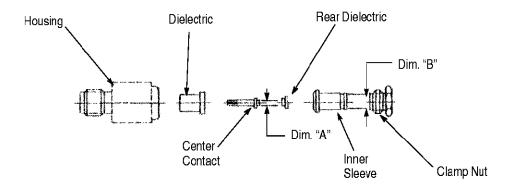




# SMA Straight Cable Jack 1050931–1, Solder Clamp Attachment

Instruction Sheet 408–4837 (was A.P. 20–552) 12 APR 01 Rev A



Tyco Electronics Part Number	OMNI-SPECTRA Part Number	Military Part Number	Cable Type	Dimension "A"	Dimension "B"
1050931–1	2002–8008–92	M39012/81-3008	RG402/U .141 Semi-Rigid Coaxial Cable	1.04 [.041]	3.66 [.144]

Figure 1

#### 1. INTRODUCTION

This instruction sheet contains the assembly procedures for the AMP SMA Straight Cable Jack 1050931–1, shown in Figure 1. This connector is a solder attachment type connector that attaches to the cable type listed in Figure 1. Figure 1 also contains the previous SMA Straight Cable Jack part number, the military part number, and the "A" and "B" dimensions.

NOTE

Dimensions on this sheet are in millimeters [with inches in brackets], unless otherwise specified. Figures are not drawn to scale.

The table in Figure 2 references the tools required to apply this connector. The table includes tool descriptions, Tyco Electronics part numbers, and the corresponding M/A–COM part numbers.

APPLICATION TOOLING				
Tool Description	Tyco Electronics Part Number	M/A-COM Part Number		
Fixture Base	1055439–1	2098–5206–54 (T–4567)		
Clamp Inserts	1055440–1	2098-5207-54 (T-4700-01)		
Center Contact Holder	1055454–1	2098-5221-10 (T-4578)		
Locator Tool	1055508–1	2098-5606-02		

Figure 2

Reasons for reissue can be found in Section 3, REVISION SUMMARY.

### 2. ASSEMBLY PROCEDURES

#### 2.1. Preparing the Cable

- 1. Insert the squared cable end into the fixture base, hole pattern number 2.
- 2. Place the saw in the saw slot and cut through the outer conductor and into the dielectric while rotating the cable. See Figure 3.
- 3. Remove the cable from the fixture base and finish cutting the dielectric with a knife.

DANGER

To avoid personal injury, be sure to adhere to all local safety practices (including gloves and eye protection) when handling a knife.

- 4. Bare the center conductor by prying the cut outer conductor and dielectric from the cable
- 5. Trim the center conductor to the dimensions shown in Figure 3.

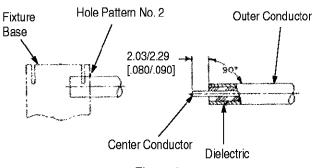


Figure 3



#### 2.2. Soldering Inner Sleeve to Cable

- 1. Place the clamp nut and inner sleeve on the end of the cable.
- 2. Place the loose assembly in the fixture base as shown in Figure 4. Slide the clamp nut back out of the way.
  - a. Nest the cable in the locator tool.
  - b. Tighten the clamp screw in order to seat the cable firmly.
  - c. Tighten the locator tool to seat the cable firmly.
- 3. Slide the inner sleeve against the locator tool.



To avoid personal injury, be sure to exercise caution and adhere to all local safety practices when handling soldering equipment.

4. Hold the inner sleeve firmly against the locator and solder (with 60/40 type solder) as shown in Figure 4.



The fixture base should be clamped vertically in a vise to keep the inner sleeve seated against the locator tool.

#### 2.3. Solder the Center Contact to the Center Conductor



To avoid personal injury, be sure to exercise caution and adhere to all local safety practices when handling soldering equipment.

- 1. Tin the center conductor of the cable.
- 2. Place the rear dielectric onto the cable center conductor.
- 3. Place the center contact in the holder, heat the center center contact, and push it over the cable center conductor. The large diameter of the contact must be resting firmly against the rear dielectric. See Figure 5.
- 4. Remove excess solder.

## 2.4. Securing the Inner Sleeve Subassembly to the Housing (Figure 6)

- 1. Assemble the front dielectric onto the center contact.
- 2. Slide the clamp nut over the inner sleeve and engage the threads of the clamp the housing.
- 3. Tighten to 25 to 30 inch-pounds.

#### 3. REVISION SUMMARY

Per EC 0990-0394-01

- Update per corporate requirements
- Update and clarify text and illustrations

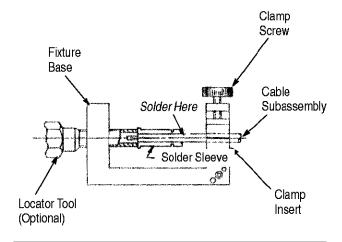


Figure 4

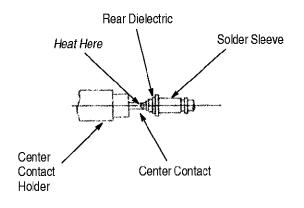


Figure 5

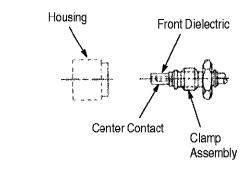


Figure 6

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