

SHEET INDEX

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PART OF 55	CONNECTIONS TO PUNCHINGS 1, 2, 3 & 4 FOR VARIOUS LINE COMBINATIONS OF FIRST AND SECOND GROUPS AND INTERCOMMUNICATING LINE WITHOUT A KEY	0112	5																				012	
55A	ALL FIRST GROUP IN ORIG UNIT																							
55B	ALL SECOND GROUP IN ORIG UNIT																							
55C	FIRST AND SECOND GROUP IN ORIG UNIT																							
55D	ALL FIRST GROUP IN ORIG AND SUPL UNITS																							
55E	ALL SECOND GROUP IN ORIG AND SUPL UNITS																							
55F	FIRST AND SECOND GROUP IN ORIG UNIT AND SECOND GROUP IN SUPL UNIT																							
55G	FIRST GROUP IN ORIG UNIT, SECOND GROUP IN SUPL UNIT																							
55H	FIRST GROUP IN ORIG UNIT FIRST AND SECOND GROUPS IN SUPL UNITS																							
55I	ALL FIRST GROUP IN ORIG AND SUPL UNITS																							
55J	FIRST GROUP IN ORIG UNIT, SECOND GROUP IN SUPL UNITS																							
55K	SECOND GROUP IN ORIG AND SUPL UNITS																							
	CONT ON NEXT SHEET																							

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.
- "OLD SHEET NO." REFERS TO SHEET NO. PRIOR TO ISSUE.

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT INFORMATION	ED-69063-01 ED-69071-01

REPLACING SD-69077-01

SD-69195-01

Station Systems
KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

BELL TELEPHONE LABORATORIES
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3S

AT&TCO
STANDARD

SD-69195-0100
SHEET INDEX A
17 SHEETS

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DWG ISS	CD ISS	DWG ISS	CD ISS	DWG ISS	CD ISS
1	1	2A	1	3D	2D
4D	2D	APR 10			
DWG ISS	EE OR CD ISSUE	DATE ISSUE	DRAWN	APP	
5D	3D	5-23-59	STJHC DHC	JPS LHA	BM

SHEET INDEX (CONT)

FIG.	CONTENTS	SHEET NO.	ISSUE NO.																				OLD SHEET NO.
			5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22			
PART OF 55	CONNECTIONS TO PUNCHINGS 1,2,3 & 4 FOR VARIOUS LINE COMBINATIONS OF FIRST AND SECOND GROUPS AND INTERCOMMUNICATING LINE WITHOUT A KEY	0113	5																			012	
55L	FIRST GROUP IN ORIG UNIT AND NEXT SUCC SUPL UNITS, FIRST AND SECOND GROUP IN NEXT SUCC SUPL UNIT, SECOND GROUP IN SUCC SUPL UNITS																						
55M	FIRST AND SECOND GROUP IN ORIG UNIT, SECOND GROUP IN SUPL UNITS																						
55N	FIRST GROUP IN ORIG AND NEXT SUCC SUPL, SECOND GROUP IN SUCC SUPL UNITS																						
56	FOR FIG. 1 AND 2 ORIG KEY UNIT	0114	5																			013	
57	FOR FIG. 3 AND 9	0115	5																				

DRAWING
ISSUE
5D

SD-69195-0100

KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUITBELL TELEPHONE LABORATORIES
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35

SD-69195-0100
SHEET INDEX B

5

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CIRCUIT NOTES:

DESIG	AMP	POTENTIAL FUSED	ONE PER
	2	14 - 26V TALK	FIGS. 2,3,6 & 10
BATTERY SYMBOL -20		VOLTAGE RANGE 14-26V	

102.

FEATURE OR OPTION		FIG.	APP OR WIR	QUANTITY
ORIGINATING LINE KEY UNIT WITH FLASH, RING AND HOLD KEY.	RIGHT TO LEFT	1,2	G	1 PER ATT STA. FOR FIRST MAX 10 LINES
	LEFT TO RIGHT		Z	
SUPPLEMENTARY LINE KEY UNIT.	RIGHT TO LEFT	1	U	1 PER ATT STA. PER SUBSEQUENT MAX 10 LINES
	LEFT TO RIGHT		P	
BATTERY SUPPLY CKT (PROVIDE WHEN ANY LINE IN THE SECOND GROUP IS USED) SEE NOTE 106		3		1 PER ATT STA
TEL SET EQPT UNIT		5		1 PER ATT STA
WHEN AN OPR HEAD TEL SET CAN BE CONNECTED TO A CO OR PBX LINE ON WHICH THE TOTAL CONDUCTOR LOOP TO THE CO OR NEAREST LONG LINE CKT (INCLUDING BOTH STA AND CO CONDUCTOR LOOPS IN CASE OF PBX) IS LESS THAN 300 OHMS.			A	
WHEN OPTION A IS NOT REQUIRED			E	
AUTOMATIC CUTOFF CKT (PROVIDE WHEN THE ATT IS TO BE CUT OFF FROM A LINE MULTIPLIED TO A REGULAR STA WHEN THAT REGULAR STA IS IN USE OR WHEN TIE LINES TO PBX ARE PROVIDED.) SEE NOTE 110		6		1 PER ATT STA
WHEN OPR SET IS REQUIRED	DIAL AREAS	A		1 PER FIG. 5
	MANUAL AREAS	B		
WHEN HAND TEL SET IS REQUIRED	DIAL AREAS	C	E	1 PER FIG. 5
	MANUAL AREAS	D		
HOLD RELAY CKT	WHEN FIG. 3 IS NOT PROVIDED	8		1 PER ATT STA
	WHEN FIG. 3 IS PROVIDED	9		
SIGNALING CKT (PROVIDE WHEN 1A1 KEY TEL SYSTEM RINGDOWN TIE LINE OR STA LINE CKT IS PROVIDED).		10		1 PER ATT STA
ON ORIGINATING OR SUPPLEMENTARY KEY UNITS (FIG. 1) SEE NOTE 106	WHEN LINES IN BOTH GROUPS ARE FURNISHED, PROVIDE V OPTION BETWEEN THE KEY ASSOCIATED WITH THE LAST LINE OF THE FIRST GROUP AND THE KEY ASSOCIATED WITH THE FIRST LINE OF THE SECOND GROUP		V	
NORMAL WIRING OF KEY UNITS. SEE NOTE 106.			W	
ON ORIGINATING OR SUPPLEMENTARY KEY UNITS (FIG. 1) SEE NOTE 106	WHEN THE LINE ASSOCIATED WITH THE LAST KEY IS IN THE SAME GROUP AS THE LINE ASSOCIATED WITH THE FIRST KEY OF A SUCC KEY UNIT		T	
ON LAST KEY UNIT (FIG. 1) SEE NOTE 106	WHEN V, Q OR M AND N OPTIONS ARE PROVIDED AT A PREC KEY AND AN INTERCOMMUNICATING LINE NOT ASSOCIATED WITH A KEY IS PROVIDED			
WHEN ALL LINES ARE IN THE FIRST GROUP AND INTERCOM LINE IS PROVIDED BUT NOT ASSOCIATED WITH A KEY, SEE NOTE 106.			S	
ON ORIGINATING KEY UNIT (FIG. 1) SEE NOTE 106	WHEN ALL LINES PROVIDED ARE IN THE SECOND GROUP		Q	
	WHEN LINES IN THE FIRST GROUP ONLY OR IN BOTH FIRST AND SECOND GROUP ARE PROVIDED		R	

CIRCUIT NOTES: (CONT)

FEATURE OR OPTION		FIG.	APP OR WIR	QUANTITY
ON SUPPLEMENTARY KEY UNITS (FIG. 1) SEE NOTE 106	WHEN THE LINE ASSOCIATED WITH THE FIRST KEY IS IN THE SAME GROUP AS THE LINE ASSOCIATED WITH THE LAST KEY OF THE PREC KEY UNIT		R	
	WHEN THE FIRST KEY IS ASSOCIATED WITH THE FIRST LINE OF THE SECOND GROUP		M	
ON ORIGINATING OR SUPPLEMENTARY KEY UNITS (FIG. 1) SEE NOTE 106	WHEN THE LAST KEY IS ASSOCIATED WITH THE LAST LINE OF THE FIRST GROUP		N	
WHEN THIS CKT IS USED IN NEW INSTALLATIONS			J	
WHEN THIS CKT IS USED FOR ADDITIONS WHERE	OTHER STA ARE EQUIPPED WITH THIS CKT		J	
	ANY OTHER STA IS EQUIPPED WITH SD-69077-01 CKT		F	
WHEN THIS CKT IS USED	WITHOUT FIG. 10		ZD	
	WITH FIG. 10		ZG	

NETWORK VALUES			
NO.	NETWORK CODE	RESISTANCE IN OHMS	CAPACITANCE IN UF

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
1				G		Y
				Z		K
				U		X
				P		H
3D	A	B OR E	102	A, E		B
				FIG. 8		FIG. 4
				FIG. 7		
	ZA OR ZB	ZA		ZB		ZA
4D	ZC OR ZD	ZC		ZD		ZC
	ZF	ZE		ZF		ZE
5D				FIG. 9		
				FIG. 10		FIG. 7
				274AH 1NDR		274T 1NDR

KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUITBELL TELEPHONE LABORATORIES
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CIRCUIT NOTES: (CONT)

105. NOT MORE THAN 20 (HOLD) LAMPS OR 20 (LINE AND BUSY) LAMPS SHALL BE MULTIPLIED TO ANY ONE H OR L LEAD.
106. (A) TWO GROUPS OF LINES CAN CONNECT TO FIG. 1, THE FIRST REQUIRING A BRIDGE CIRCUIT AND THE SECOND REQUIRING A BATTERY FEED CIRCUIT. IN THE FIRST GROUP ARE CENTRAL OFFICE LINES, PBX LINES, SECRETARIAL LINES, AUTOMATIC TIE LINES TO PBX AND LINE CIRCUITS OF KEY TELEPHONE SYSTEM NO. 1A1. IN THE SECOND GROUP ARE RINGDOWN TIE LINES, STATION LINES AND AUTOMATIC TIE LINES TO OTHER KEY EQUIPMENT.
- INTERCOMMUNICATING LINES SHALL BE IN GROUP 2 IF OTHER LINES IN GROUP 2 ARE PROVIDED, OTHERWISE THE INTERCOMMUNICATING LINES SHALL BE IN GROUP 1.
- (B) WHEN LINES IN THE FIRST GROUP ARE PROVIDED, THEY SHALL BE CONNECTED IMMEDIATELY FOLLOWING FIG. 2.
- (C) THE KEY UNITS NORMALLY ARE WIRED IN ACCORDANCE WITH W OPTION.
- (D) TERMINALS NO. 1 AND NO. 3 ARE PROVIDED ONLY ONCE PER LINE KEY UNIT (FIG. 1). SEE EQUIPMENT NOTES 201, 202, 203, 204, 205, AND 206.
- (E) WHEN LINE CIRCUITS OF KEY TELEPHONE SYSTEM NO. 1A1 ARE USED WITH 101A KEY EQUIPMENTS, THE LAMP GROUND AND SIGNAL GROUNDS OF THE KEY TELEPHONE SYSTEM NO. 1A1 SHALL BE THE SAME AS THE GROUND OF THE KEY EQUIPMENT.
108. WHEN EXPERIENCE INDICATES THAT AN EXCESSIVE AMOUNT OF A3 LAMPS BURN OUT, THE TELEPHONE CO. MAY REPLACE ALL LAMPS AT THE STATION BY A1 LAMPS PROVIDING THE ILLUMINATION FROM A1 LAMPS IS SATISFACTORY.
109. WHEN LINE CIRCUITS OF KEY TELEPHONE SYSTEM NO. 1A1 ARE PROVIDED THE ASSOCIATED HOLD LAMP SHALL BE REMOVED AND THE LINE AND BUSY LAMP SHALL BE THE TYPE CALLED FOR IN INDICATORS OF THE KEY TELEPHONE SYSTEM NO. 1A1 INSTALLATION. EXCEPT WHEN USED WITH THE CO OR PBX LINE CKT FOR JOINT USE THE HOLD LAMP NEED NOT BE REMOVED.
110. THE AUTOMATIC CUTOFF FEATURE SHALL NOT BE PROVIDED WHEN LINE CIRCUITS OF KEY TELEPHONE SYSTEM NO. 1A1 ARE PROVIDED.
111. WHEN USED WITH KEY TELEPHONE SYSTEM NO. 1A1 THE a CONTACT SHALL BE ADJUSTED TO BREAK LAST ON SLOW RELEASE OF LINE KEY.
112. ADJUST BL-RR CONTACTS TO MAKE FIRST WHEN USED WITH NO. 1A1 CIRCUITS.

INFORMATION NOTES:

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

DRAWING
ISSUE

5D

BY: JAC
CHK: JACBM
GF

FIGURES AND OPTIONS ON THIS DWG			
CKT FIG.		APP OR WIRING	
1	A	Z	ZA
2	B	Y	ZB
3	C	X	
4	D	W	ZD
5		V	ZE
6		U	ZF
7		T	ZG
8		S	
9		R	
10		Q	
		P	
		N	
		M	
		K	
		J	
		H	
		G	
		F	
		E	
		B	
		A	

SHOW
FRONT

↑ LINE
↓ LINE

SHOW
FRONT

↑ HOLD
↓ FLASH & RING

KEY EQUIPMENT NO. 101A OR 101B
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FIG. 6
AUTOMATIC CUTOFF CIRCUIT

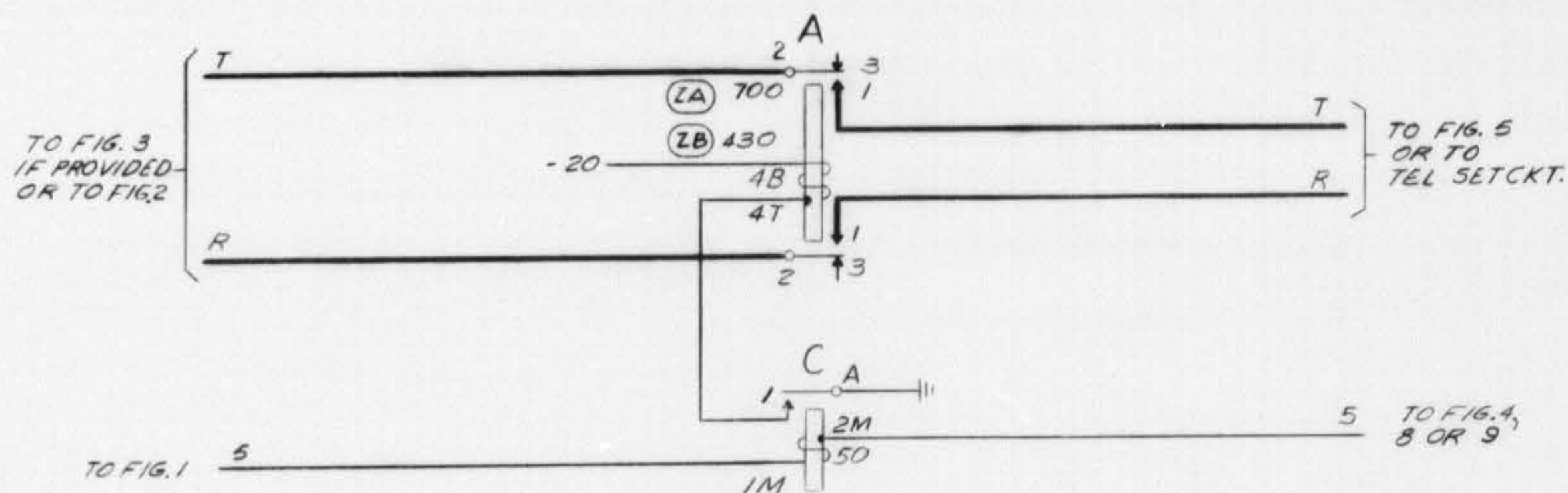


FIG. 9
HOLD RELAY CIRCUIT

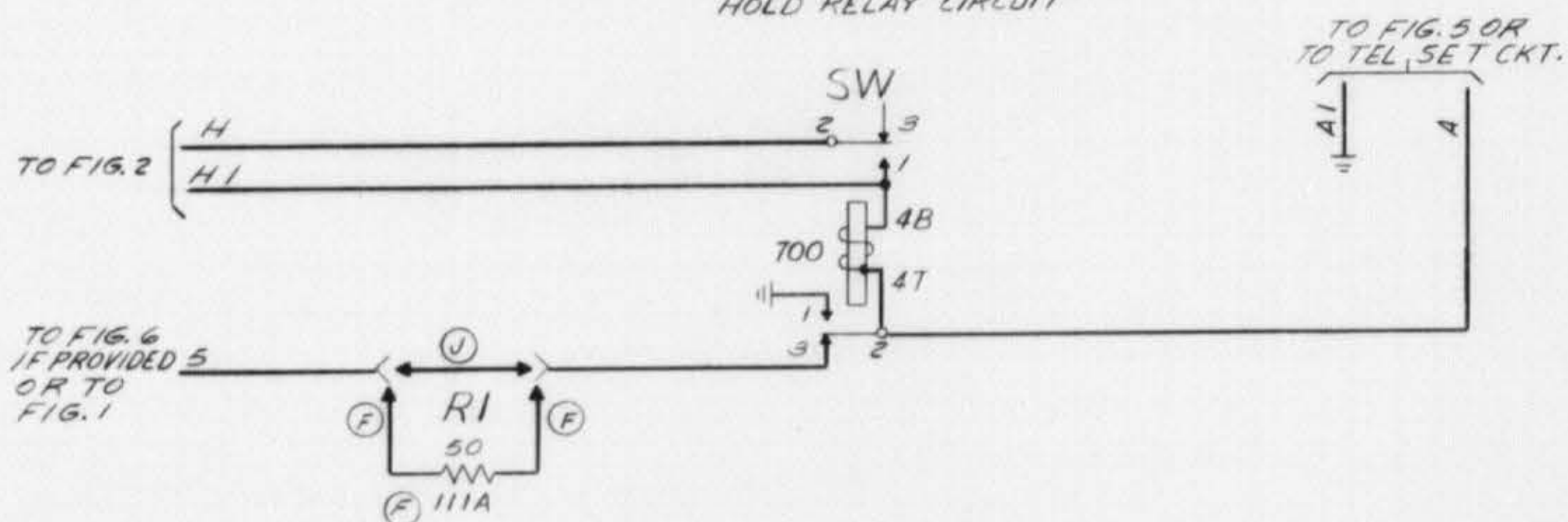
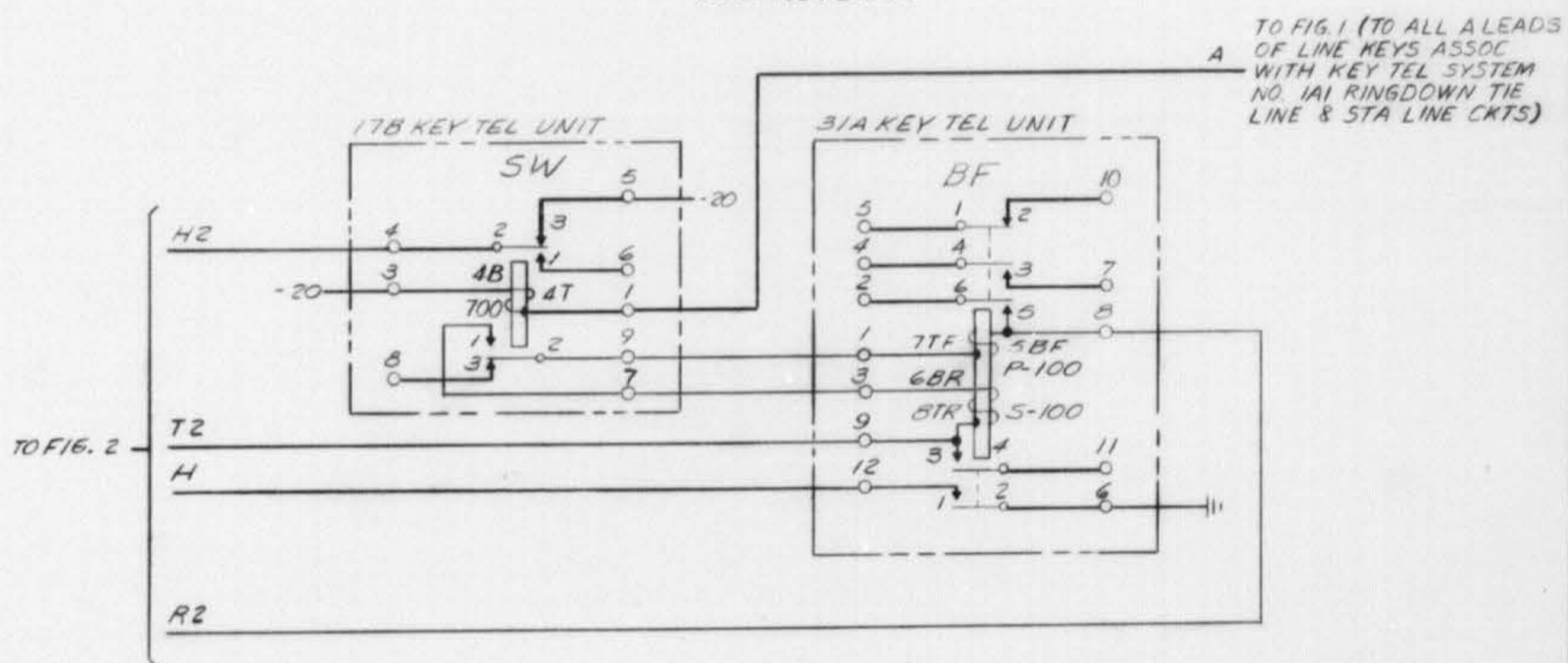


FIG. 10
SIGNALING CIRCUIT
SEE NOTE 203



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KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

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FIG. A

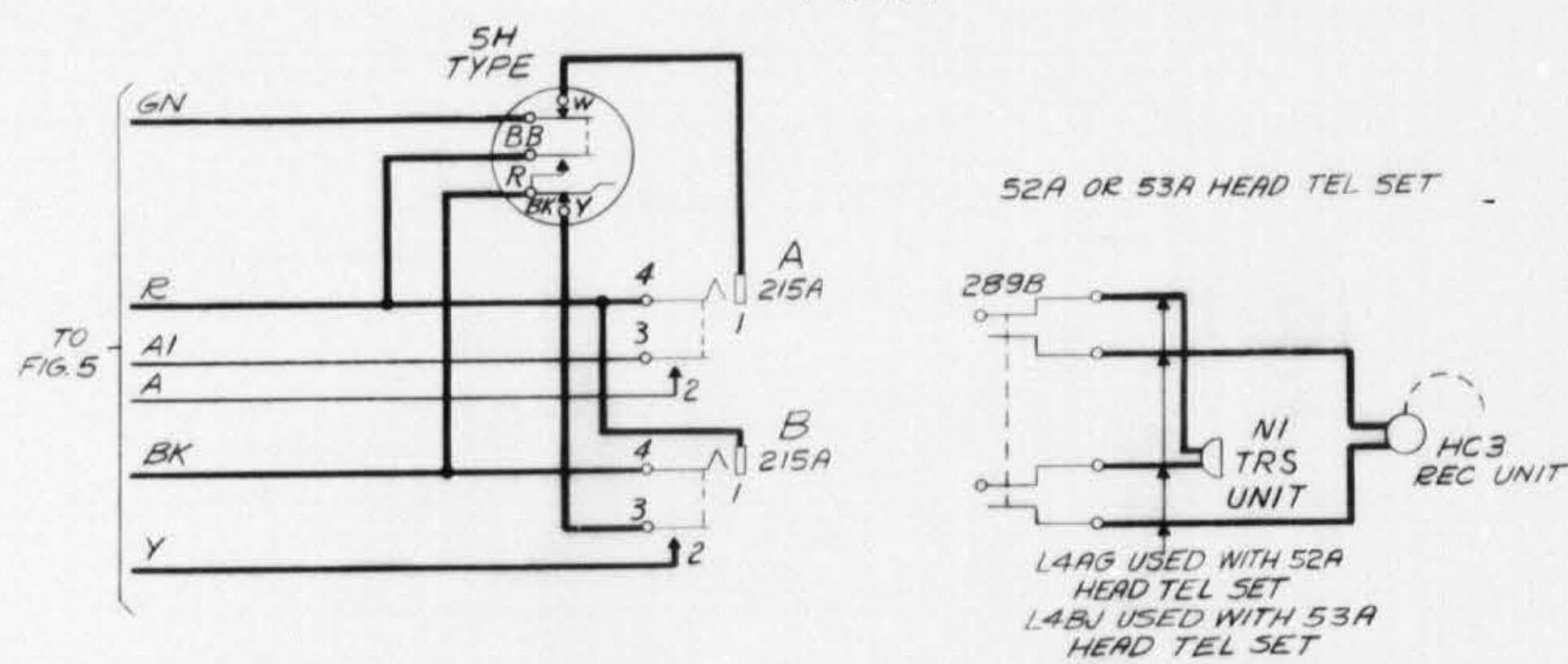


FIG. B

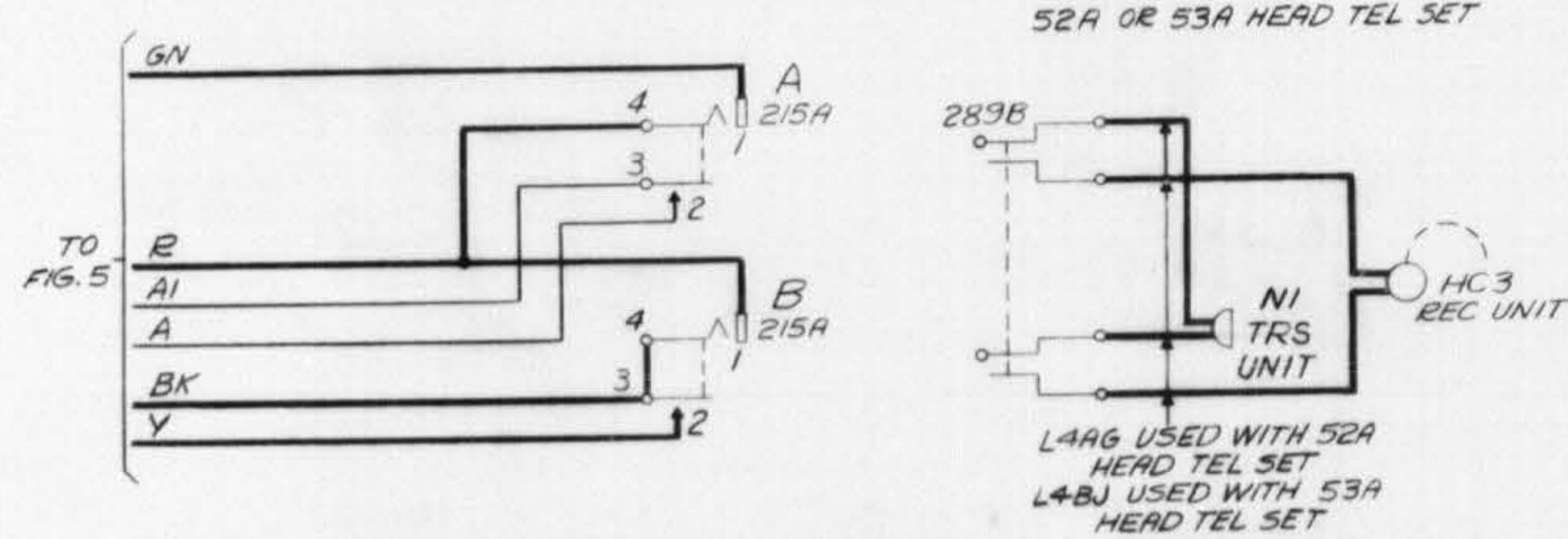


FIG. C

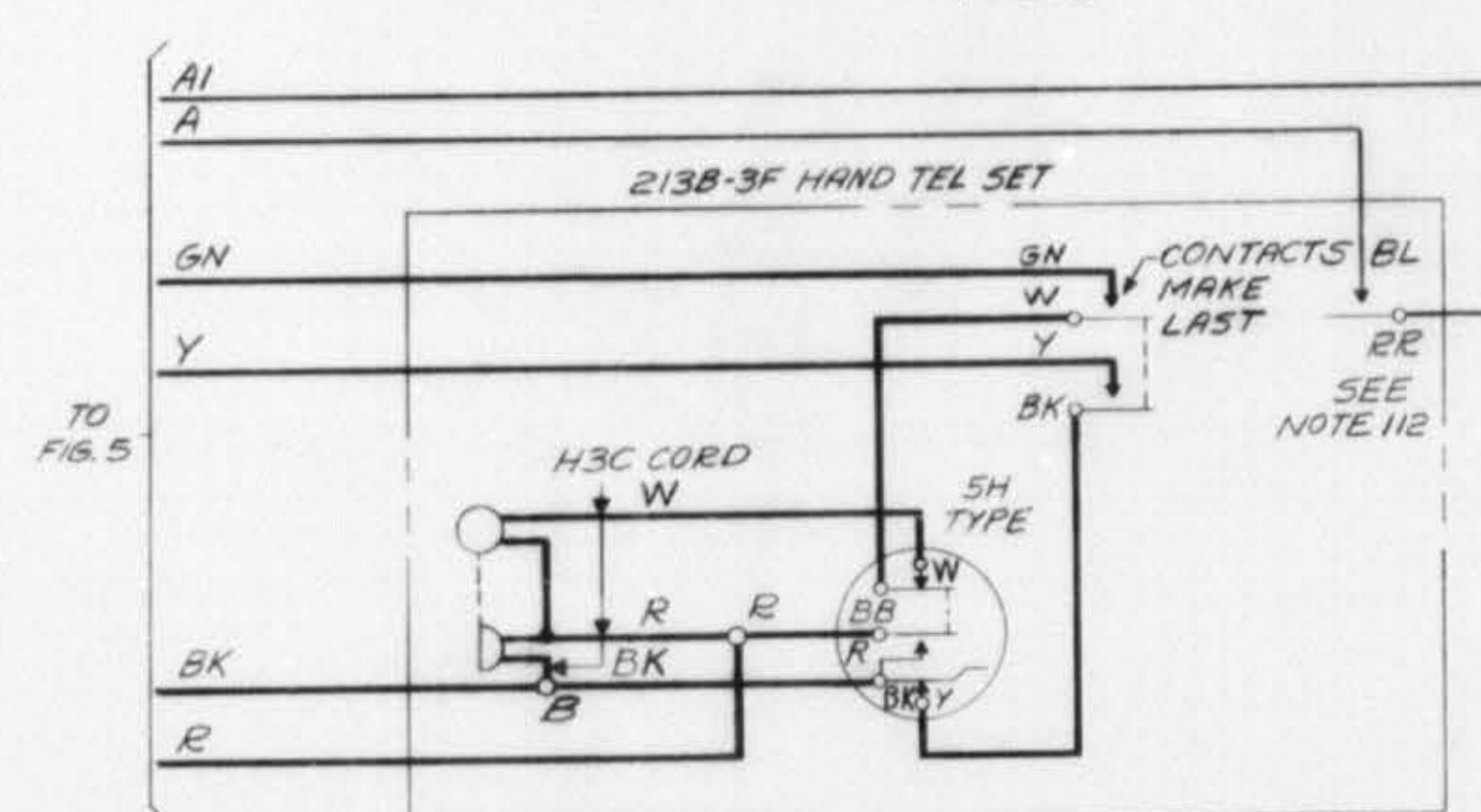
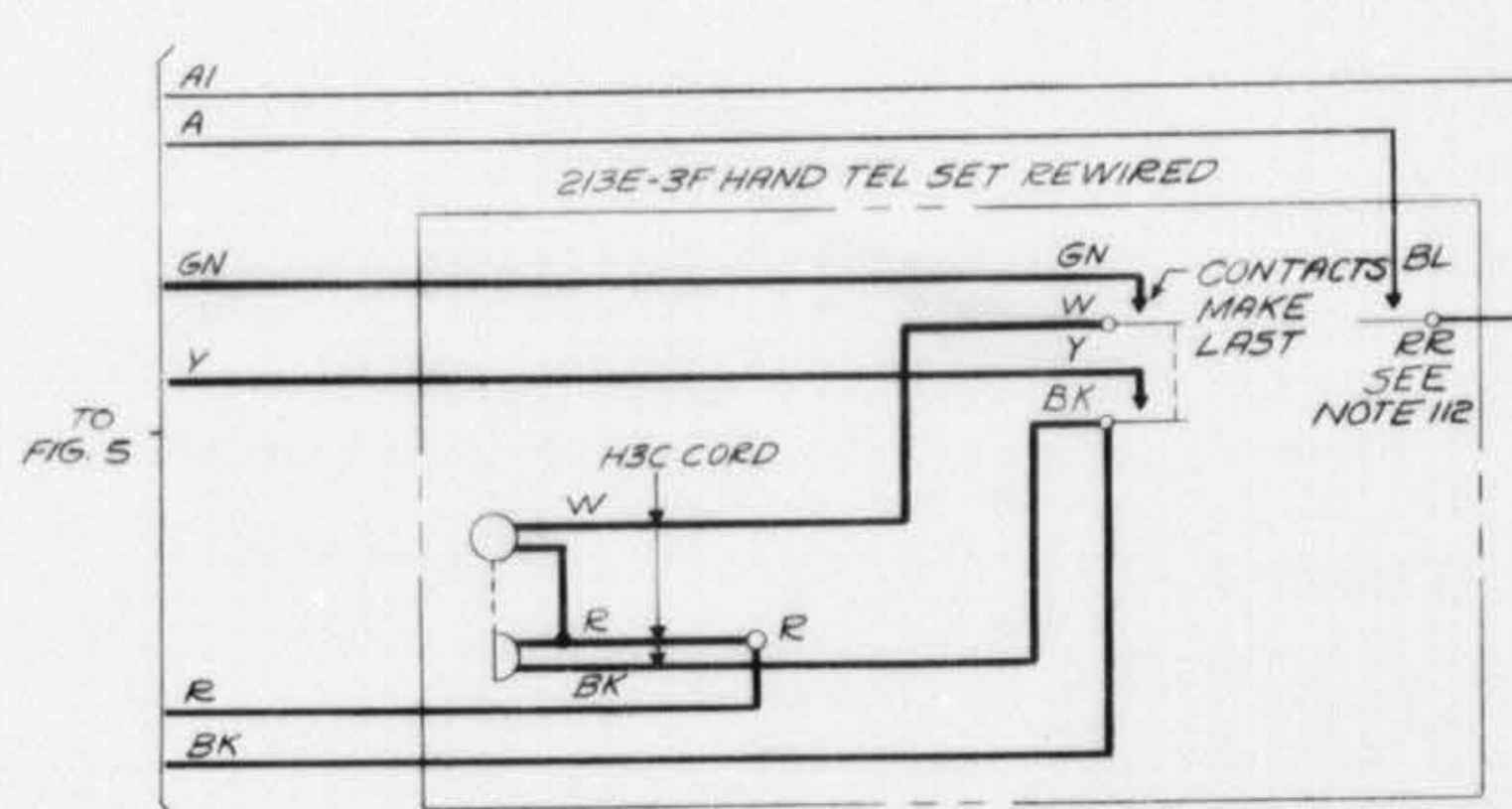


FIG. D



KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

BELL TELEPHONE LABORATORIES
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FIG. 4 (MFR DISC)
HOLD RELAY CIRCUIT

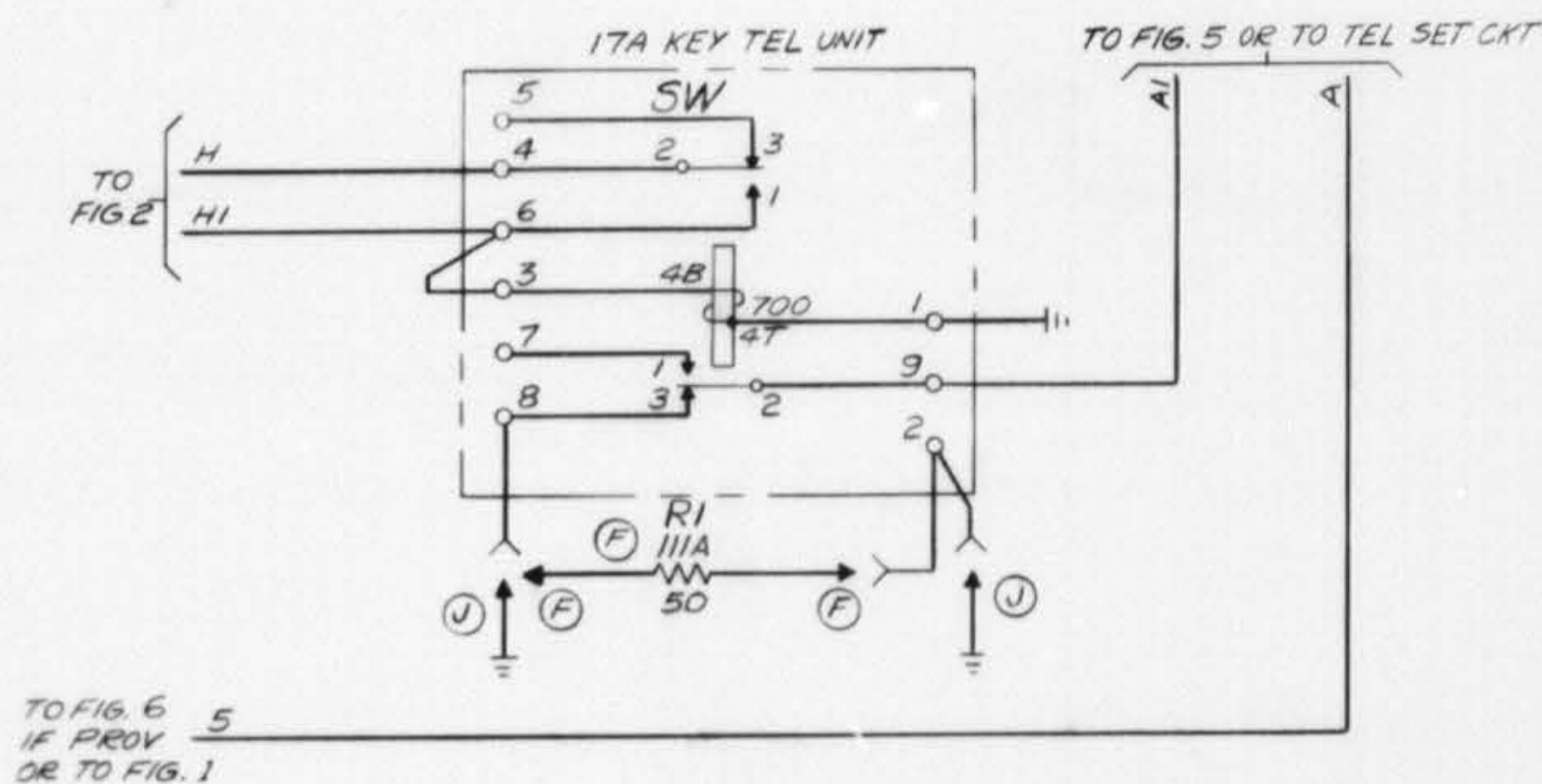
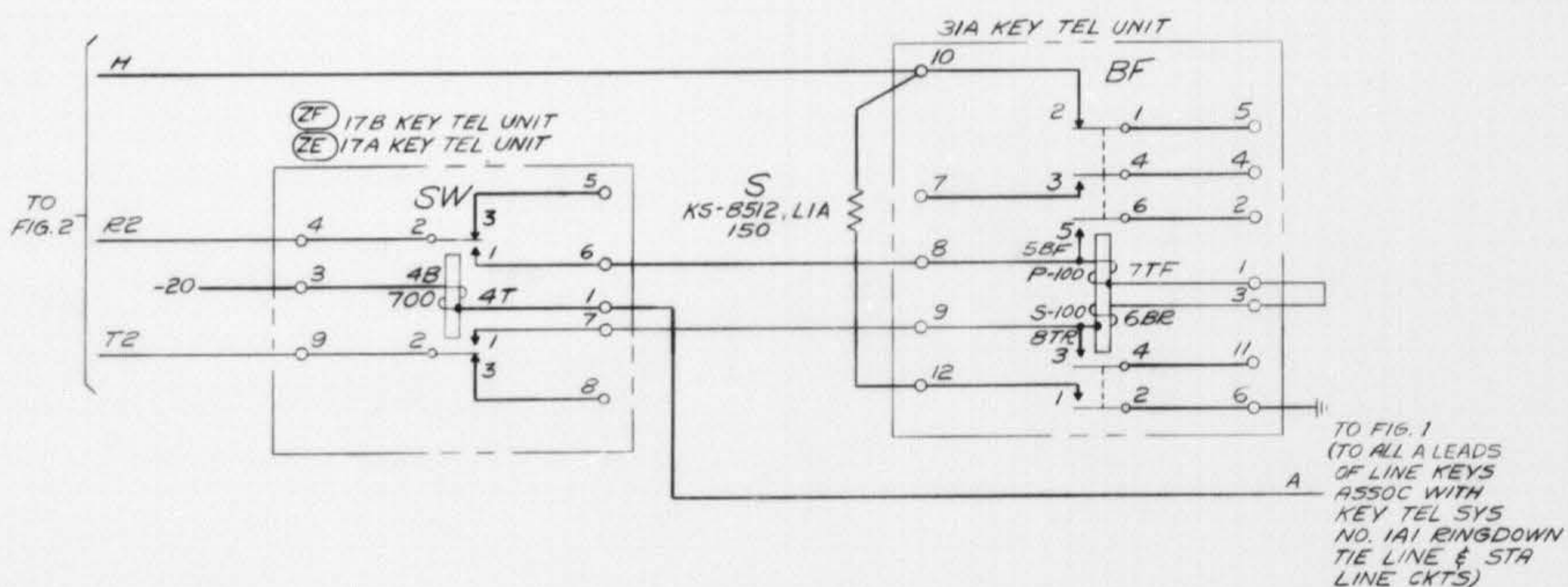


FIG. 7 (MFR DISC)
SIGNALING CIRCUIT



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KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

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SD-69195-01		CIRCUIT REQUIREMENTS														DRAWING ISSUE		
KEY EQUIPMENT NO. 101A OR 101B TEL AND KEY CKT (TEL & KEY)																5D	5M	
APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP		SEE TEST NOTE		DIRECT CURRENT FLOW REQ			REMARKS
DESIG	CODE	OPTION	FIG.	BSP FIG.	CONT PRESS	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK	TEST	READJ		
								CONN BAT.	CONN GRD								MA.	
RELAYS																		
A	U735	ZA	6	132/132	H	47			T(A)	GRD			0		17	16		
	Y209	ZB	6	175/175	H	47			T(A)	GRD			0	FS	24.5	23		
									T(A)	GRD			H	FS	2.9	2.7		
										T(A)	GRD			R	FS	1.4	1.7	
C	B459		6	6		30			IM(C)	BAT.			0		5.9	5.6	CONN DIR GRD TO 2M(C)	
									IM(C)	BAT.			R		1.3	1.4		
CT	U740		3	145/145	H	47			T(CT)	GRD			0		20.5	19.5		
PL	B459		3	6		30			IM(PL)	BAT.			0		5.9	5.6	CONN DIR GRD TO 2M(PL)	
									IM(PL)	BAT.			R		1.3	1.4		
SW	UA141		9	132/132	H	47			4B(SW)	4T(SW)	B/G		0		12.6	12		
17A KEY TEL UNIT																		
SW	U735		4	132/132	H	47			TERM. 3	BAT.			0		17	16		
			7	132/132	H	47				TERM. 1	GRD		0		17	16		
			8	132/132	H	47			TERM. 3	TERM. 1	B/G		0		17	16		
17B KEY TEL UNIT																		
SW	UA141		7	132/132	H	47				TERM. 1	GRD		0		12.6	12		
			8	132/132	H	47			TERM. 3	TERM. 1	B/G		0		12.6	12		
			10	132/132	H	47				TERM. 1	GRD		0		12.6	12		
31A KEY TEL UNIT																		
BF	UA130		7	120/111	H	35			TERM. 8	TERM. 9	B/G	P/S	0		23.0	21.5		
			10	120/111	H	35			TERM. 8	TERM. 9	B/G	3 P/S	0		23.0	21.5		
TEST NOTES:																		
1. ALL b CONTACTS SHALL MAKE BEFORE a CONTACTS. LOOKING AT TERM. SIDE OF KEYS, a CONTACT IS ON THE RIGHT.																		
2. THE d CONTACT SHALL MAKE BEFORE THE c CONTACT.																		
3. SHUNT TERMINALS 1 AND 3.																		
KEY EQUIPMENT NO. 101A OR 101B TELEPHONE AND KEY CIRCUIT																SD-69195-0107		
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EQUIPMENT NOTES:

201. IN EACH KEY UNIT, LEADS ARE PROVIDED FROM TERMINALS 1 AND 3 FOR V WIRING AND LEFT DEAD-ENDED AT THE TIME OF MANUFACTURE. THESE LEADS ARE LONG ENOUGH TO REACH ANY KEY IN THE UNIT AND SHOULD BE LEFT THAT LENGTH WHEN CONNECTED TO THE KEYS, THE SLACK BEING SEWED TO THE LOCAL CABLE.
202. THE SPRINGS OF THE LINE KEYS AT EACH ATTENDANT POSITION ARE USED FOR A CHAIN CONTACT CIRCUIT, STARTING AT THE TELEPHONE RELAY EQUIPMENT, PASSING THROUGH THE TELEPHONE SUBSCRIBER SET AND TO THE FIRST LINE KEY IN THE ORIGINATING KEY UNIT, THENCE THROUGH THE KEYS AND, WHEN SPECIFIED, TO THE INTERCOMMUNICATING LINE CIRCUIT (THE TYPE WITHOUT KEY).
203. AT THE DIVIDING POINT BETWEEN LINE KEYS FOR FIRST GROUP AND SECOND GROUP LINES, THE (PL) RELAY WINDING MUST BE CONNECTED INTO THE CHAIN CIRCUIT. THIS IS ACCOMPLISHED BY MEANS OF THE LEADS FROM THE TELEPHONE CIRCUIT RELAY EQUIPMENT TO TERMINALS 1 AND 3 OF THE ATTENDANT KEY UNITS.
204. THE (PL) RELAY CONNECTION MAY BE MADE BETWEEN HALVES OF ANY KEY, OR BETWEEN ANY TWO ADJACENT KEYS IN A KEY BOX, USING THE DEAD-ENDED LEADS PROVIDED PER NOTE 201, THE LOCATION DEPENDING ON WHERE THE DIVISION EXISTS BETWEEN FIRST GROUP AND SECOND GROUP LINES. THE (PL) RELAY CONNECTIONS MIGHT ALSO COME BETWEEN KEY BOXES, OR IT MIGHT PRECEDE THE FIRST KEY OF THE ORIGINATING KEY BOX (WHEN ALL LINES ARE OF THE SECOND GROUP). FOR THESE LAST TWO CONDITIONS, THE LEADS FURNISHED DEAD-ENDED IN THE KEY BOXES ARE NOT USED, THE (PL) RELAY CONNECTIONS BEING ACCOMPLISHED BY STRAPS FROM TERMINALS 2 TO 3 AND FROM TERMINALS 4 TO 1 OF THE PROPER KEY UNITS.
205. IF ALL THE ATTENDANT LINES ARE PER THE FIRST GROUP AND AN INTERCOMMUNICATING LINE, WITHOUT KEY, IS REQUIRED, THE (PL) RELAY MUST BE CONNECTED BETWEEN THE LAST LINE KEY AND THE INTERCOMMUNICATING LINE CIRCUIT USING S WIRING.

206. TABLE OF CROSS-CONNECTION COMBINATIONS

OPTION COMBINATIONS	CROSS-CONNECTION FIG.
R,S	55A
Q,T	55B
R,T,V	55C,55F,55H,55L,55M
R,S,T	55D,55I
Q,R,T	55E,55K
M,N,R,T	55G,55J,55N

207. NOT MORE THAN TWO 32A KEY TELEPHONE UNITS SHOULD BE MOUNTED IN ONE 105 TYPE APPARATUS BOX WITH A SPACE DIRECTLY ABOVE EACH UNIT VACANT TO AVOID OVERHEATING. IF ONLY ONE UNIT IS PROVIDED IT SHOULD BE MOUNTED IN THE BOTTOM OF THE BOX. 22 TYPE KEY TELEPHONE UNITS SHOULD NOT BE MOUNTED IN THE SAME BOX.
208. NOT MORE THAN TWO 24A KEY TELEPHONE UNITS SHOULD BE MOUNTED IN ONE 105 APPARATUS BOX WITH ONE UNIT MOUNTED AT THE TOP AND ONE MOUNTED AT THE BOTTOM OF THE BOX.
209. THE 17B KEY TELEPHONE UNIT AND THE 31A KEY TELEPHONE UNIT SHOULD BE MOUNTED IN THE SAME 105 APPARATUS BOX ADJACENT TO EACH OTHER.

DRAWING	
ISSUE	
5D	BM
DHC	GT

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KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

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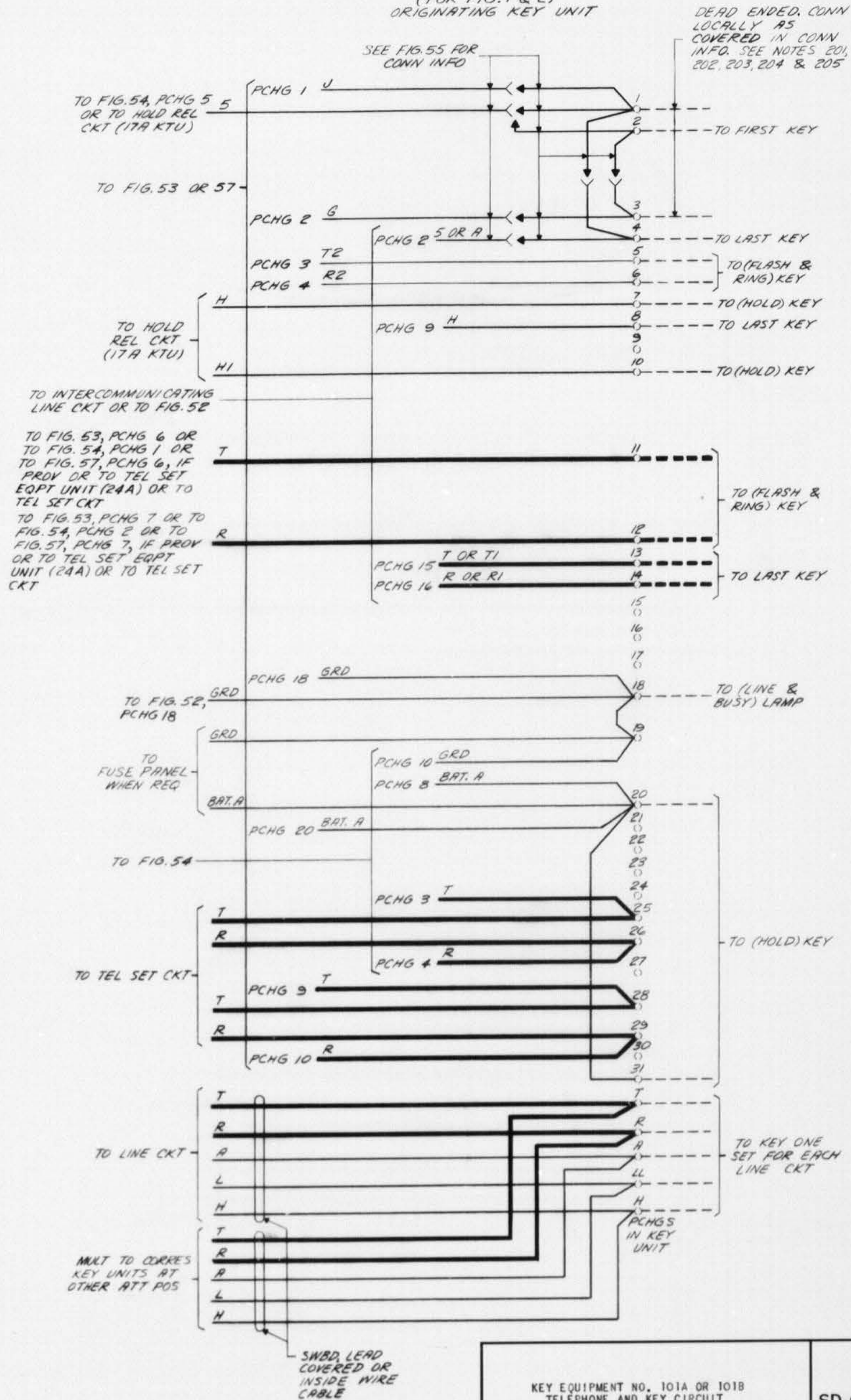
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FIG. 51 (MFR DISC)
(FOR FIG. 1 & 2)
ORIGINATING KEY UNIT

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TELEPHONE AND KEY CIRCUIT

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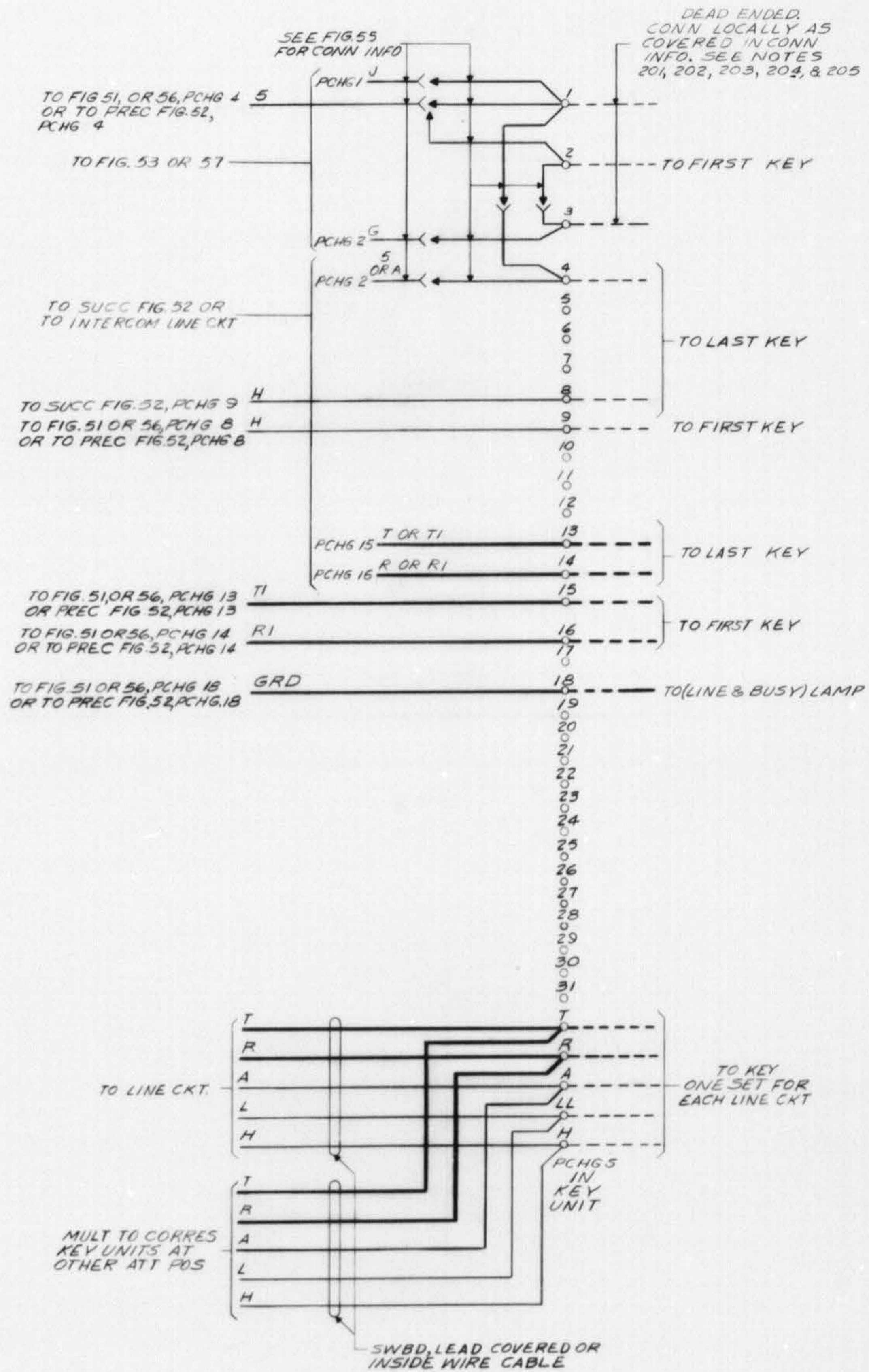
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FIG. 52
(FOR FIG. 1)
SUPPLEMENTARY KEY UNIT

DRAWING	
ISSUE	BM
50	ST. PW. D.K. GF



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FIG. 53 (MFR DISC)
(FOR FIG. 3)

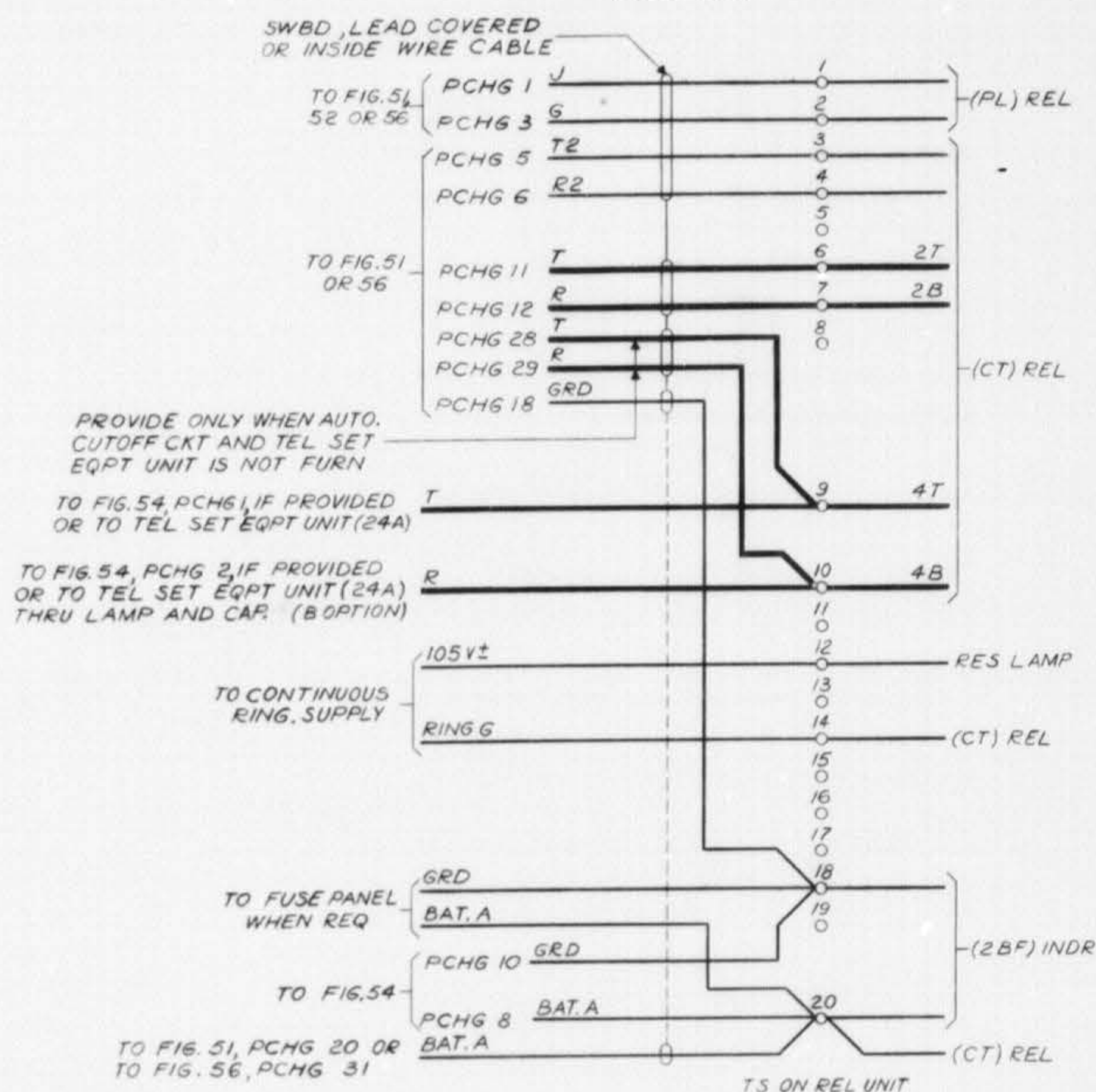
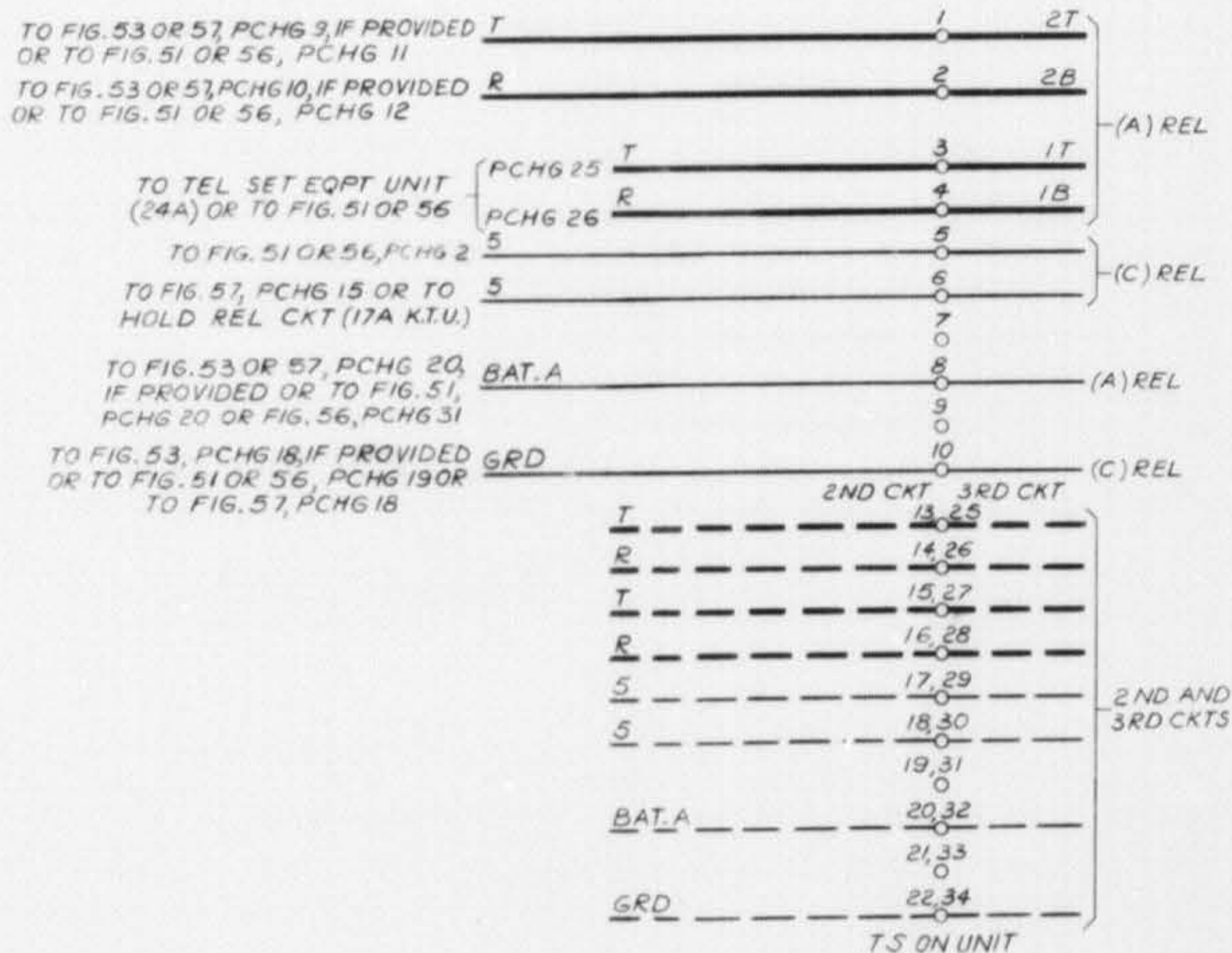


FIG. 54
(FOR FIG. 6)



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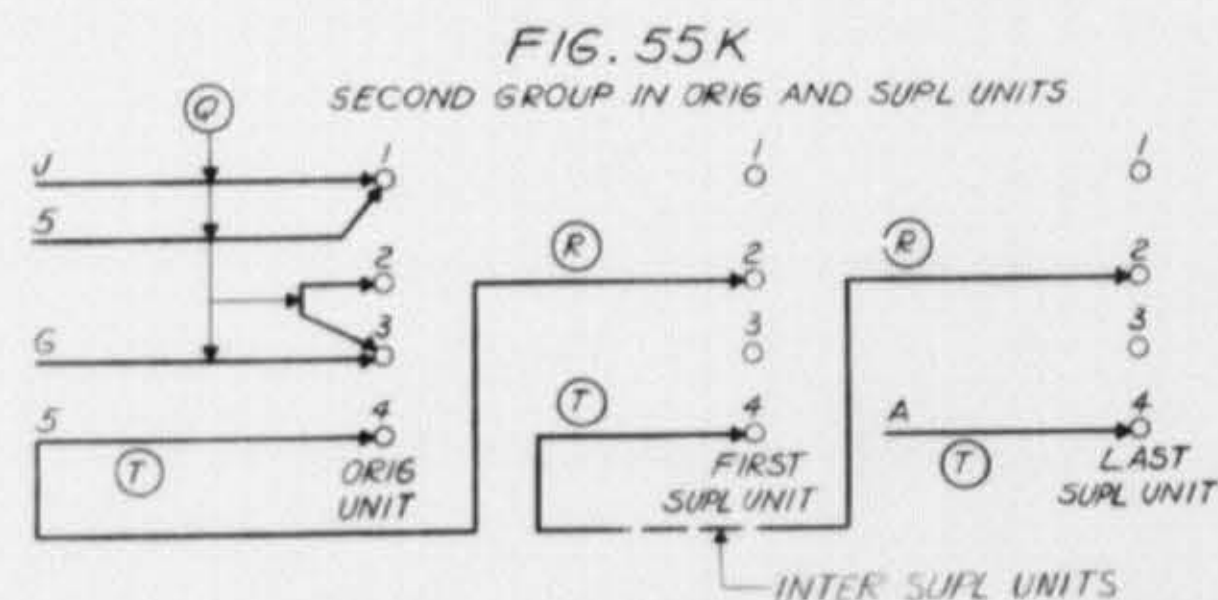
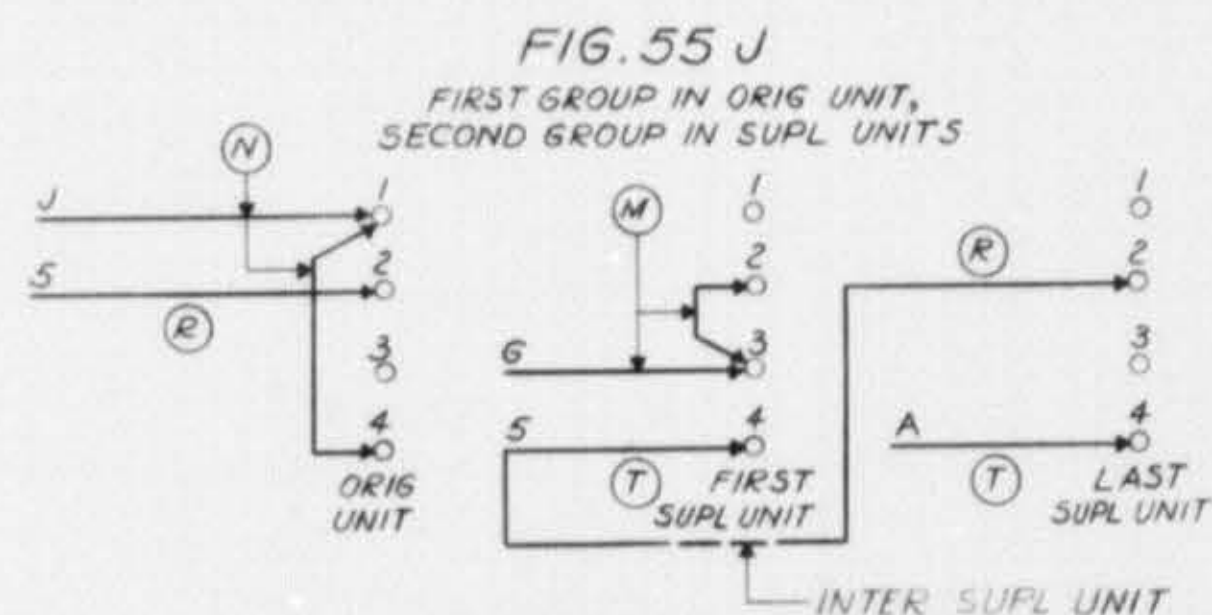
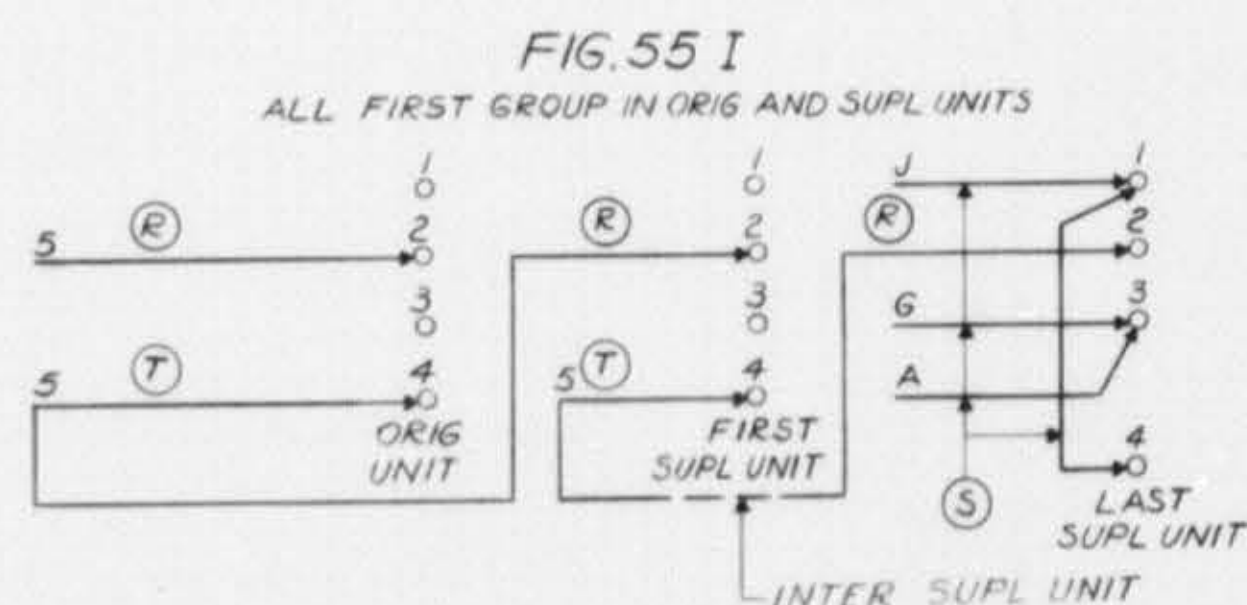
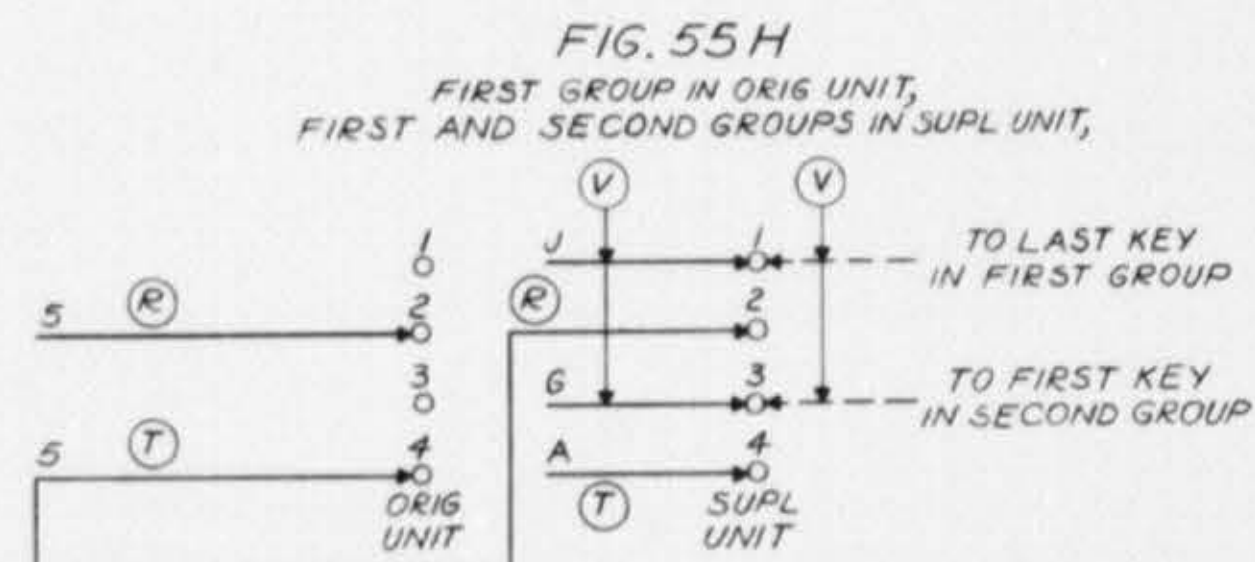
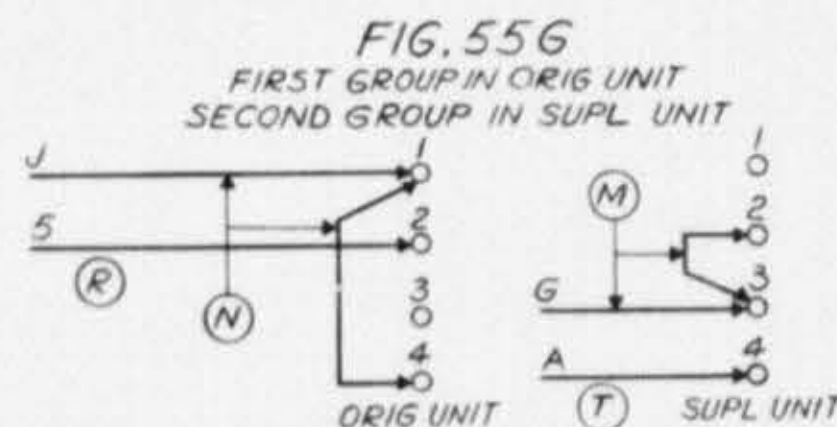
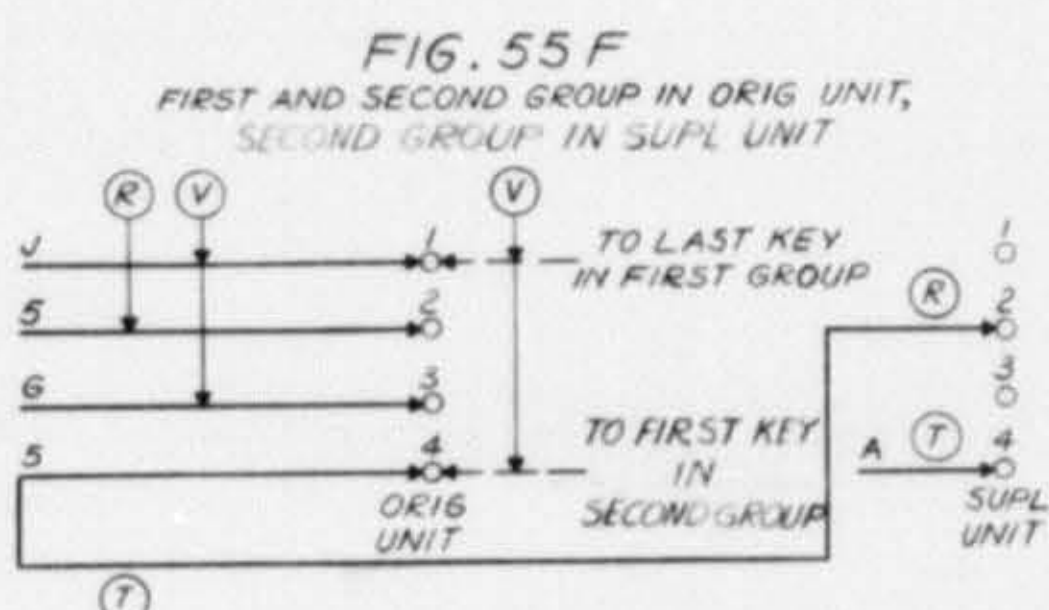
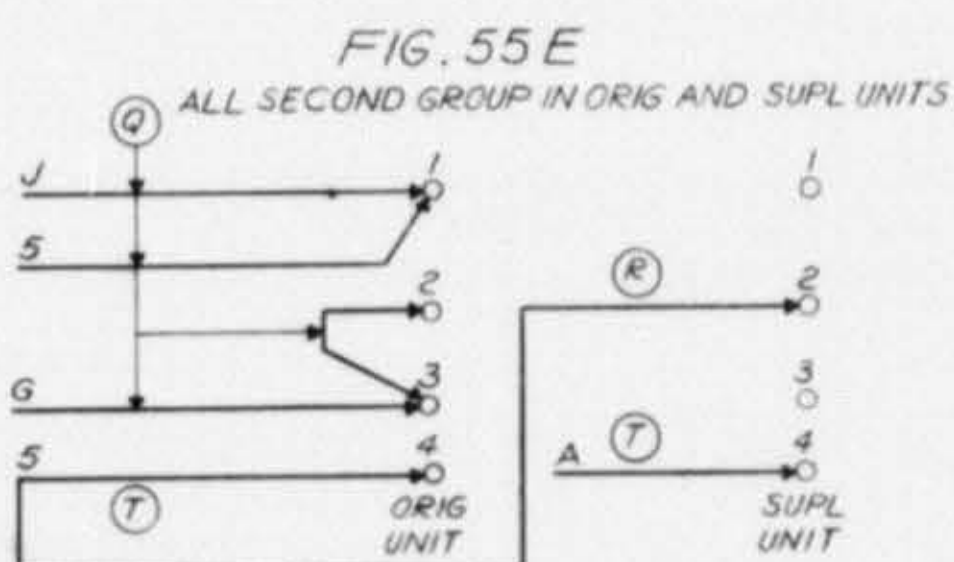
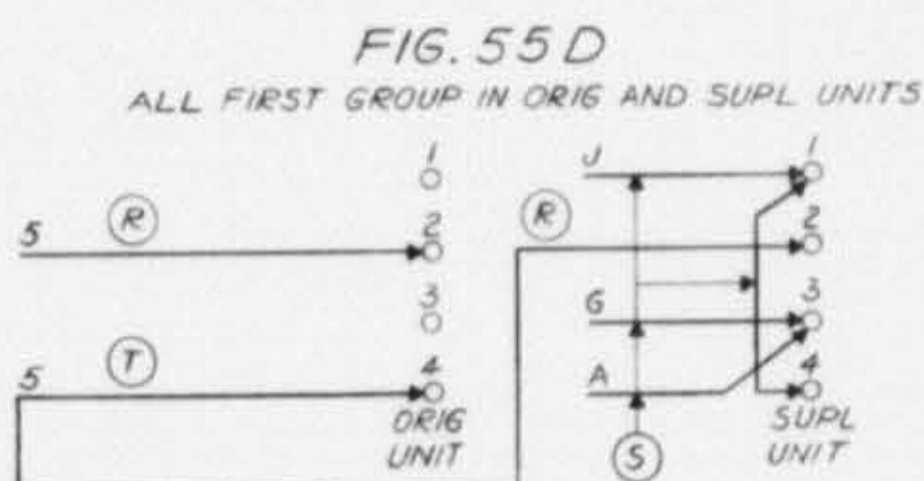
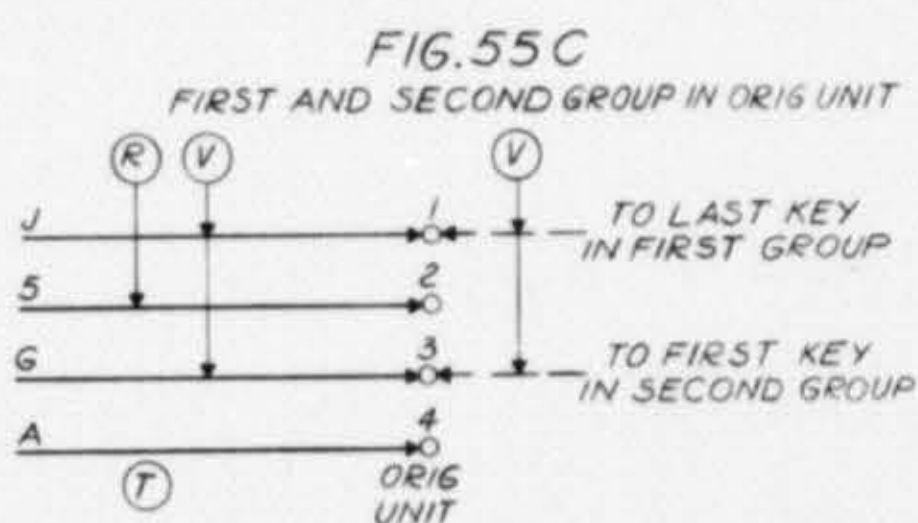
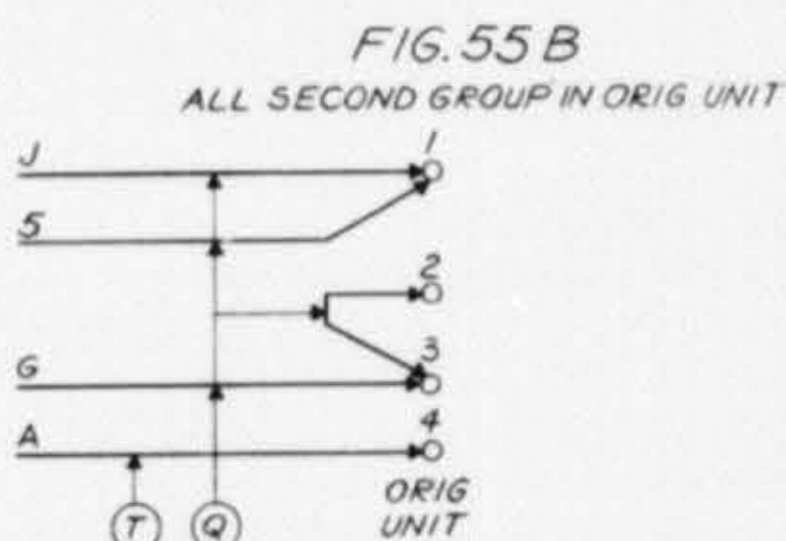
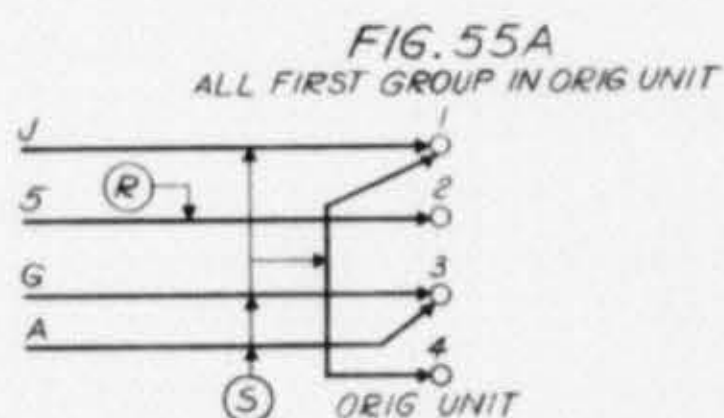
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FIG. 55

CONNECTIONS TO PUNCHINGS 1, 2, 3 AND 4 FOR VARIOUS LINE COMBINATIONS OF FIRST AND SECOND GROUPS AND INTERCOMMUNICATING LINE WITHOUT A KEY. SEE NOTES 103, 201, 202, 203, 204, 205 AND 206



KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

3S

SD-69195-0112

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SD-69195-0112

FIG. 55 (CONT)
CONNECTIONS TO PUNCHINGS 1, 2, 3, & 4 FOR VARIOUS LINE
COMBINATIONS OF FIRST AND SECOND GROUPS AND
INTERCOMMUNICATING LINE WITHOUT A KEY
SEE NOTES 103, 201, 202, 203, 204, 205 & 206

FIG. 55L
FIRST GROUP IN ORIG UNIT & NEXT SUCC SUPL UNITS,
FIRST AND SECOND GROUP IN NEXT SUCC SUPL UNIT,
SECOND GROUP IN SUCC SUPL UNITS

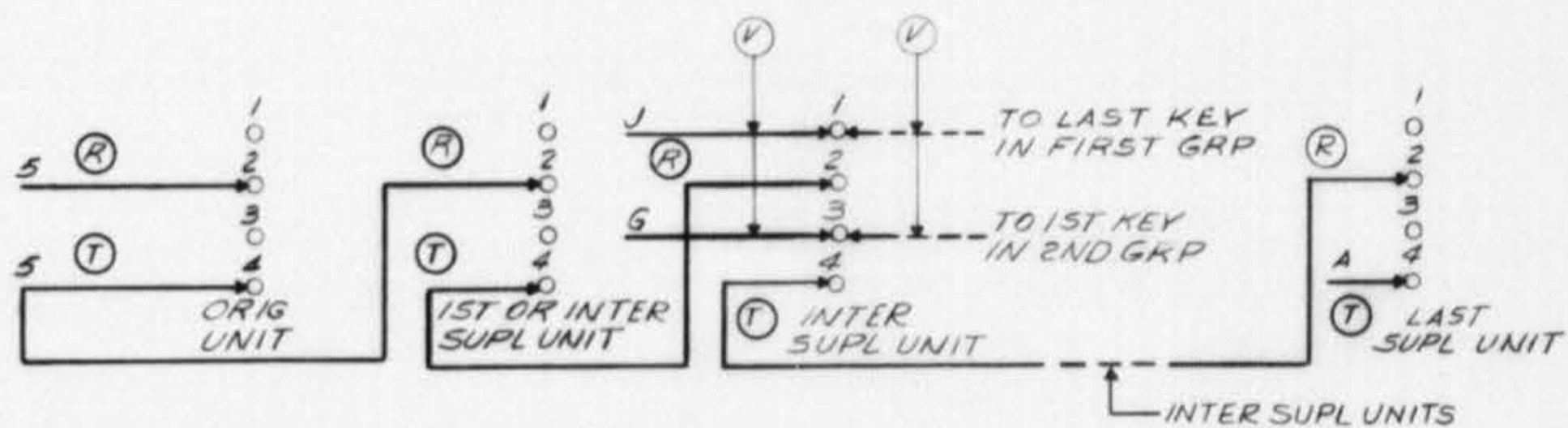


FIG. 55M
FIRST AND SECOND GROUP IN ORIG UNIT,
SECOND GROUP IN SUPL UNITS

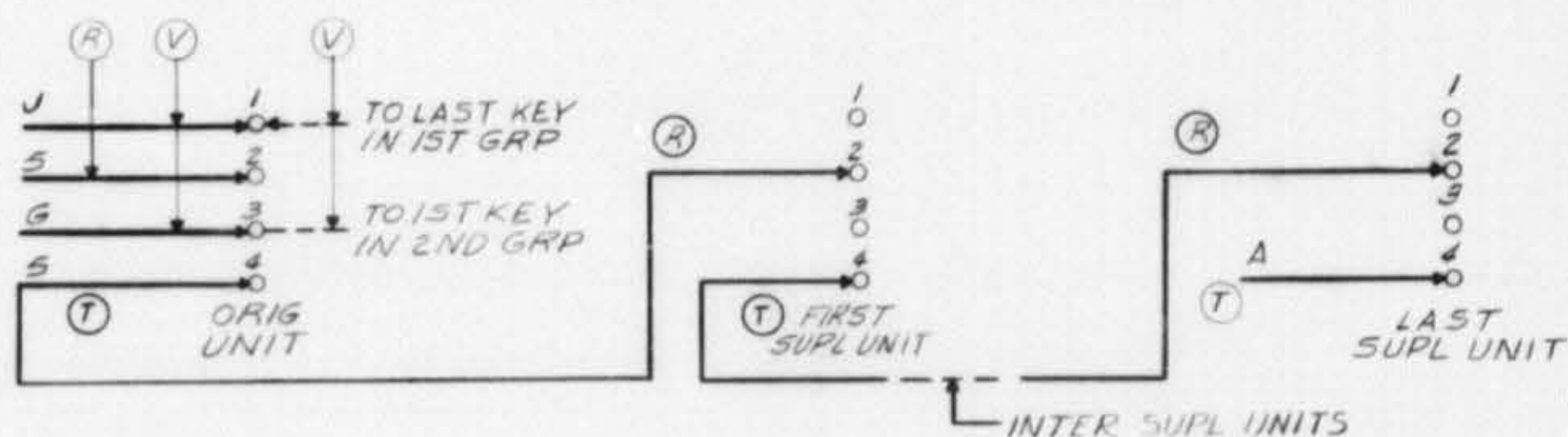
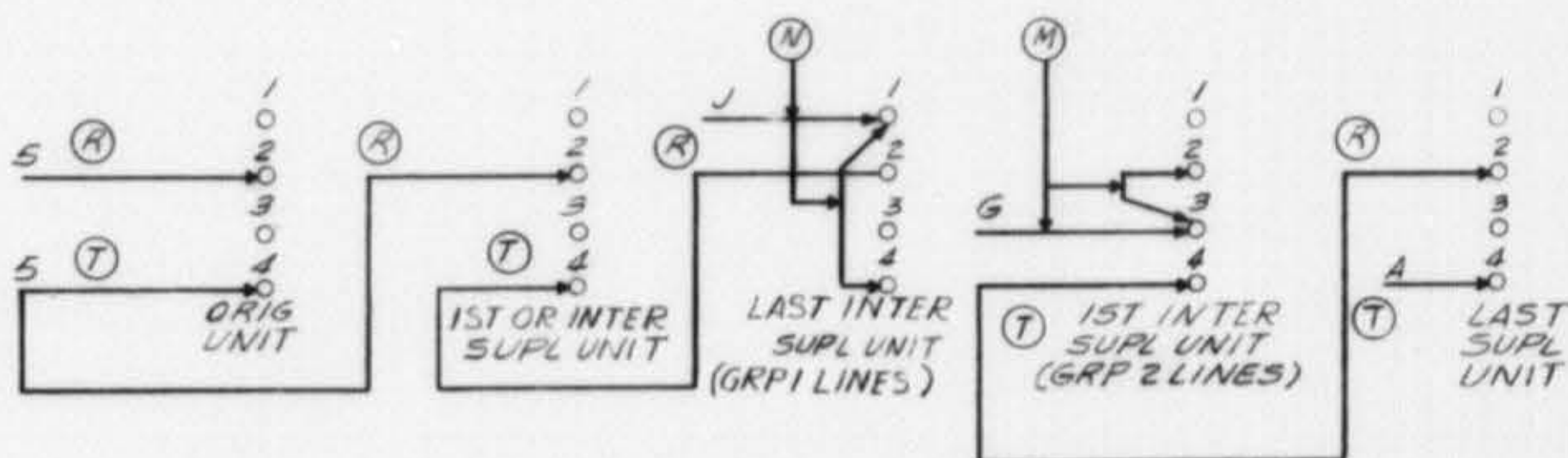


FIG. 55N
FIRST GROUP IN ORIG AND NEXT SUCC SUPL,
SECOND GROUP IN SUCC SUPL UNITS



SD-69195-0113

KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

BELL TELEPHONE LABORATORIES
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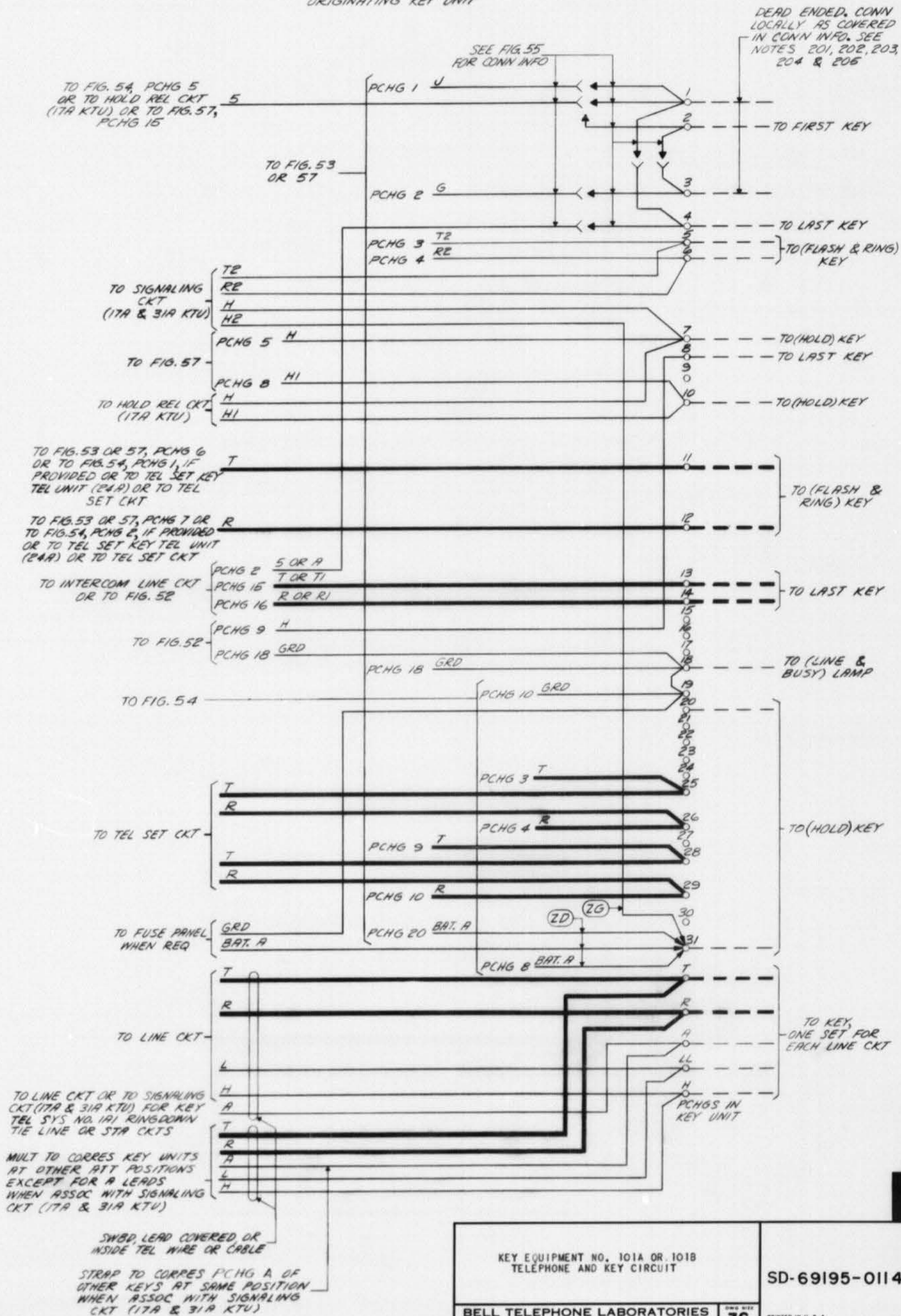
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FIG. 56
(FOR FIG. 1 & 2)
ORIGINATING KEY UNIT

DRAWING
ISSUE
5D 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



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KEY EQUIPMENT NO. 101A OR 101B
TELEPHONE AND KEY CIRCUIT

BELL TELEPHONE LABORATORIES
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FIG. 57
(FOR FIGS. 3 & 9)

