6601
Combine

JOHN DEERE

OPERATORS MANUAL

6601
Combine

OMH100680 A8 English

Harvester Works
OMH100680 A8

LITHO IN U.S.A.
ENGLISH

To the Purchaser

This new combine was carefully designed and manufactured to give years of dependable service. To keep it running efficiently, read this operator's manual, which is divided into sections, for easy location of information. The Table of Contents explains where each section is located and the alphabetical index gives detailed listings.

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.

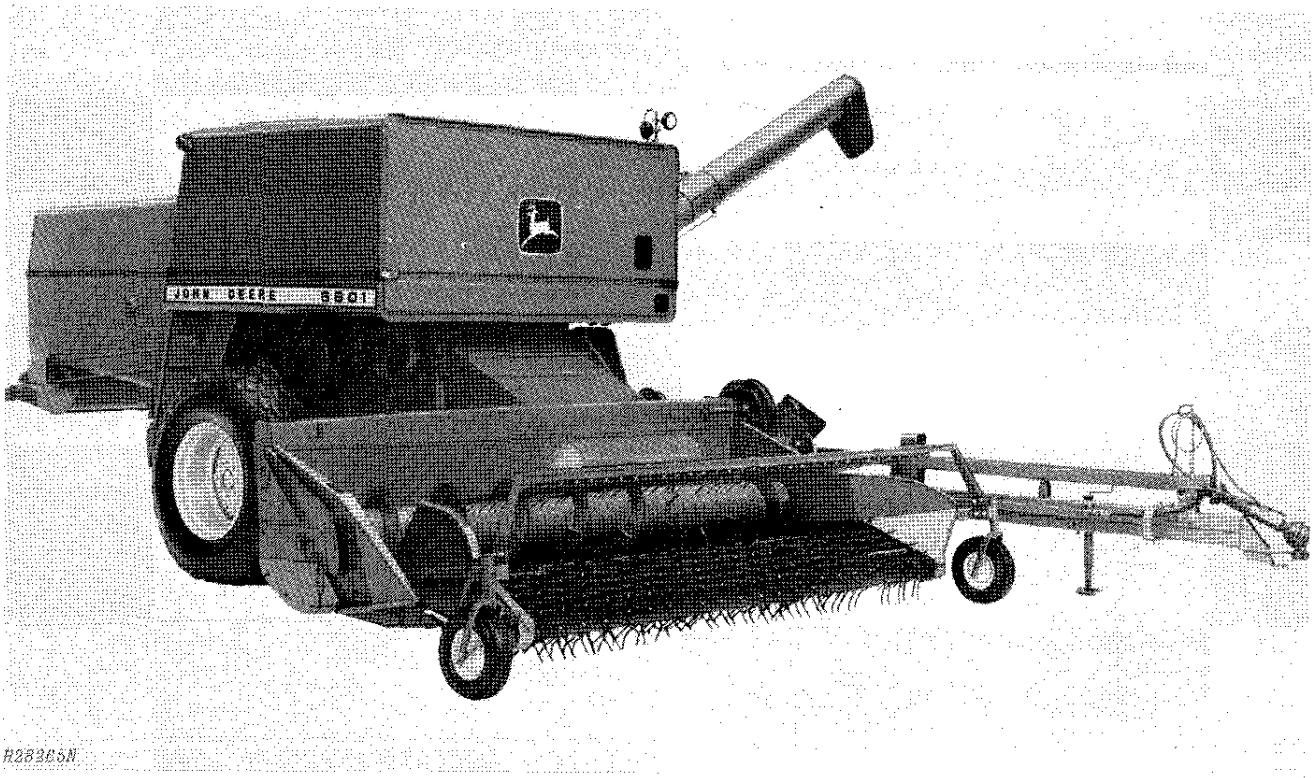
In addition to the equipment furnished with your combine, attachments are available to help you do a better job in special crop conditions. These are described in the attachments section of this manual and can be purchased from your John Deere dealer.

"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 on page 84. Your dealer needs this information to give you prompt, efficient service when you order parts or attachments. If your combine requires replacement parts, go to your John Deere dealer where you can obtain Genuine John Deere parts—accept no substitutes.

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

Safety Suggestions

The safety of the operator was one of the prime considerations in the minds of John Deere engineers when this combine was designed. Shielding, simple adjustments, and other safety features were built into the combine wherever possible.

Modifications to the machine may impair the function and or safety and affect machine life.

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

Only the operator can ride on the tractor when combining.

Shields and guards must be in place and in good condition before starting in the field.

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Before disconnecting lines relieve all pressure. Before applying pressure to system, all connections must be tight and lines, pipes and hoses not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

Clothing worn by combine operator must be fairly tight and belted. Loose jackets, shirts, or sleeves should never be worn because of the danger of getting into moving parts.

Everyone must be clear of the combine and tractor before starting so they cannot be struck by moving parts or caught in a drive belt or chain.

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

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

Always keep the tractor in gear when going down hills.

Before leaving the combine unattended, support the cutting platform with either the hydraulic cylinder safety stop or with blocks, or lower it to ground level.

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

Maintain a fire extinguisher in an easily accessible location and be familiar with its correct use.

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

Tractor brakes must be properly adjusted.

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 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 agricultural 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.

Tow only with an agricultural tractor equipped with stationary drawbar.

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

RECOMMENDED MAXIMUM TOWING SPEED

CAUTION: 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.

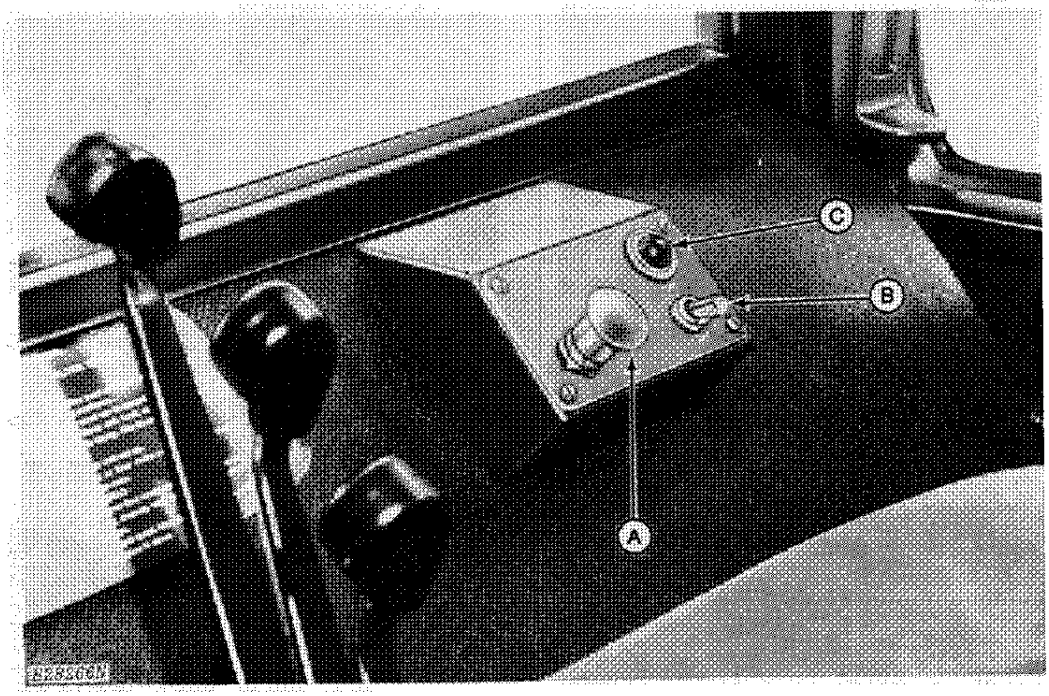
TOTAL WEIGHT OF COMBINE WITH EMPTY GRAIN TANK AND ATTACHING EQUIPMENT			
Weight of Tractor	**10,000 lbs. (4 536 kg)**	**16,000 lbs. (7 200 kg)**	**18,000 lbs. (8 100 kg)**
0—3,300 lbs. (0-1 497 kg)	Do not tow	Do not tow	Do not tow
3,300-5,300 lbs. (1 497-2 404 kg)	10 mph (16.1 km/h)	Do not tow	Do not tow
5,300-6,000 lbs. (2 404-2 722 kg)	10 mph (16.1 km/h)	10 mph (16.1 km/h)	Do not tow
6,000-10,000 lbs. (2 722-4 536 kg)	10 mph (16.1 km/h)	10 mph (16.1 km/h)	10 mph (16.1 km/h)
10,000-16,000 lbs. (4 536-7 258 kg)	20 mph (32.2 km/h)	10 mph (16.1 km/h)	10 mph (16.1 km/h)
16,000-18,000 lbs. (7 258-8 100 kg)	20 mph (32.2 km/h)	20 mph (32.2 km/h)	10 mph (16.1 km/h)
18,000 lbs. (8 100 kg)—Up	20 mph (32.2 km/h)	20 mph (32.2 km/h)	20 mph (32.2 km/h)

Controls and Instruments

This section illustrates all controls and instruments necessary for successful field operation. For an explanation of each control and instrument, refer to the page reference given.

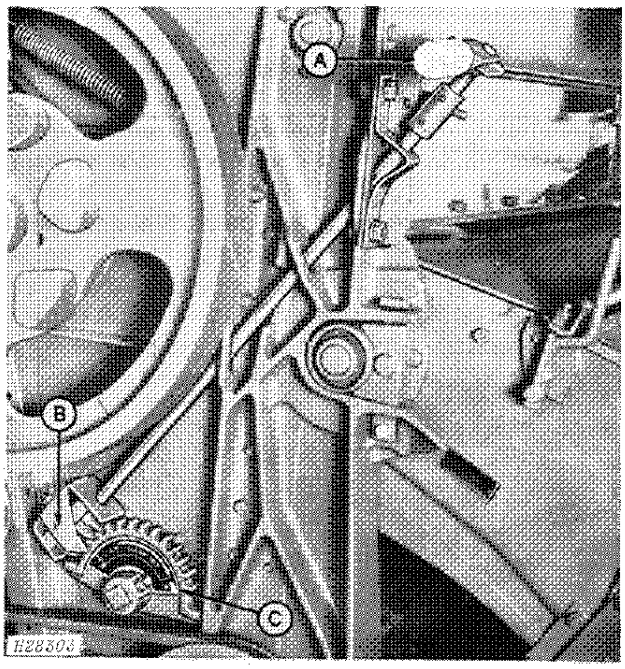
Before attempting to operate your new combine, become familiar with the location and purpose of its controls and instruments. Study these pages carefully, regardless of your previous combine experience.

SWITCH BOX



A—Platform Switch - Page 15
B—Grain Tank Unloading Auger Switch - Page 17
C—Grain Tank Unloading Auger Warning Light - Page 17

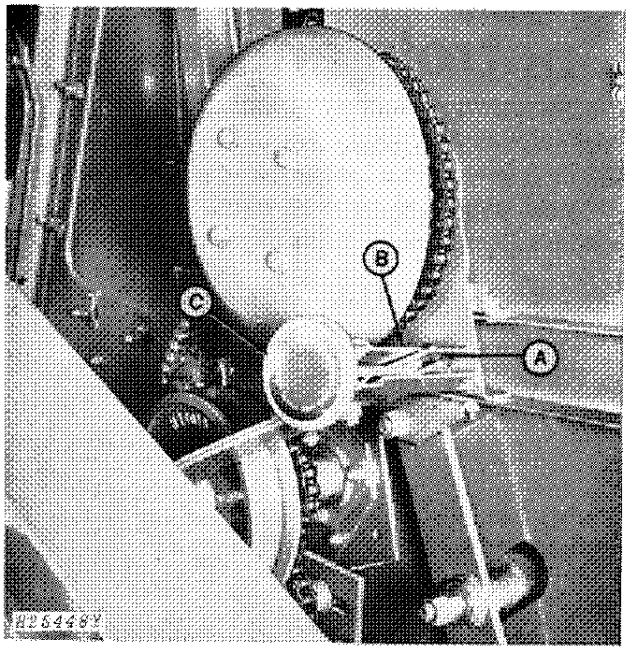
CONCAVE



A—Concave Spacing Control Ratchet
B—Pointer
C—Timed Sector

Concave Spacing Control Ratchet - Page 16

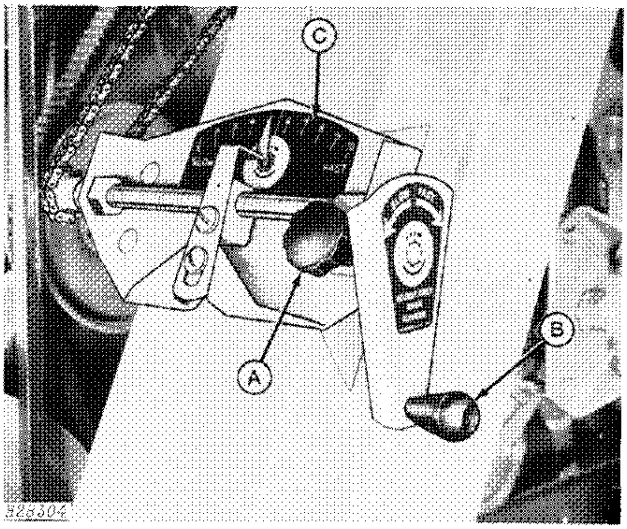
CLEANING FAN



A—Pointer
B—RPM Indicator
C—Fan Speed Control Wheel

Cleaning Fan Speed Control Wheel - Page 16

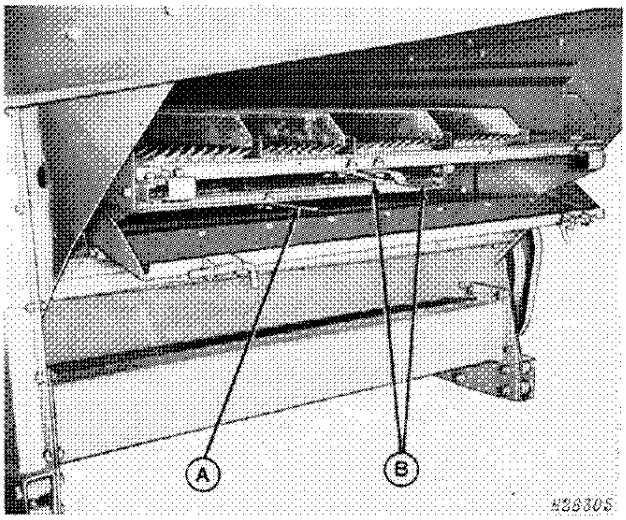
CYLINDER



A—Locking Knob
B—Cylinder Speed Control Crank
C—Speed Reference Indicator

Cylinder Speed Control Crank - Page 16

CHAFFER AND SIEVE



A—Sieve Opening Control Lever
B—Chaffer Opening Control Levers

Chaffer Opening Control Levers - Page 17
Sieve Opening Control Lever - Page 17

Operation

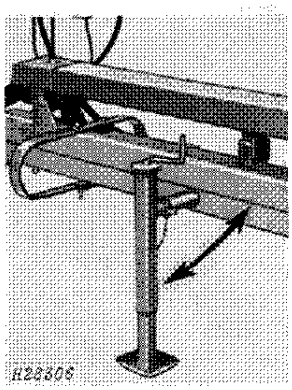
SUPPORT STAND

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

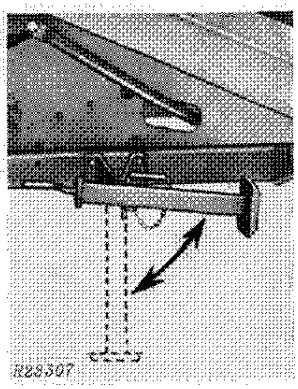
If the platform is to be removed from the separator, use the support stand on the separator.

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

When the combine is in operation, the support stands can be rotated 90 degrees for transporting.



Hitch Tube Support
Stand-Down Position



Separator Support
Stand-Up Position

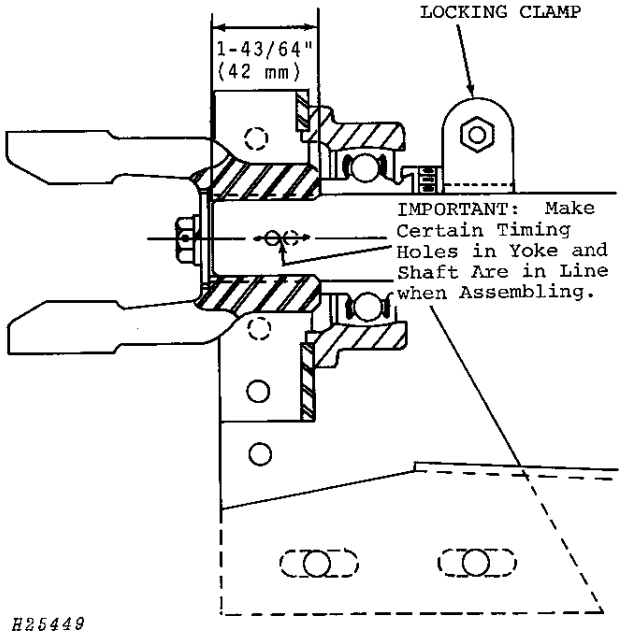
TRACTOR HOOKUP

⚠ CAUTION: Operate the 6601 Combine at 1000 rpm PTO speed only. Operating the combine at any other PTO speed can result in machine damage or personal injury.

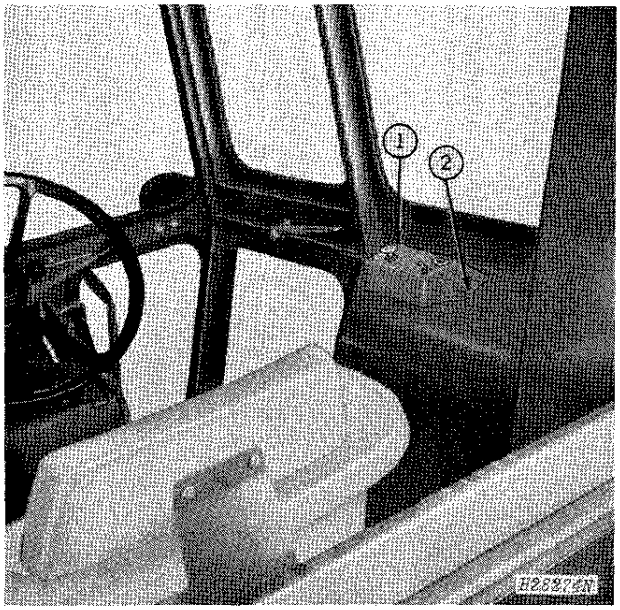
YOKE ASSEMBLY

If it becomes necessary to disturb locking clamp on hitch tube powershaft, bearing and yoke assemblies must be assembled on the shaft, using dimensions given in the illustration in the right-hand column for proper position. Failure to do so will cause misalignment of hookup parts.

IMPORTANT: Under normal circumstances, locking clamp should not be moved unless it becomes necessary to replace parts.

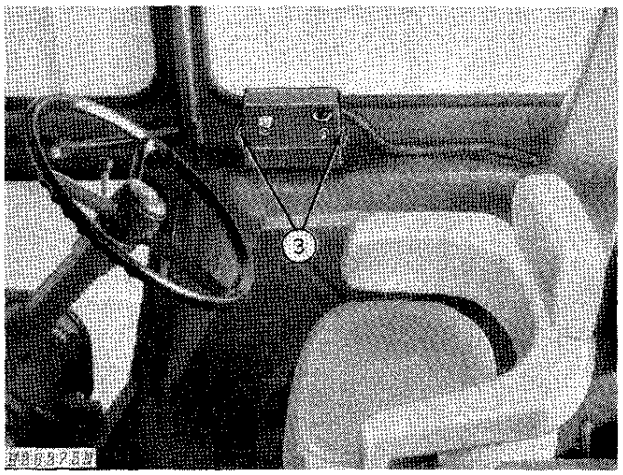


ATTACHING SWITCH BOX TO TRACTORS WITH PRESOUND-GARD® CABS (1968-1971)



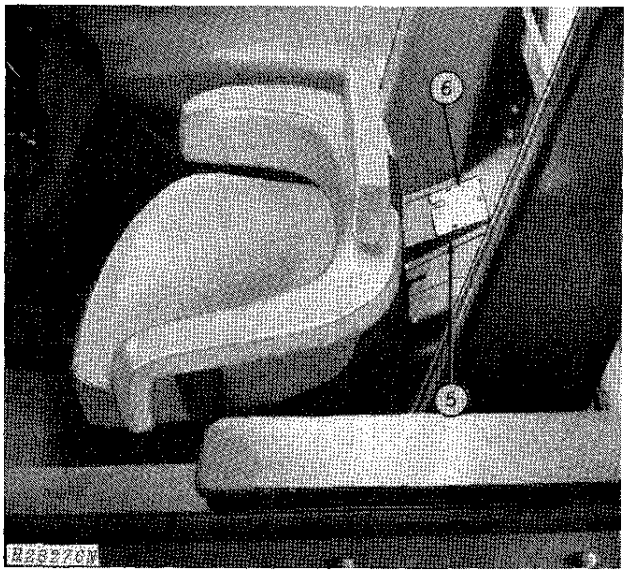
1. Push top edge of housing under trim and then use housing as a template. Locate two screw holes in tabs. Mark and center punch holes. Remove housing.

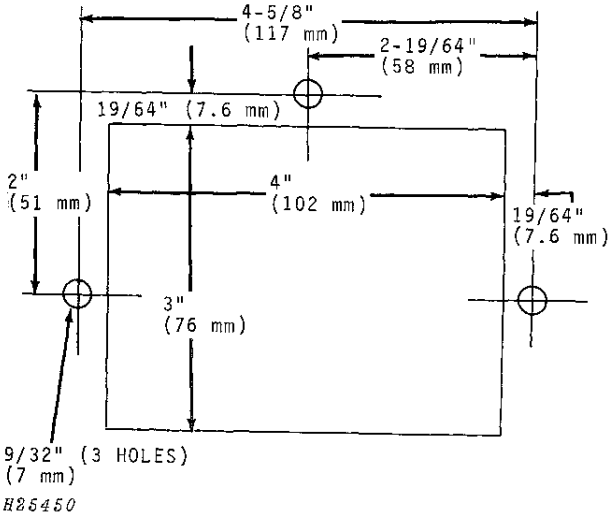
2. Drill two 1/8-inch (3 mm) holes.



3. Reinstall housing and secure with two self-tapping screws.

4. (Not Illustrated) Run wires from switch box toward rear of cab.





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.

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

1. Secure horn to mounting bracket with special nut.

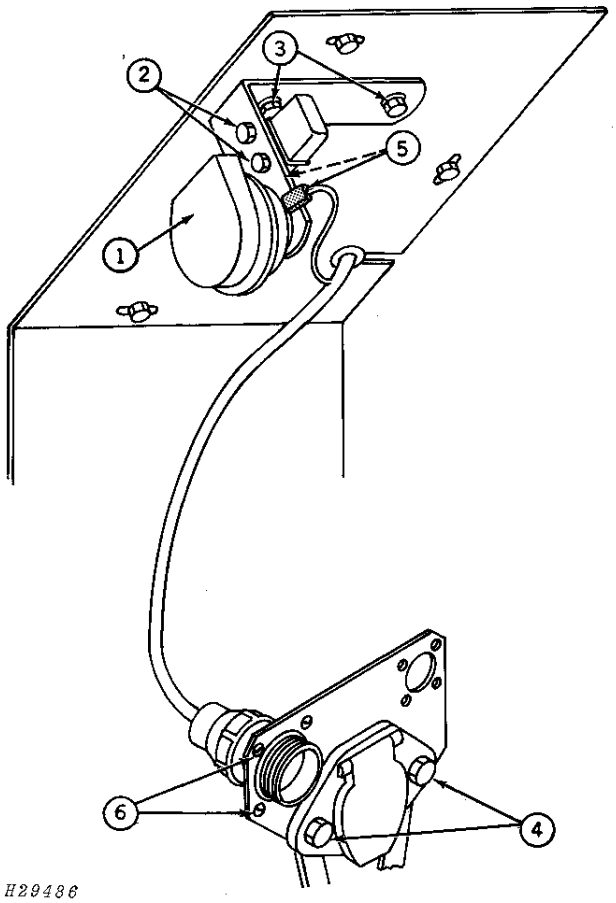
2. Secure relay to mounting bracket with two 1/4 x 1/2-inch cap screws, lock washers, and nuts.

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.



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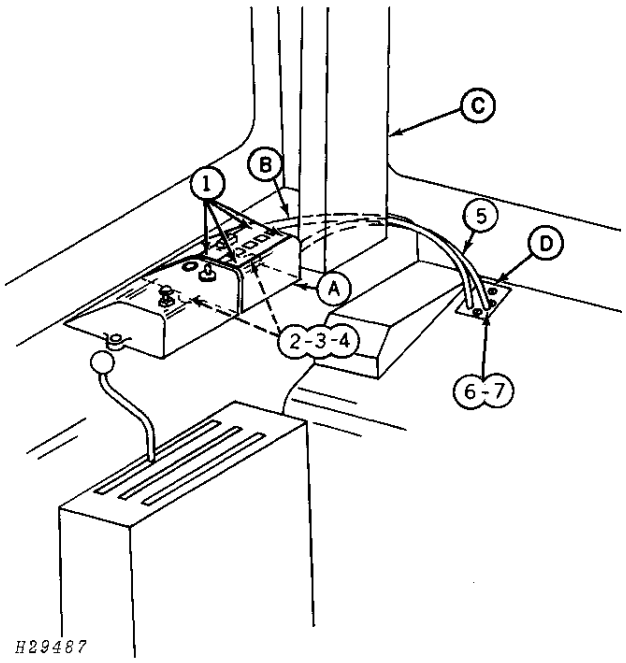
INSTALLING LOW SHAFT SPEED MONITOR SYSTEM BOX TO TRACTORS WITH PRE SOUND-GARD CABS (1968-1971)



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.

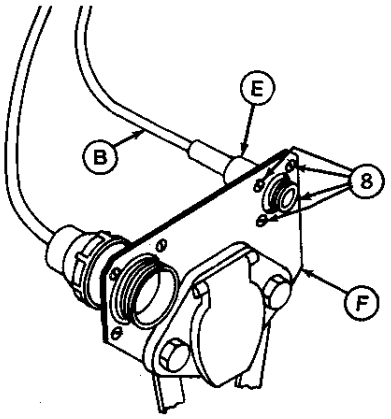
3. Remove housing (A) and drill two 1/8-inch (3 mm) holes.

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).



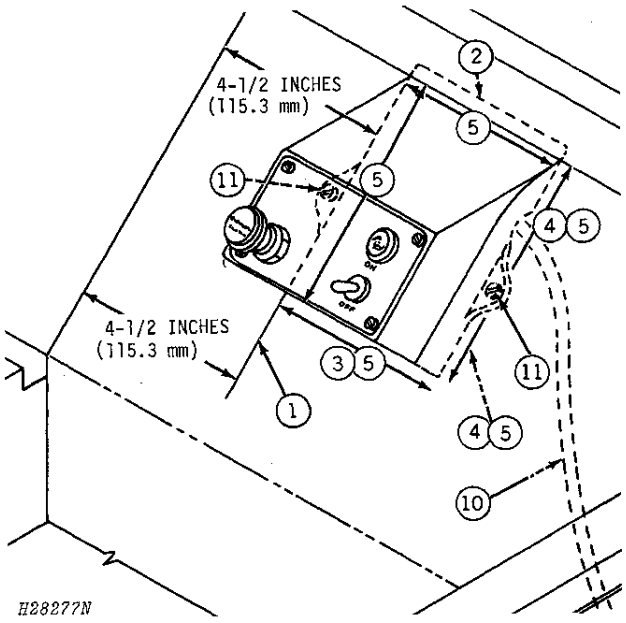
H29110

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, 4630 AND 4640 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.

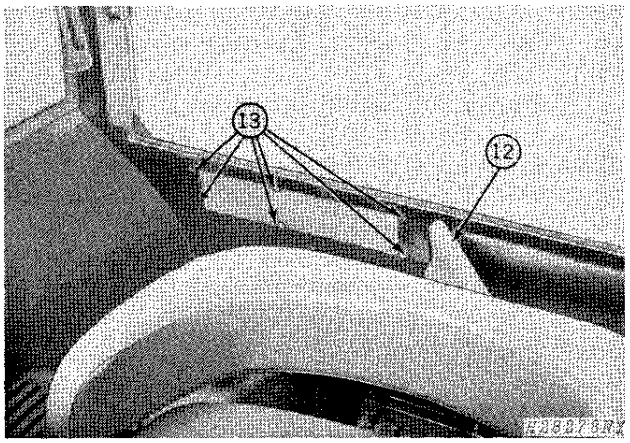
9. (Not illustrated) Drill two 1/8-inch (3 mm) holes.

10. Thread wire conduit under foam to rear of cab.

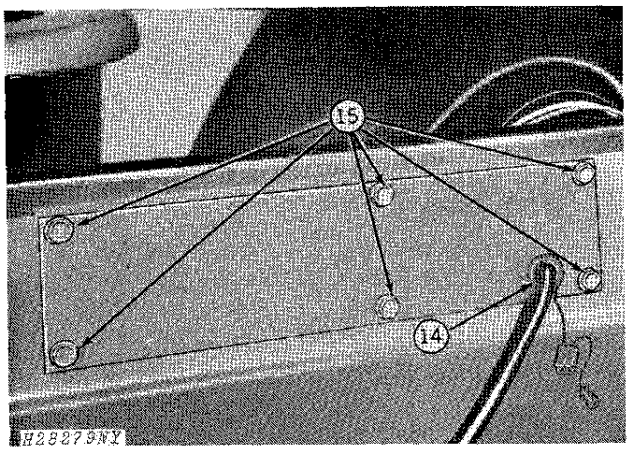
11. Reinstall housing and secure with two self-tapping screws.

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.

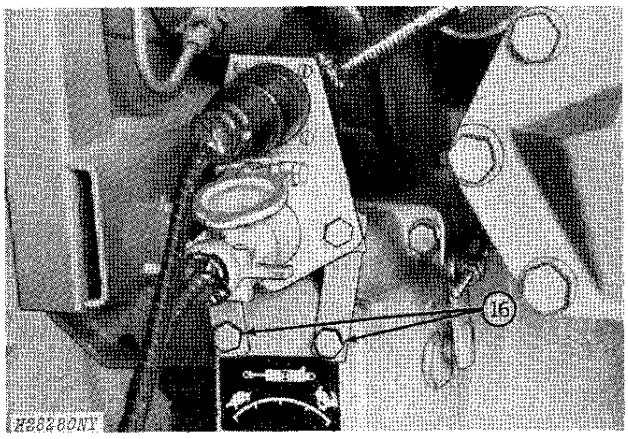


NOTE: Save cover removed in Step 13 for reuse when tractor is not used with combine.



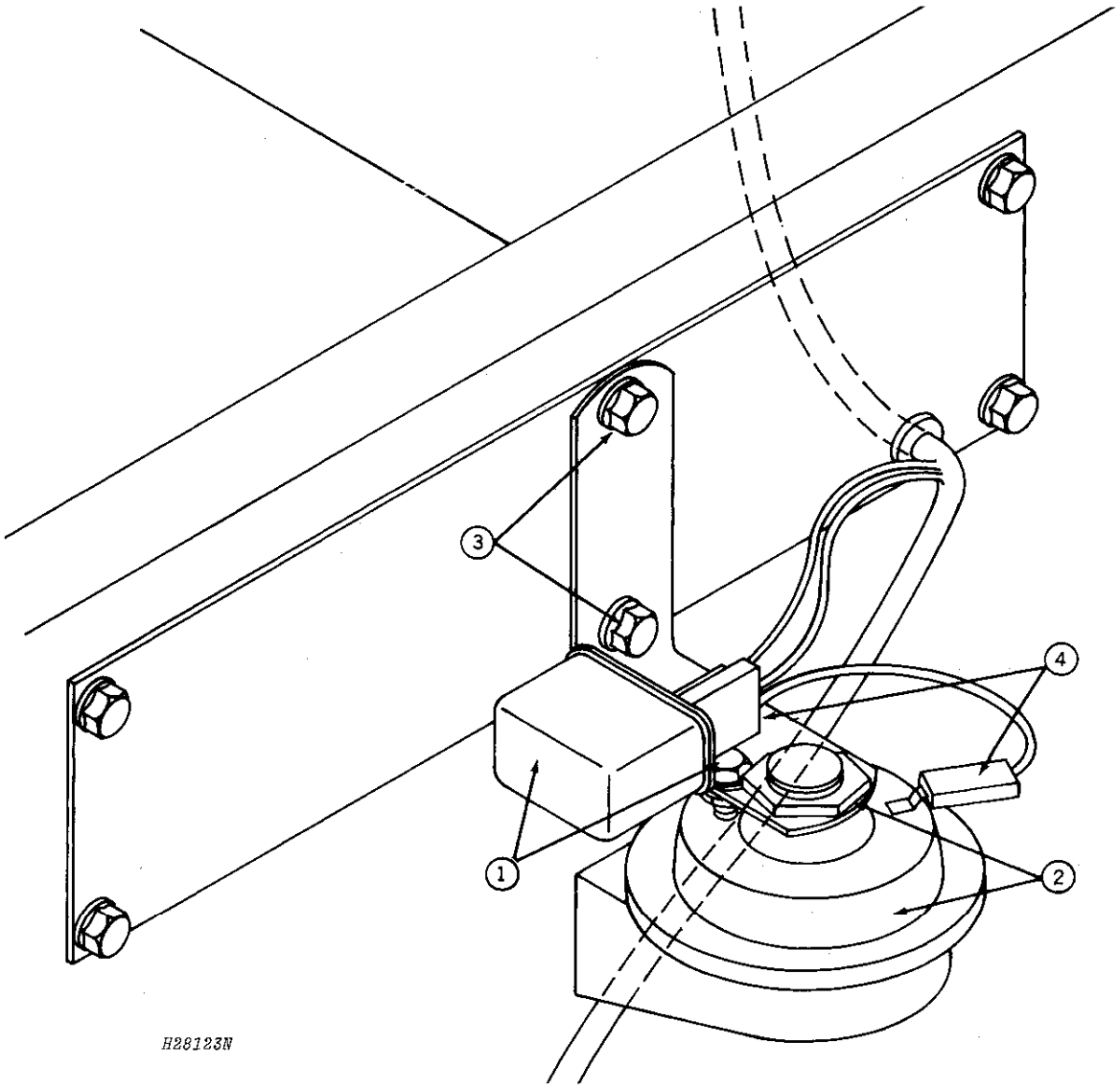
14. Slip grommet around cable and push into the large hole in the harness plate provided.

15. Attach harness plate, with new gasket, to rear of cab with hardware removed in Step 13. Replace cab foam.



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

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



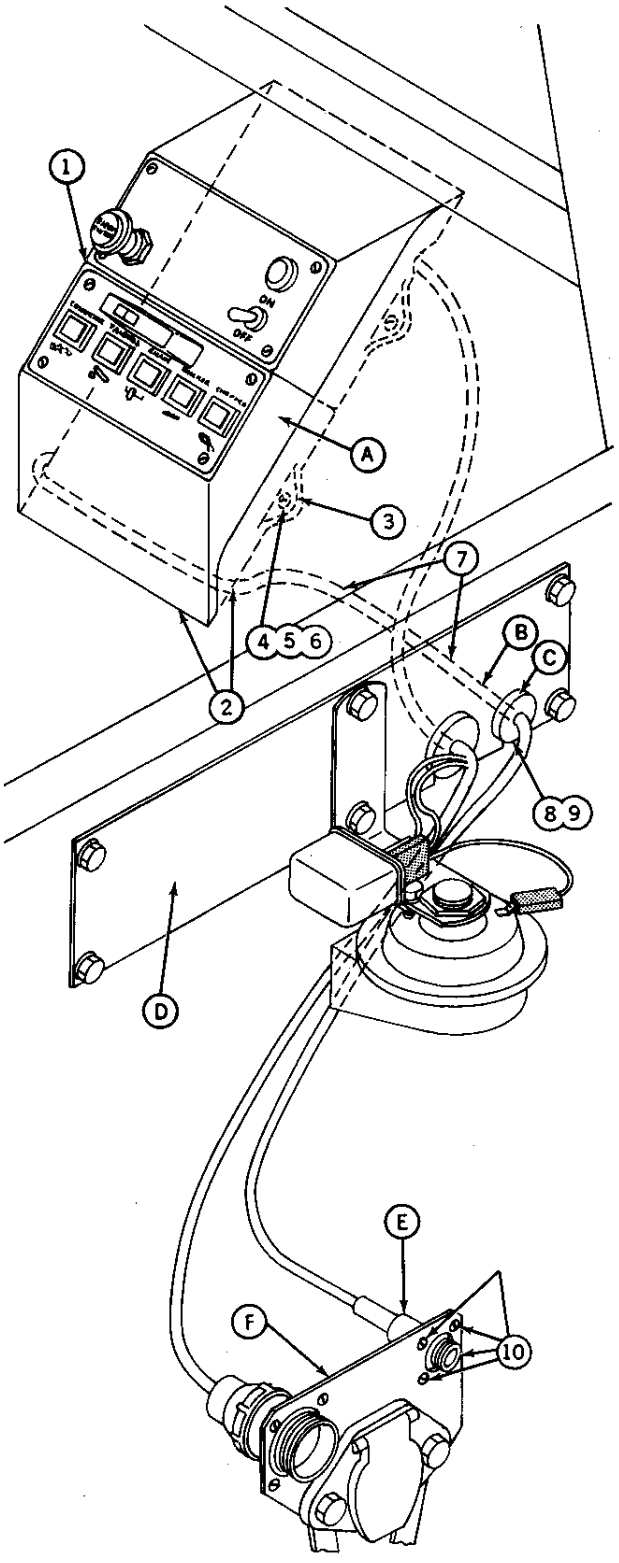
1. Secure relay to mounting bracket with 1/4 x 1/2-inch cap screw, lock washer, and nut.

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.

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



H29488

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

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. They 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.

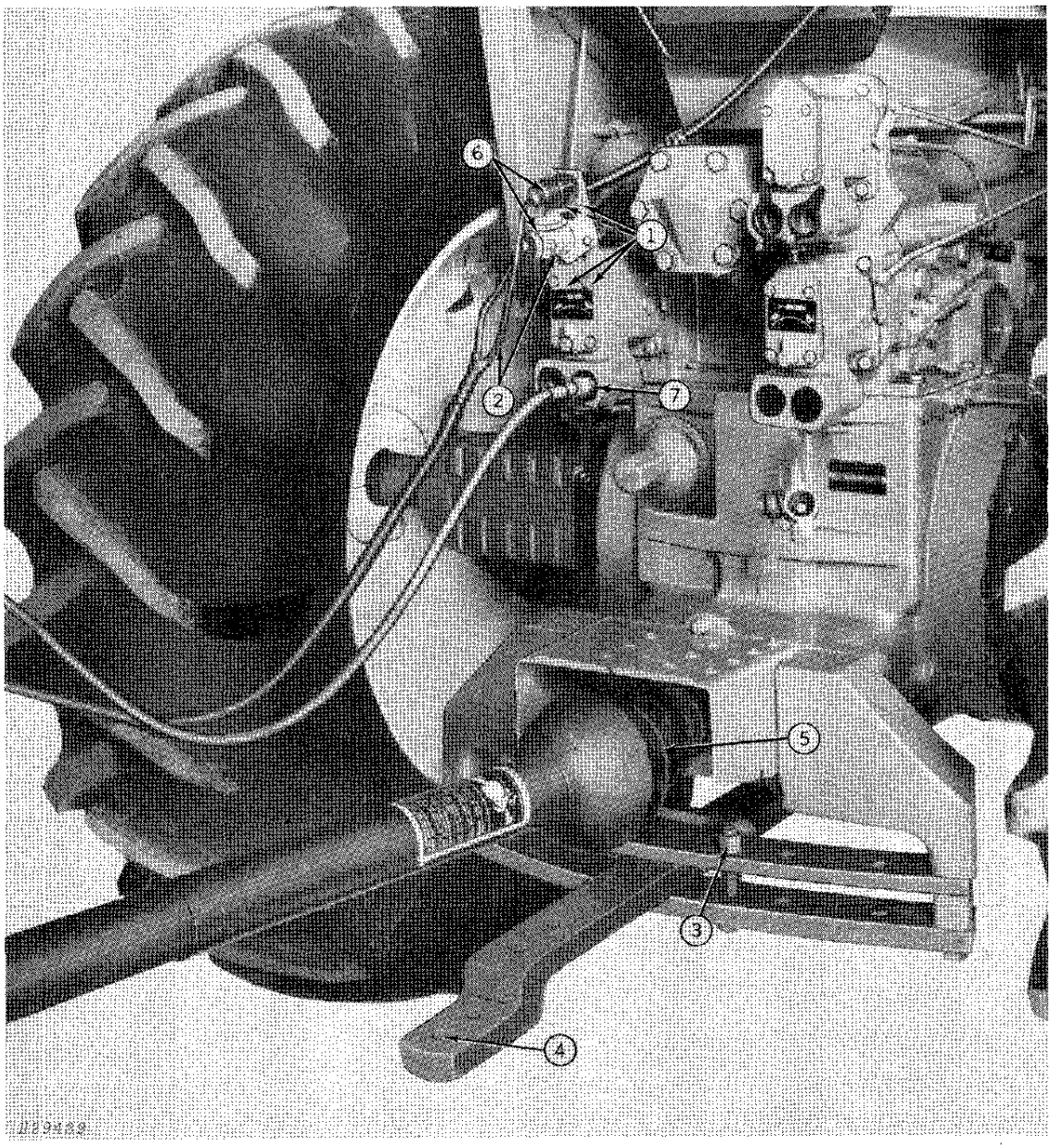
8. Remove button plug in harness plate and replace with grommet (C).

9. Run wiring harness (B) through grommet (C) in harness plate (D).

10. Secure wiring harness connector (E) to tractor connector bracket with four No. 4 UNC x 3/4-inch pan head machine screws, lock washers, and nuts.

11. (Not Illustrated) Connect combine wiring harness to tractor connector.

ATTACHING COMBINE TO TRACTOR



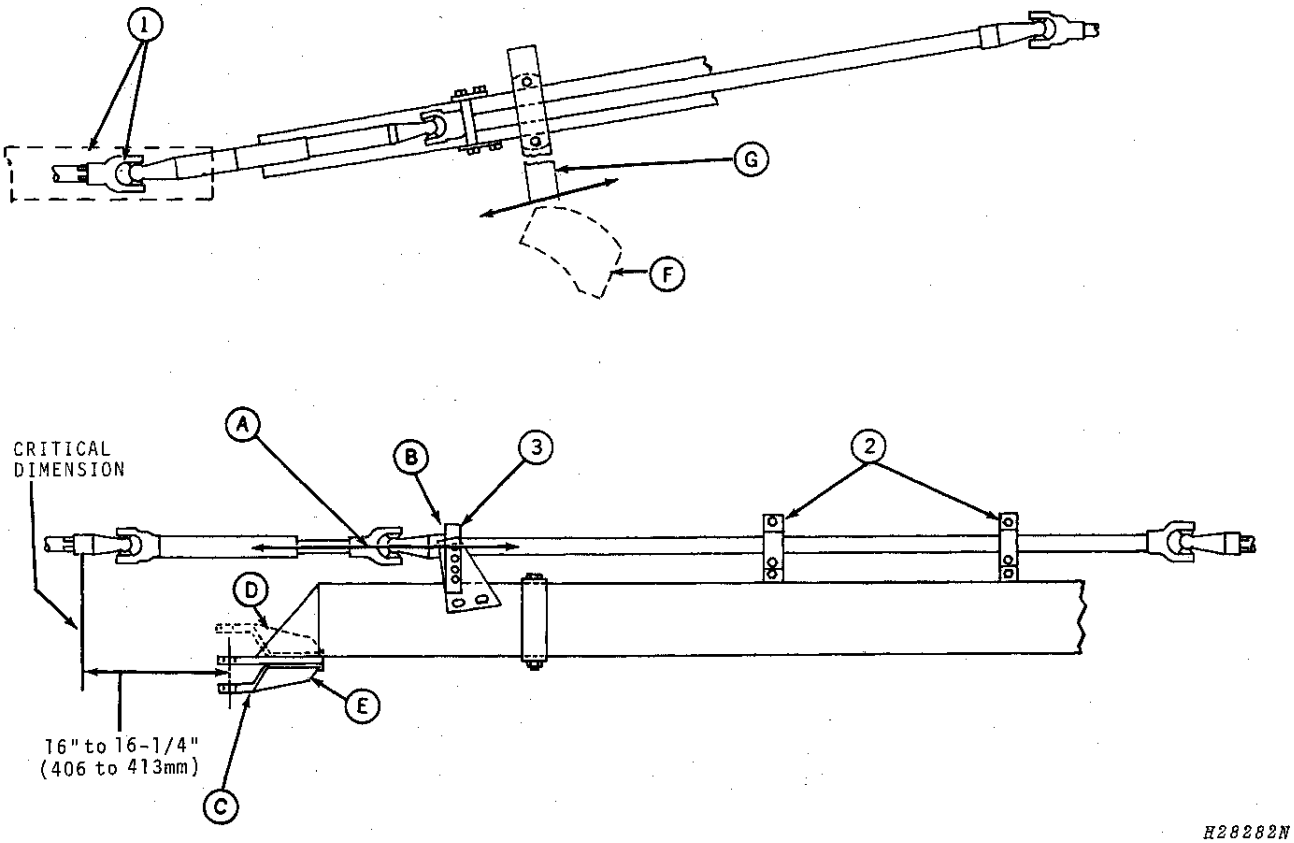
1. Attach seven-pole socket to the bracket and bracket to tractor.
2. Tractor must be equipped with three wire and auxiliary four wire kits. Order from your John Deere dealer or from the other tractor manufacturer of tractor being used.
3. Lock tractor drawbar so it is straight with tractor PTO shaft.
4. Attach combine to drawbar.
5. Secure front joint to tractor PTO shaft.
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 Tractor, it is necessary to install AR72476 adapter kit for 1-3/8-inch spline. See your John Deere dealer.

NOTE: Adapt the 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 breakaway coupler.

HOOKUP ADJUSTMENTS

Adjust hitch plates, powershaft, tractor drawbar, and turning stops as shown below.



A—Straight Line
B—Bearing Box
C—Hitch Clevis
D—Hitch Clevis Top Position
E—Hitch Clevis Bottom Position
F—Tractor Tires
G—Longer Bumper

Tractor Hookup - 1000 rpm

1. Drawbar to be straight with tractor PTO shaft.

2. Adjust bearing supports up or down so powershaft runs straight (A).

3. Bearing box (B) can be adjusted up or down in conjunction with hitch plates so powershaft runs in a straight line.

NOTE: Hitch clevis (C) can be attached to the top (D) or bottom (E) so separator is level with ground line.

Adjust bumpers to contact rear tractor tires (F) to prevent turning too short. Longer bumper (G) must always be on left-hand side of hitch tube.

COMBINE BREAK-IN

Follow the lubrication instructions and periodic service information closely (page 38).

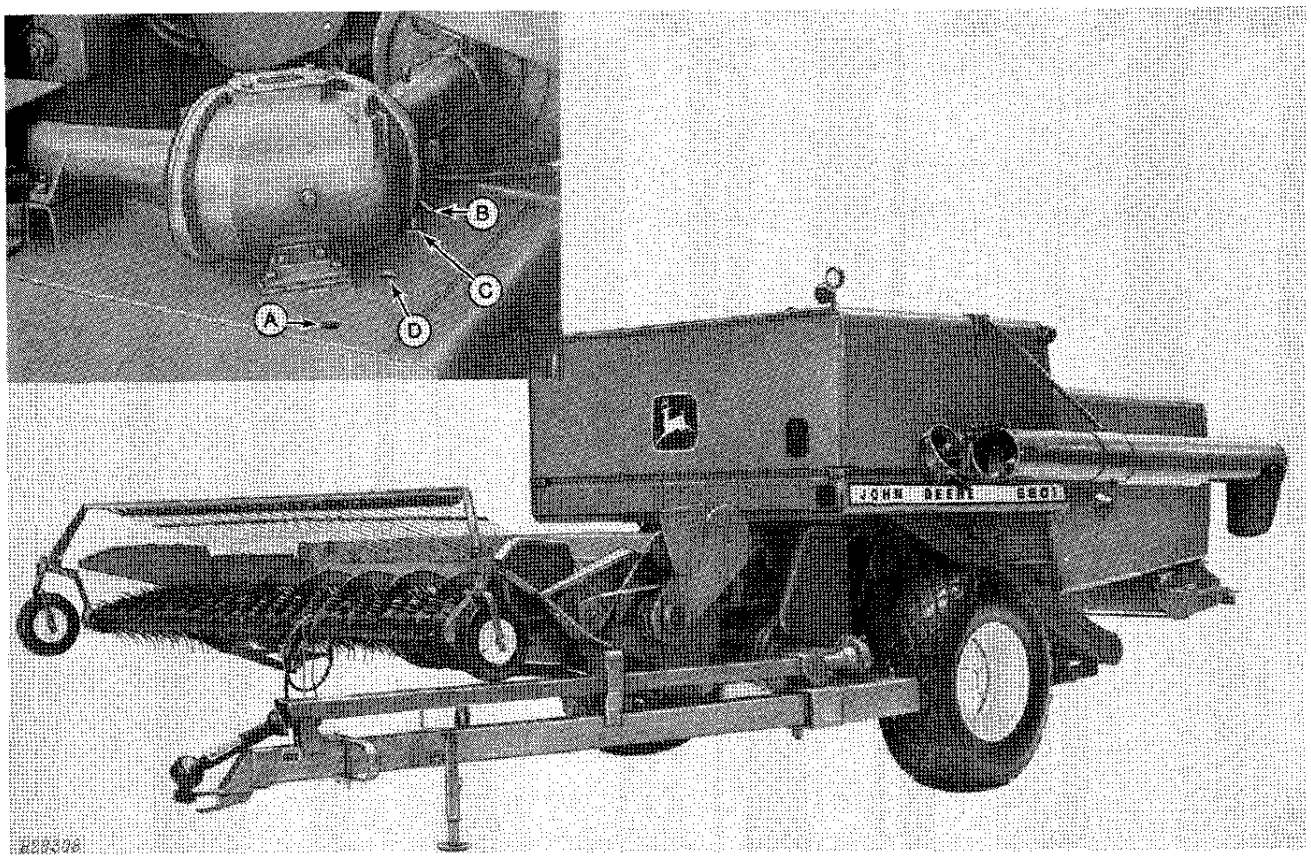
STARTING THE COMBINE

CAUTION: No one must be standing near enough to the combine or tractor to touch any moving parts. Warn everyone to stand clear.

When tractor is properly warmed, idle engine and engage PTO slowly to engage the separator. Then run tractor at rated PTO speed.

Check the speed of the primary countershaft with a speed indicator (page 57). The countershaft must operate at 1500 rpm with separator empty and not under load. If the countershaft speed is incorrect, check tractor PTO speed. If PTO is not operating at proper rpm rated speed, see your John Deere dealer.

TRANSPORTING



A—Transporting Position **B—Hitch Pin** **C—Operating Position** **D—Shipping Position**

Combine in Transport Position

The combine can be safely towed at a maximum speed of 20 mph (32.2 km/h). The grain tank must be empty when transporting.

CAUTION: Tow at a safe and reasonable speed not to exceed 20 mph (32.2 km/h).

This combine is designed for easy and safe transporting. The width of the combine can be reduced by: folding unloading auger back along separator, removing the platform, and moving the hitch.

To fold unloading auger back along separator, unfasten over-center lock and swing outer auger back. Secure outer end of auger against separator with transport lock (page 18).

IMPORTANT: Always fold unloading auger back along separator when transporting the combine.

Three locking positions are provided for the swinging hitch. The inside locking position is for field operation. The center locking position is for loading and transporting the combine on a flat car. Under no circumstances will you need to use this center position once the combine has been removed from the flat car.

The outer position locks the hitch for highway or field transporting. To secure hitch tube in transporting position (A), raise platform to its highest position. Remove hitch pin (B) from operating position (C) and swing hitch tube inward as far as possible. Install hitch pin (A) in transporting position (A).

CAUTION: Always use the hydraulic cylinder safety stop (page 21) when transporting the combine with the platform in raised position.

The combine is equipped with a slow moving vehicle emblem on the rear hood, lights, grain tank reflectors, and red reflective tape on the backside of the platform for transporting protection. Keep the emblem, reflectors, and lights clean.

CAUTION: When transporting the combine on a road or highway at night or during the day, use the lights and devices provided on the combine for adequate warning to the operators of other vehicles. In this regard, check your local governmental regulations.

FIELD AND HIGHWAY LIGHTS

Field and Highway Safety Lighting

The combine is equipped with two field lights positioned on a mast above the grain tank for night field operation.

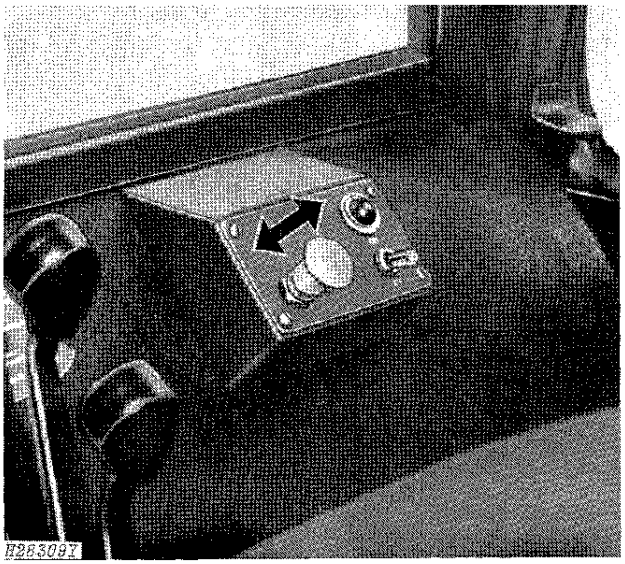
A flashing warning light on each side of the combine, and a tail light provide a warning to operators of vehicles approaching from the rear. If flashing lights are prohibited by local regulations, reconnect wires so lights will not flash. See the tractor operators manual of tractor being used.

The lights on the combine are controlled by the tractor light switch.

COMBINE FUNCTION CONTROLS

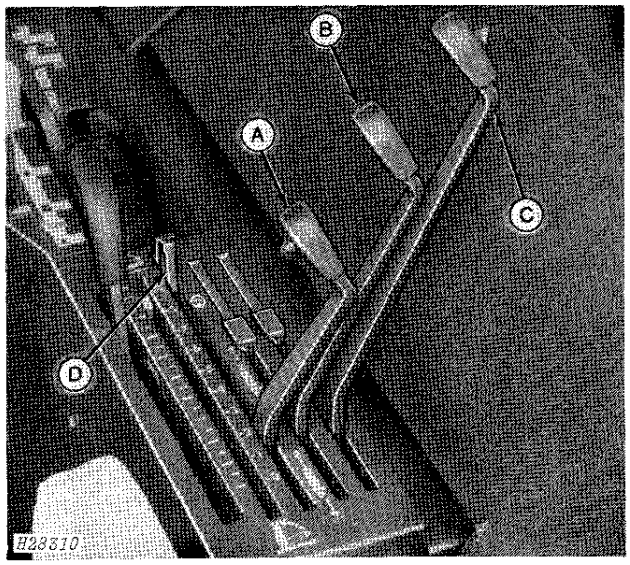
PLATFORM CONTROLS

Platform Electric Clutch Switch



Push switch down to disengage clutch. Pull switch out to engage clutch.

Platform Height Control



A—Operating Lever For Left Coupler (I)
B—Operating Lever For Lower Right Coupler (II)
C—Operating Lever For Upper Right Coupler (III)
D—Float Lockout Stop Positioned For Float

Remove Cylinder Operating Levers on 4230, 4240, 4430, 4440, 4630 and 4640 Tractors

Raise and lower the platform with the remote cylinder operating lever on the tractor. To raise the platform, push the lever forward. To lower the platform, pull the lever rearward.

Suggest:

If the above button click is invalid.

Please download this document

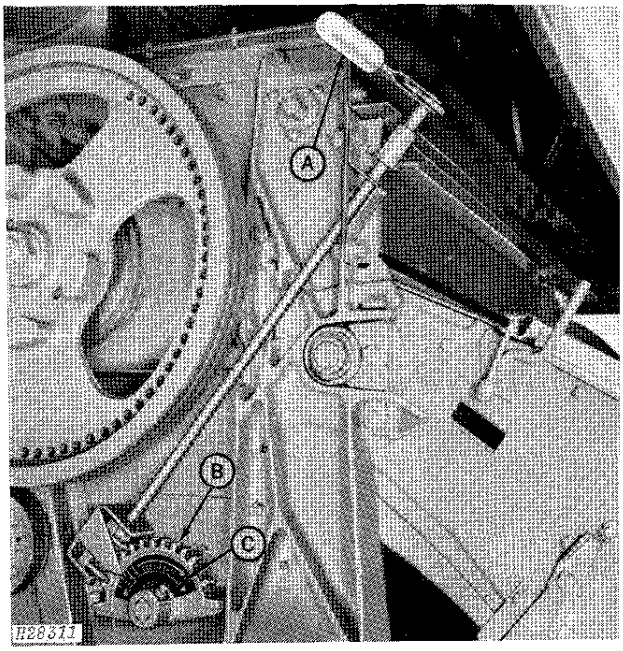
first, and then click the above link

to download the complete manual.

Thank you so much for reading

SEPARATOR CONTROLS

Concave Spacing Control Ratchet



A—Control Ratchet **B—Timed Sector** **C—Calibration**

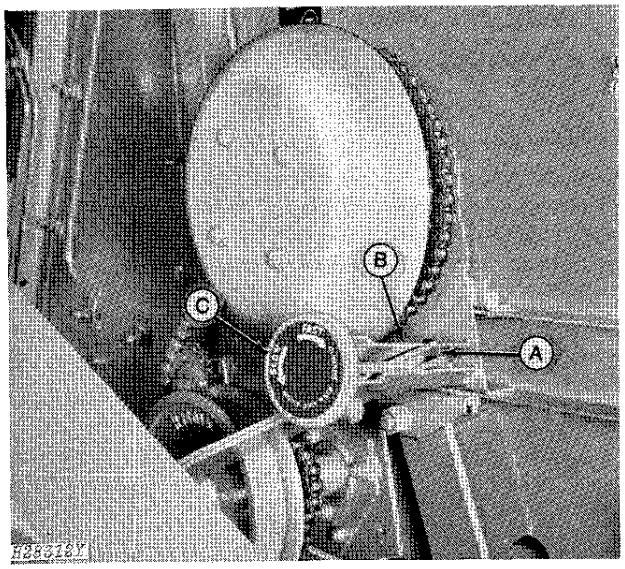
To open the concave, use the ratchet (A) to turn the adjusting shaft clockwise until the pointer on the timed sector (B) is on the desired calibration (C).

To close the concave, use the ratchet to turn the adjusting shaft counterclockwise until the pointer on the timed sector is on the desired calibration (C).

The timed sector is calibrated to indicate the setting at the front of the concave.

See Suggested Settings Chart, page 36.

Fan Speed Control Wheel



A—Pointer
B—RPM Indicator
C—Fan Speed Control Wheel

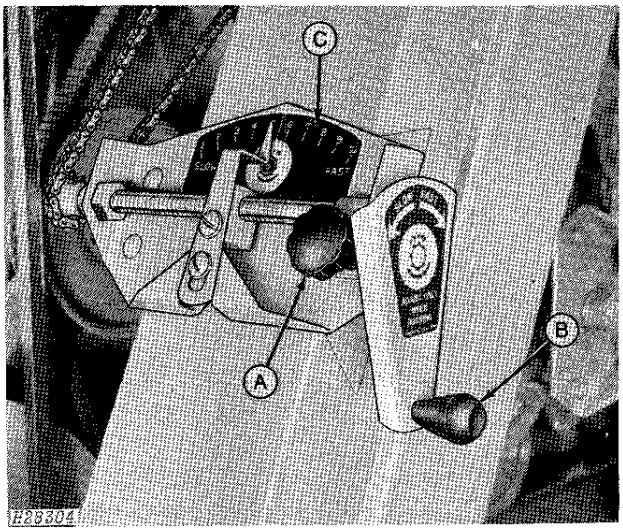
Adjust the fan speed control (C) until the pointer (A) on the indicator (B) is positioned on the desired speed.

IMPORTANT: Adjust the fan only when the separator is running.

The rpm indicator (B) is a guide so you can return to the fan speed previously found best for a particular crop or field condition.

See Suggested Settings Chart, page 36.

Cylinder Speed Control Crank



A—Locking Knob
B—Cylinder Speed Control Crank
C—Speed Reference Indicator

Loosen locking knob (A).

To increase the cylinder speed, turn the crank (B) toward "FAST."

To decrease the cylinder speed, turn the crank (B) toward "SLOW."

Tighten locking knob (A).

IMPORTANT: Adjust the cylinder speed only when the separator is running.

A cylinder speed reference indicator (C) is mounted on the back side of the clean grain elevator. The reference numbers are a guide to the operator so he can return to the cylinder speed setting that was previously found best for a particular crop or field condition.

See Suggested Settings Chart, page 36.