SEAL KIT NO. 56556 (1-1/2" Rams) & 64153 (2" Rams) (FOR SINGLE-ACTING, GLAND NUT RAMS)

SEAL INSTALLATION INSTRUCTIONS

1. Lubricate seals with oil.

2. Install seals in the exact orientation as shown in diagram.

3. Assemble gland nut over split bearing end of plunger to prevent damage to seals.

4. Carefully reassemble ram.

5. Insert a feeler gauge (0.012" for 1-1/2" rams and 0.015" for 2" rams) between front surface of cylinder tube face and hex of packing nut. Tighten gland nut until it is snug against the feeler gauge.

6. Remove feeler gauge and tighten gland nut an additional 1/4 turn. This adjustment procedure will provide a torque range of 150–180 ft-lb.
**PROCEDURE FOR INSTALLING SAE O-RING HYDRAULIC FITTINGS AND HOSES**

NOTE: Do not use any type of sealant or tape on the fittings or hoses

Always use two wrenches to ensure proper tightening of fittings and hoses.

Use the following procedure to install SAE O-Ring fittings in valve block and rams.

1. Turn jam nut on fitting as far back as possible.
2. Lubricate O-ring with clean hydraulic oil.
3. Screw fitting into port by hand until the washer contacts port face and shoulder of the jam nut threads.
4. Unscrew fitting to proper position no more than one full turn.
5. Using two wrenches, hold fitting body in position and tighten jam nut until the washer again contacts port face, then tighten an additional 1/8 to 1/4 turn to lock fitting in place. Final torque on the jam nut should be approximately 20 ft-lb.

**INSTALLING NPTF PIPE THREAD FITTINGS AND HOSES**

1. Screw fitting into female pipe port to the finger tight position.
2. Wrench tighten fitting to the appropriate turns from finger tight (TFFT) shown in chart stopping at the position where the joining tube can be attached. Avoid over tightening and then backing out the fitting to make the connection as this will likely result in a leaking or weeping connection.

<table>
<thead>
<tr>
<th>Pipe Thread Size (NPTF)</th>
<th>TFFT</th>
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</thead>
<tbody>
<tr>
<td>1/8-27</td>
<td>2.0-2.5</td>
</tr>
<tr>
<td>1/4-18</td>
<td>1.5-2.0</td>
</tr>
<tr>
<td>3/8-18</td>
<td>2.0-2.5</td>
</tr>
<tr>
<td>1/2-14</td>
<td>2.0-2.5</td>
</tr>
<tr>
<td>3/4-14 &amp; Larger</td>
<td>1.5-2.0</td>
</tr>
</tbody>
</table>

Use the following procedure to install hydraulic hoses.

1. Screw flare nut onto fitting flare and hand tighten.
2. Align hose so there are no twists or sharp bends.
3. Using two wrenches, hold the hose in position and tighten flare nut 1/8 to 1/4 turn beyond hand tight. Final torque on the flare nut should be approximately 20 ft-lb.

The company reserves the right under its Product Improvement Policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used herein.