

REFERENCE

2750-TYPE TELEPHONE SETS

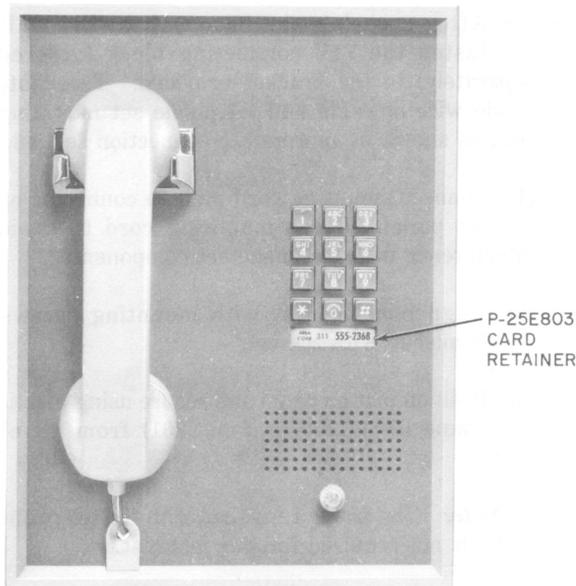


Fig. 1—2750-Type Telephone Set

1. GENERAL

1.01 This section contains identification, installation, maintenance and connection information for the 2750-type telephone sets. This information was formally contained in Sections 502-750-100 and 502-750-430 which are hereby canceled.

2. IDENTIFICATION

2.01 Set, Telephone, 2750A-58 or 2750B-60.

Note: —58 includes white handset, aluminum mat, and light gray plastic frame. —60 includes light beige handset, copper mat, and light beige plastic frame.

2.02 *Replaceable set Components are listed in Table A.*

2.03 *Associated Apparatus or Equipment (ordered separately):*

- Apparatus box, 113-type or 114A (recessed mounting)
- D-180071 or D-180072 Kit of Parts (surface mounting)
- Connecting Block, 71B

2.04 *Loose Parts Furnished With Set:*

- P-90D232 Cord and Plug Assembly or Cord, Mounting, D4BN-3 equipped with 423A plug (750-, 1750-, and 2750-type sets)
- Instruction Booklet, GN-2408
- P-160828 Mounting Screws (4)
- P-25E803 Retainer, Card

Design Features

2.05 The 2750-type telephone set may be recess mounted or adapted for surface mounting using a D-180071 or D-180072 Kit of Parts.

2.06 Component parts of these sets are mounted on a steel panel. An aluminum mat retained by a plastic frame covers the panel and gives the installation a finished appearance.

Application

2.07 Can be wired for bridged, two-party flat rate, two-party message rate or four-party full selective on CO or PBX lines.

2.08 Can be modified for 1A1 or 1A2 KTS. See Tables B and C for set modifications.

SECTION 502-707-100

2.09 The polarity guard is optional and must be ordered separately. It is intended for use when specified by local instructions for end-to-end signaling installations. Refer to Table D for connections

3. INSTALLATION

Apparatus Boxes

3.01 Refer to Division 463 for information on installing apparatus boxes.

3.02 *To install telephone set in box:*

- (1) Remove cover of apparatus box, if so equipped (see section covering apparatus boxes).
- (2) Install 71B connecting block (ordered separately) to mounting bracket located in upper right corner of apparatus box. (Consult Division 461 for further information on this type of connecting block.)
- (3) Secure mounting cord stayhook and terminate inside wire or cable and mounting cord in accordance with appropriate connection section.
- (4) Remove plastic mat retainer frame and mat from telephone set.
- (5) Position panel on lower edge of apparatus box with top tilted outward. Connect mounting cord plug to connector on set panel. Dress mounting cord to avoid interference with telephone set components. Align panel of set with mounting brackets on box and secure with four mounting screws furnished with set.
- (6) Position mat on panel and secure using the mat retainer frame. If necessary, the projecting tabs may be adjusted to insure a snug fit.

D-180071 or D-180072 Kit of Parts

3.03 *To surface mount telephone set:*

- (1) The D-180071 (light gray frame) or D-180072 (light beige frame) Kit of Parts, ordered separately, permits mounting these sets on the surface of a wall.

- (2) The base pan assembly is arranged for mounting on a 63A or KS-19407L1 bracket or a standard electrical outlet box.

Note: Additional mounting holes in the base pan assembly provide for securing to wall surface using nails or screws as required.

- (3) After securing the base pan to the wall fasten the 71B connecting block (ordered separately) to the bracket provided. Terminate inside wire or cable and telephone set mounting cord as shown in appropriate connection section.
- (4) Connect mounting cord plug to connector on set panel. Dress mounting cord to avoid interference with telephone set components.
- (5) Align panel of set with mounting screws furnished with the set.
- (6) Position mat on panel and secure using plastic frame (P-89C260 or P-89C261) from kit of parts.

Note: The frame furnished with the telephone set is not required for this installation

4. MAINTENANCE

4.01 Work done on customer's premises should be limited to replacement of accessible parts which are available through supply channels; refer to ordering guide tables.

4.02 Ringer, handsets, dials, etc. used in these sets should be maintained in accordance with section covering the particular item.

4.03 The exterior of these sets should be clean and not marred or chipped. The vinyl-faced mat may be cleaned with a water-dampened KS-2423 or equivalent cloth. Replace defective mat as follows:

- (1) Grasp mat retainer frame at top, lift upward and out to release frame from panel of set.
- (2) Remove handset from hook of set.
- (3) Pull out handset cord to allow working slack.
- (4) Remove mat from face of panel.

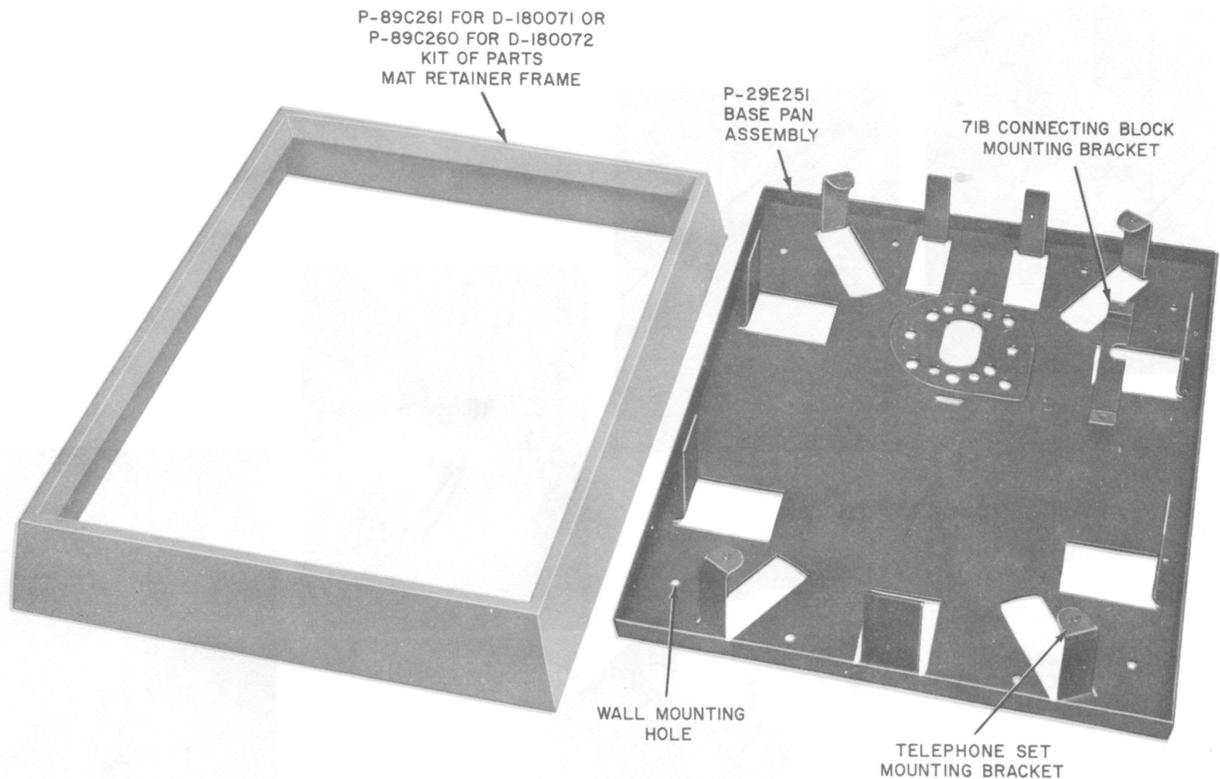


Fig. 2—D-180071 or D-180072 Kit of Parts For Surface Mounting

- (5) Remove grommet from mat as shown in Fig. 3.
 - (6) Install grommet in new mat by reversing procedure used in removal.
 - (7) Position mat on panel and secure using the mat retainer frame.
- 4.04** To test the cord reel, pull the handset cord out to its maximum length. With the cord maintained perpendicular to the panel, the cord

should retract fully. Any twists in the cord should be removed before making test.

4.05 Replace the cord reel if the cord will not retract or if the cord is frayed, kinked, or noisy. Field maintenance of the cord reel or replacement of the cord is not recommended.

4.06 The ringer volume control should operate without restriction when the knob is turned. Replace set if the control mechanism is worn or defective.

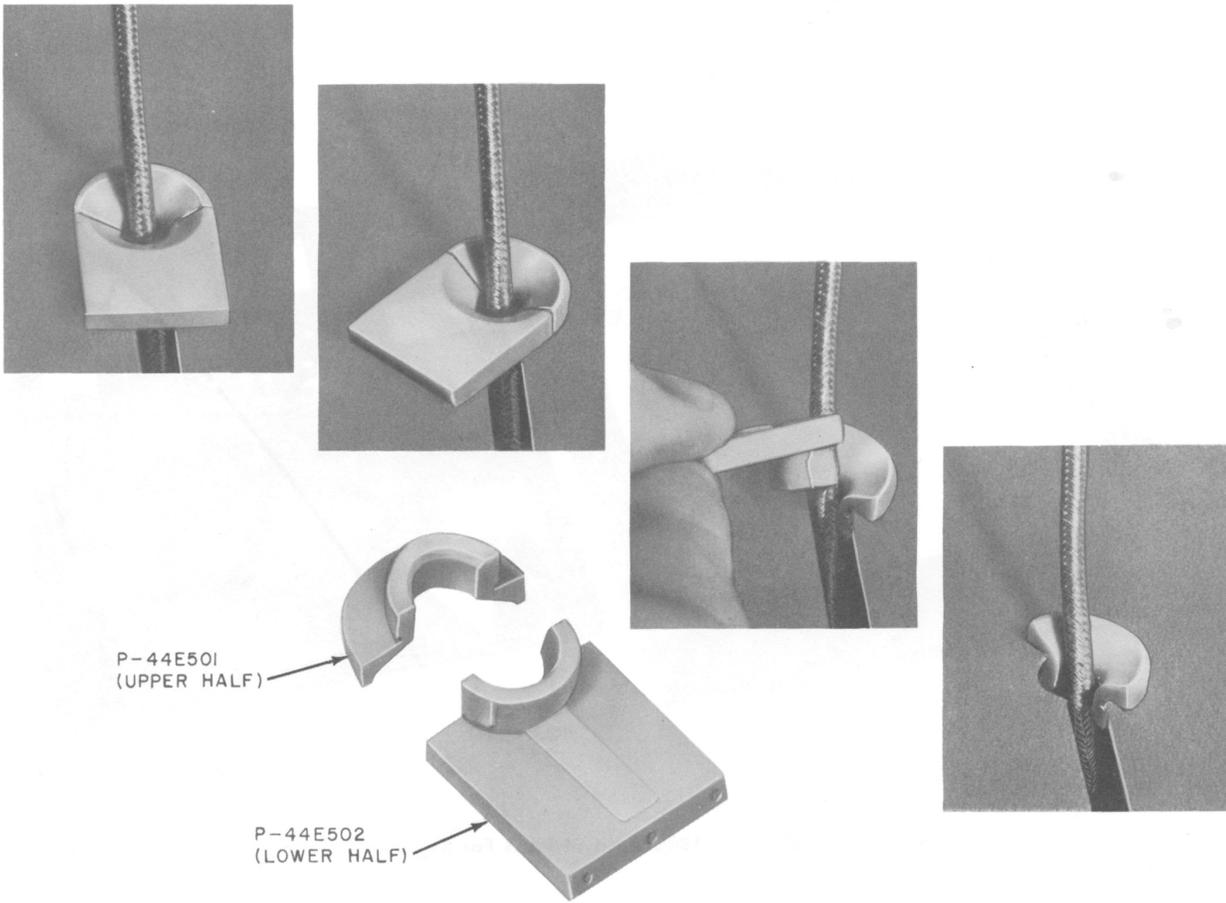
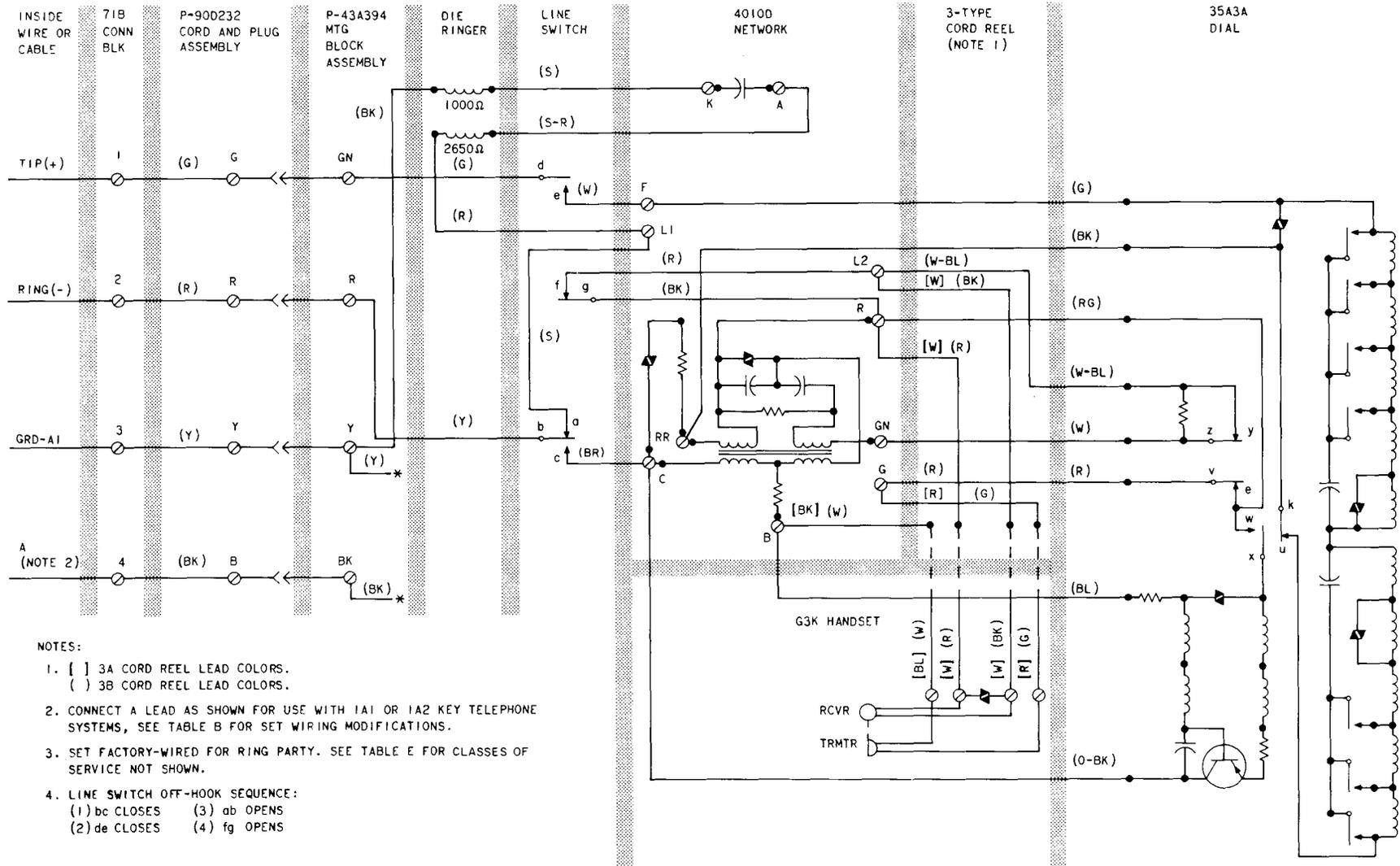


Fig. 3—Removal of Handset Cord Grommet



NOTES:

1. [] 3A CORD REEL LEAD COLORS.
() 3B CORD REEL LEAD COLORS.
2. CONNECT A LEAD AS SHOWN FOR USE WITH 1A1 OR 1A2 KEY TELEPHONE SYSTEMS, SEE TABLE B FOR SET WIRING MODIFICATIONS.
3. SET FACTORY-WIRED FOR RING PARTY. SEE TABLE E FOR CLASSES OF SERVICE NOT SHOWN.
4. LINE SWITCH OFF-HOOK SEQUENCE:
(1) bc CLOSES (3) ab OPENS
(2) de CLOSES (4) fg OPENS

Fig. 4—2750-Type Telephone Set (Later Models)-Connections

TABLE A

COMPONENT ORDERING GUIDE
(COLOR SIGNIFICANT)

TELEPHONE SET	MAT	FRAME (MAT)	LINE SWITCH ASSEMBLY	HANDSET
2750A-58	P-21F788	P-84A261* P-89C261†	P-85A161	G3K-58
2750B-60	P-21F789	P-84A260* P-89C260†	P-85A160	G3K-60

* Furnished with telephone set.

† Furnished with kit of parts used for surface mounting.

Note: These sets are also equipped with the following common components:

- Dial, 35A3A
- Ringer, D1E
- Reel, Cord, 3A or 3B
- P-90D232 Cord and Plug Assembly — replaces D4BN-3 mounting cord on early production sets
- P-44E501 (upper half) and P-44E502 (lower half) grommet — replaces P-14E894 grommet assembly



The 3A cord reel shall be used in all locations where the telephone set is subject to temperatures below 40 degrees F. When the telephone set is not subjected to temperatures below 40 degrees F, the 3B cord reel shall be used.

TABLE C

MODIFICATIONS FOR USE WITH 1A1
OR 1A2 KTS
FOR (EARLY MODEL) SETS

WIRE OR LEAD		REMOVE FROM	CONNECT TO
Line Switch Assembly	Y	R*	Y*
	BR	C†	BK*
	G	GN*	R*
	W	F†	C†
M1W Cord or Equiv.			GN* To F†

* Terminal on P-43A394 mounting block assembly.

† Terminal on 4010D network.

TABLE B

MODIFICATIONS FOR USE WITH 1A1
OR 1A2 KTS
FOR (LATER MODEL) SETS

WIRE OR LEAD		REMOVE FROM	CONNECT TO
Incoming Line at 71B Conn Block	Tip	1	3
	Ring	2	1
	GRD-A1 A	3	2 4
Ringer	R	L1†	GN*
Line Switch Assembly	BR	C†	L1†
	W	F†	C†
	S	L1†	‡
Strap	Y	‡	F†
	BK	‡	L1†

* Terminal on P-43A394 mounting block assembly.

† Terminal on 4010D network.

‡ Insulated and stored.

TABLE D

POLARITY GUARD CONNECTIONS
(P-90D060 GUARD ASSEMBLY)

WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO
Line Switch Assembly (Note)	BR	C of Net.	S of Polarity guard
Dial	BK	RR of Net.	T of Polarity guard
Polarity Guard	G W		RR of Net. C of Net.

Note: When set is connected for 1A1 or 1A2 KTS per Tables B and C, move (W) line switch lead from C of network to S of polarity guard.

TABLE E
LINE AND RINGER CONNECTIONS FOR (LATER MODEL) SETS

WIRE OR LEAD		INDIVIDUAL OR BRIDGED (NOTE 1)	RING PARTY	TIP PARTY	TIP PARTY WITH IDENT GRD			
					NORMAL CONNECTIONS		RINGER REVERSAL (NOTE 2)	
					1000 OHMS	2650 OHMS	1000 OHMS	2650 OHMS
Incoming Line at 71B Conn Block	Tip	1	1	2	2	2	2	2
	Ring	2	2	1	1	1	1	1
	GRD-A1	3 (Note 1)	3	3	3	4	4	4
Ringer Leads (Note 3)	R	L1	L1	L1	K	B	B	L1
	BK	Y†	Y†	Y†	Y†	Y†	Y†	Y†
	S	K	K	K	B	K	L1	B
	S-R	A	A	A	B	L1	K	B
Line Switch	S	L1	L1	L1	A	A	A	A
	W	F	F	C	C	C	C	C
	BR	C	C	F	F	F	F	F
Strap Connections	Y	Y† to *	Y† to *	Y† to *	Y† to *	Y† to B	Y† to B	Y† to K
	BK	BK† to *	BK† to *	BK† to *	BK† to *	BK† to L1	BK† to L1	BK† to L1

* Insulated and stored

† Terminal on P-43A394 mounting block

Notes:

1. For individual or bridged service, terminate (Y) and (G) cord leads on terminal 1 of 71B connecting block.
2. Use normal connections for tip party identification. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain tip party identification.
3. To silence ringer permanently when connected for:
 - Individual, ring party and tip party without identifying ground — remove (S-R) strap from A of network and connect to L1 of network.
 - 1000Ω or 2650Ω GRD — remove (S) line switch lead from A of network and insulate and store.

TABLE F
LINE AND RINGER CONNECTIONS FOR (EARLY MODEL) SETS

WIRE OR LEAD		INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY	TIP PARTY WITH IDENT GRD			
					NORMAL CONNECTIONS		RINGER REVERSAL (NOTE 1)	
					1000 OHMS	2650 OHMS	1000 OHMS	2650 OHMS
Incoming Line at 71B Conn Block	Tip	1	1	1	2	2	2	2
	Ring	2	2	2	1	1	1	1
	GRD-A1	3	3	3	3	3	3	3
Ringer Leads (Note 2)	R	R†	R†	GN†	L1	B	2	Y†
	BK	1	1	1	Y†	L1	1	1
	S	K	K	K	B	K	Y†	L1
	S-R	2	2	2	2	2	L1	2
Line Switch	S	*	*	*	A	A	A	A
	W	F	F	F	C	C	C	C
	BR	C	C	C	F	F	F	F
Strap Connections	BK	GN† to 1	1 to Y†	1 to Y†			1 to B	1 to K
	S-R	A to 2	A to 2	A to 2	B to 2	Y† to 2	B to 2	2 to B
	W	L1 to L1	L1 to K	L1 to K	L1 to K	L1 to B	L1 to K	L1 to B

* Insulated and stored

† Terminal on P-43A394 mounting block

Notes:

1. Use normal connections for tip party identification. If bell taps on station connected to long line equipment, reverse ringer leads as shown in this column to retain tip party identification.
2. To silence ringer permanently when connected for:
 - Individual, ring party and tip party without identifying ground — remove (S-R) strap from A of network and connect to 2 of TB1.
 - 1000Ω or 2650Ω GRD — remove (S) line switch lead from A of network and insulate and store.