

Tube End Assembly

The assembly of the tube end consists of the following two steps:

1. Tube end preparation (cutting, deburring and cleaning)
2. Assembly and installation

Tube End Preparation

Tube end preparation is a very critical step to assure the integrity of a tube assembly. Failure to properly perform this function can result in leakage. The three steps in proper tube end preparation are: cutting, deburring and cleaning.

Cutting

Cut tube reasonably square (within +/- 1°) using a circular toothed cut-off saw (see Fig. T10), or a hacksaw with a fine tooth blade guided by a Tru-Cut Saw Guide (shown in Fig. T11) or other mitre-type saw guide.

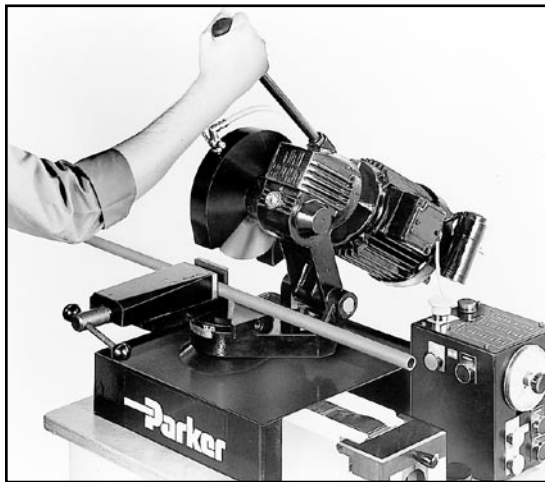


Fig. T10 – Cut-off Saw on Parker's TP432 or TP1025 Tube Preparation Center

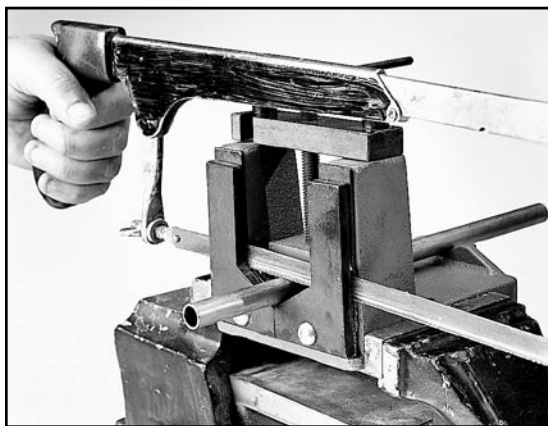


Fig. T11– Parker's Tru-Kut Sawing Vise used with hacksaw

A tube cutter may be used with soft tube such as copper and aluminum. It is not recommended for steel and stainless steel tube because it creates a large burr on the I.D., which is difficult to remove and creates flow restriction. For a steel or stainless steel tube application, Fig. T12 illustrates a proper cut and an improper cut (the improper cut was performed by a tube cutter).

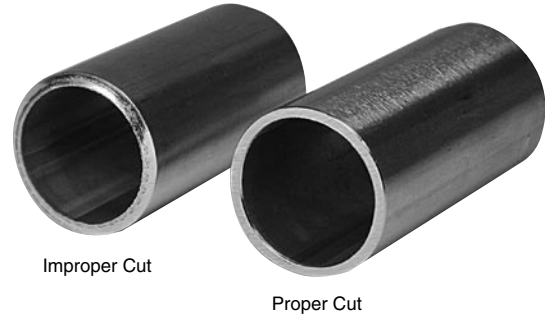


Fig. T12 – Samples of improper and proper cuts on steel tube

A square cut is essential to assure a leak-free connection. The following illustrations depict what will result from an uneven cut.

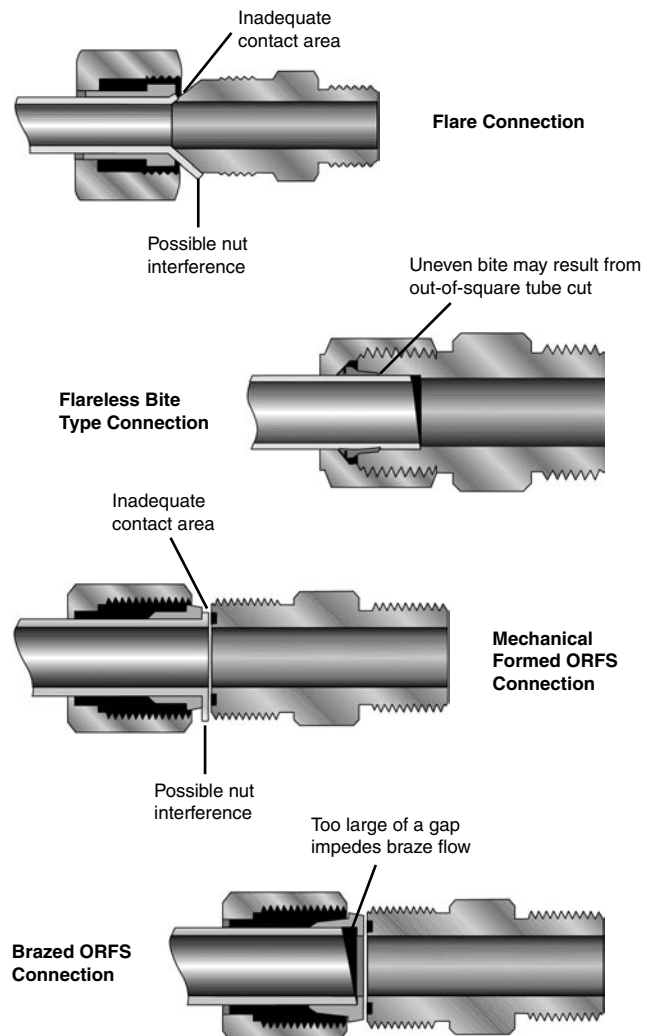


Fig. T13– Results of Uneven Tube Cuts