CABLE SPLICING—GENERAL

C AND D SPLICE COVERS

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1. GENERAL

1.01 This section describes the method of using the C and D splice covers for the temporary protection of new uncompleted straight and branch splices, respectively.

1.02 This section is reissued to include the 10-inch diameter C splice cover. Since this is a general revision arrows ordinarily used to show changes have been omitted.

1.03 It is not neceessary to use a splice cover over new splices which will be completed during the working day. These covers are intended for use over splices in large cables which require more than one day to complete or over splices completed in steps where some time elapses between visits to the splice.

1.04 Where temporary protection is required over small splices, existing splices, trouble openings, etc, use methods covered in other sections of the 633 Division of the Bell System Practices.

1.05 The procedures outlined herein are for the C splice cover, however, the D splice cover is installed essentially in the same manner, except the Y end of the D splice cover must be placed over the main and stub cable before starting the splice.

2. DESCRIPTION

C Splice Cover

2.01 The C Splice Cover (Fig. 1) is a rubber cover 60 inches long and is available in both 7 and 10 inches in diameter. It is for use over a straight splice.

D Splice Cover

2.02 The D Splice Cover (Fig. 2) is a rubber cover 66 inches long available in a 7-1/2 inch diameter at one end and openings for 2 cables not to exceed 3-1/4 inches on the other end. This closure is used over a branch splice.

3. MATERIALS

3.01 The following materials in addition to the materials normally carried by the splicers are required for installation of splice covers.

(a) Cement, C—used for making adhesive surfaces

(b) Clamp, Sealing—for sealing ends of splice cover—2 are required for C splice cover, 3 are required for D splice cover.

4. HANDLING AND PREPARATION OF SPLICE COVERS

4.01 The splice cover should be kept in its carton until it is to be used. When removed from the carton the cover should be kept clean and dry with minimum handling.

4.02 Before placing a splice cover, hold it vertically and shake it to dislodge talc inside the cover. With a clean, dry cloth carefully wipe off the remaining talc for several inches on each end.

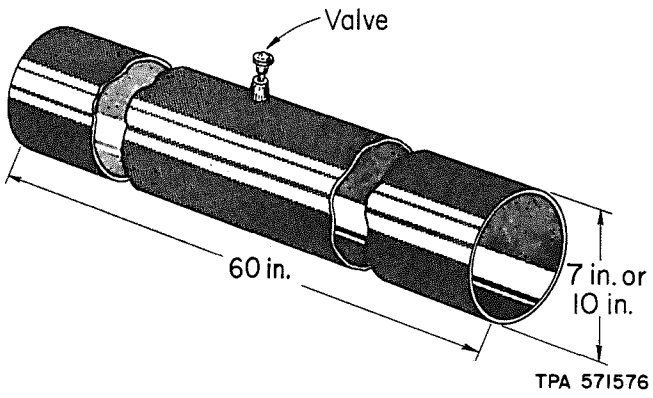

Fig. 1—C Splice Cover

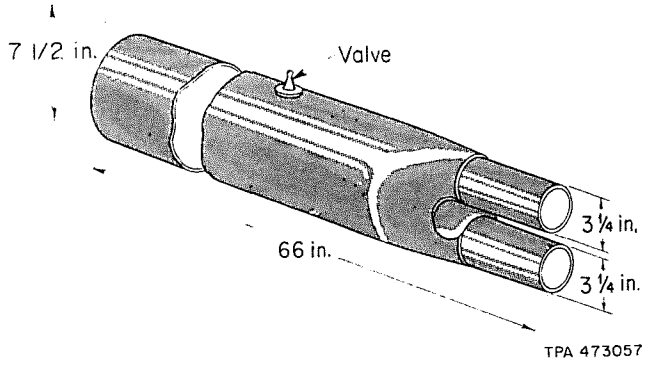

Fig. 2—D Splice Cover

5. INSTALLATION

5.01 ***Before starting a splice,*** install a C splice cover over one end of the cable (straight splice) or a D splice cover over the main cable and stub cable (Y end of branch splice).

Note: Prior to wire joining reestablish shield continuity across the splice opening—633-020-208.

5.02 The full length of the cover should be used where space is available at the splice, where space is limited, such as in small manholes, or where it is desirable to leave jute or corrosion protection on the cable sheath close to the splice the length of the splice cover may be shortened by cutting off a portion. However, where the splice will be worked on a number of times before it is completed the full length of the cover is required. In this case telescope the splice cover to a short length when fastening the end to the cable sheath.

5.03 Using a carding brush, scuff the cable sheath around the circumference on each side of the splice at the location where cover will be secured. ***Do not scuff in the direction of the cable length.*** Remove any longitudinal scratches from the cleaned area with a file.

5.04 Wrap four turns of 2-inch wide DR tape over the scuffed area shown in Fig. 3 to form a collar for the cover.

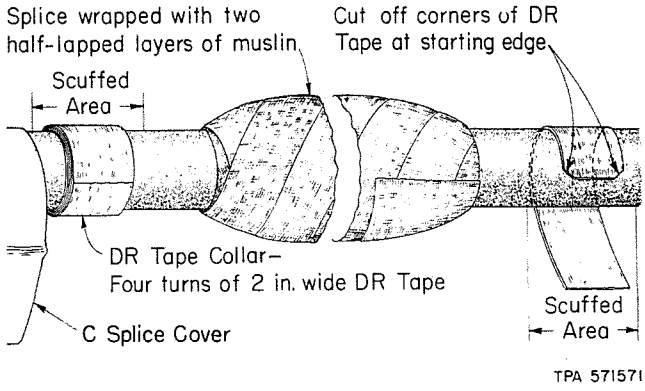

Fig. 3—Applying DR Tape Collar on Cable

5.05 Remove the valve cap and valve core from splice cover, then slide the splice cover over the splice.

5.06 Turn back the ends of the cover as shown in Fig. 4.

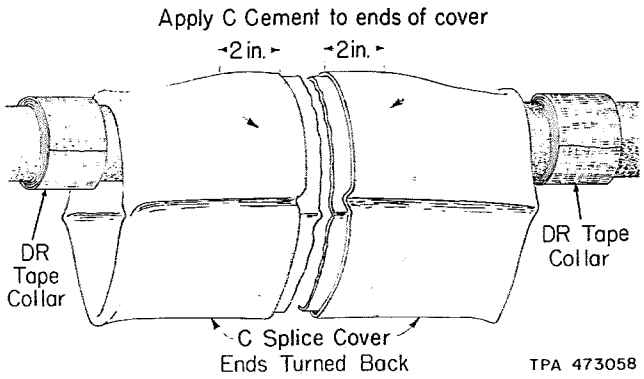

Fig. 4—Splice Cover Turned Back For Application of C Cement

5.07 Apply a 2-inch width of C Cement on the turned back ends of cover as shown in Fig. 4. Allow the C Cement to dry approximately 5 minutes.

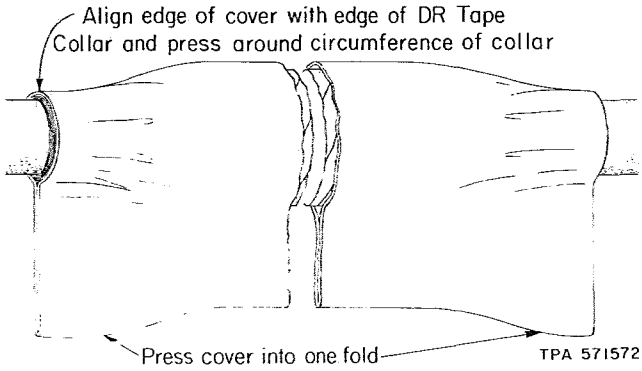

Fig. 5—Forming Cover

5.08 Turn the cover back so that cemented area is in alignment with DR tape collars. Press the cemented portion of cover around the circumferences of the collar (Fig. 5) avoiding wrinkles. Press the excess cover into one fold as shown in Fig. 5.

5.09 Wrap the excess portion of the cover around the collar as shown in Fig. 6, then tape in place. (Fig. 7).

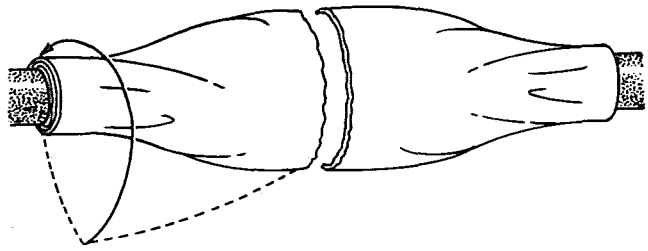

Fig. 6—Wrapping Excess Portion of Cover Around Collar

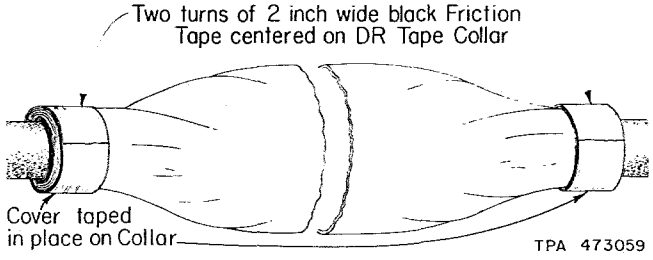

Fig. 7—Cover Taped in Place

5.10 Place a sealing clamp over the center of each collar and tighten the clamp until the collar is compressed sufficiently to seal off any passages. (Fig. 8).

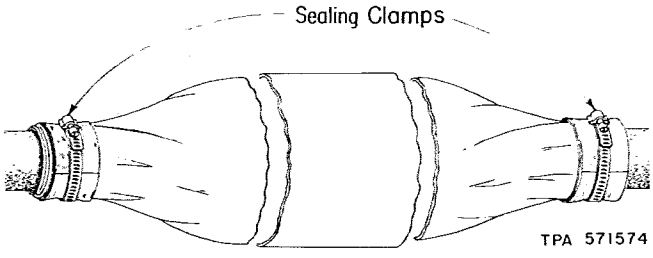

Fig. 8—Sealing Clamps Installed

5.11 Apply two turns of 2-inch wide black friction tape to the overlapped portion of the cover as shown in Fig. 9.

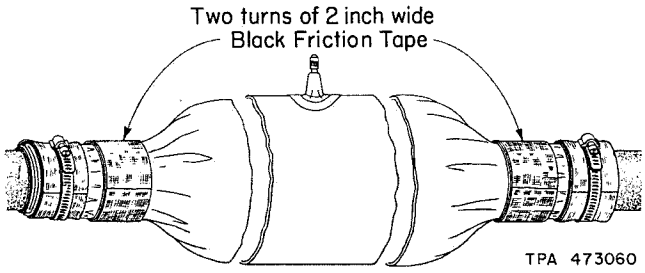

Fig. 9—Installed Cover

6. PRESSURE TESTING SPLICE COVERS

6.01 Replace the valve core and apply gas at a pressure not exceeding one-half pound per square inch.

6.02 Apply a pressure testing solution around each end of the splice cover and check for leaks as indicated by bubbles. If a leak occurs tighten the sealing clamp.

6.03 After the splice cover is gastight, remove the valve core and allow the gas to escape.

6.04 Apply a half-lapped layer of muslin over the splice cover for mechanical protection, then replace the valve core and cap.

7. CABLES UNDER CONTINUOUS AIR PRESSURE

7.01 On cables maintained under continuous air pressure, the splice cover must be reinforced to prevent a blowout. The valve core should not be replaced until the reinforcing operations are completed.

7.02 Pack and reinforce the crotch between the cables in the Y-joint with rags or muslin. Secure the packing with three or four tight figure 8 wrappings of 4-inch muslin to prevent bulging.

7.03 If the maximum diameter of the splice is 4 inches or less apply two tightly wrapped layers of half-lapped 4-inch muslin over the entire splice cover. If the diameter is greater than 4 inches apply three half-lapped layers into a figure 8 wrapping at the crotch for additional reinforcement.

7.04 Secure the finished wrapping by using 4-inch muslin horizontally back and forth across the vertical wrappings. Use a figure 8 turn on the Y end of the splice, as shown in Fig. 10.

7.05 Replace the valve core and valve cap and permit the gas to rise to the normal pressure in the cable. Examine the covering to determine if there are any bulges or weak areas. If a bulge occurs or the wrapping does not appear safe, apply one or two additional layers of muslin to make certain the covering will withstand the air pressure.

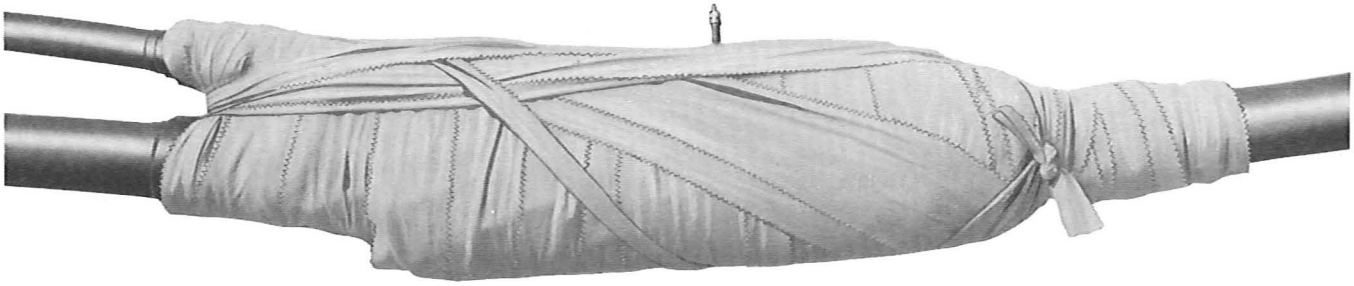

Fig. 10—Reinforcing CR Tape Collar

8. REUSE OF SPLICE COVERS

8.01 In reusing the splice cover, remove any wrappings applied for mechanical protection, then remove one end (The straight end in the case of a D splice cover.) seal by taking off the clamp and friction tape wrappings.

8.02 Cut the splice cover just inside the DR tape collar. Remove the used portion of the splice cover and DR tape collar (Fig. 11).

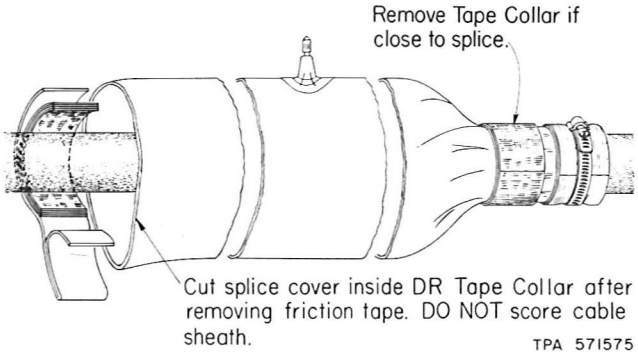

Fig. 11—Removing Cover

8.03 Fold the splice cover away from the splice opening (Fig. 12).

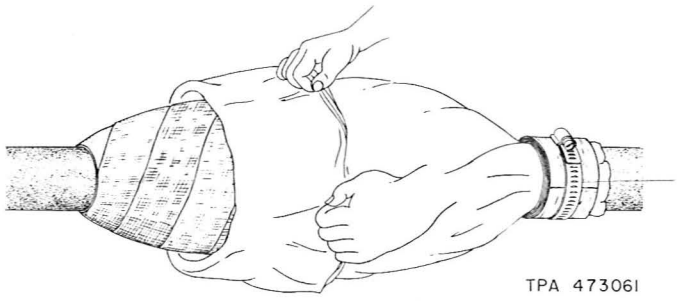

Fig. 12—Folding Splice Cover

8.04 Reuse the splice cover as outlined in Part 5. The covers can be reused until they are too short to cover the opening.

9. REMOVAL OF SPLICE COVER

9.01 Remove any wrappings that were applied for mechanical protection, then remove the sealing clamps on each end of the cover.

9.02 Cut the friction tape wrappings, splice cover, and DR tape collars and remove from cable.