

TELEPHONE SETS—701B

CONNECTIONS

1. GENERAL

1.01 This section is reissued to:

- Show 701B telephone set MD.
- Include connection modifications which will prevent false billing due to incomplete hangup.
- Delete connections for the 425A cold-cathode tube. This information is covered in the section on inductive noise.
- Delete connections for 3-type speakerphone option. Refer to Division 512 for speakerphone connections.

Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.02 For tip party identification when no ringer is used, install a 1610A or 1635A inductor in telephone set. For information on installation of inductor, see identification and installation section for 701-type telephone sets.

1.03 To convert the 701B (MD) telephone set from dial to manual, move the (S-W) lead from terminal F of network to terminal RR. The dial remains on the set.



The dial light transformer can be damaged by lightening if a sufficient difference in ground potential occurs between telephone plant and power system. Be sure that telephone and power grounds are bonded in accordance with section on protector and signaling grounds.

1.04 To prevent false billing due to incomplete hangup when tip party identification ground

is used, the set connections are modified by placing the identifying ground under control of the d and e switch hook contacts (see Table D and Fig. 4).

2. CONNECTION INDEX

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Fig. 1—701B (MD) Telephone Set Without Ringer or As A Portable Installation

Fig. 2—Schematic For 1610A or 1635A Inductor

Fig. 3—Connections For Bridged, Ring, or Tip Party Service

Fig. 4—701B Telephone Set With E1C or E1A (MD) Ringer Connections For Tip Party Identification Ground

Fig. 5—701B (MD) Telephone Set With 426A Cold-Cathode Tube

Fig. 6—701B (MD) Telephone Set Wired For 1A1 and 1A2 Key Telephone Systems

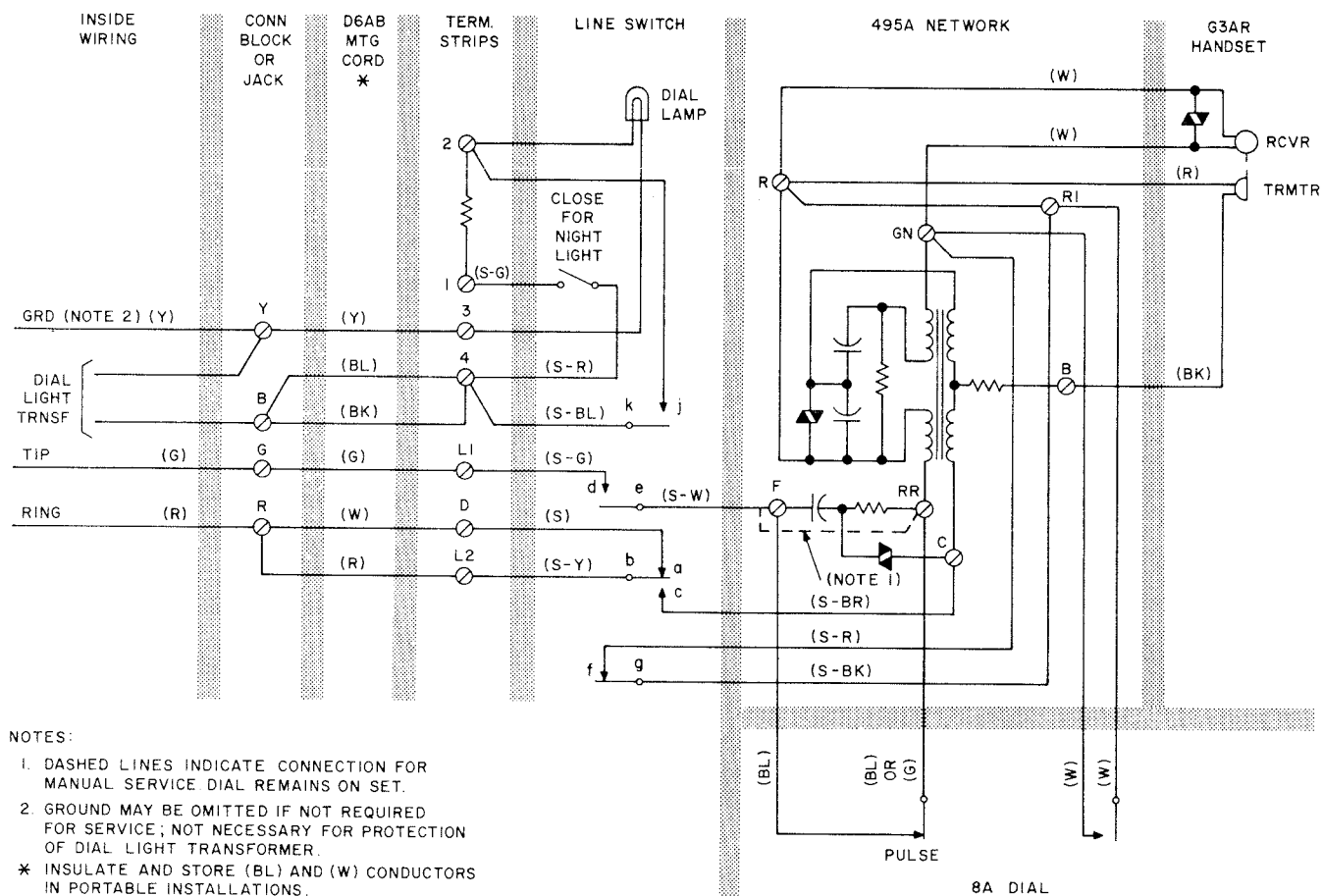


Fig. 1—701B (MD) Telephone Set Without Ringer or As A Portable Installation

TABLE A
CONNECTIONS FOR BRIDGED OR RING PARTY
SERVICE WHEN USING TELEPHONE SET
WITHOUT RINGER

WIRE OR LEAD		COLOR	INDIVIDUAL OR BRIDGED	RING PARTY
Line Wire at Conn Block	Ring	R	R	R
	Tip	G	G	G
	Grd	Y	Y	Y
Trnsf Leads at Conn Block		Y	Y	Y
		BK	B	B
Mtg Cord at Conn Block		R	R	R
		G	G	G
		Y	Y	Y
		BL	B	B
		W	R	R
Mtg Cord at Set		BK	B	B
		R	L2	L2
		G	L1	L1
		Y	3	3
		BL	4	4
		W	D	D
		BK	4	4

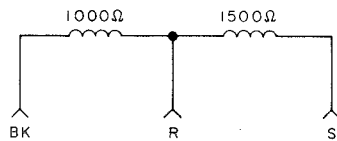


Fig. 2—Schematic For 1610A or 1635A Inductor

TABLE B
CONNECTIONS FOR TIP PARTY SERVICE WHEN
USING TELEPHONE SET WITHOUT RINGER

WIRE OR LEAD		COLOR	TIP PARTY	TIP PARTY WITH IDENT GRD	
				1000Ω	2500Ω
Line Wire at Conn Block	Ring	R	R	R	R
	Tip	G	G	G	G
	Grd	Y	Y	Y	Y
Trnsf Leads at Conn Block		Y	Y	Y	Y
		BK	B	B	B
Mtg Cord at Conn Block		R	R	G	G
		G	G	R	R
		Y	Y	Y	Y
		BL	B	B	B
		W	R	G	G
Mtg Cord at Set		BK	B	B	B
		R	L2	L2	L2
		G	L1	C†	C†
		Y	3	3	3
		BL	4	4	4
Inductor Leads at Set		W	D	D	D
		BK	4	4	4
		R		3	3
Switch Hook Assembly		S		L1	*
		S-W	F†	B†	B†
		S-BR	C†	F†	F†
		S-G	L1	L1	L1

* Insulate and store.

† Terminal on network.

Notes: 1. Connections include modifications to prevent false billing due to incomplete hangup.
 2. When connecting the D6AB mounting cord leads for tip party identifying ground use D-161488 connectors and M1W straps as required to extend conductor leads.

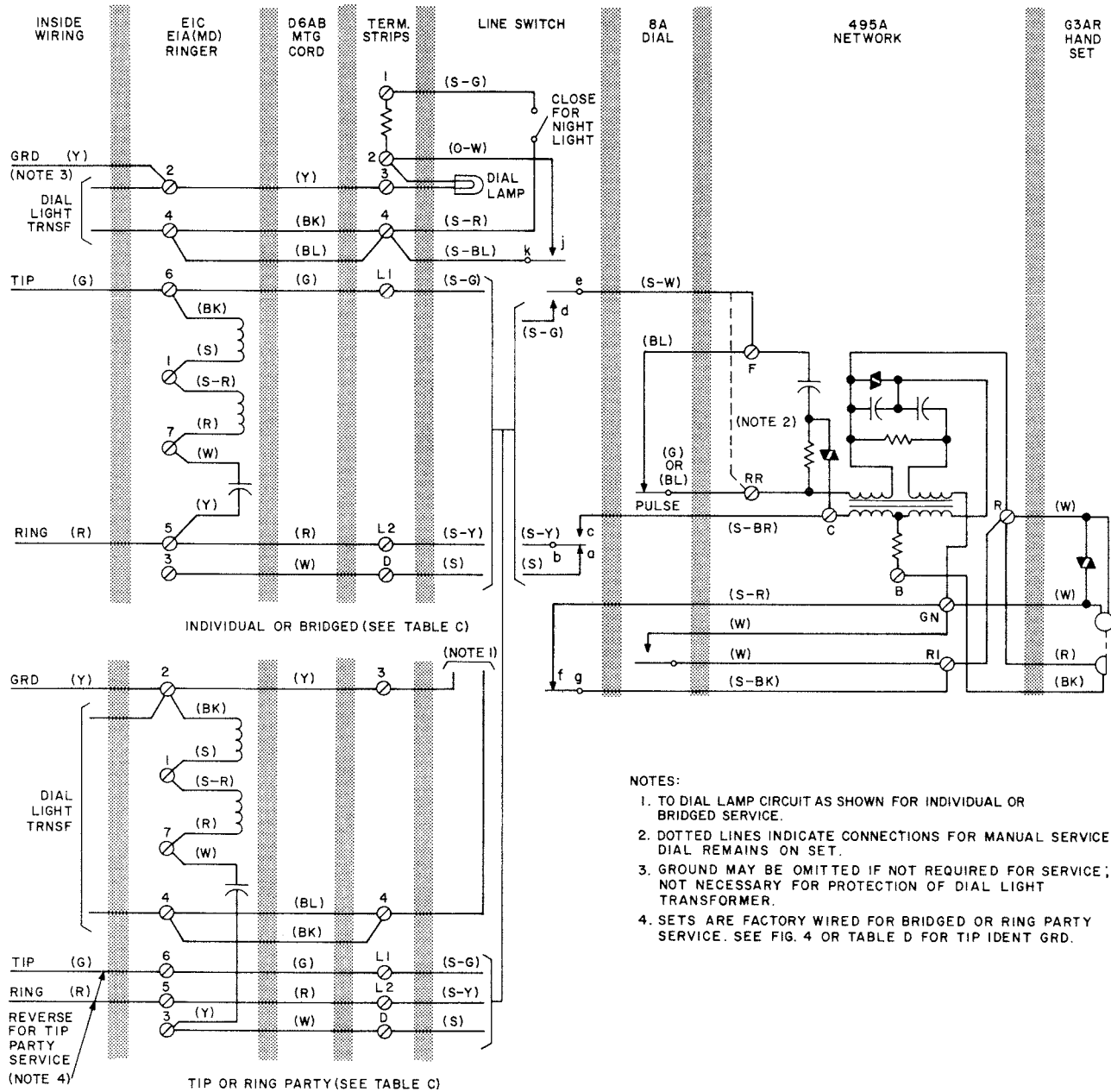


Fig. 3—Connections For Bridged, Ring, or Tip Party Service

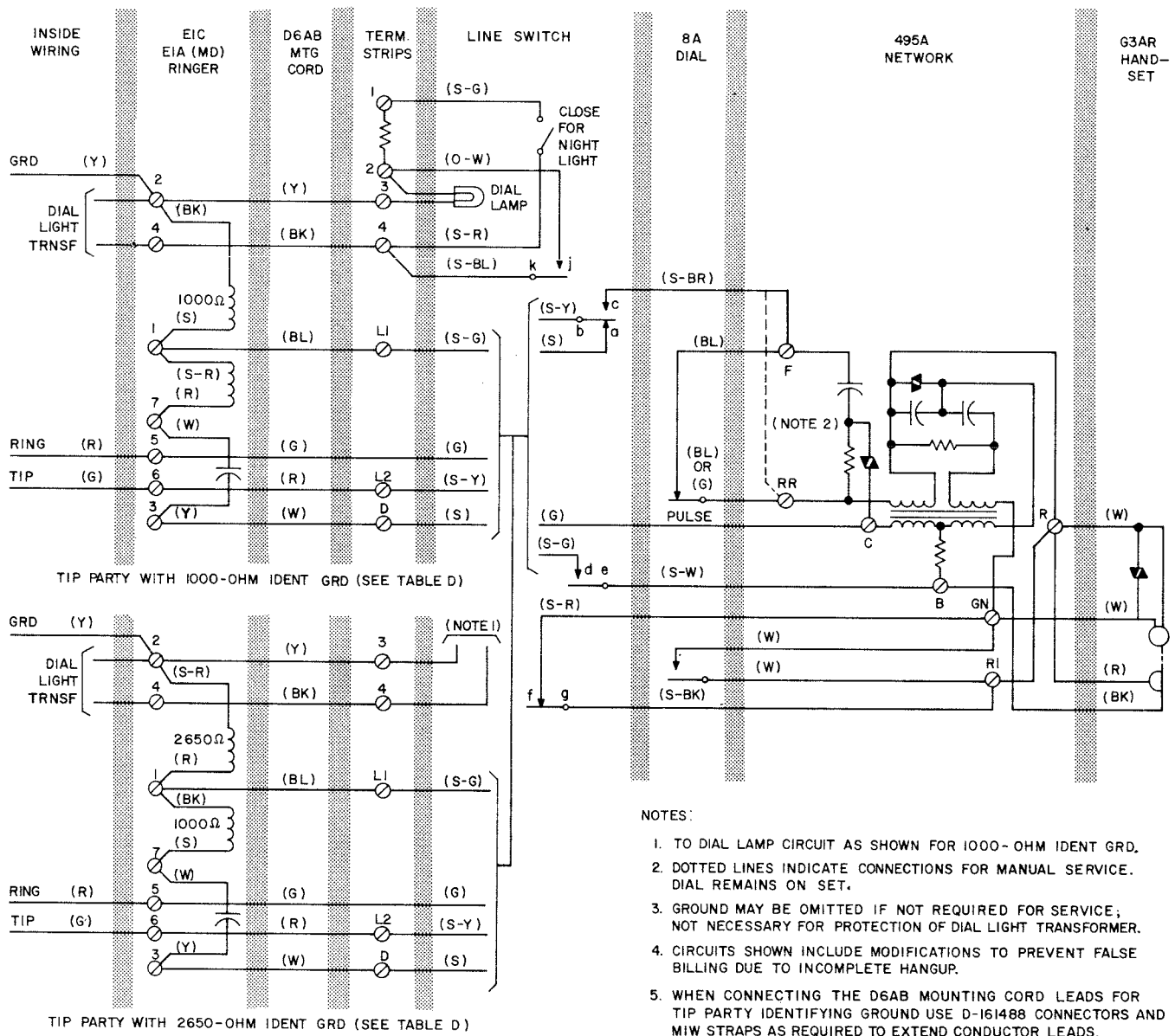


Fig. 4—701B (MD) Telephone Set With E1C or E1A (MD) Ringer Connections For Tip Party Identification Ground

TABLE C

**LINE AND RINGER CONNECTIONS WITH
E1C OR E1A(MD) RINGER**

WIRE OR LEAD		COLOR	INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY
Line or Ringer	Ring	R	5	5	5
	Tip	G	6	6	6
	Grd	Y	2	2	2
Ringer	R	R	7	7	7
	S-R	S-R	1	1	1
	BK	BK	6	2	2
	S	S	1	1	1
Capacitor in Ringer	W	W	7	7	7
	Y	Y	5	3	3
Trnsf Leads	Y	Y	2	2	2
	BK	BK	4	4	4
Mtg Cord at Ringer	R	R	5	5	6
	G	G	6	6	5
	Y	Y	2	2	2
	BL	BL	4	4	4
	W	W	3	3	3
Mtg Cord at Set	BK	BK	4	4	4
	R	R	L2	L2	L2
	G	G	L1	L1	L1
	Y	Y	3	3	3
	BL	BL	4	4	4
Switch Hook Assembly	W	W	D	D	D
	BK	BK	4	4	4

TABLE D

**CONNECTIONS OF TELEPHONE SET AND
E1C AND E1A(MD) RINGER FOR TIP PARTY
IDENTIFICATION GROUND**

WIRE OR LEAD		COLOR	TIP PARTY WITH IDENT GRD	
			1000Ω	2650Ω
Line at Ringer	Ring	R	5	5
	Tip	G	6	6
	Grd	Y	2	2
Ringer	R	R	7	1
	S-R	S-R	1	2
	BK	BK	2	1
	S	S	1	7
Capacitor in Ringer	W	W	7	7
	Y	Y	3	3
Trnsf Leads	Y	Y	2	2
	BK	BK	4	4
Mtg Cord at Ringer	R	R	6	6
	G	G	5	5
	Y	Y	2	2
	BL	BL	1	1
	W	W	3	3
Mtg Cord at Set	BK	BK	4	4
	R	R	L2	L2
	G	G	C*	C*
	Y	Y	3	3
	BL	BL	L1	L1
Switch Hook Assembly	W	W	D	D
	BK	BK	4	4
	S-BR	S-BR	F*	F*
Switch Hook Assembly	S-G	S-G	L1	L1
	S-W	S-W	B*	B*

* Terminal on network.

TABLE E
CONNECTIONS WITH F1A RINGER

WIRE OR LEAD			COLOR	INDIVIDUAL OR BRIDGED	RING PARTY	TIP PARTY	TIP PARTY WITH IDENTIFYING GROUND (NOTE 2)	
							1000Ω	2650Ω
F1A Ringer Term.	Line	Ring	R	6	6	1	1	1
		Tip	G	4	1	6	5	5
		Grd	Y	1	4	4	4	4
	Ringer Coil		R	7	7	7	7	2
			S-R	2	2	2	2	4
			BK	4	4	4	4	2
			S	2	2	2	2	7
	Network Straps	G	BL	4	4	4	4	4
		A	R	7	7	7	7	7
		B	G	6	6	6	6	6
	Dial Light Trans		1	1	4	4	4	4
			2	3	3	3	3	3
	Mtg Cord		R	6	6	6	5	5
			G	4	1	1	1	1
			Y	1	4	4	4	4
			BL	3	3	3	2	2
			W	5	5	5	6	6
			BK	3	3	3	3	3
Set Term.	Mtg Cord		R	L2	L2	L2	L2	L2
			G	L1	L1	L1	C*	C*
			Y	3	3	3	3	3
			BL	4	4	4	L1	L1
			W	D	D	D	D	D
			BK	4	4	4	4	4
	Switch Hook Assembly		S-BR	C*	C*	C*	F*	F*
			S-G	L1	L1	L1	L1	L1
			S-W	F*	F*	F*	B*	B*



The F1A ringer is not intended to be used with 4-party selective or 8-party semiselective service, or any other service where code ringing would not be distinguishable in CHIME position. For schematic drawing and maintenance information on F1A ringer, see section on the F1A ringer.

- Notes:**
1. Ringer wired at factory for individual or bridged, ring, and tip party service.
 2. Connections include modification to prevent false billing due to incomplete hangup.
 3. When connecting the D6AB mounting cord leads for tip party identifying ground use D-161488 connectors and M1W straps as required to extend conductor leads.

* Terminals on network of telephone set.

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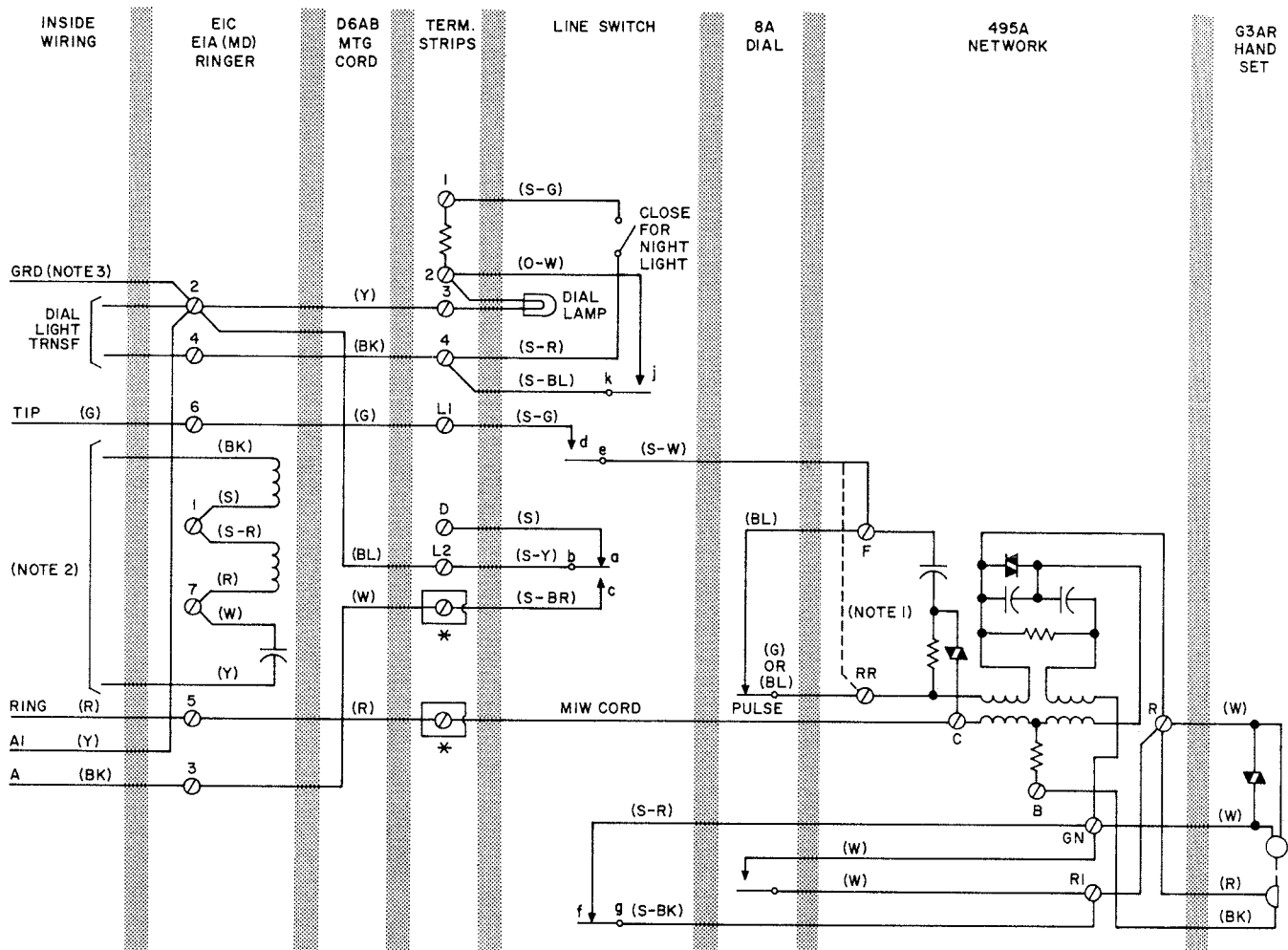
1. DOTTED LINES INDICATE CONNECTIONS FOR MANUAL SERVICE.
DIAL REMAINS ON SET.

2. FOR NEGATIVE STATIONS IN OFFICES WITHOUT ANI, (R) LEAD FROM
426A TUBE MAY BE CONNECTED TO (G) IF RINGER OPERATION IS MARGINAL.

* REMOVE W LEAD FROM D PUNCHING IN SET AND CONNECT TO BK TUBE
LEAD USING D-161488 CONNECTOR.

LOCATION	WIRE OR LEAD		COLOR	NEGATIVE STATIONS		POSITIVE STATIONS	
				1 & 5	2 & 6	3 & 7	4 & 8
Terminals on E1C or E1A (MD) Ringer	Line	Ring	R	5	6	5	6
		Tip	G	6	5	6	5
		Grd	Y	2	2	2	2
	Ringer Coil Leads		R	2	2	5	5
			S-R	1	1	1	1
			S	7	7	7	7
			BK	2	2	5	5
	Capacitor Leads		Y	7	7	7	7
			W	1	1	1	1
	Mtg Cord		R	5	5	5	5
			G	6	6	6	6
			W	1	1	1	1
			Y	2	2	2	2
			BL	4	4	4	4
			BK	4	4	4	4
	2012A or KS-16184 Trans		G	2	2	2	2
		R	4	4	4	4	
Terminals in 701B Telephone Set	Mtg Cord		R	L2	L2	L2	L2
			G	L1	L1	L1	L1
			W	*	*	*	*
			Y	3	3	3	3
			BL	4	4	4	4
			BK	4	4	4	4
	426A Tube Leads		BK	*	*	*	*
			R	L1	L1	L2	L2
			Y	L2	L2	3	3

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NOTES:

1. DOTTED LINES INDICATE CONNECTIONS FOR MANUAL SERVICE. THE DIAL REMAINS ON SET.
 2. FOR INDIVIDUAL LINE RINGER, CONNECT BK TO TIP (6) AND Y CAPACITOR LEAD TO RING (5). FOR COMMON AUDIBLE RINGER, CONNECT TO SIGNAL LEADS FROM EQUIPMENT CABINET. USING D-161488 CONNECTORS.
 3. GROUND MAY BE OMITTED IF NOT REQUIRED FOR SERVICE; NOT NECESSARY FOR PROTECTION OF DIAL LIGHT TRANSFORMER.
- * CONNECT WITH D-161488 CONNECTOR.



To prevent false holding condition when handset is restored, switch contacts de must break before cb breaks.

Fig. 6—701B (MD) Telephone Set Wired For 1A1 and 1A2 Key Telephone System