

Figure 1

## 1. INTRODUCTION

This instruction sheet covers the assembly of SMA straight cable plug (crimp attachment) 1757851-1 shown in Figure 1. The plug is designed to be crimped onto RG/U 180 and 195 coaxial cable using the tools given in Figure 2.

TOOL DESCRIPTION	PART NUMBER CROSS-REFERENCE	
	CURRENT	PREVIOUS
Center Contact Holder	1055454-1	2098-5221-10 (T-4579)
Crimp Tool and Dies	1055236-1	2098-0105-54 Die D

Figure 2



### NOTE

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches].

Reasons for reissue of this instruction sheet are provided in Section 4, REVISION SUMMARY.

## 2. DESCRIPTION

The cable plug consists of the components shown in Figure 1.

## 3. ASSEMBLY PROCEDURE



### DANGER

To avoid personal injury, follow safety precautions included with the tools used for assembly.

### 3.1. Prepare Coaxial Cable

1. Place the heat shrink sleeve and ferrule on the cable.
2. Strip the cable jacket to the dimension given in Figure 3 to expose the cable braid.
3. Trim the cable braid to the length given in Figure 3. Flare the braid.

### 3.2. Crimp Cable to Inner Sleeve (See Figure 4)

1. Insert the inner sleeve into the retaining nut.

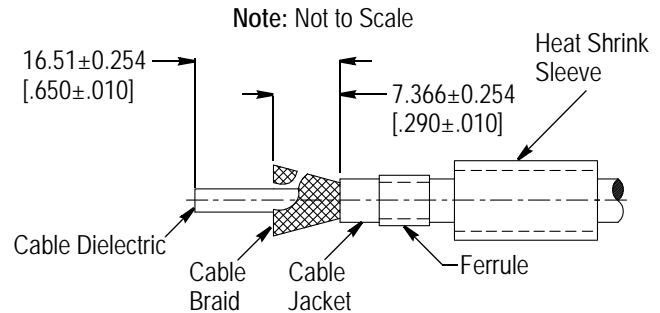


Figure 3

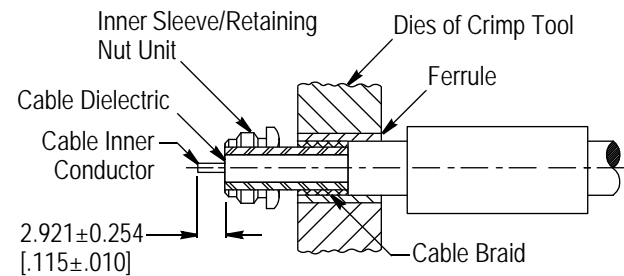


Figure 4

2. Position the inner sleeve/retaining nut unit on the cable dielectric and seat firmly.
3. Slide the ferrule over the cable braid and end portion of the inner sleeve.
4. Hold the inner sleeve/retaining nut unit in the seated position, and using the crimp tool and dies, crimp the braid in place.
5. Trim and remove the excess cable braid strands.
6. Trim the cable dielectric flush with the end of the inner sleeve to expose the cable inner conductor.
7. Trim the cable inner conductor to the length given in Figure 4.
8. Tin the inner conductor of the cable.

### 3.3. Solder Center Contact to Cable (See Figure 5)

1. Assemble the back-up bushing onto the cable inner conductor, and seat it against the inner sleeve.
2. Place the center contact in the center contact holder.
3. Solder the center contact, then push it over the inner conductor of the cable until the large diameter end of the center contact rests firmly against the back-up bushing.
4. Remove excess solder.

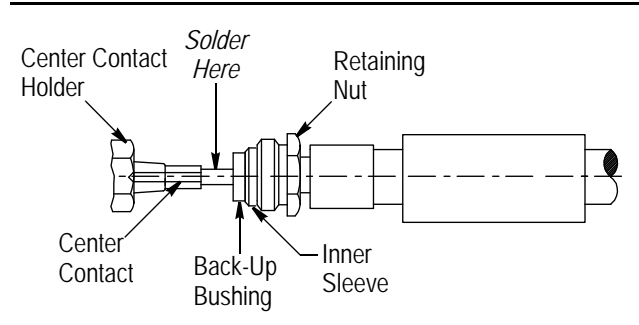


Figure 5

### 3.4. Secure Housing to Inner Sleeve Subassembly and Apply Heat Shrink Tubing

1. Assemble the dielectric over the center contact.
2. Engage the threads of the inner sleeve to the housing subassembly, and tighten to a torque from 53.4 to 66.7 N [12 to 15 in.-lbs].
3. Slide the heat shrink tubing over the ferrule as shown in Figure 6, and shrink the tubing.

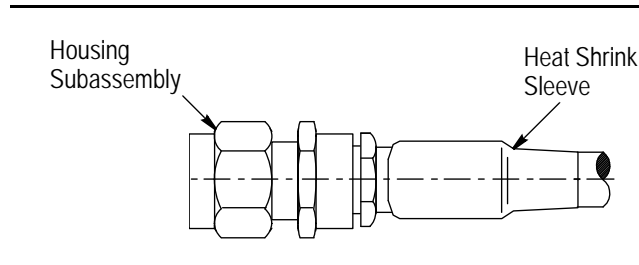


Figure 6

### 3.5. Inspect Completed Assembly

Following the assembly procedure should yield the tolerances given in Figure 7.

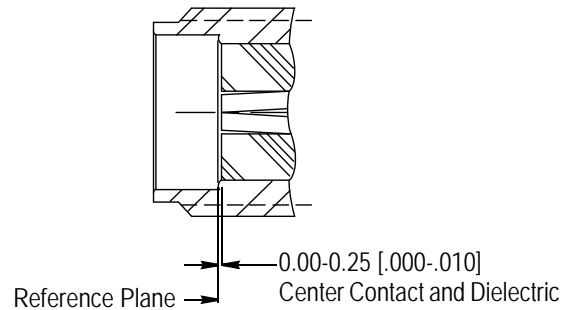


Figure 7

### 4. REVISION SUMMARY

Revisions to this instruction sheet include:

- Re-activated instruction sheet for different product part number
- Changed dielectric to back-up bushing in Step 1 of Paragraph 2.3