**LEE HI-BAR® PLUG**

**PROOF 12,500 psi / BURST 25,000 psi**

The Lee HI-BAR® Plug is a reliable, economical, leak-tight threaded plug designed to seal large passageways in hydraulic and fuel system manifolds. Rated for system pressures up to 5000 psi and temperatures from -65°F to 275°F (temperatures as high as 400°F can be tolerated at reduced pressures), Lee HI-BAR Plugs offer many advantages over existing threaded plug devices.

Significant savings are realized in reduced machining, assembly, and inspection costs. A drilled and tapped hole is all that is required along with a simple installation tool. Installation is quick and easy, and HI-BAR Plugs can be reused several times.

Installation hole dimensions and material specifications are listed in the tables below.

**HI-BAR PLUG AND INSTALLATION HOLE DIMENSIONS (in.)**

<table>
<thead>
<tr>
<th>LEE PART NUMBERS</th>
<th>THREAD SIZE</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTHB1008010A</td>
<td>5/8-18 UNJF</td>
<td>.47</td>
<td>.9</td>
<td>.500 - .502</td>
<td>.5709 - .5788</td>
<td>.45</td>
<td>.51</td>
<td>.17</td>
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<tr>
<td>PTHB1210010A</td>
<td>3/4-16 UNJF</td>
<td>.59</td>
<td>1.1</td>
<td>.625 - .627</td>
<td>.6892 - .6977</td>
<td>.48</td>
<td>.62</td>
<td>.22</td>
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<tr>
<td>PTHB1412010A</td>
<td>7/8-14 UNJF</td>
<td>.72</td>
<td>1.3</td>
<td>.750 - .752</td>
<td>.8055 - .8152</td>
<td>.56</td>
<td>.75</td>
<td>.26</td>
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</tbody>
</table>

**MATERIAL SPECIFICATION FINISH**

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>SPECIFICATION</th>
<th>FINISH</th>
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</thead>
<tbody>
<tr>
<td>Nut</td>
<td>2024-T351 AL</td>
<td>QQ-A225/6 &amp; AMS 4120 Green Anodize per AMS-A-8625 TYPE II</td>
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<tr>
<td>Pin</td>
<td>2024-T351 AL</td>
<td>QQ-A225/6 &amp; AMS 4120 Black Anodize per AMS-A-8625 TYPE III</td>
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<tr>
<td>MultiSeal</td>
<td>Polyamide-imide</td>
<td>ASTM D5204</td>
</tr>
<tr>
<td>Retaining Ring</td>
<td>17-7 PH CRES H900</td>
<td>AMS 5678 Passivate Per ASTM A967</td>
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</tbody>
</table>
**LEE HI-BAR® PLUG**

- Sealing is achieved by the use of the controlled expansion principle found in our classic Lee Plug. Matching tapers provide compressive sealing forces on multiple lands and grooves.
- The self-locking feature eliminates safety wires, locking rings, or other methods of anti-rotation. Breakaway torque exceeds twice that specified by MIL-F-18240 for threaded fasteners.
- Elimination of o-rings and other types of elastomeric seals improves system reliability since there are no seal cure dates, shelf lives, or service dates.
- The use of our Lee MultiSeal in the HI-BAR design reduces the stresses transferred to the threads and housing. Since the thread stresses are low, thinner walls can be used to reduce weight.
- Lee HI-BAR Plugs are 4 component, lightweight, pre-assembled units. The aluminum threaded plug and pin, and polyamide-imide MultiSeal save considerable weight.

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**INSTALLATION & EXTRACTION**

![Installation Diagram]

**INSTALLATION**

Thread the plug into the installation hole and torque to the proper value (see table below). Expand the seal by threading the Lee installation tool, or similar bolt, into the back of the pin and pulling out to the solid stop. This can be accomplished manually or with a pneumatic pop rivet gun. The detent mechanism then holds the pin and seal in place. Note that fluid pressure works in the direction that activates the MultiSeal.

**EXTRACTION**

De-activate the seal by threading our Lee tool, or similar tool, into the pin and driving the pin inward. The HI-BAR Plug can then be threaded out of the hole.

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**HI-BAR PLUG INSTALLATION TORQUE**

<table>
<thead>
<tr>
<th>LEE PART NUMBER</th>
<th>INSTALLATION TORQUE (ft. – lbs.)</th>
</tr>
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<tbody>
<tr>
<td>PTHB1008010A</td>
<td>5</td>
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<tr>
<td>PTHB1210010A</td>
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<td>PTHB1412010A</td>
<td>15</td>
</tr>
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Please contact a Lee Sales Engineer for additional information.

Tel: 860-399-6281
Fax, Order Entry: 860-399-7058
Fax, Technical Information: 860-399-7037
Web: www.TheLeeCo.com