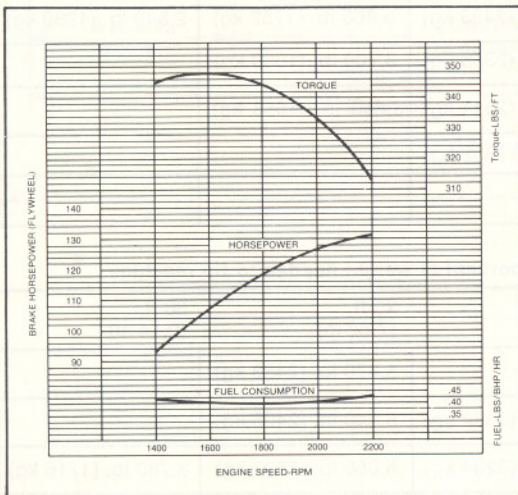




# JD646 COMPACTOR



## ENGINE PERFORMANCE



\*SAE Standard

## FEATURES

- 131 SAE net hp (133 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
  - Single-lever control w/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

## SPECIFICATIONS—JD646 COMPACTOR

(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 demolition wheels; refuse bucket, and standard equipment.)



<b>Horsepower</b> (at 2,200 engine rpm):	<b>SAE</b>	<b>PS</b>
Gross .....	141	143
Net .....	131	133

\*Net engine flywheel horsepower is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. The gross engine horsepower is without fan. Gross and net flywheel horsepower ratings are under SAE standard conditions of 500-ft. altitude and 85°F. temperature and DIN 70 020 (non-corrected). Engine maintains rated horsepower up to 10,000 feet (3000 m) altitude.

**Engine:** John Deere diesel, vertical 6-cylinder, valve-in-head, 4-stroke cycle—Turbo Built with turbocharger.

Bore and stroke .....	4.25x4.75 in. (108x121 mm)
Piston displacement .....	404 cu. in. (6620 cm)
Compression ratio .....	16.5 to 1
Maximum torque @ 1,600 rpm .....	348 lb-ft (48,1 kg-m)
NACC or AMA (U.S. Tax) horsepower .....	43.3
Lubrication .....	Pressure system w/full-flow filter
Cooling .....	Pressurized w/thermostat and fixed bypass
Fan .....	Suction
Air cleaner w/restriction indicator .....	Dry
Electrical system .....	12-volt w/alternator
Batteries (2) .....	Reserve capacity: 360 minutes

### Transmission:

Twin-turbine torque converter with Power Shift transmission (4 speeds forward—2 reverse).

**Torque Multiplication Ratio** ..... 3.2 to 1

### Differentials:

Front .....	No-Spin
Rear .....	Standard

### Drive Axles:

4-wheel drive with inboard-mounted planetary gears to each wheel. Front axle fixed. Rear axle oscillates 22 degrees total. 15.3 in. (339 mm) vertical travel at center of tire

### Recommended Travel Speeds:

Forward and reverse ..... 4.5 mph (7.2km/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..... Live, transmission-driven, vane pump delivers 60 gpm (227 lpm) at 2,200 engine rpm and 2,250 psi (158,2 kg/cm<sup>2</sup>) relief-valve pressure setting.

Control ..... Dual-lever, triple hydraulic system  
 Steering and brakes ..... Engine-driven, eight-piston, variable-displacement pump delivers 26 gpm (98 lpm) at 2,200 engine rpm and 2,250 psi (158,2 kg/cm<sup>2</sup>).

### Landfill Buckets:

	<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: 2¼ cu. yd. (1,72 m <sup>3</sup> )	106.4 in. (2,70 m)
.....	Refuse: 3½ cu. yd. (2,68 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
Compaction .....	Up to 2,898 psi

### 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)

### Capacities:

	<b>U.S.</b>	<b>Liters</b>
Cooling system .....	9 gal.	34,1
Fuel tank .....	50 gal.	189,3
Crankcase and filters .....	17 qt.	16,1
Transmission case and filters .....	9.75 gal.	36,9
Front differential: No-Spin .....	6 gal.	22,7
Rear differential .....	6.5 gal.	24,6
Loader hydraulic sump .....	17.5 gal.	66,2

### Additional Standard Equipment:

Adjustable cushioned seat  
 Engine side shields  
 Key switch  
 Pushbutton safety start  
 Cigaret lighter  
 Vandal protection  
 Horn  
 Automatic return to dig  
 Fixed drawbar  
 Vertical exhaust w/rain cap  
 Hand grips  
 Electric hourmeter  
 ROPS cab and seat belt  
 Ether starting aid  
 Heater for cab  
 Defroster  
 Fire extinguisher  
 Radiator screen

### SAE Operating Weight:

	<b>lb.</b>	<b>kg</b>
With refuse bucket .....	30,012	13625
With multipurpose bucket .....	30,282	13747

### Special Equipment:

Precleaner  
 Multipurpose landfill bucket  
 Light-materials bucket

JD646 COMPACTOR DIMENSIONS

