

GARDEN APARTMENT PROTECTED TERMINALS
DESCRIPTION AND USE

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1. GENERAL

- 1.01 This section covers the method of constructing distribution terminals housed in the MC-10/48 cable closure.
- 1.02 This section is reissued to make corrections indicated by arrows (►) in the margin.
- 1.03 The reason for previous reissues was advancement in hardware technology and to insure adequate station protection. This hardware supersedes MC 10/48 modified equipped garden apartment terminal which is no longer standard in Southwestern Bell. Previous sections were issued to:

- (a) Eliminate the use of MC-10/48 modified garden apartment terminal with the lift off cover and quick connect 66 type Blocks.
- (b) Introduce the new 199A1A-25 Protector that utilizes binding post terminals and a filled stub for buried encapsulated splicing.

(c) Illustrate the SWBT MC-10/48-SW25 and the MC-10/48-SW50 garden apartment protected terminal.

1.04 The MC-10/48 cable closure is designed to provide a station protected outdoor termination facility for buried distribution cable and station wiring.

1.05 The method of running cross-connecting wire is outlined in Part 8.

2. DESCRIPTION

2.01 The MC-10/48 cable closure (Fig. 1) is a wall mounted closure 48 inches high, 10 inches wide, and 4 inches deep painted grey-green. The closure is divided into two chambers to separate cable splicing and station wiring operations. The enclosed lower chamber is provided with brackets for securing, bonding, and splicing cable. The size of cable loop or cable splice that the lower chamber will accommodate is listed in Table A. The upper chamber which has a hinged door is designed to house a 199-type protector. The closure has knockouts to permit the entrance of the prewiring from the building. A grommet is provided to protect wiring. A standoff mounting bracket is provided for mounting the closure against an uneven surface and to facilitate entering of prewiring through a rear knockout.

2.02 The MC-10/48-SW25 is illustrated in Fig. 2.

2.03 The MC-10/48-SW50 is illustrated in Fig. 3.

FIGURE 1

MC-10/48 Cable Closure

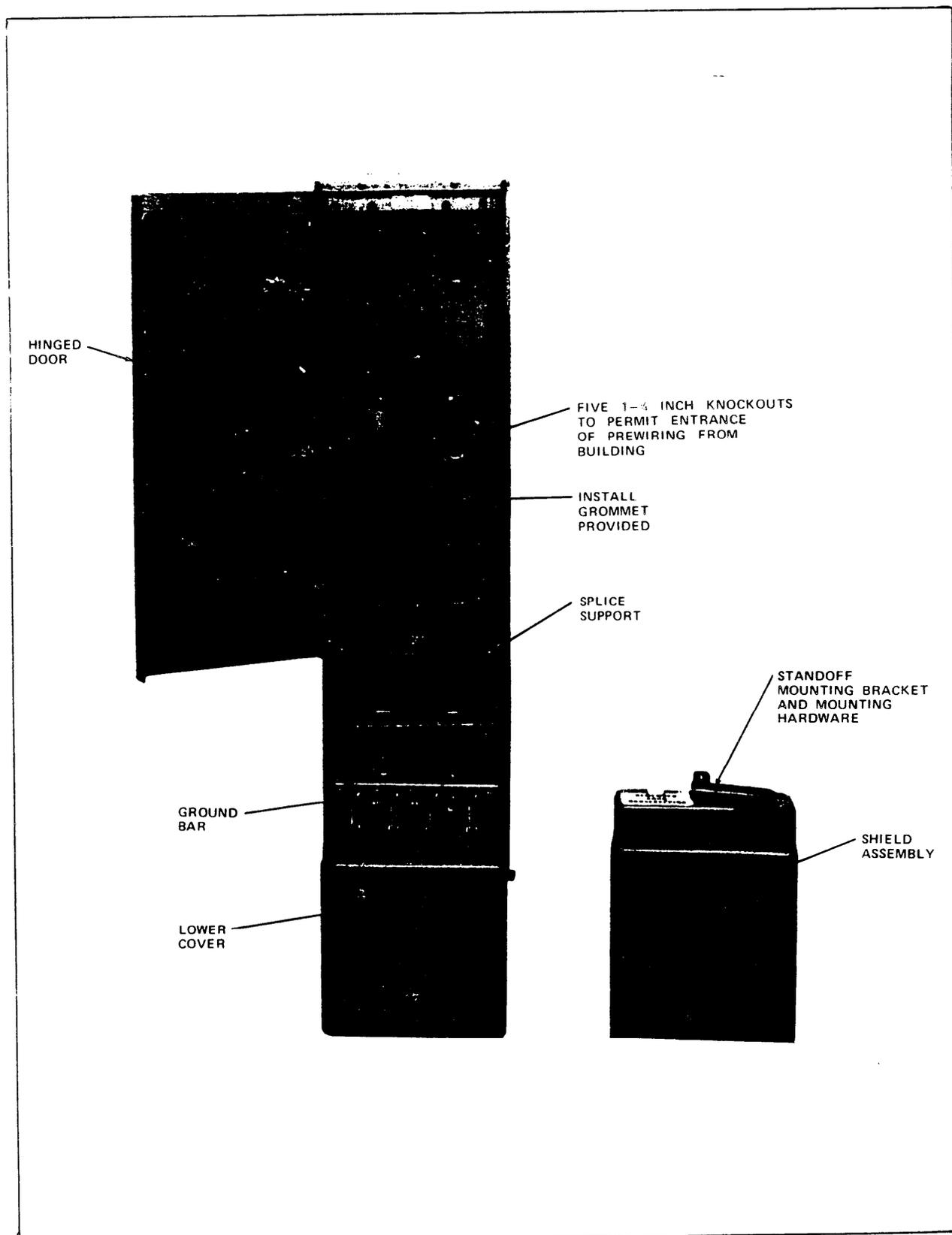


TABLE A
CAPACITY OF MC-10/48 CABLE CLOSURE

STRAIGHT SPLICE	BRIDGE SPLICE	CABLE LOOP
200 Pair	200 Pair Straight and 100 Pair Bridge	200 Pair

- NOTE 1: It is recommended to limit any splicing to 100 Pair Loop, Straight Splice or Bridge Splice. Bridging on larger cables should be made in a buried or handhole splice.

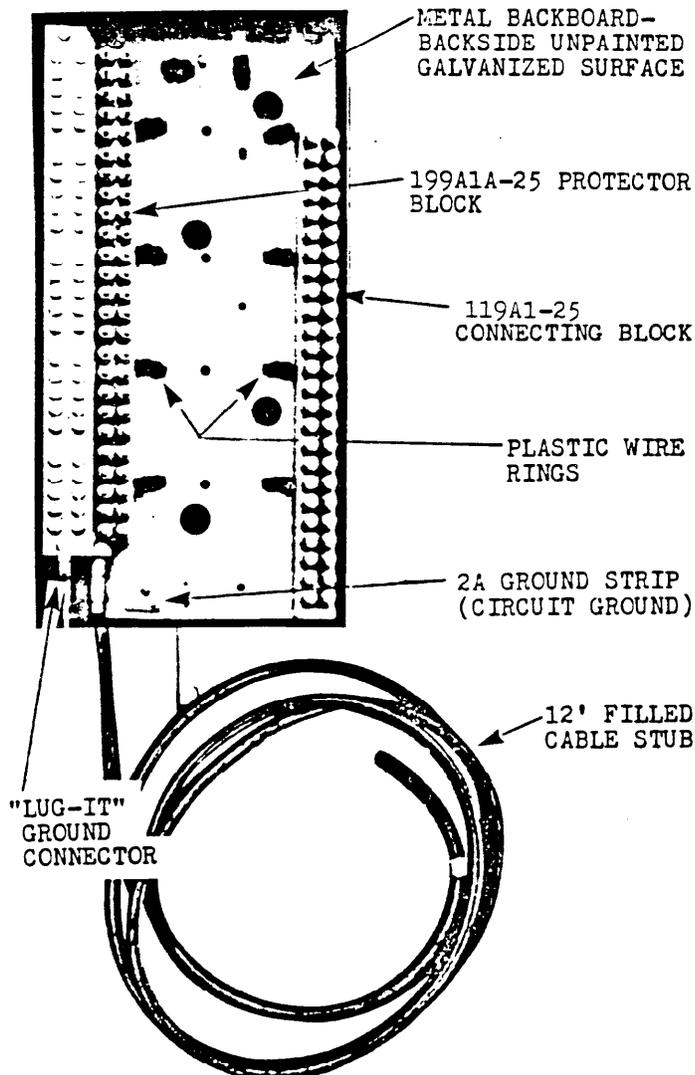


Fig. 2 - 199A1A-25-12W PROTECTOR

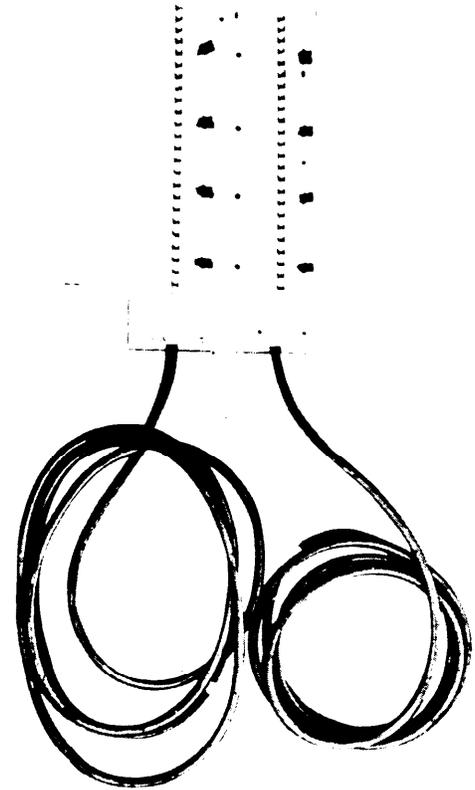


Fig. 3 - 199A1A-50-12W PROTECTOR

3. INSTALLATION

- 3.01 The MC-10/48 cable closure is designed for wall mounting with the stand-off mounting bracket provided.
- 3.02 Open the door and remove both shield assemblies from the lower part of the closure.
- 3.03 Position the closure on the wall so the prewiring will align with one of the five 1-3/4" knockouts and the lower cover will maintain a minimum depth of 3" with the final grade. Mark the wall to show the closure top (Fig. 4) (marking must not be objectionable to building owner).

NOTE: FINAL GRADE SHOULD BE DETERMINED SO THAT 3" DEPTH ON BOTTOM CLOSURE WILL BE MAINTAINED TO HOLD GRAVEL.

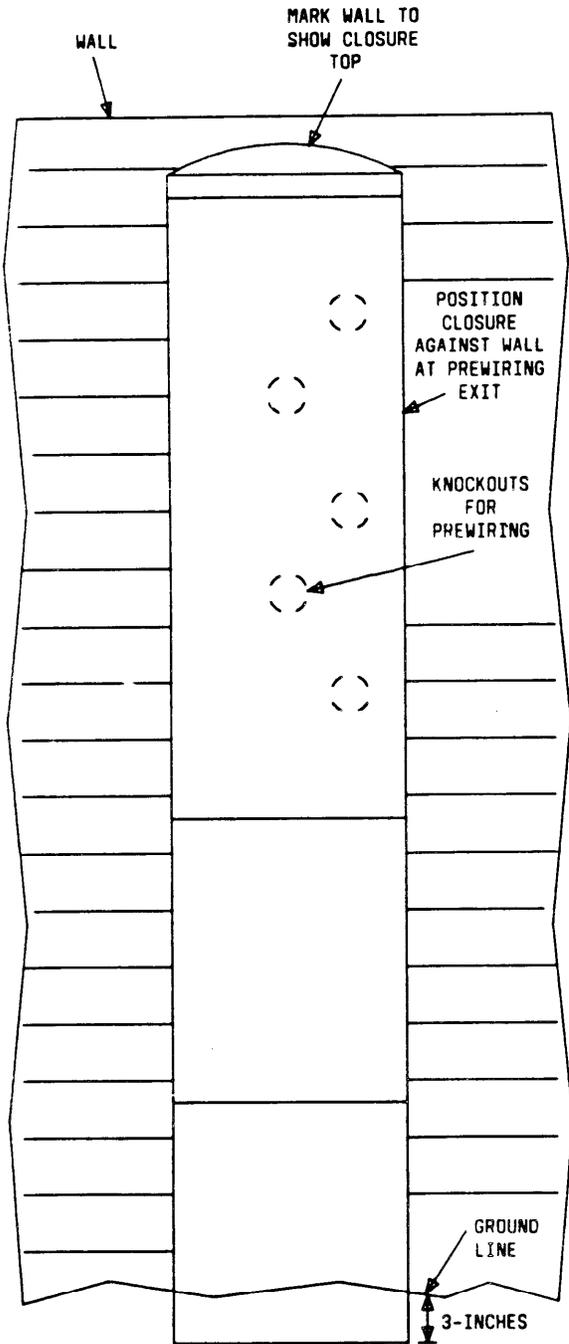


Fig. 4 - Position Closure and Mark Wall

3.04 Remove the closure, then using the standoff mounting bracket as a template, mark two mounting holes 1 inch below top of closure mark (Fig. 5).

3.05 If the closure is to be secured to a wooden surface, drill lead holes in the marked hole location and secure standoff mounting bracket to wall with two No. 12 wood screws.

3.06 If the closure is to be secured to a masonry surface, drill two 5/16-inch holes at the marked hole locations and install two No. 16 masonry anchors. Secure the standoff mounting bracket to wall with two No. 16 screws.

CAUTION: IMPACT GOGGLES SHOULD BE WORN TO PROTECT THE EYES WHEN DRIVING ANCHORS INTO MASONRY OR SIMILAR MATERIALS.

3.07 Prewiring should be brought through a knockout in the back of the closure (Fig. 6). Remove appropriate knockout and install large grommet furnished with closure. Feed prewiring through grommet, then secure.

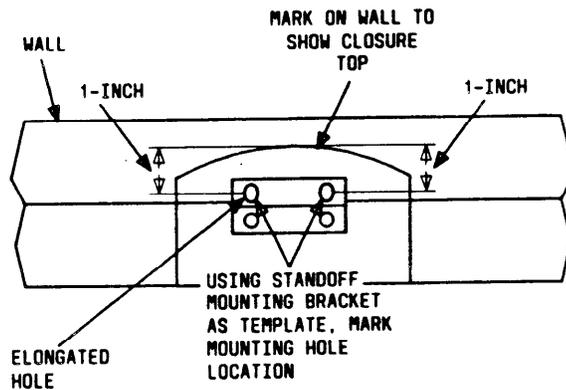
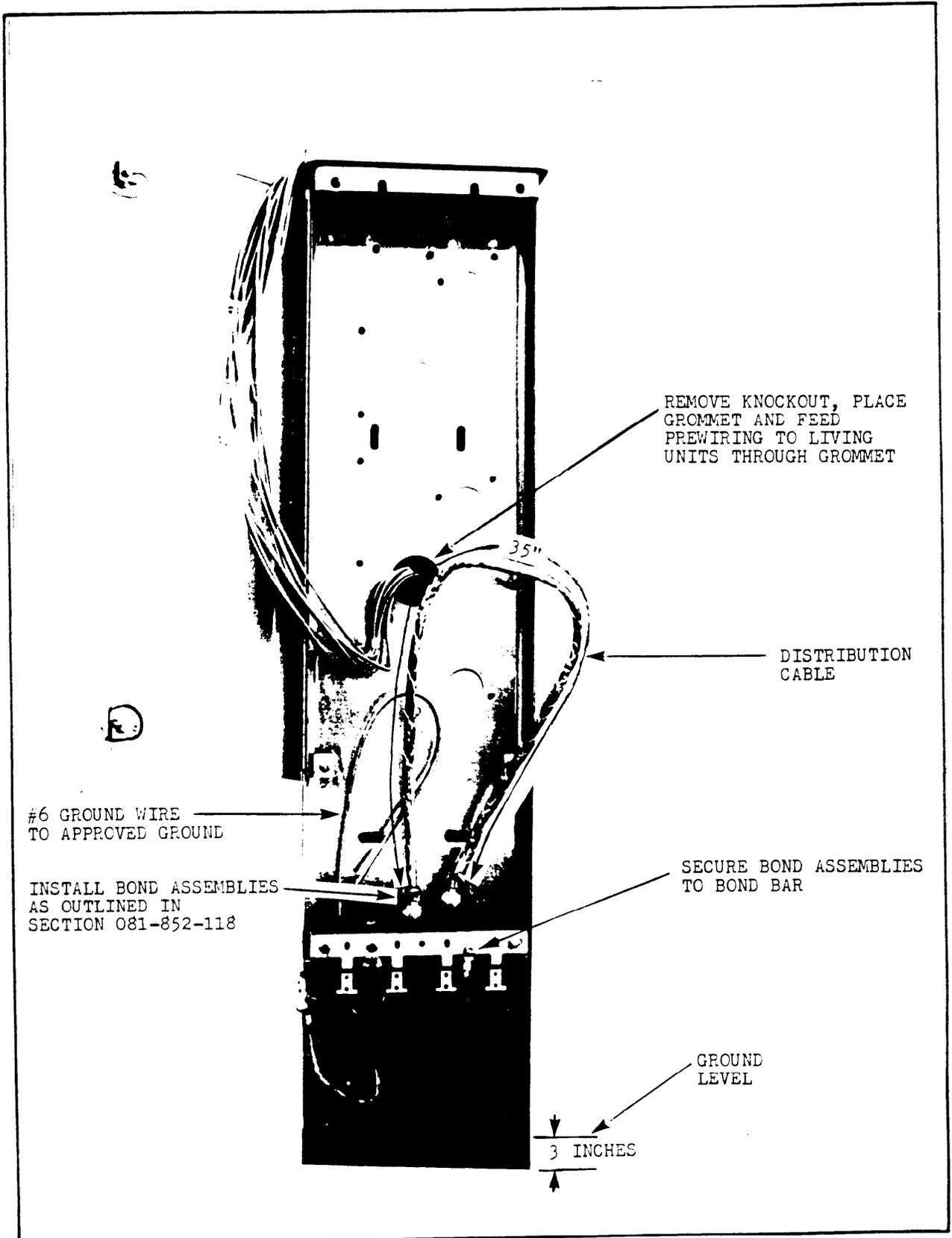


Fig. 5 - Marking Mounting Hole Location

FIGURE 6

Prewiring Entering Through Rear of Closure



4. CABLE SHEATH PREPARATION

4.01 Cable length required for installation is shown in Fig. 7 and 8.

4.02 Position the cable against the ground bar and mark the cable approximately 1/4 inch above the ground bar on each side of the proposed sheath opening. The distance between the two marks should be 35 inches as shown in Fig. 6. These dimensions must be measured accurately. A good house-keeping job cannot be done if the sheath opening is too long or too short. The ground bar can be removed or detached on one side and swung up to provide additional working space for cable sheath preparation.

4.03 Remove the sheath between the two marks.

4.04 Install D bond assembly furnished with closure on cable as outlined in Section 081-852-118. Attach the D bond assembly to bonding bracket as shown in Fig. 6.

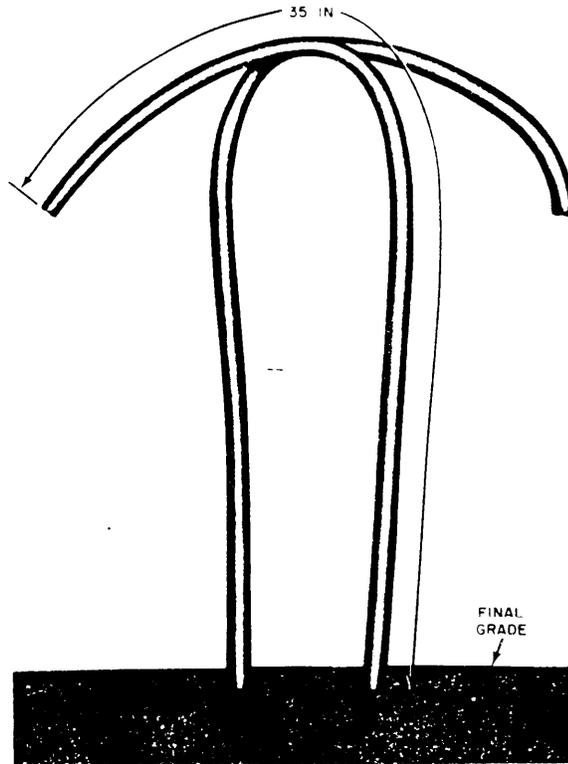


Fig. 8 - End Length - Cable Splicing Location

5. EQUIPPING TERMINALS

5.01 Install 199-type protector in closure as shown in Fig. 9. Secure protector at top with screw furnished with protector.

5.02 Install D bond assembly on stub cable as outlined in Section 081-852-118, then secure bond assembly to ground bar (Fig. 10).

5.03 Splice stub cable from protector to distribution cable as outlined on detailed work print (Fig. 10).

► 5.04 Run a No. 6 ground wire from lug on protector to an approved ground as outlined in Section 631-400-102 (Fig. 10).

NOTE: THE MC-10/48 SW50 HAS TWO 199A1A PROTECTOR BLOCKS. THIS REQUIRES THE SECOND PROTECTOR BLOCK TO BE CONNECTED TO THE No. 6 GROUND. THE SECOND No. 6 SHOULD BE BRIDGED USING AN AT-7796X SIZE 4 CONNECTOR. REFER TO SECTION 631-400-102.

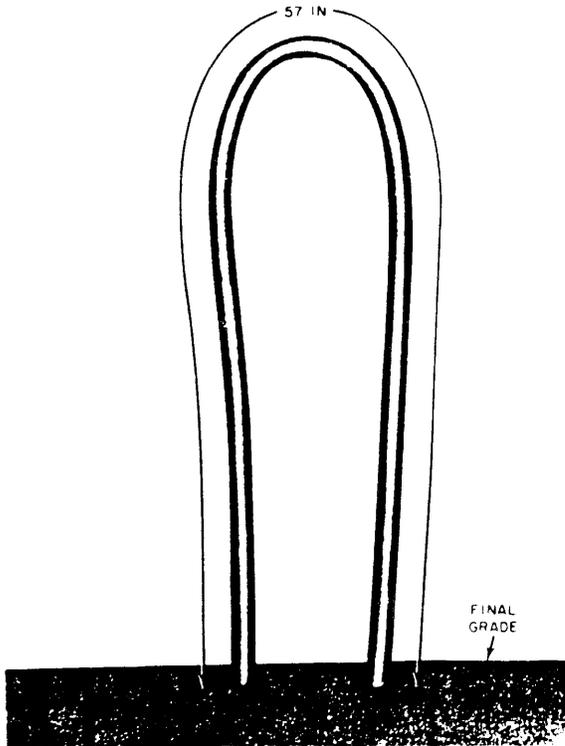


Fig. 7 - Loop Length - Cable Loop Location

FIGURE 9

Installation of 199-Type Protector

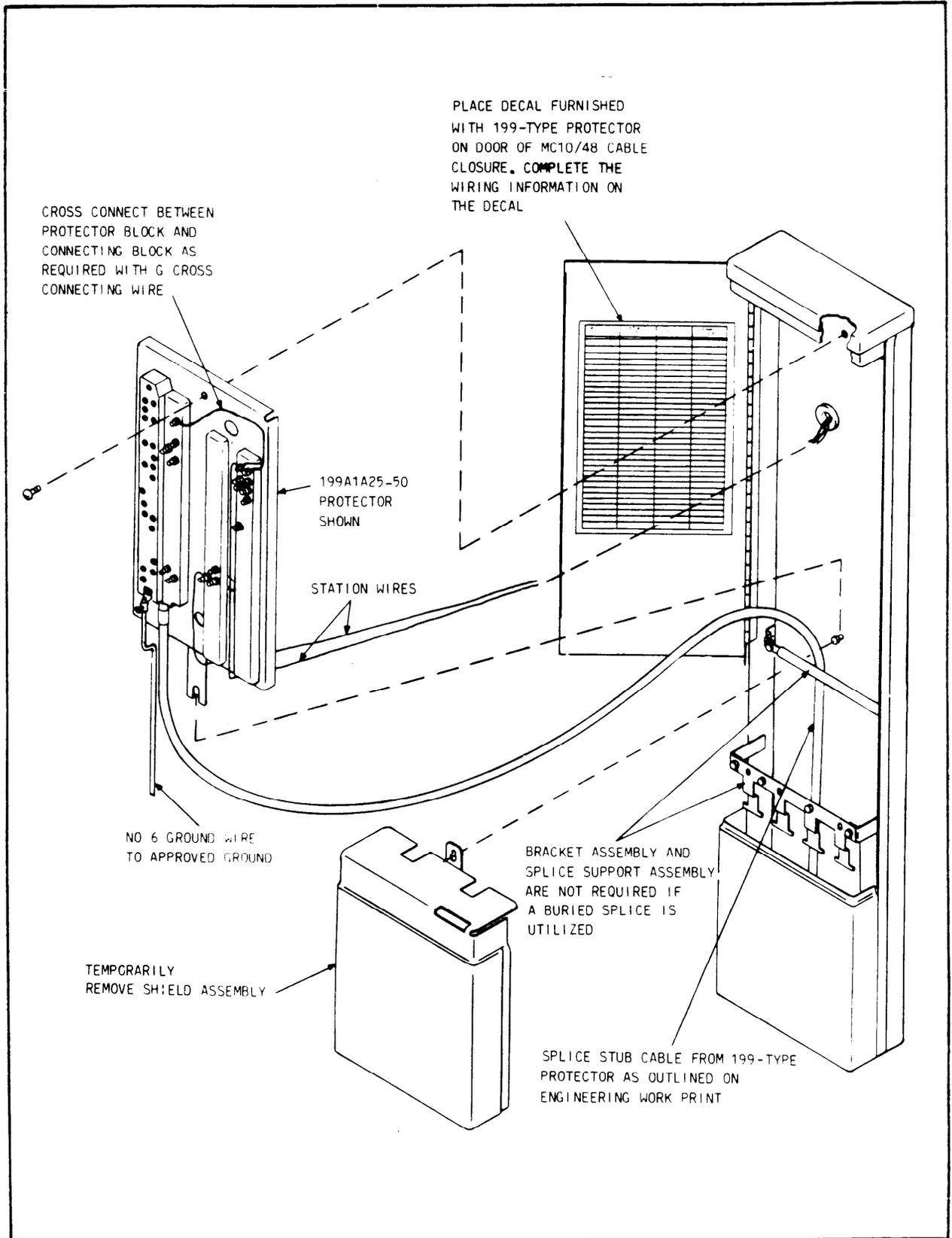
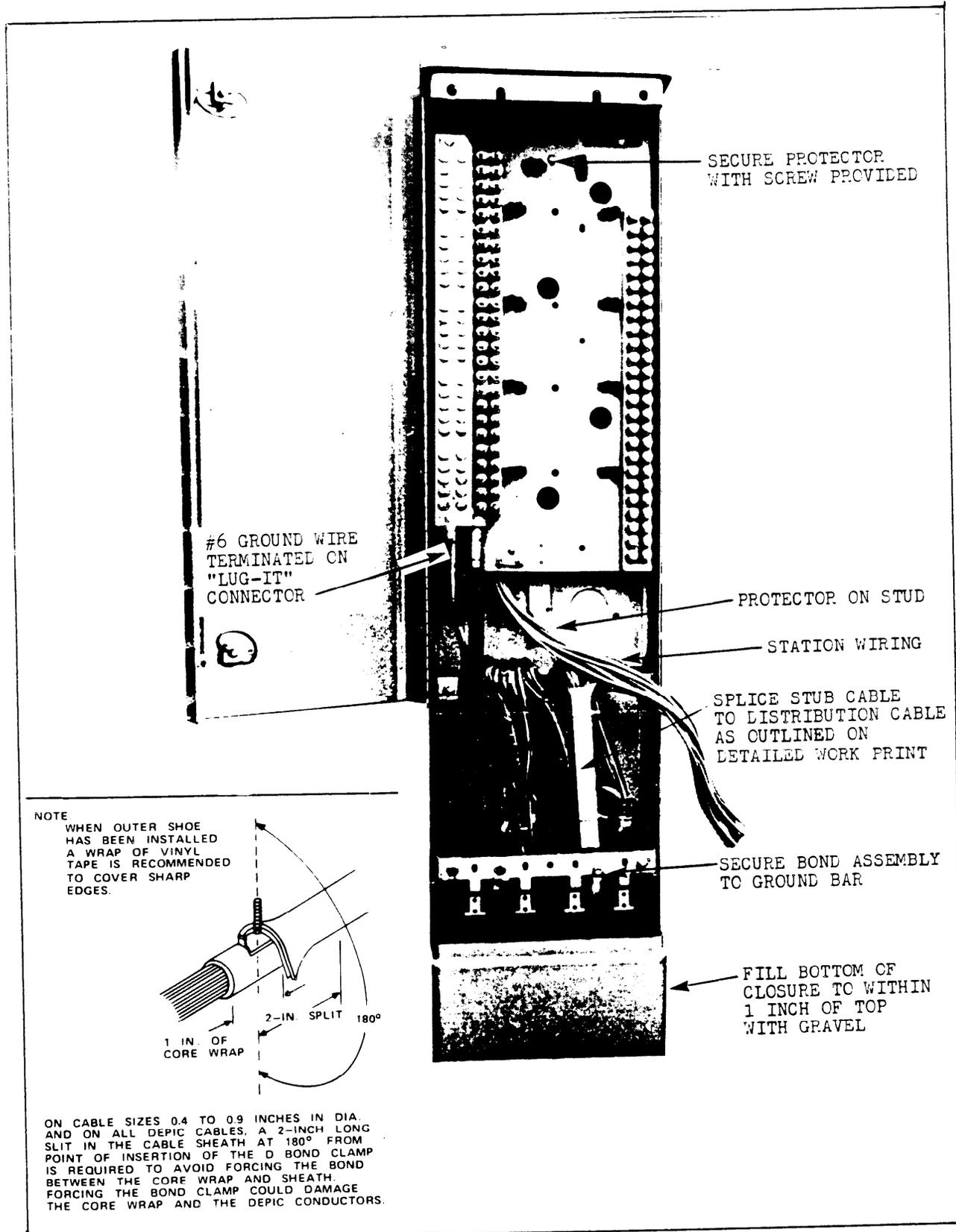


FIGURE 10

Installed 199-Type Protector



6. ENCLOSING TERMINAL

- 6.01 Backfill and tamp the soil around the cable.
- 6.02 Fill the bottom of the closure with clean gravel $\frac{3}{8}$ to 1 inch in size, to a point about 1 inch below top of lower cover. This will keep out rodents and also minimize condensation inside the closure.
- 6.03 Install and secure shield assembly, then seal void in knockout with sealing tape.
- 6.04 Close and secure front cover.

7. TERMINATING STATION WIRES

- 7.01 Route the station wire up the left-hand side of the connecting block to the assigned binding post as shown in Fig. 11 and terminate as follows:
- Strip approximately $\frac{3}{4}$ inch of insulation from end of each station wire to be terminated.
 - Loosen the two hex nuts on the binding post.
 - Wrap the bare copper of the station wire around the binding post in a clockwise direction between the solder plated washers. Tighten the larger nut to secure wire.

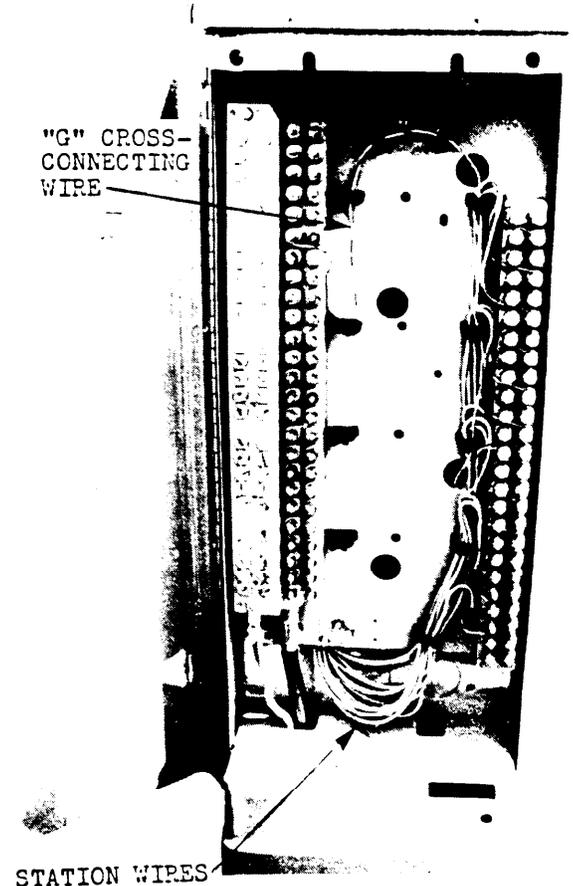


Fig. 11 - Terminated Service Wires

8. WIRING

- 8.01 The method of running G cross-connecting wire (white-violet) from the 119A1-25 connecting block to the 199-type protector is illustrated in Fig. 11 and as follows:
- Strip approximately $\frac{3}{4}$ -inch of insulation from end of cross-connecting wire.
 - Using the small end of the 216-type tool, loosen the small nut on the 119A1-25 connecting block.
 - Wrap the bare copper of the G cross-connecting wire around the binding post in a clockwise direction between the washers between the large and small nuts. Tighten the small nut.

- (d) Route the other end of the cross-connecting wire through the wire guide to the protector block as shown in Fig. 11.
- (e) Strip approximately 3/4-inch of insulation from end of cross-connecting wire.
- (f) Using 216-type tool, loosen nut on the assigned binding post of the protector block.
- (g) Wrap the bare copper of the G cross-connecting wire around the binding post in a clockwise direction between the two washers, then tighten the nut.

9. PLACING DECALS

9.01 Place SWBT buried cable warning decal over the system warning decal on front of door. (Some locations within the Company have their own warning decal. In those locations the proper decal should be placed over the system decal.)

9.02 The terminal should be addressed as shown on detailed work print. Number decal should be placed on top of door above warning decal. (See Fig. 12)

FIGURE 12
GARDEN APARTMENT TERMINAL
INSTALLED

