

Intru-Lok Assembly

The steps to properly assemble the Intru-Lok fitting are:

1. Cutting, deburring and cleaning of the tube
2. Installation

Cutting, Deburring and Cleaning

Cut soft metal tube with tube cutter, circular toothed cut-off saw, or hacksaw with a fine tooth saw blade. A square cut can be attained with a hacksaw using Parker's Tru-Kut Sawing Vise. With a Parker 226 In-Ex deburring tool (see [page S23](#)), lightly deburr the inside and outside corner of the tube end.

Plastic tube can be cut with a plastic tube cutter, Parker part number PTC-001 (available from the Parflex Division).

After cutting and deburring, remove loose burrs or dirt with a brush or compressed air.

Installation

Intru-Lok fittings are designed to permit tube entry and fitting make-up without removal of the nut and ferrule from the fitting body. The following steps are required for proper installation.

1. Insert the tube through the nut and ferrule until it bottoms on the seat within the fitting body.
2. Tighten the nut to the finger tight position, then wrench tighten 1 1/4 turns. (For low pressure instrument air service, 1 turn from finger tight is sufficient. This will also allow for the maximum number of remakes.)

Note: When using the BIP knurled nut and TIP insert for plastic tube, tighten the nut an additional 1 turn from the finger tight position.

Remake

The nut should be wrenched down until a sudden resistance to wrench force is evident. From this point wrench the nut 1/6 turn more to cause the ferrule to spring into its seal against the tube and fitting body.

Intru-Lok Troubleshooting Guide

Problems associated with bite type fittings are most often traced to faulty Pre-Set/Assembly procedure.

Problem / Probable Cause	Remedy
Tube not bottomed	On soft metal tubing, check for the indentation on the tube end. For plastic tubing or soft metal, compare the length from the end of the tube to the front end of the ferrule of a known good assembly to that of the assembly in question. This assembly should be scrapped.
Shallow bite	Inspect for turned up ridge of material at the front of the ferrule. A failure to achieve this ridge can be traced either to the nut not being tightened enough or the tube not being bottomed against the stop which allowed the tube to travel forward with the ferrule. In some instances this assembly may be re-worked.
Over-set ferrule	More than 1 1/4 turns from finger tight were used to pre-set ferrule, or the nut was severely over-tightened in final assembly. This assembly should be scrapped.
Ferrule cocked on the tube	The ferrule may become cocked on the tube when the tube end is not properly lined up with the body. Generally this condition is caused by faulty tube bending. All bent tube assemblies should fit into the fitting body prior to make up. This assembly should be scrapped.

Table T24 – Intru-Lok troubleshooting guide