

TELEPHONE MOUNTING

KS-20842

1. GENERAL

1.01 This section provides information required for installing and maintaining the KS-20842 telephone mounting.

1.02 The telephone mounting is an indoor-outdoor, vandal-resistant unit designed to provide additional security for the coin telephone.

2. IDENTIFICATION

2.01 The KS-20842 mounting (Fig. 1 and 2) consists of a post, a shelf or housing, and a base. Refer to Table A for the various combinations of the shelf, housing, and base that may be used with the post to make up the different mounting assemblies.

2.02 The mounting may be installed singly as a free standing unit, against the wall, or multiple back-to-back arrangement.

2.03 The unit is approximately 5-1/2 feet high and mounts a coin telephone approximately 4 feet (bottom of set) above the surface.

LIST 40 POST

2.04 The List 40 post (Fig. 1) is common to each of the mounting assemblies. The post is approximately 5-1/2 feet high, 10 inches wide, and 4 inches deep. A black textured vinyl finish covers the 3/16-inch thick steel unit.

2.05 A recessed area on the upper part of the post provides facilities for mounting any 1-type coin telephone. The area limits access to the lip of the front cover and the back half of the telephone including the rear mounting surface.

2.06 Entrance holes are provided in the top and bottom of the post so that power and telephone wiring connections may be from overhead or underground.

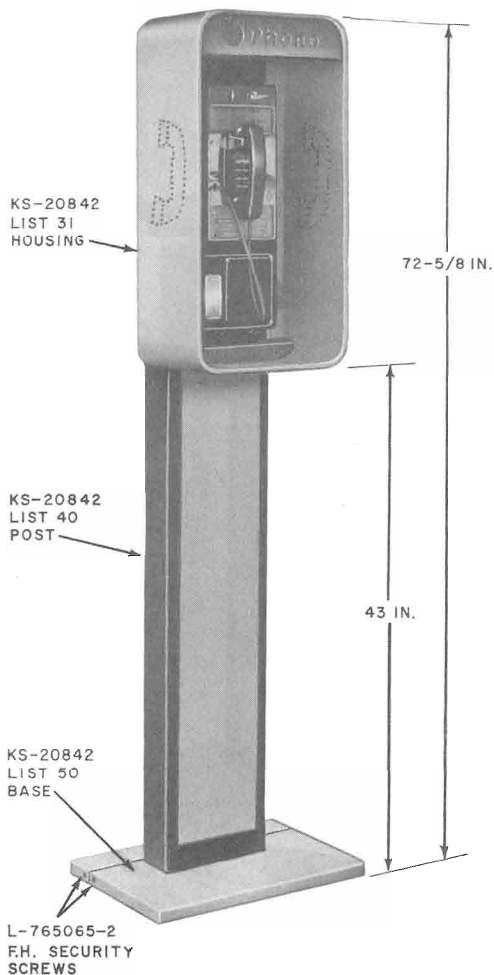


Fig. 1—KS-20842, List 5 Telephone Mounting

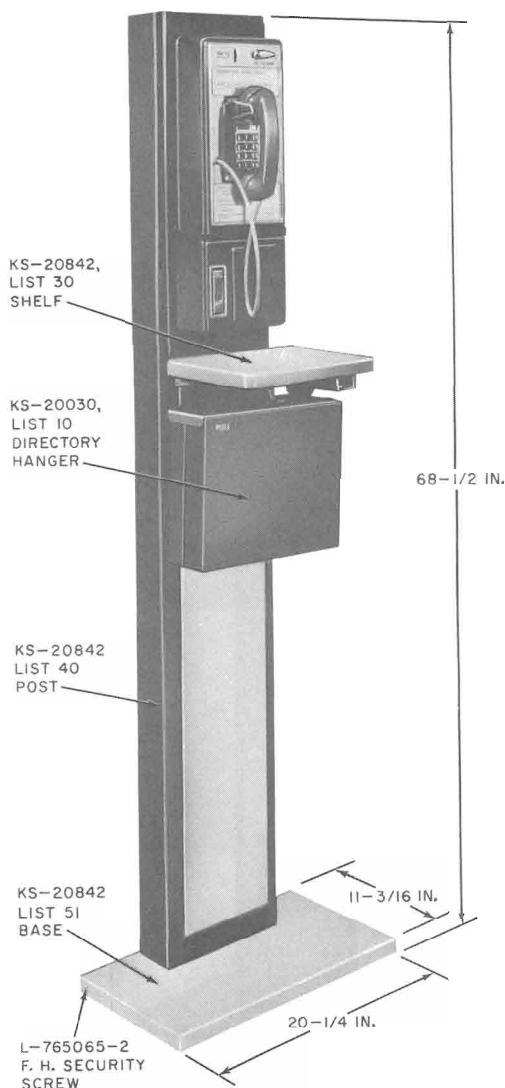


Fig. 2—KS-20842, List 2 Telephone Mounting

2.07 An aluminum panel on front of the post provides access to an outlet box and protector for terminating the power and telephone service coming into the post.

2.08 The panel is secured to the post with two screws and a fastening arrangement using spring-loaded pins. A specific procedure must be followed to remove the panel.

MOUNTING BASE

2.09 A steel base is provided for mounting the post assembly. One of three bases may be used; the List 50 regular pedestal base, the List 51 short pedestal base, and the List 52 buried base.

2.10 *List 50 regular base* (Fig. 1) is 20 inches long, 14 inches wide, 7/8-inch thick, and weighs approximately 70 pounds. Ten holes are provided for securing the base to a mounting surface. Two aluminum covers protect the mounting hardware and provide a finished appearance. The regular base is used in all pedestal installations except next-to-wall or back-to-back installations.

2.11 *List 51 short base* (Fig. 2) mounts the post assembly flush with the back of the base to permit a next-to-wall or back-to-back pedestal installation. The base is 20 inches long, 11 inches wide, 7/8-inch thick, and weighs approximately 55 pounds. Eight mounting holes and only one cover are provided with the short base.

2.12 *List 52 buried base* (Fig. 3) is 10 inches wide, 4 inches deep, and 24 inches long. The base is normally embedded full length in concrete with the top flush with the surface. The base top provides four threaded holes for use when mounting the post. Holes are provided through the base for four reinforcement rods which add strength and stability when installed.

LIST 31 HOUSING

2.13 An aluminum housing, 14-5/8 inches wide, 9-1/2 inches deep, 29-1/2 inches high, and 1/4-inch thick, is provided for indoor and outdoor use. The housing mounts on top of post (Fig. 1) and may be installed or replaced without removing the telephone or interrupting the telephone service.

TABLE A
COMPONENTS OF KS-20842 BASIC LIST NUMBERS

COMPLETE ASSEMBLY LIST NO.	COMPONENT DESCRIPTION						REMARKS
	LIST 40 WALK-UP POST	LIST 30 SHELF	LIST 31 HOUSING	BASE ASSEMBLY			
				LIST 50 REGULAR	*LIST 51 SHORT	LIST 52 BURIED	
1	●	●		●			Indoor only
2	●	●			●		
5	●		●	●			Indoor or Outdoor
6	●		●		●		
7	●		●			●	

* Used on back-to-back or back-flush-to-wall installations only.

The housing limits unauthorized access to sides of telephone, offers some voice privacy and weather protection, and provides a light and sign for the station.

2.14 Electrical service from the post to the housing is provided by a plug-connected cord. A light fixture is located in top of housing to illuminate the sign and the telephone set. The light fixture is plug connected to the housing for easier replacement.

LIST 30 SHELF

2.15 A List 30 shelf assembly (Fig. 2) is to be used indoors only and when the List 31 housing is not provided. The shelf mounts on front of post below the recessed telephone. Made of stainless steel, the shelf is approximately 13 inches wide and extends 8-3/4 inches from post.

WIRING

Electrical Wiring

2.16 Electrical service terminates in an electrical outlet located on the lower left inside of post (Fig. 4). The power wiring feeds up through a rectangular entrance hole when coming from below ground level (Fig. 5) or follows a channel down the left side of the post when entering from overhead (Fig. 6).

2.17 Mounting space is provided on a bracket, below electrical outlet, for installing an

optional circuit breaker box when required (Fig. 4). The following items must be ordered separately:

- KS-19426, List 17 circuit breaker box
- Heinemann Electric Co. No. 0912 single-pole circuit breaker, 120V, 15 amp, time-delay curve No. 3.

2.18 A lug (Fig. 4) is provided below electrical outlet for connecting the ground wires.

Telephone Wiring

2.19 The telephone wiring terminates on either a 123A1A protector or a 42A connecting block which mounts on a bracket located inside, lower-rear of post behind an access cover (Fig. 7). When the coin telephone provides the appropriate mounting holes, the protector may be installed inside the set if desired.

2.20 When telephone service enters the post from overhead or from below ground level, the wires are directed to an entrance hole in the rear of the recessed area for connecting to the coin telephone.

LIGHT CONTROL ASSEMBLY

2.21 The lamps in the housing may be wired for continuous illumination, however, a KS-19261, List 4 light control assembly, an optional item, may be used to switch the lamps on at darkness and off at daylight (Fig. 8).

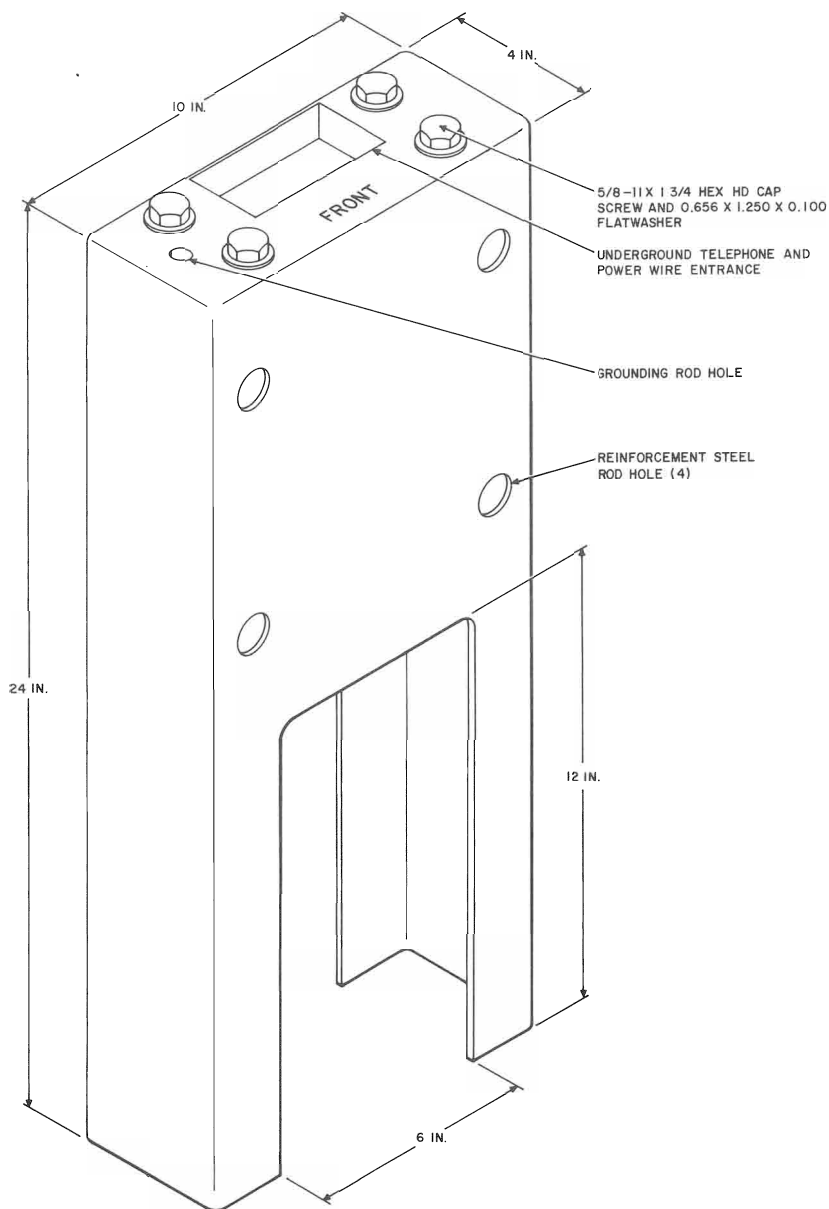


Fig. 3—KS-20842, List 52 Buried Base

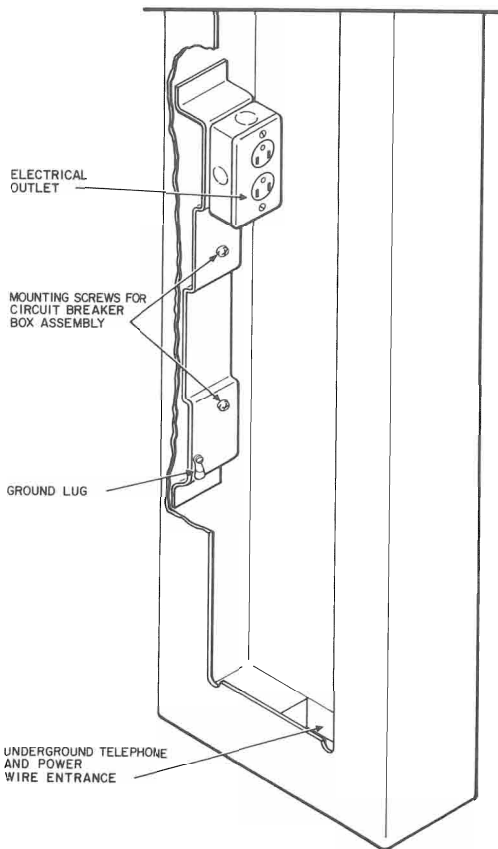


Fig. 4—Outlet for Terminating Electrical Service

2.22 One List 4 light control unit may be used to control the lamps in both housings in a back-to-back installation.

OPTIONAL DIRECTORY HANGER

2.23 A directory hanger may be used with each telephone mounting. The KS-20842, List 30 shelf will accept a KS-20030, List 9 directory hanger (Fig. 2) and the KS-20842, List 31 housing will accept a KS-20030, List 10 directory hanger. Each hanger must be ordered separately.

ORDERING GUIDE

2.24 Orders for the telephone mounting shall specify the quantity, KS number, the list number, and any desired item which must be ordered separately (Table A). The following are typical orders:

Example 1:

One single, indoor, back-to-wall, pedestal-mounted unit with shelf

1—Mounting, Telephone, KS-20842, List 2

Example 2:

One single, indoor or outdoor, free standing, pedestal-mounted unit with housing and directory hanger

1—Mounting, Telephone, KS-20842, List 5

1—Hanger, Directory, KS-20030, List 10

Example 3:

One indoor or outdoor, pedestal-mounted, back-to-back installation with housing and electrical service entrance box

2—Mounting, Telephone, KS-20842, List 6

1—Box, Circuit Breaker, KS-19426, List 17

1—Circuit Breaker, Single-Pole, 120V, 15 Amp, Time-Delay Curve No. 3, Heinemann Electric Co. No. 0912

3. INSTALLATION

3.01 Location of telephone mounting should be:

- Readily accessible to customer
- Free of such hazards as broken or uneven pavements or surfaces
- Clear of wall switches, outlets, or fuse boxes
- In sufficient space to permit access for maintenance purposes.

3.02 Telephone mountings may be installed on a concrete or wooden surfaces. The concrete base shall be a 36-inch cube flush with ground level wherever possible. Wooden surfaces must have a minimum thickness of 2 inches.

PEDESTAL BASE INSTALLATION (KS-20842, List 1, 2, 5, and 6)

List 50 and 51 Base and List 40 Post

Note: Installation procedure given is for the KS-20842, List 50 regular base. Procedure for the List 51 short base is identical with the exception there are only eight mounting holes in the base and only one cover. Refer to Fig. 9 for layout of mounting holes on each base. The solid line for the List 51 base represents a single mounting installation while the solid line plus the broken lines show the outline of a back-to-back installation. The List 50 base will be used for all pedestal installations except post-against-wall or back-to-back installations.

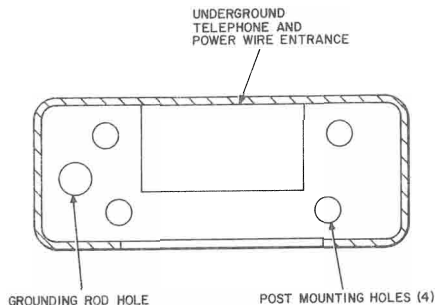


Fig. 5—Layout of Holes in Bottom of Post

3.03 Install the List 50 regular base and the List 40 post assembly as follows:

- (1) Using a KS-19192, List 1 wrench, remove the four security screws and two covers from the List 50 base (Fig. 1).
- (2) Place the base in exact position that the telephone mounting is to be installed. If underground power and telephone wires are to be used, ensure that the conduit studs in the

mounting surface correspond to the wire entrance hole in the base.

- (3) If a ground rod must be provided for the installation (refer to Section 508-100-100 for grounding requirements), install the rod so that 4 to 5 inches will extend above the top of the base.

- (4) Using the base as a template, mark the locations of the ten mounting holes.

- (5) Remove the base from the drilling area.



Use eye protection while drilling the mounting holes.

- (6) The base is secured to a masonry surface with ten 1/2 by 3 machine bolts. Select the proper anchor to accommodate this size bolt and drill holes to accept the anchors.

- (7) The base is secured to a wooden surface with ten 5/8 by 3 lag screws. Drill 1/2-inch lead hole 2 inches deep for these screws.

- (8) Lay the List 40 post adjacent to the mounting area with the recessed area up.

- (9) Using a KS-19192, List 1 wrench, remove the two flat head screws from the upper part of the front panel. Remove the panel from the post as follows:

- (a) Brace knee against the right side of the post.

- (b) Place both hands on the left side of the panel as shown in Fig. 10.

- (c) Pull forward both top and bottom of the panel at the same time.

- (d) When the locking flange on the left side of the panel clears the post, pivot the left side away from the post.

- (e) Pull the entire panel to the left until freed from the post.

- (10) Remove the four 5/8-11 by 1-3/4 hex head cap screws and four 5/8-inch flatwashers

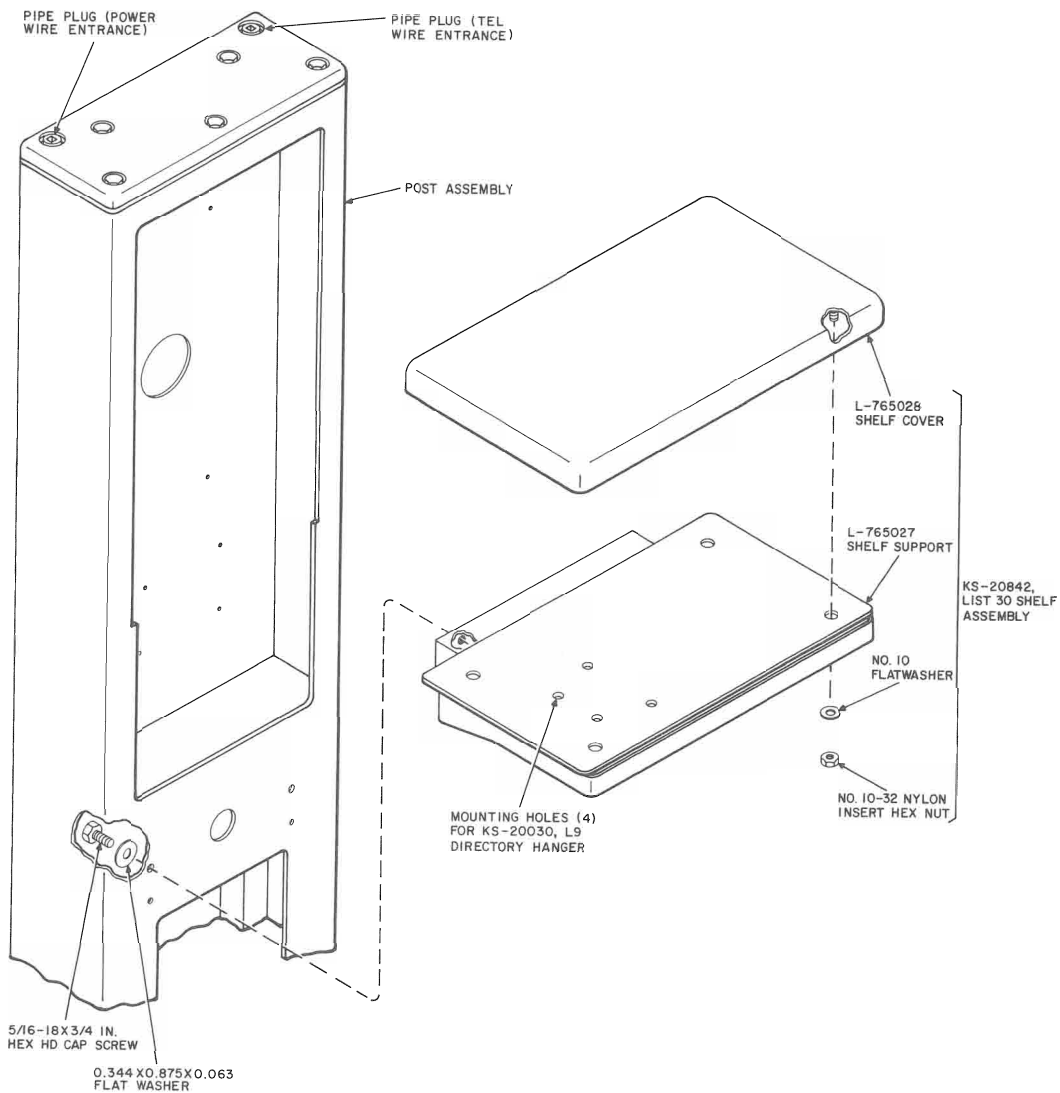


Fig. 6—Installation of List 30 Shelf on Post

from the base. Align the four mounting holes in bottom of post (Fig. 5) with holes in base (Fig. 9) and using the removed hardware, install the post assembly to the base.



To assure maximum security, the cap screws should be tightened by applying a maximum force to the wrench at an 18-inch radius.

(11) Position the assembled base and post over the drilled holes. Secure the base to the mounting surface using the appropriate hardware as indicated in either (5) or (6). The post must be plumb to ensure proper operation of the coin telephone. Use shimming washers under the base as necessary.

(12) Install the two covers on the base and secure using the four L-765065-2 flat head security screws (No. 10-32 by 1/2) removed in (1).

3.04 For back-to-back installations, install two List 51 short bases and two List 40 posts following the procedure outlined in 3.03 and preceding note.

List 30 Shelf

Note: The KS-20842, List 30 shelf assembly is intended for use only on indoor installations and when the List 31 housing is not provided.

3.05 Install the List 30 shelf on the post as follows:

- (1) If the front panel is installed on the post, remove the panel as outlined in 3.03(9).
- (2) Remove two 5/16-18 by 3/4 hex head cap screws and two 0.344 by 0.875 by 0.063 flatwashers from the rear of the shelf assembly.
- (3) Align the holes in the rear of the shelf with the mounting holes on the front of the post (Fig. 6). Using the screws and washers removed in (2), reach in through the opening under the shelf, and insert the screws through the post and into the rear of the shelf. Tighten the screws to secure the shelf

List 31 Housing

3.06 Install the KS-20842, List 31 housing on the post (Fig. 11) as follows:

- (1) Remove two cap screws and two flatwashers from top of the post; front row, outside positions.
- (2) Using KS-19192, List 1 wrench, remove the two security screws and L-765038 sign and lens assembly from the upper part of the housing.



Wear eye protection when handling the fluorescent lamps.

- (3) Remove the two fluorescent lamps from the housing and place in a secure area.
- (4) Remove the two cap screws and two flatwashers from the lower rear of the housing and remove the L-765034 cover.
- (5) Position housing on the post with the upper support plate resting on top.
- (6) Pull the housing cord through the round hole on front of the post, press the cord into the clip, and plug into electrical outlet.
- (7) Using the two 3/8-16 by 1-1/2 hex head cap screws and two 0.406 by 0.734 by 0.063 flatwashers removed in (1), secure upper part of the housing by inserting the screws through the upper support plate on the housing, the post cap, and into the post assembly.
- (8) Secure lower part of the housing using the L-765034 cover, the two 5/16-18 by 3/4 hex head cap screws and two 0.344 by 0.875 by 0.063 flatwashers removed in (4). Reach in through opening on lower part of the post and insert the screws through the post, through the housing, and into the rear of the cover.
- (9) Ensure that the two connectors in upper part of the housing are properly engaged, and install the two 12-inch, 13-watt fluorescent lamps (GE Co. No. F13T8CW) into the lamp sockets.

- (10) Install the L-765038 sign and lens assembly to upper part of the housing, and secure using the two L-765065-2 flat head security screws (No. 10-32 by 1/2) removed in (2).

Telephone Wiring

- 3.07** Telephone wire entrance holes are located on the top-right side (Fig. 6) and lower-inside of post (Fig. 5).

Note: When the underground wire entrance is used, install flexible conduit between the studs in the mounting surface and the bottom of the protector access cover (Fig. 7).

- 3.08** Feed the wire through the entrance hole and terminate on 123A1A station protector or 42A connecting block (whichever is required). The protector or connecting block mounts inside

lower-rear of the post behind the access cover. Use KS-19192, List 1 wrench to loosen the security screw securing the cover to the post. Remove two of the 8-32 by 1/2 Phillips pan head screws from the mounting brackets. Using the two screws, secure the protector or connecting block to the bracket.

Note 1: When desired and if the appropriate mounting holes are provided, the protector may be installed in the coin telephone.

Note 2: When the overhead entrance is used and the protector is located in the lower part of the post, the wire must feed down channel (Fig. 7) to the protector and back up to the wire exit hole in the recessed area. Remove the pipe plug (Fig. 6) on top of the post to gain access to the wire conduit.

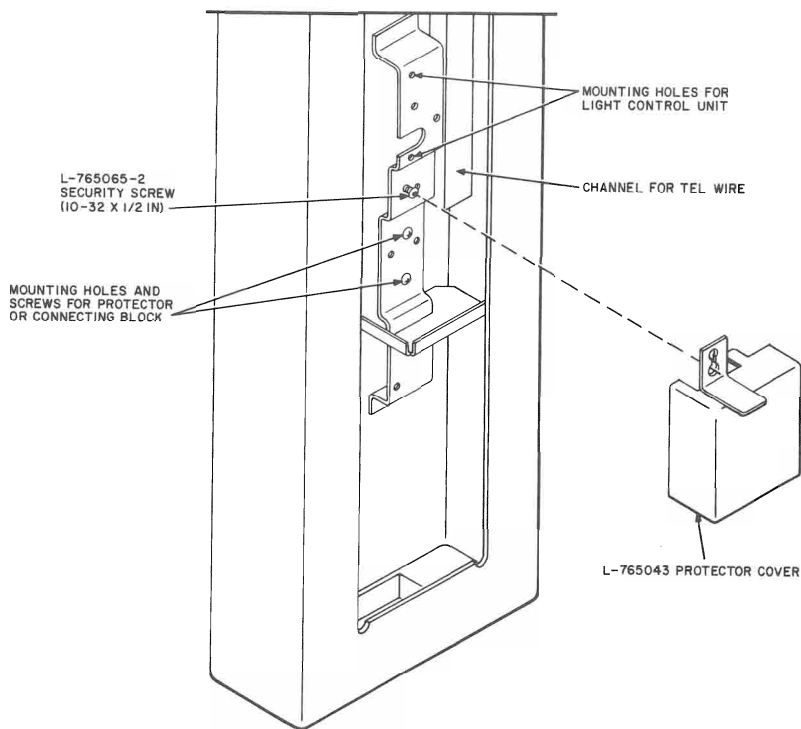


Fig. 7—Location of Station Protection

3.09 Ensure that the protector ground terminal is properly connected to the post and to an appropriate station ground as specified in Section 508-100-100. A grounding lug is provided inside lower-left of the post on a mounting bracket (Fig. 4).

Electrical Wiring

3.10 Electrical service (120V, 60Hz), which is required for telephone mounting providing the List 31 housing, may enter at the top or bottom of the post.

3.11 If the entrance is made from the top, remove the top-left pipe plug (Fig. 6), feed the wiring down the channel in the left side, and terminate at the electrical outlet located inside, lower-left of the post on a mounting bracket (Fig. 4).

3.12 If the entrance is made from below ground level, feed wiring through the underground conduit, up through the entrance hole in the base and the post (Fig. 5), and terminate at the electrical outlet (Fig. 4).

3.13 When the installation requires a service entrance box, a KS-19426, List 17 circuit breaker box assembly may be installed on the mounting bracket below the electrical outlet (Fig. 4). Remove the two 8-32 by 1/2 Phillips pan head screws from the mounting bracket. Using the two screws, secure the box assembly to the bracket. Equip the enclosure with a Heinemann Electric Co. No. 0912 single-pole circuit breaker, 120V, 15 Amp, time-delay curve No. 3. Interconnect from the circuit breaker to the electrical outlet using approved No. 14 gauge wire.

3.14 Ensure that electrical service is properly grounded as specified in Section 508-100-100. A grounding lug is provided in lower part of the post on a mounting bracket (Fig. 4).

OPTIONAL LIGHT CONTROL ASSEMBLY

3.15 When desired, install the KS-19261, List 4 light control assembly as follows:

- (1) Remove the two screws and washers and the L-765034 cover from the lower part of the KS-20842, List 31 housing (Fig. 11).

- (2) Install the light control unit on the mounting bracket inside the post assembly and secure using the two 6-32 by 1/4 Phillips pan head screws (Fig. 8).

- (3) Insert the light sensitive cell, from inside the post, through the keyhole in the lower part of the housing.

- (4) Using the two clamps and two 8-32 by 1/4 Phillips pan head screws, secure the light cell to the housing as shown in Fig. 8. Position the end of the cell so that it will just touch the edge of the 0.56 hole (Fig. 11) in the bottom of the housing.

- (5) Remove the power cord from the electrical outlet.

- (6) Plug the light unit cord into the electrical outlet.

- (7) Insert the power cord into the rear of the light unit plug.

- (8) Press both the power cord and the light cell cord into the spring clip inside the post.

- (9) Install the L-765034 cover in the lower part of the housing using the two 5/16-18 by 3/4 hex head cap screws and two 0.344 by 0.875 by 0.063 flatwashers removed in (1). Reach in through opening on post and insert the screws through the post, through the housing, and into the rear of the cover (Fig. 11).

OPTIONAL DIRECTORY HANGER

3.16 When the KS-20842, List 31 housing is used, install a KS-20030, List 10 directory hanger to the bottom of the housing using the four L-765065-2 flat head security screws (No. 10-32 by 1/2) and four No. 10 nylon-insert nuts supplied with the hanger and the KS-19192, List 1 wrench. See mounting holes on Fig. 11.

3.17 When the KS-20842, List 30 shelf is used, install a KS-20030, List 9 directory hanger (Fig. 2) as follows:

- (1) Remove the four nylon-insert nuts and flatwashers and the L-765028 shelf cover from the List 30 shelf (Fig. 6).

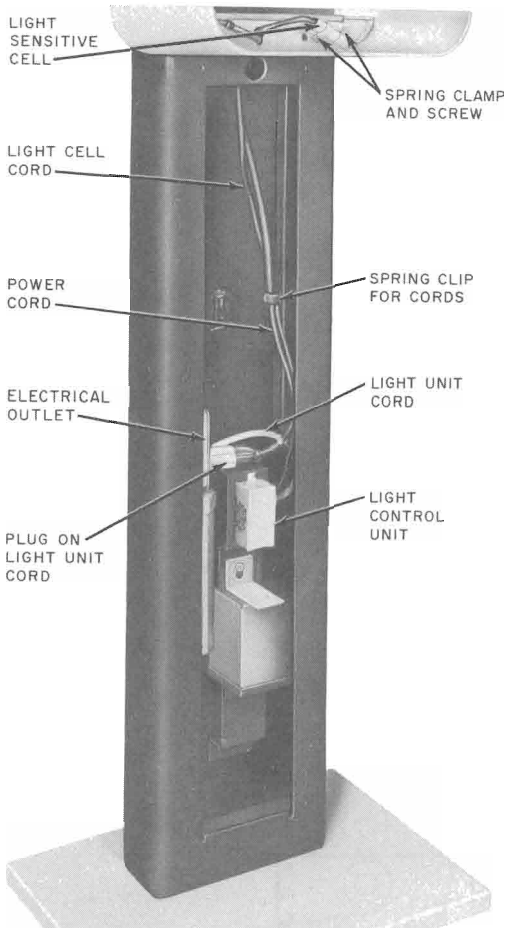


Fig. 8—Installation of KS-19261, List 4 Light Control Unit

- (2) Install the KS-20030, List 9 directory hanger to the bottom of the L-765027 shelf support (Fig. 6) using the four No. 10 flathead screws and four No. 10 nylon-insert nuts supplied with the hanger.
- (3) Install the L-765028 shelf cover on the shelf support and secure using the four No. 10-32 stop nuts and No. 10 flatwashers removed in (1).

Front Panel

3.18 Install front panel and post on follows:

- (1) Position the locking flange on right side of the front panel against the right-side opening of the post.
- (2) Pull both top and bottom of the panel to the right at the same time (Fig. 10) until the flange on left-side of the panel drops past the opening on the left side of the post, then release the panel which will lock in place.
- (3) Using a KS-19192, List 1 wrench, install the two L-765065-2 flat head security screws (No. 10-32 by 1/2), removed in 3.03(9), through the upper part of the panel and into the post.

Coin Telephone

3.19 Install the coin telephone into recessed area on the post and secure using hardware furnished with the telephone. Refer to the appropriate coin telephone section for complete installation procedures.

Note: *Telephone security studs are never used with this installation.*

BURIED BASE INSTALLATION (KS-20842, List 7)

3.20 When a List 52 buried base is used, install the base and a List 40 post as follows:

- (1) Prepare a form which is a minimum of 36 inches square with a minimum inside depth of 36 inches.
- (2) Remove the four 5/8-11 by 1-3/4 hex head cap screws and four 0.656 by 1.250 by 0.100 flatwashers from the base. Position the List 40 post on the base with the recessed area to the front. Ensure that the post is plumb, and secure to the base using the removed hardware.



To assume maximum security, the cap screws should be tightened by applying a maximum force to the wrench at an 18-inch radius.

- (3) Insert four 3/4-inch diameter, 30-inch minimum long steel reinforcement rods through the base (Fig. 3).

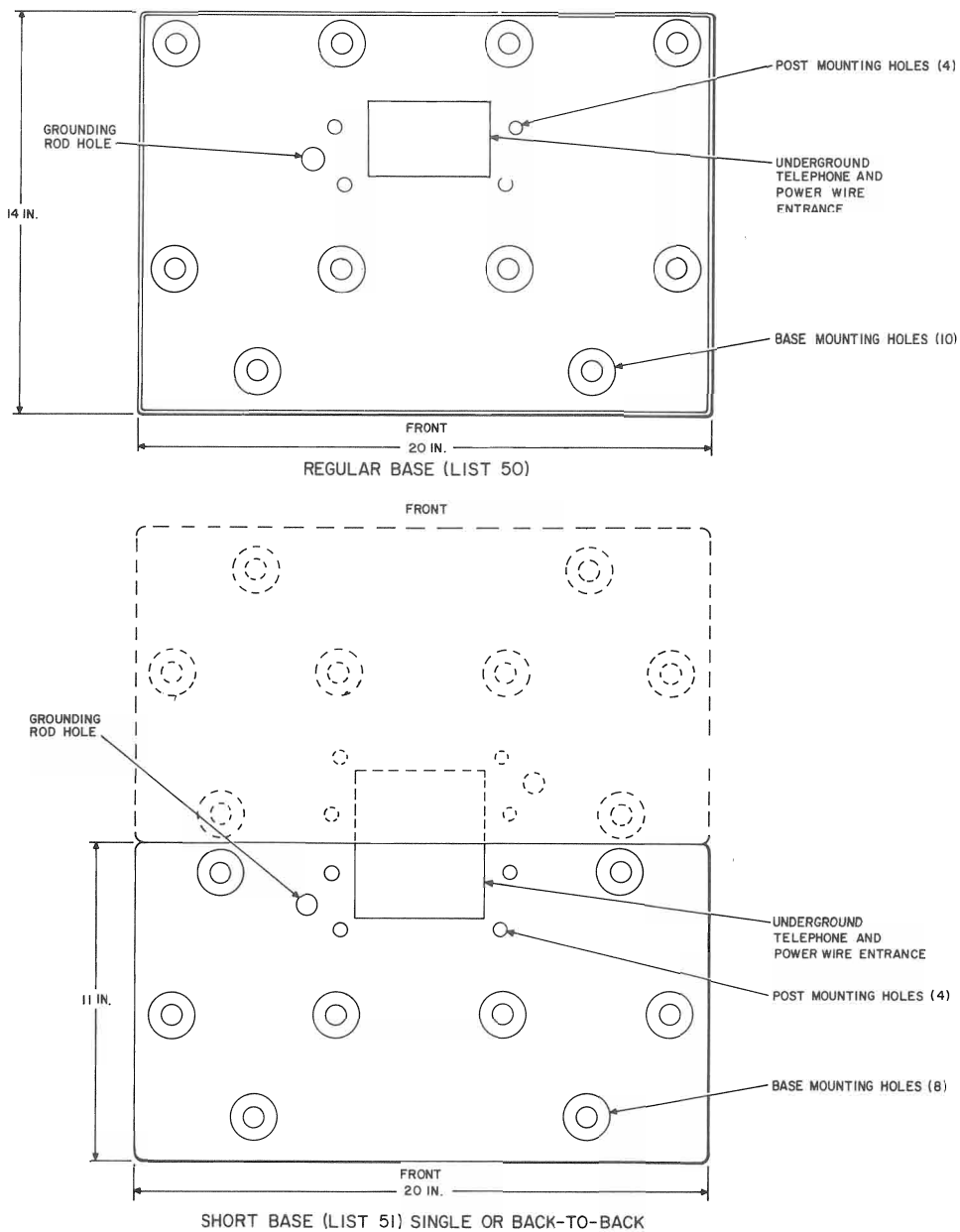


Fig. 9—Layout of Holes on List 50 and List 51 Bases, With Cover(s) Removed

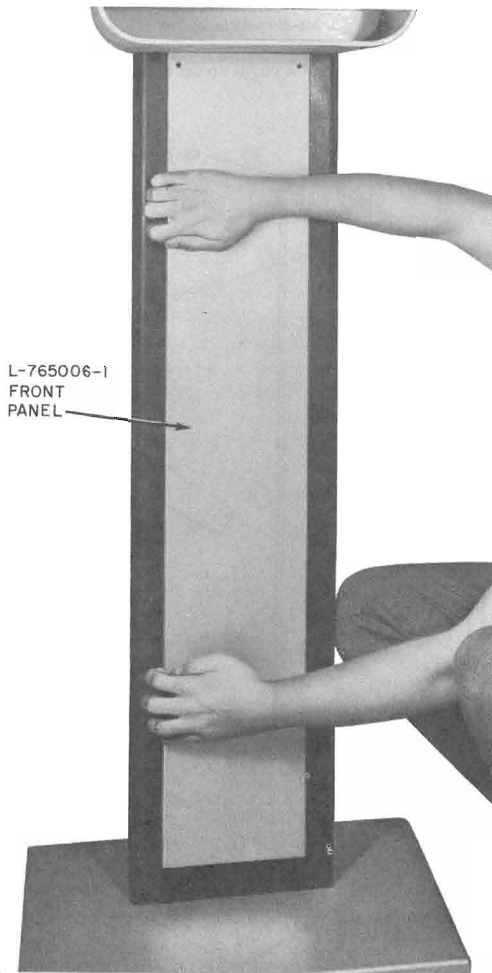


Fig. 10—Installing or Removing the Front Panel on Post Assembly

- (4) Position the base in the center of the form so that the top of the concrete will be flush with or slightly below the bottom edge of the post. Ensure that the post is plumb.

Note: Top of the concrete should also be flush with the ground.

- (5) If underground power and telephone wires are to be used, provide conduit stubs in

the form to correspond with the wire entrance hole in the top of the base (Fig. 3).

- (6) If a ground rod must be provided for the installation (3.09 and 3.14), install the rod with 4 to 5 inches extending above the top of the base. See Fig. 3 for the ground rod hole in the base.

Note: Although it is not recommended, the base may be embedded in the concrete without the post attached [ie step (2) may follow step (7)]. If this procedure should be used, the following must be ensured prior to performing step (7):

- That the base is properly positioned to ensure that the List 40 post will be plumb when later attached on the base.
 - That stamping FRONT on top of the base faces in the proper direction.
 - That the top of the base will be flush with the top of the concrete.
- (7) Pour concrete around the base to fill the form.

- 3.21** Perform the procedures outlined in 3.05 or 3.06, whichever is required, and 3.07 through 3.19.

4. MAINTENANCE

- 4.01** The local telephone company shall establish the appearance standards of all exposed surfaces.

- 4.02** The local telephone company shall establish the safety standards for all mountings.

- 4.03** Inspect the approach to the mounting and ensure that it is free of all hazards.

- 4.04** Ensure that all visible assembly screws are secure.

- 4.05** Clean the mounting as indicated in Section 508-100-101.

- 4.06** Refer to Fig. 1 through 12, except 5 and 9, and Tables A and B for repair and replacement parts.

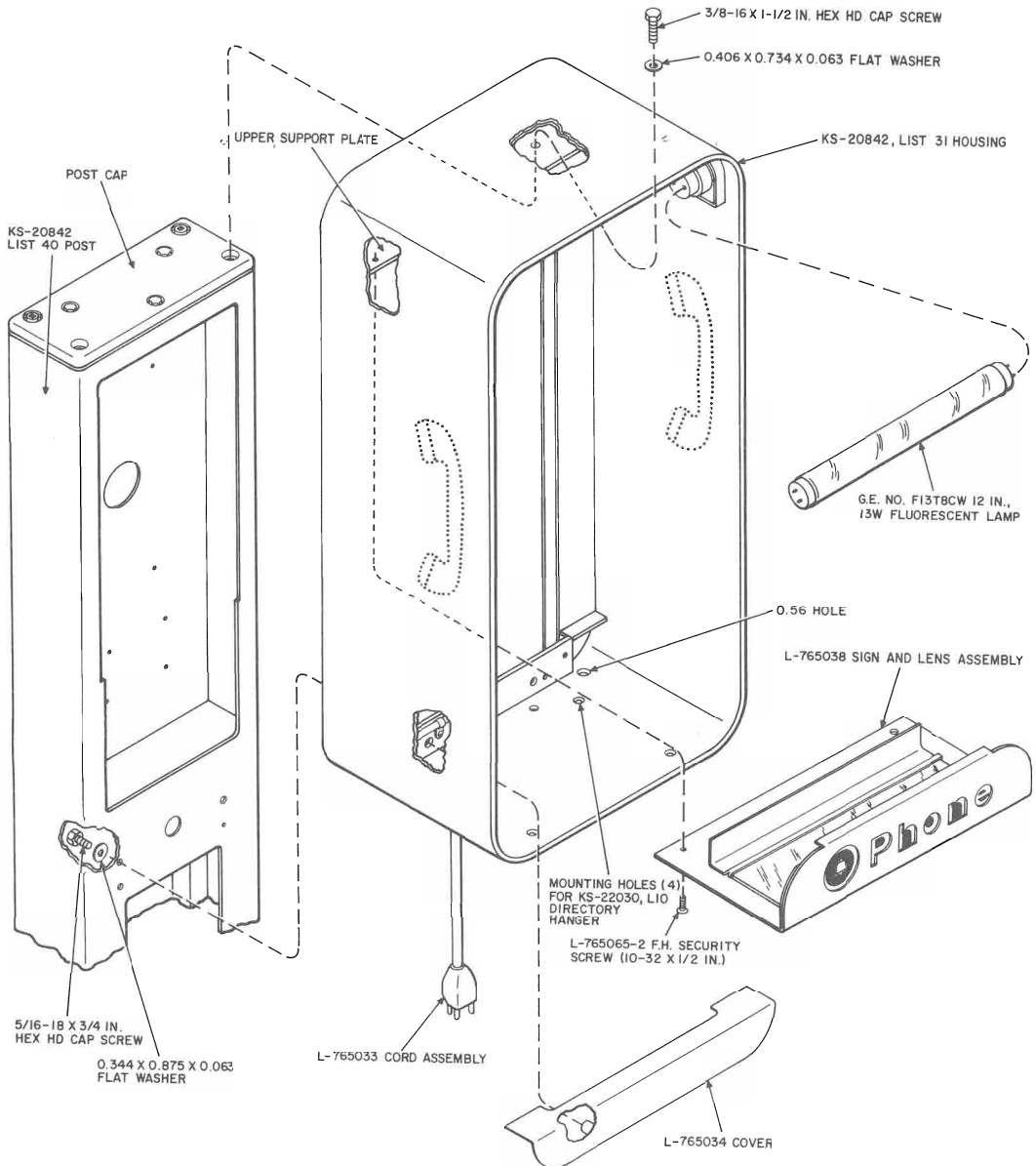


Fig. 11—Installing List 31 Housing on Post

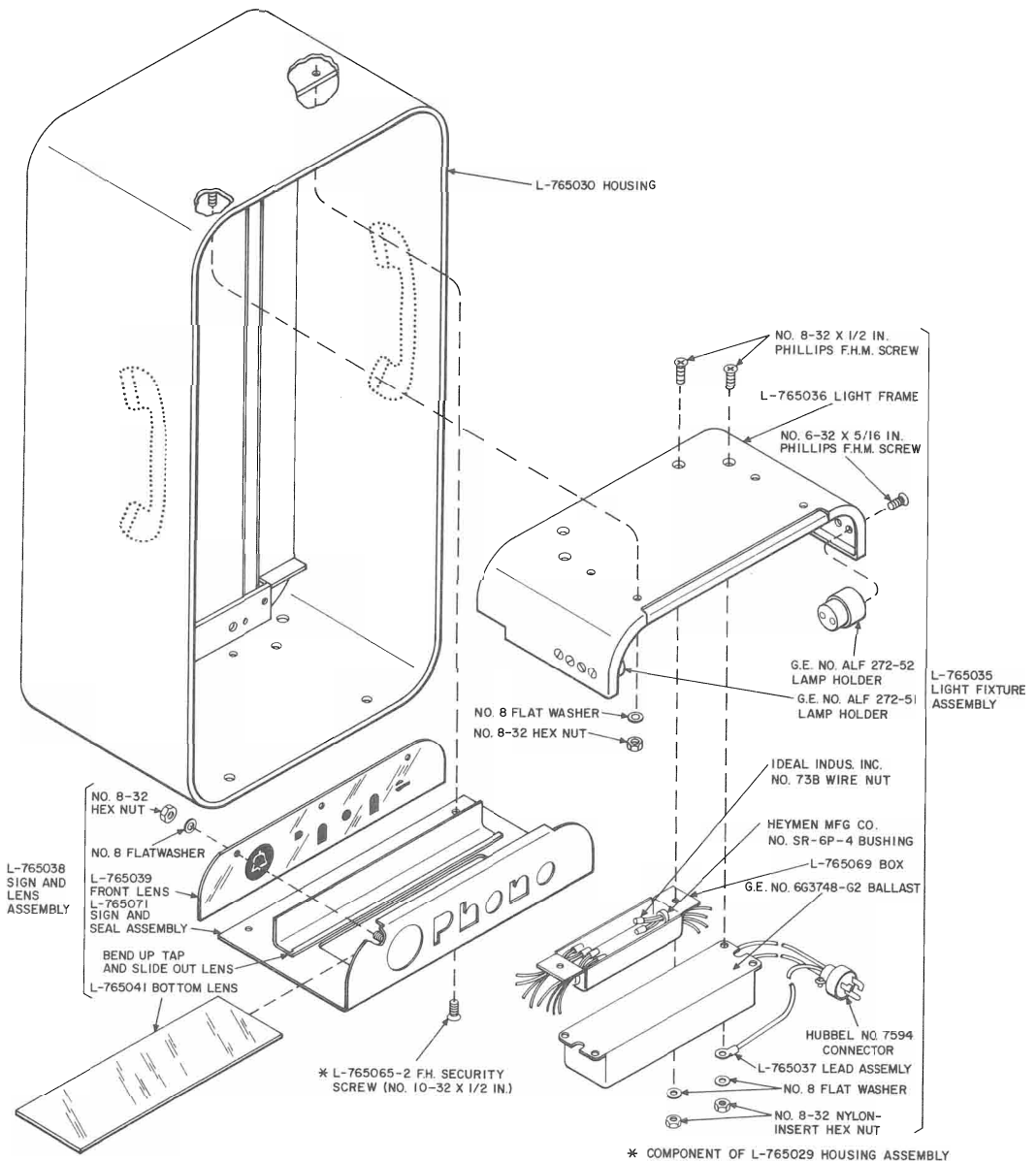


Fig. 12—Partial Exploded View of List 31 Housing

TABLE B
REPAIR AND REPLACEMENT PARTS

NAME	PART NO.	REMARKS
Cover, Base	L-765014	Used on list 50 and 51 Bases
Cover, Rear	L-765015	Used on list 50 Base
Support, Shelf	L-765027	Used on list 30 Shelf
Cover, Shelf	L-765028	Used on list 30 Shelf
Sign, Rear	L-765066	Located upper-rear of housing
Sign and Lens Assembly	L-765038	Located upper part of housing
Lens, Front	L-765038	Located upper-front of housing
Lens, Bottom	L-765041	Located upper-inside of housing
Sign Assembly	L-765042	Used on sign and lens assembly
Fixture, Light	L-765035	Located upper-inside of housing
Lead Assembly	L-765037	Provides ground for housing
Lamp	G. E. NO. F13T8CW	12 inches long, 13 watt, Flourescent used in housing
Ballast	G. E. NO. 6G3748-G2	Located upper-inside of housing
Cover	L-765034	Located lower inside of housing
Cord Assembly	L-765033	Provides electrical service from post to housing
Panel, Front	L-765006-1	Special attachment procedure to discourage unauthorized removal
Cover, Protector	L-765043	Located lower-inside of post
Cap, Post	L-765005	Located top of post
Gasket	L-765044	Located under post cap
Screw, F. H. Security	L-765065-2	Secures front panel, sign and lens assembly, base and protector covers