

TELEPHONE SETS
THE CALL DIRECTOR
632 TYPES (600B)
CONNECTIONS

1.00 INTRODUCTION

1.01 This section covers connections for various service-feature arrangements of 632-type (18-button) telephone sets. It includes terminal board connections in the set, mounting cord and connector cable conductors, as well as their associated plugs and connectors.

1.02 It is reissued to include additional module units (see Table A).

1.03 Due to extensive changes marginal arrows have been omitted.

2.00 GENERAL

2.01 The 632-type telephone set supersedes the 600B telephone set.

2.02 The 632-type telephone set is a limited-use (18-button) set and can be used with 1A1 and 6A key telephone system line circuits or equivalent. It is equipped with a D94A mounting cord which prevents its use with 1A key telephone system circuits.

2.03 For connections to 1A1 and 6A line and signaling circuits, see

appropriate C Sections covering these key telephone systems.

2.04 For connections to 1A1 or 3A speakerphone systems, see appropriate C Sections covering these systems.

3.00 APPLICATION OF 632-TYPE TELEPHONE SETS

3.01 The 6-line pickup 598A key cannot be used in place of a 599A or B key in the left module because sufficient mounting cord pairs are not provided for line lamp and lead control in the sixth pickup key position.

3.02 The turnbutton key of the 599B key may be used for cutoff control, but must be supplemented in most cases by an auxiliary relay, such as a 227A or 17B KTU, which provides more contacts for multiple switching purposes (see Table B).

3.03 The 12-button signaling 617A key may be used for pushbutton signaling purposes and can be associated with either the second or third key module position. The key is wired in such a manner that the common ground can be split into two working groups when dissimilar voltages or circuit connections are required (see Fig. 5).

TABLE A
TELEPHONE SET CODES
AND MODULE ARRANGEMENTS

Telephone Set		Set Equipped With					
		Left Module		2nd Module		3rd Module	
Type	Code	Key	Fig.	Key	Fig.	Key	Fig.
632	1	599A	2	598A	3	105B	
	2					598A	4
	3					661A	6
	4					617A	5
	5			617A	5	661A	6
	6	599B	2A	598A	3	105B	-
	7					598A	4
	8					661A	6
	11	599A	2	617A	5	667A	7
	12						
	13	599B	2A	598A	3		

Note: Key identification:

105B - apparatus blank

598A - six pickup keys

599A - five pickup keys and hold key

599B - turnbutton key, four pickup keys, hold key

617A - twelve signal keys

661A - used with 1A1 speakerphone

667A - used with 3A speakerphone

TABLE B
CONNECTION TABLE FOR
599B KEY TURN KEY

599B Key Cutoff Features	5th Pickup Key			Spade-Tipped Lead
	R (R-W)	T (G-Y)	A (G-BL)	G-BL
Cutoff Station Buzzer or Bell		To Winding of Aux Rel		Ringer TB 4

Note 1: Where the turnbutton key is used to switch a multiconductor circuit, an auxiliary relay should be provided externally, in which case the leads of the station, buzzer, or bell are connected to the contacts of the relay.

Note 2: Connect battery on winding of auxiliary relay.

TABLE C
PICKUP-SIGNALING CONVERSION
OF KEYS FROM LOCKING TO NONLOCKING OPERATION OR VICE VERSA
(See Notes and Change Leads as Follows)

No. of Pickup Keys	No. of Signal Keys Converted From Pickup Keys			No. of Private and Intercom Lines With Common Signal Keys	Key Leads and Terminals of Key Units Involved						
	599A Key	599B Key	598A Key		BK	BR-G	BR-W	R-BL	G-BL	S-BR	*
6					A	A	A	A	A	A	
5			1		A	A	A	A	A	S	
4	1		2		A	A	A	A	S	S	
3	2	1	3		A	A	A	S	S	S	
2	3	2	4		A	A	S	S	S	S	
1	4	3	5		A	S	S	S	S	S	
			6		S	S	S	S	S	S	
5			1	2	A	A	A	†	†	†	SG
5			1	3	A	A	†	†	†	†	SG
5			1	4	A	†	†	†	†	†	SG
5			1	5	†	†	†	†	†	†	SG

Note 1: All key positions are arranged in the shop as pickup positions. To convert a key position from pickup to signaling, remove the screw detail P-12A892 entirely from the plunger at the key position to be converted. Store the removed screws in the base of the telephone set; use friction tape to hold in place.

Note 2: When arrangement for a common signaling key for several private or intercommunicating lines is used, the sixth key of any supplementary key unit is converted to nonlocking and used as the signaling key. The signaling ground from the apparatus cabinet is directed to the S or Sl lead of the lines to be signaled. The automatic cutoff feature of key telephone system No. 1A1 cannot be used on a line connected to the common signaling key.

Note 3: When signaling keys are to be provided on any supplementary key unit, the spade-tipped leads associated with pickup keys to be used as signaling keys shall be connected to the S terminals associated with the supplementary key unit involved. These S terminals shall be strapped to the SG terminal of TB I.

Note 4: The ringer shall be connected without the capacitor for private, common, or intercommunicating line signals as required.

* O-BK lead on pin 37 in the second and third key units(Fig. 3, 4) shall be connected to the signaling ground at the apparatus cabinet.

† When common signaling is required, use a D-161488 connector, or equivalent, to group key leads.

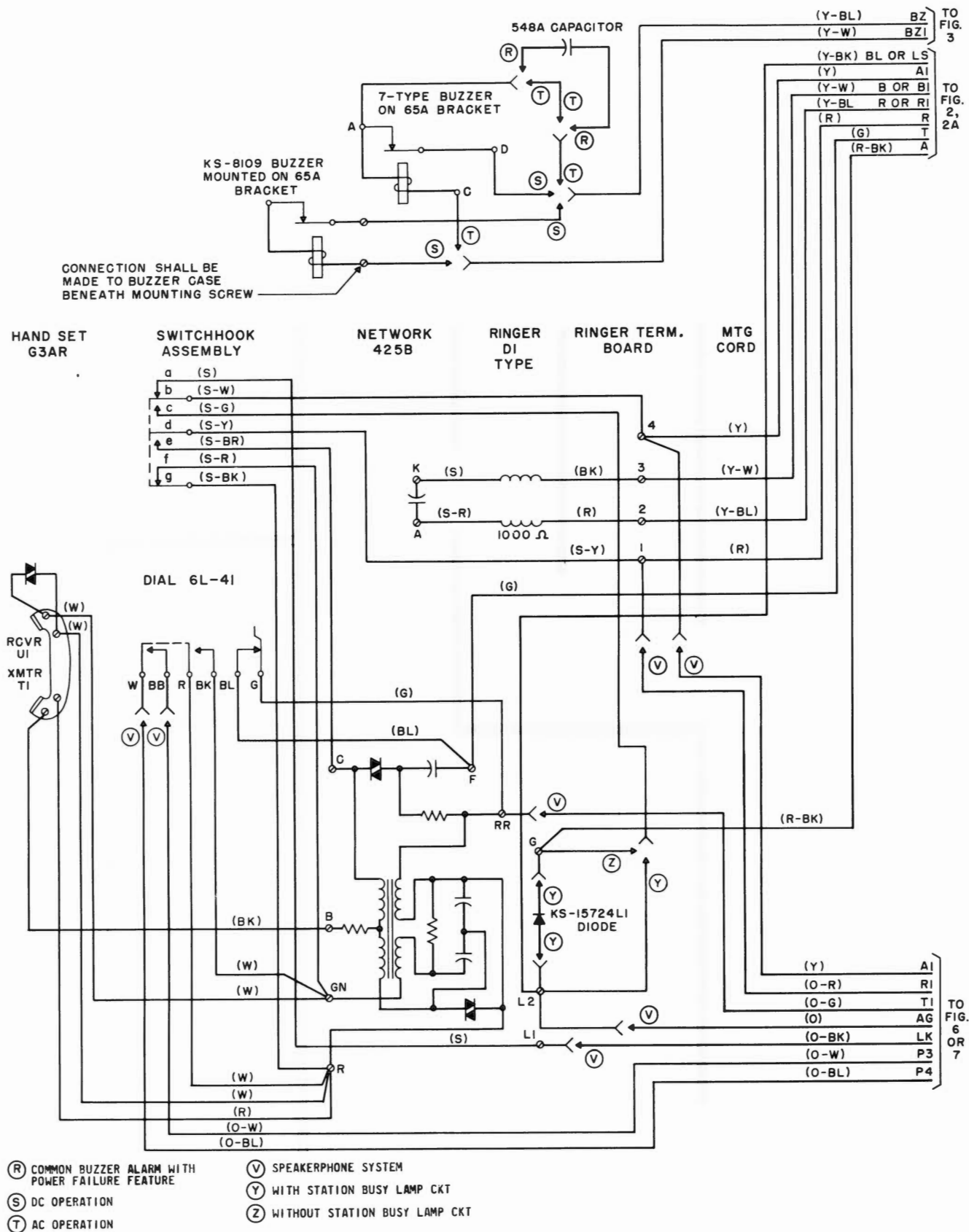


Fig. 1 - Telephone Set Circuit for 632-Type Telephone Set

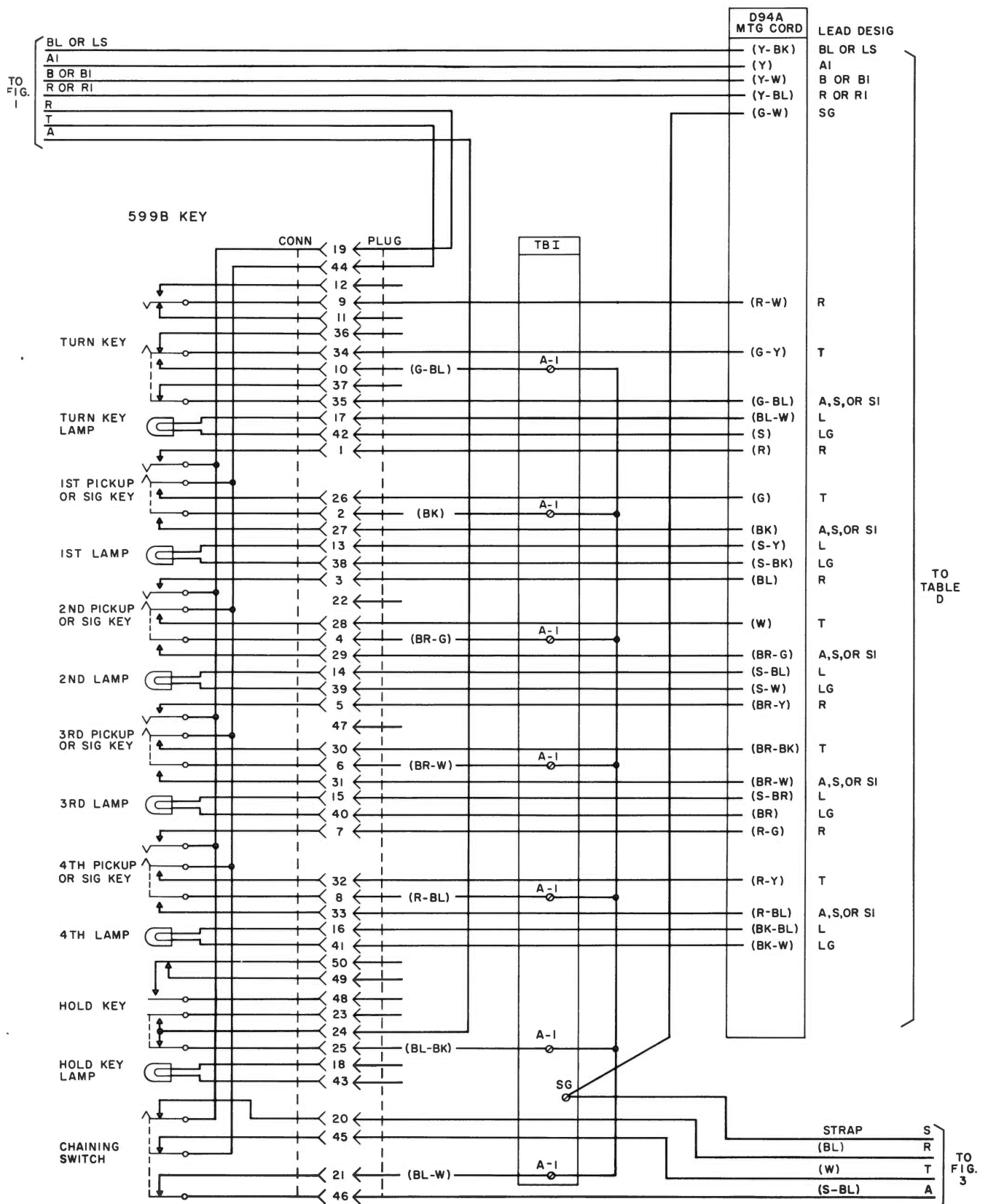
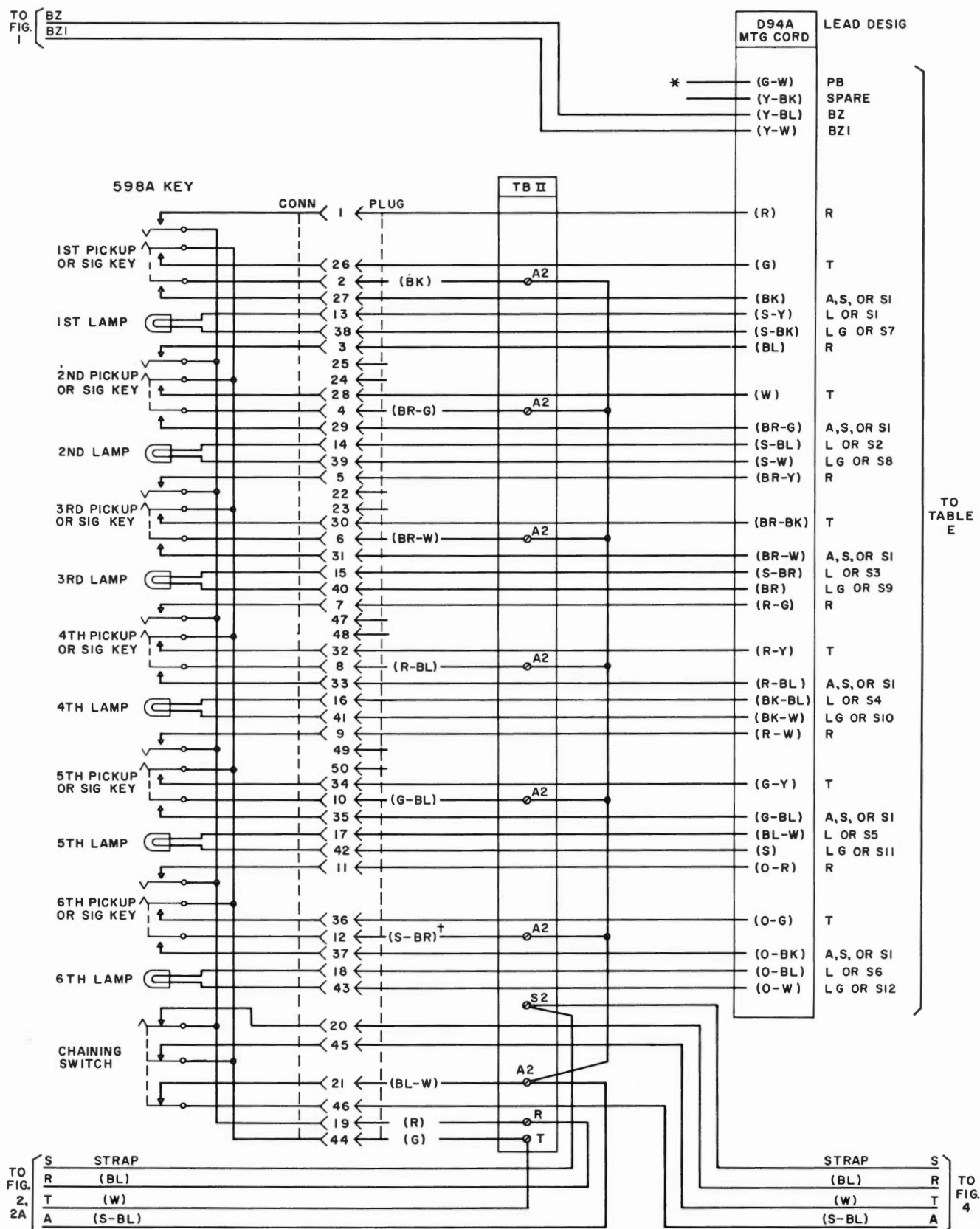


Fig. 2A - First Key Unit of 632-Type Telephone Set (599B Key)



* TERMINATE PB LEAD ON SPARE TERMINAL OR USE D-161488 CONNECTOR.
† O-BK LEAD APPEARS ON EARLY PRODUCTION SETS.

Fig. 3 - Second Key Unit of 632-Type Telephone Set (598A Key)

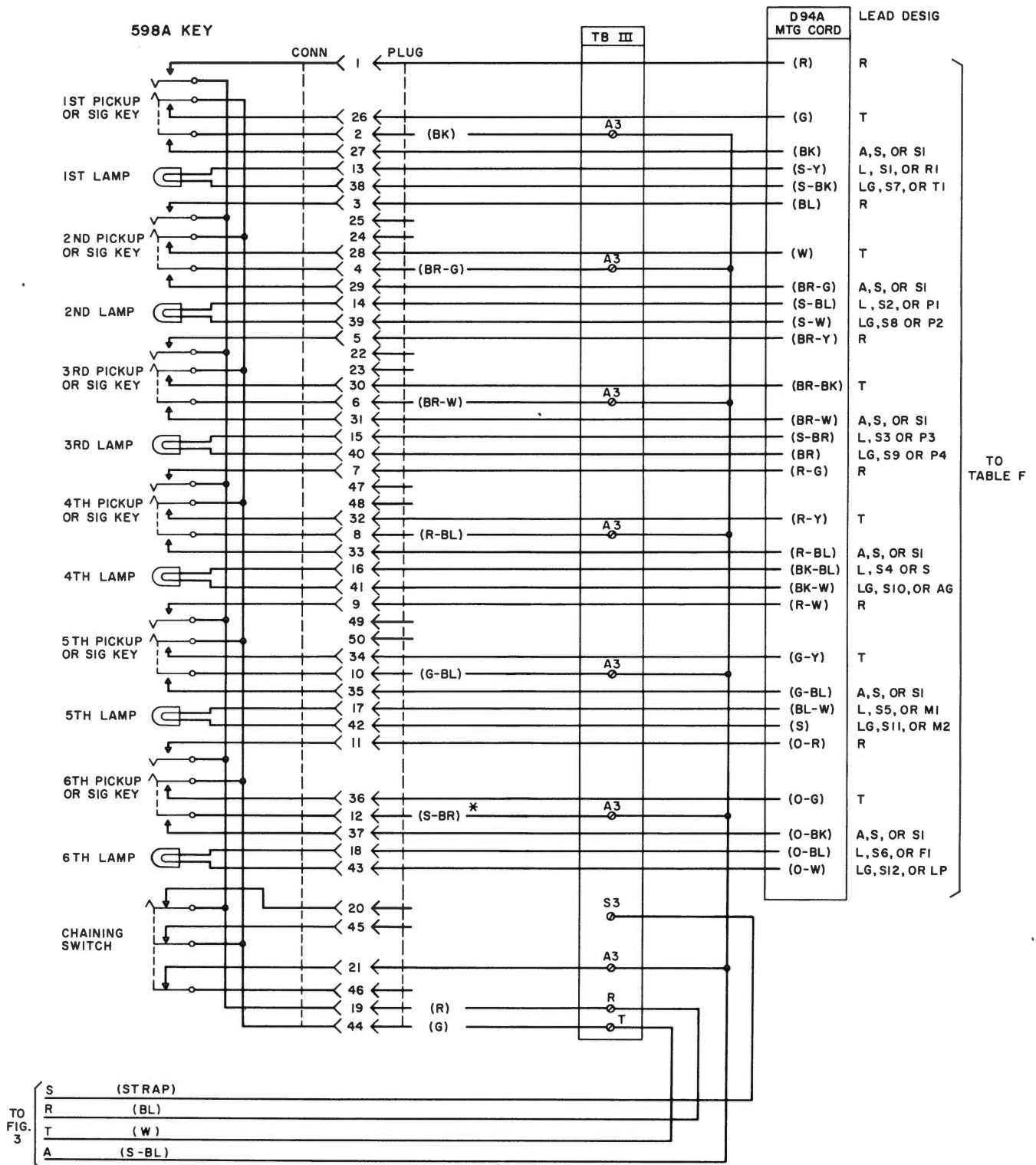


Fig. 4 - Third Key Unit of 632-Type Telephone Set (598A Key)

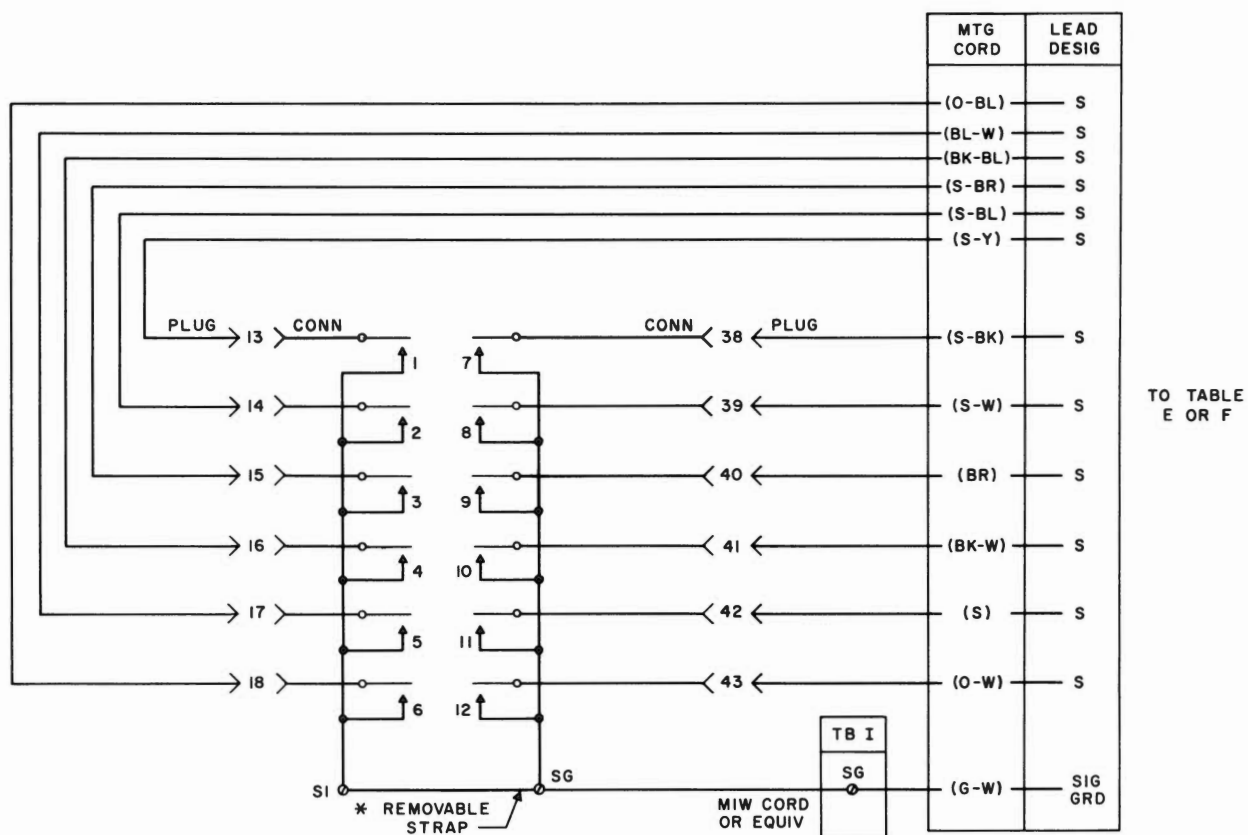


Fig. 5 - Second and Third Key Units of 632-Type Telephone Set (617A Key)

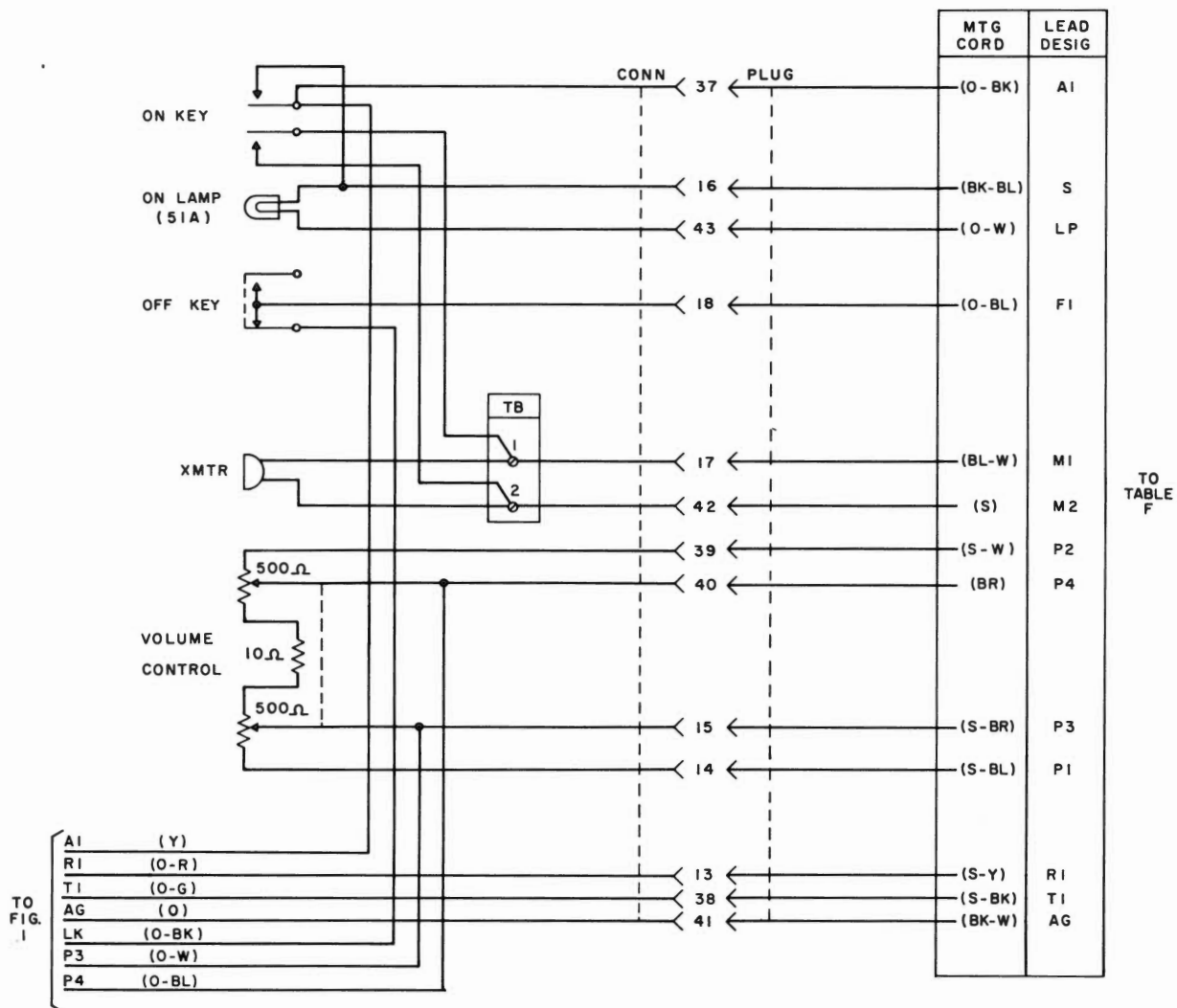


Fig. 6 - Third Key Unit of 632-Type Telephone Set (661A Key)

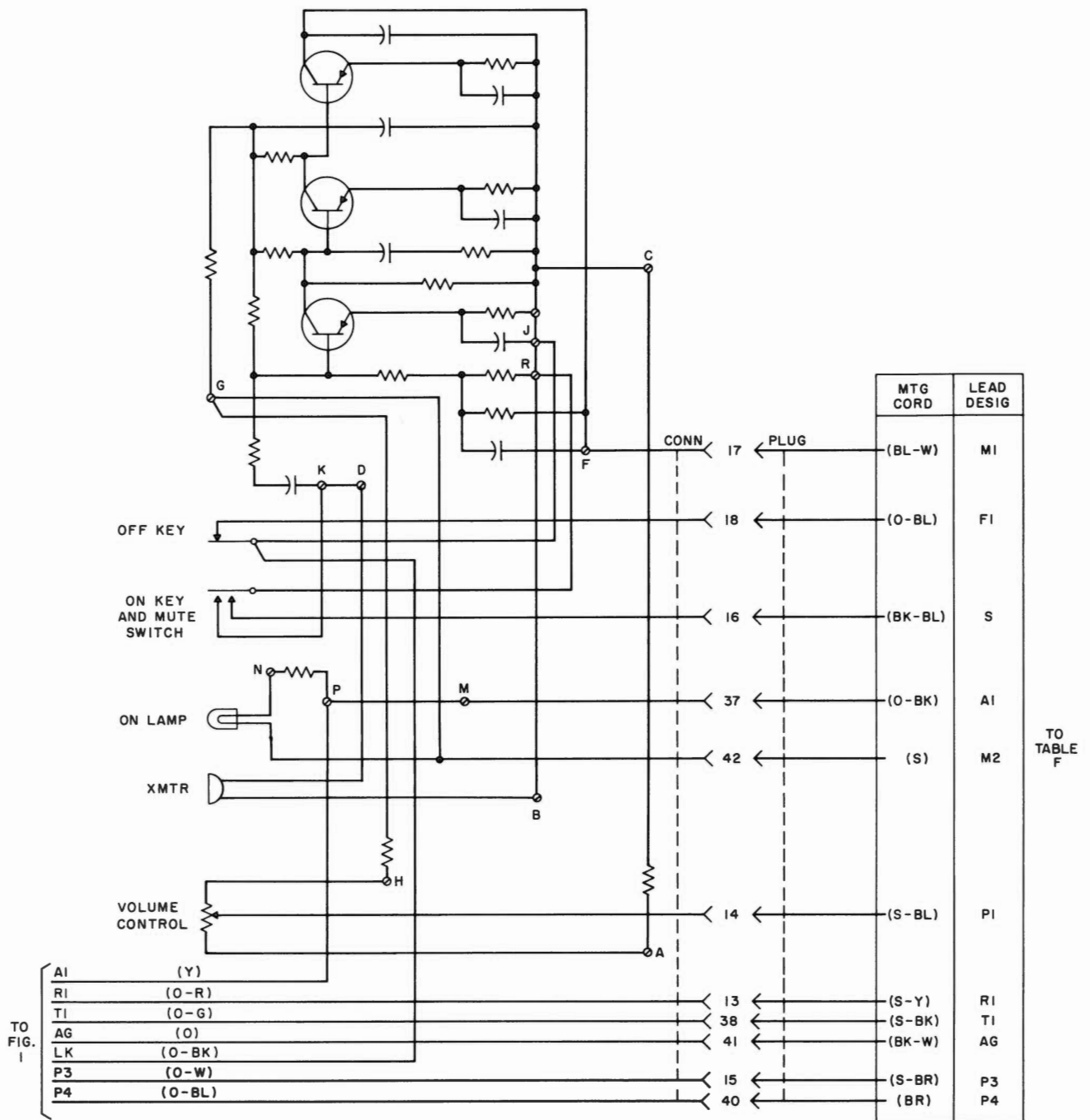


Fig. 7 - Third Key Unit of 632-Type Telephone Set (667A Key)

TABLE D

CONNECTIONS FOR FIRST KEY UNIT

From	D94A Mounting Cord				Pin No. of Cord Plug and Connector Cable	A75A Connector Cable			
Fig. No.	Termination in Set		Lead Designation	White Serving		Blue Serving			Connect to
	Connection for	Terminal or Pin No.				Solid Color	Band Color		
2, 2A	1 st Key Unit	1	R	R	1	BL	W	Key Telephone Systems 1A1 and 6A	
		26	T	G	26	W	BL		
1	Ringer TB	4	A1	Y	2	O	W		
2, 2A	1 st Key Unit	27	A, S, or S1	BK	27	W	O		
		3	R	BL	3	G	W		
		28	T	W	28	W	G		
		4*			4	BR	W		
		29	A, S, or S1	BR-G	29	W	BR		
		5	R	BR-Y	5	S	W		
		30	T	BR-BK	30	W	S		
		6*			6	BL	R		
		31	A, S, or S1	BR-W	31	R	BL		
		7	R	R-G	7	O	R		
		32	T	R-Y	32	R	O		
		8*			8	G	R		
		33	A, S, or S1	R-BL	33	R	G		
		9	R	R-W	9	BR	R		
		34	T	G-Y	34	R	BR		
		10*			10	S	R		
		35	A, S, or S1	G-BL	35	R	S		
		11			11	BL	BK		
		36			36	BK	BL		
		12			12	O	BK		
		37			37	BK	O		
		13	L1	S-Y	13	G	BK		
		38	LG1	S-BK	38	BK	G		
		14	L2	S-BL	14	BR	BK		
		39	LG2	S-W	39	BK	BR		
		15	L3	S-BR	15	S	BK		
		40	LG3	BR	40	BK	S		
		16	L4	BK-BL	16	BL	Y		
		41	LG4	BK-W	41	Y	BL		
		17	L5	BL-W	17	O	Y		
		42	LG5	S	42	Y	O		
		18			18	G	Y		
		43			43	Y	G		
				SG TB1	SG	G-W	19		BR
1	Network	L2	BL or LS	Y-BK	44	Y	BR		
	Ringer TB	TB2	R or R1	Y-BL	20	S	Y		
		TB2	B or B1	Y-W	45	Y	S		

* Spade-tipped leads are connected to these pins in the set. See Fig. 2 and 2A for lead designation and color code.

TABLE E
CONNECTIONS FOR SECOND KEY UNIT

From	D94A Mounting Cord				Pin No. of Cord Plug and Connector Cable	A75A Connector Cable			
Fig. No.	Termination in Set		Lead Designation	Red Serving		Orange Serving			Connect to
	Connection for	Terminal or Pin No.				Solid Color	Band Color		
3	2 nd Key Unit	1	R	R	1	BL	W	Key Telephone Systems 1A1 and 6A	
		26	T	G	26	W	BL		
		2*			2	O	W		
		27	A, S, or S1	BK	27	W	O		
		3	R	BL	3	G	W		
		28	T	W	28	W	G		
		4*			4	BR	W		
		29	A, S, or S1	BR-G	29	W	BR		
		5	R	BR-Y	5	S	W		
		30	T	BR-BK	30	W	S		
		6*			6	BL	R		
		31	A, S, or S1	BR-W	31	R	BL		
		7	R	R-G	7	O	R		
		32	T	R-Y	32	R	O		
		8*			8	G	R		
		33	A, S, or S1	R-BL	33	R	G		
		9	R	R-W	9	BR	R		
		34	T	G-Y	34	R	BR		
		10*			10	S	R		
		35	A, S, or S1	G-BL	35	R	S		
		11	R	O-R	11	BL	BK		
		36	T	O-G	36	BK	BL		
		12*			12	O	BK		
		37	A, S, or S1	O-BK	37	BK	O		
		13	L1 or S1	S-Y	13	G	BK		
		38	LG1 or S7	S-BK	38	BK	G		
		14	L2 or S2	S-BL	14	BR	BK		
		39	SG2 or S8	S-W	39	BK	BR		
		15	L3 or S3	S-BR	15	S	BK		
		40	LG3 or S9	BR	40	BK	S		
		16	L4 or S4	BK-BL	16	BL	Y		
		41	LG4 or S10	BK-W	41	Y	BL		
		17	L5 or S5	BL-W	17	O	Y		
		42	LG5 or S11	S	42	Y	O		
		18	L6 or S6	O-BL	18	G	Y		
		43	LG6 or S12	O-W	43	Y	G		
			19*	↑	G-W	19	BR		Y
1	AC or DC Buzzer	A or D	BZ	Y-BK	44	Y	BR		
		C	BZ1	Y-BL	20	S	Y		
		45			45	Y	S		

* Spade-tipped leads are connected to these pins in the set. See Fig. 3 for lead designation and color code.

† PB lead wired per Fig. 3.

TABLE F

CONNECTIONS FOR THIRD KEY UNIT

From	D94A Mounting Cord				Pin No. of Cord Plug and Connector Cable	A75A Connector Cable			
Fig. No.	Termination in Set		Lead Designation	Black Serving		Green Serving			Connect to
	Connection for	Terminal or Pin No.				Solid Color	Band Color		
4, 5, 6, 7	3 rd Key Unit	1	R	R	1	BL	W	Key Telephone Systems 1A1 and 6A, or to Speaker- phone System 1A1 and 3A †	
		26	T	G	26	W	BL		
		2*			2	O	W		
		27	A,S, or S1	BK	27	W	O		
		3	R	BL	3	G	W		
		28	T	W	28	W	G		
		4*			4	BR	W		
		29	A,S, or S1	BR-G	29	W	BR		
		5	R	BR-Y	5	S	W		
		30	T	BR-BK	30	W	S		
		6*			6	BL	R		
		31	A,S, or S1	BR-W	31	R	BL		
		7	R	R-G	7	O	R		
		32	T	R-Y	32	R	O		
		8*			8	G	R		
		33	A,S, or S1	R-BL	33	R	G		
		9	R	R-W	9	BR	R		
		34	T	G-Y	34	R	BR		
		10*			10	S	R		
		35	A,S, or S1	G-BL	35	R	S		
		11	R	O-R	11	BL	BK		
		36	T	O-G	36	BK	BL		
		12*			12	O	BK		
		37	A,S,S1, or A1	O-BK	37	BK	O		
		13	L1,S1, or R1	S-Y	13	G	BK		
		38	LG1,S7, or T1	S-BK	38	BK	G		
		14	L2,S2, or P1	S-BL	14	BR	BK		
		39	LG2,S8, or †P2	S-W	39	BK	BR		
		15	L3,S3, or P3	S-BR	15	S	BK		
		40	LG3,S9, or P4	BR	40	BK	S		
		16	L4,S4, or S	BK-BL	16	BL	Y		
		41	LG4,S10, or AG	BK-W	41	Y	BL		
		17	L5,S5, or M1	BL-W	17	O	Y		
		42	LG5,S11, or M2	S	42	Y	O		
		18	L6,S6, or F1	O-BL	18	G	Y		
		43	LG6,S12, or †LP	O-W	43	Y	G		
		19*			19	BR	Y		
		44*			44	Y	BR		
		20			20	S	Y		
		45			45	Y	S		

* Spade-tipped leads are connected to these pins in the set. See Fig. 4 for lead designation and color code.

† Not required on 3A speakerphone system.

‡ Use 148A adapter if speakerphone system control leads are not carried through the A75A connector cable.



When using a 148 adapter, DO NOT use long-nose pliers to pull off the insulators as this will break the conductor or strip off the spade tip. The insulator should be cut off with electrician's scissors or diagonal pliers.