

## Troubleshooting Port End Connections

### Parallel (SAE, BSPP and metric)

CONDITION	PROBABLE CAUSE(S)	RECOMMENDATION
Washer is too loose (moves by its own weight or rocks too much on the undercut)	<ul style="list-style-type: none"> <li>Washer damaged</li> </ul>	<ul style="list-style-type: none"> <li>Replace fitting</li> </ul>
Fitting threads are distorted	<ul style="list-style-type: none"> <li>Over-torqued</li> <li>Mixed threads</li> </ul>	<ul style="list-style-type: none"> <li>Replace fitting and tighten to proper torque</li> <li>Determine correct thread type</li> </ul>
Several scratches or nicks on the port face	<ul style="list-style-type: none"> <li>Port face contaminated (dirty)</li> </ul>	<ul style="list-style-type: none"> <li>Reface the port</li> </ul>
Spot face of port is smaller than washer diameter	<ul style="list-style-type: none"> <li>Improper port tool was used</li> <li>Wrong fitting selected for port</li> </ul>	<ul style="list-style-type: none"> <li>Reface the port</li> <li>Select a proper fitting</li> </ul>
Port threads are distorted (yielded)	<ul style="list-style-type: none"> <li>Fitting over-torqued</li> </ul>	<ul style="list-style-type: none"> <li>Replace component</li> </ul>
Leakage persists after locknut has been torqued	<ul style="list-style-type: none"> <li>Damaged O-ring</li> <li>Damaged washer</li> <li>Improper assembly</li> </ul>	<ul style="list-style-type: none"> <li>Replace O-ring with new quality O-ring (90 durometer) and reconnect fitting to proper torque</li> <li>Replace fitting</li> <li>Follow proper assembly procedure</li> </ul>
Washer distorted, allowing opportunity for O-ring to extrude	<ul style="list-style-type: none"> <li>Exposed upper thread forced washer into port during assembly (over-torquing makes this more prevalent)</li> </ul>	<ul style="list-style-type: none"> <li>Replace fitting, using proper installation techniques for adjustable port ends</li> </ul>

Dimensions and pressures for reference only, subject to change.