

TELEPHONE SET F-53149
(564HB TELEPHONE SET MODIFIED TO
INCLUDE PLUG-ENDED MOUNTING CORD)
IDENTIFICATION AND CONNECTIONS

1.00 INTRODUCTION

F-53149 telephone sets are manufactured to permit simple and quick connections by means of a plug and connector arrangement in lieu of the standard connecting block method of terminating key telephone system stations. Fig. 1 illustrates the components used.

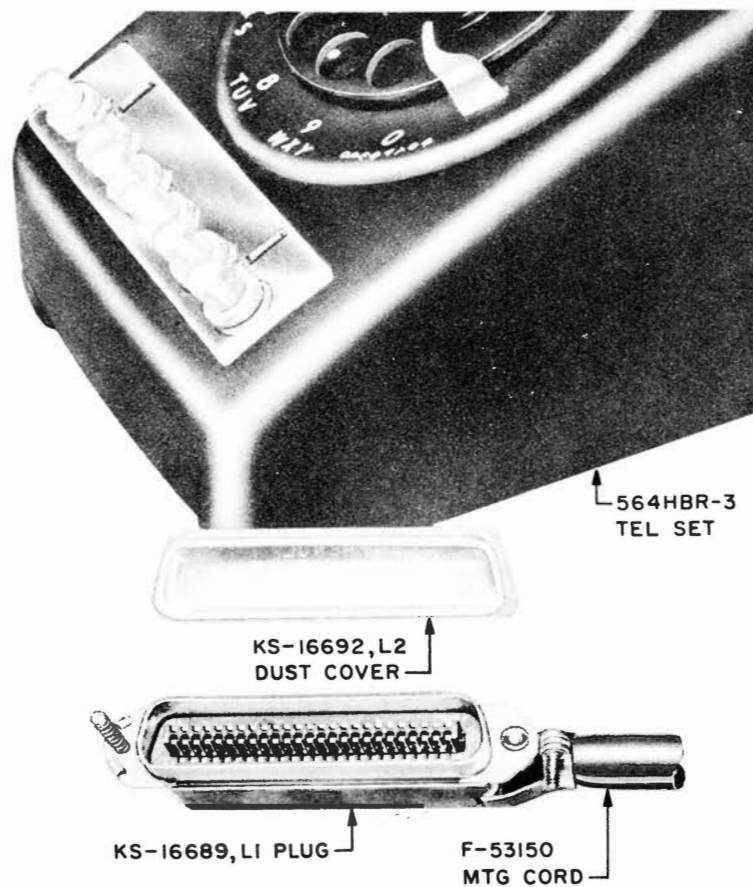


Fig. 1 — F-53149 Telephone Set with Plug-ended Mounting Cord

2.00 IDENTIFICATION

2.01 A 564-type telephone set is used for talking and switching arrangement. Its identification and parts assembly are covered in the C Section titled Telephone Sets — 540 and 560 Types. Under this application, the set is equipped with a special (F-53150, 30-conductor) mounting cord. The spade tips normally terminated on the connecting block have been replaced with a KS-16689, List 1 plug, allowing it to be connected to a matching KS-16690, List 1 connector on the key cable (see Fig. 2).

2.02 The F-53156 key cable (presently coded as A25B connector cable) is available in standard lengths of 50 feet, or 100-foot lengths when so ordered. Other than standard lengths may be obtained on special order. One end of the cable is terminated in a 50-point, female, 57-series connector (KS-16690, List 1) ; the other end is not terminated, permitting use in exposed cable runs or conduit-type systems.

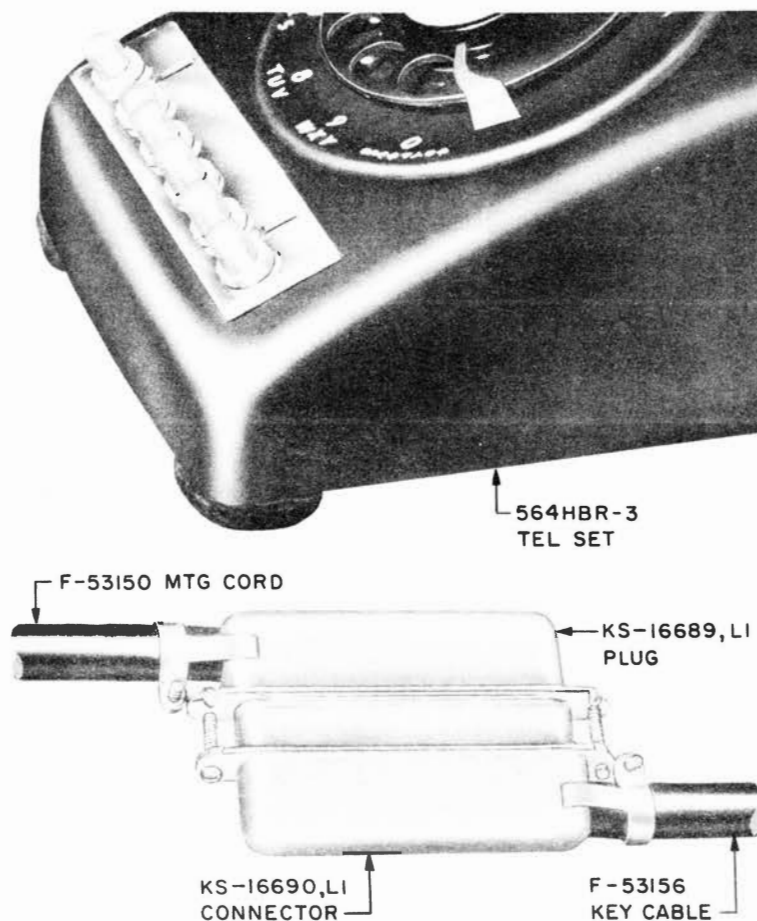


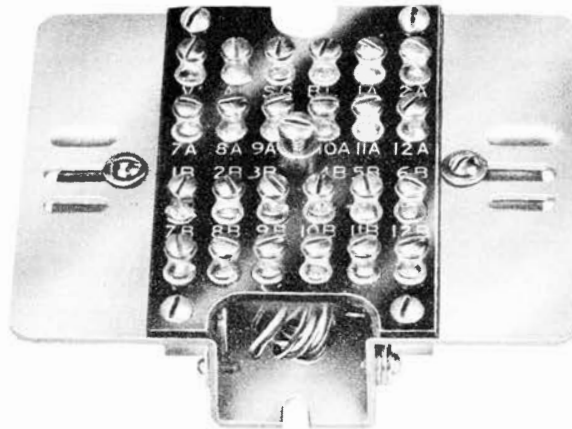
Fig. 2 — F-53149 Telephone Set with Key Cable Connected

2.03 When access to the common leads (eg, *A1*, *SG*, *R*, *B*, etc) is desired at the connector junction, use an F-53198 adapter (see Fig. 3 and 4). The use of the adapter allows access as illustrated in Fig. 6. The adapter consists of a small terminal assembly covering one KS-16671, List 1 plug and one KS-16672, List 1 connector. The plug and connector are wired internally to matching numbered contacts and/or to the screw terminals on *TS* blocks *A* or *B*.

3.00 CONNECTIONS

F-53149 telephone sets are shop wired for use with 1A1 key systems. Conversion tables (Tables A, B, and C) used in conjunction with Fig. 5 and 6 are for rearrangement for the various applications that may be desired. The information notes should be used in determining the method of connection.

**Fig. 3 — F-53198 Adapter,
Cover Removed**



**Fig. 4 — F-53198 Adapter,
Cover in Place
(Rear View)**

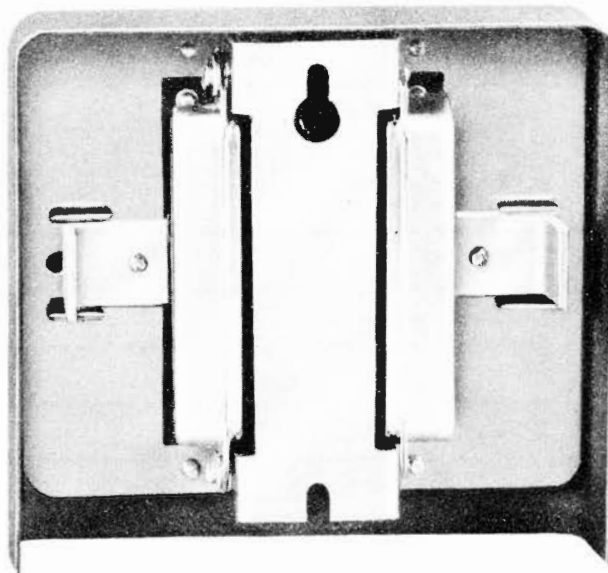


TABLE A OF FIG. 5 AND 6

1A AND 1A1 SYSTEM CONVERSION — STATION BUSY SIGNAL CONNECTIONS — CONNECTION OF HOLD KEY AND SWITCH LEADS — SEE FIG. 101 AND 102							
OPTION	KEY TEL SYS	SWITCHHOOK LEADS			HOLD KEYS		M1W CORD
		SL-W	SL-GN	SL-Y	Y	Y-BK	
No Station Busy Lamp	1A	1B	1B	N	R	M	
	1A1	1B	N	R	M	N	
With Station Busy Lamp	1A	SG	L2*	N	R	M	G* to N
	1A1	1B	L2*	R	M	N	

* Terminal on network.

TABLE B OF FIG. 5 AND 6

RINGER CONNECTIONS					
OPTION		RINGER OR BUZZER LEAD			
		SL-R	SL	BK	R
When used as bridged ringer on any line.		A	K	T†	R†
When used as private line, common sig, or other use. (See Note 3)	With Capacitor	A	K	RT	RR
	Without Capacitor	A	A		
Set ringer not used		A	K	K	A

† Of the line involved.

TABLE C OF FIG. 5 AND 6

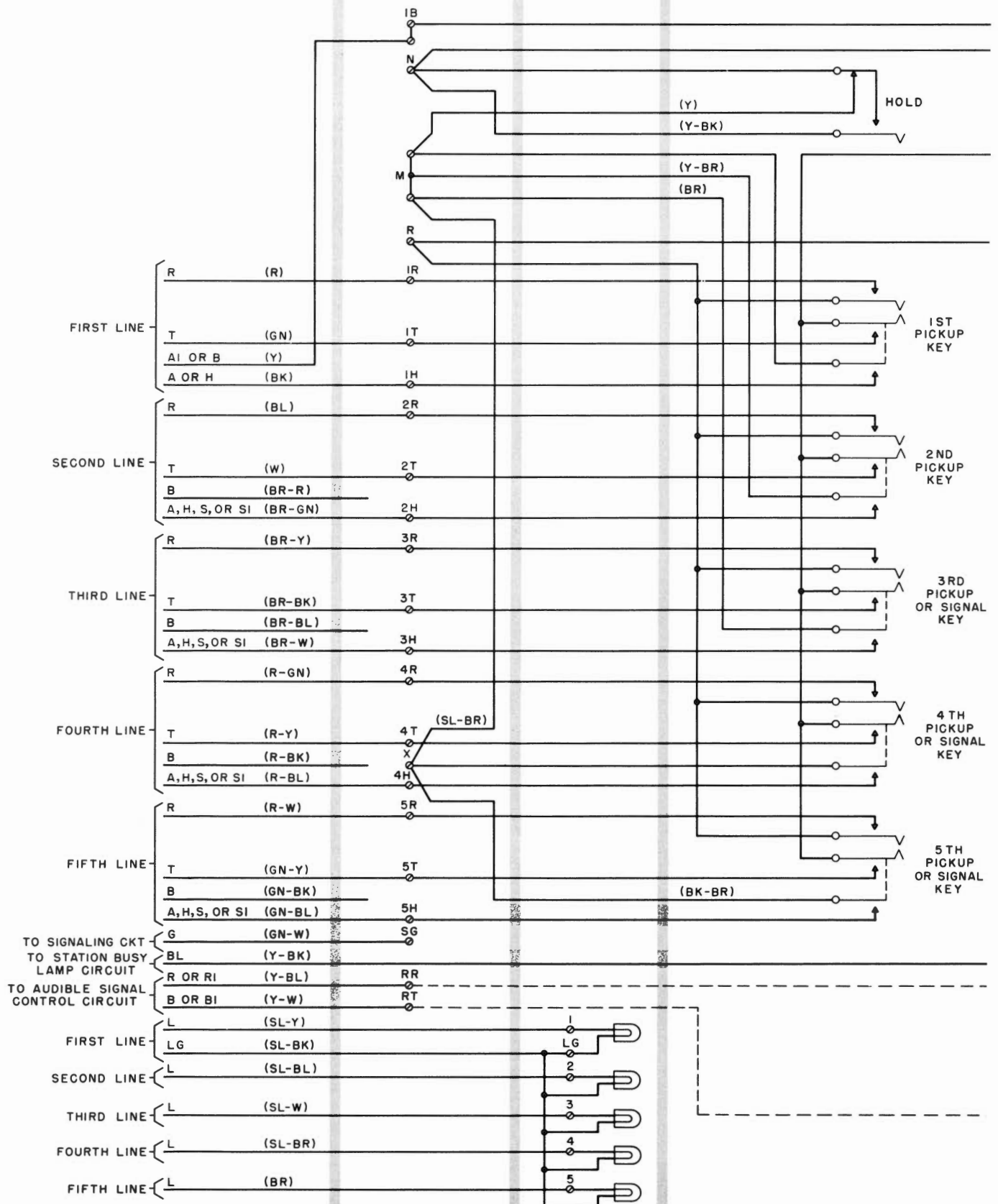
PICKUP — SIGNALING CONVERSION TO CONVERT FROM LOCKING TO NONLOCKING OR VICE VERSA CHANGE LEADS AS FOLLOWS:						
TOTAL NUMBER OF KEYS			KEY LEADS			
PICKUP KEYS	SIG KEYS CONVERTED FROM PICKUP KEYS	PRIVATE AND INTERCOMMUNICATING LINES WITH COMMON SIG KEY	Y-BR	BR	SL-BR	BK-BR
5			M	M	M	X
4	1		M	M	M	SG
3	2		M	M	SG	X
2	3		M	X	SG	X
4	1	2	M	X	5H	SG
4	1	3	X	X	5H	SG

CORD
F-53150

TERMINAL
STRIP

LAMP
STRIP

KEY
589H



SWITCH ASSEMBLY

DIAL
7D

NETWORK
425B

HAND SET
G TYPE

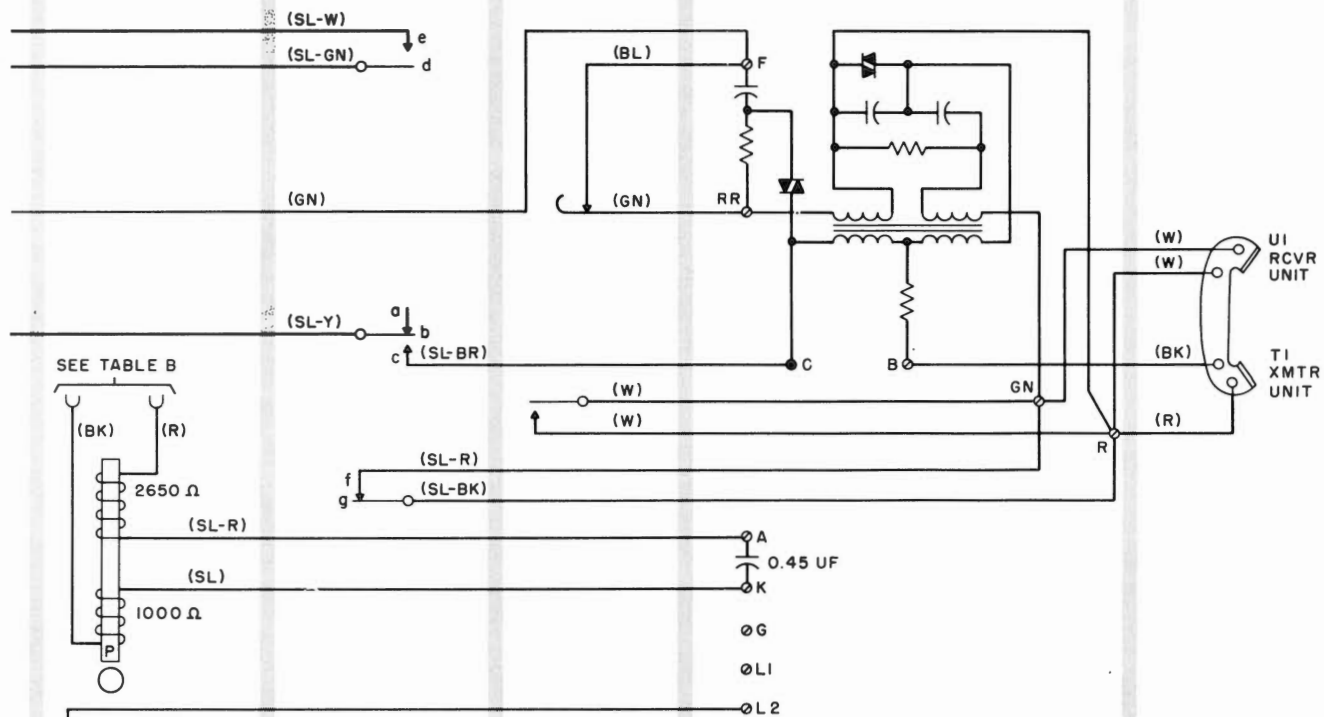


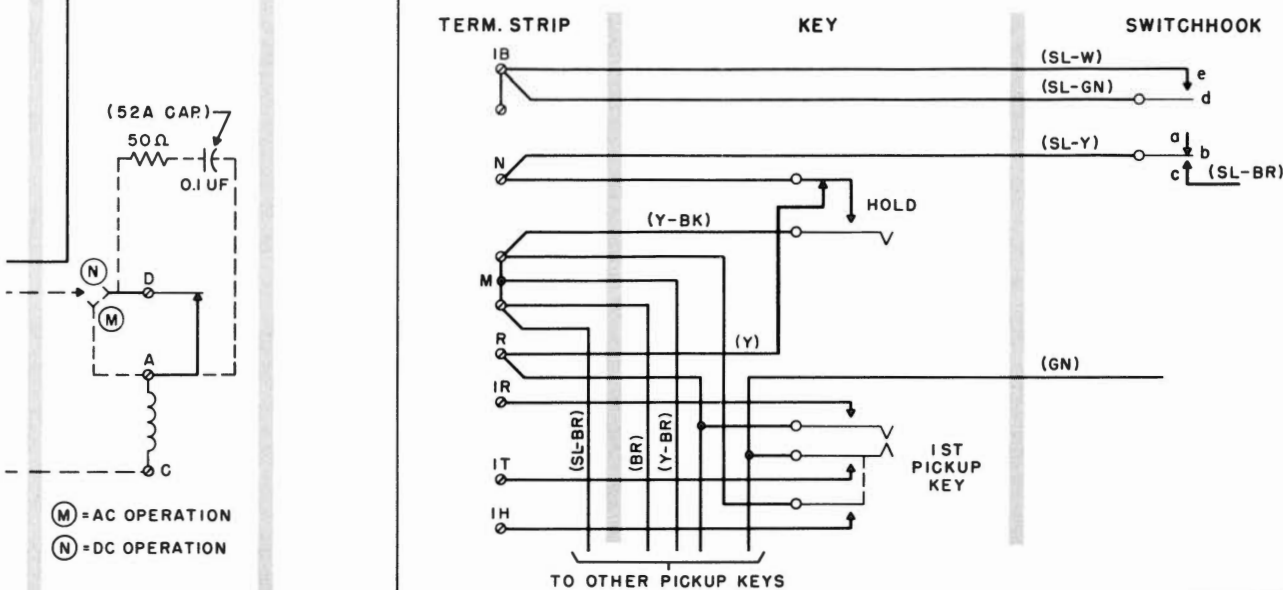
FIGURE 101
STATION BUSY LAMP CIRCUIT
FOR KEY TELEPHONE SYSTEM 1A1,
SEE TABLE A

L2 G MIW N

KS-15724, 1I
DIODE

CORD

FIGURE 102
WHEN FIGURE 5 IS USED WITH
KEY TELEPHONE SYSTEM 1A,
SEE TABLE A



Page 5

F-53150 (MOUNTING) CORD
TERMINATION

F-53198 ADAPTER

F-53156 (KEY) CABLE
TERMINATION

LEAD DESIGNATION	TERM. STRIP ON KEY ASSEM	CORD COLOR	KS-16689, LI PLUG	KS-16672, LI CONNECTOR	KS-16671, LI PLUG	KS-16690, LI CONNECTOR	CABLE COLOR	CABLE PAIR	LEAD DESIGNATION	TO
R	1R	R	1	1	1	1	BL	1	R	DISTRIBUTION TERMINAL OR APPARATUS CABINET
T	1T	GN	26	26	26	26	W		T	
AI OR B	1B	Y	2	2	2	2	O	2	AI OR B	
A OR H	1H	BK	27	27	27	27	W	2	A OR H	
R	2R	BL	3	3	3	3	GN	3	R	
T	2T	W	28	28	28	28	W	3	T	
B	DD *	BR-R	4	4	4	4	BR	4	B	
A,H,S, OR SI	2H	BR-GN	29	29	29	29	W	4	A,H,S, OR SI	
R	3R	BR-Y	5	5	5	5	SL	5	R	
T	3T	BR-BK	30	30	30	30	W	5	T	
B	DD *	BR-BL	6	6	6	6	BL	6	B	
A,H,S,OR SI	3H	BR-W	31	31	31	31	R	6	A,H,S, OR SI	
R	4R	R-GN	7	7	7	7	O	7	R	
T	4T	R-Y	32	32	32	32	R	7	T	
B	DD *	R-BK	8	8	8	8	GN	8	B	
A,H,S, OR SI	4H	R-BL	33	33	33	33	R	8	A,H,S, OR SI	
R	5R	R-W	9	9	9	9	BR	9	R	
T	5T	GN-Y	34	34	34	34	R	9	T	
B	DD *	GN-BK	10	10	10	10	SL	10	B	
A,H,S, OR SI	5H	GN-BL	35	35	35	35	R	10	A,H,S, OR SI	
VACANT			11	11	11	11	BL	11	SPARE	
			36	36	36	36	BK			
			12	12	12	12	O	12		
			37	37	37	37	BK			
L	1	SL-Y	13	13	13	13	GN	13	L	
LG	LG	SL-BK	38 †	38	38	38	BK		LG	
L	2	SL-BL	14	14	14	14	BR	14	L	
VACANT			39 †	39	39	39	BK		LG	
L	3	SL-W	15	15	15	15	SL	15	L	
VACANT			40 †	40	40	40	BK		LG	
L	4	SL-BR	16	16	16	16	BL	16	L	
VACANT			41 †	41	41	41	Y	16	LG	
L	5	BR	17	17	17	17	O	17	L	
VACANT			42 †	42	42	42	Y	17	LG	
			18	18	18	18	GN	18	SPARE	
			43	43	43	43	Y			
SG	SG	GN-W	19	19	19	19	BR	19	SG	
BL-LS	L2 ‡	Y-BK	44	44	44	44	Y		BL OR LS	
R-RI	RR	Y-BL	20	20	20	20	SL	20	R OR RI	
B-BI	RT	Y-W	45	45	45	45	Y		B OR BI	
VACANT			21	21	21	21	BL	21	SPARE	
			46	46	46	46	V			
			22	22	22	22	O	22		
			47	47	47	47	V			
			23	23	23	23	GN	23		
			48	48	48	48	V			
			24	24	24	24	BR	24		
			49	49	49	49	V			
			25	25	25	25	SL	25		
			50	50	50	50	V			

* Leads taped and stored under terminal plate of key.

† Terminals 38, 39, 40, 41, and 42 strapped in plug.

‡ Terminal on network.

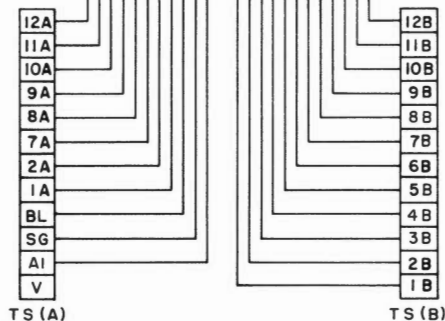


Fig. 6 - Connection Assignment