

## 450C CRAWLER BULLDOZER

14,400 lb (5152 kg)

Transport Height.....	7 ft 11.8 in. (2.43 m)
Transport Length.....	15 ft 5.5 in. (4.71 m)
Machine Width.....	6 ft (1.8 m)

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

Number of Cylinders and Displacement.....	4 cylinders, 219 cu in. (3.6 L)
Air Intake System.....	Turbocharged
Bore and Stroke.....	4.02 x 4.33 cu in. (102 x 110 mm)
Net hp at 2500 rpm.....	65 SAE hp (49 kW) DIN 49 kW
Maximum Torque at 1300 rpm.....	178 lb-ft (241 N•m)
Nozzle Opening Pressure:	
New.....	3200 ± 50 psi (22 065 ± 345 kPa)
Used.....	3000 ± 50 psi (20 685 ± 345 kPa)
Valve Clearance (Cold):	
Intake.....	0.014 in. (0.36 mm)
Exhaust.....	0.018 in. (0.46 mm)
Oil Pressure at Fast Idle.....	50 ± 15 psi (345 ± 105 kPa)
Static Injection Pump Timing.....	Timing lines aligned w/flywheel located at TDC
Dynamic Injection Pump Timing at Rated Load rpm*.....	17 + 0 - 1° BTDC
Speeds:	
Slow Idle.....	800 rpm
Fast Idle.....	2675—2700 rpm
Rated Full Load.....	2500 rpm
Cylinder Pressure Hot (Min).....	350 psi (2415 kPa) cranking with injectors removed
Turbo Boost Pressure at Rated Full Load.....	7—8.5 psi (48—59 kPa)
Flywheel Teeth.....	142

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

### TRANSMISSION

Model and Speeds.....	HLR: 4 speed ranges with high, low and reverse speeds
Lube Pressure.....	58—72 psi (400—500 kPa)
HLR Pressure.....	165—185 psi (1140—1275 kPa)

### HYDRAULIC SYSTEM—Open-Center

Pump Size.....	1.48 cu in. (24.3 cm <sup>3</sup> )
Pump Flow (Min) at 2250 psi (15 515 kPa) and 2500 rpm.....	14.0 gpm (53 L/min) new
Pump Size.....	2.29 cu in. (37.5 cm <sup>3</sup> )
Pump Flow (Min) at 2250 psi (15 515 kPa) and 2500 rpm.....	21.6 gpm (81.8 L/min) new
Pump Size (Loader).....	2.77 cu in. (45.4 cm <sup>3</sup> )
Pump Flow (Min) at 2250 psi (15 515 kPa) and 2500 rpm.....	26.1 gpm (98.8 L/min)

Continued on next page

## RELIEF VALVE SETTINGS

### System Relief Valve:

Loader .....	2250 psi (15 515 kPa)
Selector Valve.....	2000 psi (13 790 kPa) with backhoe

### Bulldozer:

6405 and 6410 .....	1750 psi (12 065 kPa)
6415 .....	2250 psi (15 515 kPa)

Winch Relief Valve at 1900 engine rpm.....	950—1050 psi (6550—7240 kPa)
--	------------------------------

### Loader Circuit Relief Valves:

#### Bucket Dump:

(S.N. —206828) .....	1000 psi (6895 kPa)
(S.N. 206829— ) .....	1250 psi (8620 kPa)

Bucket Rollback.....	2500 psi (17 240 kPa)
----------------------	-----------------------

#### Boom Lift:

(S.N. —206828) .....	2500 psi (17 240 kPa)
(S.N. 206829— ) .....	3100 psi (21 375 kPa)

Auxiliary .....	2500 psi (17 240 kPa)
-----------------	-----------------------

### 9250 Backhoe Circuit Relief Valves:

Crowd .....	2500 psi (17 240 kPa)
Swing Right .....	1750 psi (12 100 kPa)
Swing Left.....	2375 psi (16 400 kPa)
Boom Raise .....	2750 psi (19 000 kPa)
Boom Lower .....	2500 psi (17 200 kPa)

### 9300 Backhoe Circuit Relief Valves:

Crowd .....	2375 psi (16 400 kPa)
Swing Right .....	2000 psi (13 800 kPa)
Swing Left.....	2000 psi (13 800 kPa)
Boom Raise .....	3500 psi (24 100 kPa)
Boom Lower .....	2375 psi (16 400 kPa)

### 9550 Backhoe Circuit Relief Valves:

Crowd .....	2500 psi (17 240 kPa)
Swing Right .....	2375 psi (16 375 kPa)
Swing Left.....	2375 psi (16 375 kPa)
Boom Raise .....	2750 psi (18 960 kPa)
Boom Lower .....	2500 psi (17 240 kPa)

## LUBRICANTS

See front of this book for the codes [ ].

### CAPACITIES

	U.S.	Imp.	Metric
Bulldozer Hydraulic System (Refill) [C].....	6.4 gal	5.3 gal	24.2 L
Engine:			
Cooling System [N] .....	4 gal	3.3 gal	15.1 L
Crankcase w/ Filter [E].....	9 qt	7.5 qt	8.5 L
Final Drive (Each) [C] .....	6.25 qt	5.2 qt	5.9 L
Fuel Tank .....	31 gal	25.8 gal	117.3 L
Loader Hydraulic System (Refill) [C].....	7 gal	5.8 gal	26.5 L
Steering Clutch (Each Side) [C].....	28 qt	23.3 qt	26.5 L
Transmission [C].....	8 gal	6.7 gal	30.3 L