

## 850 CRAWLER BULLDOZER

37,120 lb (13 183 kg)

Transport Height.....	10 ft 6 in. (3.2 m)
Transport Length.....	16 ft 1.5 in. (4.92 m)
Machine Width.....	12 ft 8 in. (3.86 m)

### ENGINE.....John Deere 500 Series

Number of Cylinders and Displacement.....	6 cylinders, 619 cu in. (10.1 L)
Air Intake System.....	Turbocharged
Bore and Stroke.....	5.12 x 5 in. (130 x 127 mm)
Net hp at 1800 rpm.....	145 SAE hp (108 kW) DIN 108 kW
Maximum Torque at 1200 rpm.....	550 lb-ft (746 N•m)
Nozzle Opening Pressure:	
New.....	4050 ± 50 psi (27 925 ± 345 kPa)
Used.....	3800 ± 50 psi (26 200 ± 345 kPa)
Valve Clearance (Cold):	
Intake.....	0.015 in. (0.38 mm)
Exhaust.....	0.025 in. (0.63 mm)
Oil Pressure.....	40—50 psi (275—345 kPa)
Static Injection Pump Timing.....	Timing lines aligned w/ flywheel located at TDC
Dynamic Injection Pump Timing at Rated Load rpm*.....	9 + 0 - 1° BTDC
Speeds:	
Slow Idle.....	975—1000 rpm (disconnect clutch engaged)
Fast Idle.....	1975—2000 rpm
Full Load Rating.....	1800 rpm
Cylinder Pressure Hot (Min).....	380 psi (2620 kPa) cranking w/ injectors removed
Turbo Boost Pressure at Full Load.....	11—13 psi (76—90 kPa)
Flywheel Teeth.....	147

Note: \*For latest information, see Dealer Technical Assistance Center (DTAC) Solution K000413.

### TRANSMISSION

Model and Speeds.....	Hydrostatic: variable speed, forward and reverse
High Pressure Relief.....	6300—6700 psi (43 440—46 195 kPa)
Maximum Engine rpm Pulldown.....	1550 rpm

### HYDRAULIC SYSTEM—Open-Center

Pump Size:	
(S.N. —365073).....	5.96 cu in. (97.7 cm <sup>3</sup> )
(S.N. 365074—).....	4.98 cu in. (81.6 cm <sup>3</sup> )
Main System Relief at Fast Idle.....	2250 + 175 - 0 psi (15 515 + 1210 - 0 kPa)
Pump Flow, Min Used at	
2000 psi (13 790 kPa) and 1800 rpm:	
(S.N. —365073).....	36 gpm (136 L/min)
(S.N. 365074—).....	30 gpm (114 L/min)

### RELIEF VALVE SETTINGS

System Relief Valve at Fast Idle, Bulldozer.....	2250 + 175 - 0 psi (15 515 + 1210 - 0 kPa)
Circuit Relief Valve at Fast Idle:	
Blade Boom Lift.....	2500 + 175 - 0 psi (17 240 + 1210 - 0 kPa)
Auxiliary.....	2500 + 175 - 0 psi (17 240 + 1210 - 0 kPa)

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## LUBRICANTS

See front of this book for the codes [ ].

### CAPACITIES

	U.S.	Imp.	Metric
Engine:			
Cooling System [N] .....	9 gal	7.5 gal	34 L
Crankcase w/ Filter [E] .....	36 qt	28 qt	34 L
Final Drive (Each):			
1st Reduction [J] .....	5.5 gal	4.6 gal	20.8 L
1st Reduction 850 LGP [J] .....	10.0 gal	8.3 gal	37.8 L
2nd Reduction [J] .....	3.5 gal	2.9 gal	13.2 L
Splitter [M] .....	1.5 gal	1.3 gal	5.7 L
Hydraulic System [C] .....	35 gal	29.2 gal	132.5 L
Fuel Tank .....	82 gal	68.3 gal	310.4 L