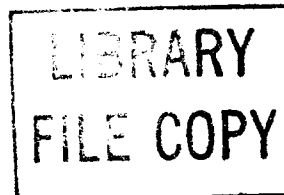


## CODED PLUGS—400 THROUGH 424

### DESCRIPTION



#### 1. GENERAL

**1.01** This section lists and illustrates coded plugs within the part or type number range of 400 through 424, used for maintenance and operation of equipment in central offices.

**1.02** The information provided in this section was previously shown in Section 032-510-101, Issue 11. The Equipment Test List is not affected.

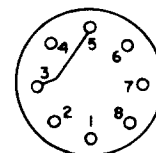
#### 2. DESCRIPTION OF PLUGS

**2.01 400A:** The 400A plug (Fig. 1) consists of contact springs assembled in a body of insulating material. The 400A plug is designed to make contact with 20 cable pairs on the main distributing frames, (MDF) equipped with C50A or C52A protectors. The 400A plug is equipped with a metal cover and a handle. This plug forms part of the P40A cord.



**Fig. 1—400A Plug**

**2.02 404A:** The 404A plug (Fig. 2) consists of a B8-1 small shell, octal type, electron tube base. The 404A plug is used with the 804A and B networks in the P1 Carrier System.



**Fig. 2—404A Plug**

**2.03 405A:** The 405A plug (Fig. 3) consists of a metal frame containing twenty spring-loaded contact plungers numbered 0 to 19 for making contact with terminals on terminal strips, and a metal sliding arm designed to fit over the mounting strip of the 35-, 36-, 168- and P-type terminal strips. This plug is used to connect subscriber line terminals on the vertical intermediate distributing or horizontal combination distributing frame with the traffic usage recorder circuit of the Step-by-Step System.

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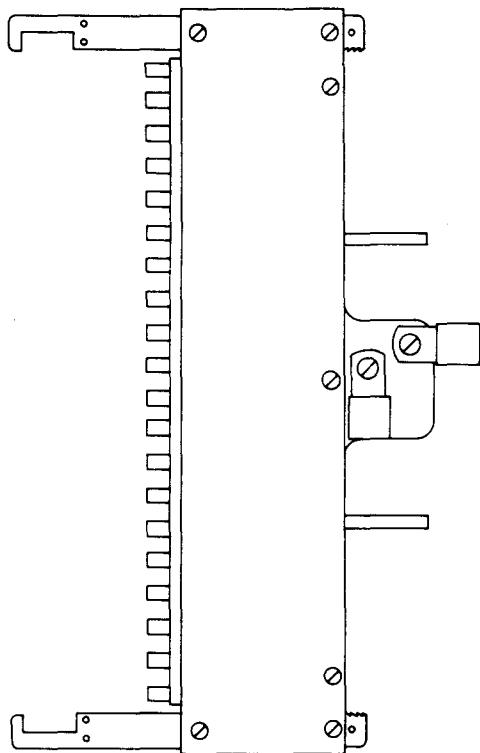


Fig. 3—405A Plug

2.04 **406A and B:** The 406A and B plugs (Fig. 4) consist of black shells of insulating material.

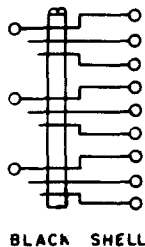


Fig. 4—406A or B Plug

(a) **406A:** The 406A plug is equipped with three P-495504 profiling assemblies. This plug is used with the 238- or similar-type jacks, and is used in the J1G001G Test Board of the A1 Digital Data Signaling System.

(b) **406B:** The 406B plug is equipped with one 309 and two 310 plugs. This plug is used with two 239- and one 246-type jacks.

2.05 **407A:** The 407A plug (Fig. 5) is provided with the sleeve and spring for holding the plug in position in the jack. This plug is designed to accommodate a 5/16-inch diameter cable and is used with the 444-type jacks.

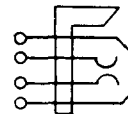


Fig. 5—407A Plug

2.06 **408A:** The 408A plug (Fig. 6) consists of a pair of coaxial plug fingers mounted in a metal shell. The 408A plug is designed for solderless shield connections to two cables and is used with the 477B- or similar-type jacks.

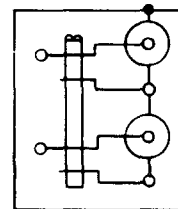


Fig. 6—408A Plug

2.07 **410B:** The 410B plug (Fig. 7) has two plug fingers with a shell of black insulating material. The short finger is connected to the tip of the long finger and the plug is not designed for cord connections. This plug replaces the 410A plug and is used with the 247A jack mounting equipped with No. 92 jacks on the 9B Telegraph Service Boards.

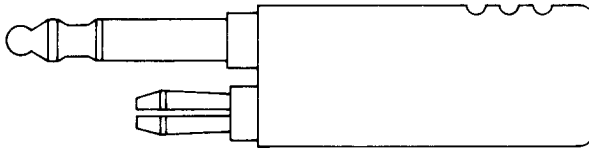


Fig. 7—410B Plug

**2.08 412A, B, and C:** The 412-type (Fig. 8) are test plugs designed to plug into a receptacle on the 1A1-type protector units.

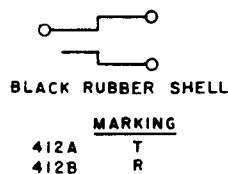


Fig. 8—412-Type Plug

- (a) **412A and B:** The 412A and B plugs form part of the 4W11A cord.
- (b) **412C:** The 412C plug forms part of the 418A plug.

**2.09 413A, B, C, and D:** The 413-type (Fig. 9) are test plugs designed to plug into a receptacle on 1A1-type protector units. The 413-type plugs form part of the 4W12A cord.

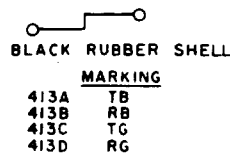


Fig. 9—413-Type Plug

**2.10 415A:** The 415A plug (Fig. 10) consists of a metal frame containing four spring-loaded contact plungers for making contact with terminals on terminal strips and a metal sliding arm designed to fit over the clamping strip. The plungers are connected to the terminal screws and are designed for connection to the P4L, P4R, and W4J cords. This plug is used with the distributing frame terminal strips.

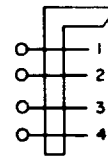


Fig. 10—415A Plug

**2.11 416A and B:** The 416A and B plugs (Fig. 11) have three conductors and are equipped with a long black shell. The 416A and B plugs have two resistors in series, between the tip and sleeve, and are not designed for cord or cable connections. These plugs are used in the L3 Carrier System at equalizing auxiliary repeaters, or at terminal main repeaters operating on constant current.

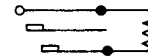


Fig. 11—416A or B Plug

- (a) **416A:** The 416A plug has a total of 18,200-ohms resistance between the tip and sleeve.
- (b) **416B:** The 416B plug has a total of 24,000-ohms resistance between the tip and sleeve.

**2.12 418B:** The 418B (Fig. 12) is a reversing plug consisting of two 1A1C protector units mounted in a metal housing and connected to a 412A and 412C plug. The 418B plug is designed to reverse the tip and ring of a cable pair with respect to central office circuits. This plug will not ground the line when the protector units are removed. The 418B plug replaces the 418A plug and is to be used on the 121-

type protectors (Mfr Disc.) and 300-type connectors (Mfr Disc.).

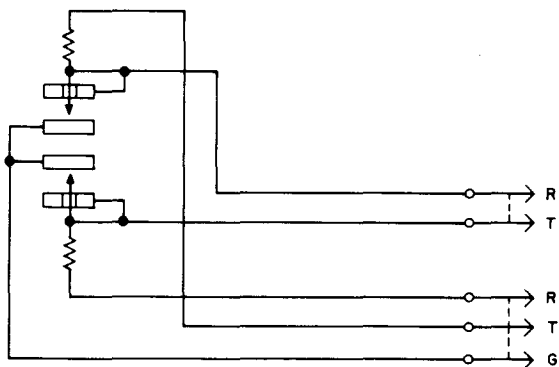


Fig. 12—418B Plug

**2.13 419A:** The 419A (Fig. 13) is a black, molded, plastic plug having two terminals. The 419A is used as a terminating plug for the KS-14418 head set in the E6 Voice Frequency Repeater.

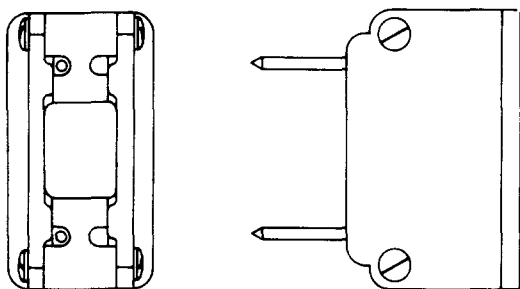


Fig. 13—419A Plug

**2.14 419D:** The 419D (Fig. 14) is a red, molded, plastic plug having four terminals. The 419D plug contains a 470-ohm resistor between terminals 3 and 4 and a 3000-ohm resistor between terminals 1 and 2. This prevents the E6 Voice Frequency Repeater from singing when the repeater is not terminated.

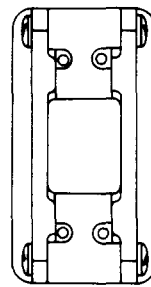


Fig. 14—419D Plug

**2.15 420A:** The 420A (Fig. 15) is a twin-plug with the long finger designed for tip and ring connection to a 280A- or similar-type jack. The short finger is designed for sleeve connection to a 240A- or similar-type jack. This plug is used in the J70099 No. 9 Telegraph Service Board.

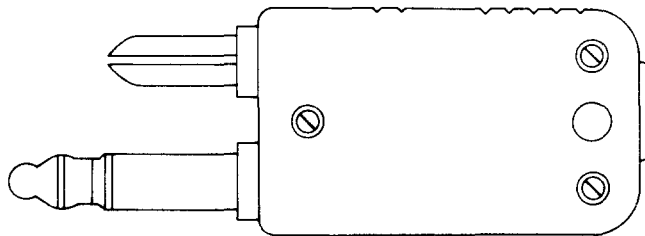


Fig. 15—420A Plug

**2.16 421A:** The 421A plug (Fig. 16) consists of a molded block of insulating material containing 11 terminals. The terminals are designed for mechanically-wrapped connections in the rear. The 421A plug mates with the 938 connectors.

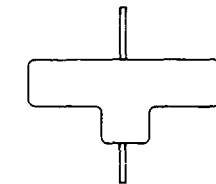
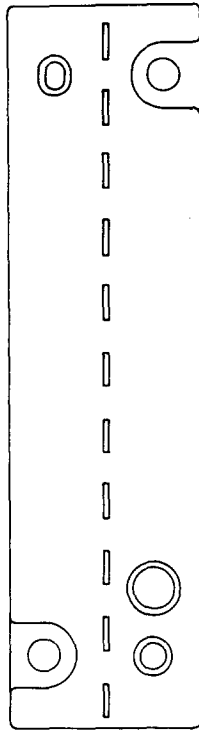


Fig. 16—421A Plug

**2.17 422A:** The 422A plug (Fig. 17) consists of a shell of black insulating material, equipped with four pin-type terminals. The 422A plug is designed to be inserted into four KS-14172, L1 jacks and forms part of the L4BP cord.

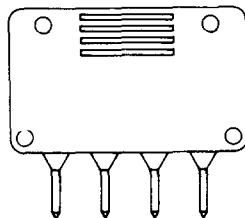


Fig. 17—422A Plug

**2.18 423A:** The 423A plug (Fig. 18) consists of a block of insulating material, containing four intermeshed coil spring contacts, and a cover. The block and cover may be furnished in a variety or combination of colors. This plug is designed to mate with the 505A- or similar-type plugs and is used with the 750A-type telephone sets.

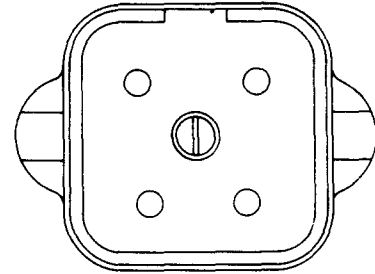


Fig. 18—423A Plug

**2.19 424A and C:** The 424A and C plugs consist of two contacts, a contact separator, a strain relief bushing, a handle, and associated hardware. Each of the contacts consist of sixteen phosphor bronze contact wires molded in a block of insulating material. The contacts are placed back-to-back, making up thirty-two contact wires. The contact separator keeps the contact wires apart and serves as the male connection for insertion into the receptacle end of the 217A connector. Two tabs on one end of the separator are positioned to lie between the contacts. The handle slides over the contacts and is held in place with a screw which goes through the entire assembly.

(a) **424A:** The 424A plug (Fig. 19) is used in the No. 1 ESS Central Office.

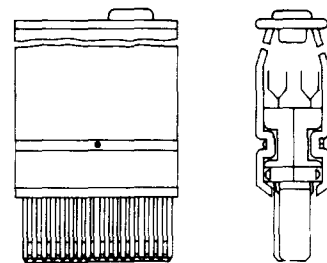
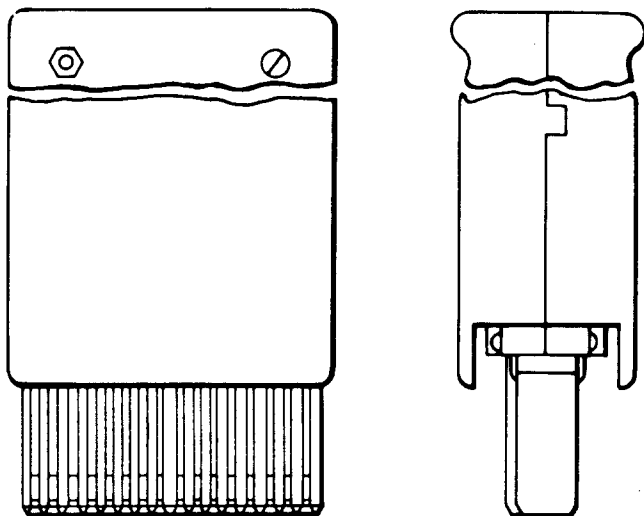


Fig. 19—424A Plug

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(b) **424C:** The 424C plug (Fig. 20) is used with the P32A patch cord in the No. 1 ESS Central Office.



**Fig. 20—424C Plug**