

SAE Dash Size	Thread Size	Assembly Torque* (+10% -0)		Tube Connection FFWR	Swivel Nut or Hose Connection FFWR
		in. lb.	ft. lb.		
-2	5/16-24	35	2	—	—
-3	3/8-24	65	5	—	—
-4	7/16-20	130	11	2 1/2	2
-5	1/2-20	165	14	2 1/2	2
-6	9/16-18	235	20	2 1/2	2
-8	3/4-16	525	43	2 1/2	2
-10	7/8-14	650	55	1 1/2	1 1/2
-12	1 1/16-12	950	80	1 1/2	1 1/2
-14	1 3/16-12	1200	100	1 1/2	1 1/2
-16	1 5/16-12	1400	115	1	1 1/2
-20	1 5/8-12	1900	160	1	1
-24	1 7/8-12	2250	185	1	1
-32	2 1/2-12	3000	250	1	1
-40	3-12	—	—	1	1

**Notes:**

1. Assembly Torque: Torque values are for unlubricated carbon steel components and properly lubricated stainless steel components. For stainless steel, a lubricant such as Permatex Anti-Seize Lubricant is recommended to prevent galling.
2. FFWR: The Flats From Wrench Resistance or "Flats" method is recommended for steel, stainless steel and brass components.
3. Torque and FFWR: Torques and FFWR shown in the chart are for use with the tube materials, wall thickness, etc. recommended by Parker Hannifin Tube Fittings Division for use with Parker Triple-Lok fittings.

**Table T20 – Triple-Lok assembly torques and FFWR**  
For brass fittings, use approximately 65% of the torque values shown, unlubricated.

## Triple-Lok Troubleshooting Guide

### 37° Flare

CONDITION	PROBABLE CAUSE(S)	RECOMMENDATION
Tube nut binds to tube flare Tube nut cannot engage the fitting body	<ul style="list-style-type: none"> <li>• Flare too large or tube wall too heavy</li> </ul>	<ul style="list-style-type: none"> <li>• Flare new tube end using proper flare diameters</li> </ul>
Flare is out-of-round (lopsided)	<ul style="list-style-type: none"> <li>• Tube cut at an angle</li> </ul>	<ul style="list-style-type: none"> <li>• Re-cut tube, reasonably square, to <math>90^\circ \pm 1^\circ</math> and flare new tube end</li> </ul>
Nicks, scratches, pock marks on tube flare of fitting	<ul style="list-style-type: none"> <li>• Contaminants on tube ID or flaring cone/pin prior to flaring</li> <li>• Worn/damaged flaring cone/pin</li> <li>• Poor-quality tube</li> </ul>	<ul style="list-style-type: none"> <li>• Flare new tube end using proper tube preparation techniques</li> <li>• Assure that flare cone is clean</li> <li>• Replace poor-quality tube</li> </ul>
Tube crack on flare	<ul style="list-style-type: none"> <li>• Poor-quality welded tube; work-hardened tube; tube not annealed (too hard)</li> </ul>	<ul style="list-style-type: none"> <li>• Flare new tube end using appropriate tube (e.g., fully annealed) and tube cutting methods</li> </ul>
Tube nut bottoms out before seats are mated properly	<ul style="list-style-type: none"> <li>• Unintentional use of 45° flare tube nut, or tube sleeve was omitted</li> </ul>	<ul style="list-style-type: none"> <li>• Use appropriate 37° flare components (body, nut and sleeve)</li> </ul>
Immediate leakage from tube nut	<ul style="list-style-type: none"> <li>• Connection may not be tightened properly (if at all)</li> </ul>	<ul style="list-style-type: none"> <li>• Check joint for appropriate FFWR or torque; retighten as appropriate</li> </ul>
Tube nut continues to back off or loosen	<ul style="list-style-type: none"> <li>• Damaged Fitting</li> <li>• Excessive vibration</li> <li>• Improper assembly torque</li> </ul>	<ul style="list-style-type: none"> <li>• Replace damaged fitting</li> <li>• Re-route or clamp properly</li> <li>• Assemble to appropriate torque</li> </ul>
Damaged fitting and/or nose collapse, flow reduction	<ul style="list-style-type: none"> <li>• Frequent assembly and disassembly or over-tightening</li> </ul>	<ul style="list-style-type: none"> <li>• Fitting should be replaced and tightened properly; avoid frequent assembly/disassembly</li> </ul>

**Table T21 — Triple-Lok Troubleshooting guide**

Dimensions and pressures for reference only, subject to change.