

## 300B LOADER AND BACKHOE LOADER

6,232 lb (2826 kg)

Transport Height.....	7 ft 8 in. (2.31 m)
Transport Length.....	15 ft 4.2 in. (4.8 m)
Machine Width.....	6 ft 8 in. (2.03 m)

### ENGINE.....John Deere 300 Series

#### Number of Cylinders and Displacement:

Gasoline.....	3 cylinders, 152 cu in. (2.5 L)
Diesel.....	3 cylinders, 164 cu in. (2.7 L)
Air Intake System.....	Naturally aspirated
Bore and Stroke.....	3.86 x 4.33 in. (98 x 110 mm) or 4.02 x 4.33 in. (102 x 110 mm)
Net hp at 2500 rpm.....	43 SAE h.p. (32.1 kW) DIN 33.7 kW
Maximum Torque at 1300 rpm.....	110 lb-ft (149 N•m)
Nozzle Opening Pressure:	
New.....	3200 ± 50 psi (22 060 ± 345 kPa)
Used.....	3000 ± 50 psi (20 680 ± 345 kPa)
Valve Clearance (Cold):	
Intake.....	0.014 in. (0.36 mm)
Exhaust:	
Diesel.....	0.018 in. (0.46 mm)
Gasoline.....	0.022 in. (0.56 mm)
Oil Pressure at 2500 rpm.....	50 ± 15 psi (345 ± 105 kPa)
Static Injection Pump Timing.....	Timing lines aligned w/ flywheel located at TDC
Dynamic Injection Pump Timing at Rated Full Load*.....	16 + 0 - 1° BTDC
Speeds:	
Slow Idle:	
Diesel.....	800 ± 25 rpm
Gasoline.....	600 rpm
Fast Idle, Throttle Lever:	
Diesel.....	2675—2400 rpm
Gasoline.....	2680 rpm
Fast Idle, Accelerator Pedal:	
Diesel.....	2775 ± 25 rpm
Gasoline.....	2275 ± 25 rpm
Full Load Rating.....	2500 rpm
Cylinder Pressure Hot (Min):	
Diesel.....	350 psi (2415 kPa) cranking w/ injectors removed
Gasoline.....	120 psi (830 kPa)
Flywheel Teeth.....	142

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

### TRANSMISSION

Model and Speeds.....	Collar shift w/ hydraulic reverser: 8 forward, 8 reverse
Pump Flow (Min).....	7.0 gpm (0.44 L/s) used at 150 psi (1035 kPa) and 2500 rpm
Reverser System Pressure.....	155—165 psi (1070—1140 kPa)
Lube Pressure.....	8—10 psi (55—69 kPa) (clutch pedal depressed)
Clutch Operating Pressure.....	155—165 psi (1070—1140 kPa)
Filter Relief Pressure.....	50 psi (345 kPa) differential

Continued on next page

## HYDRAULIC SYSTEM

Pump Size .....	3.01 cu in. (49.3 cm <sup>3</sup> )
Standby Pressure .....	2300—2400 psi (15 860—16 550 kPa)
Charge Pressure at 2200 rpm .....	30—130 psi (207—897 kPa)
Accumulator Charge Pressure.....	475—525 psi (3275—3620 kPa)
Surge Relief Pressure .....	150 psi (1035 kPa)
Filter Relief Pressure .....	50 psi (345 kPa) differential
Pump Flow (Min):	
New .....	20.6 gpm (1.3 L/s) at 2000 psi (13 790 kPa) and 1800 rpm
Used .....	19.5 gpm (1.2 L/s) at 1750 psi (12 065 kPa) and 2000 rpm
Priority Valve Setting.....	1750—1850 psi (12 065—12 755 kPa)
Cooler Bypass Valve (S.N. —282490):	
Relieves to Lubrication at.....	70 psi (485 kPa)
Relieves to Sump at .....	100 psi 9690 kPa)
Cooler Bypass Valve (S.N. 282491—):	
Relieves to Lubrication at.....	120 psi (830 kPa)
Relieves to Sump at .....	130 psi (895 kPa)

## RELIEF VALVE SETTINGS

Loader Circuit Relief Valve:	
Bucket Rollback.....	2750 psi (18 960 kPa)
Bucket Dump.....	1500 psi (10 345 kPa)
9250 Backhoe Circuit Relief Valve:	
Boom Raise .....	2750 psi (18 960 kPa)
Crowd and Boom Lower.....	2500 psi (17 240 kPa)
Swing Right .....	1875 psi (12 930 kPa)
Swing Left.....	2375 psi (16 375 kPa)
9250A Backhoe Circuit Relief Valve:	
Boom Raise .....	3500 psi (24 135 kPa)
Crowd and Boom Lower.....	2375 psi (16 375 kPa)
Swing Right .....	2375 psi (16 375 kPa)
Swing Left.....	2375 psi (16 375 kPa)

## CYCLE TIMES (Fast Idle and Hot Oil)

Loader:	
Boom Down (Float) .....	4.0 sec
Bucket Dump.....	2.3 sec
Boom Up .....	4.7 sec

## LUBRICANTS

See front of this book for the codes [ ].

## CAPACITIES

	U.S.	Imp.	Metric
Engine:			
Cooling System [N] .....	3 gal	2.5 gal	11.4 L
Crankcase w/ Filter [E].....	9 qt	7.5 qt	8.5 L
Transmission and Hydraulic System (Refill) [C] .....	8.5 gal	7.1 gal	32.0 L
Loader Hydraulic System [C].....	2.5 gal	2.1 gal	9.5 L
Fuel Tank .....	19.5 gal	16.3 gal	73.8 L

Continued on next page

## TIRE PRESSURE (Cold Inflation)

<b>Tire Size</b>	<b>Type</b>	<b>Rating</b>	<b>Normal Pressure</b>
Front:			
11L-15	F3	8 ply	40 psi (275 kPa)
7.50/8.00-16	F3	10 ply	56 psi (385 kPa)
Rear:			
14.9-24	R3, R4	6 ply	22 psi (150 kPa)
17.5L-24	R4	8 ply	22 psi 9150 kPa)