

## REFERENCE

### 1702 AND 1713B TELEPHONE SETS

#### 1. GENERAL

**1.01** This section provides identification, installation, maintenance, and connection information for the 1702D (MD) and 1713B telephone sets previously contained in Sections 502-710-102, 502-710-435, and 502-715-433 which are hereby canceled.

#### 2. IDENTIFICATION

**2.01** The 1702D (MD) telephone set (Fig. 1) is equipped with a Message Waiting Lamp and is intended for PBX use.



Fig. 1—1702D (MD) Telephone Set

**2.02** The 1713B telephone set (Fig. 2) is equipped with 2-line pickup, hold on both lines (CO-nonkey system).

#### Ordering Guide

##### 2.03 Basic Telephone Sets

- Set, Telephone, 1702D—\* (MD)
- Set, Telephone, 1713B—\*

\*Add appropriate color suffix.



Fig. 2—1713B Telephone Set

**2.04** The 1702D (MD) and 1713B telephone sets are available in all standard colors. Refer to Section 500-120-100 for promoted colors.

##### 2.05 Operating Features:

- **Message waiting lamp:** 1702D (MD) set—visual signal, under control of a PBX attendant, indicates an uncompleted incoming call (Fig. 1).
- **Line and signal key:** 1713B set—permits line selection by turning and signaling by depressing (Fig. 2 and 5).
- **Hold key plunger:** 1713B set—provides for mechanical hold on either nonselected CO line (Fig. 2).
- **Night light switch:** allows dial lamp to be operated at reduced intensity (dial lamp illuminates dial at full intensity with handset off hook) (Fig. 3).
- **Ringer volume control:** 1702D (MD)—provides manual control of ringer volume (Fig. 4).

**TABLE A**  
**1702D (MD) AND 1713B TELEPHONE SET FEATURES**

SET	DIAL/ NIGHT LAMP	MESSAGE WAITING LAMP	RINGER VOLUME/OFF CONTROL	CO AND 1A KEY TELEPHONE SYSTEM LINES		SIGNALING
				INDIVIDUAL OR 2-PARTY FLAT RATE SERVICE	2-LINE PICKUP WITH HOLD (CO LINES ONLY)	
1702D (MD)	•	•	•	•		
1713B	•		*	•	•	†

\* Not equipped with internal ringer.

† Optional feature. Change mounting cord to provide signal leads.

**TABLE B**  
**COMPONENT ORDERING GUIDE**

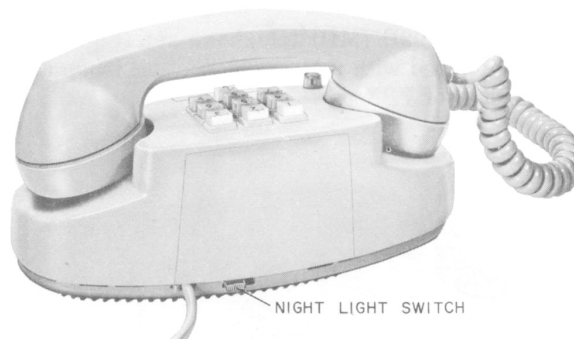
COMPONENT	TELEPHONE SET	
	1702D	1713B
REPLACEABLE:		
Cord, Handset	H4CJ-*	
Cord, Mounting	D5AK-*	D6AF-*
Dial	25P4† or 25H4 (MD)	
Housing	P-89B5-*	P-89CO-*
Key, Line		638D
Lamp, Dial	KS-19387, L1†	
Lamp, Message Waiting	KS-16893, L1	
Retainer, Number Card	P-25E803	
Ringer	M1A	
Set, Hand	G3AR-*	
Socket, Dial Lamp	KS-19240, L2†	
OPTIONAL:		
Kit of Parts (Polarity Guard)	D-180229§	
ASSOCIATED:		
Transformer (dial lamp)	2012A (or equivalent)	

\* Add appropriate color suffix.

† May be converted to provide 12-button capability by installing a D-180116 Kit of Parts and replacing the housing with the appropriate 12-button housing.

‡ Available as D-179919 Kit of Parts (containing dial lamp, socket and installation instructions).

§ Consists of P-90D054 guard assembly, P-21F675 terminal board assembly, P-26E164 retainer, and P-43A392 screw. The P-90D054 guard assembly may be ordered separately for 1702D (MD) sets equipped with 664C transmitter.



**Fig. 3—1700-Series Telephone Set, Rear—Night Light Switch Location**

### 3. INSTALLATION

**3.01** Insofar as possible be guided by the customer's wishes in placing apparatus. Consider the following:

- Safety for yourself, customer, and maintenance personnel.
- Availability of power outlet for dial lamp transformer.
- Location of telephone to provide adequate ringer coverage of area.
- General appearance of installation.

**3.02** Select a 105-120 volt ac receptacle on a circuit not controlled by a switch for dial lamp transformer. A 2A clamp is available to secure the 2012A transformer to the service outlet.

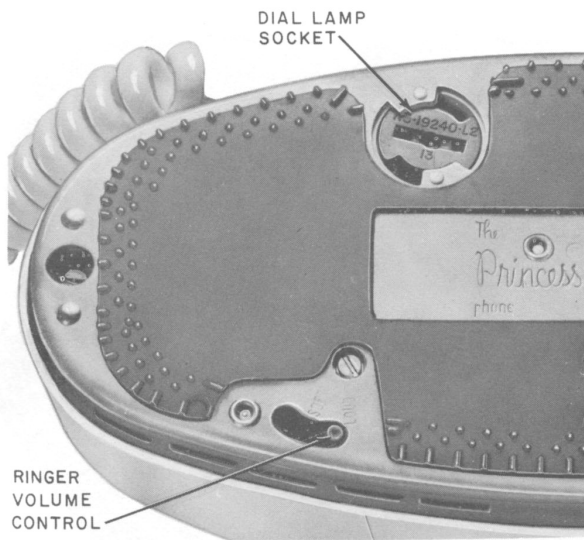


Fig. 4—1702D (MD) Telephone Set, Partial Bottom View

Current model transformers utilize folded-blade prongs to secure the transformer to the service outlet. For multiplied dial lamp sets, see section covering station transformers for selection information.



*The illumination of the dial diminishes with increased cord lengths. In installations where the illumination is considered inadequate, the 53B lamp may be replaced by a 53A, if the lamp power is supplied by a 2012A transformer and the combined lengths of mounting and handset cords exceed 15 feet.*

**3.03** Install these sets in accordance with standard practices for desk-type telephone sets. For portable installations refer to appropriate section in Division 461 for selection of appropriate jacks and plugs for these sets.

**3.04** When a ringer is required for the 1713B telephone set, install an E1-type external ringer.

**3.05** *Polarity Guard (Optional):* Install polarity guard (D-180229 Kit of Parts) only when

specified by local instructions for end-to-end signaling. Installation is as follows:

- (1) Remove housing; loosen dial mounting screws 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. 6).
- (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 connections shown in Table C.
- (5) Reinstall dial on mounting bracket, securing the P-90D054 guard assembly mounting bracket under the right-hand dial mounting screw (Fig. 7).
- (6) Reinstall housing.

**Note:** The P-21F675 terminal board and P-26E164 retainer, furnished with D-180229 Kit of Parts, are not used in sets equipped with message waiting lamp. Early production 1702D (MD) sets will require use of two D-161488 connectors for polarity guard installation. Current production 1702D (MD) sets are provided with terminals 3 and 4 added to the message waiting lamp terminal board to facilitate connecting the polarity guard (Fig. 18).

**3.06** If a call is received on one line and it is desired to hold a party on a line while transferring to the other line:

- (1) Lift the hold key (left line switch plunger) and turn the line key to pick up the second line.
- (2) When the call on the second line is completed, turn the line key back to the first line position and then depress the hold key.

**Note:** Failure to depress the hold key will automatically place a hold on the unused line preventing its being used for either incoming or outgoing calls. Reversal of this procedure (i.e., depressing the hold key before switching the line key back to the first line position) will disconnect the first line.

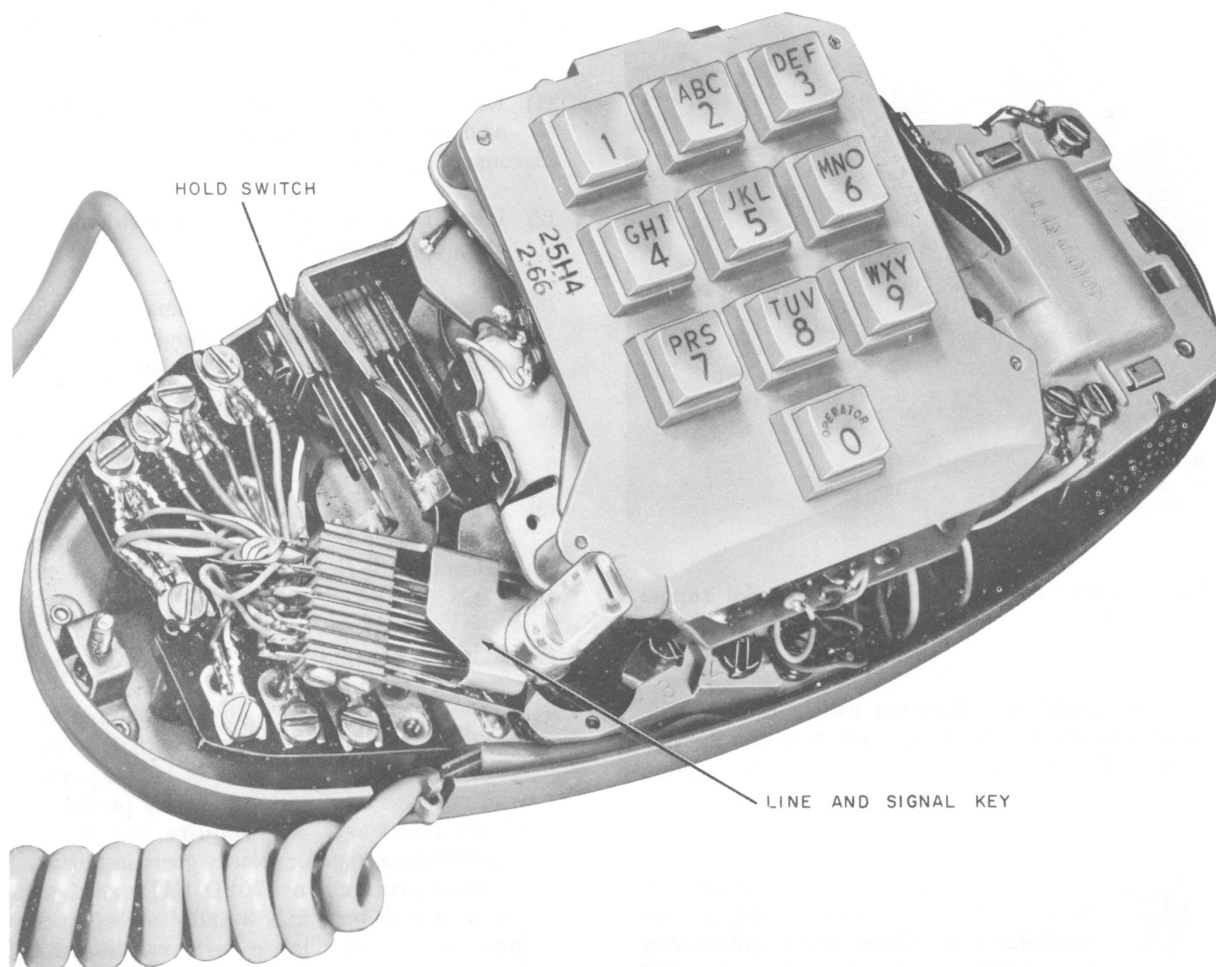


Fig. 5—1713B Telephone Set, Housing Removed

(3) If the second line is to be picked up by an extension station, the hold switch is left operated (lifted) until the extension is answered. After the extension handset is lifted, the hold switch (first set) must be depressed to connect the talking path of the extension.

(4) The hold key is automatically returned to normal when the handset is replaced.

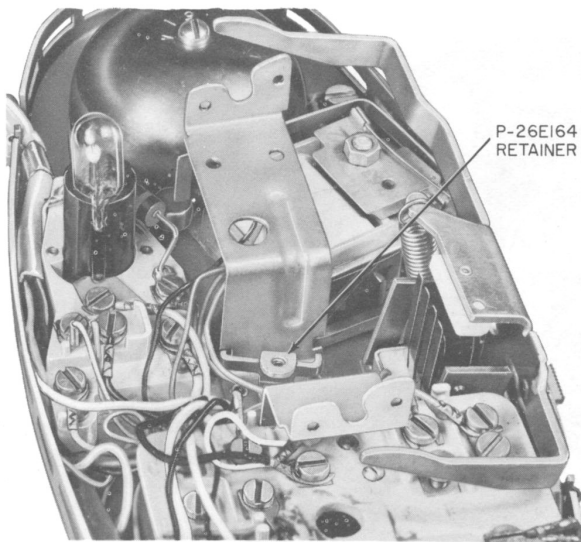
#### 4. MAINTENANCE

4.01 Maintenance of the 1702D (MD) and 1713B telephone sets is limited to replacing defective

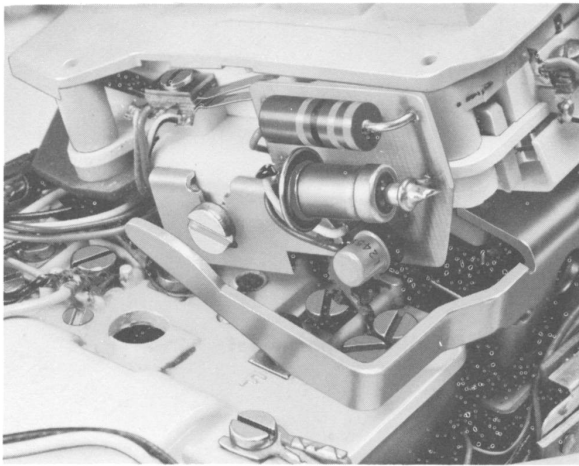
components and burnishing or adjusting switch contacts.

4.02 Housings, 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, cords, ringers, etc., for maintenance of these components.



**Fig. 6—Installing Terminal Board Retainer in PRINCESS<sup>®</sup> Telephone Set**



**Fig. 7—Polarity Guard Mounted in PRINCESS Telephone Set**

**TABLE C**  
**1702(MD) OR 1713B TELEPHONE SET POLARITY**  
**GUARD CONNECTIONS**  
**(D-180229 KIT OF PARTS)**

WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO	
		NET.	NET.	TERM BLOCK*
Line Switch	BR	C		4
Dial	BK	RR		3
D-180229 Polarity Guard	R			3
	BK			4
	G		RR	
	W		C	

\* Component of message waiting lamp assembly located between dial mounting brackets. Use screws from terminal board in D-180229 Kit of Parts.

**Note:** Without a polarity guard the 25-type TOUCH-TONE<sup>®</sup> dial 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.

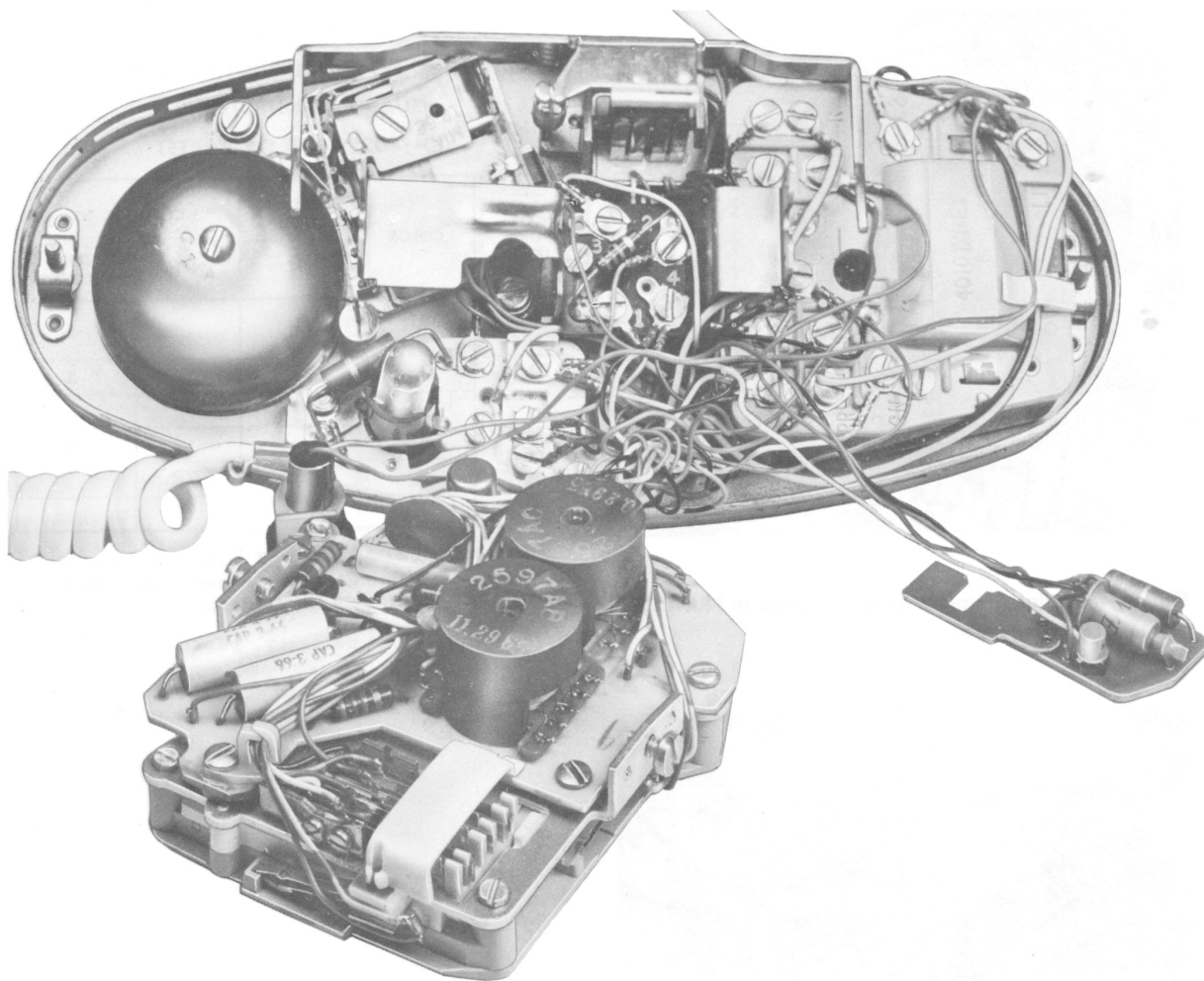
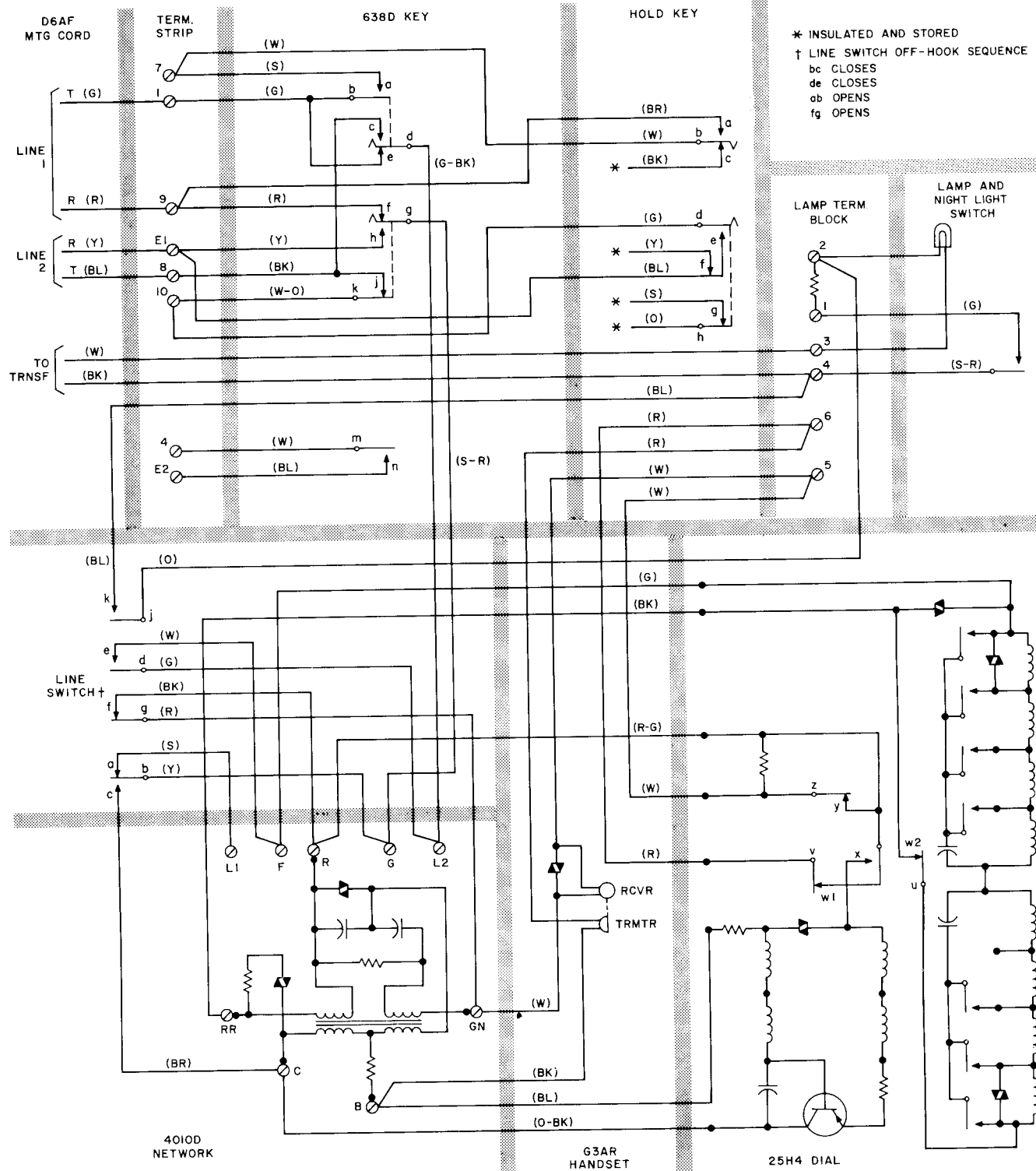


Fig. 8—P-21F675 Terminal Board Installed in 1702D (MD) Telephone Set









**Fig. 11—1713B Telephone Set Connections, With 25H4 Dial**

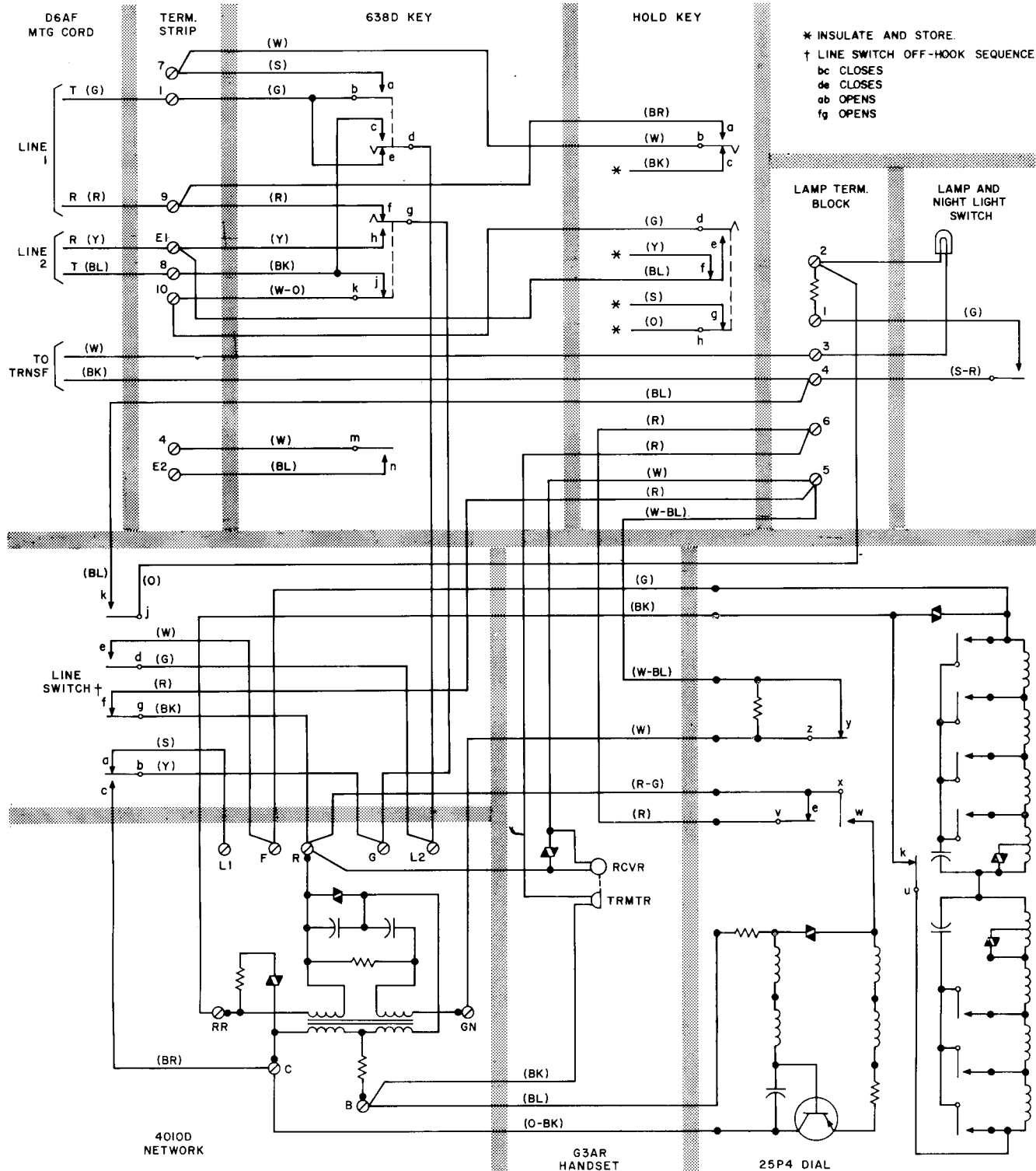


Fig. 12—1713B Telephone Set Connections, With 25P4 Dial