

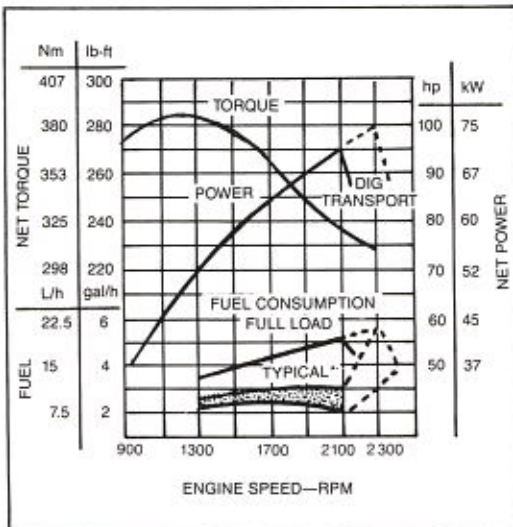


495D EXCAVATOR



Model shown may include options

ENGINE PERFORMANCE



* Depending on operating variables

FEATURES

95 SAE net hp (71 kW) John Deere turbocharged diesel engine in digging mode
100 SAE net hp (75 kW) in travel mode

26,184 lb. (11 877 kg) maximum operating weight

15 ft. 5 in. (4.71 m) maximum digging depth

24 ft. 5 in. (7.45 m) maximum reach at ground level

21.4 mph (34.5 km/h) travel speed—rubber-tired mobility

High-efficiency variable-flow hydraulic system with fuel-saving, mode control features

Automatic engine idling system

Large cab for improved operator comfort and visibility with controls for transporting and excavating

Two-lever, low-effort, all hydraulic pilot control of boom, arm, bucket, and 360-degree continuous swing

Complete instrumentation/warning system continuously monitors vital machine functions

Hydrostatic drive with Hi-Lo ranges provides excellent on- and off-road versatility

Vandal protection—lockable service doors

495D EXCAVATOR SPECIFICATIONS

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with PCSA and SAE Standards. Except where otherwise noted, these specifications are based on a unit with full fuel tank, 175-lb. (80 kg) operator and standard equipment.

Rated Power @ 2100 rpm (Dig Mode):	SAE	DIN 70 020
Net	95 hp (71 kW)	71 kW
Gross	100 hp (75 kW)	
Rated Power @ 2300 rpm (Travel Mode):		
Net	100 hp (75 kW)	75 kW
Gross	105 hp (78 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 70 020, using No. 2-D fuel @ 35 API gravity. No derating is required up to 10,000 ft. (3050 m) altitude. Gross power is without cooling fan.

Engine: John Deere 4276T

Type	4-stroke cycle, turbocharged diesel
Bore and stroke	4.19 x 5.00 in. (106.5 x 127 mm)
No. of cylinders	4
Displacement	276 cu. in. (4.524 L)
Compression ratio	17.2 to 1
Maximum net torque @ 1300 rpm	284 lb-ft (385 Nm) (39.3 kg-m)
Lubrication	Pressure system with full-flow filter
Cooling fan	Suction type
Electrical system	24 volt with 42-amp alternator
Batteries (two 12-volt)	Reserve capacity: 180 minutes

Hydraulic System: Open Center

Variable-flow, constant horsepower hydraulic system provides independent and combined operation of all functions. Load-sensing adjusts hydraulic flow and pressure to individual function demands. Pump displacement is automatically reduced when controls are returned to neutral.

Main pumps: 2 variable-displacement, axial piston	
Pressure setting	4620 psi (31 870 kPa) (325 kg/cm ²)
Maximum oil flow	2 x 30.4 gpm (2 x 115 L/min)
Pilot pump: Gear	
Pressure setting	569 psi (3923 kPa) (40 kg/cm ²)
Maximum oil flow	6.6 gpm (25 L/min)
Steering pump: Gear	
Pressure setting	1778 psi (12 258 kPa) (125 kg/cm ²)
Maximum oil flow	4.8 gpm (18 L/min)
Control valve: Nine spool valve	
System relief valve operating pressure:	
Travel	4620 psi (31 870 kPa) (325 kg/cm ²)
Front end	4050 psi (27 950 kPa) (285 kg/cm ²)
Circuit relief valves:	
Boom	4270 psi (29 420 kPa) (300 kg/cm ²)
Arm	4270 psi (29 420 kPa) (300 kg/cm ²)
Bucket	4270 psi (29 420 kPa) (300 kg/cm ²)
Stabilizers	4270 psi (29 420 kPa) (300 kg/cm ²)
Cross-over relief valves:	
Travel	4900 psi (33 830 kPa) (345 kg/cm ²)
Swing	3340 psi (23 050 kPa) (235 kg/cm ²)
Steering	2500 psi (17 160 kPa) (175 kg/cm ²)

Cylinders:	Bore		Rod Diameter		Stroke	
	In.	(mm)	In.	(mm)	In.	(mm)
Boom (2)	3.7	95	2.8	70	42.7	1085
Arm	4.1	105	3.0	75	46.3	1175
Bucket	3.7	95	2.6	65	36.8	935
Stabilizer	4.3	110	2.8	70	14.2	360
Steering	2.2	55	1.0	25	8.5	217
Blade	3.9	100	2.4	60	6.7	170
Axle lock	3.5	90	3.5	90	4.5	115

Arm cylinder has a built-in hydraulic cushion at each end of the stroke. Boom cylinder has cushion on rod end.

Swing Mechanism:

Swing speed	0 to 12.5 rpm
Swing lock	Manual for transporting
Turntable bearing	Single-row, shear-type ball bearing with induction-hardened, lubricated internal gear and pinion, 500-hour lube interval.

Wheeled Undercarriage:

The undercarriage is available with a blade or (2) stabilizers. The frame is an all-welded, stress-relieved structure.

Drive system	Two-speed—four wheel drive
Travel motor	Variable displacement, axial piston motor with hydraulic retarding valve for preventing overspeeding when traveling downhill.
Transmission	Constant mesh with high and low speed range.
Travel speeds:	
Low speed range	0 to 6.8 mph (0 to 11.0 km/h) forward and reverse
High speed range	0 to 21.4 mph (0 to 34.5 km/h) forward
Maximum traction force—high	3770 lb. (17 kN) (1710 kg)
—low	13,095 lb. (58 kN) (5940 kg)
Gradability	58 percent (30 degrees)

Steering System:

Full hydraulic power steering using two steering cylinders. Provides manual steering without engine power. Steering system mode selection provides normal steering in both transport and work positions.

Bore	2.2 in. (55 mm)
Rod diameter	1 in. (25 mm)
Stroke	8.5 in. (217 mm)

Brakes:

Service	Air over hydraulic brakes acting (foot pedal or switch) at each wheel—internal-expanding shoe type
Parking	Spring actuated, air-released, internal-expanding shoe type, acting on horizontal drive shaft (switch)

Note: Applying brakes with switch also locks oscillating axle

Axles:

Front	Oscillating axle with locking hydraulic cylinders; 14 degrees total oscillation
Rear	Fixed to frame

Tires: (Traction type tread pattern)

9.00-20.0 x 12 PR, duals
18.00-19.5 x 18 PR, singles

Stabilizers:

Each stabilizer cylinder is fitted with a pilot-operated check valve for positive locking. Left and right stabilizers can be operated independently.

Dozer Blade:

Width	8 ft. 1 in. (2470 mm)
Height	19 in. (484 mm)

Cab:

Large, isolation-mounted, with sound-absorbing materials on ceiling and sidewalls. Safety glass windows. Front window can be stored overhead. Rear window, door, and roof hatch open for ventilation.

Seat:

Deluxe, fully cushioned, cloth covered, with adjustable backrest, headrest and padded fold-up armrests. Independent horizontal and vertical adjustments. Seat suspension is adjustable to operator weight.

Controls:

All hydraulic functions are pilot controlled for precision metering and low operator effort. Two short levers control swing, boom, arm, and bucket functions. Independent control of stabilizers. Foot control for auxiliary hydraulic function. All pilot controls are neutralized by moving left console.

Boom and Arm:

Internally reinforced tapered box construction with heat-treated steel bushings. Machined and line-bored after welding for accurate alignment. Centralized lubrication system.

Servicing and Vandal Protection:

Non-slip steps and handrails allow easier servicing and maintenance. Easily accessible engine and hydraulic system covers. Machine covers, fuel cap, and cab door are lockable.

Capacities:	U.S. Gal.	Liters
Fuel tank	66	250
Engine coolant	5.5	21
Engine oil	3.4	13
Swing device	2.1	8
Transmission	1.3	5
Front axle case	1.6	6
Rear axle case	2.3	8.5
Wheel gear reduction, each	0.4	1.5
Hydraulic system	35	133
Hydraulic tank	19	72

