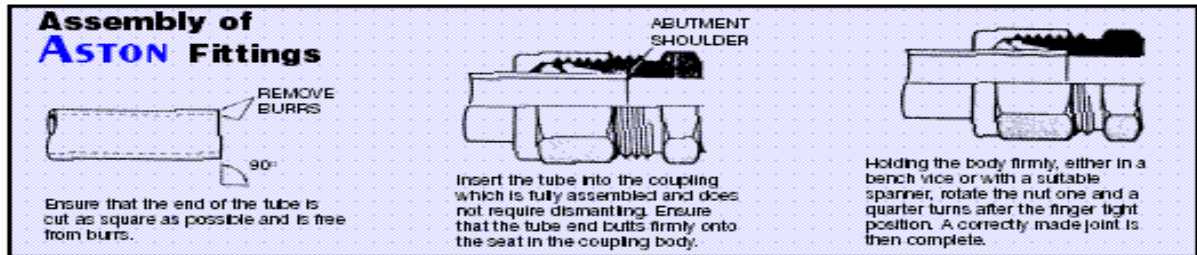


# ASTON FITTINGS & FLANGES

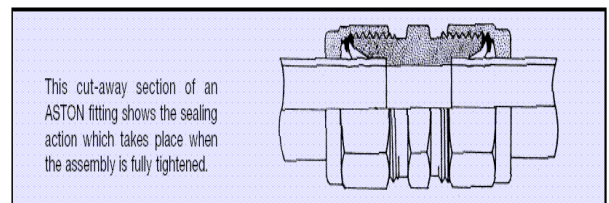
## MANUFACTURING LTD



**ASTON TWIN FERRULE COMPRESSION** fittings are usually supplied complete and ready to use, and self-aligning with the tube during assembly. Tubing for use with ASTON fittings should be fully annealed with a maximum hardness of Rockwell 90 and should be clean and smooth without surface defects. We recommend where possible tubing should preferably be Rockwell 80 for ease of installation.

### ASSEMBLY INSTRUCTIONS for individual component fittings.

- 1) Please ensure that the tube is cut square to the correct length and is de-burred inside and outside without being chamfered. Use a hacksaw (or chop saw) to cut the tube not a pipe cutter.
- 2) Lubricate the inside of the nut, the ferrules and the cone of the coupling with suitable anti-galling paste e.g. fetspaste.
- 3) Fittings must be pre-assembled in a vice prior to installation. Hold the body in a vice and slip the nut and ferrules over the tube end. Please ensure the ferrules are the correct way round with the narrow end of both ferrules towards the cut end of the tube. Also ensure the largest ferrule is nearest the cut end of the tube so it goes into the cone of the body first.
- 4) Tighten the nut on the body by hand whilst pressing the tube against the stop inside the cone.
- 5) Variations in tube diameter tolerance could mean that the nut would need to be tightened several turns before the ferrule comes into contact with the tube. The easiest way to tell when this happens is when the tube cannot be turned by hand.
- 6) Mark a datum point on the tube and nut when the tube or body cannot be turned by hand. Tighten the nut a maximum of 1.1/4 turns beyond the datum mark to ensure optimum bite. NOTE for 1/8" o/d for maximum should be 1 turn beyond the datum mark to ensure optimum bite.
- 7) Loosen the nut and check the ferrules. The ferrules must be sitting flush with the tube on the whole circumference. An equi-distant collar must be visible in front of the ferrule. The ferrules can turn axially but should not be able to move forwards or backwards.
- 8) Put the pre-installed tube into the fitting body. Tighten the nut ¼ to ½ turn beyond the point of clearly perceptible resistance. Use the second spanner to stop the fitting body from moving.
- 9) Where re-assembly is required assemble the fittings to hand tight and tighten to the previous fully tight position and tighten a further 1/16 to ¼ turn after reaching the previous fully tight position.



Please ensure the nut is assembled with the threads mating correctly. Correct application of spray will prevent galling i.e. thread seizing due to metal pickup. Design of the fitting prevents risk of damage due to over tightening. If using heavy gauge tube i.e. 2mm W.T. or thicker, pre-assembly blocks must be used and it is essential the tube is no harder than RB 85 and to ASTM A269 specification. Nuts and ferrules must be pre-assembled into a block prior to installation into the fitting body.

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VALVES – FITTINGS – FLANGES

TUBE – INSTRUMENTATION PACKAGES – SUB CONTRACT MACHINING

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