545 and 550 Round Balers

(545 up to serial no. 278165)
(550 up to serial no. 290282)

OPERATOR'S MANUAL
545 and 550 Round Balers

(545 up to serial no. 278165)
(550 up to serial no. 290282)
OMCC27550 Issue A7 (ENGLISH)

CALIFORNIA
Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

John Deere Arc-lès-Gray
European Version
Printed in U.S.A.

DCY

OMCC27550

We appreciate the confidence you have shown in John Deere and your John Deere dealer for the purchase of this equipment.

We want you to have the best performance from your new machine. To accomplish this, your dealer performed a Predelivery Inspection and familiarized you with the proper and safe operation of the baler.

After the baler has operated the first season you should contact your dealer and arrange an appropriate date at which the After-Sale Inspection will be performed.

The After-Sale Inspection is an important prerequisit to assure best performance of your new machine. For this reason you should not miss to make proper arrangments with your dealer to get this service done at the proper time.

Your dealer completed the predelivery inspection according to the check list, while at the end of this manual you will find the After-Sale Inspection check list.

These check lists will be completed by your dealer while the inspections are being performed. He will then forward the original and one copy of each inspection list to the JOHN DEERE Sales Branch Service Department, retaining the second copy for his files. The dealer will confirm completion of these inspections on that portion of the check list which remains in this manual.

IMPORTANT: To avoid accidents and to assure optimum performance, the machine must not be modified or altered in ways not approved by JOHN DEERE, nor must it be used in conditions or for purposes it is not designed for.

This machine is designed and manufactured according to JOHN DEERE specifications.

At the time the baler was delivered, your JOHN DEERE dealer discussed with you its safe operation and proper care. Carefully read the operator's manual, particularly the Safety Rules on the first pages.

This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

"Right-hand" and "left-hand" sides are determined by facing in the direction the baler will travel when in use.

Record your baler serial number in the space provided on the last page of this manual. Your dealer needs this information to give you prompt and efficient service.

IMPORTANT: This baler is primarily of metric design.

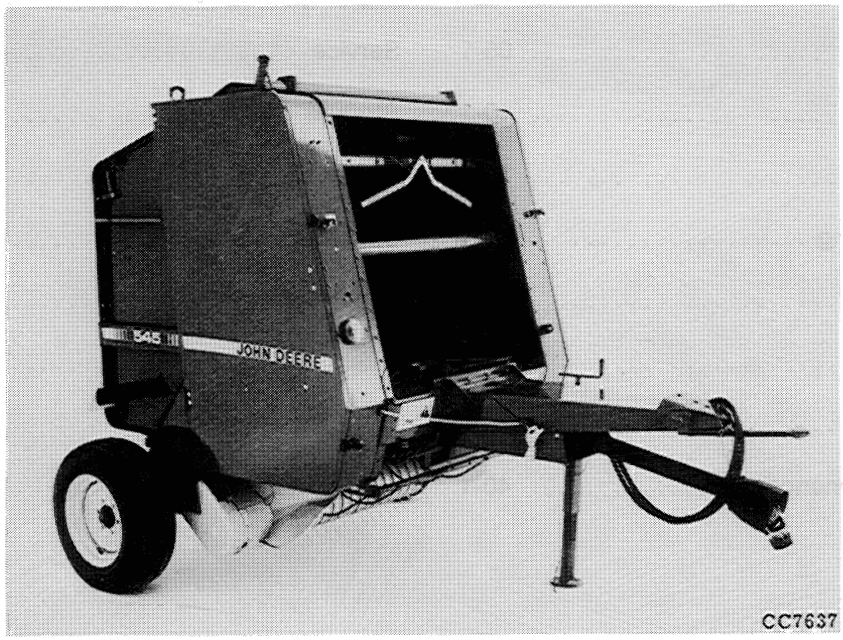
For your convenience, most specifications are given in metric measurement with the customary U.S. measurement following.

Some specifications cannot be converted, these appear in metric only.

Most hardware is metric. Specified metric hardware must be used for replacement.

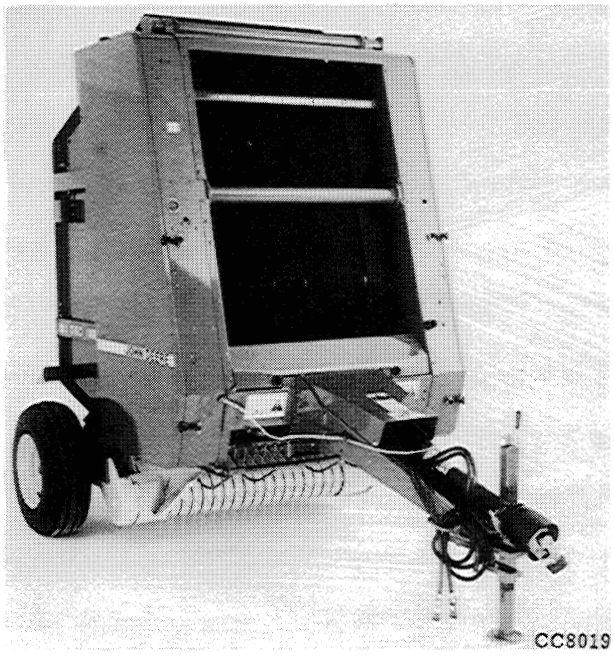
CAUTION: Use metric tools only ! Other tools may not fit properly. They may slip and cause injury.

Identification Views



545 Round Baler with Reversed Tongue

CC7637-545ACCE-281186



550 Round Baler with Tongue in Normal Position

CC8019-545ACCE-281186

Contents

TABLEOM-545ACCE-281186

Safety

OBSERVE SAFETY SIGNS AND MESSAGES

T 27999 N

CAUTION: This message is used for general reminders of good safety practices or to direct attention to unsafe practices. The message will appear in your operator's manual and/or the sign will appear on the machine with the color combination of yellow and black.

WARNING: This message denotes a specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of yellow and black.

DANGER: This message denotes the most serious specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of red and white.

T27999N-5305AAE-030285

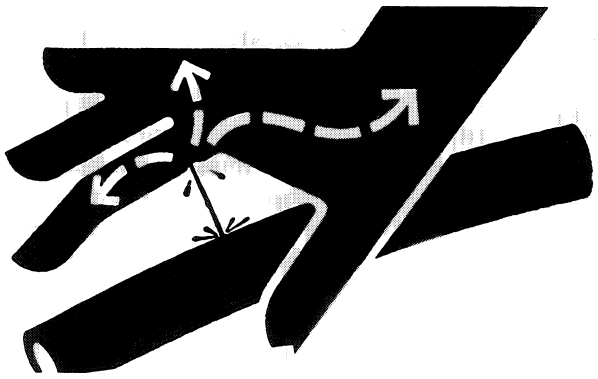
OBSERVE "IMPORTANT" MESSAGES

Messages labeled "Important" will appear in your operator's manual and/or on the machine to provide specific instructions for performing adjustments, services, etc. If these instructions are not followed, it could result in damage to the machine.

530SABE-030285

AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious injury. Before disconnecting lines, relieve all pressure. Before applying pressure to system all connections must be tight and lines and hoses must be in good condition. Pressure oil escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood to search for suspected leaks. If injured by escaping fluid, see a doctor at once. Serious infection can develop if proper medical treatment is not administered immediately.

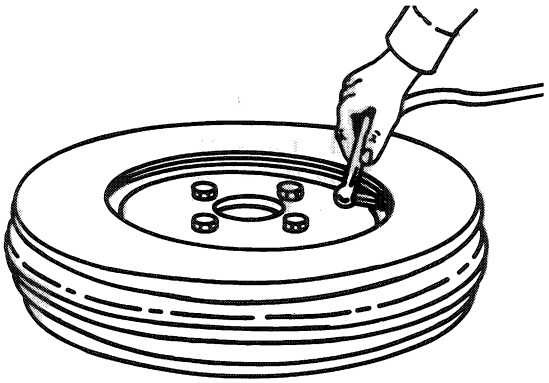


X9811-530ADE-030285

MOUNT TIRES SAFELY

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your JOHN DEERE dealer or a qualified tire repair service.

When sealing tire beads on rims, never exceed maximum inflation pressure specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.



E19547-550ACCE-030285

DO NOT MODIFY MACHINE

Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

530-SAFE-030285

USE SAFETY LIGHTS AND DEVICES

When transporting your machine on a road or highway at night or during the day, use necessary lights for adequate warning to operators of other vehicles. In this regard check local governmental regulations. These various safety lights and devices are available from your JOHN DEERE dealer.

SECURITE-550ACCE-030285

OPERATE SAFELY

Z20912

Wear relatively tight and belted clothing to prevent catching on machine parts.

Never allow riders on the baler.

Keep all shields in place when operating baler.

Do not attempt to pull hay or twine from pickup when baler is running.

Never hand-feed twine or hay into baler.

All machinery should be operated by responsible persons who have been properly instructed and delegated to do so.

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

Become familiar with all controls affecting machine functions.

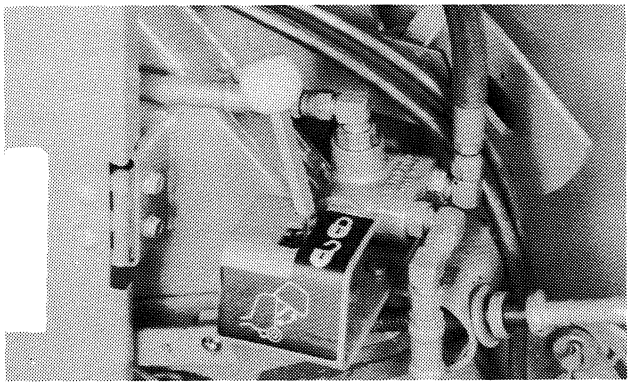
Before servicing, adjusting, or removing material from the baler, always disengage power and shut off engine.

Z20912-545ACCE-030285

On 550 baler, position gate lock valve in locked position before working on or around baler with gate in raised position. See "Operating the Baler" for gate lock valve instructions.

To avoid injury stay clear of gate while it is being raised and lowered.
Be sure bystanders are clear before operating gate.

Remove foreign objects from machine. See "Operating The Baler" for removal of foreign objects.

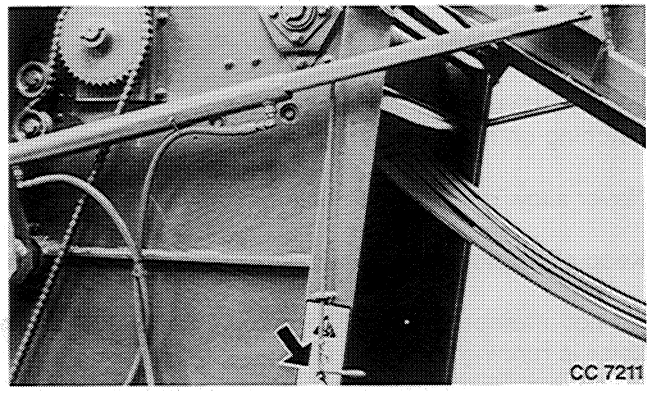


E21639-545ACCE-281186

On 545 baler, position gate stop in locked position before working on or around baler with gate in raised position. See "Operating the Baler" for gate stop instructions.

To avoid injury stay clear of gate while it is being raised and lowered.
Be sure bystanders are clear before operating gate.

Remove foreign objects from machine. See "Operating The Baler" for removal of foreign objects.

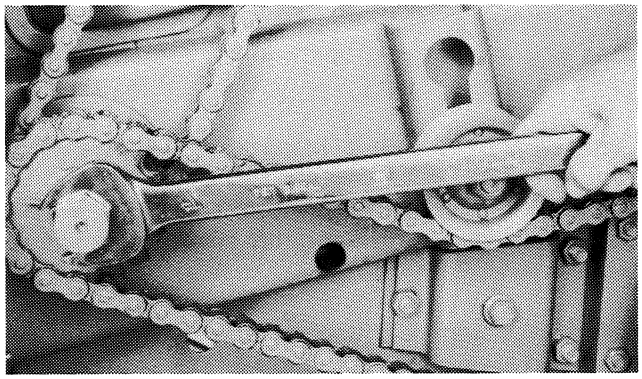


CC7211-545ACCE-281186

Use open end wrench to turn hex. gear case output shaft to aid in servicing. Never use any type of tool or wrench on shaft while tractor engine is running. Always remove tool from the shaft whenever you have finished using it.

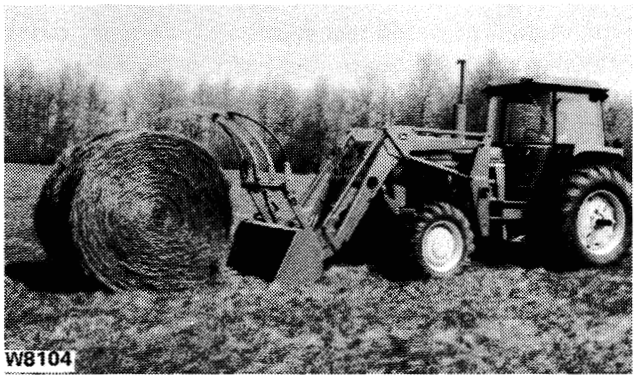
Check to make sure hookup is securely latched by pulling rearward on yoke.

Become familiar with operator's manual and the safety and instruction signs on the machine.



E21640-545ACCE-281186

USING FRONT-END LOADER TO MOVE ROUND BALES



CAUTION: Use extreme caution when using a front-end loader to handle round bales.

If using a tractor loader to move bales, the loader MUST be equipped with a grapple to prevent bale from rolling down loader frame onto tractor operator.

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

Due to the weight and rolling tendency of large round bales, be careful when moving bales.

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.

Do not allow anyone to stand near the rear of the baler when it is discharging a bale.

Even when using proper equipment, handling round bales can be hazardous. Follow the instructions shown in this manual and on the decals attached to the loader and round bale clamp.

Do not handle round bales with the loader unless a specially designed round bale clamp is installed. Without the clamp, the bale can fall on the operator when the loader is raised.

To avoid handling and stability problems, do not exceed the manufacturer's rated capacity of the tractor.

The tractor must be equipped with a roll-over protective structure to prevent injury to operator in case of a tractor roll-over accident.

The tractor must have maximum rear ballast per wheel and maximum tread width. See your tractor operator's manual.

Reduce the tractor ground speed. Carry the bale as low as possible and maintain adequate visibility and ground clearance at all times.

Jerky operation causes tractor-loader instability. Operate the loader controls smoothly.

W8104-545ACCE-281186

When handling round bales, open clamp and lower fork or bucket to the ground. Keep fork or bucket level with the ground to avoid damaging the round bale. Drive ahead until bale is on the fork or bucket. Close clamp to grasp the bale, roll fork or bucket back, and raise loader boom to provide adequate visibility and ground clearance for transport.

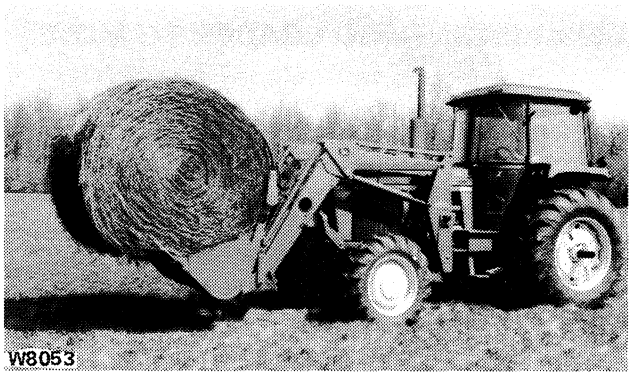
When handling round bales on a slope, approach bale with tractor facing uphill. Open clamp and lower fork or bucket to the ground. Keep fork or bucket level with ground to avoid damaging round bale. Drive ahead until bale is on fork or bucket. Close clamp to grasp bale, roll fork or bucket back, and raise loader boom approx. 15 cm (6 in.) to provide ground clearance for transport on slopes. Proceed slowly with extreme caution.

Never use the tractor loader to stop a rolling bale.

Improper use of loader to handle round bales can result in injury to the tractor operator from:

a. The bale rolling back down the loader boom into operator's station.

b. A tractor roll-over accident caused by instability when the bale is not carried low.



W8053-545ACCE-281186

JOINTED SHAFT

Make sure that jointed shaft, tractor PTO and baler hook-up are adequately protected.

Make sure that jointed shaft is correctly connected to PTO.

Make sure that the guards are secured by means of chains.

Always stay clear of jointed shaft during operation.

SECUOM-550ACCE-030285

EXTINGUISHING A FIRE

1. Eject bale immediately.

2. Move tractor and baler upwind as far as possible from flammable material.

3. Raise gate and engage locking device.

4. Use pressurized water fire extinguisher or other water supply to put out fire.

SECUOM-545ACCE-030285

INSTALL A FIRE EXTINGUISHER

Legally homologated pressurized water fire extinguishers are available in various countries and can be purchased by the owner to equip his baler.

Contact your JOHN DEERE dealer to obtain information on fire extinguishers and how to install one on your baler.

SECUOM-545BCCE-030285

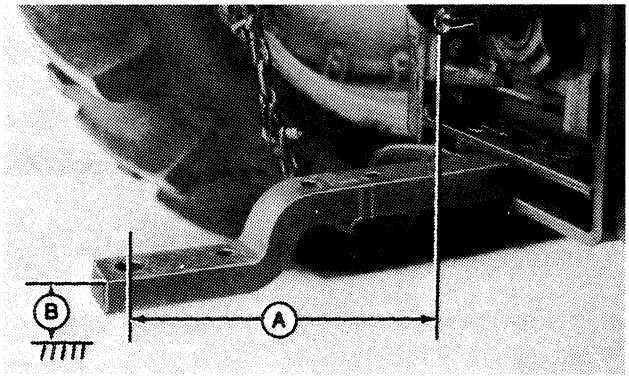
Preparing the Tractor

ADJUSTING DRAWBAR

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

IMPORTANT: Before attaching baler, be sure to adjust drawbar. Replace all shields.

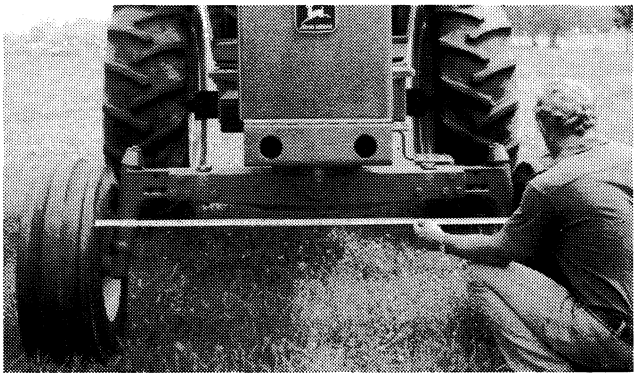
A–350 mm (14 in.)
B–330 to 508 mm (13 to 20 in.)



E21641-545ACCE-281186

SETTING TRACTOR FRONT WHEELS

Set front wheels to provide an inside tire to tire dimension of 1372 to 1524 mm (54 to 60 in.).



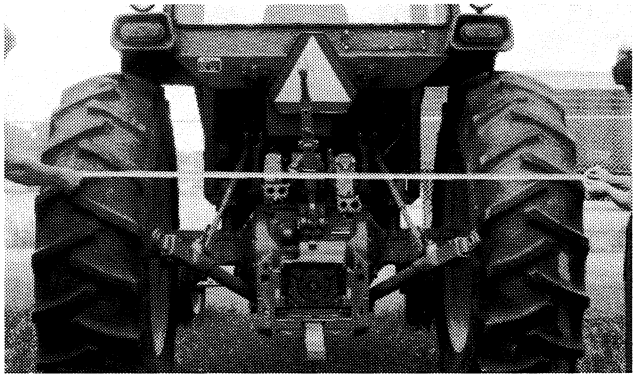
E21602-550ACCE-030285

SETTING TRACTOR REAR WHEELS

Set rear tractor wheels to provide an outside tire dimension of 2591 to 2743 mm (102 to 108 in.)

NOTE: If converging wheels are installed, the outside dimension of the rear wheels must not exceed 2286 mm (90 in.).

IMPORTANT: Do not make extremely short turns or cause the baler to jackknife while backing, as damage may occur to the converging wheels.



E21603-545ACCE-281186

CHECKING BALLAST, WHEEL SPACING AND TIRE INFLATION

Provide sufficient weight to stabilize tractor when operating on hilly ground or other adverse conditions. See your tractor operator's manual.

To insure proper stability, adjust ballast, wheel spacing and tire inflation according to tractor operator's manual.

530PTE-030285

SELECTING TRACTOR PTO SPEED

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

530PTFE-000285

SETTING HYDRAULIC OUTLETS

Set tractor hydraulic remote outlets to maximum flow rate.

530PTGE-030285

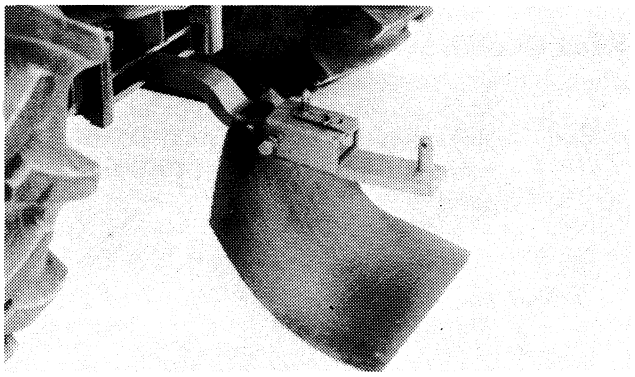
INSTALLING MONITOR

See "Installing Monitor Console" in the assembly section.

PREPTRAC-550ACCE-281186

USING DRAWBAR SHIELD

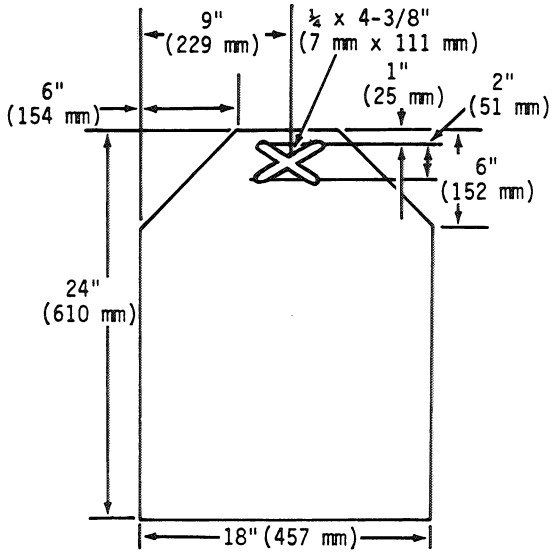
If a tractor drawbar catches and disturbs the windrow under the tractor, a drawbar shield can be used.



E21604-530PTIE-030285

MAKING DRAWBAR SHIELD

Use 2 or 4 ply belting.



E19651-550ACCE-030285

Preparing the Baler

SELECTING TWINE

A good quality twine plays a very important 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.

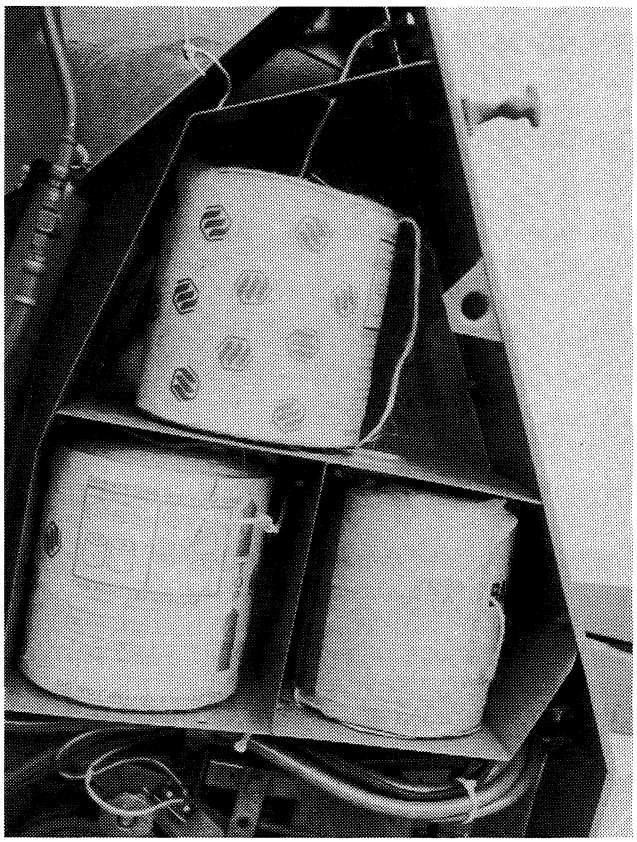
PREPPRES-550ACCE-030285

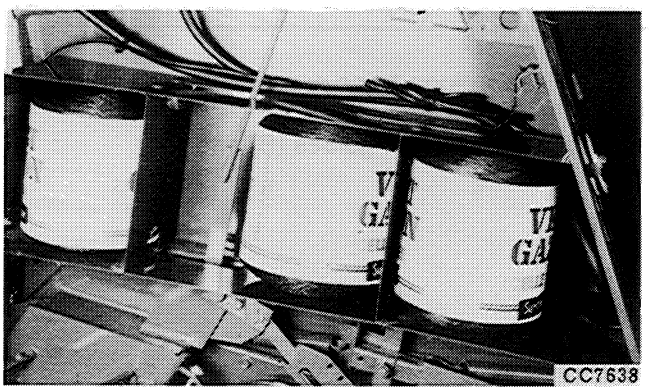
LOADING TWINE BOX

1 . 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."

2. Join twine by tying the inside end of one ball to the outside of the other ball. In joining twine, use a modified square knot with sisal twine and a sheet bend knot with plastic twine.

3. Trim loose ends of twine as close to knot as possible.



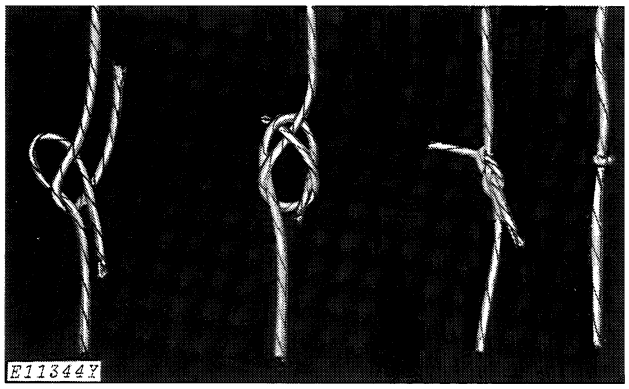


E21611,CC7638-545ACCE-281186

TYING SHEET BEND KNOT – PLASTIC TWINE

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

Tie plastic twine balls together with a sheet bend knot as shown.

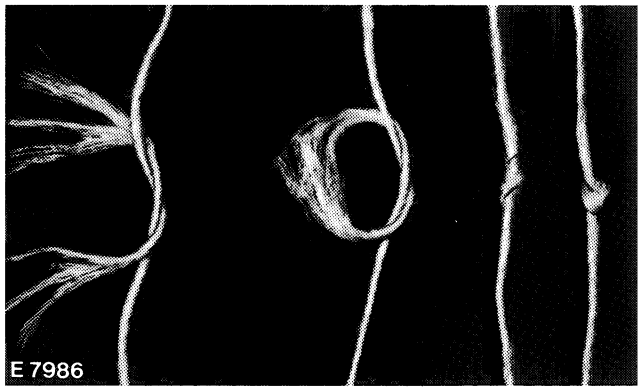


E11344-530PMCE-030285

TYING MODIFIED SQUARE KNOT – SISAL TWINE

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

Tie twine balls together with a square or modified square knot as shown.

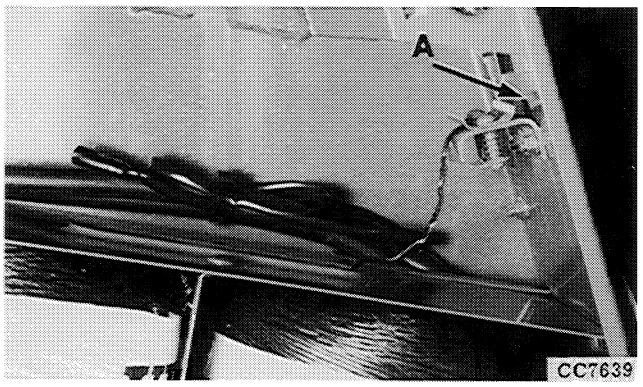


E7986-530PMDE-030285

ROUTING TWINE THROUGH GUIDES

NOTE: A detailed threading diagram is located inside right-hand shield door.

Pull twine through twine tension plate and opening (A) located above twine box on both baler models (illustration shows 545 baler).



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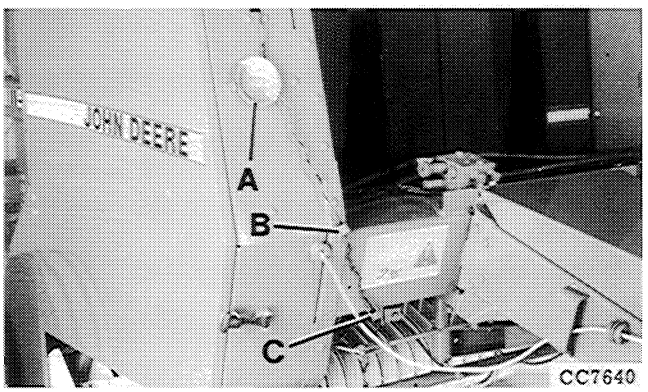
On 545 baler, loop twine around pulley (A).

Route twine through guides (B) and (C).



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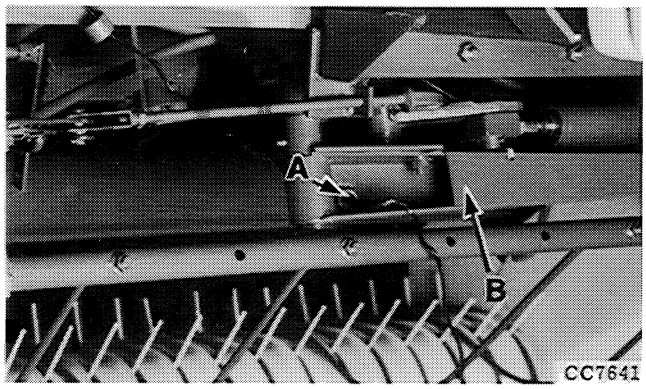
Route twine through guide (A) and open cover (B).



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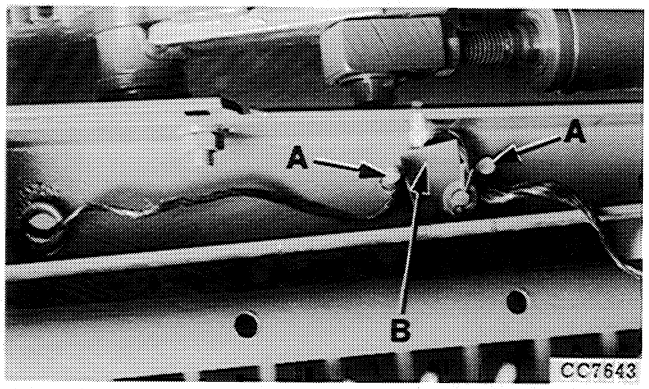
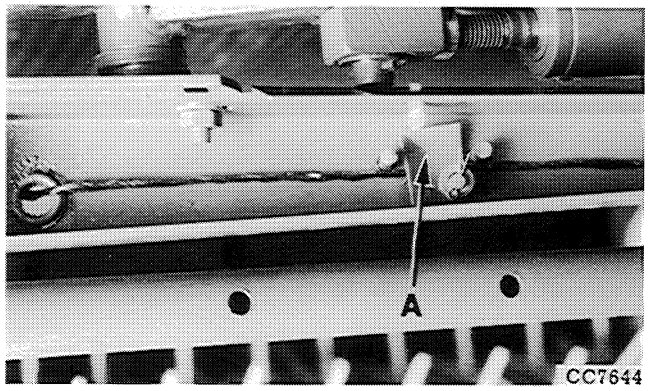
Loop twine under guide pins (A) and place twine over top of tension plate (B) as shown.



CC7643-545ACCE-281186

Pull on twine from both sides of tension plate (A) to get twine under the plate.



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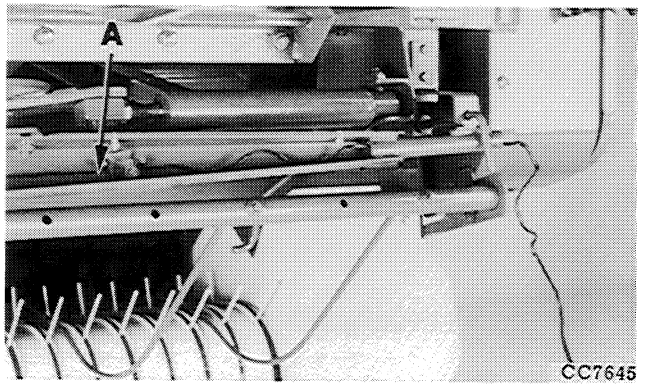
Thread twine through twine arm (A). There must be 300 mm (12 in.) of twine exposed from end of twine arm.

Close twine arm cover.



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TIRE INFLATION

10.0/75 X 15.3 (6 PR)	207 kPa (2.1 bar; 30 psi)

PREPPRES-545ACCE-281186

Attaching and Detaching

ATTACHING BALER TO 540 RPM PTO

CAUTION: Never operate 540 rpm baler with 1000 rpm PTO.

The baler can be attached to any tractor equipped with a drawbar or trailer hitch and a 540 rpm PTO.

If the baler must be run with a 1000 rpm PTO tractor, see your JOHN DEERE dealer.

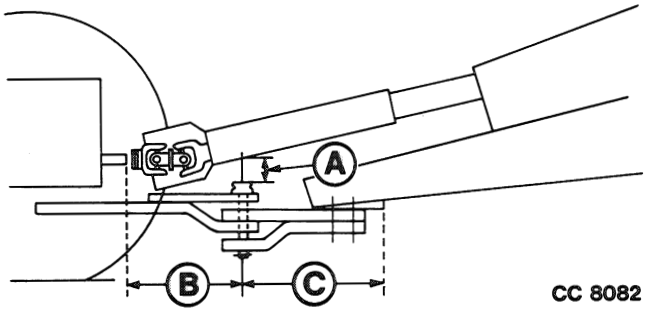
ATTACHOM-545ACCE-281186

ATTACHING BALER TO DRAWBAR

Adjust baler hitch clevis and tractor drawbar to obtain dimensions (A), (B) and (C) as shown.

A–75 mm (3 in.)
B–350 mm (14 in.)
C–430 mm (17 in.)

NOTE: Balers are delivered from the factory with tongue positioned for hitching to drawbar.



CC 8082

CC8082-545ACCE-281186

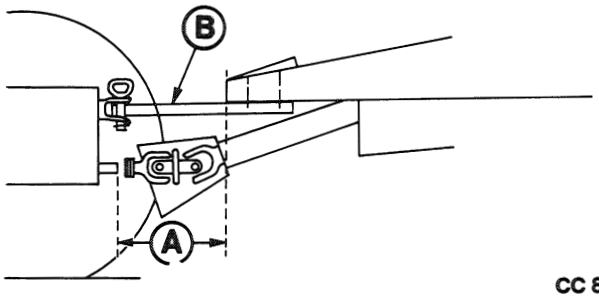
ATTACHING BALER TO TRACTOR TRAILER HITCH

Clearance between ground and baler tongue can be increased by this hitching method. This is particularly convenient when baling very thick windrows.

An adapting kit is available from your JOHN DEERE dealer to reverse the tongue position.

Adjust ball joint hitch (B) to obtain a minimum distance (A) of 300 mm (12 in.) between end of tractor PTO and tip of tongue.

A–300 mm (12 in.) minimum
B–Ball joint hitch



CC 8083

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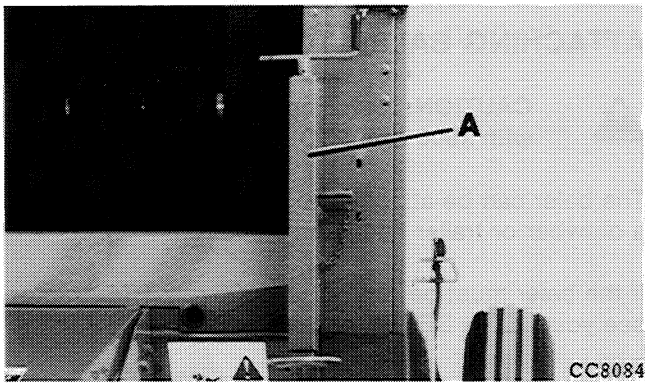
STORING JACKSTAND

After hitching to tractor, secure jackstand (A) in storage position as shown.



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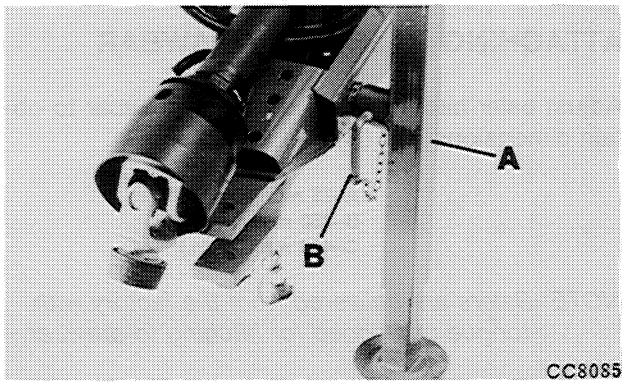
USING JACKSTAND

When unhitching tractor from baler, remove jackstand from storage position and place it in vertical position (A).

Secure to tongue with pin and quick-lock pin (B).



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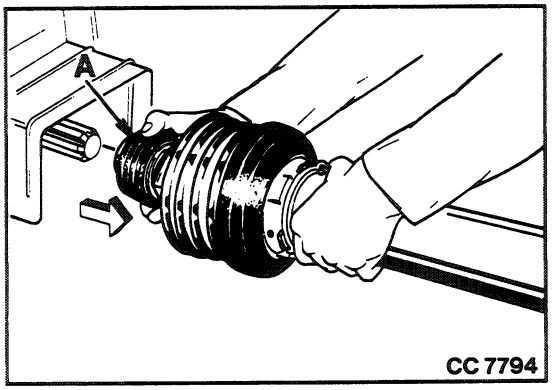
CONNECTING AND DISCONNECTING HOOKUP (550)

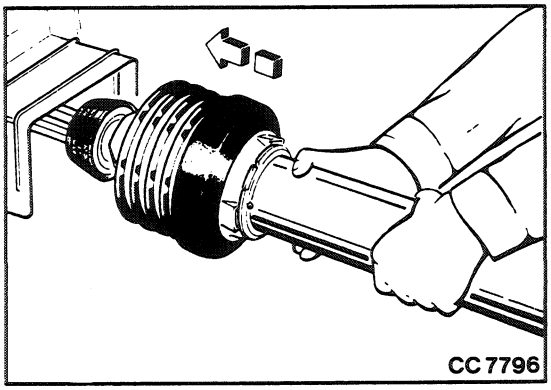
Pull back locking collar (A) until it remains in open position.



CC7794-545ACCE-281186

Push telescoping shaft onto tractor PTO until the lock engages automatically. In this position the locking collar must rotate freely.

Disconnecting: Pull back locking collar until it remains in open position. Hold telescoping shaft at guard tube and retract it from tractor PTO.

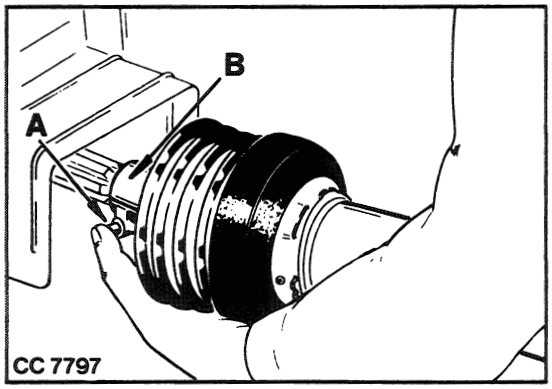


CC7796-545ACCE-281186

CONNECTING AND DISCONNECTING HOOKUP (545)

Press pin (A) and simultaneously push telescoping shaft (B) onto tractor PTO until pin engages.

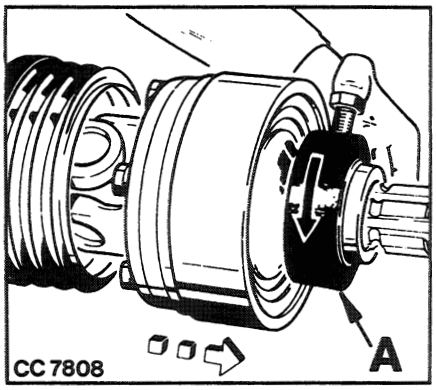
Disconnecting: Press pin (A) and simultaneously hold telescoping shaft (B) at guard tube. Retract shaft from tractor PTO.



CC7797-545ACCE-281186

CONNECTING HOOKUP TO GEAR CASE INPUT SHAFT

Turn lock ring (A) and simultaneously push telscoping shaft onto input shaft until lock engages.



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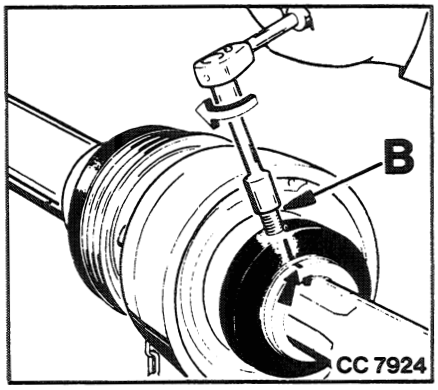
Tighten screw (B) on clamp key (marked) to 50 Nm (35 ft-lb) torque.



CC7924-545ACCE-281186

CAUTION: Always stay clear of PTO when it is running.

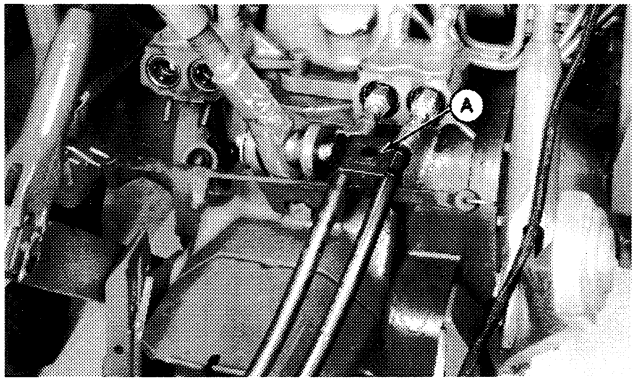
Before starting work, make sure all locks are securely engaged and safety chains are attached.

Reinstall PTO shields which have been removed to attach hookup.

Immediately replace any damaged plastic hookup shields.

ATTACHOM-545BCCE-281186

ATTACHING TO TRACTOR HYDRAULIC SYSTEM



ISO hydraulic couplers are standard with the baler. If they do not fit the tractor, see your JOHN DEERE dealer.

1. Identify which hydraulic receptacle is pressurized when tractor hydraulic lever is moved rearward.

2. Connect hose with cylinder extension symbol on identification tag (A) to this receptacle.

3. Connect remaining hose.

E21606-530ADIE-000382

CONNECTING TRACTOR WIRING HARNESS

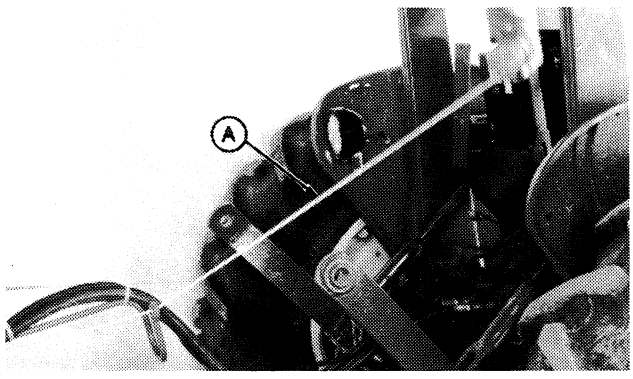
Line up timing mark on connectors and tighten locking ring.

Take care not to reverse the polarity.

ATTELOM-550DCCE-030285

ATTACHING TWINE WRAP RECYCLE ROPE

Attach twine wrap recycle rope (A) to a convenient location near tractor centerline. This will reduce the possibility of tractor tires tripping the rope when turning. Allow small amount of slack for free movement of twine linkage.



E21608-530ADKE-030285

Transporting

RECOMMENDED WARNING LIGHTS

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

TRANSPOM-550ACCE-030285

PREPARING FOR TRANSPORT

Close gate, raise pickup and converging wheels, if equipped.

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

CAUTION: Use care when towing baler at transport speeds. Reduce speed if the combined weight of baler with bale exceeds weight of tractor.

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

Do not tow baler at a speed exceeding 25 km/h (16 mph).

Baler must be empty when transporting it on roads.

TRANSPOM-545ACCE-281186

Operating the Baler

CROP PREPARATION

Make windrows either:

a. Not more than one half the width of pickup.

b. The full width of pickup to eliminate weaving.

To prevent spoilage, do not bale until the hay could be baled with a square baler.

UTILISOM-545ACCE-281186

BALING SHORT, DRY, SLICK CROPS

CAUTION: DO NOT TAKE CHANCES! To avoid injury or death from 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.

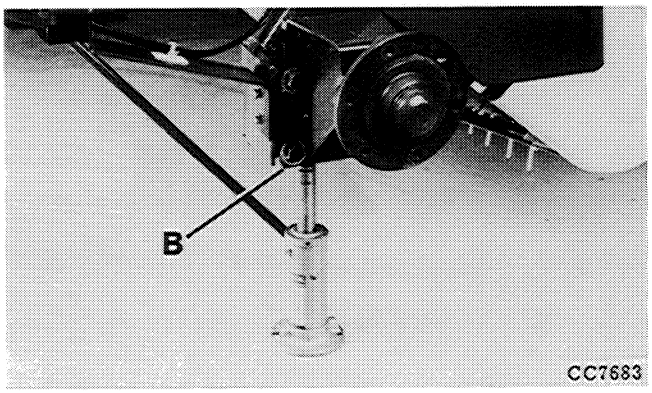
To reduce plugging, try one or more of the following techniques:
Raise pickup as high as practical.
Reduce engine speed to 1500 rpm and shift to higher gear.
Reduce bale density as necessary.
Remove compressor rack assembly, or individual rods, if material accumulates on it. Always replace compressor rack under normal conditions.
Make larger windrows (rake together as necessary).

UTILISOM-545BCCE-281186

When baling extremely short, dry hay it may be necessary to lower the baler. Position wheel spindles (A) as shown.

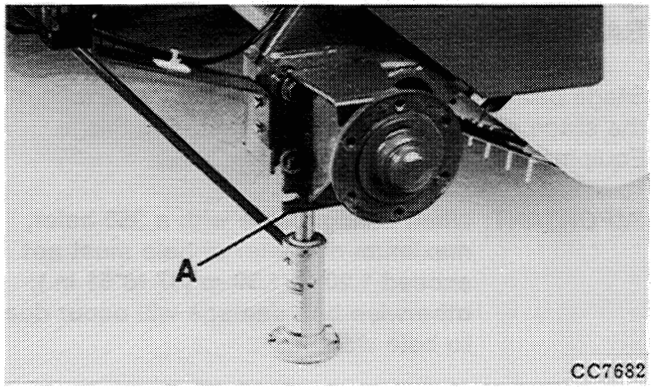
IMPORTANT: Position wheel spindles in "normal" position for all other baling conditions.

IMPORTANT: The silage attachment must be removed when operating under dry conditions (See "Installing Silage Equipment").



CC7683-545ACCE-281186

BALING CORNSTALKS



1, Cut stalks prior to baling to improve pickup tooth life.

2. Do not rake more than six rows together or plugging may occur at the pickup area. Higher productivity can be obtained by baling smaller windrows at faster ground speeds.

3. Increase feed opening by:

a. Lowering pickup as low as practical.

b. Raise the baler by placing wheel spindles (A) in normal position.

c. Adjust compressor rack to highest position. (See "Adjusting Compressor Rack Assembly").

4. Replace missing pickup teeth.

5. Remove rack if cornstalks build up on top of rods (see "Removing Compressor Rack Assembly").

6. Try adding extra compressor rods if cornstalks push up between existing rods and cause plugging.

CC7682-545ACCE-281186

BALING SILAGE

Silage baling will very often require the installation of the silage adapting bundle (see "Installing Silage Equipment").

IMPORTANT: When baling silage with a 550 baler, maximum diameter of bale must not exceed 1.20 to 1.30 m (47 to 51 in.), otherwise belt damage will occur due to bale weight.

IMPORTANT: When baling silage with a 545 baler in short and very damp crop and bales are not perfectly cylindrical, it is recommended to install the "Torsion Bar" bundle on upper tension arm.

When baling silage, the bottom side of the windrow is generally very damp. This dampness reduces the "grip-ability" of the crop on the belts and this may disturb the starting process of the bale.

To solve this problem, proceed as follows:

Always start the bale with the pickup centered on the windrow.

Reduce the tractor engine speed to low idle before entering the windrow. Select a gear ratio which will give 6 to 10 km/h (4 to 6 mph) at rated PTO speed.

Do not stop forward travel for at least 2 to 3 m (80 to 120 in.) once you have entered the crop, as this is the critical moment when more material is needed to force the bale to start.

Operate the pickup in the lowest position. It may be helpful to adjust wheel spindle position if the fields are soft or muddy to help keep the pickup out of ground contact (see "Adjusting Wheel Spindles").

Lift or remove the compressor rack (see "Adjusting Compressor Rack Assembly").

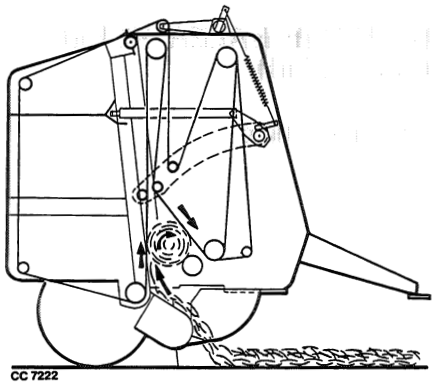
To ensure a smooth feeding, make sure tractor drawbar does not catch or disturb windrow (See "Using Drawbar Shield").

NOTE: Check for crop accumulation near bearings and clean baler at the end of each day to prevent corrosion damage to bearings.

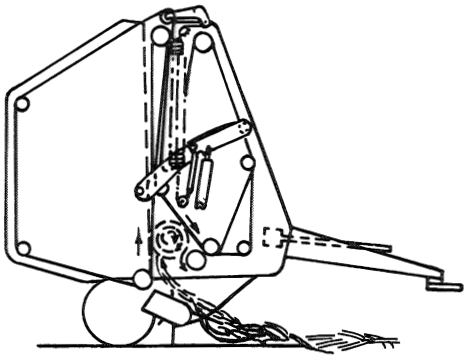
HOW THE BALER FORMS A BALE

Starting the bale.

545 Baler



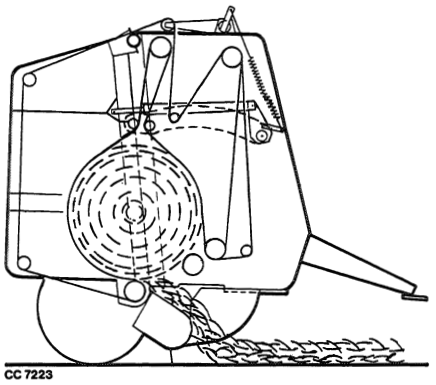
550 Baler



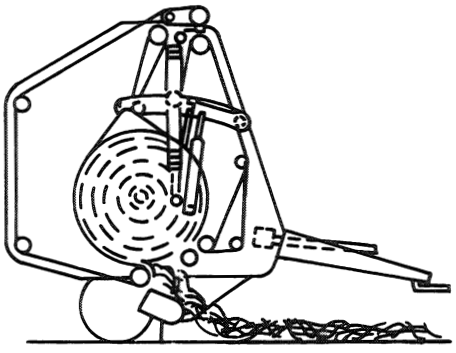
CC7222,E21621-545ACCE-281186

Forming the bale.

545 Baler



550 Baler



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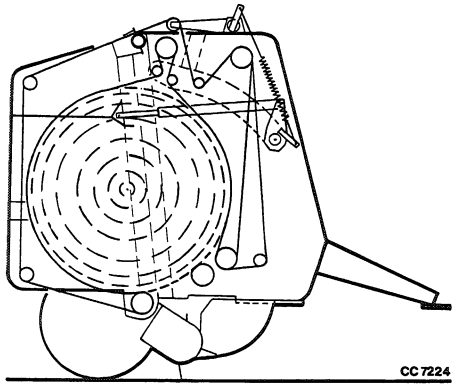
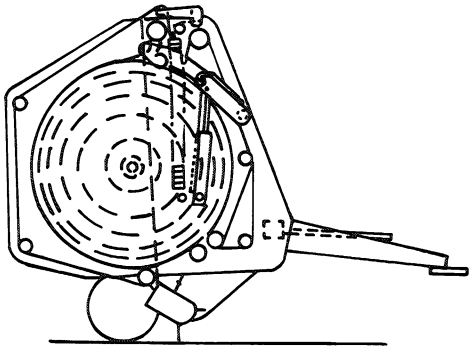
HOW THE BALER FORMS A BALE (Continued)

Completed bale.

545 Baler



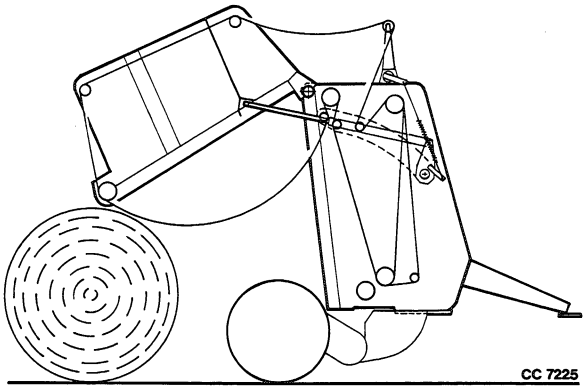
550 Baler



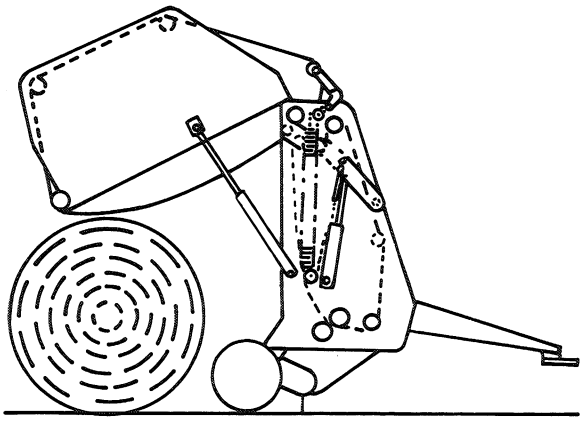
CC7224,E21623-545ACCE-281186

Discharging the bale.

545 Baler



550 Baler



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BREAK-IN PERIOD

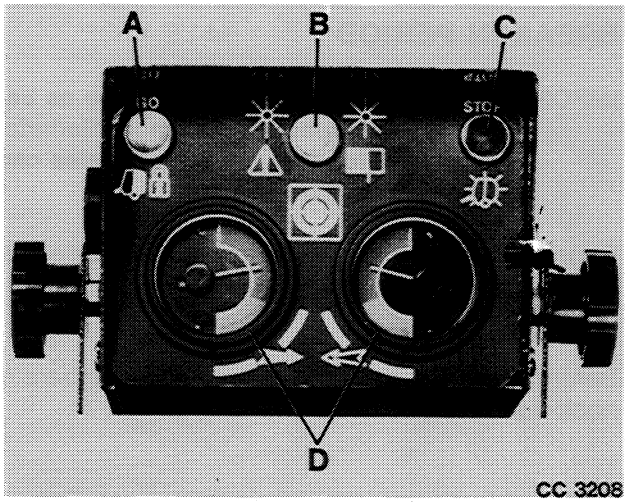
IMPORTANT: Belt and drive loads increase as bale size approaches maximum diameter. Frequent forming of oversize bales can lead to premature failures.

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

Before operation, lubricate telescoping members of PTO hook-up liberally.

UTILISOM-545DCCE-281186

BALE MONITOR (Standard on 550, Option on 545)



A–Green light – GATE LATCHED
This light indicates that the gate is closed and latched. It also acts as a pilot light showing the monitor box has power.

IMPORTANT: Damage to gate or gate latches can occur if only one side of gate is latched. Green light must be on before starting a bale. Hold tractor valve in closed position for 1 to 2 seconds after light comes on. Recheck light after transport.

B–Yellow light – AUTOMATIC TWINE WRAP
This light will start flashing when the bale is near its finished size. This allows time to even the bale up before the automatic twine wrap starts.

When the twine arm starts its cycle, this light will glow continuously and stay on until the twine arm returns to its home position. At this time, the light will return to flashing until the bale is ejected.

C–Red light and buzzer – OVERSIZE BALE
Light and buzzer on indicates the baler is filled to maximum capacity. Stop immediately or damage may occur to baler. After stopping forward travel, the bale can be wrapped with twine by pulling and releasing the manual control rope. This light should not come on during normal baler operation.

NOTE: When red light comes on, green light will go out.

D–BALE SHAPE GAUGES
Bale shape gauges show the shape of each bale end by measuring slack in the two outer belts closest to the side sheets. When the left-hand belt is tight, the left-hand gauge will read high in the green area showing that this side of baler is filled with hay. As the gauge needle falls in the green area or into the red area, it indicates that this side of the bale needs more hay to tighten the belt.

CC3208-545ACCE-281186

FORMING A BALE WITH BALE MONITOR (Standard on 550 – Option on 545)

CAUTION: DO NOT TAKE CHANCES ! 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.

Operate tractor at rated PTO speed.

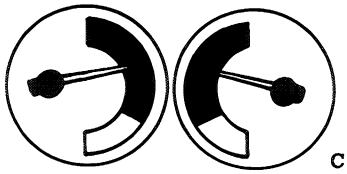
Move selective control valve lever to close gate. Hold in this position until green light is on. Move lever back to neutral position.

IMPORTANT: To ensure that the twine mechanism is relatched, tractor must be operated at PTO speed and selective control lever moved to full flow position. If not, the twine arm will be activated and the bale wrapped before it reaches its final size.

Engage PTO.

UTILISOM-545ECCE-281186

BALE SHAPE INDICATOR (Standard on 550 – Option on 545)



CC8285

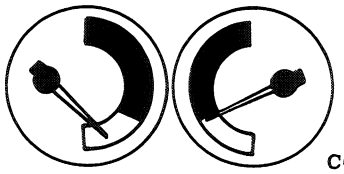
Normal gauge reading with empty baler.

NOTE: Gauge needles may not be even with empty baler.

Drive into windrow.

CC8285-545ACCE-281186

Feed hay to left-hand side.

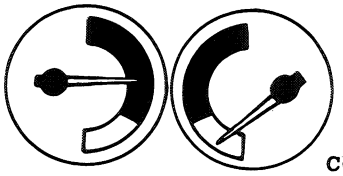


CC8286

NOTE: When forming the bale core, both gauge needles may be in the red area.

CC8286-545ACCE-281186

Feed hay to right-hand side.

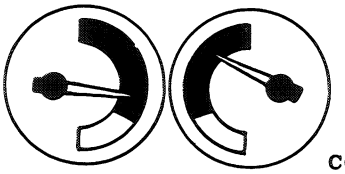


CC8287

NOTE: When weaving from side to side, weave quickly.

CC8287-545ACCE-281186

Feed hay to left-hand side.

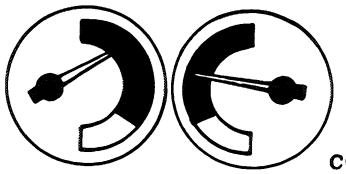


CC8288

NOTE: Crowd ends by driving with inside of front tractor tire near edge of windrow.

CC8288-545ACCE-281186

Continue feeding left-hand side for a longer period.



CC8289

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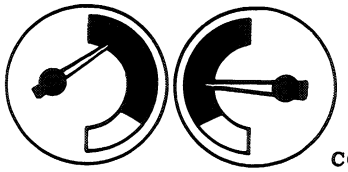
Feed right-hand side.



CC8290

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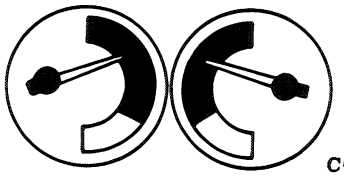
Continue feeding right-hand side for a longer period.

NOTE: Weaving too often puts too much hay in center of bale.



CC8291

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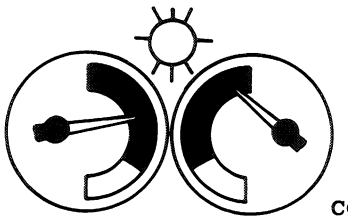
Feed left-hand side.

Flashing yellow light comes on.



CC8292

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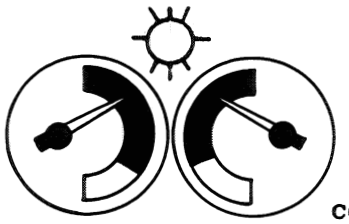
Keep gauge needles even and as high as possible by weaving more often until yellow light glows continuously.



CC8293

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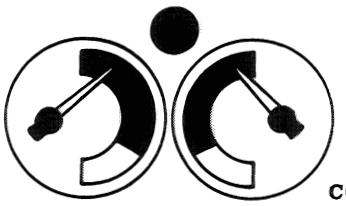
Yellow light glows continuously.



CC8294

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WRAPPING BALE WITH MONITOR (Standard on 550 – Option on 545)

Continue forward travel. Look back to make sure twine is moving.

Stop forward travel.

Back up baler 2 to 3 m (8 to 10 ft.).

Yellow light will start flashing again.

UTILISOM-545FCCE-281186

DISCHARGING BALE

To ensure that twine is cut, look back to see that twine has stopped moving.

Disengage PTO.

IMPORTANT: Once the twine cycle is completed, discharge bale immediately.

Raise gate. Drive forward to clear bale and close gate.

UTILISOM-545GCCE-281186

CLOSING THE GATE

Close the gate.

IMPORTANT: On Baler 550: When closing the gate keep engine speed high enough too keep belts tensioned. If the oil flow is less than 25 l/min (6.5 gpm), install an orifice (see "Installing Orifice in Tractors with Low Hydraulic Flow" in the Service section).

UTILISOM-545JCCE-281186

FORMING A BALE (545 STANDARD)

CAUTION: DO NOT TAKE CHANCES ! 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.

Operate tractor at rated PTO speed.

Move selective control valve lever to close gate. Hold in this position until upper tension arm is completely lowered. Shift lever to neutral.

IMPORTANT: Be sure gate is correctly closed to ensure locking of wrapping mechanism. Otherwise, twine arm will start its cycle before bale reaches final size.

Engage PTO.

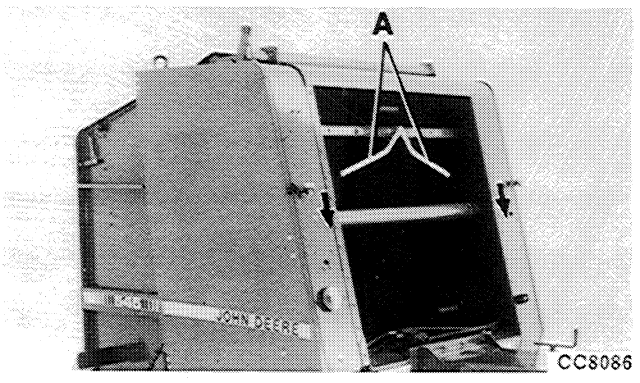
UTILISOM-545HCCE-281186

BALE SHAPE INDICATORS (545, Standard Equipment)

To obtain well-shaped bales, it is important to ensure an even distribution of material inside the bale chamber. Bale shape indicators permit checking that bale chamber is equally filled at right and left-hand side.

UTILISOM-545ICCE-281186

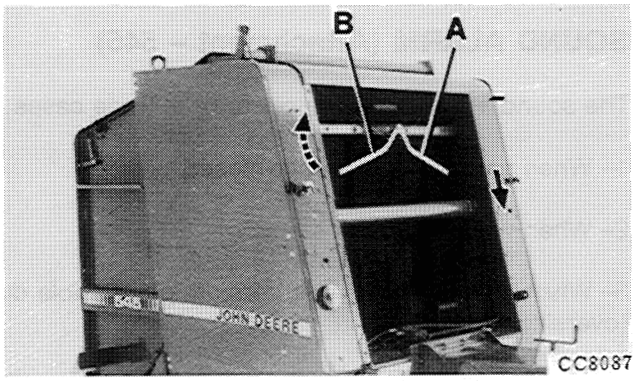
When baler is empty, bale shape indicators (A) are positioned as shown (down position).



CC8086-545ACCE-281186

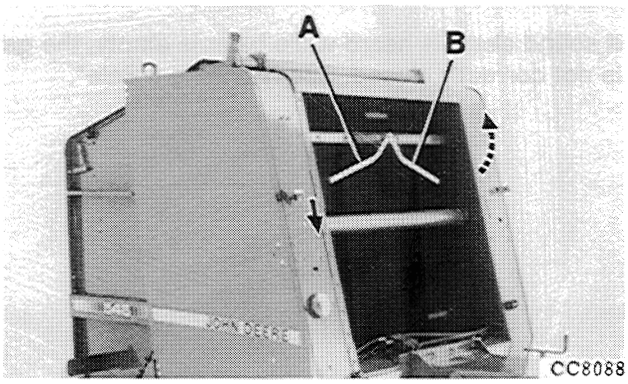
When left-hand bale shape indicator (A) remains in down position while right-hand indicator (B) has risen and is almost horizontal, baler is underfed on left-hand side. Weave to the right over windrow to bring more material to left-hand side of pickup.

NOTE: When weaving from side to side, weave quickly to avoid feeding too much crop in center of pickup, resulting in a barrel-shaped bale.



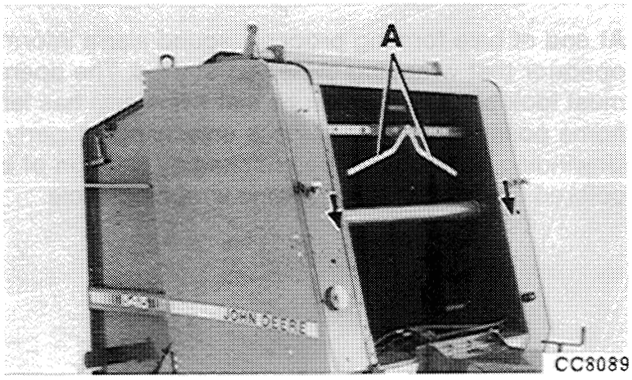
CC8087-545ACCE-281186

When right-hand bale shape indicator (A) remains in down position while left-hand indicator (B) has risen and is almost horizontal, baler is underfed on right-hand side. Weave to the left over windrow to bring more material to right-hand side of pickup.



CC8088-545ACCE-281186

When both bale shape indicators (A) remain in down position while crop is being fed into bale chamber, center of bale chamber is overfed, resulting in a barrel-shaped bale.



CC8089-545ACCE-281186

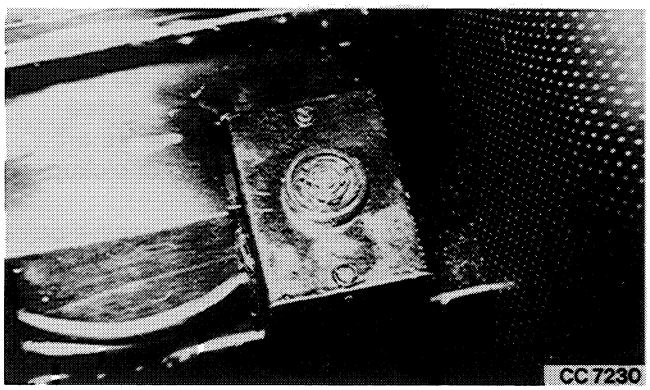
SOUND ALARM (Attachment – 545)

The sound alarm alerts the operator in three cases:

1– When gate is not correctly closed.

2– When wrapping cycle starts.

3– When bale has reached maximum permissible diameter (oversize).

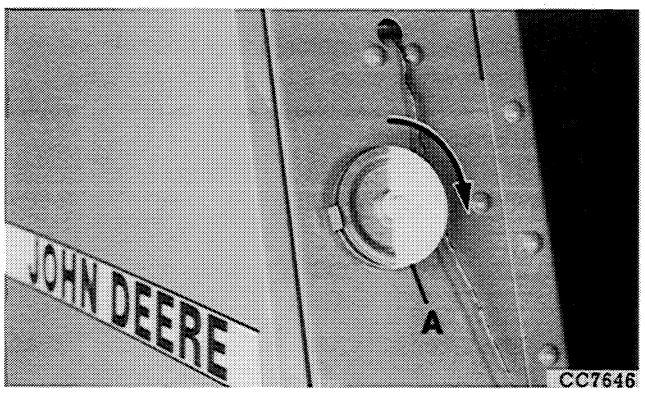


CC7230-545ACCE-281186

If sound alarm is heard while baler is empty, the gate is not correctly closed. See "Forming a Bale".

UTILISOM-545JCCE-281186

At end of bale forming process, sound alarm informs operator that wrapping cycle has started. The operator must look back to make sure that twine arm has left its home position and that twine is unwinding properly. Unwinding of twine can be checked by rotation of bi-colored sheave (A) during twine wrapping cycle.



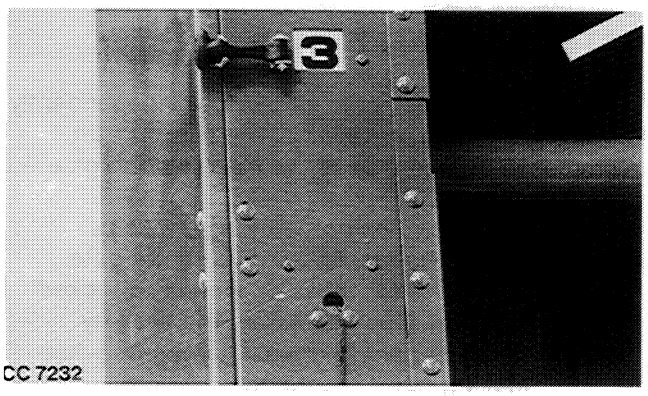
CC7646-545ACCE-281186

When bale has reached maximum diameter (oversize), sound alarm rings to alert operator that he must immediately stop and manually trip the twine wrapping system (see "Recycling Twine Arm".)

Check and determine cause of problem.

UTILISOM-545KCCE-281186

WRAPPING BALE (Without Sound Alarm, 545)

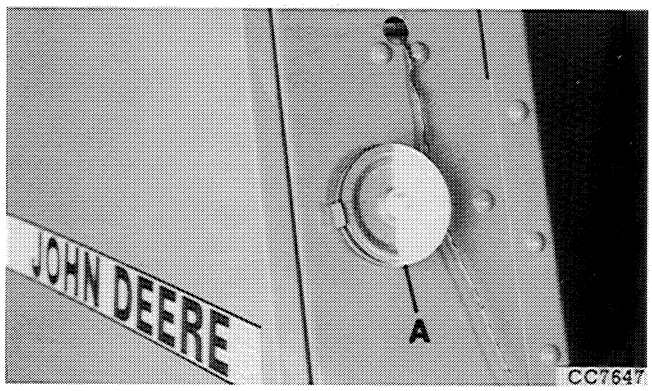


Once bale has reached its preset diameter, twine wrapping cycle starts automatically.

Check that cipher (from 3 to 6) corresponding to the selected bale diameter appears in window and look at bicolored sheave. Once sheave starts rotating, stop forward travel of tractor and back up baler 2 to 3 m (8 to 10 ft.) during twine wrapping cycle.

CC7232-545ACCE-281186

DISCHARGING BALE (545)



To ensure twine is cut, glance back to see that sheave (A) has stopped rotating.

Disengage PTO.

IMPORTANT: Once the twine cycle is completed, discharge bale immediately.

Raise gate.

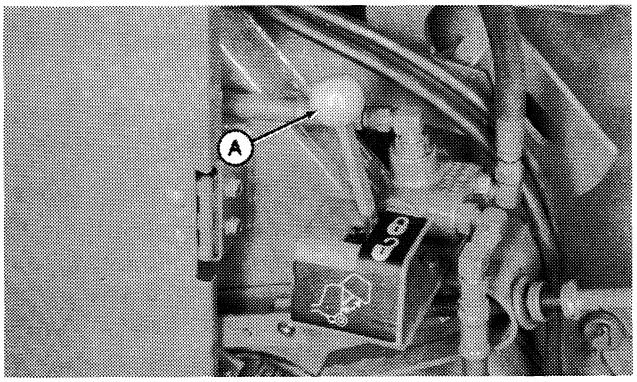
Drive forward to clear bale and close gate.

CC7647-545ACCE-281186

GATE LOCK VALVE (550)

This valve locks each gate lift cylinder independently with the gate in any position. If the hydraulic lift system fails on one side of the machine, the gate will still be held open.

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



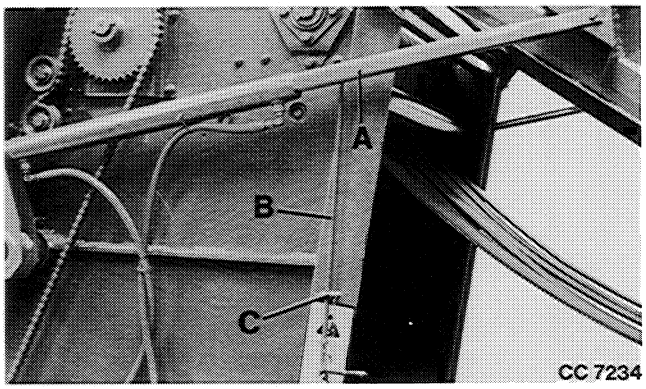
E21617-545ACCE-281186

GATE LOCKING DEVICE (545)

The gate locking device (A) prevents any accidental lowering of gate when servicing inside the baler.

CAUTION: When working inside or around the baler with an open gate, the gate locking device (A) must be moved to the locked position. Use this safety feature any time the gate is open. Close the gate any time the baler must be left unattended.

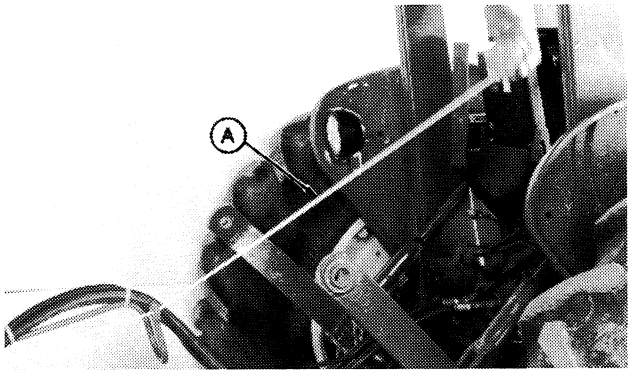
A–Gate locking device in locked position
B–Locking device control lever
C–Securing pin



CC7234-545ACCE-281186

RECYCLING TWINE ARM

If twine is not caught by bale and twine arm returns to home position, pull rope (A) and release. This will start the twine arm through another cycle.



E21608-530OMO-030285

WRAPPING A SMALL BALE

Any bale size greater than 81 cm (32 in.) diameter can be wrapped by pulling and releasing rope.

NOTE: A much greater force is required to pull the rope for wrapping a small bale than for recycling the twine arm.

UTILISOM-545NCCE-281186

WRAPPING AN OVERSIZE BALE (With Monitor, 550; 545 Option)

If the red light on the monitor box lights up while baling and the bale is not wrapped, stop forward travel and pull rope to wrap bale.

UTILISOM-545LCCE-281186

WRAPPING AN OVERSIZE BALE (545 Standard)

If bale size indicator goes beyond cipher of preset diameter, pull twine arm recycling rope.

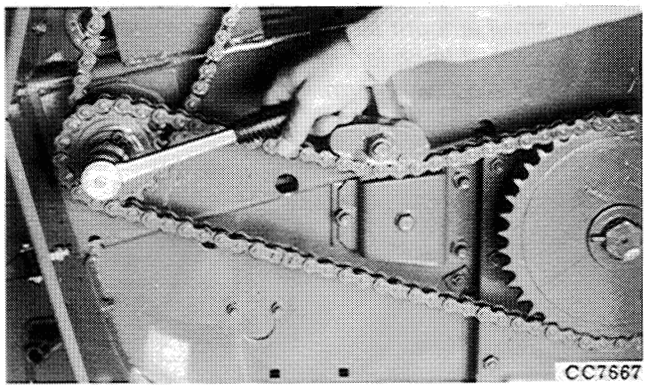
Check tripping of twine arm.

UTILISOM-545MCCE-281186

ROTATING BALER BY HAND

Never use any type of tool or wrench on shaft while tractor engine is running. Always remove tool from shaft as soon as you have finished using it.

A wrench can be positioned on gear case output shaft of baler if it is necessary to rotate baler by hand.

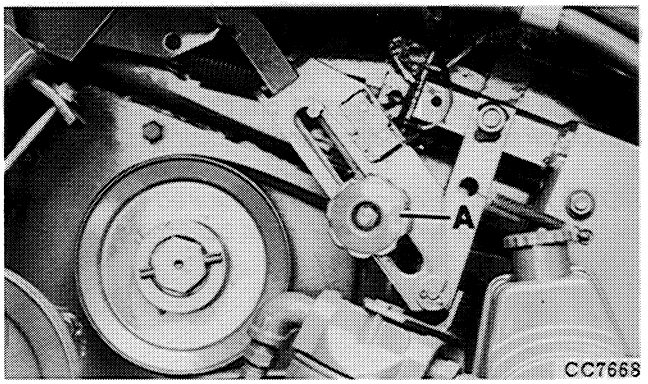


CC7667-545ACCE-281186

BALE SIZE ADJUSTMENT – MAXIMUM

Close gate.

For maximum bale diameter (approximately 1300 mm; 51 in. on 545 and 1800 mm; 71 in. on 550), loosen knob (A) and move all the way forward in slot. Tighten knob.

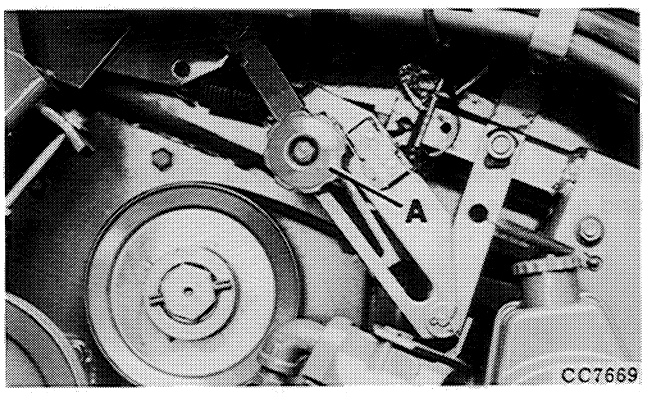


CC7668-545ACCE-281186

BALE SIZE ADJUSTMENT – MINIMUM

Close gate.

For minimum bale diameter (approximately 900 mm; 35 in. on 545 and 1000 mm; 39 in. on 550), loosen knob (A) and move all the way back in slot. Tighten knob.



CC7669-545ACCE-281186

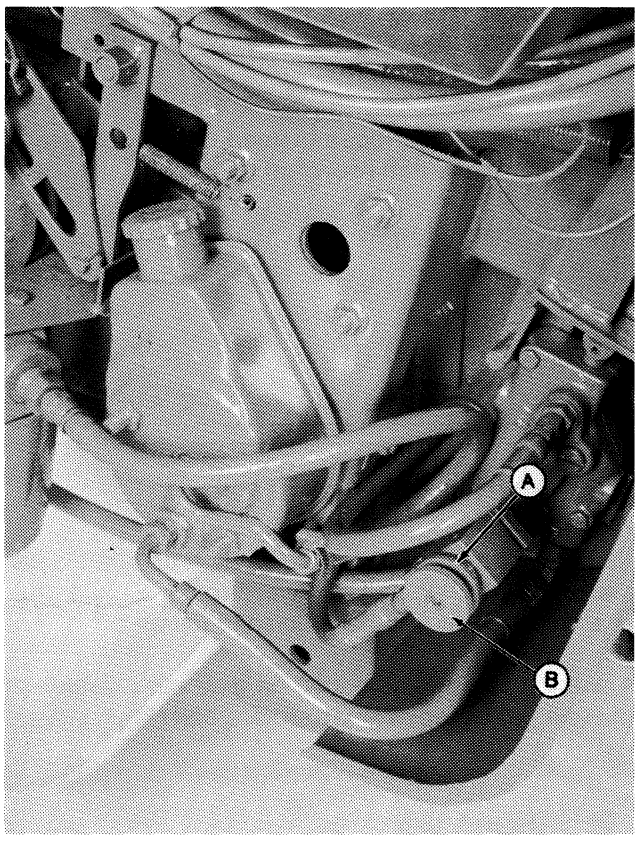
ADJUSTING TWINE SPACING

1 . Loosen locking ring (A) and turn flow control knob (B) fully counter-clockwise.

2. Turn flow control knob (B) back clockwise 1-1/4 turns and tighten locking ring (A).

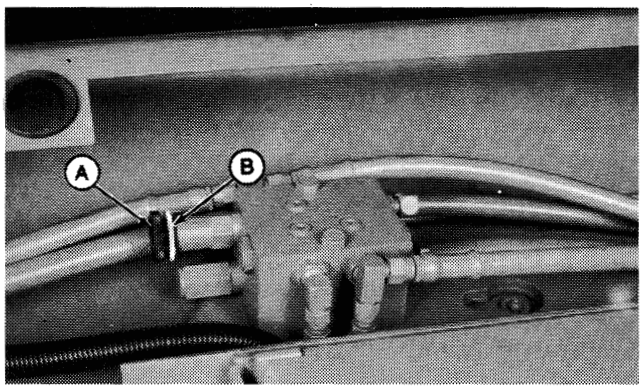
3. After making several bales, the final twine spacing adjustment can be made. For more twine, turn control knob (B) clockwise; for less twine, turn control knob counter-clockwise.

NOTE: When making the final adjustment, turn knob a small amount each time (approximately 1/8 of a turn). If knob is turned too far clockwise, it will stop twine arm.



E21632-530OMW-281186

ADJUSTING BALE DENSITY



NOTE: To adjust bale density, close gate and lower belt tension arm. This will allow bale density knob (A) to be turned more easily.

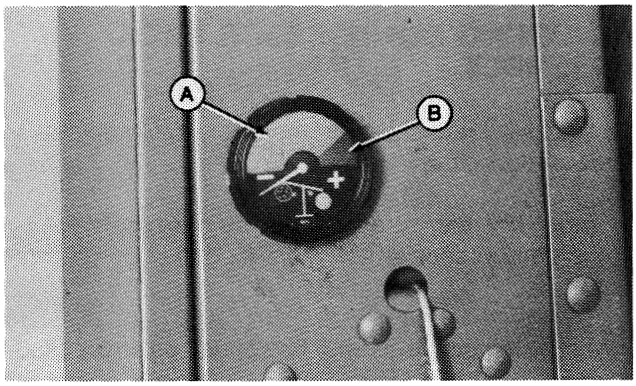
To obtain maximum bale density, loosen locking ring (B) and turn knob (A) clockwise until seated. If less compact bales are required, turn knob counter-clockwise (maximum four turns from seated position). Tighten locking ring (B).

For initial adjustment on a new baler:

Loosen locking ring (B) and turn knob (A) clockwise until seated. Turn knob (A) counter-clockwise 1-1/2 turns and tighten locking ring (B).

E21633-545ACCE-281186

BALE DENSITY GAUGE (550)



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

Turning the bale density knob counter-clockwise will cause the needle to move towards the minus sign and make lighter bales.

Turning the bale density knob clockwise will cause the needle to move towards the plus sign and make heavier bales.

NOTE: The gauge will not register a higher setting until more hay is fed into the baler.

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

If the needle reaches the red band (B):
1. Reduce bale density.
2. Check for faulty gauge or relief valve.
3. Make sure tractor selective control valve returns to neutral while baling.

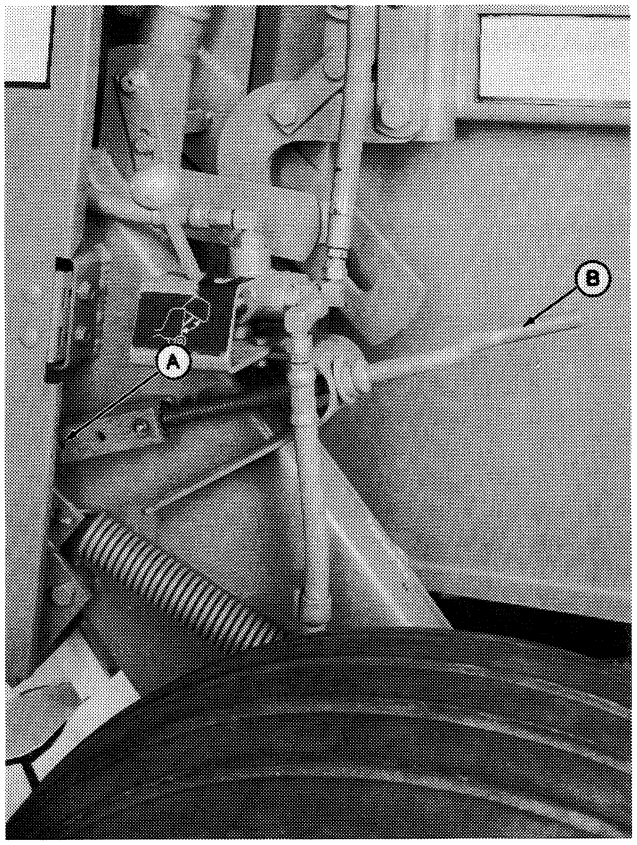
E21634-545ACCE-281186

ADJUSTING PICKUP HEIGHT

1 . Turn pickup crank (B) to align second gauge hole (A) on clevis with rear edge of door as initial adjustment.

2. The final adjustment will be determined by field conditions. To raise pickup, turn crank (B) clockwise; to lower pickup, turn crank counter-clockwise.

If baler is equipped with a hydraulic pickup lift, the crank acts as the downstop, controlling pickup operating height. This feature allows pickup to return to same operating height after raising and lowering.



E21628-545ACCE-281186

ADJUSTING COMPRESSOR RACK ASSEMBLY

To improve feeding, the compressor rack may be adjusted up or down.

In short, dry, slick crops it may be necessary to remove compressor rack if material builds up on top of rods.

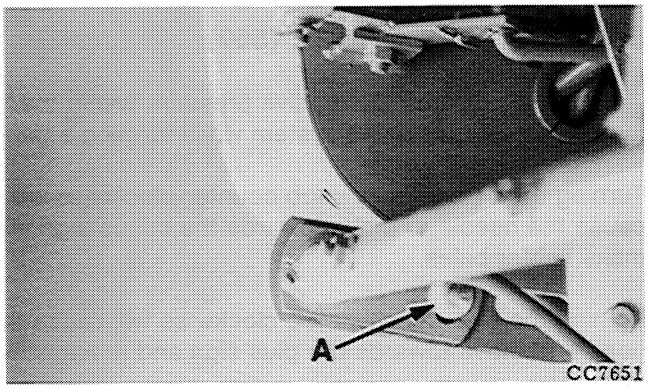
When baling silage or very heavy hay or straw windrows, it may also be necessary to remove compressor rack in order to improve feeding.

1 . Loosen bolt (A).

2. Adjust rack to desired height.

NOTE: Make sure compressor rods do not interfere with twine arm. Adjust rods as necessary for clearance.

3. Tighten bolt (A).



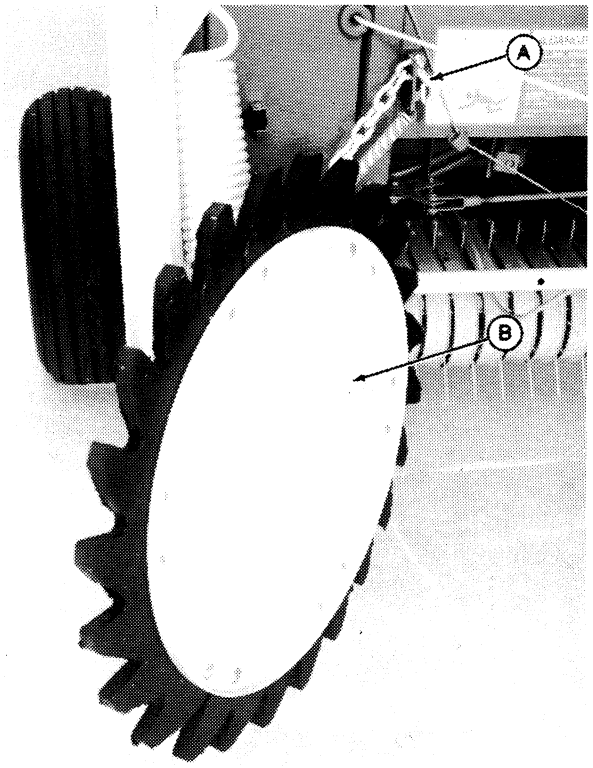
CC7651-545ACCE-281186

ADJUSTING CONVERGING WHEEL HEIGHT

1. Remove chain (A) from chain anchor support and lower wheel (B) to ground.

2. Raise chain (A) one link and install back in chain anchor support. Wheel should be approximately 25 mm (1 in.) from the ground.

NOTE: This is an initial setting. Final adjustment will be determined by field conditions. The converging wheel should never be in heavy contact with the ground.



E21636-530OMAAE-030285

UNPLUGGING BALER UNDER POWER (550)

1. Shut off tractor.

2. Place gate lock valve in "Lock" position (A).

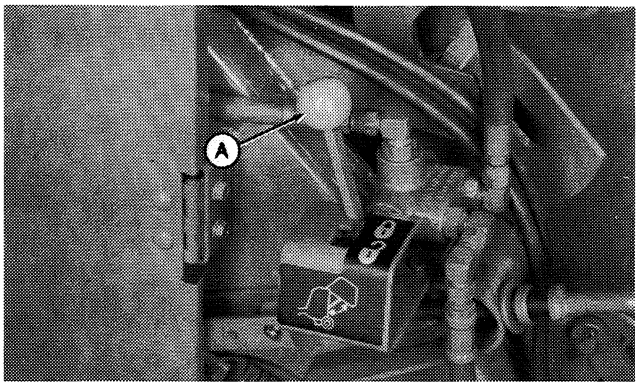
3. Raise belt tension arm by means of tractor selective control valve until upper arm starts to move.

4. Engage PTO.

IMPORTANT: If belts slip, lower belt tension arm. Prolonged belt slippage may cause baler damage.

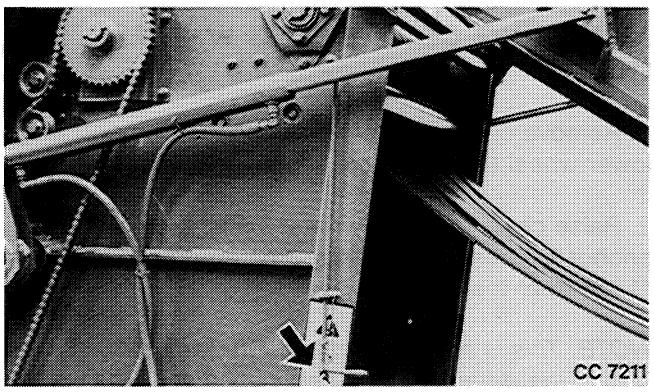
5. If this does not clear the baler, discharge bale and shut off tractor.

6. Place gate lock valve in "Lock" position (A) and unplug manually.



E21627-545ACCE-281186

UNPLUGGING BALER (545)



1. Open gate.

2. Lock gate in "open" position.

3. Shut off tractor.

4. Remove bale core from bale chamber.

5. Unplug pickup by pushing crowded material with foot from inside the machine.

6. Make a new windrow with bale core removed at step "4" and bale it.

CC7211-545ACCE-281186

OPERATING TWINE ARM WITH EMPTY BALER (545)

1. Gently raise belt tension arm until bale size indicator reads "4" (the gate is open).

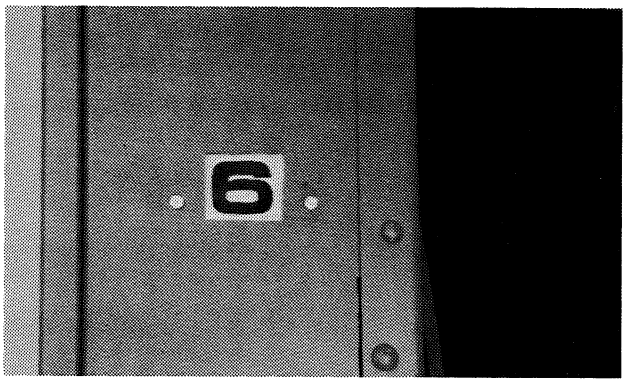
2. Trip twine wrapping system by pulling the rope.

3. Engage PTO. Twine arm starts its cycle.

4. Twine arm will move through a new cycle by pulling twine rope again. This will bring two-way valve in home position.

CC7240-545ACCE-281186

OPERATING TWINE ARM WITH EMPTY BALER (550)



1. Raise gate until bale size indicator reads "6".

2. Lock gate.

3. Lower belt tension arm by means of selective control valve lever until bale size indicator reads "4".

IMPORTANT: Do not leave the PTO engaged for more than one or two minutes with twine arm in its home position.

4. Engage PTO with tractor running at rated PTO speed. Twine arm will move through its cycle.

5. To recycle, pull and release twine rope.

E21637-545ACCE-281186

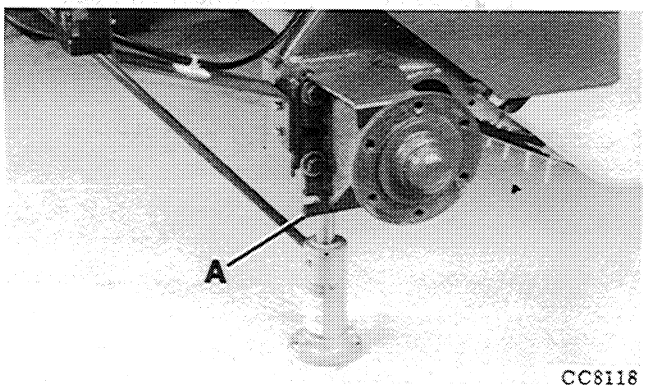
ADJUSTING WHEEL SPINDLES

Feeding difficulties may occur in extreme conditions such as brittle dry crops or large windrows. This problem can be solved by adjusting clearance between ground and machine according to crop conditions. Four wheel spindle positions are possible.

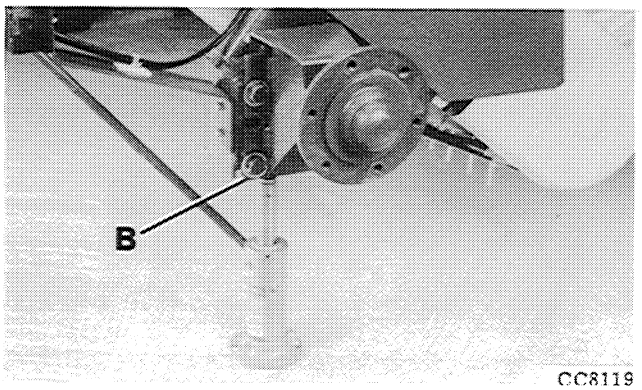
Position 1 is the normal position. Wheel spindles are installed in this position at the factory.

Position 2 permits lowering the machine. This position is recommended whenever feeding difficulties occur in short, dry, slick crops.

A–Position 1
B–Position 2



CC8118



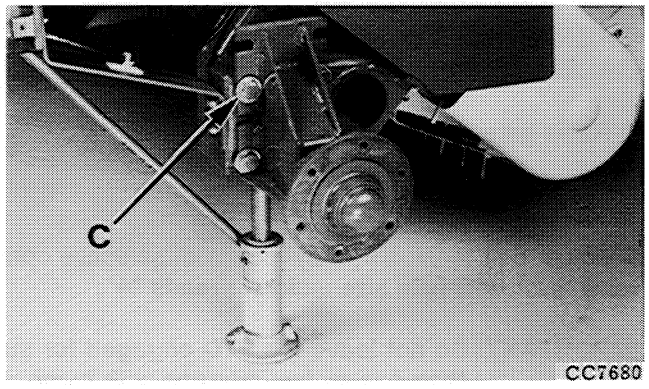
CC8119

CC8118,CC8119-545ACCE-281186

ADJUSTING WHEEL SPINDLES (Contd.)

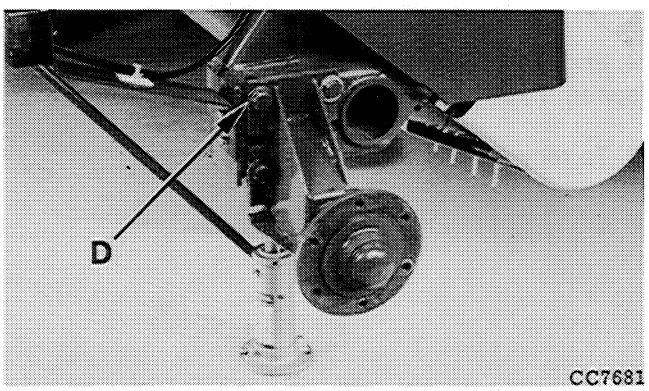
Positions 3 and 4 permit raising the machine when baling large windrows.

C–Position 3
D–Position 4



Tighten all wheel spindle bolts to 250 Nm (184 ft-lb) torque.

Make sure bolt heads face outward.



NOTE: The wheel has been removed for illustration purposes. It is not necessary to remove it from hub for spindle adjustment.

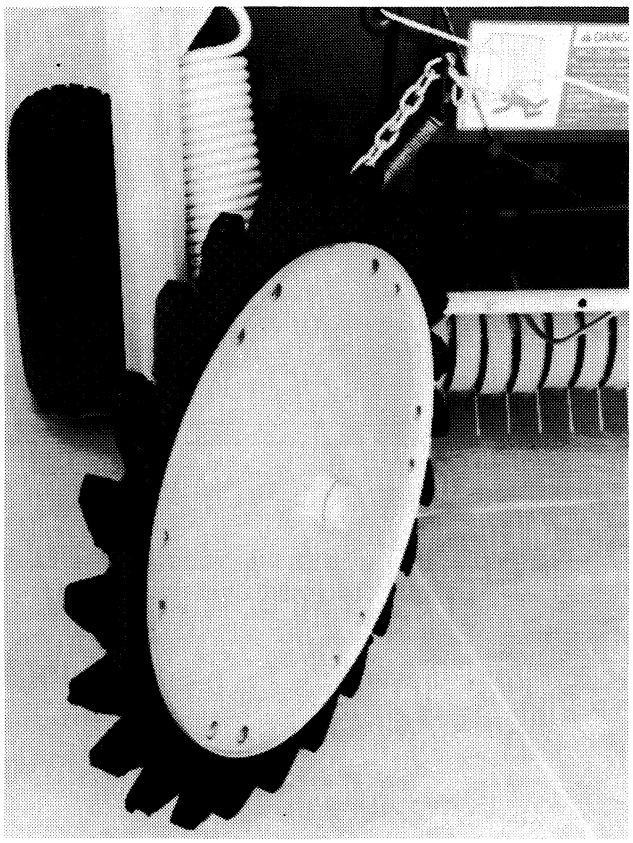
CAUTION: Always make sure that baler is securely supported by jackstand when adjusting wheel spindles. Do not forget to block up the wheel on opposite side.

CC7680,CC7681-545ACCE-281186

CONVERGING WHEELS

These wheels are mounted on each side of baler in front of the pickup.

Converging wheels aid in handling wider windrows and reducing crop loss in uneven windrows. The wheels also have a special "breakaway" feature to eliminate damage from hitting obstructions.



E21643-530ATBE-030285

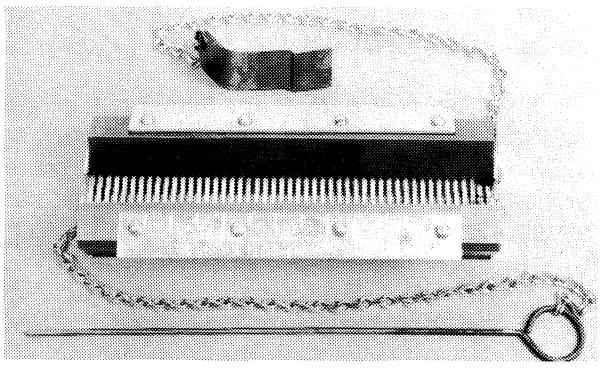
HYDRAULIC PICKUP LIFT

The hydraulic pickup lift enables control from the tractor seat. Hydraulic lines are attached to tractor hydraulic system.

ACCESSOM-545ACCE-281186

BELT LACING TOOL

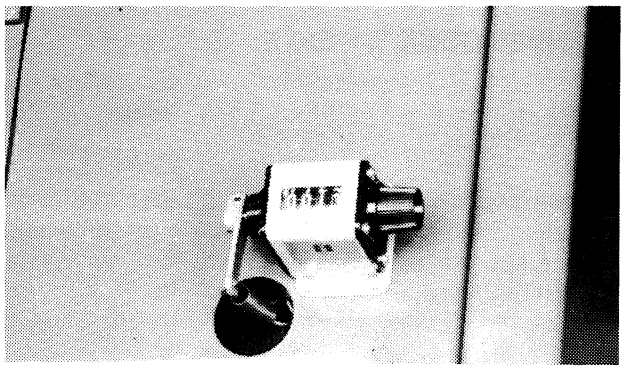
A belt lacing tool and hardware is available for repairing broken belts.



E21645-530ATIE-030285

BALE COUNTER

Bale counter keeps a record of the number of bales.



E21646-530ATJE-000285

WARNING LIGHT KIT

When tractor warning lights are hidden by the baler, install warning light kit to alert operators of other vehicles.

ACCESSOM-550ACCE-030285

FLAX BALING BUNDLE

A flax baling bundle is available as an attachment. Contact your JOHN DEERE dealer.

ACCESSOM-545BCCE-281186

BALL JOINT HITCH

The ball joint hitch permits the use of two different size hitch pins. To change from 26.5 mm (1-3/64 in.) to 33 mm (1-19/64 in.) or vice versa, simply remove or install bushing. The ball joint hitch eliminates strain on hitch pin.

NOTE: The ball joint hitch must be attached to the swinging drawbar of the tractor.

ACCESSOM-545CCCE-281186

JACKSTAND EXTENSION AND BALL JOINT HITCH FOR REVERSIBLE TONGUE

To facilitate baling of very big windrows, clearance between ground and baler tongue may be increased. For this purpose a jackstand extension and ball joint hitch bundle is available, permitting to reverse the tongue.

ACCESSOM-545DCCE-281186

BALE DISCHARGING RAMP

This ramp allows the operator to work without reversing for bale ejection. The rear gate will not interfere with the bale when closing it.

ACCESSOM-545ECCE-281186

SILAGE ADAPTING BUNDLE

A silage adapting bundle permits baling of silage (see "Baling Silage" and "Installing Silage Equipment").

ACCESSOM-545FCCE-281186

TORSION BAR (545)

This bar is installed on upper tension arm when baling silage in adverse conditions: short and very wet grass causing irregular feeding.

ACCESSOM-545GCCE-281186

ADDITIONAL MONITOR BOX

If several tractors are used to operate the baler, it is possible to equip each tractor with its own monitor box to avoid frequent removal and reinstallation of the monitor box.

ACCESSOM-545HCCE-281186

BALE MONITOR ADAPTING PARTS (545)

If the oprator wishes to take profit from the advantages of the monitor used on 550 baler, he may purchase the bale monitor adapting parts as attachment to equip his 545 baler. This bundle does not include the monitor box which must be ordered separately.

ACCESSOM-545ICCE-281186

SOUND ALARM (545)

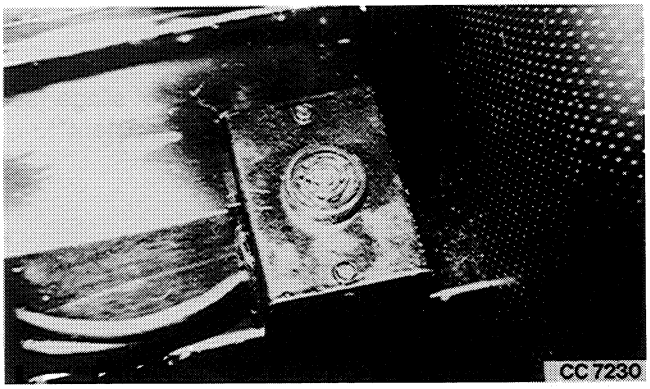
The sound alarm informs the operator:

– If gate is not closed when starting a bale.

– When twine wrapping cycle has started.

– When a bale is oversize.

The sound alarm may be installed anywhere inside the tractor cab.



CC7230-545BCCE-281186

Lubrication and Maintenance

OBSERVE LUBRICATION SYMBOLS

A – Lubricate with JOHN DEERE Multi-Purpose Lubricant or an equivalent SAE multipurpose-type grease at hourly intervals indicated on the symbols.

B – Lubricate with SAE 30 oil at hourly intervals indicated on the symbols.

CC 7196

CC7196-1340ACCE-030185

CAUTION: Do not attempt to clean, lubricate, or adjust machine while it is in motion.

IMPORTANT: The lubrication period recommended is based on normal conditions. Severe or unusual conditions may require more frequent lubrication or oil changes.

Perform each lubrication and service illustrated in this section.

Clean grease 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.

GRAISSOM-1326BCCE-060284

ALTERNATIVE LUBRICANTS

Conditions in certain geographical areas may require special lubricants and lubrication practices which do not appear in this operator's manual. If you have any questions, consult your JOHN DEERE dealer to obtain the latest information and recommendations.

530LMCE-030285

HYDRAULIC PUMP OIL (TWINE SYSTEM)

JOHN DEERE All-Weather Hydrostatic Fluid or Type F Automatic Transmission Fluid is recommended.

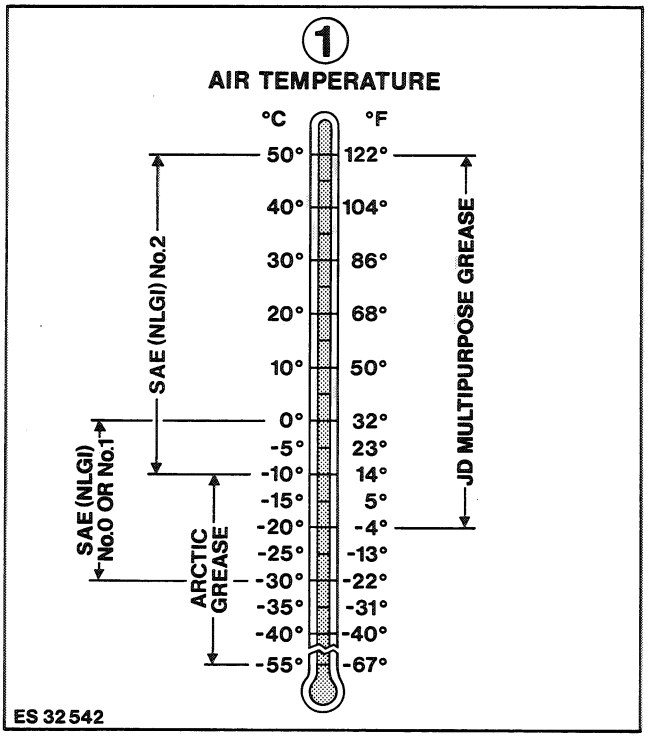
GRAISSOM-545ACCE-030285

MULTIPURPOSE GREASE

Depending upon the expected air temperature range during the service interval, use grease as shown on the adjoining temperature chart.

JOHN DEERE Multipurpose Grease is recommended. If other greases are used, use:
– SAE Multipurpose Grease
– SAE Multipurpose Grease containing 3 to 5 % molybdenum disulfide.

At temperatures below –30°C (–22°F), use arctic greases such as those meeting Military Specifications MIL-G-10924C.



ES32542-550ACCE-030285

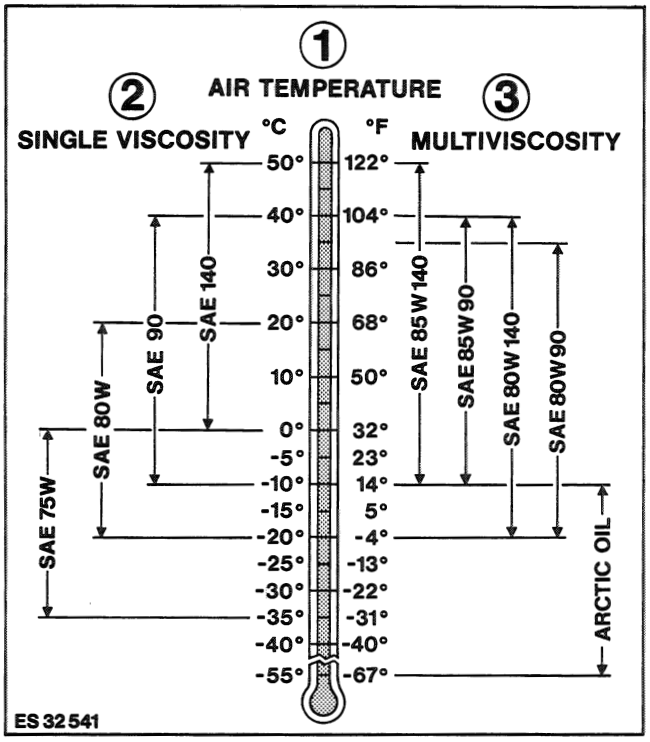
GEAR CASE OIL

Depending upon expected air temperature range during the drain interval, use oil viscosity shown in the temperature chart.

JOHN DEERE SAE 85W 140 API GL-5 Gear oil is recommended. If other oils are used, they must be oils meeting the following requirements:

– API Service Classification GL-5
– Military Specification MIL-L-2105B
– Military Specification MIL-L-2105C

At temperatures below –35°C (–31°F), use arctic oil (API CC/SC, MIL-L-10324A).



ES32541-550ACCE-030285

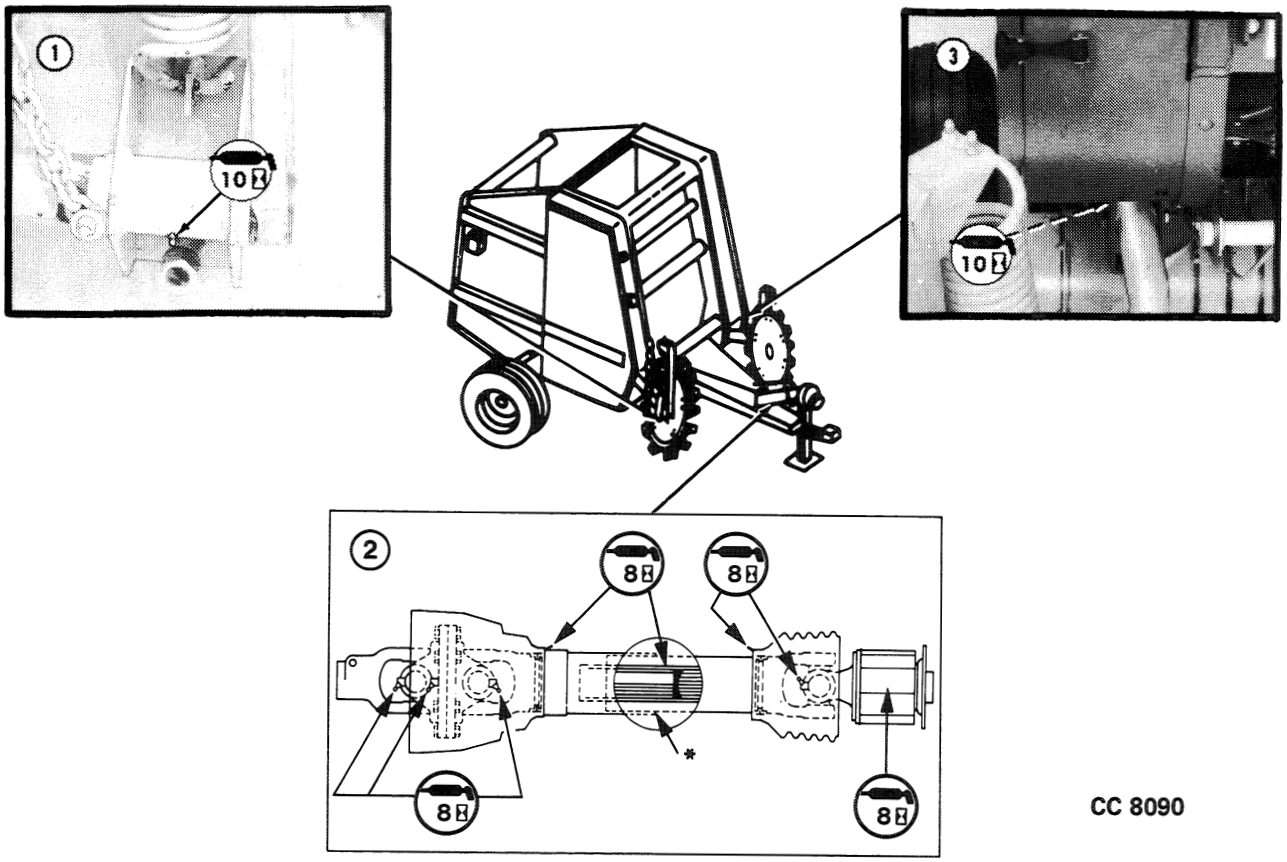
CHAINS

Liberally apply SAE 30 or heavier oil to chains every 10 hours of operation.

Lubricate chains immediately after operation when the chains are still warm. Let the machine stand idle for a short period to insure effective oil penetration, resulting in longer chain life.

530LMKE-030285

EVERY 8 OR 10 HOURS



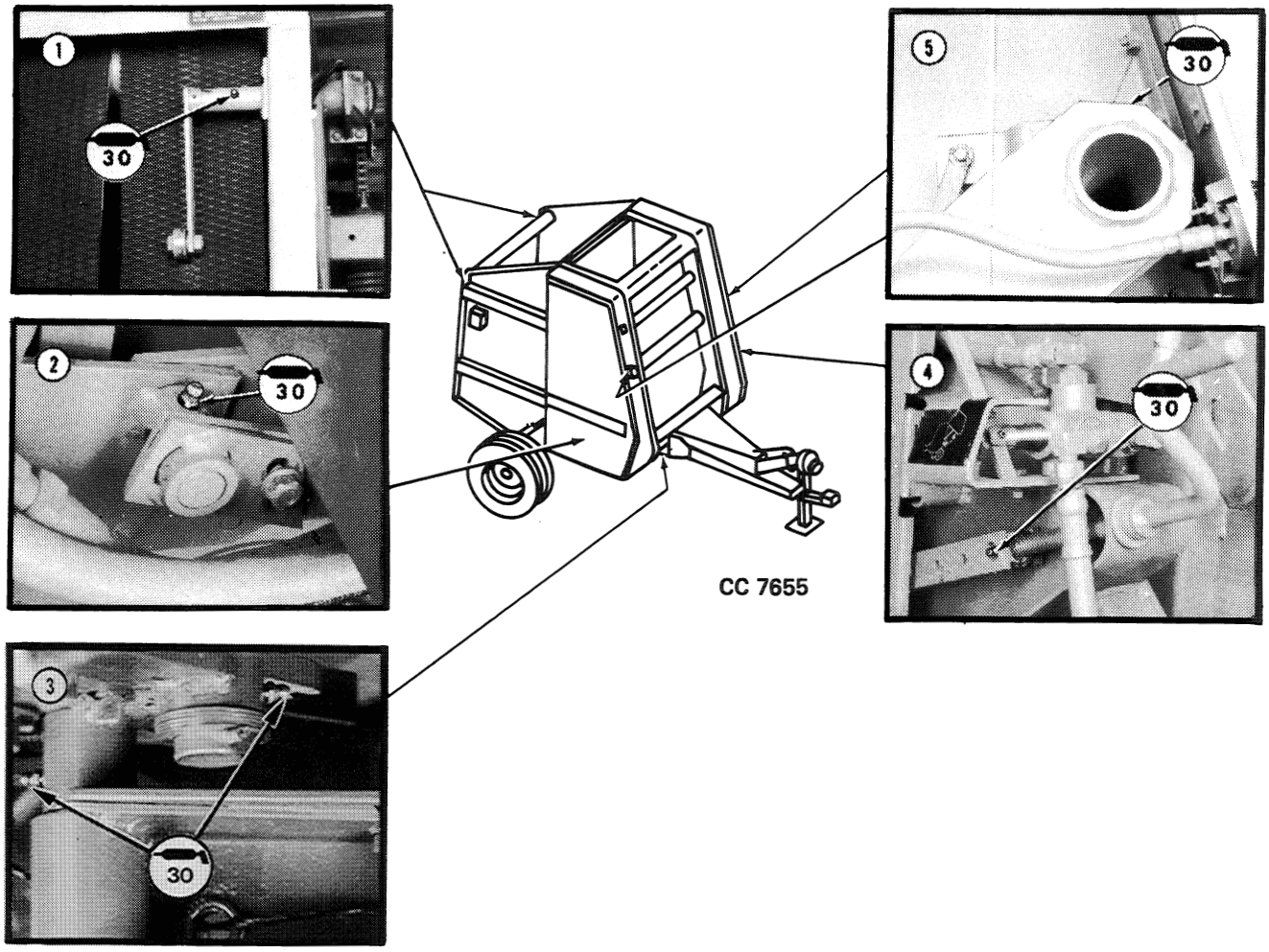
CC 8090

1. Converging wheels
2. Powerline
3. Wheel support pivot

* Grease guard tubes in winter to prevent freezing

CC8090-545ACCE-281186

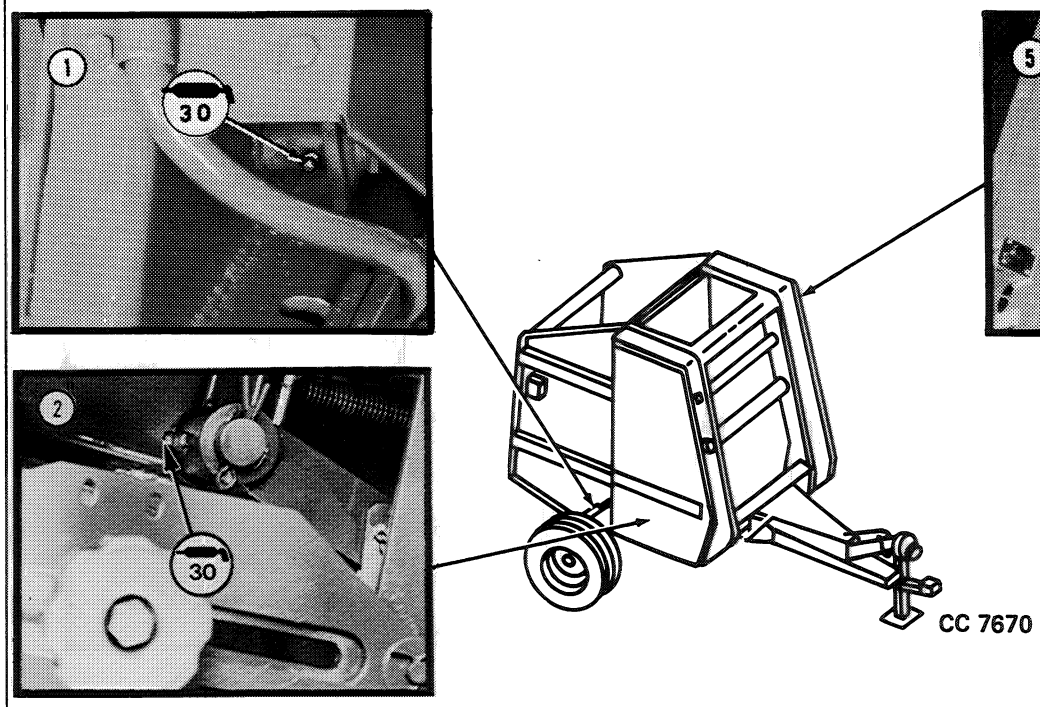
EVERY 30 HOURS



1. Bale shape sender arm
2. Automatic twine linkage bellcrank
3. Twine arm hub and gear hub
4. Pickup lift crank
5. Belt tension arm

CC7655-545ACCE-281186

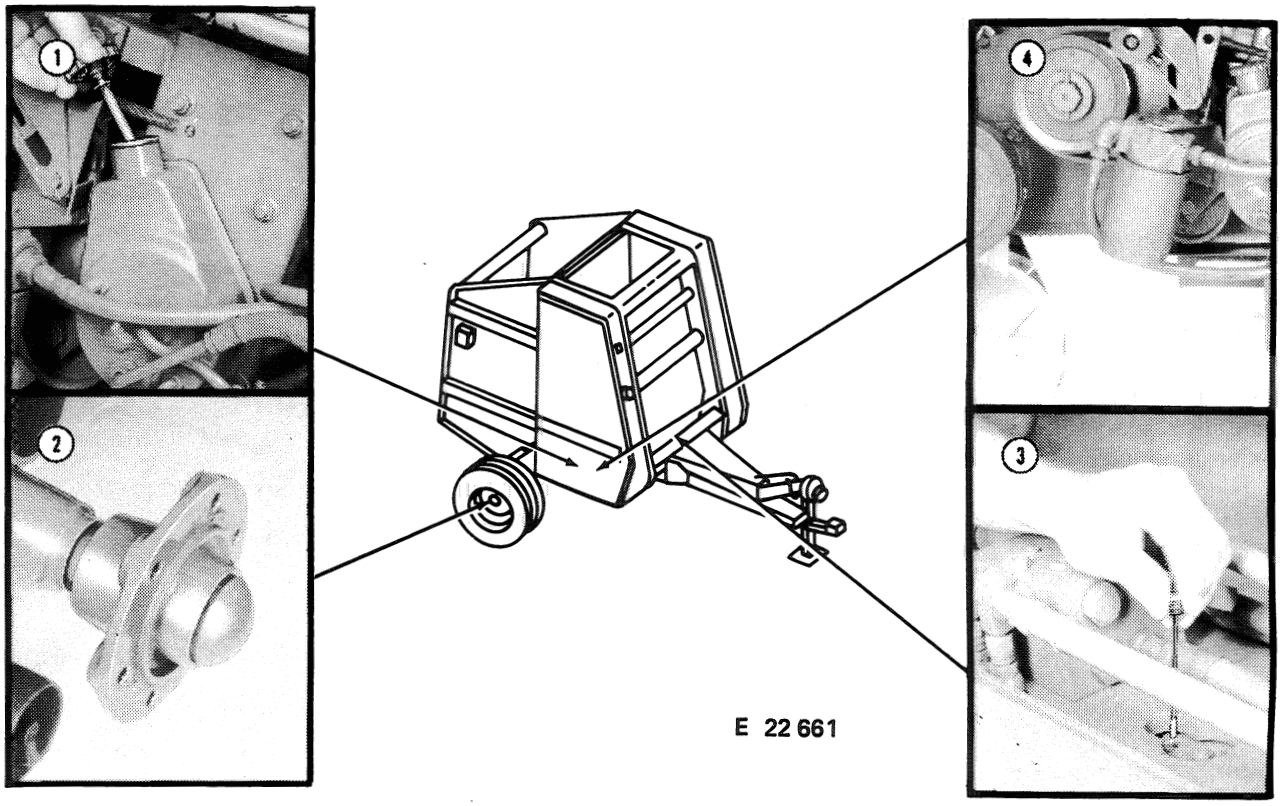
EVERY 30 HOURS



1. Pickup belt idler
2. Twine pump drive bellcrank
5. Drive chain idler

CC7670-545ACCE-281186

ANNUALLY



IMPORTANT: When checking twine pump oil level, remove all dirt and dust before removing filler cap. Use a clean container when adding oil.

1. Hydraulic Twine Pump

Use John Deere All-Weather Hydrostatic Fluid or Type F Automatic Transmission Fluid.
Check fluid level as follows:
– When oil is hot, level must not be above the mark "hot" on dipstick.
– When oil is cold, level must not be below the mark "cold" on dipstick.
– Change oil annually.

2. Wheel Bearings

Remove wheels. Then clean, re-pack and adjust bearings. Use JOHN DEERE Multipurpose-Type Lubricant, or an equivalent SAE multipurpose-type grease, or wheel bearing grease.

IMPORTANT: Do not overfill gear case as this will result in overheating and oil leakage.

3. Gear Case

Check level of lubricant and refill as necessary using SAE 85-140 API GL-5 gear lubricant.
If filler cap head looks like a hexagonal socket screw ("Superior" gear case), refill with 0.65 l (0.17 U.S.gal.).
If filler cap head looks like a hexagonal cap screw ("Comer" gear case), refill with 1.3 l (0.34 U.S.gal.).
Change oil annually.

4. Twine System Oil Filter

Change oil filter before each harvest season. Before installing new filter, drain and refill the system with 2 liters (0.53 U.S.gal.) of specified oil.

E22661-545ACCE-281186

AUTO TWINE WRAP

Twine arm moves too slow from left to right

Wrong orifice size in hydraulic cylinder –
Replace cylinder –

Valve not shifting fully. Binding in linkage or valve –
Find cause of binding and correct –

Drive belt slipping –
Replace belt or adjust belt tensioner 50-15

Twine arm will not move (if baler is equipped with monitor: the yellow light will flash and not glow continuously)

Spool valve not shifted up –
1. Pull recycle rope and release, letting rope return freely 20-4
2. Look for binding in valve linkage or latch and repair –
3. Valve shifting spring broken –

Low oil level in pump –
Fill to proper level 40-7

Belt idler tension spring broken –
Replace spring –

Broken drive belt –
Replace belt –

Pump not primed due to low oil level –
See instructions for priming pump 50-31

Defective pump –
Have pump replaced by your JOHN DEERE dealer –

Recycle rope tied too tight not allowing valve to shift –
Provide slack in rope 20-4

Twine too tight or twine breaks while wrapping

Twine routing wrong –
Check for correct routing 15-2

Bad twine, knots in twine, new ball with tight core, wet twine –
Pull out bad twine or replace twine 15-1

Wrong twine tension plate pin or springs –
Replace with correct parts –

Twine too loose on bale

Broken or missing twine tension spring –
Replace spring –

Wrong tension spring pin –
Replace pin –

Worn twine tension plates –
Replace worn parts –

PANNESOM-545ACCE-281186

AUTO TWINE WRAP

Twine arm not in home position while baler is empty (if baler is equipped with monitor: the yellow light is glowing)

Twine arm went part way through cycle –
Fully raise gate. Engage PTO. If twine arm does not return in normal cycle time, stop this operation. See "Twine Arm Moves Too Slow from Left to Right" 45-1

Twine arm moves to right-hand side of baler and will not return

Flow control valve closed –
Open valve and readjust 30-18

Low oil level in twine pump –
Fill to proper level 40-7

Two-way valve or valve arm does not move freely –
Find interference and repair, or replace part –

Dirt in line between flow control valve and hydraulic cylinder –
Remove hose between flow control valve and hydraulic cylinder. Clean hose and connecting ports –

Valve latch does not trip because of binding or obstruction in latch linkage or twine arm –
Repair or remove obstruction –

Twine arm return plunger not adjusted or missing –
Adjust or replace part 50-16

Twine spacing not constant

Low oil level –
Fill to proper level 40-7

Slipping or worn pump drive belt –
Adjust drive belt or replace 50-15

Dirty oil filter –
Replace filter –

Two-way spool valve not shifting down fully due to binding in valve or linkage –
Correct binding –

Twine contacting compressor rod –
Lower compressor rack or bend rod 30-20

Flow control valve moving out of adjustment –
Make adjustment and lock locking ring 30-18

Oil cold at start-up –
Some change in twine spacing may be expected during the first few bales made with cold oil –

PANNESOM-545BCCE-281186

AUTO TWINE WRAP

No twine on bale or twine not caught by bale

Twine from end of twine tube too short –
With tractor shut off, pull out twine until 305 mm (12 in.) is exposed from end of twine arm 15-3

Twine tension too high –
See "Twine Too Tight or Twine Breaks While Wrapping" 45-1

Twine not fed in with crop –
Do not stop forward travel of tractor. Allow a few seconds for twine to be fed in with hay –

Baler out of twine –
Add twine 15-1

Twine too close to edge of bale

Missing or bent twine guide rod –
Replace or bend rod –

Barrel shaped bales –
Fill ends of bale by crowding windrow –

Adjust twine arm travel 50-32

Twine not cut

PTO disengaged before twine is cut –
Look at twine to see that it has stopped moving before disengaging PTO –

Twine cutter out of adjustment –
Adjust twine cutter 50-20,50-22

Dull knife or uneven edge not making contact with anvil –
Sharpen or replace knife –

Knife not parallel to anvil –
Position knife pivot shaft so knife makes contact with anvil in area where twine is cut 50-20,50-22

Obstruction causing twine not to be guided under knife –
Remove obstruction –

Bent twine guide rod –
Bend or replace –

Binding in twine arm or cutter linkage –
Repair or replace so that linkage operates freely –

Incorrect twine routing or bad ball of twine causing high twine tension –
Correct cause of high tension –

PANNESOM-545CCCE-281186

AUTO TWINE WRAP

Twine arm goes through cycle prematurely and wraps small bale (if baler is equipped with monitor: yellow light lights up)

Bale size knob adjusted for small bale size –
Readjust to desired size 30-18

Pump drive latch does not relatch –
1. Make sure belt tension arm is returning all the way to start position when closing gate –

For 550 baler only: See "Installing Orifice in Tractors with Low Hydraulic Flow" 50-30

2. Belt tension bellcrank spring missing –

3. Check twine trip rod for proper adjustment 50-16,50-17

Bale size link does not telescope freely –
Find cause of binding and correct –

Tractor tire trips rope –
Check for proper rope routing 20-4

PANNESOM-545DCCE-281186

BALE MONITOR DIFFICULTIES
(Standard Equipment on 550, Optional on 545)

Red light lights up, yellow light doesn't light up and twine arm does not cycle

Bell crank arm out of adjustment –
Adjust arm 50-16,50-17

Twine trip rod clevis out of adjustment –
Adjust clevis –

Oversize bale switch (red light) out of adjustment –
Adjust switch 50-25

Yellow light on, twine arm in "home position"

Switch not adjusted properly –
Adjust twine arm switch 50-24

Switch defective –
Replace Switch –

White cable coming from twine arm shorted –
Find short and repair –

Yellow light not flashing, it lights up and twine arm goes through its normal cycle

Switch not adjusted properly –
Adjust switch 50-25

Extra light bulb inside of monitor box burned out –
Replace bulb (this bulb increases the resistance in the flasher circuit) –

Flasher defective or loose connection –
Replace flasher or repair connection –

Switch defective –
Replace switch –

Low voltage –
Make sure minimum voltage is 12 V –

Green light is not on when gate is latched

Gate lockout lever engaged (550) –
Unlock gate –

Gate switch not adjusted properly –
Adjust switch 50-22,50-23

Switch or bulb defective –
Replace defective part –

Poor connection or broken wire –
Repair –

Green light goes out while baling

Gate latch switch not adjusted properly –
Adjust switch 50-22,50-23

Air in hydraulic system –
Open and close gate several times to remove air –

Internal leak in gate hydraulic cylinder –
Repair or replace cylinder –

PANNESOM-545ECCE-281186

BALE MONITOR DIFFICULTIES (Standard Equipment on 550, Optional on 545) Continued

Wrong bale shape gauge reading

Gauge sending units not adjusted properly –
Adjust sending units 50-27,50-28

Gauge or sending units defective –
Replace defective part –

Green light on, gate not latched

Switch defective –
Replace switch –

Cable shorted –
Repair –

Bale shape gauge not working, lights working

Reversed polarity on electrical connection to tractor –
See "Connecting Wiring Harness" 20-4

PANNESOM-545FCCE-281186

SOUND ALARM DIFFICULTIES
(Standard Equipment on 550, Optional on 545)

Sound alarm functions while gate is closed and twine arm has not started its cycle

Twine wrapping system out of adjustment –
Adjust 50-16,50-17

Oversize switch out of adjustment –
Adjust 50-26

Sound alarm functions with twine arm in home position, gate closed and bale being formed or machine empty

Twine arm switch out of adjustment –
Adjust 50-24

Sound alarm functions with gate closed, machine empty and twine arm in home position

Gate switch out of adjustment –
Adjust 50-23

Sound alarm does not function

Low voltage –
Make sure minimum voltage is 12 V –

Defective sound alarm –
Replace –

Poor connection or defective cable –
Repair –

Sound alarm does not function when gate is open, but functions in other cases

Defective gate switch or defective cable –
Repair –

Sound alarm does not function when gate is closed; bale has reached maximum diameter and twine arm is in home position

Oversize switch not adjusted properly –
Adjust 50-26

Defective oversize switch –
Replace –

Defective cable –
Repair –

Sound alarm does not function during twine wrapping cycle

Twine arm switch not adjusted properly –
Adjust 50-24

Defective twine arm switch –
Replace –

Defective cable –
Repair –

Erratic function of sound alarm

Switch(es) defective or cables shorted –
Repair –

PANNESOM-545GCCE-281186

FEEDING DIFFICULTIES

Baler will not feed hay plugged at feed opening

Large windrows and/or too fast ground speed – Reduce windrow size and/or tractor ground speed	–
Missing pickup teeth – Replace teeth	–
Compressor rack too low – Raise rack	30-20
Gate opening while baling – Repair leaking gate hydraulic cylinders	–
Adjust gate latch (550 only)	–
Check bale density adjustment	30-19
Gate not closed – Eject bale. Close gate	–
Bale density too high – Decrease density	30-19
Incorrect belt routing – Route belts properly	50-7,50-8
Clutch not adjusted properly – Adjust clutch	50-39

Baler will not bale short, dry, slick crops –

Excessive buildup on top of compressor rack – Remove compressor rack assembly	30-20
PTO speed too fast – Reduce PTO speed to 1500 rpm and shift to higher gear	–
Bale density too high – Decrease density	30-19
Pickup too low – Raise pickup	30-20,30-23

PANNESOM-545HCCE-281186

PICKUP DIFFICULTIES

Pickup teeth do not revolve

Belt slipping –
Replace or tighten belt 50-30
Raise compressor rack 30-20

Broken cam –
Check for failed or worn cam –

Pickup will not float or drop freely

Excess or insufficient float assist –
Adjust float springs 50-29

Binding at pivots –
Remove chaff and dirt. Make clearance between sliding parts –

Not picking up hay clean

Pickup teeth set too high –
Lower pickup 30-20,30-23

Pickup stays up –
Loosen float springs 45-29

Ground speed too fast –
Reduce ground speed –

Windrows too light –
Rake heavier windrows –

Pickup teeth bent or broken –
Straighten or replace teeth –

Pickup teeth digging in ground

Pickup set too low –
Raise pickup 30-20,30-23

Poor pickup floatation –
Tighten float springs. Check pivots 50-29

Pickup tooth breakage

Pickup set too low –
Raise pickup 30-20,30-23

Foreign material inside and/or broken teeth –
Remove material and/or teeth –

Baling cornstalks –
Raise pickup. Higher tooth breakage can be expected 30-20,30-23

Pickup too high

Wheel spindles in high position –
Lower wheel spindles 30-23

Plugging at flares

Over-crowding ends –
Reduce crowding –

Pickup set too low –
Raise pickup 30-20,30-23

Tractor tires smashing crop into stubble –
Widen wheel tread 10-1

Inside of strippers worn

Strippers bent up hitting tooth coils –
Check for binding at flares –
Increase float 50-29
Raise pickup 30-20,30-23

PANNESOM-545ICCE-281186

BALE QUALITY

Cone shaped bales on balers equipped with monitor. Monitor shows a well shaped bale when yellow light lights up.

Monitor sending unit out of adjustment –
Readjust to correct setting 50-27

Gauge or sending unit defective –
Replace defective part –

Outer belts not of the same length –
Shorten belts to the same lenght within 38 mm (1-1/2 in.) –

Broken belt roller arm spring –
Replace spring –

Barrel or cone shaped bales on balers equipped with monitor. Gauge reading high in green area.

Gauge sending units not adjusted properly –
Adjust sending units 50-27

Cone shaped bales on 545 baler without monitor –

Bale shape indicators out of adjustment –
Readjust to correct setting 30-12

Broken belt roller arm spring –
Replace spring –

Barrel shaped bales (545 without monitor)

Belt roller arms out of adjustment –
Adjust belt roller arms 50-28

Outer belts too short –
Correct belt lenght. Belts should have the same length within 38 mm (1-1/2 in.) –

Baler will not make dense bales

Internal leak in belt tension hydraulic cylinder –
See your JOHN DEERE dealer

Dirty or defective relief valve –
See your JOHN DEERE dealer –

Bale ends not filled tightly –
Crowd more hay in ends of baler –

Density control adjusted for light bales –
Adjust for heavier bales 30-19

Bale forming belts too short –
Check length and correct –

Baler will not make full size bale

Bale size knob not adjusted to desired bale size –
Adjust knob to desired bale size 30-18

Twine trip bellcrank arm not adjusted correctly –
Adjust arm 50-16,50-17

Bale forming belts are too short –
Increase belt length to recommended length –

PANNESOM-545JCCE-281186

GENERAL BALER DIFFICULTIES

Gate opens while baling (550)

Gate not latched –
When closing gate move selective control valve lever of tractor until green light lights up –

Gate opens while baling (545 with monitor: green light goes out)

Bale density knob too loose or tractor hydraulic system failure –
Check bale density adjustment and position of tractor's selective control valve lever which must be in neutral position. Check tractor hydraulic system 30-19

Gate opens while baling (545 without monitor or without sound alarm)

Bale density knob too loose or tractor hydraulic system failure –
Check bale density adjustment and position of tractor's selective control valve lever which must be in neutral position. Check tractor hydraulic system 30-19

Gate not latched, green light not on (550)

Obstruction between gate and frame –
Remove obstruction –

Hay build-up on belts in some crop conditions –
Remove build-up. Operate PTO while closing gate –

Too much clearance between latch hooks and shim pad –
Adjust gate latch stop 50-12

Gate not latched. Green light not on (545 with monitor)

Obstruction between gate and frame –
Remove obstruction –

Hay build-up on belts in some crop conditions –
Remove build-up. Operate PTO while closing gate –

Gate does not close completely, sound alarm functions (545)

Obstruction between gate and frame –
Remove obstruction –

Bale density gauge reading in red (550)

Selective control valve lever of tractor not in neutral position –
Move lever to neutral position –

Bale density gauge defective –
Replace gauge –

Bale density valve defective –
Replace or repair valve –

PANNESOM-545KCCE-281186

GENERAL BALER DIFFICULTIES

Belts do not track properly

Lower rear gate roll out of adjustment – Adjust roll 50-13

Belts not routed correctly – See belt routing diagram and reroute belts 50-7,50-8

Twine or mud buildup on baler rolls – Remove buildup –

Belts not cut square when splicing – Resplice belt 50-36

Bale forming belts rubbing

Belt tension arm not fully down – Lower tension arm with tractor hydraulic lever –

Belts not routed properly – See belt routing diagram and reroute 50-7,50-8

Starter roll wraps with hay

Ground speed and rpm too high when starting bale – Reduce rpm until bale core has formed –

Windrows too large – Decrease windrow size –

Baling silage – See "Baling Silage Difficulties" 45-13

Bale sticks in chamber

New baler – Reduce density until baler has made several bales to polish side sheets 30-6

Bale density too high – Lower bale density at control valve 30-19

Bale density control knob hard to turn

Locking ring locked against valve body – Unscrew locking ring before adjusting density control knob 30-19

Dry threads on adjusting screw – Apply a few drops of oil or dry graphite lubricant on the threads 30-19

Raised gate and/or belt tension arm creates additional turning force – Adjust with gate closed and belt tension arm down 30-18

Belt lacing failure

Belts are not the same length – Belts must be the same length within 38 mm (1-1/2 in.) 50-36

Improper belt splice hooks or poor quality splice – See "Repairing Belts" 50-35

Crop accumulation on rolls or belt guides – Remove crop accumulation –

Belts slipping or not turning

Belt tension arm not returning all the way to tension belts – Check to see that tension arm tightens belts –

Belts too long – Cut belts to proper length –

Belts are wet on their smooth face and bales are not cylindrical – Install torsion bar (545) 60-9

Damage to belt diamond patterns

Material build-up on compressor rack causing belts to contact starter roll – See "Baling Short, Dry Slick Crops" and "Bailing Silage" 30-1,30-3

SILAGE EQUIPMENT DIFFICULTIES

Crop accumulation at starter roll

Scraper too far from starter roll –
Adjust scraper 60-7

A belt passes under a tooth point

Tooth has been bent –
Shape tooth profile –

Belt(s) slipping

Too heavy silage bales –
Reduce bale diameter* –

Belts are wet on their smooth face and bales are not cylindrical –
Install torsion bar (545) 60-9

Difficulties when starting a bale (wet crop due to rain)

Core does not start to turn –
Discharge the core and start to bale at the lowest rpm until the core starts turning (see "Baling Silage") 30-3
Bale when dry material content is 40 % –

Crop accumulation at the staggering roll

Raise and lock the gate. Stop tractor engine and clean staggering roll –

Plugging the baler by feeding a too large bunch of silage

Irregular windrows –
Discharge bale and clean inside of baler (see "Unplugging the Baler" 30-21,30-22

* On 550 baler: Reduce bale diameter to 1.2 to 1.3 m (59 to 62 in.) and bale weight to 600 kg (1320 lbs.)

PANNESOM-545MCCE-281186

Service

PRACTICE SAFETY

CAUTION: Before servicing or adjusting baler:

1. Disengage all power.

2. Shut off engine.

3. Wait until all moving parts have stopped.

530SVAE-030285

MOUNTING TIRES

CAUTION: Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

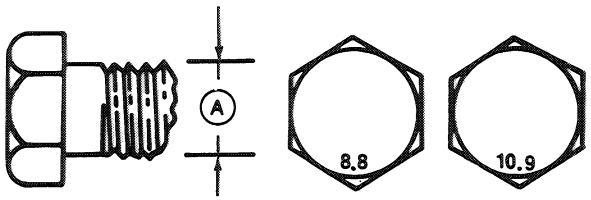
Have it done by your JOHN DEERE dealer or a qualified tire repair service.
When sealing tire beads on rims, never exceed maximum inflation pressure specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

ENTRETOM-550ACCE-030285

BOLT TORQUE CHARTS

The tables shown below give correct torque values for various bolts and cap screws. Check tightness of bolts periodically, using bolt torque chart as a guide.

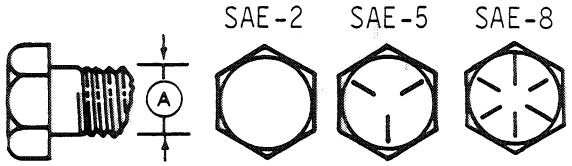
METRIC MEASUREMENT



Bolt Diameter "A"	Bolt Torque in Nm (ft-lb) 8.8		10.9	
5 mm	6	(5)	9	(7)
6 mm	11	(9)	17	(13)
8 mm	28	(20)	40	(30)
10 mm	55	(40)	80	(59)
12 mm	95	(70)	140	(103)
16 mm	235	(173)	350	(258)
20 mm	475	(350)	675	(498)
24 mm	825	(608)	1170	(863)
30 mm	1630	(1201)	2320	(1712)

Replace hardware with the same strength bolt.

U.S. MEASUREMENT



Bolt Diameter "A"	Bolt Torque in Nm (ft-lb) SAE 2		SAE 5		SAE 8	
1/4"	Not used		19	(14)	26	(19)
5/16"	Not used		37	(27)	56	(41)
3/8"	31	(23)	47	(35)	68	(50)
7/16"	47	(35)	75	(55)	108	(80)
1/2"	75	(55)	115	(85)	163	(120)
9/16"	102	(75)	176	(130)	237	(175)
5/8"	142	(105)	231	(170)	325	(240)
3/4"	217	(160)	407	(300)	576	(425)
7/8"	251	(185)	603	(445)	929	(685)
1"	339	(250)	910	(670)	1396	(1030)
1-1/4"	447	(330)	1235	(910)	1979	(1460)

NOTE: Bolts having lock nuts should be torqued to approximately 65% of amounts shown in above chart.

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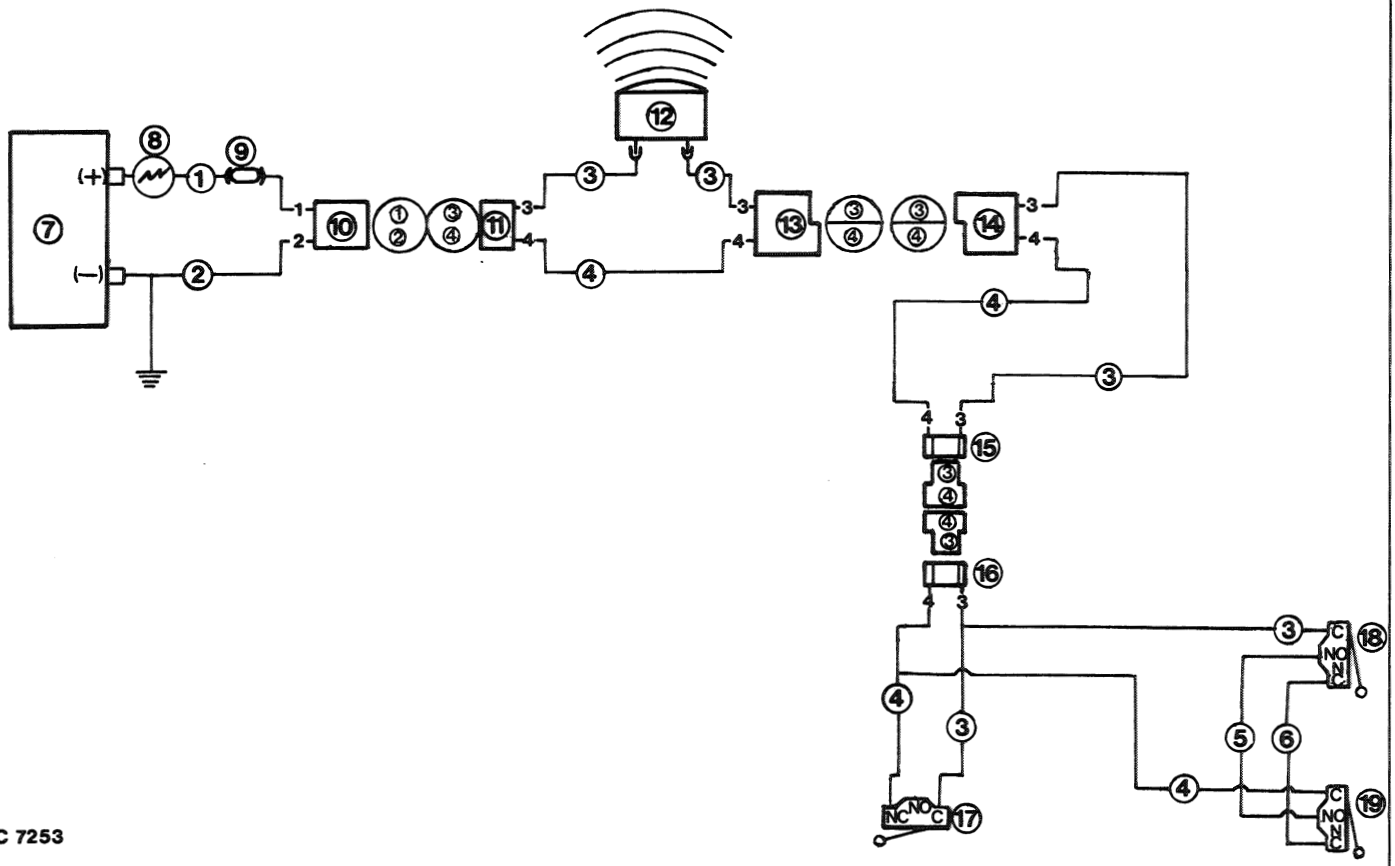
WIRING DIAGRAM – SOUND ALARM 545



CC 7253

1–Red
2–Brown
3–Blue
4–Brown
5–Green
6–Black
7–Battery
8–Tractor switch
9–Circuit breaker
10–Tractor socket
11–Tractor plug
12–Sound alarm
13–Socket, tractor to baler
14–Plug, baler to tractor
15–Socket
16–Plug
17–Twine arm switch
18–Oversize switch
19–Gate switch
C– Common
NC–Normally closed
NO–Normally open

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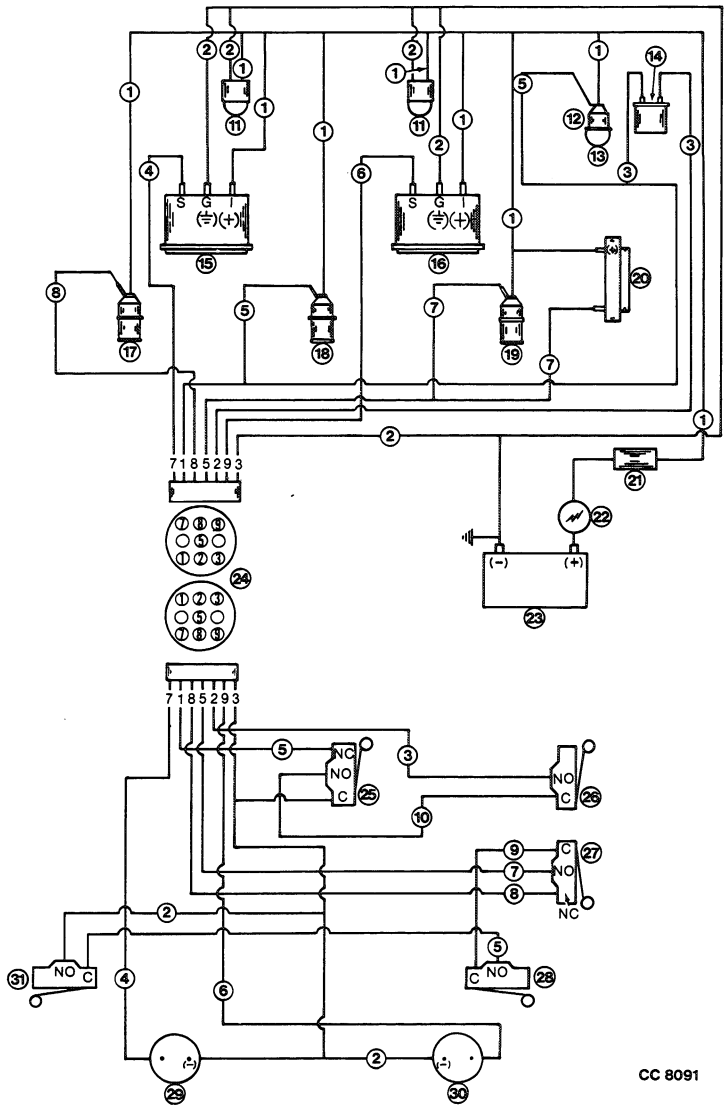
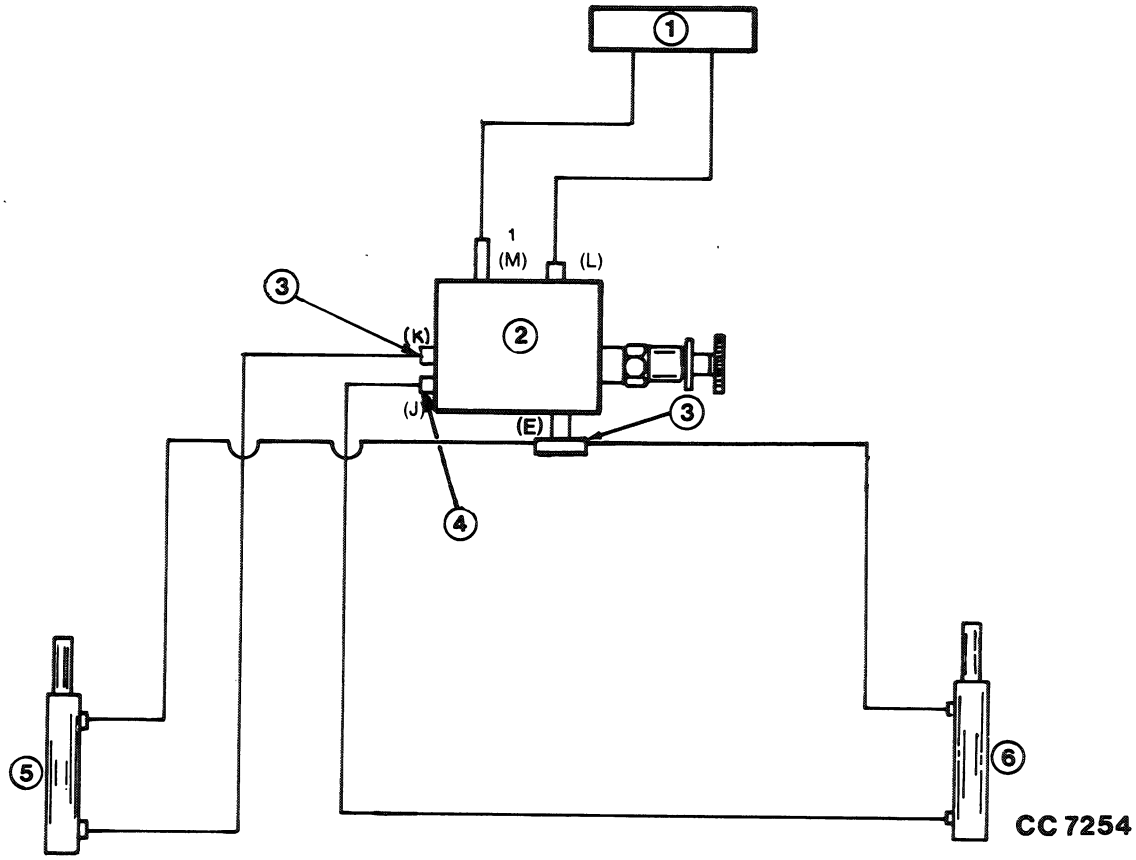
WIRING DIAGRAM – BALE MONITOR
(Standard on 550, Optional on 545)



1–Red
2–Brown
3–Grey
4–Blue
5–White
6–Yellow
7–Green
8–Purple
9–Orange
10–Beige
11–Gauge light
12–Flash circuit
13–Resistance bulb
14–Flasher
15–L.H. bale shape indicator
16–R.H. bale shape indicator
17–Green light (gate latched)
18–Yellow light (automatic twine wrap)
19–Red light (oversize bale)
20–Oversize bale horn
21–Circuit breaker
22–Tractor switch
23–Battery
24–Connector (tractor to baler)
25–Twine arm switch
26–Bale size switch
27–Oversize bale switch
28–R.H. gate latch switch
29–L.H. bale shape sending unit
30–R.H. bale shape sending unit
31–L.H. gate latch switch
S–Sending unit
G–Ground
I–Input
NC–Normally closed
NO–Normally open
C–Common

CC8091-545ACCE-281186

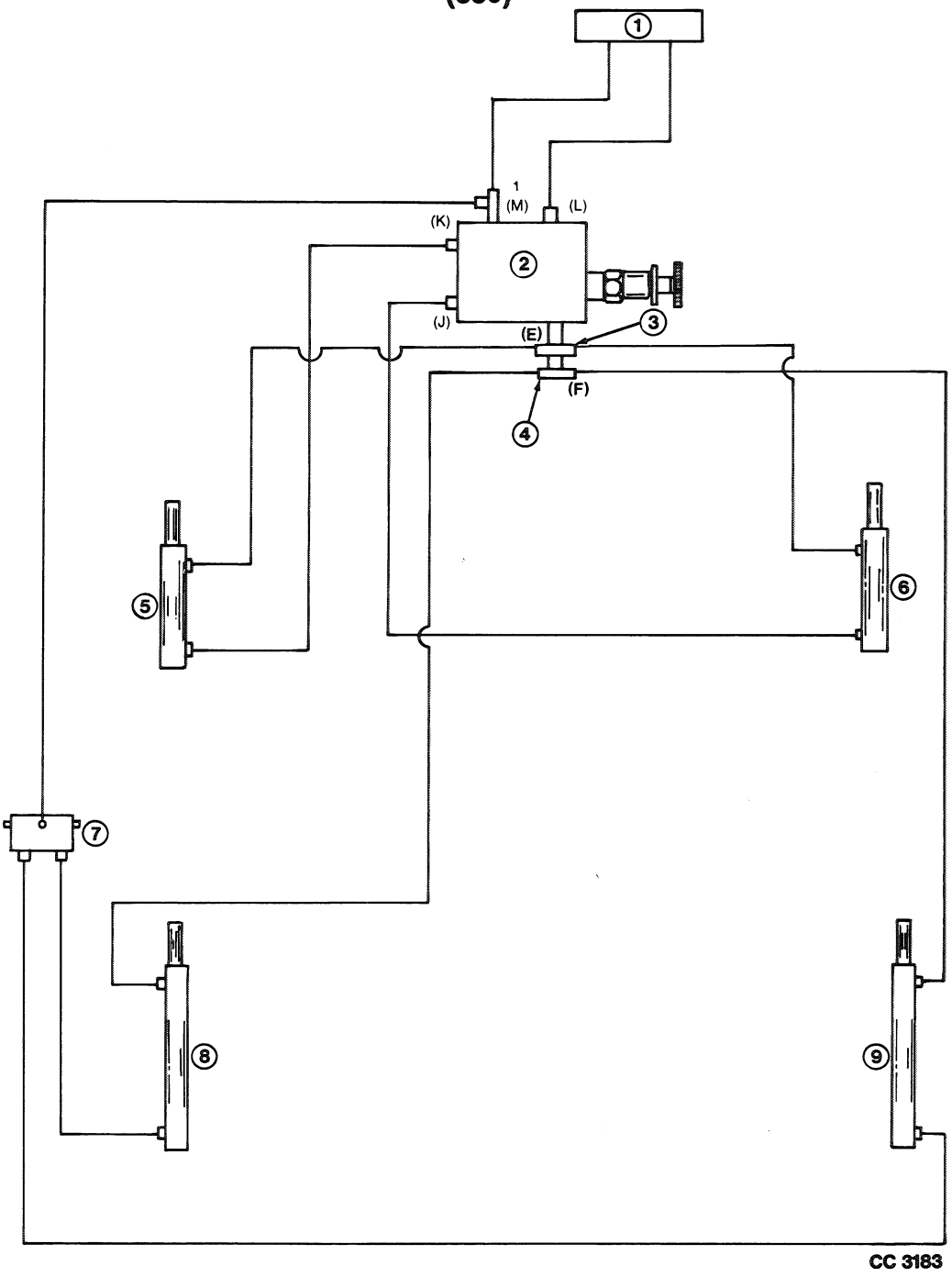
BALE TENSION AND GATE HYDRAULIC SYSTEM (545)



1–Tractor outlet ports
2–Bale density control valve
3–Upper port
4–Lower port
5–Cylinder
6–Cylinder

CC7254-545ACCE-281186

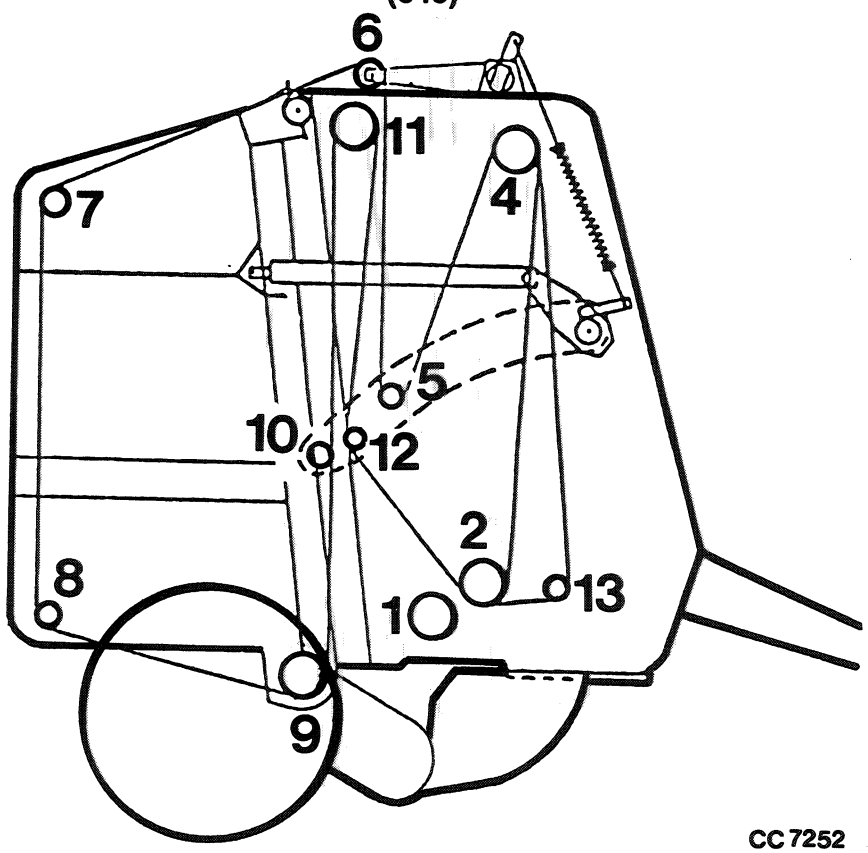
BALE TENSION AND GATE HYDRAULIC SYSTEM (550)



1–Tractor outlet ports
2–Bale density control valve
3–Upper port
4–Lower port
5–Belt tension cylinder
6–Belt tension cylinder
7–Gate lock valve
8–L.H. gate lift cylinder
9–R.H. gate lift cylinder

CC3183-545ACCE-281186

NUMBERING SYSTEM FOR BALER ROLLS (545)



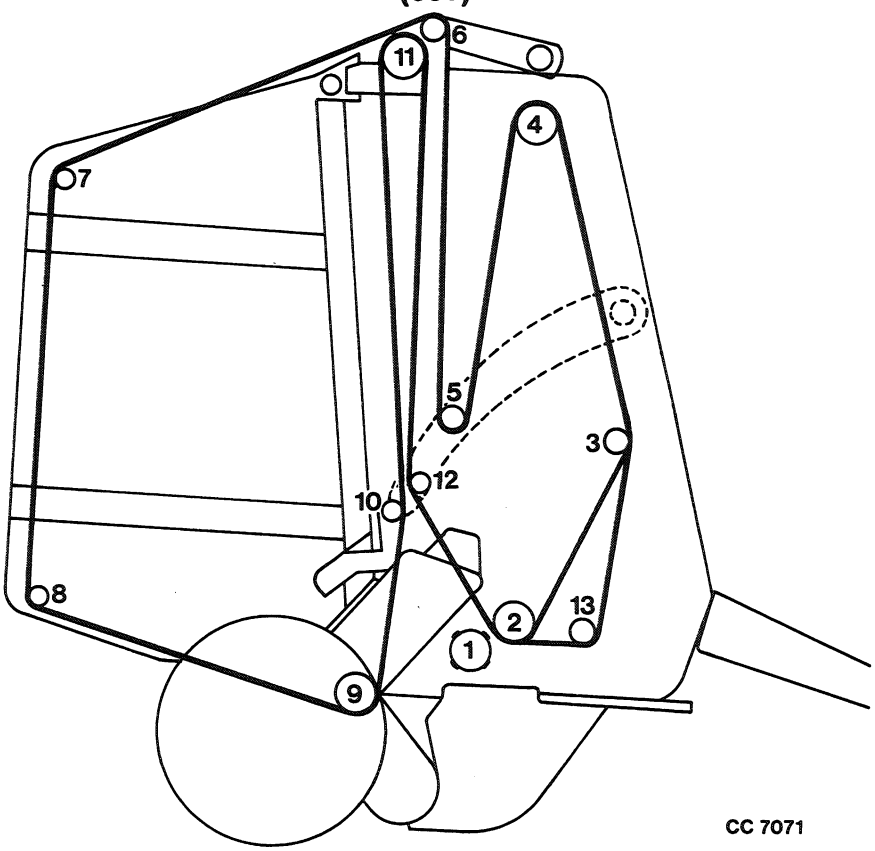
CC 7252

1–Starter roll
2–Lower belt drive roll
4–Upper belt drive roll
5–Front tension arm idler roll
6–Top arm roll
7–Upper rear gate roll
8–Lower rear gate roll
9–Lower gate roll
10–Rear tension arm idler roll
11–Top idler roll
12–Center tension arm idler roll
13–Belt staggering roll

NOTE: The numbers shown above must not be used when ordering roll replacement parts. Always refer to relevant parts catalog.

CC7252-545ACCE-281186

NUMBERING SYSTEM FOR BALER ROLLS (550)



1–Starter roll
2–Lower belt drive roll
3–Front idler roll
4–Upper belt drive roll
5–Front tension arm idler roll
6–Top arm roll
7–Upper rear gate roll
8–Lower rear gate roll
9–Lower gate roll
10–Rear tension arm idler roll
11–Top idler roll
12–Center tension arm idler roll
13–Belt staggering roll

NOTE: The numbers shown above must not be used when ordering roll replacement parts. Always refer to relevant parts catalog.

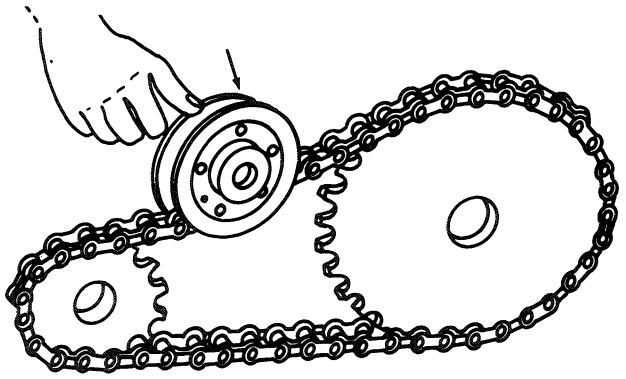
CC7071-545ACCE-281186

ADJUSTING CHAINS

Adjust tension on all roller chains by loosening idler mounting bolts and pressing idler against chain with 22,6 to 44,1 N force.

Tighten lower drive roll chain plastic idler mounting cap screws to 81 Nm (60 ft-lb) torque. Tighten remaining idler mounting cap screws to 163 Nm (120 ft-lb) torque.

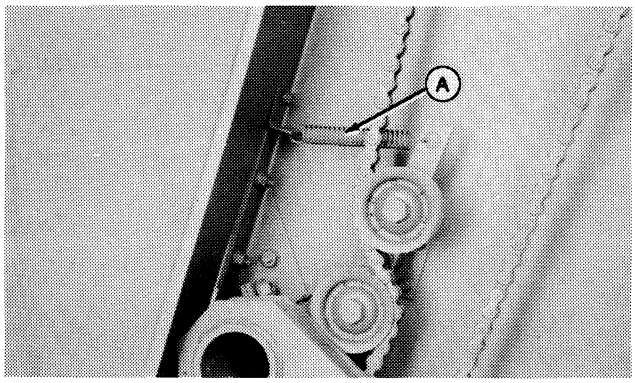
Readjust chain tension when necessary.



E21791-545ACCE-281186

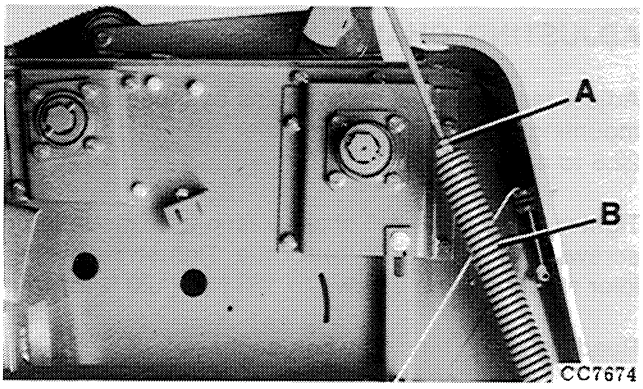
ADJUSTING UPPER DRIVE ROLL CHAIN

If dimension between hooks on spring (A) is less than 140 mm (5-1/2 in.), remove one pitch from drive chain.



E21743-530SVG-100182

ADJUSTING UPPER ARM SPRING (545)



NOTE: Baler must be empty and belt tension arm in down position.

Upper arm tension spring is located on right-hand side of baler.

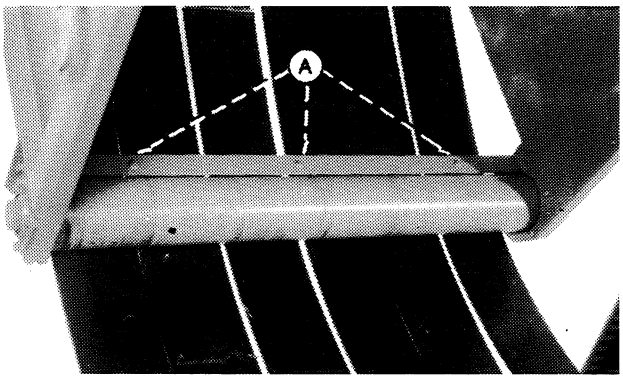
1. Loosen lock nut (A).

2. Rotate spring (B) until it measures 380 mm (15 in).

3. Re-tighten lock nut (A), using spanner on spring plug.

CC7674-545ACCE-281186

ADJUSTING LOWER FEED ROLL SCRAPER



Open gate to convenient height and lock with gate latch

Loosen nuts (A) and adjust scraper until it contacts feed roll. Retighten nuts (A).

E21747-545ACCE-030285

ADJUSTING BELT TENSION SPRINGS (550)

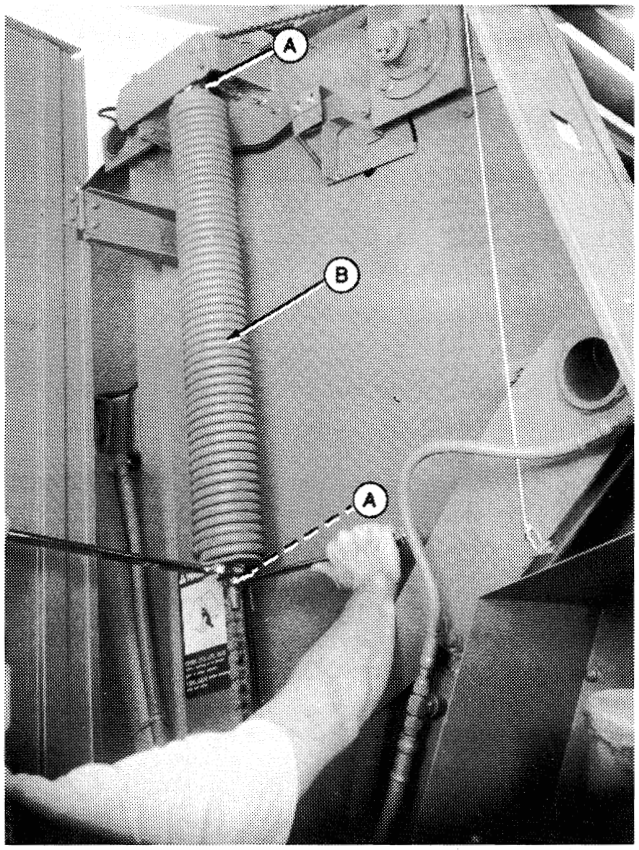
NOTE: Baler must be empty and belt tension arm in down position.

Belt tension springs are located on the right-hand and left-hand side of the baler.

1. Loosen lock nuts (A).

2. Rotate spring (B) until top and bottom eyebolts are tightened all the way into spring plug.

3. Tighten lock nuts (A) using spanner on spring plug to prevent chain from twisting.



E21745-545ACCE-281186

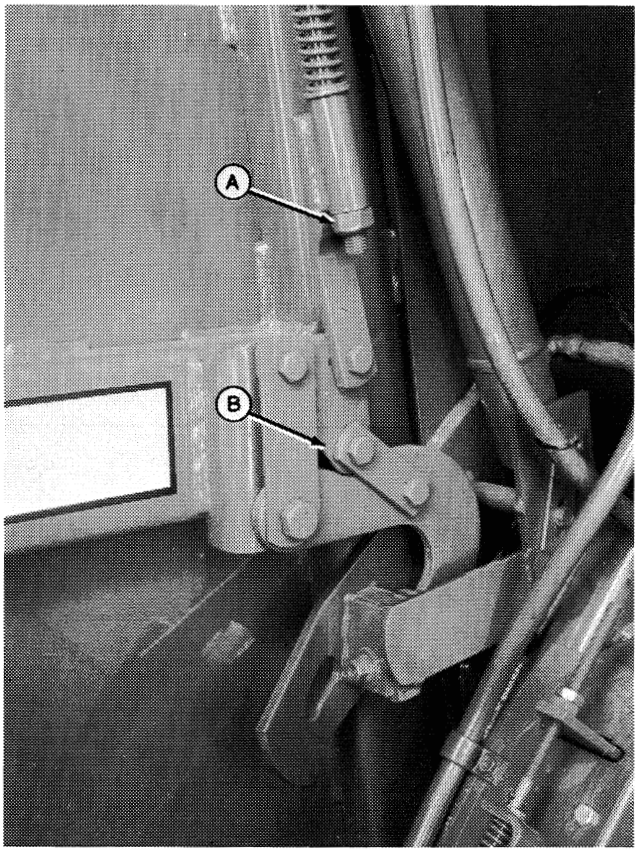
ADJUSTING GATE LATCH (550)

Close the gate completely.

Adjust nut (A) until plate (B) just touches relief notch in hook.

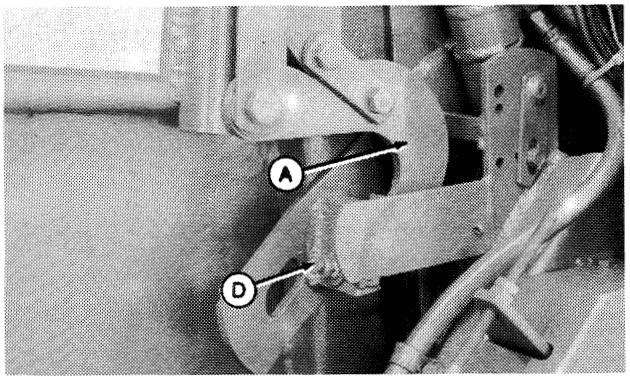
Repeat on opposite side.

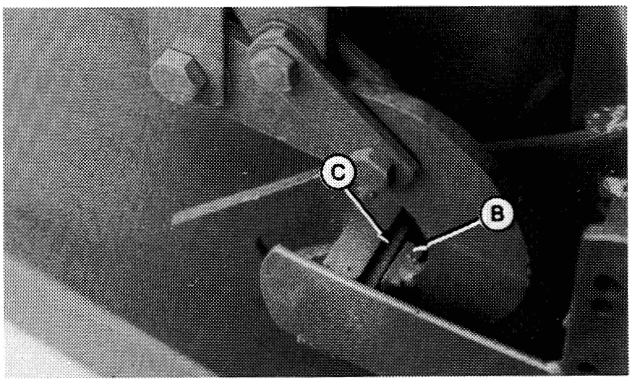
NOTE: If gate and frame of the baler are not properly aligned one latch may not be engaged while baling. See your JOHN DEERE dealer and have the gate straightened.



E22663-545ACCE-281186

ADJUSTING GATE LATCH STOP (550)





Close and latch gate.

Push gate latch (A) forward by hand. If distance between gate latch stop (B) and stop pad (C) is not 2 ± 1 mm (0.079 ± 0.039 in.), shim as necessary following this procedure:

1. Loosen bolt (D).

NOTE: Shims are slotted so bolt does not have to be removed.

2. If distance is greater than 3 mm (0.118 in.) transfer shims from storage position to shimming position until a distance of 2 ± 1 mm (0.079 ± 0.039 in.) is obtained.

3. If distance is less than 1 mm (0.039 in.) transfer shims from shimming position to storage position until a distance of 2 ± 1 mm (0.079 ± 0.039 in.) is obtained.

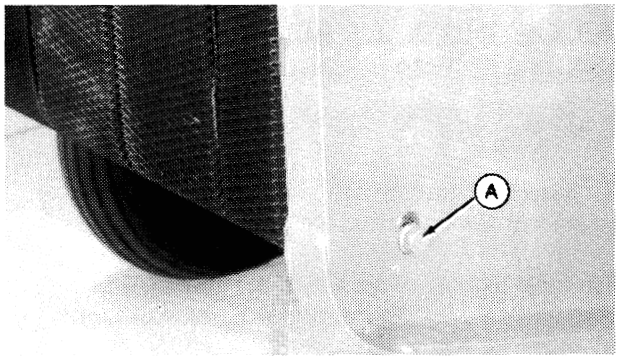
4. Center shims and stop pad and tighten bolt (D).

5. If necessary, repeat procedure on opposite side.

NOTE: If proper adjustment cannot be obtained, lower gate (tractor engine shut off). If there is a gap on one side of the gate only, see your JOHN DEERE dealer and have the gate straightened.

E21766,E21767-545ACCE-281186

ADJUSTING BELT TRACKING



NOTE: Baler must be empty and gate closed.

With baler on a level surface, engage PTO and run at slow speed.

Observe belt tracking at lower belt guide.

If belts track to the left, use the following procedure.

1. Lock gate with gate lock valve (550)

2. Using tractor selective control valve, raise belt tension arm to slacken belts.

3. Shut off tractor engine.

4. Loosen bolt (A), raise right-hand end of roller in its slot, and tighten bolt.

5. Start engine, lower belt tension arm, and re-check tracking. Readjust if necessary.

6. If belts track to the right, repeat steps 1, 2 and 3 (550) or 2 and 3 (545).

7. Loosen bolt on left-hand side and raise roller in its slot. Tighten bolt.

8 . Start engine, lower belt tension arm, and re-check tracking. Readjust if necessary.

9. If cap screw has been raised to top of slot and adjustment is necessary, lower cap screw in slot on opposite side of baler.

NOTE: If gate and frame of the baler are not properly aligned, improper belt tracking may be the result. See your JOHN DEERE dealer and have the gate straightened.

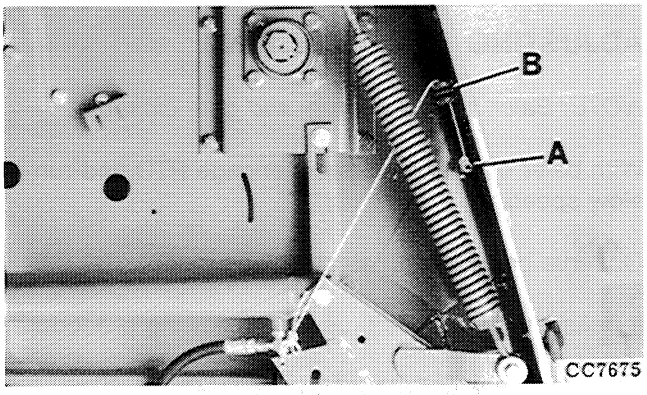
E21749-545ACCE-281186

ADJUSTING BALE SIZE INDICATOR (545)

Close the gate.

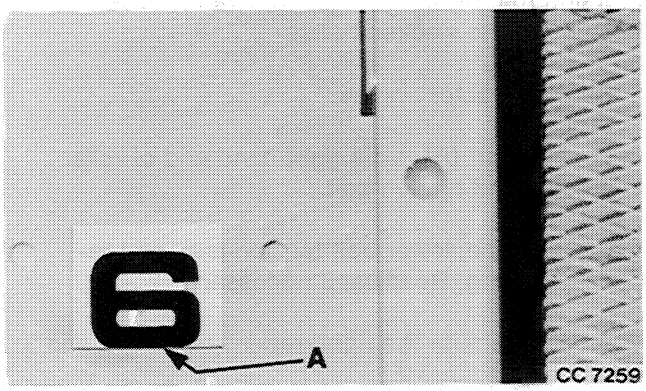
By means of tractor selective control valve lever, raise belt tension arm to highest position.

Tie rope to hole of bale size indicator (A) and thread it through twine guide (B).



CC7675-545ACCE-281186

Adjust rope so that bottom of number "6" is flush with bottom of bale size window (A).

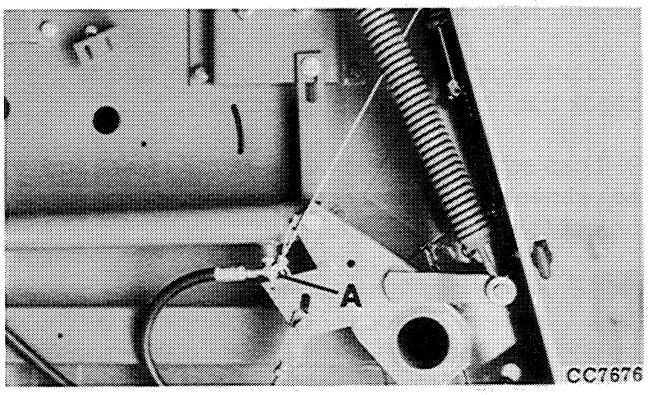


CC7259-545ACCE-030285

Tie other end of rope to belt tension arm (A) as shown.

By means of tractor selective control valve lever, lower belt tension arm.

Tension arm has been lowered for illustration purposes to show knot location.



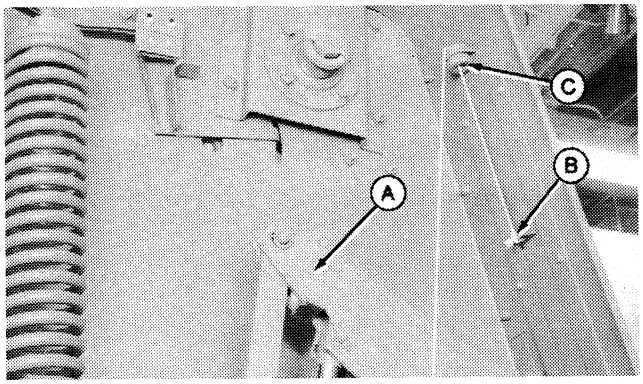
CC7676-545ACCE-281186

ADJUSTING BALE SIZE INDICATOR (550)

Lock the gate in closed position.

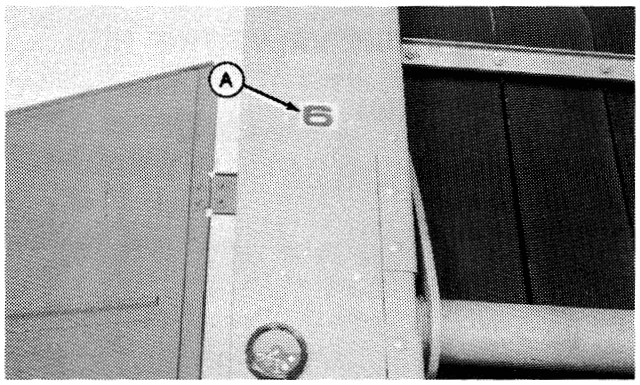
By means of tractor selective control valve lever, raise belt tension arm (A) to highest position.

Tie rope to hole of bale size indicator (B) and thread it through twine guide (C).



E21750-545ACCE-281186

Adjust rope so that the number "6" is centered in the bale size window (A).

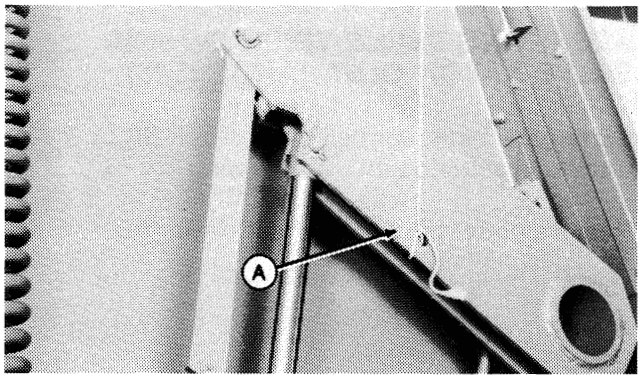


E21751-545ACCE-281186

Tie the other end of the rope to belt tension arm (A) as shown.

By means of tractor selective control valve lever, lower belt tension arm.

Unlock gate.



E21752-545ACCE-281186

ADJUSTING PUMP DRIVE IDLER

1. Close the gate.

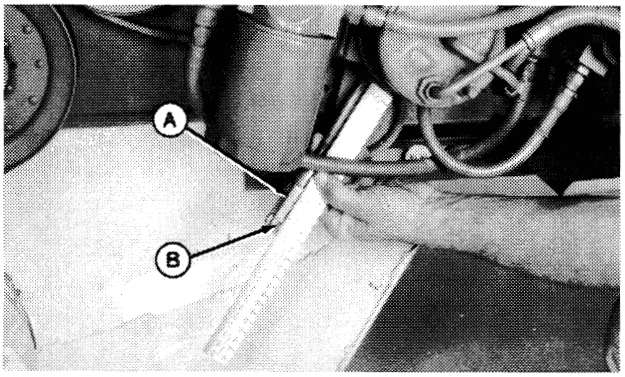
2. Remove cotter pin and clevis pin from hole (B). Pivot rod down to position shown and loosen lock nut.

3. Adjust clevis (A) to obtain a 170 mm (6-11/16 in.) dimension from center of hole in clevis to center of bend at end of rod.

4. Tighten lock nut.

5. Install clevis pin and cotter pin.

NOTE: When baling, if twine arm moves before bale has reached its preset diameter, it is necessary to extend rod length beyond 170 mm (6-11/16 in.).



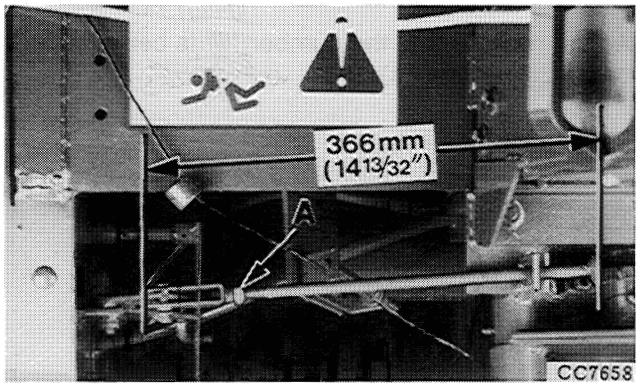
E21753-550ACCE-030285

ADJUSTING TWINE VALVE TRIP ROD

1. Loosen lock nut (A).

2. Adjust rod to 366 mm (14-13/32 in.).

3. Tighten lock nut (A).

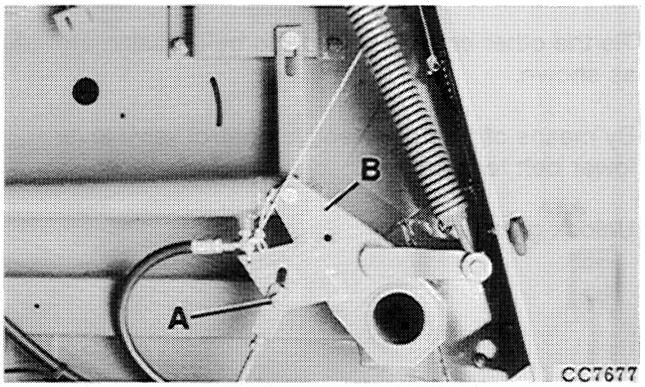


CC7658-545ACCE-281186

ADJUSTING TWINE TRIP ROD AND VALVE LATCH CLEARANCE (545)

Close gate and lower belt tension arm (B) by means of tractor selective control valve lever.

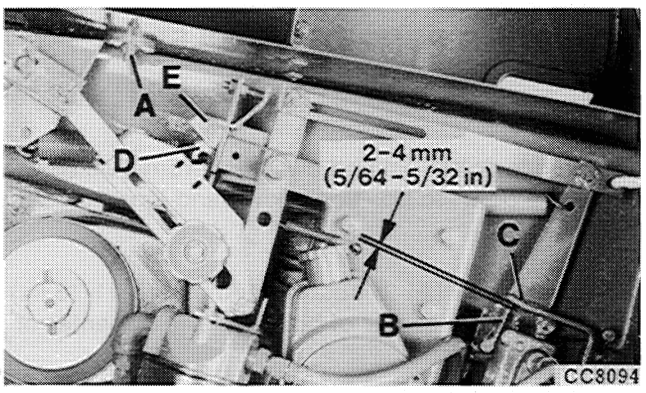
Remove cotter pin and pin from clevis (A).



CC7677-545ACCE-281186

With bell crank against stop washers (A), add or take away washers as needed to obtain 2 to 4 mm (5/64 to 5/32 in.) distance between valve arm latch (B) and valve arm (C). The pump drive bell crank (D) must latch freely with pump drive latch (E). If not, adjust by removing one stop washer.

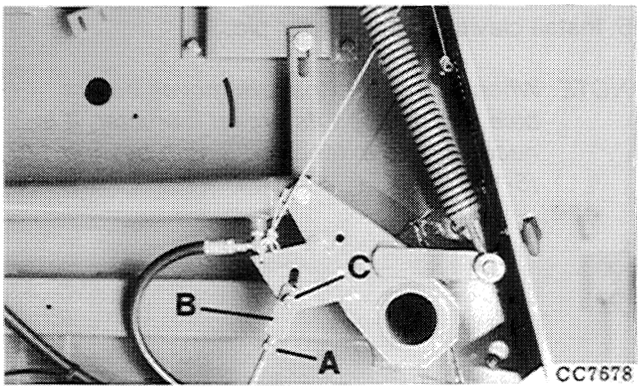
Do not remove more washers than necessary.



CC8094-545ACCE-281186

With bell crank against stop washers, loosen lock nut (A) and adjust clevis (B) so that clevis pin (C) is at lower part of slot on belt tension arm.

Tighten lock nut and install pin (C) and cotter pin.

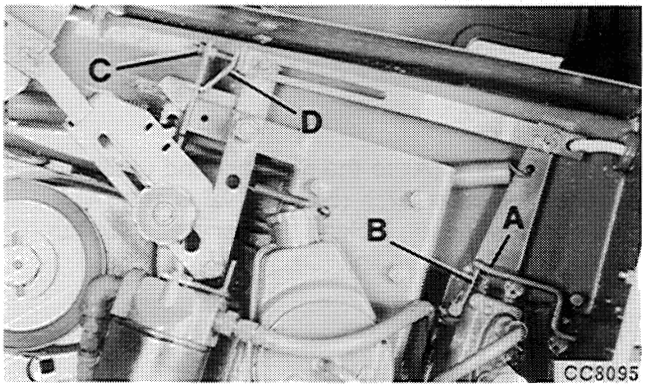


CC7678-545ACCE-281186

ADJUSTING TWINE TRIP ROD AND VALVE LATCH CLEARANCE (545) (Continued)

Move valve arm (A) to the rear by hand until it just touches the valve latch (B). With valve arm (A) in this position loosen locking nuts and adjust stop (C) until it touches valve link (D).

Tighten locking nuts.

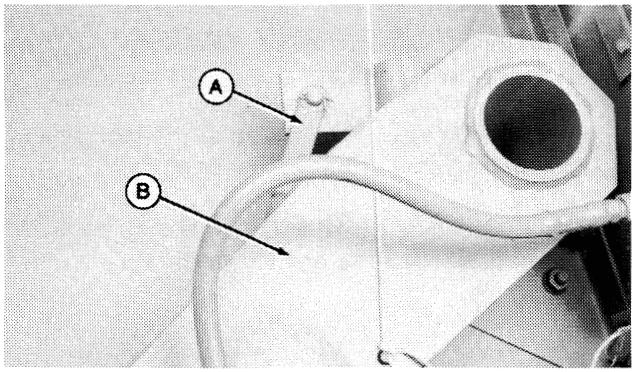


CC8095-545ACCE-281186

ADJUSTING TWINE TRIP ROD AND VALVE LATCH CLEARANCE (550)

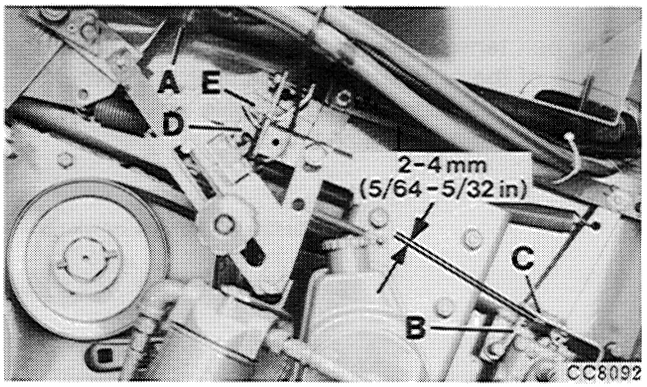
Close gate and lower belt tension arm (B) with tractor selective control valve lever.

Remove cotter pin and pin from clevis (A).



E21756-545ACCE-281186

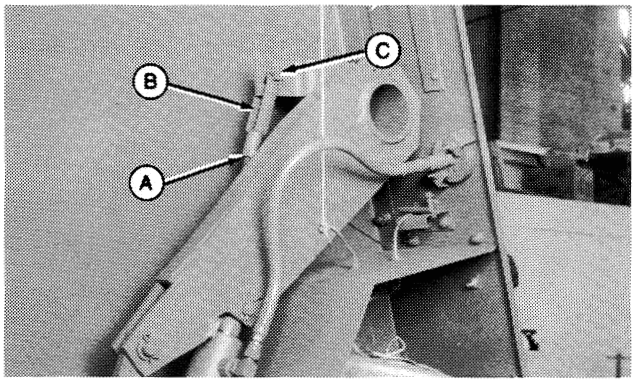
With bell crank against stop washers (A), add or take away washers as needed to obtain 2 to 4 mm (5/64 to 5/32 in.) distance between valve arm latch (B) and valve arm (C). The pump drive bell crank (D) must latch freely with pump drive latch (E). If not, adjust by removing one stop washer.



CC8092-545ACCE-281186

With bell crank against stop washers, loosen lock nut (A) and adjust clevis (B) so that it is centered in the slot on the belt tension arm.

Tighten lock nut and install pin (C) and cotter pin.

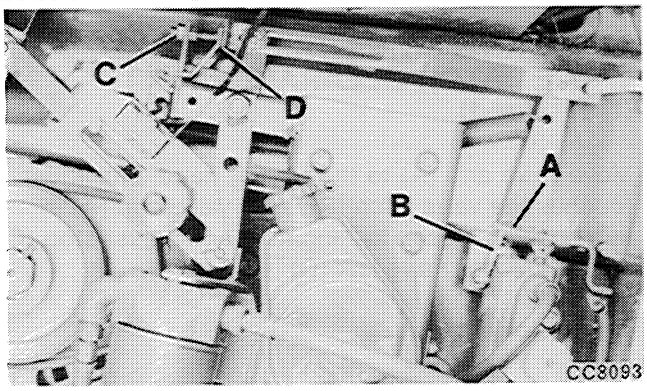


E21758-550ACCE-281186

ADJUSTING TWINE TRIP ROD AND VALVE LATCH CLEARANCE (550) (Continued)

Move valve arm (A) to the rear by hand until it just touches the valve latch (B). With valve arm (A) in this position loosen locking nuts and adjust stop (C) until it touches valve link (D).

Tighten locking nuts.

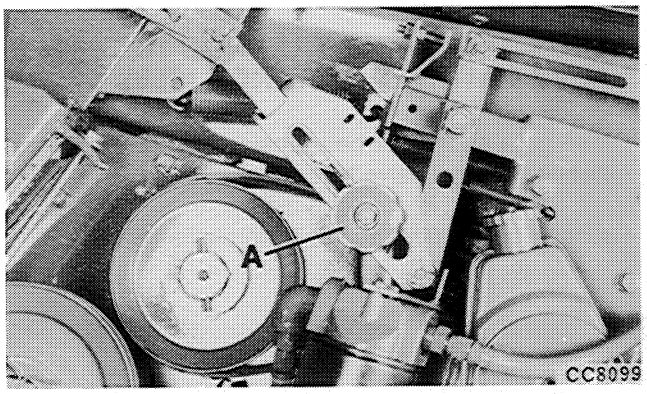


CC8093-545ACCE-281186

CHECKING PUMP DRIVE LATCH ADJUSTMENT (545)

The pump drive latch was sealed at the factory and does not need any further adjustment.

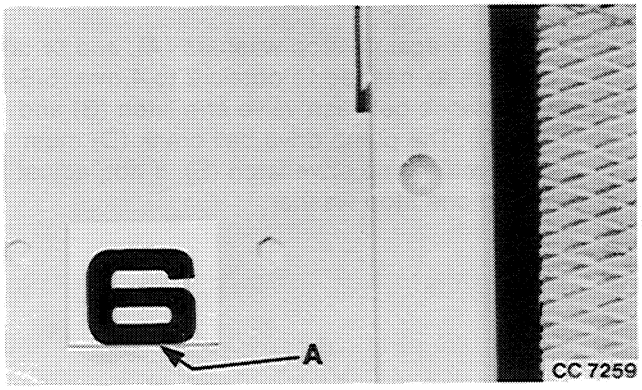
To check the adjustment, adjust bale size knob (A) to largest bale size (all the way forward).



CC8099-545ACCE-281186

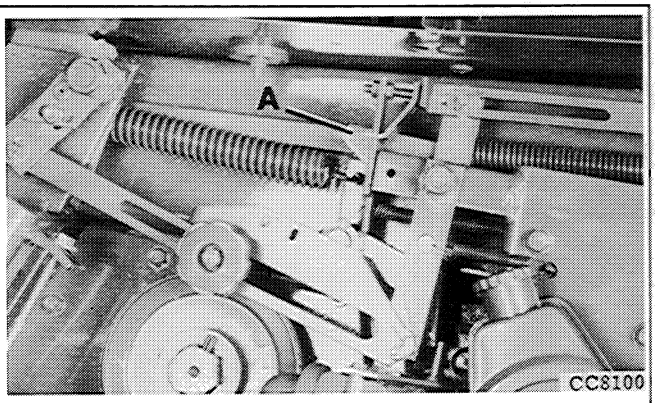
Raise belt tension arm to the upper stop. Check that bottom of the number "6" is flush with bottom of window. If not, readadjust rope of bale size indicator (see "Adjusting Bale Size Indicator").

A–"6" flush with bottom of window



CC7259-545ACCE-281186

Lower belt tension arm and raise it again very slowly until pump latch (A) trips.



CC8100-545ACCE-281186

When pump latch trips number "6" must be centered in the window.

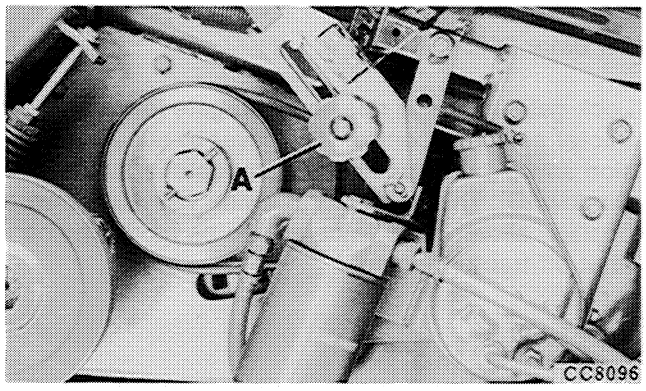
If latch does not trip or number "6" is not centered in the window, see your JOHN DEERE dealer.

CC7265-545ACCE-281186

CHECKING PUMP DRIVE LATCH ADJUSTMENT (550)

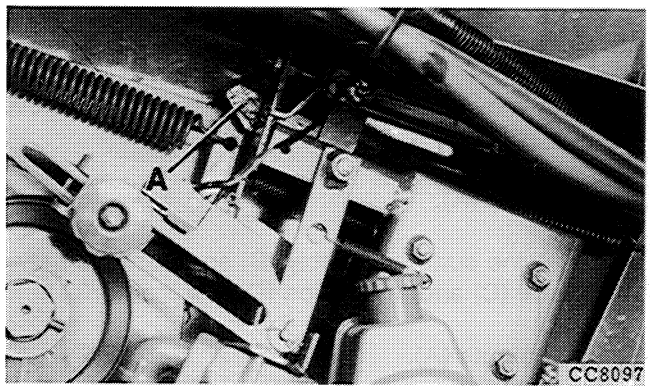
The pump drive latch was sealed at the factory and does not need any further adjustment.

To check the adjustment, adjust bale size knob (A) to largest bale size (all the way forward).



CC8096-545ACCE-281186

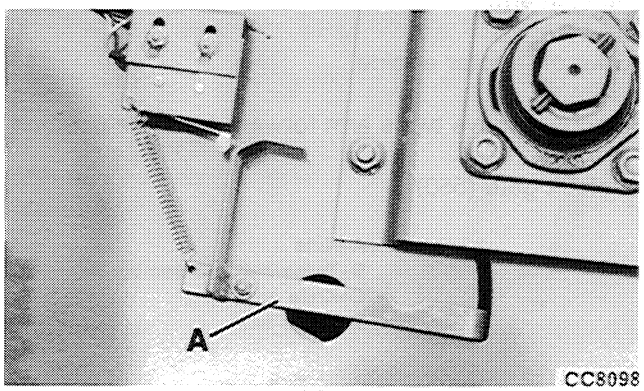
Lock gate and raise belt tension arm very slowly until pump latch (A) trips.



CC8097-545ACCE-281186

If the top edge of belt tension arm (A) is now in the bottom third of the side sheet hole, the pump drive latch is adjusted correctly.

If an adjustment is necessary, see your JOHN DEERE dealer.

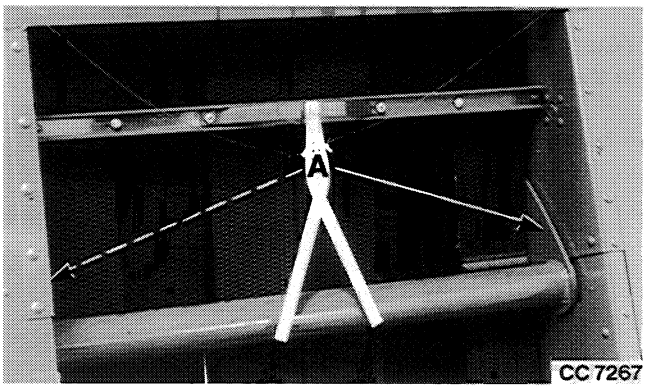


CC8098-545ACCE-281186

ADJUSTING TWINE CUTTER ANVIL

On Baler 545:

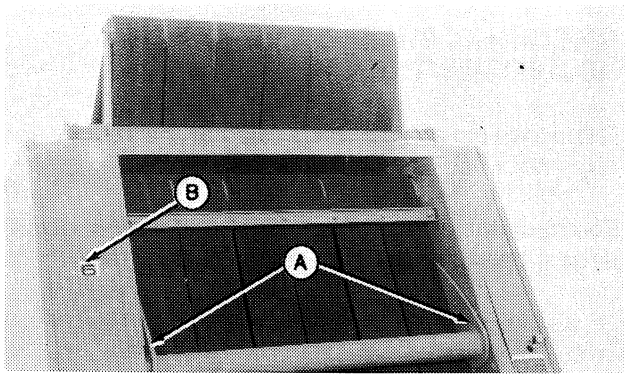
Close the gate. Move tractor selective control valve lever to raise belt tension arm (A) until it stops. This will shift the twine valve to its up position allowing the twine arm to be moved by hand. Shut off tractor engine.



CC7267-545ACCE-281186

On Baler 550:

Lock gate in closed position with gate lock valve. Move tractor selective control valve lever to raise belt tension arm (A) until number "6" appears in bale size window (B). This will shift the twine valve to its up position allowing the twine arm to be moved by hand. Shut off tractor engine.



E21761-545ACCE-281186

On Both Balers:

Manually move twine tube (D) until it is centered over knife anvil (C).

Loosen nuts (A).

Adjust twine cutter assembly (B) so clearance between knife anvil (C) and twine tube (D) is 4 mm (5/32 in.).

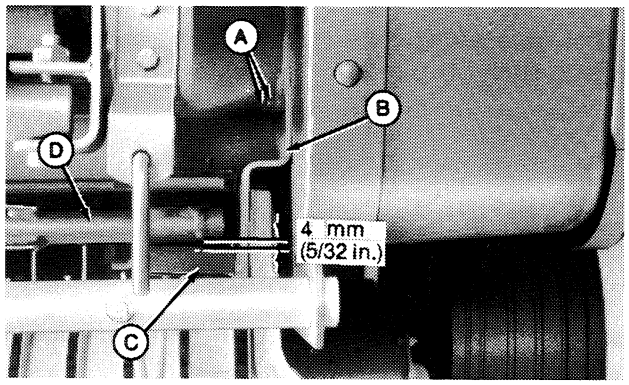
Retighten nuts (A).

Move tractor selective control valve lever to lower belt tension arm.

Shut off tractor engine.

Manually move twine arm forward to home position.

Unlock gate (550)



A–Nuts
B–Twine cutter assembly
C–Knife anvil
D–Twine tube

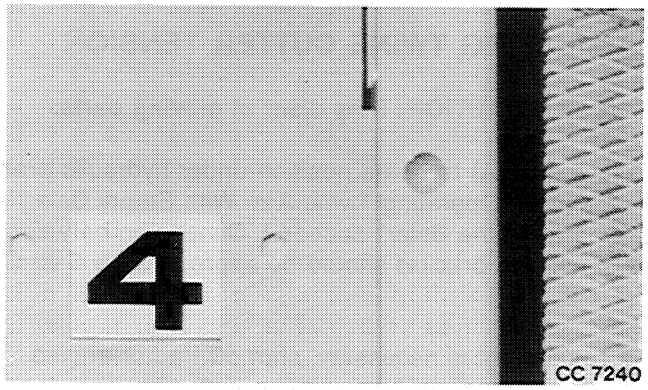
E21762-545ACCE-2811086

ADJUSTING TWINE ARM RETURN

On Baler 545:

Slowly raise lower belt tension arm until bale size indicator reads "4".

Manually trip twine arm cycle.



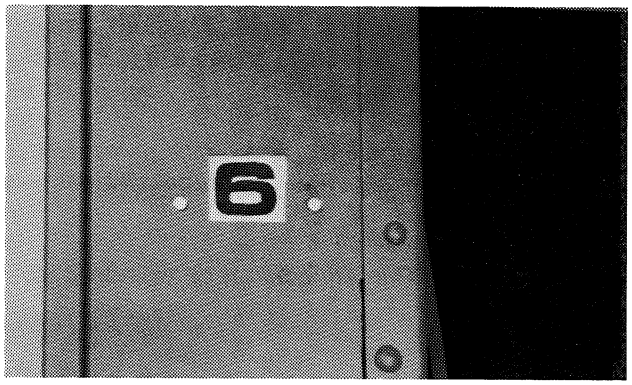
CC7240-545ACCE-281186

On Baler 550:

Raise gate until number "6" is showing.

Lock gate.

Use tractor selective control valve lever to lower belt tension arm until bale size indicator reads "4".



E21637-545ACCE-281186

On Both Balers:

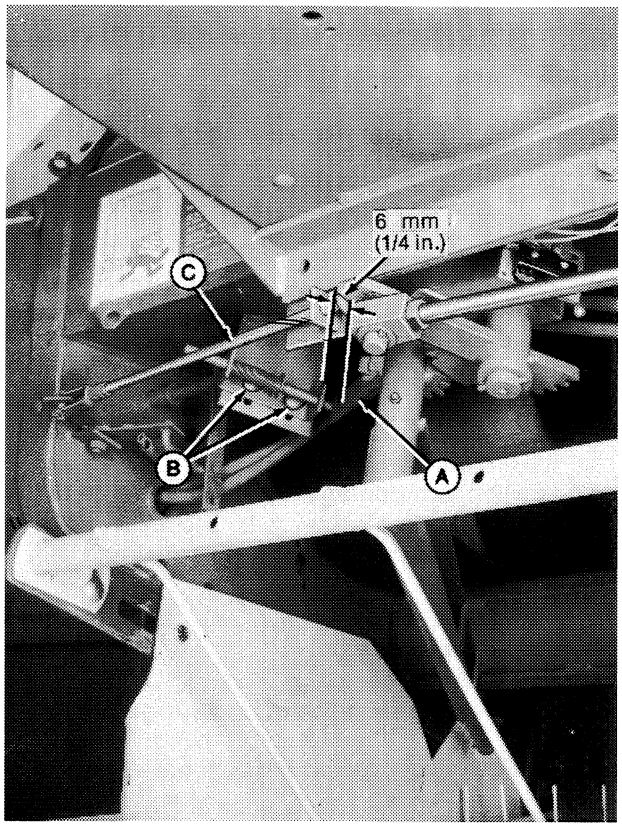
With tractor running at rated PTO speed, engage PTO. When valve trip rod (C) starts to move, disengage PTO. Twine arm will be in extreme right-hand position. Shut off tractor.

Loosen carriage bolts (B) and adjust spring stop assembly vertically until rod is centered on twine arm return strap (A). Adjust horizontally to obtain a 6 mm (1/4 in.) dimension. Tighten bolts (B).

Start tractor and engage PTO until twine arm returns to home position.

Close gate (545).

Unlock and close gate (550).



E21763-545ACCE-281186

ADJUSTING TWINE CUTTER TENSION

CAUTION: Stay clear of moving parts.

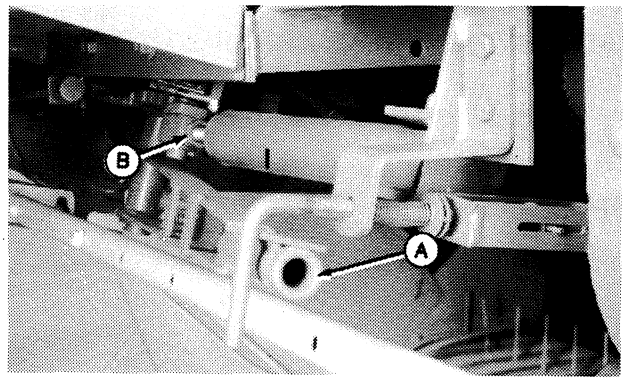
Move arm (A) to home position under hydraulic pressure (see "Operating Twine Arm With Empty Baler" in "Operating the Baler" section.). Dimension between washer and bracket should be approximately 6 mm (1/4 in.).

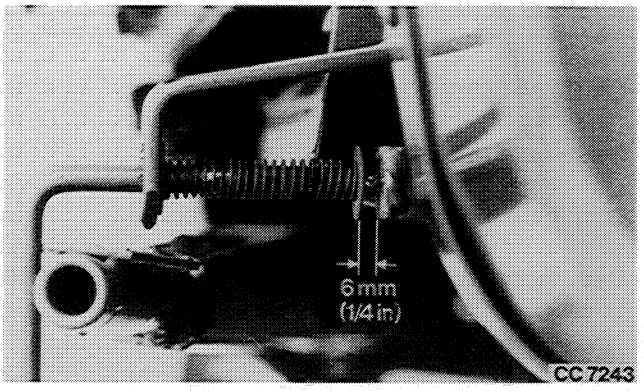
If adjustment is necessary, shut off tractor engine. Loosen lock nut (B) on cylinder rod.

Adjust twine cutter link by turning hydraulic cylinder rod in or out of adjusting blocks. Make adjustment by turning rod 1/8 to 1/4 turn. Turning rod into block will increase the dimension.

Start tractor, engage PTO, and check measurement. If measurement is still not correct, repeat adjustment procedure.

Shut off tractor. Tighten lock nut on cylinder rod.





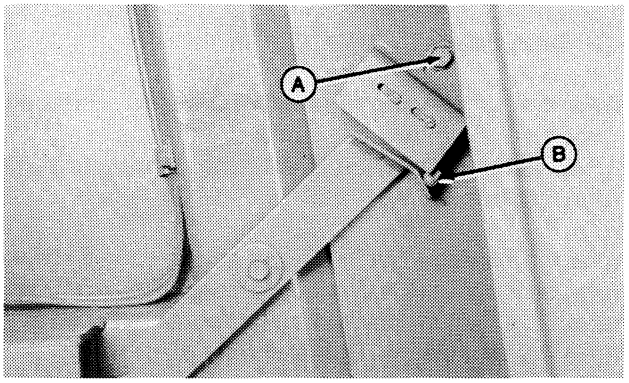
E21764,CC7243-545ACCE-281186

ADJUSTING GATE LATCH SWITCH (550)

Close and latch gate. Cylinder should be fully retracted.

Loosen cap screw (A).

Turn switch bracket so that switch roller (B) is centered on the short leg of the ramp.

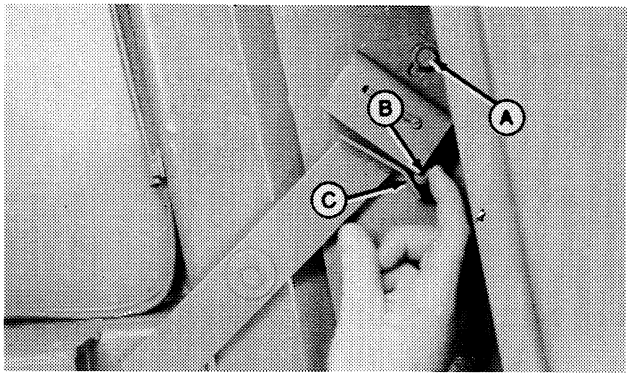


E21768-545ACCE-281186

With switch arm contacting switch body, adjust switch bracket to obtain a distance of 1 to 2 mm (0.039 to 0.079 in.) between the switch roller (B) and the ramp (C).

Retighten cap screw (A).

Repeat procedure on the opposite side.



E21769-545ACCE-281186

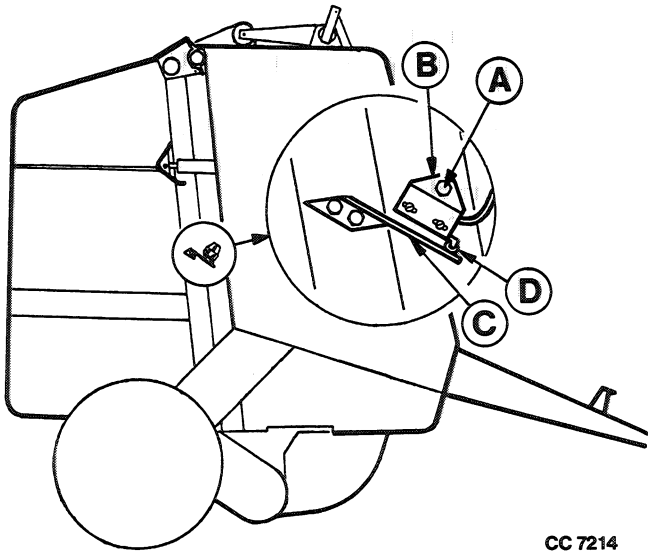
ADJUSTING GATE SWITCH (545 with Monitor or Sound Alarm)

Close the gate.

Loosen screw (A).

With switch arm contacting switch body, adjust switch bracket (B) so that ramp (C) contacts switch roller (D).

Retighten screw (A), making sure that switch arm is not at the end of its stroke.



CC 7214

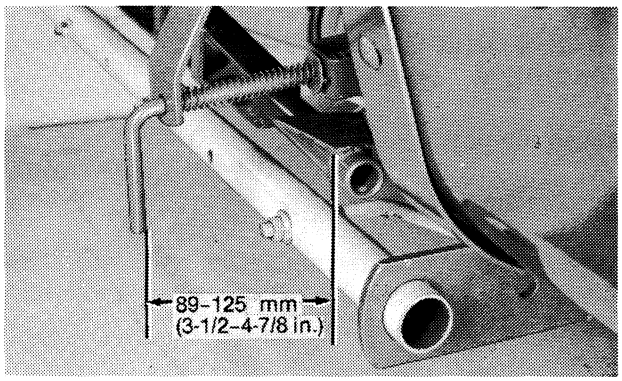
CC7214-545ACCE-281186

ADJUSTING TWINE ARM SWITCH (545 with Monitor or Sound Alarm, 550)

When this switch is activated the yellow light lights up (545 with monitor, 550) or the buzzer will be heard (545 with sound alarm), informing the operator that twine wrapping cycle has started.

Raise and lock gate to shift twine valve so twine arm can be moved manually.

Move twine arm so it is 89 to 125 mm (3-1/2 to 4-7/8 in.) from twine cutter control rod.



E21770-545ACCE-281186

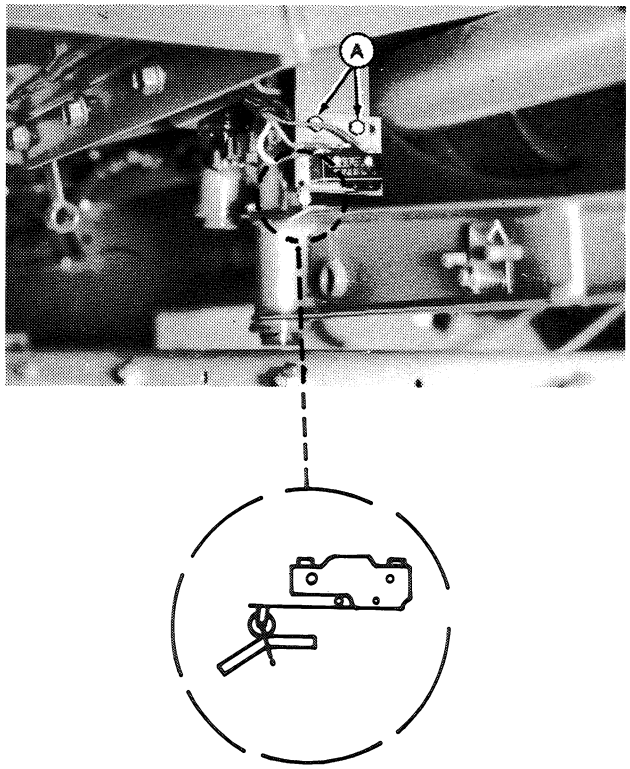
Loosen two cap screws (A) on switch mounting plate.

Move switch horizontally until it is positioned as shown in insert.

Move switch vertically until switch is just activated.

Tighten cap screws (A).

Unlock and close gate.



E21771-545ACCE-281186

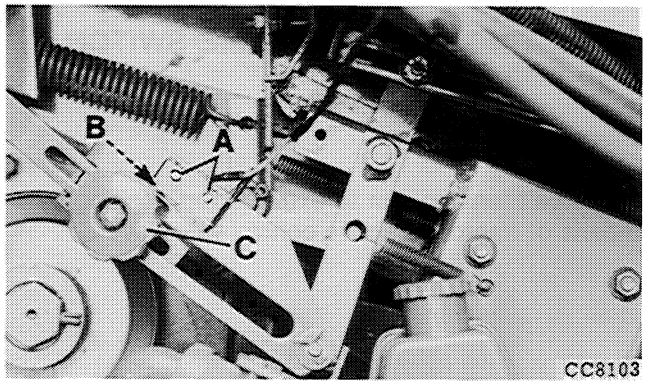
ADJUSTING FLASHING YELLOW LIGHT SWITCH (545 with Monitor, 550)

Position switch roller (B) on the highest point of bale size adjusting knob (C).

Loosen switch mounting screws (A).

Adjust switch so it is just activated.

Tighten screws (A).



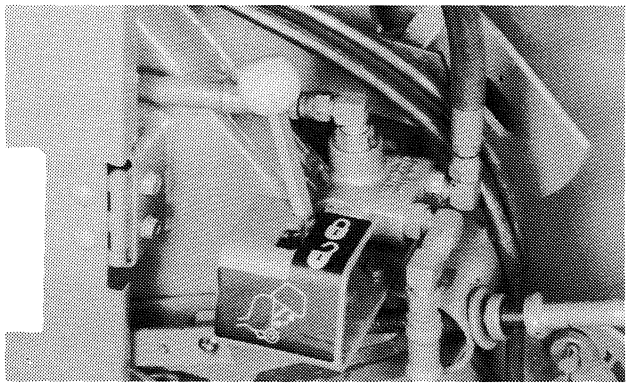
CC8103-545ACCE-281186

ADJUSTING OVERSIZE BALE SWITCH (545 with Monitor, 550)

Close the gate (545).

Close and lock the gate (550).

Raise belt tension arm to extreme top positon by means of tractor selective control valve lever. The green light must be on to make this adjustment.



E21639-545BCCE-281186

Loosen nuts (A).

Move switch horizontally until it is in position (B).

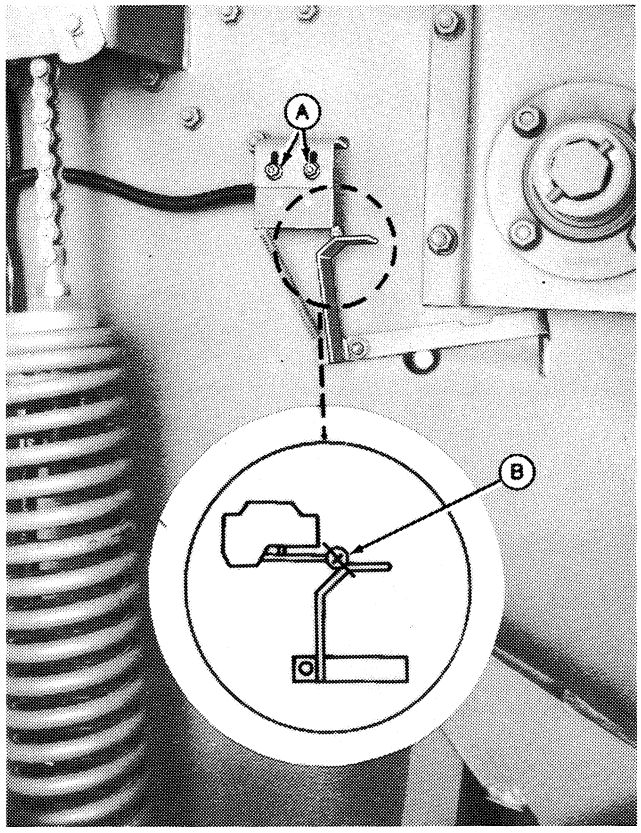
Move switch vertically until it is just activated.

Tighten nuts (A).

Lower and raise belt tension arm to check adjustment (red light on).

Lower belt tension arm.

Unlock gate (550).



E21773-545ACCE-281186

ADJUSTING OVERSIZE BALE SWITCH (545 with Sound Alarm)

Close the gate.

Raise belt tension arm to extreme top position by means of tractor selective control valve lever.

ENTRETOM-545ACCE-281186

Loosen nuts (A).

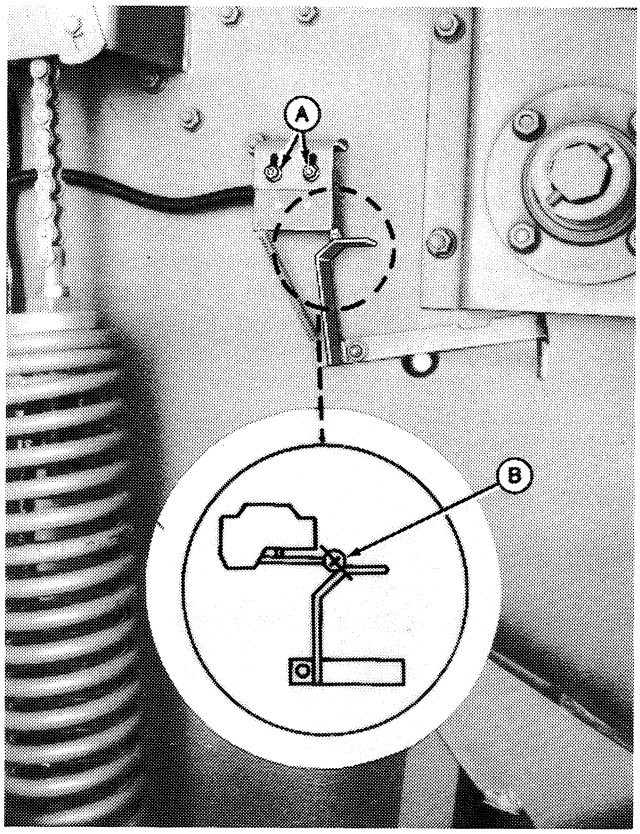
Move switch horizontally until it is in position (B).

Move switch vertically until switch is just activated.

Tighten nuts (A).

Lower and raise belt tension arm to check adjustment.

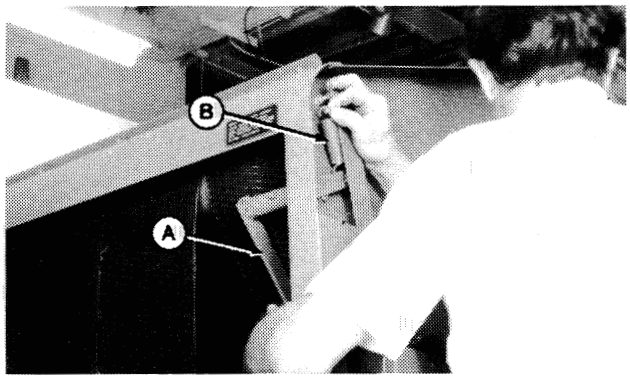
Lower belt tension arm.



E21773-545BCCE-030285

ADJUSTING BALE SHAPE SENDERS (545 with Monitor, 550)

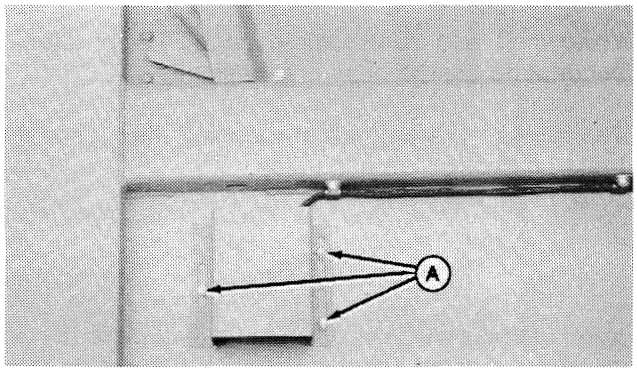
Bale shape senders are located at rear of baler on left and right-hand side.
Close the gate (545).
Lock gate in closed position (550).
Raise belt tension arm to highest position by means of tractor selective control valve lever to slacken belts.
Push in bale shape sender arm (A) and unhook spring (B).



E21774-545ACCE-281186

Lower belt tension arm and engage PTO for a few seconds to ensure belts are tensioned.

Loosen nuts (A).



E21775-545ACCE-281186

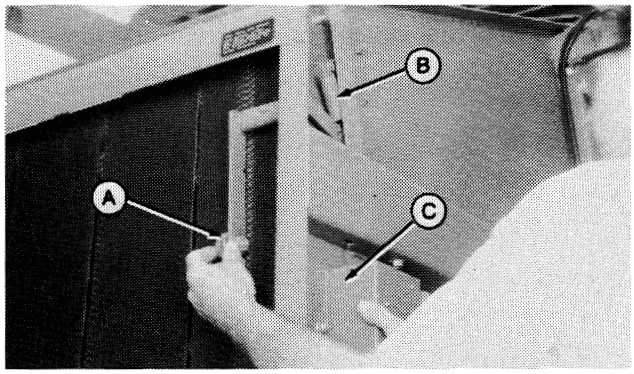
NOTE: Shield (C) has been cut away for illustration purposes only.

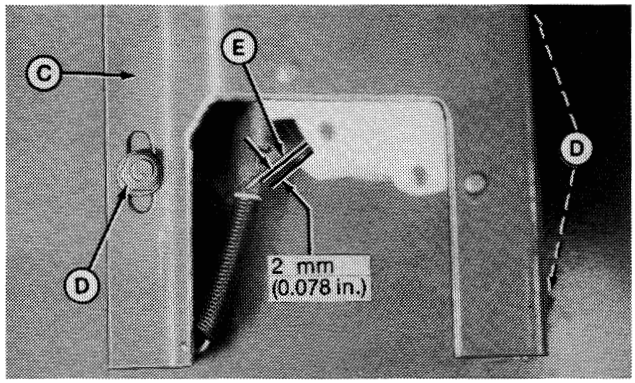
With roller (A) just touching belt, move shield (C) up- or downwards as needed to obtain approximately 2 mm (0.078 in.) distance between sending unit arm (E) and bottom stop.

Tighten nuts (D).

Raise belt tension arm to slacken belts and hook up spring (B).

A–Roller
B–Spring
C–Shield
D–Nuts
E–Sending unit arm

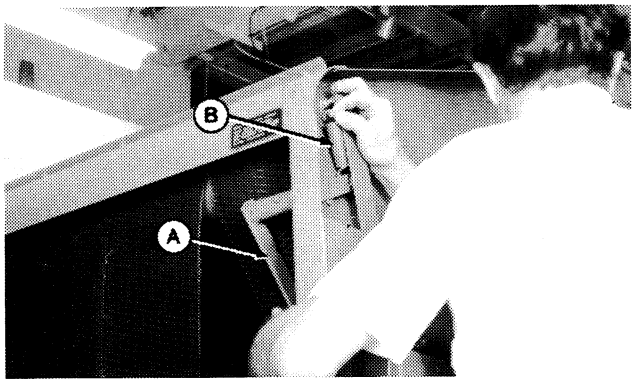




E21776,E21777-545ACCE-281186

ADJUSTING BALE SHAPE SENDERS (545 without Monitor)

Bale shape senders are located at rear of baler on left and right-hand side.
Close the gate.
Raise belt tension arm to highest position by means of tractor selective control valve lever to slacken belts.
Push in bale shape sender arm (A) and unhook spring (B). Repeat on the other side.



E21774-545BCCE-281186

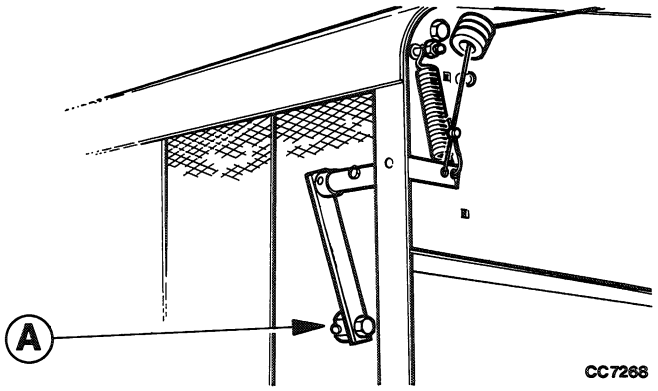
Lower belt tension arm and engage PTO for a few seconds to ensure belts are tensioned.

The rollers (A) are now just touching their respective belts on right or left-hand side.

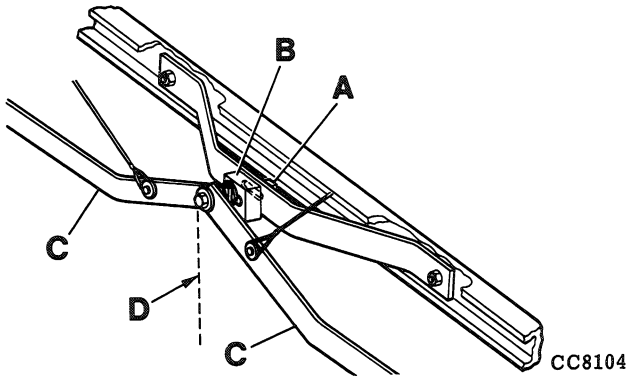
A–Roller

Loosen cap screw (A). Move adjusting plate (B) up- or downwards and/or to right or left-hand side to position bale shape indicators (C) symmetrical to center line (D) of baler.

Once bale shape indicators are in correct position, re-tighten cap screw (A).



CC7268

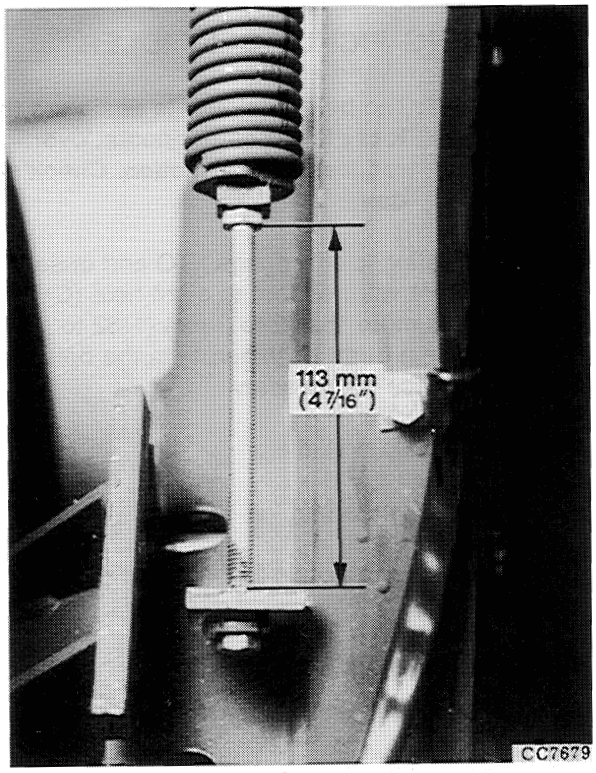


CC8104

CC7268,CC8104-545ACCE-281186

ADJUSTING PICK-UP FLOAT SPRING, LEFT-HAND SIDE (545)

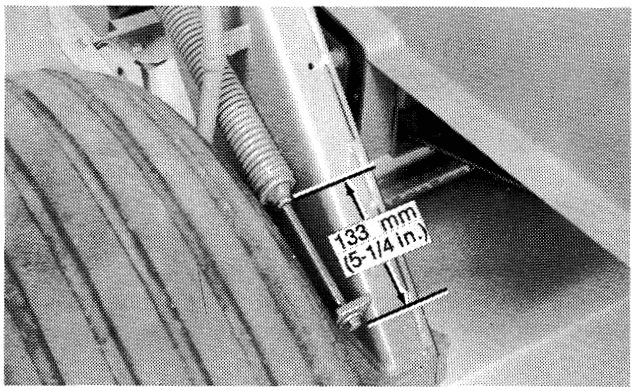
Adjust left-hand side by tightening screw into spring plug until 113 mm (4-7/16 in.) dimension is attained.



CC7679-545ACCE-281186

ADJUSTING PICK-UP FLOAT SPRING, LEFT-HAND SIDE (550)

Adjust left-hand side by tightening screw into spring plug until 133 mm (5-1/4 in.) dimension is attained.



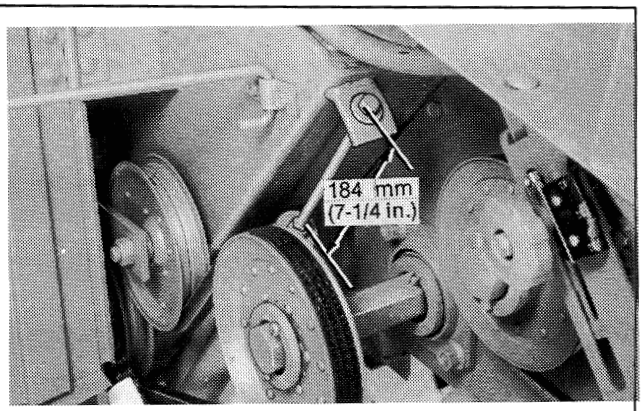
E21778-550ACCE-281186

ADJUSTING PICK-UP FLOAT SPRING, RIGHT-HAND SIDE

Adjust right-hand side by tightening screw into spring plug until 184 mm (7-1/4 in.) dimension is attained.

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

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



E21779-545ACCE-281186

ADJUSTING PICKUP BELT IDLER

IMPORTANT: The belt tensioner is designed to protect pickup components; overtightening reduces the protection. Check adjustment daily.

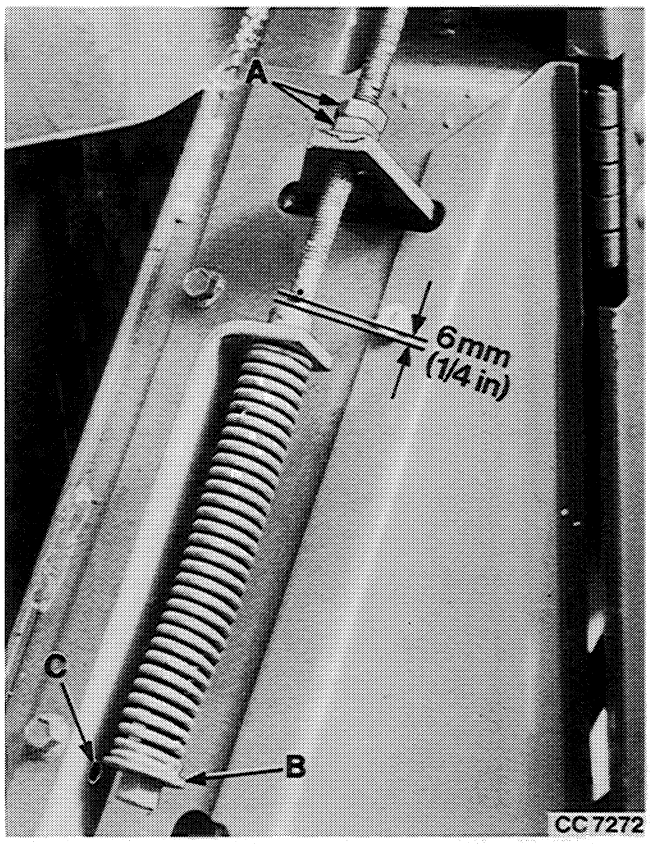
Before adjusting idler, engage PTO and observe washer (B) movement with respect to sight hole (C). If total movement is more than 2 to 3 mm (1/32 to 1/8 in.), there may be a burnt or thin spot in the belt. Inspect belt and replace if necessary.

To adjust pickup belt idler:

1. Loosen lock nuts (A).

2. Adjust spring to obtain a dimension of 6 mm (1/4 in.) as shown.

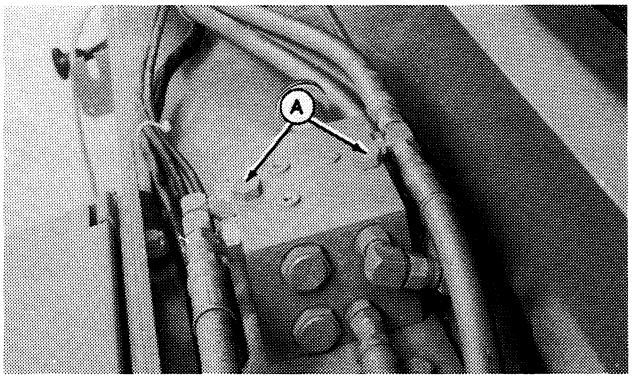
3. Tighten lock nuts (A).



CC7272-545ACCE-030285

INSTALLING ORIFICE IN TRACTORS WITH LOW HYDRAULIC FLOW (550)

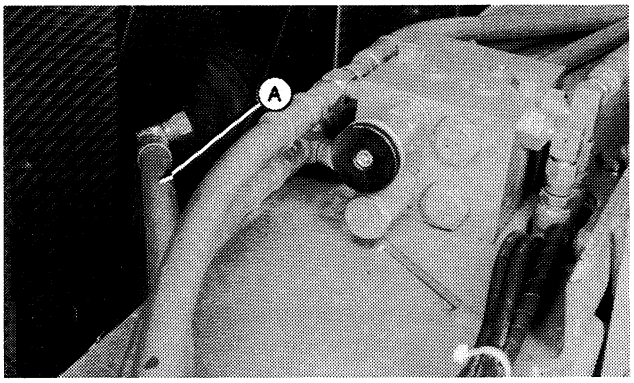
For tractors with hydraulic flow less than 25 l/min (6.5 gpm), the gate may close before the belt tension arm returns and twine mechanism relatches. To correct this situation, install orifice which is available through your JOHN DEERE dealer.
Remove nuts from cap screws (A). Bale density control valve can then be lifted for access to lower hydraulic fitting.



E21785-545ACCE-281186

NOTE: Shield removed for illustration purposes only.

Remove hose (A).



E21786-545ACCE-281186

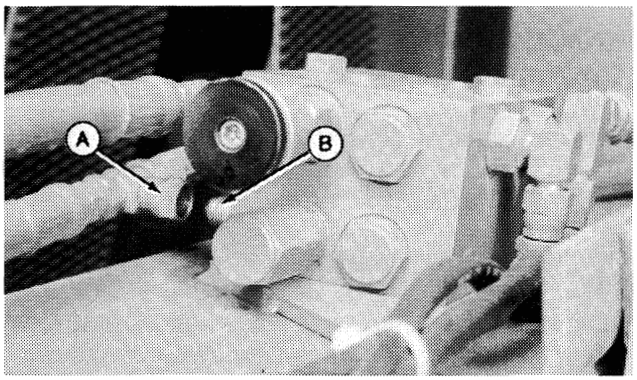
Disconnect bottom line (A) and remove fitting (B).

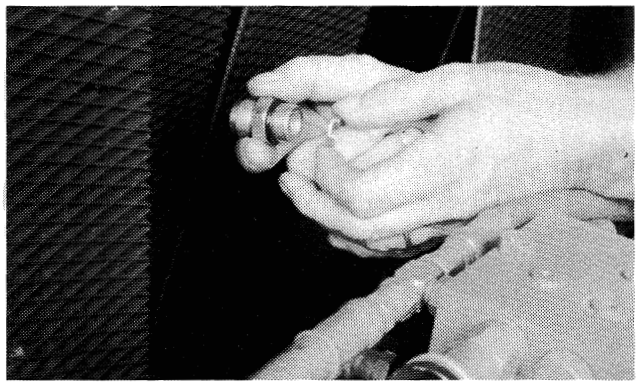
Install orifice in valve with smooth face towards fitting. Tighten fitting.

IMPORTANT: Be sure orifice is installed flush with valve. It must not be tilted.

Reinstall hydraulic line.

Reinstall two cap screws in bale density control valve.





E21787,E21788-545ACCE-281186

PRIMING TWINE HYDRAULIC PUMP

If the twine mechanism does not cycle after installing a new pump or adding a large quantity of oil, the pump has to be primed as follows.

NOTE: Check pump drive belt for wear and proper adjustment (see "Adjusting Pump Drive Idler" in this section).

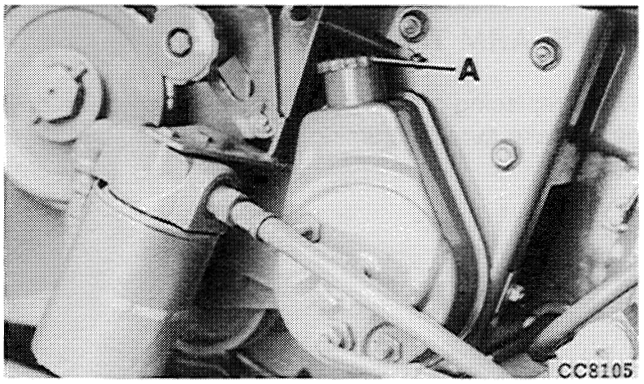
Open right-hand shield door and clean area around pump filler cap (A). Remove dipstick and check oil level.

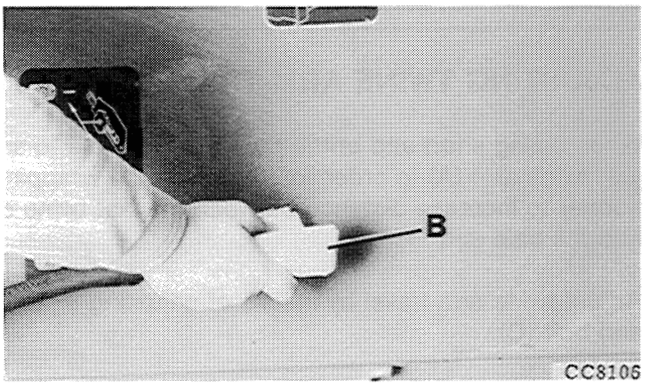
Fold a rag (B) until it is about 60 mm (2-3/8 in.) wide.

Wrap the rag tightly around the end of air hose.

Raise gate by means of tractor selective control valve lever until bale size indicator reads "6". Lock the gate.

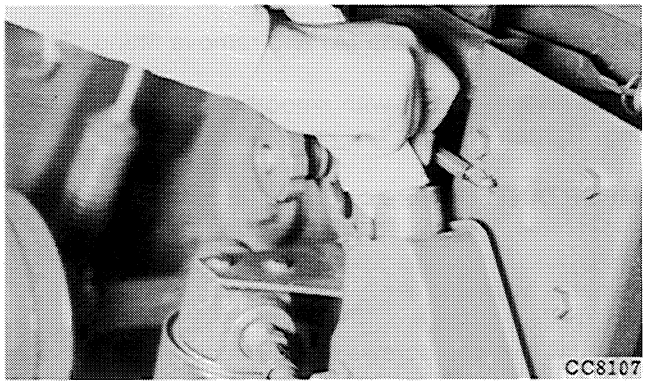
Lower belt tension arm by means of tractor selective control valve lever until bale size indicator reads "4".





CC8105,CC8106-545ACCE-281186

PRIMING TWINE HYDRAULIC PUMP (Continued)



With tractor transmission in neutral position and parking brake or parking lock engaged, engage PTO and run PTO at maximum rpm.

CAUTION: Stay clear of moving parts.

Remove pump filler cap and place end of hose with the rag on filler opening. Form a tight seal with the rag between filler neck and hose as shown.

Blow air into the reservoir for three or four seconds. The twine arm should start to move immediately. Let twine arm complete its normal cycle.

If twine arm doesn't move, tap pump with plastic mallet to unseat vanes in pump. Repeat, if necessary.

Unlock gate

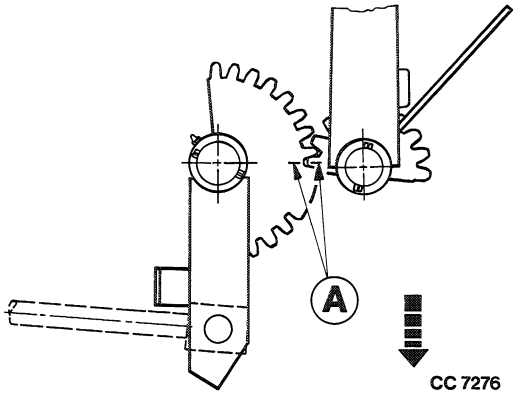
Disengage PTO.

Lower gate and shut off tractor engine.

CC8107-545ACCE-281186

TWINE ARM TIMING

When replacing or servicing the twine arm or its drive gear, make sure that timing marks (A) are lined up as shown.

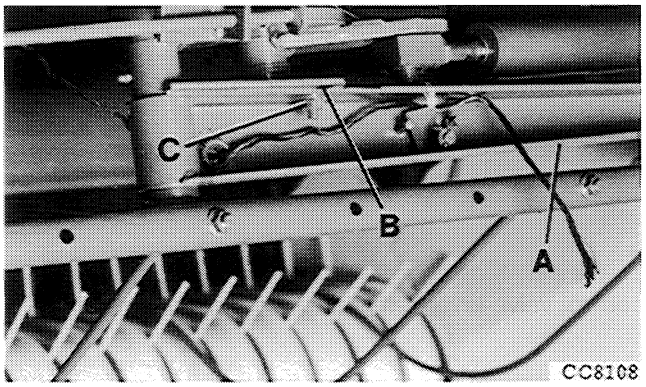


CC7276-545ACCE-030285

ADJUSTING TWINE ARM TRAVEL

When baling short and brittle crop it is possible to adjust twine arm (A) in order to stop the twine wrapping sooner to increase distance between the last twine coil and the bale end.

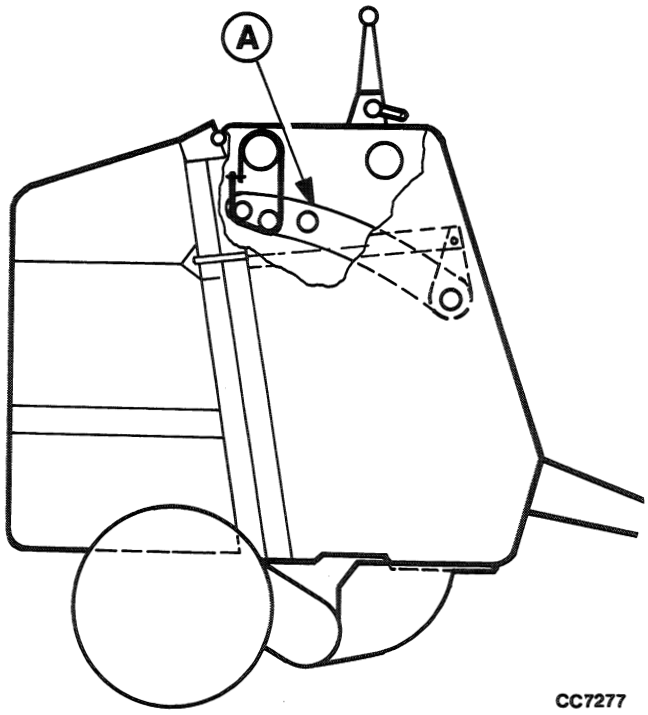
Adjust twine arm travel by means of adjusting slot (B) and bolt (C).



CC8108-545ACCE-281186

REMOVING THE BELTS

If all belts should be removed, secure belt tension arm (A) in upper position, as shown.



CC7277-545ACCE-030285

INSTALLING BELTS

On Baler 545

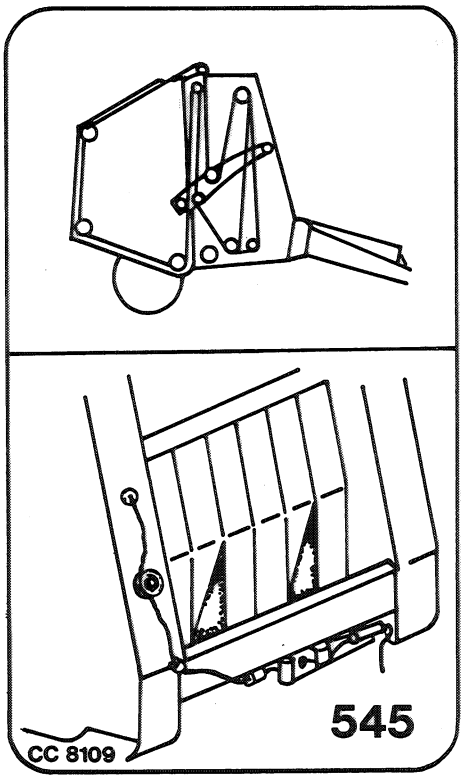
Slacken belts by raising belt tension arm with tractor selective control valve lever.

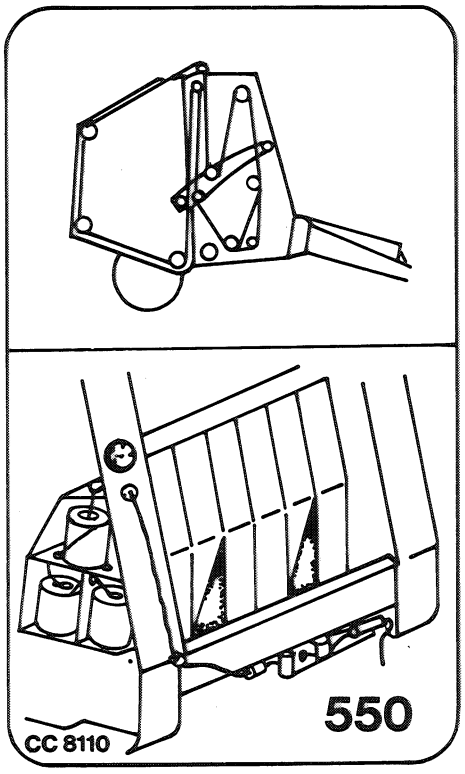
On Baler 550

Slacken belts by locking the gate in any position and raising the belt tension arm with tractor selective control valve lever.

On Both Balers

Attach belts with diamond portion of belt to the outside. Thread as shown in illustration, passing through the individual guides. See illustrations for location of long and short belts.

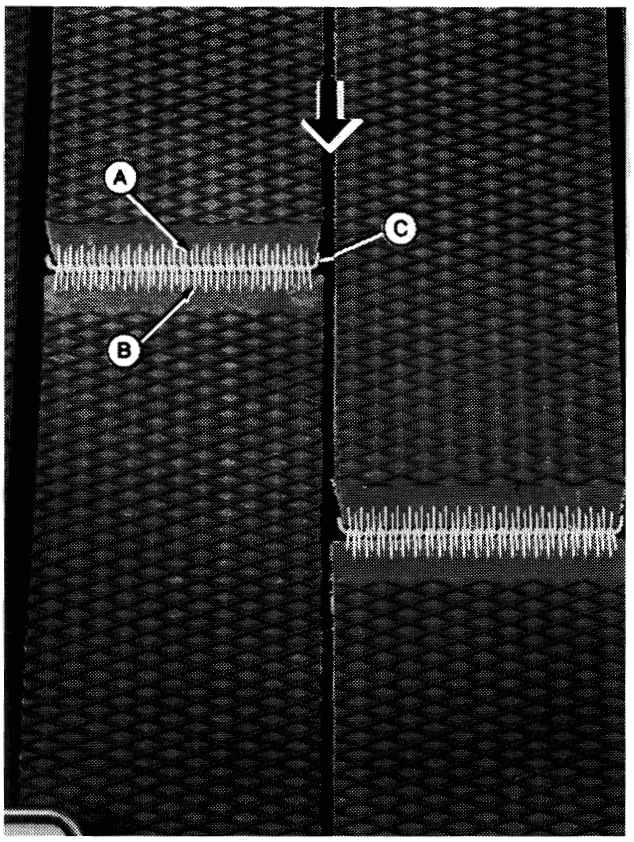




CC8109,CC8110-545ACCE-281186

Begin threading so that in the end and with belts travelling in direction shown, there will be 44 hooks in splice (A) and 45 hooks in splice (B). Insert pin and bend ends at 70 to 80 degrees angle pointing in an upward direction (C) against direction of travel (arrow).

IMPORTANT: If belts have been shortened or replaced, see "Adjusting Twine Trip Rod" in this section .



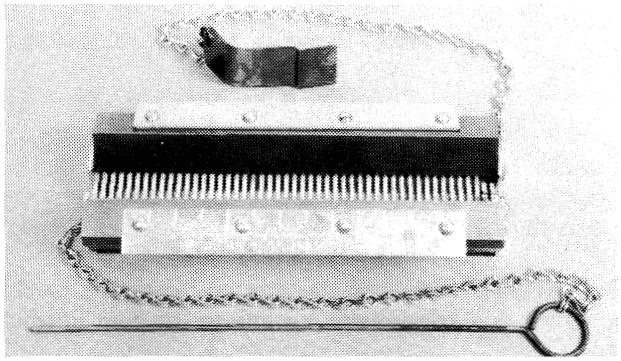
E21796-545ACCE-281186

REPAIRING BELTS

A belt lacing tool and hardware is available for repairing belts.

Belt slack may be obtained by locking the gate in any position and raising the belt tension arm by means of the tractor selective control valve lever.

NOTE: Belts may fray at the edges or cut. Trim the frayed cords as they appear, this reduces the chances of frayed cords being caught as the bale is formed, causing additional fraying or damage to the belts.



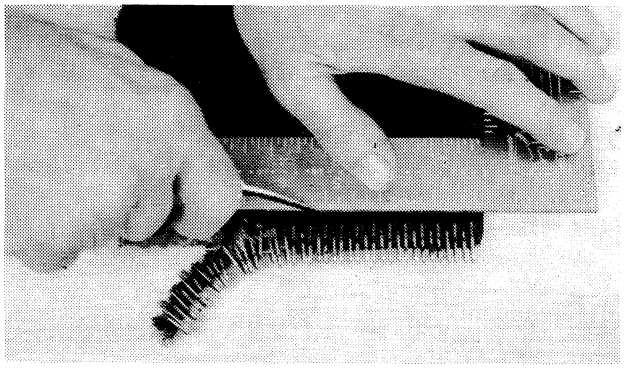
E21645-545ACCE-281186

REPAIRING BELTS (Continued)

Remove broken belt.

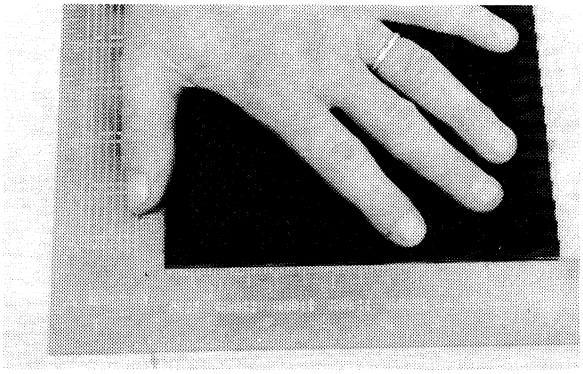
Using a square and a sharp knife, remove damaged area.

IMPORTANT: Belt length variation must not be more than 38 mm (1-1/2 in.).



E21797-545ACCE-281186

Recheck belt to make sure that it is cut squarely.

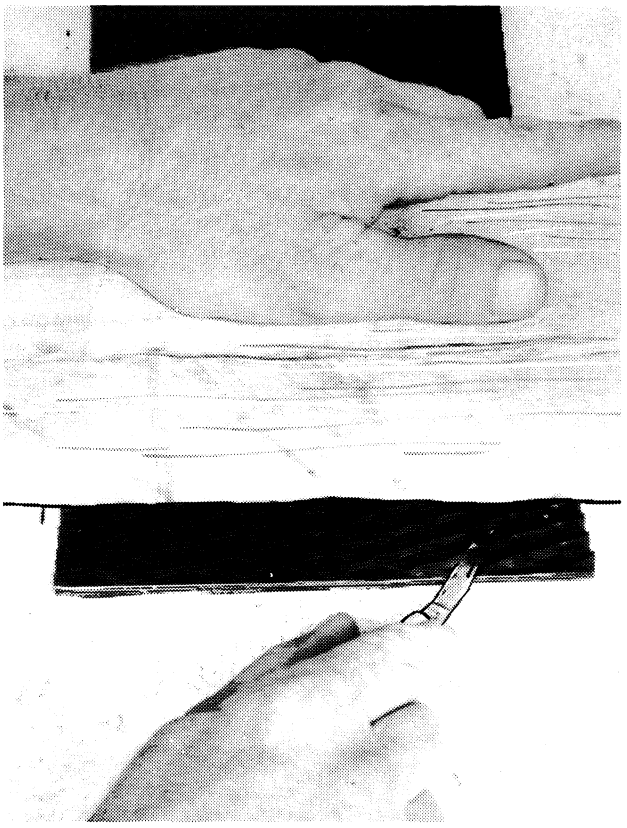


E21798-550ACCE-030285

Use a 25 to 51 mm (1 to 2 in.) thick board to hold belt as shown.

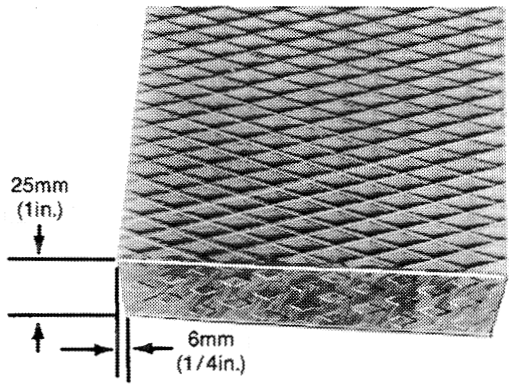
With a sharp knife, remove 25 mm (1 in.) of diamond pattern from end of belt, similar to that removed for original belt splice. To reduce cutting effort, dip knife blade in liquid soap.

IMPORTANT: Cut only the diamond pattern. Cutting deeper can damage the belt cords.



E21799-550ACCE-030285

Trim trailing end of belt only as shown in illustration.

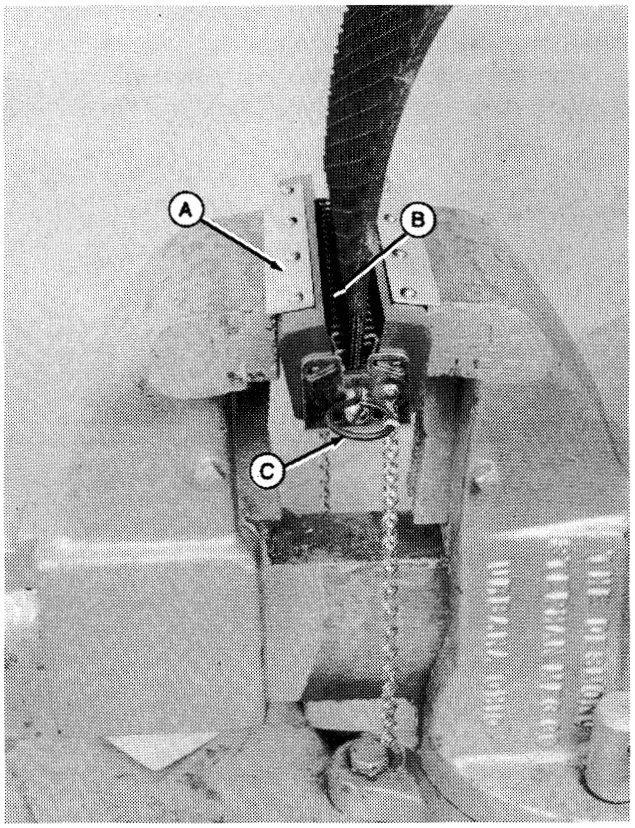


E22649-550ACCE-030285

IMPORTANT: If repair is needed on only one end of belt, count the hooks. There should be 44 hooks for trailing end of belt and 45 hooks for leading end of belt.

Place the belt lacing tool (A) in a vice, setting the determined amount of hooks (B) in center of the lacing tool, and inserting long pin (C) to hold hooks (B) in place.

Visually align belt so hooks (B) are centered in belt. Make sure full width of belt is in contact with bottom of lacer. Tighten vice forcing hooks through belt.

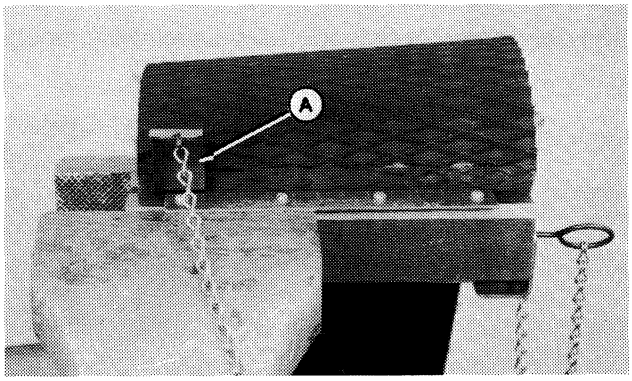


E21801-550ACCE-030285

REPAIRING BELTS (Continued)

IMPORTANT: To clinch hooks in the belt correctly and to ensure long splice life, use the following procedure.

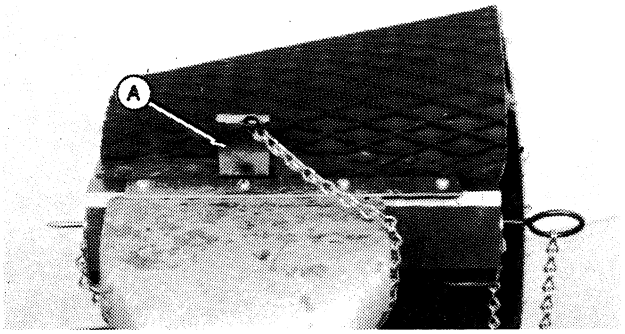
Starting at one end of belt, and keeping pressure plate (A) centered in vice, retighten vice to exert maximum pressure on approximately six hooks at a time.



E21802-545ACCE-281186

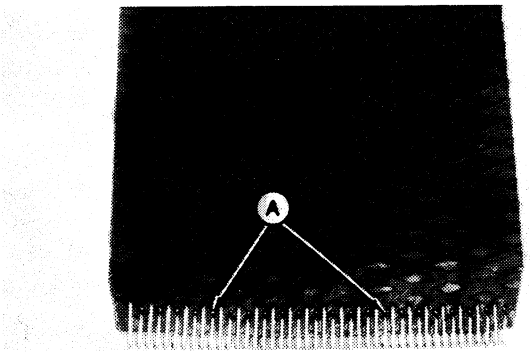
Always keeping pressure plate (A) centered in the vice, move belt and lacing tool over and retighten vice.

Repeat procedure until all hooks are clinched.



E21803-550ACCE-000285

When properly installed, the points (A) have come through the belt from the opposite side and are slightly clinched (see "Installing Belts" for proper installation).



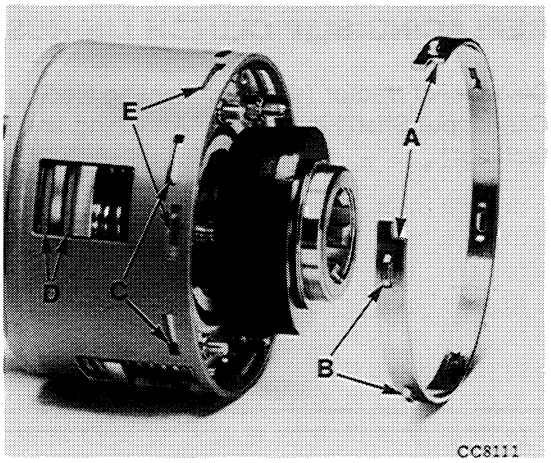
E21804-550ACCE-030285

CHECKING BELT PINS

Check pins for wear or damage after baling 2000 bales (1000 bales in sandy conditions).
Replace worn or damaged pins.

ENTRETOM-545CCCE-281186

ADJUSTING SLIP CLUTCH



Slip clutch is factory adjusted with notches (A) positioned towards outside of slip clutch (see illustration) and lugs (B) inserted into the second row of slots (C).

This adjustment permits the slip clutch to slip at a torque of 1150 Nm (848 ft-lb).

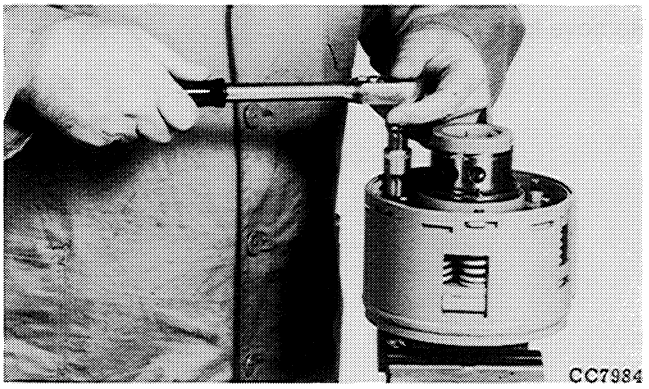
Thickness of the 4 linings (D) is 3 mm (0.12 in.) each, when new. Replace when only 2 mm (0.08 in.) thick.

After replacing linings reinstall setting ring in the position described above.

NOTE: If baler is equipped for 1000 rpm, lugs (B) must be inserted in the first row of slots (E).

CC8111-545ACCE-281186

CHECKING SLIP CLUTCH



Before first use and before beginning of every season check slip clutch as follows:

Disconnect powerline from gearcase input shaft (see "Connecting Hookup to Gearcase Input Shaft" in section "Attaching and Detaching").

Tighten the six nuts to relieve linings and setting ring.

Turn clutch completely to release linings.

Loosen the six nuts to the end of thread. Slip clutch is now ready for use.

CC7984-545ACCE-281186

REPLACING SLIP CLUTCH LININGS

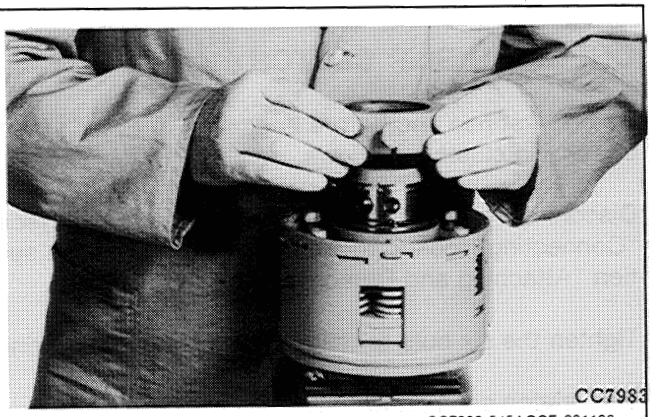
Disconnect tractor (see "Connecting Hookup to Gear Case Input Shaft" in section "Attaching and Detaching").

ENTRETOM-545DCCE-281186

Detach the retaining ring.

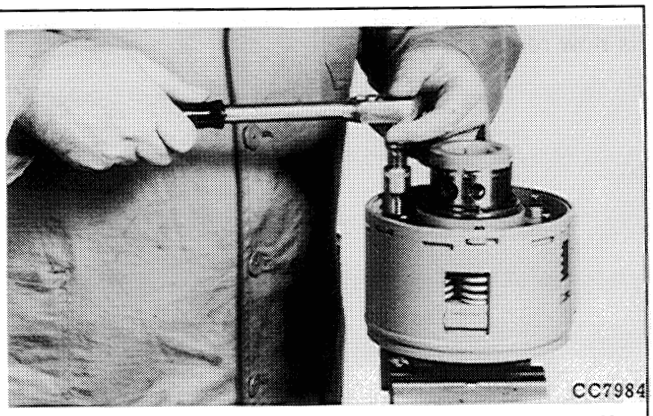
CC7982-545ACCE-281186

Remove lock ring and balls.



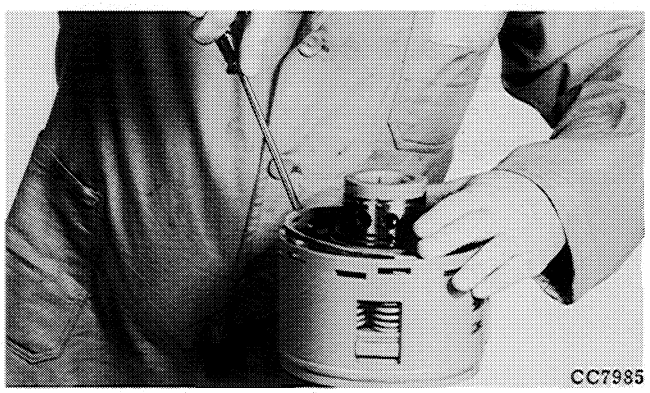
CC7983-545ACCE-281186

Tighten the six nuts to relieve spring tension.



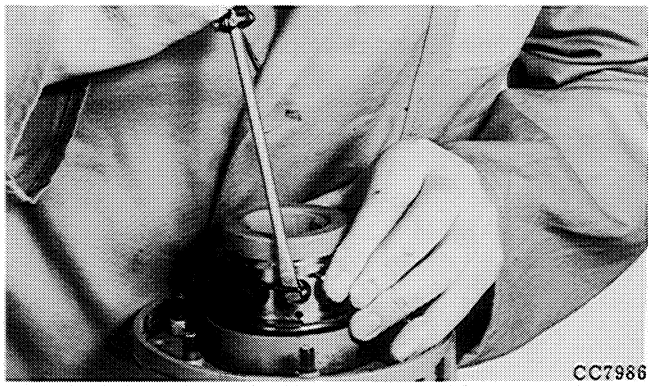
CC7984-545BCCE-281186

Remove the setting ring.



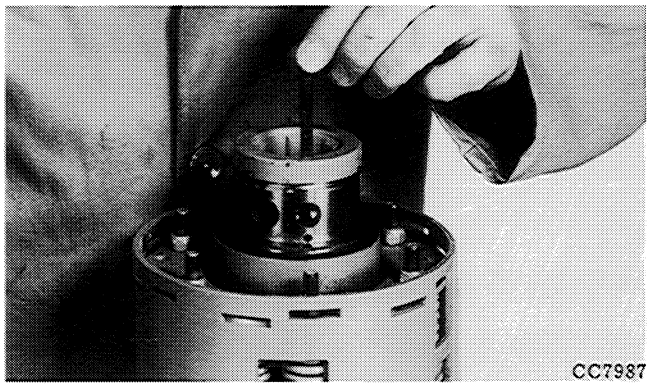
CC7985-545ACCE-281186

Remove the torsion spring.



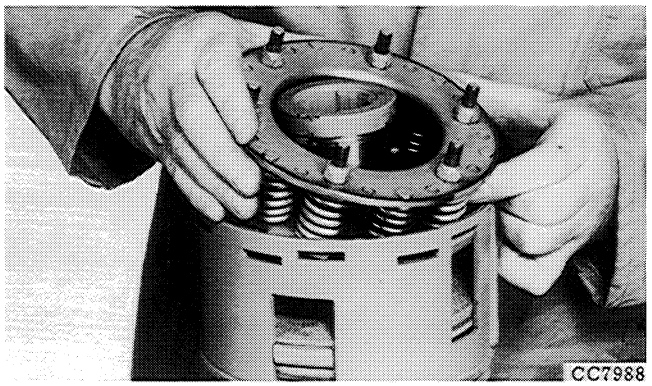
CC7986-545ACCE-281186

Remove the clamping key



CC7987-545ACCE-281186

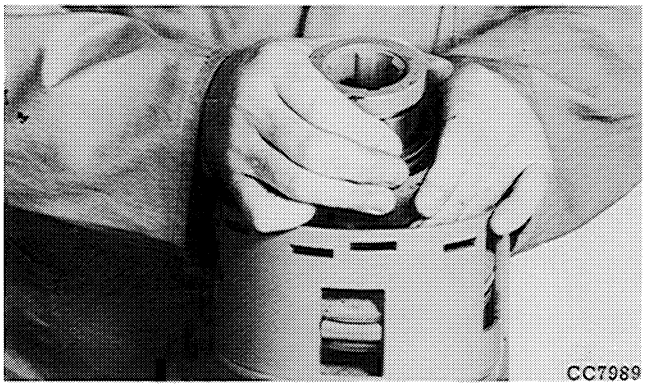
Take spring pack out of housing.



CC7988-545ACCE-281186

REPLACING SLIP CLUTCH LININGS (Continued)

Remove flange hub together with linings and drive plates.

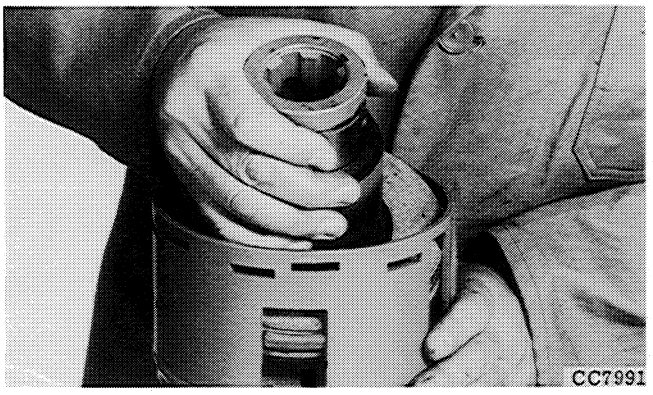


CC7989-545ACCE-281186

Install new linings and drive plates on flange hub in the correct sequence.

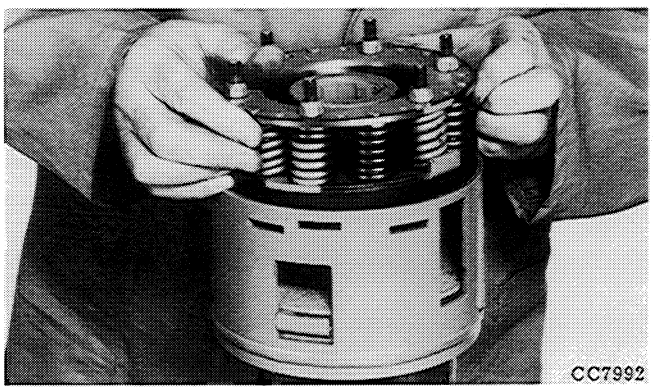
CC7990-545ACCE-281186

Insert flange hub with linings and drive plates into clutch housing.



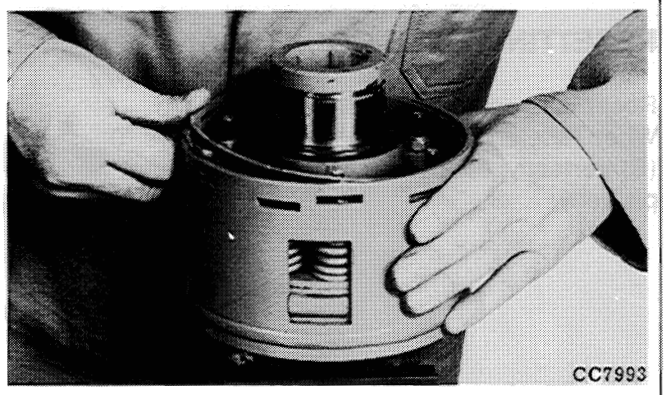
CC7991-545ACCE-281186

Insert spring pack into clutch housing.



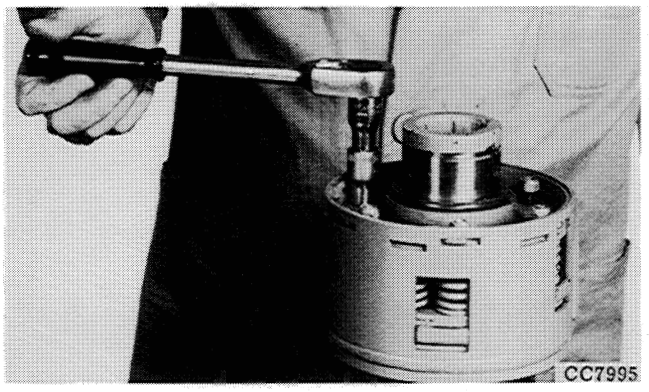
CC7992-545ACCE-281186

Reinstall setting ring in correct position (see "Adjusting Slip Clutch").



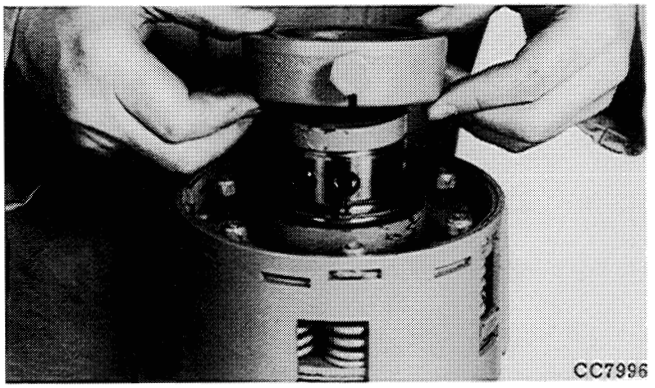
CC7993-545ACCE-281186

Retighten the six nuts.



CC7995-545ACCE-281186

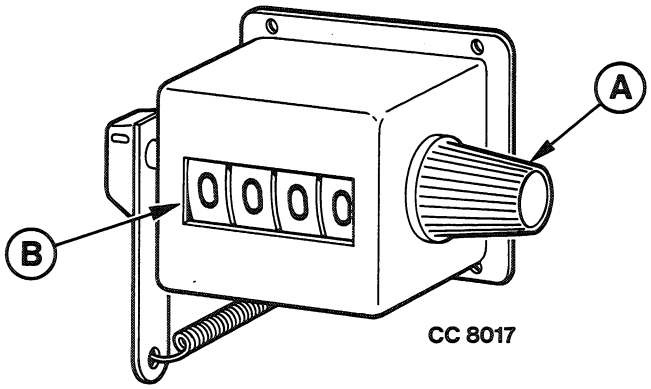
Reinstall clamping key, torsion spring, lock ring and balls and retaining ring



CC7996-545ACCE-281186

RESETTING BALE COUNTER

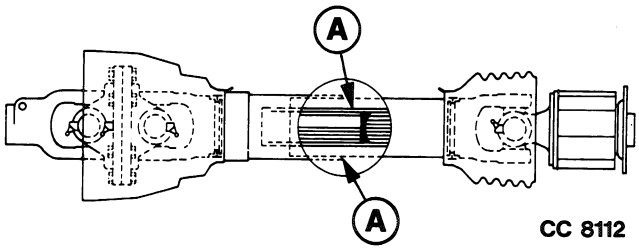
Reset bale counter by means of knob (A).
When resetting, take care to align cyphers "0" (B) perfectly, otherwise bale counter will not work properly.



CC 8017

CC8017-545ACCE-281186

STORING BALER AT THE END OF SEASON



CC 8112

Shelter baler in a dry place. If baler must be stored outside, belt life can be prolonged by covering or removing belts to protect from sunlight etc. Store belts in a cool dry place.

Clean baler thoroughly inside and out. Trash and dirt will draw moisture and cause rust.

NOTE: Should a high-pressure washer be used to clean the baler, do not direct pressurized water on the bearings.

Check that all idler rolls are working freely. If one of them is hard to rotate, remove it, clean bearing housing and replace bearing, if necessary.

Apply a few drops of oil to all pivot points and linkages.

Thoroughly lubricate baler (see "Lubrication Section").

Apply a thin layer of grease to threads of all adjusting bolts.

Grease guard tubes (A) at the beginning of the winter season to prevent freezing.

All parts from which the paint has been worn should be painted or coated with oil.

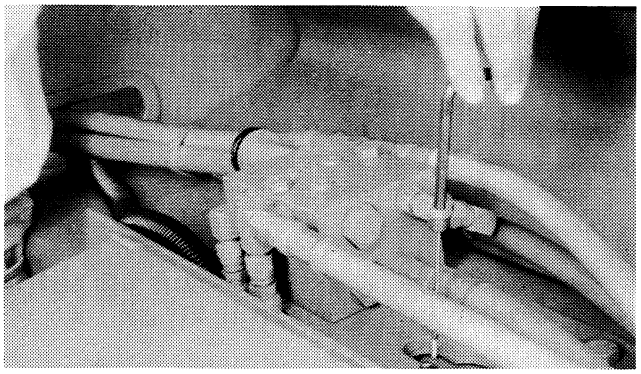
Clean all chains by washing them with diesel fuel. Dry thoroughly and coat with a heavy oil.

Block up baler, taking load off tires. Do NOT deflate tires. If exposed, cover tires to protect them from light, grease and oil.

List the replacement parts that will be needed and order them.

CC8112-545ACCE-281186

PREPARING FOR BEGINNING OF SEASON



Check and fill gear case to check plug level (see "Lubrication and Maintenance").

Replace twine system oil filter (see "Lubrication and Maintenance").

Remove the heavy oil from the chains and lubricate with 30W or heavier oil.

Lubricate complete machine (see "Lubrication Section"). This will force any collected moisture out of bearings.

Check tires for correct air pressure.

Tighten all bolts, nuts and set screws.

Check all belt splice pins for damage and replace as necessary.

Check adjustments of baler as described in "Service" section.

Review your operator's manual.

On 545 baler with sound alarm: Check for correct functioning of sound alarm. Adjust or replace switches as necessary.

On 550 baler and 545 baler equipped with monitor: Check oversize bale switch by locking gate and raising belt tension arm. Red light should come on and buzzer should sound. If not, refer to "Adjusting Oversize Bale Switch".

Remove converging wheel break-away springs and trip wheel. If wheel does not pivot freely by hand, remove wheel bracket from tube. Apply grease to pivoting surfaces and reassemble.

Check slip clutch adjustment (see "Checking Slip Clutch" in Service Section).

E21652-545ACCE-281186

TRACTOR ELECTRICAL HOOK-UP (545 with Sound Alarm)

The sound alarm is designed for use on 12-volt negative or positive ground electrical systems.

Determine whether your tractor is negative or positive ground and follow the instructions for that system.

MONTAGOM-545ACCE-281186

TRACTOR ELECTRICAL HOOK-UP (550 and 545 with Monitor)

The baler monitor is designed for use on 12-volt negative or positive ground electrical systems.

Determine whether your tractor is negative or positive ground and follow the instructions for that system.

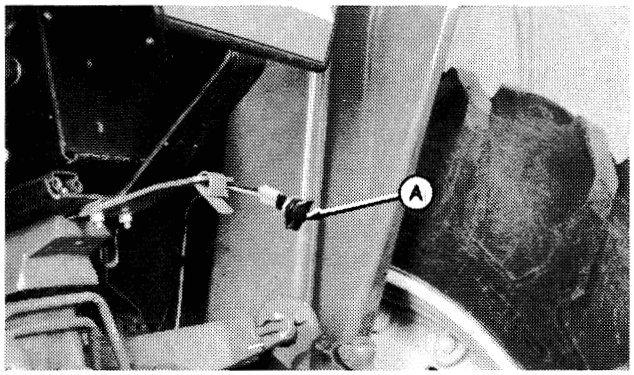
NOTE: If the connections are crossed, the lights will function, but not the bale shape gauges.

MONTAGOM-545BCCE-281186

INSTALL CONVENIENCE OUTLET ON NEGATIVE GROUND TRACTORS WITHOUT SOUND-GARD BODIES

Install socket (A) in convenient location.

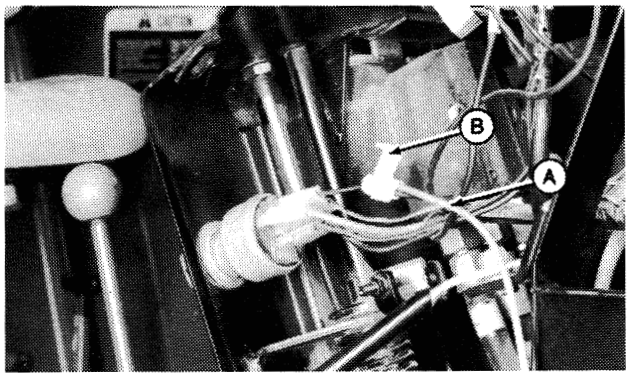
NOTE: Route cables away from tires, lift links, and other pinch points. Avoid all sharp edges. Secure cables with tie straps provided.



E21694-550ACCE-030285

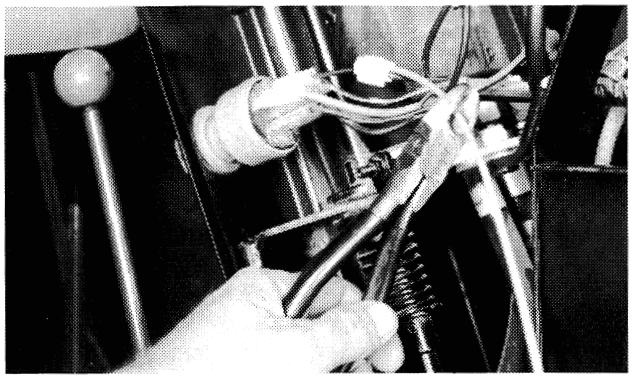
CAUTION: To avoid injury from a spark or short circuit, DISCONNECT GROUND STRAP FROM BATTERY when working on any part of the electrical system.

Locate a switch-controlled terminal. Cut red wire (A) to length and splice to a "live" wire from terminal using connector (B).



E21695-545ACCE-281186

Cut red wire approximately 10 cm (4 in.) from terminal and strip the end. Strip end of cut wire connected to convenience outlet.

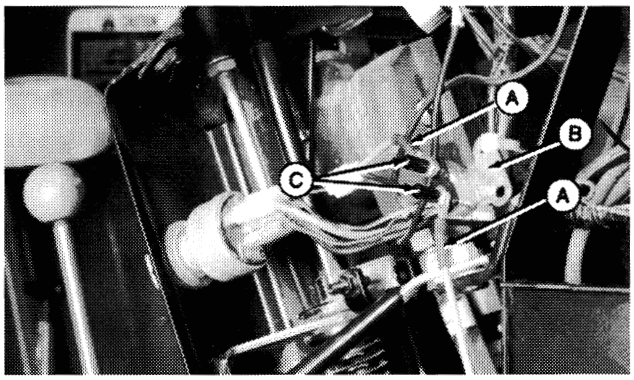


E21696-550ACCE-030285

Slip insulating sleeves (A) and eyelets over stripped wires. Crimp eyelets to wires and cover crimp with insulating sleeves (A).

Connect wires to circuit breaker (B) using two M 10 nuts on each post clamping eyelet between nuts.

Wrap circuit breaker posts with electrical tape (C) to prevent shorting and secure circuit breaker using tie strap.

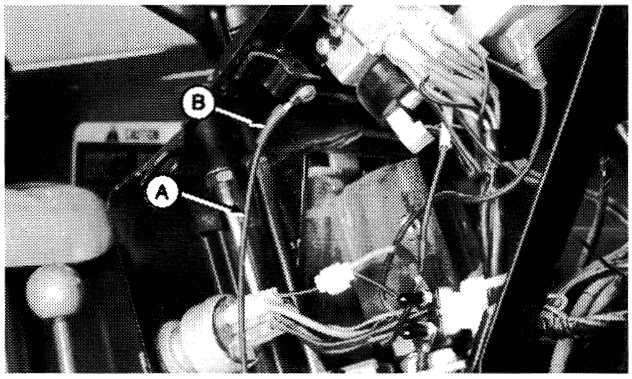


E21697-550ACCE-000285

Locate a ground screw and cut black wire to reach this location. Strip end of wire.

Slip insulating sleeve (B) and eyelet over stripped end of black wire (A). Crimp eyelet to wire and cover crimp with insulating sleeve (B).

Connect eyelet to ground screw.

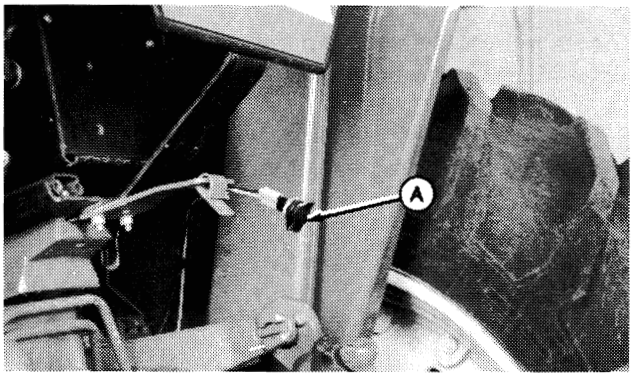


E21698-550ACCE-030285

INSTALL CONVENIENCE OUTLET ON POSITIVE GROUND TRACTORS WITHOUT SOUND-GARD BODIES

Install socket (A) in convenient location.

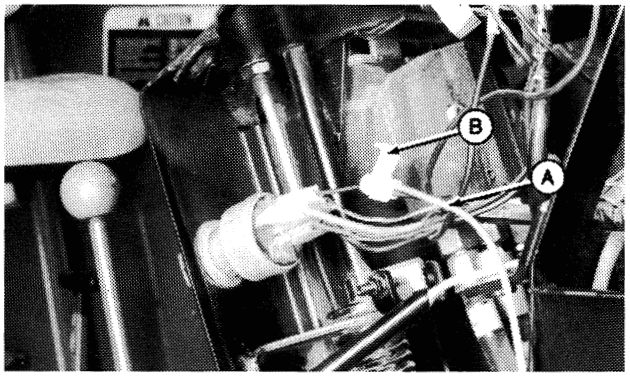
NOTE: Route cables away from tires, lift links, and other pinch points. Avoid all sharp edges. Secure cables with tie straps provided.



E21694-550BCCE-030285

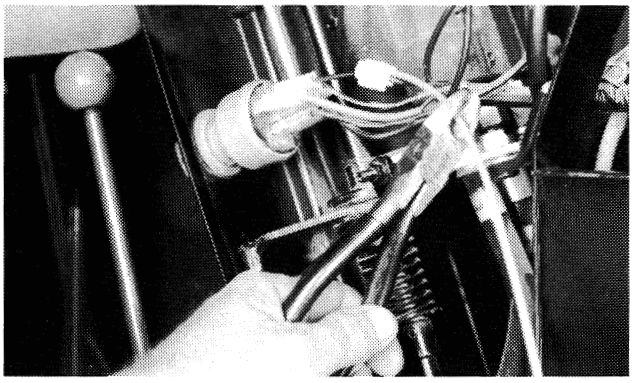
CAUTION: To avoid injury from a spark or short circuit, DISCONNECT GROUND STRAP FROM BATTERY when working on any part of the electrical system.

Locate a switch-controlled terminal. Cut black wire (A) to length and splice to a "hot" wire from terminal using connector (B).



E21695-550BCCE-030285

Cut black wire approx. 10 cm (4 in.) from terminal and strip the end. Strip end of cut wire connected to convenience outlet.

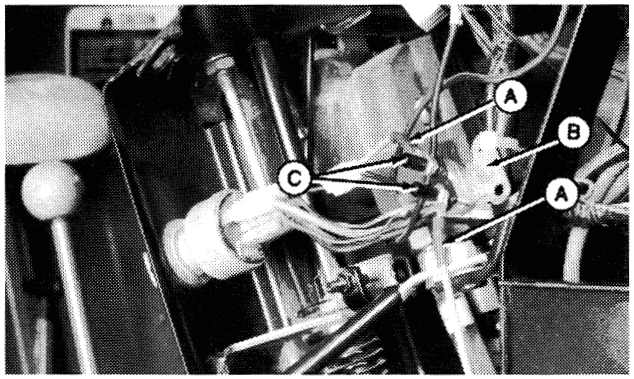


E21696-550BCCE-030285

Slip insulating sleeves (A) and eyelets over stripped wires. Crimp eyelets to wires and cover crimp with insulating sleeves (A).

Connect wires to circuit breaker (B) using two M 10 nuts on each post clamping eyelet between nuts.

Wrap circuit breaker posts with electrical tape (C) to prevent shorting and secure circuit breaker using tie strap.

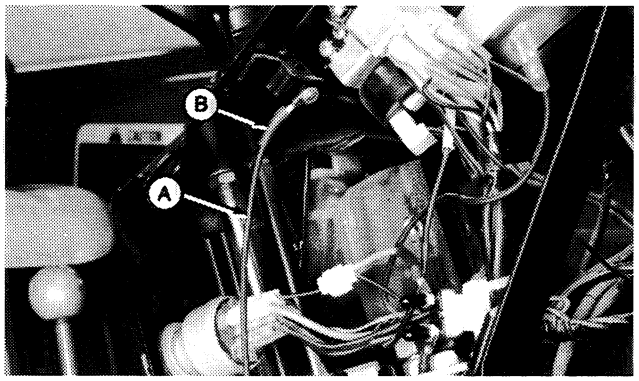


E21697-550BCCE-000285

Locate a ground screw and cut red wire to reach this location. Strip end of wire.

Slip insulating sleeve (B) and eyelet over stripped end of red wire (A). Crimp eyelet to wire and cover crimp with insulating sleeve (B).

Connect eyelet to ground screw.

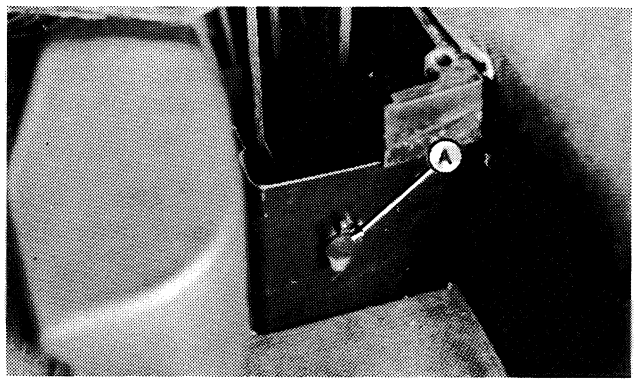


E21698-550BCCE-030285

INSTALL CONVENIENCE OUTLET ON TRACTORS WITH SOUND-GARD BODIES

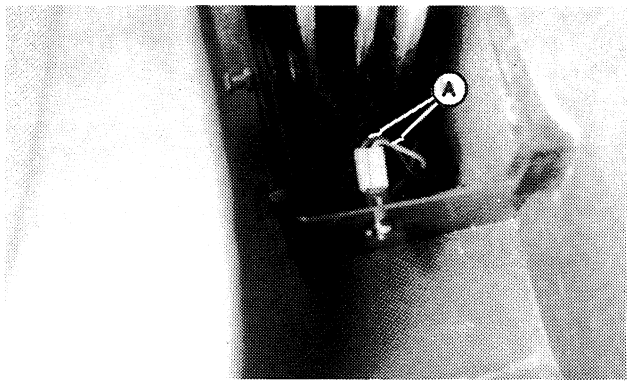
Remove top of control console at the right-hand side of the operator. Move all control levers to their rear positions.

Locate socket so it will not interfere with the control levers. Drill a 19 mm (3/4 in.) hole in the panel and install socket (A). Secure with nut.



E21699-550ACCE-030285

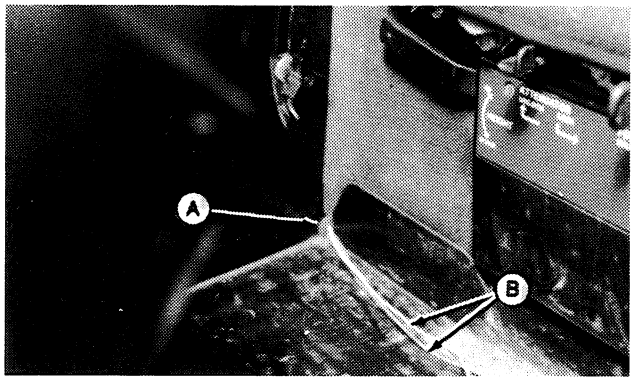
Connect wires (A) to socket. Route wires (A) to the floor level of console, avoiding all moving parts and pinch points.



E21700-550ACCE-030285

Drill a 14 mm (9/16 in.) hole in console at floor level and install grommet (A).

Route wires (B) through the hole and under the floor mat to the left cowl.

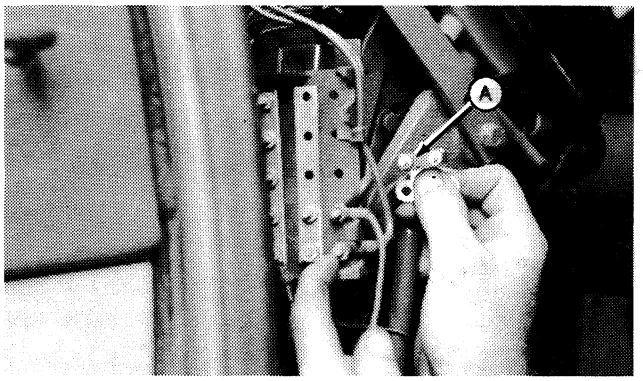


E21701-550ACCE-030285

CAUTION: To avoid injury from a spark or short circuit, DISCONNECT BATTERY GROUND STRAP.

Remove the left cowl and plate covering the tractor electrical center.

Connect circuit breaker (A) to the right-hand switch-controlled terminal strip. Secure with nuts.



E21702-550ACCE-030285

Route red wire (positive) (A) to circuit breaker and cut to length. Strip end of wire.

Slip insulating sleeve (B) and eyelet over stripped wire. Crimp eyelet to wire and cover crimp with insulating sleeve (B).

Connect red wire (A) to circuit breaker using one M 10 nut.

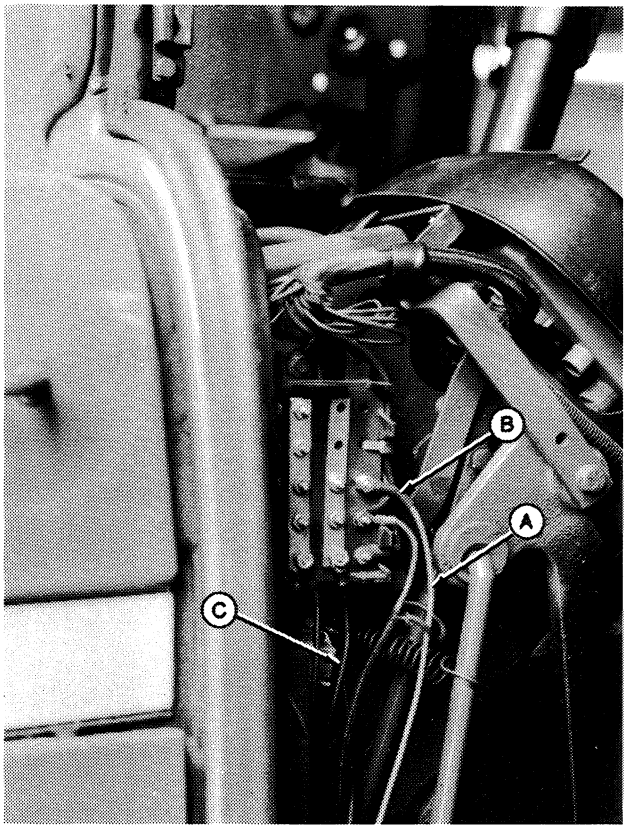
Route black wire (negative) (C) to any convenient ground bolt or screw. Cut to length and strip end.

Slip insulating sleeve and eyelet over the stripped wire (C). Crimp eyelet to wire and cover with insulating sleeve (B).

Connect to ground bolt or screw.

Reinstall electrical center cover and left-hand cowl.

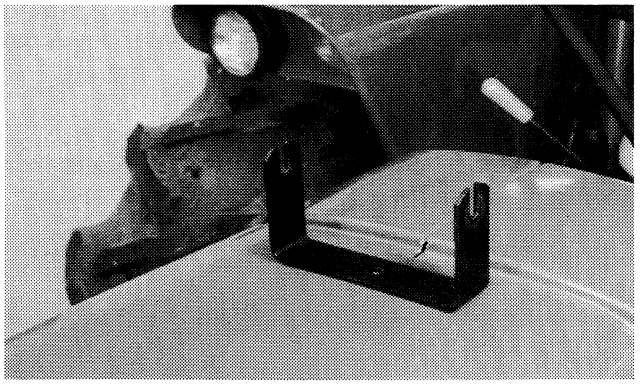
Reinstall top of control console.



E21703-550ACCE-000285

INSTALL MONITOR CONSOLE

NOTE: If the tractor is not equipped with a cab or SOUND GARD body, install monitor bracket on cowling, fender, or any convenient area. Be sure to check mounting hardware clearance before drilling.

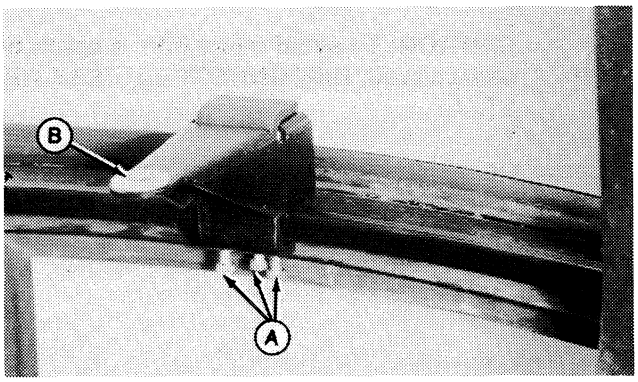


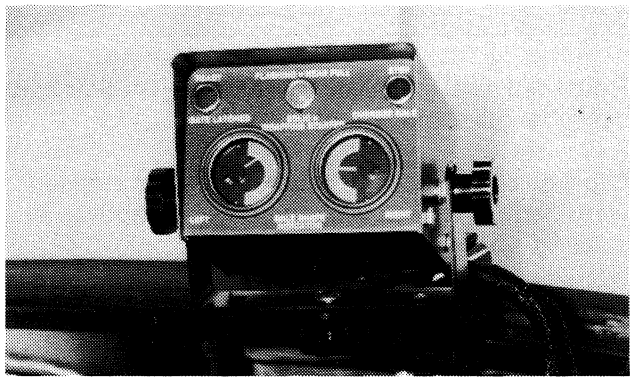
E21704-550ACCE-281186

NOTE: On tractors with cab: assemble mounting brackets and secure to window ledge with three cap screws (A).

Place washer (B) over hole.

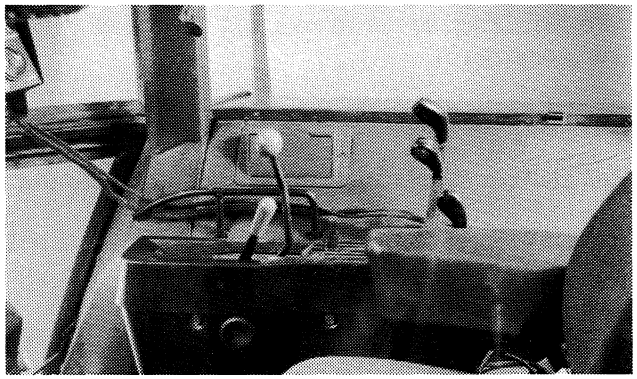
Secure console to bracket.





E21705,E21706-545ACCE-281186

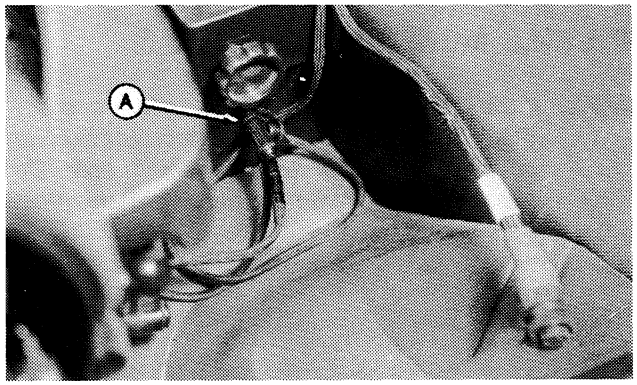
Route monitor wiring harness along the side of cab away from operating levers back to the right-hand rear corner of cab.



E21707-550ACCE-281186

Connect monitor wiring harness to convenience outlet (A).

Drill 38 mm (1-1/2 in.) hole through the cab in a convenient location and insert grommet. Route harness through grommet.



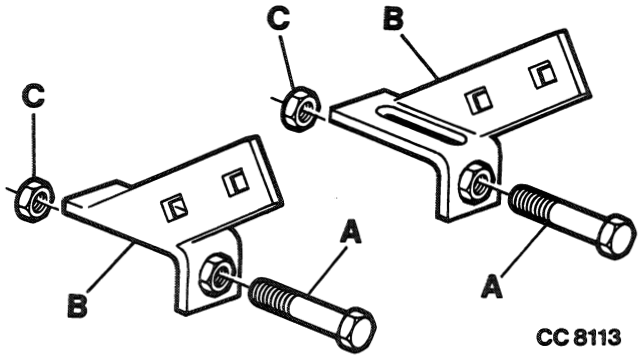
E21708-550ACCE-281186

INSTALLING SILAGE EQUIPMENT

Install two M 10 x 80 stop bolts (A) on both scraper supports (B), using two M 10 nuts (C).

Do not tighten the stop bolts at this stage.

A–Stop bolts
B–Scraper supports
C–M 10 nuts

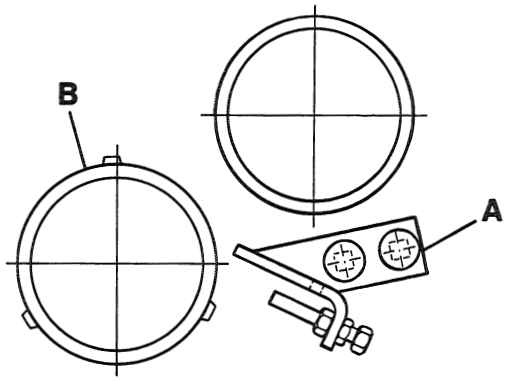


CC 8113

CC8113-545ACCE-281186

Install scraper supports (A) on each side of the baler in front of starter roll (B) (see "Numbering System for Baler Rolls" in Service Section for location of starter roll).

Use four M 12 x 25 bolts and four M 12 lock nuts to install scraper supports.



CC 8114

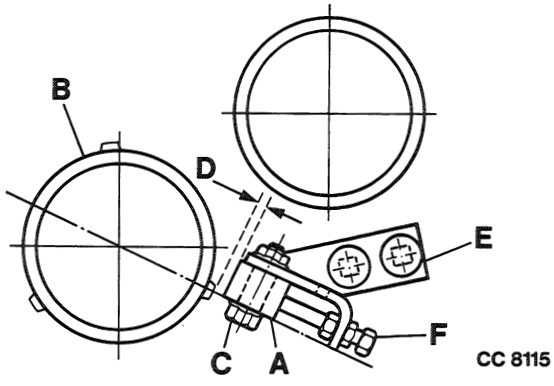
CC8114-545ACCE-281186

Install scraper bar (A) on supports (E) by means of two M 12 x 50 cap screws and two M 12 flange nuts. Slightly tighten screws (C).

Position scraper bar (A) as close as possible to starter roll (B), leaving enough clearance (D) to avoid any contact between scraper bar and roll. Adjust clearance (D) by means of adjusting screws (C). Having obtained correct adjustment, tighten screws (C).

With scraper bar in correct position, tighten attaching screws (F).

A–Scraper bar
B–Starter roll
C–Adjusting screw
D–Clearance
E–Support
F–Attaching screw

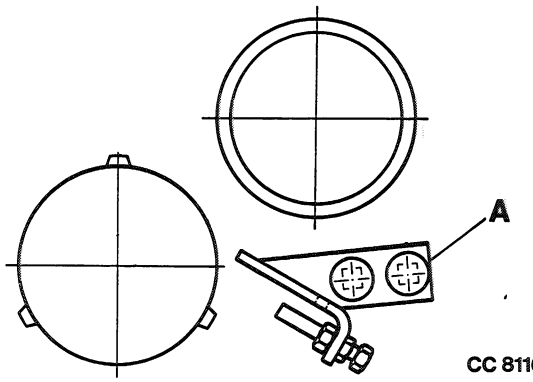


CC 8115

CC8115-545ACCE-281186

NOTE: When removing scraper bar before baling dry crops, do not remove scraper supports (A). This will ensure that scraper supports are still in proper position when reinstalling scraper bar.

IMPORTANT: Remove scraper bar before baling dry crops such as hay or straw.



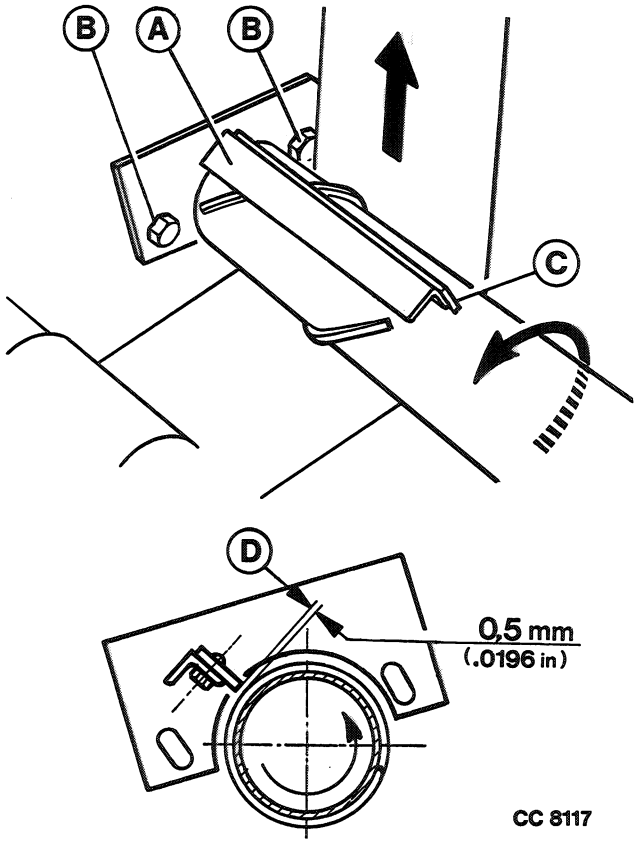
CC8116-545ACCE-281186

Install right and left-hand scraper brackets (A) with adjustable scrapers (C) on roll no. 13 (see "Numbering System for Baler Rolls" in Service Section for location of roll no. 13). Replace four existing M 12 x 30 cap screws used to retain roll supports by four M 12 x 35 cap screws (B) supplied with the bundle. Reuse existing M 12 nuts.

Adjust scrapers and scraper brackets so as to obtain 0.5 mm (0.02 in.) clearance (D) between edge of scraper and top of spiral.

Tighten all hardware firmly.

NOTE: Brackets (A) and scrapers (C) can be left on the machine when baling dry crops.



CC8117-545ACCE-281186

IMPORTANT: When baling silage, the bearings will suffer from crop accumulations and the corrosive action of crop juices. It is recommended to check idler rolls for free rotation when starting to bale again.

If a roll does not rotate freely, remove it, clean and check bearings.

MONTAGOM-545CCCE-281186

INSTALLING TORSION BAR (545)

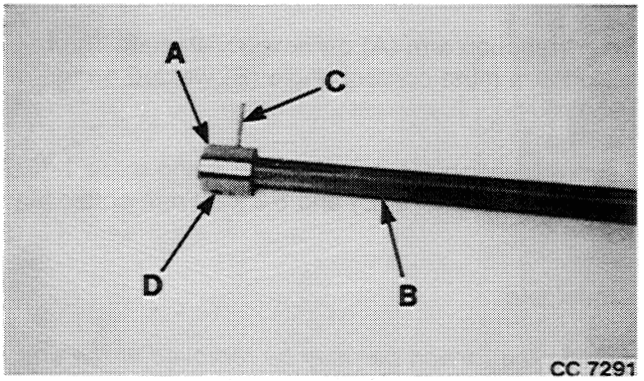
Install torsion bar attachment on 545 baler when baling very wet silage crop and non-cylindrical bales are formed.

MONTAGOM-545DCCE-281186

Position bushing (A) on end of hex. shaft (B) having two 8 mm (5/16 in.) diameter holes.

Align the 8 mm (5/16 in.) holes on hex. shaft with those of bushing and secure bushing (A) to shaft (B) with 8 x 50 mm spring pin (C).

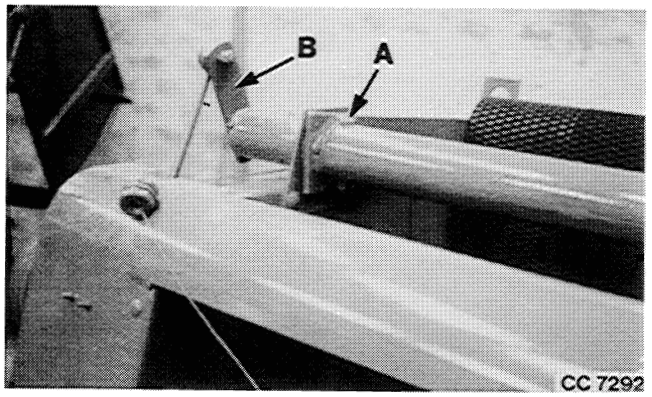
The 16 mm (5/8 in.) holes (D) on the bushing must be positioned as illustrated.



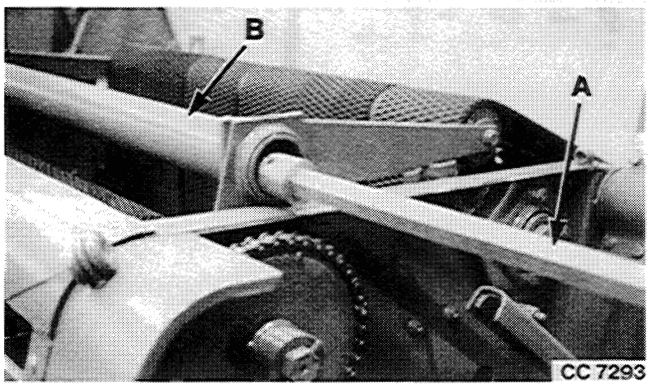
CC7291-545ACCE-281186

Close gate and slacken upper arm tension spring completely.

Remove bolt (A) but do not discard. Remove arm (B).



Install shaft (A) with bushing first in left-hand hole of tube (B).



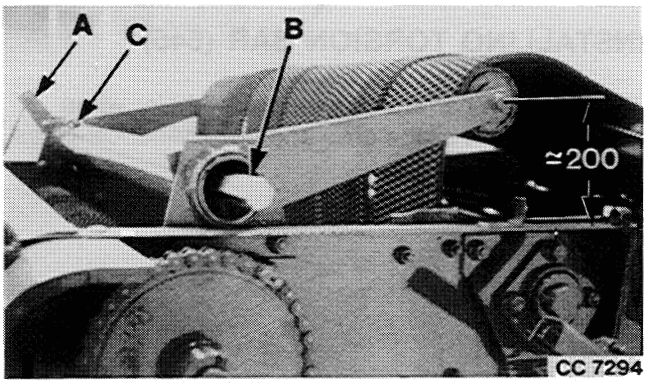
CC7292,CC7293-545ACCE-281186

INSTALLING TORSION BAR (545, Contd.)

Connect arm (A) to shaft (B), using bolt (C) removed previously.

Retension upper arm tension spring. See "Adjusting Upper Arm Spring (545)".

Open gate until a distance of approximately 200 mm (7-7/8 in.) is obtained as illustrated.



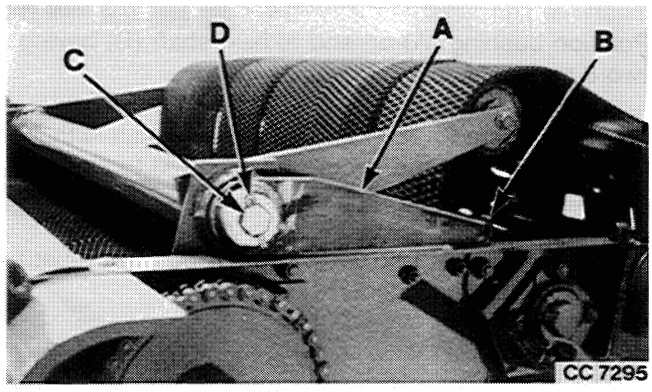
CC7294-545ACCE-281186

Install reaction arm (A) on hexagonal shaft. The reaction arm must contact angle (B) welded on top of side panel.

Secure reaction arm to hex. shaft using three 1-13/32 x 2 x 0.06 in. washers (C) and 6.3 x 50 mm cotter pin (D).

Close gate.

NOTE: The torsion bar may be removed at the end of the silage baling season.



CC7295-545ACCE-281186

Specifications

545 BALER

SIZE OF BALES	
Diameter	0.90 to 1.30 m (35 to 51 in.)
Width	1.17 m (46 in.)
BALER	
Weight	1500 kg (3307 lb)
Length, gate closed	3.62 m (143 in.)
Length, gate open	4.52 m (178 in.)
Height, gate closed	2.40 m (94 in.)
Height, gate open	2.88 m (113 in.)
Width	2.31 m (91 in.)
PICKUP	
Width (inside)	1.17 m (46 in.)
Width (on flare)	1.41 m (55.5 in.)
Width (between outer teeth)	1.12 m (44 in.)
Tooth bars	4
Number of teeth	72
Tooth spacing	66 mm (2.5 in.)
Stripper diameter	255 mm (10 in.)
FORMING BELTS	
Number of belts	6
Type	3-ply fabric, diamond tread
Width	178 mm (7 in.)
Length	10.23 m (402.75 in.) (2 belts) 10.42 m (410.25 in.) (4 belts)
TWINE WRAP	
Control	Automatic to preset bale size
Type	Hydraulic, self-contained
Spacing	Adjustable

Specifications and design are subject to change without notice

SPECIFOM-545ACCE-281186

545 BALER (Continued)

BALE FORMATION CONTROLS	
Bale shape indicators	Mechanical, electrical indicators (optional)
Near-full bale indicator	Flashing yellow light (optional)
Auto-wrap indicator	Mechanical, yellow light (optional), sound alarm (optional)
Oversize bale protection	Sound alarm (optional), red light with sound alarm (optional)
Gate closed	Sound alarm (optional), green light (optional)
MISCELLANEOUS	
PTO shaft speed	540 or 1000 rpm
Drive protection	Slip clutch
Powerline	Constant velocity powerline
Recommended tractor power	35 kW (47 hp) at PTO
Tire size	10.00/75 x 15.3 (6 PR)
Tongue	Reversible
ATTACHMENTS FOR SPECIAL CROPS	Flax attachment, silage attachment

Specifications and design are subject to change without notice

550 BALER

SIZE OF BALES	
Diameter	1.00 to 1.83 m (39 to 72 in.)
Width	1.17 m (46 in.)
BALER	
Weight	1773 kg (3940 lb)
Length, gate closed	3.71 m (146 in.)
Length, gate open	4.75 m (187 in.)
Height, gate closed	2.90 m (114 in.)
Height, gate open	3.64 m (143 in.)
Width	2.45 m (96 in.)
PICKUP	
Width (inside)	1.17 m (46 in.)
Width (on flare)	1.41 m (55.5 in.)
Width (between outer teeth)	1.12 m (44 in.)
Tooth bars	4
Number of teeth	72
Tooth spacing	66 mm (2.5 in.)
Stripper diameter	255 mm (10 in.)
FORMING BELTS	
Number of belts	6
Type	3-ply fabric, diamond tread
Width	178 mm (7 in.)
Length	13.33 m (525 in.) (2 belts) 13.49 m (531 in.) (4 belts)
TWINE WRAP	
Control	Automatic to preset bale size
Type	Hydraulic, self-contained
Spacing	Adjustable

Specifications and design are subject to change without notice

SPECIFOM-545CCCE-281186

550 BALER (Continued)

BALE FORMATION CONTROLS	
Bale shape indicators	Electrical indicators
Near-full bale indicator	Flashing yellow light
Auto-wrap indicator	Yellow light
Oversize bale protection	Red light with sound alarm
Gate closed	Green light
MISCELLANEOUS	
PTO shaft speed	540 or 1000 rpm
Drive protection	Slip clutch
Powerline	Constant velocity powerline
Recommended tractor power	37 kW (50 hp) at PTO
Tire size	10.00/75 x 15.3 (6 PR)
Tongue	Reversible
ATTACHMENTS FOR SPECIAL CROPS	Flax attachment, silage attachment

Specifications and design are subject to change without notice

Serial Number

The letters and figures on the serial number plate are required for warranty claims and when ordering spare parts. For this reason, please record this serial number in the space provided.

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John Deere Service keeps you on the job

JOHN DEERE PARTS

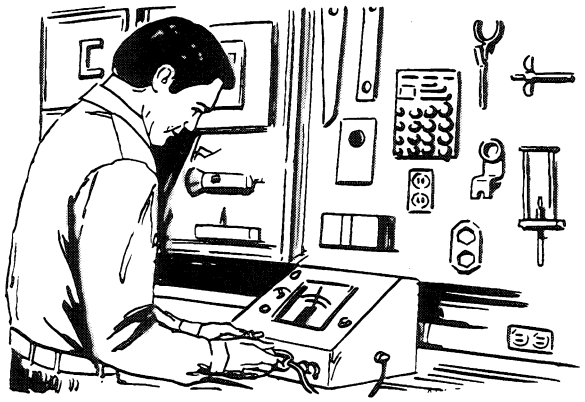
We help minimize downtime by putting the right parts in your hands in a hurry.

That's why we maintain a large and varied inventory – to stay a jump ahead of your needs.

TS100-ESPDAE-180286

THE RIGHT TOOLS

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly .... to save you time and money.



TS101-ESPDAE-180286

WELL-TRAINED TECHNICIANS

School is never out for JOHN DEERE service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result?
Experience you can count on!

TS102-ESPDAE-180286

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We can make repairs at your place or at ours, depending on the circumstances.
See us. Depend on us.

JOHN DERE Service Superiority: We'll be around when you need us.

TS103-ESPDAE-180286