Installation Procedures for Termination Socket D-607-04-H and D-607-18

| Indicates Change

1. Scope

This engineering standard contains the termination procedures and inspection requirements for the termination socket 0-607-04-H and 0-607-18.

2. References

2.1 Tyco Electronics/Raychem Specification Control Drawing.

D-607-04-H	Termination Socket
D-607-18	Termination Socket

2.2 Tyco Electronics/Raychem Application Equipment Instructions.

IR-550 Operating and Maintenance Instructions.

AA-400 Superheater Instructions.

CV-5300 MiniGun 1 Heating Tool Instructions.

3. Application Equipment And Tools

3.1 Heating Tool

(Equivalent tools may be used)

Heating Tool	*Reflector*
IR-550 Heating Tool	RG-4 Nosecone
(Portable, focused infrared)	Reflector
CV-5300 Mini Gun 1	MG-1 SolderSleeve*
AA-400 Superheater	Mini SolderSleeve
Steinel Heat Gun (HG2310)	14mm Reflector Nozzle (07461)
or Equivalent	

*CV-5300 MiniGun 1 and MG-1 replaces CV-5700 MiniGun 3 and MG-7 respectively; both CV-5300 and CV-5700 can be used, but CV-5300 is preferred over CV-5700.

3.2 Holding Fixture

AD-1446

4. General Information

4.1 Description

The termination sockets are designed to terminate one or two stranded conductor cables and have the assembly firmly grip a 0.5 mm (.020 in) dia. pin extending from a printed circuit board.

4.2 Cable Accommodation

The termination sockets will accommodate tin or silver-plated stranded conductors of the following sizes:

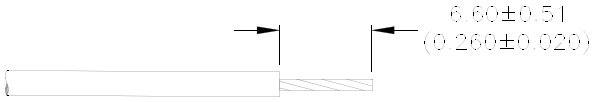
D-607-04-H	*D-607 -18*
A. One 26 AWG	A. One 22 AWG
B. Two 26 AWG	B. Two 22 AWG
C. One 24 AWG	C. One 20 AWG
D. Two 24 AWG	

5. Termination Procedures

WARNING

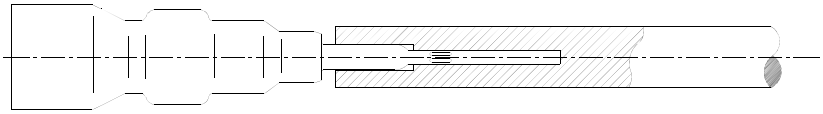
Follow installation instructions carefully. Use adequate ventilation and avoid charring or burning during installation. Charring or burning the product will produce fumes that may cause eye, skin, nose and throat irritation. Consult Material Safety Data Sheets **RAY5104** for further information.

5.1 Strip end of wire to length shown.



5.1.1 Pretin the stranded conductor, solid conductor is desired.

5.2 Insert termination socket into holding fixture (AD-1446) as shown.



5.3 Insert wire(s) into termination socket until conductor bottoms. When only a single conductor is being used (see A and C of Para. 4.2), insert the conductor on the side of the metal tab without the seam.

5.4 Apply heat using the recommended heating device until solder ring flows, forming fillets between the conductors and the body.

5.5 Remove heating device and allow to cool for approximately 5 to 10 seconds prior to removing from holding fixture.

6. Inspection

6.1 Visually inspect for correct heating as follows:

1. The solder preform must be melted and flowed so that:
   a. Preform shows no trace of its original form. (Presence of the original preform shape indicates an underheated condition).
   b. Solder fillet is visible between the cable conductor(s) and body of the termination socket body. (Insufficient visible solder caused by solder wicking indicates an overheated condition.)
2. The insulating sleeve must be shrunk over the termination socket body and over the visible cable conductors.
3. The insulating sleeve must not be darkened so as to obscure the solder joints or hinder inspection. (Such darkening indicates an overheated condition.)
4. The cable insulation must not show signs of damage or overheating outside of the insulating sleeve.

7. Repair and Rework

7.1 Underheated Terminations.

Reheat as directed in Paragraph 5.4 and reinspect per Section 6.

7.2 Overheated or Improperly Assembled Terminations.

1. Remove the termination socket from the cable as directed in Section 7.3.
2. Check the cable for damage and incorrect stripping.

   If the cable is damaged, cut off the damaged portion and restrip per Paragraph 5.1.

   If stripping is incorrect, restrip as required (Paragraph 5.1).
3. Install a new termination socket (Paragraphs 5.2 through 5.5).

7.3 Removing Termination Socket from Cable.

1. Use a sharp knife or razor blade to score the insulating sleeve full length.

CAUTION

Avoid cutting into the cable jacket.

2. Holding the assembly by the cable, heat the termination socket in the heating tool until the solder melts, and using pliers, pull the heated PCB terminator off the cable.

NOTE

If the insulating sleeve remains stuck to the cable jacket, slide it off the end of the cable using pliers. If necessary, warm the sleeve carefully so that it can be pulled off.

8. Insertion and Extraction from Connector Pins:

Follow the insertion and extraction instructions provided by the connector manufacturer.

If instructed to hold the contact with a tool, preferred area to hold is shown below: