John Deere 1010 Wheel Tractors (Serial No. 42001-)

JOHN DEERE

OPERATORS MANUAL

John Deere 1010 Wheel Tractors
(Serial No. 42001-)

OMT19261 A4 English

John Deere Dubuque Works
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ENGLISH

LIGHTS

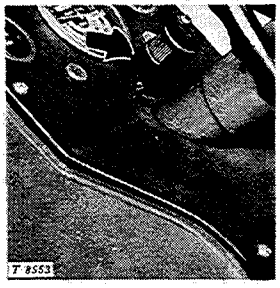
CAUTION: When driving the tractor on a road or highway at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. In this regard, check local governmental regulations. Lights and devices such as those illustrated on this page may be obtained from your John Deere dealer.

FRONT LIGHTS

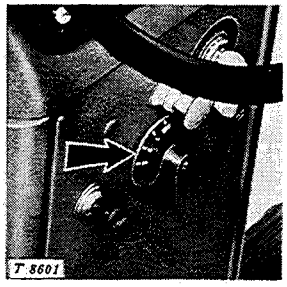
Your tractor may be equipped with hood-mounted sealed-beam headlights.

DASH LAMP

The dash lamp, which has an adjustable opening, illuminates the tractor instrument panel.



Dash Lamp



Light Switch

LIGHT SWITCH

All lights are controlled by the light switch. The switch has four positions, as follows:

"OFF" Lights off.
"L" Bright front lights and white rear light on.
"B" Bright front lights and red rear light on.
"D" Dim front lights and red rear light on.

ELECTRICAL OUTLET SOCKET

The outlet socket, a source of 12-volt, d.c. electrical power, is used for plugging in the equipment warning lamp, other auxiliary lights, or electrical service equipment. It is located conveniently on the left rear fender.

REAR LIGHT

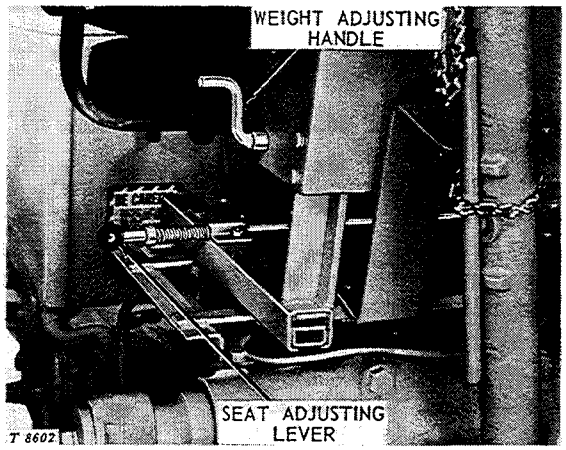
A combination rear flood light, mounted on the left rear fender, is available for illuminating drawn equipment at night. It also serves as a warning light when traveling on the highway at night.

SEAT

REGULAR SEAT ADJUSTMENT

There are two positions for moving the regular seat rearward or forward. To move to one of the two positions, remove the hex. nuts, lock washers, and cap screws attaching seat bracket to base. Lift seat up and attach at new location.

The regular seat back can be adjusted to either a high or low position. To adjust the seat back, remove the four screws and replace them in the other set of holes.



Deluxe Seat

DELUXE SEAT ADJUSTMENT

The rearward and forward movement of the deluxe seat is controlled by a lever on the left side of the seat. Push in on the lever and slide seat to desired position.

You can adjust the tension of the deluxe seat to conform to your weight. This gives the maximum amount of comfort and enables the seat to "float" when the tractor is driven over rough ground. To make this adjustment, turn the weight-adjusting handle.

BELT PULLEY

Install the belt pulley directly on the 540 rpm splined powershaft, securing it in place with three cap screws that are used to attach the powershaft guard (dual PTO) or, by means of the stud on the powershaft attachment (540 rpm PTO). The belt pulley is controlled in the same manner as the powershaft—that is, by engaging the combination powershaft-belt pulley control lever.

BELT WORK

In preparation for belt work, aligning the tractor correctly with belt-driven equipment is very important. The following procedure is recommended:

1. Place belt on pulley of driven equipment.

2. Stretch belt its full length, as straight as possible from pulley of driven equipment.

3. Back the tractor toward driven equipment, straddling belt.

4. Drive forward, watching to see that belt is aligning with pulley on tractor.

5. Slip belt over pulley on tractor and drive forward slowly until belt is tight. Engage powershaft-belt pulley control lever and release clutch slowly, watching belt to see that alignment is correct.

6. If alignment is not perfect, back tractor slightly; then drive forward, steering in the direction necessary to obtain correct alignment.

7. Lock foot brake to hold tractor in position.

Static electricity from belt pulley operation can be prevented on tractor by hanging a chain from the drawbar, allowing it to contact the ground.

CAUTION: Always start a belt load slowly. Never leave tractor running unattended when making adjustments on tractor or driven machine, even though clutch is disengaged. Never use a stick to force a belt on or off a revolving pulley.

To remove belt, disengage powershaft-belt pulley control lever and back tractor to provide slack.

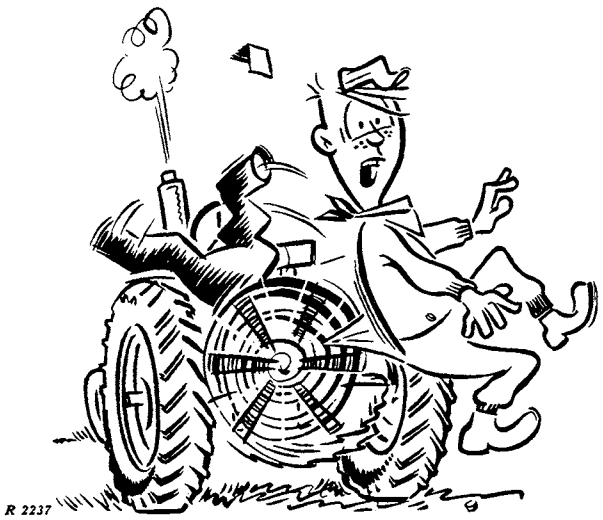
FINDING THE SIZE OF THE DRIVEN PULLEY

The chart below will help you determine the size of the driven pulley necessary to obtain a desired rpm on the driven equipment. When possible the tractor belt pulley should be operated at 1185 rpm (engine speed of 1900 rpm) for maximum economy, and a driven pulley selected to give the proper rpm on driven equipment.

The table and figures given below apply for engine operation at 1900 rpm.

Tractor pulley speed . . . . . 1185 rpm
Tractor pulley diameter . . . . . 9-1/16"
Belt speed . . . . . 2811 fpm

Desired Rpm of Driven Pulley	Diameter of Driven Pulley to Use
460	23"
630	17"
760	14"
1070	10"
1430	7-1/2"
1780	6"
2140	5"
2380	4-1/2"
2680	4"



The belt pulley should never be turned by hand with the engine running.

200-HOUR SERVICE

11. AIR CLEANER CAP

At the end of 200 hours of tractor operation clean inside of air cleaner cap with diesel fuel.

12. AIR CLEANER TUBE

At the end of 200 hours of tractor operation the air intake tube (running through center of air cleaner) should be swabbed out. This operation will assure that a sufficient volume of air is being drawn into the cylinders. To swab out tube, remove oil cup from bottom of cleaner and the cap from the top of the tube. Swab out center of tube with a cloth wrapped around a stick.

13. BATTERY

At least once every 200 hours, service the battery as instructed on page 43.

14. GENERATOR BELT

Check tension at least every 200 hours. Service as instructed on page 44.

15. TIRES

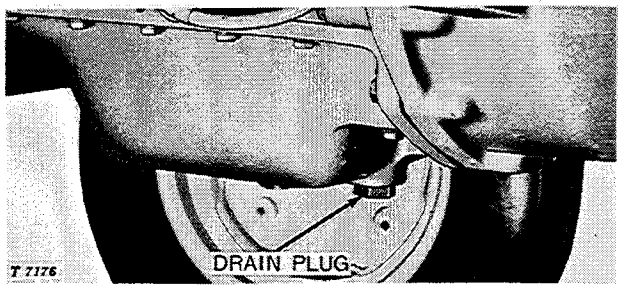
Check air pressure. See page 8.

16. PTO STUB SHAFT

Every 200 hours, remove stub shaft from bore and apply high temperature grease to driving splines.

NOTE: Lubricate more often during periods of heavy PTO operation.

17. ENGINE CRANKCASE



Crankcase Drain Plug

After every 200 hours of operation, drain crankcase oil and replace oil filter element. If there is evidence of sludge, the crankcase should be flushed.

Draining Crankcase

Drain crankcase at the end of a day's operation at which time the oil is hot and all foreign material is in suspension. While crankcase is draining replace filter element. If there is evidence of sludge, flush crankcase.

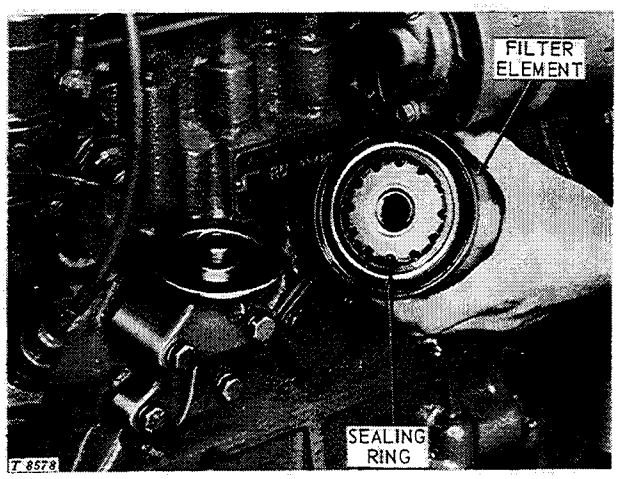
Flushing Crankcase

Drain oil, and before removing old filter element pour 5 quarts of diesel fuel into crankcase. Run engine only for a few seconds and then drain. Replace filter element (see below).

Filling Crankcase

Fill with 5 quarts of new oil of proper seasonal viscosity (see page 22), oil level on the filler gauge will show approximately one quart above the full mark. Start engine and run a short time, check for oil leaks around the filter cover and drain plug. Stop engine and recheck oil level immediately. The oil level should show at "FULL" mark on oil filler gauge.

18. CRANKCASE OIL FILTER



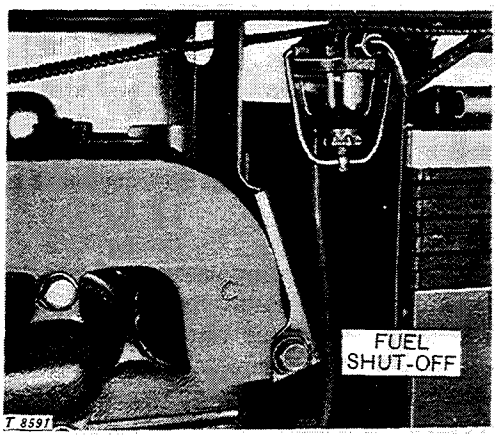
Remove old oil filter element by turning counterclockwise. Install new element, making sure new sealing ring is inserted in bottom of element. Apply a thin film of oil to sealing ring. Screw element clockwise by hand until tight.

With oil in crankcase, start engine and check for leaks around filter element. Retighten if necessary.

CAUTION: The element has a special by-pass valve. Replace with a genuine John Deere filter element supplied by your John Deere dealer.

GASOLINE FUEL SYSTEM

Uniform efficiency of fuel system will be assured by an occasional inspection, and cleaning if necessary. The logical place to start is the source of fuel supply, the fuel tank.



Fuel Shut-Off

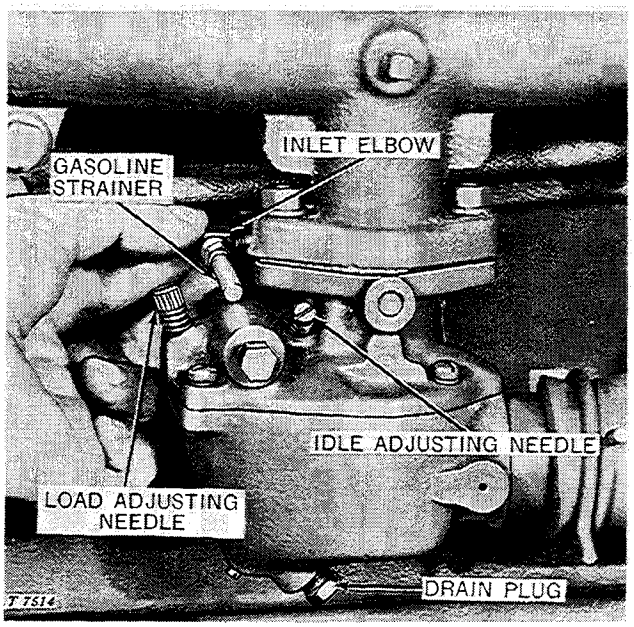
First, shut off fuel supply by turning shut-off valve clockwise until tight. Loosen jam nut and remove glass bowl and screen from the fuel strainer. Clean thoroughly. With glass removed, open the shut-off valve to see if gasoline flows readily from tank. If it does not, tank must be cleaned. When replacing filter bowl, be sure cork gasket which fits between bowl and screen is in good condition; if it is not, replace it. Check all fuel lines for dirt and leakage.

Check opening at end of fuel tank vent tube regularly to make sure end of tube is not bent, shut, or clogged, thereby preventing ventilation of fuel tank, and causing malfunction of fuel system. The vent tube is located on the right side of fuel tank extending downward in front of the water pump cover.

CARBURETOR

Cleaning Carburetor Strainer

To clean carburetor strainer assembly, remove gasoline inlet elbow, of which strainer is a part (see illustration). Flush strainer housing with gasoline to remove dirt which may have worked through strainer. Be careful when removing elbow to prevent damage to strainer. Replace gasoline inlet elbow and tighten connections. Check connections to see that there is no leakage.



Carburetor

Checking Connections

While checking carburetor, also check air cleaner-to-carburetor connecting hoses. Make sure hoses have not begun to deteriorate. If hoses show signs of cracking, or have been soaked with gasoline, replace. Make certain hose connecting clamps are tight and that they are on hose far enough to give a tight connection. This prevents engine from breathing dirt, sand, and grit into cylinders through air leaks instead of cleaned air through air cleaner.

Adjusting Carburetor

The carburetor mixes gasoline and air together to form a vaporized fuel. The carburetor has adjustments for smooth engine operation, fuel economy, and maximum power.

Slow Idle Adjustment

1. With engine running and at operating temperature, set hand throttle in closed position.

2. Adjust slow idle stop screw in behind carburetor until engine idles at approximately 600 rpm.

3. Adjust slow idle mixture by turning idle adjusting needle on top of carburetor. Set to best idling position.

ENGINE RUNS IRREGULARLY OR STALLS FREQUENTLY

Possible Cause	Possible Remedy
Low coolant temperature	If water temperature gauge is not in normal ("N") range. See "Below normal engine temperature." Page 50.
Clogged fuel filter (diesel)	Replace filter element and bleed system. Pages 32 and 38.
Water, dirt, or air in fuel system	Drain, flush, and refill. Bleed system (diesel) Page 38.
Dirty or faulty injectors (diesel)	See your John Deere dealer.
Improper carburetor setting	See "Adjusting the Carburetor," page 39.
Improper spark plug electrode spacings	Space spark plug electrodes to .025 inch. See page 42.
Irregular spark	Dirty plugs or points. Page 42.

LACK OF ENGINE POWER

Engine overloaded	Reduce load or shift to lower gear.
Too high viscosity oil in crankcase and air cleaner	Drain and fill crankcase with oil of proper viscosity and quality. Page 22.
Intake air restriction	Clean air cleaner and replace oil if necessary. Page 26.
Clogged fuel filter (diesel)	Replace filter element and bleed system. Page 38.
Improper hitching of implement	See implement operator's manual for proper hitching.
High altitude operation	Engines lose horsepower with increased altitude. Use proper type of fuel for high altitude. Page 21.
Overheated engine	See "Engine Overheats" (below).
Improper valve clearance	See your John Deere dealer.
Dirty or faulty injectors (diesel)	See your John Deere dealer.
Injection pump or distributor out of time	Check timing. See your John Deere dealer for this service.
Carburetor adjusted too lean	Adjust. See "Adjusting Carburetor," page 39.
Unsatisfactory fuel	Change to better grade fuel. Page 21.
Obstruction in fuel system	See "Gasoline Fuel System," page 39.
Dirty points or spark plugs	Clean and gap. Page 42.

ENGINE OVERHEATS

Low coolant level	Fill radiator with coolant to the proper level. Check hoses and radiator for leaks or loose connections. Page 40.
Dirty radiator core or grille screen	Remove all foreign matter from exterior of radiator core and grille screen. Page 40.
Loose or defective generator belt	Adjust belt tension. Replace worn belt. Page 44.
Cooling system limed up	Drain and flush cooling system. Page 40.
Defective temperature gauge	Check water with thermometer. Have serviceman replace gauge if defective. (To overheat, an engine must use water. Check water level.)
Defective radiator pressure cap	Replace cap.