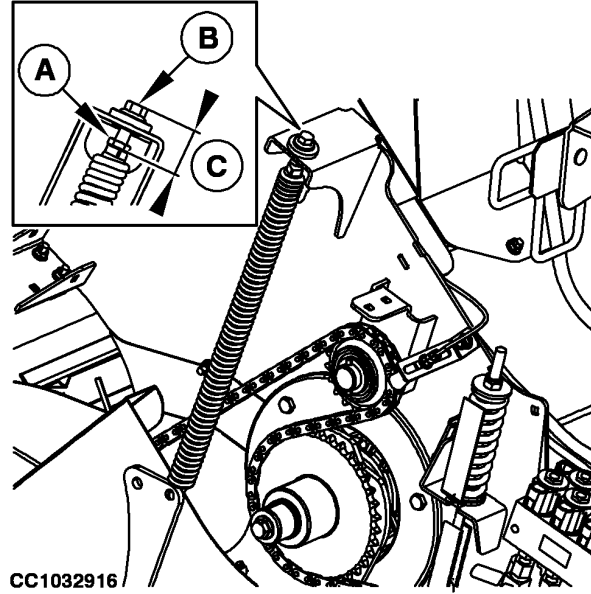
Pickup Float
Spring—Distance..... 38 mm
(1.5 in.)

3. Lock nut (A).

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



CC1032916

CC1032916 —UN—16DEC10

OUCC849,0000139 -19-16DEC10-1/1

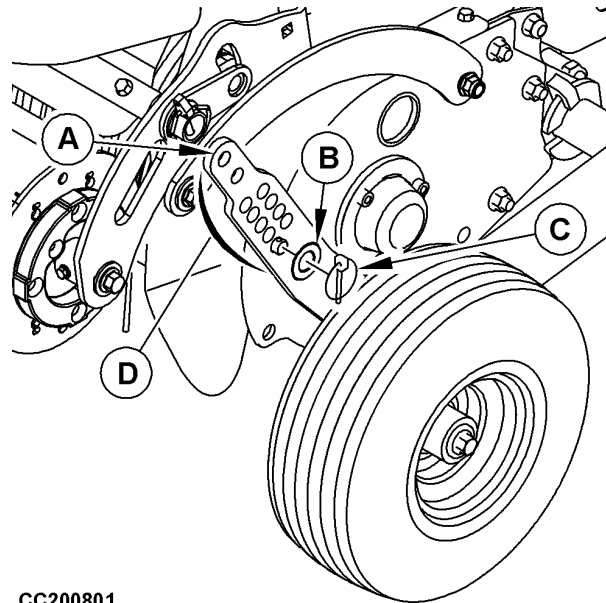
Adjust Pickup Standard Gauge Wheels

1. Adjust the pickup height. See Adjust Pickup Height in this section.
2. Act on selective control valve lever to fully lower the pickup.
3. Remove quick-lock pin (C) and washer (B) then choose one of the positioning holes (D) to fix support (A) so that gauge wheel is just above the ground.

NOTE: Gauge wheel must be approximately at the same height as pickup teeth. When baling straw it may be desirable to adjust gauge wheels slightly lower than the pickup teeth.

4. Install washer (B) and quick-lock pin (C).
5. Repeat procedure on opposite side.

A—Support
B—Washer
C—Quick-Lock Pin
D—Positioning Holes



CC200801

CC200801 —UN—19APR13

OUCC006,0001A58 -19-03APR13-1/1

Adjust Pickup Caster Gauge Wheels

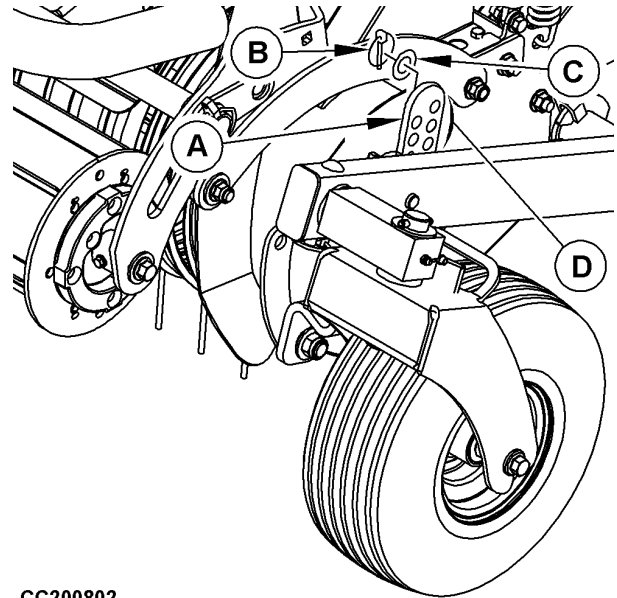
1. Adjust the pickup height. See Adjust Pickup Height in this section.
2. Act on selective control valve lever to fully lower the pickup.
3. Remove quick-lock pin (B) and washer (C) then choose one of the positioning holes (D) to fix support (A) so that caster gauge wheel is just above the ground.

NOTE: Gauge wheel must be approximately at the same height as pickup teeth. When baling straw it may be desirable to adjust gauge wheels slightly lower than the pickup teeth.

4. Install washer (C) and quick-lock pin (B).
5. Repeat procedure on opposite side.

A—Support
B—Quick-Lock Pin

C—Washer
D—Positioning Holes



CC200802

CC200802—UN—17APR13

OUC006,0001A57 -19-03APR13-1/1

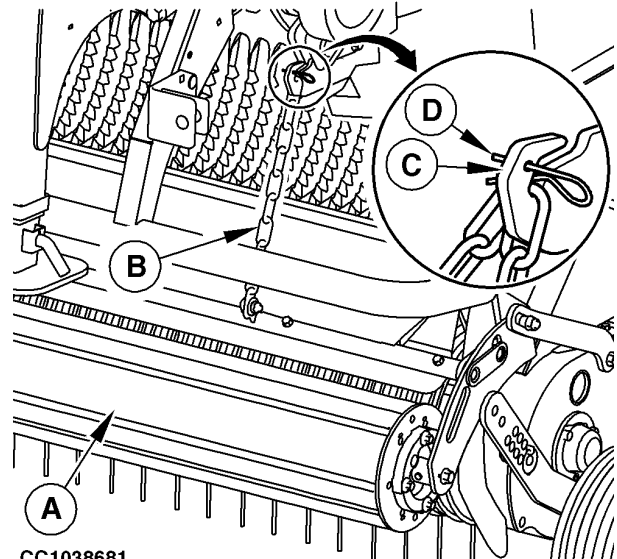
Adjust Windrow Compressor Roll Height

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

1. Fully raise the pickup with selective control valve lever.
2. If equipped, remove spring-locking pin (D) from anchor (C).
3. Remove chain (B) from anchor (C) on both sides.
4. Slowly lower the pickup until the middle of windrow compressor roll (A) and the top of the windrow are aligned.
5. Attach chain (B) on anchor (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.

6. Fully lower the pickup.
7. Check height of windrow compressor roll (A), repeat procedure, if needed.
8. If equipped, install spring-locking pin (D) on anchor (C) to lock chain (B) adjustment.



CC1038681

A—Windrow Compressor Roll
B—Chain

C—Anchor
D—Spring-Locking Pin

CC1038681—UN—13NOV12

OUC006,00019AF -19-13NOV12-1/1

Bale Density Gauge (Baler up to S.N. 130024)

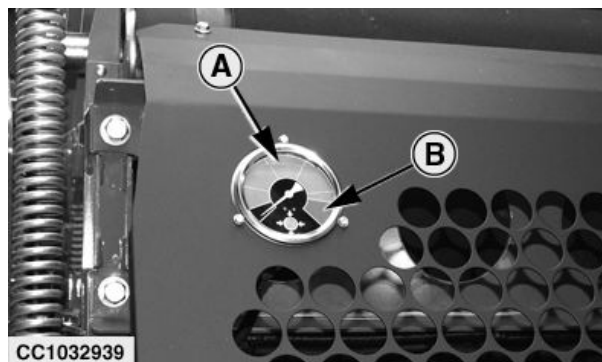
The gauge indicates the relative pressure within the hydraulic bale tensoning system while forming a bale.

NOTE: The gauge will not display a higher density setting until more material is fed into the baler.

The green band (A) represents normal baler operating pressure range.

If the needle reaches the red band (B):

- Reduce bale density.
- Check for faulty gauge.



A—Green Band

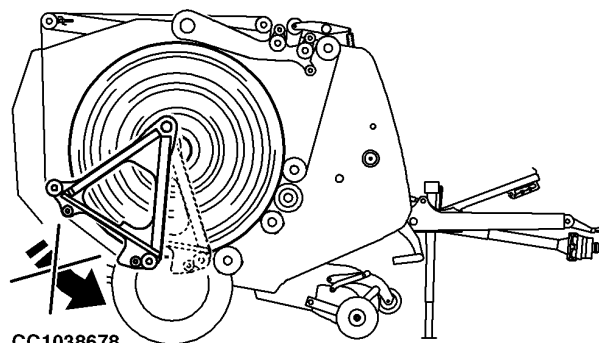
B—Red Band

OUCC006,0001992 -19-26OCT12-1/1

CC1032939—UN—14SEP10

Operate the Rear Gate

IMPORTANT: Do not open the rear gate while forming a bale. If rear gate is unintentionally opened during bale formation, eject the bale without attempting to close the rear gate again.



CC1038678

CC1038678—UN—06NOV12

OUCC006,00019A5 -19-05NOV12-1/1

Operate the Baler in Short, Dry, Slick Crops

In case of plugging or irregular bale shape:

Try one or more of the following methods:

- Raise pickup as high as practical.
- Reduce tractor PTO speed.
- Reduce bale density as necessary.
- Make larger windrows (rake together as necessary).

- Reducing number of knives can improve the bale shape.
- In case of bale start difficulties in dry conditions, soft core function can be used during the first 80 cm (2 ft 7.5 in.) of bale diameter to help in bale core formation.

In case of baling extremely short dry hay:

It may be necessary to lower the baler as much as possible.

AP00976,000018E -19-14DEC10-1/1

Operate the Baler in Cornstalks

Cut stalks prior to baling to improve pickup tooth life.

Raise machine and lower the pickup (teeth must not to touch the ground) to increase the feed opening.

Do not rake more than six rows together or plugging may occur at the pickup area. Higher productivity can

be obtained by baling smaller windrows at faster ground speeds.

Be sure to maintain rated PTO speed.

If stalks have not been cut prior to baling, put precutter knives in cutting position and slowly drive over the windrow to improve pickup tooth life.

OUCC006,0001424 -19-27JUN08-1/1

Operate the Baler in Silage and Damp Crops

IMPORTANT: When baling silage, the bale diameter must not exceed 1.20—1.40 m (3 ft. 11 in. to 4 ft. 7 in.). Bigger bales could result in belt damage.

Always start the bale with pickup centered on the windrow.

Do not stop forward travel for at least 2—3 m (8—10 ft.) once you have entered the crop, so as to feed enough material to force the bale to start.

To ensure smooth feeding, make sure that tractor drawbar does not catch or disturb windrow.

In first cut or in case of long crop, use soft core function during the first 80 cm (2 ft. 7.5 in.) of bale diameter.

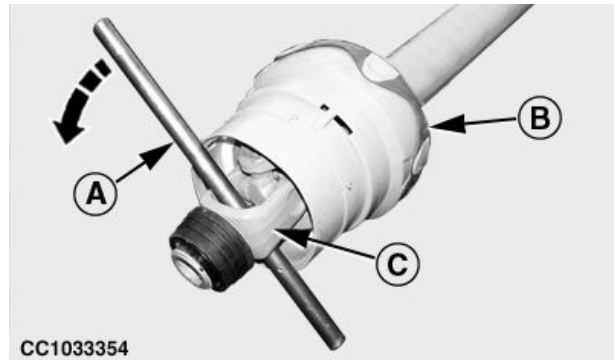
AP00976,00000F0 -19-05AUG10-1/1

Rotate Baler by Hand

1. Disconnect PTO driveline (B) from tractor.
2. Insert prybar (A) between yoke (C) and U-joint.
3. Use prybar (A) to rotate the baler as shown.
4. When process is finished, remove prybar (A).
5. Connect PTO driveline (B) to tractor.

A—Prybar
B—PTO Driveline

C—Yoke

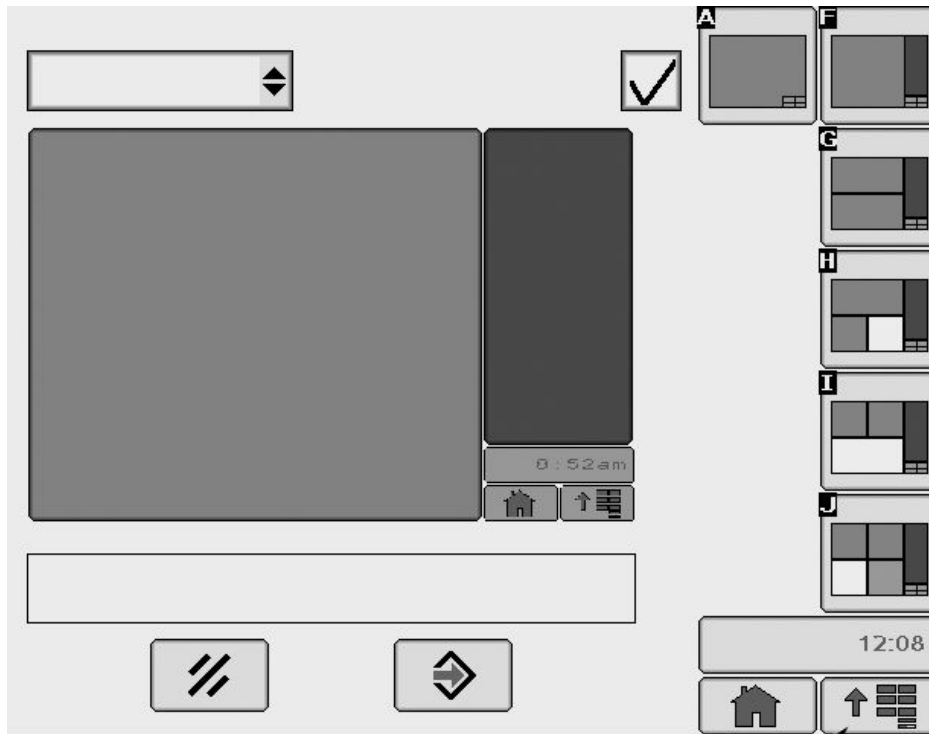


CC1033354—UN—09DEC10

AP00976,00000F7 -19-07DEC10-1/1

Operating Baler Application

Baler Application Access



CC1032323

GREENSTAR 2600 display shown

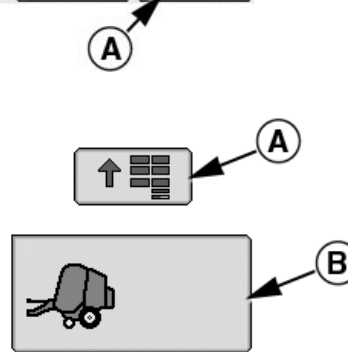
NOTE: John Deere monitors are automatically switched ON when the ignition key is turned ON.

The first time baler is connected to the monitor or after a software update, it is necessary to wait until the baler application is loaded (2 to 4 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 menu access, see your monitor operator's manual.

CC1031377



A—Display Menu Softkey or Button

B—Baler Application Softkey

OUC006,0001518 -19-13JAN10-1/1

CC1032323 —UN—21DEC09

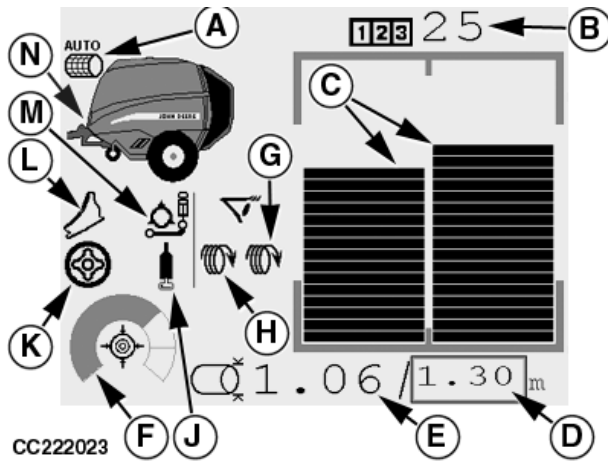
CC1031377 —UN—30SEP09

Units of Measure

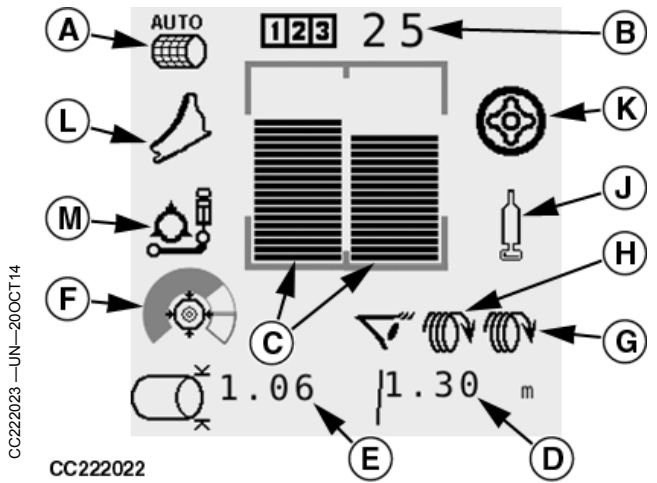
In the baler application, units of measure depend on the monitor settings. Refer to your monitor operator's manual to select the desired units of measure.

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

Baler Main Page Display Description



Baler Main Page Display with Other Display



Baler Main Page Display with Implement Display 1100

- A—Tying Mode
- B—Current Field Bale Counter
- C—Bale Shape Indicators
- D—Bale Diameter (Target)
- E—Bale Diameter (Actual)
- F—Bale Density Indicator
- G—Right Twine Pulley Status

- H—Left Twine Pulley Status
- J—Greasing System Indicator
- K—Soft Core Status
- L—Precutter Knife Status
- M—Drop Floor Position
- N—Baler Status

NOTE: Screen layout can change depending of the monitor.

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

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

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

Bale shape indicators (C) allow the bale shape to be visualized on both sides. See [Guidelines to Form a Good Bale](#) and [Make a Bale with Bale Shape Indicators](#) in this section.

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

Actual bale diameter (E) indicates the bale diameter measured during bale formation (no value are displayed below 500 mm (20 in.)).

Bale density indicator (F) indicates the relative pressure within the hydraulic bale tensioning system while forming

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a bale. See [Operate Soft Core System](#) and [Adjust Bale Density](#) in this section.

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

Symbol (J) indicates the automatic greasing system status: Enable or Disable and ON Time or OFF Time. Symbol (J) is crossed out when the automatic greasing system is disabled. See [Set Automatic Greasing System \(If Equipped\)](#) in Baler Application Service section.

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

Symbol (L) indicates the precutter knife position, Retracted or Engaged. Symbol (L) is crossed out when all precutter knives are not engaged. See [Retract or Engage Precutter Knives](#) in this section.

Symbol (M) indicates the drop floor position, Raised or Lowered. Symbol (M) is crossed out when the drop floor is lowered. See [Unplug Pickup](#) in this section.

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

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

CC1032651 —UN—24NOV10

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.



CC1032651

NB02380,0000108 -19-01MAR16-1/34

Soft Core softkey.

CC1031617 —UN—16SEP09

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



CC1031617

NB02380,0000108 -19-01MAR16-2/34

Counters softkey.

CC1031613 —UN—16SEP09

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

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

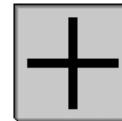


CC1031613

NB02380,0000108 -19-01MAR16-3/34

Remove Bales and Add Bales softkeys.

CC1031852 —UN—30SEP09

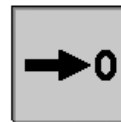


CC1031852

NB02380,0000108 -19-01MAR16-4/34

Clear Current Counter softkey.

CC1031815 —UN—16SEP09



CC1031815

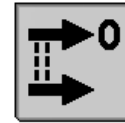
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NB02380,0000108 -19-01MAR16-5/34

Operating Baler Application

Clear All Counters softkey.

CC1031816 —UN—16SEP09



CC1031816

NB02380,0000108 -19-01MAR16-6/34

Customer and Field Counter softkey.

CC222031 —UN—07NOV14



CC222031

NB02380,0000108 -19-01MAR16-7/34

Season and Total Counter softkey.

CC222032 —UN—07NOV14



CC222032

NB02380,0000108 -19-01MAR16-8/34

Start Net Tying Cycle softkey.

CC1031615 —UN—16SEP09

See [Manual Start of an Automatic Tying Cycle](#) in this section.



CC1031615

NB02380,0000108 -19-01MAR16-9/34

Start John Deere B-Wrap™ Tying Cycle softkey.

CC274169 —UN—24FEB16

See [Manual Start of an Automatic Tying Cycle](#) in this section.



CC274169

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NB02380,0000108 -19-01MAR16-10/34

Start Twine Tying Cycle softkey.

CC1033937 —UN—15SEP11

See [Manual Start of an Automatic Tying Cycle](#) in this section.



CC1033937

Continued on next page

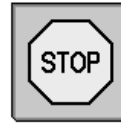
NB02380,0000108 -19-01MAR16-11/34

Operating Baler Application

Stop Tying Cycle softkey.

CC1031890 —UN—19OCT09

See [Manual Start of an Automatic Tying Cycle](#) in this section.



CC1031890

NB02380,0000108 -19-01MAR16-12/34

Net Tying Start Mode softkey.

CC1032324 —UN—21DEC09

See [Select Tying Start Mode](#) in this section.



CC1032324

NB02380,0000108 -19-01MAR16-13/34

John Deere B-Wrap™ Tying Start Mode softkey.

CC274171 —UN—25FEB16

See [Select Tying Start Mode](#) in this section.



CC274171

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NB02380,0000108 -19-01MAR16-14/34

Twine Tying Start Mode softkey.

CC1031798 —UN—16SEP09

See [Select Tying Start Mode](#) in this section.



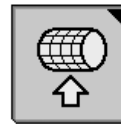
CC1031798

NB02380,0000108 -19-01MAR16-15/34

Net Tying Settings softkey.

CC1031616 —UN—16SEP09

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



CC1031616

NB02380,0000108 -19-01MAR16-16/34

John Deere B-Wrap™ Tying Settings softkey.

CC274170 —UN—24FEB16

See [Adjust B-Wrap Tying](#) in this section.



CC274170

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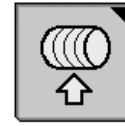
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NB02380,0000108 -19-01MAR16-17/34

Operating Baler Application

Twine Tying Settings softkey.
See [Adjust Twine Tying](#) in this section.

CC1032325 —UN—21DEC09

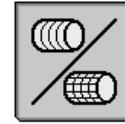


CC1032325

NB02380,0000108 -19-01MAR16-18/34

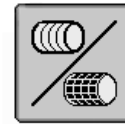
Tying System softkey.
See [Select Tying System](#) in this section.

CC1031800 —UN—16SEP09



CC1031800

CC274172 —UN—24FEB16



CC274172

NB02380,0000108 -19-01MAR16-19/34

Retract Actuator and Extend Actuator softkeys.

CC1031854 —UN—30SEP09



CC1031854

NB02380,0000108 -19-01MAR16-20/34

Drop Floor and Precutter Knife Management softkey.
See [Retract or Engage Precutter Knives](#) and [Unplug Pickup](#) in this section.

CC1031618 —UN—16SEP09



CC1031618

NB02380,0000108 -19-01MAR16-21/34

Drop Floor and Precutter Knife softkey.
See [Unplug Pickup](#) in this section.

CC1031805 —UN—16SEP09



CC1031805

NB02380,0000108 -19-01MAR16-22/34

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

CC1031806 —UN—16SEP09



CC1031806

Continued on next page

NB02380,0000108 -19-01MAR16-23/34

Operating Baler Application

Precutter Knife Set 1 softkey.

CC1031807 —UN—16SEP09

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



CC1031807

NB02380,0000108 -19-01MAR16-24/34

Precutter Knife Set 2 softkey.

CC1032652 —UN—24NOV10

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



CC1032652

NB02380,0000108 -19-01MAR16-25/34

Settings softkey.

CC1031612 —UN—16SEP09

See this section, see [Operating Baler in Automation Mode](#) section, and [Baler Application Service](#) section.

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

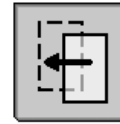
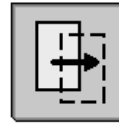


CC1031612

NB02380,0000108 -19-01MAR16-26/34

Next Page and Previous Page softkeys.

CC1031853 —UN—30SEP09



CC1031853

NB02380,0000108 -19-01MAR16-27/34

Baler Diagnostic softkey.

CC1031614 —UN—16SEP09

See [Baler Application Service](#) section.



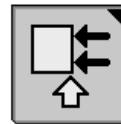
CC1031614

NB02380,0000108 -19-01MAR16-28/34

Input Test softkey.

CC1031803 —UN—16SEP09

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



CC1031803

Continued on next page

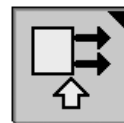
NB02380,0000108 -19-01MAR16-29/34

Operating Baler Application

Output Test softkey.

CC1031804 —UN—16SEP09

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



CC1031804

NB02380,0000108 -19-01MAR16-30/34

Baler Calibration softkey.

CC1031658 —UN—16SEP09

See Baler Application Service section.



CC1031658

NB02380,0000108 -19-01MAR16-31/34

Net and Twine Actuator Calibration softkey.

CC1031808 —UN—16SEP09

See [Calibrate Net Tying Actuator MB411](#), and [Calibrate Twine Tying Actuator MB421](#) in Baler Application Service section.



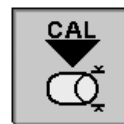
CC1031808

NB02380,0000108 -19-01MAR16-32/34

Bale Diameter Calibration softkey.

CC1031809 —UN—16SEP09

See [Calibrate Bale Diameter Potentiometer RB311](#) in Baler Application Service section.



CC1031809

NB02380,0000108 -19-01MAR16-33/34

Advanced Settings softkey.

CC1034498 —UN—07JUL11

See your John Deere dealer.



CC1034498

NB02380,0000108 -19-01MAR16-34/34

Set Bale Diameter

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

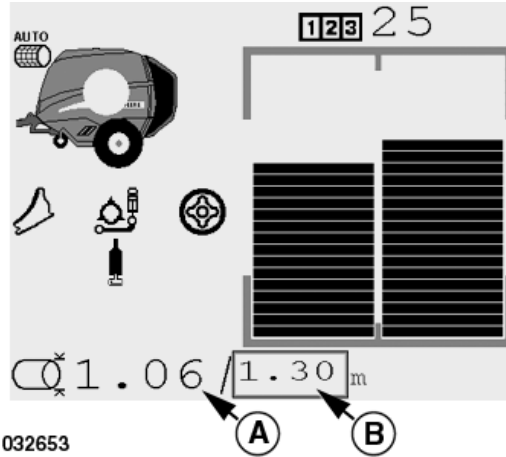
This adjustment will determine the diameter at which the tying cycle will automatically start.

- On the main page, select input box (B) and set bale diameter:
 - from 0.8 to 1.60 m (2 ft 7-1/2 in to 5 ft 3 in) for 960 baler.
 - from 0.8 to 1.85 m (2 ft 7-1/2 in to 6 ft 0-3/4 in) for 990 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.

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



CC1032653

A—Bale Diameter (Actual)

B—Bale Diameter (Target)

CC1032653—UN—24NOV10

NB02380,0000109 -19-25FEB16-1/4

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

CC1031612 —UN—16SEP09



CC1031612

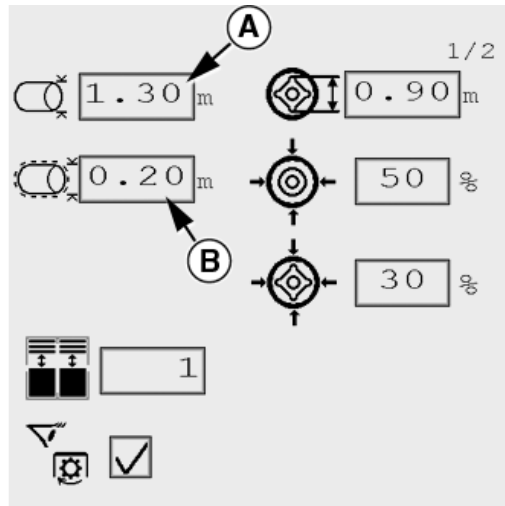
NB02380,0000109 -19-25FEB16-2/4

- Select input box (A) and set bale diameter:
 - from 0.8 to 1.60 m (2 ft 7-1/2 in to 5 ft 3 in) for 960 baler.
 - from 0.8 to 1.85 m (2 ft 7-1/2 in to 6 ft 0-3/4 in) for 990 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



CC1032654

CC1032654—UN—24NOV10

Continued on next page

NB02380,0000109 -19-25FEB16-3/4

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

CC1032651 —UN—24NOV10



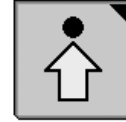
CC1032651

NB02380,0000109 -19-25FEB16-4/4

Adjust Near Full Alarm Offset

CC1031612 —UN—16SEP09

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



CC1031612

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

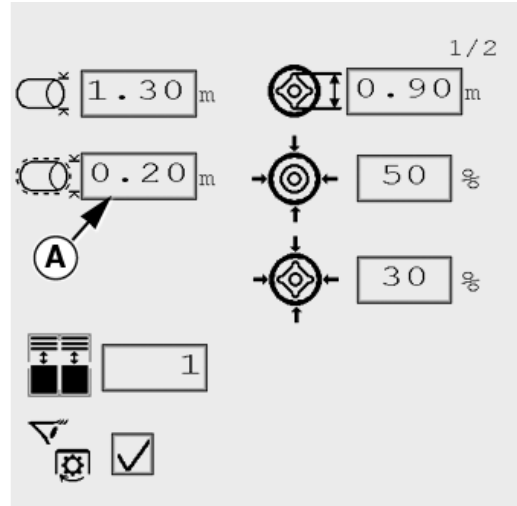
OUC006,00016DA -19-15DEC10-1/3

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 Tying Cycle in this section for more information about near full symbol.

A—Near Full Alarm Offset



CC1033547

CC1033547 —UN—24NOV10

OUC006,00016DA -19-15DEC10-2/3

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

CC1032651 —UN—24NOV10



CC1032651

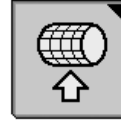
OUC006,00016DA -19-15DEC10-3/3

Select Tying System

CC1031616 —UN—16SEP09

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

1. From the baler application main page, select Net Tying Settings, John Deere B-Wrap™ Tying Settings or Twine Tying Settings softkey.



CC1031616

Net Tying Settings Softkey

CC1032325 —UN—21DEC09



CC1032325

Twine Tying Settings Softkey

CC274170 —UN—24FEB16



CC274170

B-Wrap Tying Settings Softkey

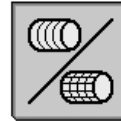
John Deere B-Wrap is a trademark of Tama Plastic Industry

JC87117.000021E -19-01MAR16-1/6

2. Select and activate Tying System softkey to choose between net or twine tying system. The corresponding tying system setting page is displayed according to the selected tying system.

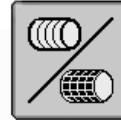
CC1031800 —UN—16SEP09

NOTE: If net tying is set to apply John Deere B-Wrap™, softkey allows operator to switch between John Deere B-Wrap™ and Twine tying.



CC1031800

CC274172 —UN—24FEB16



CC274172

JC87117.000021E -19-01MAR16-2/6

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

CC1032651 —UN—24NOV10



CC1032651

Continued on next page

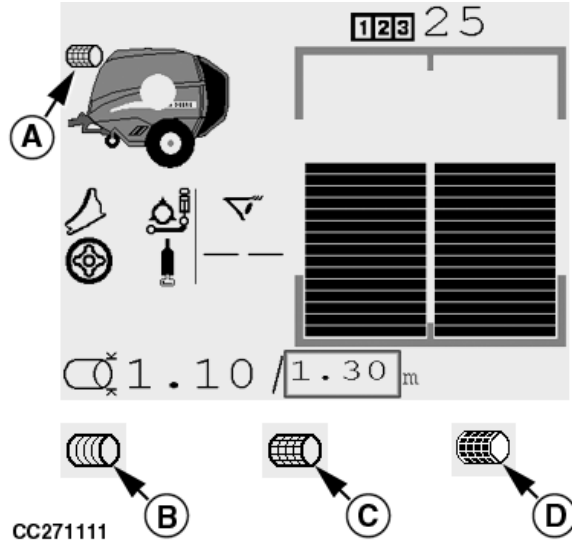
JC87117.000021E -19-01MAR16-3/6

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

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

A—Tying System
B—Twine Tying

C—Net Tying
D—B-Wrap Tying



CC271111 —UN—26FEB16

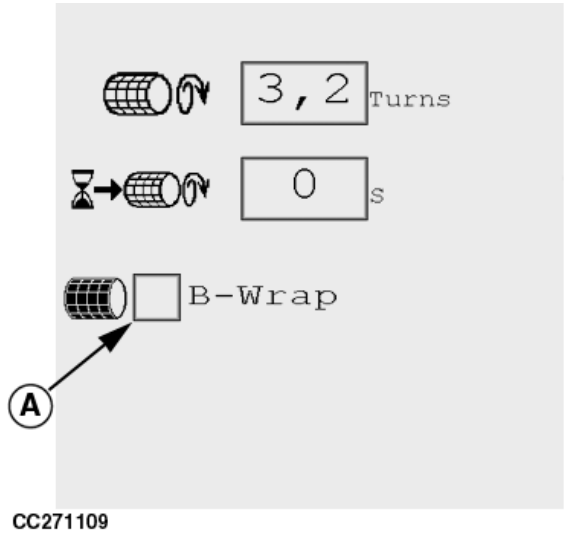
John Deere B-Wrap is a trademark of Tama Plastic Industry

JC87117,000021E -19-01MAR16-4/6

Operator can switch between John Deere B-Wrap™ and net tying system by checking or unchecking John Deere B-Wrap™ Activation case (A). John Deere B-Wrap™ is enabled when John Deere B-Wrap™ Activation case (A) is checked.

Tying symbols on main page change depending on the tying system enabled.

A—B-Wrap Activation Case



CC271109 —19—11APR16

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

Continued on next page

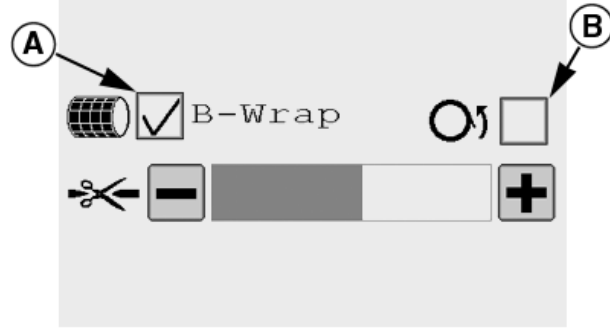
JC87117,000021E -19-01MAR16-5/6

When John Deere B-Wrap™ tying is enabled, operator can activate bale orientation by checking Bale Orientation Activation case (B). Uncheck Bale Orientation case (B) to deactivate bale orientation.

Bale orientation will help operator to orientate John Deere B-Wrap™ material seam to best resist to weather.

A—B-Wrap Activation Case

B—Bale Orientation Activation Case



CC271110

CC271110—UN—11APR16

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

JC87117,000021E -19-01MAR16-6/6

Select Tying Start Mode

CC1032324 —UN—21DEC09

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

NOTE: See *Select Tying System* in this section to select the desired tying system.



CC1032324

Net Tying Start Mode Softkey

CC1031798 —UN—16SEP09



CC1031798

Twine Tying Start Mode Softkey

CC274171 —UN—25FEB16



CC274171

B-Wrap Tying Start Mode Softkey

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Continued on next page

JC87117,000021F -19-01MAR16-1/2

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

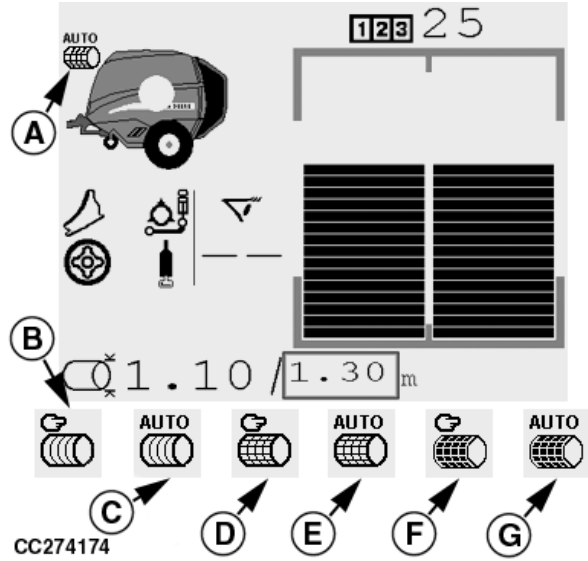
If automatic is selected, the tying cycle starts automatically when the adjusted bale diameter is reached. See [Automatic Start of Tying Cycle](#) in this Section.

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

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

If manual is selected, the tying cycle must be started manually. See [Manual Start of an Automatic Tying Cycle](#) in this Section.

- | | |
|---------------------------------|----------------------------------|
| A—Tying Start Mode | E—Automatic Start (Net Tying) |
| B—Manual Start (Twine Tying) | F—Manual Start (B-Wrap Tying) |
| C—Automatic Start (Twine Tying) | G—Automatic Start (B-Wrap Tying) |
| D—Manual Start (Net Tying) | |



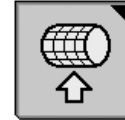
CC274174—UN—29FEB16

JC87117,000021F -19-01MAR16-2/2

Adjust Net Tying

CC1031616 —UN—16SEP09

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



CC1031616

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

Continued on next page

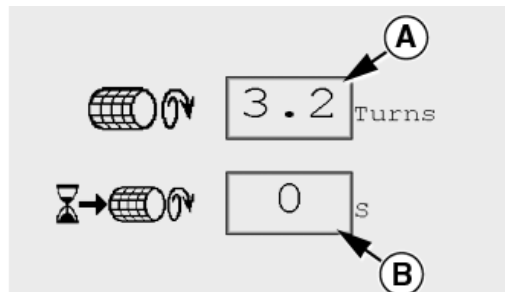
DC82261,000041B -19-07FEB14-1/3

2. Set net tying as follows:

• **Number of Net Turns (A):**

Set number of net turns between 1.2 and 10 net turns in input box (A). Refer to the following table to obtain the recommendations for the number of net turns according to the crop type and adjusted bale density. To adjust the bale density, see [Adjust Bale Density](#) in this section.

NOTE: Number of net turns needed may vary depending on crop material, harvesting condition (temperature) and net type. To ensure a correct overlap of each net turn, we recommend to use decimal values between X.3 and X.5.



CC1033550

A—Number of Net Turns

B—Net Tying Delay

CC1033550 —19—24NOV10

Recommendations for number of net turns		
Adjusted bale density	Crop Type	
	Silage	Hay / Straw
0 — 55 %	=	=
55 — 65 %	=	+ +
65 — 100 %	=	+ + to + + +

NOTE: Due to net tying system composition, a minimum amount of net is applied on the bale, even if number (A) of net turns is set to a low value. This minimum

amount of net turns applied on the bale varies depending on bale diameter. Following table gives this minimum amount of net turns applied on the bale.

Bale diameter	90 cm (2 ft. 11 in.)	100 cm (3 ft. 3 in.)	110 cm (3 ft. 3 in.)	120 cm (3 ft. 7 in.)	130 cm (4 ft. 3 in.)	140 cm (4 ft. 7 in.)	150 cm (4 ft. 11 in.)	160 cm (5 ft. 3 in.)	170 cm (5 ft. 7 in.)	180 cm (5 ft. 11 in.)
Minimum net turns applied by net tying system	2.9 turns	2.6 turns	2.4 turns	2.2 turns	2 turns	1.9 turns	1.8 turns	1.7 turns	1.6 turns	1.5 turns

• **Net Tying Delay (B):**

Set net tying delay between 0 and 9 seconds in input box (B). The net tying delay is the time between the tying start indication on the monitor and the activation of the net actuator. The net tying delay

provides time to stop tractor forward travel and to avoid crop getting trapped between net layers.

NOTE: The initial factory setting is 0 seconds.

DC82261,000041B -19-07FEB14-2/3

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

CC1032651 —UN—24NOV10



CC1032651

DC82261,000041B -19-07FEB14-3/3

Adjust B-Wrap Tying

CC274170 —UN—24FEB16

1. From the baler application main page, select John Deere B-Wrap™ Tying Settings softkey.



CC274170

Continued on next page

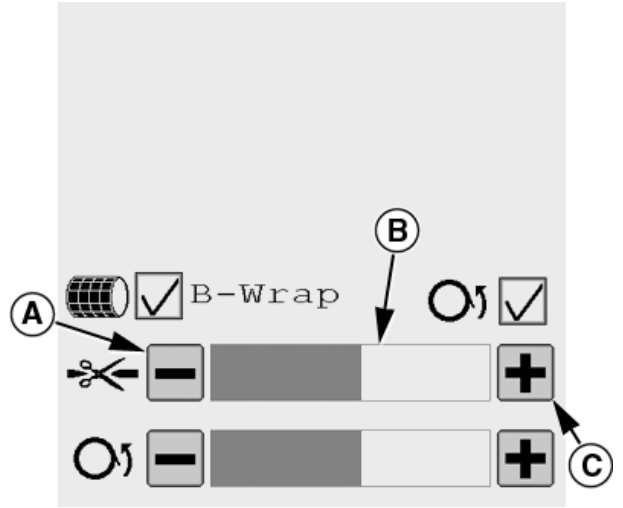
JC87117,0000225 -19-01MAR16-1/3

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

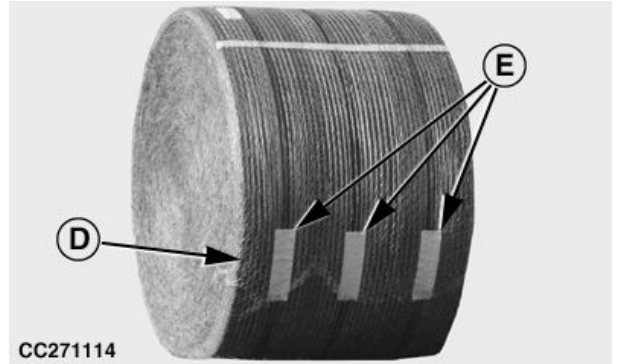
Press Plus (C) or Minus (A) softkey to respectively extend or reduce net cut length after VELCRO®. Net cut length adjustment bar (B) indicates current setting.

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

- A—Net Cut Length Minus Softkey
- B—Net Cut Length Adjustment Bar
- C—Net Cut Length Plus Softkey
- D—B-Wrap Net
- E—VELCRO



CC271112



CC271114

VELCRO is a trademark of Velcro Industries B.V.

Continued on next page

JC87117,0000225 -19-01MAR16-2/3

CC271112—UN—26FEB16

CC271114—UN—26FEB16

3. Adjust bale orientation help:

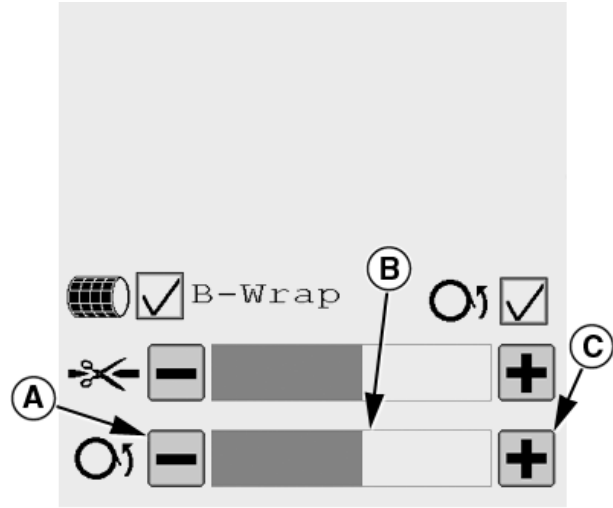
To ensure that bale is correctly oriented, John Deere B-Wrap™ material seam (E) should be below metal strip (D). John Deere B-Wrap™ material seam (E) ideal position is at the 3 o'clock position when looking at the left-hand side. A good material seam position prevents water from running into the bale.

To orientate John Deere B-Wrap™ material seam (E) forward (rotate counterclockwise looking at left-hand side of bale), increase bale orientation help value by pressing plus softkey (C).

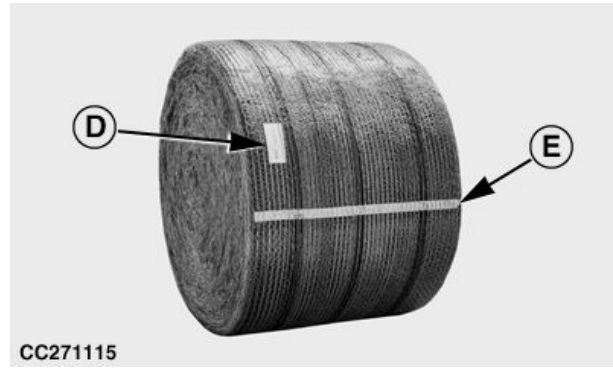
To orientate John Deere B-Wrap™ material seam (E) backward (rotate clockwise looking at left-hand side of bale), decrease bale orientation help value by pressing plus softkey (A).

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

- | | |
|--|------------------------|
| A—Bale Orientation Help Minus Softkey | D—Metal Strip |
| B—Bale Orientation Help Adjustment Bar | E—B-Wrap Material Seam |
| C—Bale Orientation Help Plus Softkey | |



CC271113



CC271115

CC271113 —UN—26FEB16

CC271115 —UN—26FEB16

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

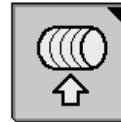
JC87117,0000225 -19-01MAR16-3/3

Adjust Twine Tying

CC1032325 —UN—21DEC09

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

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



CC1032325

Continued on next page

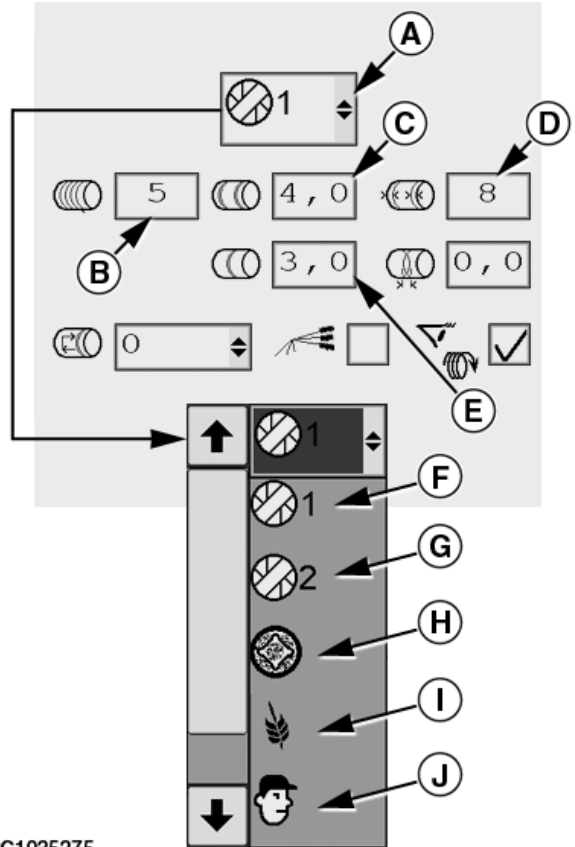
OUC006,0001990 -19-07NOV12-1/4

- Select and activate drop-down list (A).
- Select desired program according to crop type. The following table shows the default settings of each twine tying program.

Twine Tying Programs (Default settings)					
	Silage 1 (F)	Silage 2 (G)	Hay (H)	Straw (I)	Custom (J)
Twine Spacing (B)	5 cm (2 in.)	10 cm (4 in.)	5 cm (2 in.)	2 cm (0.8 in.)	5 cm (2 in.)
Number of Twine Coils on Sides (C)	4 turns	3 turns	2 turns	4 turns	3 turns
Distance of Tying Ends on Sides (D)	8 cm (3 in.)	10 cm (4 in.)	8 cm (3 in.)	8 cm (3 in.)	10 cm (4 in.)
Number of Twine Coils in the Middle (E)	3 turns	2 turns	1 turn	2 turns	1 turn

- Ensure that twine spacing value (B) is adjusted to at least 5 cm (2 in.). If necessary see next step to customize twine spacing value (B).

- A—Twine Tying Program List
- B—Twine Spacing
- C—Number of Twine Coils on Sides
- D—Distance of Tying Ends on Sides
- E—Number of Twine Coils in the Middle
- F—Silage 1
- G—Silage 2
- H—Hay
- I—Straw
- J—Custom



CC1035275

Continued on next page

OUC006,0001990 -19-07NOV12-2/4

CC1035275 —UN—15SEP11

5. Each program can be customized depending on crop conditions.

• **Twine Spacing (A):**

Set value between 5 and 20 cm (2 and 8 in.) in input box (A).

NOTE: We recommend to set 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 Tying 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 0 and 4 cm (0 and 1.6 in.) in input box (E).

NOTE: When switching from one program to another, the customized settings will be lost. Modifications made in Custom program are permanently saved.

Two other specific twine tying modes are available:

• **Re-Extension Tying Mode (F):**

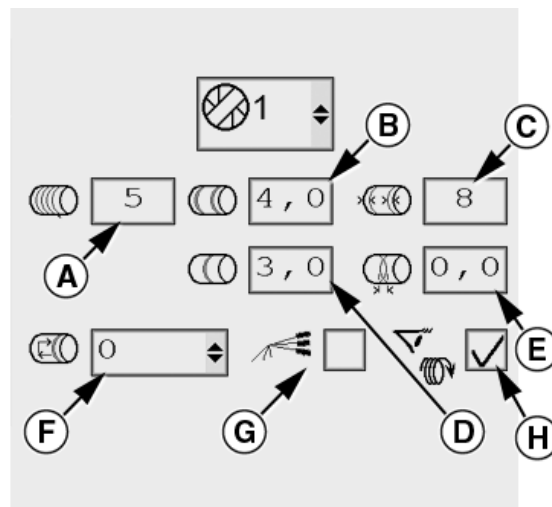
Set the desired re-extension distance in drop-down list (F) to 0 or 20 cm (0 or 8 in.). Do not set re-extension distance to 40 or 60 cm (16 or 24 in.). When the re-extension distance value is 0, the mode is disabled.

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

• **Dry Straw Tying Mode (G):**

Check box (G) is used to enable or disable dry straw tying 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



CC1035276

CC1035276 —UN—15SEP11

- A—Twine Spacing
- B—Number of Twine Coils on Sides
- C—Distance of Tying Ends on Sides
- D—Number of Twine Coils in the Middle

- E—Distance of Twine Overlap in the Middle
- F—Re-Extension Tying Mode
- G—Dry Straw Tying Mode
- H—Twine Pulley Sensors

come back to the edge, pause to place the set number at tying start, and continue to apply twines as set in the monitor.

6. 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 in Service section.

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.

OUC006,0001990 -19-07NOV12-3/4

7. Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUC006,0001990 -19-07NOV12-4/4

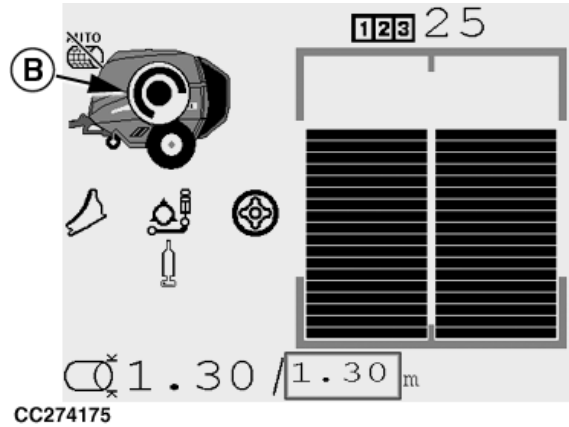
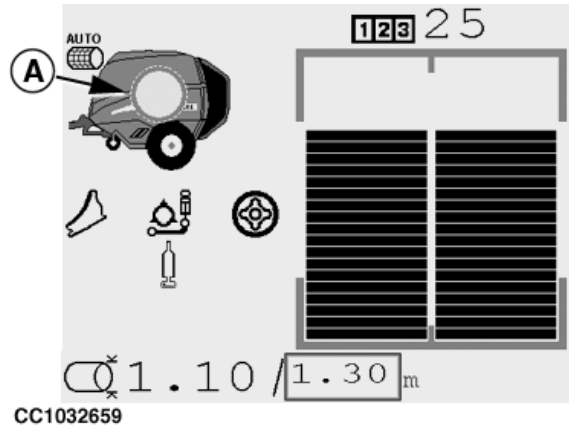
Automatic Start of Tying Cycle

NOTE: To allow automatic start of tying cycle, tying start mode must be automatic. See Select Tying 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 tying process symbol (B) indicates that the net or twine actuator is moving.

A—Near Full Symbol

B—Tying Process Symbol



Continued on next page

NB02380,000010D -19-02MAR16-1/4

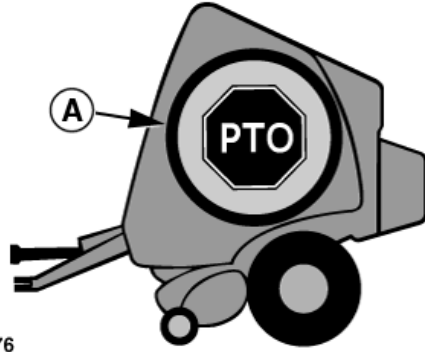
CC1032659 —UN—24NOV10

CC274175 —UN—29FEB16

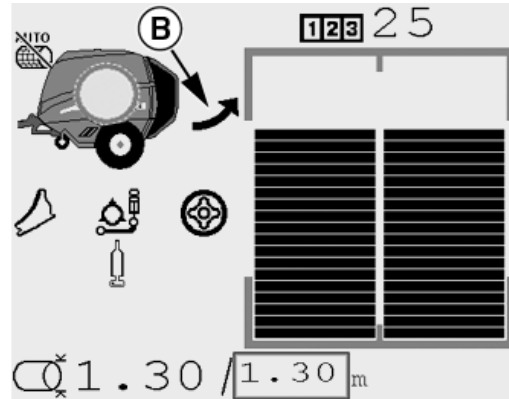
3. When the tying cycle is completed:
 - a. For baler with bale orientation enabled (John Deere B-Wrap™):
 1. Three short beeps sound with a visual count down.
 2. When stop PTO symbol (A) is displayed with a long beep, disengage PTO.
 - b. The bale ejection symbol (B) is displayed and the monitor beeps 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



CC274177

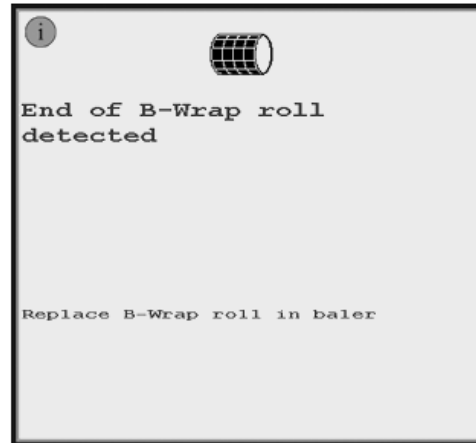
John Deere B-Wrap is a trademark of Tama Plastic Industry

NB02380,000010D -19-02MAR16-2/4

CC274176 —UN—29FEB16

CC274177 —UN—11APR16

5. In John Deere B-Wrap™ tying, 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

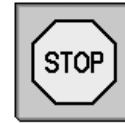
NB02380,000010D -19-02MAR16-3/4

CC274178 —19—11APR16

Operating Baler Application

6. If a problem occurs during tying cycle, select Stop Tying Cycle softkey to interrupt tying cycle and retract actuator.

CC1031890 —UN—19OCT09



CC1031890

NB02380,000010D -19-02MAR16-4/4

Manual Start of an Automatic Tying Cycle

CC1031615 —UN—16SEP09

An automatic net or twine tying cycle can be manually started at any time.

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

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



CC1031615

Start Net Tying Cycle Softkey

CC1033937 —UN—15SEP11



CC1033937

Start Twine Tying Cycle Softkey

CC274169 —UN—24FEB16



CC274169

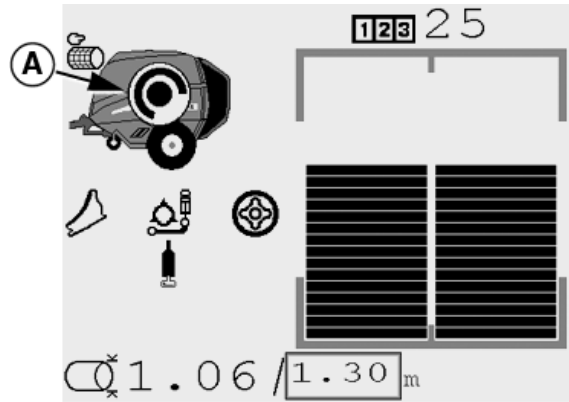
Start B-Wrap Tying Cycle Softkey

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

JC87117,0000221 -19-02MAR16-1/5

2. Tying process symbol (A) allows the tying cycle to be monitored.

A—Tying Process Symbol



CC1032657

CC1032657 —UN—24NOV10

JC87117,0000221 -19-02MAR16-2/5

3. If a problem occurs during tying cycle, select Stop Tying Cycle softkey to interrupt tying cycle and retract actuator.

CC1031890 —UN—19OCT09



CC1031890

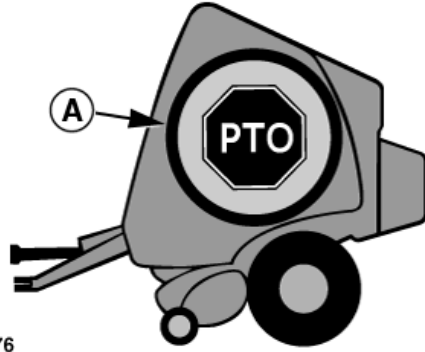
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JC87117,0000221 -19-02MAR16-3/5

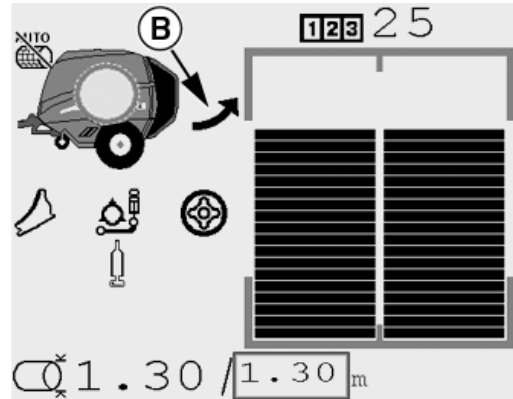
4. When the tying cycle is completed:
 - a. For baler with bale orientation enabled (John Deere B-Wrap™):
 1. Three short beeps sound with a visual count down.
 2. When stop PTO symbol (A) is displayed with a long beep, disengage PTO.
 - b. The bale ejection symbol (B) is displayed and the monitor beeps 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



CC274177

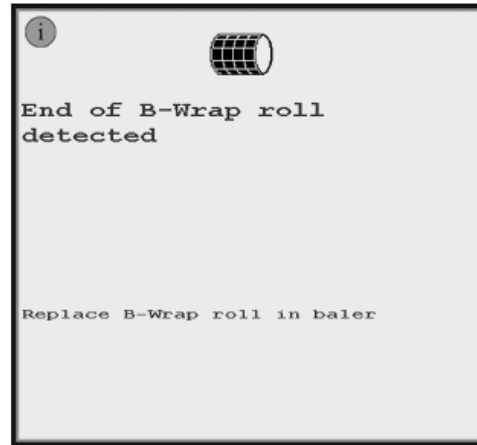
John Deere B-Wrap is a trademark of Tama Plastic Industry

JC87117,0000221 -19-02MAR16-4/5

CC274176 —UN—29FEB16

CC274177 —UN—11APR16

6. In John Deere B-Wrap™ tying, 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

JC87117,0000221 -19-02MAR16-5/5

CC274178 —19—11APR16

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 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.

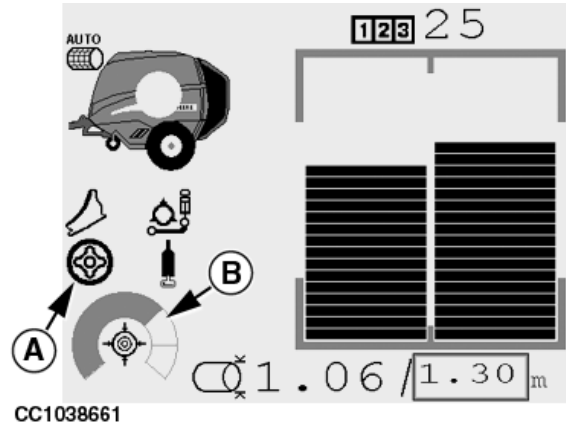
OUC006,000198E -19-19OCT12-1/5

2. The soft core symbol (A) is displayed when the soft core system is enabled.
3. 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



CC1038661

CC1038661 —UN—19OCT12

OUC006,000198E -19-19OCT12-2/5

Adjust Soft Core Diameter and Density:

CC1031612 —UN—16SEP09

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



CC1031612

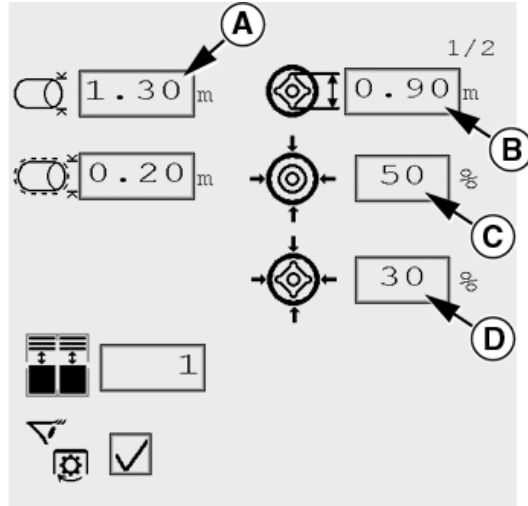
Continued on next page

OUC006,000198E -19-19OCT12-3/5

- 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 30 %. 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 **C—Bale Density**
B—Soft Core Diameter **D—Soft Core Density**



CC1032663

CC1032663 —UN—24NOV10

OUCC006,000198E -19-19OCT12-4/5

- Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUCC006,000198E -19-19OCT12-5/5

Adjust Bale Density

CC1031612 —UN—16SEP09

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



CC1031612

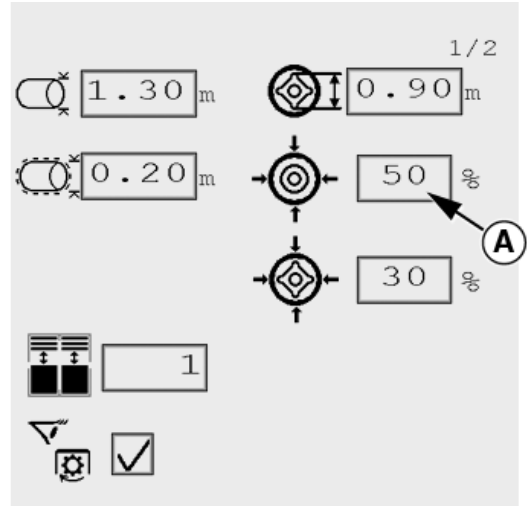
Continued on next page

OUCC006,0001991 -19-23OCT12-1/4

- Select input box (A) and set the bale density from 0 % (minimum density) to 100 % (maximum density).

NOTE: The initial factory setting is 50 %. Bale density setting is limited to 80 % if density pressure sensor is defective or disconnected.

A—Bale Density



CC1032805

CC1032805 —UN—14DEC10

OUCC006,0001991 -19-23OCT12-2/4

- Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUCC006,0001991 -19-23OCT12-3/4

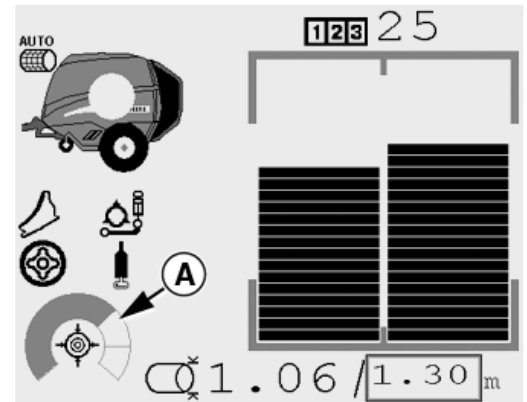
- On the main page, indicator (A) indicates the relative pressure within the hydraulic bale tensing system while forming a bale.

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

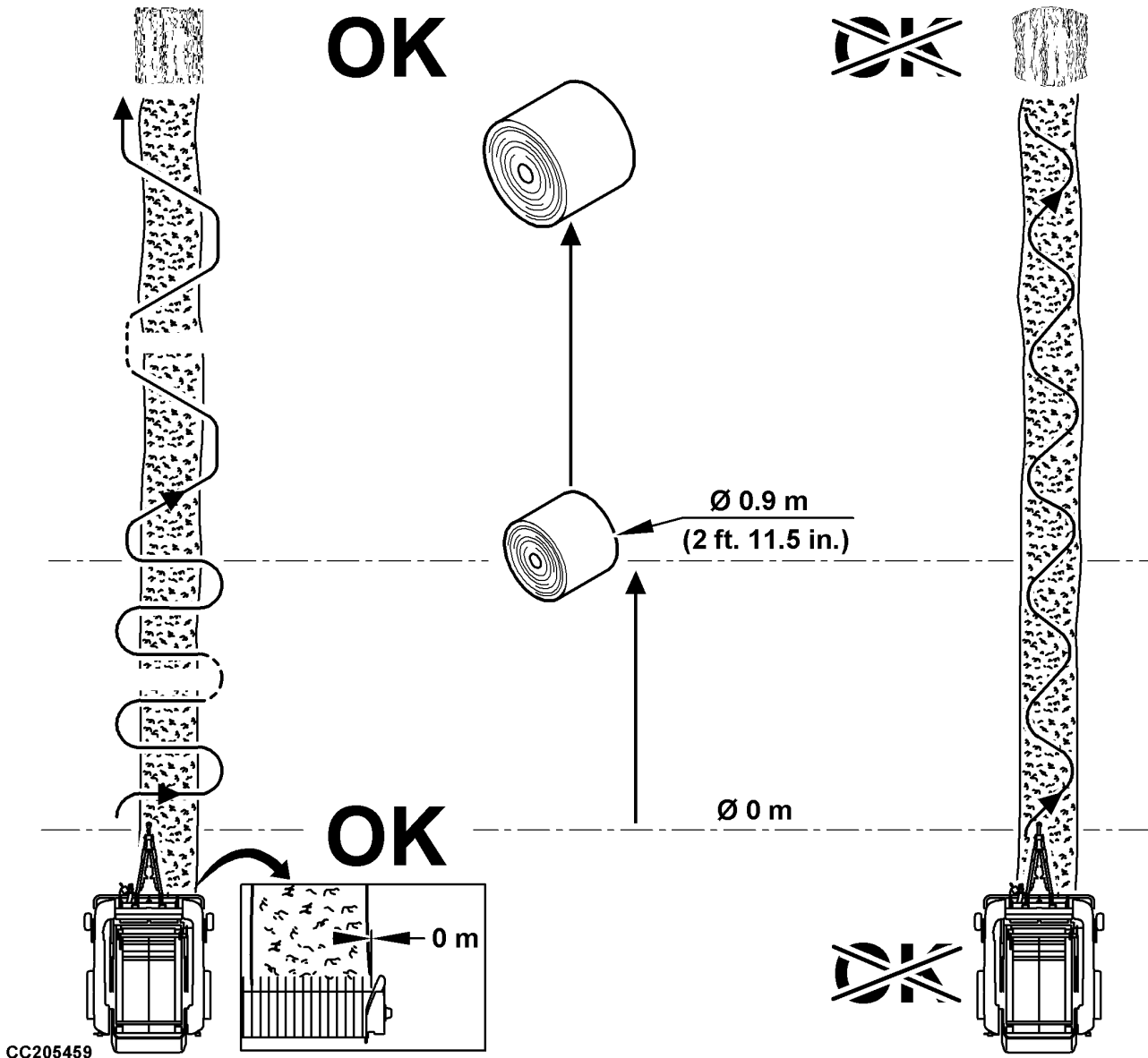


CC1038662

CC1038662 —UN—07NOV12

OUCC006,0001991 -19-23OCT12-4/4

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.

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.

Continued on next page

DC82261,0000408 -19-25FEB14-1/2

- 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.

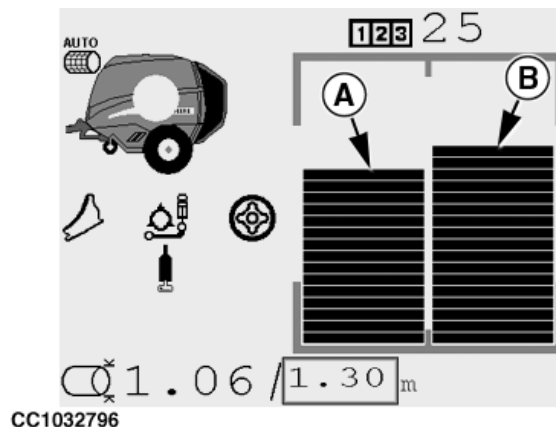
Narrow windrows:

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.

It is preferable to work in full pickup width windrows.

Medium-sized windrows:



A—Left Bale Shape Indicator B—Right Bale Shape Indicator

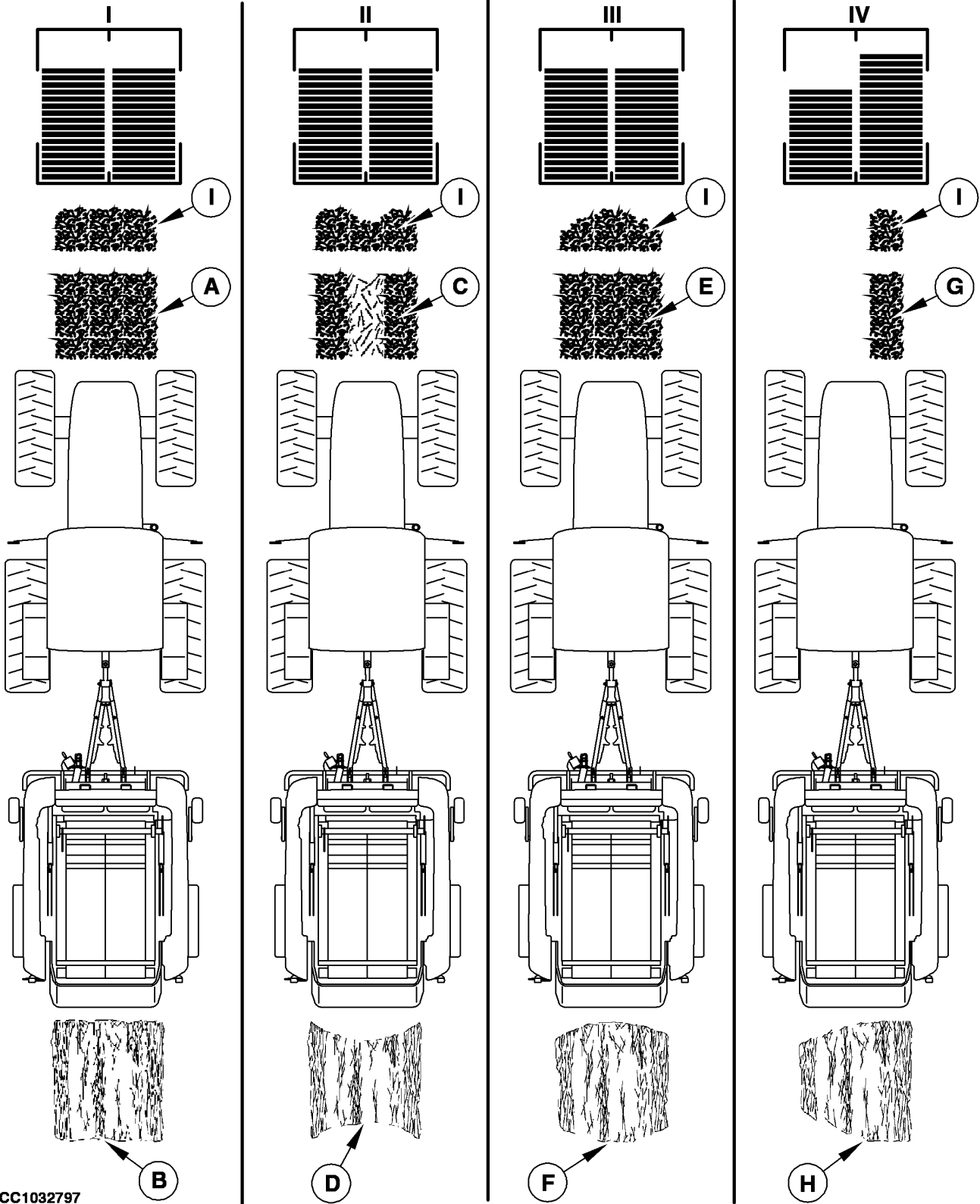
Whenever possible, avoid medium-sized windrows.

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.

DC82261,0000408 -19-25FEB14-2/2

CC1032796—UN—24NOV10

Make a Bale with Bale Shape Indicators



CC1032797

CC1032797 —UN—16DEC10

Continued on next page

OUC006,000162E -19-16DEC10-1/2

The illustration on the facing page and the following information describe the relationship between the display, windrow variations and actual bale shape.

To ensure optimum bale shape and maximum bale density, the bale shape indicators should be shown on BOTH sides at the same high, as shown in Example I. Refer to Guideline to Form a Good Bale in this section.

I— Best shape bales (B) are formed when windrow (A) has a uniform side-to-side density and windrow 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. Refer to Guideline to Form a Good Bale in this section.

II— If full-width windrow (C) is heavy on the edges and light at the center, an hourglass shaped bale (D) will be formed even though bale shape bars are balanced.

If possible, weaving back and forth across windrow will help fill the middle of the bale. Otherwise, proper windrow formation (raking, etc.) may be needed.

III— Bale shape bars are balanced and a barrel shaped bale (F) is formed if any of the following conditions exist:

- Windrow width (E) is approximately 2/3—3/4 the width of the baler.
- Windrow correct but operator may not be weaving over far enough.
- Windrow width is full but density in the middle of the windrow is greater.
- Weaving back and forth too frequently.

Windrow preparation should be less than one-half of the bale chamber width or as large as the bale chamber. If necessary, rake windrow to obtain correct width.

IV— If narrow windrow (G) is baled without weaving back and forth, a cone shaped bale (H) will be formed.

- Operator feeding one side more than other.

Weave back and forth across narrow windrow to keep bale shape bars balanced 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.

OUC006,000162E -19-16DEC10-2/2

Raise or Lower the Pickup

The pickup raise or lower function is automatically selected. Actuate tractor selective control valve lever to raise or lower the pickup.



CC1032798 —UN—23NOV10

OUC006,000162F -19-07DEC10-1/1

Retract or Engage Precutter Knives

The precutter device is used to chop the crop.

1. From the baler application main page, select Drop Floor and Precutter Knife Management softkey.

CC1031618 —UN—16SEP09



CC1031618

Continued on next page

OUC006,00019B3 -19-12NOV12-1/4

Operating Baler Application

- Select Precutter Knife Set 1 or Precutter Knife Set 2 (if equipped) softkey to activate the retract or engage knife function for the desired precutter knife set.

CC1031807 —UN—16SEP09



CC1031807

Precutter Knife Set 1 Softkey

NOTE: The precutter knife set 1 includes 13 precutter knives and the precutter knife set 2 includes 12 precutter knives.

Distance between knives is 40 mm (1.6 in.) with 25 knives engaged and 80 mm (3.1 in.) with 12 or 13 knives engaged.

CC1032652 —UN—24NOV10



CC1032652

Precutter Knife Set 2 Softkey

OUCC006,00019B3 -19-12NOV12-2/4

- Actuate tractor selective control valve lever to retract or engage the selected set of precutter knives.

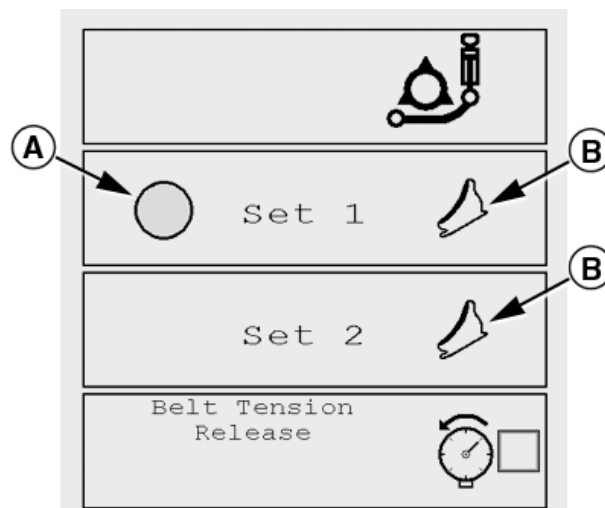
NOTE: Retract or engage knife function uses the same selective control valve as raise or lower the pickup.

The retract or engage knife function status (A) is displayed to indicate that the retract or engage knife function is activated for the precutter knife set 1.

- Knife position symbol (B) is crossed out when precutter knife 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.



CC1032799

Baler with Precutter, 25 Knives Shown

CC1032799 —19—24NOV10

A—Retract or Engage Knife Function Status B—Knife Position Symbol

OUCC006,00019B3 -19-12NOV12-3/4

- Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUCC006,00019B3 -19-12NOV12-4/4

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 Knife Management" softkey.

OUC006,0001631 -19-17DEC10-1/4

3. Act on selective control valve lever to lower the drop floor and retract precutter knives (if engaged) 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 to indicate that the "raise or lower drop floor" function is activated. Precutter knife function status (C) is automatically displayed if precutter knives are engaged.

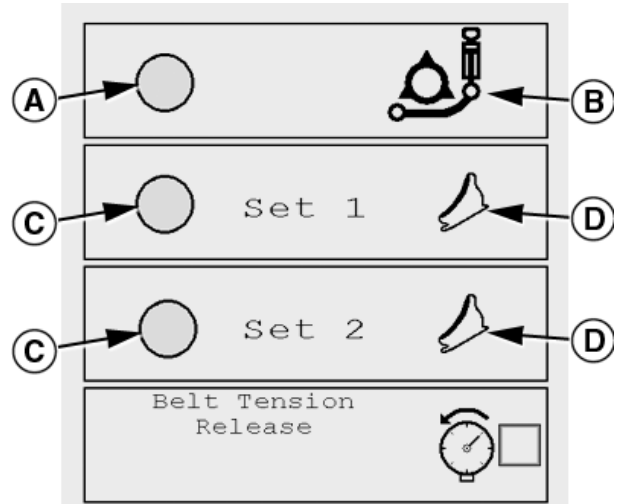
Drop floor lowered symbol (E) and precutter knives retracted symbol (F) indicate that drop floor is lowered and precutter knives are retracted.

4. When the drop floor is lowered, slowly engage the PTO at slow tractor idle until rotary feeder turns freely.
5. If needed, tick check box (G) to release the belt tension in order to unplug the baler more easily.

NOTE: To release the belt tension, check box (G) must be ticked before entering the drop floor and precutter knife management page.

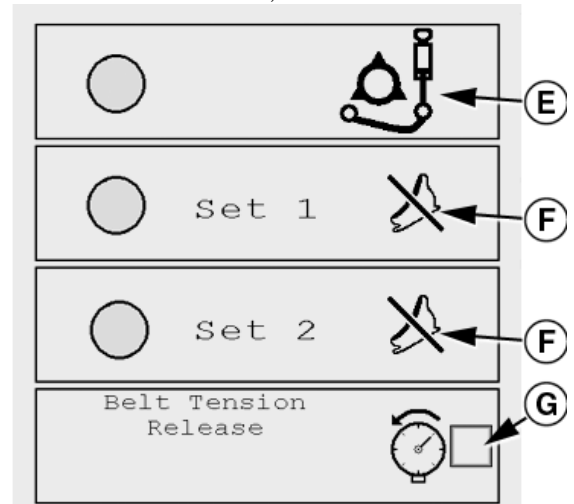
6. When the baler is unplugged, act on selective control valve lever to raise the drop floor and engage precutter knives (if activated).
7. Put the selective control valve lever to neutral position.

- | | |
|-----------------------------------|-------------------------------------|
| A—Drop Floor Function Status | E—Drop Floor Lowered Symbol |
| B—Drop Floor Raised Symbol | F—Precutter Knives Retracted Symbol |
| C—Precutter Knife Function Status | G—Release Belt Tension Symbol |
| D—Precutter Knives Engaged Symbol | |



CC1032800

Baler with Precutter, 25 knives Shown



CC1030801

Baler with Precutter, 25 knives Shown

Continued on next page

OUC006,0001631 -19-17DEC10-2/4

CC1032800 —19—24NOV10

CC1032801 —19—13DEC10

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,0001631 -19-17DEC10-3/4

NOTE: If needed, select "Drop Floor" softkey to activate the "raise or lower drop floor" function only or 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.

CC1031806 —UN—16SEP09



CC1031806

"Drop Floor" softkey

CC1031805 —UN—16SEP09



CC1031805

"Drop Floor and Precutter Knife" softkey

OUCC006,0001631 -19-17DEC10-4/4

Customer and Field Counters

CC1031613 —UN—16SEP09

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 tied and the rear gate must be opened and closed to add a bale to the current field counter.

Select Customer and Field Number:



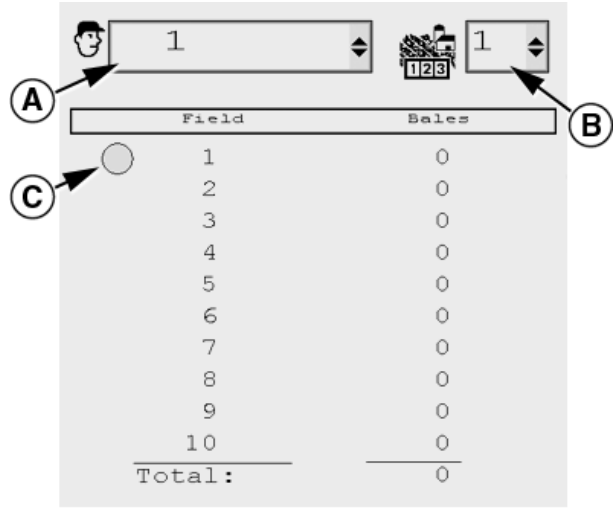
CC1031613

1. From the baler application main page, select Counters softkey.

Continued on next page

JC87117,00001A9 -19-14NOV14-1/8

2. Select customer number:
 - a. Select and activate drop-down list (A).
 - b. Select the desired customer number from 1 to 10.
 - c. The list shows the total number of bales of the 10 fields for the selected customer.
3. Select field number:
 - a. Select and activate drop-down list (B).
 - b. Select the desired field number from 1 to 10.



NOTE: Current field indicator (C) 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.

A—Customer Number C—Current Field Indicator
 B—Field Number

CC1038515

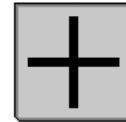
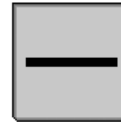
CC1038515 —19—26SEP12

JC87117,00001A9 -19-14NOV14-2/8

Add or Remove Bales in Current Field Counters:

CC1031852 —UN—30SEP09

Select Remove Bales or Add Bales softkey to adjust if necessary (e.g. bale not counted) the total number of bales for the current field counter.



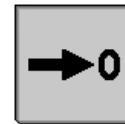
CC1031852

JC87117,00001A9 -19-14NOV14-3/8

Clear Current Field Counter:

CC1031815 —UN—16SEP09

Select Clear Current Counter softkey to clear the current field bale counter.



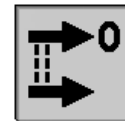
CC1031815

JC87117,00001A9 -19-14NOV14-4/8

Clear Current Customer Counters:

CC1031816 —UN—16SEP09

Select Clear All Counters softkey to clear information about all fields of the selected customer.



CC1031816

JC87117,00001A9 -19-14NOV14-5/8

Customer and Field Counters Softkey:

CC222031 —UN—07NOV14

Select Customer and Field Counters softkey to go to the customer and field counters page.



CC222031

Continued on next page

JC87117,00001A9 -19-14NOV14-6/8

Season and Total Counters Softkey:

CC222032 —UN—07NOV14

Select Season and Total Counters softkey to go to the season and total counters page.



CC222032

JC87117,00001A9 -19-14NOV14-7/8

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

CC1032651 —UN—24NOV10



CC1032651

JC87117,00001A9 -19-14NOV14-8/8

Season and Machine Total Counters

CC1031613 —UN—16SEP09

1. From the baler application main page, select Counters softkey.



CC1031613

JC87117,00001A8 -19-07NOV14-1/8

2. From the counter page, select Season and Total Counters softkey.

CC222032 —UN—07NOV14



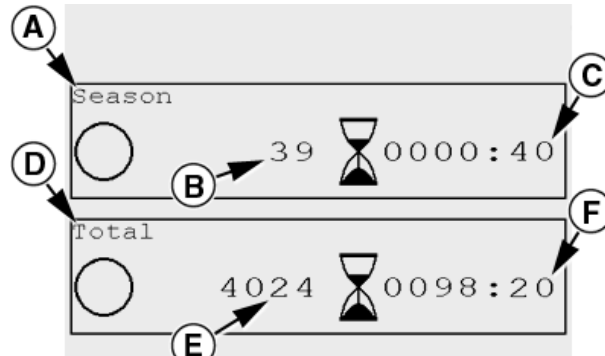
CC222032

JC87117,00001A8 -19-07NOV14-2/8

a. Season counter (A):
The season counter (A) shows total number of bales for season (B) and total time of season (C).

b. Machine total counter (D):
The machine total counter (D) shows the total number of bales (E) and the total time done by the machine (F).

- | | |
|---|--|
| A—Season Counter | D—Machine Total Counter |
| B—Total Number of Bales for Season | E—Total Number of Bales Done by the Machine |
| C—Total Time of Season | F—Total Time Done by the Machine |



CC222033

CC222033 —19—27NOV14

Continued on next page

JC87117,00001A8 -19-07NOV14-3/8

Operating Baler Application

Add or Remove Bales in Season Counter (A):

CC1031852 —UN—30SEP09

Select Remove Bales or Add Bales softkey to adjust if necessary (e.g. bale not counted) the total number of bales for season (B) counter.

NOTE: Changing the total number of bales for season (B) does not modify the current field bale counter.



CC1031852

JC87117,00001A8 -19-07NOV14-4/8

Clear Season Counter (A):

CC1031815 —UN—16SEP09

Select Clear Current Counter softkey to clear the total number of bales for season (B) and total time of season (C).



CC1031815

JC87117,00001A8 -19-07NOV14-5/8

Customer and Field Counters Softkey:

CC222031 —UN—07NOV14

Select Customer and Field Counters softkey to go to the customer and field counters page.



CC222031

JC87117,00001A8 -19-07NOV14-6/8

Season and Total Counters Softkey:

CC222032 —UN—07NOV14

Select Season and Total Counters softkey to go to the season and total counters page.



CC222032

JC87117,00001A8 -19-07NOV14-7/8

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

CC1032651 —UN—24NOV10



CC1032651

JC87117,00001A8 -19-07NOV14-8/8

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 Automation Mode

Operate Baler in Automation Mode Safely

The Baler Automation system is intended to aid the operator in performing field operations more efficiently. The operator is always responsible for controlling the machine's path and behavior as well as the behavior of the bale. To prevent injury to operator and bystanders,

always remain alert and pay attention to the surrounding environment. Do not rely on the system to stop the vehicle when an obstacle or bystander is present.

Read and understand Operating Baler in Automation Mode section before using automation.

OUCC006,00015C2 -19-18JAN10-1/1

Tractor-Implement Automation Prerequisites

Tractor-Implement Automation (TIA) relies on ISOBUS information exchange between tractor and baler.

TIA requires an ISOBUS Ready tractor with at least electronic selective control valves to operate the baler in automation mode level 1 (baler gate automation). ISOBUS Ready tractor equipped with electronic selective control valves and IVT allows the baler to be operated in automation mode level 2 (baler gate automation and tractor automatic stop). To operate the baler in automation mode, a TIA activation key needs to be installed on the

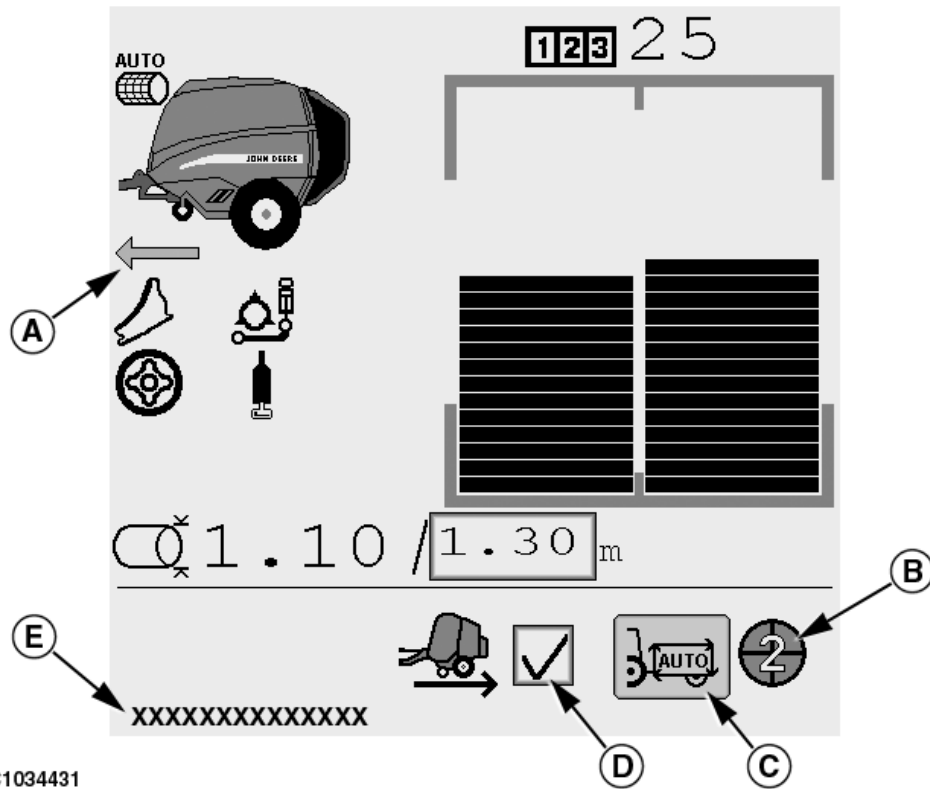
tractor and on the baler. For more information see your John Deere dealer.

Theory of operation:

- Baler commands tractor to brake until tractor stops forward travel when adjusted bale diameter is reached.
- Baler commands tractor to activate electronic selective control valve to open and close the gate to unload the bale.
- Baler commands tractor to disengage the PTO and brake until tractor stops forward travel when baler plugging occurs.

OUCC006,0001801 -19-20SEP11-1/1

Baler Automation Main Page Display Description



CC1034431

CC1034431 —UN—13OCT11

A—Baler Ready to Go
B—Automation States Pie

C—Enable or Disable Automation
D—Manual Bale Unload

E—Automation Deactivation Message

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

Arrow (A) indicates that the baler is ready to continue operation in automation mode after the bale unloading process. See Operate Baler in Automation Mode in this section.

Symbol (B) indicates the current automation state. See Automation States Pie in this section.

Icon (C) is used to enable or disable the automation mode. See Operate Baler in Automation Mode in this section. If

automation was deactivated or can not be activated, icon (C) provides direct access to the automation diagnostic pages. See Automation Diagnostic in this section.

Manual bale unload (D) function places automation mode in a paused state when the adjusted bale diameter is reached. See Manual Bale Unload in this section.

Message (E) indicates why automation was deactivated or can not be activated. See Automation Diagnostic in this section.

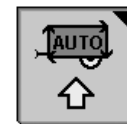
OUC006,00017A7 -19-28APR11-1/1

Automation Softkey Designation

CC1034499 —UN—07JUL11

Automation Settings softkey.

See this section.



CC1034499

Continued on next page

OUC006,00017EF -19-07JUL11-1/2

Automation Diagnostic softkey.

CC1031799 —UN—16SEP09

See Automation Diagnostic in this section.



CC1031799

OUCC006,00017EF -19-07JUL11-2/2

Operate Baler in Automation Mode

NOTE: When John Deere B-Wrap™ tying is enabled, automation is disabled.

Before automation mode activation, check following conditions:

- Automation level is selected. See [Select Automation Level](#) in this section.
- Baler rear gate selective control valve is selected. See [Select Rear Gate Selective Control Valve](#) in this section.
- Automation states pie (B) shows Ready-to-Enable (2/4 of pie). See [Automation States Pie](#) in this section.

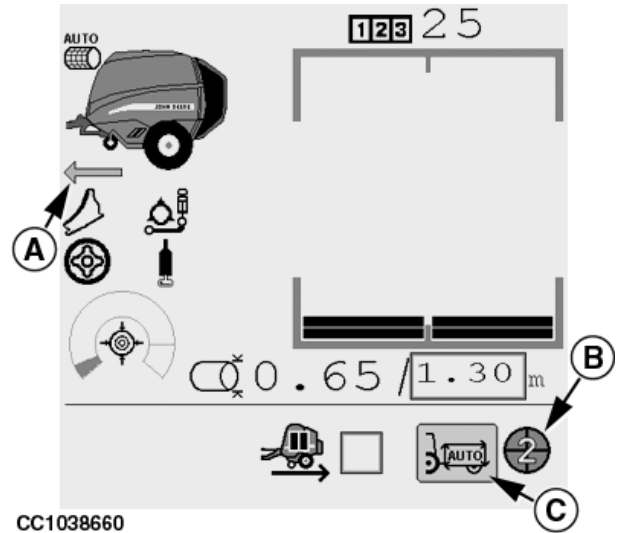
1. Select and activate icon (C) to switch automation state (B) to Enabled (3/4 of pie).
2. Move tractor reverse drive lever to Power Zero™, center park or forward position (automation level 2 only) and press Tractor-Implement Automation™ hot key (resume switch) (D). See TIA™ — Tractor-Implement Automation™ section in your tractor operator's manual.
3. Automation states pie (B) is switched to Active (4/4 pie) and monitor beeps to indicate that automation mode is activated.
4. Set the travel speed and start baling. See your tractor operator's manual.
5. According to the selected tying start mode, the tractor slows down and stops moving forward (automation level 2 only). See [Select Tying Start Mode](#) in Operating Baler Application section.
 - If tying start mode is Automatic, the tractor slows down and stops moving forward when the adjusted bale diameter is reached. The tying cycle then starts automatically.
 - If tying start mode is Manual, the tractor slows down and stops moving forward when the operator selects Start Net Tying Cycle or Start Twine Tying Cycle softkey. The tying cycle then starts.

NOTE: See [Adjust Tractor Behavior](#) in this section to adjust the tractor deceleration.

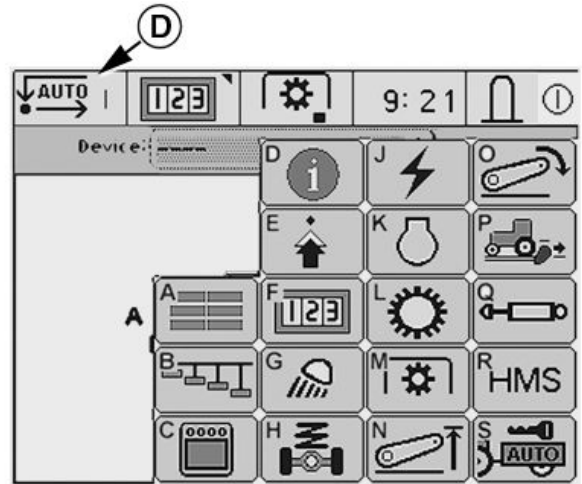
6. After the tying process, tractor actuates electronic selective control valve to unload the bale.

NOTE: To unload the bale at a specific place, activate the manual bale unload function. See [Manual Bale Unload](#) in this section.

7. After bale unloading, arrow (A) is displayed to indicate that the baler is ready to proceed in automation mode.
8. Move tractor reverse drive lever to the center park position then in forward position to start baling (automation level 2 only). See TIA™ — Tractor-Implement Automation™ section in your tractor operator's manual.



CC1038660



CC1038659

A—Baler Ready to Go
B—Automation States Pie

C—Enable or Disable Automation
D—Tractor-Implement Automation™ Hot Key

NOTE: Instead of moving tractor reverse drive lever, operator can press and hold brake or clutch pedal when the bale diameter is reached and until arrow (A) is displayed.

9. Tractor starts moving forward automatically and accelerates until adjusted travel speed is obtained (automation level 2 only).

NOTE: See [Adjust Tractor Behavior](#) in this section to adjust the tractor acceleration.

IMPORTANT: Moving tractor speed control lever while the tractor automatically decelerates or accelerates may deactivate automation.

- To deactivate automation mode, select and activate icon (C) to switch automation states pie (B) to Ready-to-Enable (2/4 of pie).

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

JC87117,0000222 -19-24FEB16-2/2

Unplug Pickup in Automation Mode

When operating the baler in automation mode and plugging occurs, the system is capable of disengaging the tractor PTO automatically if automatic tractor PTO disengagement function is enabled. See Automatic Tractor PTO Disengagement in this section.

- Whenever it is necessary to unplug the baler, the tractor disengages the PTO automatically.
 - If working in automation level 1: a warning screen appears to indicate that the pickup is plugged. The tractor must be stopped manually.
 - If working in automation level 2: a warning screen appears to indicate that the pickup is plugged. Then the tractor slows down and stops moving forward automatically.
- When the tractor stops moving forward, automation state is switched from Active (4/4 pie) to Enabled (3/4 of pie).
- Move tractor PTO control lever to the disengaged position.
- Unplug the baler as described under Unplug Pickup in Operating Baler Application section.
- When the baler is unplugged successfully, move tractor reverse drive lever to Power Zero™, center park or forward position (automation level 2 only) and press Tractor-Implement Automation™ hot key (resume switch) to continue baling in automation mode. See TIA™ — Tractor-Implement Automation™ section in your tractor operator's manual.



CC1035194

Automation Level 1



CC1035195

Automation Level 2

CC1035194 —19—31AUG11

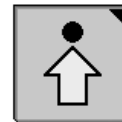
CC1035195 —19—31AUG11

OUC006,00019B4 -19-12NOV12-1/1

Baler Automation Activation Key

CC1031612 —UN—16SEP09

NOTE: To make the baler ready for automation, an activation key is needed. To obtain the baler automation activation key, see your John Deere dealer.



CC1031612

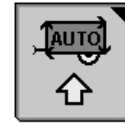
- From the baler application main page, select Settings softkey.

Continued on next page

NB02380,000010C -19-26FEB16-1/4

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



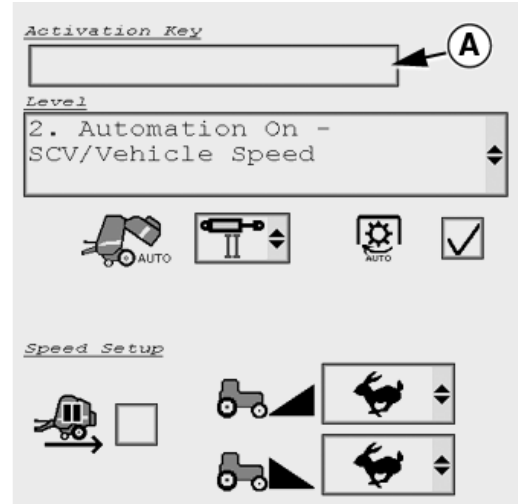
CC1034499

NB02380,000010C -19-26FEB16-2/4

3. Select input box (A).
4. Use displayed keyboard to enter the baler automation activation key, then select the Enter softkey to validate.

NOTE: When the baler is delivered, automation mode can be activated free of charge for baling 200 bales. After this, the baler automation activation code must be entered. If the automation activation code is successfully saved, the input box (A) becomes grayed out. See Automation Diagnostic in this section to ensure that the baler automation activation is OK. From software version 08.07, activation key is not required.

A—Activation Key Input Box



CC1038502

CC1038502 —19—26SEP12

NB02380,000010C -19-26FEB16-3/4

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

CC1032651 —UN—24NOV10



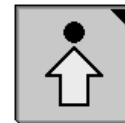
CC1032651

NB02380,000010C -19-26FEB16-4/4

Select Automation Level

CC1031612 —UN—16SEP09

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

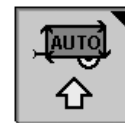


CC1031612

OUC006,0001987 -19-19OCT12-1/4

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



CC1034499

Continued on next page

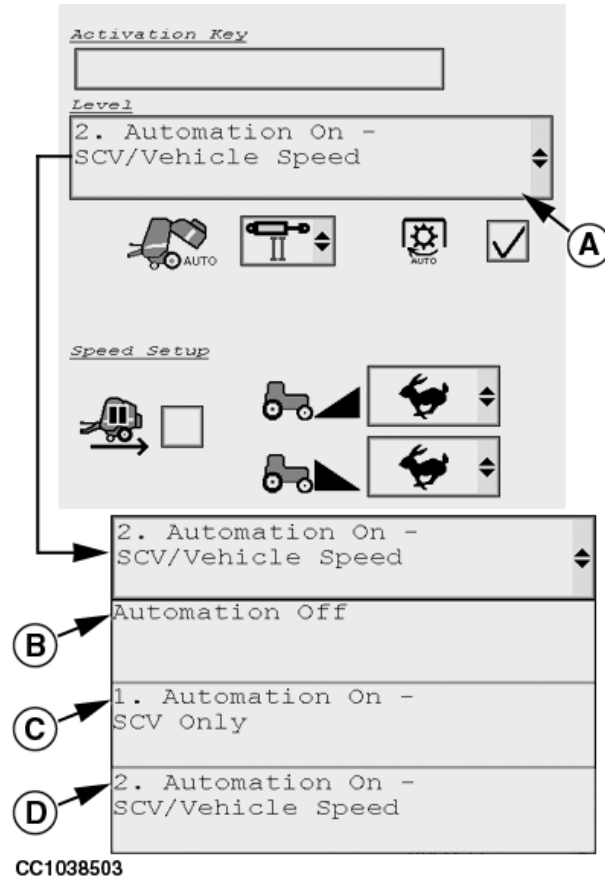
OUC006,0001987 -19-19OCT12-2/4

3. Select and activate drop-down list (A) then select the desired automation level:

- **Automation OFF (B)** - Tractor does not receive commands from the baler.
- **Automation level 1 (C)** - Tractor receives commands from the baler to actuate the SCV to unload the bale after tying cycle (requires tractor with E-SCV).
- **Automation level 2 (D)** - Tractor receives commands from the baler to brake until tractor stops moving forward when the adjusted bale diameter is reached (requires tractor with IVT). After tying cycle, tractor receives commands from the baler to actuate the SCV to unload the bale (requires tractor with E-SCV).

A—Automation Level
B—Automation OFF

C—Automation Level 1
D—Automation Level 2



CC1038503

CC1038503 -19-26SEP12

OUCC006,0001987 -19-19OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,0001987 -19-19OCT12-4/4

Select Rear Gate Selective Control Valve

CC1031612 —UN—16SEP09

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

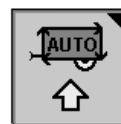


CC1031612

OUCC006,0001988 -19-19OCT12-1/4

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



CC1034499

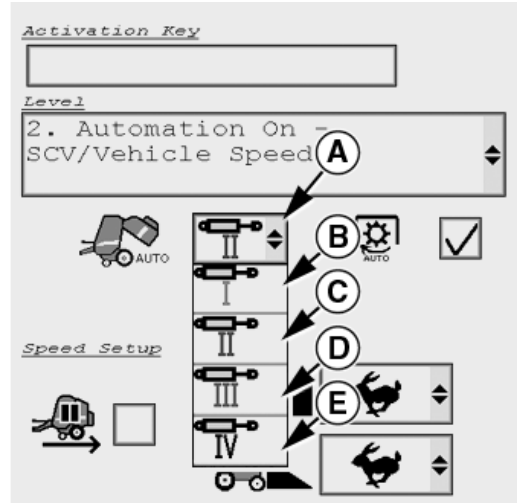
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OUCC006,0001988 -19-19OCT12-2/4

3. Select and activate drop-down list (A).
4. Select the corresponding tractor SCV (B), (C), (D) or (E) to operate the baler rear gate.

NOTE: The number of SCVs available in the drop-down list (A) depends on the tractor configuration.

- | | |
|-----------------|-----------------|
| A—Rear Gate SCV | D—Tractor SCV 3 |
| B—Tractor SCV 1 | E—Tractor SCV 4 |
| C—Tractor SCV 2 | |



CC1038504

CC1038504—19—26SEP12

OUC006,0001988 -19-19OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUC006,0001988 -19-19OCT12-4/4

Automatic Tractor PTO Disengagement

CC1031612 —UN—16SEP09

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



CC1031612

OUC006,0001988 -19-19OCT12-1/4

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



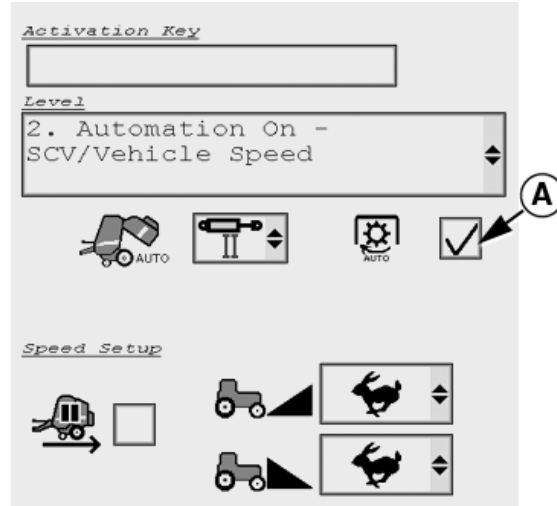
CC1034499

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OUC006,0001988 -19-19OCT12-2/4

3. Check box (A) is used to enable or disable the automatic tractor PTO disengagement function.
- Tick check box (A) to enable the automatic tractor PTO disengagement function. The automatic tractor PTO disengagement function disengages the tractor PTO when operating the baler in automation mode and plugging occurs. For more information, see Unplug Pickup in Automation Mode in this section.
 - Do not tick check box (A) to disable the automatic tractor PTO disengagement function.

A—Automatic Tractor PTO Disengagement



CC1038506

CC1038506 —19—26SEP12

OUCC006,0001989 -19-19OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,0001989 -19-19OCT12-4/4

Adjust Tractor Behavior

CC1031612 —UN—16SEP09

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

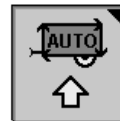


CC1031612

OUCC006,000198A -19-19OCT12-1/4

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



CC1034499

Continued on next page

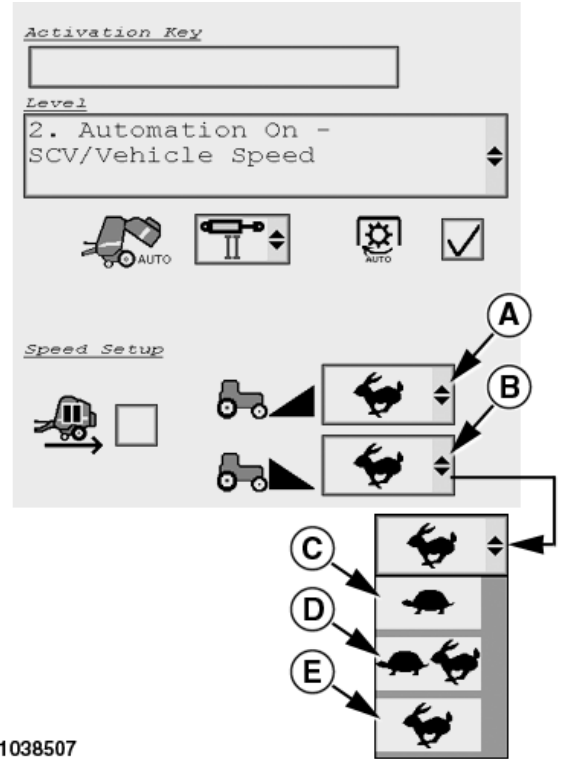
OUCC006,000198A -19-19OCT12-2/4

3. When working in automation level 2, tractor acceleration and deceleration can be adjusted. See Select Automation Level in this section.

- Adjust tractor acceleration: Select and activate drop-down list (A) and set the desired tractor acceleration (C), (D) or (E). This value is applied when tractor reverse drive lever is moved to center park position and then to forward position after the bale unloading process.
- Adjust tractor deceleration: Select and activate drop-down list (B) and set the desired tractor deceleration (C), (D) or (E). This value is applied when the adjusted bale diameter is reached and the tractor brakes and stops moving forward.

NOTE: We recommend to set tractor deceleration to minimum (C) when using twine tying system. This allows a few seconds for twine to be fed in with crop.

- | | |
|------------------------|-----------|
| A—Tractor Acceleration | D—Normal |
| B—Tractor Deceleration | E—Maximum |
| C—Minimum | |



CC1038507

CC1038507 —19—26SEP12

OUCC006,000198A -19-19OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,000198A -19-19OCT12-4/4

Manual Bale Unload

CC1031612 —UN—16SEP09

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



CC1031612

OUCC006,000198B -19-19OCT12-1/4

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



CC1034499

Continued on next page

OUCC006,000198B -19-19OCT12-2/4

3. Check box (A) is used to enable or disable the manual bale unload function.

- Tick check box (A) to enable the manual bale unload function. The manual bale unload function places automation in Paused state when the adjusted bale diameter is reached. This function allows the tractor to be placed at the desired location before unloading the bale and is recommended for hilly conditions. To unload the bale, move tractor reverse drive lever to center park position then place automation in Active state by pressing Tractor-Implement Automation™ hot key (resume switch). See Automation States Pie in this section and see TIA™ — Tractor-Implement Automation™ section in your tractor operator's manual.
- Do not tick check box (A) to disable the manual bale unload function. The bale is automatically unloaded at the end of the tying cycle.

NOTE: This function is also available from the baler application main page. See *Baler Automation Main Page Display Description* in this section.



CC1038508

A—Manual Bale Unload

CC1038508 — 19-26SEP12

OUC006,000198B -19-19OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUC006,000198B -19-19OCT12-4/4

Automation States Pie

CC1031913 —UN—30OCT09

On the main page, automation states pie indicates the current automation state. Automation has six different states.

NOTE: The number (1 or 2) displayed inside the automation states pie indicates the automation level selected. See *Select Automation Level* in this section.

1. Unavailable:

If tractor is not "Automation Ready", automation states pie is Unavailable (does not appear on the main page). The tractor is not capable to receive commands from the baler.

2. Disabled:



Disabled

CC1031913

If tractor and baler are "Automation Ready", automation state is Disabled (1/4 of pie). The tractor is capable to receive commands from the baler.

Continued on next page

OUC006,000152F -19-12JAN10-1/5

3. **Ready-to-Enable:**

CC1031919 —UN—30OCT09

Automation state switches automatically to Ready-to-Enable (2/4 of pie) state some time after ignition key is turned ON. If not, see Automation Diagnostic in this section.



Ready-to-Enable

CC1031919

OUC006,000152F -19-12JAN10-2/5

4. **Enabled:**

CC1031920 —UN—15NOV10

When automation states pie is Ready-to-Enable, select and activate the enable or disable automation icon on the baler application main page to switch automation state to Enabled (3/4 of pie). See Operate Baler in Automation Mode in this section.



Enabled

CC1031920

OUC006,000152F -19-12JAN10-3/5

5. **Active:**

CC1031921 —UN—30OCT09

When automation state is Enabled, press tractor automation resume switch to switch automation state to Active (4/4 of pie). When automation states pie shows an active state, the baler commands the tractor. See Operate Baler in Automation Mode in this section and see TIA — Tractor-Implement Automation section in your tractor operator's manual.



Active

CC1031921

NOTE: Following conditions must be met to switch automation state from Enabled to Active.

- Tractor reverser lever is in "Power Zero", center park or forward position.

- The baler rear gate is closed and latched.
- Current bale diameter is less than 98% of the adjusted bale diameter.
- Tractor detects an operator on the seat.
- Tractor PTO is engaged.

OUC006,000152F -19-12JAN10-4/5

6. **Paused:**

CC1031923 —UN—30OCT09

Automation state switches automatically from Active (4/4 of pie) to Paused (4/4 of pie flashing) when the manual bale unload function is enabled and adjusted bale diameter is reached. See Manual Bale Unload in this section.



Paused (flashing)

CC1031921

OUC006,000152F -19-12JAN10-5/5

Automation Diagnostic

CC1031612 —UN—16SEP09

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



CC1031612

Continued on next page

OUC006,000198D -19-19OCT12-1/7

2. Select Automation Settings softkey.

CC1034499 —UN—07JUL11



CC1034499

OUC006,000198D -19-19OCT12-2/7

3. Select Automation Diagnostic softkey.

CC1031799 —UN—16SEP09



CC1031799

OUC006,000198D -19-19OCT12-3/7

4. Message (A) indicates why automation was deactivated or can not be activated. See Automation Deactivation Messages List in this section.

On the baler application main page, message (A) is also displayed for 3 seconds then disappears if automation was deactivated or can not be activated. See Baler Automation Main Page Display Description in this section.

Automation table page 1/2 shows information about the required conditions for automation and automation state: disabled (B) (1/4 of pie) and ready-to-enable (C) (2/4 of pie). When a condition is met, the condition status (D - J) displayed is OK.

Disabled (B) (1/4 of pie):

- Status (D) is OK if the tractor is capable of receiving commands from the baler. If status (D) is not OK, see your John Deere dealer.

Ready-to-enable (C) (2/4 of pie):

- Status (E) is OK if the baler automation activation key is successfully saved. If status (E) is not OK, see Baler Automation Activation Key in this section.
- Status (F) is OK if there is no active diagnostic trouble code. If status (F) is not OK, see Recent Problems in Baler Application Service section.
- Status (G) is OK if there is no error regarding the Tractor-Implement Automation™ hot key (resume switch). If status (G) is not OK, see your John Deere dealer.
- Status (H) is OK if the tractor ignition key is turned ON. If status (H) is not OK, see your tractor operator's manual.
- Status (I) is OK if the tractor automation activation key is successfully saved. If status (I) is not OK, see your John Deere dealer.

Last Exit Code Issued:		1/2
Manual tying timeout		
(A)	Conditions	OK (D)
(B)	Tractor Automation Ready	OK (E)
(C)	Baler Activation	OK (F)
	No Active Baler Codes	OK (G)
	Resume Switch Status	OK (H)
	Key Switch On	OK (I)
	Security Authorized	OK (J)
	Automation ON	OK

CC1038509

- A—Automation Deactivation Message
- B—Automation State Disabled
- C—Automation State Ready-to-enable
- D - J— Condition Status

- Status (J) is OK if the selected automation level is automation level 1 or automation level 2. If status (J) is not OK, see Select Automation Level in this section.

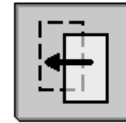
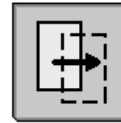
NOTE: On the baler application main page, if automation state ready-to-enable (C) (2/4 of pie) can not be obtained, check missing condition and see your John Deere dealer.

Continued on next page

OUC006,000198D -19-19OCT12-4/7

5. Select Next Page or Previous Page softkey to access page 2/2.

CC1031853 —UN—30SEP09



CC1031853

OUC006,000198D -19-19OCT12-5/7

6. Automation table page 2/2 shows information about the required condition for automation and automation state: enabled (A) (3/4 of pie) and active (B) (4/4 of pie). When a condition is met, the condition status (C - I) displayed is OK.

Enabled (A) (3/4 of pie):

- Status (C) is OK if the enable or disable automation icon is pressed. If status (C) is not OK, see Operate Baler in Automation Mode in this section.

Active (B) (4/4 of pie):

- Status (D) is OK if the selected tying system is not already running. If status (D) is not OK, retract selected tying system actuator, see Test Electro-Hydraulic Components in Baler Application Service section.
- Status (E) is OK if the current bale diameter is less than 98% of the target bale diameter. If status (E) is not OK, see Set Bale Diameter in Operating Baler Application section.
- Status (F) is OK if an operator is detected on the tractor seat. If status (F) is not OK, see your tractor operator's manual.
- Status (G) is OK if the tractor PTO is engaged. If status (G) is not OK, see your tractor operator's manual.
- Status (H) is OK if the baler gate is correctly closed. If status (H) is not OK, see Adjust Gate Latch Switches in Service section.
- Status (I) is OK if the Tractor-Implement Automation™ hot key (resume switch) is pressed. If

Last Exit Code Issued: 2/2
Manual tying timeout

	Conditions	OK	(C)
(A)	Enable Button Pressed	OK	(D)
	Tying Process Idle	OK	(E)
	Bale < 98% Diameter	OK	(F)
	Operator in Seat	OK	(G)
	PTO On	OK	(H)
	Bale Gate Shut	OK	(I)
	Resume Switch Pressed	OK	

CC1038510

CC1038510 —19—26SEP12

A—Automation State Enabled C - I— Condition Status
B—Automation State Active

status (I) is not OK, see TIA™ — Tractor-Implement Automation™ section in your tractor operator's manual.

OUC006,000198D -19-19OCT12-6/7

7. Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUC006,000198D -19-19OCT12-7/7

Automation Deactivation Message List

The automation deactivation messages (last exit code issued) and descriptions are given in the following table:

Automation deactivation message	Description
Activation key expired. ^a	See your John Deere dealer.
Active baler codes. ^a	Check your baler Diagnostic Trouble Codes and see Diagnostic Trouble Code List in Baler Application Service section.
Automation aborted due to PTO. ^b	Engage PTO.
Automation aborted due to speed. ^b	Re-engage automation mode.
Automation aborted due to valve 1. ^b	Switch valves and see your John Deere dealer.
Automation aborted due to valve 2. ^b	Switch valves and see your John Deere dealer.
Automation aborted due to valve 3. ^b	Switch valves and see your John Deere dealer.
Automation aborted due to valve 4. ^b	Switch valves and see your John Deere dealer.
Automation aborted due to valve 5. ^b	Switch valves and see your John Deere dealer.
Automation aborted due to valve 6. ^b	Switch valves and see your John Deere dealer.
Automation command message time-out. ^c	Check wiring harness between tractor and baler.
Communication error. ^a	Disconnect and reconnect baler wiring harness. See your John Deere dealer.
Driver fault. ^c	See your John Deere dealer.
Driver out of range. ^c	Switch valves and see your John Deere dealer.
Function not authorized. ^c	Tractor TIA™ activation key not OK.
Invalid PTO configuration. ^c	See your John Deere dealer.
Lever fault. ^c	Switch valves and see your John Deere dealer.
Manual tying time-out. ^a	Check net tying device and restart tying cycle.
Net tying problem. ^a	Check net tying device. Check your baler diagnostic trouble codes and see Diagnostic Trouble Code List in Baler Application Service section.
Oil level low. ^c	Refill tractor with oil.
Operator is no longer on the seat. ^a	Operator should be on the seat to operate baler in automation mode.
Oversized bale. ^a	If working in automation level 1, stop tractor then tie current bale as soon as possible. If working in automation level 2, tractor stops moving forward then tying cycle starts automatically. Eject current tied bale and re-engage automation mode.
Over-speed fault. ^c	Reduce engine speed.
Pause mode, tractor speed is 0. ^a	Unload bale and re-engage automation mode.
Pickup is plugged. ^a	Unplug the pickup. See Unplug Pickup in Automation Mode in this section.
Power out of range. ^c	See your John Deere dealer.
PTO not calibrated. ^c	See your John Deere dealer.
PTO not enabled in current gear. ^c	Check your tractor DTC.
PTO re-engagement fault. ^c	Check your tractor DTC.
PTO switch conflict. ^c	Check your tractor DTC.
PTO switch Off. ^c	Engage PTO.
RBC Security challenge failed. ^a	Restart tractor. See your John Deere dealer.
Remote armed. ^c	Check PTO operation. See your tractor operator's manual.
Remote PTO enable switch fault. ^c	Disengage the PTO. See your John Deere dealer.
Remote PTO switch fault. ^c	See your John Deere dealer.
Resume switch error. ^a	Check Tractor-Implement Automation™ hot key (resume switch). See your John Deere dealer.
Reverse command. ^c	See your John Deere dealer.
SCV lock. ^c	Unlock SCV.
Security error 1. ^c	See your John Deere dealer.

Continued on next page

OUC006,00019A9 - 19-06NOV12-1/2

Operating Baler in Automation Mode

Automation deactivation message	Description
Security error 2. ^c	See your John Deere dealer.
Security error 3. ^c	See your John Deere dealer.
Security error 4. ^c	See your John Deere dealer.
Security error 5. ^c	See your John Deere dealer.
Security error 6. ^c	See your John Deere dealer.
Tractor does not resume. ^a	See your John Deere dealer.
Tractor in reverse. ^c	Leave reverse position.
Tractor is in park. ^c	Leave park.
Tractor is stopped. ^a	Increase ground speed and re-engage automation mode.
Tractor speed is not 0. ^a	Stop tractor and restart tying cycle.
Under-speed fault. ^c	Increase engine speed.
Valve circuit error. ^c	Switch valves and see your John Deere dealer.
Valve error other. ^c	See your John Deere dealer.
Valve missing. ^c	Switch valves and see your John Deere dealer.
Valve not calibrated. ^c	See your John Deere dealer.

^aDeactivation message from the baler

^bDeactivation message generic

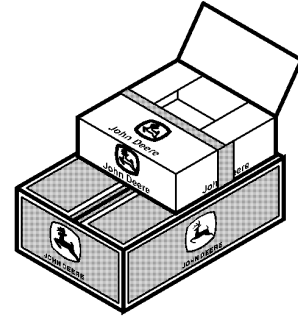
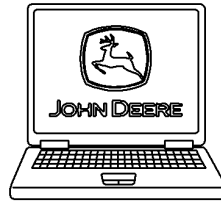
^cDeactivation message from the tractor

OUCC006,00019A9 -19-06NOV12-2/2

Attachments

Find Attachments

See your John Deere dealer or the John Deere online attachment website to check the attachments suitable for your machine.



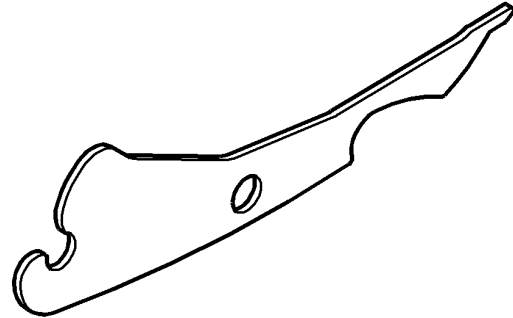
CC208612

CC208612 —JUN—14APR14

DC82261,0000447 -19-18OCT14-1/1

Knife Slot Filler Kit

To prevent the crop from entering into the knife spring mechanism when baling without knives for a long period of time, a set of knife slot fillers is available as attachment.



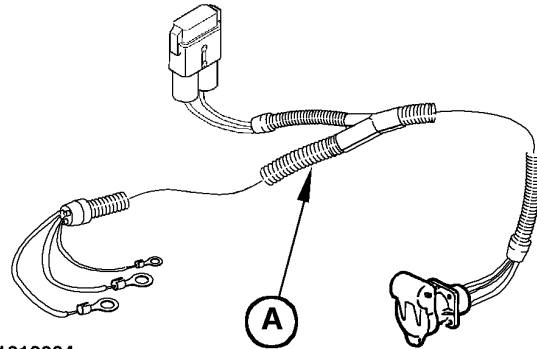
CC1033018

CC1033018 —JUN—02JUL10

OUCC006,000169C -19-02JUL10-1/1

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 —JUN—24OCT00

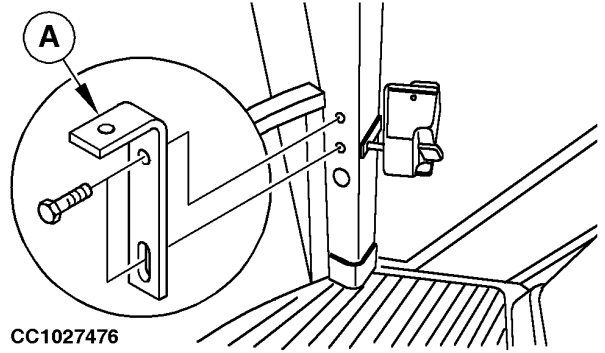
OUCC006,00014A0 -19-07OCT08-1/1

Monitor Support (6000, 6R, 7000 and 8000 Series Tractors Only)

A monitor support is available from your John Deere dealer.

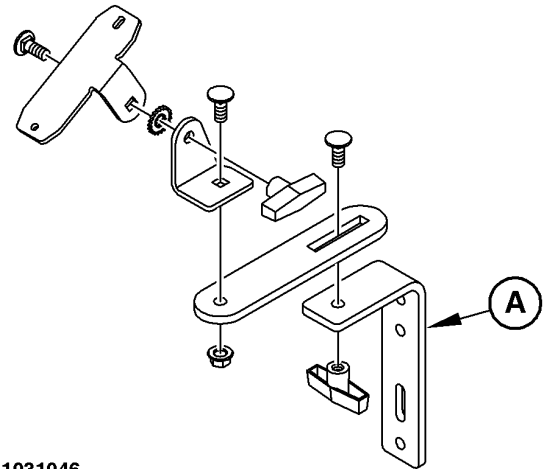
1. Remove the top two plugs from the lower right-hand cab post.
2. Install angle (A) to cab post. Fasten with two M10x20 flange screws.
3. Assemble parts on the angle (A) as shown.
4. Install monitor.

A—Angle



CC1027476

CC1027476—UN—11JUL05



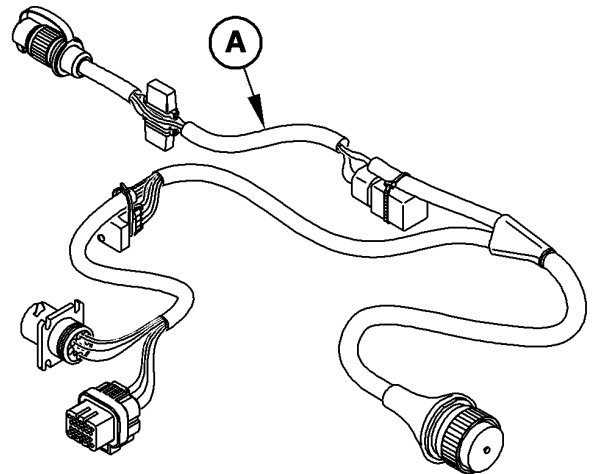
CC1031046

CC1031046—UN—28OCT08

OUC006.00019C4 -19-15NOV12-1/1

Cab Wiring Harness for Monitor

A cab wiring harness (A) for virtual terminal (display) is available from your John Deere dealer.



CC1034494

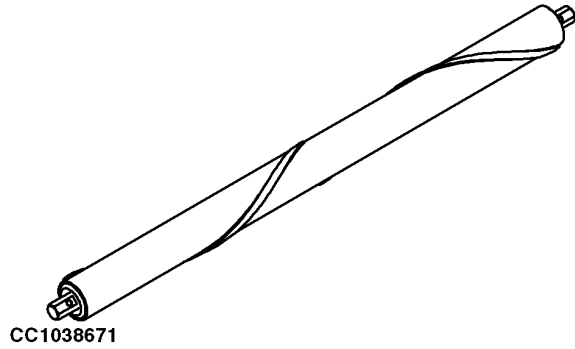
CC1034494—UN—06JUL11

OUC006.00017E7 -19-27JUN11-1/1

Cleaning Roll (No. 13) for Front Gate Roll (No. 14)

This bundle consists of a cleaning roll (no. 13) for front gate roll (no. 14) which conveys the crop accumulated in the gate area outside.

Contact your John Deere dealer.



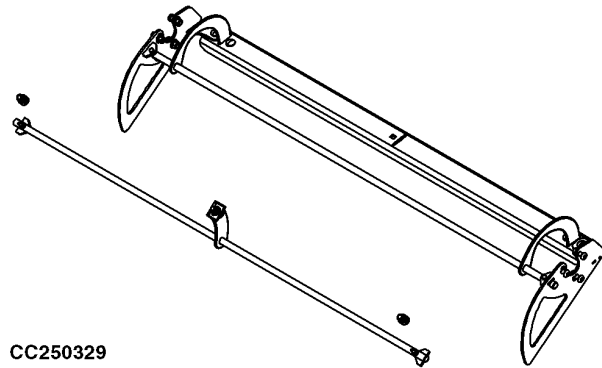
CC1038671 —UN—30OCT12

OUCC006,0001999 -19-26OCT12-1/1

Crop Accumulation Kit

This bundle prevents crop accumulation on gate.

Contact your John Deere dealer.



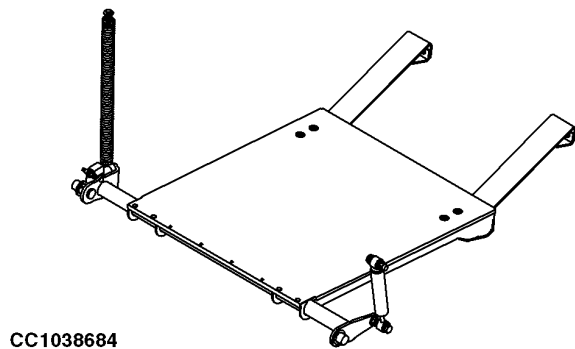
CC250329 —UN—30SEP15

DC82261,000064A -19-22SEP15-1/1

Bale Discharging Ramp

This ramp allows the operator to work without reversing for bale ejection.

Contact your John Deere dealer.



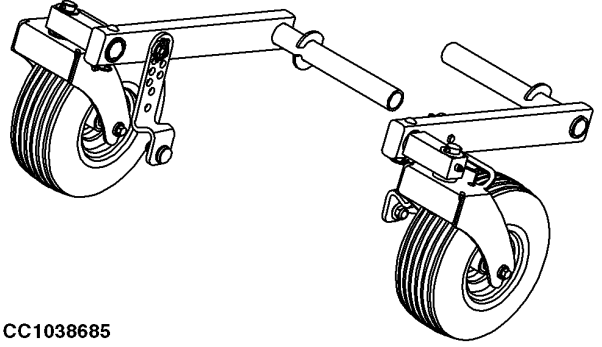
CC1038684 —UN—19NOV12

OUCC006,00019C9 -19-19NOV12-1/1

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

Lubrication and Maintenance

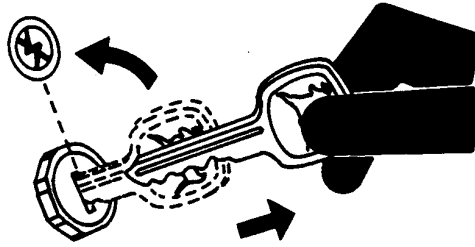
Lubricating and Maintaining Machine Safely

⚠ CAUTION: To help prevent personal injury caused by unexpected movement, be sure to service machine on a level surface.

Do not lubricate or maintain the machine while it is in motion.

If machine is connected to tractor, engage tractor parking brake and/or place transmission in "Park", shut off engine and remove key.

If machine is detached from tractor, block wheels to prevent movement.



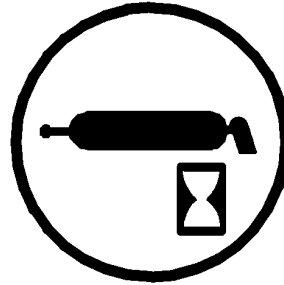
T5230 —UN—24MAY89

CC03745,00002A8 -19-27AUG01-1/1

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

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

John Deere SD Polyurea Grease is preferred.

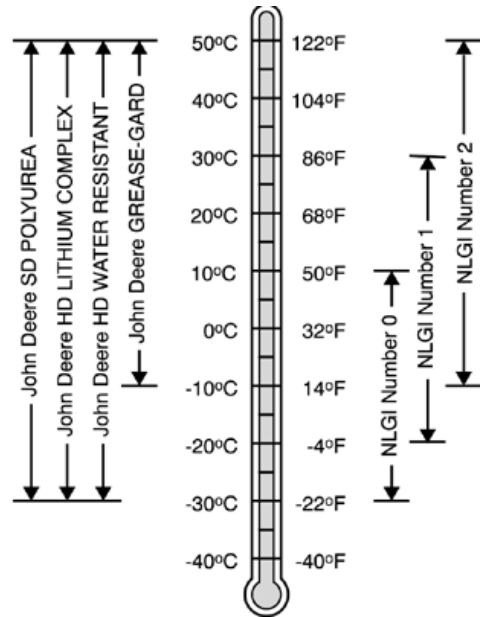
The following greases are also recommended:

- John Deere HD Lithium Complex Grease
- John Deere HD Water Resistant Grease
- John Deere GREASE-GARD™

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB

IMPORTANT: Some types of grease thickeners are not compatible with others. Consult your grease supplier before mixing different types of grease.



Greases for Air Temperature Ranges

GREASE-GARD is a trademark of Deere & Company

DX,GRE1 -19-14APR11-1/1

TS1673—UN—31OCT03

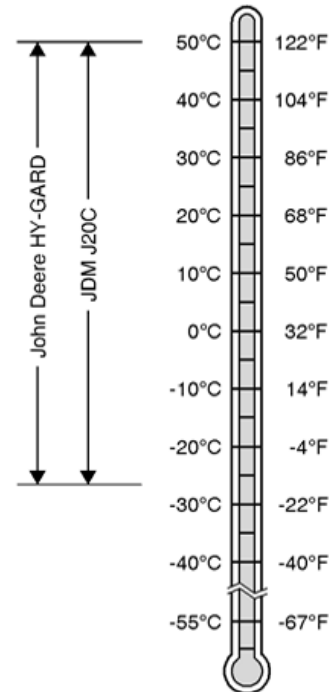
High Viscosity Gear Case Oil

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere HY-GARD™ (high viscosity) is recommended.

Other oils may be used if they meet the John Deere Standard JDM J20C.

John Deere Low Viscosity HY-GARD™ and BIO-HY-GARD™ oils are NOT recommended.



CC1027835

HY-GARD is a trademark of Deere & Company
BIO-HY-GARD is a trademark of Deere & Company

CC03745,000101C -19-25OCT10-1/1

CC1027835—UN—06JAN06

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.

OUCC006,000147E -19-17SEP08-1/1

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

OUCC006,00019AE -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 both conventional and synthetic lubricants.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

DX,ALTER -19-11APR11-1/1

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 (If Equipped)

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.

Automatic greasing function

The system provides a grease pump driven by an electric motor, greasing lines, grease distributors and an electronic timer controlled with the monitor. Once the system is enabled, the grease pump turns at regular ON and OFF intervals according to the operator settings. To enable, disable or set the automatic greasing system, see Set Automatic Greasing System in Baler Application Service section.



CC1032606 —UN—14SEP10

OUC849,000012D -19-30NOV10-1/2

Checking system for proper operation

Manually initiate automatic greasing cycle with monitor during 2 minutes to determine whether grease is supplied to all greasing points. See Set Automatic Greasing System in Baler Application Service section to manually activate automatic greasing system.

If blockage occurs at a lube fitting or in a lube line, grease escapes from relief valve (A). This valve is a safety feature which allows system checks.

NOTE: If blockage occurs at a grease nipple or in a greasing line, see Automatic Greasing System in Troubleshooting section.



CC1032607 —UN—14SEP10

A—Relief Valve

Intermediate greasing

Manually initiate automatic greasing cycle with monitor:

- During 2 minutes at the start of each harvesting season.
- During 2 minutes after cleaning with a high-pressure washer, steam cleaning or cleaning with compressed air.
- During 3 minutes at the end of the season.

During the first few weeks of operation, periodically check the system and following points:

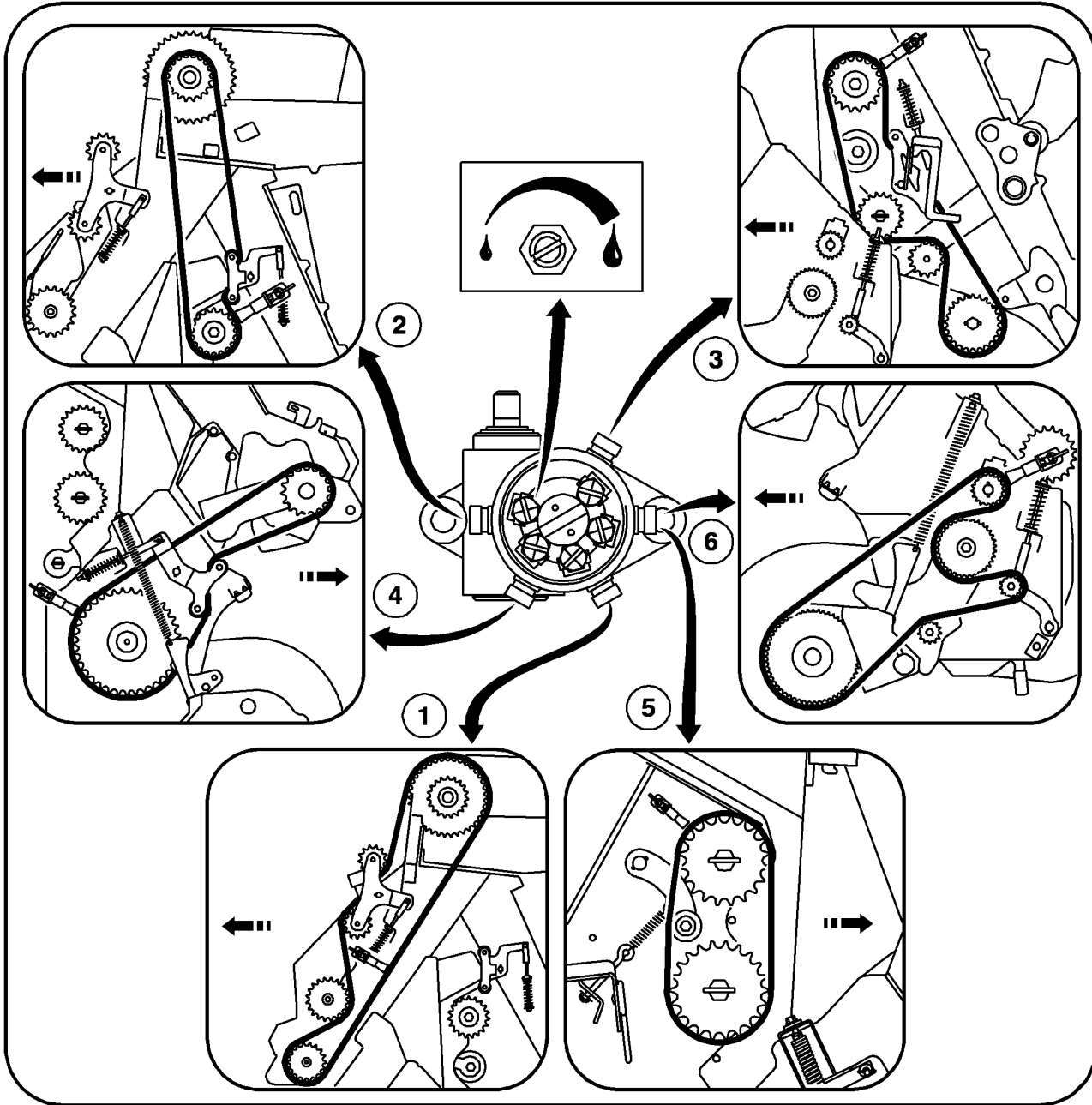
- Sufficient grease at bearing points.
- Broken or leaking lines.

Service

NOTE: All system components are maintenance-free.

OUC849,000012D -19-30NOV10-2/2

Adjust Chain Oiling System



CC1032908

- | | | |
|--------------------------------|------------------------------|----------------------------------|
| 1— Main Drive Chain | 3— Starter Roll Drive Chain | 5— Bale Chamber Roll Drive Chain |
| 2— Belt Lower Drive Roll Chain | 4— Rotary Feeder Drive Chain | 6— Pickup Cylinder Drive Chains |

NOTE: Each hose is identified on pump and brush sides with a number on a color ring.

Continued on next page

OUC849,0000132 -19-08DEC10-1/2

CC1032908 —UN—14SEP10

Adjusting Oil Flow

The oil flow can be adjusted for each chain.

1. Unscrew cover (A).
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: The pump is very precise. Turn screw 1/4 turn by 1/4 turn to adjust oil flow.

When the screw is totally screwed in (maximum flow), the minimum flow will be obtained by unscrewing four turns.

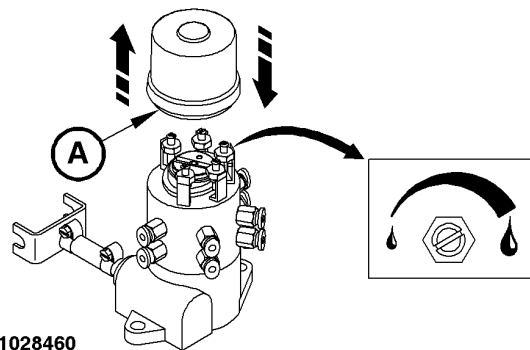
To apply initial factory settings, proceed as follows:

Fully screw in the relevant screw.

For screw of brush 1, unscrew by 14 clicks.

For screw of brush 2, unscrew by 12 clicks.

For screw of brush 3, unscrew by 10 clicks.



CC1028460

A—Pump Cover

For screw of brush 4, unscrew by 10 clicks.

For screw of brushes 5 and 6, unscrew by 10 clicks.

4. Install cover (A).

OUC849,0000132 -19-08DEC10-2/2

CC1028460 —UN—21SEP06

As Required - Refill Automatic Greasing System Reservoir (If Equipped)

IMPORTANT: Cleanliness is a must when filling the system.

Depending on the automatic greasing system settings, refill reservoir as required.

Specification

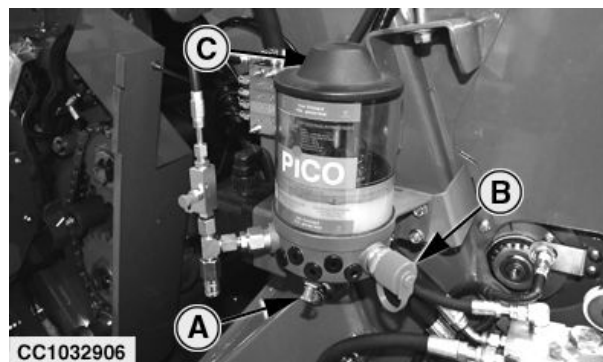
Greasing Reservoir—Capacity.....	1.2 kg (2.6 lb.)
----------------------------------	---------------------

Fill the system with grease at filling nipple (A) by using a grease pump or at orifice (B) by using a high-flow filling press.

Make sure that vent tube (C) on the outside of the reservoir is not plugged.

Do not fill the reservoir beyond the maximum fullness level.

Use grease specified under Grease for Automatic Greasing System in this section.



CC1032906

A—Filling Nipple
B—Filling Orifice

C—Vent Tube

IMPORTANT: Never use any other type of grease.

OUC849,000012E -19-08NOV10-1/1

CC1032906 —UN—09DEC10

As Required - Refill Multiluber Chain Oiling System Reservoir

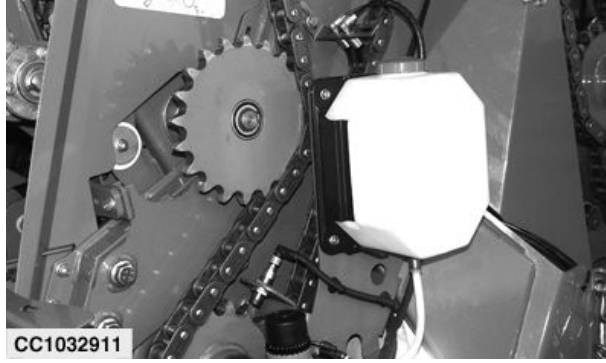
Depending on the pump flow adjustment, refill reservoir as required.

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.

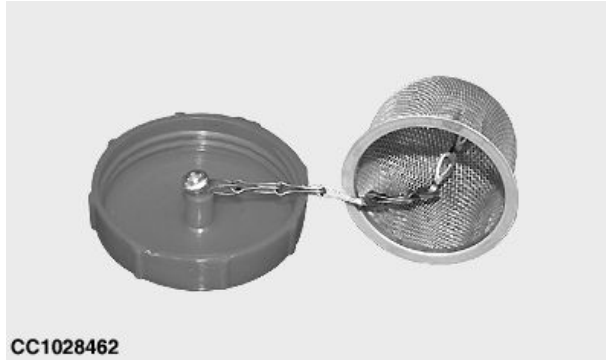


CC1032911 —UN—09DEC10

OUCC849,0000134 -19-10MAY10-1/1

As Required - Cleaning Oil Reservoir Filter

Clean oil reservoir filter when it is necessary.



CC1028462 —UN—21SEP06

OUCC006,0001272 -19-08FEB07-1/1

As Required - Clean Hydraulic Coupler Filters

Clean coupler filter as follows:

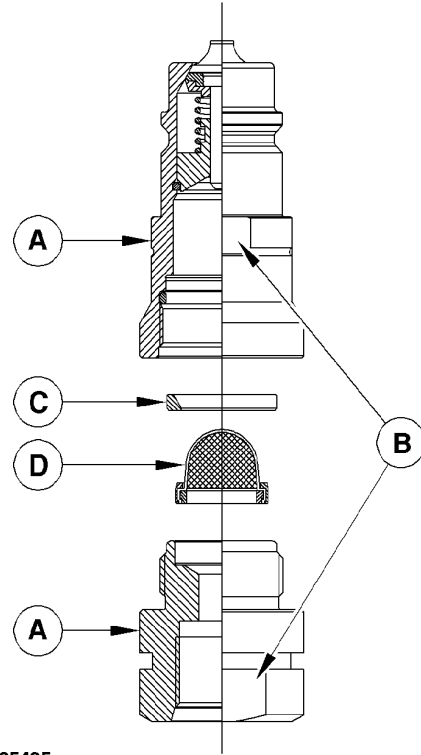
1. Disassemble coupler (A) using flat surfaces (B).
2. Remove spacer ring (C) and filter (D).
3. Clean filter (D), using clean solvent.
4. Assemble coupler (A) in reverse order of disassembly.
5. Tighten coupler (A) to the following specification:

Specification

Pressure Line
Coupler—Torque.....90 N·m
(66 lb.-ft.)

A—Coupler
B—Flat Surface

C—Spacer Ring
D—Filter



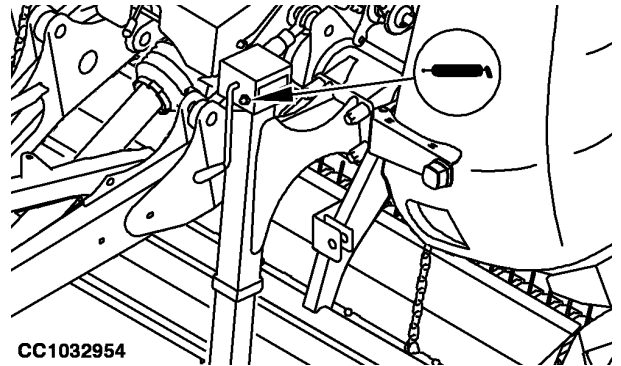
CC1025485

JC87117,00001A4 -19-21OCT14-1/1

CC1025485 —UN—15MAR04

As Required - Jackstand

Lubricate with John Deere GREASE-GARD.



CC1032954

OUC849,0000152 -19-08NOV10-1/1

CC1032954 —UN—14SEP10

Daily - Fire Prevention

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 gate and lock it.
- 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.

Check condition of pressurized water tank:

- Check the pressure of the pressurized water tank by using the indicator. The pressure will vary slightly due to temperature but should always be within green area.
- Check that the pressurized water tank is fully charged. Weigh or heft the pressurized water tank to determine fullness. See [Charge Pressurized Water Tank](#) in Service section.

DC82261,00004E1 -19-05AUG14-1/1

Daily - 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. Open the gate.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Secure the gate with the safety lock device.

Keep each precutter knife very sharp. Knives must be checked daily or after 200 bales, whichever occurs first.

Refer to Service section under Replace Precutter Knives to remove the knives and under Sharpen Precutter Knives to sharpen them.



CC1030614 —UN—14OCT08

Continued on next page

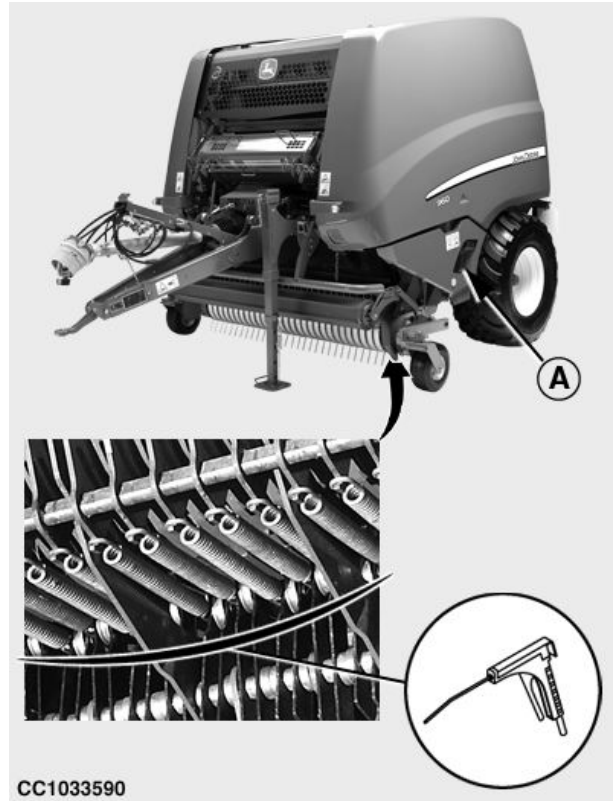
AP00976,0000183 -19-17DEC10-1/2

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 in Operating Baler Application section.
3. Engage tractor park lock, shut off tractor engine and remove key.
4. Close the knife shut-off valve(s) (A).
5. Remove material using air gun or another type of tool.

NOTE: Material is easily removed when knives are engaged.

A—Knife Shut-Off Valve



CC1033590 —UN—18DEC10

AP00976,0000183 -19-17DEC10-2/2

After the First 10 Hours - Wheel Nut Torque

Check wheel nut torque after the first 10 hours of use. See Check Wheel Nut Torque in Preparing the Baler section.

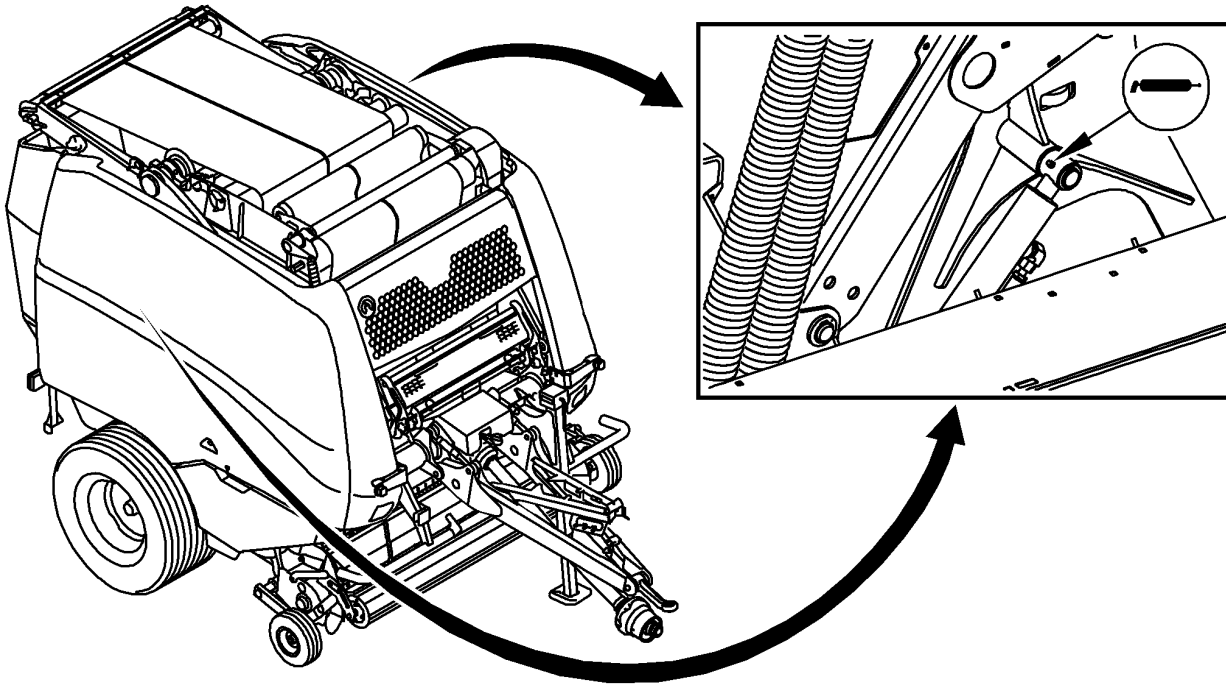
IMPORTANT: Repeat the procedure each time a wheel has been removed and installed.



CC1035309 —UN—23SEP11

OUC006,0001973 -19-11OCT12-1/1

Every 10 Hours - Gate Hydraulic Cylinder Rod



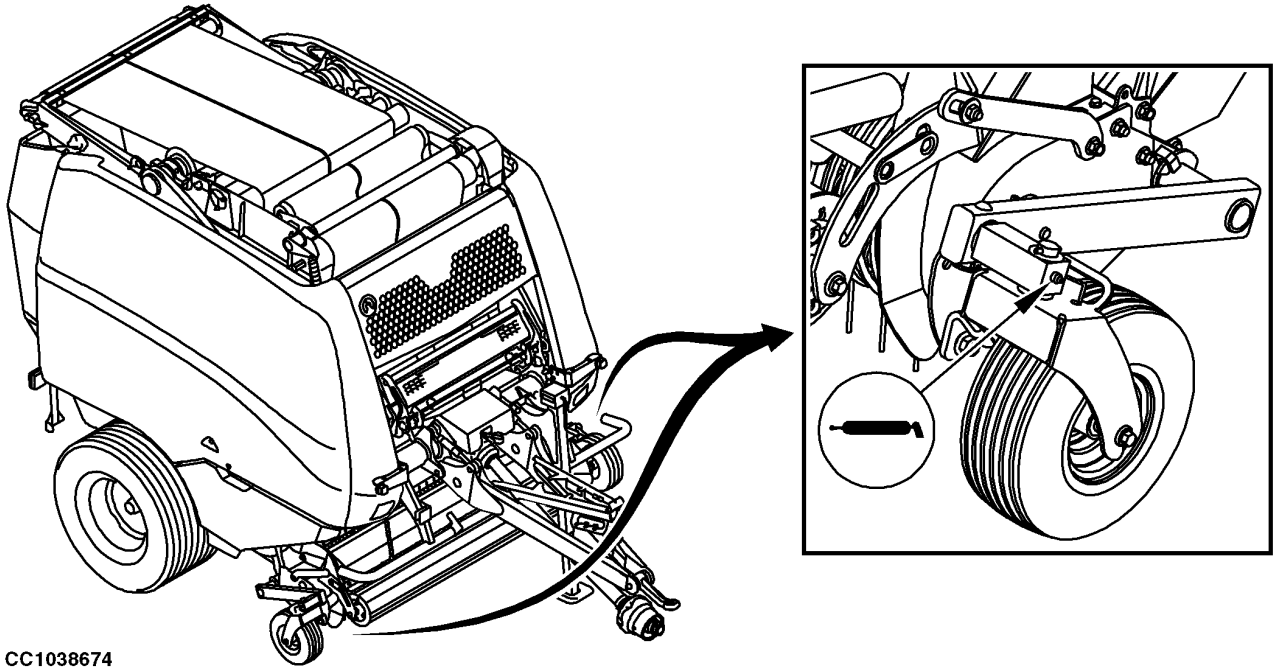
CC1032962

Lubricate with John Deere GREASE-GARD.

CC1032962—JUN—15NOV10

OUC006,00017C0 -19-27APR11-1/1

Every 10 Hours - Pickup Caster Gauge Wheels (if Equipped)



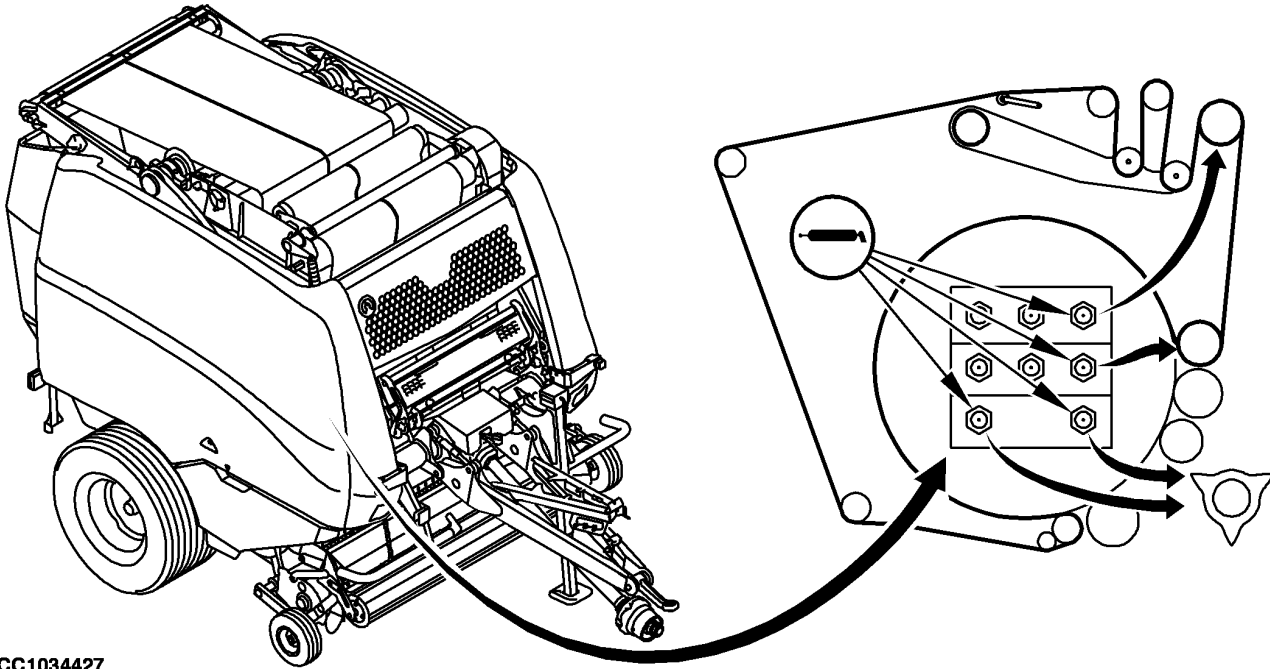
CC1038674

Lubricate with John Deere GREASE-GARD.

OUCC006,000199C -19-30OCT12-1/1

CC1038674—JN—31OCT12

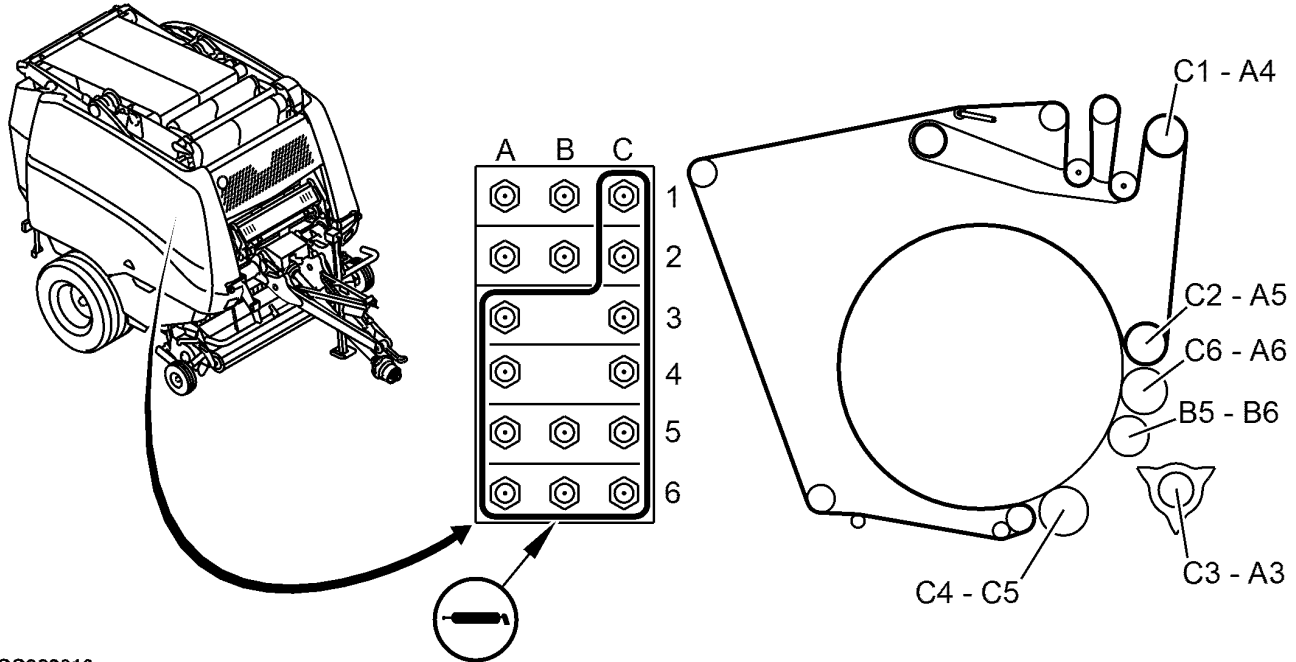
Every 10 Hours - Rotary Feeder and Belt Drive Rolls (Baler without Automatic Greasing System)



CC1034427

Baler with 9 Points Grease Bank

CC1034427 —UN—15SEP11



CC222018

Baler with 18 Points Grease Bank

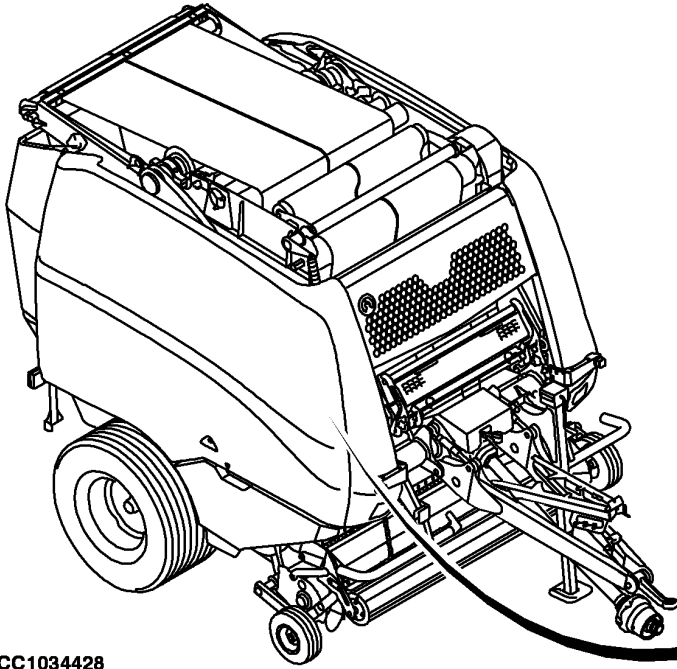
CC222018 —UN—17OCT14

Lubricate with John Deere Grease-Gard™.

Grease-Gard is a trademark of Deere & Company

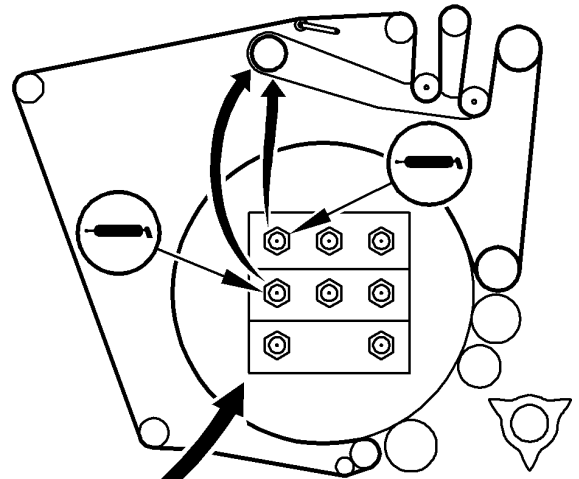
JC87117,0000198 -19-21OCT14-1/1

Every 30 Hours - Tension Arm (Baler without Automatic Greasing System)

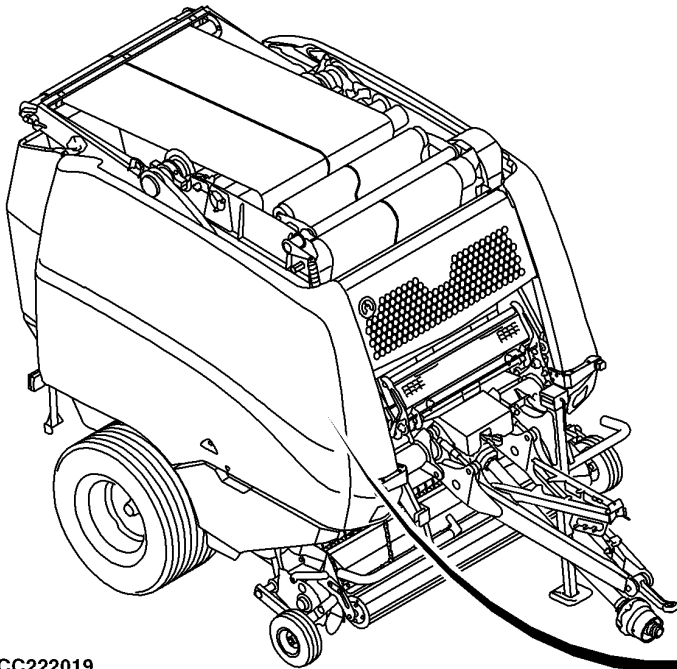


CC1034428

Baler with 9 Points Grease Bank

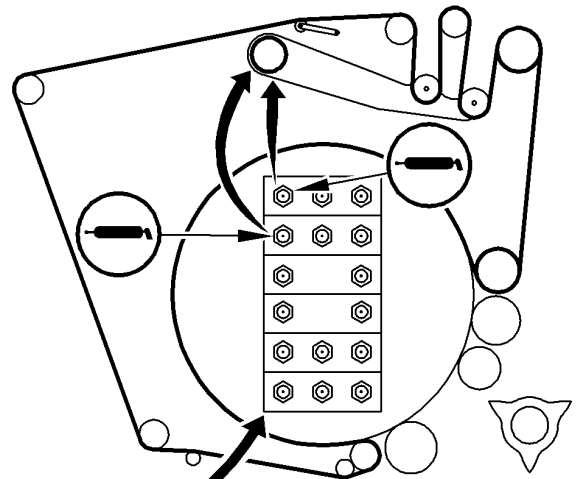


CC1034428—UN—15SEP11



CC222019

Baler with 18 Points Grease Bank



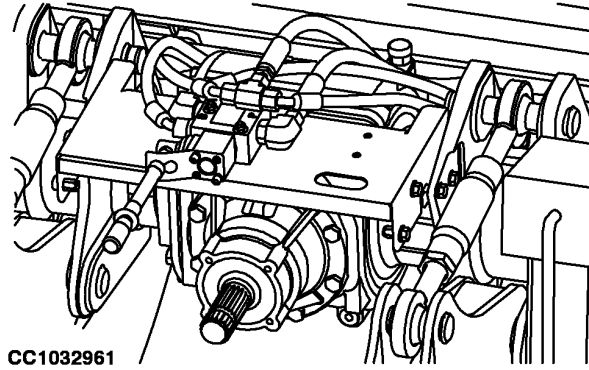
CC222019—UN—17OCT14

Lubricate with John Grease-Gard™.
Grease-Gard is a trademark of Deere & Company

JC87117,0000199 -19-21OCT14-1/1

After the First 50 Hours - 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 this section.



CC1032961

CC1032961 —UN—14SEP10

OUCC006,0001974 -19-11OCT12-1/1

After the First 50 Hours - Wheel Nut Torque

Check wheel nut torque after the first 50 hours of use. See Check Wheel Nut Torque in Preparing the Baler section.

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

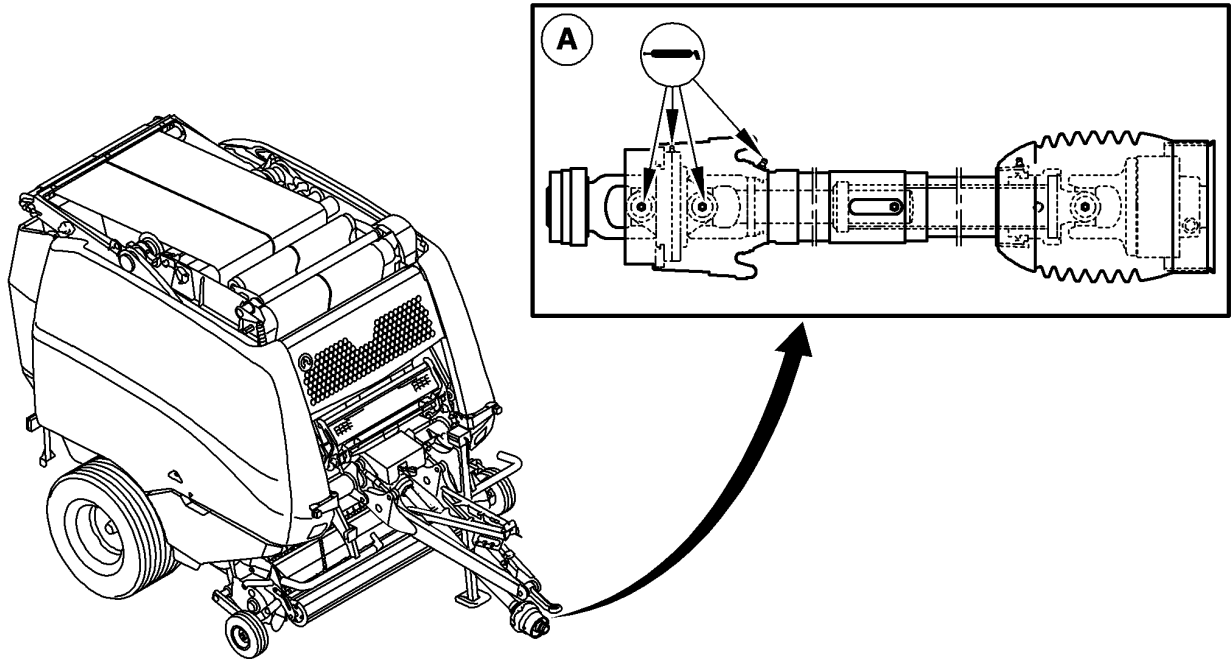


CC1035309

CC1035309 —UN—23SEP11

OUCC006,0001975 -19-11OCT12-1/1

Every 50 Hours - Telescoping Driveline (Baler with Walterscheid Telescoping Driveline)



CC1033589

A—Grease Fittings

Lubricate with John Deere GREASE-GARD.

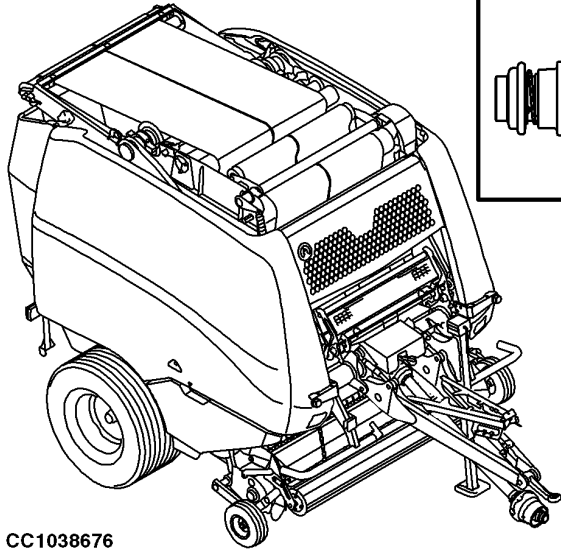
Refer to the basic telescoping driveline Operator's Manual to lubricate telescoping driveline correctly.

NOTE: The quantity of grease delivered at each grease gun pump stroke is average 1 g (0.035 oz.).

OUC006,00019A0 -19-06NOV12-1/1

CC1033589—UN—09DEC10

Every 50 Hours - Telescoping Driveline (Baler with Bondioli Telescoping Driveline)

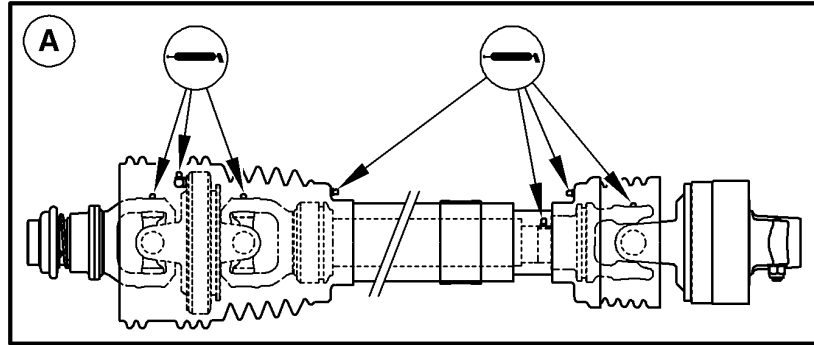


CC1038676

A—Grease Fittings

Lubricate with John Deere GREASE-GARD.

Refer to the basic telescoping driveline Operator's Manual to lubricate telescoping driveline correctly.

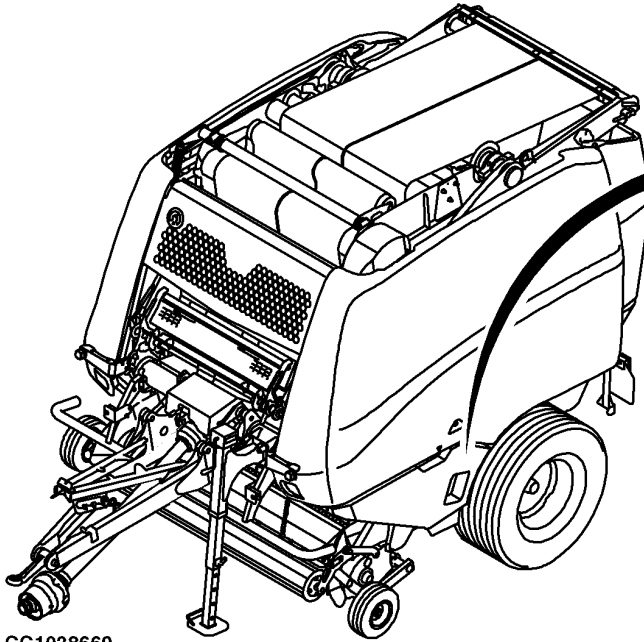


NOTE: The quantity of grease delivered at each grease gun pump stroke is average 1 g (0.035 oz.).

OUC006,00019A1 -19-06NOV12-1/1

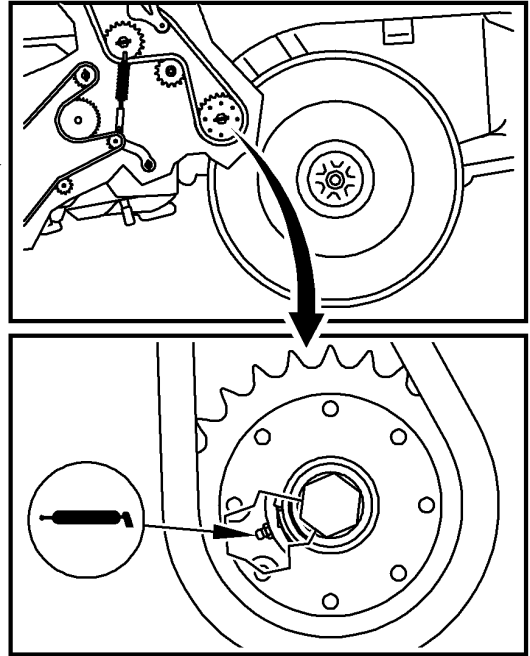
CC1038676 —UN—06NOV12

Every 50 Hours - Free Wheel of Lower Starter Roll (No. 1)



CC1038669

Remove shields to provide access.

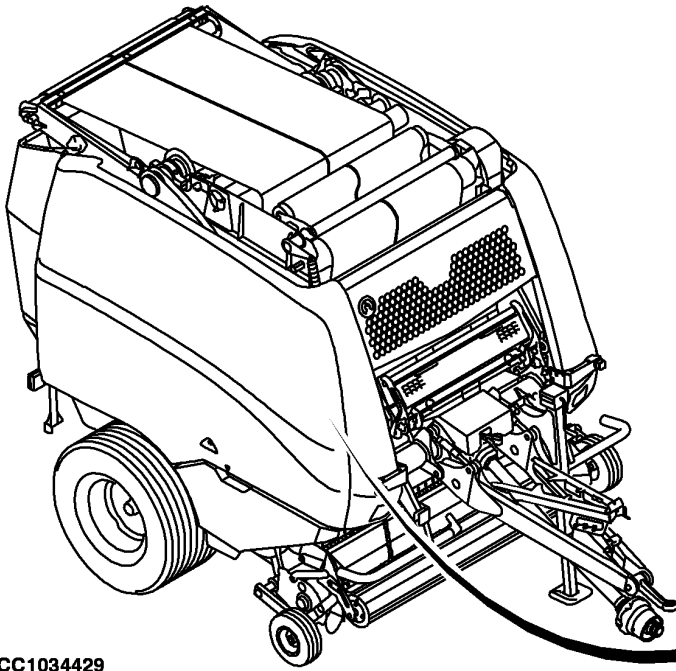


Lubricate with John Deere Grease-Gard™.

JC87117,000019A -19-17OCT14-1/1

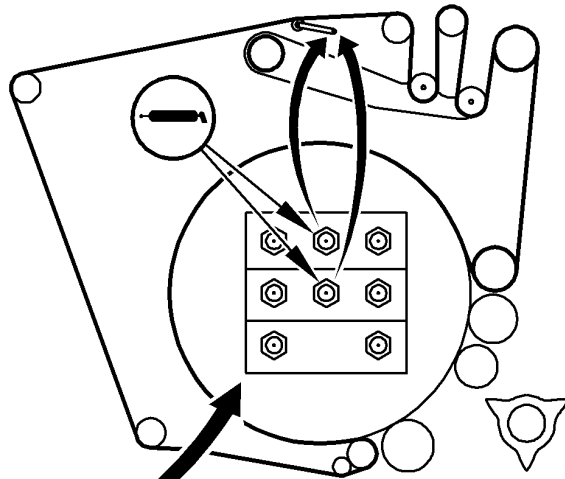
CC1038669 —UN—30OCT12

Every 50 Hours - Bale Shape Indicators (Baler without Automatic Greasing System)

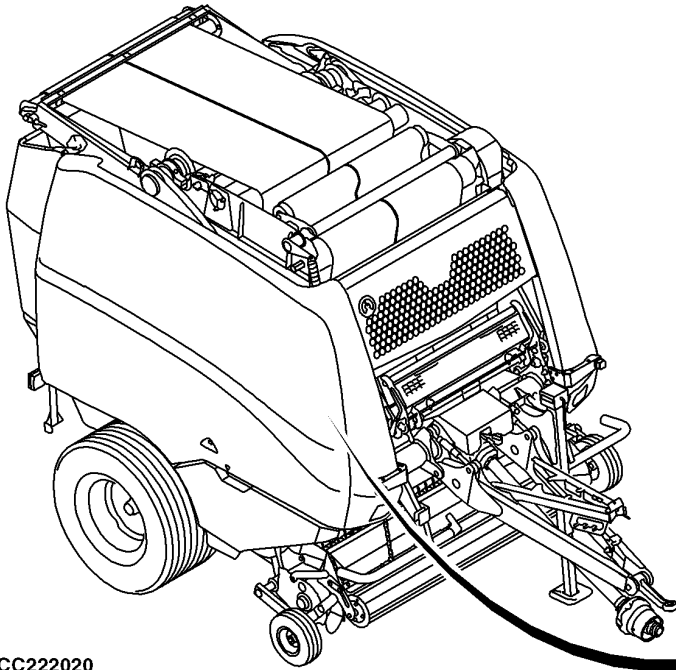


CC1034429

Baler with 9 points Grease Bank

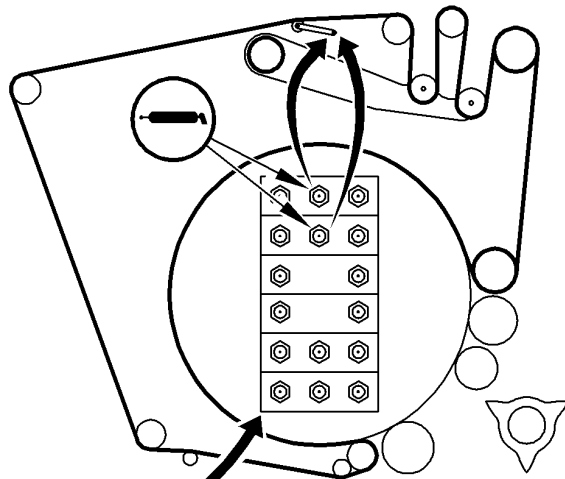


CC1034429 —UN—15SEP11



CC222020

Baler with 18 Points Grease Bank



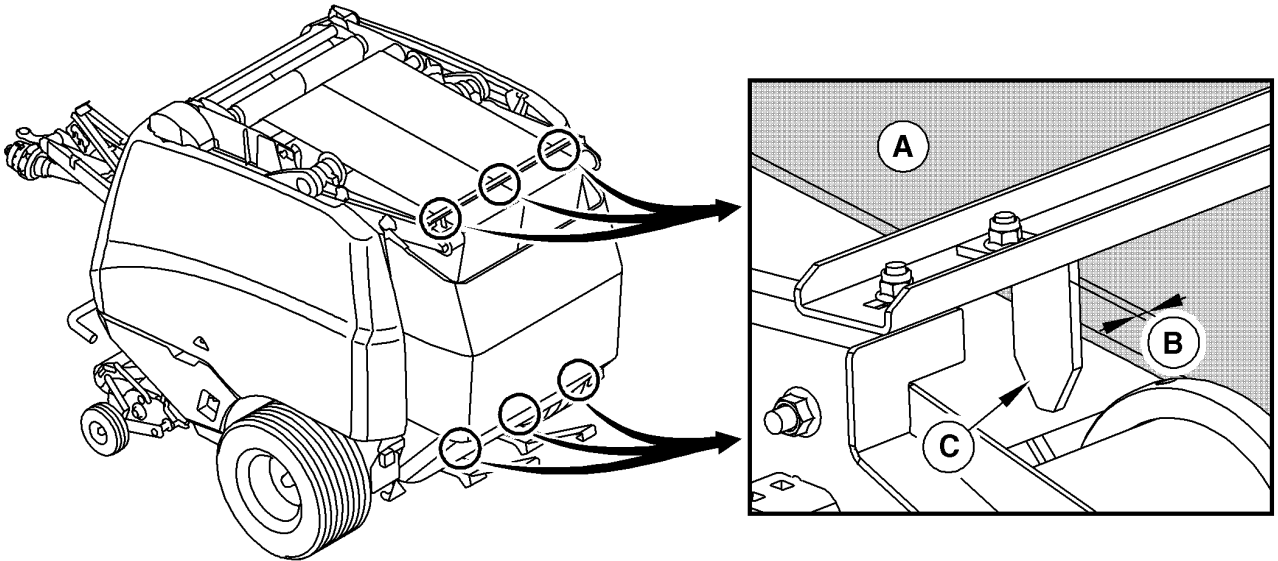
CC222020 —UN—17OCT14

Lubricate with John Deere Grease-Gard™.

Grease-Gard is a trademark of Deere & Company

JC87117,000019C -19-21OCT14-1/1

Every 50 Hours - Check Wear of Belt Guides



CC208599

A—Belt

B—Thickness

C—Guide

Check that thickness (B) of belt guides (C) is greater than the following specification:

If not, see your John Deere dealer to replace the belt guides.

Specification

Belt Guides—Minimum
Thickness.....2.5 mm (0.1 in.)

CC208599—JUN—28JAN14

DC82261,000040F -19-12FEB14-1/1

Weekly - Gear Case Oil Level

Remove shield (A) to access to the dipstick (B).

The top of dipstick (B) must be horizontal, use jackstand if necessary.

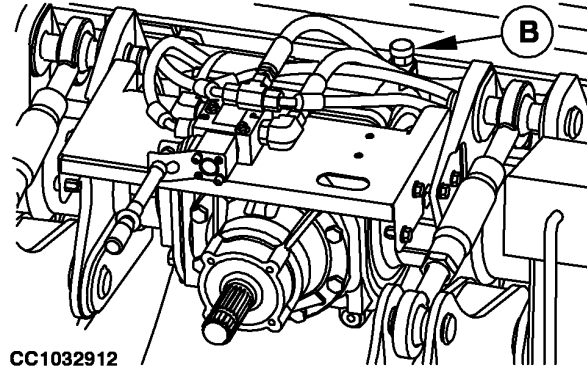
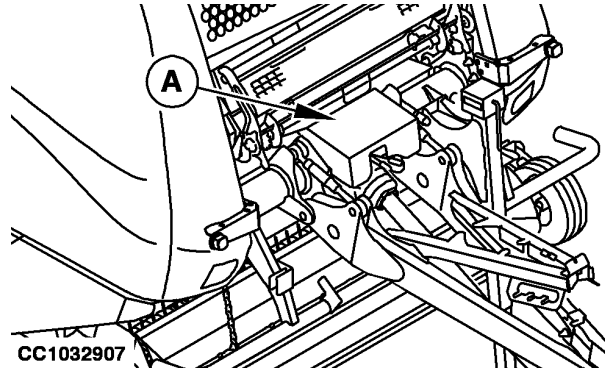
IMPORTANT: Check level of lubricant weekly using dipstick (B) and refill as necessary.

Do not overfill gear case as this will result in overheating and oil leakage.

Use a type of oil specified under High Viscosity Gear Case Oil in this section.

A—Shield

B—Dipstick



CC1032907 —UN—14SEP10

CC1032912 —UN—15NOV10

OUC849,0000135 -19-21DEC10-1/1

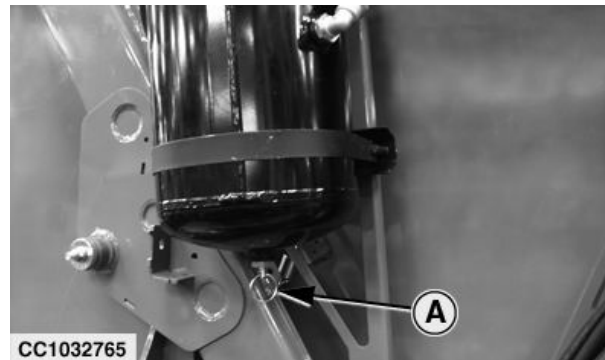
Weekly - Check and Drain Air Brake Tank

CAUTION: Before draining condensed water from the compressed air tank, make sure that the machine cannot roll away. Apply the park brake and place wheel chocks under the wheels.

1. Pull the park brake lever.
2. Pull ring (A) to drain water from the air reservoir.

IMPORTANT: Condensation in brake system may cause malfunctions.

A—Ring



CC1032765 —UN—24AUG10

OUC849,0000136 -19-24AUG10-1/1

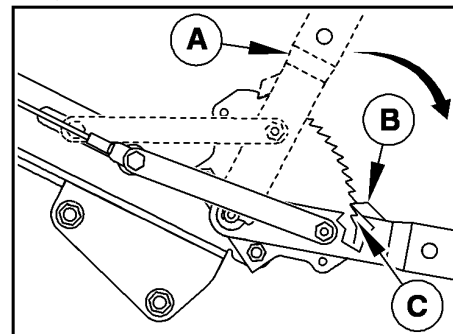
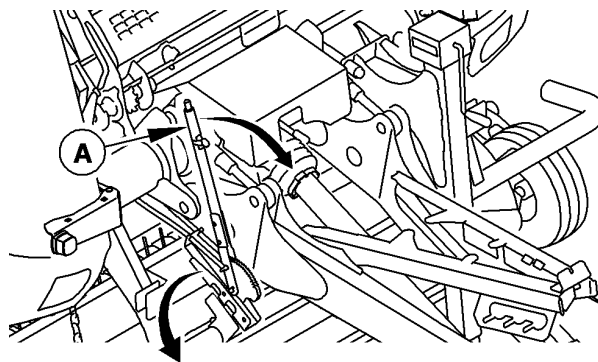
Monthly - Check Park Brake

Pull lever (A) completely back to engage park brake, then check that latch (B) is not positioned in last remaining notch (C).

If the latch is positioned in last remaining notch (C), see your John Deere dealer.

A—Park Brake Lever
B—Park Brake Latch

C—Remaining Notch



CC1035343

CC1035343—UN—11OCT11

OUC006,0001822 -19-10OCT11-1/1

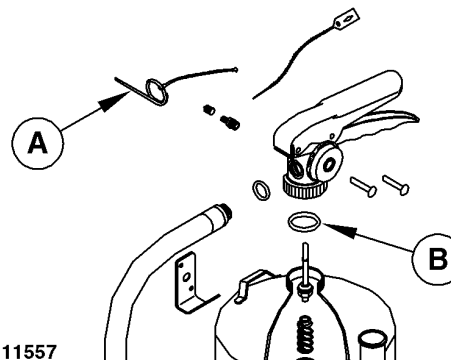
Monthly - Inspection of Pressurized Water Tank

1. Check for any possible damage: corrosion, leakage or obstruction in the discharge outlet.
2. Check that the seal (B) is not broken.
3. Check that the safety pin (A) is in good condition.
4. The pressurized water tank must be clean, and the instructions on the label must always be clearly visible.

When inspection of the pressurized water tank reveals a deficiency, the pressurized water tank must be replaced.

A—Safety Pin

B—Seal

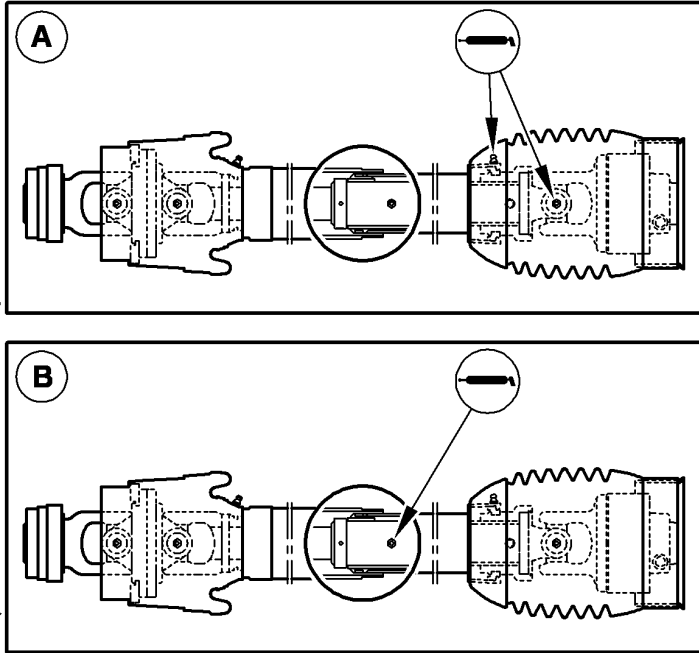
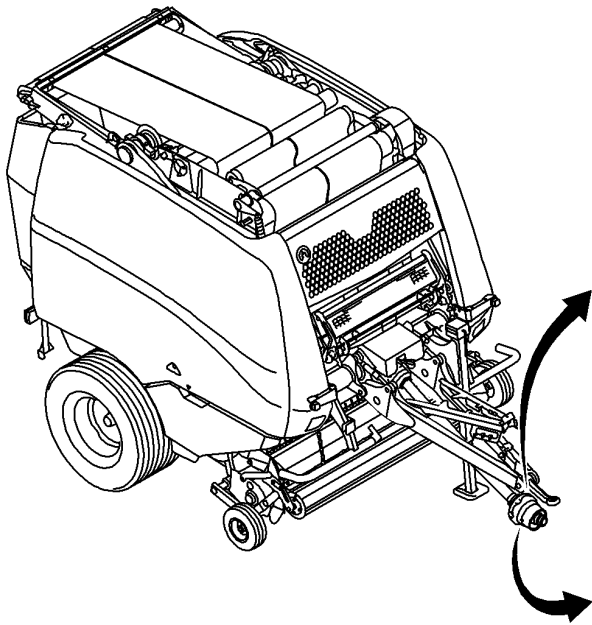


CC211557

CC211557—UN—20AUG14

DC82261,00004D7 -19-20AUG14-1/1

Every 250 Hours - Telescoping Driveline (Baler with Walterscheid Telescoping Driveline)



CC1032915

A—Grease Fitting

B—Profile Tube Grease Fitting

Lubricate with John Deere GREASE-GARD.

IMPORTANT: For 1000 rpm telescoping driveline, there are two grease fittings (B), one on each side of profile tube.

NOTE: The quantity of grease delivered at each grease gun pump stroke is average 1 g (0.035 oz.).

Refer to the basic telescoping driveline Operator's Manual to lubricate telescoping driveline correctly.

OUCC006,00019A2 -19-06NOV12-1/1

CC1032915 —UN—09DEC10

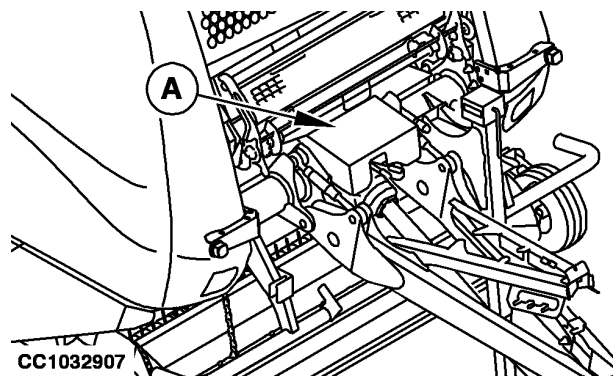
Every 500 Hours or Yearly - Drain and Refill Gear Case

IMPORTANT: Change the oil in the gear case after the first 50 hours and then every 500 hours or yearly, whichever comes first.

Do not overfill gear case as this will result in overheating and oil leakage.

1. Remove shield (A).

A—Shield



CC1032907

Continued on next page

OUCC006,0001823 -19-21SEP11-1/2

CC1032907 —UN—14SEP10

2. Drain the oil while it is hot (i.e. after operation). Pull out dipstick (A) 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
(22.1 lb.-ft.)

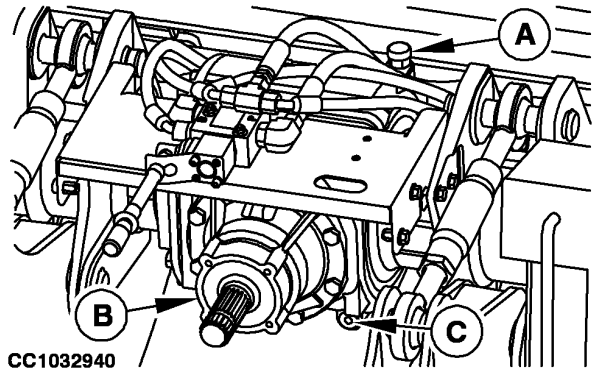
4. Refill gear case (B) with John Deere HY-GARD high viscosity oil or equivalent. See High Viscosity Gear Case Oil in this section.

Specification

540 rpm Gear
Case—Capacity..... 4.3 L
(1.14 U.S. gal)

1000 rpm Gear
Case—Capacity..... 3.9 L
(1.03 U.S. gal)

5. Check oil level with dipstick (A).



CC1032940

A—Dipstick
B—Gear Case
C—Drain Plug

6. Install shield previously removed.

OUC006,0001823 -19-21SEP11-2/2

CC1032940 —UN—14SEP10

Yearly - Check Wheel Nut Torque

Retighten wheel nuts diagonally to the following specification:

Specification

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

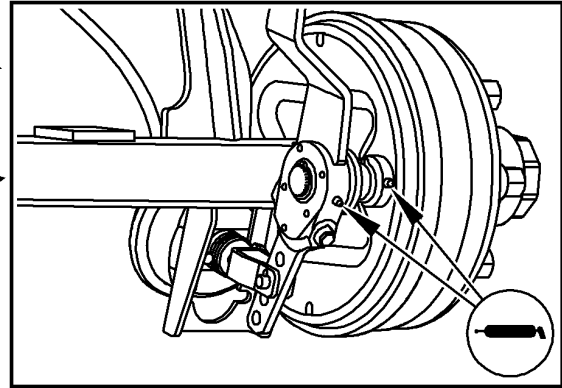
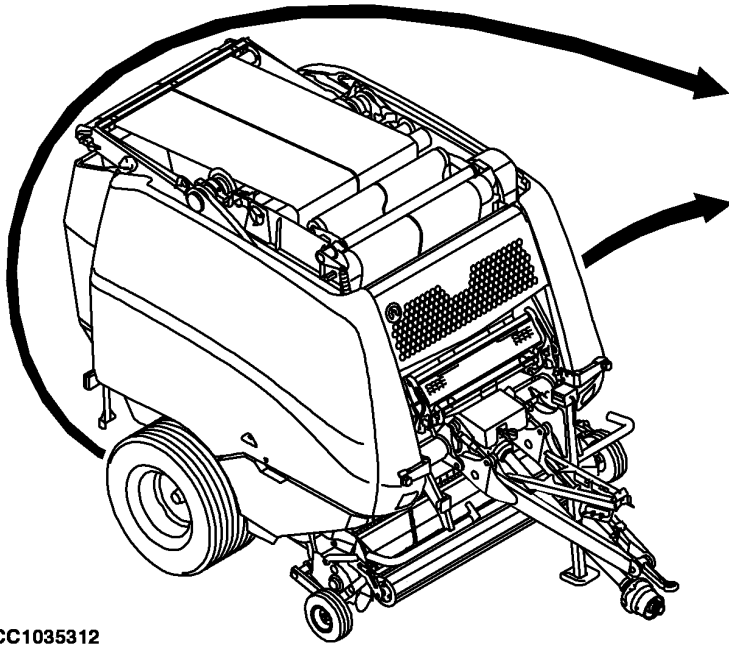


CC1035309

OUC006,0001825 -19-07OCT11-1/1

CC1035309 —UN—23SEP11

Yearly - Air Brake Shafts



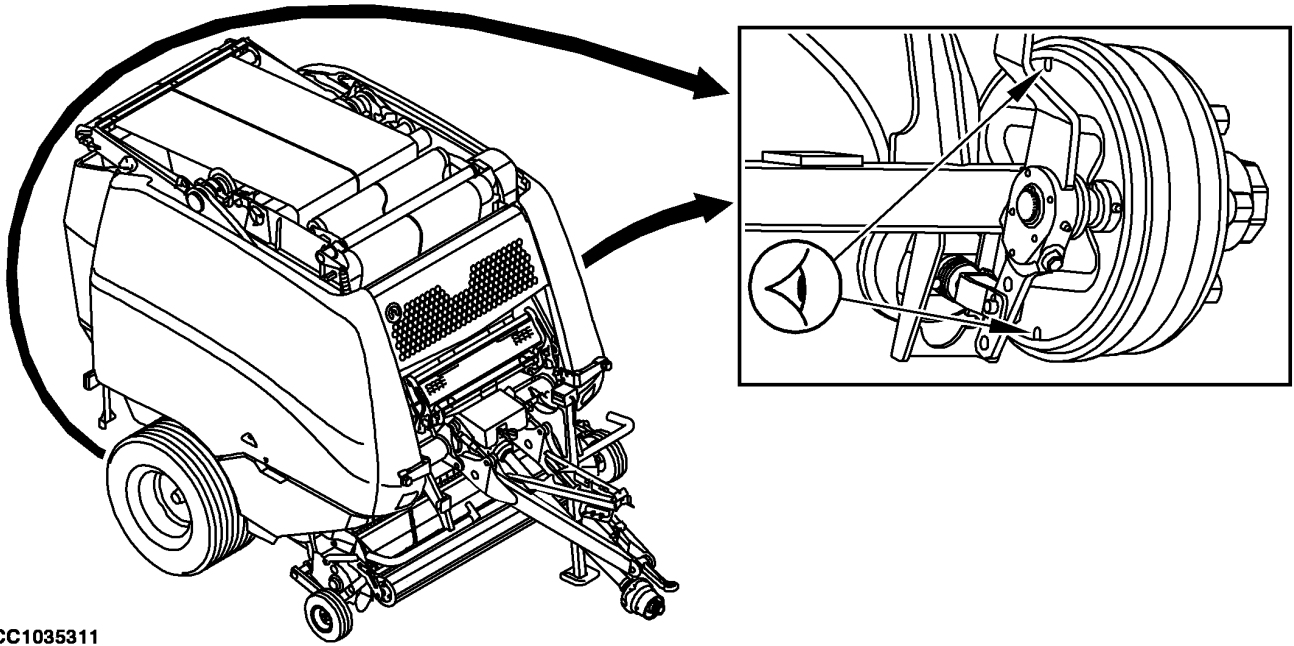
CC1035312

Lubricate with John Deere GREASE-GARD on both sides.

CC1035312 —UN—30SEP11

OUCC006,0001826 -19-27SEP11-1/1

Yearly - Air Brake Shoes



CC1035311

On both sides, check that thickness of brake linings is greater than the following specification:

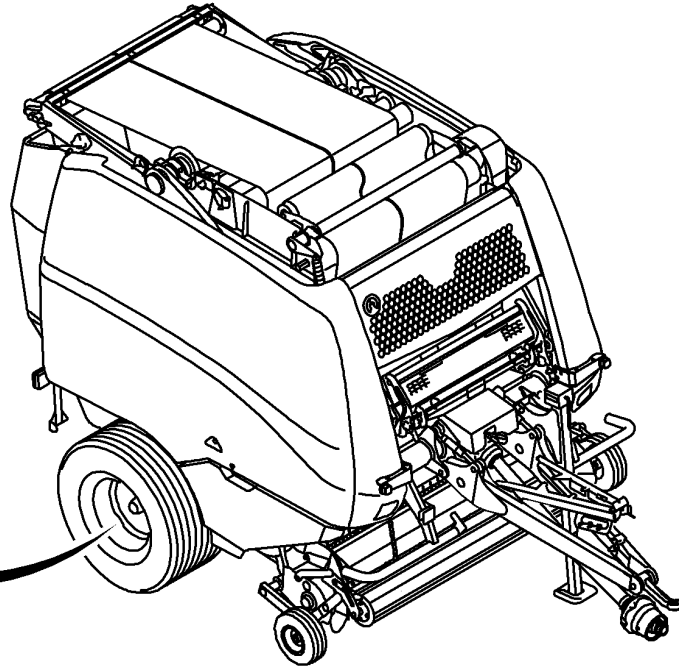
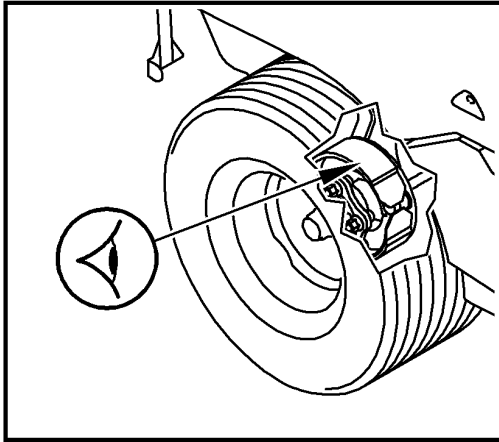
Specification	
Brake Lining—Minimum	
Thickness.....	2 mm (0.08 in.)

If not, see your John Deere dealer for brake shoe replacement.

CC1035311 —UN—30SEP11

OUC006,000182C -19-07OCT11-1/1

Yearly - Hydraulic Brake Shoes



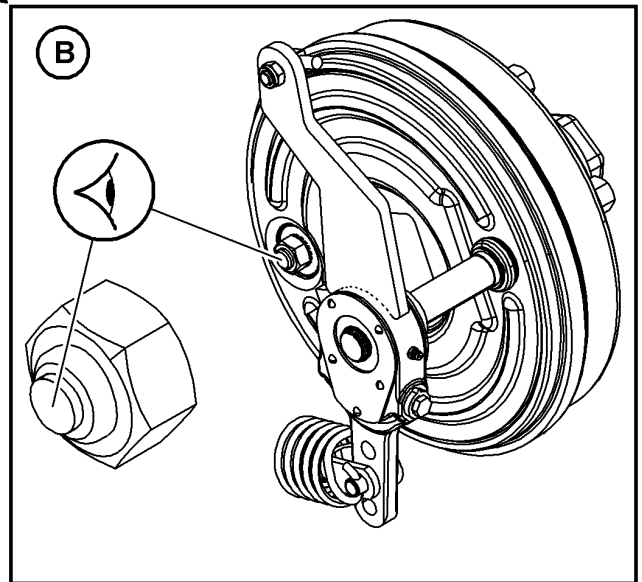
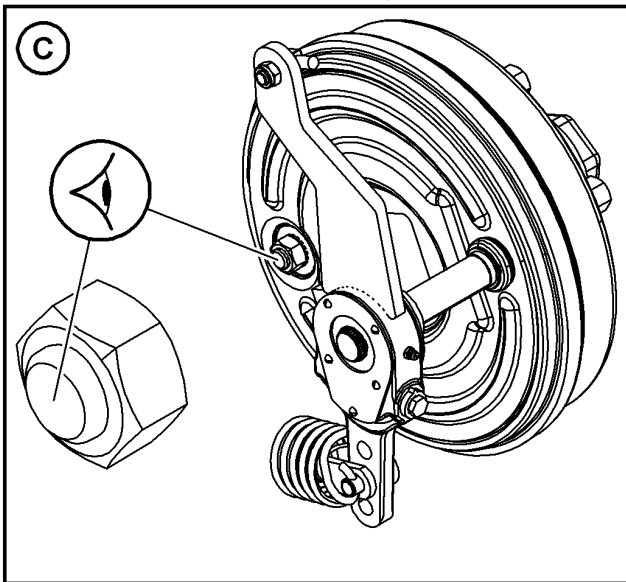
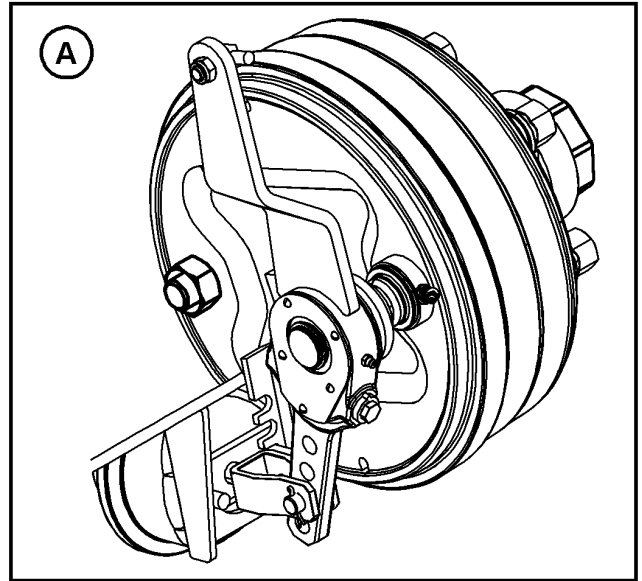
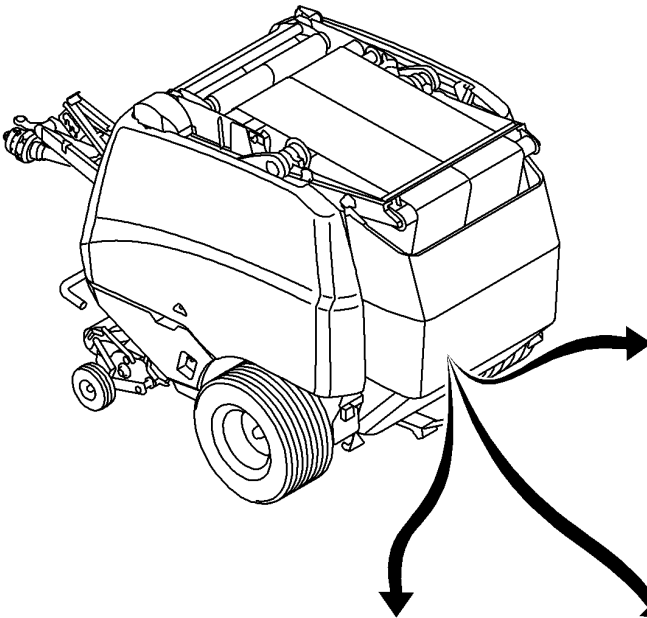
CC1035344

To check brake lining thickness, see your John Deere dealer.

CC1035344 —UN—30SEP11

OUCC006,000182D -19-07OCT11-1/1

Yearly - Brake Pivot



CC221752

- A—Axle with Air Brake
- B—Axle with Hydraulic Brake and with Shouldered Brake Pivot
- C—Axle with Hydraulic Brake and with No Shouldered Brake Pivot

Engage baler park brake, retighten nut of brake pivot on both sides to specified torque:

	Specification
Brake Pivot of Axle with Air Brake (A)—Torque.....	220—280 N·m (162—206 lb.-ft.)
Shouldered Brake Pivot of Axle with Hydraulic Brake (B)—Torque.....	350—390 N·m (258—288 lb.-ft.)

No Shouldered Brake Pivot of Axle with Hydraulic Brake (C)—Torque.....	115—145 N·m (85—107 lb.-ft.)
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DC82261,000054D -19-17OCT14-1/1

CC221752 —UN—17OCT14

Yearly - Wear Plates

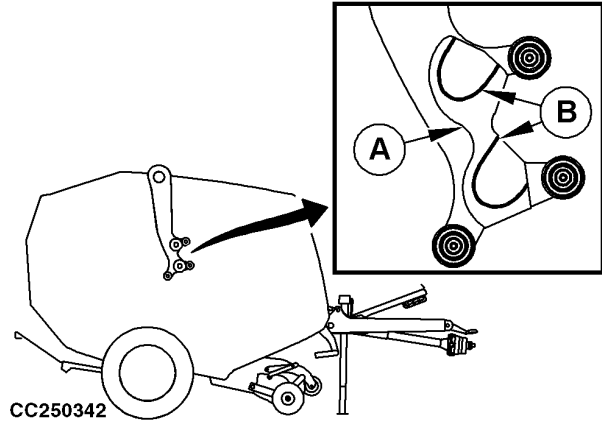
Check wear plates:

1. Open the gate to 1.5 m (4 ft 11 in).
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Secure the gate with the safety lock device.
4. Visually check that the depth of the grooves (B) does not exceed the following specification, on each side:

Specification	
Grooves—Depth.....	1.5—2 mm (1/16—3/32 in)

If not, wear plate must be changed.

5. Close the gate.



CC250342

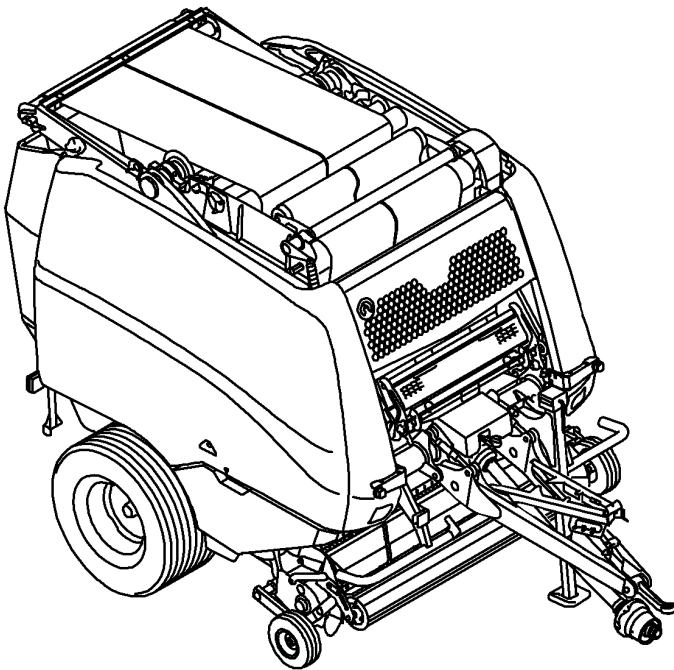
A—Wear Plate

B—Groove

CC250342—UN—19OCT15

DC82261,000065A -19-19OCT15-1/1

Yearly - Check Hitch Fixing Screw



CC1032963

A—Hitch Fixing Screw

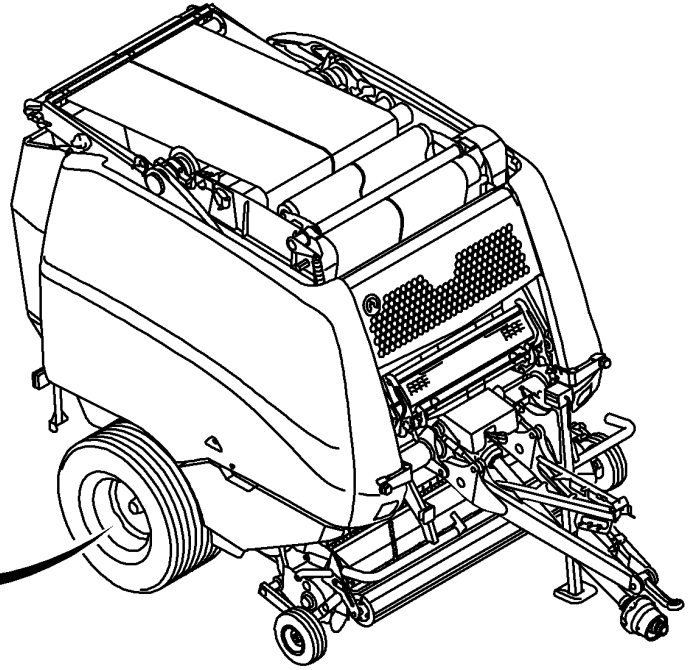
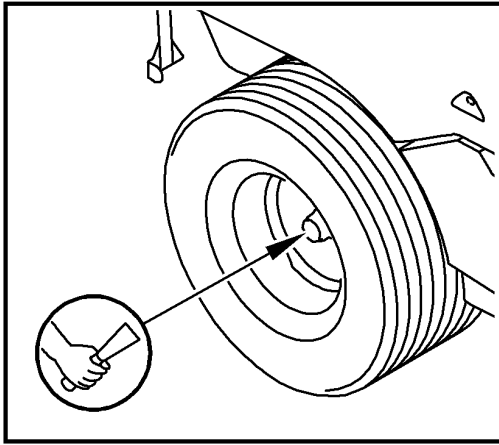
Retighten hitch fixing screw (A) to the following specification:

	Specification
Hitch Fixing Screw—Torque.....	.620 N·m (450 lb.-ft.)

OUC006,0001829 -19-22SEP11-1/1

CC1032963—UN—15NOV10

Every 2 Years - Axle Bearings



CC1035345

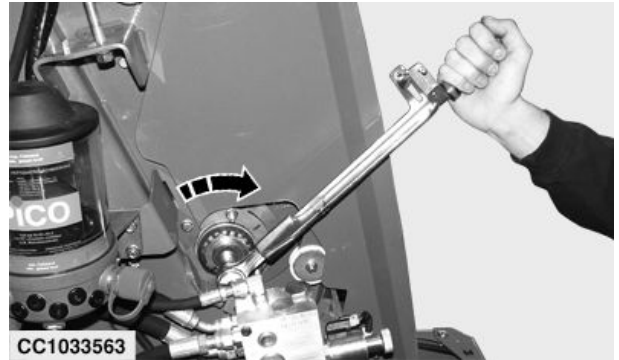
To check and lubricate the axle bearings, see your John Deere dealer.

CC1035345 —UN—30SEP11

OUC006,000182A -19-11OCT11-1/1

Every 15000 Bales - Check Net Tying Rubber Roll Brake

Check rolling drag torque of rubber roll brake. See Adjust Net Tying Rubber Roll Brake in Service section.



CC1033563

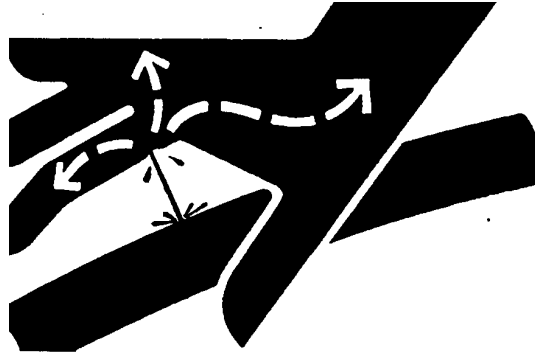
CC1033563 —UN—03DEC10

OUC006,00017F3 -19-20JUL11-1/1

Every 6 Years - Hydraulic Hoses

Due to wear on hydraulic hoses over time, it is recommended to change hydraulic hoses every 6 years.

In some countries, regulations make this recommendation mandatory.



X9811 —JUN—23AUG88

AP00976,000018D -19-14DEC10-1/1

Every 10 Years - Accumulators

Always observe local regulations for accumulator service intervals.

Any service and maintenance on accumulators must be done by your John Deere dealer only. Have a complete inspection with pressure check performed by your dealer every 10 years.



CC1022636

CC1022636 —JUN—15JAN03

CC03745,0000522 -19-01SEP03-1/1

Troubleshooting

Pickup and Feed Difficulties

Symptom	Problem	Solution
Clutch disengagement during bale formation without hay feeding.	Hay accumulation behind the rotor.	Check drop floor is in high position. Adjust sensor if necessary. See Adjust Drop Floor Sensor SB531 in Service section. Install straw bar. Stop PTO when baler is not fed.
	Pickup drive chain broken.	Replace chain.
	Broken cam.	Replace cam. See your John Deere dealer.
Not picking up hay cleanly.	Pickup set too high.	Lower pickup. See 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 Attaching and Detaching section.
	Compressor roll too high.	Lower compressor roll. See Adjust Windrow Compressor Roll Height in Operating the Baler - General Purposes section.
	Ground speed too high.	Reduce ground speed.
	Pickup teeth bent or broken.	Straighten or replace teeth.
	Pickup teeth digging in ground.	Pickup set too low.
Poor pickup flotation.		Check float spring adjustment. See Adjust Pickup Float Spring in Operating the Baler - General Purposes section.
Bulldozing	Compressor roll too low.	Raise compressor roll. See Adjust Windrow Compressor Roll Height in Operating the Baler - General Purposes section.
	Tongue set too high.	Check tongue adjustment. See Attaching and Detaching section.
Plugging at flares.	Over-crowding ends.	Reduce crowding. Drive backward.

Continued on next page

AP00976,0000185 -19-13DEC10-1/2

Troubleshooting

Symptom	Problem	Solution
	Pickup set too low.	Raise pickup. See Operating the Baler—General Purposes section.
	Tractor tires crushing crop into stubble.	Increase wheel tread. See tractor operator's manual.
Pickup does not float or drop freely.	Excess or insufficient float assist.	Adjust float springs. See Adjust Pickup Float Spring 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 Baler Application section.
Plugging at converging augers.	Rotor auger not scraped.	Check drop floor is in high position. Adjust sensor if necessary. See Adjust Drop Floor Sensor SB531 in Service section. Adjust rotor auger scrapers. See Adjust Rotor Auger Scrapers in Service section.
Noise in the rotor.	Deformed tooth of rotor.	See your John Deere dealer.
Loss of knife.	Knife locking bar unlocked.	Lock bar.
	Knife locking bar worn.	Replace knife locking bar.

AP00976,0000185 -19-13DEC10-2/2

General Baler Difficulties

Symptom	Problem	Solution
Ground clearance too low.	Incorrect tongue setting.	Adjust tongue to correct position. See Attaching and Detaching section.
Excessive tractor power requirements during operation with precutter knives engaged.	Precutter knives are worn.	Sharpen or replace precutter knives. See Sharpen Precutter Knives or Replace Precutter Knives in Service section.
Gate not latched.	Obstruction between gate and frame.	Remove obstruction.
	Too much clearance between gate latch and gate latch bushing.	Adjust gate latch. See Adjust Gate Latch in Service section.
Clutch disengagement during bale formation.	Baler plugged.	See Pickup and Feed Difficulties in this section.
	Mud buildup on tension arm rolls.	Remove buildup. Install cleaning rolls no. 16 and 17. See your John Deere dealer.
Belts do not track properly.	Upper rear roll out of adjustment.	Adjust roll. See Adjust Belt Tracking in Service section.
	Belt guides of roll no. 10 and 11 out of adjustment.	Adjust belt guides. See Adjust Belt Tracking in Service section.
	Mud buildup on baler rolls.	Remove buildup.
	Centering sheave not present.	Install centering sheave.
	Mud buildup on centering sheave.	Remove buildup.
	Belt guides worn or missing.	Check condition of belt guides. See Every 50 Hours - Check Wear of Belt Guides in Lubrication and Maintenance.
	Belt does not stay on front pulley.	See Guidelines to Form a Good Bale in Operating Baler Application section or see your John Deere dealer. Check Belt Tracking. See Adjust Belt Tracking in Service section.
Belts slipping or not turning.	Tension arm spring out of adjustment or broken.	Adjust and/or replace tension arm spring. See Adjust Tension Arm Spring in Service section.

Continued on next page

DC82261,0000418 -19-24JAN14-1/2

Troubleshooting

Symptom	Problem	Solution
	Mud buildup on tension arm rolls.	Remove buildup. Install cleaning rolls no. 16 and 17. See your John Deere dealer.
Clutch disengagement during bale ejection.	Take-up arm spring out of adjustment or broken.	Adjust and/or replace take-up arm spring. See <u>Adjust Take-Up Arm Spring</u> in Service section.
Gate closes by itself (gate lock valve in unlocked position).	Damaged hoses or fittings.	See your John Deere dealer.
	Tractor selective control valve (SCV) leaking.	See your John Deere dealer.
	Faulty gate hydraulic cylinder.	See your John Deere dealer.
Gate closes by itself (gate lock valve in locked position).	Damaged hoses or fittings.	See your John Deere dealer.
	Faulty gate lock.	See your John Deere dealer.
	Faulty gate hydraulic cylinder.	See your John Deere dealer.
Gate opens by itself (gate lock valve in locked position). Gate does not open.	Faulty gate lock.	See your John Deere dealer.
	Gate lock is locked.	Unlock the gate lock.
	Damaged hoses or fittings.	See your John Deere dealer.
	Faulty gate lock.	See your John Deere dealer.
	Faulty gate hydraulic cylinder.	See your John Deere dealer.
	Faulty tractor hydraulic system.	See your John Deere dealer.
Gate does not close.	Gate lock is locked.	Unlock the gate lock.
	Obstruction between gate and frame.	Remove obstruction.
	Faulty gate lock.	See your John Deere dealer.
	Faulty tractor hydraulic system.	See your John Deere dealer.

DC82261_0000418 -19-24JAN14-2/2

Bale Quality

Symptom	Problem	Solution
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.
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.
Barrel or hourglass shaped bales. Monitor shows a well shaped bale.	Bad feeding of the machine.	See Guidelines to Form a Good Bale in Operating Baler Application section.
Bale shape indicators remain stationary. Desired bale diameter can not be achieved.	Broken bale shape potentiometer spring.	Replace spring.
	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.
Baler does not make dense bales.	Real diameter of the bale ejected differs (more than 3 cm (1.2 in.)) from the actual bale diameter displayed before bale ejection.	Reset and calibrate bale diameter potentiometer. See Calibrate Bale Diameter Potentiometer RB311 in Baler Application Service section.
	Bale ends not filled tightly.	Crowd more crop in ends of baler. See Guidelines to Form a Good Bale in Operating Baler Application section.
	Density control adjusted for light bales.	Adjust for heavier bales. See Adjust Bale Density in Operating Baler Application section.
	Internal leak in belt tension hydraulic cylinder.	See your John Deere dealer.
	Dirty or defective relief valve.	See your John Deere dealer.

DC82261,0000406 -19-03MAR14-1/1

Bale Density

Symptom	Problem	Solution
Density pressure low or zero (needle in black area) when the diameter displayed on the monitor is different from the actual diameter.	Faulty calibration of bale diameter potentiometer.	Calibrate bale diameter potentiometer. See Calibrate Bale Diameter Potentiometer RB311 in Baler Application Service section.
Density pressure low or zero during the baling.	The open gate message appears on the monitor.	Close the gate.
	Bale diameter displayed on the monitor is less than 70 cm (2.3 ft.).	Increase the bale diameter. See Set Bale Diameter in Operating Baler Application section.
	Faulty soft core system.	Suppress soft core mode. See Operate Soft Core System in Operating Baler Application section.
	Density adjustment is less than 25%.	Increase the density pressure. See Adjust Bale Density in Operating Baler Application section.
	Faulty proportional density solenoid valve.	Activate density pressure emergency control. See Activate Density Pressure Emergency Control in Service section.
	Setup density pressure is less than 300 kPa (3 bar; 43.5 psi).	See your John Deere dealer.
	No activation of the proportional density solenoid valve.	See your John Deere dealer.
	Faulty tension cylinder.	See your John Deere dealer.
	Faulty proportional density valve.	See your John Deere dealer.
	Faulty pressure gauge.	See your John Deere dealer.
Bale density too high.	Damaged hoses or fittings.	See your John Deere dealer.
	Faulty density adjustment.	Decrease the density pressure. See Adjust Bale Density in Operating Baler Application section.
	Faulty pressure gauge.	See your John Deere dealer.
	Accumulator pressure is too high.	See your John Deere dealer.
	Faulty filter of the proportional density valve.	See your John Deere dealer.
	Faulty proportional density valve.	See your John Deere dealer.
	Pressure increases before diameter of 70 cm (2.3 ft.) is reached.	Faulty density circuit pressure setup.
Faulty accumulator pressure.		See your John Deere dealer.

OUCC223,00007B6 -19-22DEC10-1/1

Net Tying Equipment Difficulties

Symptom	Problem	Solution
Net tying does not start.	Baler rotation speed sensor not connected, defective or not correctly adjusted.	Reconnect or readjust sensor. Replace if necessary. See Adjust Baler Rotation Speed Sensor in Service section.
	Net is not in the duck bill.	Restart net installation. See Load Net Roll in Preparing the Baler section. Check the free movement of the upper duck bill sheet.
	Net back on top of duck bill.	Check presence and condition of rubber flap.
	Net pulled out from the duck bill when net tying starts because net roll tube is too long.	Reduce the net roll tube length.
	Poor electrical power.	Check electrical connection (ISOBUS implement breakaway connector, battery harness, connector of actuator, etc.). Reduce electrical power consumption of tractor.
Net tying starts but monitor does not show start.	Net sensor not connected, defective or not correctly adjusted.	Reconnect or readjust sensor. Replace if necessary. See Adjust Net Feeding Sensor in Service section.
	Target missing.	Check and install correct screws.
Oversize alarm during net tying (high diameter).	Poor electrical power.	Check electrical connection (ISOBUS implement breakaway connector, battery harness, etc.). Reduce electrical power consumption of tractor.
Net not cut or not properly cut.	Specified net quality not used.	Use recommended net quality.
	Electrical actuator defective.	Check and/or replace parts.
	Dull net knife.	Sharpen net knife. See Sharpening Net Knife in Service section.
	Fouling of net knife and/or counterknife.	Clean net knife and/or counterknife and check presence of little rubber flap under the duck bill.
	Counterknife not correctly adjusted.	Adjust counterknife. See Adjust Net Tying Counterknife Position in Service section.

Continued on next page

NB02380,0000105 -19-01MAR16-1/4

Troubleshooting

Symptom	Problem	Solution
	Poor braking of rubber roll.	Adjust finger of brake activation. See Adjust Net Tying Rubber Roll Brake in Service section. Adjust rubber roll brake or replace brake lining. See your John Deere dealer.
Bale not tied (with slow intermittent beep / with warning screen).	Net roll empty.	Install a new net roll.
	Net not engaged properly (new roll).	Restart net installation. See Load Net Roll in Preparing the Baler section.
	Net sticky from packaging.	Cut off sticky area.
Bale not tied or not uniformly tied (with four quick intermittent beeps / without warning screen).	Net around starter roll of baler.	Remove burrs on starter roll.
	Net not engaged properly (new roll).	Restart net installation. See Load Net Roll in Preparing the Baler section.
	Net roll loading device unlocked.	Lock net roll loading device.
	Net rolled up around rubber roll.	Shut off tractor PTO. See Remove Net Wrapped Around Feed Rolls in Service section. Adjust net system (duck bill, net knife, brake, etc). See Service section. Clean rubber roll or change it.
	Net rolled up around spiral roll.	Remove welding spots and marks on spiral roll. Restart net installation. See Load Net Roll in Preparing the Baler section.
	Net around rotary feeder or around upper starter roll no. 2.	Check roll no. 2 scraper adjustment. See Adjust Upper Starter Roll (No. 2) Scraper in Service section.
	Net around sticky rolls of baler.	Clean the relevant rolls and adjust scrapers. See Service section.
	Bale tied (with slow intermittent beep / with warning screen).	Net roll empty.
Net sensor broken or not correctly adjusted.		Adjust or replace net sensor. See Service section.
Net tying on the bale does not correspond to the value specified in the monitor.	Bale diameter potentiometer not properly calibrated.	Calibrate potentiometer. See Calibrate Bale Diameter Potentiometer in Baler Application Service section.
	Target missing.	Check and install correct screws.

Continued on next page

NB02380,0000105 -19-01MAR16-2/4

Troubleshooting

Symptom	Problem	Solution
Net tying on the bale is greater than the adjusted value specified in the monitor.	Adjusted number of net turns too low regarding the adjusted bale diameter.	Increase number of net turns. See Adjust Net Tying in Operating Baler Application section.
Net tying settings not constant.	Net sensor not connected, defective or not correctly adjusted.	Reconnect or readjust sensor. Replace if necessary. See Adjust Net Feeding Sensor in Service section.
	Target missing.	Check and install correct screws.
	Bale diameter potentiometer not connected or defective.	Reconnect or replace bale diameter potentiometer. See Component Location in Baler Application Service section.
Net around the bale, but lacerated.	Number of net turns not adjusted correctly.	Adjust number of net turns. See Adjust Net Tying in Operating Baler Application section.
	Welding spots or marks on straw bar or pressure arm.	Remove spots and marks.
	Welding spots or marks on starter rolls no. 1, no. 2 and no. 3.	Remove spots and marks.
	Poor mounting screw of roll no. 2 scraper.	Use John Deere screw.
	Bale unloading rolls are not mounted properly.	Check that the front roll is higher than the rear roll.
	Bale unloading rolls do not rotate freely.	Repair the rolls so that they can turn freely.
	Bale not unloaded completely and tractor starts moving forward.	Check that bale discharging ramp is in raised position before starting to move tractor forward.
Net around the bale, but not all across its width.	Net not engaged properly.	Restart net installation. See Load Net Roll in Preparing the Baler section.
Net loose around bale.	Too many turns applied.	Normally no more than three turns are needed. Excess wraps may appear to be loose.
Net not tight around bale.	Net roll loading device unlocked.	Lock net roll loading device.
	Free wheel of sprocket is worn.	Replace free wheel.
John Deere B-Wrap™ net drags on the ground.	John Deere B-Wrap™ net cut too short.	Increase B-Wrap net cut length. See <u>Adjust B-Wrap Tying</u> in Baler Application Service Section.
	VELCRO® damaged or missing.	See your John Deere dealer.

Continued on next page

NB02380,0000105 -19-01MAR16-3/4

Troubleshooting

Symptom	Problem	Solution
Metal strip not detected during John Deere B-Wrap™ tying 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 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™ tying 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 Tying in Baler Application Service 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.*

NB02380,0000105 -19-01MAR16-4/4

Twine Tying

Symptom	Problem	Solution
Twine too tight or twine breaks while tying.	Wrong twine routing.	Check for correct routing.
	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.
Twine too loose on bale.	Broken or missing twine tension spring.	Replace spring.
	Wrong tension spring pin.	Replace pin.
	Worn twine tension plates.	Replace worn parts.
Twine spacing not constant.	PTO rpm change during tying.	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 in Preparing the Baler section. Check twine knife adjustment. See Adjust Twine Cutter in Service section.
	Twine from end of twine arms too long.	Check twine knife adjustment. See Adjust Twine Cutter in Service section. Remove twine knife and reinstall it in reversed position, or replace twine knife. See Replace Twine Knife in Service section.
	Twine tension too high.	See Twine too tight or twine breaks while tying above.
	Twine tension too high at the beginning of tying cycle.	Calibrate twine actuator. See Calibrate Twine Tying Actuator MB421 in Baler Application Service section.
	Twine quality.	Replace twine. See Select Twine in Preparing the Baler section.
	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 tying actuator not calibrated.

Continued on next page

DC82261,000054F -19-29OCT14-1/2

Troubleshooting

Symptom	Problem	Solution
	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 Cutter in Service section.
	Dull twine knife.	Remove twine knife and reinstall it in reversed position, or replace twine knife. See Replace Twine Knife in Service section.
	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.
Twine arm goes through cycle prematurely and ties small bale.	Bale diameter adjusted for small bale diameter.	Readjust to desired bale diameter from the monitor. See Operating Baler Application section.
Twine tying 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.
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 tying actuator.	Repair or replace as necessary.
	Defective control unit.	Replace as necessary.
Noise at the beginning of tying cycle.	Tying arms out of adjustment causing contact with bale chamber rolls.	Adjust twine tying arms. See Adjust Twine Tying Arms in Service section.

DC82261,000054F -19-29OCT14-2/2

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 Chain Oiling System 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 Chain Oiling System in Lubrication and Maintenance section.
	Machine dry.	Pump not correctly driven.
Faulty pump.		Repair, adjust or replace.
Main line interrupted.		Repair or replace.
No oil in system.		Refill as necessary with specified oil. See Lubricating 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.

DC82261,0000661 -19-19OCT15-1/1

Automatic Greasing System (If Equipped)

all the other grease nipples. Pressure rises and grease emerges from the relief valve.

NOTE: If blockage occurs at a grease nipple or in a grease line, the supply of grease is stopped for

Symptom	Problem	Solution
Machine not greased (grease emerges from relief valve).	Blockage at grease nipple or in grease line.	One at a time, open each of the lines between the primary and secondary distributors. 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 kPa; 400 bar; 5800 psi) at the relevant secondary distributor.
Machine not greased (no grease emerges from relief valve).	Automatic greasing system is disabled.	Enable pump with monitor. See Set Automatic Greasing System in Baler Application Service section.
	Grease reservoir empty.	Refill reservoir. See Lubrication and Maintenance section.
	The pump does not work.	Check wires and connectors. Check pump. See your John Deere dealer.
Nipple not greased (no grease emerges from relief valve).	Leak occurs in a greasing line.	Replace damaged greasing line. See your John Deere dealer.

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Baler Application Display

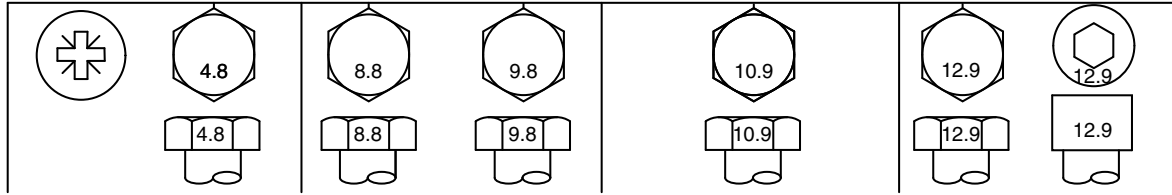
Symptom	Problem	Solution
Bale shape indicators are not displayed while bale formation.	Faulty calibration of bale shape potentiometers.	Reset and calibrate bale shape potentiometers. See Calibrate Bale Shape Potentiometers RB321 and RB322 in Baler Application Service section.
Bale shape indicators on 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.
Field bale counter is not incremented of one when a bale is finished.	Task controller enabled.	Disable the task controller, see Adjust Task Controller (If Equipped) in Baler Application Service section.

DC82261.0000407 -19-13FEB14-1/1

Service

Metric Bolt and Screw Torque Values

TS1670 —UN—01MAY03



Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^b		Lubricated ^a		Dry ^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	4.7	42	6	53	8.9	79	11.3	100	13	115	16.5	146	15.5	137	19.5	172
									N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.
M8	11.5	102	14.5	128	22	194	27.5	243	32	23.5	40	29.5	37	27.5	47	35
			N·m	lb.-ft.	N·m	lb.-ft.	N·m	lb.-ft.								
M10	23	204	29	21	43	32	55	40	63	46	80	59	75	55	95	70
	N·m	lb.-ft.														
M12	40	29.5	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	46	80	59	120	88	150	110	175	130	220	165	205	150	260	190
M16	100	74	125	92	190	140	240	175	275	200	350	255	320	235	400	300
M18	135	100	170	125	265	195	330	245	375	275	475	350	440	325	560	410
M20	190	140	245	180	375	275	475	350	530	390	675	500	625	460	790	580
M22	265	195	330	245	510	375	650	480	725	535	920	680	850	625	1080	800
M24	330	245	425	315	650	480	820	600	920	680	1150	850	1080	800	1350	1000
M27	490	360	625	460	950	700	1200	885	1350	1000	1700	1250	1580	1160	2000	1475
M30	660	490	850	625	1290	950	1630	1200	1850	1350	2300	1700	2140	1580	2700	2000
M33	900	665	1150	850	1750	1300	2200	1625	2500	1850	3150	2325	2900	2150	3700	2730
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2770	4750	3500

Torque values listed are for general use only, based on the strength of the bolt or screw. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For stainless steel fasteners or for nuts on U-bolts, see the tightening instructions for the specific application. Tighten plastic insert or crimped steel type lock nuts by turning the nut to the dry torque shown in the chart, unless different instructions are given for the specific application.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class. 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 fastener threads are clean and that you properly start thread engagement. When possible, lubricate plain or zinc plated fasteners other than lock nuts, wheel bolts or wheel nuts, unless different instructions are given for the specific application.

^a“Lubricated” means coated with a lubricant such as engine oil, fasteners with phosphate and oil coatings, or M20 and larger fasteners with JDM F13C, F13F or F13J zinc flake coating.

^b“Dry” means plain or zinc plated without any lubrication, or M6 to M18 fasteners with JDM F13B, F13E or F13H zinc flake coating.

DX_TORQ2 -19-12JAN11-1/1

Prevent Fire at Each Service

Keep foreign material (crop, chaff, twine, net wrap 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.

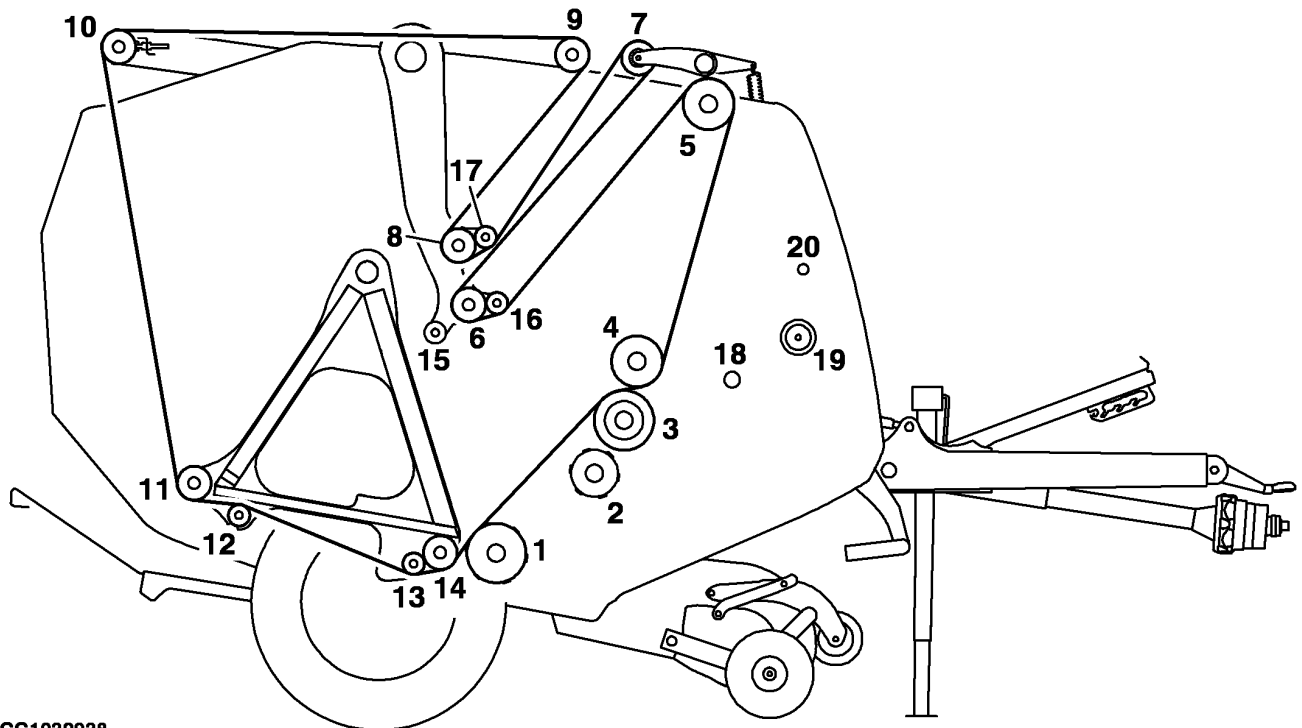
Check bearings regularly for early signs of failure, replace as necessary. Turn off power to baler and check for unusual noises, hot parts, smells of scorching, and discolored paint or metal. Check condition of bearings. (See Daily - Fire Prevention in Lubrication and Maintenance section.)

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 the pressurized water tank or other 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.

CC03745,0001156 -19-06NOV14-1/1

Baler Roll Numbering



CC1032938

960 and 990 Round Balers

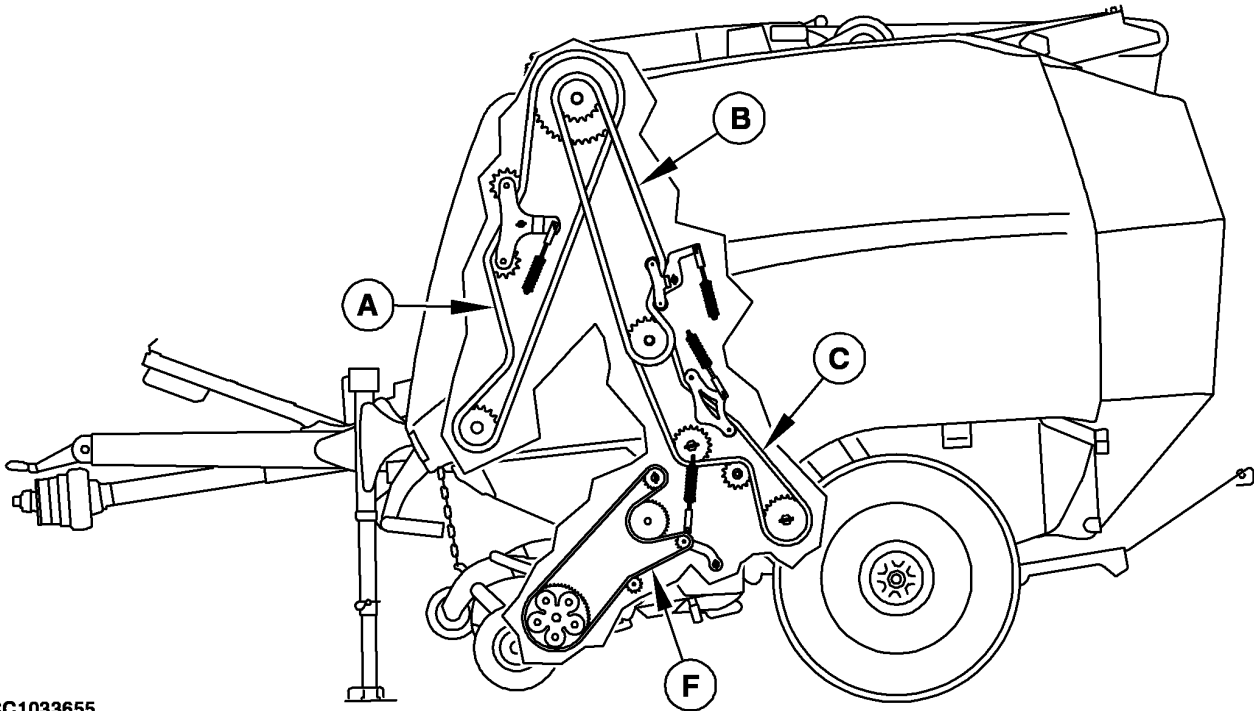
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|---------------------------|----------------------------------|-------------------------------|---------------------------|
| 1— Lower Starter Roll | 7— Take-Up Arm Roll | 13— Cleaning Roll for Roll 14 | 18— Net Distributing Roll |
| 2— Upper Starter Roll | 8— Tension Arm Rear Roll | 14— Front Gate Roll | 19— Rubber Net Feed Roll |
| 3— Bale Chamber Roll | 9— Upper Intermediate Roll | 15— Bale Ejecting Roll | 20— Net Braking Roll |
| 4— Belt Lower Drive Roll | 10— Upper Rear Roll | 16— Cleaning Roll for Roll 6 | |
| 5— Belt Upper Drive Roll | 11— Rear Gate Roll | 17— Cleaning Roll for Roll 8 | |
| 6— Tension Arm Front Roll | 12— Belt Staggering Roll on Gate | | |

NOTE: Numbers shown above must not be used when ordering roll replacement parts. Always refer to relevant parts catalog.

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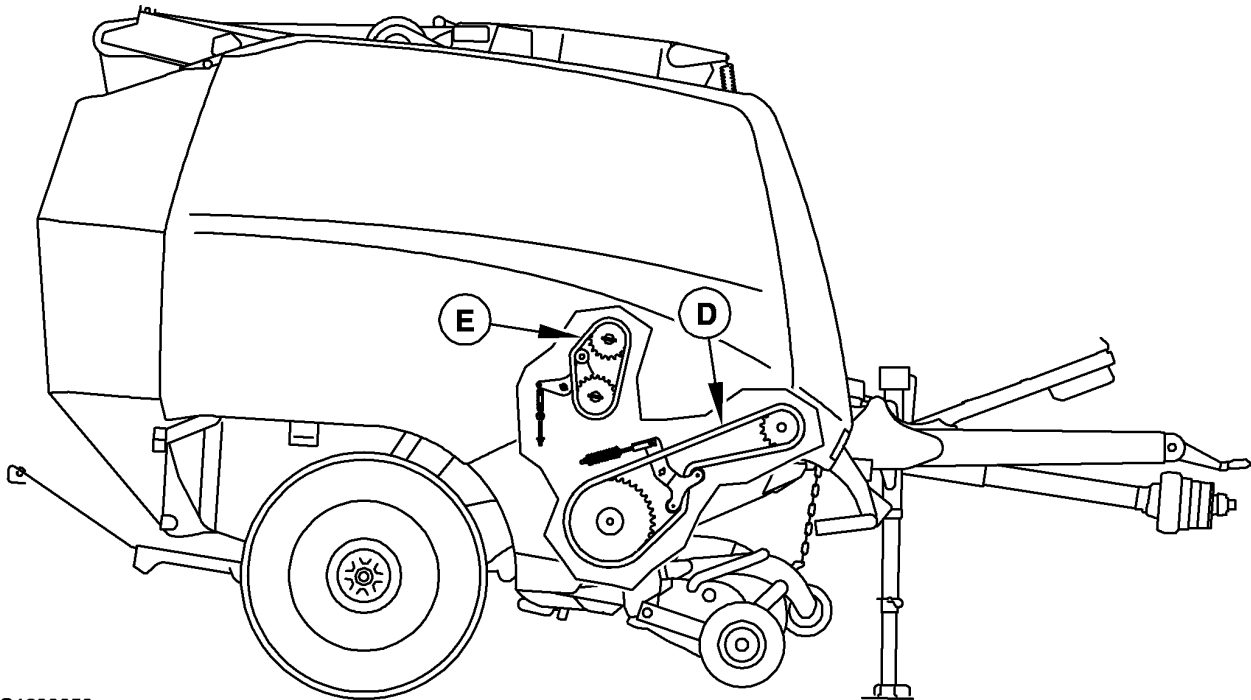
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Baler Chain Identification



CC1033655

CC1033655 —UN—10JAN11



CC1033656

CC1033656 —UN—10JAN11

- | | | |
|-------------------------------|-----------------------------|---------------------------------|
| A—Main Drive Chain | C—Starter Roll Drive Chain | E—Bale Chamber Roll Drive Chain |
| B—Belt Lower Drive Roll Chain | D—Rotary Feeder Drive Chain | F—Pickup Drive Chain |

OUCC006,000181A -19-14SEP11-1/1

Charge Pressurized Water Tank

NOTE: Pressurized water tank is shipped uncharged.
Prior to delivery of machine pressurized water tank must be charged.

When an antifreeze charge is used to freeze protect the pressurized water tank, a complete discharge and maintenance is required.

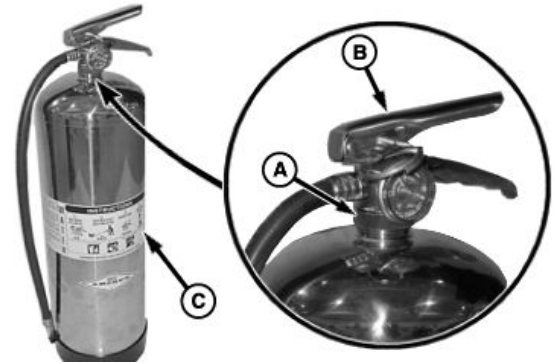
CAUTION: Before attempting to recharge ensure that pressurized water tank is completely depressurized.

1. Discharge all remaining pressure and water (or antifreeze solution) making sure that there is no remaining air pressure.
2. Loosen nut (A) and remove valve assembly (B) from cylinder (C).

IMPORTANT: Pressurized water tank must not be exposed to freezing temperatures unless protected with antifreeze.

NOTE: Corrosion inhibitor must be used, if water includes high levels of chlorides (40 ppm).

3. Fill cylinder with 9.5 L (2.5 gal.) of clean water or antifreeze solution.



A—Nut
B—Valve Assembly

C—Cylinder

NOTE: Fluid level will be approximately 15 cm (6 in.) below the top of the cylinder.

4. Check that the seal is not damaged, if necessary replace the seal.
5. Place the seal in nut (A) of the valve assembly (B).

Continued on next page

DC82261,00004DE -19-20AUG14-1/3

H92727 —UN—10SEP08

CAUTION: Hand tighten nut to specification. Over tightening with wrench will damage valve.

6. Install valve assembly (A) and tighten nut (B) to specification.

	Specification	
Nut—Torque.....		11.3—11.9 N·m (100—105 lb-in)

7. Remove cap from pressurizing valve (C).

NOTE: Set pressure regulator on air compressor to no more than 175 kPa (1.75 bar, 25 psi) higher than gauge operating pressure.

CAUTION: Never leave pressurized water tank connected to a regulator of a high-pressure source for an extended period of time. Do not over pressurize the pressurized water tank. Pressurized water tank may rupture if over pressurized.

8. Pressurize the pressurized water tank to specification using air or nitrogen.

	Specification	
Pressurized Water Tank—Pressure.....		690 kPa 6.9 bar (100 psi)



A—Valve Assembly
B—Nut
C—Pressurizing Valve

NOTE: Check nut, gauge, pressurizing valve, cylinder welds, and valve orifice for leaks using leak detection fluid or a solution of soapy water.

9. Install previously removed cap on pressurizing valve.

DC82261,00004DE -19-20AUG14-2/3

H92728—UN—08SEP08

10. Install pin (A) with ring facing towards front of pressurized water tank and install tamper seal.
11. Install hose and nozzle assembly (B) in holder (C).
12. Install pressurized water tank on machine.

A—Pin
B—Hose and Nozzle Assembly
C—Holder



DC82261,00004DE -19-20AUG14-3/3

H92729—UN—08SEP08

Adjust Pickup Drive Chain

1. Close gate and engage PTO for a few seconds to ensure that all slack is removed from chain. Shut off tractor engine.

2. Check that spring length (D) is within specification:

Specification

Pickup Drive
Chain—Spring Length..... 128—130 mm
(5.04—5.12 in.)

3. If spring length (D) is within specification, pickup drive chain (A) tension is correct and no adjustment is required. If not, adjust spring length (D) as follows.

4. Adjust position of nut (C) to obtain specified spring length (D):

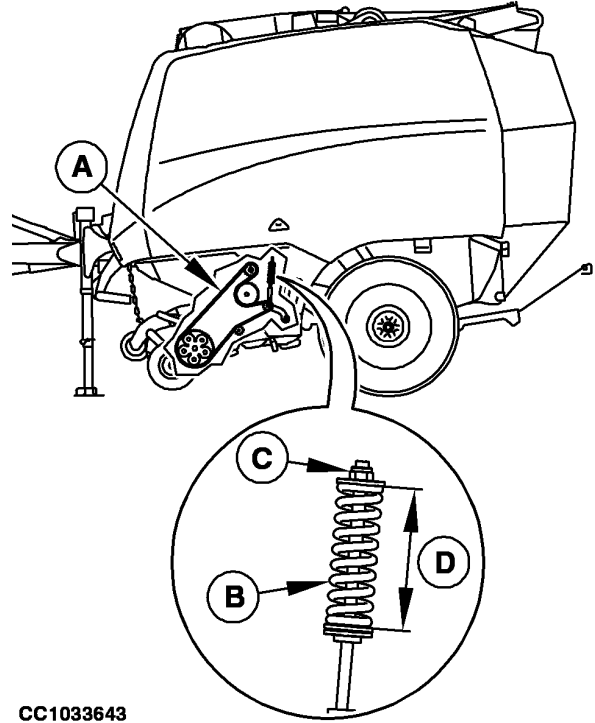
Specification

Pickup Drive
Chain—Spring Length..... 128 mm
(5.04 in.)

5. Engage PTO for a few seconds and check adjustment described in step 4. Repeat adjustment if necessary.

A—Pickup Drive Chain
B—Spring

C—Nut
D—Spring Length



CC1033643

OUC006,00019BC -19-15NOV12-1/1

CC1033643 —UN—17DEC10

Adjust Main Drive Chain

1. Close gate and engage PTO for a few seconds to ensure that all slack is removed from chain. Shut off tractor engine.

2. Check that spring length (D) is within specification:

Specification

Main Drive
Chain—Spring Length..... 124—130 mm
(4.88—5.12 in.)

3. If spring length (D) is within specification, main drive chain (A) tension is correct and no adjustment is required. If not, adjust spring length (D) as follows.

4. Adjust position of nut (C) to obtain specified spring length (D):

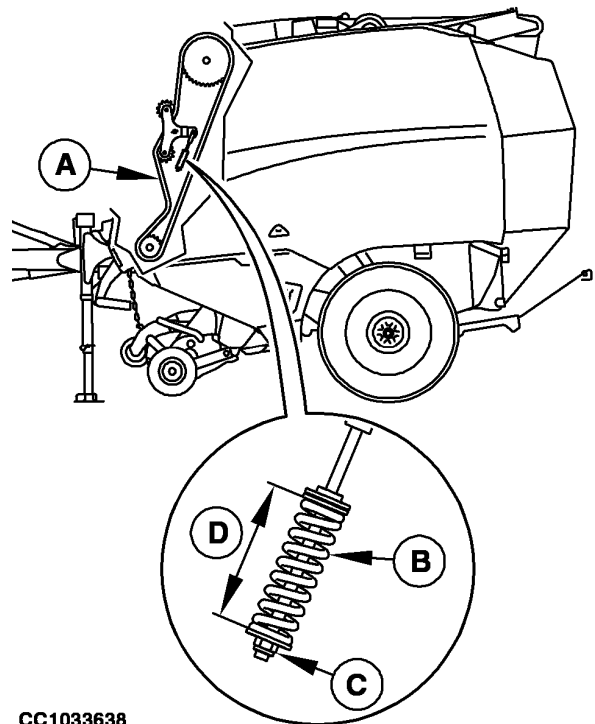
Specification

Main Drive
Chain—Spring Length..... 124 mm
(4.88 in.)

5. Engage PTO for a few seconds and check adjustment described in step 4. Repeat adjustment if necessary.

A—Main Drive Chain
B—Spring

C—Nut
D—Spring Length



CC1033638

OUC006,00019BB -19-15NOV12-1/1

CC1033638 —UN—17DEC10

Adjust Belt Lower Drive Roll Chain

1. Close gate and engage PTO for a few seconds to ensure that all slack is removed from chain. Shut off tractor engine.

2. Check that spring length (D) is within specification:

Specification

Belt Lower Drive Roll	
Chain—Spring Length.....	124—132 mm (4.88—5.2 in.)

3. If spring length (D) is within specification, belt lower drive roll chain (A) tension is correct and no adjustment is required. If not, adjust spring length (D) as follows.

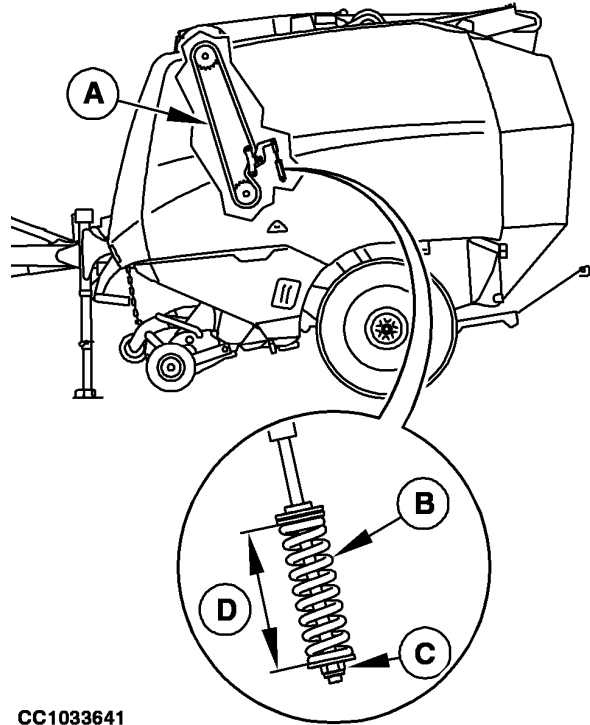
4. Adjust position of nut (C) to obtain specified spring length (D):

Specification

Belt Lower Drive Roll	
Chain—Spring Length.....	124 mm (4.88 in.)

5. Engage PTO for a few seconds and check adjustment described in step 4. Repeat adjustment if necessary.

A—Belt Lower Drive Roll Chain C—Nut
B—Spring D—Spring Length



CC1033641

CC1033641—UN—17DEC10

OUC006.00019BD -19-15NOV12-1/1

Adjust Starter Roll Drive Chain

1. Close gate and engage PTO for a few seconds to ensure that all slack is removed from chain. Shut off tractor engine.

2. Check that spring length (D) is within specification:

Specification

Starter Roll Drive	
Chain—Spring Length.....	126—130 mm (4.96—5.12 in.)

3. If spring length (D) is within specification, starter roll drive chain (A) tension is correct and no adjustment is required. If not, adjust spring length (D) as follows.

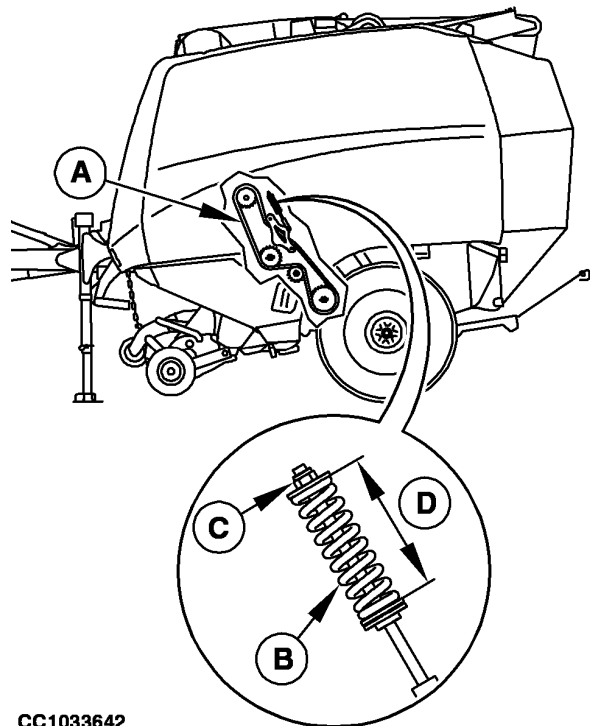
4. Adjust position of nut (C) to obtain specified spring length (D):

Specification

Starter Roll Drive	
Chain—Spring Length.....	126 mm (4.96 in.)

5. Engage PTO for a few seconds and check adjustment described in step 4. Repeat adjustment if necessary.

A—Starter Roll Drive Chain C—Nut
B—Spring D—Spring Length



CC1033642

CC1033642—UN—17DEC10

OUC006.00019BE -19-15NOV12-1/1

Adjust Bale Chamber Roll Drive Chain

1. Close gate and engage PTO for a few seconds to ensure that all slack is removed from chain. Shut off tractor engine.
2. Check that spring length (D) is within specification:

Specification

Bale Chamber Roll Drive	
Chain—Spring Length.....	128—132 mm (5.04—5.2 in.)

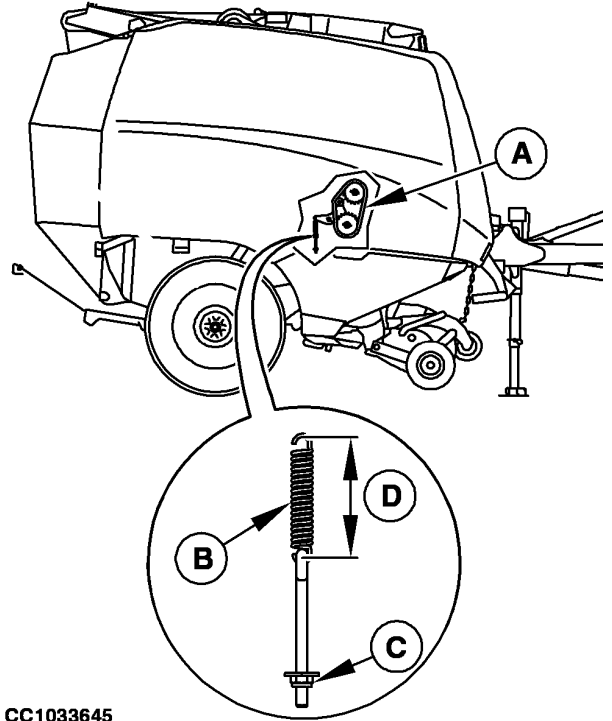
3. If spring length (D) is within specification, bale chamber roll drive chain (A) tension is correct and no adjustment is required. If not, adjust spring length (D) as follows.
4. Adjust position of nut (C) to obtain specified spring length (D):

Specification

Bale Chamber Roll Drive	
Chain—Spring Length.....	132 mm (5.2 in.)

5. Engage PTO for a few seconds and check adjustment described in step 4. Repeat adjustment if necessary.

A—Bale Chamber Roll Drive Chain
B—Spring
C—Nut
D—Spring Length



CC1033645

CC1033645 —UN—17DEC10

OUCC006,00019BF -19-15NOV12-1/1

Adjust Rotary Feeder Drive Chain

1. Close gate and engage PTO for a few seconds to ensure that all slack is removed from chain. Shut off tractor engine.
2. Check that spring length (D) is within specification:

Specification

Rotary Feeder Drive	
Chain—Spring Length.....	115—120 mm (4.53—4.72 in.)

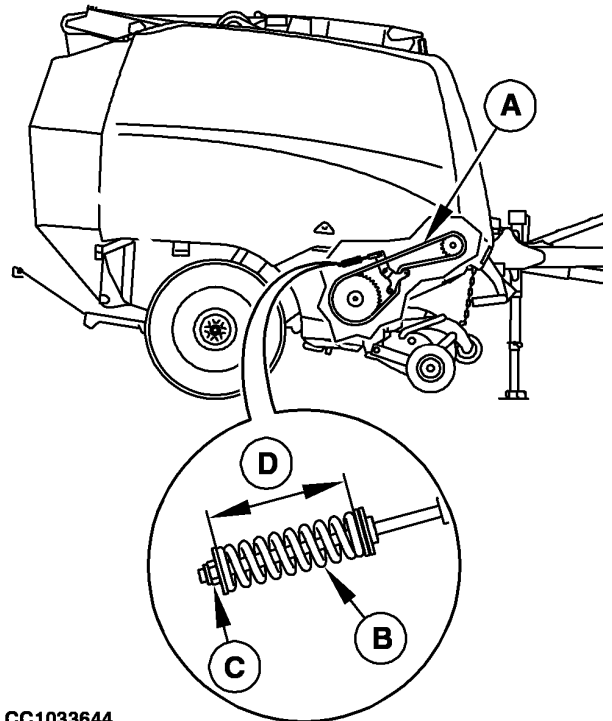
3. If spring length (D) is within specification, rotary feeder drive chain (A) tension is correct and no adjustment is required. If not, adjust spring length (D) as follows.
4. Adjust position of nut (C) to obtain specified spring length (D):

Specification

Rotary Feeder Drive	
Chain—Spring Length.....	115 mm (4.53 in.)

5. Engage PTO for a few seconds and check adjustment described in step 4. Repeat adjustment if necessary.

A—Rotary Feeder Drive Chain
B—Spring
C—Nut
D—Spring Length



CC1033644

CC1033644 —UN—17DEC10

OUCC006,00019C0 -19-15NOV12-1/1

Replace Precutter Knives

⚠ CAUTION: DO NOT TAKE CHANCES. To avoid injury or death by being cut by a knife, always close shut-off valves (A) and (B) before removing or replacing knives.

Always wear gloves to handle knives.

NOTE: Each knife (E) can be separately removed and replaced.

To remove and replace a knife, proceed as follows:

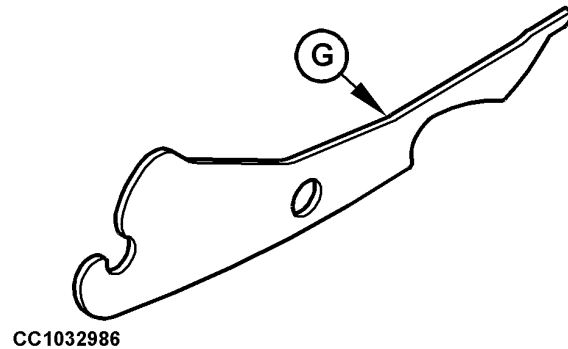
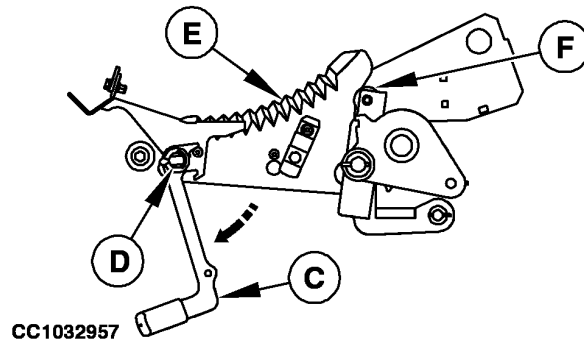
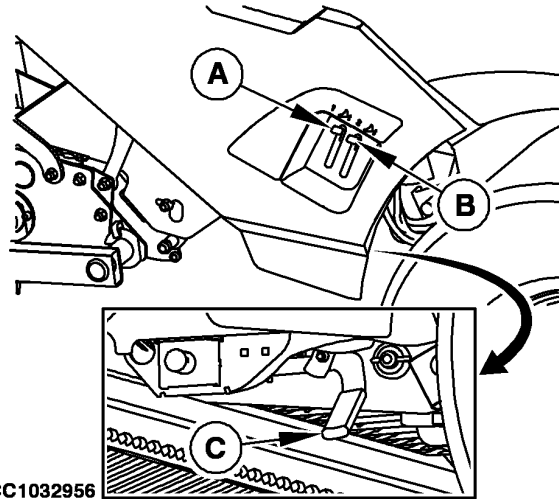
1. Retract knives. See Retract or Engage Precutter Knives in Operating Baler Application section.
2. Lower the drop floor. See Unplug Pickup in Operating Baler Application section.
3. Close knife shut-off valves (A) and (B).
4. Fully open the gate and secure it.
5. Pull the lever (C) out of its locking pin and lower it.
6. Pull on knife (E) to remove it from guide (F) and bar (D).
7. To install a knife, simply insert knife (E) first on the bar (D), then place it in guide (F).

IMPORTANT: When a knife is no longer required, it is recommended to install the knife slot filler (G) instead. This will avoid crop accumulation at the hole provided by the missing knife.

8. Raise and secure lever (C) in its locking pin.
9. Lower the gate.
10. Open knife shut-off valves (A) and (B) and raise drop floor.

A—Knife Shut-Off Valve
B—Knife Shut-Off Valve
C—Lever
D—Bar

E—Knife
F—Guide
G—Knife Slot Filler



OUCC849.0000167 -19-07DEC10-1/1

CC1032956 —UN—14SEP10

CC1032957 —UN—18NOV10

CC1032986 —UN—30JUN10

Sharpen Precutter Knives

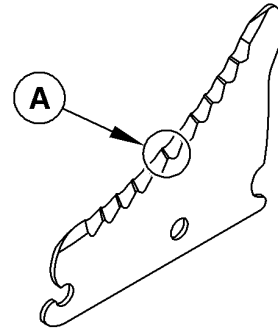
CAUTION: Prevent personal injury by wearing gloves to handle knives.

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

OUC006,00016AD -19-23JUL10-1/1

CC1029106—UN—08JAN07

Adjust Tension Arm Spring

If spring has been replaced or screws have been removed, adjust spring as follows:

960 Baler:

1. If required, remove net roll and/or twine ball compartment to provide access.
2. Unlock nut (E).
3. Loosen screw (F) in order to release tension of arm spring.
4. Unlock nut (B).
5. Tighten or loosen spring (C) until specified distance (A) is obtained:

Specification

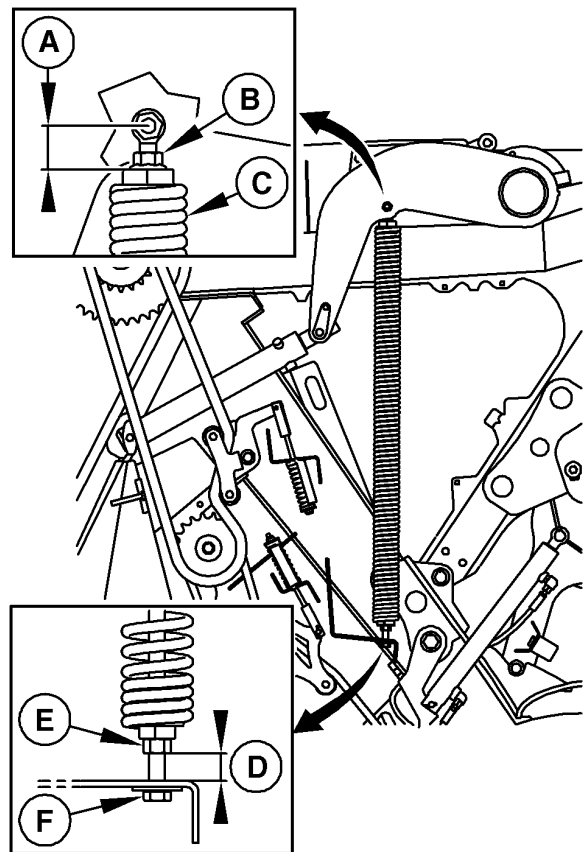
Top of Tension Arm Spring (A) (960 Baler)—Distance.....	42—45 mm (1.65—1.77 in.)
---	-----------------------------

6. Lock nut (B).
7. Tighten screw (F) until specified distance (D) is obtained:

Specification

Bottom of Tension Arm Spring (D) (960 Baler)—Distance.....	5—8 mm (0.20—0.32 in.)
--	---------------------------

8. Lock nut (E).
9. Reinstall net roll and/or twine ball compartment, if removed.
10. Repeat procedure on opposite side.



CC1038675

960 Baler

A—Distance
B—Nut
C—Spring

D—Distance
E—Nut
F—Screw

Continued on next page

OUC006,000199F -19-31OCT12-1/2

CC1038675—UN—05NOV12

990 Baler:

1. If required, remove net roll and/or twine ball compartment to provide access.
2. Unlock nuts (B).
3. Adjust screw (C) until specified distance (A) is obtained:

Specification

Front Tension Arm Spring (A) (990 Baler)—Distance.....	4—7 mm (0.16—0.28 in.)
--	---------------------------

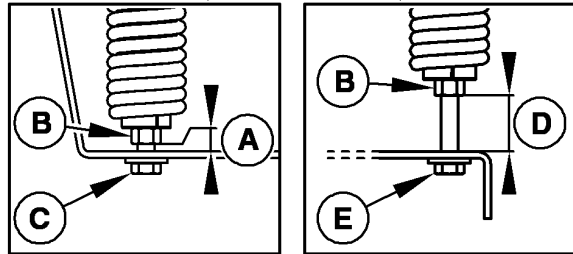
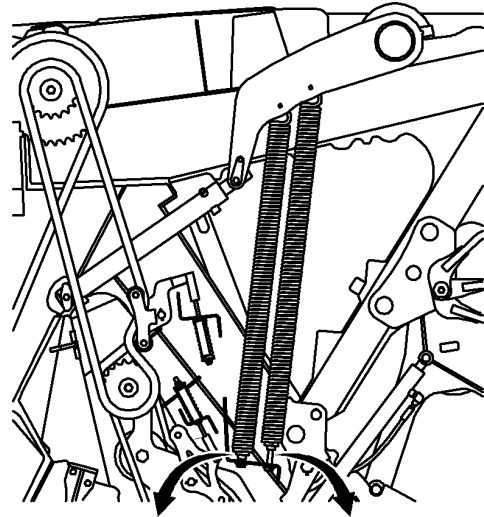
4. Adjust screw (E) until specified distance (D) is obtained:

Specification

Rear Tension Arm Spring (D) (990 Baler)—Distance.....	49—52 mm (1.93—2.05 in.)
---	-----------------------------

5. Lock nuts (B).
6. Reinstall net roll and/or twine ball compartment, if removed.
7. Repeat procedure on opposite side.

A —Distance	D —Distance
B —Nut	E —Screw
C —Screw	



CC1034485

990 Baler

CC1034485—UN—15SEP11

OUC006,000199F -19-31OCT12-2/2

Adjust Take-Up Arm Spring

If spring has been replaced or screws have been removed, adjust spring as follows:

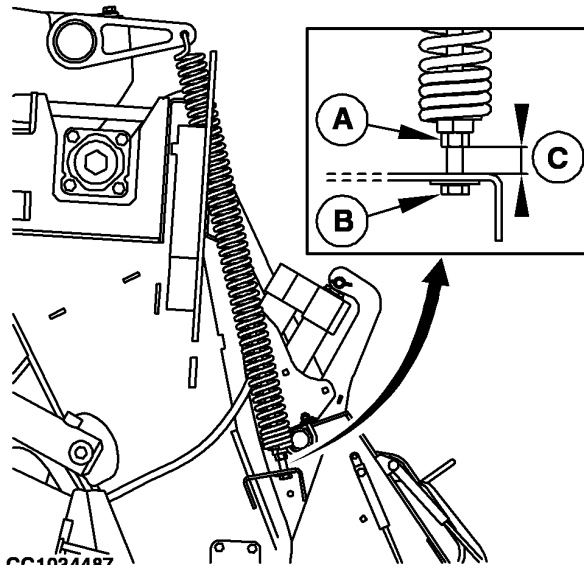
1. Unlock nut (A).
2. Adjust screw (B) until specified distance (C) is obtained:

Specification

Take-Up Arm Spring (960 Baler)—Distance.....	15—21 mm (0.6—0.8 in.)
Take-Up Arm Spring (990 Baler)—Distance.....	188—194 mm (7.4—7.6 in.)

3. Lock nut (A).

A —Lock Nut	C —Distance
B —Screw	



CC1034487

CC1034487—UN—15SEP11

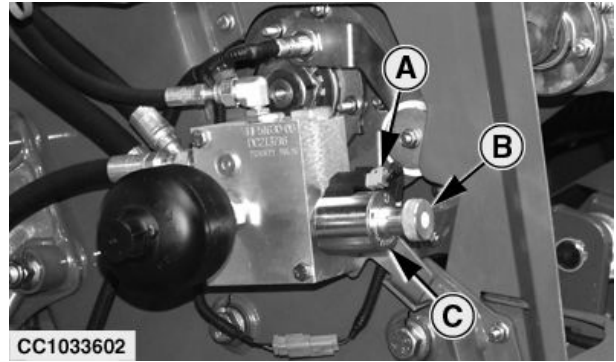
OUC006,000198F -19-22OCT12-1/1

Activate Density Pressure Emergency Control

In case of failure of the electrical system, this procedure allows applying hydraulic pressure in the density circuit.

IMPORTANT: This procedure does not allow normal functioning of the baler. Maximum density pressure can not be reached when using this procedure. See your John Deere dealer to replace defective parts as soon as possible.

1. Disconnect connector (A).
2. Remove adjusting screw (B).
3. Remove solenoid (C).



A—Connector
B—Adjusting Screw

C—Solenoid

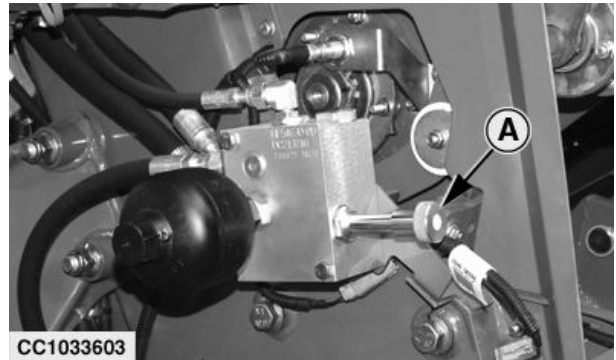
OUCC006,00019B5 -19-12NOV12-1/2

CC1033602—UN—23NOV10

IMPORTANT: Never use a tool to tighten adjusting screw (A).

4. Tighten adjusting screw (A) by hand.

A—Adjusting Screw



OUCC006,00019B5 -19-12NOV12-2/2

CC1033603—UN—23NOV10

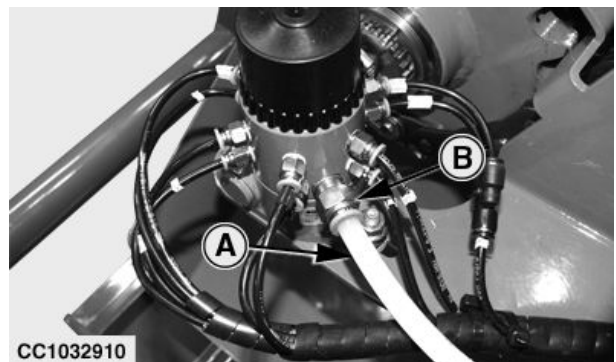
Bleed Chain Oiling System Pump

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



OUCC849,0000133 -19-09NOV10-1/1

CC1032910—UN—14SEP10

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).

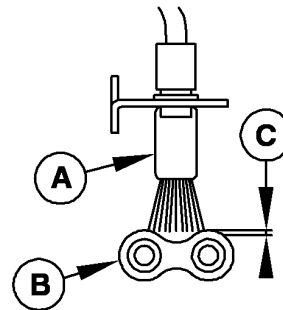
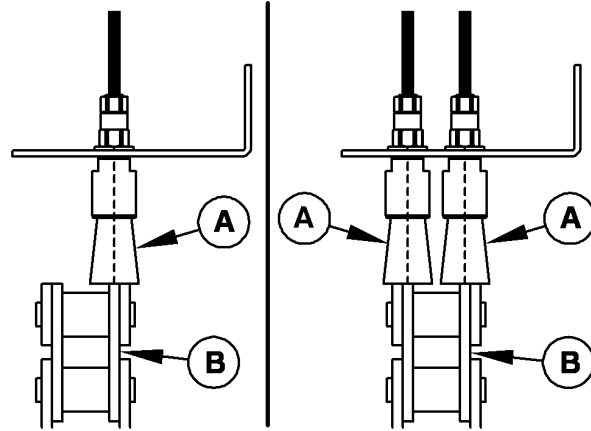
Specification

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

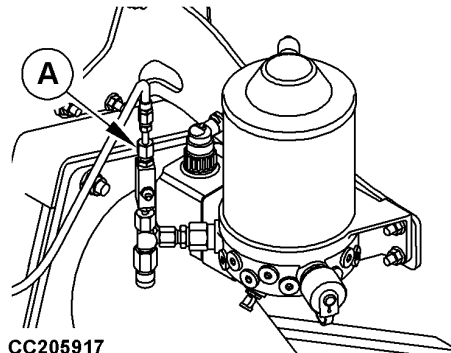
OUCC006,000181D -19-11OCT11-1/1

CC1035277 —UN—23SEP11

Bleed Automatic Greasing System (If Equipped with Reservoir-Type Pump)

NOTE: If the grease reservoir has completely run dry, bleed the system as follows.

- Remove main line (A) from pump outlet.
- Initiate an automatic greasing cycle with monitor until grease without bubbles appears at the pump outlet. See Set Automatic Greasing System (If Equipped) in Baler Application Service section, to manually activate automatic greasing system.
- Reconnect main line (A).
- Initiate an automatic greasing cycle of 3 minutes.



CC205917

A—Main Line

DC82261,0000425 -19-03FEB14-1/1

CC205917 —UN—25OCT13

Adjust Belt Tracking

IMPORTANT: Belt tracking is factory adjusted following a specific and individual procedure. Do not adjust belt tracking without confirming that belt tracking is incorrect.

Check belt tracking:

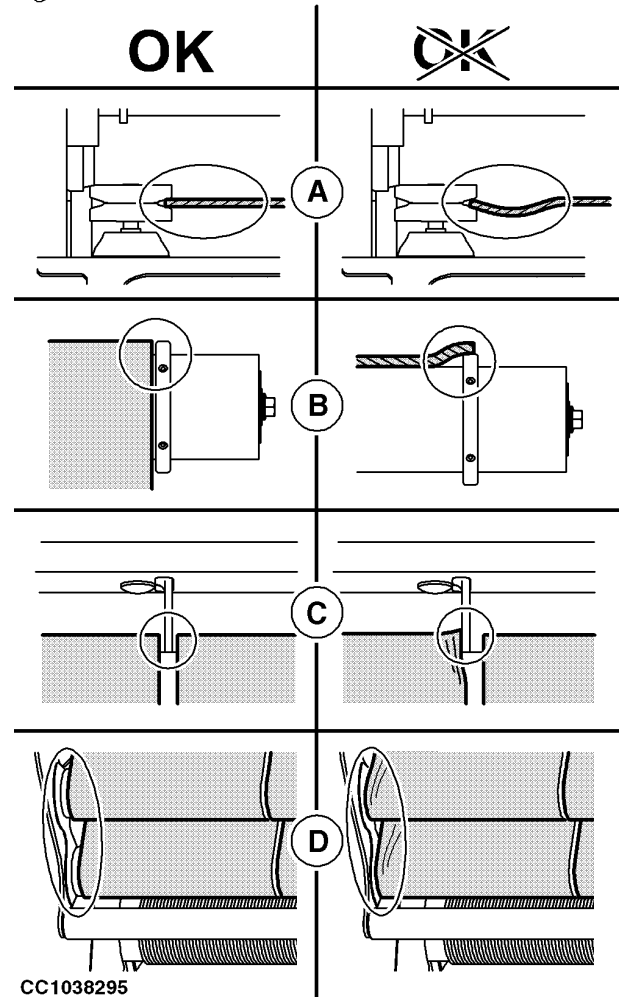
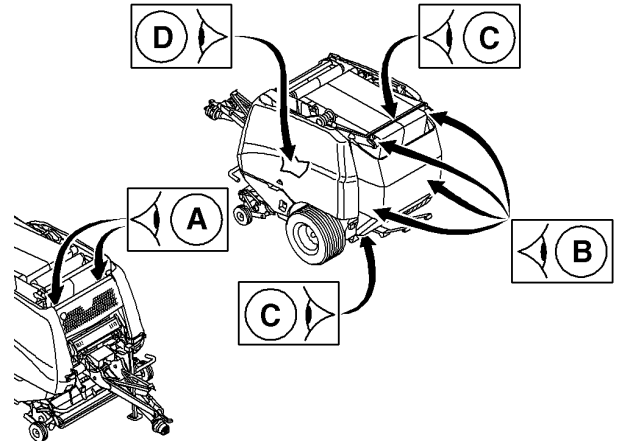
NOTE: To check belt tracking, baler must be attached to tractor on a level surface (baler jackstand should not be in contact with the ground), bale chamber empty and gate closed.

1. Engage PTO and run at rated PTO speed during 2 minutes.
2. Shut off tractor engine.
3. Ensure that following conditions are met:
 - a. Belts are not deformed by front pulleys (A).
 - b. Belts do not overlap rings (B) on rolls No. 10 and No. 11.
 - c. Belts are not deformed by lower and upper belt guides (C).
 - d. Belts are not in contact with tension arm plates (D).

If all conditions are met, belt tracking adjustment is correct and no adjustment is required. If one of these conditions is not met, adjust belt tracking using the following procedure.

A—Front Pulley
B—Ring

C—Belt Guide
D—Tension Arm Plate



CC1038295

CC1038295—UN—10OCT12

Continued on next page

OUC006.0001939 - 19-15NOV12-1/6

Adjust belt tracking:

1. On both sides, record distance (D) on roll No. 11 and distance (H) on roll No. 10.

Specification

Ring (B), Roll No. 11, Left
 Side—Distance (D).....
 Ring (B), Roll No. 11,
 Right Side—Distance
 (D).....
 Ring (F), Roll No. 10, Left
 Side—Distance (H).....
 Ring (F), Roll No. 10,
 Right Side—Distance
 (H).....

2. Slightly loosen screws (C) and (G) to position rings (B) and (F) at each end of rolls No. 10 and No. 11.
3. On both sides, slightly loosen screws (L) and (M) on lower and upper belt guides (J) and (K).

NOTE: Lower and upper belt guides (J) and (K) should be free to be self-aligned by the belts when PTO is running.

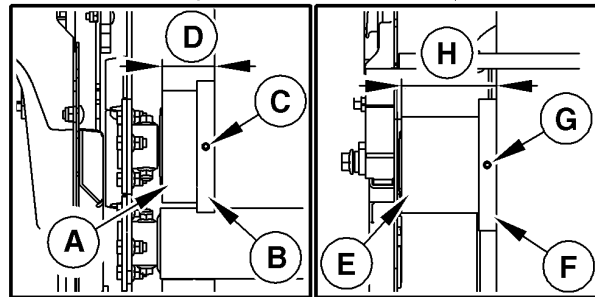
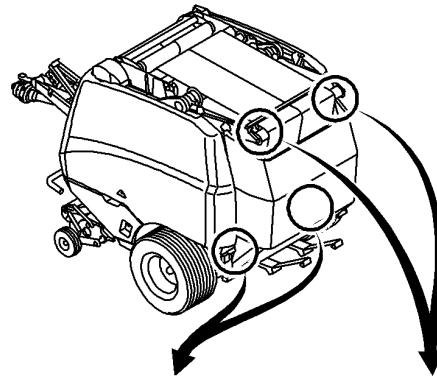
4. Engage PTO and run at rated PTO speed during 2 minutes.
5. Ensure that following conditions are met:

NOTE: Refer to check belt tracking at the beginning of this procedure.

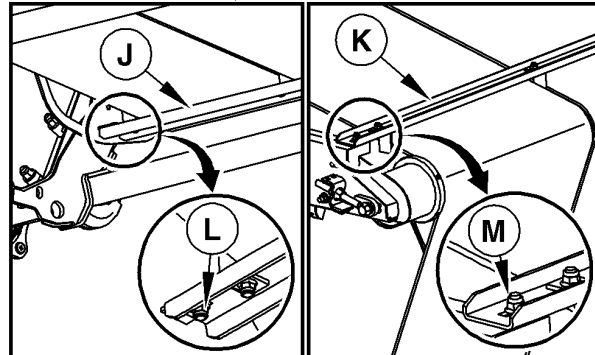
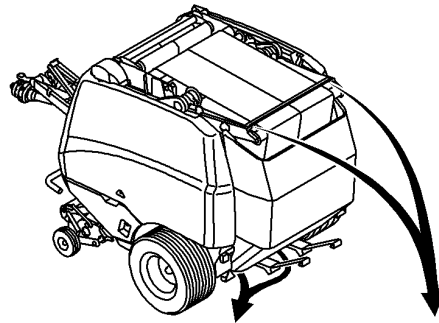
- a. Belts are not deformed by front pulleys.
- b. Belts are not deformed by lower and upper belt guides.
- c. Belts are not in contact with tension arm plates.

If all conditions are met, roll No. 10 is properly adjusted. Go to step 11 to adjust lower and upper belt guides. If one of these conditions is not met, adjust roll No. 10 using the following procedure.

- | | |
|---------------|---------------------------------|
| A—Roll No. 11 | G—Screw |
| B—Ring | H—Distance |
| C—Screw | J—Lower Belt Guide |
| D—Distance | K—Upper Belt Guide |
| E—Roll No. 10 | L—Lower Belt Guide Fixing Screw |
| F—Ring | M—Upper Belt Guide Fixing Screw |



CC1038296



CC1038495

CC1038296—UN—07SEP12

CC1038495—UN—10OCT12

Continued on next page

OUCC006,0001939 -19-15NOV12-2/6

6. Record distance (A) and (F).

Specification

Roll No. 10, Eye Bolt (C),
 Right Side—Distance
 (A).....
 Roll No. 10, Eye Bolt (J),
 Left Side—Distance (F).....

7. Loosen cap screws (B) and (K) and adjust roll No. 10:

- If belts track to the right:

NOTE: Before adjustment, calculate and record difference (A) - (F). After adjustment, difference (A) - (F) should be increased.

- On right side, loosen front nut (E).
- Tighten rear nut (D) in order to increase distance (A).
- Tighten front nut (E).
- If necessary, loosen rear nut (H) on left side in order to decrease distance (F).
- Tighten front nut (G).

- If belts track to the left:

NOTE: Before adjustment, calculate and record difference (A) - (F). After adjustment, difference (A) - (F) should be decreased.

- On left side, loosen front nut (G).
- Tighten rear nut (H) in order to increase distance (F).
- Tighten front nut (G).
- If necessary, loosen rear nut (D) on right side in order to decrease distance (A).
- Tighten front nut (E).

8. Tighten cap screws (B) and (K) to specified torque:

Specification

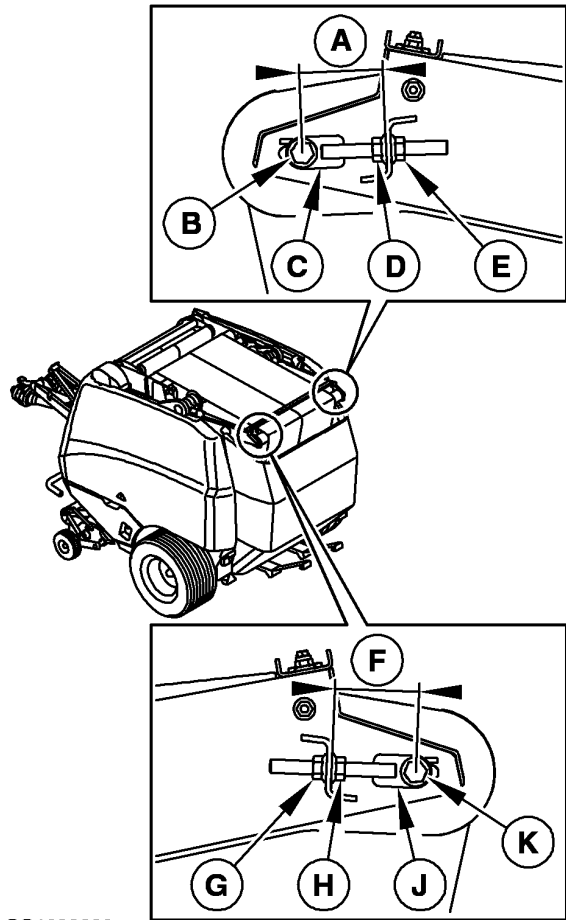
Roll No. 10 Cap
 Screws—Torque.....275 N·m
 (203 lb.-ft.)

9. Engage PTO and run at rated PTO speed during 2 minutes.

10. Ensure that following conditions are met:

NOTE: Refer to check belt tracking at the beginning of this procedure.

- Belts are not deformed by front pulleys.
- Belts are not deformed by lower and upper belt guides.



CC1033630

A—Distance
 B—Cap Screw
 C—Eye Bolt
 D—Rear Nut
 E—Front Nut

F—Distance
 G—Front Nut
 H—Rear Nut
 J—Eye Bolt
 K—Cap Screw

- Belts are not in contact with tension arm plates.

If all conditions are met, roll No. 10 is properly adjusted. Go to next step to adjust lower and upper belt guides. If one of these conditions is not met, reposition rings, belt guides and roll No. 10 adjusting screws according to the value recorded during this procedure. Then contact your John Deere dealer.

Continued on next page

OUC006,0001939 -19-15NOV12-3/6

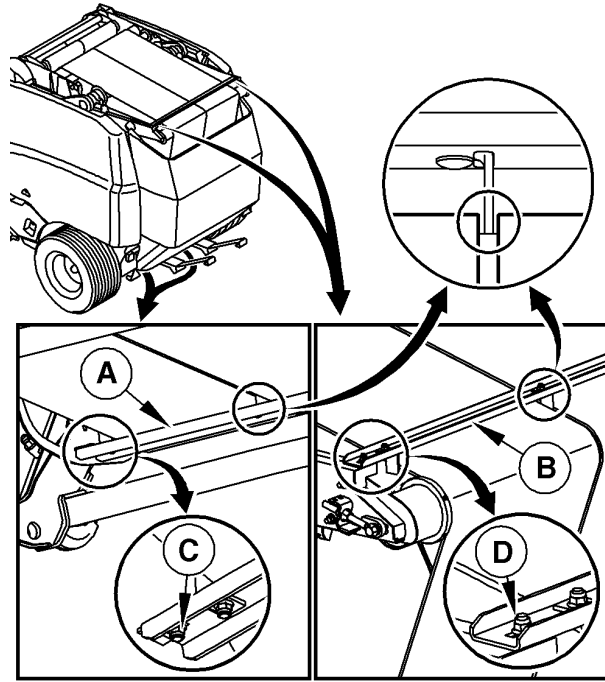
CC1033630 —UN—15DEC10

11. Adjust lower and upper belt guides (A) and (B) in order to align center of each guide with the middle of both belts.

12. Tighten screws (C) and (D) on both sides.

A—Lower Belt Guide
B—Upper Belt Guide

C—Lower Belt Guide Fixing Screw
D—Upper Belt Guide Fixing Screw



CC1038496

CC1038496—UN—11OCT12

OUCC006,0001939 -19-15NOV12-4/6

13. On both sides, adjust rings (B) on roll no. 10 observing the specified distance (D) to upper belt guide (A).

Specification

Ring to Upper Belt Guide—Distance..... 5 mm
(0.2 in.)

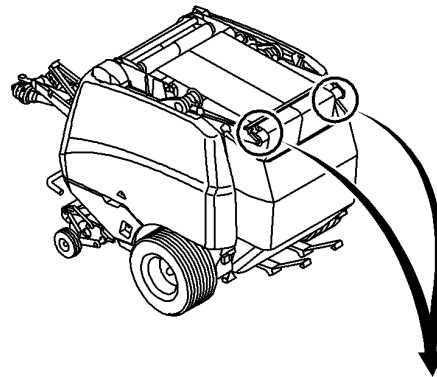
14. Tighten screws (C) to specified torque:

Specification

Ring Screws—Torque..... 15 N·m
(11 lb.-ft.)

A—Upper Belt Guide
B—Ring

C—Screw
D—Distance



CC1038294

CC1038294—UN—11OCT12

Continued on next page

OUCC006,0001939 -19-15NOV12-5/6

15. Measure distance (A) between both rings on roll No. 10.
16. Adjust rings (B) on roll no. 11 applying the previously measured distance (A) taking care that the distance between the rings and the middle of the belts is the same.
17. Tighten screws (C) to specified torque:

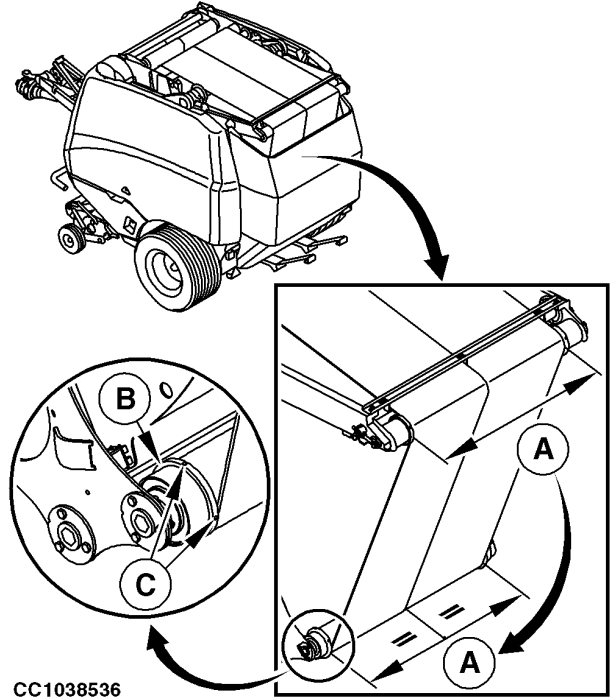
Specification

Ring Screws—Torque.....15 N·m
(11 lb.-ft.)

18. Check belt tracking. Repeat procedure from the beginning.

A—Distance
B—Ring

C—Screw



CC1038536

CC1038536—UN—11OCT12

OUCC006,0001939 -19-15NOV12-6/6

Adjust Scraper of Lower Starter Roll (No. 1) (Baler up to S.N. 139999)

1. Fully open the gate.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Lock gate.

CAUTION: Make sure gate is locked. If gate is not locked while performing this procedure, the gate could close suddenly causing injury or death.

4. Loosen nuts (E) from screws (B) and adjust scraper (C) to specified distance (D):

Specification

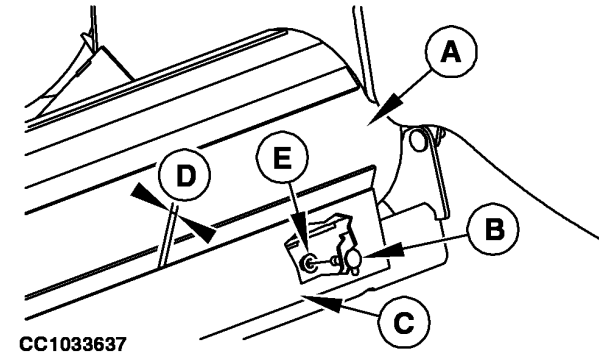
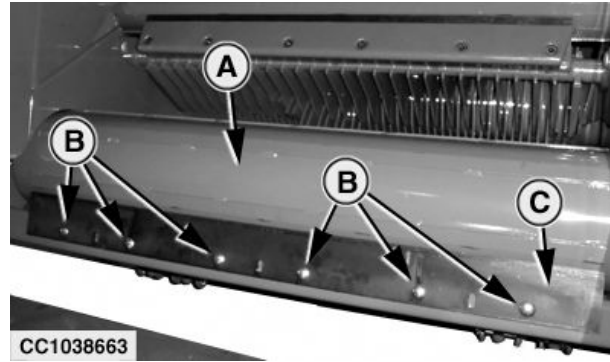
Scraper to Bar on	
Roll—Distance.....	4—5 mm (0.16—0.2 in.)

5. Manually rotate baler to check distance (D) at all bars. See *Rotate Baler by Hand* in *Operating the Baler—General Purposes* section.

6. Tighten nuts (E) to specified torque:

Specification

Lower Starter Roll	
Scraper Fixing	
Nuts—Torque.....	.44 N·m (56 lb.-ft.)



A—Lower Starter Roll
B—Screw
C—Scraper
D—Distance
E—Nut

CC1038663—UN—24OCT12

CC1033637—UN—15DEC10

DC82261,000041D -19-29JAN14-1/1

Adjust Scraper of Lower Starter Roll (No. 1) (Baler from S.N. 140001)

1. Fully open the gate.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Lock gate.

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. Untighten nuts (E) on both sides.
5. Manually rotate baler to select the bar (F) for which distance (D) between the bar and scraper (C) is the smallest.
6. Adjust scraper (C) on selected bar (F) to the following specification:

Specification

Scraper to Bar on
Roll—Distance.....0—1 mm
(0—0.04 in.)

7. Manually rotate baler to check that scraper (C) rubs on whole length of bars. See Rotate Baler by Hand in Operating the Baler—General Purposes section.

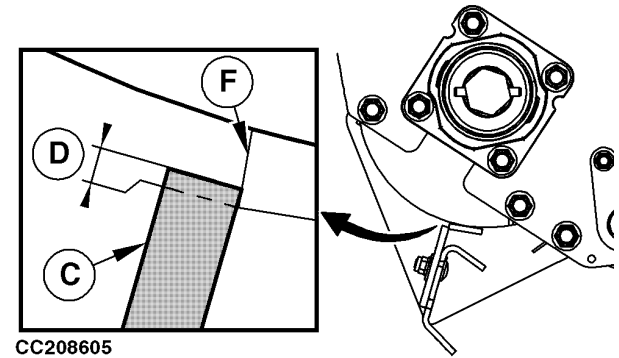
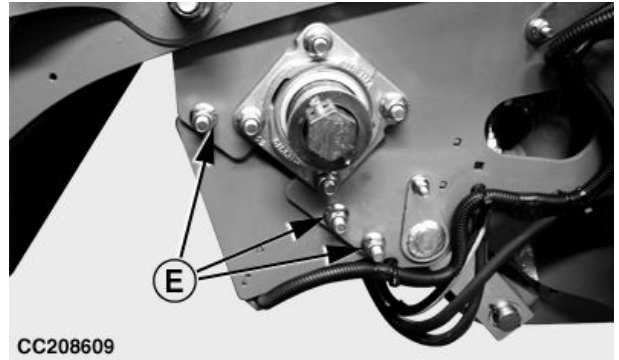
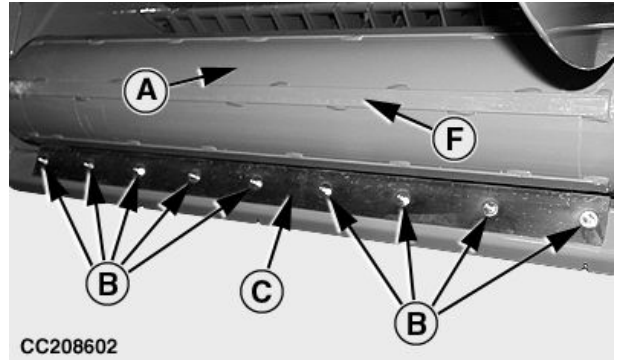
IMPORTANT: Scraper (C) must not rub on lower starter roll (A).

8. On both sides, tighten fixing nuts (E) to specified torque:

Specification

Fixing Nuts—Torque.....76 N·m
(56 lb.-ft.)

- | | |
|----------------------|------------|
| A—Lower Starter Roll | D—Distance |
| B—Screw | E—Nut |
| C—Scraper | F—Bar |



DC82261,000041E -19-12FEB14-1/1

CC208602—UN—14FEB14

CC208609—UN—03FEB14

CC208605—UN—13FEB14

Adjust Upper Starter Roll (No. 2) Scraper

1. Fully open the gate.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Lock gate.

CAUTION: Make sure gate is locked. If gate is not locked while performing this procedure, the gate could close suddenly causing injury or death.

4. Remove screws (G) and bar (F).
5. Loosen screws (E).
6. Adjust scraper (B) as close as possible to roll (A), leaving enough space (H) to avoid any contact with roll.
7. Manually rotate baler to check space (H) at all bars. See *Rotate Baler by Hand* in Operating the Baler - General Purposes Section.
8. Tighten fixing screws (E) to specified torque:

Specification

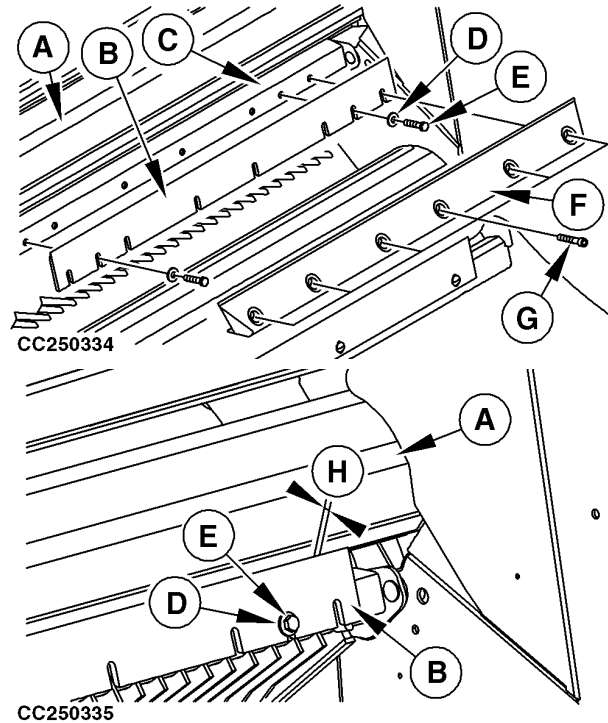
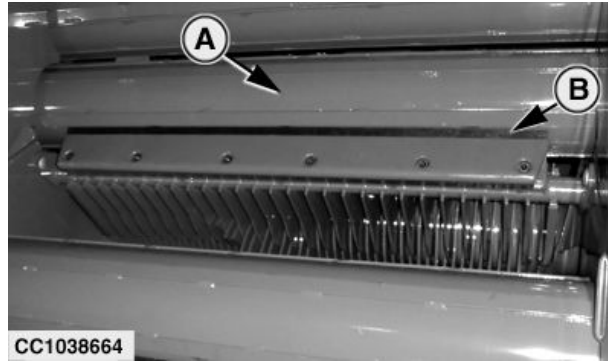
Scraper Fixing	
Screws—Torque.....	111 N·m (82 lb·ft)

9. Install bar (F) and tighten screws (G) to specified torque:

Specification

Bar Fixing	
Screws—Torque.....	130 N·m (98 lb·ft)

- | | |
|----------------------|---------|
| A—Upper Starter Roll | E—Screw |
| B—Scraper | F—Bar |
| C—Stripper | G—Screw |
| D—Belleville Spring | H—Space |



DC82261,0000652 -19-01MAR16-1/1

CC1038664—UN—24OCT12

CC250334—UN—30SEP15

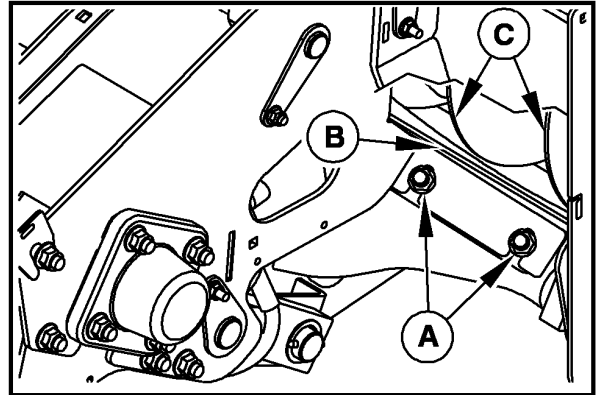
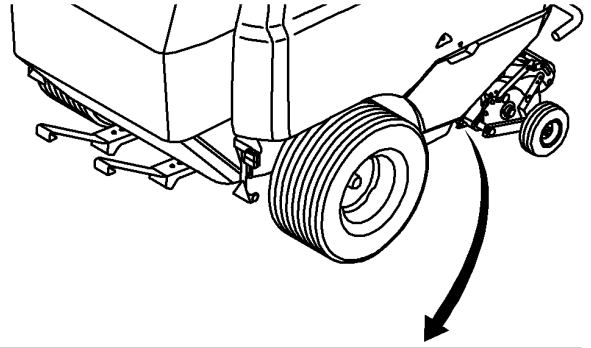
CC250335—UN—30SEP15

Adjust Rotor Auger Scrapers

1. Fully raise drop floor. See Unplug Pickup in Operating Baler Application section.
2. Loosen screws (A).
3. Position and maintain scraper (B) as close as possible to auger (C) avoiding contact.
4. Tighten screws (A).
5. Repeat procedure on the opposite side.

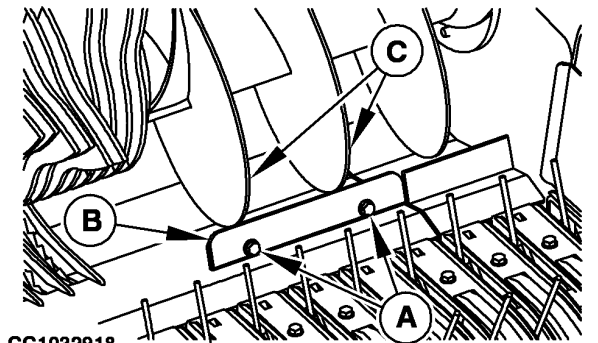
A—Screws
B—Scraper

C—Rotor Auger



CC1032964

Rear Scrapers of Rotor Auger



CC1032918

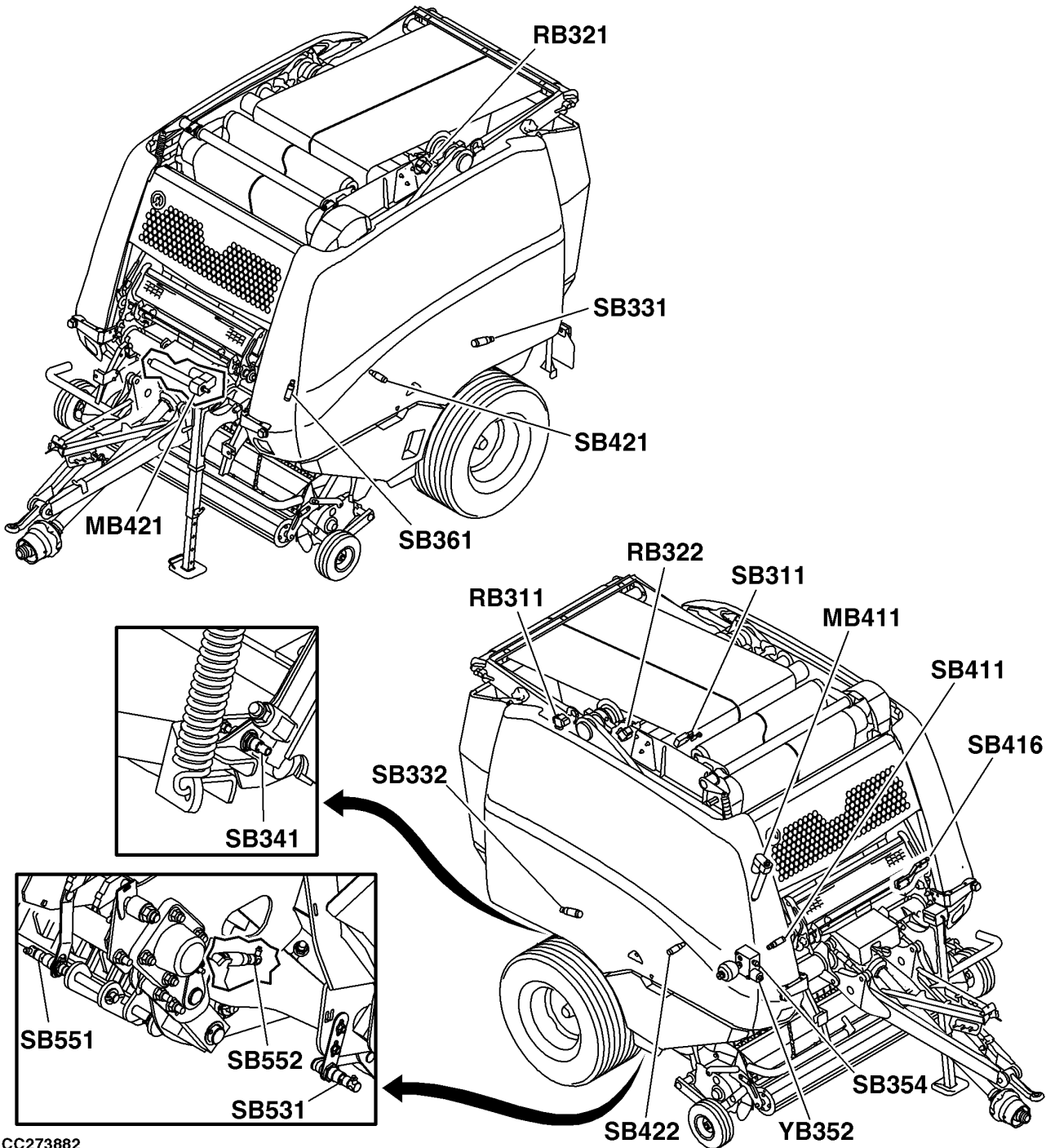
Front Scrapers of Rotor Auger

OUC849,000013B -19-21DEC10-1/1

CC1032964 —UN—15NOV10

CC1032918 —UN—14SEP10

Locate Baler Electrical Components (Baler Up to S.N. 149999)



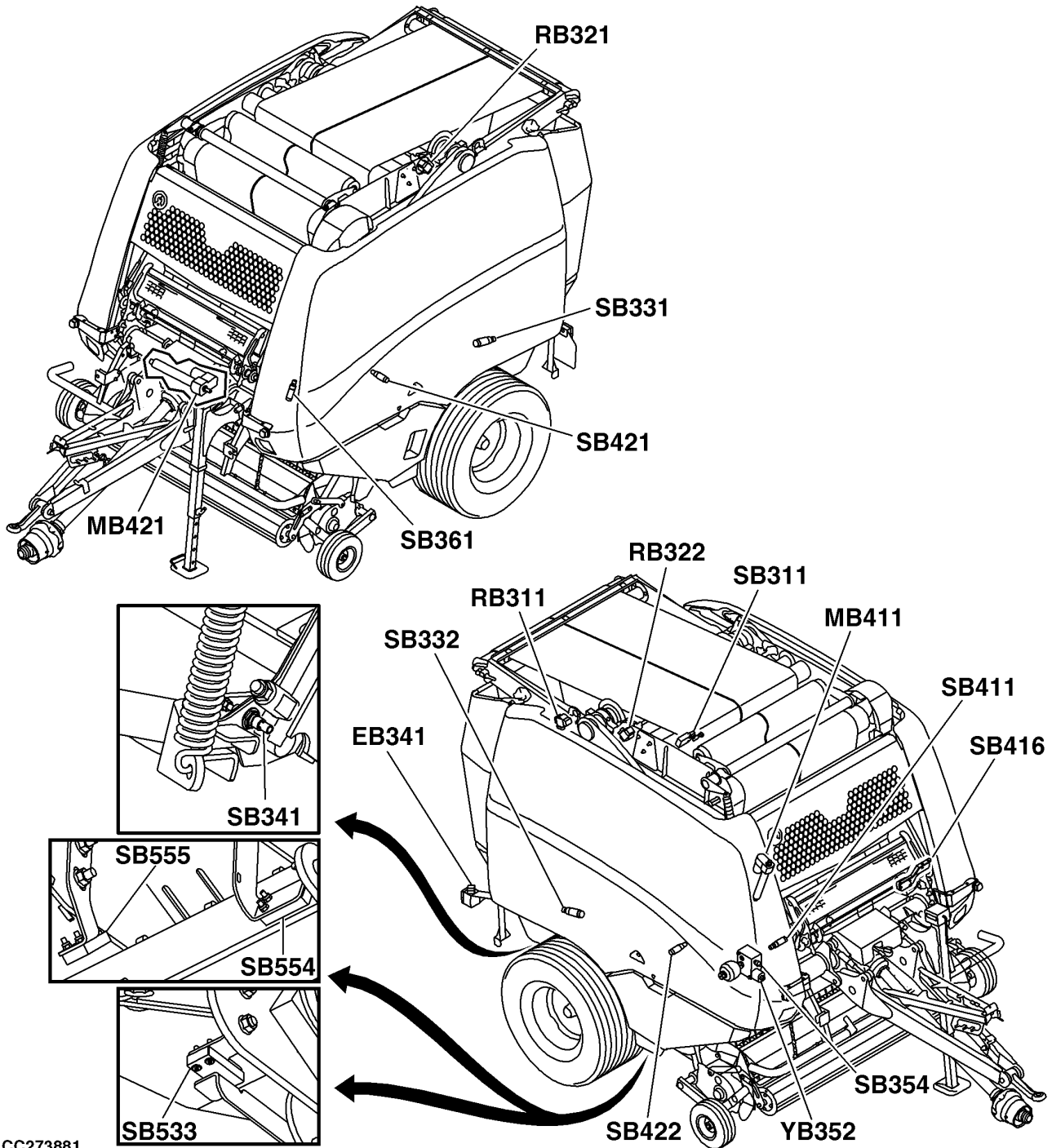
CC273882

CC273882 —UN—19FEB16

- | | | | |
|--------------------------------------|------------------------------------|--|---|
| MB411—Net Actuator | SB331—Left Gate Latch Sensor | SB411—Net Feeding Sensor | SB552—Sensor for Precutter Knife Set 2 |
| MB421—Twine Actuator | SB332—Right Gate Latch Sensor | SB416—B-Wrap Sensor (If Equipped) | YB352—Proportional Density Solenoid Valve |
| RB311—Bale Diameter Potentiometer | SB341—Bale Discharging Ramp Sensor | SB421—Left Twine Pulley Sensor | |
| RB321—Left Bale Shape Potentiometer | SB354—Density Pressure Sensor | SB422—Right Twine Pulley Sensor | |
| RB322—Right Bale Shape Potentiometer | SB361—Baler Rotation Speed Sensor | SB531—Drop Floor Sensor | |
| SB311—Bale Oversize Switch | | SB551—Sensor for Precutter Knife Set 1 | |

NB02380,0000103 -19-19FEB16-1/1

Locate Baler Electrical Components (Baler from S.N. 150001)



CC273881

- | | | | |
|--------------------------------------|------------------------------------|--|---|
| EB341—Video Camera | SB311—Bale Oversize Switch | SB411—Net Feeding Sensor | SB555—Sensor for Precutter Knife Set 2 |
| MB411—Net Actuator | SB331—Left Gate Latch Sensor | SB416—B-Wrap Sensor (If Equipped) | YB352—Proportional Density Solenoid Valve |
| MB421—Twine Actuator | SB332—Right Gate Latch Sensor | SB421—Left Twine Pulley Sensor | |
| RB311—Bale Diameter Potentiometer | SB341—Bale Discharging Ramp Sensor | SB422—Right Twine Pulley Sensor | |
| RB321—Left Bale Shape Potentiometer | SB354—Density Pressure Sensor | SB533—Drop Floor Sensor | |
| RB322—Right Bale Shape Potentiometer | SB361—Baler Rotation Speed Sensor | SB554—Sensor for Precutter Knife Set 1 | |

DC82261.0000654 -19-19FEB16-1/1

CC273881—UN—19FEB16

Identify Sensor Detection Area (Baler from S.N. 150001)

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).

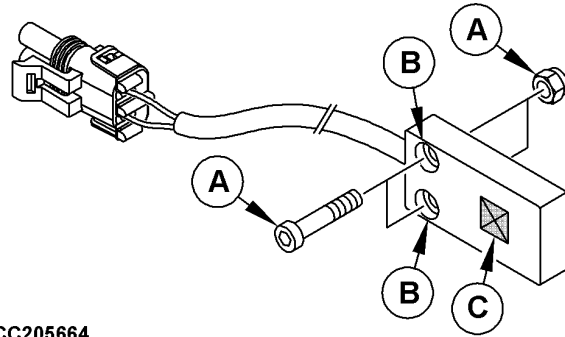
If sensor has been replaced or cap screws (A) have been removed, tighten cap screws (A) to specified torque:

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

DC82261,0000548 -19-16OCT14-1/1

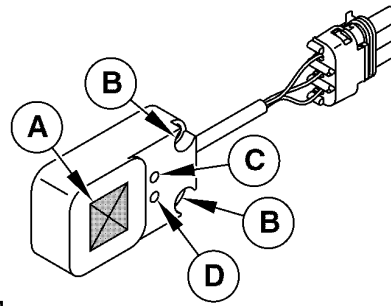
Identify B-Wrap Sensor Detection Area (If Equipped)

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 on the same side as both bores (B). When installed, sensor must be oriented face to rubber net feed roll.

John Deere B-Wrap™ sensor is equipped with a green LED (D) and an orange LED (C). Green LED (D) indicates that sensor is powered and orange LED (C) indicates that sensor detects 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

NB02380,0000104 -19-01MAR16-1/1

Adjust Bale Oversize Switch SB311

NOTE: Bale oversize switch does not require adjustment.

If needed, check switch with monitor. See Test Sensors and Switches in Baler Application Service section.

Bale oversize switch should be closed when switch is in position shown (tension arm in lower position).



CC1033022

CC1033022—UN—26OCT10

OUC006,00016A4 -19-16DEC10-1/1

Adjust Gate Latch Sensors SB331 and SB332

1. Close and latch gate. Gate hydraulic cylinders must be fully retracted.
2. If required, remove net roll and/or twine balls compartment to provide access.
3. Check that gate is correctly latched. If necessary, adjust gate latch. See [Adjust Gate Latch](#) in this section.
4. Loosen lock nuts (A) then slide sensor (B) until specified distance (D) is achieved.

Specification

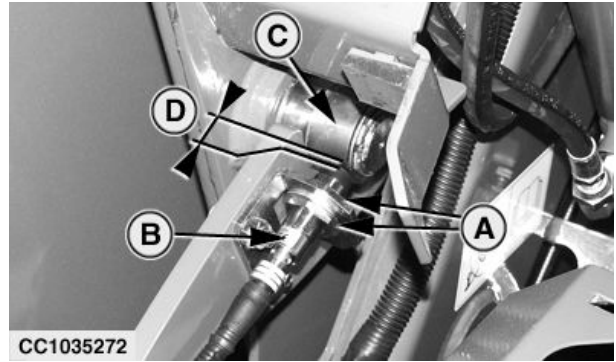
Sensor to
 Bushing—Distance.....3—5 mm
 (0.12—0.2 in.)

5. Check that center line of sensor (B) is aligned with bushing (C).
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.



CC1035272

A—Lock Nuts
 B—Gate Latch Sensor
 C—Gate Latch Bushing
 D—Distance

8. Check sensors detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.
9. Reinstall net roll and/or twine balls compartment, if removed.

DC82261,0000410 -19-28FEB14-1/1

CC1035272—UN—15SEP11

Adjust Bale Discharging Ramp Sensor SB341

1. Open the rear gate and secure it with the safety lock device. Engage tractor park lock, shut off tractor engine and remove key.
2. Adjust bale discharging ramp spring. See [Adjust Bale Discharging Ramp](#) in Preparing the Baler section.
3. Loosen lock nuts (C) and slide sensor (B) until distance (D) is obtained.

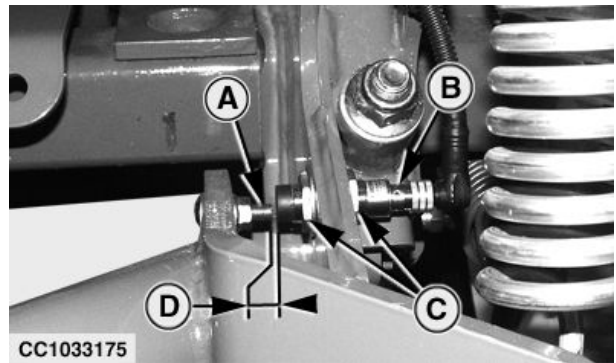
Specification

Sensor to
 Screw—Distance.....3—5 mm
 (0.12—0.2 in.)

4. Check that center line of sensor (B) is aligned with center line of screw (A).
5. Tighten lock nuts (C) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
 (17 lb.-ft.)



CC1033175

A—Screw
 B—Bale Discharging Ramp Sensor
 C—Lock Nuts
 D—Distance

6. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.

DC82261,0000411 -19-28FEB14-1/1

CC1033175—UN—04AUG10

Adjust Baler Rotation Speed Sensor SB361

1. Rotate baler by hand so that gear (A) is in position shown. See [Rotate Baler by Hand](#) in Operating the Baler—General Purposes section.
2. Loosen lock nuts (B) then slide sensor (C) until specified distance (D) is achieved.

Specification

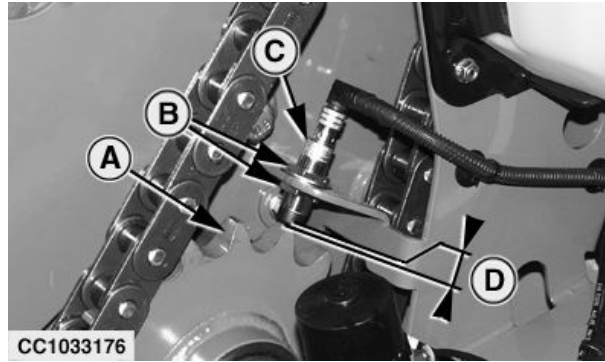
Sensor to
 Gear—Distance.....3—5 mm
 (0.12—0.2 in.)

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).



A—Gear
 B—Lock Nuts

C—Baler Rotation Speed Sensor
 D—Distance

6. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.

DC82261,0000412 -19-28FEB14-1/1

CC1033176—UN—04AUG10

Adjust Net Feed Sensor SB411

1. Slightly extend net actuator with monitor.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Rotate rubber net feed roll by hand so that screw (A) is aligned with sensor (C).
4. Loosen lock nuts (B) then slide sensor (C) until specified distance (D) is achieved.

Specification

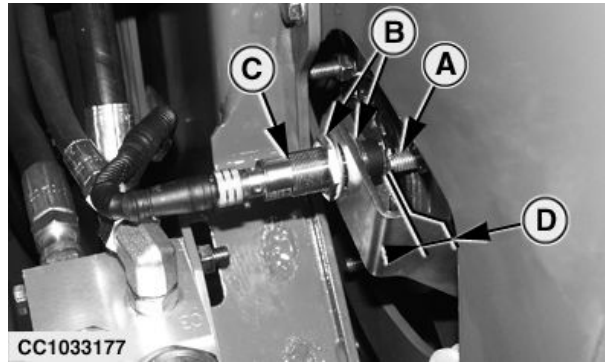
Sensor to
 Screw—Distance.....2—4 mm
 (0.08—0.16 in.)

5. Check that center line of sensor (C) is aligned with center line of screw (A).
6. Tighten lock nuts (B) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
 (17 lb.-ft.)

7. Rotate rubber net feed roll several times to check that there is no interference between sensor (C) and screws (A).



A—Screw
 B—Lock Nuts

C—Net Feed Sensor
 D—Distance

8. Check sensor detection with monitor. See [Test Sensors and Switches](#) in Baler Application Service section.
9. Repeat procedure for each screw (A).
10. Fully retract net actuator.

DC82261,0000413 -19-28FEB14-1/1

CC1033177—UN—04AUG10

Adjust B-Wrap Sensor SB416 (If Equipped)

1. Engage tractor park lock, shut off tractor engine and remove key.
2. Remove screw (C).
3. Place shim (D) between bracket (B) and sensor (A) to obtain specified distance (E):

Specification

Sensor to Rubber Net
 Feed Roll—Distance.....10—14 mm
 (0-13/32—0-35/64 in)

NOTE: Place shim (D) not used between bracket and nut.

4. Tighten screw (C) to the following specification:

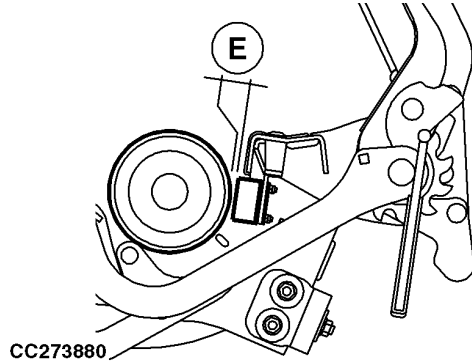
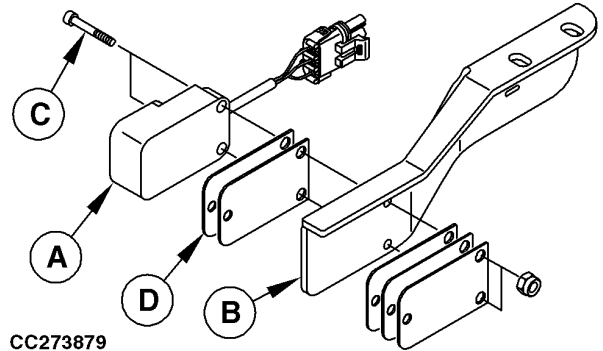
Specification

Screw—Torque.....10 N·m
 (7 lb·ft)

5. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.

NOTE: When not tying, the sensor must not detect target.

- | | |
|-----------|------------|
| A—Sensor | D—Shim |
| B—Bracket | E—Distance |
| C—Screw | |



CC273879—UN—19FEB16

CC273880—UN—19FEB16

DC82261,000066B -19-22FEB16-1/1

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
(1.57 — 1.65 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

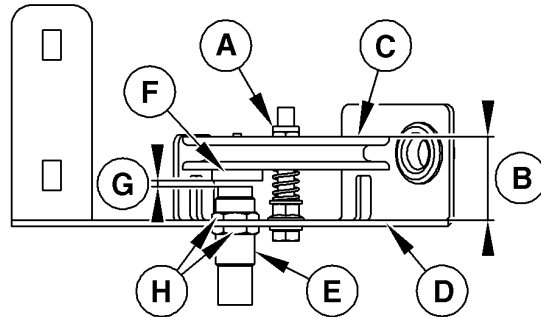
Sensor to
Magnet—Distance (G).....2—4 mm
(0.08—0.16 in.)

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 | E—Sensor |
| B—Distance | F—Magnet |
| C—Twine Pulley | G—Distance |
| D—Bracket | H—Lock Nuts |

7. Repeat procedure on the opposite side.
8. Check sensors detection with monitor. See Test Sensors and Switches in Baler Application Service section.

CC1035274—UN—10FEB12

DC82261_0000414 -19-28FEB14-1/1

Adjust Drop Floor Sensor SB531 (Baler Up to S.N. 149999)

To adjust drop floor sensor (C), proceed as follows:

1. Fully raise drop floor. See Unplug Pickup in Operating Baler Application section.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Loosen nuts (A).
4. Adjust bracket (B) and target (D) to align the center line of sensor (C) and the top of the target (D).
5. Tighten nuts (A).
6. Loosen lock nuts (E) and slide sensor (C) until distance (F) is obtained.

Specification

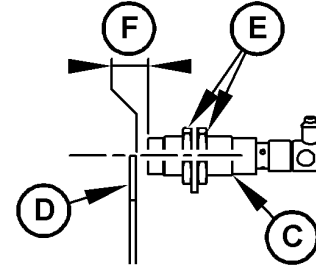
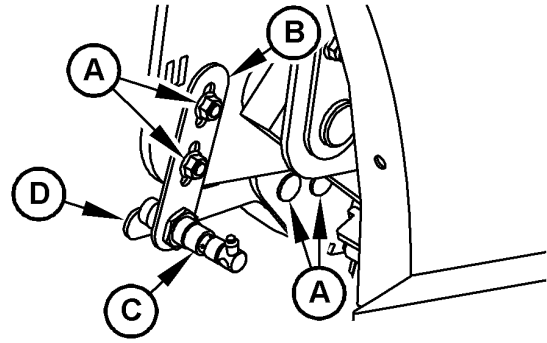
Drop Floor Sensor to Target—Distance.....3—5 mm
(0.12—0.2 in.)

7. Tighten lock nuts (E) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
(17 lb.-ft.)

8. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC1033178

- A—Nuts
- D—Sensor Target
- B—Sensor Bracket
- E—Lock Nuts
- C—Drop Floor Sensor
- F—Distance

CC1033178 —UN—03NOV10

DC82261,000053C -19-16OCT14-1/1

Adjust Drop Floor Sensor SB533 (Baler from S.N. 150001)

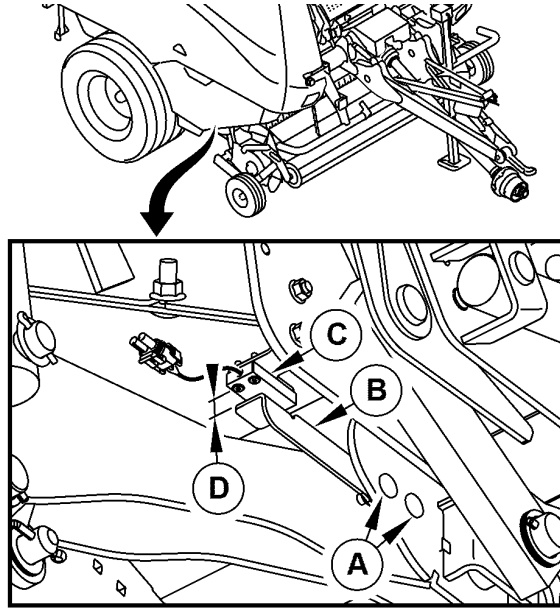
To adjust drop floor sensor (C), proceed as follows:

1. Fully raise drop floor. See Unplug Pickup in Operating Baler Application section.
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 (Baler from S.N. 150001) 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
 (0.02—0.08 in.)

6. Retighten cap screws (A).
7. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC222013

A—Cap Screw
 B—Target

C—Drop Floor Sensor
 D—Distance

DC82261,000053D -19-17OCT14-1/1

CC222013 —UN—15OCT14

Adjust Precutter Knife Sensors SB551 and SB552 (Baler Up to S.N. 149999)

Baler with Precutter, 13 Knives

To adjust precutter knife sensor (B), proceed as follows:

1. Engage precutter knives. See Retract or Engage Precutter Knives in Operating Baler Application section.
2. Engage tractor park lock, shut off tractor engine, remove key and close knife shut-off valve.
3. Loosen lock nuts (A).
4. Slide sensor (B) to obtain specified distance (D).

Specification

Sensor to Pivot
 Pin—Distance.....3—5 mm
 (0.12—0.2 in.)

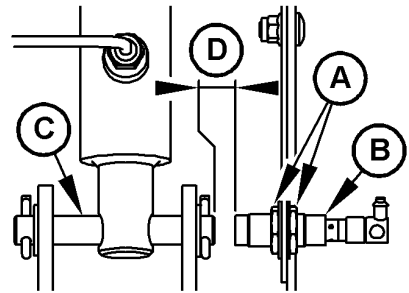
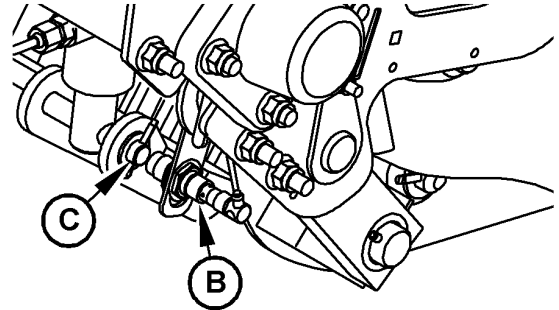
5. Align the bottom of sensor (B) and the bottom of pivot pin (C).

6. Tighten lock nuts (A) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
 (17 lb.-ft.)

7. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC1033180

Baler with Precutter, 13 knives

A—Lock Nuts
 B—Precutter Knife Sensor
 C—Pivot Pin
 D—Distance

CC1033180—UN—23SEP10

Continued on next page

DC82261.0000540 -19-16OCT14-1/3

Baler with Precutter, 25 Knives

To adjust sensor for precutter knife set 1 (B), proceed as follows:

1. Engage precutter knife set 1. See Retract or Engage Precutter Knives in Operating Baler Application section.
2. Engage tractor park lock, shut off tractor engine, remove key and close precutter knife set 1 and set 2 shut-off valves.
3. Loosen lock nuts (A).
4. Slide sensor (B) to obtain specified distance (D).

Specification

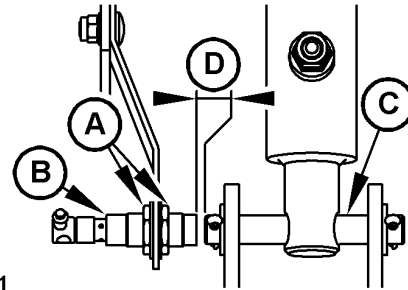
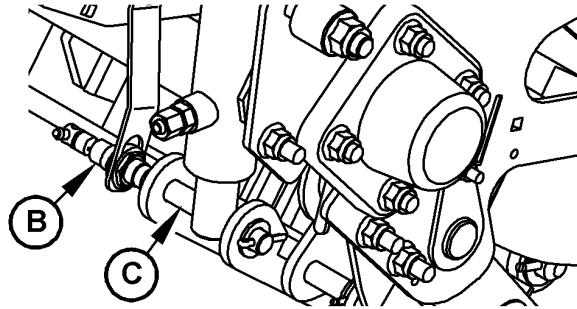
Sensor to Pivot
 Pin—Distance.....3—5 mm
 (0.12—0.2 in.)

5. Align the bottom of sensor (B) and the bottom of pivot pin (C).
6. Tighten lock nuts (A) to the following specification:

Specification

Lock Nuts—Torque.....23 N·m
 (17 lb.-ft.)

7. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC1033181

Baler with Precutter, 25 knives (Set 1)

- A—Lock Nuts
- B—Sensor for Precutter Knife Set 1
- C—Pivot Pin
- D—Distance

CC1033181—UN—03NOV10

Continued on next page

DC82261,0000540 -19-16OCT14-2/3

To adjust sensor for precutter knife set 2 (D), proceed as follows:

1. Engage precutter knife set 2. See Retract or Engage Precutter Knives in Operating Baler Application section.
2. Engage tractor park lock, shut off tractor engine, remove key and close precutter knife set 1 and set 2 shut-off valves.
3. Loosen fixing screws (A).
4. Remove sensor bracket (B).
5. Loosen lock nuts (E) and slide sensor (D) to obtain specified distance (C) between the top of sensor (D) and sensor bracket (B).

Specification

Top of Sensor to
Bracket—Distance..... 21 mm
(0.83 in.)

6. Tighten lock nuts (E) to the following specification:

Specification

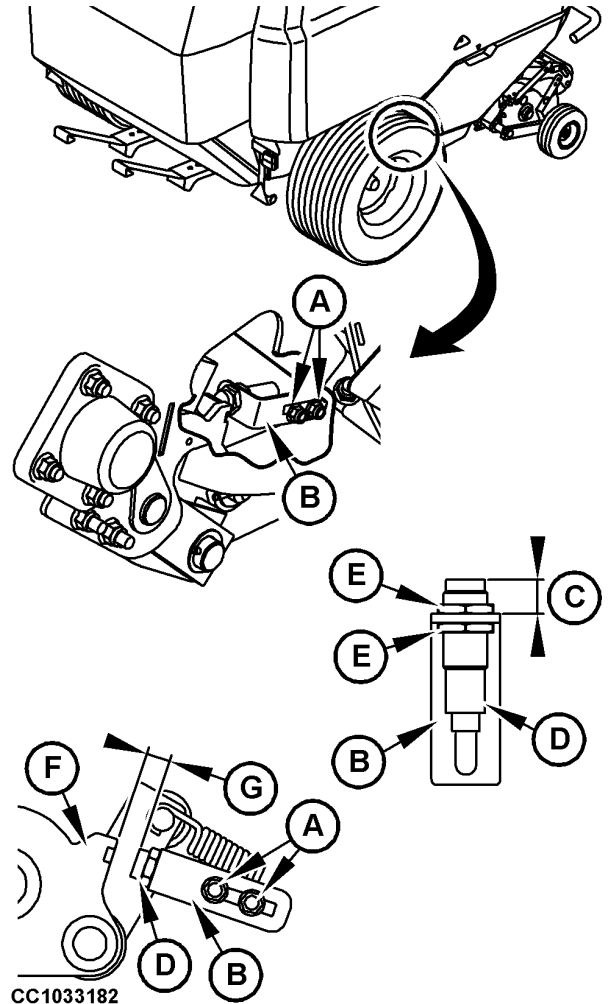
Lock Nuts—Torque.....23 N·m
(17 lb.-ft.)

7. Install sensor bracket (B) to obtain specified distance (G) between sensor (D) and target (F).

Specification

Sensor to
Target—Distance.....3–5 mm
(0.12–0.2 in.)

8. Tighten the two fixing screws (A).
9. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



Baler with Precutter, 25 knives (Set 2)

- A—Fixing Screws
- B—Sensor Bracket
- C—Distance
- D—Sensor for Precutter Knife Set 2
- E—Lock Nuts
- F—Target
- G—Distance

CC1033182—UN—15SEP10

DC82261,0000540 -19-16OCT14-3/3

Adjust Precutter Knife Sensors SB554 and SB555 (Baler from S.N. 150001)

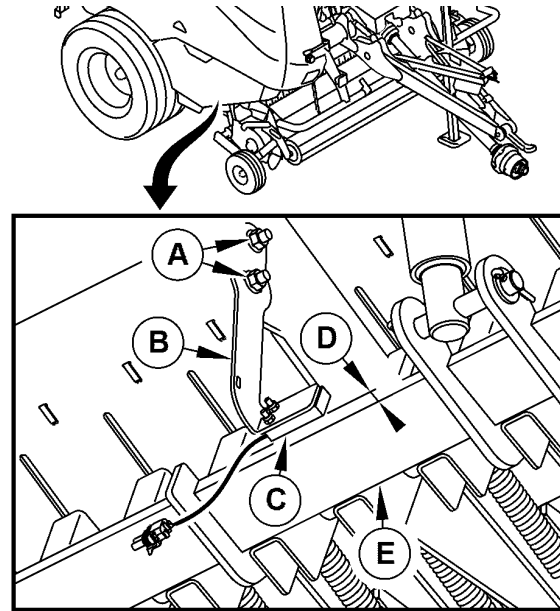
Sensor for Precutter Knife Set 1 (Baler with Precutter, 13 or 25 Knives):

1. Engage precutter knives. See Retract or Engage Precutter Knives in Operating Baler Application section.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine, remove key and close knife shut-off valve.
3. Check that sensor (C) is mounted properly. See Identify Sensor Detection Area (Baler from S.N. 150001) in this section.
4. Loosen cap screws (A).
5. 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
 (0.02—0.08 in.)

6. Retighten cap screws (A).
7. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC222014

- A—Cap Screw
- B—Sensor Bracket
- C—Precutter Knife Sensor (Set 1)
- D—Distance
- E—Precutter Knife Selection Bar

CC222014 —UN—15OCT14

Continued on next page

DC82261,0000542 -19-29OCT14-1/2

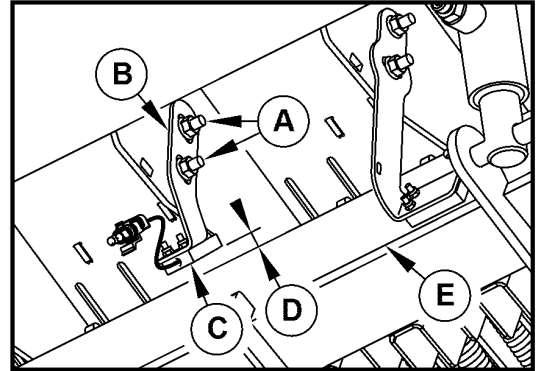
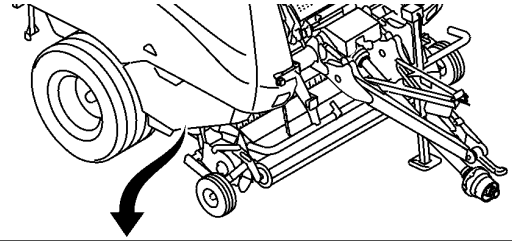
Sensor for Precutter Knife Set 2 (Baler with Precutter, 25 Knives only):

1. Engage precutter knives. See Retract or Engage Precutter Knives in Operating Baler Application section.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine, remove key and close knife shut-off valve.
3. Check that sensor (C) is mounted properly. See Identify Sensor Detection Area (Baler from S.N. 150001) in this section.
4. Loosen cap screws (A).
5. 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
 (0.02—0.08 in.)

6. Retighten cap screws (A).
7. Check sensor detection with monitor. See Test Sensors and Switches in Baler Application Service section.



CC222015

- A—Cap Screw
- B—Sensor Bracket
- C—Precutter Knife Sensor (Set 2)
- D—Distance
- E—Precutter Knife Selection Tube

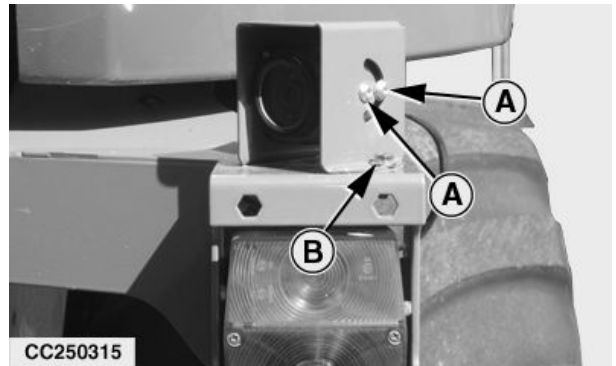
DC82261,0000542 -19-29OCT14-2/2

CC222015—UN—15OCT14

Adjust Orientation of Camera EB341

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—Screws
- B—Screw



CC250315

DC82261,000063D -19-19OCT15-1/1

CC250315—UN—19OCT15

Adjust Net Tying Rubber Roll Brake

Adjust Finger of Brake Activation:

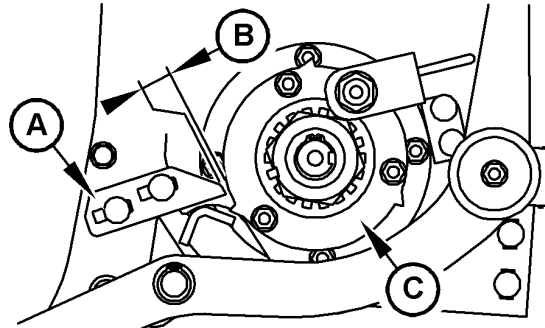
1. Fully retract net actuator with monitor.
2. Check that distance (B) between finger (A) and rubber roll brake (C) is within specification:

Specification

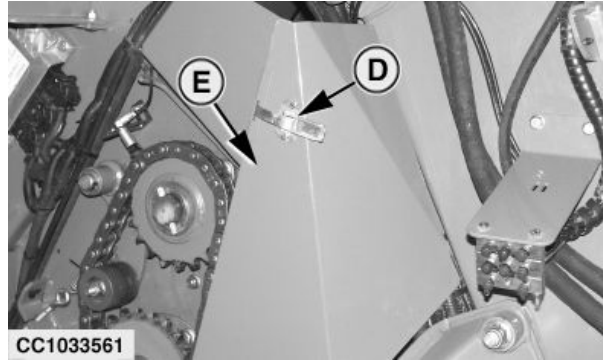
Finger to
 Brake—Distance.....0.5 — 1.5 mm
 (0.02 — 0.06 in.)

3. If necessary, adjust finger (A) as follows:
 - a. On the right side of the machine, unlock clamp assembly (D) and remove shield (E).
 - b. Extend net actuator with monitor to provide access to finger (A).
 - c. Engage tractor park lock, shut off tractor engine and remove key.
 - d. Slightly loosen screws (F).
 - e. Slide finger (A) forward or backward to modify distance checked in step 2 accordingly.
 - f. Tighten screws (F).
 - g. Repeat procedure until specified distance in step 2 is obtained.
 - h. Reinstall shield (E).
4. Check counter-knife adjustment. See Adjust Net Tying Counter-Knife Position in this section.

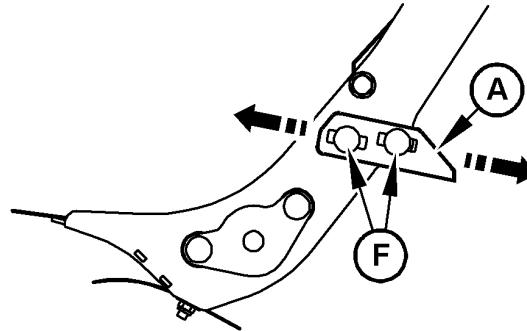
A—Finger of Brake Activation **D**—Clamp Assembly
B—Distance **E**—Shield
C—Rubber Roll Brake **F**—Fixing Screws



CC1033193



CC1033561



CC1033195

Continued on next page

OUC006,00016B1 -19-09DEC10-1/3

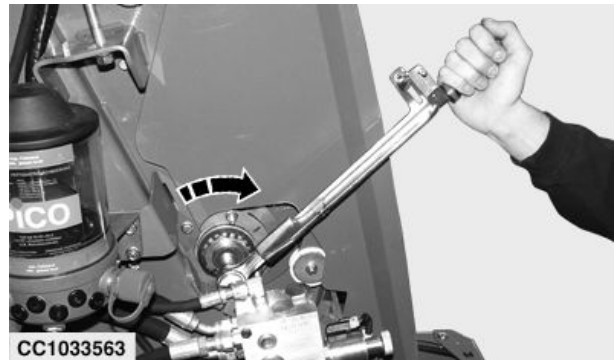
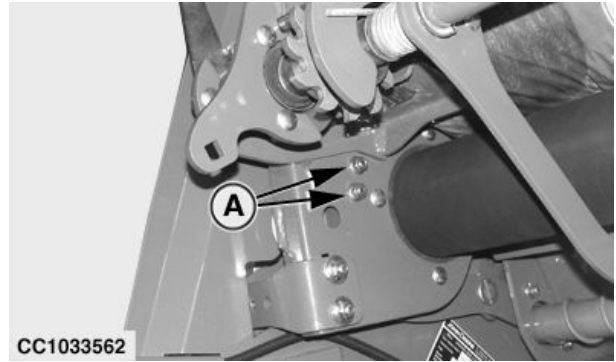
CC1033193 —UN—13SEP10

CC1033561 —UN—02DEC10

CC1033195 —UN—03DEC10

Adjust Rolling Drag Torque of Rubber Roll Brake:

1. Fully retract net actuator with monitor.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Remove net roll.
4. Release main drive chain tension and remove chain from the net tying rubber roll drive sprocket.
5. Loosen fixing screws (A) and remove net feeding sensor bracket.
6. On right side of the rubber roll shaft, install a screw M12x20-10.9.
7. Rotate screw M12 clockwise as shown by using a torque wrench adjusted to 40 N·m (29 lb.-ft.).
 - If the net tying rubber roll rotates and specified torque is not reached, go to step 9 and increase the rolling drag torque of rubber roll brake.
 - If the net tying rubber roll does not rotate when specified torque is reached, go to step 8.
8. Rotate screw M12 clockwise as shown by using a torque wrench adjusted to 80 N·m (59 lb.-ft.).
 - If the net tying rubber roll does not rotate when specified torque is reached, go to step 9 and decrease the rolling drag torque of rubber roll brake.
 - If the net tying rubber roll rotates and specified torque is not reached, rolling drag torque of rubber roll brake is correctly adjusted. Go to step 10.



A—Net Feeding Sensor Bracket Fixing Screws

OUCC006,00016B1 -19-09DEC10-2/3

CC1033562—UN—03DEC10

CC1033563—UN—03DEC10

9. To adjust rolling drag torque of rubber roll brake, proceed as follows:

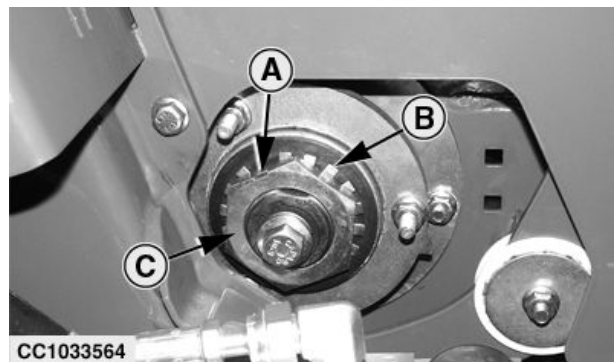
NOTE: When the baler is delivered, one of the teeth on washer (B) is bent over to lock nut (C).

- a. To unlock nut (C), unbend tooth (A).

NOTE: For adjustment below, turn nut (C) by one tooth only.

- b. Rotate nut (C) to align notch of nut (C) with the next tooth of washer (B):
 - Rotate nut (C) clockwise by one tooth, to increase rolling drag torque of rubber roll brake.
 - Rotate nut (C) counterclockwise by one tooth, to decrease rolling drag torque of rubber roll brake.
- c. Repeat procedure from step 7.
- d. To lock nut (C), the tooth aligned with the notch of nut (C) has to be bent over again.

10. Reinstall main drive chain and adjust tension. See Adjust Main Drive Chain in this section.



**A—Bent Tooth
B—Toothed Washer**

C—Nut

11. Reinstall net feeding sensor bracket previously removed.

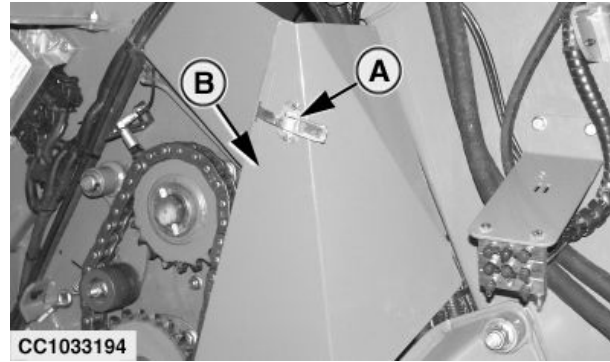
OUCC006,00016B1 -19-09DEC10-3/3

CC1033564—UN—06DEC10

Adjust Net Tying Counterknife Position

NOTE: The counterknife position (in relation to the knife) must be checked if serious net cut problems occur during field operation.

1. Fully retract net actuator with monitor.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Unlock clamp assembly (A) and remove shield (B) on both sides.
4. Check that:
 - Counterknife (D) is not against net knife (C) all across its width.
 - Gap (E) between net knife and counterknife is within specification.
 - Overlap length (F) between the net knife and the counterknife is within specification.

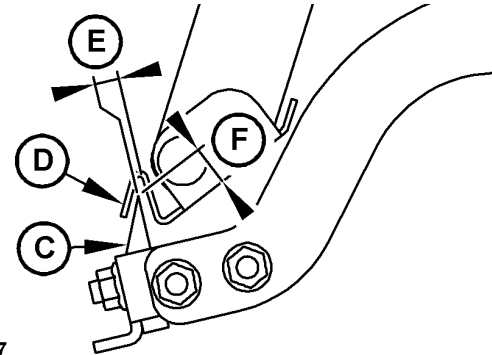


CC1033194—UN—09SEP10

Specification

Knife to Counterknife—Gap (E)..... 2.5 mm
(0-7/64 in)

Knife to Counterknife—Overlap Length (F)..... 24 mm
(0-61/64 in)



CC1033197—UN—16SEP10

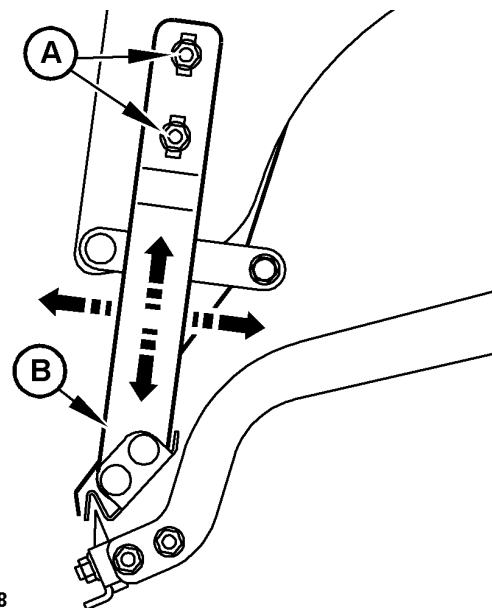
- A—Clamp Assembly
- D—Counterknife
- B—Shield
- E—Knife to Counterknife Gap
- C—Net Knife
- F—Knife to Counterknife Overlap Length

IMPORTANT: The difference of counterknife adjustments between left side and right side must not exceed 2 mm (0.08 in).

NB02380.000010E -19-01MAR16-1/2

5. If necessary, adjust the counterknife position on both sides as follows:
 - a. Loosen nuts (A).
 - b. Adjust counterknife bracket (B) to obtain specifications described in step 4.
 - c. Tighten nuts (A).
 - d. Extend and retract net actuator then repeat procedure if necessary.
6. Reinstall shields previously removed.

- A—Nut
- B—Counterknife Bracket



CC1033198—UN—15SEP10

NB02380.000010E -19-01MAR16-2/2

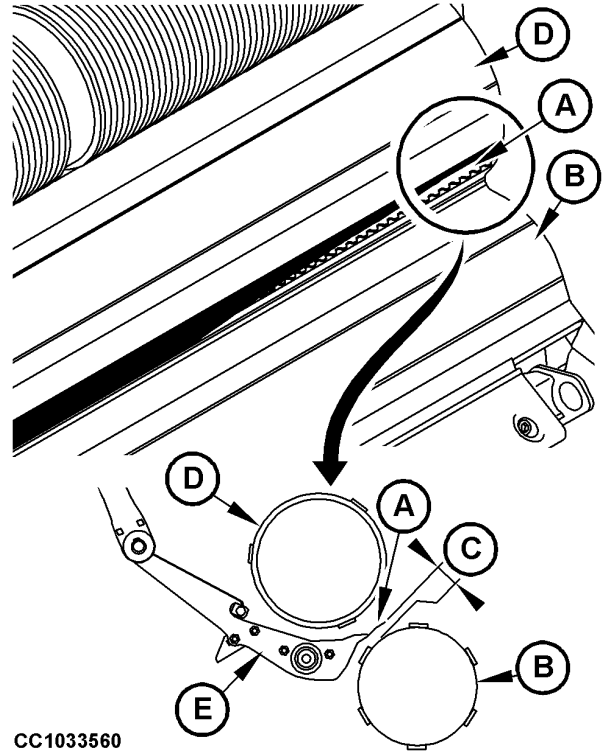
Adjust Net Tying Duck Bill Position

1. Fully extend net actuator with monitor.
2. Fully open the gate and secure it.
3. Engage tractor park lock, shut off tractor engine and remove key.
4. On both sides, check that:
 - Distance (C) between duck bill (A) and roll (B) is within specification.
 - There is no contact between duck bill arm (E) and roll (D).

Specification

Duck Bill to Roll (No. 2)
 2)—Distance (C)..... 14 — 20 mm
 (0.55 — 0.79 in.)

- | | |
|---|------------------------------------|
| A—Net Tying Duck Bill | D—Bale Chamber Roll (No. 3) |
| B—Upper Starter Roll (No. 2) | E—Net Tying Duck Bill Arm |
| C—Duck Bill to Roll (No. 2) Distance | |



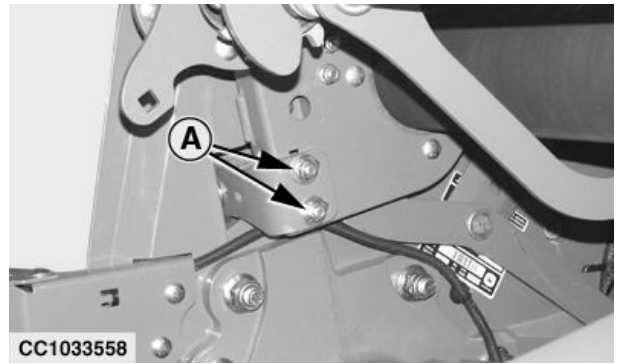
CC1033560

CC1033560 —UN—08DEC10

OUC006,00016E3 -19-09DEC10-1/2

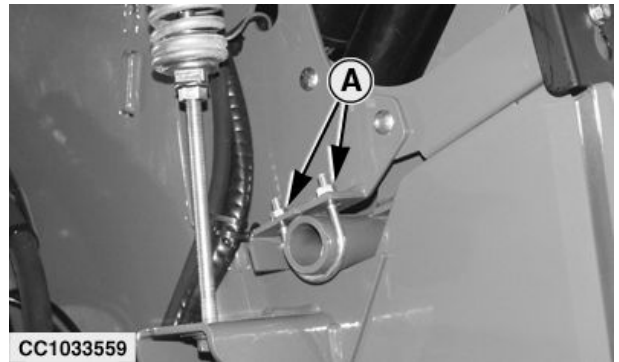
5. If needed, adjust duck bill position as follows:
 - a. Release main drive chain tension.
 - b. Loosen fixing screws (A) on both sides.
 - c. Push or pull net tying assembly by the bottom to obtain specifications described in step 4.
 - d. Tighten fixing screws (A).
 - e. Retract and extend net actuator then repeat procedure from step 4.
6. Fully retract net actuator with monitor.
7. Adjust main drive chain tension. See Adjust Main Drive Chain in this section.

- A—Net Tying Assembly Fixing Screws**



CC1033558

CC1033558 —UN—01DEC10



CC1033559

CC1033559 —UN—01DEC10

OUC006,00016E3 -19-09DEC10-2/2

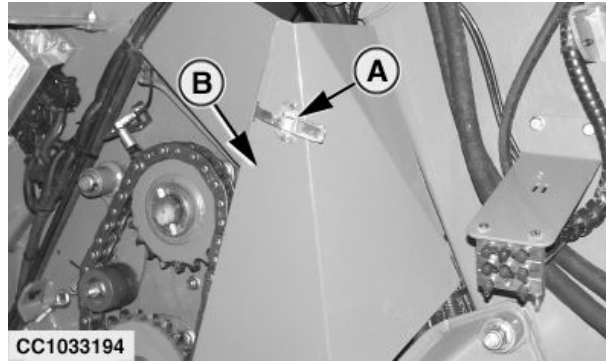
Remove and Install Net Knife

⚠ CAUTION: Prevent personal injury by wearing gloves to handle net knife.

1. Fully retract then slightly extend net actuator with monitor.
2. Disconnect net actuator plug.
3. Unlock clamp assembly (A) and remove shield (B) on both sides.
4. Note position of knife cutting edge for reinstallation.

A—Clamp Assembly

B—Shield



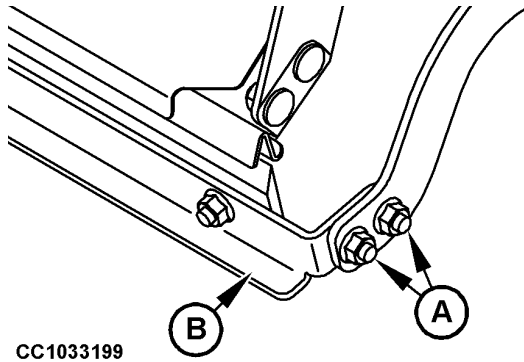
CC1033194—UN—09SEP10

OUC006.00016B2 -19-04AUG10-1/2

5. Remove fixing screws (A) of knife bracket (B) on both sides, then remove knife bracket (B).
6. Install knife bracket (B) in the same position as before removal.
7. Secure knife bracket (B) by means of fixing screws (A).
8. Reconnect actuator plug and fully retract net actuator.
9. Reinstall shields previously removed.

A—Fixing Screws

B—Net Knife Bracket



CC1033199

CC1033199—UN—15SEP10

OUC006.00016B2 -19-04AUG10-2/2

Sharpening Net Knife

⚠ CAUTION: Prevent personal injury by wearing gloves to handle net 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

OUC006.0000BBE -19-17AUG04-1/1

Twine Tying Device Check Procedure

The following procedure must be carried out when twine tying problems occur during field operation.

The check procedure includes different tests to carry out:

- [Test 1 - Check Twine Routing](#)

- [Test 2 - Check Length of Twine](#)
- [Test 3 - Check Position of Twine Tying Arms](#)
- [Test 4 - Check Twine Tension](#)

NOTE: When all test results are OK, the twine tying device is optimized for good field operation.

DC82261,0000420 -19-12FEB14-1/1

Test 1 - Check Twine Routing

NOTE: Carefully follow the twine routing procedure if twine tying difficulties occur after new twine balls have been loaded. If necessary, see [Select Twine](#), [Load Twine Boxes](#) and [Knot for Twine](#) in [Preparing the Baler](#) section.

To check twine routing:

- See [Route Twine out of Twine Boxes](#) in [Preparing the Baler](#) section.
- See [Route Twine from Twine Box to Twine Arms](#) in [Preparing the Baler](#) section.

Proceed to test 2.

DC82261,0000421 -19-12FEB14-1/1

Test 2 - Check Length of Twine

On both sides, check that length (B) of twine hanging from tying arm (A) is within specification:

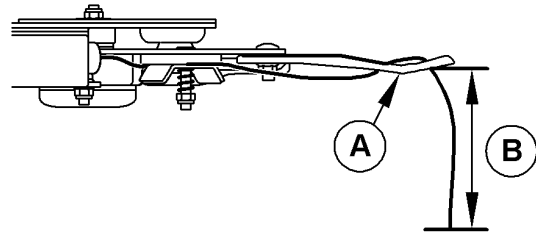
Specification

Twine Tying Arm to Twine	
End—Length.....	150—200 mm (6—8 in.)

If not, check twine knife as follows:

- Check that twine knife is not worn or damaged. If necessary, see [Replace Twine Knife](#) in [Service](#) section.
- Check that twine knife arm is correctly adjusted. See [Adjust Twine Cutter](#) in [Service](#) section.

Proceed to test 3.



CC208607

A—Twine Tying Arm

B—Length

CC208607 —UN—05FEB14

DC82261,0000550 -19-29OCT14-1/1

Test 3 - Check Position of Twine Tying Arms

This test is used to check the position of the twine tying arms. See [Adjust Twine Tying Arms](#) in this section.

Proceed to test 4.

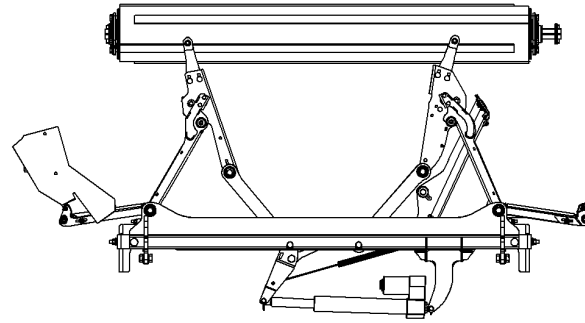
DC82261,000042A -19-12FEB14-1/1

Test 4 - Check Twine Tension

⚠ CAUTION: During the manual tying cycle, parts of the machine will move. Before performing procedure, make sure area of the machine is clear of people and obstacles.

1. Start a manual tying cycle. If necessary, see Select Tying System and Select Tying Start Mode in Operating Baler Application section.
2. Stop the procedure when twine tying arms in tying position stop between rolls, by shutting down electrical power.

NOTE: A diagnostic trouble code can appear when the monitor is switched on again.

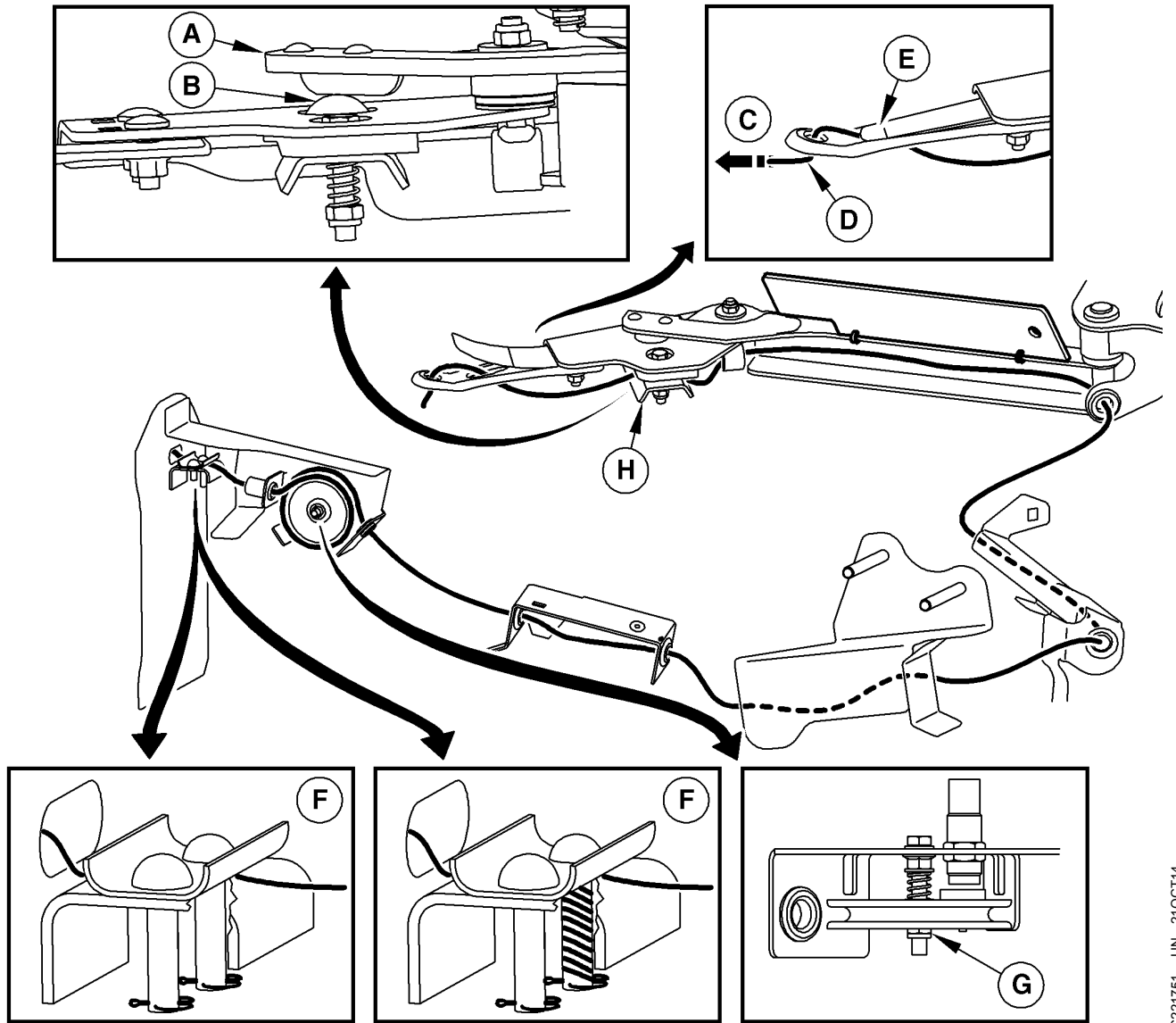


Tying Position

Continued on next page

DC82261,000054C -19-17OCT14-1/2

CC208606—JUN—05FEB14



CC221751

A—Arm
B—Ball
C—Force

D—Twine
E—Spring
F— Twine Tension Plate

G—Nut
H—Twine Tension Plate

3. Visually check that arm (A) pushes ball (B) as shown.

If not, calibrate the twine actuator, see [Calibrate Twine Tying Actuator MB421](#) in Baler Application Service section.

4. Check that twine moves freely in twine tension plate (H).

5. Check that the MAXIMUM force (C) necessary to pull twine (D) does not exceed the following specification:

Specification	
Pull Twine—Maximum	
Force.....	13.7 N

If not, adjust twine tension as follows:

1. Check that assembly of twine tension plate (F) is correct: there must be one spring and no washer for balers up to S.N. 149999 and no spring, no washer for balers from S.N. 150001.
2. Unbend spring (E) to reduce pressure on the twine.
3. If the twine tension is still out of specification, untighten pulley nut (G) until the pulley is just able to turn freely.

6. Repeat procedure from step 3 to obtain the same tension on the other twine.

DC82261,000054C -19-17OCT14-2/2

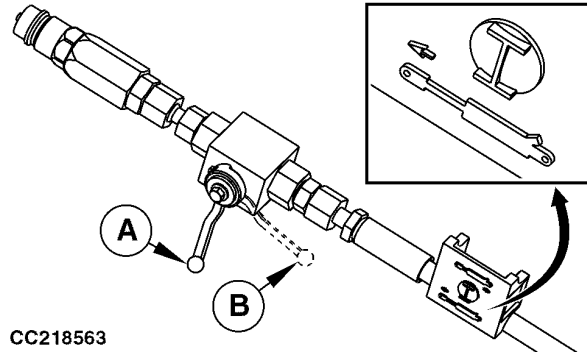
CC221751—UN—21OCT14

Adjust Twine Tying Arms

CAUTION: DO NOT TAKE CHANCES. To avoid injury or death, disengage PTO, shut off tractor engine and close the pickup shut-off valve (A) before adjusting twine tying arms.

A—Pickup Shut-Off Valve Closed Position

B—Pickup Shut-Off Valve Open Position



CC218563

CC218563 —UN—13OCT14

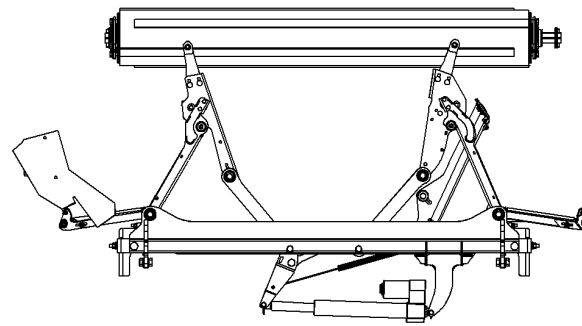
JC87117,0000184 -19-13OCT14-1/4

CAUTION: During the manual tying cycle, parts of the machine will move. Before performing procedure, make sure area of the machine is clear of people and obstacles.

1. Start a manual tying cycle. If necessary, see [Select Tying System](#) and [Select Tying Start Mode](#) in Operating Baler Application section.
2. Stop the procedure when twine tying arms in tying position stop between rolls, by shutting down electrical power.

NOTE: A diagnostic trouble code can appear when the monitor is switched on again.

3. Fully open the gate and secure it.
4. Engage tractor park lock, shut off tractor engine, remove key and close pickup shut-off valve (A).



CC208606

Tying Position

CC208606 —UN—05FEB14

Continued on next page

JC87117,0000184 -19-13OCT14-2/4

5. Manually rotate baler to position roll (B) as shown. See Rotate Baler by Hand in Operating the Baler—General Purposes section.

IMPORTANT: To avoid baler damage, check on both sides that there is no contact between twine arm (A) and roll (D).

6. On both sides, check that distance (C) between twine arm (A) and bar roll (B) is within specification.

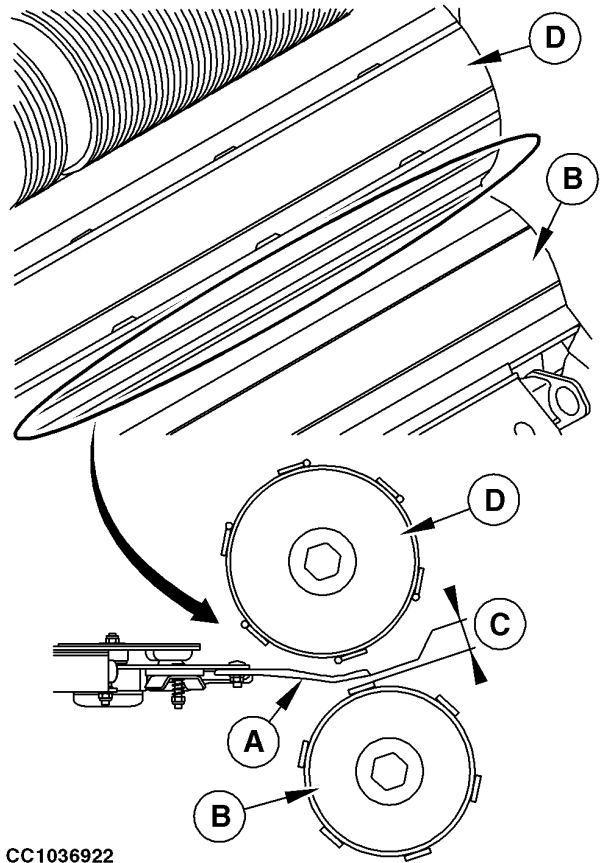
Specification

Twine Arm to Bar Roll
 (No. 2)—Distance (C).....1—12 mm
 (0.04 — 0.47 in.)

NOTE: If twine is not caught, reduce the distance (C) to minimum.

7. Manually rotate baler to check distance (C) at all bars of roll (B).

A—Twine Tying Arm **C—Distance**
B—Upper Starter Roll (No. 2) **D—Bale Chamber Roll (No. 3)**

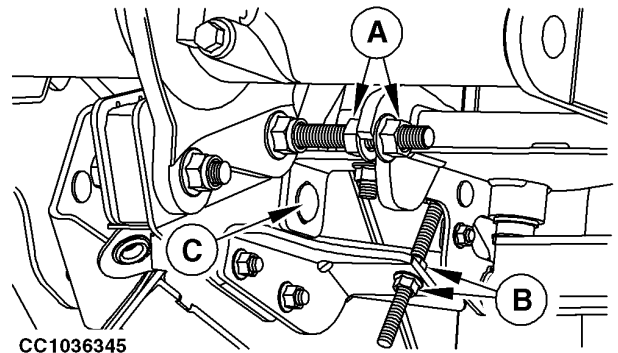


CC1036922

JC87117,0000184 -19-13OCT14-3/4

CC1036922—UN—13FEB12

8. If needed, adjust twine arm position as follows:
 - a. Slightly loosen fixing screws (A) and (C) on both sides.
 - b. By using adjusting nuts (B) on both sides, adjust twine tying assembly to obtain specifications described in step 6.
 - c. On both sides, tighten fixing screws (C), and then fixing screws (A).
9. Slowly retract and fully extend twine actuator with monitor to ensure that specification described in step 6 is correct on all actuator stroke. If not, repeat procedure from step 1.
10. Open pickup shut-off valve.



CC1036345

A—Twine Tying Assembly Fixing Screws **C—Twine Tying Assembly Fixing Screws**
B—Twine Arm Adjusting Nuts

JC87117,0000184 -19-13OCT14-4/4

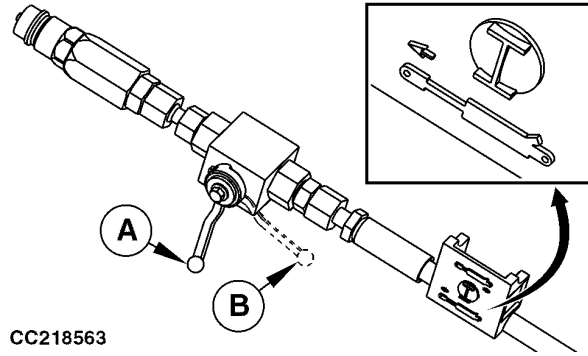
CC1036345—UN—20FEB12

Adjust Twine Cutter

CAUTION: DO NOT TAKE CHANCES. To avoid injury or death, disengage PTO, shut off tractor and close the pickup shut-off valve (A) before adjusting twine cutter.

IMPORTANT: Before adjusting twine cutter, be sure that twine arms are correctly adjusted. See **Adjust Twine Tying Arms** in this section.

1. Fully extend and retract twine actuator with monitor.
2. Fully open the gate and secure it.
3. Engage tractor park lock, shut off tractor engine, remove key and close pickup shut-off valve (A).



A—Pickup Shut-Off Valve Closed Position

B—Pickup Shut-Off Valve Open Position

JC87117,0000183 -19-05NOV14-1/3

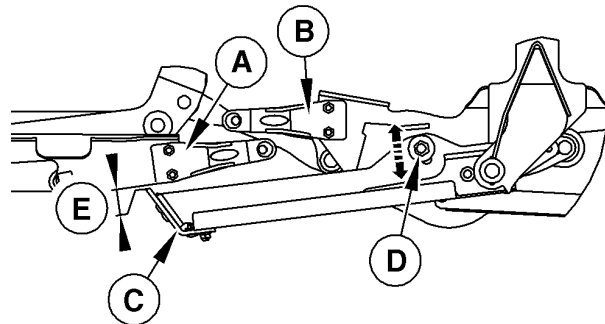
CC218563—UN—13OCT14

4. With twine actuator fully retracted, check that:
 - Both twine arms (A) and (B) are not in contact. If not see your John Deere dealer.
 - Twine deflector (C) and twine arm (A) are not in contact and distance (E) is within specification.

Specification

Twine Deflector to Twine Arm—Distance (E).....1—10 mm
(0.04—0.4 in.)

5. If needed, adjust twine deflector (C) as follows:
 - a. Slightly loosen screw (D).
 - b. Adjust screw (D) to adjust retracted position of twine deflector (C) accordingly.
 - c. Fully extend and retract twine actuator with monitor then repeat procedure from step 3.



A—Twine Tying Arm
B—Twine Tying Arm
C—Twine Deflector

D—Adjusting Screw
E—Distance

Continued on next page

JC87117,0000183 -19-05NOV14-2/3

CC1036346—UN—13FEB12

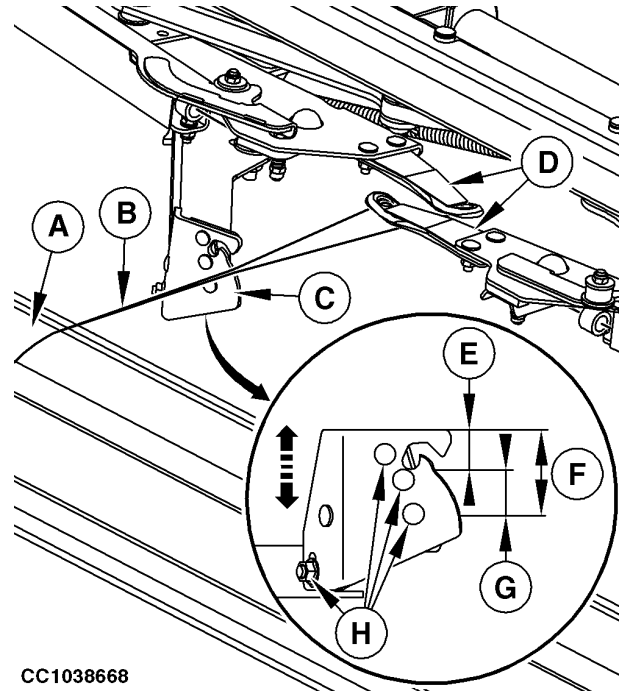
6. Check position of twine deflector (C) as follows:
 - a. Route both twines from twine box to twine arms. See Route Twine out of Twine Boxes and Route Twine from Twine Box to Twine Arms in Preparing the Baler section.
 - b. Extend twine actuator to catch twine (B) from the inside of the bale chamber.
 - c. Attach both twines (B) to the middle of the baler axle. Twine (B) must be tensioned and positioned at the center of roll (A).
 - d. Slowly retract twine actuator until twine deflector (C) contacts both twines (B).
 - e. Check that both twines (B) are in contact with twine deflector (C) within range (G). Range (G) is obtained by subtracting distance (E) from distance (F).

Specification

Top of Twine Deflector to	
Twine—Distance (E).....	26 mm (1 in.)
Distance (F).....	51 mm (2 in.)
Range (G).....	25 mm (1 in.)

- f. If needed, slightly loosen fixing screws (H) and adjust twine deflector (C) accordingly. Tighten fixing screws (H) then repeat procedure from step 6.

7. Fully retract twine actuator with monitor.
8. Open pickup shut-off valve.



- | | |
|------------------------------|----------------|
| A—Upper Starter Roll (No. 2) | E—Distance |
| B—Twine | F—Distance |
| C—Twine Deflector | G—Range |
| D—Twine Tying Arm | H—Fixing Screw |

CC1038668 —UN—31OCT12

JC87117,0000183 -19-05NOV14-3/3

Replace Twine Knife

CAUTION: DO NOT TAKE CHANCES. To avoid injury or death, disengage PTO, shut off tractor and close the pickup shut-off valve (A) before replacing twine knife.

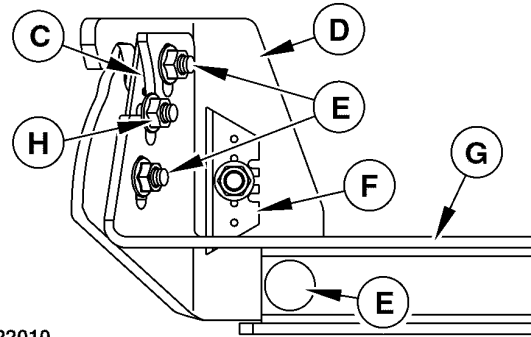
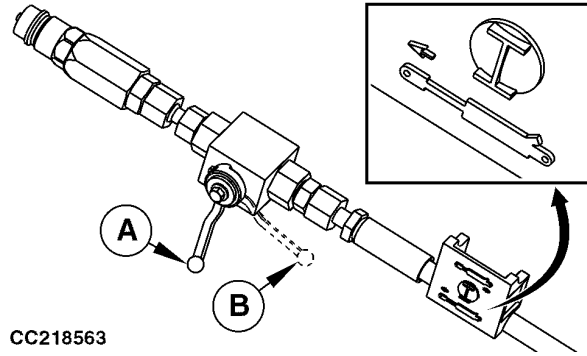
Always wear gloves to handle twine knife.

IMPORTANT: After removing twine knife (C) and reinstalling it in reversed position, or after replacing twine knife (C), be sure that twine deflector (D) is correctly adjusted. See Adjust Twine Cutter in this section.

1. Engage tractor park lock, shut off tractor engine, remove key and close pickup shut-off valve (A).
2. Remove fixing screws (E).
3. Loosen screw (H) then remove deflector (D) with knife (C).

NOTE: If needed, a second spare knife (F) is available on twine deflector (D). Twine knives (C) and (F) are reversible.

4. Remove screw (H) then reinstall knife (C) in reversed position.
5. Reinstall screw (H) to attach knife (C) to deflector (D).
6. Reinstall deflector (D) on arm (G).
7. Reinstall fixing screws (E).
8. Adjust deflector (D) and tighten screws (E) and (H). See Adjust Twine Cutter in this section.



- | | |
|--|-------------------------|
| A—Pickup Shut-Off Valve
Closed Position | E—Fixing Screw |
| B—Pickup Shut-Off Valve Open
Position | F—Twine Knife (Spare) |
| C—Twine Knife | G—Twine Cutter Arm |
| D—Twine Deflector | H—Knife Attaching Screw |

JC87117,0000182 -19-05NOV14-1/1

CC218563—UN—13OCT14

CC222010—UN—13OCT14

Adjust Twine Tension Plates

CAUTION: DO NOT TAKE CHANCES. To avoid injury or death, disengage PTO, shut off tractor and close the pickup shut-off valve (A) before adjusting twine tension plates.

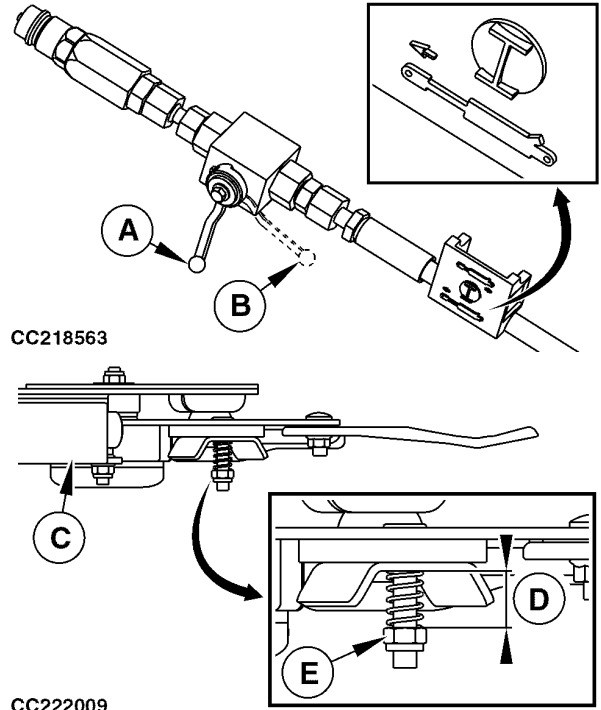
1. Engage tractor park lock, shut off tractor engine, remove key and close pickup shut-off valve (A).
2. On both twine arms (C), adjust spring length (D) by loosening or tightening nut (E) to obtain specified length:

Specification

Tension Plate	
Spring—Length.....	20 ± 1 mm (0.8 ± 0.04 in.)

3. Open pickup shut-off valve (B).

- | | |
|--|-----------------|
| A—Pickup Shut-Off Valve
Closed Position | D—Spring Length |
| B—Pickup Shut-Off Valve Open
Position | E—Nut |
| C—Twine Arm | |



CC218563 —UN—13OCT14

CC222009 —UN—13OCT14

JC87117,0000181 -19-13OCT14-1/1

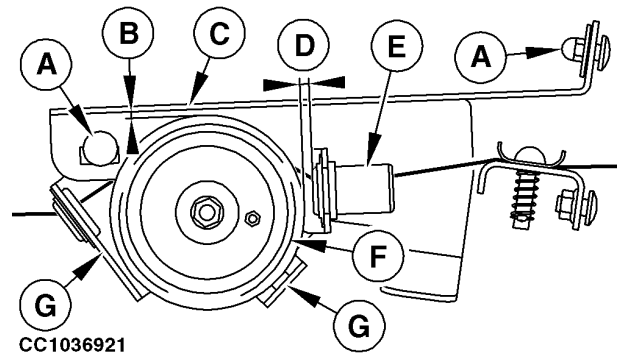
Adjust Twine Pulley Supports

1. Raise dust shield to provide access.
2. Loosen nuts (A).
3. Slide bracket (C) until specified distances (B) and (D) are achieved:

Specification

Pulley to Bracket—Distance (B).....	2 — 5 mm (0.08 — 0.2 in.)
Pulley to Guide—Distance (D).....	2 — 8 mm (0.08 — 0.31 in.)

4. Tighten nuts (A).
5. Rotate pulley (F) several times to check that there is no interference between pulley (F) and bracket (G).
6. Repeat procedure on the opposite side.



- | | |
|------------|----------------|
| A—Nut | E—Twine Guide |
| B—Distance | F—Twine Pulley |
| C—Bracket | G—Bracket |
| D—Distance | |

CC1036921 —UN—20FEB12

OUC006,00018B9 -19-20FEB12-1/1

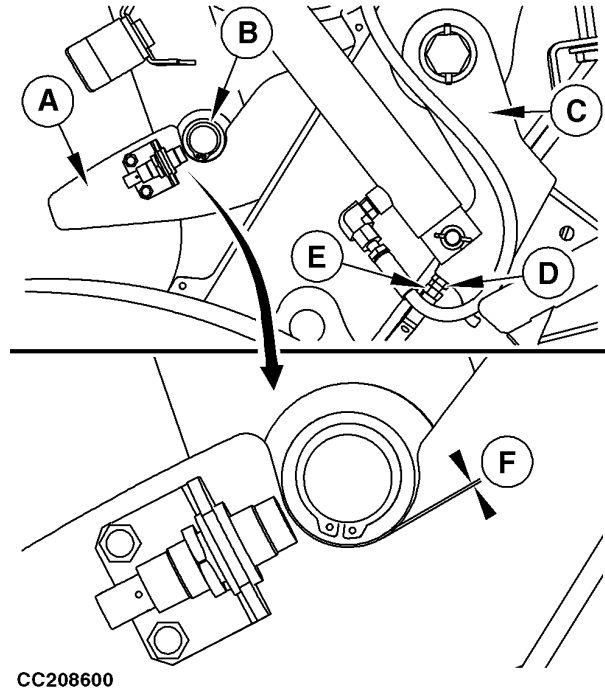
Adjust Gate Latch

1. Close and latch gate. Gate hydraulic cylinders must be fully retracted.
2. Turn off tractor engine.
3. Actuate tractor selective control valve lever to relieve gate hydraulic pressure.
4. If required, remove net roll and/or twine balls compartment to provide access.
5. Raise gate latch (A) by hand and place gate latch bushing (B) to obtain the following distance (F):

Specification

Gate Latch to Gate Latch
 Bushing—Distance.....2—4 mm
 (0.08—0.16 in.)

6. Loosen nut (E).
7. Adjust screw (D) until contact with gate latch arm (C) is obtained.
8. Lock nut (E).
9. Repeat procedure on the opposite side.
10. Reinstall net roll and/or twine balls compartment, if removed.



- | | |
|----------------------|------------|
| A—Gate Latch | D—Screw |
| B—Gate Latch Bushing | E—Nut |
| C—Gate Latch Arm | F—Distance |

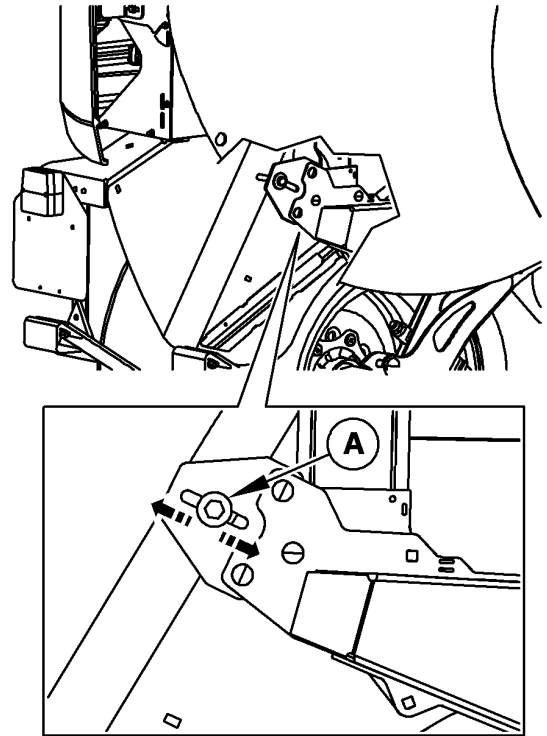
DC82261,0000417 -19-28FEB14-1/1

CC208600—UN—29JAN14

Adjust Gate Curtain Lock

1. Fully close gate.
2. Open gate curtain.
3. Move bolt (A) to the front.
4. Drop gate curtain.
 - If gate curtain is locked, the procedure is completed.
 - If gate curtain is not locked, go to next step.
5. Open gate curtain.
6. Move bolt (A) about 10 mm (0.4 in.) to the rear.
7. Drop gate curtain.
 - a. If gate curtain is locked, the procedure is completed.
 - b. If gate curtain is not locked, go to step 5.

A— Bolt



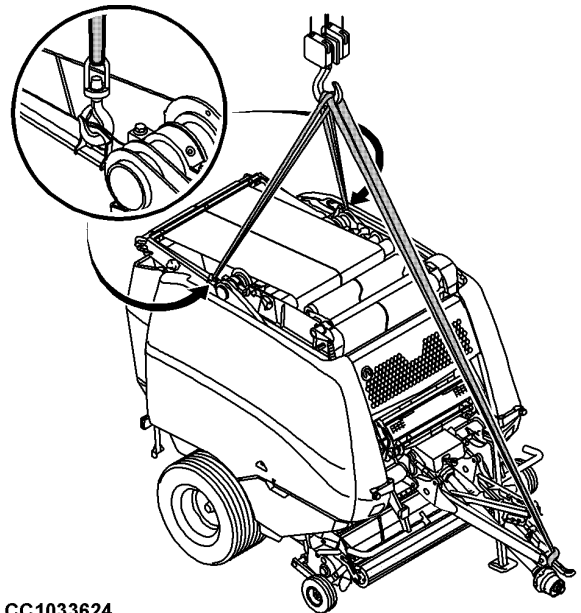
CC1033271

CC1033271—UN—04NOV10

AP00976,0000189 -19-21DEC10-1/1

Round Baler Hanging Points

If the round baler must be moved without attaching it to a tractor, use the hanging points shown.



CC1033624

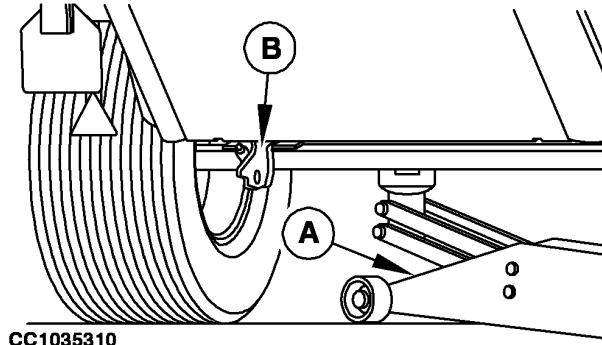
CC1033624—UN—20DEC10

AP00976,000018B -19-08DEC10-1/1

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) under axle as close as possible to axle clamp (B) avoiding contact as shown.
4. Raise wheel off ground with jack (A).
5. Install stand to secure baler.
6. Remove wheel nuts and wheel.
7. Install wheel and fully screw in nuts manually.
8. Remove stand, lower the baler and remove jack (A).
9. Tighten wheel nuts diagonally to the following specification:

Specification	
Wheel Nuts—Torque.....	270 N·m (200 lb.-ft.)
10. Check tire inflation. See Tire Inflation in Preparing the Baler section.



A—Jack

B—Axle Clamp

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

OUCC006,000182B -19-11OCT11-1/1

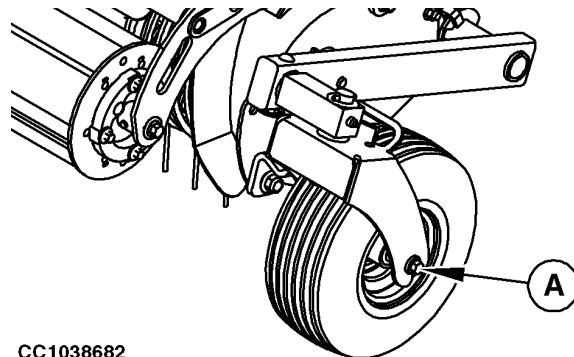
Repair Gauge Wheel

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



Caster Gauge Wheel Shown

OUCC006,00019BA -19-14NOV12-1/1

Baler Application Service

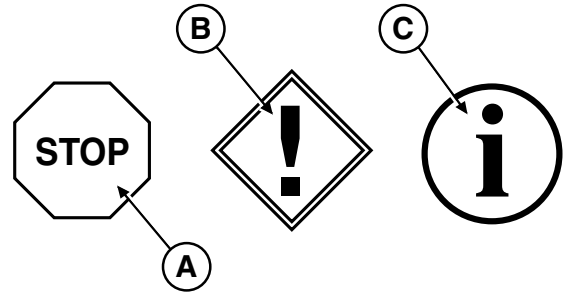
Warning Screens

The monitor supports caution and warning messages to inform about certain behaviors or error conditions in the system. Warning screens allow to monitor system operational problems.

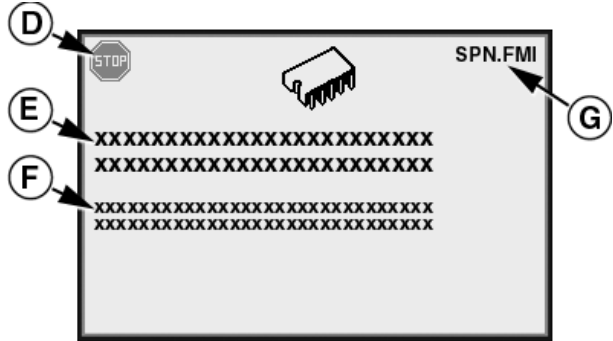
WARNING:

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:

- Icon (D) and the associated tone define the importance of the warning:
 - Icon (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.
 - Icon (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.
 - Icon (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.
- Keyword strings (E) help to determine the importance and the cause of the warning and briefly define the area of malfunction.
- 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 in this section to get



ZX026095



CC1031855

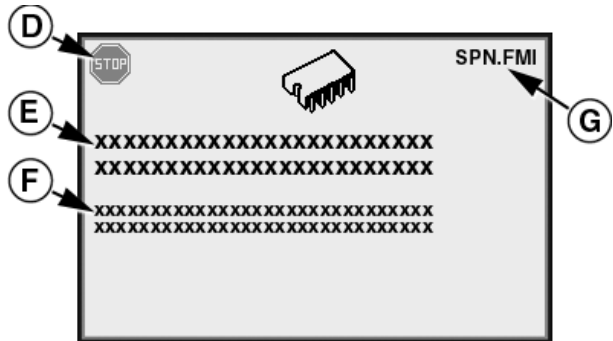
- | | |
|---------------------------|---------------------------------|
| A—Stop Engine/System Icon | E—Keyword Strings |
| B—Service Alert Icon | F—Text Strings |
| C—Information Icon | G—Diagnostic Trouble Code (DTC) |
| D—Warning Icon | |

specific operational problem and recommended corrective action.

OUC006,000158A -19-15OCT09-1/2

- Text strings (F) provide more details about the cause of the warning and possible corrective action.
- The warning screen will disappear automatically when the machine detects the correction of the malfunction.

- | | |
|-------------------|---------------------------------|
| D—Warning Icon | F—Text Strings |
| E—Keyword Strings | G—Diagnostic Trouble Code (DTC) |



CC1031855

OUC006,000158A -19-15OCT09-2/2

Recent Problems

CC1031612 —UN—16SEP09

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



CC1031612

OUCC006,000163D -19-15DEC10-1/5

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09



CC1031614

OUCC006,000163D -19-15DEC10-2/5

3. Select "Next Page" or "Previous Page" softkey to access page 2/3.

CC1031853 —UN—30SEP09



CC1031853

OUCC006,000163D -19-15DEC10-3/5

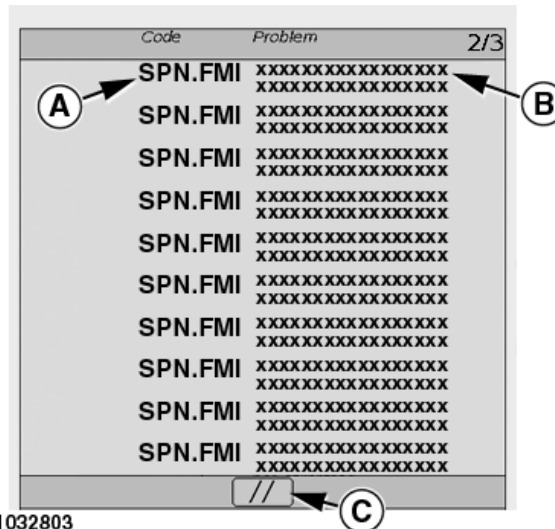
4. In the recent problem list, a history of the DTCs is updated each time a new DTC is generated. Recent problem text (B) gives a brief description of the problem.

Up to 10 DTCs can be stored at one time and will be displayed in the order in which they occurred. If more than 10 DTCs need to be stored, a first-in-first-out system is used with the earliest code being deleted.

The DTC (A) gives more information about the issue. It is made of SPN.FMI (A) (Suspect Parameter Number.Failure Mode Indicator). See Diagnostic Trouble Code List in this section.

5. Select icon (C) to clear the recent problem list.

A—Diagnostic Trouble Code (DTC) **C**—Clear Recent Problem List
B—Recent Problem Text



CC1032803

CC1032803 —19—24NOV10

OUCC006,000163D -19-15DEC10-4/5

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

CC1032651 —UN—24NOV10



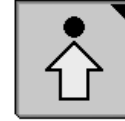
CC1032651

OUCC006,000163D -19-15DEC10-5/5

Test Tractor Battery Voltage

CC1031612 —UN—16SEP09

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



CC1031612

OUCC006,000163E -19-15DEC10-1/5

2. Select "Baler Diagnostic" softkey.

CC1031614 —UN—16SEP09

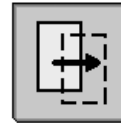


CC1031614

OUCC006,000163E -19-15DEC10-2/5

3. Select "Next Page" or "Previous Page" softkey to access page 3/3.

CC1031853 —UN—30SEP09



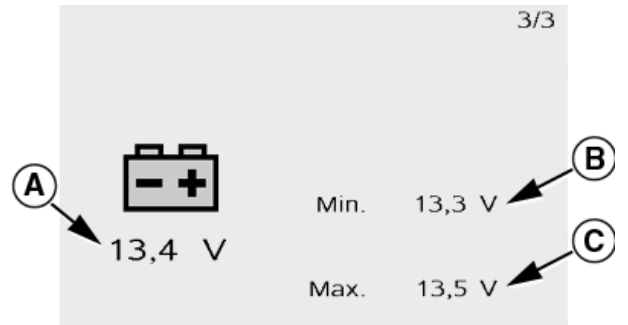
CC1031853

OUCC006,000163E -19-15DEC10-3/5

4. On page 3/3, 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



CC1031857

CC1031857 —19—05OCT09

OUCC006,000163E -19-15DEC10-4/5

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,000163E -19-15DEC10-5/5

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 168.16	Battery voltage too high (above 15.8 volts).	Check tractor battery and alternator. See Test Tractor Battery Voltage in this section.
RBC 168.18	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 1563.12	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 3025.04	Automatic greasing system relay short to ground.	Check wires and connectors. Check automatic greasing system relay.
RBC 3025.05	Automatic greasing system relay open load.	Check wires and connectors. Check automatic greasing system relay.
RBC 3509.03	Sensor supply voltage too high.	Check wires and connectors.
RBC 3509.04	Sensor supply voltage too low.	Check wires and connectors.
RBC 3755.16	Baler drive roll speed above proper operation.	Tying process stopped due to high drive roll speed. Ensure that baler is operated at appropriate PTO speed.
RBC 3755.18	Baler drive roll speed below proper operation.	Tying 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 SB361 in Service section. If baler rotation speed sensor is faulty, see Baler Rotation Speed Sensor in this section to disable the sensor.
RBC 3761.03	Drop floor solenoid valve open load or short to battery.	Check wires and connectors. Check drop floor solenoid valve.
RBC 3761.04	Drop floor solenoid valve short to ground.	Check wires and connectors. Check drop floor solenoid valve.
RBC 3762.03	Solenoid valve for precutter knife set 1 open load or short to battery.	Check wires and connectors. Check solenoid valve for precutter knife set 1.
RBC 3762.04	Solenoid valve for precutter knife set 1 short to ground.	Check wires and connectors. Check solenoid valve for precutter knife set 1.
RBC 3763.03	Pickup lift solenoid valve open load or short to battery.	Check wires and connectors. Check pickup lift solenoid valve.
RBC 3763.04	Pickup lift solenoid valve short to ground.	Check wires and connectors. Check pickup lift solenoid valve.
RBC 3764.07	No movement of the net actuator. Net actuator faulty or jammed.	Check net actuator. See your John Deere dealer.
RBC 3764.11	Net actuator broken.	Check net actuator. See your John Deere dealer.
RBC 3764.14	Net actuator stalled.	Check net tying device. Check net actuator. See your John Deere dealer.
RBC 3766.07	No movement of the twine actuator. Twine actuator faulty or jammed.	Check twine actuator. See your John Deere dealer.
RBC 3766.12	Twine actuator broken.	Check twine actuator. See your John Deere dealer.
RBC 3766.14	Twine actuator stalled.	Check twine tying device. Check twine actuator. See your John Deere dealer.
RBC 3774.02	Gate not moving when commanded to move.	Check for proper gate operation.
RBC 3774.07	Gate not fully closed.	Check gate area. Check gate latch sensors. See Adjust Gate Latch Sensors SB331 and SB332 in Service section.

Continued on next page

NB02380,000010B -19-11MAR16-1/4

Baler Application Service

SPN.FMI	Description	Comment
RBC 3774.11	Gate ajar. The gate is in an unknown position.	Check the gate status. Check gate latch sensors. See Adjust Gate Latch Sensors SB331 and SB332 in Service section. Check wires and connectors.
RBC 3776.07	Bale stuck in the chamber.	Check if the bale is still in the chamber. Check bale discharging ramp sensor adjustment. See Adjust Bale Discharging Ramp Sensor SB341 in Service section.
RBC 3776.14	Bale stuck on ramp.	Check if the bale has left the bale discharging ramp. Check the bale discharging ramp.
RBC 3778.14	Unexpected movement of the precutter knife set 1 from the previous state.	Check that precutter knives are in the desired position. Check sensor for precutter knife set 1.
RBC 3779.05	Unexpected oversize alarm.	Tie 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 in this section.
RBC 3779.14	Oversize bale.	Tie and eject current bale as soon as possible. Check bale diameter potentiometer calibration. See Calibrate Bale Diameter Potentiometer RB311 in this section.
RBC 3781.07	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 Feed Sensor SB411 in Service section.
RBC 3781.08	Net stopped feeding.	Check net roll.
RBC 3781.11	Net feeding unexpectedly.	Check that net actuator is fully retracted. Extend and then retract actuator to manually cut net.
RBC 3781.14	Net not cut.	Extend and then retract actuator to manually cut net. Check net tying counterknife position. See Adjust Net Tying Counterknife Position in Service section. Sharpen net knife. See Sharpen Net Knife in Service section.
RBC 3782.07	One or both twines not feeding. One or both twine balls are empty. Twine missing around the bale.	Replace twine balls. Check twine routing. See Route Twine out of Twine Boxes and Route Twine from Twine Box to Twine Arms in Preparing the Baler section. Calibrate twine actuator. See Calibrate Twine Tying 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 Tying in Operating Baler Application section to disable these sensors.
RBC 3782.11	Twine feeding unexpectedly.	Check that twine actuator is fully retracted.
RBC 3782.14	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 Knife and Replace Twine 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 517005.07	John Deere B-Wrap™ sensor does not detect metal strip during tying cycle.	See Metal strip not detected during John Deere B-Wrap™ tying cycle in Net Tying 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 521075.03	Solenoid valve for precutter knife set 2 open load or short to battery.	Check wires and connectors. Check solenoid valve for precutter knife set 2.
RBC 521075.04	Solenoid valve for precutter knife set 2 short to ground.	Check wires and connectors. Check solenoid valve for precutter knife set 2.
RBC 521075.14	Unexpected movement of the precutter knife set 2 from the previous state.	Check that precutter knives are in the desired position. Check sensor for precutter knife set 2.
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.

Continued on next page

NB02380,000010B -19-11MAR16-2/4

Baler Application Service

SPN.FMI	Description	Comment
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 521083.16	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.
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 521084.16	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 521086.14	Bale in chamber at power-up.	Automatic tying cycle disabled for the current bale. Start tying 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 to ground or relative pressure within the hydraulic bale tensioning system too low (less than 5 bar (72.5 psi; 500 kPa)).	Check wires and connectors. Bale density setting is limited to 80 %. See your John Deere dealer.
RBC 522016.07	Ramp sensor problem.	Check bale discharging ramp sensor adjustment. See Adjust Bale Discharging Ramp Sensor SB341 in Service section. Check wires and connectors.
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.
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 tying device.	Net or twine operation may have reduced performance. Replace control unit at earliest convenience. See your John Deere dealer.
RBC 523836.18	Grease reservoir empty.	Refill grease reservoir. See Lubrication and Maintenance section.
RBC 524063.03	Net actuator short to battery.	Check wires and connectors.

Continued on next page

NB02380,000010B -19-11MAR16-3/4

Baler Application Service

SPN.FMI	Description	Comment
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.
RBC 524151.07	The pickup is plugged. Stop the tractor (automation level 1). Tractor is stopping automatically (automation level 2).	Unplug the pickup. See <u>Unplug Pickup in Automation Mode</u> in Operating Baler in Automation Mode section. Check sensor adjustment. See <u>Adjust Baler Rotation Speed Sensor SB361</u> in Service section.

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

NB02380,000010B -19-11MAR16-4/4

Test Sensors and Switches

CC1031612 —UN—16SEP09

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



CC1031612

NB02380,0000106 -19-01MAR16-1/6

2. Select Baler Diagnostic softkey.

CC1031614 —UN—16SEP09

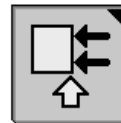


CC1031614

NB02380,0000106 -19-01MAR16-2/6

3. Select Input Test softkey.

CC1031803 —UN—16SEP09



CC1031803

NB02380,0000106 -19-01MAR16-3/6

4. The Input Test function is used to test sensors and switches.

For sensor location, see [Locate Baler Electrical Components \(Baler Up to S.N. 149999\)](#) or [Locate Baler Electrical Components \(Baler from S.N. 150001\)](#) 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 metal in front of the sensor. The counter (B) is increased by one each time the sensor is activated or deactivated.

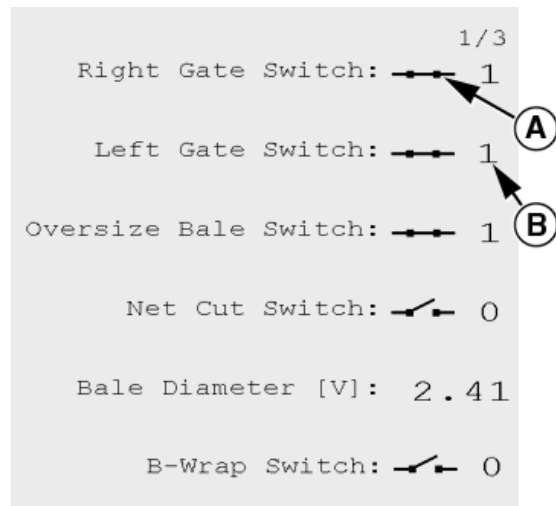
NOTE: Counter (B) is reset after each page switching.

NOTE: A diode located at the rear of some sensors lights up when sensors are activated. John Deere B-Wrap™ sensor also has a green diode to indicate when it is powered.

If the test is not OK:

- Check that the pins of connectors are functional.

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CC274173

CC274173 —19—26FEB16

A—Status Symbol

B—Counter

- John Deere B-Wrap™ sensor excepted, swap the failed sensor with another sensor on the machine (preferably the net feed sensor or the baler rotation speed sensor).
- If the two previous tests are not OK, see your John Deere dealer.

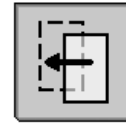
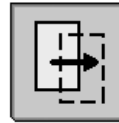
Continued on next page

NB02380,0000106 -19-01MAR16-4/6

Baler Application Service

5. Select Next Page or Previous Page softkey to switch from one page to another.

CC1031853 —UN—30SEP09



CC1031853

NB02380,0000106 -19-01MAR16-5/6

6. Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

NB02380,0000106 -19-01MAR16-6/6

Test Electro-Hydraulic Components

CC1031612 —UN—16SEP09

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



CC1031612

OUC006,000197D -19-18OCT12-1/9

2. Select Baler Diagnostic softkey.

CC1031614 —UN—16SEP09

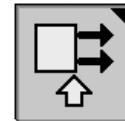


CC1031614

OUC006,000197D -19-18OCT12-2/9

3. Select Output Test softkey.
4. The Output Test function is used to test electro-hydraulic components. To activate component, select and activate the desired icon.

CC1031804 —UN—16SEP09



CC1031804

⚠ CAUTION: During the test of electro-hydraulic components, parts of the machine will move. Before performing a test, take care area of the machine is clear from people or foreign objects.

IMPORTANT: If one of these tests is not OK, see your John Deere dealer.

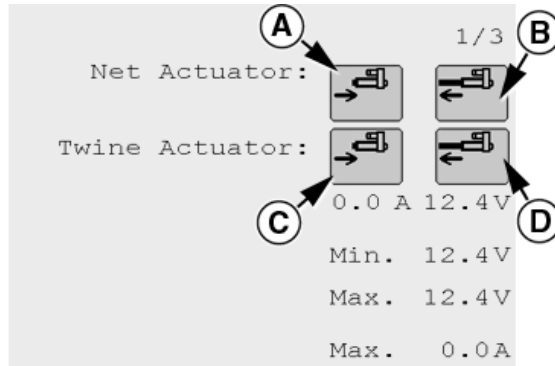
Continued on next page

OUC006,000197D -19-18OCT12-3/9

5. Page 1/3:

- Icon (A) is used to retract the net actuator.
- Icon (B) is used to extend the net actuator.
- Icon (C) is used to retract the twine actuator.
- Icon (D) is used to extend the twine actuator.

- A—Retract Net Actuator
- B—Extend Net Actuator
- C—Retract Twine Actuator
- D—Extend Twine Actuator



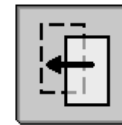
CC1034488

CC1034488 —19—16SEP11

OUCC006,000197D -19-18OCT12-4/9

6. Select Next Page or Previous Page softkey to switch from one page to another.

CC1031853 —UN—30SEP09



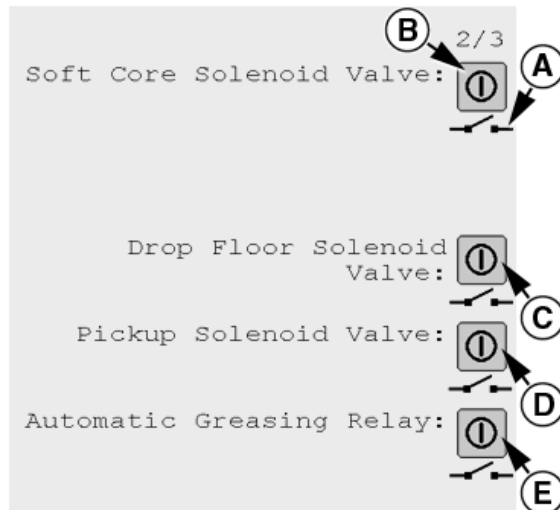
CC1031853

OUCC006,000197D -19-18OCT12-5/9

7. Page 2/3:

- Status symbol (A) shows the component status (deactivated or activated).
- Icon (B) is used to test the proportional density solenoid valve.
- Icon (C) is used to test the drop floor solenoid valve.
- Icon (D) is used to test the pickup lift solenoid valve.
- Icon (E) is used to test the automatic greasing relay.

- A—Status Symbol
- B—Proportional Density Solenoid Valve
- C—Drop Floor Solenoid Valve
- D—Pickup Lift Solenoid Valve
- E—Automatic Greasing Relay



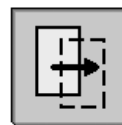
CC1038543

CC1038543 —19—18OCT12

OUCC006,000197D -19-18OCT12-6/9

8. Select Next Page or Previous Page softkey to switch from one page to another.

CC1031853 —UN—30SEP09



CC1031853

Continued on next page

OUCC006,000197D -19-18OCT12-7/9

9. Page 3/3:

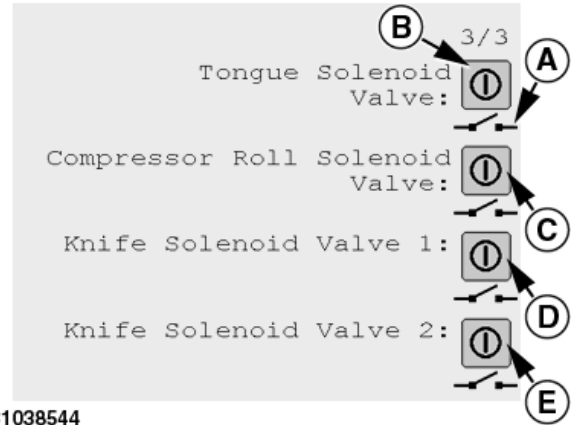
Status symbol (A) shows the component status (deactivated or activated).

Icon (B) is used to test the tongue solenoid valve (not used).

Icon (C) is used to test the windrow compressor roll solenoid valve (not used).

Icon (D) is used to test the solenoid valve for precutter knife set 1.

Icon (E) is used to test the solenoid valve for precutter knife set 2.



CC1038544

CC1038544—19—18OCT12

- | | |
|---|---|
| A—Status Symbol | D—Solenoid Valve for Precutter Knife Set 1 |
| B—Tongue Solenoid Valve | E—Solenoid Valve for Precutter Knife Set 2 |
| C—Windrow Compressor Roll Solenoid Valve | |

OUCC006,000197D -19-18OCT12-8/9

10. Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUCC006,000197D -19-18OCT12-9/9

Test Actuator Electrical Consumption

CC1031612 —UN—16SEP09

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



CC1031612

OUCC006,00017C8 -19-07DEC11-1/5

2. Select Baler Diagnostic softkey.

CC1031614 —UN—16SEP09

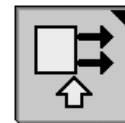


CC1031614

OUCC006,00017C8 -19-07DEC11-2/5

3. Select Output Test softkey.

CC1031804 —UN—16SEP09



CC1031804

Continued on next page

OUCC006,00017C8 -19-07DEC11-3/5

- Select icon (A) or (B) to extend or retract the actuator of the desired tying system.

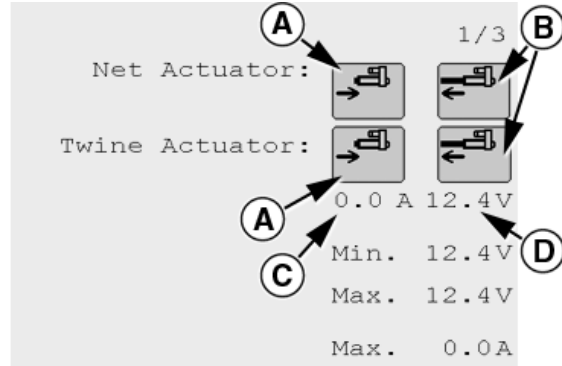
Amperage value (C) indicates the amperage reading of the net or twine actuator.

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, or poor or corroded harness connections.
- Readings above normal indicate tying mechanical problem, faulty harness or faulty actuator.
- Amperage spike reading indicates tying mechanical obstruction.



CC1034489

A—Retract Actuator
B—Extend Actuator

C—Amperage Value
D—Voltage Value

Value (D) indicates the voltage in the electrical circuit.

OUC006,00017C8 -19-07DEC11-4/5

- Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



CC1032651

OUC006,00017C8 -19-07DEC11-5/5

Calibrate Bale Diameter Potentiometer RB311

CC1031612 —UN—16SEP09

IMPORTANT: Prior to calibrating the bale diameter potentiometer, ensure that baler rotation speed sensor is correctly adjusted and activated. See **Adjust Baler Rotation Speed Sensor in Service section and Baler Rotation Speed Sensor in Baler Application Service section.**



CC1031612

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:

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

Continued on next page

OUC006,000197A -19-18OCT12-1/11

2. Select Baler Calibration softkey.

CC1031658 —UN—16SEP09



CC1031658

OUCC006,000197A -19-18OCT12-2/11

3. Select icon (B) to reset the bale diameter potentiometer calibration.

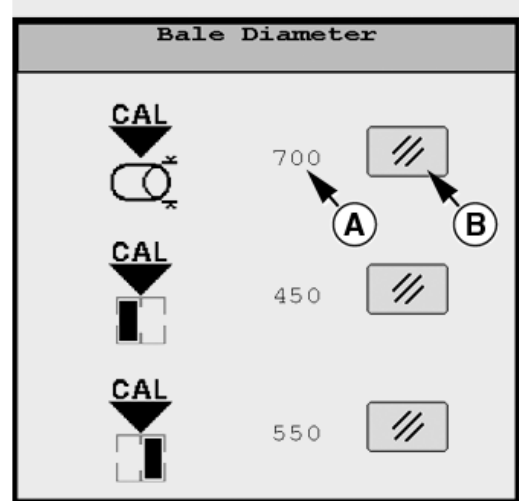
NOTE: Bale chamber must be empty and gate closed when resetting bale diameter potentiometer calibration.

4. Engage tractor PTO and run at rated PTO speed for a few seconds.

NOTE: Bale diameter potentiometer calibration value (A) should be modified when tractor PTO is engaged.

A—Bale Diameter Potentiometer Calibration Value

B—Reset Bale Diameter Potentiometer Calibration Value



CC1038539

CC1038539 —19—18OCT12

OUCC006,000197A -19-18OCT12-3/11

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

CC1032651 —UN—24NOV10



CC1032651

Continued on next page

OUCC006,000197A -19-18OCT12-4/11

6. Make a bale to check the bale diameter potentiometer calibration. Before dumping the bale, record actual bale diameter (A) value.

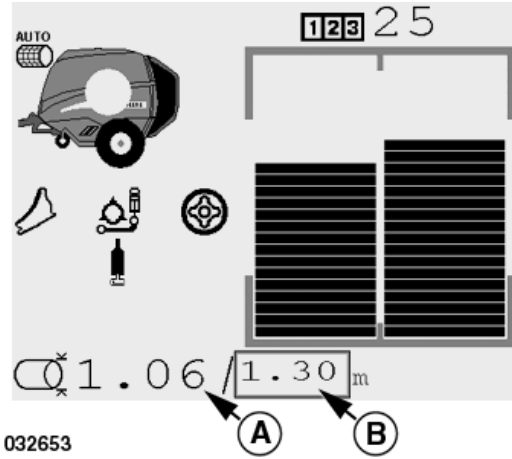
7. Dump the bale and measure bale diameter.

NOTE: To check bale diameter, measure bale horizontally and vertically on both ends. Add the four measurements together and divide by four to determine average bale diameter.

8. Compare actual bale diameter (A) previously recorded and measured bale diameter. If difference is less than 3 cm (1.2 in.), bale diameter potentiometer is correctly calibrated. If not, continue procedure to precisely calibrate the bale diameter potentiometer.

9. Adjust target bale diameter (B) to the desired bale diameter but without exceeding a value of 1.50 m (4 ft. 11 in.).

10. Make 2 to 3 bales taking care that difference between actual bale diameter (A) and target bale diameter (B) is less than 3 cm (1.2 in.).



CC1032653

A—Bale Diameter (Actual)

B—Bale Diameter (Target)

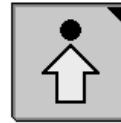
11. Measure each bale horizontally and vertically on both ends and determine the average bale diameter.

OUC006,000197A -19-18OCT12-5/11

CC1032653 —UN—24NOV10

12. Select Settings softkey.

CC1031612 —UN—16SEP09



CC1031612

OUC006,000197A -19-18OCT12-6/11

13. Select Baler Calibration softkey.

CC1031658 —UN—16SEP09



CC1031658

OUC006,000197A -19-18OCT12-7/11

14. Select Bale Diameter Calibration softkey.

CC1031809 —UN—16SEP09



CC1031809

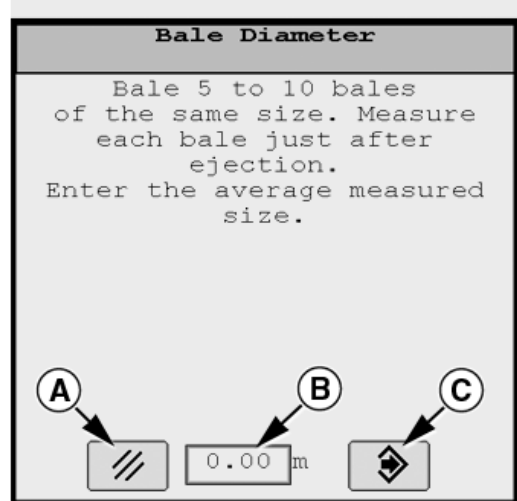
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OUC006,000197A -19-18OCT12-8/11

15. Enter the average bale diameter measured value determined under step 11 in input box (B).
16. Select enter icon (C) to validate setting or select cancel icon (A) to leave the bale diameter potentiometer calibration page without proceeding.

NOTE: When validating setting, average bale diameter measured is recorded and input box (B) value is zero.

A—Cancel Icon **C**—Enter Icon
B—Measured Bale Diameter



CC1038540

CC1038540 —19—18OCT12

OUCC006,000197A -19-18OCT12-9/11

17. Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10



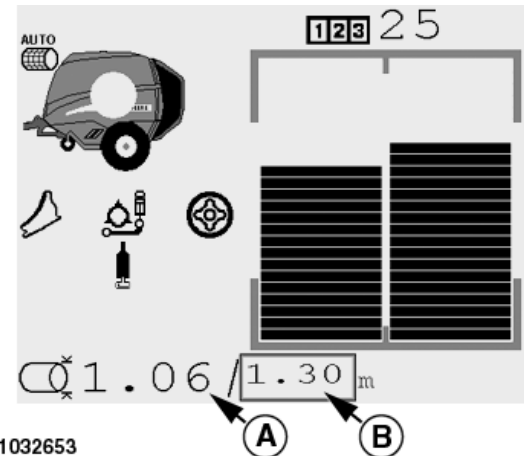
CC1032651

OUCC006,000197A -19-18OCT12-10/11

18. Make a bale to check if the bale diameter potentiometer is precisely calibrated. Before dumping the bale, record actual bale diameter (A) value.
19. Dump the bale and measure bale diameter.
20. Compare actual bale diameter (A) previously recorded and measured bale diameter. If difference is less than 3 cm (1.2 in.), bale diameter potentiometer is correctly calibrated. If not repeat procedure from step 9.

NOTE: There will be no change in calibration behavior if the procedure from step 9 is repeated more than three times.

21. If bale diameter potentiometer calibration is not correct, repeat procedure from the beginning.



CC1032653

CC1032653 —UN—24NOV10

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

OUCC006,000197A -19-18OCT12-11/11

Calibrate Bale Shape Potentiometers RB321 and RB322

CC1031612 —UN—16SEP09



CC1031612

IMPORTANT: It is normal for right and left bale shape indicators to provide different information with empty chamber. No calibration is necessary.

IMPORTANT: Prior to calibrating the bale shape potentiometers, ensure that baler rotation speed sensor is correctly adjusted and activated. See Adjust Baler Rotation Speed Sensor SB361 in Service section.

Do not shut off tractor engine before the calibration procedure of the bale shape potentiometers is completely finished.

Left and right bale shape potentiometers are automatically calibrated. If bale shape indicators on monitor and real bale shape do not match or if bale shape indicators on monitor are not displayed, reset calibration of bale shape potentiometers then bale 3 bales by following the procedure below.

1. Start tractor engine.
2. Reset calibration of left and right bale shape potentiometers:
 - a. From the baler application main page, select Settings softkey.

OUC006,0001AD8 -19-25FEB14-1/6

-
- b. Select Baler Calibration softkey.

CC1031658 —UN—16SEP09



CC1031658

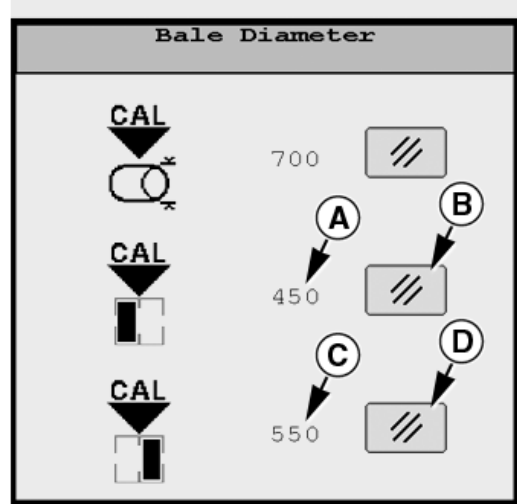
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OUC006,0001AD8 -19-25FEB14-2/6

- c. Select icon (B) to reset the calibration of the left bale shape potentiometer and select icon (D) to reset the calibration of the right bale shape potentiometer.

NOTE: Bale chamber must be empty and gate closed when resetting bale shape potentiometer calibration. Calibration values (A) and (C) of the left and right bale shape potentiometers must be modified.

- | | |
|--|---|
| A —Left Bale Shape Potentiometer Calibration Value | C —Right Bale Shape Potentiometer Calibration Value |
| B —Reset Left Bale Shape Potentiometer Calibration Icon | D —Reset Right Bale Shape Potentiometer Calibration Icon |



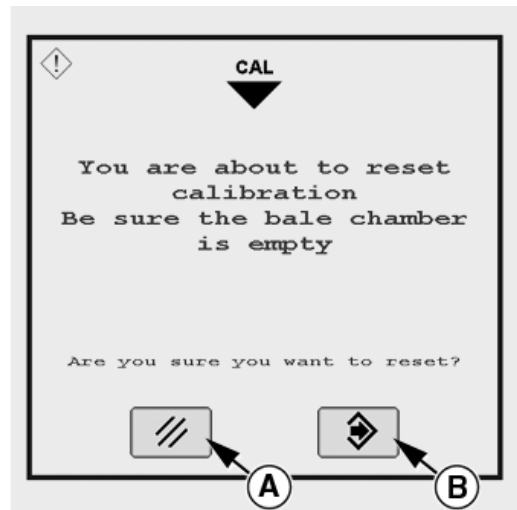
CC1038541

CC1038541 —19—18OCT12

OUC006,0001AD8 -19-25FEB14-3/6

- d. Select enter icon (B) to validate and reset calibration or select cancel icon (A) to leave the reset calibration page without proceeding.

- | | |
|-----------------------|----------------------|
| A —Cancel Icon | B —Enter Icon |
|-----------------------|----------------------|



CC1035372

CC1035372 —19—13OCT11

OUC006,0001AD8 -19-25FEB14-4/6

- e. Select Main Page softkey to return to baler application main page.

CC1032651 —UN—24NOV10

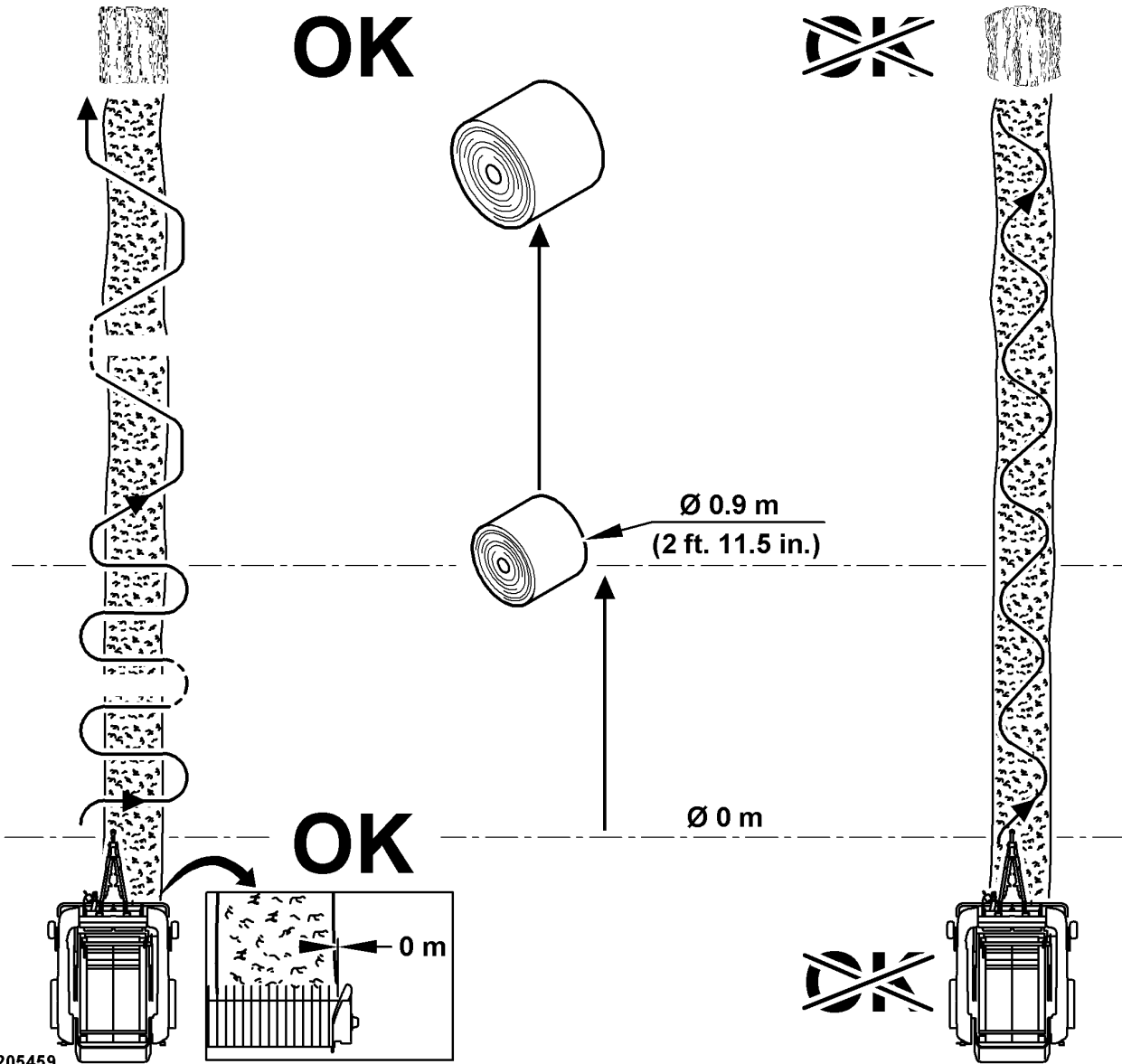
- Set the bale density to 100 % (maximum density) and disable Soft Core System. See [Adjust Bale Density](#) and [Operate Soft Core System](#) in Operating Baler Application section.
- Set bale shape sensitivity to 5 (high sensitivity). See [Adjust Bale Shape Sensitivity](#) in this section.



CC1032651

Continued on next page

OUC006,0001AD8 -19-25FEB14-5/6



CC205459

CC205459 —UN—26SEP13

5. Bale three bales as follows:

IMPORTANT: Do not follow bale shape indicators on 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. 11.5 in.) is reached.

NOTE: To correctly feed each side of the baler, feed all the pickup width alternatively in order to balance crop as much as possible on the rotor auger.

- To obtain desired bale diameter, finish the bale by feeding more each side of the baler to reduce weaving (slaloming).

- Then bale several bales by following the procedure described under Guidelines to Form a Good Bale in Operating Baler Application section.
- Check that bale shape indicators on monitor and real bale shape match. If not, repeat procedure from the beginning.

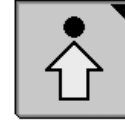
If the bale shape indicators on monitor and real bale shape still do not match, see your John Deere dealer.

OUC006,0001AD8 -19-25FEB14-6/6

Calibrate Net Tying Actuator MB411

CC1031612 —UN—16SEP09

NOTE: In order to calibrate the net tying actuator, see Select Tying System in Operating Baler Application section to select net tying system. Before starting the net tying actuator calibration, remove the net from the net tying duck bill. See Load Net Roll in Preparing the Baler section.



CC1031612

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

OUC006,00017BB -19-07DEC11-1/4

2. Select Baler Calibration softkey.

CC1031658 —UN—16SEP09



CC1031658

OUC006,00017BB -19-07DEC11-2/4

3. Select Net or Twine Actuator Calibration softkey to start calibration of the net tying actuator.

CC1031808 —UN—16SEP09

The net actuator will fully extend, and then will fully retract. When the net actuator is successfully calibrated, the monitor beeps continuously for 3 seconds.



CC1031808

OUC006,00017BB -19-07DEC11-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUC006,00017BB -19-07DEC11-4/4

Calibrate Twine Tying Actuator MB421

CC1031612 —UN—16SEP09

NOTE: In order to calibrate the twine tying actuator, see Select Tying System in Operating Baler Application section to select twine tying system.



CC1031612

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

OUC006,00017BA -19-07DEC11-1/4

2. Select Baler Calibration softkey.

CC1031658 —UN—16SEP09



CC1031658

Continued on next page

OUC006,00017BA -19-07DEC11-2/4

3. Select Net or Twine Actuator Calibration softkey to start calibration of the twine tying actuator.

CC1031808 —UN—16SEP09



CC1031808

The twine actuator will fully extend, and then will fully retract. When the twine actuator is successfully calibrated, the monitor beeps continuously for 3 seconds.

OUCC006,00017BA -19-07DEC11-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,00017BA -19-07DEC11-4/4

Adjust Bale Shape Sensitivity

CC1031612 —UN—16SEP09



CC1031612

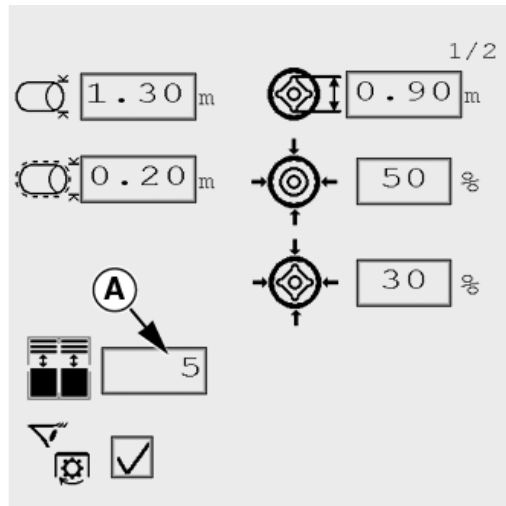
1. From the baler application main page, select Settings softkey.

OUCC006,000183E -19-10OCT11-1/3

2. Select input box (A) and set the bale shape sensitivity from 1 (low sensitivity) to 5 (high sensitivity).

NOTE: The initial factory setting is 5.

A—Bale Shape Sensitivity



CC1035368

CC1035368 —UN—10OCT11

OUCC006,000183E -19-10OCT11-2/3

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,000183E -19-10OCT11-3/3

Baler Rotation Speed Sensor

CC1031612 —UN—16SEP09

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



CC1031612

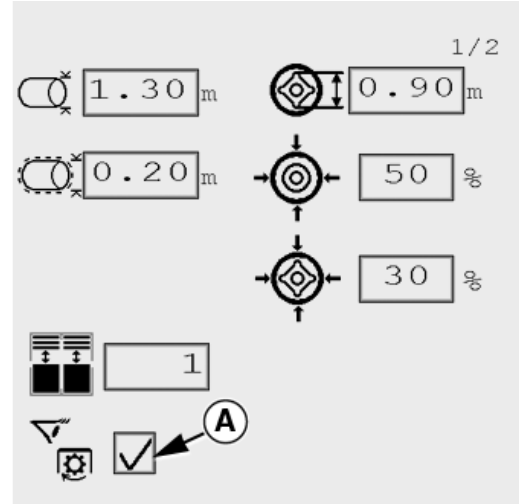
OUCC006,00016DC -19-15DEC10-1/3

2. Check box (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 check box (A) to enable the baler rotation speed sensor.
 - Do not tick check box (A) to disable the baler rotation speed sensor.
3. Before deactivating this function, check sensor adjustment. See Adjust Baler Rotation Speed Sensor in Service section.

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



CC1033407

CC1033407 —UN—24NOV10

A—Baler Rotation Speed Sensor

OUCC006,00016DC -19-15DEC10-2/3

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

CC1032651 —UN—24NOV10



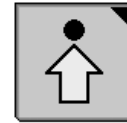
CC1032651

OUCC006,00016DC -19-15DEC10-3/3

Adjust Task Controller (If Equipped)

CC1031612 —UN—16SEP09

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

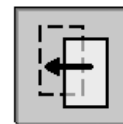
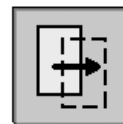


CC1031612

DC82261,0000409 -19-28JAN14-1/4

2. Select Next Page or Previous Page softkey to access page 2/2.

CC1031853 —UN—30SEP09



CC1031853

Continued on next page

DC82261,0000409 -19-28JAN14-2/4

3. Set task controller as follows:

- a. Enable or disable the Task Controller function by using check box (A).

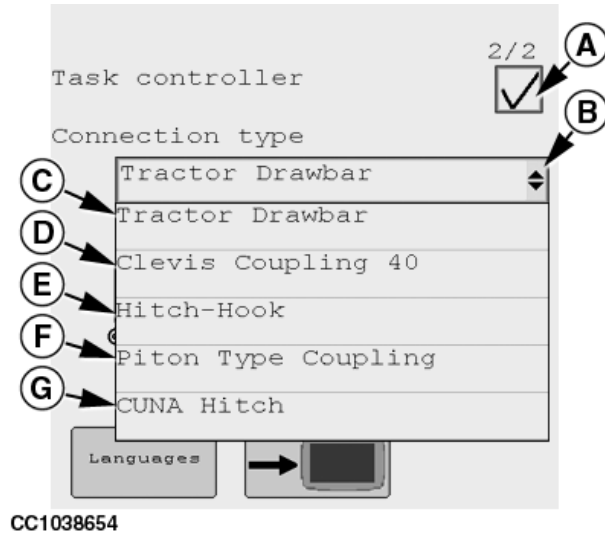
NOTE: When task controller is enabled, field bale counter can be interrupted.

- Tick check box (A) to enable the Task Controller function.
- Do not tick check box (A) to disable the Task Controller function.

- b. Select and activate drop-down list (B) then select the desired connection type: (C), (D), (E), (F) or (G).

NOTE: For detailed description of the task controller function, see your monitor operator's manual.

- | | |
|-------------------------------------|-----------------------|
| A—Enable or Disable Task Controller | E—Hitch Hook |
| B—Connection Type | F—Piton-Type Coupling |
| C—Tractor Drawbar | G—CUNA Hitch |
| D—Clevis Coupling 40 | |



CC1038654 —19—18OCT12

DC82261,0000409 -19-28JAN14-3/4

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

CC1032651 —UN—24NOV10



CC1032651

DC82261,0000409 -19-28JAN14-4/4

Set Automatic Greasing System (If Equipped)

CC1031612 —UN—16SEP09

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

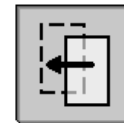
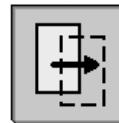


CC1031612

OUC006,000197F -19-18OCT12-1/4

2. Select Next Page or Previous Page softkey to access page 2/2.

CC1031853 —UN—30SEP09



CC1031853

Continued on next page

OUC006,000197F -19-18OCT12-2/4

3. Set automatic greasing system as follows:
 - a. Enable or disable the Automatic Greasing function by using check box (A).
 - Tick check box (A) to enable the Automatic Greasing function.
 - Do not tick check box (A) to disable the Automatic Greasing function.
 Set the ON time from 1 to 5 minutes by using input box (C).

NOTE: The initial factory setting is 1 minute.

Set the complete cycle time (ON time + OFF time) from 30 to 180 minutes by using input box (D).

NOTE: The initial factory setting is 45 minutes.

On the main page, indicator (E) is displayed according to the automatic greasing system status:

- Greasing pump crossed out when the automatic greasing system is disabled.
- Greasing pump full during the ON time.
- Greasing pump empty during the OFF time.

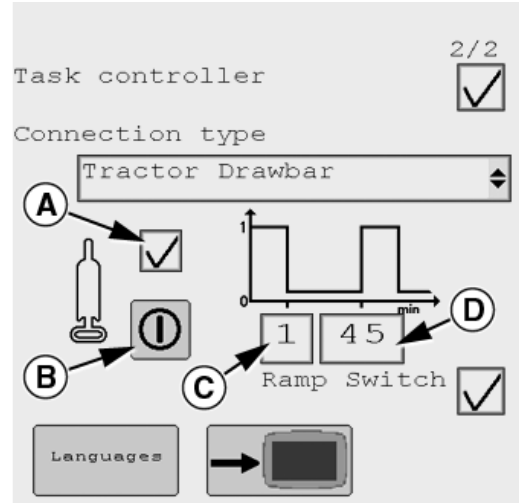
The following preconditions have to be met for the activation of the Automatic Greasing pump:

- PTO engaged.
- Baler rotation speed sensor enabled. See Baler Rotation Speed Sensor in this section.

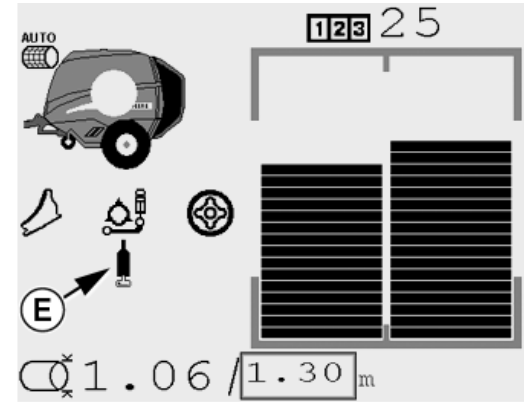
NOTE: If the PTO is disengaged or baler rotation speed sensor is disabled during ON or OFF time, the system memorizes the remaining ON or OFF time and continues the greasing cycle at the point where it was interrupted.

- b. Activate icon (B) to initiate an automatic greasing cycle manually. The automatic greasing system is also activated during the ON time calibration (C) set up. Icon (B) only works if the Baler Rotation Speed Sensor is disabled. See Baler Rotation Speed Sensor in this section.

4. For detailed description of the automatic greasing system, see Automatic Greasing System in Lubrication and Maintenance section.



CC1038655



CC1033549

- | | |
|--|-----------------------------------|
| A—Enable or Disable Automatic Greasing | D—Complete Cycle Time Calibration |
| B—Start Automatic Greasing Cycle | E—Greasing System Indicator |
| C—ON Time Calibration | |

CC1038655—19—18OCT12

CC1033549—UN—24NOV10

OUC006,000197F -19-18OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUC006,000197F -19-18OCT12-4/4

Bale Discharging Ramp Sensor (If Equipped)

CC1031612 —UN—16SEP09

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

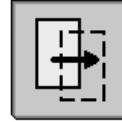


CC1031612

OUC006,0001980 -19-18OCT12-1/4

2. Select Next Page or Previous Page softkey to access page 2/2.

CC1031853 —UN—30SEP09



CC1031853

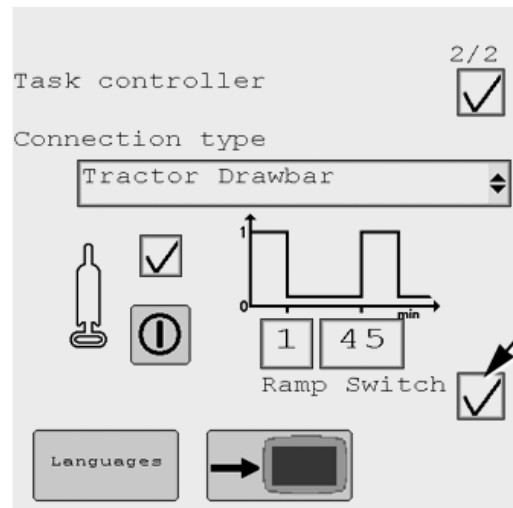
OUC006,0001980 -19-18OCT12-2/4

3. Check box (A) allows to enable or disable the bale discharging ramp sensor.

NOTE: Disabling the bale discharging ramp sensor allows to operate the baler with a defective sensor.

- Tick check box (A) to enable the bale discharging ramp sensor.
 - Do not tick check box (A) to disable the bale discharging ramp sensor.
4. Before disabling this function, check sensor adjustment. See Adjust Bale Discharging Ramp Sensor in Service section.

IMPORTANT: The bale discharging ramp sensor must be activated. Operating the baler with bale discharging ramp sensor disabled may cause malfunctions. See your John Deere dealer to replace defective parts as soon as possible.



CC1038656

CC1038656 —19—18OCT12

A—Bale Discharging Ramp Sensor

OUC006,0001980 -19-18OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUC006,0001980 -19-18OCT12-4/4

Load Languages (Monitor with Memory Card Reader or USB Port)

CC1031612 —UN—16SEP09

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



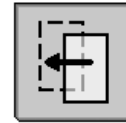
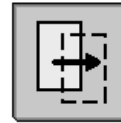
CC1031612

Continued on next page

NB02380,000010A -19-29FEB16-1/4

2. Select Next Page or Previous Page softkey to access page 2/2.

CC1031853 —UN—30SEP09



CC1031853

NB02380,000010A -19-29FEB16-2/4

3. Select icon (A) to access the language server page.
- Select and activate the desired language in languages available list (B).
 - The language is added in languages installed list (C).
 - The memory space available (E) is updated according to the languages added.
 - To remove a language, select and activate a language in languages installed list (C).
 - To leave the language server page, select icon (D).
 - To display the desired language on the monitor, select the language on the display settings page of the monitor. For more information see your monitor operator's manual.

NOTE: To add a new language in the languages available list (B) or for more information, see your John Deere dealer or visit www.StellarSupport.com.

- A—Language Server Icon** **D—Exit Icon**
B—Languages Available List **E—Memory Space Available**
C—Languages Installed List

CC1038657

CC1038657 —19—18OCT12

NB02380,000010A -19-29FEB16-3/4

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

CC1032651 —UN—24NOV10



CC1032651

NB02380,000010A -19-29FEB16-4/4

Switch Baler Application from Current Virtual Terminal (Display) to Another

CC1031612 —UN—16SEP09

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

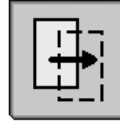


CC1031612

OUCC006,0001982 -19-18OCT12-1/4

2. Select Next Page or Previous Page softkey to access page 2/2.

CC1031853 —UN—30SEP09



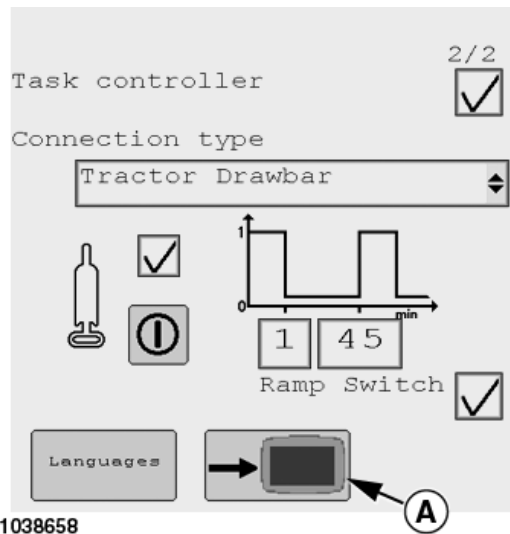
CC1031853

OUCC006,0001982 -19-18OCT12-2/4

3. Select icon (A) to switch baler application from the current virtual monitor to another virtual terminal already connected on CAN BUS.

NOTE: This function is not available at this time.

A—Next Virtual Terminal



CC1038658

CC1038658 —19—18OCT12

OUCC006,0001982 -19-18OCT12-3/4

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

CC1032651 —UN—24NOV10



CC1032651

OUCC006,0001982 -19-18OCT12-4/4

Storage

Prepare the Baler for Storage

Remove net roll and store in a cool, dry place.

IMPORTANT: Use an antifreeze or drain pressurized water tank (if equipped). See Charge Pressurized Water Tank in Service section.

Clean baler thoroughly inside and out. Trash and dirt will draw moisture and cause rust.

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 net knife.

Coat exposed cylinder rods with grease to prevent rusting.

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.

Apply a few drops of oil to all pivot points and linkages.

Thoroughly lubricate complete machine. See Lubrication and Maintenance section. This excess of grease will collect moisture and protect bearings against humidity.

Apply a thin layer of grease to threads of all adjusting bolts.

All parts from which the paint has been worn should be painted or coated with oil.

Clean all chains by washing them with diesel fuel. 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.

DC82261,0000546 -19-16OCT14-1/1

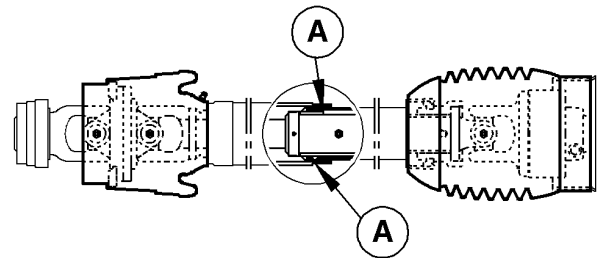
Store Baler at the End of Season

Store baler in a dry sheltered place. If stored outside, cover with waterproof material.

If baler must be stored outside, belt life can be increased by covering belts to protect from sunlight etc.

Block up baler, taking load off tires. Do NOT deflate tires. If exposed, cover tires to protect them from light, grease and oil.

Grease guard tubes (A) at the beginning of the winter season to protect them from freezing.



CC1030882

CC1030882—UN—24SEP08

AP00976,000013F -19-03NOV10-1/1

Prepare for Beginning of Season

Check and fill gear case up to check plug level. See Lubrication and Maintenance section.

Remove the oil from the chains.

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 Preparing the Baler section.

Tighten all bolts, nuts and set screws. See Service section.

Check adjustments of baler as described in Service section.

Review operator's manual.

Check that control monitor is working properly.



CC1033597

CC1033597—UN—10NOV10

If equipped, fill pressurized water tank with water, see Charge Pressurized Water Tank in Service section.

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DC82261,0000547 -19-16OCT14-1/2

Storage

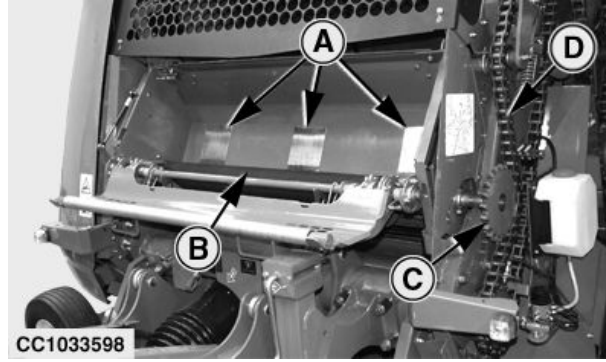
Wipe off feed rolls (B) and check for any sticky material. If necessary, rolls may be washed with soap and water. NEVER use solvents to clean rubber feed roll.

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 tying. See Service section.

Release chain (D) so it is not in contact with sprocket (C). Check that sprocket (C) rotates counterclockwise freely and does not rotate clockwise. If it is not OK, contact your John Deere dealer. After check, adjust chain (D) tension, see Service section.

Check that net knife is sharp. See Service section.



CC1033598 — UN — 10NOV10

A—Steel Net Roll Supports
B—Feed Rolls

C—Sprocket
D—Chain

DC82261,0000547 -19-16OCT14-2/2

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 960 Baler

Bale Chamber Dimensions

Bale chamber diameter	0.80 to 1.60 m (31 to 63 in.)
Bale chamber width	1.21 m (47-5/8 in.)

Baler

Weight ^a	4440 kg (9790 lb.)
Length	5.10 m (16 ft. 9 in.)
Height	2.70 to 2.86 m (8 ft. 10-1/4 in. to 9 ft. 4-5/8 in.)
Width	2.43 to 2.72 m (7 ft. 11-3/4 in. to 8 ft. 11-1/8 in.)

^aweight may vary depending on equipment

2.20 m (7 ft. 3 in.) Pickup with Drop Floor

Pickup Width	2.20 m (7 ft. 2-5/8 in.)
Width (between outer teeth)	1.92 m (6 ft. 3-5/8 in.)
Tooth bars	5
Number of teeth	150
Tooth spacing	68 mm (2-11/16 in.)
Stripper diameter	340 mm (13-3/8 in.)

Precutter Device with 13 Knives (If Equipped)

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)

Forming Belts

Number of belts	2
Type	2-ply - Endless
Width	573 mm (22-9/16 in.)
Length	10.96 m (35 ft. 11-1/2 in.)

Brake System (If Equipped)

Type	Hydraulic or pneumatic
------------	------------------------

Miscellaneous

PTO shaft speed	540 rpm (balers with 540 rpm gearbox) 1000 rpm (balers with 1000 rpm gearbox)
Drive protection	Cam-type cut out clutch
Powerline	Constant velocity powerline
Minimum tractor horsepower	75 kW (100 hp) at PTO
Tire size	15/70 - 18 (12PR) 16/70 - 20 (12PR) 500/55 - 20 (150A8) 500/60R22.5 (155D) 600/50 - 22.5 (156A8)
Tongue	Adjustable

DC82261,0000544 -19-06NOV14-1/1

Specifications

Specifications for 990 Baler

Bale Chamber Dimensions

Bale chamber diameter.....	0.80 to 1.85 m (31 in. to 72-3/4 in.)
Bale chamber width	1.21 m (47-5/8 in.)

Baler

Weight ^a	4740 kg (10450 lb.)
Length.....	5.32 m (17 ft. 5-1/2 in.)
Height	2.84 to 3.00 m (9 ft. 3-13/16 in. to 9 ft. 10-1/8 in.)
Width	2.43 to 2.72 m (7 ft. 11-3/4 in. to 8 ft. 11-1/8 in.)

^aweight may vary depending on equipment

2.20 m (7 ft. 3 in.) Pickup with Drop Floor

Pickup Width.....	2.20 m (7 ft. 2-5/8 in.)
Width (between outer teeth).....	1.92 m (6 ft. 3-5/8 in.)
Tooth bars	5
Number of teeth.....	150
Tooth spacing.....	68 mm (2-11/16 in.)
Stripper diameter	340 mm (13-3/8 in.)

Precutter Device with 13 Knives (If Equipped)

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)

Forming Belts

Number of belts	2
Type	2-ply - Endless
Width	573 mm (22-9/16 in.)
Length.....	12.70 m (41 ft. 8 in.)

Brake System (If Equipped)

Type	Hydraulic or pneumatic
------------	------------------------

Miscellaneous

PTO shaft speed	540 rpm (balers with 540 rpm gearbox) 1000 rpm (balers with 1000 rpm gearbox)
Drive protection	Cam-type cut out clutch
Powerline	Constant velocity powerline
Minimum tractor horsepower	75 kW (100 hp) at PTO
Tire size.....	15/70 - 18 (12R) 16/70 - 20 (12PR) 500/55 - 20 (150A8) 500/60R22.5 (155D) 600/50 - 22.5 (156A8)
Tongue	Adjustable

DC82261,0000545 -19-06NOV14-1/1

EC Declaration of Conformity

**Deere & Company
Moline, Illinois USA**

The person named below declares that:

Machine type: Round Baler
Models: 960 and 990

fulfills all relevant provisions and essential requirements of the following directives:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-certification
Agricultural Machinery - Safety - Part 1: General Requirements	ISO 4254-1	Self-certification
Agricultural Machinery - Safety - Part 11: Pick-up Balers	ISO 4254-11	Self-certification

Name and address of the person in the European Community authorized to compile the technical construction file:

Henning Oppermann
Deere & Company European Office
John Deere Strasse 70
Mannheim, Germany D-68163
EUConformity@JohnDeere.com

Place of declaration: Arc-lès-Gray, France
Date of declaration: 01 March 2011
Manufacturing unit: John Deere Arc-lès-Gray

Name: Miles R KEATON
Title: Manager Product Engineering

DXCE01 —UN—28APR09



OUC006.00016E1 -19-22DEC10-1/1

Specifications

Customs Union–EAC

This information applies only to machines which bear the EAC mark.

Information for products that bear conformity mark of the Customs Union member states

Manufacturer: Deere & Company
Moline, Illinois U.S.A.

Model: 960 and 990 Round Balers

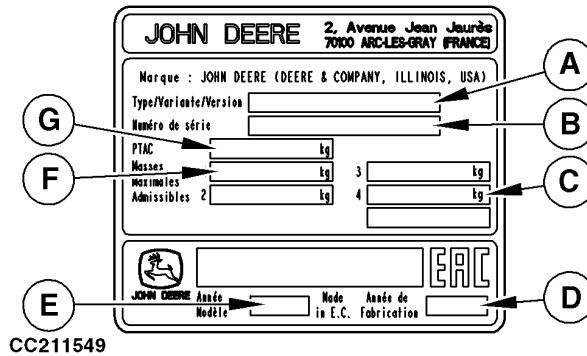
Name and address of the authorized representative in the Customs Union of Russia, Belarus and Kazakhstan:
Limited Liability Company
"John Deere Rus"

Address:
142050, Russia, Moscow region, Domodedovo district, Domodedovo, Belye Stolbi micro district, vladenye "Warehouse 104," Building 2.

For technical support, please contact your dealer.

Date of manufacture is denoted by the product label.

- | | |
|---|--|
| <p>A—Model Designation
 B—Serial Number
 C—Maximum Load at Hitch
 D—Month and Year of Manufacture (MM/YYYY)</p> | <p>E—Model Year
 F—Maximum Load on Axle
 G—Maximum Permissible Total Weight</p> |
|---|--|



CC211549 —UN—01SEP14

Example		
Month of Manufacture	Year of Manufacture	Date of Manufacture
05	2014	May 2014
10	2014	October 2014

DC82261,0000543 -19-05NOV14-1/1

Serial Numbers

Serial Number Plate

Serial number identifying the baler is stamped on factory serial number plate.

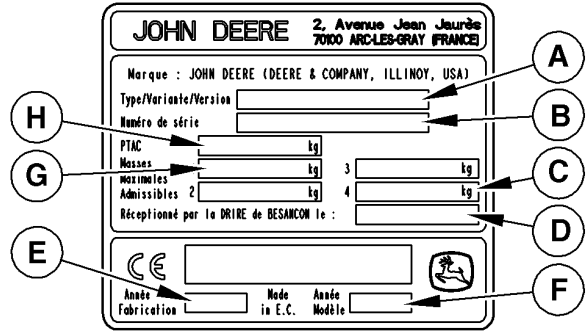
These numbers and letters are required when ordering baler or attachment replacement parts.

To ensure that you have these numbers at hand, enter the appropriate serial number in the table provided under the illustration.

OUC006,000169A -19-29JUN10-1/1

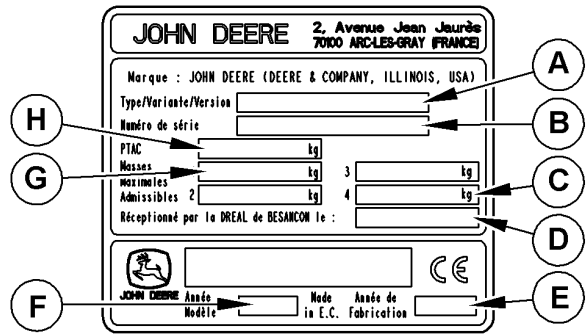
Serial Number Plate Description

- A—Model Designation
- B—Serial Number
- C—Maximum Load at Hitch
- D—Date of Acceptance or homologation number
- E—Year of Production
- F—Model Year
- G—Maximum Load on Axle
- H—Maximum Permissible Total Weight



CC208610

Version 1



CC206124

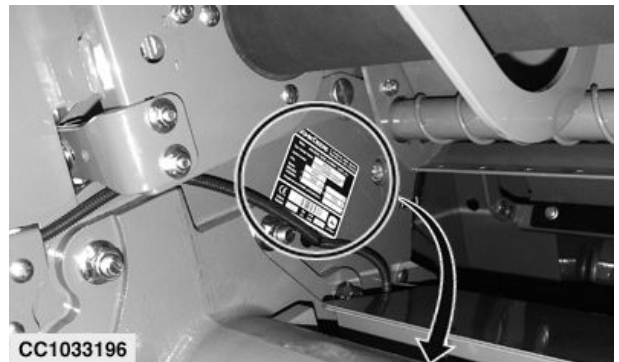
Version 2

DC82261,000043F -19-08APR14-1/1

Baler Serial Number Record

The serial number plate is located on the right side of the front frame.

Record the serial number in the table below.



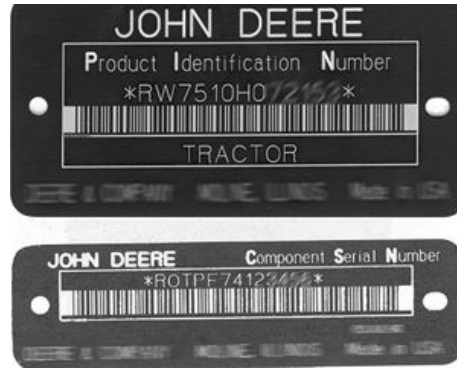
CC1033196

Serial Number											
*											*

OUC006,00016B5 -19-14DEC10-1/1

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

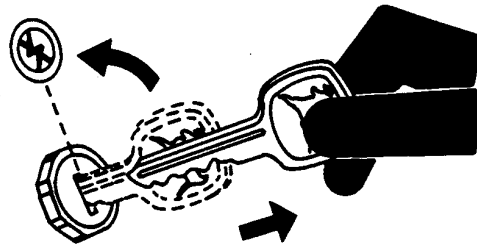


TS1680—JUN—09DEC03

DX,SECURE1 -19-18NOV03-1/1

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.



TS230—JUN—24MAY89

DX,SECURE2 -19-18NOV03-1/1

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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

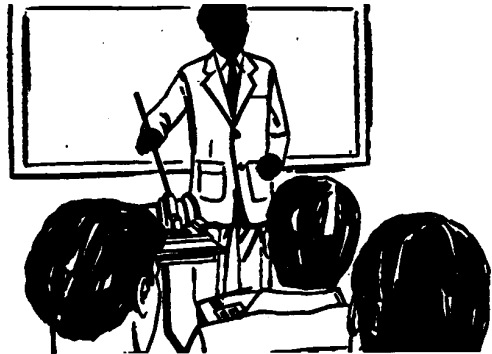
Well-Trained Technicians

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

