

## SERVICE

### 2702B, 2702BM, AND 2702BMG TELEPHONE SETS

### CONNECTIONS

#### 1. GENERAL

**1.01** This section contains information on 2702B manufacture discontinued (MD), 2702BM, and 2702BMG telephone sets (Fig. 1, 2, 3, 4, 5, and 6).

**1.02** The reasons for reissuing this section are listed below. Revision arrows are used to emphasize the more significant changes.

- To add information that 2702BM and 2702BMG telephone sets manufactured after 6-1-82 will be marked "1-PTY." This marking indicates the set is intended for bridged ringer service only.
- Revise Fig. 3 for clarity.

**1.03** If a polarity guard is required in a 2702B (MD) or 2702BM set, refer to Table A for connections and Section 502-703-100 for installation information.

**1.04** Refer to Tables B, C, and D for line and ringer connections.

**1.05** Figure 6 or 7 indicates the termination of the D4BT mounting cord in sets equipped with 4010- or 4228-type networks, respectively.

**1.06** Refer to Section 501-320-100 if conversion to four or eight party ringing is required.

**1.07** The 2702BM and 2702BMG telephone sets *not* marked "1-PTY" are adaptable for all classes of line and ringer connections and for A-lead control. Sets marked "1-PTY" on the base pan are not

adaptable for multiparty service connections or for A-lead control. If service other than individual or bridged ringing is required, a 2702B2M or 2702B2MG telephone set base, housing, and handset must be ordered separately.

**1.08** Associated with the production of "1-PTY" telephone sets are changes in the ringer, line switch, and network. These changes were not necessarily introduced simultaneously and therefore sets marked "1-PTY" may have only one or more of the planned changes. Figure 8 is a connecting diagram showing the connections when all the changes are incorporated. For sets with less than all the changes, refer to the following paragraphs for each new component.

(a) The (R) 623P4 mounting cord jack lead is removed from L2 of network and connected to A of network.

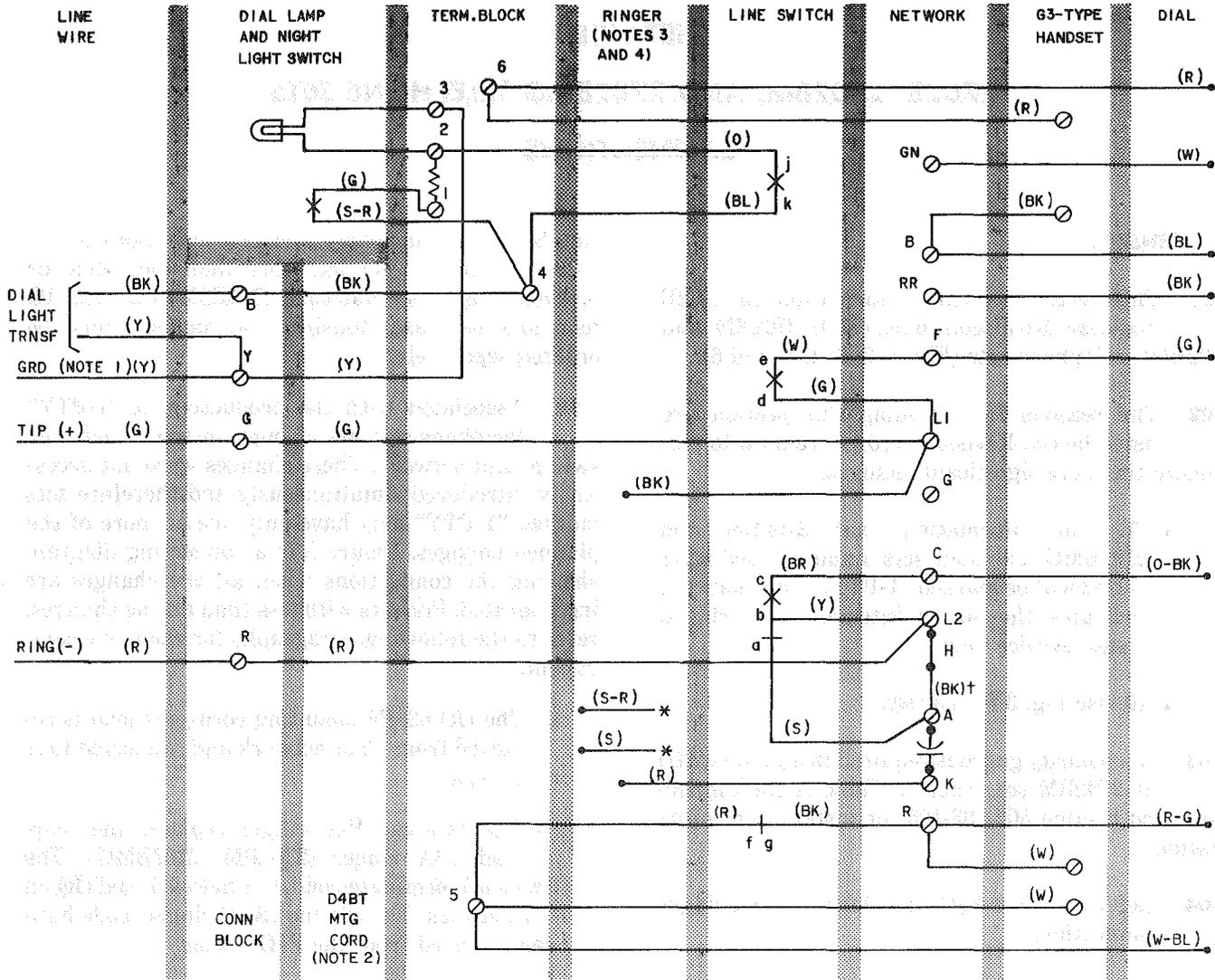
(b) The two-lead P1D ringer replaces the four-lead P3A ringer (2702BM, 2702BMG). The (BK) lead terminates on L1 of network and (R) on K of network. The (S) and (S-R) ringer leads have been removed from the P1D ringer.

(c) The 842622102 line switch replaces the 842622110 (2702BM, 2702BMG). Contact "a" and (S) lead have been removed; also contacts "d", "e" (BR-W) and (S-W) leads have been removed. The (BR) line switch lead at contact "c" terminates on terminal C of network.

(d) The 4293-type network replaces the 4228-type (MD) network. Screw terminals "G" and "L2" have been removed, also 840704001 (BK) strap lead has been removed from terminal H on network.¶

#### NOTICE

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- NOTES:
- 1. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR SERVICE BEING INSTALLED.
  - 2. CONNECTIONS SHOWN FOR D4BT MTG. CORD. IF D5AK (MD) MTG. CORD IS USED, REFER TO TABLE B.
  - 3. TO SILENCE RINGER PERMANENTLY FOR ALL CLASSES OF SERVICE REFER TO THE APPROPRIATE RINGER SECTION IN DIVISION 501.
  - 4. WIRED FOR BRIDGED SERVICE. FOR OTHER CLASSES OF SERVICE SEE TABLE B OR C.
- \* INSULATE AND STORED  
† THIS LEAD GOES DIRECTLY TO L2 ON 4228G NET.

Fig. 1—2702B (MD) Telephone Set, Connections

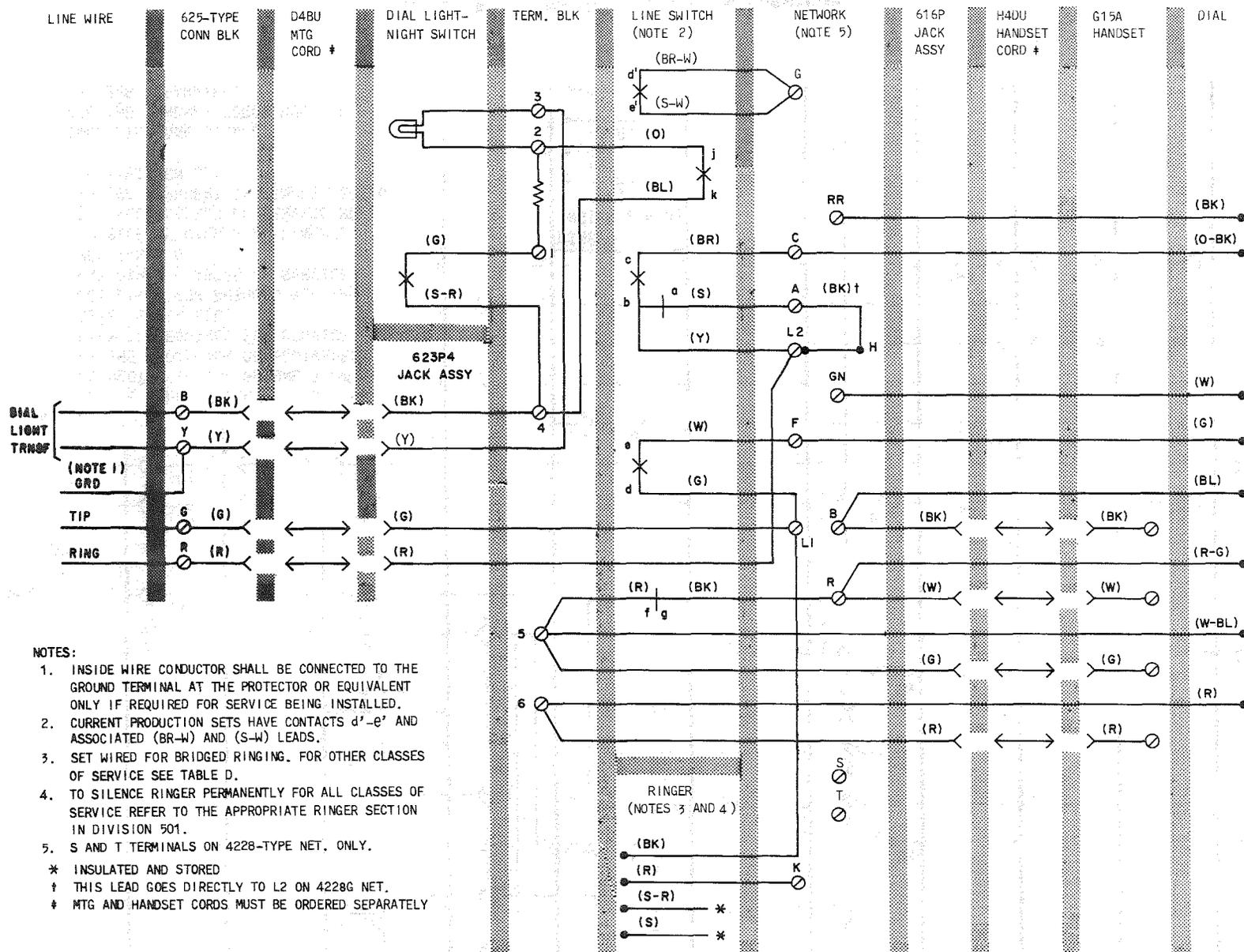


Fig. 2—2702BM Telephone Set, Connections

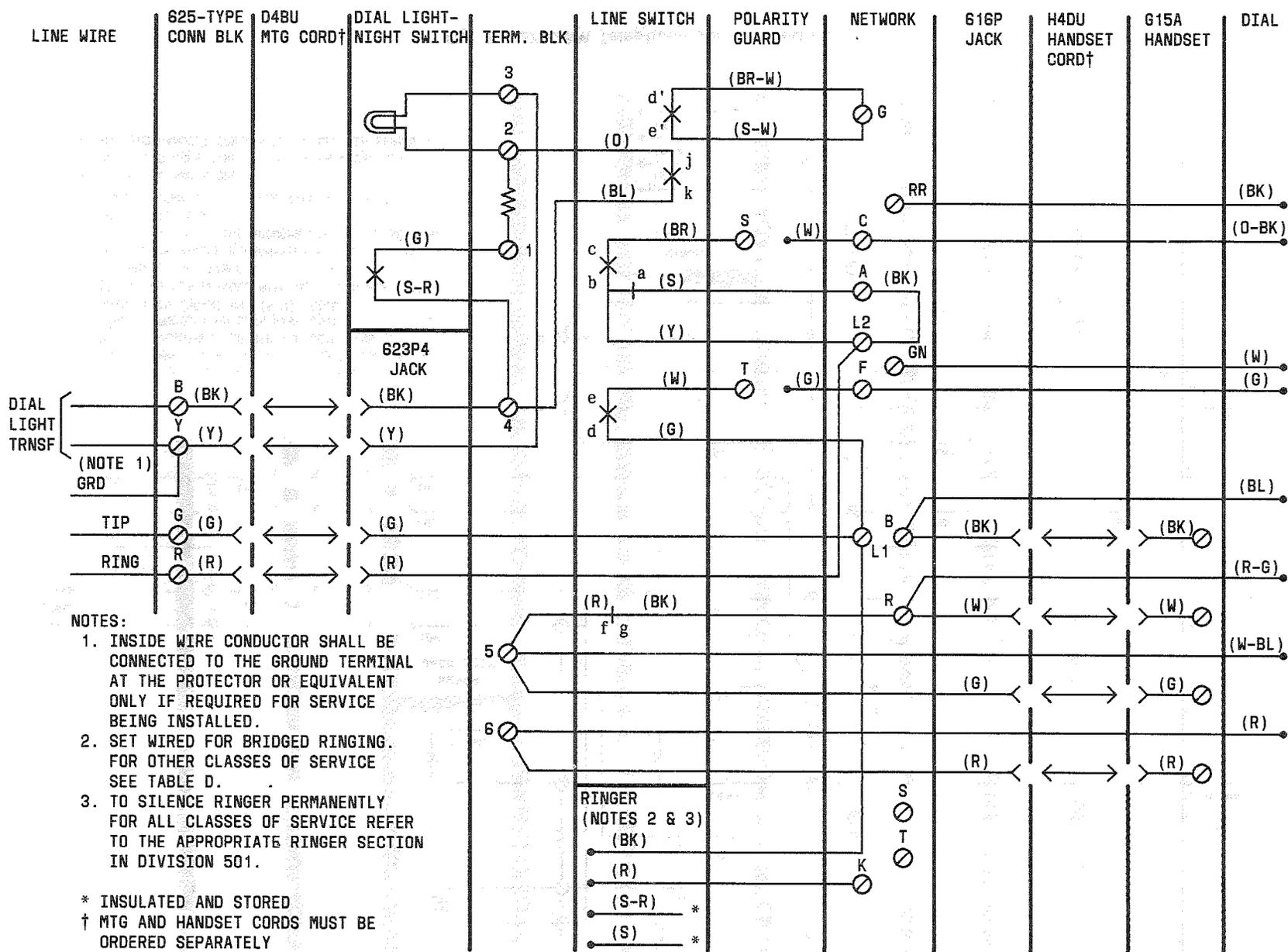
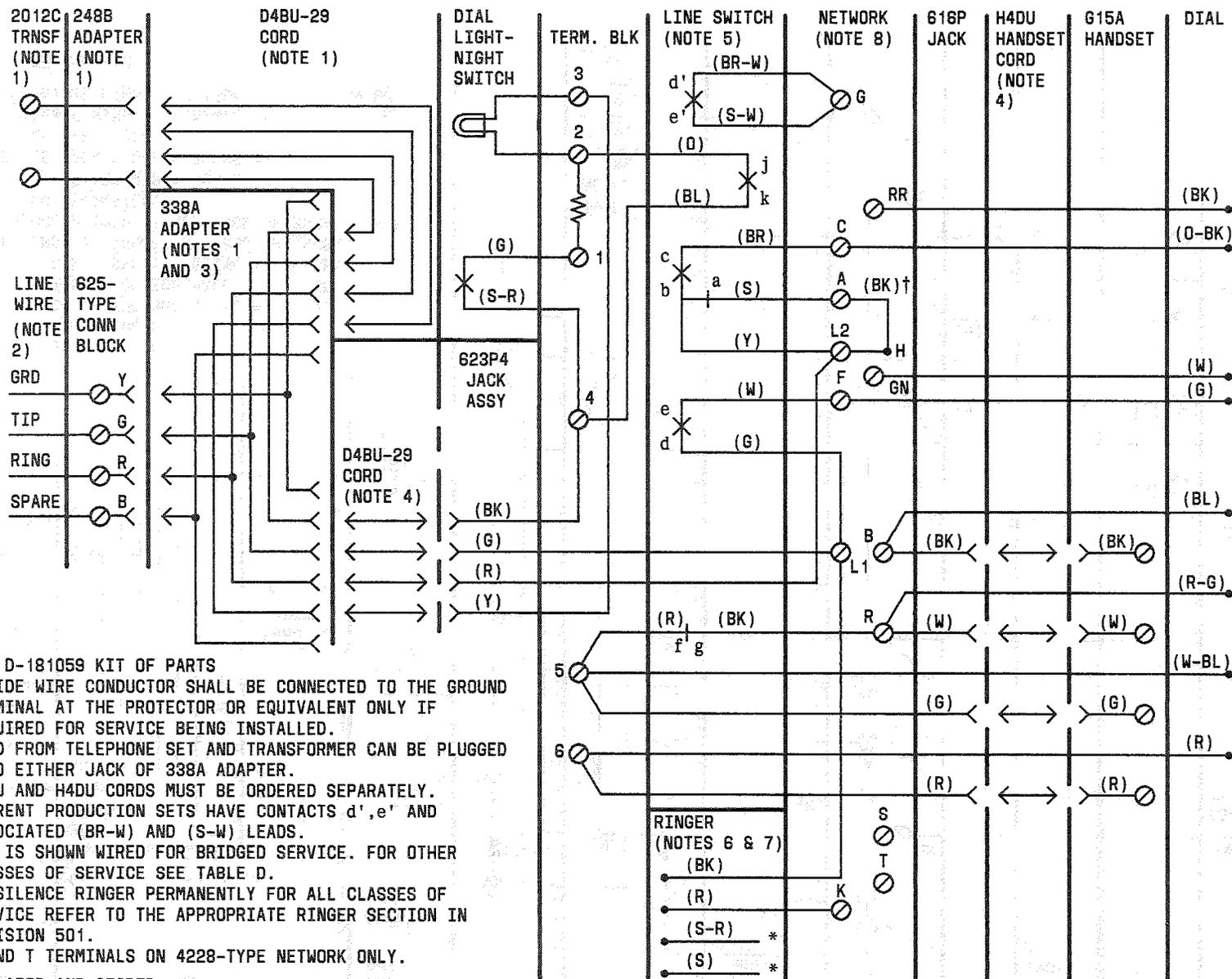


Fig. 3—2702BMG Telephone Set, Connections

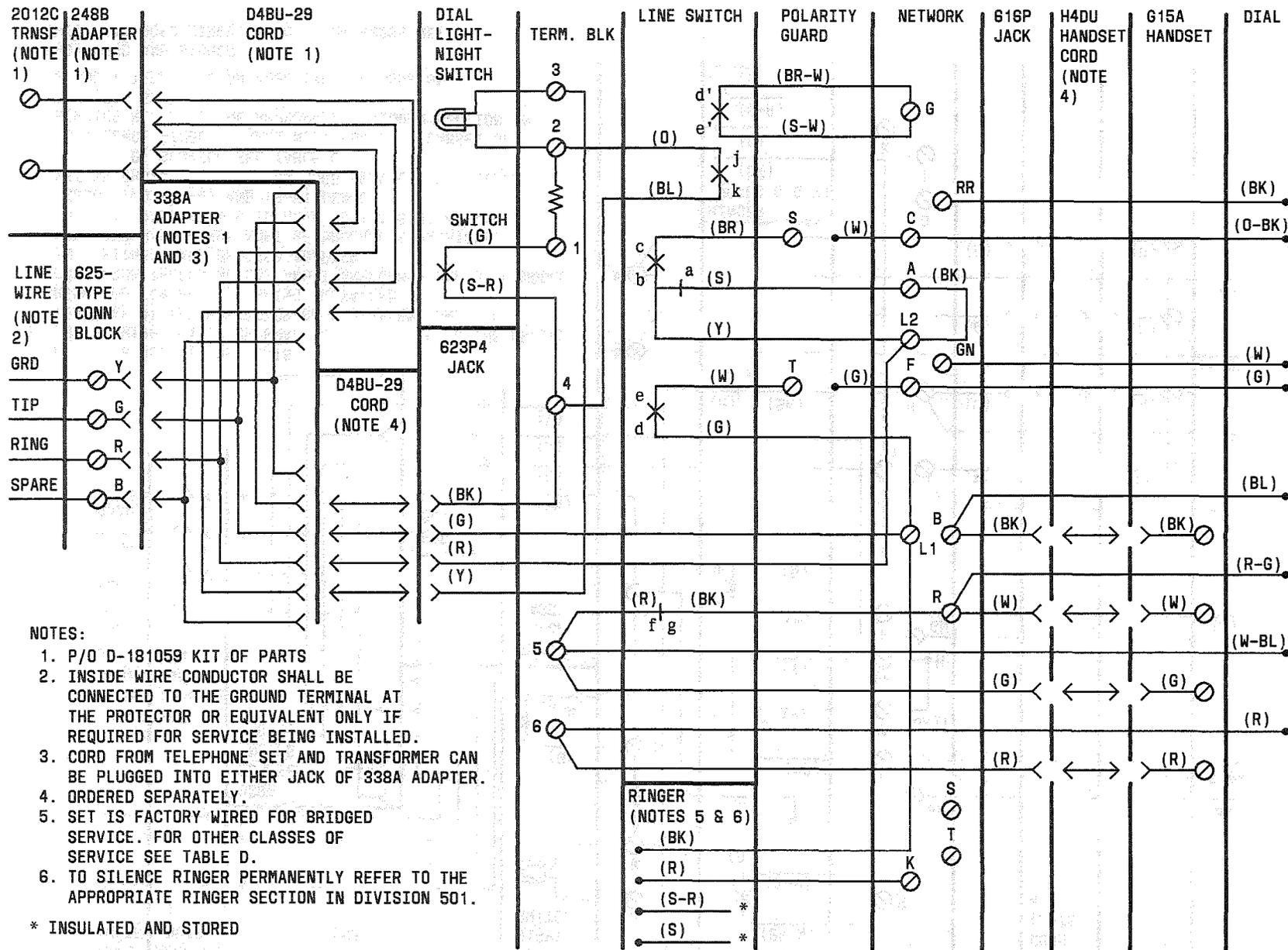


NOTES:

1. P/O D-181059 KIT OF PARTS
2. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR SERVICE BEING INSTALLED.
3. CORD FROM TELEPHONE SET AND TRANSFORMER CAN BE PLUGGED INTO EITHER JACK OF 338A ADAPTER.
4. D4BU AND H4DU CORDS MUST BE ORDERED SEPARATELY.
5. CURRENT PRODUCTION SETS HAVE CONTACTS d', e' AND ASSOCIATED (BR-W) AND (S-W) LEADS.
6. SET IS SHOWN WIRED FOR BRIDGED SERVICE. FOR OTHER CLASSES OF SERVICE SEE TABLE D.
7. TO SILENCE RINGER PERMANENTLY FOR ALL CLASSES OF SERVICE REFER TO THE APPROPRIATE RINGER SECTION IN DIVISION 501.
8. S AND T TERMINALS ON 4228-TYPE NETWORK ONLY.

\* INSULATED AND STORED  
 † THIS LEAD GOES DIRECTLY TO L2 ON 4228G NET.

Fig. 4—2702BM Telephone Set, Components Using D-181059 Kit of Parts

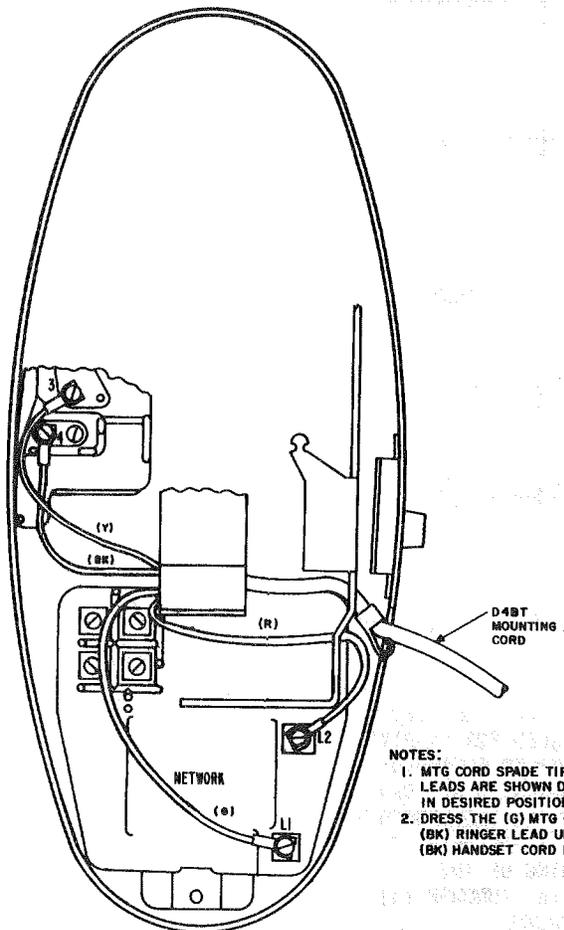


NOTES:

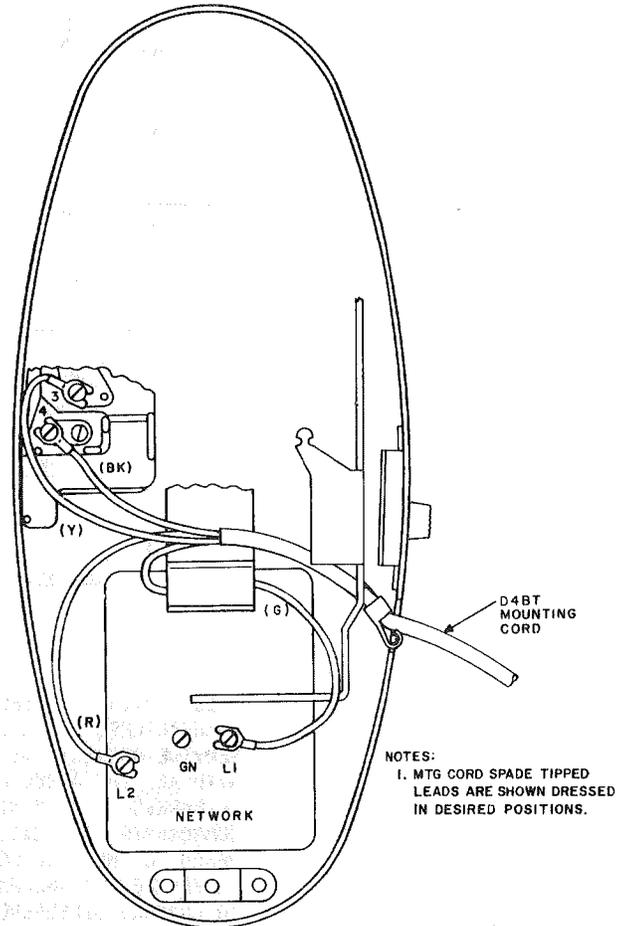
1. P/O D-181059 KIT OF PARTS
2. INSIDE WIRE CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL AT THE PROTECTOR OR EQUIVALENT ONLY IF REQUIRED FOR SERVICE BEING INSTALLED.
3. CORD FROM TELEPHONE SET AND TRANSFORMER CAN BE PLUGGED INTO EITHER JACK OF 338A ADAPTER.
4. ORDERED SEPARATELY.
5. SET IS FACTORY WIRED FOR BRIDGED SERVICE. FOR OTHER CLASSES OF SERVICE SEE TABLE D.
6. TO SILENCE RINGER PERMANENTLY REFER TO THE APPROPRIATE RINGER SECTION IN DIVISION 501.

\* INSULATED AND STORED

Fig. 5—2702BMG Telephone Set, Connections Using D-181059 Kit of Parts



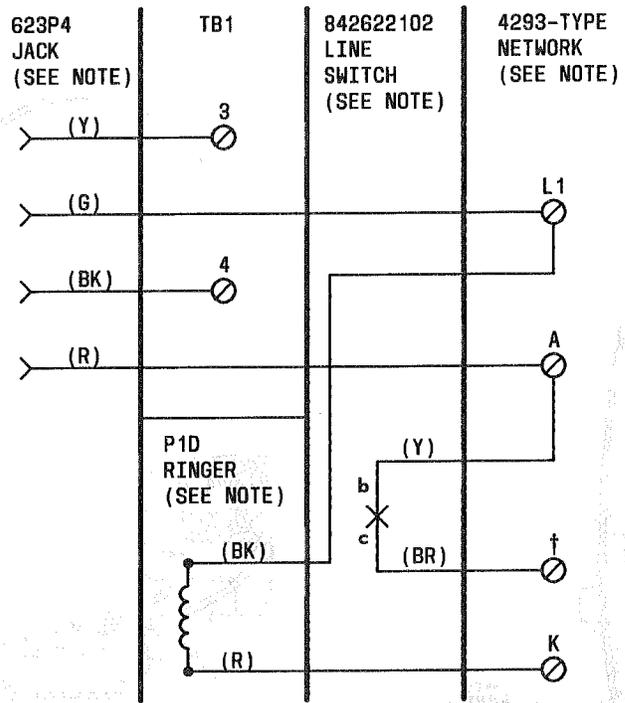
- NOTES:
1. MTG CORD SPADE TIPPED LEADS ARE SHOWN DRESSED IN DESIRED POSITIONS.
  2. DRESS THE (G) MTG CORD AND (BK) RINGER LEAD UNDER THE (BK) HANDSET CORD LEAD.



- NOTES:
1. MTG CORD SPADE TIPPED LEADS ARE SHOWN DRESSED IN DESIRED POSITIONS.

Fig. 6—Method of Terminating D4BT Mounting Cord on Sets with 4010-Type Network

Fig. 7—Method of Terminating D4BT Mounting Cord on Sets with 4228-Type Network



**NOTE:**  
 THIS PARTIAL DRAWING SHOWS HOW A TELEPHONE SET MANUFACTURED AFTER 6-1-82 AND MARKED FOR "1-PTY" SERVICE CONNECTIONS IS WIRED IF IT IS EQUIPPED WITH ALL THE ABOVE LISTED COMPONENTS. A SET CAN BE MARKED "1-PTY" WITHOUT HAVING ALL THE LISTED COMPONENTS. IF THIS ARRANGEMENT IS ENCOUNTERED, REFER TO THE FULL SCHEMATIC DRAWING OF THE TELEPHONE SET AND PARAGRAPH 1.08(a) THROUGH (d) TO COMPARE DIFFERENCES IN THE WIRING.

† NETWORK TERMINAL C OR POLARITY GUARD TERMINAL S.

**Fig. 8—2702BM or 2702BMG Telephone Set, Connections (See Note)**

TABLE A

## POLARITY GUARD CONNECTIONS (SEE NOTE)

RINGER	POLARITY GUARD	WIRE OR LEAD	COLOR	REMOVE FROM NET.	CONNECT TO	
					NET.	POLARITY GUARD
M-Type Ringer	D-181063 Kit of Parts	Line Switch	W	F		T
			BR	C		S
		Polarity Guard	G		F	
			W		C	
	D-180229 (MD) Kit of Parts	Dial	BK	RR		3*
		Line Switch	BR	C		4*
		Polarity Guard	R			3*
			BK			4*
			G		RR	
			W		C	
P-Type Ringer	D-180896 Kit of Parts	Line Switch	W	F		T
			BR	C		S
	Polarity Guard	G		F		
		W		C		

**Note:** For use when specified by local instructions for end-to-end signaling installations.

\* Terminals 3 and 4 are on terminal board which is part of D-180229 (MD) Kit of Parts.

TABLE B

**LINE AND RINGER CONNECTIONS**  
**2702B (MD) TELEPHONE SET WITH D5AK (MD) MOUNTING CORD**

WIRE OR LEAD		INDIVIDUAL OR BRIDGED (NOTE)	RING PARTY (NOTE)	TIP PARTY		
				NO IDENT GRD	IDENTIFYING GROUND	
					1000 OHMS	2650 OHMS
Inside Wire at Conn Block	Ring	R	R	R	R	R
	Tip	G	G	G	G	G
	Grd	Y	Y	Y	Y	Y
Dial Light Transformer	1	Y	Y	Y	Y	Y
	2	B	B	B	B	B
D5AK Mtg Cord at Conn Block	(R)	R	R	G	G	G
	(G)	G	G	R	R	R
	(Y)	G	Y	Y	Y	Y
	(BK)	B	B	B	B	B
	(W)	Y	Y	Y	Y	Y
D5AK Mtg Cord at Set Terminals*	(R)	L2	L2	L2	L2	L2
	(G)	L1	L1	L1	C	C
	(Y)	G	G	G	G	G
	(BK)	4†	4†	4†	4†	4†
	(W)	3†	3†	3†	3†	3†
Ringer Leads‡	(R)	K	K	K	K	K
	(BK)	G	G	G	G	G
	(S)	§	§	§	L1	§
	(S-R)	§	§	§	§	L1
Line Switch¶	(BR)	C	C	F	F	F
	(W) [S-W]	F	F	C	B	B
Strap From H	(BK) [S-BK]	A	A	A	§	§

**Note:** Factory-wired for bridged or ring party.

\* When connecting the D5AK mounting cord leads for tip part identifying ground, use D-161488 connectors and M1W straps as required to extend conductor leads.

† Terminals on lamp terminal block.

‡ To silence ringer permanently for all classes of service, refer to appropriate section in Division 501.

§ Insulated and stored.

¶ This change does not apply to sets equipped with a polarity guard.

( ) Current color code.

[ ] MD color code.

TABLE C

**LINE AND RINGER CONNECTIONS  
2702B (MD) TELEPHONE SET WITH D4BT MOUNTING CORD**

WIRE OR LEAD		INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY		
				NO IDENT GRD	IDENTIFYING GROUND	
					1000 OHMS	2650 OHMS
Inside Wire at Conn Block	Ring	R	R	R	R	R
	Tip	G	G	G	G	G
	Grd	Y	Y	Y	Y	Y
Dial light Transformer	1	Y	Y	Y	Y	Y
	2	B	B	B	B	B
D4BT Mtg Cord at Conn Block	(R)	R	R	G	G	G
	(G)	G	G	R	R	R
	(Y)	Y	Y	Y	Y	Y
	(BK)	B	B	B	B	B
D4BT Mtg Cord at Set Terminals	(R)	L2	L2	L2	L2	L2
	(G)	L1	L1	L1	C	C
	(Y)	3*	3*	3*	3*	3*
	(BK)	4*	4*	4*	4*	4*
Ringer Leads†	(R)	K	K	K	K	K
	(BK)	L1	3*	3*	3*	3*
	(S)	‡	‡	‡	L1	‡
	(S-R)	‡	‡	‡	‡	L1
Line Switch§	(BR)	C	C	F	F	F
	(W) [S-W]	F	F	C	B	B
Strap From H	(BK) [S-BK]	A	A	A	‡	‡

\* Terminals on lamp terminal block.

† To silence ringer permanently for all classes of service, refer to appropriate section in Division 501.

‡ Insulated and stored.

§ This change does not apply to sets equipped with a polarity guard.

( ) Current color code.

[ ] MD color code.

TABLE D

2702BM AND 2702BMG TELEPHONE SET LINE AND RINGER CONNECTIONS WITH D4BU MOUNTING CORD

WIRE OR LEAD	COLOR	INDIVIDUAL OR BRIDGED (NOTE 1)	RING PARTY	TIP PARTY			
				NO IDENT GRD	IDENTIFYING GROUND (NOTE 2)		
					1000 OHMS	2650 OHMS	
Inside Wire at Conn Block	Ring	R	R	R	R	R	R
	Tip	G	G	G	G	G	G
	Grd	Y	Y	Y	Y	Y	Y
Dial light Transformer	1	Y	Y	Y	Y	Y	Y
	2	BK	B	B	B	B	B
623P4 Jack Assembly in Set*	R	L2	L2	L1	C	C	C
	G	L1	L1	L2	L2	L2	L2
	Y	3	3	3	3	3	3
	BK	4	4	4	4	4	4
Ringer Lead†	BK	L1	3	3	3	3	3
	R	K	K	K	K	K	K
	S	‡	‡	‡	L1	‡	‡
	S-R	‡	‡	‡	‡	L1	L1
Line Switch at Net§	W	F	F	C	B	B	B
	BR	C	C	F	F	F	F
Strap of Net.	BK	A	A	A	‡	‡	‡

**Note 1:** Sets are factory-wired for bridged or ring party.

**Note 2:** For tip party service with identifying ground, remove insulate and store (BK) strap between network terminals A and II.

\* When connecting the 623P4 jack assembly leads for tip party identifying ground, use D-161488 connectors and M1W straps as required to extend conductor leads.

† To silence ringer permanently for all classes of service, refer to appropriate section in Division 501.

‡ Insulated and stored.

§ This change does not apply to sets equipped with a polarity guard.