

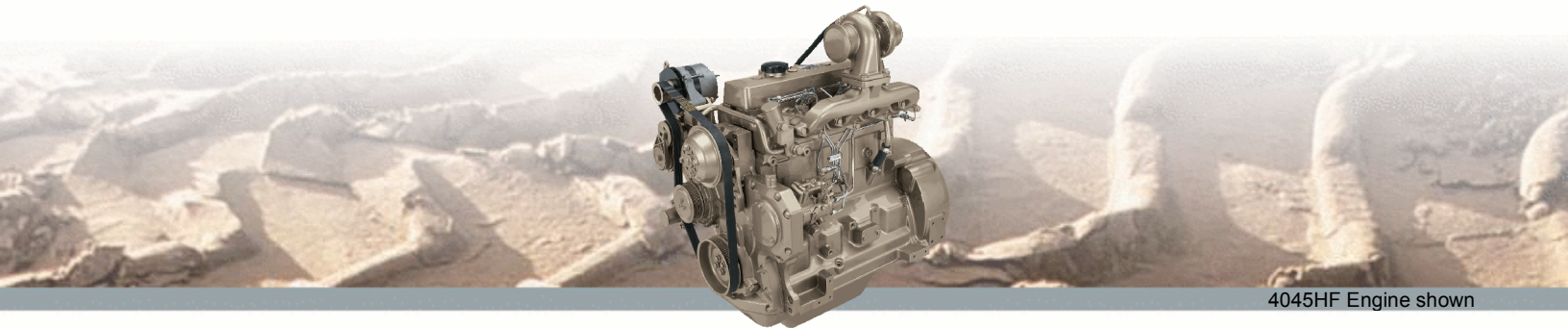


JOHN DEERE

PowerTech™ M

4045H Diesel Engine

Specifications



4045HF Engine shown

General Data

Model	4045HF280	Aspiration	Air-to-Air
Number of cylinders	4	Length-- mm (in)	860 (33.9)
Displacement-- L (cu in)	4.5 (275)	Width-- mm (in)	612 (24.1)
Bore and Stroke-- mm (in)	106 x 127 (4.17 x 5.00)	Height-- mm (in)	994 (39.1)
Compression Ratio	19.0:1	Weight, dry-- kg (lb)	396 (873)
Engine Type	In-line, 4-Cycle		

Rated BHP is the power rating for variable speed and load applications where full power is required intermittently.

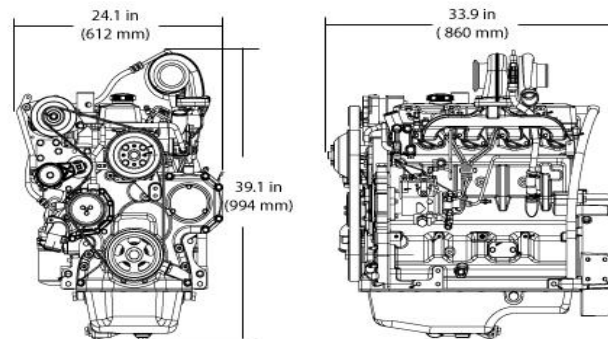
Continuous BHP is the power rating for applications operating under a constant load and speed for long periods of time.

Heavy duty - see application ratings/definitions, engine performance curves. Power output is within + or - 5% at standard SAE J 1995 and ISO 3046.

Certifications

- CARB
- EPA Tier 3
- EU Stage III A

Dimensions



Performance data

Rated Speed

Intermittent	74 kW (99 hp) @ 2400 rpm
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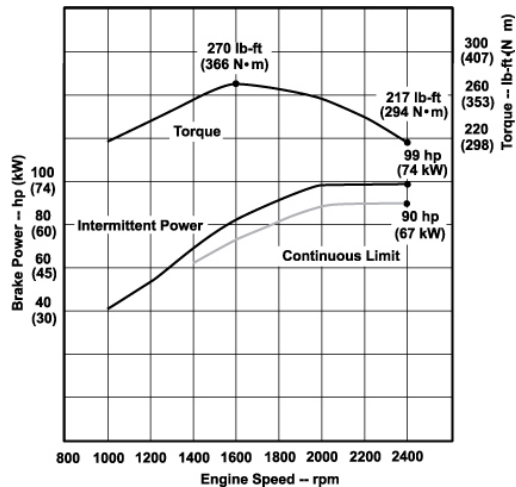
Peak power

Power bulge %	75 kW (101 hp) @ 2200 rpm
	NA @ 2400 rpm

Peak torque

Torque Rise %	366 N-m (270 ft-lb) @ 1600 rpm
	24% @ 1600 rpm

Performance curve



Features and Benefits

2-Valve Cylinder Head

- Cross flow head design that provides excellent breathing from a lower cost two-valve cylinder head

Mechanical Rotary Fuel Pump

- The timing and fuel injection pressures are optimized to maximize performance and fuel economy at a given rated speed

Fixed Geometry Turbocharger

- Fixed geometry turbochargers are precisely matched to the power level and application

Air-to-Air Aftercooled

- This is the most efficient method of cooling intake air to help reduce engine emissions while maintaining low-speed torque, transient response time, and peak torque. It enables an engine to meet emissions regulations with better fuel economy and the lowest installed costs.

Compact Size

- Mounting points are the same as Tier 2/Stage II engine models

Engine Performance

- New power bulge feature
- New higher-peak torque speed
- Lower-rated speeds available for reduced noise and improved fuel economy

Additional Features

- Self-adjusting poly-vee fan drive
- Forged-steel connecting rods
- Replaceable wet-type cylinder liners
- Either-side service
- 500-hour oil change
- Optional final fuel filter with water separator and water-in-fuel sensor
- Optional balancer shafts



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