

# 110-, 132- and 154-Inch Three-Roller Belt Pickups and 212 and 214 Pickup Platforms



JOHN DEERE

## OPERATORS MANUAL

110-, 132- and 154-Inch Three-Roller Belt Pickups  
and 212 and 214 Pickup Platforms

OMH116952 J3 English

John Deere Harvester Works  
OMH116952 J3

LITHO IN U.S.A.  
ENGLISH



## 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.

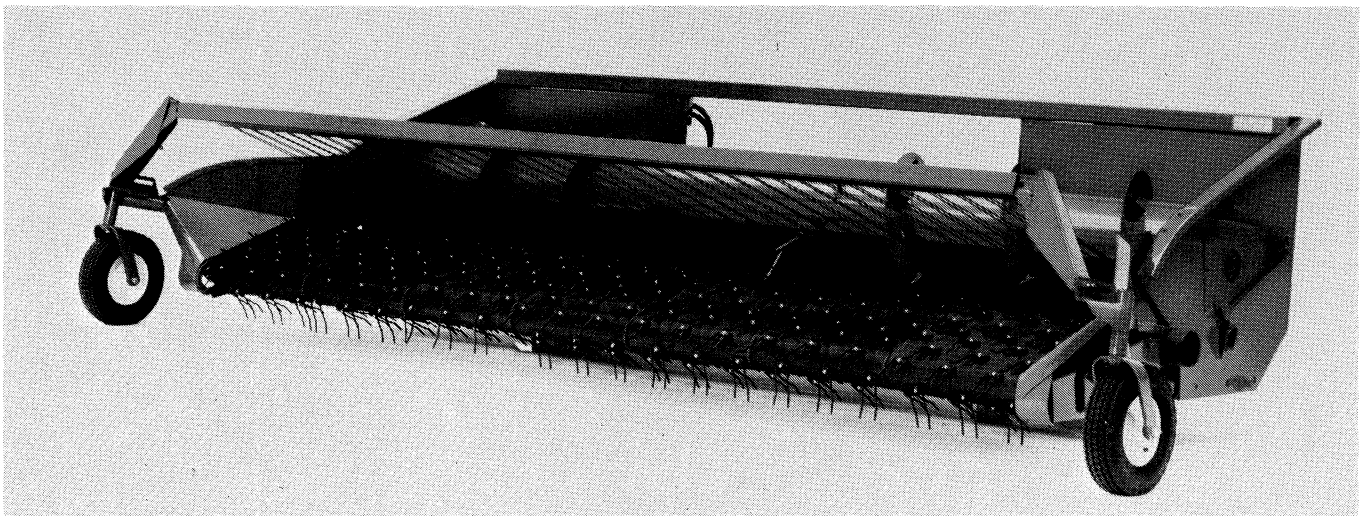
The operator's manual contains SI Metric equivalents which follow immediately after the U.S. customary units of measure.

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

Record your belt pickup serial number in the space provided in Specifications.

The warranty on this belt pickup appears on your copy of the purchase order which you should have received from your dealer when making your purchase. This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty.

Warranty and field improvements are a part of John Deere's product support program for customers who operate and maintain their equipment as described in this manual. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied.



*214 Belt Pickup Illustrated*

H50130



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# Safety

## SAFETY DECALS



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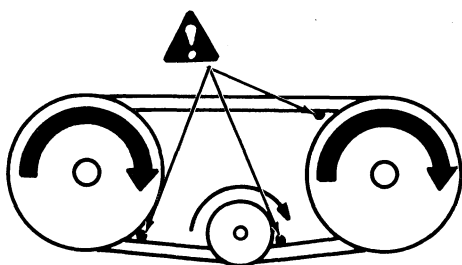


**CAUTION, WARNING OR DANGER:** Decals with these headings and symbol indicate the possibility of personal injury.

**IMPORTANT:** Decals with this heading indicate the possibility of damage to the machine.

Decals are located in areas where they apply.

## AVOID CONTACT WITH MOVING PARTS



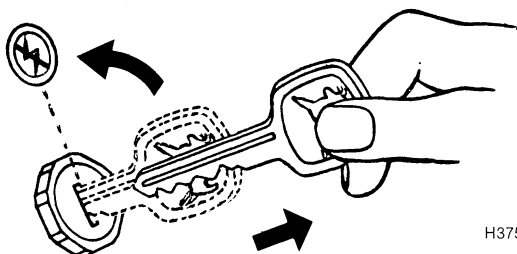
H36880

Keep hands, feet, and clothing away from power-driven parts. Be particularly careful of pinch points on belt and chain drives.

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

Never attempt to clear obstructions off the pickup unless the separator is disengaged and the power is shut off.

## LEAVING COMBINE UNATTENDED



H37524

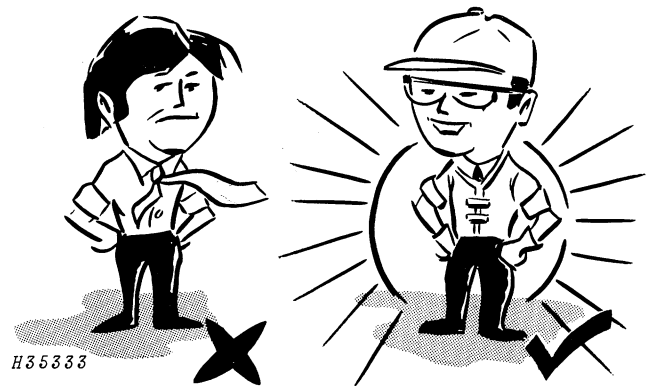
Before leaving the combine unattended, turn off engine and remove keys. Support the pickup with the hydraulic cylinder safety stop or lower it to the ground. Place the gearshift lever in neutral and engage the parking brake. Lock cab doors on 6620, SideHill 6620, 7720 and 8820 Combines.



## OPERATE SAFELY

Clothing worn by operator must be fairly tight and belted. Loose jackets, shirts, or sleeves must never be worn.

Any time work is being done under pickup, the hydraulic cylinder safety stop must be placed in the safety position. Refer to page 5.

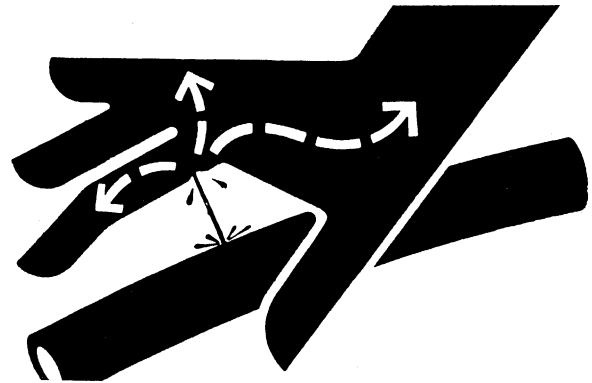


## AVOID HIGH PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.

Cracking hydraulic line fittings to lower the feeder house will result in an instantaneous dropping of feeder house or feeder house and header.

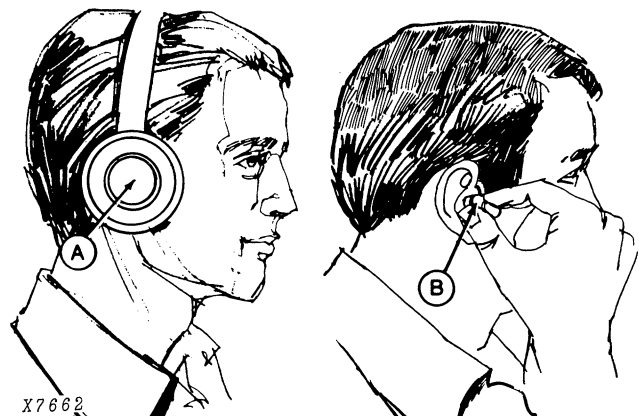


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## PROTECT AGAINST NOISE

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

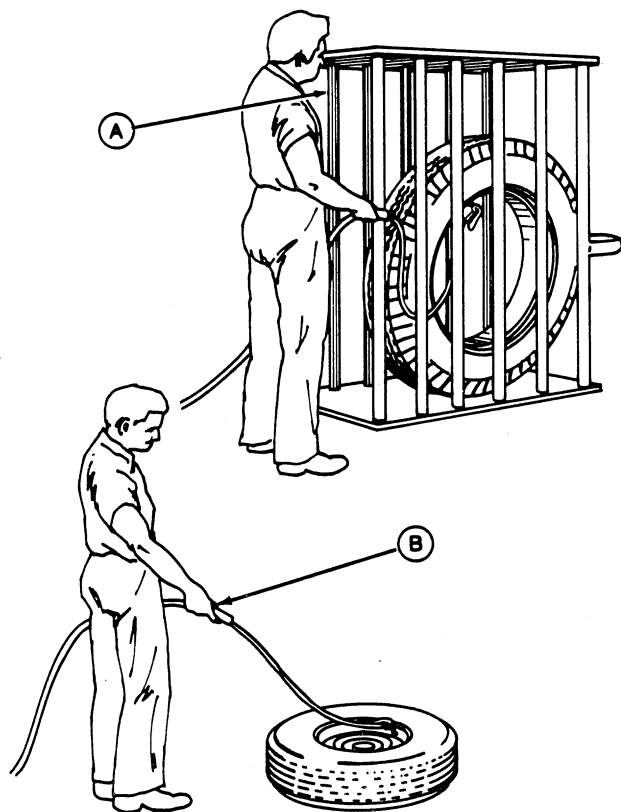
Wear a suitable hearing protective device as ear-muffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noises.



A — Earmuffs  
B — Earplugs

X7662

## SERVICE TIRES SAFELY



TS0123

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

When seating tire beads on rims, never exceed 35 psi (2.40 kPa) (2.4 bar) or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

Detailed tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your John Deere dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.

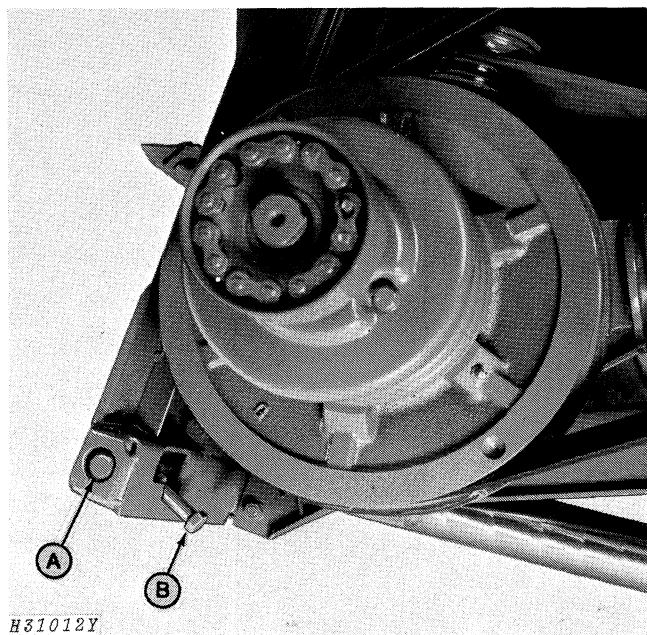
**A—Use a safety cage if available.**  
**B—Do not stand over tire. Use a clip-on chuck and extension hose.**



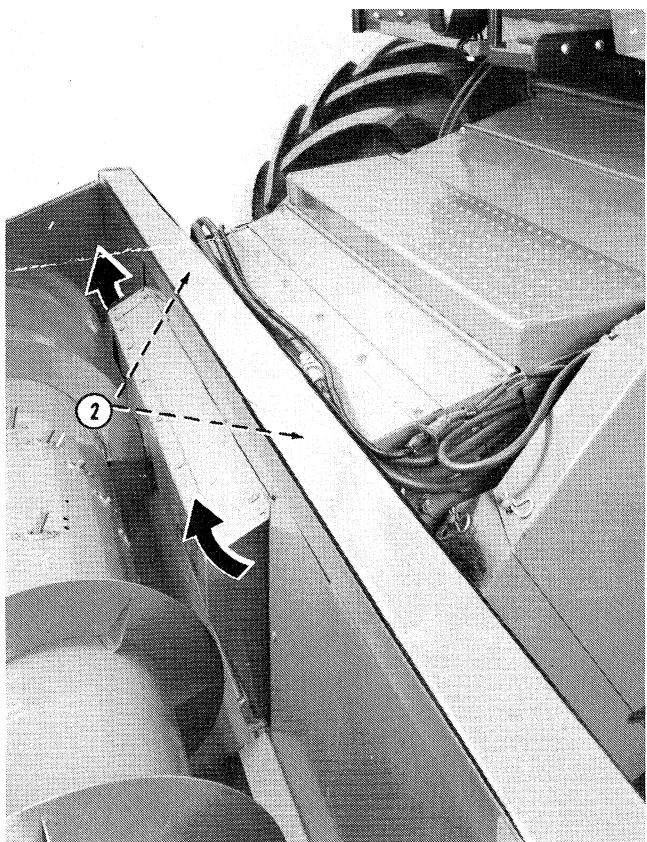


# Attaching and Detaching Platform

## ATTACHING PICKUP PLATFORM TO 4400 (350001- ), 6620, 7720, 7721 AND 8820 COMBINES



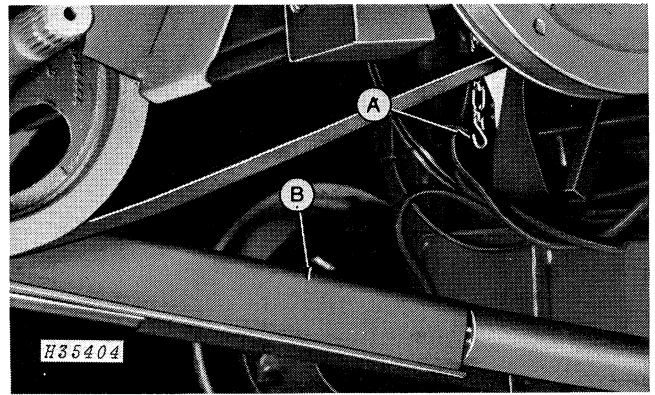
**IMPORTANT:** Lock pin (A) (both sides) must be positioned in before attaching header. Position pin by sliding stop bolt (B) in and pivoting it down. Damage to feeder house results when mounting header with pins in out position.



1. Start engine and lower feeder house.
2. Move combine slowly forward until feeder house is centered in platform opening. Raise feeder house, lifting platform, all the way up. Shut off engine.

3. Disconnect chain (A) and lower hydraulic cylinder safety stop (B) on lift cylinder.

A — Support Chain  
B — Safety Stop



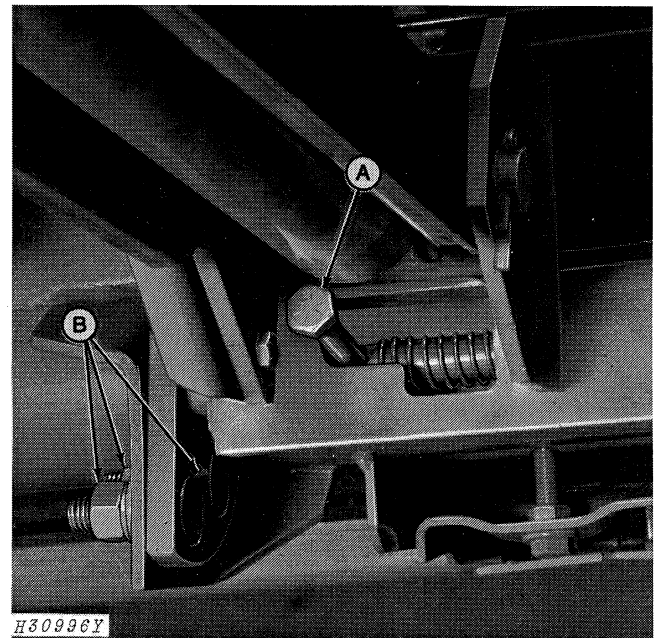
4. Slide and pivot stop bolt (A) up and out, to move lock pin into header. Repeat procedure for other side.

**NOTE:** Loosen mating lock plate (B) on platform, to let lock pin lock and center into platform. Torque nut on lock plate (B) to 170 ft. lbs. (231 N•M). Repeat procedure on other side.

On 8820 combines, install coupler shipped with feeder house on L.H. platform drive shaft.

5. Place chain around sprockets and slide coupler over sprockets and chain. Repeat for other side.
6. Connect hoses for hydrostatic belt drive at couplers under operator's platform or on feeder house.

A — Pivot Stop Bolt  
B — Mating Lock Plate



## **DETACHING PLATFORM FROM 4400 (350001- 6620, 7720 and 8820 COMBINES), 4420,**

1. Disconnect hoses for hydrostatic belt drive at couplers under operator's platform or on feeder house.

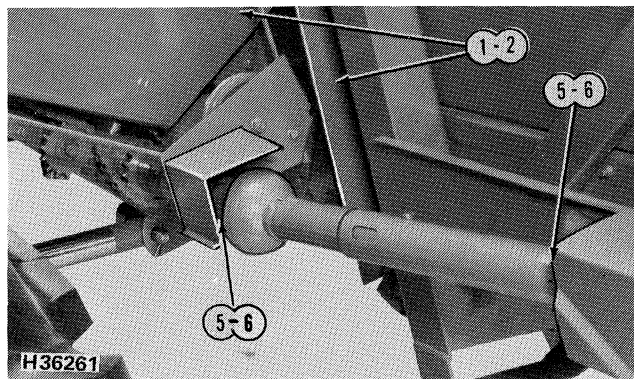
**IMPORTANT: To prevent damage to hydraulic system connect hoses under operator's platform or on feeder house. These hoses stay with combine.**

2. To prevent damage to variable speed feeder house hose if so equipped, when it is disconnected, route hose down between feeder house and variable-belt-drive and secure with clamp or disconnect at bracket.
3. Start engine and raise pickup platform all the way up. Shut off engine.
4. Disconnect chain and lower hydraulic cylinder safety stop on lift cylinder.
5. Slide coupler off sprockets and chain and remove coupler chain.
6. Slide and pivot stop bolt in and down to unlock pin from platform. Repeat procedure on other side.
7. Raise hydraulic cylinder safety stop and hook chain.
8. Start engine and lower feeder house until belt pickup platform is on the ground and attaching blocks are free.
9. Move combine slowly rearward until feeder house is clear of belt pickup platform.

## ATTACHING PICKUP PLATFORM TO SIDEHILL 6600 AND SIDEHILL 6620 (-358900)

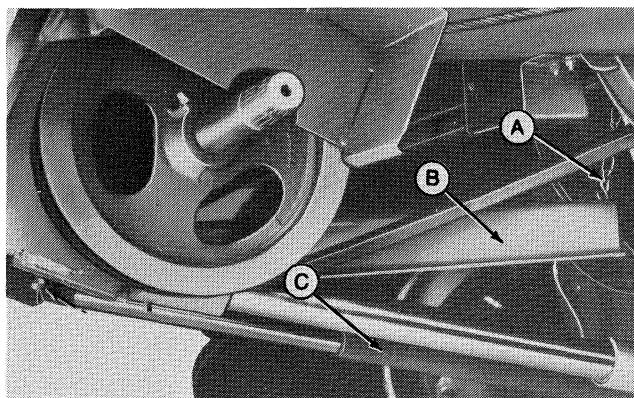
1. Start engine and lower feeder house.
2. Move combine slowly forward until feeder house is centered in platform opening. Raise feeder house, lifting platform, all the way up. Shut off engine.

**IMPORTANT:** Pivot blocks on feeder house must be properly seated in pocket under top beam of header.

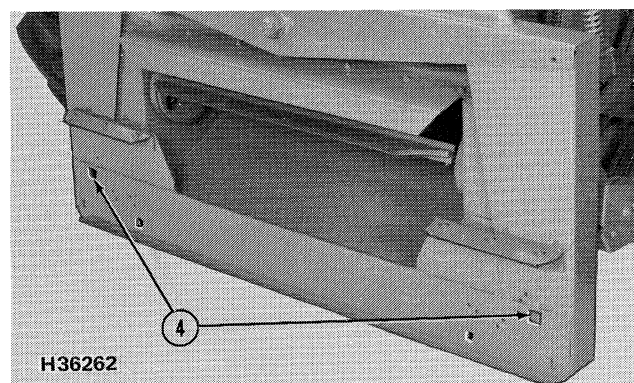


3. Disconnect chain (A) and lower hydraulic cylinder safety stop (B) on lift cylinder (C).

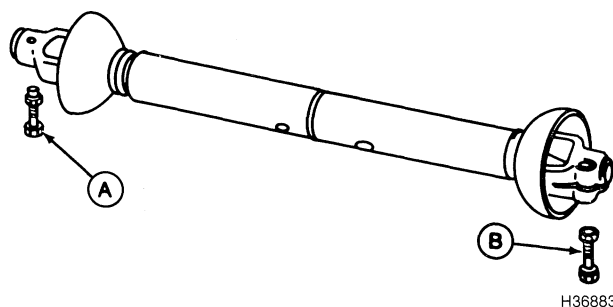
A — Support Chain  
B — Safety Stop  
C — Lift Cylinder



4. Secure platform to feeder house with two 5/8 x 1-1/2-inch round head bolts and 21/32 x 2 x .250-inch flat washers.
5. Install telescoping drive shaft between platform and feeder house by securing 5/16 x 2-1/2-inch cap screw (A) through platform shaft.
6. Take other end of telescoping drive shaft and secure it on feeder house drive shaft with 1/2 x 3-inch cap screw (B). (This clamps yoke to shaft).
7. Connect hoses for hydrostatic belt drive at couplers under operator's platform.
8. To prevent damage to variable speed feeder house hoses when disconnected, route hoses down between feeder house and variable-belt-drive and secure with clamps. Do not connect hoses together.



Feeder House Lower Attaching Plate Bolt Locations



## **DETACHING PICKUP PLATFORM FROM SIDEHILL 6600 AND SIDEHILL 6620 (-358900) COMBINES**

1. Disconnect hoses for hydraulic belt drive at couplers under operator's platform.

**IMPORTANT: To prevent damage to hydraulic system connect hoses under operator's platform. These hoses stay with combine.**

2. Start engine and raise pickup platform all the way up. Shut off engine.
3. Disconnect chain and lower hydraulic cylinder safety stop on lift cylinder.
4. Remove cap screw from end of shaft and disconnect telescoping drive shaft from feeder house (shafts stay with header). Repeat procedure on other side.
5. Remove two 5/8 x 1-1/2-inch round head bolts and flat washers.
6. Raise hydraulic cylinder safety stop and hook chain.
7. Start engine and lower feeder house until platform is on the ground and attaching blocks are free.
8. Move combine slowly rearward until feeder house is clear of pickup platform.



## ATTACHING PICKUP PLATFORM TO SIDEHILL 6620 (403301- ) COMBINES

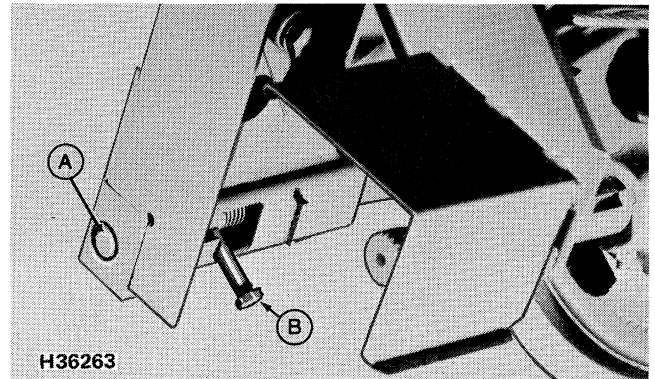
**IMPORTANT:** Lock pin (A) (both sides) must be positioned in before attaching header. Position pin by sliding stop bolt (B) in and pivoting it down. Damage to feeder house results when mounting header with pins in out position.

1. Start engine and lower feeder house.
2. Move combine slowly forward until feeder house is centered in pickup platform. Raise feeder house, lifting platform all the way up. Shut off engine.

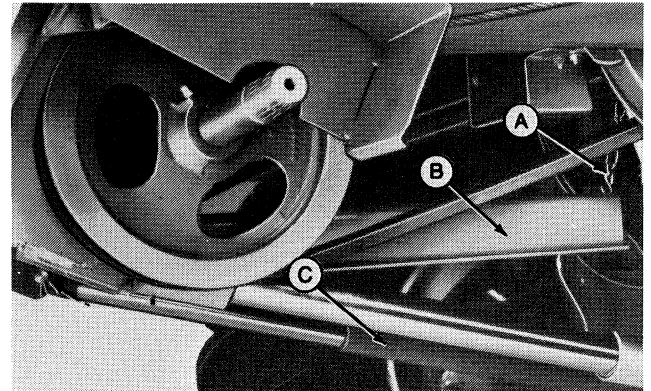
**IMPORTANT:** Pivot blocks on feeder house must be properly seated in pocket under top beam of header.

3. Disconnect chain (A) and lower hydraulic cylinder safety stop (B) on lift cylinder (C).

A — Support Chain  
B — Safety Stop  
C — Lift Cylinder



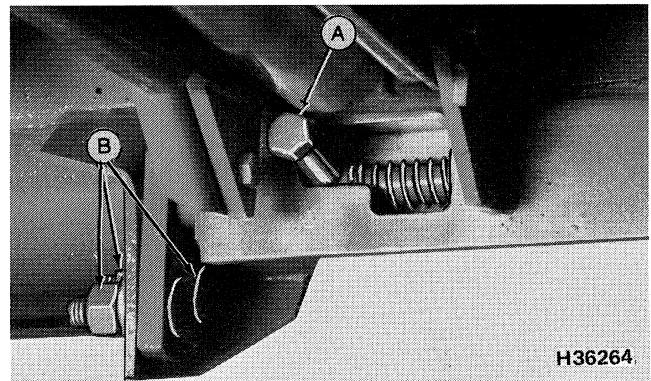
A — Lock Pin  
B — Stop Bolt



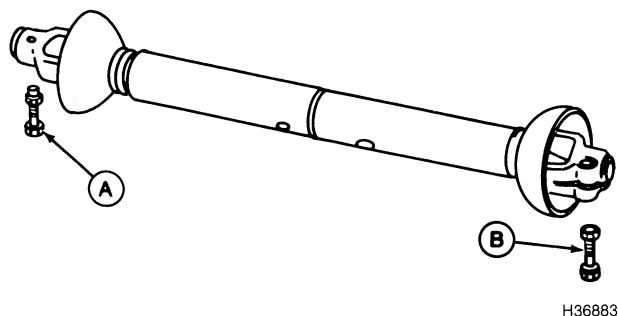
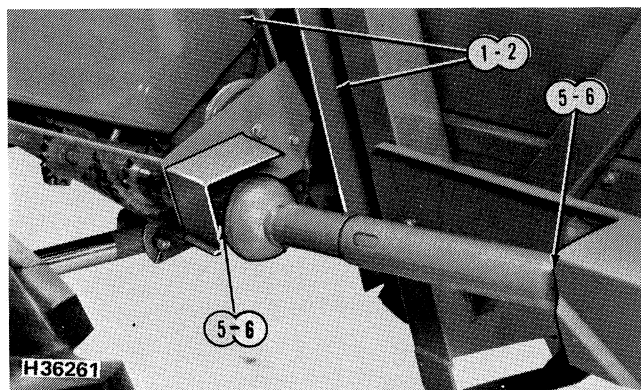
4. Slide and pivot stop bolt (A) up and out, to move lock pin into platform. Repeat procedure for other side.

**NOTE:** Loosen mating lock plate (B) on platform, to let lock pin lock and center into platform. Torque nut on lock plate (B) to 170 ft. lbs. (231N•M). Repeat procedure on other side.

A — Stop Bolt  
B — Lock Plate



## 10 Attaching and Detaching Platform



5. Install telescoping drive shaft between platform and feeder house by securing 5/16 x 2-1/2-inch cap screw (A) through platform shaft.
6. Take other end of telescoping drive shaft and secure it on feeder house drive shaft with 1/2 x 3-inch cap screw (B). (This clamps yoke to shaft).
7. Connect hoses for hydrostatic belt drive at couplers under operator's platform or on feeder house.
8. To prevent damage to variable speed feeder house hose(s) when they are disconnected, route hose(s) down between feeder house and variable-belt-drive and secure with clamps. Do not connect hose(s) together.

### DETACHING PLATFORM FROM SIDEHILL 6620 (403301- ) COMBINES

1. To prevent damage, disconnect hoses for hydrostatic belt drive at couplers under operator's platform, or on feeder house.
2. Start engine and raise pickup platform all the way up. Shut off engine.
3. Disconnect chain and lower hydraulic cylinder safety stop on lift cylinder.
4. Remove cap screw from end of shaft and disconnect telescoping drive shaft from feeder house (shafts stay with header).
5. Slide and pivot stop bolt in and down, to unlock platform. Repeat procedure on other side.
6. Raise hydraulic cylinder safety stop and hook chain.
7. Start engine and lower feeder house until platform is on ground and attaching blocks are free.
8. Move combine slowly rearward until feeder house is clear of the pickup platform.

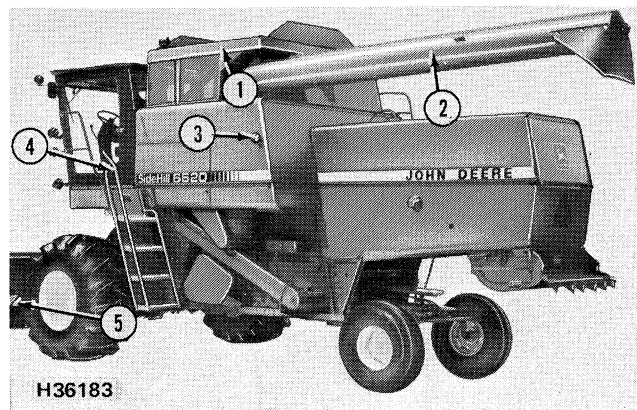


# Transporting

Check local width laws before transporting.

The platform can be transported by leaving it attached to the combine.

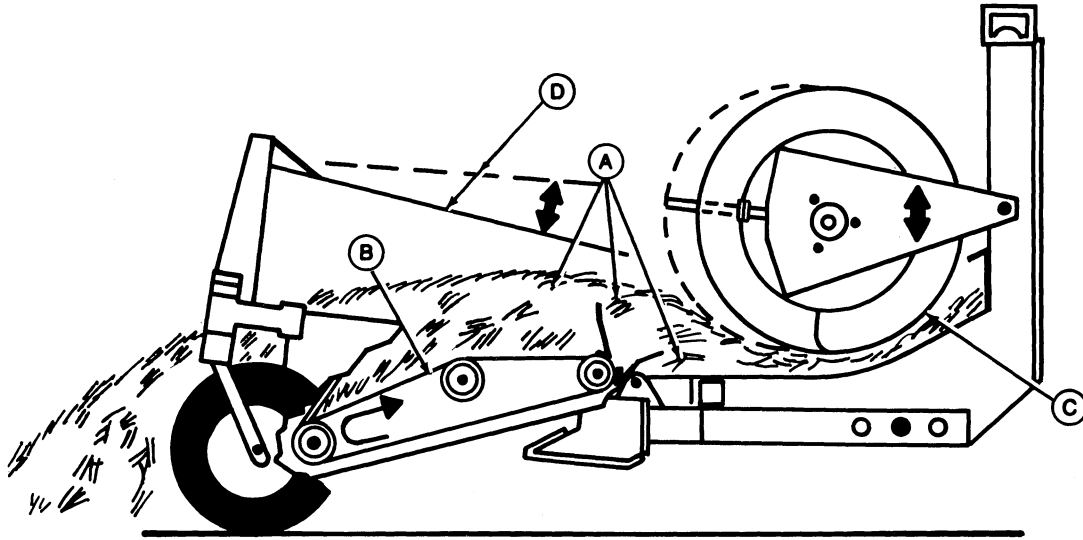
1. Empty grain tank.
2. Swing unloading auger back and secure with transport brace.
3. Turn on combine flashing warning lights, unless prohibited by local law.
4. Couple combine brake pedals together.
5. Raise pickup platform to a position that will keep it off the ground but still allow good visibility.





# Operating the Platform

## GENERAL INFORMATION



H36914

A — Crop Flow

B — Pickup Belts

C — Auger

D — Floating Hold Down

The belt pickup platform receives the crop (A) and moves it to front of feeder house by means of belts (B) and auger (C). Retracting fingers in auger feed material to the feeder conveyor. The floating hold down (D) helps keep flow of crop even.

## PICKUP SPEED

Successful operation depends largely upon speed and pitch of belt pickup.

If the crop is pushed ahead of belt pickup or if it does not release from stripper, pickup speed is too slow.

If windrow is torn apart as it is elevated onto platform, pickup speed is too fast.

### 6601 Mechanical Drive

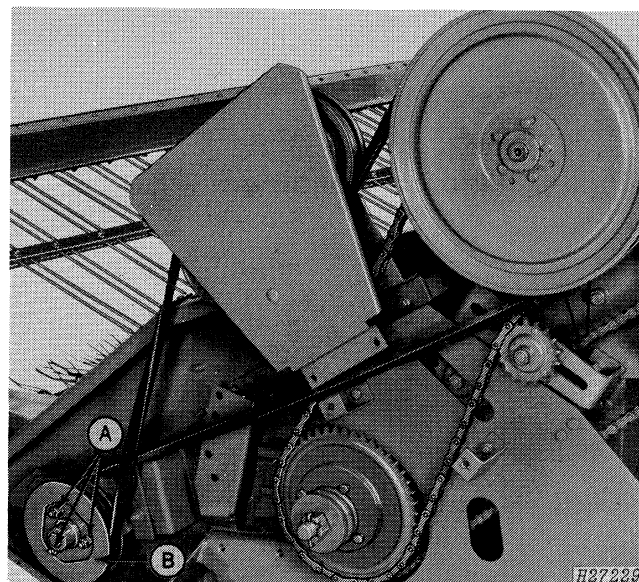
Speed ranges of 387 to 490 rpm on 6601 Combines are set by changing location of washers (A) on adjustable driven sheave (B).

To decrease speed, remove washers (A) from between sheave halves and place them on outside as shown.

To increase speed, add washers between sheave halves.

One set of washers changes speed approximately 23 rpm.

A — Washers  
B — Adjustable Driven Sheave



6601 Combine Illustrated

### Hydrostatic Drive

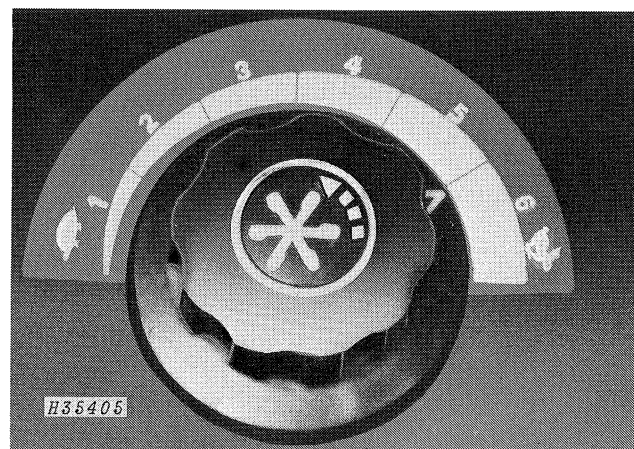
Hydrostatic belt pickup drive on all self-propelled combines lets the operator vary speed of belt pickup without leaving operator's platform.

Belt pickup speed is changed from 50 rpm to 450 rpm by turning control knob on console.

To increase pickup speed, turn knob to right.

To decrease pickup speed, turn knob to left.

Use reference indicator to return to speed previously found best suited for a particular crop or field condition.



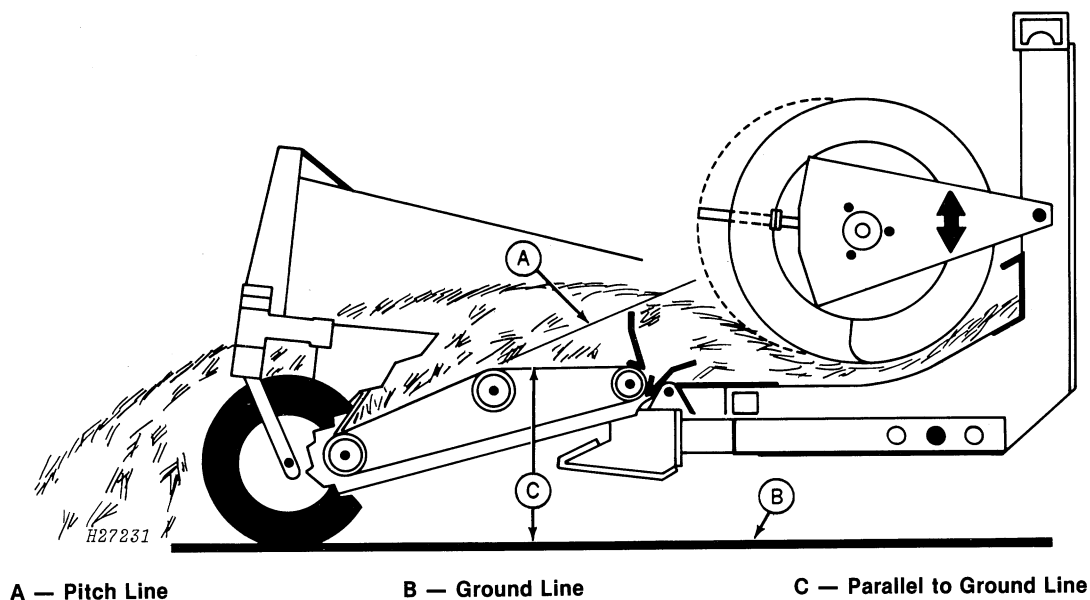
## PICKUP PITCH

In addition to proper speed, correct pitch of belt pickup is important for good pickup operation.

By raising or lowering platform, pitch can be changed for varying field and crop conditions. Raise platform to increase pitch; lower platform to decrease pitch.

If pitch is altered considerably, check distance between pickup fingers and ground. If fingers are digging into ground, lower gauge wheel; if fingers are not low enough to gather all the crop, raise gauge wheel. See Adjusting Gauge Wheels.

### Normal Windrow Condition

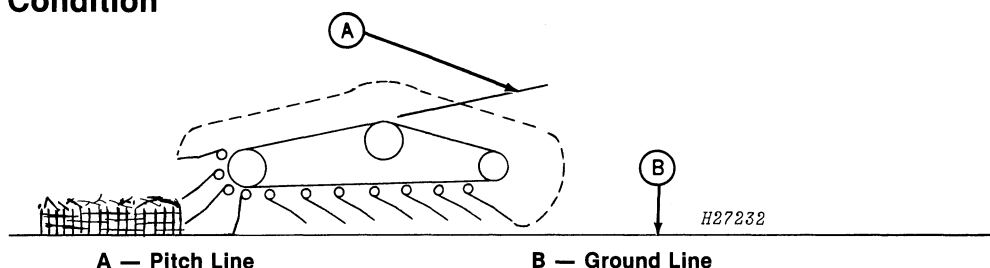


If ground conditions are normal and windrow is lying on top of stubble and off the ground, operate belt pickup as level as possible between center and drive rollers.

**IMPORTANT:** This portion of belt pickup must be parallel with ground, for good pickup and direct feeding to platform auger.

**NOTE:** Platform is set in 4-inch (102 mm) forward position. Rear position is used for short crops or damp windrow conditions. 4-inch (102 mm) forward position is used for medium length crops. 8-inch (203 mm) forward position is used for long straw crops.

## Poor Windrow Condition

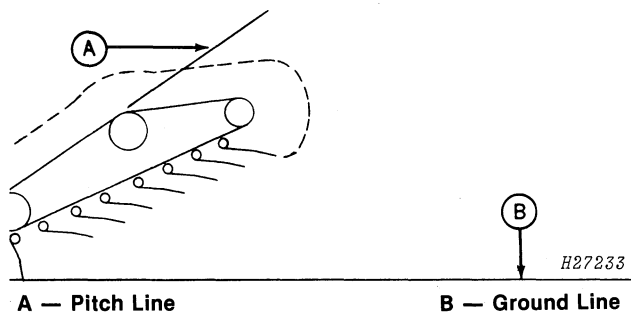


If windrow is embedded in stubble, if stubble is short, or if windrow is lying on ground, decrease the pitch of pickup. This lets more fingers come closer to ground, for better combing action.

**IMPORTANT:** Do not decrease pitch to a point where pickup bottom is parallel with ground. This lets lower mounting arms dig into ground in dips and swales and cause serious damage to platform.

When pitch is decreased, pickup fingers can pick up dirt. To eliminate this condition, lower gauge wheels 1/2 inch (13 mm) at a time until fingers no longer dig into ground. (See Adjusting Gauge Wheels.)

## Rocky Conditions



Increase pitch of belt pickup only in rocky conditions to prevent rocks from being carried into platform auger. Check and clean stone traps daily.

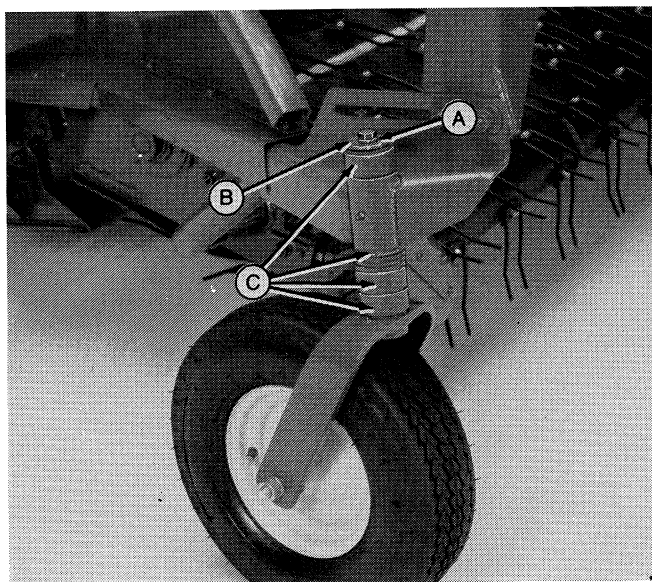
**IMPORTANT:** When operating in this position, gauge wheels must be in full contact with ground to prevent missing strips of crop.

Increased pitch may feed windrow higher than normal to auger.

Adjust hold-down to its lowest position and reduce speed of belt pickup. On 200 Series and Pickup Platforms Serial Number (217601- ) move platform to 8-inch forward position.

**IMPORTANT:** Do not operate belt pickup without flow of grain over belts. Without grain flow rapid stripper wear occurs.

## PICKUP HEIGHT



H50131

- A — Cap Screw
- B — Washer
- C — Spacers

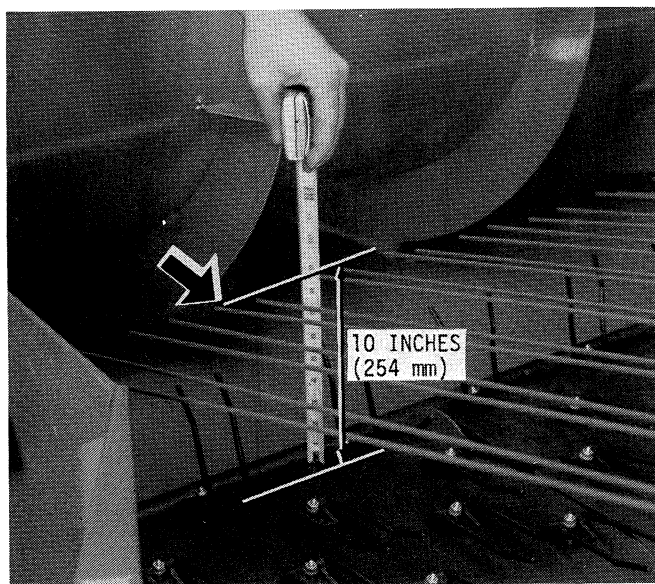
If pitch is altered considerably, check distance between pickup fingers and ground. Operate belt pickup just low enough to allow pickup fingers to gather in all the crop, but high enough so fingers do not dig into ground.

Distance between pickup fingers and ground is regulated by adjusting gauge wheels up or down. If fingers are digging into ground, lower gauge wheels. If fingers are not low enough to gather all the crop, raise the gauge wheels.

### Adjusting Gauge Wheels

To raise gauge wheel, remove cap screw (A) and washer (B) and position spacers (C) on top of yoke bearing, or position spacers (C) below yoke bearing to lower gauge wheel. Replace washer (B) and cap screw (A).

## ADJUSTING WINDROW HOLD-DOWN



H50132

The windrow hold-down (which is free to float) eliminates bunching and overriding by deflecting windrow downward into platform auger.

Hold-down must be adjusted so fingers are 10-inches (254 mm) from roller as shown. This is important to assure proper feeding under platform auger.



## 6601 Belt Pickup

To adjust hold-down, loosen cap screws (A) and lift or push down on fingers until correct height is reached. Tighten cap screws (A) after adjusting.

The hold-down is adjusted when belt pickup is in mid position and should be left in this position in most cases.

If the windrow is very light with short straw and the belt pickup is moved to the LOW POSITION, hold-down should be placed in LOW POSITION.

Check that there is still a 10-inch (254 mm) dimension from hold-down fingers to roller. Readjust if necessary.

## Belt Pickup On Quik-Tatch, 200 Series, And Pickup Platforms

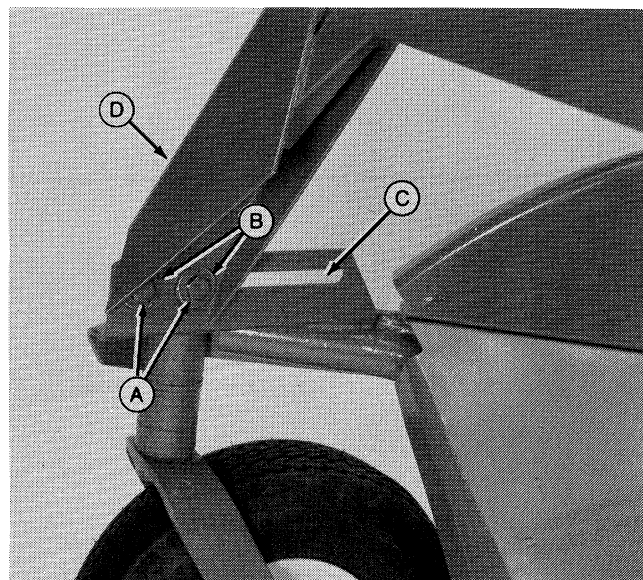
**NOTE:** Readjust hold-down in slot when pickup is adjusted in or out.

When pickup is in rear position, hold-down must be in front of slot.

When pickup is in mid-position, hold-down must be in center of slot.

When pickup is in outer position, hold-down must be in rear of slot.

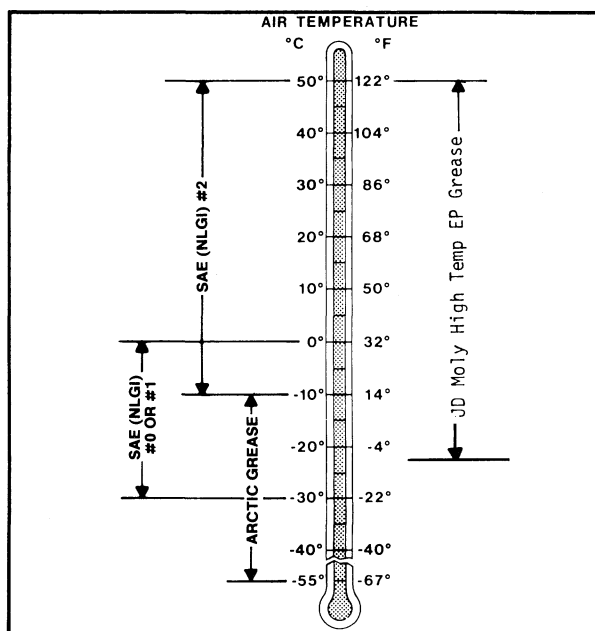
- A — 1/2 x 1-1/2-inch Cap Screw
- B — 17/32 x 1-1/16 x .090-inch Flat Washers
- C — Adjusting Slot
- D — Support Arm



H50133



# Lubricants



TS0153

## Greases

The following greases are recommended for John Deere Belt Pickups:

- John Deere Moly High Temperature/Extreme Pressure Grease
- SAE Multipurpose High Temperature Grease with Extreme Pressure (EP) Performance and 3 to 5% molybdenum disulfide

**IMPORTANT:** If grease fitting is missing, replace immediately. Clean fittings thoroughly before using grease gun.

**NOTE:** Multipurpose Lubricant can still be used.

*The part number for John Deere Moly High Temperature/Extreme Pressure Grease with 3 to 5% Molybdenum Disulfide in 14 oz. tube is TY6333 for a case of ten.*

## Storing Lubricants

Your combine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture, and other contamination.

## Alternative Lubricants

Conditions in certain geographical areas outside the United States and Canada may require different lubricant recommendations than those printed in the operator's manual. Consult your John Deere dealer to obtain alternative lubricant recommendations.



# Lubrication and Maintenance

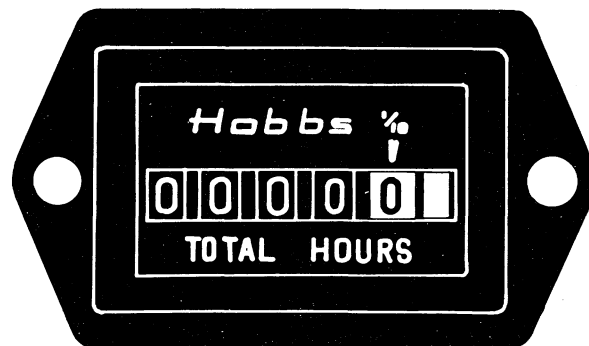
## SERVICE INTERVALS

Using hour meter as a guide, perform all services at hourly intervals indicated on following page.

**IMPORTANT:** Recommended service intervals are for average conditions. Service **MORE OFTEN** if belt pickup is operated under adverse conditions.



**CAUTION:** Never lubricate or service belt pickup while combine engine is running.



H35387

## SYMBOLS



Lubricate with John Deere Moly High Temperature/Extreme Pressure lubricant or an equivalent SAE High Temperature/Extreme Pressure type grease with 3 to 5% Molybdenum Disulfide at hourly intervals indicated on the symbols.

*NOTE: Multipurpose grease can still be used.*

## KEEP LUBRICANTS CLEAN

Use only high-grade lubricants that have been stored in clean containers. Wipe grease fittings clean before lubricating.

## CHAINS

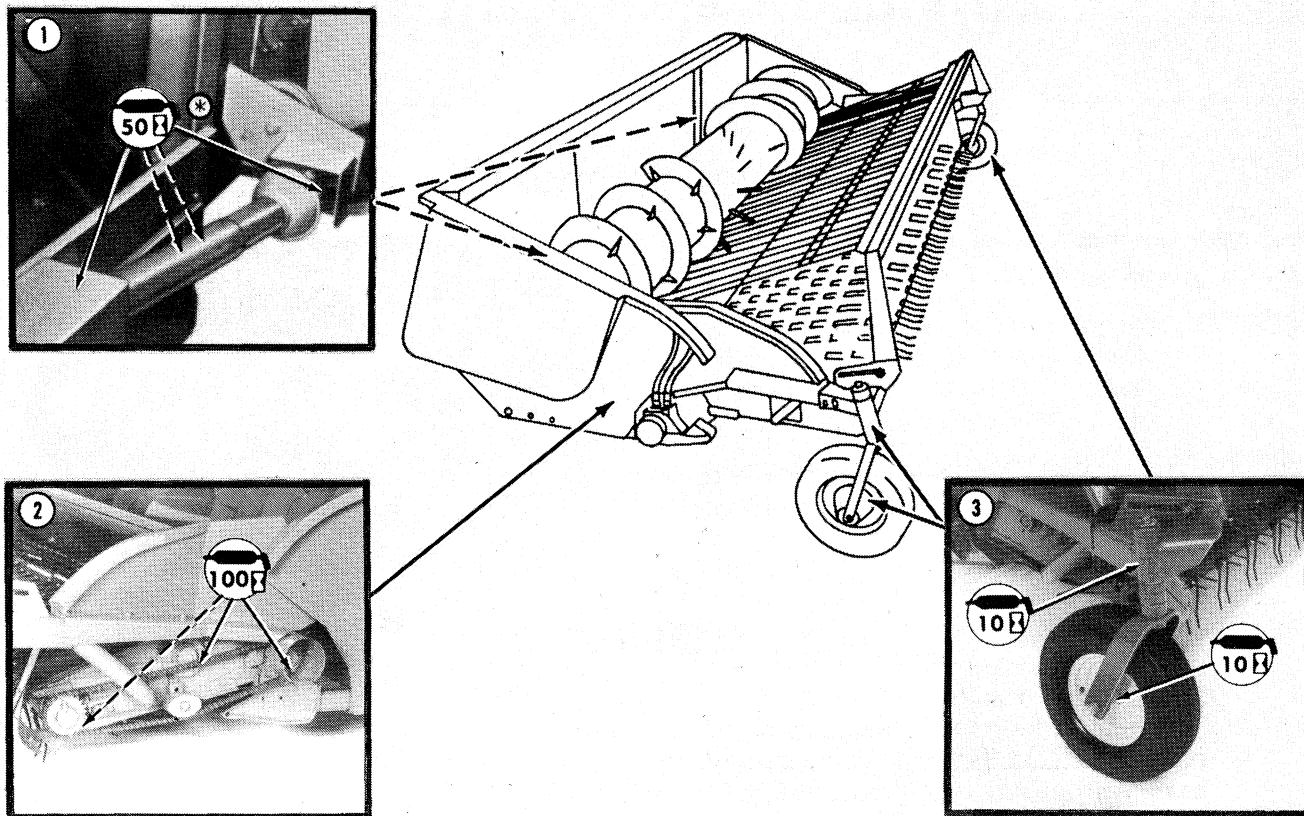


**CAUTION:** Never lubricate chains with combine engine running.

Lubricate chains every 10 hours of operating with SAE 30 or heavier oil. Run chain for a few minutes before lubricating. A warm chain increases penetration of oil between pins and bushings. Shut off combine engine and lubricate chains.

*NOTE: Genuine John Deere Chain Lube in an aerosol can (part number PT508), is obtained from your dealer.*

## EVERY 10 AND 100 HOURS OF OPERATION



H37767

1. \*Grease Header Drive Shafts (both sides)  
(SideHill 6620)

- Disconnect drive shaft from feeder house.
- Align access holes in shaft shields with one of the grease fittings on the drive shaft.
- Lubricate with High Temperature/Extreme Pressure grease.
- Rotate shaft 180° and lube second fitting on drive shaft.

2. (Both sides) Lubricate bearings with John Deere Moly High Temperature/Extreme Pressure lubricant.

3. (Both sides) Lubricate gauge wheel bearings and axle with John Deere Moly High Temperature/Extreme Pressure lubricant.

*NOTE: Multipurpose grease can still be used.*



# Trouble Shooting

Majority of belt pickup operating problems can be traced to improper adjustment. The Chart which follows will help you when problems develop by suggesting a probable cause and recommended remedy.

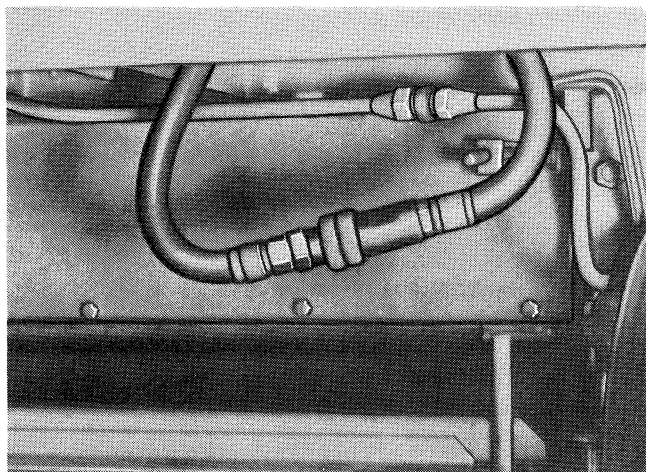
When you are trying to solve a problem, be certain source is not from some place other than where problem exists.

| Problem                                                                               | Cause                                                                | Remedy                                                                                                                                          | Page        |
|---------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Windrow difficult to pick up or strips of crop not being picked up.                   | Short crop down in the stubble embedded in drill or wheel furrows.   | Raise gauge wheels to allow fingers to run closer to ground.                                                                                    | 16          |
|                                                                                       | Gauge wheels not always contacting ground.                           | Lower platform to allow pickup to operate at less pitch.                                                                                        | —           |
|                                                                                       | Pickup speed too slow.                                               | Increase pickup speed.                                                                                                                          | 13          |
| Picking up dirt.                                                                      | Improper gauge wheel setting.                                        | Lower gauge wheels to prevent pickup fingers from digging in ground.                                                                            | 16          |
|                                                                                       | Pitch of pickup too flat.                                            | Raise platform so area between center and drive rollers is parallel with ground.                                                                | —           |
|                                                                                       | Excessive pickup speed.                                              | Decrease speed of pickup.                                                                                                                       | 13          |
| Picking up stones.                                                                    | Improper gauge wheel setting.                                        | Lower gauge wheels (1/2-inch [12.5 mm] increments) to increase finger clearance to ground.                                                      | 16          |
|                                                                                       | Excessive pickup speed.                                              | Decrease speed of pickup.                                                                                                                       | 13          |
|                                                                                       | Pitch of pickup too flat.                                            | Raise platform to increase pitch.                                                                                                               | —           |
| Pickup feeds too high on auger.                                                       | Excessive pitch on pickup.                                           | Lower platform so area between center and rear rollers is parallel with ground.                                                                 | —           |
|                                                                                       | Pickup too close to auger - Pickup Platform and 200 Series Platform. | Move pickup to outer position.                                                                                                                  | 14,42       |
|                                                                                       | Hold-down fingers not adjusted properly.                             | Adjust hold-down fingers to provide more compression of crop at rear of pickup.                                                                 | 16          |
|                                                                                       | Excessive pickup speed.                                              | Decrease speed of pickup                                                                                                                        | 13          |
|                                                                                       | Speed of pickup too slow.                                            | Increase speed of pickup.                                                                                                                       | 13          |
| Windrow rolls ahead of pickup.                                                        | Speed of pickup too slow.                                            | Increase speed of pickup.                                                                                                                       | 13          |
| Material builds up at pickup stripper or builds up between pickup stripper and auger. | Adjust platform auger down.                                          | Increase speed of pickup.<br>Move pickup to inner position on pickup platform and 200 Series Platform.<br>Platform auger not adjusted properly. | 13<br>14,42 |
|                                                                                       | Improper hold-down adjustment.                                       | Raise hold-down to high position.                                                                                                               | 16          |
| Platform auger plugging.                                                              | Auger not adjusted properly.                                         | On 200 Series Rigid Platforms increase auger clearance to platform bottom. Check auger fingers. See combine operator's manual.                  | —           |
| Material not feeding properly into feeder house.                                      | Short crop feeding conditions.                                       | Adjust auger to platform stripper, auger to platform bottom, or auger flight extensions required.                                               | —           |



# Service

## CONNECTING HOSES ON BELT PICKUP DRIVE



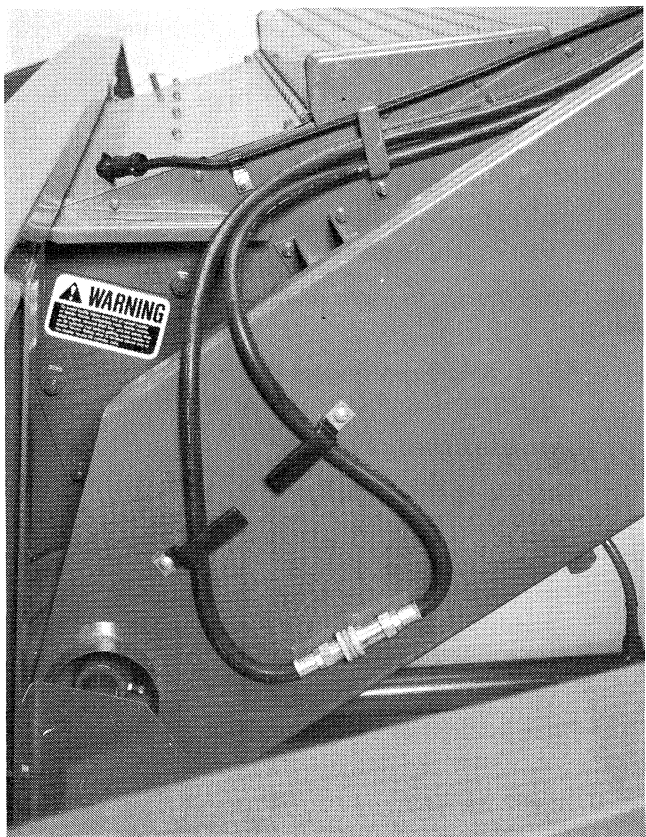
H18572

Combines Serial No. ( -600000)

**IMPORTANT:** Whenever hoses are disconnected from oil lines to motor, hoses must be connected together as shown.

If hoses are not connected when separator is engaged, extensive damage will result to pump.

Belt pickup drive hoses shown, connected under the operators platform, are for combines up to serial number ( -600000).



H37768

Combines Serial No. (600001- )  
7721 Combine Illustrated

Belt pickup drive hoses shown, connected on feeder house drive shield, are for combines serial number (600001- ) and up. Hoses must be secured by clamps to prevent damage from drives.

## TIGHTENING PUMP DRIVE BELT FOR BELT PICKUP DRIVE

### 3300, 4400 and 4420 Combines

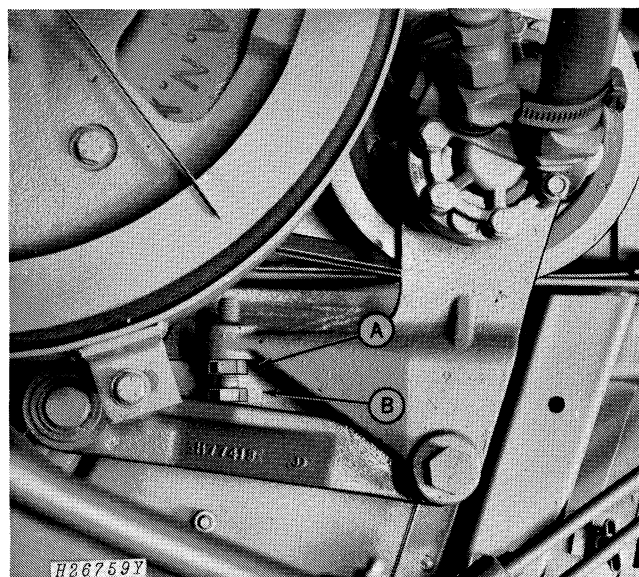
Loosen lock nut (A).

Turn cap screw (B) out against support casting, forcing pump sheave against belt.

Tighten belt until it will operate without slipping.

Tighten lock nut (A).

**IMPORTANT: Keep this belt tight at all times.**



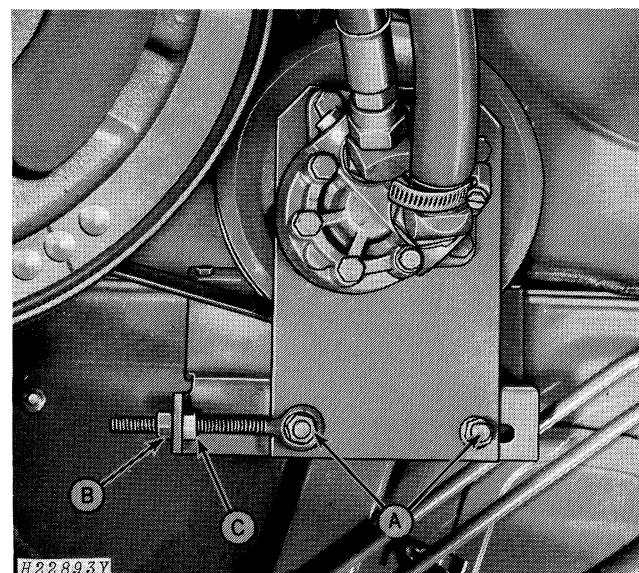
### 6600, SideHill 6600, and 7700 Combines

Loosen nuts (A) and nut (B).

Turn nut (C) until belt will operate without slipping.

Tighten nut (B) and nuts (A).

**IMPORTANT: Keep this belt tight at all times.**



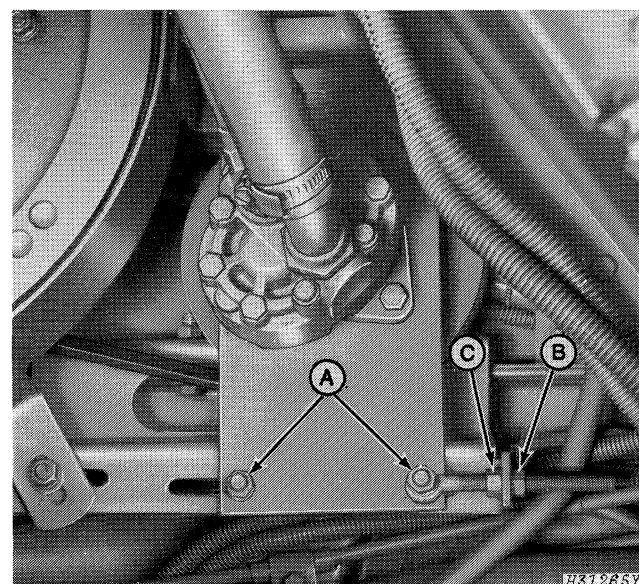
### 6620, SideHill 6620, 7720 and 8820 Combines

Loosen nuts (A) and nut (B).

Turn nut (C) until belt will operate without slipping.

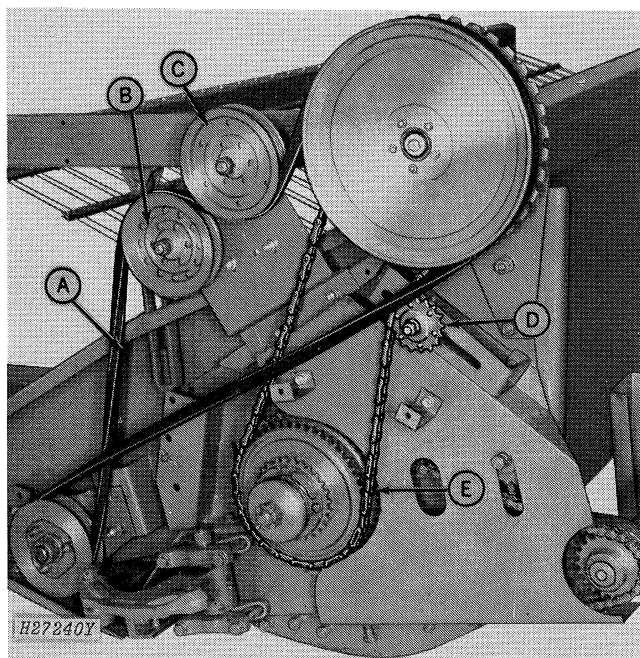
Tighten nut (B) and nuts (A).

**IMPORTANT: Keep this belt tight at all times.**





## ADJUSTING PICKUP DRIVE BELT AND CHAIN (6601)



### Belt

Tighten drive belt (A) just enough so that belt slippage will not occur in normal operation. Loosen nuts on the tightener sheaves (B) and (C) with the most slot space available and adjust sheaves as necessary to obtain proper belt tension.

### Chain

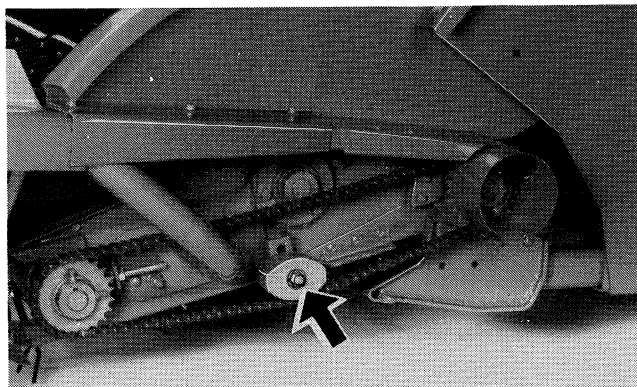
Loosen nut (D).

Move tightener against chain (E). Chain is a proper tension when it will operate without climbing or jumping sprockets.

Tighten nut (D).

- A — Drive Belt
- B — Sheave
- C — Sheave
- D — Nut
- E — Drive Chain

## ADJUSTING LOWER ROLLER DRIVE CHAIN



*Shield Removed For Illustrative Purposes*

Adjust chain tension so chain is just tight enough to run without climbing or jumping sprockets. All sprockets must be properly aligned.

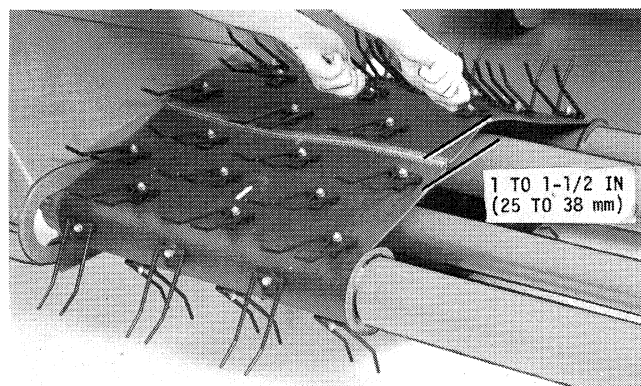
To adjust, loosen nut on tightener block and adjust block downward then tighten nut. See illustration to left.



## PICKUP BELTS

### Adjusting Tension

Pickup belts must have 1 to 1-1/2-inch (25 to 38 mm) free play between center of belt and middle roller. Check dimension by lifting on fingers over center roller.

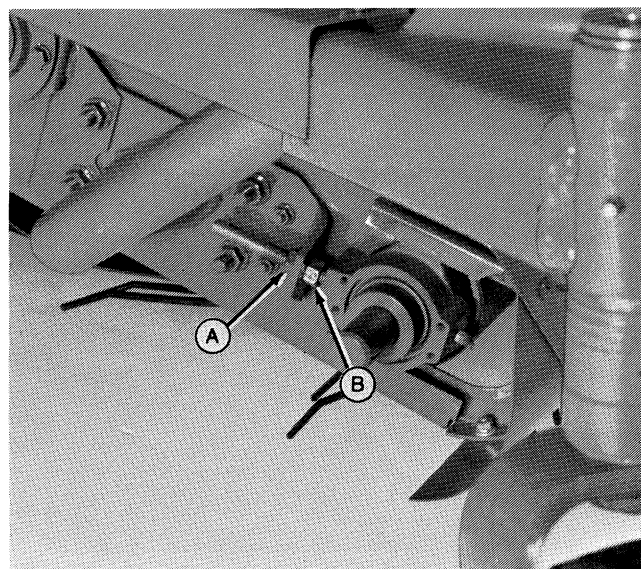


H37769

To tighten belts, loosen nuts (A) and tighten nuts (B). Lock nuts (A).

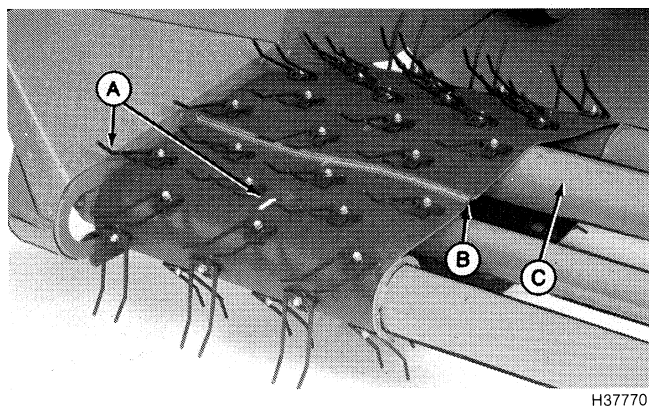
To loosen belts, loosen nuts (B) and tighten nuts (A). Lock nuts (B).

**IMPORTANT:** Too much tension causes undue wear on pickup belts and other parts. Tighten pickup belts just enough to prevent slipping when belt pickup is operating under normal crop conditions.



H50136

154-Inch (3912 mm) Pickup Illustrated



H37770

## Removing Belts

Relieve tension by loosening nuts (B) and tightening nuts (A). (See Adjusting Tension.)

Pull lacing pin out of lacings and remove belts.

## Installing Belts

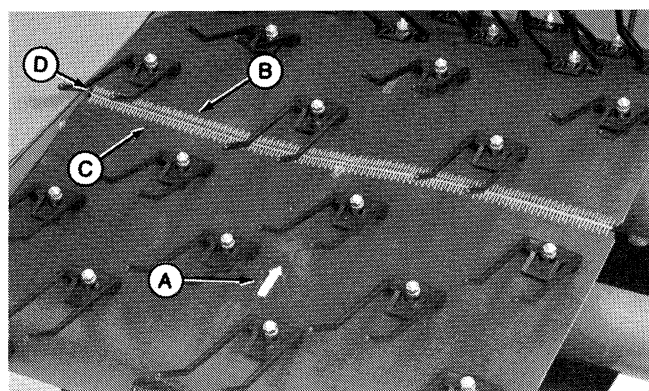
Install right-hand and left-hand belts before installing center belt to keep ends of rollers from spreading. Fingers must point opposite direction of belt travel.

Place belts around rollers so lacings come together over center roller.

A—Finger Pointing in Opposite Direction of Arrow

B—Lacing Pin

C—Center Roller



H37771

## Installing Lacing

Hold lacings together and insert lacing pin, then adjust tension of belts.

**IMPORTANT:** Belt directional arrow (A) must be pointing, as shown, and top lacing (B) is on the outside of bottom lacing (C). Lacing pin (D) must be bent 90 degrees on both ends to keep from falling out.

A—Directional Arrow

B—Top Lacing

C—Bottom Lacing

D—Lacing Pin

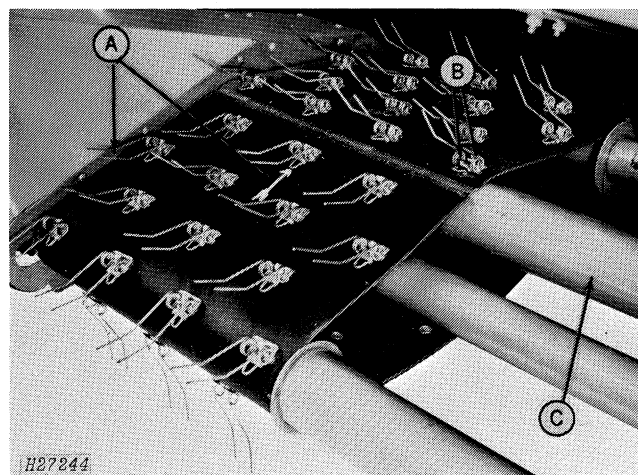
## REPLACING PICKUP FINGERS

If fingers become worn, bent, or damaged, straighten or replace them immediately.

Turn belt pickup until finger that is to be replaced is directly over center roller (C).

Spring Tooth Finger: Remove lock nut, clip, and finger. Install new finger so it points opposite direction of belt travel (A). Secure with clip and lock nut (B).

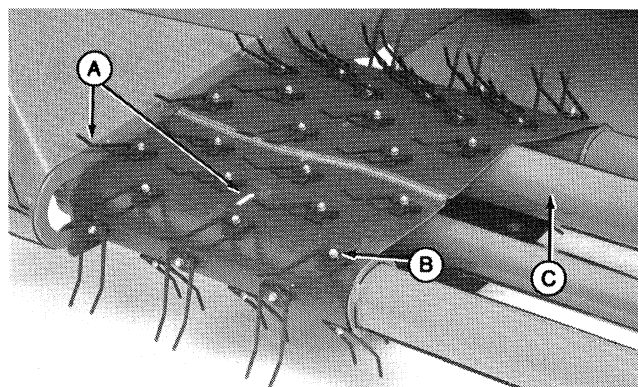
- A—Fingers Pointing in Opposite Direction Of Arrow
- B—Lock Nut and Clip
- C—Center Roller



*Spring-Tooth Fingers*

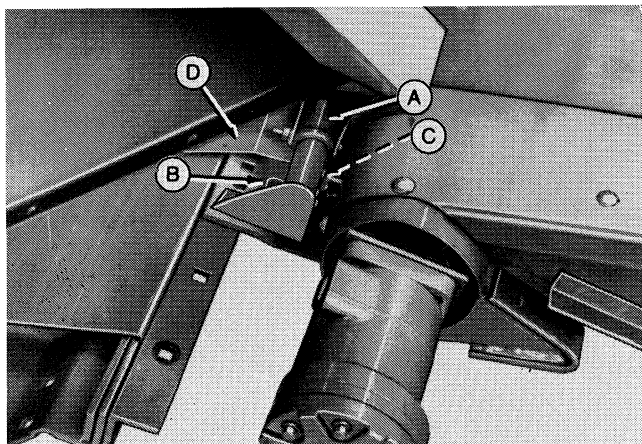
Plastic Finger: Remove nut and finger. Install new finger so it points opposite direction of belt travel (A). Secure with nut, making certain shoulder of bolt is seated in base of finger. (Torque to 55 in-lbs [6.2 N•m]).

- A—Fingers Pointing In Opposite Direction Of Arrow
- B—Lock Nut
- C—Center Roller



*Synthetic Plastic Finger*

## STRIPPER (200 SERIES PLATFORMS ONLY)



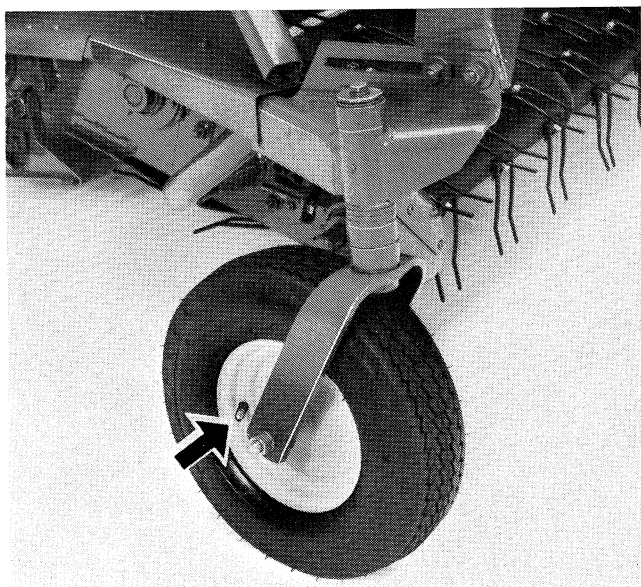
H36915

*Shield Removed for Illustrative Purposes*

If stripper (A) is worn, turn stripper on bar to expose a new surface by punching a new row of holes and replacing stripper.

- A — Rubber Stripper
- B — Cotter Pin
- C — Adjust Holes
- D — Grain Slide

## TIRE INFLATION



H50143

Keep belt pickup tires inflated to 20 psi (1.40 bar) air pressure.

Varying temperatures cause tire pressure to change. Check tire pressure every day before operating pickup platform.

Cap must be kept on valve to prevent dirt from getting into valve core.



# Storage

---

## END OF SEASON SERVICE

1. Clean pickup platform thoroughly. Chaff and dirt will draw moisture and rust metal.
2. Lubricate platform. Grease threads on adjusting bolts. Release spring tension on slip clutch and apply a coating of grease to slip clutch washers.
3. If pickup is stored outside remove pickup belts and store in a dry cool place where they will not be damaged. Do not roll belts.
4. Paint all parts from which paint was worn.
5. If possible, shelter pickup platform in a dry place.



**CAUTION: Support pickup platform with either the hydraulic cylinder safety stop or with blocks, or lower it to ground level.**

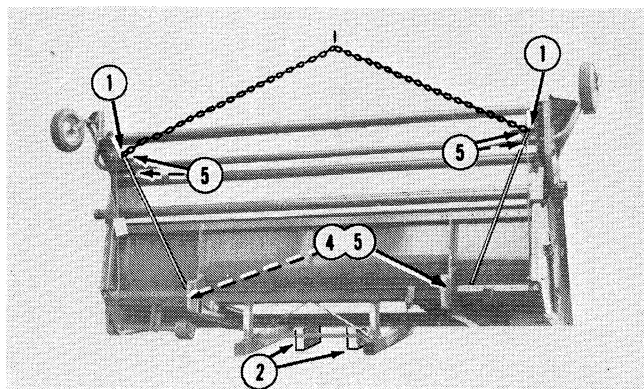
## BEGINNING OF SEASON SERVICE

1. Clean pickup platform thoroughly.
2. Replace or adjust belts and check tension.
3. Adjust chains to proper tension.
4. Clean grease from thrust washers of slip clutch. Grease bore of slip clutch after cleaning. Adjust spring tension on slip clutch and check torque on nuts.
5. Lubricate pickup platform completely.
6. Go over complete pickup platform and see that all bolts are tight and cotter pins are spread.
7. Check for hot bearings or looseness. Slip clutch must operate freely.
8. Review your operator's manual.



# Assembly and Installation

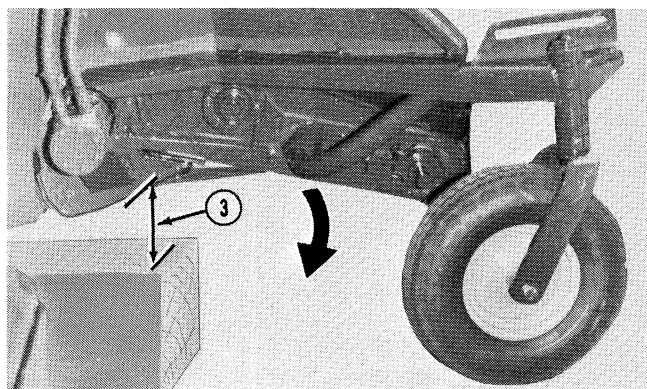
## ASSEMBLING SUPPORT ARMS, BELTS, AND HOLD-DOWN



### Assembly of 212 and 214 Pickup Platform with Belt Pickup Mounted

1. Hook chains to lift plates and hoist pickup platform from truck or flatcar. Lift truck may be used.

**CAUTION:** Weight of pickup rests on two shipping skid uprights. Do not remove these uprights or their attaching bolts until pickup has been rolled over (on ground) to operating position.



2. With chains still attached, lift pickup high enough to clear combine blocks, 20 in. (508 mm). Place two blocks under pickup top beam and slowly lower pickup. As pickup is lowered it will move forward.
3. With pickup on ground, place blocks under side frame. You must allow about 3 in. (74 mm) between blocks and frame.
4. Loosen nuts on shipping rods. As nuts are loosened the pickup will lower to blocks installed in Step 4.
5. Remove and discard four nuts and rods. Remove four nuts (per side) holding shipping plates. Remove and discard plates, then reinstall nuts on bolts. Remove and discard shipping stand.
6. Remove two cap screws and flat washers per side. Reverse windrow hold-down 180° and reinstall with same hardware. (See Adjusting Windrow Hold-down.)
7. Install belts.
8. Belt pickup is now ready to be picked up by combine.

## Assembly of Pickup Platform with Belt Pickup Not Mounted

**NOTE:** For ease of installation on Pickup Platform Serial No. (217601- ) see *Installing Stripper before installing arms, belts and hold-down.*

1. Set belt pickup on a sturdy support.
2. Attach left-hand support arm to bearing carrier with two 7/16 x 1-1/2-inch plow bolts and two 7/16 x 1 x .075-inch washers.
3. Attach right-hand support arm to bearing carrier with two 7/16 x 1-1/2-inch plow bolts and two 7/16 x 1 x .075-inch washers.

(If pickup is to be installed on combine immediately, Steps 4 through 7 are more easily done after pickup is attached to platform.)

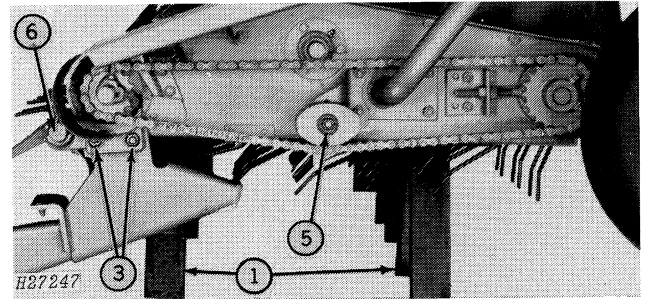
4. See installation instructions for installing pickup belts.
5. Adjust drive chain to correct tension so it operates without climbing or jumping sprockets.
6. (200 Series Pickup) Install stripper.

**NOTE:** Shield can now be attached to end of pickup platform.

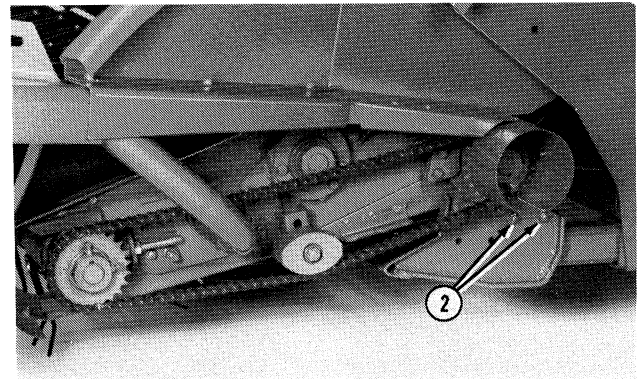
7. Install windrow hold-down by attaching welded assembly (A) to gauge wheel yoke bearing with two 1/2 x 1-1/2-inch cap screws and 17/32 x 1-1/16 x .090-inch flat washers at (B). Adjust hold-down fingers to proper position.
8. Install shields, using (three each side) 1/4 x 1/2-inch cap screws, 9/32 x 5/8 x .060-inch flat washers, and lock washers and four existing round head bolts.
9. Remove cap screw and two thick spacers from end of wheel mount.
10. Place wheel mount through opening. Replace two thick spacers on top and secure cap screw.

**NOTE:** Wheel position is shown for middle position. To raise or lower see *Adjusting Gauge Wheels.*

A—Welded Assembly  
B—Cap Screw with Flat Washer

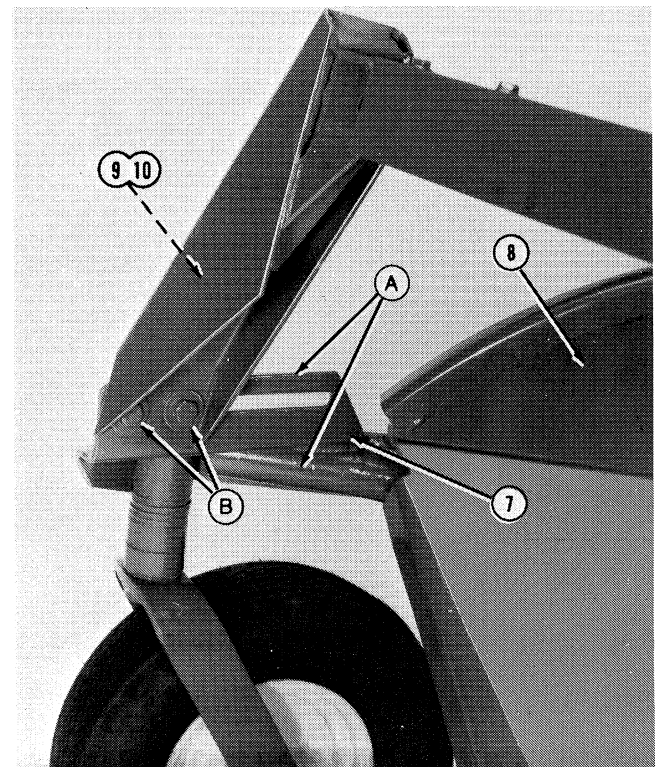


Left-Hand Side - 6601 Illustrated



H50138

Left-Hand Side Shield Removed - Pickup Platform Illustrated

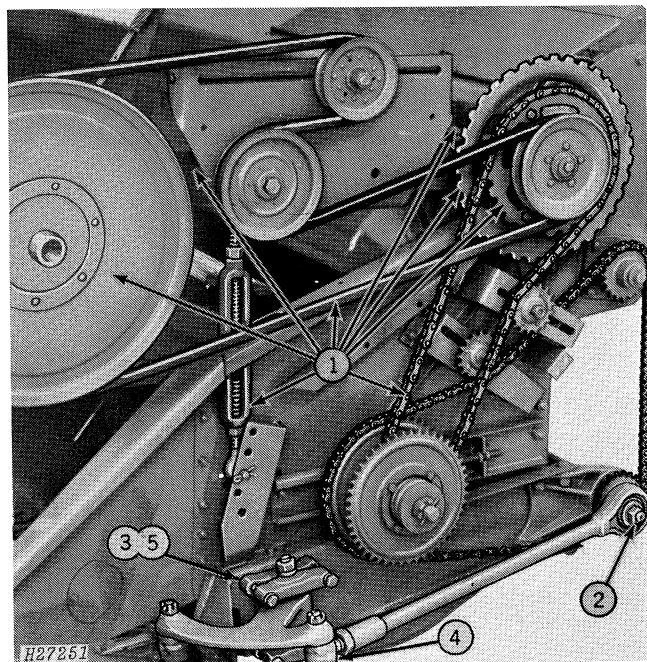


H50139

200 Series, and Pickup Platform Belt Pickup Illustrated



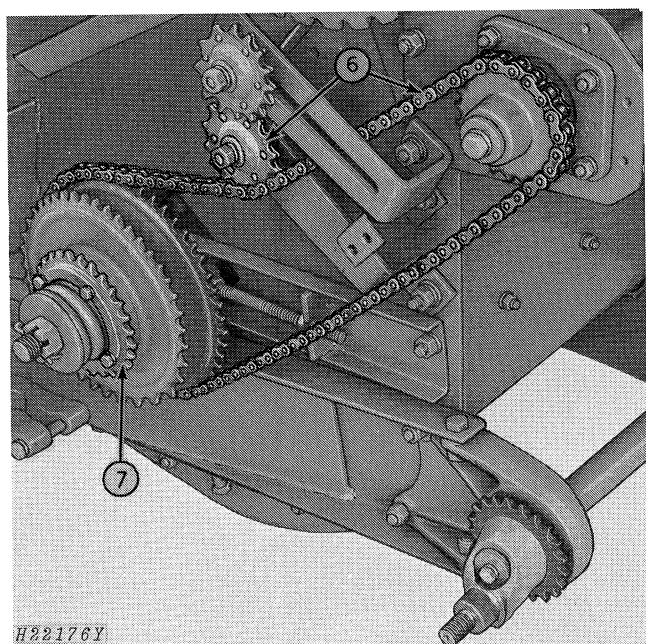
## PREPARING 6601 PLATFORM FOR BELT PICKUP



6601 Cutting Platform Illustrated

### Mechanical Drive 6601 Combine

1. Remove loop dividers, shields, drive belt, drive chain, and reel.
2. Disconnect pitman from crank; replace nut on crank.
3. Remove four clamps holding bell crank in place.
4. With bell crank attached, pull knife out of cutterbar if so equipped.
5. Reattach four clamps to platform.



6601 Cutting Platform Illustrated

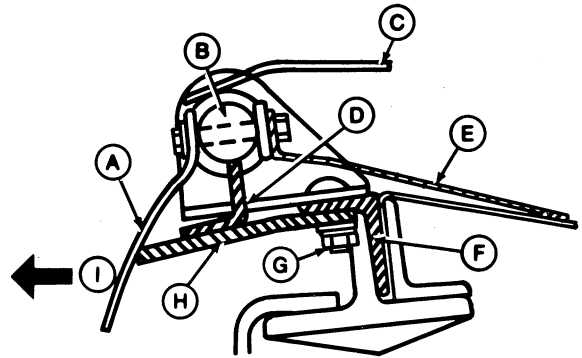
6. Remove 18 links from pitman and auger drive chain. Reinstall auger drive chain and adjust tension.
7. Remove 27-tooth sprocket and store sprocket and hardware with cutting parts that were removed. Secure 47-tooth sprocket, using three 5/16 x 2-inch cap screws.



## Installing Stripper Support Plate

The stripper bar support rests on the support plate, which is bolted, with offset down, to under-side of cutterbar angle.

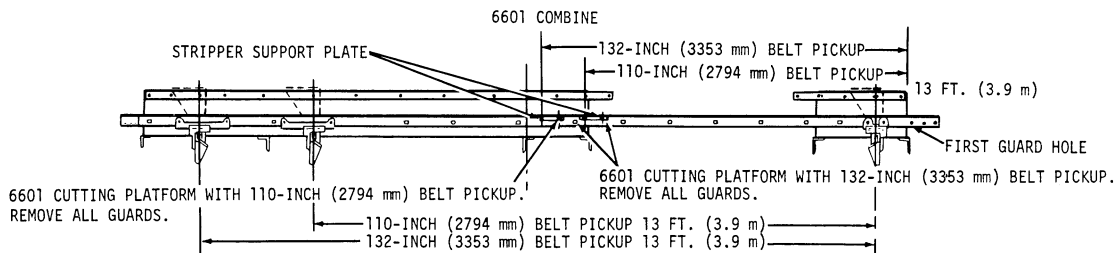
- A — Stripper
- B — Stripper Tube
- C — Finger
- D — Stripper Bar Support
- E — Grain Slide
- F — Cutterbar Angle
- G — Two 3/8 x 1-inch Rd. Hd.  
Bolts with 13/32 x 13/16 x .060-inch  
Flat Washers and Nuts
- H — Support Plate - Off-  
Set Down
- I — Direction of Travel



6601 Platforms

H37398

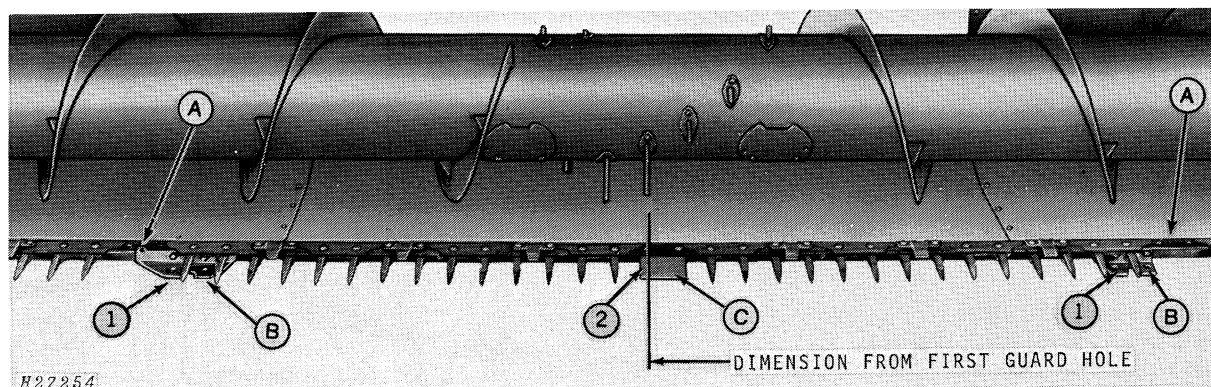
## Installing Belt Pickup



H36926

**NOTE:** Above chart shows where to install pickup support arms and to remove all guards.

Installing Belt Pickup (continued)



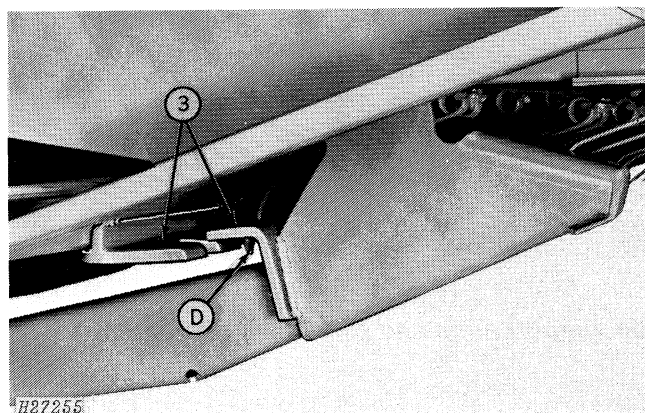
A—Guard  
B—Mounting Bracket  
C—Stripper Support Plate

1. Remove all guards (A) then attach left-hand and right-hand mounting brackets (B) to platform with  $\frac{3}{8}$  x 1-1/2-inch cap screws. Refer to chart for correct location.

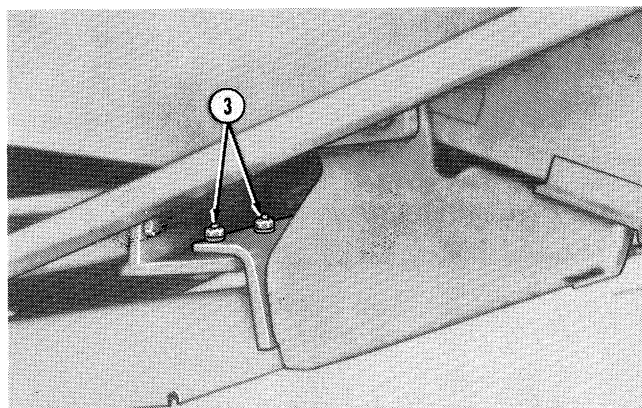
**NOTE:** Check bracket to see that “110-inch (2794 mm), or 132-inch (3353 mm)” side is to front.

2. On cutting platforms remove guard and knife clip then attach stripper support plate (C) (with offset down) to underside of cutterbar angle with two  $\frac{3}{8}$  x 1-inch carriage bolts.
3. Move combine forward until mounting brackets are a few inches from brackets on support arms.

Using aligning pins (D) as a guide in slot of mounting bracket, slide pickup into position and attach support arms to mounting brackets with four  $\frac{3}{8}$  x 1-1/4-inch carriage bolts. Carriage bolts must be inserted from underside of mounting brackets.

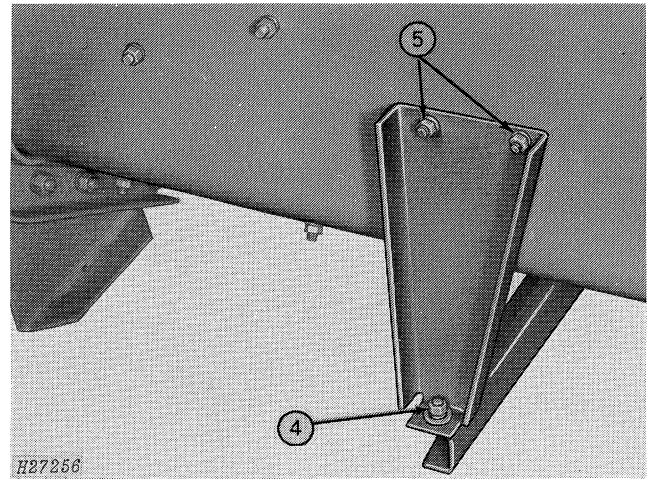


D—Aligning Pins

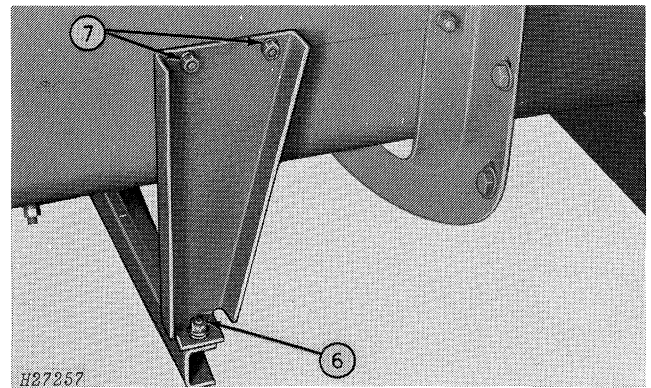


H22213

4. Attach right-hand support bracket to support arm, using 3/8 x 1-inch cap screw.
5. Bolt bracket to platform, using two 3/8 x 1-inch cap screws.



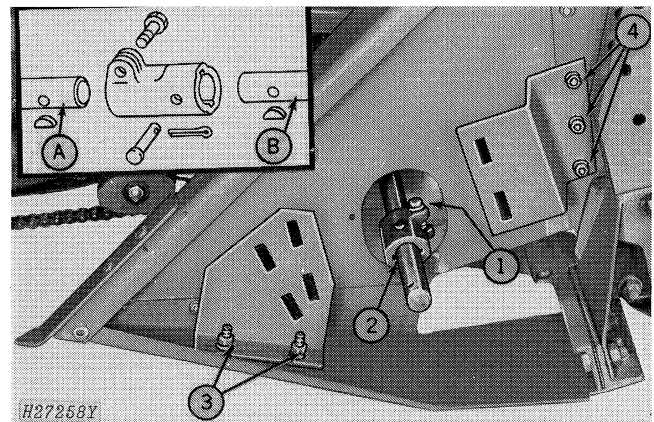
6. Attach left-hand support bracket to support arm, using one 3/8 x 1-inch cap screw.
7. Bolt bracket to platform, using two 3/8 x 1-inch cap screws.



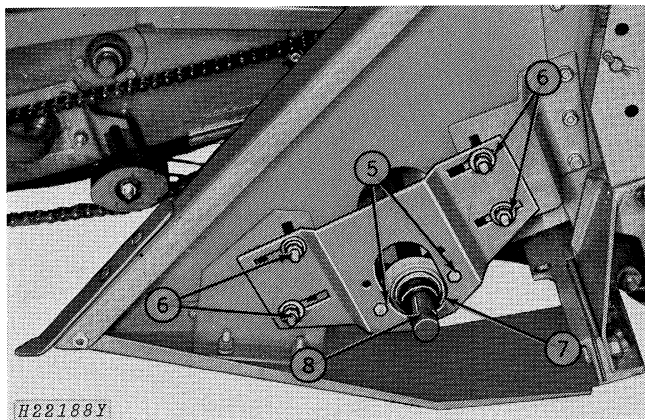
110-Inch (2794 mm) and 132-Inch (3353 mm) Belt Pickup on 6601 Combine

## INSTALLING MECHANICAL DRIVE PARTS AND SHIELDS ON 6601 COMBINE CUTTING PLATFORMS AND PICKUP PLATFORMS

1. Place Woodruff key on inner drive shaft (A) and secure coupler to shaft, using one 3/8 x 1-3/4-inch cap screw.
2. Place Woodruff key on outer drive shaft (B) and insert shaft into coupler and secure, using one 5/16 x 2-inch drilled pin. Insert 1/8 x 1/2-inch cotter pin and bend.
3. Attach front support bracket to divider, using two 3/8 x 1-inch cap screws and 3/8-inch nuts, and four 13/32 x 13/16 x .060-inch flat washers — one each next to slotted holes in support bracket and divider.
4. Attach rear support bracket to end sheet, using existing hardware (5/16 x 3/4-inch truss head machine screws, lock washers, and nuts).



A — Inner Drive Shaft  
B — Outer Drive Shaft



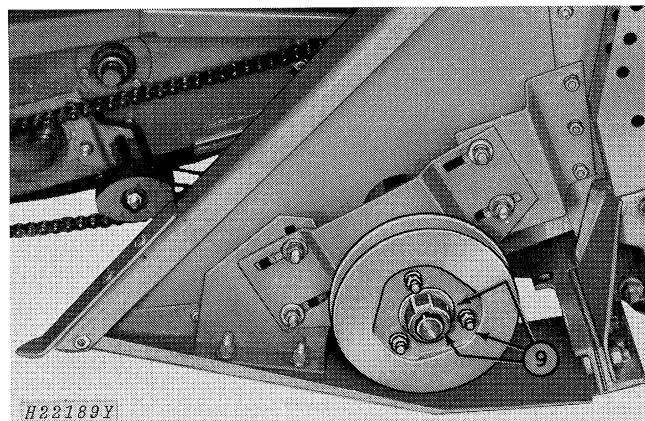
5. Attach bearing and retainers to support plate at lower set of holes in plate with two 5/16 x 3/4-inch cap screws.

6. Install support plate with four 3/8 x 1-1/4-inch carriage bolts, 13/32 x 1 x .105-inch flat washers, and 3/8-inch nuts.

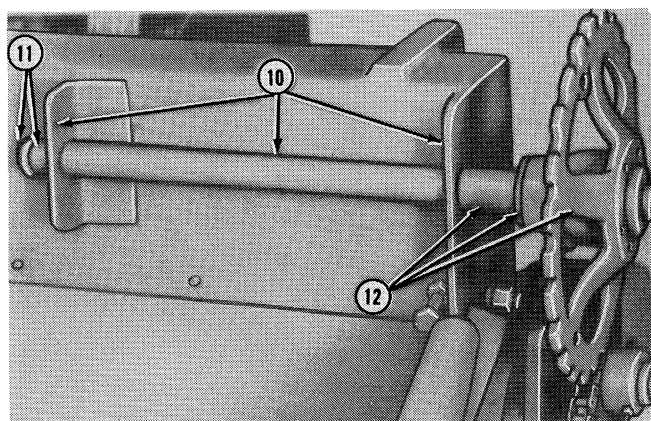
*NOTE: Raise pickup off of ground; relieve all binding between coupler sleeve and outer drive shaft and tighten hardware.*

7. Install bearing collar.

8. Install Woodruff key.



9. Slide sheave on shaft and insert spring pin.

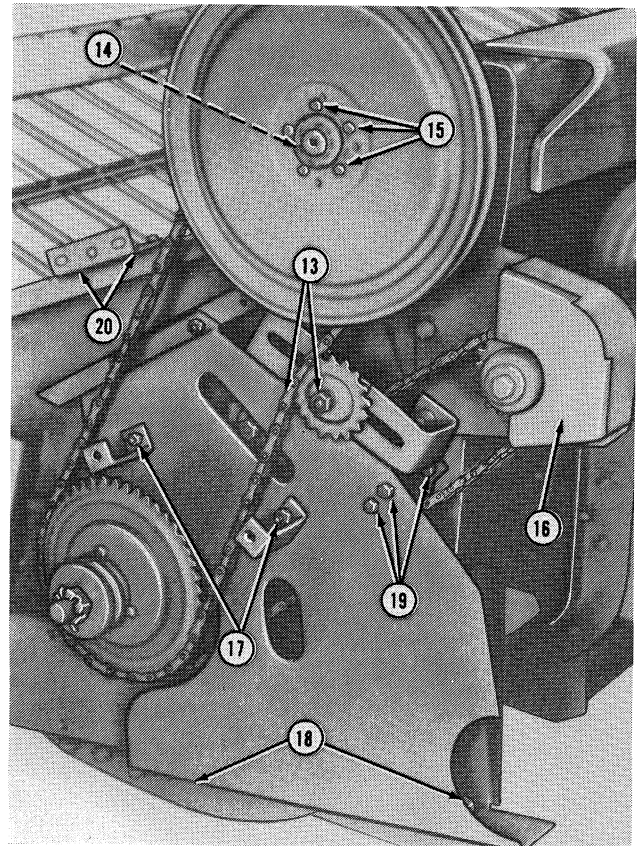


10. Insert pivot shaft through support brackets.

11. Install flat washer, spacer, flat washer, and 3/4-inch lock nut on pivot shaft.

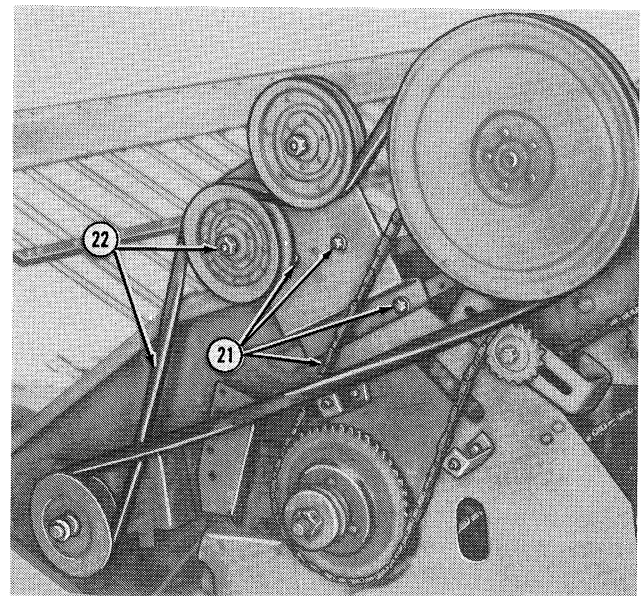
12. Install spacer, washer, and sprocket.

13. Install drive chain and adjust tension so it will operate without climbing or jumping sprockets.
14. Slip 3-1/2-inch washer onto shaft.
15. Secure drive sheave to sprocket using five 1/4 x 1-1/4-inch cap screws. Washer must be between sheave and sprocket.
16. Install shield, using four 5/16 x 1/2-inch self-tapping screws.
17. Attach brackets to shield, using two 3/8 x 3/4-inch cap screws.
18. Install drive shield. Install hardware in bottom holes at this time. Use existing hardware in front hole and one 1/2 x 1-1/4-inch cap screw in rear hole.
19. Install support bracket, using one 3/8 x 1-inch cap screw in J-angle and two 3/8 x 3/4-inch cap screws in shield.
20. Install shield bracket, using two 5/16 x 3/4-inch cap screws.



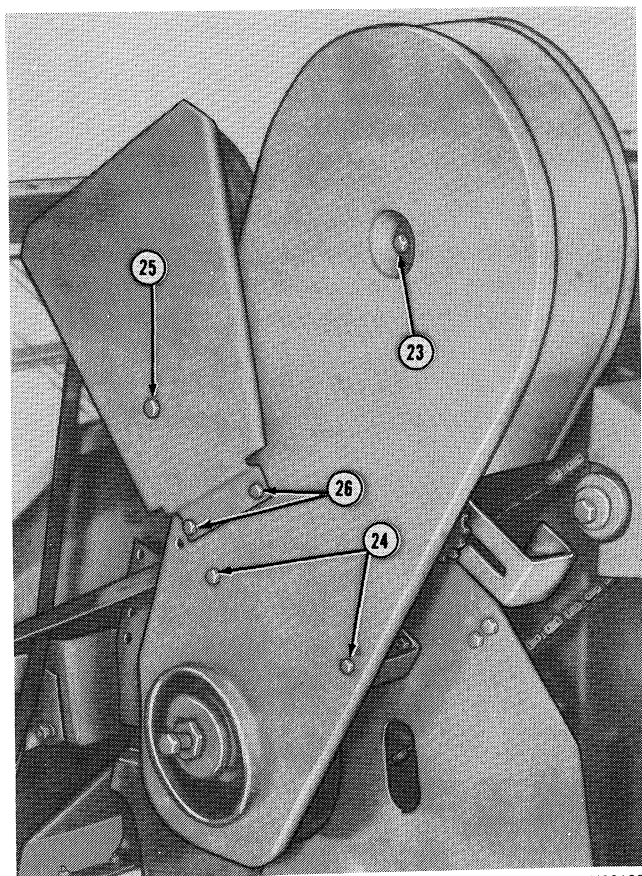
H22190

21. Install tightener assembly, using two 3/8 x 1-inch cap screws in bottom holes and two 5/16 x 1-inch round head bolts in top holes.
22. Install drive belt and adjust tension so belt will operate without slipping.



H22191



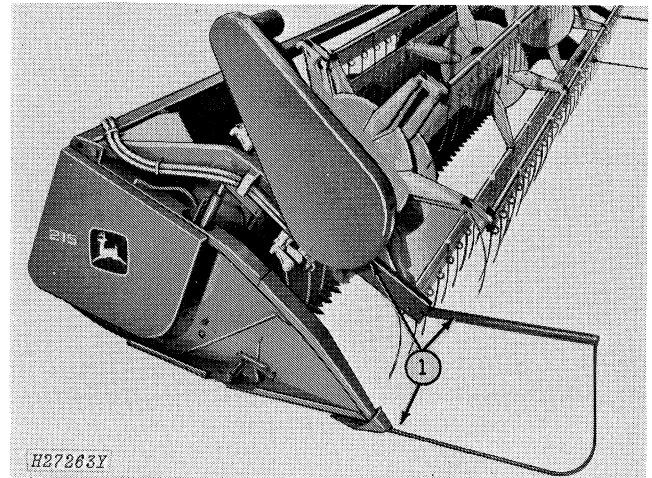


H22192

23. Attach drive shield to pivot shaft, using a flat washer and a 3/8 x 3/4-inch cap screw.
24. Attach drive shield to brackets, using two 3/8 x 3/4-inch cap screws.
25. Attach shield, using a 1/2 x 3-3/4-inch spacer and a 3/8 x 4-3/4-inch round head bolt.
26. Attach shield to drive shield, using two 3/8 x 5/8-inch cap screws.

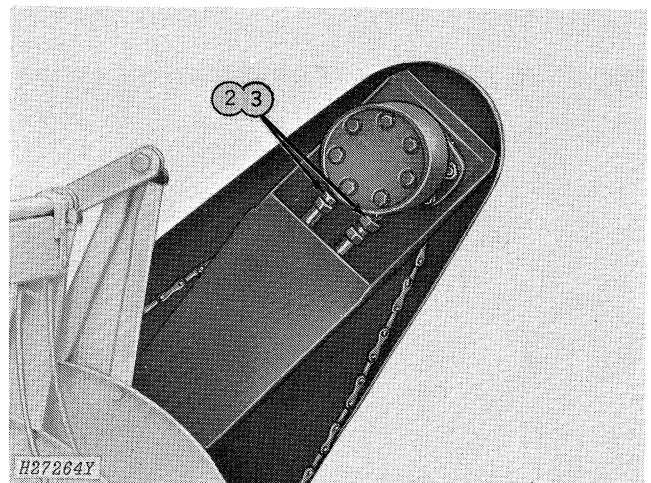
## PREPARING 200 SERIES RIGID CUTTING PLATFORM FOR BELT PICKUP (Serial No. 217601- )

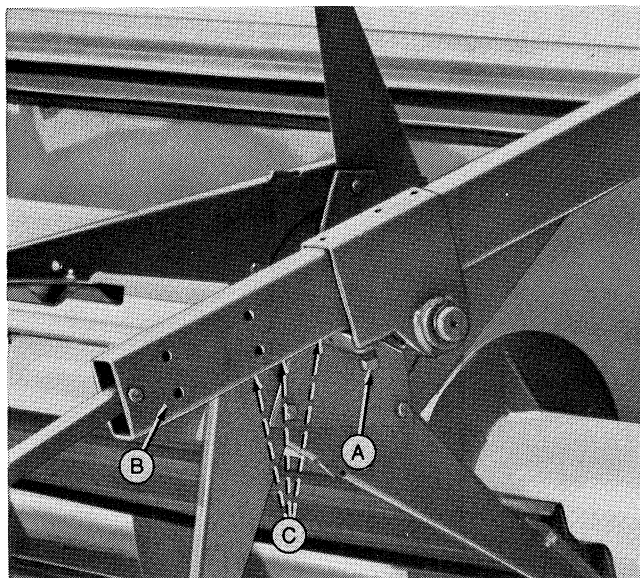
1. Remove and retain loop dividers and hydrostatic drive shield.



*R.H. End Illustrated*

2. Disconnect hydrostatic drive hoses at motor.
3. Place plugs in ends of hydrostatic drive hoses and ports in motor to keep clean.
4. Place hydrostatic drive hoses (still connected to platform lines) out of the way.





*Bat Reel Illustrated*

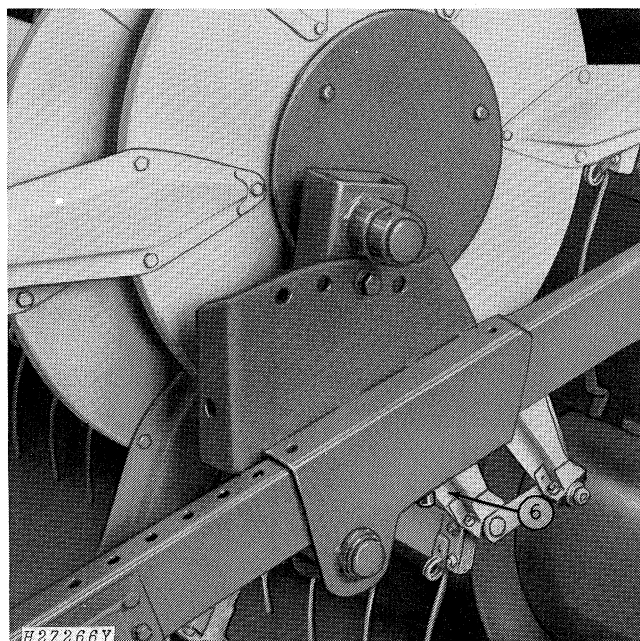
H36885

5. Loosen adjusting screw (A) (both sides) from holes (C) and slide reel and reel drive off reel support arms (B).



**CAUTION:** Reel is heavy. Use proper lifting equipment when removing.

- A — Adjusting Screw
- B — Reel Support Arm
- C — Alignment Holes



*Pickup Reel Illustrated*

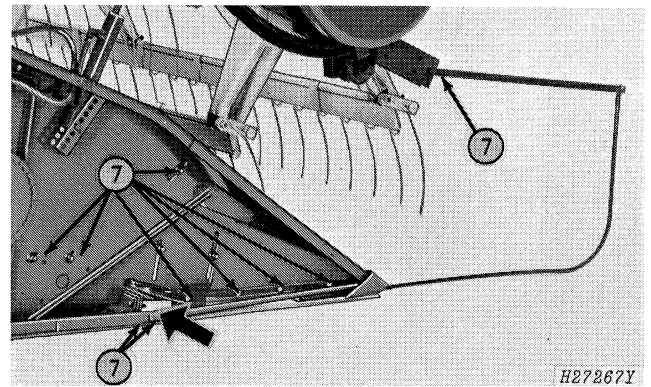
6. Loosen set screw (both sides) and slide reel off platform support arms.



**CAUTION:** Reel is heavy. Use proper lifting equipment when removing.

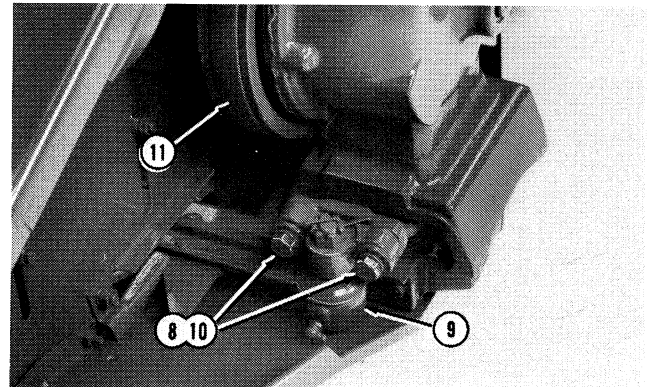


7. Remove and retain right-hand divider point on 13-ft (3.9 m) platform when used with 132-in. (3353 mm) belt pickup only. Divider point has to be removed for clearance of 132-in. (3353 mm) belt pickup. The 3/8-in. round head bolt must be replaced (shown with bold arrow) in cutterbar mounting.



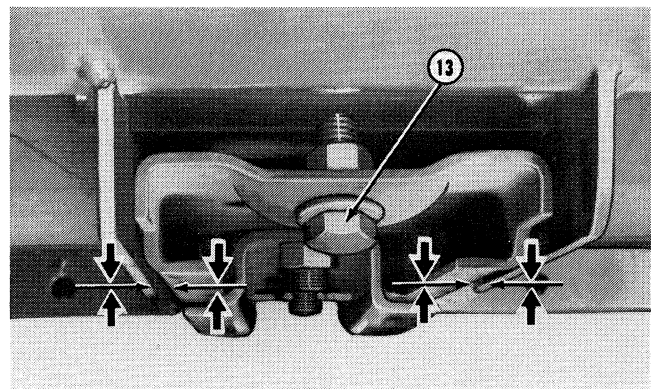
End Shield on 13-Foot (3.9 m) Platform

8. Remove and retain hardware holding sickle to knife drive case.
9. Remove and retain sickle assembly.
10. Place hardware removed in Step 8, back where it was removed, and secure it for storage.
11. Disconnect knife drive case drive by removing belt.
12. See charts to show which guards are to be removed when used with each size belt pickup.



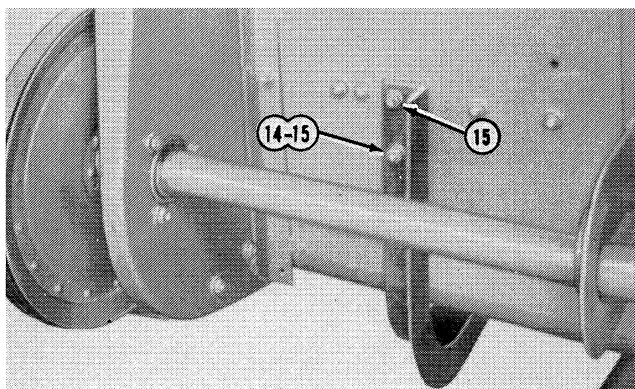
H50140

13. If platform is equipped with skid plates, set cutterbar tilt to maximum downward position. (rear of channel must be all the way up).



Bottom Edge Viewed at Rear of Platform

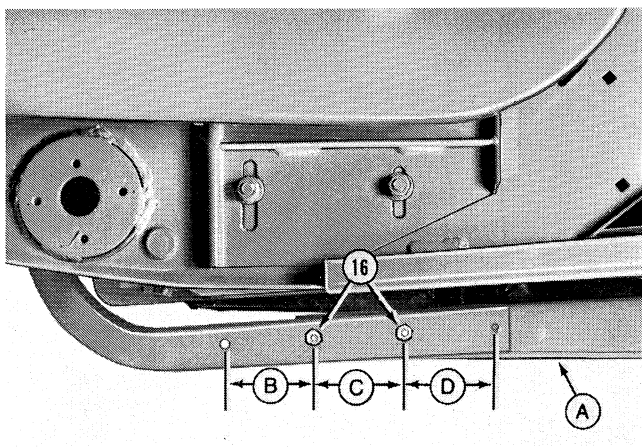
H37399



L.H. Rear of Platform Illustrated

H37400

14. Drill 13/32-in. (10 mm) holes through second layer of sheet metal. Pilot holes are already through first layer.
15. (Both sides) Secure J-angle with two 3/8 x 1-1/4-in. cap screw, lock washer, 13/32 x 13/16 x 0.060-in. flat washer, and nut.



H36918

- A—Support Arms  
 B—Rear Position  
 C—4-in. Forward Position  
 D—8-in. Forward Position

**NOTE:** Knife guards must be removed before belt pickup can be mounted.

16. Move combine forward until mounting brackets are a few inches from cutterbar. Slide pickup into position on top of cutterbar. Attach mounting brackets to cutterbar with existing hardware.

Attach belt pickup platform as shown in charts.

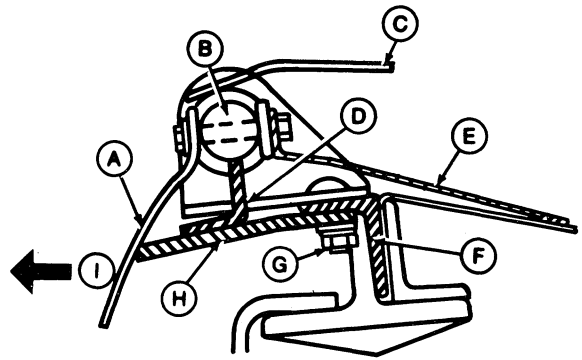
Slide support arms (A) into J-angles and secure with 2 (each side) 3/8 x 1-1/4-in. cap screws, lock washer, 13/32 x 13/16 x 0.060-in. flat washer, and nut.

**NOTE:** Platform is set in 4-in. (102 mm) forward position. Rear position is used for short crops or damp windrow conditions. 4-in. (102 mm) forward position is used for medium length crops. 8-in. (203 mm) forward position is used for long straw crops.

## Installing Stripper Support Plate

17. Install stripper support plate (H) in center of cutterbar as shown. Stripper bar support rests on support plate, that is bolted, with offset down, to underside of cutterbar angle.

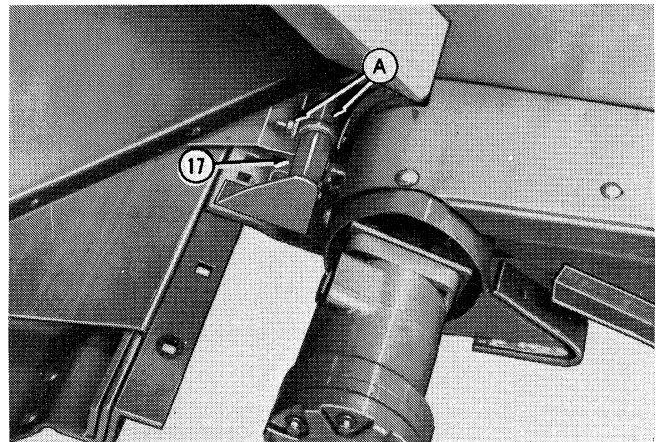
A—Stripper  
 B—Stripper Tube  
 C—Finger  
 D—Stripper Bar Support  
 E—Grain Slide  
 F—Cutterbar Angle  
 G—Two 3/8 x 1-in. Rd. Hd. Bolts  
 with 13/32 x 13/16 x .060-in.  
 Flat Washers and Nuts.  
 H—Support Plate — Off-Set Down  
 I—Direction of Travel



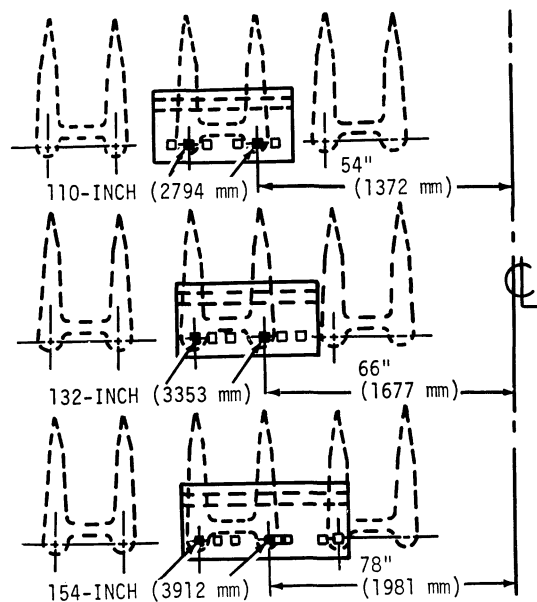
H37398

Place adjustable stripper (A) in stripper holder between belt pickup and platform. Lock in place with cotter key.

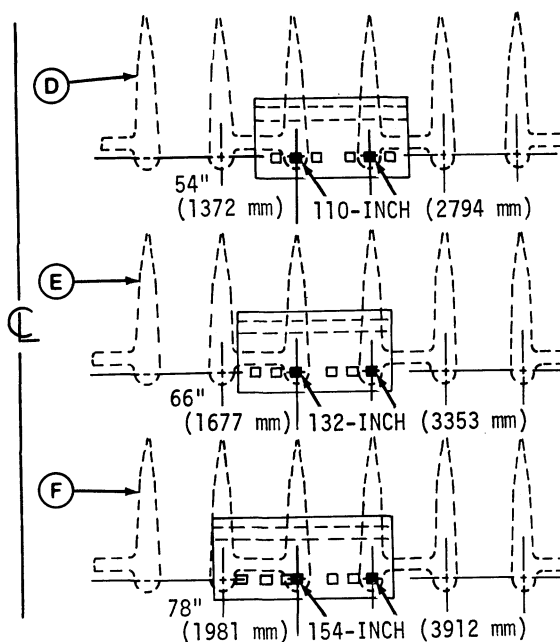
A — Stripper



H36919



H36920



H36921

*Left-Hand Side Illustrated*

*Right-hand Side Illustrated*

### A — View A

**B — View B**

**C — View C**

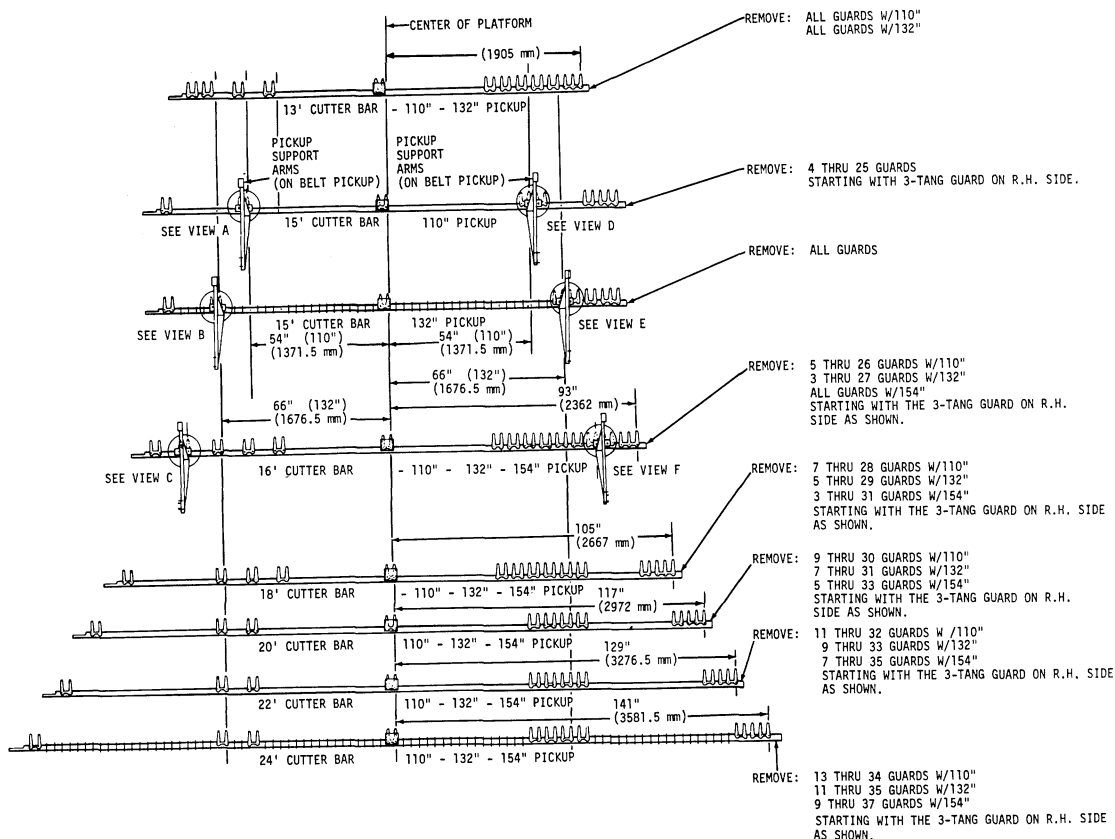
**D — View D**

**E — View E**

**F — View F**

**Ⓢ — Center of Platform**

**Ⓞ — Center of Platform**



H36922

## INSTALLING HYDROSTATIC DRIVE PARTS ON 200 SERIES PLATFORMS (Serial No. 217601-

)

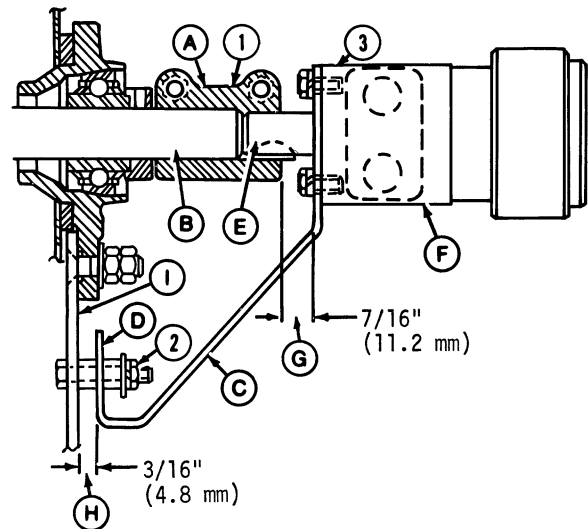
**NOTE:** The hydrostatic drive motor is mounted on right-hand end of belt pickup.

1. Place 1/4 x 7/8-inch Woodruff key on shaft and slide coupler (A) onto shaft (B).
2. Attach support bracket (C) to belt pickup, using two 3/8 x 1-1/2-inch cap screws, two 3/8-inch pipe spacers (D), two 13/32 x 13/16-inch flat washers, and two 3/8-inch nuts.
3. Place 1/4 x 1-inch Woodruff key on motor shaft (E) and attach motor (F) to bracket (C), using four 3/8 x 3/4-inch cap screws.

**NOTE:** Intake and exhaust ports on hydrostatic drive motor face toward rear. When using 132-inch (3353 mm) belt pickup on 13-foot (3.9 m) platform, rotate hydrostatic drive motor so ports are at the top. **Do not** use 90° fittings.

4. Remove shield around motor shaft for ease of installation of motor. Hold motor (F) level so output shaft (E) does not bind in coupler. There must be a minimum of 7/16-inch (11 mm) clearance between support bracket (C) and coupler (A) as shown at (G) and a 3/16-inch (5 mm) clearance between support bracket (C) and pickup support arm as shown at (H), then tighten the two 3/8 x 1-3/4-inch cap screws in coupler.

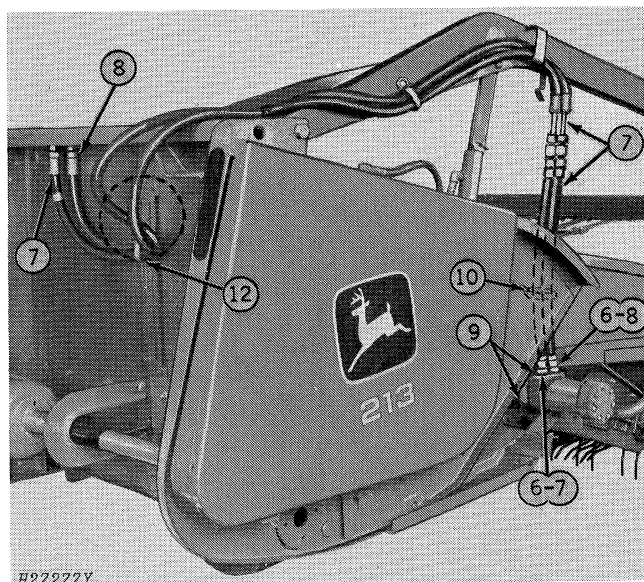
**IMPORTANT:** It is necessary that support bracket (C) is free to float on spacers.



H36923

132-Inch (3353mm) Belt Pickup Illustrated. Looking Forward on Right-Hand Side

- A — Coupler
- B — Shaft
- C — Support Bracket
- D — Spacer
- E — Motor Shaft
- F — Motor
- G — 7/16-inch (11.2 mm)
- H — 3/16-inch (4.8 mm)
- I — Side Sheet



13-Foot (3.9 m) Cutting Platform

5. (Not Illustrated) If cutting platform is equipped with a pickup reel, hydrostatic drive motor ports must be plugged.

If cutting platform is equipped with a bat reel, steel lines to bat reel hydrostatic drive motor must be plugged on both ends.

6. Dip O-rings in hydraulic oil and correctly seat them on connectors, then place connectors in belt pickup hydrostatic drive motor ports. Secure two elbows to two connectors.
7. Attach hose to 90 degree elbow in bottom port on hydrostatic drive motor or the rear port without 90 degree elbow for 132-inch (3353 mm) belt pickup on a 13-foot (3.9 m) platform. Following note shows platform and belt pickup sizes that require extension lines and hoses between existing hoses and 90 degree elbow (or port) on hydrostatic drive motor.

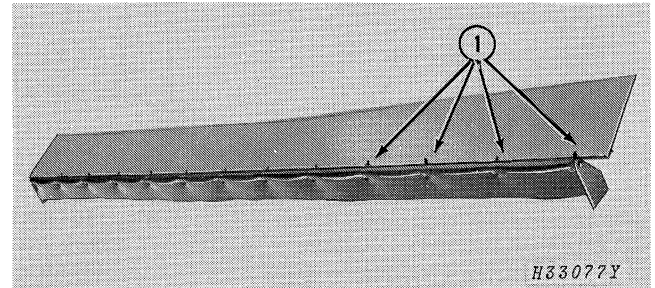
**NOTE:** The 24-foot (7.3 m) platform, equipped with pickup reel, requires two new additional hoses when used with 110-inch (2794 mm) belt pickup. All 13-, 15-, 16-, 18-, 20-, and 22-foot (3.9, 4.6, 4.9, 5.5, 6.1, and 6.7 m) platforms, equipped with pickup reel when used with 110-, and 132-inch (2235, 2794, and 3353 mm) belt pickups or 24-foot (7.3 m) platforms, equipped with pickup reel when used with 132-inch (2235 and 3353 mm) belt pickups use existing hoses.

The 13-, 15-, 16-, 18-, 20-, 22-, and 24-foot (3.9, 4.6, 4.9, 5.5, 6.1, 6.7, and 7.3 m) platforms, equipped with bat reel when used with 110-, and 132-inch (2235, 2794 and 3353 mm) belt pickups, require two new connecting steel lines and two new hoses.

8. Attach hose to 90 degree elbow in top port on hydrostatic drive motor or front port without 90 degree elbow for 132-inch (3353 mm) belt pickup on a 13-foot (3.9 m) platform. Note following Step 7 shows platform and belt pickup sizes that require extension lines and hoses between existing hoses and 90 degree elbow (or port) on hydrostatic drive motor.
9. Install drive shield over motor shaft, using two 1/4 x 5/8-inch round head machine screws.
10. Hold hoses together with hose clamp, then secure hose clamp to inside of right-hand end sheet.
11. (Not Illustrated) 16-foot (4.9 m) and larger platforms require a second hose clamp midway between hydrostatic drive motor and end sheet. Attach clamp through guard mounting hole, using 3/8 x 1-1/4-inch cap screw, lock washer, and nut.
12. Loop any excessive hydraulic hose, as shown with dotted lines, through existing hose clamp.
13. Route hose through clamps on feeder house and connect at couplers under operator platform.

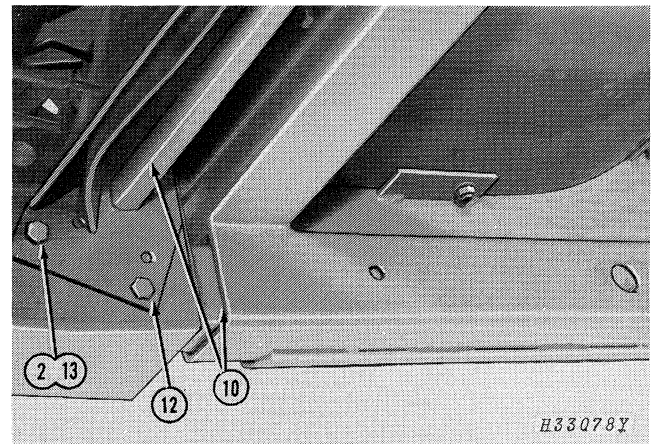
## PREPARING BELT PICKUP ON THE PICKUP PLATFORM (Serial No. 217601- )

1. Attach grain slide to stripper studs with 1/4-inch lock washers and nuts. Do not over tighten.



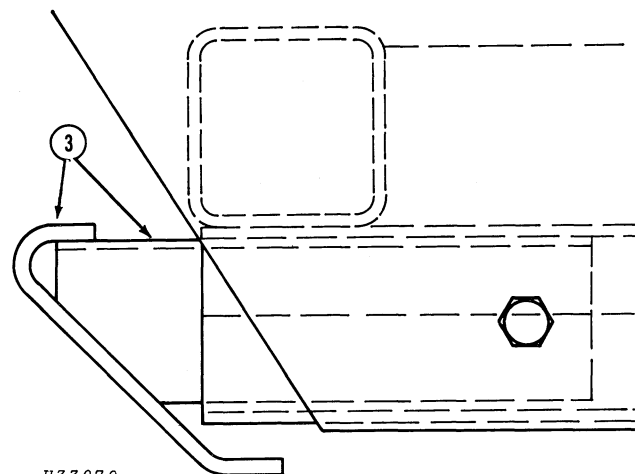
132-inch (3353 mm) Stripper Illustrated

2. Attach stripper at front hole only with 3/8 x 1-inch cap screw and self-locking nut on left-hand side. Use existing hardware at front hole only on right-hand side. Do not tighten at this time.



132-inch (3353 mm) Belt Pickup R.H. Side Illustrated

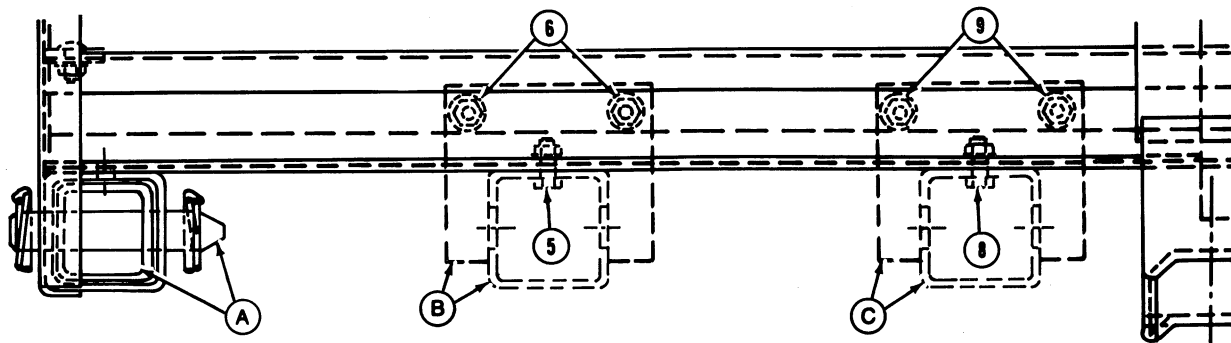
3. (110-inch [2794 mm] Belt Pickup) When using 110-inch (2794 mm) belt pickup, you must plug 132-inch (3353 mm) support arm channels with two runner assemblies and secure with two 1/2 x 3-3/4-inch cap screws and self-locking nuts.



H33079

Runner to Plug 132-inch (3353 mm) Belt Pickup  
Support Arm Channels





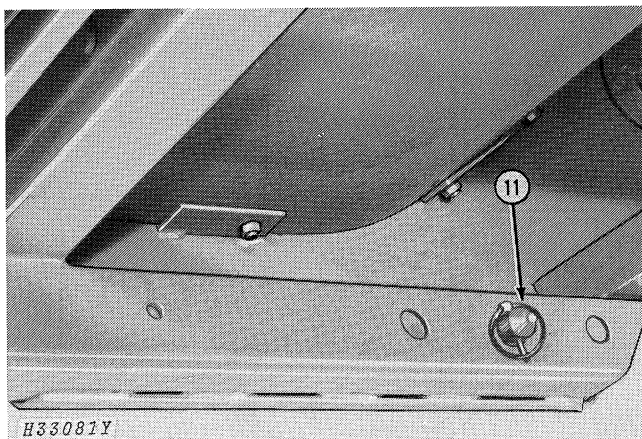
H36924

**A** — 132-inch (3353 mm) Support Arm  
Tube Position on 212 Platform  
— 154-inch (3912 mm) Support Arm  
Tube Position on 214 Platform

**B** — 110-inch (2794 mm) Support Arm  
Tube Position on 212 Platform  
— 132-inch (3353 mm) Support Arm  
Tube Position on 214 Platform

**C** — 110-inch (2794 mm) Support Arm  
Tube Position on 214 Platform

4. (110-inch [2794 mm] on 212 or 132-inch [3353 mm] on 214 Belt Pickups) Place support arm channels (B) in position as shown on both sides by aligning with existing holes.
5. (110-inch [2794 mm] on 212 or 132-inch [3353 mm] on 214 Belt Pickups) Secure rear of channels with one 3/8 x 1-inch cap screw and self-locking nut (each side).
6. (110-inch [2794 mm] on 212 or 132-inch [3353 mm] on 214 Belt Pickups) Secure front of channels with two 3/8 x 3-3/4-inch cap screws and self-locking nuts (each side).
7. (110-inch [2794 mm] —214 only Belt Pickup) Place support arm channels (C) in position, as shown, on both sides by aligning with existing holes.
8. (110-inch [2794 mm] —214 only Belt Pickup) Secure rear of channels with one 3/8 x 1-inch cap screw and self-locking nut (each side).
9. (110-inch [2794 mm] —214 only Belt Pickup) Secure front of channels with two 3/8 x 3-3/4-inch cap screws and self-locking nuts (each side).
10. Slide belt pickup support arms into pickup platform. Hold stripper grain slide up as belt pickup is moved into position.
11. Let stripper grain slide down as belt pickup is moved into position. Place pin in hole (mid-position).
12. Secure 3/8 x 1-inch cap screw and self-locking nut in Step 2 (both sides) in stripper. Also secure hardware installed.
13. Secure cap screws in front of stripper from Step 2.

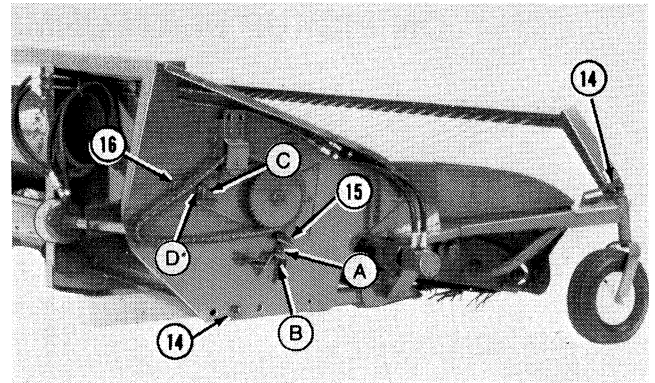


132-inch (3353 mm) Belt Pickup Illustrated on 212 Platform or  
154-inch (3912 mm) Belt Pickup on 214 Platform.

14. Set belt pickup support arms in mid-position hole (Step 11) and set hold-down in middle of adjusting slot.
15. (Auger adjustment to platform bottom — both sides) Adjust auger for a clearance of 1/4-inch (6 mm) between auger flights and bottom of platform. Loosen nut (A) and tighten nut (B) to move auger down. Loosen nut (B) and tighten nut (A) to move auger up. Tighten nuts (A) and (B).

**IMPORTANT:** Pickup drive shaft must be attached to combine before checking chain tension. Chain must deflect 1-in. at 20 lbs. (88 N) of pull at mid span when auger is at bottom of travel.

16. (Auger adjustment to stripper — both sides) Auger to stripper clearance must be 1/4-inch (6 mm). To move forward, loosen nut (C) and tighten nut (D). Reverse for adjusting auger to rear. Tighten nuts (C) and (D).

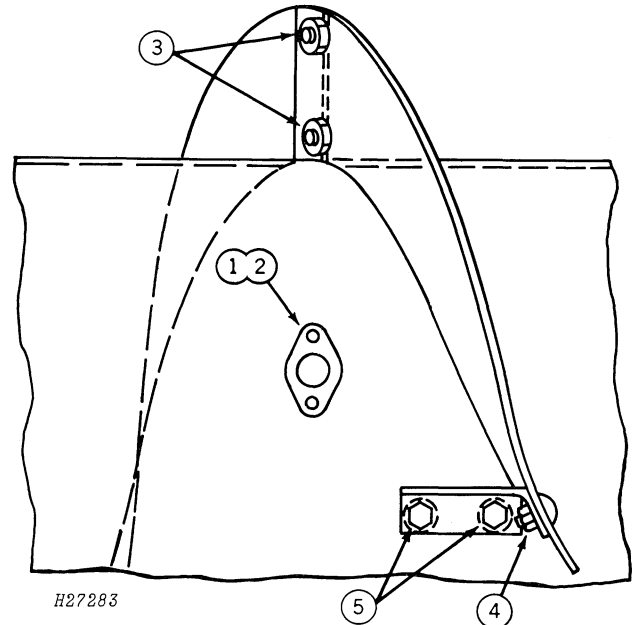


H50141

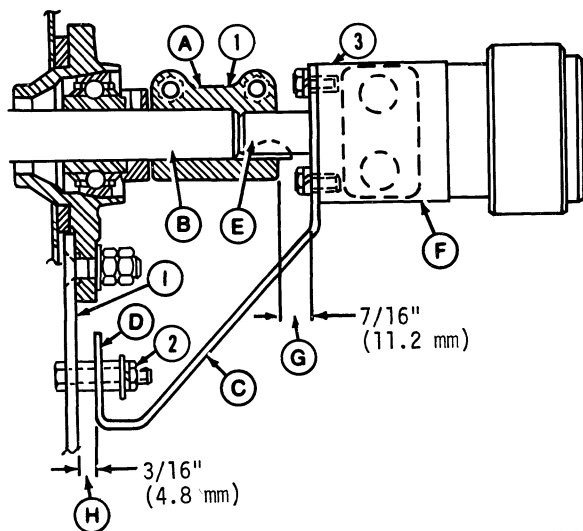
Shield Removed for Illustrative Purposes

## INSTALLATION OF AUGER FLIGHT EXTENSIONS FOR 3300, 4400 AND 4420 COMBINE PICKUP PLATFORM

1. Remove three auger fingers, each end of auger finger pattern.
2. Secure three auger finger covers, each end, using six 5/16-inch button head self-tapping screws.
3. Drill two 13/32-inch (10 mm) diameter holes in end of auger flight. Attach extension to flight with two 5/16 x 3/4-inch round head bolts, lock washers, and nuts provided.
4. Attach clip to extension with two 5/16 x 3/4-inch round head bolts, lock washers, and nuts provided.
5. Use clip as template and drill two 13/32-inch (10 mm) diameter holes in auger. Attach clip to auger with two 3/8 x 7/8-inch cap screws, flat washers, lock washers, and nuts provided. Place flat washers inside auger.



## INSTALLING HYDROSTATIC DRIVE PARTS ON PICKUP PLATFORMS (Serial No. 217601- )



H36923

132-inch (3353 mm) Belt Pickup Illustrated

- A — Coupler
- B — Shaft
- C — Support Bracket
- D — Spacer
- E — Motor Shaft
- F — Motor
- G — 7/16-inch (11.2 mm)
- H — 3/16-inch (4.8 mm)
- I — Side Sheet

**NOTE:** Hydrostatic drive motor is mounted on right-hand end of belt pickup.

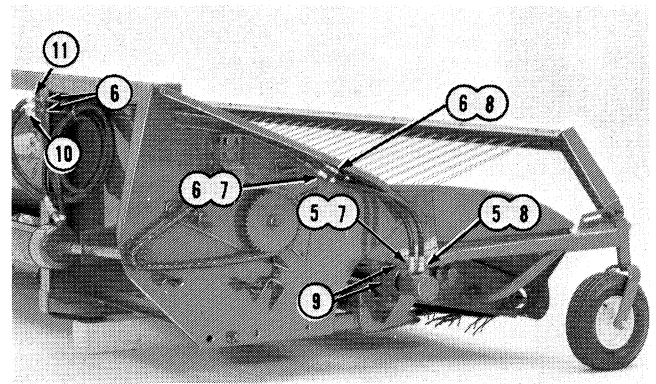
1. Place 1/4 x 7/8-inch Woodruff key on shaft and slide coupler (A) onto shaft (B).
2. Attach support bracket (C) to belt pickup, using two 3/8 x 1-1/2-inch cap screws, two 3/8 x 1/2-inch pipe spacers (D), two 13/32 x 13/16-inch flat washers, and two 3/8-inch nuts.
3. Place 1/4 x 1-inch Woodruff key on motor shaft (E) and attach motor (F) to bracket (C) using four 3/8 x 3/4-inch cap screws.

**NOTE:** Ports on hydrostatic drive motor face upwards.

4. Remove shield around motor shaft for ease of installation of motor. Hold motor (F) level so output shaft (E) does not bind in coupler. There must be a minimum of 7/16-inch (11 mm) clearance between support bracket (C) and coupler (A) as shown at (G), and a 3/16-inch (5 mm) clearance between support bracket (C) and pickup support arm as shown at (H), then tighten two 3/8 x 1-3/4-inch cap screws in coupler.

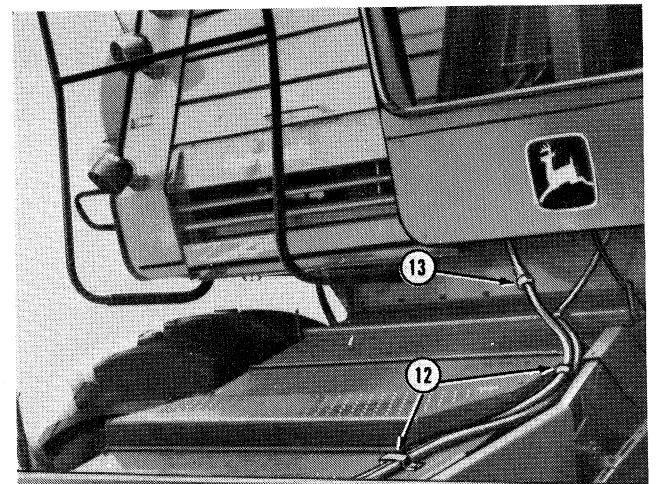
**IMPORTANT:** Support bracket (C) must be free to float on spacers.

5. Dip O-rings in hydraulic oil and correctly seat them on straight connectors. Install connectors in belt pickup hydrostatic drive motor ports. Install 90° elbow on each connector on 110-inch (2794 mm) belt pickups.
6. Remove plugs from both ends of steel hydraulic lines.
7. Attach pressure hydraulic hose to rear port of hydrostatic drive motor and lower pressure steel hydraulic line.
8. Attach hydraulic hose to front port of hydrostatic drive motor and upper steel hydraulic line.
9. Secure drive shield over motor shaft, using two 1/4 x 5/8-inch round head machine screws.
10. Install O-ring into hose and then install nose to hose. Attach hose (with female fitting) to upper steel line.
11. Install O-ring into hose and then install body to hose. Attach hose (with female fitting) to upper steel line.
12. Combine Serial No. (        -600000). Route hydraulic hoses through clamps on feeder house.
13. Combine Serial No. (        -600000). Attach two hydraulic hoses to coupling from control valve.
14. Combine Serial No. (600001-        ). Attach two hydraulic hoses to hose connectors from belt pickup. Lay hoses across feeder house as shown.



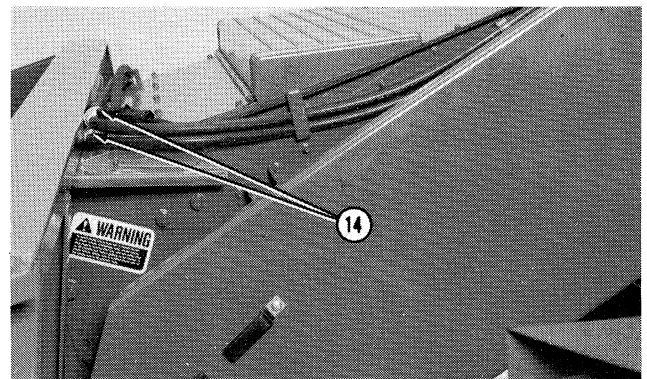
12-Foot (3.9 m) Pickup Platform Illustrated  
Shield Removed

H50142



Combines Serial No. (        -600000)

H36925



Combines Serial No. (600001-        )

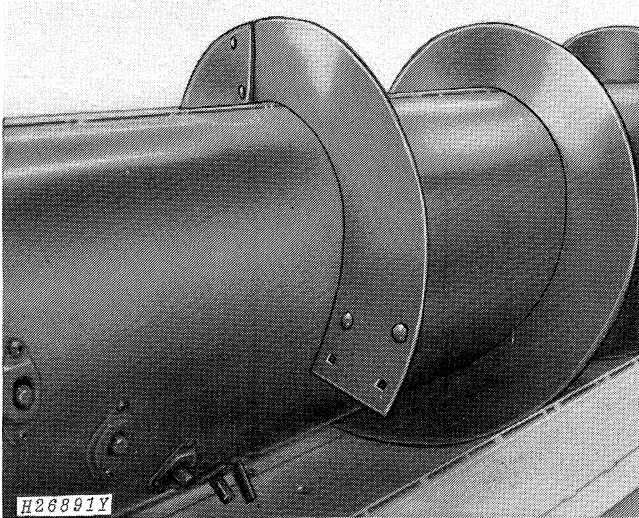
H37773



# Special Equipment

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## AUGER FLIGHT EXTENSIONS



Auger flight extensions are recommended for use in short, slick feeding conditions. Extensions help convey material closer to center of feeder house for even feeding to cylinder.



# Specifications

*(Specifications given in this manual are intended for service only and do not include normal factory manufacturing tolerances.)*

*(Specifications and design subject to change without notice)*

**Platform Widths** ..... 212 or 214

**Pickup Widths** ..... 110, 132, 154 in.  
(2794, 3353, 3912 mm)

**Platform Height Control** ..... Hydraulic

**Pickup Belts:**

Width of belts ..... 22 in. (559 mm)

Number of belts per pickup:

110 in. (2794 mm) ..... 5

132 in. (3353 mm) ..... 6

154 in. (3912 mm) ..... 7

Operating speed of belts ..... 53—475 ft./min.  
(16—145 m/min.)

Number of rollers ..... 3

**Vari-Belt Feeder House Speeds**

6620—7720 ..... 460-470 RPM.

8820 ..... 490-500 RPM.

**Pickup Carriage Adjustment** ..... Fore-and-aft  
through 8 in. (203 mm) range

**Extension** ..... 0, 4, 8 in. (0, 102, 203 mm)  
(Pickup Platforms and 200 Series Platforms)

**Pickup Fingers:**

Type ..... Steel or plastic

Number of fingers per belt ..... 60

**Auger:**

Float range ..... 1-1/2-in. (38.1 mm)

Diameter ..... 24 in. (610 mm)

Auger fingers ..... Heavy-duty, round, 5/8-in.  
(15.9 mm) diameter with breakaway notch

Number of auger fingers ..... 18

Auger finger pattern ..... Spiral, retracting

Finger reach ..... 6 in. (152 mm)

Operating speed ..... 150 rpm

**Tires:**

Pressure ..... 20 psi (1.40 bar)

**Approximate Shipping Weights:**

(Includes shipping skid)

212 Pickup Platform ..... 975 lbs. (443 kg)

214 Pickup Platform ..... 1050 lbs. (477 kg)

\*110-in. Belt Pickup ..... 588 lbs. (267 kg)

\*132-in. Belt Pickup ..... 803 lbs. (365 kg)

\*154-in. Belt Pickup ..... 855 lbs. (388 kg)

\*Does not include weight of platform.

MODEL NUMBER

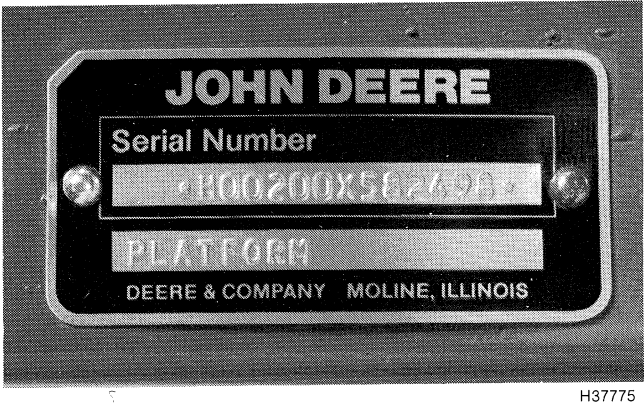
☐ 110-inch

☐ 132-inch

☐ 154-inch

Date of Purchase \_\_\_\_\_

(To be filled in by purchaser)



PICKUP PLATFORM SERIAL NUMBER

The platform serial number is on a plate located on top, left-hand end of platform.

When ordering parts, always bring with you the serial number as given on serial number plate. By doing so, you will assist your John Deere dealer in giving you prompt, efficient service.

Serial Number .....  
Date Purchased .....

(To be filled in by purchaser)

## BOLT TORQUE VALUES

The tables shown below give correct torque values for various bolts and cap screws. Check bolts to see that they are tight, using bolt torque chart as a guide.

### U.S. MEASUREMENT

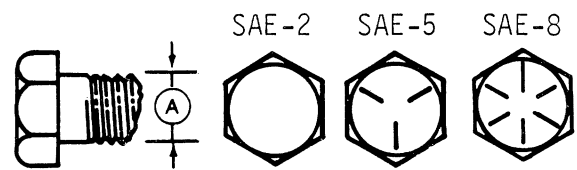
| Bolt<br>Diameter<br>"A" | Bolt Torque in Ft-Lbs (N•m) |       |       |        |       |        |
|-------------------------|-----------------------------|-------|-------|--------|-------|--------|
|                         | SAE 2                       |       | SAE 5 |        | SAE 8 |        |
| 1/4"                    | Not                         | Used  | 14    | (10)   | 19    | (14)   |
| 5/16"                   | Not                         | Used  | 27    | (20)   | 41    | (30)   |
| 3/8"                    | 23                          | (31)  | 35    | (47)   | 50    | (68)   |
| 7/16"                   | 35                          | (47)  | 55    | (75)   | 80    | (108)  |
| 1/2"                    | 55                          | (75)  | 85    | (115)  | 120   | (163)  |
| 9/16"                   | 75                          | (102) | 130   | (176)  | 175   | (237)  |
| 5/8"                    | 105                         | (142) | 170   | (231)  | 240   | (325)  |
| 3/4"                    | 185                         | (251) | 300   | (407)  | 425   | (576)  |
| 7/8"                    | 160                         | (217) | 445   | (603)  | 685   | (929)  |
| 1"                      | 250                         | (339) | 670   | (910)  | 1030  | (1396) |
| 1-1/4"                  | 330                         | (450) | 910   | (1235) | 1460  | (1979) |

Replace hardware with same strength bolt.

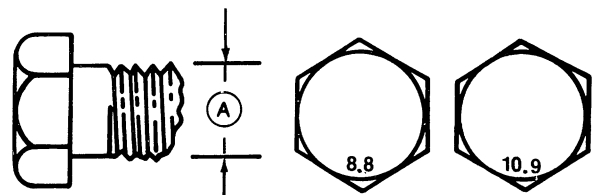
### METRIC MEASUREMENT

| Bolt<br>Diameter<br>"A" | Bolt Torque in Ft-Lbs (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 must be torqued to about 65% of amounts shown in above chart.



E19562



E19563













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NOTE: If you want manuals or catalogs for equipment not shown on this list, list the model number, serial number and name of the equipment below.

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|-------------------------------------------------------------------------------------------|-------------|--|
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| FMO Manual - Tillage                                                                      | FMO-111B    |  |
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| FMO Set of 9 Manuals above                                                                | FMO-394 Set |  |
| FOS Manual - Hydraulics                                                                   | FOS-1003B   |  |
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| FOS Manual - Mowing and Spraying Equipment                                                | FOS-56B     |  |
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| FOS Manual - Fiber Glass                                                                  | FOS-5902B   |  |
| FOS Manual - Fasteners                                                                    | FOS-6002B   |  |
| FOS Manual - Iden. of Parts Failures                                                      | FOS-6101B   |  |
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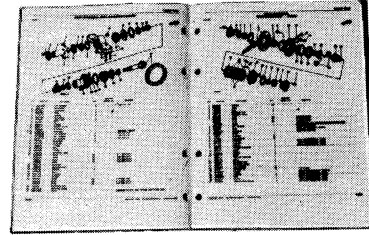
Illinois State Residents add 5% for ROT .....

Check or money order in U.S. Dollars enclosed ..... Total  
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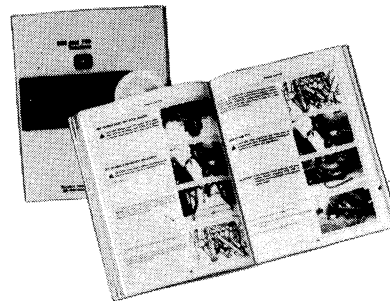
SP-320 Litho in U.S.A. MAY-83

## PARTS CATALOG



A parts catalog containing exploded view illustrations and lists of all parts is useful when purchasing service parts. Helps identify the correct parts. Useful in assembling and disassembling.

## OPERATOR'S MANUAL



An extra copy of the operator's manual may be important if the copy furnished with your machine is misplaced.

## FMO AND FOS MANUALS



These are basic manuals covering most all types and makes of agricultural machinery. FMO manuals tell you how to *operate* machines; FOS manuals tell you how to *service* machines. Each manual starts with basic theory and is fully illustrated with colorful diagrams and photographs. Both the "whys" and "hows" of adjustments and repairs are covered in this reference library.



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