REFERENCE

1712B TELEPHONE SETS



Fig. 1-1712B Telephone Set

1. GENERAL

1.01 This section contains identification, installation, maintenance, and connection information for the 1712B telephone set. This information was formerly contained in Sections 502-710-102 and 502-710-438 which are hereby canceled.

2. IDENTIFICATION

Ordering Guide

2.01 Set, Telephone, 1712B-*

$\textbf{2.02} \quad \textit{Replaceable Components:} \\$

- Cord, Mounting, D14L-*
- Dial, 25P4† or 25H4(MD)
- Key, 638B, (line and signal key)
- KS-19240,L2 Dial Lamp Socket‡
- KS-19387,L1 Dial Lamp*
- P-25E803 Number Card Retainer

- P-26E572 Exclusion Key (Hold)
- P-89C0-* Housing
- Set, Hand, G3AR-*
- * Add color suffix, refer to Section 500-120-100 for promoted colors.
- † May be converted to 12-button by installing D-180116 Kit of Parts and replacing housing with appropriate 12-button housing.
- † Available as D-179919 Kit of Parts

2.03 Associated Apparatus or Equipment (ordered separately):

- 2012A Transformer (dial light)
- E1-Type ringer (when required)

2.04 Optional Apparatus or Equipment (ordered separately):

• D-180229 Kit of Parts (polarity guard) consists of:

P-90D054 guard assembly

P-26E164 retainer

P-43A392 screw

Design Features

- 2.05 The 1712B telephone set (Fig. 1) is equipped with a 638B key for line selection and signaling.
- **2.06** A hold key is included and is operated by raising the left line switch plunger.
- 2.07 A concealed lamp illuminates the dial when the handset is removed. This lamp also

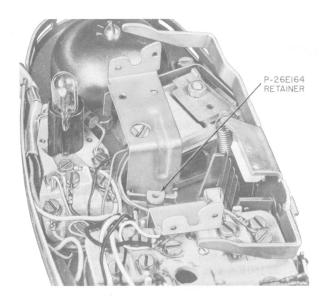


Fig. 2—Installing Terminal Board Retainer in PRINCESS
Telephone Set

serves as a night light under control of a slide switch located in the base at rear of set.

Application

2.08 For use on CO, PBX, or 1A1 and 1A2 key telephone system line circuits.

3. INSTALLATION

- **3.01** Install sets using standard installation procedures.
- 3.02 Dial Light Transformer: Select a 105-120 volt ac receptable that is on a circuit not controlled by a switch. A 2012A transformer should be used with each telephone set. A 2A clamp is available to secure this transformer to the service outlet. Current production transformers have folded blade prongs for this purpose. For multiple installations, see section covering station transformers.



For proper illumination of the dial, the wire run between transformer and telephone set should not exceed 250 feet of standard inside wire. Do not use a 25-foot mounting cord because the added resistance may result in decreased illumination.

- 3.03 Ringer: When an external ringer is required, install an E1-type. See section covering E1-type ringer for connections.
- 3.04 *Polarity Guard:* An optional polarity guard (ordered separately) is available for use with these sets. It is intended for use when specified by local instructions for end-to-end signaling installations, refer to Table A for connections.
- 3.05 Install D-180229 Kit of Parts (polarity guard) as follows:
 - (1) Remove housing; loosen dial mounting screw and move the dial to one side without disconnecting the dial leads.
 - (2) Insert the P-26E164 retainer in left-hand dial mounting bracket (Fig. 2).
 - (3) Insert tabs of P-21F675 terminal board into notches in right-hand dial mounting bracket and secure to retainer using P-43A392 screw.
 - (4) Connect polarity guard in accordance with Table A.
 - (5) Reinstall dial on mounting bracket, securing the P-90D054 guard assembly mounting bracket under the right-hand dial mounting screw (Fig. 3).
 - (6) Reinstall housing.
- 3.06 Jacks and plugs are available for portable installation of these telephone sets. Refer to appropriate section in Division 461 for selection.

4. MAINTENANCE

- **4.01** Maintenance of the 1712B telephone sets is limited to replacing defective components and burnishing or adjusting switch contacts.
- 4.02 Housing, handsets, and cords may be cleaned with a damp KS-2423 (or equivalent) cloth. Do not use scouring cleaners or volatile solvents as these may damage finish.
- 4.03 Refer to sections covering dials, handsets, ringers, etc., for maintenance of these components.

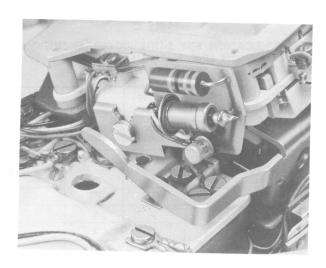


Fig. 3—Polarity Guard Mounted in PRINCESS Telephone Set

5. CONNECTIONS



Without a polarity guard, the TOUCH-TONE® dial of these sets will not operate unless the orange-black dial lead is connected to the negative (ring) side of the line and the green dial lead is connected to the positive (tip) side.

TABLE A
POLARITY GUARD CONNECTIONS
(D-180229 KIT OF PARTS)

WIRE OR LEAD	COLOR	REMOVE FROM NET.	CONNECT TO		
			TERM. STRIP*	NET.	
Dial	BK	RR	3		
Line Switch	w	C	4		
P-90D054 Guard Assembly	R		3		
	BK		4		
	G			RR	
	w		· · · · · · · · · · · · · · · · · · ·	C	

^{*} Component of polarity guard kit of parts.

TABLE B

MODIFICATION FOR 2-LINE PICKUP AND SIGNALING
(USED WITH 1A1 OR 1A2 KTS)

WIRE OR LEAD	50100	REMOVE FROM TERM. STRIP	CONNECT TO	
	COLOR		TERM. STRIP	NET.
Line Key	0	9	7	
	O-BK	10	8	
	S	8	*	
	w	7	E1	-
Hold Key	W	3	*	
	ВК	3	*	
Line Switch	BR	E1		G

^{*} Insulate and store.

TABLE C

MODIFICATION FOR 2-LINE PICKUP, EXCLUSION
ON LINE 1, AND SIGNALING
(USED WITH 1A1 OR 1A2 KTS)

WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO		
		TERM. STRIP	TERM. STRIP	NET.	
Line Key	S	8	*		
	w	7		A	
Exclusion Key	BR	1	E1		
	W	3	8		
	Y	*	1		
	BL	*	E1		
	S	*	10		
	0	*	7		
Line Switch	BR	E1		G	
	Y	E1		A	

^{*} Insulate and store.

TABLE D

MODIFICATION FOR 1-LINE PICKUP, CUTOFF
FEATURE FOR EXTENSION STATION OR
EXTERNAL LINE RINGER

WIRE OR LEAD		REMOVE FROM		CONNECT TO	
	COLOR	TERM. STRIP	NET.	TERM. STRIP	NET.
Line Key	W-O		G	E1	_
Exclusion Key	BR	1		†	
Line Switch	BR	E1		8	
Strap*				3	F

^{*} M1W cord or equivalent.

[†] Insulate and store.

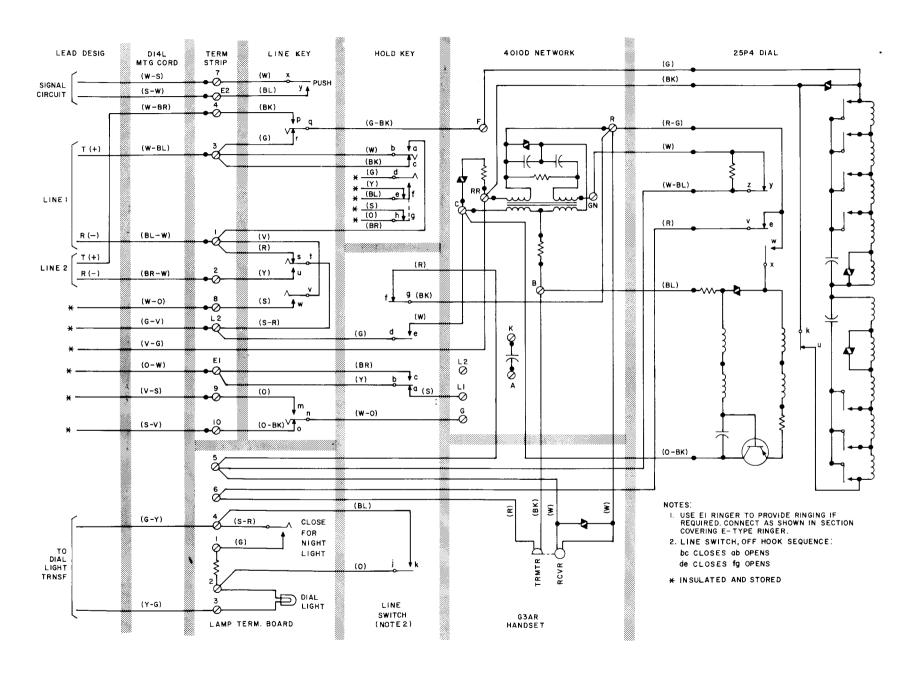


Fig. 4—1712B Telephone Set Connections With 25P4 Dial and 4010D Network, 2-Line Pickup, Hold on Line 1, and Signaling (Used Without 1A1 or 1A2 KTS)

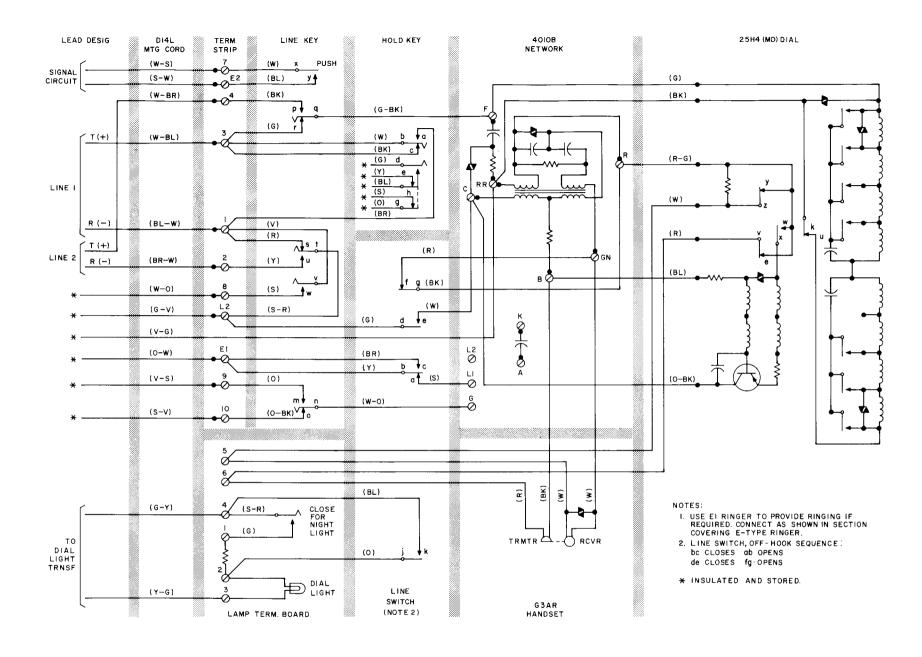
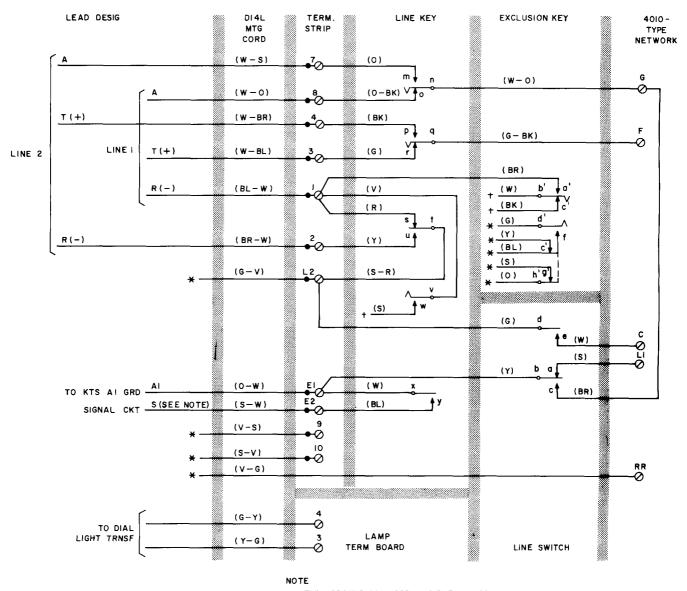


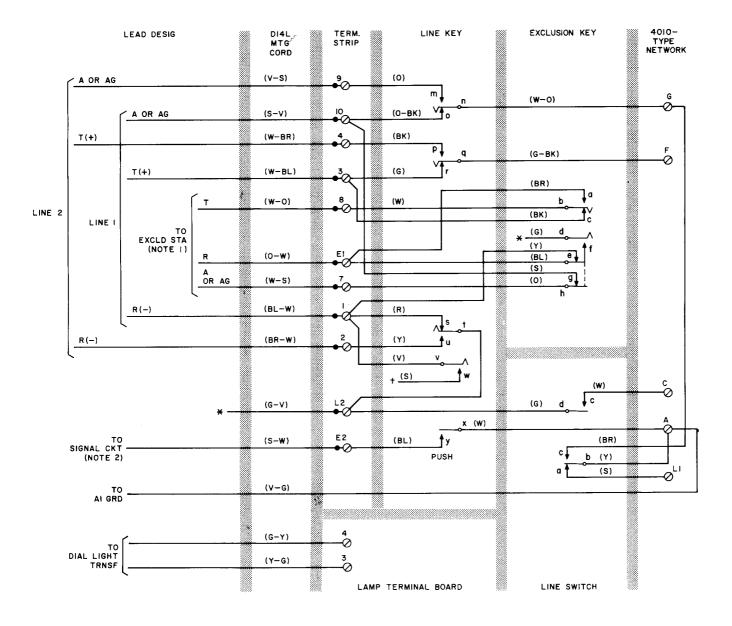
Fig. 5—1712B Telephone Set Connections With 25H4(MD) Dial and 4010B Network, 2-Line Pickup, Hold on Line 1, and Signaling (Used Without 1A1 or 1A2 KTS)



THIS GROUND WILL OPERATE BUZZERS OR RINGERS THAT REQUIRE DC. IF AC IS REQUIRED USE THIS GROUND TO OPERATE AN AUXILIARY RELAY THAT WILL SUPPLY AC.

- * INSULATED AND STORED
- + INSULATE AND STORE OR CONNECT TO SPARE TERMINAL.

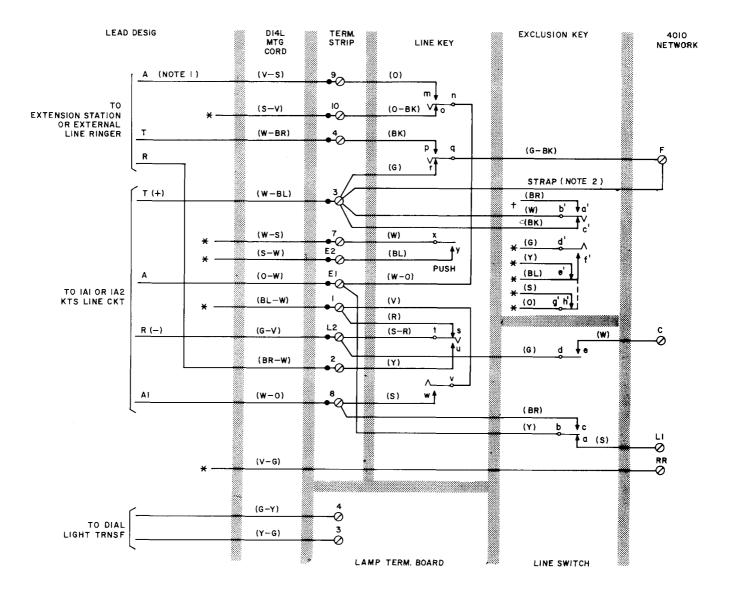
Fig. 6—1712B Telephone Set Connections, 2-Line Pickup, and Signaling (Used With 1A1 or 1A2 KTS)



NOTE:

- I. PROVIDE AI GROUND AT EXCLUDED STATION.
- 2. THIS GROUND WILL OPERATE BUZZERS OR RINGERS THAT REQUIRE DC. IF AC IS REQUIRED, USE THIS GROUND TO OPERATE AN AUXILIARY RELAY THAT WILL SUPPLY AC.
- * INSULATED AND STORED
- + INSULATE AND STORE OR CONNECT TO SPARE TERMINAL.

Fig. 7—1712B Telephone Set Connections, 2-Line Pickup, Exclusion on Line 1, and Signaling (Used With 1A1 or 1A2 KTS)



I. PROVIDE AT GRD AT EXTENSION STATION.

Fig. 8—1712B Telephone Set Connections, 1-Line Pickup, Cutoff Feature For Extension Station or Extension Line Ringer

^{2.} USE MIW CORD OR EQUIVALENT.

^{*} INSULATED AND STORED.

⁺ INSULATE AND STORE OR CONNECT TO SPARE TERMINAL.

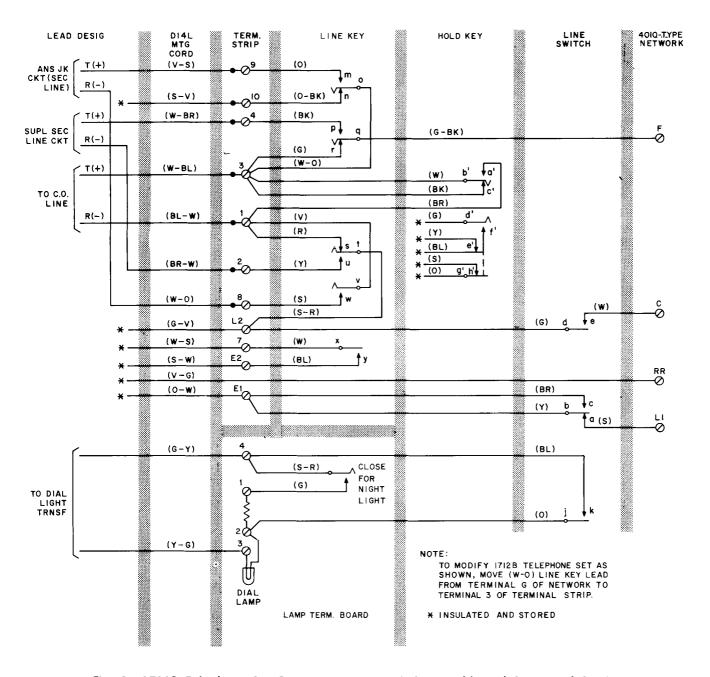


Fig. 9—1712B Telephone Set Connections, 1-Line Pickup, Hold, and Secretarial Service