

# V451M, and V461M Round Balers



**JOHN DEERE**



**OPERATOR'S MANUAL**  
**V451M and V461M Round Balers**  
OMCC61486 ISSUE F3 (ANGLAIS)

**John Deere Arc-lès-Gray**  
European Edition  
PRINTED IN U.S.A.



# Introduction

## Foreword

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

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

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

RIGHT-HAND AND LEFT-HAND sides are determined by facing the direction the implement will travel when going forward.

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

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

THIS ROUND BALER IS DESIGNED SOLELY for use in customary agricultural or similar operations ("INTENDED USE"). Use in any other way is considered as contrary to

the intended use. The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

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

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

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

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## Predelivery Inspection

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

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

**Date:**

**Signature Dealer/Service Technician:**



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

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# Identification View

## Identification View



CC575706

CC575706 — UN — 05MAY23

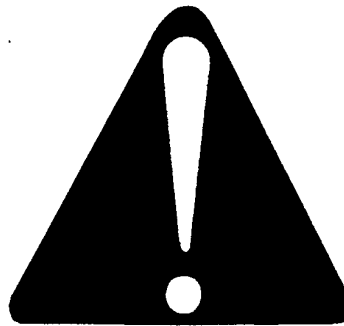
ga87848,1685001015398 -19-31MAY23-1/1

# 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.



T81389 —UN—28JUN13

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

## Follow Safety Instructions

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

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

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

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



TS201 —UN—15APR13

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

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

## Understand Signal Words

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

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

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

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General



**▲ WARNING**

**▲ CAUTION**

precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

DX.SIGNAL -19-05OCT16-1/1

TS187 —19—30SEP08

### Observe Road Traffic Regulations

Always observe local road traffic regulations when using public roads.



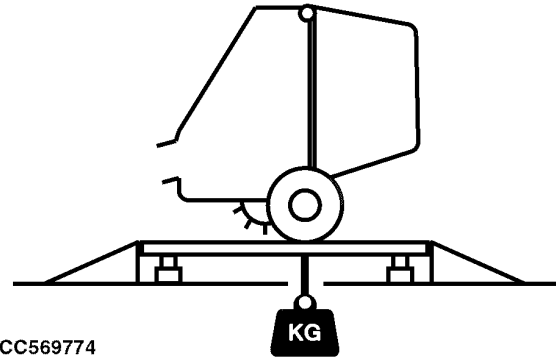
H28890 — UN — 30JUN89

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

### Machine Weight

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

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



CC569774

CC569774 — UN — 05APR23

ga87848,1680679934353 -19-12APR23-1/1

### 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

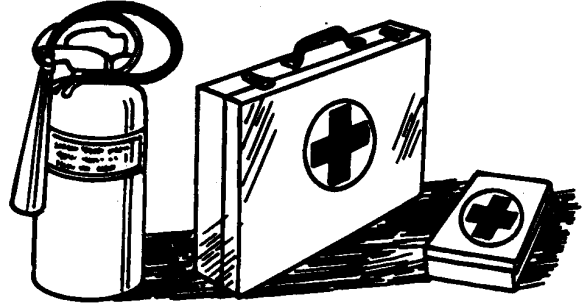
DX,STORE -19-03MAR93-1/1

### 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

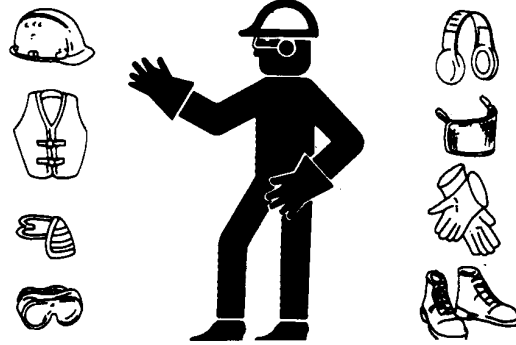
### Wear Protective Clothing

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.

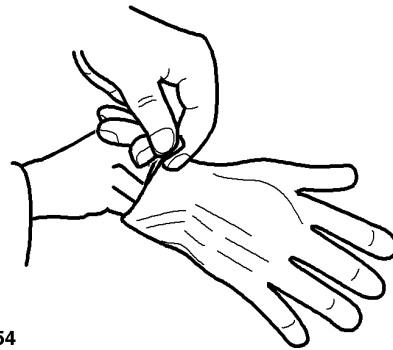


TS206 —UN—15APR13

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

### Handle Knives

Prevent personal injury by wearing safety gloves to handle knives.



CC1026954

CC1026928 —UN—26JAN05

GA87848,0000473 -19-24OCT17-1/1

### 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.

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

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

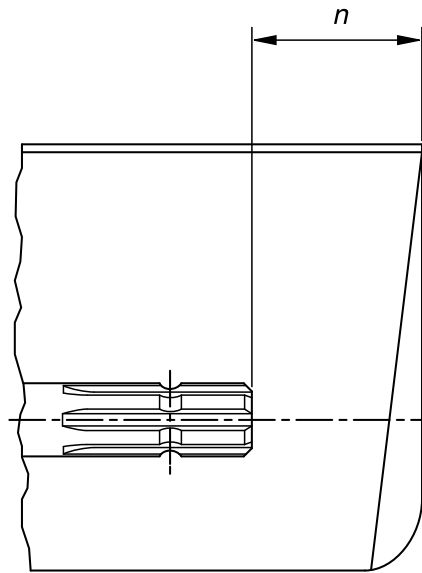
Do not install any adapter device between the tractor and the primary implement PTO driveshaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

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

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

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

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



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

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

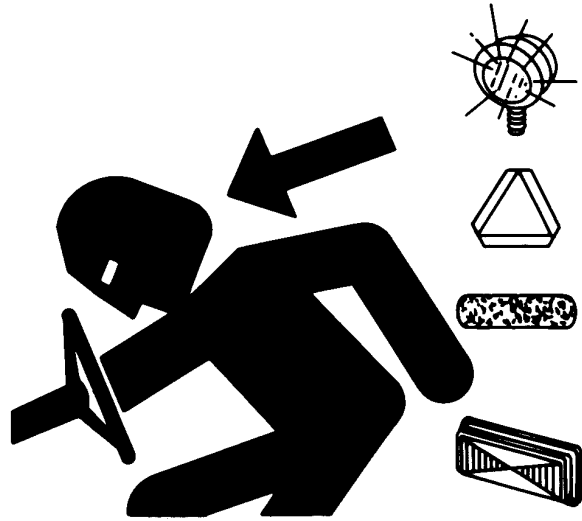
TS1644 —UN—22AUG95

H96219 —UN—29APR10

### Use Safety Lights and Devices

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

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost. An implement safety lighting kit is available from your John Deere dealer.



TS951 —UN—12APR90

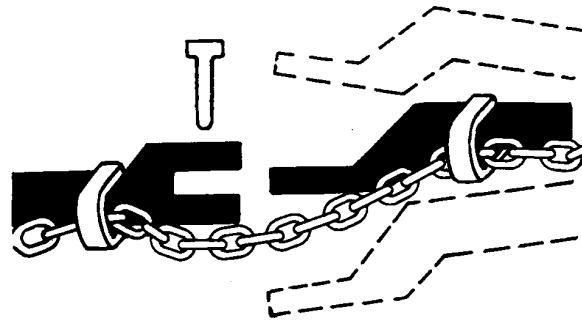
DX,FLASH -19-07JUL99-1/1

### Use a Safety Chain

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

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

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



TS217 —UN—23AUG88

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

### Observe Maximum Transport Speed

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

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

*NOTE: See your John Deere dealer for more information.*

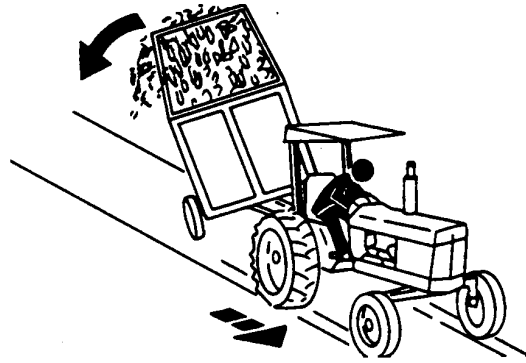
Do not exceed implement gross weight (PTAC) when towing this implement at transport speed.

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

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

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

Exceeding the implement maximum transport speed can result in:



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

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

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

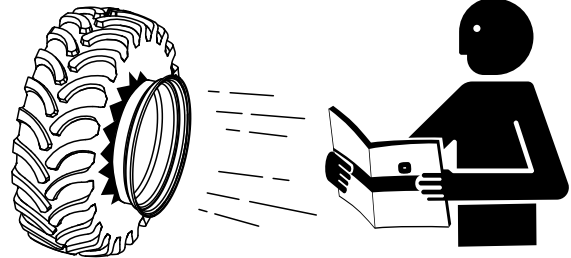
TS216 —UN—23AUG88

### Follow Tire Recommendations

Keep your machine in proper working order.

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

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



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

H111235 —UN—13MAY14

### Service Tires Safely

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

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

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

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

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



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

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

RXA0103438 —UN—11JUN09

### 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.



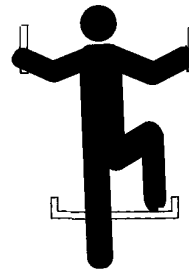
OUCC006,0001546 -19-29MAY09-1/1

CC1031622 —UN—29MAY09

### Use Steps and Handholds Correctly

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

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



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

T133468 —UN—15APR13

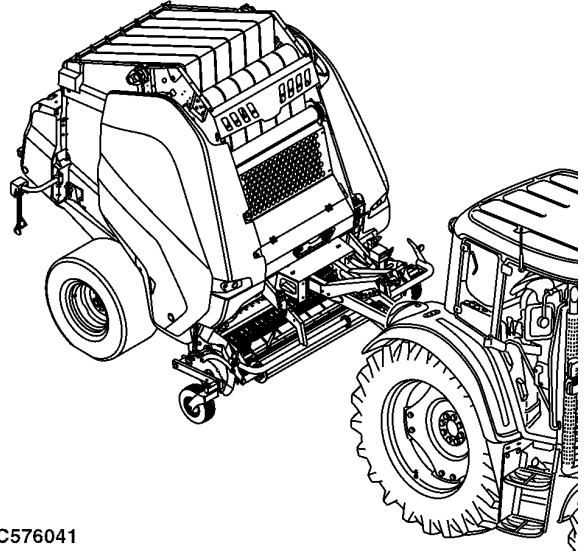
### Operate Baler Safely

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

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

Disengage PTO and shut off engine.

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



CC576041

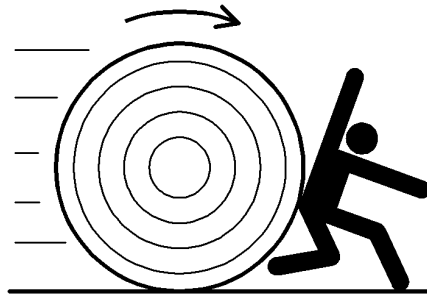
CC576041 —JUN—23JUN23

†81334,1687527930084 -19-23JUN23-1/1

### Operate Baler Safely on Slopes

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

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



CC1038683

CC1038683 —JUN—19NOV12

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

## Prevent Fire

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

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



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

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

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

TS227—UN—15APR13

## In Case of Fire

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

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

### If you can safely extinguish the fire:

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



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

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

TS227—UN—15APR13

### Secure Gate Safely

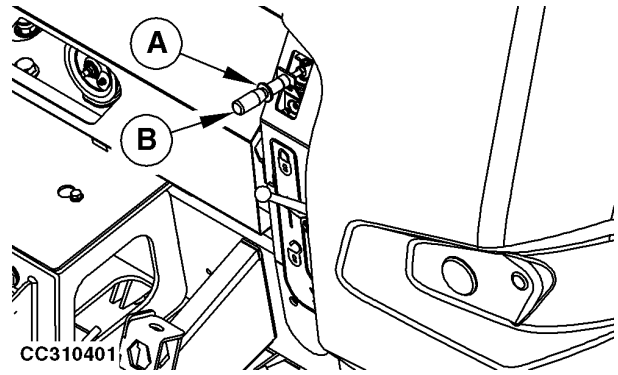
**IMPORTANT:** Never travel with an open gate at a speed higher than 2 km/h (1.2 mph). Damage to the gate could occur.

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

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

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

Remove foreign objects from machine.



A—Lock Bushing

B—Gate Lock Device Lever

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

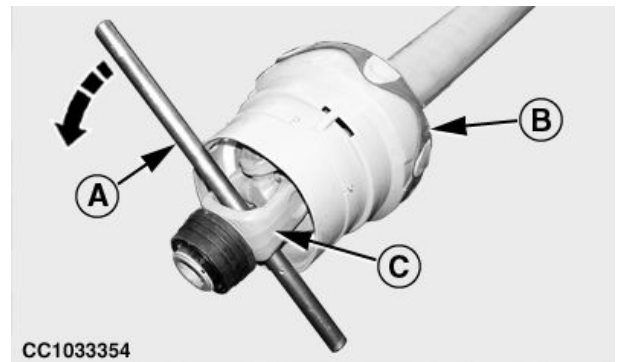
CC310401—UN—18APR17

### Service Machine Safely

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

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

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



A—Prybar

B—Telescoping Hook-Up

C—Yoke

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

CC1033354—UN—09DEC10

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

A—Nut



CC576125

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

CC576125—UN—26APR23

### Maximum Hydraulic Operating Pressure

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

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

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

### Practice Safe Maintenance

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

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

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

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

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

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

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



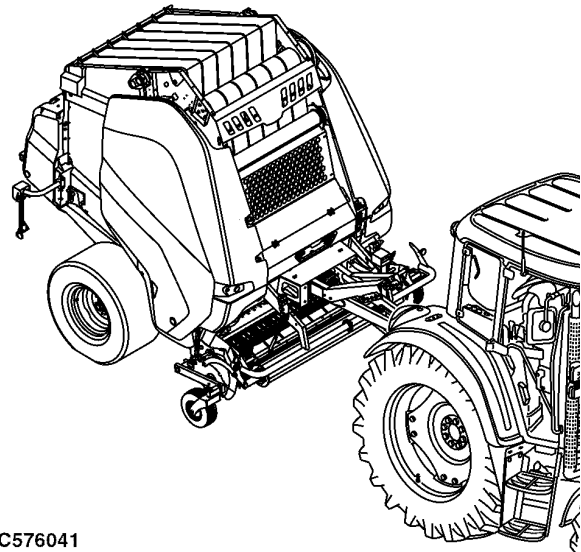
TS218 —UN—23AUG88

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

### Protect People and Animals

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

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



CC576041

CC576041 —UN—23JUN23

†181334,1687527998265 -19-23JUN23-1/1

### Avoid High-Pressure Fluids

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

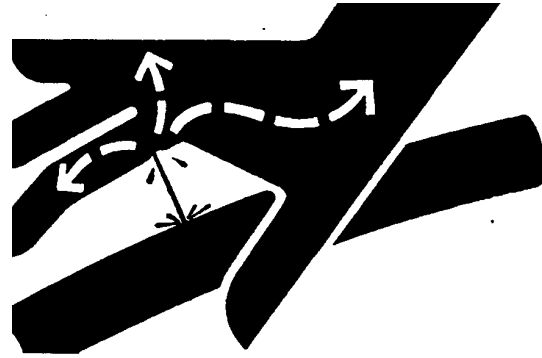
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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

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

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

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within



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

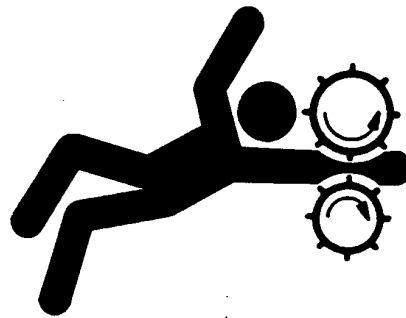
DX,FLUID -19-12OCT11-1/1

X9811 —UN—23AUG88

### Service Machines Safely

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

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



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

TS228 —UN—23AUG88

### Remove Paint Before Welding or Heating

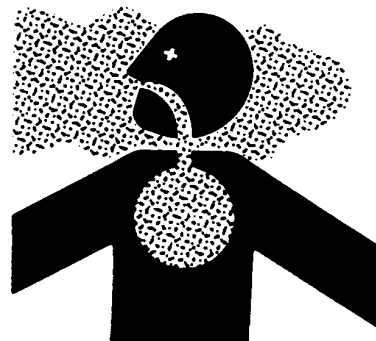
Avoid potentially toxic fumes and dust.

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

Remove paint before heating:

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

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



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

Dispose of paint and solvent properly.

DX,PAINT -19-24JUL02-1/1

TS220 —UN—15APR13

### Avoid Heating Near Pressurized Fluid Lines

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



TS953 —UN—15MAY90

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

### Service Accumulator Systems Safely

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

Relieve pressure from the pressurized system before removing accumulator.

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

Accumulators cannot be repaired.



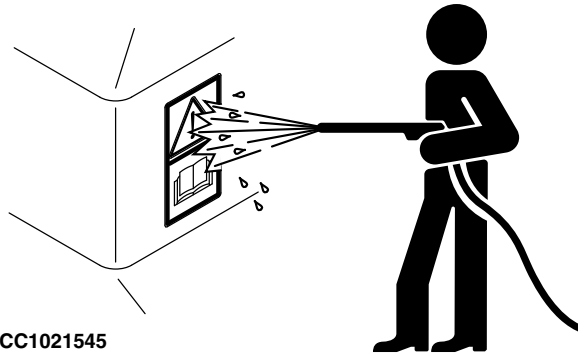
TS281 —UN—15APR13

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

### Avoid High-Pressure Jet on Safety Signs

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

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



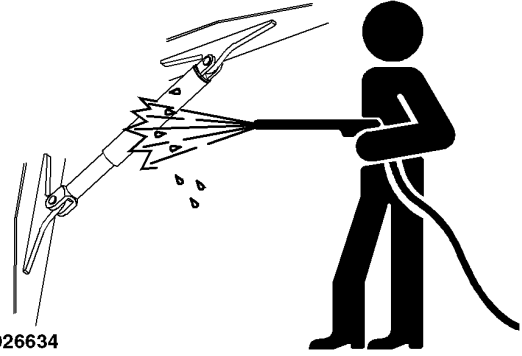
CC1021545

CC1021545 —UN—23APR02

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

### Avoid High-Pressure Jet on Cylinders

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



CC1026634

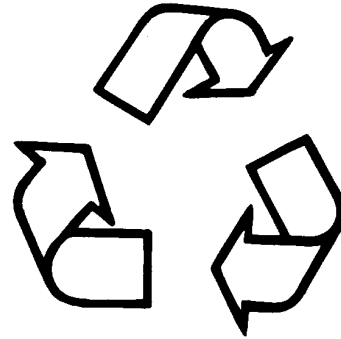
CC1026634 —UN—03DEC04

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

### Decommissioning — Proper Recycling and Disposal of Fluids and Components

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

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.
- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid);



TS1133 —UN—15APR13

- filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
  - Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
  - Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

DX,DRAIN -19-01JUN15-1/1

# Safety Signs

## Pictorial Safety Signs

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

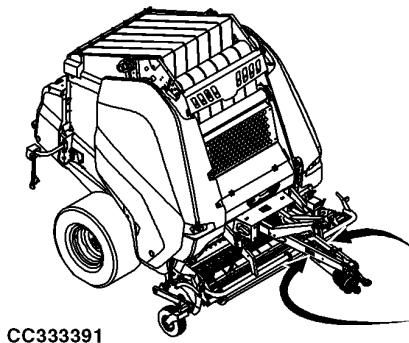


TS231 —19—07OCT88

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

## Baler Drive Line

Stay clear of rotating drive line to avoid personal injury.



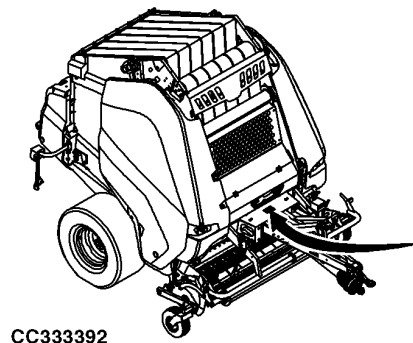
CC333391 —UN—02OCT17

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

## Avoid Fall

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

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



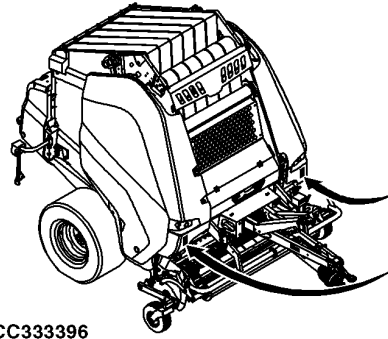
CC333392 —UN—02OCT17

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

### Pickup

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

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



CC333396

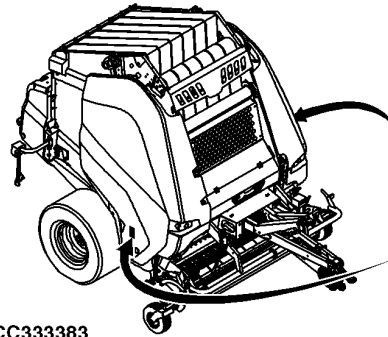


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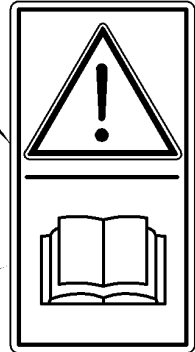
GA87848,000041A -19-02OCT17-1/1

### Operator's Manual

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



CC333383

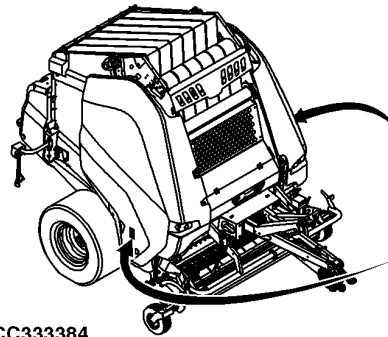


CC333383 —UN—02OCT17

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

### Repair and Maintenance

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



CC333384

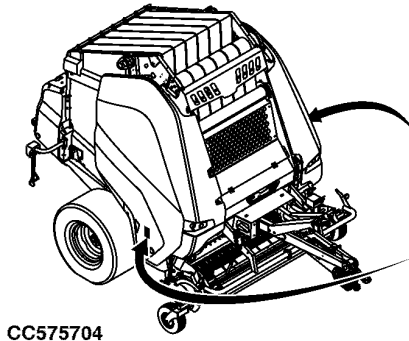


CC333384 —UN—02OCT17

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

### Drive Chains

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



CC575704

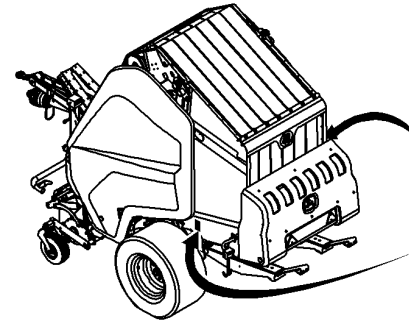


CC575704 —UN—02MAY23

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

### Belt

Stay clear from belt while machine is running.



CC333388



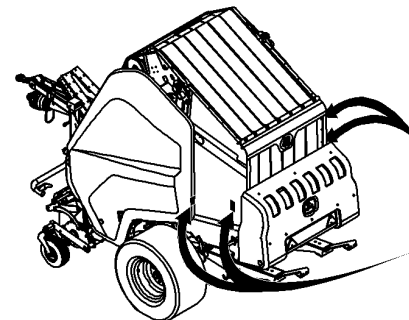
CC333388 —UN—02OCT17

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

### Gate Safety Lock

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

Stand clear before unlocking the gate safety lock.



CC333387



CC333387 —UN—02OCT17

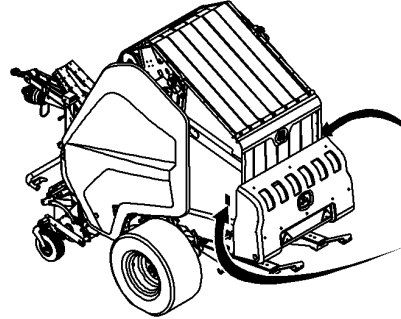
GA87848,0000413 -19-02OCT17-1/1

### Raised Gate

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

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

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



CC333386



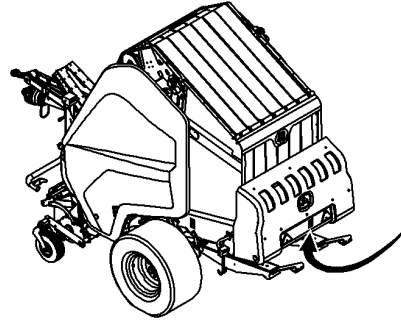
CC333386 —UN—02OCT17

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

### Bale Unload

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

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



CC333389



CC333389 —UN—02OCT17

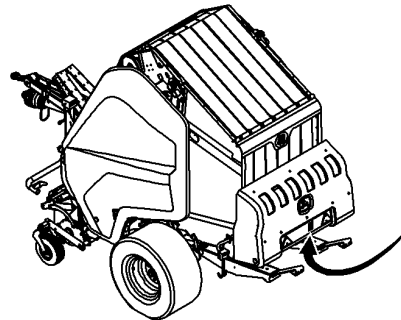
GA87848,0000419 -19-02OCT17-1/1

### Opened Gate

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

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

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



CC333390

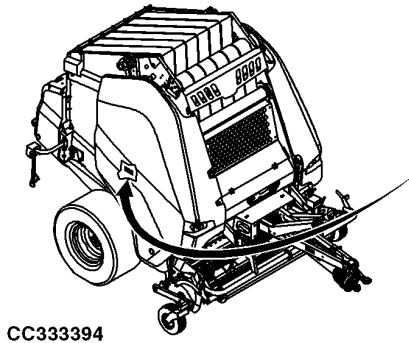


CC333390 —UN—02OCT17

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

### Compressed Air Tank

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



CC333394



CC333394—UN—03OCT17

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

# Preparing the Tractor

## Adjust Drawbar

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

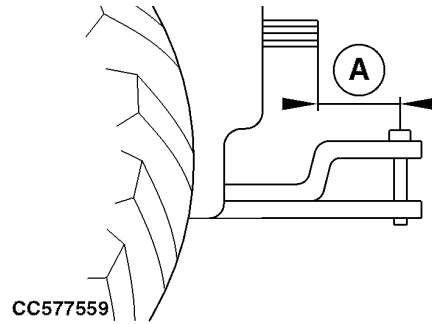
**IMPORTANT:** Before attaching baler, be sure to adjust drawbar. Make sure that is no interference between PTO shields and hitch device.

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

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

Set drawbar to the following specification:

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



CC577559

A—350 mm (1 ft. 2 in.)

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

tt81334,1683722581257 -19-10MAY23-1/1

CC577559—UN—10MAY23

## Select Tractor PTO Speed

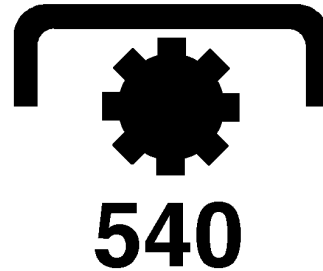
*NOTE:* Refer to tag on the front of baler to select tractor PTO speed.

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

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

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

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



CC1020007

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

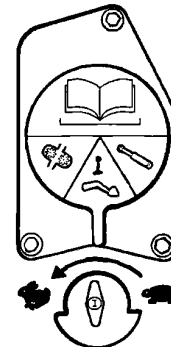
CC1020007—UN—09JUL01

## Adjust the Tractor SCV Flow

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

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

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



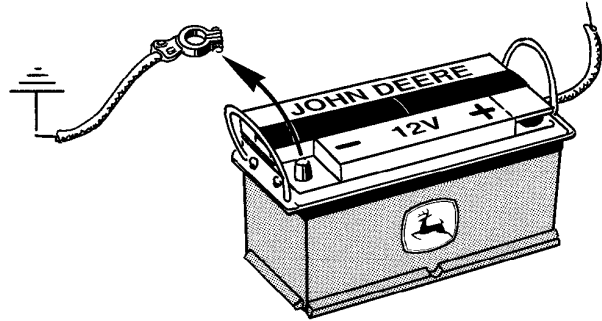
CC000833

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

CC000833—UN—05APR05

### Round Baler Electrical Circuit and Control Power Supply Requirement

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



CC1020363

CC1020363 —UN—23AUG01

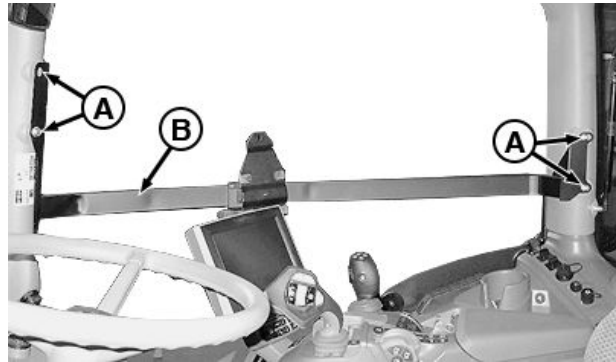
CC03745,0000288 -19-23AUG01-1/1

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

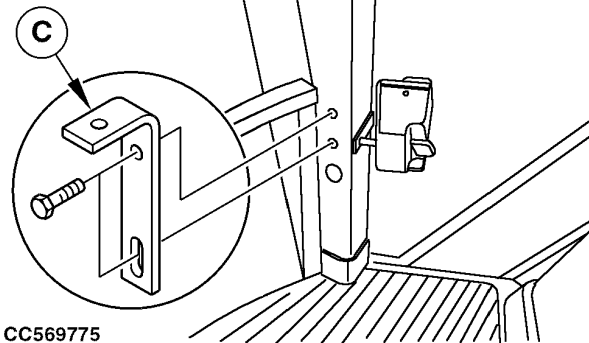
To install monitor to the mounting rail (B) or mounting strap (C), see your tractor Operator's Manual.

A—Mounting Point  
B—Mounting Rail

C—Mounting Strap



Mounting Rail



CC569775

Mounting Strap

LX372914 —UN—10JUL20

CC569775 —UN—06APR23

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

### Install Battery Wiring Harness for Connecting Control Monitor

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

Proceed as follows:

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

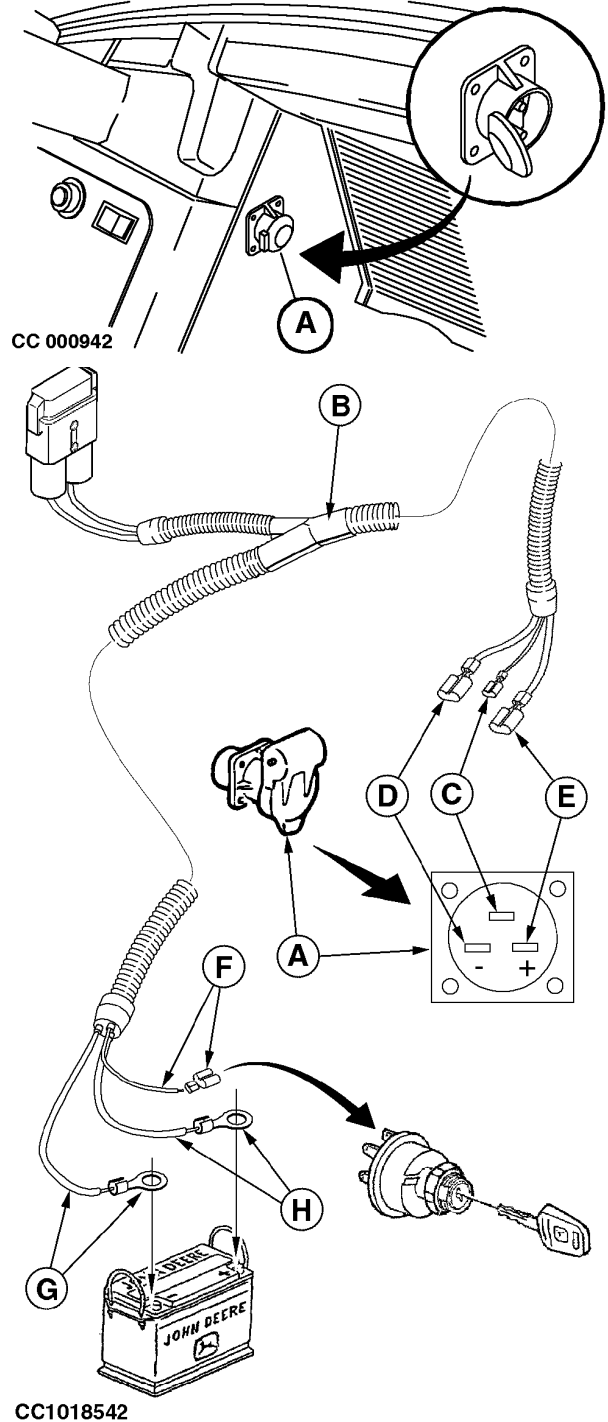
**IMPORTANT: Do not connect the positive wires (F) and (H) (RED) to the starter motor solenoid!**

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

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

A—Convenience Outlet  
B—Battery Harness  
C—Red Wire (1.5 mm<sup>2</sup>)  
D—Black Wire (6.0 mm<sup>2</sup>)

E—Red Wire (6.0 mm<sup>2</sup>)  
F—Red (Positive) Wire (1.5 mm<sup>2</sup>)  
G—Black (Negative) Wire (6.0 mm<sup>2</sup>)  
H—Red (Positive) Wire (6.0 mm<sup>2</sup>)



CC000942—JUN—05APR95

CC1018542—JUN—23OCT00

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

### Install BaleTrak Monitor on the Tractor

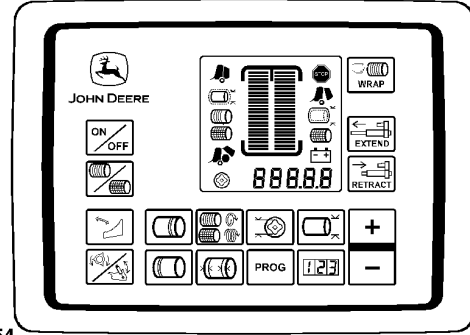
Install BaleTrak monitor on the provided support.

The power supply must be 12 Volt, 30 A with fully charged battery. A minimum of 20 A is required during electrical cylinder retract cycle.

**IMPORTANT: Over voltage should not be higher than 16 V.**

**Under voltage should not be below 11.2 V as under this value the BaleTrak monitor will not work correctly and a diagnostic trouble code will be displayed. This can occur when battery is flat or if battery connections are not good. Always check battery voltage and connections by actuating the actuators before operating the baler.**

*NOTE: Due to the high level of ripple current (over voltage), do not perform any BaleTrak test with the battery connected to a battery charger.*



CC1031054

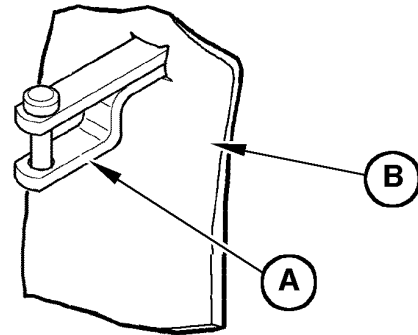
The BaleTrak monitor is reverse voltage protected.

CC1031054 —UN—22OCT08

OUCC006,00014AD -19-18NOV08-1/1

### Using Drawbar Shield

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



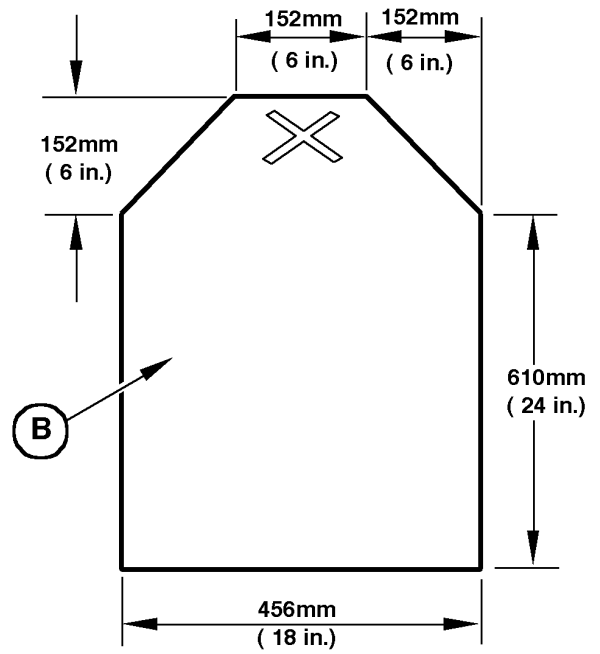
CC007918

Continued on next page

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

CC007918 —UN—12DEC96

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



CC007919

CC007919 — UN — 25NOV96

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

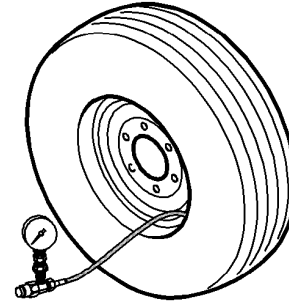
# Preparing the Baler

## Tire Inflation

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

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

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



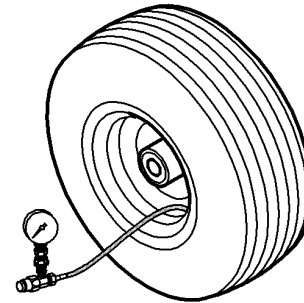
CC1030245

CC1030245—UN—27SEP07

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

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

Inflate pickup gauge wheels to specified pressure:



CC1030246

CC1030246—UN—01OCT07

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

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

## Set Machine Angle

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

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

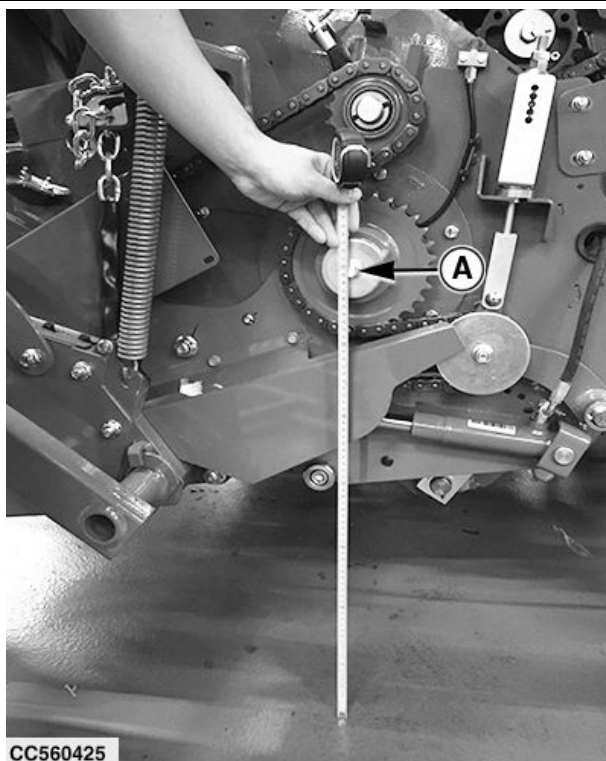
1. Park the baler on flat surface.
2. Adjust the jackstand until the rotor axle (A) reaches the following height:

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

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

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

**A—Rotor Axle**



CC560425

CC560425—UN—20MAR23

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

### Adjust Tongue

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

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

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

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

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

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

**Specification**

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

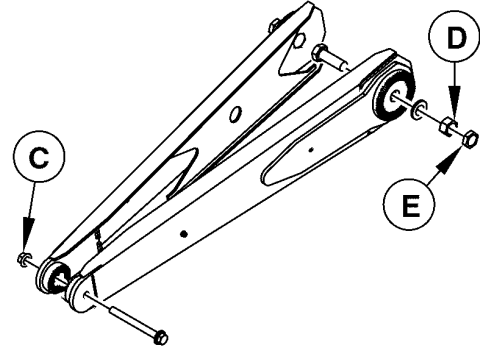
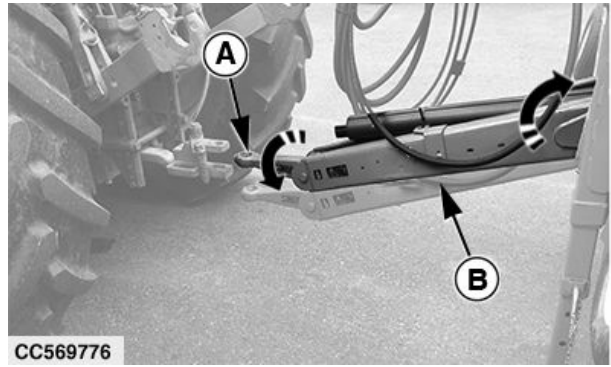
7. Attach baler to the tractor.

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

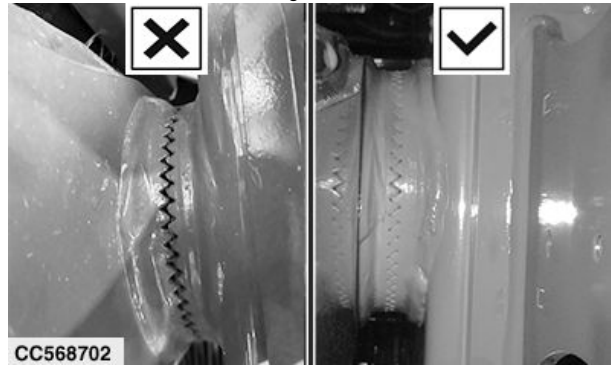
8. Fold the jackstand.
9. Check the height of the rotor axle is within the given range. See Set Machine Angle in this section.

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

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



Tongue Nut



Tongue Tighten Error

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

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

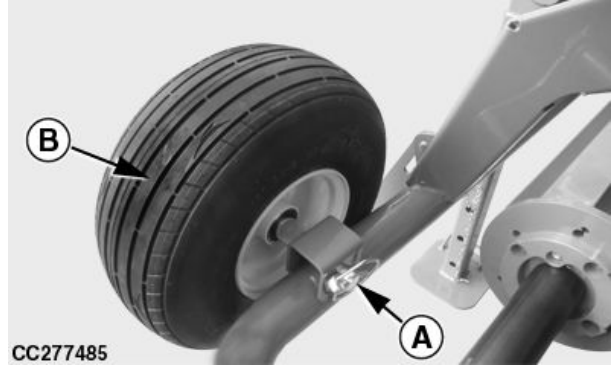
*using the gauge wheels. See Adjust Pickup Gauge Wheels in Operating the Baler section.*

### Install Standard Gauge Wheels in Working Position

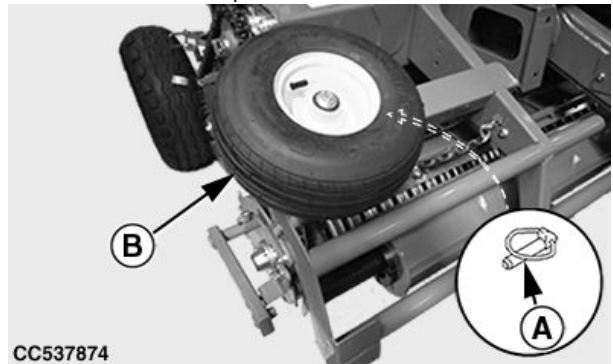
1. Remove quick-lock pin (A).
2. Remove gauge wheel (B) from its bracket.
3. Position gauge wheel (B) on pickup as shown. Secure it with quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin

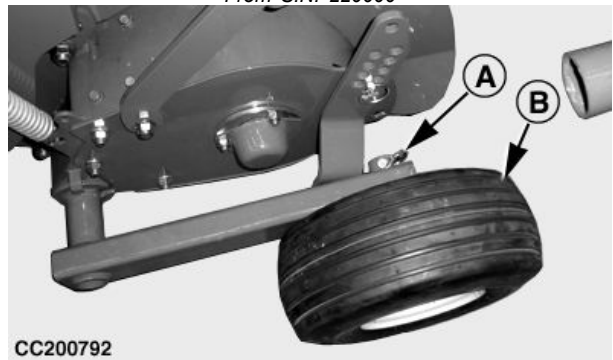
B—Gauge Wheel



CC277485 —UN—18JUL16



CC537874 —UN—01JUN22



CC200792 —UN—12APR13

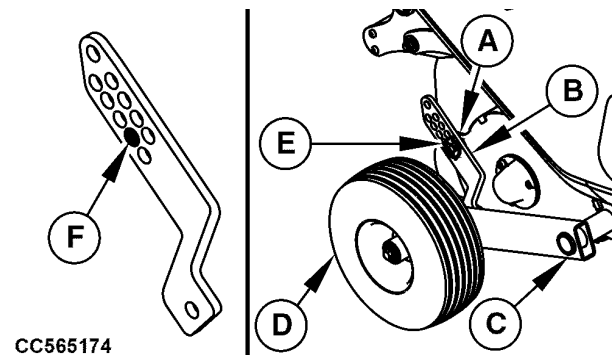
ga87848,1681390273440 -19-31MAY23-1/2

### Initial Setup of the Standard Gauge Wheels:

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

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

D—Gauge Wheel  
E—Pin  
F—Hole Position



CC565174 —UN—13MAR23

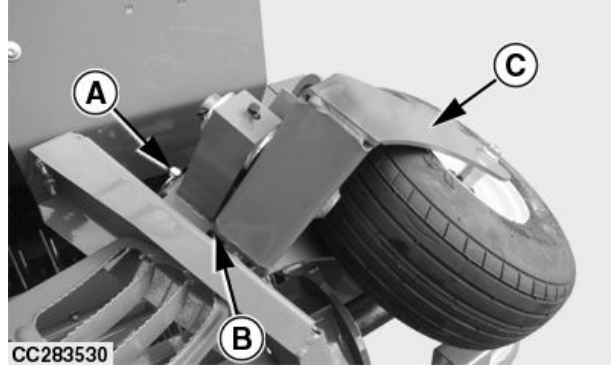
ga87848,1681390273440 -19-31MAY23-2/2

### Install Caster Gauge Wheels in Working Position

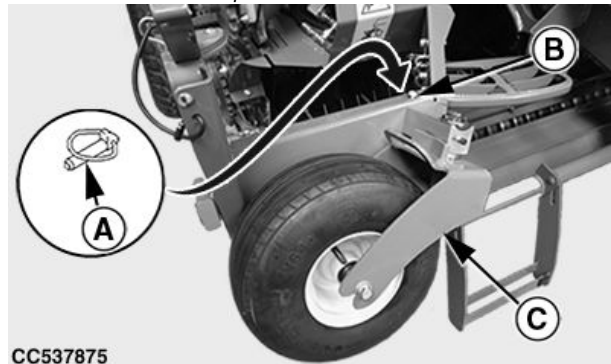
1. Remove quick-lock pin (A) and pin (B).
2. Remove caster gauge wheel (C) from its bracket.
3. Position caster gauge wheel (C) on pickup with handle (D) as shown and secure it with pin (B) and quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin  
B—Pin

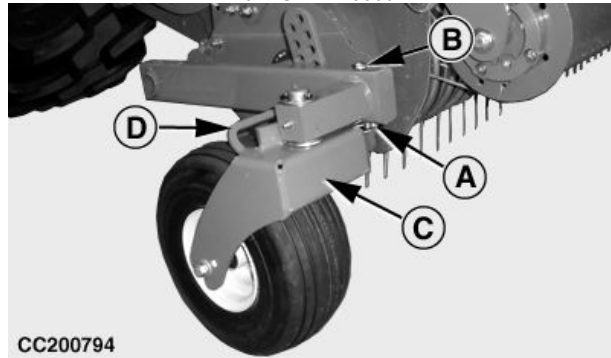
C—Caster Gauge Wheel  
D—Caster Gauge Wheel Handle



Up To S.N. 219999



From S.N. 220000



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

CC283530—UN—18JUL16

CC537875—UN—01JUN22

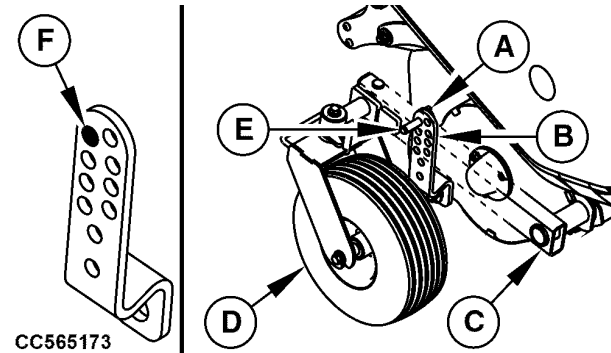
CC200794—UN—12APR13

### Initial Setup of the Gauge Wheels:

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

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

D—Gauge Wheel  
E—Pin  
F—Hole Position



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

CC565173—UN—13MAR23

### Select Net Roll

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

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

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

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

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

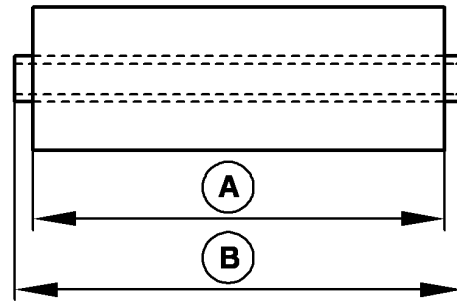
A—Material Width

B—Core Width

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



CC421116



CC1033200

CC421116 —UN—22OCT20

CC1033200 —UN—05AUG10

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

### Care of Net Roll

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

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

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

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

### Care of Net Binding Device

Before operating the baler proceed as follows:

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

It is recommended to use:

- Water
- Soap water

Apply talcum powder to rubber feed roll.

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

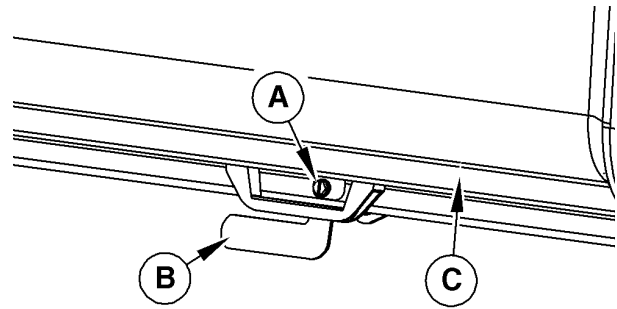
### Load Net Roll

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

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

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

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



CC310414

A—Lock  
B—Latch

C—Net Binding Cover

CC310414—UN—18APR17

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GA87848,00010AC -19-08JAN21-1/7

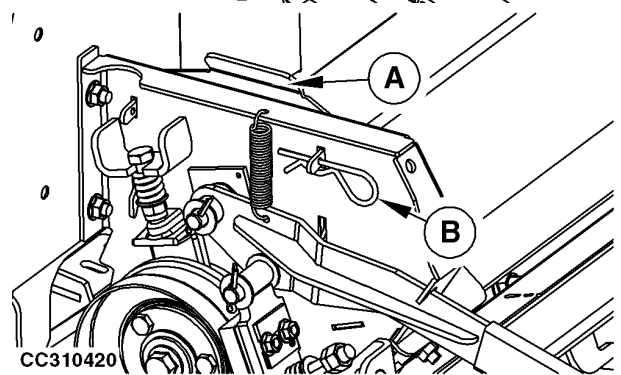
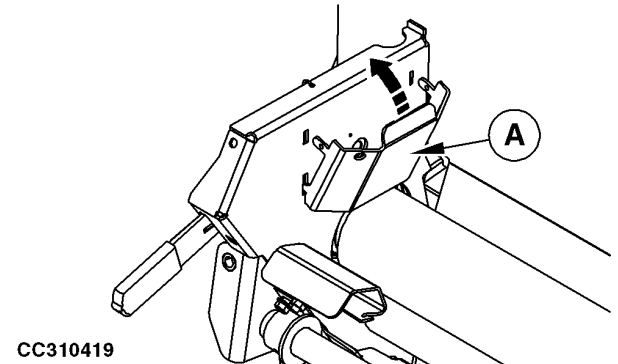
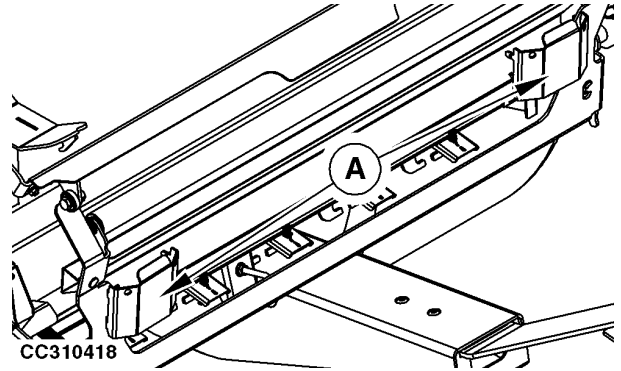
## Preparing the Baler

### 4. Install net roll:

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

A—Stops

B—Spring Locking Pin



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

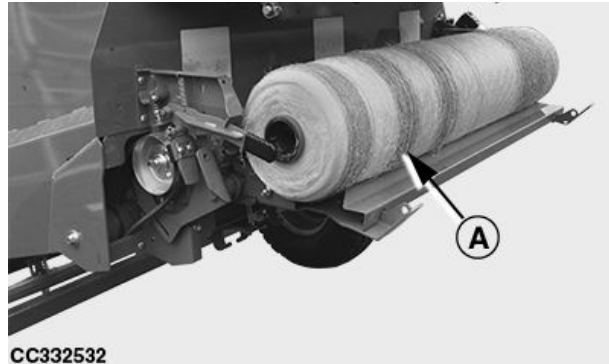
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GA87848.00010AC -19-08JAN21-2/7

## Preparing the Baler

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

**A—Loading Position**



CC332532

CC332532 —UN—03OCT17

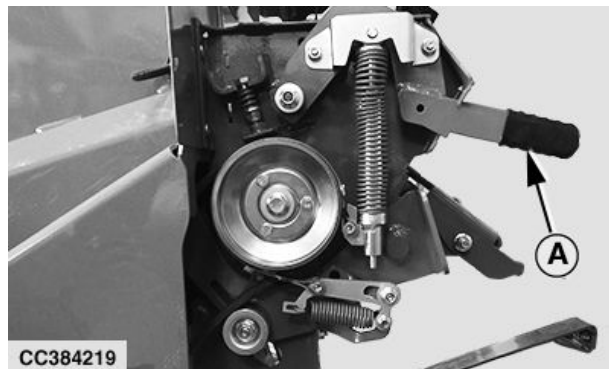
*John Deere B-Wrap is a trademark of Tama Plastic Industry*

GA87848,00010AC -19-08JAN21-3/7

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

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

**A—Lever**



CC384219

CC384219 —UN—03JUL19

Continued on next page

GA87848,00010AC -19-08JAN21-4/7

## Preparing the Baler

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

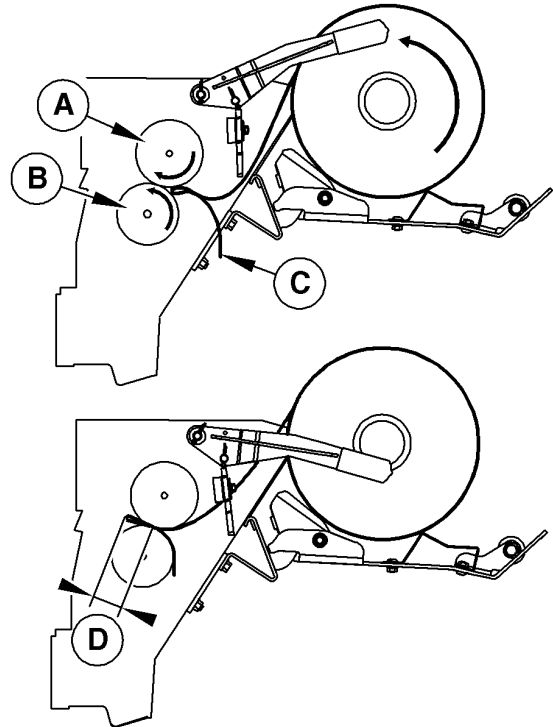
**IMPORTANT:** Do not thread more than 25 mm (1 in) of loop (D) between the two rolls as it causes material to wrap around the rolls.

A—Rubber Roll  
B—Steel Roll

C—Net  
D—25 mm (1 in)



CC332533 —UN—03OCT17



CC332530

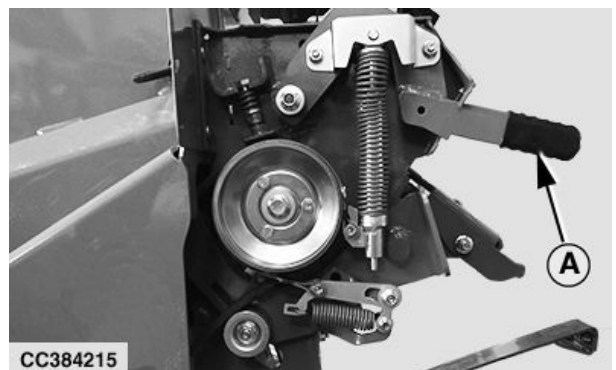
CC332530 —UN—03OCT17

GA87848.00010AC -19-08JAN21-5/7

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

**IMPORTANT:** If feed rolls can still be rotated with brake. See Check Net Feed Roll Brake (Machine Equipped with Rubber Brake Pad) (Test 6), or Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6) in Service section.

A—Brake Lever



CC384215

CC384215 —UN—03JUL19

Continued on next page

GA87848.00010AC -19-08JAN21-6/7

## Preparing the Baler

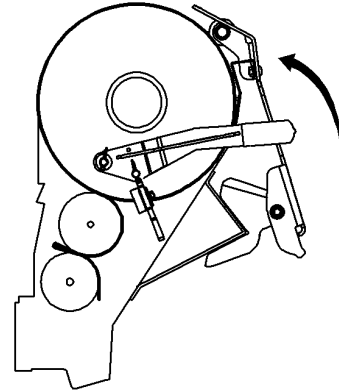
11. Swing lower tension arm up, and lift the net roll on the rubber roll, against the stainless steel plates.
12. Rotate net roll to remove slack.
13. Cut off excessive material.
14. Rear net box can contain two net rolls. One for the net binding process (B), and an additional net roll (A) stored on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

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

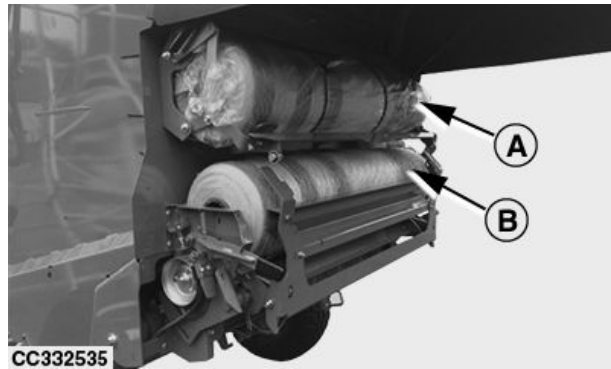
**This procedure must also be done each time baler is used for twine binding mode.**

A—Additional Net Roll

B—Net for Binding Process



CC332531



CC332535

CC332531 —UN—03OCT17

CC332535 —UN—03OCT17

GA87848,00010AC -19-08JAN21-7/7

## Select Twine

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

Twine quality plays a critical part in proper baler operation.

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



CC421118

CC421118 —UN—22OCT20

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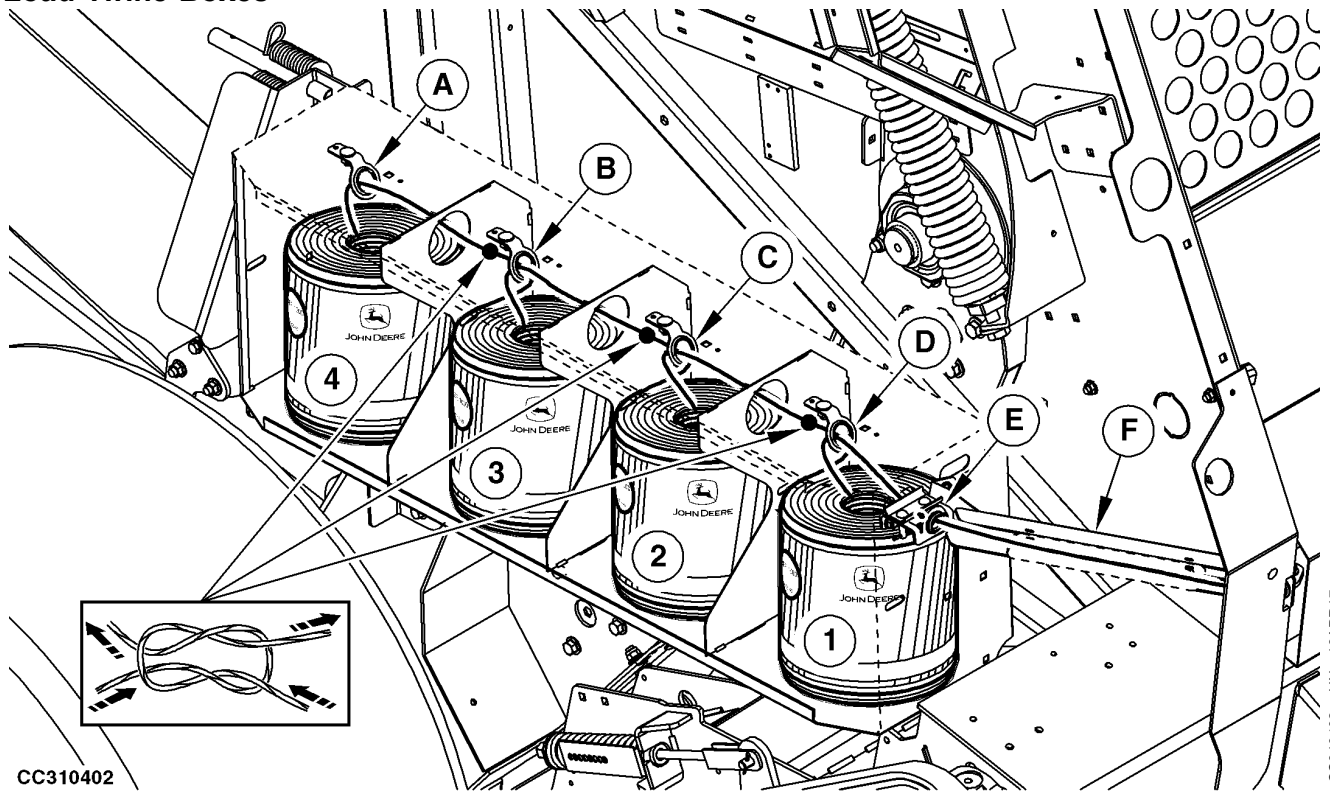
## Care of Twine Ball

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

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

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

**Load Twine Boxes**



A—Twine Guide  
B—Twine Guide

C—Twine Guide  
D—Twine Guide

E—Twine Guide  
F—Square Tube

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

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

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

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

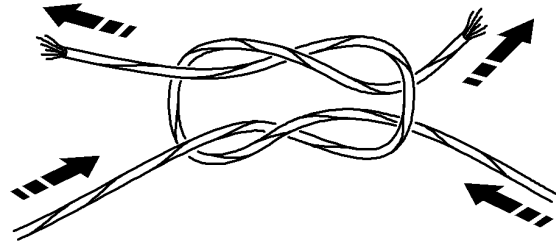
NB02380.0000507 -19-04OCT17-1/1

### Knot for Twine

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

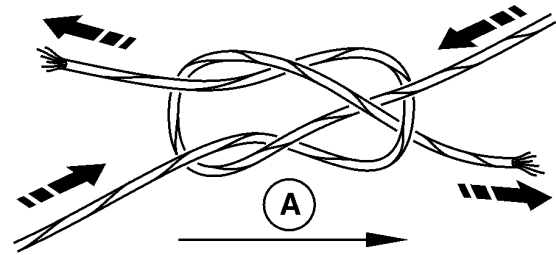
We recommend to bind twine balls together with a square or modified square knot as shown. If needed bind twine balls together with a sheet bend knot as shown.

A—Flow Direction of Twine



CC1034420

Modified Square Knot



CC1034421

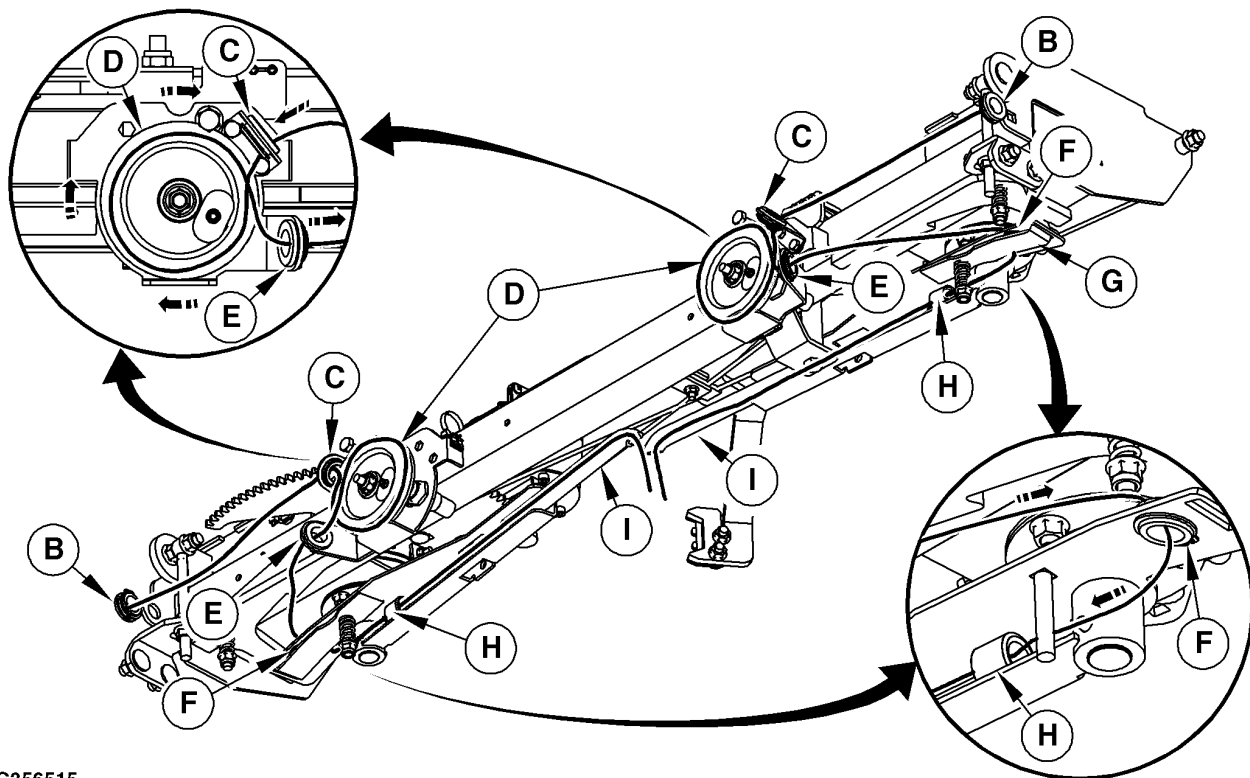
Sheet Bend Knot

CC1034420 —UN—15SEP11

CC1034421 —UN—08DEC11

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



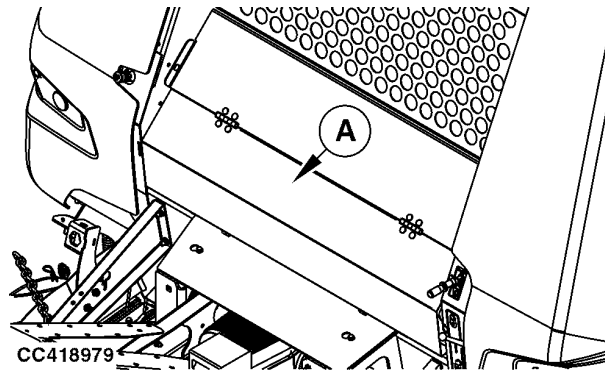
CC356515

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

**Specification**

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

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



- |                              |                       |
|------------------------------|-----------------------|
| A—Twine Binding System Cover | F—Twine Guide         |
| B—Twine Guide                | G—Twine Tension Plate |
| C—Pulley Upper Twine Guide   | H—Arm Twine Guide     |
| D—Pulley                     | I—Twine Arm           |
| E—Pulley Lower Twine Guide   |                       |

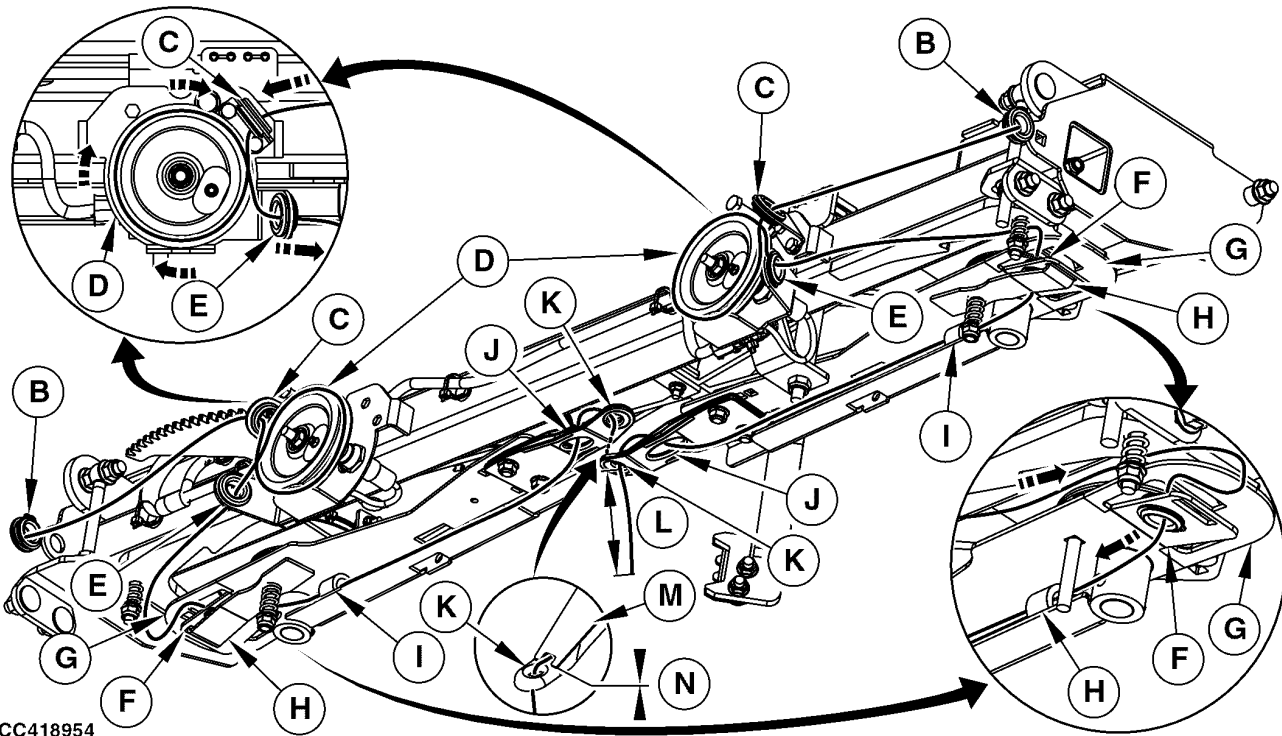
12. Close twine cover (A).

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

CC356515 —UN—05JUL 18

CC418979 —UN—18DEC20

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



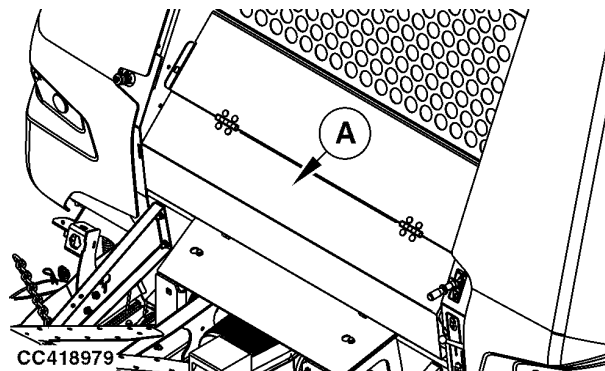
CC418954 —UN—16DEC20

CC418954

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

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

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



CC418979

CC418979 —UN—18DEC20

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

**Specification**

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

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

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

### Check Wheel Nut Torque

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

Tighten wheel nuts diagonally to the following specification:

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



CC575701—UN—28APR23

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

# Attaching

## Use Only Approved Hitch

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

Always check that your hitch complies with local regulation.

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

### Hitches are designed for hitching on the following tractor hitches:

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

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

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

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

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

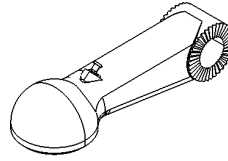
Turnable Hitch with 35 mm Eye: DC223909; for tractor non-swivel trailer hitch (ISO6489-5), piton-fix hitch (ISO6489-4), or tractor drawbar cat3 (ISO6489-3).

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

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

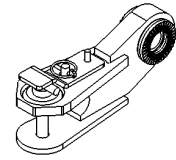
Straight Hitch with 42 mm Ball Eye: DC226463; for tractor drawbar cat3 (ISO6489-3).

CC404700 —UN—16APR20



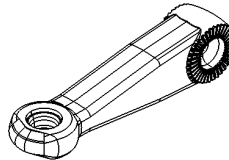
DC217306

CC574297 —UN—12APR23



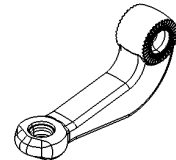
DC221194

CC404697 —UN—16APR20



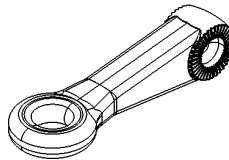
DC223340

CC574299 —UN—13APR23



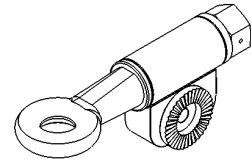
DC223342

CC574298 —UN—13APR23



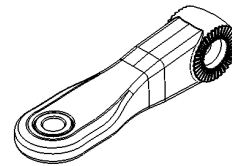
DC223344

CC404702 —UN—16APR20



DC223909, DC224136

CC565104 —UN—22FEB23



DC225809, DC226463

CC565114 —UN—28FEB23

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

### Attach Baler to Tractor

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



CC565106—JUN—19APR23

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

### Fold Jackstand

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

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

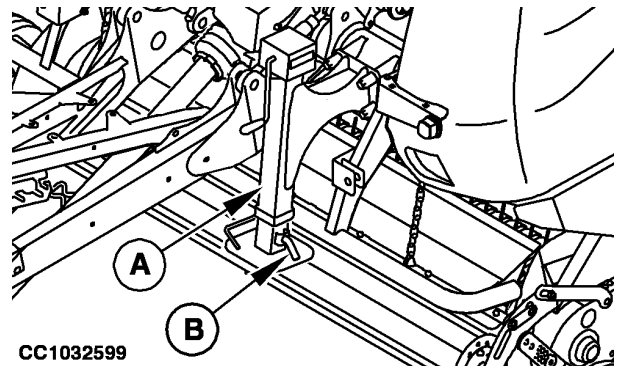
1. Insert pin (B) as shown in step (I).
2. Turn pin (B) as shown in step (II) to secure jackstand in storing position.

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

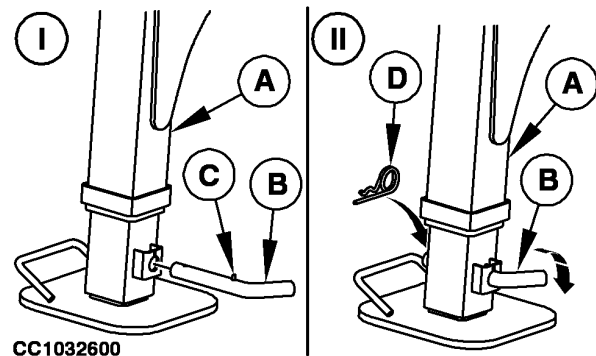
3. Insert spring locking pin (D) in pin (B) as shown in step (II).

A—Jackstand  
B—Pin

C—Cotter Pin  
D—Spring Locking Pin



CC1032599—JUN—14SEP10



CC1032600—JUN—14SEP10

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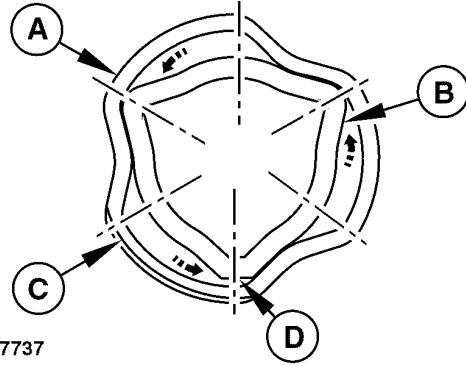
### Install Telescoping Driveline

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

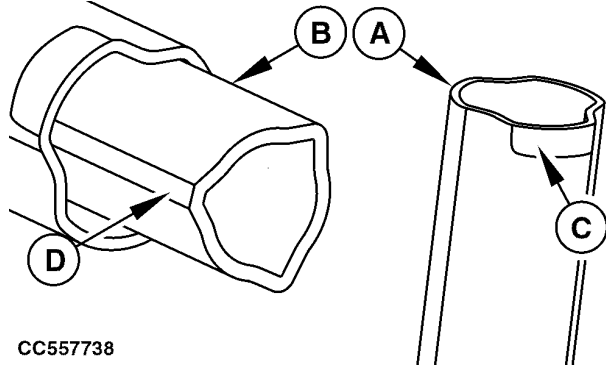
**IMPORTANT:** Male tube (B) can rotate inside female tube (A) freely about 30 degrees.

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

D—Flat Corner  
E—Shield

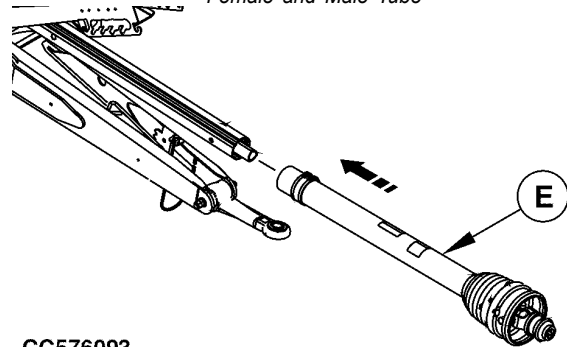


CC557737



CC557738

Female and Male Tube



CC576093

Install Powerguard Shield

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CC557738 —UN—05APR23

CC576093 —UN—26APR23

### Connect Telescoping Driveline to Tractor PTO Shaft

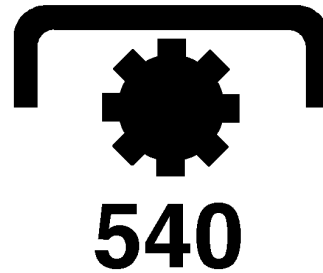
**CAUTION:** Never attach telescoping driveline while the tractor is running.

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

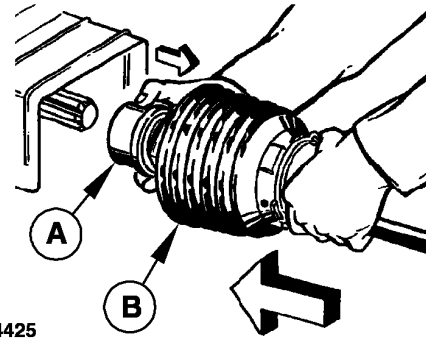
**IMPORTANT:** Keep driveline and PTO shaft splines free from paint, dirt, chaff and burrs.

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

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



CC1020007



CC1034425

A—Locking Collar

B—Guard

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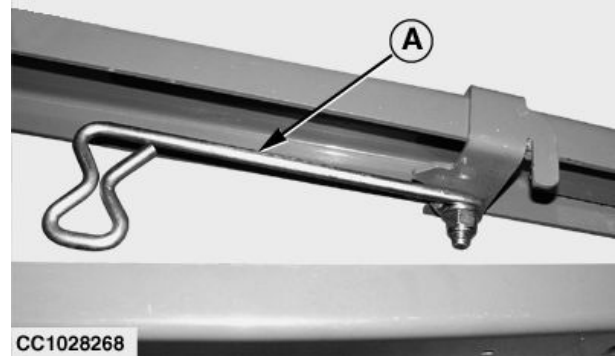
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CC1034425—UN—15SEP11

### Telescoping Driveline Support

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

A—Support



CC1028268

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

CC1028268—UN—21SEP06

### Connect Safety Chain

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

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



CC565106 —UN—19APR23

tl81334,1687177134758 -19-21JUN23-1/1

### Connect to Tractor Hydraulic System

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

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

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

#### 1. Connect gate lift hydraulic hoses

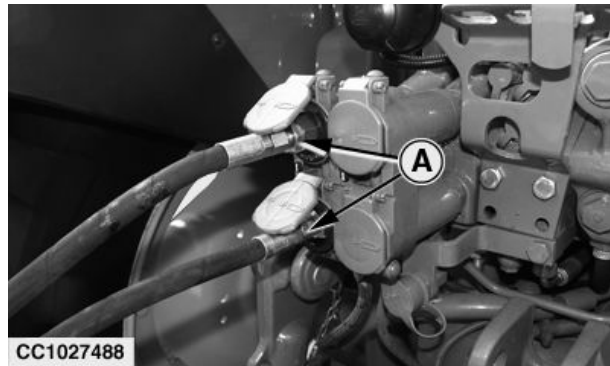
Connect gate hydraulic hoses (A) to a double-acting SCV to operate the gate.

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

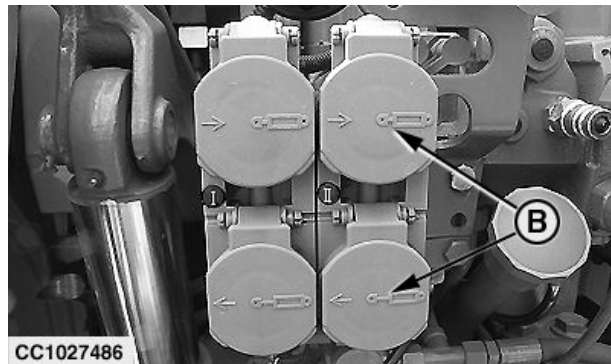
Push hoses firmly into tractor receptacles.

A—Gate Hydraulic Hoses  
B—SCV Symbols

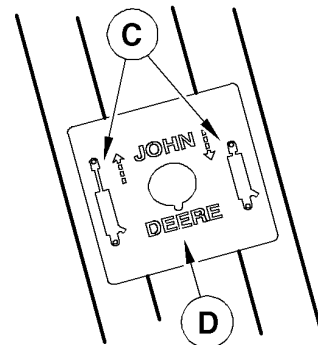
C—Identification Plate Symbols  
D—Hose Identification Plate



CC1027488 —UN—11JUL05



CC1027486 —UN—11JUL05



CC1026711

CC1026711 —UN—03DEC04

Continued on next page

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

**2. Connect pickup control valve hydraulic hoses**

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

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

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

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

Push hoses firmly into tractor receptacles.

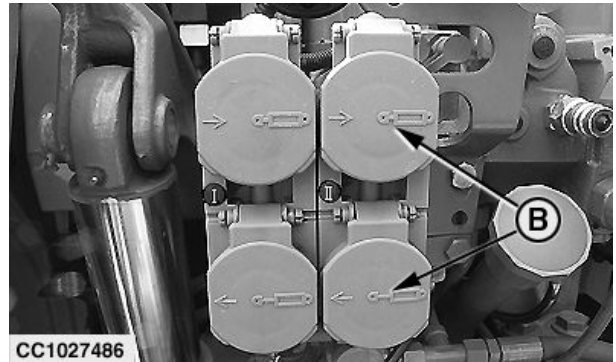
**A—Pickup Hydraulic Hose**  
**B—SCV Symbol**

**C—Identification Plate Symbol**  
**D—Hose Identification Plate**



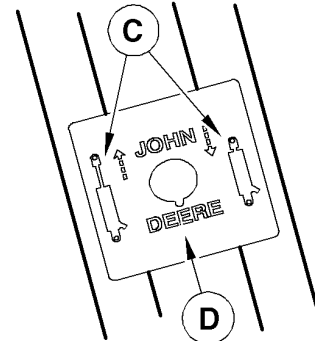
CC1027490

CC1027490 —UN—1JUL05



CC1027486

CC1027486 —UN—1JUL05



CC1026711

CC1026711 —UN—03DEC04

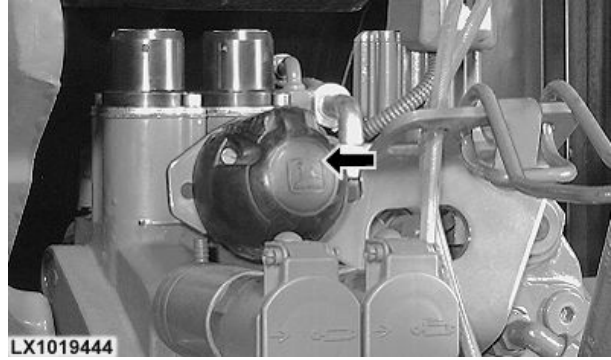
ga87848,1687437809891 -19-22JUN23-2/2

### Connect Seven-Terminal Trailer Socket

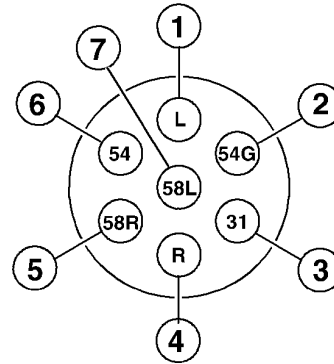
Connect road light plug to seven terminal socket of the tractor.

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

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



Tractor seven-terminal socket



CC017032

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

LX1019444 —UN—17SEP99

CC017032 —UN—25FEB00

### Connect Machine Wiring Harness

**IMPORTANT:** Be sure timing marks on connector and monitor are lined up before tightening locking ring.

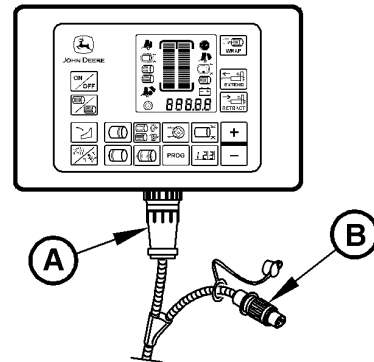
Line up timing marks on connector (A) and monitor then tighten locking ring.

**IMPORTANT:** Make sure that battery harness is connected properly, see [Install Battery Wiring Harness for Connecting Control Monitor in Preparing the Tractor section](#).

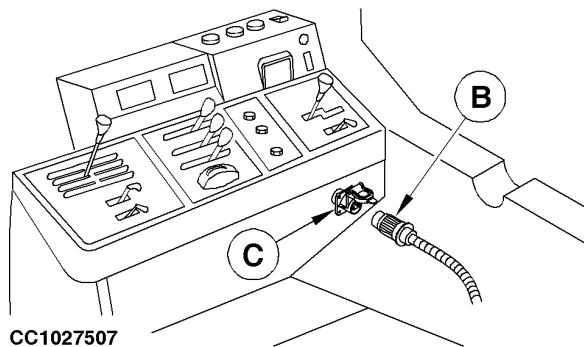
Connect the power supply plug (B) to the convenience outlet (C) on the tractor.

A—Connector  
B—Power supply plug

C—Outlet



CC1031058



CC1027507

1181334,1685448578248 -19-01JUN23-1/1

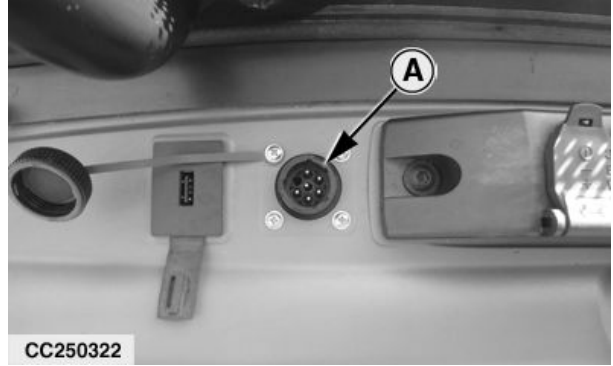
CC1031058 —UN—28OCT08

CC1027507 —UN—22JUL05

### Connect Video Camera Harness(es) (If Equipped)

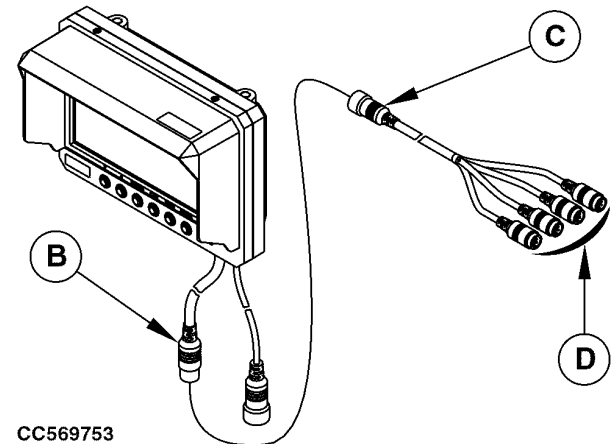
Connected video camera from the tractor camera socket (A) or from the external monitor socket (B). See your tractor Operator's Manual to locate it.

- A—Socket - Tractor Video Camera
- B—Plug - External Monitor Video Camera
- C—Plug - Extention to Monitor
- D—Plug - Extention to Camera



CC250322—UN—30SEP15

Connect Video Camera Harness - Tractor



CC569753—UN—09MAR23

Connect Video Camera Harness - External Monitor

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

### Connect Hydraulic Brakes (If Equipped)

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

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

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

**Make sure that the pressure hose is connected.**

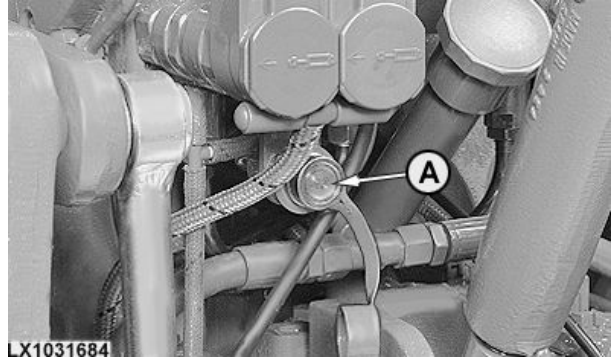
**When driving downhill, select the same gear you would for driving uphill.**

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

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

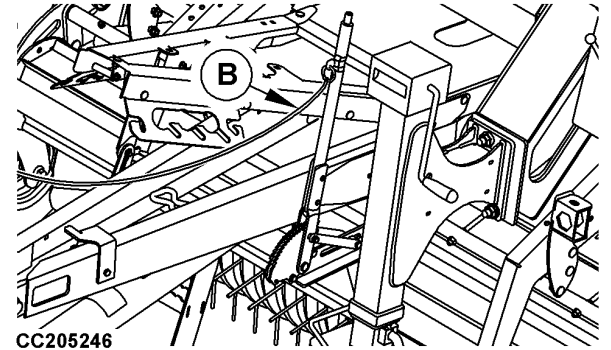
A—Trailer Brake Coupler

B—Safety Rope



LX1031684

LX1031684—UN—03APR03



CC205246

CC205246—UN—16OCT13

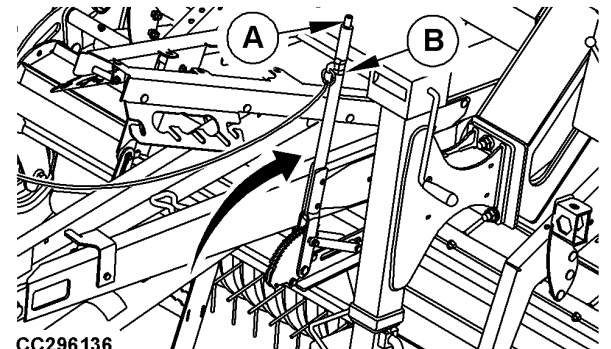
OUC006,0001AD6 -19-02SEP13-1/1

### Disengage Machine Park Brake (Baler with Hydraulic Brakes)

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

A—Button

B—Lever



CC296136

CC296136—UN—07OCT16

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

### Connect Air Brakes (If Equipped)

**IMPORTANT:** Pay attention to the colors of the couplers.

*NOTE: Couplers and colors comply with 1728 ISO standard.*

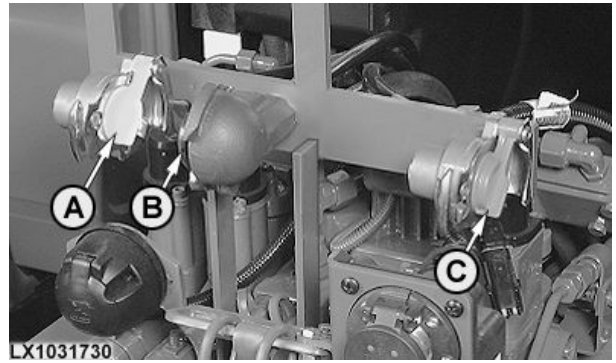
Ensure that the connections are clean before joining the pressure hoses. Seal the connections with the dust caps whenever the hoses are disconnected.

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

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

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

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



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

C—Red (Dual-Line Brake, Supply)

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

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

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

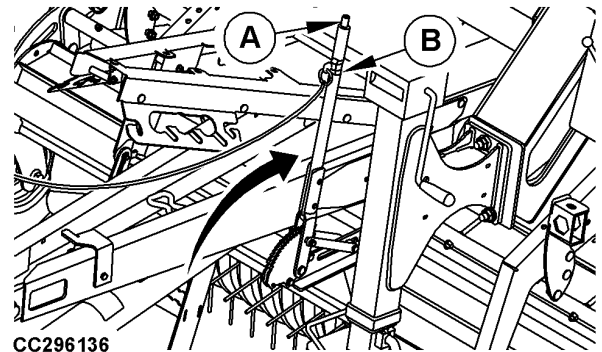
### Disengage Machine Park Brake (Baler with Air Brakes)

#### Park Brake Lever

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

A—Button

B—Lever



CC296136

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

### Air Brake Valve

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

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

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

A—Button



CC565109

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

# Detaching

## Detach Baler from Tractor

**CAUTION:** To prevent personal injury caused by unexpected movement:

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

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

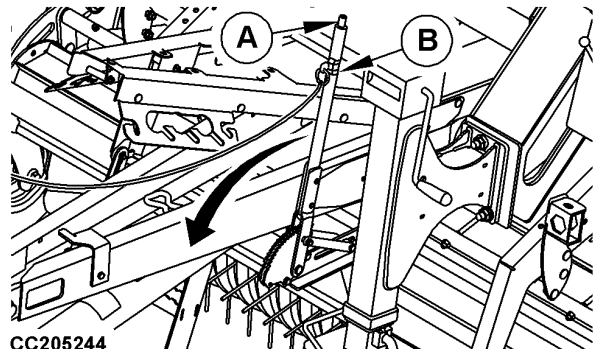
ga87848,1678972367503 -19-30MAY23-1/1

## Engage Machine Park Brake (Baler with Hydraulic Brakes)

Pull lever (B) to engage park brake.

A—Button

B—Lever



CC205244—UN—16OCT13

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

### Disconnect Hydraulic Brakes (If Equipped)

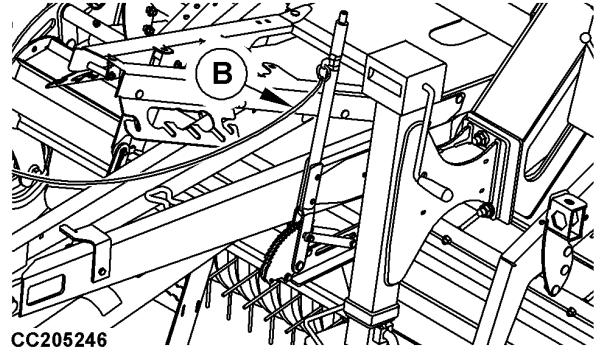
Disconnect safety rope (B) from tractor.

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

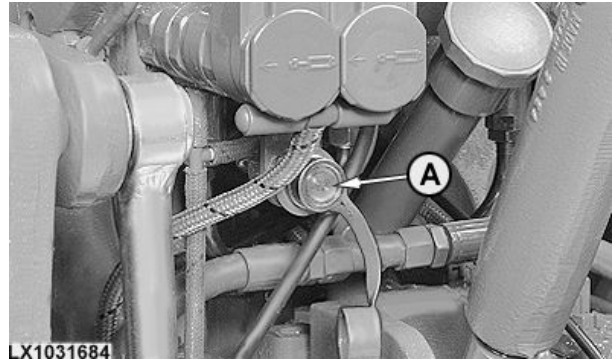
Store hydraulic brake connector on the brake hose storage (C) as shown.

A—Trailer Brake Coupler  
B—Safety Rope

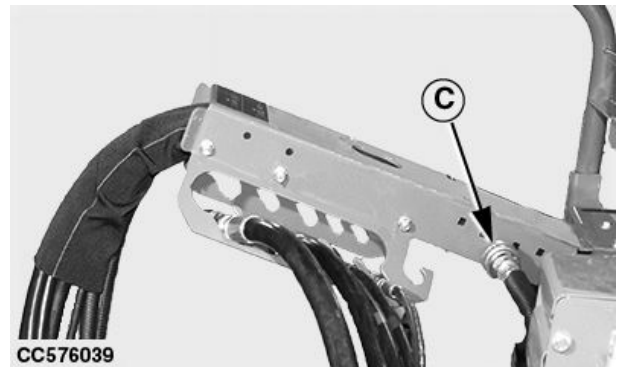
C—Brake Hose Storage



CC205246—UN—16OCT13



LX1031684—UN—03APR03



CC576039—UN—21JUN23

††81334,1687357582410 -19-21JUN23-1/1

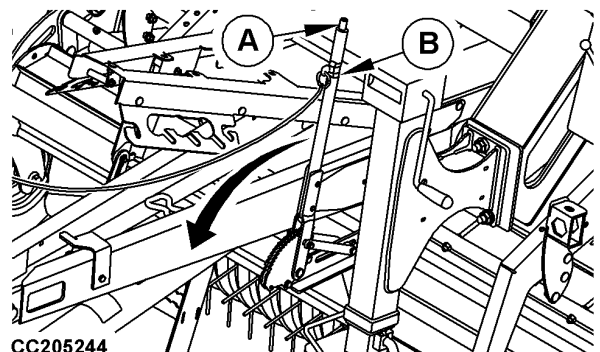
### Engage Machine Park Brake (Baler with Air Brakes)

#### Park Brake Lever

Pull lever (B) to engage park brake.

A—Button

B—Lever



CC205244—UN—16OCT13

Continued on next page

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

### Air Brake Valve

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

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

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

A—Button



CC565109—UN—04MAY23

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

### Disconnect Air Brakes (If Equipped)

**IMPORTANT:** Pay attention to the colors of the couplers.

*NOTE:* Couplers and colors comply with 1728 ISO standard.

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

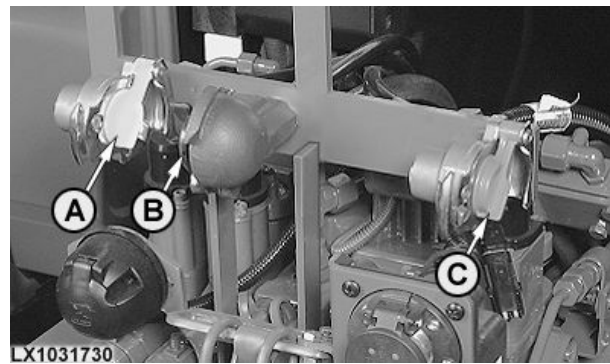
Seal the connections with the dust caps whenever the hoses are disconnected.

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

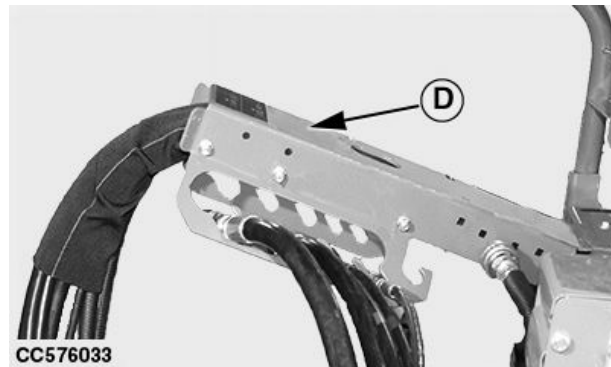
*NOTE:* When the brake hoses are disconnected from the tractor brake system, the brakes of the machine are automatically engaged. See [Park the Machine \(Baler with Air Brakes\)](#) in [Transporting and Parking](#) section.

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

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



LX1031730—UN—13AUG03



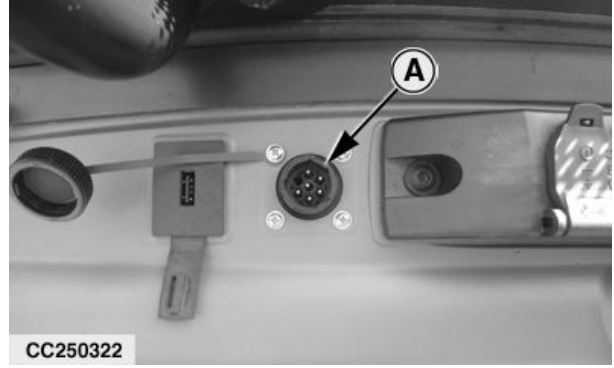
CC576033—UN—21JUN23

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

### Disconnect Video Camera Harness(es) (If Equipped)

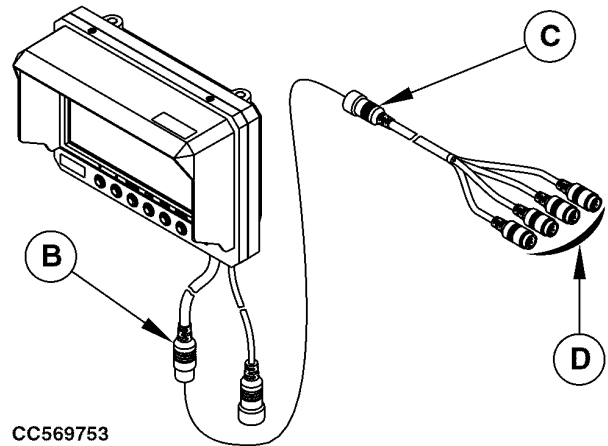
Disconnect video camera from the tractor camera socket (A) or from the external monitor socket (B). See your tractor Operator's Manual to locate it.

- A—Socket - Tractor Video Camera
- B—Plug - External Monitor Video Camera
- C—Plug - Extention to Monitor
- D—Plug - Extention to Camera



CC250322 —UN—30SEP15

Connect Video Camera Harness - Tractor



CC569753 —UN—09MAR23

Connect Video Camera Harness - External Monitor

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

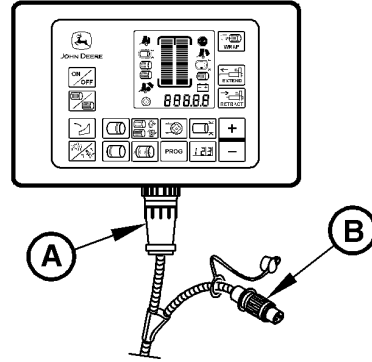
### Disconnect Machine Wiring Harness

Loosen locking ring then disconnect connector (A) from monitor.

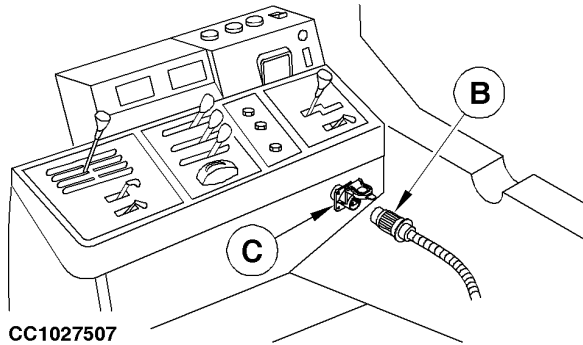
Disconnect the power supply plug (B) from the convenience outlet (C) on the tractor.

A—Connector  
B—Power Supply Plug

C—Outlet



CC1031058



CC1027507

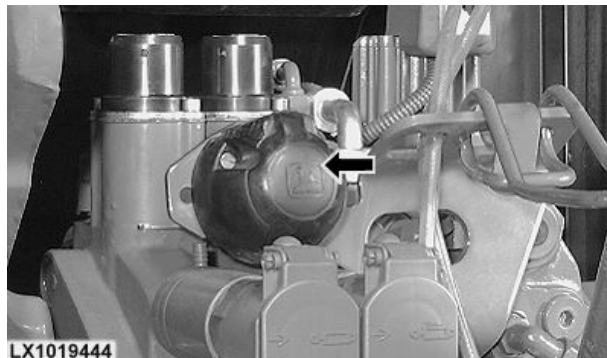
CC1031058 —UN—28OCT08

CC1027507 —UN—22JUL05

t181334,1685454666889 -19-30MAY23-1/1

### Disconnect Seven-Terminal Trailer Socket

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



LX1019444

Tractor Seven-Terminal Socket

LX1019444 —UN—17SEP99

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

## Disconnect from Tractor Hydraulic System

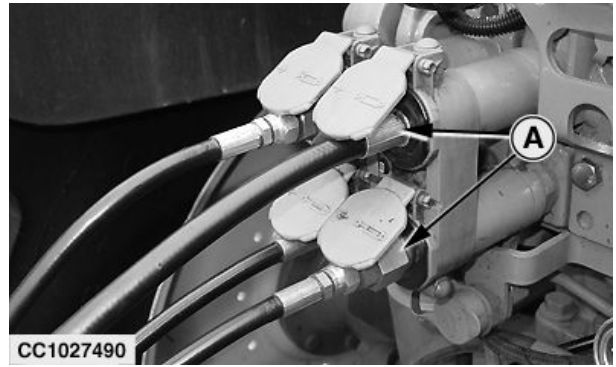
**CAUTION:** Maximum working pressure of baler hydraulic hoses is about 21000 kPa (210 bar; 3045 psi). To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying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

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

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

### 1. Disconnect pickup control valve hydraulic hoses

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



A—Pickup Hydraulic Hose

Pull hoses firmly from tractor receptacles.

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

CC1027490—UN—1JUL05

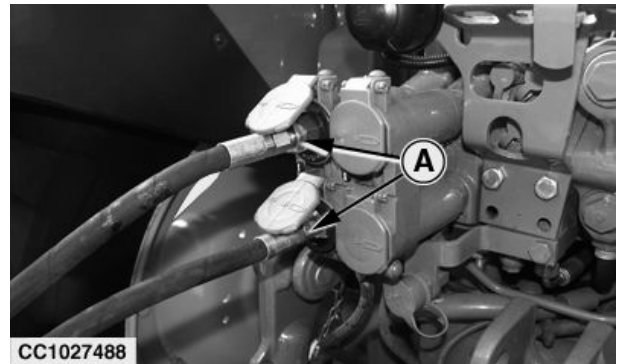
### 2. Disconnect gate lift hydraulic hoses

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

Pull hoses firmly from tractor receptacles.

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

A—Gate Hydraulic Hose



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

CC1027488—UN—1JUL05

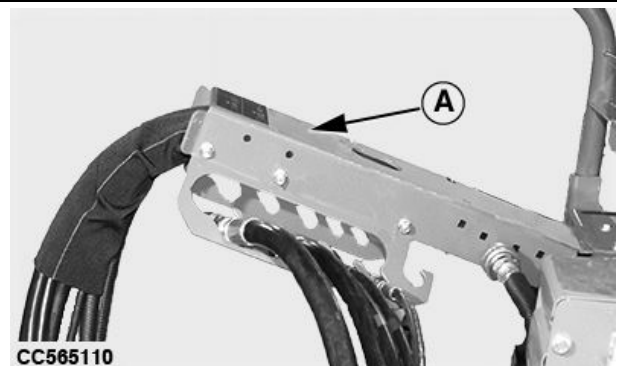
## Store Hydraulic Hoses

**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



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

CC565110—UN—19APR23

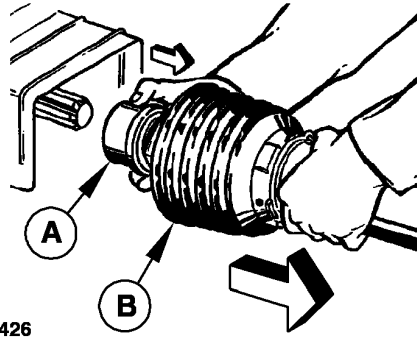
### Disconnect Telescoping Driveline from Tractor PTO Shaft

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

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

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

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



CC1034426

A—Locking Collar

B—Guard

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

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

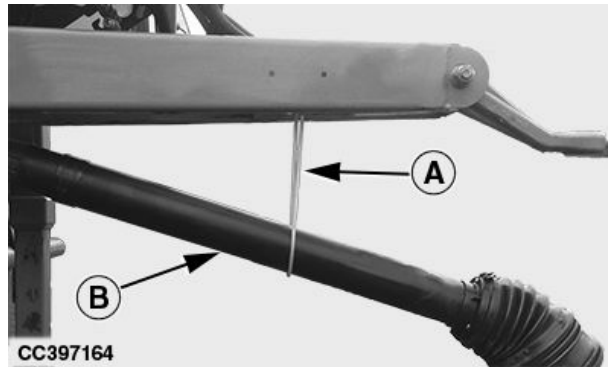
CC1034426 —UN—15SEP11

### Store Telescoping Driveline

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

A—Wire

B—Telescoping Driveline



CC397164

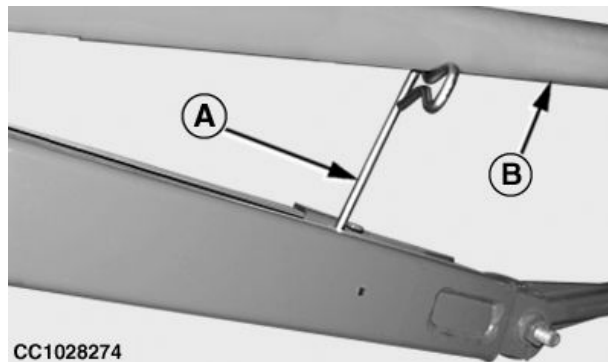
†181334,1687181258122 -19-19JUN23-1/2

CC397164 —UN—27NOV19

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

A—Support

B—Telescoping Driveline



CC1028274

†181334,1687181258122 -19-19JUN23-2/2

CC1028274 —UN—21SEP06

### Unfold Jackstand

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

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

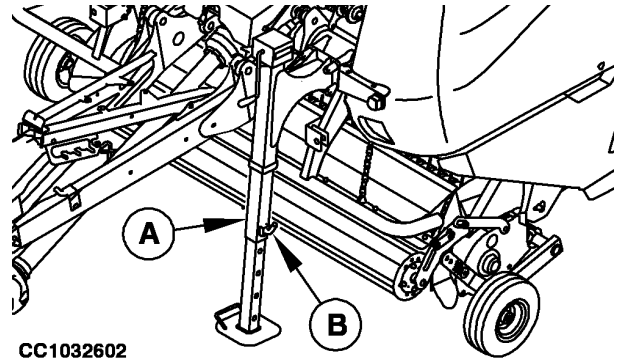
1. Insert pin (B) as shown in step (I).
2. Turn pin (B) as shown in step (II) to secure jackstand.

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

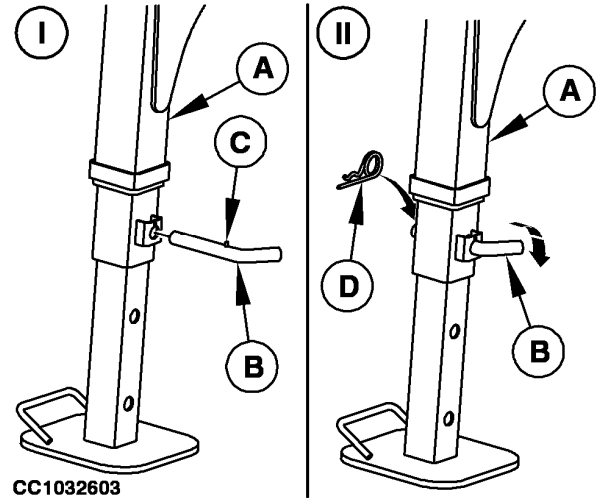
3. Insert spring locking pin (D) in pin (B) as shown in step (II).

A—Jackstand  
B—Pin

C—Cotter Pin  
D—Spring Locking Pin



CC1032602



CC1032603

CC1032602—UN—14SEP10

CC1032603—UN—14SEP10

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### Lock Mechanical Coupling

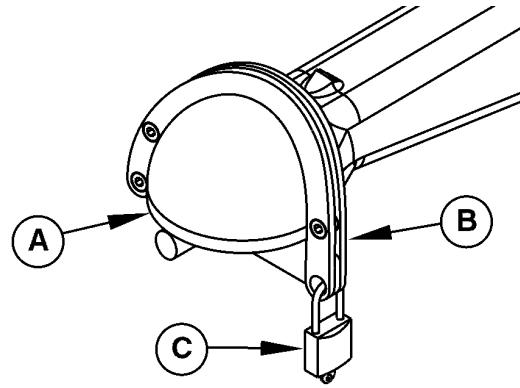
A lock (B) for the mechanical coupling shall protect the machine against unauthorized use:

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

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

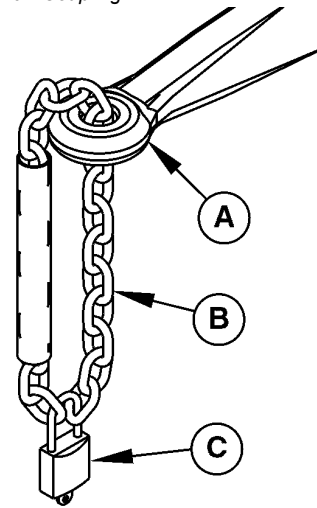
A—Towing Device  
B—Tow Lock

C—Padlock



CC550630

Tow Ball Coupling



CC550631

Tow Eye Coupling

CC550630—UN—18OCT22

CC550631—UN—18OCT22

#81334,1665997396733 -19-18OCT22-1/1

# Transporting and Parking

## Tow Baler on Public Roads

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

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

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

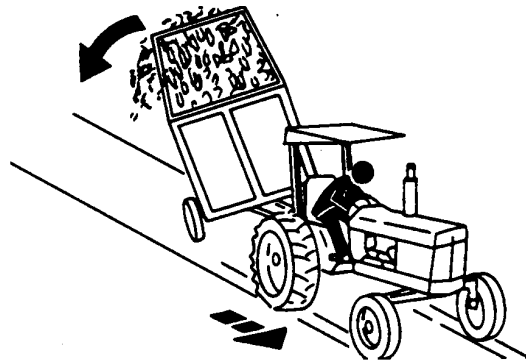
Always observe local road traffic regulations when driving on public roads.

Before towing the baler on public roads:

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

Use of beacon light is recommended.

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



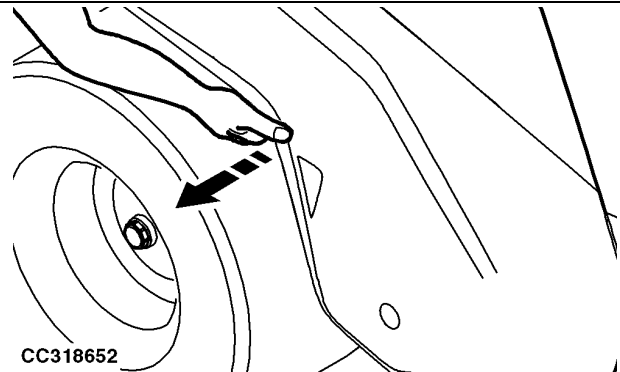
ga87848,1683103458730 -19-23MAY23-1/1

H288930—UN—30JUN89

TS216—UN—23AUG88

## Check Side Doors Are Locked

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



CC318652

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

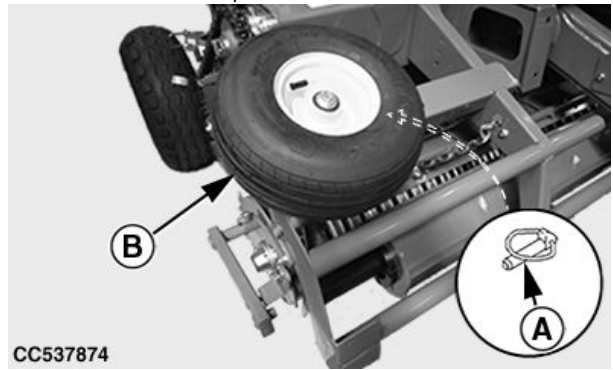
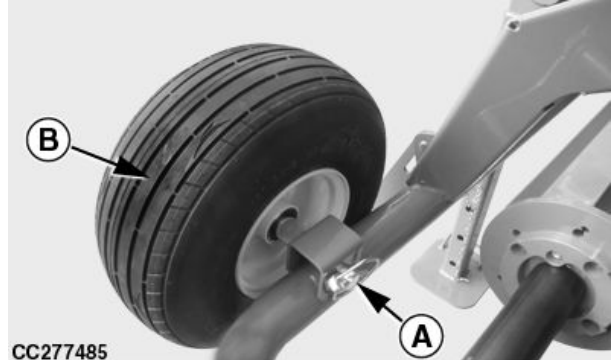
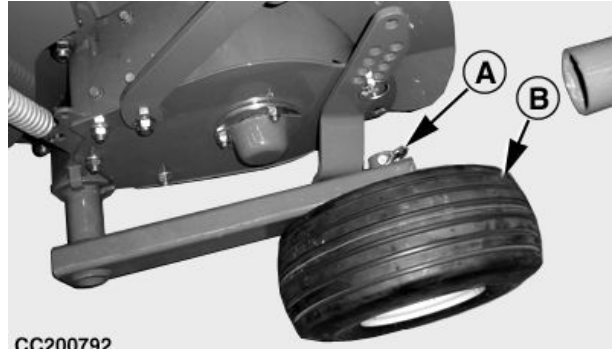
CC318652—UN—06JUN17

### Put Standard Gauge Wheels in Transport Position

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

A—Quick-Lock Pin

B—Gauge Wheel



1181334,1652785041405 -19-01JUN22-1/1

CC200792—UN—12APR13

CC277485—UN—18JUL16

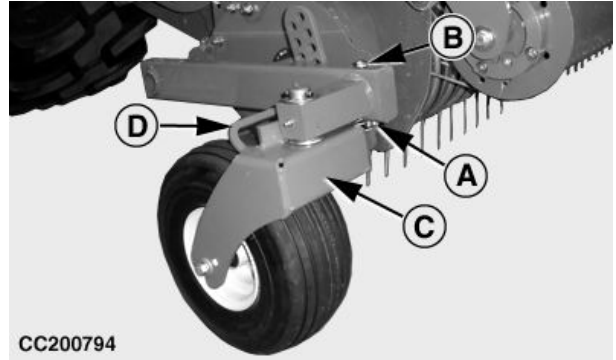
CC537874—UN—01JUN22

### Put Caster Gauge Wheels in Transport Position

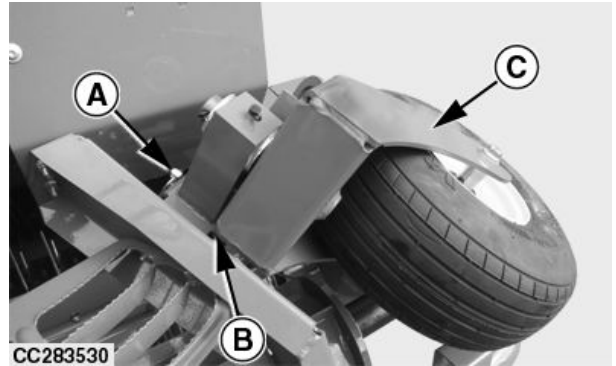
1. Remove quick-lock pin (A) and pin (B).
2. Remove caster gauge wheel (C) from pickup by using handle (D).
3. Position caster gauge wheel (C) on bracket as shown and secure it with pin (B) and quick-lock pin (A).
4. Repeat procedure on opposite side.

A—Quick-Lock Pin  
B—Pin

C—Caster Gauge Wheel  
D—Caster Gauge Wheel Handle

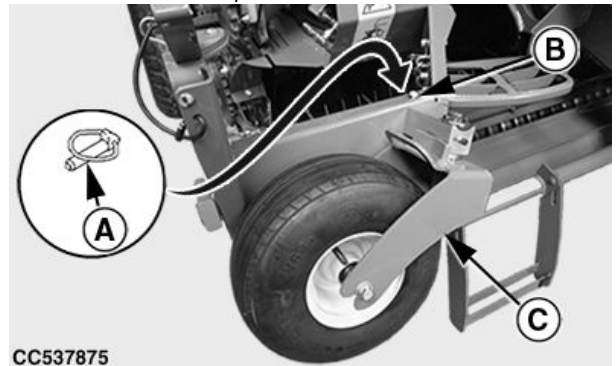


CC200794 —UN—12APR13



CC283530 —UN—18JUL16

Up To S.N. 219999



CC537875 —UN—01JUN22

From S.N. 220000

tt81334,1652785854533 -19-01JUN22-1/1

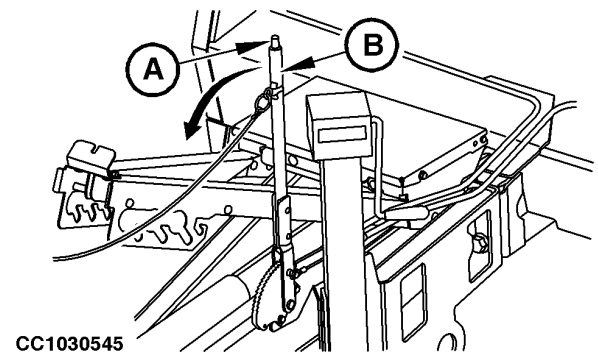
### Park the Machine (Baler with Hydraulic Brakes)

Pull lever (B) to engage parking brake.

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

A—Button

B—Lever



CC1030545 —UN—22OCT08

OUC006,00013BF -19-13FEB08-1/1

### Park the Machine (Baler with Air Brakes)

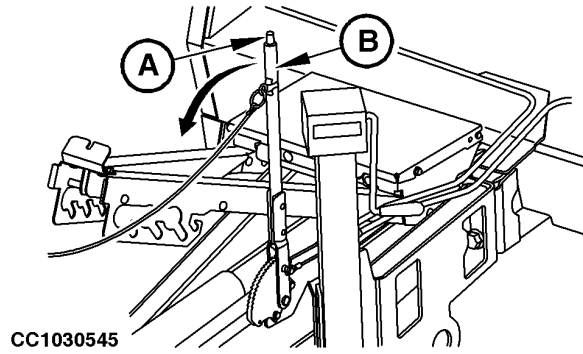
#### Parking brake

Pull lever (B) to engage parking brake.

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

A—Button

B—Lever



CC1030545—UN—22OCT08

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

#### Air Brake Valve

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

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

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

A—Button



CC565109—UN—04MAY23

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

# Break-In Period

## Break In Baler

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

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

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

## After the First 10 Hours: Check Wheel Nut Torque

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

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



CC575701

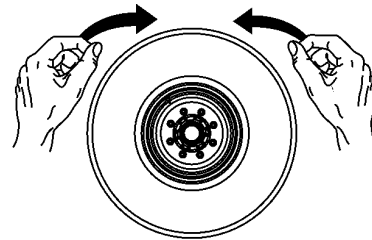
CC575701—UN—28APR23

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

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

Check the wheel have no play:

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



CC574077

CC574077—UN—19APR23

If necessary, see your John Deere dealer.

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

## After the First 50 Hours: Drain and Refill Gear Case

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

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

**After the First 500 Bales: Check Net Feed Roll Brake (Machine Equipped with Brake Band)**

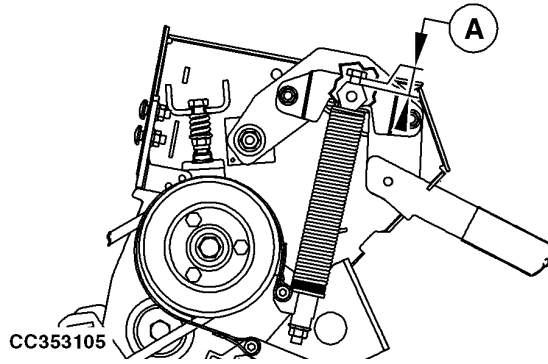
Check that distance (A) is within specification:

**Specification**

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

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

**A—Distance**



CC353105—JUN—17MAY18

aysdijz,1683184392065 -19-01JUN23-1/1

# Operating the Baler—General Purposes

## Before Each Use of the Baler

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

### Check the Baler:

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

### Adjust the Baler:

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

### Lubricate the Baler:

1. Refill the automatic greasing system. See As Required: Replace Automatic Greasing System Cartridge (If Equipped with Cartridge-Type Pump) in Lubrication and Maintenance section.
2. Refill the chain oiling system reservoir. See As Required: Refill Multiluber Chain Oiling System Reservoir in Lubrication and Maintenance section.

### Set Control Monitor Functions:

1. Adjust the bale diameter. See Set Bale Diameter in Operating BaleTrak Monitor section.
2. Select the binding system. See Select Net or Twine Binding in Operating BaleTrak Monitor section.
3. Select the binding start mode. See Channel 032: Automatic Start of Binding Cycle in BaleTrak Monitor Service section.
4. Adjust net and twine binding system. See Set Number of Net Turns, or Set Twine Spacing, Set Number of Twine Coils on Sides, Set Number of Twine Coils in the Middle, Set Distance of Twine Coils in the Middle in Operating BaleTrak Monitor section.
5. Adjust the soft core diameter. See Operate Soft Core in Operating BaleTrak Monitor section.
6. Select the bale counter. See Use Bale Counters in Operating BaleTrak Monitor section.

### Beginning of Baling:

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

1. Raise then close the gate. Check that the gate is latched correctly.
2. Check that the drop floor is in raised position. See Unplug Rotary Feeder in Operating BaleTrak Monitor section.

t181334,1685517505266 -19-16JUN23-1/1

## Clean the Machine to Prevent Fire

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

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

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

### Use compressed air to clean the machine.

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

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

t181334,1687246489709 -19-20JUN23-1/1

## In Case of Fire Take Following Action

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

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

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

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



TS227 —UN—15APR13

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

## Crop Preparation

### Windrow Size

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

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

### Preparing the Hay Crops for Baling

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

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

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

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

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

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

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

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

### Preparing the Silage Crops for Baling

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

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

### Preparing the Straw Crops for Baling

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

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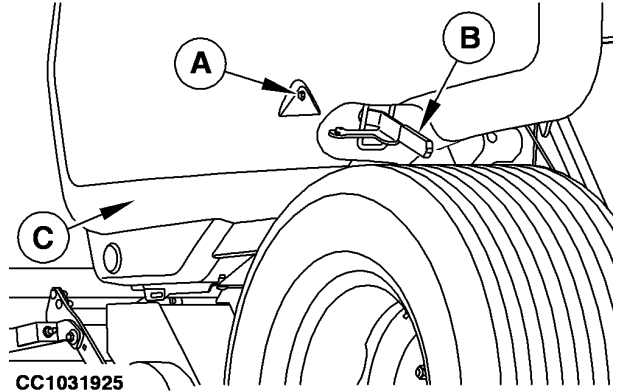
### Open and Close the Side Door

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

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

A—Lock  
B—Latch

C—Door



CC1031925 —UN—30NOV09

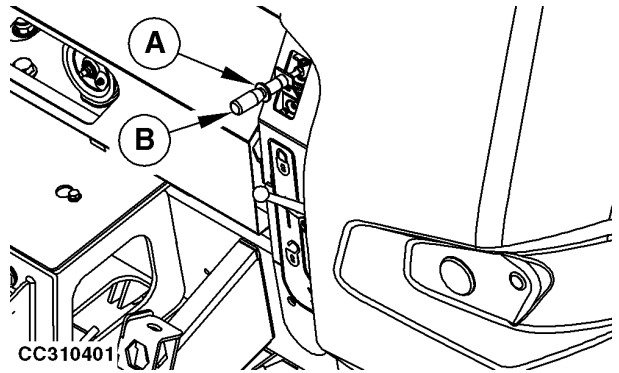
GA87848.0000474 -19-24OCT17-1/1

### Gate Lock Valve

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

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

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



A—Lock Bushing

B—Gate Lock Lever

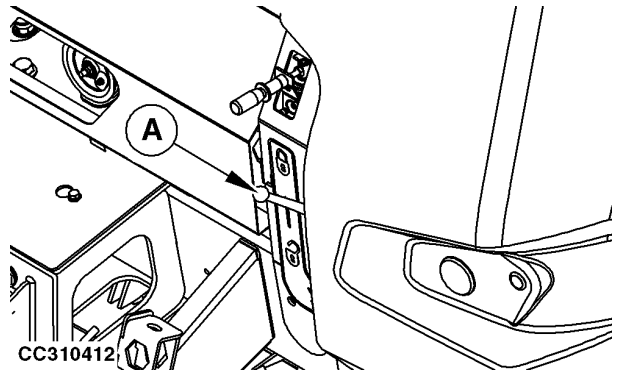
CC310401 —UN—18APR17

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### Operate Precutter Knives Lock Valve

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

A—Lock Lever



CC310412 —UN—18APR17

t181334.1685514782375 -19-31MAY23-1/1

### Adjust Pickup Float Spring

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

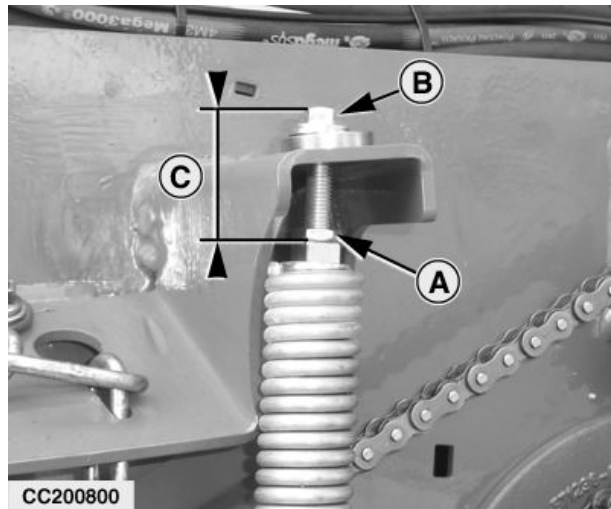
**Specification**

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

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

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

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



A—Nut  
 B—Screw

C—Distance

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CC200800—UN—12APR13

### Adjust Pickup Gauge Wheels

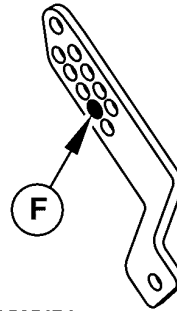
Depending on crop and field conditions, the initial gauge wheel setting may need to be reconsidered whether there is crop left on the ground or pickup teeth too close to the ground. Adjust to next available hole as required.

**Adjust Pickup Standard Gauge Wheels:**

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

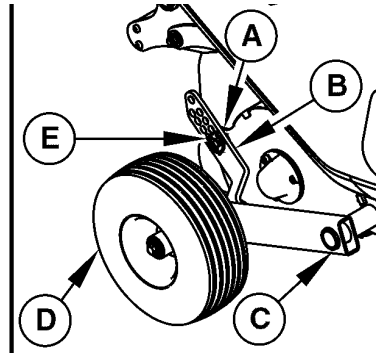
*NOTE: Hole position (F) shown on the illustration is the recommended starting position.*

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



CC565174

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



D—Gauge Wheel  
 E—Pin

CC565174—UN—13MAR23

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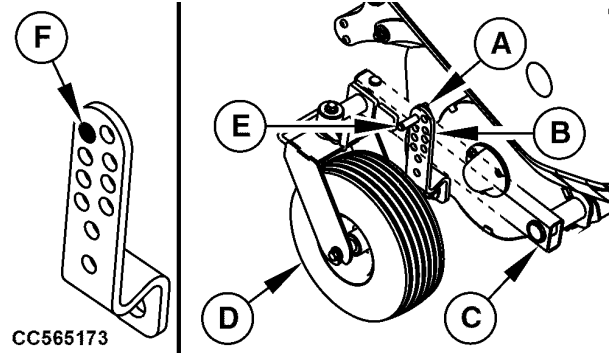
### Adjust Pickup Caster Gauge Wheels:

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

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

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

A—Quick-Lock Pin	D—Gauge Wheel
B—Support	E—Pin
C—Wheel Arm	F—Hole Position



CC565173

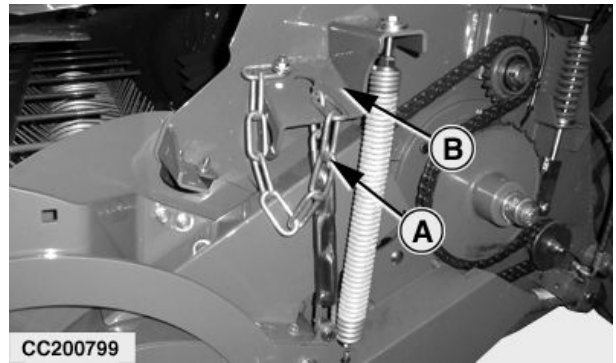
CC565173—UN—13MAR23

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

### Adjust Pickup Downstops

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

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



CC200799

A—Chain

B—Anchor

CC200799—UN—12APR13

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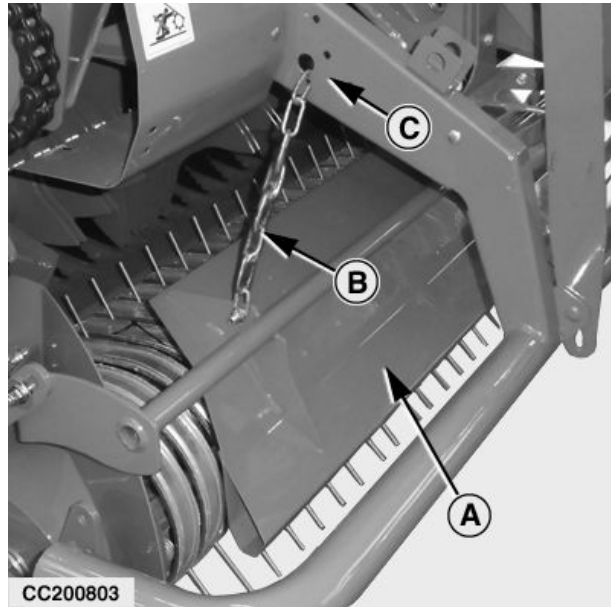
### Adjust Windrow Compressor Sheet (If Equipped)

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

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

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

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



A—Windrow Compressor Sheet  
B—Chain

C—Bracket

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CC200803—UN—12APR13

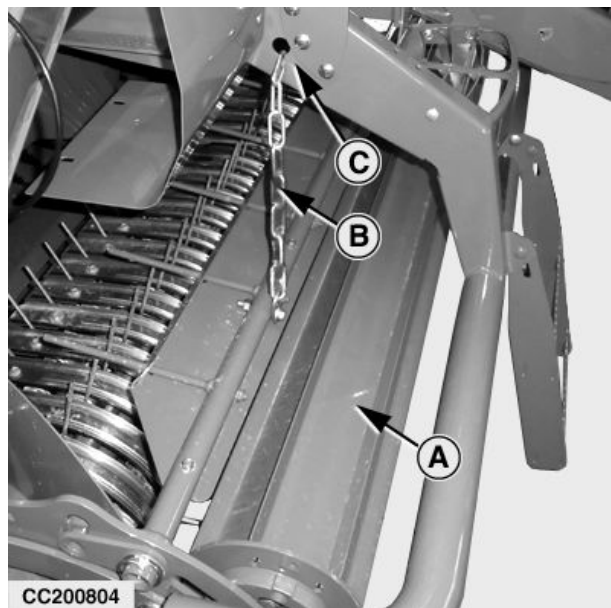
### Adjust Windrow Compressor Roll (If Equipped)

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

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

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

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



A—Windrow Compressor Roll  
B—Chain

C—Bracket

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

CC200804—UN—12APR13

### Adjust Bale Density

**IMPORTANT:** Never work with bale density gauge needle (F) in the yellow band (B), the orange band (C), or the red band (D).

When baling dry crops, never work with bale density gauge needle (F) in the red band (D).

The bale density gauge (E) indicates the pressure within the hydraulic bale tensioning system while forming a bale.

**NOTE:** To adjust bale density, close the gate to turn knob (H) more easily.

The needle (F) varies when material is fed in the machine.

The needle (F) exceeds the setting value when closing the door.

#### Adjust bale density:

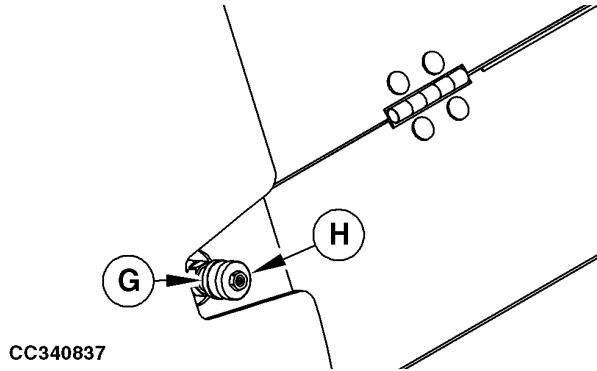
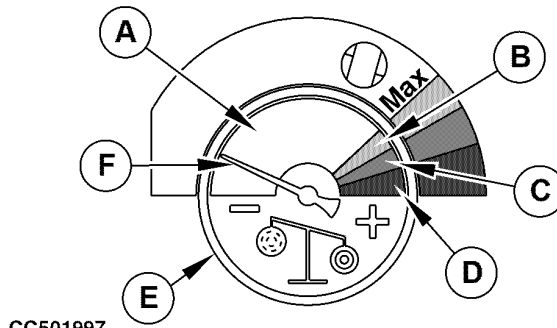
To adjust bale density, proceed as follows:

1. Loosen locking ring (G).
2. Turn knob (H) clockwise until seated.
3. Turn knob (H) counterclockwise two turns.
4. Tighten locking ring (G).
5. Make a bale.

Stop baling immediately if the needle (F) goes over the yellow band (B) in silage or damp crops, and over the orange band (C) in dry crops. Decrease bale density.

6. Check bale density, if necessary adjust bale density as follows:

- Loosen locking ring (G).
- To increase bale density, turn knob (H) clockwise by 1/4 turns.



- |               |                      |
|---------------|----------------------|
| A—Green Band  | E—Bale Density Gauge |
| B—Yellow Band | F—Needle             |
| C—Orange Band | G—Locking Ring       |
| D—Red Band    | H—Knob               |

- To decrease bale density, turn knob (H) counterclockwise by 1/4 turns.
  - Tighten locking ring (G).
7. Repeat step 5.

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CC340837—UN—14DEC17

### Guideline to Form a Good Bale

1. Start feeding windrow in the center of baler.
2. Move quickly to one side for several meters feeding the baler, 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 crisp zigzag fashion to balance crop intake side-to-side. Weaving too often or too slowly puts too much crop in the center of the bale and should be avoided.*

3. Move quickly to the other side for several meters feeding the baler, 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 this side until the top bar on the

monitor-controller display lights or the other bale shape bars drop into the red.

5. Then quickly drive to the other side and continue feeding this side until the top bar on the monitor-controller display lights or the other bale shape bars drop into the red.
6. Continue to feed in this manner until the nearly full indicator is flashing. Then finish up the bale by getting the bars on both sides as high and as even as possible before reaching full size. Both sides should be in the green zone when finished and, if possible, finish bale by feeding the left side.

As bale diameter increases, bars are less sensitive to rise and fall as hay is fed into the baler. **Do not weave from one side unless the top bar is lit or the bars are at least in the green zone. Avoid baling for extended periods with either of the bale shape displays in the red zone.**

OUCC006,0000690 -19-13MAY02-1/1

### In Case of Plugging

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

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

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

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### Set Net Guide Based on Field Condition

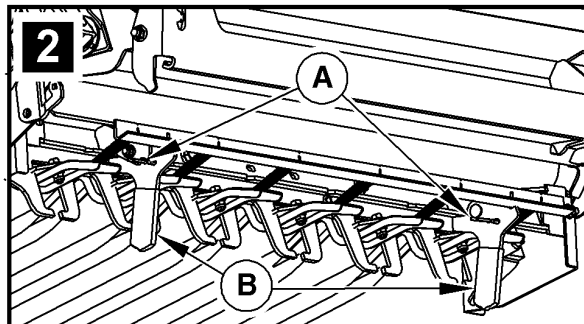
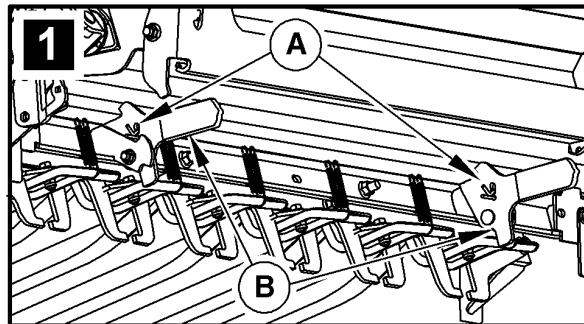
To avoid net from jamming, set net guide based on field condition.

Proceed as follows:

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

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

- A—Pin
- B—Lever



CC334396

CC334396 — UN — 30OCT17

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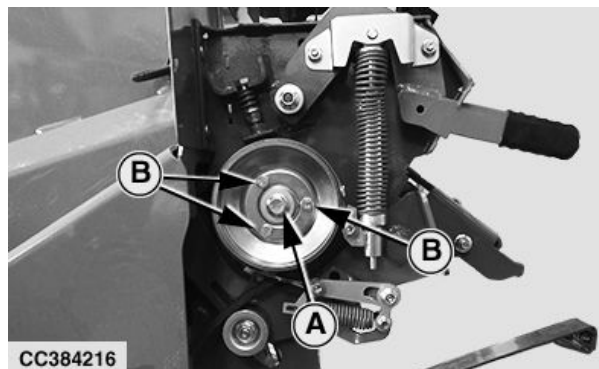
### Adjust Net Binding Stretch

To adjust net binding stretch, proceed as follows:

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

A—Cap Screw

B—Cap Screw



CC384216—UN—03JUL19

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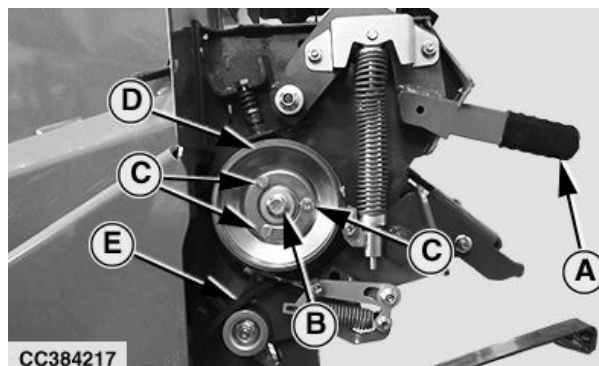
2. Remove cap screw (B) with washers (C).
3. Release net feed roll brake lever (A). Push lever (A) down and out, then raise it to disengage.

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

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

A—Brake Lever  
B—Cap Screw  
C—Washer

D—Sheave  
E—Belt



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

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

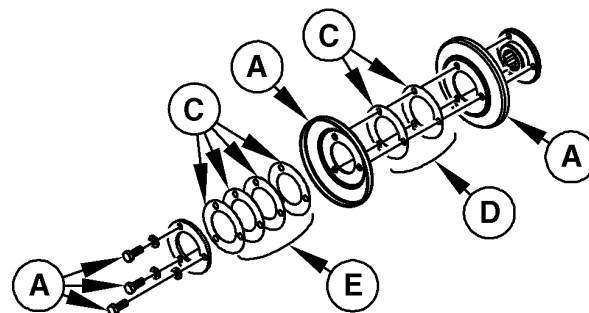
*NOTE: During removal, record number and location of shims (C).*

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

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

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

Once the number of shims is adjusted, reassemble sheave.



A—Sheave  
B—Cap Screws  
C—Shims

D—Adjustment Position  
E—Storage Position

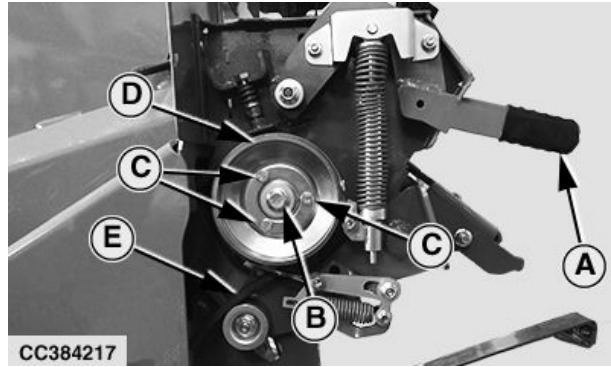
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7. Reinstall sheave (D) and belt (E).
8. Apply net feed roll brake lever (A).  
Pull lever (A) up and out, then lower.
9. Install cap screw (B) with washers (C).

**A—Brake Lever**                      **D—Sheave**  
**B—Cap Screw**                      **E—Belt**  
**C—Washer**



CC384217—UN—03JUL19

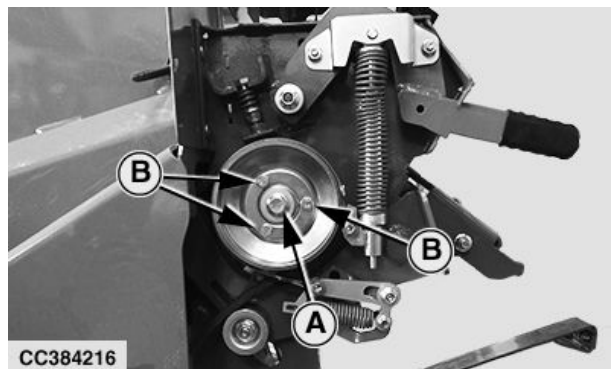
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10. Tighten cap screws (B).
11. Tighten screw (A) to specified torque.

**Specification**

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

**A—Cap Screw**                      **B—Cap Screw**

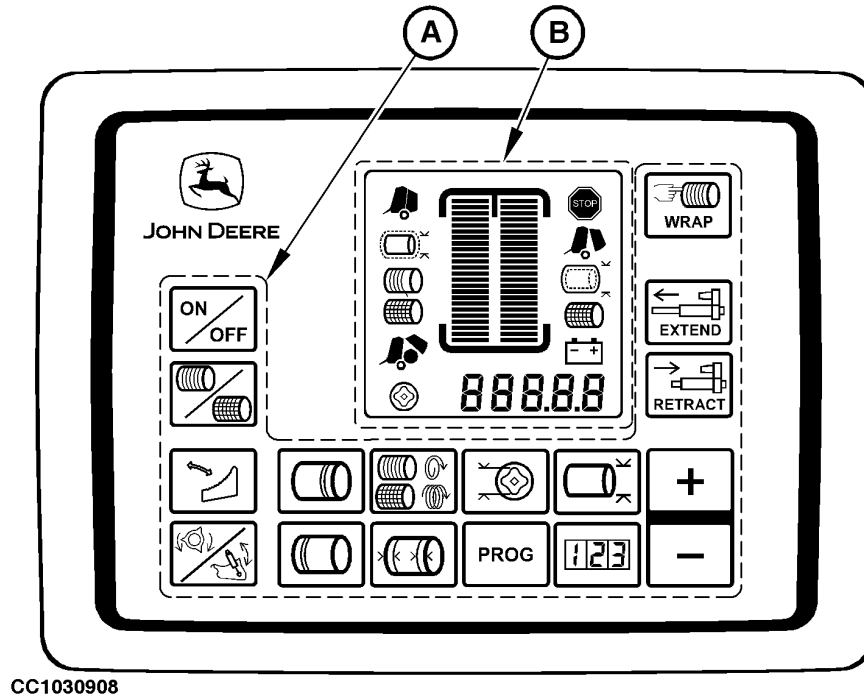


CC384216—UN—03JUL19

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

# Operating BaleTrak Monitor

## BaleTrak Plus Monitor



CC1030908

### A—Keyboard

### B—Liquid Crystal Display Screen

The BaleTrak Plus monitor provides information to help the operator to make well-shaped bales. The monitor operates the binding system, the pickup, the drop floor, the precutter, and the soft core system automatically.

The monitor settings can be modified to suit specific requirements. In most cases, adjustments can be made from the tractor seat.

The system is preset, functional, and ready to use. Operate the baler briefly with the factory settings to familiarize with programmed settings before modifying the settings.

The BaleTrak Plus monitor also reports alarms or malfunctions. The monitor allows the operator to check and calibrate baler electrical components.

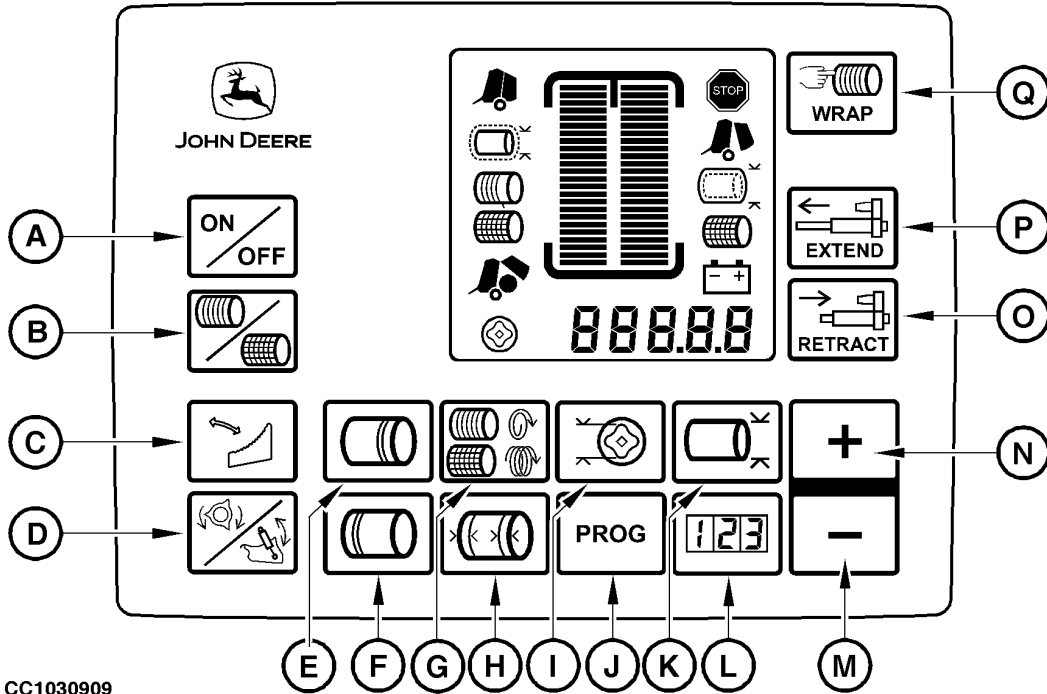
The BaleTrak Plus monitor includes:

- A function keyboard (A) with sensitive keys. See [BaleTrak Plus Monitor Keyboard Description](#) in this section.
- A Liquid Crystal Display (LCD) screen (B). See [LCD Screen Description](#) in this section.

t81334,1681821358196 -19-18APR23-1/1

CC1030908—UN—02OCT08

### BaleTrak Plus Monitor Keyboard Description



CC1030909

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- |                                      |   |                             |                                   |
|--------------------------------------|---|-----------------------------|-----------------------------------|
| A—ON/OFF Key                         | F—Number of Twine Coils in the Middle Key   | I—Soft Core Key             | O—Retract Key                     |
| B—Twine or Net Binding Key           | G—Twine Spacing or Number of Net Turns Key  | J—Not Used                  | P—Extend Key                      |
| C—Precutter Knife Key                | H—Distance of the Binding Ends on Sides Key | K—Bale Diameter Setting Key | Q—Manually Start of Binding Cycle |
| D—Drop Floor Key                     |   | L—Bale Counters Key         |                                   |
| E—Number of Twine Coils on Sides Key |   | M—MINUS Key                 |                                   |
|                                      |   | N—PLUS Key                  |                                   |

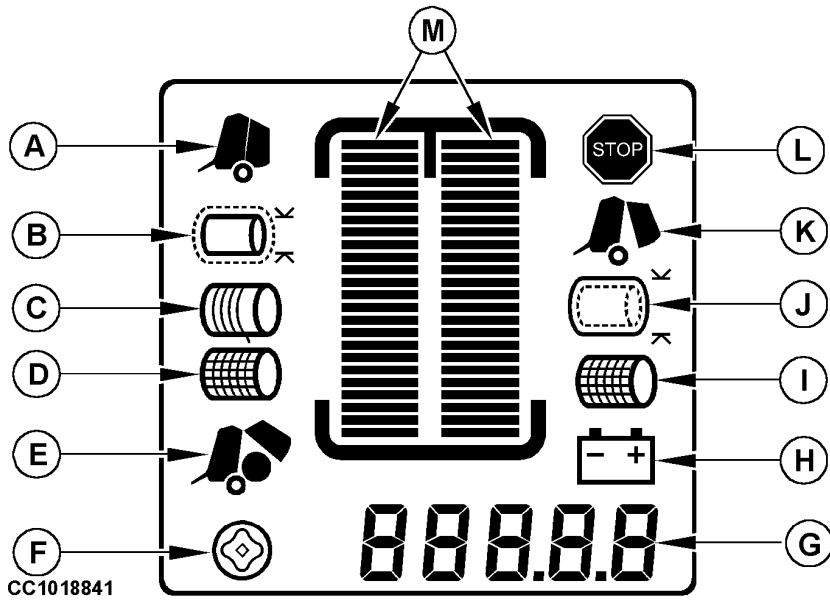
**NOTE:** When any key is pressed, buzzer will beep.

Pressing the "PLUS" or "MINUS" key briefly will increase or decrease selected value.

Pressing the "PLUS" or "MINUS" key for a longer time accelerates value change.

1181334,1681821378606 -19-18APR23-1/1

LCD Screen Description



- A—Gate Closed Pictogram
- B—Near Full Pictogram
- C—Twine Binding Pictogram
- D—Net Binding Pictogram
- E—Ejecting Bale Pictogram

- F—Soft Core ON Pictogram
- G—Digital Display (Bale Size, Bale Counter, John Deere B-Wrap™ etc.)

- H—Battery Alarm Pictogram
- I—Net Binding Alarm Pictogram
- J—Oversize Alarm Pictogram
- K—Open Gate Alarm Pictogram

- L—Stop Indicator
- M—Bale Shape Indicators

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TL81334,0000F58 -19-04JUN21-1/1

CC1018841 —JUN—18JAN01

### Switch Monitor On or Off

Press "ON/OFF" key (A) to switch on the monitor.

During the power-up:

- All the pictograms are displayed.
- The buzzer beeps for one second.
- Then, the model number (B) is displayed for one second.

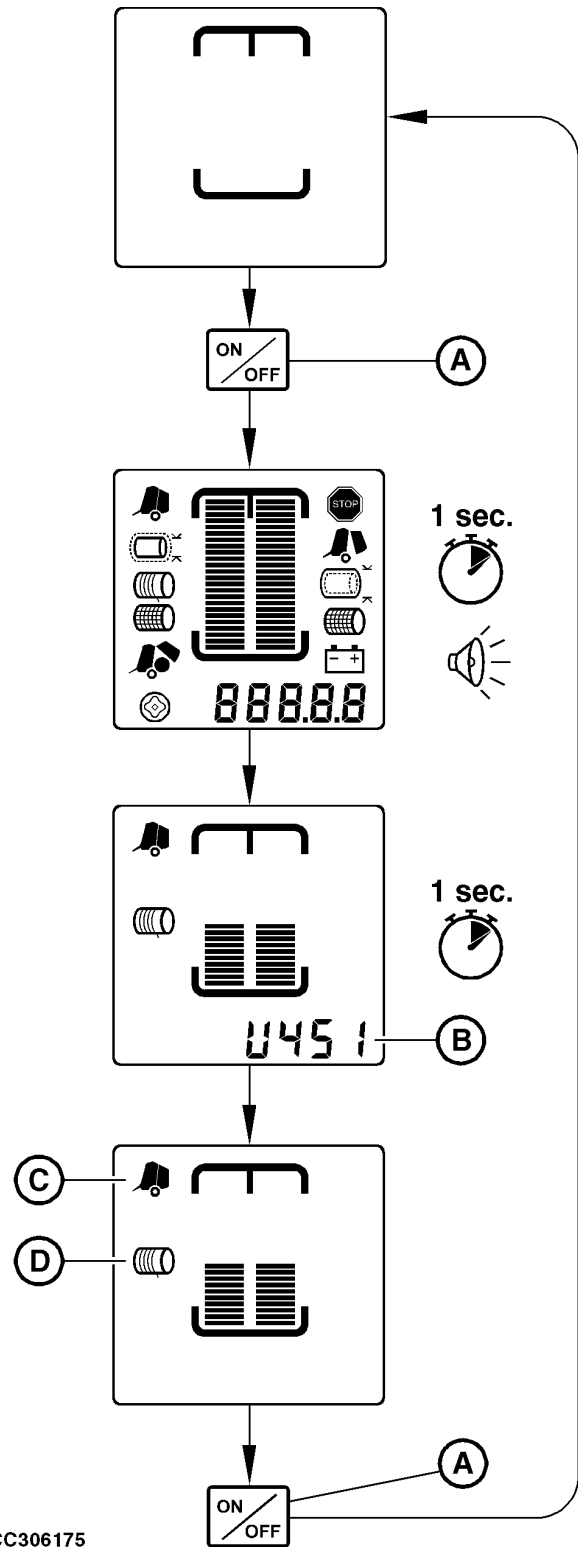
After the power-up sequence, the monitor enters in normal display mode. Closed gate pictogram (C) and current binding system selected is displayed (D).

To switch off the monitor, press "ON/OFF" key (A), OFF is displayed for one second then the monitor is off.

*NOTE: After 30 minutes without any operation, the monitor will power off by itself. If the voltage is higher than 16 V for 5 seconds, the monitor will automatically power off.*

A—ON/OFF Key  
B—Baler Model

C—Closed Gate Pictogram  
D—Twine Binding Pictogram



CC306175

CC306175—UN—18APR17

TL81334.0000F59 -19-04JUN21-1/1

### Set Bale Diameter

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

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

Bale diameter can be set:

- From 100 to 163 cm (3 ft 3 in to 5 ft 5 in) for V451M balers.
- From 100 to 183 cm (3 ft 3 in to 6 ft) for V461M balers.

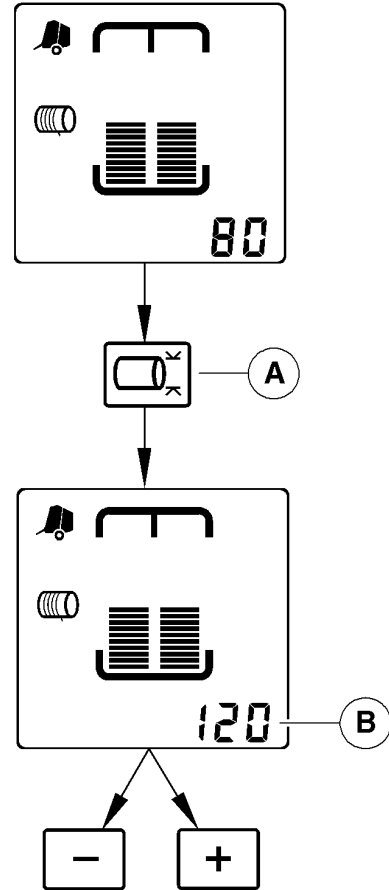
Press "Bale Diameter" key (A). The bale diameter setting (B) is displayed for five seconds.

While the bale diameter is displayed, press "PLUS" or "MINUS" key to respectively increase or decrease the bale diameter setting.

The last bale size displayed is stored after five seconds.

A—Bale Diameter Key

B—Bale Diameter Value



CC219825

CC219825 —JUN—07OCT14

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### Select Net or Twine Binding

**NOTE:** If baler is equipped with John Deere B-Wrap™, see your John Deere dealer to switch baler between John Deere B-Wrap™ and twine binding.

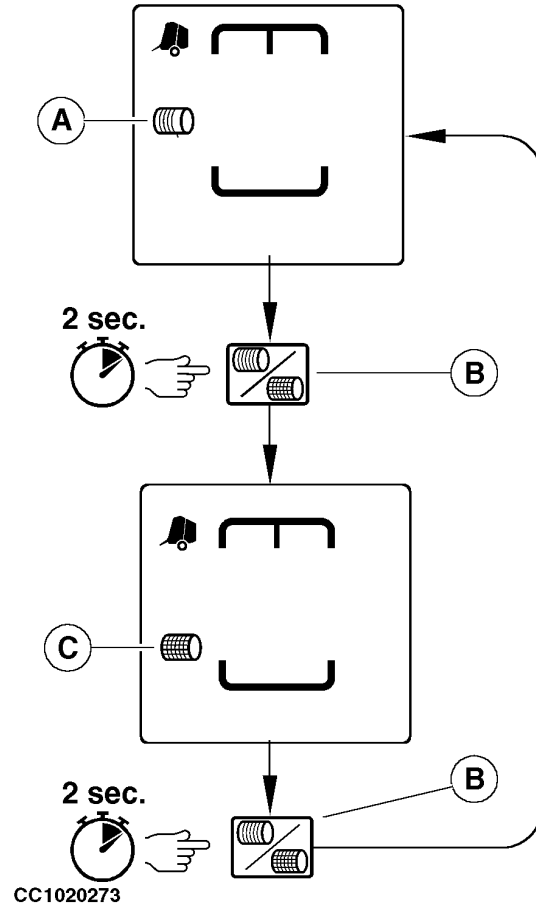
Press and hold "Twine or Net Binding" key (B) for about 2 seconds to switch from net to twine binding or from twine to net binding.

When the twine binding is selected, the twine binding pictogram (A) is displayed.

When the net binding is selected, the net binding pictogram (C) is displayed.

**NOTE:** If pressing the "Twine or Net Binding" key (B) does not select the desired binding, see your John Deere dealer.

- A—Twine Binding Pictogram
- B—Twine or Net Binding Key
- C—Net Binding Pictogram



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t181334,1681821417043 -19-18APR23-1/2

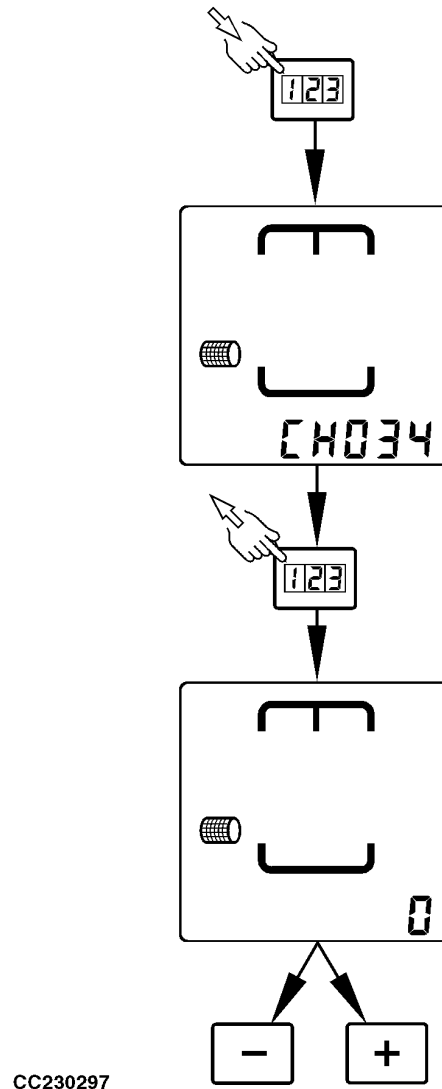
If John Deere B-Wrap™ is equipped:

1. To switch from net binding to John Deere B-Wrap™ binding:
  - a. The monitor should be set for net binding.
  - b. Go to channel 034. See Channel 034: B-Wrap Mode Selection (If Equipped) in BaleTrak Monitor Service.
  - c. Change value by pressing "PLUS" or "MINUS" key to 1 for John Deere B-Wrap™ binding mode with bale orientation or 2 for John Deere B-Wrap™ binding without bale orientation.
2. To switch from John Deere B-Wrap™ binding to net binding:
  - a. Go to channel 034. See Channel 034: B-Wrap Mode Selection (If Equipped) in BaleTrak Monitor Service.
  - b. Change value by pressing "PLUS" or "MINUS" key to 0 for net binding mode.

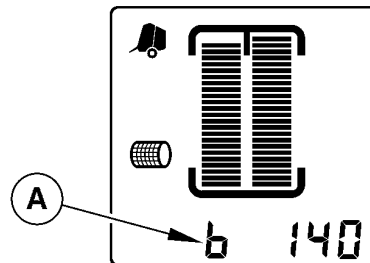
When John Deere B-Wrap™ binding is enabled, the symbol "b" is displayed on the screen. If knives are engaged, the monitor display symbol "c" instead of "b", and if drop floor is down, the monitor display "d" instead of "b".

Bale orientation will help the operator to orientate the John Deere B-Wrap™ material seam for a better resistance to weather.

**A—B-Wrap Mode Symbol**



CC230297



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CC230297 —UN—19FEB16

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## Set Binding Parameters

The following tables show the recommended settings for net and twine binding.

Recommended Net Binding Settings				
	Silage	Straw	Hay	Chopped Silage
Number of Net Turns	2	3	2.5	3

Recommended Twine Binding Settings				
	Silage	Straw	Hay	Chopped Silage
Number of Twine Coils on Sides	4	3	2	3
Number of Twine Coils in the Middle	4	3	2	3
Twine Spacing	5 cm (2 in)	10 cm (4 in)	5 cm (2 in)	5 cm (2 in)
Distance of Binding Ends	8 cm (3 in)	10 cm (4 in)	8 cm (3 in)	8 cm (3 in)
Distance of Binding Ends in the Middle	2 cm (13/16 in)	2 cm (13/16 in)	2 cm (13/16 in)	2 cm (13/16 in)

Each parameters can be customized depending on crop condition.

### Net binding parameters adjustment:

- See [Set Number of Net Turns](#) in this section to adjust the number of net turns.
- See [Channel 009: Net Binding Delay](#) in BaleTrak Monitor Service section to adjust net binding delay.

### Twine binding parameters adjustment:

- See [Set Twine Spacing](#) in this section to adjust twine spacing.
- See [Set Number of Twine Coils on Sides](#) in this section to adjust the number of twine coils on sides.

- See [Set Number of Twine Coils in the Middle](#) in this section to adjust the number of twine coils in the middle.
- See [Set Distance of Twine Coils in the Middle](#) in this section to adjust the distance from binding ends to the edges of bale.
- See [Channel 031: Adjust Distance of Twine Coils in the Middle](#) in BaleTrak Monitor Service section to adjust distance of binding ends in the middle.
- See [Channel 033: Set Offset of Twine Binding Start](#) in BaleTrak Monitor Service section to adjust anticipation of twine binding start.

†181334,1687846957881 -19-27JUN23-1/1

### Set Number of Net Turns

*NOTE: When John Deere B-Wrap™ binding is enabled, the number of net turns cannot be adjusted.*

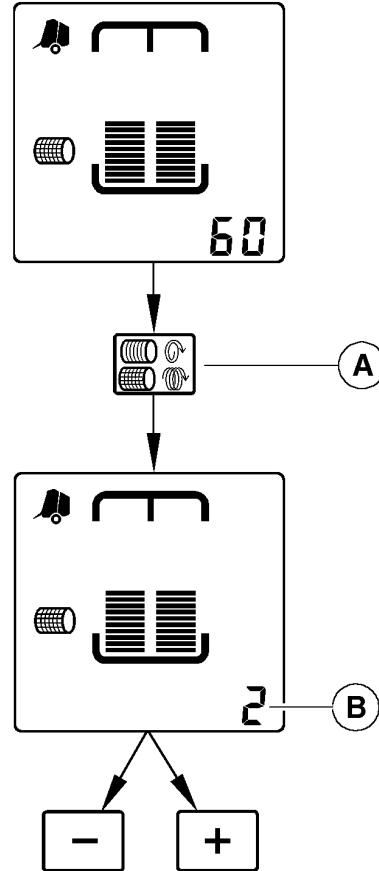
Press "Twine Spacing or Number of Net Turns" key (A). The last number of net turns settings (B) is displayed for five seconds.

While the number of net turns is displayed, press "PLUS" or "MINUS" key to respectively increase or decrease the number of turns from 1.5 to 5.

The last net turn number displayed is stored after five seconds.

See [Set Binding Parameters](#) in this section for recommended binding parameters.

**A**—Twine Spacing or Number of Net Turns Key      **B**—Number of Net Turns



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### Set Twine Spacing

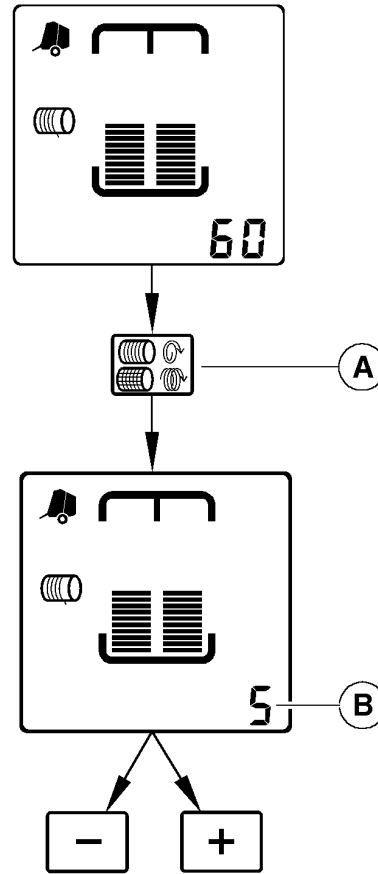
Press "Twine Spacing or Number of Net Turns" key (A).  
The last setting of space between coils (B) is displayed for 5 seconds.

While the space between coils is displayed, press "PLUS" or "MINUS" key to respectively increase or decrease the space from 5 to 15 cm (2 to 6 in.).

The last twine spacing displayed is stored after 5 seconds.

See [Set Binding Parameters](#) in this section for recommended binding parameters.

**A**—Twine Spacing or Number of Net Turns of Net Turns Key      **B**—Space Between Coils



CC1020079

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### Set Number of Twine Coils on Sides

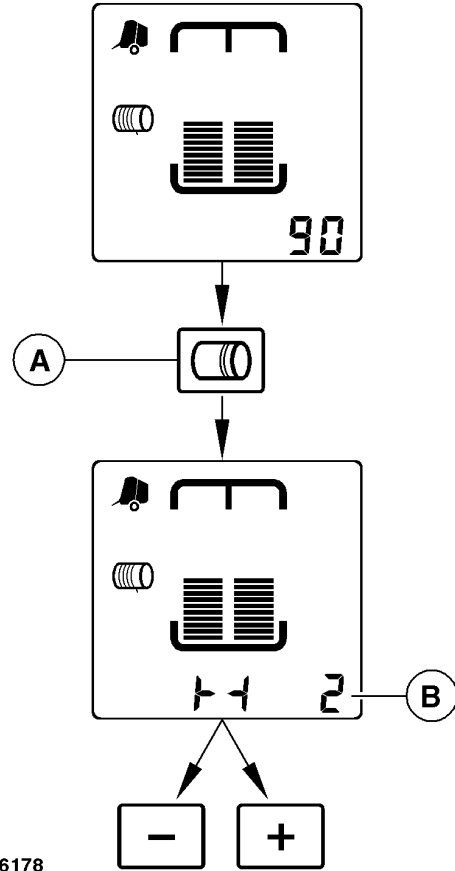
Press "Number of Twine Coils on Sides Setting" key (A). The last number of twine coils on sides (B) is displayed for 5 seconds.

While the number of coils on sides is displayed, press "PLUS" or "MINUS" key to respectively increase or decrease the number of coils on side from 2 to 5.

The number of twine coils at binding start displayed is stored after 5 seconds.

A—Number of Twine Coils on Sides Setting Key

B—Number of Twine Coils on Sides



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### Set Number of Twine Coils in the Middle

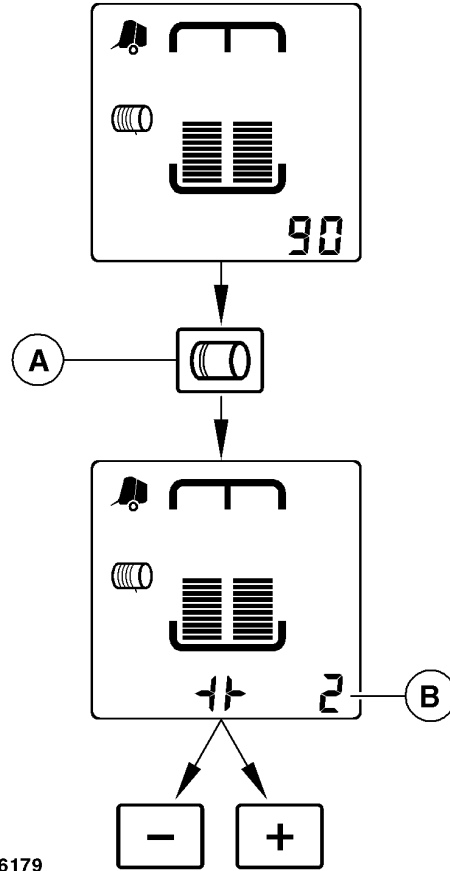
Press "Number of Twine Coils in the Middle Setting" key (A). The last number of twine coils in the middle (B) is displayed for 5 seconds.

While the number of twine coils in the middle is displayed, press "PLUS" or "MINUS" key to respectively increase or decrease the number of coils in the middle from 2 to 5.

The number of coils in the middle displayed is stored after 5 seconds.

A—Number of Twine Coils in the Middle Setting Key

B—Number of Twine Coils in the Middle



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### Set Distance of Twine Coils in the Middle

The distance between twine coils in the middle of bale can be adjusted from 2 to 8 cm (0-3/4 to 3-1/8 in). See

Channel 031: Adjust Distance of Twine Coils in the Middle in BaleTrak Monitor Service section.

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### Offset of Twine Binding Start

The offset of twine binding starting allows twine binding cycle to be started at a lower bale size than the preset

bale size. This offset helps the twine to be caught by the bale. See Channel 033: Set Offset of Twine Binding Start in BaleTrak Monitor Service section.

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### Automatic Start of Binding Cycle

**IMPORTANT:** Channel 032 must be ON to allow automatic start of binding cycle. See **Channel 032: Automatic Start of Binding Cycle** in BaleTrak Monitor Service section.

**I** — Just before the set bale diameter is reached, the near full pictogram (A) flashes and the monitor beeps twice. The near full diameter at which the pictogram flashes is adjustable. See **Channel 010: Offset of Nearly Full Alarm** in BaleTrak Monitor Service section.

**II** — When the adjusted bale diameter is reached, the monitor beeps continuously for 3 seconds and the stop indicator (C) is displayed. Immediately stop the tractor. The net or twine pictogram (B) flashes (depending on which binding mode has been selected), and the binding cycle starts.

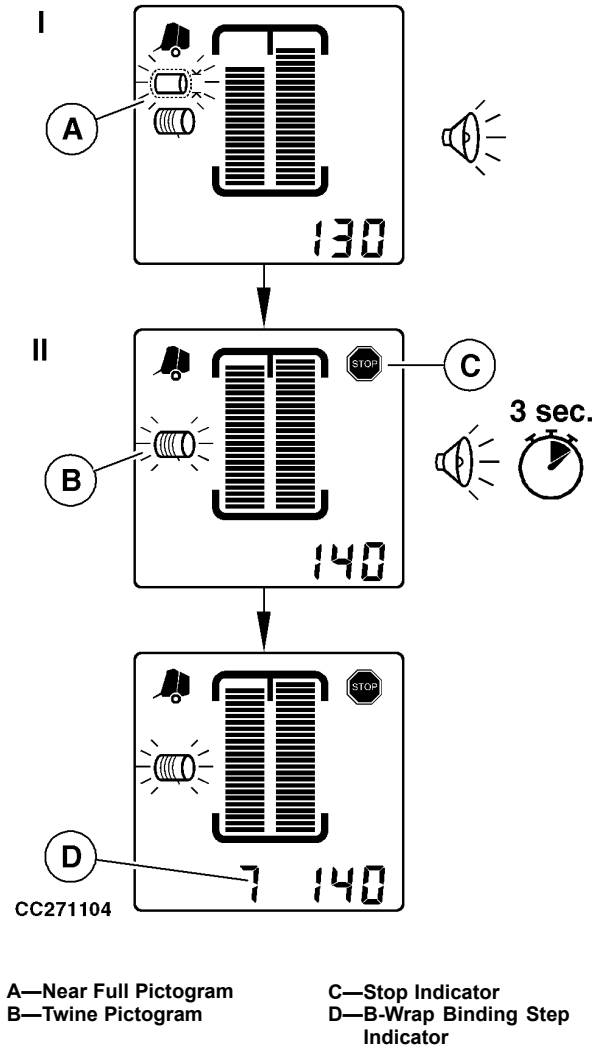
**For baler equipped with twine pulley sensor:** If twine balls are empty, the stop indicator (C) flashes, a continuous beep is emitted and the diagnostic trouble code "E321" is displayed. Replace twine balls and press "MINUS" key to clear the diagnostic trouble code.

Only for John Deere B-Wrap™ binding:

During John Deere B-Wrap™ binding, monitor displays some indications about current binding cycle:

- Monitor displays "1" and extends net actuator.
- Monitor displays "2" and net is feeding.
- Monitor displays "3" and waits John Deere B-Wrap™ metal strip.
- Monitor displays "4" and detects John Deere B-Wrap™ metal strip (display quickly).
- Monitor displays "5" and retract the net actuator to cut John Deere B-Wrap™ net.
- Only if bale orientation is enabled, monitor displays "6" and start a sequence of three short beeps.
- Only if bale orientation is enabled, switch off PTO when monitor displays "7" and start long beeps. Monitor repeats countdown and beeps until operator switches off PTO.

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CC271104 —UN—19FEB16

## Operating BaleTrak Monitor

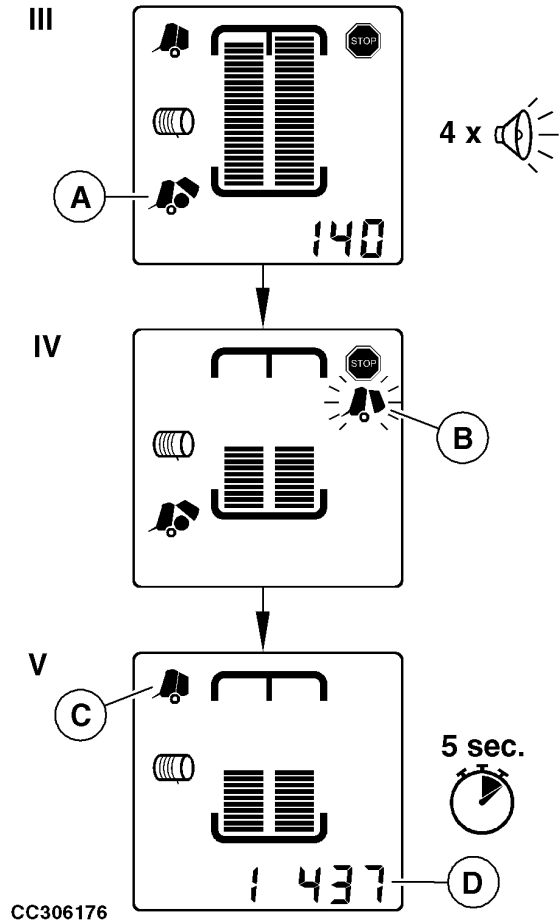
**III** — When the binding cycle is completed, the bale ejection pictogram (A) is displayed and the monitor beeps four times.

**IV** — Open the gate of the baler with the tractor selective control valve lever to dump the bale. The open gate pictogram (B) flashes while the gate is opened.

**V** — When the gate is closed, the closed gate pictogram (C) is displayed and the current bale counter (D) is displayed for 5 seconds.

In John Deere B-Wrap™ binding, monitor Displays “10nEt” when the John Deere B-Wrap™ roll is empty. See [Load Net Roll](#) in Preparing the Baler section.

**A**—Bale Ejection Pictogram      **C**—Closed Gate Pictogram  
**B**—Open Gate Pictogram        **D**—Daily Counter



CC306176—UN—18APR17

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TL81334,0000F61 -19-04JUN21-2/2

### Manual Start of Binding Cycle

**IMPORTANT:** Channel 032 must be OFF to start a binding cycle manually. See [Channel 032: Automatic Start of Binding Cycle](#) in BaleTrak Monitor Service section.

A binding cycle can be manually started at any time, even if automatic start of binding cycle is enabled.

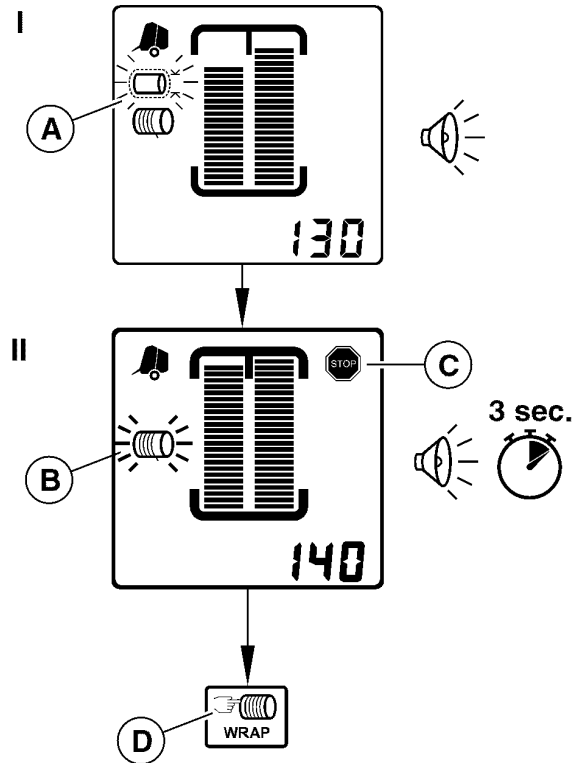
**I** — Just before the set bale diameter is reached, the near full pictogram (A) flashes and the monitor beeps twice. The near full diameter at which the pictogram flashes is adjustable. See [Channel 010: Offset of Nearly Full Alarm](#) in BaleTrak Monitor Service section.

**II** — When the adjusted bale diameter is reached, the monitor beeps continuously for 3 seconds and the stop indicator (C) is displayed. Immediately stop the tractor.

To manually start a binding cycle, press “Manual Start of Binding Cycle” key (D). The monitor beeps and binding animation begins, see [Automatic Start of Binding Cycle](#) in this section.

A—Near Full Pictogram  
B—Twine Pictogram

C—Stop Indicator  
D—Manual Start of Binding Cycle Key



CC271117

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CC271117 —UN—03MAR16

### Raise or Lower the Pickup Function

**CAUTION:** To help prevent personal injury caused by unexpected movement, disengage PTO, engage park brake, shut off the tractor engine, and remove key. Wait for all moving part to come standstill. The pickup is still able to move downwards.

When the control monitor is switched on, the pickup raise or lower function is automatically selected. In this case, there is no special LCD screen display.

Act on selective control valve lever of the tractor to raise or lower the pickup.



CC333382

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### Retract or Engage Precutter Knives Function

**IMPORTANT:** Retract and engage precutter knives several times after each working day to prevent jamming and material accumulation. See Lubrication and Maintenance section.

*NOTE:* The knife retract or engage function and the pickup raise or lower function use the same selective control valve.

The precutter device is used to chop the crop.

In normal operating mode, the symbol "c" (A) is displayed if the knives are engaged and not displayed if the knives are retracted.

Press and hold "Precutter Knife" key (B) about 3 seconds to select the knife retract or engage function. The buzzer beeps to confirm that the knife retract or engage function is selected.

"cut" (C) is displayed if the knives are engaged or "nocut" (E) if the knives are retracted.

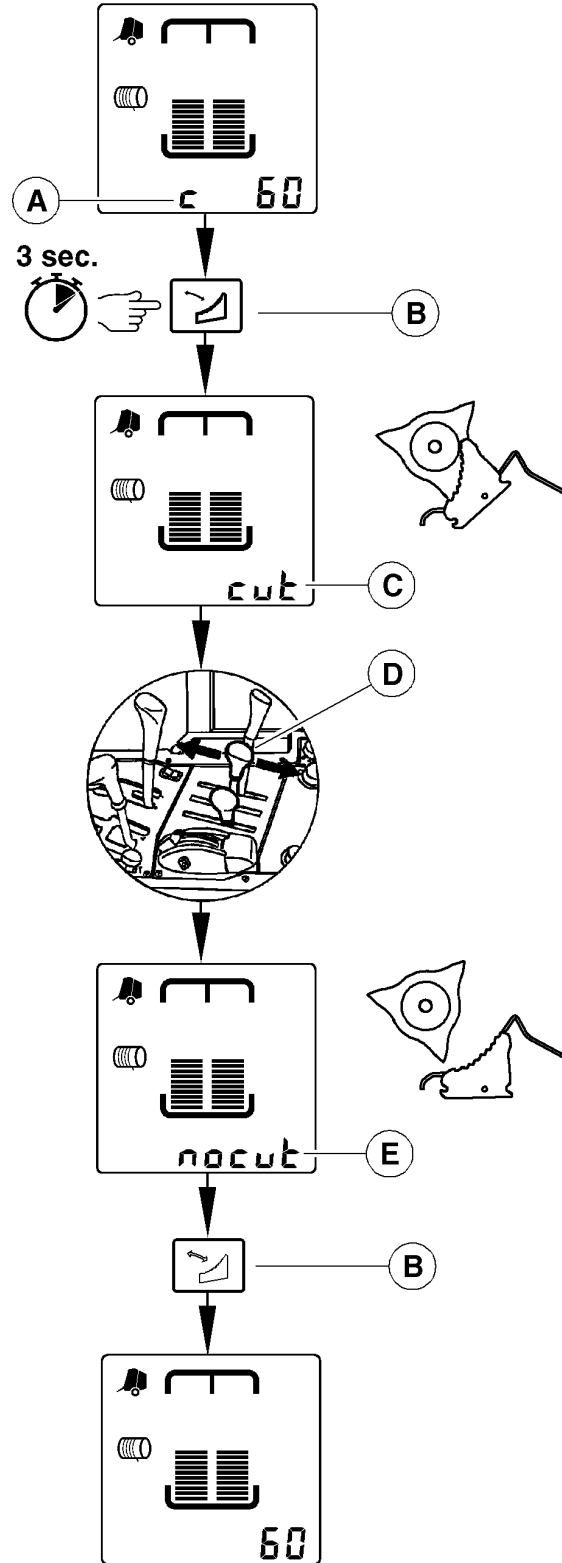
Actuate selective control valve lever of the tractor (D) to retract or engage the knives.

"nocut" (E) (knives retracted) or "cut" (C) (knives engaged) is displayed according to position of knives.

Press "Precutter Knife" key (B) or another key to leave the knife retract or engage function. The buzzer beeps to confirm that the monitor is back to normal operating mode.

*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.

- |                         |                           |
|-------------------------|---------------------------|
| A—Precutter Symbol      | D—Control Valve Lever     |
| B—Precutter Knife Key   | E—Knives Retracted Symbol |
| C—Knives Engaged Symbol |                           |



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## Unplug Rotary Feeder

**NOTE:** The drop floor lower function and the pickup raise or lower function use the same selective control valve.

In normal operating mode, the symbol "d" (A) flashes and an alarm is emitted if the drop floor is lowered during more than 2 seconds.

Whenever it is necessary to unplug the baler, lower the drop floor to increase the empty space beneath the rotary feeder.

1. Stop tractor.
2. Disengage the PTO. Press and hold "Drop Floor" key (B) for about 3 seconds.
3. The monitor enters in drop floor raise/lower function and a slow intermittent sound alarm is emitted while this function is selected. "UP" (C) is displayed to indicate that the drop floor is not lowered.
4. Act on selective control valve lever (D) to lower the drop floor.
5. When the drop floor is lowered, "dn" (E) is displayed and a slow intermittent sound alarm is emitted. Slowly engage the PTO at slow tractor idle until rotary feeder turns freely.

**NOTE:** To unplug the rotary feeder more easily, retract precutter knives. See [Retract or Engage Precutter Knives Function](#) in this section.

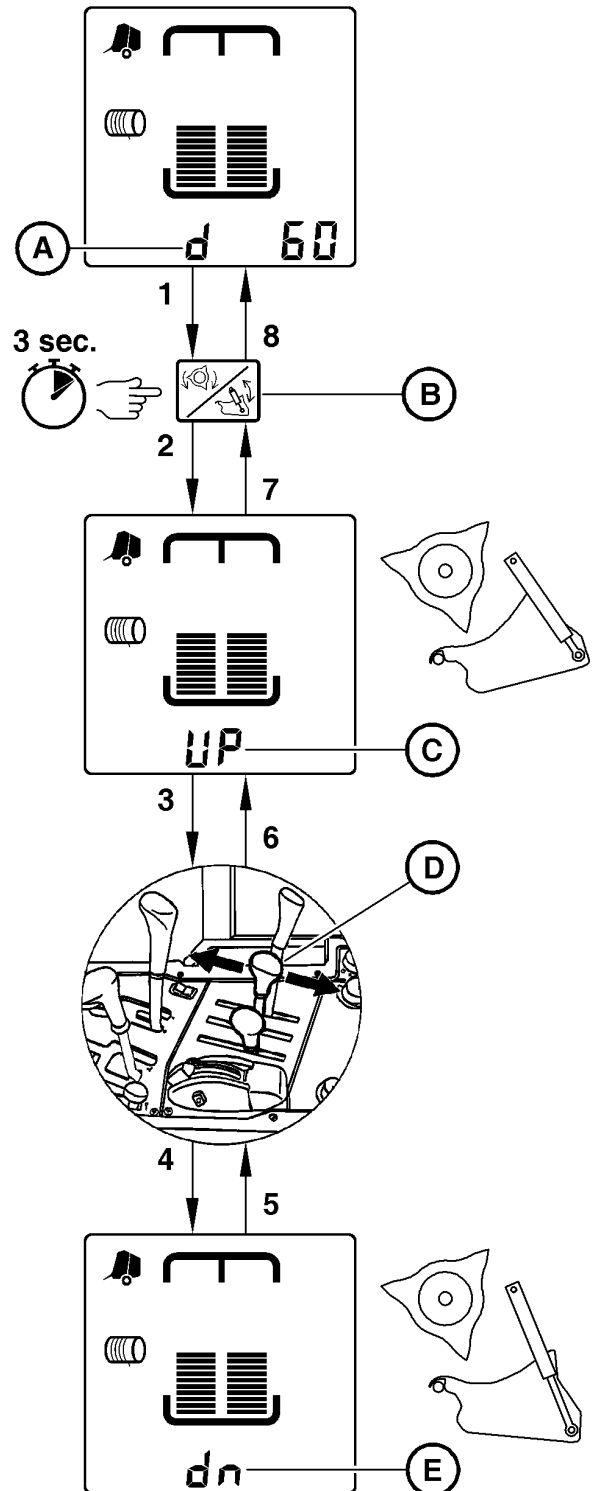
6. When the baler is unplugged, act on selective control valve lever (D) to raise the drop floor.

**IMPORTANT:** Before raising the drop floor, ensure that knives are down.

7. "UP" (C) is displayed to indicate that the drop floor is in normal operation. Put the selective control valve lever to neutral position.
8. Press "Drop Floor" key (B) or another key to leave the drop floor raise/lower function.
9. The monitor is back to normal operating mode.

A—Drop Floor Symbol  
B—Drop Floor Key  
C—Drop Floor Raised

D—Control Valve Lever  
E—Drop Floor Lowered



CC1030610

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### Operate Soft Core

**NOTE:** If John Deere B-Wrap™ kit is installed on baler, see your John Deere dealer to switch between John Deere B-Wrap™, and soft core.

The soft core allow to make a bale with a lower density at the center and high density at the outer layer of the bale.

When the soft core function is ON, the baler prevent full pressure on the center of the bale. When bale size reaches soft core diameter setting, the baler allows full pressure on the outer layer of the bale. The bale is finished at full pressure to forming tighter and denser outer layer.

### Switching on Soft Core

Press "Soft Core" key (A) to activate soft core.

When the soft core is ON, the soft core pictogram (B) is displayed.

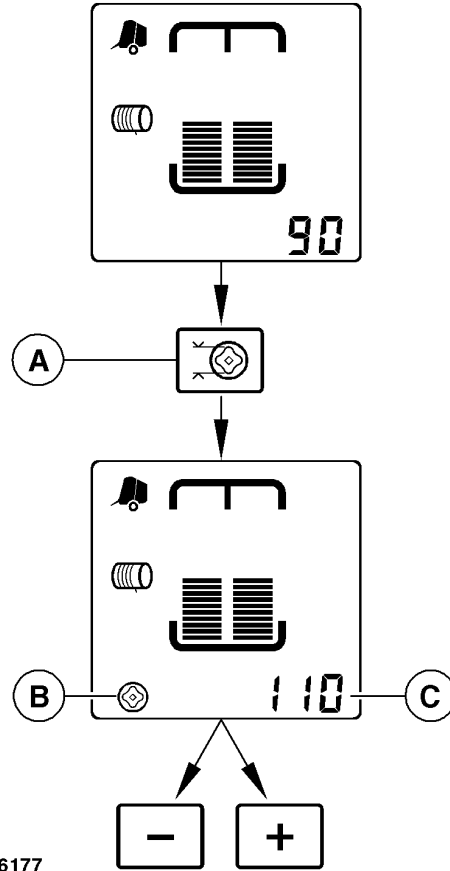
Press again the "Soft Core" key (A) to deactivate soft core mode, the soft core pictogram (B) disappears.

### Adjusting Soft Core Diameter

Press "Soft Core" key (A). The last soft core diameter setting is displayed for five seconds.

While the soft core diameter setting (C) is displayed, press "PLUS" or "MINUS" key, to raise or lower diameter setting. The minimum of soft core diameter is 1 meter (3 ft. 3-3/8in).

The last soft core size displayed is stored after five seconds.



CC306177

A—Soft Core Key  
B—Soft Core Pictogram

C—Soft Core Diameter Setting

CC306177—UN—29MAR17

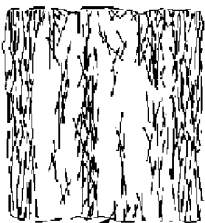
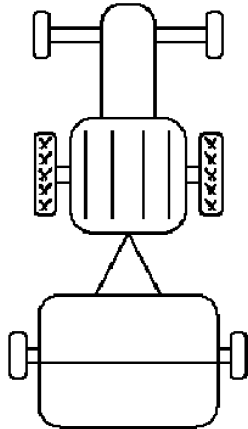
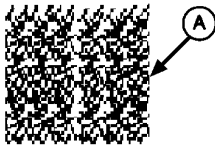
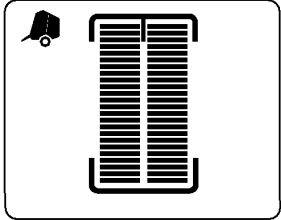
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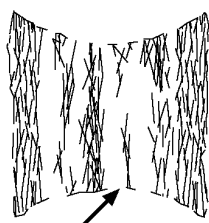
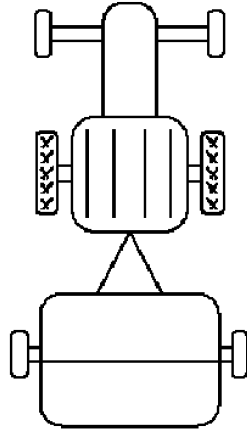
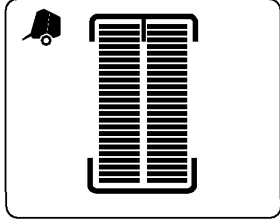
### Make a Bale with Bale Shape Indicators

I



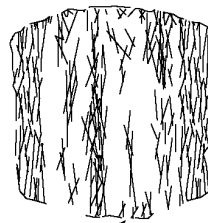
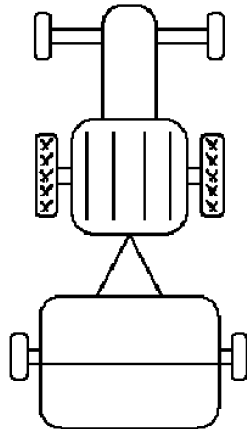
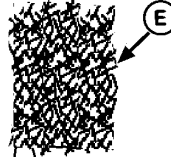
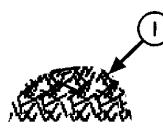
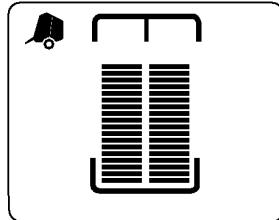
B

II



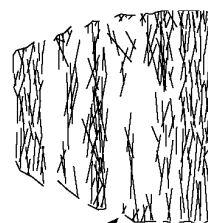
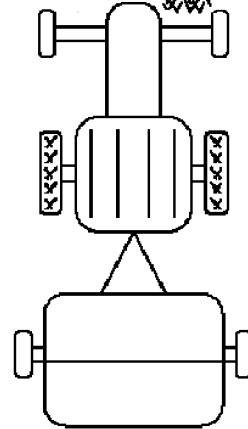
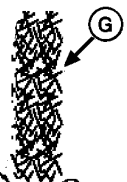
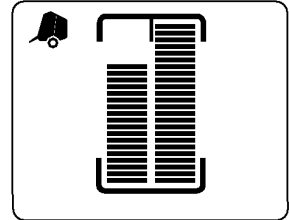
D

III



F

IV



H

E47515 —UN—07JAN00

Continued on next page

t81334,1681821841953 -19-18APR23-1/2

**A—Correct Shape Windrow**  
**B—Correct Shape Bale**  
**C—Curve-Shaped Windrow**

**D—Hourglass-Shaped Bale**  
**E—Round-Shaped Windrow**  
**F—Barrel-Shaped Bale**

**G—Half Windrow**  
**H—Cone-Shaped Bale**  
**I— Top of the Windrow**

The illustration on the facing page and the following information describe the relationship between the monitor-controller display, windrow variations, and current bale shape.

To ensure optimum bale shape and maximum bale density, the top bar is shown on both sides of the bale shape indicator display, as shown in Example I. The top bar is displayed when bale is being bound. See [Guideline to Form a Good Bale](#) in Operating the Baler-General Purposes section.

**I—** Correct shape bale (B) is formed when correct shape windrow (A) has a uniform side-to-side density and bale width is the same as bale chamber width. Weaving is not necessary.

If this is not practical, create windrows up to one-half the width of the bale chamber and follow the bale shape bars. See [Guideline to Form a Good Bale](#) in Operating the Baler-General Purposes section.

**II—** If curve-shaped windrow (C) is heavy on the edges and light at the center, an hourglass-shaped bale (D) is formed even though bale shape bars are balanced and all lit.

If possible, weaving back and forth across windrow helps fill the middle of the bale. Otherwise, proper windrow formation (raking, etc.) is needed.

**III—** The bale shape bars will not reach maximum height and a barrel-shaped bale (F) is formed if any of the following conditions exist:

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

If windrow is almost as wide as bale chamber, reduce tractor rpm and increase ground speed to spread material across pickup.

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

The bale shape bar will not reach maximum height when operating at reduced bale density and/or using variable core option. This is also true when operating in certain crops such as third cut grass or short wheat straw, because ends of bale are soft.

**IV—** If half windrow (G) is baled without weaving back and forth, a cone-shaped bale (H) is formed. The same result is obtained if operator feeds one side more than other.

Weave back and forth across the narrow windrow to keep bale shape bars as high as possible.

## Use Bale Counters

The monitor is equipped with six bale counters and one operating hours counter: one total counter (D), and five resettable current counters (B) and (C) which can be used to store daily number of bales or number of bales per field.

Two conditions must be met to add a bale to the current and total counters: the bale must be bound without any diagnostic trouble code and the gate must be fully open and closed.

In normal operating mode, the selected current counter is displayed for five seconds following bale ejection.

### Select a Current Counter

To select a current counter (B), press several times "Counter" key (A) until the desired counter (C) is displayed. After five seconds without pressing any key, the monitor return to normal display mode and the last displayed current counter is selected. The new bales are added in the selected counter.

If the last counter displayed is the total counter (D), the current counter selected (B) is the current counter from the last selection (for example 2).

### View Current Bale Counters

Press "Counter" key (A). The last selected current counter (B) is displayed for five seconds.

### View Total Bale Counter

While a current counter (B) is displayed, press several times "Counter" key (A) until the monitor displays the total counter. (Total counter is displayed after the fifth counter.)

### View Operating Hours Counter

While a current counter (B) is displayed, press several times "Counter" key (A) until the monitor displays the operating time. (Operating hours counter is displayed after the total bale counter.)

*NOTE: Operating hours counter cannot be changed or erased.*

### Add or Remove Bales in Current Counters

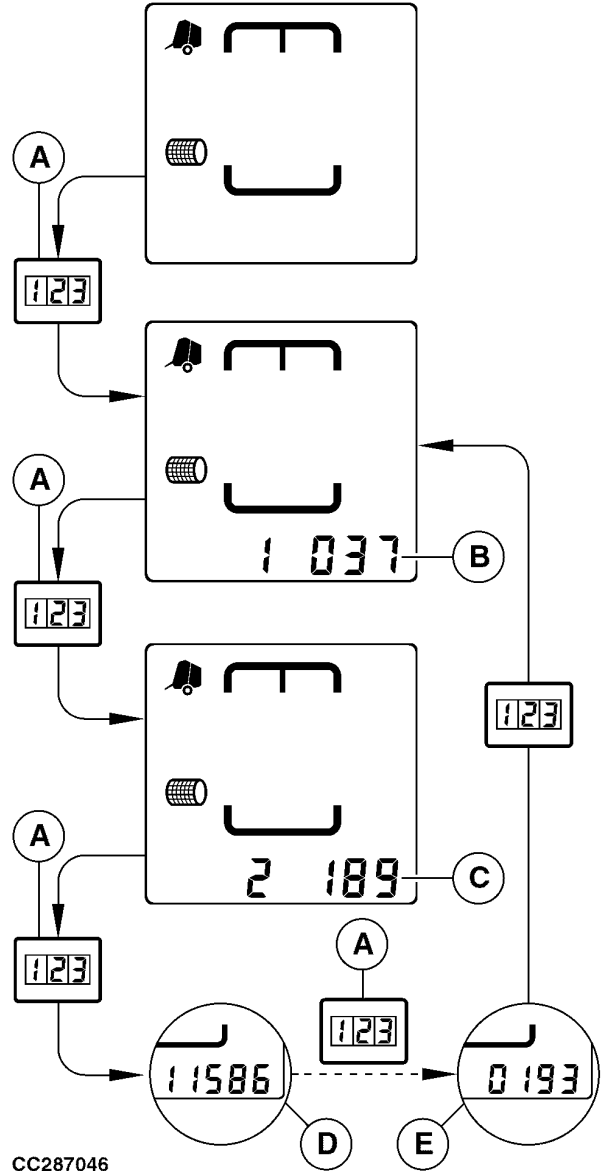
Current counters can be increased to add bales or decreased to subtract bales.

While the desired current counter is displayed, press "PLUS" or "MINUS" key to increase or decrease number of bales.

*NOTE: Maintain the "MINUS" key to reset the current counter displayed.*

The last number of bales displayed is stored after five seconds.

*NOTE: Add or remove bales from the current counter does not affect the total counter.*



CC287046

CC287046—UN—07SEP16

A—Counter Key  
B—Current Counter  
C—Current Counter

D—Total Counter  
E—Operating Hours Counter

### Reset Current Bale Counters

To reset a current bale counter, press and hold "MINUS" key while a current counter (B) is displayed. The counter displayed begins to decrease then reset.

*NOTE: Total bale counter cannot be changed or erased.*

## Warning Pictograms

### Stop indicator

The Stop indicator (A) is displayed when:

- The bale reaches the preset diameter.
- The open gate pictogram (B) is displayed.
- The oversize bale pictogram (C) is displayed.
- The net binding pictogram (D) is displayed.
- A diagnostic trouble code is displayed.
- The monitor is switched on with a bale inside the baler.

Stop the tractor when the stop indicator (A) is displayed.

**NOTE:** The Stop indicator is displayed at start-up if the net or twine actuator is disconnected or does not work.

### Open gate pictogram

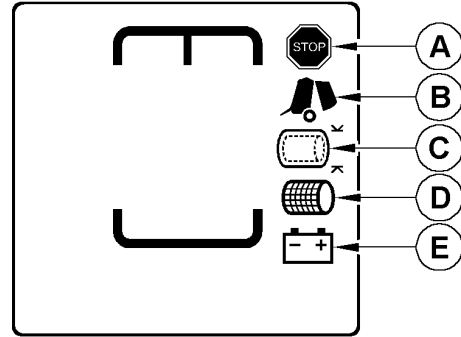
**IMPORTANT:** Never travel with an open gate at a speed higher than 2 km/h (1.2 mph). Damage to the gate could occur.

The open gate pictogram (B) is displayed when the gate of the baler is open while ejecting the bale.

Actuate the tractor selective control valve lever to close the gate of the baler and switch off this pictogram.

### Oversize bale pictogram

The oversize bale pictogram (C) is displayed when the bale exceeds the maximum bale diameter of the baler model. Continuing to operate with oversize bale in chamber can cause severe gate damage, bearing breakage, and roll damage.



CC1018857

- A—Stop Indicator
- B—Open Gate Pictogram
- C—Oversize Bale Pictogram
- D—Net Binding Pictogram
- E—Battery Pictogram

When the oversize bale pictogram is displayed, immediately stop the tractor. Start the binding cycle with "Manual Binding Start" key, see [Manual Start of Binding Cycle](#) in this section and eject the bale.

### Net binding pictogram

The net binding pictogram (D) is displayed when the net is not cut or when the net roll is empty. Correct the net cut problem or replace the net roll to switch off this pictogram.

### Battery pictogram

The battery pictogram (E) and the voltage are displayed when the battery voltage is below 11.2 V or over 16 V.

TL81334,0000F68 -19-04JUN21-1/1

CC1018857—UN—22DEC00

## Diagnostic Trouble Code

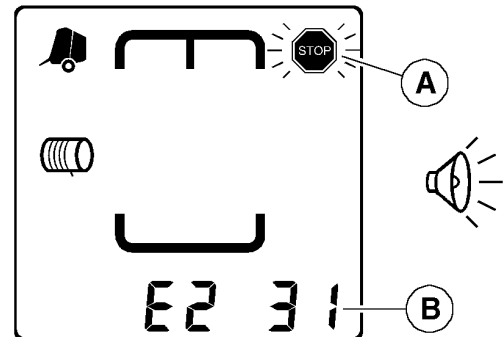
When an error occurs on the round baler, a sound alarm is emitted and a diagnostic trouble code (B) is displayed.

**NOTE:** The Stop indicator (A) is also displayed.

Some of the diagnostic trouble codes are displayed for 5 seconds then disappear.

It is possible to clear some of the diagnostic trouble codes from the LCD screen by pressing the "MINUS" key.

To clear some other of the diagnostic trouble codes, it is necessary to correct the malfunction. Press the "MINUS" key to stop the buzzer then correct the problem corresponding to the diagnostic trouble code. See [Diagnostic Trouble Code List](#) in BaleTrak Monitor Service section.



CC1020287

- A—Stop Indicator
- B—Diagnostic Trouble Code

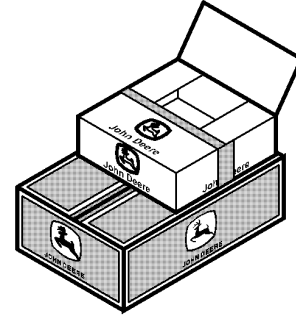
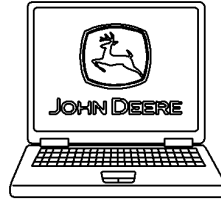
tl81334,1679048503693 -19-21MAR23-1/1

CC1020287—UN—30JUL01

# Attachments

## Find Attachments

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



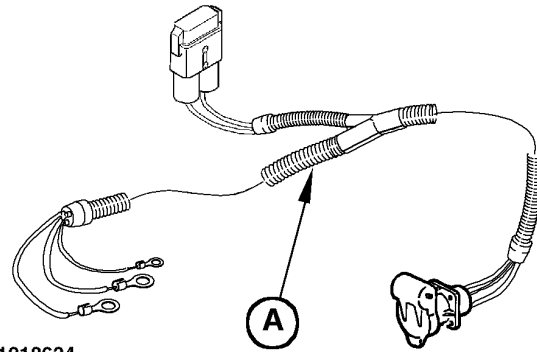
CC208612

CC208612—UN—14APR14

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

## Battery Harness for Monitor

Whenever necessary, a battery harness (A) is available as an attachment to be installed on tractors not being equipped with any convenience outlet.



CC1018634

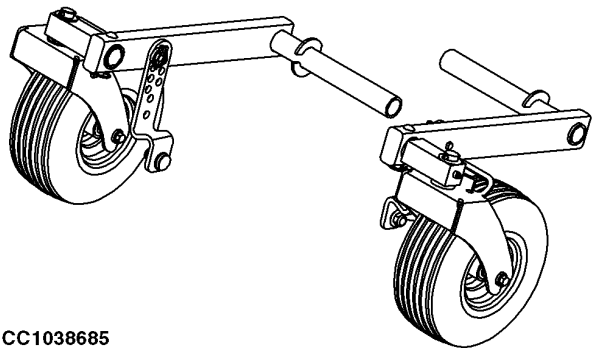
CC1018634—UN—24OCT00

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

## 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

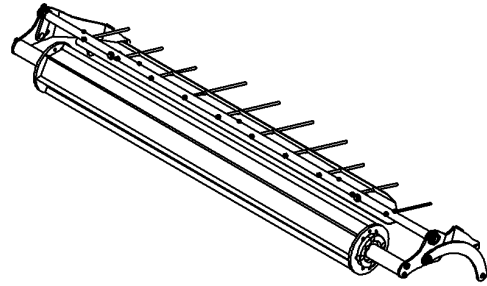
CC1038685—UN—19NOV12

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

### Pickup Roll Compressor

Pickup roll compressor is available as an attachment to improve the feeding flow.

Contact your John Deere dealer.



CC286973

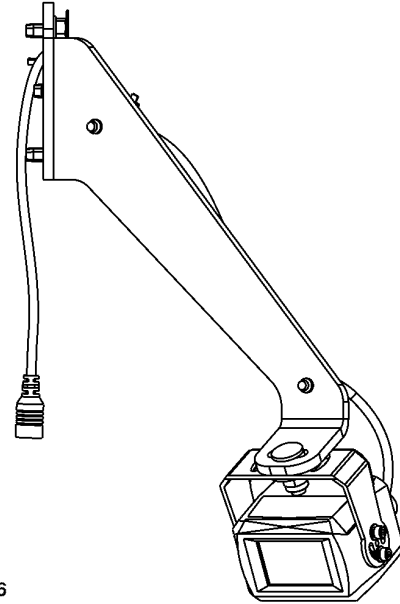
CC286973 —UN—03AUG16

NB02380,00001BB -19-28JUL16-1/1

### Camera

A camera is available to monitor the discharge of the bale.

Contact your John Deere dealer.



CC576436

CC576436 —UN—04MAY23

ga87848,1683122980694 -19-04MAY23-1/1

# Lubrication and Maintenance

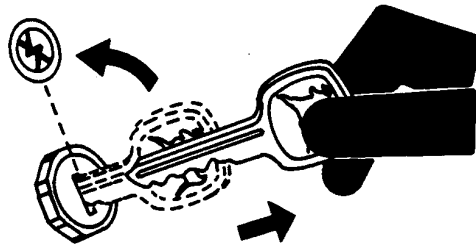
## Lubricating and Maintaining Machine Safely

**⚠ 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.



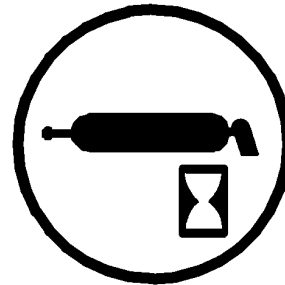
TS230—UN—24MAY89

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 for Lubrication

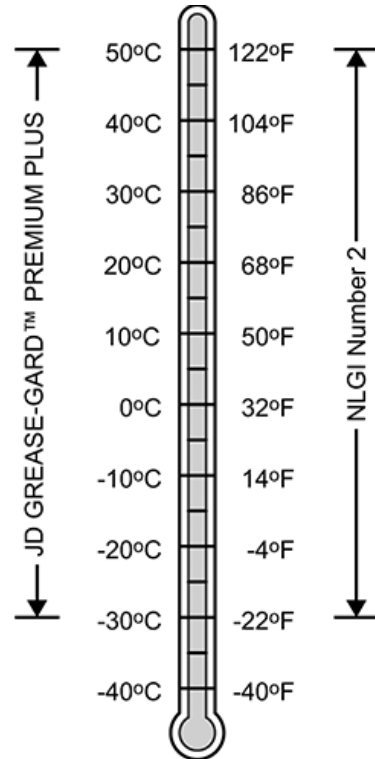
The following grease is recommended:

- John Deere Grease-Gard™ Premium Plus

Other greases may be used if they meet the following:

- NLGI 2 Classification
- ISO-L-X-BDHB 2 or DIN KP 2 N-10 Lithium Complex, Non-Synthetic Base Oil (160 to 220 mm<sup>2</sup>/s @ 40°C)
- With Extreme Pressure Additive

**IMPORTANT: Some types of thickeners, base oils, and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.**



Greases for Air Temperature Ranges

Grease-Gard is a trademark of Deere & Company

GA87848,0001049 -19-25NOV20-1/1

CC390496 —UN—24SEP19

### 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 MoS<sub>2</sub> on request).**

The system is designed for commercially available multi-purpose grease lubricants up to NLGI Class 2 for use in summer and wintertime.

Use greases with high-pressure additives (EP greases).

Use only greases of same kind of saponification.

For specification see "Grease" in this section.

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## Gear Oil

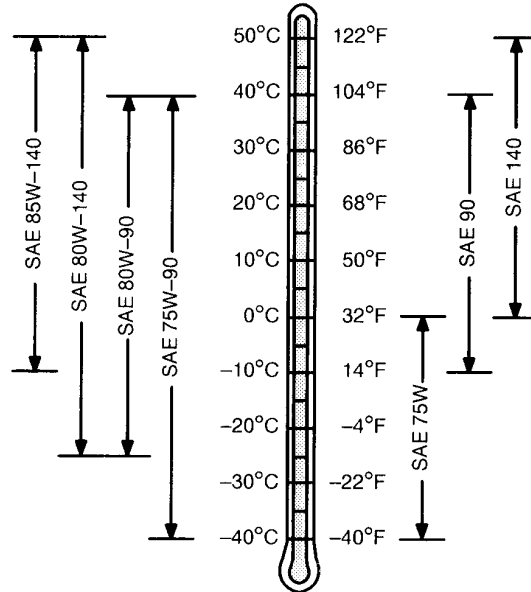
Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

- John Deere GL-5 Gear Lubricant
- John Deere EXTREME-GARD™

Other oils may be used if they meet the following:

- API Service Category GL-5



Oil Viscosities for Air Temperature Ranges

EXTREME-GARD is a trademark of Deere & Company

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

TS1653—UN—14MAR96

## Multiluber Chain Oil

Use the following oil for the multiluber chain oiling system:

John Deere BIO-MULTILUBER-OIL<sup>1</sup>

Other equivalent biodegradable oils may also be used.

**IMPORTANT: Never use mineral oil for this application.**

<sup>1</sup>John Deere BIO-MULTILUBER-OIL meets or exceeds minimum biodegradability of 80% within 21 days according to CEC-L-33-T-82 test method. BIO-MULTILUBER-OIL must not be mixed with mineral oil.

**NOTE: John Deere BIO-MULTILUBER-OIL is available at the John Deere dealer.**

- DC43300: BIO-MULTILUBER-OIL 5 liters

OUC006,00019AE -19-09NOV12-1/1

### Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

The temperature limits and service intervals shown in this manual apply to John Deere branded fluids or fluids that have been tested and/or approved for use in John Deere equipment.

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

DX,ALTER -19-13JAN18-1/1

### Lubricant Storage

Your equipment can operate at top efficiency only when clean lubricants are used.

Use clean containers to handle all lubricants.

Store lubricants and containers in an area protected from dust, moisture, and other contamination. Store containers on their side to avoid water and dirt accumulation.

Make certain that all containers are properly marked to identify their contents.

Properly dispose of all old containers and any residual lubricant they may contain.

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

### Mixing of Lubricants

In general, avoid mixing different brands or types of oil. Oil manufacturers blend additives in their oils to meet certain specifications and performance requirements.

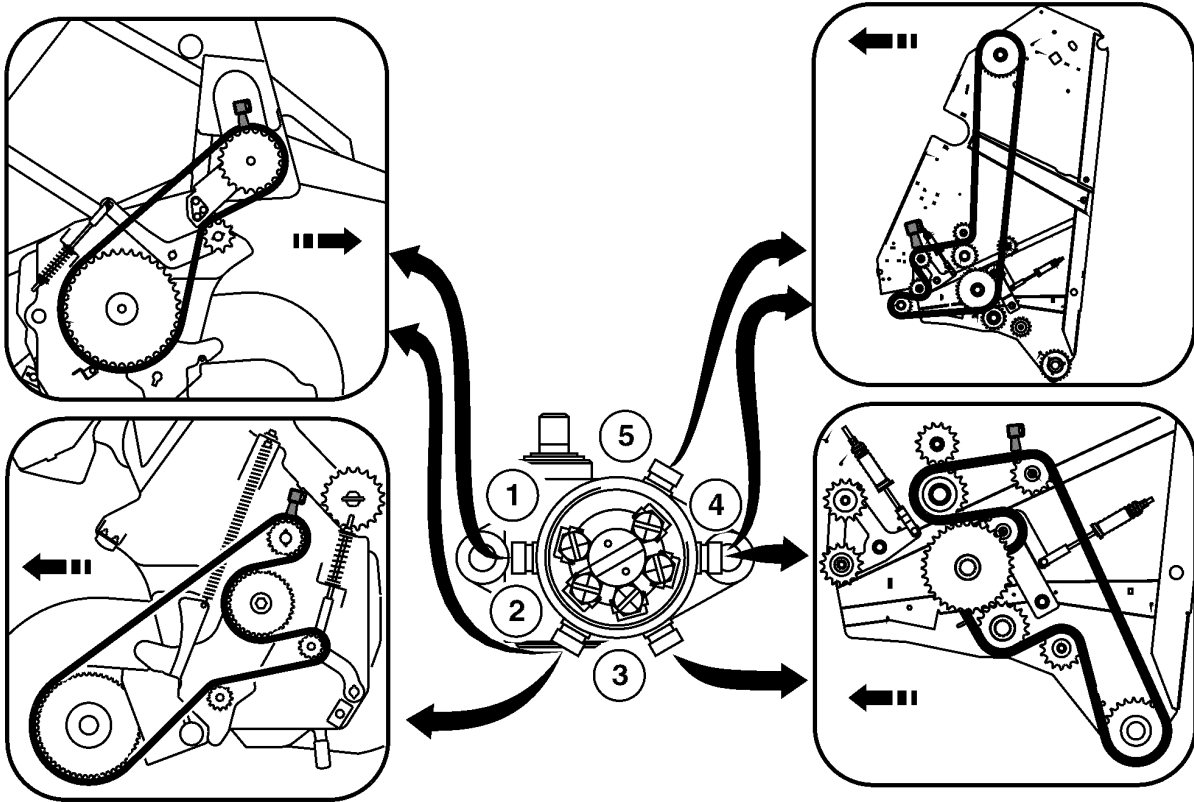
Mixing different oils can interfere with the proper functioning of these additives and degrade lubricant performance.

Consult your John Deere dealer to obtain specific information and recommendations.

DX,LUBMIX -19-18MAR96-1/1



### Chain Oiling Component Location



CC397166

- |   |  |                                   |
|---|--|-----------------------------------|
| 1— Rotary Feeder Drive Chain (Green Ring)                                   | 3— Frame Roll Drive Chain (Blue Ring)                                    | 5— Main Drive Chain (Orange Ring) |
| 2— Pickup Drive Chain (Red Ring) and Rotary Feeder Drive Chain (Green Ring) | 4— Main Drive Chain (Orange Ring) and Frame Roll Drive Chain (Blue Ring) |                                   |

*NOTE: Each hose is identified on pump and brush side with a number on a color ring.*

ga87848,1682587892909 -19-27APR23-1/1

CC397166—UN—28NOV19

### Adjust Oil Flow

The oil flow can be adjusted for each chain.

1. Unscrew and remove cover.
2. Identify the screw allowing the oil flow of the relevant brush(es) to be adjusted.
3. Turn the screw clockwise to increase oil flow and counterclockwise to decrease oil flow.

**NOTE:** When the screw is totally screwed in (maximum flow), the minimum flow will be obtained by unscrewing four turns.

For screw of brush location, see Chain Oiling Component Location in this section.

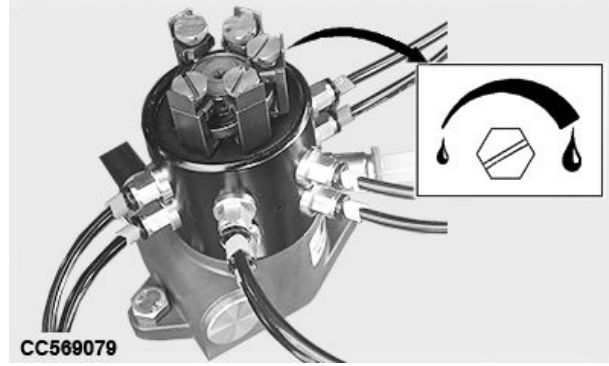
1 turn = 6 clicks

To apply initial factory settings, proceed as follows:

Fully screw in the relevant screw.

For screw of brush 1, unscrew 1 turn and 4 clicks.

For screw of brush 2, unscrew 3 turns.



CC569079

A—Pump Cover

- For screw of brush 3, unscrew 2 turn and 3 clicks.
- For screw of brush 4, unscrew 2 turns and 3 clicks.
- For screw of brush 5, unscrew 1 turn and 1 click.

4. Install cover.

ga87848,1685022691900 -19-25MAY23-1/1

CC569079 —UN—10MAY23

### As Required: Refill Multiluber Chain Oiling System Reservoir

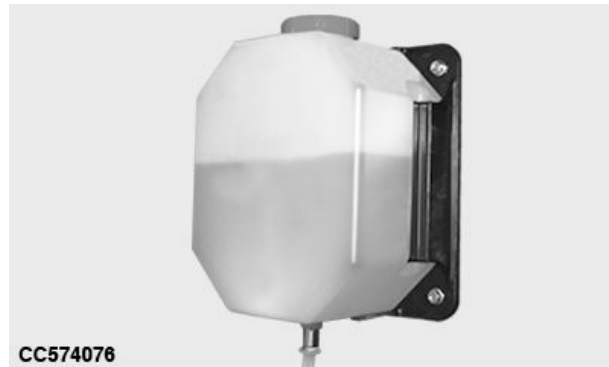
Depending on the pump flow adjustment, refill reservoir as required.

**Specification**

Oil Reservoir—Capacity..... 4 l  
(1 US gal.)

Use oil specified under Multiluber Chain Oil in this section.

**IMPORTANT: Never use any other type of oil.**



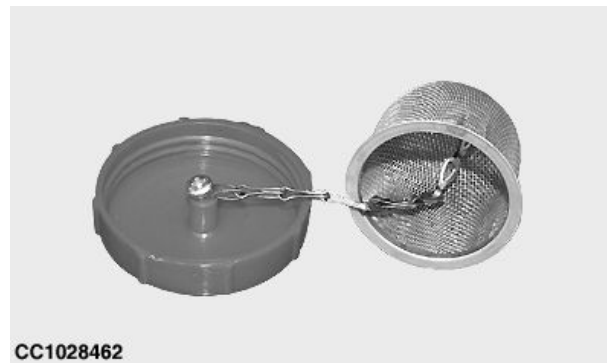
CC574076

ga87848,1681216226114 -19-13APR23-1/1

CC574076 —UN—19APR23

### As Required: Clean Oil Reservoir Filter

Clean oil reservoir filter as necessary.



CC1028462

ga87848,1681396385370 -19-23MAY23-1/1

CC1028462 —UN—21SEP06



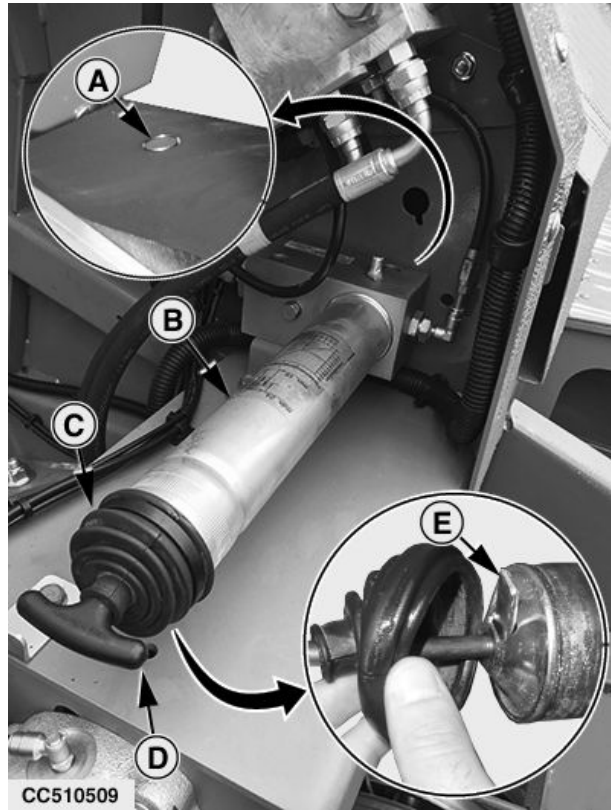
### As Required: Replace Automatic Greasing System Cartridge (If Equipped with Cartridge-Type Pump)

#### Grease cartridge replacement

On the top of the grease pump, indicator (A) extends to indicate that the grease cartridge is empty. To replace the grease cartridge, proceed as follows:

1. Pull handle (D) fully downward.
2. Unscrew tube (B).
3. Replace empty grease cartridge by a new one.
4. Reinstall and tighten tube (B).
5. Press lock (E) located below rubber boot (C), then fully push up handle (D).
6. Bleed the grease pump. See Bleed Automatic Greasing System (If Equipped with Cartridge-Type Pump) in Service section.

- |                             |                               |
|-----------------------------|-------------------------------|
| A—Empty Cartridge Indicator | D—Handle of Follower Piston   |
| B—Grease Cartridge Tube     | E—Lock of Follower Piston Rod |
| C—Rubber Boot               |                               |



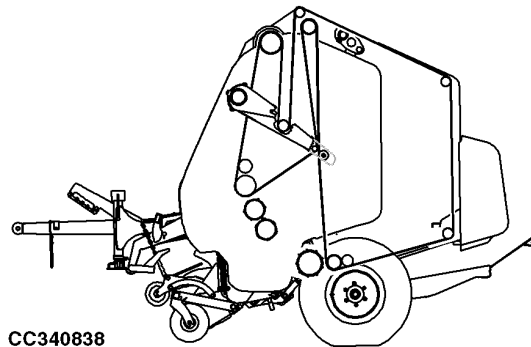
CC510509

CC510509 —UN—09JUL21

ga87848,1684831761133 -19-23MAY23-1/1

### As Required: Clean Bale Chamber Rolls

Remove wrapped crop from the bale chamber rolls.



CC340838

CC340838 —UN—14DEC17

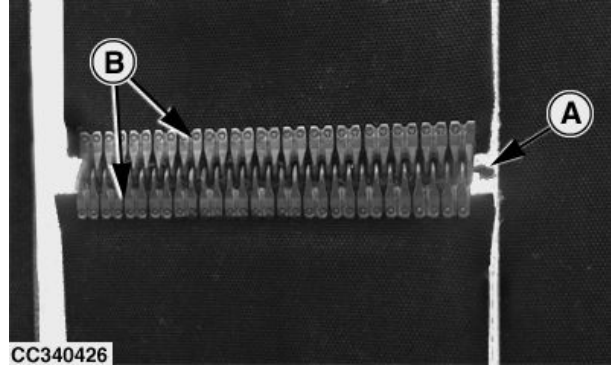
GA87848,0000520 -19-15DEC17-1/1

### As Required: Clean Belt Hooks and Hook Wires

Remove crop from hooks (B) and hook wires (A).

A—Hook Wire

B—Belt Hook



CC340426 —UN—14DEC17

GA87848,0000521 -19-15DEC17-1/1

### Daily: Prevent Fire

Use compressed air to remove buildup of crop material and to keep the machine clean.

Avoid high-pressure power-washing next to the bearings to prevent damaging seals.

Check bearings for early signs of damage, and replace as indicated. Turn off power to baler and check for unusual noises, hot parts, smells of scorching, and discolored paint or metal.

#### Check condition of bearings:

- Open the gate and lock it. see [Secure Gate Safely](#) in Safety section.
- With the belts slackened, rotate each of the rollers by hand, paying attention to dry, noises, or rough rotation.
- Push, pull, or gently pry to check bearing radial play.
- Watch and feel for looseness in the bearings. Replace worn or damaged bearings. Just after operation, check the temperature of each bearing, if one or some are hotter than the others replace the bearings.

ga87848,1676297506102 -19-13FEB23-1/1

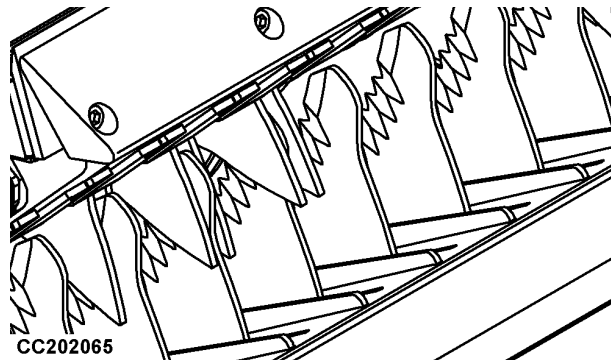
### Daily: Check Precutter Knives and Drop Floor

**⚠ CAUTION:** Be careful when working around the knives. Knives are sharp and can cause serious injury.

#### Check Precutter Knives:

1. Open the gate.
2. Engage tractor park brake or place transmission in PARK, shut off tractor engine and remove key.
3. Lock the gate. See [Secure Gate Safely](#) in Safety section.

Keep each precutter knife very sharp. Knives must be checked daily or each 200 bales, whichever comes first.



CC202065 —UN—12APR13

To remove the knives, see [Replace Precutter Knives](#) in Service section. To sharpen knives, see [Sharpen Precutter Knives](#) in Service section.

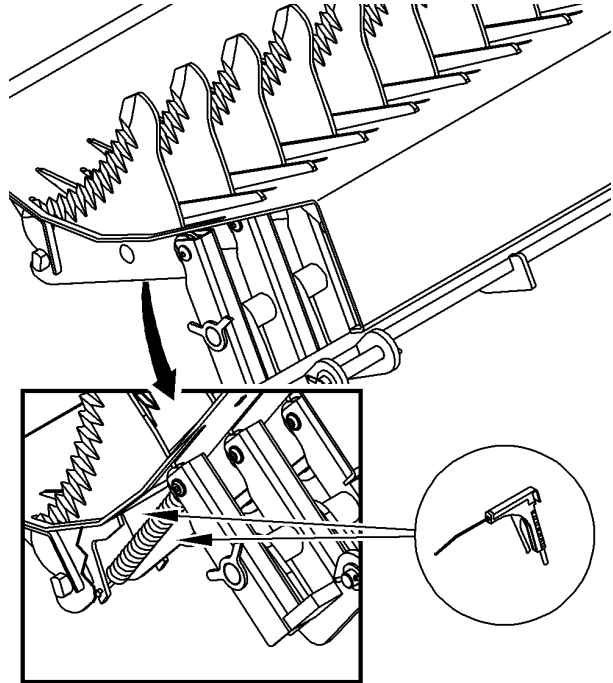
Continued on next page

†181334,1685609124839 -19-01JUN23-1/2

**Clean Drop Floor:**

1. Lower the drop floor. See Unplug Rotary Feeder in Operating BaleTrak Monitor section.
2. Engage and retract knives several times. See Retract or Engage Precutter Knives Function in Operating BaleTrak Monitor section.
3. Engage tractor park brake or place transmission in PARK, shut off tractor engine and remove key.
4. Close the knife shut-off valve(s).
5. Remove material with an air gun or any suitable tool.

*NOTE: Material is easier to remove when knives are engaged.*

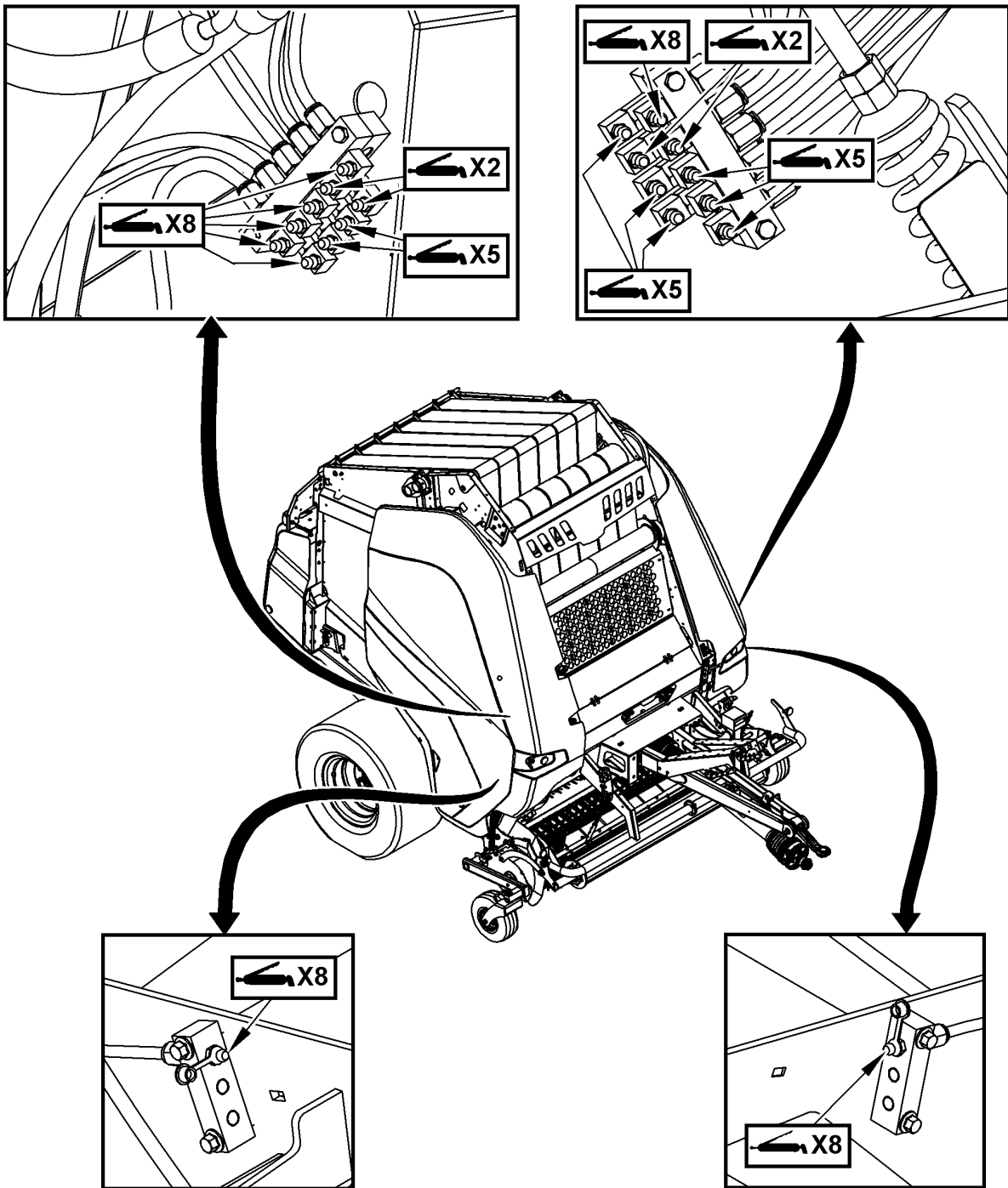


CC202066

CC202066 —UN—12APR13

†181334,1685609124839 -19-01JUN23-2/2

### Every 10 Hours: Lubricate Baler without Automatic Greasing System



CC310409

**IMPORTANT:** Lubricate all roll grease nipples after each working day while bearings are still warm.

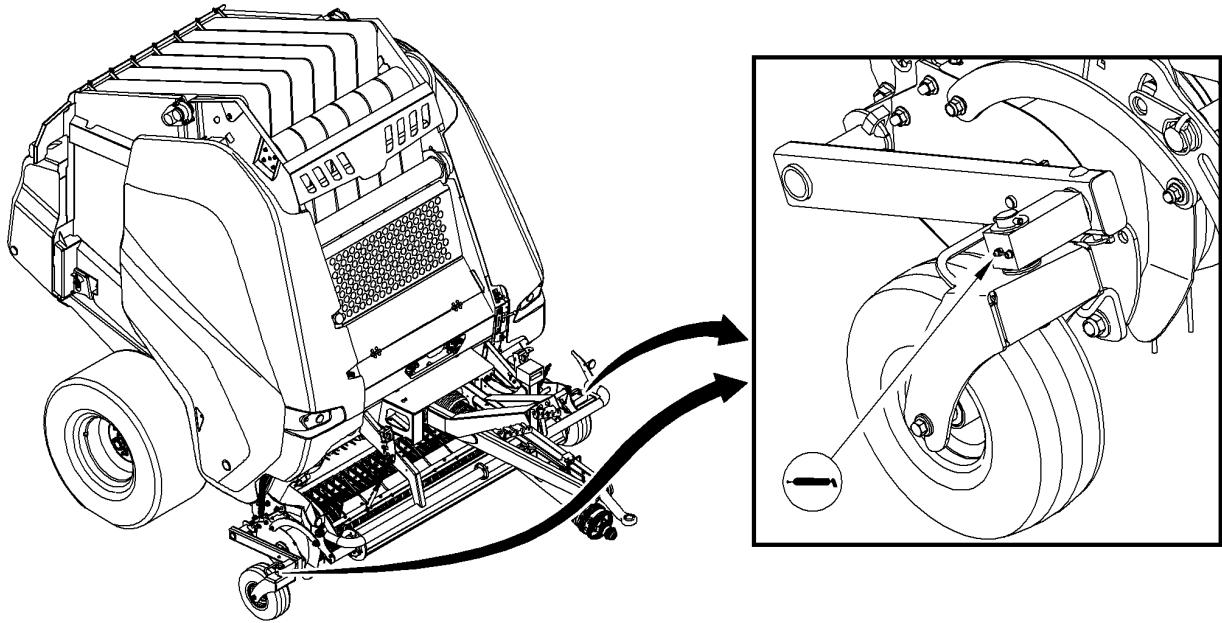
*Grease-Gard is a trademark of Deere & Company*

Lubricate with John Deere Grease-Gard™ Premium Plus.

ga87848,1682604520912 -19-27APR23-1/1

CC310409 —UN—18APR17

### Every 10 Hours: Lubricate Pickup Caster Gauge Wheels (If Equipped)



CC329276

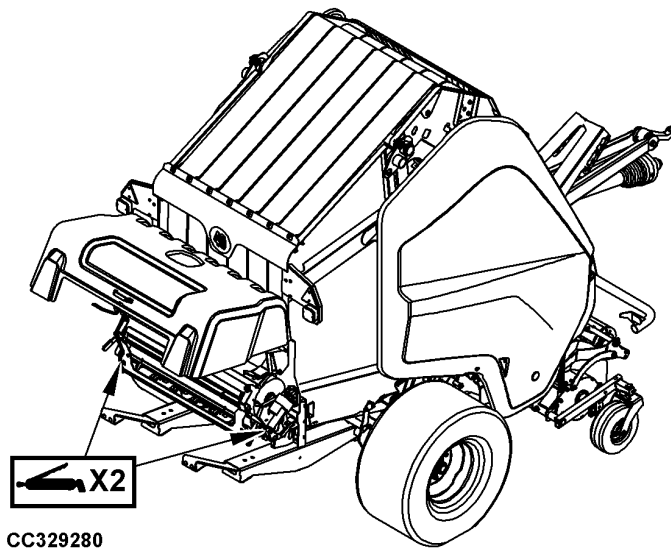
CC329276—UN—01SEP17

Lubricate with John Deere Grease-Gard™ Premium Plus.

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

ga87848,1682604758326 -19-27APR23-1/1

### Every 30 Hours: Lubricate Net Binding Pivots



CC329280

CC329280—UN—01SEP17

Lubricate with John Deere Grease-Gard™ Premium Plus.

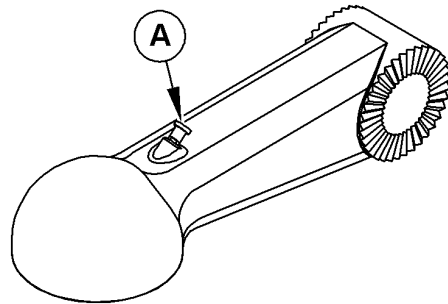
*Grease-Gard is a trademark of Deere & Company*

ga87848,1682604825115 -19-27APR23-1/1

### Every 50 Hours: Lubricate Ball Type Hitch (If Equipped)

Lubricate with John Deere Grease-Gard™ Premium Plus.

A—Grease Fitting



CC205925

CC205925 —UN—29OCT13

Grease-Gard is a trademark of Deere & Company

GA87848,0000FDC -19-02NOV20-1/1

### Every 50 Hours: Check Chain Tension

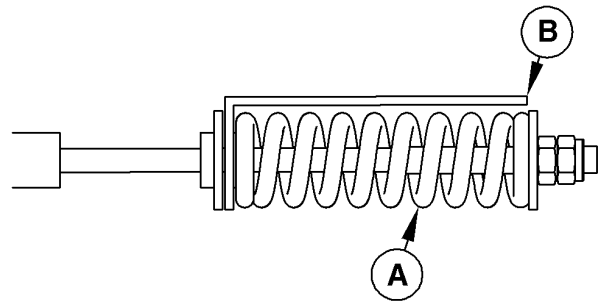
Check for all tensioner that length of spring (A) and strap (B) are the same.

If necessary, see Service section to adjust chain.

If the length of spring (A) cannot be adjusted to match the length of strap (B), replace the chain. See your John Deere dealer.

A—Spring

B—Strap

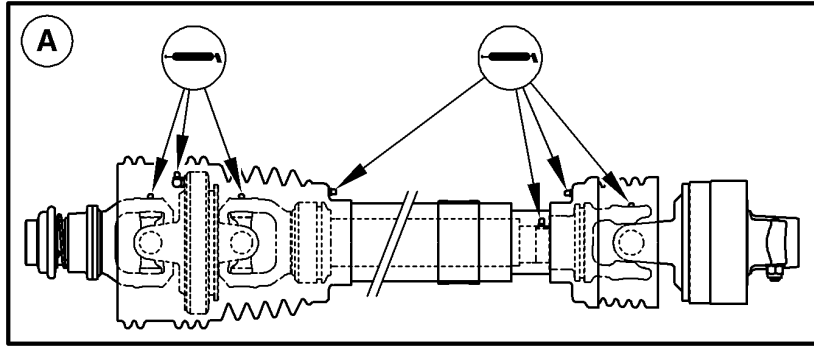
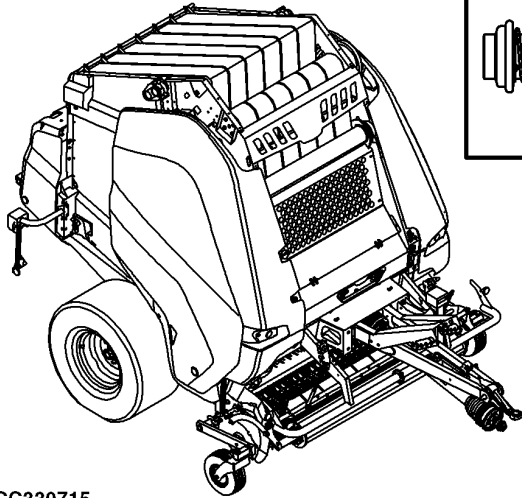


CC286971

CC286971 —UN—01SEP16

ga87848,1676629354204 -19-20FEB23-1/1

### Every 50 Hours: Lubricate Telescoping Driveline



CC330715

#### A—Grease Fittings

Lubricate grease fittings with John Deere Grease-Gard™ Premium Plus.

Refer to the basic telescoping driveline Operator's Manual to lubricate telescoping driveline correctly.

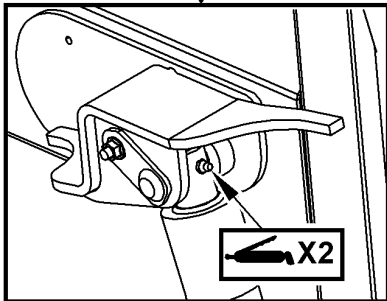
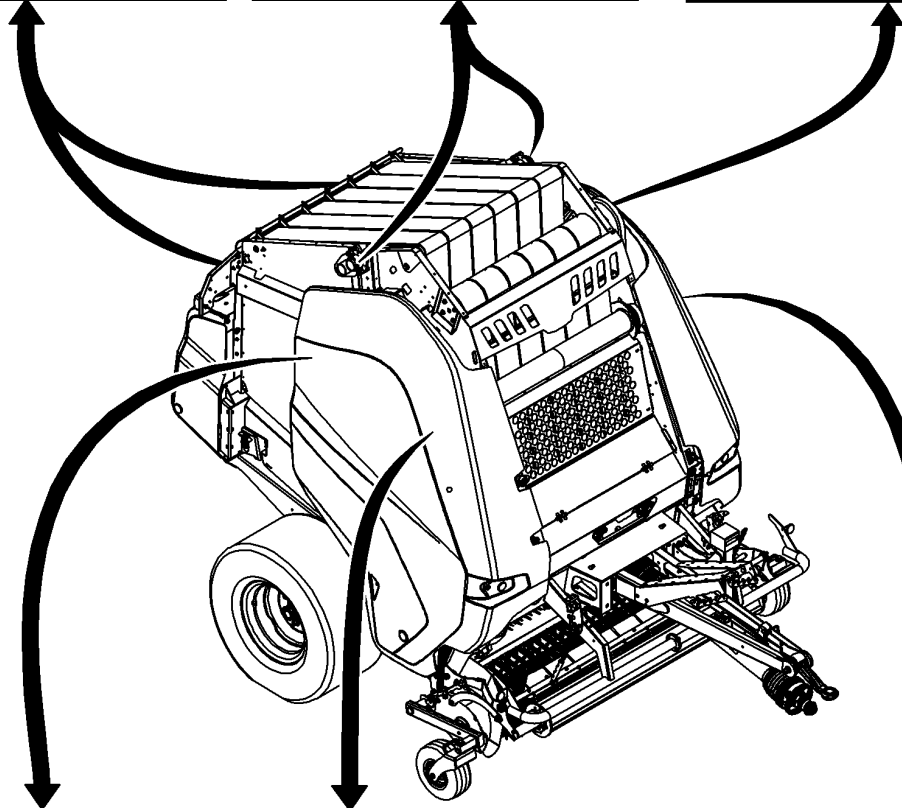
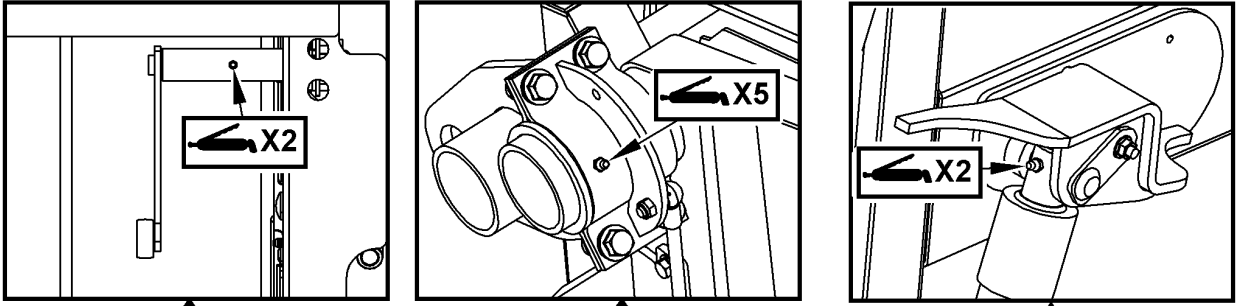
*Grease-Gard is a trademark of Deere & Company*

*NOTE: The quantity of grease delivered at each grease gun pump stroke is average 1 g (0.035 oz.).*

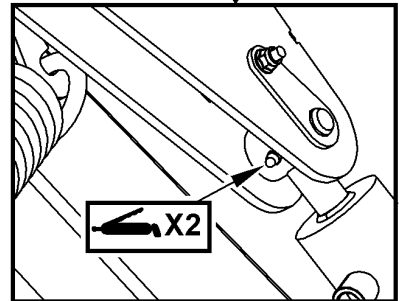
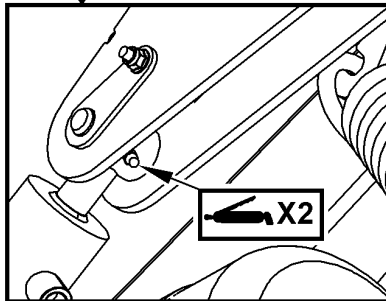
CC330715 —UN—27SEP17

GA87848,000108D -19-04JAN21-1/1

**Every 50 Hours: Lubricate Door Hinges, Hydraulic Cylinders, and Bale Shape Sensor Pins**



CC310415



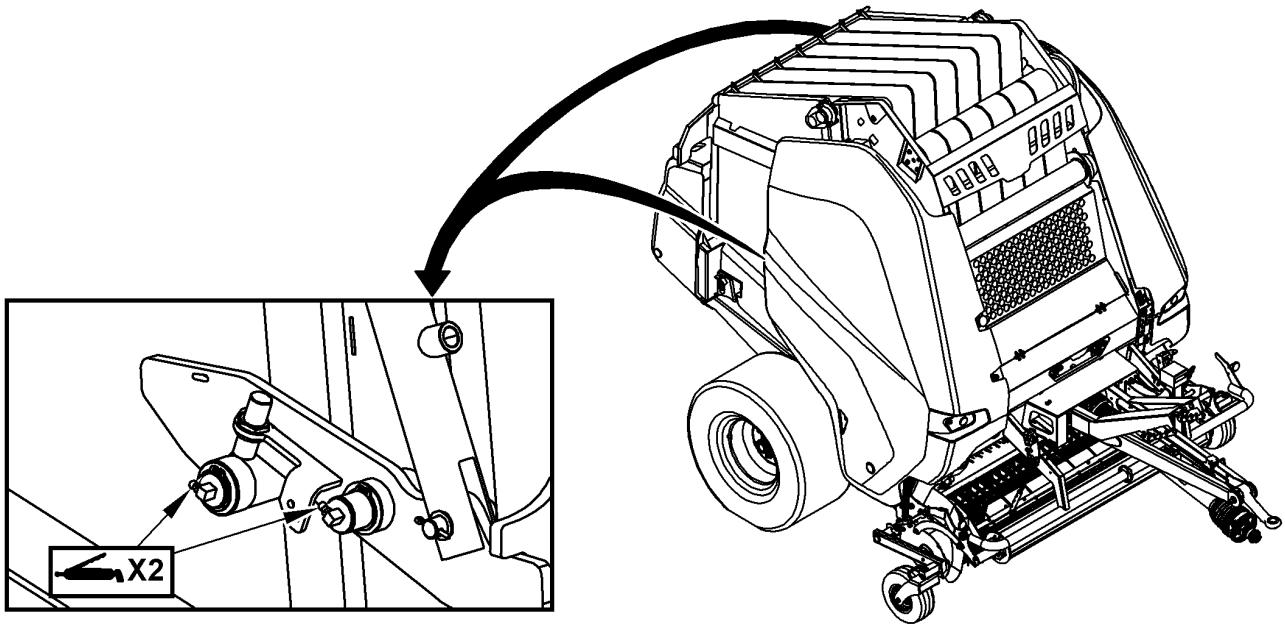
CC310415—UN—18APR17

Lubricate with John Deere Grease-Gard™ Premium Plus.

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

ga87848,1682604928735 -19-27APR23-1/1

**Every 50 Hours: Lubricate Gate latches**



CC329279 —UN—01 SEP17

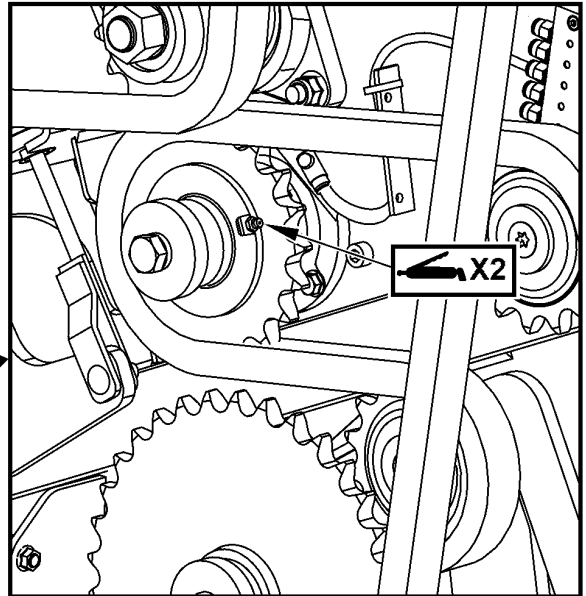
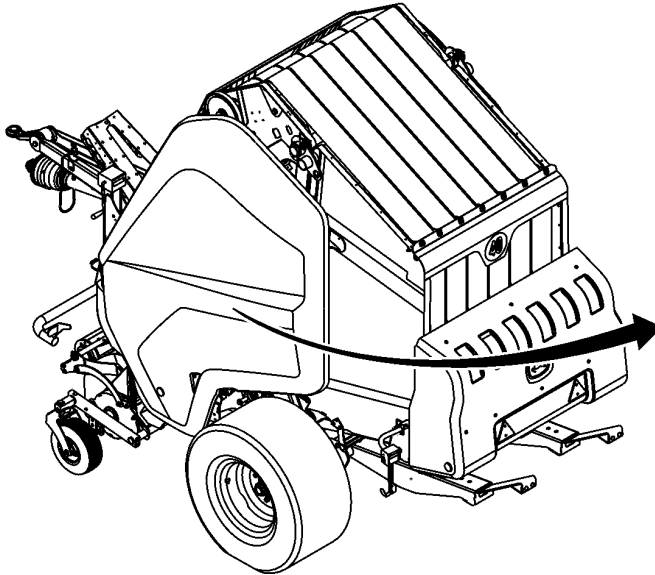
CC329279

Lubricate with John Deere Grease-Gard™ Premium Plus.

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

ga87848,1682604976496 -19-27APR23-1/1

### Every 50 Hours: Lubricate Lower Belt Drive Roll (With 2nd Drive Roll)



CC516887

Lubricate with John Deere Grease-Gard™ Premium Plus.

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

ga87848,1682605017559 -19-27APR23-1/1

CC0516887 —UN—07JUL21

### Weekly: Check Gear Case Oil Level

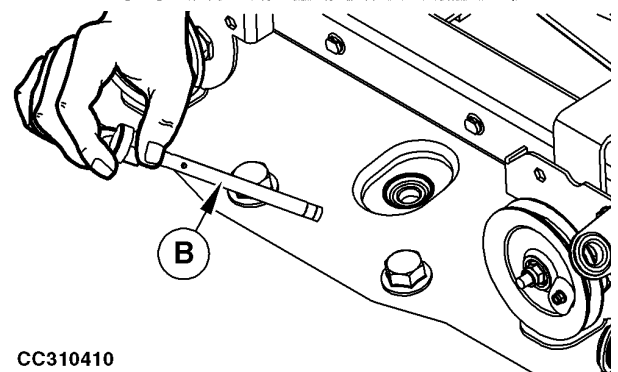
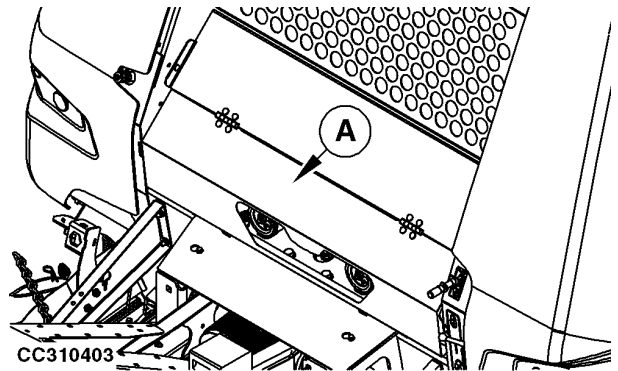
1. Open twine binding system cover (A).
2. Use dipstick (B) to check gear case oil level.

**IMPORTANT:** Check level of lubricant weekly using dipstick (B) and refill as necessary.

**Do not overfill gear case as this will result in overheating and oil leakage.**

A—Twine Binding System Cover

B—Dipstick



CC310403

CC310410

NB02380,000050A -19-23OCT17-1/1

CC310403 —UN—18APR17

CC310410 —UN—17AUG17

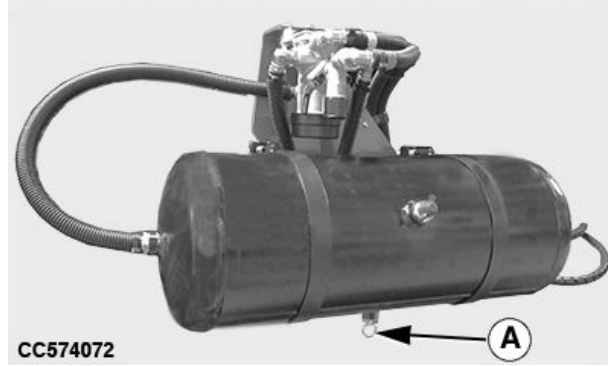
### Weekly: Check and Drain Air Brake Tank

**CAUTION:** Before draining condensed water from the compressed air tank, make sure that the machine is secured against rolling away. Engage the park brake and place wheel chocks under the wheels.

Pull ring (A) to drain water from the air tank.

Condensation in brake system may cause malfunctions.

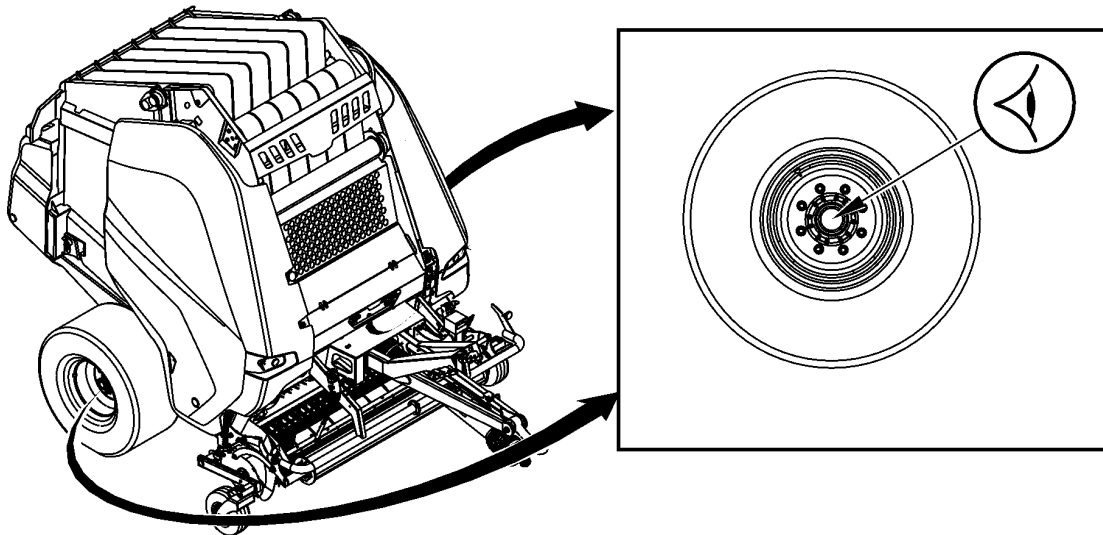
A—Ring



CC574072 —UN—19APR23

ga87848,1680857690153 -19-07APR23-1/1

### Weekly: Check Wheel Hub Cap



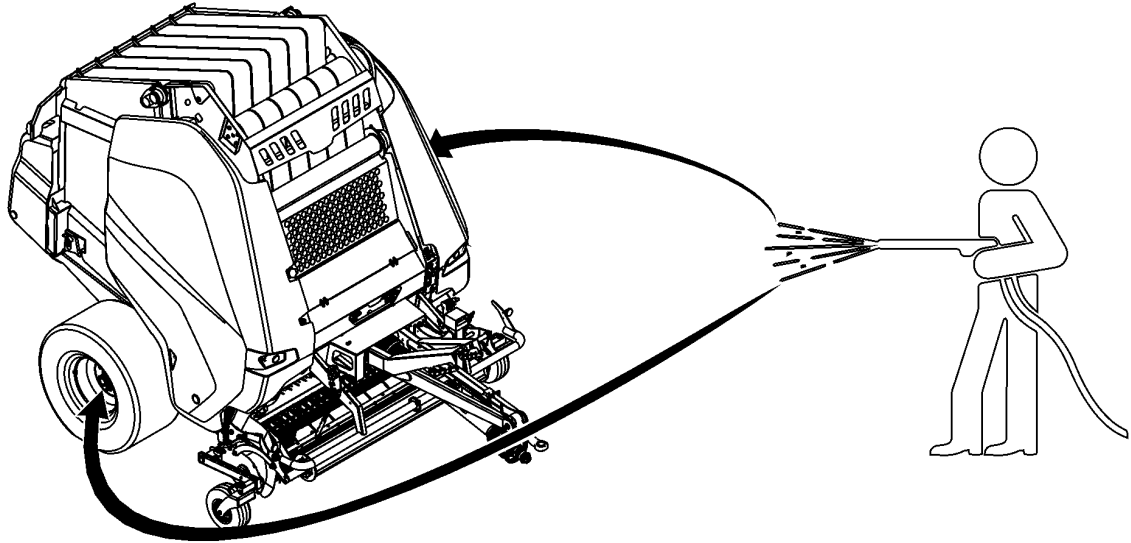
CC574087 —UN—25MAY23

Check wheel hub cap is correctly installed on both machine sides.

Check wheel hub cap for leaks on both machine sides. If necessary, see your John Deere dealer.

aysdijz,1681894690872 -19-25APR23-1/1

### Weekly: Clean and Check Brake



CC574088

CC574088 —UN—25MAY23

**IMPORTANT: Pressurized water can damage brake parts. Avoid to direct high-pressure jet on brake hoses, cylinders and seals.**

sure that there is no leaks. If necessary, see your John Deere dealers.

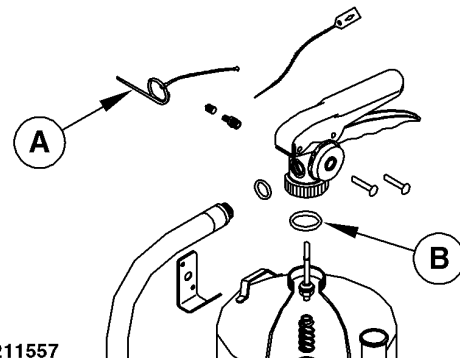
Clean that the brakes are in good condition. See Avoid High-Pressure Jet on Cylinders in Safety section. Make

aysdijz,1681894690895 -19-31MAY23-1/1

### 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.



CC211557

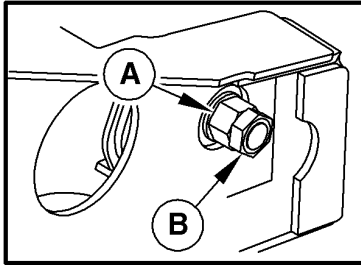
CC211557 —UN—20AUG14

A—Safety Pin

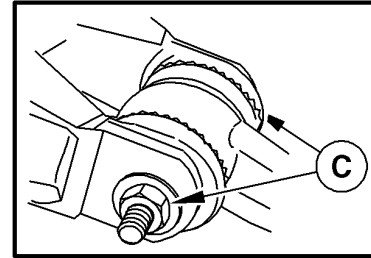
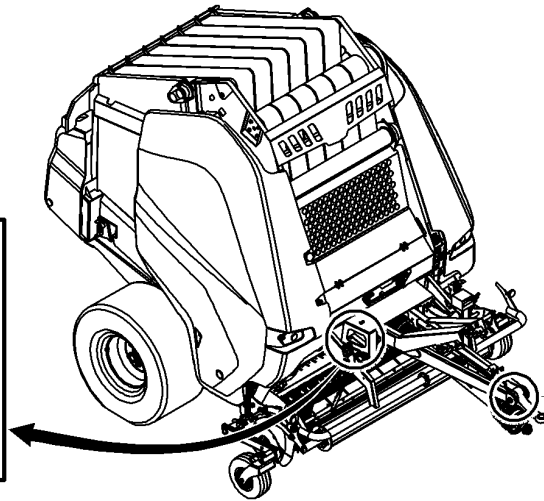
B—Seal

DC82261,00004D7 -19-20AUG14-1/1

**Every 100 Hours or Yearly: Check Tongue Frame and Hitch**



CC329283

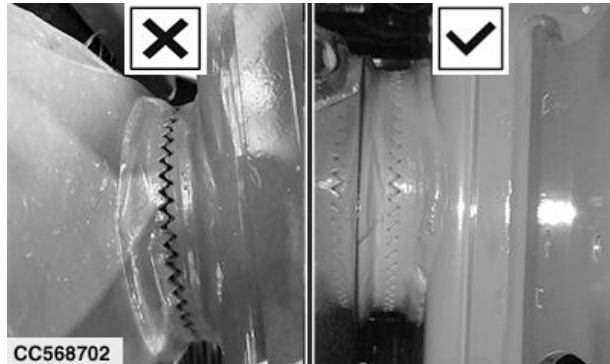


**IMPORTANT:** Make sure that all ring teeth are **FULLY engaged (not standing tip to tip)** when tightening nuts (A), (B), and (C).

Retighten tongue frame fixing nuts (A), lock nuts (B) and hitch fixing screw (C) to specified torque:

**Specification**

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



CC568702

Tongue Tighten Error

**A—Tongue Frame Fixing Nut  
B—Tongue Frame Lock Nut**

**C—Hitch Fixing Nut**

ga87848,1682670818211 -19-23JUN23-1/1

CC329283—UN—01SEP17

CC568702—UN—08MAR23

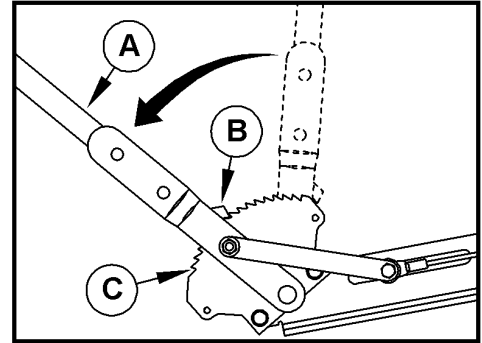
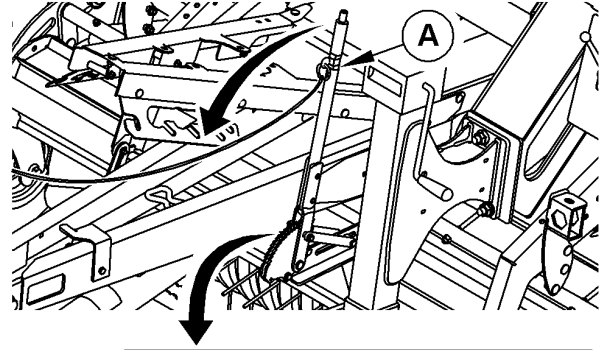
### Every 100 Hours or Yearly: Check Park Brake

Pull lever (A) at the maximum to engage park brake then check that latch (B) is not positioned on latest remaining notch (C).

If not, see your John Deere dealer.

A—Park Brake Lever  
B—Park Brake Latch

C—Remaining Notch



CC205667

CC205667 —UN—16OCT13

ga87848,1682431028358 -19-25APR23-1/1

### Every 100 Hours or Yearly: Check Wheel Nut Torque

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

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

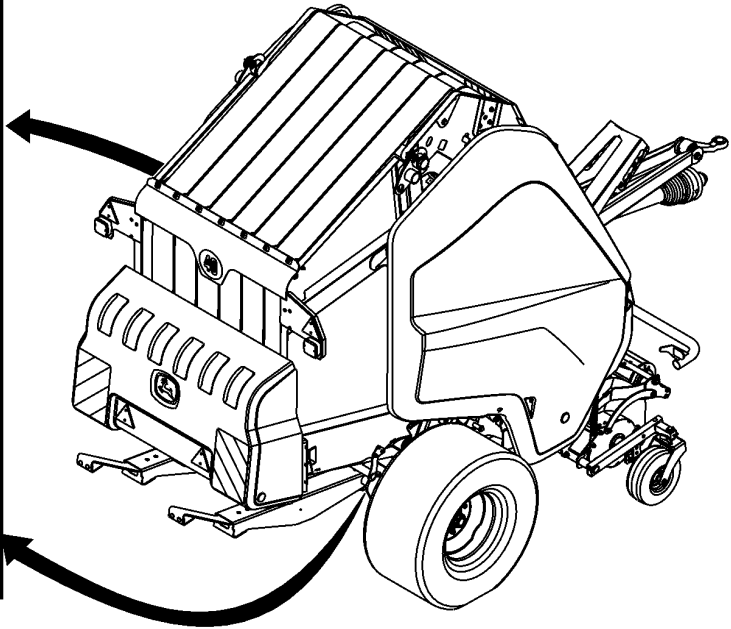
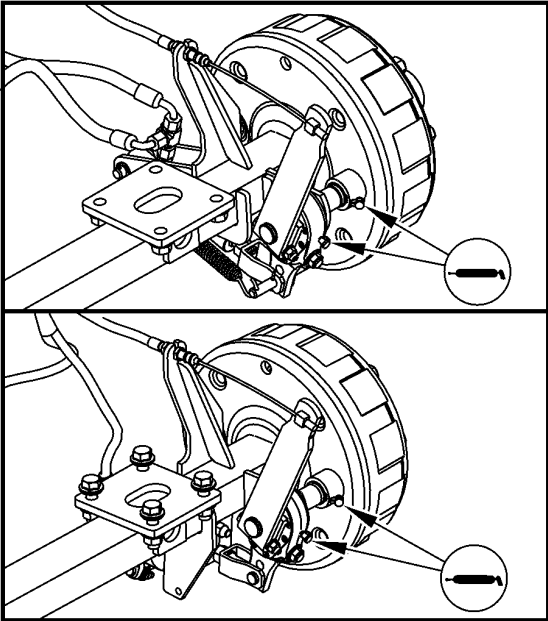


CC575701

CC575701 —UN—28APR23

aysdijz,1681395389627 -19-26APR23-1/1

### Every 100 Hours or Yearly: Lubricate Brake Shafts



CC574100

Lubricate with John Deere Grease-Gard™ Premium Plus on both machine sides.

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

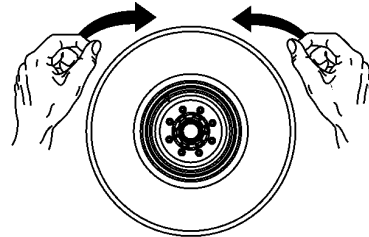
aysdijz,1681895000050 -19-25APR23-1/1

CC574100 —UN—21APR23

### Every 100 Hours or Yearly: Check End Play of Wheel Hub Bearing

Check the wheels have no play:

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



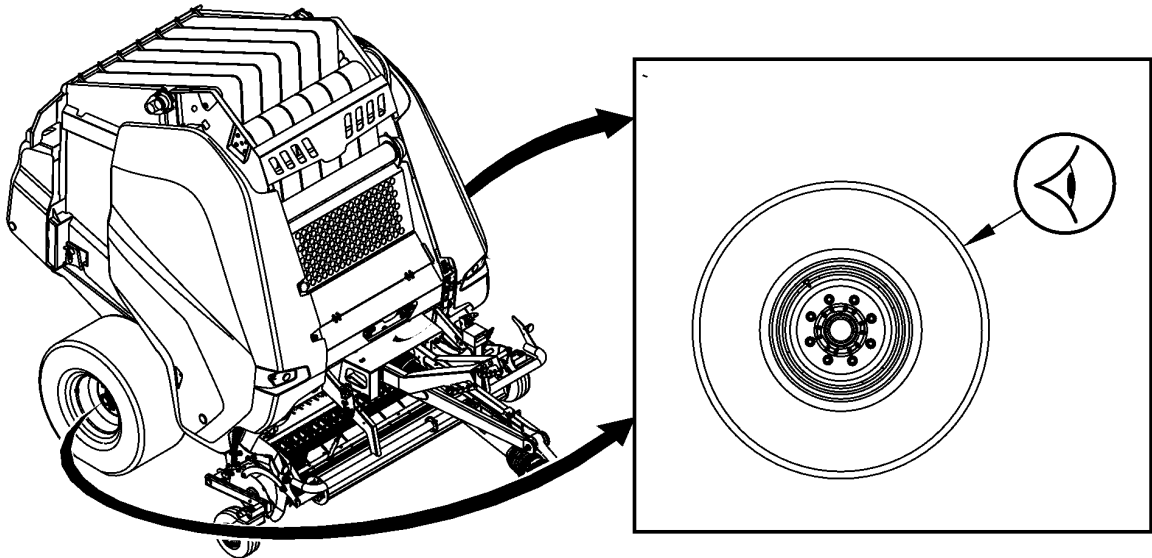
CC574077

If necessary, see your John Deere dealer.

aysdijz,1681895000103 -19-25APR23-1/1

CC574077 —UN—19APR23

**Twice a Year: Check Tire**



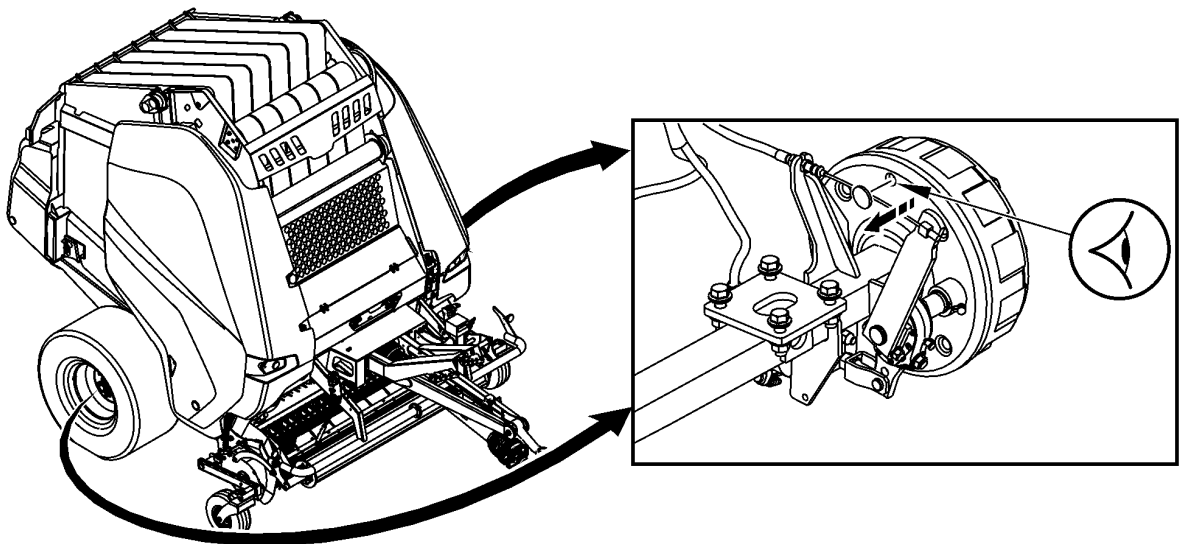
CC574101

Check tire conditions on both machine sides. If necessary, see your John Deere dealer.

aysdijz,1681895043328 -19-31MAY23-1/1

CC574101 —UN—25MAY23

**Every 500 Hours: Check Brake Shoes**



CC575679

*Air Brake Shown*

On both machine sides, check that thickness of brake linings is greater than the following specification:

If not, see your John Deere dealer for brake shoe replacement.

**Specification**

Brake Lining—Minimum	
Thickness.....	2 mm (5/64 in)

aysdijz,1681895063783 -19-31MAY23-1/1

CC575679 —UN—25MAY23

### Every 500 Hours or Yearly: Drain and Refill Gear Case

1. Open twine binding system cover (A).
2. Drain oil while it is warm (i.e. after operation).  
Remove dipstick (B) and drain plug (C), then drain oil into a suitable receptacle.
3. Clean then reinstall drain plug (C) and tighten to specified torque:

**Specification**

Drain Plug—Torque.....30 N·m  
(22 lb·ft)

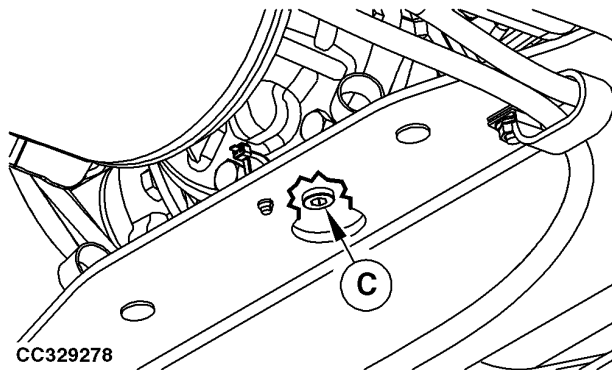
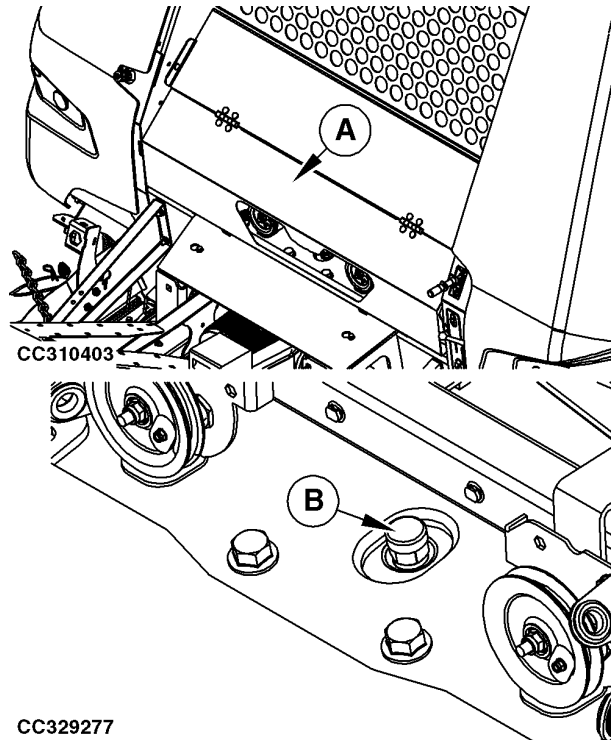
4. Refill gear case with John Deere Extreme-Gard™ or equivalent. See Gear Oil in this section.

**Specification**

Gear Case—Capacity..... 1.9 L  
(0.5 gal)

5. Check oil level with dipstick (B) before reinstalling.
6. Close twine binding cover (A).

**A—Twine Binding System Cover**      **C—Drain Plug**  
**B—Dipstick**

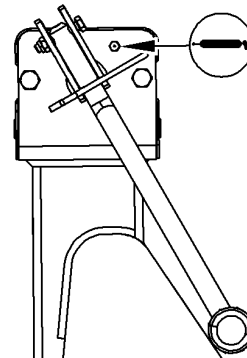


*Extreme-Gard is a trademark of Deere & Company*

ga87848,1682671470117 -19-28APR23-1/1

### Every 500 Hours or Yearly: Lubricate Jackstand

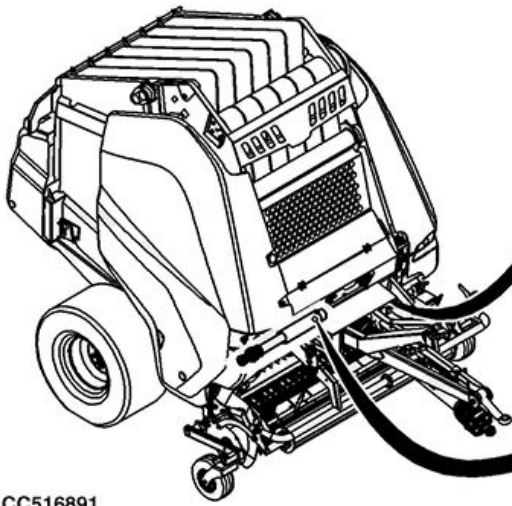
Lubricate with John Deere Grease-Gard™ Premium Plus.



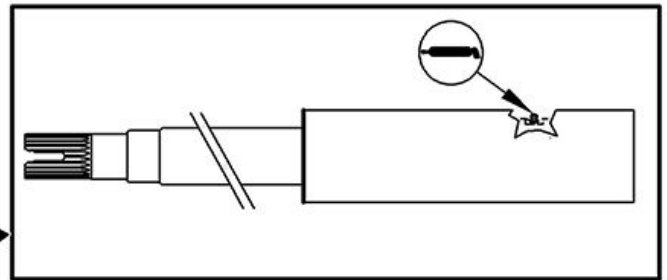
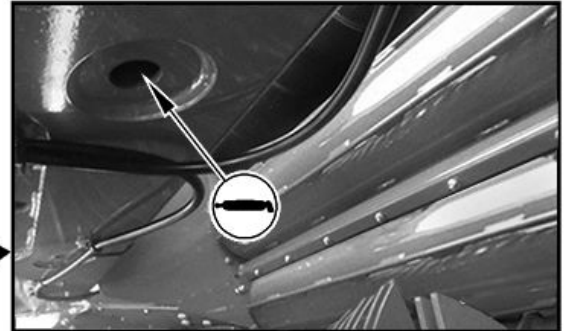
*Grease-Gard is a trademark of Deere & Company*

ga87848,1679386792278 -19-21MAR23-1/1

**Every 500 Hours or Yearly: Lubricate  
Extension Shaft**



CC516891

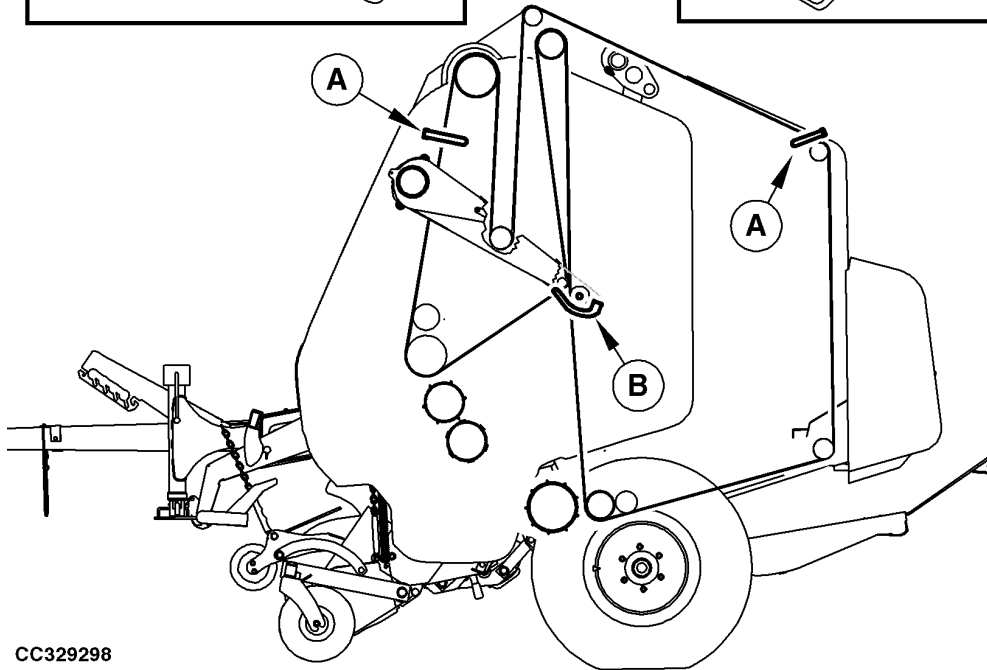
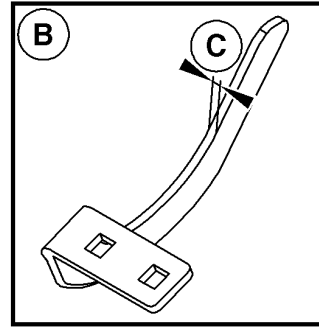
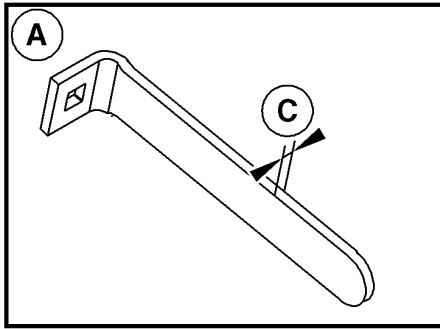


Lubricate with John Deere Grease-Gard™ Premium Plus.  
*Grease-Gard is a trademark of Deere & Company*

CC516891 — UN — 09JUL21

ga87848,1683286596825 -19-05MAY23-1/1

**Every 500 Hours or Yearly: Check Belt Guides Wear**



CC329298

CC329298 —UN—21SEP17

**A—Belt Guide Type 1**

**B—Belt Guide Type 2**

**C—Distance**

Check if distance (C) on belt guides (A) and (B) is greater than specification.

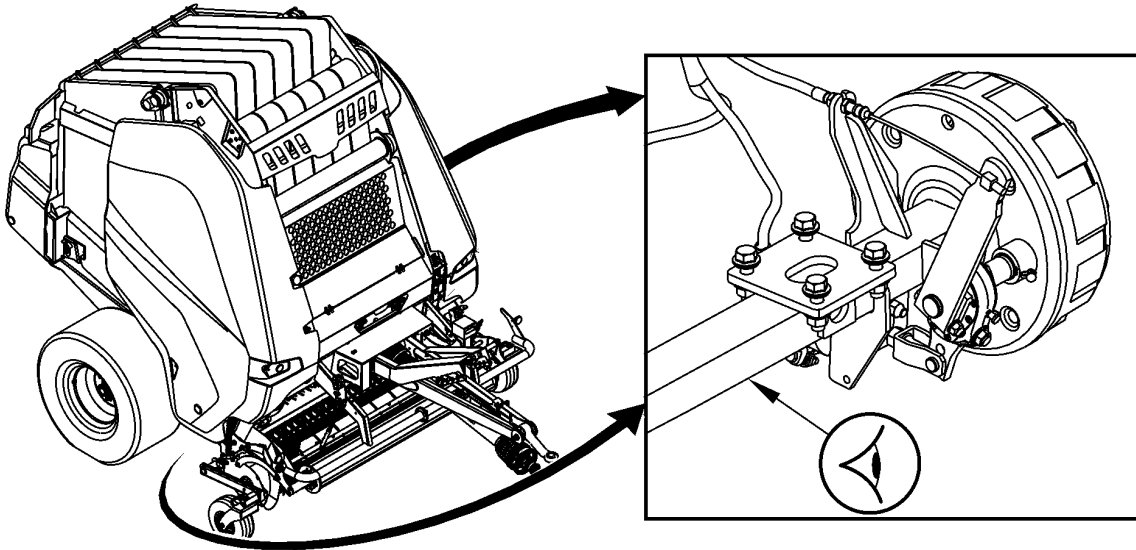
If distance (C) is less than specification, see your John Deere dealer.

**Specification**

Belt Guide—Distance.....	2.5 mm
	(3/32 in)

ga87848,1682671739417 -19-05MAY23-1/1

**Yearly: Check Axle Wear**



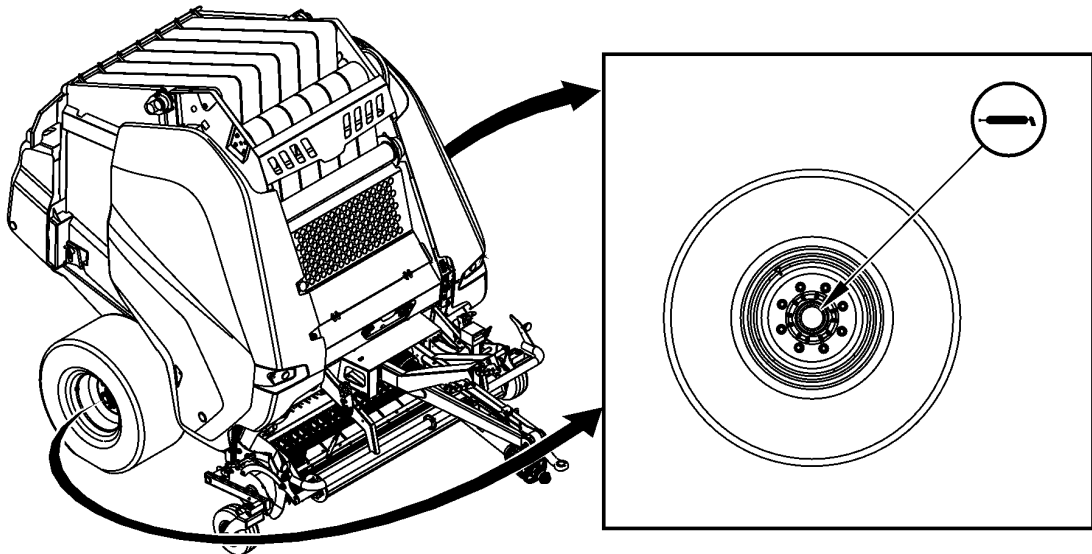
CC575686

Check axle worn condition. If necessary, see your John Deere dealer.

aysdijz,1681895063884 -19-31MAY23-1/1

CC575686 —UN—25MAY23

**Yearly: Clean, Check and Lubricate Wheel Bearing**



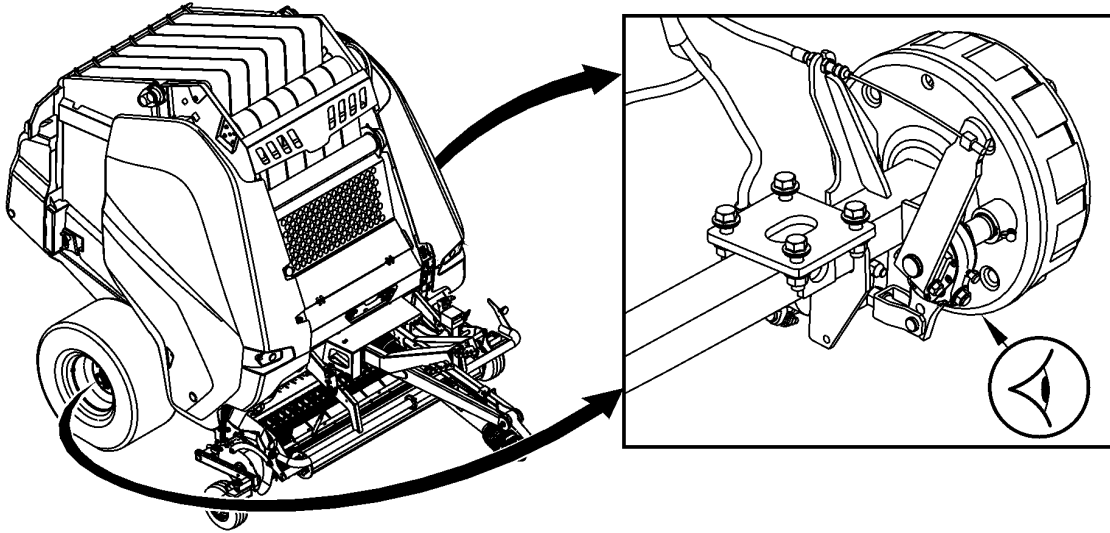
CC575678

To clean, check and lubricate the wheel bearings, see your John Deere dealer.

aysdijz,1681895063854 -19-02MAY23-1/1

CC575678 —UN—25MAY23

**Yearly: Clean and Check Drum Wear**



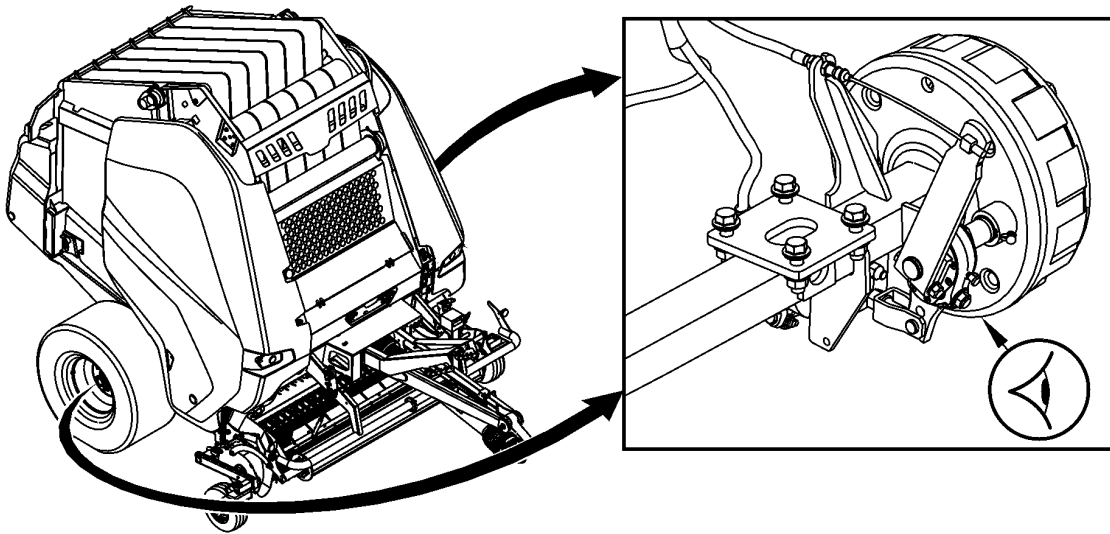
CC575680

To clean and check drum wear, see your John Deere dealer.

aysdijz,1681895063829 -19-31MAY23-1/1

CC575680 —UN—25MAY23

**Yearly: Clean Drum and Shoes Assembly**



CC575680

To clean drum and shoes assembly, see your John Deere dealer.

aysdijz,1683030947992 -19-31MAY23-1/1

CC575680 —UN—25MAY23

**Yearly: Check Thickness of Wear Plates**

1. Open the gate and secure it with safety lock device.
2. Check that thickness (B) is with specification, see your John Deere dealer.

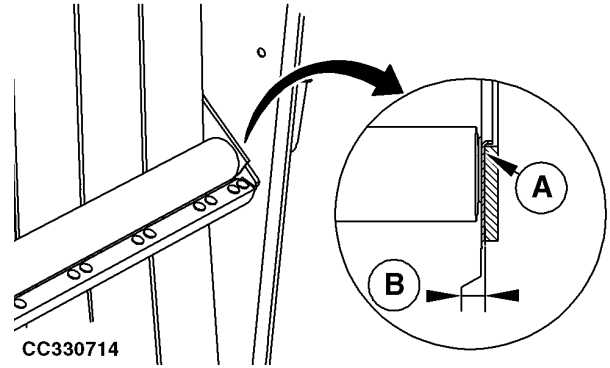
	<b>Specification</b>	
Wear Plate—Thickness.....		0—3 mm (0—1/8 in)

**IMPORTANT: Tension arm can be damaged if thickness (B) is less than specification.**

3. Repeat procedure on opposite side.

A—Wear Plate

B—Thickness



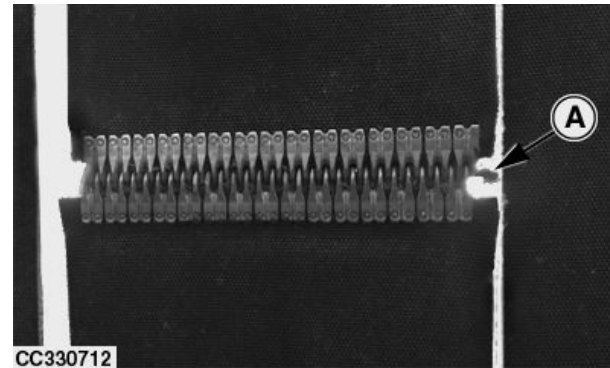
CC330714—UN—28SEP17

GA87848.00003F5 -19-02NOV17-1/1

**Yearly: Replace Belt Wires**

Belt wires (A) must be changed every years. See Install Belts in Service section.

A—Wire



CC330712—UN—27SEP17

GA87848.0000C58 -19-05JUN19-1/1

**Yearly: Check Accumulator**

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

1. Check the accumulator for corrosion.
  - a. As required, replace the accumulator.
2. Check that connections are tight and leak-free.
3. Check the mounting elements.



CC1022636

Accumulator Explosion

ga87848.1676036265828 -19-13FEB23-1/1

CC1022636—UN—15JAN03

### Every 3000 Bales or Yearly- Check Net Feed Roll Brake (Machine Equipped with Brake Band)

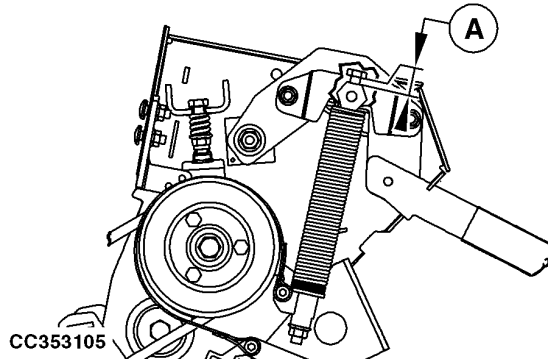
Check that distance (A) is within specification:

**Specification**

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

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

**A—Distance**

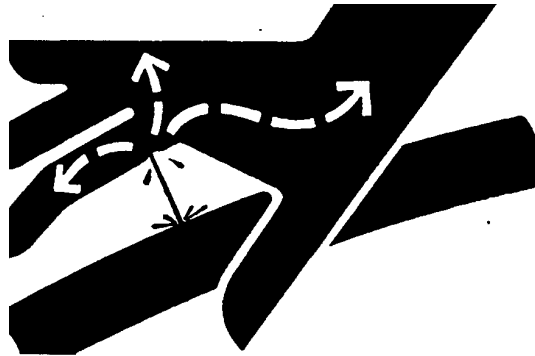


CC353105 —UN—17MAY18

GA87848,00012A6 -19-02JUL21-1/1

### Every 6 Years: Replace Hydraulic Hoses

Due to wear on hydraulic hoses over time, it is recommended to change hydraulic hoses every 6 years.

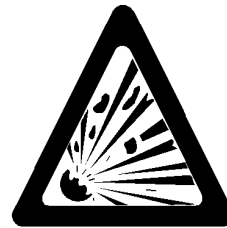


AP00976,000018D -19-13FEB23-1/1

### Every 6 Years: Replace Density Accumulator

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

Density accumulator shall be replaced 6 years. The date of manufacture is marked on the accumulator: MM - YY. See Service Hydraulic Accumulator Device in Service section.



Accumulator Explosion

ga87848,1681816726950 -19-18APR23-1/1

CC1022636 —UN—15JAN03

**Every 6 Years: Replace Hydraulic Brake Accumulators (If Equipped)**

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.

Hydraulic brake accumulators shall be replaced 6 years. The date of manufacture is marked on the accumulator: MM - YY. See Service Hydraulic Accumulator Device in Service section.



CC1022636

*Accumulator Explosion*

ga87848,1681816707983 -19-18APR23-1/1

CC1022636—UN—15JAN03

# Troubleshooting

## Pickup and Feed Difficulties

Symptom	Problem	Solution
<b>Clutch disengagement during bale formation.</b>	Crop accumulation front or behind the rotor.	Install center starter roll (No. 2) scraper. See <a href="#">Install Roll No. 2 Scraper</a> in Service section.  Check if knives are well sharpened, if necessary see <a href="#">Sharpen Precutter Knives</a> in Service section.
	Windrow compressor sheet or windrow compressor roll too low.	Raise windrow compressor sheet or windrow compressor roll. See <a href="#">Adjust Windrow Compressor Sheet (If Equipped)</a> or <a href="#">Adjust Windrow Compressor Roll (If Equipped)</a> in Operating the Baler—General Purposes section.
	Machine angle not set properly.	Check machine angle. See <a href="#">Set Machine Angle</a> in Preparing the Baler section.
<b>Not picking up hay cleanly.</b>	Pickup set too high.	Lower pickup. See <a href="#">Adjust Pickup Gauge Wheels</a> in Operating the Baler—General Purposes section.
	Poor pickup flotation.	Check float spring adjustment. See <a href="#">Adjust Pickup Float Spring</a> in Operating the Baler—General Purposes section.
	Tongue set too low.	Check tongue adjustment. See <a href="#">Adjust Tongue</a> in Preparing the Baler section.
	Short crop deflector or windrow compressor roll too high.	Lower short crop deflector or windrow compressor roll. See <a href="#">Adjust Windrow Compressor Sheet (If Equipped)</a> or <a href="#">Adjust Windrow Compressor Roll (If Equipped)</a> in Operating the Baler—General Purposes section.
	Windrows too light.	Rake heavier windrows. See Operating the Baler—General Purposes section.
	Pickup teeth bent or broken.	Straighten or replace teeth, see <a href="#">Replace Pickup Tooth</a> in Service section.
	Ground speed too high.	Reduce ground speed.

Continued on next page

t181334,1685609628447 -19-27JUN23-1/3

## Troubleshooting

Symptom	Problem	Solution
<b>Pickup does not float or drops freely.</b>	Excess or insufficient float assist.	Adjust float springs. See <a href="#">Adjust Pickup Float Spring</a> in Operating the Baler—General Purposes section.  Check there is no crop accumulation between pickup frame and precutter frame, or between pickup frame and drop floor (if equipped).
	<b>Pickup teeth do not revolve.</b>	Pickup drive chain not enough tensioned or broken.  Adjust tension of pickup drive chain, see <a href="#">Adjust Pickup Drive Chain</a> in Service section.  Replace chain.
<b>Pickup teeth digging in ground.</b>	Broken cam.	Replace cam. See your John Deere dealer.
	Pickup set too low.	Raise pickup. See <a href="#">Adjust Pickup Gauge Wheels</a> in Operating the Baler—General Purposes section.
<b>Pickup tooth breakage.</b>	Poor pickup flotation.	Check float spring adjustment. See <a href="#">Adjust Pickup Float Spring</a> in Operating the Baler—General Purposes section.
	Pickup set too low.	Raise pickup. See <a href="#">Adjust Pickup Gauge Wheels</a> in Operating the Baler—General Purposes section.
<b>Inside of strippers worn.</b>	Foreign material inside and/or broken teeth.	Remove material and/or replace teeth, see <a href="#">Replace Pickup Tooth</a> in Service section.
	Baling cornstalks.	Raise pickup. Higher tooth breakage can be expected. See Operating the Baler—General Purposes section.
<b>Inside of strippers worn.</b>	Strippers bent up hitting tooth coils.	Check for binding at flares.  Check teeth and stripper position.  Increase float. See <a href="#">Adjust Pickup Float Spring</a> in Operating the Baler—General Purposes section.  Raise pickup. See <a href="#">Adjust Pickup Gauge Wheels</a> in Operating the Baler—General Purposes section.

Continued on next page

#181334,1685609628447 -19-27JUN23-2/3

*Troubleshooting*

Symptom	Problem	Solution	
<b>Plugging at flares.</b>	Over-crowding ends.	Reduce crowding.	
	Pickup set too low.	Raise pickup. See <a href="#">Adjust Pickup Gauge Wheels</a> in Operating the Baler—General Purposes section.	
<b>Plugging at rotary feeder.</b>	Ground speed too high.	Reduce ground speed. To unplug rotary feeder, see <a href="#">Unplug Rotary Feeder</a> in Operating the Baler—General Purposes.  Check drop floor adjustment.	
	Bale density too high.	Decrease density. See <a href="#">Adjust Bale Density</a> in Operating the Baler—General Purposes section.  Adjust rotor auger scrapers. See <a href="#">Adjust Rotor Auger Scrapers</a> in Service section.	
	<b>Plugging at pickup.</b>	Short crop deflector or windrow compressor roll too high.	Lower short crop deflector or windrow compressor roll. See <a href="#">Adjust Windrow Compressor Sheet (If Equipped)</a> or <a href="#">Adjust Windrow Compressor Roll (If Equipped)</a> in Operating the Baler—General Purposes section.
		Bad tongue adjustment.	Check tongue adjustment, see <a href="#">Adjust Tongue</a> in Preparing the Baler section.
<b>Noise in the rotor.</b>	Excessive windrow size.	Reduce windrow size.	
	Ground speed too high.	Reduce ground speed.	
	Deformed tooth of rotor.	See your John Deere dealer.	
	Foreign body inside rotor.	Remove foreign body from inside of rotor.	
<b>Loss of knife.</b>	Bad stripper adjustment.	Check stripper adjustment.	
	Interference between knives and teeth.	Check there is no interference between knife and teeth.	
	Knife locking bar unlocked.	Lock bar.	

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*Troubleshooting*

<b>Symptom</b>	<b>Problem</b>	<b>Solution</b>
	Knife locking bar worn.	Replace knife locking bar. See your John Deere dealer.
	Knife slot worn.	Replace worn knife.

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## Bale Quality

Symptom	Problem	Solution
<b>Cone shaped bales on balers equipped with BaleTrak control monitor whereas monitor shows a well-shaped bale.</b>	Bale shape potentiometer out of adjustment.	Calibrate the bale shape potentiometer. See <a href="#">Channels 006 and 007: Calibrate Bale Shape Potentiometers RB321 and RB322</a> in BaleTrak Monitor Service section.
	Outer belts not of the same length.	Shorten belts to the same length within 38 mm (1-1/2 in). See Service section.
	Broken bale shape indicator spring.	Replace spring.
<b>Cone shaped bales on baler without BaleTrak control monitor.</b>	Bad driving.	See <a href="#">Guideline to Form a Good Bale</a> in Operating the Baler—General Purposes section.
<b>Twine or net binding settings not constant with different sized bales.</b>	Baler rotation speed sensor not connected, defective or not correctly adjusted.	Reconnect or readjust sensor. Replace if necessary. See Service and BaleTrak Monitor Service sections.
	Bale diameter potentiometer not connected, defective or not correctly calibrated.	Reconnect or calibrate potentiometer. Replace if necessary. See <a href="#">Channel 027: Record Lowest Position of Belt Tension Arm</a> in BaleTrak Monitor Service section.
	Net binding system belt not tight.	Check net belt tension, see <a href="#">Check Drive Belt Tension (Test 5)</a> in Service section.
<b>Baler does not make dense bales.</b>	Internal leak in belt tension hydraulic cylinder.	See your John Deere dealer.
	Dirty or defective relief valve.	See your John Deere dealer.
	Bale ends not filled tightly.	Crowd more crop in ends of baler. See <a href="#">Guideline to Form a Good Bale</a> in Operating the Baler—General Purposes section.
	Density control adjusted for light bales.	Adjust for heavier bales. See <a href="#">Adjust Bale Density</a> in Operating the Baler—General Purposes section.
	Bale forming belts too short.	Check length and correct. See Service section.

Continued on next page

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*Troubleshooting*

Symptom	Problem	Solution
<b>Peripheral density of bale insufficient.</b>	Not enough net turns.	Adjust number of net turns. See <a href="#">Set Number of Net Turns</a> in Operating BaleTrak Monitor section.
	Gate latch sensor not correctly adjust or faultly	Adjust gate latch sensor. See <a href="#">Adjust Gate Latch Sensors SB3310 and SB3311</a> in Service section.  See your John Deere dealer.
	Faulty density valve.	See your John Deere dealer
<b>Baler will not make full size bale.</b>	Bale diameter not adjusted to desired bale diameter.	Adjust bale diameter. See <a href="#">Set Bale Diameter</a> in Operating BaleTrak Monitor section.
	Bad calibration of bale diameter potentiometer.	Calibrate bale diameter potentiometer. See <a href="#">Channel 027: Record Lowest Position of Belt Tension Arm</a> and <a href="#">Channel 028: Fine Tune Bale Size</a> in BaleTrak Monitor Service section.
	Bale forming belts are too short.	Increase belt length to recommended length. See Service section.
	Bale density set to low.	Increase bale density. See <a href="#">Adjust Bale Density</a> in Operating the Baler—General Purposes section.
<b>Desired bale diameter cannot be achieved.</b>	Bale diameter potentiometer not correctly calibrated.	Calibrate bale diameter potentiometer. See <a href="#">Channel 027: Record Lowest Position of Belt Tension Arm</a> and <a href="#">Channel 028: Fine Tune Bale Size</a> in BaleTrak Monitor Service section.

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**General Baler Difficulties**

Symptom	Problem	Solution
<b>Gate opens while baling.</b>	Gate not latched.	When closing gate, hold selective control valve lever of tractor a few seconds after the gate is closed.  Adjust gate latch. See <u>Adjust Gate Latch</u> in Service section.
	Gate latch sensor not correctly adjust or faulty.	Adjust latch sensor. See <u>Adjust Gate Latch Sensors SB3310 and SB3311</u> in Service section.  See your John Deere dealer
<b>Gate not latched.</b>	Obstruction between gate and frame.	Remove obstruction.
	Crop buildup on belts in some crop conditions.	Remove buildup. Operate PTO while closing gate.
<b>Gate latched but displayed not latched.</b>	Gate latch sensor not correctly adjust or faulty.	Adjust latch sensor. See <u>Adjust Gate Latch Sensors SB3310 and SB3311</u> in Service section.  See your John Deere dealer
	Gate latch not correctly adjust.	Adjust gate latch. See <u>Adjust Gate Latch</u> in Service section.
<b>Noise during gate closing.</b>	Tension arm not lubricated.	Lubricate tension arm. See Lubrication and Maintenance section.
	Door hinges not lubricated.	Lubricate door hinges. See <u>Every 50 Hours: Lubricate Door Hinges, Hydraulic Cylinders, and Bale Shape Sensor Pins</u> in Lubrication and Maintenance section.
	Gate latch not lubricated	Lubricate gate latches. See <u>Every 50 Hours: Lubricate Gate Latches</u> in Lubrication and Maintenance section.
	Faulty gate hydraulic cylinder shock-absorber.	See your John Deere dealer
<b>Bale density gauge reading in red.</b>	Bale density gauge defective.	Replace gauge. See your John Deere dealer.
	Hydraulic circuit overload.	Reduce ground speed.

Continued on next page

t181334,1685610967873 -19-27JUN23-1/4

## Troubleshooting

Symptom	Problem	Solution
		Reduce bale density. See <a href="#">Adjust Bale Density</a> in Operating the Baler—General Purposes section.
	Bale density valve defective.	Repair or replace valve. See your John Deere dealer.
<b>Belts do not track properly.</b>	Lower rear gate roll out of adjustment.	Adjust roll. See <a href="#">Adjust Tracking of Belts</a> in Service section.
	Belts not routed correctly.	See <a href="#">Route Belts Through the Baler</a> in Service section.
	Accumulation on baler rolls.	Remove buildup.
	Belts not cut square when splicing.	Resplice belt. See Service section.
<b>Bale forming belts rubbing.</b>	Belt tension arm not fully down.	Fully open then close gate.  Lubricate tension arm. See Lubrication and Maintenance section.
	Hydraulic valve defective.	See your John Deere dealer.
	Belts not routed properly.	See <a href="#">Route Belts Through the Baler</a> in Service section.
<b>Starter rolls 1 and, 2 wraps with hay.</b>	Scraper not adjusted.	Adjust scraper. See <a href="#">Adjust Bottom Starter Roll (No. 1) Scraper</a> , and <a href="#">Install Roll No. 2 Scraper</a> in Service section.
<b>Bale sticks in chamber.</b>	New baler.	Reduce density until baler has made several bales to polish side sheets.  Unload without PTO engaged.
	Baler in downhill.	Unload bale on a flat surface.
	Bale oversize.	Do not make oversize bale.
	Bale density too high.	Reduce bale density. See <a href="#">Adjust Bale Density</a> in Operating the Baler—General Purposes section.
	Tongue not correctly adjust.	Adjust tongue. See <a href="#">Adjust Tongue</a> in Preparing the Baler section.

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#181334,1685610967873 -19-27JUN23-2/4

*Troubleshooting*

Symptom	Problem	Solution
<b>Bale density control knob hard to turn.</b>	Locking ring locked against valve body.	Unscrew locking ring before adjusting density control knob.
	Dry threads on adjusting screw.	Apply a few drops of oil or dry graphite lubricant on the threads.
	Raised gate and/or belt tension arm create additional turning force.	Open then close gate by placing tractor SCV lever in floating position.
<b>Belt lacing failure.</b>	Belts are not the same length.	Belts must be the same length within 38 mm (1-1/2 in). See Service section.
	Improper belt splice hooks or poor quality splice.	See <u>Repair Belts</u> in Service section.
<b>Belts slipping or not turning.</b>	Crop accumulation on rolls or belt guides.	Remove crop accumulation.
	Belt tension arm not returning all the way to tension belts.	Check that tension arm tightens belts.  Fully open then close gate.  Lubricate tension arm. See Lubrication and Maintenance section.
	Belts too long.	Cut belts to proper length. See Service section.
	Bale density valve defective.	Repair or replace valve. See your John Deere dealer.
	Broken Chain.	Replace Chain.
<b>Excessive shear bolt breakage.</b>	Incorrect PTO speed	Set correct PTO speed. See <u>Select Tractor PTO Speed</u> in Preparing the Tractor section.
	Wrong size or grade of shear bolt.	Replace with recommended shear bolt.
	Bale density and/or ground speed to high.	Reduce ground speed and/or bale density. See <u>Adjust Bale Density</u> in Operating the Baler—General Purposes section.
	Pick up aperture angle to low.	Adjust tongue. See <u>Adjust Tongue</u> in Preparing the Baler section.

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*Troubleshooting*

<b>Symptom</b>	<b>Problem</b>	<b>Solution</b>
	Hay wrapped around starter roll.	Adjust scraper. See <a href="#">Adjust Bottom Starter Roll (No. 1) Scraper</a> , and <a href="#">Install Roll No. 2 Scraper</a> in Service section.
<b>Oversize alarm at smaller bale diameter than the maximum.</b>	Accumulation on switch.	Clean oversize switch area.
	Oversize switch block in oversize position.	Unblock oversize switch, replace if necessary.
<b>Soft core solenoid is not power supplied.</b>	Gate latch sensor not correctly adjust or faulty.	Adjust latch sensor. See <a href="#">Adjust Gate Latch Sensors SB3310 and SB3311</a> in Service section.  See your John Deere dealer
	Gate latch not correctly adjust.	Adjust gate latch. See <a href="#">Adjust Gate Latch</a> in Service section.
<b>Excessive tractor power requirements during operation with precutter knives engaged.</b>	Precutter knives are worn.	Sharpen or replace precutter knives. See <a href="#">Sharpen Precutter Knives</a> in Service section.

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## Silage Equipment Operation Difficulties

Symptom	Problem	Solution
<b>Crop accumulation at starter roll.</b>	Scraper too far from starter roll.	Adjust scraper. See <a href="#">Adjust Bottom Starter Roll (No. 1) Scraper</a> , and <a href="#">Install Center Starter Roll (No. 2) Twine Deflector</a> in Service section.
<b>Belt(s) slipping.</b>	Too heavy silage bales.	Reduce bale diameter.  Reduce bale density. See <a href="#">Adjust Bale Density</a>
	Wet conditions.	Install second drive roll kit. See your John Deere dealer.
<b>Difficulties when starting a bale (wet crop due to rain).</b>	Core does not start to turn.	Retract precutter knives, activate soft core system, and reduce bale density. See <a href="#">Retract or Engage Precutter Knives Function</a> , <a href="#">Operate Soft Core</a> , and <a href="#">Adjust Bale Density</a> in Operating the Baler—General Purposes and Operating BaleTrak Monitor section.
<b>Plugging the baler by feeding a too large bunch of silage.</b>	Irregular windrows.	Re-engage PTO at low engine rpm. If unsuccessful, lower the drop floor and retract precutter knives. See <a href="#">Unplug Rotary Feeder</a> in Operating the Baler—General Purposes section.

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## Net Binding Equipment Difficulties

Symptom	Problem	Solution
<b>Bale not tied (no "end of cycle" beep).</b>	Net drive belt too short.	Replace drive belt. See <u>Remove And Install Net Feed Roll Drive Belt</u> in Service section.
	Lower net guide not in contact with belts.	See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
	Burrs on lower net guide channels.	Remove burrs.
	Net roll empty.	Install a new net roll.
	Net feed rolls not engaged.	Check, or replace drive belt. See <u>Check Net Binding Device</u> in Service section.  Check belt tension when cycle starts. See <u>Check Drive Belt Tension (Test 5)</u> in Service section.  Check that net roll diameter is not greater than 320 mm (1 ft 1/2 in).
	Net rolled up around rubber roll.	Shut off tractor PTO. Open the net cover and release net feed roll brake. Unroll net by pulling on it. Never attempt to cut net with a knife against rubber roll.
	Net rolled up around rubber roll after the first bale of the day.	Disengage net from net feed rolls if baler must stand over night or more than 10 hours without operation.
	Net feed roll pressure too high, or too low.	Adjust net roll pressure. See Service section.
	Net not engaged properly (new roll).	Restart net installation. See Preparing the Baler section.
	Net not engaged properly.	Adjust net feed roll brake. See <u>Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6)</u> in Service section.
Rubber roll damaged or sticky.	Change rubber roll, clean it, and apply talc to roll.	
Net sticky from packaging.	Cut off sticky area.	
<b>Bale not tied (with "end of cycle" beep).</b>	Net around starter roll of baler.	Remove burrs on starter roll.

*Troubleshooting*

Symptom	Problem	Solution
	Net around sticky rolls of baler.	Clean the relevant rolls and adjust scrapers. See Service section.
	Belt lacing aggressive.	Change relevant belt lacing.
<b>Bale tied (no "end of cycle" beep).</b>	Net switch or sensor defective, bent or not correctly adjusted.	Check, and/or replace switch or sensor. See Service, and BaleTrak Monitor Service section.
	Spring missing on switch actuating stud.	Replace spring.
<b>Net rolled up around rubber roll.</b>	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See <a href="#">Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6)</a> in Service section.
<b>Net torn.</b>	Brake force out of adjustment.	Increase net binding stretch, see <a href="#">Adjust Net Binding Stretch in Operating the Baler—General Purposes</a> section.
<b>Insufficient net extended.</b>	Brake force out of adjustment.	Decrease net binding stretch, see <a href="#">Adjust Net Binding Stretch in Operating the Baler—General Purposes</a> section.
	Rubber brake worn.	Replace rubber brake.
<b>Net around the bale, but lacerated or net stays behind pickup.</b>	Net lower guide deformed.	Check guide at the level of lower gate roll No. 10. See <a href="#">Check Lower Net Guide Position (Test 7)</a> in Service section.
	1.81 m (5 ft 11 in) pickup feeder forks too aggressive.	Check that 1.81 m (5 ft 11 in) pickup feeder forks are set in position "1". See <a href="#">Operating the Baler-General Purposes</a> section.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See <a href="#">Check Net Feed Roll Brake (Machine Equipped with Rubber Brake Pad) (Test 6)</a> , and <a href="#">Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6)</a> in Service section.
	Belt lacing aggressive.	Change relevant belt lacing.
	Welding spots or marks on starter roll.	Remove spots and marks.

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## Troubleshooting

Symptom	Problem	Solution
	Too hard contact between lower net guide and belts.	Correct contact. See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
<b>Net partially around the rotor.</b>	Crop accumulation between the scraper and roll n° 2.	Remove roll n° 2 scraper. See <u>Remove Roll No. 2 Scraper</u> in Service section.
<b>Bale not uniformly tied or not tied.</b>	Plugging between lower net guide and gate roll No. 9. See <u>Baler Roll Numbering</u> in Service section.	Clean this area.
	Guide of gate roll No. 10 bent.	See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See <u>Check Net Feed Roll Brake (Machine Equipped with Rubber Brake Pad) (Test 6)</u> , and <u>Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6)</u> in Service section.
	Lower net guide panel not in contact with belts.	Correct contact. See <u>Check Lower Net Guide Position (Test 7)</u> in Service section.
	Net drive belt too long.	Replace drive belt. See <u>Remove And Install Net Feed Roll Drive Belt</u> in Service section.
	Net binding cover not closed.	Cover must be closed and latched for best results.
	Net roll is installed backwards in box.	Install net roll correctly. See <u>Preparing the Baler</u> section.
	Net binding cover gas spring(s) weak.	Check springs on both sides of the net binding cover. Replace if necessary.
	Crop accumulation between the scraper and roll n° 2.	Remove roll n° 2 scraper. See <u>Remove Roll No. 2 Scraper</u> in Service section.
<b>Net loose around bale.</b>	Too many turns applied.	Normally no more than three turns are needed. Excess wraps may appear to be loose.
	Weak gas spring(s).	Check spring(s) for proper force.
<b>Net not cut.</b>	Specified net quality not used.	Use recommended net quality.

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## Troubleshooting

Symptom	Problem	Solution
	Electrical components defective.	Check and/or replace parts.
	Dull knife.	Sharpen knife. See Service section.
	Net feed roll brake not correctly adjusted.	Adjust net feed roll brake. See <a href="#">Check Net Feed Roll Brake (Machine Equipped with Rubber Brake Pad) (Test 6)</a> , and <a href="#">Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6)</a> in Service section.
	Counterknife not all across the width in contact with net knife.	Reinstall correctly. See <a href="#">Check Knife and Counterknife Position (Test 1)</a> in Service section.
	Net knife not parallel.	Reinstall correctly.
<b>Buzzer stays on after net is cut.</b>	Spring missing on switch actuating stud.	Replace spring.
<b>Net not tight around bale.</b>	Net drive belt too long.	Replace drive belt. See <a href="#">Remove And Install Net Feed Roll Drive Belt</a> in Service section.
<b>Cover does not stay open.</b>	Weak gas spring(s).	Replace gas spring(s).
<b>John Deere B-Wrap™ net drags on the ground.</b>	John Deere B-Wrap™ net cut too short.	Increase John Deere B-Wrap™ net cut length. See <a href="#">Channel 035: Adjust B-Wrap Net Cut Length (if Equipped)</a> in BaleTrak Monitor Service section.
	VELCRO® damaged, or missing.	See your John Deere dealer.
<b>Metal strip not detected during John Deere B-Wrap™ binding cycle.</b>	John Deere B-Wrap™ roll not correctly installed.	See <a href="#">Load Net Roll</a> in Preparing the Baler section.
	John Deere B-Wrap™ sensor defective, or not connected.	Reconnect John Deere B-Wrap™ sensor. See <a href="#">Channel 023: Test of Right Twine Pulley Sensor SB422 or B-Wrap Sensor SB416 (If Equipped)</a> in BaleTrak Monitor Service section to test John Deere B-Wrap™ sensor. Replace sensor if necessary.
	John Deere B-Wrap™ sensor not correctly adjusted.	See <a href="#">Adjust B-Wrap Sensor SB416 (if Equipped)</a> in Service section.

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## Troubleshooting

Symptom	Problem	Solution
	John Deere B-Wrap™ roll is out of time after wrong John Deere B-Wrap™ binding cycle.	Roll out John Deere B-Wrap™ roll, and cut net approximately 25 cm (10 in) after next VELCRO®. See <a href="#">Load Net Roll</a> in Preparing the Baler section.
<b>John Deere B-Wrap™ net cut length too long after VELCRO®.</b>	John Deere B-Wrap™ net cut length needs to be adjusted.	See <a href="#">Channel 035: Adjust B-Wrap Net Cut Length (if Equipped)</a> in BaleTrak Monitor Service section to adjust John Deere B-Wrap™ net cut length.
<b>BaleTrak™ monitor displays “IOneT”.</b>	John Deere B-Wrap™ roll is empty.	Load a new roll of John Deere B-Wrap™. See <a href="#">Load Net Roll</a> in Preparing the Baler section.

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

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## Twine Binding Equipment Difficulties

Symptom	Problem	Solution
<b>Twine partially around the bale and the rotor or twine around the rotor entire width.</b>	Crop accumulation between the deflector and roll No 2.	Install twine deflector. See <a href="#">Install Center Starter Roll (No. 2) Twine Deflector</a> in Service section.
<b>Twine too tight or twine breaks while binding.</b>	Wrong twine routing.	Check for correct routing. See <a href="#">Route Twine from Twine Box to Twine Arms (Tube Arms)</a> , or <a href="#">Route Twine from Twine Box to Twine Arms (Adjustable Arms)</a> in Preparing the Baler section.
<b>Twine too loose on bale.</b>	Bad twine, knots in twine, new ball with tight core, wet twine.	Pull out bad twine or replace twine.
	Wrong twine tension plate pin or springs.	Replace with correct parts.
	Broken or missing twine tension spring.	Replace spring.
	Wrong tension spring pin.	Replace pin.
<b>Twine spacing not constant.</b>	Worn twine tension plates.	Replace worn parts.
	PTO rpm change during binding.	Keep PTO rpm constant.
<b>No twine on bale or twine not caught by bale.</b>	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 <a href="#">Route Twine from Twine Box to Twine Arms (Tube Arms)</a> , or <a href="#">Route Twine from Twine Box to Twine Arms (Adjustable Arms)</a> in Preparing the Baler section. Check twine knife adjustment. See <a href="#">Adjust Twine Cut Length</a> , and/or <a href="#">Replace Twine Binding Knife</a> in Service section.
	Twine from end of twine arms too long.	Check twine knife adjustment. See <a href="#">Adjust Twine Cut Length</a> , and/or <a href="#">Replace Twine Binding Knife</a> in Service section.
	Twine tension too high.	See Twine too tight or twine breaks while binding above.
	Twine tension too high at the beginning of binding cycle.	Calibrate twine actuator. See <a href="#">Channel 029: Calibrate Twine Electrical Motor</a> in BaleTrack Monitor Service section.
	Twine quality.	Replace twine. See <a href="#">Select Twine</a> in Preparing the Baler section.

Continued on next page

ga87848,1685628777613 -19-01JUN23-1/3

## Troubleshooting

Symptom	Problem	Solution
	Twine not fed in with crop.	Do not stop forward travel of tractor. Allow a few seconds for twine to be fed in with crop.
	Baler out of twine.	Add twine. See <a href="#">Load Twine Boxes</a> and <a href="#">Knot for Twine</a> in Preparing the Baler section.
<b>Twine too close to both edges of bale.</b>	Twine binding actuator not calibrated.	Calibrate twine binding actuator. See <a href="#">Channel 029: Calibrate Twine Electrical Motor</a> in BaleTrack Monitor Service section.
	Barrel shaped bales.	Fill ends of bale by crowding windrow.
<b>Twine too close to one edge of bale.</b>	Cone shaped bales.	Fill ends of bale by crowding windrow.
<b>Twine not cut.</b>	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 <a href="#">Adjust Twine Cut Length</a> in Service section.
	Dull twine knife.	Remove twine knife and reinstall it in reversed position, or replace twine knife. See <a href="#">Replace Twine Binding Knife</a> 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.
<b>Twine arm goes through cycle prematurely and binds small bale.</b>	Bale diameter adjusted for small bale diameter.	Readjust to desired bale diameter from the monitor. See Operating BaleTrack Monitor section.
<b>Twine binding cycle start few seconds after request.</b>	Electric intensity too low.	See your John Deere dealer to have the current of the twine actuator adjusted.
<b>Twine arms move too slowly.</b>	Battery charge level to low.	Check battery charge (at least 20 A).
	Resistance in linkage.	Find cause of resistance and correct.
<b>Twine arms do not move.</b>	Poor electrical power.	Check electrical connection (connectors, battery harness, connector of actuator, etc.).

Continued on next page

ga87848,1685628777613 -19-01JUN23-2/3

## Troubleshooting

Symptom	Problem	Solution
		Reduce electrical power consumption of tractor.
	Defective twine binding actuator.	Repair or replace as necessary.
	Defective control unit.	Replace as necessary.
<b>Noise at the beginning of binding cycle.</b>	Binding arms out of adjustment causing contact with bale chamber rolls.	Adjust twine binding arms. See <a href="#">Adjust Twine Arm Position (Tube Arms)</a> or <a href="#">Adjust Twine Arm Position (Adjustable Arms)</a> in Service section.

ga87848,1685628777613 -19-01JUN23-3/3

## Chain Oiling System

Symptom	Problem	Solution
<b>Oil consumption too high.</b>	Main line interrupted.	Repair or replace.
	Oil too light.	Use a type of oil specified in Lubrication and Maintenance section. Reduce oil flow. See <a href="#">Adjust Oil Flow</a> in Lubrication and Maintenance section.
<b>Oil consumption too low.</b>	Oil too heavy.	Use a type of oil specified in Lubrication and Maintenance section. Increase oil flow. See <a href="#">Adjust Oil Flow</a> in Lubrication and Maintenance section.
	<b>Machine dry.</b>	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 Lubrication and Maintenance section.
	Air lock or pump empty.	Bleed pump.
	Heavy contamination resulting in blocked system.	Clean system and replace all metering valves.
	Line trapped.	Repair line.

DC82261,0000656 -19-02OCT15-1/1

**Automatic Greasing System (If Equipped with Cartridge-Type Pump)**

*the other grease nipples. Pressure rises then no grease emerges from the cartridge-type pump.*

*NOTE: If blockage occurs at a grease nipple or in a grease line, the supply of grease is stopped for all*

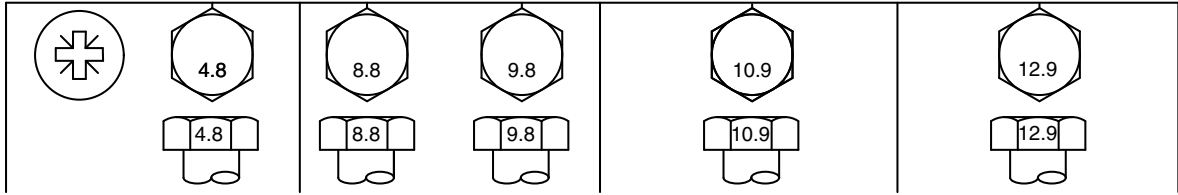
Symptom	Problem	Solution
<b>Machine not greased</b>	Blockage at grease nipple or in grease line.	Open lines between the primary and secondary distributors, one at a time. The blockage lies behind the secondary distributor with the line from which the most grease is emerging. Clear the blockage by placing a commercially available grease gun (pressure up to 40000 Pa; 400 bar; 5800 psi) at the relevant secondary distributor.
	Grease cartridge empty.	Replace grease cartridge. See Lubrication and Maintenance section.
	The pump does not work.	Bleed pump. See Service section.
		Check pump. See your John Deere dealer.
<b>Nipple not greased</b>	Leak occurs in a greasing line.	Replace damaged greasing line. See your John Deere dealer.

OUCC006,0001AE5 -19-24SEP13-1/1

# Service

## Metric Bolt and Screw Torque Values

TS1742 —UN—31MAY18



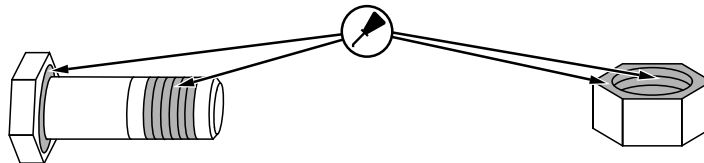
Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Hex Head <sup>a</sup>		Flange Head <sup>b</sup>		Hex Head <sup>a</sup>		Flange Head <sup>b</sup>		Hex Head <sup>a</sup>		Flange Head <sup>b</sup>		Hex Head <sup>a</sup>		Flange Head <sup>b</sup>	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
M6	3.6	31.9	3.9	34.5	6.7	59.3	7.3	64.6	9.8	86.7	10.8	95.6	11.5	102	12.6	112
									<b>N·m</b>	<b>lb·ft</b>	<b>N·m</b>	<b>lb·ft</b>	<b>N·m</b>	<b>lb·ft</b>	<b>N·m</b>	<b>lb·ft</b>
M8	8.6	76.1	9.4	83.2	16.2	143	17.6	156	23.8	17.6	25.9	19.1	27.8	20.5	30.3	22.3
			<b>N·m</b>	<b>lb·ft</b>	<b>N·m</b>	<b>lb·ft</b>	<b>N·m</b>	<b>lb·ft</b>								
M10	16.9	150	18.4	13.6	31.9	23.5	34.7	25.6	46.8	34.5	51	37.6	55	40.6	60	44.3
	<b>N·m</b>	<b>lb·ft</b>														
M12	—	—	—	—	55	40.6	61	45	81	59.7	89	65.6	95	70.1	105	77.4
M14	—	—	—	—	87	64.2	96	70.8	128	94.4	141	104	150	111	165	122
M16	—	—	—	—	135	99.6	149	110	198	146	219	162	232	171	257	190
M18	—	—	—	—	193	142	214	158	275	203	304	224	322	245	356	263
M20	—	—	—	—	272	201	301	222	387	285	428	316	453	334	501	370
M22	—	—	—	—	365	263	405	299	520	384	576	425	608	448	674	497
M24	—	—	—	—	468	345	518	382	666	491	738	544	780	575	864	637
M27	—	—	—	—	683	504	758	559	973	718	1080	797	1139	840	1263	932
M30	—	—	—	—	932	687	1029	759	1327	979	1466	1081	1553	1145	1715	1265
M33	—	—	—	—	1258	928	1398	1031	1788	1319	1986	1465	2092	1543	2324	1714
M36	—	—	—	—	1617	1193	1789	1319	2303	1699	2548	1879	2695	1988	2982	2199

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench. DO NOT use these values if a different torque value or tightening procedure is given for a specific application. For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

TS1741 —UN—22MAY18



<sup>a</sup>Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.

<sup>b</sup>Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX\_TORQ2 -19-09MAY22-1/1

### Prevent Fire at Each Service

Keep foreign material (crop, chaff, twine, net binding material, etc.) from building up on the machine near potentially hot areas, such as bearings and slip clutch. Remove this buildup as part of the regular service operations.

Avoid high-pressure power-washing adjacent to the bearings to prevent damaging seals.

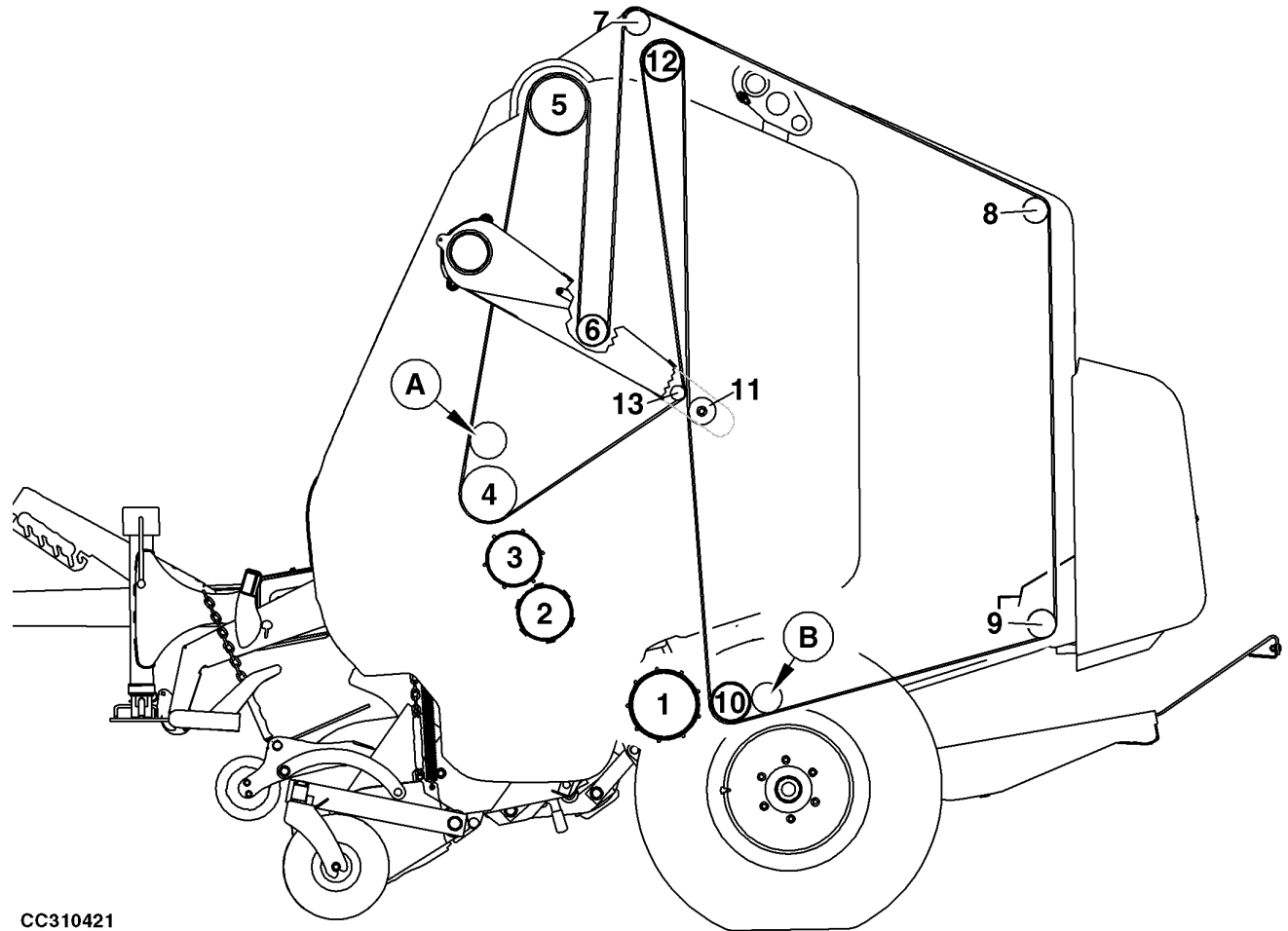
Check bearings regularly for early signs of failure, replace as necessary. Turn off power to baler and check for unusual noises, hot parts, smells of scorching, and discolored paint or metal. Check condition of bearings. (See Daily: Prevent Fire in Lubrication and Maintenance section.

Follow these guidelines if the use of welder, cutting torch or grinder is required for service work:

1. Park baler on pavement or bare ground.
2. Remove chaff to avoid exposure of flammable material to sparks; if chaff cannot be removed, soak it thoroughly with water before starting. Protect hoses and belts from exposure to sparks, arcs, or flames.
3. Have a source of extinguishing agent ready for immediate use.
4. Use an assistant to check for fire while welding, cutting, or grinding.
5. After welding, cutting or grinding allow parts to cool down before starting to bale. Verify that no fire has started before leaving service area.

GA87848,0000556 -19-08FEB18-1/1

### Baler Roll Numbering



CC310421

A—Front Cleaning Roll  
 B—Gate Cleaning Roll (if Equipped)  
 1—Bottom Starter Roll  
 2—Center Starter Roll

3—Upper Starter Roll  
 4—Lower Belt Drive Roll  
 5—Upper Belt Drive Roll  
 6—Front Tension Arm Idler Roll

7—Upper Front Roll  
 8—Upper Rear Gate Roll  
 9—Lower Rear Gate Roll  
 10—Lower Front Gate Roll  
 11—Rear Tension Arm Idler Roll

12— Top Idler Roll  
 13— Center Tension Arm Idler Roll

NB02380,00004CE -19-04SEP17-1/1

CC310421—UN—01SEP17

### Practice Safe Service Procedures

**CAUTION:** This machine feature automatic sequence with dwelling positions: the machine may seem to be stopped and restart unexpectedly.

To avoid bodily injury or death always:

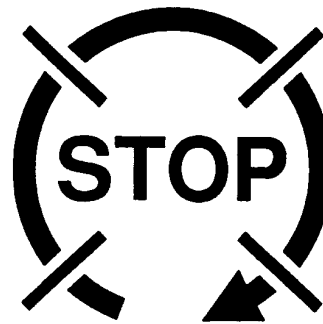
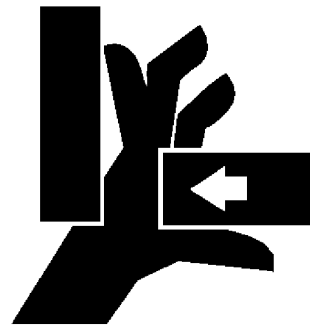
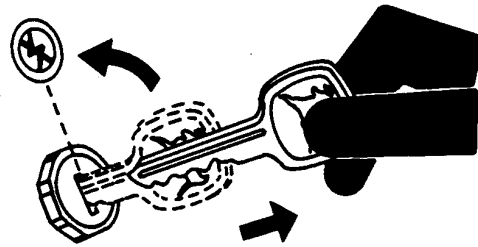
- Disengage PTO
- Engage tractor parking brake and/or place transmission in "Park"
- Shut off tractor engine
- Remove main switch key
- Relieve hydraulic pressure
- Lock gate. See Secure Gate Safely in Safety section.
- Engage parking lock
- Apply handbrake
- Wait until all moving parts have stopped
- Let all components cool

before servicing the machine.

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

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

**IMPORTANT:** Disconnect power supply to all electronic components when welding on machine. Over-voltage can damage electronic controls.



LX002 510

TS230 —UN—24MAY89

E41125 —UN—25OCT96

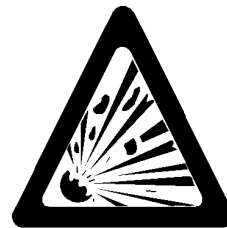
LX002510 —UN—17JAN95

ga87848,1677744952291 -19-02MAR23-1/1

### Service Hydraulic Accumulator Device

**CAUTION:** Accumulators cannot be repaired. Escaping fluid or gas from pressurized hydraulic accumulator systems can cause serious injury.

Only properly trained persons with appropriate equipment shall carry out inspection and replacement of accumulators.



CC1022636

Accumulator Warning

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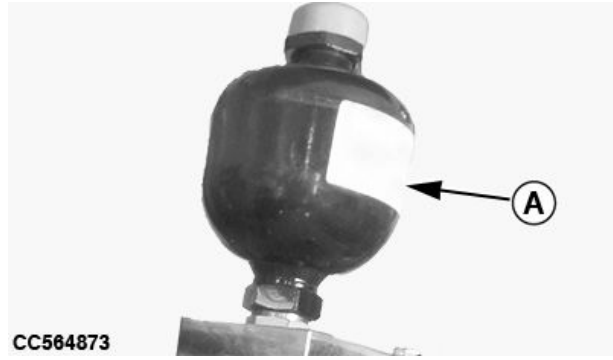
ga87848,1676020303443 -19-15FEB23-1/2

CC1022636 —UN—15JAN03

The following information shall be given either on accumulators or on a label on accumulators:

- Name and brief address of the manufacturer/supplier
- Product identification of the manufacturer/supplier
- Warning note, to read: "Caution - Pressurized Vessel, Discharge pressure prior to disassembly!"
- Gas-charge pressure XX bar
- Warning note, to read: "Hydraulic accumulators must only be charged with nitrogen"

A—Label



ga87848,1676020303443 -19-15FEB23-2/2

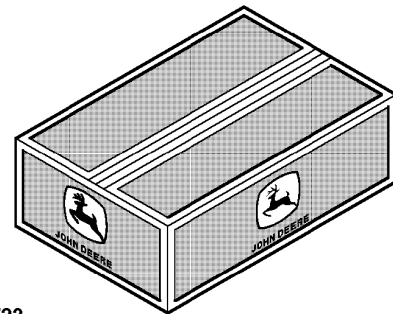
CC564873 —UN—14FEB23

### Use Genuine John Deere Parts

Genuine John Deere parts have been specifically designed for John Deere machines.

Other parts are neither examined nor released by John Deere. Installation and use of such products could have negative effects upon the design characteristics of the machine and thereby affect its safety.

Avoid this risk by using only genuine John Deere parts.



CC03745,0000FD5 -19-18SEP09-1/1

CC1020723 —UN—25OCT01

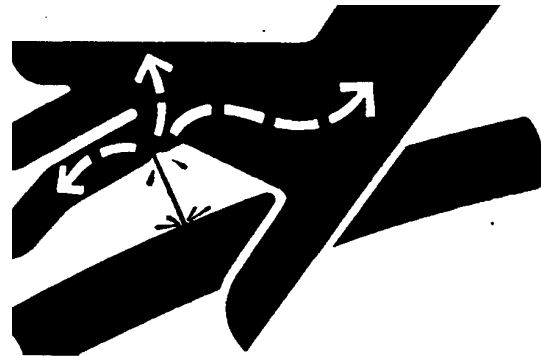
### Replacing Hydraulic Components

**CAUTION:** Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

Always relieve hydraulic pressure before servicing hydraulic components.

To prevent twisting the hydraulic tubes, use two wrenches when removing or connecting hoses to tubes.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within



a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

CC03745,0000286 -19-23AUG01-1/1

X9811 —UN—23AUG88

## 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.

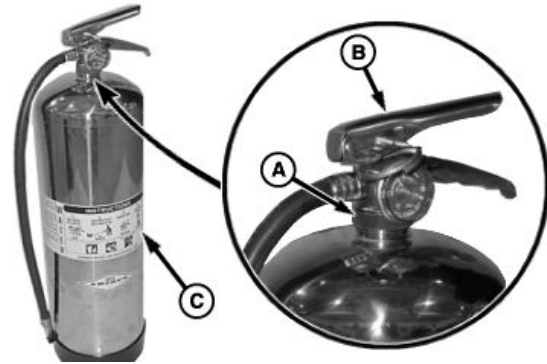
**CAUTION:** Before attempting to recharge ensure that pressurized water tank is completely depressurized.

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

H02727 —UN—10SEP08

**CAUTION:** Hand tighten nut to specification. Over tightening with wrench will damage valve.

- Install valve assembly (A) and tighten nut (B) to specification.

	Specification
Nut—Torque.....	11.3—11.9 N·m (100—105 lb-in)

- 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.

- 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.*

- Install previously removed cap on pressurizing valve.

DC82261,00004DE -19-20AUG14-2/3

H92728 —UN—08SEP08

- Install pin (A) with ring facing towards front of pressurized water tank and install tamper seal.
- Install hose and nozzle assembly (B) in holder (C).
- Install pressurized water tank on machine.

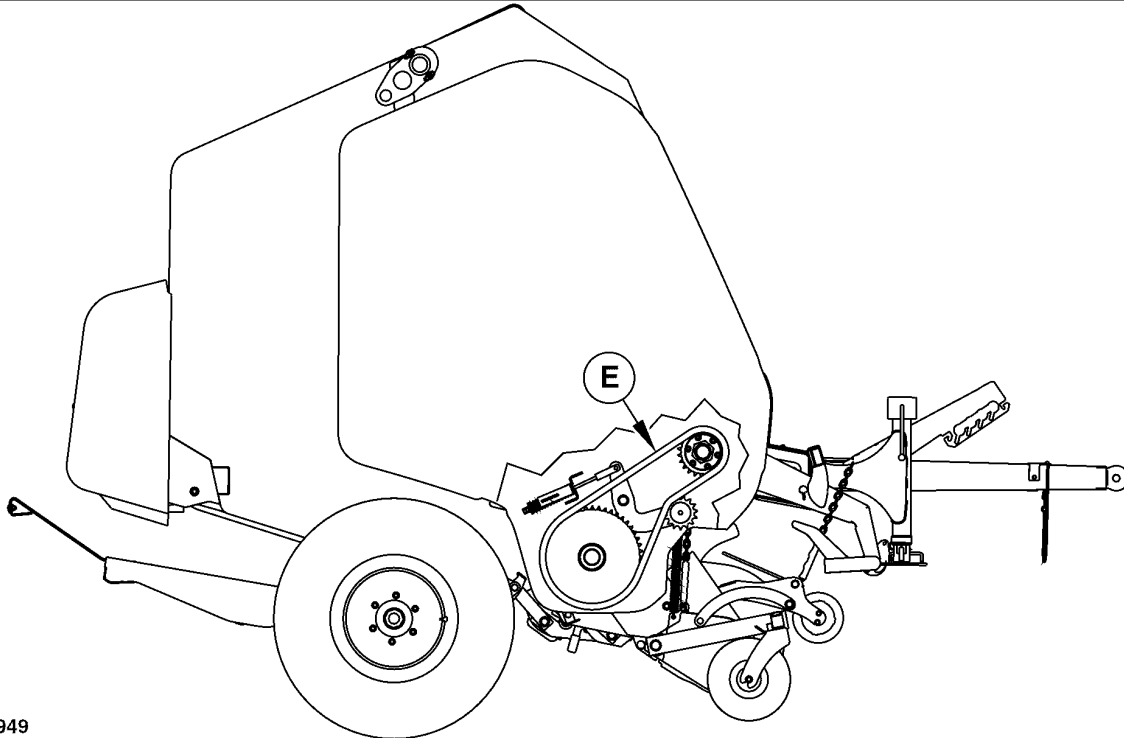
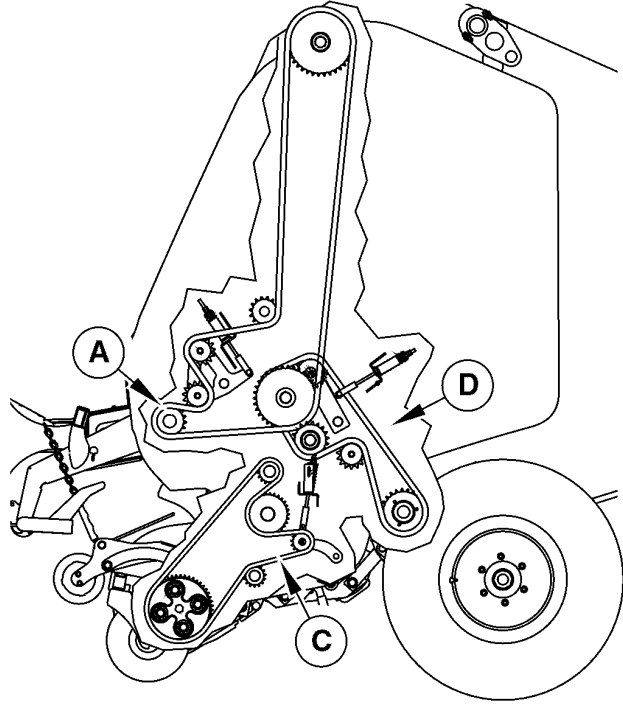
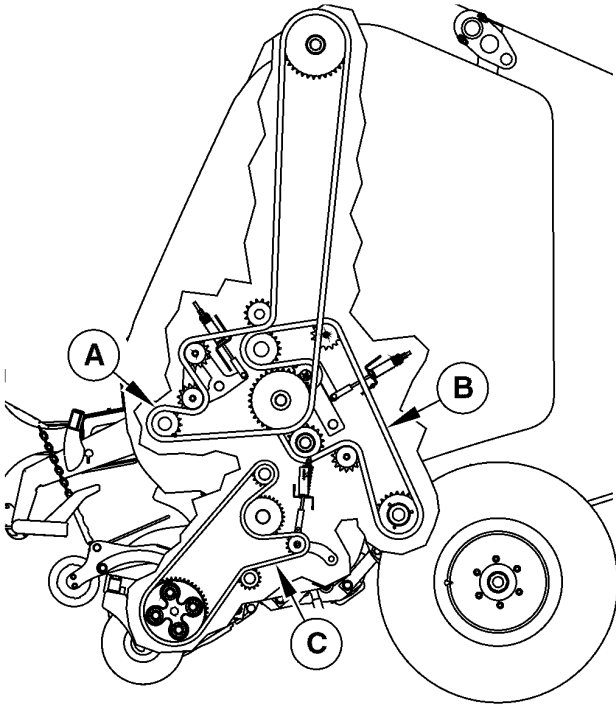
A—Pin  
B—Hose and Nozzle Assembly  
C—Holder



DC82261,00004DE -19-20AUG14-3/3

H92729 —UN—08SEP08

### Baler Chain Identification



CC518949

A—Main Drive Chain  
B—Starter Roll Drive Chain (with  
2nd Drive Roll)

C—Pickup Drive Chain  
D—Starter Roll Drive Chain  
(without 2nd Drive Roll)

E—Rotary Feeder Drive Chain

CC518949—UN—01SEP21

GA87848,00013C3 -19-25AUG21-1/1

### Adjust Ball-Type Hitch

When ball-type hitch is used, it can be necessary to adjust the clearance between the lock (C) and the ball-type hitch (E).

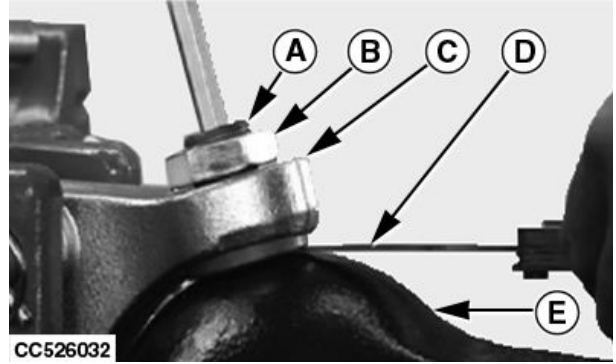
1. Attach the machine to the tractor.
2. Place the lock (C) in locking position.
3. Check clearance between screw (A) and ball-type hitch (E) by using shim (D). It should be within specification:

**Specification**

Screw-to-Ball-Type  
 Hitch—Clearance..... 0.5 mm max.  
 (0-1/32 in)

If the clearance is more than the specification, go to next check.

4. Loosen lock nut (B).
5. Tighten screw (A) until obtain the above specification.
6. Tighten lock nut (B)



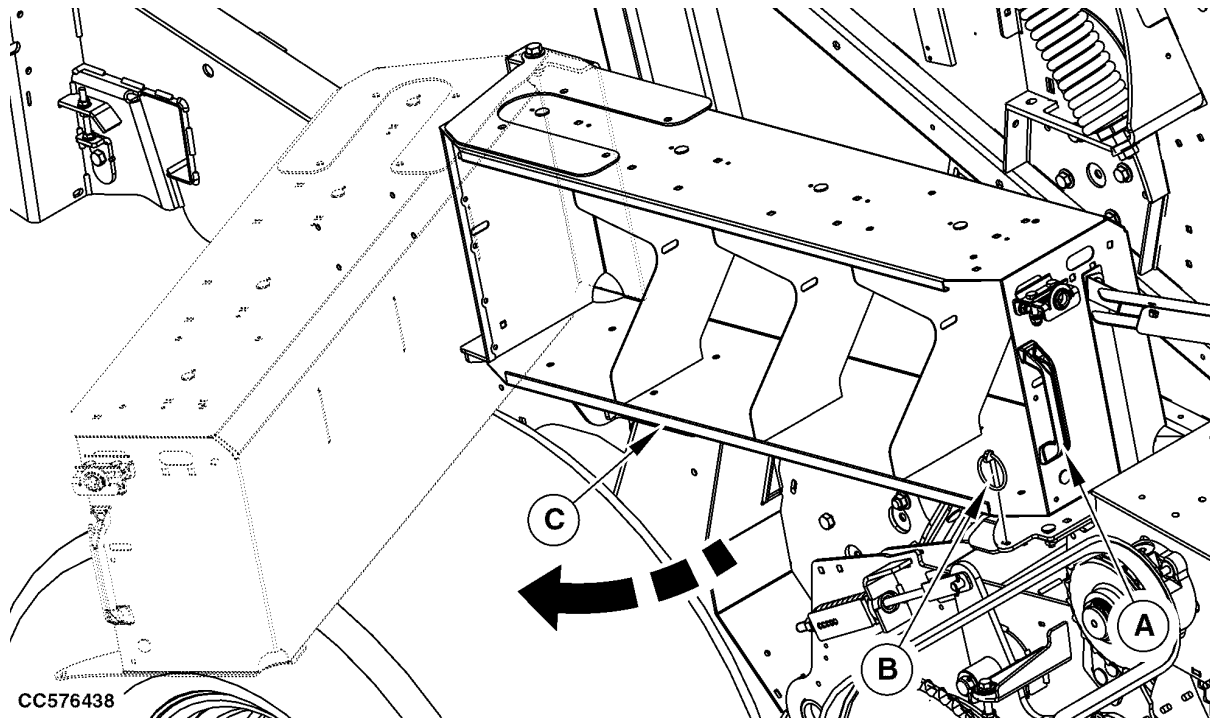
A—Screw  
 B—Counter-Nut  
 C—Lock

D—Shim  
 E—Ball-Type Hitch

CC526032—UN—10MAY22

TL81334.00010A2 -19-19MAY22-1/1

### Operate Pivoting Twine Boxes (If Equipped)



CC576438 —UN—05MAY23

A—Handle

B—Pin

C—Twine Box

The twine boxes (C) on both side of the machine can be opened to gain access to parts of the machine behind the twine boxes (C).

To open the twine boxes (C), proceed as follows:

1. Remove pin (B).
2. Pull handle (A) until the twine box (C) is fully open.

After that the servicing of the machine is done, close the twine boxes:

1. Push handle (A) until the twine box (C) is fully closed.
2. Intall pin (B) to lock the twine box (C) in the baler frame.

ga87848,1683296201799 -19-05MAY23-1/1

### Adjust Pickup Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of pickup drive chain (A) as follows:

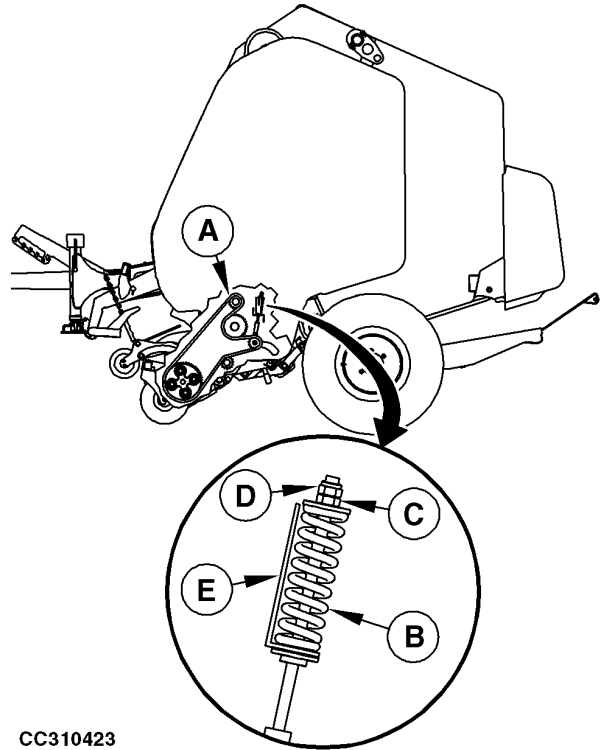
1. Loosen lock nut (D).
2. Adjust tension of pickup drive chain (A) by means of the nut (C) so that length of spring (B) should be within specification.

**Specification**

Gate Roll Drive  
Chain—Spring Length.....124—128 mm  
(4-7/8—5-1/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (D).

- A—Pickup Drive Chain
- B—Spring
- C—Nut
- D—Lock Nut
- E—Strap



CC310423

aysdijz,1683209645498 -19-05MAY23-1/1

CC310423—UN—01SEP17

### Adjust Main Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of main drive chain (A) as follows:

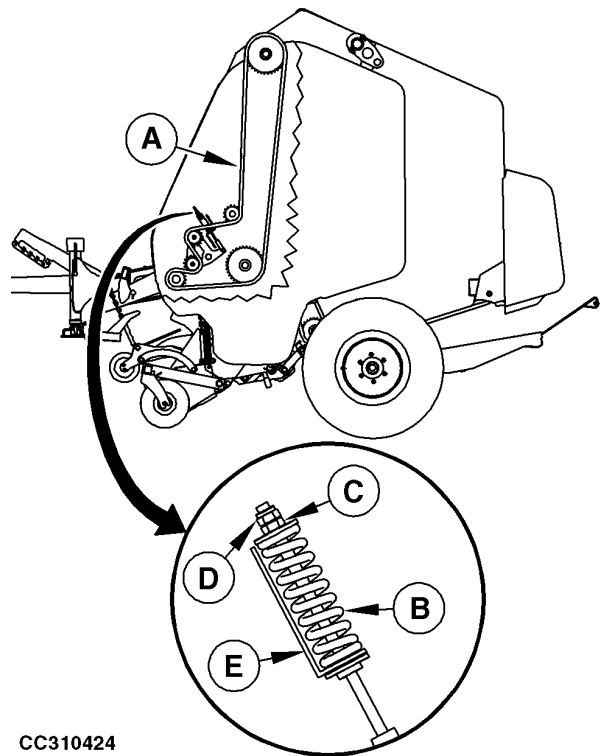
1. Loosen lock nut (D).
2. Adjust tension of main drive chain (A) by means of the nut (C) so that length of spring (B) should be within specification.

**Specification**

Main Drive  
Chain—Spring Length.....108—112 mm  
(4-1/4—4-13/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (D).

- A—Main Drive Chain
- B—Spring
- C—Nut
- D—Lock Nut
- E—Strap



CC310424

aysdijz,1683209645451 -19-05MAY23-1/1

CC310424—UN—01SEP17

### Adjust Starter Roll Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of starter roll drive chain (A) or (B) as follows:

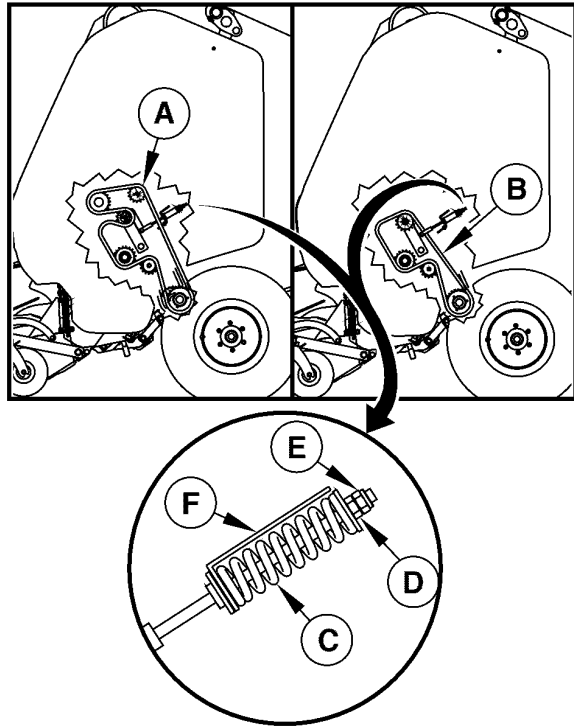
1. Loosen lock nut (E).
2. Adjust tension of starter roll drive chain (A) or (B) by means of the nut (D) so that length of spring (C) should be within specification.

**Specification**

Starter Roll Drive Chain	
(A) (with 2nd Drive Roll)	
Roll—Spring Length.....	107 (4-7/32 in)
Starter Roll Drive Chain	
(B) (without 2nd Drive Roll)	
Roll—Spring Length.....	120 (4-23/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (E).

- |   |                   |
|---|-------------------|
| <b>A—Starter Roll Drive Chain</b><br>(with 2nd Drive Roll)    | <b>D—Nut</b>      |
| <b>B—Starter Roll Drive Chain</b><br>(without 2nd Drive Roll) | <b>E—Lock Nut</b> |
| <b>C—Spring</b>   | <b>F—Strap</b>    |



CC575705—UN—04MAY23

aysdijz,1683209645397 -19-05MAY23-1/1

### Adjust Rotary Feeder Drive Chain

To ensure that all slack is removed from chain, close gate and engage PTO for a few seconds. Shut off tractor engine.

Adjust tension of rotary feeder drive chain (A) as follows:

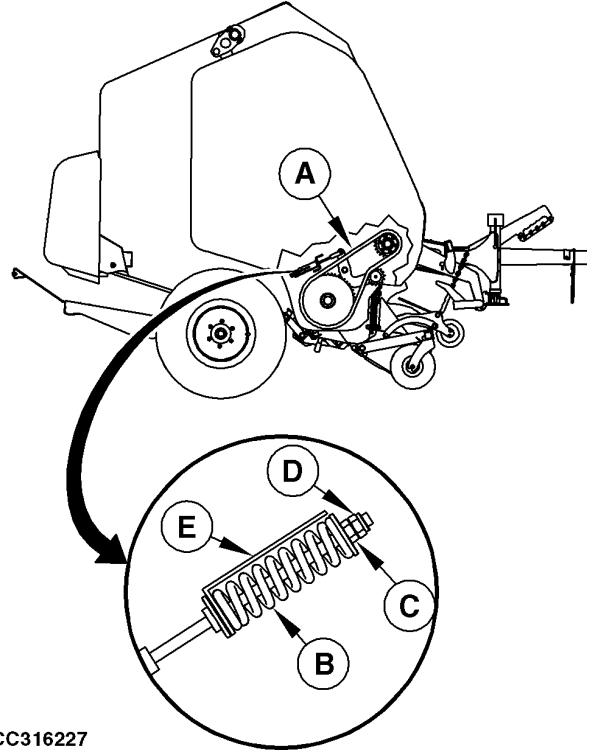
1. Loosen lock nut (D).
2. Adjust tension of rotary feeder drive chain (A) by means of the nut (C) so that length of spring (B) should be within specification.

**Specification**

Rotary Feeder Drive  
Chain—Spring Length.....124—128 mm  
(4-7/8—5-1/32 in)

3. Engage PTO for a few seconds.
4. Check adjustment. Repeat from step 2 if necessary.
5. Tighten lock nut (D).

**A—Rotary Feeder Drive Chain**    **D—Lock Nut**  
**B—Spring**                                **E—Strap**  
**C—Nut**



CC316227

CC316227—UN—01SEP17

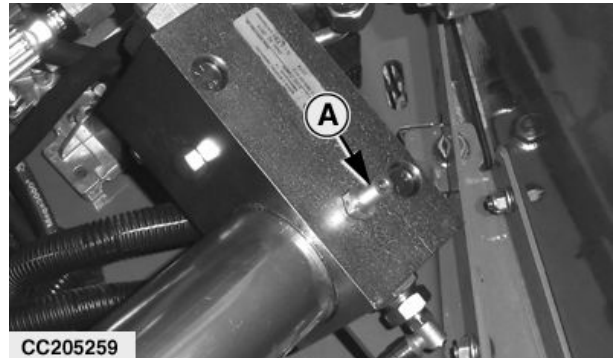
aysdijz.1683209645305 -19-05MAY23-1/1

### Bleed Automatic Greasing System (If Equipped with Cartridge-Type Pump)

*NOTE: Each time the grease cartridge is replaced, bleed the system as follows.*

Press the ball on the vent fitting (A) and actuate selective control valve to open and close the rear gate. Repeat until the grease emerging is free of air bubbles.

**A—Vent Fitting**



CC205259

CC205259—UN—10OCT13

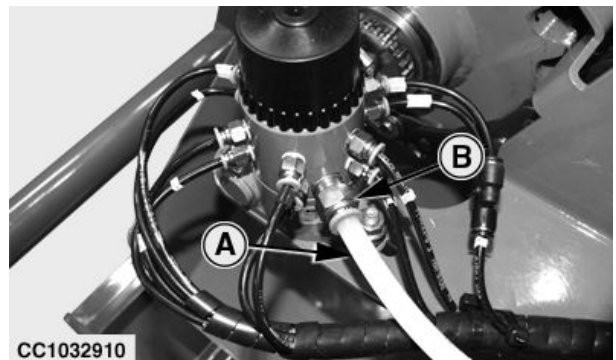
OUCC006,0001AEB -19-06SEP13-1/1

### Bleed Chain Oiling System Pump

*NOTE: It is necessary to bleed chain oiling system circuit if oil reservoir was totally empty.*

1. Disconnect inlet pipe (A).
2. Wait until air of inlet pipe (A) is completely bled before reconnecting inlet pipe (A) into coupling (B).
3. Run the baler until oil drains continuously from brushes.

**A—Inlet Pipe**                                **B—Coupling**



CC1032910

CC1032910—UN—14SEP10

OUC849,0000133 -19-09NOV10-1/1

### Adjust Brushes

1. 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).
2. Adjust each brush (A) to obtain specified overlap length (C) with chain (B).

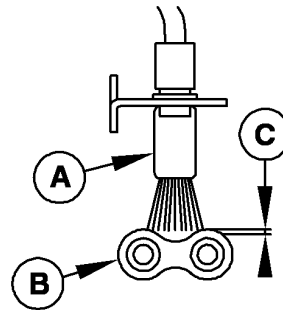
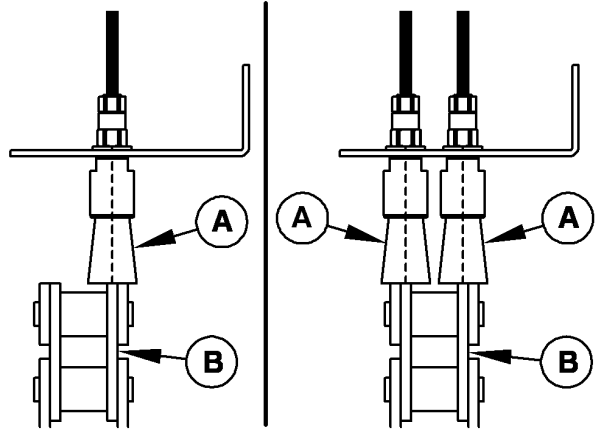
**Specification**

Brush to Chain—Overlap  
 Length.....0—2 mm  
 (0—0.08 in.)

This adjustment is necessary to clean and lubricate the drive chain correctly. Other adjustments may lead to chain premature wear.

A—Brush  
 B—Chain

C—Brush to Chain Overlap  
 Length



CC1035277

CC1035277 —UN—23SEP11

OUCC006,000181D -19-11OCT11-1/1

## Replace Precutter Knives

**CAUTION:** To avoid injury or death by being cut by a knife, always move shutoff valve lever (A) in lock position before replacing knives.

Always wear gloves to handle knives.

*NOTE: Each knife (D) can be separately removed or replaced.*

To replace a knife, proceed as follows:

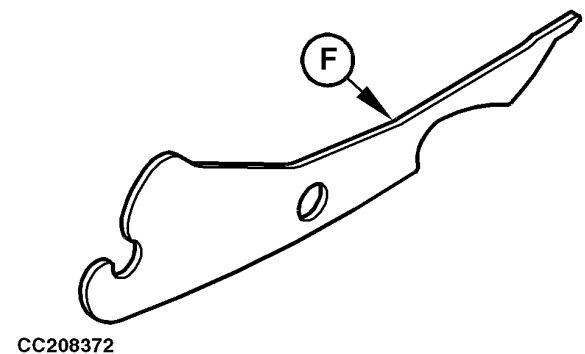
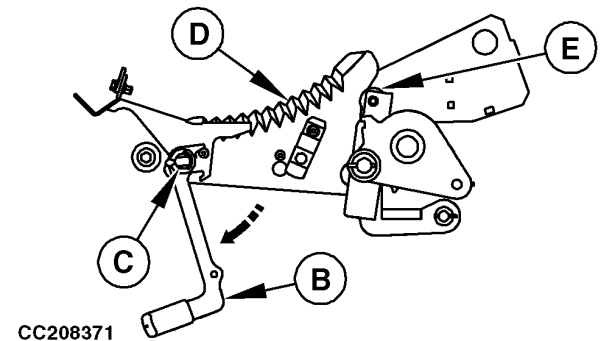
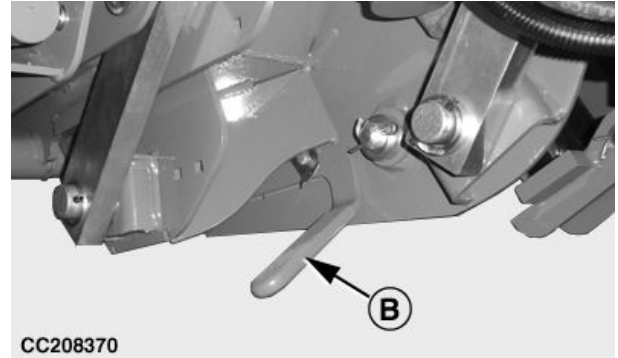
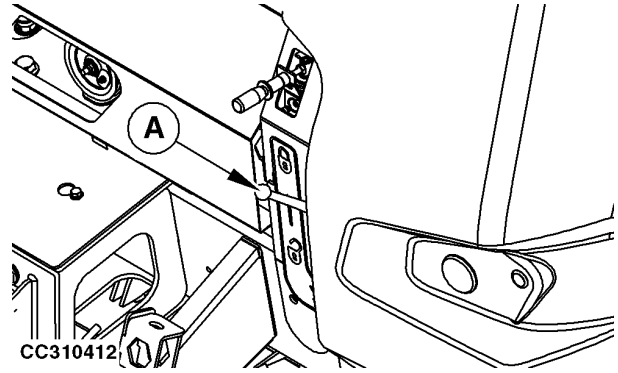
1. Retract knives. See [Retract or Engage Precutter Knives Function](#) in Operating BaleTrak Monitor section.
2. Lower the drop floor. See [Unplug Rotary Feeder in Operating BaleTrak Monitor section](#).
3. Fully open the gate.
4. Lock gate. See [Secure Gate Safely](#) in Safety section.
5. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
6. Close knife shutoff valve using lever (A).
7. On left side, pull the lever (B) out of its locking pin and lower it.
8. Pull on knife (D) to remove it from guide (E) and bar (C).
9. To install a knife, simply insert knife (D) first on the bar (C), then place it in guide (E).

**IMPORTANT:** When a knife is no longer required, it is recommended to install the knife slot filler (F) instead. This will avoid crop accumulation in the missing knife slot.

10. Raise and secure lever (B) in the locking pin.
11. Lower the gate.
12. Open knife shutoff valve by positioning lever (A) downwards and raise drop floor.

A—Precutter Knife Shutoff Valve Lever  
B—Lever  
C—Bar

D—Knife  
E—Guide  
F—Knife Slot Filler



CC310412—UN—18APR17

CC208370—UN—09DEC13

CC208371—UN—09DEC13

CC208372—UN—09DEC13

ga87848,1682678883638 -19-01JUN23-1/1

### Sharpen Precutter Knives

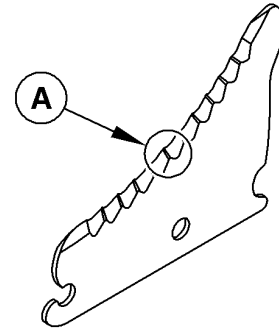
**CAUTION:** Prevent personal injury by wearing gloves to handle knives.

Remove knives from the machine. See Replace Precutter Knives in this section.

Clamp knives to a bench or table.

Draw-file the smooth bevelled edge maintaining a 12° angle. See your John Deere dealer for more information on the knife sharpener device.

**IMPORTANT:** Heating precutter knives during sharpening process may reduce precutter knife life. If tooth profile (A) disappears, replace knife.



CC1029106

A—Tooth Profile

ga87848,1677760226410 -19-02MAR23-1/1

CC1029106—UN—08JAN07

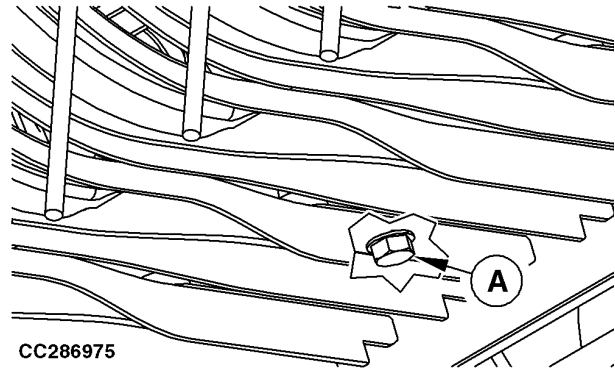
### Replace Pickup Tooth

**CAUTION:** Before working on the baler, disengage the PTO, place transmission in PARK, engage park brake, shut off engine, remove ignition key and wait for moving parts to come to a standstill.

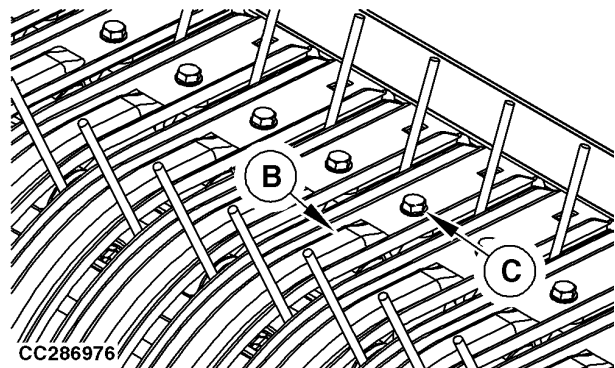
1. Remove bottom screw (A).
2. Remove upper screw (C) then remove stripper (B).

A—Bottom Screw  
B—Stripper

C—Upper Screw



CC286975



CC286976

CC286975—UN—03AUG16

CC286976—UN—03AUG16

Continued on next page

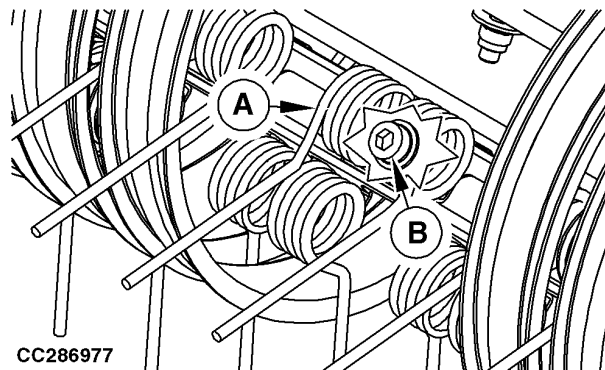
NB02380,00001BC -19-07OCT16-1/3

3. Remove screw (B).
4. Replace damaged pickup tooth (A). Pickup tooth must be fitted as shown.
5. Install and tighten screw (B) to specified torque.

**Specification**

Tooth Screw—Torque.....64 N·m  
(47 lb·ft)

**A—Tooth**                                      **B—Screw**



CC286977—UN—03AUG16

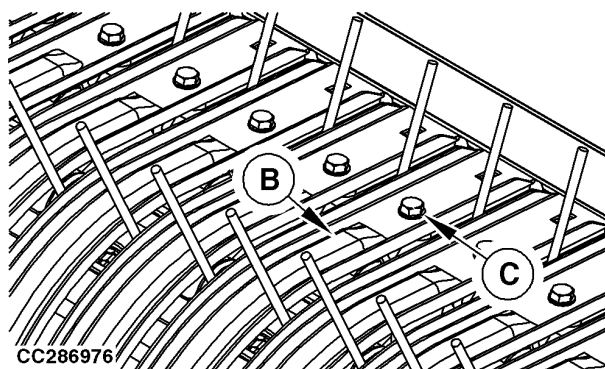
NB02380,00001BC -19-07OCT16-2/3

6. Replace stripper (B) if necessary. Install the stripper as shown.
7. Install upper screw (C) then bottom screw (A).
8. Tighten screws (A) and (C) to specified torque.

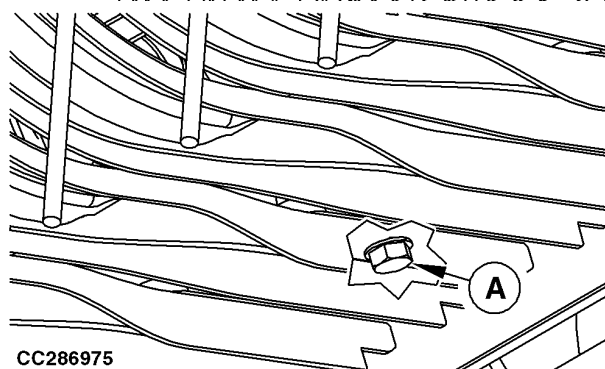
**Specification**

Stripper  
Screws—Torque.....25 N·m  
(18 lb·ft)

**A—Bottom Screw**                                      **C—Upper Screw**  
**B—Stripper**



CC286976—UN—03AUG16



CC286975—UN—03AUG16

NB02380,00001BC -19-07OCT16-3/3

### Adjust Tension Arm Spring

If spring has been replaced or screws has been removed, adjust spring as follows:

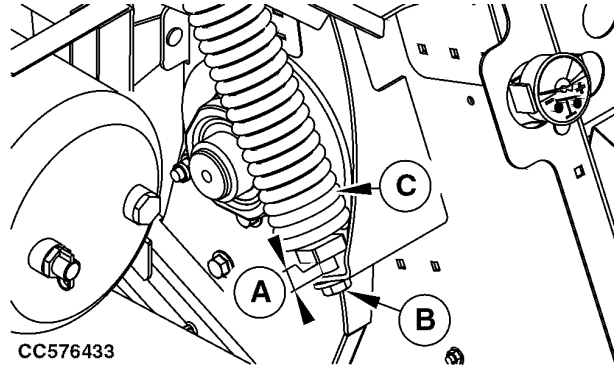
Tighten or loosen screw (B) until specified distance (A) is obtained.

**Specification**

Tension Arm Spring Bracket-to-Bottom of Tension Arm Spring—Distance.....	16—24 mm (5/8—1 in)
---	------------------------

**A—Distance**  
**B—Screw**

**C—Spring**



CC576433 —JUN—04MAY23

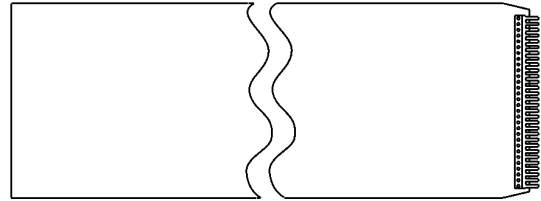
ga87848,1682679990202 -19-28APR23-1/1

### Prepare Belt: New Belt

**NOTE:** John Deere belt spare parts are delivered longer than recommended length and with only a hook on the chamfer side.

Accordingly the belt must be cut and hooked at the specified recommended length.

1. Unroll belt on a flat ground.



CC423768

CC423768—UN—03DEC20

GA87848,000106F -19-22DEC20-1/4

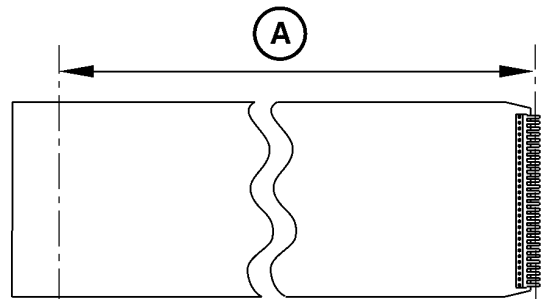
**IMPORTANT:** Belt length (A) is measured from pin to pin axis as if installed on the machine.

2. Measure belt length specification as specified:

	Specification
V451G Belt—Length.....	11.650 ± 0.015 m (38 ft 2-21/32 in ± 19/32 in)
V451M Belt—Length.....	11.650 ± 0.015 m (38 ft 2-21/32 in ± 19/32 in)
V461M Belt—Length.....	12.845 ± 0.015 m (42 ft 45/64 in ± 19/32 in)

3. Mark the belt so it matches specified belt length (A).

A—Specified Length



CC423769

CC423769—UN—03DEC20

GA87848,000106F -19-22DEC20-2/4

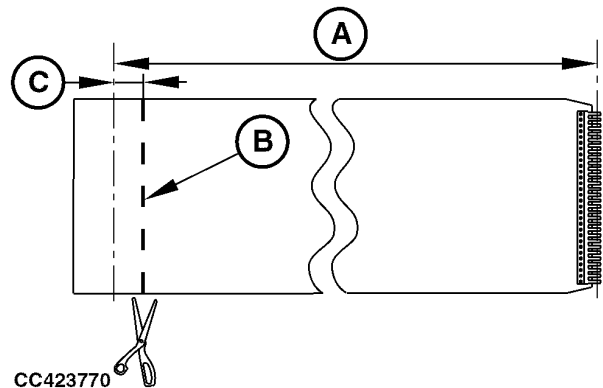
4. Make a new mark (B) 5 mm (3/16 in) from the previous mark as shown.

**NOTE:** Offset correspond to the distance (C) between rubber end and the pin axis.

5. Cut the belt on mark (B) using belt cut tool.

A—Specified Length  
B—Cutting Mark

C—Distance



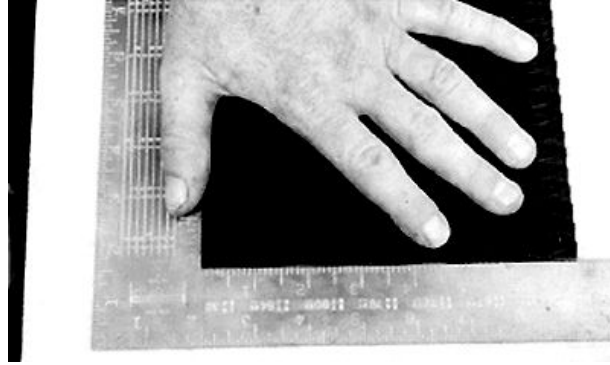
CC423770

CC423770—UN—03DEC20

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GA87848,000106F -19-22DEC20-3/4

6. Check belt to make sure that it is cut squarely as shown.
7. Install belt hook. See [Install Belt Hooks](#) in this section.



E21798 —UN—24JUN99

GA87848,000106F -19-22DEC20-4/4

## Repair Belts

**IMPORTANT:** Belts may fray at the edges or cut. Trim the frayed cords as they appear. Avoid the risk of frayed cords being caught or wrapped around rolls as the bale is formed, causing additional fraying or damage to the belts.

*NOTE:* If belts are shorter than the specified dimensions, add a belt extension kit.

*Replace both side of hooks when repairing belts.*

Proceed as follows for emergency or recommended repair:

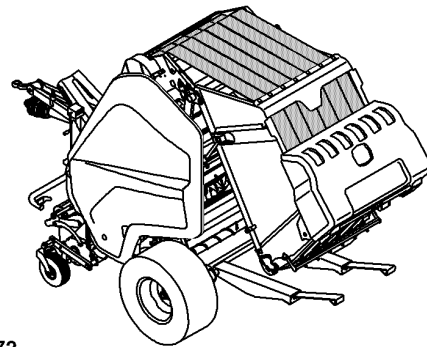
- Emergency repair: Repair quickly one or several belts while working in the field. Need to proceed to recommended repair as soon as possible.
- Recommended repair: Repair the 6 belts and replace all hooks of each belt. Need to be done after an emergency repair or if at least one or more belt, or belt hooks are damaged.

### Emergency Repair:

1. Remove damaged belt. See [Remove Belts](#) in this section.
2. Measure damaged belt length.

*NOTE:* Belt length before and after repair must be the same.

3. Cut the belt so that it matches the same length with a belt extension kit. See [Prepare Belt: Emergency Repair](#) in this section.
4. Install hooks. See [Install Belt Hooks](#) in this section.
5. Install belt. See [Route Belts Through the Baler and Install Belts](#) in this section.



CC368972

6. Adjust tracking of belts. See [Adjust Tracking of Belts](#) in this section.
7. As soon as possible, apply recommended repair procedure. See the following recommended repair procedure.

### Recommended Repair:

1. Remove all belts. See [Remove Belts](#) in this section.
2. Cut belts to remove hooks on both ends and ensure that belts length matches specification. See [Prepare Belt: Recommended Repair](#) in this section.
3. Install hooks. See [Install Belt Hooks](#) in this section.
4. Install belt. See [Route Belts Through the Baler and Install Belts](#) in this section.
5. Adjust tracking of belts. See [Adjust Tracking of Belts](#) in this section.

CC368972 —UN—15JAN19

GA87848,00010E2 -19-20JAN21-1/1

### Remove Belts

1. Start tractor engine and switch on the monitor.
2. Make sure that the gate latch sensors are correctly powered (LED light ON when the gate is closed).
3. Fully open gate and secure it with safety lock device.

**⚠ CAUTION: Make sure that gate is locked. If gate is not locked while performing this procedure, the gate could close suddenly causing injury or death.**



TS688 —UN—21SEP89

GA87848,000106D -19-22DEC20-1/3

4. Insert M16 screw in hole (A) on both side.
5. Position a magnet in front of one of the gate sensors.
6. Disconnect the hydraulic hose for gate opening.
7. Actuate SCV as to close the gate until the tension arm is fully raised.
8. Shut off tractor engine and monitor.

**A—Hole**



CC406013

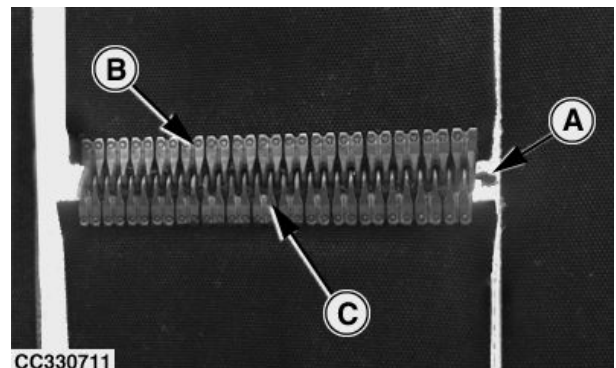
CC406013 —UN—04MAR20

GA87848,000106D -19-22DEC20-2/3

9. Rotate pin (A) with pliers and pull it from the lacing.
10. Remove belt.
11. Check belt hooks (B) and (C) for wear or damage. Replace worn or damaged parts.

**A—Splice Pin**  
**B—Belt Hook**

**C—Belt Hook**



CC330711

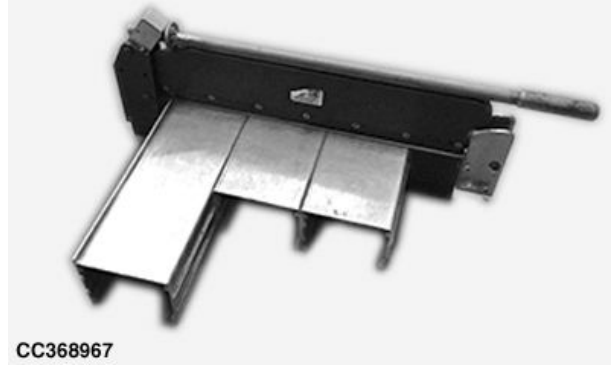
CC330711 —UN—26SEP17

GA87848,000106D -19-22DEC20-3/3

### Prepare Belt: Emergency Repair

#### Belt Cut Tool

To remove damaged belts area, it is recommended to use a cut tool as shown. See your John Deere dealer.



CC368967

Belt Cut Tool—MC464300012

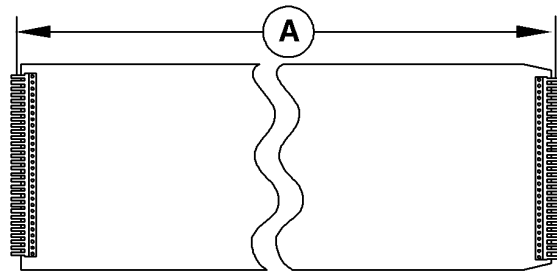
CC368967—UN—21DEC18

GA87848,0001070 -19-22DEC20-1/4

**IMPORTANT:** Make sure that the distance between two hooks is at least 2 m.

*NOTE:* Belt length (A) is measured from pin to pin axis as if installed on the machine.

A—Length



CC368973

CC368973—UN—21JAN19



CC368968

CC368968—UN—23JAN19

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GA87848,0001070 -19-22DEC20-2/4

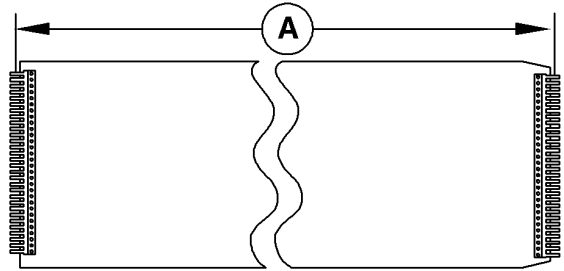
1. Measure belt length (A).
2. Cut the belt so that it matches the measured length (A) with a belt extension kit.

**Specification**

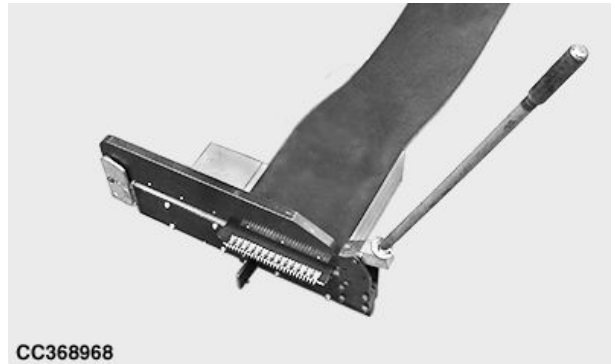
Belt Extension Kit—Minimum Length..... 2 m  
(6 ft 7 in)

3. Check belt to make sure that it is cut squarely as shown.
4. Check that belt length (A) with belt extension is the same as the measured length.

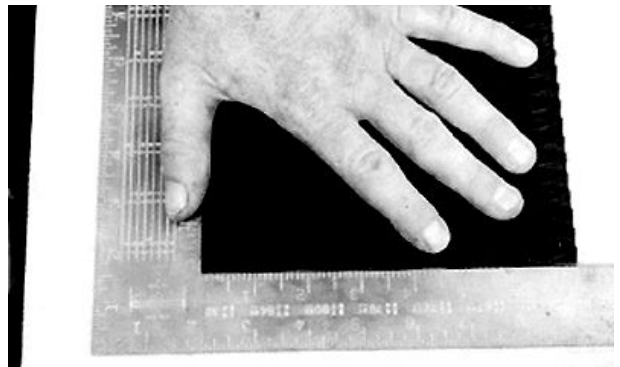
**A—Length**



CC368973



CC368968



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GA87848,0001070 -19-22DEC20-3/4

CC368973—UN—21JAN19

CC368968—UN—23JAN19

E21798—UN—24JUN99

**IMPORTANT: Cut belts trim trailing end ONLY in the travel direction.**

**DO NOT vary from these dimensions.**

5. Cut belts so trim trailing end is within specification:

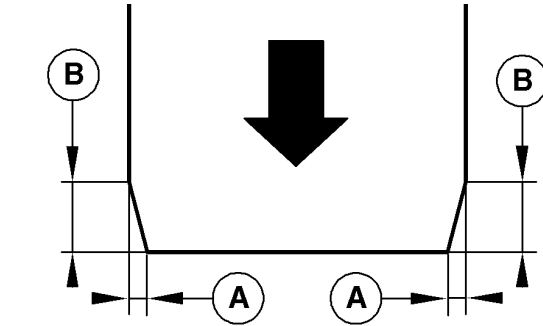
**Specification**

A—Trim Trailing End  
Width—Distance..... 6 mm  
(1/4 in)

**Specification**

B—Trim Trailing End  
Height—Distance..... 25—26 mm  
(63/64 in—1-1/32 in)

6. Install belt hook. See Install Belt Hooks in this section.



CC368965

A—Distance

B—Distance

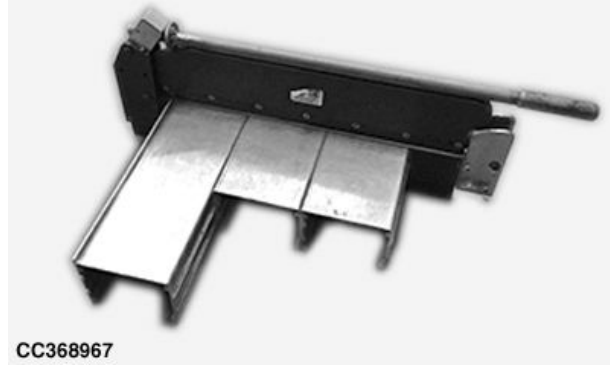
CC368965—UN—17/JAN19

GA87848,0001070 -19-22DEC20-4/4

## Prepare Belt: Recommended Repair

### Belt Cut Tool

To remove damaged belts area, it is recommended to use a cut tool as shown. See your John Deere dealer.



CC368967

Belt Cut Tool—MC464300012

GA87848,0001071 -19-22DEC20-1/3

CC368967—UN—21DEC18

**IMPORTANT:** As a recommended repair, replace all hooks of each 6 machine belts.

**Make sure that the distance between two hooks is at least 2 m.**

*NOTE:* To replace hooks, cut the belt at the end of the hooks.

1. Check that belt length (A) is within specification.
  - If belt length (A) is longer than specification: Mark the belt at belt length specification.
  - If belt length (A) is shorter than belt length specification: Mark the belt so it matches belt length specification with a belt extension kit.

#### Specification

Belt Extension	
Kit—Minimum Length.....	2 m (6 ft 7 in)

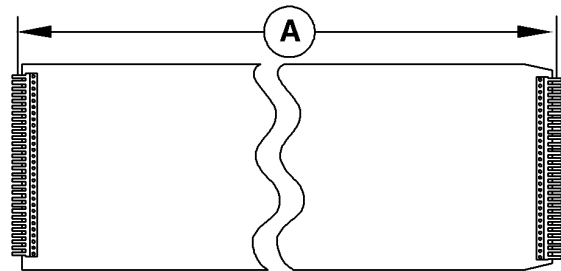
*NOTE:* Belt length (A) is measured from pin to pin axis as if installed on the machine.

#### Specification

V451G Belt—Length.....	11.650 ± 0.015 m (38 ft 2-1/2 in ± 19/32 in)
V451M Belt—Length.....	11.650 ± 0.015 m (38 ft 2-1/2 in ± 19/32 in)
V461M Belt—Length.....	12.845 ± 0.015 m (42 ft 45/64 in ± 19/32 in)

2. Cut the belt at the define length (A).
3. Check belt to make sure that it is cut squarely as shown.

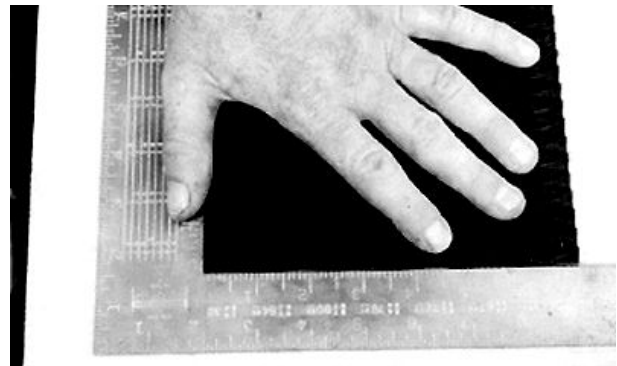
**A—Length**



CC368973



CC368968



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GA87848,0001071 -19-22DEC20-2/3

CC368973—UN—21JAN19

CC368968—UN—23JAN19

E21798—UN—24JUN99

**IMPORTANT: Cut belts trim trailing end ONLY in the travel direction.**

**DO NOT vary from these dimensions.**

4. Cut belts so trim trailing end is within specification:

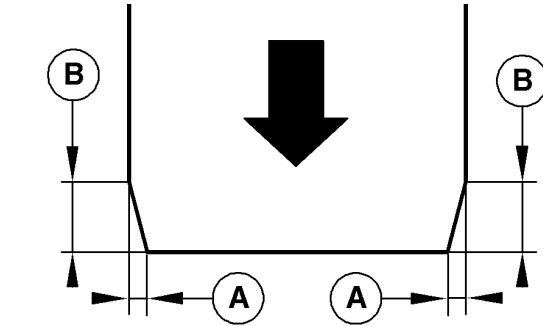
**Specification**

A—Trim Trailing End  
Width—Distance..... 6 mm  
(1/4 in)

**Specification**

B—Trim Trailing End  
Height—Distance..... 25—26 mm  
(63/64 in—1-1/32 in)

5. Install belt hook. See Install Belt Hooks in this section.



CC368965

A—Distance

B—Distance

CC368965—UN—17JAN19

GA87848,0001071 -19-22DEC20-3/3

### Install Belt Hooks

#### Belt Lacing Tools

To fasten lacings segments to bale forming belts, it is recommended to use a belt lacing tool with a punch or a pneumatic hammer as shown.

The belt lacing tool requires a vice being installed on a desk.

See you John Deere dealer.



CC368964

Belt Lacing Tool—MC411295872

E40772—UN—08AUG96



Pneumatic Hammer—MC411295806

CC368964—UN—09JAN19

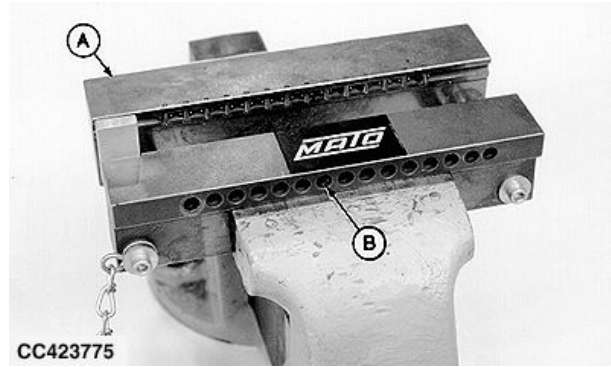
Continued on next page

GA87848,0001072 -19-22DEC20-1/7

1. Put belt lacing tool (A) in a vice with holes (B) toward the operator. The lacer shoulder should rest on jaws of vise.

A—Belt lacing tool

B—Hole



CC423775 —UN—01DEC20

GA87848,0001072 -19-22DEC20-2/7

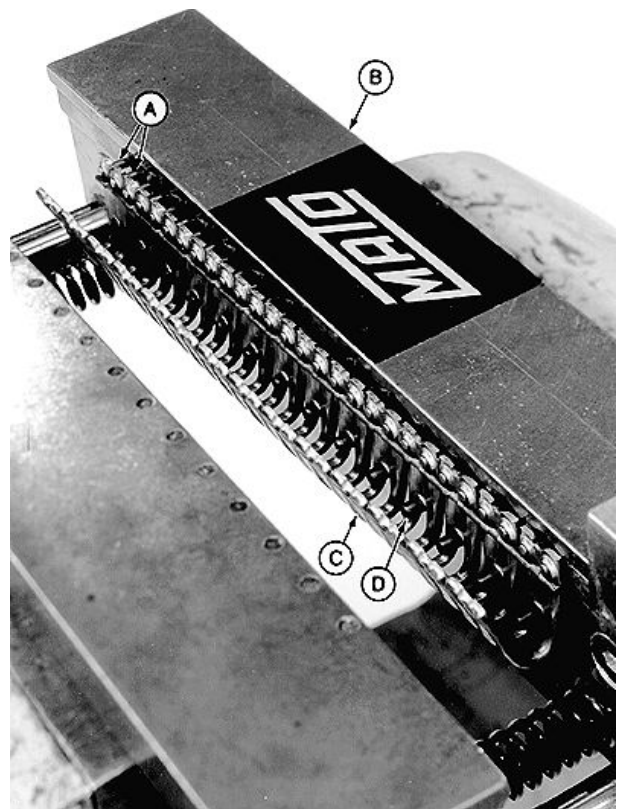
2. Install lacing strip (C) in lacing tool (B). Make sure that two rivet pins (A) of each lacing segment is inserted into each of the tool's 15 holes. The lacing segments should rest against stop pins (D).
3. Tighten vice until the lacing strip is lightly gripped and the belt can be easily inserted.

A—Pin

B—Lacing Tool

C—Strip

D—Stop pin



E40774 —UN—08AUG96

Continued on next page

GA87848,0001072 -19-22DEC20-3/7

**IMPORTANT:** Hook has a lateral offset inside lacing tool. Hooks must be installed as shown to ensure belt ends alignment.

When only one hook needs to be installed, observe first hook position to determine belt side into the lacing tool. If necessary, flip belt.

When both hooks need to be installed, belt must be flipped between first and second clinch.

**IMPORTANT:** Check that belt side is pressed along stop plate (A). Belt edges must be aligned when hooks are assembled.

4. Install belt (D) in lacing strip while holding edge of belt against stop plate (C), uniformly push belt down to the stop pins. Make sure that lacing strip is against stop pins.

*NOTE: The lacing tool is equipped with a stop, do not tighten the vice too much to keep an evenly distribute pressure on the belt.*

5. Make sure that belt and lacing are positioned squarely in lacer tool. Close vice on belt and lacing until distance between lacer jaws equals width of belt.

**IMPORTANT:** If using a hand punch (E), using too large of a hammer or striking punch too hard can damage lacing tool or belt lacing.

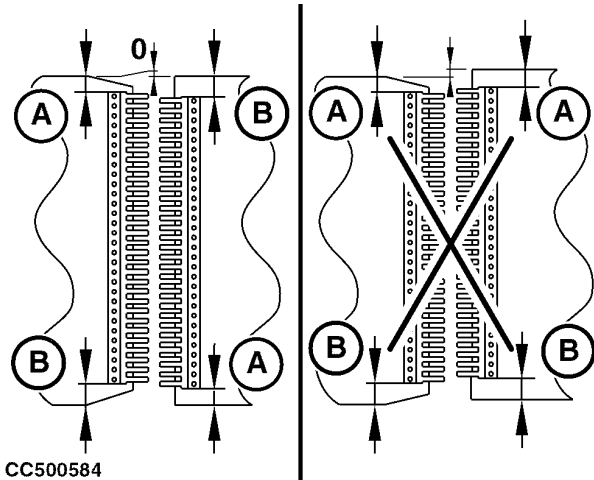
If using a pneumatic hammer (F), too high air pressure and/or too long riveting time can damage lacing tool or belt lacing.

6. Drive the rivets through the belt using punch (E) or pneumatic hammer (F).

For proper installation, use the following instructions:

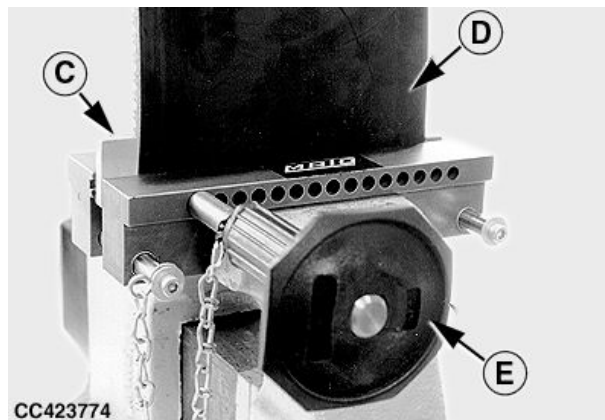
Rivet both outer lacing segments first, then, working from the outside to the inside, rivet the rest of the lacing segments.

- If using punch (E), drive rivets until shoulder on punch contacts lacing tool jaw. Hit punch an additional time to ensure contact between shoulder and lacing tool jaw.
- If using pneumatic hammer (F), set air pressure to 500—600 kPa (5—6 bar) (72.5—87 psi). Operate hammer for 1—2 seconds for each rivet. Re-riveting is usually not necessary.



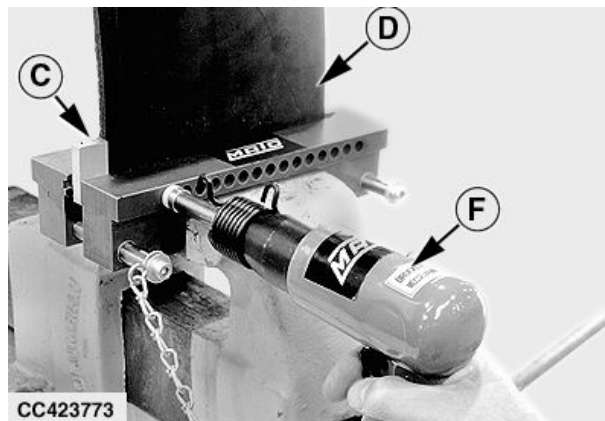
CC500584

CC500584 —UN—14DEC20



CC423774

CC423774 —UN—11DEC20



CC423773

CC423773 —UN—11DEC20

C—Stop Plate  
D—Belt

E—Hand Punch  
F—Pneumatic Hammer

Continued on next page

GA87848,0001072 -19-22DEC20-4/7

7. Remove belt from vice and inspect hooks. All rivets should be driven through belt and show punch marks in center of rivet.

**IMPORTANT: Do not hit the loop area of the fastener when using hammer to flatten heads of rivets.**

**Do not hit rivets too hard or they may buckle and damage joints.**

8. Put belt with hooks on a solid base. Flatten heads of rivets using the flat face of a small hammer. Strike several rivets at a time using a light "tapping" motion. Rivets should be flush with splice.



CC368975

CC368975 —UN—23JAN19

GA87848.0001072 -19-22DEC20-5/7

9. Check hook (A) perpendicularity with belt (D) as shown.

- a. Position try square (C) 5 cm (2 in) away from the belt end.

**IMPORTANT: Press the thicker side of try square (C) along the side of belt (D) as shown.**

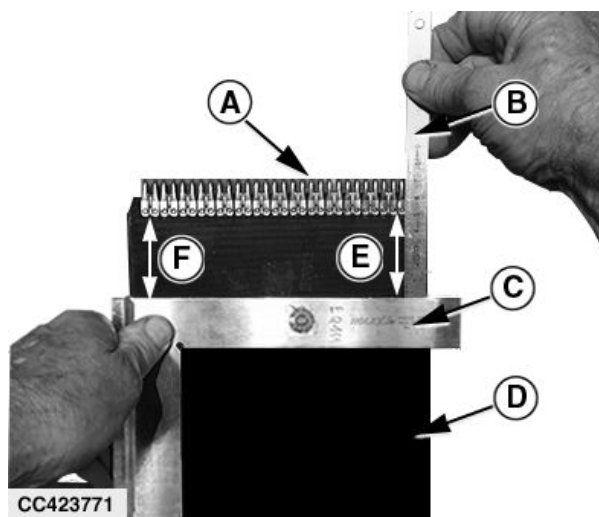
- b. Measure distance (E) and (F) on each hook extremities. Distances (E) and (F) must be the same.

**Specification**

E - F—Distance.....  $0 \pm 1 \text{ mm}$   
 (  $0 \pm 1/32 \text{ in}$  )

- c. Repeat this step for the second hook.

- If OK, go to next step.
- If not OK, repeat procedure. See [Prepare Belt: Recommended Repair](#) in this section.



CC423771

CC423771 —UN—10DEC20

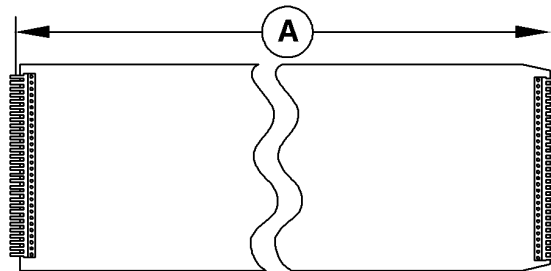
A—Hook  
 B—Ruler  
 C—Try Square  
 D—Belt  
 E—Distance  
 F—Distance

GA87848.0001072 -19-22DEC20-6/7

10. Recheck belt length (A).

11. Install belt. See [Install Belts](#) in this section.

**A—Specified Length**

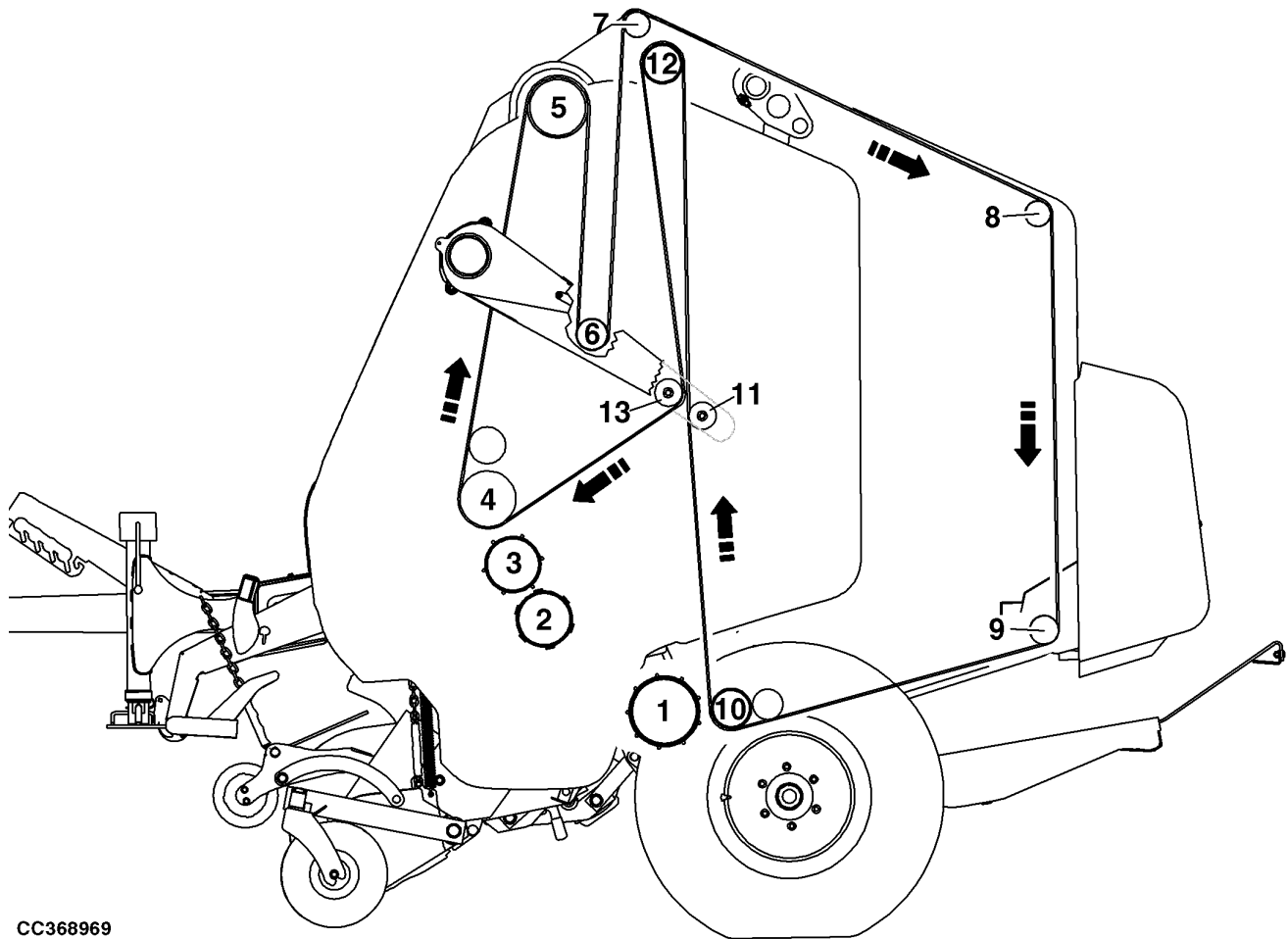


CC368973

CC368973 —UN—21JAN19

GA87848.0001072 -19-22DEC20-7/7

### Route Belts Through the Baler



CC368969

CC368969 —UN—20DEC18

Route belts as shown in illustration, passing them through the individual guides. See [Install Belts](#) in this section.

GA87848,0001074 -19-08JAN21-1/1

## Install Belts

1. Loosen belt, see [Remove Belts](#) in this section.

**IMPORTANT: Belts must be installed so the trimmed end moves in normal direction of travel (large arrows shown).**

2. Make sure that belts are installed through the individual guides. Check belt routing. See [Route Belts Through the Baler](#) in this section.
3. Route belts so the belt end with square corners (D) leads the trimmed corner (E) as belt moves in normal direction of travel (large arrows).

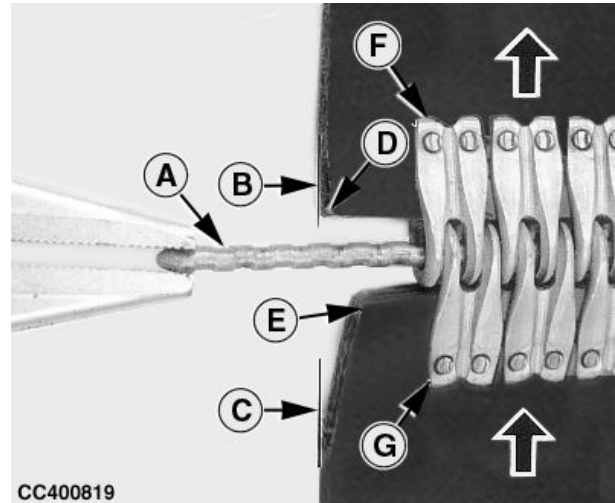
**IMPORTANT: The placement (interlocking) of lacing segments will affect belt edge alignment. Belt edges must align or damage to belts will occur.**

4. Interlock lacing segments making sure belt edge (B) aligns with belt edge (C). If belt edges do not align, reposition the interlocking segments by moving one belt end left (or right) one lacing notch relative to the opposite belt end.

*NOTE: The splice pin is shown rotated 90° (locking position) for illustration purposes only. Pin should be rotated to this position only after pin is fully inserted.*

*NOTE: It is recommended to replace splice pins at least once a year or in case of wear or breakage.*

5. With notches (A) facing toward back side and front side of belts, insert splice pin. Be careful not to deform ends of pin while installing pin. Rotate pin 90° after pin is fully inserted. Make sure lacing segments seat in pin notches.
6. Remove magnet.
7. Remove M16 screws on both side.
8. Connect the hydraulic hose for gate opening.



A—Notches in splice pin  
B—Belt edge (squared end)  
C—Belt edge (trimmed end)  
D—Square corner

E—Trimmed corner  
F—Outer segment (squared end)  
G—Outer segment (trimmed end)

9. Start tractor engine.

**IMPORTANT: Before closing the gate, tension arm must be in lower position to avoid belt damage.**

10. Actuate SCV to open the gate then actuate SCV to close the gate in order to raise the lower tension arm.
11. Unlock gate.
12. Close the gate.
13. Check belt tracking visually if necessary. See [Adjust Tracking of Belts](#) in this section.

GA87848.00010E1 -19-20JAN21-1/1

CC400819 — UN—27FEB20

## Adjust Tracking of Belts

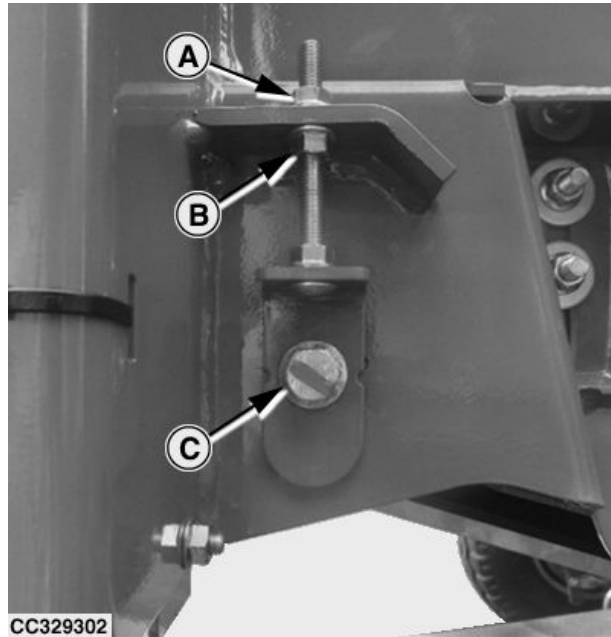
**NOTE:** Soft core function must be disabled.

**NOTE:** Baler must be empty, gate closed, and density set to the maximum.

Observe belt tracking at roll No. 5, 8 and 11 gate upper belt guides by using relevant lifting device.

If belts do not track correctly, use the following procedure:

1. With baler on a level surface, engage PTO and run at nominal speed.
2. Hold tractor SCV lever in gate closing position to apply tension to belts while checking.
3. Shut off tractor engine.
4. Check belt tracking:
  - If belts are centered in the gate guide and in the tension arm guide, belt tracking is OK, go to step 11.
  - If outer belts are slightly in contact with outer guides and inner belts are centered in the guides, belt tracking is OK, go to step 11.
  - If all belts deviate from the same side, go to next step.
5. Start tractor engine
6. Open the gate.
7. Shut off tractor engine.
8. Close the gate with SCV in floating position to relieve hydraulic pressure
9. Loosen counter-nut (B) then loosen or tighten nut (A) to lower or raise lower gate roll (C).
  - If belts track to the right, lower right-hand end of lower gate roll (C).



CC329302

A—Nut  
B—Counter-nut

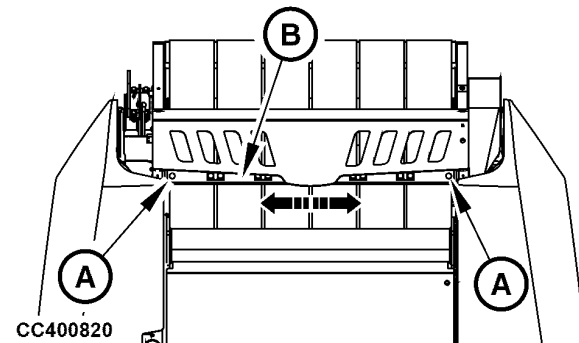
C—Lower Gate Roll

10. Observe belt tracking, then go to step 1.
11. Check front belt guide:
  - If gate guide and tension arm guide are centered with belts, result is OK, go to 15.
  - If gate guide and tension arm guide are not centered, adjust frame belt guide, go to next step.

ga87848,1685105056779 -19-31MAY23-1/2

CC329302—UN—21SEP17

12. Loosen screws (A).
13. Move belt guides bracket (B) so that belt guides are not pressed against the belt.
14. Tighten screws (A).
15. Run baler to ensure that belt do not run against the belt guide.
16. Calibrate bale diameter potentiometer RB311. See [Channel 027: Record Lowest Position of Belt Tension Arm](#) in BaleTrak Monitor Service section.
17. Calibrate bale shape potentiometers RB321 and SB322. See Channels 006 and 007: [Calibrate Bale Shape Potentiometers RB321 and RB322](#) in BaleTrak Monitor Service section.



CC400820

A—Screw

B—Belt Guide Bracket

ga87848,1685105056779 -19-31MAY23-2/2

CC400820—UN—27MAR20

### Adjust Bottom Starter Roll (No. 1) Scraper

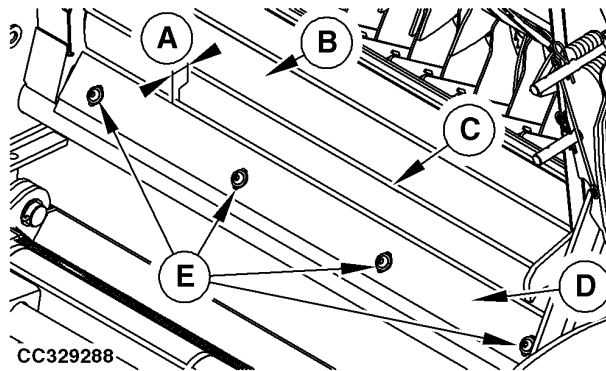
1. Fully open the gate.
2. Engage tractor park lock, shut off tractor engine and remove key.
3. Lock gate, see Secure Gate Safely in Safety Section.

**CAUTION:** Make sure gate is locked. If gate is not locked while performing this procedure, the gate may close suddenly causing injury or death.

4. Open right-hand side door.
5. Remove starter roll drive chain, see Baler Chain Identification in this section to locate chain.
6. Loosen nuts (E).
7. Select the bar (C) for which distance (A) between the bar and scraper (D) is the smallest.
8. Adjust scraper (D) on selected bar (C) to the following specification:

	Specification
Scraper to Bar on	
Roll—Distance.....	2—3 mm (3/32—1/8 in)

9. Rotate roll (B) to check there is no interference between scraper (D) and roll (B).



A—Distance  
B—Bottom Starter Roll (No. 1)  
C—Bar  
D—Scraper  
E—Nut

**IMPORTANT:** Scraper (D) must not rub on lower starter roll (B).

10. On both side, tighten fixing nuts (E) to specified torque:

	Specification
Fixing Nuts—Torque.....	65 N·m (48 lb-ft)

11. Install starter roll drive chain.

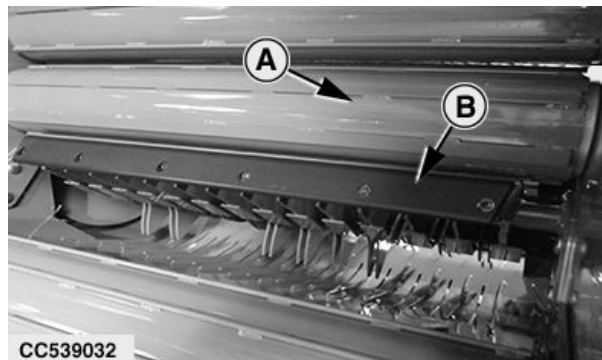
NB02380,00004D7 -19-05SEP17-1/1

### Install Roll No. 2 Scraper

The recommended factory configuration is only with plastic deflector (B) installed in the chamber.

Only when crop sticks around roll n°2 (A) in difficult condition, the machine can be equipped with a scraper.

A—Roll No. 2                      B—Deflector



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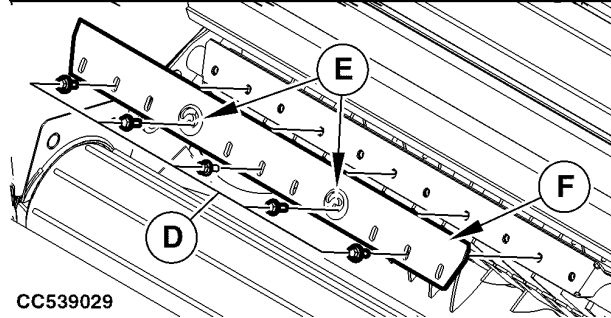
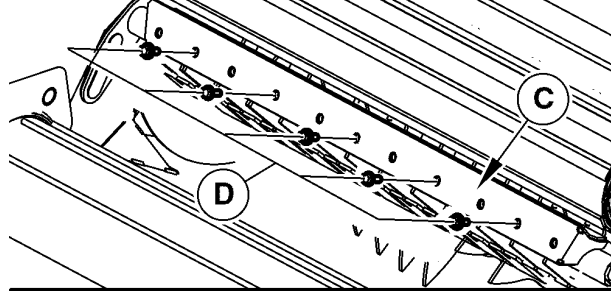
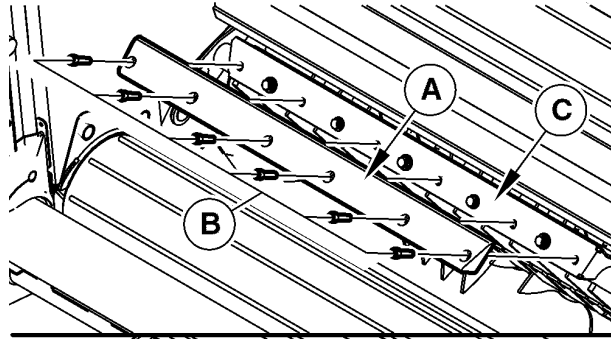
ga87848,1687263736773 -19-28JUN23-1/4

To install the scraper, proceed as follows:

1. Fully open the gate.
2. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
3. Lock gate. See Secure Gate Safely in Safety section.
4. Remove screws (B).
5. Remove deflector (A).
6. Remove screws (D).
7. Remove scraper (F) from storage. See Store Roll No. 2 Scraper in this section
8. Install scraper (F) and eccentric (E) on rotor stripper (C).
9. Install screw (D).

**NOTE:** Do not tight screw to adjust the scraper.

- |                         |                    |
|-------------------------|--------------------|
| <b>A—Deflector</b>      | <b>D—Screw</b>     |
| <b>B—Screw</b>          | <b>E—Eccentric</b> |
| <b>C—Rotor Stripper</b> | <b>F—Scraper</b>   |



CC539029

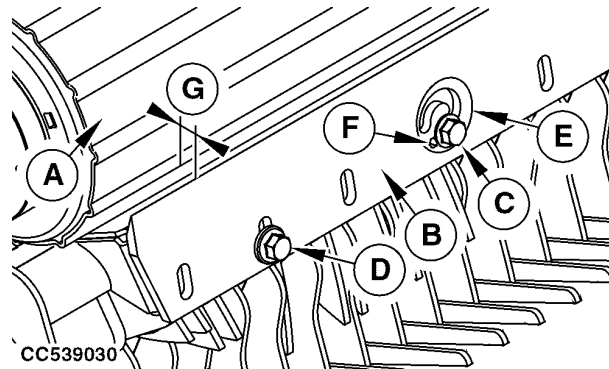
ga87848,1687263736773 -19-28JUN23-2/4

CC539029 —UN—29JUN22

10. Adjust scraper (B) as close as possible to roll (A) by turning eccentrics (E) clockwise by using appropriate tool in hexagonal shapes (F). Leave enough space (G) to avoid any contact with roll (A).
11. Manually rotate baler to check that there is no interference between roll (A) and scraper (B). See Service Machine Safely in Safety section.
12. Tighten scraper fixing screws (C) then (D) to specified torque:

**Specification**

Scraper Fixing	
Screws—Torque.....	111 N·m (82 lb·ft)



CC539030

- |                               |                          |
|-------------------------------|--------------------------|
| <b>A—Upper Starter Roll</b>   | <b>E—Eccentric</b>       |
| <b>B—Scraper</b>              | <b>F—Hexagonal Shape</b> |
| <b>C—Scraper Fixing Screw</b> | <b>G—Space</b>           |
| <b>D—Scraper Fixing Screw</b> |                          |

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CC539030 —UN—29JUN22

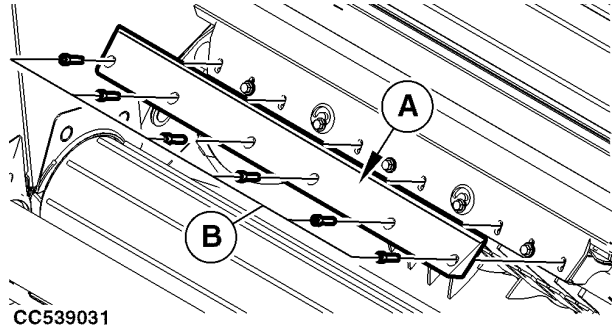
13. Install deflector (A).

14. Install and tighten screws (B) to specified torque:

Specification	
Deflector	
Screws—Torque.....	111 N·m (82 lb·ft)

A—Deflector

B—Screw



CC539031 —JUN—29JUN22

ga87848,1687263736773 -19-28JUN23-4/4

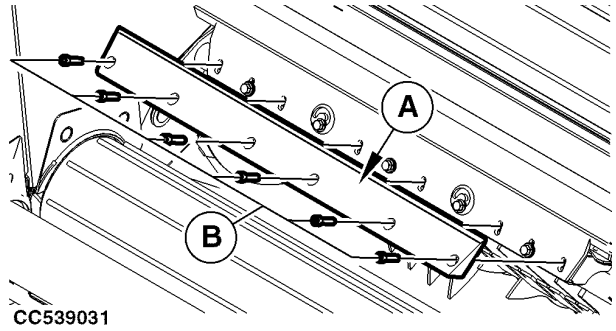
### Remove Roll No. 2 Scraper

If the net wraps around the rotor, or if crop accumulates on top of the scraper, remove the scraper as follows:

1. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
2. Lock gate. see Secure Gate Safely in Safety section.
3. Remove screws (B).
4. Remove deflector (A).

A—Deflector

B—Screw



CC539031 —JUN—29JUN22

Continued on next page

ga87848,1687264271209 -19-27JUN23-1/2

5. Remove screws (A).
6. Remove scraper (C) and eccentric (B).
7. Store scraper (C) and eccentric (B). See Store Roll No. 2 Scraper in this section.
8. Install tighten screws (A) to specified torque:

**Specification**

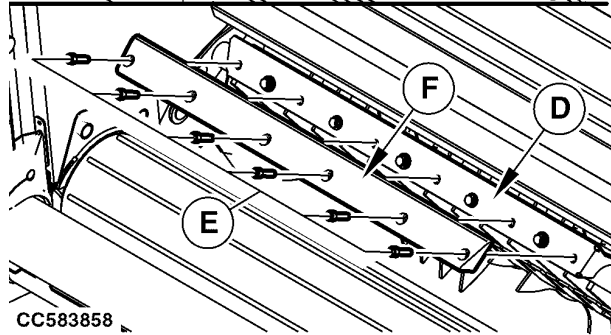
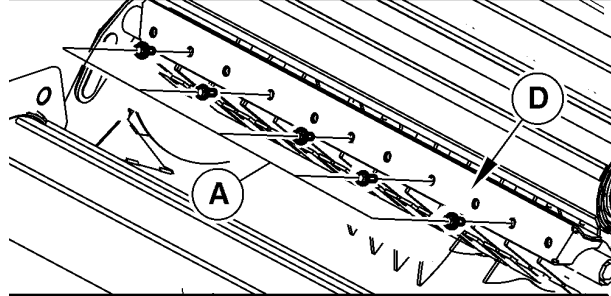
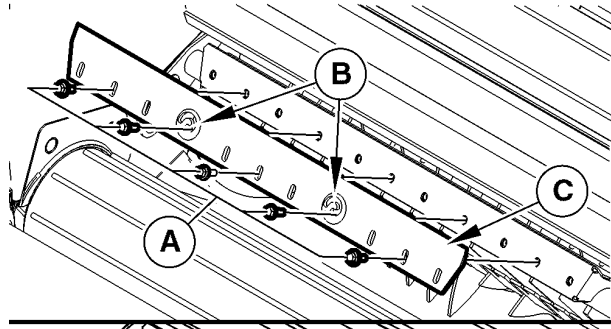
Deflector	
Screws—Torque.....	111 N·m (82 lb·ft)

9. Install deflector (F).
10. Install and tighten screws (E) to specified torque:

**Specification**

Deflector	
Screws—Torque.....	111 N·m (82 lb·ft)

- |                    |                         |
|--------------------|-------------------------|
| <b>A—Screw</b>     | <b>D—Rotor Stripper</b> |
| <b>B—Eccentric</b> | <b>E—Screw</b>          |
| <b>C—Scraper</b>   | <b>F—Deflector</b>      |



CC583858

ga87848,1687264271209 -19-27JUN23-2/2

CC583858 —UN—21JUN23

### Store Roll No. 2 Scraper

For machine equipped with twine binding system, store scraper (F) on the twine box (G).

For machine not equipped with twine binding system, store scraper (F) on the front cover (H).

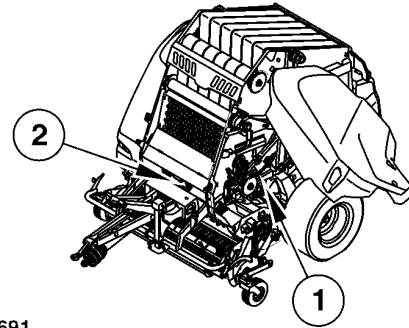
To remove the scraper from storage position, proceed as follows:

1. Remove nuts (A).
2. Remove screws (D).
3. Remove scraper (E) and eccentric (F).
4. Remove washers (B).
5. Remove washers (C).

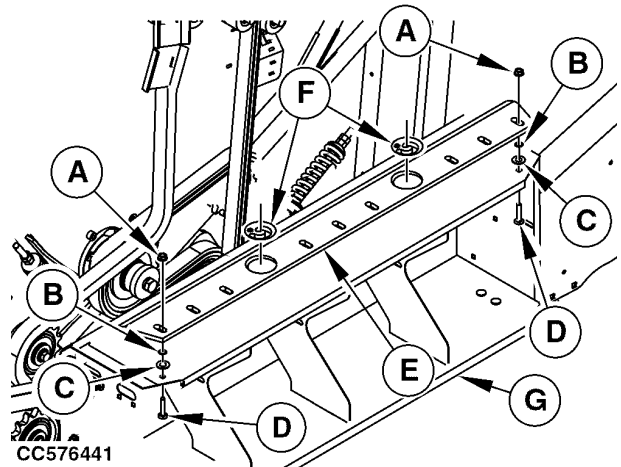
To store the scraper, proceed as follows:

1. Install washers (C).
2. Install washers (B).
3. Install scraper (E) and eccentric (H).
4. Install screws (D).
5. Install nuts (A).

- |   |               |
|---|---------------|
| 1—Storage Location for Machine Equipped with Twine Binding System     | D—Screw       |
| 2—Storage Location for Machine Not Equipped with Twine Binding System | E—Scraper     |
|   | F—Eccentric   |
|   | G—Twine Box   |
|   | H—Front Cover |
| A—Nut   |               |
| B—Washer  |               |
| C—Washer  |               |

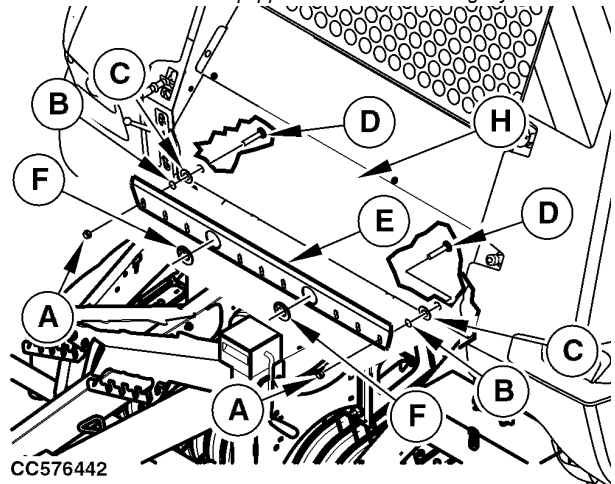


CC398691



CC576441

1—Machine Equipped with Twine Binding System



CC576442

2—Machine Not Equipped with Twine Binding System

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CC398691 —UN—09JAN20

CC576441 —UN—22MAY23

CC576442 —UN—22MAY23

### Install Center Starter Roll (No. 2) Twine Deflector

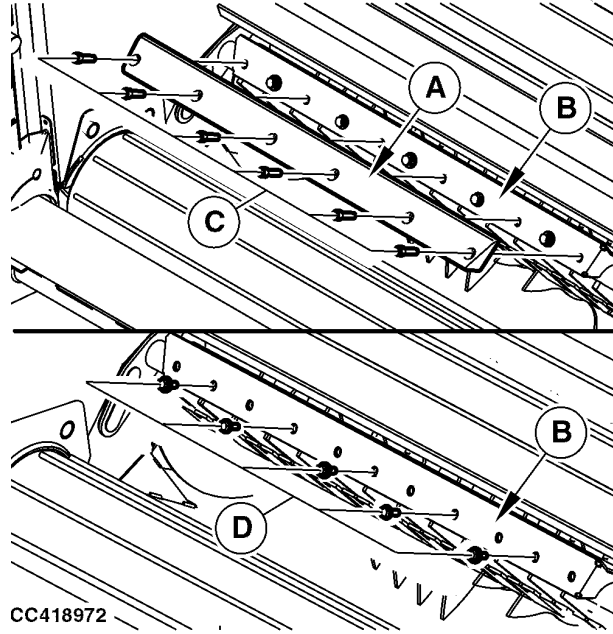
install the twine deflector if the twine is wrapped around the rotor. Proceed as follows:

1. Fully open the gate and secure it.

**⚠ CAUTION:** Make sure that gate is locked. If gate is not locked while performing this procedure, the gate could close suddenly causing injury or death.

2. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove the key.
3. Open left-hand side door.
4. Remove center starter roll (No. 2) drive chain.
5. Remove screws (C).
6. Remove deflector (A).
7. Remove screws (D).

*NOTE: Remove scrapper if equipped.*



CC418972

A—Deflector  
B—Rotor Stripper

C—Screw  
D—Screw

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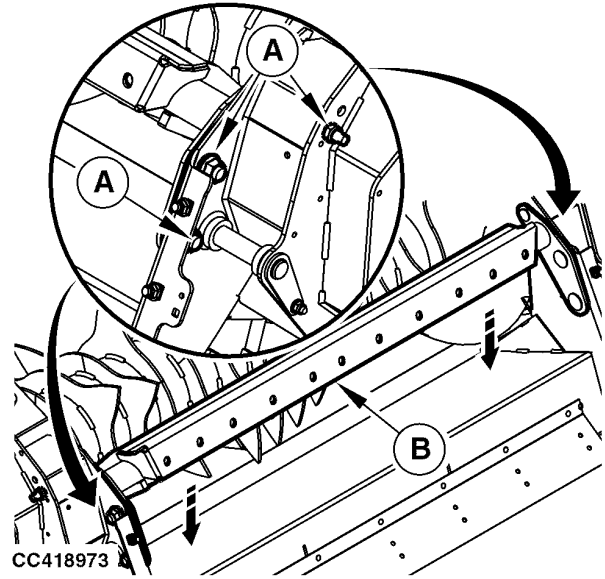
GA87848,0001314 -19-09JUL21-1/4

CC418972—UN—16DEC20

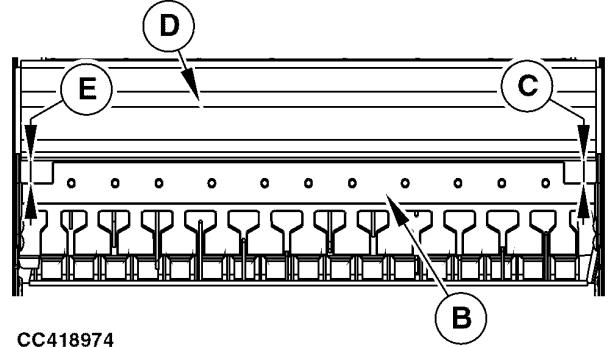
8. Loosen screw (A).
9. Fully lower rotor stripper (B).
10. Make sure that the distance (C) and (E) are the same on both side of the machine.
11. Tighten screw (A).

A—Screw  
 B—Rotor Stripper  
 C—Distance

D—Center Starter Roll (No. 2)  
 E—Distance



CC418973  
 V451M, V461M Rotor Stripper Shown



CC418974  
 V451M, V461M Rotor Stripper Shown

Continued on next page

GA87848,0001314 -19-09JUL21-2/4

CC418973 —UN—16DEC20

CC418974 —UN—16DEC20

12. Install twine deflector (A) on rotor stripper (B).
13. Install screws (C) until the head is in contact with twine deflector (A).
14. Use a tool to push and maintain the twine deflector to obtain the maximal possible gap (E) between the twine deflector (A) and center starter roll (No. 2) (D).

**Specification**

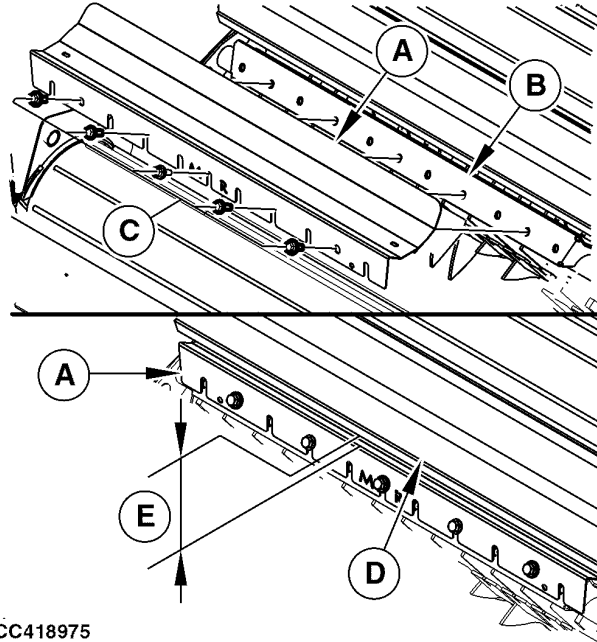
Twine Deflector-to-Center Starter Roll (No. 2)—Gap..... Maximum Possible

15. Tighten screws (C) to the specified torque:

**Specification**

Deflector Screw—Torque..... 111 N·m (82 lb·ft)

**A—Twine Deflector**                      **D—Center Starter Roll (No. 2)**  
**B—Rotor Stripper**                      **E—Gap**  
**C—Screw**



CC418975

CC418975—UN—16DEC20

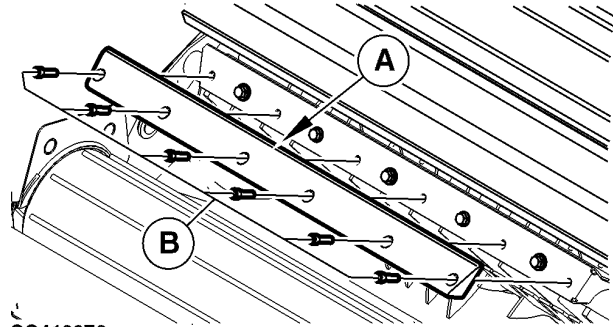
GA87848,0001314 -19-09JUL21-3/4

16. Install deflector (A).
- NOTE: Do not install the scrapper.*
17. Install and tighten screws (B) to the specified torque:

**Specification**

Deflector Screw—Torque..... 111 N·m (82 lb·ft)

**A—Deflector**                      **B—Screw**



CC418976

CC418976—UN—16DEC20

GA87848,0001314 -19-09JUL21-4/4

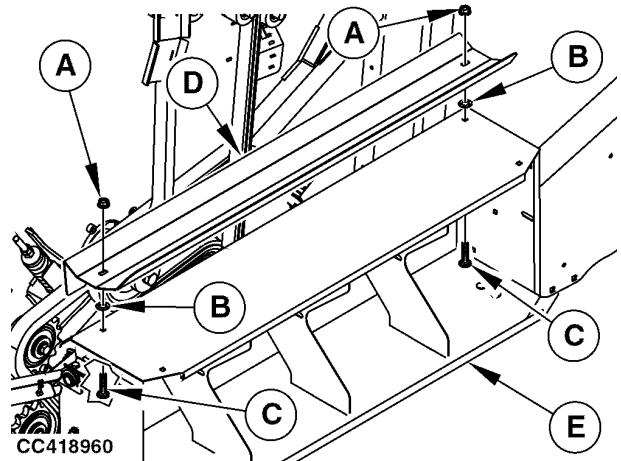
### Store Center Starter Roll (No. 2) Twine Deflector

To remove twine deflector (D) from its storage, proceed as follows:

1. Remove nuts (A).
2. Remove screws (C).
3. Remove twine deflector (D).
4. Install screws (C) on twine box (E).
5. Install nuts (A) on screws (C).

To store twine deflector (D), proceed as follows:

1. Remove nut (A).
2. Remove screw (C).
3. Install washer (B) on twine box (E).
4. Install twine deflector (D) on twine box (E) as shown.
5. Install screws (C).
6. Install nuts (A).



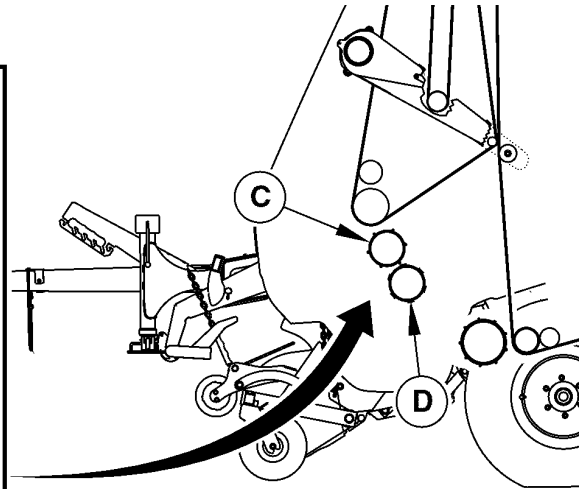
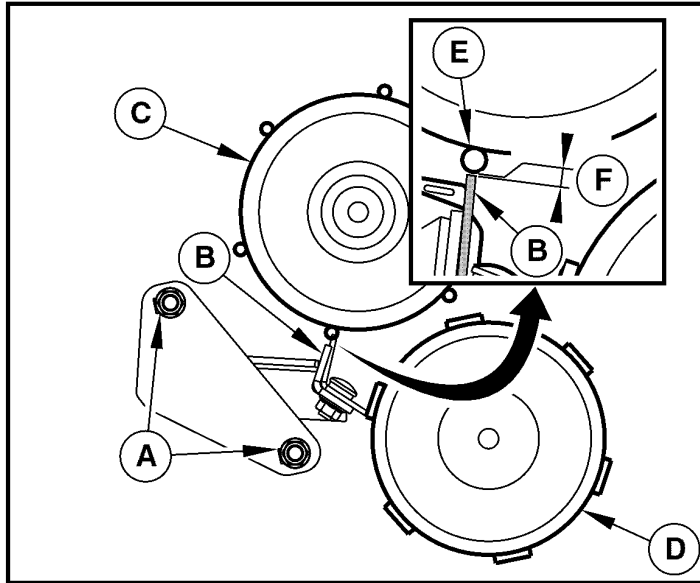
A—Nut  
B—Washer  
C—Screw

D—Twine Deflector  
E—Twine Box

CC418960 —UN—14DEC20

GA87848,0000F9E -19-07SEP20-1/1

### Adjust Upper Starter Roll (No. 3) Scraper (Machine Equipped with Twine Binding)



CC516998 —UN—09.JUL.21

CC516998

A—Nut  
B—Scraper  
C—Upper Starter Roll

D—Lower Starter Roll  
E—Upper Starter Roll Bar

F—Distance

1. Engage park brake and/or place transmission in PARK. Shut off the engine of the tractor and remove the key.
2. Remove the starter roll drive chain. See [Baler Chain Identification](#) in this section to locate the chain.
3. Lower the pickup and remove the chains. See [Adjust Pickup Downstops](#) in Operating the Baler—General Purposes.
4. If equipped, remove roller baffle.
5. Loosen nuts (A) on both side.
6. Move scraper (B) as close as possible to upper starter roll bar (C) and maintain it.
7. Tighten nuts (A).

8. Check that distance (F) between upper starter roll bar (C) and scraper (B) is within specification among its entire width:

**Specification**

Upper Starter Roll-to-Scraper—Distance.....As close as possible without contact.

9. Fully rotate upper starter roll (C) to check for contacts. Go to step 3 as required.
10. If equipped, install roller baffle.
11. Install pickup chains. See [Adjust Pickup Downstops](#) in Operating the Baler—General Purposes.
12. Install the starter roll drive chain.

GA87848,0001315 -19-09.JUL.21-1/1

### Adjust Lower Rear Gate Roll (No. 9) Scraper

To adjust scraper proceed as follows:

1. Check if distance (D) on both end of scraper (B). If it is OK go to step 5, otherwise go to next step.
2. Loosen screws (C) on both side.
3. Move scraper bracket to obtain the same distance (D) on both scraper (B) end.
4. Tighten screws (C) on right hand side then on left hand side to following specification.

**Specification**

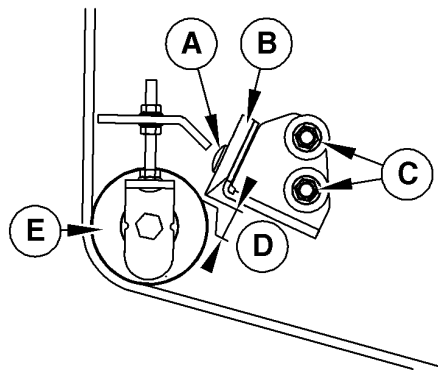
Lower Rear Gate Roll (No. 9) Scraper Bracket Screws—Torque.....	65 N·m (48 lb·ft)
---	----------------------

5. Check if distance (D) is within specification, if necessary go to next step to adjust distance (D).

**Specification**

Lower Rear Gate Roll (No. 9) Scraper-to-Roll (No. 9)—Distance.....	2—3 mm (3/32—1/8 in)
--	-------------------------

6. Loosen screws (A).
7. Move scraper (B) to obtain the specified distance (D) between scraper (B) and roll (E).



CC329290

- |           |                                |
|-----------|--------------------------------|
| A—Screw   | D—Distance                     |
| B—Scraper | E—Lower Rear Gate Roll (No. 9) |
| C—Screw   |                                |

8. Tighten screws (A) to the following specification.

**Specification**

Lower Rear Gate Roll (No. 9) Scraper-to-Bracket Screws—Torque.....	65 N·m (48 lb·ft)
--	----------------------

NB02380,00004D9 -19-31AUG17-1/1

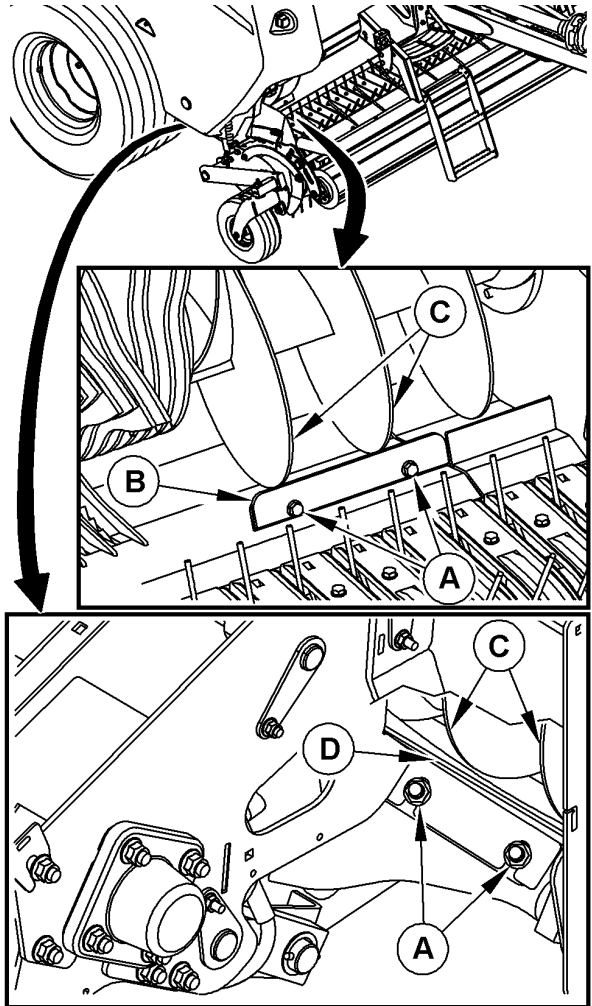
CC329290—JUN—05SEP17

### Adjust Rotor Auger Scrapers

1. Fully raise the drop floor. See Unplug Rotary Feeder in Operating the Baler—General Purposes.
2. Loosen screws (A).
3. Position and maintain scrapers (B) and (D) as close as possible to rotor auger (C) avoiding contact.
4. Manually rotate baler to check that there is no interference between rotor auger (C) and scrapers (B) and (D).
5. Tighten screws (A).
6. Repeat procedure on the opposite side.

A—Screw  
B—Front Scraper of Rotor Auger

C—Rotor Auger  
D—Rear Scraper of Rotor Auger



CC202090

CC202090 —UN—18APR13

ga87848,1685543371123 -19-31MAY23-1/1

### Sharpen Net Binding Knife

**⚠ CAUTION: Prevent personal injury by wearing gloves to handle knife.**

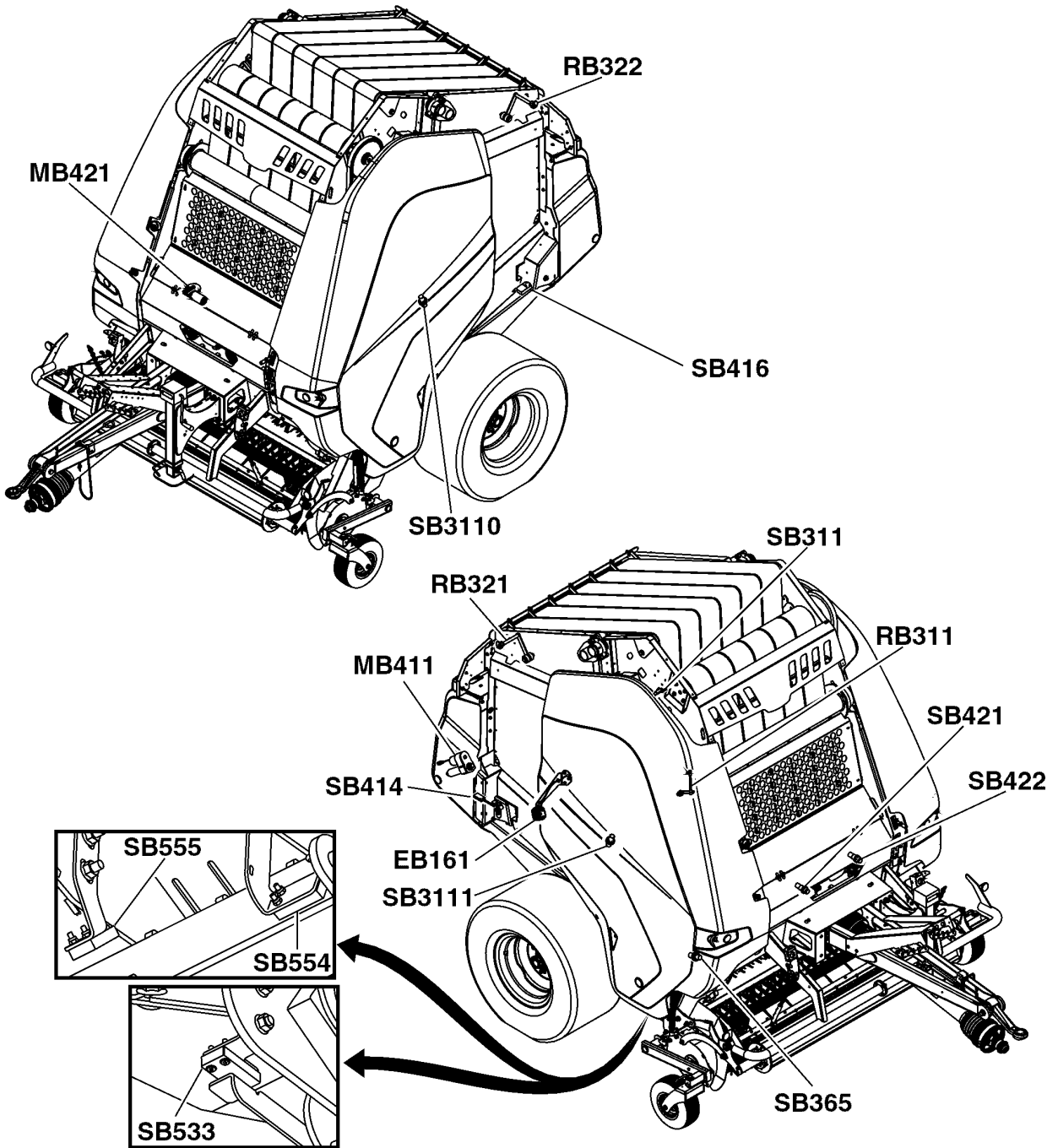
1. Remove any residue from beveled edge.
2. Clamp knife to a bench or table.
3. Draw-file the beveled edge maintaining a 25° angle.
4. Keep the sharpened edge straight, within 1 mm (0.04 in.).



E36336 —UN—18DEC91

ga87848,1680270381989 -19-31MAR23-1/1

Locate Machine Electrical Components



CC576437

EB161—Rear Gate Camera  
 MB411—Net Actuator  
 MB421—Twine Actuator  
 RB311—Bale Diameter  
 Potentiometer  
 RB321—Left Bale Shape  
 Potentiometer

RB322—Right Bale Shape  
 Potentiometer  
 SB311—Bale Oversize Switch  
 SB3110—Left Gate Latch Sensor  
 SB3111—Right Gate Latch  
 Sensor

SB365—Baler Rotation Speed  
 Sensor  
 SB414—Net Cut Sensor  
 SB416—B-Wrap Sensor (If  
 Equipped)  
 SB421—Left Twine Pulley Sensor  
 SB422—Right Twine Pulley  
 Sensor

SB533—Drop Floor Sensor  
 SB554—Precutter Knife Sensor  
 SB555—Precutter Knife Sensor

ga87848,1683010497929 -19-23MAY23-1/1

CC576437 - UN - 04MAY23

### Identify Sensor Detection Area

To ensure a proper detection of the target by the sensor, check that sensor detection area (C) is correctly oriented to the target. Sensor detection area (C) is located only on the same side as both spot facings (B).

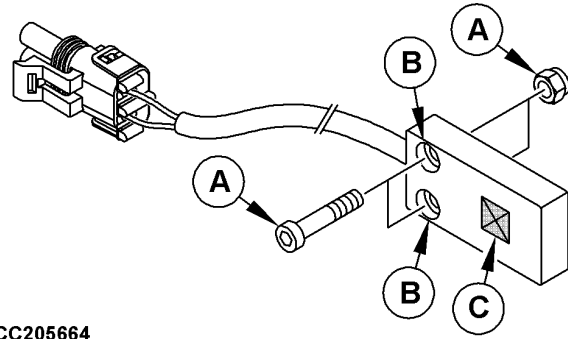
If sensor has been replaced or cap screws (A) have been removed, tighten cap screws (A) to specified torque:

**Specification**

Cap Screws—Torque..... 1.2—1.8 N·m  
(0.9—1.3 lb.-ft.)

**A—Cap Screw**  
**B—Spot Facing**

**C—Sensor Detection Area**



CC205664

CC205664—UN—10OCT13

NB02380,0000417 -19-24MAY17-1/1

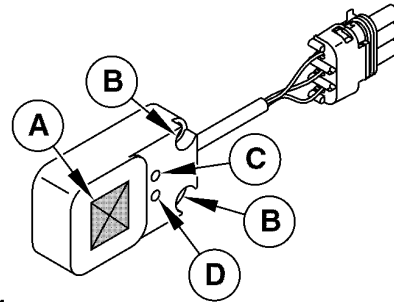
### Identify B-Wrap Sensor Detection Area (if Equipped)

To ensure a proper detection of the target by the sensor, check that sensor detection area (A) is correctly oriented to the target. Sensor detection area (A) is located only the same side as both bores (B). When installed, sensor must be oriented face to the belt.

John Deere B-Wrap™ sensor is equipped with an Orange LED (C), and a green LED (D). Green LED (D) indicates that sensor is powered, and orange LED (C) indicates that the sensor detects the target.

**A—B-Wrap Sensor Detection Area**  
**B—Bores**

**C—Orange LED**  
**D—Green LED**



CC230304

CC230304—UN—19FEB16

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

TL81334,00003B5 -19-28JUN18-1/1

### Adjust Twine Pulley Sensors SB421 and SB422

1. Raise dust shield to provide access.
2. Adjust nut (A) to obtain specified distance (B) between twine pulley (C) and bracket (D):

**Specification**

Twine Pulley-to-Bracket—Distance (B).....40—42 mm  
(1-9/16 — 1-21/32 in)

3. Rotate pulley (C) so that magnet (F) is aligned with sensor (E).
4. Loosen lock nuts (H), then slide sensor (E) to obtain specified distance (G):

**Specification**

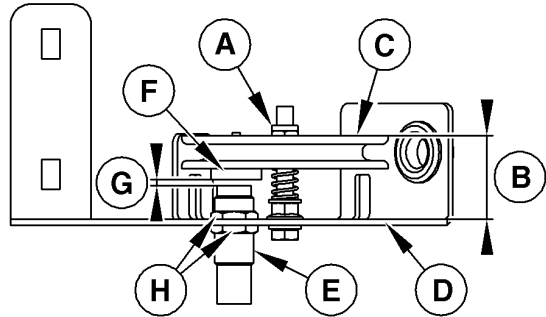
Sensor-to-Magnet—Distance (G).....2—4 mm  
(5/64—10/64 in)

5. Tighten lock nuts (H) to the following specification:

**Specification**

Lock Nuts—Torque.....2 N·m  
(1.5 lb·ft)

6. Rotate pulley (C) several times to check that there is no interference between sensor (E) and magnet (F).
7. Repeat procedure on the opposite side.



CC1035274

- |                |             |
|----------------|-------------|
| A—Nut          | E—Sensor    |
| B—Distance     | F—Magnet    |
| C—Twine Pulley | G—Distance  |
| D—Bracket      | H—Lock Nuts |

8. Check sensors detection with monitor. See
  - Channel 022: Test of Left Twine Pulley Sensor SB421 in the BaleTrak Monitor Service section.
  - Channel 023: Test of Right Twine Pulley Sensor SB422 or B-Wrap Sensor SB416 (If Equipped) in the BaleTrak Monitor Service section.

TL81334.00003BA -19-20JUN18-1/1

CC1035274 —UN—10FEB12

### Adjust Drop Floor Sensor SB533

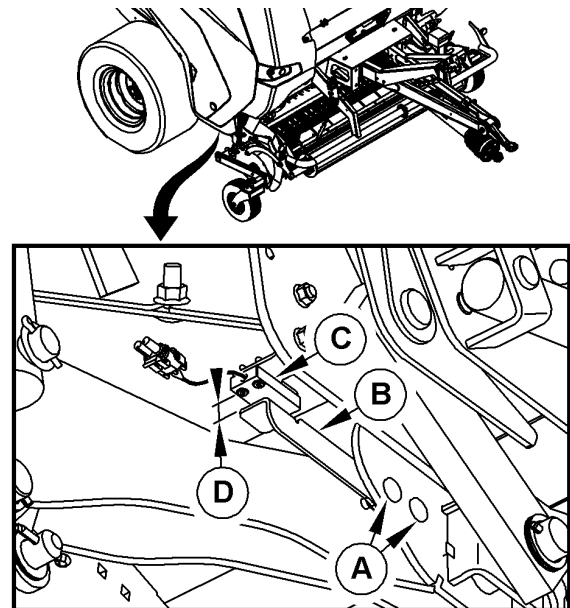
To adjust drop floor sensor (C), proceed as follows:

1. Fully raise drop floor.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine and remove key.
3. Check that sensor (C) is mounted properly. See Identify Sensor Detection Area in this section.
4. Loosen cap screws (A).
5. Position and maintain target (B) in order to obtain specified distance (D) between sensor (C) and target (B).

**Specification**

Sensor-to-Target—Distance.....0.5—2 mm  
(1/64—3/32 in)

6. Tighten cap screws (A).
7. Check sensor detection with monitor. See Channel 024: Test of Drop Floor Sensor SB533 in BaleTrak Monitor Service section.



CC330695

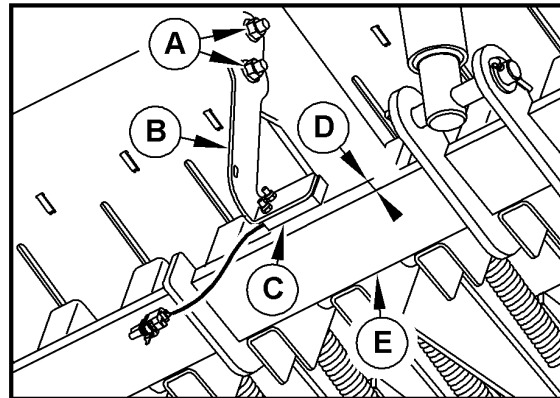
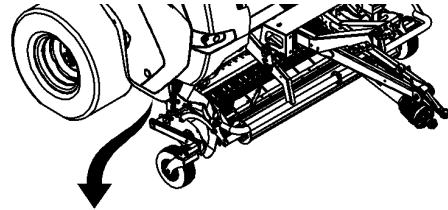
- |             |                     |
|-------------|---------------------|
| A—Cap Screw | C—Drop Floor Sensor |
| B—Target    | D—Distance          |

GA87848.0000442 -19-20OCT17-1/1

CC330695 —UN—22SEP17

### Adjust Precutter Knife Sensor SB554

1. Engage precutter knives. See [Retract or Engage Precutter Knives Function](#) in Operating BaleTrak Monitor section.
2. Engage tractor park brake, place transmission in PARK, shut off tractor engine, remove key and close knife shut-off valve.
3. Close precutter knife shut-off valves. See [Replace Precutter Knives](#) in this section.
4. Check that sensor (C) is mounted properly. See [Identify Sensor Detection Area](#) in this section.
5. Loosen cap screws (A).
6. Position and maintain sensor bracket (B) in order to obtain specified distance (D) between sensor (C) and bar (E).



CC330696

- A—Cap Screw
- B—Sensor Bracket
- C—Precutter Knife Sensor (Set 1)
- D—Distance
- E—Precutter Knife Selection Bar

**Specification**

Sensor-to-  
Bar—Distance.....0.5—2 mm  
(1/64—3/32 in)

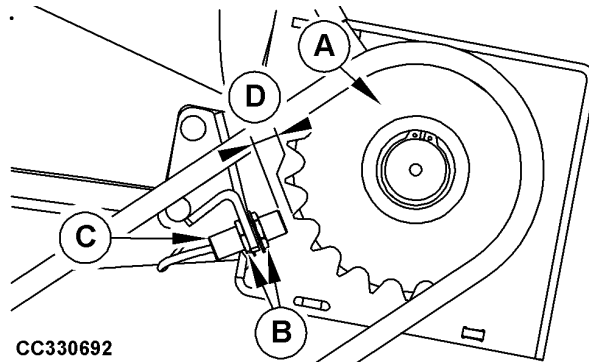
7. Retighten cap screws (A).
8. Check sensor detection with monitor. See [Channel 024: Test of Drop Floor Sensor SB533](#) in BaleTrak Monitor Service section.

ga87848,1685108087937 -19-01JUN23-1/1

CC330696—UN—22SEP17

### Adjust Baler Rotation Speed Sensor SB365

1. Rotate baler by hand so that gear (A) is in position shown. See [Service Machine Safely](#) in Safety section.
2. Loosen lock nuts (B) then slide sensor (C) until specified distance (D) is achieved.



CC330692

- A—Gear
- B—Lock Nut
- C—Baler Rotation Speed Sensor
- D—Distance

**Specification**

Sensor to  
Gear—Distance.....2—4 mm  
(5/64—10/64 in)

3. Check that center line of sensor (C) is aligned with center line of gear (A).
4. Tighten lock nuts (B) to the following specification:

**Specification**

Lock Nuts—Torque.....23 N·m  
(17 lb-ft)

5. Rotate baler several times to check that there is no interference between sensor (C) and gear (A).
6. Check sensor detection with monitor. See or [Channel 017: Test of Baler Rotation Speed Sensor SB365](#) in BaleTrak Monitor Service section.

ga87848,1685108087775 -19-31MAY23-1/1

CC330692—UN—08SEP17

### Adjust Gate Latch

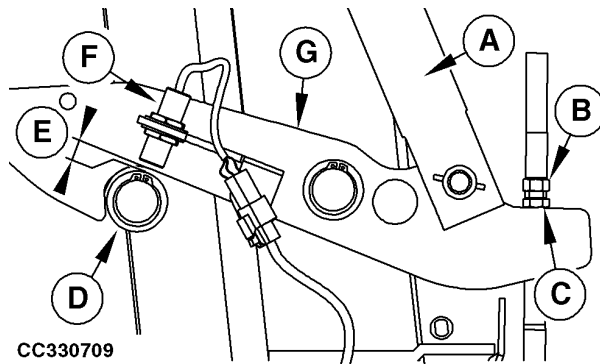
**IMPORTANT: To avoid gate opening during baler operation, gate latch (G) must be correctly adjust.**

1. Fully close gate. Gate hydraulic cylinders must be fully retracted.
2. If necessary, remove net roll and/or twine balls compartment to provide access.
3. Check that distance (E) is within specification. If necessary, proceed as follows.

**Specification**

Gate Latch-to-Gate Latch  
 Bushing—Distance..... 1—2 mm  
 (3/64—5/64 in)

4. Loosen counter-nut (B).
5. Adjust nut (C) to obtain specified distance (E).
6. Tighten counter-nut (B).
7. Check that gate latch sensor is correctly adjusted. See Adjust Gate Latch Sensors SB3310 and SB3311 in this section.



A—Gate Cylinder  
 B—Counter-Nut  
 C—Nut  
 D—Gate Latch Bushing  
 E—Distance  
 F—Sensor  
 G—Gate Latch

8. Repeat procedure on the opposite side.
9. If removed, reinstall net roll and/or twine balls compartment.

GA87848.00006E7 -19-28JUN18-1/1

CC330709 —JUN—28SEP17

### Adjust Gate Latch Sensors SB3310 and SB3311

1. Fully close gate. Gate hydraulic cylinders must be fully retracted.
2. If necessary, remove net roll and/or twine balls compartment to provide access.
3. Check that gate is correctly latched. If necessary, adjust gate latch. See Identify Sensor Detection Area in this section.
4. Loosen lock nuts (A) then slide sensor (D) until specified distance (F) is achieved.

**Specification**

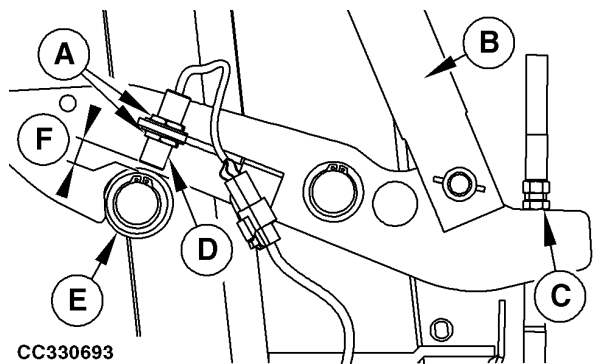
Sensor-to-  
 Bushing—Distance..... 2.5—3.5mm  
 (3/32—9/64 in)

5. Check that center line of sensor (D) is aligned with bushing (E).
6. Tighten lock nuts (A) to the following specification:

**Specification**

Lock Nuts—Torque..... 23 N·m  
 (17 lb-ft)

7. Repeat procedure on the opposite side.
8. Check sensors detection with monitor. See



A—Lock Nut  
 B—Gate Cylinder  
 C—Adjust Screw  
 D—Sensor  
 E—Gate Latch Bushing  
 F—Distance

- Channel 014: Test of Right Gate Sensor SB3311 in BaleTrak Monitor Service section.
- Channel 015: Test of Left Gate Sensor SB3310 in BaleTrak Monitor Service section.

9. If removed, reinstall net roll and/or twine balls compartment.

GA87848.00006E6 -19-28JUN18-1/1

CC330693 —JUN—11SEP17

### Adjust Net Cut Sensor SB414

1. Remove net binding cover to provide access.
2. Loosen nuts (B) then slide sensor (C) to specified distance (A).

**Specification**

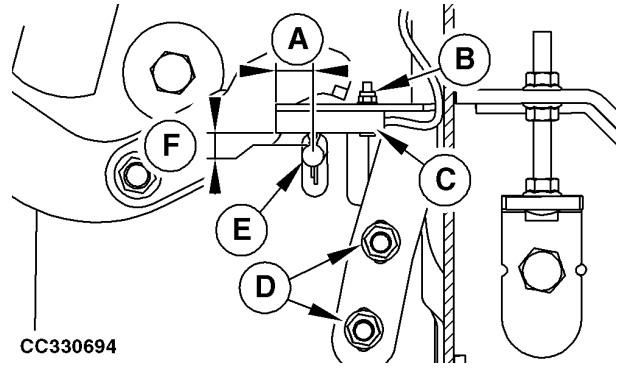
Sensor to Net Binding  
Rod—Distance.....15—19 mm  
(19/32—3/4 in)

3. Tighten nuts (B).
4. Loosen nuts (D) then slide sensor (C) to specified distance (F).

**Specification**

Sensor to Net Binding  
Rod—Distance.....0.5—2 mm  
(1/64—3/32 in)

5. Tighten nuts (D).
6. Check sensor detection with monitor. See [Channel 012: Test of Net Cut Sensor SB414](#) in BaleTrak Monitor Service section.



CC330694

CC330694—UN—21SEP17

- A—Distance
- B—Nut
- C—Net Cut Sensor
- D—Nut
- E—Net Binding Rod
- F—Distance

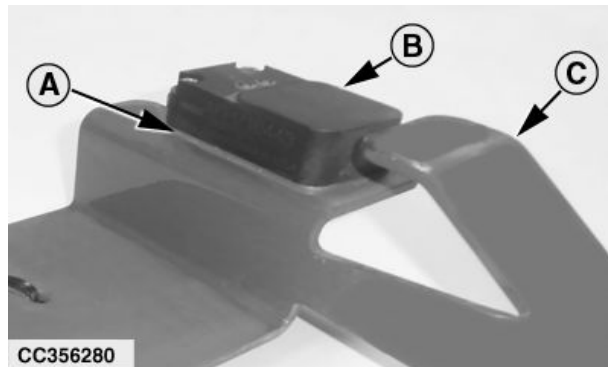
7. Install net binding cover.

GA87848,0000446 -19-20OCT17-1/1

### Adjust B-Wrap Sensor SB416 (If Equipped)

Sensor (B) is mounted on bracket (C) using screws, lock nuts, and Shims (A). When installed, sensor (B) must be oriented face to belt.

- A—Shim
- B—Sensor
- C—Bracket



CC356280

CC356280—UN—02AUG18

TL81334,00003B7 -19-02AUG18-1/2

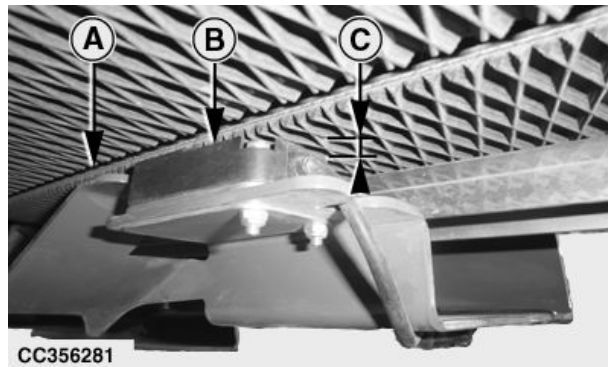
Distance (C) between top of sensor (B), and belt (A) should be within specification:

**Specification**

Sensor to  
Belt—Distance.....4—8 mm (0.16—0.31 in)

Add, or remove Shims between sensor (B), and bracket as needed to obtain specified distance.

- A—Belt
- B—Sensor
- C—Distance



CC356281

CC356281—UN—02AUG18

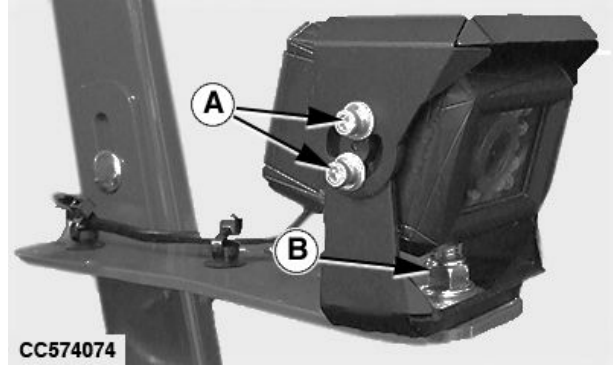
TL81334,00003B7 -19-02AUG18-2/2

### Adjust Orientation of Camera EB161

1. Loosen screws (B) and (A) on both sides.
2. Adjust the orientation of the camera.
3. Tighten screws (B) and (A) on both sides.

A—Screw

B—Screw



CC574074 —JUN—19APR23

ga87848,1682080626799 -19-21APR23-1/1

### Twine Binding Device Adjustment List

The following adjustments should be carried out when twine binding problems occur during field operation.

- Adjust twine binding arm position.
- Adjust twine binding motor position.
- Adjust twine binding plate clamp.
- Adjust twine binding tension plate.
- Adjust twine binding pulley scraper.
- Replace twine binding knife.
- Adjust twine cut length.
- Twine binding actuator calibration: See [Channel 029: Calibrate Twine Electrical Motor](#) in BaleTrak Monitor Service section.

GA87848.00010AB -19-18JAN21-1/1

### Adjust Twine Arm Position (Tube Arms)

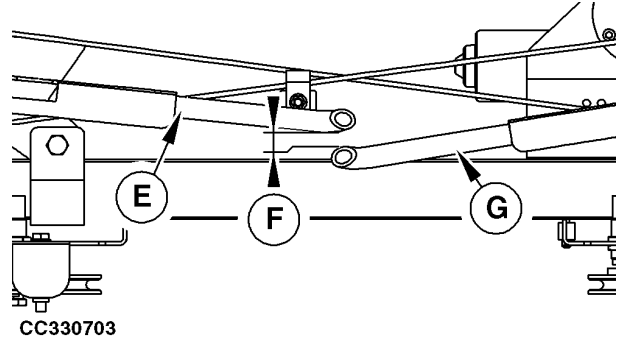
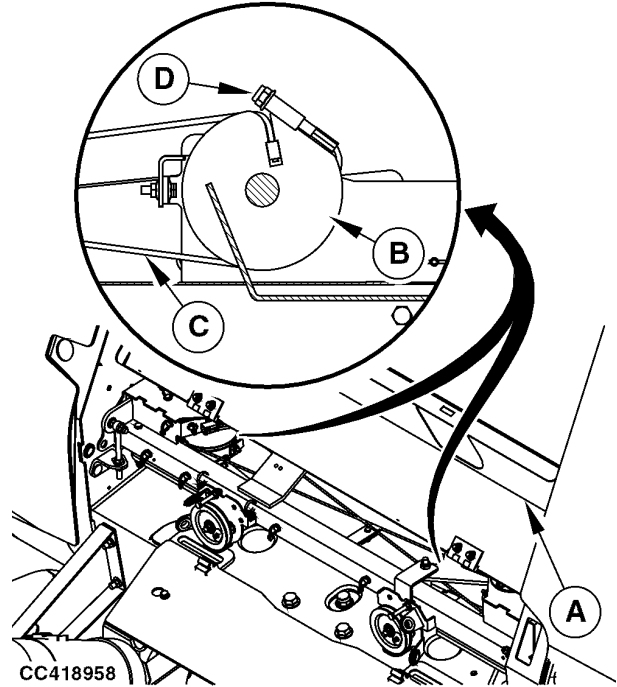
1. Open twine binding cover (A).
2. With twine arm (E) and (G) retracted, check if distance (F) is within specification.

**Specification**

Left-Twine-Arm-to-Right-Twine-Arm—Distance.....10—14 mm  
(25/64—35/64 in)

- If OK, go to step 5
  - If not OK, go to next step
3. • If distance (F) is less than specification, proceed as follows.
    - a. Loosen nut (D) on right-hand side.
    - b. Tighten nut (D) on left-hand side to adjust distance (F).
    - c. Tighten nut (D) on right-hand side.
  - If distance (F) is more than specification, proceed as follows.
    - a. Loosen nut (D) on left-hand side.
    - b. Tighten nut (D) on right-hand side to adjust distance (F).
    - c. Tighten nut (D) on left-hand side.
4. Check that distance (F) is within specification.
    - If OK, go to next step
    - If not OK, go to step 2

- |                              |                    |
|------------------------------|--------------------|
| <b>A—Twine Binding Cover</b> | <b>E—Right Arm</b> |
| <b>B—Pulley</b>              | <b>F—Distance</b>  |
| <b>C—Cable</b>               | <b>G—Left Arm</b>  |
| <b>D—Nut</b>                 |                    |



CC418958

CC330703

CC418958 —UN—14DEC20

CC330703 —UN—22SEP17

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GA87848,00010A9 -19-08JAN21-1/3

5. Fully extend twine arm (F).
6. Check that distance (E) follows specification:

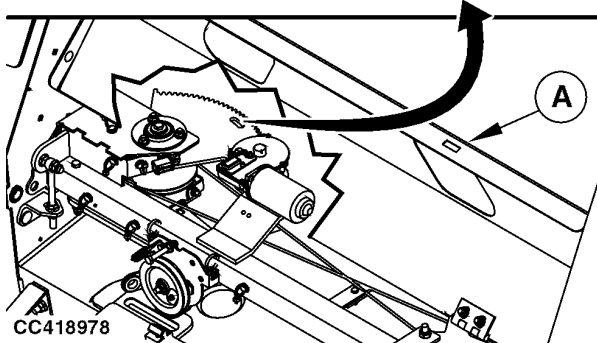
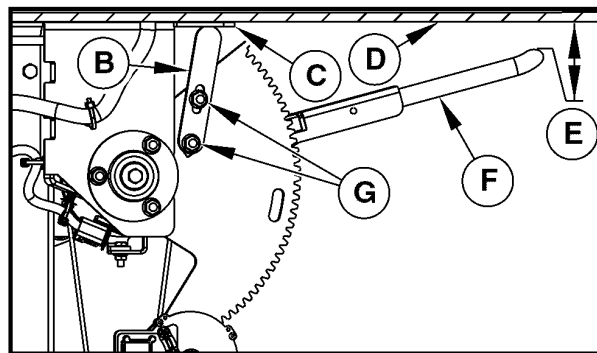
**Specification**

Twine Arm-to-Bale Chamber Frame—Distance.....25—35 mm  
(1—1-3/8 in)

- If OK: Go to step 10.
- If not OK: Go to next step.

7. Loosen nuts (G).
8. Retract or extend twine arm to obtain specified distance (E).
9. Move stop (B) until contact with bracket (C).
10. Tighten nuts (G).
11. Calibrate twine motor. See [Channel 029: Calibrate Twine Electrical Motor](#) in BaleTrak Monitor Service section.

<b>A—Twine Binding Cover</b>	<b>E—Distance</b>
<b>B—Stop</b>	<b>F— Twine Arm</b>
<b>C—Twine Binding Bracket</b>	<b>G—Nut</b>
<b>D—Bale Chamber Frame</b>	



CC418978

CC418978 —UN—16DEC20

GA87848.00010A9 -19-08JAN21-2/3

12. Check that arm (B) is as close as possible to upper starter roll (No. 3) (C) without contact.

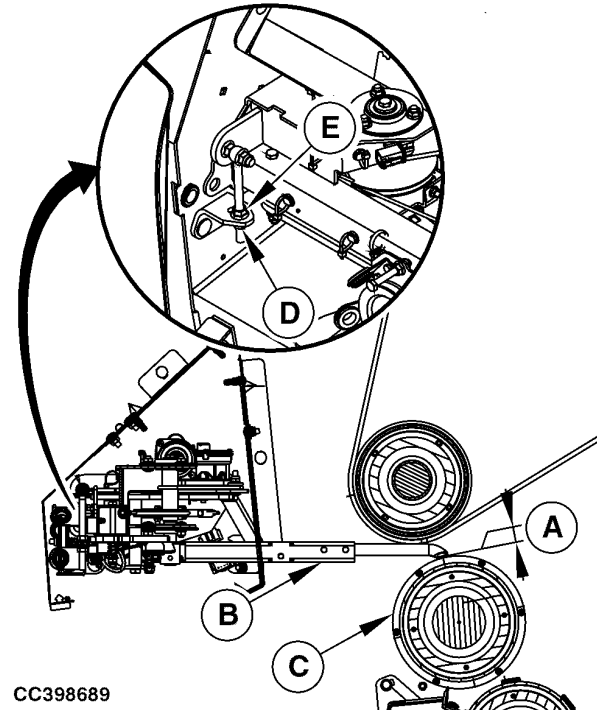
**Specification**

Twine Arm-to-Upper Starter Roll (No. 3)—Distance.....As close as possible without contact

13. If distance (A) is not within specification, proceed as follows on both side of the twine binding system:

- To increase the distance:
  - a. Loosen screw (E).
  - b. Tighten screw (D).
  - c. Tighten screw (E).
- To decrease the distance:
  - a. Loosen screw (D).
  - b. Tighten screw (E).
  - c. Tighten screw (D).

<b>A—Distance</b>	<b>D—Nut</b>
<b>B—Twine Arm</b>	<b>E—Nut</b>
<b>C—Upper Starter Roll (No. 3)</b>	



CC398689

CC398689 —UN—16JAN20

GA87848.00010A9 -19-08JAN21-3/3

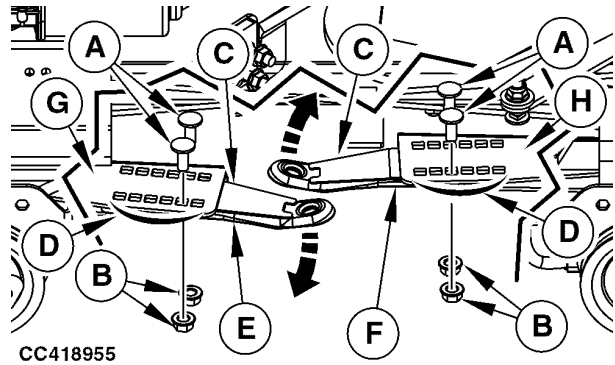
### Adjust Twine Arm Position (Adjustable Arms)

1. Open the gate and secure it.
2. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
3. Open twine binding cover.
4. Remove nuts (B).
5. Remove screws (A).
6. Align holes of spring plates (C) and twine arms extension (E) and (F) with the desired holes (D) of twine arms (G) and (H).

**NOTE:** Factory setting shown on the illustration:

- *Right-Hand Side Twine Arm (G):* 2nd hole from the arm end as shown.
- *Left-Hand Side Twine Arm (H):* 3rd hole from the arm end as shown.

7. Install screws (A) and nuts (B).
8. Pull twine arm extension (E) and tighten nut (B).



CC418955

- |                |                             |
|----------------|-----------------------------|
| A—Screw        | E—Twine Arm Extension       |
| B—Nut          | F—Twine Arm Extension       |
| C—Spring Plate | G—Right-Hand Side Twine Arm |
| D—Hole         | H—Left-Hand Side Twine Arm  |

9. Push twine arm extension (F) and tighten nut (B).

GA87848,00010AA -19-08JAN21-1/4

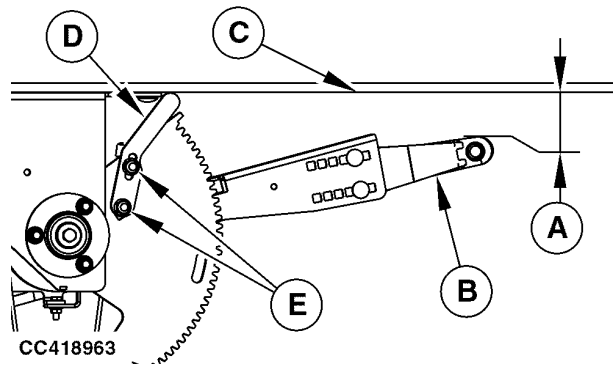
10. Fully extend twine arms with the monitor.
11. Check that distance (A) is within specification:

**Specification**

Right-Hand Side Twine Arm-to-Bale Chamber Frame—Distance.....	25—35 mm (1—1-3/8 in)
---	--------------------------

- If OK: Go to step 15.
- If not OK: Go to next step.

12. Adjust distance (A) as follows:
  - a. Loosen nuts (E).
  - b. Retract or extend twine arm (B) to obtain specified distance (A).
  - c. Move stop (D) in contact with baler chamber frame (C).
  - d. Tighten nuts (E).



CC418963

- |                      |        |
|----------------------|--------|
| A—Distance           | D—Stop |
| B—Twine Arm          | E—Nut  |
| C—Bale Chamber Frame |        |

Continued on next page

GA87848,00010AA -19-08JAN21-2/4

13. Measure distance (B).

*NOTE: Distance (B) depends on distance (A).*

14. Check that distance (B) is within 0—15 mm of distance (A).

Example of Distance (B) in Relation to Distance (A)	
Distance (A)	Distance (B)
25 mm	10—25 mm
30 mm	15—30 mm
35 mm	20—35 mm

- If OK: Go to step 18.
- If not OK: Go to next step.

15. Adjust distance (B) as follows:

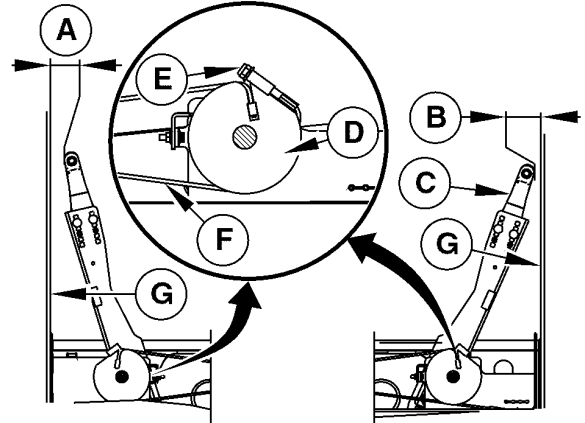
- If distance (B) is less than specification, proceed as follows.

1. Loosen nut (E) on the right-hand side.
2. Tighten nut (E) on the left-hand side to adjust distance (B).
3. Tighten nut (E) on the right-hand side.

- If distance (B) is more than specification, proceed as follows.

1. Loosen nut (E) on the left-hand side.
2. Tighten nut (E) on the right-hand side to adjust distance (B).
3. Tighten nut (E) on the left-hand side.

16. Check that twine arms do not overlap during the binding cycle.



CC418964

- A—Distance
- B—Distance
- C—Twine Arm
- D—Pulley
- E—Nut
- F—Cable
- G—Bale Chamber Frame

*NOTE: Especially at the end of the cycle.*

- If OK: Go to next step.
- If not OK: Increase distance (B). Go to step 15.

17. Calibrate twine motor. See [Channel 029: Calibrate Twine Electrical Motor](#) in [BaleTrak Monitor Service](#) section.

Continued on next page

GA87848,00010AA -19-08,JAN21-3/4

CC418964 —UN—14DEC20

18. Check that arm (B) is as close as possible to upper starter roll (No. 3) (C) without contact.

**Specification**

Twine Arm-to-Upper

Starter Roll (No.

3)—Distance.....As close as possible without contact

19. If distance (A) is not within specification, proceed as follows on both side of the twine binding system:

- To increase distance (A):

- a. Loosen screw (E).
- b. Tighten screw (D).
- c. Tighten screw (E).

- To decrease distance (A):

- a. Loosen screw (D).
- b. Tighten screw (E).
- c. Tighten screw (D).

20. Close twine binding cover (A).

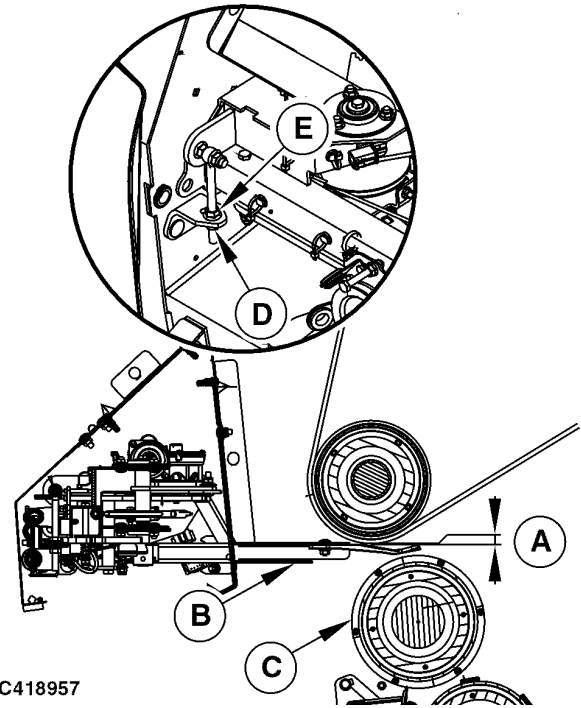
**A**—Distance

**B**—Twine Arm

**C**—Upper Starter Roll (No 3)

**D**—Nut

**E**—Nut



CC418957

CC418957 —UN—14DEC20

GA87848,00010AA -19-08JAN21-4/4

### Adjust Twine Binding Actuator Position

1. Open twine binding cover (A).
2. Check if screw (E) is tightened at specified torque.

**Specification**

Twine-Binding-Sprocket-Screw—Torque..... 2—4 N·m  
(1.5—3 lb-ft)

If necessary, tighten screw (E) to specified torque.

3. Loosen screw (C).
4. Push twine actuator (F) until sprocket tooth (B) is in contact with bottom of rack tooth (D).
5. Tighten screw (C) to specified value.

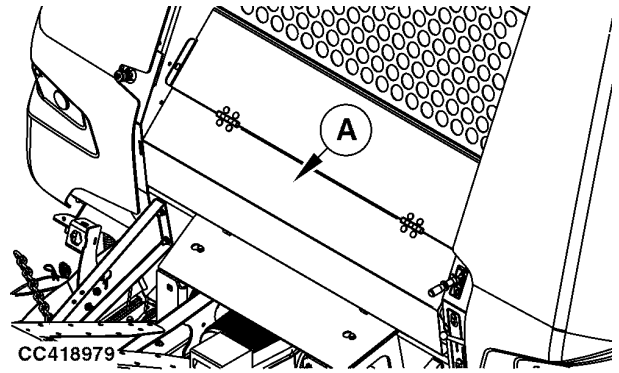
**Specification**

Twine Binding Actuator Screw—Torque..... 8—10 N·m  
(6—7.5 lb-ft)

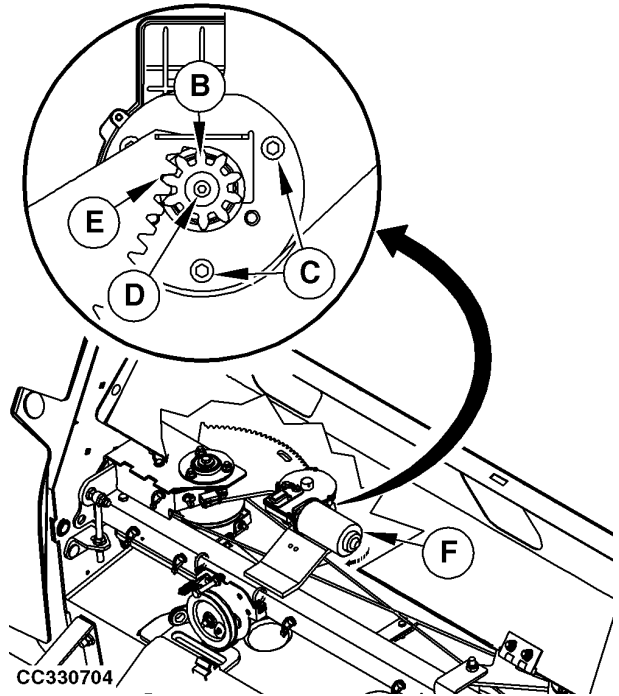
6. Close twine binding cover (A).

**A—Twine Binding Cover**  
**B—Sprocket Tooth**  
**C—Screw**

**D—Screw**  
**E—Bottom of Rack Tooth**  
**F—Twine Motor**



CC418979 —UN—18DEC20



CC330704 —UN—28SEP17

GA87848.000107A -19-18JAN21-1/1

### Adjust Twine Binding Tension Plate Clamp

1. Open twine binding cover (A).
2. Check if distance (C) is within specification.

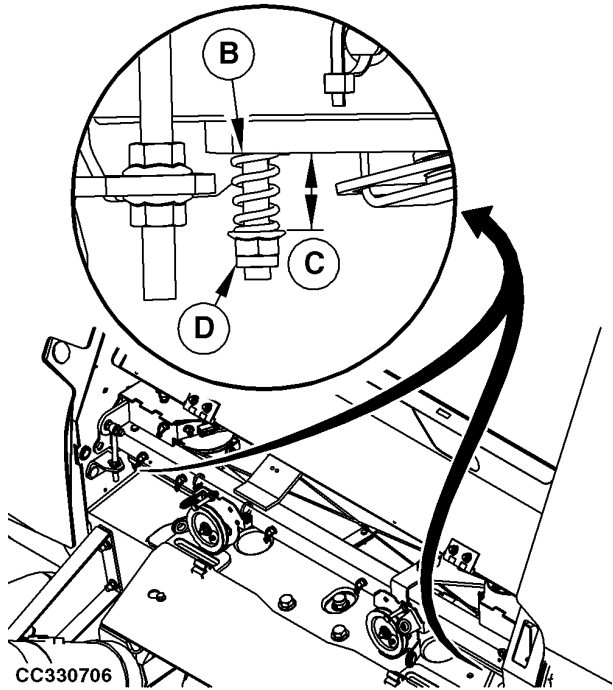
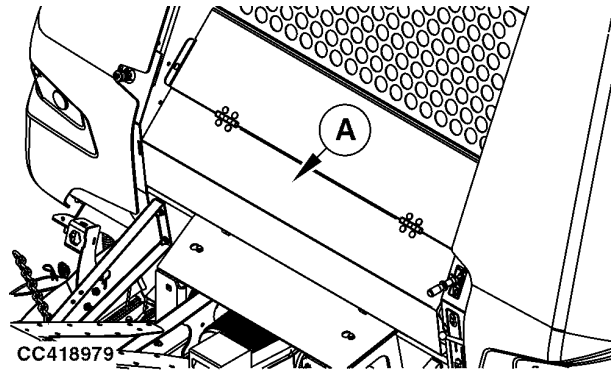
**Specification**

Twine Binding  
Clamp—Distance.....23—25 mm  
(29/32—1-1/16 in)

3. • If distance (C) is less than specified value, loosen nut (D).  
• If distance (C) is more than specified value, tighten nut (D).
4. Close twine binding cover (A).

A—Twine Binding Cover  
B—Spring

C—Distance  
D—Nut



CC418979 —UN—18DEC20

CC330706 —UN—28SEP17

GA87848.000107B -19-18JAN21-1/1

### Adjust Twine Binding Tension Plate

1. Open twine binding cover (A).
2. Check if distance (C) is within specification.

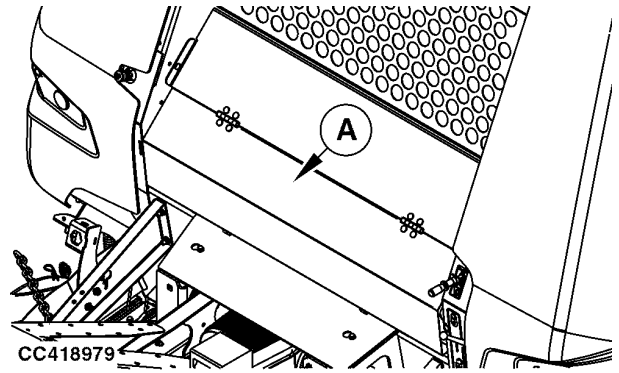
**Specification**

Twine Tension  
Plate—Distance.....31—33 mm  
(1-1/4—1-5/16 in)

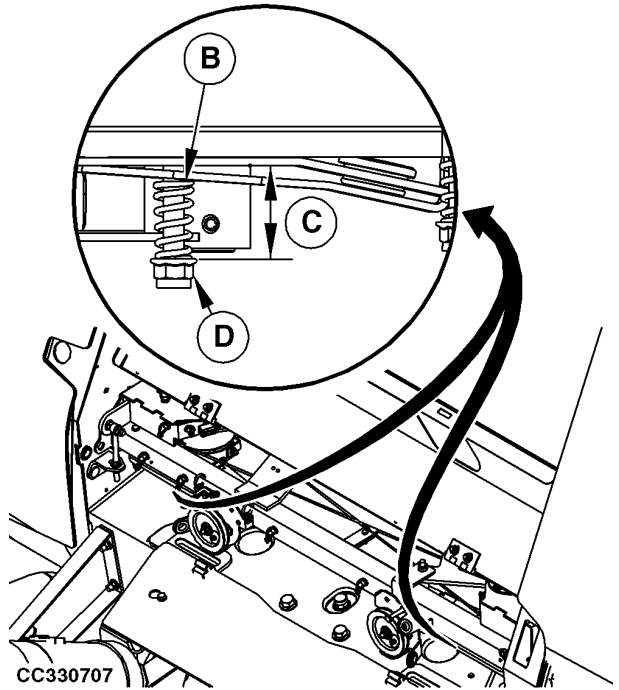
3. • If distance (C) is less than specified value, loosen nut (D).  
• If distance (C) is more than specified value, tighten nut (D).
4. Close twine binding cover (A).

A—Twine Binding Cover  
B—Spring

C—Distance  
D—Nut



CC418979 —UN—18DEC20



CC330707 —UN—28SEP17

GA87848.000107C -19-18JAN21-1/1

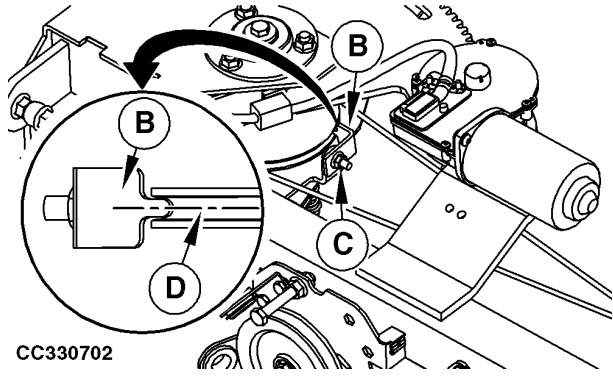
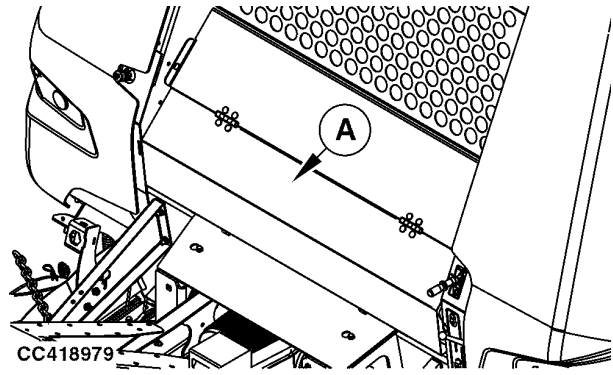
### Adjust Twine Binding Pulley Scraper

1. Open twine binding cover (A).
2. Check if pulley scraper (B) is in the middle of pulley groove (D). If not proceed as follow.
3. Loosen nut (C).
4. Move pulley scraper in the middle of pulley groove (D).

**IMPORTANT: Make sure scraper finger (B) does not touch pulley groove (D).**

5. Tighten nut (C).
6. Close twine binding cover (A).

A—Twine Binding Cover      C—Nut  
B—Pulley Scraper            D—Pulley Groove



CC418979 —UN—18DEC20

CC330702 —UN—22SEP17

GA87848,000107D -19-18JAN21-1/1

### Replace Twine Binding Knife

1. Open twine binding cover (A).
2. Retract twine binding arm.

**⚠ CAUTION: Prevent personal injury by wearing gloves to handle twine binding knife.**

3. Loosen nuts (C).
4. Replace knife (E).

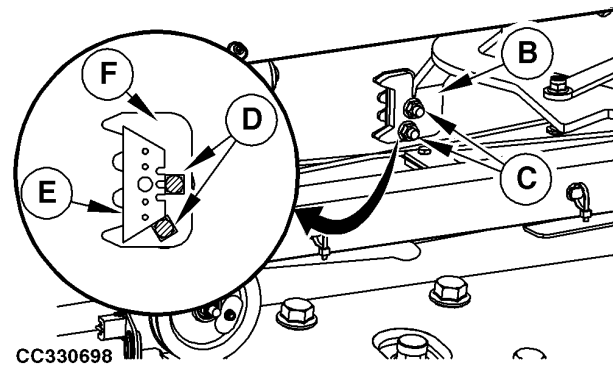
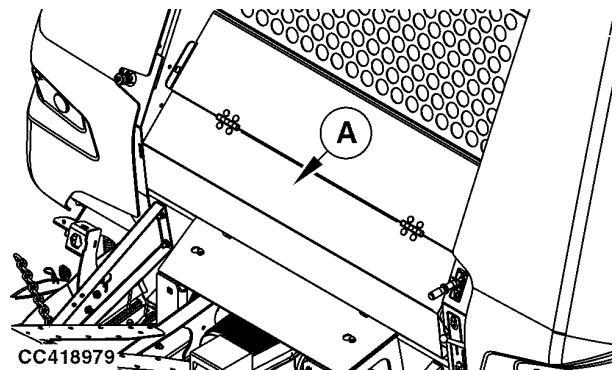
**IMPORTANT: Screws (D) must be correctly plugged into brackets (B) and (F).**

**Knife (E) must be in contact with screw (D).**

5. Tighten nuts (C).
6. Close twine binding cover (B).

A—Twine Binding Cover  
B—Bracket  
C—Nut

D—Screw  
E—Knife  
F—Bracket



TS268 —JUN—23AUG88

CC418979 —JUN—18DEC20

CC330698 —JUN—22SEP17

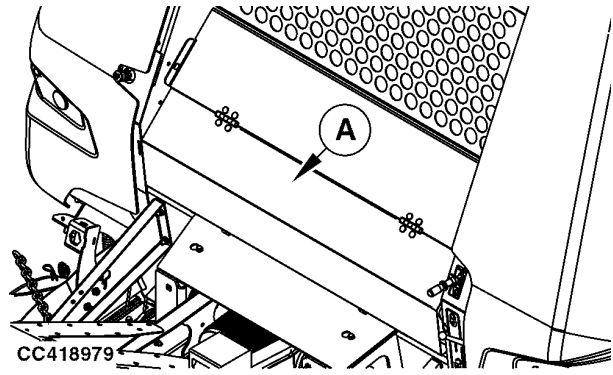
GA87848.000107E -19-18JAN21-1/1

### Adjust Twine Cut Length

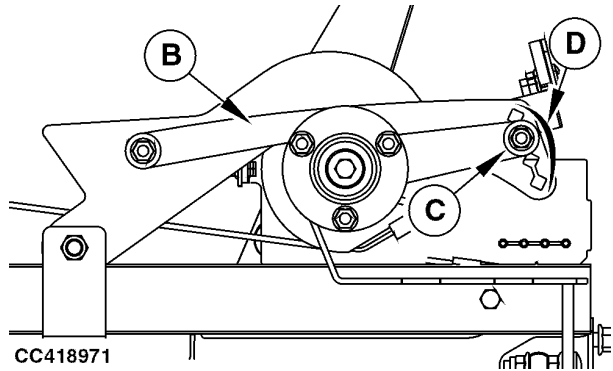
1. Open twine binding cover (A).
2. Check that screw (B) is in the second hole (D) of the knife rod (B) as shown.
  - If OK: Twine cutting length is OK.
  - If not OK: Go to next step.
3. Remove screw (C).
4. Move knife rod (B) as shown.
5. Tighten screw (C).
6. Close twine binding cover (A).

**A**—Twine Binding Cover  
**B**—Knife Rod

**C**—Screw (Factory Setting)  
**D**—Hole



CC418979 —UN—18DEC20



CC418971 —UN—17DEC20

GA87848,000107F -19-18JAN21-1/1

### Check Net Binding Device

The following procedure should be carried out when net cut or net binding problems occur during field operation.

The check procedure includes different tests to carry out:

- Test 1 - Check knife and counterknife position
- Test 2 - Check free motion of swinging bar
- Test 3 - Check net feed roll pressure

- Test 4 - Check No. 9 roll position
- Test 5 - Check drive belt tension
- Test 6 - Check net feed roll brake
- Test 7- Check lower net guide position

*NOTE: When all test results are OK, the net binding device is optimized for good field operation.*

NB02380,00004F2 -19-04OCT17-1/1

### Check Knife and Counterknife Position (Test 1)

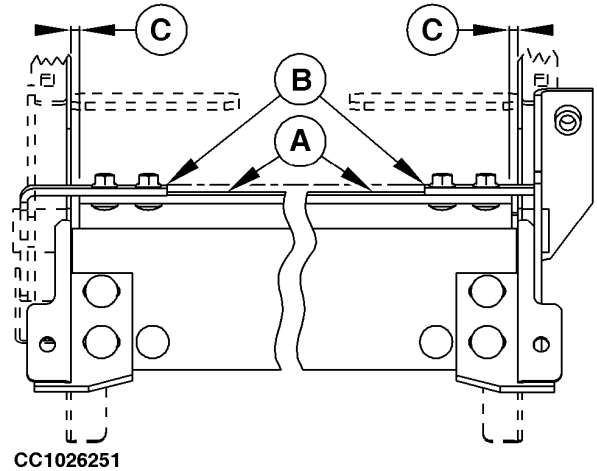
**CAUTION:** Prevent personal injury by wearing gloves when working on knife and counterknife.

*NOTE: The counterknife position (in relation to the knife) must be checked if serious net cut problems occur during field operation.*

1. Keep the net actuator retracted.
2. Check that the two counterknife supports (B) are aligned.
3. Center counterknife (A) between lateral supports to obtain specified distance (C) on both sides.

**Specification**

Counterknife-to-Lateral	
Support—Distance.....	5 ± 2 mm (3/16 ± 5/64 in)



A—Counterknife  
B—Counterknife support

C—Distance

CC1026251 — JUN—27OCT04

Continued on next page

†181334,1687770699647 -19-26JUN23-1/3

- Check that counterknife (A) is against net knife (D) all across its width.

**IMPORTANT: Contact should occur on the medium area of the sharp side of the knife as shown.**

The gap (E) in not touching area should not exceed the following specifications:

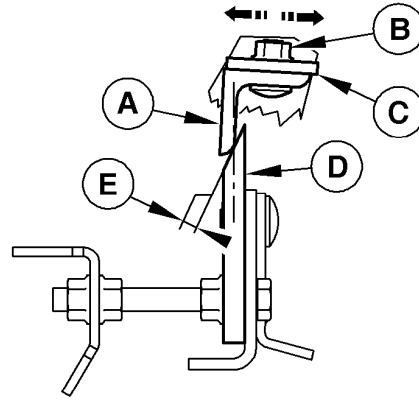
**Specification**

Counterknife to  
 Knife—Gap.....0.5 mm maximum  
 (1/64 in maximum)

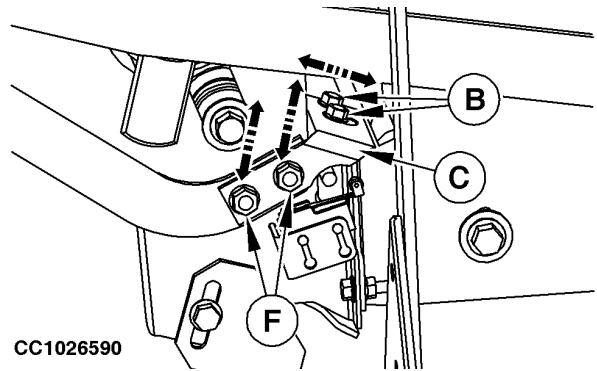
If necessary, adjust the gap (E) as follows:

- Loosen nuts (B) and (F).
- Move counterknife (A) and counterknife support (C) to obtain specified gap (E).
- Tighten nuts (B) and (F).

A—Counterknife                      D—Knife  
 B—Nuts                                      E—Gap  
 C—Counterknife Support              F—Nuts



CC1026591



CC1026590

†181334,1687770699647 -19-26JUN23-2/3

CC1026591 —UN—27OCT04

CC1026590 —UN—27OCT04

- If counterknife (A) is not fully in contact all across the knife (B) width, complete the adjustment of gap (E) as follows:

- Loosen lock nut (C).
- Tighten nut (D) to bend the knife (B) to obtain the specified gap (E).

**Specification**

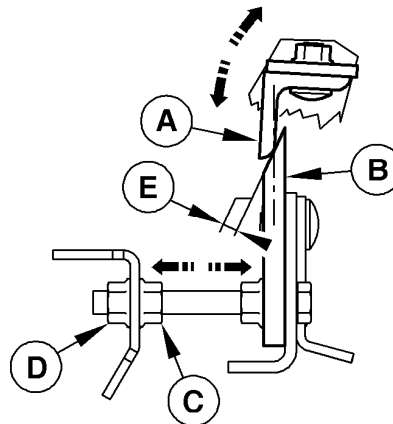
Counterknife to  
 Knife—Gap.....0.5 mm maximum  
 (1/64 in maximum)

- Tighten lock nut (C) after adjustment.

- Extend and retract net actuator. Check gap (E) and repeat the procedure if necessary.

**Proceed to test 2.**

A—Counterknife                      D—Nut  
 B—Knife                                      E—Gap  
 C—Lock Nut

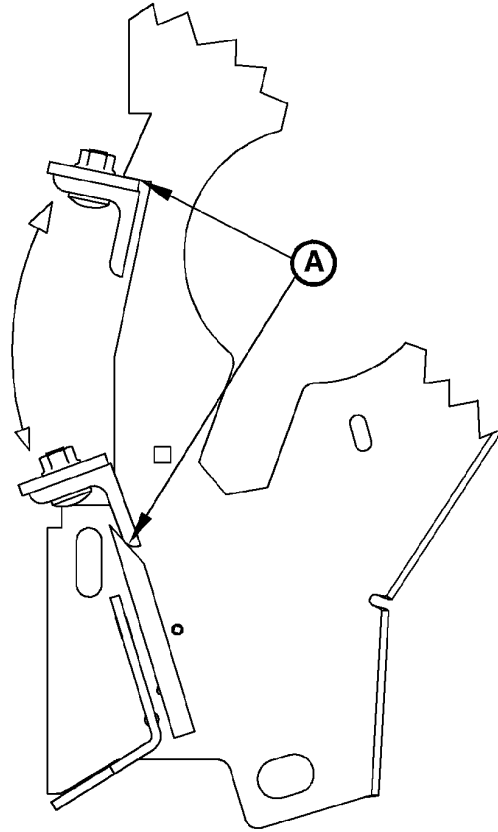


CC1026592

†181334,1687770699647 -19-26JUN23-3/3

CC1026592 —UN—27OCT04

### Check Free Motion of Swinging Bar (Test 2)



CC1019126

CC1019126 -UN-09FEB01

A—Stops

**IMPORTANT:** Prior to carry out this test, make sure that test 1 results are "OK". Proceed to the relevant tests described in this Section.

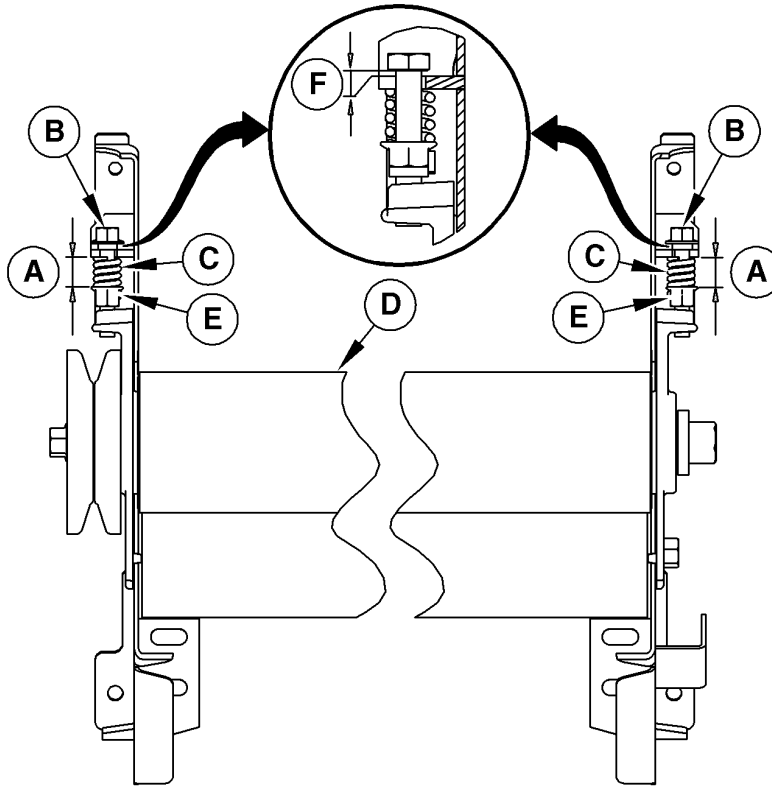
Proceed as follows:

With actuator discoupled, check that swinging bar motions are free without contact with lateral supports between its two stops (A).

**Proceed to test 3**

NB02380.00004F3 -19-20SEP17-1/1

**Check Net Feed Roll Pressure (Test 3)**



CC329305

CC329305—UN—23OCT17

A—Length  
B—Screw  
C—Spring

D—Rubber roll  
E—Spring Adjusting Nut

F—Distance

**IMPORTANT:** Prior to carrying out this test, make sure that test 1 and 2 are OK. Proceed to the relevant tests described in this section.

Proceed as follows:

1. Release net feed roll brake, see Load Net Roll in Preparing the Baler section.
2. Adjust distance (F) to specification by loosening or tightening screw (B).

**Specification**

Screw-to-Angle—Distance..... 2 mm  
(3/32 in)

3. Adjust net feed roll pressure by loosening or tightening spring adjusting nuts (E) until length (A) of springs (C) is within specification.

**Specification**

Spring—Length..... 20.5 ± 0.5 mm  
(0.8 ± 0.02 in)

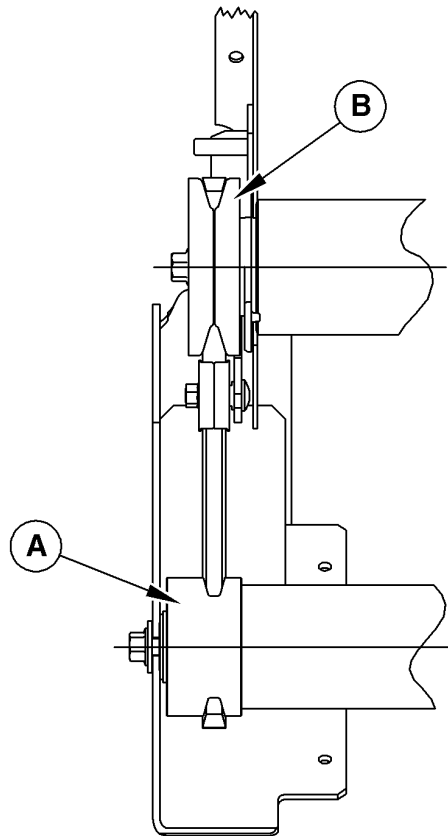
**IMPORTANT:** Make sure that rubber roll and plated roll rotate freely by hand in both directions.

4. Remove any foreign material or net from between the feed rolls.

**Proceed to test 4.**

NB02380,00004F5 -19-23OCT17-1/1

## Check No. 9 Roll Position (Test 4)



CC333381

A—Roll No. 9

B—Rubber Roll Pulley

**IMPORTANT:** Prior to carrying out this test, make sure that test 1 to 3 are OK. Proceed to the relevant tests described in this section.

**IMPORTANT:** Check the position of roll No. 9 (A) after each drive belt replacement.

Proceed as follows:

Check that axial clearance of roll No. 9 (A) is between 0.5 to 1.5 mm (1/64 to 1/16 in) and that rubber roll (B) and No. 9 roll pulleys are aligned within  $\pm 5$  mm (2 in).

Add or remove washers on each sides of roll No. 9 (A) as necessary.

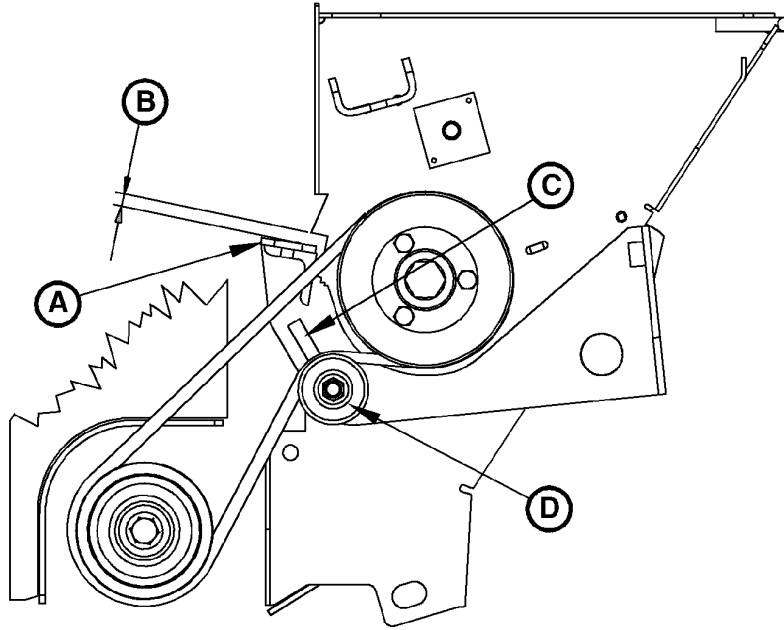
Reinstall net feed roll drive belt. See Remove And Install Net Feed Roll Drive Belt in this section.

**Proceed to test 5.**

NB02380,00004F8 -19-28SEP17-1/1

CC333381—JUN—28SEP17

## Check Drive Belt Tension (Test 5)



CC1019129

CC1019129—JN—09FEB01

A—Counterknife Support

B—Distance  
C—Oblong Hole

D—Idler Pulley

**IMPORTANT:** Prior to carry out this test, make sure that test 1 to 4 results are “OK”. Proceed to the relevant tests described in this section.

**IMPORTANT:** After each drive belt replacement, it is essential to check that the new belt has a length which allows a good net binding drive timing.

Proceed as follows:

1. Fully extend actuator.
2. Adjust idler pulley (D) in the oblong hole (C) so that distance (B) between counterknife support (A) and the cut in side wall is to 10 mm (3/8 in).

3. Run the belt drive for 15 seconds at full speed.
4. Fully extend and retract actuator several times.
5. Completely extend actuator.
6. Readjust distance (B) to  $3.5 \pm 1.5$  mm ( $2/16 \pm 1/16$  in.).

**IMPORTANT:** With actuator in extended position, operator should not be able to turn the net feed rolls.

**Proceed to test 6.**

TL81334,0000FCF -19-08JUL21-1/1

### Check Net Feed Roll Brake (Machine Equipped with Rubber Brake Pad) (Test 6)

**IMPORTANT:** Prior to this test, make sure that tests 1 to 5 results are "OK". Proceed to the relevant tests described in this section.

**IMPORTANT:** The net feed roll brake adjustment must be performed before using the baler.

Proceed as follows:

1. Keep the net actuator retracted.
2. Release net feed roll brake lever (A).
3. Check that spring length (B) is within specification:

	Specification	
Spring—Length.....		20 mm (3/4 in)

If necessary, adjust spring length (B) as follows:

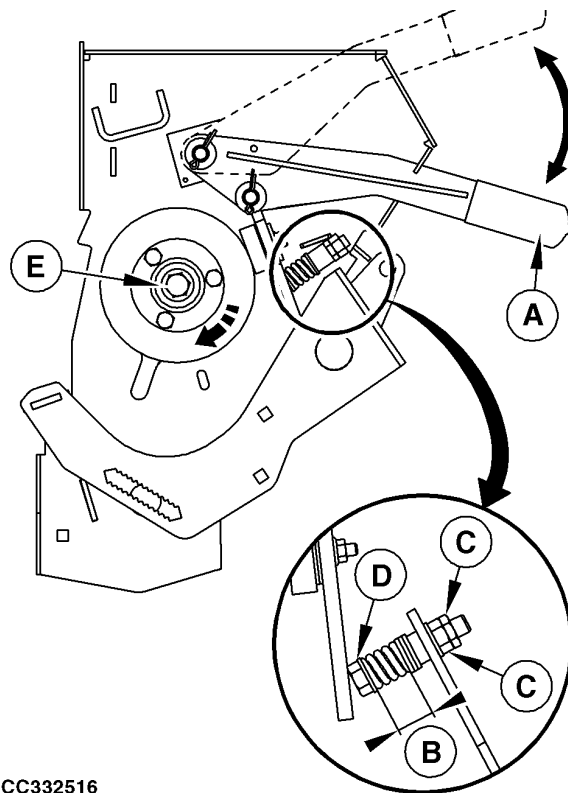
- a. Loosen the two lock nuts (C).
  - b. Turn screw (D) clockwise to decrease or counterclockwise to increase spring length (B).
4. Apply net feed roll brake lever (A).
  5. Check that resisting torque to turn rubber feed roll screw (E) a quarter turn clockwise is within specification:

- Equipped with a rubber brake pad already in use:

	Specification
Sheave—Torque turn.....	min. 40 N·m (min. 30 lb·ft)

- Equipped with a new rubber brake pad:

	Specification
Sheave—Torque turn.....	65—75 N·m (48—55 lb·ft)



CC332516

- A—Net Feed Roll Brake Lever
- B—Length
- C—Lock Nuts
- D—Screw
- E—Rubber Feed Roll Screw

CC332516 —UN—21SEP17

Continued on next page

GA87848.00005A2 -19-17MAY18-1/2

6. If resisting torque is less than specifications, adjust net feed roll brake as follows:

- a. Release net feed roll brake lever (A).
- b. Loosen nuts (H).

**IMPORTANT: Never transfer two shims (G) at a time to prevent undue wear of the rubber brake pad (I).**

- c. Transfer one shim (G) between rubber brake pad (I) and its support (F).
- d. Tighten nuts (H).
- e. Apply net feed roll brake lever (A).
- f. Check that resisting torque to turn rubber feed roll screw a quarter turn clockwise is within specification:

- Equipped with a rubber brake pad already in use:

**Specification**

Sheave—Torque turn.....min. 50 N·m  
(min. 37 lb·ft)

- Equipped with a new rubber brake pad:

**Specification**

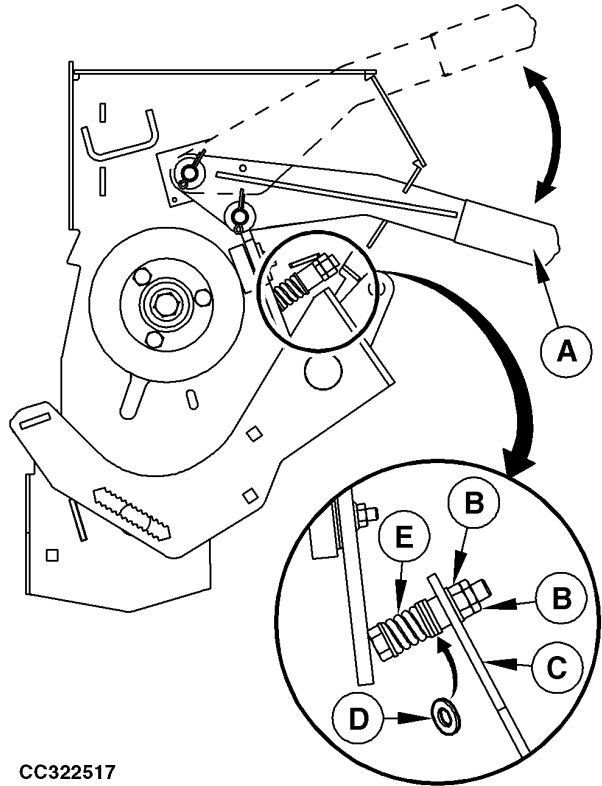
Sheave—Torque turn.....65—75 N·m  
(48—55 lb·ft)

If resisting torque is less than specification, repeat step 6.

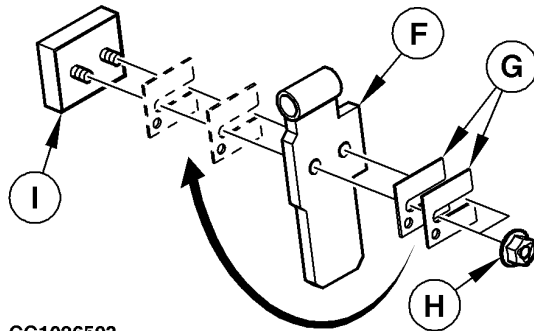
If resisting torque is always less than specification after using all the shims (G), proceed as follows:

- a. Release net feed roll brake lever (A).
- b. Remove lock nuts (B).
- c. Add one washer (D) between spring (E) and support (C).
- d. Reinstall and tighten lock nuts (B).
- e. Apply net feed roll brake lever (A).
- f. Check resisting torque again.

**Proceed to test 7.**



CC322517



CC1026593

- |                             |                    |
|-----------------------------|--------------------|
| A—Net Feed Roll Brake Lever | F—Support          |
| B—Lock Nuts                 | G—Shims            |
| C—Support                   | H—Nuts             |
| D—Washer                    | I—Rubber Brake Pad |
| E—Spring                    |                    |

GA87848,00005A2 -19-17MAY18-2/2

CC332517 —UN—21SEP17

CC1026593 —UN—27OCT04

### Check Net Feed Roll Brake (Machine Equipped with Brake Band) (Test 6)

**IMPORTANT:** Prior to this test, make sure that tests 1 to 5 results are "OK". Proceed to the relevant tests described in this section.

**IMPORTANT:** The net feed roll brake adjustment must be performed when the net rolls up around the rubber roll and/or the galvanized roll.

Proceed as follows:

1. Fully retract net actuator.
2. Adjust band stop (A):
  - a. Loosen screws (B).

*NOTE: At least one hole must be tangent to brake band (D) when brake is engaged.*

- b. Align edges of holes (C) with the brake band (D).
- c. Tighten screws (B).

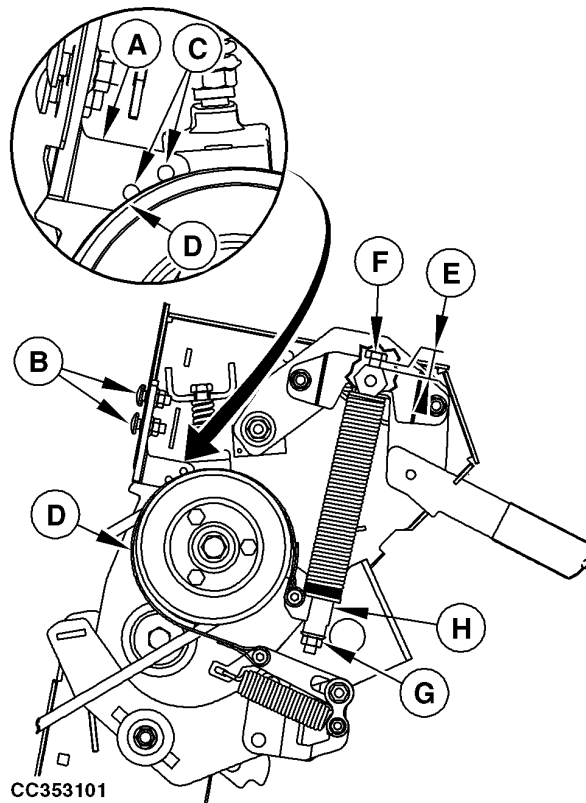
3. Check that distance (E) is within specification:

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

If necessary, adjust timing screw (F):

**IMPORTANT: Do not adjust timing screw (F) before loosening nut (G), or damage to the brake can result.**

- a. Loosen nut (G) while holding the tension tube (H).
- b. Turn timing screw (F) until distance (E) is within specification.
- c. Tighten nut (G) while holding the tension tube (H).



- |             |                |
|-------------|----------------|
| A—Band Stop | E—Distance     |
| B—Screw     | F—Timing Screw |
| C—Hole      | G—Nut          |
| D—Band      | H—Tension Tube |

4. Turn the pulley clockwise using a wrench. The head of timing screw (F) must not be in contact with the head of the tension tube (H).

Continued on next page

GA87848,0001149 -19-09JUL21-1/2

CC353101—UN—17MAY18

5. Check that net binding material is feeding properly.

- When the brake timing is correct, the net material (A) is snug against the steel roll as shown in Photo 1
- If the brake timing is too late, a loop of net can develop above the counterknife (B). The material can get pinched between the front sheet and the rubber roll and cause feeding issues as shown in Photo 2. Adjust the timing bolt to specification, go to step 2.
- If the brake timing is too soon, net snap back can occur and can result in feeding issues as shown in Photo 3. Adjust the timing bolt to specification, go to step 2.

A—Net Binding Material

B—Counterknife

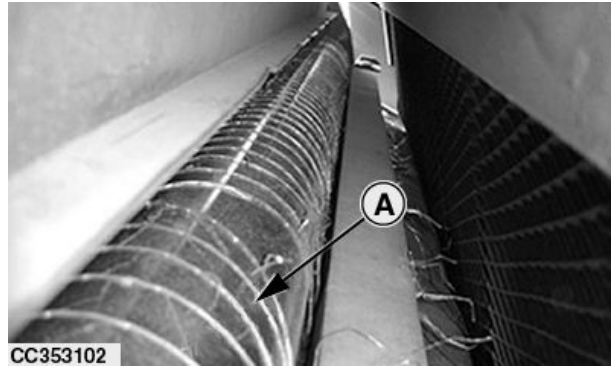


Photo 1: Timing is Correct

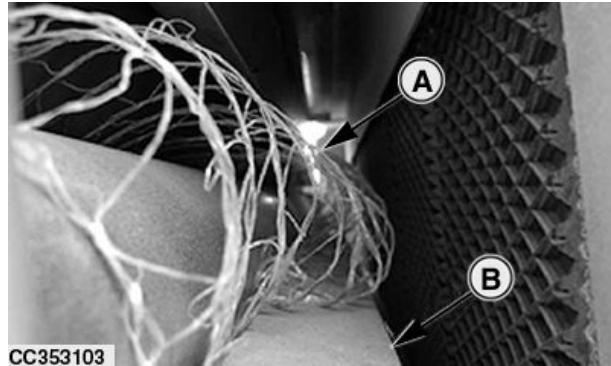


Photo 2: Timing is Late

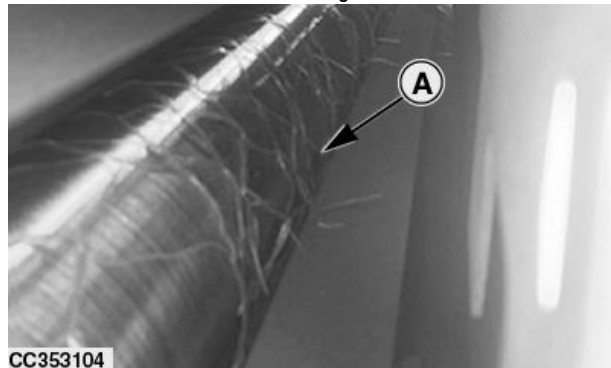


Photo 3: Timing is Early

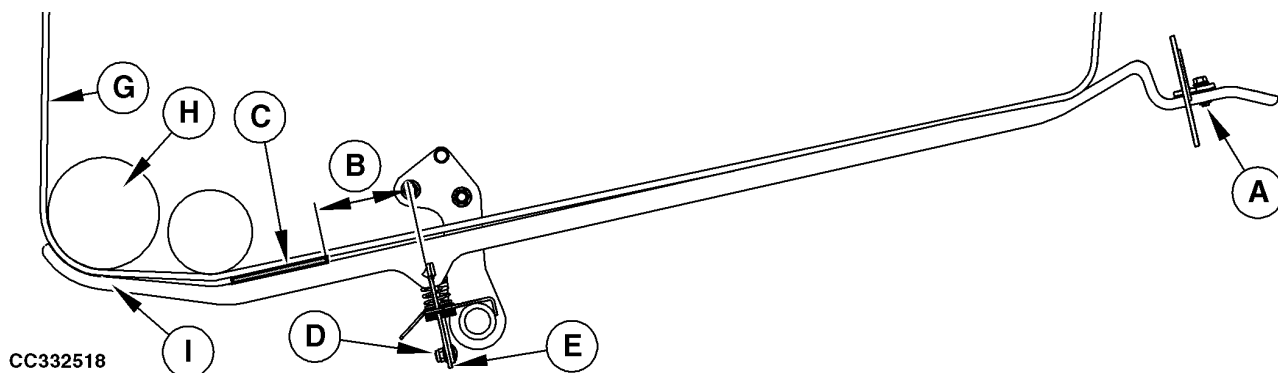
CC353102 —UN—15MAY18

CC353103 —UN—15MAY18

CC353104 —UN—15MAY18

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### Check Lower Net Guide Position (Test 7)



To adjust net guides position proceed as follows:

**IMPORTANT: Make sure that net guides are set in normal field condition position. See Set Net Guide Based on Field Condition in Operating the Baler-General Purpose section.**

1. Loosen nuts (A) and (D) on all guides.
2. Place metal sheet (C) to the specified distance (B) between runners (I) and belts (G) over the entire width of the baler.

**Specification**

Metal Sheet  
Position—Distance..... 83 mm  
(3-1/4 in)

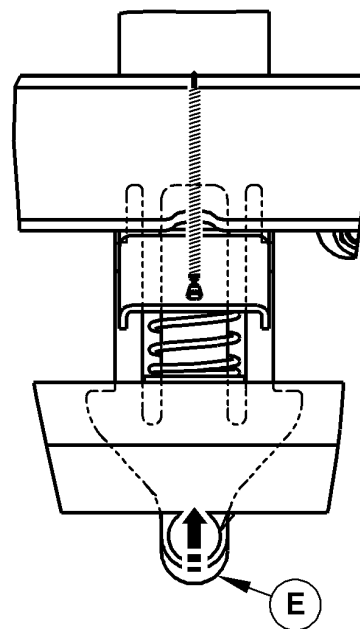
3. Push up runner front fixing lock (E) so that it is in contact with the support.
4. Tighten screw (E).
5. Repeat step 3 and 4 on all other guides.
6. Remove metal sheet (C).
7. Adjust position of runner (I) to obtain the specified distance (F) between runner and belt.

**Specification**

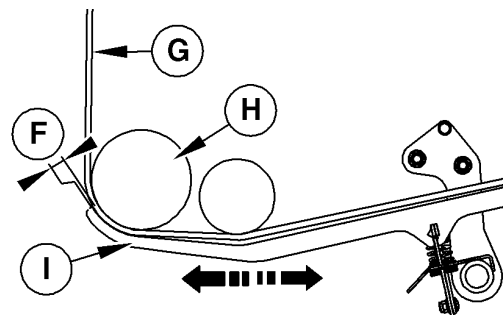
Front Runner  
End-to-Belt—Distance..... 2 mm  
(5/64 in)

8. Tighten screw (A).
9. Repeat step 7 and 8 on all other guides.
10. Check if the all rear ends of runners can move up and down freely.

- |   |               |
|---|---------------|
| A—Nut   | F—Distance    |
| B—Distance  | G—Belt        |
| C—Metal Sheet 1200 X 150 X<br>1.5 mm (3 ft 11-1/4 in X 5-7/8<br>in X 1/16 in) | H—Roll No. 10 |
| D—Nut   | I—Runner      |
| E—Runner Front Fixing Lock  |               |



CC332519



CC332520

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CC332518 —UN—21SEP17

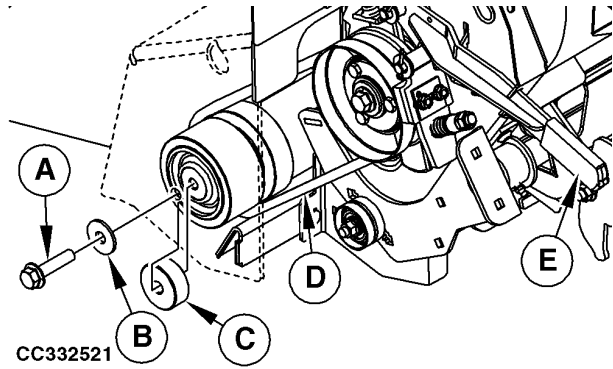
CC332519 —UN—21SEP17

CC332520 —UN—21SEP17

### Remove and Install Net Feed Roll Drive Belt

Remove net feed roll drive belt as follows:

1. Fully retract net actuator with monitor.
2. Open net system cover.
3. Slightly open gate to release pressure on baler belts.
4. Remove gate roll No. 9 fixing screw (A) and washer (B).
5. Remove spacer ring (C).
6. Release brake lever (E).
7. Remove drive belt (D).
8. Reverse removal procedure to install drive belt back in place.
9. Close the gate and check belt tracking. See Adjust Tracking of Belts in this section.



A—Screw  
B—Washer  
C—Spacer Ring  
D—Belt  
E—Brake Lever

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CC332521 —UN—25SEP17

### Remove and Install Net Knife

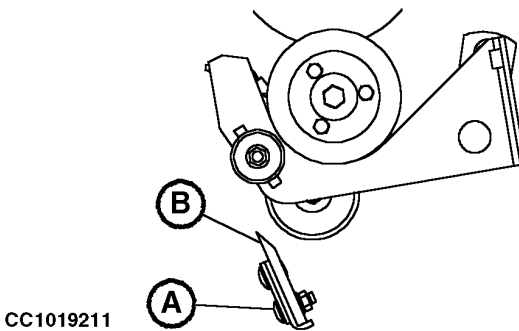
**CAUTION:** Prevent personal injury by wearing gloves to handle net knife.

1. Note position of knife cutting edge for reinstallation.
2. Open net binding cover.
3. Fully extend net actuator and disconnect actuator plug.
4. Remove fixing screws (A) of knife (B), then remove knife (B) from its brackets.
5. Install knife (B) on its brackets in the same position as before removal.
6. Install and tighten screws to specified torque.

**Specification**

Net Knife Fixing	
Screw—Torque.....	55 N·m (40 lb·ft)

7. Reconnect actuator plug and retract actuator. Close net binding cover.



A—Fixing screw  
B—Knife

**IMPORTANT:** Always carry out “Test 1” of net binding device check procedure after having installed net knife, see Check Knife and Counterknife Position (Test 1) in this section.

NB02380,00004FC -19-09OCT17-1/1

CC1019211 —UN—13FEB01

## Remove Binding Materials Wrapped Around Feed Rolls

**⚠ CAUTION:** Avoid injury from entanglement in moving rolls. Disengage PTO and shut off tractor before servicing.

If net wraps around the rubber roll:

Open net binding cover.

Release feed roll brake.

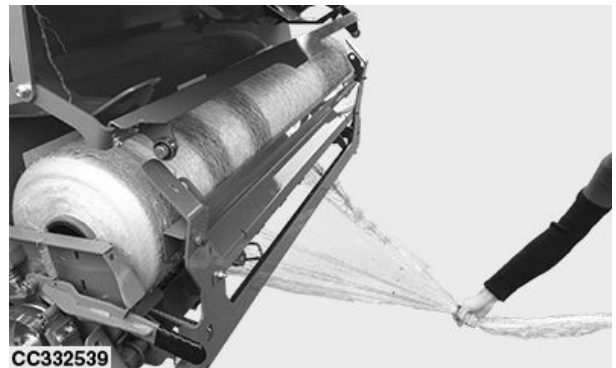
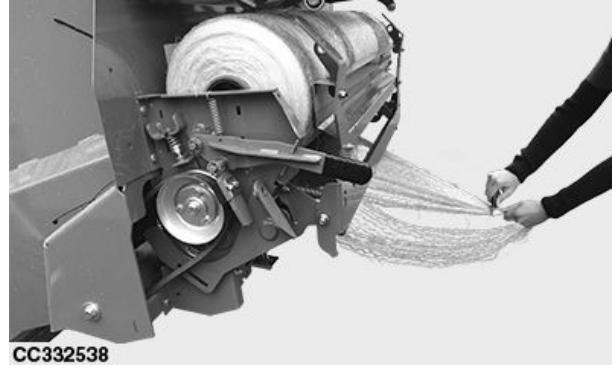
**IMPORTANT:** Do not cut net material from rubber roll. Any knife cuts in the rubber roll covering may result in more frequent wrapping around the rolls and may require roll replacement.

Pull net material away from the supply roll. Cut net material.

Gather the free end of the net and lay over the top roll of wrap material.

Remove and discard all of the wrapped material, including all strings, staples, etc.

Wipe off feed rolls and check for any sticky material. If necessary, roll may be washed with soap and water. NEVER use solvents to clean rubber feed roll. Allow roll to dry before threading or wrappage may occur again.



CC332538 —UN—03OCT17

CC332533 —UN—03OCT17

CC332539 —UN—03OCT17

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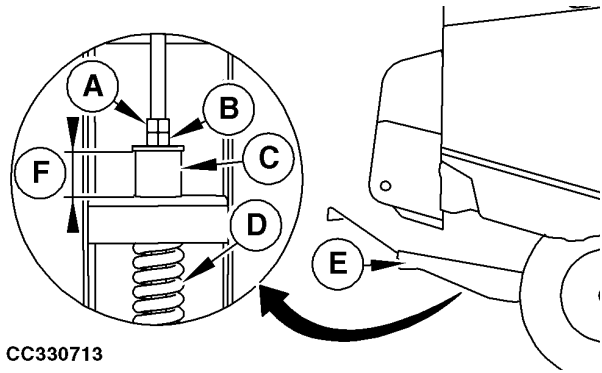
### Adjust Bale Discharging Ramp

1. Park baler on level ground.
2. Check if distance (F) is within specification. If necessary, proceed as follow.

**Specification**

Bale Discharging  
 Bushing—Distance.....38.5—41.5 mm  
 (1-1/2—1-5/8 in)

3. Loosen counter nut (A).
4. Adjust nut (B) to obtain specified distance (F).
5. Tighten counter nut (A).



CC330713

A—Counter Nut  
 B—Nut  
 C—Bushing

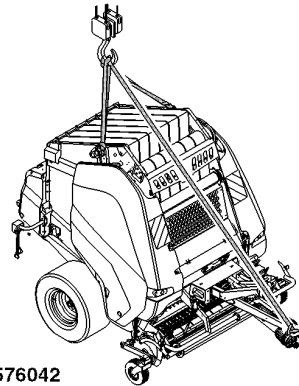
D—Spring  
 E—Bale Discharging Ramp  
 F—Distance

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CC330713—UN—27SEP17

### Round Baler Hanging Points

If you need to lift the machine, use the hanging points shown.



CC576042



CC576042—UN—26JUN23

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### Remove and Install Wheel

1. Engage park brake and/or place transmission in PARK, shut off tractor engine and remove key.
2. Slightly loosen wheel nuts.
3. Position jack (A) close the decal (B) under axle as shown.
4. Raise wheel off ground with jack (A).
5. Install stand to secure baler.
6. Remove wheel nuts and wheel.
7. Install the new wheel and nuts . Slightly tighten nuts by hand.
8. Remove stand, lower the baler and remove jack (A).
9. Tighten wheel nuts diagonally to the following specification:

**Specification**

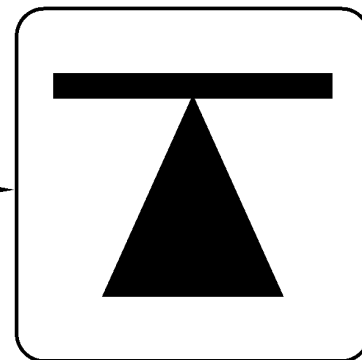
Wheel Nut—Torque.....270 N·m  
(200 lb.-ft.)

10. Check tire inflation. See [Tire Inflation](#) in Preparing the Baler section.

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



CC1035369



CC576043

A—Jack

B—Jack Point Decal

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CC1035369—JUN—11OCT11

CC576043—JUN—26JUN23

### Repair Gauge Wheel

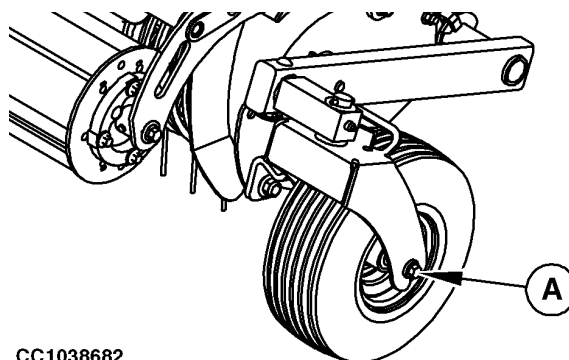
If gauge wheel fixing screw (A) is loosened for standard or caster gauge wheel repair, replace fixing screw (A). See your John Deere dealer to obtain appropriate screw (A).

Tighten gauge wheel fixing screw to the following specification:

**Specification**

Gauge Wheel Fixing  
Screw—Torque.....110 N·m  
(81 lb.-ft.)

A—Gauge Wheel Fixing Screw



CC1038682

Caster Gauge Wheel Shown

OUC006,00019BA -19-14NOV12-1/1

CC1038682—JUN—14NOV12

# BaleTrak Monitor Service

## Diagnostic Trouble Code List

The diagnostic trouble codes are given in the following table:

Battery			
Diagnostic trouble code	Description	Solution	How to clear the code displayed
E001	Voltage drop while actuator is ON.	Check wires and connectors. Check battery. Check alternator. See <a href="#">Channel 019: Voltmeter</a> in this section. See your John Deere dealer.	Press "MINUS" key when actuator is OFF.
E002	Battery voltage below or equal to 11.2 V.	Check wires and connectors. Check battery. Check alternator. See <a href="#">Channel 019: Voltmeter</a> in this section. See your John Deere dealer.	Disappears when problem is resolved.
E003	Battery voltage above or equal 16 V.	Check wires and connectors. Check battery. Check alternator. See <a href="#">Channel 019: Voltmeter</a> in this section. See your John Deere dealer.	Disappears when problem is resolved.
B...	Display the battery voltage.	Check wires and connectors. Check battery. Check alternator. See <a href="#">Channel 019: Voltmeter</a> in this section. See your John Deere dealer.	Disappears when problem is resolved.

Bale diameter potentiometer RB311			
Diagnostic trouble code	Description	Solution	How to clear the code displayed
E102	Bale diameter open circuit or short circuit to the ground.	Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E103	Bale diameter short circuit to the battery.	Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E104	Bale size below the minimum size.	Check potentiometer calibration. See <a href="#">Channel 027: Record Lowest Position of Belt Tension Arm</a> in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E105	Bale size over the maximum size.	Check potentiometer calibration. See <a href="#">Channel 027: Record Lowest Position of Belt Tension Arm</a> in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

Right bale shape potentiometer RB322			
Diagnostic trouble code	Description	Solution	How to clear the code displayed
E112	Right bale shape open circuit or short circuit to the ground.	Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E113	Right bale shape short circuit to the battery.	Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

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*BaleTrak Monitor Service*

<b>Right bale shape potentiometer RB322</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E114	Right bale shape below the minimum value.	Check potentiometer calibration. See <a href="#">Channels 006 and 007: Calibrate Bale Shape Potentiometers RB321 and RB322</a> in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E115	Right bale shape over the maximum value.	Check potentiometer calibration. See <a href="#">Channels 006 and 007: Calibrate Bale Shape Potentiometers RB321 and RB322</a> in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

<b>Left bale shape potentiometer RB321</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E122	Left bale shape open circuit or short circuit to the ground.	Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E123	Left bale shape short circuit to the battery.	Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E124	Left bale shape below the minimum value.	Check potentiometer calibration. See <a href="#">Channels 006 and 007: Calibrate Bale Shape Potentiometers RB321 and RB322</a> in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E125	Left bale shape over the maximum value.	Check potentiometer calibration. See <a href="#">Channels 006 and 007: Calibrate Bale Shape Potentiometers RB321 and RB322</a> in this section. Check wires and connectors. Check potentiometer. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

<b>Twine Electric Motor MB421</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E201	Twine electric motor disconnected.	Check wires and connectors. Check twine electric motor. See your John Deere dealer.	Press "MINUS" key when electric motor is OFF.
E202	Twine electric motor faulty or jammed.	Check wires and connectors. Check twine electric motor. See your John Deere dealer.	Press "MINUS" key when electric motor is OFF.
E203	Resistive twine electric motor power line.	Check wires and connectors. Check twine electric motor. See your John Deere dealer.	Press "MINUS" key when electric motor is OFF.
E204	Electric motor wire short circuit to the battery.	Check wires and connectors. Check twine electric motor. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E205	Electric motor wire short circuit to the ground.	Check wires and connectors. Check twine electric motor. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

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*BaleTrak Monitor Service*

<b>Net actuator MB411</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E211	Net actuator disconnected.	Check wires and connectors. Check net actuator. See your John Deere dealer.	Press "MINUS" key when actuator is OFF.
E212	Net actuator faulty.	Check wires and connectors. Check net actuator. See your John Deere dealer.	Press "MINUS" key when actuator is OFF.
E213	Resistive net actuator power line. Net actuator does not retract in the expected time.	If it appears during John Deere B-Wrap™ binding cycle, set Channel 036 to 1410. See <a href="#">Channel 036: Set B-Wrap Bale Orientation (If Equipped)</a> in this section. Check wires and connectors. Check net actuator. See your John Deere dealer.	Press "MINUS" key when actuator is OFF.
E214	Actuator wire short circuit to the battery.	Check wires and connectors. Check net actuator. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E215	Actuator wire short circuit to the ground.	Check wires and connectors. Check net actuator. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E217	John Deere B-Wrap™ metal strip not detected during the binding cycle.	See Metal strip not detected during John Deere B-Wrap™ binding cycle in <a href="#">Net Binding Equipment Difficulties</a> in Troubleshooting section. Check sensors. See <a href="#">Channel 023: Test of Right Twine Pulley Sensor SB422 or B-Wrap Sensor SB416 (If Equipped)</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E218	PTO shut OFF before actuator retracted completely.	Check wires and connectors. Check net actuator. Check the PTO. Check sensor adjustment. See <a href="#">Adjust Baler Rotation Speed Sensor SB365</a> in Service section. Check baler rotation speed sensor. See <a href="#">Channel 017: Test of Baler Rotation Speed Sensor SB365</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
IOEt	John Deere B-Wrap™ end of roll.	Check the John Deere B-Wrap™ roll See <a href="#">BaleTrak™ Displays IOEt in Net Binding Equipment Difficulties</a> in Troubleshooting section. Check wires and connectors. Check John Deere B-Wrap™ sensors. See <a href="#">Channel 023: Test of Right Twine Pulley Sensor SB422 or B-Wrap Sensor SB416 (If Equipped)</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

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*BaleTrak Monitor Service*

<b>Soft core solenoid valve YB351</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E221	Soft core solenoid valve disconnected.	Check wires and connectors. Check soft core solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E222	Soft core solenoid valve short circuit to the ground.	Check wires and connectors. Check soft core solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E223	Soft core solenoid valve short circuit to the battery.	Check wires and connectors. Check soft core solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

<b>Pickup solenoid valve YB511</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E231	Pickup solenoid valve disconnected.	Check wires and connectors. Check pickup solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E232	Pickup solenoid valve short circuit to the ground.	Check wires and connectors. Check pickup solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E233	Pickup solenoid valve short circuit to the battery.	Check wires and connectors. Check pickup solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

<b>Precutter knife solenoid valve YB551</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E241	Precutter knife solenoid valve disconnected.	Check wires and connectors. Check precutter knife solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E242	Precutter knife solenoid valve short circuit to the ground.	Check wires and connectors. Check precutter knife solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E243	Precutter knife solenoid valve short circuit to the battery.	Check wires and connectors. Check precutter knife solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

<b>Drop floor solenoid valve YB531 and YB532</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E251	Drop floor solenoid valve disconnected.	Check wires and connectors. Check drop floor solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E252	Drop floor solenoid valve short circuit to the ground.	Check wires and connectors. Check drop floor solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E253	Drop floor solenoid valve short circuit to the battery.	Check wires and connectors. Check drop floor solenoid valve. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

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*BaleTrak Monitor Service*

**Baler rotation speed sensor SB365**

<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E311	Baler rotation speed too low or sensor disconnected.	Increase PTO speed. Check sensor adjustment. See <a href="#">Adjust Baler Rotation Speed Sensor SB365</a> in Service section. Check sensor. See <a href="#">Channel 017: Test of Baler Rotation Speed Sensor SB365</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E312	Baler rotation speed too low.	Increase PTO speed. Check sensor adjustment. See <a href="#">Adjust Baler Rotation Speed Sensor SB365</a> in Service section. Check sensor. See <a href="#">Channel 017: Test of Baler Rotation Speed Sensor SB365</a> in this section. See your John Deere dealer.	Press "Minus" key when problem is resolved.
E313	Baler rotation speed over the maximum value.	Decrease PTO speed. Check sensor adjustment. See <a href="#">Adjust Baler Rotation Speed Sensor SB365</a> in Service section. Check sensor. See <a href="#">Channel 017: Test of Baler Rotation Speed Sensor SB365</a> in this section. See your John Deere dealer.	Press "Minus" key when problem is resolved.

**Twine pulley sensors SB421 and SB422**

<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E321	Twine coil is empty or twine is not wrapped around the bale.	Replace twine coil. Check twine routing. See <a href="#">Route Twine from Twine Box to Twine Arms (Tube Arms)</a> or <a href="#">Route Twine from Twine Box to Twine Arms (Adjustable Arms)</a> in Preparing the Baler section. Check adjustment of twine pulley sensors. Check sensors. See <a href="#">Channel 022: Test of Left Twine Pulley Sensor SB421</a> and <a href="#">Channel 023: Test of Right Twine Pulley Sensor SB422</a> or <a href="#">B-Wrap Sensor SB416 (If Equipped)</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E322	Twine not cut.	Check twine arm adjustment. See <a href="#">Adjust Twine Arm Position (Tube Arms)</a> or <a href="#">Adjust Twine Arm Position (Adjustable Arms)</a> in Service section. Replace twine binding knife. See <a href="#">Replace Twine Binding Knife</a> in Service section. Check sensors. See <a href="#">Channel 022: Test of Left Twine Pulley Sensor SB421</a> and <a href="#">Channel 023: Test of Right Twine Pulley Sensor SB422</a> or <a href="#">B-Wrap Sensor SB416 (If Equipped)</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

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*BaleTrak Monitor Service*

<b>Net cut sensor SB414</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E401	Net cut sensor always detects the target (net binding rod). No net on bale.	Replace net roll. Check net routing. See <u>Load Net Roll</u> in Preparing the Baler section. Check wires and connectors. Check net cut sensor adjustment. Check net cut sensor. See <u>Channel 012: Test of Net Cut Sensor SB414</u> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E402	Net cut sensor never detects the target (net binding rod). Net not cut.	Check net knife and counterknife position. See <u>Check Knife and Counterknife Position (Test 1)</u> in Service section. Check wires and connectors. Check net cut sensor adjustment. See <u>Adjust Net Cut Sensor SB414</u> in Service section. Check net cut sensor. See <u>Channel 012: Test of Net Cut Sensor SB414</u> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

<b>Gate latch sensor SB3310 and SB3311</b>			
<b>Diagnostic trouble code</b>	<b>Description</b>	<b>Solution</b>	<b>How to clear the code displayed</b>
E411	Right gate latch sensor SB3311 never detects the target. Gates always open.	Check wires and connectors. Check right gate latch sensor adjustment. See <u>Adjust Gate Latch Sensors SB3310 and SB3311</u> in Service section. Check right gate latch sensor. See <u>Channel 014: Test of Right Gate Sensor SB3311</u> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E412	Right gate latch sensor SB3311 always detects the target. Gates always closed.	Check wires and connectors. Check right gate latch sensor adjustment. See <u>Adjust Gate Latch Sensors SB3310 and SB3311</u> in Service section. Check right gate latch sensor. See <u>Channel 014: Test of Right Gate Sensor SB3311</u> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E421	Left gate latch sensor SB3310 never detects the target. Gates always open.	Check wires and connectors. Check left gate latch sensor adjustment. See <u>Adjust Gate Latch Sensors SB3310 and SB3311</u> in Service section. Check left gate latch sensor. See <u>Channel 015: Test of Left Gate Sensor SB3310</u> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

Continued on next page

†181334,1681895431617 -19-20APR23-6/7

*BaleTrak Monitor Service*

**Gate latch sensor SB3310 and SB3311**

Diagnostic trouble code	Description	Solution	How to clear the code displayed
E422	Left gate latch sensor SB3310 always detects the target. Gates always closed.	Check wires and connectors. Check left gate latch sensor adjustment. See <a href="#">Adjust Gate Latch Sensors SB3310 and SB3311</a> in Service section. Check left gate latch sensor. See <a href="#">Channel 015: Test of Left Gate Sensor SB3310</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E423	Gate ajar	Check wires and connectors. Check gate latch sensors adjustment. See <a href="#">Adjust Gate Latch Sensors SB3310 and SB3311</a> in Service section. Check gate latch sensors. See <a href="#">Channel 014: Test of Right Gate Sensor SB3311</a> and <a href="#">Channel 015: Test of Left Gate Sensor SB3310</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

**Oversize bale switch SB311**

Diagnostic trouble code	Description	Solution	How to clear the code displayed
E431	Oversize bale not detected when expected.	Check wires and connectors. Check oversize bale sensor. See <a href="#">Channel 013: Test of Oversize Bale Switch SB311 (Baler with BaleTrak Monitor)</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E432	Oversize bale.	Check wires and connectors. Check oversize bale sensor. See <a href="#">Channel 013: Test of Oversize Bale Switch SB311 (Baler with BaleTrak Monitor)</a> in this section. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

**Positive analog reference**

Diagnostic trouble code	Description	Solution	How to clear the code displayed
E512	Grounded circuit.	Check potentiometer wire and connectors. See your John Deere dealer.	Press "MINUS" key when problem is resolved.
E513	Shorted circuit.	Check potentiometer wire and connectors. See your John Deere dealer.	Press "MINUS" key when problem is resolved.

**EEPROM**

Diagnostic trouble code	Description	Solution	How to clear the code displayed
E601	Memory faulty.	Do your personal settings again.	Disappears after 5 seconds.
E602	Memory faulty.	Check your personal settings.	Disappears after 5 seconds.
E603	Memory faulty.	See your John Deere dealer.	Disappears when problem is resolved.
E604	Memory faulty.	Check your personal settings.	Disappears after 5 seconds.
E605	Memory faulty.	See your John Deere dealer.	Disappears when problem is resolved.

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

†181334,1681895431617 -19-20APR23-7/7

### Diagnostic Mode: User Parameters

The user parameters allow the operator to reset all settings to the factory default settings and to set user parameters. The user parameter also allows the operator to select special twine binding programs, and to check or adjust electrical components which are connected to the monitor.

The user parameters are stored in several "Channels" from CH001 to CH040.

#### Switch on the monitor in diagnostic mode

Monitor off, press and hold the "Counter" key (A), then switch ON the monitor by pressing the "ON/OFF" key (B).

During the power-up, all the LCD screen pictograms are displayed and the buzzer beeps for one second.

Then, CH001 is displayed on the LCD screen. The monitor is switched in diagnostic mode and the setting of channel 1 is displayed if the "Counter" key (A) is released.

*NOTE: To switch ON the monitor in diagnostic mode, do not release the "Counter" key (A) before the LCD screen displays CH001.*

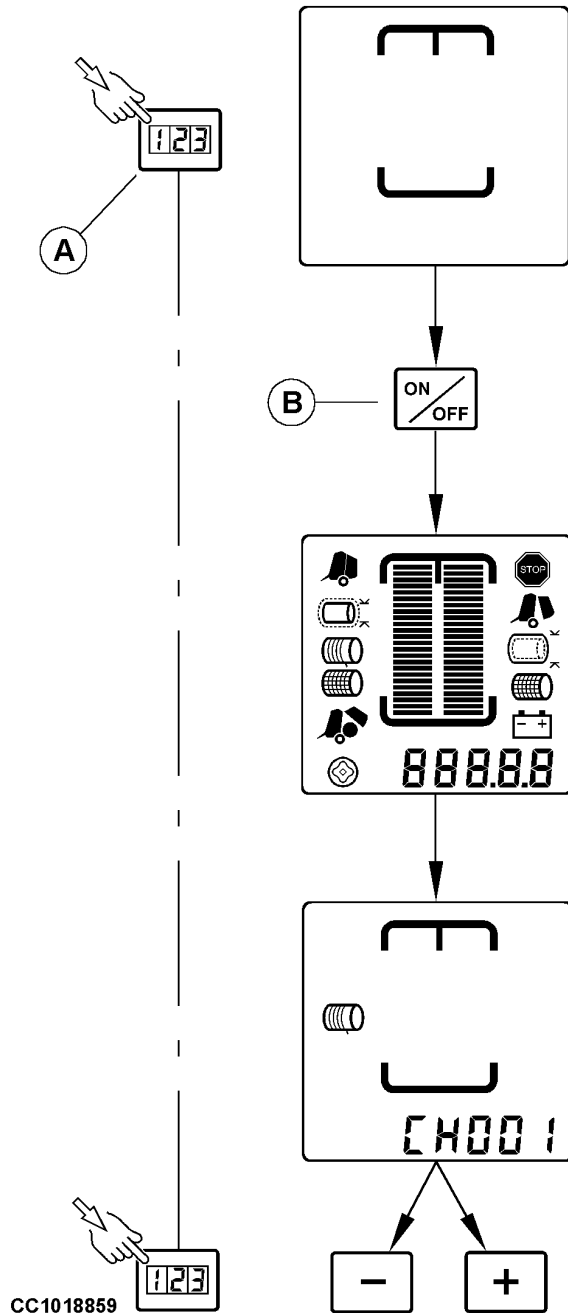
#### Select user channel

When the monitor is switched in diagnostic mode, press and hold "Counter" key (A), and press "PLUS" or "MINUS" key to change the channel.

To return in normal mode and save the user parameters settings, switch OFF the monitor by pressing the "ON/OFF" key.

A—Counter Key

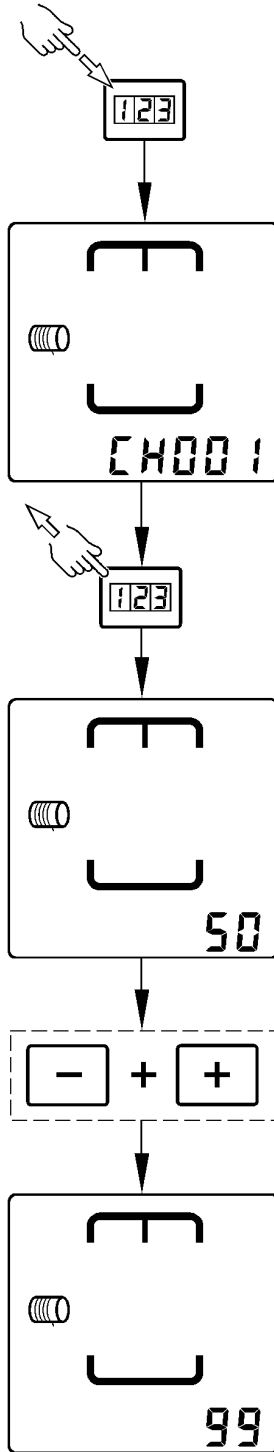
B—ON/OFF Key



### Channel 001: Reset to Factory Default Settings

When CH001 is selected, "50" is displayed. To reset all twine and net binding programs to the factory default settings, press "PLUS" and "MINUS" keys simultaneously. The LCD screen displays "99".

*NOTE: It is recommended to check all other channel parameters after resetting to factory default settings.*



CC1018860

CC1018860 —UN—22DEC00

TL81334,0000F88 -19-28JUN21-1/1

### Channel 002: Not Activated

TL81334,000019B -19-08SEP17-1/1

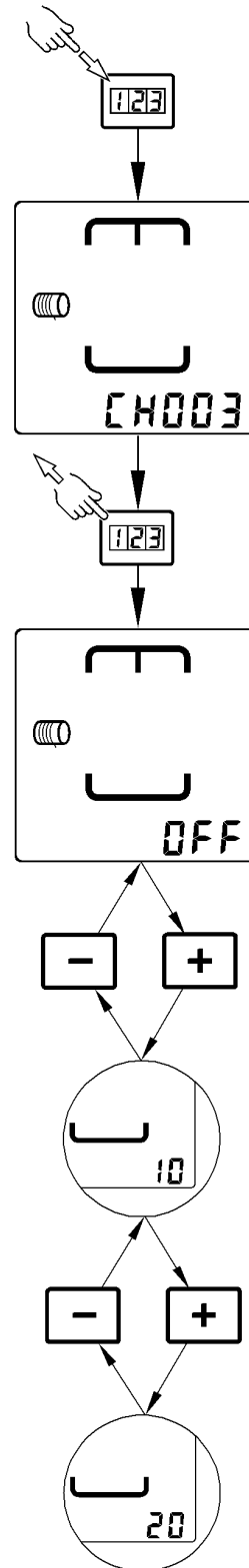
### Channel 003: Re-extension Twine Binding Program

This program allows operator to have more twine coils at the end of the bale binding, and helps to prevent twine unrolling.

After the set number at binding end has been applied, the twine arm is extended again towards the center of the bale to the set distance, and then, it completely retract.

In CH003, press “PLUS” key to activate this program, and adjust the re-extension distance to 10, or 20 cm (4, or 8 in).

Press “MINUS” key to decrease the re-extension distance from 20, 10 cm, (from 8, or 4 in), and switch off this program. When the re-extension twine binding program is switched off, the LCD screen displays “OFF”.



CC353909

TL81334,0000F89 -19-10JUN21-1/1

CC353909 —JUN—29JUN18

**Channel 004: Not Activated**

JC87117,0000329 -19-04APR17-1/1

**Channel 005: Bale Diameter Default Value for Lowest Position of Belt Tension Arm**

• For V461M Baler: 8500.

**IMPORTANT: Do not modify this value. If this value has been modified, set the value:**

This channel is used to store the bale diameter default value for lowest position of belt tension arm.

• For V451M Baler: 8430.

TL81334,0001005 -19-25AUG21-1/1

**Channels 006 and 007: Calibrate Bale Shape Potentiometers RB321 and RB322**

CH006 allows operator to set the position of right bale shape potentiometer and CH007 the left bale shape potentiometer.

*NOTE: The adjusting procedure is the same for both sides. Use the appropriate channel for each side.*

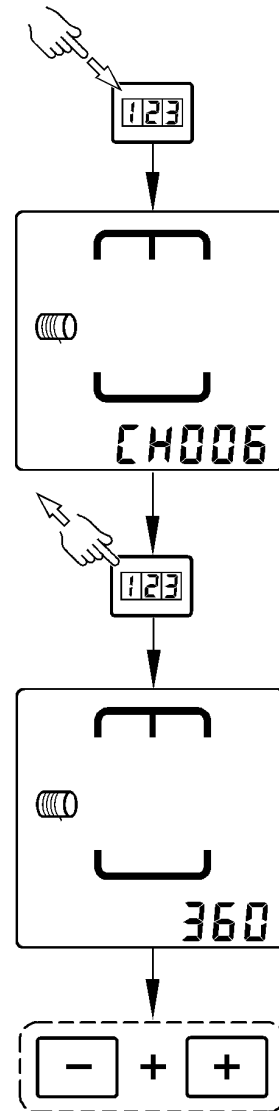
Deactivate the soft core device, open and close the gate, and adjust bale density valve to working pressure.

Engage PTO a few seconds to remove all slacks. Actuate selective control valve lever again to be sure that the belt tension arm is in low position.

In CH006, press simultaneously "PLUS" and "MINUS" keys to record the value of right bale shape potentiometer.

In CH007, press simultaneously "PLUS" and "MINUS" keys to record the value of left bale shape potentiometer.

*NOTE: In CH006 and CH007, press "PLUS" key to display the recorded value of right and left bale shape potentiometer.*



CC1038105

CC1038105 —UN—20SEP12

TL81334,0001006 -19-25AUG21-1/1

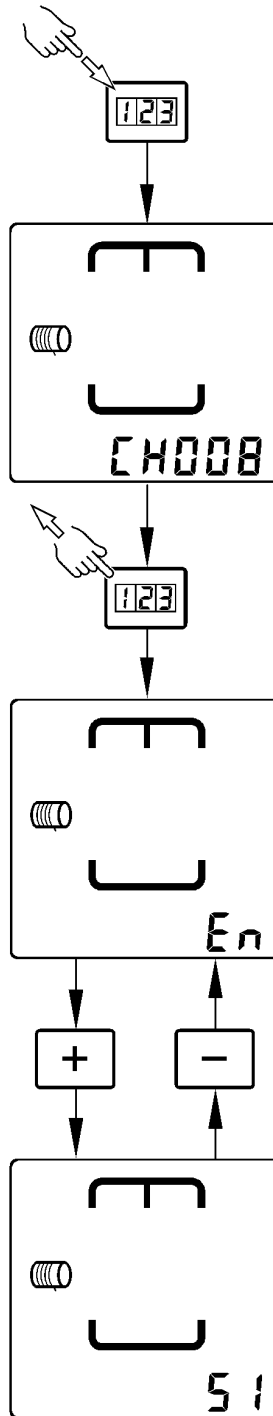
### Channel 008: Measurement Units

The monitor is factory set to the metric measurement units.

CH008 allows operator to switch the measurement units from metric to non-metric.

Press "MINUS" key to select the non-metric units, "En" (English) is displayed. The units displayed are in inches.

Press "PLUS" key to select the metric units, "SI" (International System) is displayed. The units displayed are in centimeters.



CC1026735

TL81334.0000F8B -19-10JUN21-1/1

CC1026735 —UN—28JAN05

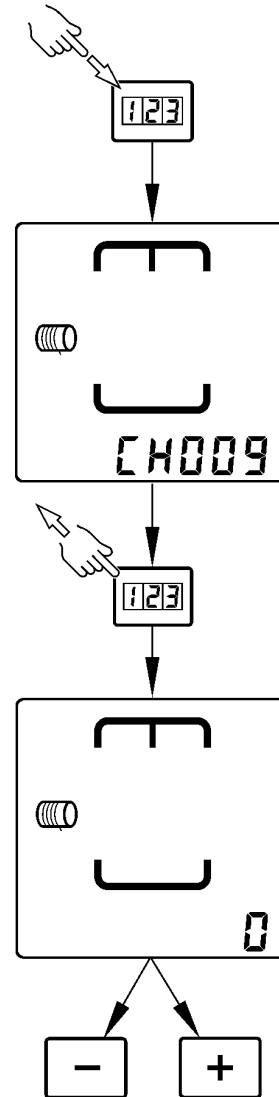
### Channel 009: Net Binding Delay

The net binding delay is the time between the binding start indication on the monitor and the activation of net actuator.

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

CH009 allows operator to set the net binding delay from 0 to 15 seconds. The initial factory setting is 0 seconds.

Press "PLUS" or "MINUS" key to increase or decrease the net binding delay.



CC518968

CC518968—UN—25AUG21

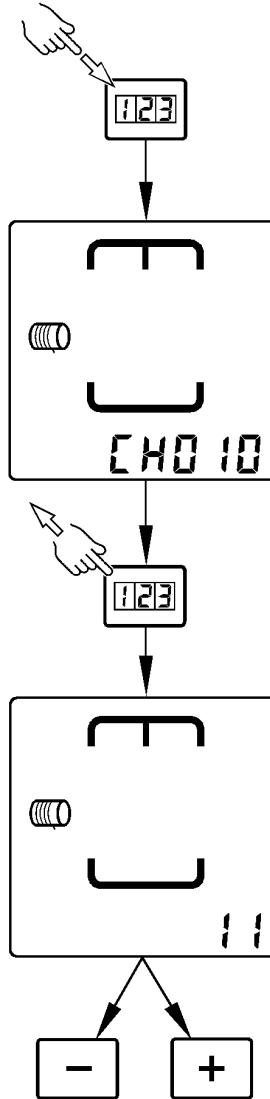
t181334,1681895479385 -19-19APR23-1/1

### Channel 010: Offset of Nearly Full Alarm

The offset of nearly full alarm represents the distance subtracted from the preset bale size at which the nearly full pictogram display.

CH010 allows operator to set this distance from 1 to 27 cm (0.5 to 10 in). The initial factory value is 11 cm (4.5 in).

Press "PLUS" or "MINUS" key, to increase or decrease the offset of nearly full alarm.



CC1018869

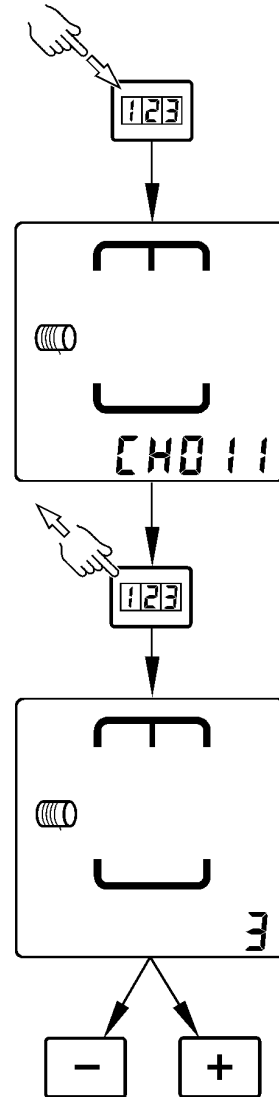
CC1018869—UN—22DEC00

TL81334,0000F8D -19-23JUN21-1/1

### Channel 011: Bale Shape Sensitivity

CH011 allows operator to set the bale shape sensitivity from 1 (slowest sensitivity) to 5 (fastest sensitivity). The initial factory setting is 3.

Press "PLUS" or "MINUS" key, to increase or decrease the bale shape sensitivity.



CC1018870

TL81334,0000F8E -19-11JUN21-1/1

CC1018870 —UN—22DEC00

### Channel 012: Test of Net Cut Sensor SB414

CH012 allows operator to test the net cut sensor.

The monitor displays "12" with a continuous beep when sensor (A) does not detect rod (B).

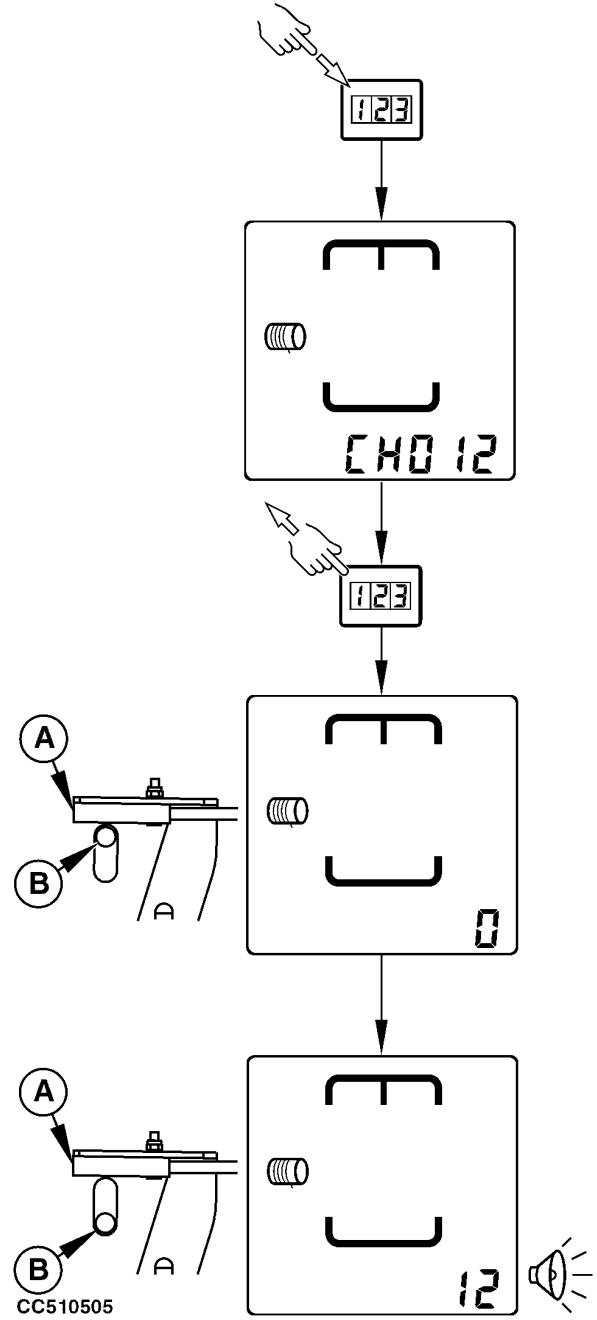
The monitor displays "0" when sensor (A) detects rod (B).

If this test is not OK, see your John Deere dealer.

**NOTE:** See *Adjust Net Cut Sensor SB414 in Service* section to check the net cut sensor adjustment.

A—Net Cut Sensor

B—Net Binding Rod



CC510505

CC510505—UN—23JUN21

TL81334.0000FAC -19-23JUN21-1/1

### Channel 013: Test of Oversize Bale Switch SB311 (Baler with BaleTrak Monitor)

CH013 allows operator to test the oversize bale switch.

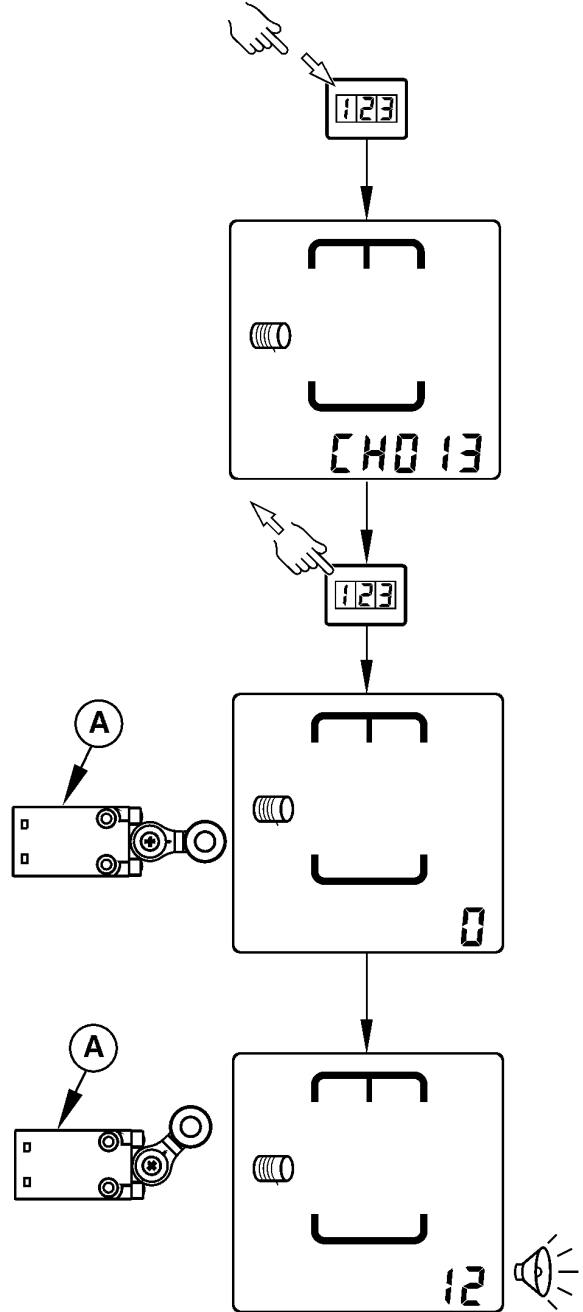
The monitor displays "0" when switch (A) does not detect the target (B).

The monitor displays "12" with a continuous beep when switch(A) detects the target (B).

If this test is not OK, see your John Deere dealer.

A—Oversize Bale Switch

B—Oversize Bale Switch Target



CC380432

CC380432—UN—16JAN20

TL81334,0000C71 -19-16JAN20-1/1

### Channel 014: Test of Right Gate Sensor SB3311

CH014 allows operator to test the right gate sensor.

The monitor displays "0" when sensor (A) detects the target (B).

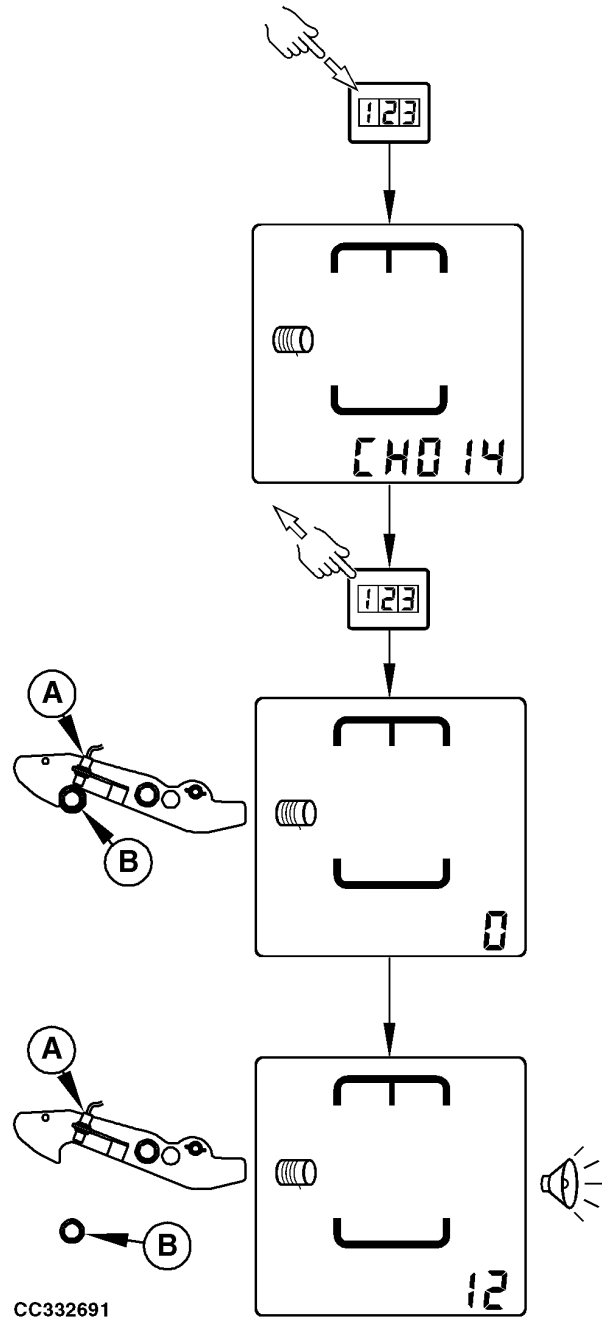
The monitor displays "12" with a continuous beep when sensor (A) does not detect the target (B).

If this test is not OK, see your John Deere dealer.

*NOTE: See Adjust Gate Latch Sensors SB3310 and SB3311 in Service section to check the right gate sensor adjustment.*

A—Right Gate Sensor

B—Right Gate Sensor Target



GA87848,000042F -19-19OCT17-1/1

**Channel 015: Test of Left Gate Sensor SB3310**

CH015 allows operator to test the left gate sensor.

The monitor displays "0" when sensor (A) detects the target (B).

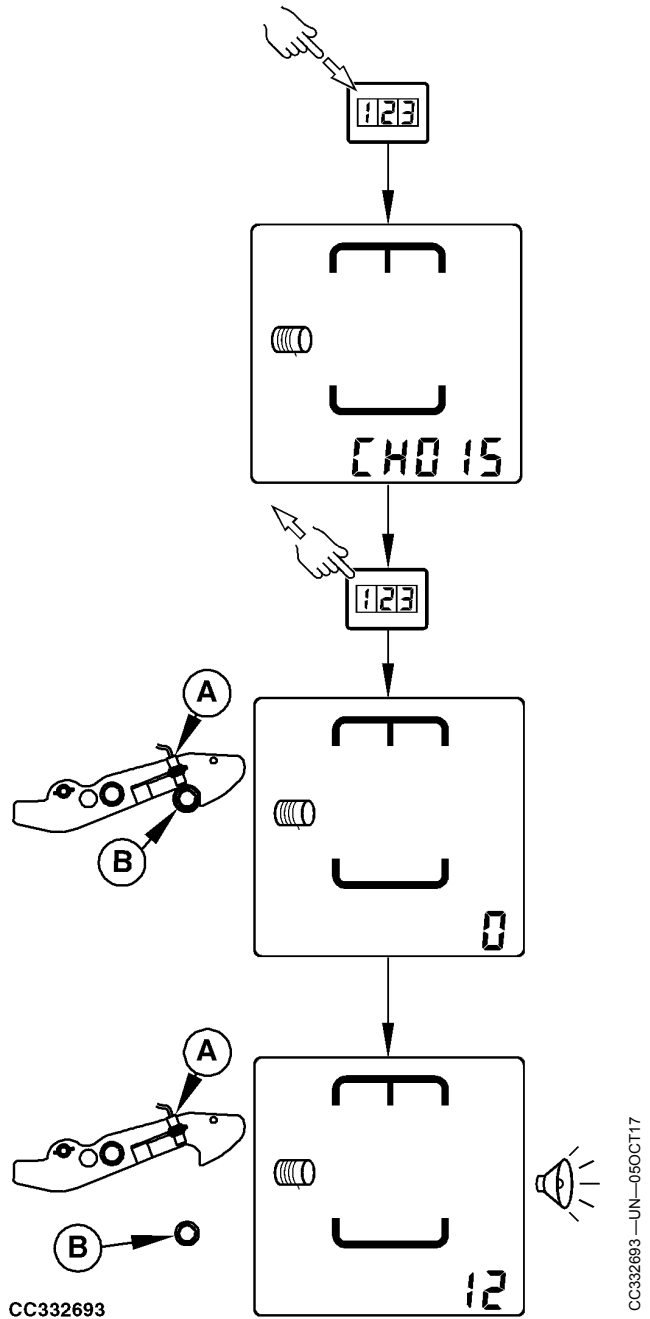
The monitor displays "12" with a continuous beep when sensor (A) does not detect the target (B).

If this test is not OK, see your John Deere dealer.

*NOTE: See Adjust Gate Latch Sensors SB3310 and SB3311 in Service section to check the left gate sensor adjustment.*

A—Left Gate Sensor

B—Left Gate Sensor Target



GA87848,0000430 -19-19OCT17-1/1

**Channel 016: Not Activated**

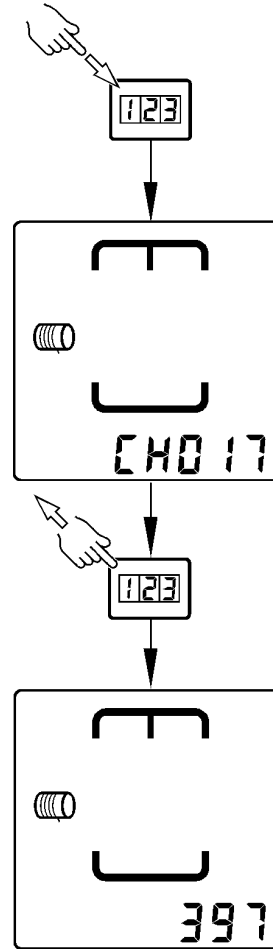
OUCC006,00014C0 -19-04NOV08-1/1

### Channel 017: Test of Baler Rotation Speed Sensor SB365

CH017 allows operator to check the speed of baler rotation. The measured speed can be 397 rpm when the nominal tractor PTO speed is 540 rpm.

*NOTE: See Adjust Baler Rotation Speed Sensor SB365 in Service section to check the gear case output shaft sensor adjustment.*

If this test is not OK, see your John Deere dealer.



CC332695

TL81334.000100C -19-25AUG21-1/1

CC332695—UN—05OCT17

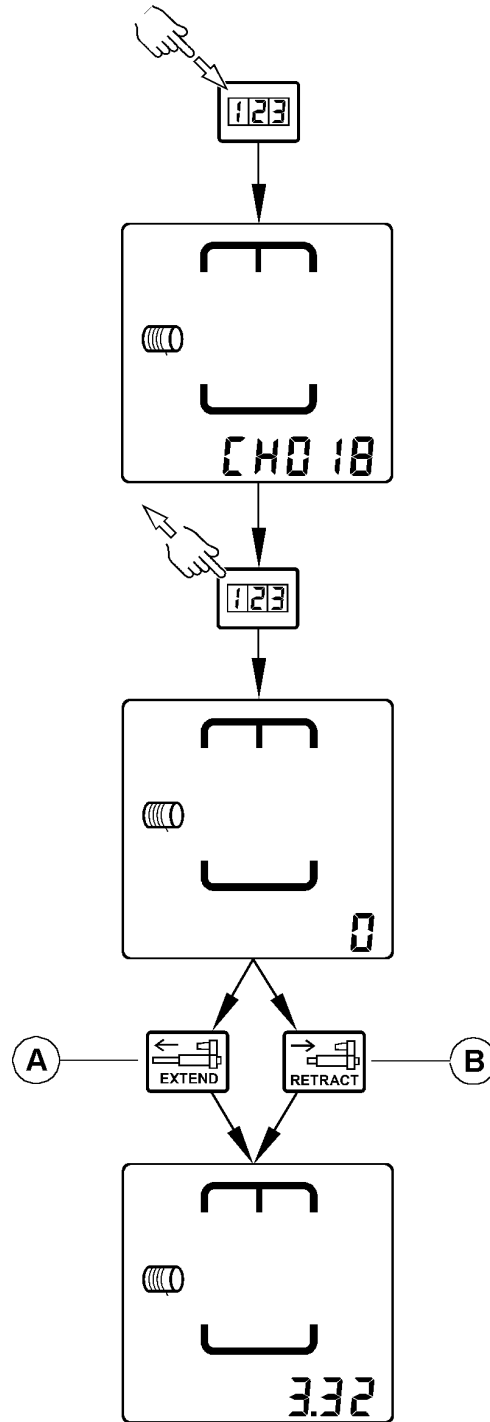
### Channel 018: Test of Actuator Current Consumption

CH018 allows operator to display the current consumption of either the twine or net actuator.

Press "EXTEND" key (A) or "RETRACT" key (B) to move the actuator of the selected binding system. While the actuator moves, the current consumption in ampere is displayed on the LCD screen.

A—EXTEND Key

B—RETRACT Key



CC1018876

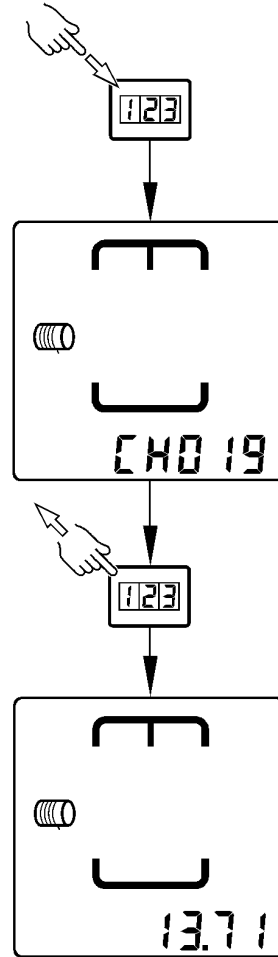
CC1018876—UN—30JAN01

TL81334,0000F8F -19-11JUN21-1/1

### Channel 019: Voltmeter

CH019 allows operator to display the voltage in the electrical circuit.

When this channel is selected, the voltage during the twine or net actuator motion can be checked to detect a resistive line. Press "EXTEND" or "RETRACT" key to move the actuator of the selected binding system. The voltage during the actuator motion is displayed on the LCD screen.



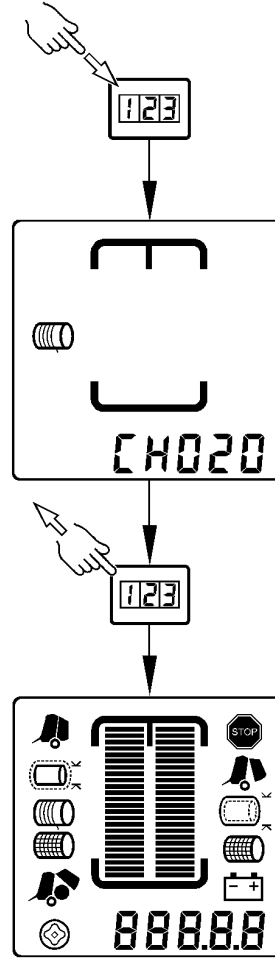
CC1018877

TL81334.0000F90 -19-28JUN21-1/1

CC1018877 -JUN-22DEC00

### Channel 020: Test of LCD Screen

CH020 allows operator to test all the LCD screen pictograms.



CC1018878

CC1018878 —UN—22DEC00

GA87848,0000435 -19-06OCT17-1/1

### Channel 021: Maximum Actuator Current Consumption

CH021 allows to display the maximum value of actuator current consumption in either twine or net actuator.

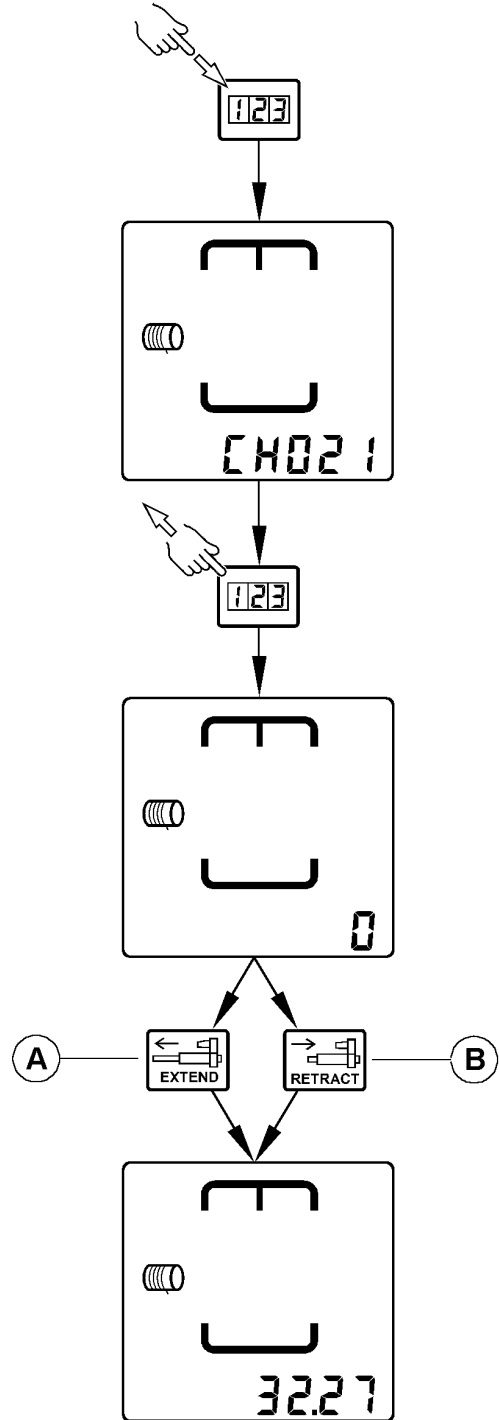
Press “EXTEND” key (A) or “RETRACT” key (B) to move the actuator of the selected binding system.

The maximum current consumption measured during the actuator motion is displayed.

To reset the display, extend or retract actuator by pressing “EXTEND” key (A) or “RETRACT” key (B) to full stroke position, then press again the same key.

A—EXTEND Key

B—RETRACT Key



CC1018884

TL81334,0000F91 -19-11JUN21-1/1

CC1018884 —UN—30JAN01

### Channel 022: Test of Left Twine Pulley Sensor SB421

CH022 allows the operator to test the left twine pulley sensor.

Pulley sensor (C) informs the monitor about pulley rotation which confirms that the twine has been caught by the bale during the binding cycle.

Rotate pulley (A) by hand.

The monitor displays "0" with a continuous beep when sensor (C) is aligned with magnet (B).

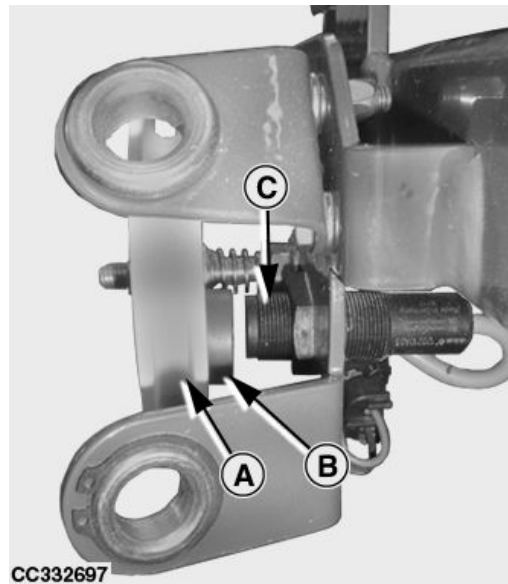
The monitor displays "12" when sensor (C) is not aligned with magnet (B).

If this test is not OK, see your John Deere dealer.

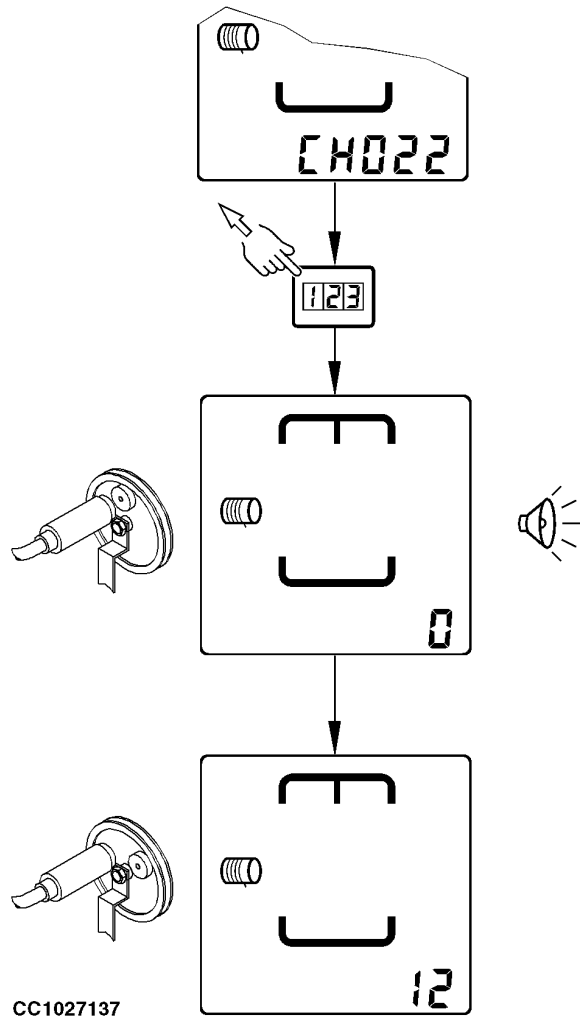
**NOTE:** See *Adjust Twine Pulley Sensors SB421 and SB422* in Service section to check the pulley sensor adjustment.

A—Pulley  
B—Magnet

C—Sensor



CC332697 —UN—05OCT17



CC1027137

CC1027137 —UN—10FEB05

TL81334,0000F92 -19-23JUN21-1/1

### Channel 023: Test of Right Twine Pulley Sensor SB422 or B-Wrap Sensor SB416 (If Equipped)

• **When the baler is set for twine binding:**

CH023 allows the operator to test the right twine pulley sensor.

Pulley sensor (C) informs the monitor about pulley rotation which confirms that the twine has been caught by the bale during the binding cycle.

Rotate pulley (A) by hand.

The monitor displays "0" with a continuous beep when sensor (C) is aligned with magnet (B).

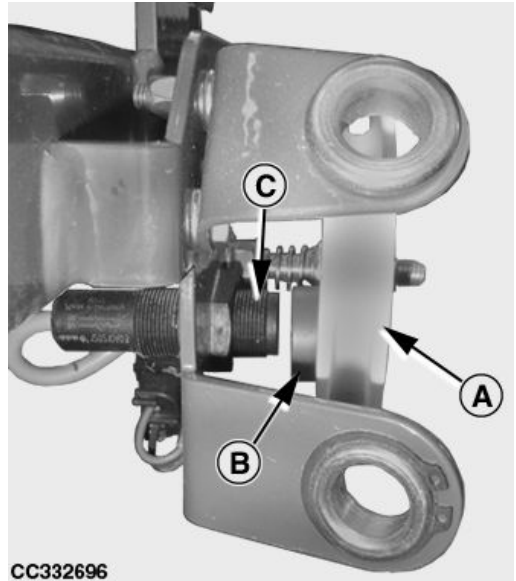
The monitor displays "12" when sensor (C) is not aligned with magnet (B).

If this test is not OK, see your John Deere dealer.

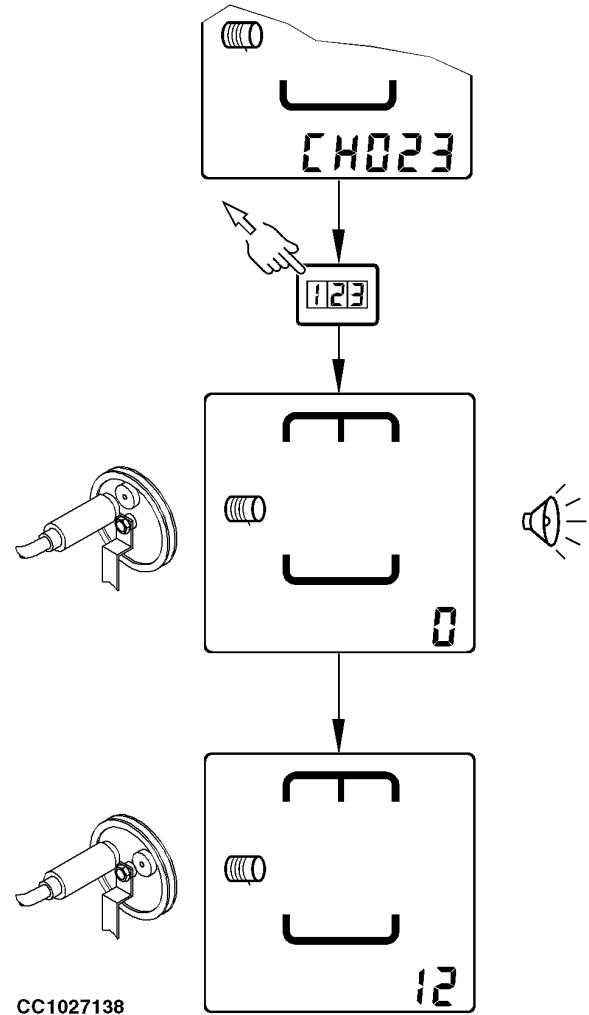
**NOTE:** See *Adjust Twine Pulley Sensors SB421 and SB422* in Service section to check the pulley sensor adjustment.

A—Pulley  
B—Magnet

C—Sensor



CC332696 —UN—05OCT17



CC1027138 —UN—10FEB05

Continued on next page

TL81334,0000F93 -19-11JUN21-1/2

• When the baler is set for John Deere B-Wrap™ binding:

CH023 allows the operator to test the John Deere B-Wrap™ sensor (A).

John Deere B-Wrap™ sensor (A) informs the monitor about the John Deere B-Wrap™ metal strip which allows the monitor to cut the John Deere B-Wrap™ net at correct length.

Pass a fine metallic part between John Deere B-Wrap™ sensor (A), and belt (B).

The monitor displays “0” with a continuous beep when the sensor detects the metallic part.

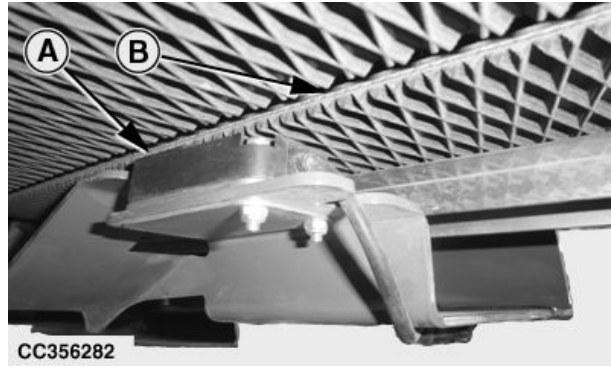
The monitor displays “12” when the sensor does not detect the metallic part.

If this test is not OK, see your John Deere dealer.

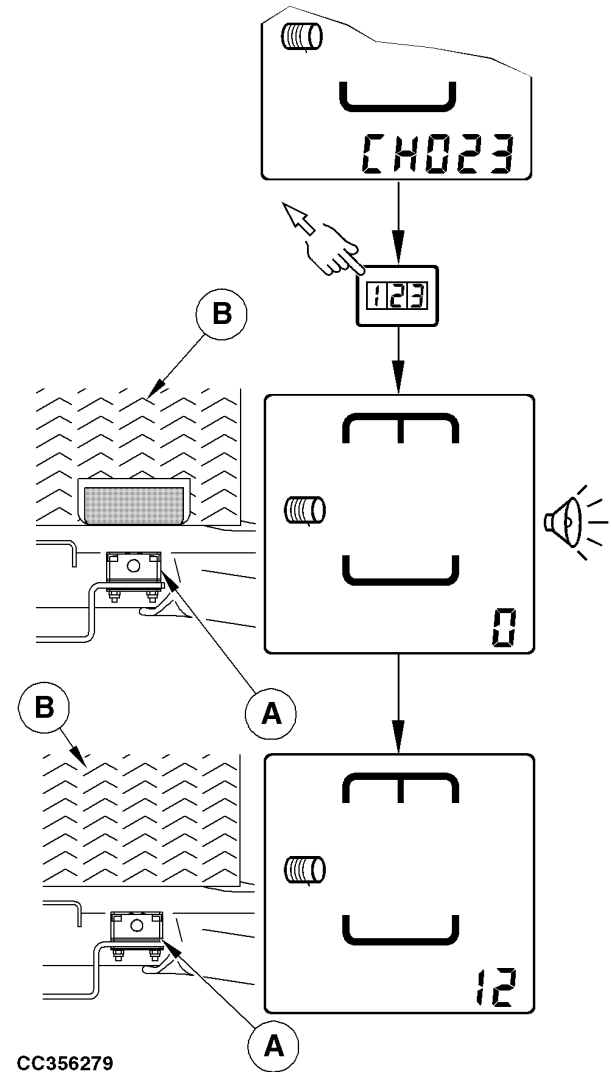
*NOTE: See Adjust B-Wrap Sensor SB416 (if Equipped) in Service section to check the John Deere B-Wrap™ sensor adjustment.*

A—B-Wrap Sensor

B—Belt



CC356282 —UN—02AUG18



CC356279 —UN—01AUG18

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

TL81334,0000F93 -19-11JUN21-2/2

### Channel 024: Test of Drop Floor Sensor SB533

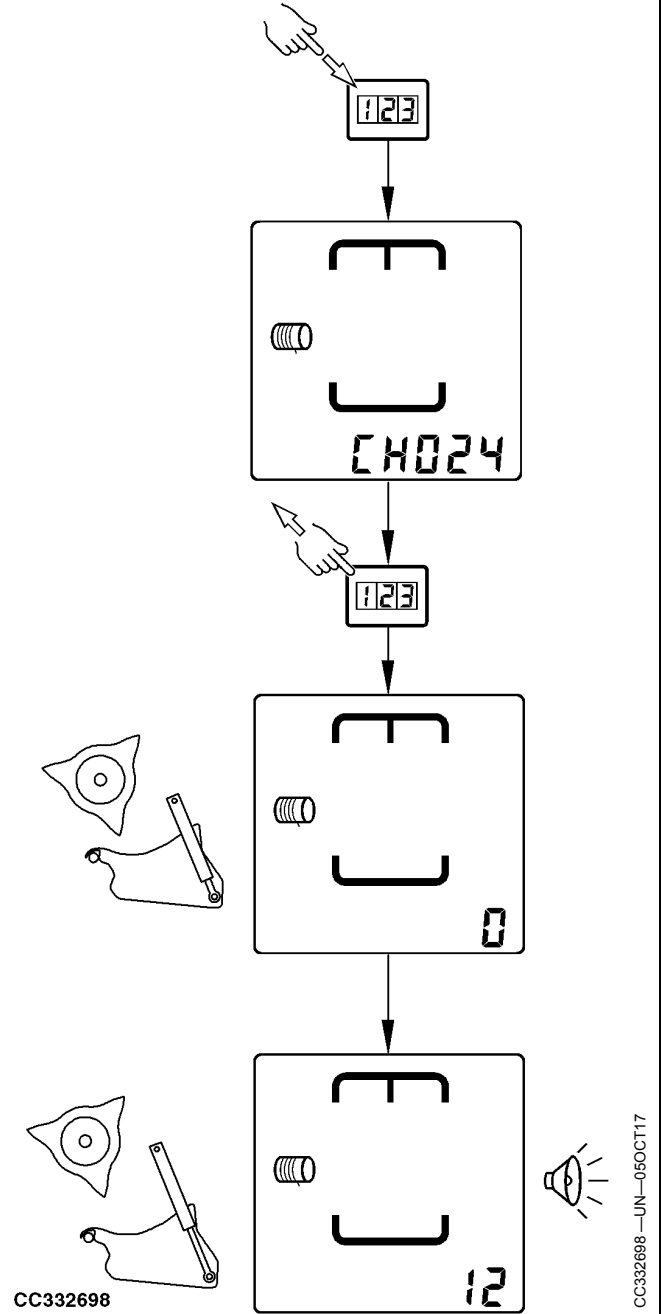
CH024 allows operator to test the drop floor sensor.

The monitor displays "0" when the drop floor is in normal operating mode.

The monitor displays "12" with a continuous beep when the drop floor is in lower position.

If this test is not OK, check the sensor adjustment.

*NOTE: See Adjust Drop Floor Sensor SB533 in Service section or your John Deere dealer.*



NB02380,000051C -19-10OCT17-1/1

**Channel 025: Test of Precutter Knife Sensor SB554**

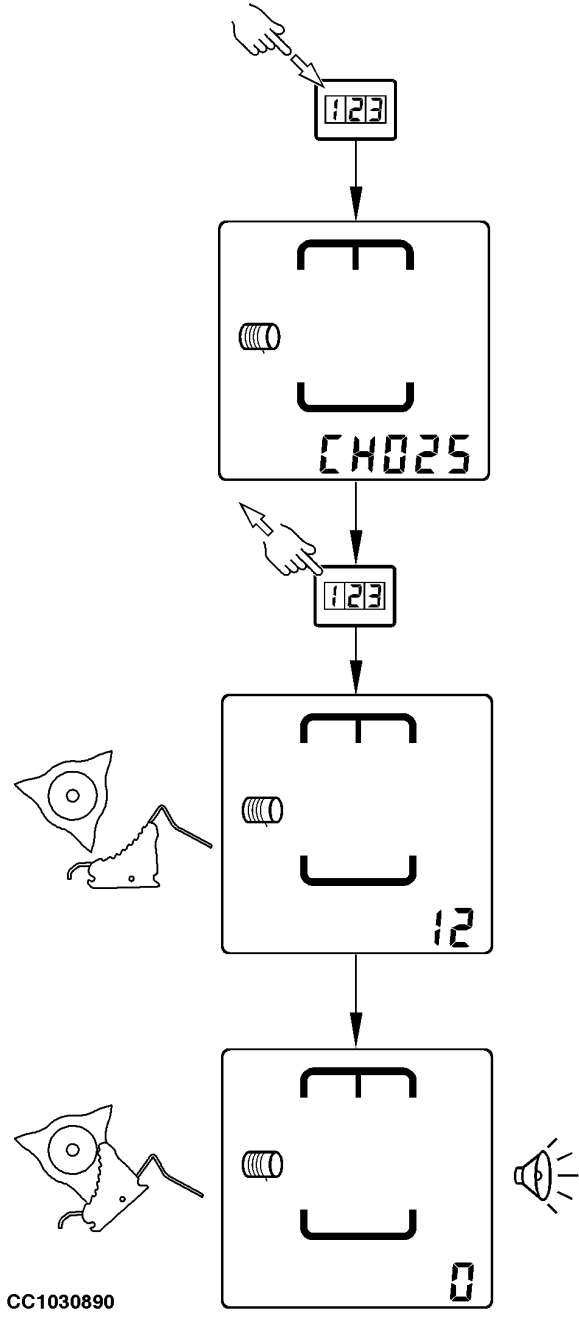
CH025 allows operator to test the precutter knife sensor.

The monitor displays “0” with a continuous beep when the precutter knives are engaged.

The monitor displays “12” when the precutter knives are retracted.

If this test is not OK, see your John Deere dealer.

*NOTE: See Adjust Precutter Knife Sensor SB554 in Service section to check the precutter knife sensor adjustment.*



NB02380,000051D -19-19OCT17-1/1

**Channel 026: Not Activated**

JC87117,0000332 -19-04APR17-1/1

### Channel 027: Record Lowest Position of Belt Tension Arm

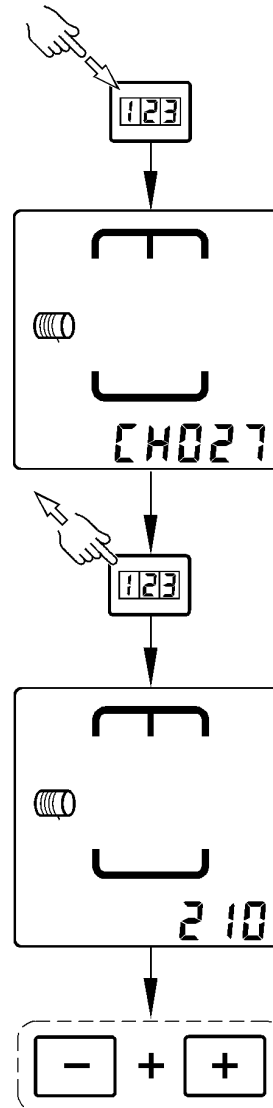
CH027 allows operator to record the lowest position of the belt tension arm.

Ensure that bale chamber is empty, the soft core device is deactivate, the bale density valve is adjusted to working pressure, and the tension arm is in lowest position.

Remove belt slack by engaging PTO a few seconds. Shut off tractor engine.

Select channel 27.

In CH027, press simultaneously "PLUS" and "MINUS" keys, to record the value of belt tension arm lowest position.



CC356511

TL81334.0001007 -19-25AUG21-1/1

CC356511 -UN-29JUN18

### Channel 028: Fine Tune Bale Size

Depending on the crop baled, the measured bale diameter might not correspond to the desired diameter adjusted on monitor.

**IMPORTANT: Before modifying this adjustment, make sure that channel 27 is correctly calibrated.**

In CH028, the monitor can be fine-tuned to recover the real desired bale diameter. To do so, proceed as follows:

1. Make bale with current diameter setting.

*NOTE: For the first calibration, we recommend to set the bale diameter target to 1.40 m (4ft 7-2/16in.) for V451M and 1.50 (4ft 11-1/16in.) for V461M, to avoid to reach oversize alarm.*

2. Measure the ejected bale diameters.

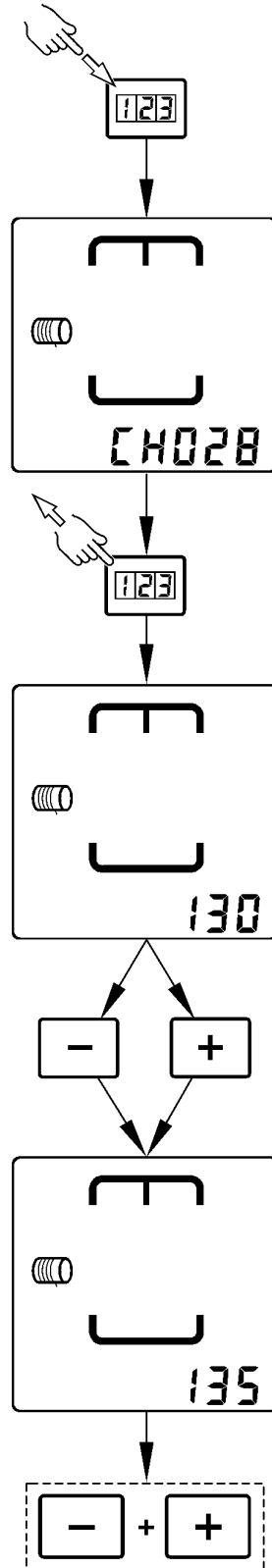
*NOTE: To check ejected bale diameter, measure bale horizontally and vertically on both ends. Add the four measurements together and divide by four to determine average bale diameter.*

3. Select the channel 28.
4. In CH028, press “PLUS” or “MINUS” key to enter the ejected and measured bale diameter.
5. When measured bale diameter is entered, press “PLUS” and “MINUS” simultaneously to record the value.
6. Set the desired bale diameter target and make another bale and check the result. if needed, repeat the procedure from step 1.

*NOTE: After the fine-tune of the bale diameter, the actual bale diameter (empty chamber) is modified depending on the correction.*

*The bale diameter (empty chamber) must be inferior to 93 cm (36 5/8 in).*

*NOTE: This fine-tune procedure may need to be repeat if the desired bale diameter or crop is changed.*



CC332700

TL81334,000100E -19-25AUG21-1/1

CC332700 —UN—05OCT17

### Channel 029: Calibrate Twine Electrical Motor

*NOTE: Before calibrating the twine binding, make sure the gate is correctly closed.*

CH029 allows operator to calibrate the twine electric motor.

1. Select the channel 29.
2. Press "RETRACT" key (A) until the monitor displays "0".
3. Press "EXTEND" key (B) until twine actuator is fully extended.

*NOTE: Do not release "EXTEND" key (B) until the twine arms stop is in contact with the frame.*

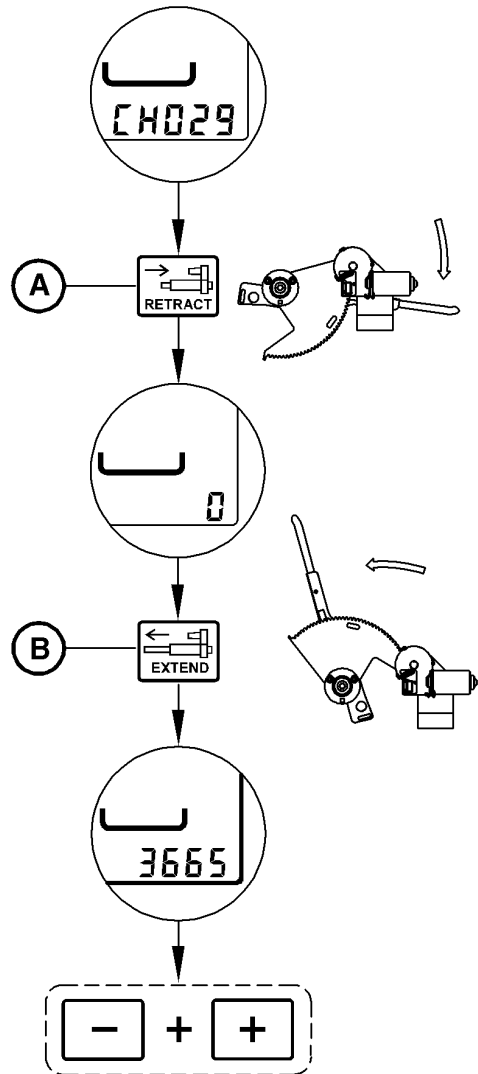
*If the value does not vary during the arms extension:*

- Check that the tractor key is switched on **ON**.
- Ensure that power supply plug is correctly connected and power supplied.
- See your John Deere dealer.

4. Press simultaneously "PLUS" and "MINUS" keys to record the value of twine arm position.
5. Switch off the monitor.

A—RETRACT Key

B—EXTEND Key



CC332701

CC332701—UN—05OCT17

TL81334,000100F -19-25AUG21-1/1

### Channel 030: Not Activated

GA87848,000044E -19-09OCT17-1/1

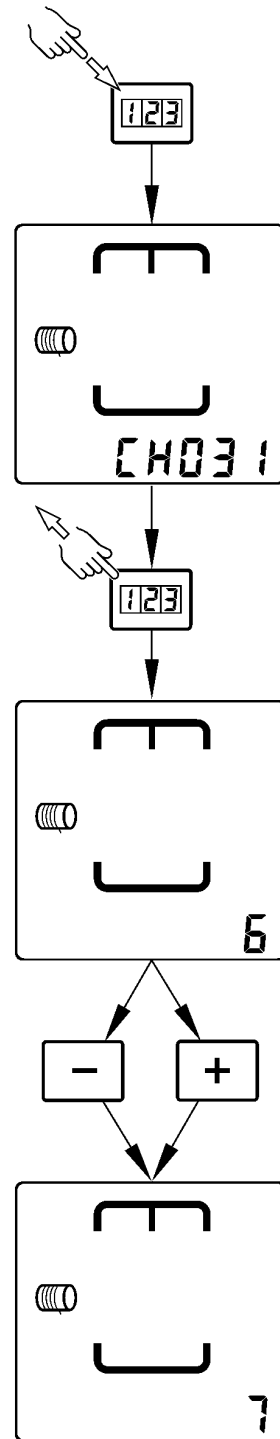
### Channel 031: Adjust Distance of Twine Coils in the Middle

CH031 allows operator to adjust the distance of twine coils in the middle (B).

The distance of twine coils in the middle can be adjusted between 2—8 cm, press the “PLUS” or “MINUS” key to increase or decrease the value by 1 unit.

*NOTE: Factory setting is 6 cm.*

After set the value of distance of twine coils in the middle, turn OFF and turn ON the monitor to validate the setting.



CC510504

TL81334,0000FAA -19-23JUN21-1/1

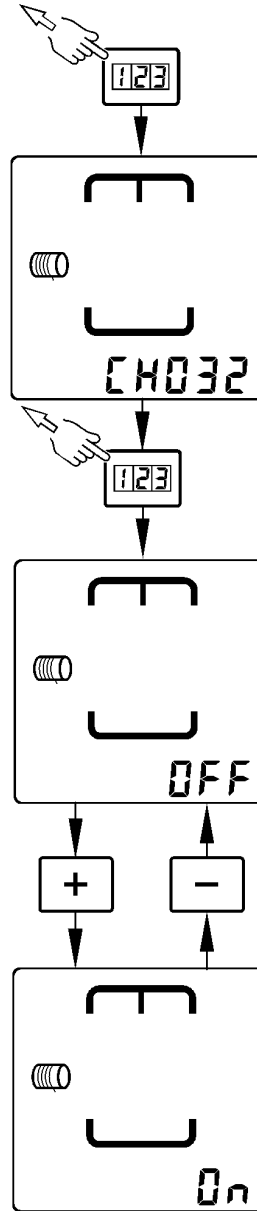
CC510504 —UN—23JUN21

### Channel 032: Automatic Start of Binding Cycle

CH032 allows operator to enable or disable automatic start of binding cycle.

In CH032 press "PLUS" key to enable automatic start of binding cycle. The LCD screen displays "ON".

Press "MINUS" key to disable automatic start of binding cycle. The LCD screen displays "OFF".



CC1023442

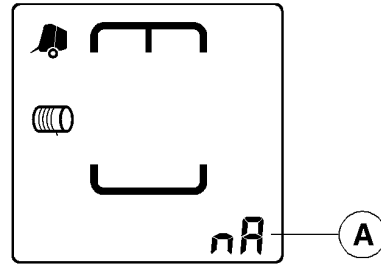
CC1023442—JUN—18SEP03

Continued on next page

TL81334,0000F97 -19-11JUN21-1/2

NOTE: When the automatic start of binding cycle is disabled, "nA" code (A) flashes in normal mode.

A—"nA" code



CC10234423

CC1023443 —UN—18SEP03

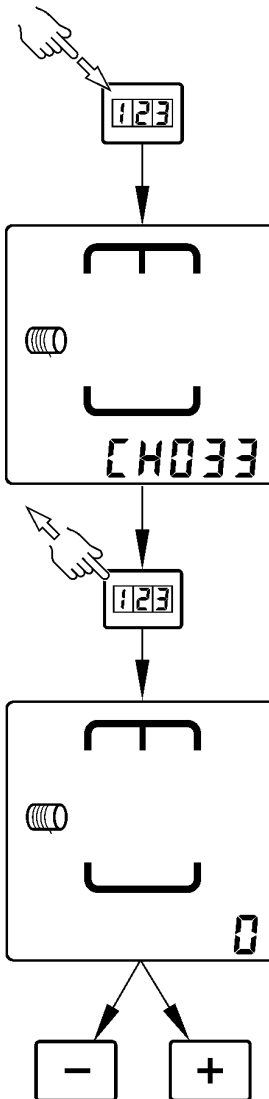
TL81334,0000F97 -19-11JUN21-2/2

### Channel 033: Set Offset of Twine Binding Start

The offset of twine binding start allows twine binding cycle to be started at a lower bale size than the preset bale size. This offset helps the twine to be caught by the bale.

CH033 allows operator to set twine binding start offset from 0 cm (0 in.) (no offset) to 15 cm (5-7/8 in.).

The initial factory value is 0 cm (0 in). Press "PLUS" or "MINUS" key to increase or decrease the offset of twine binding start.



CC510503

CC510503 —UN—05JUL21

TL81334,0000F98 -19-05JUL21-1/1

### Channel 034: B-Wrap Mode Selection (If Equipped)

*NOTE: Before switching to John Deere B-Wrap™ binding, the monitor must be set for net binding, and baler must be equipped with the John Deere B-Wrap™ kit.*

CH034 allows the operator to switch between net binding, and two different modes of John Deere B-Wrap™ binding.

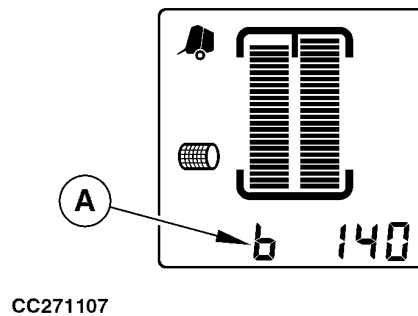
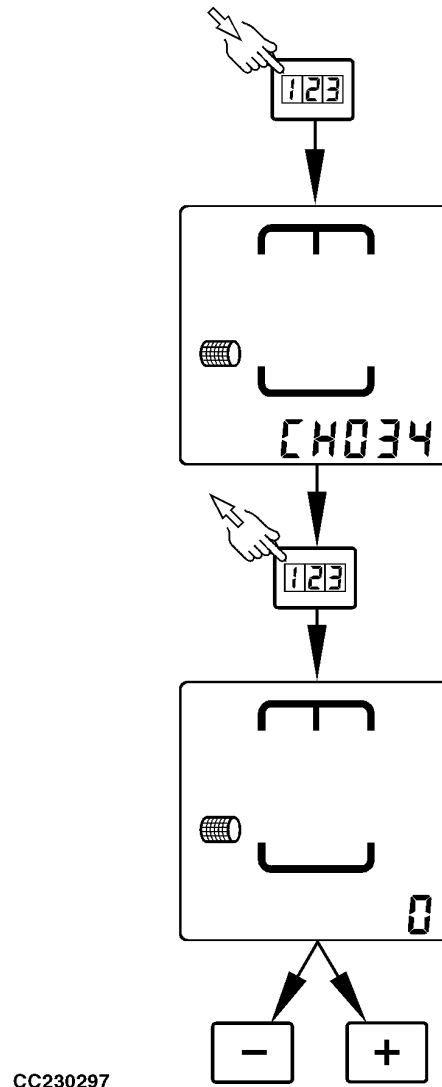
Press “PLUS” or “MINUS” key to switch the channel value between:

- 0 for net binding.
- 1 for John Deere B-Wrap™ binding with bale orientation.
- 2 for John Deere B-Wrap™ binding without bale orientation.

When John Deere B-Wrap™ binding is enabled, the symbol “b” (A) is displayed on the screen. If knives are engaged, the monitor displays symbol “c” instead of “b”. If drop floor is down, the monitor display symbol “d” instead of “b”.

Bale orientation will help the operator to orientate the John Deere B-Wrap™ material seam for a better resistance to weather.

#### A—B-Wrap Mode Symbol



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

TL81334,0000F99 -19-11JUN21-1/1

CC230297 —UN—19FEB16

CC271107 —UN—19FEB16

### Channel 035: Adjust B-Wrap Net Cut Length (If Equipped)

**NOTE:** This parameter is only used when the sensor detects John Deere B-Wrap™ metal strip during binding cycle. If the John Deere B-Wrap™ sensor does not detect the metal strip, the value of channel 037 is used to cut at correct length.

CH035 allows the operator to set the John Deere B-Wrap™ net length past VELCRO® (A).

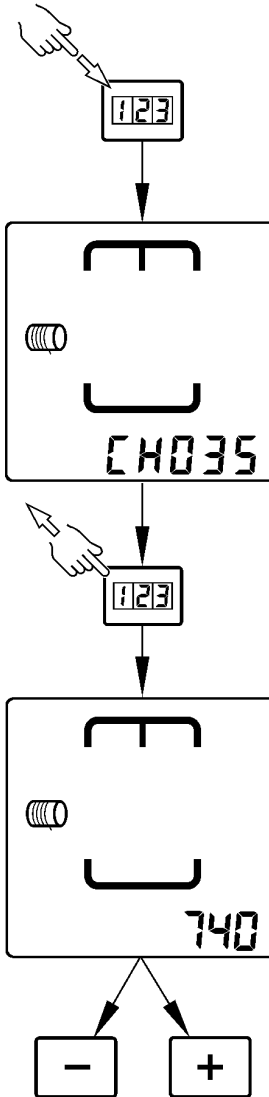
The parameter can be adjusted between 95 and 1050 by pressing “PLUS” or “MINUS” key, to increase or decrease the value by 5. The initial factory value is 740.

Increase the parameter to increase the length of John Deere B-Wrap™ net (B) past VELCRO® (A). Decrease the parameter to reduce the length of John Deere B-Wrap™ net (B) past VELCRO® (A).

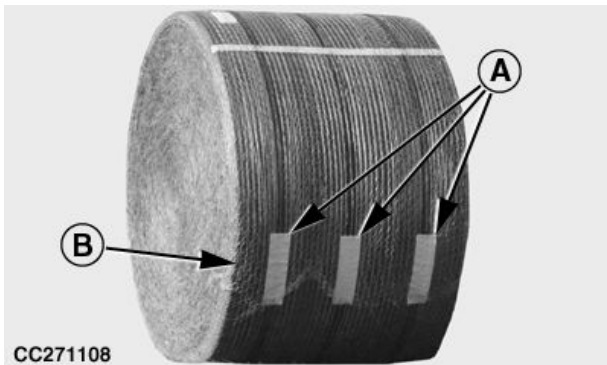
John Deere B-Wrap™ net (B) can be cut off around 25 cm (10 in) past VELCRO® (A).

A—VELCRO

B—B-Wrap Net



CC574252



CC271108

CC574252 —UN—19APR23

CC271108 —UN—19FEB16

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

tl81334,1681895521622 -19-19APR23-1/1

### Channel 036: Set B-Wrap Bale Orientation (If Equipped)

**NOTE:** To enable the bale orientation, see *Channel 034: B-Wrap Mode Selection (If Equipped)* in this section.

CH036 value helps to correctly position the John Deere B-Wrap™ material seam (B) after the bale is ejected. To ensure that the bale is correctly oriented, John Deere B-Wrap™ material seam (B) must be below metal strip (A). A good material seam position allows to keep water from running into the bale.

John Deere B-Wrap™ material seam (B) must be between the noon, and 6 o'clock position with ideal position being at the 3 o'clock position when looking the left-hand side.

The parameter can be adjusted between 305 and 1410 by pressing “PLUS” or “MINUS” key, to increase or decrease by 5. The initial factory value is 1410.

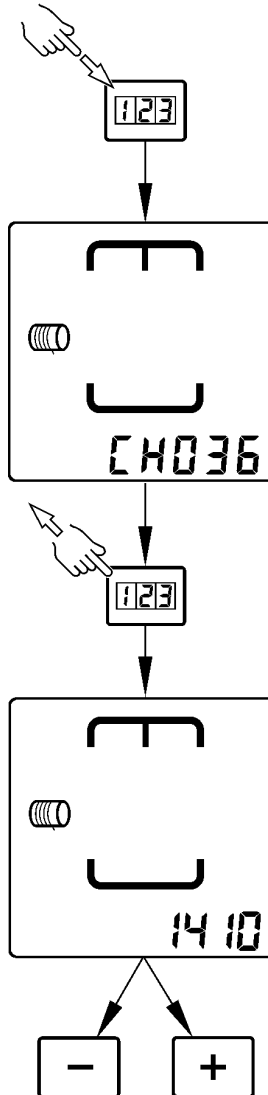
Increase the channel value to orientate the John Deere B-Wrap™ material seam (B) forward (bale rotated counterclockwise when looking at the left-hand side of the bale).

Increase the channel value to orientate the John Deere B-Wrap™ material seam (B) backward (bale rotated clockwise when looking at the left-hand side of the bale).

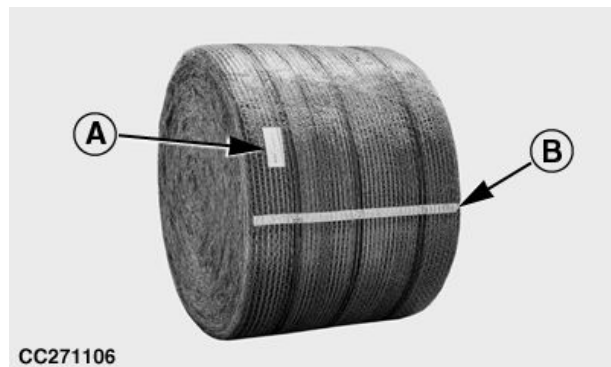
**NOTE:** If diagnostic trouble code E213 appears, set the channel to 1410.

A—Metal Strip

B—B-Wrap Material Strip



CC574253



CC271106

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

t81334,1681895536344 -19-19APR23-1/1

CC574253 —UN—19APR23

CC271106 —UN—19FEB16

### Channel 037: Set B-Wrap Net Cut Length after Timeout (If Equipped)

**NOTE:** This parameter is only used when monitor does not detect John Deere B-Wrap™ metal strip during binding cycle.

CH037 allows the operator to set the John Deere B-Wrap™ net cut length after VELCRO® (A) when the monitor does not detect the metal strip.

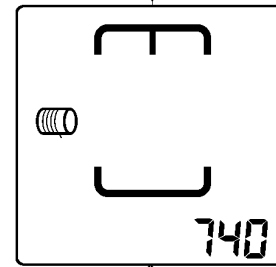
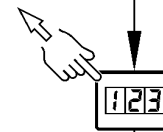
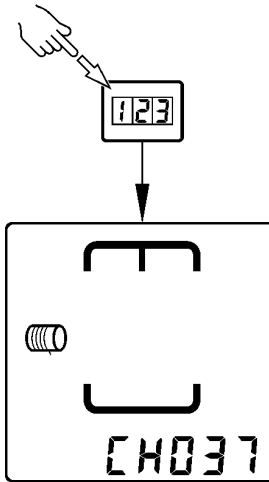
The parameter can be adjusted between 740 and 1270 by pressing “PLUS” or “MINUS” key, to increase or decrease value by 5. The initial factory value is 740.

Increase the parameter to increase the length of John Deere B-Wrap™ net (B) past VELCRO® (A). Decrease the parameter to decrease the length of John Deere B-Wrap™ net (B) past VELCRO® (A).

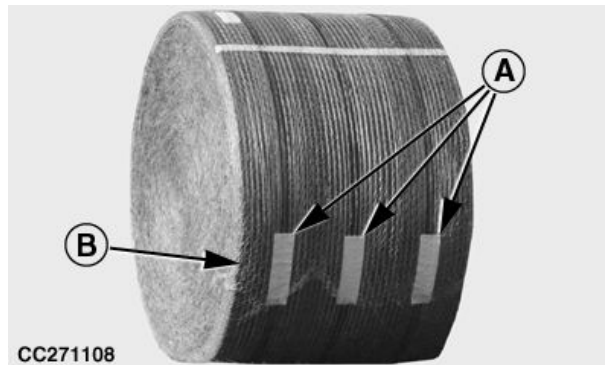
John Deere B-Wrap™ net (B) can be cut off around 25 cm (10 in) past VELCRO® (A).

A—VELCRO

B—B-Wrap Net



CC510515



CC271108

B-Wrap Cut Length Too Short

CC510515 —UN—19AUG21

CC271108 —UN—19FEB16

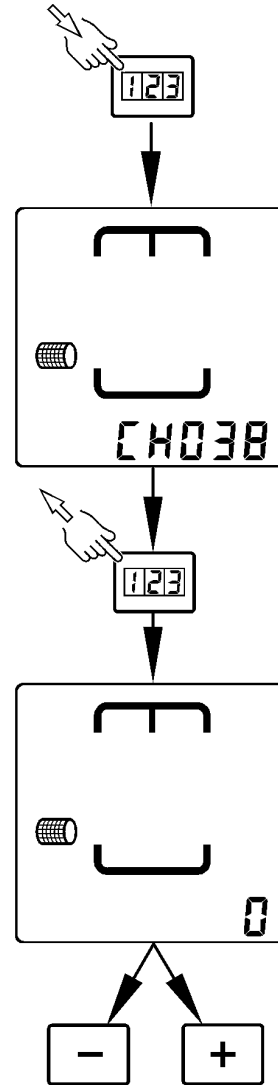
John Deere B-Wrap is a trademark of Tama Plastic Industry  
VELCRO is a trademark of Velcro Industries B.V.

1181334,1681895553888 -19-19APR23-1/1

### Channel 038: Set B-Wrap Sensor Polarity (If Equipped)

*NOTE: If John Deere B-Wrap™ sensor polarity is not correctly set, the John Deere B-Wrap™ binding will not work properly.*

CH038 allows the operator to change the John Deere B-Wrap™ sensor polarity. This channel must be set to 0 to ensure that the John Deere B-Wrap™ sensor detects the metal strip.



CC353882

CC353882—UN—20JUN18

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

TL81334,00003BF -19-20JUN18-1/1

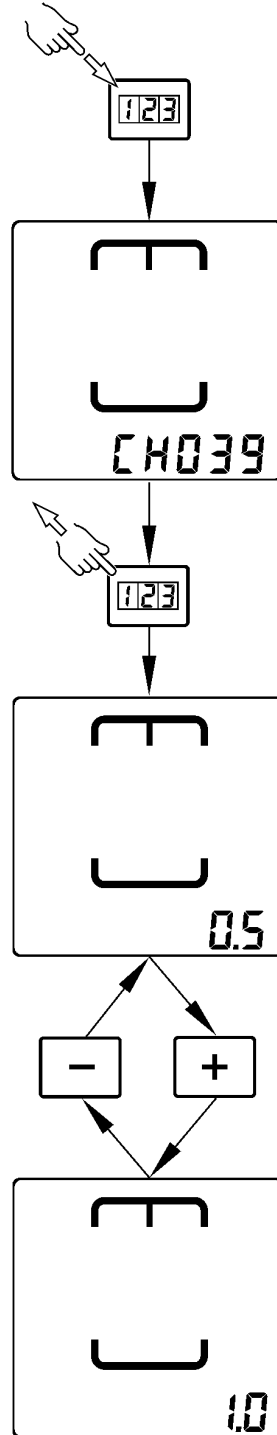
### Channel 039: Set Delay at End of Net Binding Cycle

CH039 allows operator to set a delay at the end of a net binding cycle. This delay ensures that the net binding is correctly fastened on the bale.

The delay can be set between 0—3 seconds. Press “PLUS” or “MINUS” key, to increase or decrease the value by 0.5 second.

*NOTE: The factory setting is 0.5 second.*

After setting the value of delay at the end of net binding cycle, turn OFF and turn ON monitor to validate the setting.



CC510501

CC510501—UN—10JUN21

†181334,1681895572255 -19-19APR23-1/1

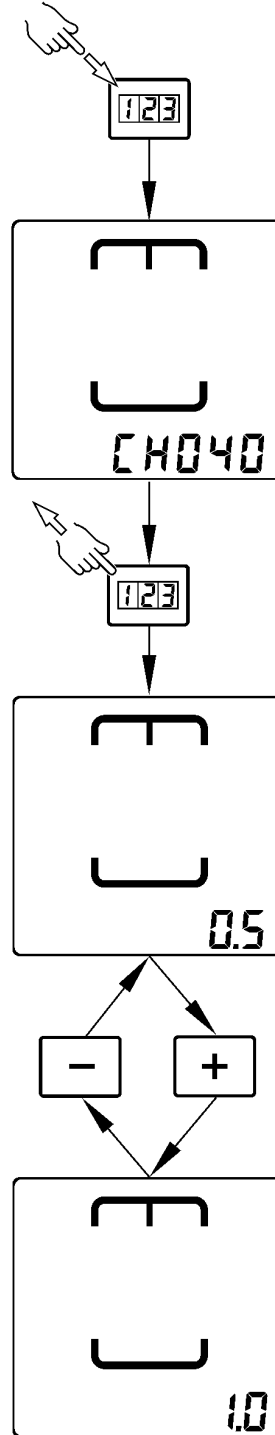
### Channel 040: Set Delay at End of Twine Binding Cycle

CH039 allows operator to set a delay at the end of a twine binding cycle. This delay ensures that the twine binding is correctly fastened on the bale.

The delay can be set between 0—3 seconds. Press “PLUS” or “MINUS” key, to increase or decrease the value by 0.5 second.

*NOTE: The factory is 0.5 second.*

After setting the value of delay at the end of twine binding cycle, turn OFF and turn ON monitor to validate the setting.



CC574255

t81334,1681895587406 -19-19APR23-1/1

CC574255 —UN—19APR23

# Storage

## Prepare the Baler for Storage

Remove bindings rolls and store them in a cool and dry place.

Release belt tension.

Clean baler thoroughly inside and out. Trash and dirt will draw moisture and cause rust.

Clean binding frame(s) thoroughly.

**IMPORTANT: If the net binding device is going to be stored for a long period of time, avoid the rubber feed roll being deformed by releasing feed roll pressure and placing feed roll brake into unlocked position. Place a piece of cardboard between feed rolls, all across their width.**

*NOTE: Should a high-pressure washer be used to clean the baler, do not direct pressurized water on the bearings or electrical components.*

Sharpen and grease knives.

Check that all rolls are working freely. If one of them is hard to rotate, remove it, clean bearing housing and replace bearing, if necessary.

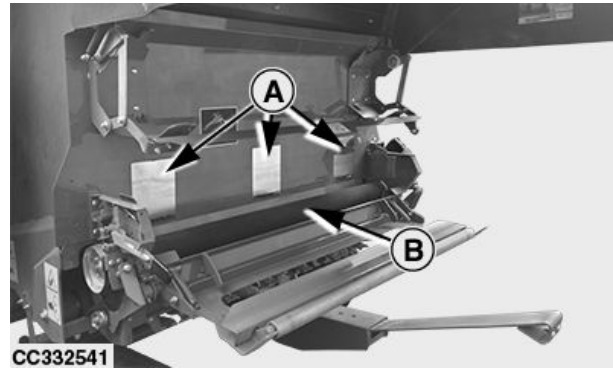
Thoroughly lubricate complete machine. See Lubrication and Maintenance section. This excess of grease will collect moisture and protect bearings against humidity.

Coat exposed cylinder rods with grease to prevent rusting.

Apply a few drops of oil to all pivot points and linkages.

Apply a thin layer of grease to threads of all adjusting bolts.

Grease powerline guard tubes (A) at the beginning of the winter season to prevent freezing.



A—Guard Tube

All parts from which the paint has been worn should be painted or coated with oil.

Clean all chains. Dry thoroughly and coat with a heavy oil.

Protect electrical connectors against corrosion with adequate fluid.

List the replacement parts that will be needed and order them.

Store baler in a dry sheltered place. If stored outside, cover with waterproof material.

Block up baler, taking load off tires. Do NOT deflate tires. If exposed to light, grease and oil, cover tires for protection.

ga87848,1683028620519 -19-31MAY23-1/1

CC332541 —JUN—04OCT17

### Prepare for Beginning of Season

Check and fill gear case up to check plug level. See [Weekly: Check Gear Case Oil Level](#) in Lubrication and Maintenance section.

Lubricate complete machine. See Lubrication and Maintenance section. This lubrication will force any collected moisture out of the bearings.

Check tires for correct air pressure. See [Tire Inflation](#) in Preparing the Baler section.

Tighten all nuts and screws. See Service section.

Check all belt hooks, then replace as necessary. See [Install Belt Hooks](#) in Service section.

Replace all belt splice pins. See [Install Belts](#) in Service section.

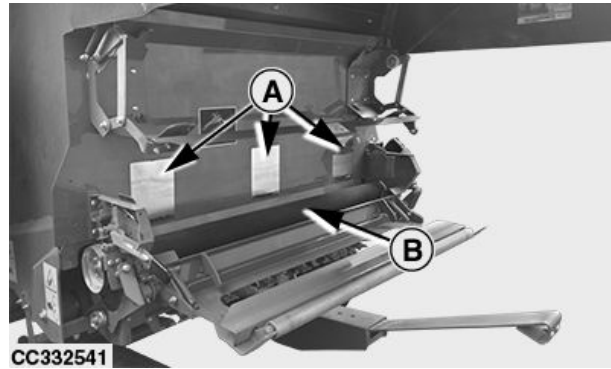
Check adjustments of baler as described in Service section.

Review this operator's manual.

Check that control monitor is working properly.

Wipe off feed rolls (B) and check for any sticky material. If necessary, rolls may be washed with soap and water. NEVER use solvents to clean rubber feed roll.

Apply talcum powder to rubber feed roll.



A—Steel net roll supports

B—Feed rolls

Check areas which will contact net roll. These areas must be clean and smooth to help prevent net wrapping on rubber coated roll. Remove excessive dust or crop material from feed rolls (B) and stainless steel net roll supports (A) with a dry cloth.

Check adjustments of net binding, mainly net feed roll pressure. See [Check Net Binding Device](#) in Service section.

Check that net knife is sharp.

TL81334.00006A4 -19-05JUN19-1/1

### Handle Round Bales With B-Wrap

Do not snag or tear the wrapping material. Snags or tears in the net wrapping can reduce durability of bales and detract from hay quality when bales are stored outside.

Orientate breathable material seam so that water is shed after moving (between noon and six o'clock) and the seam overlap faces down, preventing water from getting in.

JC87117.0000227 -19-29FEB16-1/1

# Specifications

## Specifications for V451M Baler

### Size of Bale Chamber

Bale chamber diameter .....	0.9 to 1.65 m (3 to 5.4 ft)
Bale chamber width .....	1.21 m (4 ft)

### Baler

Shipping weight empty <sup>a</sup>	4350 kg (9590 lb)
Length, gate closed.....	5.15 m (16 ft 11 in)
Length, gate open.....	5.85 m (19 ft 1/4 in)
Height, gate closed .....	3.1m (10 ft 2 in)
Height, gate open .....	4.2 m (13 ft 11-1/4 in)
Width (with 500/55 - 20 tires) .....	2.75 m (9 ft 1/4 in)

<sup>a</sup>Weight without consumables, may vary depending on equipment.

### 2.00 m (6 ft 6-3/4 in) Pickup with Drop Floor

Pickup width.....	2.00 m (6 ft 6-3/4 in)
Width (between outer teeth) .....	1.66 m (5 ft 5-1/4 in)
Tooth bars .....	10 (2 x 5)
Number of teeth .....	130
Tooth spacing .....	66 mm (2-1/2 in)
Stripper diameter.....	340 mm (1 ft 1-1/2 in)

### 2.20 m (7 ft 3 in) Pickup with Drop Floor

Pickup width.....	2.20 m (7 ft 3 in)
Width (between outer teeth) .....	1.92 m (6 ft 4 in)
Tooth bars .....	10 (2 x 5)
Number of teeth .....	150
Tooth spacing .....	66 mm (2-1/2 in)
Stripper diameter.....	340 mm (1 ft 1-1/2 in)

### Precutter Device with 13 Knives

Number of knives .....	13
Knife spacing .....	80 mm (3-1/8 in) (with 13 knives engaged)

### Brake System (If Equipped)

Type .....	Hydraulic or pneumatic
------------	------------------------

### Miscellaneous

PTO shaft speed .....	540 rpm (balers with 540 rpm gear case)
Drive protection.....	Cam-type cut-out clutch
Powerline .....	Constant velocity powerline
Maximum tractor weight .....	10000 kg (22050 lb)
Minimum tractor horsepower .....	82 kW (110 hp) at PTO
Tire type.....	15/55-17 134 A8 500/50-17 140 A8 500/55-20 150 A8 620/40R22 148D
Tongue .....	Adjustable

Continued on next page

ga87848,1685518226945 -19-14JUN23-1/2

*Specifications*

**Sound Level**

Max. sound level in accordance with EN1553; measurement method in accordance with ISO3744 (average value) ..... 85 dB(A)

ga87848.1685518226945 -19-14.JUN23-2/2

**Specifications for V461M Baler**

**Size of Bale Chamber**

Bale chamber diameter .....	0.9 to 1.85 m (3 to 6 ft)
Bale chamber width .....	1.21 m (4 ft)

**Baler**

Shipping weight empty <sup>a</sup>	4450 kg (9810 lb)
Length, gate closed.....	5.15 m (16 ft 11 in)
Length, gate open.....	5.85 m (19 ft 1/4 in)
Height, gate closed .....	3.3 m (10 ft 10 in)
Height, gate open .....	4.2 m (13 ft 11-1/4 in)
Width (with 500/55 - 20 tires) .....	2.75 m (9 ft 1/4 in)

<sup>a</sup>Weight without consumables, may vary depending on equipment.

**2.00 m (6 ft 6-3/4 in) Pickup with Drop Floor**

Pickup width.....	2.00 m (6 ft 6-3/4 in)
Width (between outer teeth) .....	1.66 m (5 ft 5-1/4 in)
Tooth bars .....	10 (2 x 5)
Number of teeth .....	130
Tooth spacing .....	66 mm (2-1/2 in)
Stripper diameter.....	340 mm (1 ft 1-1/2 in)

**2.20 m (7 ft 3 in) Pickup with Drop Floor**

Pickup width.....	2.20 m (7 ft 3 in)
Width (between outer teeth) .....	1.92 m (6 ft 4 in)
Tooth bars .....	10 (2 x 5)
Number of teeth .....	150
Tooth spacing .....	66 mm (2-1/2 in)
Stripper diameter.....	340 mm (1 ft 1-1/2 in)

**Precutter Device with 13 Knives**

Number of knives .....	13
Knife spacing .....	80 mm (3-1/8 in) (with 13 knives engaged)

**Brake System (If Equipped)**

Type .....	Hydraulic or pneumatic
------------	------------------------

**Miscellaneous**

PTO shaft speed .....	540 rpm (balers with 540 rpm gear case)
Drive protection.....	Cam-type cut-out clutch
Powerline .....	Constant velocity powerline
Maximum tractor weight .....	10000 kg (22050 lb)
Minimum tractor horsepower .....	82 kW (110 hp) at PTO
Tire type.....	15/55-17 134 A8 500/50-17 140 A8 500/55-20 150 A8 620/40R22 148D
Tongue .....	Adjustable

Continued on next page

ga87848,1685518226737 -19-14JUN23-1/2

*Specifications*

**Sound Level**

Max. sound level in accordance with EN1553; measurement method in accordance with ISO3744 (average value) ..... 85 dB(A)

ga87848.1685518226737 -19-14.JUN23-2/2

**EC Declaration of Conformity: V451M, and V461M Round Balers**

**Deere & Company  
Moline, Illinois USA**

The person who signed this certificate declares that:

**Machine type:** Round Baler

**Models:** V451M, and V461M

**From serial numbers:** 1CCV451HAHM179001-  
1CCV451LAHM179001-  
1CCV451NAHM179001-  
1CCV451PAHM179001-  
1CCV461HAHM179001-  
1CCV461LAHM179001-  
1CCV461NAHM179001-  
1CCV461PAHM179001-

fulfills all relevant provisions and essential requirements of the following directive:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-certification

The product is in conformity with the following standards and/or other normative documents:

ISO 4254-1                      ISO 4254-11

Name and address of the person in the European Community authorized to compile the technical construction file:

Brigitte Birk  
John Deere GmbH and Co. KG  
Mannheim Regional Center  
John Deere Strasse 70  
D-68163 Mannheim, Germany

This declaration of conformity is issued under the sole responsibility of the manufacturer.



CC213594 —UN—09OCT14

**Place of declaration:** Arc-lès-Gray, France

**Date of declaration:** 15 November 2017

**Manufacturing unit:** John Deere, Arc-lès-Gray, France

**Name:** Didier DELPHIGUÉ

**Title:** Manager Product Engineering



**EU Declaration of Conformity: V451M and V461M Round Balers**

**Deere & Company**  
Moline, Illinois USA

The person who signed this certificate declares that:

**Machine type:** Round Baler

**Models:** V451M and V461M

**From serial numbers:** 1CCV451HAMM220001- 1CCV461HAMM220001-  
1CCV451NAMM220001- 1CCV461NAMM220001-  
1CCV451PAMM220001- 1CCV461PAMM220001-

fulfills all relevant provisions and essential requirements of the following directive:

DIRECTIVE	NUMBER	CERTIFICATION METHOD
Machinery Directive	2006/42/EC	Self-certification

The product is in conformity with the following standards and/or other normative documents:

EN ISO 4254-1                      EN ISO 4254-11 + A1

The party in the European Community authorized to compile the technical construction file is:

John Deere Walldorf GmbH and Co. KG  
Customer Support  
Impexstraße 3  
D-69190 Walldorf, Germany  
EUConformity@JohnDeere.com

This declaration of conformity is issued under the sole responsibility of the manufacturer.



**Place of declaration:** Arc-lès-Gray, France

**Date of declaration:** 1 July 2021

**Manufacturing unit:** John Deere Arc-lès-Gray, France

**Name:** Frédéric PERROTIN

**Title:** Engineering Manager

CC414332—UN—24JUN21

GA87848,00012BB -19-01JUL21-1/1

**UK Declaration of Conformity: V451M and V461M Round Balers**

**Deere & Company  
Moline, Illinois USA**

The person who signed this certificate declares that:

**Machine type:** Round Baler

**Models:** V451M and V461M

**From serial numbers:** 1CCV451HAMM220001- 1CCV461HAMM220001-  
1CCV451NAMM220001- 1CCV461NAMM220001-  
1CCV451PAMM220001- 1CCV461PAMM220001-

fulfills all relevant provisions and essential requirements of the following UK regulation:

REGULATION	NUMBER	CERTIFICATION METHOD
Supply of Machinery (Safety) Regulations 2008	S.I. 2008/1597	Self-certification

The product is in conformity with the following standards and/or other normative documents:

EN ISO 4254-1                      EN ISO 4254-11 + A1

The party authorized to compile the technical construction file is:

John Deere Ltd  
Harby Road  
Langar  
Nottinghamshire  
NG13 9HT  
United Kingdom  
EUConformity@JohnDeere.com

This declaration of conformity is issued under the sole responsibility of the manufacturer.



**Place of declaration:** Arc-lès-Gray, France  
**Date of declaration:** 1 July 2021  
**Manufacturing unit:** John Deere Arc-lès-Gray, France

**Name:** Frédéric PERROTIN  
**Title:** Engineering Manager

CC511493 —JUN—19MAY21

GA87848,000118F -19-01JUL21-1/1

### Eurasian Economic Union

This information applies only to products which bear the EAC conformity mark of the Eurasian Economic Union member states.

**Manufacturer:**

Deere & Company, Moline, Illinois U.S.A.

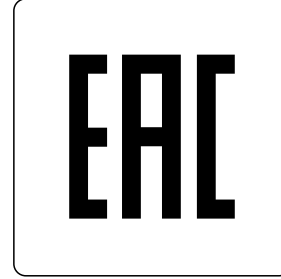
**Name of the authorized representative in the Eurasian Economic Union:**

Limited Liability Company  
"John Deere Rus"

**Address of the authorized representative:**

142050, Russia, Moscow region, Domodedovo district,  
Domodedovo, Beliye Stolbi micro district, vladenye  
"Warehouse 104", Building 2

For technical support, contact your dealer.



EAC Marking

Date of manufacture is denoted by the product marking on or near the serial number plate.

TS1738—UN—26APR16

DX,EAC -19-27APR16-1/1

# Serial Numbers

## Serial Number Plate

Serial number identifying the baler is stamped on factory product identification serial number plate or European vehicle identification number plate.

These numbers and letters are required when ordering baler or attachment replacement parts.

To ensure that you have these numbers at hand, enter the appropriate serial number in the table provided under the illustration.

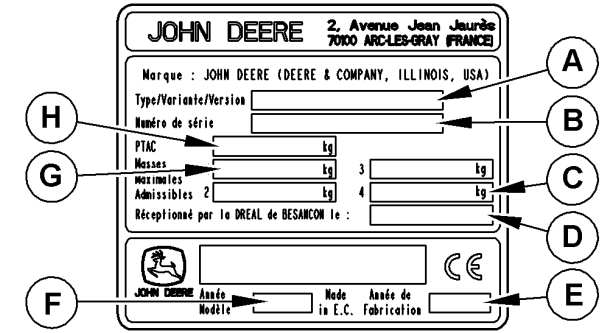
GA87848,00006F8 -19-09JUL18-1/1

## Serial Number Plate Description

Based on local regulation, machine is equipped with one of the following identification number plate:

### Product Identification Number Plate

- |   |                                    |
|---|------------------------------------|
| A—Model Designation                         | E—Year of Production               |
| B—Identification Number                     | F—Model Year                       |
| C—Maximum Load at Hitch                     | G—Maximum Load on Axle             |
| D—Date of Acceptance or homologation number | H—Maximum Permissible Total Weight |



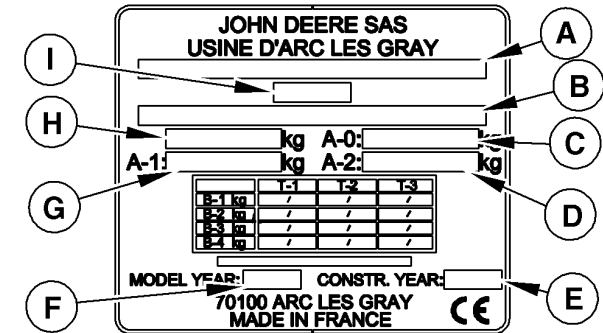
CC206124

CC206124—UN—30CCT13

GA87848,00006EF -19-03AUG18-1/2

## European Vehicle Identification Number Plate

- |   |   |
|---|---|
| A—EU Type Approval Number                         | F—Model Year                                      |
| B—Identification Number                           | G—Technically Permissible Maximum Mass for Axle 1 |
| C—Vertical Load (S) on Coupling Point             | H—Technically Permissible Maximum Laden Mass      |
| D—Technically Permissible Maximum Mass for Axle 2 | I—European Vehicle Category                       |
| E—Year of Construction                            |   |

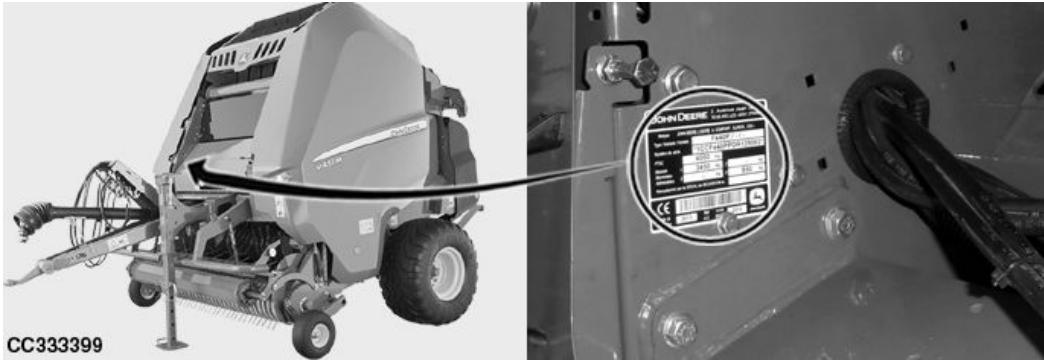


CC356514

CC356514—UN—04JUL18

GA87848,00006EF -19-03AUG18-2/2

### Round Baler Identification Number



CC333399

CC333399—UN—06OCT17

The round baler identification number plate is located on the right-hand side of the baler, behind the hinged protection screen.

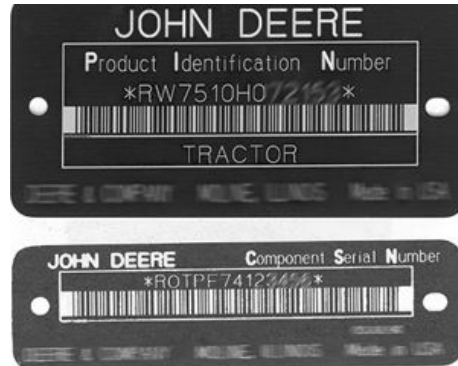
Record the serial number in the table below.

Serial Number														
*														*

GA87848,0000427 -19-11OCT17-1/1

### 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

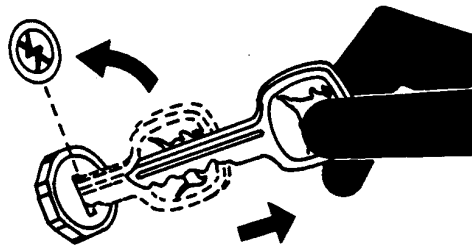


TS1680—UN—09DEC03

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—UN—24MAY89

DX,SECURE2 -19-18NOV03-1/1

# John Deere Service Literature Available

## Technical Information

Technical information can be purchased from John Deere. Publications are available in print or CD-ROM format.

Orders can be made using one of the following:

- John Deere Technical Information Store:  
**[www.JohnDeere.com/TechInfoStore](http://www.JohnDeere.com/TechInfoStore)**
- Call 1-800-522-7448
- Contact your John Deere dealer

Available information includes:

**PARTS CATALOGS** list service parts available for your machine with exploded view illustrations to help you identify the correct parts. It is also useful in assembling and disassembling.



TS189 — UN — 17JAN89

DX,SERVLIT -19-07DEC16-1/4

**OPERATOR'S MANUALS** providing safety, operating, maintenance, and service information.



TS191 — UN — 02DEC88

DX,SERVLIT -19-07DEC16-2/4

**TECHNICAL MANUALS** outlining service information for your machine. Included are specifications, illustrated assembly and disassembly procedures, hydraulic oil flow diagrams, and wiring diagrams. Some products have separate manuals for repair and diagnostic information. Some components, such as engines, are available in a separate component technical manual.



TS224 — UN — 17JAN89

Continued on next page

DX,SERVLIT -19-07DEC16-3/4

EDUCATIONAL CURRICULUM including five comprehensive series of books detailing basic information regardless of manufacturer:

- Agricultural Primer series covers technology in farming and ranching.
- Farm Business Management series examines “real-world” problems and offers practical solutions in the areas of marketing, financing, equipment selection, and compliance.
- Fundamentals of Services manuals show you how to repair and maintain off-road equipment.
- Fundamentals of Machine Operation manuals explain machine capacities and adjustments, how to improve machine performance, and how to eliminate unnecessary field operations.
- Fundamentals of Compact Equipment manuals provide instruction in servicing and maintaining equipment up to 40 PTO horsepower.



TS1663—UN—10OCT97

DX.SERVLIT -19-07DEC16-4/4

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