

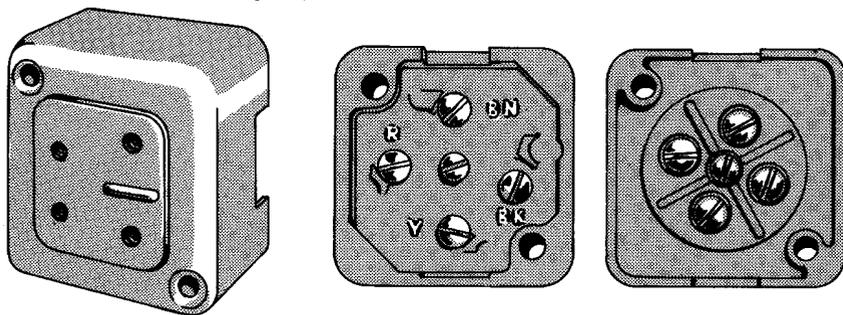
PORTABLE TELEPHONE INSTALLATION

1. GENERAL

- 1.01 This practice provides the description of and installation procedures for plugs and jacks used with portable telephones. This practice is being reissued to update information on the 505A plug which replaces the 283B portable phone plug.
- 1.02 The installer should be consistent in positioning portable telephone jacks so that the customer can easily remember how to insert the plug in each jack.

2. DESCRIPTION

- 2.01 The various types of jacks are divided into two categories, surface mounted jacks and flush mounted jacks. The surface mounted jacks are the 404B indoor jack (see Figure 1) and the 16151 outdoor jack (see Figure 2). The flush mounted jacks are the 548A indoor jack, with various outlet plates and mounting brackets (see Figures 3 and 4), and the 16152 outdoor jack (see Figure 5).



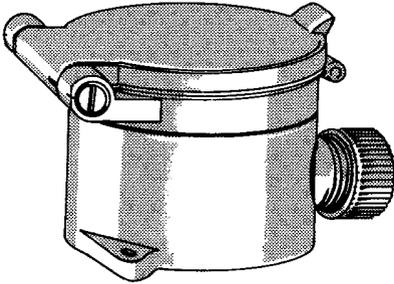
1A. Front

1B. Rear (Different Manufacturers)

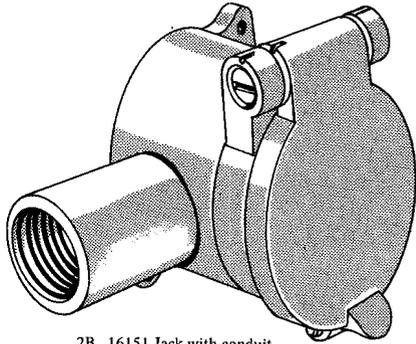
FIGURE 1. Surface Mounted Indoor Installation (404B Jack)

2.02 *Surface Mounted Jacks:*

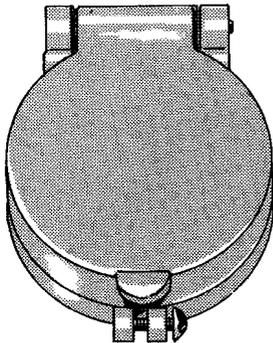
- a. The 404B indoor jack shown in Figure 1 is principally intended for use where exposed wire is run along the baseboard or floor. Two wood screws are supplied with the jack for mounting on a wood surface. The jack accepts a 505A plug.
- b. The 16151 outdoor jack shown in Figure 2 houses a modified 493A jack which accepts a 505A plug. This jack is designed for service at outdoor locations such as breezeways, patios and terraces where there is an exposed wire run. The jack may be installed with or without conduit.



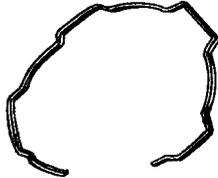
2A. 16151 Jack without conduit



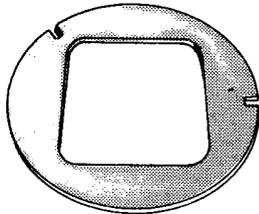
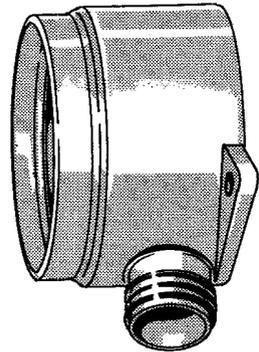
2B. 16151 Jack with conduit



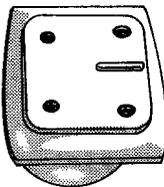
Cover Assembly



Retainer Spring



Retainer Ring



Jack Front
Modified 493A Jack



Housing

2C. Assembly of 16151 Outdoor Jack

FIGURE 2. Surface Mounted Outdoor Installation

2.03 Flush Mounted Jacks:

- a. The 548A indoor jack may be used in conjunction with a customer installed conduit outlet box as shown in Figure 3, or for prewiring in association with a type 60A mounting ring as shown in Figure 4. The jack accepts a 505A plug.

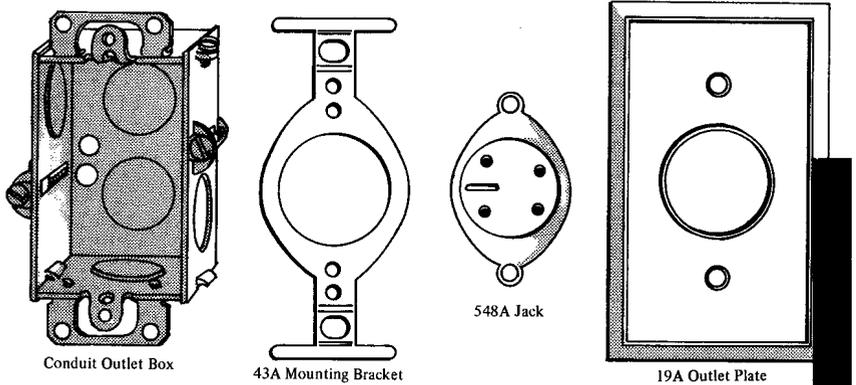


FIGURE 3. Installation Using Customer Installed Conduit Box (548A Jack)

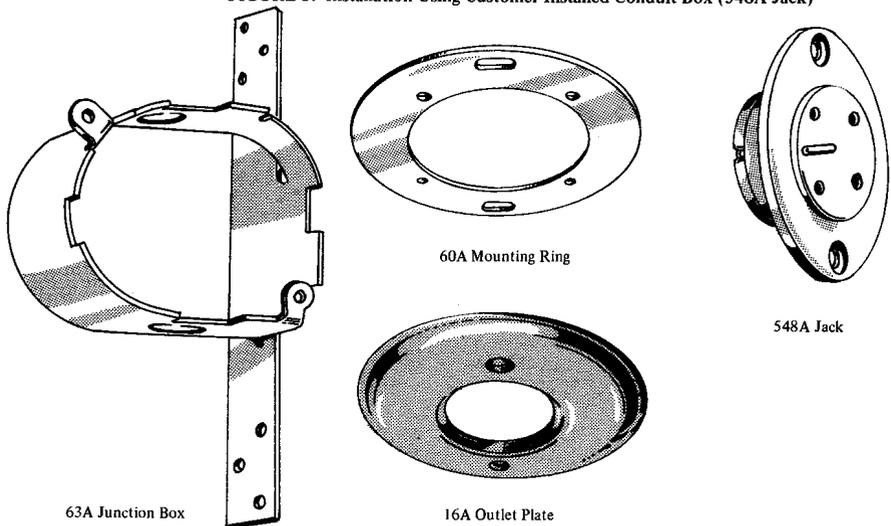
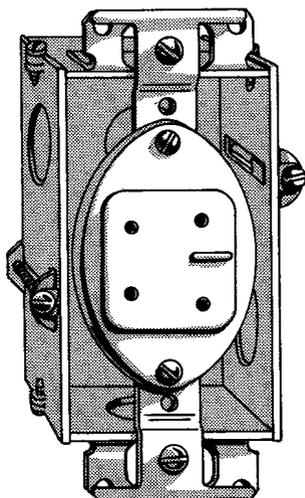
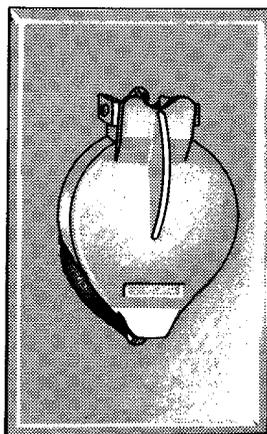


FIGURE 4. Flush Mounted Indoor Installation for Prewiring (548A Jack)

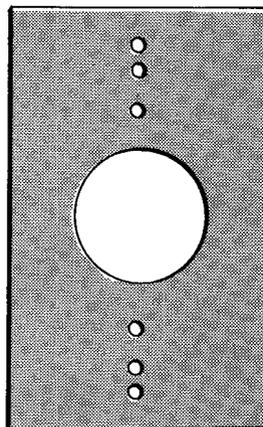
- b. The 16152 outdoor jack houses a 493A jack and may be used for prewiring at outdoor locations. The conduit outlet box supplied with the assembly (see Figure 5) is used. When the outdoor jack is to be installed in conjunction with a customer installed conduit outlet box, the conduit outlet box supplied with the unit is not used. The jack accepts a 505A plug.



Conduit Outlet Box
with Portable Jack
Assembly Installed



Outlet Plate



Neoprene Gasket

FIGURE 5. Flush Mounted Outdoor Installations (16152 Jack)

2.04 *505A Plug*: The 505A plug fits 404B and 548A jacks, as well as associated 498A and 550A jack assemblies. It consists of an insulating block with four push-in spade terminals and a removable cap (see Figure 6). The 505A plug replaces the 283B plug (see Figure 7).

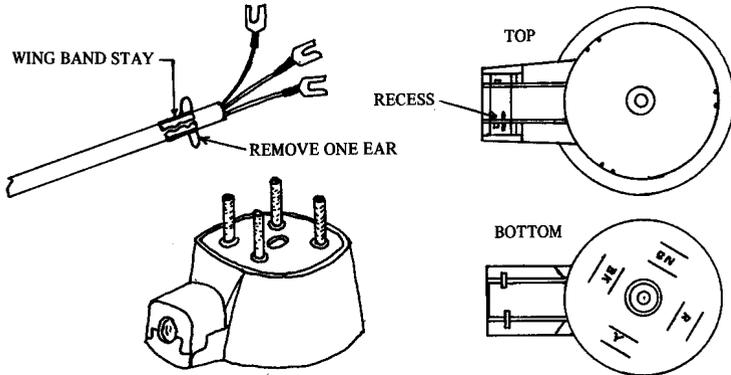


FIGURE 6. 505A Portable Phone Plug

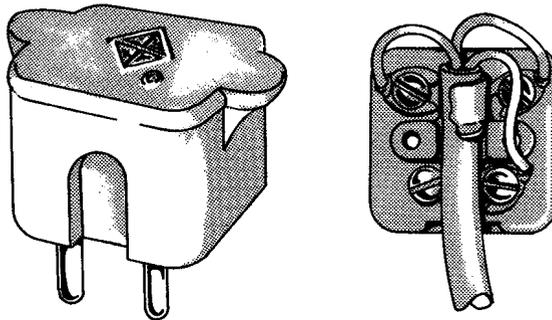


FIGURE 7. 283B Portable Phone Plug

3. INSTALLATION

3.01 The following paragraphs cover the procedures for installing the various combinations of jacks. It is assumed that conduit outlet boxes (where used) will have been installed in buildings already constructed and the installer will be responsible for prewiring installations.

3.02 *Surface Mounted Jacks*:

- a. To install station wire to 404B indoor jacks (see Figure 1), proceed as follows:
 - (1) Connect station wire to terminals in accordance with the color code markings shown in Figure 1B. Position the 404B jack so that the cord entry hole is situated on the side.
 - (2) If necessary, coil excess station wire around the outside of the circular molded case.

- (3) Mount the 404B indoor jack using the two 1-1/2-inch wood screws supplied with the jack.

NOTE: If the 404B indoor jack is to be mounted to a masonry wall (or any similar hard surface), use appropriate standard mounting hardware.

- b. The 16151 outdoor jack may be installed with or without conduit. If installed without conduit, the wire entrance fitting should always be at the bottom, with the cover hinge of the assembly at the top, as shown in Figure 2A. The jack should be fastened to wood or masonry (or similar hard surfaces) with appropriate standard mounting hardware. To install station wire to the 16151 outdoor jack, proceed as follows:

- (1) Remove the retainer spring, retainer ring and 493A jack.
- (2) Loosen the gland nut.
- (3) Run station wire through the gland nut friction washer, grommet and into the housing.
- (4) Connect the station wire to terminals marked R, Y, G, and B on the rear of the 493A jack. If excess cord is left, it may be coiled around the outside of the circular molded case.
- (5) Pull excess station wire back through the grommet while inserting the 493A jack in place.

NOTE: Arrange the 493A jack inside the housing so that the ridge on the face of the jack is at the side. This is to ensure that the cord entry hole on the 505A plug will be situated at the side when connected.

- (6) Place a friction washer over the grommet and tighten the gland nut.
 - (7) Insert the retainer ring over the 493A jack.
 - (8) Insert the retainer spring.
- c. The 16151 outdoor jack may be coupled directly to 1/2-inch conduit (see Figure 2B). When attached in this manner, the cover assembly (see Figure 2C) can be rotated (by loosening the cover lock screw) to position the cover hinge at the top. To connect station wire to the 493A jack, pull the station wire through the conduit and proceed as follows:
 - (1) Remove the gland nut, friction washer and grommet from the entry hole (these items are not necessary when connecting the 16151 jack to conduit).
 - (2) Remove the retainer spring, retainer ring and 493A jack.
 - (3) Connect the housing to conduit (using 1/2-inch conduit fitting) and secure to the mounting surface (wood, masonry, or similar hard surface) with appropriate standard mounting hardware.
 - (4) Bring the station wire out through the housing and connect to the 493A jack according to the color code marked on the rear of the jack.

- (5) Wrap any excess cord around the outside of the circular molded case.
- (6) Insert the 493A jack into the housing.
- (7) Replace the retainer ring and retainer spring.

3.03 *Flush Mounted Jacks:*

- a. For an installation where a conduit outlet box is used, pull the station wire through the conduit box and proceed as follows:
 - (1) Secure the 43A mounting bracket to the front of the conduit outlet box with the two 1-inch flathead machine screws provided.
 - (2) Bring the station wire out through the conduit outlet box and the 43A mounting bracket and connect to the rear of the 548A jack in accordance with the color code markings. Wrap any excess cord around the outside of the circular molded case.
 - (3) Insert the 548A jack into the 43A mounting bracket and secure with the two 6-32 x 5/16-inch flathead screws supplied with the 548A jack. When installed in a conduit outlet box, the face of a flush type jack should be aligned with the supporting surface and brought forward a sufficient distance so that the outlet plate will not interfere with insertion of the plug. In order to secure a flush fit, it may be necessary to remove tabs as shown in Figure 3, or to place washers between the mounting bracket and conduit outlet box.
 - (4) Attach the 19A outlet plate to the 43A mounting bracket with the two 6-32 x 3/8-inch ovalhead machine screws supplied with the outlet plate.
- b. To install the 16152 outdoor jack in conjunction with a customer installed conduit outlet box, pull the station wire through the conduit and proceed as follows:
 - (1) Mount the 43A mounting bracket to the conduit outlet box with the screws provided.
 - (2) Bring the station wire out through the 43A mounting bracket and connect to the 493A jack in accordance with color code markings. Wrap any excess cord around the outside of the circular molded case.
 - (3) Mount the 493A jack to the 43A mounting bracket with the screws provided.
 - (4) Secure the neoprene gasket and outlet plate to the 43A mounting bracket with the screws provided.
- c. Prewired outdoor installations require the use of the conduit box supplied with the 16152 outdoor jack. Prior to installing a conduit box, obtain the permission of the customer. To mount the 16152 outdoor jack, proceed as follows:
 - (1) Secure the conduit box supplied with the 16152 outdoor jack between suitable studs according to standard procedures.
 - (2) Repeat steps (1) through (4) of paragraph 3.03 b.