



450D/6405 BULLDOZER

FEATURES

67 SAE net hp (50 kW)

Single T-bar controls all dozer functions

Power Shift Hi-Lo-Reverse

Dura-Trax™ undercarriage with boron-steel deep-heat-treated, strutted, sealed track links; deep-heat-treated sealed rollers; boron-steel through-hardened grousers; sealed front idler and carrier roller

Self-adjusting, oil-cooled steering clutches and brakes

Roll-over protective structure (ROPS)

Vandal protection

ADD VERSATILITY WITH:

Winch

Fairlead and drawbar

Integral log arch

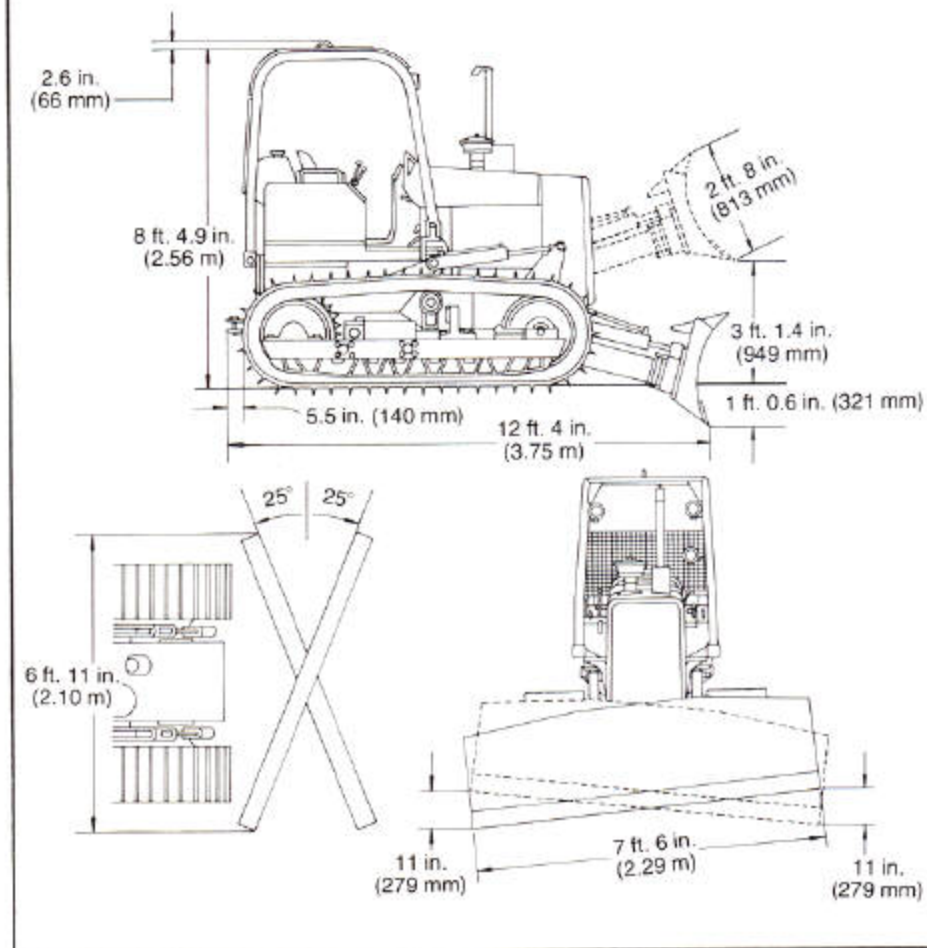
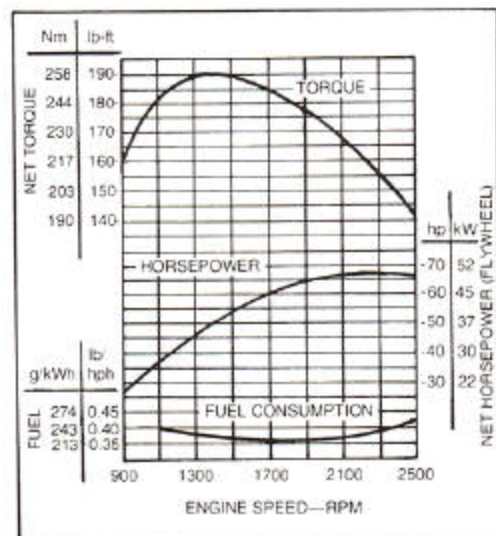
Backhoes

Sideboom

Cable plow

Ripper

ENGINE PERFORMANCE



450D/6405 BULLDOZER SPECIFICATIONS

(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ICED and SAE Standards. Except where otherwise noted, these specifications are based on a unit with roll-over protective structure, full fuel tank, 175-lb. (79 kg) operator and standard equipment.)

Power (@ 2500 engine rpm):	SAE	DIN
Gross	72 hp (54.0 kW)	
Net	67 hp (50 kW)	68 hp (50 kW)
Drawbar	50.1 hp (37.4 kW)	50.8 hp (37.4 kW)

Net engine flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, and alternator. The gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500-ft. (150 m) altitude and 85° F (29.5°C) temperature, and DIN 6270 conditions (non-corrected). No derating is required up to 10,000 feet (3050 m) altitude.

Engine: John Deere 4-cyl. turbocharged diesel, 4-stroke cycle	
Bore and stroke	4.02 × 4.33 in. (102 × 110 mm)
Piston displacement	219 cu. in. (3.589 L)
Compression ratio	16.2 to 1
Maximum torque @ 1400 rpm	190 lb-ft (258 Nm) (26.3 kg-m)
Torque rise	35 percent
NACC or AMA (U.S. Tax) horsepower	25.8
Lubrication	Pressure system w/full-flow filter
Main bearings	5
Cooling	Pressurized w/thermostat and fixed bypass
Fan	Blower
Air cleaner w/restriction indicator	Dry
Electrical system	12-volt w/alternator
Battery (12 volt)	Reserve capacity: 180 minutes

Transmission: H-L-R: 4 speed ranges; with high, low, and reverse speeds shifted hydraulically without clutching in each range.

Clutch: 11-in. (279 mm) single-disk

Gear:	TRAVEL SPEEDS					
	mph (km/h)		mph (km/h)			
Range 1			Range 3			
Low	1.3	2.1	Low	3.0	4.8	
High	1.8	2.9	High	4.3	6.9	
Reverse	1.7	2.7	Reverse	4.1	6.6	
Range 2			Range 4			
Low	2.0	3.2	Low	4.7	7.6	
High	2.8	4.5	High	6.7	10.8	
Reverse	2.7	4.3	Reverse	6.4	10.3	

Gear:	DRAWBAR PULL					
	(with adequate weight and traction)					
	@Maximum Engine Torque			@Rated Engine Speed		
	lb.	(kN)	(kg)	lb.	(kN)	(kg)
Range 1						
Low	18,200	81.0	8255	13,700	60.9	6215
High	12,400	55.2	5625	9,500	42.3	4310
Range 2						
Low	11,100	49.4	5035	9,000	40.0	4080
High	9,000	40.0	4080	6,000	26.7	2720
Range 3						
Low	8,700	38.7	3945	5,600	24.9	2460
High	5,200	23.1	2360	3,600	16.0	1630
Range 4						
Low	4,900	21.8	2220	3,200	14.2	1450
High	3,100	13.8	1405	1,400	6.23	635

Special Equipment:

- Auxiliary 2-spool control valve
- Brush screens
- Cab (includes ROPS)
- Cast steel end bits
- Cigaret lighter
- Front idler shields
- Limb risers and overhead exhaust
- PTO (1000 rpm)
- Remote hydraulic cylinder
- Swinging drawbar
- 16-in. (406 mm) open-center grouser shoes
- 13-in. (330 mm) rubber shoes
- Two batteries
- Winch drive

Steering:

Steering clutches and brakes are controlled by a single lever for each track. A pedal provides braking, and lock-down for parking.
Clutches: Oil-cooled, hydraulically actuated, multiple-disk, 11-in. (279 mm) disks; 16 friction surfaces per clutch.
Brakes: Self-adjusting, self-energizing, oil-cooled contracting band with bonded lining.

Hydraulic System:

Control	Single "T-bar", triple hydraulic system
Pump	Gear, 17 or 23 gpm (1.07 or 1.45 L/s)
Pressure	2250 psi (15 514 kPa) (158.2 kg/cm ²)

Hydraulic Cylinders:	Bore	Stroke
Lift, two	3.5 in. (89 mm)	15 in. (381 mm)
Angle, two	3.5 in. (89 mm)	13.375 in. (343 mm)
Tilt, one	3.5 in. (89 mm)	3 in. (76 mm)
Cylinder rods	Ground, heat-treated, chrome-plated, polished	
Cylinder pivot pins	Hardened steel (replaceable bushings)	

Undercarriage: 5-roller track frame with full-length rock guards, Dura-Trax™ deep-heat-treated components.

Grouser	16 in. (406 mm)
Track shoes, each side	36
Ground contact area	2328 sq. in. (15 019 cm ²)
Ground pressure	6.3 psi (43.4 kPa) (0.443 kg/cm ²)
Length of track on ground	72.75 in. (1.85 m)
Track gauge	52 in. (1.32 m)
Carrier roller	1
Adjustment	Hydraulic
Clearance at rear crossbar	14.25 in. (362 mm)

Blade: Reinforced, box-welded

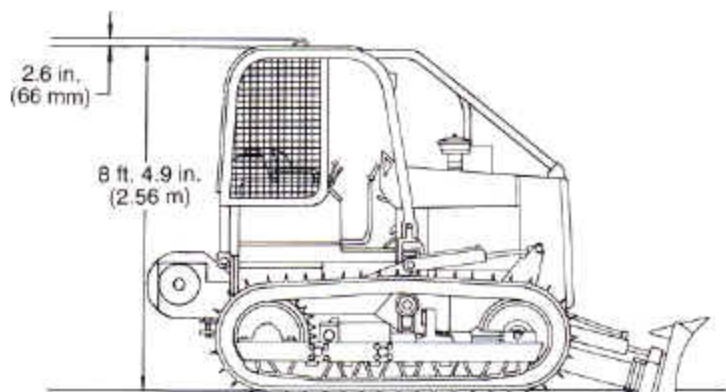
Cutting edge	3-piece, reversible, replaceable
Center section	0.625 in. (16 mm)
End bits	0.75 in. (19 mm)

Capacities:	U.S.	Liters
Cooling system	4 gal.	15.1
Fuel tank	31 gal.	117.3
Crankcase, including filter	9 qt.	8.5
Transmission	8 gal.	30.3
Final drive (each)	6.25 qt.	5.9
Hydraulic reservoir	6 gal.	22.7
Hydraulic system	9.5 gal.	36.0
Steering clutch housing (each)	28 qt.	26.5

Additional Standard Equipment:

- Cold-weather starting aid
- Deluxe cushion seat w/armrests
- Electric hourmeter
- Engine sideshields, perforated
- Front hitch
- Front/rear bottom guard
- Horn
- Key switch w/pushbutton safety start
- Lights
- Master electrical disconnect switch
- Muffler
- Outer sprocket shields
- Precleaner
- ROPS w/canopy and seat belt
- Tachometer
- Transistorized voltage regulator
- Trash-resistant radiator
- Vandal protection

SAE Operating Weight w/ROPS: 14,640 lb. (6640 kg)



Limb risers and brush-protection assembly for roll-over protective structure