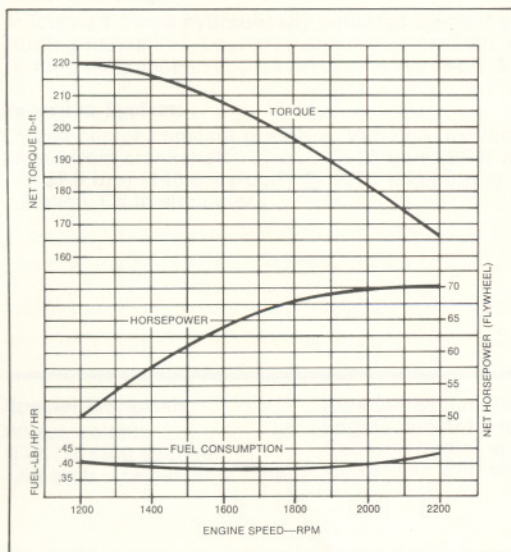




JD440-C GRAPPLE SKIDDER



ENGINE PERFORMANCE



FEATURES

- 70 SAE net hp (71.0 PS)
- Articulated frame power steering
- Oscillating front axle
- 6-speed Syncro-Range transmission
- Front-axle differential lock
- Wet-disk power brakes
- 360-degree rotation of grapple
- 17,600 lb. (7983 kg) maximum lifting capacity
- 6 ft. 3 in. (1.91 m) grapple opening

JD440-C GRAPPLE SKIDDER 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 equipped with Syncro-Range transmission, 18.4-26, 10-ply logging tires and standard equipment.)

Power (@ 2200 engine rpm):	SAE	
Gross	76 hp (56.7 kW*)	
Net	70 hp (52.2 kW)	71.0 PS

Net engine flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator and muffler. The gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500-ft. altitude and 85° F. temperature, and DIN 70 020 conditions (non-corrected). No derating is required up to 10,000 feet (3000 m) altitude.

*In the international system of units (SI) power is expressed in kilowatts (kW).

Engine: John Deere 4-cylinder-diesel, 4-stroke cycle

Bore and stroke	4.19x5.00 in. (106.4x127 mm)
Piston displacement	276 cu. in. (4523 cm ³)
Compression ratio	16.7 to 1
Maximum torque @ 1200 rpm	220 lb-ft (298 Nm) (30.4 kg-m)
NACC or AMA (U.S. Tax) horsepower	28
Lubrication	Pressure system w/full-flow filter
Cooling	Pressurized w/thermostat and fixed bypass
Fan	Blower
Air cleaner w/restriction indicator	Dry
Electrical system	12-volt w/alternator
Batteries (2)	Reserve capacity: 410 minutes

Differentials:

Front	Full differential w/hydraulic lock
Rear	Solid axle w/no differential action

Transmission: Syncro-Range

Constant mesh with 6 speeds forward, 3 reverse. Three forward speed ranges with synchronized shifting between low and high within each range. Incorporates a brake lock for service brakes. Clutch is 11 in. (280 mm), dry, feramic-faced, foot-pedal-operated.

Travel Speeds (2200 engine rpm, no tire slip):

Forward	2 mph (3.2 km/h) to 15 mph (24.1 km/h)
Reverse	2 mph (3.2 km/h) to 10 mph (16.1 km/h)

Brakes:

Hydraulic power actuated, wet-disk service brakes on output shaft. Hand-operated mechanical brake for parking.

Drive Axles:

Four-wheel drive with inboard planetary gears on all axles. Front axle oscillates 15 degrees above and below horizontal. 18 in. (457 mm) total travel at tire center line.

Power Steering:

Articulated frame hydraulically actuated by dual cylinders.	
Turning radius	17 ft. 8 in. (5.38 m)
Turning clearance	37 ft. 1 in. (11.30 m)

Hydraulic System:

Closed-center constant pressure. Variable-displacement pump driven from crankshaft . . . 25 gpm (95 l/min), 2000 psi (137.9 bar) (140.6 kg/cm²) @ 2200 engine rpm. Full flow filtration. Oil to air cooler.

Hydraulic Cylinders:

	Bore	Stroke
Lift (2)	4.0 in. (102 mm)	30 in. (762 mm)
Grapple (1)	5.25 in. (133 mm)	17 in. (432 mm)
Cylinder rods	Ground, heat-treated, chrome-plated, polished	
Lift cylinder rods	2-in. (51 mm) dia.	
Grapple cylinder rod	2.25 in. (57 mm) dia.	

Tires:

18.4-26, 10-ply-rating, logging, LS2
16.9-30, 10-ply-rating, logging, LS2

Capacities:

	U.S.	Liters
Fuel tank	42 gal.	159.0
Cooling system	8 gal.	30.3
Engine lubrication, including filter	15 qt.	14.2
Transmission case (includes hydraulic system)	8 gal.	30.3
Front differential	4.5 gal.	17.0
Rear differential	4.5 gal.	17.0
Winch	2.5 gal.	9.5

Additional Standard Equipment:

Flanged axles	Ether starting aid
Muffler	Engine side shields
Fuel gauge	Deluxe seat w/suspension
Oil pressure gauge	Roll-over protective structure (ROPS) w/canopy, seat belt, brush screens, & limb risers
Alternator charge warning light	Transistorized voltage regulator
Water temperature gauge	Vandal protection
Lights	Altitude compensator
John Deere winch	
Front axle differential lock	
Electric hourmeter	
Key switch w/push-button safety start	
Cigaret lighter	
Horn	
Fire extinguishers (2)	
Foot throttle	
Hand throttle	
Front blade	

Winch:

Live mechanical drive; hydraulically actuated clutch and brake.	
Single-lever control.	
Cable capacities*:	
1/2-in. (12.7 mm) cable	230 ft. (70.1 m)
5/8-in. (15.8 mm) cable	151 ft. (46.0 m)
3/4-in. (19.1 mm) cable	107 ft. (32.6 m)

*Calculated: No allowance made for loose or uneven spooling.

Line pull (1600 rpm)**:

Bare drum	22,200 lb. (99.5 kN) (10 070 kg)
Full drum	13,700 lb. (61.4 kN) (6214 kg)

**Based on engine torque.

Line speed (2200 rpm):

Bare drum	119 fpm (36.3 m/min)
Full drum	194 fpm (59.1 m/min)

Blade: Hydraulic control

Width	6 ft. (1.83 m)
Height (ends)	1 ft. 8 in. (508 mm)
Height (center)	2 ft. 3 in. (686 mm)
Max. lift above ground level	4 ft. (1.22 m)
Max. drop below ground level	9.5 in. (241 mm)

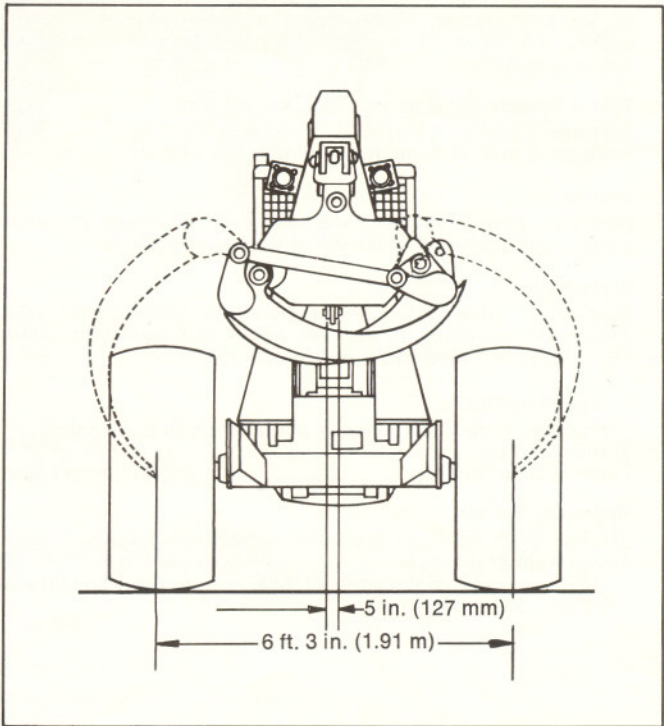
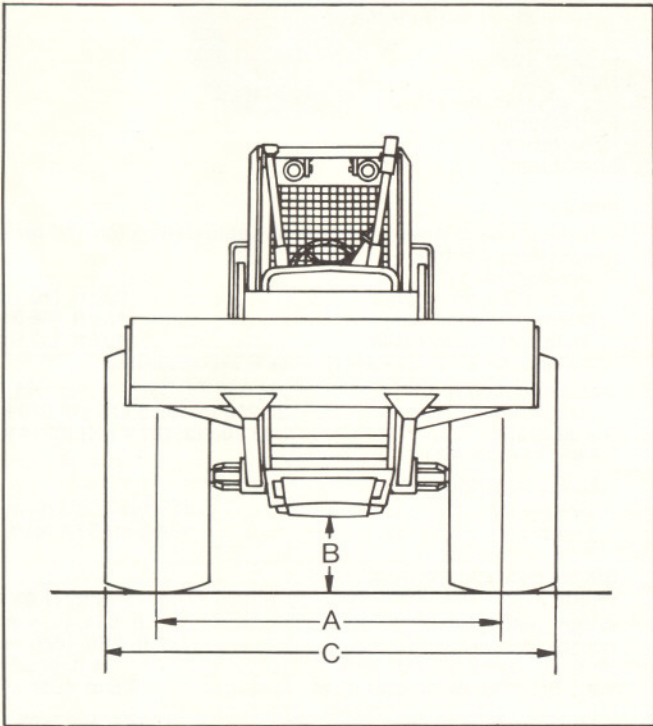
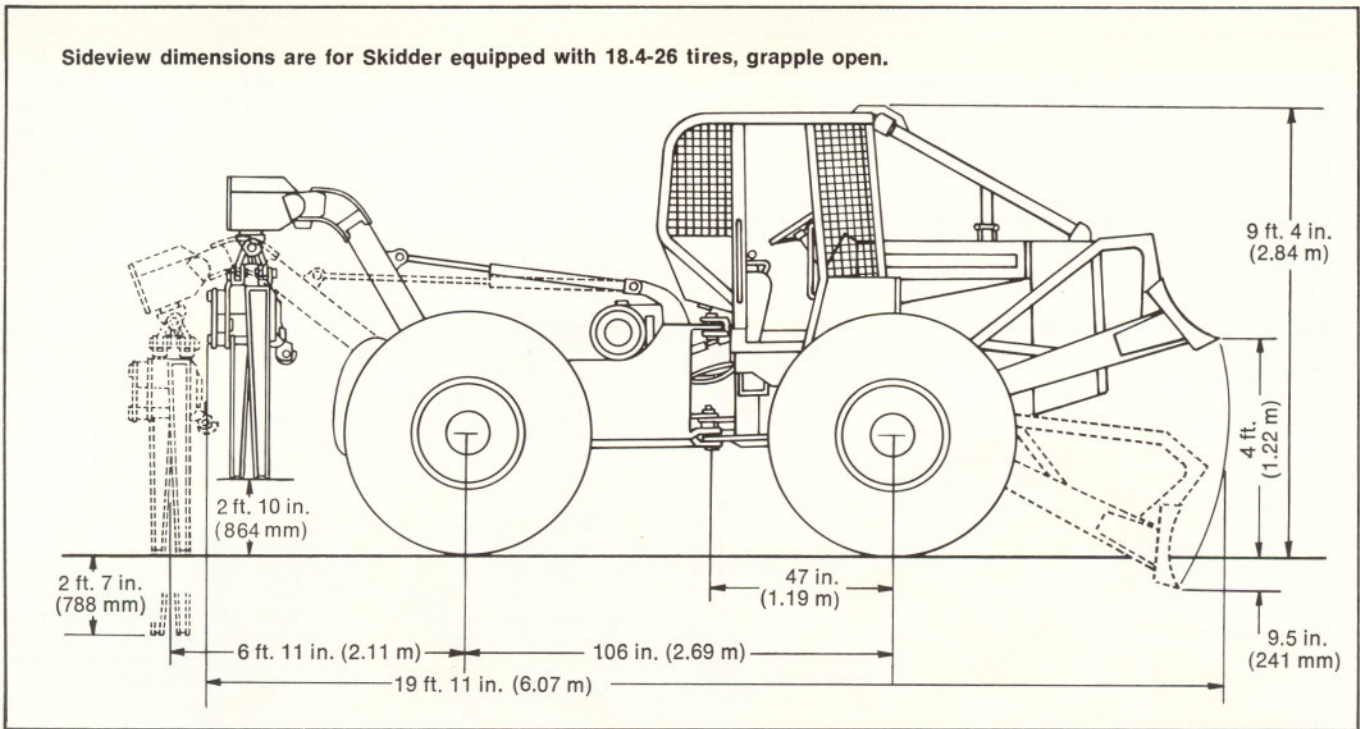
SAE Operating Weight . . . 16,525 lb. (7496 kg)

Special Equipment:

Wheel weights
Steering accumulator
Engine coolant heater
Cab with heater and noise treatment
Windshield with wiper
3 in. (76 mm) seat belt
Log arch with adjustable rollers

JD440-C GRAPPLE SKIDDER DIMENSIONS

Sideview dimensions are for Skidder equipped with 18.4-26 tires, grapple open.



TIRE SIZE	A WHEEL TREAD	B GROUND CLEARANCE	C OVERALL WIDTH
16.9-30	74 in. (1.88 m)	1 ft. 7 in. (483 mm)	7 ft. 7 in. (2.31 m)
18.4-26	74 in. (1.88 m)	1 ft. 6 in. (457 mm)	7 ft. 8.4 in. (2.35 m)