

M.D.

## DRIVE-UP, WALK-UP PUBLIC TELEPHONES MOUNTING KS-16705 INSTALLATION AND MAINTENANCE

### 1.00 INTRODUCTION

This section is reissued to:

- Change Fig. 1
- Clarify 3.02
- Revise 3.01 and 5.04.

### 2.00 LOCATION

A satisfactory location for the drive-up, walk-up public telephone is important. In select-

ing this location, the accessibility of the telephone and the safety of those using it should be considered. The approach of the mounting should be:

- Away from the main stream of traffic.
- Free of such hazards as:

Broken sidewalks  
Holes  
Obstructions  
Broken or uneven pavement.

The location of the mounting and associated coin collector should be specified on the service order.

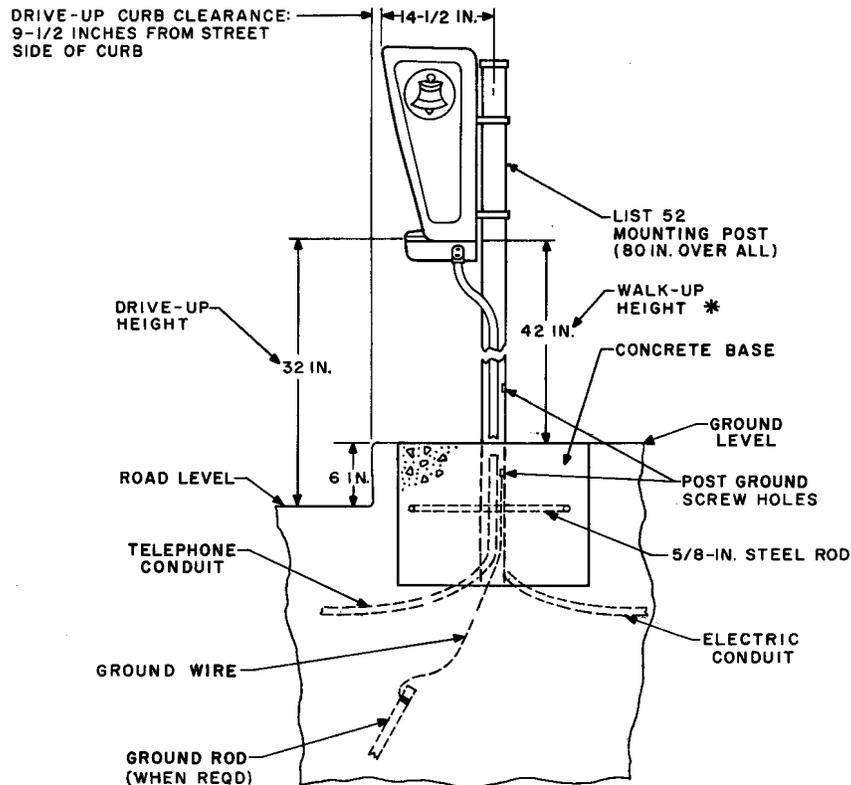


Fig. 1 — Mounting Post Assembly

**3.00 MOUNTING POST INSTALLATION**

→ **3.01** The mounting post is constructed of extra strong 3-inch steel pipe. A 5/8-inch hole is located 9 inches from the lower end of the post. In order to provide additional security and stability, a steel rod may be inserted through this hole before the base is poured. Obtain rod locally. Requirements for a complete mounting installation are shown in Fig. 1.

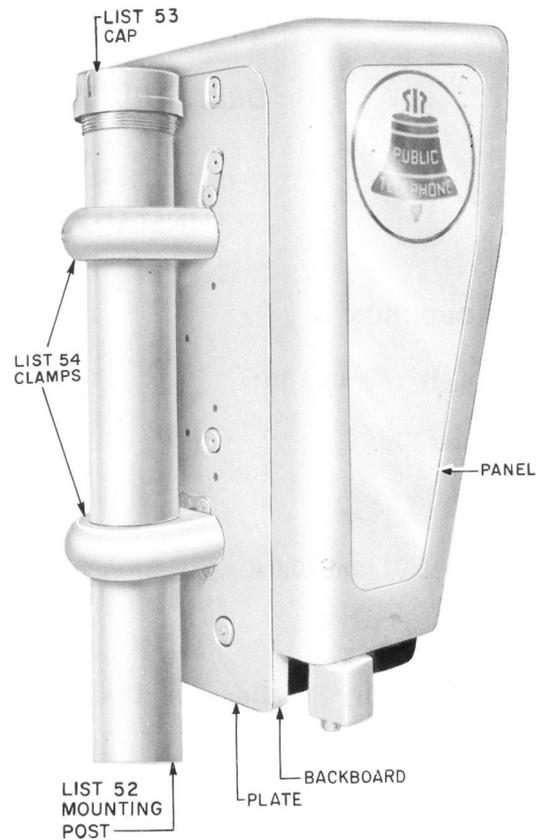
**3.02** When a curbing is not available to protect the mounting from damage by vehicles, a concrete base 48 inches long, 24 inches wide, and 24 inches deep should be imbedded in the ground. Six inches of the base should extend above road level.

→  *The 24-inch dimension shall parallel road, with mounting post always centered in concrete base.*

**3.03** Where a curb already exists, the concrete base need be only 18 inches deep.

**3.04** The concrete base for walk-up installation should be 24 inches square, 18 inches deep, and flush with ground level.

**3.05** The mounting post is embedded in the concrete base in an upright plumb position in order that the coin collector will be plumb. This is necessary to ensure proper operation of the coin collector.



**Fig. 2 — Mounting Clamped to Post**

**3.06** The mounting is fastened to the post with list 54 clamps as shown in Fig. 2.

**3.07** A list 53 cap or list 70 sign mast is always placed over the top of the post.

**3.08** The KS-14614 antiseize compound placed on screw-type fasteners exposed to the weather will facilitate future removal.

**TABLE A**

**FASTENERS FOR WALL-TYPE MOUNTINGS**

Fasteners  Size and Type	Drill Size		Mounting Surfaces			
	B and D	Masonry	Soft-wood	Hard-wood	Masonry (Concrete, Brick)	Cinder Block, Hollow Tile
	inches					
1-1/2 inch No. 14 FH wood screw	3/32			•		
→ 5/16 by 2 inch hex or RH machine screw and 5/16 inch expansion shield.		5/8			•	
1/4-by 4-inch RH toggle bolt	3/4	3/4	•			•

**4.00 WALL-TYPE INSTALLATION**

**4.01** Place paper template, B-192542, at proper height on the wall (42 inches from ground level to bottom of hood) and mark location of holes through template.

**4.02** Drill holes in masonry or lead holes in wood and use fasteners as indicated in Table A to fasten mounting to surface.

**5.00 TELEPHONE WIRING**

**5.01** Access to the protector and subscriber set is gained by unlocking the 10H lock on the under side of the subscriber set housing. Slide door to rear until it drops down in front.

**5.02** Terminate station wiring on the protector. If the service order does not specify a station protector, the protector then functions as a connecting block.

**5.03** When station protection is required, either the 111A or 123A1A protector located in the subscriber set housing may be used. If the requirements for a 123A1A cannot be satisfied, install a fused-type protector at a convenient location near end of the conduit and connect to tele-

phone ground rod. Leave the fuseless protector in place, in subscriber set housing, and use as a bridging point.

**5.04** A weatherproof D-9H mounting cord is used to connect the subscriber set to the coin collector. Earlier models of this cord were not weatherproof. Conductor terminations are given in Tables B and C.

**TABLE C**  
**CONNECTIONS WITH 685B SUBSCRIBER SET**

Wire or Lead		Station Protector	Coin Collector	Subscriber Set
Ring	R	Ring		
Tip	G	Tip		
Grd	Y	Grd		
D9H Cord	R	Ring		L1
	G	Tip		L2
	Y	Grd	G	
	BK		T	B*
	R-W		TR	R
	G-W		W	GN
	BR-Y		R	RR
	R-BK		Y	L1
G-Y		†	K	

\* Black strap from S-36 relay moved from terminal 2 to B on network. Yellow coin collector strap from T to coin relay is removed.  
† Connect to terminal 3 on coin relay.

**5.05** Ground for the station protector in the subscriber set housing will usually be provided by the power system ground. Additional grounding for the protector is required only when all three of the following conditions exist:

- Power system is not of the multigrounded neutral type.
- Power ground consists of a driven electrode.
- A length of less than 10 feet of the conduit associated with the booth is buried in permanently moist soil.

If all of the above conditions are present, drive a station ground rod in moist soil at the mounting. Use No. 14 wire to connect from rod to ground screw in the list 52 mounting post or to conduit.

**TABLE B**  
**CONNECTIONS WITH 685A SUBSCRIBER SET**

Wire or Lead		Station Protector	Coin Collector	Subscriber Set
Ring	R	Ring		
Tip	G	Tip		
Grd	Y	Grd		
D9H Cord	R	Ring		L1
	G	Tip		L2
	Y	Grd	G	
	BK		T	B
	R-W		TR	R
	G-W		W	GN
	BR-Y		R	RR
	R-BK		Y	L1
G-Y	Spare (taped back)			

Note 1: Remove BL strap between RR of network and L1 of terminal block.

Note 2: S-BR strap from C of network moved from terminal 2 to L2 of terminal block.

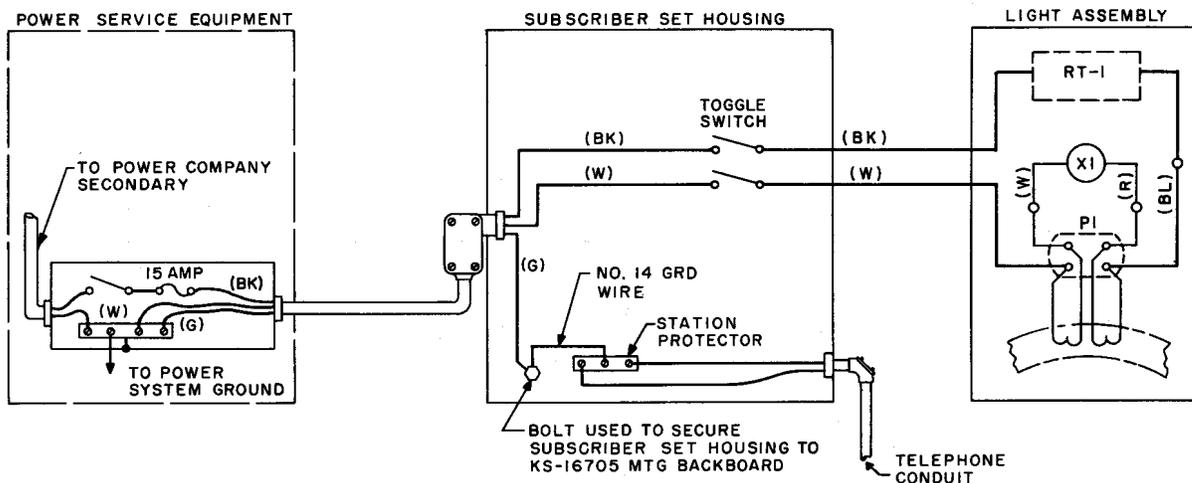


Fig. 3 - Wiring Diagram

## 6.00 ELECTRICAL WIRING

6.01 The 110-volt wiring is installed to conform with current requirements of the National Electrical Code, governmental agencies, and company standards.

6.02 For your safety observe the following:

**THINK** Under no circumstances shall any makeshift or temporary electric connection be made on lighting equipment.

Before making any repairs or replacement in electrical equipment, operate the electric switch and make sure the circuit is dead. Check, using an electric wire tester or approved device.

Wear eye protection when handling fluorescent lamps.

6.03 A 3-wire arrangement between the power service equipment and the subscriber set housing is shown in Fig. 3. It is recommended that this 3-wire arrangement to the service equipment or to a junction box be used at all installations.

6.04 A change has been made in the internal grounding connections in the subscriber set housing. Earlier mountings were wired with the green electric conductor connected to the electric conduit and the ground terminal of the protector connected to the telephone conduit. Install earlier mountings without changing these connections.

6.05 The use of a KS-14611, List 20 power cord assembly is shown in Fig. 4. The cord-connected or direct conduit-connected arrangements may be used interchangeably in Fig. 4, 5, and 6. In either case the mounting is grounded by means of a separate third-wire connected directly to the power system ground.

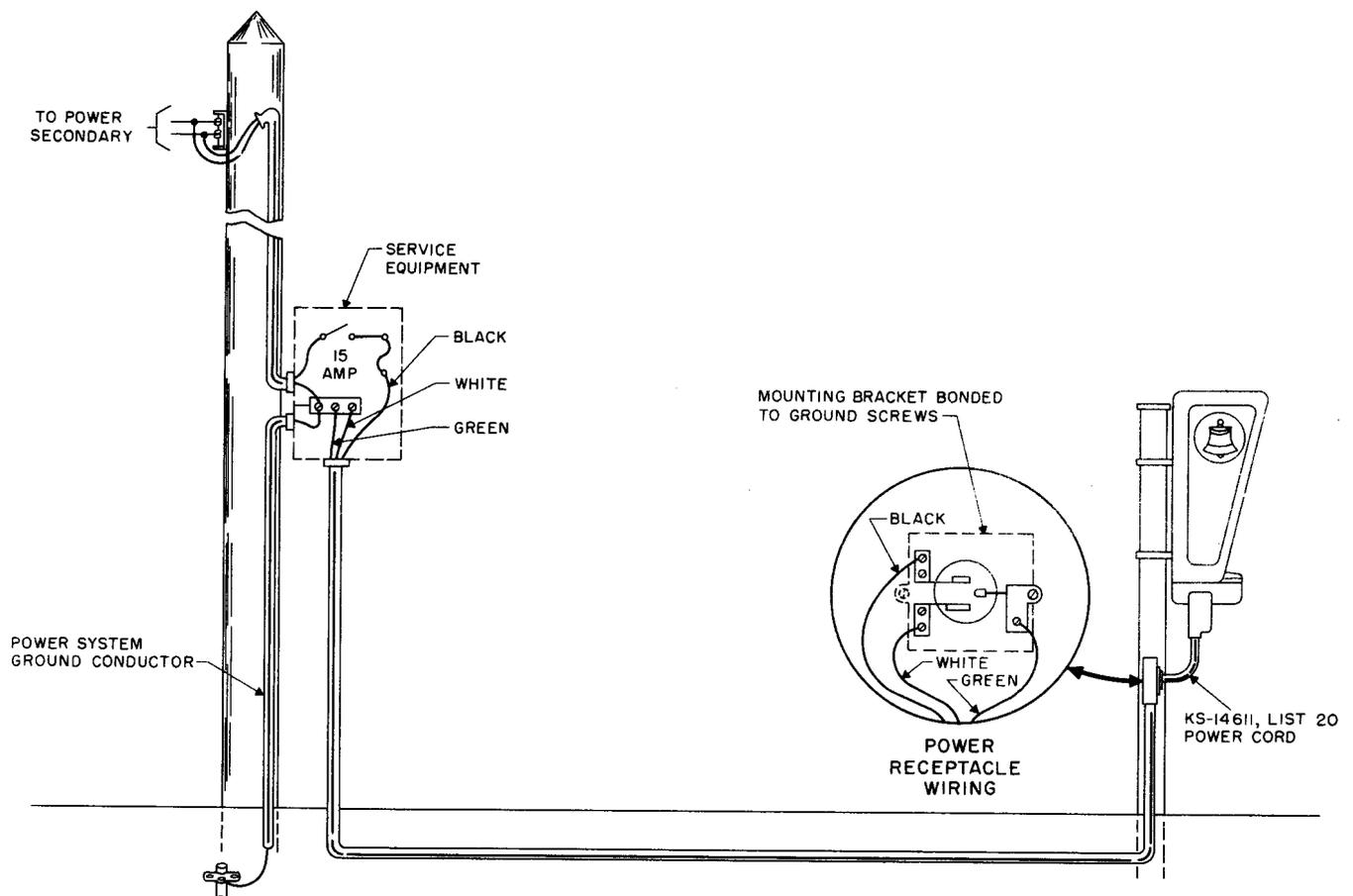


Fig. 4 – Individual Power Source to Mounting

**6.06** The following covers those installations where a branch circuit from one building is extended to the mounting by metal conduit, armored cable, nonmetallic sheath cable, or open conductors.

**6.07** The metal conduit or armored cable from the mounting must be electrically bonded to the power system ground.

- Where electric wiring in building consists of nonmetallic sheath cable having a third conductor for grounding purposes, connect this conductor (after checking for con-

tinuity) to the conduit or armored cable leading to the mounting.

- Where electric wiring in the building consists of nonmetallic sheath cable *without* a separate grounding conductor, place a No. 14 wire strap from mounting conduit or armored cable to the power system ground conductor or a nearby cold water pipe.

**6.08** When tapping into a branch circuit at a junction box, it is important that the metal conduit or cable be electrically bonded to the power system grounding electrode.

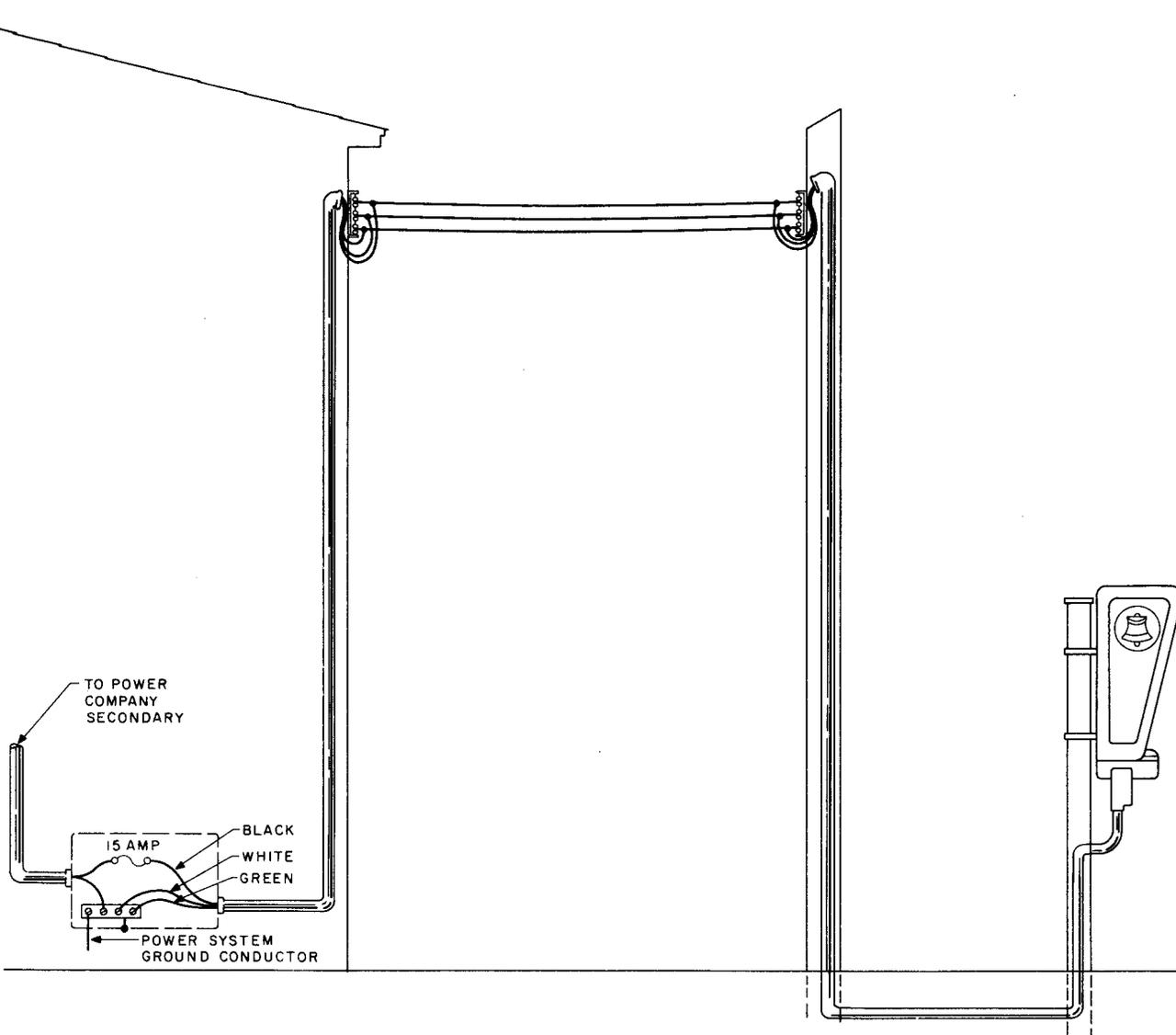


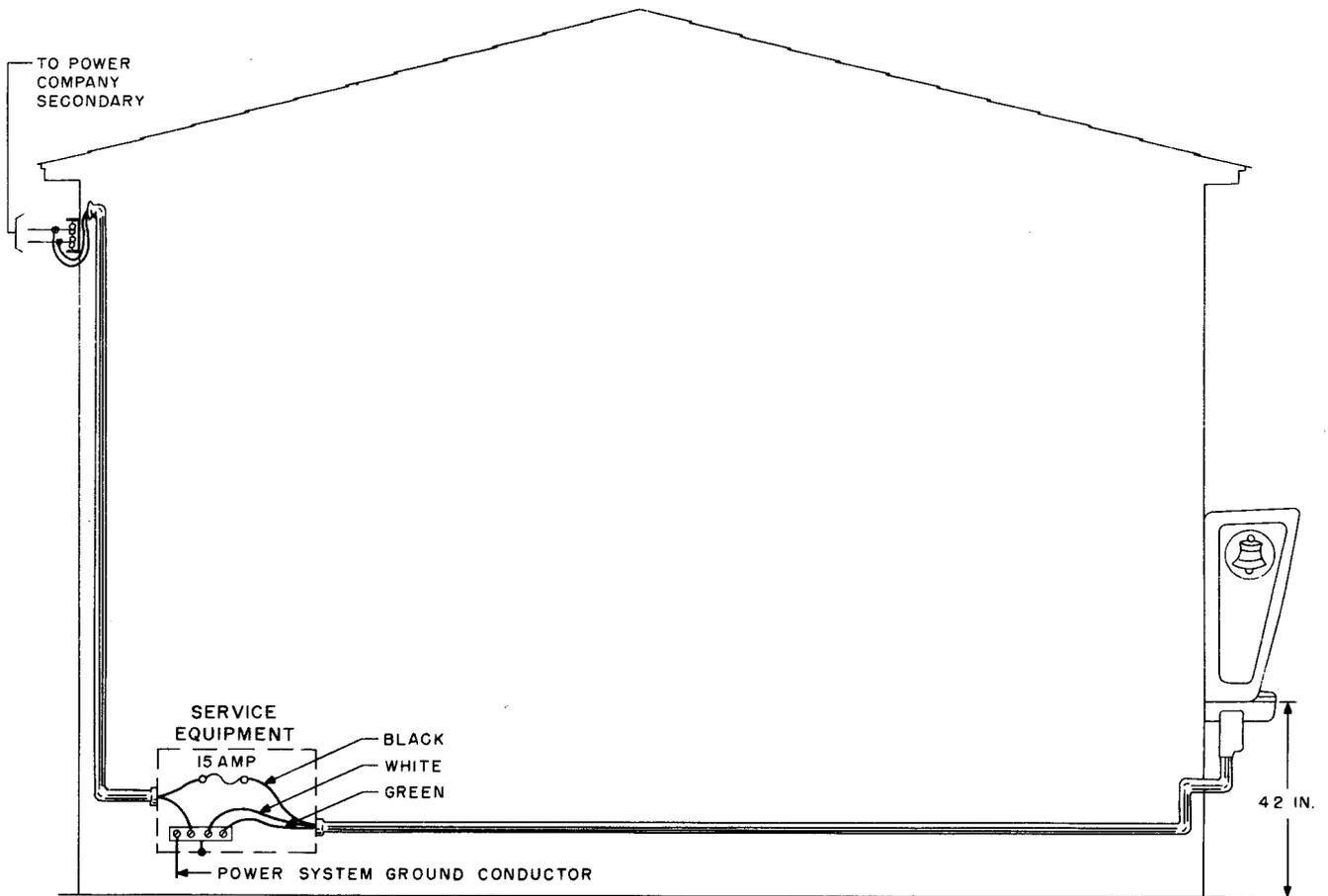
Fig. 5 — 3-Wire Open Conductor Extension of Branch Circuit

6.09 Fig. 5 shows a branch circuit extended from a building. Where a portion of this circuit is run overhead, the third conductor is continued through the aerial run by means of a third aerial conductor.

6.10 Fig. 6 shows an installation utilizing a branch circuit within a building.

#### 7.00 PUBLIC TELEPHONE SIGNS

7.01 Since this mounting presents a new service facility to the public, adequate sign treatment is necessary. Install as covered in the section entitled Public Telephone Signs, Reflectorized Types, Installation.



**Fig. 6 — Mounting Located on Same Building As Branch Circuit**

**7.02** When signs are to be illuminated, a shaded light fixture may be installed on top of list 70 mast over signs. Local instructions will cover this assembly.

#### **8.00 DIRECTORIES**

No mounting arrangements for telephone directories are provided.

#### **9.00 MAINTENANCE**

**9.01** Mounting post assembly check points:

- Safe approach to mounting (refer dangerous conditions to supervisor).
- Security of the mounting post.

- Security of the coin collector on the mounting post.

• Lighting equipment:

**9.02** Mounting hood assembly may be cleaned with the following:

- Damp cloth.
- Mild detergent in water.
- KS-7860 petroleum spirits which removes wax base substances (crayons, lipstick, etc).

*Note:* Do not use abrasive materials that will scratch the hood.