Coaxial Contacts



1

Sidney, N.Y. 13838

SECTION I

GENERAL INSTRUCTIONS

1-1. This manual contains installation procedures for 10-PT-CE series coaxial contacts. These contacts are covered by two basic contact assembly numbers. The socket contact is P/N 10-305077 and the pin P/N 10-305076. The contact assembly number is followed by a dash number which indicates the contact configuration for use with certain coaxial cables. For example, 10-305077-81 is a socket contact which uses RG-180/U or RG-195/U coaxial cable.

1-2. Present production coaxial contacts have the assembly dash number stamped in the crimp area. Older contacts did not incorporate this identification, therefore the assembly dash number must be determined by making the two measurements indicated in figure 1-1 and obtaining the dash number from Table I.

1-3. The main differences in installation procedure for various dash number contacts are:

a. Type of coaxial cable used.

b. Method of insertion and removal.

c. Type of crimping tool, insertion tool, and removal tool used.

1-4. Refer to Section II for installation procedure. Table II lists the cable type and tool numbers for each contact configuration.

1-5. General information concerning installation of coaxial contacts.

a. When cutting cables to proper length, ends must be cut cleanly and at right angles to axial plane of cable. Cable must not be deformed while making cut. b. Strip cable sheath and dielectric carefully to avoid cutting or nicking braid or conductor strands. Small diagonal cutting pliers, scissors or a fingernail clipper may be used for trimming braid.

c. If outer sheath of cable is the woven type which tends to fray easily, slip a one inch length of tight fitting vinyl tubing onto cable ahead of contact attaching parts. After soldering is completed and attaching parts are installed, slide vinyl sleeve along cable until it fits snugly against contact assembly.



Figure 1-1. Contact Identification Dimensions

TABLE I						
Contact P/N	Dash No.	"A" Dim.	"B" +.002 001 Dim.			
	81	+.003 0.196000	0.016			
10-305076 Pin & 10-305077 Socket	82	+.006 0.247000	0.045			
	83	+.006 0.223000	0.024			
	84	+.003 0.196000	0.045			
	122	+.006 0.152000	0.024			

L-611-2

SECTION II

INSTALLATION PROCEDURE

TABLE II

CE CRIMP COAX CONTACTS									
CONTACT		USED	CRIMPING TOOLS		· · · · ·				
SERIES PART NO.	DASH NO.	WITH RG CABLE NO.	OUTER BARREL	INNER CONTACT 11-7295 WITH POSITIONER	INSERTION TOOL 11-8660-	REMOVAL* TOOL			
21N OCKET	-81	-180/U -195/U	11-8153	11-7771-11 (Socket) 11-7771-12 (Pin)	-3	11-7310			
	-82	-55B/U -142A/U -223/U	WT-208 (Nest GSC 205/219)	11-7771-11 (Socket) 11-7771-12 (Pin)	- 5	11-7310			
	-83	Suprenant 5699 & 4705	WT 232 or 206 (Nest GSC 194)	Solder	-4	11-7310			
	-84	Douglas A/C Spec. 7869679	11-8153	11-7771-26 (Pin) 11-7771-27 (Socket)	-3	11-7310			
	-122	-187/U -188/U	WT-200 (Nest GSC 128)	11-7771-11 (Socket) 11-7771-12 (Pin)	-2	11-8793			

*The 11-7310 removal tool kit contains the 11-7171 removal tip for removing socket contacts and 11-7173 removal tip for pins. The 11-8793 removal tool kit contains the 11-7170 removal tip for removing sockets and 11-7172 for pins.

NOTE

See Section I, paragraph 1-5, for general information concerning cutting and stripping of cable. Refer to Table II for cable type and tool numbers for each contact configuration.



Figure 2-1. Contact Part Identification.

2-1. Assemble contact to cable as follows:

a. Remove 0.687 inch (11/16'') of cable outer sheath from end of cable (A, figure 2-2). Hot wire stripping is recommended to avoid cutting or nicking inner conductor.

b. Expand outer conductor (braid) and slide retaining sleeve under braid until it bottoms against edge of outer sheath (B, figure 2-2).

c. Smooth braid over retaining sleeve. Trim braid flush with edge of sleeve.

d. Measure 0.093 inch (3/32")from end of braid and strip remaining cable core from inner conductor (C, figure 2-2). Hot wire stripping is recommended.

e. Position back insulator onto cable, large ID first (D, figure 2-2). Butt back insulator against retaining sleeve, catching ends of braid between insulator and sleeve.

f. Cut center conductor 0.156 inch (5/32") from front edge of back insulator.

g. Install inner contact on inner conductor and butt back end of contact against back insulator (E, figure 2-2).

L-611-2

3



Figure 2-2. Contact Assembly Steps.

h. Crimp inner contact using 11-7295 crimping tool* with applicable positioner.**

4

i. Position front insulator over crimped contact and slide assembly into contact sleeve (F, figure 2-2). Make certain outer conductor is visible in inspection hole.

j. Insert contact assembly into crimping tool** and, with tool jaws centered between inspection hole and end of contact outer barrel, crimp outer barrel.

k. Make certain center contact and front insulator are fully seated and outer conductor is visible through inspection hole.

2-2. CONTACT INSERTION.

2-3. Using channel type insertion tool**, insert contact assembly into rear (grommet) end of connector. Make certain that contact is aligned with hole and not inserted at an angle. Some increase in resistance will be noted prior to seating of contact in wafer.

2-4. CONTACT REMOVAL.

2-5. Working from front face of connector, use the appropriate removal tip of the removal tool kit** to push contact out through rear of connector.

*There is no available crimping tool for crimping inner contact on -83 coaxial contacts. For -83 contacts, solder inner contact to inner conductor using 60-40 solder, a good grade of rosin flux and a 30-60 watt soldering iron.

**See Table II for proper tool to be used with each specific contact configuration.