

1, 2, 3, AND 4-ROW ROW-CROPS



JOHN DEERE

OPERATORS MANUAL

1, 2, 3, AND
4-ROW ROW-CROPS

OME73455 H4 English

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Introduction



This safety alert symbol identifies 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.



The Four-Row Row-Crop is primarily of metric design.

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

Most Four-Row Row-Crop hardware is metric. Specified metric hardware must be used for replacement.



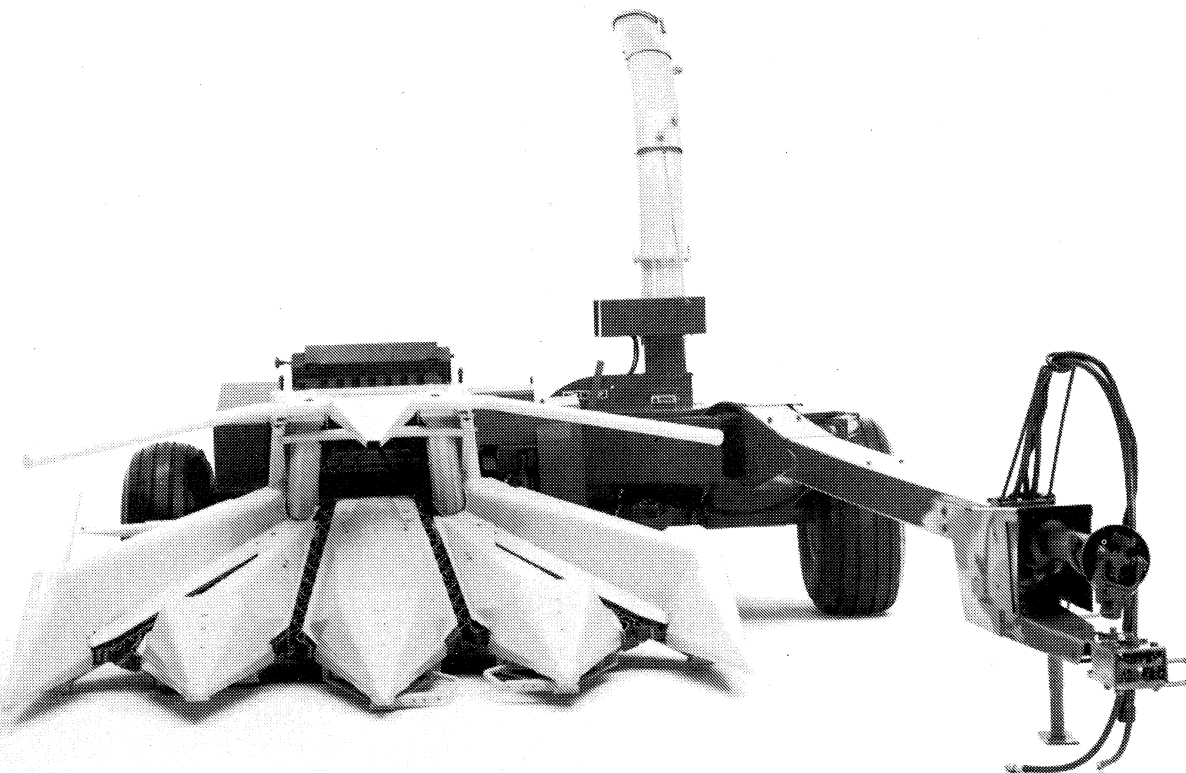
CAUTION: Use only metric tools. Other tools may not fit properly. They may slip and cause injury.

The One, Two and Three-Row Row-Crop is primarily of English design.

“Right-hand” and “left-hand” sides are determined by facing in the direction the row-crop will travel when in use.

Your warranty appears on your copy of the purchase order copy which you should have received from your dealer.

Record your row-crop model and serial numbers on page 77.



Row-Crops

PREDELIVERY CHECK LIST

After the row-crop has been completely assembled and lubricated, inspect it thoroughly to be certain it is in good running order before delivering it to the customer. The following check list is a reminder of points to inspect. Check off each item as it is found satisfactory or after proper adjustment has been made. Consult the row-crop operator's manual for proper adjustments.

- ☐ All shields open and close freely.
- ☐ Row-crop has been properly assembled.
- ☐ (Three-Row) Multi-luber hoses and connections have been checked for leaks.
- ☐ (Four-Row) Grease hoses and connections have been checked for leaks.
- ☐ Nuts on all bolts have been tightened.
- ☐ All grease fittings have been lubricated.
- ☐ (Four-Row) Gear case has been properly filled. (See Lubrication and Maintenance)
- ☐ Knife assemblies adjusted properly. (See Service Section)
- ☐ Gatherer points have been adjusted. (See Assembly Section)
- ☐ Shipping brackets removed.
- ☐ Slip clutch has been checked for proper adjustment. (See Service Section)
- ☐ All moving parts are working freely.
- ☐ Gatherer chains have been adjusted properly. (See Service Section)
- ☐ (One, Two or Three-Row) Proper axle extensions are installed. (See Attachment Section)
- ☐ Row-crop has been cleaned and touched up wherever paint is nicked or scratched.
- ☐ Mounting brackets have not been bent in transit.
- ☐ (Four-Row) Upper crop divider has been adjusted to normal operating position (See Service Section)
- ☐ This row-crop has been tested and, to the best of my knowledge, is ready for delivery to the customer.

(Date Set Up)

(Signature)

0A6; E03;;4RRCU A 300484

OWNER REGISTER

Name.

Rural Route No.

City State Zip

Serial No.

Operator's Manual No. OM-E73455

Date Sold

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E25;IFC 120684

DELIVERY CHECK LIST

Items in the Delivery Check list should be performed when delivering the row-crop to the customer. Customer satisfaction will be further insured if the items in the "After Sales Check List" are performed as listed.

- ☐ Discuss proper harvesting management practices required for good silage.
- ☐ Give operator's manual to customer and fully explain all operating adjustments.
- ☐ Advise the customer of the proper weights and fluids that must be used in the tires, depending upon forage harvester.
- ☐ Advise the customer of the importance of regular lubrication at scheduled intervals and point out all lubrication points.
- ☐ Advise the customer of safety precautions that must be observed while using the row-crop.
- ☐ Invite the customer to come in and discuss any problems that may be encountered while operating the row-crop.
- ☐ Advise the customer to record the serial number.

(Date Delivered)

(Signature)

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AFTER-SALE CHECK LIST

It is suggested that the following items be checked sometime during the first season's operation.

- ☐ Go over entire machine for loose or missing nuts and bolts.
- ☐ Inspect the knives to be sure they are sharp, have proper clearance, and register is properly adjusted.
- ☐ All chains are properly adjusted.
- ☐ All safety shields are in place and fastened securely.
- ☐ Check for broken or damaged parts.
- ☐ If possible, run the row-crop to see if it is functioning properly.
- ☐ Check for worn gatherer chains and guides.
- ☐ Check with the customer as to the performance of the row-crop thus far. Make sure the customer understands the best methods of row-crop operation.
- ☐ Review the entire operator's manual with the customer and **stress the importance of proper and regular lubrication and safety precautions.**

(Date Checked)

(Signature)

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Safety

OBSERVE SAFETY SIGNS AND MESSAGES



CAUTION: This message is used for general reminders of good safety practices or to direct attention to unsafe practices. This 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.

IMPORTANT: 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.



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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.

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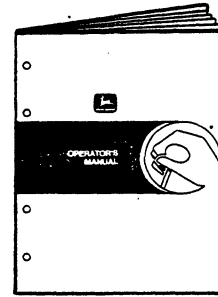
DO NOT MODIFY MACHINE

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

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BEFORE OPERATING

1. Read operator's manual, machine decals, and SAFETY section of this manual.
2. Remove foreign objects from machine.
3. All shields must be in place and secure.
4. Become familiar with all controls affecting machine functions.



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PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noise.

A—Earmuffs
B—Earplugs

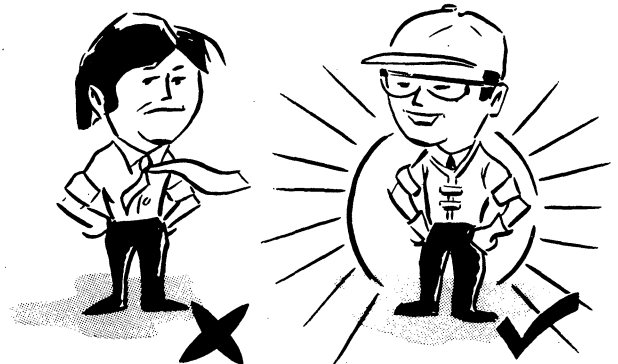


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OPERATE SAFELY

Keep all shields in place when operating machine. Wear relatively tight and belted clothing to prevent catching on some machine parts. Never clean, lubricate or adjust row-crop when it is running. Stand clear of gatherer chains and oscillating knives. DO NOT hand feed material into row-crop.

Always operate machine at rated speed. Drive slowly over rough ground.



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

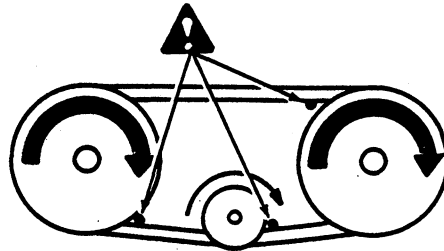
1. Disengage drives and shut off engine before attempting to unplug the harvesting unit or machine. The feed rolls can feed crop material faster than you can release your grip on the material.
2. Never use your hands or feet to feed crop into the forage harvester, with or without a harvesting unit.
3. This harvesting unit is intended for mobile field operation only. Never use or modify machine to be used in a stationary operation.

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AVOID CONTACT WITH MOVING PARTS

Keep hands, feet and clothing away from power-driven parts.

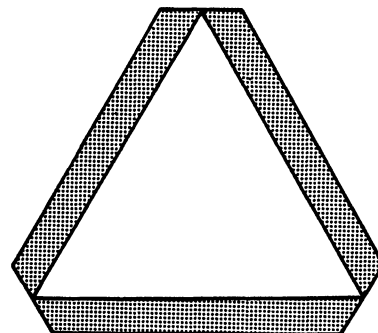
Never clean, lubricate or adjust the machine when it is running.



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DRIVING ON PUBLIC ROADS

When transporting the row-crop, raise the unit to the highest position to prevent damage. When transporting the equipment on a road or highway at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. In this regard, check local governmental regulations. Various safety devices are available from your John Deere dealer.



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GOVERNMENTAL REGULATIONS

In some areas, additional equipment may be needed when operating your row-crop on public roads. See your John Deere dealer for these requirements.

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SERVICE ROW-CROPS SAFELY

Before servicing, adjusting or removing material from the row-crops:

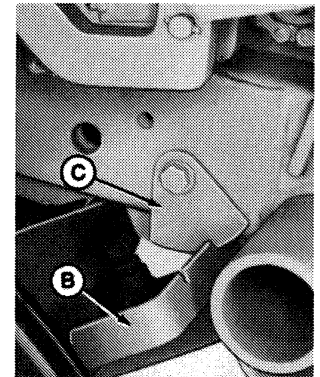
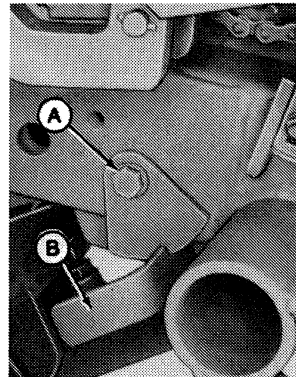
1. Disengage all power.
2. Shut off engine.
3. THEN WAIT until all moving parts have stopped moving.

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Always place lift cylinder stop in locked (A) position when transporting machine or working under the machine.

Before operating machine, be sure lift cylinder stop is in the unlocked (C) position. Raise harvesting unit to extreme upper position before moving handle (B) to unlocked position.

When machine is unattended or not in use, ALWAYS lower the harvesting unit to the ground or engage lift cylinder stop.



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On machines with ROW-TRAK™ Guidance, avoid being knocked down or crushed by unexpected movement of machine.

Be sure ELECTRICAL POWER is OFF before servicing or unplugging.

If a stalk, leg, hand or other objects contact the ROW-TRAK sensor when power is on, the machine will move.

Be especially careful in the area between the row-crop and tongue.

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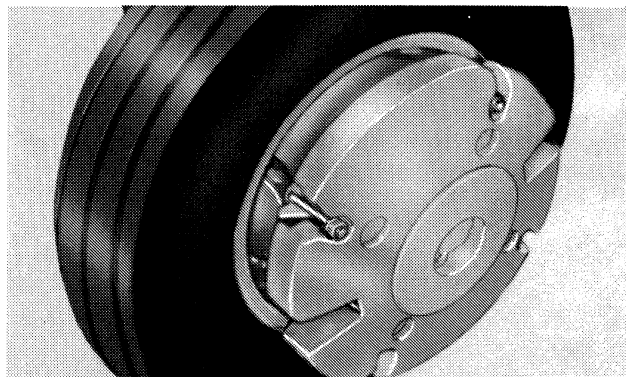
Attaching and Detaching

STEERING WHEEL BALLAST AND SUITCASE BALLAST WEIGHTS (SELF-PROPELLED FORAGE HARVESTERS)

Rear wheel weights are required to help stabilize the harvester by equalizing weight distribution when attaching row-crop to harvester.

Wheel weights and fluids add a total of approximately 1500 lbs (680 kg) to the rear wheels of the harvester.

Use the weight code with the description below to determine weight requirements for your particular need.



Rear Wheel Requirement

WEIGHT CODE				
Code	Description	Harvester	Without Power 11.00-16,6 Ply Tire Weight Code	With Power 11.2-24,4 Ply Tire Weight Code
1	No weights or fluids required	5200	3 and 4	4
2	Inside wheel weights and outside wheel weights - 560 lbs (254 kg)	5400	2 and 4	1
3	Inside wheel weights, outside wheel weights and auxiliary wheel weights - 900 lbs (408 kg)	5440	3, 4 and 5	4 and 5
4	Calcium chloride in tires - 600 lbs (272 kg)	5460	2 and 4	1
5	Suitcase weights - 600 lbs (272 kg)	5720*		
		5820*		

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SELECTING DRIVE SPROCKET

Use correct drive sprocket for your harvester and row-crop.

Harvester	4-Row Dr. Sprocket RC80	2 or 3-Row Dr. Sprocket RC60
5200-5400	28-Tooth 21-Tooth (Optional)	35-Tooth
5440-5460	21-Tooth 19-Tooth (Optional)	28-Tooth
4720-5720-5820	16-Tooth 14-Tooth (Optional)	21-Tooth
3940-3960-3950-3970	NA	17-Tooth 21-Tooth (Optional)

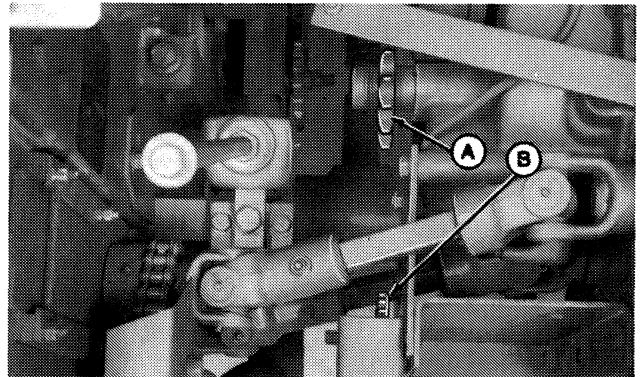
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INSTALLING DRIVE SPROCKET AND IDLER (SELF-PROPELLED FORAGE HARVESTERS)

Install drive sprocket (A) and idler (B). Leave idler loose.

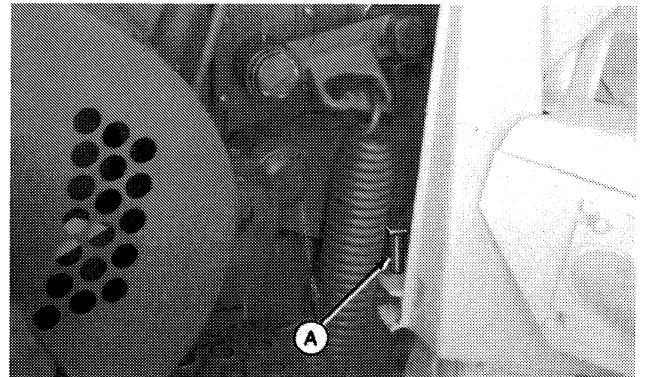
NOTE: If you have an older harvester that is not equipped with a chain cover over the idler, obtain one through your John Deere dealer.



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ATTACHING ROW-CROP TO HARVESTER (SELF-PROPELLED FORAGE HARVESTERS)

1. Move the harvester height control lever (to raise or lower the cutterhead) until the lower attaching points align with the lower attaching clips on the row-crop. Secure on both sides with a rectangular, tapered pin (A). Right-hand side shown in picture.

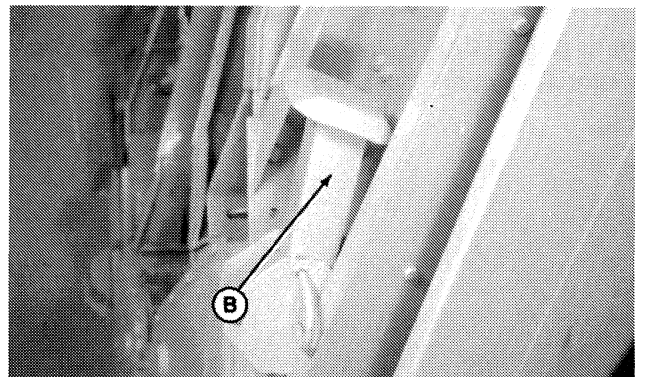


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2. Raise row-crop slightly, and secure support stands in the transport position (B).



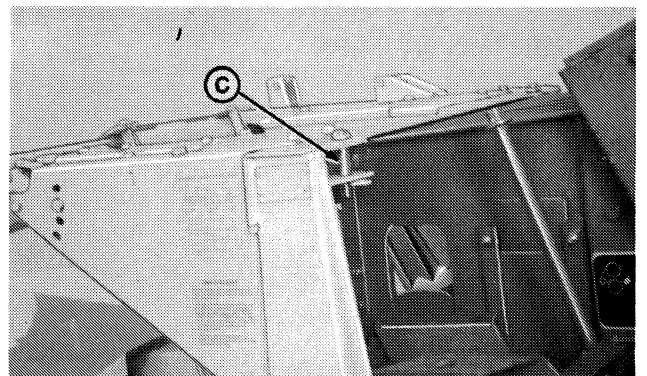
CAUTION: Be sure pins are seated and stands are secure.



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3. Move the height control lever until the two upper attaching points are seated in the clips. Secure with a round drilled pin (C) and a locking pin on both sides. Raise row-crop off the ground and remove float spring lockout pins.

IMPORTANT: Before removing row-crop, always place lift springs in the lockout position.



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4. Remove slip clutch shield (D). Loop the row-crop drive chain (E) around the sprocket (F). The chain must go over the idler (G).

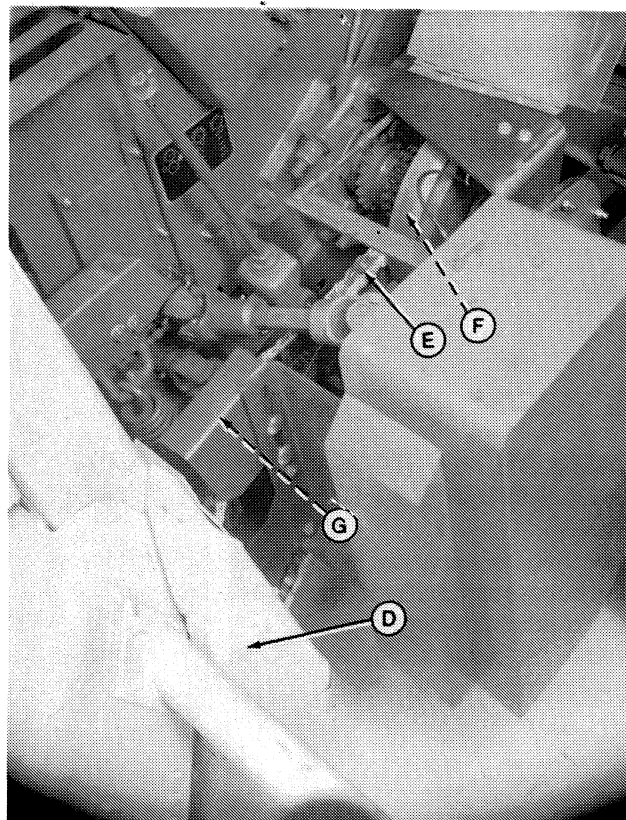
NOTE: Loosen idler (G) hardware and chain cover.

Align the idler and chain cover. Connect the chain and adjust the idler to give 1/4 to 1-in. (6 to 25 mm) "free movement" on the lower strand. Install clutch shield.



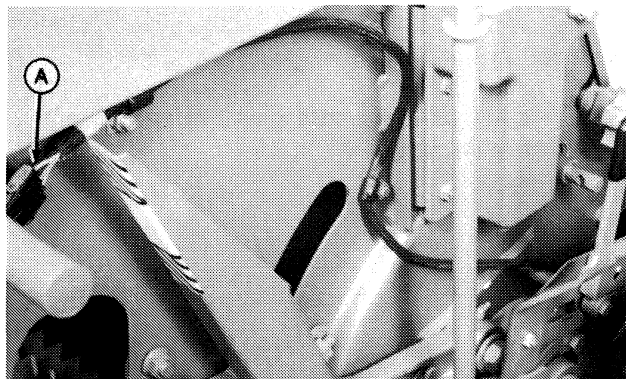
CAUTION: DO NOT run harvester without chain cover and clutch shield in place.

D—Slip Clutch Shield
E—Row-Crop Drive Chain
F—Sprocket
G—Idler



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5. If ROW-TRAK Guidance is installed, connect row-crop harness to connector (A) on forage harvester.

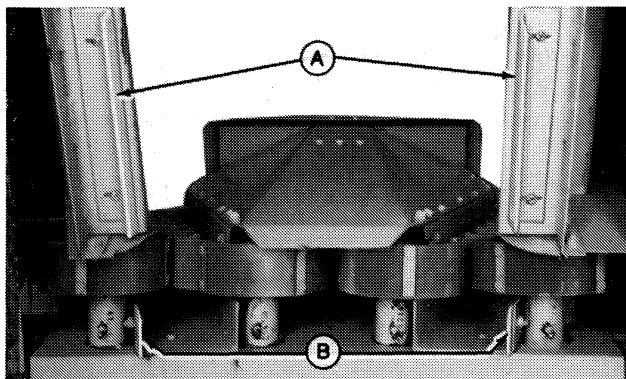


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ADJUSTING STRAPS (TWO-ROW)

1. Remove angles (A) when used on 3960, 3970, 4720, 5720 and 5820.

2. Adjust strap (B) out to maximum length when used on 3940 and 3950.



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ATTACHING ROW-CROP TO HARVESTER (PULL-TYPE FORAGE HARVESTERS)

1. Move tongue to extreme left-hand position.

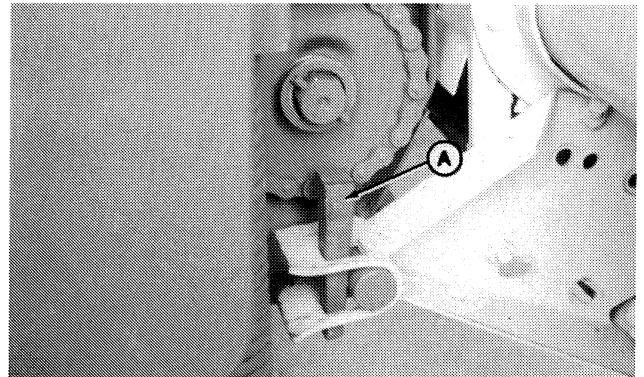


CAUTION: To prevent harvester from tipping over, do not attach any harvesting unit until tongue has been installed. See harvester operator's manual.

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2. Extend or retract lift cylinder (raise or lower the cutterhead) until the lower attaching points on the harvester align with the lower attaching clips on the harvesting unit to be installed. Secure the unit at the two lower points with two rectangular, tapered pins (A).

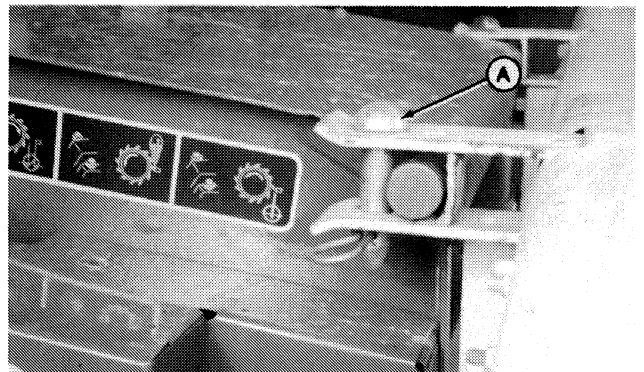
NOTE: If cutterhead will not lower without harvesting unit, shut tractor off. Move control lever (manual) or toggle switch (remote controls) to lower housing.



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3. Raise the cutterhead slightly to remove weight from support stands. Put support stands in storage location.

4. Slowly lower the cutterhead until the two upper attaching points are aligned. Secure with two round drilled pins (A) and spring locking pins.

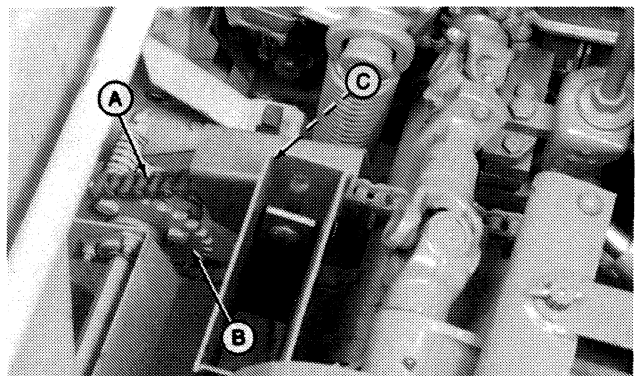


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5. Loop the harvesting unit drive chain (A) around the sprockets (B). The chain must go over the idler (C).

Align the idler; then connect the chain and adjust the idler to give 1/4 to 1-in. (6 to 25 mm) "free movement" on the lower strand.

NOTE: Reverse procedure to detach row-crop from forage harvester.



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See your forage harvester operator's manual for the following:

- Adjusting harvester downstop
- Adjusting harvester rate of drop
- Rear wheel spacing
- Front wheel spacing
- Wheels, tires and ballast
- Suitcase ballast weights

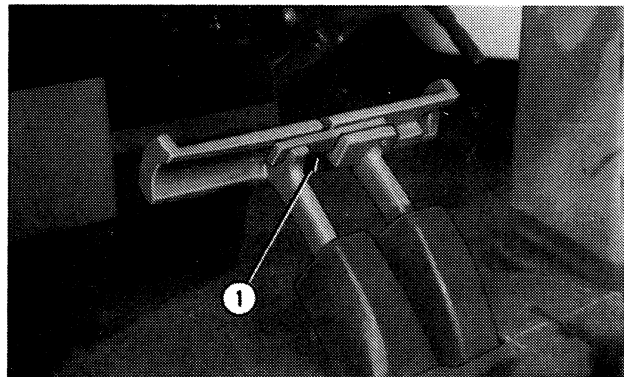
For 3940, 3950, 3960, 3970, 4720, 5200, 5400, 5440, 5460, 5720 and 5820 Harvesters, see this section for information concerning rear wheel ballast and suitcase ballast weights.

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Transporting

(SELF-PROPELLED FORAGE HARVESTERS)

1. Couple harvester brake pedals together.
2. Turn on harvester warning lamps.
3. Raise row-crop to highest position.



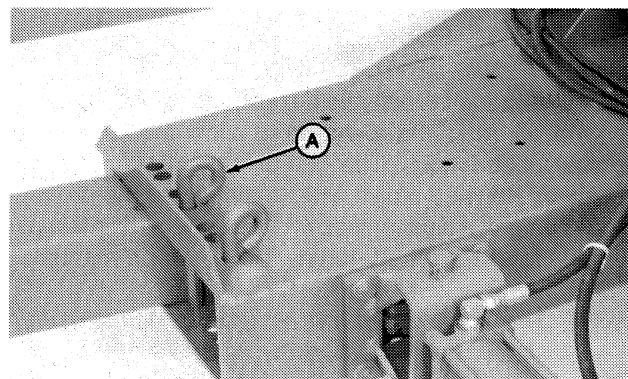
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(PULL-TYPE FORAGE HARVESTERS)



CAUTION: If harvester is equipped with hydraulic tongue positioner, use pin (A) as a mechanical locator to hold tongue in transport position when transporting on road.

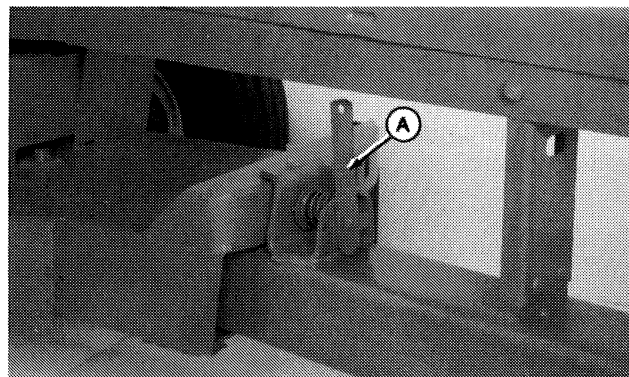
(3940)



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NOTE: Without hydraulic tongue positioner, move tongue to the extreme right-hand position by placing a block behind the right-hand wheel of the harvester and backing the tractor toward the right-hand side. Be sure the tongue locating pin(s) are removed before moving tongue with tractor, or damage could result to harvester main frame and tongue.

(3950, 3960 and 3970)

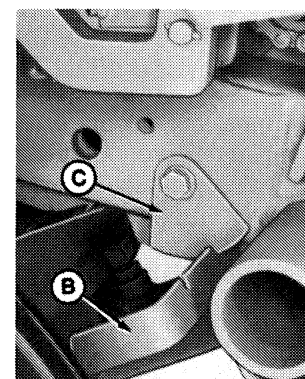
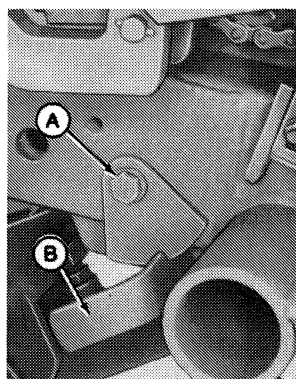


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1. Raise harvesting unit to extreme upper position.
2. Rotate lever stop out of way and push handle (B) in until lever stop engages locked position (A).

IMPORTANT: Before operating machine, raise harvesting unit to extreme upper position and move handle to unlocked position (C).

A—Locked
B—Handle
C—Unlocked



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Operating the Row-Crop



CAUTION: Before servicing or adjusting the row-crop always:

1. Disengage all power.
2. Shut off engine.
3. Then wait until all moving parts have stopped rotating.

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ADJUSTING KNIFE HEIGHT

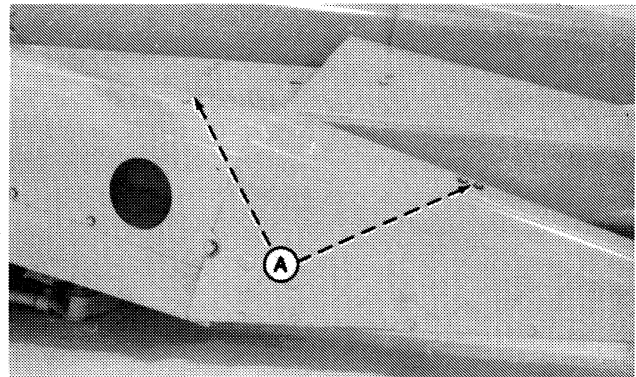
When operating in rocky fields, or fields where the crop has been hilled, raise the row-crop to allow the knife assembly to clear obstructions. The gatherer points may be lowered to pick up downed stalks while maintaining the proper knife cutting height. Adjust unit downstop to help maintain stubble height. Refer to forage harvester operator's manual.

NOTE: The row-crop is not a ground gauging unit and should be carried on the lift system.

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ADJUSTING GATHERER POINT HEIGHT (ONE AND TWO-ROW)

Reposition strap (A) or chain in each divider point to meet field conditions.

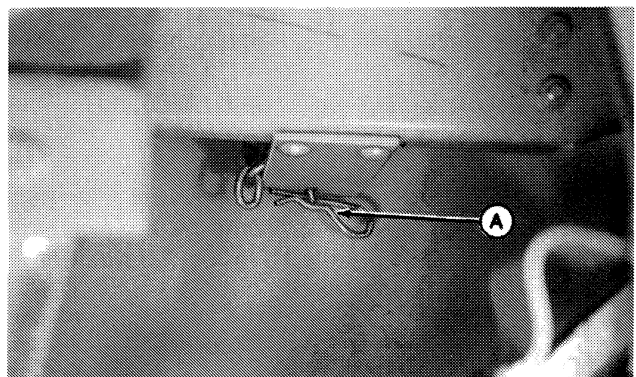


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ADJUSTING GATHERER POINT HEIGHT (THREE AND FOUR-ROW) (EUROPE)

For most conditions, operate front of gatherer points just touching the ground. In muddy conditions, or in snow, adjust points high enough to prevent getting material into the throat opening and clogging the machine.

1. Adjust the gatherer points to the desired operating height.
2. Starting with outer points, remove spring locking pin (A) and adjust to desired height. Level remaining points.



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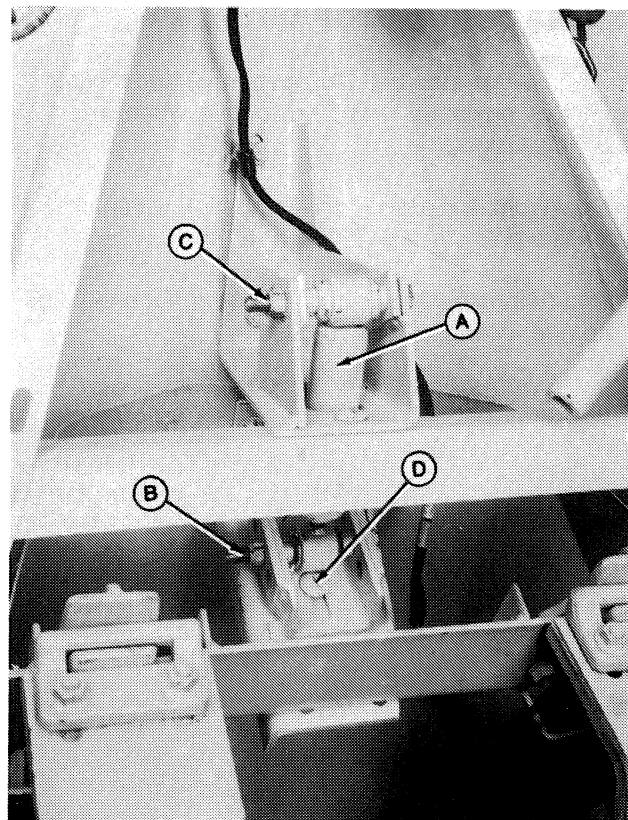
ADJUSTING GATHERER POINT HEIGHT (THREE AND FOUR-ROW) (NORTH AMERICA)

For most conditions, operate front of gatherer points just touching the ground. In muddy conditions or in snow, adjust points high enough to prevent material build-up in throat opening and clogging the machine.

1. A standard operating position of the shock absorber (A) is installed in center hole (B) and the lower hole (C) located in the point. Place outer points in this position. Level remaining points.

2. Small amounts of adjustments can be made by loosening carriage bolt (D).

NOTE: Additional holes in mounting brackets allow for different field conditions.

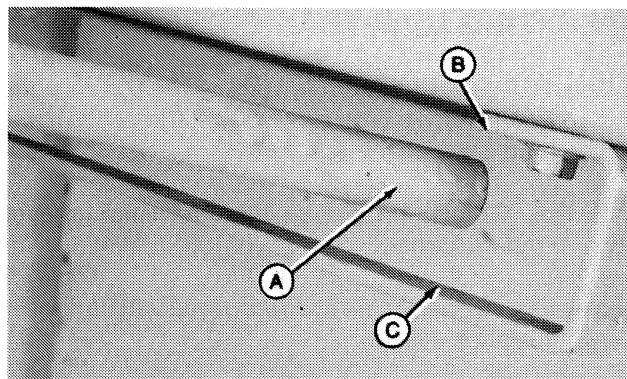


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ADJUSTING SENSOR TUBE

To keep the row guidance operating correctly, the sensor tube (A) must stay centered between the bracket (B) and point (C), and be free to move. To adjust:

1. Loosen three spin lock nuts that secure the tube and position tube between bracket and point. Tighten lock nuts securely.



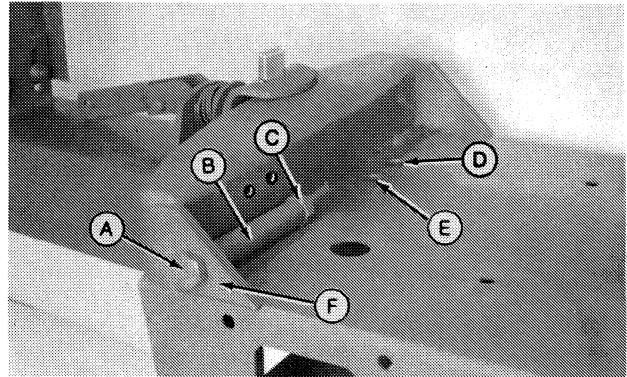
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USING TONGUE STOP BOLT

Use the tongue stop bolt (A), spacer (B) and locknut (C) on harvesters equipped with long tongue when using Three-Row Row-Crops.

Two positions are provided for operation with narrow (D) or wide (E) rows.

When not in use, stop bolt, spacer and nut should be kept in storage location (F) as shown.

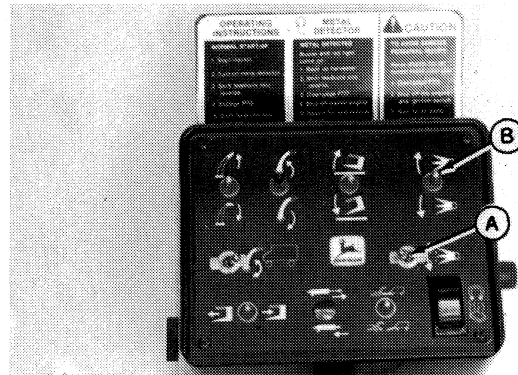


- A—Stop Bolt
- B—Spacer
- C—Lock Nut
- D—Narrow Row Location
- E—Wide Row Location
- F—Storage Location

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OPERATING ROW-TRAK GUIDANCE

1. Turn ROW-TRAK switch (A) "on" at the control console. This activates the row-crop sensors which keep the row-crop centered on rows.
2. Switch (B) can be activated at anytime to override ROW-TRAK Guidance.
3. Release switch (B) to return automatically to the ROW-TRAK Guidance system.

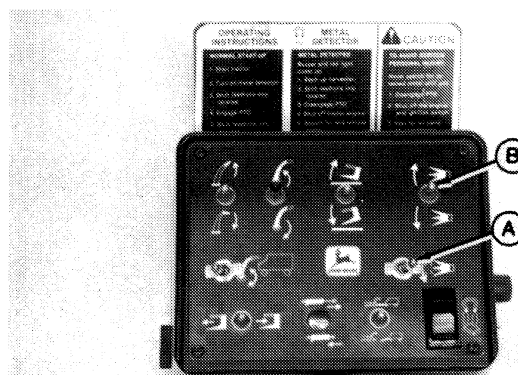


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CONDITIONS FOR NOT OPERATING ROW-TRAK GUIDANCE

In some conditions, such as very weedy fields or fields with a large amount of volunteer corn, the ROW-TRAK sensors may constantly guide the row-crop off the row. In these certain conditions, it may be desirable to turn the ROW-TRAK Guidance system off.

1. Turn ROW-TRAK switch (A) "off" at the control console.
2. Use switch (B) to line up the row-crop on rows.



0A6;E23622 E03;;4RRCJ J 221183

FUNCTIONAL CHECK FOR ROW-TRAK GUIDANCE

NOTE: Row-crop unit must be attached to harvester.

1. Start tractor engine. DO NOT engage PTO.
2. Activate tongue switch (A) to insure the tongue moves in the direction indicated on the control console.
3. Turn row guidance switch (B) on.

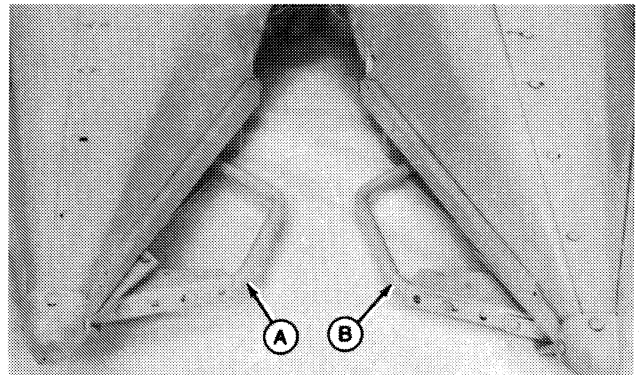


0A6;E23731 E03;;4RRCJ K 300484



CAUTION: Stand beyond the points of row-crop and use a stick to activate sensors.

4. Activate the right-hand row sensor (A) on the point. The row-crop should move to the right.
5. Activate the left-hand row sensor (B) on the point. The row-crop should move to the left.
6. When both row sensors are activated at the same time, the row-crop should not move.



0A6;E23732 E03;;4RRCJ L 304084

CHECK OVERRIDE FEATURE

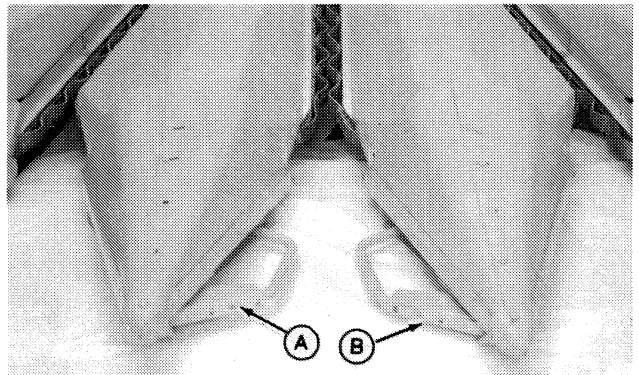
NOTE: Two people are required in checking the override feature.

1. One person should activate the right-hand row sensor (A) on the point. At the same time, the other person in the tractor should activate the tongue positioner switch to the left. This switch will override the row-crop sensor and the row-crop should move to the left.



CAUTION: Stand beyond the points of row-crop and use a stick to activate sensors.

2. One person should activate the left-hand row sensor (B) on the point. At the same time, the other person in the tractor should activate the tongue positioner switch to the right. This switch will override the row-crop sensor and the row-crop should move to the right.



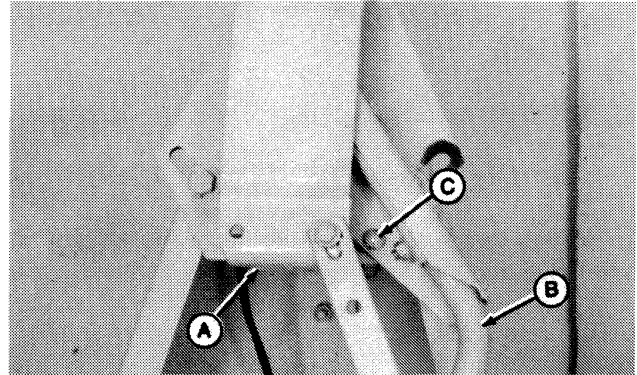
0A6;E23733 E03;;4RRCJ M 050784

E25;P15 120684

ROW-TRAK SENSOR LOCK NUT

When distinct rows do not exist, it may be desirable to lock out ROW-TRAK Guidance.

1. Remove pin from storage position (A).
2. Pull tube (B) inward.
3. Insert pin (C) in hole and through slot in mounting. (Secure with spring pin.) Sensor will become inactive.

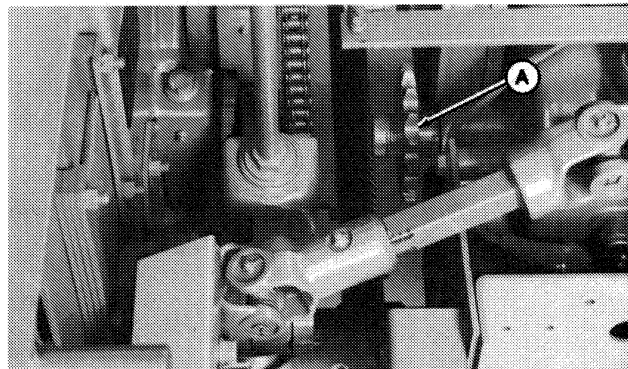


0A6;E24122 E03;;4RRCJ S 260484

Attachments

HARVESTING UNIT SPEED-UP SPROCKET (PULL-TYPE FORAGE HARVESTERS)

This drive sprocket (A) allows the operator to increase the harvesting unit speed when operating in certain light crop conditions.



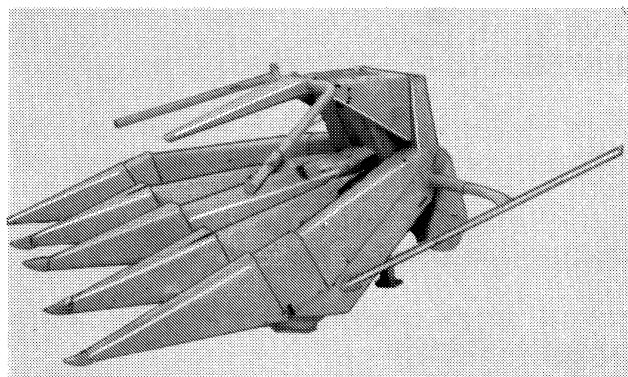
0A6;E23058 E03;;4RRCK D 300484

GATHERER POINTS (FOUR-ROW)

The Four-Row Row-Crop is available with two lengths of points.

Long points are recommended in most conditions and are available to better divide down and tangled crops.

Short points are not recommended in down crop conditions, but help in turning into tight end rows and for use in small fields.

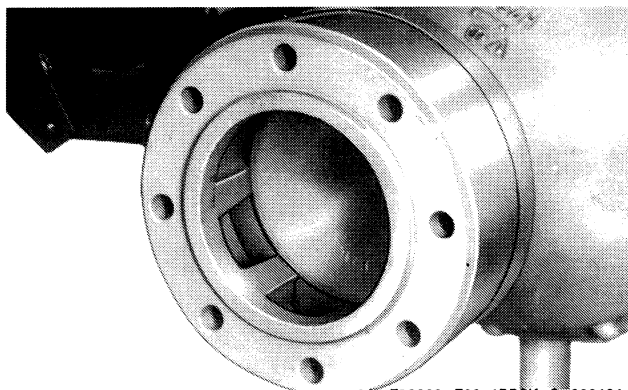


0A6;E19381 E03;;4RRCK C 300484

FRONT WHEEL SPACERS (SELF-PROPELLED FORAGE HARVESTERS)

2-in. (51 mm), 4-in. (102 mm) and 8-in. (203 mm) wheel spacers are available to space wheels accurately when harvesting row crops.

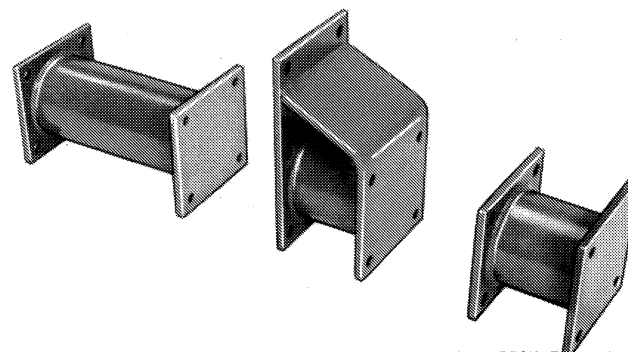
NOTE: The 8-in. (203 mm) spacers are obtained by using two 4-in. (102 mm) spacers. See Assembly Section for installation instructions.



0A6;E18832 E03;;4RRCK G 300484

AXLE EXTENSIONS (PULL-TYPE FORAGE HARVESTERS)

Extensions are available in 6 or 13 in. (152.4 or 330.2 mm) lengths. Row-crop units are shipped with required extensions. See forage harvester operator's manual for correct extension and row combination.



0A6;E23633 E03;;4RRCK E 300484

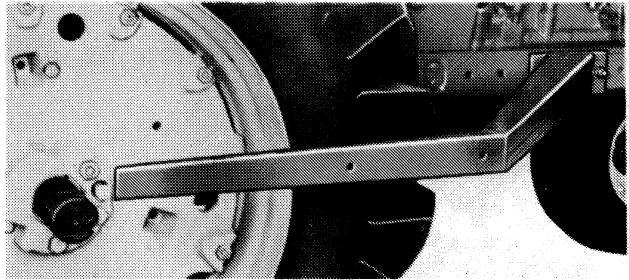
E25;P17 120684

TRACTOR AXLE GUARD

Recommended for tractors with axle length of 98 in. (2489 mm) to 130 in. (3302 mm) maximum when using Three-Row Row-Crop Narrow or Wide 3950 - 3960 and 3970.

C

NOTE: Axle guard may need to be shimmed or extended for some tractors.



0A6;E22980 E03;;4RRCK F 260484

ROW-TRAK GUIDANCE (THREE AND FOUR-ROW)

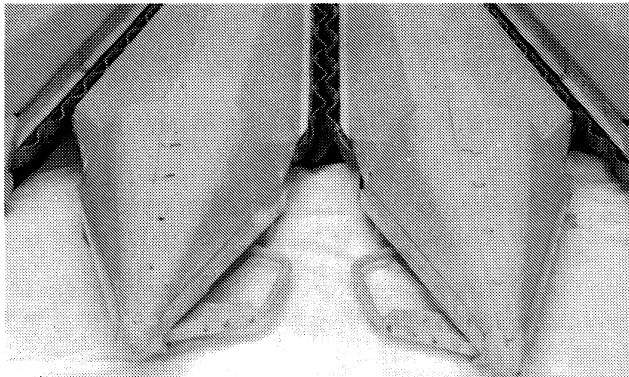
Keeps row-crop centered on rows through turns, contours and down crop for increased field efficiency.

Ideal for articulated tractors (150 horsepower or less for 3950; 190 horsepower or less for 3970).

Hydraulic tongue positioner must also be installed for ROW-TRAK Guidance.

Refer to ordering codes for base machine.

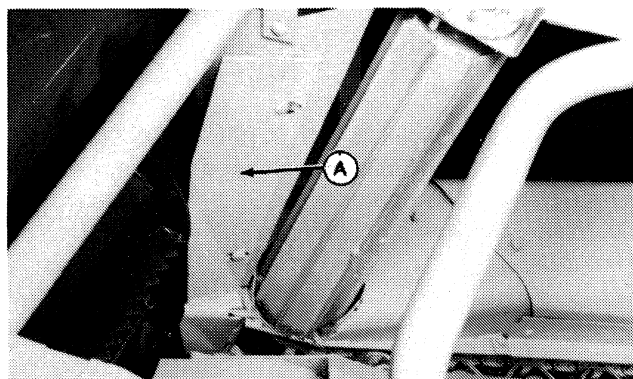
See Assembly section for installation instructions.



0A6;E23629 E03;;4RRCK H 260484

THROAT FILLERS (THREE-ROW/3950)

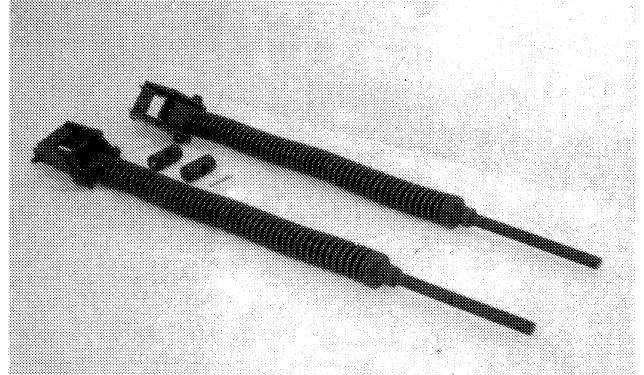
Throat fillers (A) are required for proper feeding.



0A6;E23501 E03;;4RRCK I 260484

HEAVY DUTY LIFT SPRINGS (FOUR-ROW/ SELF-PROPELLED FORAGE HARVESTERS)

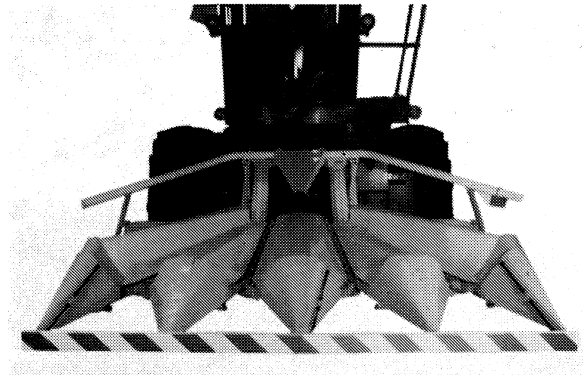
For increased lift assist, heavy duty lift springs are available.



0A6;E23318 E03;;4RRCK J 260484

TRANSPORT BAR (FOUR-ROW) (FOR COUNTRIES WHERE REQUIRED)

The transport bar is required when the row-crop is being transported on public roads in some countries.



0A6;E24123 E03;;4RRCK K 260484

Lubrication and Maintenance

PERFORM LUBRICATION AND MAINTENANCE AT RECOMMENDED INTERVALS

IMPORTANT: The intervals recommended are based on normal conditions; severe or unusual conditions may require more frequent lubrication or oil changes.

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.



CAUTION: Do not clean, lubricate or adjust your row-crop while it is running.

Perform each lubrication and service illustrated in this section.

0A6; E03;;4RRCN A 300484

OBSERVE LUBRICATION SYMBOLS

Lubricate with John Deere Multipurpose Lubri-cant or an equivalent SAE multipurpose-type grease (unless otherwise specified) at hourly intervals indicated on the symbols.

Lubricate with SAE 30 or heavier oil at hourly intervals indicated on the symbols.

Brush periodically with John Deere Multipurpose Lubricant or an equivalent SAE multipurpose-type grease.

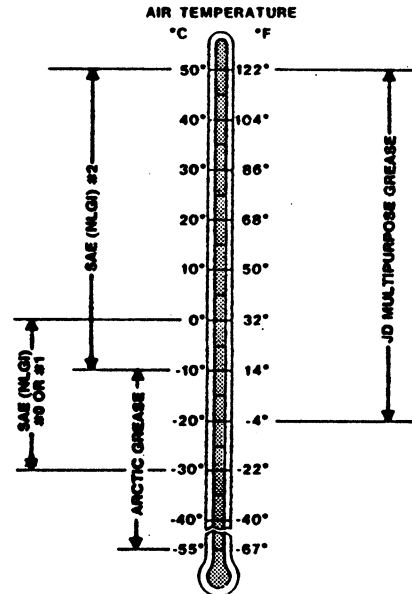
0A6; E03;;4RRCN B 300484

E25;P20 120684

CHOOSING A GREASE

John Deere Multipurpose Grease is recommended in all grease fittings at hourly intervals indicated. If other greases are used, use:

- SAE Multipurpose Grease
- SAE Multipurpose Grease containing 3 to 5 percent molybdenum disulfide.



0A6;X9326 E03;;4RRCN C 300484

CHOOSING GEAR CASE LUBRICANTS (FOUR-ROW)

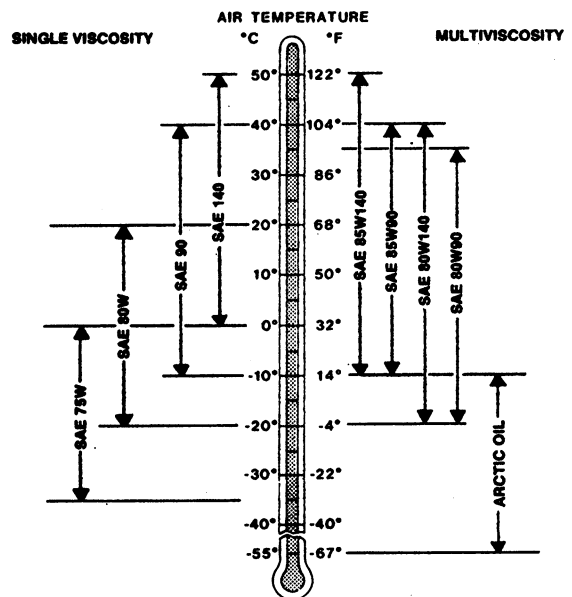
For the following gear cases use these recommended lubricants:

- John Deere SAE 85W/140 API or GL-5 Gear Oils
- Oils meeting performance requirements of:
API Service Classification GL-5
Military Specification MIL-L-2105C

Left-hand spur gear case and
bevel gear case 11 Qts (10.4 L)

Right-hand spur gear case and
bevel gear case 11 Qts (10.4 L)

Depending on the expected prevailing temperature for the fill period, use oil of viscosity as shown in the chart.



0A6;X9322 E03;;4RRCN D 221183

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.

0A6; E03;;4RRCN L 300484

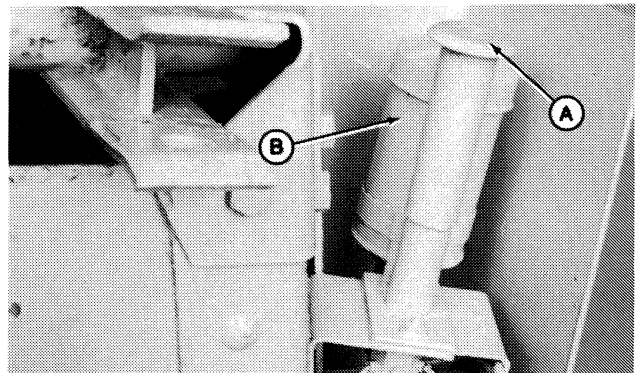
MULTI-LUBER SYSTEM (THREE-ROW)

Pump Multi-Luber twenty times every ten hours of operation.

Depress the pump handle (A) manually through its full stroke to discharge lubricant from all outlet ports. The measuring chamber in the pump is filled as the plunger and handle returns to normal position.

Check reservoirs (B) periodically to be sure lubricant is always available to system. A dipstick in the top of the reservoir is provided for this purpose.

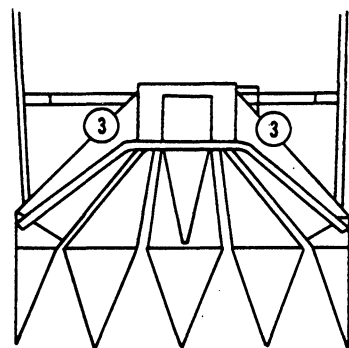
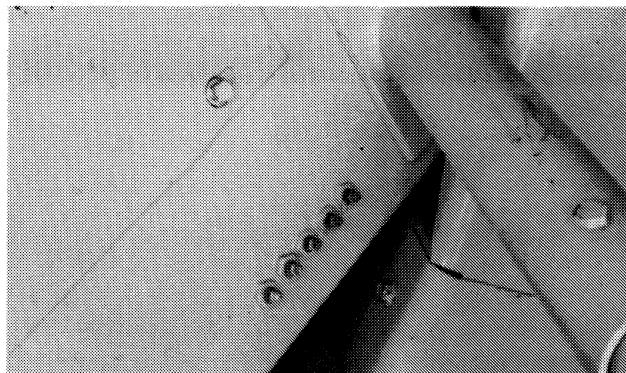
IMPORTANT: Use only John Deere Quik-Lube Lubricant or its equivalent in the Multi-Luber system. Improper lubricants may clog system.



0A6;E23070 E03;;4RRCN I 300484

GREASE BANKS (FOUR-ROW)

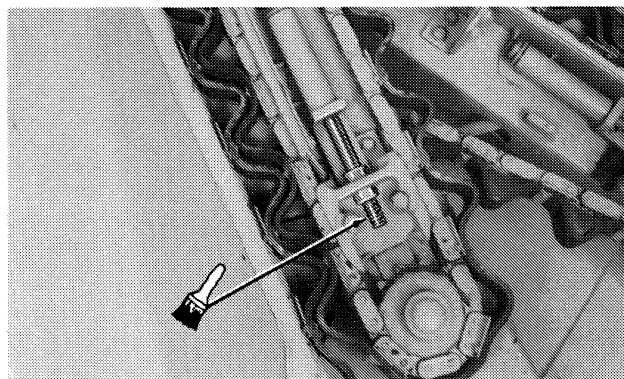
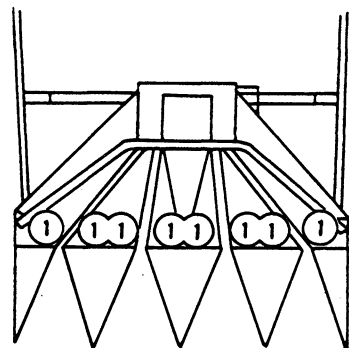
Pump handle on grease gun five times every ten hours for each fitting. Lubrication banks are located on each side of the row-crop.



0A6;E23071, E23486 E03;;4RRCN J 300484

SERVICE AS REQUIRED

1—(One, Two, Three and Four-Row Row-Crops)
Gatherer Chain Adjusting Bolts
Apply grease as required.



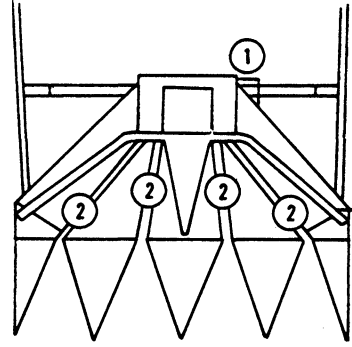
0A6;E23487, E19423 E03;;4RRCN H 300484

SERVICE EVERY 10 HOURS

1—(One, Two, Three and Four-Row Row-Crops)

Row-Crop Main Drive Chain -

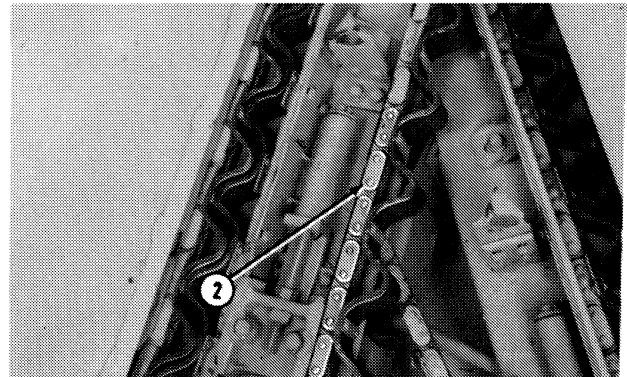
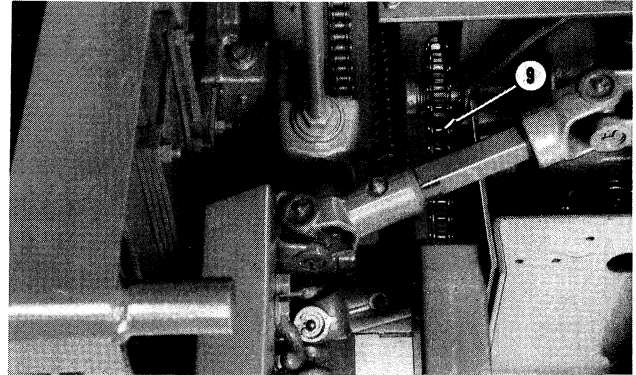
Liberal apply SAE 30 or heavier oil to chain immediately after operation when the chain is still warm to insure effective oil penetration. Make a practice of checking chain adjustment at this time.



2—(One, Two, Three and Four-Row Row-Crops)

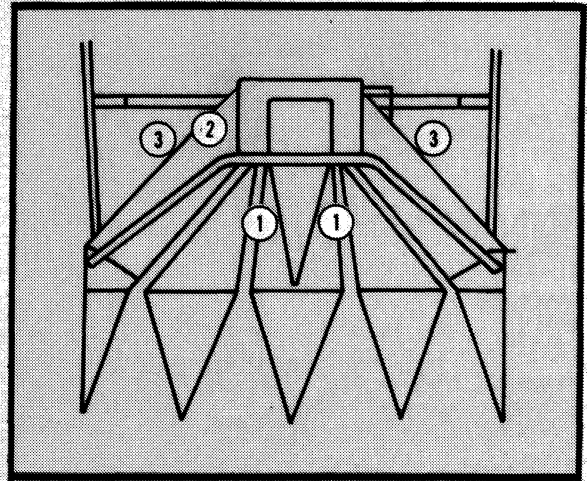
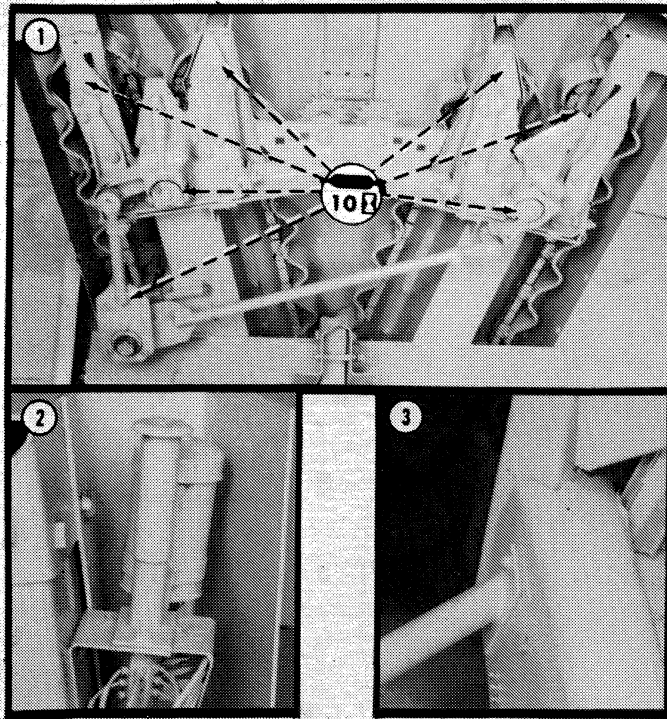
Gatherer Chains -

Liberal apply SAE 30 or heavier oil to chains immediately after operation when the chains are still warm to insure effective oil penetration. Make a practice of checking all chain adjustments at this time.



0A6;E23488, E19424, E19426 E03;;4RRCN F 300484

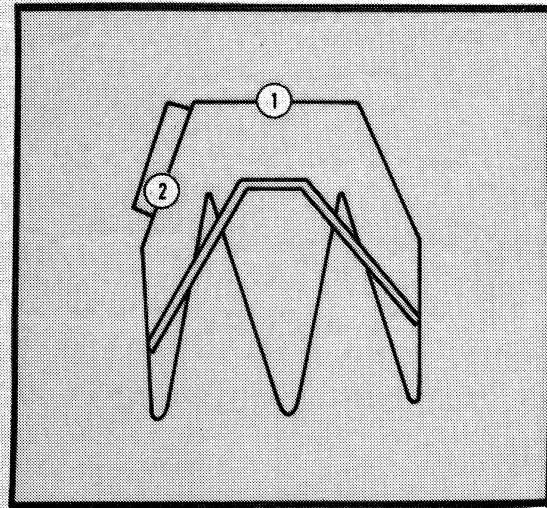
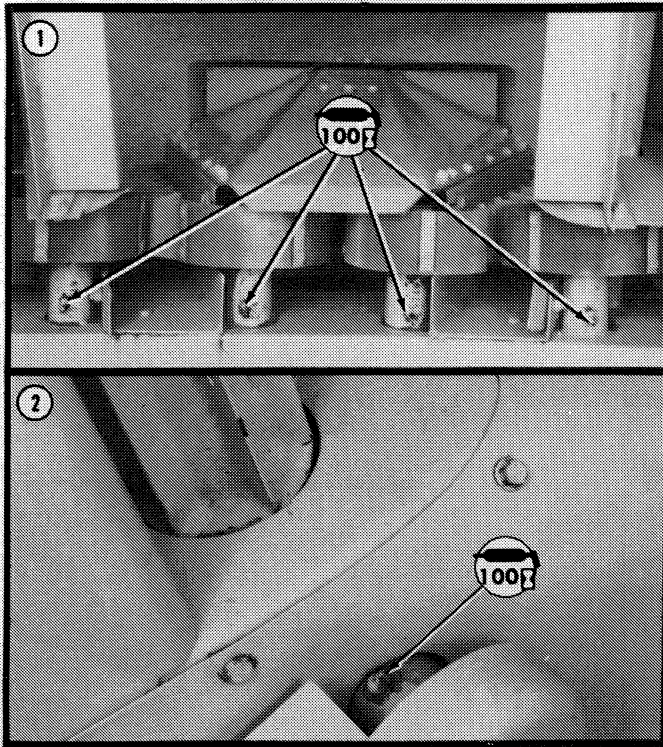
SERVICE EVERY 10 HOURS



- 1—(One and Two-Row Row-Crops)**
Gatherer Chain Idlers and Knife Support
- 2—(Three-Row Row-Crop)**
Multi-Luber System
Pump handle twenty times every 10 hours
- 3—(Four-Row Row-Crop)**
Grease Banks - Pump handle on grease gun
five times for each fitting.
Lubrication banks located on each side of
the Row-Crop

0A6;E24124 E03;;4RRCN E 260484

SERVICE EVERY 100 HOURS



- 1—(One and Two-Row Row-Crops)
Gathering Chains
- 2—(Two-Row Row-Crop)
Gatherer Chain Drive

0A6;E23069 E03;;4RRCN K 010584

SERVICE EVERY 250 HOURS OR EACH SEASON (FOUR-ROW ROW-CROP)

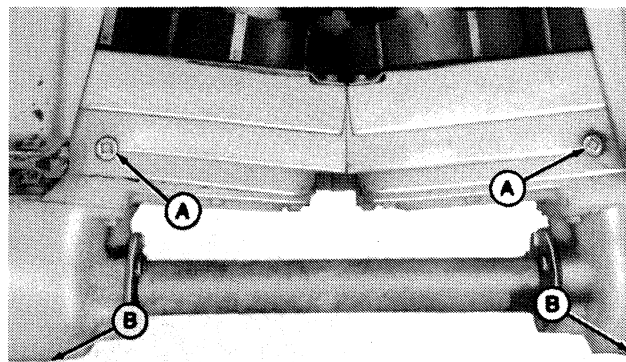
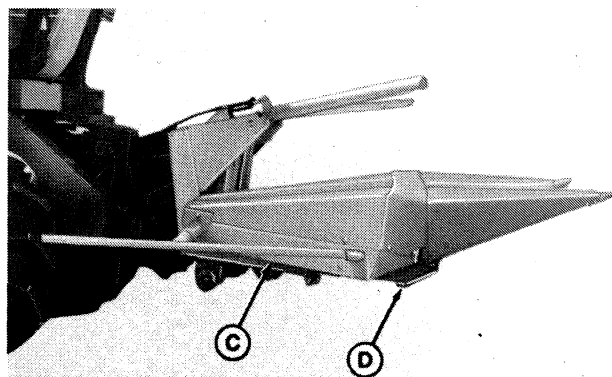
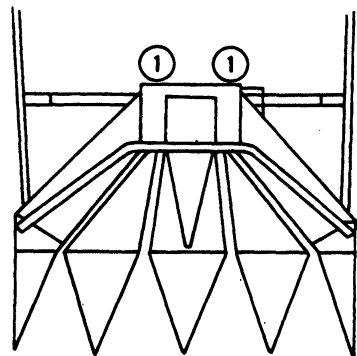
NOTE: Always check lubricant level with the side panels (C) parallel with the ground.



CAUTION: To check lubricant level while the row-crop is attached to the harvester, follow this procedure:

1. Raise row-crop until side panels (C) are parallel to the ground.
2. Shut off harvester and wait until all parts have stopped.
3. Place blocks or stands under the skid plates (D) at the front of the unit.
4. Remove the plugs from the back of the gear cases (in front of the lower front feed roll).
5. Use a pump or syringe to fill the cases until oil runs back out the fill hole.
6. Reinstall plugs and remove blocks.

1—(Four-Row Row-Crop)
 Spur and Bevel Gear Case -
 Each side of the row-crop
 has a spur gear case and a
 bevel gear case which share
 a common fill and check
 hole (A) and a drain hole (B).
 Check and fill as necessary
 with SAE-85 API-GL5 Gear
 Lubricant.



0A6;E23485, E19431, E19430 E03;;4RRCN G 010584

Troubleshooting

Problem	Cause	Remedy	Page
Gatherer Chains Out of Time	Gatherer chains loose	Retime and tighten chains	41,45,49 & 53
	Material under chain in sprocket teeth	Clean material accumulation around sprockets	..
	Material collects against chain sprockets	Reverse as necessary to clear plugged machine	..
	Knife plugs	Clean and adjust oscillating knife	39
		Check hydraulic downstop adjustment	..
	Gatherer chains stiff	Oil chains	24
	Belt trough plugging with material	Reverse machine to clean out material	..
		Check oscillating knife register and condition	..
	Gatherer chain drive sprockets out of time	Retime	53
	Idler support loose	Tighten or replace bolts	..
	Bearing failure in gatherer chain idler	See your John Deere dealer	..
	Lodged or down crop	Maintain tighter chain ad- justment in down crops	..
Material Pulling from Gatherer Chains		Adjust hydraulic downstop actuator	..
	Gatherer chains loose	Adjust gatherer chains	41,47 & 49
	Gatherer chains out of time	Time gatherer chains	53
	Gatherer chains belt- ing worn and/or collapsed	Replace belting - see your John Deere dealer for rubber lug repair kit	..
	Upper crop guide not at correct height	Adjust height	56

Troubleshooting

Problem	Cause	Remedy	Page
Short Gatherer Chain Life	Gatherer chain not being oiled regularly	Oil with SAE 30 or heavier oil	24
	Gatherer chain too tight	Adjust gatherer chain	41,42 & 50
	Using old sprockets with new gatherer chain	Replace sprockets if worn	..
	Belt trough or sprockets plugging with material	Clean material accumulation out of trough or around sprockets. Adjust knife clearance	39
Short Gatherer Belt Life	Material wrappage in belt path	Remove material	..
	Rocks or foreign material in rows	Raise row-crop by adjusting downstop - see your harvester operator's manual	..
	Gatherer chains not timed properly	Time gatherer chains	53
	Material buildup in trough	See material buildup below belt in trough	53
Material buildup Below Belt in Trough	Poor oscillating register with side knife	Adjust knife	..
	Damaged knives	Replace damaged knives	41,47 & 55
	Complete knife assembly tipped downward	Adjust as close to belt as possible	..
Too Many Stalks Left on Ground	Excessive ground speed for crop condition	Reduce ground speed	..
	Short points installed	Install long points (Four-Row)	..
	Row crop set too high	Adjust downstop. See your harvester operator's manual	..
	Improper direction of travel	Reverse direction of travel	..
	Points improperly adjusted	Adjust points vertically and evenly	12

0A6; E03;4RRCO B 010584

E25;P29 120684

Troubleshooting

Problem	Cause	Remedy	Page
Ragged Cut by Row-Crop Knife	Improper knife clearance	Adjust knife clearance	..
	Improper knife register on row-crop unit	Set knife register	..
	Dull or worn knives	Replace with new knives	..
	Excessive ground speed	Reduce ground speed	..
	Knives not centered on row	Move harvester into rows	..
	Header set too high	Adjust downstop	..
	Incorrect drive sprocket on gear case	Replace sprocket	..
Outer Gatherer Point Interferes With Standing Crop	Not harvesting planted rows	Harvest rows as they were planted. It will be easier to follow the rows, reduce plugging and eliminate loss of crop	..
Tongue and Harvesting Unit Contact Each Other in Transport Position	Tongue lockout bolt and spacer not being used with long tongue (3960)	Install lockout bolt spacer	..
Tractor Tire Contacting Harvesting Unit Point in Right-Hand Turn	Not using long tongue with Three-Row Row-Crop	Install long tongue	..
Plugging	Throat fillers for 3950 not installed or misadjusted (Three-Row)	Install throat fillers and adjust properly	18 & 42
	Ground speed too fast	Slow down. Operate at a speed to meet the yield and ground condition	..
	Row-crop set too low	Adjust downstop - see your harvester operator's manual	..

Troubleshooting

Problem	Cause	Remedy	Page
Plugging - Continued	Excessive knife clearance	Adjust knife clearance	39
	Improper knife register	Adjust knife register	42,45 & 54
	Slip clutch slipping	Adjust slip clutch	39 & 40
	Damaged sheet metal around gatherer chain, assemblies	Repair or see your John Deere dealer	..
	Gatherer chains loose	Adjust gatherer chains	41,42 & 50
	Idler arm support bracket bent	Straighten or replace	..
	Excessive knife shield clearance	Adjust knife shield	..
	Knives worn	Replace knives	43,47 & 55
	Center portion of upper crop divider not being used or in proper position (Four-Row)	Adjust crop divider. Use center portion of upper crop divider to meet crop conditions	56
Material Wraps Around Power Rolls	Stripper clearance excessive	Adjust stripper	53
	Bent or nicked flutes on power roll	Straighten and smooth rough edges	..
	Down and tangled material	Reverse machine to clean	..
	Damaged power roll upper support	Straighten power roll upper support	..
Ragged Stubble Left on Ground	Improper knife register	Adjust knife register	40,45 & 54
	Excessive knife clearance	Adjust knife clearance	37
	Excessive ground speed	Reduce ground speed	..

Troubleshooting

Problem	Cause	Remedy	Page
Ragged Stubble Left on Ground - Continued	Knives not centered on row	Center harvester on rows	..
		Use proper wheel extensions and tongue position	..
	Harvesting unit set too high	Adjust downstop. See your self-propelled harvester operator's manual	..
	Worn knives	Adjust, sharpen or replace worn knives	41,47 & 55
Lack of Machine Capacity	Drive sprocket on gear case	Replace with optional speed-up sprocket	..
	Material being stopped by support tube (Four-Row)	Remove support tube	56
Harvesting Unit Will Not Raise or Lower	Hydraulic pump does not function	Check hydraulic pump	..
	Engine at slow idle	Increase engine speed to 1500 rpm	..
	Hose to left-hand lift cylinder poppets(s) failed	Replace hose	..
	Control valve linkage out of adjustment	Check harvesting unit lift control lever and linkage	**
	Faulty base module for rear outlet valve (electric solenoid controlled valve)	See your John Deere dealer	*

* See your John Deere Dealer

** See your forage harvester operator's manual

Troubleshooting

Problem	Cause	Remedy	Page
Harvesting Unit Drops Too Fast or Too Slow	Harvesting unit drop rate screw out of adjustment	Adjust drop rate on valve	**
	Control lever linkage out of adjustment	Check control lever and linkage	**
	Poppet stop not in valve outlet port	See your John Deere dealer	*
	Low oil supply in hydraulic tank	Fill system with proper oil to sight glass	**
	Clogged suction line to hydraulic pump	Clean line	..
Harvesting Unit Will Not Lower to Ground	Harvesting unit downstop not properly adjusted	Adjust downstop valve	**
	Float springs are too tight	Loosen float springs	**
	Heavy duty float springs being used with light harvesting unit	Install correct float springs	**
	Too much air in the large front tires	Adjust air pressure in tires	**
Harvesting Units Digs Into Ground	Float springs set too loose	Tighten float springs	**
	Downstop set too low	Correct downstop setting	**

* See your John Deere dealer

** See your forage harvester operator's manual

Troubleshooting

Problem	Cause	Remedy	Page
One Side or Both Sides of ROW-TRAK Fail to Function but Control Console Tongue Positioner Switch Does Work	ROW-TRAK locked out	Remove lockout pin and place in operating position	16
	Broken switch or switches in row-crop points	Replace	..
	Wires loose at switches in row-crop points	Tighten	..
	Failed relay	Replace	..
	ROW-TRAK harness not fully plugged in	Check connection between harvester and row-crop and connection between row-crop and row-crop point	..
	Wires loose or disconnected at solenoid	Check connections	..
Tongue Positioner Switch Does Not Override Automatic ROW-TRAK Operation	Failed relay	Replace	..
	Failed diode	Replace	*
Row-Crop Does Not Center on Rows	Row sensors not adjusted properly	Adjust sensors	..

* See your John Deere dealer

Service



CAUTION: Before servicing or adjusting the row-crop always:

1. Disengage all power.
2. Shut off engine.
3. Then wait until all moving parts have stopped rotating.

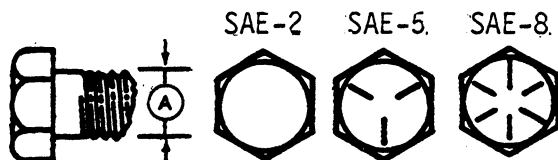
0A6; E03;;4RRCJ 0 260484

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.

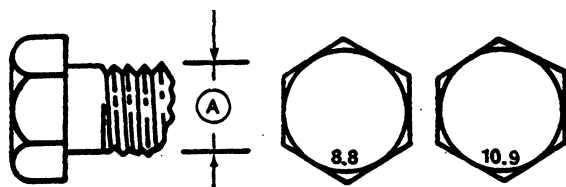
U.S. MEASUREMENT

Bolt Diameter "A"	Bolt Torque in Lbs-Ft (N·m)					
	SAE 2		SAE 5		SAE 8	
1/4"	Not	Used	14	(20)	19	(25)
5/16"	Not	Used	27	(35)	41	(55)
3/8"	23	(31)	35	(47)	50	(70)
7/16"	35	(47)	55	(75)	80	(110)
1/2"	55	(75)	85	(115)	120	(160)
9/16"	75	(100)	130	(175)	175	(240)
5/8"	105	(140)	170	(230)	240	(325)
3/4"	185	(250)	300	(410)	425	(575)
7/8"	160	(215)	445	(600)	685	(930)
1"	250	(340)	670	(910)	1030	(1400)
1-1/4"	330	(450)	910	(1235)	1460	(1980)



Replace hardware with the same strength bolt.

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



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

AB3;E19562;E19563 E03;;KPFHP B 100484

ADJUSTING HARVESTING UNIT MAIN DRIVE CHAIN

Adjust the main drive chain by positioning the idler to give 1/4 to 1-in. (6 to 25 mm) "free movement" on the lower strand.

0A6; E03;;4RRCP P 260484

REPLACING KNIFE BEARINGS

The knife pivot bearing assembly is a matched set of preadjusted bearings and spacers. Replacement of any portion of the assembly is not recommended. See your John Deere dealer for a new matched bearing assembly.

0A6; E03;;4RRCP T 260484

ADJUSTING KNIFE CLEARANCE

1. Loosen clamp bolt (A) and tighten adjusting bolt (B) until rear of oscillating knife (C) JUST contacts the side knives (D).

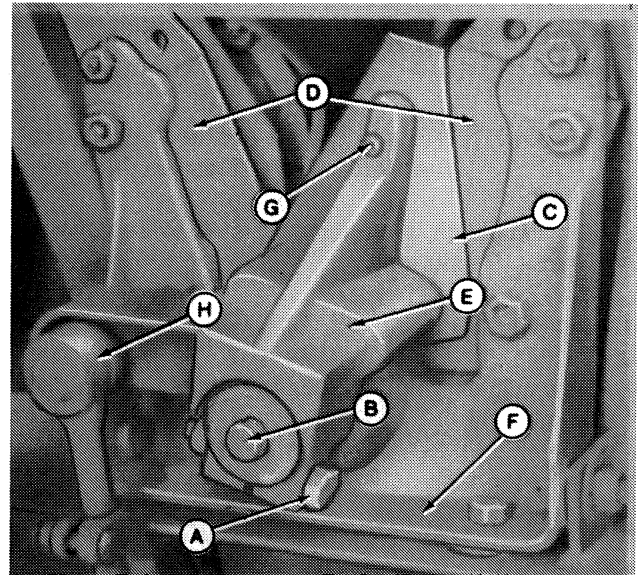
IMPORTANT: Excessive contact will cause rapid knife wear and high drive line loads.

2. Use set screw (G) to adjust tip of knife. Maximum adjustment is 0.015 in. (0.38 mm).

3. If tip does not make contact after adjusting, reshim the side knives.

4. Torque clamp bolt (A) to 85 lb-ft (115 N·m) and adjusting bolt (B) to 40 lb-ft (55 N·m).

5. Disconnect ball joint (H) to check adjustment. If oscillating knife casting can not be moved with one hand there is excessive contact.



A—Clamp Bolt
B—Adjusting Bolt
C—Oscillating Knife
D—Side Knives
E—Oscillating Knife Casting
F—Support Casting
G—Set Screw
H—Ball Joint

0A6;E21880 E03;;4RRCP S 010584

ADJUSTING SLIP CLUTCH (ONE, TWO, AND THREE-ROW)

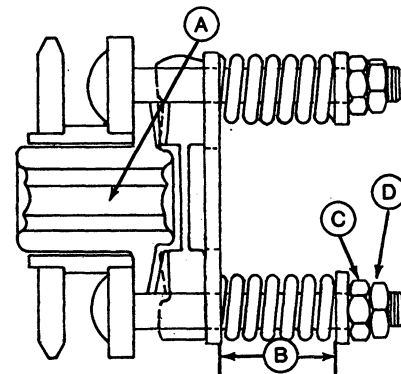
IMPORTANT: The slip clutch protects the drive train; overtightening will lessen this protection.

A new slip clutch (A) is properly adjusted when dimension (B) is 2-1/8 in. (54 mm) long.

1. Loosen the locking nut (D).

2. Turn adjusting nut (C) until the proper spring dimension (B) is attained.

3. Retighten lock nuts (D).



A—Slip Clutch
B—2-1/8-in. (54 mm)
C—Adjusting Nut
D—Lock Nuts

0A6;E13212 E03;;4RRCP AK 010584

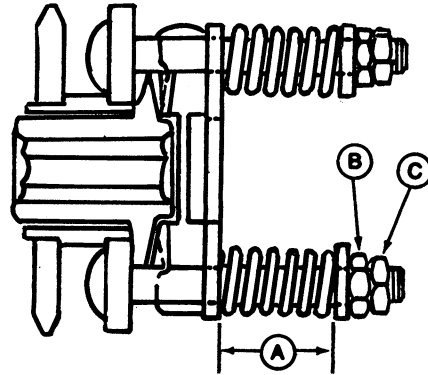
E25;P37 120684

ADJUSTING SLIP CLUTCH (FOUR-ROW)

IMPORTANT: The slip clutch protects the drive train; overtightening will lessen this protection.

A new slip clutch is properly adjusted when dimension (A) is 1.9-in. (48 mm) long.

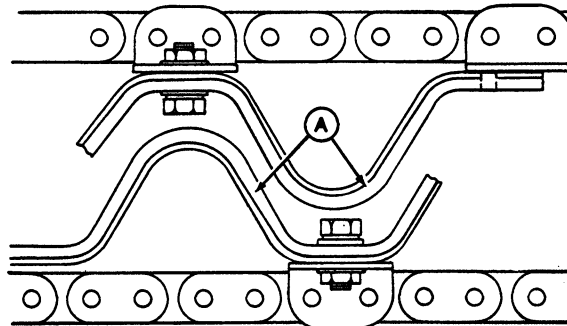
1. Loosen the locking nut (C).
2. Turn adjusting nut (B) until the proper spring dimension (A) is attained.
3. Retighten lock nuts (B).



0A6;E19403 E03;;4RRCP R 010584

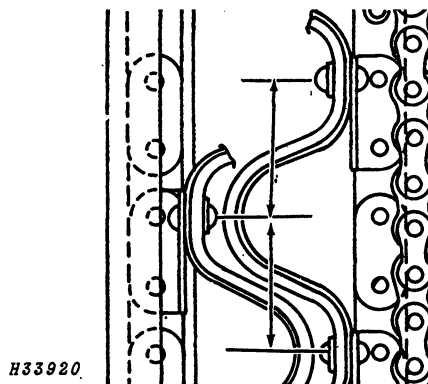
REPLACING GATHERER BELTS

A gatherer belt may be repaired by replacing the 2-ply rubber repair fabric. The fabric has two rubber sides and one is thicker than the other. Install the **THICKER** side (A) away from chains (so it contacts the crop).



0A6;E22984 E03;;4RRCP AC 010584

To time the gatherer belts, position gathering belt so the lug attachment links on the right-hand belt are halfway between the lug attachment links on the left-hand belt. The arrows show equal distance.



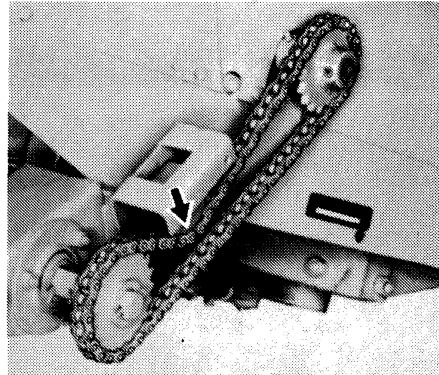
H33920

0A6;E33920 E03;;4RRCP AD 010584

E25;P38 120684

ADJUSTING GATHERER FEED ROLL DRIVE CHAIN (TWO-ROW)

1. Adjust drive chain to allow 1/4 to 1-in. (6 to 25 mm) "free movement" on the chain opposite the tightener (arrowed).
2. Loosen the tightener mounting bolts and move the tightener (arrowed). Retighten bolts.



0A6;E13887 E03;;4RRCP AL 010584

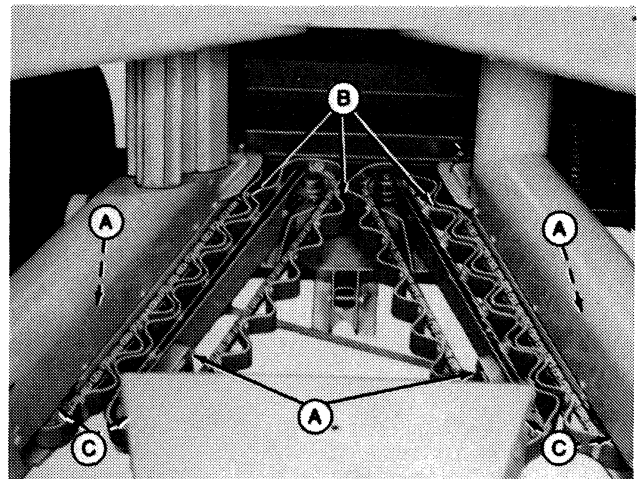
ADJUSTING GATHERER CHAINS (ONE AND TWO-ROW)

IMPORTANT: Chains will stretch during initial operation. It is necessary to tighten chains periodically during this period.

Chains which run too tight will cause bearings to heat and wear. If chains run too loose, they will climb, jump sprockets, get out of time, and wear faster.

1. Measure deflection of chain between driving sprocket (A) and idler sprocket (B). Tighten chains if deflection exceeds 1-1/4 in. (32 mm).
2. Loosen bolts (C) through the idler sprocket (B).
3. Turn adjusting bolts (A) until the chain deflects 5/8-in. (16 mm) midway between the sprockets with 12 lbs (53 N) of pressure.
4. Tighten bolts (C).
5. After tightening, be sure chains are in time. The feeding lug links on the right-hand side must be halfway between the lugs on the left-hand side. Time the inner chains before timing the outer chains.

IMPORTANT: The rubber lugs will be damaged if the chains are not in time.



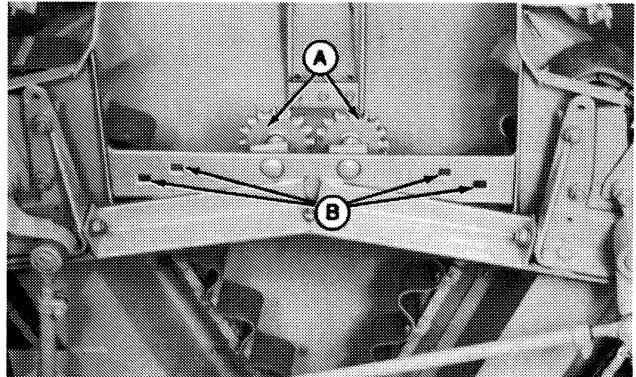
Idler Sprocket Not Shown in Illustration

0A6;E20259 E03;;4RRCP AM 231183

E25;P39 120684

(TWO-ROW)

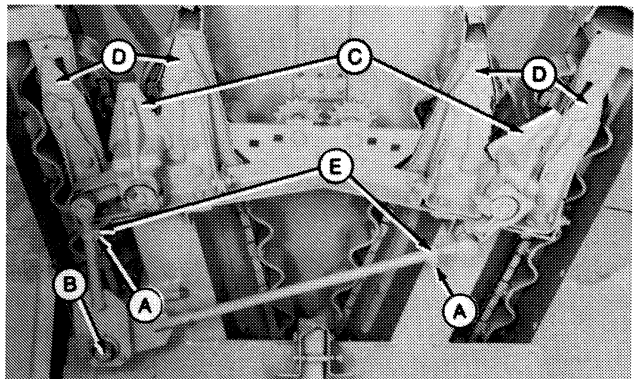
6. For additional adjustment, position auxiliary idler sprocket (A) in hole (B) and adjust chain.



0A6;E22747 E03;;4RRCP AN 010584

ADJUSTING KNIFE REGISTER (ONE AND TWO-ROW)

1. Loosen bolt (A) and disconnect bolt (B).
2. Adjust link (E) so the tip of the oscillating knife (C) over travels the side knives (D) an equal amount.
3. Torque bolt (B) to 250 lb-ft (339 N-m).
4. Torque bolt (A) to 17 lb-ft (23 N-m). Too much torque will collapse the clamp.



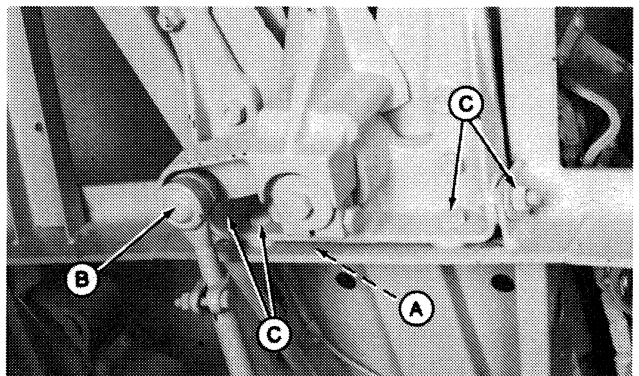
A—Clamp Bolt
B—Link Bolt
C—Oscillating Knife

D—Side Knives
E—Knife Register
Adjustment

0A6;E24152 E03;;4RRCP AO 260484

REMOVING KNIFE ASSEMBLY (ONE AND TWO-ROW)

1. Remove grease fitting (A).
2. Remove ball joint, nut and washer (B).
3. Remove four bolts, nuts and washers (C).
4. Remove knife assembly from row-crop frame.



0A6;E23068 E03;;4RRCP AZ 231184

5. To reinstall knife assembly, reverse preceding steps.
6. Torque ball joint nuts to 40 lb-ft (54 N·m).
7. With a hammer, rap casting near the ball joint and retorque to ensure the ball joint is seated in the casting.

0A6; E03;;4RRCP AE 260484

REMOVING AND REPLACING KNIVES AND OSCILLATING KNIFE SHIELD (ONE AND TWO ROW)

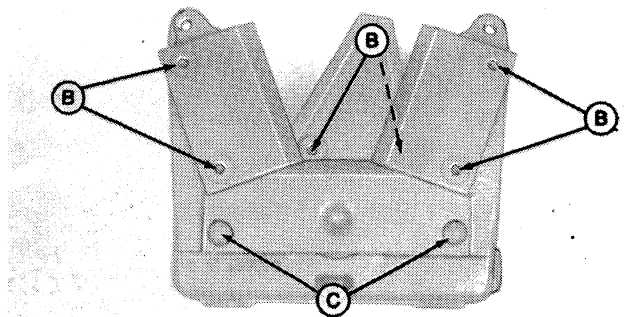
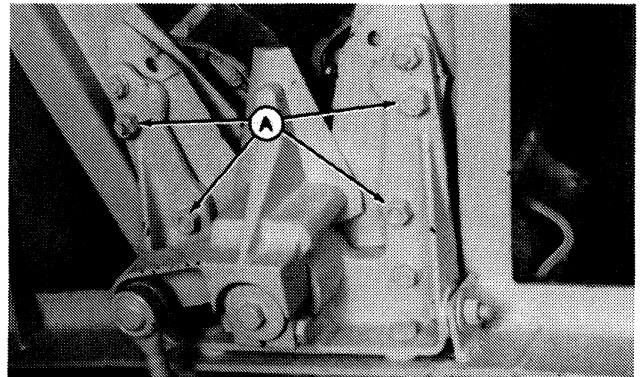
1. Remove two hex nuts (A) from socket head cap screws in each stationary knife.
2. Remove two socket head cap screws (B) from each knife.
3. Remove two round head bolts and nuts (C) from oscillating knife and shield.

NOTE: The oscillating knife can also be removed by itself. Remove one socket head cap screw, rotate, then remove the second one. For knife clearance see *Adjusting Knife Clearance*.

TO REPLACE KNIVES AND OSCILLATING KNIFE SHIELD:

Reverse the above procedure.
Torque socket head cap screws and hex nuts to 80 lb-ft (108 N·m).

NOTE: Oscillating knife shield should rest against the front corner of the stationary knives, and lower edge should be contacting the top of the oscillating knife.

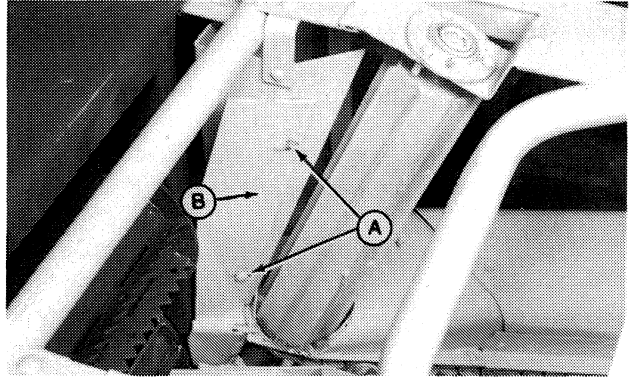


0A6;E23067, E19409 E03;;4RRCP BA 010584

ADJUSTING THROAT FILLERS (THREE-ROW/3950)

IMPORTANT: Throat fillers that are adjusted too far from gathering belt bolt heads may cause plugging. If fillers are adjusted too close to bolt heads, contact with gathering belt may occur and cause damage to the gathering belt and associated parts.

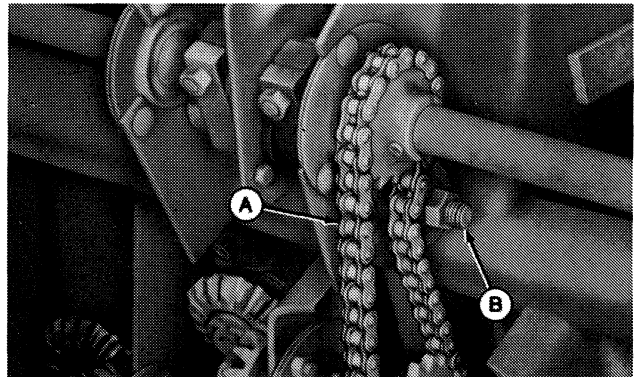
1. Loosen carriage bolts (A).
2. Slide fillers (B) to within 2 mm (.079-in.) clearance from bolt heads of gathering belt assembly.
3. Tighten carriage bolts (A).



0A6;E23491 E03;;4RRCP AP 010584

ADJUSTING KNIFE DRIVE CHAIN (THREE-ROW)

1. Loosen bolt (B).
2. Move tightener until chain deflects 1/4 to 1-in. (6 to 25 mm) at point (A).
3. Tighten bolt (B).



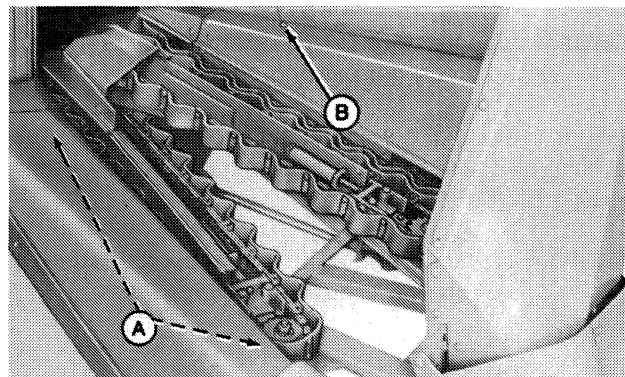
0A6;E20264 E03;;4RRCP AQ 050184

ADJUSTING GATHERER CHAINS (THREE-ROW)

IMPORTANT: Chains will stretch during initial operation. It is necessary to tighten chains periodically during this period.

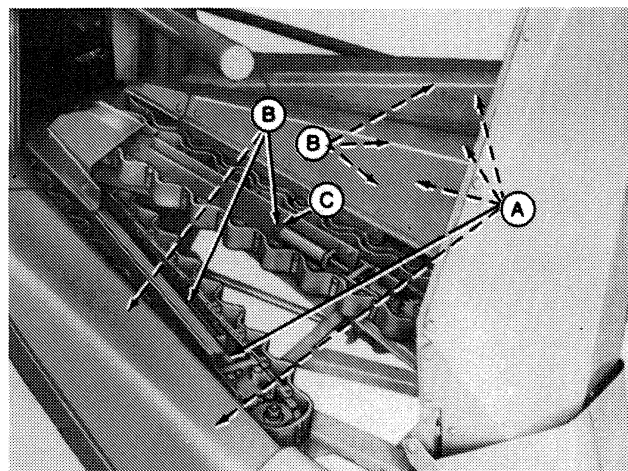
Chains which run too tight will cause bearings to heat and wear. If chains run too loose, they will climb, jump sprockets, get out of time, and wear faster.

1. Remove two bolts (A) and lift off each upper shield.
2. Loosen bolt (B) and slide it forward until inner shield is loose. Lift shield up on pivot and remove.



0A6;E22748 E03;;4RRCP AR 010584

3. Loosen nut (A) and turn bolt (B) until clearance (C) is 1/16-in. (1.6 mm).
4. Tighten nut (A).



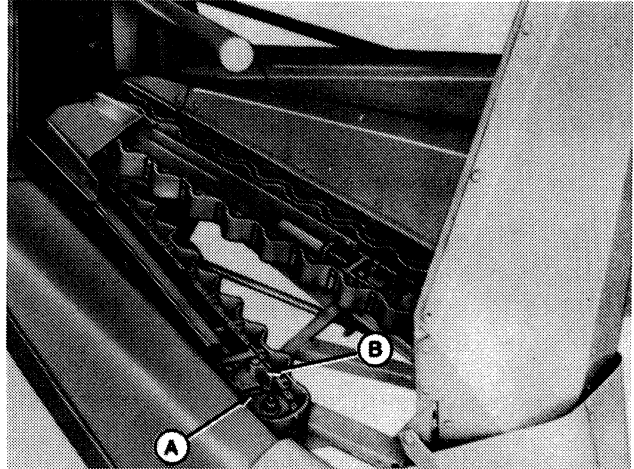
0A6;E21882 E03;;4RRCP AS 010584

E25;P43 120684

5. If idler support strap (A) does not slide freely, remove block (B) and clean out dirt and chaff.

6. After tightening, be sure chains are in time. The feeding lug links on the right-hand side must be halfway between the lugs on the left-hand side.

IMPORTANT: The rubber lugs will be damaged if the chains are not in time.



0A6;E21883 E03;;4RRCP AT 010584

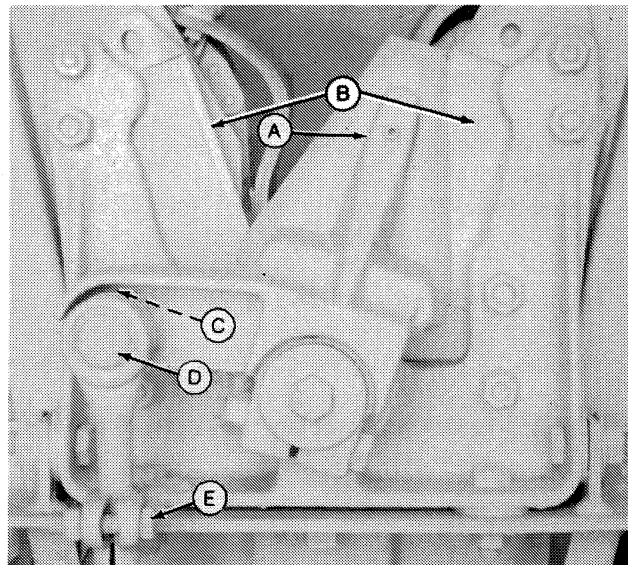
Service

ADJUSTING KNIFE REGISTER (THREE-ROW)

To set register of oscillating knife (A) to the side knives (B):

1. Loosen the link end clamp bolt (C) and disconnect the ball joint stud (D) from the oscillating casting.
2. Adjust the threaded ball joint link until the tip of the oscillating knife over-travels the side knives an equal amount.
3. Torque ball joint nut (C) to a minimum of 40 lb-ft (54 N·m).
4. Rap oscillating casting with a hammer near ball joint stud a few times to insure stud is seated. Recheck torque.
5. Torque link end clamp bolt (E) to 17 lb-ft (23 N·m).

IMPORTANT: Do not tighten so tight that clamp is collapsed.



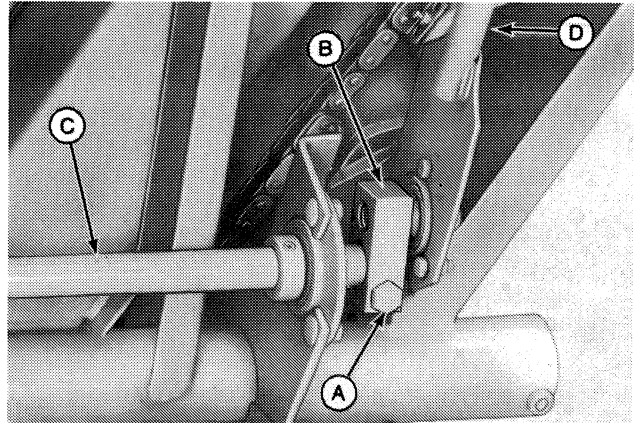
A—Oscillating Knife
B—Side Knives
C—Ball Joint Nut
D—Ball Joint Stud
E—Link Clamp Bolt

0A6/E18190 E03;;4RRCP AF 010584

To set register of oscillating knife to the outside row side knives:

1. Remove bolt (A) and slide crank (B) off shaft (C).
2. Adjust link (D) until the tip of the oscillating knife over-travels the side knives an equal amount.
3. Replace crank on shaft and tighten bolt.
4. Torque nut on link tightener (D) to 20 lb-ft (27 N·m).

IMPORTANT: Do not tighten so tight that clamp is collapsed.

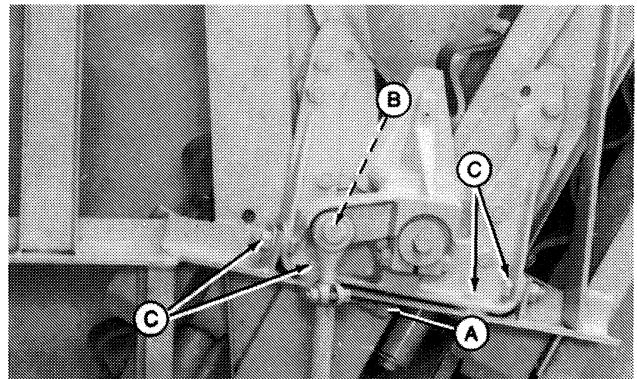


A—Bolt
B—Crank
C—Shaft
D—Link

0A6;E23870 E03;;4RRCP AG 010584

REMOVING KNIFE ASSEMBLY (THREE-ROW)

1. Remove grease line and 90-degree fitting (A).
2. Remove ball joint, nut and washer (B).
3. Remove four bolts, nuts and washers (C).
4. Remove knife assembly from row-crop frame.



0A6;E22742 E03;;4RRCP AX 010584

5. To reinstall knife assembly, reverse preceding steps.
6. Torque ball joint nuts to 40 lb-ft (54 N·m).
7. With a hammer, rap casting near the ball joint and retorquer to ensure the ball joint is seated in the casting.

0A6; E03;;4RRCP AH 010584

E25;P46 120684

REMOVING AND REPLACING KNIVES AND OSCILLATING KNIFE SHIELD (THREE-ROW)

1. Remove two hex nuts (A) from socket head cap screws in each stationary knife.
2. Remove two socket head cap screws (B) from each knife.
3. Remove two round head bolts and nuts (C) from oscillating knife and shield.

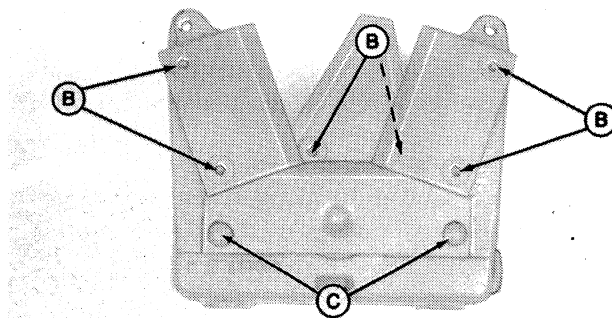
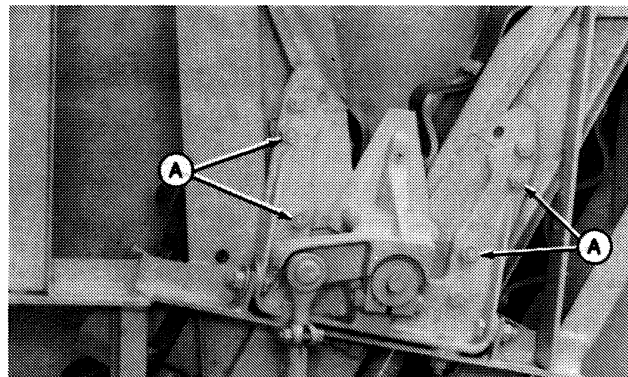
NOTE: *The oscillating knife can also be removed by itself. Remove one socket head cap screw, rotate, then remove the second one. For knife clearance see Adjusting Knife Clearance.*

TO REPLACE KNIVES AND OSCILLATING KNIFE SHIELD:

Reverse the above procedure.

Torque socket head cap screws and hex nuts to 80 lb-ft (108 N·m).

NOTE: *Oscillating knife shield should rest against the front corner of the stationary knives, and lower edge should be contacting the top of the oscillating knife.*



0A6;E22743, E19409 E03;;4RRCP AY 010584

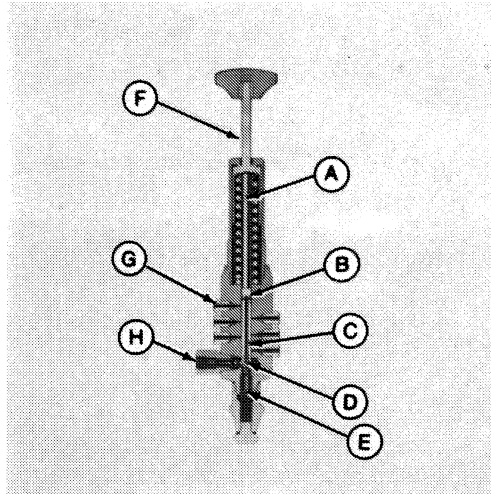
DETERMINING PLUGGED LINE OR BEARING ON MULTI-LUBER SYSTEM (THREE-ROW)



CAUTION: Do not force oil through oil line with a pressure grease gun. Burst pressure of the oil line is 3000 psi (206.8 bar) (20 685 kPa).

When operating properly, the plunger will move through its full stroke without difficulty. If an oil line or bearing becomes clogged, the normal stroke of the plunger will be interrupted when it reaches the outlet port of the clogged line. Clear the obstruction in the following way.

1. Determine which line is clogged by estimating how far the plunger (A) has moved. Check to make sure by disconnecting the suspected oil line at the bearing and moving the plunger (A).
2. After disconnecting the clogged line, move the plunger (A) to determine if the clogging is in the bearing or in the oil line.
3. Clean bearing if clogged, and refill with grease before attaching Multi-Luber feed line. If oil line is clogged, operate the pump until lubricant is forced through the line.



A—Plunger
B—Oil Ring
C—Outlet Passage
D—Ball Check

E—Measuring Chamber
F—Handle
G—Outlet Ports
H—Lubricant Inlet

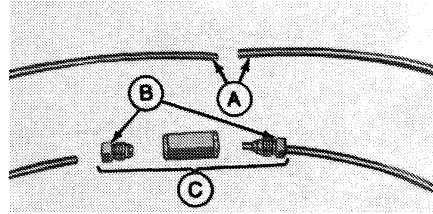
0A6;E11974 E03;;4RRCP AU 010584

REPAIRING GREASE LINES ON MULTI-LUBER SYSTEM (THREE-ROW)

Whenever a grease line has been damaged or broken, the plunger action will speed up as it passes the outlet port having a broken or punctured grease line.

1. Determine the location of the break in the feed line (A).
2. Cut broken ends of feed lines square and insert them into compression nuts (B) and union (C) as shown.
3. Tighten nuts firmly.

NOTE: Compression nuts (B) can be used only once.



A—Broken Feed Lines
B—Compression Nuts

C—EE1729M Union

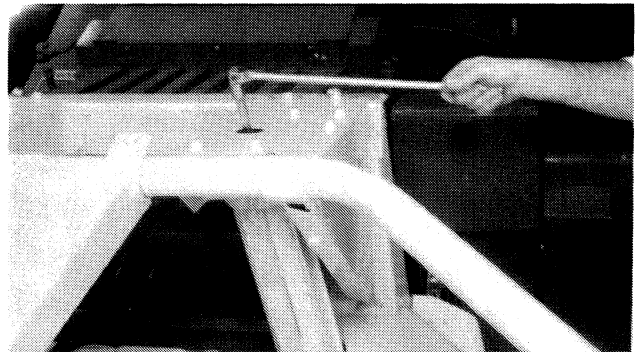
0A6;E11975 E03;;4RRCP AV 010584

TURNING DRIVE SYSTEM OVER MANUALLY (FOUR-ROW)

Turn the hex shaft on top of either power roller with a 1-in. socket wrench and extension as shown.



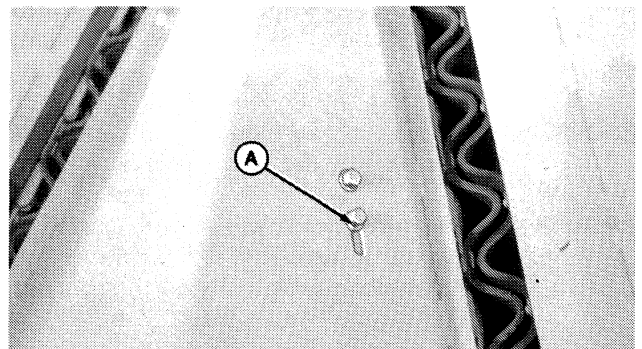
CAUTION: Avoid possible injury or property damage from wrench coming off when row-crop is engaged. ALWAYS REMOVE wrench immediately after turning row-crop over manually.



0A6;E19389 E03;;4RRCP E 010584

PREPARING TO ADJUST OR REMOVE GATHERER CHAINS (FOUR-ROW)

The shields that cover the gatherer chains are bolted, the center three are also hinged and may be removed after their respective retainers (A) have been loosened and slid back.



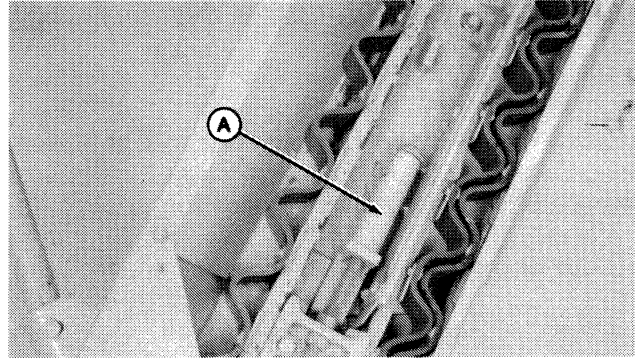
0A6;E19390 E03;;4RRCP F 010584

ADJUSTING GATHERER CHAINS (FOUR-ROW)

NOTE: Check the gatherer chains daily for proper adjustment.

The chains are properly adjusted when the idler spring spacer (A) is loose, 1.6 mm (1/16-in.) maximum gap at one end), and the idler support strap slides freely.

IMPORTANT: DO NOT OVERTENSION GATHERER CHAINS. Overtensioning will cause excessive wear and reduce life of chain idler bearings, gear case needle bearings and chains. Gatherer chains that run too loose may climb sprockets and jump time causing faster wear and possible breakage.



0A6;E19391 E03;;4RRCP G 010584

All gatherer chains have adjustable bolt tighteners (A).

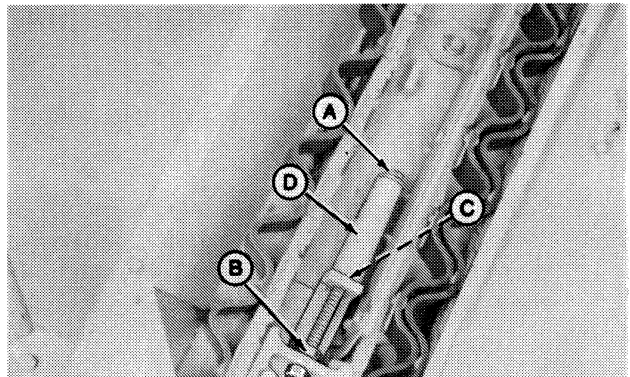
To adjust chain:

1. Loosen lock nut (B) and turn adjusting bolt (A) until 1.6 mm (1/16-in.) clearance (C) is obtained at one end of the spacer (D).
2. Tighten lock nut (B).
3. Check tension on opposite gatherer chain and adjust if necessary.

If the idler support strap does not slide freely, remove idler support, clean out dirt and chaff until "free movement" is obtained.

IMPORTANT: Remove all foreign material from gatherer chains and sprockets.

IMPORTANT: Gatherer chains will stretch during initial operation making it necessary to tighten the chains periodically during this period.



0A6;E22744 E03;;4RRCP H 010584

E25;P50 120684

PREPARING TO REMOVE GATHERER CHAINS (FOUR-ROW)

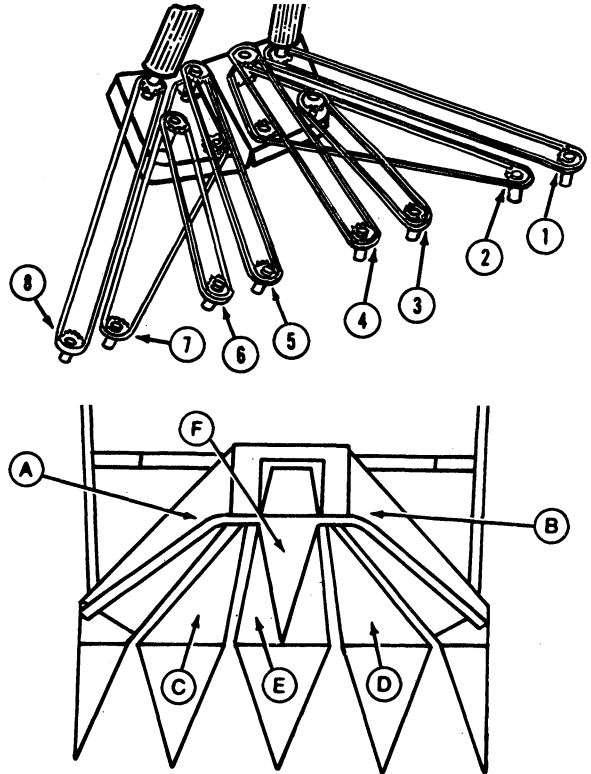
For gatherer chains 1 and 8:

1. Lower row-crop to the ground and remove fender (A) or (B).

For gatherer chains 2, 3, 4, 5, 6 and 7:

1. Raise row-crop to highest position, lower support stands and secure with handle.
2. Pivot shield (C) or (D) upward and lift off.
3. The center shield (E) can also be removed at this time by removing retainer bolt on center panel (F) and pivoting up and out of the way.

A—Fender
B—Fender
C—Shield
D—Shield
E—Center Shield
F—Center Panel



0A6;E19393, E19394 E03;;4RRCP J 281183

REMOVING GATHERER CHAINS 1, 2, 7 AND 8 (FOUR-ROW)

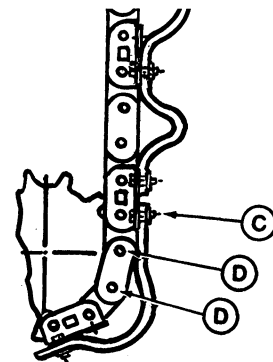
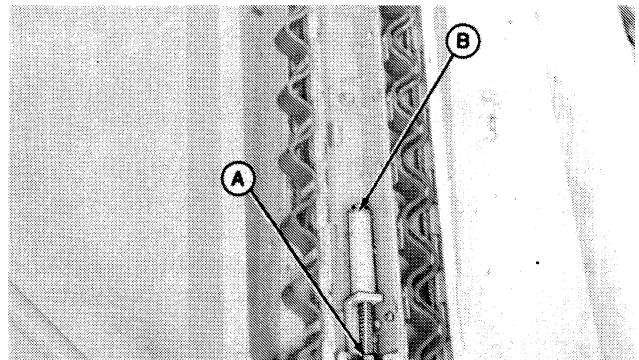
For gatherer chains 1, 2, 7 and 8:

1. Relieve gatherer chain tension by loosening lock nut (A) and backing off adjusting bolt (B).
2. Grind heads off belting rivets (C) and chain link pins (D) at splice. Use punch to drive rivets and pins out.



CAUTION: Avoid possible injury or property damage from wrench coming off when row-crop is engaged. **ALWAYS REMOVE** wrench immediately after turning row-crop over manually.

3. Feed chain assembly down and out of row-crop trough by turning either hex shaft (see Turning Drive System Over Manually) using a 1-in. socket wrench and extension.

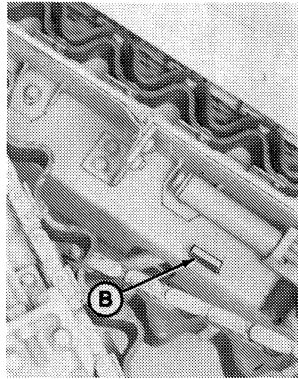
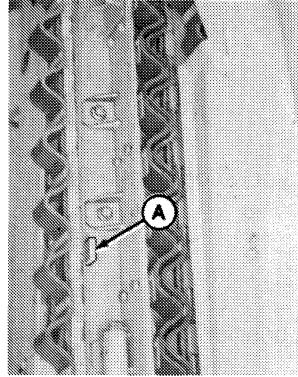


0A6;E19395, E19396 E03;;4RRCP K 010584

E25;P51 120684

NOTE: The gatherer chain assemblies available for chains 1, 2, 7 or 8 come separated at the splice. The assembly includes a coupler, two bolts, two nuts, and reinforcements for you to install after threading chain assembly up through the trough. See your John Deere dealer.

Pads (A) and (B) on outer row units provide a surface to use when staking the coupler pins during installation of these chain assemblies.

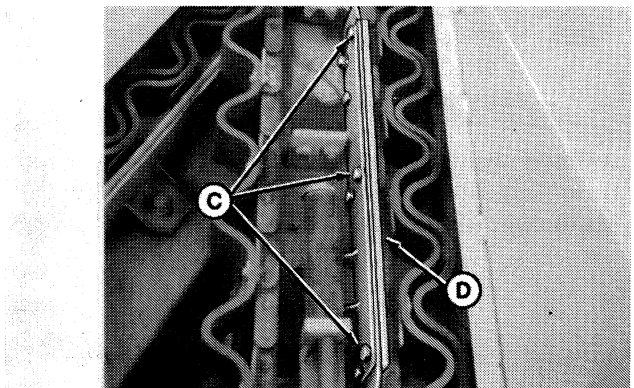
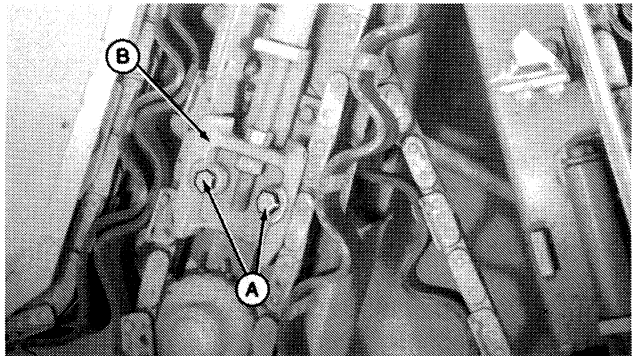


0A6;E22745, E22746 E03;;4RRCP L 010584

REMOVING GATHERER CHAINS 3, 4, 5 AND 6 (FOUR-ROW)

For gatherer chains 3, 4, 5 and 6, two bolts (A), idler support (B), bolts (C) and wear bar (D) must be removed.

NOTE: Endless gatherer chain assemblies are available for chains 3, 4, 5 and 6. See your John Deere dealer.

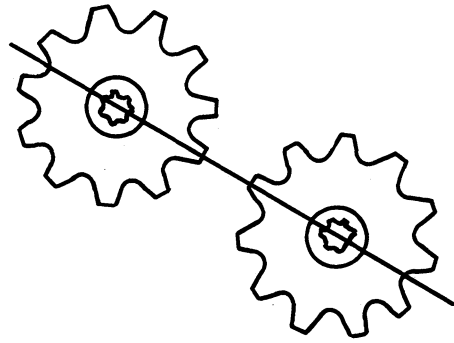


0A6;E19399, E19400 E03;;4RRCP M 010584

E25;P52 120684

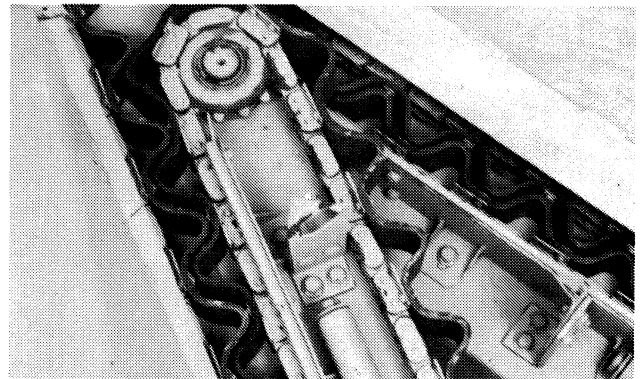
TIMING GATHERER CHAINS (FOUR-ROW)

The drive sprockets for rows 1 AND 4 ONLY are also properly timed when the tooth of one drive sprocket is directly in line with the tooth of the opposite drive sprocket.



0A6;E19401 E03;;4RRCP 0 010584

1. Start with one gatherer chain and drive sprocket in place on any row.
2. Lay opposite chain and drive sprocket beside the first.
3. Match lugs until they intermesh. The feeding lug links on the right-hand side must be halfway between the lugs on the left-hand side.
4. Slide sprocket over spline of drive shaft.



0A6;E23066 E03;;4RRCP AI 010584



CAUTION: Before servicing or adjusting the row-crop always:

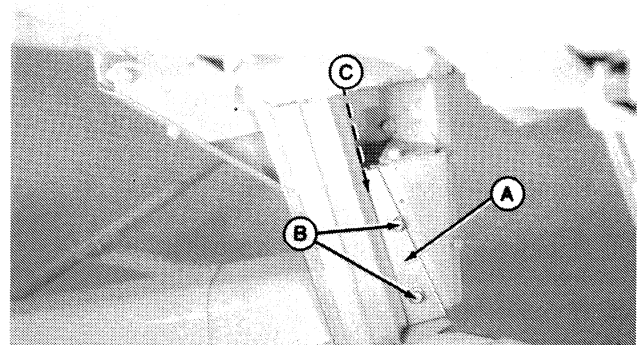
1. Disengage all power.
2. Shut off engine.
3. Then wait until all moving parts have stopped rotating.

0A6; E03;;4RRCP 0 260484

ADJUSTING POWER ROLLER STRIPPER (FOUR-ROW)

To adjust power roller stripper (A):

1. Loosen two bolts (B) and slide stripper until correct clearance of 3 mm (1/8-in.) (C) is obtained.
2. Tighten bolts securely.
3. Check clearance by rotating the power roller, see Turning Drive System Over Manually.



0A6;E19402 E03;;4RRCP Q 010584

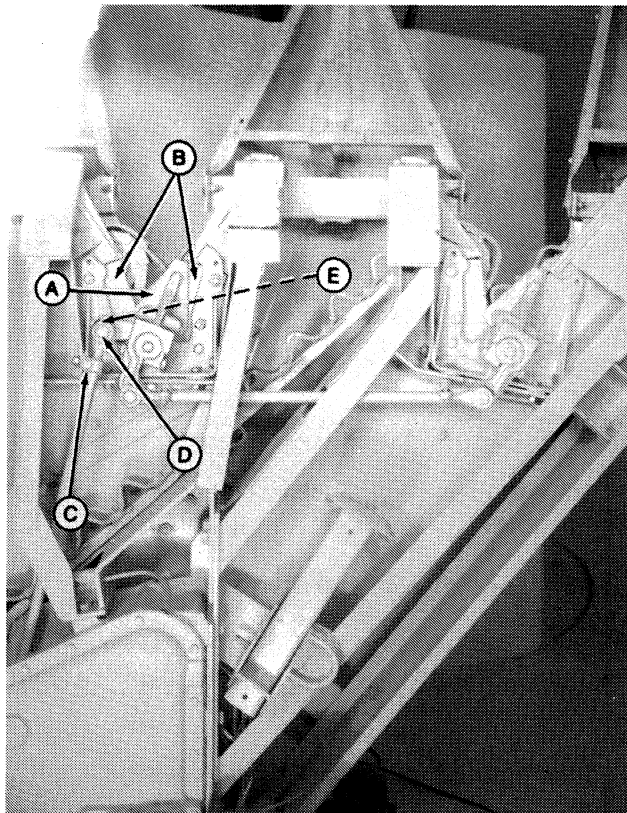
E25;P53 120684

ADJUSTING KNIFE REGISTER (FOUR-ROW)

IMPORTANT: Set register of inner row first. To set the register of the oscillating knife (A) to the side knives (B), loosen the pitman link end clamp bolt (C), and disconnect the ball joint stud (D) from the oscillating casting.

1. Adjust the threaded ball joint link until the tip of the oscillating knife over-travels the side knives an equal amount.
2. Torque ball joint nut (E) to a minimum of 54 N·m (40 lb-ft).
3. Rap oscillating casting with a hammer near ball joint stud to ensure stud is seated. Recheck torque.
4. Torque pitman link end clamp bolt to 23 N·m (17 lb-ft).

IMPORTANT: Do not tighten so tight that clamp is collapsed.



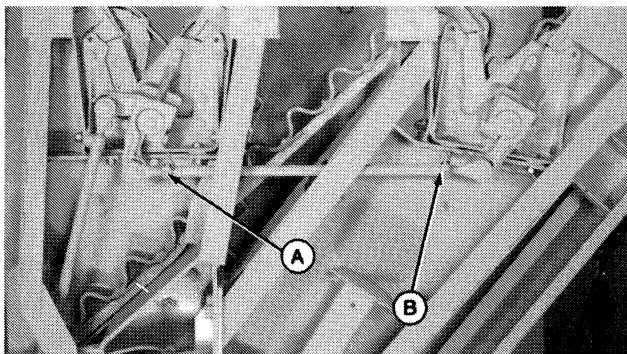
0A6/E19405 E03;;4RRCP U 010584

ADJUSTING CROSS LINK (FOUR-ROW)

When setting the register of an oscillating knife on the outside rows, loosen cross link clamp bolt (A) or (B).

NOTE: Clamp bolts (A) and (B) are inch hardware.

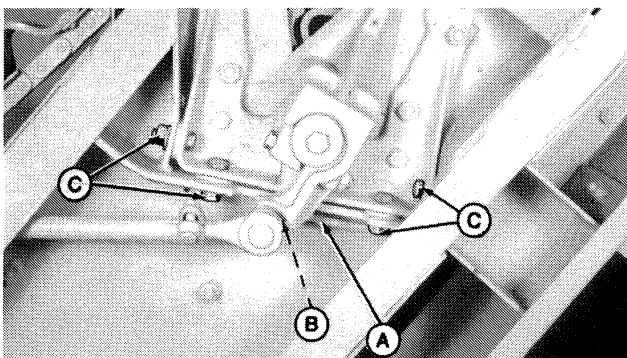
IMPORTANT: To avoid possible damage, make certain that all links clear framework, and an equal ± 6 mm ($\pm 1/4$ -in.) amount of threads are exposed on each ball joint.



0A6/E19406 E03;;4RRCP V 010584

REMOVING KNIFE ASSEMBLY (FOUR-ROW)

1. Remove grease line and 90-degree fitting (A).
2. Remove ball joint, nut and washer (B).
3. Remove four bolts, nuts and washers (C).
4. Remove knife assembly from row-crop frame.



0A6/E19407 E03;;4RRCP W 010584

E25;P54 130684

5. To reinstall knife assembly, reverse preceding steps.
6. Torque ball joint nuts to 54 N·m (40 lb-ft).
7. With a hammer, rap casting near the ball joint and retorquer to ensure the ball joint is seated in the casting.

0A6; E03;;4RRCP AJ 010584

REMOVING AND REPLACING KNIVES AND OSCILLATING KNIFE SHIELD (FOUR-ROW)

1. Remove two hex nuts (A) from socket head cap screws in each stationary knife.
2. Remove two socket head cap screws (B) from each knife.
3. Remove two round head bolts and nuts (C) from oscillating knife and shield.

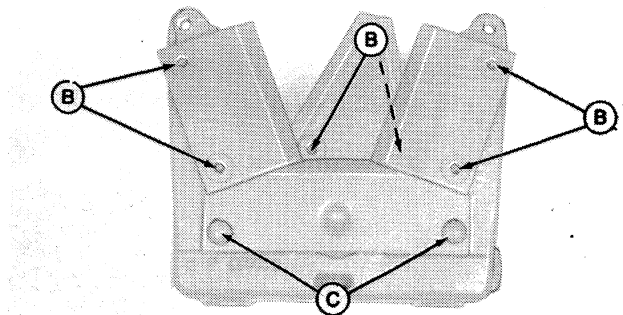
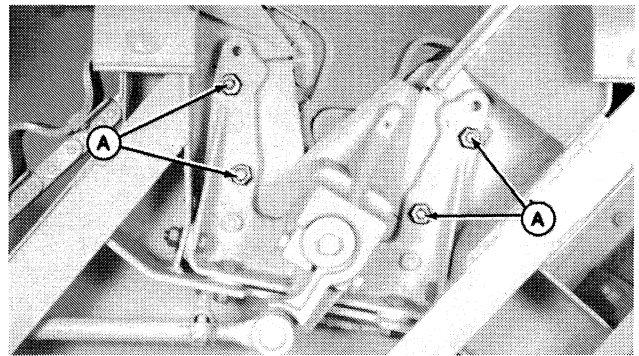
NOTE: The oscillating knife can also be removed by itself. Remove one socket head cap screw, rotate, then remove the second one. For knife clearance see *Adjusting Knife Clearance*.

TO REPLACE KNIVES AND OSCILLATING KNIFE SHIELD:

Reverse the above procedure.

Torque socket head cap screws and hex nuts to 108 N·m (80 lb-ft).

NOTE: Oscillating knife shield should rest against the front corner of the stationary knives, and lower edge should be contacting the top of the oscillating knife.



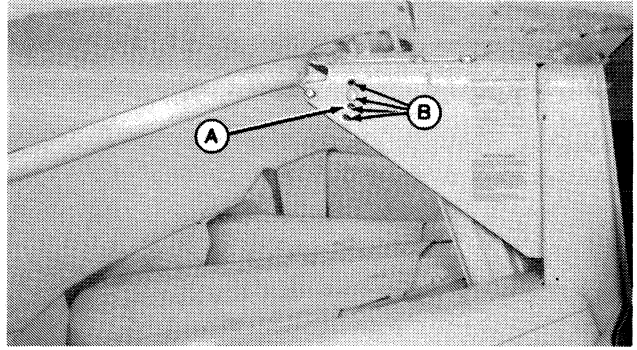
0A6;E19408, E19409 E03;;4RRCP Y 010584

ADJUSTING UPPER CROP DIVIDER (FOUR-ROW)

In certain field conditions, like leaning or tangled crop it may be necessary to adjust the upper crop divider for optimum performance.

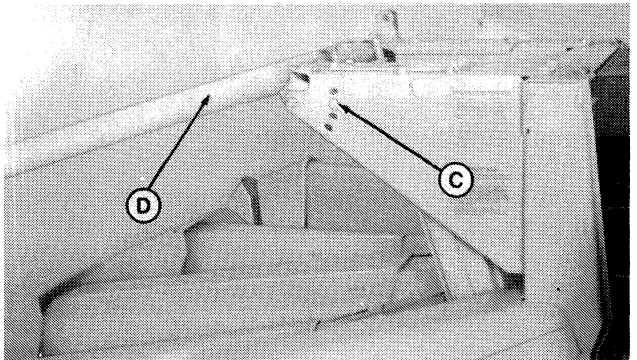
NOTE: Normal operating position is shown at location (A).

IMPORTANT: To avoid machine damage, if your row-crop is equipped with a hydraulic cylinder, **NEVER** allow a bolt to be left in slots (B). Disregard step 1.



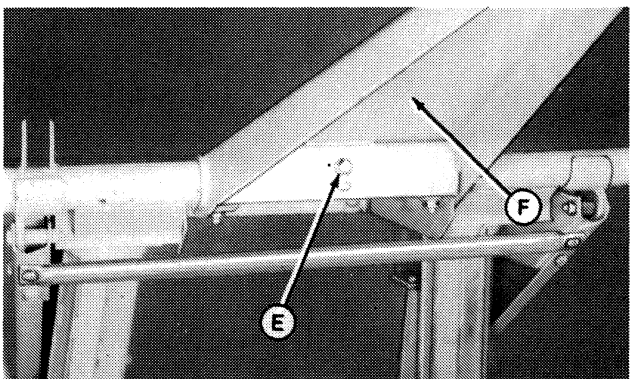
0A6;E19410 E03;;4RRCP Z 260484

1. Remove bolt (C) from either side and raise or lower crop deflectors (D) to any of the other three positions. Reinstall bolts and secure.



0A6;E19411 E03;;4RRCP AA 260484

2. Remove one bolt (E), raise or lower the center panel (F) to the other position. Reinstall bolt and secure.

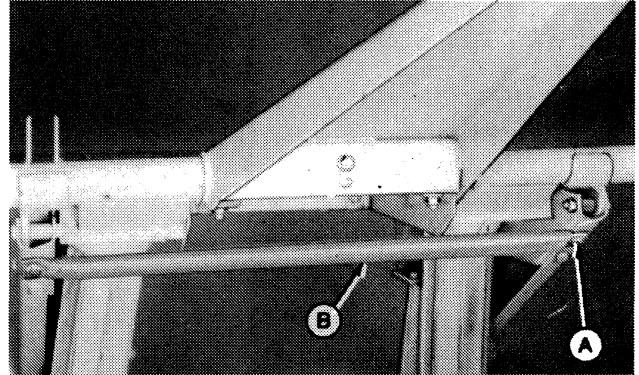


0A6;E24125 E03;;4RRCP AB 260484

REMOVING SUPPORT TUBE (FOUR-ROW)

In certain field conditions, the support tube may cause resistance in flow of material.

1. Remove screws (A) from both sides of tube and remove tube (B).
2. Reinstall screws (A).



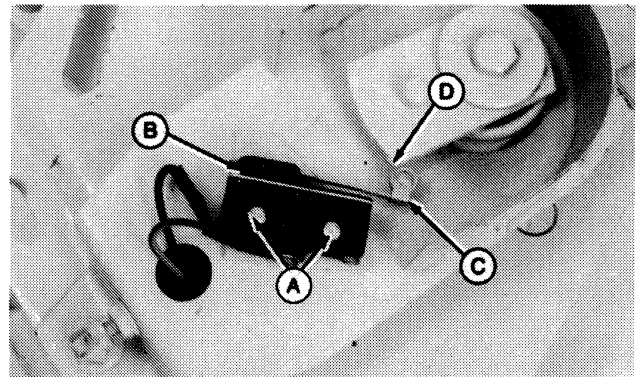
0A6;E24126 E03;;4RRCP AW 260484

ADJUSTING SENSOR SWITCH



CAUTION: Sensor unit must be removed to make this adjustment. Raise row-crop and block securely before working underneath gatherer points.

1. Loosen two machine screws (A).
2. Rotate switch (B) until roller (C) is to tip of arm (D). Tighten screws.
3. Move sensor tube about 51 mm (2-in.). A “click” should be heard as switch roller arm is depressed.
4. If “click” is not heard, repeat above steps.



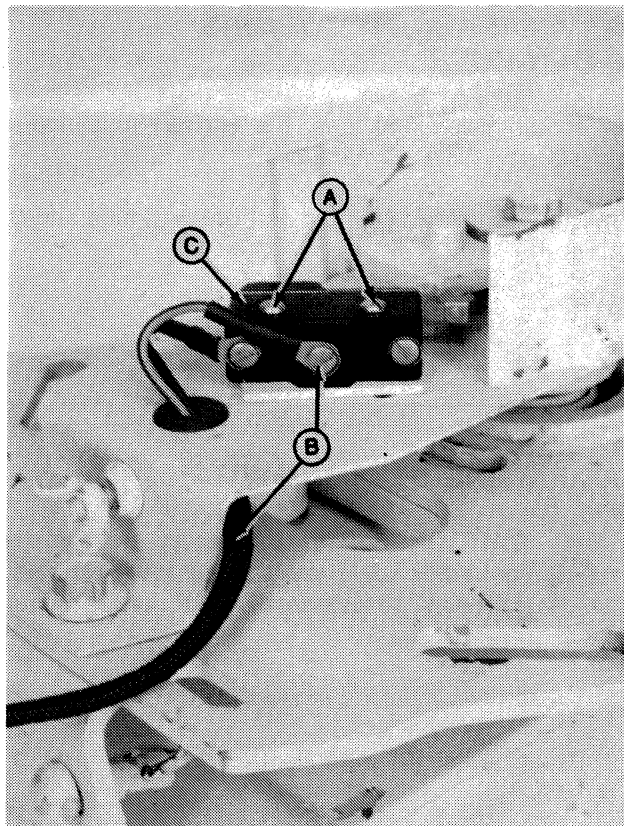
0A6;E24155 E03;;4RRCP BB 260484

REPLACING SENSOR SWITCH



CAUTION: Sensor unit must be removed to make this adjustment. Raise row-crop and block securely before working underneath gatherer points.

1. Remove two machine screws (A).
2. Remove two machine screws on wire leads and harness (B). Discard sensor switch (C).
3. Install one wire to the normally open terminal and one wire to the common terminal of the switch. (Wire colors are immaterial to function.) The normally closed terminal is not used.
4. Install sensor switch and adjust. See Adjusting Sensor Switch.



0A6;E24157 E03;;4RRCP BC

Storage

END OF SEASON STORAGE

1. Thoroughly clean row-crop, especially around gatherer chains, knives and power corners. Chaff and dirt will draw moisture and cause rust.
2. Store row-crop with support stands lowered on firm ground.
3. Thoroughly lubricate row-crop. (See Lubrication section.)
4. Paint all parts from which the paint has been worn.
5. If possible, shelter the unit in a dry place.
6. Release spring tension on slip clutch.
7. List replacement parts that will be needed for the next season and order them early.

0A6; E03;;4RRCQ A 010584

BEGINNING OF SEASON SERVICE

1. If needed, thoroughly clean row-crop.
2. Adjust oscillating knives to proper clearance. (See Service section.)
3. Adjust gatherer chains to proper tension. (See Service section.)
4. Adjust spring tension on slip clutch. (See Service section.)
5. Adjust power roller strippers to proper clearance. (See Service section.)
6. Thoroughly lubricate row-crop. (See Lubrication section.)
7. Check row-crop to ensure all hardware is tight.
8. Run row-crop at half speed for several minutes. Check bearings for overheating or excessive looseness.
9. Review operator's manual.

0A6; E03;;4RRCQ B 010584

E25;P57 120684

Crime Prevention Tips

GOOD ADVICE

Keep your machine damage-free and YOURS!

Follow the advice on these pages to reduce vandalism, discourage theft, and help recover your machine if it is stolen.

TAKE A BITE OUT OF
CRIME
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AB6/TS140 053/CRPRV A 181183

RECORD IDENTIFICATION NUMBERS

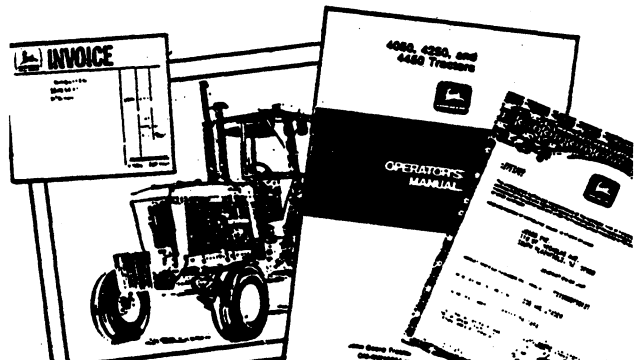
1. Record Product Identification Number (PIN) of unit and identification numbers of engine, component, attachment, etc. EXACTLY as they appear on the plates.
2. Check that the complete and correct numbers appear on all documentation (insurance, financial, warranty, manufacturer's certificate of origin, etc.). Keep all documents in a safe location.
3. If available, participate in an "Owner Applied Numbering Program" and mark your own machines.



AB6/TS161 053/CRPRV B 091283

MAINTAIN DOCUMENTED PROOF OF OWNERSHIP

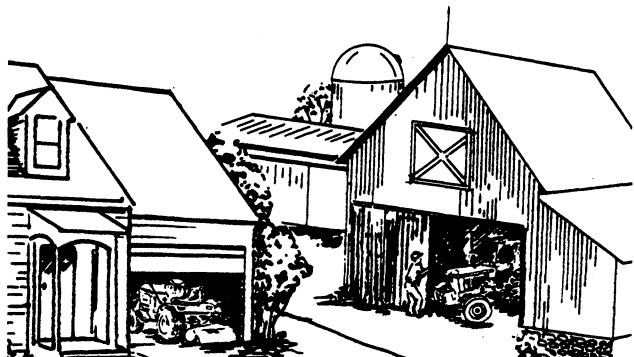
1. Keep in a safe location all documents (invoices, warranty cards, manufacturer's certificate of origin, if available, etc.) that accompanied your machines at the time of purchase.
2. Take color photographs of each machine from several angles.
3. Maintain an up-to-date inventory of all machines. Check regularly to insure no machines have been stolen.



AB6/TS142 053/CRPRV C 181183

PARK INDOORS OUT OF SIGHT

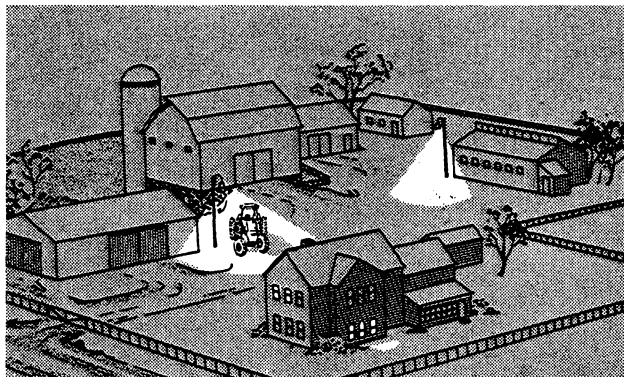
1. Lower all equipment making the machine harder to move.
2. Remove ignition key. If so equipped, lock cab doors, windows and any vandal protection devices. Place hard-to-move equipment in front of exits.
3. If machine is being stored, remove the battery or any essential component in the electrical system.
4. Set wheels in widest position making loading more difficult. Secure all openings to storage buildings.



AB6/TS143 053/CRPRV D 100184

PARKING OUTDOORS

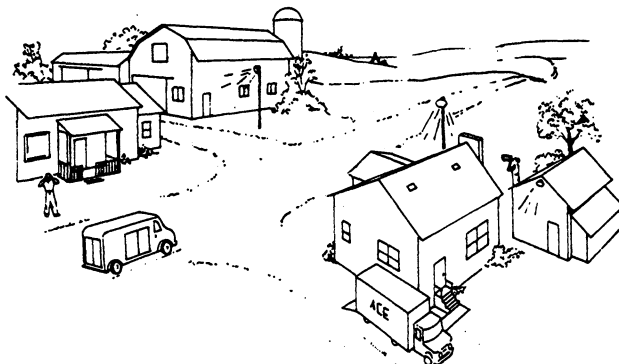
1. Park machine in a fenced, well-lighted, locked area. Lower equipment, remove ignition key and lock cab doors, windows, and any vandal protection devices, if so equipped.
2. Make law enforcement aware of your presence in an area and provide them with a contact person to assist them in dealing with suspicious activity.
3. Solicit assistance from neighbors or merchants who permanently reside near the parking area.



AB6/TS155 053/CRPRV E 091283

REDUCE VANDALISM

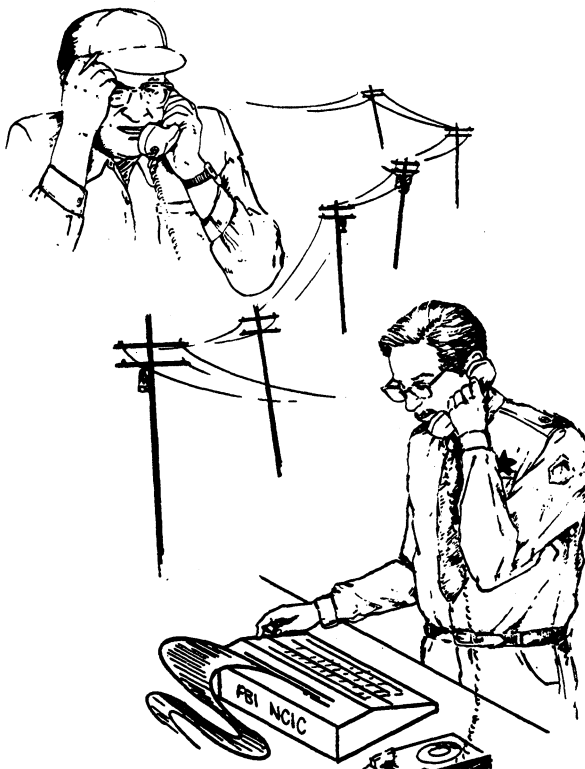
1. Install vandal protection devices especially if parking machine in high-risk areas.
2. Solicit assistance for watching machine from individuals residing in the area.
3. Take written notes and report to law enforcement all suspicious vehicles or persons.
4. Participate in a "Neighborhood Watch Program."



AB6/TS145 053/CRPRV F 100184

REPORT THEFT

1. If a theft occurs, notify the law enforcement agency having jurisdiction and the insurance carrier immediately.
2. Give a full description and a complete identification number(s) to the investigating officer and insurance carrier.
3. If available, provide the investigating officer with photographs of the actual machine, manufacturer's literature and knowledge of any identifiable marks that would assist in identifying the machine.
4. Ask for verification that the stolen machine has been entered into the National Crime Information Center (NCIC) operated by the FBI in Washington D.C.
5. Notify your John Deere dealer of the theft and request that, if possible, a notice be posted that provides the description and identification information.
6. Regularly check the identification plates on all machines and report any removed plates to law enforcement immediately. Promptly contact your dealer and order a duplicate identification plate.



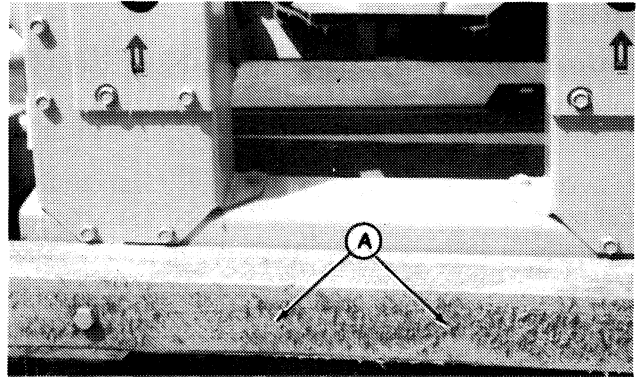
AB6/TS146 053/CRPRV G 181183

Assembly

REMOVE ROW-CROP FROM SKID (FOUR-ROW)



CAUTION: If a forklift is used, its capacity must be at least 1362 kg (3000 lbs). **ONLY** place forks in area shown (A).

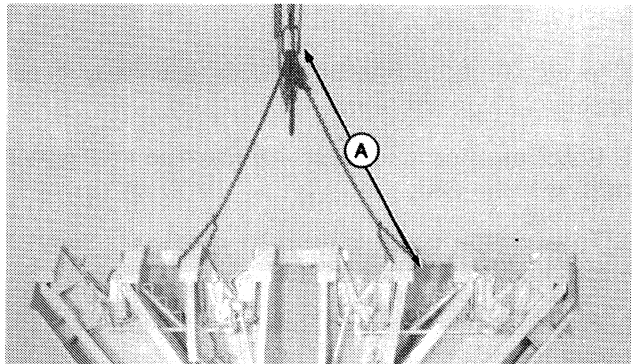


0A6;E23499 E03;;4RRCR A 010584

1. Attach hoist chain as shown with approximately 914 mm (36-in.) (A) to chain joint and position row-crop in desired location.



CAUTION: Hoist chain must have a capacity of at least 1362 kg (3000 lbs).

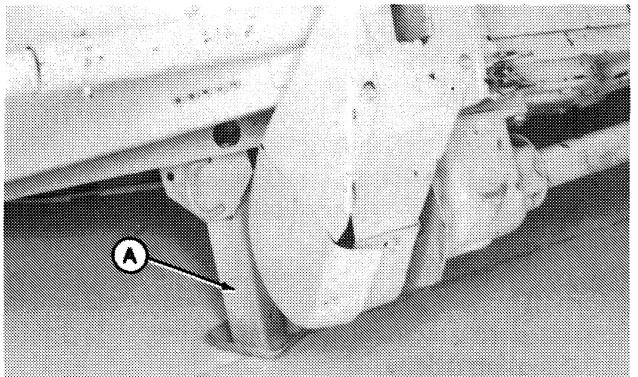


0A6;E19414 E03;;4RRCR B 010584

2. Lower support stands (A) and secure with handles.

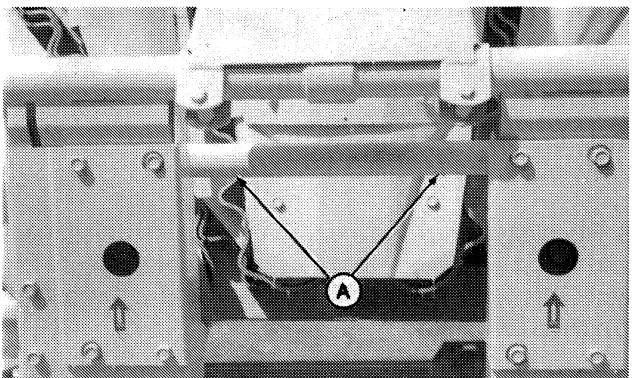


CAUTION: Handles must be seated properly.



0A6;E23064 E03;;4RRCR C 010584

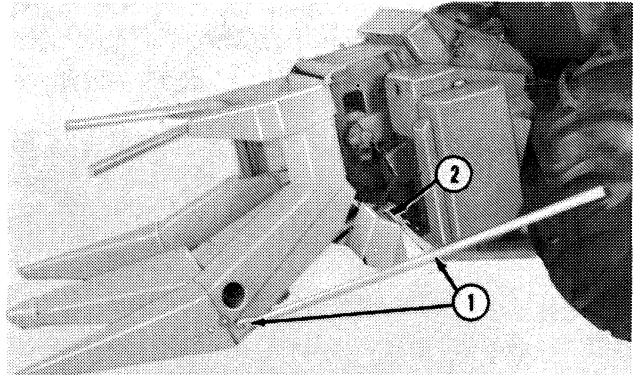
IMPORTANT: **ONLY** place forklift forks under tube (A) when moving row-crop from one location to another.



0A6;E23073 E03;;4RRCR M 010584

INSTALL CROP DEFLECTORS (TWO-ROW) (SELF-PROPELLED FORAGE HARVESTERS)

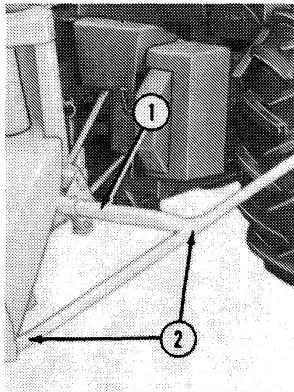
1. Attach crop deflector using cap screw, washer, lock washer and nut.
2. Complete assembly using cap screw, lock washer and nut.
3. Repeat procedure on opposite side of machine.



0A6;E19131 E03;;4RRCR N 260484

INSTALL CROP DEFLECTORS (THREE-ROW) (SELF-PROPELLED FORAGE HARVESTERS)

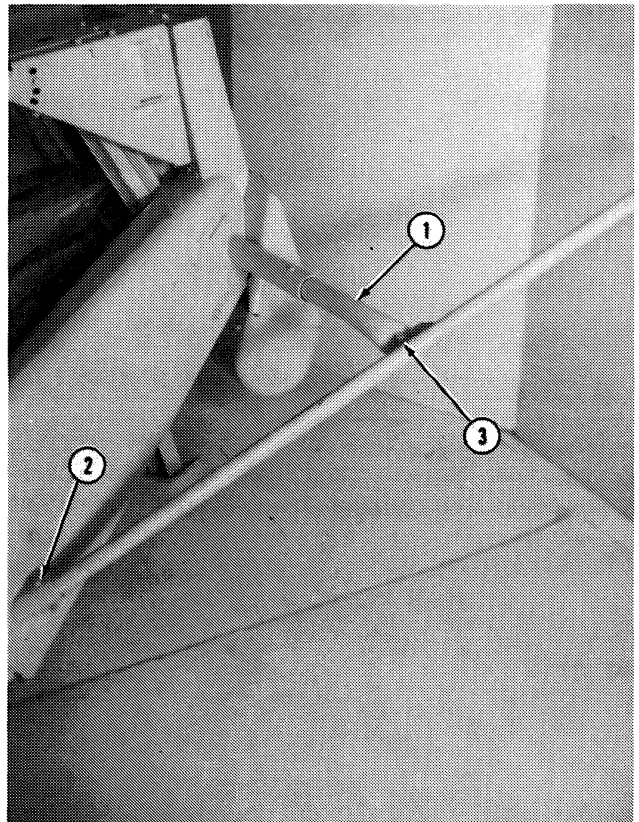
1. Install extension tube into frame and assemble using cap screw and nut.
2. Attach crop deflector tube using two cap screws, washers and nuts.
3. Repeat procedure on opposite side of machine.



0A6;E19132 E03;;4RRCR O 260484

INSTALL CROP DEFLECTORS (FOUR-ROW) (SELF-PROPELLED FORAGE HARVESTERS)

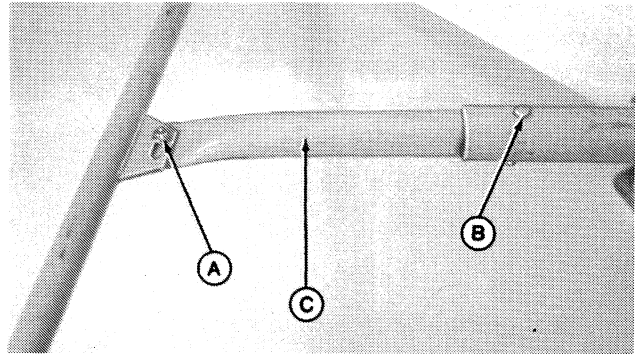
1. Position extension tube on support and secure using existing hardware.
2. Secure tube to support using cap screw and lock nut.
3. Secure tube using cap screw and lock nut.
4. Repeat procedure on opposite side of machine.



0A6;E23063 E03;;4RRCR K 260484

ADJUST CROP DEFLECTORS (THREE AND FOUR-ROW) (SELF-PROPELLED FORAGE HARVESTERS)

1. To adjust, loosen nut (A).
2. Remove bolt (B) and move tube (C) to desired position (align holes in both tubes).
3. Reinstall bolt (B) and nut. Tighten nut (A).



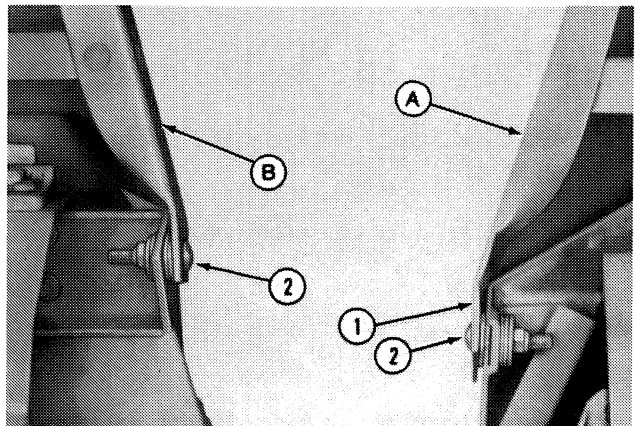
0A6;E19379 E03;;4RRCR Q 260484

INSTALL GATHERER POINTS (THREE AND FOUR-ROW) (EUROPE)

Remove points from shipping position and discard both shipping brackets.

Installing outer points:

1. Insert hinge pivot in hinge hole on outer gatherer sheet to full depth (Three-Row).
2. Bolt point to outer gatherer sheet with carriage bolt, place washers between gatherer frame and point as needed to secure hinge in pivot and place at least one washer behind lock nut.

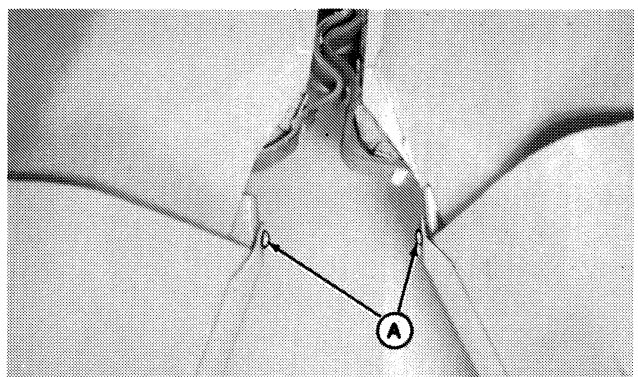


A—Outer Points
B—Inner Points

0A6;E16199 E03;;4RRCR P 260484

3. Using this hardware, attach the two outer points and center points with carriage bolts (A), washers and nuts.

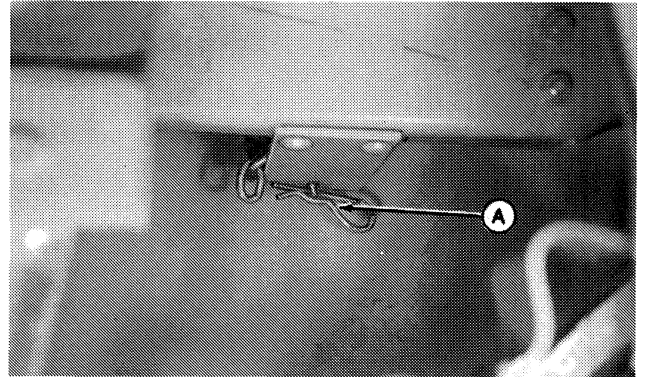
IMPORTANT: DO NOT overtighten bolts, points should pivot freely.



0A6;E22738 E03;;4RRCR E 260484

- Starting at outer point, attach chain inside point and route link through slot in island or fender. Secure with spring locking pin (A) as shown.

Level remaining gather points starting with the outer point.



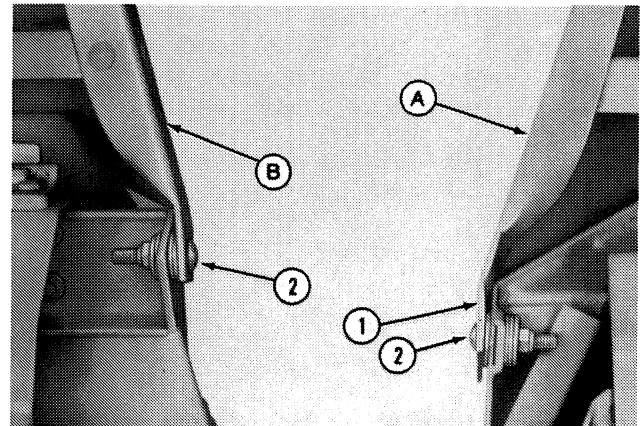
0A6;E22739 E03;;4RRCR F 260484

INSTALL GATHERER POINTS (THREE AND FOUR-ROW) (NORTH AMERICA)

Remove points from shipping position and discard both shipping brackets.

Installing outer points:

- Insert hinge pivot in hinge hole on outer gatherer sheet to full depth (Three-Row).
- Bolt point to outer gatherer sheet with carriage bolt, place washers between gatherer frame and point as needed to secure hinge in pivot and place at least one washer behind lock nut.



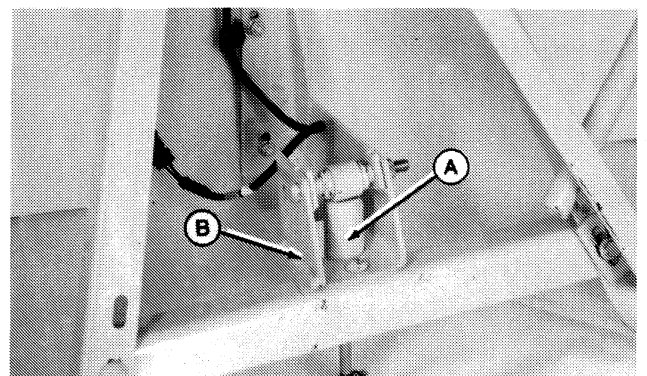
A—Outer Points
B—Inner Points

0A6;E16199 E03;;4RRCR AN 260484

INSTALLING INNER POINTS

- Attach shock absorber (A) in center hole of mounting bracket (B) using cap screw and lock nut.

NOTE: If ROW-TRAK is to be installed, see Installing ROW-TRAK (North America).

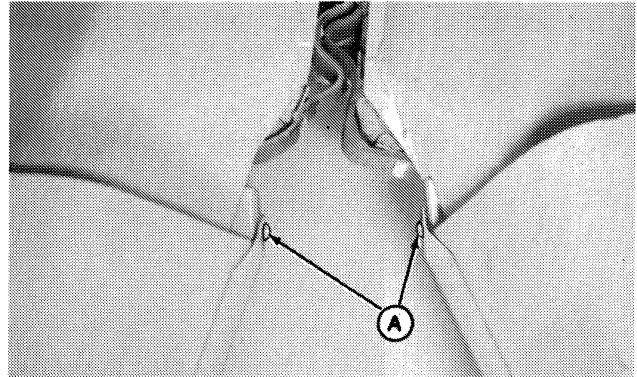


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E25;P63 120684

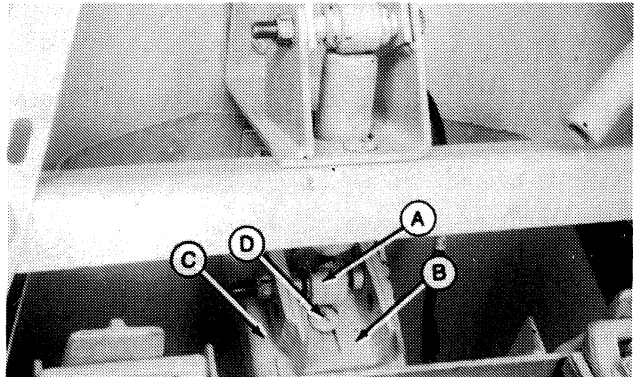
2. Attach inner points using carriage bolts (A), washers and nuts.

IMPORTANT: DO NOT overtighten bolts, points should pivot freely.



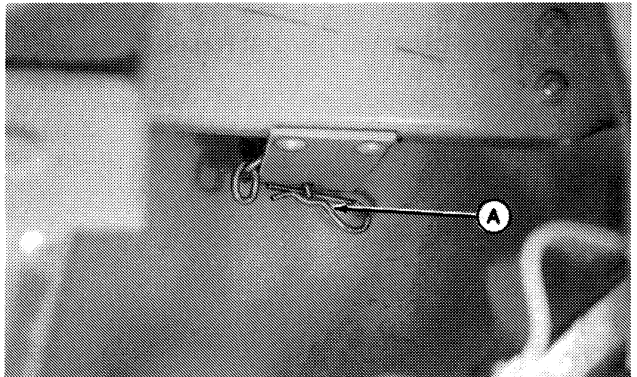
0A6;E22738 E03;;4RRCR S 270484

3. Install shock absorber (A) (rod end) in middle hole of mounting bracket (B) using cap screw and lock nut. Install bracket (B) into support (C) using two carriage bolts (D).



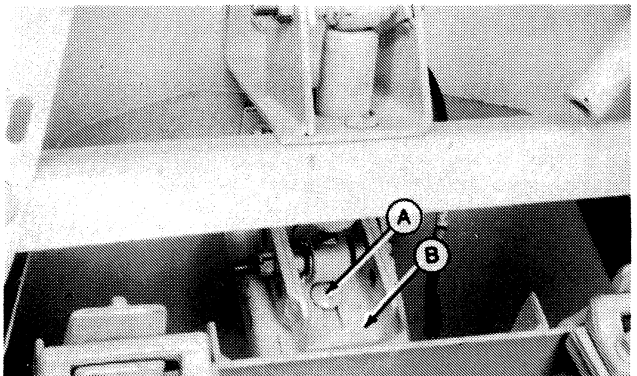
0A6;E24128 E03;;4RRCR T 270484

4. Starting at outer points, attach chain inside point and route link through slot in island or fender. Secure with spring locking pin (A) as shown.



0A6;E22739 E03;;4RRCR U 270484

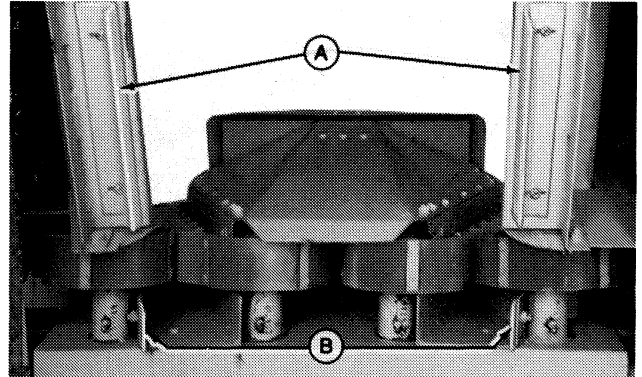
5. Level inner points by loosening carriage bolt (A) and sliding bracket (B) to desired height.



0A6;E24158 E03;;4RRCR V 270484

ADJUSTING STRAPS (TWO-ROW)

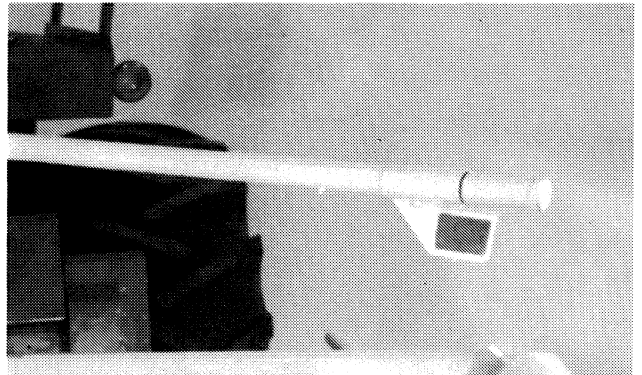
1. Remove angles (A) when used on 3960, 3970, 4720, 5720 and 5820.
2. Adjust strap (B) out to maximum length when used on 3940 and 3950.



0A6;E24120 E03;;4RRCW S 260484

ADJUST REFLECTOR (THREE AND FOUR-ROW)

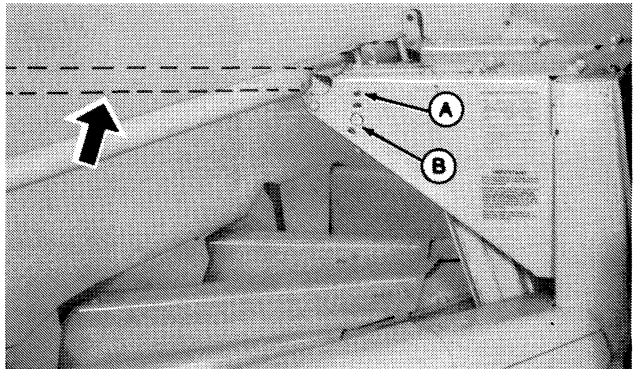
Loosen cap screw and adjust reflector so reflective surface is perpendicular to the ground. Tighten cap screw.



0A6;E23065 E03;;4RRCR L 270484

POSITION CROP DIVIDERS (FOUR-ROW)

1. Remove two bolts from position (A).
2. Raise crop dividers to normal operating position.
3. Reinstall bolts into slots (B) and secure.

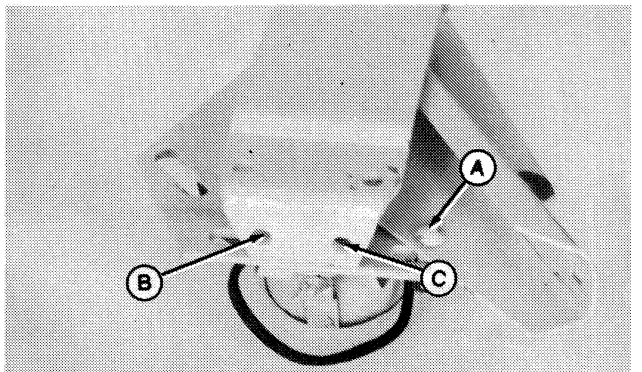


0A6;E19419 E03;;4RRCR G 270484

INSTALL ROW-TRAK (NORTH AMERICA)

1. Remove pin (A) from sensor unit and place in storage position (B or C).

A—Pin
B—Storage Position-
Right-Hand Point
C—Storage Position-
Left-Hand Point

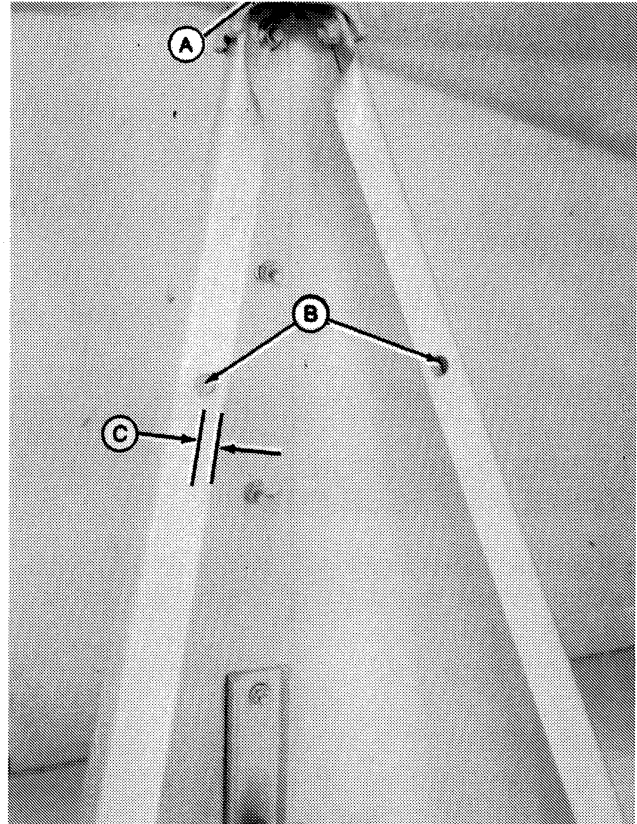


0A6;E24129 E03;;4RRCR W 270484

NOTE: *Sensor unit with female plug must be installed in left-hand point.*

2. Slide sensor unit under tip of point (A). Center sensor unit in point. Mark location on side angles and remove sensor assembly.

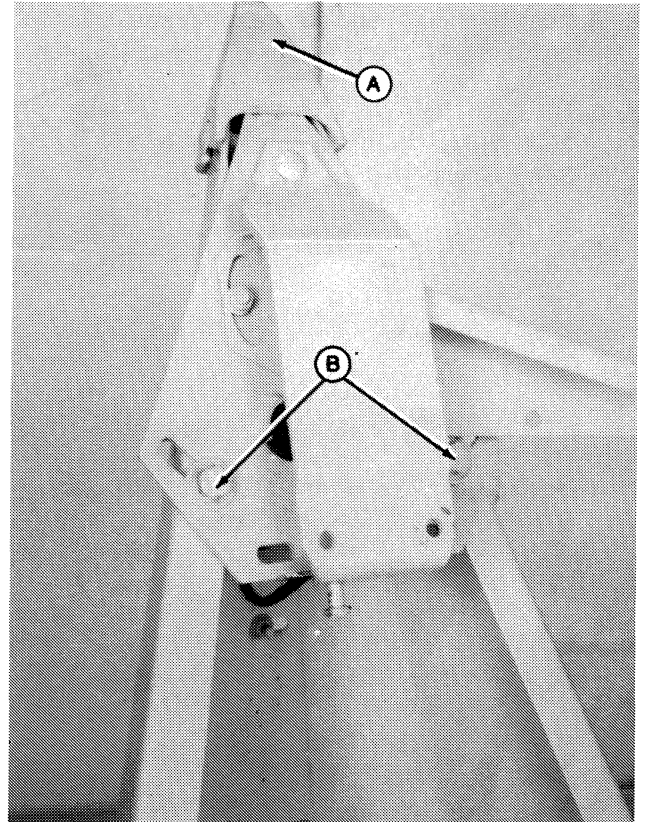
3. Locate center of hole 15 mm (C) from edge of angles. Drill two 17/32-in. (13.5 mm) holes (B).



0A6;E24159 E03;;4RRCR X 270484

4. Slide unit under point tip (A) and secure using two 1/2 x 1-1/4 in. cap screws (B), washers and lock nuts. (Nuts inside point.)

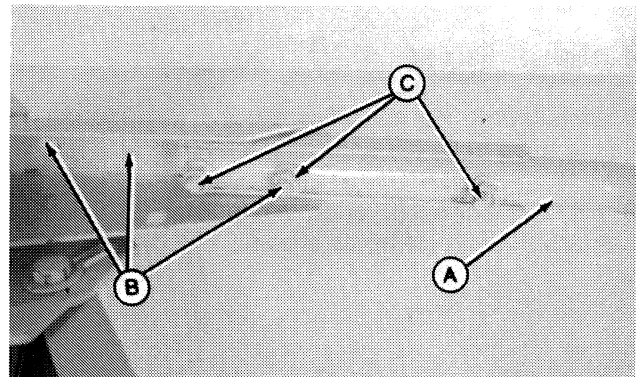
NOTE: The sensor unit should be centered in the point.



0A6;E24130 E03;;4RRCR Y 270484

5. Install tube (A) in the desired row spacing.

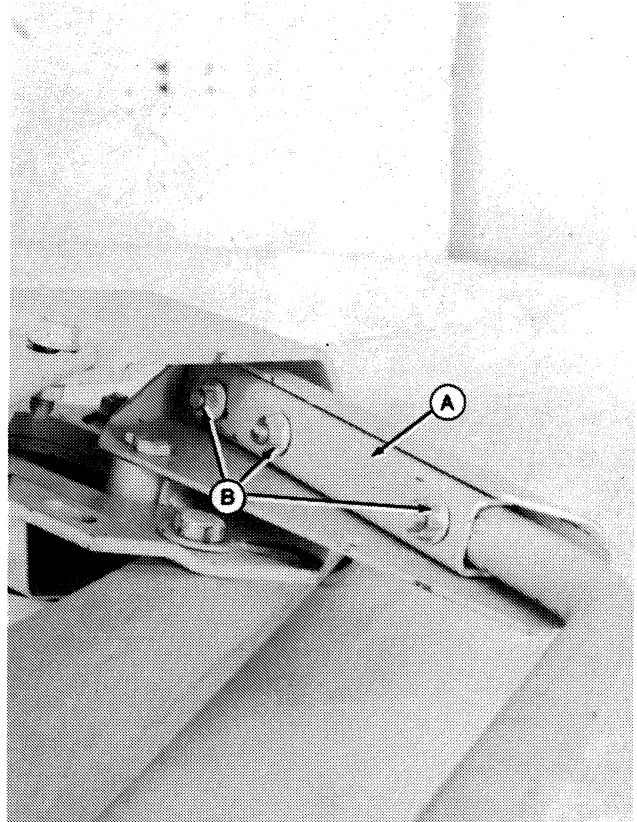
A—Tube
B—30-in. (762 mm) Row
C—38-in. (965 mm) Row



0A6;E24131 E03;;4RRCR Z 270484

6. Attach channel (A) and secure with three 3/8 x 1-3/4 in. carriage bolts and spin lock nuts (B). Do not tighten at this time.

- 30-in. Rows — Install as shown.
- 38-in. Rows — Install on opposite side of tube (see step 5.)

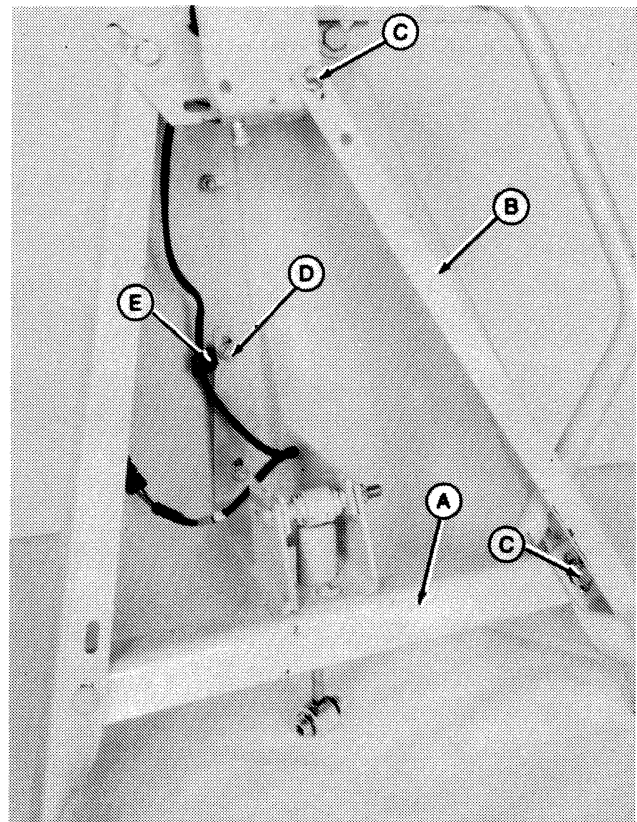


0A6;E24132 E03;;4RRCR AA 270484

7. Remove carriage bolt and lock nut securing angle (A) and discard.

8. Install strap (B) and secure using two 3/8 x 1-1/8 in. flange head bolts (C) and spin lock nuts.

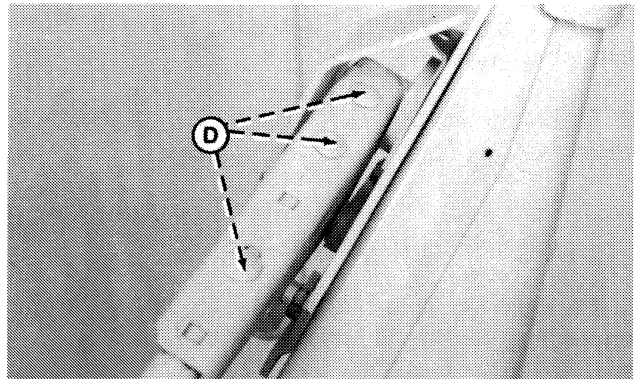
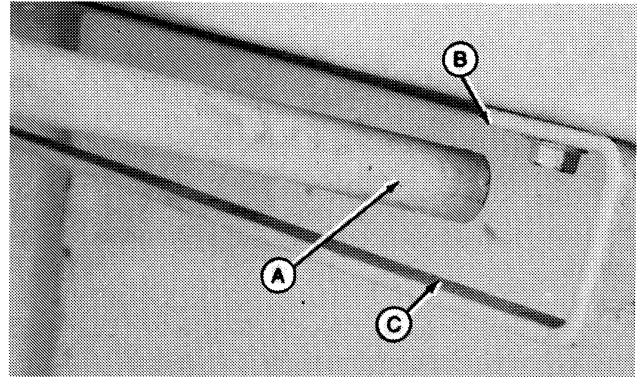
9. Remove lock nut (D) and install J-clamp (E). Route sensor harness through clamp as shown.



- A—Angle
- B—Strap
- C—Flange Head Bolts
- D—Carriage Bolt
- E—J-Clamp

0A6;E24133 E03;;4RRCR AB

10. Center tube (A) between point (B) and bracket (C).
11. With tube (A) centered, tighten three lock nuts (D).



0A6;E24796, E24134 E03;4RRCR AC 270484

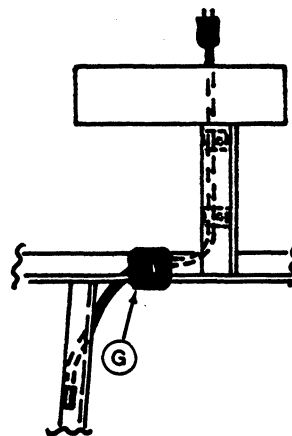
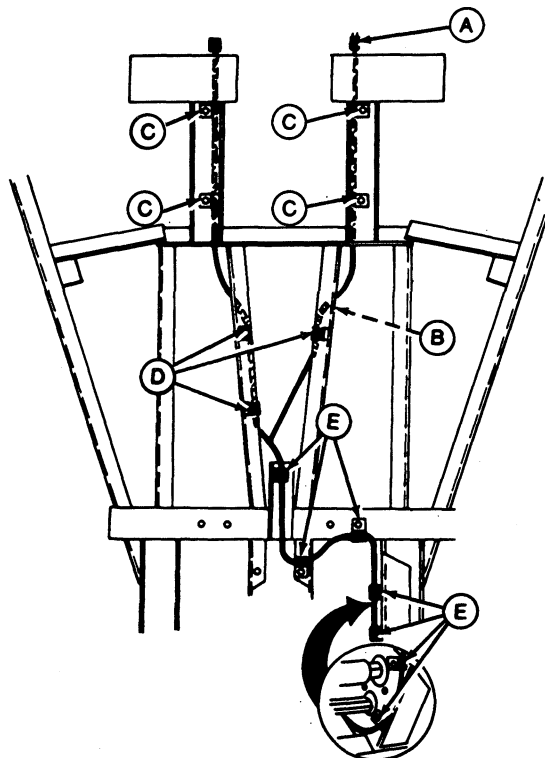
INSTALL WIRING HARNESS (THREE-ROW)

1. Loosely route male plug (A) through slot (B) in frame and route to left-hand island.
2. Route female plug through slot in frame to right-hand island.
3. Install four J-clamps (C) using 5/16 x 3/4-in. cap screws and lock nuts. Place harness in clamps.
4. Install three J-clamps (D) using 5/16 x 3/4-in. cap screws and lock nuts.
5. Route harness through J-clamps (E) holding multi-luber lines.

NOTE: On wide Three-Row Row-Crops, use tape (G) to secure harness to cross angle.

6. Secure harness to side of frame using two J-clamps (F) on existing hardware in position shown.

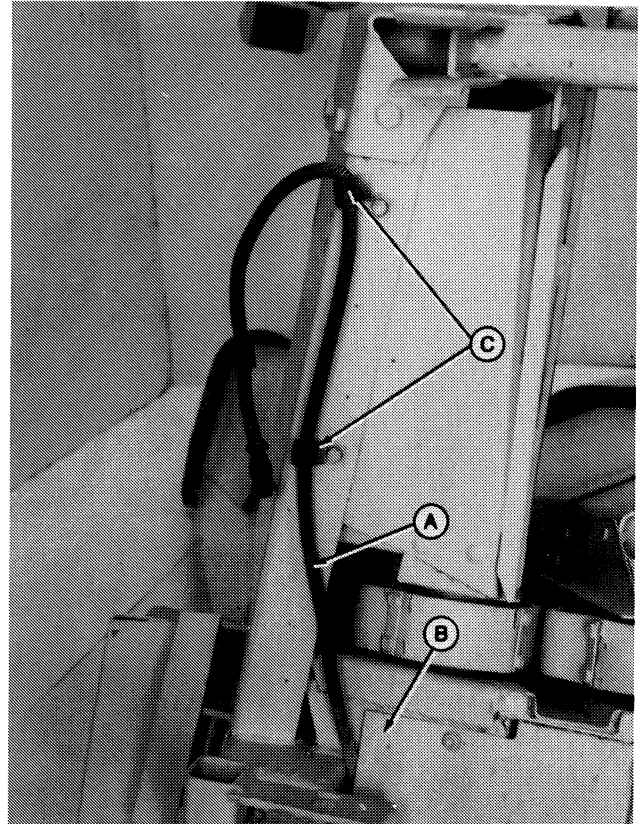
A—Male Plug
B—Slot
C—J-Clamps
D—J-Clamps
E—J-Clamps
F—J-Clamps
G—Tape



7. Route harness (A) between shield (B) and frame.

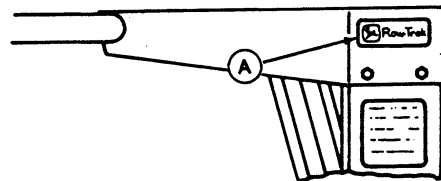
NOTE: Shield (B) may have to be loosened for harness to be routed.

8. Secure harness to frame using two J-clamps (C), on existing hardware.



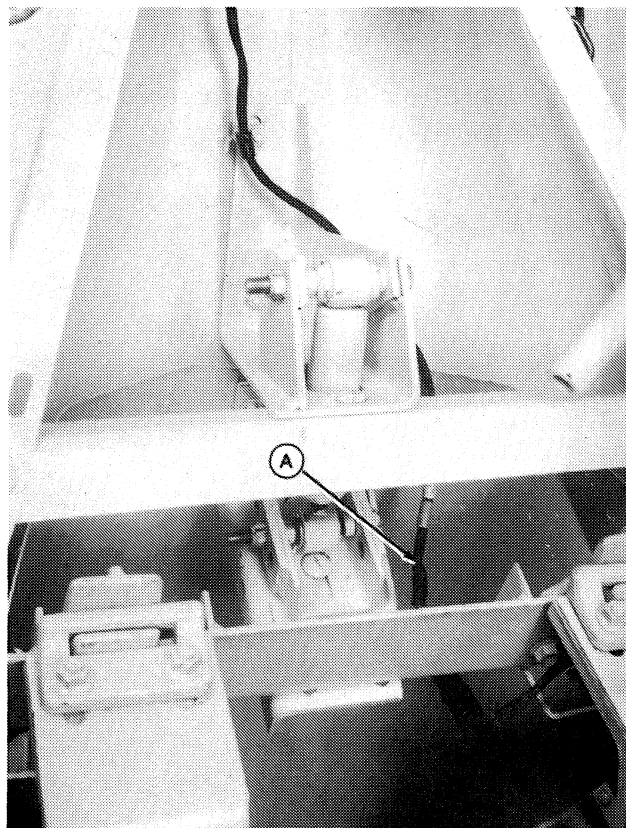
0A6;E24137 E03;;4RRCR AE 270484

9. Clean area shown thoroughly and apply ROW-TRAK decal (A).



0A6;E24138 E03;;4RRCR AF 270484

10. Connect sensor wire to main harness wire (A).

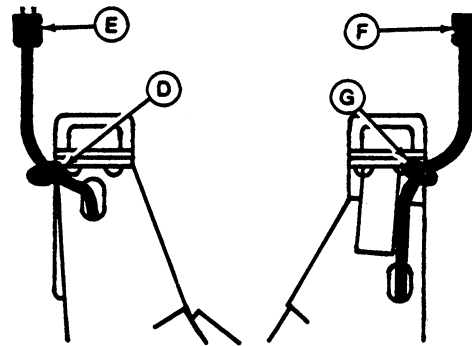
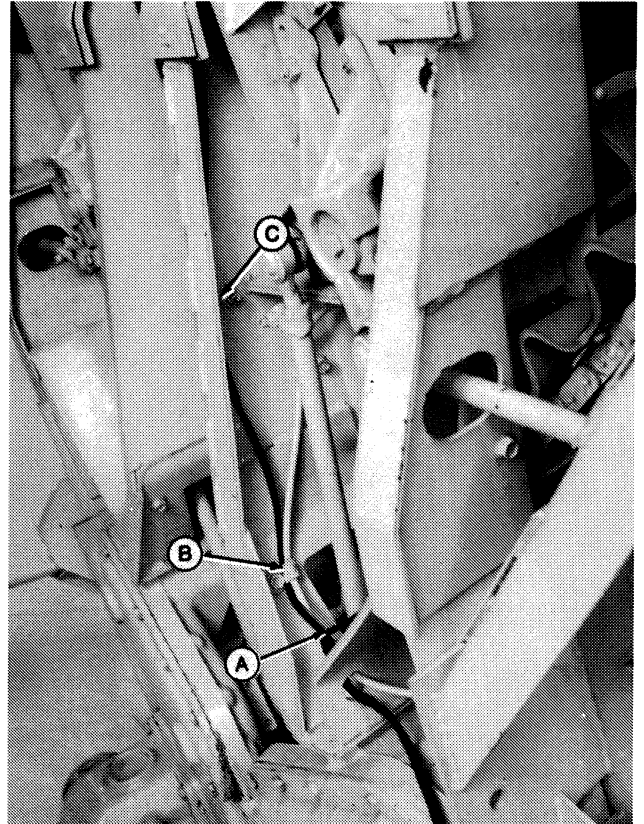


0A6;E24139 E03;;4RRCR AG 270484

INSTALL MAIN HARNESS (FOUR-ROW)

1. Locate "Y" of harness (A) as shown and loosely route male plug (E) through frame and out slot as shown. Route remaining plug (E) as shown.
2. Loosen grease line J-clamp (B) and route harness through.
3. Install J-clamp (C) using 3/8 x 3/4-in. cap screw and spin lock nut. Attach harness.
4. Attach J-clamp (D) using existing hardware and secure harness.
5. Attach J-clamp (G) using existing hardware and secure harness.

A—"Y" of Harness
B—J-Clamp
C—J-Clamp
D—J-Clamp
E—Male Plug
F—Female Plug
G—J-Clamp



0A6;E24140, E24141 E03;;4RRCR AH 270484

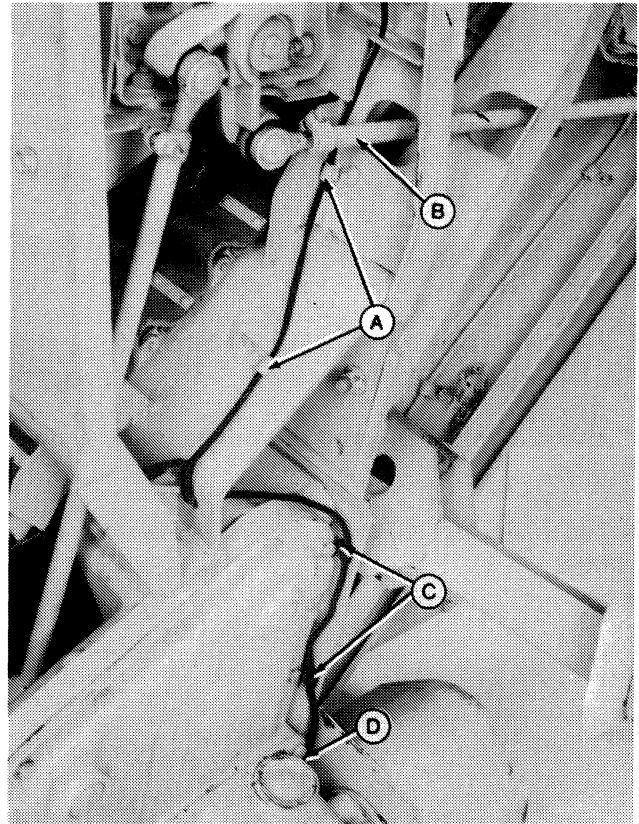
6. Attach two J-clamps (A) using 3/8 X 3/4-in. cap screws and spin lock nuts. Secure harness.

IMPORTANT: Harness routes above pitman tube (B) and must not contact tube.

7. Attach two J-clamps (C) to gear case using existing hardware. Secure harness.

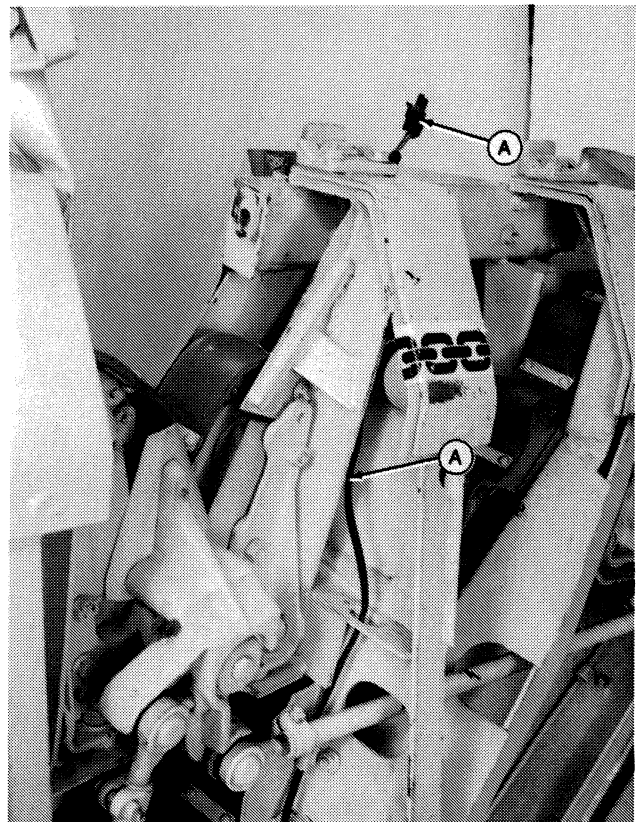
8. Route harness between quill and out through rear of frame (D).

A—J-Clamps
B—Pitman Tube
C—J-Clamps
D—Frame



0A6;E24142 E03;;4RRCR AI 270484

9. Route harness (A) through frame as shown.



Gatherer Points Removed for Illustration Purposes Only

0A6;E24143 E03;;4RRCR AJ 270484

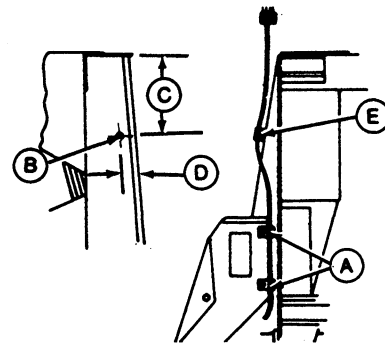
E25;P74 130684

10. Attach two J-clamps (A) on rear frame panel using existing hardware.

11. Locate and drill a 11/32-in. (9 mm) hole (B) as shown.

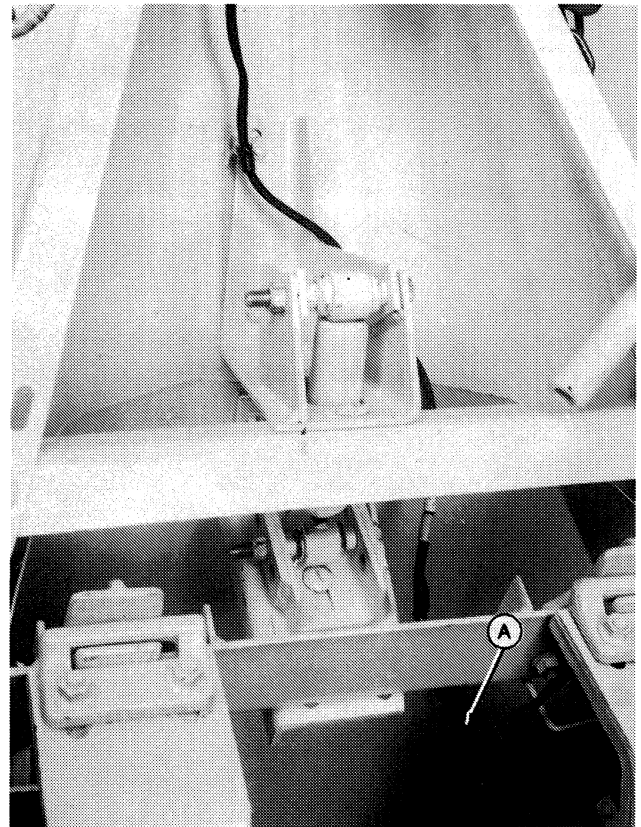
12. Attach J-clamp (E) using 3/8 x 7/8-in. self-tapping screw. Secure harness.

- | | |
|-------------------------|------------------|
| A—J-Clamps | D—1/4-in. (6 mm) |
| B—11/32-in. (9 mm) Hole | E—J-Clamp |
| C—2-in. (51 mm) | |



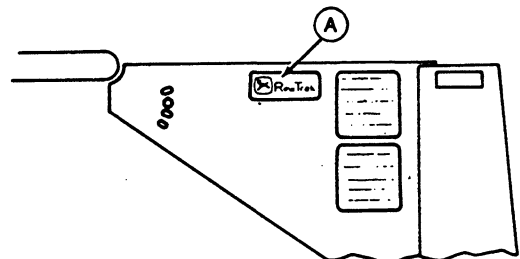
0A6;E24144 E03;;4RRCR AK 270484

13. Connect sensor wire to main harness wire (A).



0A6;E24145 E03;;4RRCR AL 270484

14. Install ROW-TRAK decal (A) on row-crop units in location shown.



0A6;E24146 E03;;4RRCR AM 270384

Specifications

	4-Row Row-Crop	3-Row Narrow Row-Crop	3-Row Wide Row-Crop	2-Row Narrow Row-Crop	2-Row Wide Row-Crop	1-Row Row-Crop
Width:	116 in. (2 946 mm)	95 in. (2 413 mm)	108.5 in. (2 756 mm)	57.5 in. (1 461 mm)	74.5 in. (1 892 mm)	35 in. (889 mm)
Length With: Long Points	100 in. (2 540 mm)	101 in. (2 565 mm)	101 in. (2 565 mm)	75 in. (1 905 mm)	75 in. (1 905 mm)	74 in. (1 880 mm)
Short Points	85 in. (2 159 mm)	—	—	—	—	—
Height:	41 in. (1 041 mm)	36 in. (914 mm)	36 in. (914 mm)	36 in. (914 mm)	36 in. (914 mm)	36 in. (914 mm)
Weight:	2600 lbs. (1 179 kg)	1450 lbs. (658 kg)	1482 lbs. (672 kg)	705 lbs. (320 kg)	715 lbs. (324 kg)	505 lbs. (229 kg)
Row Spacing:	28-32 in. (711-812 mm)	28-34 in. (711-864 mm)	36-40 in. (914-1 016 mm)	28-34 in. (711-864 mm)	36-40 in. (914-1 016 mm)	—
Speed: Gathering Belts	419 ft/min (213 m/sec)	313 ft/min (1.59 m/sec)	313 ft/min (1.59 m/sec)	313 ft/min (1.59 m/sec)	313 ft/min (1.59 m/sec)	313 ft/min (1.59 m/sec)
Oscillating Knife	875 strokes per/min	768 strokes per/min	768 strokes per/min	768 strokes per/min	768 strokes per/min	768 strokes per/min
Power Roller	340 RPM	293 RPM	293 RPM	384 RPM	384 RPM	384 RPM

Specifications

Gatherer Belts	(One, Two and Three-Row) Rubber Gatherer Belts on Coupled Chain (Four Row) Rubber Gatherer Belts on Endless Chain
Gatherer Points	Adjustable and Floating
Row Unit Drive	(One, Two and Three-Row) Gear Driven - Open (Four-Row) Gear Driven in Oil Filled Case
Stationary and Oscillating Knives	Tungsten Carbide Cutting Edge
Upper Stalk Guide	(One, Two and Three-Row) Fixed (Four-Row) Adjustable
Lubrication	(One and Two-Row) Separate Locations (Three-Row) Multi-Luber (Four-Row) Grease Banks

(Specifications and design subject to change without notice.)

0A6; E03;;4RRCS C 080584

SERIAL NUMBER

When ordering parts, always furnish the model and serial number as given on the serial number plate located on the left-hand side of the row-crop. By doing so, you will assist your John Deere dealer in giving you prompt, efficient service. For your convenience, a space is provided below for recording this number.

The row crop unit serial number is located on the left-hand side of frame.

Row-Crop Serial No. _____

Date of Purchase _____ 19 _____
(To be filled in by purchaser)

0A6; E03;;4RRCS B 010584

E25;P77 120684

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Row-Crops			
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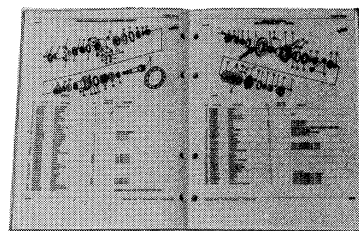
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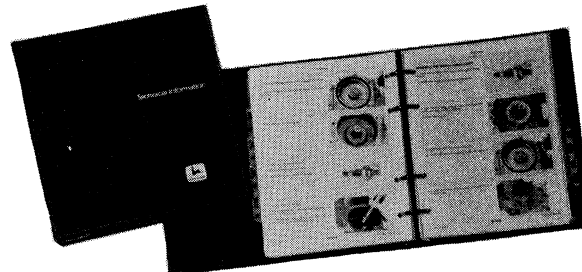
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