

ASSEMBLY INSTRUCTIONS



USEFUL DATA

1. Cut the tube to length and file the ends square.
2. Remove internal and external burrs from the tube end.
3. We always recommend that joints are pre-made whilst the coupling body is held *firmly in a bench vice*.
4. Ascertain that all detail parts of the coupling are suitably *lubricated*, especially the internal body cone, the rear of the ferrule and the internal thread of the nut.

The lubrication process is highly recommended on ALL fittings, however, on stainless steel couplings, the use of a quality lubricant is imperative. Betalube, a copper based paste is highly recommended and available from Betabite Hydraulics or your local distributor.

Please note after assembly, fittings to be used on Oxygen lines should be fully degreased.

5. Slide the nut onto the tube, followed by the ferrule, the open end of the nut should be towards the end of the tube, and similarly, the cutting or smaller end of the ferrule should point towards the tube end.
6. Present the tube, nut and ferrule to the coupling body, making sure that tube passes cleanly through the nut and ferrule & butts firmly against the step (abutment face) provided in the coupling body.

Screw the nut onto the coupling body until finger tight.

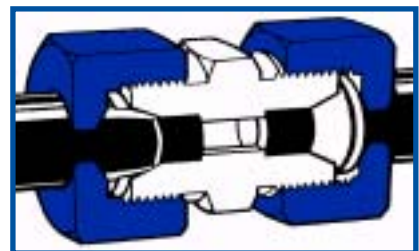
7. Hold the tube in one hand and with the correct spanner in the other hand, tighten the nut until the ferrule is felt to just grip the tube. This point can be determined by rotation or slightly rocking the tube. From this point, the nut should be tightened $1\frac{1}{4}$ to $1\frac{1}{2}$ turns from the initial ring grip to obtain a fully effective cutting action.

On larger sizes of fitting, an extension to the spanner is highly recommended to maximise leverage and minimise effort.

8. If the nut is now removed, the ferrule will have cut its own seating on the tube and whilst it will be found to rotate, it cannot be moved towards the tube end.

The 'joint' may now be re-assembled, by re-tightening of the nut until significant resistance is felt and then increase for a further $\frac{1}{8}$ to $\frac{1}{4}$ of a turn. The above procedure **MUST** be followed closely to ensure a safe and successful joint.

9. Betabite fittings correctly made can be broken repeatedly, when not under pressure and re-made without affecting their pressure tightness and leak-proof quality.



PRESSURE RATING TABLES FOR YOUR SAFETY, CONVENIENCE AND PEACE OF MIND

Imperial sizes		Metric sizes		
> 1" OD or $\frac{3}{4}$ " NB	Hydraulic 690 bar (10,000 psi)	Gas 345 bar (5,000 psi)	(L) Light series 6 to 18mm	315 bar (4,568 psi)
> $1\frac{1}{4}$ " OD or 1" NB	552 bar (8,000 psi)	276 bar (4,000 psi)	(L) Light series 22 to 42mm	160 bar (2,320 psi)
> $1\frac{1}{2}$ " OD or $1\frac{1}{4}$ " NB	414 bar (6,000 psi)	207 bar (3,000 psi)	(S) Heavy series 6 to 14mm	630 bar (9,135 psi)
			(S) Heavy series 16 to 30mm	400 bar (5,800 psi)