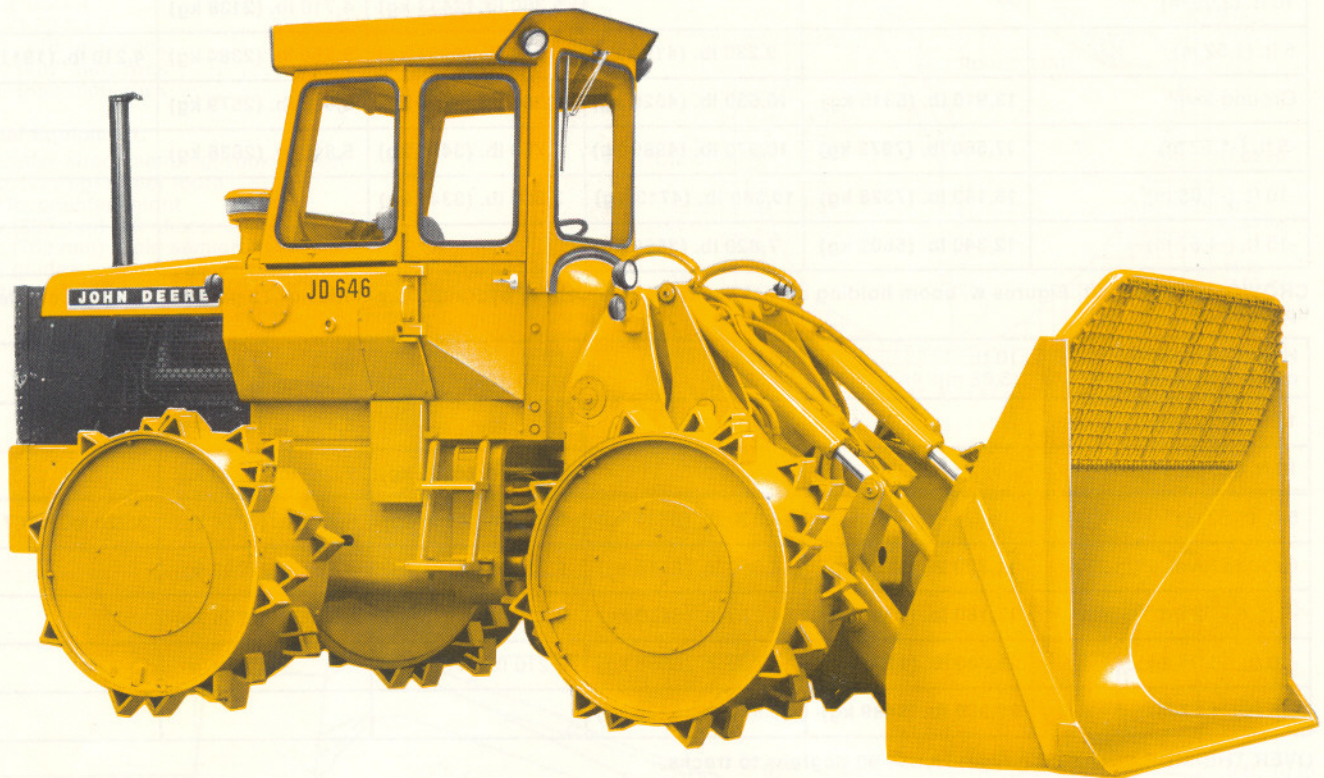
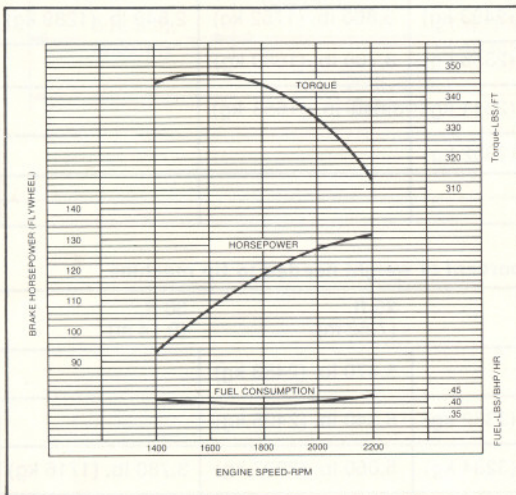




JD646 COMPACTOR



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.)



Horsepower (at 2,200 engine rpm):	SAE	PS
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 (7.2 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..... Live, transmission-driven, vane pump delivers 60 gpm (227 lpm) at 2,200 engine rpm and 2,250 psi (158,2 kg/cm²) 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/cm²).

Landfill Buckets:

	Capacity	Width
Refuse Dirt:	2¾ cu. yd. (2,10 m ³)	110.77 in. (2,81 m)
..... Refuse:	4½ cu. yd. (3,44 m ³)	
Light materials Dirt:	4½ cu. yd. (3,44 m ³)	110.77 in. (2,81 m)
Multipurpose Dirt:	2¼ cu. yd. (1,72 m ³)	106.4 in. (2,70 m)
..... Refuse:	3½ cu. yd. (2,68 m ³)	

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:

	U.S.	Liters
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
Cigarette 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:	lb.	kg
With refuse bucket	30,012	13625
With multipurpose bucket	30,282	13747

Special Equipment:

Precleaner
Multipurpose landfill bucket
Light-materials bucket

JD646 COMPACTOR DIMENSIONS

