

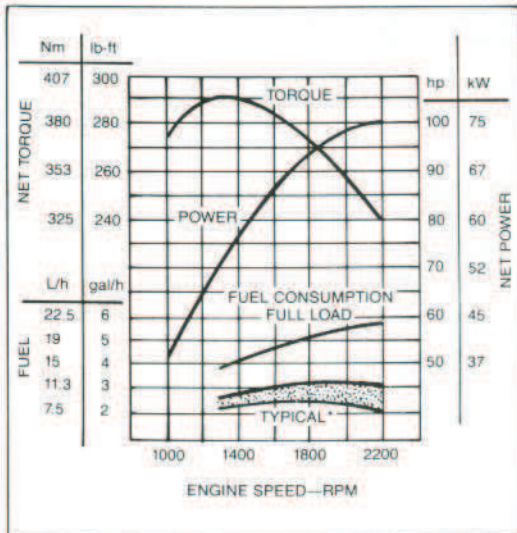


540D SKIDDER



Model shown may include options

ENGINE PERFORMANCE



*Depending on operating variables

FEATURES

- 100 SAE net hp (75 kW) John Deere turbocharged diesel engine
- Articulated-frame steering
- Automotive-type, position-responsive steering
- Oscillating front axle
- Power Shift transmission
- Differential lock on both axles
- Wet-disk power service brakes never need adjusting
- Wet-disk parking brake
- Hydraulically actuated winch
- Arch with adjustable roller
- Extended log bumper

ADD VERSATILITY WITH:

- Stacking blade
- Cab
- Cold weather starting kit
- Lights

540D SKIDDER 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 18.4-26, 10 PR tires, full fuel tank, 175-lb. (80 kg) operator and standard equipment.

Rated Power @ 2200 rpm:	SAE	DIN 70 020
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 feet (3050 m) altitude. Gross power is without cooling fan.

Engine: John Deere 4-276T	
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)
Maximum net torque @ 1300 rpm	290 lb-ft (393 Nm) (40 kg-m)
Cooling fan	Blower
Compression ratio	16.8 to 1
Lubrication	Pressure system w/full-flow filter
Electrical system	12-volt w/42 amp alternator
Battery	Reserve capacity: 180 minutes

Differentials:	
Front and rear	Full differentials w/hydraulic lock

Engine Clutch Disconnect:	
Hand-operated, spring-loaded, dry disk. Single plate, 12 in. (305 mm).	

Transmission:	
Power Shift with planetary gears, hydraulically actuated wet-disk clutches and brakes; provides 8 speeds forward—4 reverse. Controlled by single lever on console.	

Travel Speeds (2200 engine rpm, no tire slip):		
	mph	km/h
Forward	1.6-17.4	2.6-28.0
Reverse	2.1-5.8	3.4-9.3

Drive Axles:	
Four-wheel drive with inboard planetary gears on all axles. Front axle oscillates 15 degrees above and below horizontal. Travel at tire center line 20 in. (508 mm).	

Steering: Power	
Articulated frame hydraulically actuated by two double-acting cylinders with cushioned stops. Steering system has hydraulic pressure priority.	
Outside clearance circle w/o blade	34 ft. 4 in. (10.46 m)
Outside clearance circle w/blade	35 ft. 0 in. (10.67 m)

Brakes:	
Service	Hydraulic, power-actuated, pedal-controlled wet disk brakes located in axle.
Parking, winching and emergency stop	Hand-operated mechanical wet-disk brake located on driveline for braking front and rear axles. Hydraulic release.

Hydraulic System:	
Closed center, constant pressure. Variable-displacement pump driven from crankshaft	
	25 gpm (1.58 L/s), 2000 psi (13 790 kPa) (140.6 kg/cm ²) @ 2200 engine rpm. Full-flow filtration. Oil-to-air cooler.

Hydraulic Cylinders:	Rod Dia.	Bore	Stroke
Blade lift cylinders (2)	1.50 in. (38.1 mm)	3.50 in. (89 mm)	14.25 in. (362 mm)
Steering cylinders (2)	1.75 in. (44.5 mm)	2.75 in. (70 mm)	14.37 in. (365 mm)

Cylinder rods are ground, heat-treated, chrome-plated and polished.

Tires:	
18.4-26, 10 PR, steel-ply, LS2	
18.4-34, 10 PR, steel-ply, LS2	
23.1-26, 10 PR, steel-ply, LS2	
28L-26, 10 PR, steel-ply, LS2	
28L-26, 10 PR, steel-ply, LS3	
67 x 34.00-26, 10 PR, steel-ply tubeless, DT	

Capacities:	U.S.	Liters
Fuel tank	41 gal.	155.2
Cooling system	7.7 gal.	29.2
Engine lubrication, including filter	15 qt.	14.2
Transmission and hydraulic system	9 gal.	34.1
Front differential	4.5 gal.	17
Rear differential	4.5 gal.	17
Winch	1.8 gal.	6.8

Blade: Hydraulic control	
Width	6 ft. 11 in. (2.11 m)
Max. lift above ground level	4 ft. 2 in. (1.27 m)
Max. drop below ground level	13 in. (330 mm)
Height (ends)	1 ft. 9 in. (533 mm)
Height (center)	2 ft. 3 in. (686 mm)

Cable Arch:	
Horizontal roller	6 in. (152 mm) dia.
Vertical rollers (through-hardened steel)	4.5 in. (114 mm) dia.
Working height settings (top of horizontal roller to ground):	
Lower	5 ft. 10 in. (1.78 m)
Upper	6 ft. 3 in. (1.91 m)

Winch:	
Live mechanical drive; hydraulically actuated clutch and brakes, single lever control.	
Winch capacities*	
1/2-in. (12.7 mm) cable	223 ft. (68 m)
5/8-in. (15.8 mm) cable	146 ft. (45 m)
3/4-in. (19.1 mm) cable	103 ft. (31.4 m)
*Calculated—no allowance made for loose or uneven spooling.	

Linepull**:	
Bare drum	26,700 lb. (119 kN) (12 100 kg)
Full drum	18,100 lb. (81 kN) (8200 kg)
**Based on winch clutch capacity and .75 in. (19 mm) cable.	

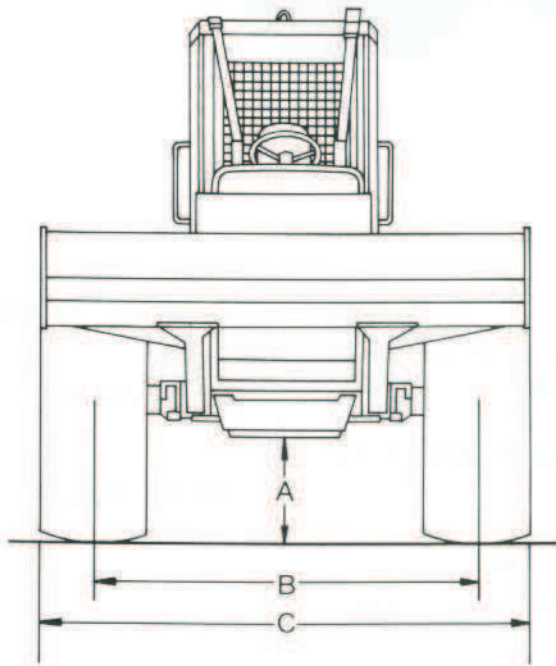
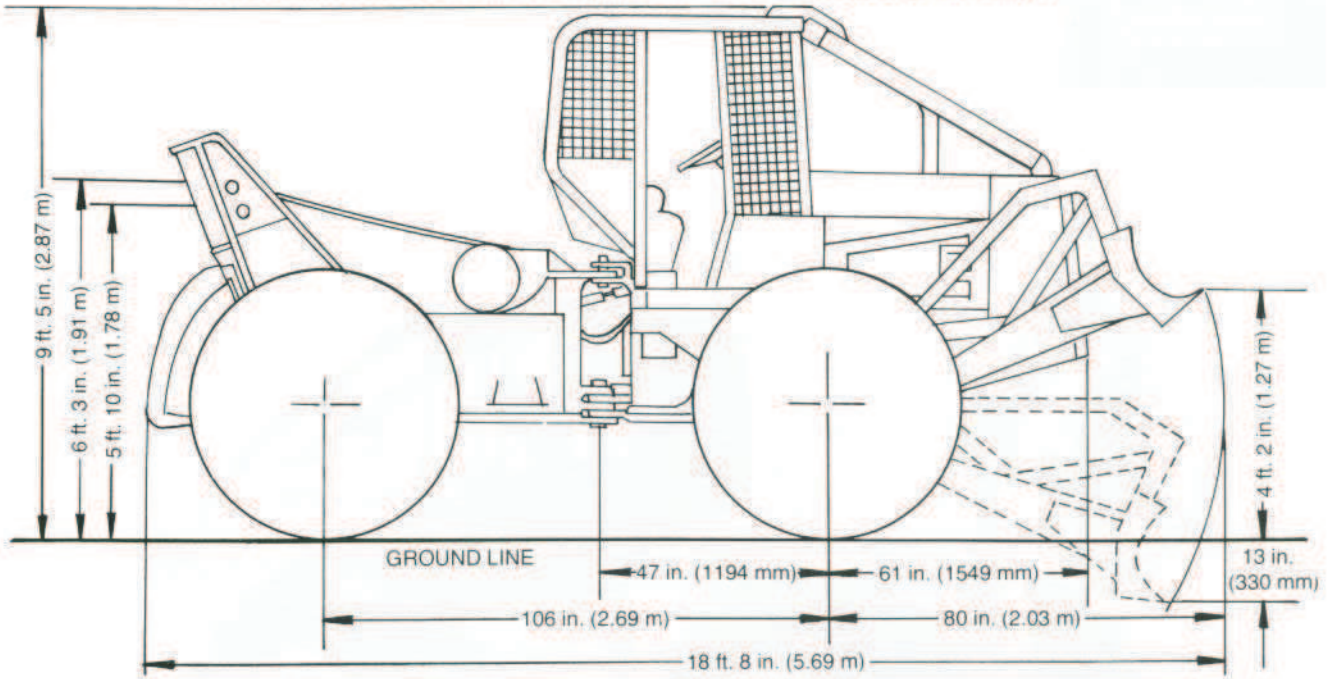
Line speed (2200 rpm) and .75 in. (19 mm) cable:	
Bare drum	126 fpm (38.3 m/min)
Full drum	176 fpm (53.6 m/min)

Additional Standard Equipment:	
S3 Series axles	
Air cleaner w/restriction indicator and unloading valve	
Alternator warning light	
Bottom guards	
Canopy w/ROPS, brush screens and limb risers	
Cushion seat w/suspension, position adjustment and seat belts	
Engine oil pressure warning light	
Engine sideshields	
Exhaust w/rain deflector	
Extended log bumper	
Gauges:	
Electric hourmeter	
Engine coolant temperature	
Fuel	
Transmission oil temperature	
Foot throttle	
Heavy-duty starter	
Hinge locking bar, two position	
Horn	
Key switch w/pushbutton safety start	
Log arch w/2-position roller	
Muffler	
Parking brake w/warning light and buzzer	
Solid-state voltage regulator	
Transmission oil pressure warning light	
Winch	

SAE Operating Weight w/Blade	16,200 lb. (7348 kg)
SAE Operating Weight w/o Blade	14,970 lb. (6790 kg)

Optional or Special Equipment:	
Cab (ROPS) w/noise treatment and wiper	
Cab heater	
Canopy (ROPS) w/screened door, right window, windshield and wiper	
Cold weather starting package	
Engine coolant heater (field only)	
Emergency steering system (field only)	
Fire extinguisher	
Hand throttle (field only)	
Lights (field only)	
Stacking blade	
3-in. (76 mm) seat belt	
Vandal protection (field only)	
Windshield washer	
Winch warm-up circuit (field only)	

Sideview dimensions are for skidder equipped with 18.4-26 tires and adjustable arch.



TIRE SIZE	A GROUND CLEARANCE	B WHEEL TREAD	C OVERALL WIDTH
18.4-26	1 ft. 6.5 in. (470 mm)	76 in. (1.93 m)	7 ft. 11 in. (2.41 m)
18.4-34	1 ft. 10 in. (559 mm)	76.6 in. (1.95 m)	7 ft. 11 in. (2.41 m)
23.1-26	1 ft. 9 in. (533 mm)	82.1 in. (2.09 m)	8 ft. 10 in. (2.69 m)
28L-26	1 ft. 9.5 in. (546 mm)	85.4 in. (2.17 m)	9 ft. 6 in. (2.90 m)
67 x 34.00-36	1 ft. 10.5 in. (571 mm)	85.5 in. (2.17 m)	9 ft. 11 in. (3.02 m)

