



INSTALLATION AND MAINTENANCE INSTRUCTIONS

IMI 3.101

April 1998

Transmission Tubing Installation Instructions 2" Class 300 25-Series Valve

The 25-Series valve for which the transmission tubing kit is to be attached has been designed so that the tubing can be mounted on either side. Once a side has been chosen, it is recommended that the installation instructions be followed to ensure proper installation.

NOTE: Operation of the valve without transmission tubing or with improperly installed tubing could potentially result in injury to personnel.

- The individual components provided in the tubing kit are shown in Figure 1. The transmission tubing is NOT to be assembled together as shown in Figure 1 prior to attachment to the valve.
- Some type of piping compound thread protector is recommended for all NPT threads.
- For the convenience of the customer, all Swagelok nuts and ferrules have already been installed on the tubing.

All of the following instructions refer to Figure 2. The item numbers are as shown in Figure 1.

1. Remove all plastic NPT thread protectors from valve openings.
2. Install pipe plugs at two openings on opposite side to transmission tubing as shown.
3. Install the three NPT fittings in their appropriate openings as follows:
 - a. Thread Items 4 and 5 into the COVER as shown. It is recommended that the elbow and nipple be turned together.
 - b. Thread Items 1 and 3 into the body as shown. These should also be turned together. The bleeder wire end of Item 1 should be placed into the body.
 - c. Thread Item 2 into the bottom of the lower diaphragm case as shown.

Tighten the fittings in accordance with guidelines for standard NPT threads. Care must be taken to ensure that the Swagelok threaded end is oriented in the direction indicated by Figure 2 for each fitting to accommodate the mating tubing. For example, the Swagelok opening on Item 2 should face perpendicular to the inlet/outlet centerline of the fitting.

4. Of the two pieces of tubing, the shorter piece of tubing, Item 6, should be installed first. Line the ends of the tubing up with the fitting openings of Items 3 and 4 and hand tighten the nuts.

Due to the stiffness of the tubing, the following adjustment of the mating fittings (Items 3 and 4) may be required to facilitate assembly:

- After completion of Step 3, rotate Item 3 slightly (about 20 degrees) in the CCW direction.
 - Rotate Item 4 slightly in the CW direction.
 - Place the long end of Item 6 in the fitting opening of Item 3 and hand tighten the nut onto the fitting threads.
 - While rotating Item 3 back into proper position, align the end of Item 6 with the fitting opening of Item 4. This may require rotating both fittings 3 and 4 at the same time until the ends mate sufficiently to allow the nut to engage with the threads.
5. Line up the ends of the longer piece of tubing, Item 7, with the fitting openings of Items 3 and 2 and hand tighten the nuts.
 6. All Swagelok nuts are to be tightened slightly with a wrench after hand tightening. When completely assembled, it is recommended that there be a gap of .125 (minimum) to .140" between the nuts and the tube fitting bodies.

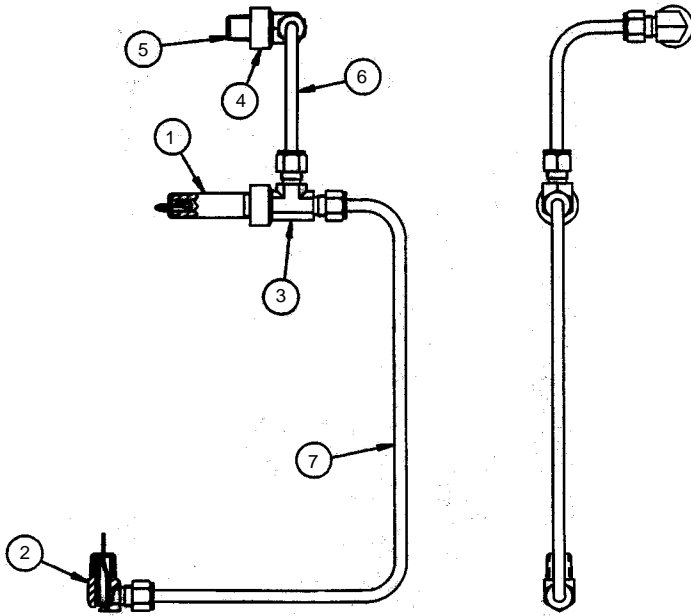


Figure 1 - Identification of Components - 2 Class 300 25-Valve Tubing

* Not shown here but included in kit are two (2) 1/4" NPT pipe plugs

| Item | Stock No. | Item Description |
|------|-----------|-----------------------------|
| 1 | 67223 | Nipple Bleeder Assembly |
| 2 | 67219 | Male Elbow Bleeder Assembly |
| 3 | 67220 | Tee |
| 4 | 67249 | Elbow |
| 5 | 44557 | Nipple |
| 6 | 67235 | Cap to Tee Tubing |
| 7 | 67234 | Case to Tee Tubing |

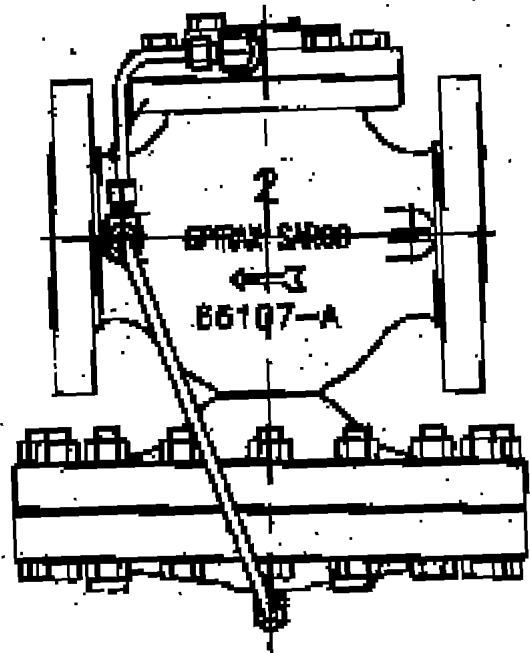
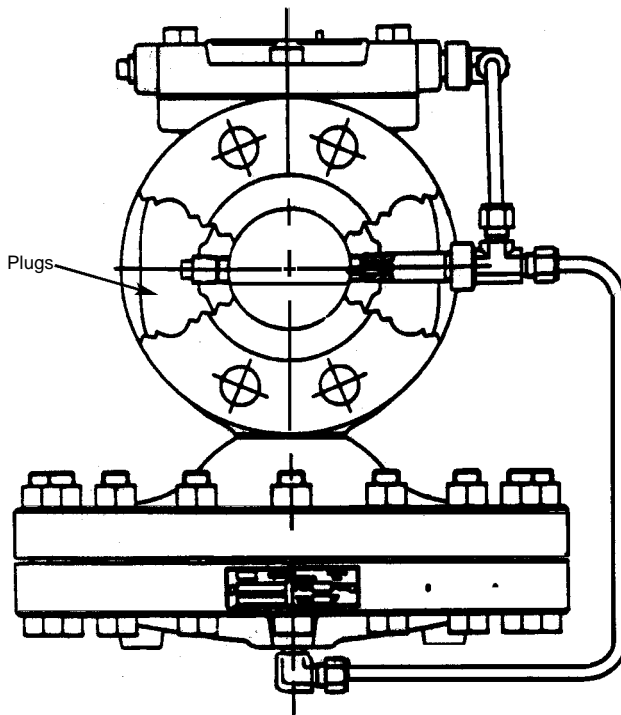


Figure 2- Final Configuration of Transmission Tubing

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