6-TYPE CLOSURES

DESCRIPTION AND INSTALLATION

CONTENTS PAGE

1. GENERAL

1.01 This section covers the description and installation of the 6C1 and 6D1 closures which are intended for use as:

- A closure for straight splices in aerial PIC cable.
- A fixed or preferred count cable terminal when equipped with terminal blocks (see 631-240-100).

1.02 This section is reissued to add information on the 6C1 and 6D1 closures which replace the 6A1 and 6B1 which are rated MD. Since this is a general revision, arrows showing changes will not be used.

1.03 These closures are not furnished with terminal blocks. See Table A for terminal blocks that may be used with 6-type closures. Section 631-240-100 contains procedures for installation of these blocks.

TABLE A

TERMINAL BLOCKS FOR USE WITH 6-TYPE CLOSURES

TERMINAL BLOCK	RATING	MAX. NUMBER PER TERMINAL
3A2-3	MD	4
3A2B-3[1]	STD	4
3A3-3[2]	MD	4
3A4-3	STD	4
8A1-12	STD	1

Note 1: Furnished with 2A1B protector units.

Note 2: Intended for corrosive atmospheres — replaced by 3A4-3 terminal block.

1.04 Table B lists various 6-type closures and associated cable sizes.

TABLE B

6-TYPE CLOSURES — SPECIFICATIONS

CLOSURE	RATING	DIMENSIONS (INCHES)			MAX CABLE OD (INCHES)	REPLACED BY
		LENGTH	DEPTH	HEIGHT		
6A1	MD	22 13/16	3 5/16	7 3/4	Up To 1.0	6C1
6B1	MD	28 1/4	3 11/16	8 3/4	1.0 To 2.2	6D1
6C1	STD	22 13/16	3 5/16	7 3/4	Up to 1.0	—
6D1	STD	28 1/4	3 11/16	8 3/4	1.0 To 2.2	—

2. DESCRIPTION

Base Assembly

2.01 Figure 1 shows a 6-type closure base assembly equipped with the flexible bond strap. This flexible bond strap arrangement allows up to three inches of sheath travel on each end before any strain is applied to the bond clamps which can withstand at least 100 pounds tension. Four captive wire clips and three rings are supported on the bottom part of the base.

2.02 The molded plastic cover provides weatherproof protection for 6-type closures. The bottom interior of the cover is grooved for a snug fit around the edge of the base. The tapered ends of the cover are grooved with the diameter of each groove marked alongside.

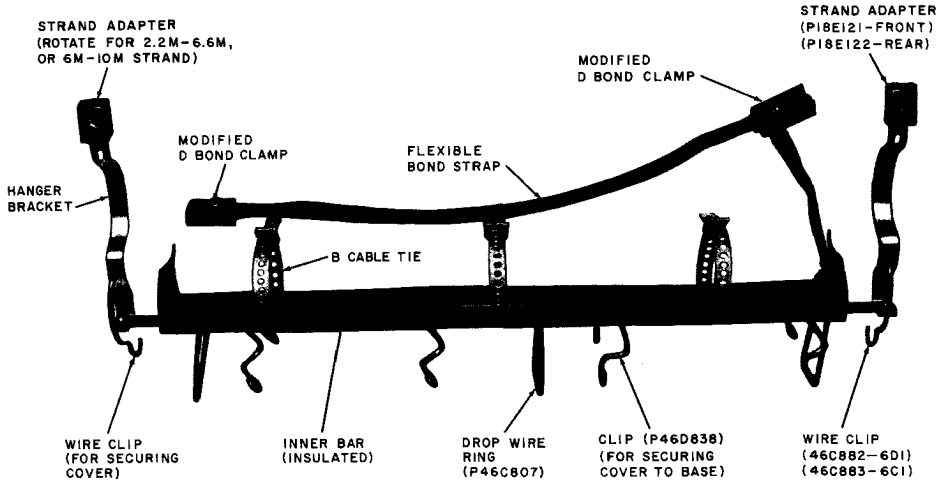


Fig. 1—6-Type Cable Closure Base Assembly

197A Adapter

2.03 The 197A adapter (Fig. 2) is required when using 6-type closures at locations where more than one cable is carried on the strand. Assemble the 197A adapter as shown in Fig. 3.

3. LOCATION OF CLOSURE

3.01 The location of the closures should be positioned for best arrangement of the entering cable. The positions of the closures used to enclose straight splices are contained in this section. See Section 631-240-100 for locating closures when used as terminals and for positioning on self-supporting cable. Section 631-020-200 contains information on locating closures on building walls.

3.02 At the junction of underground and aerial PIC cables, locate the closure on the right side of the pole as shown in Fig. 4.

3.03 Locate the closure at a straight aerial splice as shown in Fig. 5.

3.04 If there is not sufficient space for a closure on the right side of the pole due to the presence of another splice, then locate the closure to the left of the pole.

3.05 After determining the closure location, cut and secure lashing wire to the strand with lashing wire clamps, as shown in Fig. 4 and 5.

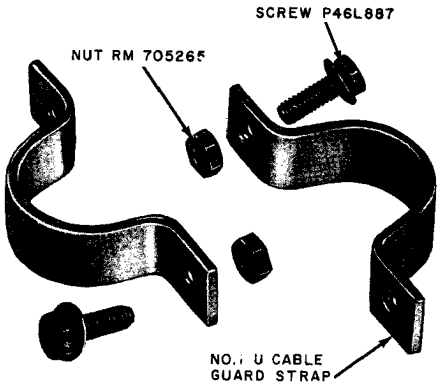


Fig. 2—197A Adapter

3.06 Temporarily tie the unlashed portion of the cable to the strand with lashing wire.

4. SHEATH PREPARATION

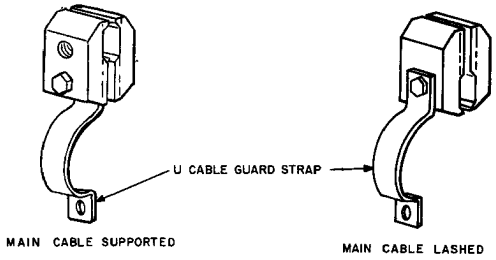
4.01 See Section 631-240-100 for preparation of cable when terminating conductors.

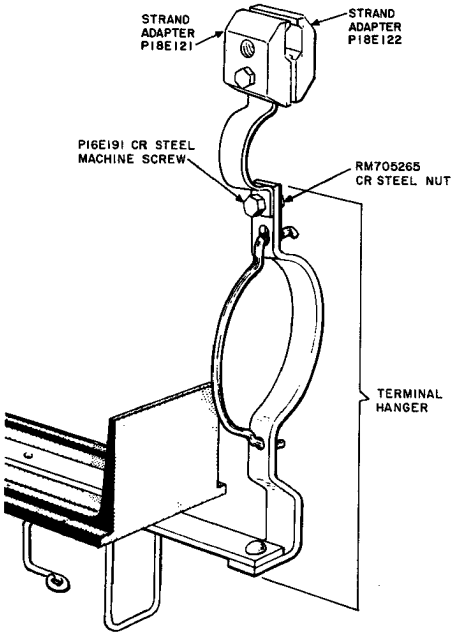
LASHED CABLE—STRAIGHT SPLICE

4.02 Overlap the ends of the cables and place B paper tape markers as shown in Fig. 4 or 5. (See Section 627-240-212 for details on dead ending strand.)

Note: For clarity, only the left-hand cable is shown in Fig. 6 and 7. Prepare the right-hand cable in a similar manner.

1. REMOVE STRAND ADAPTER FROM TERMINAL.
2. FASTEN STRAND ADAPTER TO NO. 1 U CABLE GUARD STRAP (IF CABLE IS MORE THAN 1-3/8 INCHES IN DIAMETER, USE LARGER U CABLE GUARD STRAP).





3. U CABLE GUARD STRAP FASTENED TO TOP OF TERMINAL HANGER USING MACHINE SCREW AND NUT.

Fig. 3—Assembling 197A Adapter

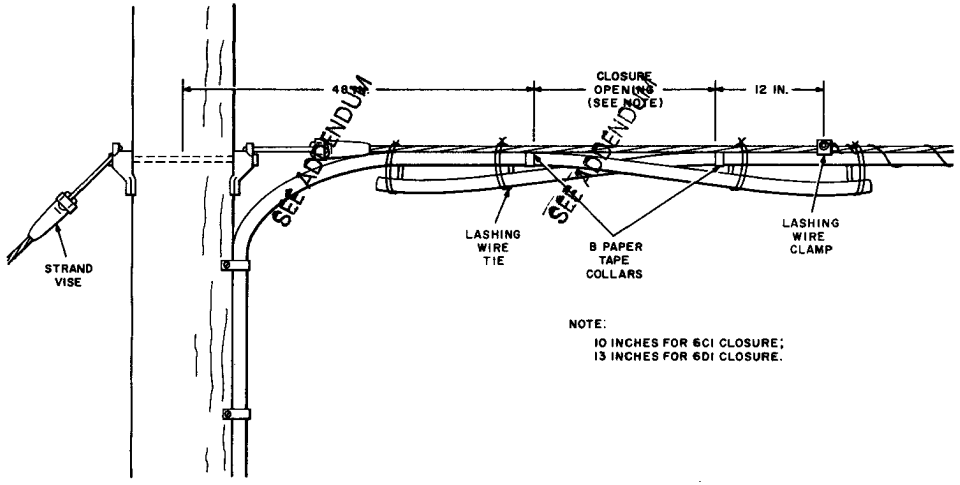


Fig. 4—Location of Closure at Dead-End Pole

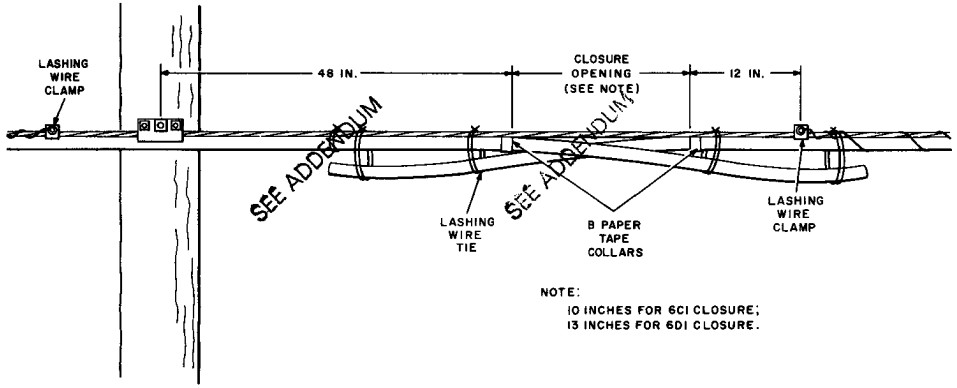


Fig. 5—Location of Closure at Intermediate Pole

4.03 Mark, cut, and remove the polyethylene sheath as shown in Fig. 6.

4.04 Remove the aluminum shield as shown in Fig. 7. ***Wear gloves when removing aluminum shield. Exercise care not to damage the core wrap.***

Note: On multisheath cable (PAP or PASP), leave a 3/4-inch long collar at each end of the sheath opening when cutting inner sheath.

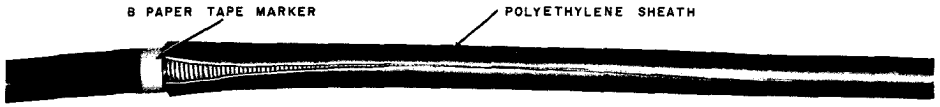


Fig. 6—Removing Polyethylene Sheath

Fig. 7—Removing Aluminum Shield

SELF-SUPPORTING CABLE—STRAIGHT SPLICE

4.05 Prepare strand and cable for splicing as described in Sections 627-230-208 and 627-700-014. Figure 8 shows preparation for installation of 6C1 or 6D1 cable closure.

4.06 Follow procedure described in 4.02 through 4.04 for preparing cable sheath.

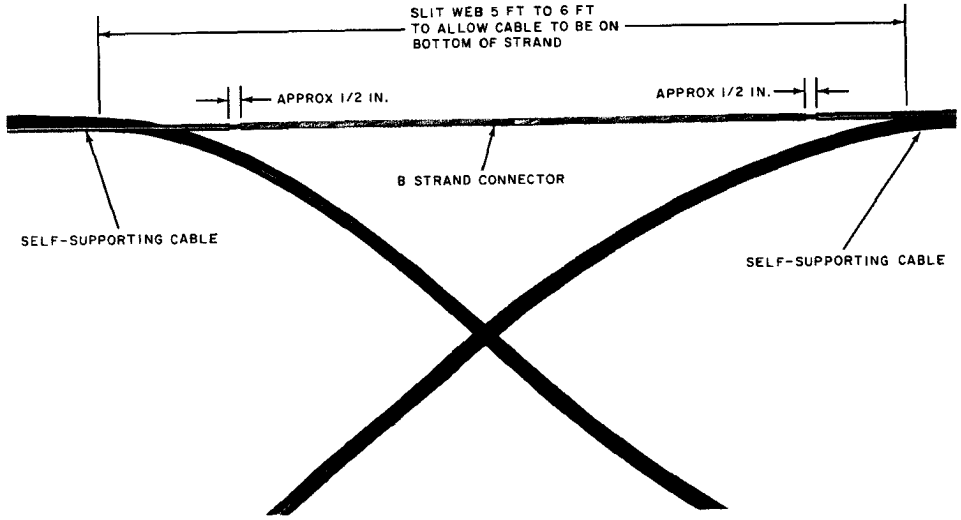


Fig. 8—Preparing Self-Supporting Cable

5. INSTALLATION OF CLOSURE

5.01 Center the base assembly on the sheath opening and engage and tighten strand adapters on the suspension strand.

Note: If self-supporting cable is used rotate strand adapters to fit B strand connector (Fig. 9).

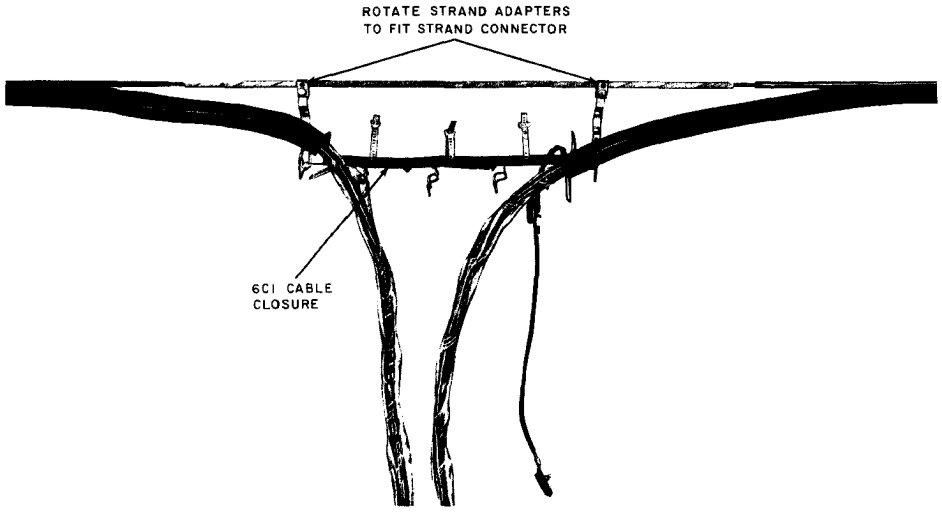


Fig. 9—6C1 Cable Closure Base Assembly Installed on Self-Supporting Cable

5.02 Install right bond clamp as follows: Slide the inner shoe of the bond clamp between the core wrap and metal shield until threaded stud hits end of sheath (Fig. 10). Orient it so the stud faces to the top. On single sheath cables less than 0.8-inch in diameter, slit the sheath approximately 1 1/2 inches on the bottom side of the cable to allow clamp to slide in on top side. Tighten bond clamp nut securely with a 216-type tool.

Note: Double sheath cables slightly larger than 0.8 inch od may require slitting of the outer sheath to obtain proper bonding.

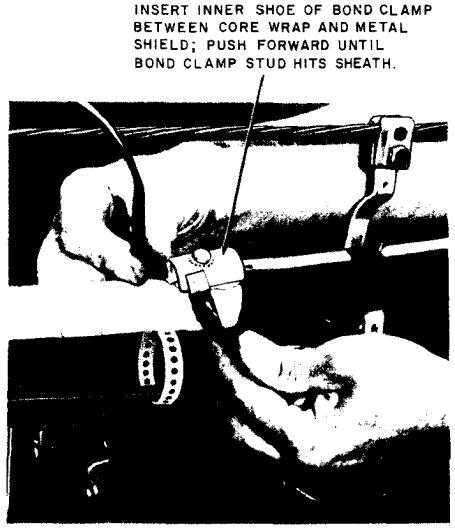


Fig. 10—Installing Bond Clamp

5.03 Install left bond clamp in a similar manner as right clamp (5.02).

5.04 Trim core wrap so that it extends approximately 3/4-inch past outer sheath. On PAP sheath cable, core wrap may be trimmed back even with inner sheath (4.04).

5.05 On the cable sheath at each end, just outside the bond clamps, form drip collars with the sealing tape provided. Form the collar starting at the top of the cable by building up layers of tape, one on top of the other, using the entire length of tape (Fig. 11). Place two turns of vinyl tape over drip collars to prevent the cover from adhering to the sealing tape.

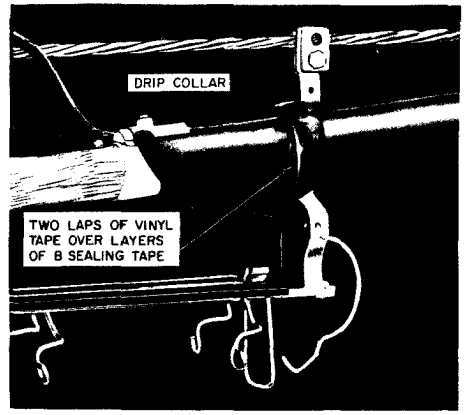


Fig. 11—Drip Collar Installed

5.06 Perform splicing operation as required and dress flexible bond strap by stretching it tight across the center and forming nearly equal loops at each end (Fig. 12).

5.07 Select the appropriate groove for the diameter of cable being used and cut off outside portion of the tapered ends.

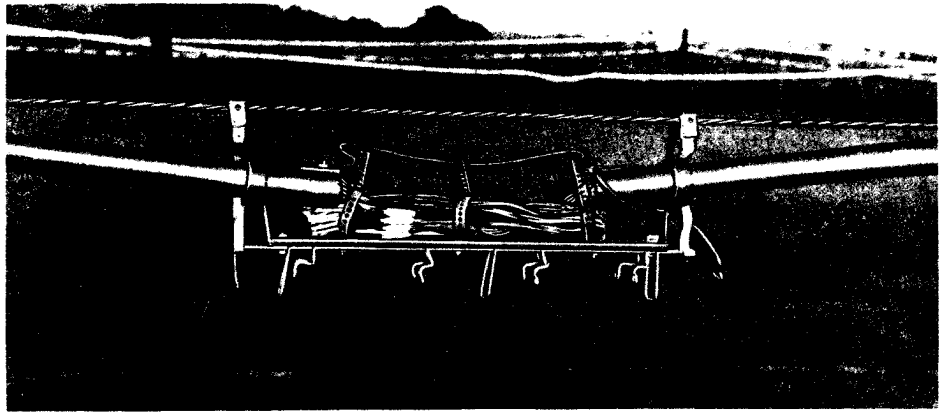


Fig. 12—Completed Splice

5.08 Starting from the rear, work the cover between the strand and the cable. Slide the cover down over the base assembly working the bottom of the cover over the edge of the base so the base is completely seated in the groove. Clip in place with bottom and end wire the tapered ends of the cover until tightly closed (Fig. 13). Install cable required. Figure 14 shows completed on self-supporting cable.

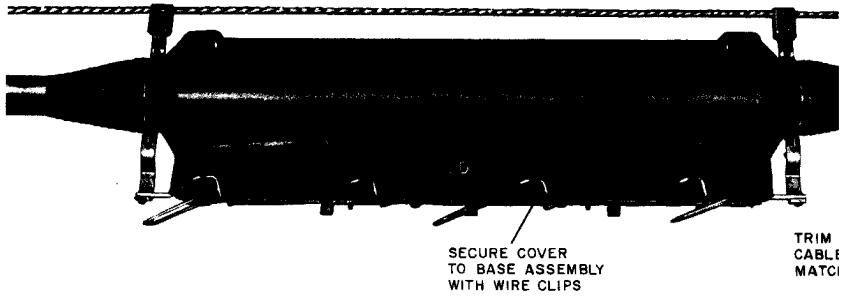


Fig. 13—Completed Installation with Cover Placed

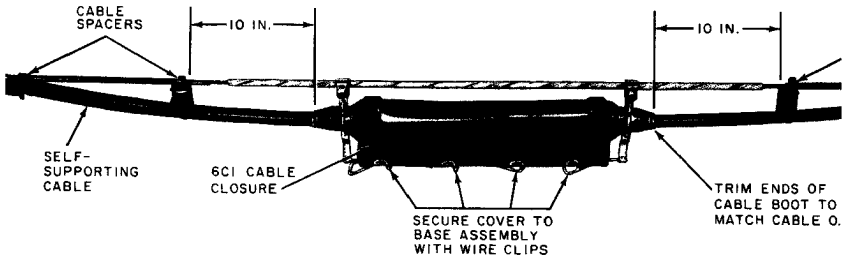


Fig. 14—Completed Installation on Self-Supporting Cable