BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G34.120.3
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AT&T Co Standard

C RURAL WIRE
SPLICING AND TERMINATING

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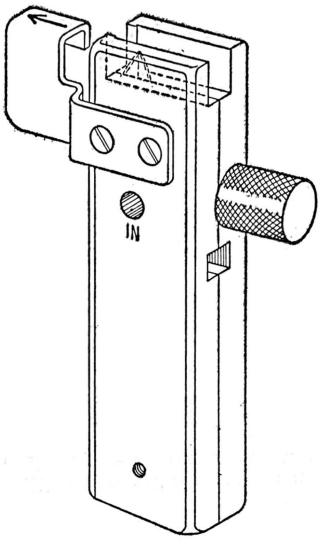
1. GENERAL

1.01 This section describes methods of splicing and terminating the conductors of C Rural Wire.

2. SPLICING

2.01 The B Wire Slitter (see illustration) has been developed for use in slitting and removing the insulation on C Rural Wire.



B WIRE SLITTER

Fig. 1

2.02 To slit the wire, place the guide of the wire slitter on the wire and turn the slitter so the wire is forced into the groove in the top of the slitter where the insulation between the conductors is pierced by the blade point and the wire is pressed flat against the guide and groove. The wire may then be slit by moving the slitter in the direction of the arrow on the guide as shown in illustration. The wire may be slit when under tension on a pole line or when hanging slack for splicing or terminating. When slitting a slack wire end, the slitter may not cut the insulation between the wires at the end, in which case, the tip may be cut off with a pair of side cutting pliers.

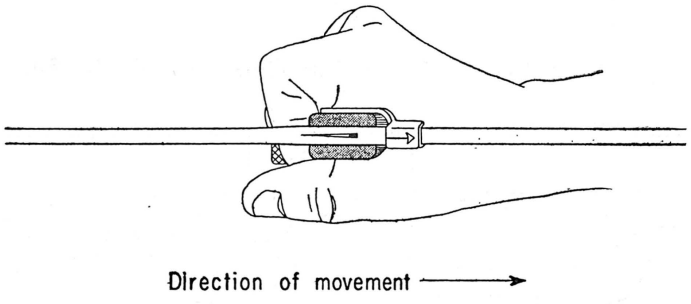


Fig. 2

2.03 To remove the insulation after the wire has been slit, place one of the conductors in the hole marked "IN" and tighten the knurled screw. Hold the insulation adjacent to the "IN" side of the hole to prevent turning and rotate the tool around the wire a few times then pull it off the wire, removing the insulation.

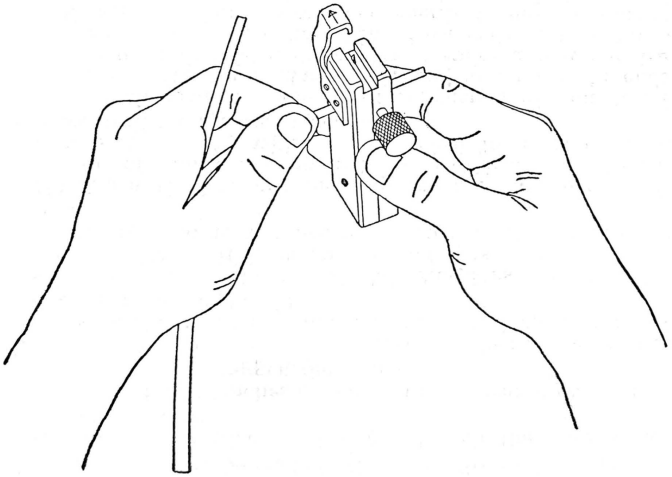


Fig. 3

2.04 A splice may be made in C Rural Wire as follows:

(1) Slit end of wire of Pair No. 1 with the wire slitter for 6 inches.

(2) Cut off 2-1/2 inches of one of the separated conductors in order to stagger the joints.

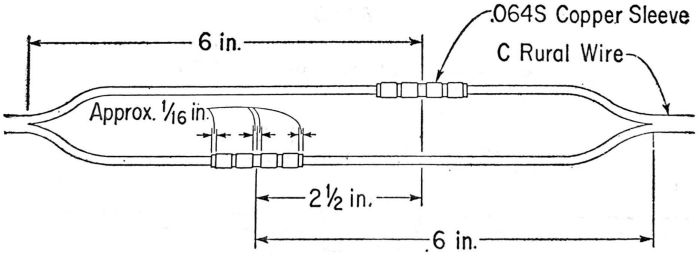
(3) Remove insulation from both conductors with the wire slitter for a distance of half the length of a 064 S Copper Sleeve (9/16").

(4) Treat the conductors of Pair No. 2 as described for Pair No. 1. It is important that legs of splice be of equal length so as to equalize the tension between conductors.

(5) Slip a 064 S Copper Sleeve over each skinned conductor of Pair No. 1, up to the end of insulation. Crimp each sleeve lightly with diagonal pliers to hold sleeve in place until presses are made.

(6) Match conductor and insert conductors of Pair No. 2 into sleeves on conductors of Pair No. 1 up to the ends of the insulation. Straighten legs of splice and if one leg is found shorter than the other, adjust ends of Pair No. 2 until legs of splice are of equal length. Crimp the sleeves lightly with diagonal pliers over conductors of Pair No. 2 to hold conductors in position until presses are made.

(7) Starting approximately 1/16 inch from constriction in sleeve, press each sleeve four times using the C Groove of the 31-QC Nicopress Tool, two presses on each side of the constriction. Make the two inside presses adjacent to the constriction first. Presses at the ends of the sleeve should be located approximately 1/16 inch from the ends.



Use C Groove of the 31-QC Nicopress Tool to make presses.

Fig. 4

(8) Using 3/4-inch DR Tape, wrap each sleeve with two reversed half-lapped layers starting in the center and extending the tape 3/4 inch beyond each end of each sleeve.

(9) Wrap the entire splice and 1/2 inch beyond the slits with 2 reversed half-lapped layers of 3/4-inch black friction tape starting in the center or with one half-lapped layer of D Vinyl Tape starting at one end.

3. TERMINATION

3.01 C Rural Wire may be terminated at either end in a 101B Wire Terminal as illustrated.

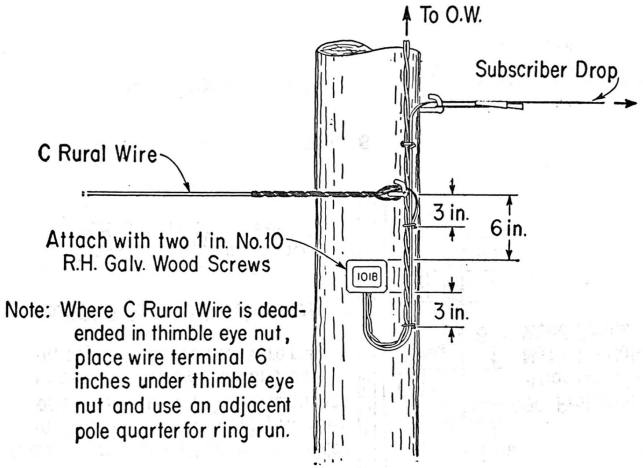


Fig. 5

3.02 A 99 or 118 type protector may be placed at the end of C Rural Wire run as illustrated. The illustration uses a 99C protector. Place 118 type protector in same relative location.

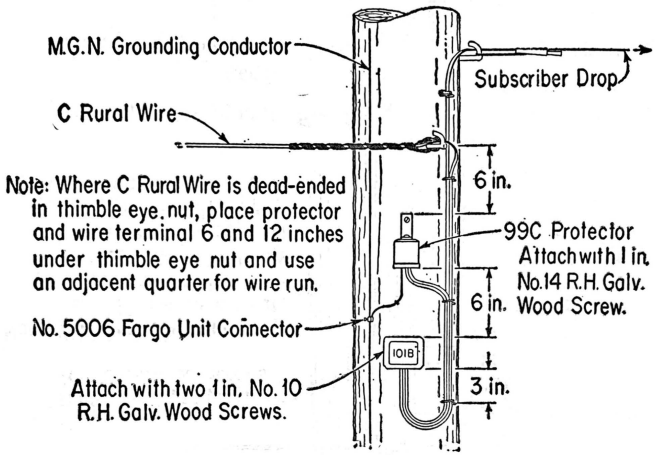


Fig. 6

At intermediate poles without subscriber drops, a 99 or 118 type protector may be bridged to C Rural Wire in the manner shown in Paragraph 3.03 for bridging a 101B Wire Terminal.

3.03 To serve a station from an intermediate pole, a 101B Wire Terminal may be used as illustrated.

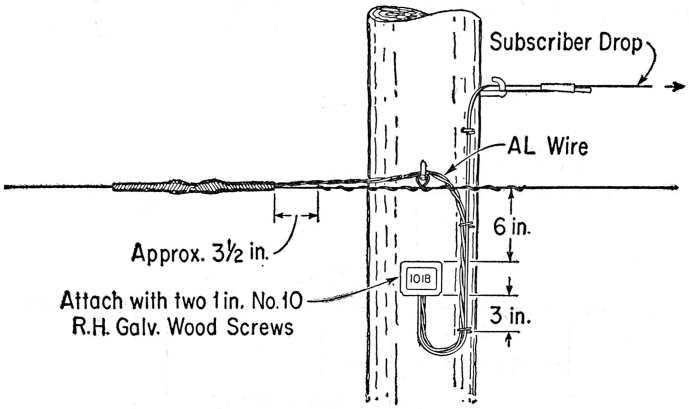


Fig. 7

To bridge the 101B Wire Terminal, proceed as follows:

(1) With wire slitter, slit the C Rural Wire for a distance of 12 inches starting 4 inches from the end of the support and insert the B Wire Wedges. Remove 3/4 inch of insulation from each conductor as shown. This may be done by crushing the insulation in the jaws of long nose pliers.

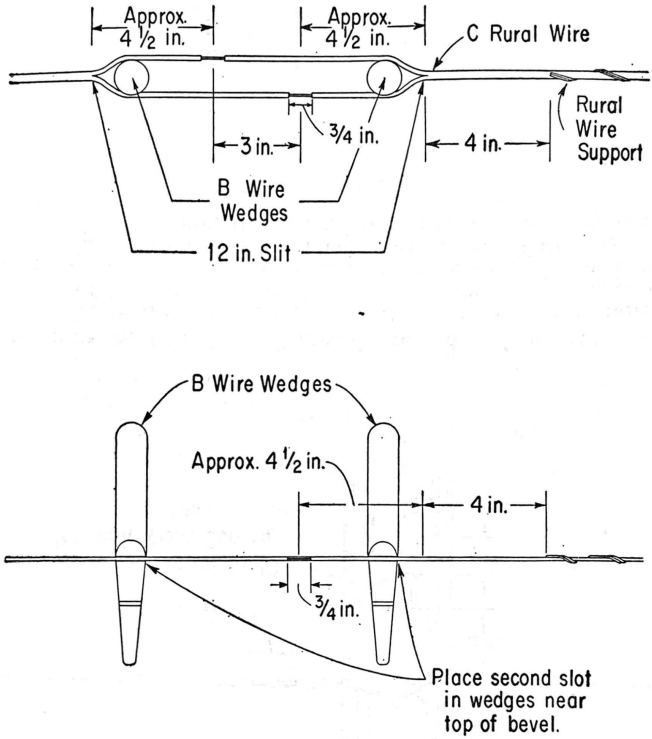


Fig. 8

(2) Place the wire slot of the 2B Bridging Connectors over the skinned C Rural Wire. Wrap the skinned end of the AL conductors around the connector binding posts and tighten the nut with pliers and B Braid Stripper. Wrap the skinned AL conductor in the direction the nut tightens. Position the bridging connectors as shown.

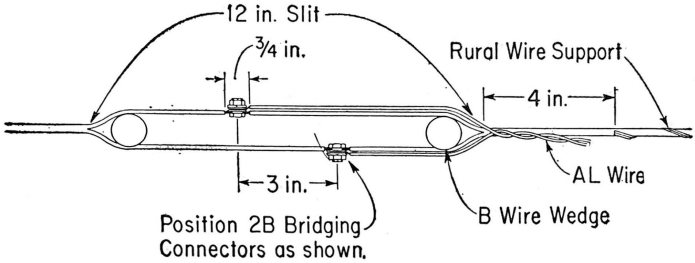


Fig. 9

(3) Wrap each bridging connector with two reversed half-lapped layers of 3/4-inch DR Tape. Start the tape between the corresponding conductors as shown below and make three turns on the conductor of the C Rural Wire before starting around both wires. Extend the tape one inch over the insulation on each side of the connector. Cover each taped connector with two reversed half-lapped layers of 3/4-inch black friction tape. Start the tape between the corresponding conductors and extend 1/2 inch beyond the ends of the rubber tape. One layer of half-lapped D Vinyl Tape may be used instead of the friction tape, provided the wrapping is done carefully to seal in the rubber tape.

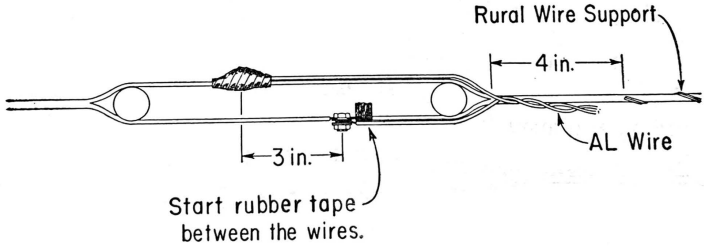


Fig. 10

(4) Remove the wedges and cover the entire splice 1/2 inch beyond the ends of the slit with 2 reversed half-lapped layers of 3/4-inch black friction tape starting at the center. One layer of D Vinyl Tape starting at one end may be used in place of the friction tape.

Fig. 11