**SHIFT VALVE TORQUE SEQUENCE**

- **ELECTRIC SHIFT VALVE:**
  A. TORQUE SCREWS 1 AND 2 TO 11.5 FT-LBS [15.5 NM].
  B. TORQUE THE OUTER SCREWS [3-6] INCREMENTALLY TO 55 FT-LBS [75 NM] IN A CRISS-CROSS PATTERN.
  C. CHECK SCREWS 1 AND 2 ARE AT 11.5 FT-LBS [15.5 NM].

- **MECHANICAL SHIFT VALVE:**
  A. TORQUE ALL CAP SCREWS [1-6] TO 10 FT-LBS [14 NM].
  B. TORQUE THE OUTER CAP SCREWS [3-6] TO 25 FT-LBS [34 NM] INCREMENTALLY IN A CRISS-CROSS PATTERN.
  C. CHECK SCREWS 1 AND 2 ARE AT 11.5 FT-LBS [15.5 NM].

**NOTES:**
1. TIGHTEN INCREMENTALLY IN A CRISS-CROSS PATTERN TO 40 [54], 60 [81], 80 [108], 100 [135], AND THEN 120 [163] FT-LBS [NM].
2. TIGHTEN IN CRISS-CROSS PATTERN IN 1/8 TURN INCREMENTS.

**HP TUBING FITTING TORQUE REQUIREMENTS**

<table>
<thead>
<tr>
<th>TUBING SIZE</th>
<th>FT-LBS</th>
<th>NM</th>
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</thead>
<tbody>
<tr>
<td>1/4&quot; TUBING</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>3/8&quot; TUBING</td>
<td>50</td>
<td>68</td>
</tr>
<tr>
<td>9/16&quot; TUBING</td>
<td>110</td>
<td>149</td>
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