

## PLUGS

### FOR PORTABLE TELEPHONE SETS

### IDENTIFICATION AND CONNECTIONS

#### 1. GENERAL

- 1.01** This section contains plug information formerly found in Section 461-630-100.
- 1.02** For associated jacks see Section 461-630-100.
- 1.03** Some areas require at least one telephone set or ringer to be permanently connected to the line. Check local instructions governing line ringers.
- 1.04** Portable telephone sets should be kept indoors when not in use. Inform the customer how important it is to protect telephone sets from

inclement weather in order to maintain good telephone service.

#### 2. IDENTIFICATION

- 2.01** Table A lists plugs used with portable telephone sets.

#### 274A PLUG

- 2.02** The 274A plug (Fig. 1) is a two piece, 8-contact plug of molded plastic. It is intended for use with braided fabric covered mounting cords and is equipped with two eyes to which the braid is secured. It is available in color as shown in Table A.

**TABLE A  
PLUGS**

| TYPE    | NO. OF CONTACTS | COLOR   | FIG. NO. | ASSOCIATED JACKS                           |
|---------|-----------------|---|----------|--|
| 283B    | 4               | *   | 2        | 404B      493A (MD)                        |
| 505A    |                 |   | 6, 7     | 548A      497A (MD)                        |
| 423A    |                 | †   | 3        | P-44E055 Mounting Block and Screw Assembly |
| 274A    | 8               | - 49 (Lt Ol Gy)<br>- 50 (Ivory)<br>- 54 (Brown) | 1        | 391A<br>392A                               |
| 504A    | 12              | *   | 4, 5     | 541A, 547A, B,<br>551A                     |
| KS-8419 | 3               | Brass   | 8        | KS-8420<br>KS-8421                         |

\* Available in the following colors to match the telephone set: -3 (Black), -51 (Green), -56 (Yellow), -58 (White), -59 (Pink), -60 (Lt Beige), -61 (Lt Gray), -62 (Aqua Blue), -64 (Turquoise).

† This plug is inside the 750 telephone set and may be any color as it is made from scrap plastic.

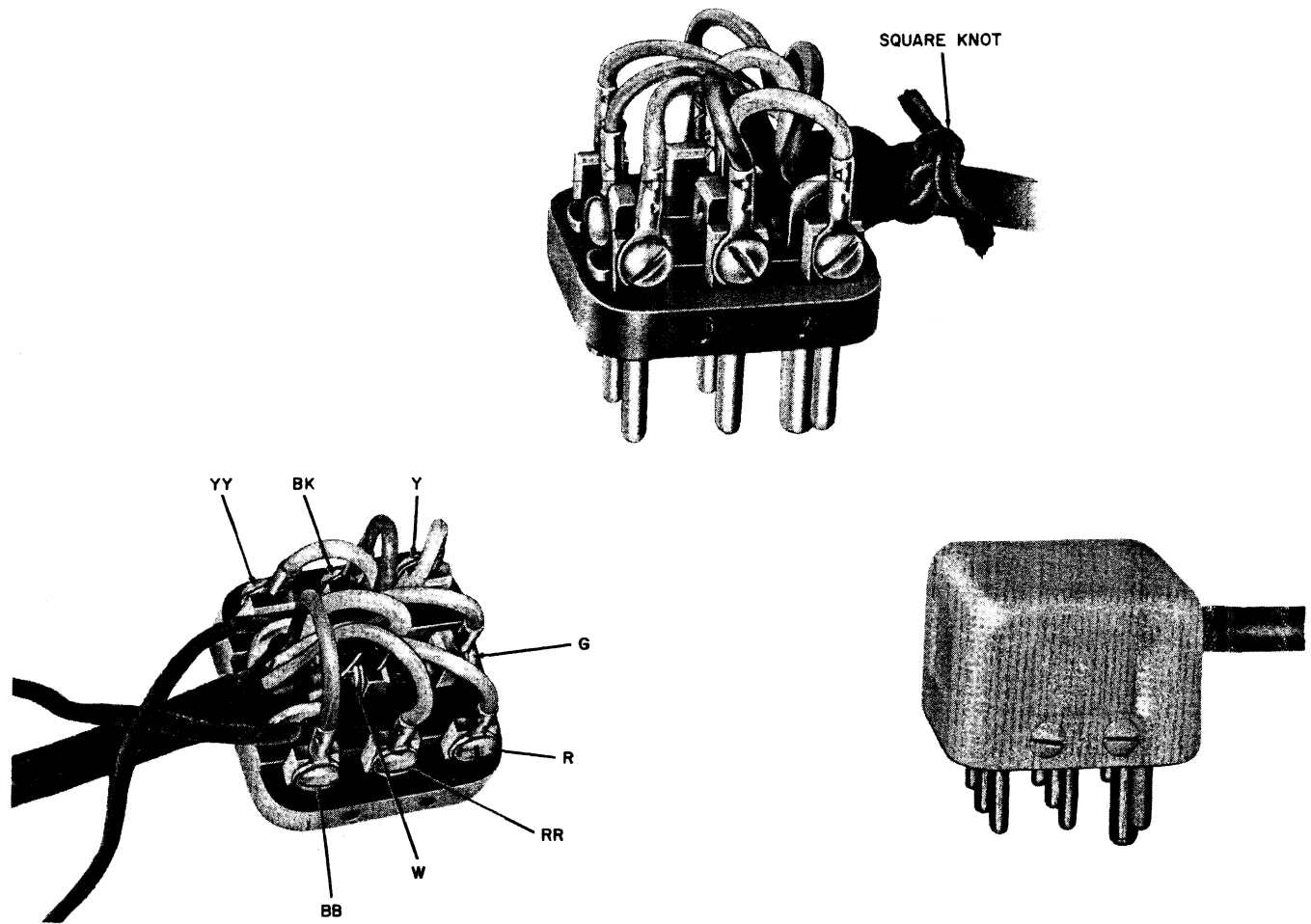


Fig. 1—274A Plug

**283B PLUG**

2.03 The 283B plug (Fig. 2) is a two piece, 4-contact plug of molded plastic in colors to match telephone set colors (see Table A). The mounting cord is secured by either a wingband inserted in a slot in the cover or an S hook secured with a self-tapping screw packed with the plug.

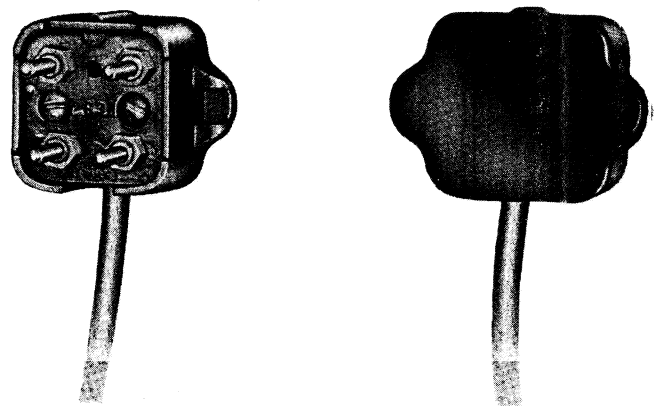


Fig. 2—283B Plug

**423A PLUG**

2.04 The 423A plug (Fig. 3) is a two piece, 4-contact molded plastic plug for use with the 750-type panel telephone set. U-shaped projections are molded in the base for securing the mounting cord.

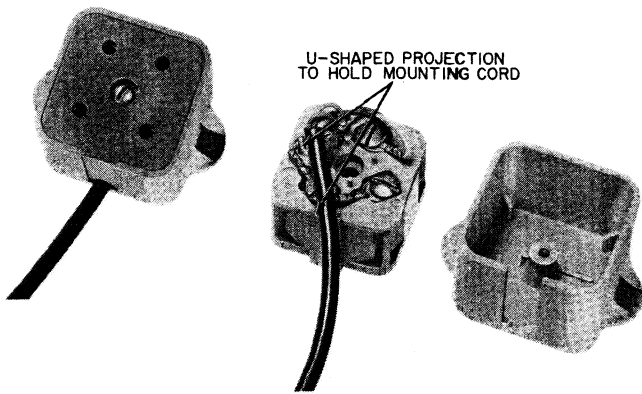


Fig. 3—423A Plug, Front View and Rear View Cover Removed

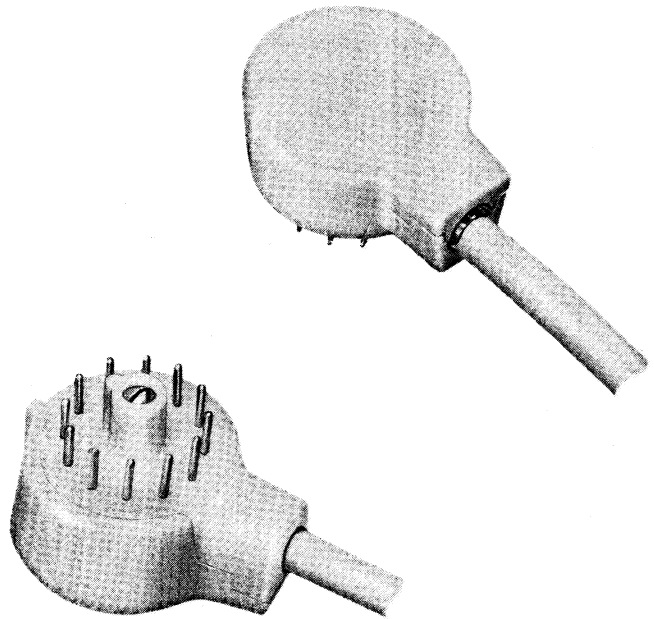


Fig. 4—504A Plug

**504A PLUG**

2.05 The 504A plug (Fig. 4) is made in three pieces of molded plastic and is held together by one screw and a snap-fit in the neck. Plug block contains contacts and socket type terminals. A cord tip guide (Fig. 5) covers terminals. Guide will fit in only one position. The contact numbers are molded on the guide. Contacts are numbered

1 through 12 and match numbering on 541A jack. Plug can be inserted in jack in only one position.

2.06 Slots are provided on plug block and shell (Fig. 5) to hold a wingband or clipped stay hook. The wingband or stay hook seated in the

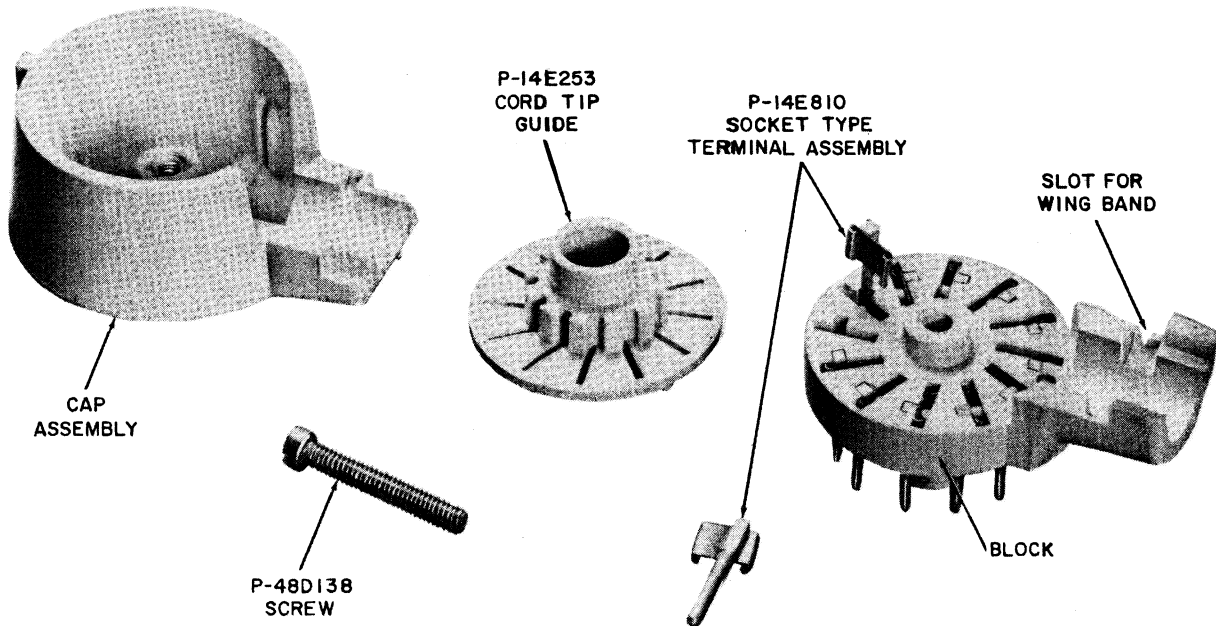


Fig. 5—504A Plug Disassembled

## SECTION 461-630-105

slot prevents mounting cord from slipping out of plug. Included with latest models of the plug is a metal cord stay, designed to be used with cords equipped with a stay hook. The wire stay hook is removed and discarded. The cord stay, inserted in the vacated band hole, serves as a wingband.

### 505A PLUG

2.07 The 505A plug (Fig. 6) is a 4-contact plug similar to the 504A plug, but has in addition a cord fastener (Fig. 7) which holds the cord in place while the spade tips are being connected. The cord fastener also anchors the mounting cord in the assembled plug.

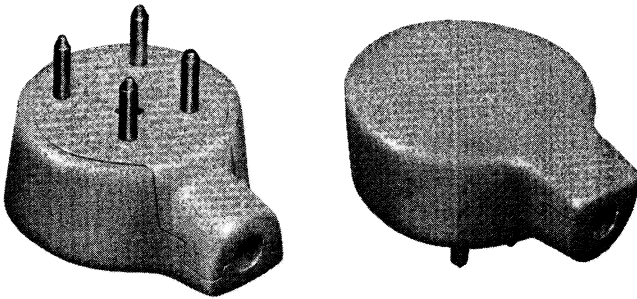


Fig. 6—505A Plug

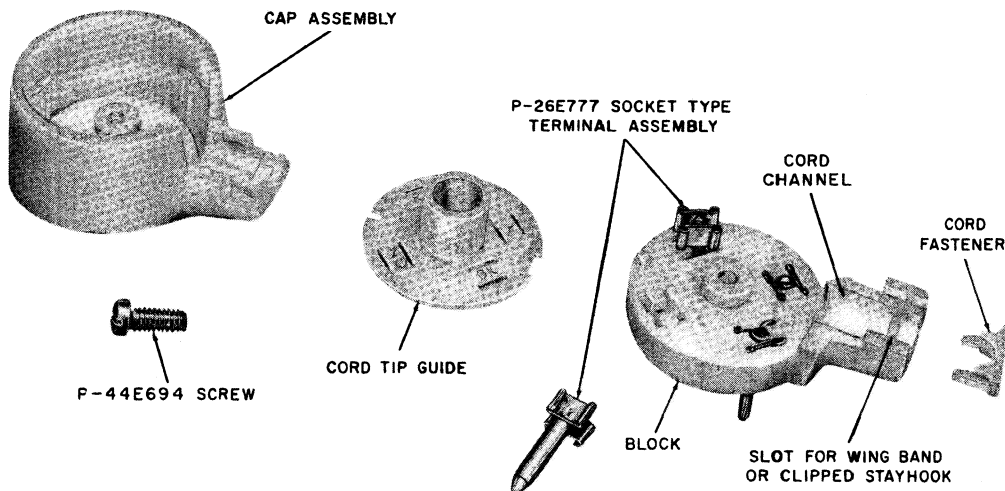


Fig. 7—505A Plug Disassembled

### KS-8419 PLUG

2.08 The KS-8419 plug (Fig. 8) is a 3-contact, brass plug intended for connecting telephone sets installed on boats, trains, or auto trailers to outdoor jacks of PBX or CO lines. This plug is intended for use with KS-8420 or KS-8421 jacks.

### 4. CONNECTIONS

4.01 Only one wire, cable conductor, or cord conductor shall be connected to a terminal of a plug. In some plugs, e.g. 505A, 2 socket type connectors are found on the terminal pins. These extra connectors may be used for storing unused cord conductors if the unused conductors are insulated and stored at the telephone set end.

### 274A PLUG

4.02 Connections for 274A plug are as follows:

- (1) Make connections as indicated by color designations stamped adjacent to terminals.
- (2) Connect cord spade tips as shown in Fig. 1.
- (3) Tie mounting cord securely.
- (4) Place shell on base and tighten screws.

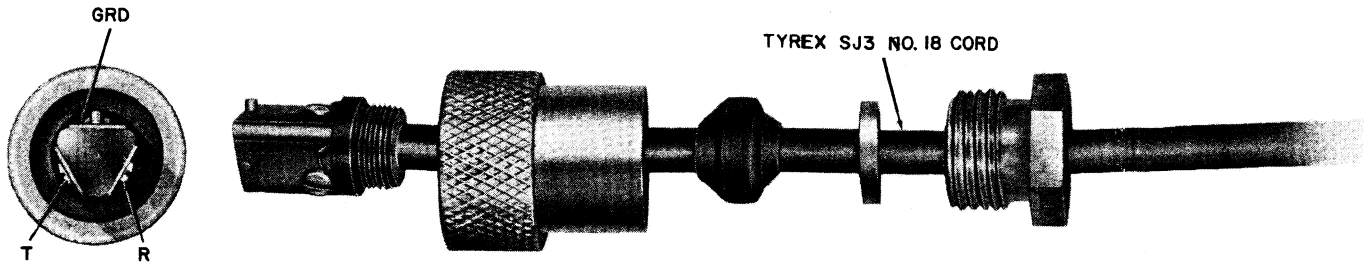


Fig. 8—KS-8419 Plug

**283B PLUG**

4.03 Connections for 283B plug (Fig. 2) are as follows:

(a) Using D3BP or D4BK cord:

- (1) Make connections as indicated by color designations stamped adjacent to terminals (Fig. 9).
- (2) Bend cord spade tips up as shown in Fig. 9.
- (3) Place one edge of wingband in the larger (shallow drilled) of the two holes in the base.

(4) Place cover so cord and wingband will seat properly in their slots.

(5) Seat base of plug in its cover before tightening screws in order to prevent pinching of cord conductors.

(b) Using D3BU or D4BP cord:

- (1) Remove P-18E457 adapter from cord (Fig. 10).
- (2) Using long-nose pliers and 8-inch side cutters or equivalent (Fig. 11), turn large eye of S hook clockwise until positioned 90 degrees away from small eye of S hook.

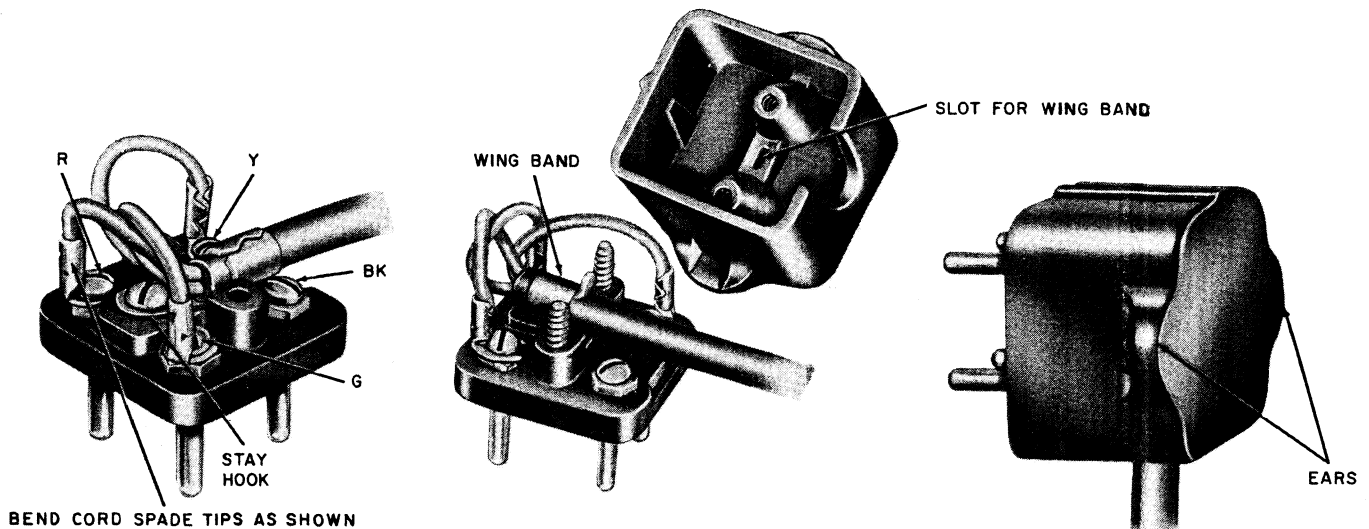


Fig. 9—Terminating D3BP and D4BK Cords on 283B Plug

## SECTION 461-630-105

(3) With small eye of S hook up, insert RM-658901 self-tapping screw with P-284139 flat washer through large eye of S hook. Using farthest hole opposite cord entrance (Fig. 12 and 13), anchor cord securely.

**Note:** An RM-658901 self-tapping screw and a P-284139 flat washer will be shipped with each 283B plug (Fig. 13).

(4) Lay the cord conductors out straight from the cord (Fig. 12). Pass the green conductor clockwise under the cord stay and terminate it on the GN punching. Pass the red conductor counterclockwise under the cord stay and terminate it on the R punching. Pass the yellow conductor clockwise, under and then over the top of the cord stay. Terminate on the Y punching. If the black conductor is used, pass it counterclockwise under and then over the cord stay. Terminate it on the BK punching.

(5) Bend cord spade tips and dress red and green conductors so they lie outside of the mounting screw hole guides (Fig. 13).

(6) Seat base of plug in cover before tightening screws. This prevents pinching of conductors.

### 423A PLUG

4.04 Connections for the 423A plug (Fig. 3) are as follows:

- (1) Make connections as indicated by color designations stamped adjacent to terminals.
- (2) Connect cord tips as shown in Fig. 3.
- (3) Lay jacketed portion of cord in the two molded U-shaped projections.
- (4) Place cover on base and tighten screw.

### 504A PLUG

4.05 Connections for the 504A plug (Fig. 4) are as follows:

- (1) Place cord tip guide on block (Fig. 5).

(2) Insert mounting cord tips into socket type terminals of plug.

**Note:** For mounting cord conductor connections, refer to the proper section.

- (3) Dress conductors so they will lie within the cap of plug.
- (4) Place wingband or stay hook and mounting cord in their proper slots.
- (5) Place cap on plug so cord and wingband or stay hook will seat properly. Be sure no leads are pinched.
- (6) Snap two sections of neck together.
- (7) Insert screw and tighten.

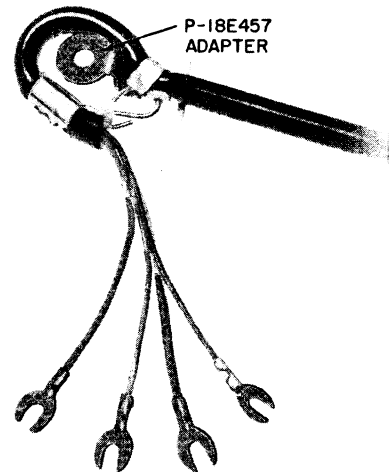


Fig. 10—D4BP Cord and Adapter

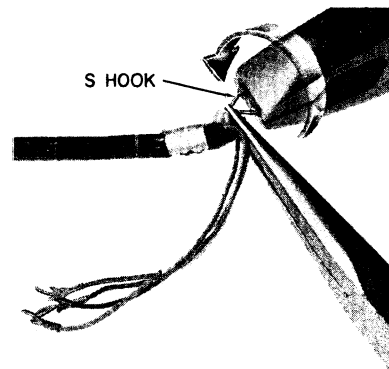


Fig. 11—Bending S Hook

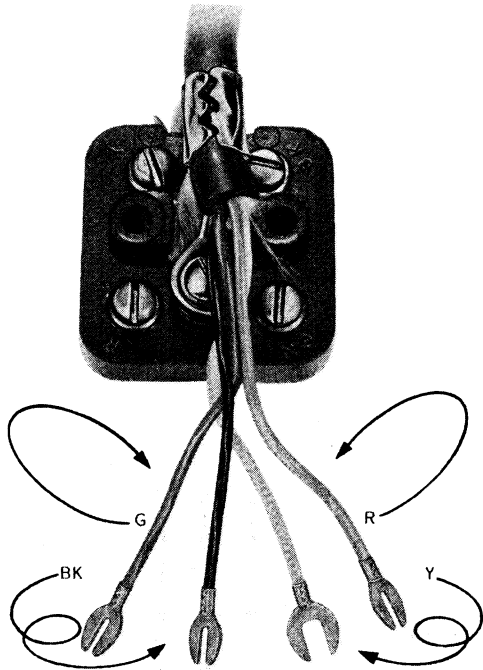


Fig. 12—D4BP Cord Ready to Terminate

#### 505A PLUG

4.06 Connections for the 505A plug (Fig. 6 and 7) are as follows:

- (1) Fit the cord tip guide into place on the top of the block.
- (2) Position the mounting cord into the cord channel of the block so that the cord wingband fits into the wingband slot. One ear of the wingband will extend into the wingband slot of the cord fastener.
- (3) Fit the cord fastener into the groove in the cord channel and press until it snaps into position.
- (4) Arrange the mounting cord spade tips in the socket type terminals.
- (5) Adjust the conductors so that they will not obstruct the center of the cord tip guide.

(6) Position the cap assembly on the cord tip guide and block; assuring that no leads are pinched.

(7) Insert screw and tighten.

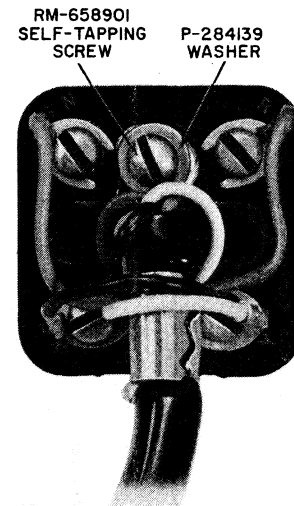


Fig. 13—D4BP Cord Terminated on 283B Plug

#### KS-8419 PLUG

4.07 Connections for the KS-8419 plug are as follows.

- (1) Plug components are assembled to TYREX SJ3 No. 18 cord or equivalent (Fig. 8).
- (2) In TYREX SJ3 No. 18 cord or equivalent, the black conductor should be used for the ring (negative) side of the line. The white conductor should be used for tip (positive) side of the line. The green conductor is the ground conductor.
- (3) One terminal of the KS-8419 plug has a small lug protruding from the contact. This lug and the notched terminal on KS-8420 and KS-8421 jacks are provided to ensure that the plug is inserted in one position only.
- (4) When ground is necessary for service, the green conductor should be terminated on the notched terminal.