

## 550A CRAWLER DOZER

15,400 lb (5845 kg)

|                       |                       |
|-----------------------|-----------------------|
| Transport Height..... | 8 ft 4.9 in. (2.56 m) |
| Transport Length..... | 11 ft 10 in. (3.61 m) |
| Machine Width.....    | 8 ft (2.44 m)         |

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

|   |                                     |
|---|-------------------------------------|
| Number of Cylinders and Displacement.....             | 4 cylinders, 276 cu in. (4.5 L)     |
| Air Intake System.....                                | Turbocharged                        |
| Bore and Stroke.....                                  | 4.19 x 5.00 in. (106 x 127 mm)      |
| Compression Ratio.....                                | 16.2 to 1                           |
| Net hp at 2200 rpm.....                               | 78 SAE hp (58.2 kW) DIN 58.2 kW     |
| Maximum Torque at 1300 rpm.....                       | 250 lb-ft (339 N•m) (34.6 kgm)      |
| Nozzle Opening Pressure:                              |                                     |
| New.....  | 3700 ± 50 psi (25 510 ± 345 kPa)    |
| Used.....   | 3500 ± 50 psi (24 135 ± 345 kPa)    |
| Valve Clearance (Cold):                               |                                     |
| Intake.....   | 0.014 in. (0.36 mm)                 |
| Exhaust.....  | 0.018 in. (0.46 mm)                 |
| Injection Pump Timing.....                            | 2 ± 1° advance at slow idle         |
| Dynamic Injection Pump Timing at Rated Load rpm*..... | 16 + 0 - 1° BTDC                    |
| Speeds:   |                                     |
| Slow Idle.....  | 800 ± 25 rpm                        |
| Fast Idle.....  | 2375—2400 rpm                       |
| Full Load Rating.....                                 | 2200 rpm                            |
| Turbo Boost Pressure (at Full Load).....              | 10—11 psi (69—76 kPa)               |
| Cylinder Pressure (Min).....                          | 350 psi (2415 kPa)                  |
| Electrical System.....                                | 12 V with battery disconnect switch |
| Cooling System Pressure.....                          | 10 psi (69 kPa)                     |
| Flywheel Teeth.....                                   | 115                                 |

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

### TRANSMISSION

|   |                                  |
|---|----------------------------------|
| Model and Speeds.....                                 | Powershift: 3 forward, 3 reverse |
| Cooler Flow in Range (Min).....                       | 15 gpm (57 L/min)                |
| Transmission Pump Flow at Fast Idle:                  |                                  |
| New.....  | 28 gpm (106 L/min)               |
| Used.....   | 22 gpm (83 L/min)                |
| Lube Pressure (Steering Clutches Engaged).....        | 30 psi (207 kPa)                 |
| Converter-Out Pressure in Range at Fast Idle.....     | 85 ± 25 psi (585 ± 170 kPa)      |
| Transmission Main Pressure in Range at Fast Idle..... | 255 ± 12 psi (1760 ± 83 kPa)     |

### HYDRAULIC SYSTEM—Open-Center

|   |                     |
|---|---------------------|
| Minimum Pump Flow at 2000 rpm<br>and 2000 psi (13 790 kPa): |                     |
| Big Pump:   |                     |
| New.....  | 17.7 gpm (67 L/min) |
| Used.....   | 15.5 gpm (59 L/min) |
| Small Pump:   |                     |
| New.....  | 11.6 gpm (44 L/min) |
| Used.....   | 10 gpm (38 L/min)   |

Continued on next page

## RELIEF VALVE SETTINGS— at Fast Idle

### System Relief Valve:

|                          |   |
|--------------------------|---|
| 6410 Dozer .....         | 1750 + 100 - 0 psi (12 065 + 690 - 0 kPa) |
| 6405 or 6415 Dozer ..... | 2250 + 100 - 0 psi (15 515 + 690 - 0 kPa) |

### 9300 Backhoe Circuit Relief Valve:

|                   |                       |
|-------------------|-----------------------|
| Crowd .....       | 2375 psi (16 375 kPa) |
| Swing Right ..... | 2000 psi (13 790 kPa) |
| Swing Left .....  | 2000 psi (13 790 kPa) |
| Boom Raise .....  | 3500 psi (24 135 kPa) |
| Boom Lower .....  | 2375 psi (16 375 kPa) |

### 9550 Backhoe Circuit Relief Valve:

|                   |                       |
|-------------------|-----------------------|
| 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) |

## CYCLE TIMES (at Fast Idle)

### Big Pump:

|                                |             |
|--------------------------------|-------------|
| Blade Raise .....              | 1.8—2.3 sec |
| Blade Lower (Float Down) ..... | 2.0—2.4 sec |
| Blade Tilt .....               | 0.6—1.9 sec |
| Blade Angle .....              | 2.2—2.7 sec |

### Small Pump:

|                                |             |
|--------------------------------|-------------|
| Blade Raise .....              | 2.3—2.9 sec |
| Blade Lower (Float Down) ..... | 2.0—2.4 sec |
| Blade Tilt .....               | 0.8—1.9 sec |
| Blade Angle .....              | 2.7—3.4 sec |

## LUBRICANTS

See front of this book for the codes [ ].

### CAPACITIES

|  | U.S.     | Metric |
|--|----------|--------|
| Fuel Tank .....                          | 36 gal.  | 136 L  |
| Cooling System [N] .....                 | 5 gal.   | 19 L   |
| Engine Lubrication [E] .....             | 15 qt    | 14.2 L |
| Hydraulic System [C] .....               | 9.5 gal  | 36 L   |
| Hydraulic Reservoir [C] .....            | 6.0 gal  | 22.7 L |
| Transmission [C] .....                   | 13.5 gal | 51 L   |
| Final Drive (Each) [C] .....             | 6.25 qt  | 5.9 L  |
| Steering Clutch Housing (Each) [C] ..... | 28 qt    | 26.5 L |