

855 CRAWLER LOADER

49,600 lb (19 543 kg)

Transport Height.....	10 ft 10 in. (3.3 m)
Transport Length.....	20 ft (6.1 m)
Machine Width	12 ft 8 in. (3.8 m)

ENGINE.....John Deere 500 Series

Number of Cylinders and Displacement	6 cylinders, 619 cu in. (10.1 L)
Air Intake System.....	Turbocharged and aftercooler
Bore and Stroke	5.12 x 5 in. (130 x 127 mm)
Net hp at 1800 rpm	200 SAE hp (149 kW) (DIN 149 kW)
Maximum Torque at 1300 rpm	730 lb-ft (990 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. (0.063 mm)
Oil Pressure at 1900 rpm	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*	8 + 0 - 1° BTDC
Speeds:	
Slow Idle	975—1000 rpm (disconnect clutch engaged)
Fast Idle.....	1975—2000 rpm
Rated Full Load	1800 rpm
Cylinder Pressure Hot (Min)	380 psi (2620 kPa) cranking with injectors removed
Turbo Boost Pressure at Rated Full Load	15—18 psi (105—125 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	9.90 cu in. (162.2 cm ³)
Main System Relief.....	2375 + 175 - 0 psi (16 375 + 1210 - 0 kPa)
Pump Flow (Min) Used at 2000 psi (13 790 kPa) and 1700 rpm	58.5 gpm (221.4 L/min)

RELIEF VALVE SETTINGS

System Relief Valve at 1250 rpm:	
Loader	2375 + 175 - 0 psi (16 375 ± 1210 - 0 kPa)
Circuit Relief Valve:	
Bucket Dump	3000 + 225 - 0 psi (20 685 + 1550 - 0 kPa)
Bucket Rollback.....	3000 + 225 - 0 psi (20 685 + 1550 - 0 kPa)
Boom Lift	3000 + 225 - 0 psi (20 685 + 1550 - 0 kPa)
Auxiliary	3000 + 225 - 0 psi (20 685 + 1550 - 0 kPa)

CYCLE TIMES (At Fast Idle and Hot Oil)

Boom:	
Raise	6.7 sec
Lower (Float)	3.7 sec
Bucket Dump	1.5 sec

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LUBRICANTS

See front of this book for the codes [].

CAPACITIES

	U.S.	Imp.	Metric
Engine:			
Cooling System [N]	10.5 gal	8.7 gal	39.8 L
Crankcase w/ Filter [E]	36 qt	28 qt	34 L
Final Drive (Each):			
1st Reduction [J]	6.25 gal	5.2 gal	23.6 L
2nd Reduction [J]	3.5 gal	2.9 gal	13.2 L
Fuel Tank	106 gal	88.3 gal	401.2 L
Hydraulic System [C]	40 gal	33.3 gal	151.4 L
Splitter [M]	1.5 gal	1.3 gal	5.7 L