

## SERVICE

### 634A, B, C, D AND 635A, C, D TELEPHONE SETS

#### 1. GENERAL

**1.01** This section contains connection and maintenance information for 18- and 30-button CALL DIRECTOR® telephone sets used with station line concentrators.

**1.02** This section is reissued to:

- Change title of section from 634- and 635-type telephone sets
- Show that all codes of these telephone sets are now MD
- Add information on T1A ringer, Fig. 1
- Add information for Priority Hold, 2.04 and Fig. 6
- Remove common maintenance information which is now covered in Section 502-600-100
- Revise Table A to specify lamp lead be disconnected

#### 2. CONNECTIONS

**2.01** See SD-69498-01 (key telephone systems 6A, 1A1, and 1A2, station line concentrator) and appropriate sections in Division 518 for connections to station line concentrator using 235- or 236-type key telephone units.

**2.02** A 235-type KTU is associated with each 634-type (MD) telephone set and a 236-type KTU with each 635-type (MD) telephone set. Because of the single common talking and control lead pattern in these sets, a line concentrator KTU must be associated with each telephone set installed and cannot be shared, even on a bridged station basis.

**2.03** A 599B or 657B key may be used in the first key position to provide ringer or line cutoff (Notes 5 and 6 associated with Fig. 3 and 4). When other uses are required, they must be provided for by means of an auxiliary relay externally mounted and controlled by the turn key contacts since there are insufficient mounting cord conductors to permit full switching at the key.

**2.04** Priority Hold can be supplied in these sets by installing a 657L key in the first module and modifying set as shown in Fig. 6. Refer to Section 518-310-405 for connections to the 235- or 236-type KTU and to Section 518-215-125 and SD-69530-01 for connections to the 429A and 430A KTUs.

**2.05** To convert a key position from pickup (locking) to signaling (nonlocking) remove the screw detail P-10E837 entirely from the plunger at the key position to be converted. Make the necessary wiring changes as shown in Table A. When converting a key for signaling, place a P-11E977 insulating detail over the 2 key contacts adjacent to key plunger.

**2.06** A 661A (MD) or 667-type speakerphone transmitter unit (Fig. 5) may be used in the third key position of an 18-button set or fifth key position of 30-button set when internal speakerphone feature is required.

**2.07** The 8R dial replaces the 8C dial. For speakerphone conversion, an 8C dial must be installed and wired per Fig. 1.

#### 3. MAINTENANCE

**3.01** Maintenance of handset, dials, ringers, and modular keys is outlined in sections covering these components located in Division 501.

**3.02** Refer to Section 502-600-100 for common installation and maintenance information for these CALL DIRECTOR telephone sets.

◆ TABLE A — FEATURE CONVERSION OF TELEPHONE SETS ◆

KEY POSITION		SERVICE FEATURE OPTIONS								LINE PICKUP		
		BUZZER SIGNALING		6A ADD-ON		6A PUSHBUTTON		LOCKED-IN LAMP RELEASE				
		CONNECT STORED SPADE-TIPPED LEAD INDICATED TO TERM. SG OF TB VI.	DISCONNECT SPADE-TIPPED LAMP LEAD INDICATED FROM ASSOC TB. INSULATE AND STORE.	CONNECT STORED SPADE-TIPPED LEAD INDICATED TO TERM. PB OF TB VI.	DISCONNECT SPADE-TIPPED LAMP LEAD INDICATED FROM ASSOC TB. INSULATE AND STORE.	CONNECT STORED SPADE-TIPPED LEAD INDICATED TO TERM. A OR 1A OF TB VI.	DISCONNECT SPADE-TIPPED LAMP LEAD INDICATED FROM ASSOC TB. INSULATE AND STORE.	CONNECT STORED SPADE-TIPPED LEAD INDICATED TO TERM. SG OF TB VI.	MOVE SPADE-TIPPED LAMP LEAD IND FROM ASSOC TB TO AVAIL. LAMP GRD.			
634 (MD) TEL SET	635 (MD) TEL SET	1	1	BL	R-BR	BL	R-BR	BL	R-BR	BL	R-BR	Factory equipped and wired
		2	2	O	R-S	O	R-S	O	R-S	O	R-S	
		3	3	G	BK-BL	G	BK-BL	G	BK-BL	G	BK-BL	
		4	4	BR	BK-O	BR	BK-O	BR	BK-O	BR	BK-O	
		5	5	S	BK-G	S	BK-G	S	BK-G	S	BK-G	
6		NOT CONVERTIBLE								Replace 599A or 657A key with 598A or 656A key. Connect G-R to avail lamp grd. Connect W-0 to term. A or A1 of TBV1.		
	6	635—Connect W to term. SG of TB VI. Connect one of two spares (S-BK or BK-S) from Plug 2 to term. 6 of TBI.		635—Connect W to term. PB of TB VI. Connect one of two spares (S-BK or BK-S) from Plug 2 to term. 6 of TBI.		635—Connect W to term. 1A of TB VI. Connect one of two spares (S-BK or BK-S) from Plug 2 to term. 6 of TBI.		635—Connect W to term. SG of TB VI. Connect one of two spares (S-BK or BK-S) from Plug 2 to term. 6 of TBI. Connect G-R to avail. lamp grd.				
7	7	BL	BK-BR	BL	BK-BR	BL	BK-BR	BL	BK-BR	BL	BK-BR	Factory equipped and wired
8	8	O	BK-S	O	BK-S	O	BK-S	O	BK-S	O	BK-S	
9	9	G	Y-BL	G	Y-BL	G	Y-BL	G	Y-BL	G	Y-BL	
10	10	BR	Y-O	BR	Y-O	BR	Y-O	BR	Y-O	BR	Y-O	
11	11	S	Y-G	S	Y-G	S	Y-G	S	Y-G	S	Y-G	
12	12	W	Y-BR	W	Y-BR	W	Y-BR	W	Y-BR	W	Y-BR	
	13	BL	W-BL	BL	W-BL	BL	W-BL	BL	W-BL	BL	W-BL	
	14	O	W-O	O	W-O	O	W-O	O	W-O	O	W-O	
	15	G	W-G	G	W-G	G	W-G	G	W-G	G	W-G	
	16	BR	W-BR	BR	W-BR	BR	W-BR	BR	W-BR	BR	W-BR	
	17	S	W-S	S	W-S	S	W-S	S	W-S	S	W-S	
	18	W	R-BL	W	R-BL	W	R-BL	W	R-BL	W	R-BL	
	19	BL	R-O	BL	R-O	BL	R-O	BL	R-O	BL	R-O	
	20	O	R-G	O	R-G	O	R-G	O	R-G	O	R-G	
	21	G	R-BR	G	R-BR	G	R-BR	G	R-BR	G	R-BR	
	22	BR	R-S	BR	R-S	BR	R-S	BR	R-S	BR	R-S	
	23	S	BK-BL	S	BK-BL	S	BK-BL	S	BK-BL	S	BK-BL	
	24	W	BK-O	W	BK-O	W	BK-O	W	BK-O	W	BK-O	
13	25	BL	Y-S	BL	Y-S	BL	Y-S	BL	Y-S	BL	Y-S	
14	26	O	V-BL	O	V-BL	O	V-BL	O	V-BL	O	V-BL	
15	27	G	V-O	G	V-O	G	V-O	G	V-O	G	V-O	
16	28	BR	V-G	BR	V-G	BR	V-G	BR	V-G	BR	V-G	
17	29	S	V-BR	S	V-BR	S	V-BR	S	V-BR	S	V-BR	
	30	W	V-S	W	V-S	W	V-S	W	V-S	W	V-S	
18		W	V-S	W	V-S	W	V-S	W	V-S	W	V-S	Connect R-BL to avail. lamp grd.

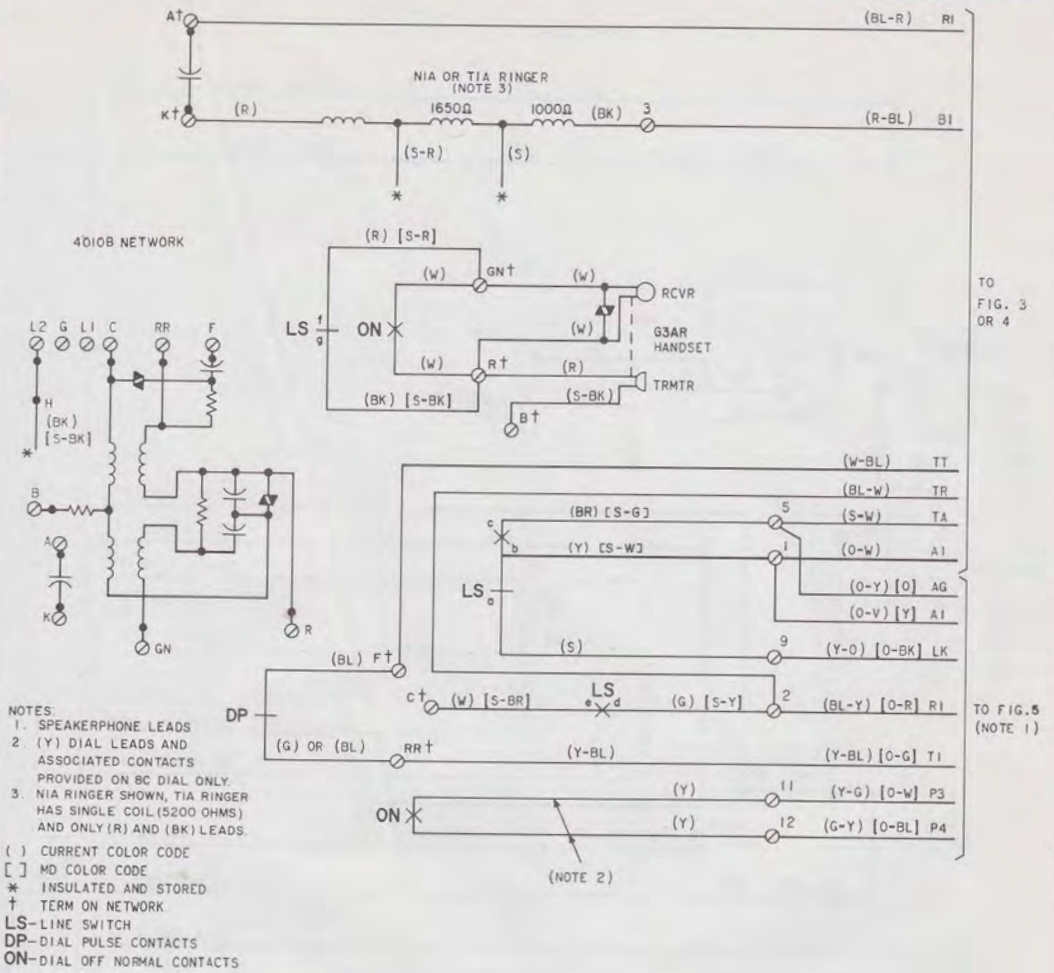
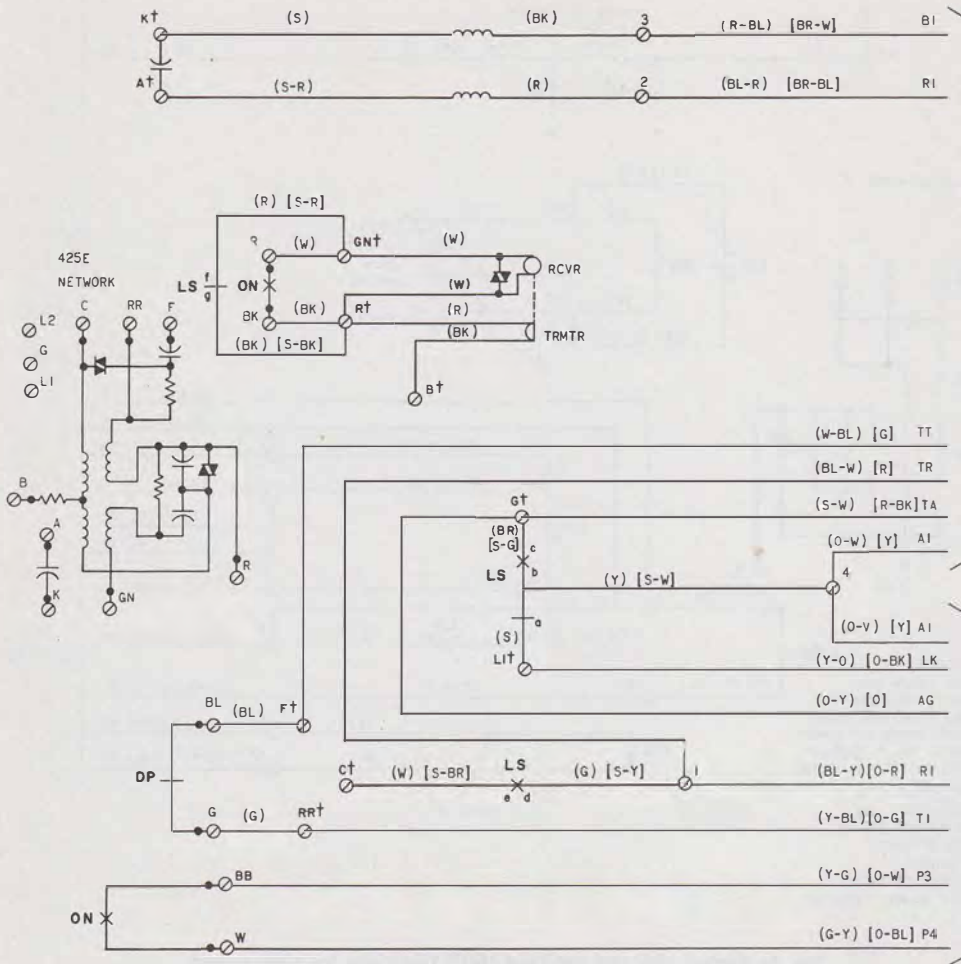


Fig. 1—Current 634- and 635-Type (MD) Telephone Set, Connections

DI-TYPE RINGER



TO FIG. 3 OR 4

TO FIG. 6 (SEE NOTE)

NOTE: SPEAKERPHONE LEADS  
 LEGEND  
 LS - LINE SWITCH  
 DP - DIAL PULSE CONTACTS  
 ON - DIAL OFF NORMAL CONTACTS  
 ( ) CURRENT COLOR CODE  
 [ ] MD COLOR CODE  
 † TERM ON NET ORK

Fig. 2—Early 634- and 635-Type (MD) Telephone Set, Connections

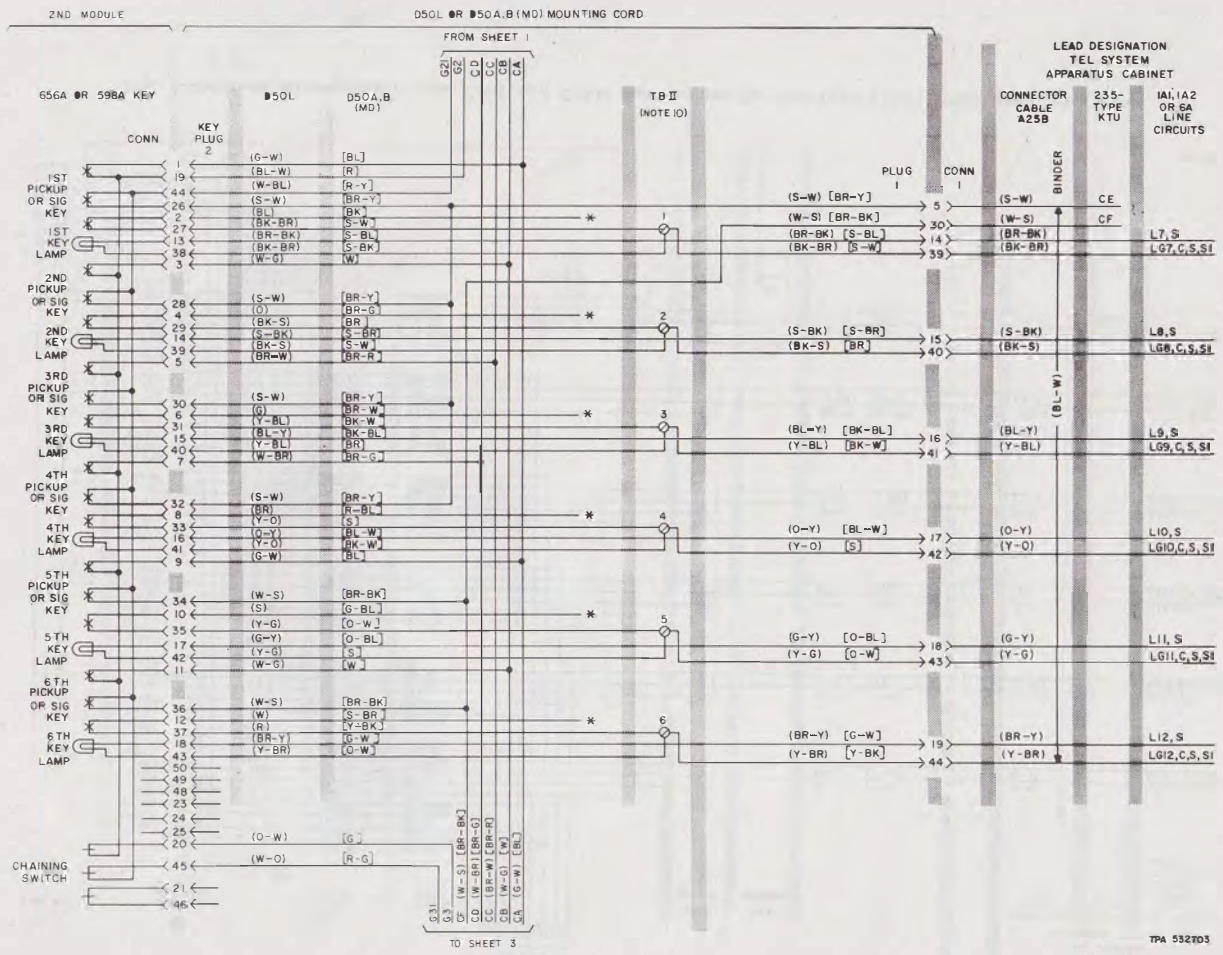


**Notes Associated With Fig. 3 and 4**

1. WHEN 657A, 599A OR 657B, 599B KEYS ARE USED IN FIRST MODULE, HOLD KEY LAMP (6TH LAMP) MAY BE USED FOR A MISCELLANEOUS VISUAL SIGNAL. CONNECT INDICATED LEAD TO AN AVAILABLE LAMP GROUND. WHEN 656A OR 598A KEY IS USED IN FIRST MODULE, INDICATED LEAD IS CONNECTED TO GROUND ON TERMINAL 5 OF TB1.
  2. WHEN 656A OR 598A KEY IS USED IN FIRST MODULE, INDICATED LEAD IS CONNECTED TO TERMINAL A (634 SET) AND TERMINAL 1A (635 SET) OF TB6.
  3. WHEN 656A OR 598A KEY IS USED IN THIRD MODULE OF 634 SET, INDICATED LEAD IS CONNECTED TO TERMINAL 5 OF TB3.
  4. TO CONVERT A PICKUP KEY FROM LOCKING TO NONLOCKING THE CONVERSIONS SHOWN IN TABLE A MUST BE FOLLOWED. A P-11E977 INSULATING DETAIL MUST BE PLACED OVER THE TWO KEY CONTACTS ADJACENT TO THE KEY PLUNGER. REMOVE THE SCREW DETAIL P-10E837 ENTIRELY FROM THE PLUNGER AT THE KEY POSITION TO BE CONVERTED.
  5. CUTOFF OF THE INTERNAL RINGER CAN BE PROVIDED USING THE 657B OR 599B KEY IN FIRST MODULE. TRANSFER BI (R-BL) [BR-W] LEAD FROM TERMINAL 3 OF TERMINAL BOARD (TEL. SET) TO TERMINAL 6 OF TB1. TRANSFER (R) [S-BK] LEAD FROM TERMINAL 5 OF TB1 TO TERMINAL 3 VACATED BI LEAD.
  6. WHEN 657B OR 599B KEY IS USED IN FIRST MODULE TO PROVIDE CUTOFF, SWITCHING, OR TRANSFER FEATURES, TRANSFER (Y-BR) [Y-BK] LEAD FROM TERMINAL 6 OF TB1 TO TERMINAL SG OF TBVI. THESE SERVICE FEATURES ARE PROVIDED BY AN AUXILIARY RELAY (229B KTU OR EQUIVALENT) SEPARATELY MOUNTED AND CONTROLLED BY THE TURN KEY CONTACTS THROUGH THE LG5, C, S, SI LEAD.
  7. CONTACTS OF TURN KEY CONNECTED TO PINS 9 AND 11 MUST BE ISOLATED FROM EACH OTHER WITH INSULATING DETAIL P-13E443 (FURNISHED WITH 657B OR 599B KEY) TO PREVENT INTERFERENCE WITH WORKING CIRCUITS.
  8. THE TURN KEY LAMP CAN BE ILLUMINATED IN ACCORDANCE WITH OR INDEPENDENT OF TURN KEY OPERATION.
  9. WHEN THE 617A KEY IS REQUIRED AS A DUAL PURPOSE KEY, THE BRASS STRAP BETWEEN THE SI AND SG TERMINALS OF THE KEY MAY BE REMOVED. USE MIW CORD OR EQUIVALENT TO CONNECT SI TERMINAL OF 617A TO A DISSIMILAR GROUND OR A NONGROUNDED CIRCUIT.
  10. CORDS MANUFACTURED BEFORE APRIL 1968 HAVE SOME LEADS SOLDERED TO THE TB.
  11. WHEN 661- OR 667-TYPE TRANSMITTER IS USED IN THIRD MODULE OF 634 SET, REMOVE INDICATED LEAD AND INSULATE.
  12. WHEN SPEAKERPHONE CONTROL UNIT IS LOCATED NEAR TELEPHONE SET, A 148A (MD) OR 148B ADAPTER MAY BE INSERTED BETWEEN CONNECTOR I AND PLUG I OF THE 634- OR 635-TYPE SET.
- \* LEADS ARE SPADE-TIPPED, INSULATED, AND STORED.  
 † NOT REQUIRED FOR 3-TYPE SPEAKERPHONE SYSTEM.  
 ‡ IF A 148-TYPE ADAPTER IS USED, INSULATE AND STORE THESE LEADS AT TERMINAL.  
 ( ) CURRENT COLOR CODE.  
 [ ] MD COLOR CODE.

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**Fig. 3—Module Arrangements and Cord and Cable Connections for 634-Type (MD) Telephone Sets (Sheet 2 of 3)**







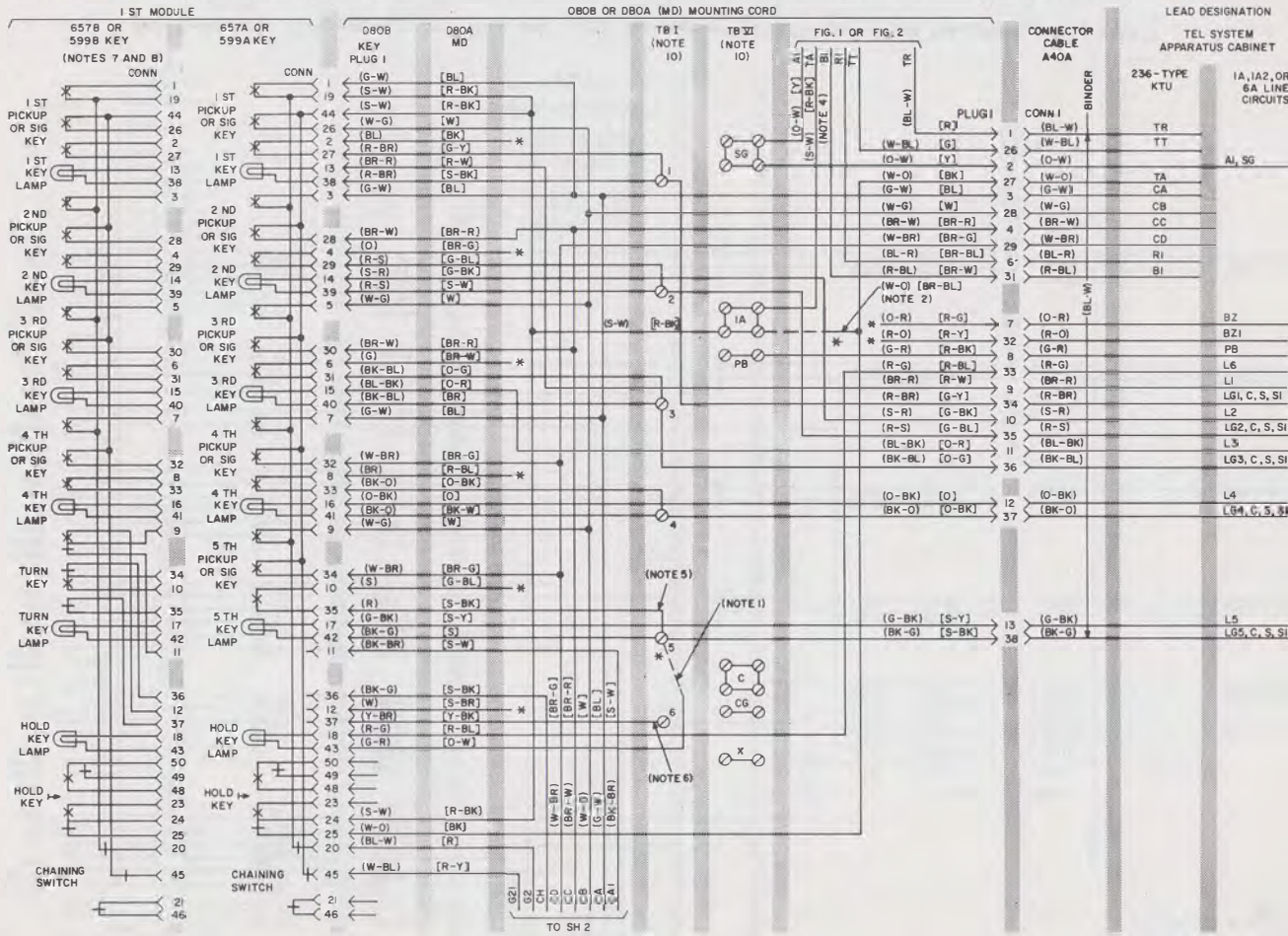


Fig. 4—Module Arrangements and Cord and Cable Connections for 635-Type (MD) Telephone Sets (Sheet 1 of 5)

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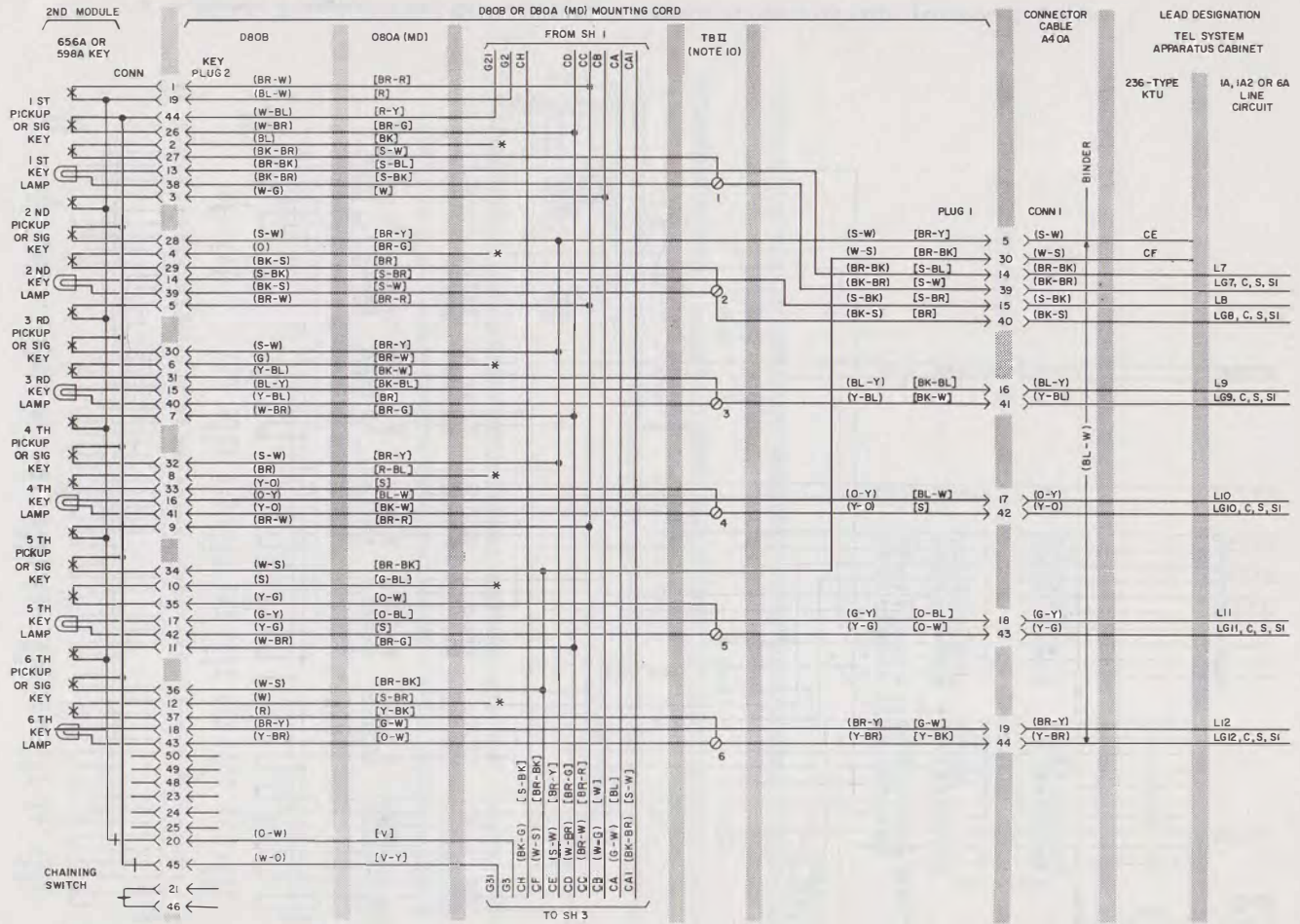


Fig. 4—Module Arrangements and Cord and Cable Connections for 635-Type (MD) Telephone Sets (Sheet 2 of 5)



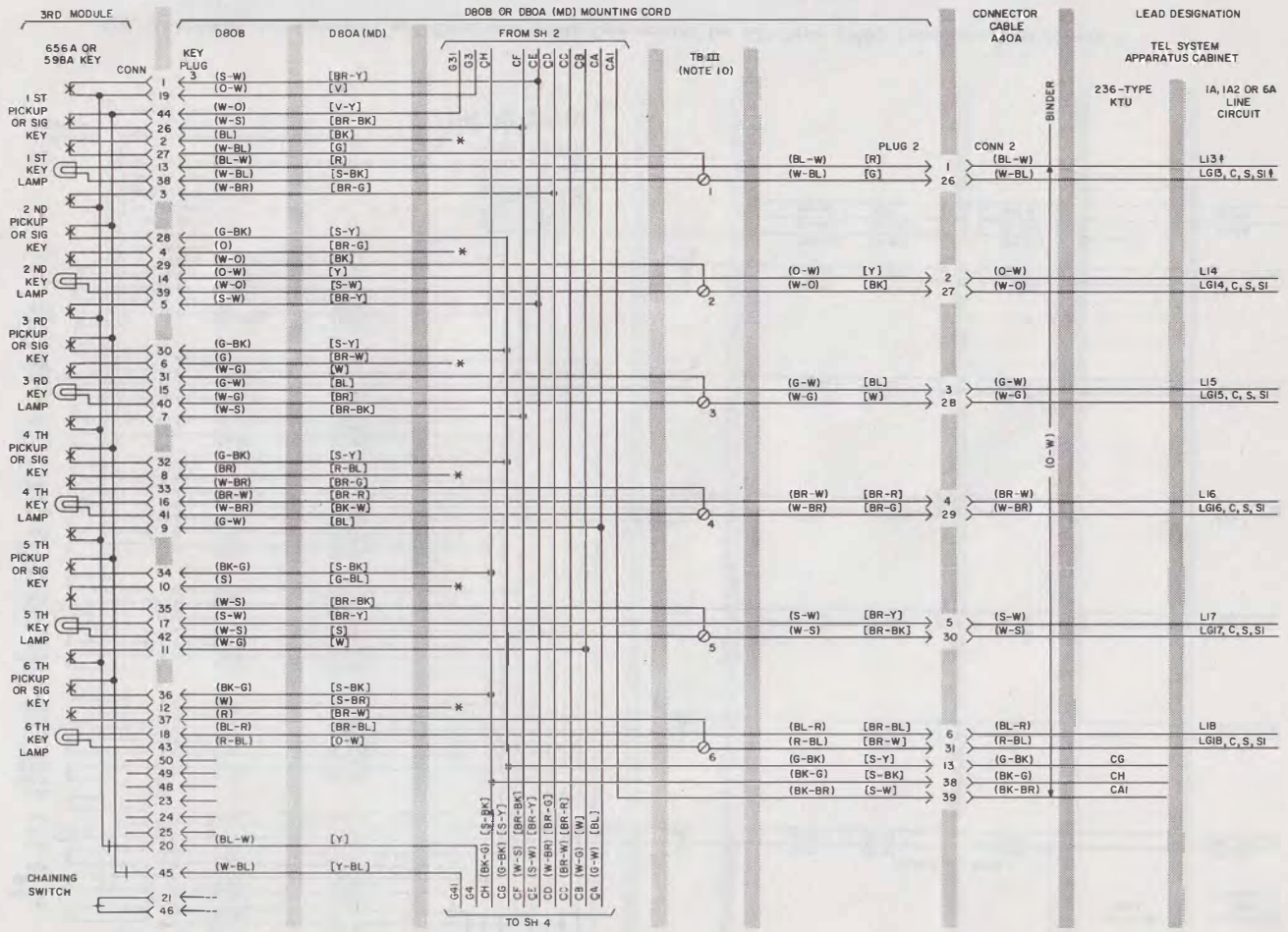


Fig. 4—Module Arrangements and Cord and Cable Connections for 635-Type (MD) Telephone Sets (Sheet 3 of 5)





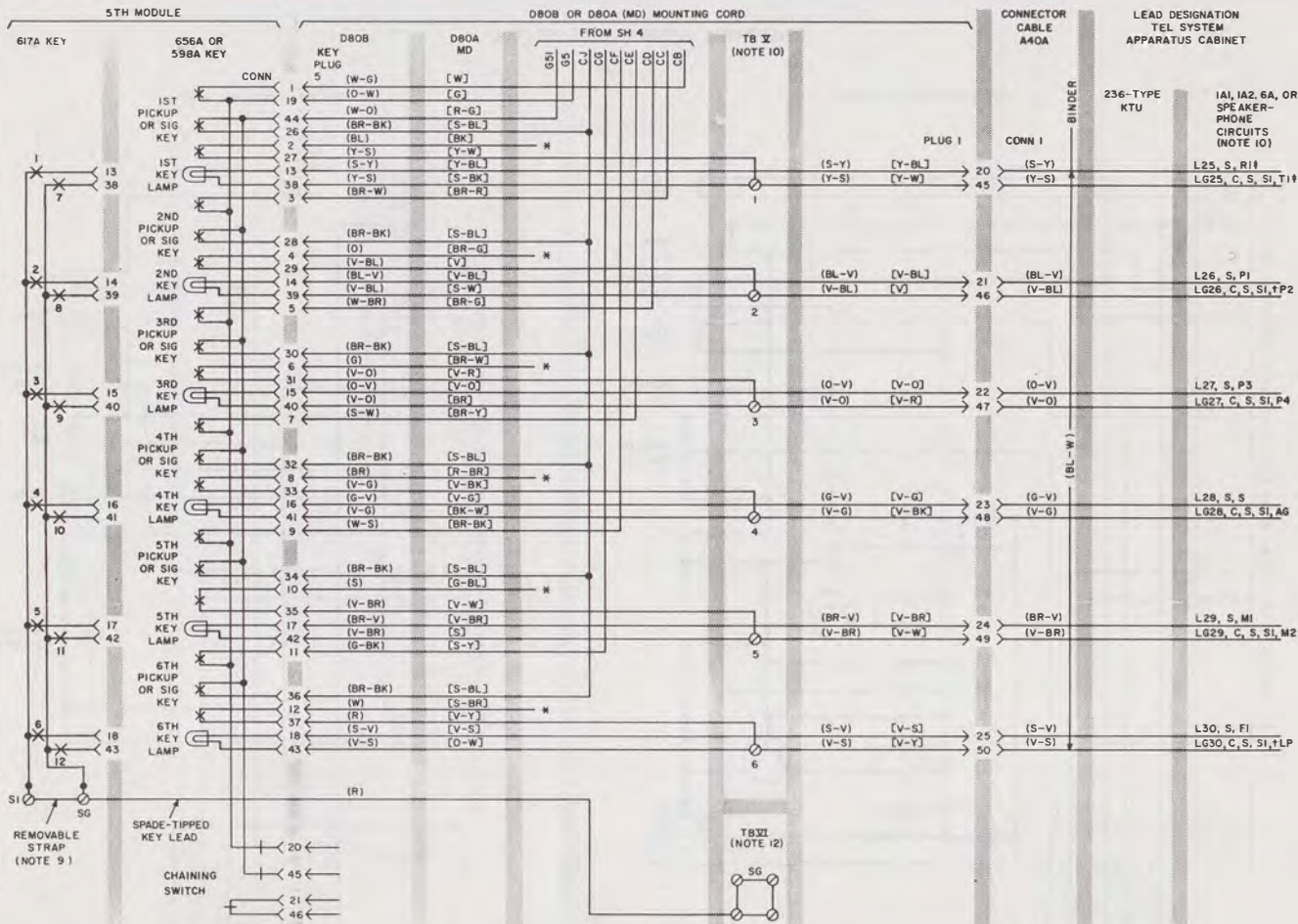
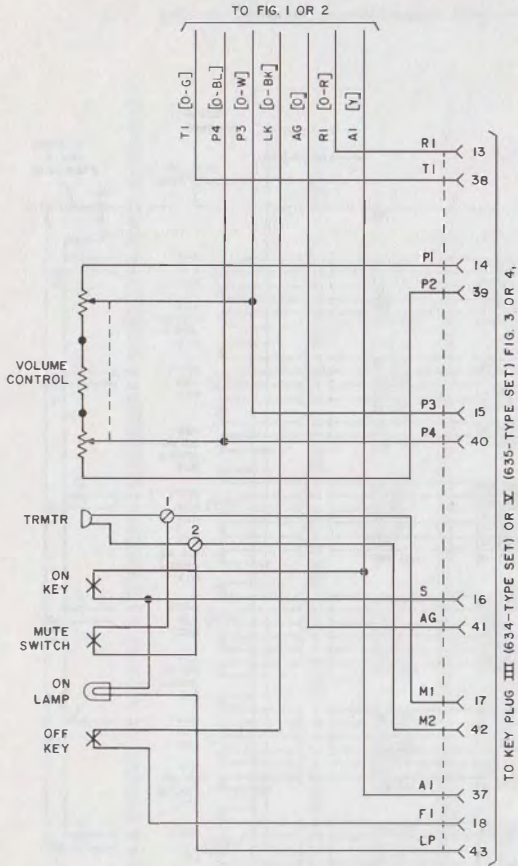
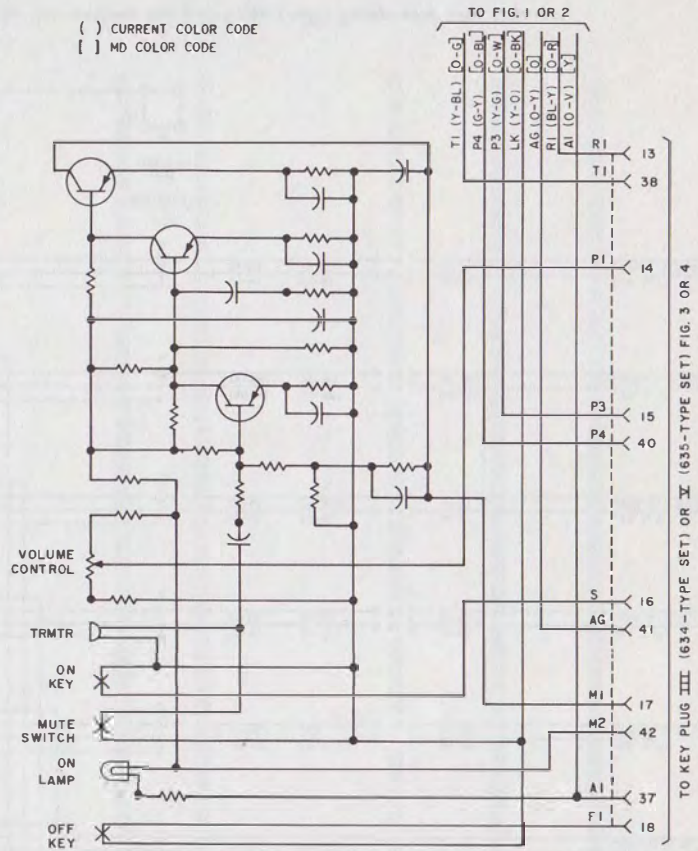


Fig. 4—Module Arrangements and Cord and Cable Connections for 635-Type (MD) Telephone Sets (Sheet 5 of 5)





661A TRANSMITTER (MD)

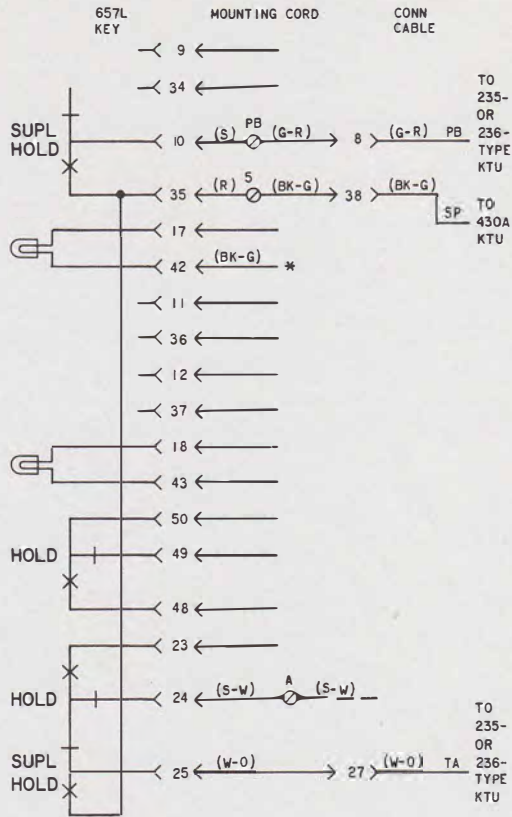


667-TYPE TRANSMITTER

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Fig. 5—Speakerphone Transmitters





LEAD		FROM	TO
KEY	(S)	*	PB
STRAPS	(BK-G)	5	*

\* - INSULATED AND STORED

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Fig. 6 - Priority Hold, Using 657L Key