

## JACKS AND PLUGS

### SELECTION AND INSTALLATION

#### 1. GENERAL

**1.01** This section contains identification, connection, and installation information for jacks and plugs used with portable telephone sets.

**1.02** This section is reissued to add:

- KS-19407, List 1 bracket
- KS-19316, List 4 housing
- KS-19316, List 5 cover
- 547B jack

**1.03** Due to extensive changes marginal arrows have been omitted.

**1.04** By using jacks and plugs, telephone sets can be made portable and can provide rapid connecting and disconnecting of telephone service to ships, trains, in trailer courts, etc.

**1.05** All telephone sets in a jack and plug system may be portable. Some areas require at least one telephone set or ringer be perma-

nently connected to the line. Check local instructions governing line ringers.

**1.06** Do not use hand telephone sets (those requiring a subscriber set) and combined telephone sets together in the same jack and plug system.

**1.07** Mount jacks in a uniform manner so that plugs can be inserted in the same way throughout customer premises.

**1.08** Portable telephone sets should be kept indoors when not in use. Inform customer how important it is to protect telephone set from inclement weather in order to maintain good telephone service.

#### 2. IDENTIFICATION

**2.01** Tables A and B give description of plugs and jacks, respectively.

**TABLE A  
PLUGS**

TYPE	NO. OF CONTACTS	COLOR	FIG. NO.	ASSOCIATED JACKS
283B	4	*	2	404B      493A (MD) 548A      497A (MD)
505A			6, 7	549A      KS-16151, L1 (MD) 550A
423A		†	3	P-44E055 Mounting Block and Screw Assembly
274A	8	-49 (Lt Ol Gy) -50 (Ivory) -54 (Brown)	1	391A 392A
504A	12	*	4, 5	541A, 547A, B, 551A
KS-8419	3	Brass	8	KS-8420 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.

## 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.

## 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.

**TABLE B**  
**JACKS**

TYPE	CONTACTS	TYPE	COLOR	LOCATE	FIG. NO.	REMARKS
404B	4	Nonflush	-49 (Lt Ol Gy)	I n d o o r s	11	Furnished with 2 wood screws for mounting
549A			-50 (Ivory)		18	
493A (MD)		Flush	-49 (Lt Ol Gy) -50 (Ivory) -54 (Brown)		17	May be mounted in electrical outlet with 43 type bracket, in 63A bracket, or in woodwork by drilling 1-1/4 inch hole.
548A					12	Furnished with mounting screws, 493A jack, 43A bracket and faceplate. Additional faceplates ordered as: P-89C149 (Lt Ol Gy), P-89C150 (Ivory), P89C154 (Brown).
497A (MD)					19	Furnished with mounting screws, 548A jack, 43A bracket and faceplate. Additional faceplates ordered as: P-88C949 (Lt Ol Gy), P-89C950 (Ivory), P-88C954 (Brown).
550A					9	Furnished with mounting screws, washers, and faceplate. Additional faceplates ordered as: P-24E602 (Lt Ol Gy), P-24E603 (Ivory), P-24E604 (Brown).
391A	8	Nonflush	-49 (Lt Ol Gy)		10	Furnished with a cover. Additional covers ordered as: P-24E600 (Lt Ol Gy), P-24E601 (Ivory).
392A			-50 (Ivory)		20	Furnished with 2 wood screws for mounting.
551A	12	Flush	-49 (Lt Ol Gy) -50 (Ivory) -54 (Brown)		13, 14, 15	Mount in 63A bracket. Use 16A faceplate the same color as jack.
541A					16	Furnished with mounting screws, 541A jack, 74A bracket and faceplate. Additional faceplates ordered as: P-88C949 (Lt Ol Gy), P-88C950 (Ivory), P-88C954 (Brown).
547A						Same as 547A jack except 43B bracket is used instead of 74A bracket.
547B						
KS-8420	3	Nonflush	Brass	O u t d o o r s	21	
KS-8421					22	
KS-16151, List 1 (MD)	4	Aluminum	23		Rated MD. Replaced by KS-19316 series weatherproof housings. See Table C.	

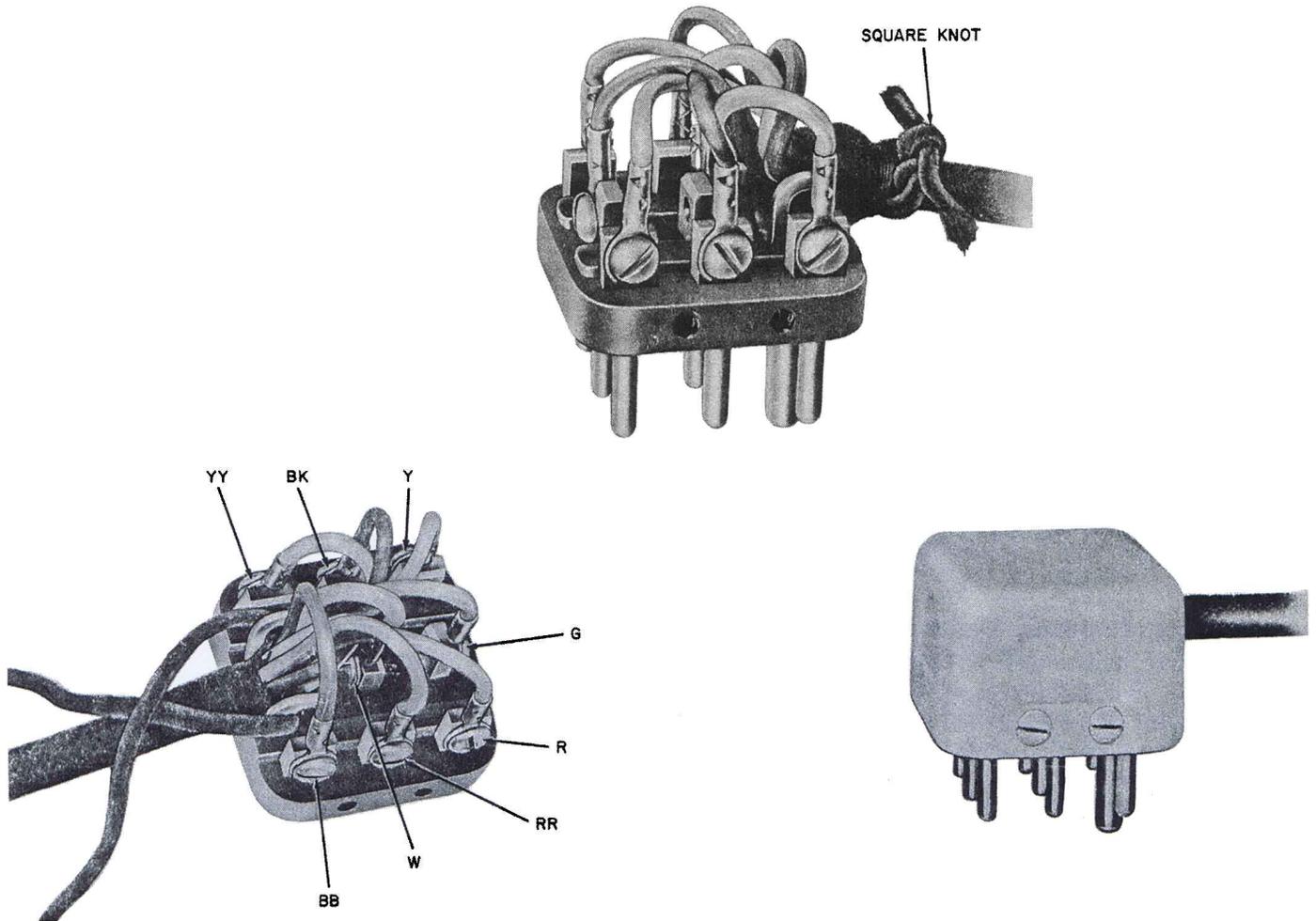


Fig. 1 — 274A Plug

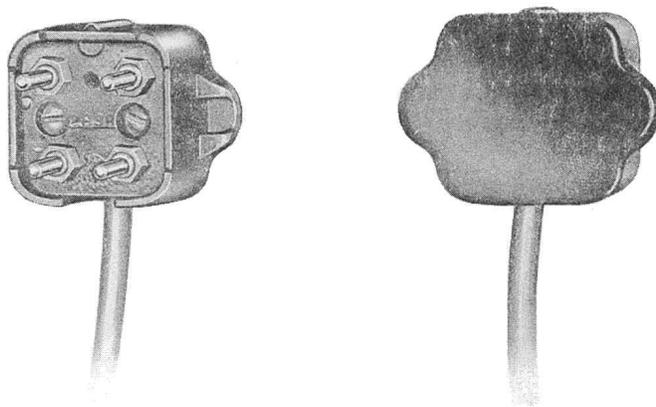


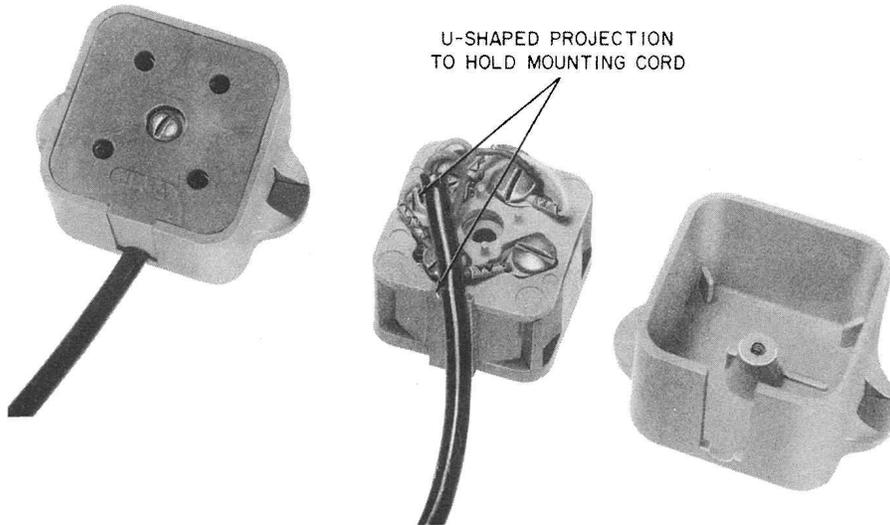
Fig. 2 — 283B Plug

**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.

**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 is inserted in jack in only one position.



**Fig. 3 — 423A Plug, Front and Rear Views**

**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 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.

**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 the outlets of central office lines. This plug is intended for use with KS-8420 or KS-8421 jacks.

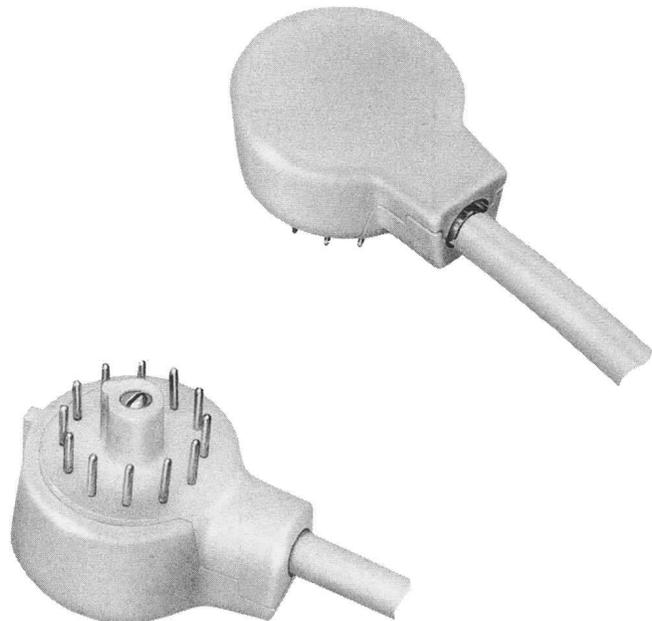
**391A JACK**

**2.09** The 391A jack (Fig. 9) is an 8-contact, flush-type jack intended for use with an electrical outlet-type box. Mounting hardware

and a faceplate are furnished. This jack mates with a 274A plug.

**392A JACK**

**2.10** The 392A jack (Fig. 10) is an 8-contact, nonflush-type jack intended for baseboard mounting. It consists of a terminal block and metal cover. Mounting hardware is not furnished.



**Fig. 4 — 504A Plug**

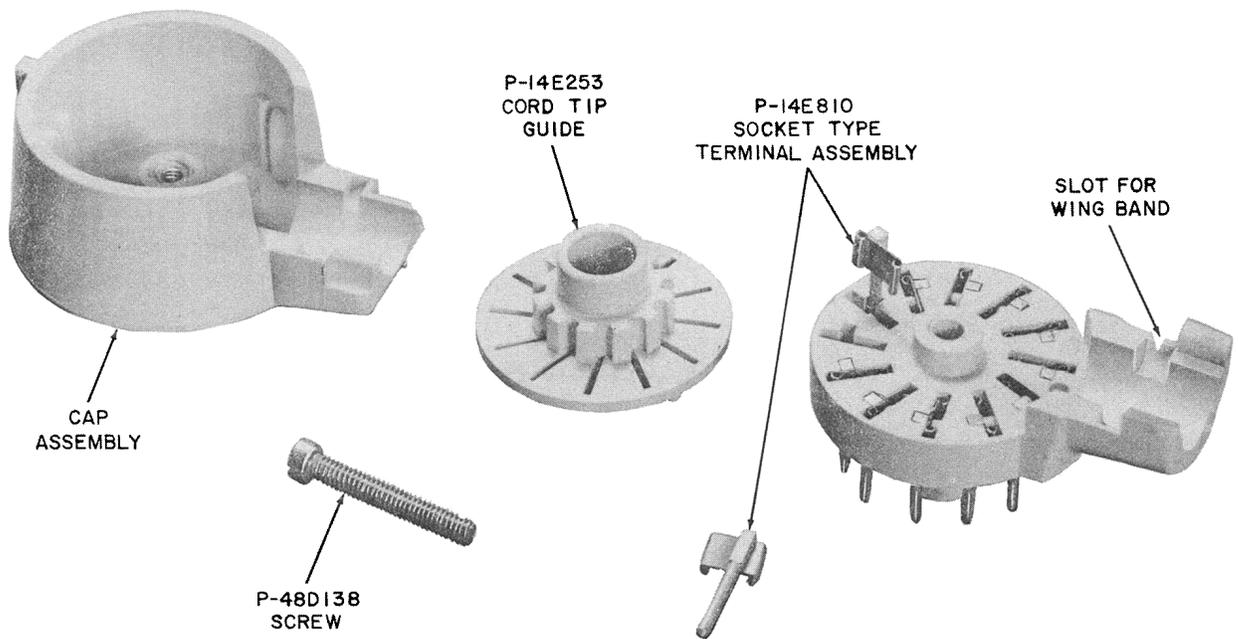


Fig. 5 — 504A Plug Disassembled

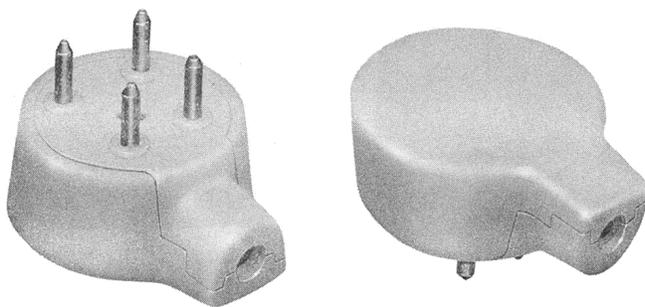


Fig. 6 — 505A Plug

**404B JACK**

2.11 The 404B jack (Fig. 11) is a one piece, 4-contact, nonflush-type jack intended for baseboard mounting. Mounting hardware is furnished with the jack.

**493A JACK**

2.12 The 493A jack is a one piece, 4-contact jack intended for flush mounting in an electrical outlet with a 43-type bracket; in a 63A bracket; or in a 1-1/4-inch drilled hole.

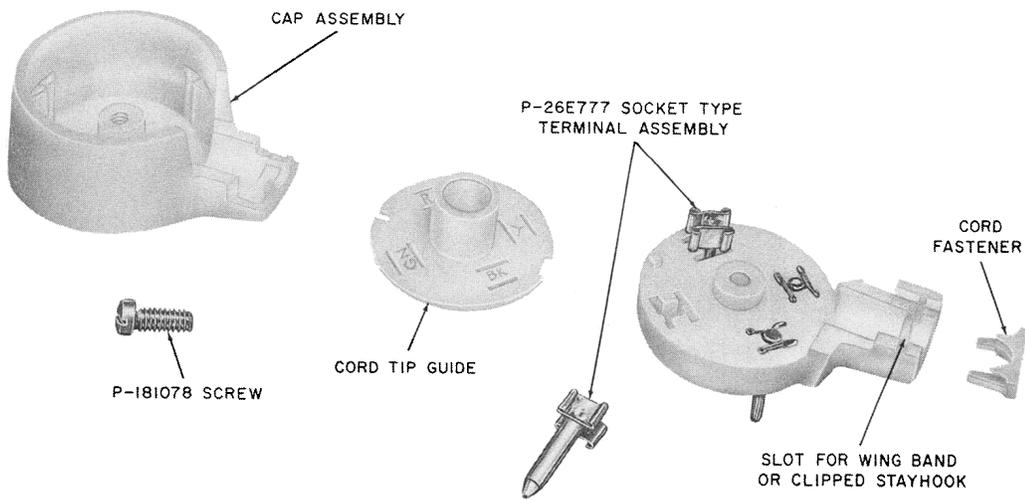


Fig. 7 — 505A Plug Disassembled

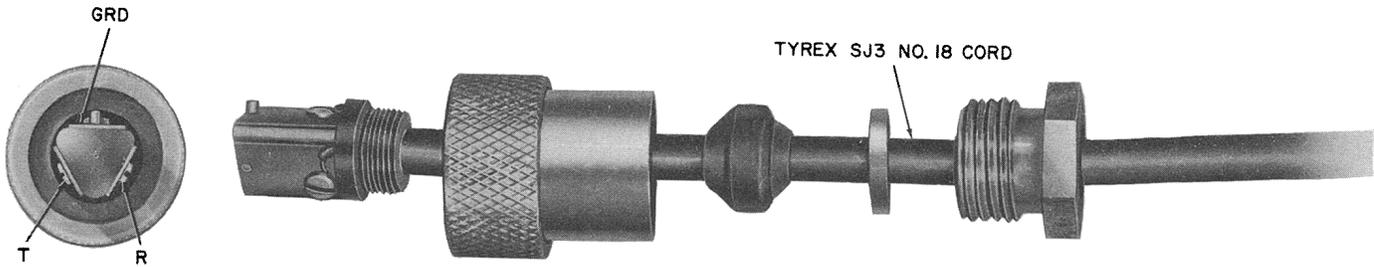


Fig. 8 — KS-8419 Plug

**497A JACK**

2.13 The 497A jack (Fig. 12) consists of a 493A jack, 43A bracket and faceplate. It is intended for flush mounting in an electrical outlet. Mounting hardware is furnished with the jack.

**541A JACK**

2.14 The 541A jack (Fig. 13, 14, 15) is a two-piece, 12-contact jack intended for flush mounting using a 63A bracket and 16A faceplate.

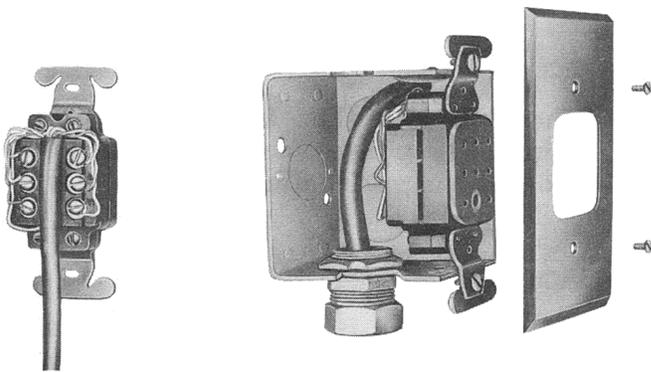


Fig. 9 — 391A Jack Unmounted and 391A Jack Mounted in Outlet Box

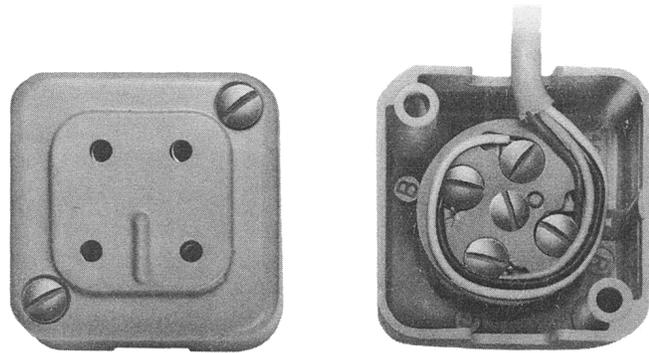


Fig. 11 — 404B Jack

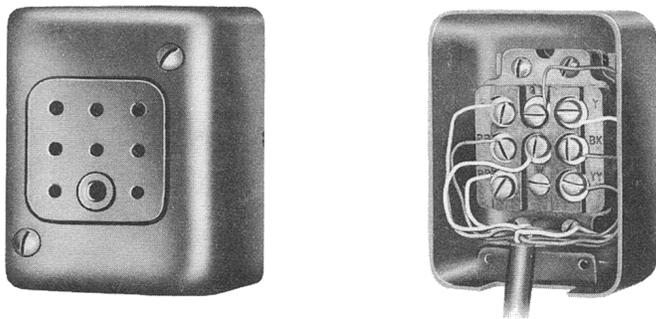


Fig. 10 — 392A Jack

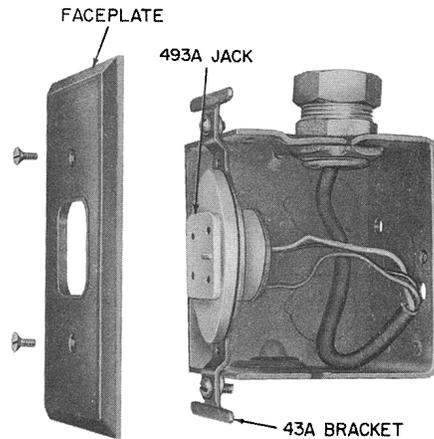
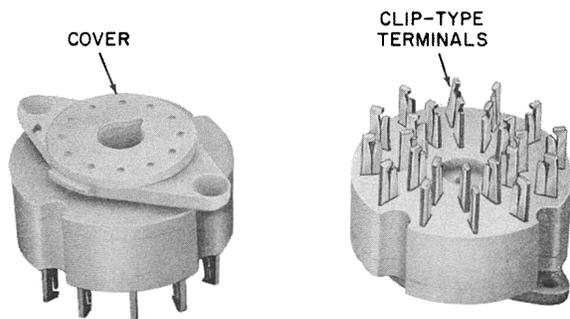


Fig. 12 — 497A Jack Mounted in Outlet Box

**547A JACK**

2.15 The 547A jack (Fig. 16) consists of a 541A jack, 74A bracket and faceplate and is intended for flush mounting in an electrical outlet. Mounting screws are furnished.



**Fig. 13 — 541A Jack**

**547B JACK**

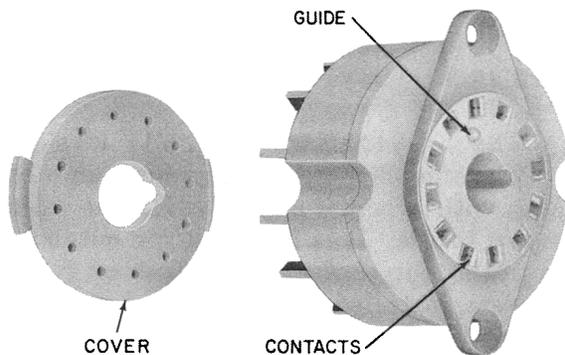
2.16 The 547B jack is similar to the 547A jack except the 43B bracket is used instead of the 74A bracket.

**548A JACK**

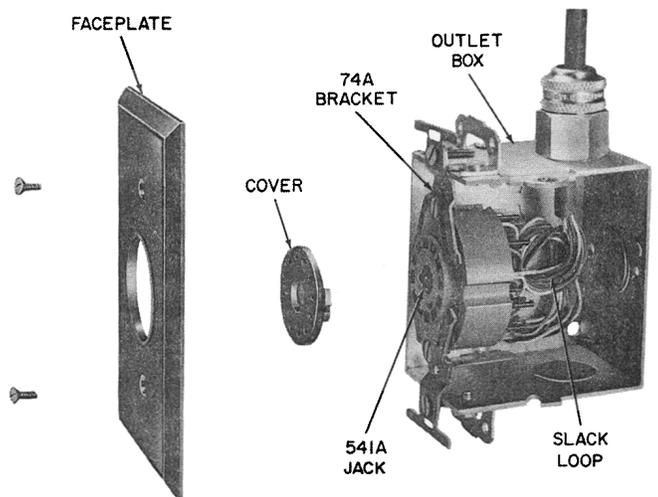
2.17 The 548A jack (Fig. 17) is a one-piece, 4-contact jack of molded plastic intended for flush mounting in a 63A bracket, in an electrical outlet using a 43-type bracket, or in wood-work through a 1-1/4 inch hole.

**549A JACK**

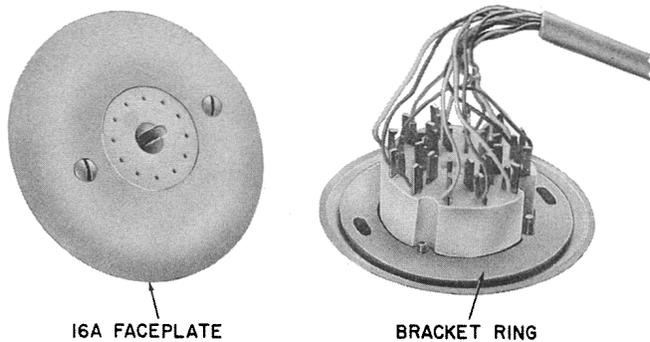
2.18 The 549A jack (Fig. 18) is a one-piece, 4-contact, nonflush-type jack intended for baseboard mounting. Two wood screws are furnished for mounting the jack.



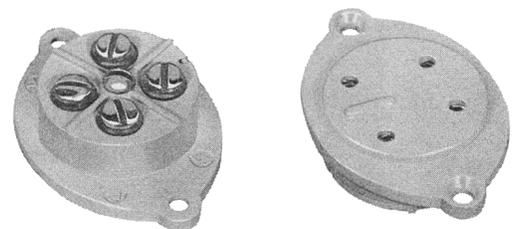
**Fig. 14 — 541A Jack, Cover Removed**



**Fig. 16 — 547A Jack, Side View**



**Fig. 15 — 541A Jack with 16A Faceplate and Wire Attached**



**Fig. 17 — 548A Jack**

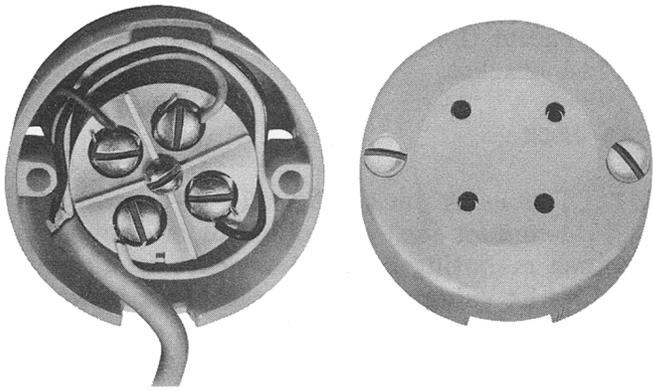


Fig. 18 — 549A Jack

**550A JACK**

**2.19** The 550A jack (Fig. 19) consists of a 548A jack, 43A bracket and faceplate. Mounting hardware is furnished and additional faceplates may be ordered (Table B). Latest production 550A jacks are furnished with 43B brackets instead of the 43A.

**551A JACK**

**2.20** The 551A jack (Fig. 20) is a one-piece, 12-contact, nonflush-type jack intended for baseboard mounting. Mounting hardware is furnished.

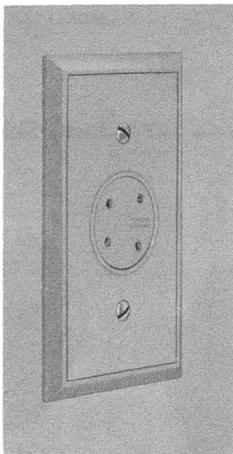


Fig. 19 — 550A Jack, Mounted

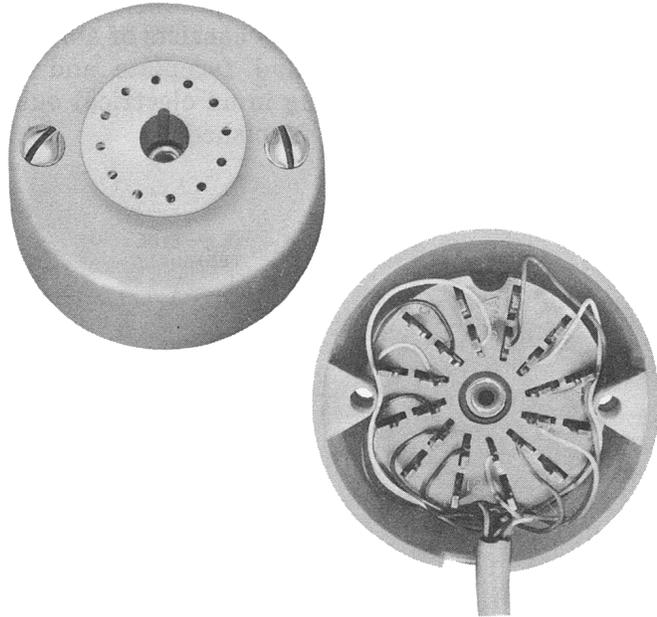


Fig. 20 — 551A Jack

**KS-8420 JACK**

**2.21** The KS-8420 jack (Fig. 21) is a flush-mounted, 3-contact jack housed in a brass housing with a screw cap to cover the opening when not in use. It is intended for outdoor use as an outlet for central office lines or for telephone sets installed on boats, trains, or auto trailers. This jack is suitable for use with the KS-8419 plug.

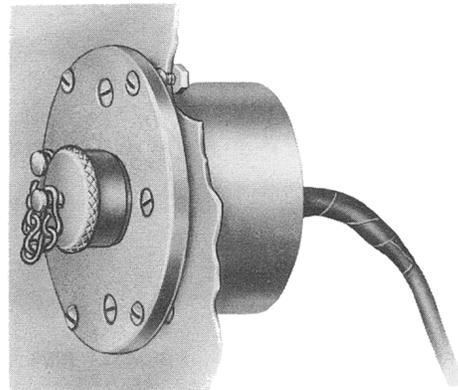


Fig. 21 — Installation of KS-8420 Jack

**KS-8421 JACK**

**2.22** The KS-8421 jack is similar to the KS-8420 jack except that it is intended for nonflush surface mounting. A 1/2-inch pipe thread tapped hole is provided in the housing to accommodate metal conduit or other threaded connector. Fig. 22 shows typical installations of the KS-8421 jack.

**KS-16151, LIST 1 JACK**

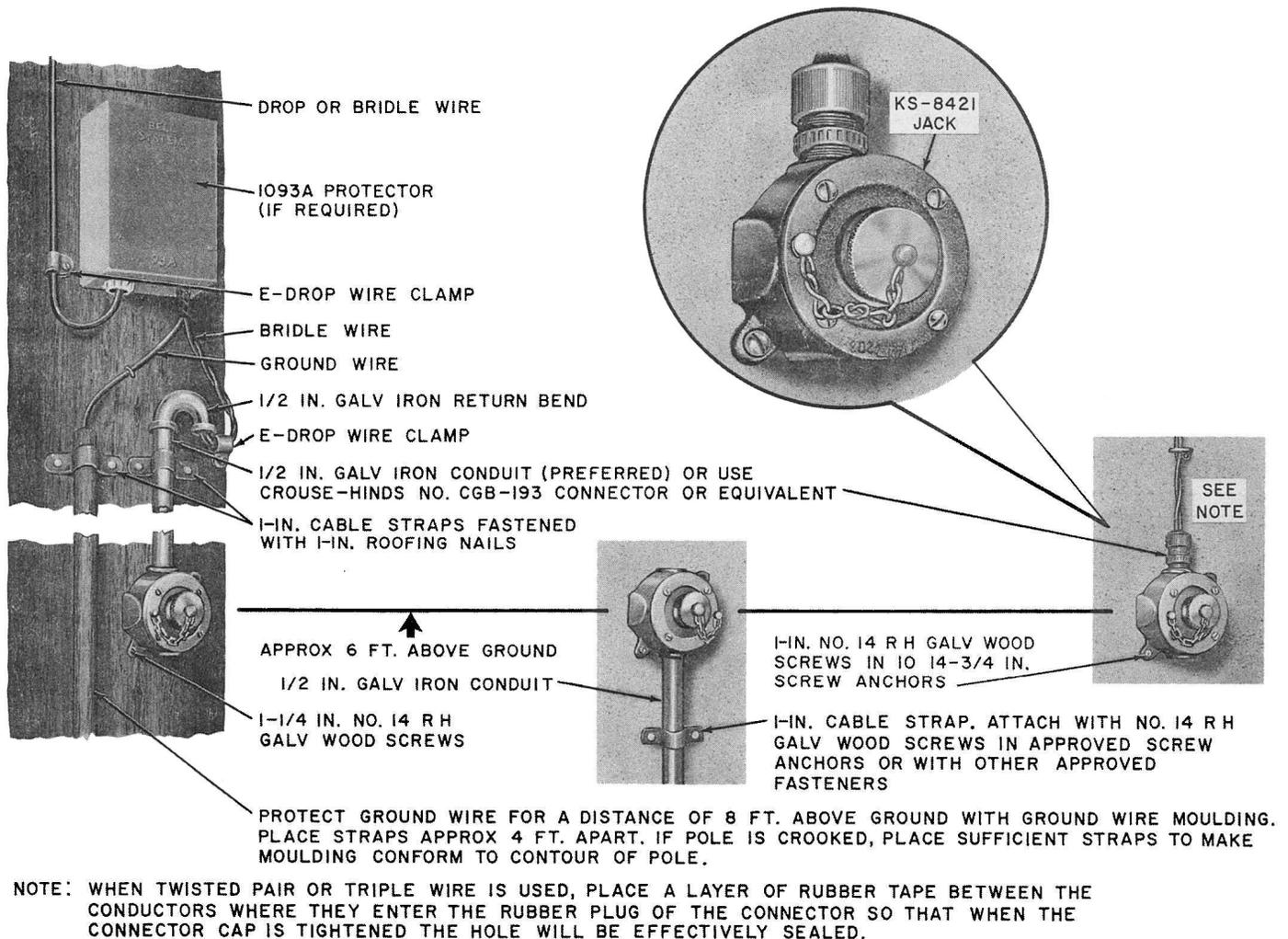
**2.23** The KS-16151, List 1 jack (Fig. 23) is Manufacture Discontinued (MD) and is replaced by the KS-19316 series weatherproof housings (3.07).

**3. JACK MOUNTINGS****43-TYPE BRACKET**

**3.01** The 43-type brackets (Fig. 24) are intended for use in mounting jacks in electrical outlet boxes. The 43A bracket is used as a component of the 497A and older 550A jacks and can be used to mount the 493A (MD) and 548A jacks. The 43B bracket is a component of the 547B and newer 550A jacks. It also may be used to mount the 493A (MD) and 548A jacks.

**63A BRACKET**

**3.02** The 63A bracket (Fig. 25) is used in prewiring a building (i.e. house) during construction prior to finishing the wall surface. The



**Fig. 22 — Typical Installation of KS-8421 Jack**

bracket is intended to be nailed to the studding. A 16-type faceplate is used with but not included with the bracket. The 63A bracket is used for mounting jacks such as the 493A, 541A, and 548A.

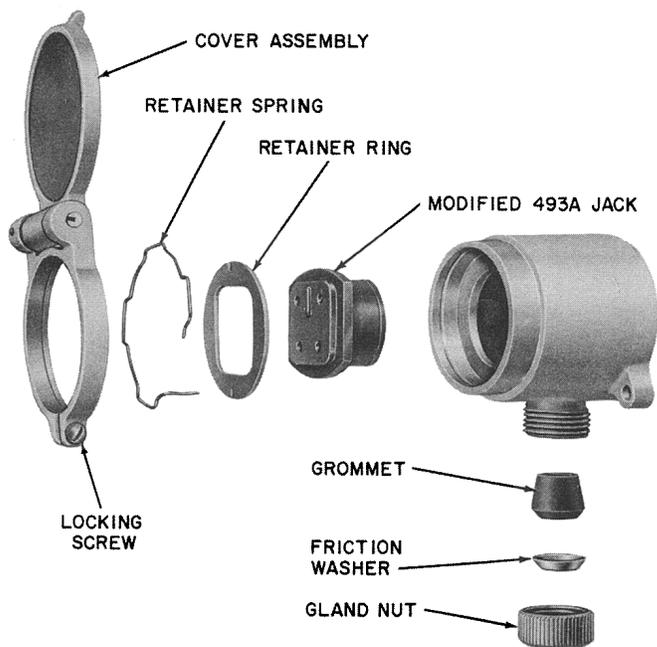


Fig. 23 — Assembly of KS-16151, List 1 Jack

**16-TYPE FACEPLATES**

**3.03** The 16-type faceplate (Fig. 26) consists of a colored plastic plate arranged for a jack or a connecting block and a metal ring which is arranged for mounting to a 63A bracket. Six screws are provided for mounting the metal ring to a jack or connecting block; attaching the ring to the 63A bracket, and for mounting the faceplate to the metal ring. The 16D faceplate has the Bell System emblem embossed in the center and is used to cover openings at unused 63A brackets. The 16-type faceplate is available in colors to match jacks with which it is used. The 16-type faceplate may also be used with the KS-19407, List 1 bracket, in which case the metal ring is not required.

**74A BRACKET**

**3.04** The 74A bracket (Fig. 27) is used in mounting the 541A jack to an electrical outlet box. It is also used as a component of the 547A jack. The 74A bracket consists of two identical metal brackets.

**KS-19407, LIST 1 BRACKET**

**3.05** The KS-19407, List 1 bracket (Fig. 28) is similar in function to the 63A bracket except that it is designed for use in existing walls

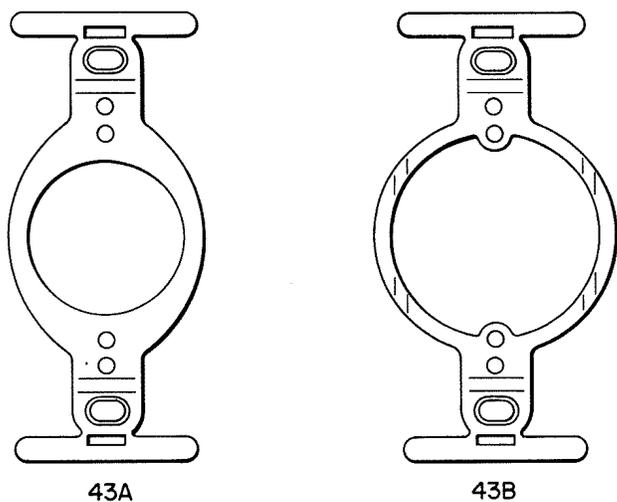


Fig. 24 — 43-Type Brackets

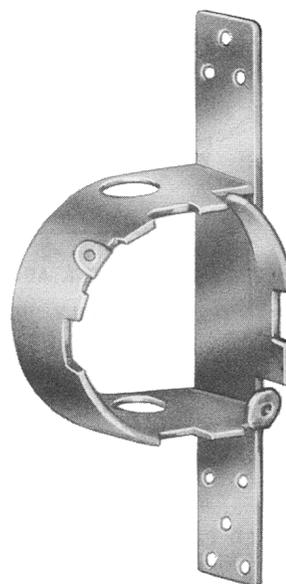


Fig. 25 — 63A Bracket

and the 63A bracket is designed for attachment to a stud before the wall is constructed. The KS-19407, List 1 bracket can be used in walls up to 1-1/2 inches thick.

**3.06** The cylindrical portion of the bracket is designed to be inserted through a 2-1/4 inch diameter hole drilled in a wall. A flange bears against the front surface of the wall and two inner clamps, which ride in slots in the cylinder, are pulled against the inside surface of the wall by screws controlled from the surface of the flange.

#### KS-19316 SERIES WEATHERPROOF HOUSINGS

**3.07** The KS-19316, List 1 weatherproof housing (Fig. 29) is an aluminum alloy outlet box, a rubber-gasketed cover with spring-hinged door, and a bracket which will mount 493-, 541-, and 548-type jacks. It is primarily intended for recess mounting to provide for an outdoor telephone outlet. Mounting hardware is furnished.

**3.08** The KS-19316, List 2 weatherproof housing is similar to the KS-19316, List 1 except it is intended for surface mounting and con-

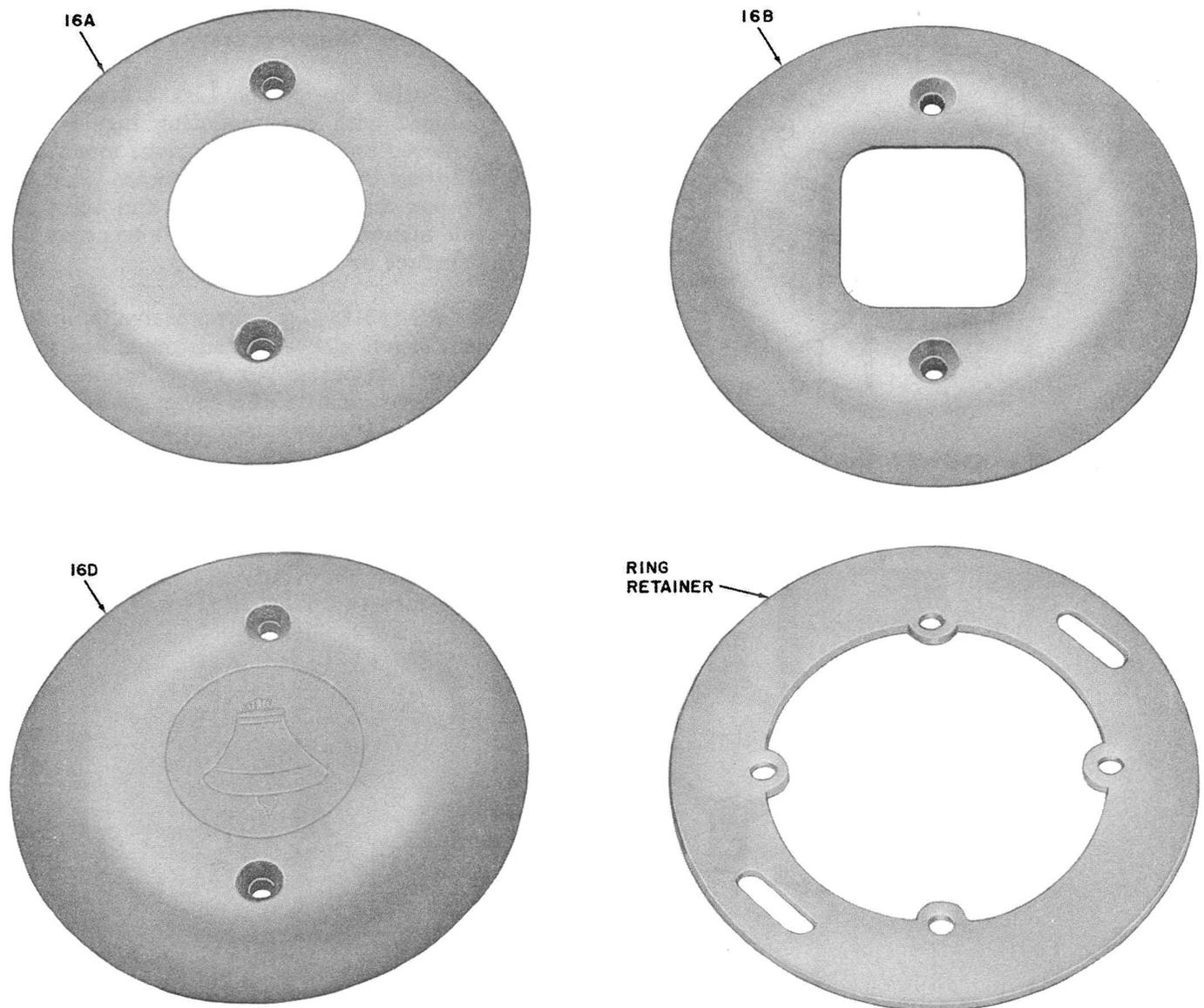


Fig. 26 — 16-Type Faceplate

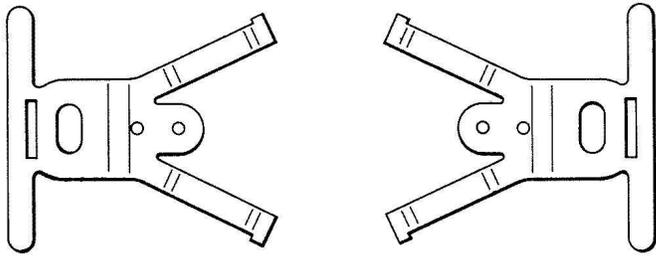


Fig. 27 — 74A Bracket

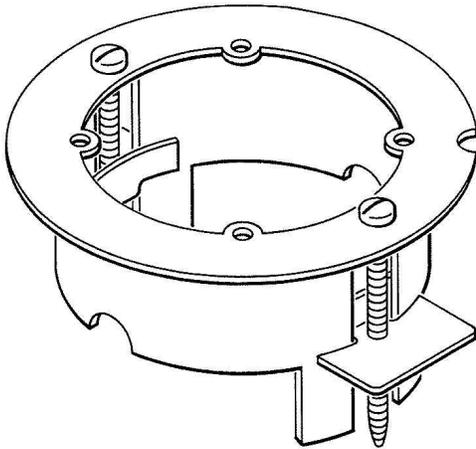


Fig. 28 — KS-19407, List 1 Bracket

tains a watertight strain relief connector, primarily for 4-conductor cable.

**3.09** The KS-19316, List 3 weatherproof housing is similar to the KS-19316, List 2 except that the strain relief connector is designed for 12-conductor cable.

**3.10** The KS-19316, List 4 weatherproof housing (Fig. 30) combines the features of the List 1, 2, and 3 and is intended to supersede these housings. The List 4 housing consists of a waterproof box with reversible mounting lugs, bracket, rubber-gasketed cover, and watertight connector with two sizes of grommets for either 4- or 12-conductor cables. Mounting screws are provided.

**3.11** The outlet box of the List 4 housing is equipped with two mounting lugs which may be removed and placed in various mounting positions during the installation process. Fig. 31 shows the box and mounting lugs and eight of the possible mounting positions. The box may be used for surface or flush mounting.

**3.12** The KS-19316, List 5 cover is available for installation where the customer has previously placed an outlet box for telephone use. The List 5 cover consists of a cover, gasket, and bracket identical to those used on the KS-19316, List 4 housing.

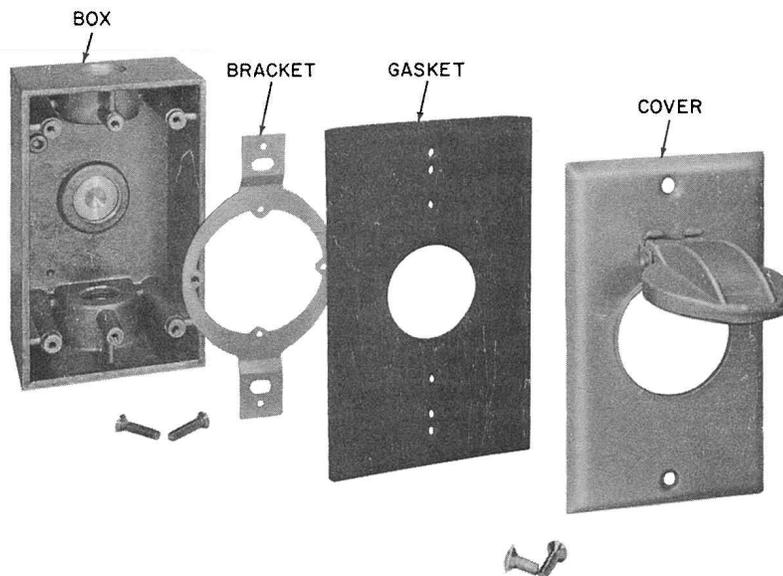
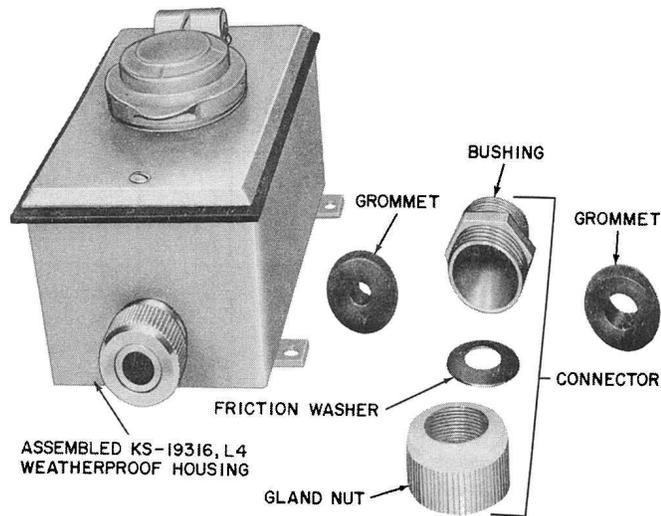


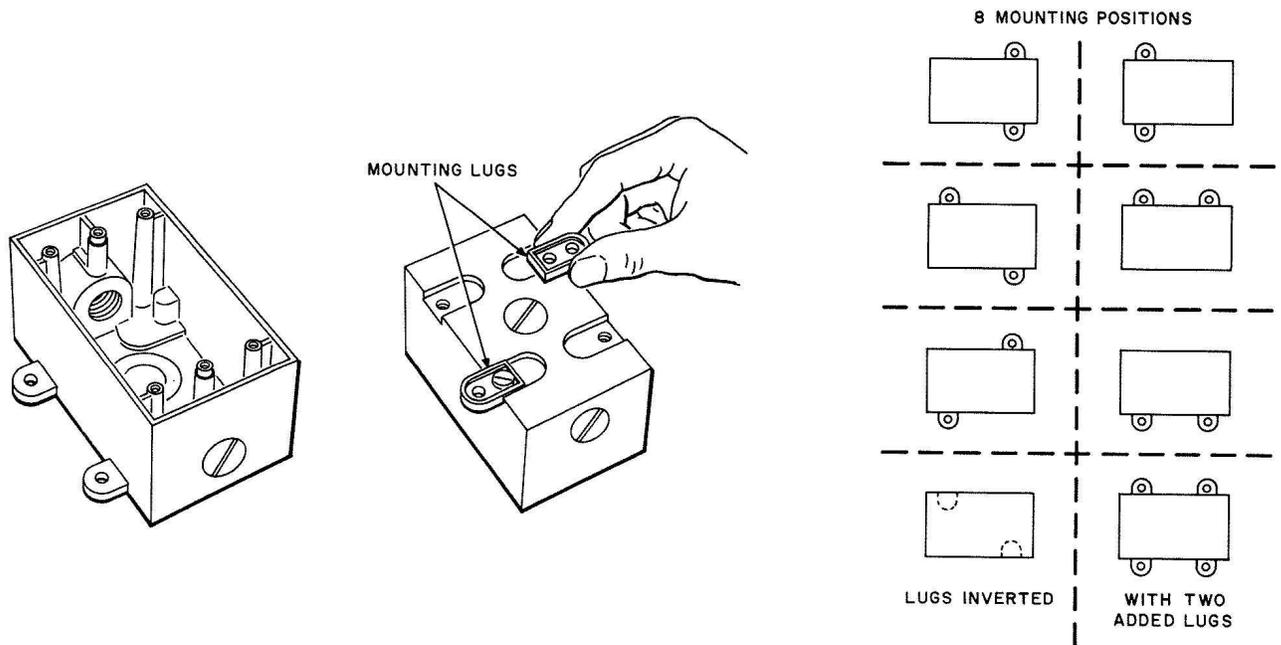
Fig. 29 — KS-19316, List 1 Weatherproof Housing

**3.13** The KS-19316 series weatherproof housings replace the T-10 cover, T-11 box, KS-16151, List 1 weatherproof jack, and the KS-16151, List 2 weatherproof housing.

**3.14** See Table C for description, replacement, and component information for KS-19316 series weatherproof housings.



**Fig. 30 — KS-19316, List 4 Housing and Components**



**Fig. 31 — Outlet Box Showing Reversible Mounting Lugs**

**TABLE C**  
**KS-19316 SERIES WEATHERPROOF HOUSINGS**

TYPE	REPLACES	COMPONENTS	FIG. NO.	REMARKS	USE WITH JACK NO.*
KS-19316, L1	Cover, Perfect Line Mfg Co, T-10 Box, Perfect Line Mfg Co, T-11	Gasket, Bracket, Weatherproof Box, and Cover	29	May be Mounted in a Recess with Cover Flush to Wall	493A (MD) 541A 548A
KS-19316, L2	KS-16151, L1 Weatherproof Jack KS-16151, L2 Weatherproof Housing	Gasket, Bracket, Connector, Grommet, Weatherproof Box, and Cover	29	Surface Mount for use with JKT or Wire of Similar Diameter	493A (MD) 548A
KS-19316, L3		Same as KS-19316, L2 except larger Grommet	29	For use with 6-pair Cable or Wire of Similar Diameter	541A
KS-19316, L4	KS-19316, L1, L2, and L3 Weatherproof Housing	Gasket, Bracket, Weatherproof Box, Connector, Two Grommets, and Cover	30	For Recess or Surface Mounting. For use with JKT or 6-pair Cable or Wire of Similar Diameter	493A (MD) 541A 548A
KS-19316, L5		Gasket, Bracket, and Cover		For use on Existing Outlet Boxes	

\* Jacks must be ordered separately.

#### 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:

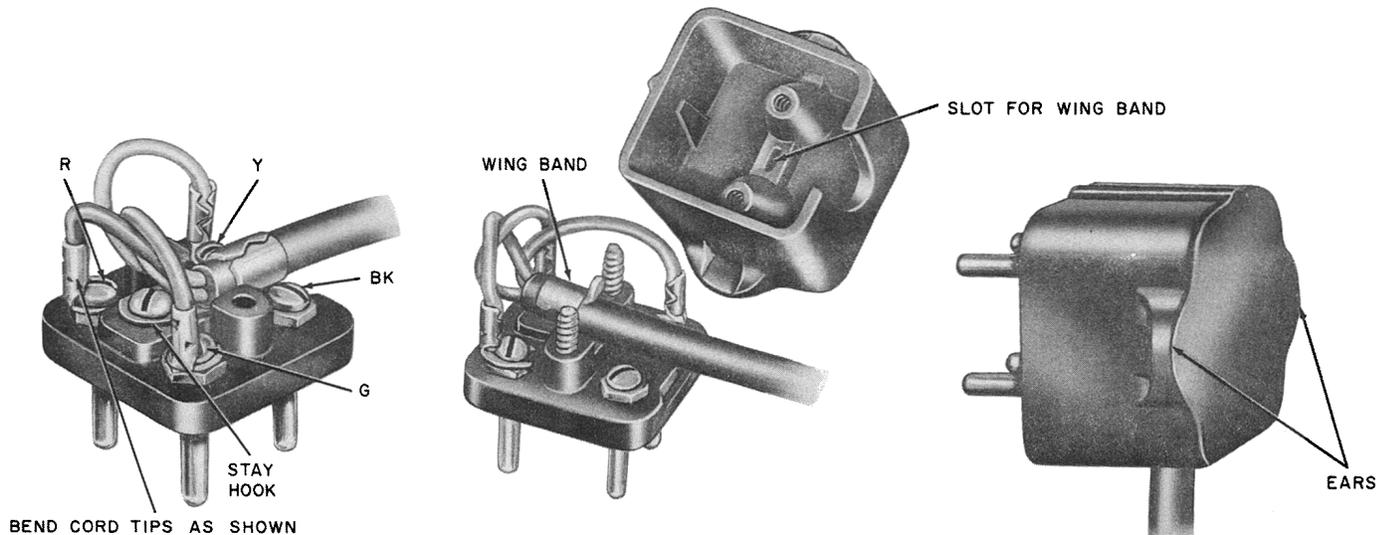
- (1) Make connections as indicated by color designations stamped adjacent to terminals.
- (2) Connect cord tips as shown in Fig. 1.
- (3) Tie mounting cord securely.
- (4) Place shell on base and tighten screws.

##### 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. 32).
- (2) Bend cord tips up as shown in Fig. 32.
- (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.



**Fig. 32 — Terminating D3BP and D4BK Cords on 283B Plug**

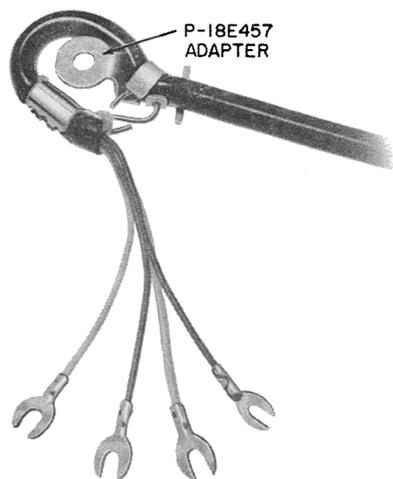
(b) Using D3BU or D4BP cord:

- (1) Remove P-18E457 adapter from cord (Fig. 33).
- (2) Using long-nose pliers and 8-inch side cutters or equivalent (Fig. 34), turn large eye of S hook clockwise until positioned 90 degrees away from small eye of S hook.

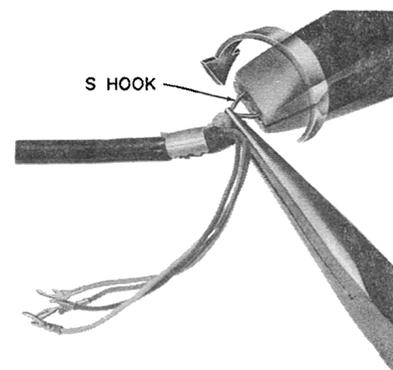
- (3) With small eye of S hook up, insert RM-658901 self-tapping screw with P-284139 flat washer through large eye of S hook. Using farthest hole opposite cord entrance (Fig. 35 and 36), anchor cord securely.

*Note:* An RM-658901 self-tapping screw and a P-284139 flat washer will be shipped with each 283B plug (Fig. 36).

- (4) Lay the cord conductors out straight from the end of cord (Fig. 35). Pass the green conductor to the right and under the cord, and terminate it on the GN punching.



**Fig. 33 — D4BP Cord with Adapter**



**Fig. 34 — Bending S Hook**

Pass the red conductor to the left and the cord and terminate it on the R punching. Pass the yellow conductor to the left, under and over the cord and terminate on the Y punching. If the black conductor is used, pass it to the right, under and over the cord, and terminate it on the BK punching.

(5) Bend cord tips and dress red and green conductors so they lie next to the cover mounting screw (Fig. 36).

(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.

**505A PLUG**

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

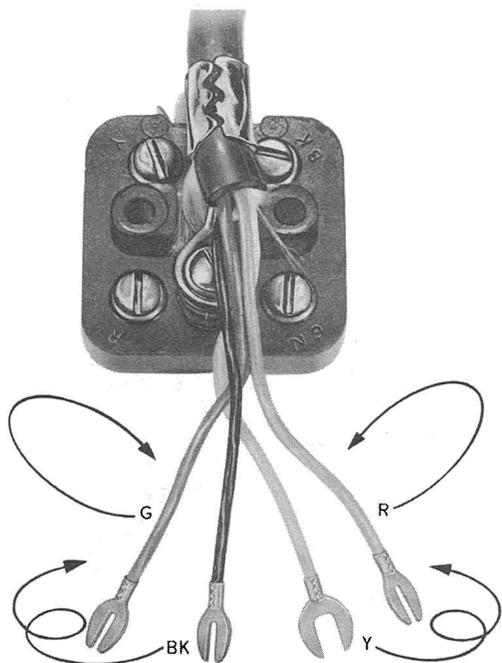


Fig. 35 — D4BP Cord Ready to Terminate

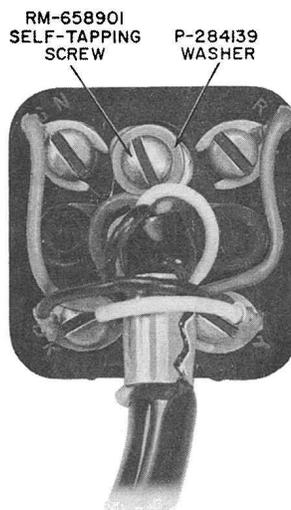


Fig. 36 — D4BP Cord Terminated on 283B Plug

- (1) Place cord tip guide on block.
- (2) Place wingband or stay hook and mounting cord in their proper slots.
- (3) Place cord fastener over cord and press it into slots in block. One ear of the wingband will extend into slot in top of the cord fastener.
- (4) Insert mounting cord tips into socket type terminals of plug.
- (5) Dress conductors so they will lie within the cap of the plug.
- (6) Place cap on plug. (Be sure no leads are pinched.)
- (7) Snap two sections of neck together.
- (8) Insert screw and tighten.

**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.

**CONNECTIONS, JACKS**

**4.08** Only one wire or cable conductor shall be connected to a terminal of a jack. A loop-through method of terminating IW cable may be used on jacks having clip type terminals.

**4-CONDUCTOR JACKS**

**4.09** Connect wires or cable conductors as indicated by the color designations stamped next to the terminals. Red conductor is connected to R terminal, etc.

**8- AND 12-CONDUCTOR JACKS**

**4.10** Table D gives connections for 8- and 12-conductor jacks.

**TABLE D**  
**8- AND 12-CONDUCTOR JACKS**  
**CONNECTIONS**

INSIDE WIRE QUAD		D AND E INSIDE WIRING CABLE	NO. TERMINALS	
			8	12
		TERMINAL DESIGNATIONS		
1st	Red	BL-W	R	1
	Green	W-BL	G	2
	Yellow	O-W	Y	3
	Black	W-O	BK	4
2nd	Red	G-W	W	5
	Green	W-G	R-R	6
	Yellow	BR-W	Y-Y	7
	Black	W-BR	BK-BK	8
3rd	Red	S-W		9
	Green	W-S		10
	Yellow	BL-R		11
	Black	R-BL		12

**5. INSTALLATION-NONFLUSH JACKS**

**392A JACK**

**5.01** Install 392A jack (Fig. 10) as follows:

- (1) Connect cable conductors to jack and dress as shown in Fig. 10.
- (2) Fasten base assembly to baseboard or other mounting surface with 3/4-inch No. 8 RH blued wood screws or equivalent.
- (3) Fasten jack to base assembly with furnished machine screws.

**404B AND 549A JACKS**

**5.02** Install 404B (Fig. 11) and 549A (Fig. 18) jacks as follows:

- (1) Connect station wire to jack and dress as shown in Fig. 11 or 18.
- (2) Fasten jack to baseboard or other mounting surface using screws furnished with jack.

**551A JACK**

**5.03** Install the 551A jack as follows:

- (1) Connect station wire or cable conductors to clip terminals of jack as shown in Fig. 20. Cable conductors may be terminated on a loop-through basis, if desired.
- (2) Fasten jack to baseboard or other mounting surface using screws furnished with jack.

**KS-8421 JACK**

**5.04** Install KS-8421 jack as follows:

- (1) Mount jack as shown in Fig. 22.
- (2) Fasten cover, using screws furnished with jack.

**6. INSTALLATION-FLUSH-TYPE JACKS IN OUTLET BOXES**

**391A JACK**

**6.01** The 391A jack is mounted in outlet box (Fig. 9) as follows:

- (1) Connect station wire to jack and dress as shown in Fig. 9.
- (2) Mount jack in outlet box, using screws furnished with jack.
- (3) Fasten faceplate on jack, using screws furnished with jack.

**497A JACK**

**6.02** The 497A jack is shown in an outlet box in Fig. 12. It consists of a 493A jack, 43A bracket, faceplate, and mounting screws. It is installed as follows:

- (1) Mount 493A jack on 43A bracket.
- (2) Connect station wire to jack.
- (3) Dress wire as shown in Fig. 12.
- (4) Mount jack equipped bracket in outlet box.
- (5) Fasten faceplate with furnished screws.

**547A OR 547B JACK**

**6.03** The 547A or 547B jack is installed as follows:

- (1) Attach 541A jack on 74A bracket (Fig. 16) or 43B bracket.
- (2) Connect station wire or cable to jack.
- (3) Dress wire as shown in Fig. 16. (Leave slack loop.)
- (4) Mount jack and bracket assembly in outlet box.
- (5) Install faceplate. (Be sure cover is on jack before placing faceplate.)

**493A OR 548A JACK**

**6.04** The 493A or 548A jack is installed as follows:

- (1) Connect station wire or cable to jack.
- (2) Attach jack to 43-type bracket or drill a 1-1/4 inch diameter hole in the mounting surface.
- (3) Attach 43-type brackets to outlet box or mount jack directly to mounting surface.
- (4) Install suitable faceplate (not furnished).

**550A JACK**

**6.05** The 550A jack (Fig. 19) is assembled in the same manner as the 497A jack (6.02). It consists of a 548A jack (Fig. 17), 43A bracket, faceplate, and mounting screws.

**7. INSTALLATION-FLUSH-TYPE JACKS IN 63A BRACKET**

**7.01** The 493A, 541A (Fig. 13), and 548A (Fig. 17) jacks can be mounted in a 63A bracket (Fig. 25) with a 16-type faceplate (Fig. 26). Use same color faceplate as jack. Jacks are installed in 63A bracket as follows:

(a) 493A jack and 548A jack:

- (1) Mount bracket ring on bracket. The bracket ring is furnished with the faceplate.
- (2) Connect station wire to jack.
- (3) Mount jack on bracket ring.
- (4) Mount faceplate on bracket ring.

(b) 541A jack:

- (1) Mount bracket ring on bracket. The bracket ring is furnished with the faceplate.
- (2) Connect station wire or cable leads to clip terminals of jack (Fig. 13).
- (3) Mount jack on bracket ring (Fig. 15).
- (4) Place cover on jack.
- (5) Position faceplate over cover and fasten to bracket.

**KS-8420 JACK**

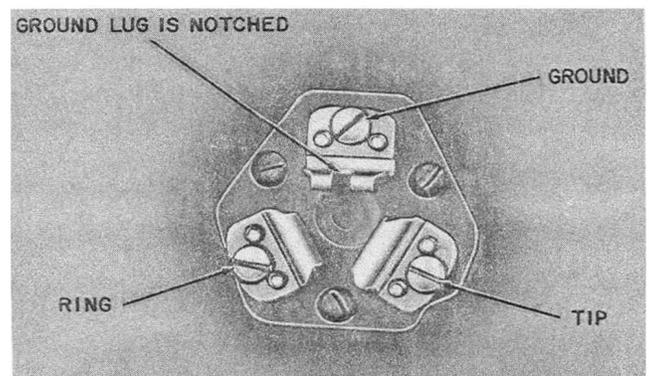
**7.02** Install KS-8420 jack (Fig. 21) at outdoor locations (for ships, boats, trains, etc) as follows:

- (1) Arrange for a 2-11/16 inch hole at desired location.
- (2) Temporarily insert jack in hole and mark fastener holes.
- (3) Remove jack and drill fastener holes.
- (4) Connect wire as shown in Fig. 37.
- (5) Secure jack to mounting surface with four No. 8 RH brass wood screws or No. 8 RH brass machine screws.

**KS-8421 JACK**

**7.03** Install KS-8421 jack (Fig. 22) at outdoor locations (for boats, trains, auto trailers, etc) as follows:

- (1) Arrange drop wire or bridle wire and any metal conduit at desired location.
- (2) Secure the jack housing to the mounting surface using suitable fasteners.
- (3) Connect wire to the terminal block as shown in Fig. 37.
- (4) Mount terminal block to jack housing.
- (5) Install cover on housing.



**Fig. 37 — Connections for KS-8420 and KS-8421 Jacks**