## PUBLIC PHONE SIGNS ILLUMINATED TYPES

#### 1. GENERAL

- 1.01 The following signs are included in this section:
  - KS-16422 (Fig. 1)
  - KS-19322 (Fig. 2 and 3)
    - KS-20031 (Fig. 4)
    - KS-20135 (Fig. 5)
- 1.02 This section is reissued to revise information on the KS-20135 sign, and revise graphics on all other signs.
- 1.03 Signs shall not create a hazard in passageways or other areas. Minumum height specifications are included with installation information for each particular sign.



Always disconnect power or remove cord from power receptacle before doing any work on a sign. Do not connect signs to nonstandard or temporary electrical wiring.

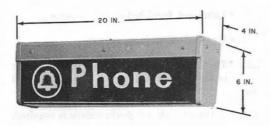


Fig. 1-KS-16422 Sign



Fig. 2-KS-19322 Sign for Phone Service



Fig. 3-KS-19322 Sign for Directory Service

#### 2. KS-16422 SIGN

- 2.01 The top metal cover and two metal ends are finished with gray lacquer.
- 2.02 The following list numbers are available:
  - (a) KS-16422, List 1 Sign (Fig. 6):
    - Does not include sign dome, lamp, and mounting brackets.
  - (b) KS-16422, List 8 Dome (Fig. 6):
    - Blue dome with the word Phone and an arrow on each side plus a white translucent area on the bottom.

### NOTICE

Not for use or disclosure outside the Bell System except under written agreement

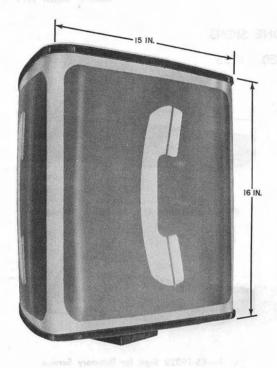


Fig. 4-KS-20031 Sign

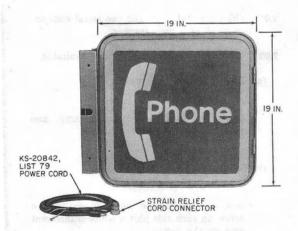


Fig. 5-KS-20135, List 3 Sign

- (c) KS-16422, List 9 Dome (Fig. 6):
- Blue dome with Bell System Emblem and word Phone on each side.
- (d) KS-16422, List 10 Dome (Fig. 6):
  - Blue dome with the word Phone and an arrow on each side.
- (e) KS-16422, List 11 Dome (Fig. 6):
  - Blue dome with Bell System Emblem and word Phone on each side plus a white translucent area on the bottom.
- (f) KS-16422, List 4 Bracket Assembly (Fig. 7):
  - Mounting bracket for mounting List 1 to a vertical surface.
- (g) KS-16422, List 5 Bracket (Fig. 8):
- Mounting bracket for mounting List 1 to a horizontal surface.
- 2.03 The KS-16422 sign is intended for use indoors or in sheltered areas, at semiexposed or remote coin stations, to direct customers to the coin phone.
- 2.04 The sign is designed to accept one 15-watt, T12 fluorescent lamp 18 inches long (F15T12/CW).
  - · Lamp not furnished—order separately
  - Use cool-white lamps.
- 2.05 The sign is equipped with a 5-foot, 3-conductor power cord with a molded 3-wire grounded plug.
- 2.06 A 110/125-volt AC power source is required.
- 2.07 Following is an example of a typical order:
  - 1-Sign, Phone, KS-16422, L1
  - 1-Dome, KS-16422, L8
- 1-Bracket, KS-16422, L5

- 2.08 The sign and mounting brackets are designed to permit paralled mounting with the mounting surface (Fig. 9) or projection at right angles from the mounting surface (Fig. 10).
- 2.09 The lower edge of List 4 bracket shall be at least 85-1/2 inches from the floor.
- 2.10 The lower edge of List 5 bracket shall be at least 83-1/2 inches from the floor.
- 2.11 Fasteners for List 4 or 5 mounting brackets are listed in Table A.
- 2.12 The four threaded holes on top of the unit (Fig. 11) are equipped with No. 8-32 by 7/16 BHM screws and No. 8 lockwashers. Use two screws to attach the unit to the mounting bracket and two to seal the holes not used.
- 2.13 Install F15T12/CW lamp as follows (Fig. 11).
  - (1) Remove power cord from storage area.
  - Remove screws from end coverplate and remove plate.
  - (3) Slide plastic dome out of open end.
  - (4) Install lamp in lamp holder.
  - (5) Slide dome in place.
  - (6) Install end coverplate and secure with screws.
- 2.14 Plug power cord into an approved electrical receptacle.



A 3-wire grounded electrical receptacle is preferred; however, a 2-wire receptacle may be used with the use of a plug adapter (Fig. 11). If ground potential is not available at the receptacle, run a No. 14 AWG wire from the adapter to a suitable ground.

2.15 Store excess power cord in top of sign unit.

#### KS-19322 SIGN

3.01 The metal parts of the sign exposed to view when installed are anodized aluminum.

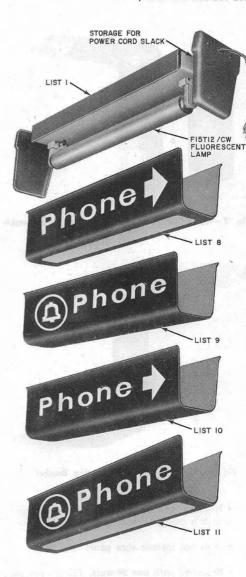


Fig. 6—KS-16422 Sign with Optional Domes

- 3.02 The following list numbers are available.
  - (a) KS-19322, List 1 Sign (Fig. 12):
- Basic sign frame for single sign installation and backplate for wall mounting

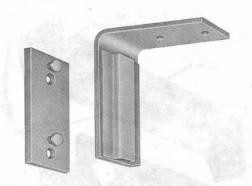


Fig. 7—KS-16422, List 4 Mounting Bracket Assembly

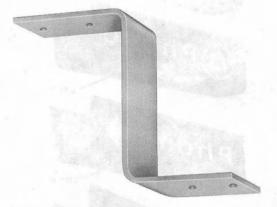


Fig. 8-KS-16422, List 5 Mounting Bracket

- Includes a 7-foot, 3-conductor power cord with a molded 3-wire grounded plug
- · Does not include sign panel
- Equipped with one 20-watt, T12 fluorescent lamp 24 inches long (F20T12/CW).
- (b) KS-19322, List 2 Sign:
  - · Basic sign frame for multiple sign installations
- Same as the List 1 except it does not include a power cord and must be wired by a local electrician



Fig. 9—Parallel Installation of KS-16422 Sign

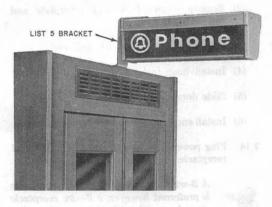


Fig. 10—Projecting Installation of KS-16422 Sign

- Equipped with two locking screws which prevent it from being lifted from the backplate
- Knockouts are provided in cord storage area to allow wiring to enter from top, bottom, or either side.
- (c) KS-19322, List 10 Panel:
  - · Unlettered white translucent plastic.

# TABLE A FASTENERS FOR MOUNTING KS-16422, LIST 4 OR 5 BRACKETS

SURFACE	FASTENER
Hardwood	1-1/4 inch, No. 14 RH wood screws
Softwood	1-3/4 inch No. 14 RH wood screws
Plaster on wood lath	2-1/4 inch, No. 14 RH wood screws
Masonry, unfinished	1-1/4 inch, No. 14 RH wood screw in 10-14 by 1 inch screw anchor
Masonry, finished	1-3/4 inch, No. 14 RH wood screw in 10-14 by 1-1/2 inch screw anchor
Hollow Tile	1/4-inch by 4-inch, RH toggle bolts or appropriate size wall anchors

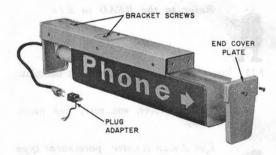


Fig. 11—KS-16422 Sign—Assembly of Parts

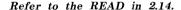
- (d) KS-19322, List 13 Panel:
  - Front area-blue translucent plastic
  - Bottom area—white translucent plastic
  - · No letters.
- (e) KS-19322, List 14 Panel:
  - White translucent plastic with blue letters (Phone) and Bell System Emblem on front.
- (f) KS-19322, List 15 Panel:
  - Front area—blue translucent plastic with white letters (Phone) and Bell System Emblem
  - Bottom area—white translucent plastic (Fig. 2).
  - (g) KS-19322, List 16 Wire Shield Kit:
    - For use with KS-19267 coin telephone shelf.
  - (h) KS-19322, List 17 Panel:
    - Front area—blue translucent plastic with white letters (directories)
    - Bottom area—white translucent plastic (See Fig. 3).
  - (i) KS-19322, List 18 Panel:
    - White translucent plastic with blue letters (directories).

- 3.03 The KS-19322 sign is intended for use indoors or in sheltered areas, over a KS-19267 coin telephone shelf or over directory racks and tables.
- 3.04 A 110/125-volt AC power source is required.
- **3.05** Following is an example of a typical order:
  - 1-Sign, Lighted, KS-19322, L1
  - 1-Panel, KS-19322, L15
  - 1-Kit, Wire Shield, KS-19322, L16
- **3.06** The backplate (Fig. 13) must be securely fastened to the mounting surface.
- **3.07** Locate the backplate as follows:
  - (a) When installed over a KS-19267 coin telephone shelf, bottom edge of backplate to top edge of shelf shall be 6 inches.
  - (b) When installed over a directory shelf, bottom edge of backplate to floor shall be 73-1/2 inches.
- 3.08 Use a KS-19267, List 10 auxiliary backboard assembly if an uneven wall surface or a wall with poor anchoring qualities prevent a neat and secure installation. Refer to Section 508-251-100.
- **3.09** Table B lists fasteners for mounting the backplate.
- 3.10 Install KS-19322, List 1 sign on the backplate as follows:
  - (a) Remove the power cord through the hole in the rear wall of the cord storage compartment (Fig. 13).
  - (b) Place cord in upper or lower channel opening of backplate as required.
  - (c) Engage lower slot of sign with lower flange of backplate (Fig. 14, Step 1).
  - (d) Raise sign assembly as far as possible and tilt top of sign toward wall (Fig. 14, Step 2).

- **Note:** Equal lifting pressure must be applied to each end of the sign assembly when installing or removing.
- (e) Allow sign to slide down, engaging upper slot and flange (Fig. 14, Step 3).

**Note:** If the cord is concealed behind a KS-19267 coin telephone shelf installation, place a KS-19322, List 16 wire shield kit over the exposed cord between sign and shelf as shown in Section 508-251-100.

- 3.11 Install sign panel as follows:
  - (a) Remove top cover and end caps.
  - (b) Place end caps on sign panel (Fig. 13).
  - (c) Slide the panel and end caps onto sign frame.
  - (d) Ensure that F20T12/CW lamp is secured in lamp holders.
  - (e) Install top cover.
  - (f) Plug power cord into an approved electrical receptacle.





- 3.12 Install KS-19322, List 2 sign on backplate as follows:
  - (a) Remove top cover, end caps, sign panel, and lamp.



List 2 sign requires permanent type wiring. Ensure that the wiring is installed in accordance with local electrical and building codes.

- (b) Remove the bottom cover (Fig. 15) to make wiring area accessible.
- (c) Perform operations outlined in 3.10 (c) through (e).
- (d) Feed wire through end knockouts to adjacent sign(s).

- (e) Have a local electrician make power connections.
- (f) Perform operations outlined in 3.11 (b) through (e).
- (g) Install bottom cover (Fig. 15), lamp, sign panel, end caps, and top cover.



Always disconnect power or remove cord from power receptacle before doing any work on a sign.

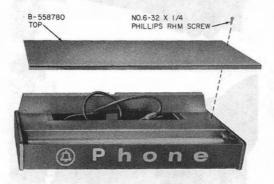


Fig. 12—KS-19322, List 1 Sign With Top Cover Removed

#### 4. KS-20031 SIGN

- 4.01 The KS-20031, List 1 sign (Fig. 4) is intended for indoor or outdoor use over a walk-up, drive-up mounting and provides the following features:
  - (a) Consists of a KS-20031, List 2 polycarbonate plastic lens assembly (Fig. 16) and fixture assembly (Fig. 17).
    - The List 2 lens assembly can be ordered separately as a replacement part.
  - (b) Illuminated with a 160-watt, self ballasted, mercury lamp (Dura Test Corp. No. 976 or approved equivalent).
    - · Lamp furnished with sign (shipped loose).

TABLE B
FASTENERS FOR MOUNTING A
KS-19322 SIGN BACKPLATE

SURFACE	FASTENERS
KS-19267, L10 Backboard	1/4-20 by 3/4-inch steel RHM screws (furnished with backboard assembly)
Hardwood	1-1/4 inch No. 14 RH wood screws
Softwood	1-3/4 inch No. 14 RH wood screws
Plaster on wood lath	2-1/4 inch No. 14 RH wood screws*
Plaster on metal lath	1/4-20 by 1-1/2 inch RH machine screw in 1/4 by 1-1/4 inch expansion shield
Masonry, all types	2-inch No. 14 RH wood screws in No. 16D plastic anchor 1-1/2 inches long. Requires 2- inch deep hole.
Hollow Tile	1/4-inch by 4-inch RH toggle bolts

\* At least one (preferably two) of the screws in the top row of holes shall be anchored in the wall studding. Drill additional 1/4-inch hole in backplate if necessary.

Caution: Do not expose eyes or skin surface to ultra violet rays of a burning mercury arc if the outer glass envelope is broken.

- (c) Not equipped with power cord; must be wired by a local electrician.
- (d) Ends of the sign are closed by aluminum caps which are pulled together with 1/4-inch rods causing the lens to be compressed into water tight seals.

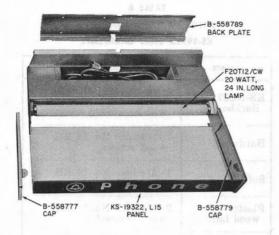


Fig. 13-Assembly of KS-19322 Sign

4.02 Following is an example of a typical order:

1-Sign, KS-20031, L1

1-\$Kit, KS-20842, L724

- 4.03 The KS-20031, List 1 sign can be installed on the following:
  - (a) KS-19426, List 39 mast (Fig. 18 and 21):
    - The List 39 mast is for overhead power where a canopy is used over a KS-19426 mounting. See Section 508-451-100 for installation procedures.
  - (b) KS-19426, List 40 mast (Fig. 19 and 21):
    - The List 40 mast is for overhead power where a canopy is not used. See Section 508-451-100 for installation procedures.
  - (c) KS-19426, List 41 mast (Fig. 20 and 21):
    - The List 41 mast may be used to accommodate the KS-20031, List 1 sign on a KS-19426 mounting where a canopy is used but not overhead power. See Section 508-451-100 for installation procedures.
    - The List 41 mast cannot be installed on mountings without canopies.

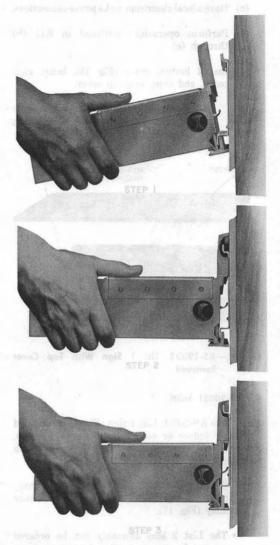


Fig. 14—Installation of KS-19322 Sign

- (d) KS-20842, List 76, 76B, 77, or 77B Mast (Fig. 22, 23, and 24):
  - The List 76 and 76B masts are 45 inches long

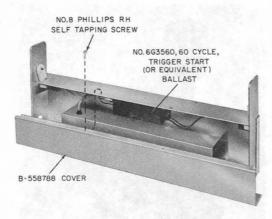


Fig. 15—KS-19322, List 1 Sign—Bottom View with Cover Removed

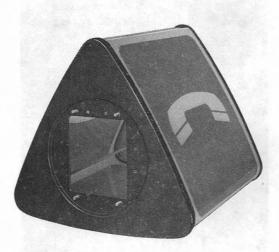


Fig. 16—KS-20031, List 2 Lens Assembly—Bottom View

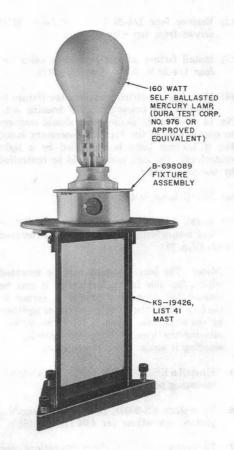


Fig. 17—₱Fixture and Lamp—Component of KS-20031 Signs♥

- The List 77 and 77B masts are 12 inches long
- A KS-20842, List 72 sign kit is required (Fig. 23 and 24).
- 4.04 Install a KS-20031, List 1 sign on a KS-19426 mounting as follows:

**Note:** The List 2 lens assembly (Fig. 16) must be removed from the fixture assembly (Fig. 17) before installation.

(1) Remove four cap nuts which secure lens to base.

- (2) Remove four 1/4-20 by 5/8 Phillips RHM screws from top edge of mast.
- (3) Install fixture assembly to mast using the four 1/4-20 by 5/8 screws (Fig. 17).
- (4) Have local electrician connect the fixture to junction box below KS-19426 housing with No. 14 AWG wire. Connections should conform to connections of the housing fluorescent lamp, ie; if housing lamp is controlled by a light control unit, the sign lamp should be controlled by the same unit.
- (5) Install lamp in fixture.
- (6) Install List 2 lens assembly over fixture and secure with the four cap nuts removed in (1) (Fig. 21).

**Note:** The lens assembly may be mounted with a flat side facing forward or it may be rotated 180 degrees to provide a corner in the forward position. Change mounting positions by removing four cap nuts from the bottom, rotating the lens assembly 180 degrees, and securing it again with the cap nuts.

- 4.05 ♦Install a KS-20031, List 1 sign on a KS-20842 mounting per Fig. 23 and 24.♦
- **4.06** To replace KS-20031, List 2 lens assembly, perform operations per 4.04 (1) and (6).
- **4.07** To replace lamp, perform operations per 4.04 (1), (5), and (6).

Caution: Do not expose eyes or skin surface to ultra violet rays of a burning mercury arc if the outer glass envelope is broken.

#### 5. \$KS-20135 Sign

- 5.01 The KS-20135 sign (Fig. 5) is a double-sided sign designed for mounting on the mast of a KS-20842 telephone mounting (Fig. 25).
- 5.02 The sign is approximately 19 inches square and 4-5/8 inches thick with rounded corners.
- 5.03 The frame is aluminum and is available in clear or black finish.



Fig. 18—₩KS-20031, List 1 Sign Installed on KS-19426 Mounting With Canopy¶



- 5.04 A KS-20842, List 79 power cord comes as a component of the sign.
- 5.05 Each KS-20135 sign is elliptical illuminated with a 160 watt, self ballasted mercury lamp (Norelco No. 160DE23SB/C or an approved equivalent). See Fig. 26.
  - · Lamp furnished with sign (shipped loose).

Caution: Do not expose eyes or skin surface to ultra violet rays of a burning mercury arc if the outer glass envelope is broken.

- 5.06 The following signs are available.
  - (a) KS-20135, List 3 sign:
    - A complete clear aluminum sign equipped with two List 6 diffusers (white graphics on blue background).
  - (b) KS-20135, List 3B sign:
    - A complete black aluminum sign equipped with two List 6 diffusers (white graphics on blue background).
  - (c) KS-20135, List 13 sign:
    - A complete clear aluminum sign equipped with two List 7 diffusers (blue graphics on white background).
  - (d) KS-20135, List 13B sign:
    - A complete black aluminim sign equipped with two List 7 diffusers (blue graphics on white background).
- 5.07 The following replacement parts are availabe:
  - (a) KS-20135, List 6 diffuser:
    - · A plain diffuser without frame
    - · White graphics on blue background.
  - (b) KS-20135, List 7 diffuser:
    - · A plain diffuser without frame
    - · Blue graphics on white background.



Fig. 20—♦KS-20031, List 1 Sign Installed on KS-19426, List 41 Mast♥

- (c) KS-20135, List 8 hinged lens:
  - A clear aluminum hinged frame with List 6 diffuser.
- (d) KS-20135, List 8B hinged lens:
  - A black aluminum hinged frame with List 6 diffuser.
- (e) KS-20135, List 9 hinged lens:



Fig. 21—Mounting Hardware for KS-20031, List 1 Sign Mounted on KS-19426, List 39, 40 or 41 Mast¶

- A clear aluminum hinged frame with List 7 diffuser.
- (f) KS-20135, List 9B hinged lens:
  - A black aluminum hinged frame with List 7 diffuser.
- 5.08 Ordering information should specify quantity, KS-20135, and list number.
- 5.09 Installation instructions are described in the section on the KS-20842 mounting (Section 508-452-100).



Fig. 22—♦KS-20031, List 1 Installed on a KS-20842 Mounting♦

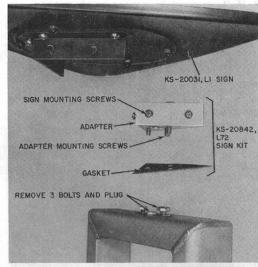


Fig. 23-Installation of KS-20031, List 1 Sign

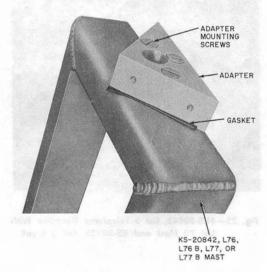


Fig. 24-Installation of KS-20842, List 72 Sign Kit



Fig. 25—♦KS-20842, List 5 Telephone Mounting With List 70 Mast and KS-20135, List 3 Sign€

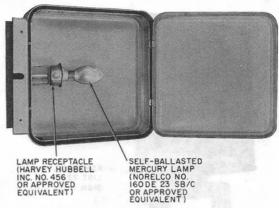


Fig. 26-♦KS-20135 Sign With Lens Open