BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G34.101.3
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AT&T Co Standard

B RURAL WIRE
SPLICING AND TERMINATING

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1. GENERAL

1.01 This section describes methods of splicing and terminating the conductors of B Rural Wire. It replaces Section G31.112.2 and since it has been rewritten, arrows to indicate changes have been omitted. Information on new terminals and protectors, color coding, and new splicing methods are included.

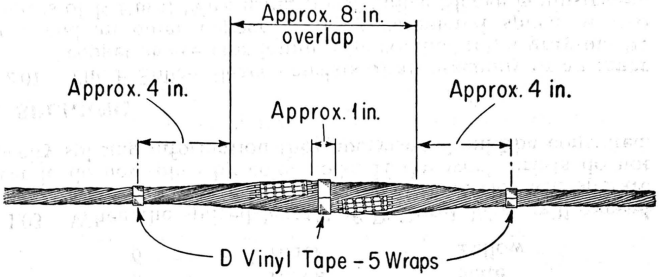
1.02 The color coding of the conductors of B Rural Wire simplifies pair identification and should facilitate the splicing and terminating operations. The pairs are color-coded as follows:

Pair No.	Tip	Ring
1	Black	Blue
2	Black	Red
3	Black	Green
4	Black	Brown
5	Black	Slate
6	Black	Yellow

1.03 When the spliced length of B Rural Wire will exceed 5 miles or where it is expected that carrier will operate over it, do not splice by color code. If the work prints do not specify splicing information the supervisor should be consulted.

2. SPLICING

2.01 The F Splice Sleeve consists of an assembly of an inner copper sleeve (for joining the conductor), a gray plastic liner and an outer copper shell. A completed splice of two lengths of B Rural Wire using the F Splice Sleeve is illustrated.

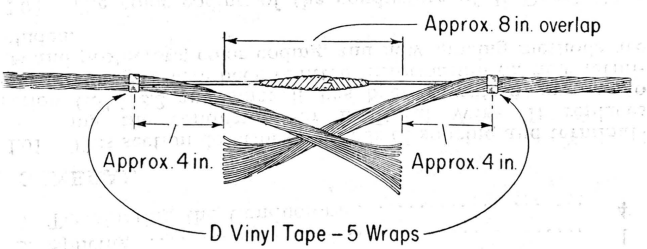


Splice each of two groups of conductors so as to retain their spiral lay.

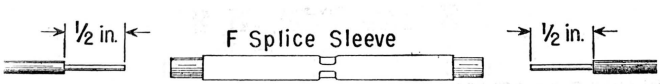
This splice may be made as follows:

(1) Join and tape the support wire leaving overlap as shown.

Join Steel Support Wire with 109E Steel Sleeve or with a Wire-link. Tape with 2 layers of half-lapped ¾ in. DR Tape and 2 layers of half-lapped D Vinyl Tape.

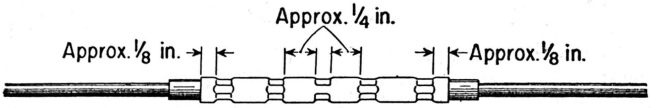


(2) After cutting a pair of wires to be joined, to proper length, remove ½ inch of insulation from ends of conductors with a pair of diagonal pliers using the skinning hole. It is important that the ½ inch be reasonably accurate for a proper splice.



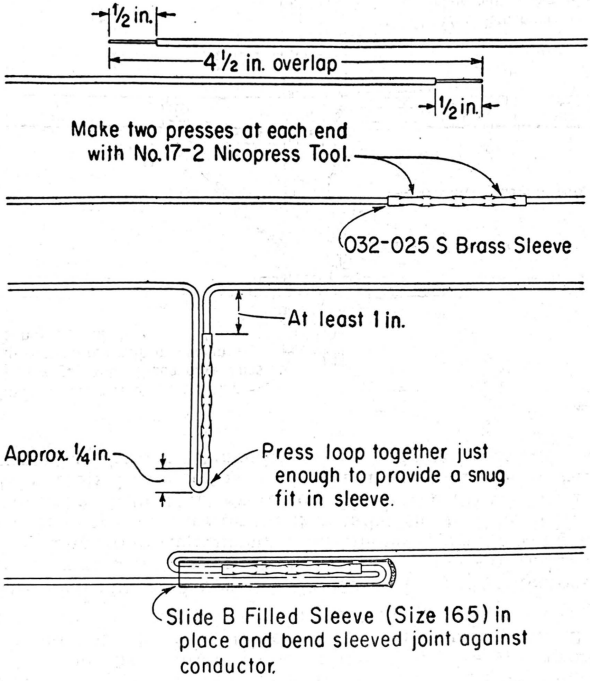
Strip ½ in. insulation from wires and insert in sleeve until conductors reach the constriction in the inner sleeve.

(3) Insert conductors into the sleeve until the conductor reaches the constriction in the inner sleeve. Using the D Sleeve Presser make four presses along the length of the sleeve as shown, making the two inner presses first.



Using D Sleeve Presser, make 4 presses located as shown.

2.02 Individual conductors may also be spliced as shown.

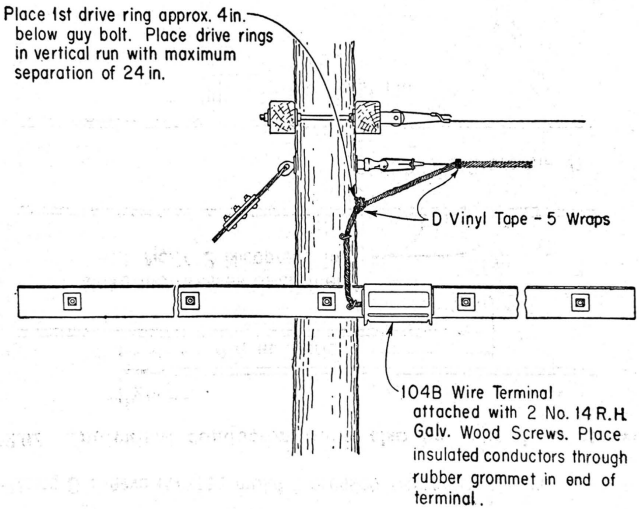


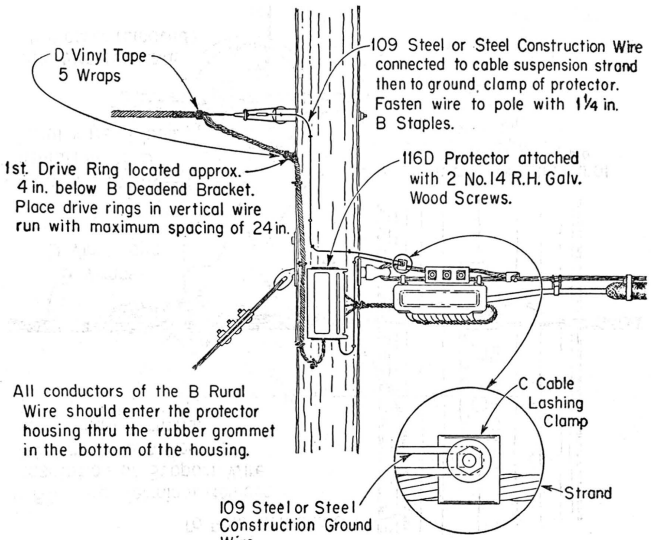
Note:-Protect sleeves from sunlight by wrapping spliced section of B Rural Wire with one layer of half-lapped D Vinyl Tape.

3. TERMINATING THE CONDUCTORS

3.01 The conductors of B Rural Wire may be terminated in the distribution cable terminal, a 116-type protector equipped with 107B Protectors, a 104-type wire terminal or a 105A Wire Terminal as specified on detail plans.

3.02 The 104-type wire terminal and 116-type protectors provide facilities for terminating all six pairs of the B Rural Wire. The following illustrations show typical arrangements for a protector or wire terminal installation with the 104B Wire Terminal and the 116D Protector. Where the 104A Wire Terminal or 116B Protector is used attach them to a 45A Bracket mounted with four ¼ inch by 2½ inch Drive Screws.





3.03 At intermediate poles subscribers' drops may be bridged by using the 105A Wire Terminal. A maximum of 3 terminals may be mounted on each side of the wire bracket. Terminals should be mounted approximately 10 inches apart, and the bundle of 6 pairs must pass around the support wire between terminal locations. The method of installing a terminal is as follows:

(1) Separate the pair to be connected and open the lay of the B Rural Wire to expose the support wire.

(2) Place a one-inch B Cable Guard (½ length) around the remaining 5 pairs.

(3) Remove about one inch of insulation from the support wire at the point where the terminal mounting clamp is to be placed. (Insulation on the support wire may be crushed with side cutting or long nosed pliers, as an aid in removing it.)

(4) Dress the 2 wires (of the pair to be connected) across the face of the terminal, in the wire grooves on the upper side of each binding post. The required slack may be worked into this pair by pulling gently on the wires.

(5) Place the terminal mounting clamp on the support wire, on the side of the mounting stud away from the drop wire slot and tighten the clamping nut securely using a B Braid Stripper or a C Socket Wrench. The face of the terminal should be at an angle of about 45° with the horizontal, with the drop wire entrance slot on the low side.

(6) Remove the insulation of the conductors at the binding post locations by crushing with long nose pliers. Loosen the nuts on the binding post using a 216B Tool, and place the conductor under the lower washer, then tighten.

(7) Place drop wire in slot and twist into locked position after placing conductor immediately above the lower nut. If a second drop is to be connected, the thin web in the drop wire slot must be broken down (with long nosed pliers) and the conductor of the second drop connected between the washers under the top nut.

(8) Replace cover. Rotate cover slightly to insure that lip of cover is engaged in groove in terminal faceplate.

The following illustrates a single installation of a 105A Wire Terminal: