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**Termination Procedures for Triaxial Connectors  
D-621-0001, D-621-0002, D-621-0003, and D-621-0008**

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**1. SCOPE**

This standard covers the procedures for terminating triaxial and twinaxial cables to the triaxial connectors listed.

**2. REFERENCES****2.1 Raychem Specification Control Drawings**

1. D-621-0001 Connector, plug
2. D-621-0002 Connector, jack, triaxial, bulkhead
3. D-621-0003 Connector, jack triaxial, bulkhead, short shell
4. D-621-0008 Connector, Plug Subminiature, Bulkhead
5. CTA-0011 Strain relief
6. CTA-0012 Barrier Tube
7. CTA-0013 Preform insulator sleeve

**2.2 Raychem Process Standards**

1. ES-61132 Termination Procedure for SolderTacts® Contacts D-602-54/-55
2. ES-61133 Termination Procedure for SolderTacts® Contacts D-602-44/-45

**3. TOOLS AND EQUIPMENT**

1. AD-1447 Contact Removal Tool
2. AD-1464 Contact Removal Tool
3. AD-1564 Triaxial Connector Holding Tool (Optional)
4. IR-550 Heating Tool with RG-2 Solder sleeve Reflector
5. AA-400 Super Heater (Portable, Compressed Air)
6. AA-400-102 Mini SolderSleeve Reflector
7. HL1920E/ HL2020E Steinel Hot Air Gun
8. EH0600-000 HL-SOLDER-SLV-REFLECTOR

**4. TRIAXIAL CONNECTOR GENERAL INFORMATION****4.1 Description**

The D-621 triaxial connectors covered by this standard are used with #748 SolderTacts® contacts to interconnect triaxial, twinaxial, or coaxial cable. Table 4-1 gives the possible combinations of connectors, contacts, and cable types.

**NOTE**

The D-621-Triax/Twinax connector is designed such that either the pin or socket shielded contact may be mounted in either the plug or jack connector housing. Table 4-1 gives the forward combinations.

Table 4-1

Plug Connector Side		Receptacle Connector Side	
Plug Connector	With Contact and Cable	Receptacle Connector	With Contact and Cable
D-621-0001 D-621-0008	D-602-44 + triaxial	D-621-0002	D-602-45 + triaxial
	or		D-602-55 + twinaxial
	D-602-54 + twinaxial	D-621-0003*	D-602-45 + coaxial
			D-602-55 + twisted pair

\*D-621-003 receptacle connectors are not terminated to the contacts. The contact/cable assembly plugs into these connectors and can be removed using either of the listed contact removal tools.

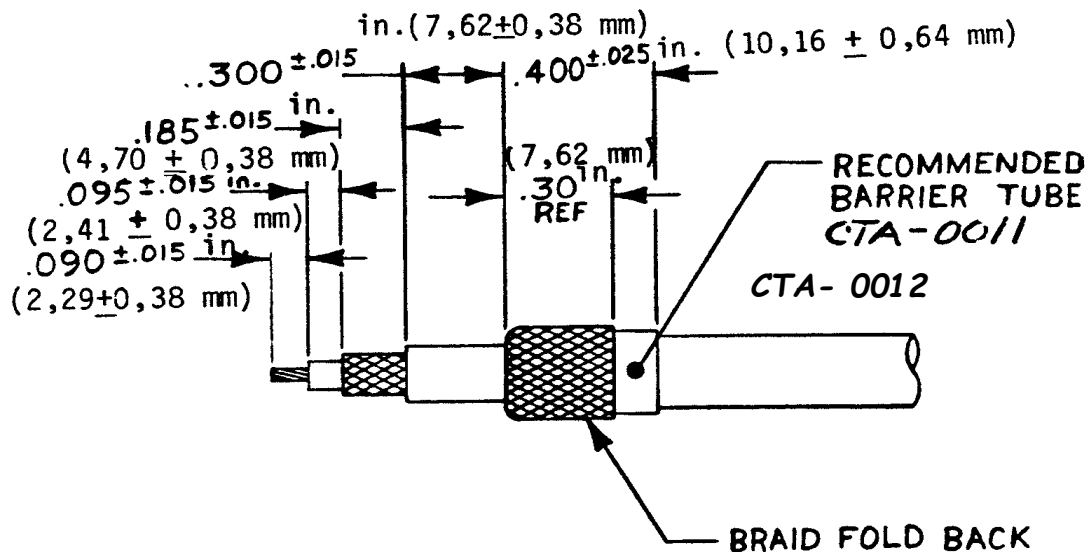
## 5. PROCEDURES

### 5.1 Triaxial Cable Preparation and Termination Procedures

#### 5.1.1 Triaxial Cable/Connector Accommodation

D-621-0001, D-621-0002, D-621-0003, and D-621-0008 connectors will accommodate triaxial cable: Raytheon #10270730.

#### 5.1.2 Triaxial Cable Preparation, Barrier Under Braid Method. Strip the cable to the dimensions shown.



### 5.1.3 Triaxial Cable Termination

1. Terminate the center conductor and inner shield to the appropriate SolderTacts® Contact (Table 4-1), according to the procedures in Engineering Standard 61133. Per this standard pretinning the center conductors and unplated solid center conductor is recommended.

After this step the assembly will look like this:



2. Slide the CTA-0011 over the contact and slide up onto the cable.

**NOTE**

The CTA-0011 is not over the contact at this time. Do not shrink the CTA-0011.

3. Insert the assembly into the rear of the appropriate D-621 connector using AD-1564 holding tool, until the retention clip engages, locking the SolderTacts® contacts in place.

The outer shield should be positioned directly under the solder preform.

The contact/cable assembly can be removed from the connector using the AD-1447 or AD-1464 removal tool.

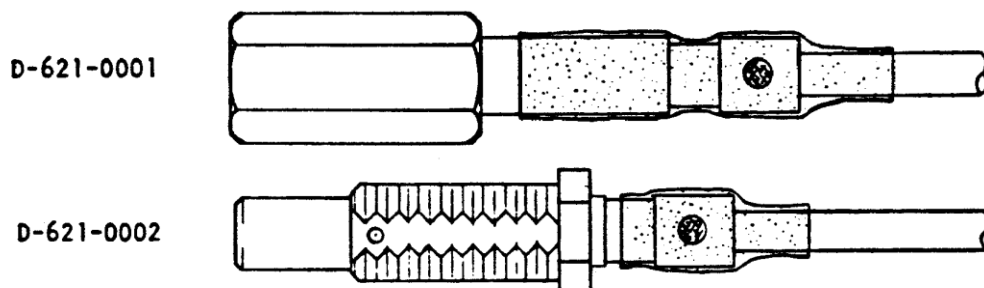
4. Heat the assembly using the IR-550 heating tool with the RG-2 reflector.

Position the assembly so that the solder preform is centered in the bottom of the reflector slot.

A mating contact can be inserted in the SolderTacts® contact and used to support the assembly during heating.

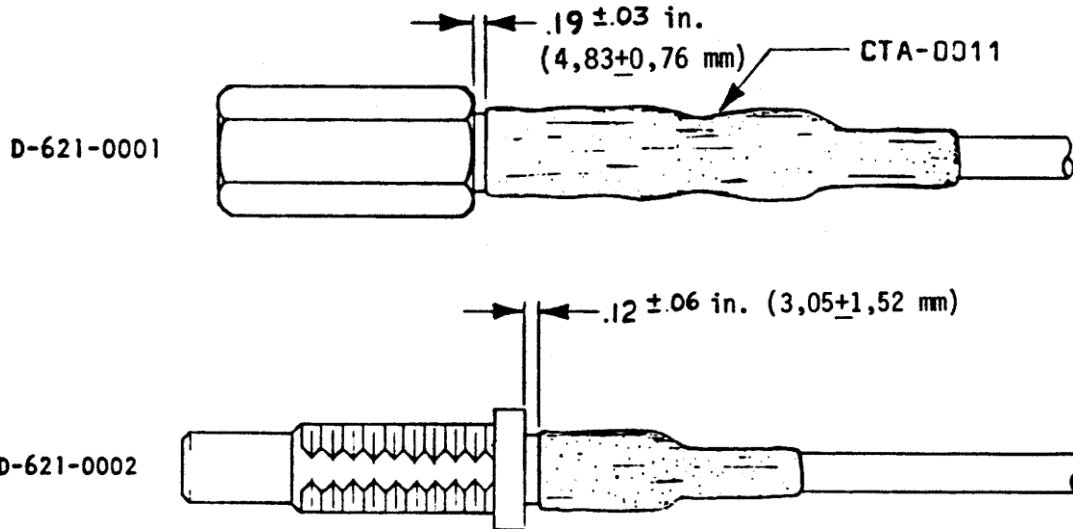
Heat until the solder preform melts and flows through the holes and into the outer braid.

The assembly will look like this:



5.1.4 Now slide the CTA-0011 over the connector as shown below. Shrink the CTA-0011 in place over the connector.

The completed assembly with the CTA-0011 in place will look like this:

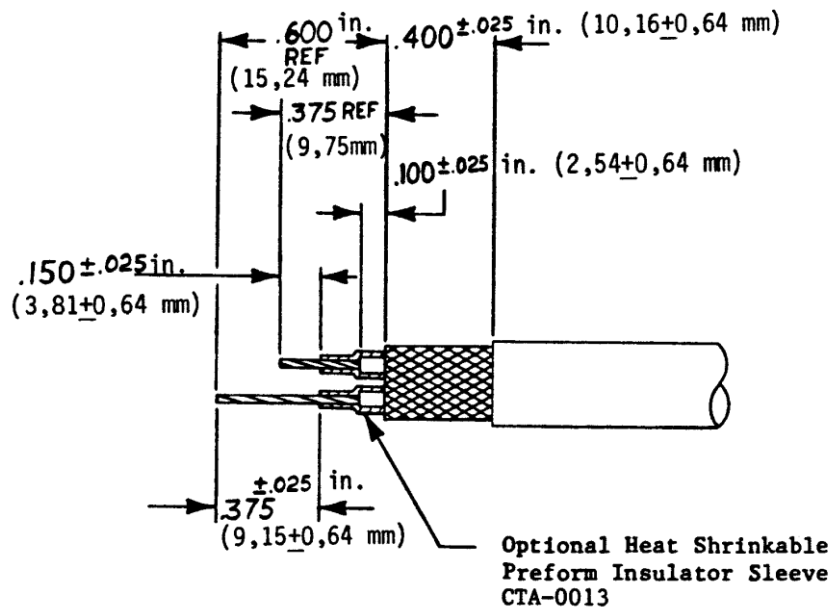


## 5.2 Twinaxial Cable Preparation and Termination Procedures

### 5.2.1 Twinaxial Cable/Connector Accomodation

1. D-621-0001, D-621-0002, D-621-0003, and D-621-0008 connectors will accommodate twinaxial cable Raytheon #MIS-0054/1-01.

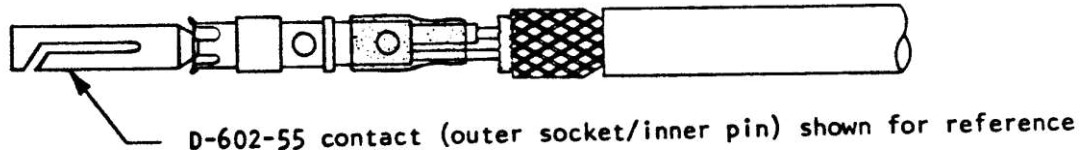
Strip the cable to the dimensions shown:



### 5.2.2 Twinaxial Cable Termination

1. Terminate the center conductors to the appropriate Soldertacts® contact (see Table 4-1) according to the procedures in Engineering Standard 61132.

After this step the assembly will look like this:



2. Slide the CTA-0011 over the contact and slide up onto the cable.

**NOTE**

The CTA-0011 is not over the contact at this time. Do not shrink the CTA-0011.

3. Insert the assembly into the rear of the appropriate D-621 connector until the retention clip engages, locking the Soldertacts® contact in place.

The shield should be positioned directly under the solder preform.

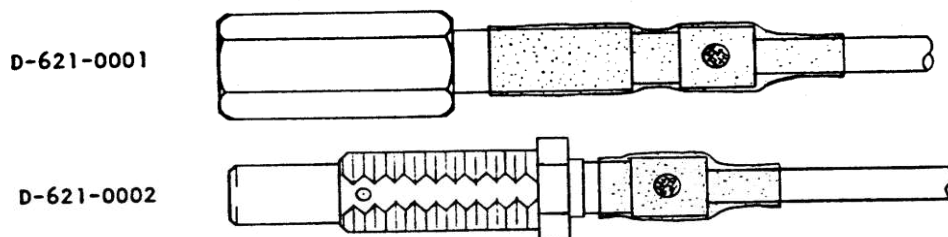
The contact/cable assembly can be removed from the connector using the AD-1447 or AD-1464 removal tool.

4. Heat the assembly using the IR-550 heating tool with the RG-2 reflector. Position the assembly so that the solder preform is centered in the bottom of the reflector slot.

A mating contact can be inserted in the Soldertacts® contact and used to support the assembly during heating.

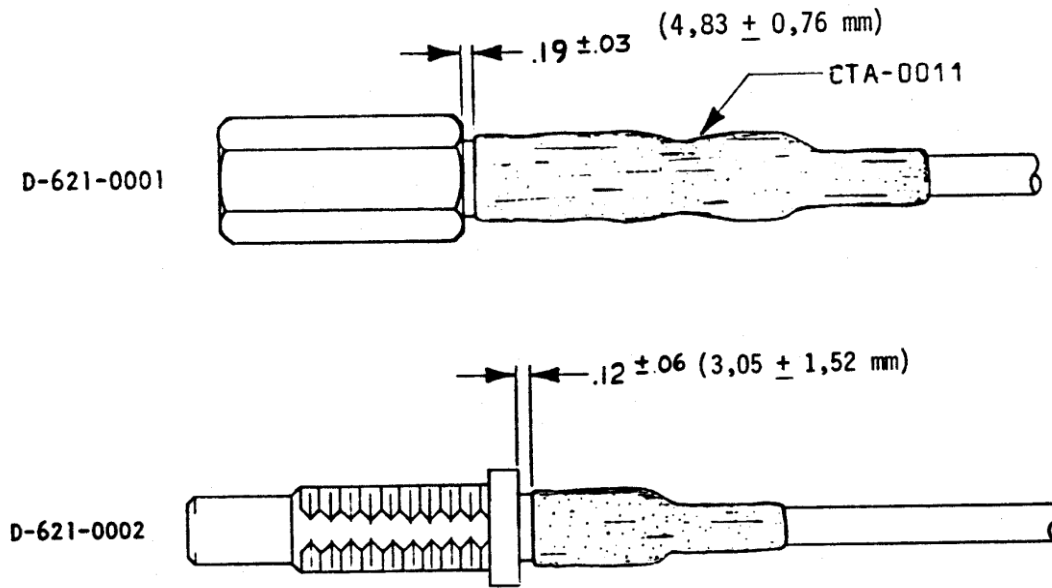
Heat until the solder preform melts and flows through the holes and into the outer braid.

The assembly will look like this:



5.2.3 Now slide the CTA-0011 over the connector as shown below. Shrink the CTA-0011 in place over the connector.

The completed assembly with the CTA-0011 in place will look like this:



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