

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)
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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 (15 790 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 cm ²)
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

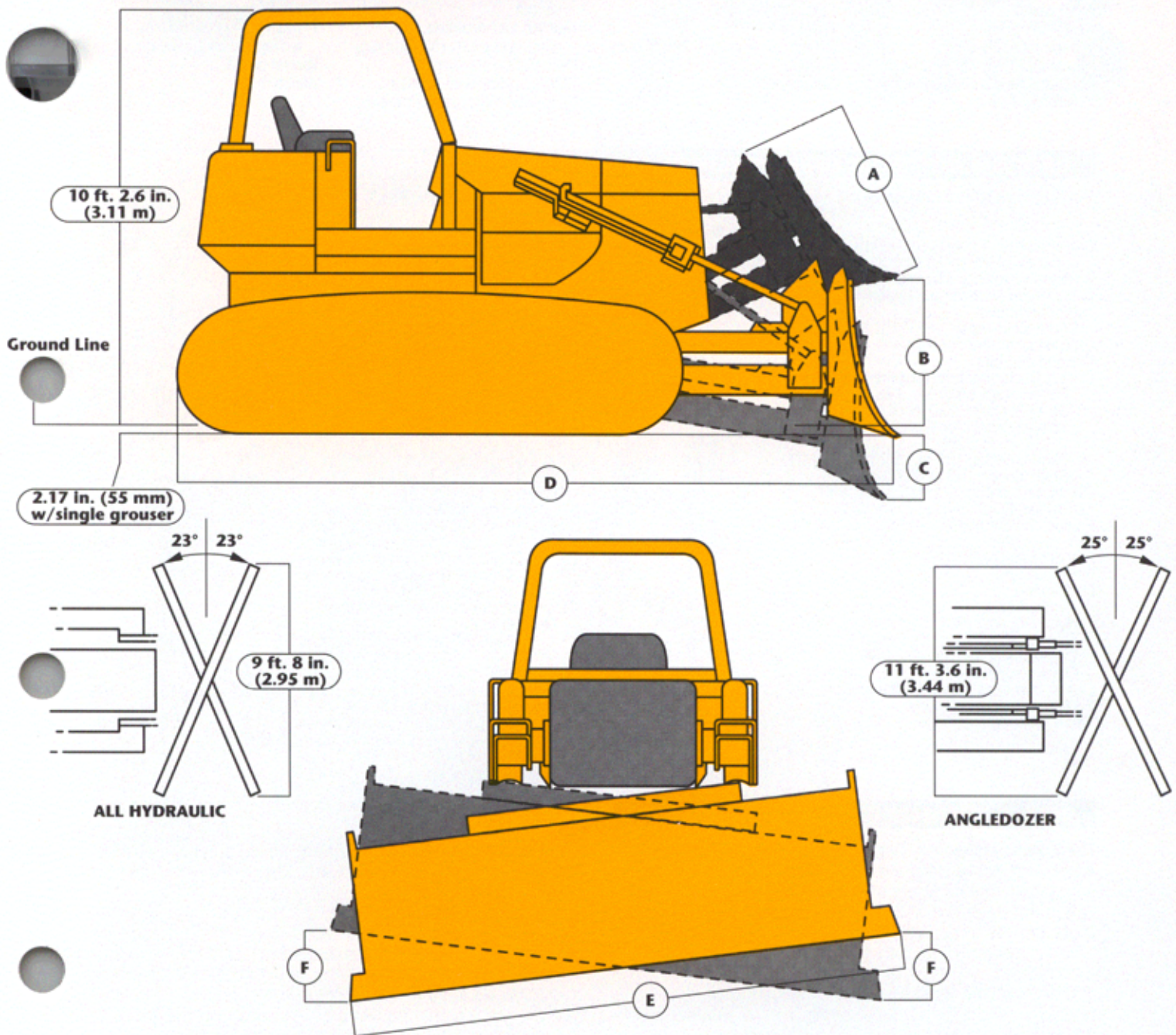
CAPACITIES

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)
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DIMENSIONS*



*Drawing based on 750B/6505

DOZER SPECIFICATIONS

Blade	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)	
	yd ³	(m ³)	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.

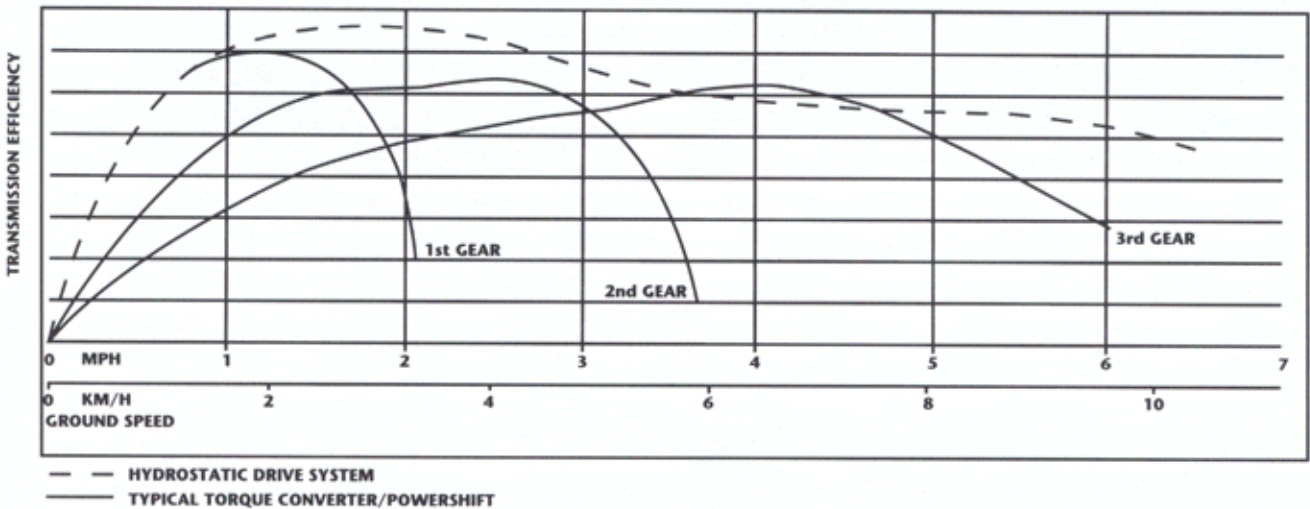
Automatic load sensing. As a load increases and engine rpm lessens, the transmission automatically reduces ground speed to

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)

