

JACKS AND PLUGS

1. INTRODUCTION

1.01 This section covers the identification, installation, connections, and information on fasteners for jacks, and the termination of wire and cable thereon. It also includes the identification of plugs used with jacks.

1.02 Due to minor changes, marginal arrows are shown.

2. JACK AND PLUG SYSTEMS — REQUIREMENTS

2.01 Normally, one telephone equipped with a ringer is used in conjunction with a jack and plug arrangement. When the telephone arrangement is such that a ringer is not permanently connected to the line, a Test Line Termination consisting of a QHM4A Lamp Indicator is required as described in Section 501-250-900CA.

2.02 Hand telephone sets (those requiring a subscriber set) and combined telephone sets should not be used together in the same jack and plug system.

2.03 Jack mounting should be uniform so that plug insertions will be the same throughout the customer's premises.

3. JACKS AND PLUGS — IDENTIFICATION AND USE

3.01 Jacks and plugs permit one or more telephone sets to be used at one or more locations. They also permit the rapid disconnection

and reconnection of telephone service to ships, boats, trains, etc.

3.02 Table A provides information on the selection, identification, and use of plugs.

3.03 Table B provides information on the selection, identification, and use of jacks.

TABLE A

PLUGS

Principal Use	No. of Conductors	Type	Color	Plug Shown in Fig.
Portable Telephone Sets	4	283B	Gray-49 Ivory-50	1
	8	274A	Gray-49 Ivory-50	2
Fixed Locations for Ships, Boats, Trains, etc	3	KS-8419	Brass	10

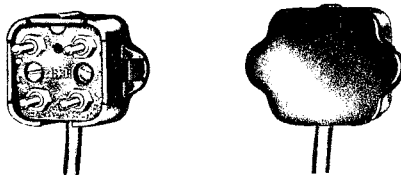


Fig. 1 — 283B Plug

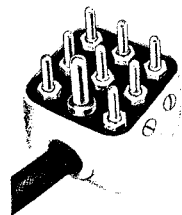


Fig. 2 — 274A Plug

TABLE B

JACKS

SECTION 461-630-100CA

Principal Use	Location	Type of Mounting		No. of Conductors	Type	Color	Jack Shown in Fig.	Furnished with	
								Quantity	Equipment
Portable Telephone Sets	Inside Buildings	Flush	Baseboard	4	493A	Gray-49 Ivory-50	4	2	Self-tapping Screws
			Outlet Box	4	497A	Gray-49 Ivory-50	3	1	493A Jack
								1	43-type Bracket
								1	Coverplate
								4	Metal Screws
			Baseboard Outlet Box	8	391A	Gray-49 Ivory-50	5 7	1	Flush Coverplate
									Mounting Screws
								Washers	
		Nonflush		4	404B	Gray-49 Ivory-50	12	2	Wood Screws
				8	392A	Gray-49 Ivory-50	13	1	Metal Cover
	Patios, Terraces, Breezeways, Porches	Nonflush		4	KS-16151, List 1	Aluminum	15	1	493A Jack (Modified) Aluminum Housing with Hinged Cover
Flush		Coverplate	4	□ T-10	Aluminum	11	1	Coverplate, Rubber Gasket, and Screws	
		Outlet Box	4	□ T-11	Aluminum	11	1	Outlet Box	
Fixed Locations for Ships, Boats, Trains, etc	Outdoors at Ships, Boats, Wharves, Trains, etc	Flush		3	KS-8420	Brass	8	1	Cover
		Nonflush		3	KS-8421	Brass	18	1	Cover

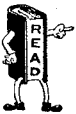
▣ Not Bell Canada Standard

4. JACKS AND PLUGS — TERMINATIONS AND CONNECTIONS

- 4.01 Connect only one wire or cable conductor to screw terminals of jacks.

Jacks for Indoors and Patios — Connections

- 4.02 For 4-conductor jacks, connections should be as indicated by the color designations stamped adjacent to the terminals. The red conductor should be connected to the terminal designated R, etc.



Where jacks are used on 2-party selective, dial message-rate lines and at tip-party automatic ticketing stations, terminate the green conductor of station wiring on black terminal instead of on green terminal. A corresponding change is required in the associated plugs. This is required to prevent fraudulent use of the telephone.

- For all types of 8-conductor jacks, see Table C.

TABLE C

CONNECTIONS FOR 8-CONDUCTOR JACKS

	Inside Wire	C or D Inside Wiring Cable	Terminal Designations
1st Quad	Red	Blue	Red
	Green	White	Green
	Yellow	Orange	Yellow
	Black	White	Black
2nd Quad	Red	Green	White
	Green	White	Red-Red
	Yellow	Brown	Yellow-Yellow
	Black	White	Black-Black

5. FLUSH-TYPE JACKS — INSTALLATION

- 5.01 The 391A, 493A and 497A jacks may be flush-mounted in outlet boxes, baseboards and panels. Fig. 3, 4, 5 and 7 show these mounting arrangements.

- 5.02 The 497A jack in outlet box (Fig. 3) is mounted as follows:

1. Mount jack on 43A bracket with screws furnished.
2. Connect station wire to block, and dress as shown in Fig. 3.
3. Mount block-equipped bracket in outlet box with screws furnished.
4. Mount coverplate with screws furnished.

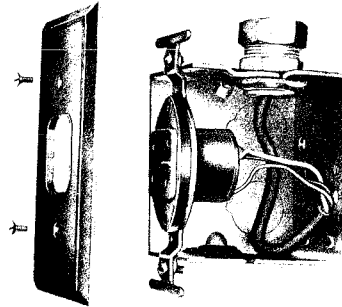
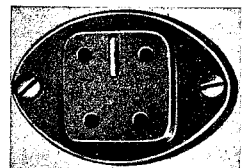


Fig. 3 — 497A Jack Mounted in Outlet Box

- 5.03 The 493A jack is installed in baseboard or wall panel, as shown in Fig. 4, and as follows:

1. Place front side of jack against baseboard or other mounting surface at desired location.
2. Mark outline of jack on surface.
3. Drill a lead hole in the center of the marked jack outline.
4. Drill a hole for jack with a 1-1/4 inch station bit or equivalent, using lead hole.
5. Place jack in hole and mark locations for mounting screws.
6. Drill mounting holes.
7. Connect station wire to jack.
8. Fasten jack, using screws furnished with jack.

Fig. 4 — 493A Jack Mounted in Base-board



SECTION 461-630-100CA

5.04 The 391A jack is installed in baseboard or wall panel, as shown in Fig. 5 and as follows:

1. Place coverplate against baseboard or other mounting surface at desired location.
2. Insert the point of a pencil through the coverplate screw holes and mark the centers of these holes on the supporting surface.
3. Measure from center of holes and draw rectangle as shown in Fig. 5.
4. Bore holes within the corners of the rectangle and remove material.
5. Connect station wire to jack.
6. Fasten jack to mounting surface with two 1/2 inch, FH bright wood screws.
7. Fasten coverplate with screws furnished with jack.

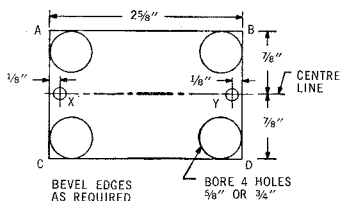


Fig. 5 — Method of Preparing Recess Hole for 391A Jack

5.05 This faceplate is used with 493A Type jacks, in homes with concealed wiring. —See section on concealed wiring for method of mounting.

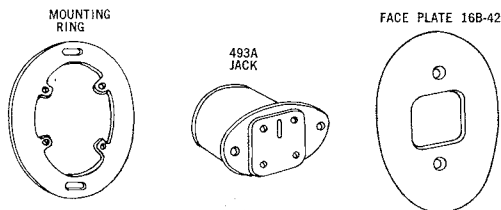


Fig. 6 — 16B Face Plate

5.06 The 391A jack in outlet box (Fig. 7) is mounted as follows:

1. Connect station wire to jack, and dress as shown in Fig. 7.
2. Mount jack in outlet box, using screws furnished with jack.
3. Fasten coverplate on jack, using screws furnished with jack.

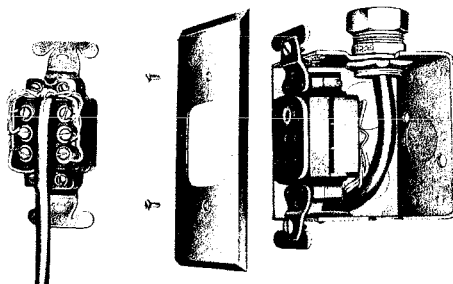


Fig. 7 — 391A Jack Unmounted and 391A Jack Mounted in Outlet Box

5.07 Install the KS-8420 jack at outdoor locations (for ships, boats, trains, etc) as follows (see Fig. 8) :

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. 9.
5. Secure jack to mounting surface with four No. 8 RH brass wood screws or No. 8 RH brass machine screws.

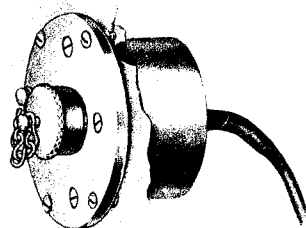


Fig. 8 — Installation of KS-8420 Jack

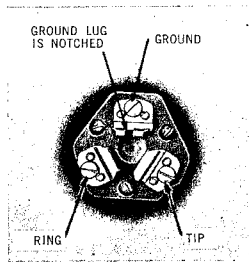


Fig. 9 — Connections for KS-8420 and KS-8421 Jacks

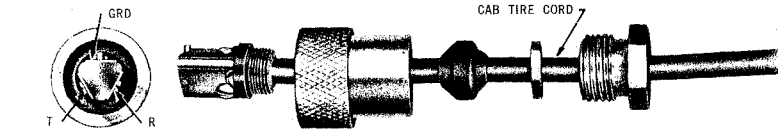


Fig. 10 — KS-8419 Plug

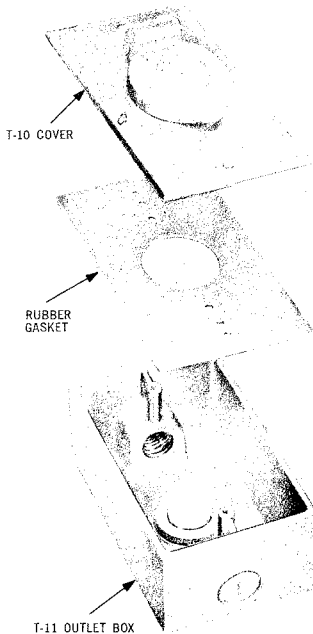


Fig. 11 — T-11 Outlet Box with T-10 Cover

- • Where a more rugged waterproof-type outlet box is required, a T-11 box may be used with a T-10 outlet cover.

Outdoor Flush-type Jacks

- 5.08 For outdoor flush-type jacks, the T-10 outlet cover and T-11 outlet box may be used.
- • Where a flush-type jack is desired in an outdoor location, the weatherproof T-10 telephone outlet cover may be used (see Fig. 11).

- • The T-10 outlet cover will fit any standard size outlet box and requires a 43A bracket to accommodate a 493A jack. The outer surface of both T-10 and T-11 have an aluminum finish.
- • The cover and box may be ordered as follows:
- Cover, Perfect-Line Manufacturing Company, T-10 (includes faceplate, gasket, 43A bracket, and mounting screws)
- Box, Perfect-Line Manufacturing Company, T-11

6. NONFLUSH-TYPE JACKS — INSTALLATION

- 6.01 Install 404B jack (Fig. 12) as follows:
1. Connect station wire to jack, and dress as shown in Fig. 12.
 2. Fasten jack to baseboard or other mounting surface, using screws furnished with jack.

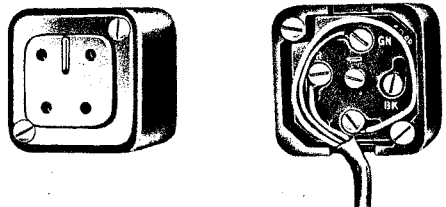


Fig. 12 — Installation of 404B Jack

6.02 Install 392A jack (Fig. 13) as follows:

1. Connect station wire to jack, and dress as shown in Fig. 13.
2. Fasten jack to baseboard or other mounting surface.

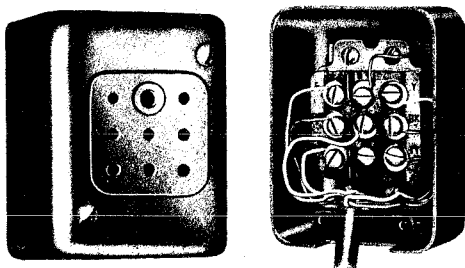


Fig. 13 — Installation of 392A Jack

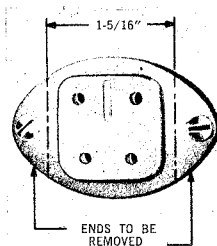


Fig. 14 — Modification of 493A Jack to Fit into KS-16151, List 1 Jack (See Note 2, Pg. 7)

- ▣ **6.03** The 493A jack (Fig. 14) may be modified to fit into the KS-16151, List 1 outdoor jack as follows:

1. Mark ends of jack as shown in Fig. 14.
2. Remove ends with hack saw.

- 6.04** Assemble and install the KS-16151, List 1 jack when used without conduit (Fig. 15 and 16) as follows:

1. Turn jack so that wire entrance hole faces downward.
2. Fasten jack housing with two fasteners (see Table D).
3. Run station wire through gland nut, friction washer, grommet, and through entrance hole into housing.
4. Connect wire to jack.
5. Assemble as shown, with hinge of cover at top of jack.

▣ Not Bell Canada Standard

6. If the cover spring should become inoperative, remove the bottom locking screw and replace the entire cover.

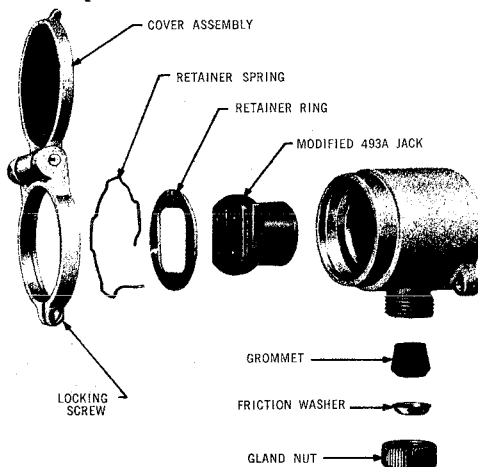


Fig. 15 — Assembly of KS-16151, List 1 Jack

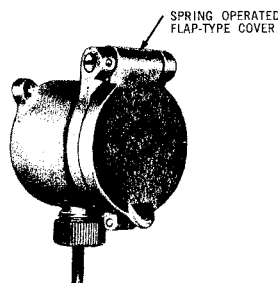
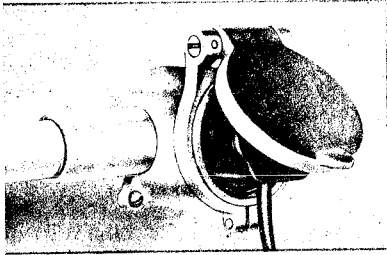


Fig. 16 — Typical Installation of KS-16151 Jack Installed without Conduit

- 6.05** Assemble and install the KS-16151, List 1 jack when used with 1/2-inch conduit (Fig. 17) as follows:

1. Screw threaded portion of jack housing into 1/2-inch conduit fitting. Screw other end of conduit fitting on conduit.
2. Fasten jack housing with two fasteners (see Table D).
3. Pull wire through conduit into fitting.
4. Connect wire to jack.
5. Assemble as shown, with hinge of cover at top of jack.

6. If the cover spring should become inoperative, remove the bottom locking screw and replace the entire cover.



**Fig. 17 — Typical Installation of KS-16151 Jack
Installed on 1/2-inch Conduit**

TABLE D

FASTENING DEVICES FOR KS-16151, LIST 1 JACK

Surface	Fasteners
Wood	1-1/4 in., No. 8 RH Galvanized Screws
Masonry	1-1/2 in., No. 6-8 Screw Anchor or equiv. and 2 in., No. 8 RH Galv. Screws
Hollow Tile	3/16 in. Toggle Bolts 4XL or 6S Wall Screw Anchor

- 6.06** Install the KS-8421 jack (Fig. 18) as follows:

1. Mount jack as shown in Fig. 18. Connect wire to jack.
2. Fasten cover, using screws furnished with jack.

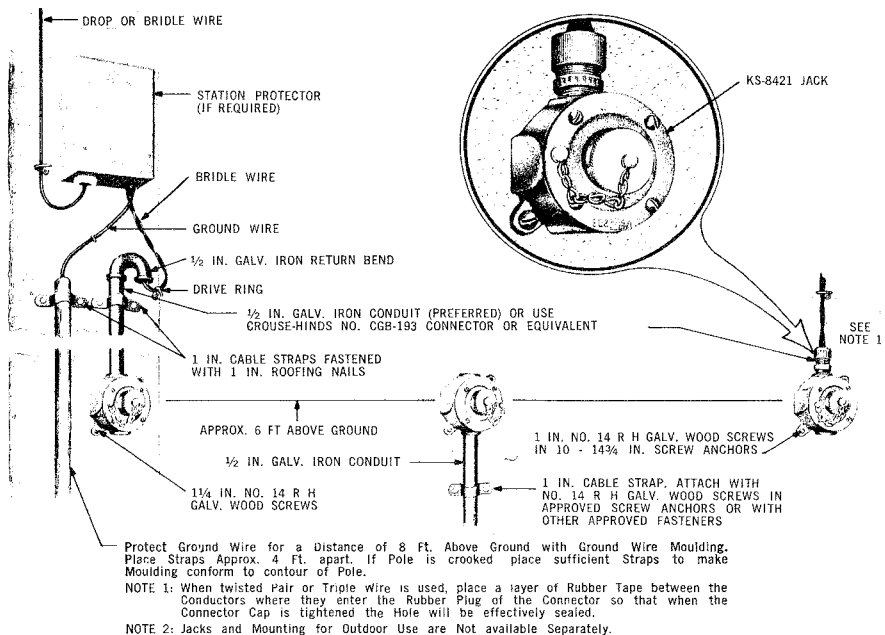


Fig. 18 — Typical Installation of KS-8421 Jack