

CABLE PLUG PART NUMBER		MILITARY PART NUMBER
CURRENT	PREVIOUS	M39012/92
1050805-1	2001-8901-92	B 3001
1050807-1	2001-8911-92	B 3001 (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 mm [.141 in.] semi-rigid coaxial cable using the following tools shown in Figure 2.

TOOL DESCRIPTION	PART NUMBER CROSS-REFERENCE		
	TE CONNECTIVITY	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	5098-5216-54	
Fixture Base	1055439-1	2098-5206-54	

Figure 2



Dimensions on this instruction sheet are in millimeters [with inches in brackets]. Figures and illustrations are for reference only and 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.

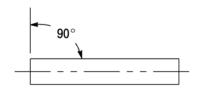


Figure 3

### 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.



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



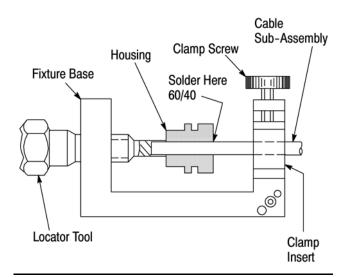


Figure 4

### 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.

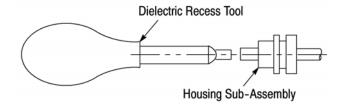


Figure 5

## 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.

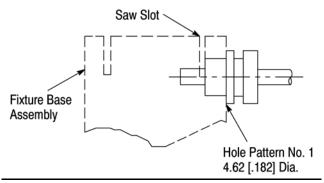


Figure 6

### 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.

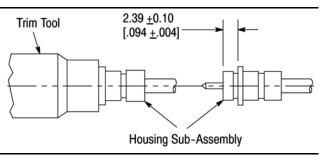


Figure 7

### 3.6. Shaping Inner Conductor

- 1. Trim to length as shown in Figure 8.
- 2. File blunt end of inner conductor to an  $80^{\circ}$  to  $90^{\circ}$  cone.

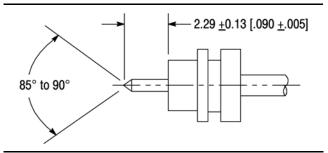


Figure 8

### 3.7. Securing Coupling Nut to Housing

- 1. Place the retaining ring and gasket on housing as shown in Figure 9.
- 2. Push the coupling nut onto the housing and retaining ring.
- 3. Push the coupling nut onto the housing and retaining ring.

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# 4. Coupling nut should rotate freely.

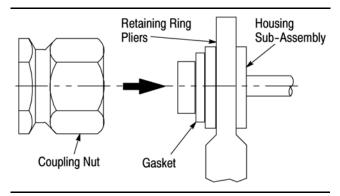


Figure 9



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

# 4. REVISION SUMMARY

New logo

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