

## 1-TYPE CABLE CLOSURES RESTORATION OF SHIELD CONTINUITY

### 1. GENERAL

**1.01** This section describes the use of the 841084064 bond strap for the rehabilitation of the 1A1, 1B1, or 1C1 cable closures.

**1.02** The materials and methods described in this section provide economical techniques for restoring features whose absence may result in poor transmission performance, safety hazards, or unmanagable upkeep conditions.

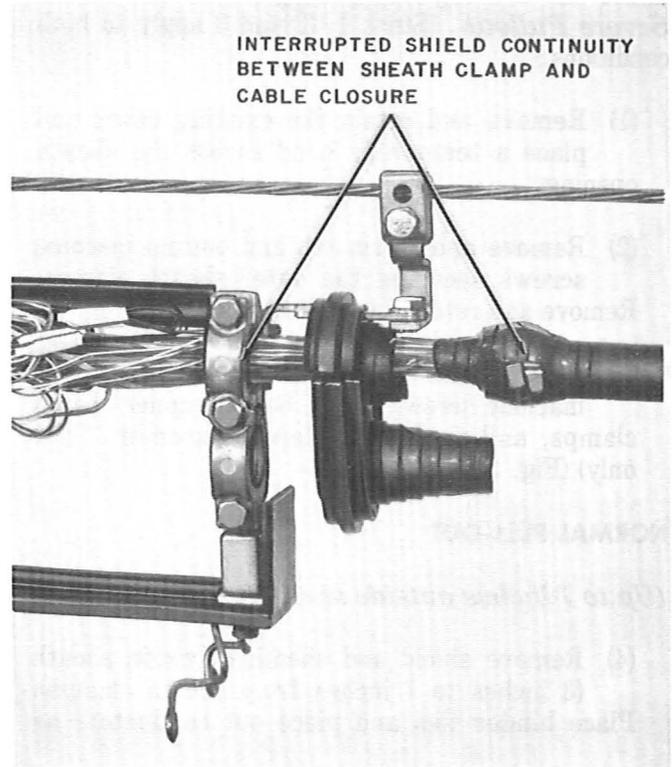
**1.03** Prior to working on any cable opening where shield continuity has been interrupted, a temporary electrical bond must be placed until permanent bonds are established.

### 2. RESTORATION OF SHIELD CONTINUITY



*In all cases, both ends of the closure shall be reworked even though continuity may be lost only at one end.*

**2.01** A typical example of a 1-type closure with sheath pull-out and/or broken sheath tabs is shown in Fig. 1.



**Fig. 1—Example of Sheath Pull-out from 1-Type Closure**

**2.02** The following restoration procedures are divided into two categories according to the length of sheath removed to obtain a suitable bond clamp position. Determine the distance between the sheath clamp and end of the sheath where it has been trimmed back and follow the instructions under the corresponding length for *Normal* or *Severe Pullout*. (Steps 1, 2, and 3 apply to both conditions.)

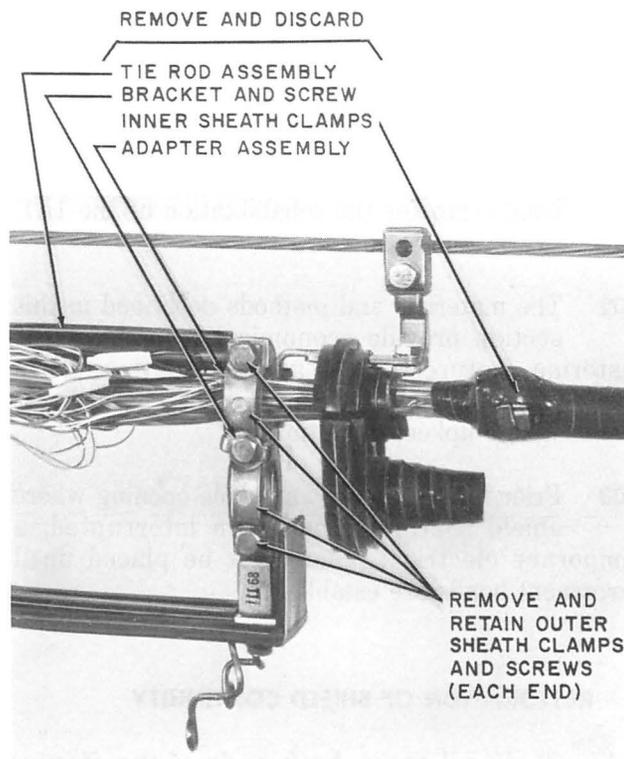
- (1) Remove and retain the existing cover and place a temporary bond across the sheath opening.
- (2) Remove and retain top and bottom machine screws securing the outer sheath clamps. Remove and retain outer sheath clamps. (Fig. 2).
- (3) Remove and discard the center bracket and machine screw, the tie bar, the inner sheath clamps, and the 138A adapter assembly (1B1 only) (Fig. 2).

**NORMAL PULL-OUT**

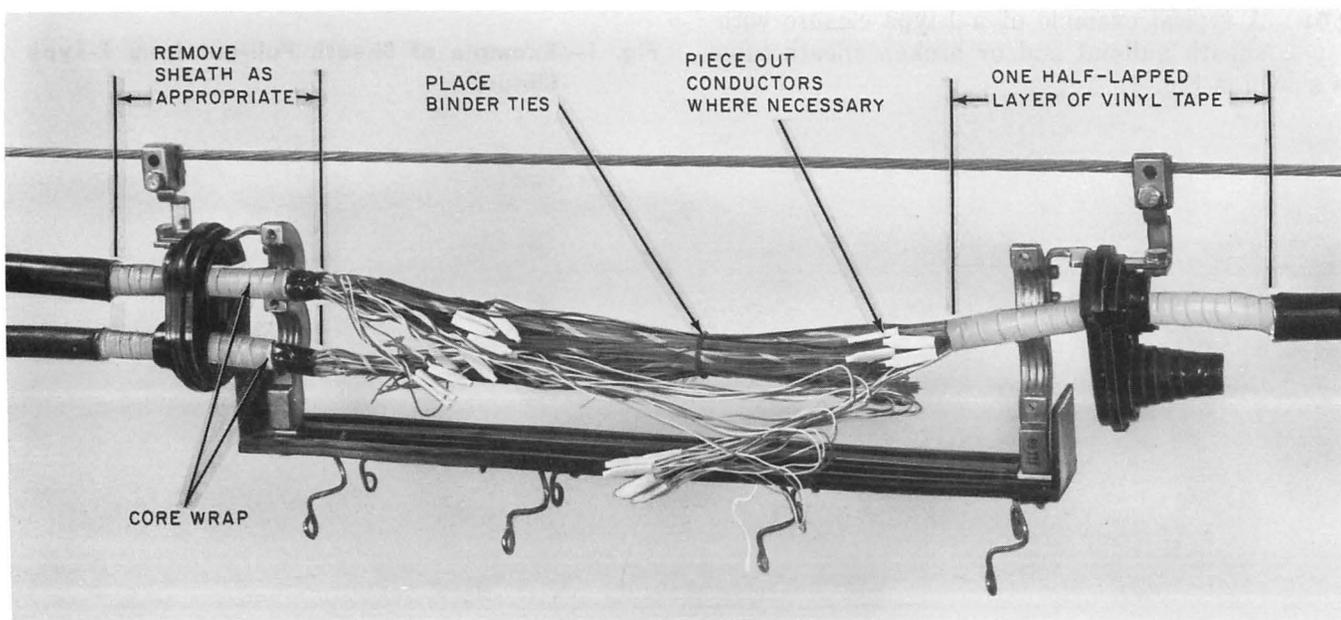
*(Up to 7-inches outside sheath clamps)*

- (4) Remove shield and sheath to virgin sheath (3 inches to 7 inches from sheath clamps). Place binder ties and piece out conductors as

appropriate. Wrap core wrap with a half-lapped layer of vinyl tape to prevent chafing (Fig. 3).



**Fig. 2—Hardware Removal**



**Fig. 3—Shield and Sheath Removed**

- (5) Install 841084064 bond straps using clamp screws retained in Step (2).

**Note:** Install bond strap on both top and bottom sheath clamps (Fig. 4).

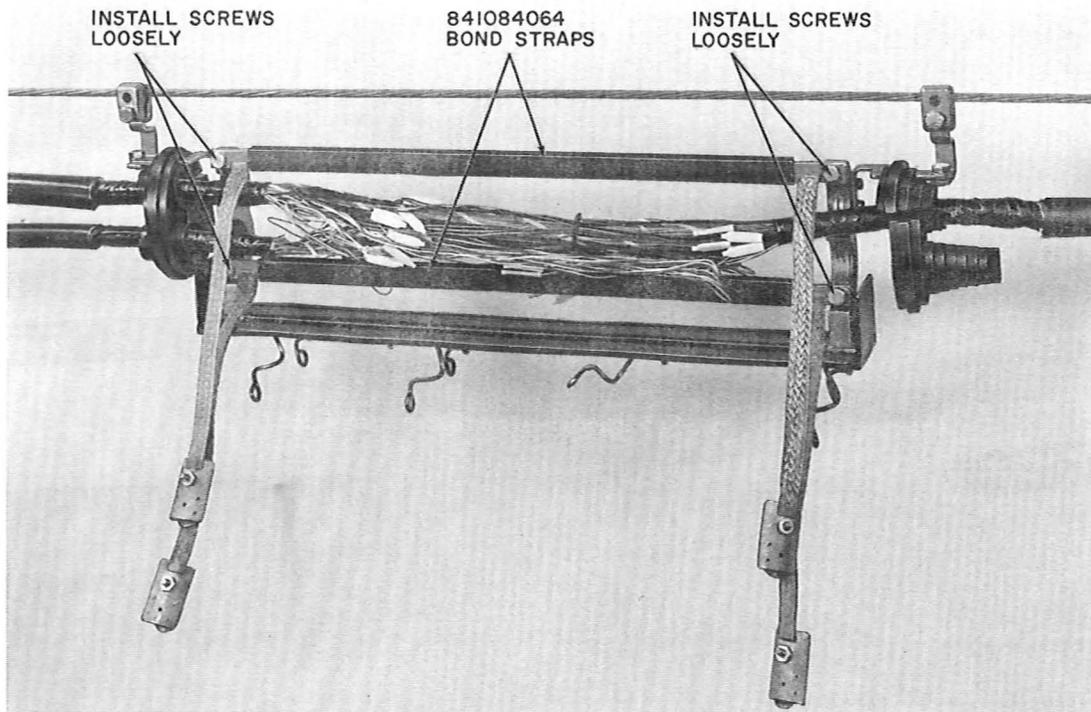
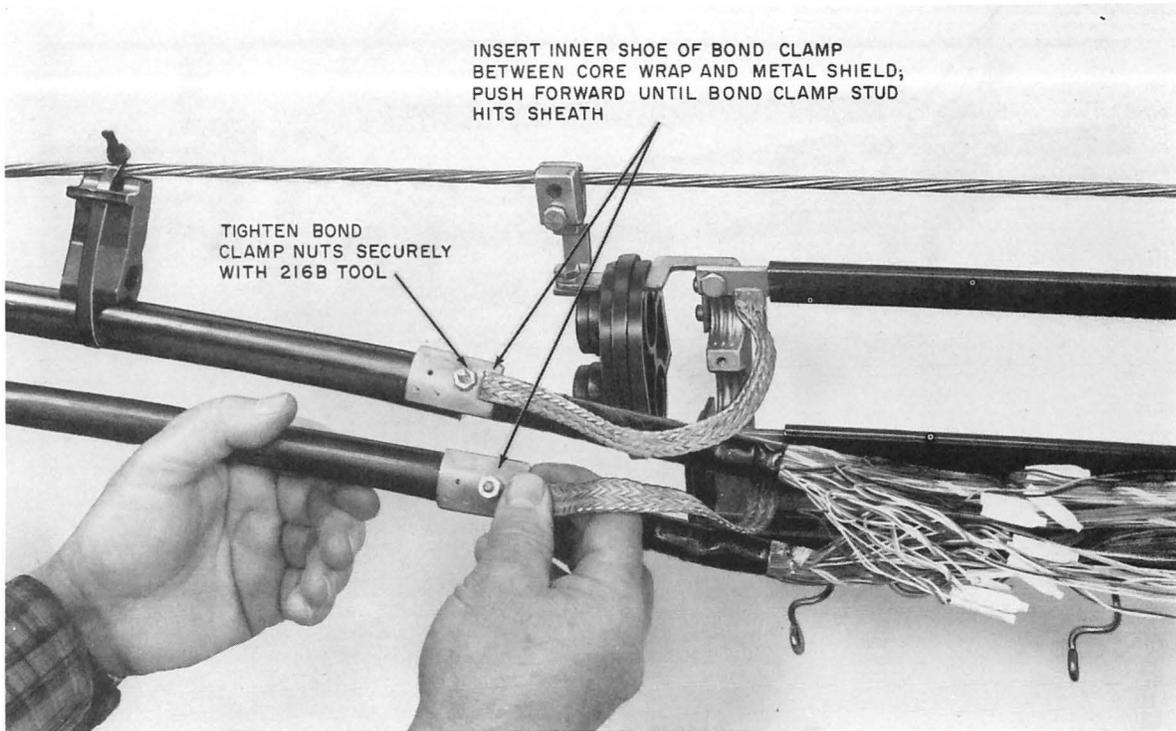


Fig. 4—841084064 Bond Straps Installed

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(6) Slide inner shoe of bond clamp between core wrap and metal shield until threaded stud hits end of sheath (Fig. 5). On cables less than 0.80 inch in diameter, slit the sheath 1-1/2 inches

on back side of cable to allow clamp to slide in on front side. Tighten bond clamp nuts with 216-type tool.



**Fig. 5—Installing Bond Clamps**

(7) Wrap braided strap with a half-lapped layer of vinyl tape. Apply layer of DR tape and two half-lapped layers of vinyl tape over cable, bond clamp, and braided strap. Form drip collars between sheath clamp and nipple (Fig. 6).

(8) Fit nipple around cable and bond strap. Install outer sheath clamps (top and bottom) as spacers. Tighten securely (Fig. 7).

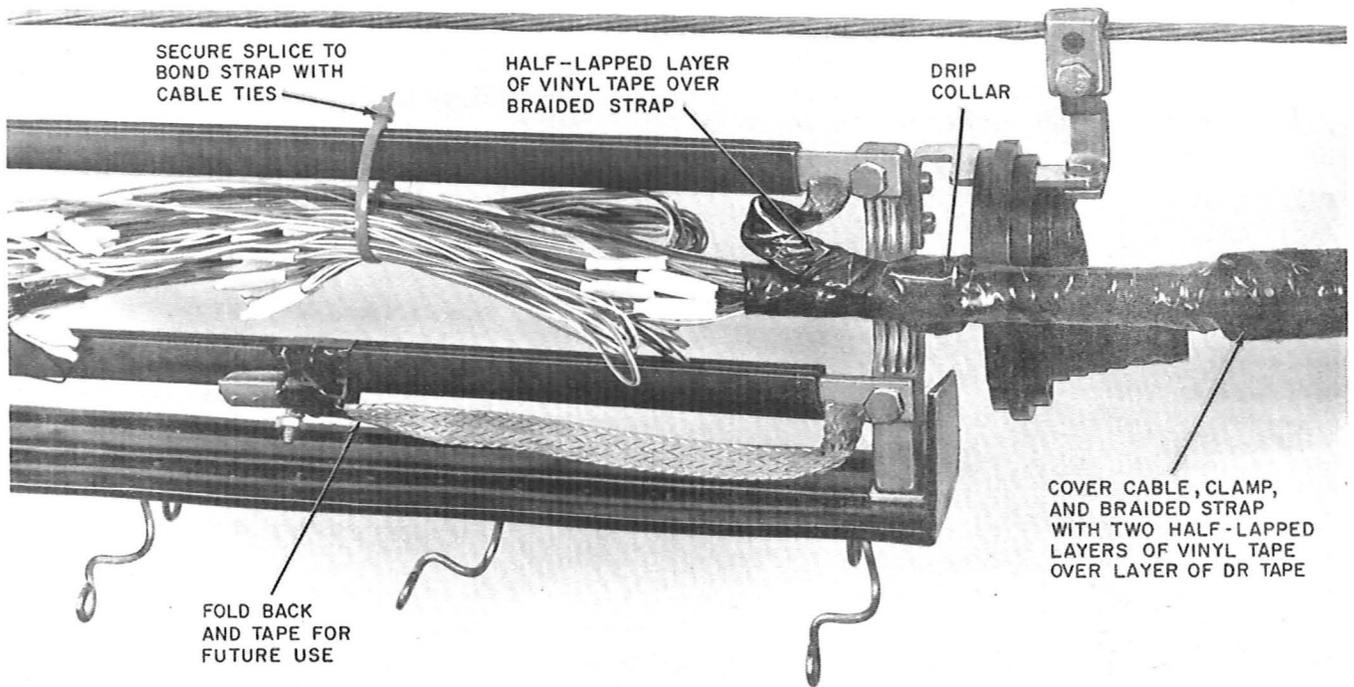


Fig. 6—Tape Applied and Drip Collars Formed

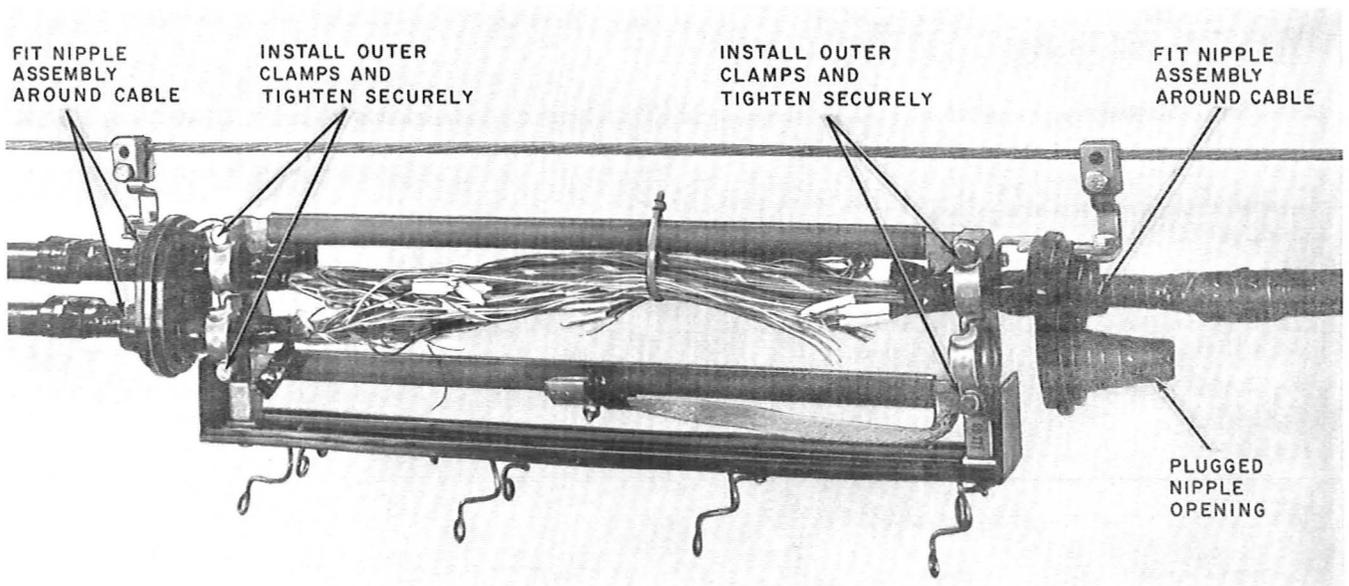


Fig. 7—Completed Installation—Normal Pull-out (Cover Removed)

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- (9) Place cover and secure with wire clips (Fig. 8).

appropriate. Wrap core wrap with a half-lapped layer of vinyl tape to prevent chafing (Fig. 2).

- (5) Install 841084064 bond straps using clamp screws retained in Step (2).

**SEVERE PULL-OUT**

*(7-inches to 17-inches outside sheath clamps)*

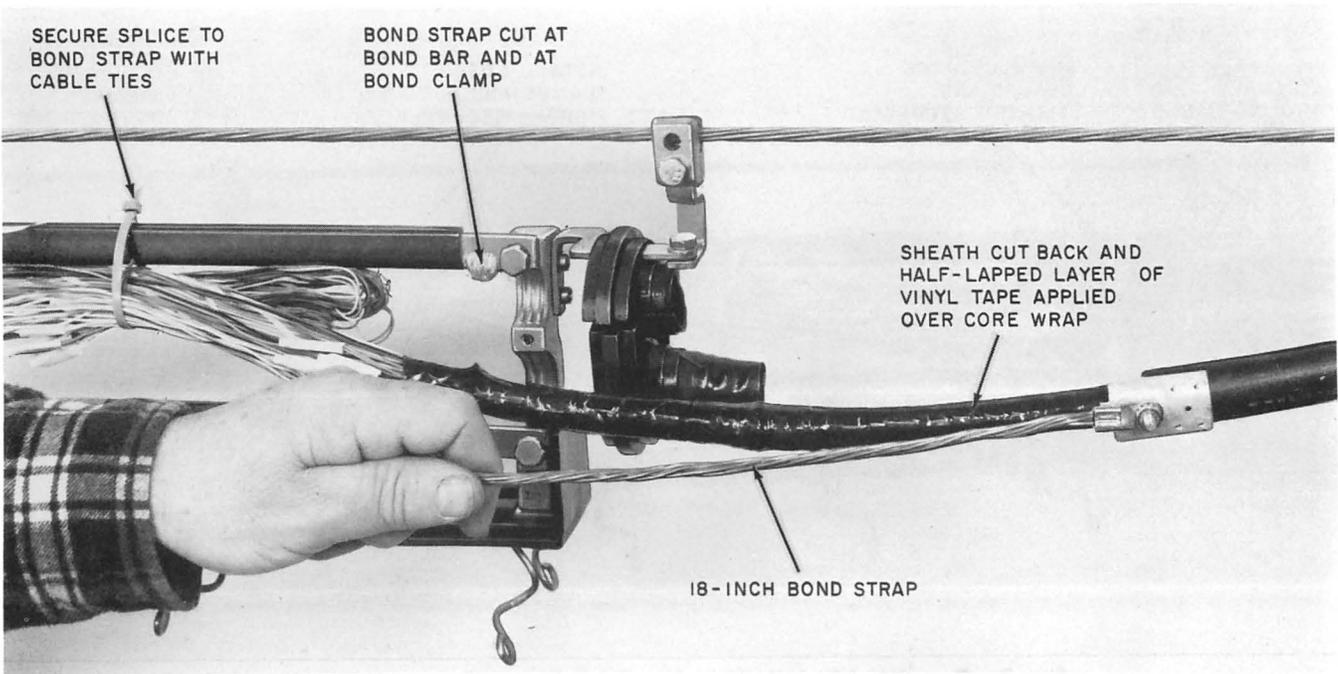
- (4) Remove shield and sheath to virgin sheath (7 inches to 17 inches from sheath clamps). Place binder ties and piece out conductors as

**Note:** Install bond strap on both top and bottom sheath clamps (Fig. 4).

- (6) Cut braided strap at bond bar and at bond clamp (Fig. 9). **Retain bar and bond clamp.**



**Fig. 8—Completed Installation—Normal Pull-out (Cover Placed)**



**Fig. 9—Braided Strap Removed and 18-inch Bond Strap Installed on Bond Clamp**

- (7) Slide inner shoe of bond clamp between core wrap and metal shield until threaded stud hits end of sheath. On cables less than 0.80 inch in diameter, slit the sheath 1 1/2 inches on back side of cable to allow clamp to slide in on front side.
- (8) Remove captive nut on bond clamp and attach 18-inch bond strap (ordered separately).

Replace nut and tighten securely with 216-type tool (Fig. 9).

- (9) Wrap bond clamp, bond strap, and cable with DR tape and vinyl tape. Form drip collars between sheath clamp and nipple. Fit nipple around cable and bond strap. Install outer sheath clamps (top and bottom) as spacers, and bond strap. Tighten securely (Fig. 10).

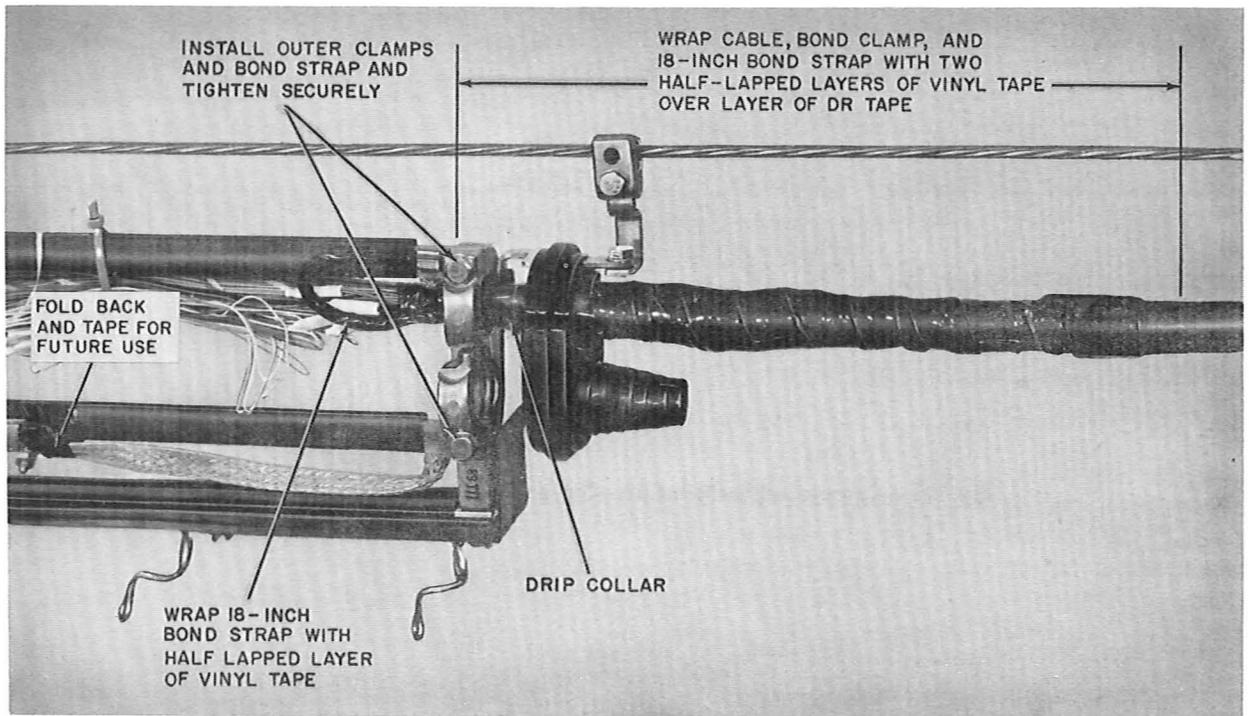
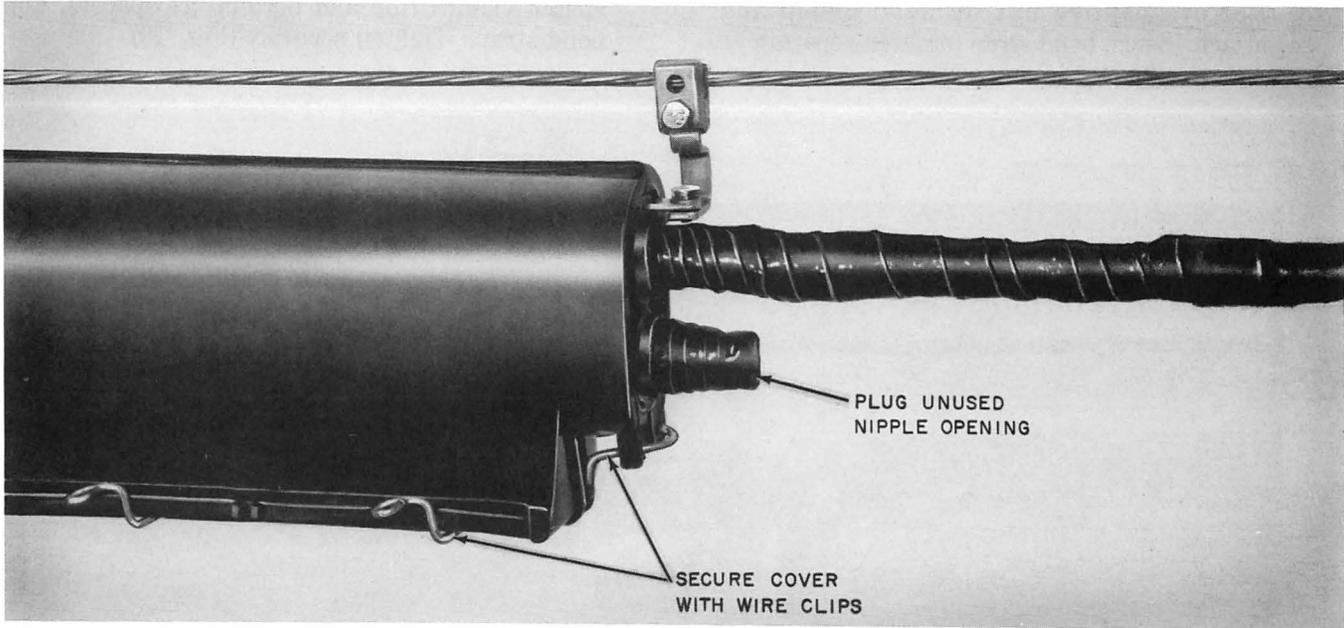


Fig. 10—Completed Installation—Severe Pull-out (Cover Removed)

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- (10) Place cover and secure with wire clips.  
Fig. 11 shows completed installation.



**Fig. 11—Completed Installation—Severe Pull-out (Cover Placed)**