



JD544 LOADER



FEATURES

Four-wheel-drive for fast cycles, high production. 1-1/2-, 1-3/4-, 3-yd. buckets and 1-1/2-yd. 4-in-1. John Deere 6-cylinder Diesel engine develops 94 net horsepower at the flywheel.

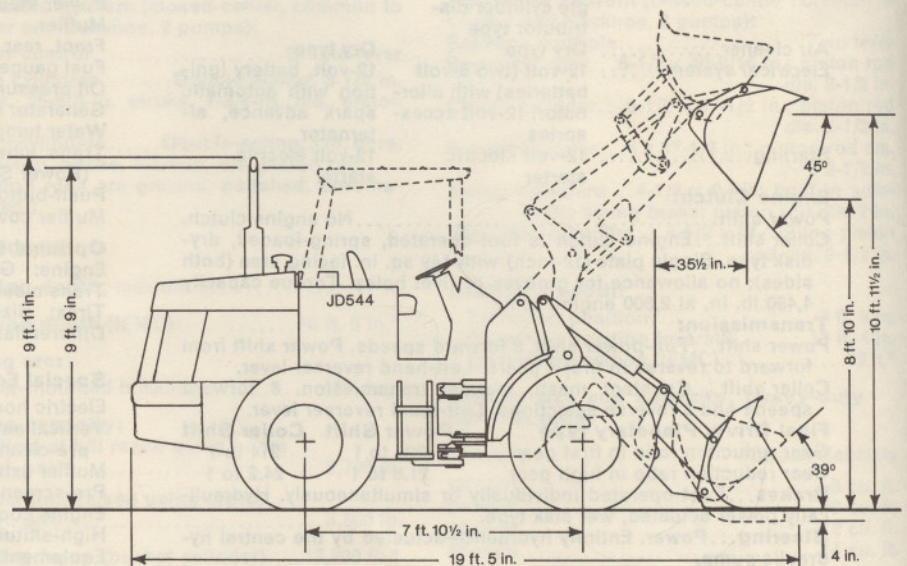
Twin-turbine, torque converter with two-range Power-Shift transmission provides 4 speeds forward to 23 mph and 2 reverse speeds to 9 mph without clutching.

13-ft. 10-in. turning radius with articulated power steering. Four-wheel disk-type power brakes. Parking brake. Four-wheel planetary final drives. One lever controls bucket cutting depth, rollback, lift, dump, shakeout, float, and automatic return to dig. 9,000-lb. lifting capacity at full height. 8-ft. 10-in. clearance and 35-1/2-in. reach at full height with bucket dumped at 45 degrees.

Transmission disconnect is brake actuated; directs all available engine power to hydraulics. Oscillating rear axle with differential. Optional No-Spin differential for front axle.

One-spot engine servicing. Vandal-protection for engine, batteries, tools, fuel tank, instruments, hydraulics.

Low-profile loader provides excellent visibility.



JD544 LOADER SPECIFICATIONS

(Specifications and design are subject to change without notice. Wherever applicable, specifications are in accordance with IEMC and SAE Standards. Specifications are based on a job-ready machine equipped with 1-1/2-cu.-yd.-bucket, 17.5-25, 12-ply, loader-tread tires with 1,160 lb. of CaCl₂ solution in rear tires.)



Horsepower* (at 2,500 engine rpm):	Diesel
Gross engine flywheel.....	104
Net engine flywheel. Engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, and alternator.....	94

*Maximum under SAE standard conditions of 500 ft. altitude and 85° F. temperature.

Operating Information:

Tipping load, straight (SAE).....	12,500 lb.
Tipping load, full turn (40 deg.).....	11,250 lb.
Breakout force, pivot point 19-1/4 inches from cutting edge (SAE).....	25,000 lb.
Lifting capacity, full height.....	9,000 lb.
Raising time to full height.....	5.5 sec.
Lowering time (power).....	4.5 sec.
Dumping time.....	1.2 sec.

Travel Speeds:

Forward:

1. Low range, first and second turbines, 0 to 2.8 mph.	3. High range, first and second turbines, 0 to 10.7 mph.
2. Low range, second turbine, 2.8 to 6.8 mph.	4. High range, second turbine, 10.7 to 23.0 mph.

Reverse:

1. Low range, first and second turbines, 0 to 3.8 mph.	2. Low range, second turbine, 3.8 to 9.0 mph.
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Shifting from first and second turbines to second turbine is automatic.

Engine: John Deere, vertical 6-cylinder, valve-in-head, 4-stroke cycle

	Diesel
Bore and stroke.....	3-7/8 x 4-1/3 in.
Piston displacement.....	303 cu. in.
Compression ratio.....	16.3 to 1
Operating speed range.....	1,500-2,500 rpm
Maximum torque.....	225 ft. lb.
Rpm at maximum torque.....	1,400
N.A.C.C. or A.M.A. horsepower rated for tax purpose.....	35.8
Lubrication.....	Pressure system with full-flow filter
Crankshaft.....	Induction-hardened, counterbalanced
Main and connecting-rod bearings.....	Steel-backed, aluminum-lined, removable

Main bearings:

Number.....	7
Diameter.....	3-1/8 in.
Length (total).....	8.138 in.
Cooling.....	Pressured with water pump thermostat and fixed bypass Governor.....
Fuel injection pump.....	Integral with injection pump
	Opposed plunger, inlet metering; single cylinder distributor type

Air cleaner...Dry type, dual element with restriction indicator

Electrical system.....12-volt with alternator

Starting.....12-volt electric starter

Transmission... Twin-turbine torque converter with a two-range (4 speeds forward, 2 reverse speeds) Power-Shift transmission.

Torque multiplication ratio..... 5.1 to 1

Differentials:

Front.....	Standard or optional "No-Spin" type
Rear.....	Standard

Drive axles... Four-wheel drive with inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22-degree total (14-1/2 inches vertical travel at center of tire).

Brakes:

Service...Power actuated, 4-wheel, inboard-mounted wet disk. Foot-operated by either right or left pedal.

Parking...10x1-1/2-inch expanding shoe type on transmission output shaft. Hand operated with warning light on dash.

Steering... Full power steering. Articulated frame steering by two hydraulic cylinders. Articulation is 80 degrees. Turning radius of 13 feet 10 inches. Curb clearance circle is 31 feet.

Hydraulic systems:

Loader functions system... Live transmission-driven, vane-type pump delivers 45.5 gpm at 2,500 rpm. Constant-volume system.

Steering and brake systems... Includes power steering, power brakes and transmission cooling. Engine-driven, eight-piston, power-on-demand-type pump delivers 28 gpm at 2,500 rpm. Constant-pressure system.

Tires (Sizes and plies):

13-24, 10-ply, grader tread
14-24, 12-ply, grader tread
14-24, 12-ply, rock grader tread
15.5-25, 10-ply loader tread
17.5-25, 12-ply, loader tread

Wheel Treads... Front and rear.....70 in.

Dimensions (with 17.5-25 tires):

Height to top of canopy.....	9 ft. 9 in.
Over-all height to top of muffler.....	8 ft. 2 in.
Over-all width (17.5-25 tires).....	7 ft. 4 in.
Over-all length.....	19 ft.
Wheelbase.....	7 ft. 10-1/2 in.
Ground clearance.....	14.5 in.

Buckets:

	Weight:	Width:
1-1/2-cu. yd.....	1,200 lb.	88 in.
1-3/4-cu. yd.....	1,320 lb.	92 in.
3-cu. yd.....	1,890 lb.	96 in.
Drott 1-1/2-yd. 4-in-1.....	2,050 lb.	97 in.

Weight

Operating (without canopy, approx.).....18,500 lb.

Diesel

Capacities (U.S. Measure):

Cooling system.....	7-1/2 gal.
Fuel tank.....	40 gal.
Engine lubrication, including filter.....	10 qt.
Transmission case and filters.....	9-3/4 gal.
Front differential:	
Regular.....	4-3/4 gal.
"No-Spin" optional.....	4-1/4 gal.
Rear differential.....	4-3/4 gal.
Loader hydraulic sump (excluding lines and cylinders).....	12 gal.

Base Equipment:

Transmission oil temperature gauge	55 amp. alternator
Transmission oil pressure gauge	Transistorized voltage regulator
Fuel gauge	Two 95 amp. batteries
Electric hour meter	Power steering
Ammeter	Fuel filter
Coolant temperature gauge	Two stage dry-type air cleaner with safety element and restriction indicator
Engine oil temperature gauge	Foot throttle
Key-ignition switch with safety start	Adjustable cushioned seat
Cigarette lighter	Engine side shields
Parking brake warning light	Front fenders
Lights	Vertical muffler
Instrument panel cover with lock	Front and rear hand grips
12-volt starter and electrical system	Tool tote-tray
	Antifreeze
	Automotive-type horn

Special Equipment:

"No-Spin" differential for front axle	Ether starting aid (Diesel)
Protective roll-frame with canopy (includes seat belt)	Heater
Cab (fits roll frame)	Engine oil heater, 240 watt
Front and rear work lights	Engine coolant heater
Flashing and turn signal lights	Pre-cleaner
Triple-spool valve	Special tools
Bucket teeth	Fixed drawbar, clevis type
	Side counterweights
	Splash guards for fenders