



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.

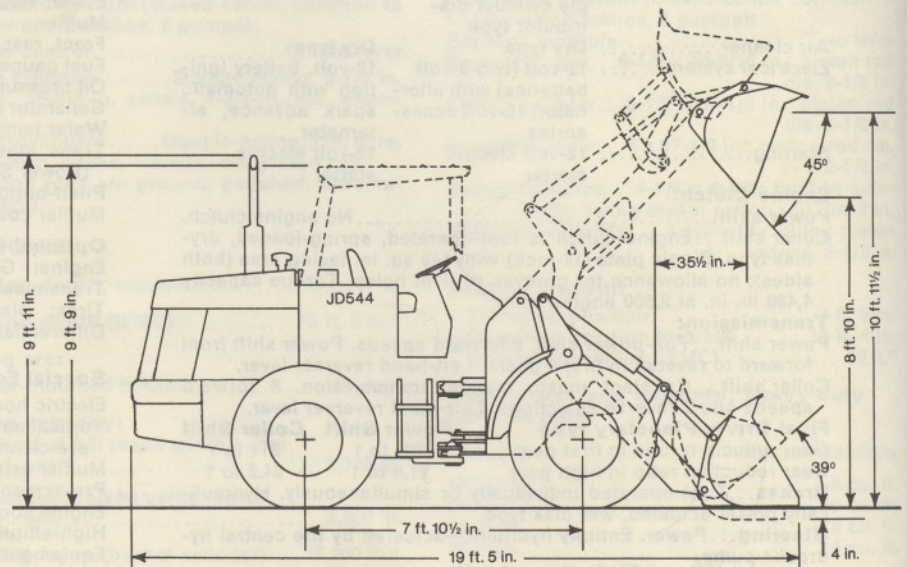
Twin-turbine, torque converter with two-range Power-Shift transmission provides 4 speeds forward to 23 mph and 2 reverse speeds to 9 mph without clutching.

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.)



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| 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:

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| 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:

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| 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:

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| 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

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| | 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:

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| Number..... | 7 |
| Diameter..... | 3-1/8 in. |
| Length (total)..... | 8.138 in. |
| Cooling... Pressured with water pump thermostat and fixed bypass Governor..... | Integral with injection pump |
| Fuel 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:

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| 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):

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| 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):

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| 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:

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| 1-1/2-cu. yd..... | Weight: 1,200 lb. | Width: 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.

Capacities (U.S. Measure):

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| 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:

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| 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:

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| "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 |