



450E/6415 BULLDOZER

FEATURES

70 SAE net hp (52 kW)

Outside-mounted dozer

Hydraulic tilt

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

Single-lever control of blade, lift, downpressure, tilt and float

Power Shift Hi-Lo-Reverse

Self-adjusting, oil-cooled steering, clutches and brakes

Roll-over protective structure (ROPS)

Vandal protection

ADD VERSATILITY WITH:

Winch

Fairlead and drawbar

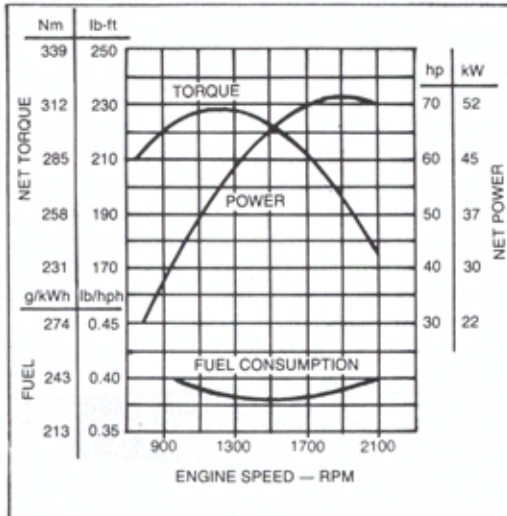
Integral log arch

Ripper

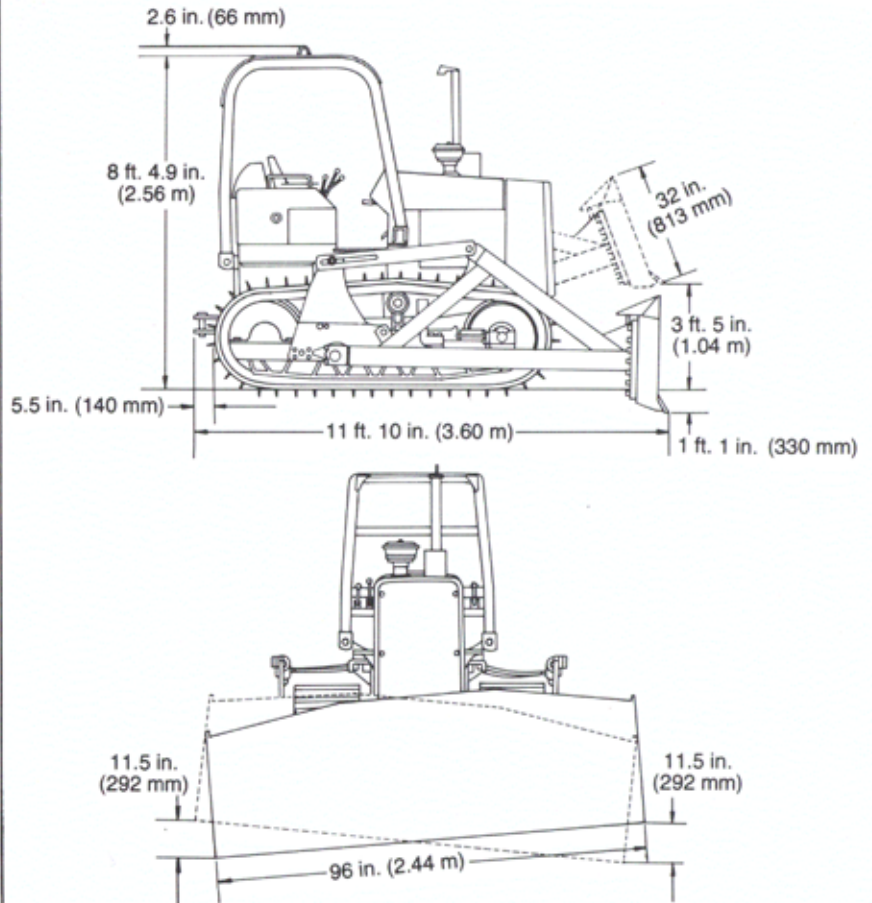
Backhoes

Cable plow

ENGINE PERFORMANCE



Model shown may include options



450E/6415 BULLDOZER SPECIFICATIONS

(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with 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.)

Rated Power @2100 rpm:	SAE	DIN 6270
Net	70 hp (52 kW)	53 kW
Gross	73 hp (54.5 kW)	
Drawbar	51 hp (38 kW)	

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 6270, using No.2-D fuel @35 API gravity. No derating is required up to 5,000 feet (1500 m) altitude. Gross power is without cooling fan.

Engine: John Deere 4-276D

Type	4-stroke cycle, naturally aspirated diesel
Bore and stroke	4.19 x 5.00 in. (106.4 x 127 mm)
No. of cylinders	4
Displacement	276 cu. in. (4.524 L)
Maximum net torque @1200 rpm	228 lb-ft (309 Nm) (31.5 kg-m)
Torque rise	30 percent
Cooling fan	Blower
Compression ratio	16.8 to 1
Main bearings	5
Lubrication	Pressure system w/full flow filter
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		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	2.1	3.3	Low	4.6	7.3
High	2.9	4.7	High	6.5	10.4
Reverse	2.8	4.5	Reverse	6.2	9.9

DRAWBAR PULL

(with adequate weight and traction)

Gear:	@Maximum Engine Torque		@Rated Engine Speed			
	lb.	(kN)	(kg)	lb.	(kN)	(kg)
Range 1						
Low	18,200	81.0	8255	14,200	63.2	6440
High	12,400	55.2	5625	9,900	44.0	4490
Range 2						
Low	11,100	49.4	5035	9,000	40.0	4080
High	9,000	40.0	4080	6,200	27.6	2810
Range 3						
Low	8,700	38.7	3945	6,300	28.0	2860
High	5,200	23.1	2360	3,800	16.9	1720
Range 4						
Low	4,900	21.8	2220	3,400	15.1	1540
High	3,100	13.8	1405	2,300	10.2	1040

Steering:

Steering clutches and brakes are controlled by a single lever for each track (pedal steering optional). 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-lever, double 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)
Tilt, one	4.5 in. (114 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 Dura-Trax™ deep-heat-treated components.

Grouser	18 in. (457 mm)
Track shoes, each side	36
Ground contact area	2619 sq. in. (16 897 cm ²)
Ground pressure	5.6 psi (38.6 kPa) (0.394 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)

C-Frame Reinforced, box-welded

Capacities:

	U.S.	Liters
Cooling system	4 gal.	15
Fuel tank	31 gal.	117.3
Crankcase, including filter	15 qt.	14.2
Transmission	8 gal.	30.3
Final drive (each)	6.25 qt.	5.9
Hydraulic reservoir	7.0 gal.	26.5
Hydraulic system	9.5 gal.	36.0
Steering clutch housing (each side)	14 qt.	13.2

Additional Standard Equipment:

- Adjustable seat w/armrests
- Electric hourmeter
- Enclosed alternator w/solid state regulator
- Engine side shields, perforated
- Front hitch
- Horn
- Isolation mounted ROPS w/canopy and seat belt
- Key switch start
- Muffler
- Precleaner
- Trash-resistant radiator
- Vandal protection

SAE Operating Weight 14,675 lb. (6655 kg)

Special Equipment:

- Altitude compensating turbocharger
- Brush screens
- Cab (includes ROPS)
- Cast steel end bits
- Chain guides
- Cold weather starting aid
- Front idler shields
- Lights
- Limb risers and overhead exhaust
- Master electrical disconnect switch
- PTO (1000 rpm)
- Remote hydraulic cylinder
- Rock guards, full length
- Swinging drawbar
- 13-in. (330 mm) rubber shoes
- 16-in. (406 mm) open-center grouser shoes
- 18-in. (457 mm) open-center grouser shoes
- Two batteries
- Winch drive

