VHF/UHF ANTENNAS
MOBILE STATION MOBILE TELEPHONE SERVICE ANTENNAS
INSTALLATION
METHOD OF TERMINATING COAXIAL CABLE

This section describes the method to be used when terminating coaxial cable in the various types of connectors (plugs) used in mobile station antenna installations and referred to in Section 402-304-100.

STEP	PROCEDURE
	PLUG, 83-850-1001
1	Trim off vinyl jacket of coaxial cable to 1-3 16 inches as indicated in Fig. 1. Do not cut or damage the braid.

Fig. 1

2	Comb out the braid and cut dielectric to 1-1/16 inches. Do not cut or damage the center conductor (see Fig. 2). Bend center conductor over double to obtain a length of 35/64 inch and squeeze with pliers to obtain a maximum thickness of 0.052 inch. Taper braid forward over dielectric and center conductor as shown in Fig. 2.

Fig. 2

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STEP	PROCEDURE
3	Assemble 83-185 reducing adapter to cable clamp, slide assembly over cable jacket, and position leading edge flush with jacket. Fold braid back over end of entire assembly, trim and smooth out as shown in Fig. 3.

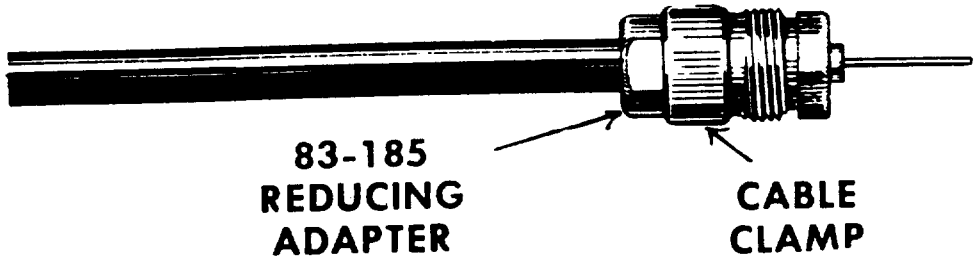

Fig. 3

4	Place small washer into body cavity and screw body tightly onto cable clamp, holding cable clamp and cable stationary. Screw contact on tight to retain center conductor using a screwdriver that has a blade not over 3/32 of an inch wide, such as a watchmakers screwdriver. See Fig. 4.

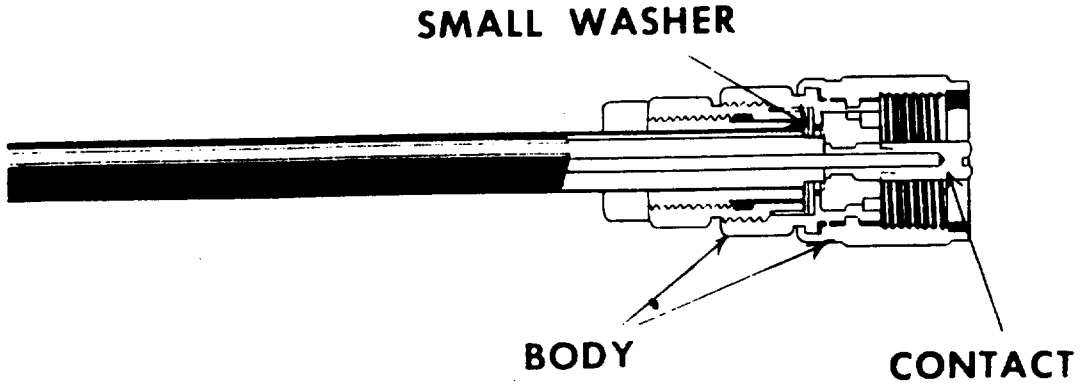

Fig. 4

STEP	PROCEDURE
	PLUG, COAXIAL (Modified PL-259 Plug for KS-15510 Antenna)
1	Remove insulation and prepare end of cable as shown in Fig. 5.

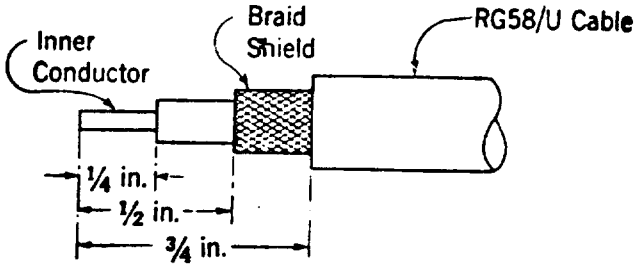

Fig. 5

2	Place adapter over cable. See Fig. 6 for this item.

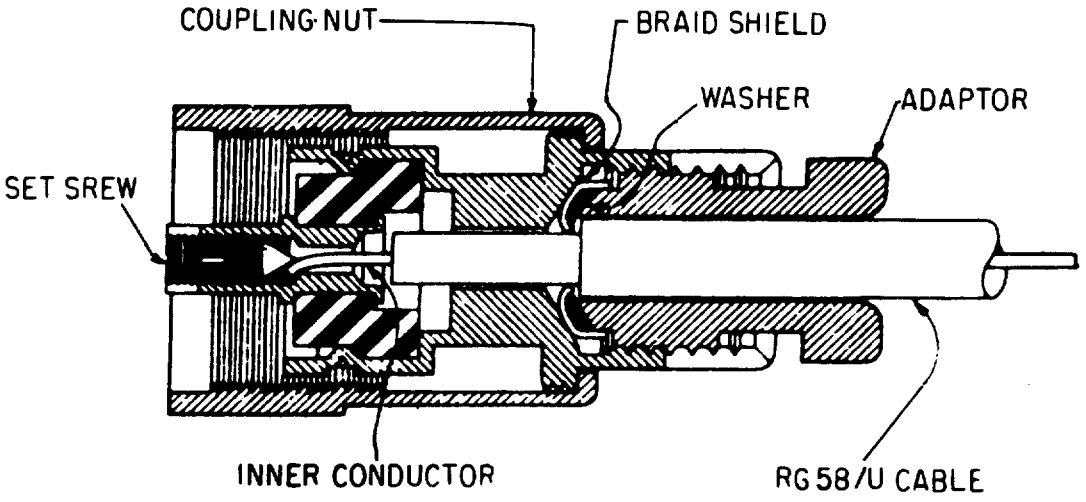

Fig. 6

3	Place washer over braided shield.
4	Flair braid out and trim to outside diameter of washer which is held against cable jacket.
5	Loosen set screw in inner conductor of connector until two (2) or three (3) full threads show. See Fig. 6.
6	With the exposed inner conductor of the cable straight, insert into back of shell of connector and tighten adapter into shell.
7	Tighten set screw into center conductor pin of connector using a screwdriver that has a blade not over 3/32 of an inch wide, such as a watchmaker's screwdriver.

STEP	PROCEDURE
	PLUG, PL-259-A
1	Cut end of cable even. Remove vinyl jacket 1-3/16 inches as shown in Fig. 7.
2	Remove dielectric 11/16 inch from end of cable as shown in Fig. 7. Trim braided shield.

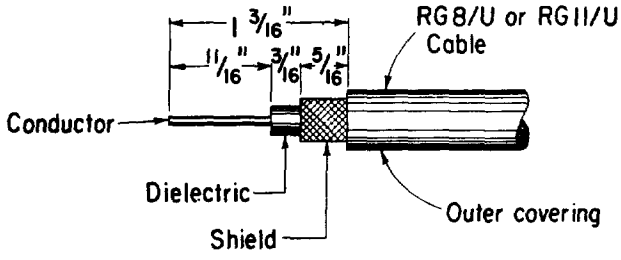

Fig. 7

3	Slide shell and locking nut over cable with large opening toward prepared end. See Fig. 8.

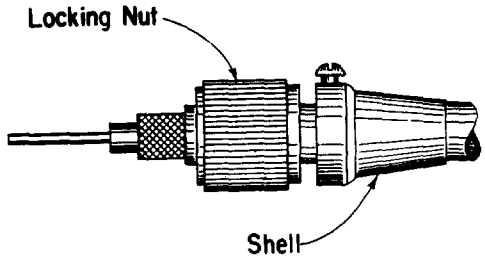

Fig. 8

4	Thread cable into plug body until shield is in line with holes. See Fig. 9.
5	Solder shielding to plug body through holes using KS-512, L50 (50% tin and 50% lead) or KS-512, L60 (60% tin and 40% lead) solder. Remove excess solder.
6	Solder cable conductor to plug pin using solder described in Step 5 and smooth off end.
	Caution: Heat application for soldering shall be kept to a minimum to prevent breakdown of dielectric.
7	Slip locking nut and shell over plug body and tighten shell locking screw.

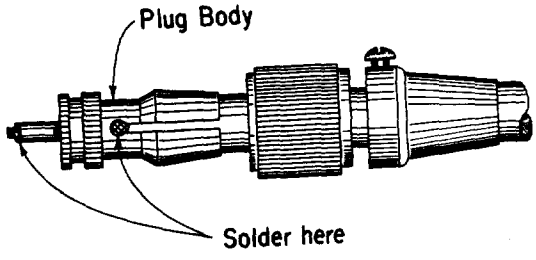

Fig. 9

STEP	PROCEDURE

PLUG, UG-94A/U

1 Prepare end of cable as shown in Fig. 10.

2 Slide locknut over cable, then plain washer, rubber washer and cone-shaped washer so that it is flush with the outer covering. See Fig. 11. Spread shielding evenly over cone-shaped washer.

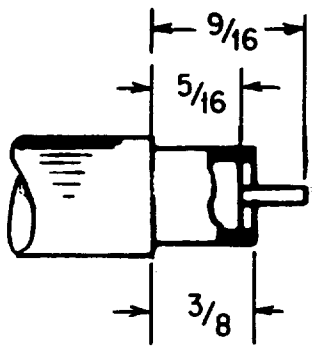

Fig. 10

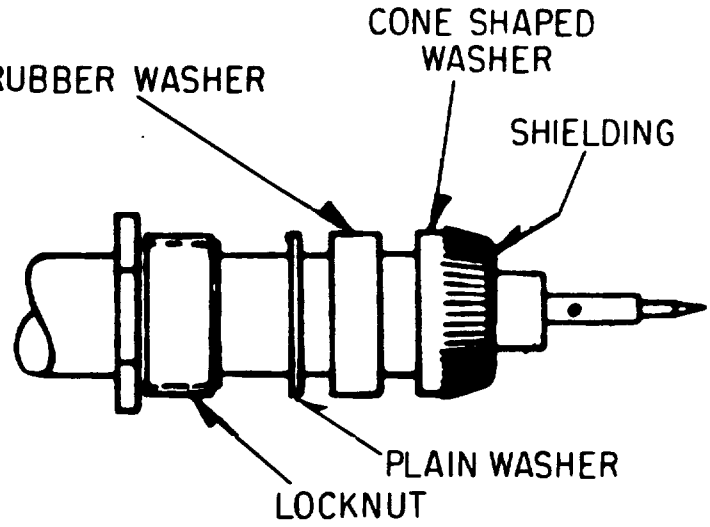

Fig. 11

3 Solder probe to center conductor. Do not apply the head too long as this will melt the dielectric. Remove any excess solder that remains.

4 Insert assembly (Fig. 11) into plug and tighten locknut. See Fig. 12 for completed assembly.

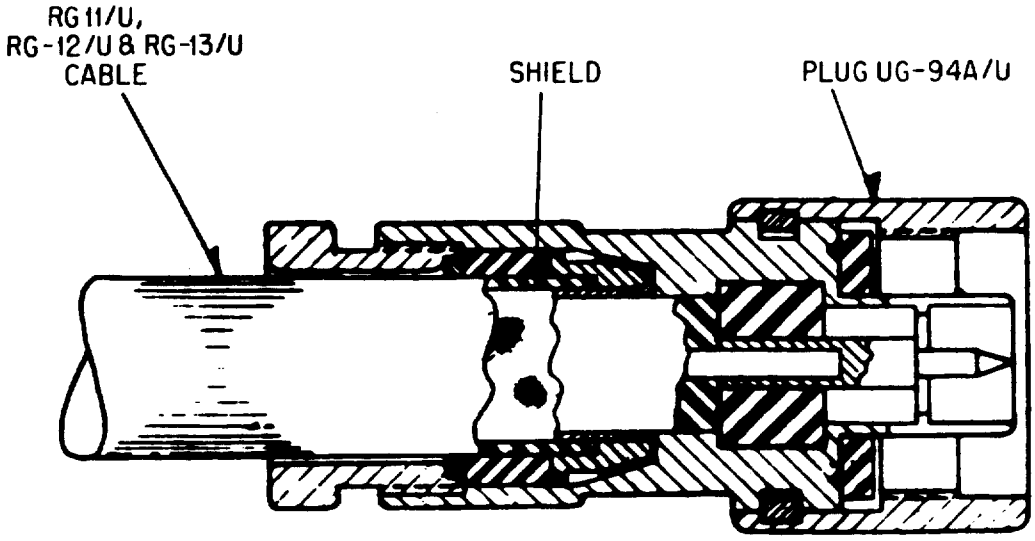

Fig. 12