Marine Engine Application and Installation Guide

- Serviceability Considerations
  - Periodic Maintenance
  - Overhead Clearance for Disassembly of Engine

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Lubrication and Maintenance Charts

These recommendations vary depending on the model and rating selected. Go to the Operations & Maintenance Manual or the Marine Data Wizard to find Maintenance Interval Schedules and Fluid Recommendations based on the model and rating you have selected.

Overhead Clearance for Disassembly of Engine

General Information

Well-designed engine compartments will include features that contribute to the serviceability of the machinery. For example:

- Overhead lifting equipment for engine subassemblies that may be heavier than one man can safely lift by hand, particularly in the often close quarters of the machinery space.
- Hatches located directly above engines for simplified removal and reinstallation during overhaul.
- Outlets for electricity and/or compressed air to drive high production mechanic’s tools.

Access to those points on the engine that require periodic preventive maintenance such as:

- lube oil filters and drain plug — engine and transmission
- fuel and air filters
- sea water and jacket water pump
- turbochargers
- zinc plugs
- heat exchanger — for core cleaning

Overhead Clearance for Connecting Rods and Piston Removal

The following tables give the height above the crankshaft centerline requirements to allow removal of a connecting rod and piston from the engines. This information is offered to assist designers who wish to provide adequate overhead clearance for piston/connecting rod removal.
## In-Line Engines

<table>
<thead>
<tr>
<th>Engine</th>
<th>Height Above Crankshaft Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>3126, 3126B, C7</td>
<td>626 mm (24.6 in.)</td>
</tr>
<tr>
<td>3196, C9</td>
<td>635 mm (25 in.)</td>
</tr>
<tr>
<td>3406C, 3406E, C12</td>
<td>786 mm (30.9 in.)</td>
</tr>
</tbody>
</table>

## Vee Engines

<table>
<thead>
<tr>
<th>Engine</th>
<th>Height Above Crankshaft Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>3408C, 3412C&amp;E, C30, C32</td>
<td>693 mm (27.28 in.)</td>
</tr>
<tr>
<td>3508C, 3512C, 3516C</td>
<td>969 mm (38.15 in.)</td>
</tr>
</tbody>
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