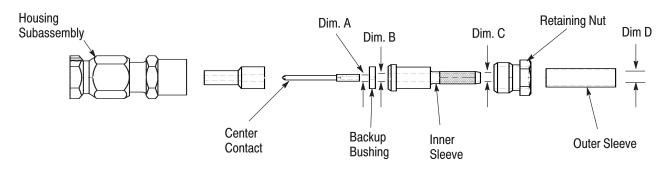


SMA Straight Cable Plug Connectors

12 MAY 05 Rev A



TYCO ELECTRONICS P/N	PREVIOUS P/N	MIL P/N M39012/55B—	CABLE	CLOSURE	CRIMP TOOL (T.E. P/N)	CRIMP TOOL (PREVIOUS P/N)	DIMENSIONS			
							Dim. A	Dim. B	Dim. C	Dim. D
1051764-1	2031-8011-92	3011	RG178/U	А	1055236-1	2098-0105-54	.022	.022	.037	.101
1051796-1	2031-8111-92	3111*	RG178/U	А	1055236-1	2098-0105-54	.022	.022	.037	.101
1051771-1	2031-8018-92	3018	RG178/U	А	1055236-1	2098-0105-54	.022	.022	.037	.101
1051803-1	2031-8118-92	3118*	RG178/U	А	1055236-1	2098-0105-54	.022	.022	.037	.101
1056413-1	2031-8019-92	3019	RG174/U	С	1055236-1	2098-0105-54	.022	.022	.067	.128
1051804-1	2031-8119-92	3119*	RG316/U	С	1055236-1	2098-0105-54	.022	.022	.067	.128

^{*} Indicates NO SAFETY WIRES.

Figure 1

1. INTRODUCTION

These instructions cover the assembly of the SMA Straight Cable Plug Connectors listed in Figure 1. These connectors are crimp-attachment type connectors, that attach to the cable listed in Figure 1.

The crimp tooling used is also listed in Figure 1.



Dimension on this document are in inches. Illustrations are for reference only, and are not drawn to scale.

Reasons for revision can be found in Section 4. **REVISION SUMMARY.**

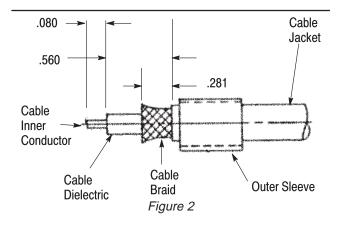
2. DESCRIPTION

Each cable plug is a subassembly consisting of a housing subassembly, a center contact, a rear dielectric, an inner sleeve, a retaining nut, and an outer sleeve. Refer to the illustration in Figure 1.

3. ASSEMBLY PROCEDURES

3.1. Preparing the Coaxial Cable End

- 1. Place the outer sleeve on the cable.
- 2. Remove the end portion of the cable jacket to expose the cable braid.
- 3. Trim the cable braid to the the dimension specified in Figure 2.
- 4. Trim the cable dielectric to the dimension specified in Figure 2.



- 5. Trim the inner conductor to the length specified in Figure 2.
- 6. Flare the cable braid.

3.2. Crimping the Cable to the Inner Sleeve

1. Tin the inner conductor.

DANGER

Be sure to follow all local and safety practices when using solder.

2. Assemble the inner sleeve into the retaining nut.

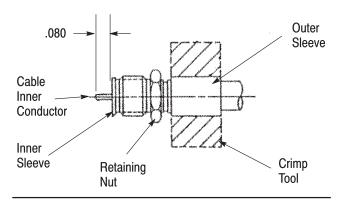


Figure 3

- 3. Position and secure the inner sleeve in a small bench vise.
- 4. Insert the cable dielectric into the inner sleeve and seat firmly.
- 5. Slide the outer sleeve over the flared portion of the cable braid.
- 6. Hold the cable firmly seated and crimp the outer sleeve in place. Refer to Figure 3.
- 7. Trim and remove the excess cable braid.
- 8. If necessary, trim the cable dielectric flush to the face of the inner sleeve.

3.3. Soldering the Center Contact to the Cable Inner Conductor

1. Place the center contact in a center contact holder, heat the center contact and and push it over the inner conductor of the cable with the large diameter of the contact resting firmly against the rear dielectric. Refer to Figure 4.

DANGER

Follow all local and safety practices while using solder and soldering equipment.

2. Remove excess solder.

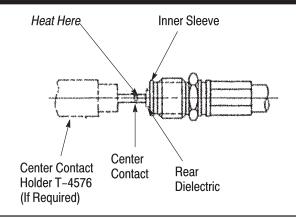


Figure 4

3.4. Securing the Housing to the Inner Sleeve Subassembly (Figure 5)

- 1. Carefully insert the center contact into the dielectric bushing's inner diameter of the housing subassembly.
- 2. Engage the threads of the retaining nut to the housing and torque to 12 to 15 inch—pounds.

The completed assembly should appear as shown in Figure 5.

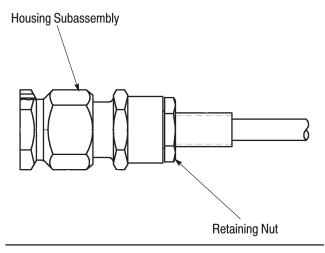


Figure 5

4. REVISION SUMMARY

- Updated format to current corporate requirements
- Created Tyco / Omni–Spectra / MIL cross–reference
- Obsoleted 1051773–1
- Added 1051764–1, 1051771–1, 1051803–1, and 1051804–1

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