

C RURAL WIRE GROUNDING NON-WORKING CIRCUITS

1. GENERAL

- 1.01 This section describes methods of grounding non-working C Rural Wire.
- 1.02 Grounding non-working wire will reduce the effects of electrical induction and of foreign voltages resulting from accidental contact with power conductors.
- 1.03 A non-working C Rural Wire circuit is one that is not connected to other telephone plant and includes:
- (a) Wire that is idle because of service disconnects.
 - (b) Newly constructed C Rural Wire not immediately connected for service.
- 1.04 Section 624-700-200, Part 2, provides grounding and general safety precautions to be used when placing C Rural Wire.

2. PRECAUTIONS

- 2.01 If it is known or suspected that a C Rural Wire is in contact with power, do not perform any work on the line until the contact is cleared by the power company.
- 2.02 If a non-working ungrounded C Rural Wire is encountered, test the wire with the B Voltage Tester as instructed in Section 620-105-010. If the indicator of the B Voltage Tester glows, make a visual inspection from the ground of the entire length of the non-working wire and report all hazardous conditions to your supervisor who will immediately contact the power company.
- 2.03 If the indicator of the B Voltage Tester does not glow, make the ground connection as outlined in Part 3.
- 2.04 Insulating gloves must be worn when removing ground connections on C Rural

Wire prior to placing it in service. Test the circuit as described in 2.02 after the ground connection is removed.

3. GROUNDING NON-WORKING C RURAL WIRE

- 3.01 Wire fed from aerial cable shall be grounded as follows:
- (a) Remove approximately 4 inches of the insulation from a single conductor No. 12 Ground Wire. Terminate the ground wire on both binding posts of the 107A2 or 101B2 Wire Terminal.
 - (b) Strip the insulation from the cable end of the No. 12 Ground Wire, and connect it to the cable messenger with a cable lashing wire clamp. (See Figure 1.)

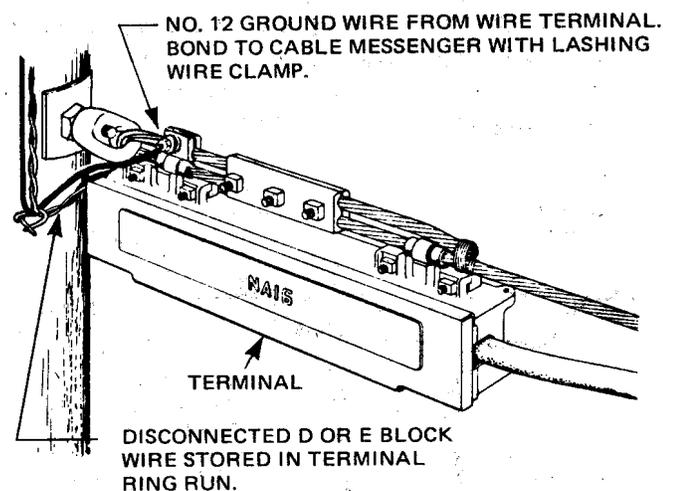


Figure 1 — Method of Grounding C Rural Wire at Terminal Pole

- 3.02 Non-working C Rural Wire fed by multiple line wire shall be grounded to the multiple line wire support wire by one of the following methods:

(a) Guyed dead-end pole. Connect one end of a No. 12 Ground Wire to the binding posts of the 107A2 or 101B2 Wire Terminal, and the other to the down guy with a cable lashing clamp. (See Figure 2.)

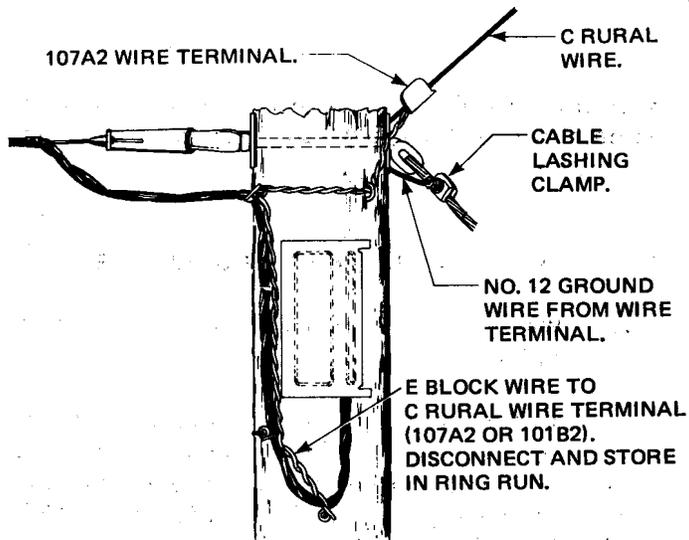


Figure 2 - Grounding Non-working C Rural Wire at Multiple Line Wire Dead-end

(b) Intermediate Pole. Connect one end of a No. 12 Ground Wire to the binding posts of the 107A2 or 101B2 Wire Terminal. Remove insulation from the other end, and clamp the wire securely in the bottom groove of the one-bolt clamp as shown in Figure 3.

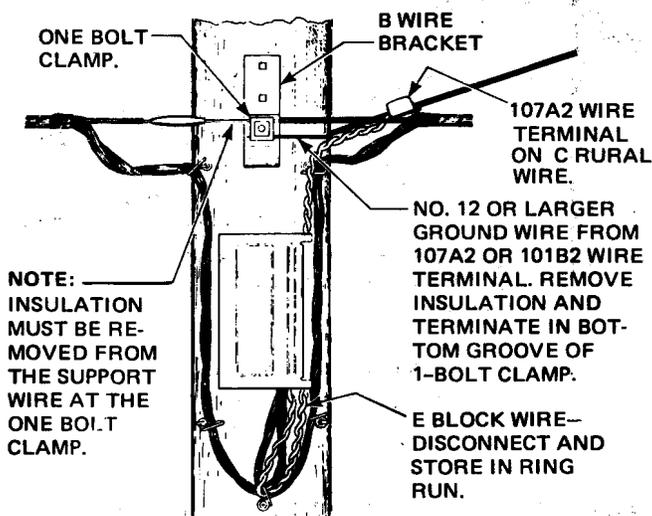


Figure 3 - Grounding Non-working C Rural Wire at Multiple Line Wire Intermediate Pole

3.03 Non-working C Rural Wire fed by an open wire circuit, when possible, shall be left connected to the open wire which shall be grounded at the cable terminal to an effectively grounded aerial cable messenger.

3.04 In cases where the C Rural Wire must be disconnected from the open wire, it shall be grounded by one of the following methods.

(a) Higher voltage joint use poles with 118-B Protectors - Disconnect the bridle wire from the open wire and place a tag showing the pole number of the ground location. The ground location should be the 118-B Protector location nearest the junction pole. Remove approximately 4 inches of insulation from a length of No. 12 or larger ground wire. Terminate the ground wire on both binding posts of the 107A2 Wire Terminal. Connect the other end to the vertical grounding conductor with an A.T. - 7796 x 6S, Fig. 1 Connector. (See Figure 4.)

NOTE: DO NOT DISCONNECT 118-B PROTECTOR LEADS FROM C RURAL WIRE OR VERTICAL GROUNDING CONDUCTOR.

(b) On wholly owned poles - Install a Copperweld driven ground rod and No. 6 Ground Wire as shown in Sections 638-420-941PT and 638-420-942PT. Place a No. 12 or larger ground wire from the 107A2 Wire Terminal to the vertical grounding conductor as detailed in 3.04 (a).

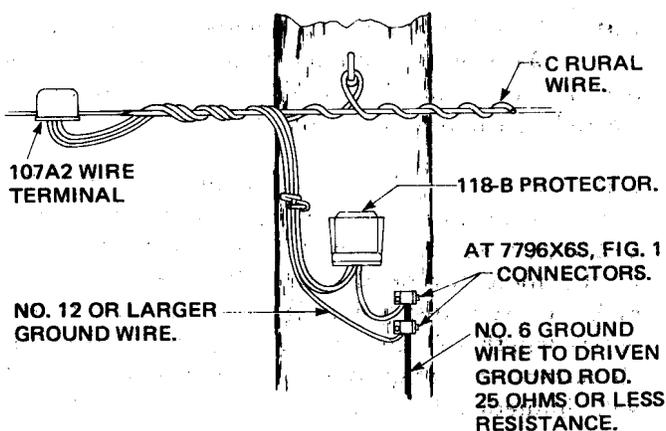


Figure 4 - Grounding Non-working C Rural Wire at 118-B Protector Pole