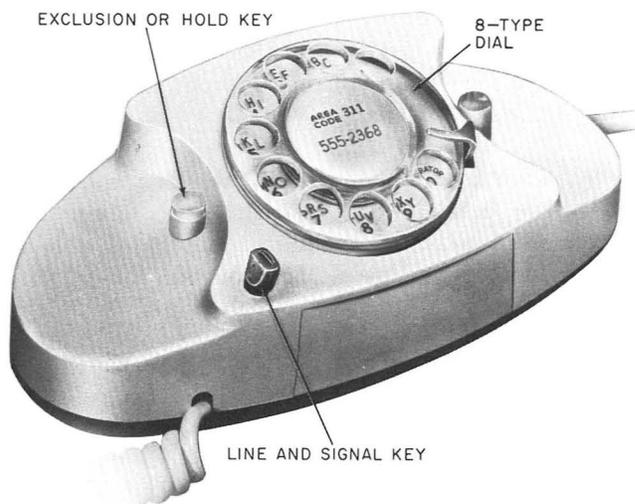# REFERENCE

712B AND 712BM TELEPHONE SETS

Fig. 1—712B Telephone Set—Without Handset

1. GENERAL

1.01 This section contains identification, installation, maintenance, and connection information for the 712B and 712BM telephone sets.

1.02 This section is reissued to:

- Add D-179919 Kit of Parts

- Add 124A apparatus blank

- Revise Table F and G

- Add Table C, D, and E

- Add Fig. 4, 6, 8, and 10

2. IDENTIFICATION

Ordering Guide

2.01 *Telephone Sets:*

- Set, Telephone, 712B-*

- Set, Telephone, 712BM-*

2.02 *Replaceable Components:*

- Cord, Mounting, D14L-87 or D14R-87

- Dial, 8-Type

- Key, 638B (line and signal key)

- KS-19240L2 Dial Lamp Socket (3.03)

- KS-19387 (GE259) Dial Lamp (3.03)

- 812655728 (P-26E572) Exclusion Key (Hold)

- Housing (Table F)

- ▶Blank, Apparatus, 124A (3.06)◀

- Set, Hand, G3-Type (712B)

- Set, Hand, G15A-* (712BM)

*Add color suffix (Table G).

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

- 2012A transformer (dial light)

- H4DU handset cord (712BM)

- D14S-87 mounting cord (712BM)

- E1-type ringer (when required)

NOTICE

Design Features

2.02 The 712B (Fig. 1) and 712BM (Fig. 2) telephone sets are equipped with a 638-type key for line selection and signaling.

TABLE A
MODIFICATION OF 712B FOR 2-LINE PICKUP, EXCLUSION ON LINE 1, AND SIGNALING (USED WITHOUT 1A1 OR 1A2 KTS)

WIRE OR LEAD	COLOR	REMOVE FROM	CONNECT TO	
		TERM. STRIP	TERM. STRIP	NET.
Line Switch	Y	E1		A
	BR	E1		G
638A Line Key	S	8		*
	W	7		A
Exclusion Key	BR	1	E1	
	W	3	8	
	Y	*	1	
	BL	*	E1	
	S	*	10	
	O	*	7	
D14L Mtg Cord	V-G	RR†		A

*Insulate and store.
†Network terminal.
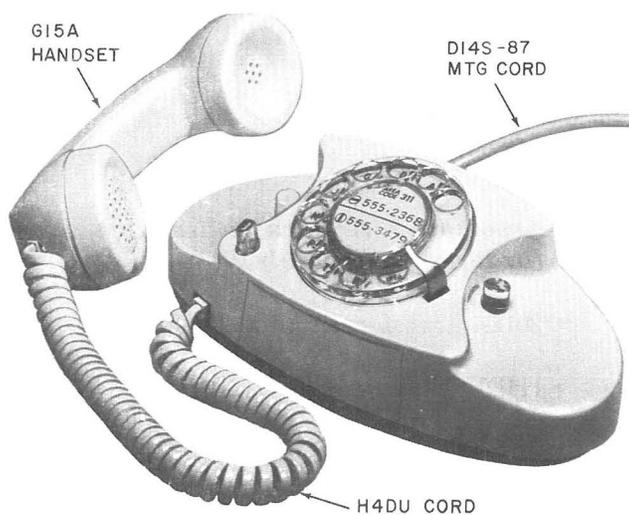

G15A HANDSET

D14S-87 MTG CORD

H4DU CORD

Fig. 2—▶712BM Telephone Set◀

2.03 Exclusion or hold feature is operated by raising the left line switch plunger.

Note: 712B is factory-wired with hold feature. 712BM is factory-wired with exclusion feature (same key).

2.04 A ringer is not provided with these sets. If a ringer is required, an external (E1-type) must be ordered separately.

2.05 A concealed lamp illuminates the dial when the handset is removed. This lamp also serves as a night light under control of a slide switch located in base at rear of set.

Application

2.06 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 receptacle 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.

▶*Caution: Do not connect more than one transformer to the same inside wiring pair.*

Caution: 2A or similar clamp must not be used on outlets where center mounting screw holds the duplex outlet box.

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 ▶*D-179919 Kit of Parts:* Contains a dial lamp, socket, and installation instructions and is available for the 712-type telephone set.◀

3.04 ▶*Portable Installations:* Jacks and plugs are available for portable installation of these telephone sets. Refer to appropriate section in Division 461 for selection.◀

3.05 ▶*Ringers:* When an external ringer is required, install an E1-type. Refer to section covering E1-type ringers for connections.◀

3.06 ▶*Apparatus Blanks:* A 124A apparatus blank is available to insert into the rear notch when not filled.◀

3.07 ▶*Speakerphone:* Speakerphone may be used with the 712B/BM telephone set. Refer to Section 512-620-474 for 3-type or to Section 512-740-410 for 4A connection information.◀

4. MAINTENANCE

4.01 Maintenance of the 712B and 712BM PRINCESS® telephone sets is limited to replacing defective components and burnishing or adjusting line switch contacts.

4.02 Refer to sections covering dials, handsets, cords, ringers, line keys, etc., for maintenance of these components.

4.03 Housings, dial plates, and handsets may be cleaned with a damp KS-2423 cloth. *Do not use scouring cleaners on components as this may damage finish.*

TABLE B

MODIFICATION OF 712B FOR 1-LINE PICKUP, CUTOFF FEATURE FOR EXTENSION STATION OR EXTERNAL LINE RINGER

WIRE OR LEAD	COLOR	REMOVE FROM TERM. STRIP	CONNECT TO TERM. STRIP	NET.
Line Switch	BR	E1	8	
Exclusion Key	BR	1		*
638A Line Key	R	1		*
	W-O	G†	E1	
Strap (M1W Cord or equivalent)			3	F

*Insulate and store.
†Network terminal.

◆ TABLE C ◆

MODIFICATION OF 712BM FOR 1-LINE PICKUP, CUTOFF
FEATURE FOR EXTENSION STATION OR
EXTERNAL LINE RINGER

WIRE OR LEAD	COLOR	REMOVE FROM		CONNECT TO	
		TERM. STRIP	NET.	TERM. STRIP	NET.
Line Switch	G	6		1	
	BR		G	5†	
	R		GN	*	
	BK		R	*	
Exclusion or Hold Key	BR	E1		*	
	W	8		3	
	Y	1		*	
	BL	E1		*	
	S	10		*	
	O	L2		*	
Line Key	BK	4		8	
	R	1		*	
	S-R	6		1	
	Y	2		E1	
	V	1		*	
	S	*		5†	
	O	9		L2	
	O-BK	10		*	
Strap				3	F

* Insulate and store.
† Lamp terminal board.

Fig. 3—712B Telephone Set Connections, 2-Line Pickup, Hold on Line 1, and Signaling (Factory Wired)

NOTES:
1. EXTERNAL RINGER MUST BE PROVIDED, IF RINGING SERVICE IS DESIRED SEE SECTIONS COVERING EI-TYPE RINGER FOR CONNECTIONS.
2. LINE SWITCH, OFF-HOOK SEQUENCE:
   bc CLOSES   ab OPENS
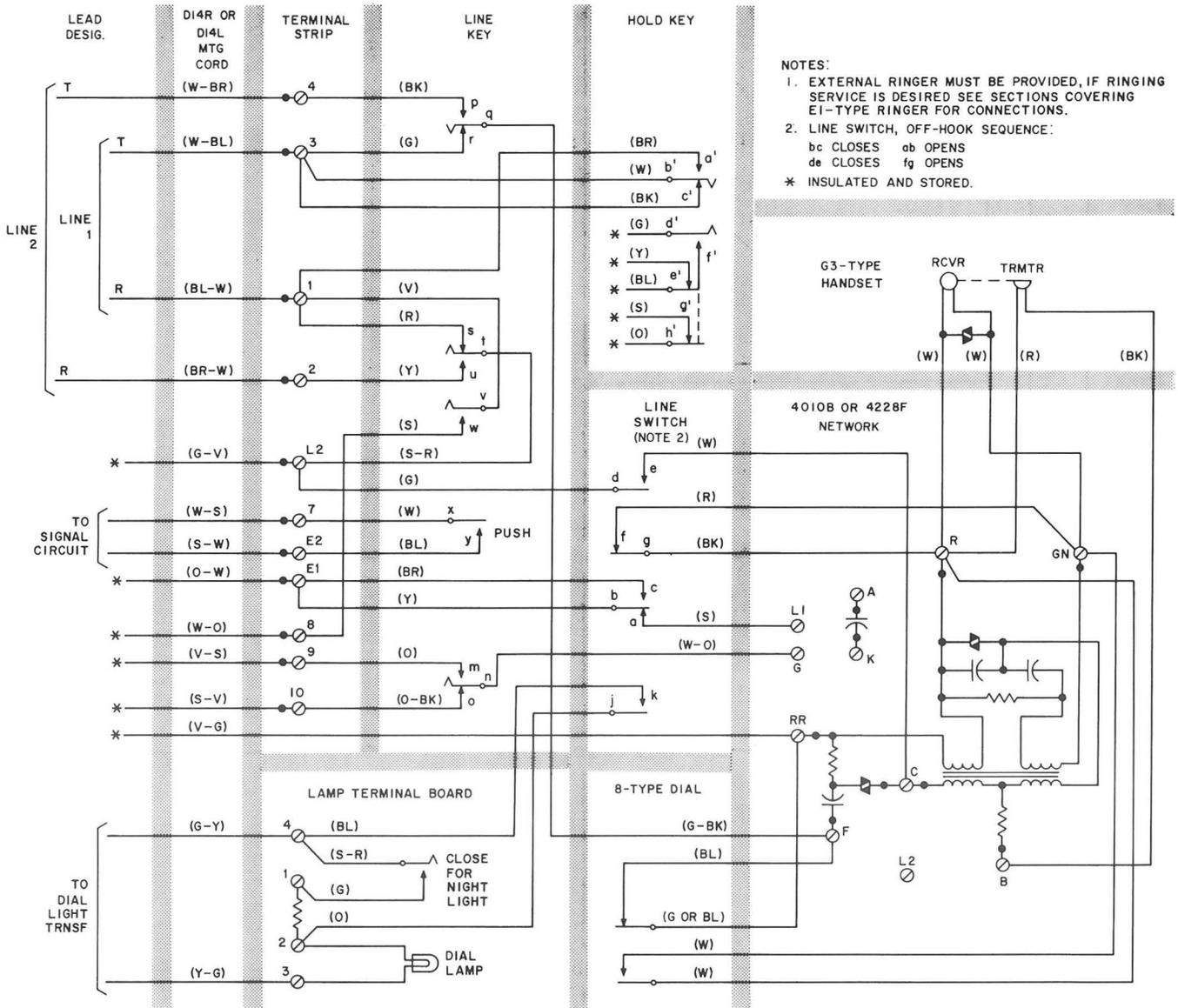   de CLOSES   fg OPENS
* INSULATED AND STORED.

Fig. 4—▶712BM Telephone Set Connections, 2-Line Pickup, Hold on Line 1, and Signaling (Factory Wired)◀
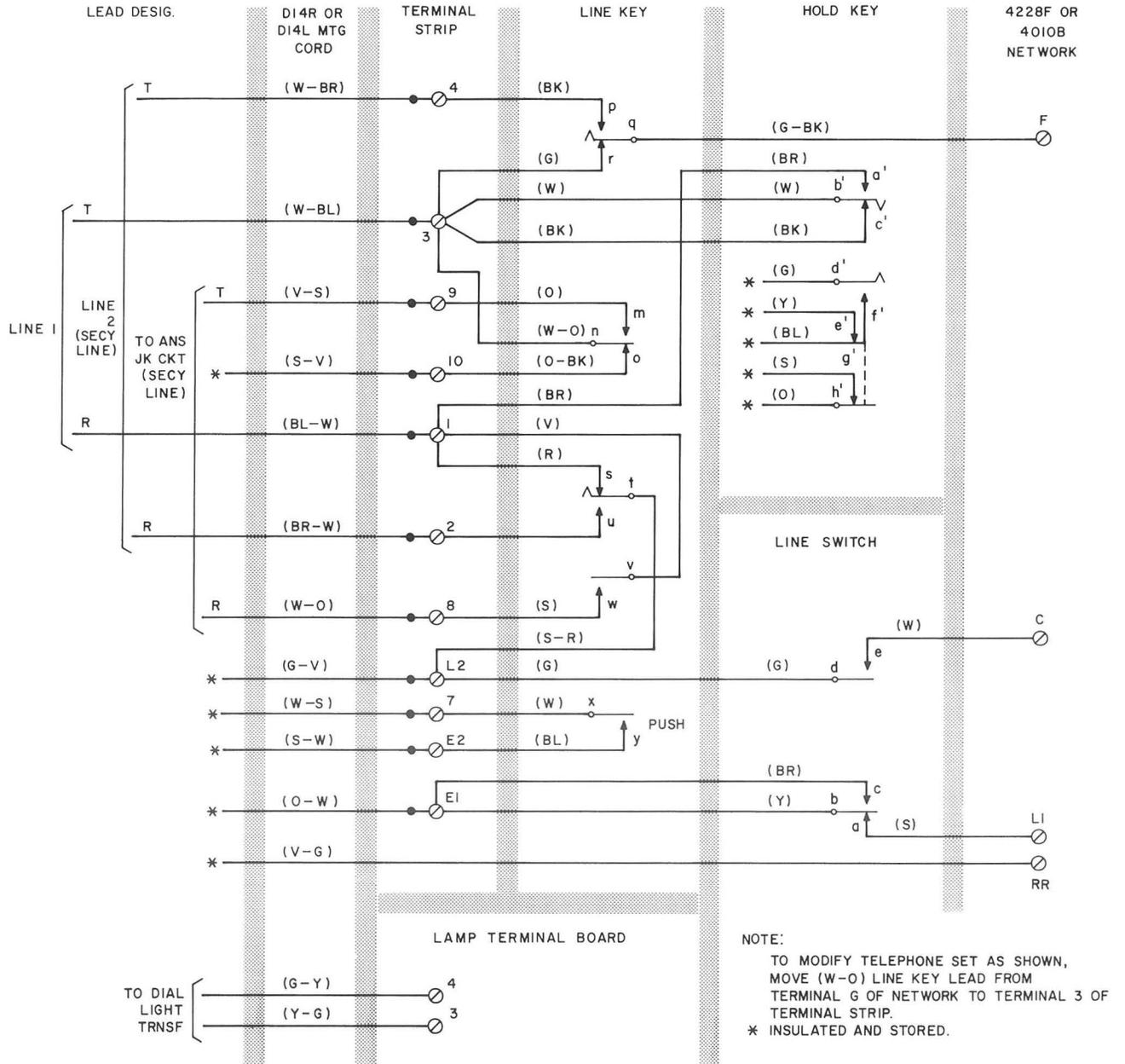
Fig. 5—712B Telephone Set Connections, 1-Line Pickup, Hold and Secretarial Service (Used Without 1A1 or 1A2 KTS)
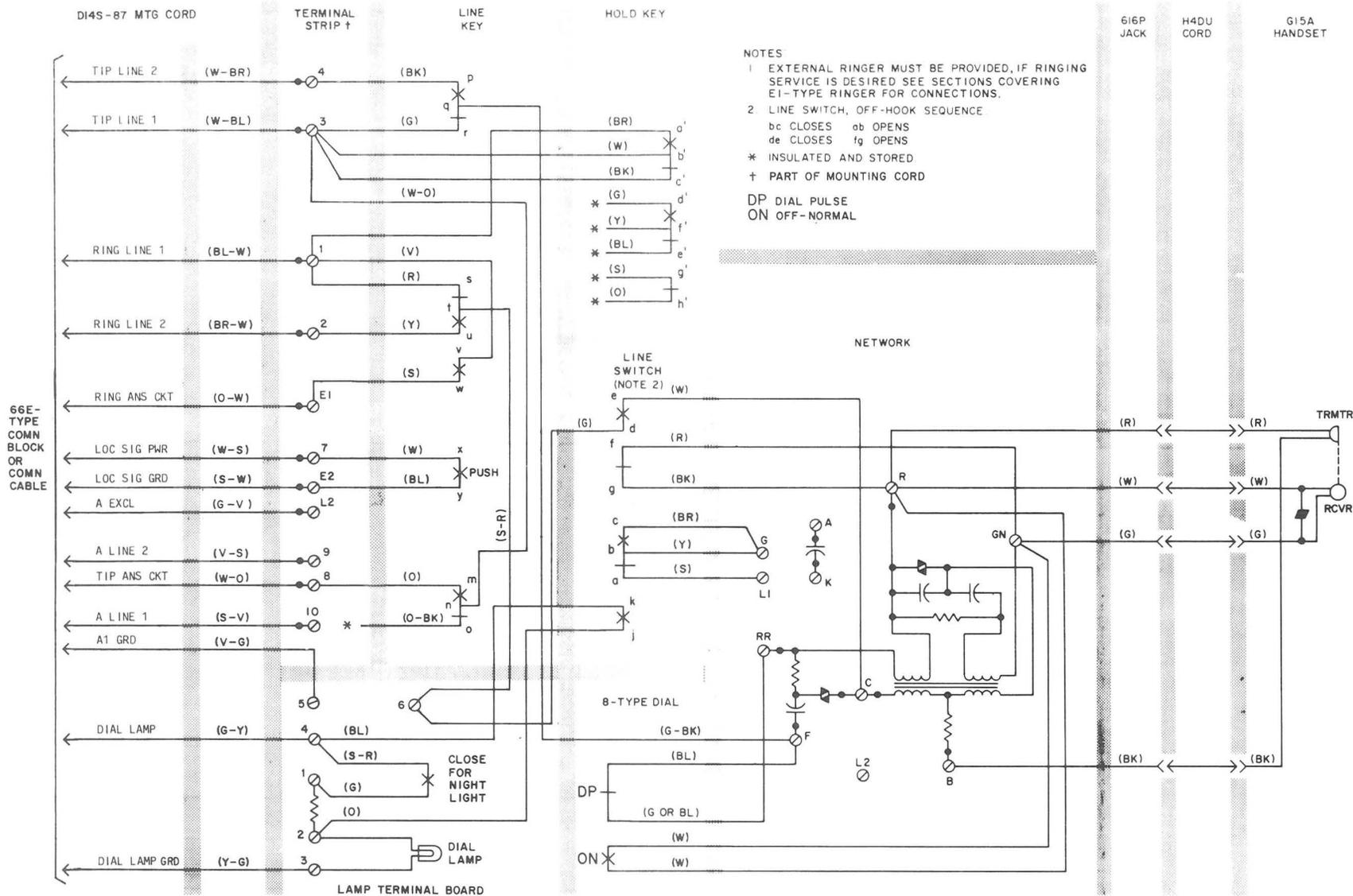
Fig. 6—712BM Telephone Set Connections, 1-Line Pickup, Hold and Secretarial Service (Used Without 1A1 or 1A2 KTS)
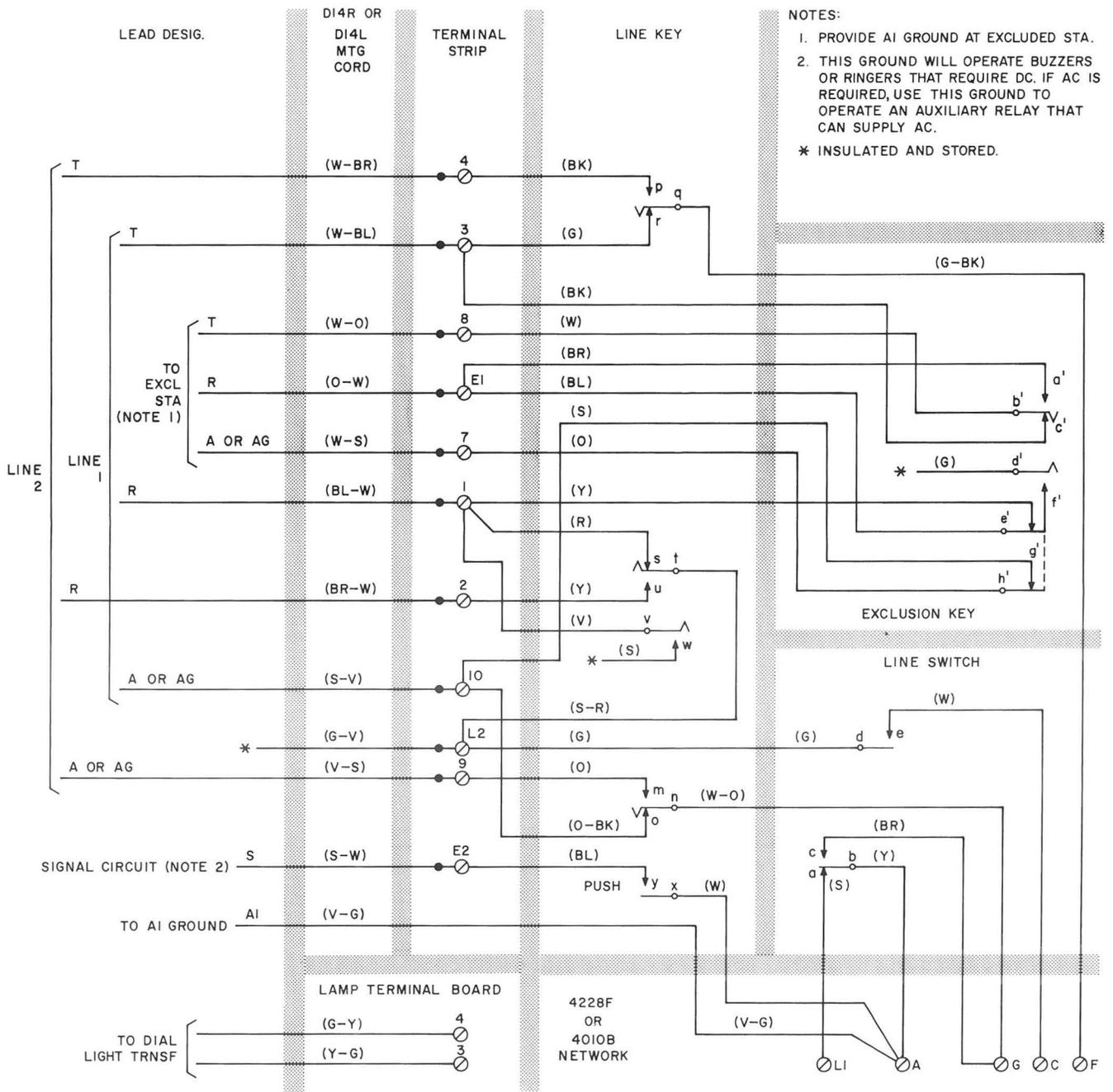
Fig. 7—712B Telephone Set Connections, 2-Line Pickup, Exclusion on Line 1, and Signaling (Used With 1A1 or 1A2 KTS)

NOTES:

1. EXTERNAL RINGER MUST BE PROVIDED, IF RINGING SERVICE IS DESIRED SEE SECTIONS COVERING E1-TYPE RINGER FOR CONNECTIONS.

2. LINE SWITCH, OFF-HOOK SEQUENCE:
   bc CLOSES   ab OPENS
   de CLOSES   fg OPENS

* INSULATED AND STORED.

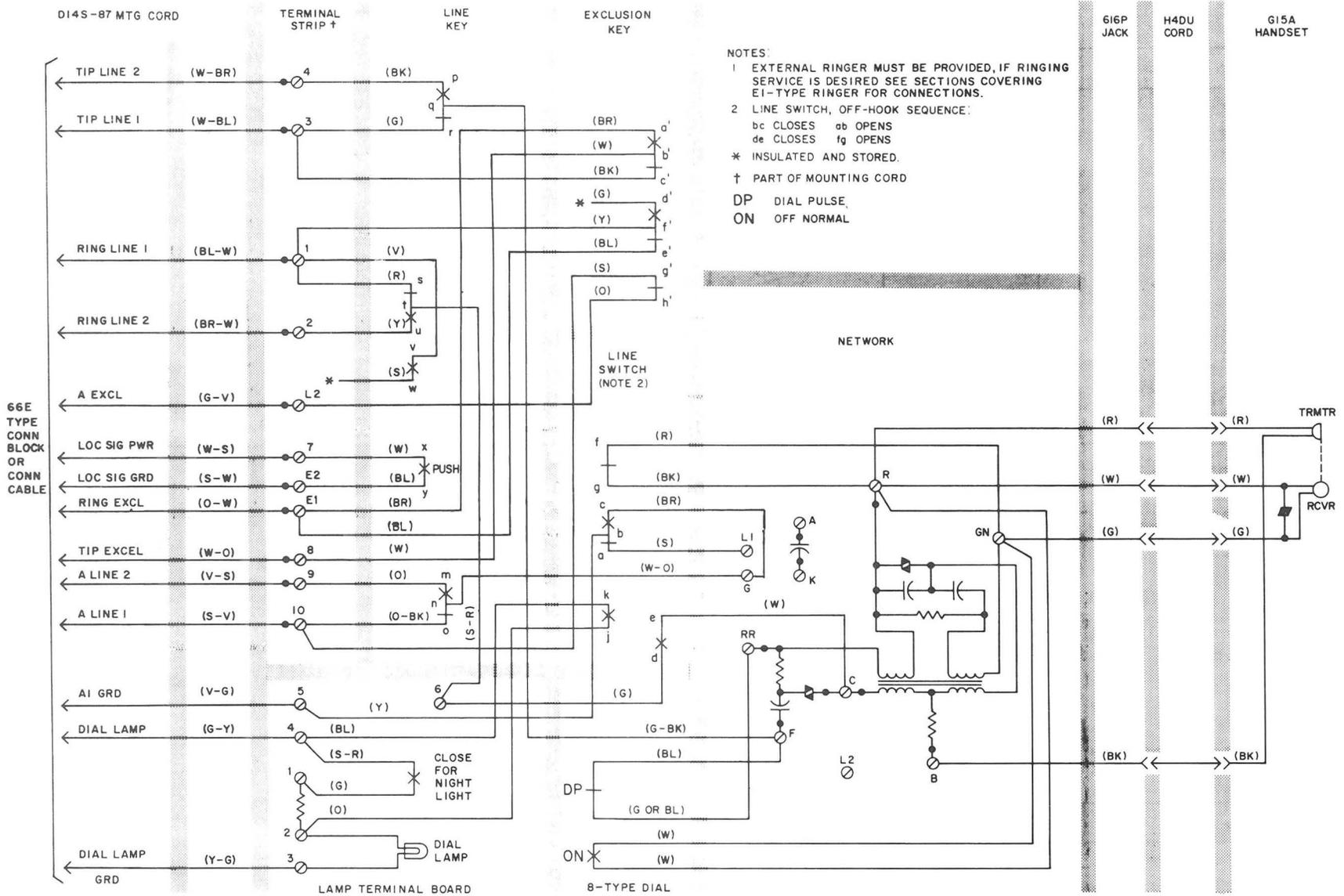† PART OF MOUNTING CORD

DP   DIAL PULSE

ON   OFF NORMAL

Fig. 8—712BM Telephone Set Connections, 2-Line Pickup, Exclusion on Line 1, and Signaling (Used With 1A1 or 1A2 KTS) (Factory Wired)
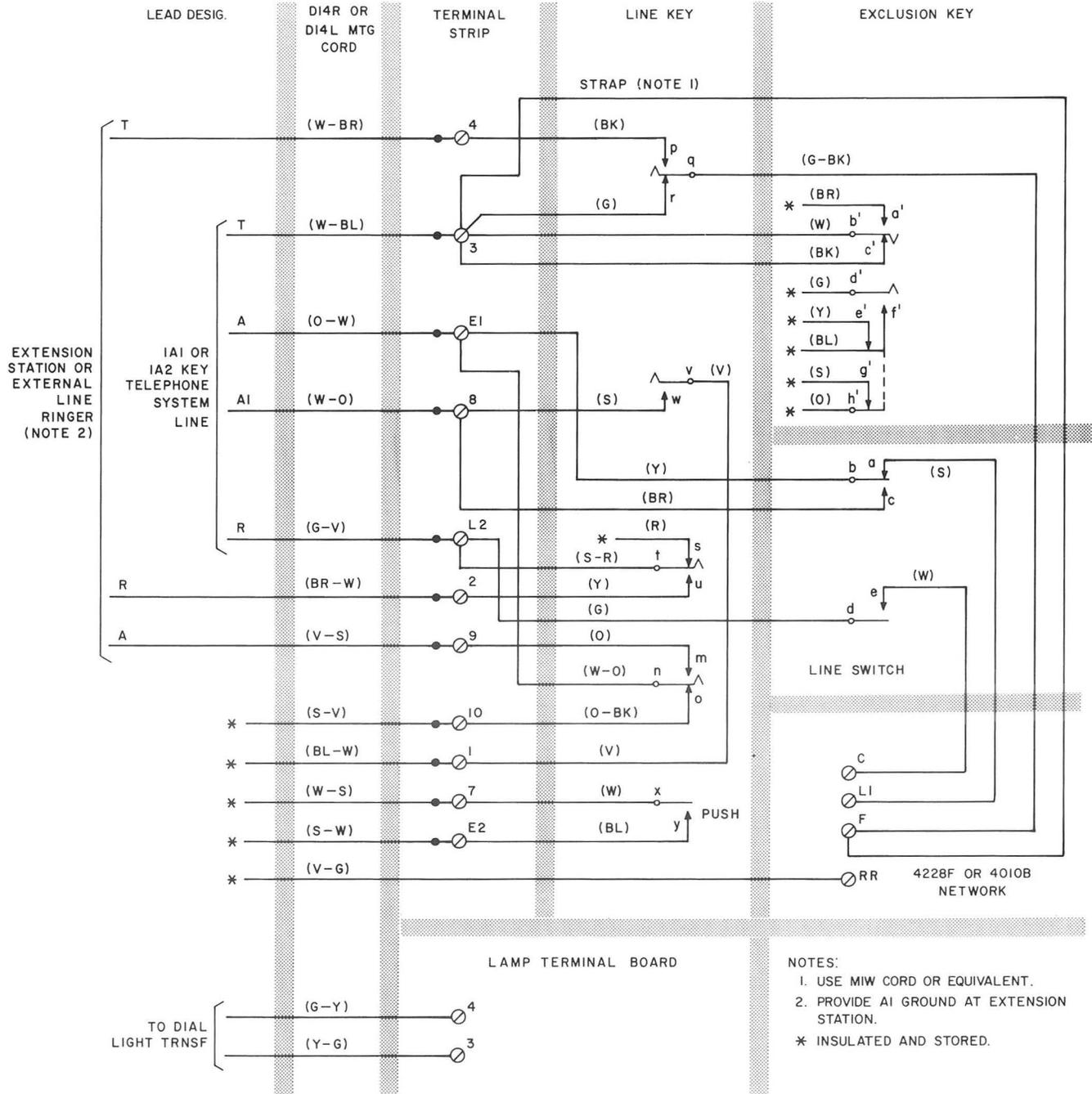
Fig. 9—712B Telephone Set Connections, 1-Line Pickup, Cutoff Feature for Extension Station or External Line Ringer

Fig. 10—712BM Telephone Set Connections, Wired for 1-Line Pickup, Cutoff Feature for Extension Station or External Line Ringer

NOTES:
1. EXTERNAL RINGER MUST BE PROVIDED IF RINGING SERVICE IS DESIRED, SEE SECTION COVERING E1-TYPE RINGER FOR CONNECTIONS.
2. H4DU CORD ORDERED SEPARATELY
3. USE M1W CORD OR EQUIVALENT

* INSULATE AND STORE
† PART OF MOUNTING CORD

DP DIAL PULSE

ON OFF NORMAL

LINE SWITCH SEQUENCE
bc- MAKE   fg- BREAK
de- MAKE   jk- MAKE
ab- BREAK

◆TABLE D◆

MODIFICATION OF 712BM FOR 1-LINE PICKUP, HOLD AND SECRETARIAL (WITHOUT 1A1 OR 1A2 KTS)

WIRE OR LEAD	COLOR	REMOVE FROM TERM. STRIP	CONNECT TO TERM. STRIP
Line Switch	Y	5†	G‡
Exclusion or Hold Key	BR	E1	1
	W	8	3
	Y	1	*
	BL	E1	*
	S	10	*
	O	L2	*
Line Switch	S	*	E1
	O	9	8
	O-BK	10	*

  * Insulate and store.
  † Lamp terminal board.
  ‡ Network terminal.

◆TABLE E◆

MODIFICATION OF 712BM FOR 2-LINE PICKUP HOLD ON LINE 1 AND SIGNALING

WIRE OR LEAD	COLOR	REMOVE FROM TERM. STRIP	CONNECT TO TERM. STRIP
Line Switch	BR	G	E1
	Y	5†	E1
Exclusion or Hold Key	BR	E1	1
	W	8	3
	Y	1	*
	BL	E1	*
	S	10	*
	O	L2	*
Line Switch	V	1	*
	S	*	8

  * Insulate and store.
  † Lamp terminal board.

▶TABLE F◀

HOUSING AND PLUNGER ASSEBMLY

COLOR	TELEPHONE SET	
	712B	712BM
Black	818981037 (P-89H103)	840701007
Ivory	818981508 (P-89H150)	840701015
Green	818981516 (P-89H151)	840701023
Red	818981532 (P-89H153)	840701031
Yellow	818981565 (P-89H156)	840701049
White	818981581 (P-89H158)	840701056
Rose Pink	818981599 (P-89H159)	840701064
Lt. Beige	818981607 (P-89H160)	840701072
Aqua Blue	818981623 (P-89H162)	840701080

▶TABLE G◀

COLOR ORDERING GUIDE

HANDSET	
COLOR	SUFFIX
Black	—03
Ivory	—50
Green	—51
Red	—53
Yellow	—56
White	—58
Rose Pink	—59
Lt. Beige	—60
Aqua Blue	—62