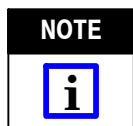


1. INTRODUCTION

This instruction sheet describes the application of plastic pipe fittings on 9.52 mm [.375 in.] plastic tubing. Nine different fittings are available for use in a variety of applications. A reducer bushing is also available for use in assembling a 6.35 mm [.250 in.] tubing to any of these fittings. Hand Tool 69671 is required to crimp these assemblies to the tubing. Instructions for use, maintenance, and inspection of this hand tool is provided in Instruction Sheet 408-2703.

Reason for re-issue of this document is provided in Section 5, REVISION SUMMARY.



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.

2. DESCRIPTION

Pipe fittings that are crimped to 9.52 mm [.375 in.] tubing are shown in Figure 1 and listed by part number in Figure 5. In addition, available fitting kits and tools required for assembly are also listed in Figure 5.

Nine different fittings and a reducer bushing are available for use on 9.52 mm [.375 in.] plastic tubing, as shown in Figure 1. Each fitting consists of a plastic molding with one or more pre-assembled stainless steel rings required to crimp the fitting to the 9.52 mm [.375 in.] tubing. Brass inserts are supplied with each fitting for use as stiffeners in the ends of the tubing.

Any of the plastic pipe fittings shown in Figure 1 can also be used with 6.35 mm [.250 in.] tubing. This is accomplished simply by placing the reducer bushing (Figure 1J) into the appropriate crimp opening of the fitting. See Section 3, PREPARATION AND ASSEMBLY.

The plastic pipe fittings available (Figure 1) are described as follows:

2.1. Coupling

The Coupling (Figure 1A) is used for joining two ends of 9.52 mm [.375 in.] plastic tubing.

2.2. Disconnect Coupling

The Disconnect Coupling (Figure 1B) connects 9.52 mm [.375 in.] plastic tubing to any 1/8-inch male NPT fitting. The knurled, captive nut on this coupling

permits convenient disconnection of the coupling before or after assembly into the air distribution system.

2.3. Disconnect Elbow

The Disconnect Elbow (Figure 1C) connects 9.52 mm [.375 in.] plastic tubing to any 1/8-inch female NPT fitting. It provides a 90° elbow, with a knurled, captive nut for convenient disconnection of the coupling before or after assembly.

2.4. Disconnect Coupling

The Disconnect Coupling (Figure 1D) connects 9.52 mm [.375 in.] plastic tubing to any 1/4-inch female NPT fitting. It also features a knurled, captive nut for convenient disconnection of the coupling before or after assembly.

2.5. Globe Valve

The Globe Valve (Figure 1E) connects two ends of 9.52 mm [.375 in.] plastic tubing and provides a shut-off capability.

2.6. Disconnect Coupling

The Disconnect Coupling (Figure 1F) connects 9.52 mm [.375 in.] plastic tubing to any 1/8-inch female NPT fitting. This coupling also features a knurled, captive nut for convenient disconnection of the coupling before or after assembly.

2.7. Tee Fitting

The Tee Fitting (Figure 1G) is used to tap into a 9.52 mm [.375 in.] plastic tubing.

2.8. Deadend

The Deadend (Figure 1H) is used to seal a section of 9.52 mm [.375 in.] plastic tubing.

2.9. Elbow

The Elbow (Figure 1I) connects two ends of 9.52 mm [.375 in.] plastic tubing through a 90° elbow.

2.10. Reducer Bushing

The Reducer Bushing (Figure 1J) is used in the crimp opening of any of the fittings listed in Figure 1 to permit the crimping of 6.35 mm [.250 in.] plastic tubing. The Reducer Bushing can also be used to adapt the exit ports of a Manifold Assembly to 6.35 mm [.250 in.] plastic tubing. Refer to Instruction Sheet 408-2707.

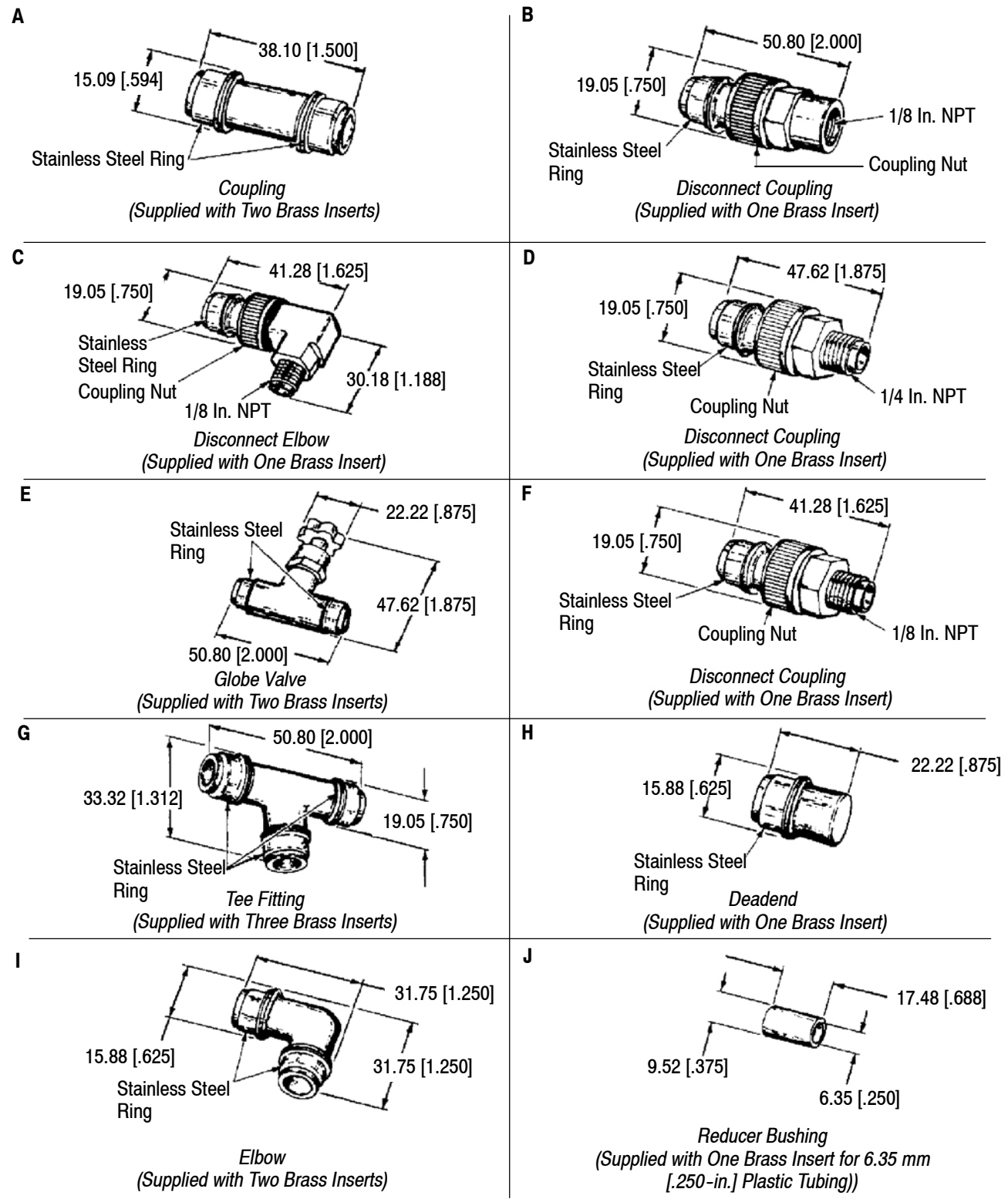


Figure 1

3. PREPARATION AND ASSEMBLY

The plastic pipe fittings that have both a crimp connection and a threaded connection (Figures 1B, 1C, 1D, and 1F) can be assembled either connected

or disconnected. Assemble the threaded connection to another fitting, valve, etc., as follows:

1. Coat fitting threads (1/8-in. or 1/4-in. NPT) with pipe thread compound. Do not use pipe thread compound on disconnect threads.

2. Hand tighten connection, and then use a wrench to tighten an additional 1-1/2 turns, leaving two or three threads exposed.
3. If crimp section was disconnected, re-connect crimp section and hand tighten connection. If crimp section was not disconnected, ensure that crimp section is hand tightened to threaded section of fitting.

3.1. Tubing Preparation

Prepare plastic tubing for assembly to any of the plastic pipe fittings as follows:

1. Cut tubing squarely. See Figure 2.
2. Remove any burrs from both the outer diameter and the inner diameter of the tubing.
3. Push the insert, supplied with the fitting, into the tubing end and then push the tubing fully into the fitting. See Figure 2.

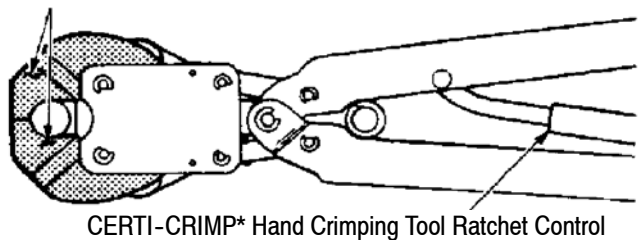
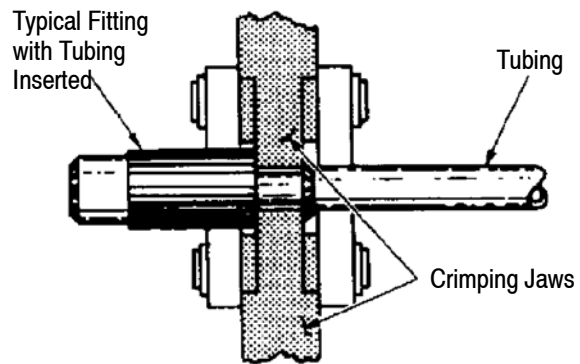


Figure 3

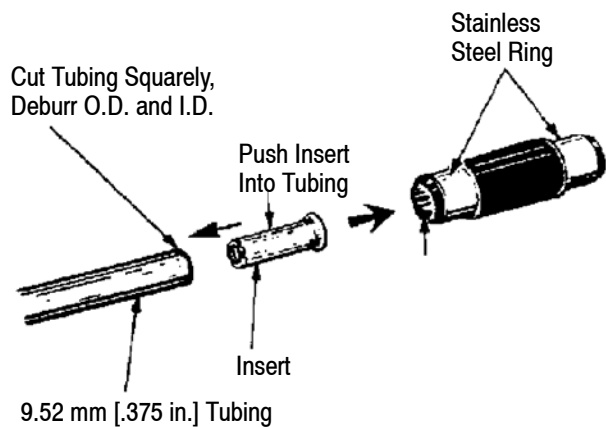


Figure 2

NOTE An insert must always be used in a crimp assembly. Ensure that insert is used, and also ensure that tubing is fully inserted into crimp fitting when fitting is being crimped.

3.2. Crimping

If crimping with Hand Tool 69671 as shown in Figure 3, follow the procedures listed in Instruction Sheet 408-2703.

3.3. Use of Reducer Bushing

The Reducer Bushing (Figure 1J) can be used in any of the plastic pipe fittings to connect 6.35 mm [.250 in.] plastic tubing. Prepare tubing and plastic pipe fitting as follows:

1. Cut tubing squarely. See Figure 4.

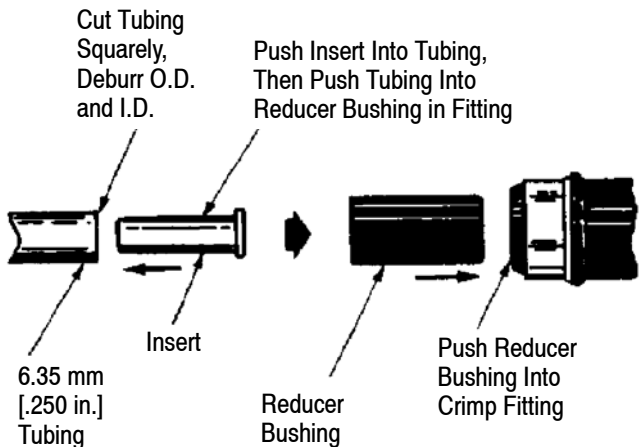


Figure 4

2. Remove any burrs from both the outer diameter and the inner diameter of the tubing.
3. Push the insert, supplied with the Reducer Bushing, into the tubing.
4. Push the Reducer Bushing into the crimp fitting. See Figure 4.
5. Push tubing (with insert installed) into Reducer Bushing in the crimp fitting. Ensure that Reducer Bushing and tubing are fully inserted into fitting when fitting is being crimped.
6. Crimp fitting as instructed in Paragraph 3.2.

4. ORDERING INFORMATION

Plastic pipe fittings for use on 9.52 mm [.375 in.] plastic tubing, available fitting kits, and tools required for assembly can be ordered as listed in Figure 5 through your local Tyco Electronics Representative.

PLASTIC PIPE FITTINGS AND ASSOCIATED TOOLING FOR USE ON 9.52 MM [.375 IN.] PLASTIC TUBING	
FITTING	PART NO.
Coupling (Figure 1A)	561302-1
Disconnect Coupling with 1/8-in. Female NPT (Fig. 1B)	561309-1
Disconnect Elbow with 1/8-in. Male NPT (Fig. 1C)	561314-1
Disconnect Coupling with 1/4-in. Male NPT (Fig. 1D)	561312-1
Globe Valve (Fig. 1E)	561306-1
Disconnect Coupling with 1/8-in. Male NPT (Fig. 1F)	561310-1
Tee Fitting (Fig. 1G)	561304-1
Deadend (Fig. 1H)	561308-1
Elbow (Fig. 1I)	561318-1
Reducer Bushing to Adapt 9.52 mm [.375 in.] Fitting to 6.35 mm [.250 in.] Tubing (Fig 1J)	561335-1
FITTING	PART NO.
AMP-FIT* Fitting Kit - Contains Assortment of Above Fittings and Hand Tool 69671	561344-2
AMP-FIT Fitting Kit - Contains Assortment of Above Fittings without Hand Tool	561344-3
TOOL	PART NO.
Hand Tool Used for Crimping Operation (Paragraph 3.2)	69671

Figure 5

5. REVISION SUMMARY

- Updated document to corporate requirements
- Deleted obsolete tooling and related documentation
- New logo and format