2040 AND 2240 TRACTORS

JOHN DEERE

OPERATORS MANUAL

2040 AND 2240
TRACTORS

OMR71859 F0 English

JOHN DEERE WATERLOO WORKS
OMR71859 F0

LITHO IN THE U.S.A.
ENGLISH

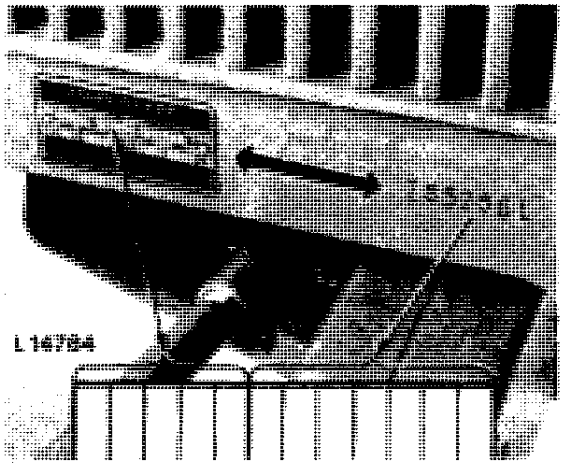
To the Purchaser

Your new John Deere Tractor meets the exacting requirements of modern farming.

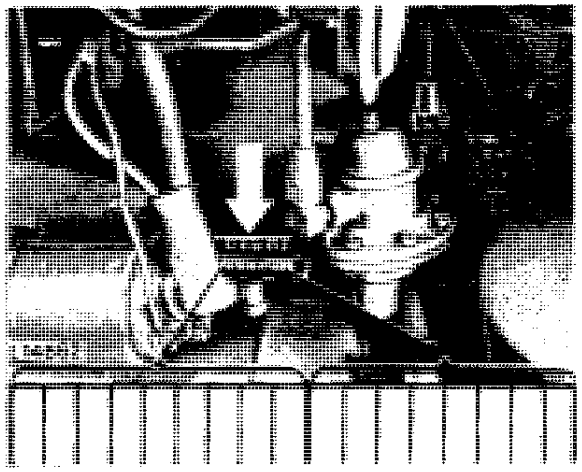
Operating ease and comfort, hydraulic power when and where you need it, the ability to match engine power and transmission speed to any job, outstanding economy and dependability, modern styling, and simplicity of lubrication and service are all special features of this tractor.

At the time the tractor was delivered, the John Deere dealer discussed with you its safe operation and proper care. However, before putting the tractor to work, read this manual.

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.



Record Tractor Serial Number Here



Record Engine Serial Number Here

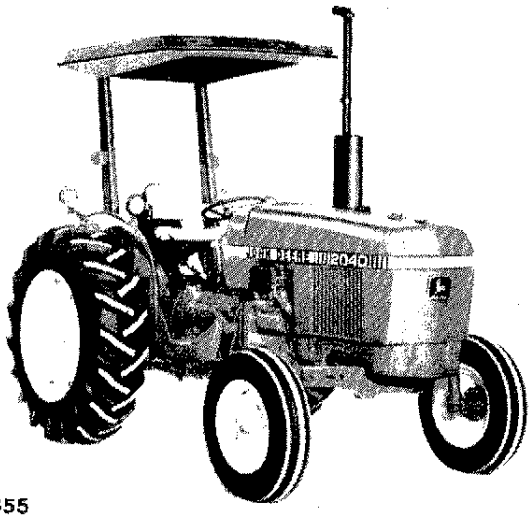
For ready reference, locate and record these serial numbers in the spaces provided below each illustration. Your John Deere dealer requires this information for warranty claims* and to give you prompt, efficient service when you order replacement parts**

* *It is extremely important to quote complete serial number and all letters of both machine and engine on all warranty claims or correspondence pertaining to this machine. This point cannot be overemphasized.*

** *When ordering new parts, state only number group – without letters – of machine and engine serial numbers.*

All information, illustrations, and specifications contained in this operator's manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

Contents



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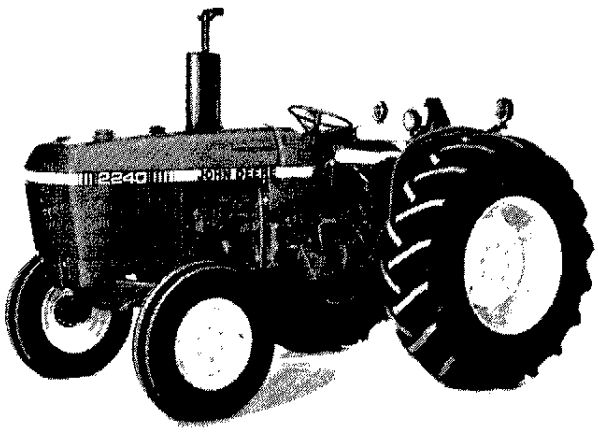
2040 Tractor



L16856

2240 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

Power take-off guards, shields, and other safety features are built into the tractor whenever possible. However, investigation of thousands of accidents shows that careless use of machinery causes a high percentage of accidents. You can avoid many accidents by observing the rules for safety given here. Study these rules carefully and insist that they be followed by those working with you and for you.

Only one person — the operator — should be permitted on the tractor when it is in operation. Never allow a person to ride on the drawbar.

Before starting engine make sure rockshaft control lever is in forward (equipment lowered) position.

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

Never operate the tractor engine in a closed building.

Since loose clothing might catch in moving parts, always keep sleeves, jackets, or other clothing relatively tight and belted.

Provide a first-aid kit for use in case of accident.

It is a good practice to have a fire extinguisher nearby. Be sure that the extinguisher is properly maintained and be familiar with its proper use.

A protective ROLL-GARD® with seat belt is available for your tractor. A canopy that fits on top of the ROLL-GARD is also available.

Under almost all operating conditions:

1. The use of a seat belt with optional JOHN DEERE ROLL-GARD is recommended.
2. Its use without roll-over protective equipment is not recommended.

Under no circumstances modify structural members of roll-gard by welding on additional parts or by drilling any holes.

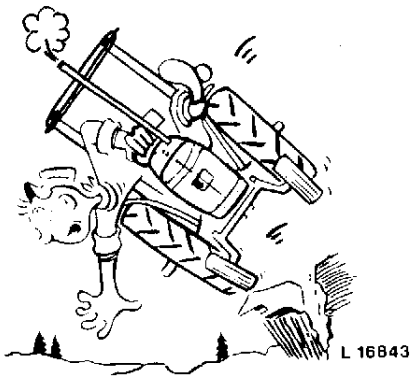
If ROLL-GARD protective equipment is loosened or removed for any reason, make certain all parts are reinstalled correctly. Tighten mounting bolts to proper torque, see page 93.

When driving out of a ditch, gully, or up a steep hillside, engage the clutch slowly. Be prepared to disengage the clutch promptly should the front wheels rise off the ground. Observe the same precautions if the rear wheels become mired in soft ground or drop in a hole. Back the tractor out of these situations.

Do not drive near the edge of a ditch or gully.

The rate of tractor travel on hillsides and curves should always be such that there is no danger from tipping.

Be careful to prevent the tractor from tipping sideways if it strikes a hole, ditch, or other irregularity, especially when operating on hillsides.


L 16843

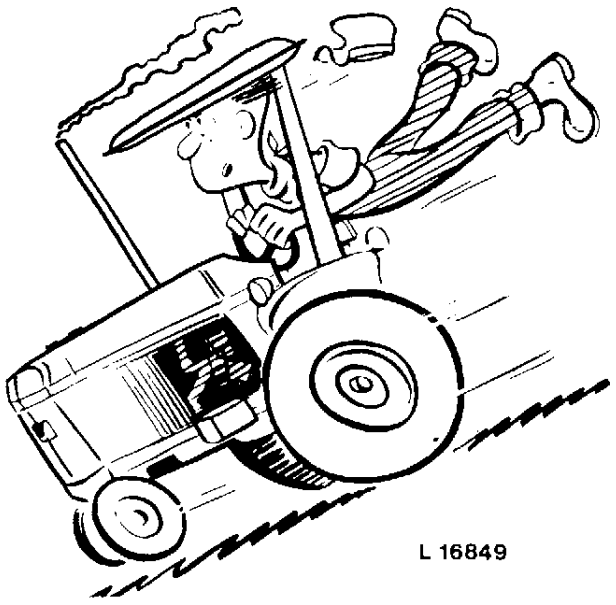
Keep a firm grip on the steering wheel at all times when speed is increased.

Reduce speed before turning quickly or applying brakes. Couple the brake pedals together when traveling at high speeds. Brake both wheels simultaneously when making an emergency stop. Always drive slowly over rough ground. Drive at speeds slow enough to insure your safety.

Always keep the tractor in gear when going down steep hills or grades.

When pulling heavy towed loads at road speeds, use extreme caution and avoid hard applications of the tractor brakes at high speeds. When descending steep grades, select a sufficiently low gear to maintain control with minimum braking.

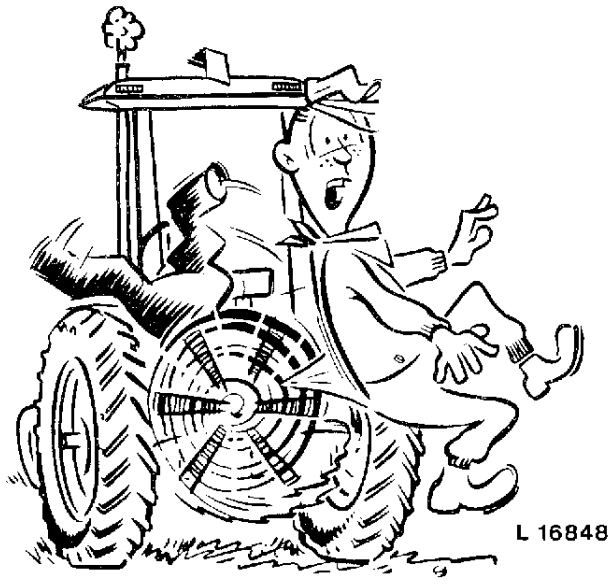
Towed loads that weigh more than twice the weight of the tractor should have brakes. If not, reduce speed and avoid inclines.


L 16849

When hitching drawn equipment to the drawbar, back the tractor past the clevis. Then move forward so that, in making the connection, the tractor will be moving away from the equipment.

When hitching a heavy towed load to the tractor, always hitch to the drawbar. When using a chain, attach it to the drawbar and be sure to take up the slack in the chain slowly.

Front ballast may be required for stability and steering control when implement is attached.



L 16848

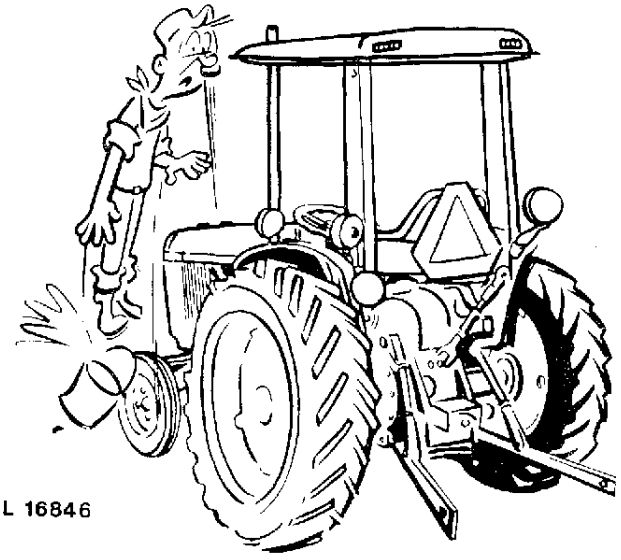
All power equipment should be operated only by those who are responsible and delegated to do so.

If a PTO-driven implement is attached, make sure powershaft shields are installed. After having disengaged the PTO, driven equipment does not stop rotating immediately.

Disengage PTO, place transmission in neutral, set hand brake, and shut off tractor engine before working on equipment.

Do not leave an implement in the raised position when it is not in use. Always lower implement to the ground when tractor is parked.

Whenever the tractor is stopped, set handbrake before dismounting.



L 16846

Add coolant to the radiator only when the engine is stopped or slowly idling. To avoid being scalded when the pressure-type filler cap is being removed, turn the cap slightly to the stop to relieve pressure before removing the cap.

Do not oil, grease, or adjust the tractor while it is in motion or while the engine is running.

Do not attempt to make adjustments or repairs while tractor is running unless specifically recommended.

When servicing front-wheel drive equipped tractor with rear wheels supported off ground and engine running, always support front wheels in a similar manner. Loss of electrical power or transmission-hydraulic system pressure will engage front driving wheels, pulling rear wheels off support if front wheels are not raised.

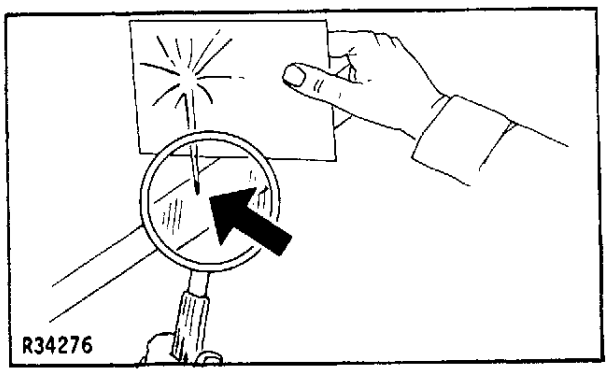
When transporting or driving the tractor on a road or highway at night or during the day, use accessory lights and devices for adequate warning to the operators of other vehicles. In this regard check local governmental regulations. Various safety lights and devices are available from your John Deere dealer.

Before using booster batteries, read instructions on page 10. To avoid sparks if a battery needs recharging, turn battery charger off before making connections or disconnections.

Before making adjustments on engine or electrical system, disconnect battery ground cable from both batteries. This prevents sparks which create a dangerous fire and explosion hazard and may cause damage or personal injury.

Use caution in handling any type of tractor fuel. Never refuel the tractor when the engine is hot or running. Do not smoke while filling the fuel tank or servicing the fuel system.

Escaping hydraulic oil or diesel fuel 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 the 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.



Pin Hole Leak

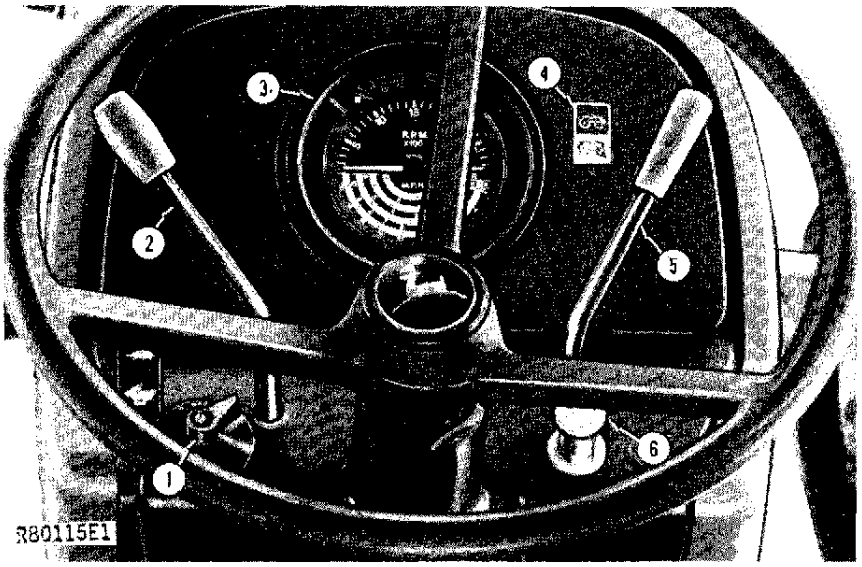
If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

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

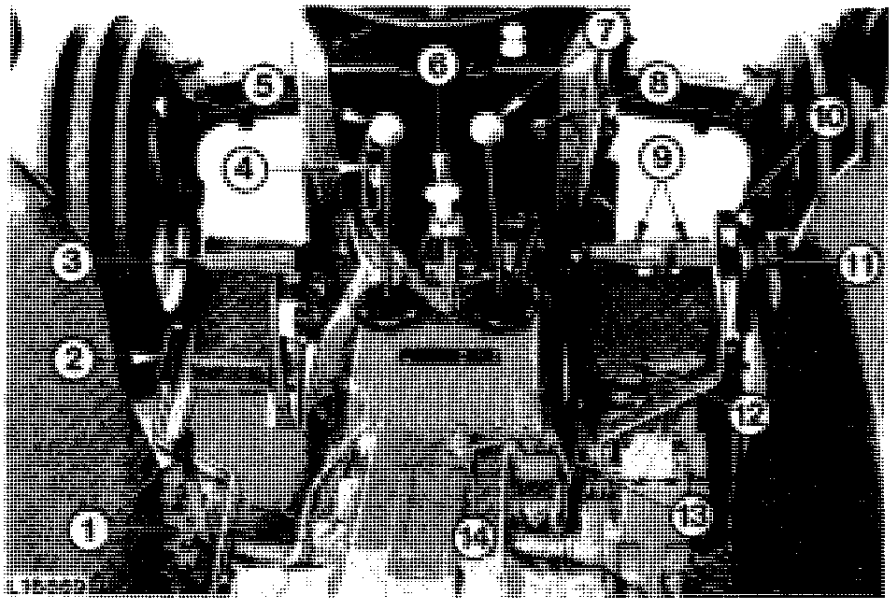
Detailed tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, which is available from your John Deere dealer.

Controls and Instruments

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



1—Light Switch
2—Hi-Lo or Reverser Lever
3—Instrument Cluster
4—Front-Wheel Drive Switch
5—Hand Throttle
6—Engine Shut-Off Knob



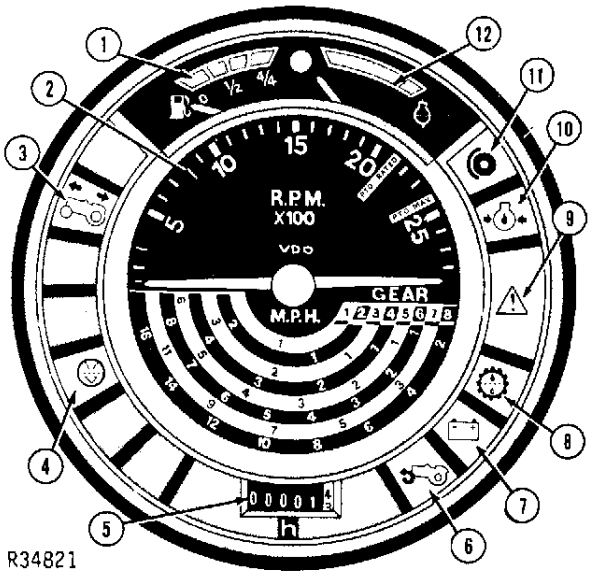
1—Differential Lock (Lever and Pedal)
2—Handbrake Lever
3—Clutch Pedal
4—Starting Fluid Adapter
5—Range Shift Lever
6—PTO Control Lever
7—Gear Shift Lever
8—Starter Switch
9—Brake Pedals
10—Selective Control Valve Lever
11—Rockshaft Control Lever
12—Foot Throttle
13—Rockshaft Selector Lever
14—Rate-of-Drop Lever

INSTRUMENT CLUSTER

Air cleaner, alternator, engine oil pressure and transmission oil pressure* indicator lamps should glow as soon as main switch key is turned on. If this is not the case, a burnt-out bulb or blown fuse may be the cause. Replace defective bulb or blown fuse.

Indicator lamps should go out as soon as engine is running.

*On tractors with Hi-Lo transmission: Transmission oil pressure indicator lamp glows only when oil level is low or filter clogged.



1 — Fuel gauge shows amount of fuel in tank, from "full" (4/4) to "empty" (0). Never run fuel tank completely dry, otherwise you will have to bleed the fuel system.

2 — Engine and tractor speed gauge shows engine speed and tractor speed for the gear engaged.

3 — Whenever warning lamps are on, warning lamp indicator will blink.

4 — If air cleaner indicator lamp glows with engine running, the air cleaner element must be cleaned or replaced.

5 — Hour meter shows the number of engine operation hours in full and tenths of hours. Hour meter facilitates close observation of the proper service intervals.

6 — Front wheel drive indicator lamp glows when front wheel drive is engaged.

7 — If alternator indicator lamp glows with engine running, check for loose alternator connections, condition and tension of V-belt or defective alternator or regulator. If necessary have electrical system checked by your John Deere dealer.

8 — If transmission oil pressure indicator lamp glows during tractor operation, stop tractor and check transmission/hydraulic oil level. Should indicator lamp glow and oil level is correct, then oil filter may be clogged. Replace filter. (Air cleaner indicator (4) will glow when this indicator comes on.)

9 — Warning lamp blinks when indicator lamp 7, 8, 10 or 11 glows.

10 — If engine oil pressure indicator lamp glows with engine running, shut-off engine and check oil level.

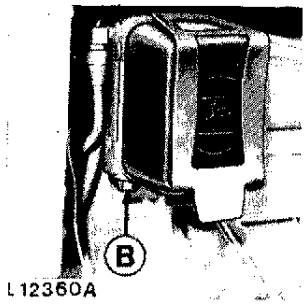
11 — The handbrake indicator lamp glows when handbrake is applied and main switch is turned on. Handbrake warning horn will sound if handbrake is set, tractor is placed in gear and clutch is released.

12 — Should the coolant gauge needle move into red zone, engine is overheating. Immediately reduce load or shift to a lower gear. Should needle remain in red zone, shut-off engine and determine cause of overheating.

Operation

IMPORTANT: If the engine is to be run for a short time without battery (using a slave battery for starting). Always leave the key switch on until engine has been stopped by means of the engine shut-off knob. Do not raise engine speed above 1000 rpm. Also, use additional current (lights) while engine is running. Insulate battery end of disconnected starter cable properly to avoid damage to both alternator and regulator.

PRE-OPERATION CHECKS



Oil Level in Engine Crankcase

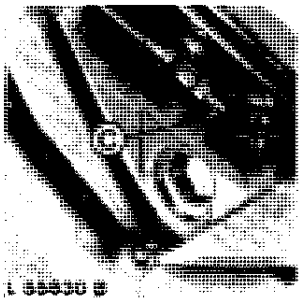
Be sure oil level is between two marks on dipstick. Add oil as necessary. See page 59.

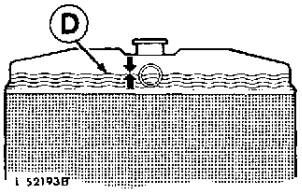
A—Dipstick

Fuel Filter

Drain all water and sediment deposits from filter.

B—Drain Plug





Fuel Shut-Off Valve

Make sure fuel shut-off valve located under fuel tank is fully open.

C—Fuel Shut-Off Valve

Radiator Coolant Level

Coolant should be maintained at a level midway between radiator core and filler neck.

D—Coolant Level

STARTING THE ENGINE

CAUTION: Before starting engine, make sure there is plenty of ventilation. Never operate engine in a closed building.

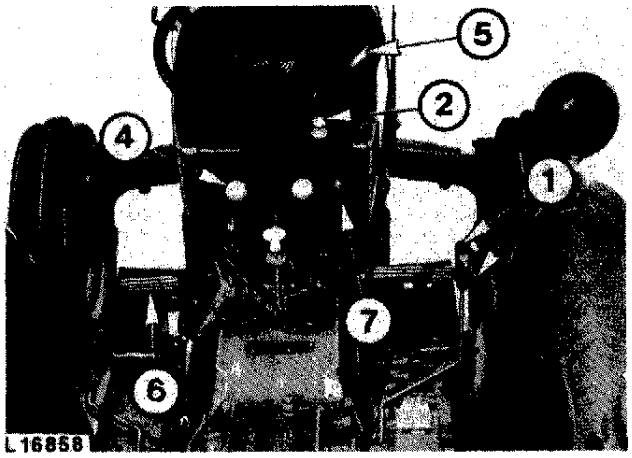
1. Rockshaft control lever in "equipment - lowered" position and selective control valve lever in "neutral".
2. Push engine shut-off knob all the way in.
3. Disengage PTO (continuous-running only).
4. Place range shift lever in neutral position.
5. Move hand throttle approximately 1/4 of its travel to the rear.
6. Depress clutch pedal.
7. Turn starter key clockwise to last position. Keep key engaged until engine starts. As soon as engine starts release starter key.

IMPORTANT: If engine does not start within 20 seconds, release starter key and wait at least one minute before trying again.

8. Run engine for one or two minutes, with temperature below 32°F (0°C) for two to four minutes, with hand throttle set approximately 1/4 of it's travel to the rear.

IMPORTANT: Do not attempt to start a tractor with reverser by towing. Doing so may damage the reverser clutches in a very short distance.

Tractors without reverser may be started by towing or pushing. Tow tractor for starting in 6th, 7th, or 8th gear only. Never tow at a speed greater than normal for gear in which tractor is being towed.



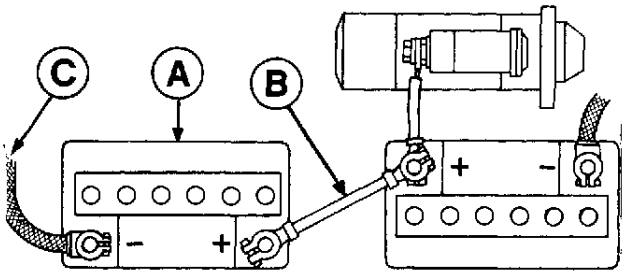
COLD WEATHER STARTING AIDS

To assist in cold weather starting, several aids are available. These aids are effective at low temperatures only when engine is otherwise operating satisfactorily. They will not correct such deficiencies as low battery charge, crankcase oil of too heavy viscosity, or high electrical resistance, any of which may prevent the engine from starting.

Booster Batteries

Starting engine in cold weather can be made easier by connecting an additional 12-volt battery in parallel with the 12-volt battery (or batteries) on the tractor.

CAUTION: Gas given off by batteries is explosive. To avoid injury or battery damage, avoid sparks near the batteries.



L 64703 B

A—Booster Battery
B—Connect Both Positive Terminals
C—Connect Negative Terminal to Ground

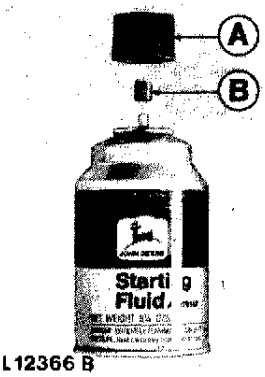
Use jumper cables to connect positive (+) terminal of booster battery to positive (+) terminal of tractor batteries and negative (−) terminal of booster battery to a good ground on tractor frame away from tractor battery. Connect jumper cable to tractor battery first. See your John Deere dealer for booster batteries.

IMPORTANT: The batteries on your tractor are NEGATIVE grounded only. Reversed polarity in battery or alternator connections will result in damage to electrical system.

Diesel Starting Fluid

Your tractor is equipped with a starting fluid adapter. Use it to inject atomized starting fluid into the engine air intake system when starting the engine at temperatures below 32°F (0°C).

Prepare starting fluid can by removing protective cap (A) and spray button (B). Remove cap (C) from adapter on tractor.



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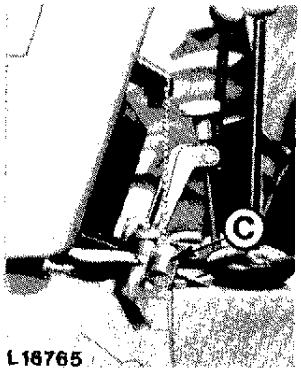

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A—Protective Cap
B—Spray Button
C—Adapter Cap

IMPORTANT: To avoid damage, turn engine with starter one or two revolutions before injecting starting fluid.

Inject starting fluid only while engine is turning. Inject starting fluid intermittently, not continuously.

Position can onto adapter and inject fluid by pushing up on can for a short period.

Relax pressure on can between "shots" of fluid. Stop injecting fluid as soon as engine starts. If engine begins to die during first few minutes of operation, inject another "shot" of fluid. When engine is running smoothly, remove can from adapter and replace safety cap on can. Be sure to put cap back on adapter when not in use. This prevents dust from being drawn into the engine.

Store starting fluid in a cool, dry, and protected area to prevent accidental discharge. Keep starting fluid away from extreme heat.

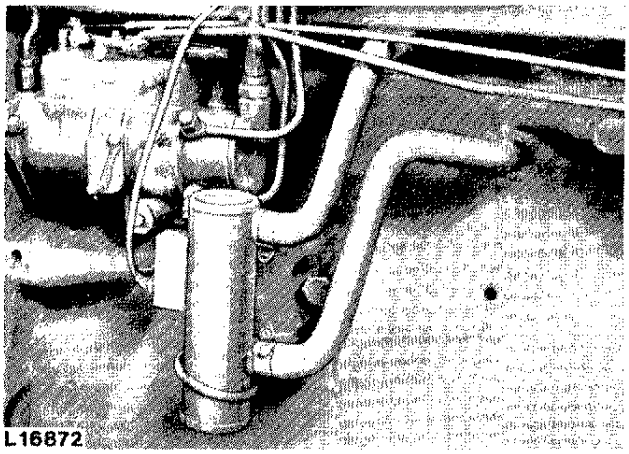
L16766

CAUTION: 1. Ether starting fluid is highly flammable. Do not use near fire, sparks, or flames. Read the cautionary information on the container.

2. Before discarding used starting fluid containers, empty them completely in a well ventilated area, at a good distance from sparks or open fire.

Engine Coolant Heater

A 1000-watt, 115-volt electrical coolant heater can be installed on the engine. Heater can be plugged into any 115-volt electrical source.


L16872

CAUTION: To avoid shock or hazardous operation, always use three wire heavy-duty electrical cord equipped with 3 wire connectors. If a 2 to 3 contact adapter is used at the wall receptacle, always connect the green wire to a good ground.

ENGINE WARM-UP PERIOD

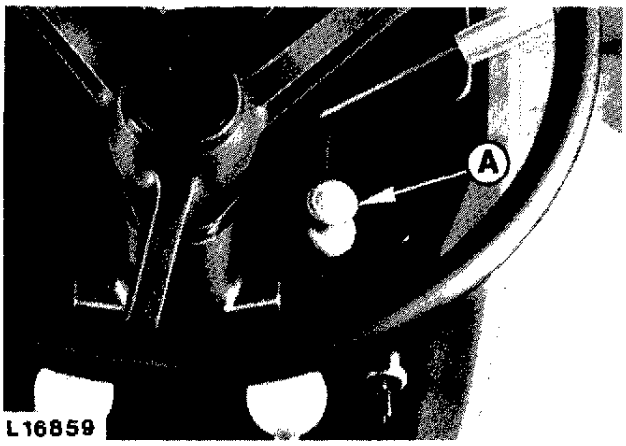
Engine must have attained correct operating temperature before putting the unit under full load. To warm up engine, run for a few minutes with hand throttle halfway open. Thus excessive wear on piston rings, cylinders and bearings is avoided.

ENGINE SPEEDS

Engine working speed range is between 1500 and 2500 rpm. Within these limits engine can be put under full load. Maximum continuous power is obtained at 2500 rpm.

Operate engine at 2400 rpm to obtain SAE standard PTO speeds (tractors with reverser transmission 2100 rpm).

STOPPING THE ENGINE



Stop tractor and apply handbrake. Slide hand throttle forward to stop and run engine for one or two minutes at slow idle speed.

Pull engine shut-off knob (A) up. Push shut-off knob back in fully as soon as engine has stopped.

Before leaving tractor lower equipment to ground.

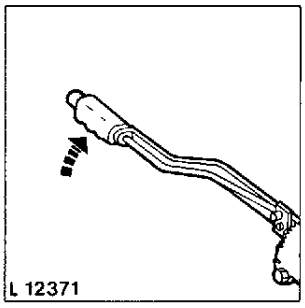
CAUTION: Remove starter key to prevent accidents.

IMPORTANT: Make sure that exhaust stack flap is closed when engine is not running. This will prevent water and dirt from entering the engine.

A—Engine Shut-off Knob

PARKING TRACTOR

Set handbrake when tractor is parked or when it operates stationary.



TOWING TRACTOR

When towing tractor, move both gear and range shift levers to neutral position.

CAUTION: Never tow tractor at speed greater than 15 mph (25 km/h).

BREAK-IN PERIOD

During first 100 hours of operation refer to following chart:

ITEM	SERVICE	LUBRICANT/TORQUE
After first 4 and 8 hours:		
Wheel retaining bolts	Retighten	**Rear wheels** Wheel disk to axle flange: 175 ft-lbs (240 N·m) Rim to wheel disk: 180 ft-lbs (250 N·m) Wheel disk to hub (rack and pinion axle): 300 ft-lbs (400 N·m) Rim to wheel disk (rack and pinion axle): 170 ft-lbs (230 N·m) **Front wheels** 130 ft-lbs (180 N·m) **Front axle adjusting bolts** 300 ft-lbs (400 N·m)
Steering arm clamping bolt (see illustration on page 26)	Retighten	85 ft-lbs (120 N·m)
After first 50 hours:		
Transmission oil filter	Replace	.....
Front axle drive housing and final drive oil (front-wheel drive)	Drain and refill	See page 85
After first 100 hours		
Front axle tie rod outer clamping bolts	Retighten	40 ft-lbs (54 N·m)
Front axle tie rod inner clamping bolts	Retighten	30 ft-lbs (40 N·m)
Engine crankcase oil	Drain and refill	JOHN DEERE TORQ-GARD SUPREME® Engine Oil or equivalent
Engine crankcase oil filter	Replace	.....
During first 100 hours:	1. Operate at normal loads. 2. Avoid light loads. 3. Avoid excessive engine idling. 4. Check engine crankcase oil level periodically. 5. Check wheel retaining bolts frequently.	

NOTE: During break-in period a higher-than-usual oil consumption should be considered as normal.

We recommend that you ask your John Deere dealer to carry out a general inspection of the tractor before the first 100 operating hours are completed.

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

SELECTING TRAVEL SPEEDS

The tractor has eight forward gears and four reverse gears. Tractors with Hi-Lo transmission have sixteen forward gears and eight reverse gears.

Gears should be selected so as to avoid overloading engine.

Ground travel speeds with engine running at a speed different to the rated speed (2500 rpm) can be worked out as follows:

$$\frac{\text{Desired engine speed}}{2500\ \text{rpm}} = \text{Conversion factor}$$

The conversion factor multiplied by the speed shown in the tables (pages 16, 17) gives the ground travel speed at the desired engine speed.

Example:
Ground travel speed at rated speed (2500 rpm) according to table (page 16) 4.6 mph; Desired engine speed: 1300 rpm

$$\frac{1300\ \text{rpm}}{2500\ \text{rpm}} = 0.52$$

$$4.6\ \text{mph} \times 0.52 = 2.4\ \text{mph}$$

Should you wish to determine engine speed at a desired ground travel speed, proceed as follows:

$$\frac{\text{Desired ground travel speed}}{\text{Ground travel speed in table}} = \text{Conversion factor}$$

The conversion factor multiplied by the rated speed (2500 rpm) gives you the desired engine rpm.

Example:
Ground travel speed at rated speed (2500 rpm) according to table (page 16) 4.6 mph; Desired ground travel speed: 2.5 mph

$$\frac{2.5\ \text{mph}}{4.6\ \text{mph}} = 0.54$$

$$2500\ \text{rpm} \times 0.54 = 1350\ \text{rpm}$$

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