

# BURIED WIRE

## SPLICING 16-GAUGE COPPER

### CONDUCTORS TO D UNDERGROUND WIRE

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#### 1. GENERAL

**1.01** This section describes the method, materials, and tools used to splice B or C Underground Wire or the 154A Coil Case to D Underground Wire. It includes the restoration of the armor at splices which, to be fully effective as lightning protection, must be made electrically continuous across the splice.

**1.02** In wet weather, splicing should be done under a shelter, such as a tent or tarpaulin, to keep the surfaces of the wires dry. Satisfactory splices cannot be made otherwise.

**1.03** Splicing should follow as soon as practical after placing, but not before the wire has been tested and reported free of faults. Locations will be found marked by stakes placed upright to one side of the wire and indicating the distance in feet to the wire ends. On completion of the work, the wire should be buried at the depth of the original plowing.

#### 2. PREPARING WIRE ENDS

**2.01** The conductors being spliced should be prepared as shown in the following sections except that one inch of insulation shall be removed from each conductor (see Fig. 1) rather than the one-half inch shown in these sections.

TYPE WIRE	SECTION	PART
D Underground Wire	629-760-206	2
C Underground Wire	629-760-205	2
B Underground Wire	629-760-200	2
154A Coil Case (B Underground Wire)	629-760-200	2

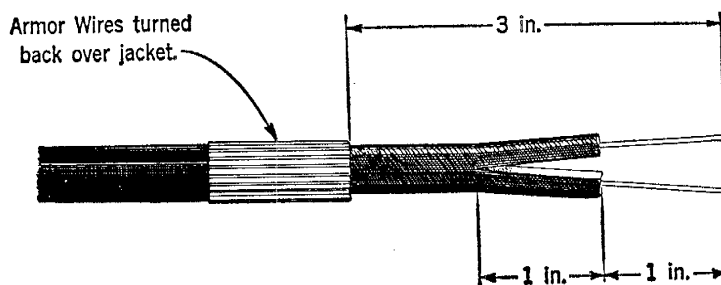


Fig. 1

**2.02** Before joining the conductors shape a 10-inch length of Iron Shielding Braid into a tube and slip it over one of the wires. Place the braid with all types of wires even though C Underground Wire has no armor wire. Braid gives mechanical protection to splice.

### 3. SPLICING CONDUCTORS

**3.01** Place the 064 end of an  $064 \times 045 - 040$  Combination S Brass Sleeve on the 16-gauge copper conductors of B or C Underground Wire or the 154A Coil Case as shown in Fig. 2.

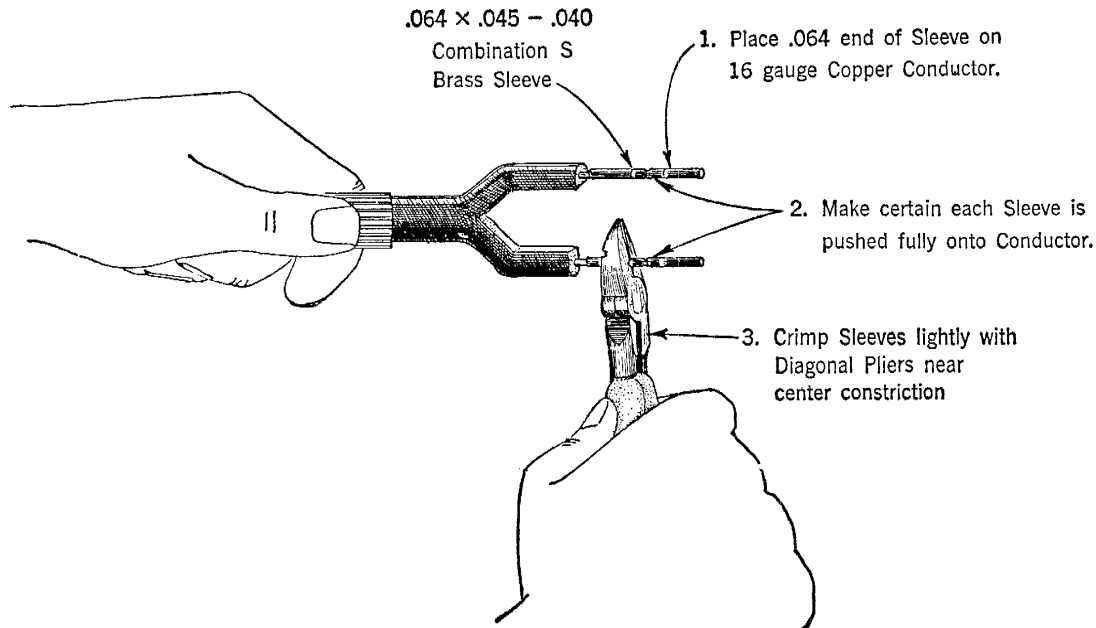


Fig. 2

**3.02** Insert the 19-gauge conductors of D Underground Wire into the 045 - 040 end of

the  $064 \times 045 - 040$  Combination S Brass Sleeve as shown in Fig. 3.

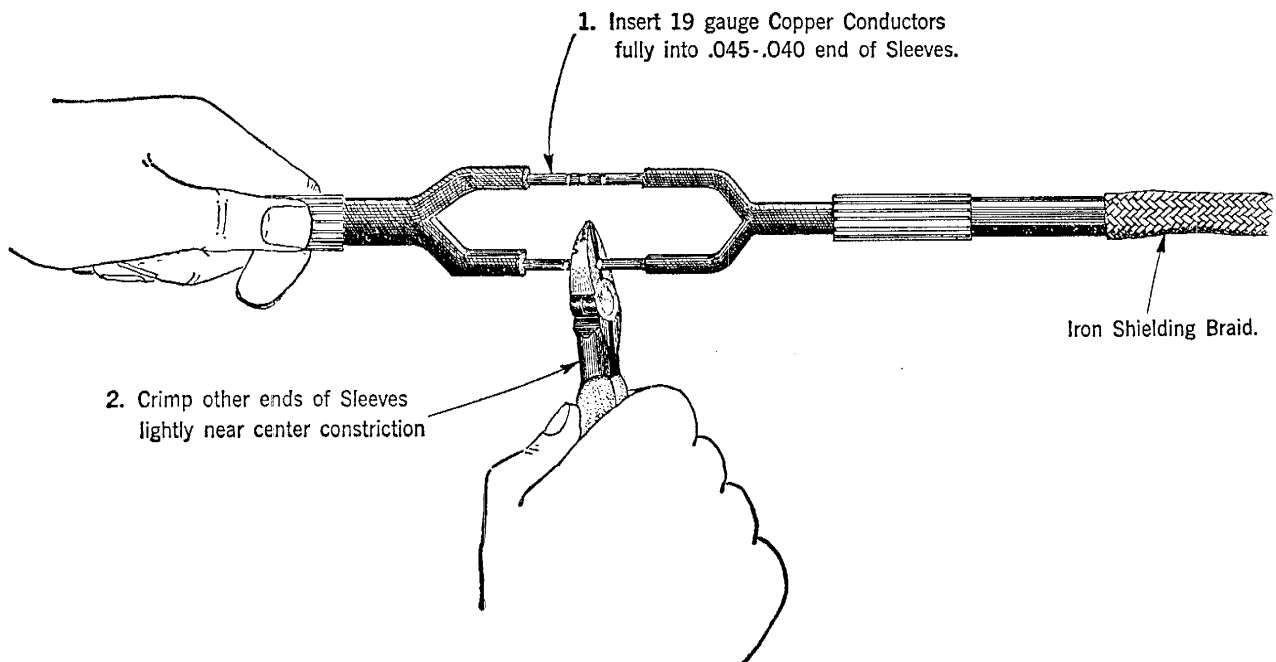
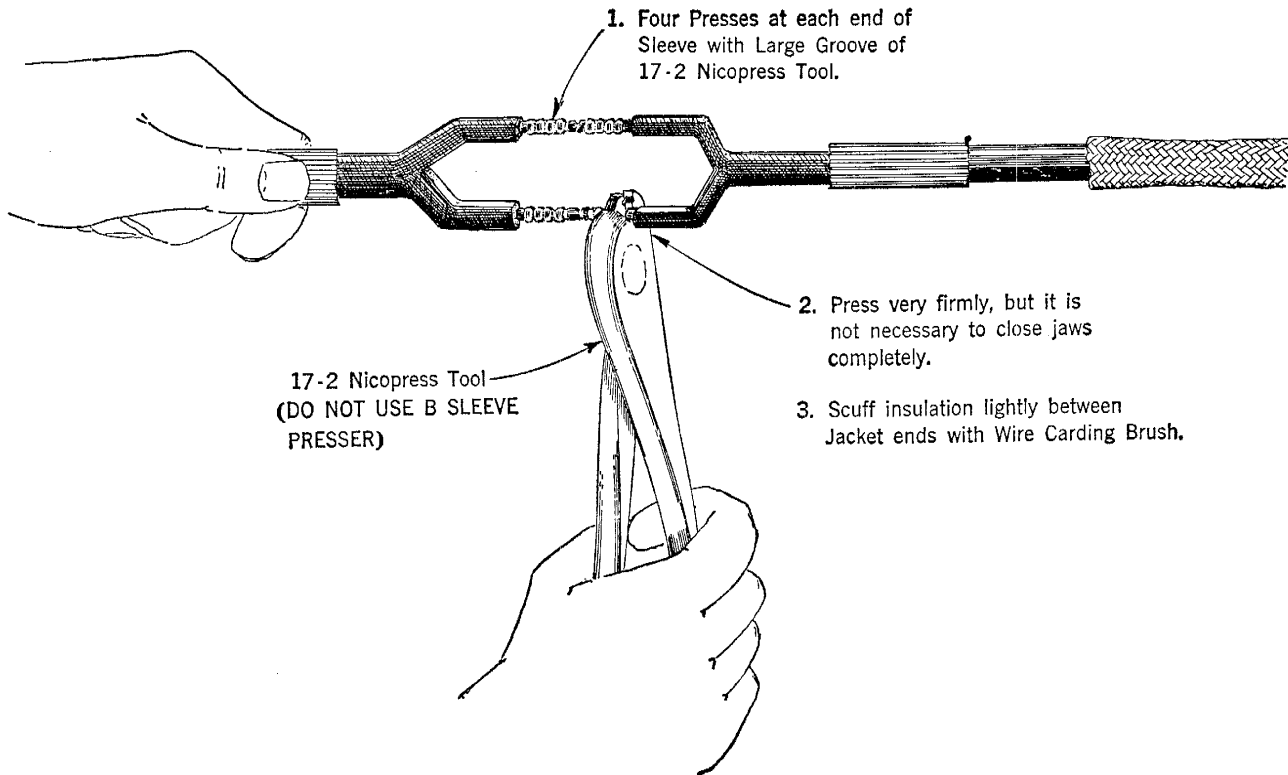


Fig. 3

**3.03** Complete the splice by pressing the sleeves as shown in Fig. 4.



**Fig. 4**

#### **4. INSULATING CONDUCTORS**

**4.01** Insulate the conductors just spliced as shown for D Underground Wire in Section 629-760-206, Part 4. Be sure to add the length of D Underground Wire to act as a splint to stiffen the splice as shown in Paragraph 4.02 of Section 629-760-206.

#### **5. RESTORING ARMOR**

**5.01** The length of Iron Shielding Braid placed over the insulated splice is intended to

serve a double purpose: (1) the braid makes the armor electrically continuous over the splice, and (2) the completed covering provides mechanical protection against cuts, punctures, or insect damage comparable with that of the wire itself.

**5.02** Restore the armor and replace the jacket with tape wrappings as shown for D Underground Wire in Section 629-760-206, Part 5. When splicing C Underground Wire, which has no armor wire, pull the braid over jacket and fasten with 049 Construction Wire.