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	140 SAE net hp (104 kW)
	148 SAE gross hp (110 kW)
Turbocharger	standard
Cylinders	6
Displacement	414 cu. in. (6.785 L)
Fuel consumption, typical	3.8 to 5.5 gal./hr. (14.4 to 20.8 L/h)
Maximum net torque at 1300 rpm	420 lb.-ft. (570 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 independently 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. 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 counterrotation. 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

7-roller, 101-in. (2565 mm) track frame with front and rear track guides and sprocket guard. Dura-Trax™ undercarriage features deep-heat-treated, sealed and lubricated track links and through-hardened sealed and lubricated rollers for maximum wear resistance.

Grouser	22 in. (560 mm)
Shoes, each side	43
Ground contact area with 22-in. (560 mm) shoes	4444 sq. in. (28 680 cm²)
Ground pressure	7.1 psi (49 kPa)
Ground clearance, minimum	14 in. (356 mm)
Length of track on ground	101 in. (2565 mm)
Track gauge, standard	74 in. (1880 mm)
Oscillation	11.5 in. (292 mm)
Carrier rollers each side	2
Adjustment	hydraulic

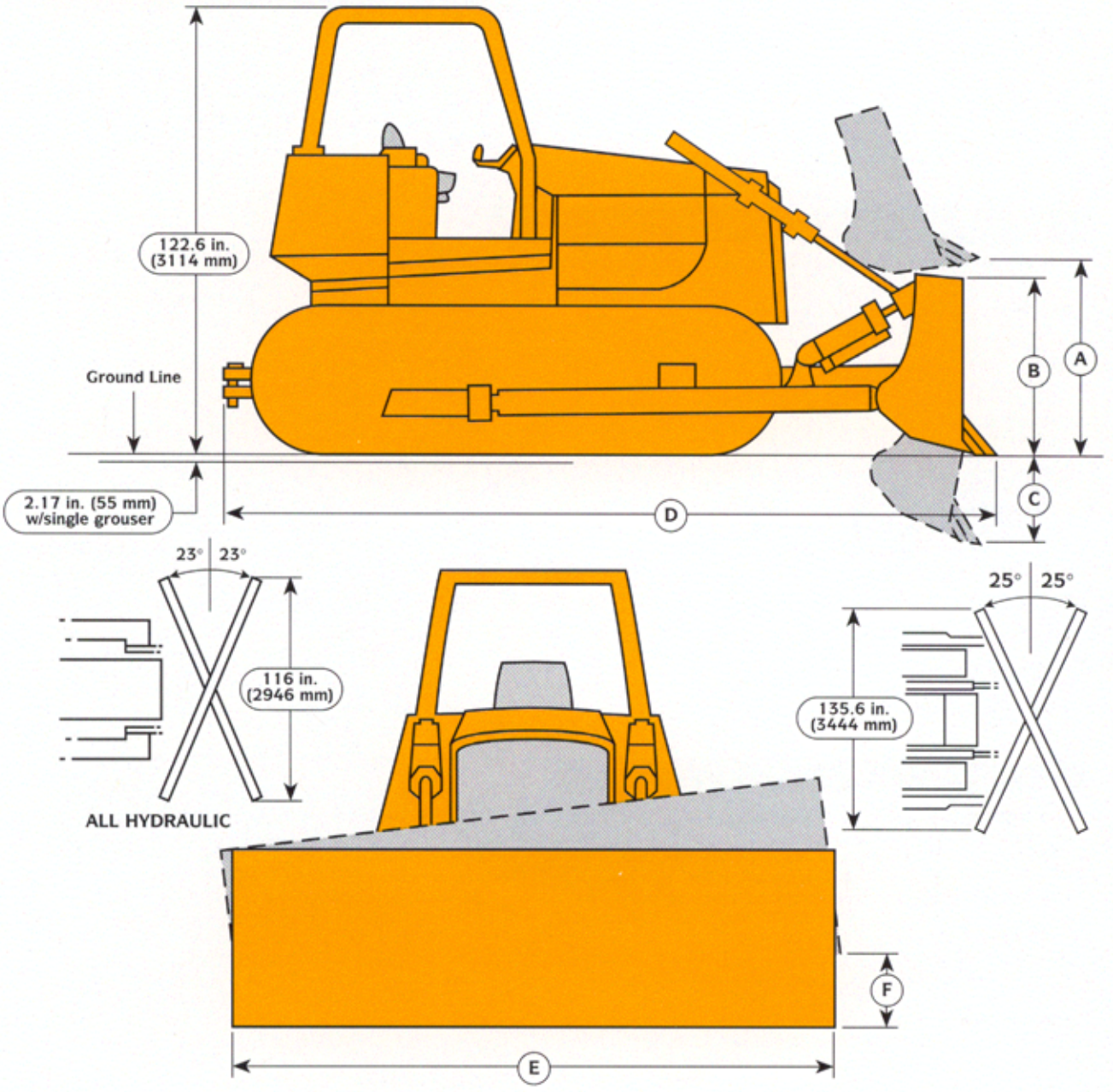
CAPACITIES

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 Long-Track	31,530 lb. (14 300 kg)

DIMENSIONS*



*Drawing based on 750B Long-Track w/Semi U

DOZER SPECIFICATIONS

Blade	Blade Capacity per SAE J1265 yd³	(m³)	A Blade Lift Height in.	(mm)	B Blade Height in.	(mm)	C Digging Depth in.	(mm)	D Overall Length (Tractor with Blade) in.	(mm)	E Overall Width** (Tractor with Blade) in.	(mm)	F Maximum Tilt in.	(mm)	Weight lb.	(kg)	Total Operating Weight (Tractor with Blade) lb.	(kg)
Straight	2.93	2.24	42.2	1072	38	965	20.2	513	198	5024	125	3175	15.5	394	3795	1721	31,105	14 105
Semi U	4.33	3.31	42.2	1072	43.3	1100	20.2	513	207	5263	126	3200	15.5	394	4225	1916	31,530	14 302
Angle	3.37	2.58	39.3	998	38.4	975	23.8	604	200	5090	154	3912	12.75	324	4575	2075	31,880	14 460
All Hydraulic	3.18	2.43	36	914	40	1016	30	762	210	5345	126	3210	14.25	362	5820	2640	33,125	15 025

**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.

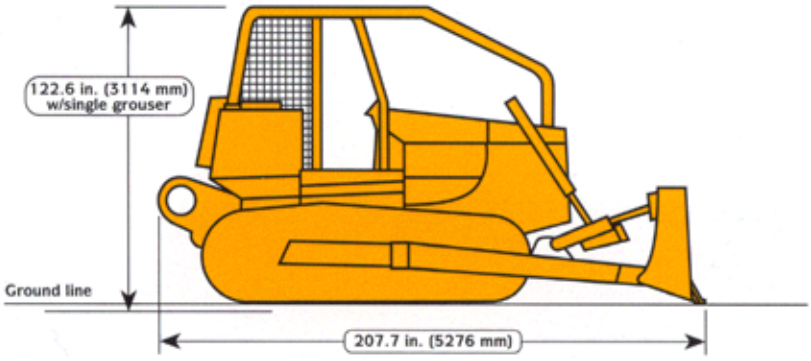
Dynamic braking. Positive speed reduction is provided on slopes. When shifted to neutral, oil flow between the pump and motor is blocked. The crawler stops without use of the service brakes.

Efficiency. Overall, hydrostatic drive is more efficient in delivering horsepower to the tracks than systems that use torque converters. 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.

FORESTRY APPLICATION

The 750B Long-Track Dozer can be equipped for forestry applications with the addition of limb risers and screens for the rollover protective structure.



DRAWBAR PULL

Drawbar pull
At 1.2 mph (1.9 km/h) .....30,800 lb. (137 kN)
At 2.0 mph (3.2 km/h) .....19,100 lb. (85 kN)