

## SPLICING DROP AND BLOCK WIRING

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### 1. GENERAL

**1.01** This section covers methods for splicing drop and block wires, using single tube brass sleeves pressed on with a sleeve presser.

**1.02** This section is reissued to include information on F drop wire and to include splicing information using AMP® drop wire splice.

**1.03** Observe the following general rules when splicing insulated drop and block wires.

- Exercise care to avoid nicking the conductors when removing the insulation.
- Thoroughly clean the skinned conductor ends before inserting into the brass sleeves.
- Splice tracer conductor to tracer conductor and plain conductor to plain conductor.

- When a splice is to be placed in a wire span, exercise care in splicing so as to equalize the tension in the conductors as near as possible.

- Thoroughly tape all splices.

**1.04** For convenience in describing splicing procedures covered in these instructions, the wires to be spliced shall be referred to as pair No. 1 and pair No. 2.

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### 2. DESCRIPTION OF SINGLE TUBE BRASS SLEEVES

**2.01 S brass sleeves:** These sleeves are single brass tubes having bore diameters the same size throughout their length. The centers of the sleeves are indented to ensure insertions of the proper lengths of conductor ends. A color band marking 1/8 inch in width is applied around the sleeve to identify the size.

**2.02 Combination S brass sleeves:** These sleeves are similarly constructed from single brass tubes. There are two different bore diameters in these sleeves, each extending through half the sleeve length. Two color band markings 1/8 inch in width are used to distinguish these sleeves.

**2.03** The available sleeve sizes, associated color band markings, and type of wire for which they are intended in drop and block wiring are indicated in Table A.

TABLE A  
TYPES OF S BRASS SLEEVES

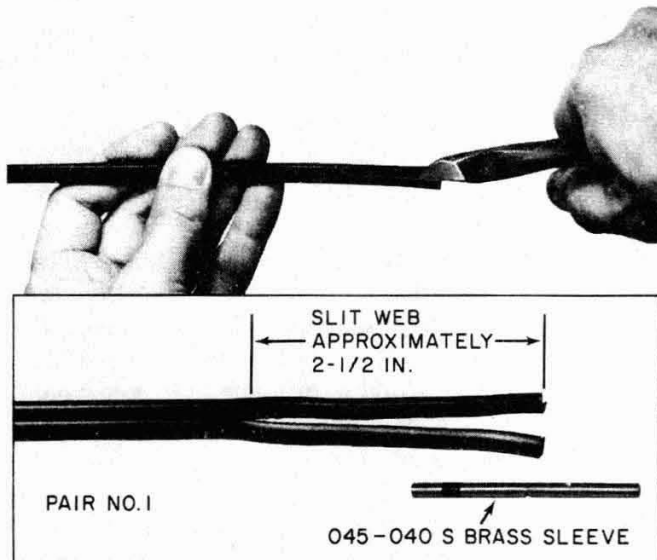
TYPE OF SLEEVE	SIZE	COLOR BAND	LENGTH (INCHES)	TYPE OF WIRE
S Brass	032 — 025	None	1	Block
	045 — 040	Black	1-7/8	Drop
Combination S Brass	045 — 040 × 032	Black-Gray	1	Drop to Block
	045 — 040 × 064	Blue-Black	1-7/8	Drop to Bridle or C Rural Wire

### 3. SPLICING DROP WIRE TO DROP WIRE

**3.01** ♦Splice F drop wire using S brass sleeves as follows:

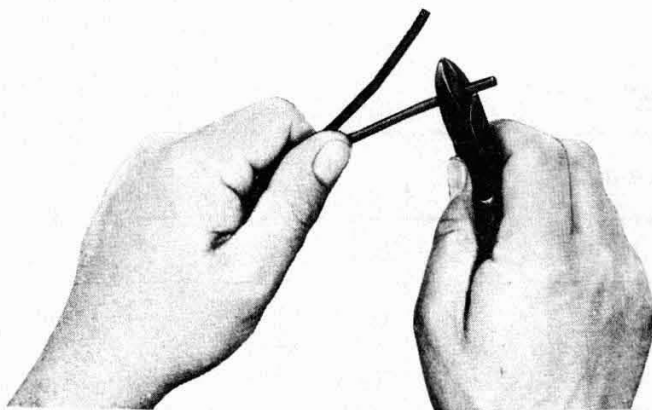
**Note:** C drop wire may be spliced in a similar manner.

- (1) Slide drop wire pair No. 1 halfway into jaws of diagonal pliers and cut insulation web as shown in Fig. 1.



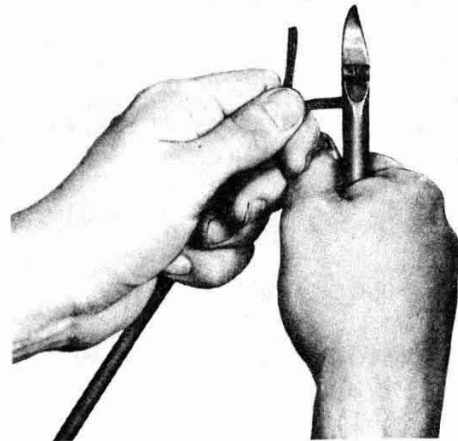
**Fig. 1—Slitting Insulating Web**

- (2) Nick insulation circumferentially 15/16-inch from end (Fig. 2). **Do not nick conductors.**



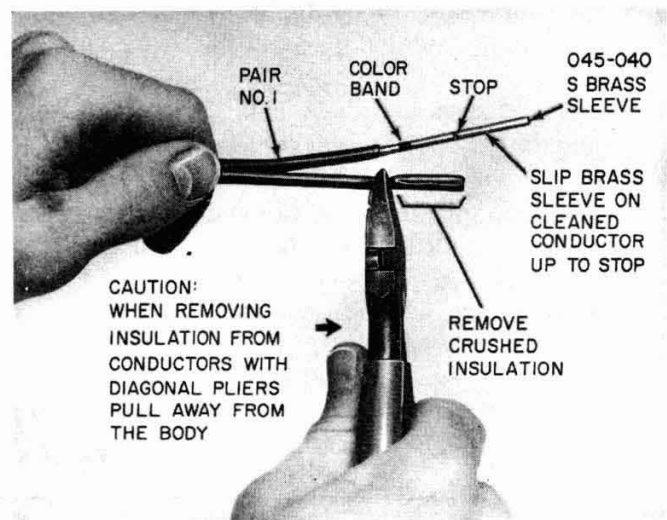
**Fig. 2—Nicking Insulation**

- (3) Crush the 15/16-inch length of insulation between the handles of diagonal pliers (Fig. 3).



**Fig. 3—Crushing Insulation**

- (4) Remove insulation, clean conductors with diagonal pliers, and install brass sleeves (Fig. 4).



**Fig. 4—Removing Insulation and Installing Brass Sleeve (Drop Wire)**

- (5) Treat conductors of pair No. 2 as described for pair No. 1 in Steps (1) through (3).
- (6) Remove insulation from pair No. 2 and matching tracer conductors, insert conductors

of pair No. 2 into sleeves of pair No. 1. Crimp lightly with sleeve presser to hold in place (Fig. 5).

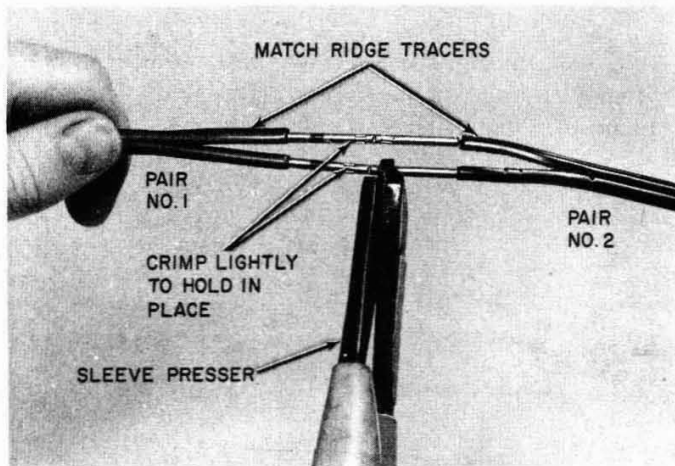


Fig. 5—Installing Pair No. 2

- (7) Crimp each sleeve six times (approximately 1/16 inch intervals) and apply DR tape as shown in Fig. 6.

**Note:** Where drop wire splice will fall in a drop wire span, the spliced conductors should be of equal length to equalize tension between the conductors. Pull and straighten the spliced conductors. If one conductor is shorter than the other, lengthen the shorter one by pressing one or more of the unpressed portions of the sleeve until equalization is obtained.

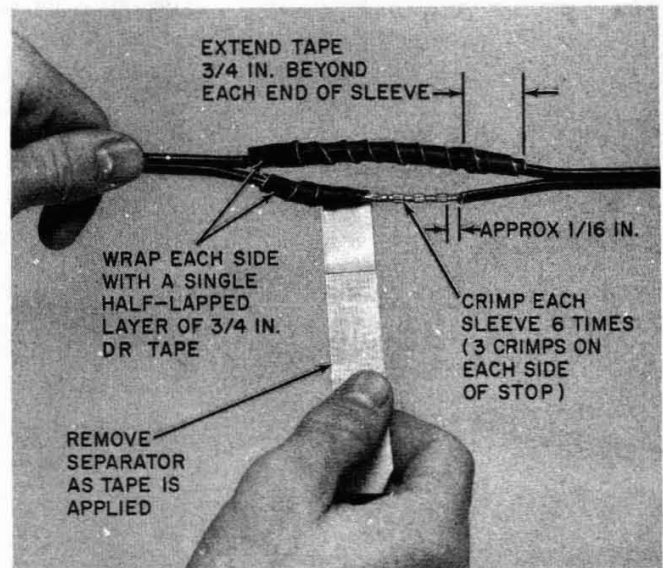


Fig. 6—Applying DR Tape After Crimping Sleeves

- (8) Wrap entire splice with vinyl tape starting at the center of the splice, wrapping to one end (Fig. 7). Reverse direction, wrap to the other end; reverse direction again and end wrapping at the center.

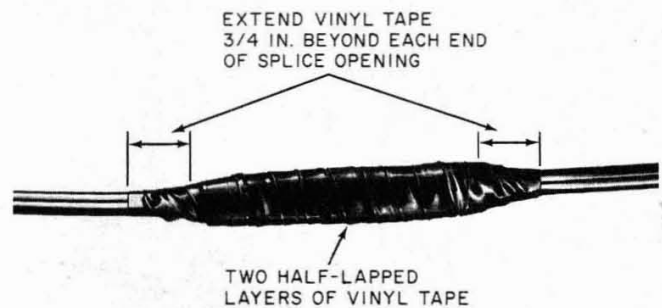
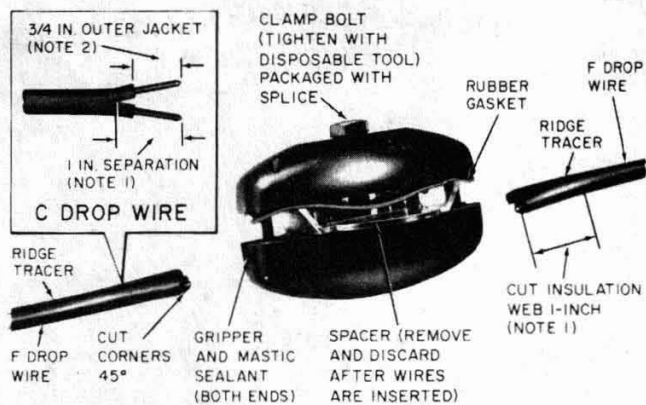


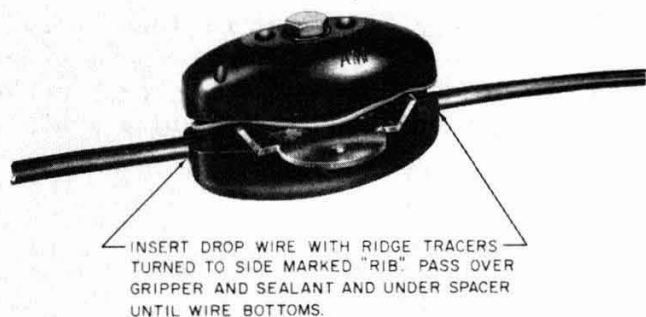
Fig. 7—Completed Splice (Drop to Drop)

**3.02** ♦Splice F drop wire using AMP® drop wire splice as shown in Fig. 8.♦



- NOTES:  
 1. GAGE MARKS, 1-INCH APART, ARE FOUND ON SIDE OF SPLICE HOUSING MARKED "RIB".  
 2. REMOVE APPROX 3/4 IN. OF OUTER JACKET ON C DROP WIRE.

**(1) DROP WIRE PREPARATION**



**(2) DROP WIRE INSERTION**



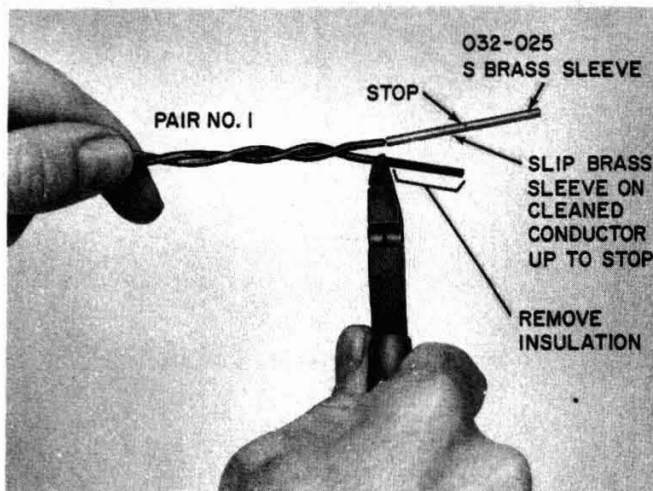
**(3) COMPLETED SPLICE**

**Fig. 8—Splicing Drop Wire with Amp Drop Wire Splice**

**4. SPlicing BLOCK WIRE TO BLOCK WIRE**

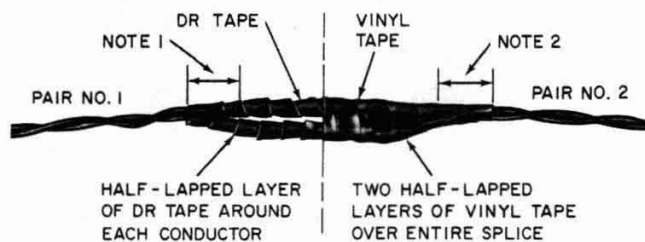
**4.01** ♦Splice block wire to block wire as follows:

- (1) Cut ends of block wire making sure conductors are even. Nick insulation 1/2 inch from end exercising care not to nick conductors. Remove insulation, clean conductors with diagonal pliers and install brass sleeves (Fig. 9).



**Fig. 9—Removing Insulation and Installing Brass Sleeve (Block Wirs)**

- (2) Crimp sleeves as in 3.01 (7) and apply DR tape and vinyl tape as described in 3.01 (8) and Fig. 10.♦



- NOTES:  
 1. EXTEND DR TAPE 3/4-INCH BEYOND EACH END OF SLEEVE  
 2. EXTEND VINYL TAPE 3/4-INCH BEYOND ENDS OF DR TAPE

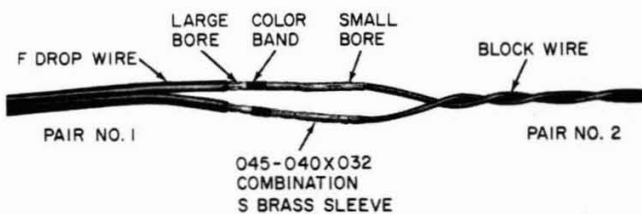
**Fig. 10—DR Tape and Vinyl Tape Applied**

## 5. SPLICING BLOCK WIRE TO DROP WIRE

**Caution:** *Splice block wire only to unexposed drop wire or to drop wire on the station side of a fuseless protector.*

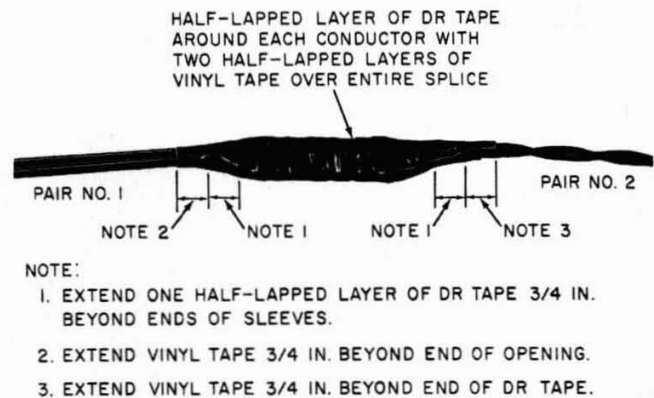
### 5.01 Splice block wire to drop wire as follows:

- (1) Prepare the ends of drop wire (pair No. 1) and the ends of block wire (pair No. 2) as described in Parts 3 and 4.
- (2) Match tracer conductors and insert skinned ends of pairs 1 and 2 into the proper bores of 045-040  $\times$  032 combination S brass sleeves. Crimp the sleeves slightly with diagonal pliers to restrain the conductors from slipping out.
- (3) Starting 1/16 inch from one end of a sleeve, press each sleeve four times with the sleeve presser. See Fig. 11.



**Fig. 11—Sleeves Installed (Drop to Block)**

- (4) Wrap each joint with a single half-lapped layer of 3/4-inch DR tape.
- (5) Wrap the entire splice with two half-lapped layers of D or F vinyl tape. Start at the center of the splice, wrap to 3/4 inch beyond the end of the DR tape, then reverse the direction of wrap to 3/4 inch beyond the end of the opening, reverse direction again and end the wrapping at the center of the splice. See Fig. 12.



**Fig. 12—Completed Splice (Drop to Block)**