



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

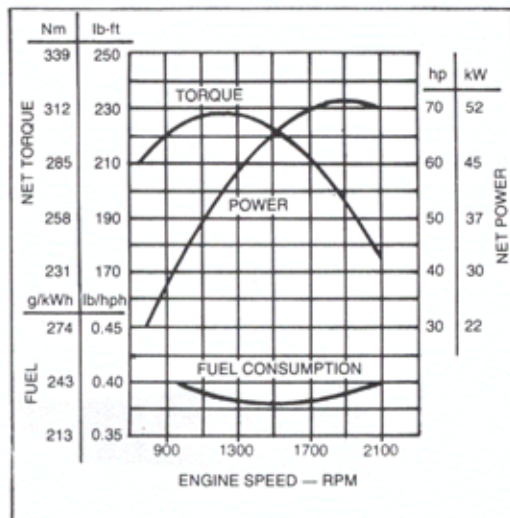
Integral log arch

Ripper

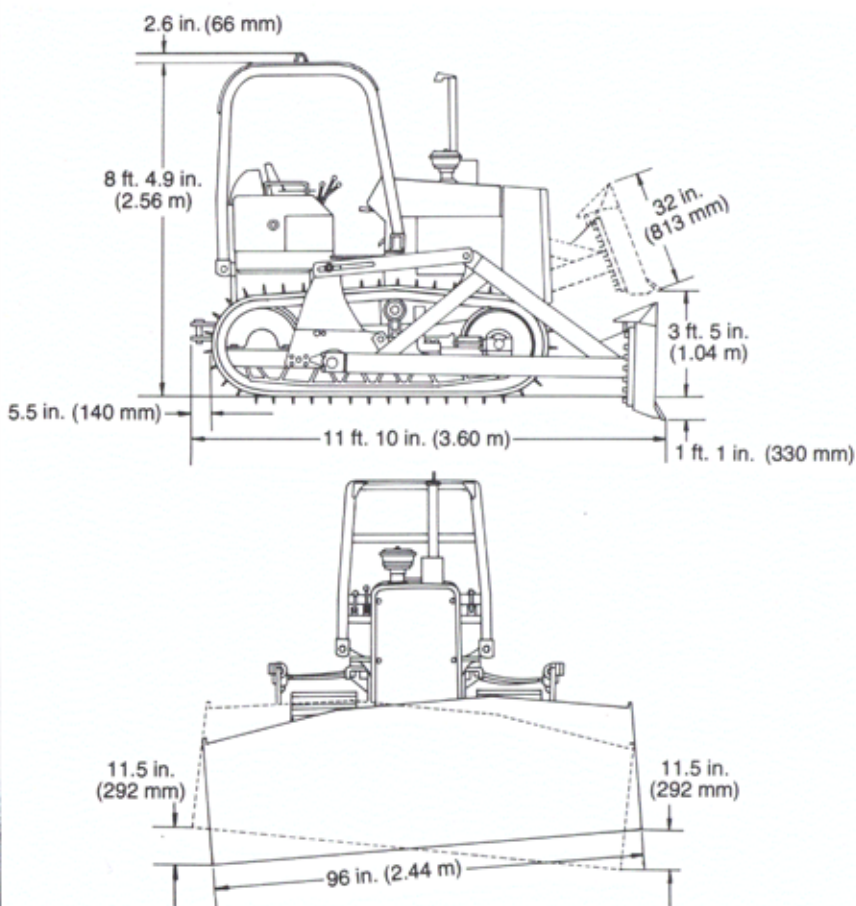
Backhoes

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 mph km/h	Gear	Travel Speeds 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 lb. (kN)	@Rated Engine Speed lb. (kN)
Range 1		
Low	18,200 81.0	14,200 63.2
High	12,400 55.2	9,900 44.0
Range 2		
Low	11,100 49.4	9,000 40.0
High	9,000 40.0	6,200 27.6
Range 3		
Low	8,700 38.7	6,300 28.0
High	5,200 23.1	3,800 16.9
Range 4		
Low	4,900 21.8	3,400 15.1
High	3,100 13.8	2,300 10.2

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

