



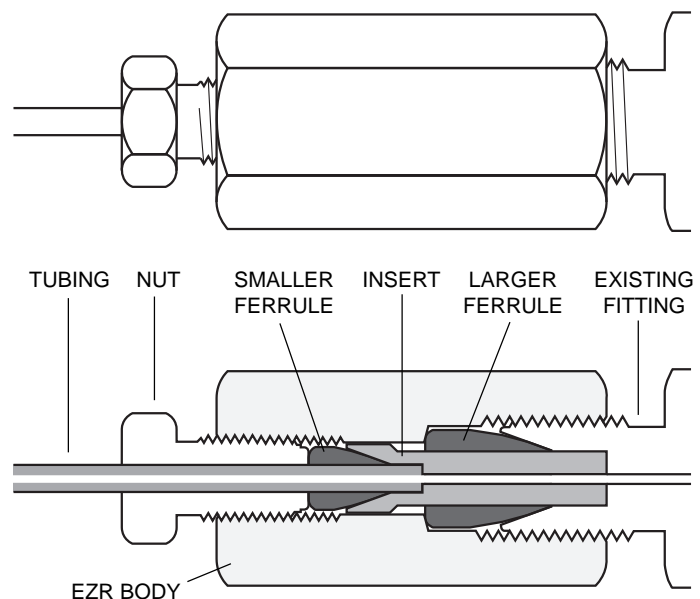
## EZR and IZR Installation Instructions

**EZR**s (external reducers) adapt an external tee or union or the Parker and Swagelok® type fittings commonly used on injectors and detectors to Valco zero dead volume connections.

**IZR**s (internal reducers) are most commonly used for adapting small transfer lines to Valco valves with larger fittings.

### External Reducers (EZRs)

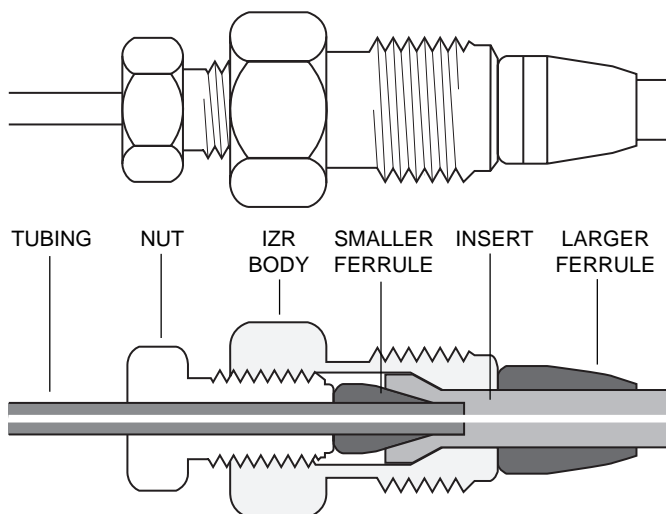
1. Remove the plastic cap from the fitting assembly.
2. Remove the zero volume nut and the smaller ferrule from the EZR body. (**Figure 1**)
3. Slide the nut and ferrule onto the tubing, oriented as in **Figure 1**. Do not screw the nut into the EZR body yet.
4. Insert the tubing into the EZR body (with the nut and ferrule moving freely on the tubing) until it sits in the tubing seat in the insert.
5. With the larger ferrule over the insert, screw the EZR body onto the existing Parker or Swagelok fitting, but do not tighten anything.
6. While pushing firmly on the tubing so that the insert is all the way into the tubing seat in the Parker or Swagelok fitting, use a wrench to tighten the EZR body so that the larger ferrule will make up on the insert. (Approximately 1/3 turn past finger tight.)
7. Still pushing firmly on the tubing so that it is fully seated in the insert, tighten the zero volume nut into the EZR body to make up the smaller ferrule on the tubing. (Approximately 1/4 turn past finger tight.)
8. Check for leaks and tighten as necessary.



**Figure 1:** EZR cutaway view

## Internal Reducers (IZRs)

1. Remove the zero volume nut and the smaller ferrule from the IZR body. (**Figure 2**)
2. Slide the nut and ferrule onto the tubing, oriented as in **Figure 2**. Do not screw the nut into the IZR body yet.
3. Insert the tubing into the IZR body (with the nut and ferrule moving freely on the tubing) until it sits in the tubing seat of the insert.
4. Screw the IZR body into the valve detail, but do not tighten anything.
5. While pushing firmly on the tubing so that the insert is all the way into the tubing seat in the valve detail, use a wrench to tighten the IZR body so that the larger ferrule makes up on the insert. (Approximately 1/3 turn past finger tight.) Use an adjustable wrench to support the valve body when tightening fittings.
6. Remove the IZR body and check to make sure that the larger ferrule has seated properly on the insert. The ferrule may spin on the insert but there should be no lateral movement. If the ferrule is not seated properly, reinstall the assembly and tighten the IZR body an additional 1/8 turn. Disassemble and check the ferrule as before.
7. Still pushing firmly on the tubing so that it is fully seated in the insert, tighten the zero volume nut into the IZR body to make up the smaller ferrule on the tubing. (Approximately 1/4 turn past finger tight.)
8. Check for leaks and tighten as necessary.



**Figure 2:** IZR cutaway view

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