INSTALLING A LOOP
Technical Note 105

VICI Valco loops now include nuts and ferrules. Normally installing a loop presents no special problems beyond typical fitting installation. Most tubing is flexible and most loops, particularly those with coils, are easy to bend wherever they need to go. There is no shape to which we can pre-bend a loop that will not require some bending during installation, but once the nuts and ferrules are properly made up, other considerations are purely cosmetic.

FIGURE 1: Sampleloop installed on a C6W valve

INSTALLATION INSTRUCTIONS

1. Slide a nut and ferrule onto one end of the tubing. Insert this assembly into one of the valve fitting details, screwing the nut in two or three turns by hand.

2. Bend or flex the tubing as necessary to push the tubing all the way into the detail until it seats firmly. This is essential for a proper Zero Dead Volume connection. Manually turn the nut into the detail until it is finger tight.

3. While making sure that the tubing stays pushed all the way in, use an open end wrench to turn the nut 1/4 turn past finger tight.

4. Remove the fitting and inspect it. When made up properly, the ferrule may be free to spin axially on the tubing, but should have no lateral movement along the tubing. If the ferrule moves later- ally, reinstall the fitting into the detail and tighten it another 1/8 turn past finger tight.

5. Remove, reinspect, and repeat, if necessary. Once this end of the tubing is made up correctly, remove the loop from the valve and repeat Steps 1-7 with the other end.

6. Screw one end of the loop into the valve fitting where it will actually be installed. Leave it loose enough to allow the tubing to rotate in the nut.

7. Grasp the nut at the free end of the tubing and pull it into position in line with the port in which it will be installed. When the tubing is aligned with the axis of the fitting detail, push the ferrule and tubing into the fitting detail and screw the nut in a couple of turns by hand.

8. Tighten both fittings with the open end wrench. Usually 1/8 to 1/4 turn past finger tight is sufficient.

NOTE: Since all Valco fitting details are identical, the loop may be installed backwards or even in another Valco valve without risk of dead volume or leaks.