

8440 and 8640 Tractors



JOHN DEERE

OPERATORS MANUAL

8440 and 8640
Tractors

OMRW15912 Issue C1 English

John Deere Tractor Works
OMRW15912 Issue C1

LITHO IN U.S.A.
ENGLISH



IMPORTANT WARRANTY INFORMATION

The warranty on this tractor 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. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.



This safety alert symbol indicates 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.



Worldwide symbols are used to assist identification and operation. In this manual, an identifying symbol is placed by the instructions like the example at left for the symbol on the engine oil pressure gauge. The cylinder block in the symbol represents the engine, the drop signifies oil, and the arrows indicate pressure. Regardless of the language used in a nation, this symbol means engine oil pressure without translation.

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

"Right-hand" and "left-hand" sides of the tractor are determined by facing in the direction of tractor forward travel.

Record your tractor serial numbers on page 129. Provide this information to your dealer when ordering parts.



R 31906

John Deere 8640 Tractor



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Hello dear friend!

Thank you very much for reading.

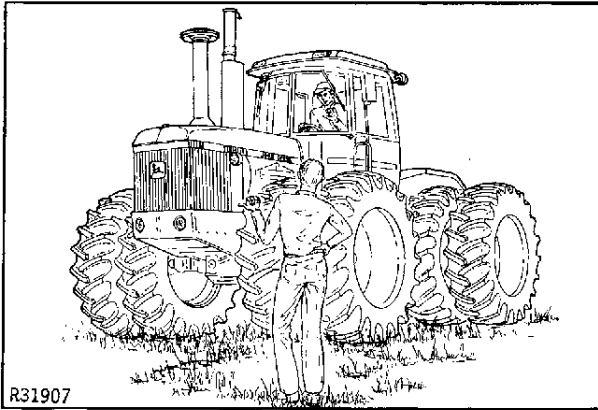
Enter the link into your browser.

The full manual is available for immediate download.

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Safety



Operate Tractor Safely

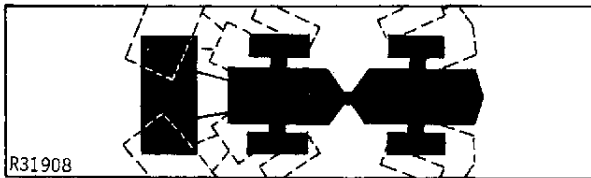
Never allow riders on the tractor.

Slow down for hillsides, rough ground, and sharp turns.

To avoid exhaust gas hazards, never run the engine in a closed building.

Keep all shields in place.

Always place transmission in PARK before dismounting. Leaving transmission in gear with engine stopped will NOT prevent the tractor from moving.



Be sure everyone is clear of tractor and attached equipment before starting engine or moving steering wheel. Tractor and equipment move as shown, even with transmission in PARK. Some steering movement often occurs as engine starts.

Stay Clear of Moving Tractor

Never try to get on or off a moving tractor.

Before dismounting, place the transmission in park and lower implements to the ground. If tractor is to be left unattended, stop the engine and remove the key.

Never attempt to start or operate the tractor except from the operator's station.

Avoid Tip-Overs

Use a seat belt under almost all operating conditions.

Avoid holes, ditches, and obstructions which may cause the tractor to tip, especially on hillsides.

Never drive near the edge of a gully or steep embankment—it might cave in.

Be especially careful when using single wheels. Danger of an overturn increases greatly with narrow tread (80 inches [2.03 m] or less) and high speed.

For hillside operation use only dual wheels - front and rear. Avoid sharp, uphill turns.

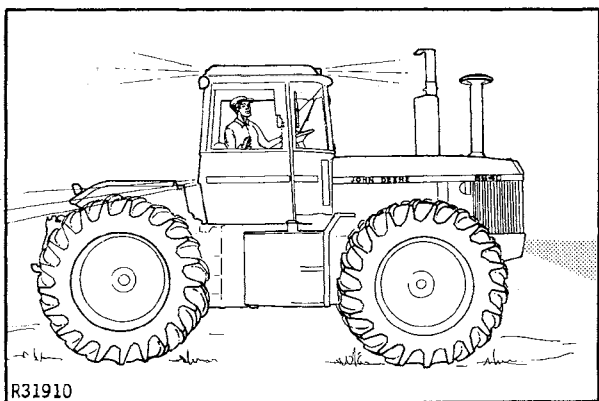
Keep transmission-hydraulic oil level at upper mark on dipstick when operating on hillsides. Low oil level might result in loss of steering and clutch engagement. If this should happen, hold tractor with brakes, shift to PARK, stop engine, and add hydraulic oil to proper level.

Before operating on extremely steep slopes, overfill transmission-hydraulic system by three to five gallons (11 to 19 L). This is particularly important when using large hydraulic cylinders, due to the volume of oil used to extend them.

Never modify structural members of SOUND-GARD® Body by welding, bending, drilling, grinding, or cutting as this might weaken the structure. If any component is damaged, replace it. Do not attempt repairs.

For an emergency exit, SOUND-GARD Body windows can be opened. Remove the quik-lock pins and headed pins from window latches, and push window wide open.





Transport Safely

Add SMV emblem, reflectors, and auxiliary lighting to equipment as required for safety.

Before operating tractor on highway, be sure flashing warning lamps work properly. Adjust rear view mirror, and clean windows and SMV emblem.

Lock drawbar pin in place, and use safety chain for towed equipment.

Turn light switch to "H" position. Never use white lights which are visible from the rear. Always dim head lamps before meeting another vehicle. Keep head lamps properly adjusted.

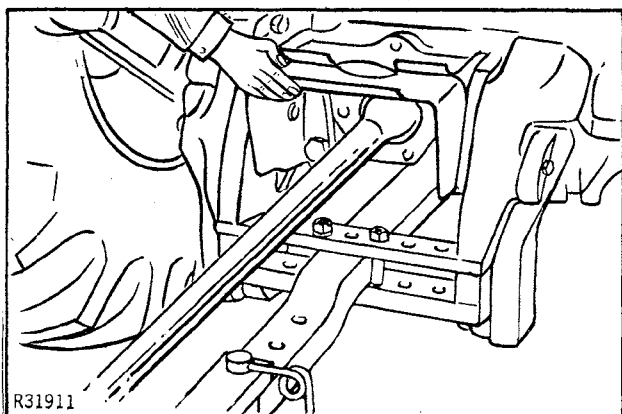
Before descending a steep hill, shift to a low gear to control the tractor with little or no braking. Never coast downhill.

When transporting downhill on icy or graveled grades, be alert for skids which could result in loss of steering control. To decrease chance of skids, reduce speed and be sure tractor is properly ballasted.

A towed load of more than twice the weight of the tractor should have brakes. If it does not, drive slowly and avoid hills. Avoid hard applications of the brakes when pulling heavy loads.

Before towing tractor, see instructions on page 70. Never tow tractor faster than 5 mph (8 km/h) with all wheels on the ground. With rear wheels raised, never tow tractor faster than 10 mph (16 km/h).

Use of radial ply tires require special precautions, see page 66.



Stay Clear of PTO

Stop the engine and be sure the PTO has stopped before:

- Connecting or disconnecting implement drive line
- Making adjustments on the implement
- Cleaning out PTO driven equipment.

PTO master shield should be in place at all times except for special applications as directed in the implement operator's manual.

Operate PTO at recommended speed.

The PTO shaft guard should be in place when the PTO is not being used.

Install lock bars on tractor hinge before operating stationary PTO equipment. Be sure lock bars are removed before driving tractor.

Avoid loose-fitting or dangling clothing.

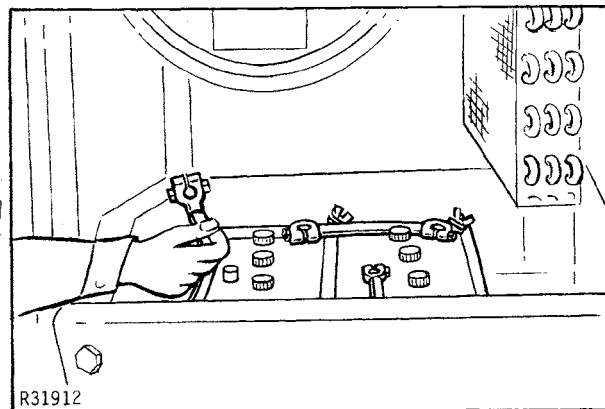
Service Tractor Safely

Do not service the tractor while it is in motion or while the engine is running.

Stay clear of hinge area when engine is running. Stop engine and remove key before working near hinge.

Install lock bars on tractor hinge before performing service work in hinge area. Be sure lock bars are removed before operating tractor.

Disconnect the battery ground cable before working on the electrical system or working in any area where you might accidentally contact electrical components. A short circuit could cause burns, as well as damaging the electrical system.



Avoid Explosions or Fire

Batteries produce explosive gas. Before using booster batteries, read the instructions on page 23.

Before connecting or disconnecting a battery charger, turn the charger off to avoid sparks. See page 108 for instructions.

Be careful with starting fluid or any type of fuel.

Never smoke while handling fuel.

Protect Against Noise

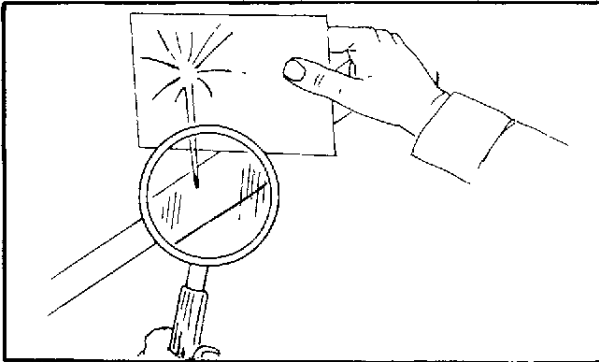
Prolonged exposure to loud noise can cause impairment or loss of hearing.

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



Handle Chemicals Properly

SOUND-GARD Body air filters are not designed to filter out harmful chemicals. When using agricultural chemicals, follow the instructions given in the implement operator's manual and those given by the chemical manufacturer.



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Avoid High-Pressure Fluids

Do not remove the radiator cap when the engine is hot. Shut the engine off and wait until it cools. Then turn the cap to the first stop to relieve pressure before removing it completely.

Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious injury. Before disconnecting lines, be sure to relieve pressure. Before applying pressure, be sure connections are tight and lines, pipes and hoses are not damaged. Use a piece of cardboard or wood, rather than your hands, to search for leaks.

If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

Before disconnecting brake accumulator or brake valve, relieve all pressure from the accumulator. To do so, pump brake pedal with engine stopped, until pedal easily goes all the way down.

The accumulator is charged with dry nitrogen to a pressure of 500 psi (3 450 kPa) (35 bar). If it needs recharging, have the job done only by a qualified service person and only with dry nitrogen.

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 repair service.

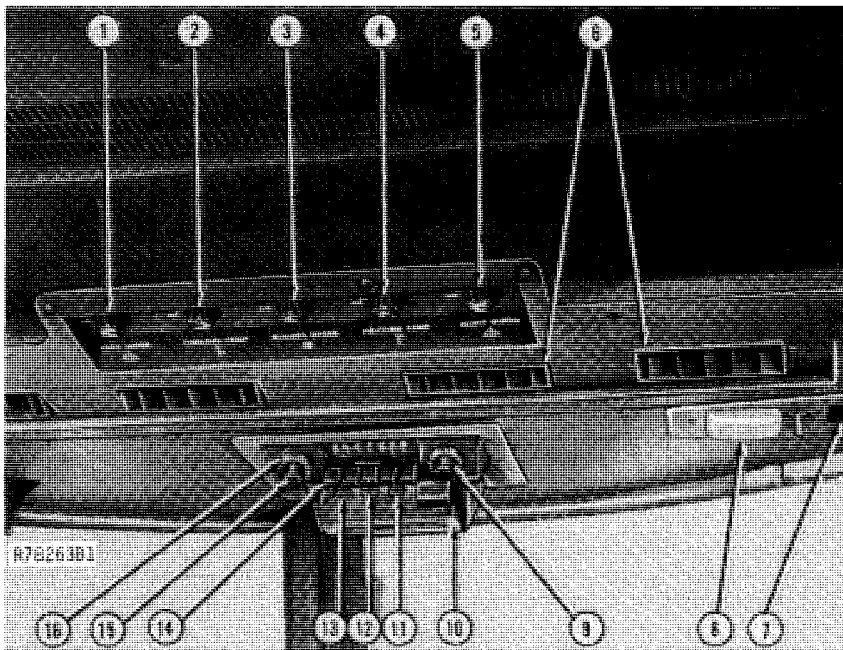
When sealing tire beads on rims, never exceed 35 psi (240 kPa) (2.4 bar) or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

Detailed 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.

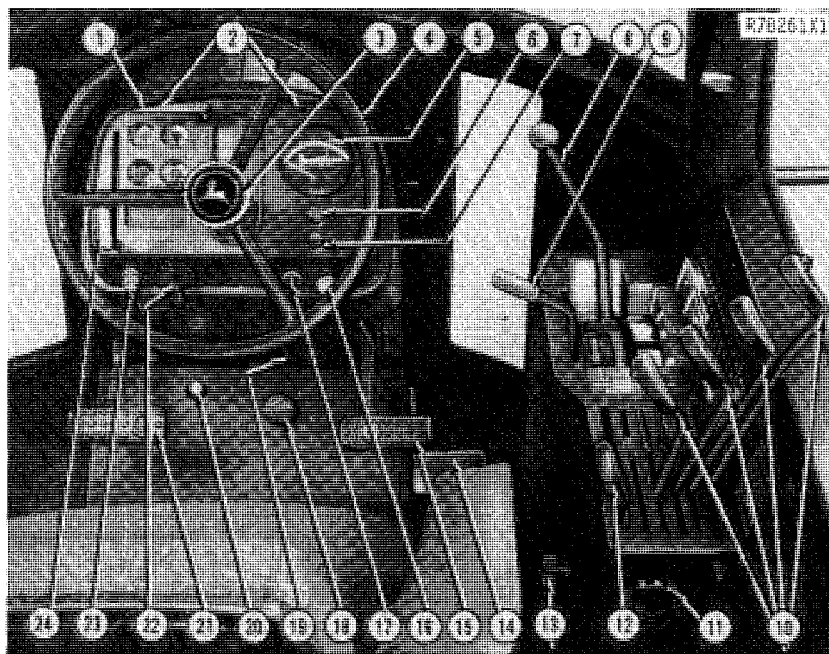


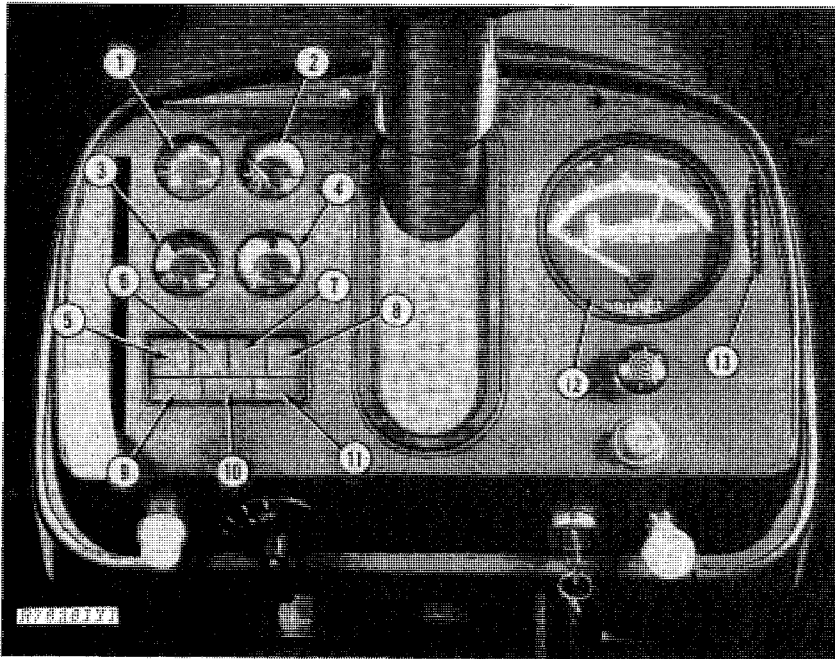
Controls and Instruments

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- 1—Fuel Gauge
- 2—Engine Temperature Gauge
- 3—Engine Oil Pressure Gauge
- 4—Voltmeter
- 5—Clutch System Pressure Indicator
- 6—Clutch Temperature Indicator
- 7—Clutch Lube Pressure Indicator
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- 9—Hydraulic Oil Temperature Indicator
- 10—Air Filter Restriction Indicator
- 11—Clutch Filter Restriction Indicator
- 12—Speed-Hour Meter
- 13—Speed Indicator Wheel

Check Instruments Often

Leave key switch on while operating tractor so instruments will function. Form a habit of checking them often.

Check indicator lamps each time engine is started. All seven should glow when key switch is in start position.

A warning horn accompanies engine oil pressure gauge, engine temperature gauge, and all red indicator lamps. Any time horn sounds, stop tractor immediately and determine the cause.

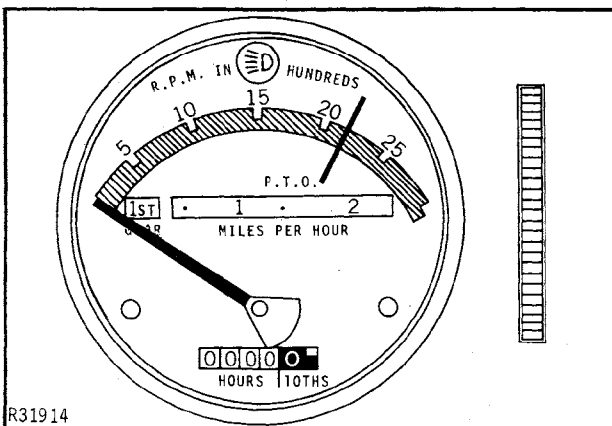
As a test, horn should sound every time key switch is turned on with engine stopped, since engine oil pressure is zero.

IMPORTANT: See your John Deere dealer if any instrument malfunctions. Operate tractor only if all instruments work properly.

Speed-Hour Meter

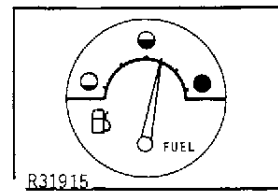
Keep engine speed between 1500 and 2100 rpm for most work. Align needle with P.T.O. mark (2100 rpm) for standard P.T.O. speed.

Turn speed indicator wheel to show correct gear, so travel speed is also indicated.



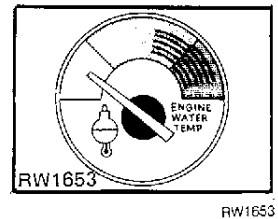
Fuel Gauge

Stop to refuel before fuel gauge reaches empty mark. Do not allow a diesel engine to run out of fuel.



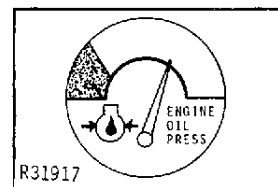
Engine Temperature Gauge

Green band represents normal operating temperature. Green striped area represents maximum safe temperature. If gauge reaches red striped area, check grille screens and radiator for plugging. Reduce load or shift to a lower gear. If it reaches solid red area (horn will sound), stop tractor and determine the cause. See page 103.



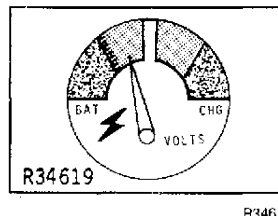
Engine Oil Pressure Gauge

If engine oil pressure gauge ever drops into the red band (horn will sound), stop the engine immediately and determine the cause. If low oil level is not the cause, see your John Deere dealer. NEVER operate an engine without sufficient oil pressure—not even for a minute.



Voltmeter

With key switch on and engine stopped, voltmeter should reach left-hand green band. If it does not, batteries are undercharged. With engine running, it should rise to right-hand green band. If needle stays in either amber band, see your John Deere dealer.

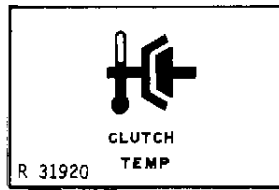


Clutch System Pressure Indicator

If indicator glows (horn will sound), pressure is too low to prevent clutch slippage under load. Indicator has a three-second delay to prevent activation during normal starts and stops and an override to prevent activation when clutch is disengaged.

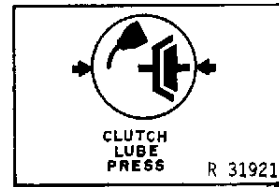
1. If activation is due to slipping clutch longer than three seconds, avoid such slow engagement. Never 'ride' clutch by resting your foot on pedal.
2. If activation occurs with clutch fully engaged, check transmission-hydraulic oil level as instructed on page 85.
3. If oil level is correct and no other warning is activated (oil temperature or clutch filter), see your John Deere dealer. Do not operate tractor.





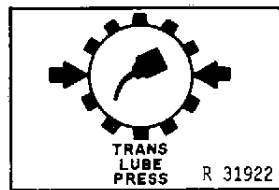
Clutch Oil Temperature Indicator

If indicator glows (horn will sound), oil coming from clutch is too hot. This can be caused by slipping the clutch excessively. If this warning and no other is activated, see your John Deere dealer. Do not operate tractor.



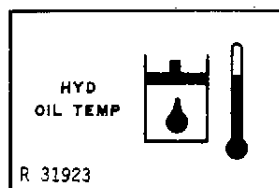
Clutch Lube Pressure Indicator

If indicator glows (horn will sound), insufficient lube oil is reaching clutch housing. A time delay prevents activation during momentary pressure drops, and an override prevents activation due to cold oil. If this warning and no other is activated, see your John Deere dealer. Do not operate tractor.



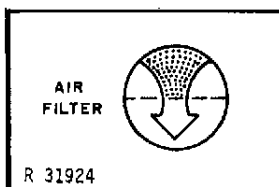
Transmission Lube Pressure Indicator

If indicator glows (horn will sound), insufficient lube oil is reaching transmission gears. A time delay prevents activation due to momentary pressure drops, and an override prevents activation when clutch is disengaged. Check transmission-hydraulic oil level as instructed on page 85. If oil level is correct, see your John Deere dealer. Do not operate tractor.



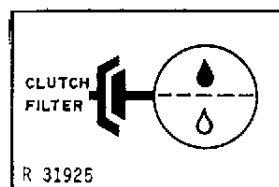
Hydraulic Oil Temperature Indicator

If indicator glows (horn will sound), oil is too hot. Check grille screens and oil cooler-condenser for plugging as instructed on page 103. If this is not cause of overheating, see your John Deere dealer. Wait until oil cools before operating tractor.



Air Filter Restriction Indicator

If indicator glows, return to service area and service air cleaner as instructed on page 96. Indicator lamp is amber instead of red, and horn will not sound.



Clutch Filter Restriction Indicator

If indicator glows, return to service area and replace clutch filter element as instructed on page 93. An override prevents activation due to cold oil. Indicator lamp is amber instead of red, and horn will not sound.



Operator's Station

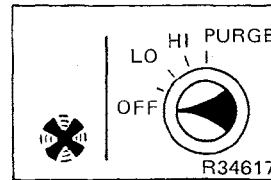
SOUND-GARD BODY CONTROLS

CAUTION: The SOUND-GARD Body air filters are not designed to filter out harmful chemicals. When using agricultural chemicals, follow the instructions in the implement operator's manual and those given by the chemical manufacturer.

Blower

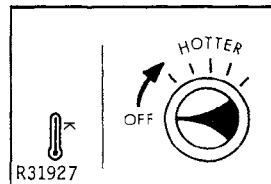
To keep the air clean, run the blower continuously when operating the tractor. Keep doors and windows closed.

"Purge" position provides maximum air flow.



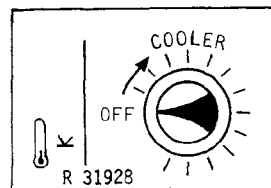
Heater

Control temperature with heater control and blower switch.



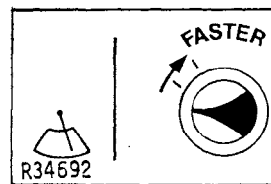
Air Conditioning

Blower switch must be turned on before the air conditioning system will operate. Regulate temperature with air conditioning control and blower speed.

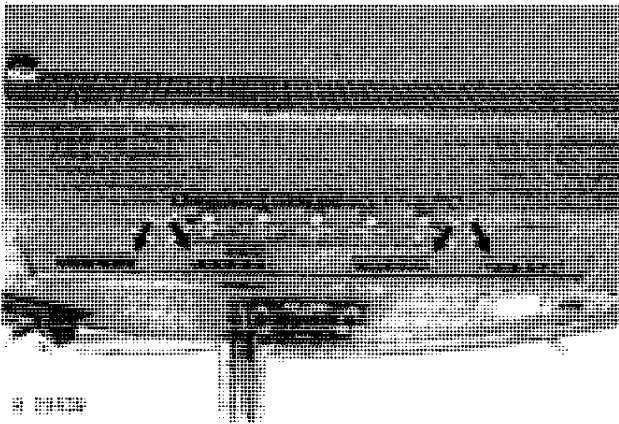


Wipers

The left-hand and right-hand windshield wipers have separate switches.

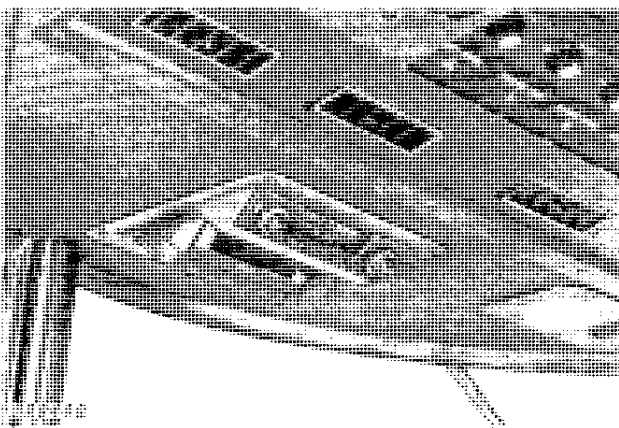


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Louvered Air Outlets

Adjust louvers to direct air where needed, such as for defogging windows.



Radio (optional)

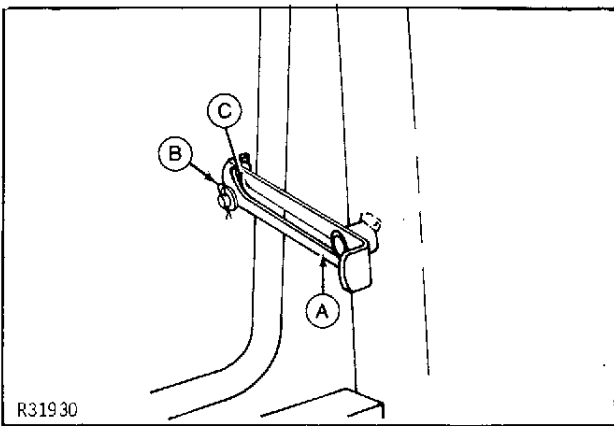
To adjust push-button tuning, pull button out to the stop. Tune to desired station, then push button all the way in.

A CB radio mounting kit is available for tractors not equipped with tape player. See your John Deere dealer.

8-Track Tape Player (optional)

To start tape player, insert a tape cartridge label side up. To stop player, remove the cartridge.

To avoid damage to player, keep tapes free of dust.

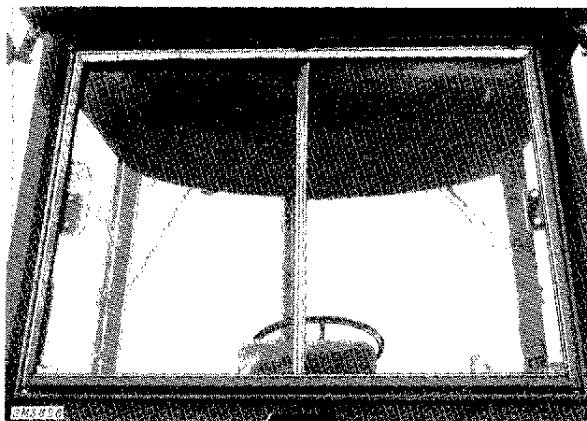


Windows

To open a window, lift and push BOTH sliding latches (A) out to the notched detents.

For an emergency exit, remove quik-lock pins (B) and headed pins (C). Swing windows out as far as necessary.

- A—Latches
- B—Quik-Lock Pins
- C—Headed Pins



Sliding Rear Window (Optional)

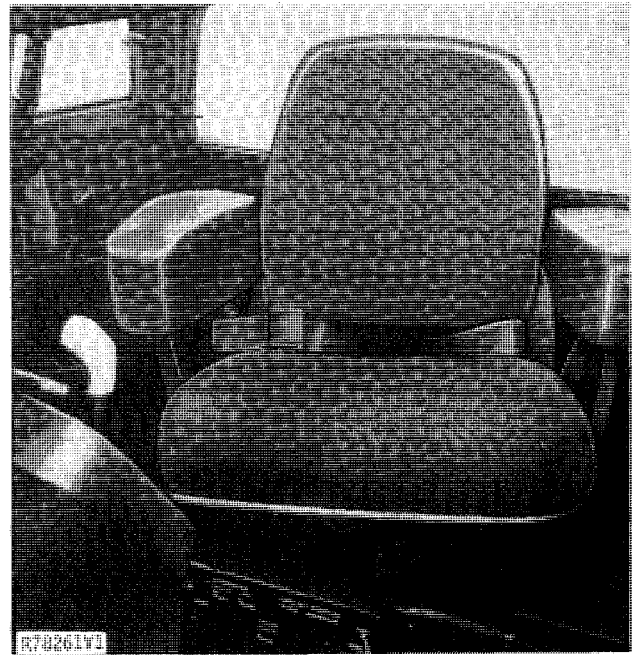
For jobs requiring that you open rear window, a sliding rear window is available from your John Deere dealer. Release latch and slide either half open. Keep window closed whenever possible to reduce noise and dust.

Other options available from your dealer include a windshield washer, a rear window wiper, and sun visors.

HYDRACUSHIONED™ SEAT

Clean seat frequently with a soft brush or vacuum cleaner. Use solvent-type spot remover to clean oil or grease stains.

IMPORTANT: Keep all loose objects from under seat. Seat will settle to bottom position after engine is stopped. It will rise to preset height after engine is started.



Height Adjustment

With engine running, raise or lower lever (A). Seat will maintain same height regardless of operator weight.

Fore-And-Aft Adjustment

Push lever (B) to left and slide seat forward or back.

Ride Adjustment

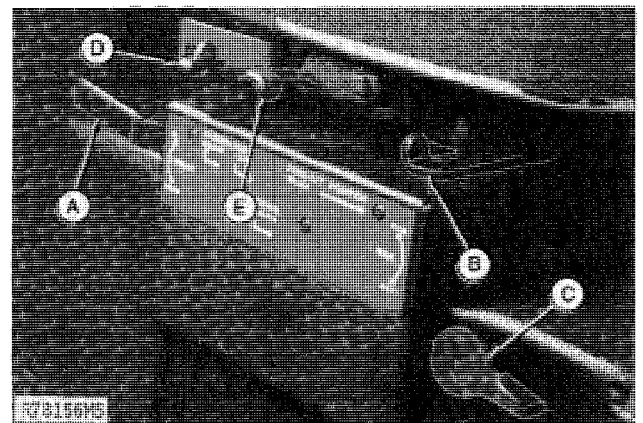
Move lever (C) up for a firmer ride or down for a softer ride.

Attenuator

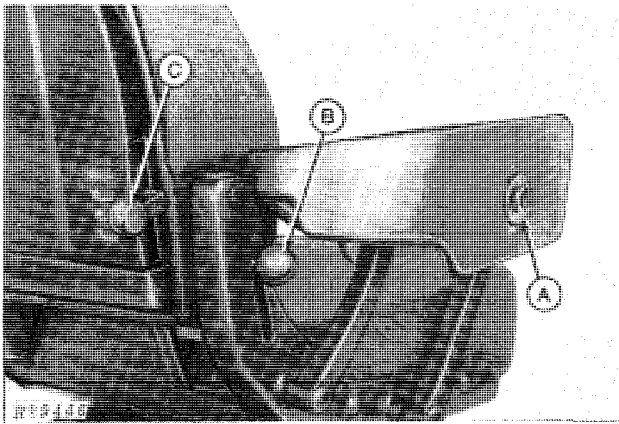
Seat will move side to side slightly to cushion the ride. If you want to prevent this motion, hook "attenuator" lever (D) in upper right position. Motion may be undesirable when working in close quarters, such as hooking up an implement or when transporting on road.

Swivel

To lock seat in any of five positions, hook lever in upper right position. To leave seat free to swivel, move lever to lower left.



- A—Height Adjustment
- B—Fore-And-Aft Adjustment
- C—Ride Adjustment
- D—Attenuator
- E—Swivel Release



Adjusting Armrest Height

Press button (A) and move armrest to desired position. Do not sit on armrest except in its fully lowered position.

Adjusting Backrest Angle

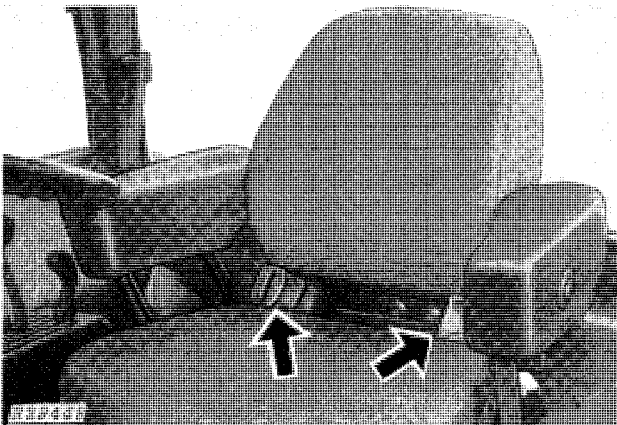
To change backrest angle, raise or lower control (B).

Adjusting Lumbar Support

For more pressure against your lower back, push control (C) down.

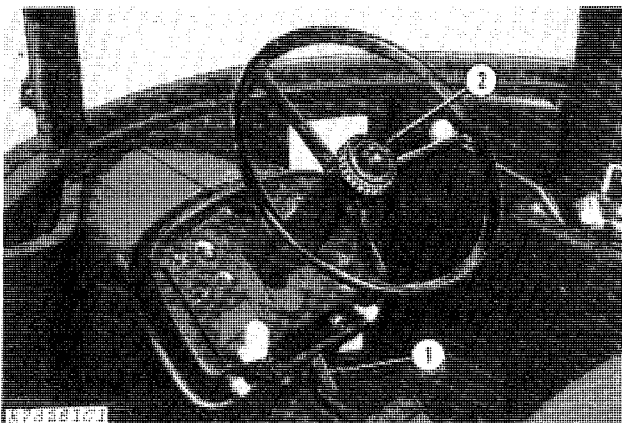
- A—Armrest Release Button
- B—Backrest Angle Control
- C—Lumbar Support Control

SEAT BELT



⚠ CAUTION: Use seat belt under almost all operating conditions.

STEERING WHEEL



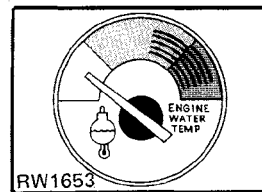
1. Lift tilt release lever and move steering column to desired angle.
2. Loosen steering wheel hub and extend or retract steering wheel as desired. Tighten hub.



Engine Break-In

The engine is ready for normal operation. However, you should be extra cautious during the first 100 hours.

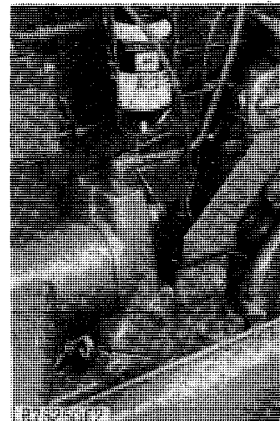
1. Avoid unnecessary engine idling. If tractor will be idle longer than five minutes, stop the engine.
2. Watch coolant temperature gauge closely. If temperature rises to red striped zone, shift to a lower gear or reduce load. Unless temperature quickly drops, stop the engine and determine the cause.



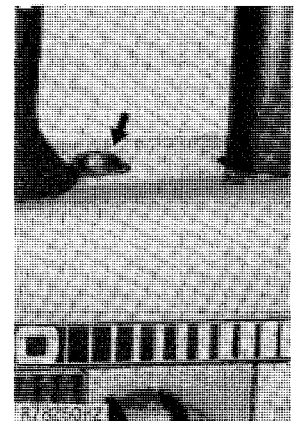
RW1653

3. Check engine oil and coolant levels more frequently. Watch for any signs of leaks.

Coolant level should be above the baffle located in the radiator top tank by 1-1/2 inches (38 mm) for 8440 Tractor or by 1/2 inch (13 mm) for 8640 Tractor.



Engine Oil Dipstick



Radiator Cap

4. Follow break-in lubrication instructions on page 81.
5. Until you become thoroughly familiar with the sound and feel of your new tractor, stay extra attentive and alert.



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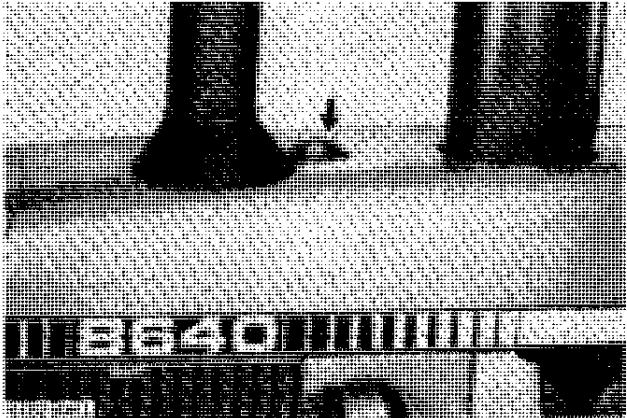
Prestarting Checks



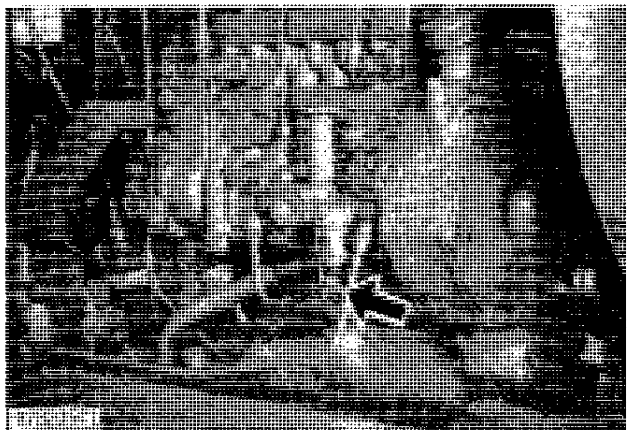
Do the following before starting the engine for the first time each day.

1. Check the engine oil level. Do not operate engine when oil level is below the low mark on dipstick. See page 78 for oil specifications.

A—Engine Oil Dipstick
B—Crankcase Filler Cap



2. Check the coolant level. It should be above baffle in radiator top tank by 1-1/2 inches (38 mm) for 8440 Tractor or by 1/2 inch (13 mm) for 8640 Tractor.



3. Check fuel pump sediment bowl. If water or sediment is present, remove it. See page 102.

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