

SERVICE

632-TYPE TELEPHONE SETS

1. GENERAL

1.01 This section provides connection information for the 632-type telephone sets. This information was formerly found in Section 502-630-402 which will be canceled.

2. CONNECTIONS

2.01 The 632-type telephone set is restricted to use with 1A1, 1A2, or 6A KTS line circuits. The D94B or D94A (MD) mounting cord does not supply sufficient conductors for use with 1A KTS.

2.02 A 656A or 598A key cannot be used in the first module because of a lack of mounting cord leads.

2.03 The 657B or 599B key (turnbutton) may be used in the first module for cutoff control. Use a 227-type or 17A KTU, to provide additional contacts for multiple switching purposes (Table A).

2.04 The 12-button 617A key may be used for pushbutton signaling purposes in either the second or third module. The key is wired to provide a common ground but can be rewired to supply two independent grounds when dissimilar voltage or current connections are required.

2.05 Supplementary hold option can be provided in these sets by substitution of a 657H or 599H key in the first key modular (left-hand) position. Refer to Division 518 and SD-69530-01 for connections. The **I hold** option cannot be used with these sets due to insufficient mounting cord conductors.

2.06 The 656A and 657-type keys are electrically the same and mechanically interchangeable with the 598A and 599-type keys, respectively.

2.07 Speakerphone connections for the 632-type telephone sets are found in Division 512.

2.08 Current production sets are equipped with an 8R dial. For speakerphone conversion, an 8C dial must be installed and wired per Fig. 1A.

2.09 The 667B transmitter, in certain CALL DIRECTOR® telephone set installations is subject to noise pickup when a line button is released. This noise is transmitted through the control unit to the line. If this condition is encountered, replace transmitter with one modified by the addition of a D-180196 Kit of Parts. Order as "Transmitter, 667B, Modified per D-180196."



Some spade-tipped conductors or mounting cord leads are insulated with tubing which should be cut off with electrician scissors or diagonal pliers. Other conductors are insulated with stiff plastic pockets. Pinch open the mouth to release the spade tips.

2.10 Supports are provided in the set for mounting a 7-type buzzer. A bracket for mounting a KS-8109L2 buzzer is provided and is screwed to the supports for the 7-type buzzer. If a metal mounting bracket is supplied, the KS-8109L2 buzzer shall be mounted using two nylon screws and two fiber washers to insulate the buzzer from bracket. When a molded bracket is supplied, the insulating screws and washers are not required. A KS-20419L1 (10 volt AC only) buzzer may be substituted and mounted on the buzzer bracket or mounted in any convenient location in the set. A screw must be provided for mounting.



It is recommended that the P-44E410 bracket be replaced with a P-44E409 bracket assembly, in sets produced between June 1964 and 1966.

TABLE A
657B OR 599B KEY CONNECTIONS

657B OR 599B KEY CUTOFF FEATURES	5TH PICKUP KEY	SPADE TIPPED LEAD	
	(BK-G) [G-Y]	[G-BL]	(BK-BR)
Cutoff station buzzer or bell	To winding of aux relay (Note 2)	Term. 4 on tel set TB	Term. 1 on tel set TB

() Current color code.

[] MD color code.

Notes:

1. Connect buzzer or bell leads from KTS and leads from buzzer or bell in set to contacts of auxiliary relay.
2. Connect battery to other side of auxiliary relay.

TABLE B
PICKUP-SIGNAL KEY CONVERSION

NO. OF PICKUP KEYS	NO. OF SIGNAL KEYS	KEY LEADS AND TERMINALS ON MT. CORD					
		(W-O) [BK]	(W-S) [BR-G]	(R-G) [BR-W]	(BK-BL) [R-BL]	(BK-BR) [G-BL]	(Y-O) [S-BR] NOTE 4
6		A	A	A	A	A	A
5	1	A	A	A	A	A	S
4	2	A	A	A	A	S	S
3	3	A	A	A	S	S	S
2	4	A	A	S	S	S	S
1	5	A	S	S	S	S	S
	6	S	S	S	S	S	S

() Current color code.

[] MD color code.

Notes:

1. Table B provides conversion for one 6-button unit. Convert buttons of right-hand unit first (Module 3).
2. All key positions are factory assembled as pickup positions. To convert a key position from pickup to signaling, remove the P-10E837 screw detail from the plunger at the key position to be converted.
3. All S terminals used for signaling key connections shall be strapped to the SG terminal of TB1.
4. Lead is on 2nd or 3rd module only.
5. The keys and their associated cords are adaptable for individual signaling but not for common signaling.

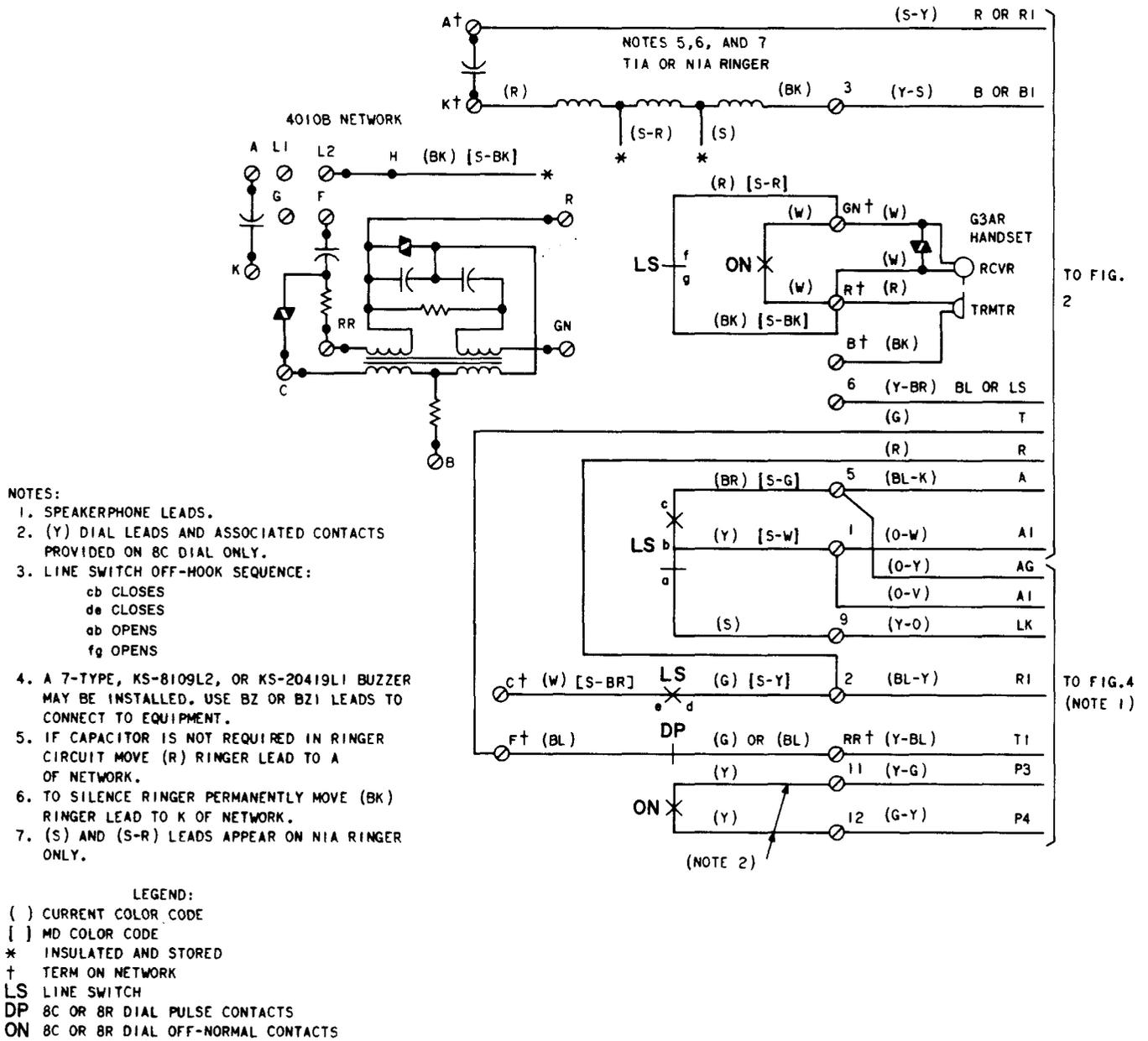
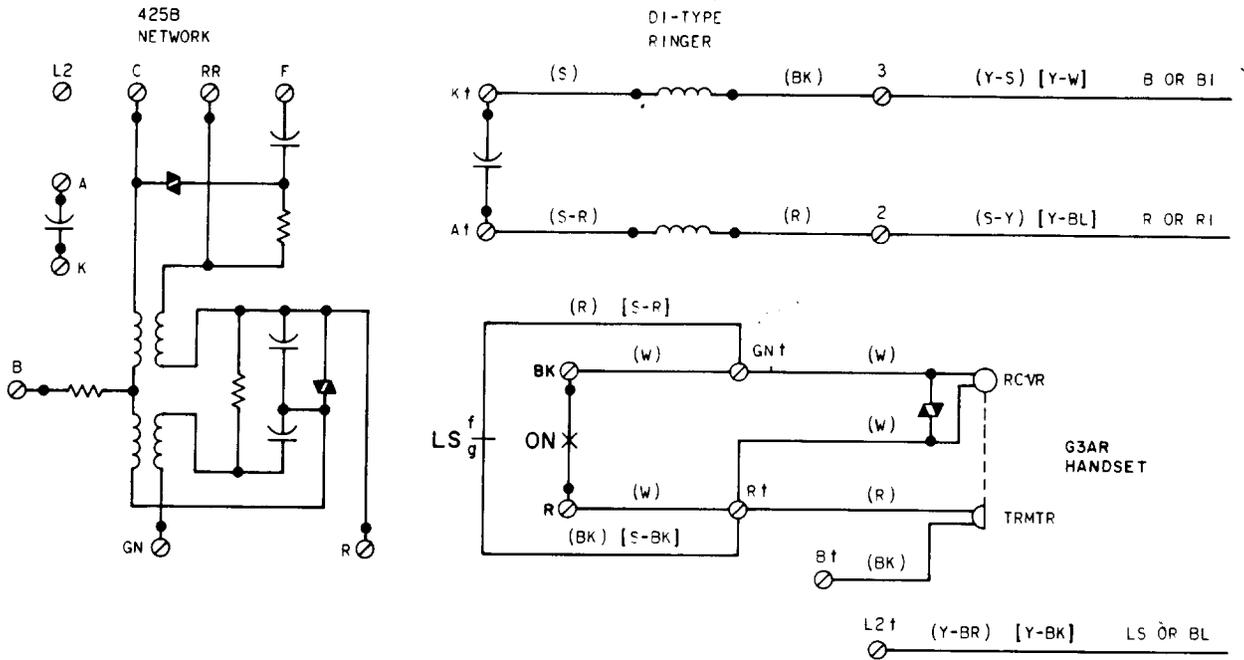


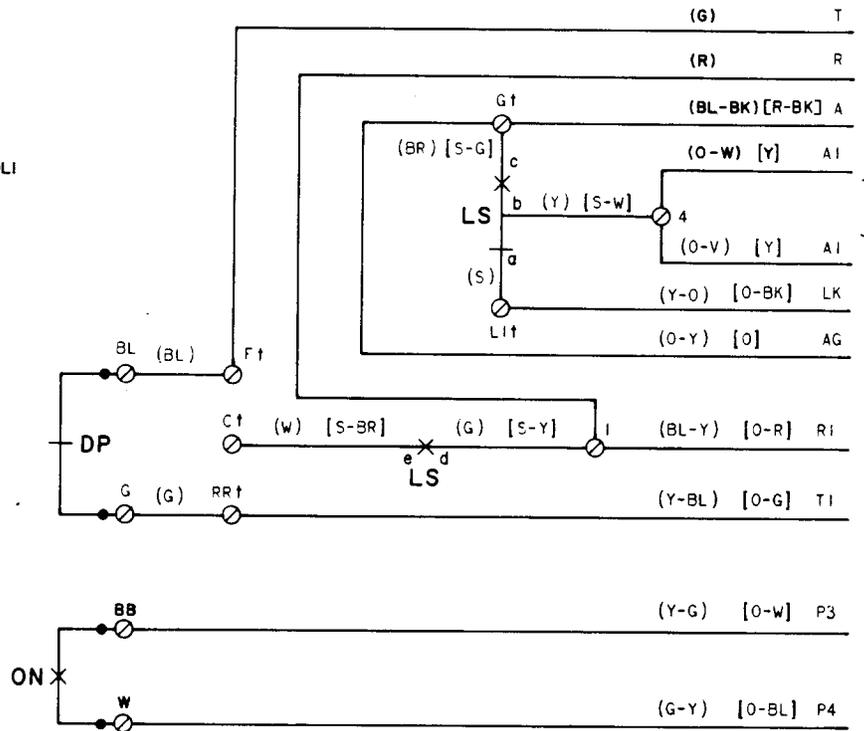
Fig. 1A—Telephone Set Circuit, 8C or 8R Dial



TO FIG. 2 OR 3

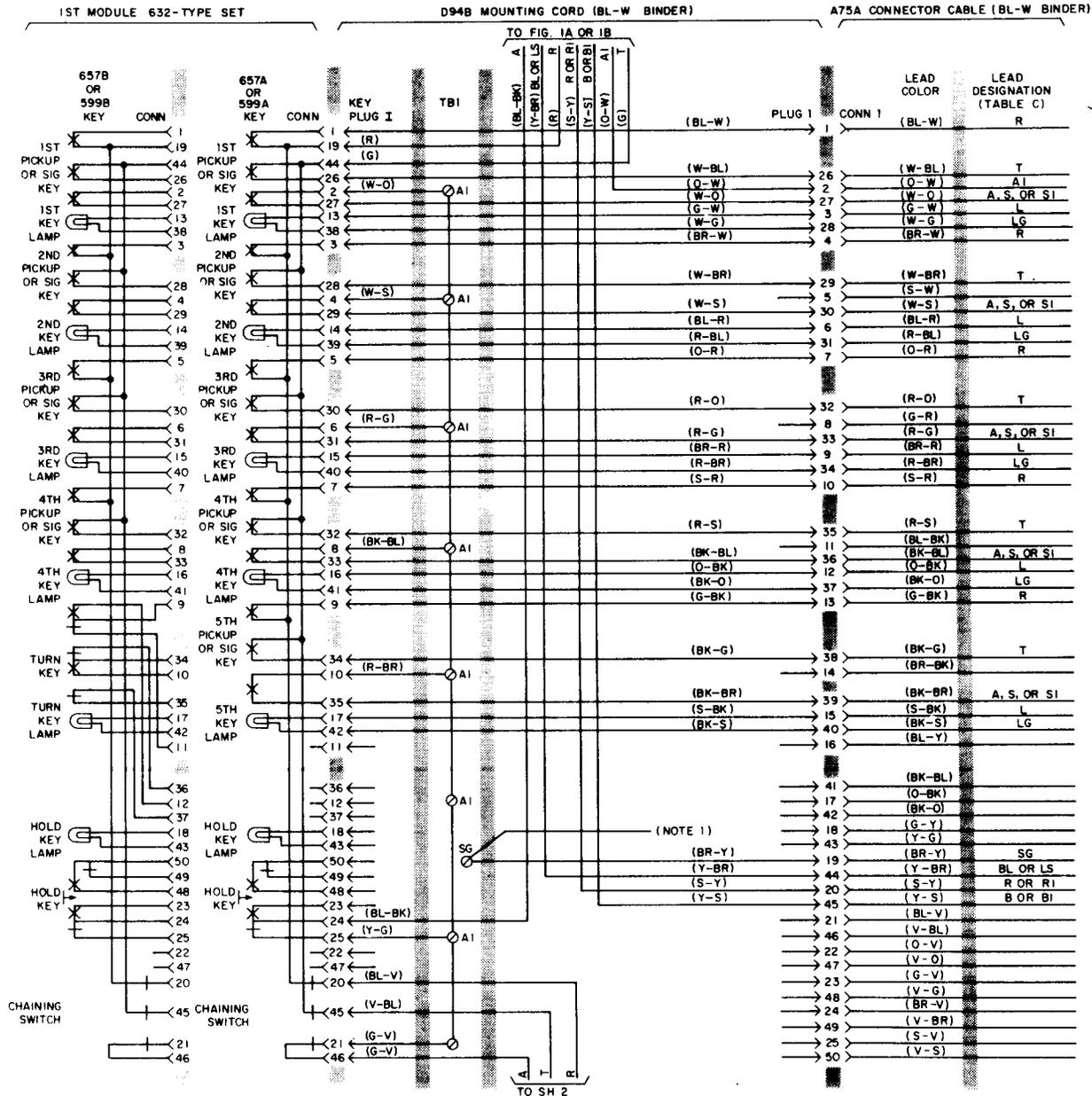
- NOTES:
1. SPEAKERPHONE LEADS
 2. LINE SWITCH OFF-HOOK SEQUENCE:
 cb - CLOSES
 de - CLOSES
 ab - OPENS
 fg - OPENS
 3. A 7-TYPE, KS-8109L2, OR KS-20419L1 BUZZER MAY BE INSTALLED. USE BZ AND BZ1 LEADS TO CONNECT TO EQUIPMENT.
 4. IF CAPACITOR IS NOT REQUIRED IN RINGER CIRCUIT MOVE (S) RINGER LEAD TO A OF NETWORK.
 5. TO SILENCE RINGER PERMANENTLY MOVE (BK) RINGER LEAD TO K AND (R) RINGER LEAD TO A OF NETWORK.

- LEGEND:
- LS - LINE SWITCH
 - DP - DIAL PULSE CONTACTS
 - ON - DIAL OFF NORMAL CONTACTS
 - () CURRENT COLOR CODE
 - [] MD COLOR CODE
 - † TERM ON NETWORK



TO FIG. 4 (NOTE 1)

Fig. 1B—Telephone Set Circuit, 6L-41 Dial

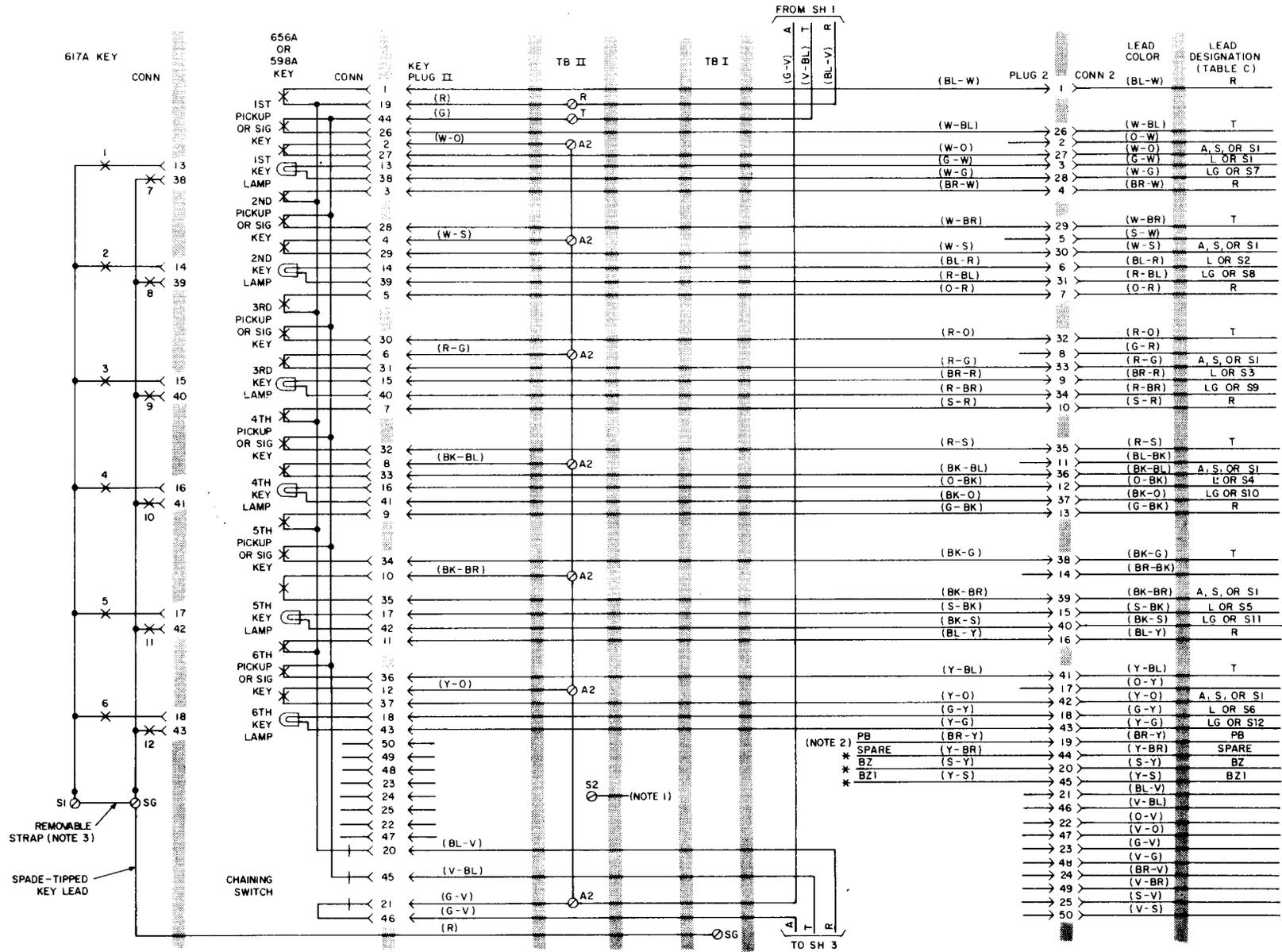


TO KEY TELEPHONE SYSTEMS 1A1, 1A2, OR 6A

ISS 1, SECTION 502-610-408

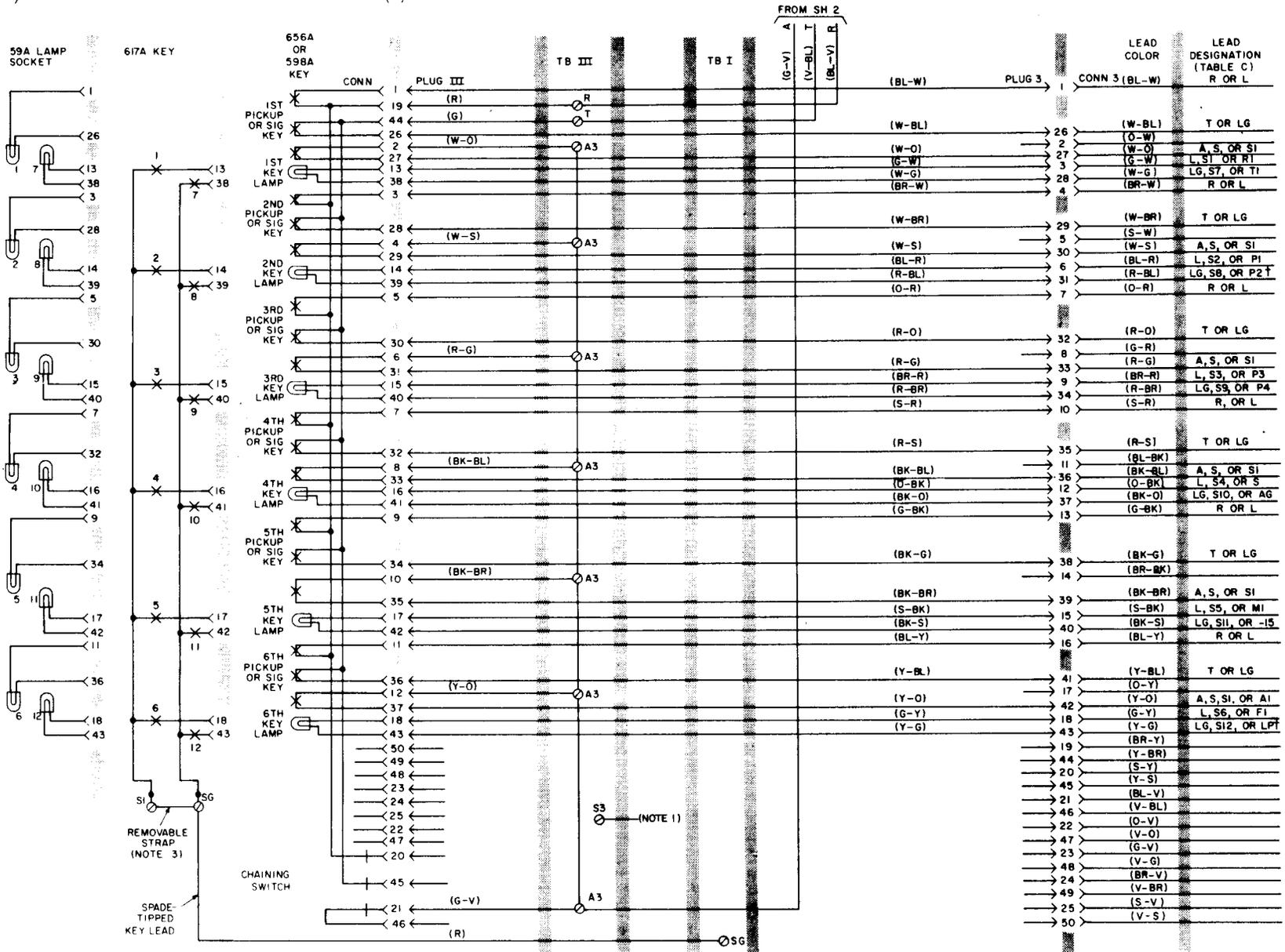
- NOTES:
1. WHEN PICKUP KEYS ARE CONNECTED IN THE 2ND OR 3RD MODULE FOR SIGNALING PURPOSES, THE SPADE-TIPPED LEADS ASSOCIATED WITH THE PICKUP KEYS SHALL BE CONNECTED TO THE S TERMINAL OF THE MODULE INVOLVED. THESE S TERMINALS SHALL THEN BE STRAPPED TO THE SG TERMINAL OF TBI. SEE TABLE B.
 2. THE PB LEAD IS FOR ADD-ON CONFERENCE CONTROL OF THE 6A KTS. TERMINATE ON SPARE TERMINAL OR USE D-161488 CONNECTOR.
 3. WHEN THE 617A KEY IS REQUIRED AS A DUAL-PURPOSE KEY, THE BRASS STRAP BETWEEN THE S1 AND SG TERMINALS OF THE KEY MAY BE REMOVED. USE M/W CORD OR EQUIVALENT TO CONNECT S1 TERMINAL OF 617A KEY TO A DISSIMILAR GROUND OR A NONGROUND CIRCUIT.
- * INSULATED AND STORED
 † NOT REQUIRED FOR 3-TYPE SPEAKERPHONE.

Fig. 2—Module Arrangements, Cord and Cable Connections For Sets Equipped With D94B Mounting Cords (Sheet 1 of 3)



TO KEY TELEPHONE SYSTEMS 1A1, 1A2, OR 6A

Fig. 2—Module Arrangements, Cord and Cable Connections For Sets Equipped With D94B Mounting Cords (Sheet 2 of 3)



TO KEY TELEPHONE SYSTEMS (A1, IA2, 6A OR 3-TYPE SPEAKERPHONE SYSTEM)

Fig. 2—Module Arrangements, Cord and Cable Connections For Sets Equipped With D94B Mounting Cords (Sheet 3 of 3)

NOTES:

1. WHEN PICKUP KEYS ARE CONNECTED IN THE 2ND OR 3RD MODULE FOR SIGNALING PURPOSES, THE SPADE-TIPPED LEADS ASSOCIATED WITH THE PICKUP KEYS SHALL BE CONNECTED TO THE S TERMINAL OF THE MODULE INVOLVED. THESE S TERMINALS SHALL THEN BE STRAPPED TO THE SG TERMINAL OF TBI. SEE TABLE B.
 2. THE PB LEAD IS FOR ADD-ON CONFERENCE CONTROL OF THE 6A KTS. TERMINATE ON SPARE TERMINAL OR USE D-161488 CONNECTOR.
 3. WHEN THE 617A KEY IS REQUIRED AS A DUAL-PURPOSE KEY, THE BRASS STRAP BETWEEN THE S1 AND SG TERMINALS OF THE KEY MAY BE REMOVED. USE MIW CORD OR EQUIVALENT TO CONNECT S1 TERMINAL OF 617A KEY TO A DISSIMILAR GROUND OR A NONGROUND CIRCUIT.
- * INSULATED AND STORED
- 1 NOT REQUIRED FOR 3-TYPE SPEAKERPHONE

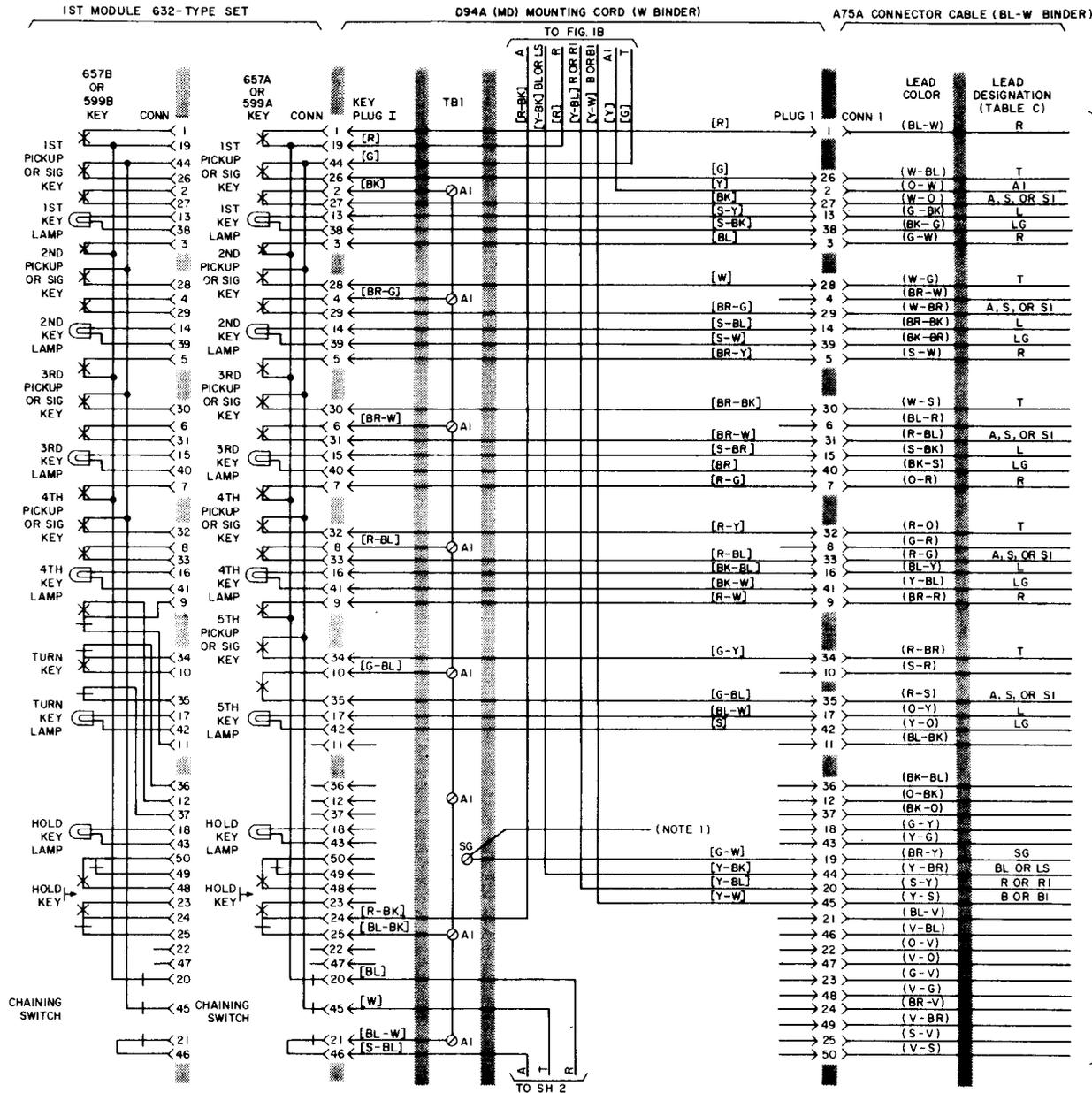


Fig. 3—Module Arrangements, Cord and Cable Connections For Sets Equipped With D94A (MD) Mounting Cords (Sheet 1 of 3)

TO KEY TELEPHONE SYSTEMS 1A1, 1A2, OR 6A

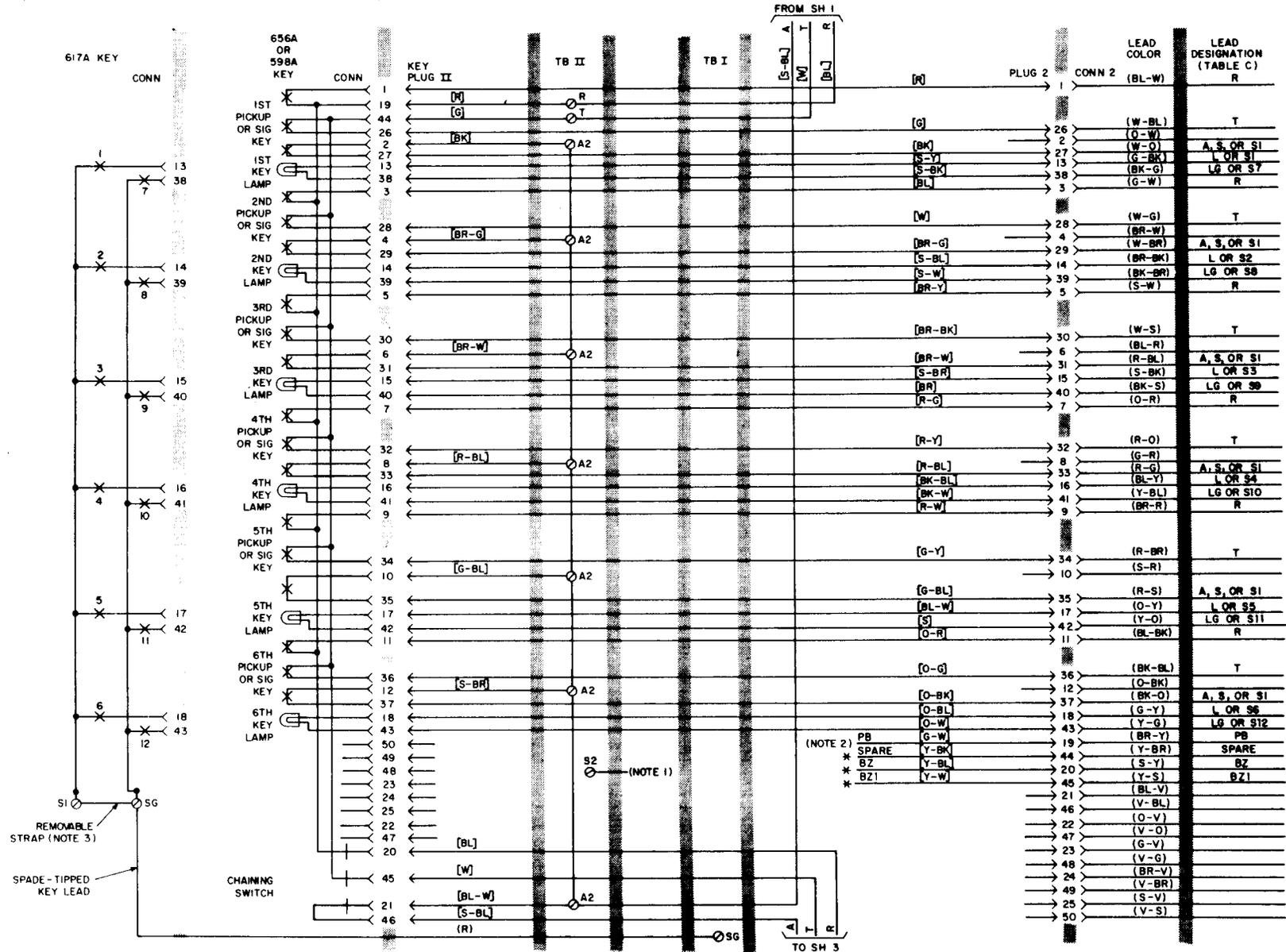
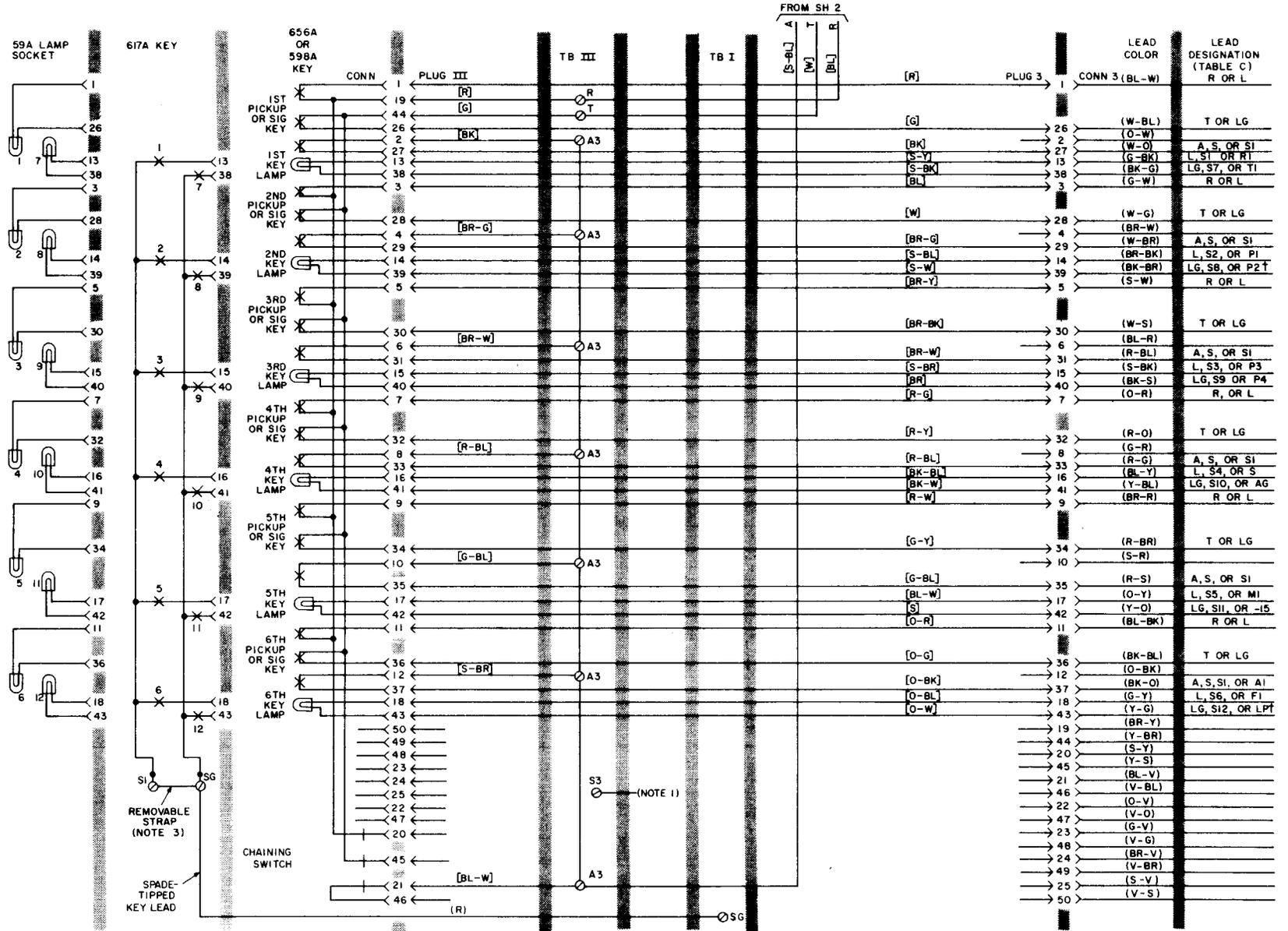


Fig. 3—Module Arrangements, Cord and Cable Connections For Sets Equipped With D94A (MD) Mounting Cords (Sheet 2 of 3)



TO KEY TELEPHONE SYSTEMS 1A1, 1A2, 6A OR 3-TYPE SPEAKERPHONE SYSTEM

Fig. 3—Module Arrangements, Cord and Cable Connections For Set Equipped With D94A (MD) Mounting Cords (Sheet 3 of 3)

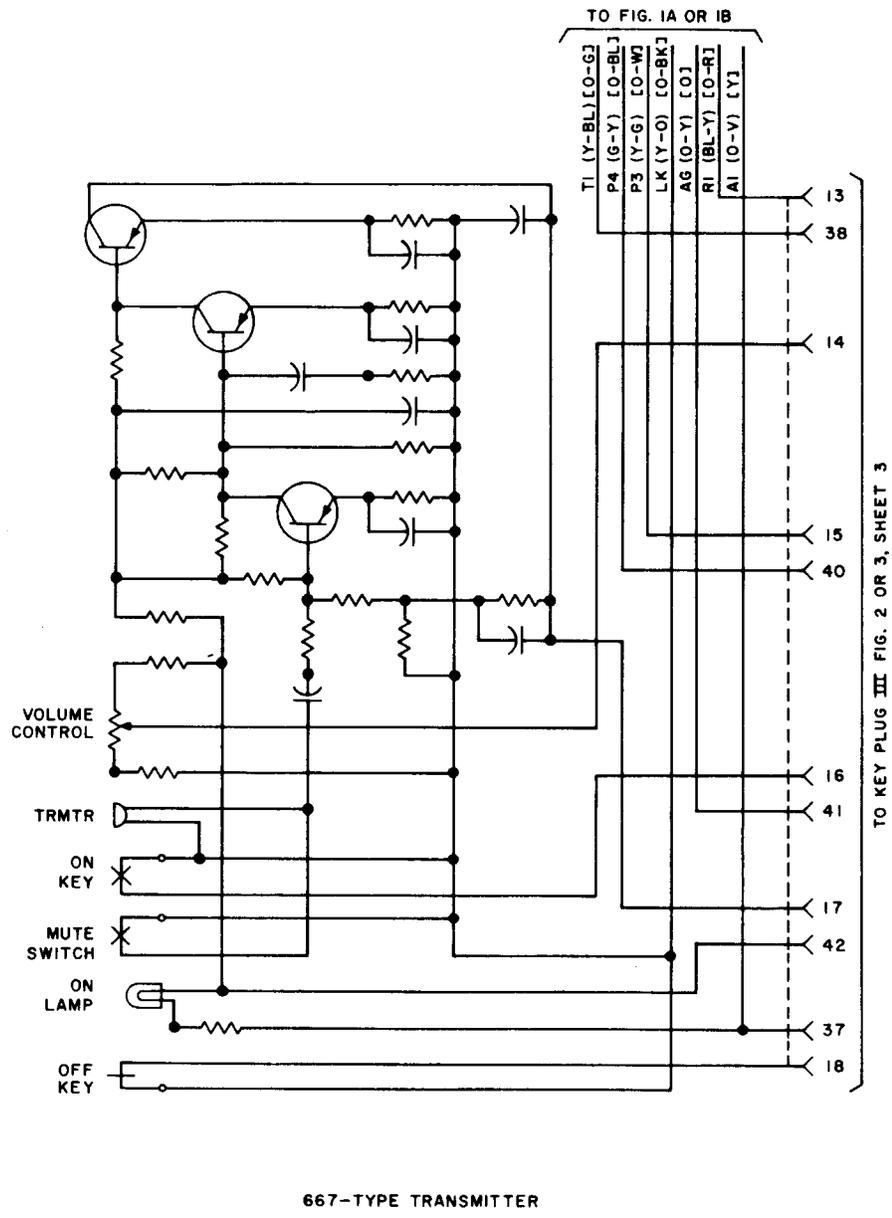
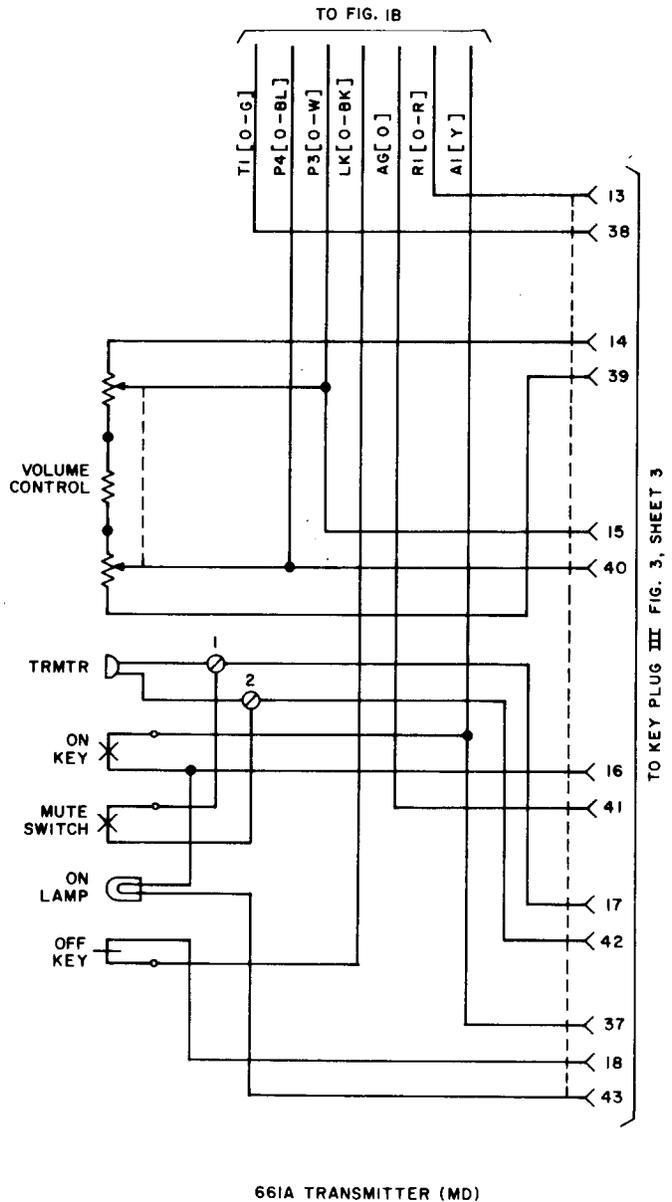
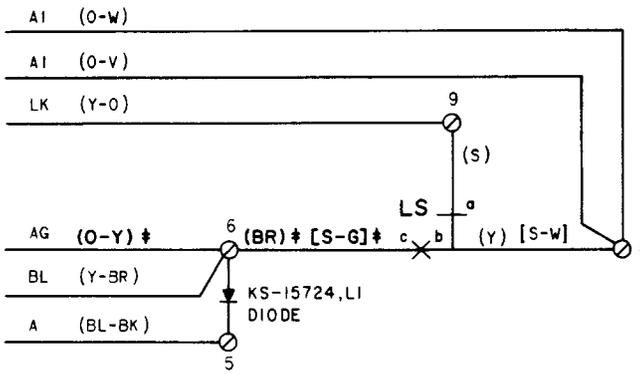


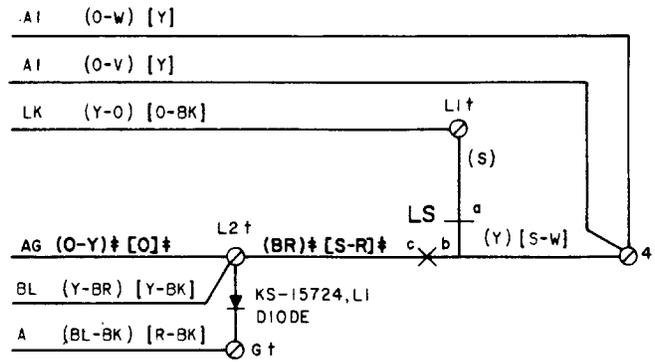
Fig. 4—Speakerphone Transmitters

SECTION 502-610-408



‡ LEADS INVOLVED IN MODIFICATION
 () CURRENT COLOR CODE
 [] MD COLOR CODE
 LS LINE SWITCH

Fig. 5—Station Busy Lamp Modification for Telephone Set Equipped With 8R or 8C Dial



† TERMINAL ON NETWORK
 ‡ LEADS INVOLVED IN MODIFICATION
 () CURRENT COLOR CODE
 [] MD COLOR CODE
 LS LINE SWITCH

Fig. 6—Station Busy Lamp Modification for Telephone Set Equipped With 6L Dial