

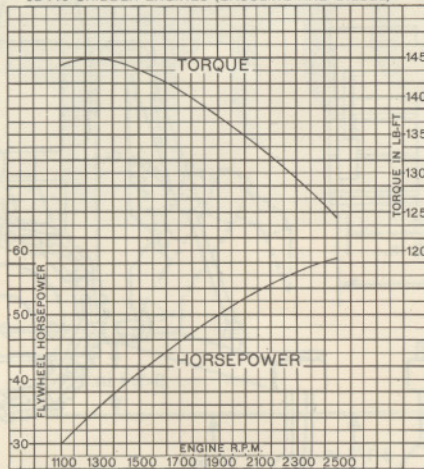


JD440 SKIDDER



ENGINE PERFORMANCE

JD440 SKIDDER ENGINES (GASOLINE AND DIESEL)



CURVES SHOWN ARE FOR AN ENGINE COMPLETE WITH FUEL SYSTEM, WATER PUMP, LUBRICATING PUMP, AIR CLEANER, ALTERNATOR, FAN AND MUFFLER.
 DATA SHOWS PERFORMANCE OBSERVED AT STANDARD CONDITIONS OF 29.92 INCHES OF MERCURY BAROMETRIC PRESSURE (500 FEET) AND 85 FAHRENHEIT AIR TEMPERATURE.

FEATURES

TRACTOR

4-wheel drive and oscillating front axle with differential lockout.

Power steering controlled by steering wheel. Pivot steering actuated by dual cylinders.

Disk-type power brake runs in oil.

8 forward speeds with high of 16 mph; 3 reverse.

59 flywheel h.p. John Deere 4-cylinder engine—choice of Diesel or gasoline.

Deluxe seat. Complete operator protection.

Integrated blade, winch, arch, canopy, and log bumper.

BLADE

72 in. wide by 20 in. high. High-carbon steel cutting edge.

Piles logs and brush, clears skid trails.

Lifts to nearly 4 ft. Lowers 9-1/2 inches below ground level.

WINCH

Mechanical drive; power-actuated clutch and brake. Single-lever hydraulic control.

Holds, winches, and free-spools, with tractor standing or on-the-go.

Produces 14,500 lb. bare drum line-pull; line speeds to 159 fpm.

ARCH

Steel-plate frame rigidly mounted in conjunction with winch.

3-roller fairlead. Large-diameter horizontal roller minimizes cable wear.

Up to 70-inch lift.

SPECIFICATIONS

(Specifications and design are subject to change without notice. Wherever applicable, specifications are in accordance with I.E.M.C. Standards.)

Horsepower (at 2,500 engine rpm):	Gasoline	Diesel
Net engine flywheel (at 500 ft. altitude and 85° F. Temp.).....	59	59

Travel Speeds (at 2,500 engine rpm):			
Shift Lever Position	Travel Speeds (mph)*	Shift Lever Position	Travel Speeds (mph)*
1st	1.8	7th	10.0
2nd	2.9	8th	16.0
3rd	3.8	Rev. 1	1.8
4th	4.8	Rev. 2	2.9
5th	6.0	Rev. 3	4.8
6th	7.9		

*Travel speeds based on 14.9-28 tires, without slip.

Engine: Vertical, 4-cylinder, valve-in-head, 4-stroke cycle, gasoline or Diesel.

	Gasoline	Diesel
Bore and stroke.....	3-7/8 x 3-7/8 in.	3-7/8 x 4-5/16 in.
Piston displacement...	180 cu. in.	202 cu. in.
Compression ratio.....	7.5 to 1	16.7 to 1
Governed speed range...	1,500-2,500 rpm	1,500-2,500 rpm
Maximum torque.....	145 lb. ft.	145 lb. ft.
RPM at maximum torque	1,300	1,300
Lubrication.....	Pressure system with full-flow filter.	
Crankshafts.....	(Gas and Diesel engines) Induction-hardened, counterbalanced, statically and dynamically balanced.	
Main and connecting-rod bearings.....	Steel-backed, aluminum-lined, removable.	
Main bearings:		
Number.....	3	5
Diameter.....	3-1/8 in.	3-1/8 in.
Length.....	3.560 in.	5.870 in.
Cooling.....	Pressurized with water pump, thermostat, and fixed bypass.	
Governor.....	Enclosed flyweight type	Flyweight, integral with injection pump
Carburetor.....	Up-draft type with load and idle adjustment	
Fuel-injection pump.....		Opposed-plunger, inlet metering, single-cylinder distributor type
Air cleaner.....	Oil-wash type	Oil-wash type
Electrical system.....	12-volt	12-volt
Starting.....	12-volt electric starter	12-volt electric starter

Engine Clutch:
Foot-operated, spring-loaded, dry-disk type. Single plate (12-inch).

Transmission:
4-range, synchro-high-low transmission. 4 ranges with a high and low in each range provides 8 forward and 3 reverse speed selections. High and low synchronized in each range.

Brake...Foot-operated, power actuated, wet disk type. Hand-operated, mechanical-actuated parking brake.

Steering...Power. Hydraulic-actuated by steering wheel. Pivot steering—dual cylinder controlled.
Turning radius..... Approx. 16 ft. 8 in.
Turning clearance circle (with blade)..... Approx. 35 ft. 6 in.

Hydraulic System...Closed center, constant pressure. Variable-displacement pump driven from front of engine; 23 gpm at 2,500 rpm; 2,000 psi operating pressure. Oil supplied from transmission.

Tires:
14.9 x 28, 8-ply bar type.
16.9 x 30, 8-ply "Logger Special."

Wheel Treads:
73 in., center-to-center, with 14.9 x 28 tires.
72 in., center-to-center, with 16.9 x 30 tires.

Dimensions:

Over-all height (top of canopy).....	103 in.
Over-all width.....	90 in.
Over-all length.....	183 in.
Over-all length with blade.....	206 in.
Wheelbase.....	89 in.
Ground clearance (with 16.9x30 tires).....	18-1/4 in.

Weight (approximate):

	Gasoline	Diesel
Shipping (with blade and 16.9x30, 8-ply tires).	11,710 lb.	11,840 lb.

Capacities:

Cooling system.....	3 gal.
Fuel tank, gasoline and Diesel.....	24 gal.
Engine lubrication, including filter.....	6 qt.
Transmission-hydraulic system.....	16 gal.

Base Equipment:

Hydraulic system	Speed-hour meter
Power steering	Key-ignition switch with safety start
Power brakes	Alternator
Muffler	Air cleaner (wet type)
Fuel gauge	Canopy
Oil-pressure indicator light	Winch
Alternator-charge indicator light	Log arch
Water-temperature gauge	Log bumper
Suction fan	Seat: Deluxe with suspension
Differential lock for front axle	Foot throttle
90 amp. battery	Hand throttle
	14.9x28, 8-ply R-1 tires (nylon)

Special Equipment:

Wheel weights	140 amp. hour battery installation (two 70 amp. batteries)
Cigarette lighter	Engine side-shields
Drawbar	Lights: Front, rear, and panel
Automotive-type horn	Front blade
16.9x30, 8-ply "Logger Special" tires.	

Winch

Drive: "Live" mechanical; power-actuated clutch and brake. Single lever, hydraulic control.

Cable Capacities*:

1/2-in. wire rope.....	185 ft.
5/8-in. wire rope.....	115 ft.
3/4-in. wire rope.....	90 ft.

Line Pull (at 2,100 rpm):

Bare drum.....	14,500 lb.
Full drum.....	9,150 lb.

Line Speed (at 2,100 rpm):

Bare drum.....	100 fpm
Full drum.....	159 fpm

*Calculated capacities—allowance must be made for loose or uneven spooling.

Blade

Width	72 in.
Height	20 in.
Lift (max.)	47-1/2 in. above ground level. Hydraulic control.
Depth of cut	9-3/4 in. below ground level.

Arch

Working height (top of horizontal roller to ground level with 16.9x30 tires)..... 70 in.

Horizontal roller..... 6 in. dia.

Vertical rollers:

Case-hardened steel..... 3 in. dia.