

CABLE PLUG PART NUMBER		MILITARY PART NUMBER M39012/92
CURRENT	PREVIOUS	
1050805-1	2001-8901-92	B 3001
1050807-1	2001-8911-92	B 3101 (No Safety Wire Holes)

NOTE: Adherence to steps given will yield tolerances shown on M39012/92.

Figure 1

## 1. INTRODUCTION

This instruction sheet contains the assembly procedures for the SMA Straight Cable Plugs (Direct Solder Attachment) 1050805-1 and 1050807-1 which are designed to be soldered onto RG 402/U 3.58 [1.41] semi-rigid coaxial cable using the following tools shown in Figure 2.

TOOL DESCRIPTION	PART NUMBER CROSS-REFERENCE	
	TYCO ELECTRONICS	PREVIOUS PART NUMBER
Locator Tool	1055442-1	2098-5209-02
Clamp Inserts	1055440-1	2098-5207-54
Dielectric Recess Tool	1055450-1	2098-5217-54
Trim Tool	1055455-1	2098-5222-02
Retaining Ring Pliers	1055449-1	2098-5216-54
Fixture Base	1055439-1	2098-5206-54

Figure 2

### NOTE

Dimensions on this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

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

## 2. DESCRIPTION (Figure 1)

The SMA Straight Cable Plug consist of a housing sub-assembly, gasket, retaining ring, and a housing.

## 3. ASSEMBLY PROCEDURES

### 3.1. Preparing the Cable

Trim the cable end square and deburr as shown in Figure 3.

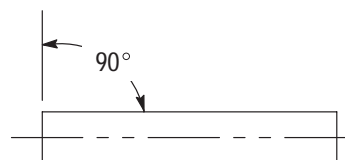


Figure 3

### 3.2. Soldering of Cable to Housing

1. Place the connector housing on the end of the cable.
2. Place loose assembly in fixture base as shown in Figure 4.
3. Nest the cable end in locator tool.
4. Tighten the clamp screw to secure the cable.
5. Tighten the locator tool to seat the cable firmly.
6. Slide the housing against the locator tool.
7. Maintain position of housing firmly against locator tool and solder.

### NOTE

Fixture should be clamped vertically in vise to keep housing seated against locator tool.

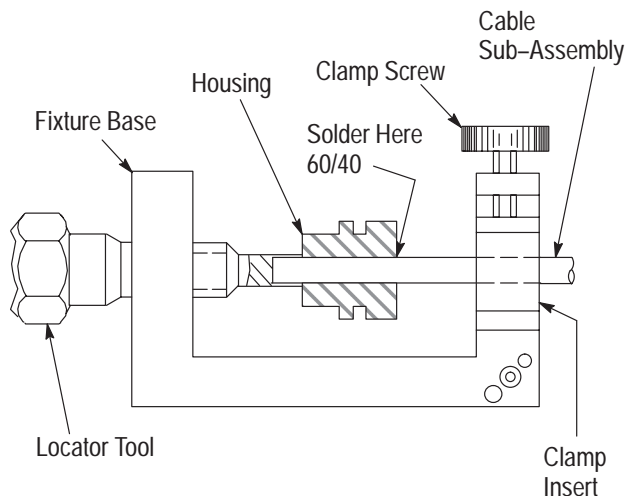


Figure 4

### 3.3. Compress Expanded Dielectric

1. Trim extended or exposed dielectric flush with the end of the cable outer conductor.
2. Place the dielectric recess tool on the dielectric and push to recess the dielectric within the cable outer conductor as shown in Figure 5.

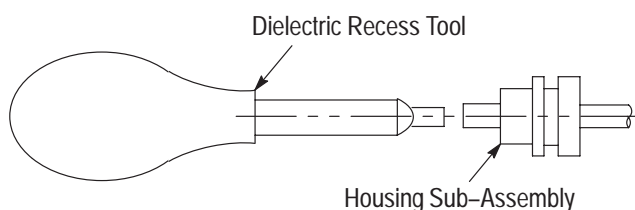


Figure 5

### 3.4. Removing Outer Conductor and Dielectric

1. Insert the squared cable end into the fixture base hole pattern No. 1 as shown in Figure 6.
2. Place saw in saw slot and cut through outer conductor and into dielectric while rotating cable.
3. Remove the cable from the dielectric and finish cutting dielectric with cutting blade.
4. Bare inner conductor by prying cut outer conductor and dielectric from cable.

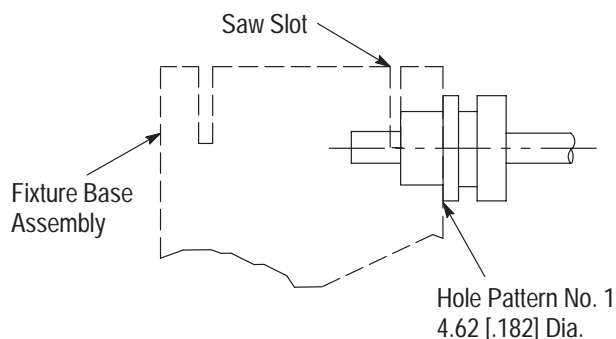


Figure 6

### 3.5. Trim End of Housing Sub-Assembly (Optional)

1. Place the trim tool over the inner conductor projection and rotate to face off front face.
2. Inspect for the dimensional tolerance shown in Figure 7.

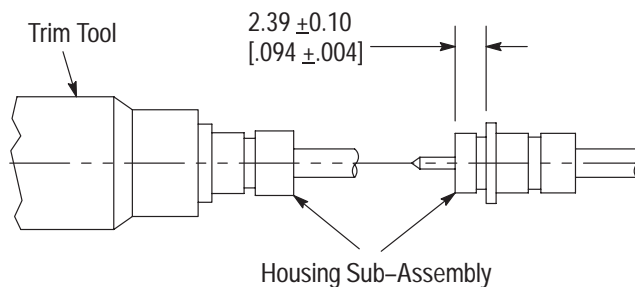


Figure 7

### 3.6. Shaping Inner Conductor

1. Trim to length as shown in Figure 8.
2. File blunt end of inner conductor to an 80° to 90° cone.

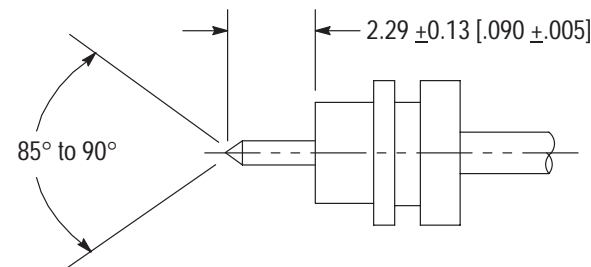


Figure 8

### 3.7. Securing Coupling Nut to Housing

1. Place the retaining ring and gasket on housing as shown in Figure 9.

2. Compress the retaining ring with the retaining ring pliers.
3. Push the coupling nut onto the housing and retaining ring.
4. Coupling nut should rotate freely.

**CAUTION**

*Damaged components may not be used. They must be replaced with new components.*

**4. REVISION SUMMARY**

Revisions to this instruction sheet per EC 0990-0189-03 include:

- Updated document to corporate requirements
- Updated document for clarity

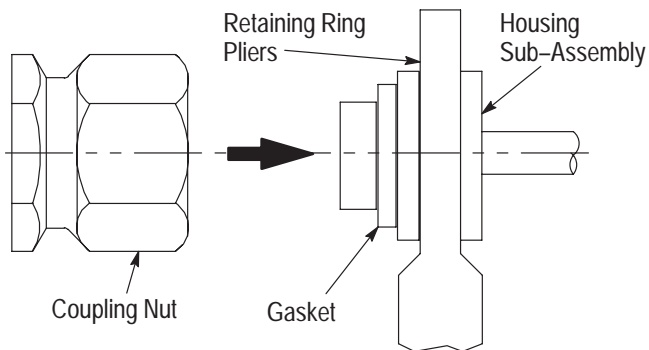


Figure 9