General Specifications

Basic Engine: 4 Cycle
Model: 6047MK2E
Number of Cylinders: 4 Inline
Air System: Turbcharged Air-to-Air Charge Cooling
Control: DDEC
Bore and Stroke: 5.12 in x 6.30 in (130 mm x 160 mm)
Displacement: 519 cu in (8.5 liters)
Compression Ratio: 16.5:1
Dimensions: (approx.)
  Length: 42.9 in (1090 mm)
  Width: 44.2 in (1123 mm)
  Height: 47.5 in (1207 mm)
  Weight (dry): 2230 lbs (1012 kg)

Rated Power Output*

<table>
<thead>
<tr>
<th>Gross Power</th>
<th>Peak Torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>*250 BHP (187 kW) @ 2100 RPM</td>
<td>890 lb ft (1207 N-m) @ 1200 RPM</td>
</tr>
<tr>
<td>*275 BHP (205 kW) @ 2100 RPM</td>
<td>890 lb ft (1207 N-m) @ 1200 RPM</td>
</tr>
<tr>
<td>**320 BHP (239 kW) @ 2100 RPM</td>
<td>1150 lb ft (1559 N-m) @ 1200 RPM</td>
</tr>
</tbody>
</table>

* Available in No. 1 and 2 Diesel

Features

EGR (Exhaust Gas Recirculation) The turbocharger incorporates an EGR valve to reduce NOx emissions while maintaining excellent durability and fuel economy.

VNT (Variable Nozzle Turbo-Charger) This design optimizes performance to provide quicker acceleration under all conditions. System is controlled by DDEC and is supported by full diagnostics.

Eight Head Bolts per Cylinder The head bolts provide a uniform load on the gasket and liner to reduce stress on the liner flange and block counterbore.

MAS (Maintenance Alert System) This DDEC option helps reduce unexpected downtime, optimizes routine PM service and helps to maximize air and fuel filter life. MAS sensors provide DDEC with useful information on the status of oil level, coolant level, air filter restriction and fuel filter restriction which is easily read by a driver or maintenance technician through the MAS display.

ProDiver This system provides a continuous view of fuel economy and idle time. It stores critical operating data in all phases of vehicle operation, such as driving, cruise and top gear.

Detroit Diesel Electronic Controls (DDEC) are standard on all Series 50 engines. DDEC is the most advanced electronics for diagnosing critical engine functions.

Diagnostic Link This software system can extract data, analyze and manage information from DDEC. It can monitor engine fault codes, passwords, speed settings and engine protection with additional options available.

Rating conditions of SAE: 77°F (25°C) and 29.31 in Hg (99 kPa) Barometer (Dry)

*Barrington Diesel Club for manuals and specs
https://www.barringtondieselclub.co.za/
Performance Curves

### 250 BHP
- **890 LB-FT (1207 N·m)**
- **625 LB-FT (848 N·m)**
- **250 BHP (187 kW)**

### 275 BHP
- **890 LB-FT (1207 N·m)**
- **688 LB-FT (932 N·m)**
- **275 BHP (205 kW)**

### 320 BHP
- **1150 LB-FT (1559 N·m)**
- **800 LB-FT (1085 N·m)**
- **320 BHP (239 kW)**

#### Rating Explanation
- RATED BHP is the power rating for variable speed and load applications where full power is required intermittently.
- FUEL CONSUMPTION CURVE shows fuel used in pounds per brake horsepower hour.
- THIS RATING does not include power requirements for accessory and standard equipment.
- Power output guaranteed within 5% at SAE J1995 conditions.