COAXIAL OFFICE CABLE
PREPARING FOR SPLICING AND TERMINATION

1. GENERAL

1.01 This section describes the method of preparing coaxial office cable for splicing and termination, using the No. 300-WE coaxial cable stripper, and the KS-15710 hand crimping tool.

1.02 The methods outlined in this section are for use in central offices having TD2 radio, L1 or L3 carrier, A2, A2A, or A2B TV amplifiers, and by plant men involved in TV pickups with portable microwave equipment.

1.03 The No. 300-WE cable stripper kit consists of the cable stripper, gauge, and adjusting tool for use in preparing Nos. 724, 727, and 728 cables for splicing or termination. Optional equipment provides for similar preparation of RG 59/U cable.

1.04 The KS-15710 hand crimping tool has a ratchet feature which requires that the dies be completely closed before they can be released, thus insuring complete compression of the outer connecting part.

1.05 Periodically, before using the hand crimping tool, check the dies for closure. When closed, there should be not more than 0.003 in. space at the open end of the dies. Check with a feeler gauge. Tools failing to meet this requirement should be adjusted or returned to the manufacturer in accordance with local procedures.

1.06 The following drawings cover detailed information for terminating and connecting to various apparatus and connectors, making splices, and installing pads in the cables:

ED-92524-10 to -16	Methods of Terminating Coaxial and Twin-Conductor Office Cables
ED-92774-11	Splices for Office-Type Coaxial Cable and Balanced-Pair Transmission Cable
ED-92731-10 -31	Installing Pi-Type Pad in Office-Type Coaxial Cable
ED-92839-10 -30	Installing Square-Type Pad in Office-Type Balanced-Pair Cable

Note: New developments or improvements may require changes in or additions to the existing drawings.

2. TOOLS AND MATERIALS

2.01 P-Long Nose Pliers

2.02 5-inch Diagonal Pliers

2.03 4-inch Regular Screwdriver

2.04 No. 74D Gauge or equivalent

2.05 No. 300-WE Cable Stripper Kit (for preparing Nos. 724, 727, and 728 cables) consisting of:

No. 300-WE Coaxial Cable Stripper
WG-724 Gauge
Wooden Box and Adjusting Tool

Optional Equipment (for preparing RG 59/U cable) consisting of:

CPW 59/U Collet Plate
WG 59/U Gauge

Set of Seven Replacement Knives

2.06 KS-15710, List 2 or 3, Crimping Tool

2.07 KS-15711, Lists 6, 8, and 9, Inner Sleeves

2.08 KS-15712, Lists 4, 5, 7, and 8 Outer Sleeves

3. PROCESSING CABLE

3.01 The No. 300-WE coaxial cable stripper is designed primarily for processing No. 724 and like size cable, but by replacing the WE-724 guard plate with the CPW 59/U collet plate and resetting the blades, it may also be used for processing RG 59/U cable.

3.02 The blades are set for the proper cutting depth as follows (see Fig. 1):

(a) Remove guard plate or collet plate.

(b) Loosen blade screws so they are just friction-tight.

(c) Place gauge in open tool.

(d) Close tool tightly and push blades in against gauge.

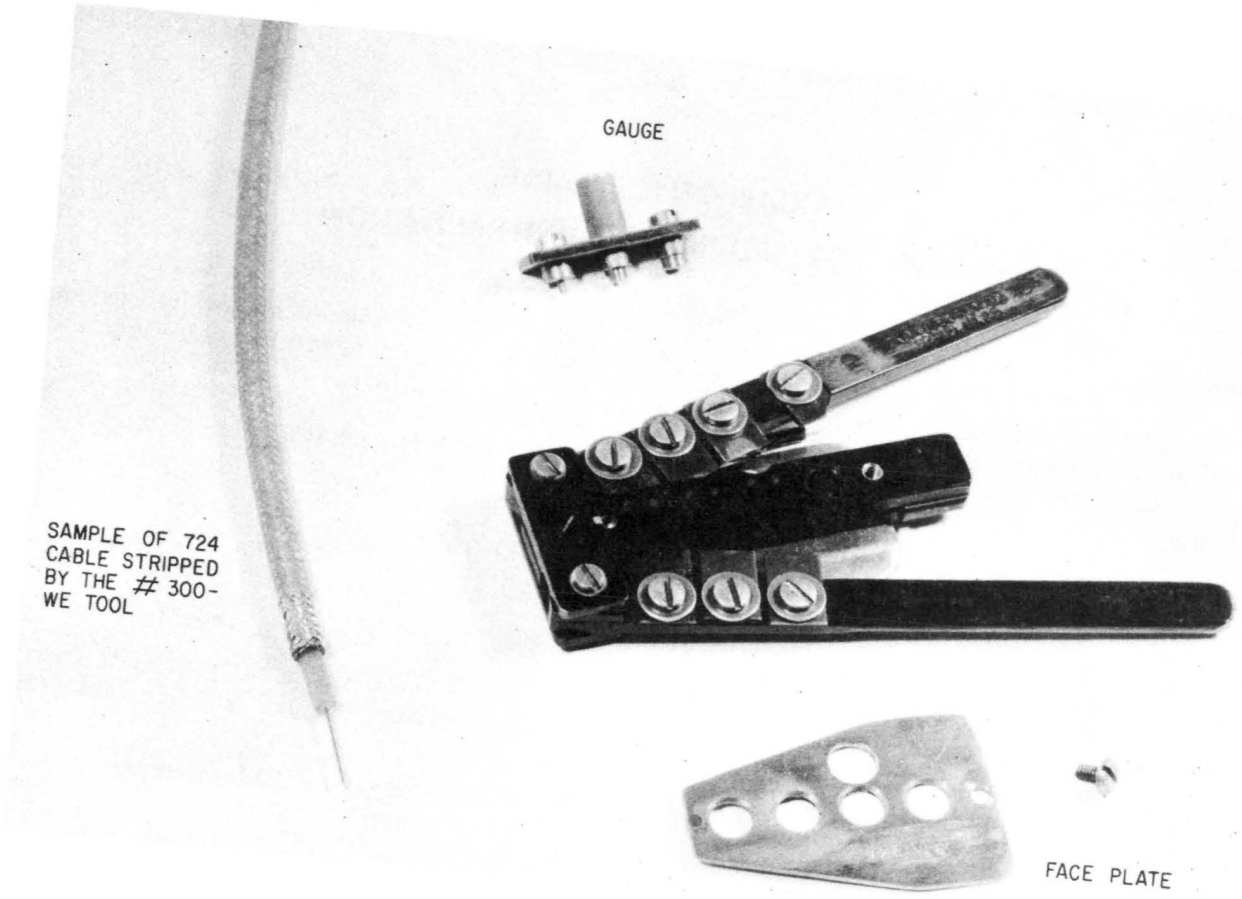

Fig. 1 — Method of Setting Blades

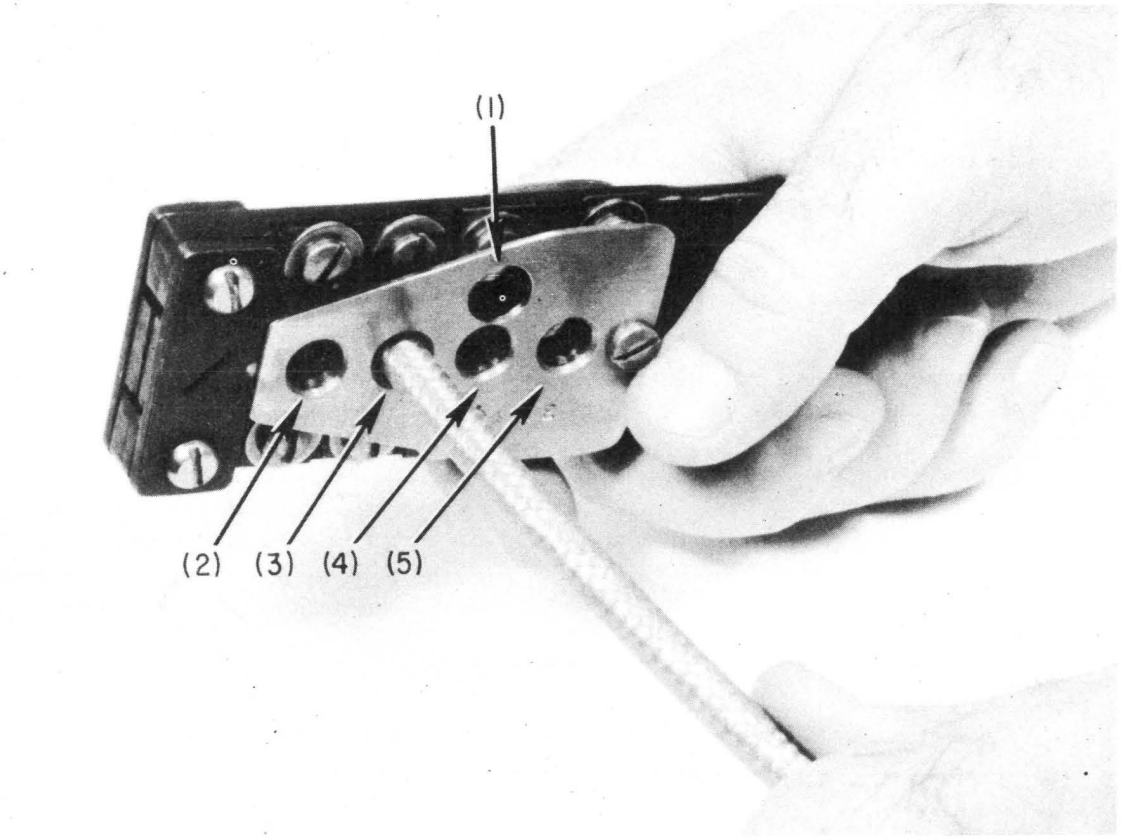

Fig. 2 — Method of Holding Coaxial Cable Stripper

(e) Holding tool tightly closed, tighten the screws.

(f) Remove gauge and replace plate on tool.

3.03 The method of holding the coaxial cable stripper is shown in Fig. 2. Also shown are the holes designated (1), (2), (3), (4) and (5) for cutting, skinning, stripping, and butting the cable.

3.04 Insert the cable into the hole designated (1) in Fig. 2 and cut the cable to the required length.

3.05 Fig. 3 shows a portion of coaxial office cable prepared for splicing or termination, and is for use with Table A in determining the "A," "B," and "C" dimensions required for skinning, stripping, and butting.

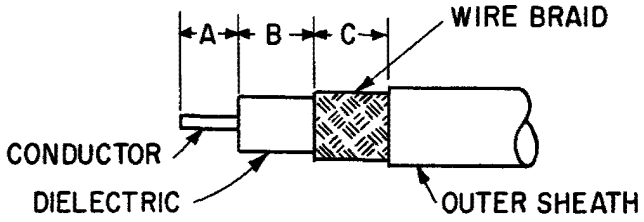

Fig. 3 — Portion of Skinned, Stripped, and Butted Coaxial Office Cable, for Use with Table A in Determining Variable "A," "B," and "C" Dimensions

3.06 Table A shows the variable "A," "B," and "C" dimensions required for preparation of the coaxial office cable, dependent upon the cable termination.

TABLE A

Values of Variable Dimensions for Preparation of Coaxial Office Cable (See Fig. 3)

Cable Terminated at	724, 727, and 728 Cables			RG 59/U Cable		
	A	B	C	A	B	C
210 Connector	7/32	1/16	3/8			
802A Connector	1/4	1/16	3/8	1/4	1/16	3/8
P-16A423 Connector	5/8	*	3/8	5/8	*	3/8
474B Jack (MD)	3/8	5/16	3/8			
477A & 480 Jack	1/4	1/16	3/8	1/4 #	1/16	3/8
477B Jack	5/16	1/4	3/8	5/16	1/4	3/8
491 Jack	1/4	1/8	3/8	1/4	1/8	3/8
491 Jack with RG 62/U Bridge	1/4	1/8	3/8			
492 Jack	1/4	*	3/8	1/4	*	3/8
358 Plug	1/4	1/16	3/8	1/4 #	1/16	3/8
374 Plug	7/16	3/8	3/8	7/16	3/8	3/8
211A & 212A Terminal	7/16	*	3/8	7/16	*	3/8

* Flush with Wire Braid

\# 1/4 + 0 or 1/4 − 1/32

3.07 Insert the cable into the hole designated (2) in Fig. 2. With the cable extending the required length beyond the cutting edge of the stripper (dimension "A"), hold the stripper tightly closed while rotating it in a half circle to insure a complete cut around the cable. Pull off the outer sheath, the wire braid, and the dielectric.

3.08 Insert the cable into the hole designated (3) in Fig. 2. With the cable extending the required length beyond the cutting edge of the stripper (dimension "B"), hold the stripper tightly closed while rotating it in a half circle to insure a complete cut around the cable. Hold the stripper at right angles to the cable, and with a

slight easing of the closing pressure, pull the stripper toward the bare conductor end and pull off the outer sheath and the wire braid.

3.09 Insert the cable into the hole designated (4) in Fig. 2. With the cable extending the required length beyond the cutting edge of the stripper (dimension "C"), hold the stripper tightly closed while rotating it in a half circle to insure a complete cut around the cable. Remove the cable from the hole and insert it into the hole designated (5) in Fig. 2. Holding the stripper tightly closed, pull in a straight line toward the bare conductor end, making a longitudinal cut. Remove the cable from the hole and peel off the outer sheath, using the thumb nail or the pliers.

4. GROUND CONNECTION

4.01 Where a lead for ground connection is required (see Fig. 4), use inner and outer sleeves as follows:

(a) For Nos. 724, 727, and 728 cables, use the KS-15711, List 8, inner sleeve and the KS-15712, List 5, outer sleeve.

(b) For RG 59/U cable, use the KS-15711, List 6, inner sleeve and the KS-15712, List 4, outer sleeve.

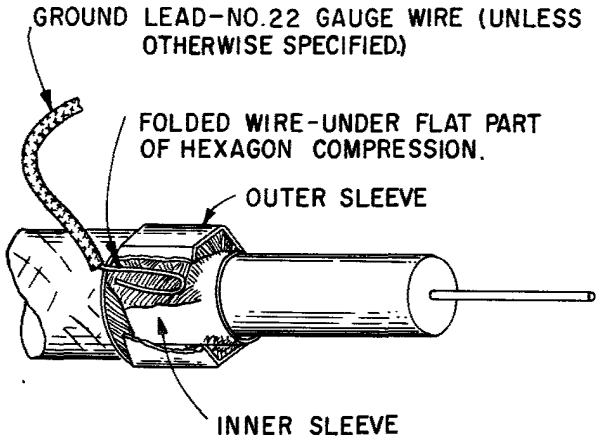

Fig. 4 — Portion of Coaxial Office Cable with Lead for Ground Connection

4.02 The inner sleeve, shown under the wire braid in Fig. 4, should project approximately 1/32 inch beyond the inner braid.

4.03 The outer sleeve should be approximately flush with the butt of the cable.

4.04 Use No. 22-gauge wire where a lead for ground connection is required (unless a heavier gauge is specified), fold the lead as shown in Fig. 4, and insert between the outer sleeve and the wire braid.

Note: The fold of the ground lead wire may be inserted in either direction as required, but the wire should be under the flat part of the hexagon compression after the connection is crimped (see 4.09).

4.05 Where the ground connection requires the use of flag-type ground sheath connector (see Figs. 5 and 6), use inner and outer sleeves as follows:

(a) For Nos. 724, 727, and 728 cables, use the KS-15711, List 8, inner sleeve and the KS-15712, List 7, outer sleeve.

(b) For RG 59/U cable, use the KS-15711, List 9, inner sleeve and the KS-15712, List 7, outer sleeve.

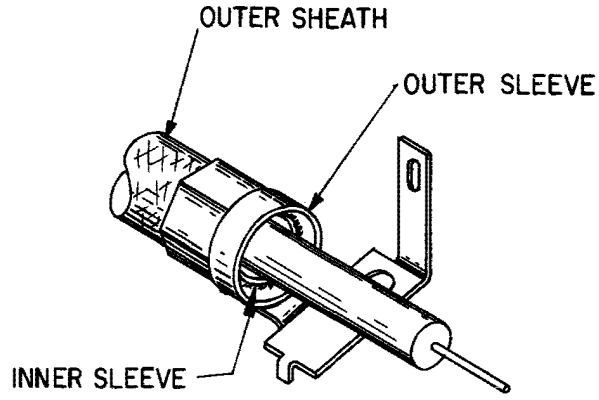

Fig. 5 — Portion of Coaxial Office Cable with Flag of Outer Sleeve Nearest to the Bare Conductor

4.06 With the flag end of the outer sleeve in the proper position (Fig. 5 or 6), place the outer sleeve on the cable at a point just beyond the exposed wire braid.

4.07 Position the inner sleeve as follows:

(a) If the KS-15712, List 4 or 5, (plain) outer sleeve is used, move the inner sleeve backwards under the wire braid so that the inner sleeve projects approximately 1/32 inch beyond the wire braid (see Fig. 4).

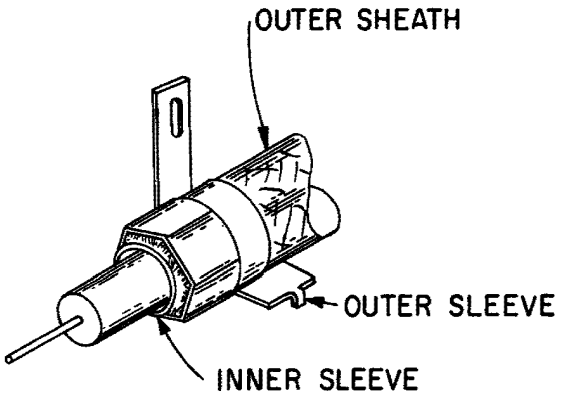

Fig. 6 — Portion of Coaxial Office Cable with Flag of Outer Sleeve Nearest to the Cable Butt

(b) If the KS-15712, List 7 or 8, outer sleeve has the flag nearest to the bare conductor, move the inner sleeve backwards under the wire braid so that the back end of the inner sleeve is approximately flush with the butt (see Fig. 5).

(c) If the KS-15712, List 7 or 8, outer sleeve has the flag nearest to the butt, the inner sleeve should project approximately 1/32 inch beyond the wire braid (see Fig. 6).

4.08 Move the outer sleeve forward over the wire braid so that the back end of the outer sleeve is approximately flush with the butt.

4.09 With the inner and outer sleeves in the proper position, and with due regard for the position of the wire fold (see 4.04), proceed as follows:

(a) On the Nos. 724, 727, and 728 cables, use the KS-15710, List 2 or 3, hand crimping tool equipped with die code "V," and crimp the connection to hexagon shape.

(b) On the RG 59/U cable, use the KS-15710, List 2, hand crimping tool equipped with die code "T," and crimp the connection to hexagon shape.

Note: As described in 1.04, the crimping tool has a ratchet feature which requires that the dies be completely closed before they can be released, thus insuring complete compression of the outer connecting part.