

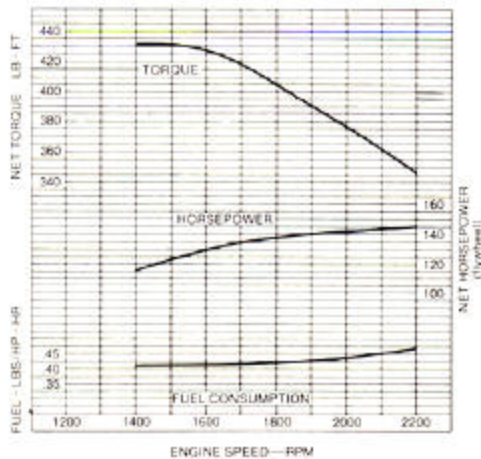


# JD646-B COMPACTOR



TED B. MILLER CO., INC.  
GERING, NEB.

## ENGINE PERFORMANCE



## FEATURES

- 145 SAE net hp (147.5 PS)
- 4-wheel drive
- Choice of 3 landfill buckets
- Torque converter w/Power Shift transmission
- Power steering, articulated frame
- 4-wheel, wet-disk brakes and parking brake
- Inboard planetary final drives
- Automatic return to dig
- No-Spin front axle differential
- Vandal protection
- Roll-over protective structure (ROPS) w/cab

### Protective guards:

- Rear bottom
- Hydraulic lines
- Engine
- Transmission
- Articulation
- Radiator
- Front drive line
- Front work lights

# JD646-B COMPACTOR SPECIFICATIONS



(Specifications and design are subject to change without notice. Wherever applicable, specifications are in accordance with IEMC and SAE Standards. Except where otherwise noted, these specifications are based on a unit equipped with refuse bucket, standard equipment, full fuel tank, and 175-lb. (79kg) operator.)

<b>Power (@ 2,200 engine rpm):</b>	<b>SAE</b>	
Gross .....	160 hp (119.5 kW <sup>*</sup> )	
Net .....	145 hp (108 kW)	147.5 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° temperature, and DIN 70 020 conditions (non-corrected). No derating is required up to 10,000 ft. (3000 m) altitude.

\*In the International System of Units (SI), power is expressed in kilowatts (kW).

**Engine:** John Deere diesel, vertical 6-cylinder, valve-in-head, 4-stroke cycle, Turbo Built with turbocharger.  
 Bore and stroke ..... 4.75x5 in. (120.5x127 mm)  
 Piston displacement ..... 531 cu. in. (8702 cm<sup>3</sup>)  
 Compression ratio ..... 15.8 to 1  
 Maximum torque @ 1,500 rpm ..... 432 lb-ft (59.7 kg-m)  
 NACC or AMA (U.S. Tax) horsepower ..... 54.0  
 Lubrication ..... Pressure system w/full-flow filter  
 Cooling .... Pressurized w/thermostat and controlled bypass Fan  
 Air cleaner w/restriction indicator ..... Dry  
 Electrical system ..... 12-volt w/alternator  
 Batteries (2) ..... Reserve capacity: 325 minutes each

**Torque Converter:**  
 Type ..... Twin-turbine  
 Torque multiplication ..... 3.20 to 1

**Transmission** ..... Power Shift planetary

**Differentials:**  
 Front ..... No-Spin  
 Rear ..... Standard

**Drive Axles:**  
 Inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22-degree total. 15.8 inches (401 mm) vertical travel at center of tire.

**Recommended Travel Speeds:**  
 Forward and reverse ..... 4.5 mph (7.2 km/h) maximum

**Brakes:**  
 Service .. Power actuated, 4-wheel, inboard-mounted wet disk. Foot-operated by either right or left pedal.  
 Parking ..... 10x1.5-in. (254x38 mm) expanding shoe on transmission output shaft. Adjustable, hand operated with warning light on dash.

**Steering:**  
 Full power steering. Frame articulated 80 degrees by two hydraulic cylinders. Turning radius of 15 ft. 6.7 in. (4.74 m). Turning clearance is 36 ft. 10.8 in. (11.25 m).

**Hydraulic Systems:**  
 Loader functions ..... Independent engine-driven vane pump delivers 44.5 gpm (168.4 l/min) at 600 psi (42.2 kg/cm<sup>2</sup>) and 2,200 engine rpm.  
 2,250 psi (158.2 kg/cm<sup>2</sup>) relief-valve pressure setting.

Control ..... Two-lever triple hydraulic valve for use with refuse bucket or special multipurpose bucket.  
 Steering and brakes ..... Engine-driven, 8-piston, variable-displacement pump delivers 26.5 gpm (100 l/min) at 2,200 engine rpm and 2,000 psi (140.6 kg/cm<sup>2</sup>). Maximum system pressure is 2,350 psi (165.2 kg/cm<sup>2</sup>).

<b>Landfill Buckets</b>	<b>Capacity</b>	<b>Width</b>
Refuse .....	Dirt: 2¾ cu. yd. (2.10 m <sup>3</sup> )	110.77 in. (2.81 m)
	Refuse: 4½ cu. yd. (3.44 m <sup>3</sup> )	
Light materials .....	4½ cu. yd. (3.44 m <sup>3</sup> )	110.77 in. (2.81 m)
Multipurpose .....	Dirt: 2½ cu. yd. (1.91 m <sup>3</sup> )	104.75 in. (2.66 m)
	Refuse: 4½ cu. yd. (3.44 m <sup>3</sup> )	

**Compactor Wheels:**  
 Width ..... 23 in. (584 mm)  
 Diameter ..... 55 in. (1397 mm)  
 60° cleats, 32/wheel ..... 5 in. (127 mm)  
 Encased General tires ..... 13-24, 12 PR, L-G  
 Compaction ..... Up to 3,223 psi (226.6 kg/cm<sup>2</sup>)

**Wheel Treads and Width:**  
 Front and rear (center-to-center) ..... 81.5 in. (2.07 m)  
 Width outside wheels ..... 104.5 in. (2.65 m)

<b>Capacities</b>	<b>U.S.</b>	<b>Liters</b>
Cooling system .....	49 qt.	46.4
Fuel tank .....	56 gal.	211.9
Crankcase .....	20 qt.	18.9
Crankcase, including filter .....	22 qt.	20.8
Transmission case and filters .....	39 qt.	36.9
Front differential: No Spin .....	24 qt.	22.7
Rear differential .....	25 qt.	23.7
Loader hydraulic sump .....	70 qt.	66.2

**Additional Standard Equipment:**  
 Adjustable cushioned seat  
 Engine side shields  
 Key switch  
 Push-button safety start  
 Cigaret lighter  
 Vandal protection  
 Horn  
 Fixed drawbar  
 Vertical exhaust w/rain cap  
 Hand grips  
 Electric hourmeter  
 Ether starting aid  
 Heater for cab  
 Defroster fan  
 Fire extinguisher  
 Radiator guard and screen  
 Lights  
 Parking brake  
 ROPS cab  
 Front and rear windshield wipers  
 Precleaner

<b>SAE Operating Weight:</b>	<b>lb.</b>	<b>kg</b>
With refuse bucket .....	31,450	14 266
With multipurpose bucket .....	32,230	14 620

**Special Equipment:**  
 Refuse bucket  
 Multipurpose landfill bucket  
 Light-materials bucket  
 Reverse warning system switch  
 3-inch seat belt  
 Multipurpose bucket teeth

# JD646-B COMPACTOR DIMENSIONS

