

# **JOHN DEERE 6600, SIDEHILL 6600 AND 7700 COMBINES**



## **OPERATORS MANUAL JOHN DEERE 6600, SIDEHILL 6600 AND 7700 COMBINES**

OMH92873 J5    English

**JOHN DEERE HARVESTER WORKS  
OMH92873 J5**

LITHO IN THE 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.

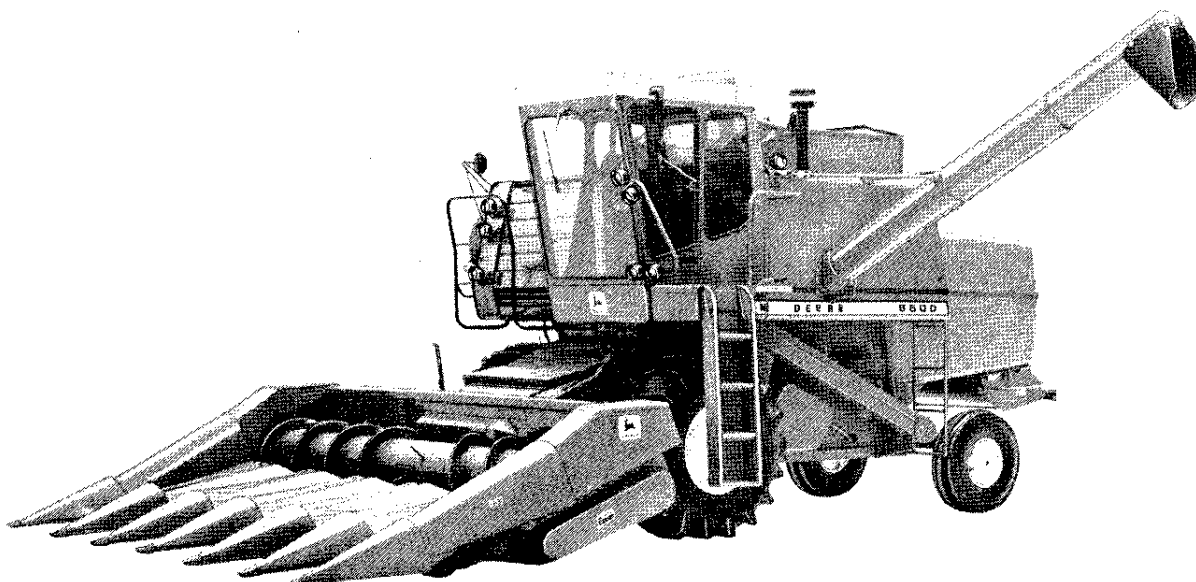
Your Operator's manual contains SI Metric equivalents which follow immediately after the U.S. customary units of measure.

This operator's manual covers the feeder house and separator areas of the combine. For header information, see the separate operator's manuals furnished with that equipment.

"Right-Hand" and "left-hand" sides are determined by facing in the direction the combine will travel when in use. The radiator end of the engine is referred to as the "front," the flywheel end as the "rear."

Record your combine serial numbers in the space provided on page 208. 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 received from your dealer when you purchased the combine.



H26307

*John Deere 6600 Combine with 653 Row-Crop Head*



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## Safety Suggestions

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**A** 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.

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

No riders should be allowed on the operator's platform when combine is in operation.

Be sure shields and guards are 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 be sure to relieve all pressure. Before applying pressure to system, be sure all connections are tight and that lines, pipes and hoses are 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 should be fairly tight and belted. Loose jackets, shirts, or sleeves should never be worn because of the danger of getting into moving parts.

Make certain everyone is clear of the combine 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 especially careful when operating on hillsides because combine may tip sideways if it strikes a hole, ditch, or other irregularity.

Never attempt to clear obstructions off the header unless the combine is stopped and the engine shut off.

Keep the operator's platform clean. Do not use it as a place to carry loose tools, lunch boxes, etc.

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

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

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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>**



# Controls and Instruments

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

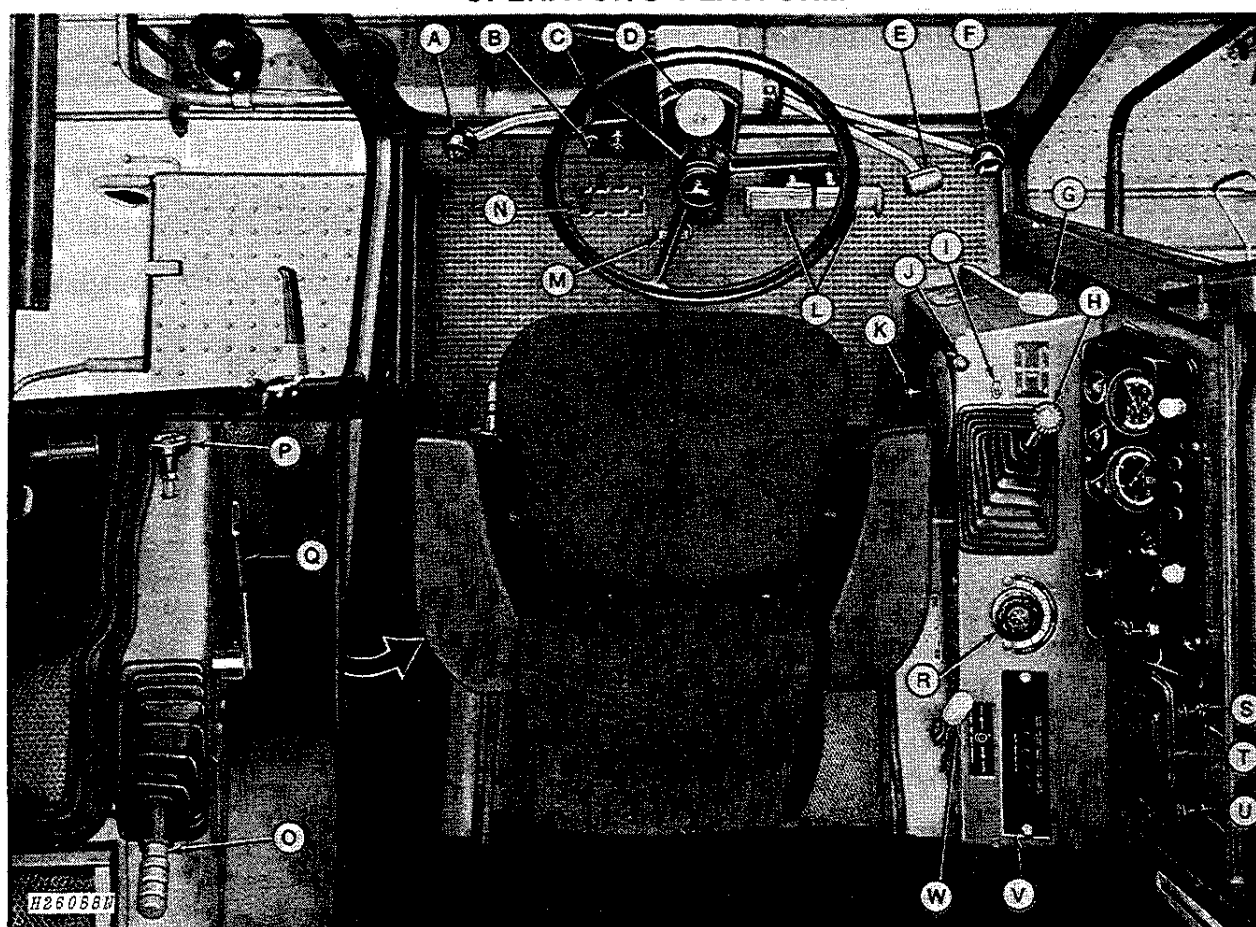
Control levers and knobs have different colors and shapes to help you quickly locate them while operating the combine. Colors on controls indicate:

RED—Combine movement controls (Throttle, Gearshift Lever, Selective Ground Speed Control)

YELLOW—Auxiliary Power Controls (Separator Control Lever, Cylinder Speed Control Ratchet, Header Electromagnetic Clutch Switch)

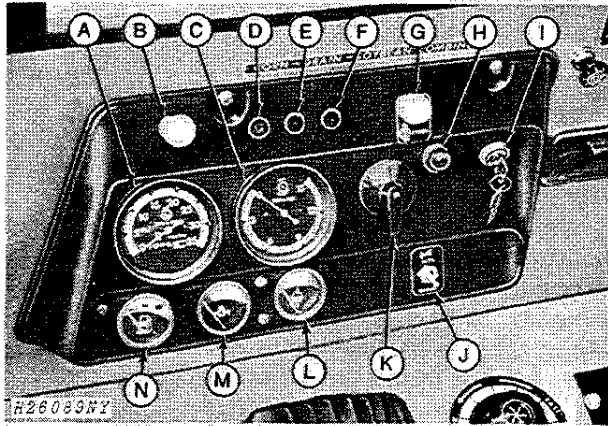
BLACK—Combine Function Controls Header Height Control, Hydraulic Lift Reel Control, etc.)

## OPERATOR'S PLATFORM



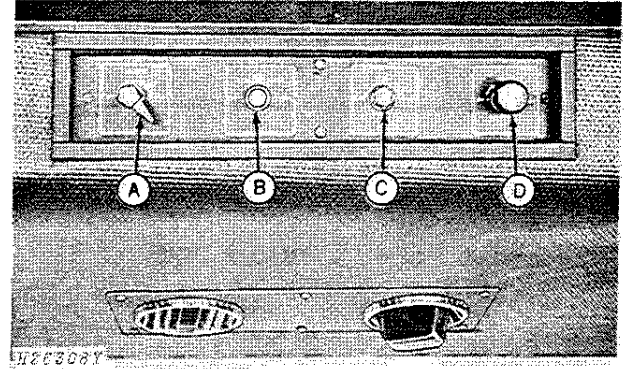
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The operator's cab controls are located in the cab headliner. The radio is located in the rear right-hand corner of the cab.

*NOTE: For controls not located on the operator's platform (fan speed control, chaffer and sieve opening controls) see page 19.*

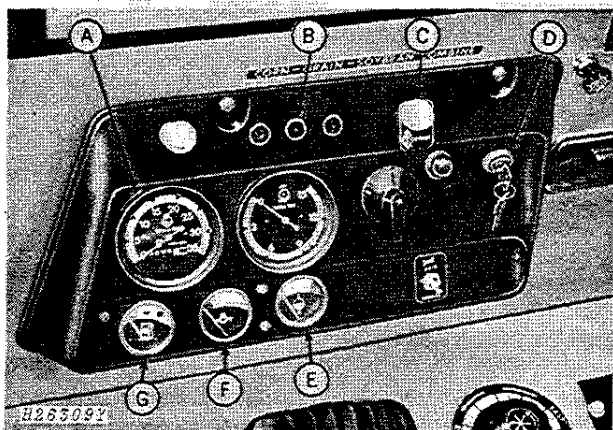


# Operation

## OPERATING THE ENGINE

### ENGINE INSTRUMENTS AND CONTROLS

#### Instrument Panel Controls and Instruments



- A—Engine Tach-Hour Meter
- B—Alternator Indicator Light
- C—Cold Weather Starting Aid Button
- D—Ignition Switch
- E—Coolant Temperature Gauge
- F—Engine Oil Pressure Gauge
- G—Fuel Gauge

#### Ignition Switch

Turn the key "D" clockwise to the first stop. Check that alternator indicator light glows red. If it does not, turn key off and see TROUBLE SHOOTING, page 188.

Turn the key further clockwise and hold until engine starts. Release the key immediately when the engine starts. The alternator indicator light should go out. If it does not go out after 10 seconds, shut off engine at once and determine cause.

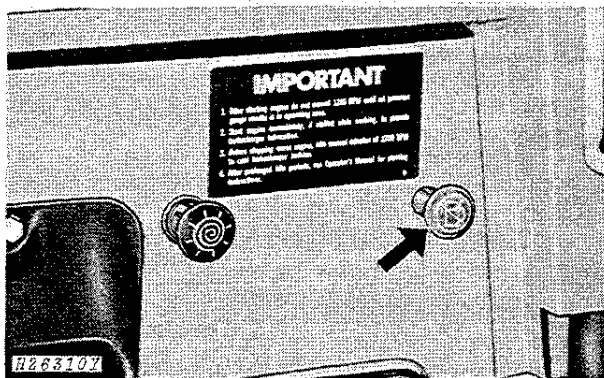
**IMPORTANT:** When starting the engine, never hold the key in start position for more than 30 seconds. If the engine does not start within 30 seconds, allow at least 2 minutes for proper cooling of the starter. Be certain to pause a few seconds after a false start to make certain that the starter has stopped completely.

If the engine fails to start, refer to the trouble shooting charts on page 188.

#### Throttle

Move throttle all the way forward for normal operation; move throttle all the way rearward for slow idle.

#### Fuel Shut-Off (404 Engines Only)



The fuel shut-off knob cuts off the fuel supply to the fuel injection pump. Push the knob all the way in before attempting to start engine.

To stop engine, turn key off and pull fuel shut-off knob all the way out until engine stops running.

### Alternator Indicator Light

This light glows red when the alternator is not charging. If the light goes on while the engine is running, stop engine and determine cause.

Check the operation of this light by turning the key to the on position.

### Coolant Temperature Gauge

This gauge indicates the coolant temperature in the cooling system—not the quantity. The white zone on the dial indicates normal operating temperature; the red-orange zone indicates above normal operating temperature.

If the pointer on the gauge goes into the red-orange zone, stop the engine immediately and determine the cause.

### Coolant Temperature Warning Horn

A low note horn sounds when the coolant temperature gauge registers hot. This horn will also sound when the straw walker sensing unit (attachment) is activated.

If the horn sounds, stop engine and check the engine for overheating or straw walkers for plugging.

If the straw walkers are not plugged, determine the cause of engine overheating.

### Engine Oil Pressure Gauge

This gauge "F" indicates pressure of the engine lubricating oil. Oil pressure will vary slightly with wear, but with recommended oil, it should read normal at full governed speed (indicated by white zone on the dial). If oil pressure drops (indicated by red zone on the dial), stop engine immediately and determine cause.

### Fuel Gauge

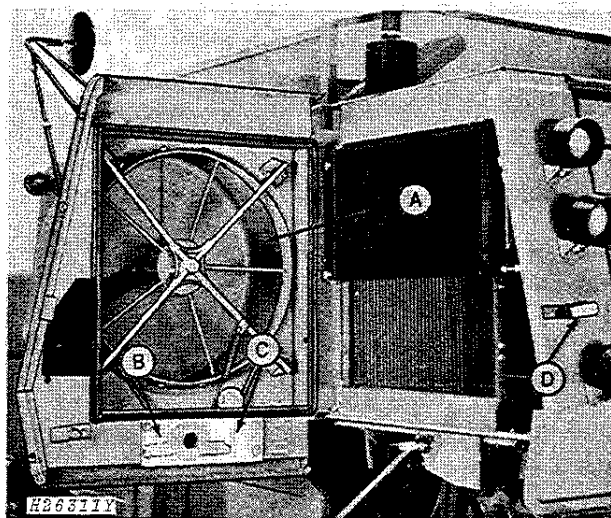
A full mark, a half-full mark, and an empty mark indicates fuel level. The red-orange zone indicates that the fuel tank is empty.

### Engine Tach-Hour Meter

The tach-hour meter shows the engine speed in hundreds of rpm and accumulated engine service in hours and tenths of hours (based on an average engine operating speed of 2500 rpm, 2200 rpm on turbocharged diesel). Use this hour meter to determine when lubrication and periodic services are needed.

## PRESTARTING CHECKS

1. Check engine crankcase oil level (Page 58).
2. Check radiator coolant level (Page 161).
3. Check fuel tank level.
4. Drain sediment from fuel filter(s) (Page 155).
5. Clean air cleaner dust cup and precleaner (Page 164).
6. Check and lubricate combine (Pages 54-71).



A—Rotary Cooling Screen      C—Drive Disengaged  
B—Drive Engaged                D—Over-Center Latch

**IMPORTANT:** When preparing to operate the combine in below-freezing temperatures and before starting engine, be certain the rotary screen is free of snow or frozen moisture and will turn easily. Belt failure can occur if rotary screen will not turn.

7. The rotary screen drive must be engaged whenever the engine is running.

Disengage screen drive by moving lever rearward and up as shown at "C". Move lever down and forward to engage as shown at "B".

Pull out on screen door over-center latch "D" and swing door open.

Close screen door, fasten over-center latch "D" and engage screen drive "B".

**IMPORTANT:** Rotary screen drive must be fully disengaged before opening or closing screen door.

8. When starting the engine after the combine has been idle for an extended period, pull the fuel shut-off all the way out, and crank the engine with the starter until the engine oil pressure gauge registers pressure. Do not operate the starter more than 30 seconds at a time. After pressure is indicated, move the throttle to the slow idle position, make sure fuel shut-off is all the way in, and start the engine.

## STARTING ENGINE

 **CAUTION:** Before starting the combine engine, be sure there is plenty of ventilation. Never operate the combine in a closed building.

1. Disengage header electromagnetic clutch switch, separator control lever, and grain tank unloading auger lever.

2. Place gearshift lever in neutral.

3. Depress clutch pedal fully or place the hydrostatic speed range lever in neutral.

4. Move throttle lever to slow idle position.

5. Be certain fuel shut-off knob is pushed all the way in on 404 engines.

6. Turn key clockwise to the first stop. Check that alternator indicator light glows red.

7. Turn key further clockwise and hold until engine starts. Release key immediately when engine starts.

**IMPORTANT:** When starting engine, never hold key in start position for more than 30 seconds. If engine does not start within 30 seconds, allow at least 2 minutes for proper cooling of starter. Be certain to pause a few seconds after a false start to be certain starter has stopped completely.

*NOTE: If the prevailing temperature is 40°F (4°C) or lower, it may be necessary to use the cold weather starting aid to start the engine.*

To inject starting fluid, press starting aid button located on instrument panel (button marked with decal).

Stop injecting fluid after the engine starts. If the engine begins to die during the first few minutes of operation, inject another "shot" of fluid.

**IMPORTANT:** Fluid can must be left in tray, even if empty, to prevent dirt from being drawn into the engine. To avoid damage, turn engine with starter one or two revolutions before injecting starting fluid. Inject starting fluid only while the engine is turning.

**IMPORTANT:** Do NOT tow hydrostatic drive combines to start engine.

8. Make certain the oil pressure gauge registers pressure and the alternator indicator light goes off. If not, stop engine and determine the cause.

9. Idle the engine for several minutes to warm up engine and to insure turbocharger lubrication before accelerating, applying a load, or transporting.

10. Engage the separator and operate at 1500-1800 engine rpm for 5 to 10 minutes. Monitor oil pressure and water temperature and check for oil leaks.

11. If engine has not been operated for a long period of time, bleed entire fuel system to remove air bubbles.

## STOPPING ENGINE

1. Place the hydrostatic speed range lever in neutral.

2. Place the gearshift lever in neutral.

3. Move the throttle lever to the rear. Allow the engine to idle a few minutes to cool the engine and turbocharger. (Lubrication and cooling of the turbocharger and some engine parts is provided by the engine lubricating oil. Therefore, sudden stopping of a hot engine may allow some parts to overheat and cause possible damage.) Allow the temperature gauge needle to drop well into the white range on the dial.

4. Pull out the fuel shut-off, and then turn the key off.

**IMPORTANT:** On combines with turbocharged 404 engine, push fuel shut-off back in immediately after the engine has completely stopped, to prevent difficult restarting in cold weather.

**IMPORTANT:** Do not attempt to stop engine by turning off fuel supply at tank.

## COLD WEATHER OPERATION

### Fuel System

Use winter-grade fuel. Fill the fuel tank at the end of the day's run to prevent condensation.

### Cooling System

Drain, flush, and fill cooling system with a recognized brand of radiator sealer and antifreeze solution. Use permanent-type (ethylene glycol) antifreeze solution containing rust inhibitors and without stop-leak additive. This type of antifreeze is resistant to evaporation when heated.

Quarts (litre) of Ethylene Glycol  
Required at Lowest Expected Temperature

|               | 329 Engine |           | 404 Engine |           |
|---------------|------------|-----------|------------|-----------|
| +20°F (-7°C)  | 5          | (4.73 l)  | 6          | (5.68 l)  |
| +10°F (-12°C) | 8          | (7.57 l)  | 9          | (8.52 l)  |
| 0°F (-18°C)   | 10-1/2     | (9.94 l)  | 12         | (11.36 l) |
| -10°F (-23°C) | 12         | (11.36 l) | 14         | (13.25 l) |
| -20°F (-29°C) | 14         | (13.25 l) | 16         | (15.14 l) |
| -34°F (-37°C) | 16         | (15.14 l) | 18-1/2     | (17.51 l) |

After filling, check system for leaks.

### Batteries

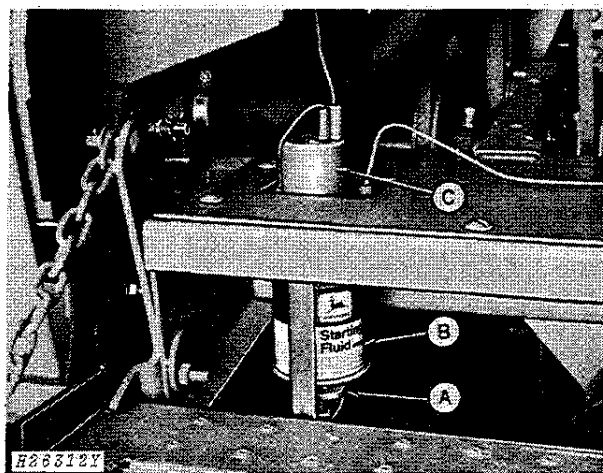
When the temperature drops below freezing, keep batteries fully charged. A badly discharged battery freezes more quickly than one that is well charged.

In freezing weather, do not add water to the batteries unless engine is going to be run. Water will freeze as it will not mix with the electrolyte until the alternator passes a charging current through the batteries.

**IMPORTANT:** If booster batteries are required, see instructions on page 144.

### Cold Weather Starting Aid

Diesel engines are equipped with an ether starting fluid aid which injects atomized ether fluid into the engine air intake system. Normally, ether is used for starting at temperatures below 40°F. (4°C).



A—Screw

B—Tray

C—Solenoid

To use the starting fluid aid, remove safety cap and plastic spray button from can. Loosen screw "A" and place can in tray "B". Position can directly under electric solenoid "C". Tighten screw by hand until nozzle of can is securely seated in the solenoid.

**IMPORTANT:** To avoid damage, turn engine with starter one or two revolutions before injecting starting fluid. Inject starting fluid only while the engine is turning.

To inject starting fluid, press starting aid button (marked "ether") located on instrument panel.

Stop injecting fluid after the engine starts. If the engine begins to die during the first few minutes of operation, inject another "shot" of fluid.

**IMPORTANT:** Fluid can must be left in tray, even if empty, to prevent dirt from being drawn into the engine.

**CAUTION:** Ether starting fluid is highly flammable. Store starting fluid cans where they will not be subject to extreme cold or warm temperatures. For best results, store fluid at room temperature.

## HOT WEATHER OPERATION

The combine has a 7 psi (0.50 bar) pressure radiator cap. This pressurizes the cooling system so all components must be tight and in good condition for proper operation. Loss of pressure will result in overheating and loss of coolant.

The combine is shipped from the factory with permanent-type antifreeze in the cooling system.

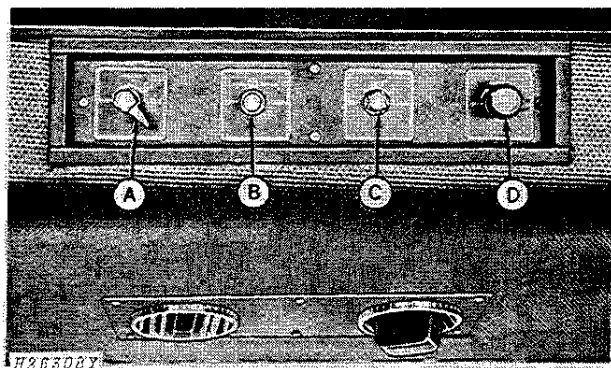
This antifreeze should be left in the cooling system during hot weather operation. If coolant is lost or drained out and freezing temperatures are not anticipated, the cooling system can be protected against corrosive action by using summer Engine Coolant Conditioner.

To install the Summer Engine Coolant Conditioner, drain and flush cooling system and add two 32-oz. (0.9463 l) cans of Summer Engine Coolant Conditioner (John Deere Part No. T19566) to the cooling system following directions on the container.

**IMPORTANT: Summer Engine Coolant Conditioner is NOT AN ANTIFREEZE or a cooling system sealer. Drain system and fill with recommended antifreeze solution as required for winter protection. When antifreeze solution is in system, it is not necessary to use the Conditioner; however, if severely corrosive water conditions are present, the Conditioner is compatible with antifreeze solutions.**

## OPERATOR'S PLATFORM COMPONENTS

### OPERATOR'S CAB CONTROLS



- A—Heater Temperature Control Switch
- B—Pressurizer Fans Switch
- C—Air Conditioner Temperature Control Switch
- D—Windshield Wiper Switch

The operator's cab controls are located in the cab headliner. The radio is located in the rear right-hand corner of the cab.

The air outlets are adjustable by rotating to control air flow into the cab. An air deflector on one outlet will further control air flow.

### PRESSURIZER SYSTEM

The switch "B" controls the fans which pressurize the cab. This is a three-speed switch with the highest speed obtained by turning the switch clockwise as far as it will go.

**IMPORTANT:** Pressurizer fans must be operating whenever the heater or air conditioner is in use.

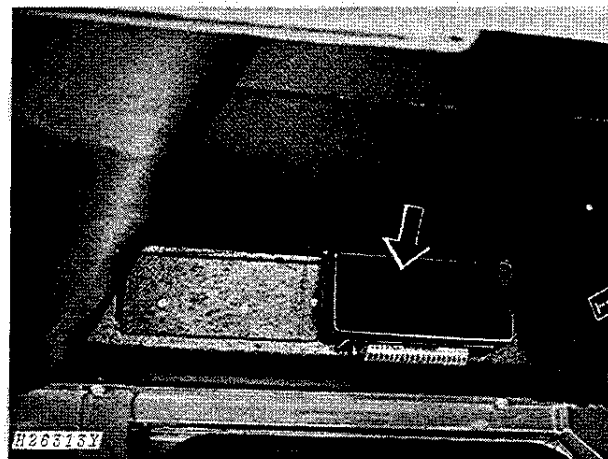
### AIR CONDITIONER SYSTEM

**CAUTION:** The air conditioner system should only be serviced by a qualified serviceman.

This switch "C" is a thermostatic-type switch which maintains the desired temperature.

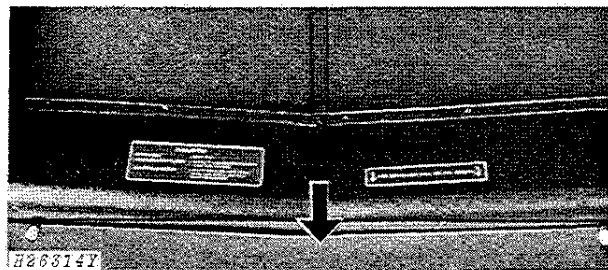
Cool air is controlled by turning the switch "C" clockwise toward "COLD." Turning the switch all the way to the "COLD" position will provide maximum cooling.

### Normal Air Recirculator



Under normal operating conditions, the normal air recirculator, which is located above the dome light, will provide sufficient cooling.

### Maximum Air Recirculator



Under normal operating conditions, the normal air recirculator will provide sufficient cooling.

If increased cooling is desired, open the door on the maximum air recirculator in the rear of cab headliner.

### Air Intake (Attachment)

The air intake, which is mounted on the rear of the cab roof, provides additional air intake to the cab.

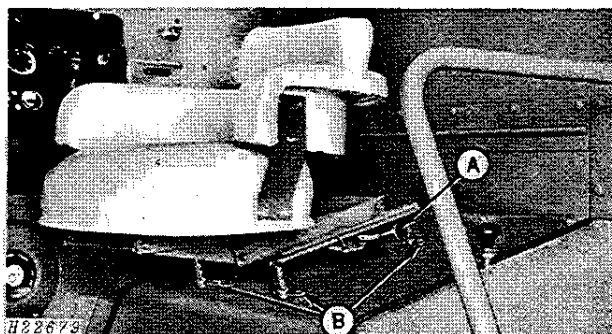
### HEATER SYSTEM

Heat is controlled by turning the heater control switch "A" clockwise. Turning the switch all the way to the "HOT" position will provide maximum heating.

**IMPORTANT:** The pressurizer system must be in operation when the heater is in use.

## OPERATOR' SEAT

### Standard Operator's Seat



The operator's seat moves forward and rearward or up and down to accommodate individual height and to allow greater accessibility to all controls.

Use only warm water and mild soap to clean the seat cushions. NEVER USE SOLVENTS.

### Adjusting Seat Forward or Rearward

While sitting in the seat, push lever "A" forward as far as possible and by using your weight, adjust seat to desired position and then release lever "A".

### Adjusting Seat Up or Down

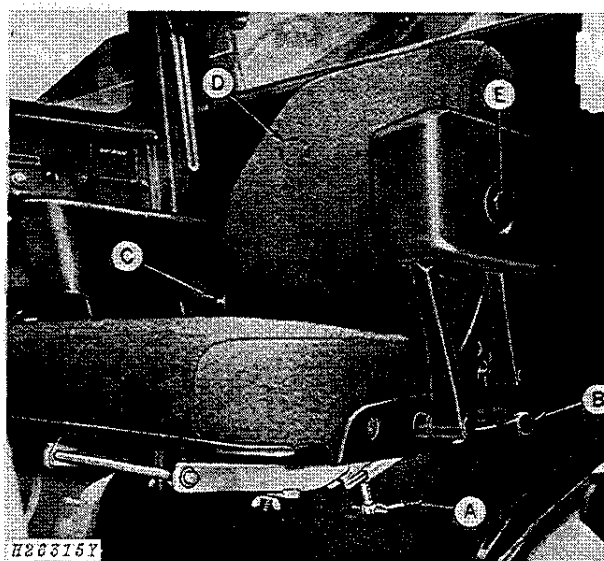
Remove four spring locking pins "B", raise or lower the seat to the desired height then reinsert spring locking pins "B".

### (Optional) Personal-Posture Seat

The Personal-Posture seat is adjustable in five different respects and is upholstered in durable cloth fabric for operator comfort.

Seat fabric should be frequently vacuum cleaned or brushed with a soft bristle brush to remove loose dirt and dust. Fabric cleaners may be used to clean normal soilage on fabric. Grease and oil stains on fabric may be cleaned with commercially available solvent-type spot removers. Follow solvent label directions carefully.

Use only warm water and mild soap to clean the arm rests. Never use solvents.



A—Spring Locking Pins  
B—Lever  
C—Backrest Angle Control Knob  
D—Lumbar Support Knob  
E—Armrest Release Button

### Adjusting Seat Up or Down

Remove the four spring locking pins "A". Raise or lower the seat to the desired height. Replace spring locking pins "A".

### Adjusting Seat Forward or Rearward

Sit in the seat, push lever "B" forward as far as possible and by using your weight, adjust seat to the desired position, and release lever "B".

### Adjusting Backrest Angle

The backrest is adjustable through a 10° angle. To change the angle to the desired position, raise or lower the backrest angle control knob "C."

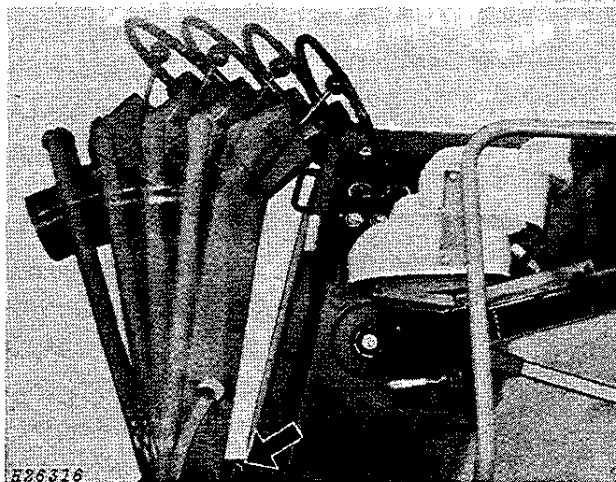
### Adjusting Lumbar Support

A lumbar support mechanism is built into the backrest. This support is adjustable to five different pressures against the lower portion of the back. Move knob "D" up or down to adjust lumbar support to the desired position.

### Adjusting Armrest Height

Armrest height is adjustable to five different positions. To adjust the height, press the armrest release button "E", move armrest up or down to the desired position, and release button.

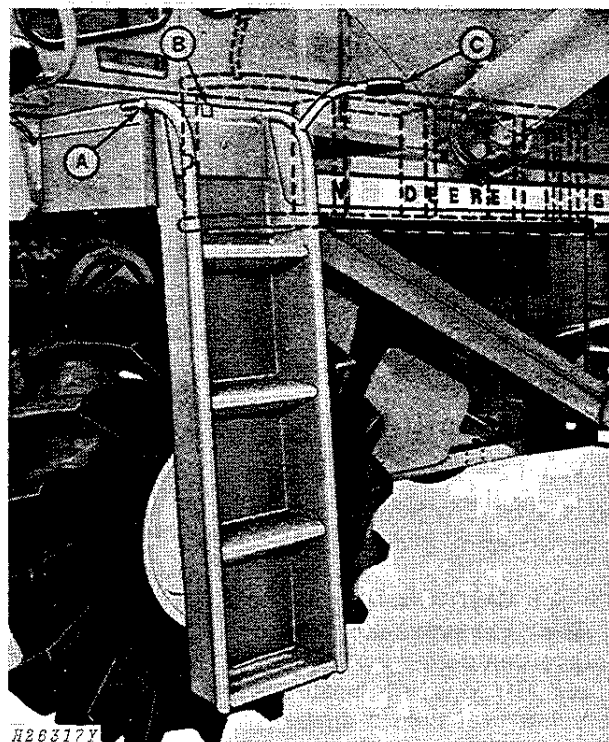
## STEERING COLUMN



The steering column is adjustable to one of four positions for individual arm lengths.

To adjust steering column, push pedal (arrow) down, position column to desired setting, and release pedal.

## PIVOTING LADDER



A—Lever

B—Lock

C—Lever

Move the pivoting ladder up out of the way of uncut grain.

Pull lever "A" up and to the right to release lock "B", then pull lever "C" forward until ladder is parallel to the ground. Push lever "A" to the left to lock ladder in place.

## PROPULSION CONTROLS

### GEARSHIFT LEVER

#### Posi-Torq Drive Combines

Depress the clutch pedal fully; then shift lever to desired position.

**CAUTION:** Make certain that the gearshift lever is in the neutral position and the clutch pedal is fully depressed before starting the engine.

When towing combine, place gearshift lever in tow position (page 15).

#### Hydrostatic Drive Combines

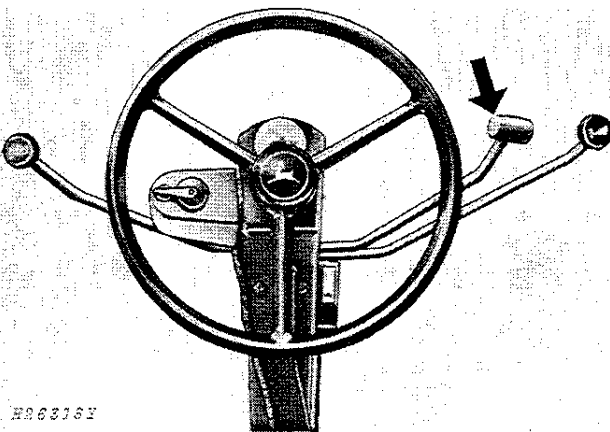
Move hydrostatic drive lever to (N) neutral, then shift lever to desired position. There is no reverse position as all forward gears are also reverse gears.

**CAUTION:** When operating combine and transmission is under load you cannot move gearshift from the gear it is in. It is necessary to move the hydrostatic drive lever to (N) neutral first before shifting.

When towing combine, place the speed range lever in neutral.

### GROUND SPEED CONTROL

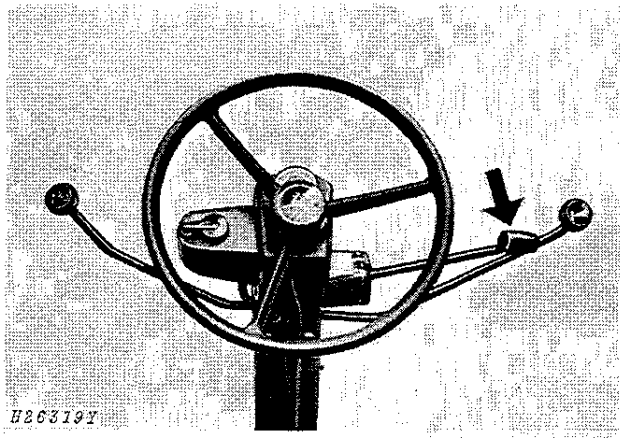
#### Selective Ground Speed Control (Posi-Torq)



To increase ground travel speed within a selected transmission gear, move lever forward. To decrease ground travel speed, move lever rearward.

Release the lever and it will return to its neutral position while the travel speed remains as selected.

#### Hydrostatic Drive Speed Range Lever



To move combine forward, place gearshift lever in desired transmission gear and push the speed range lever forward.

To stop combine, return the speed range lever to neutral against the stop. Place the gearshift lever in neutral.

To move combine in reverse, place the gearshift lever in desired transmission gear and move the speed range lever up and pull rearward.

#### Ground Speed Indicator (Posi-Torq)

This indicator, attached to the steering column, permits returning to the same ground travel speed after stopping or changing speed.

**IMPORTANT:** The indicator is not a speedometer. The numerals do not indicate the ground travel speed in miles per hour.

## TRANSMISSION OIL PRESSURE INDICATOR LIGHT



X 2237

The indicator light glows red when the oil pump in the transmission is not functioning properly, when the oil pressure is too low, or when the hydrostatic drive is in reverse range.

To check operation of the light, turn the key switch on; the light should glow. If light does not glow, check wire connections on the switch at the transmission.

### Posi-Torq Drive Combines

The light will go off when the engine is at full throttle and when the clutch is engaged. If the light stays on, stop combine immediately and check the transmission oil level; see page 70. If the oil level is correct, see your John Deere dealer.

When the clutch is disengaged, the light will glow because the oil pump is not engaged.

### Hydrostatic Drive Combines

The light will go off when the engine is at full throttle and the speed range lever is positioned at mid-range or above.

When the hydrostatic speed range lever is in neutral, the light will glow because the oil pump is not engaged.

## NEUTRAL STARTING SWITCH

This switch prevents the combine from being started when the transmission is in gear. Check the wires to the switch on the transmission periodically (page 133). If the switch fails, see your John Deere dealer.

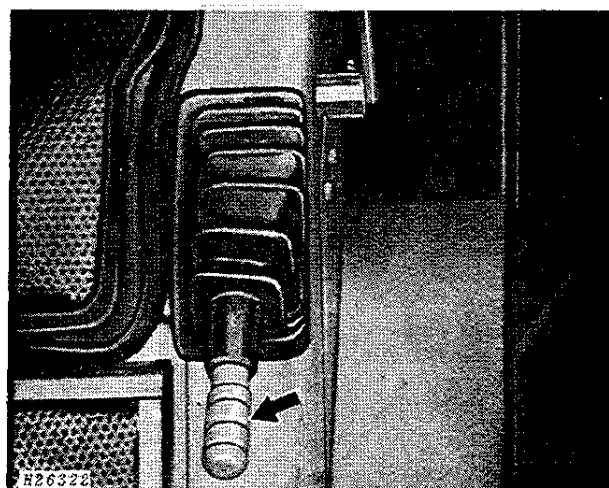
## STEERING MECHANISM

The steering mechanism is operated by full-time power steering, sometimes referred to as hydrostatic steering. The steering control wheel activates the valve, located under the operator's platform, which in turn allows oil to flow through steel lines to the hydraulic steering cylinder, thus turning rear steering wheels to desired position.

## PARKING BRAKE

The parking brake locks the wheel brakes so the combine cannot move if left unattended. Never attempt to move the combine with the parking brake lever engaged.

### Parking Brake Lever



To engage, pull lever upward.

To disengage, push lever downward.

### Parking Brake Indicator Light

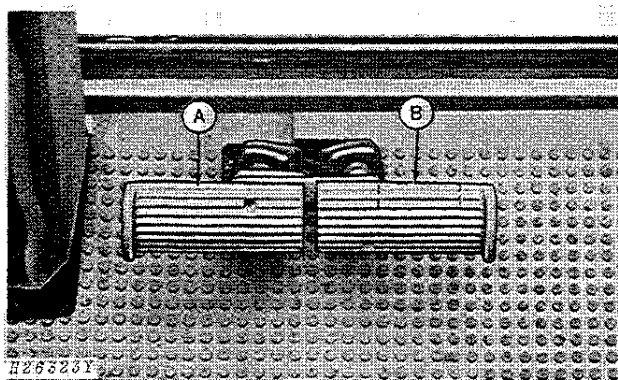
This light flashes red when the ignition is on and the lever is engaged. If the light is flashing, release the lever before moving the combine.

## HYDRAULIC BRAKES

These are differential brakes and can be used to assist in turning to left and right. When pedals are used together, a quick stop is assured.

**CAUTION:** Reduce travel speed by moving ground speed lever before applying brakes.

When stopping the combine, press on both brake pedals. Uneven application of brakes will draw combine to one side. Apply brakes evenly at transport speeds.



A—Brake Lock Position for Both Brakes  
B—Brake Lock Position for Single Brakes

When transporting the combine or traveling at high speeds, couple the pedals together with the brake lock.

Quick stops can result in combine nosing forward. Drive with the care necessary to allow controlled application of brakes at all times.

## HYDRAULIC CLUTCH

When shifting gears, depress the clutch pedal fully. Never attempt to depress the clutch and shift into gear while the combine is moving. Damage will result in the shifting mechanism.

**CAUTION:** Do not depress the clutch pedal when driving downhill.

## TIRES

Proper inflation is essential to the long life of a tire. Lack of air pressure allows the tire to slip on the rim and buckle the side walls. Overinflation causes uneven tread on tire structure and may result in ruptures due to impact with stones, roots, or ruts. It also causes excessive tread wear and allows tire to cut in more on wet ground.

**IMPORTANT:** Never operate combine with tires at shipping pressure.

Check air pressure in all tires every 50 hours. Inflate or deflate tires to obtain proper air pressure as given in tire inflation chart (page 127).

**IMPORTANT:** Your combine may be equipped with tubeless tires. It is important that the specified tire pressure be maintained. Underinflation can cause a tubeless tire to lose its mounting bead.

Keep valve caps screwed finger-tight onto valve stems. This will prevent dust, fine gravel, mud and other foreign material from accumulating in the valve core and permitting the compressed air to escape.

Correct toe-in (page 124 or 126) of the rear wheels must be maintained; otherwise the combine will be difficult to steer and the tires will be subject to excessive wear.

## TRACKS

A new track assembly has a tendency to be very stiff. To loosen it properly, run the combine backward and forward several times. After tracks have loosened, check track tension (page 129).

Instances arise where, after working in muddy conditions, the combine is driven to higher ground and left overnight without removing mud from between track bushings. The mud dries and hardens and the sprocket is unable to grip the bushing firmly, which results in slipping and puts a tremendous strain on the transmission. To help prevent this condition, the combine should either be left sitting in water to keep the mud from hardening, or the combine should be run back and forth a number of times after it has reached dry ground to remove the mud before parking overnight.

The proper adjustment of tracks is important when operating under heavy mud conditions. If tracks are adjusted properly for operation on high ground, they may prove to be too tight when combine operates in muddy or underwater sections of the field.

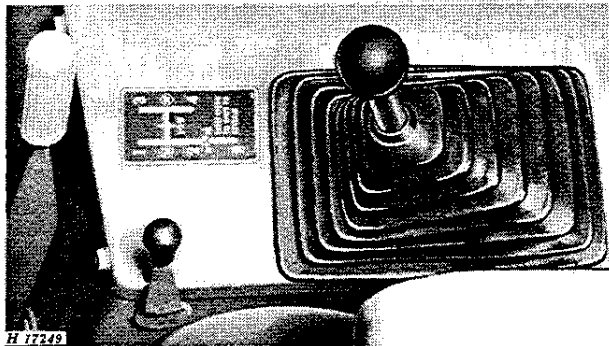
Hard wood blocks can be made and bolted to the track shoes for added traction and flotation in extremely muddy conditions.

**NOTE:** Blocks for tracks must not extend more than 3 inches (76 mm) past the tips of track shoes.

## TRANSPORTING

The combine can be transported under its own power, hauled on a truck, or by towing. If combine is to be towed, place the gearshift lever in "TOW" position and tow up to a maximum speed of 20 mph. If the combine is equipped with hydrostatic drive, place the speed range lever in neutral.

**CAUTION:** If combine must be towed at higher speeds, remove the drive shafts and lock the brake drums in place by applying the parking brake. Higher speeds will cause oil to flow out of breather plugs in final drives. Check oil level before operating.



*Gearshift in Tow Position*

Couple the brake pedals together with the brake lock (page 14).

Reduce the width of the combine by folding the unloading auger back along the separator and removing the header. Over-all dimensions are given on pages 212 and 213.

The rotary cooling screen, fender, and vacuum duct may be removed to further reduce transport width.

An optional bracket is available for attaching the rotary screen to the separator body during transport and storage.

If the header and feeder house are removed, the hydraulic cylinders must be wired or supported by chains no closer to separator support channel than 14 inches (356 mm). Damage to hoses may result if carried too close.

If the header is left on, raise it to a position that will keep it off the ground but still allow good visibility.

Reduce the spread of noxious weed seeds by thoroughly cleaning the combine before leaving one field and going to the next.

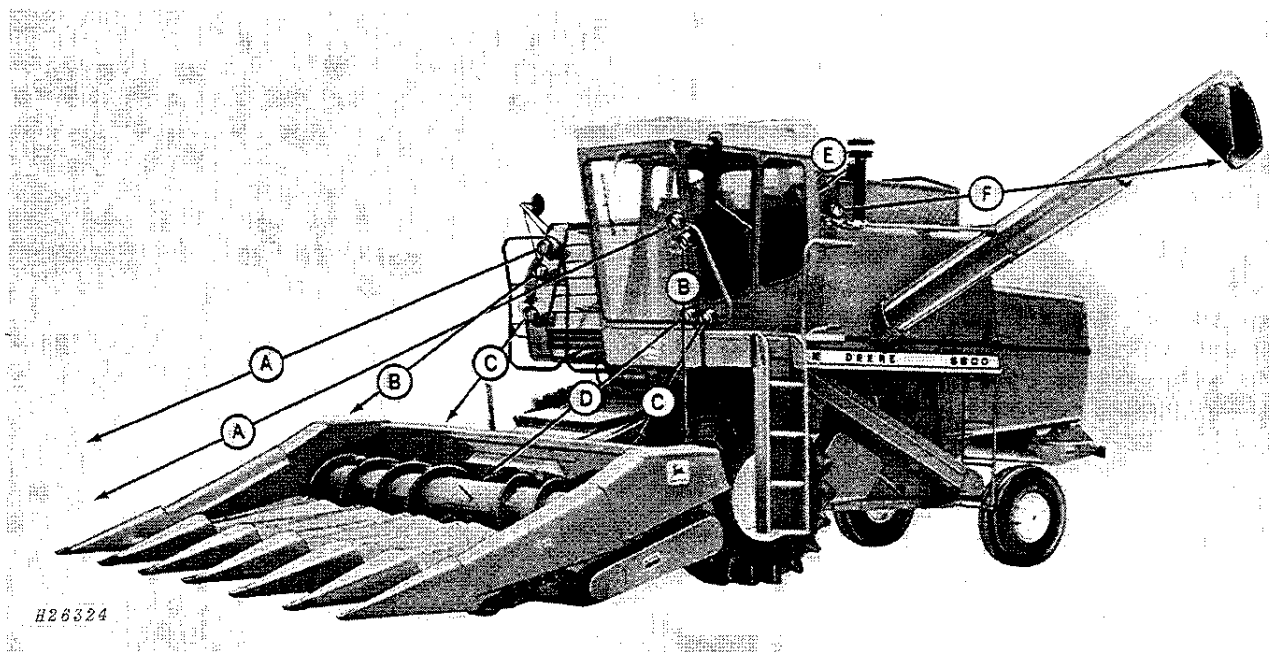
Sweep trash and straw from the outside of combine. Open doors at bottom of elevators, remove grain tank drain hole cover, and run combine until all straw, trash, and grain are removed from inside. Shut off combine engine. Clean out shoe grain supply augers (page 109).

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

**CAUTION:** When driving the combine on a road or highway at night or during the day, use accessory lights provided for adequate warning to the operators of other vehicles.

When transporting the 7700 Combine at highway speeds with the engine inoperative, plug the engine exhaust to prevent damage to the turbocharger.

## FIELD AND HIGHWAY LIGHTING



The combine is equipped with the following nine lights:

Two 80 watt, dual beam lamps for field and road operation "A."

Two 60 watt lamps for illuminating both ends of the header "B."

Two 18 watt lamps for illuminating the stubble areas in front of the combine drive tires "C."

One 18 watt lamp for illuminating the center of the header auger "D."

One 18 watt lamp for illuminating the grain tank "E."

One 35 watt lamp for illuminating the unloading auger "F."

For maximum illumination from all nine lights, be certain lights are positioned correctly as illustrated.

Loosen bolt in light mounting clamp and position light in the desired position.

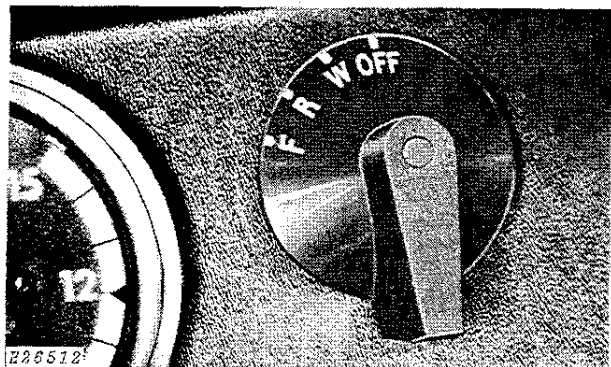
**FIRST DETENT (OFF):** All lights are off.

**SECOND DETENT (W):** Rear warning lights (amber lens) are lit.

**THIRD DETENT (R):** Low beam in both 80 watt lamps, both 60 watt lamps, and the flashing warning lights are lit.

**FOURTH DETENT (F):** Both high and low beams in the 80 watt lamps and all the other lamps are lit.

**TURN SIGNALS:** When operating combine with light switch on W or R detent, the flashers will operate at 60 flashes per minute. When turn signal is set for right-hand turn, the right-hand light will flash 90 flashes per minute while the left-hand light will burn continuously. The opposite will happen for left-hand turn.



**CAUTION:** When transporting on a road or highway, a flashing warning light on each side of the combine and one taillight on left-hand side provide a warning to operators of vehicles approaching from the rear. Be sure they are turned on when transporting.

## COMBINE FUNCTION CONTROLS

### HEADER CONTROLS

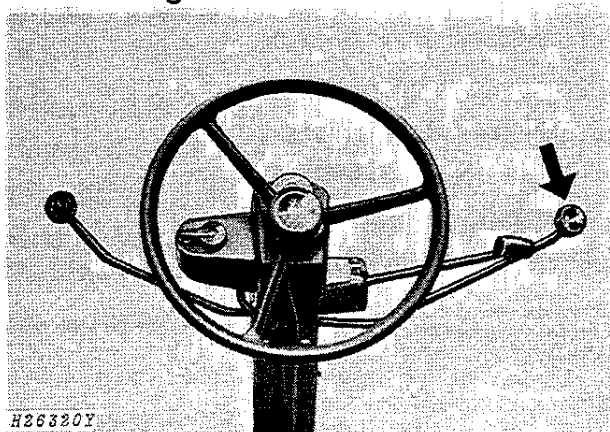
#### Header Electromagnetic Clutch Switch (Optional)



This switch engages or disengages an electromagnetic clutch for the header. Disengaging the clutch permits stopping the header and feeder house while the separator continues to run.

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

#### Header Height Control Lever



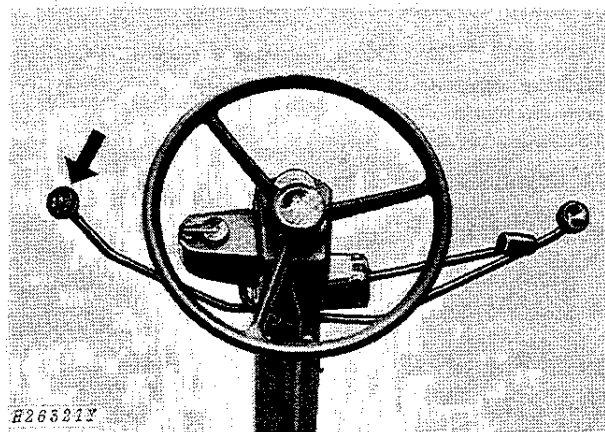
Height of the header can be changed by moving the height control lever located on the steering column. As a safety measure, the height cannot be changed unless the engine is running.

To lower the header, push the lever forward.

To raise the header, pull the lever rearward.

Speed of lowering can be regulated on the hydraulic control valve (page 135).

#### Hydraulic Lift Reel and Optional Variable Speed Feeder House Control Lever



The raising and lowering of the reel and varying the speed of the feeder house, is controlled by a lever located on the steering column.

To lower the reel, push the lever forward.

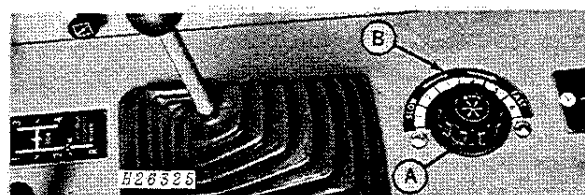
To raise the reel, pull the lever rearward.

When combining with the corn head or row-crop head, the speed of the feeder house and header can be changed by moving the control lever.

To increase speed, push the lever forward.

To decrease speed, pull the lever rearward.

#### Hydrostatic Drive Reel



A—Speed Control Knob

B—Speed Reference Indicator

Reel speed may be varied from 5 to 40 rpm with a pickup reel and from 8 to 64 rpm with a bat reel, by turning the control "A" on the console.

To increase reel speed, turn knob toward "FAST."

To decrease reel speed, turn knob toward "SLOW."

Use the reference indicator "B" as a guide to return to the speed previously found best suited for a particular crop or field condition.



**Suggest:**

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

**Please download this document first, and then click the above link to download the complete manual.**

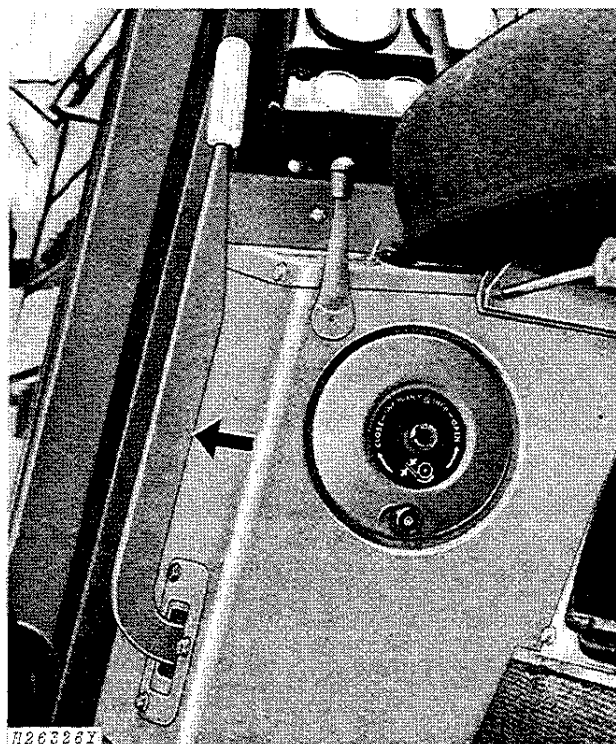
**Thank you so much for reading**

## SEPARATOR CONTROLS

### Separator Control Lever

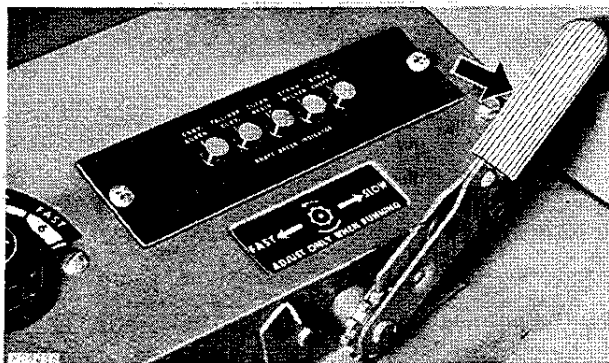
The separator is engaged or disengaged by moving the separator control lever on the operator's platform.

**CAUTION:** Do not engage separator until everyone is standing away from moving parts or belts.



To engage separator, push lever forward; to disengage separator, pull lever rearward.

### Cylinder Speed Control Ratchet



Before changing cylinder speed, place ratchet pawl in the position of ratchet handle movement.

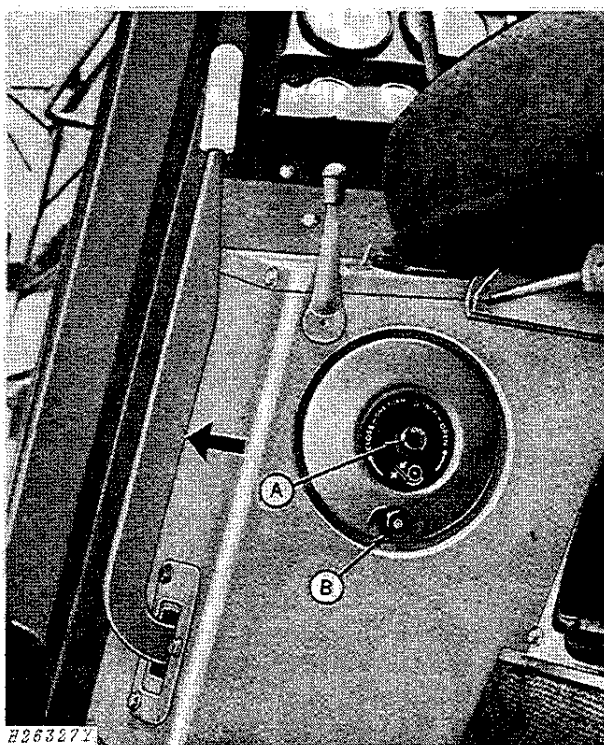
**IMPORTANT:** Adjust cylinder speed only when the separator is engaged and the engine is running at full rpm.

See Suggested Settings Chart, page 41.

To increase speed, move ratchet toward "FAST."

To decrease speed, move ratchet toward "SLOW."

### Concave Opening Control Wheel (Rasp-Bar and Spike-Tooth)



A—Locking Knob

B—Wheel with Knob

Loosen locking knob "A."

To open the concave, turn the wheel "B" toward "OPEN."

To close the concave, turn the wheel toward "CLOSE."

Tighten locking knob.

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