

OPERATOR'S MANUAL

OM-R38357

JOHN DEERE

2510 ROW-CROP
AND HI-CROP

TRACTORS





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R 6217

John Deere 2510 Hi-Crop Tractor with Diesel Engine and Power Shift Transmission



SPECIFICATIONS

HORSEPOWER:*

Observed at PTO (Syncro-Range)	Diesel 53 h.p.	Gasoline 53 h.p.
Observed at PTO (Power Shift)	49 h.p.	49 h.p.

ENGINE:

Type	4-cylinder, in-line, valve-in-head	
Engine speeds:		
Idle for engine shut-off.	425 rpm
Normal slow idle.	800 rpm	800 rpm
Working range	1500 to 2500 rpm	1500 to 2500 rpm
Bore and stroke	3.86 in. x 4.33 in.	3.86 in. x 3.86 in.
Displacement	202 cu. in.	180 cu. in.
Compression ratio	17 to 1	7.5 to 1
Firing order	1-3-4-2	1-3-4-2
Intake valve clearance.	0.014 in.	0.014 in.
Exhaust valve clearance	0.018 in.	0.022 in.
Injection pump timing	TDC
Distributor timing (2500 rpm engine speed).	"S" mark
Distributor point gap.	0.020 in.
Spark plug gap	0.025 in.

ELECTRICAL SYSTEM:

Starter and alternator voltage.	12 volts	12 volts
Lights and accessory voltage	12 volts	12 volts
12-volt battery, 78-plate, 75 amp-hour.	Two	One

**Factory observed horsepower at 2500 engine rpm.*



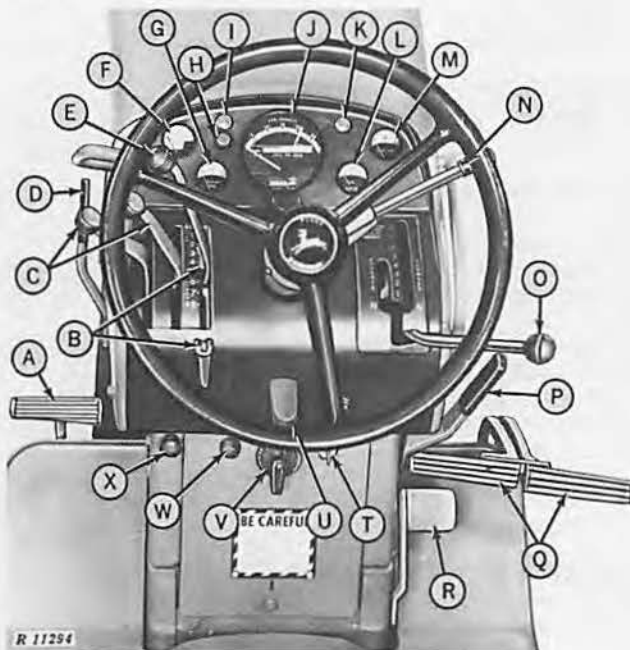
R 6218

John Deere 2510 Row-Crop Tractor with Gasoline Engine, Syncro-Range Transmission, and Wide-Adjustable Front Axle

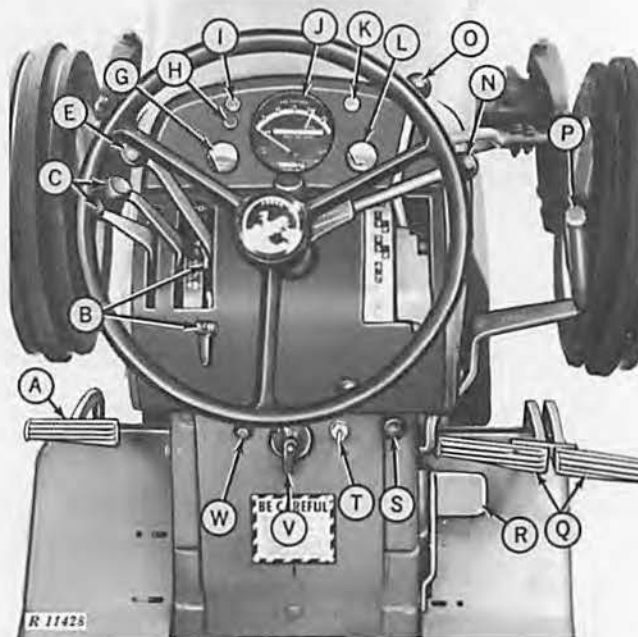


CONTROLS AND INSTRUMENTS

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

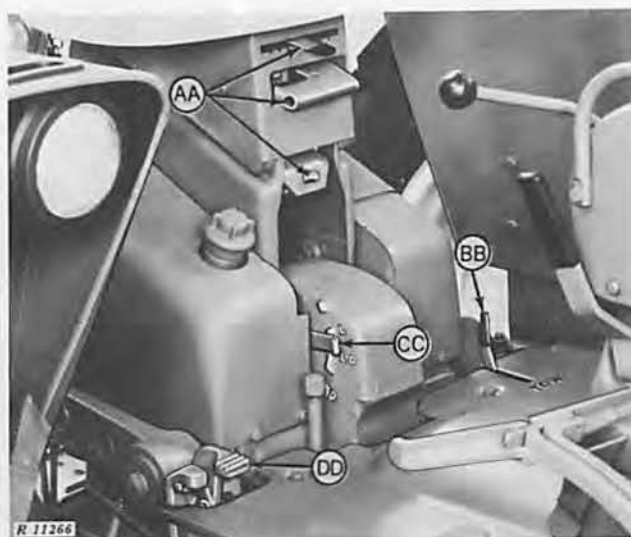


Tractor with Diesel Engine and Power Shift Transmission



Tractor with Gasoline Engine and Syncro-Range Transmission

- A - Clutch Pedal (Syncro-Range Tractors, page 14)
Inching Pedal (Power Shift Tractors, page 12)
- B - Rockshaft Control Lever Stop and Lock (page 25)
- C - Remote Cylinder Operating Levers (page 32)
- D - Engine Disconnect Lever (Power Shift Tractors, page 8)
- E - Rockshaft Control Lever (page 25)
- F - Transmission Oil Pressure Gauge (Power Shift Tractors, pages 8 and 13)
- G - Coolant Temperature Gauge
- H - Speed Indicator Knob (page 12)
- I - Alternator Indicator Light (pages 5 and 6)
- J - Speed-Hour Meter (pages 12 and 45)
- K - Oil Pressure Indicator Light (pages 5 and 6)
- L - Fuel Gauge
- M - Transmission Oil Temperature Gauge (Power Shift Tractors, page 13)
- N - Hand Throttle (page 9)
- O - Shift Lever (Syncro-Range Tractors, page 14)
Speed Selector (Power Shift Tractors, page 12)
- P - Power Take-Off Clutch Lever (page 37)
- Q - Brake Pedals (page 16)
- R - Foot Throttle (page 9)
- S - Engine Choke Knob (Gasoline Tractors, page 6)
- T - Key Switch (pages 5, 6, and 10)
- U - Ether Starting Fluid Adapter (Diesel Tractors, page 7)
- V - Light Switch (page 23)
- W - Starter Switch (pages 5 and 6)
- X - Lever Latch Knob (Power Shift Tractors, page 8)



- AA - Seat Controls (page 11)
- BB - Tow Lever (Power Shift Tractors, page 15)
- CC - Rockshaft Selector Lever (page 26)
- DD - Differential Lock Pedal (page 15)



OPERATION

Complete instructions for operating your tractor safely and efficiently are given on the following pages. By following these directions carefully, you can be sure that you are taking full advantage of the many features built into your tractor.

OPERATING THE ENGINE

PRESTARTING CHECKS

Perform the following checks and services before starting the engine for the first time each day:

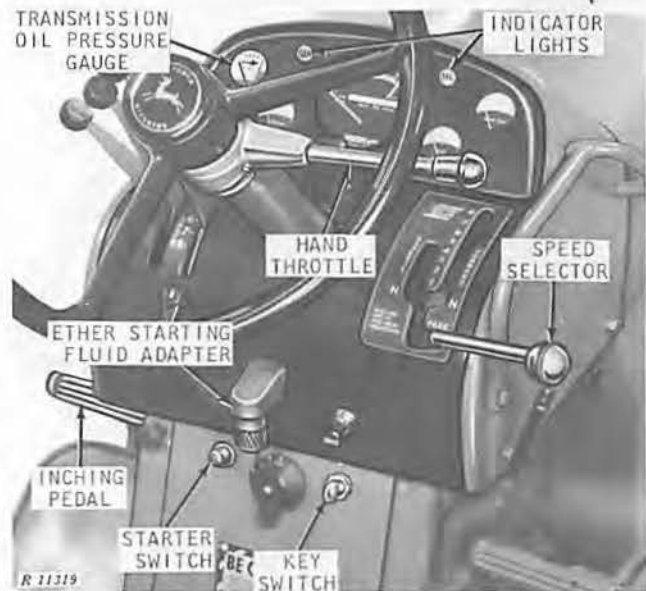
- (1) Check the engine crankcase oil level—see page 49.
- (2) Check the radiator coolant level—see page 49.
- (3) If tractor has an oil-bath air cleaner, check the oil and dirt level in the cup—see page 49. If tractor has a pre-cleaner, check the collector bowl—see page 49.
- (4) Check the fuel pump sediment bowl—see page 50.
- (5) Grease the wide-swing drawbar rollers, Hi-Crop rear axles, and the Roll-O-Matic or wide front axle grease fittings—see page 50.
- (6) Grease the front wheel bearing if the tractor has been operated in extremely wet or muddy conditions—see page 50.
- (7) Make sure the fuel shut-off valve on the bottom of the fuel tank is open—see page 58.

STARTING THE DIESEL ENGINE

NOTE: If the prevailing temperature is 40 degrees Fahrenheit or lower, it may be necessary to use a cold weather starting aid to start the engine (page 7).

Perform the Prestarting checks listed above.

(1) If your tractor has a Syncro-Range transmission, move the shift lever into "PARK" position and depress the clutch pedal. If your tractor has a Power Shift transmission, move the



Diesel Starting Controls

selector lever into "PARK" position and depress the inching pedal.

(2) PLACE THE HAND THROTTLE IN THE 1200 RPM POSITION, approximately one-third of its travel downward.

(3) Turn the key switch clockwise to the on position. Both indicator lights should glow. If either light fails to glow, turn off the key switch and determine the cause.

(4) Press on the starter switch to start the engine. Do not press on the starter switch for more than 30 seconds at a time. To do so may overheat the starter. If the engine does not start the first time, wait for a minute or two before trying again. If it does not start after four attempts, see "Trouble Shooting" (page 73).

If the starter switch is released before the engine starts, wait until the starter and the engine stop before trying again. This will prevent possible damage to the starter.

This is the end of the preview.

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