Applying Shut-Off Valve on CA-3131 Dry Air Feeder Pipe

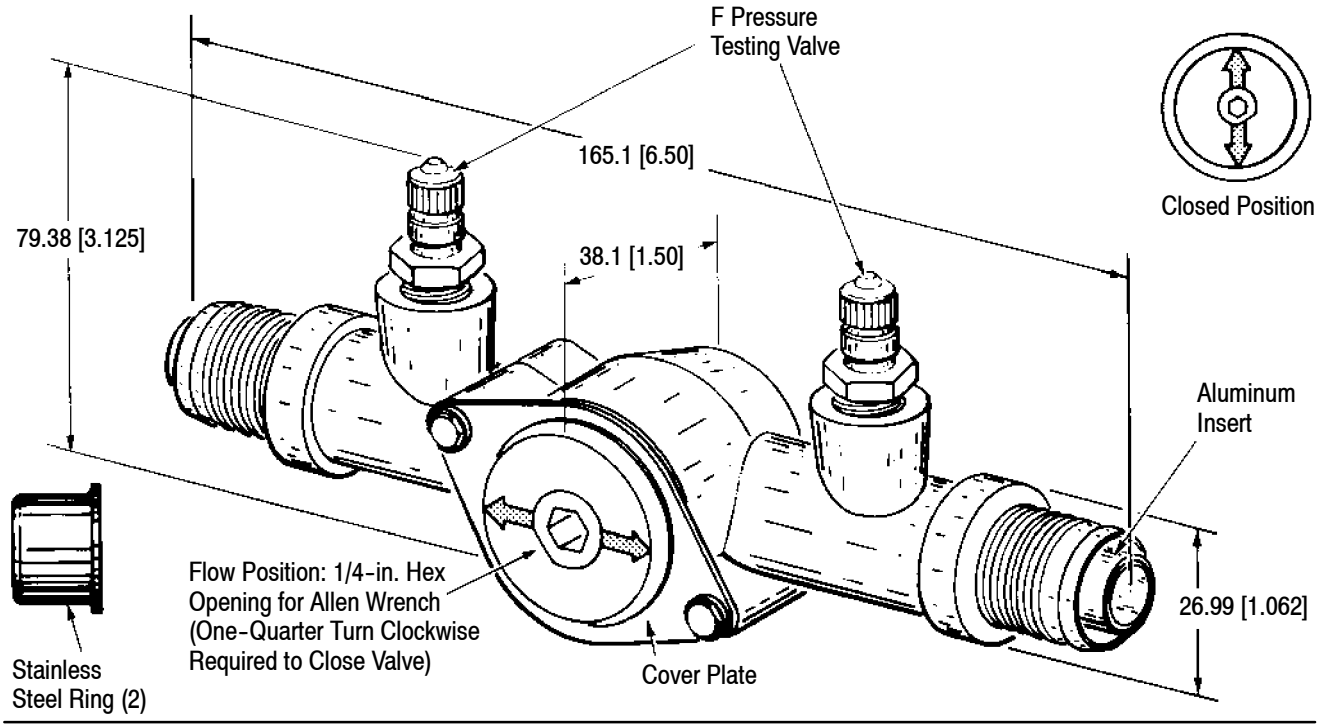

Figure 1

1. INTRODUCTION

This instruction sheet describes the use of a shut-off valve on CA-3131 Dry Air Feeder Pipe. The valve provides an accessible point for checking pressure and flow, or for isolating sections for leak detection, repair, or rearrangement of the pipe. AMP-FIT* Hand Tool 69992, furnished separately on order, is required to crimp the shut-off valve to the pipe. Instructions for use, maintenance, and inspection of the hand tool are provided in Instruction Sheet 408-2540 shipped with the tool.

NOTE

Dimensions on this sheet are in millimeters [with inch equivalent dimensions in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

Reasons for reissue of this sheet are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION

This lightweight shut-off valve (Figure 1) is made of rigid plastic for installation in manholes or in above-ground applications. The crimp rings, cover plate, and screws are of 300 series stainless steel. The inserts are of aluminum and are fitted with neoprene O-Rings. Electrical continuity is provided through the valve, and contact is established with the pipe's aluminum lining during the crimping operation.

NOTE

"300" is a standard series classification assigned by the American Iron and Steel Institute for corrosion-resistant stainless steels.

A clockwise one-quarter turn, using a 1/4-inch hex key wrench, is required to close the valve. Figure 1 shows direction of arrows in flow (open) position and in closed position. When closed, a one-quarter turn counterclockwise is required to open the valve.

3. PIPE PREPARATION

Prepare pipe for assembly to shut-off valve as follows:

1. Cut the end of the pipe squarely. See Figure 2A.
2. Size and chamfer pipe using the appropriate pipe shaper.

4. ASSEMBLY TO PIPE

Assemble shut-off valve to pipe as follows:

1. Slide stainless steel ring over end of pipe with flanged end of ring toward valve, as shown in Figure 2B.

2. Slide valve onto pipe until pipe bottoms inside valve: minimum insertion depth is 15.88 mm [.625 in.]. See Figure 2C.

3. Slide stainless steel ring forward until it butts against end of valve.

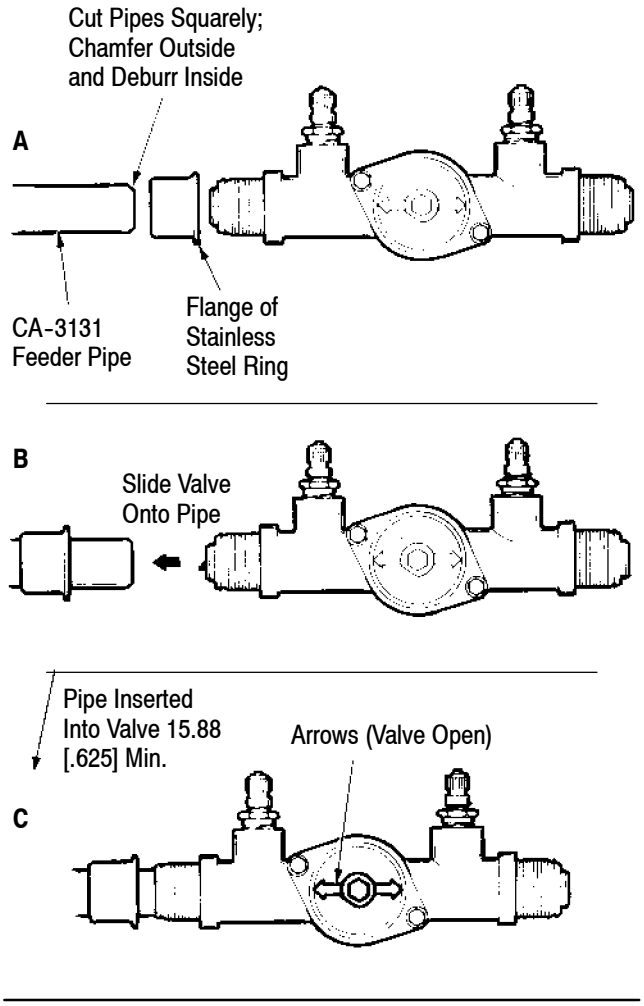

Figure 2

5. CRIMPING

Under normal temperature conditions, no special preparation is needed, and the valve can be crimped to the pipe using AMP-FIT Hand Tool 69992 after assembly of the pipe and valve. Crimp pipe to valve as follows:

1. Open the handles of the tool. Place stationary jaw behind valve shoulder and the movable jaw behind the ring flange as shown in Figure 3A.

2. Close handles until ring flange is resting against valve. Then apply a steady, even pressure on tool handles until the ring flange bottoms against the valve shoulder and entire ring is beyond locking rib. (Do not *snap* tool closed.) See Figure 3B. Open the handles to remove the assembly.

3. Perform procedures given in Paragraphs 3, 4, and 5 on the other end of the shut-off valve to complete valve installation.

Under cold temperatures (below freezing), the ends of the valve should be coated with the same soap solution that is used to provide leak detection. This should be done before starting the crimping procedures. The valve is then ready for crimping using the procedures in Paragraphs 3, 4, and 5.

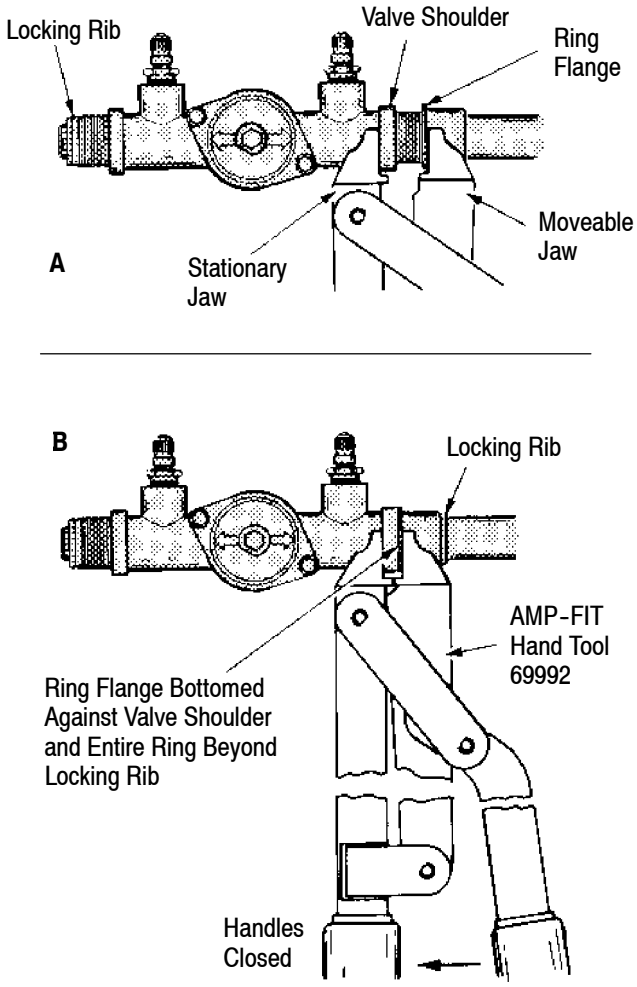

Figure 3

6. ORDERING INFORMATION

Shut-off valves and tooling can be ordered through your local Tyco Electronics Representative as follows:

- AMP-FIT Shut-Off Valve 561604-1
- AMP-FIT Hand Tool 69992

7. REVISION SUMMARY

- Updated document to corporate requirements
- Match document revision to document part number revision