

## ENGINE

John Deere engineered and manufactured 6-cylinder diesel engine. Replaceable wet-type cylinder liners help ensure superior heat dissipation, longer engine life. High-strength alloy heads include replaceable valve seat inserts. The forged steel, 7-main bearing crankshaft is statically and dynamically balanced for smooth operation. Cast aluminum pistons reduce rod bearing loads and provide vital heat transfer; pistons are sprayed with cooling oil for longer life.

**Engine:** John Deere 6068T

Rated power at 2100 rpm ..... 120 SAE net hp (90 kW)

..... 128 SAE gross hp (95 kW)

Turbocharger ..... standard

Cylinders ..... 6

Displacement ..... 414 cu. in. (6.785 L)

Fuel consumption, typical ..... 3.5 to 5 gal/hr (13.5 to 19 L/h)

Maximum net torque at 1300 rpm ..... 375 lb-ft (509 Nm)

Lubrication ..... pressure system with full-flow filters

Air cleaner ..... dry type with restriction indicator

Electrical system ..... 24-volt with 40-amp alternator

Cooling fan ..... blower

## TRANSMISSION

Automatic, dual-path, hydrostatic drive provides infinitely variable speeds to 6.5 mph (10.5 km/h). The transmission's load sensing feature automatically adjusts speed and power to match changing load conditions. Each track is powered by a variable displacement piston pump and motor combination. The speed and direction of each track can be individually controlled.

### TRAVEL SPEEDS

Forward and reverse ..... infinite to 6.5 mph (0 to 10.5 km/h)

## FINAL DRIVES

Double-reduction, planetary final drives transfer torque loads over three gear sets instead of one. The final drives are mounted independent of the track frames to isolate them from shock loads for increased life and reliability.

## BRAKES

Hydrostatic (dynamic) braking stops the crawler when the transmission control lever is moved to neutral. Wet, multi-disk parking brakes are automatically applied when the engine stops, or can be operator-applied by engaging the center brake pedal.

## STEERING

Steering is done hydrostatically by varying track speed and/or direction. Pedal steering is standard; lever steering is available. Depressing a pedal slows or varies the speed of the track, all the way to a stop if desired. Continuing to depress the pedal will cause the track to reverse for counter-rotation. Hydrostatic steering eliminates the need for steering clutches and steering brakes, as well as the need for cross-steering when working on steep slopes.

## HYDRAULICS

System ..... open center

Pressure ..... 2000 psi (13 790 kPa)

Pump ..... vane

Flow at 2100 rpm ..... 38 gpm (144 L/min)

## TRACKS

6-roller, 90-in. (2.29 m) track frame with front and rear track guides and sprocket guard. Dura-Trax™ undercarriage features deep-heat-treated sealed track links and through-hardened sealed rollers for maximum wear resistance. Lubricated track chain available.

Grouser ..... 22 in. (560 mm)

Shoes, each side ..... 40

Ground contact area with 22-in.

(560 mm) shoes ..... 3960 sq. in. (25 548 cm²)

Ground pressure ..... 8.09 psi (55.8 kPa)

Ground pressure with 34-in.

(865 mm) shoes ..... 5.18 psi (35.7 kPa)

Ground clearance, minimum ..... 14 in. (356 mm)

Length of track on ground ..... 90 in. (2290 mm)

Track gauge, standard ..... 74 in. (1880 mm)

Oscillation ..... 10 in. (254 mm)

Carrier rollers each side ..... 2

Adjustment ..... hydraulic

## CAPACITIES

Fuel tank ..... 73 gal. (276.3 L)

Cooling system ..... 7 gal. (26.5 L)

Crankcase ..... 18 qt. (17 L)

Crankcase, including filter ..... 20 qt. (19 L)

Splitter drive ..... 1.5 gal. (5.7 L)

Final drive each: 1st reduction ..... 8.5 gal. (32.2 L)

2nd reduction ..... 3.5 gal. (13.2 L)

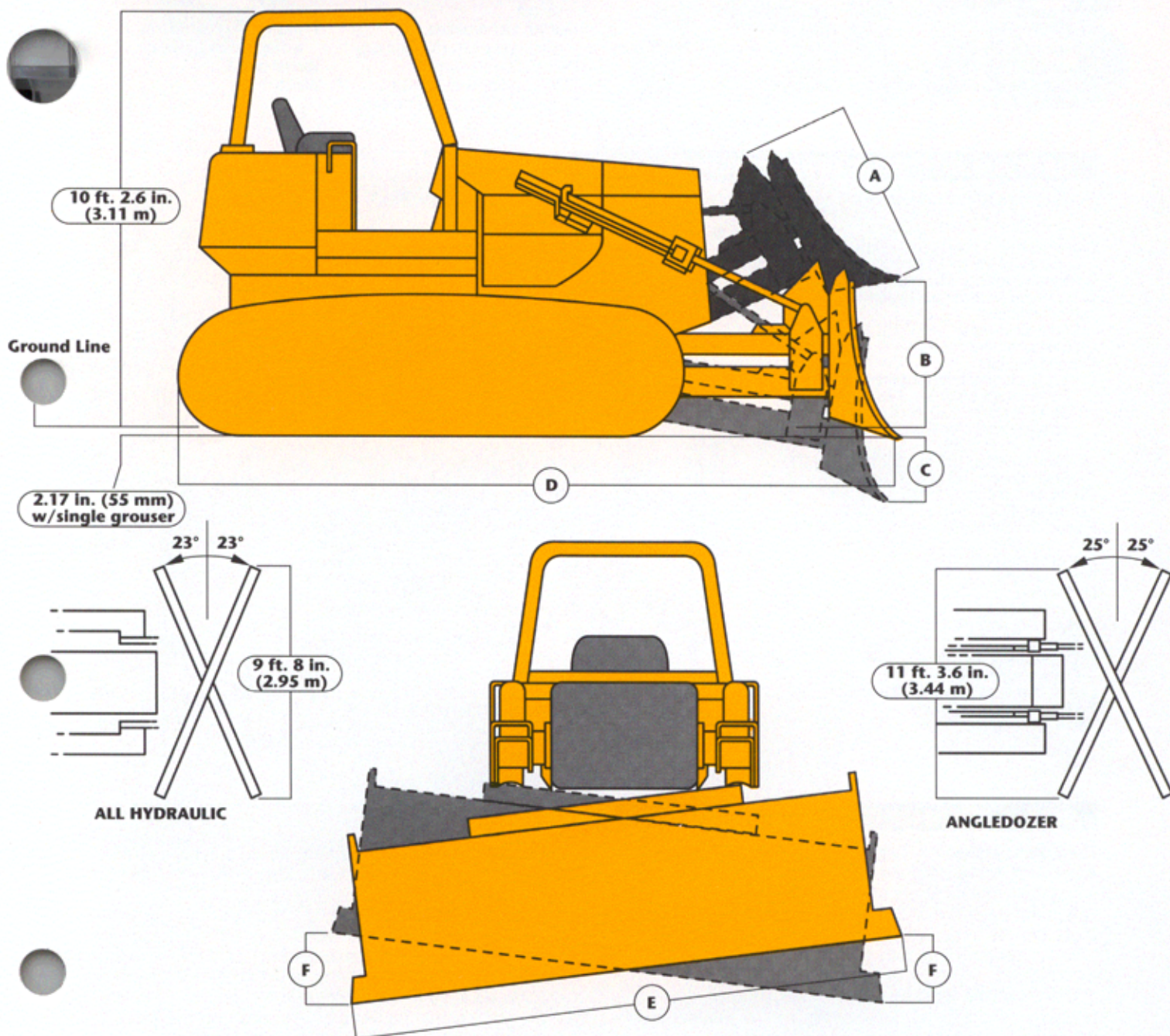
Hydraulic system ..... 33 gal. (125 L)

Hydrostatic drives ..... 33 gal. (125 L)

## OPERATING WEIGHT

750B ..... 32,060 lb. (14 540 kg)

# DIMENSIONS\*



\*Drawing based on 750B/6505

## DOZER SPECIFICATIONS

|               | Blade Capacity per SAE J1265 |                   | A Height |      | B Ground Clearance (Tractor with Blade) |      | C Digging Depth |      | D Overall Length (Tractor with Blade) |      | E Overall Width** (Tractor with Blade) |      | F Maximum Tilt |      | Weight |      | Total Operating Weight (Tractor with Blade) |        |
|---------------|------------------------------|-------------------|----------|------|-----------------------------------------|------|-----------------|------|---------------------------------------|------|----------------------------------------|------|----------------|------|--------|------|---------------------------------------------|--------|
| Blade         | yd <sup>3</sup>              | (m <sup>3</sup> ) | in.      | (mm) | in.                                     | (mm) | in.             | (mm) | ft.-in.                               | (mm) | ft.-in.                                | (mm) | in.            | (mm) | lb.    | (kg) | lb.                                         | (kg)   |
| Straight      | 2.93                         | 2.24              | 38       | 965  | 46                                      | 1168 | 19.3            | 490  | 15' 6.5"                              | 4736 | 10' 5"                                 | 3175 | 15.5           | 394  | 3795   | 1721 | 30,070                                      | 13 640 |
| Semi U        | 4.35                         | 3.31              | 43.3     | 1100 | 46                                      | 1168 | 19.3            | 490  | 16' 4"                                | 4975 | 10' 6"                                 | 3200 | 15.5           | 394  | 4225   | 1916 | 30,500                                      | 13 832 |
| Angle         | 3.37                         | 2.58              | 38.4     | 975  | 37.5                                    | 953  | 25              | 635  | 15' 10"                               | 4828 | 12' 10"                                | 3912 | 12.75          | 324  | 4575   | 2075 | 30,850                                      | 13 993 |
| All Hydraulic | 3.73                         | 2.85              | 40       | 1016 | 36                                      | 914  | 20              | 508  | 16' 8"                                | 5090 | 10' 11"                                | 3327 | 14.25          | 362  | 5785   | 2624 | 32,060                                      | 14 542 |
| Wide Track    | 3.23                         | 2.47              | 38       | 965  | 46                                      | 1168 | 19.3            | 490  | 15' 6.5"                              | 4736 | 11' 5"                                 | 3480 | 15.5           | 394  | 4145   | 1880 | 31,730                                      | 14 392 |

\*\*Includes cupped end bit

# HYDROSTATIC DRIVETRAIN

Dual-path hydrostatic drive provides many advantages over mechanical crawler drivetrains in the areas of machine performance and reliability.

**Live power turns.** Both tracks remain fully powered during turns. This affords greater maneuverability with larger loads and less ground disturbance. This feature also provides improved capability for working on soft ground, as well as the ability to counterbalance blade-corner loads when benching, ditching or backfilling.

**Counterrotation.** Separate control allows the two transmissions to be driven in opposite directions, permitting spot turns with excellent maneuverability. Quick blade position changes can be made.

**Infinite speed selection.** Infinitely variable ground speeds, from 0 to 6.5 mph (0-10.5 km/h), allow precise matching of machine speed to your application. Ground speed can be reduced without slowing engine rpm, so hydraulic power remains high and response time remains fast.

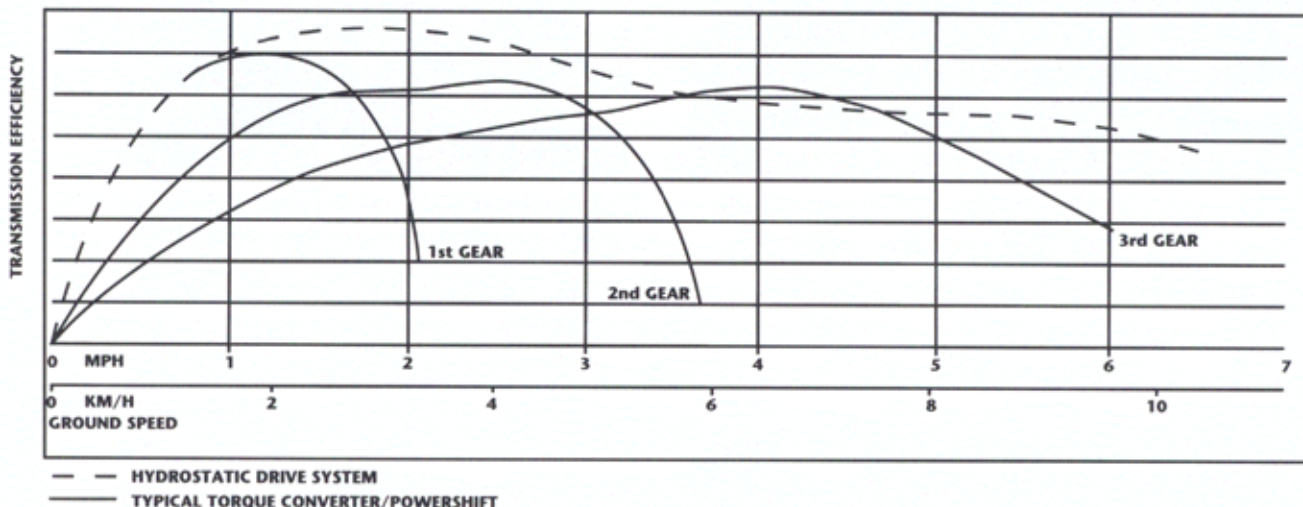
**Automatic load sensing.** As a load increases and engine rpm lessens, the transmission automatically reduces ground speed to

match load changes. This feature works at all throttle settings, providing full drawbar pull even at reduced engine speed.

**Dynamic braking.** Positive speed reduction is provided on slopes. When shifted to neutral, oil flow between the pump and motor is blocked. The crawler stops without use of the service brakes.

**Efficiency.** Overall, hydrostatic drive is more efficient in delivering horsepower to the tracks than systems that use torque converters. (See chart.) Note that the greatest efficiency advantages are in the 1.5 to 3.5 mph (2.4 to 5.6 km/h) range, the main work speed range of a crawler dozer.

**Simplicity.** Hydrostatic drive design uses, on the average, 150 fewer parts than the design of an ordinary drive system. Fewer parts mean increased reliability. Some of our hydrostatic drive crawlers have accumulated more than 35,000 hours of use without any major transmission repairs.



# DRAWBAR PULL

Maximum drawbar pull ..... 47,500 lb. (211 kN) at 0.37 mph (0.6 km/h)

