**Marine Auxiliary Engine 3306B**

**SPECIFICATIONS**

**I-6, 4-Stroke-Cycle-Diesel**

- **Emissions** ............ IMO compliant
- **Displacement** .......... 10.5 L (641 cu. in.)
- **Bore** .................. 120.7 mm (4.75 in.)
- **Stroke** ................. 152.4 mm (6.0 in.)
- **Aspiration** ............. Naturally Aspirated
- **Governor** .............. Hydra-mechanical or PSG
- **Engine Weight, Net Dry (approx)**
  - Heat Exchanger Cooled ........... 977 kg (2155 lb)
- **Cooling System (engine only)**
  - Capacity for Liquids Coolant System (engine only) .... 15.9 L (4.2 U.S. gal)
  - Lube Oil System ........... 38.8 L (10.25 U.S. gal)
- **Oil Change Interval** .......... 250 hr
- **Rotation (from flywheel end)** .... Counterclockwise

**STANDARD EQUIPMENT**

- **Air Inlet System**
  - Regular duty air cleaner, rain cap
- **Charging System**
  - 24V 35 Amp alternator
- **Cooling System**
  - Gear driven, self-priming, centrifugal auxiliary water pump with rubber impeller (heat exchanger engines); gear driven, centrifugal, jacket water pump; expansion tank; oil cooler; engine mounted heat exchanger with removable tube bundle and replaceable copper-nickel tubes (heat exchanger engines); thermostat and housing
- **Exhaust System**
  - Watercooled manifold and turbocharger; dry elbow, 102 mm (4 in.)
- **Flywheel and Flywheel Housing**
  - SAE No. 1 (156 teeth)
- **Fuel System**
  - Fuel priming pump, fuel transfer pump, fuel filter, primary fuel filter, flexible fuel lines
- **Instruments**
  - RH instrument panel with oil pressure, water temperature, and fuel pressure gauges; service meter
- **Lube System**
  - Top mounted crankcase breather, LH oil filter and oil level gauge, oil pan
- **Mounting System**
  - Supports
- **Starting System**
  - 24V electric starting motor
- **General**
  - Vibration damper and guard, Caterpillar yellow paint, lifting eyes

**ACCESSORY EQUIPMENT**

- **Air Starting Motor**
- **Alarm Contactor — Oil Pressure, Water Temperature**
  - 24V 35 Amp, 24V 60 Amp Alternator
- **Auxiliary Drive Pulley**
- **Digital Tachometer**
- **Double Wall Fuel Lines and Drain**
- **12V Electric Gauges — Oil Pressure, Water Temperature**
- **24V or 32V Electric Gauges — Oil Pressure, Water Temperature**
- **Electric Shutoffs — Oil Pressure, Water Temperature, Overspeed**
- **Ether Starting Aid**
- **Exhaust Elbow, Pipe, Flexible Fittings**
- **Fuel Ratio Control**
- **Generator Installation Arrangement**
- **Hydraulic Pump Drive and Adapter**
- **Magnetic Pickup**
- **Manual Shutoff Lever**
- **Manual Voltage Control**
- **Mechanical Tachometer Drive**
- **Mechanical Overspeed Contactor**
- **Paralleling Kit**
- **Rear Enclosed Clutch and Support**
- **RFI Filter**
- **RH Oil Level Gauge**
- **Solenoid Shutoff — 12V or 24V, ETR or ETS**
- **Spare Parts Kit**

**PERFORMANCE DATA**

- **Naturally Aspirated**

**TM1557-00**

<table>
<thead>
<tr>
<th>% load</th>
<th>bkW</th>
<th>Lph</th>
<th>gph</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>80</td>
<td>22.0</td>
<td>5.8</td>
</tr>
<tr>
<td>75</td>
<td>61</td>
<td>16.1</td>
<td>4.3</td>
</tr>
<tr>
<td>49</td>
<td>42</td>
<td>11.7</td>
<td>3.1</td>
</tr>
<tr>
<td>25</td>
<td>23</td>
<td>7.9</td>
<td>2.1</td>
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**DIMENSIONS***

<table>
<thead>
<tr>
<th>Dimension</th>
<th>mm</th>
<th>in.</th>
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<tbody>
<tr>
<td>Overall Length</td>
<td>1715.6</td>
<td>67.5</td>
</tr>
<tr>
<td>Length from front to rear face of block</td>
<td>1285.0</td>
<td>50.6</td>
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<tr>
<td>Length from rear face of block to back of flywheel housing</td>
<td>149.8</td>
<td>5.9</td>
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<tr>
<td>Overall Height</td>
<td>1227.2</td>
<td>48.3</td>
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<tr>
<td>Height from crankshaft centerline to top of engine</td>
<td>904.4</td>
<td>35.6</td>
</tr>
<tr>
<td>Height from crankshaft centerline to bottom of oil pan</td>
<td>322.8</td>
<td>12.7</td>
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<tr>
<td>Overall Width</td>
<td>956.7</td>
<td>37.7</td>
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<tr>
<td>Width from crankshaft centerline to port side (left side)</td>
<td>434.8</td>
<td>17.1</td>
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<tr>
<td>Width from crankshaft centerline to starboard side (right side)</td>
<td>521.9</td>
<td>20.6</td>
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Customer mounting hole diameter

<table>
<thead>
<tr>
<th>Front</th>
<th>mm</th>
<th>in.</th>
<th>Rear</th>
<th>mm</th>
<th>in.</th>
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</thead>
<tbody>
<tr>
<td>Width from crankshaft centerline to side</td>
<td>62.0</td>
<td>2.4</td>
<td>17.0</td>
<td>0.7</td>
<td></td>
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<tr>
<td>Length from rear face of block to mounting hole</td>
<td>265.1</td>
<td>10.4</td>
<td>285.8</td>
<td>11.3</td>
<td></td>
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<tr>
<td></td>
<td>913.9</td>
<td>36.0</td>
<td>49.5</td>
<td>2.0</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>125.7</td>
<td>5.0</td>
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*Illustrations and dimensions from drawing: 118-7822.

**RATING CONDITIONS**

**Engine Performance Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>±3%</th>
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<tbody>
<tr>
<td>Power</td>
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<tr>
<td>Specific Fuel Consumption</td>
<td>±3%</td>
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<tr>
<td>Fuel Rate</td>
<td>±5%</td>
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</table>

**Ratings** are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg), 27°C (81°F), and 60% relative humidity.

**Fuel rates** are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/L (7.001 lb/U.S. gal).

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

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