BURIED WIRE

D AND E BURIED WIRE TERMINALS

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1. GENERAL

1.01 This section covers the description and installation of the D and E buried wire terminals. These terminals provide facilities for terminating, splicing, and loading buried wire and a junction point for rural, aerial, and buried plant.

1.02 This section is reissued to cover design changes in the D and E buried wire terminals. Since this is a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 Procedures for terminating buried wire at junctions with aerial plant and buried plant are covered in Sections 629-720-200 and 629-720-205, respectively.

1.04 Section 462-260-202 covers description of buried wires.

1.05 The D and E buried wire terminals should be located where they are protected from damage by motor vehicles and other machinery. They should also be located at least one foot from metallic fences or similar lightning attractors.

2. DESCRIPTION

2.01 The D buried wire terminal (Fig. 1) is a free standing terminal consisting of a cap-cover assembly, a 6 foot long back with a bottom cover, a two pair connecting block, an AT-7796X connector, and a split-bolt clamp. It can be mounted either free standing or on the base of a pole.

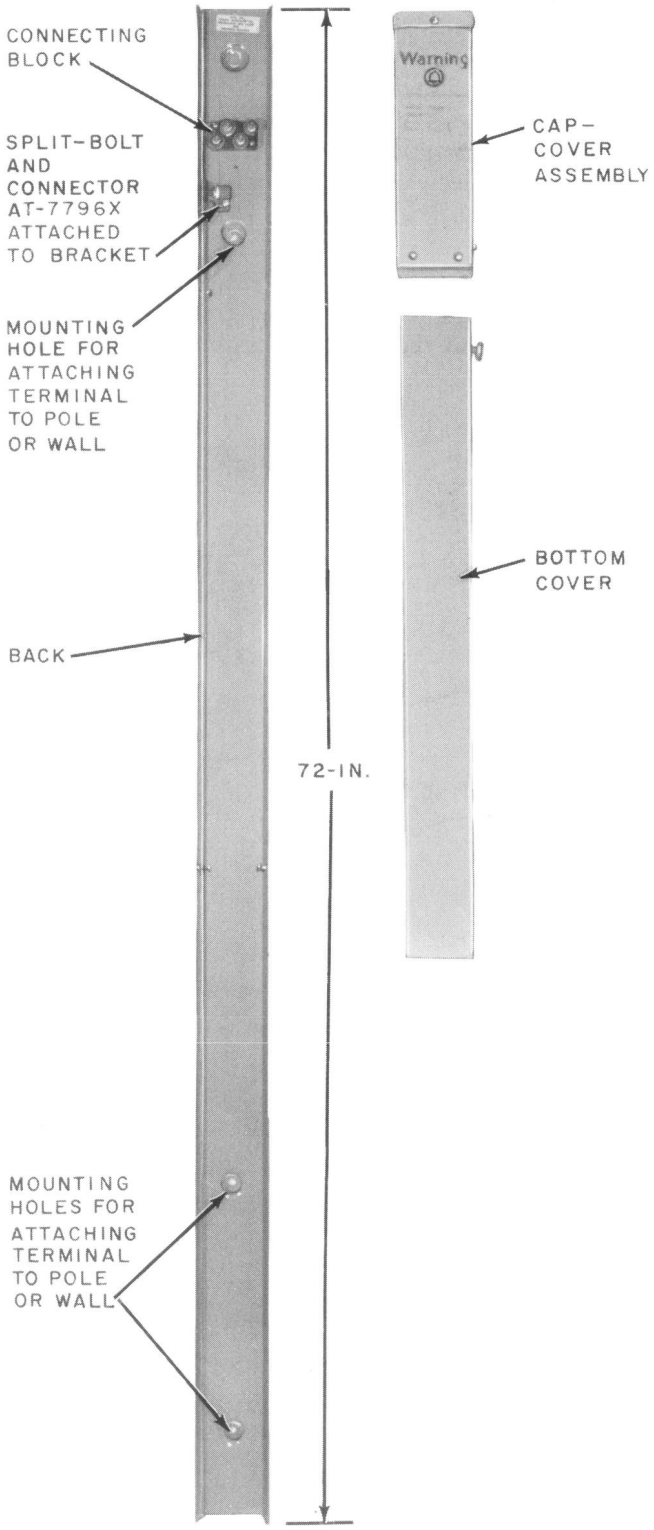

Fig. 1—D Wire Terminal

2.02 The E buried wire terminal (Fig. 2) is for pole or wall mounting. It consists of a 13-inch back, cap-cover assembly, two pair connecting block, an AT-7796X connector, and a split-bolt clamp.

2.03 The connecting block furnished with both terminals provides air gap lightning protection. The large washers on each binding post are spaced to provide an air gap between themselves and the heads of the screw mounting the connecting block to the back.

2.04 F warning decal is placed on the exterior surface of the cap-cover assembly.

2.05 Parts associated with the wire terminals that must be ordered separately, as required, are as follows.

(a) ***Connecting Block*** (when more than one is required)—The block is ordered as Block, Connecting for D or E buried wire terminal. Tapped holes are provided in the backplate for mounting connecting blocks.

(b) ***179-type Coil Case***—For loading buried wire. Tapped holes in the backplate are provided for mounting two load coils.

(c) ***G Warning Decal***—10-inches by 1-inch strip of yellow plastic used in areas where a high degree of visibility is required.

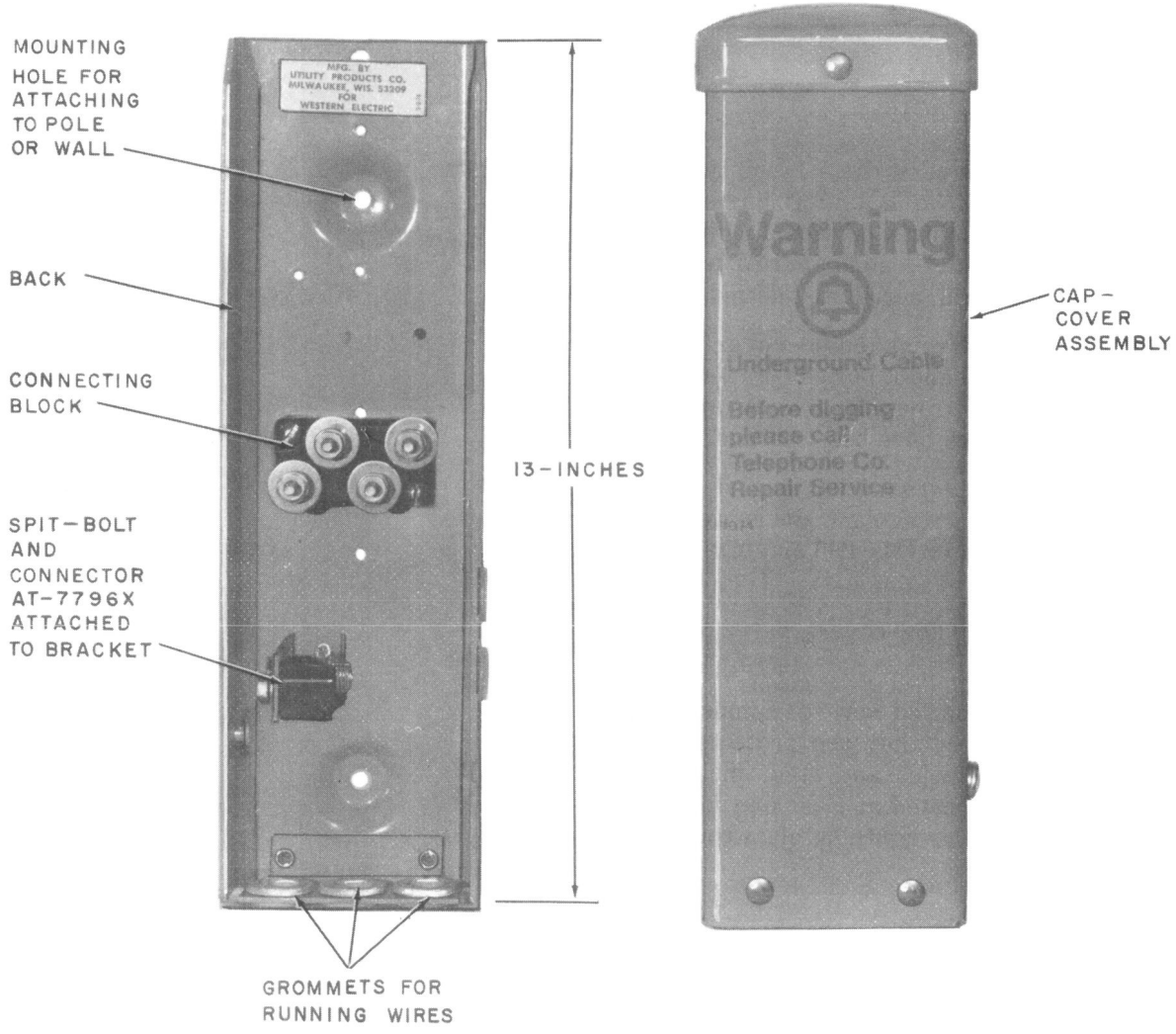

Fig. 2—E Wire Terminal

3. BURIED WIRE PLACING

3.01 When possible the plowing or trenching of buried wire should be completed before terminal is placed. The length of buried wire ends required at terminal location should extend a minimum of 40 inches above final grade (Fig. 3).

4. INSTALLATION

D Buried Wire Terminal

4.01 Disassemble and place D buried wire terminal at ***free standing*** location as follows.

(a) Loosen the bolts on the side of the terminal with a 216-type tool, then pull the cap-cover assembly away from the post and lift cover up and out.

(b) Lift up the bottom cover and remove from post.

(c) Using a post driver, if available, drive the closure post into the ground until a maximum of 36 inches remains above the estimated final grade.

Note: Determine the path of the buried wires, then carefully drive the post to assure wires are not damaged.

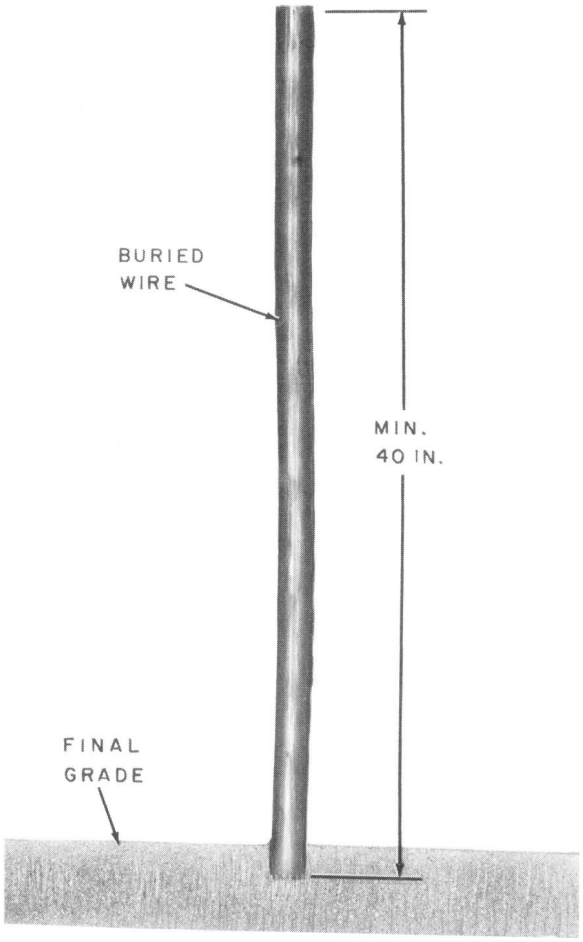

Fig. 3—Wire Ends Required

(d) Place the wires in trough and install bottom cover (Fig. 4). ***The length of buried wire ends required at each terminal location should extend a minimum of 40 inches above final grade.***

Note: When building foundation is close to ground line the E buried wire terminal should be used in lieu of D buried wire terminal.

4.02 The D buried wire terminal can be used in lieu of E buried wire terminal for pole or wall mounting at locations where mechanical protection is required for the buried wires between ground line and base of terminal. This arrangement precludes the necessity of installing wire guards and clamps.

4.03 Disassemble and install D buried wire terminal on pole or wall as follows.

(a) Remove the cap-cover assembly and bottom cover as outlined in 4.01(a) and (b).

(b) Remove knockouts as required from the back of terminal for mounting.

(c) Dig a trench from bottom of pole or foot of building to buried wire.

(d) Attach post to pole using two 1/4 inch by 2 inch drive screws or to masonry wall using 5/16-inch drive or screw anchors.

(e) Place buried wire in trough, then install and secure bottom cover.

E Buried Wire Terminal

4.04 Disassemble and place the E buried wire terminal on pole or wall as follows.

(a) Loosen the bolt on the side of the terminal with 216-type tool, then pull the cap-cover assembly away from the back and lift cover up and out.

4.05 The length of the buried wire ends required at each terminal location should be sufficient to extend 1 inch above the top of the terminal.

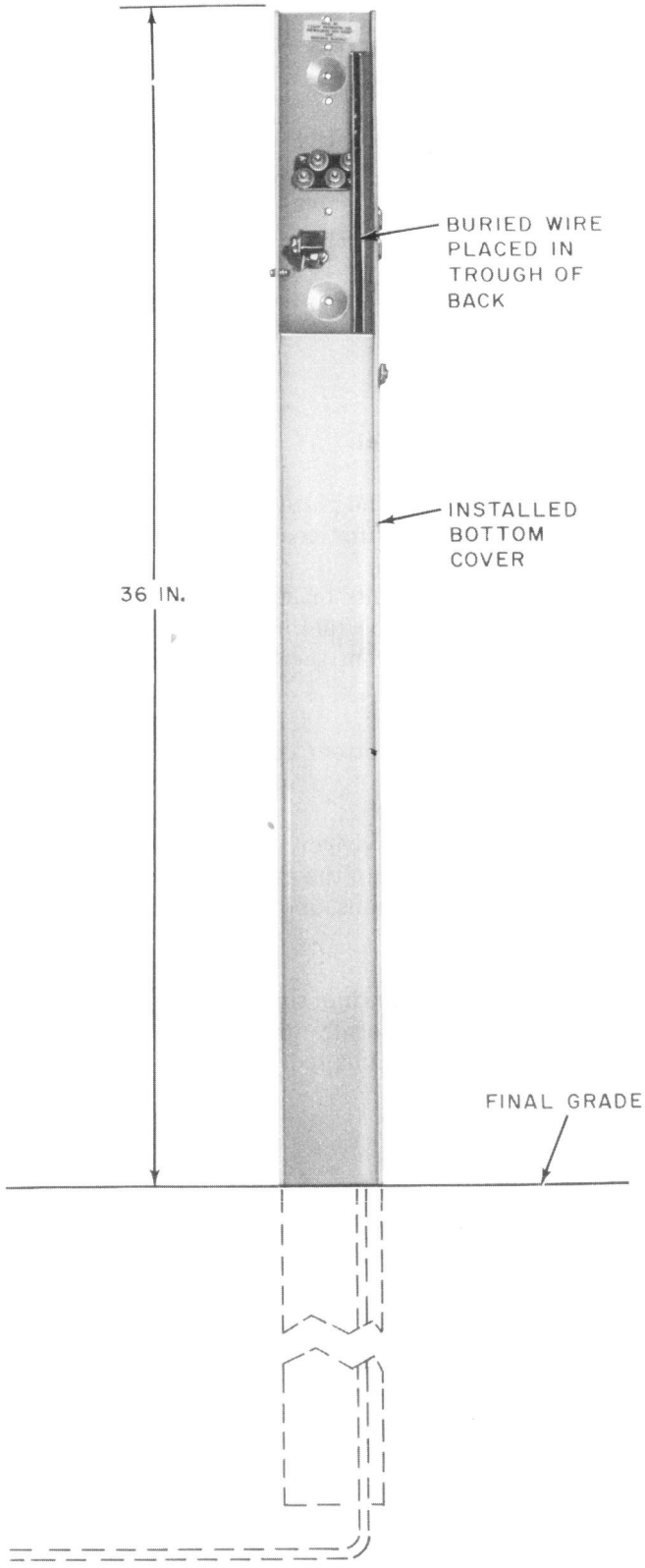

Fig. 4—Installed D Wire Terminal

5. TERMINATING

Buried Wire to Buried Wire

5.01 Pull the slack from the E buried wire, then position the E buried wires alongside the split-bolt and mark the outer jacket approximately 1/4-inch below split-bolt.

5.02 Prepare the E buried wire as shown in Fig. 5.

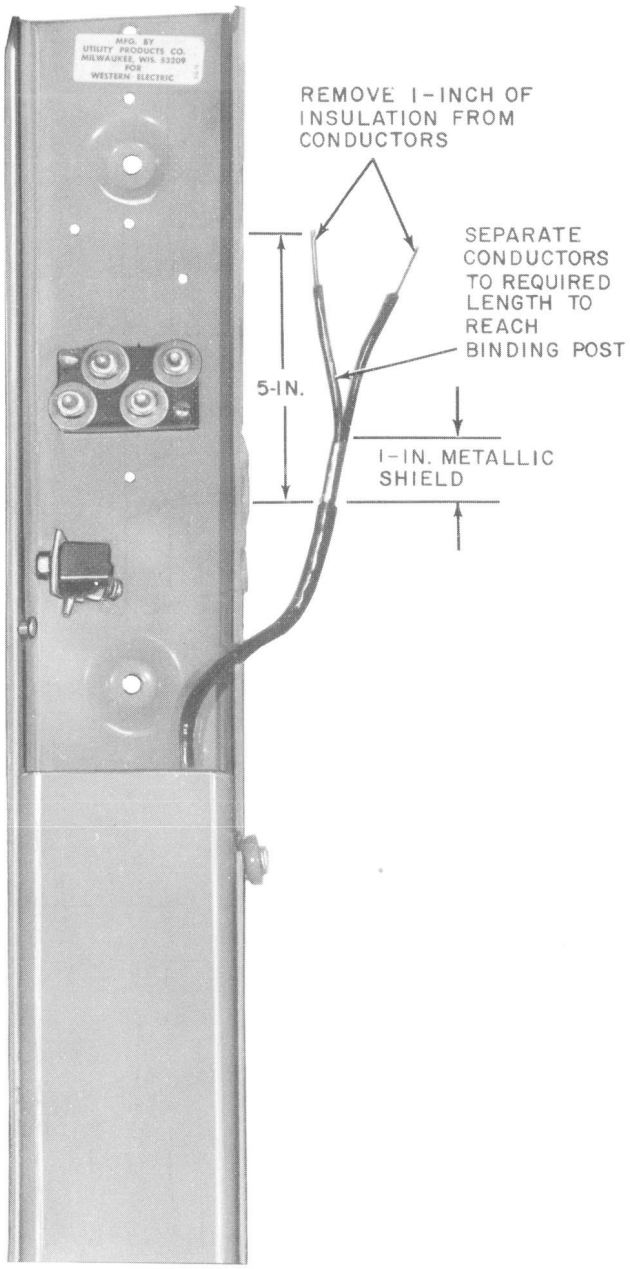

Fig. 5—Prepared Buried Wire

5.03 Install the buried wire in the split-bolt connector with the exposed metallic shield portion contacting the split-bolt as shown in Fig. 6. Tighten nut securely, then terminate the conductor on the binding post of the connecting block as shown in Fig. 6. The tip conductors are all terminated on the tip binding post and all the ring conductors are terminated on the ring binding post.

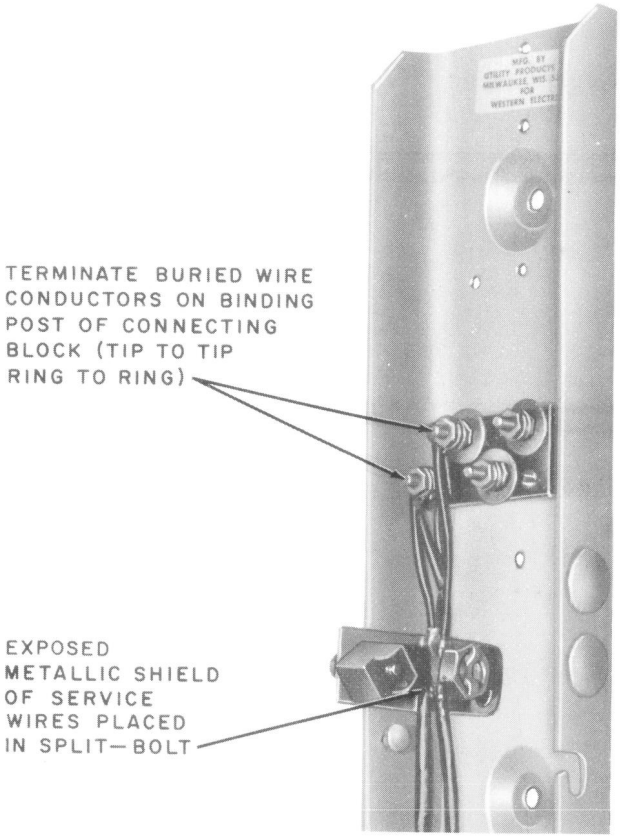

Fig. 6—Terminated Buried Wire

Buried Wire to Buried Service Wire

5.04 Prepare the buried service wire and E buried wire as shown in Fig. 7.

5.05 Install the buried wire in the split-bolt connector with the exposed metallic shield portion contacting the split-bolt as shown in Fig. 8. Tighten nut securely.

5.06 Place the service wire in the AT-7796X connector with the exposed metallic shield contacting the connector.

5.07 Terminate the tip and ring conductors on the respective binding post of the connecting block. Terminate the spare pair of the service wire on the spare binding post (Fig. 8).

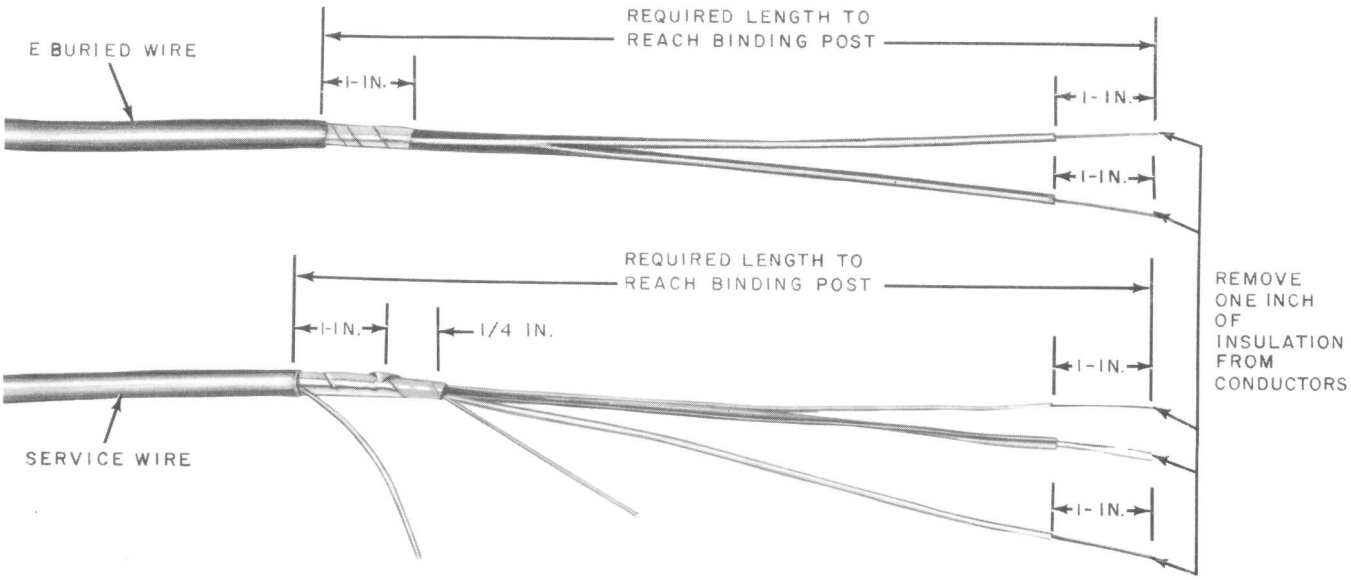

Fig. 7—Prepared Service and Buried Wires

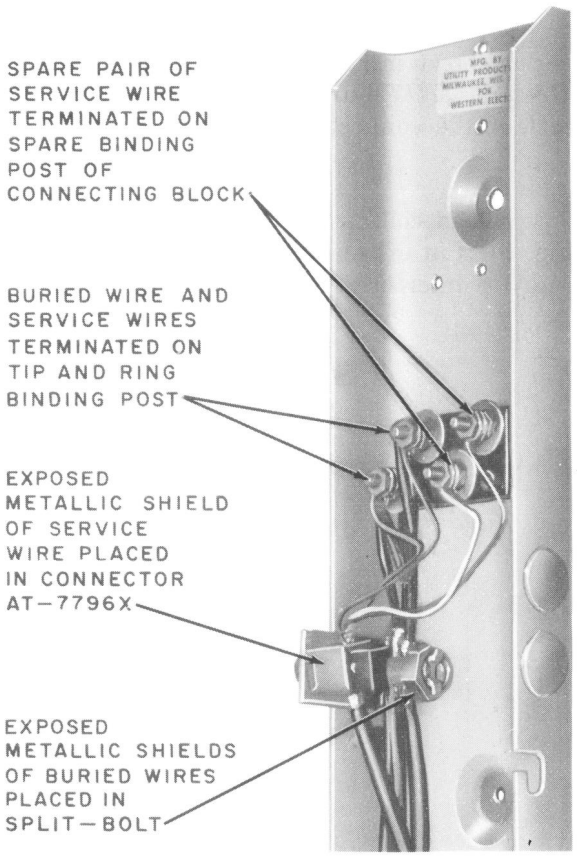

Fig. 8—Terminated Buried Wire and Buried Service Wire

6. LOADING

6.01 Prepare the buried wires as shown in Fig. 7. Then terminate the ***IN*** and ***OUT*** buried wires on separate binding post of the connecting block (Fig. 9).

6.02 Install and secure 179-type load coil on the back of the terminal (Fig. 9). Cut off plastic wire support as required so not to interfere with cover placing.

6.03 Strip the insulation from the leads of the coil case then terminate the leads from the coil case to the ***IN*** and ***OUT*** binding post of the connecting block (Fig. 9).

7. ENCLOSING

7.01 Install and secure the cover-cap assembly. Where high visibility is required, place a G warning decal just above the F warning decal. Figures 10 and 11 illustrate completed installations.

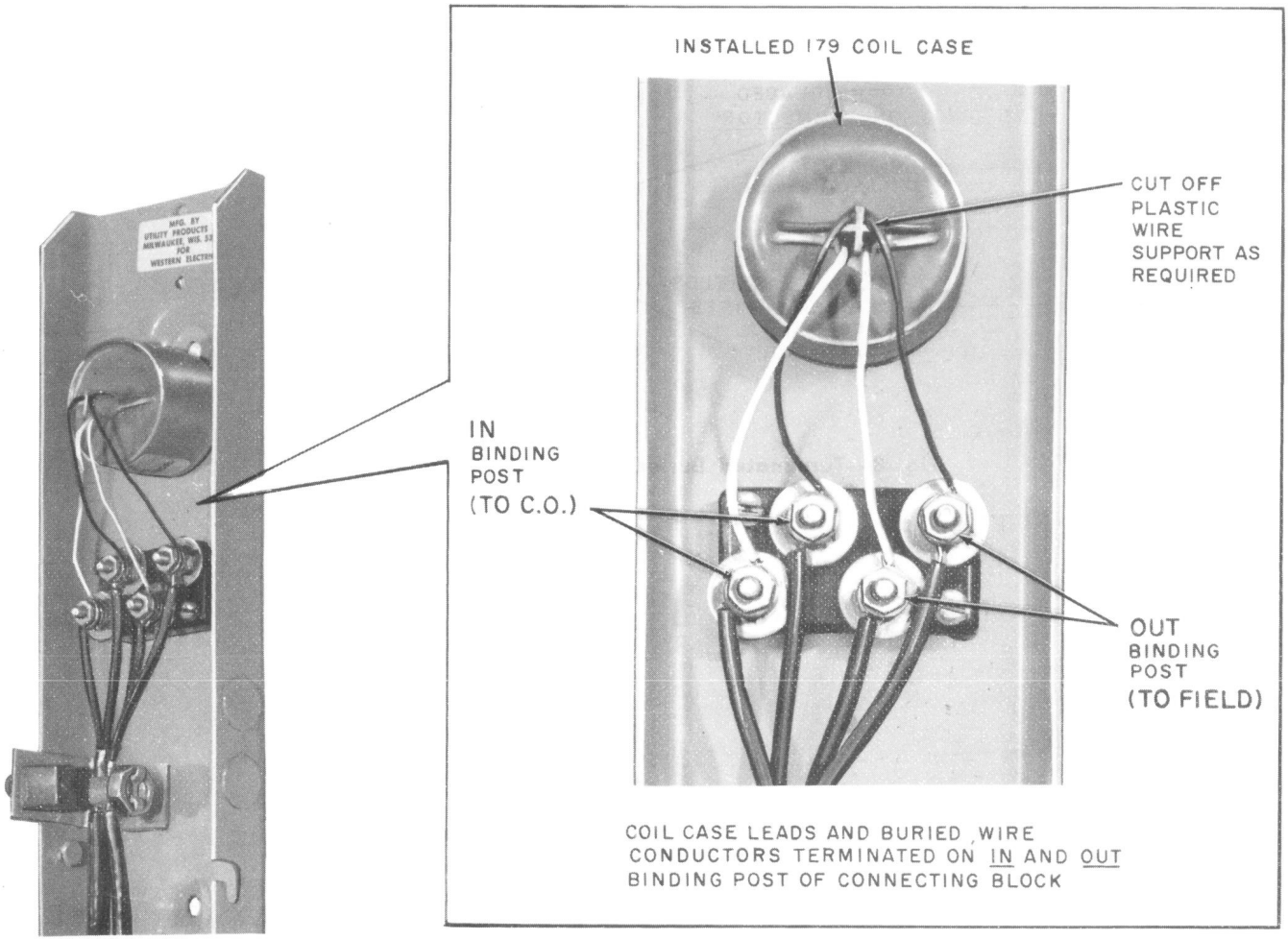

Fig. 9—Loaded Buried Wire

Fig. 10—Completed Installation—D Wire Terminal

Fig. 11—Completed Installation—E Wire Terminal