

# 6601 COMBINE



JOHN DEERE

## OPERATORS MANUAL

6601  
COMBINE

OMH116956 B4 English

JOHN DEERE HARVESTER WORKS  
OMH116956 B4

LITHO IN THE 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.

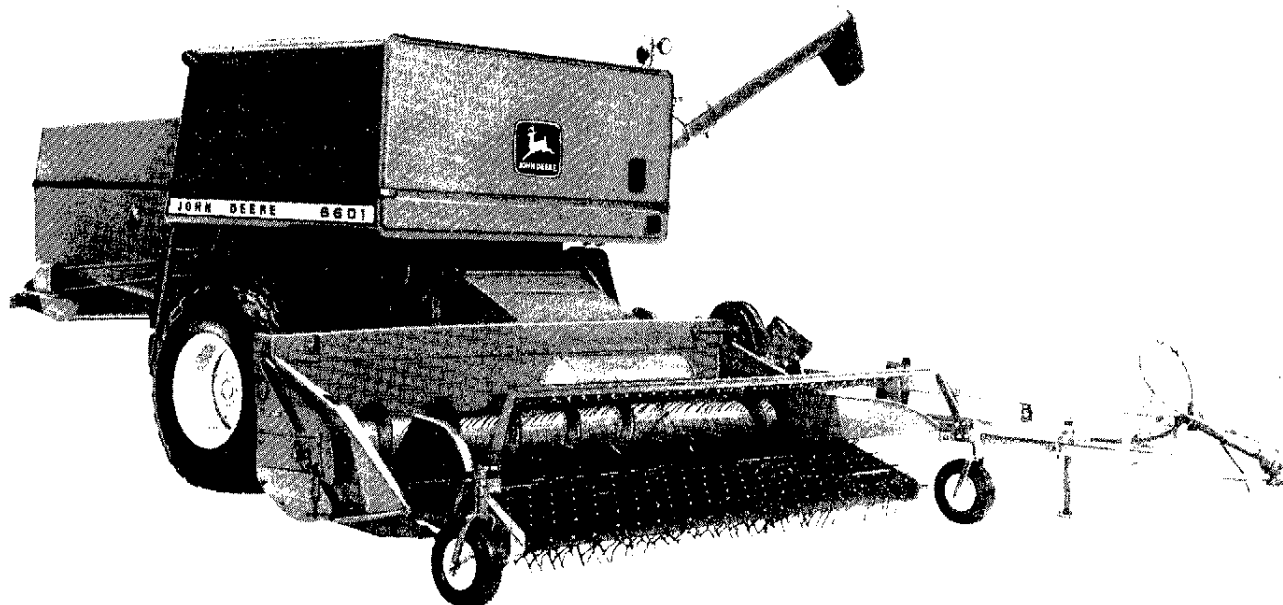
Your Operator's manual contains SI Metric equivalents which follow immediately after the U.S. customary units of measure.

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

Record your combine serial numbers in the space provided in Specifications.

The warranty on this combine 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.





# Contents

---

	Page
Introduction .....	
Contents .....	1
Safety .....	2-5
Combine Function Controls .....	6
Initial Tractor Preparation .....	7-14
Preparing the Combine .....	15
Attaching and Detaching the Combine .....	16-18
Transporting .....	19-21
Lighting and Signals .....	22-23
Operating the Combine .....	24-29
Lubricants .....	30,31
Lubrication and Maintenance .....	32-37
Fundamentals of Combine Harvesting .....	38-54
Platform and Feeder House .....	55-66
Separator .....	67-105
Grain Tank and Unloading Auger .....	106-111
Electrical System .....	112,113
Monitors .....	114-116
Hydraulic System .....	117
Power Train .....	118,119
Trouble Shooting .....	120-125
Storage .....	126
Specifications .....	127,128
Index .....	129-131

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**



# Safety



H28488N



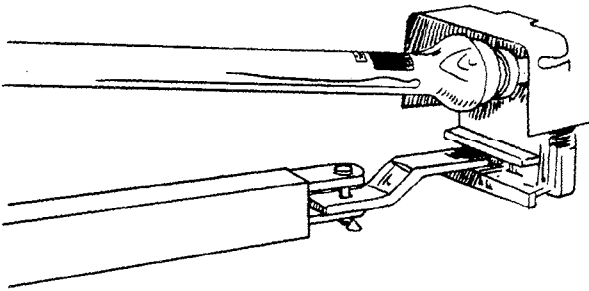
**CAUTION, WARNING or DANGER:** Decals with these headings and symbol indicate the possibility of personal injury.

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

Decals are located in areas where they apply.

H28468N

## AVOID CONTACT WITH MOVING PARTS



A19405

A19405

Keep guards and shields in place at all times while operating the combine. Always disengage tractor PTO and shut off engine before removing guards or shields.

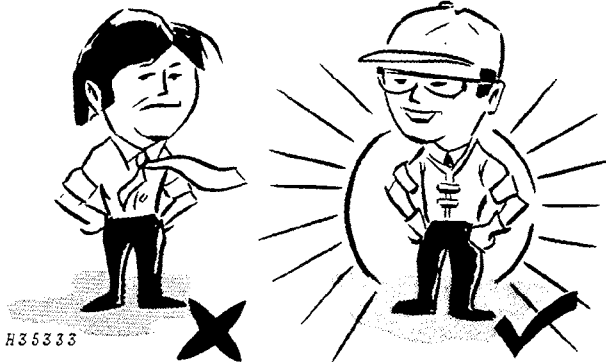
Keep hands, feet, and clothing away from power-driven parts.

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

Everyone must be clear before starting tractor engine or running combine.

Never attempt to clear obstructions off the header unless the PTO is disengaged and the tractor engine is shut off.

## OPERATE SAFELY



H35333

H35333

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

The gearshift lever of tractor must be in neutral and the PTO lever disengaged before starting tractor engine.

Be careful when operating on hillsides so the combine or tractor will not tip sideways.

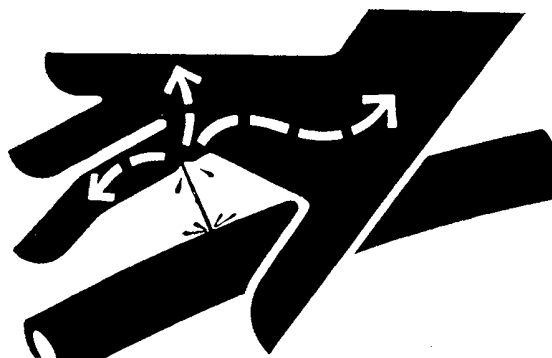
Always keep the tractor in gear when going down hills.

## 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 pin holes 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.



X9611

## LEAVING COMBINE UNATTENDED

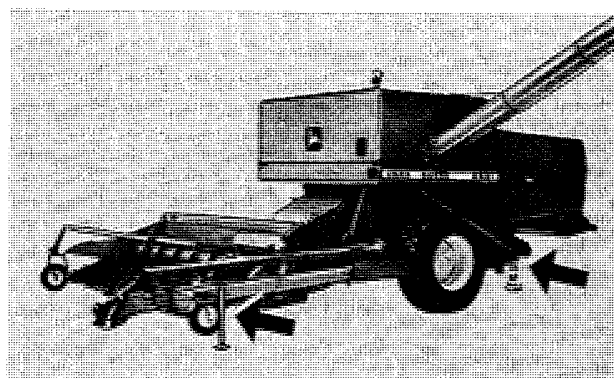
Before leaving combine unattended, support header with either hydraulic cylinder safety stop or with blocks, or lower it to ground.

Lower hitch and separator support stands and block wheels.

If combine is attached to tractor, place tractor transmission in park, stop engine and remove tractor key.

If platform is to be removed from separator, use support stand on separator.

**CAUTION:** Before platform is removed attach support stand to separator and place in "down" position as shown with dotted lines. Adjust stand to contact ground so hitch tube will not fly upward when platform is removed.



H28751

## TRANSPORT SAFELY

Never ride or allow anyone on the tractor, drawbar, or hitch.

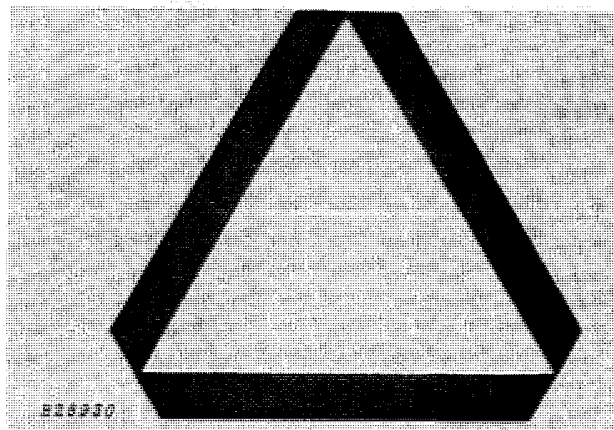
Be extra careful when transporting the combine in hilly country.

Use a tractor large enough to maintain control. When transporting the combine on a road or highway, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard, check local governmental regulations.

Tow only with agricultural tractor equipment with stationary drawbar.

Support stands must be rotated 90 degrees for transporting.

Do not transport combine over 20 MPH (32.2 km/h).



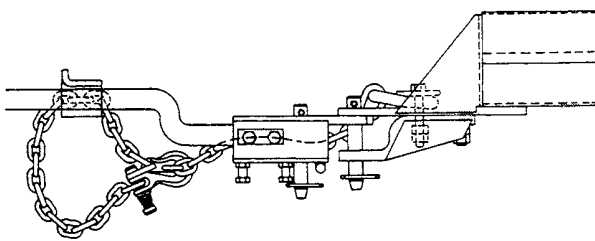
H28930

## RECOMMENDED MAXIMUM TOWING SPEED

To assure adequate braking performance and control during transport, do not exceed recommended maximum towing speed given in table below. When operating on slopes or less than optimum traction conditions, these towing speeds must be reduced. Always refer to this table before transporting combine.

Weight of Tractor	Total Weight of Combine with Empty Grain Tank and Attaching Equipment		
	10,000 lbs. (4536 kg)	16,000 lbs. (7200 kg)	18,000 lbs. (8100 kg)
0-5,000 lbs. (0-2270 kg)	Do not tow	Do not tow	Do not tow
5,000-8,000 lbs. (2270-3632 kg)	10 mph (16.1 km/h)	Do not tow	Do not tow
8,000-9,000 lbs. (3632-4086 kg)	10 mph (16.1 km/h)	10 mph (16.1 km/h)	Do not tow
9,000-10,000 lbs. (4086-4536 kg)	10 mph (16.1 km/h)	10 mph (16.1 km/h)	10 mph (16.1 km/h)
10,000-16,000 lbs. (4536-7258 kg)	20 mph (32.2 km/h)	10 mph (16.1 km/h)	10 mph (16.1 km/h)
16,000-18,000 lbs. (7258-8100 kg)	20 mph (32.2 km/h)	20 mph (32.2 km/h)	10 mph (16.1 km/h)
18,000 lbs. (8100 kg)—Up	20 mph (32.2 km/h)	20 mph (32.2 km/h)	20 mph (32.2 km/h)

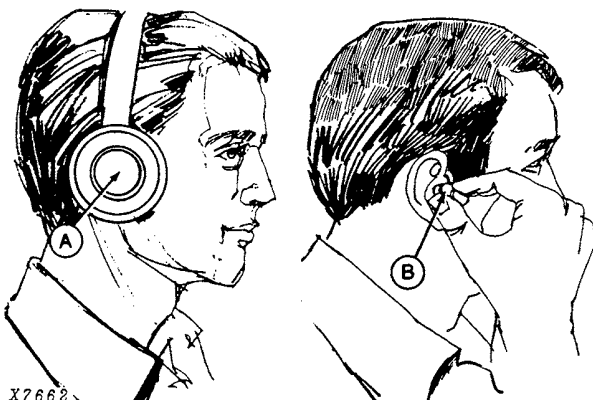
## SAFETY CHAINS



H37525

Install safety chain before transporting combine.

## NOISE



X7662

X7662

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 noises.

A—Earmuffs  
B—Earplugs

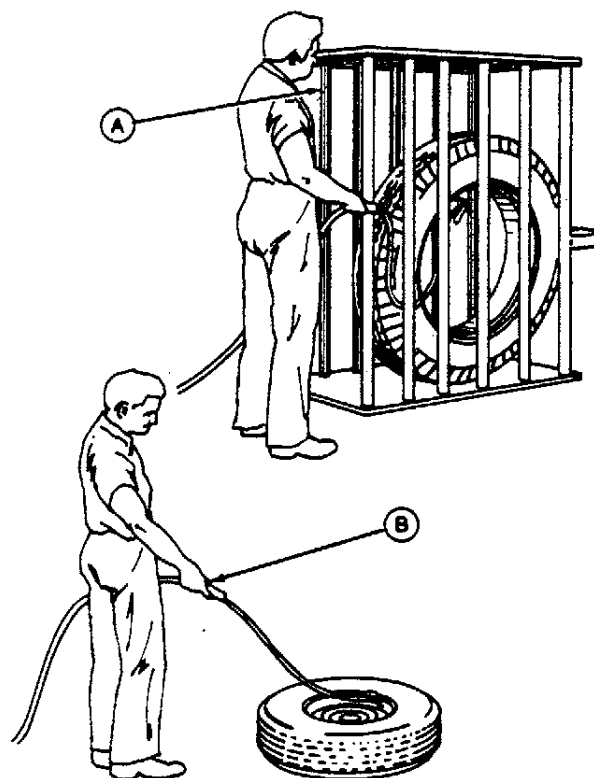
## SERVICE TIRES SAFELY

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

When sealing tire beads on rims, never exceed 35 psi 240 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.



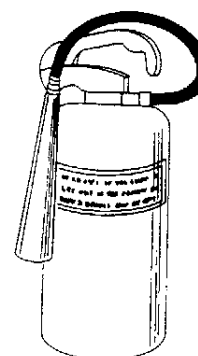
TS-0:23

## FIRE EXTINGUISHER

Have a multipurpose dry chemical fire extinguisher filled and handy. Know how to use it.

DO NOT refuel with the tractor engine running.

DO NOT smoke or use a lantern when refueling.

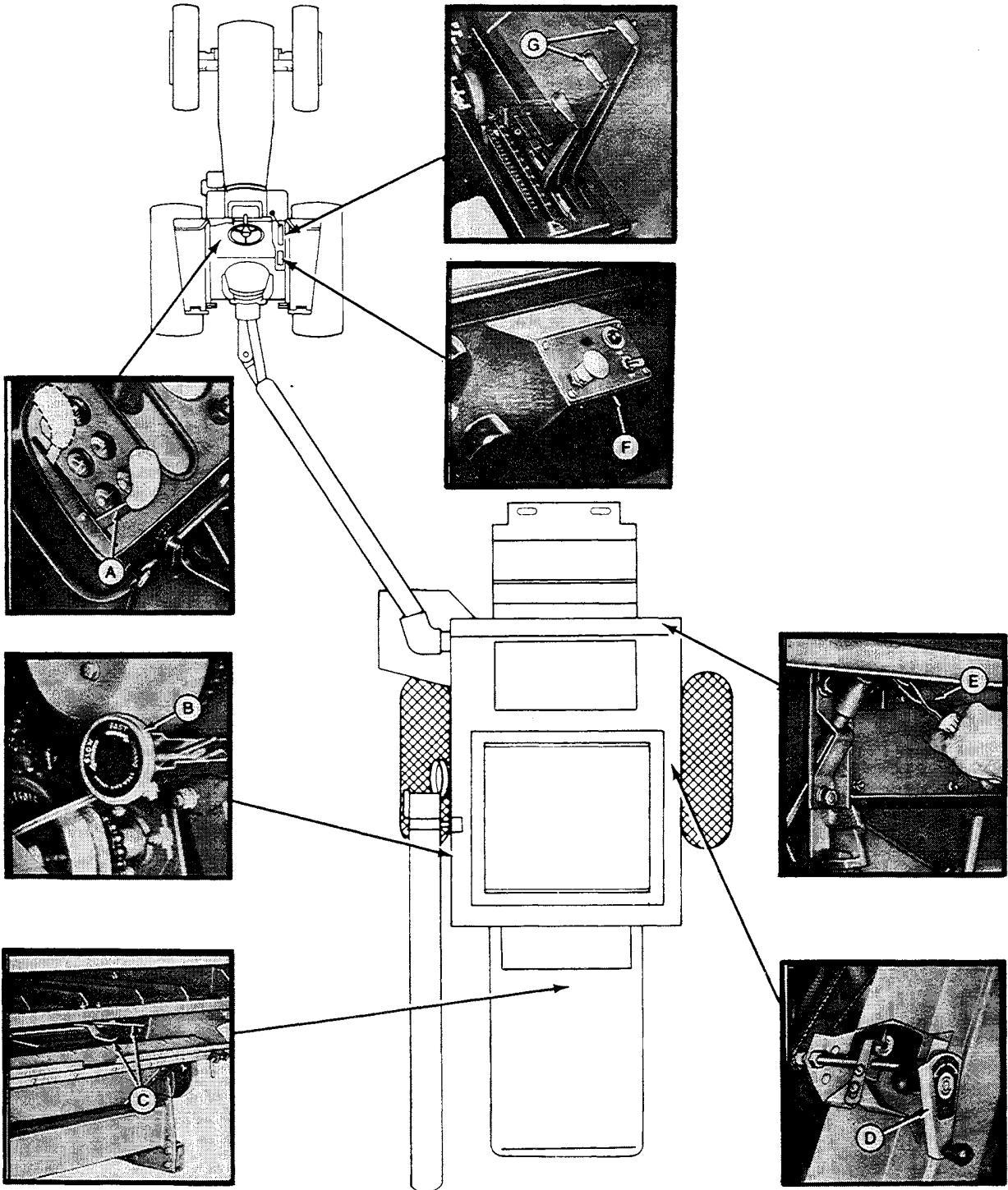


N35540

N35540



# Combine Function Controls



- A—PTO Clutch Lever
- B—Cleaning Fan Speed Control Wheel
- C—Chaffer and Sieve Levers

See page 67  
See page 70  
See page 99

- D—Cylinder Speed Control Crank
- E—Concave Spacing Control Ratchet
- F—Control Box
- G—Header Height Control

H37033

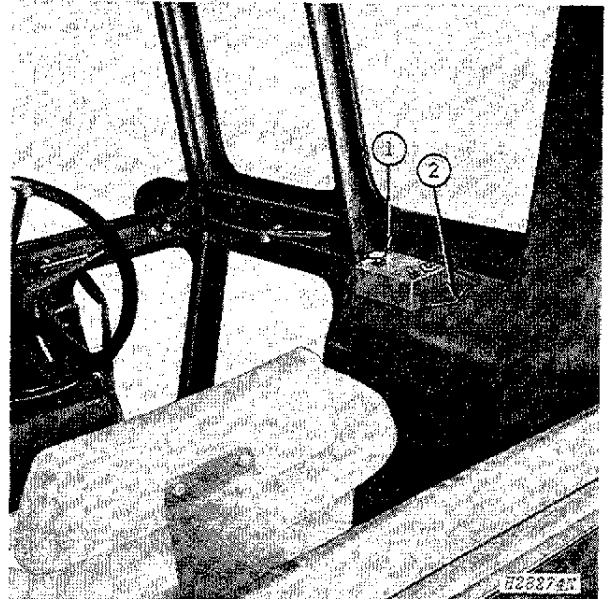
See page 70  
See page 68  
See page 25  
See page 24



# Initial Tractor Preparation

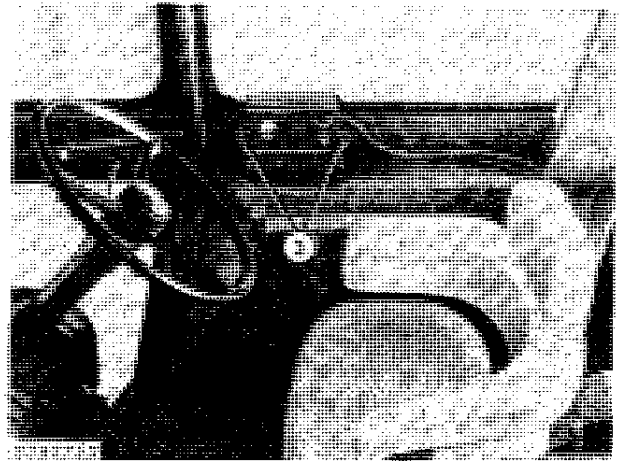
## ATTACHING SWITCH BOX TO TRACTORS WITH PRESOUND-GARD® CABS (1968-1971)

1. Push top edge of housing under trim and then use housing as a template. Locate two screw holes in tabs. Mark and center punch holes. Remove housing.
2. Drill two 1/8-inch (3 mm) holes.



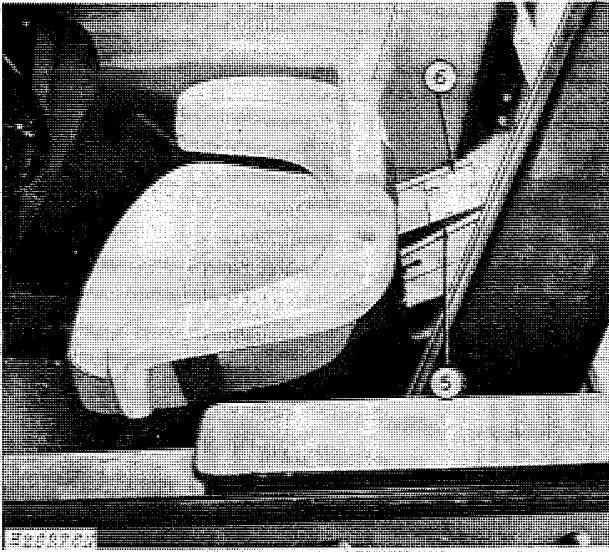
H28274N

3. Reinstall housing and secure with two self-tapping screws.
4. (Not Illustrated) Run wires from switch box toward rear of cab.



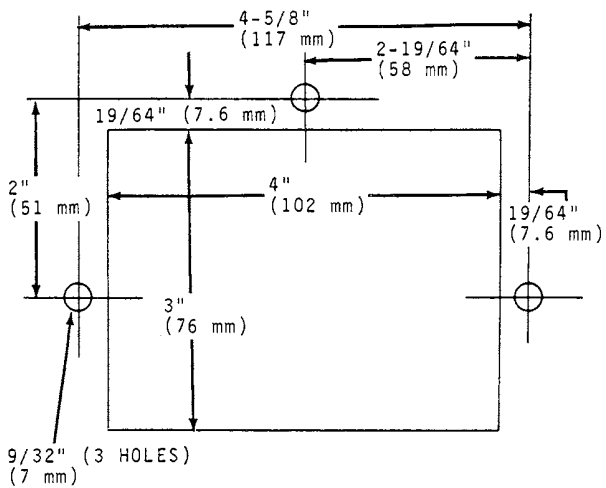
H28275N

## 8 Initial Tractor Preparation



H28276N

5. Cut and drill holes, to dimensions shown, in right-hand rear deck of tractor cab next to roll bar.
6. Attach harness plate provided to cover hole in rear deck, using three 1/4 x 7/8-inch truss head machine screws. Install grommet in harness plate.
7. (Not Illustrated) Run wires from switch box through hole in harness plate.

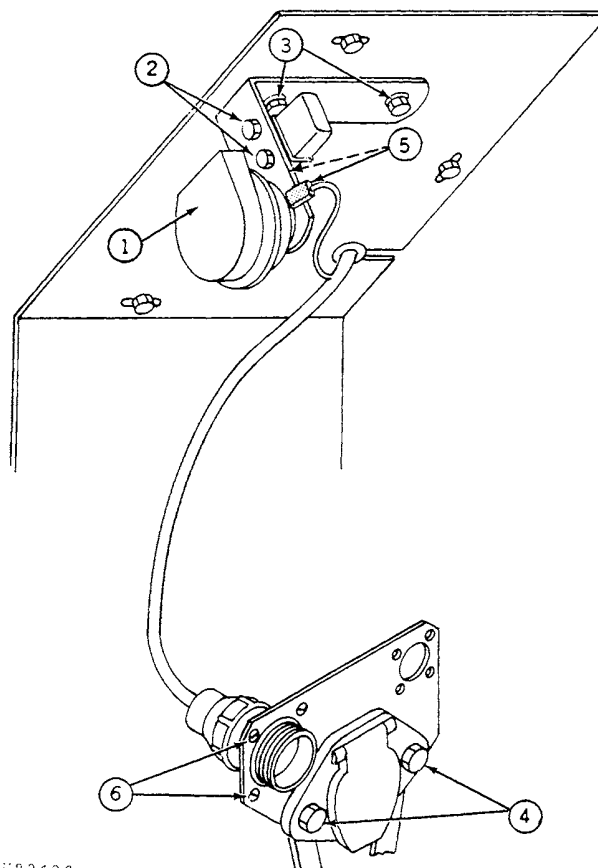


H25450

H25450

## INSTALLING STRAW WALKER WARNING HORN ON TRACTORS WITH PRE SOUND-GARD CABS (1968-1971)

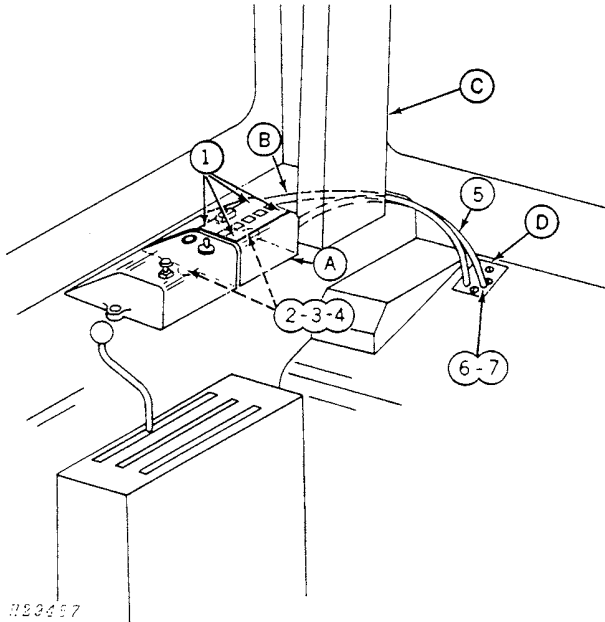
1. Secure horn to mounting bracket with special nut.
2. Secure relay to mounting bracket with two 1/4 x 1/2-inch cap screws, lock washers, and nuts.
3. Secure bracket to outside of harness plate with two 5/16 x 5/8-inch truss head machine screws, lock washers, and nuts.
4. Secure plate to existing wiring connector, using existing hardware.
5. Slide connectors onto relay and horn.
6. Secure seven-pin connector to the bracket with four No. 6 x 1/2-inch pan head machine screws, lock washers, and nuts.



H29486

H29486

## INSTALLING LOW SHAFT SPEED MONITOR SYSTEM BOX TO TRACTORS WITH PRE SOUND-GARD CABS (1968-1971)

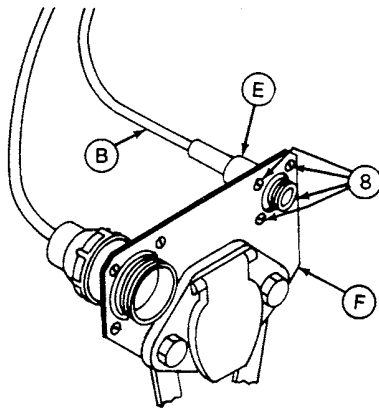


H29487

H29487

**A—Monitor Housing**  
**B—Harness**  
**C—Roll Bar**  
**D—Harness Plate**

1. Remove four No. 6 self-tapping screws from monitor housing face plate and turn face plate so lettering can be read from tractor seat. Reinstall four screws.
2. Push top edge of monitor housing (A) under trim. Use housing as template, locate two screw holes in tabs; mark and center punch holes, as shown.
3. Remove housing (A) and drill two 1/8-inch (3 mm) holes.
4. Secure housing (A) with two No. 8 x 1/2-inch self-tapping screws.
5. Run wiring harness (B) in back of roll bar (C) toward rear of cab.
6. Remove button plug in harness plate (D) and replace with grommet.
7. Run wiring harness through grommet in harness plate (D).



H29110

H29110

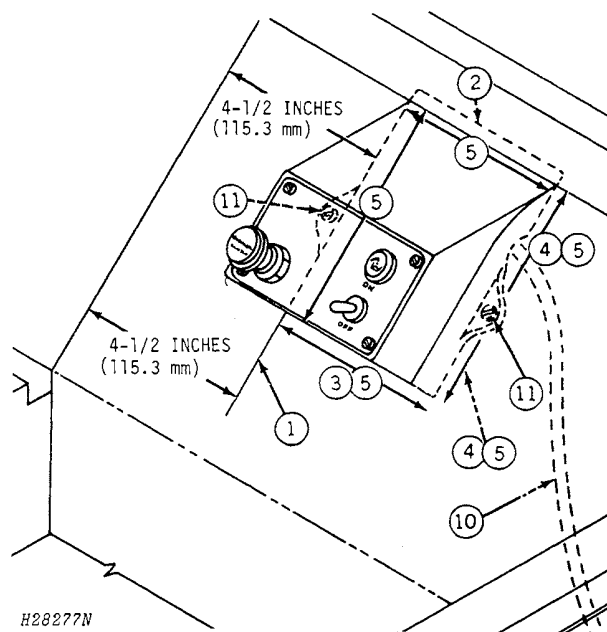
**B—Harness**  
**E—Harness Connector**  
**F—Connector Bracket**

8. Secure wiring harness connector (E) to tractor connector bracket (F) with four No. 4 UNC x 3/4-inch pan head machine screws, lock washers, and nuts.
9. (Not Illustrated) Connect combine wiring harness to tractor connector.

## ATTACHING SWITCH BOX TO 4230, 4240, 4430, 4440, 4450, 4630, 4640 AND 4650 TRACTORS WITH SOUND GARD CABS

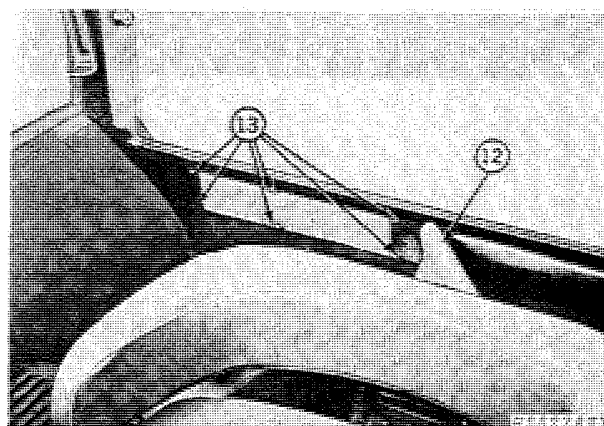
1. Measure in 4-1/2 inches (110.3 mm) from console and draw a line on foam as shown.
2. Place switch box housing edge along line with top edge under cab trim.
3. Draw line on bottom of switch box housing.
4. Draw a straight line on remaining side of switch box housing. Do not cut out for screw tabs. They must be hidden under foam. Remove housing.
5. Cut foam around edge of switch box housing.
6. (Not Illustrated) Remove cut-out of foam.
7. Insert housing into area that was cut out in Step 6 by sliding screw tabs under foam on sides and top edge under trim.
8. Using housing as template to locate screw holes in tabs by pulling back foam on sides. Mark and center punch holes.
9. (Not Illustrated) Drill two 1/8-inch (3 mm) holes.
10. Thread wire conduit under foam to rear of cab.
11. Reinstall housing and secure with self-tapping screws.
12. Pull cab foam away to expose the six 5/16 x 3/4-inch cap screws.
13. Remove cover. Route cable and wires through opening.

**NOTE:** Save cover removed in Step 13 for reuse when tractor is not used with combine.



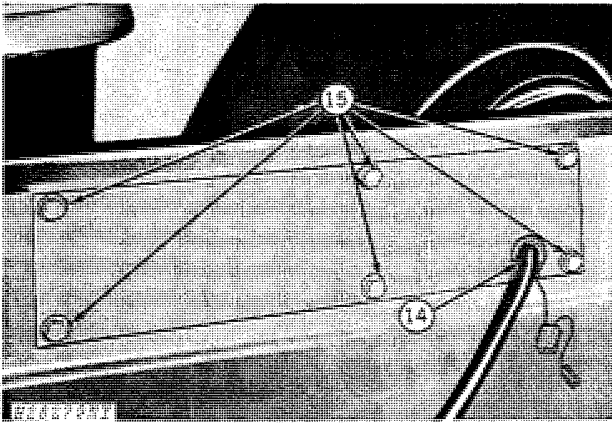
H28277N

H28277N



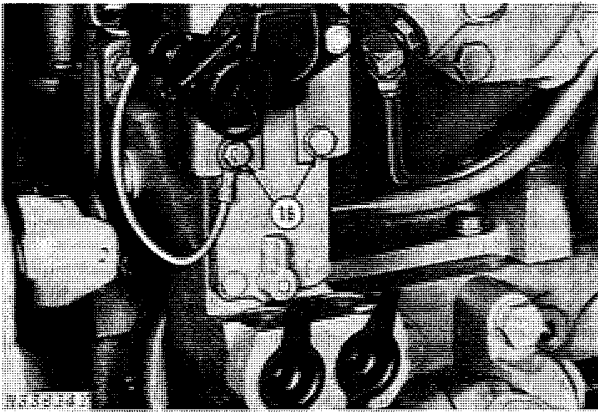
H28278NY

## 12 Operation



H26279NY

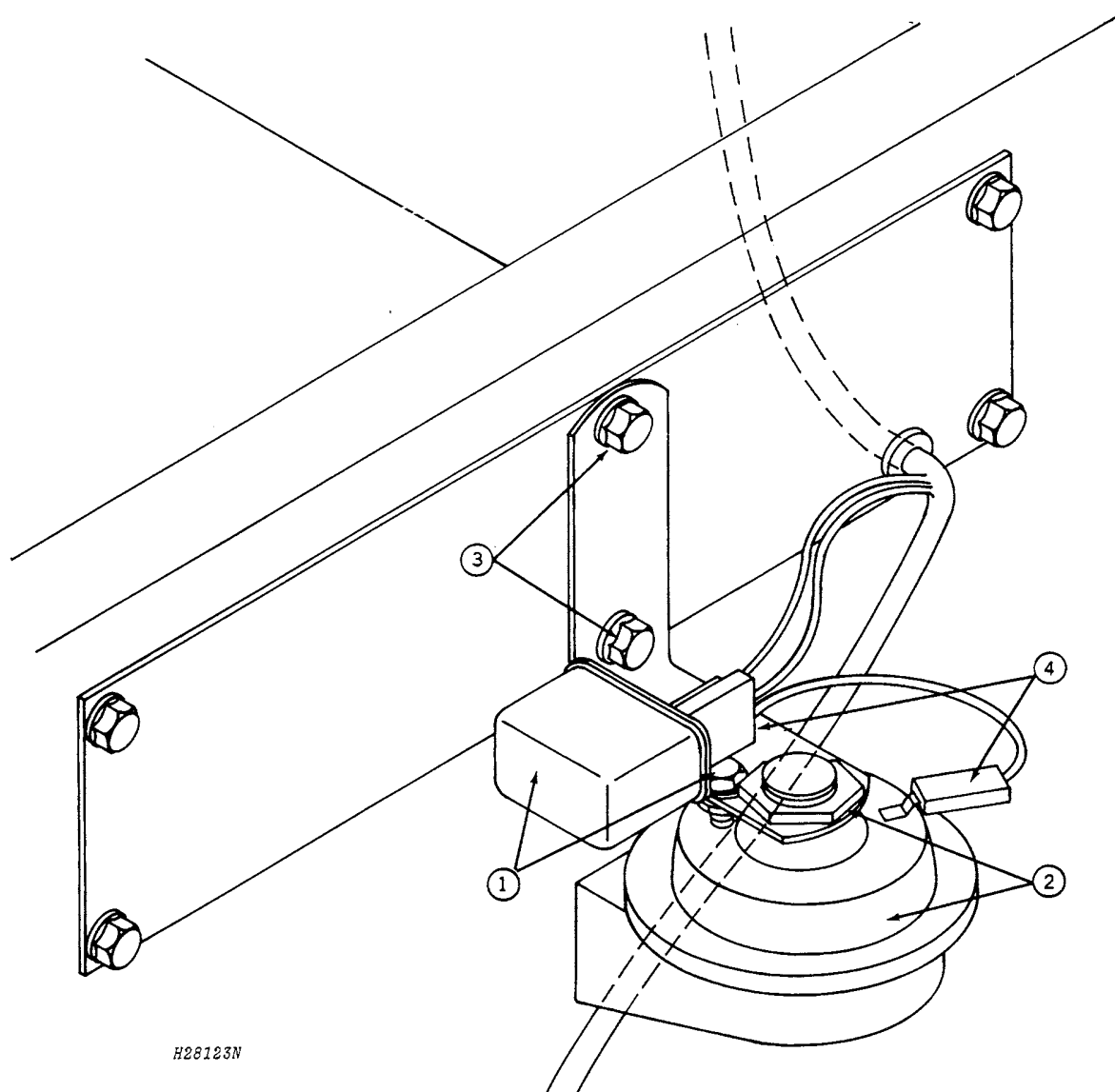
14. Slip grommet around cable and push into large hole in harness plate provided.
15. Attach harness plate, with new gasket, to rear of cab with hardware removed in Step 13. Replace cab foam.



H33614Y

16. Attach bracket with socket to remote cylinder valve, using existing hardware.

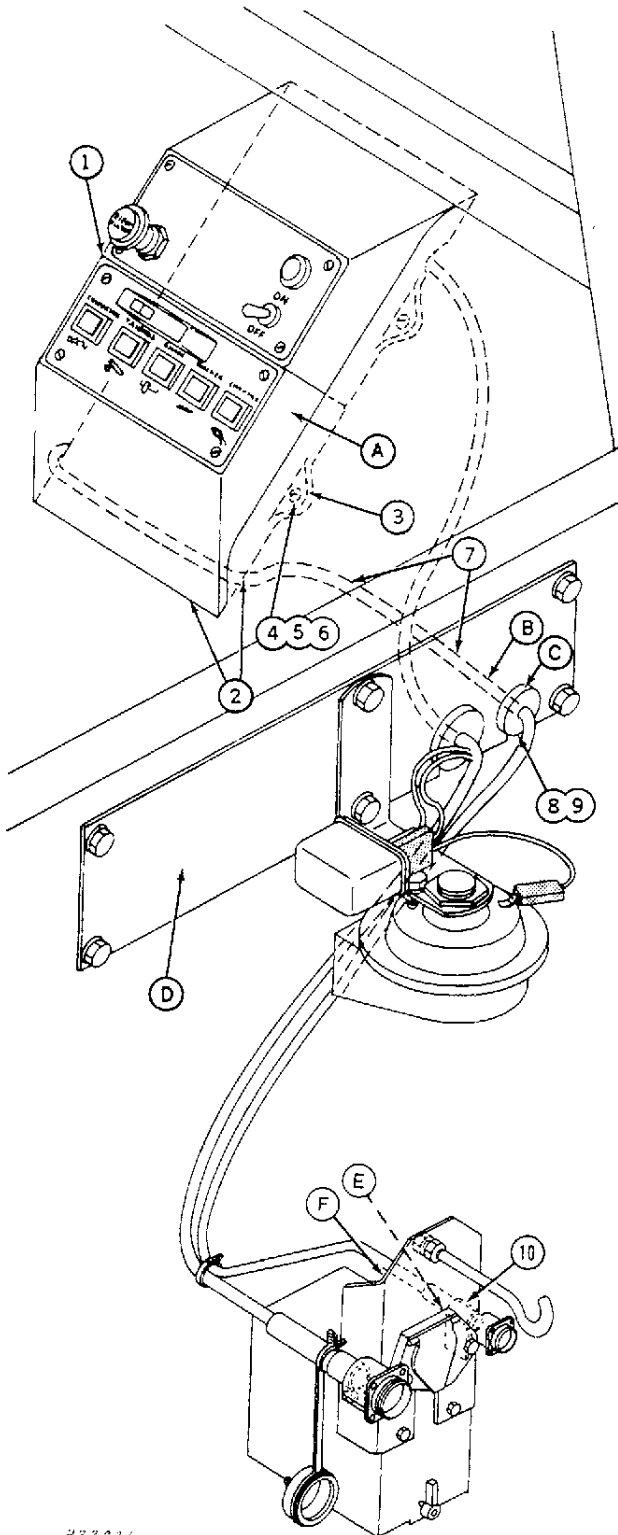
## INSTALLING STRAW WALKER WARNING HORN TO TRACTORS WITH SOUND-GARD CABS



1. Secure relay to mounting bracket with 1/4 x 1/2-inch cap screw, lock washer, and nut.
2. Secure horn to bracket with special nut as shown.
3. Use existing hardware and secure bracket to mounting plate.
4. Attach multiple connector to relay and single connector to horn as shown.

H28123N

## INSTALLING LOW SHAFT SPEED MONITOR SYSTEM BOX TO TRACTORS WITH SOUND-GARD CABS



1. Place monitor housing (A) edge along line with bottom edge of switch box housing, as shown.
2. Mark around outside of monitor housing (A).
3. Cut out foam to fit housing. Do not cut out for screw tabs. Tabs must be hidden under foam.
4. Insert housing and use as template to locate screw holes. Mark and center punch holes.
5. (Not Illustrated) Remove housing (A) and drill two 1/8-inch (3 mm) holes.
6. Secure housing (A) with two No. 8 x 1/2-inch self-tapping screws.
7. Route wire harness (B) under foam to rear of cab.
8. Remove button plug in harness plate and replace with grommet (C).
9. Run wiring harness (B) through grommet (C) in harness plate (D).
10. Secure wiring harness connector (E) to tractor connector bracket with clamp and 5/16 x 1/2 self tapping screw.
11. (Not Illustrated) Connect combine wiring harness to tractor connector.

- A—Monitor Housing
- B—Harness
- C—Grommet
- D—Harness Plate
- E—Harness Connector
- F—Connector Bracket

#33616

H33615

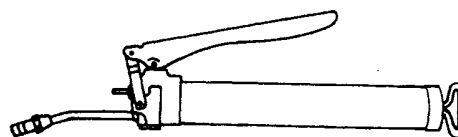


## Preparing the Combine

---

Before starting to combine for the first time each day:

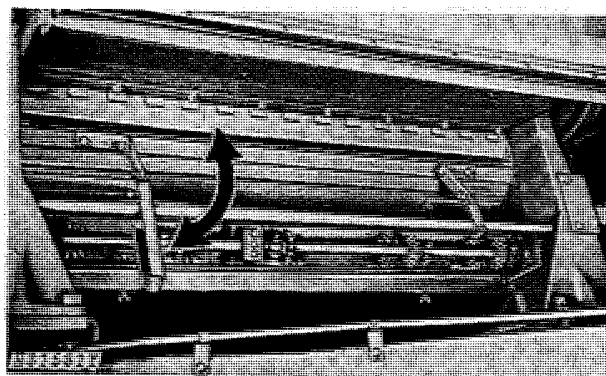
1. Perform all daily lubrication and maintenance.



H31858

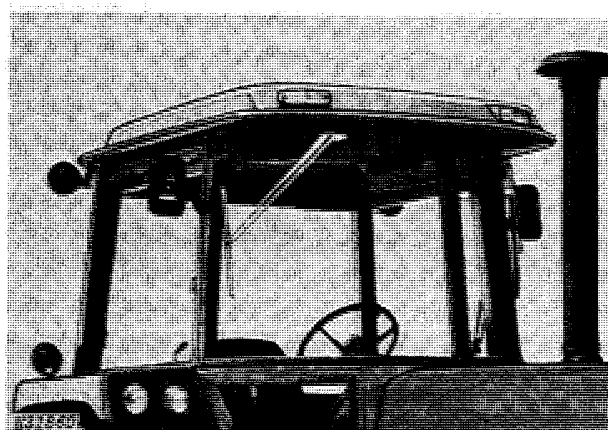
H31858

2. Clean out stone traps.



H31531Y

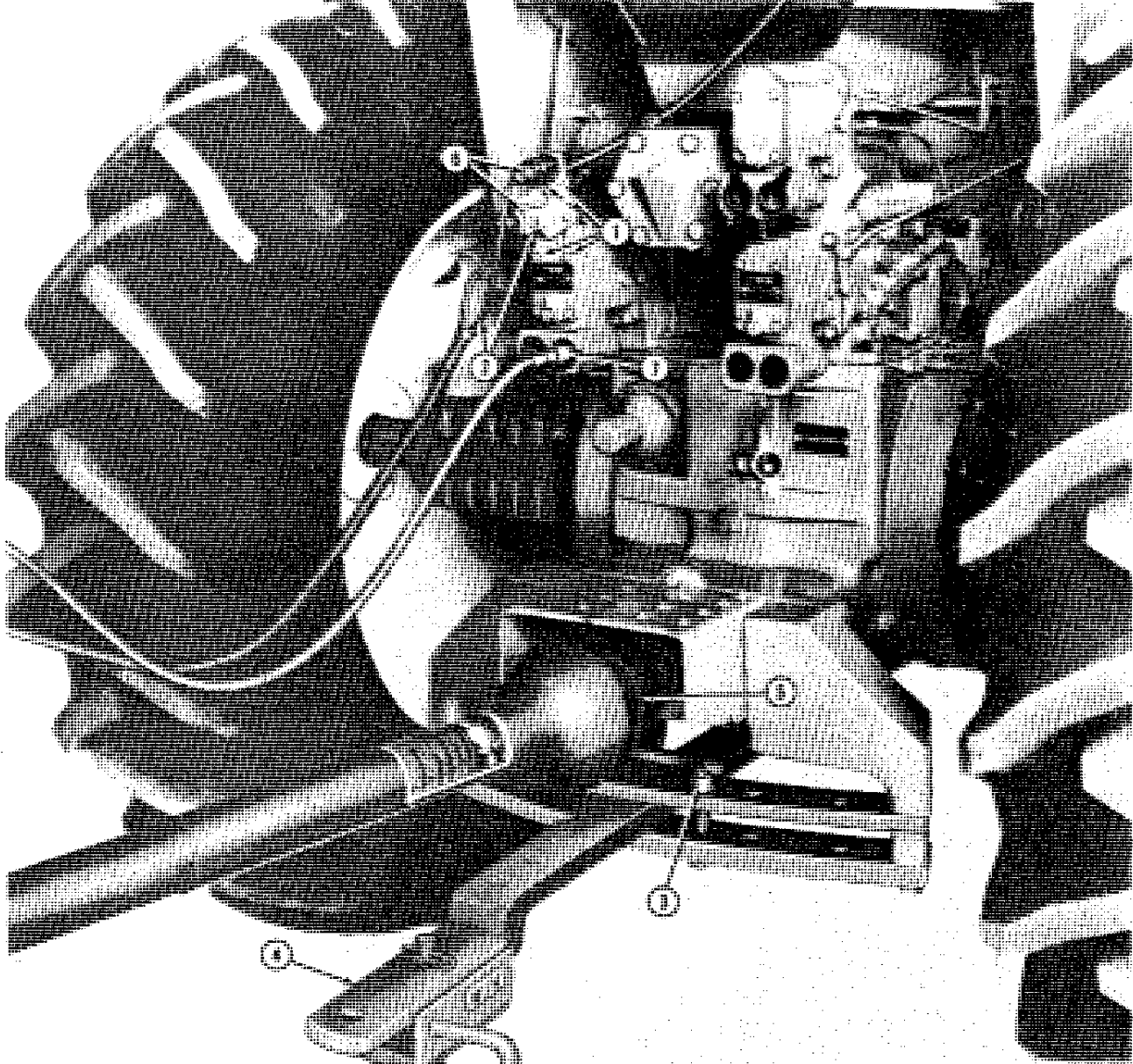
3. Clean tractor cab glass.



H31860



# Attaching and Detaching the Combine



H37526

1. Attach seven-pole socket to the bracket and bracket to tractor.
2. Tractor must be equipped with three wire and auxiliary four wire kits. Wiring kits are provided with combine in Bundle Number BH-77047.
3. Lock tractor drawbar so it is straight with tractor PTO shaft and hitch point at 16-in. (406 mm) before adding hitch extension, or 20-in. (508 mm) with hitch extension added. See page 18.
4. Attach combine to drawbar extension.



**Suggest:**

**If the above button click is invalid.**

**Please download this document**

**first, and then click the above link**

**to download the complete manual.**

**Thank you so much for reading**

5. Attach PTO Powr-Gard™ to tractor.

**CAUTION:** Follow safe PTO hookup procedure outlined below.

Shut off tractor engine.

Move collar (B) back against stop on yoke.

Push button (C) and turn collar (B) until button locks in position.

Turn collar (B) or tractor PTO (A) to align splines.

Push bell (D) forward firmly until button snaps out.

Pull rearward on bell (D) to be sure powershaft is latched. Do NOT pull on collar as this will release latch.

Replace any tractor PTO shielding which was removed to attach PTO Powr-Gard hookup.

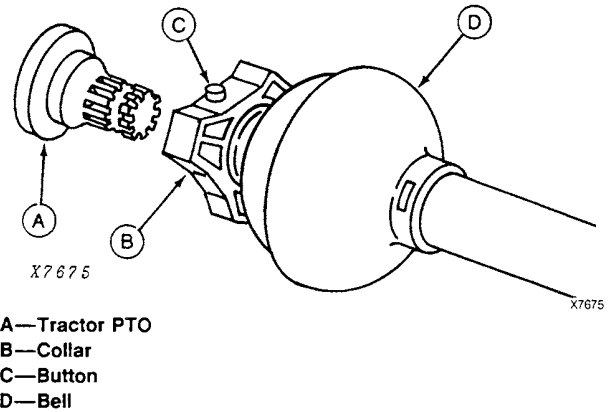
6. Connect two seven pin combine connectors to connectors on tractor.

7. Couple hydraulic hose to tractor. (See Note.)

**IMPORTANT:** When attaching to a John Deere 4640 or 4650 Tractor, it is necessary to install AR72476 adapter kit for 1-3/8-in. spline. See your John Deere dealer.

*NOTE: Adapt tractor remote hydraulic cylinder valve housing for single-action cylinder operation. See tractor operator's manual. Couple hydraulic hose to tractor No. 1 hydraulic circuit break-away coupler.*

*NOTE: Install safety chain before transporting combine.*



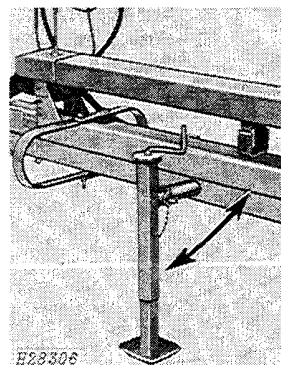
## SUPPORT STAND

The support stand is attached to hitch tube and is adjusted to keep hitch tube at proper height for tractor-combine hookup.

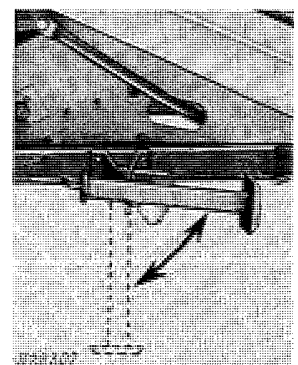
If platform is to be removed from separator, use support stand on separator.

**CAUTION:** Before platform is removed attach support stand to separator and place in “down” position as shown with dotted lines. Adjust stand to contact ground so hitch tube will not fly upward when platform is removed.

Support stands must be rotated 90 degrees for transporting or when combine is in operation.



Hitch Tube Support  
Stand-Down Position



Separator Support  
Stand-Up Position

**<https://www.ebooklibonline.com>**

Hello dear friend!

Thank you very much for reading.

Enter the link into your browser.

The full manual is available for immediate download.

**<https://www.ebooklibonline.com>**