

SHEET INDEX

FIG	CONTENTS	SHEET NO.	ISSUE NO.																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	SHEET INDEX SUPPORTING INFORMATION	A1	1	2	3	4																
	CIRCUIT NOTES 101-113	B1	1	2	3	4																
	EQUIPMENT NOTES INFORMATION NOTES CIRCUIT NOTES 114- END	B2	1	2	2	4																
	TABLES A, B & C FIGURES & OPTIONS TABLE	B3	1	2	3	4																
1 2 3 4	64A CONN BLOCK 599A KEY 599B KEY 598A KEY	C1	1	2	3	3																
PART OF FIG. 5	STATION LINE CONCENTRATOR FOR 30 LINES (MFR. DISC.)	C2	1	2	3	4																
		C3	1	2	3	3																
6	690A SUB SET (MFR DISC.)	C4	1	2	2	2																
7	688A SUB SET (MFR DISC.)	C5	1	2	2	2																
8 9	500LR, 500MR TEL SET (MFR DISC) TEL CKT, G-TYPE TEL SET	C6	1	2	2	4																
10 11 12 13 14	622A KEY 621A KEY HANDSET, HEADSET & JACKS DIAL RINGER	C7	1	2	2	2																
15 16 22	7-TYPE BUZZER KS-8109 BUZZER (MFR DISC.) KS-8109 L2 BUZZER	C8	1	2	2	2																
17	690B SUBSET (MFR DISC.)	C9		2	2	2																
18	688B SUBSET (MFR DISC.)	C10		2	2	2																
19	690C SUBSET	C11		2	2	4																
20	688C SUBSET	C12		2	2	4																
21	1690C SUBSET	C13		2	2	4																
PART OF FIG 23	STATION LINE CONCENTRATOR FOR 30 LINES	C14			3	4																
		C15			3	3																
	CIRCUIT REQUIREMENTS	D1	1	2	3	3																

DWG ISSUE	CD ISSUE	DATE ISSUED	DRAWN	APP'D
1	1	9-12-61	DWC	RT LHA REJ
2D	2D	5-8-65	HBN	PBF GRT ARM
3A	2D APP'K	9-12-66	PBB	APS FNR PBB
4D	3D	9-12-66	PBB	APS FNR PBB REG

SHEET INDEX NOTES

- WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
- THIS SHEET INDEX WILL BE REISSUED AND BROUGHT UP TO DATE EACH TIME ANY SHEET OF THE DRAWING IS REISSUED, OR A NEW SHEET IS ADDED.
- THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
- SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
- THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.

SUPPORTING INFORMATION

CATEGORY	NO.

REPLACING SD-69406-01

SD-69431-01

STATION SYSTEMS
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A
KEY AND TELEPHONE CIRCUIT
FLUSH MOUNTED KEYS

AT&TCO
STANDARD

SD-69431-01-A1
SHEET INDEX
20 SHEETS

BELL TELEPHONE LABORATORIES
INCORPORATED

DWG SIZE
3S

PRINTED IN U.S.A.

HNDBK DWG

SD-69431-01-A1

CIRCUIT NOTES:

101.	DESIG	AMP	POTENTIAL	ONE PER
		1-1/3	24V SIG BAT.	FLUSH KEY POSITION
		BATTERY SYMBOL -20		VOLTAGE RANGE 14-26V

FEATURE OR OPTION	PROVIDE		
	FIG.	APP OR WRG	QUANTITY
TERMINAL ASSIGNMENT, 64A CONN BLOCK	1		AS REQD
599A KEY CKT	2		
599B KEY CKT	3		
598A KEY CKT	4		
STATION LINE CONCENTRATOR CKT FOR 30 LINES	5		ONE PER 30 PICKUP KEYS
SUPPLEMENTARY FIG. 5 (MFR. DISC)		X	
COMMON AUDIBLE, 1ST FIG. 5 ONLY (MFR. DISC)		Y	
POWER FAILURE LINE, 1ST FIG. 5 ONLY (MFR. DISC)		Z	
6TH LINE PICKUP ON 6TH KEY OF 1ST KEY UNIT ON 1ST FIG. 5 (MFR. DISC)		M	
1ST KEY ON 1ST KEY UNIT OF 1ST FIG. 5 NOT USED AS 6TH LINE PICKUP (MFR. DISC)	K		
690A SUBSET CKT (MFR. DISC.)	6		AS REQD
688A SUBSET CKT (MFR. DISC.)	7		
500LR OR 500MR TEL SET CKT (MFR. DISC)	8		
G-TYPE TEL SET CKT	9		
622A KEY CKT	10		ONE PER POS OVER 60 LINES OR AS REQD
621A KEY CKT	11		
TEL JKS, HAND-SET, 52- OR 53-TYPE HEADSET USED WITH SUBSET	12	688A OR 690A	H
		688B OR 690B	G
		688C, 690C, OR 1690C	F, G
DIAL CKT	13		
RINGER CKT	14		
BUZZER CKT	7-TYPE	DC OPERATED	V
		AC OPERATED	T
		COMMON BUZZER A OR Z WIRING PROV	R
		RADIO FREQ SUPPRESSION	S
KS-8109, L2	DC OPERATED		V
		AC OPERATED	T
609B SUBSET (MFR. DISC.)	17		AS REQD
686B SUBSET (MFR. DISC.)	18		
690C SUBSET	19		
688C SUBSET	20		
1690C SUBSET	21		
ASSOCIATED WITH 400D KTU, IN NO. 1A2 K.T.S. (SEE NOTE 113) (MFR. DISC)	5		E
NOT ASSOC. WITH 400D KTU (MFR. DISC)		B	
COMMON AUDIBLE WITH POWER FAILURE (SEE NOTE 114) (MFR. DISC)			A
SUPPLEMENTARY FIG. 23	23		X
COMMON AUDIBLE, 1ST FIG. 23 ONLY		Y	
POWER FAILURE LINE, 1ST FIG. 23 ONLY		Z	
6TH LINE PICKUP ON 6TH KEY OF 1ST KEY UNIT ON 1ST FIG. 23		M	
1ST KEY ON 1ST KEY UNIT OF 1ST FIG. 23 NOT USED AS 6TH LINE PICKUP		K	
COMMON AUDIBLE WITH POWER FAILURE (SEE NOTE 114)		A	

NETWORK VALUES			
NO.	NETWORK CODE	RESISTANCE IN OHMS	CAPACITANCE IN UF
A	152A CAP.	50	0.1
B	185A	470	0.13

CIRCUIT NOTES: (CONTINUED)

RECORD OF FIGURES, WIRING, AND APPARATUS CHANGES							
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT			
				STD	A&M	MD	
I	J	N		N		J	
2D	F, G, OR H	H	102	F, G		H	
	FIG. 22	FIG. 16		FIG. 22		FIG. 16	
	FIG. 17 OR 19	FIG. 6	102	FIG. 19		FIG. 6, 17	
3AC	FIG. 18 OR 20	FIG. 7	102	FIG. 20		FIG. 7, 18	
	B, E	B	113	B, E			
	FIG 5 OR 23	5		23		5	
4D	A		114	A			

- 105. THE HOLD KEY MAY BE CHANGED TO A PICKUP KEY BY REPLACING THE 599A KEY UNIT OR 599B KEY UNIT WITH A 598A KEY UNIT AND PROVIDING M WIRING. PROVIDING WRG OPTIONS A, Y OR Z ARE NOT REQUIRED.
- 106. PICKUP KEYS 1 THROUGH 6 IN EACH GROUP OF 30 LINES MAY BE CONVERTED FROM PICKUP (LOCKING) TO SIGNALING (NONLOCKING) BY REMOVING THE SCREW DETAIL P-10E837 FROM THE PLUNGER AND PLACING AN INSULATOR DETAIL P-11E977 OVER THE 2 CONTACTS ADJACENT TO THE PLUNGER. SIX INSULATING DETAILS ARE FURNISHED WITH EACH GROUP OF 30 LINES. SEE TABLE A FOR CONNECTING INFORMATION.
- 107. KEYS 1 THROUGH 6 IN EACH GROUP OF 30 LINES MAY BE USED AS A COMMON SIGNALING ARRANGEMENT BY CONNECTING THE M TERMINAL OF THE CONVERTED KEY TO THE A TERMINAL, AND THE C,S OR S1 TERMINAL TO THE M TERMINAL OF PICKUP KEYS WITH LINES CONNECTED REQUIRING SIGNAL KEY SIGNALING.
- 108. THE 622A KEY UNIT SHALL BE PROVIDED WHEN A POSITION EXCEEDS 60 LINES. IT CONTAINS AN ELECTRO-MECHANICAL ASSIST FOR RELEASING OPERATED PICKUP KEYS IN LARGE ARRAYS.
- 109. WHEN THE 599B KEY UNIT IS USED, REMOVE THE SURFACE WIRING BETWEEN TERMINALS CB1 AND CB, CD1 AND CD, CH1 AND CH ON THE FIRST FIG. 5. CONNECT THE CB1, CA1, M6, CD1, M5, C,S,S1, (5) CH1 AND C,S,S1 (6) TERMINALS ON THE 1ST FIG. 5 TO MANUALLY CONTROLLED CIRCUITS AS REQUIRED. SEE TABLE C.
- 110. WHEN THE RINGER IS USED AS A PRIVATE, COMMON OR INTER-COMMUNICATING LINE SIGNAL, CONNECT THE S RINGER LEAD TO TERMINAL "A" IN THE SUBSET, AND THE 500LR OR MR TELEPHONE SETS, CONNECT THE B1 LEAD TO TERMINAL 7 IN THE E-TYPE RINGER.
- 111. DEPRESSING THE TURN KEY RELEASES ANY LOCKED DOWN KEY BUT DOES NOT DEFLECT THE ASSOCIATED SPRING PILE-UP.
- 112. REPLACE THE U2 RECEIVER WITH A U1 RECEIVER.
- 113. WHEN 236A K.T.U. (MFR. DISC) IS ASSOCIATED WITH 400D K.T.U. IN NO. 1A2 K.T.S. PROVIDE E WRG & APP. TO REDUCE INDUCTIVE TRANSIENT CAUSED BY RELEASE OF LINE CONCENTRATOR SWITCHING RELAYS.

DRAWING ISSUE
1 DHC
2D HBM
3AC DHC
4D RRB
RBB
REG
RBB
RBB

STATION SYSTEMS		SD-69431-01-B1
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED	OWN SIZE 3S	PRINTED IN U.S.A.

CIRCUIT NOTES: (CONT)

114. TO PROVIDE A POWER FAILURE LINE WITH THE COMMON AUDIBLE FEATURE USE A WRG. THE COMMON AUDIBLE SIGNAL CIRCUIT IS ARRANGED TO USE THE SAME AUDIBLE SIGNAL FOR THE POWER FAILURE LINE AS THE LINE SIGNALING CIRCUITS.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS.

302. KEY POSITION ASSIGNMENTS FOR THE 1ST 30 PICKUP KEYS; KEY POSITIONS 31-60, 61-90, AND 91-120 WILL HAVE THE SAME KEY POSITION ASSIGNMENTS AS 1-30.

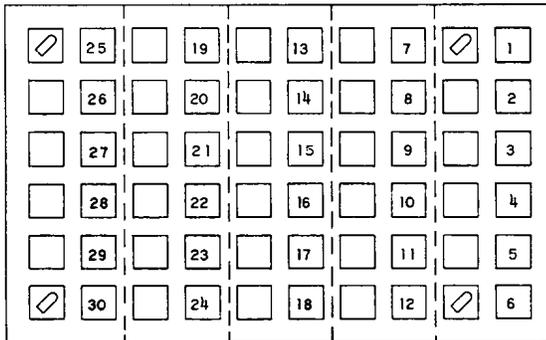
DRAWING ISSUE
1
DHC
PAC
2D
RBM
DHC
ART
RBB
LBB
4D
PLG

EQUIPMENT NOTES:

201. THE PLUGS HAVE TERMINAL NUMBERS MOLDED INTO THE INSULATION ON THE FACE OF THE PLUG. TERMINALS ARE NUMBERED 1-25 AND 26-50 WITH 1 AND 26 OPPOSITE EACH OTHER AT ONE END OF THE LONG DIMENSION AND 25 AND 50 OPPOSITE EACH OTHER AT THE OTHER END.

202. TERMINAL FIELD LAYOUT:

	L	LG	L	LG	C,S,S1	M	
⊕ CA	19	19	7	7	1	1	⊕
⊕ CB1	++	++	++	++	++	++	⊕
⊕ CB	20	20	8	8	2	2	⊕ A1&SG
⊕ CC	21	21	9	9	3	3	⊕ A1&SG
++	++	++	++	++	++	++	+
CD1	CD	22	22	10	10	4	4 A
++	++	++	++	++	++	++	+
BZ	CE	23	23	11	11	5	5 A
++	++	++	++	++	++	++	+
BZ1	CF	24	24	12	12	6	6 A2
++	++	++	++	++	++	++	+
T A	CG	25	25	13	13	L	LG A3
++	++	++	++	++	++	++	+
CH1	CH	26	26	14	14	2	2 A4
++	++	++	++	++	++	++	+
T T	CJ	27	27	15	15	3	3 A5
++	++	++	++	++	++	++	+
T R	CA1	28	28	16	16	4	4 PB
++	++	++	++	++	++	++	+
⊕ B1	29	29	17	17	5	5	⊕
++	++	++	++	++	++	++	+
⊕ R1	30	30	18	18	6	6	⊕
++	++	++	++	++	++	++	+



598A KEYS

599A, 599B
OR
598A KEY

← DIRECTION OF GROWTH

STATION SYSTEMS KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		SD-69431-01-B2
BELL TELEPHONE LABORATORIES <small>INCORPORATED</small>	<small>OVER SIZE</small> 3S <small>PRINTED IN U.S.A.</small>	

DRAWING
ISSUE
1
2D
3AC
4D

TABLE A
NONLOCKING KEY CONNECTIONS

KEY POSITION	1	2	3	4	5	6
CONNECT TERMINAL	M1	M2	M3	M4	M5	M6
BUZZER SIG	TO TERM. SG					
6A ADD-ON	TO TERM. PB					
6A PUSH BUTTON	TO TERM. A					
LOCKED IN LP RLS	TO TERM. SG					
COMMON SIG	TO TERM. A SEE NOTE 107					

TABLE B
COMBINATIONS OF RELAYS - STATION LINE CONCENTRATOR

KEY POSITION	RELAYS*									
	A	B	C	D	E	F	G	H	J	CA1
1,31,61,91	X	X								
2,32,62,92	X		X							
3,33,63,93		X	X							
4,34,64,94	X			X						
5,35,65,95		X		X						
6,36,66,96								X		X
7,37,67,97			X	X						
8,38,68,98		X			X					
9,39,69,99			X		X					
10,40,70,100				X	X					
11,41,71,101		X				X				
12,42,72,102				X		X				
13,43,73,103					X	X				
14,44,74,104				X			X			
15,45,75,105					X		X			
16,46,76,106						X	X			
17,47,77,107	X							X		
18,48,78,108		X							X	
19,49,79,109			X						X	
20,50,80,110				X				X		
21,51,81,111					X				X	
22,52,82,112						X			X	
23,53,83,113							X	X		
24,54,84,114	X								X	
25,55,85,115		X								X
26,56,86,116			X							X
27,57,87,117				X						X
28,58,88,118					X					X
29,59,89,119						X				X
30,60,90,120							X		X	

*SYMBOL X DENOTES RELAY OPERATED WHEN KEY POSITIONS ARE OPERATED.

TABLE C
TURN BUTTON CONNECTIONS

FEATURE	LEAD DESIG	CONNECT TO			
		IN	OUT	POS 1	POS 2
LINE CUTOFF	R T A	CB1 CD1 C,S,SI(5)	CA1 CH1 C,S,SI(6)		
RINGER OR BUZZER CUTOFF	R1 OR BZ B1 OR BZ1	CB1 CD1	CA1 CH1		
RINGER OR BUZZER TRFR	R1 OR BZ B1 OR BZ1	CB1 CD1		CA1 CH1	M6 M5
RELAY OPERATION	SI G	CB1			M6
LAMP CKT	L G	CB1			M6
MONITOR SET CUTOFF	R GN	CB1 CD1	CA1 CH1		

FIGURES AND OPTIONS ON THIS DWG			
CKT FIG.	APP OR WIRING		
1	17	Z	F
2	18	Y	E
3	19	X	B
4	20		A
5	21	V	
6	22		
7	23	T	
8		S	
9		R	
10		J	
11		N	
12			
13		M	
14		K	
15		H	
16		G	

SD-69431-01-B3

4

STATION SYSTEMS KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		SD-69431-01-B3
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S	PRINTED IN U.S.A.

FIG. 4
598A KEY
SEE NOTE 106

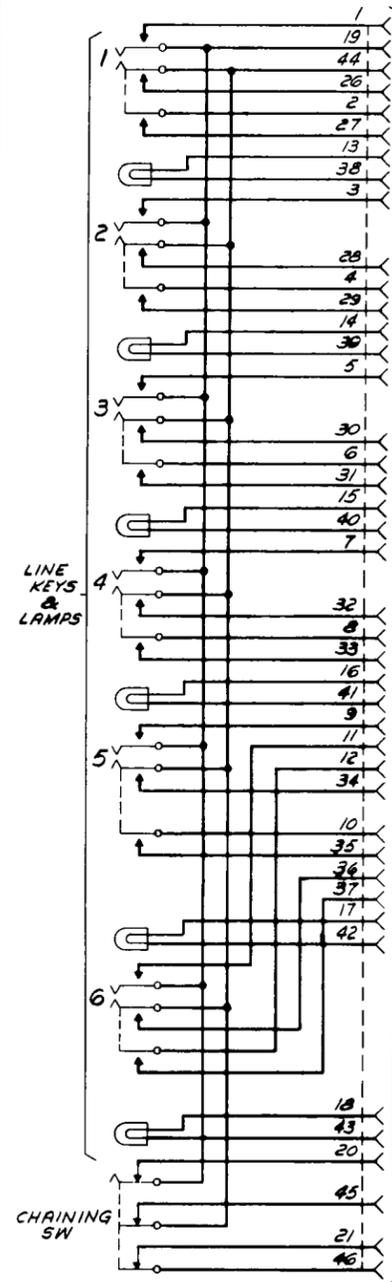


FIG. 3
598B KEY
SEE NOTES 105, 106, 109 & 111

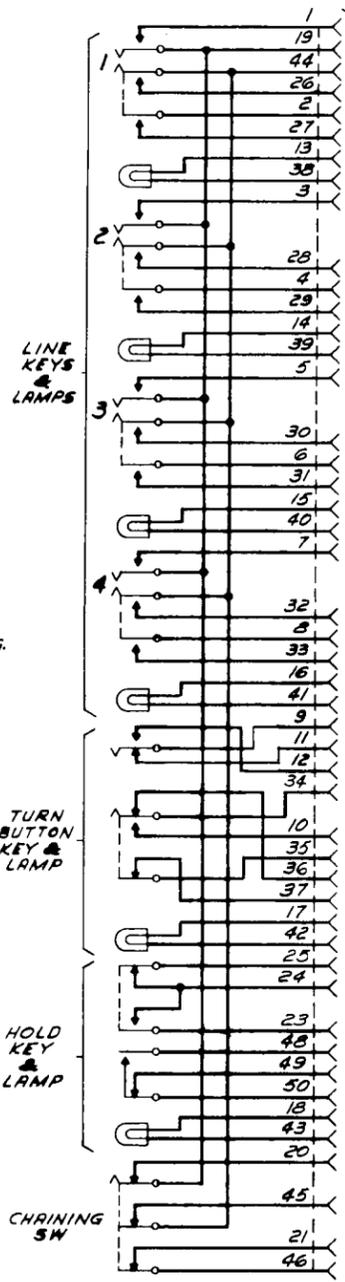


FIG. 2
599A KEY
SEE NOTES 105 & 106

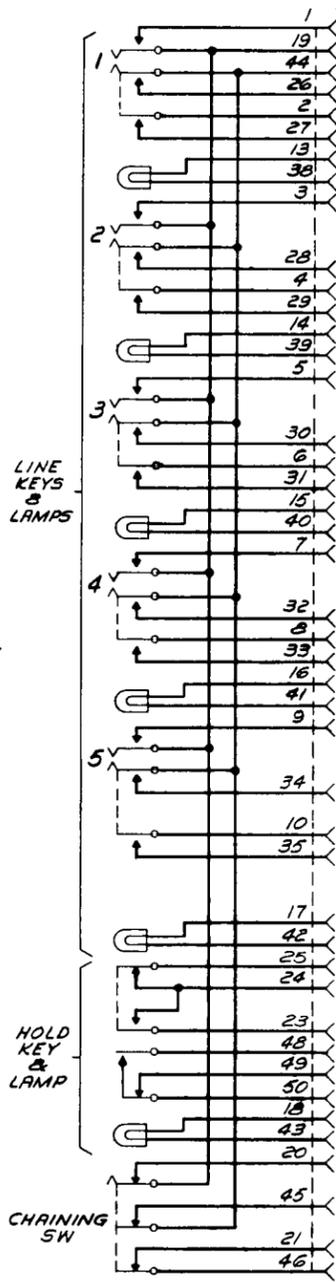


FIG. 1
64A CONNECTING BLOCK

PIN NO.	PLUG 5		PLUG 4		PLUG 3		PLUG 2		PLUG 1		CONNECT TERMINAL TO
	COLOR	TERM. DESIG †									
19	W	CB	R-BR	CC	O-BR	CE	R-BR	CC	BL	CA	FIG. 5 OR 23
44	G*		G*		G*		G*		W-BK	A2	ON ORIGINATING FIG. 1 ONLY, STRAP TO TERM. A
26	G*		S-BK	CH	BR-BK	CF	G-BR	CD	S-W	A3	FIG. 5 OR 23
2	BL-S	CJ							W	CB	SEE TABLE A
27			R-G	L19	R	L13	BL-S	L7	BK	M1	KTS NO. 1A2, 1A1, OR 6A
13	BL-Y	L25	BL-R	LG19	G	LG13	S-W	LG7	G-Y	C, S, SI (1)	KTS NO. 1A2, 1A1, OR 6A
38	BL-Y	LG25	G-BR	CD	G-BR	CD	W	CB	G-W	L1	KTS NO. 1A2, 1A1, OR 6A
3	R-BR	CC							G-R	LG1	LINE CKT
									BL	CA	FIG. 5 OR 23
28	BL-S	CJ	S-BK	CH	O-S	CG	O-BR	CE	R-BR	CC	FIG. 5 OR 23
4									BL-S	M2	SEE TABLE A
29			R-S	L20	W-BK	L14	S-Y	L8	BL-D	C, S, SI (2)	KTS NO. 1A2, 1A1, OR 6A
14	O-R	L26	R-BL	LG20	BK	LG14	BR	LG8	G-BK	L2	KTS NO. 1A2, 1A1, OR 6A
39	O-R	LG26	O-BR	CE	O-BR	CE	R-BR	CC	S-W	LG2	LINE CKT
5	G-BR	CD							W	CB	FIG. 5 OR 23
30	BL-S	CJ	S-BK	CH	O-S	CG	O-BR	CE	R-BR	CC	FIG. 5 OR 23
6									BR-W	M3	SEE TABLE A
31			G-W	L21	G-W	L15	BL-BK	L9	O-G	C, S, SI (3)	KTS NO. 1A2, 1A1, OR 6A
15	G-R	L27	G-Y	LG21	BL-S	LG15	BK-W	LG9	R-D	L3	KTS NO. 1A2, 1A1, OR 6A
40	O-W	LG27	BR-BK	CF	BR-BK	CF	G-BR	CD	BR	LG3	LINE CKT
7	O-BR	CE							BL	CA	FIG. 5 OR 23
32	BL-S	CJ	S-BK	CH	O-S	CG	O-BR	CE	G-BR	CD	FIG. 5 OR 23
8									R-BL	M4	SEE TABLE A
33			G-BR	L22	R-BR	L16	O-R	L10	O-BK	C, S, SI (4)	KTS NO. 1A2, 1A1, OR 6A
16	BR-R	L28	BL-G	LG22	R-G	LG16	S	LG10	O	L4	KTS NO. 1A2, 1A1, OR 6A
41	G-W	LG28	O-S	CG	BL	CA	R-BL	CC	BK-W	LG4	LINE CKT
9	BR-BK	CF	BL	CA	W	CB	G-BR	CD	R-G	CB1	FIG. 5 OR 23
11	O-S	CG							S-Y	CA1	FIG. 5 OR 23
12									S-BK	M6	SEE TABLE A
34	BL-S	CJ	S-BK	CH	S-BK	CH	BR-BK	CF	G-S	CD1	FIG. 5 OR 23
10											
35									BL-G	M5	SEE TABLE A
36	BL-S	CJ	BL-S	CJ	S-BK	CH	BR-BK	CF	O-R	C, S, SI (5)	KTS NO. 1A2, 1A1, OR 6A
17			O-R	L23	O	L17	BL-O	L11	BL-Y	CH1	FIG. 5 OR 23
42	S-Y	L29	O-G	LG23	S	LG17	O-W	LG11	BR-BK	C, S, SI (6)	KTS NO. 1A2, 1A1, OR 6A
25	BR-W	LG29							O-S	L5	KTS NO. 1A2, 1A1, OR 6A
24									S	LG5	LINE CKT
									R	TA	FIG. 5 OR 23
23									R-S	A	FIG. 8, 9, OR 12
48											
49											
50											
18	O-Y	L30	O	L24	BL-BR	L18	G-S	L12	O-BR	L6	KTS NO. 1A2, 1A1, OR 6A
43	S-W	LG30	O-BK	LG24	BR-W	LG18	BL-R	LG12	O-W	LG6	LINE CKT
20	R	A4	G*		G*		G*		G*		A2 OF SUCC FIG. 1
45	G-W	A5	G*		G*		G*		G*		A3 OF SUCC FIG. 1
21											
46											

PIN NO.	TR				
19	20	19	20	19	TT
44	45	44	45	44	A1-SG
20	19	20	19	20	R1
45	44	45	44	45	B1
					BZ
					BZ1
					PB

* STRAPS BETWEEN PLUGS
 † DUPLICATE TERMINAL DESIGNATIONS MAY BE THE SAME TERMINAL OR TERMINALS STRAPPED ON FACTORY WIRING SIDE.

SD-69431-01-C1

STATION SYSTEMS
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A
KEY AND TELEPHONE CIRCUIT
FLUSH MOUNTED KEYS

BELL TELEPHONE LABORATORIES
INCORPORATED

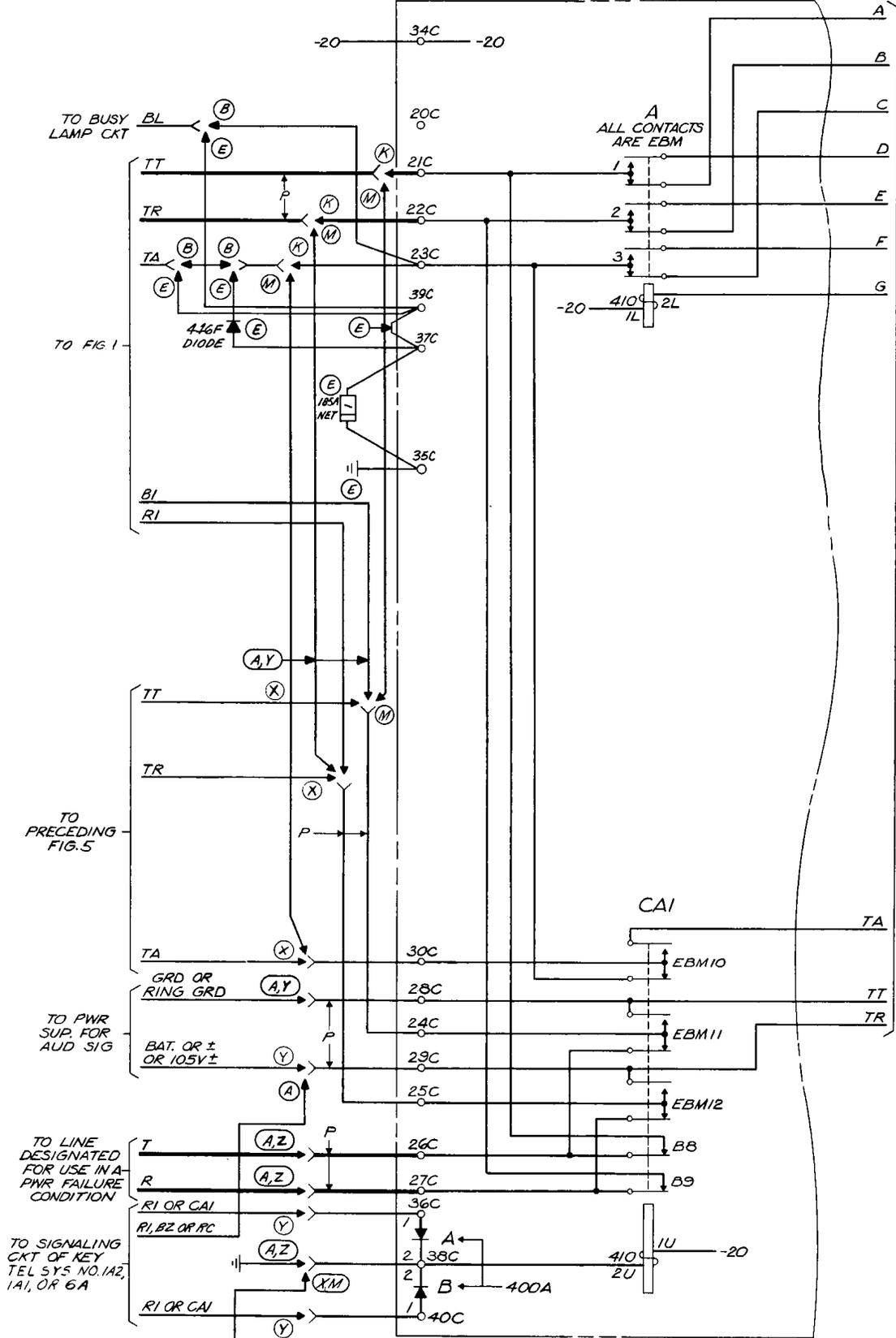
SD-69431-01-C1

6S

PRINTED IN U.S.A.

PART OF FIG. 5
 STATION LINE CONCENTRATOR FOR 30 LINES (MFR.DISC)
 SEE NOTE 113
 PART OF 236A KEY TEL UNIT

DRAWING ISSUE	
1	27 DNC MJC
20	488 DNC ARR
3AC	488 488 486
AD	488 488 486

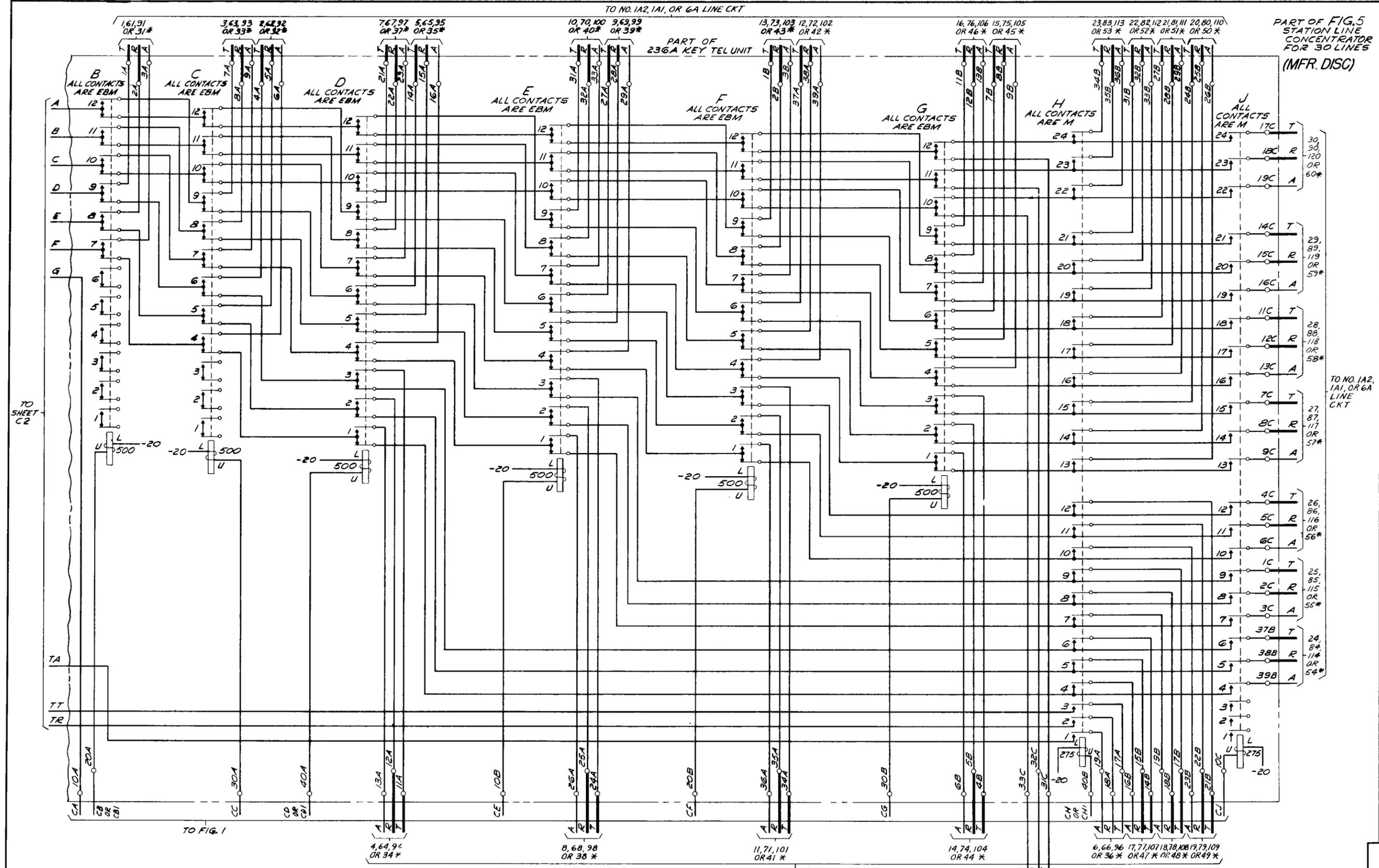


SD-69431-01-C2

STATION SYSTEMS KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		SD-69431-01-C2
BELL TELEPHONE LABORATORIES INCORPORATED	DWG. SIZE 3S	

PRINTED IN U.S.A.

DRAWING	ISSUE
1	1
2D	
3AC	

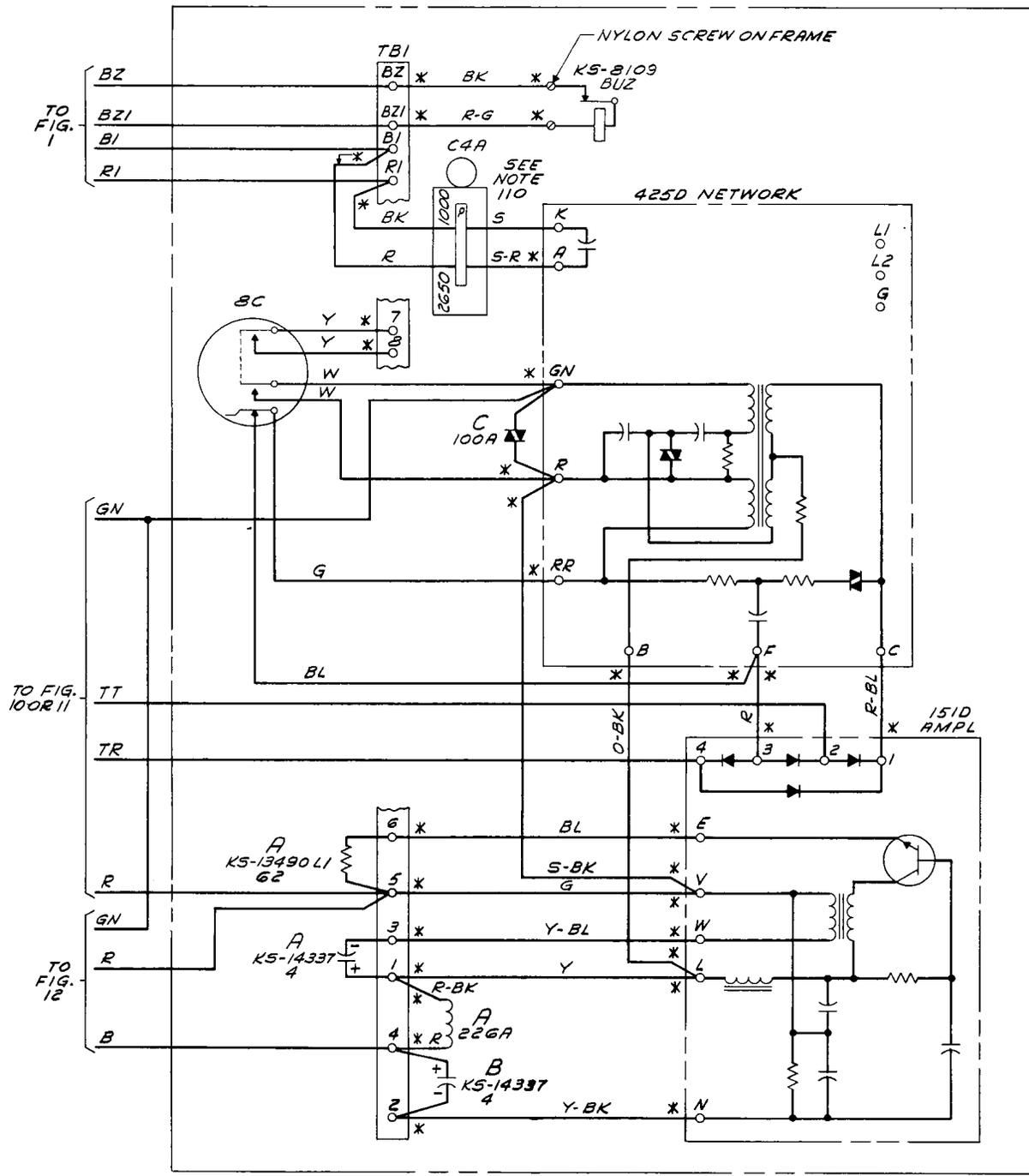


SD-69431-01-C3

* THIS LINE CIRCUIT CONTROLLED BY KEY NUMBER AS INDICATED.

STATION SYSTEMS	
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A	
KEY AND TELEPHONE CIRCUIT	
FLUSH MOUNTED KEYS	
SD-69431-01-C3	
BELL TELEPHONE LABORATORIES	TWO SIZE
INCORPORATED	6S
PRINTED IN U.S.A.	

FIG. 6 (MFR DISC.)
690A SUB SET

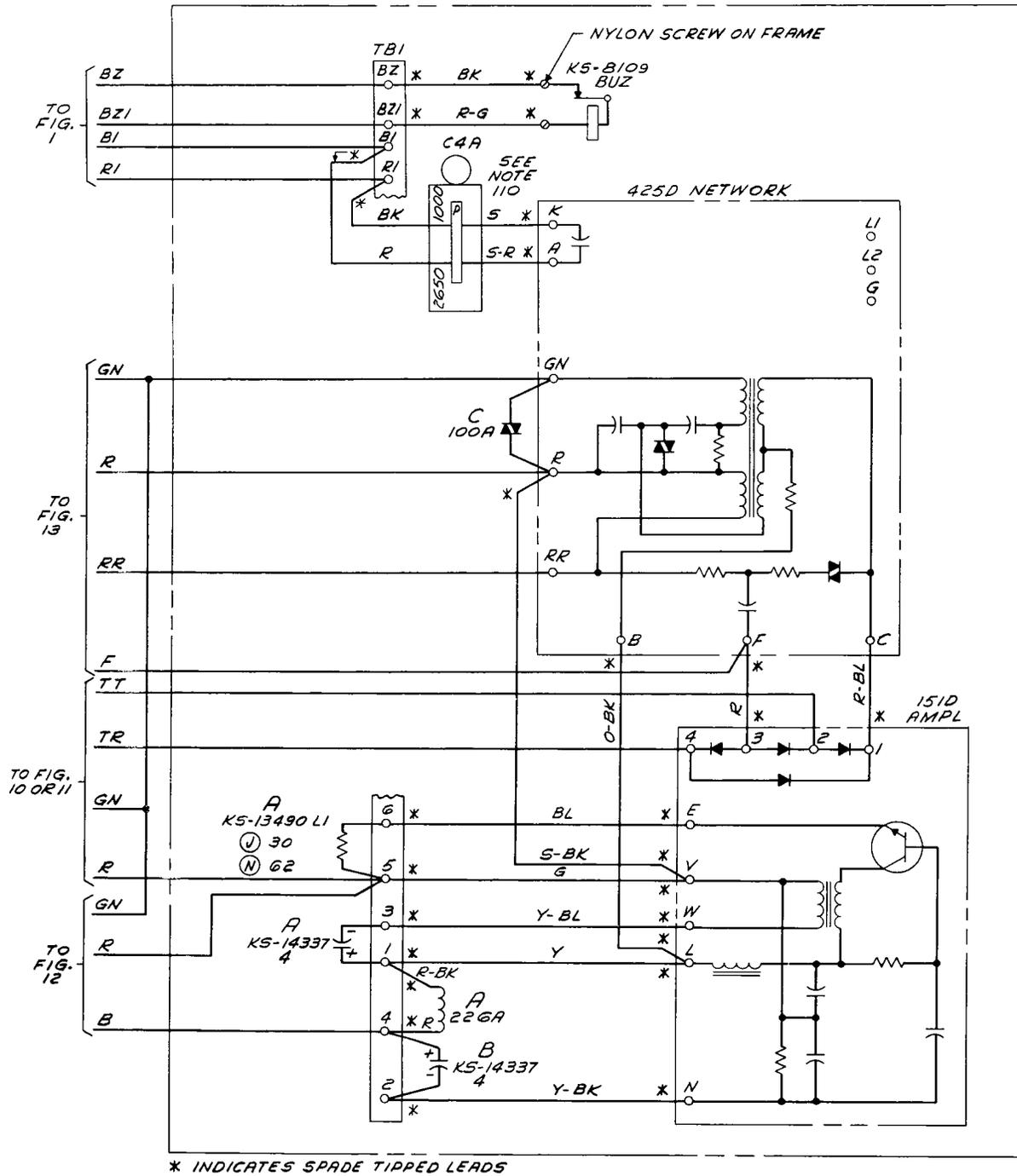


* INDICATES SPADE TIPPED LEADS

SD-69431-01-C4

STATION SYSTEMS		SD-69431-01-C4
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S	PRINTED IN U.S.A.

FIG. 7 (MFR DISC.)
688A SUB SET

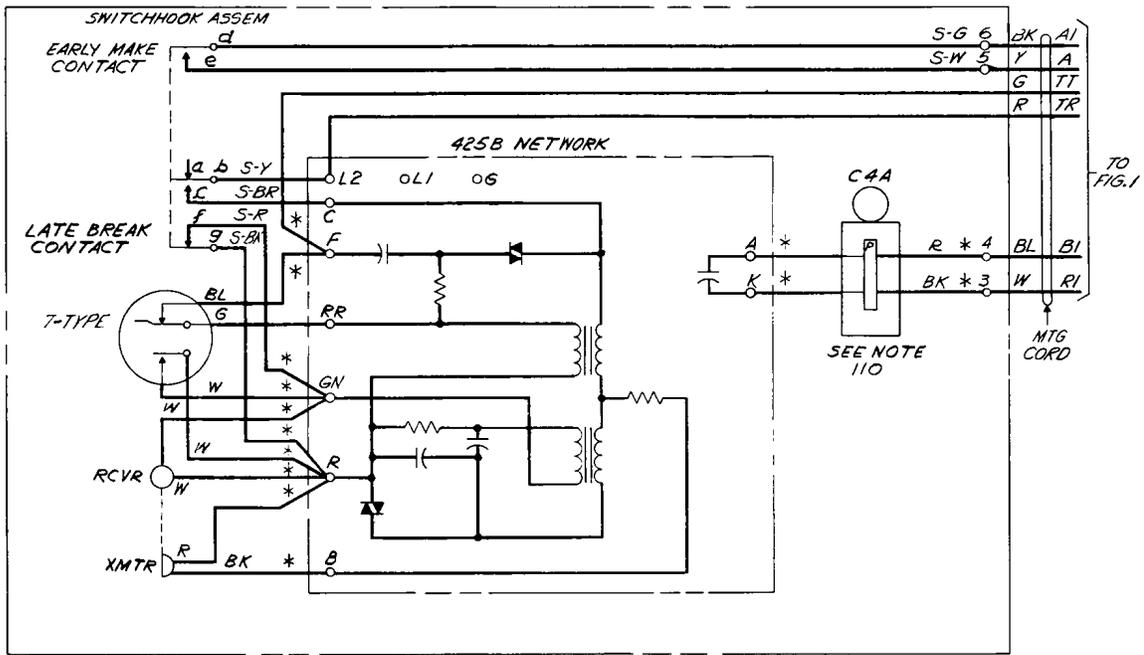


SD-69431-01-C5

STATION SYSTEMS		SD-69431-01-C5
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED	ONE SIZE 3S	PRINTED IN U.S.A.

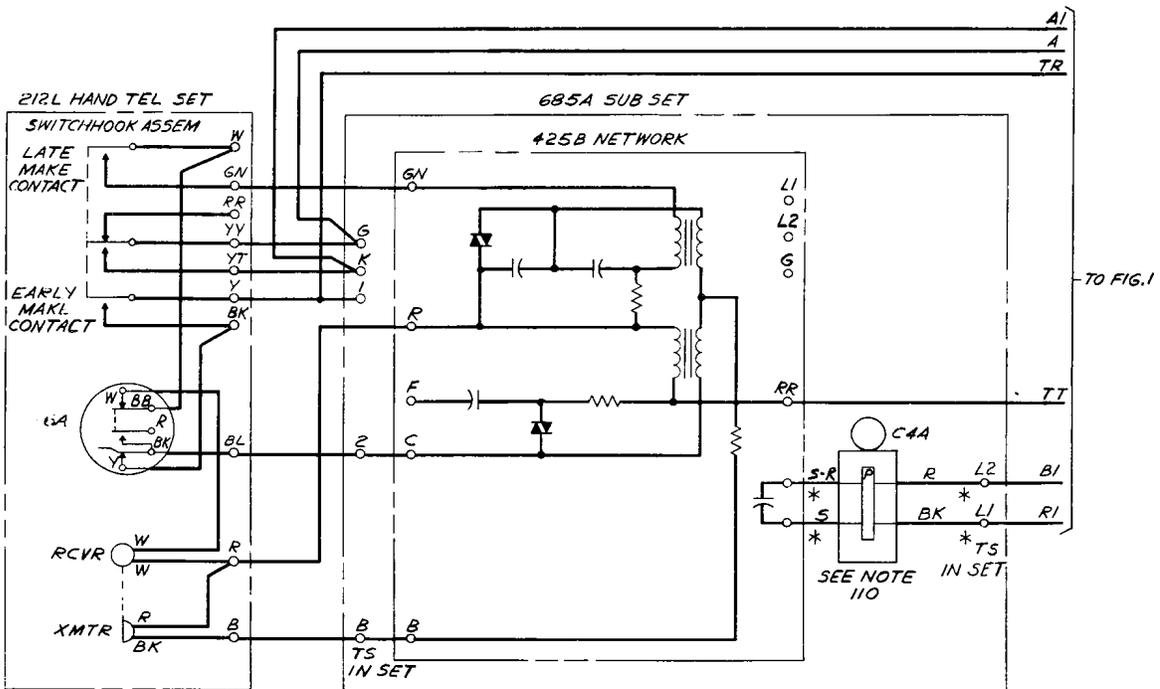
DRAWING	1
ISSUE	5/2
	DHC
	PLB
	2D
	WPM
	DHC
	ARR
	EBB
	EBB
	PEG

FIG. 8 (MFR. DISC.)
500LR, 500MR TELEPHONE SET



*INDICATES SPADE TIPPED LEADS

FIG. 9
TELEPHONE CKT
G-TYPE TELEPHONE SET



*INDICATES SPADE TIPPED LEADS

SD-69431-01-C6

STATION SYSTEMS		SD-69431-01-C6
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 3S	PRINTED IN U.S.A.

DRAWING ISSUE	
1	CHK DNC WEG
2D	SEA D/KS ART

FIG.10
622A KEY
(FLASH AND RELEASE)

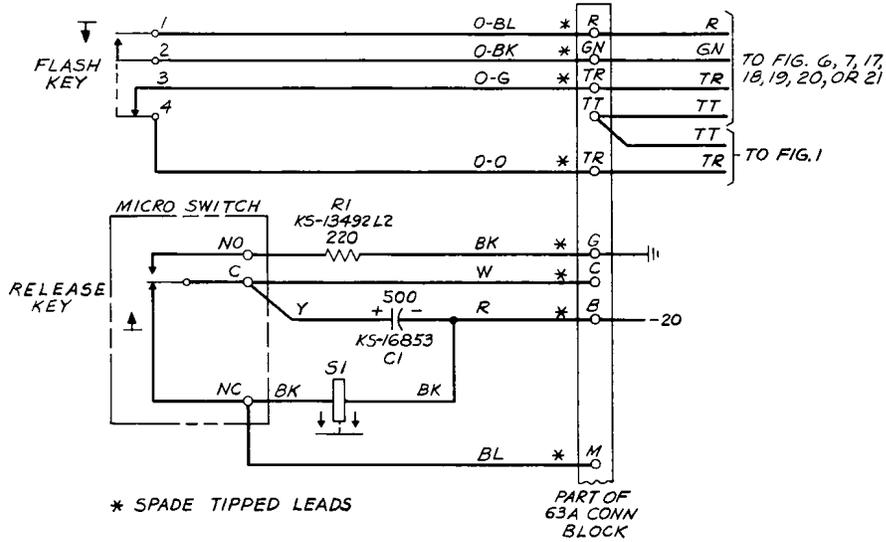


FIG.11
621A KEY
(FLASH AND RELEASE)

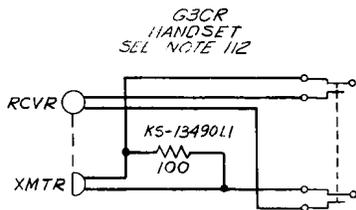
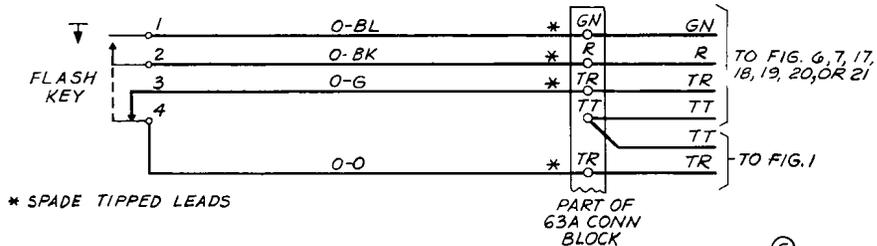


FIG.12
HANDSET, HEADSET AND JACKS
52- OR 53-TYPE
OPR TEL SET

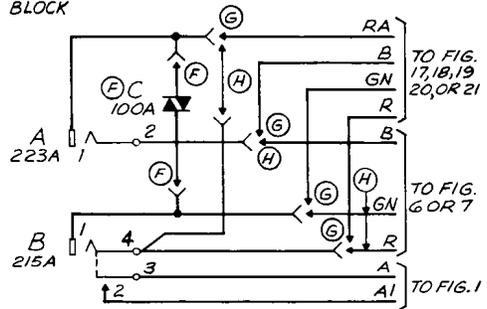
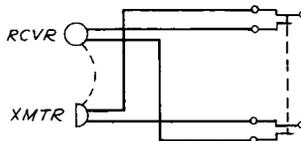


FIG.13
DIAL

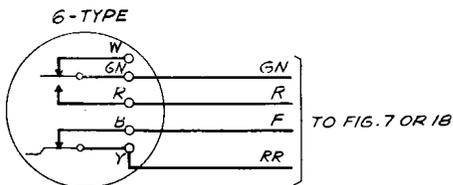
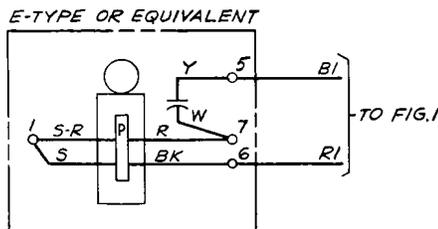


FIG.14
RINGER
SEE NOTE 110



SD-69431-01-C7

STATION SYSTEMS
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A
KEY AND TELEPHONE CIRCUIT
FLASH MOUNTED KEYS

SD-69431-01-C7

BELL TELEPHONE LABORATORIES
INCORPORATED

35

PRINTED IN U.S.A.

DRAWING ISSUE	
1	DHC MEJ
2D	SEA DHC ARR

FIG. 15
7-TYPE BUZZER

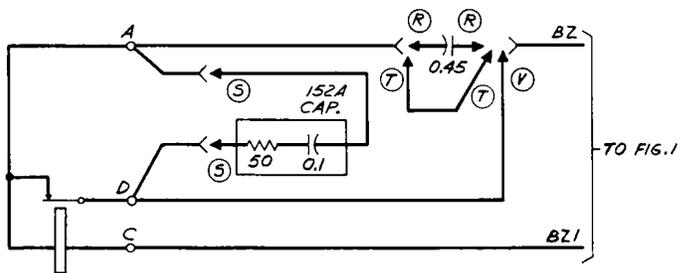


FIG. 16 (MFR DISC)
KS-8109 BUZZER

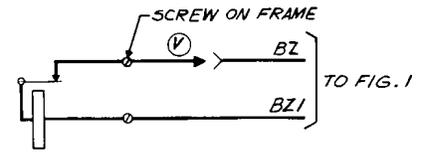
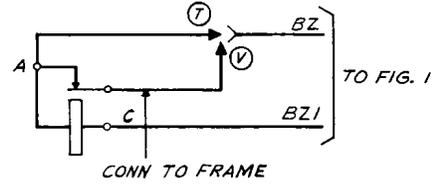


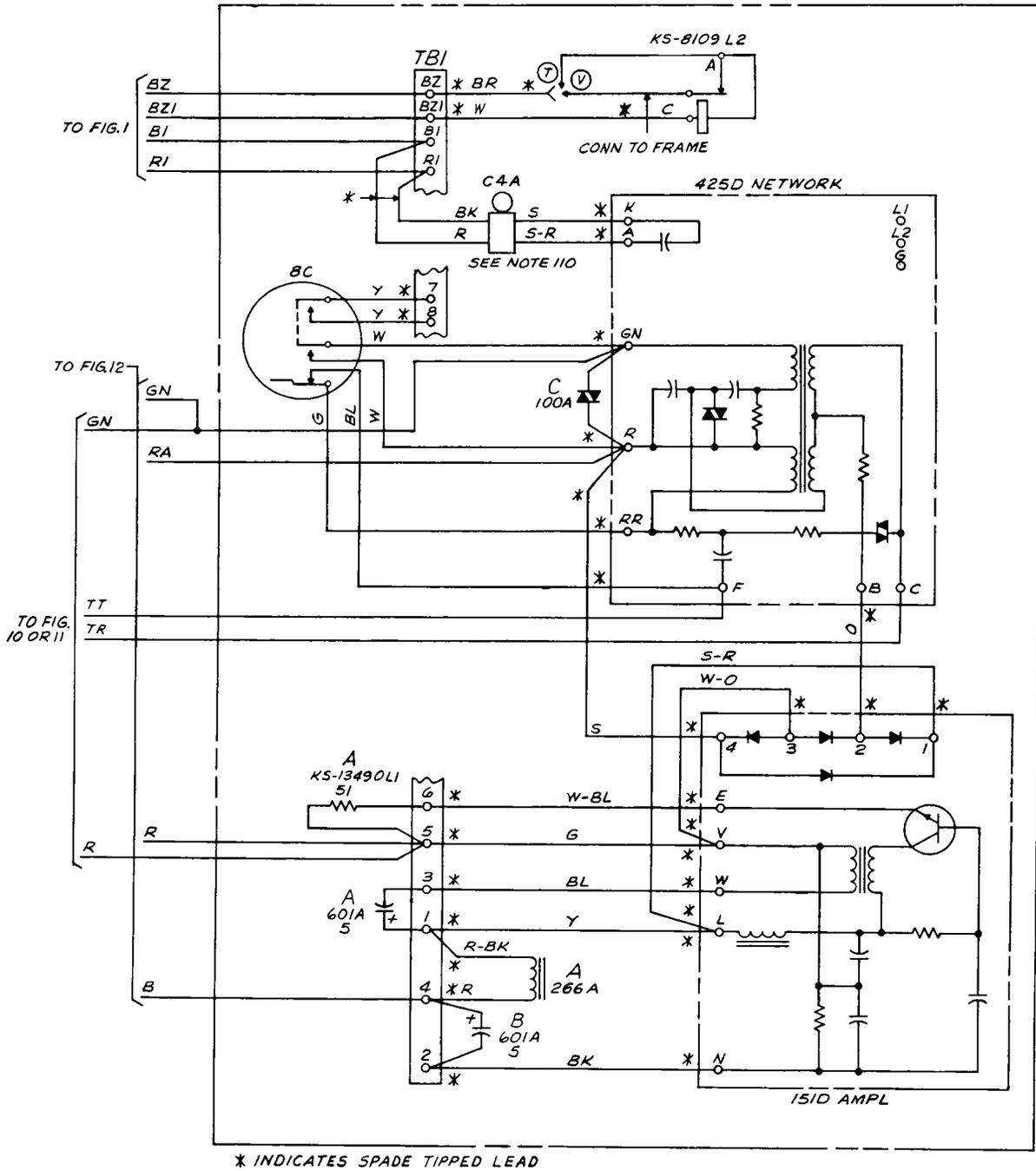
FIG. 22
KS-8109 L2 BUZZER



SD-69431-01-C8

STATION SYSTEMS KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		SD-69431-01-C8
BELL TELEPHONE LABORATORIES INCORPORATED	DWG. SIZE 3S	

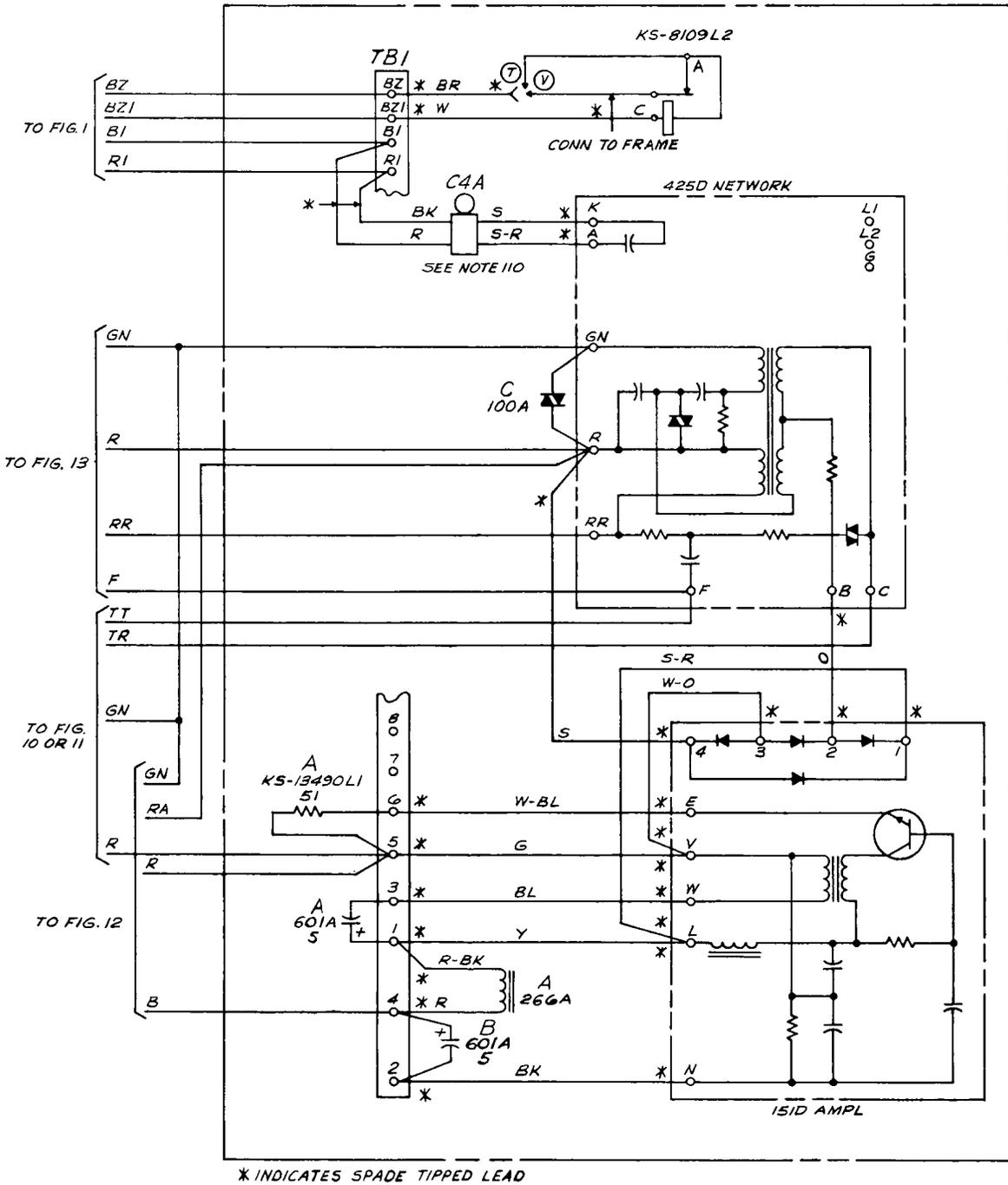
FIG. 17 (MFR DISC)
6908 SUBSET



SD-69431-01-C9

STATION SYSTEMS		SD-69431-01-C9
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED	OVER SIZE 35 PRINTED IN U.S.A.	

FIG. 18 (MFR DISC)
688B SUBSET

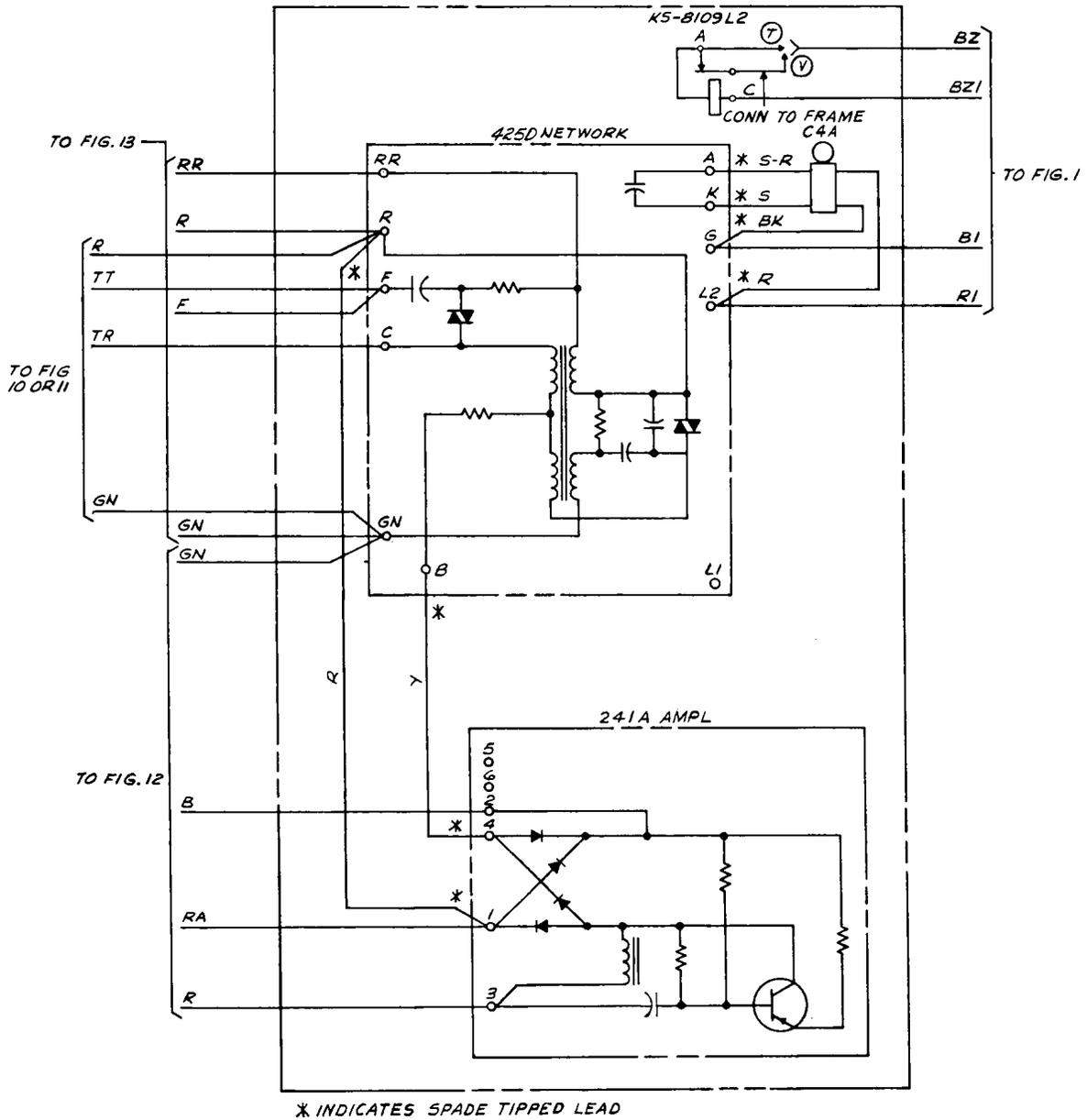


SD-69431-01-C10

STATION SYSTEMS		SD-69431-01-C10
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED	OVER SIZE 3S PRINTED IN U.S.A.	

DRAWING ISSUE	
2D	SEA DHC AM
4D	RBO RAB REG

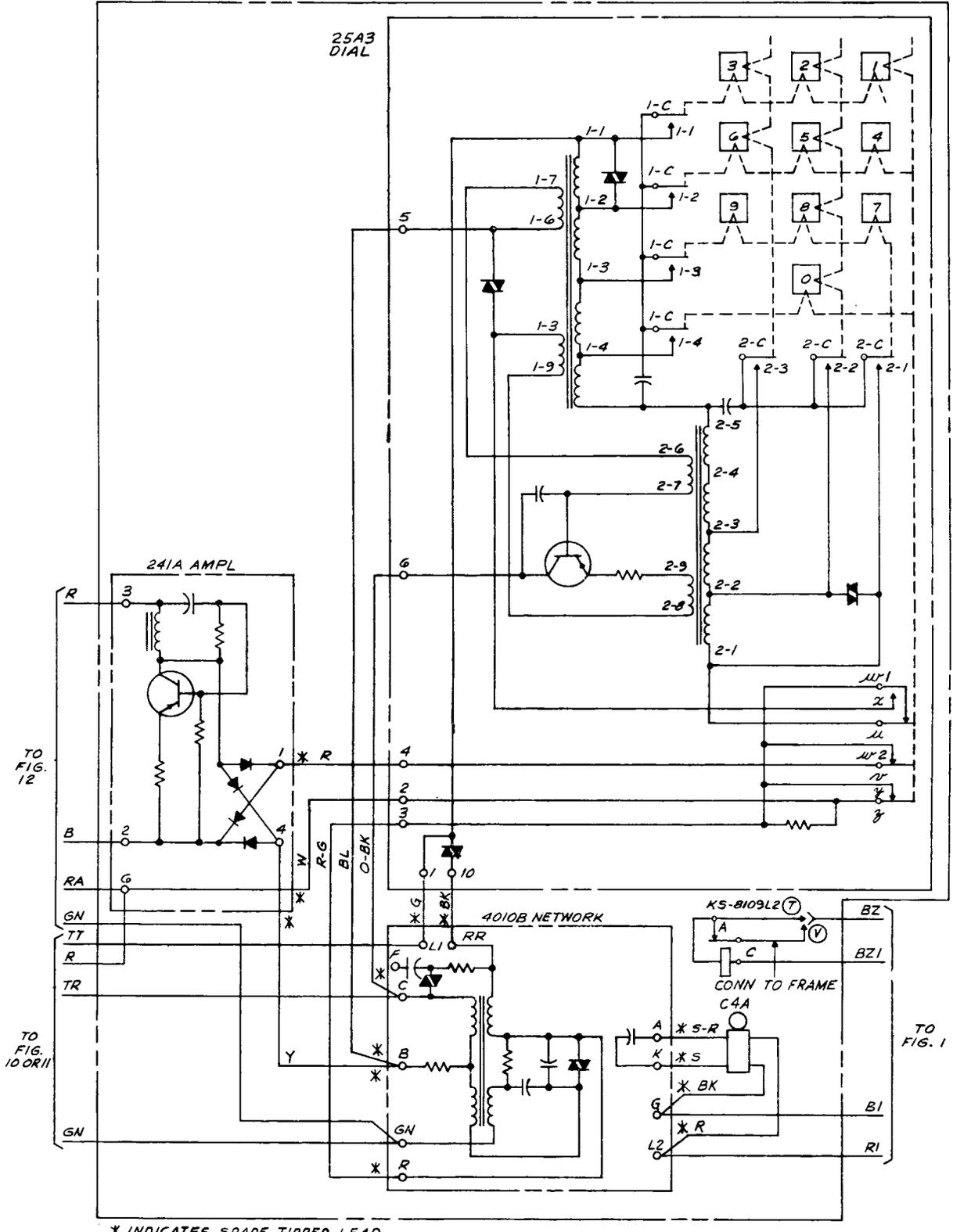
FIG. 20
GBBC SUBSET



SD-69431-01-C12

STATION SYSTEMS		SD-69431-01-C12
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 8A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED		
3S		PRINTED IN U.S.A.

FIG. 21
1690C SUBSET



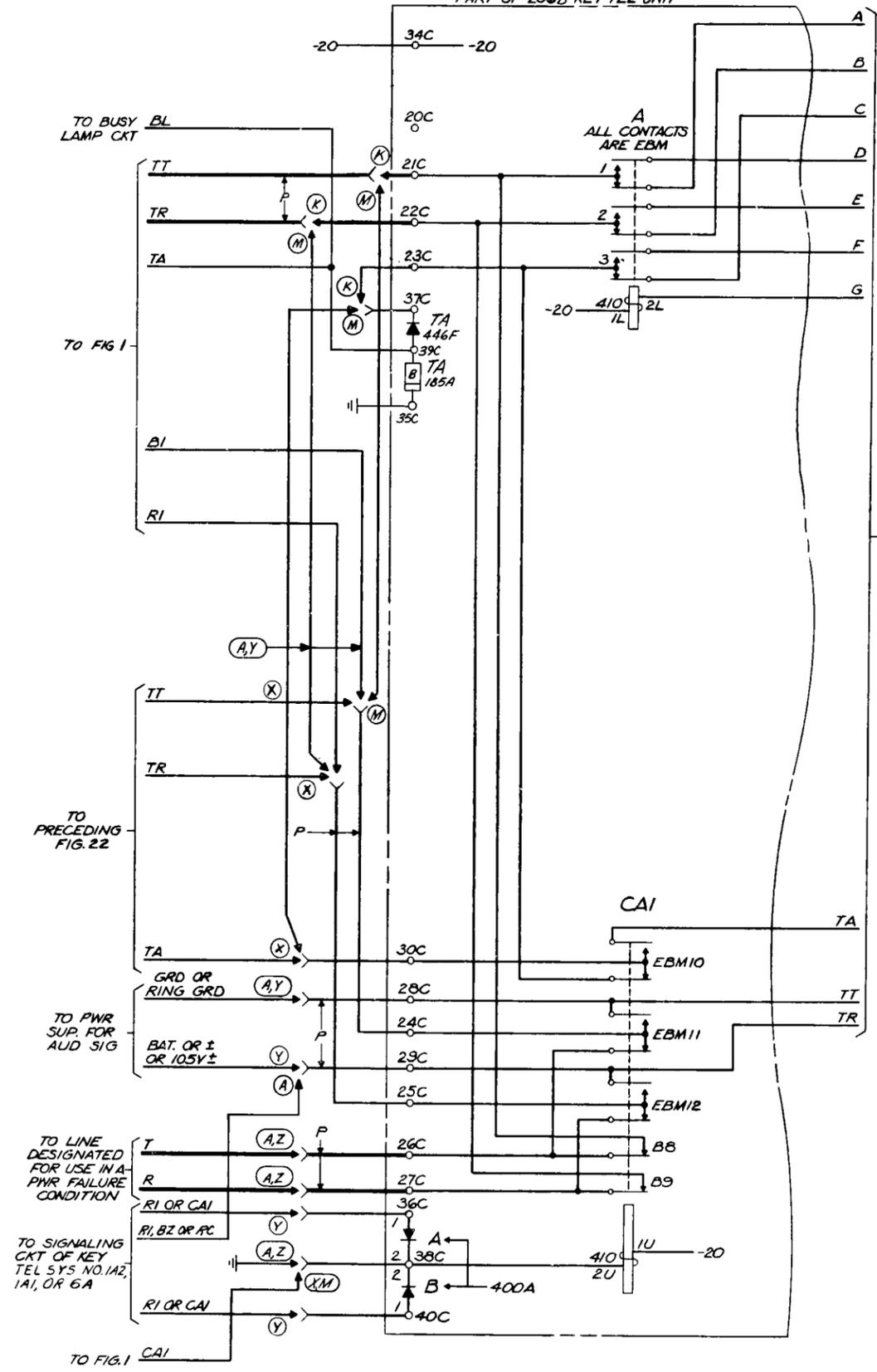
SD-69431-01-C13

STATION SYSTEMS	
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS	
BELL TELEPHONE LABORATORIES INCORPORATED	OVER SIZE 3S PRINTED IN U.S.A.

SD-69431-01-C13

PART OF FIG. 23
STATION LINE CONCENTRATOR FOR 30 LINES

PART OF 236B KEY TEL UNIT



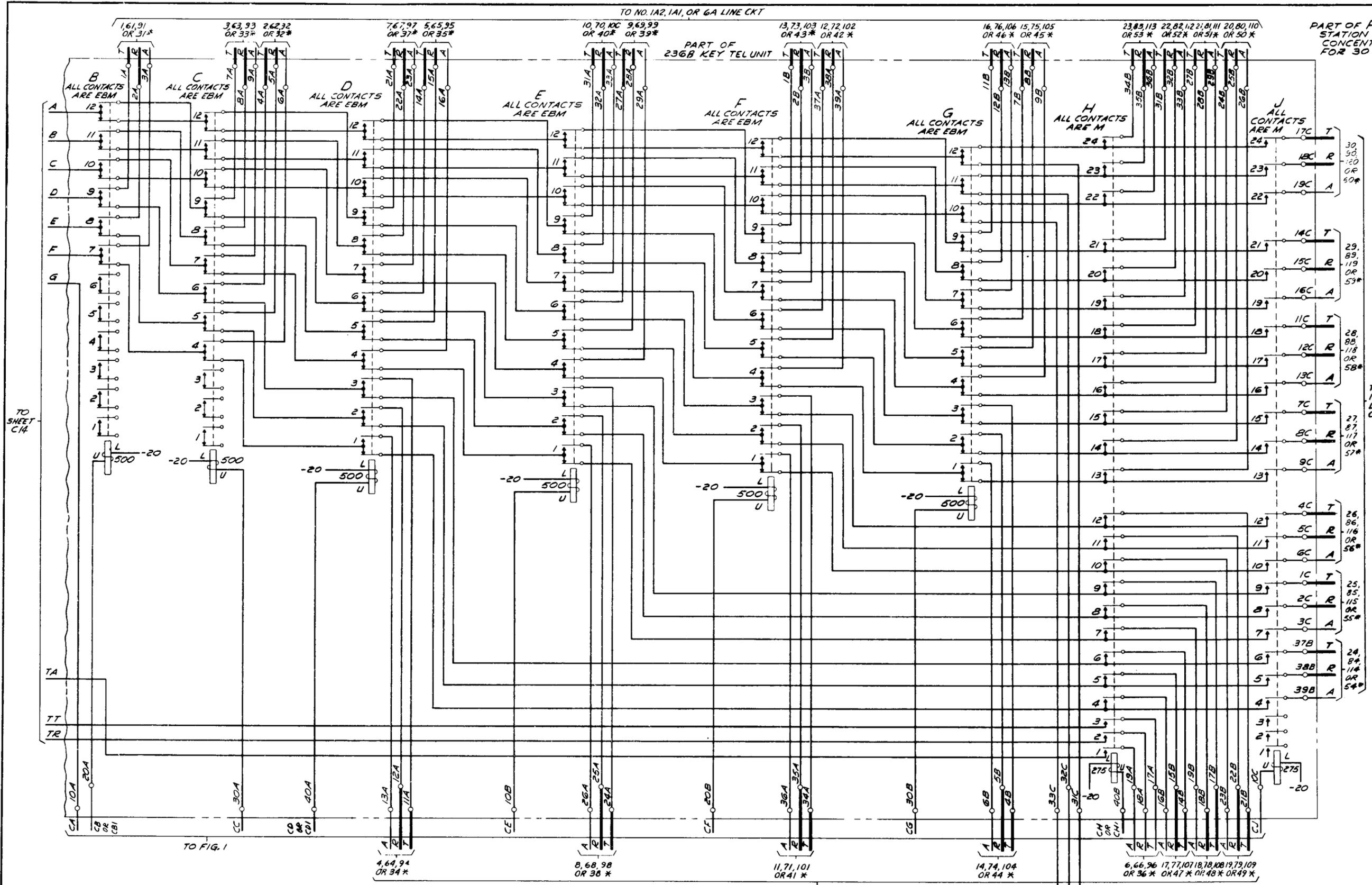
TO SHEET C 15

SD-69431-01-C14

DRAWING	ISSUE
3AC	FIG. 23
4D	FIG. 23

STATION SYSTEMS		SD-69431-01-C14
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		
BELL TELEPHONE LABORATORIES INCORPORATED		PRINTED IN U.S.A.

PART OF FIG. 23
STATION LINE
CONCENTRATOR
FOR 30 LINES



* THIS LINE CIRCUIT CONTROLLED BY KEY NUMBER AS INDICATED.

STATION SYSTEMS
KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A
KEY AND TELEPHONE CIRCUIT
FLUSH MOUNTED KEYS

BELL TELEPHONE LABORATORIES
INCORPORATED

SD-69431-01-C15

6S

SD-69431-01-C15

SD-69406-01

CIRCUIT REQUIREMENTS

KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS

DRAWING
ISSUE

APPARATUS				MECH REQT			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT					REMARKS
DESIG	CODE	OPTION	FIG.	BSP FIG.	CONT PRESS	ARM TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG			TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.		
								CONN BAT.	CONN GRD									
236A (MD) OR 236B KEY TEL UNIT																		
RELAYS																		
A	AK14		5.23	208					10A	GRD		0	25.5	24.0	MTD WITH (CA1) REL			
B	AJ81		5.23	220					20A	GRD		0	24.5	23.0				
C	AJ81		5.23	220					30A	GRD		0	24.5	23.0				
CA1	AK14		5.23	208					38A	GRD		0	25.5	24.0	MTD WITH (A) REL			
D	AJ81		5.23	220					40A	GRD		0	24.5	23.0				
E	AJ81		5.23	220					10B	GRD		0	24.5	23.0				
F	AJ81		5.23	220					20B	GRD		0	24.5	23.0				
G	AJ81		5.23	220					30B	GRD		0	24.5	23.0				
H	AJ203		5.23	500					40B	GRD		0	35.0	33.3				
J	AJ203		5.23	500					10C	GRD		0	35.0	33.3				

1
2D
3AC

SD-69431-01-D1

STATION SYSTEMS KEY TELEPHONE SYSTEMS NO. 1A2, 1A1, AND 6A KEY AND TELEPHONE CIRCUIT FLUSH MOUNTED KEYS		SD-69431-01-D1 35 PRINTED IN U. S. A.
BELL TELEPHONE LABORATORIES INCORPORATED		