

SHEET INDEX (INITIATED ON ISSUE 8)

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CAD 9		12													21	22	22	22																																							12		

*SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER

APPARATUS INDEX

DESIG	LOCAT'ON		
	FS	APP FIG	EQUIP
RELAYS			
MA	3A0	1	
MB	3A1	1	
MC	3B1	1	
MD	3B0	1	
ME	3B0	1	
MF	3G9	2	
MG	3C7	3	

SUPPORTING INFORMATION

CATEGORY	NO.
ORMC FR	J-28154M-()
LL OR IP	J-28154U-()
OR LLS MC FR	J-28154U-()
OR MC FR	J-28154W-()
OR MC FR	J-28154AL-()
AUX ORMC UNIT	J-28154AR-()
EQUIP DESIGN REQ	J28154

ISSUE	CD	DATE	BY	CHKD	APPD
1	20	20	30		
4B	5C	APP 10	6D		
4B	APP 30				
80	4B	APP 40			
90	APP 50				
10A	4B	APP 6A			
11D	4B	APP 7C			
12D	4B	APP 8C			
13D	5D				
14R	6AR				
5D	6AR				
16D	6AR				
17D	6AR				
18D	7D				
19D	7D				
20AC	7D				
21D	7D				
22D	7D				
23A	7D				
24B	7D				
25D	7D				

SHEET INDEX NOTES

1. WHEN CHANGES ARE MADE IN THIS DRAWING, ONLY THOSE SHEETS AFFECTED WILL BE REISSUED.
2. 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.
3. THE ISSUE NUMBER ASSIGNED TO A CHANGED OR NEW SHEET WILL BE THE SAME ISSUE NUMBER AS THAT OF THE SHEET INDEX.
4. SHEETS THAT ARE NOT CHANGED WILL RETAIN THEIR EXISTING ISSUE NUMBER.
5. THE LAST ISSUE NUMBER OF THE SHEET INDEX IS RECOGNIZED AS THE LARGEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.

NOTICE - NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT.

REPLACING MARKER PART OF SD-25586-01 FOR ORIG REG

SD-26023-01 IC02

Crossbar Systems
NO. 5
ORIGINATING REGISTER
MARKER CONNECTOR CIRCUIT
MARKER PART

BELL TELEPHONE LABORATORIES
INCORPORATED

ISSUE
25D

AT & T CO.
STANDARD

SD-26023-01-A
14 SHEETS

SD-26023-01-A

LEAD INDEX CONNECTING CIRCUITS

CIRCUIT TITLE	LEAD INDEX TABLE LOC
COMBINED OR COMPLETING MARKER CKT	10A0
CONFERENCE CONTROLLER CKT	10E3
MASTER TEST FRAME CONNECTOR CKT	10D3
OFFICE TEST FRAME TROUBLE INDICATOR AND CONNECTOR CKT	10C7
ORIGINATING REGISTER CKT	16G
ORIGINATING REGISTER MARKER CONNECTOR CKT REGISTER PART OR MARKER CONNECTOR CKT	14A
PREFERENCE CONTROL CKT FOR MARKER CKT	10G
TROUBLE RECORDER CONNECTOR CKT	1A8

MASTER TEST FRAME CONN CKT		
CN	3G6	5E6, 7E6, 8F6
CNG	3G6	6F6, 8F6
FR	3G6	5F6, 7F6
FRG	3G6	6F6, 8F6
RGG	3G6	6F4, 8F4

ORIGINATING REG CKT		
CN	3G7	5E6, 7E6
FR	3G7	5F6, 7F6

DESIG	FS LOC	CAD LOC
ORIG REG MKR CONN CKT REG PART OR MKR CONN CKT OR CONF CONT CKT		
2DT	3H5	5C6, 7C8, 7C6
2W	3E9	5C6, 7C6
4W	3D9	9E7
11	3D7	5C0, 7C0
A0,1,2,4,7	3A5	5C0, 7C0
BC,1,2,4,7	3A5	5C0, 7C0
BT	3A5	5E4, 7F4
COL2,4,7	3B5	5C0, 7C0
CD,1,2,4,7	3D9	9E7
CD10,15	3F9	9E7
CDPO,1,2,4,7,10,15	3F9	9E7
CGA,B	3B5	5C6, 7C6
CN	3G7	5E6, 7E6
CNM	3B5	5C4, 7C4
CPNT	3C9	9D7
CR	3C5	5C4, 7C4
CRUD,1,2,4,7	3H5	5C8, 7C8
CTA0-2	3B5	5C6, 7C6
CTA4,7	3H5	5C8, 7C8
CUO,1,2,4,7	3C5	5C8, 7C8
D	3H5	5C6, 7C6
DO,1,2,4,7	3C5	5C2, 7C2
EQ,1,2,4,7	3C5	5C2, 7C2
FO,1,2,4,7	3D5	5C2, 7C2
FAC	3D5	5C0, 7C0
FR	3G7	5F6, 7F6
FT0-3	3D5	5C8, 7C8
FU0,1,2,4,7	3D5	5C6, 7C6
FVD	3G7	6C4, 8C4
GO,1,2,4,7	3D5	5C2, 7C2

DESIG	FS LOC	CAD LOC
ORIG REG MKP CONN CKT REG PART OR MKR CONN CKT OR CONF CONT CKT		
HO,1,2,4,7	3E5	5C2, 7C2
HGO,1,2,4,7	3E5	5C6, 7C6
HNA	3F9	9E7
JO,1,2,4,7	3E5	5C4, 7C4
KO,1,2,4,7	3E5	5C4, 7C4
LO,1,2,4,7	3E5	5C4, 7C4
LLO,1,2,4,7	3F5	5C6, 7C6
LT	3F5	5C0, 7C0
LT1	3F5	5E6, 7E6
LT2	3A7	5E6, 7E6
LT3	3A6	5E2, 7E2
MO,1,2,4,7	3C7	11D7
M7	3F5	5E4, 7F4
MF	3H5	5C6, 7C6
MGN	3G5	5C4, 7C4
MRL	3G5	5C4, 7C4
N7	3C7	11D7
NOB	3G5	5C4, 7C4
OBS	3G5	5C4, 7C4
OR	3A7	5D0, 7C0
PD	3A7	5C2, 7C2
PK	3A7	5C0, 7C0
PKI	3E9	5C6, 7C6
PS	3B7	5C2, 7C2
RG	3G7	5E4, 7F4
RGA	3E9	9E7
RL	3B7	5C4, 7C4
RP	3B7	5C0, 7C0
RT	3E9	9E7
RVI	3G7	5G6, 7F6

DESIG	FS LOC	CAD LOC
ORIG REG MKR CONN CKT REG PART OR MKR CONN CKT OR CONF CONT CKT		
SCK	3B7	5C0, 7C0
SCN	3C7	5E4, 7F4
T	3E9	5E6, 7E6
TP	3C7	5C0, 7C0
VFO-A	3C7	5C8, 7C8
VG0,1,2,4,7	3C6	5C8, 7C8
VG10	3C6	5C8, 7C8
VX11	3D7	5C0, 7C0
PREFERENCE CONTROL CKT FOR MKR CKT		
BT	3A5	5F4, 7E4
CB	3E7	8H0, 8H2
CB1	3E7	5E0, 8H0, 8H2, 11G0
MA	3C0	8H0, 8H2
Mb	3C0	8H0, 8H2, 11G0
MC	3C0	8H0, 8H2
MK	3G7	5D6, 7F6
MRL	3H5	5D4, 7E4
MS1	3E7	5F6, 7F6
MS2	3F7	5F6, 7F6
RCB	3E7	
STA,B	3F7	5G6, 8G2, 11A4
TC	3F7	5D4, 7E4
TC1	3F7	5E4, 7E4
TR2	3D7	5E0, 7F0
TRC	3H7	5F4, 7G4
TRK	3D7	5E0, 7F0
TRL	3E7	5E2, 7E2
TRS	3E7	5E2, 7E2
WZ	3F7	5D4, 7E4

DESIG	FS LOC	CAD LOC
TBL RCDP CONN CKT		
CN		5E6
OFFICE TEST FRAME TROUBLE INDICATOR AND CONN CKT		
CN	3G6	5E6, 7E6, 6F6, 8F6
CNG	3G6	6F6, 8F6
FR	3G6	5F6, 7F6, 6F6, 8F6
FRG	3G6	6F6, 8F6
RGG	3G6	6F4, 8F4

OPTION INDEX

APP OR CIRCUIT	LOCATION
2	APP FIG. 2
3	APP FIG. 3
2	3A7
Y	3A7
X	3F6
W	3F6
V	3E6
T	3E6
S	3A4
Q	3F4
N	3H4
M	3E8
K	3G9
J	3H9
H	3A7
G	3H4, 3H5
E	3E8, 3E9
B	3E8, 3E9
A	3A6, 3A7
2A	3F6, 3F7
ZB	3E6, 3F6, 3F7, 3H7
ZC	APP FIG. 1,2
ZD	APP FIG. 1,2
ZE	3G4
ZF	3G4
ZG	3F8, 3F9
ZH	3G8, 3G9
ZI	3G8, 3G9
ZJ	3G9, 3H9
ZK	3H8, 3H9
ZL	3G4, 3G7, 3H7
ZM	3G6, 3G7, 3H7
ZO	3D9
ZR	3C7
ZS	3C7

DRAWING ISSUE
8D
9D
10A
11D
12D
13D
14A
15D
16D
17D
18D
19D
21D

21

ORIGINATING REGISTER MARKER CONNECTOR CIRCUIT MARKER PART (2) SD-26023-01-1
 BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26023-01-1

DRAWING
ISSUE
17D
18D
19D
20AC
21D

ISSUE 23A

CIRCUIT NOTES:

DESIG	FUSE AMP	POTENTIAL	ONE PER	TERM. DESIG
A	1-1/3	-48V	TWO FIGURES 1 SERVED BY SAME MKR ON SAME FR	
B	1-1/3	-48V	FIVE FIGURES 2 SERVED BY SAME MKR	
C	1-1/3	-48V	FOUR FIGURES 3 SERVED BY SAME MKR	
D	1-1/3	-48V	ALL FIGURES 1 SERVED BY ONE MKR ON SAME FR	
A	-	GRD	ALL FIGURES 1 IN SAME CONN	
B	-	GRD*	ALL FIGURES 2 IN SAME CONN	
C	-	GRD*	ALL FIGURES 3 IN SAME CONN	
D	-	GRD	ALL FIGURES 3 IN SAME CONN	
BATTERY SYMBOL		VOLTAGE RANGE		
-48		45-50V		
* SEPARATE LEADS SHALL BE RUN FROM GRD BUS TO EACH END OF GRD MULTIPLE.				

CIRCUIT NOTES: (CONT)

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	150	0.3

104. RECORD OF APPARATUS FIGURES, WIRING, AND APPARATUS CHANGES

CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	ABM	MD
2D	Z, Y	Y	102	Z, Y		
4D	X, W	X	119	W	X	
	V, T	V		T	V	
6D	S	NONE	105	S		
	Q	NONE	108	Q		
7D	N	NONE	106	N		
	M	NONE	107, 102	M		
8D			102	Z		
	K, J	NONE	102	K, J		
	H	NONE	109	H		
9D	G	N OR NONE	106, 110	N	G	
	A	NONE	111	A		
11D			102, 114	E		
	ZF	ZF	102	ZF		
13D	ZE	B OR NONE	102, 114	ZE		B
	ZA, ZS	ZA	112, 113, 120	ZB	ZA	
	ZC, ZD	ZC		ZD		ZC
15D	ZG	NONE	115	ZG		
16D	ZH OR ZI	NONE	102	ZH, ZI		
	ZJ OR ZK	J, K OR NONE	102	ZJ, ZK		J, K
17D	ZL, ZM	ZL	116, 117, 102, 107	ZM	ZL	
				M		
18D	ZO	M OR NONE	102	ZO		
	ZR, ZS, APP FIG 3	ZR	102, 118	ZR, ZS, APP FIG 3		

CIRCUIT NOTES: (CONT)

- 105. S OPTION IS REQUIRED IN OFFICES ARR FOR PUSH BUTTON OPERATION OR EQUIPPED WITH A CONFERENCE CONTROLLER CKT.
- 106. M OPTION IS REQUIRED IN OFFICES WHERE LINE CLASS OF SERVICE SELECTION IS ON A TENS AND UNITS BASIS.
- 107. SUBSEQUENT TO ISSUE 8D AND PRIOR TO ISSUE 18D OPTION M WAS ALWAYS PROVIDED AND IS REQUIRED IN OFFICES WITH BOTH 2-WIRE AND 4-WIRE NETWORKS.
- 108. Q OPTION IS REQUIRED FOR USE OF DIGIT "1" ACCESS CODE.
- 109. PROVIDE OPTION H FOR USE WITH PERSON PAID COLLECT SPECIAL FEATURE (PPCS) OR WHEN THE 4-WIRE ORIG REGISTER IS ARR TO HANDLE 10 DIGIT CALLS.
- 110. PRIOR TO ISSUE 9D OPTION G WAS PART OF OPTION M. IF M OPTION IS NOT PROVIDED IN AN OFFICE WHERE THE ORIG REGISTERS ARE ARR TO SERVE BOTH PBX AND REGULAR CENTRAL OFFICE CUSTOMERS, G OPTION SHOULD BE PROVIDED.
- 111. IN OFFICES WITH A PRIVATE LINE NETWORK (CLASS PLM) OPTION "A" MUST BE PROVIDED.
- 112. WHERE CENTREX WITH 4 AND 5 DIGIT DIALING OF INTERCOM CALLS IS REQUIRED, OR WHERE IODD IS REQUIRED, OPTIONS ZB & ZC MUST REPLACE OPTIONS ZA AND X.
- 113. THE USE OF OPTION ZB REQUIRES THAT ALL ASSOCIATED SD-26029-01 PREFERENCE CONTROL CIRCUITS BE MODIFIED TO AGREE WITH ISSUE 10B OF SD-26029-01.
- 114. WHEN OPTION E IS REQUIRED, REPLACE OPTION B WITH OPTION ZE.
- 115. WHEN A SECOND PREFIX CONTROL DIGIT IS REQUIRED IN OFFICES ARR FOR 4-WIRE OPERATION, OPTION ZG MUST BE PROVIDED.
- 116. WHERE THE CKT IS ASSOCIATED WITH AN ORIG REGISTER CKT ARR FOR TOLL DIVERSION, OPTION ZM MUST REPLACE OPTION ZL.
- 117. WHERE TOLL DIVERSION IS NOT REQUIRED FOR THE ASSOCIATED ORIGINATING REGISTER CKT, PROVIDE OPTION ZL FOR ADDITIONS TO A CONNECTOR NOT EQUIPPED WITH OPTION ZM. A CONNECTOR EQUIPPED WITH OPTION ZL MAY BE DISTRIBUTED OVER MORE THAN ONE FRAME AND BE LOCATED ON THE SAME FRAME AS ANOTHER CONNECTOR EQUIPPED WITH OPTION ZM.
- 118. PROVIDE OPTION ZR WHERE APP FIG. 3 IS NOT PROVIDED.
- 119. PROVIDE OPTION X FOR ADDITIONS TO CONNECTORS WHERE WZ LEAD IS REQUIRED FOR ASSOCIATED SD-26029-01.
- 120. IN A MKR GROUP NOT ARRANGED FOR CENTREX WITH 4 AND 5 DIGIT DIALING OF INTERCOM CALLS OR IODD WHERE ADDITIONS ARE REQUIRED TO CONNECTORS NOT EQUIPPED WITH OPTION ZB, PROVIDE OPTION ZA.

INFORMATION NOTES:

301. FOR INFORMATION ON ORMC ARRANGEMENTS FOR MARKER EXPANSION SEE BSP 819-311-150, PART 6.

102.

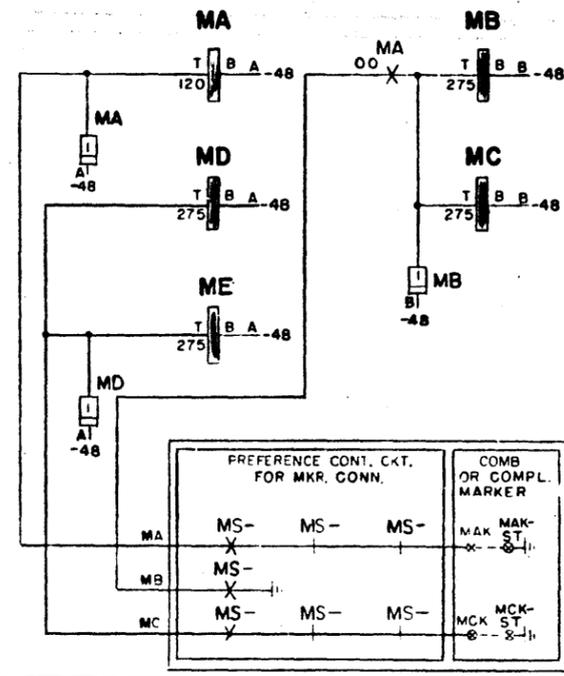
FEATURE OR OPTION	APP FIG.	APP OR WRG	PROVIDE		
			QUANTITY		
CONN RELAYS	SERVING 2-WIRE REGISTERS	1	NO	M	
			YES	ZO	
	REGISTERS HANDLE 12 DIGIT CALLS AND NEW FEATURE	3	YES	ZS	
			NO	ZR	
SERVING 4-WIRE REGISTERS	1, 2				
CONNECTS TO	ORIG REGISTER MKR CONN CKT REGISTER PART		Z		
	MKR CONN CKT ARR FOR FACD				
	MKR CONN CKT NOT ARR FOR FACD		Y		
CONFERENCE CONTROLLER			E, Z		
CONN NO. INFORMATION	APP FIG 2	NOT PROVIDED (2-WIRE)	EVEN NO. CONN	ZH	
		PROVIDED (4-WIRE)	ODD NO. CONN	ZI	
	OFFICE TEST FR		PROVIDED	EVEN NO. CONN	ZJ
			NOT PROVIDED	ODD NO. CONN	ZK
		PROVIDED		ZE	
		NOT PROVIDED		ZF	

SD-26023-01-2

HIGGINS 4465

ORIGINATING REGISTER MARKER CONNECTOR CIRCUIT MARKER PART	2	SD-26023-01-2
BELL TELEPHONE LABORATORIES INCORPORATED	65	PRINTED IN U.S.A.

FS 1
OPERATING PATHS
CONNECTOR RELAYS



APP FIG. 1

DESIG	MA	MB	MC	MD	ME
CODE	286G	286H	286H	286H	286H
CODE	286A	286E	286E	286E	286E
OPTION	ZDZC	ZDZC	ZDZC	ZDZC	ZDZC
54	B4	E4	F4	E4	H4
53	B4	E4	F4	E4	H4
52	F4	E4	F4	E4	H4
51	B4	E4	F4	E4	H4
50	B4	E4	F4	E4	H4
44	A4	D4	E4	C4	D7
43	A4	D4	E4	C4	D7
42	A4	D4	E4	C4	D7
41	A4	D4	E4	C4	D7
40	A4	D4	E4	C4	D7
34	A4	D4	E4	F4	C4
33	A4	D4	E4	F4	C4
32	A4	D4	E4	F4	C4
31	A4	D4	E4	F4	C4
30	A4	D4	E4	F4	C4
24	A7	C4	F7	B4	D7
23	B7	C4	G4	B4	D7
22	D4	C4	G4	B4	D7
21	B7	C4	G4	B4	D7
20	C7	C4	B7	B4	D7
14	D7	C4	B4	H4	D7
13	D7	C4	C4	E9	D7
12	F4	C4	G4	H4	D4
11	F4	C4	F7	G7	D4
10	A7	C4	C7	A7	D4
04	E7	E7	F4	F4	H4
03	B4	B7	F7	G7	H4
02	E7	A7	B7	F7	H4
01	D7	E7	A4	E7	E9
00	A1	A7	G7	G7	G9
COIL	A0	A1	B1	B0	B0

NETWORK

DESIG	LOC	CODE
MA	A0	180A
MB	B1	180A
MD	C0	180A

APP FIG. 2

DESIG	MF
CODE	286G
CODE	286A
OPTION	ZDZC
54	
53	
52	
51	F9
50	F9
44	D9
43	D9
42	D9
41	D9
40	D9
34	E9
33	C9
32	
31	E9
30	E9
24	E9
23	E9
22	E9
21	E9
20	E9
14	
13	
12	D9
11	D9
10	D9
04	G9
03	G9
02	
01	
00	
COIL	G9

NETWORK

DESIG	LOC	CODE
MF	G9	180A

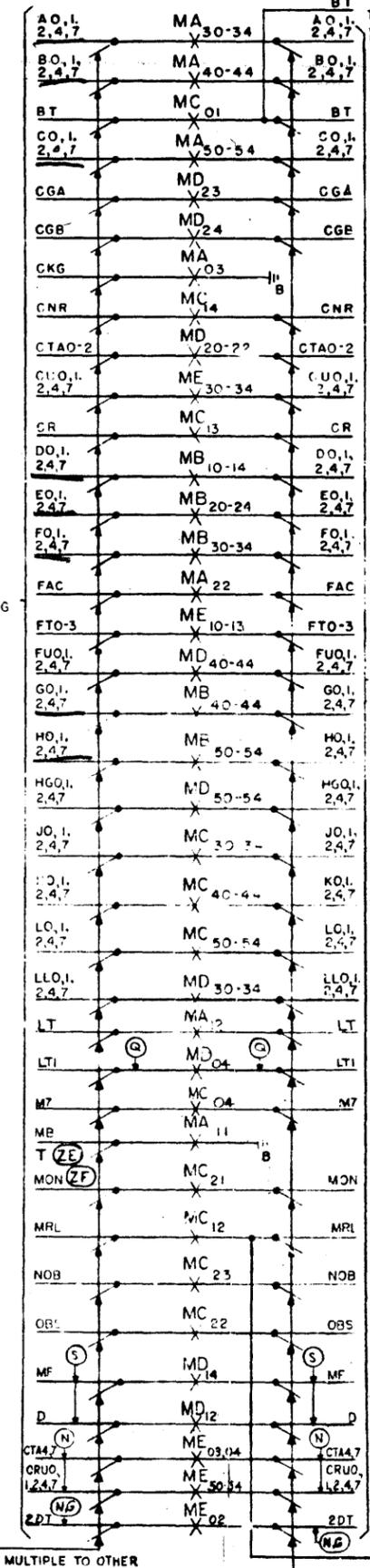
APP FIG. 3

DESIG	MG
CODE	286H
CODE	286B
OPTION	
54	
53	
52	
51	
50	
44	
43	
42	
41	
40	
34	
33	
32	
31	
30	
24	
23	
22	
21	
20	C6
14	C7
13	C7
12	C7
11	C7
10	C7
04	
03	
02	
01	
00	
COIL	C7

NETWORK

DESIG	LOC	CODE
MG	C7	180A

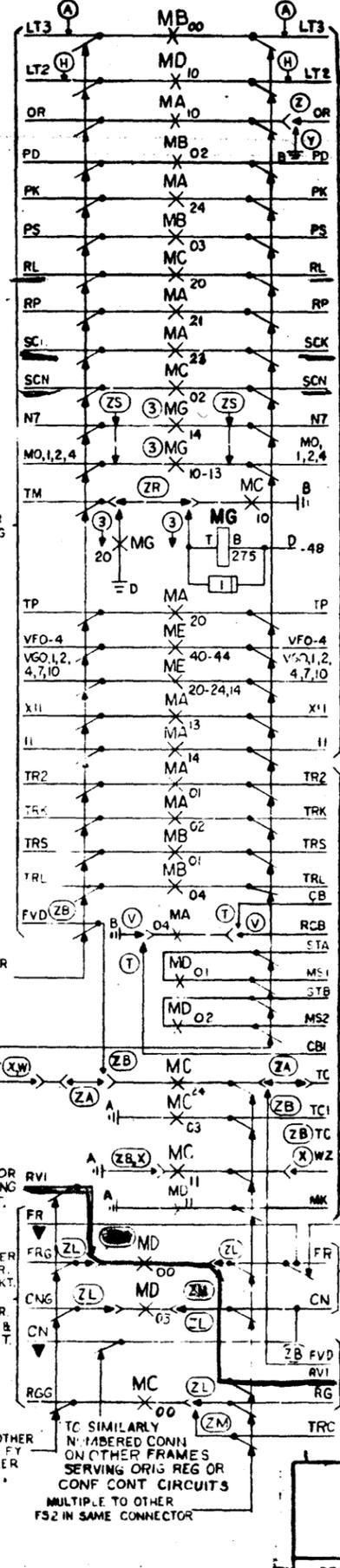
FS 2
LEADS TO CONNECTOR RELAYS



TO PREFERENCE CONTROL CKT FOR MARKER CONN

TO ORIG. REG. MARKER CONN. REG. PART. MKR. CONN. CKT. OR CONF. CONT. CKT.

MRL TO PREFERENCE CONTROL CKT. FOR MARKER CONN



TO COME OR COMPLETING MKR. CKT.

MULTIPLE TO OTHER FS 2 SERVED BY SAME MARKER

MULTIPLE TO OTHER FS 2 IN SAME CONNECTOR

TO COMB OR COMPLETING MKR. CKT.

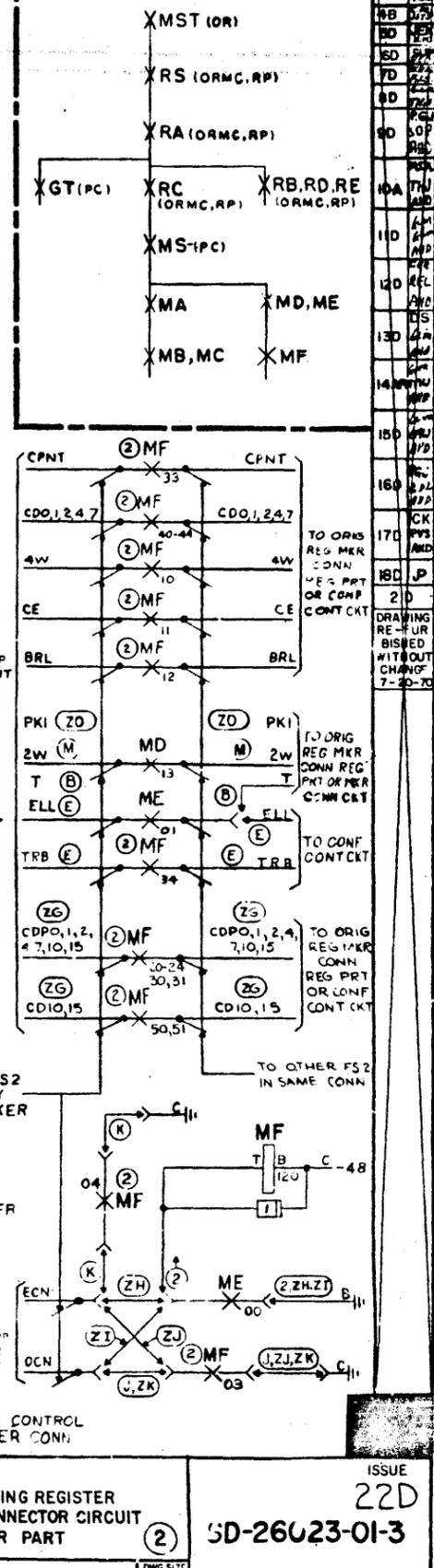
TO MASTER TEST FR. CONT. CKT. OR OFF TEST FR. TBL. MKR. B. CONN. CKT.

MULTIPLE TO OTHER FS 2 SERVED BY SAME MARKER

TO ORIG. REG. MARKER CONN. REG. PART. MKR. CONN. CKT.

MULTIPLE TO OTHER FS 2 IN SAME CONNECTOR

SCI



TO ORIG. REG. MARKER CONN. REG. PART. MARKER CONN. CKT. OR CONF. CONT. CKT.

TO COMP MKR. CIRCUIT

TO PREFERENCE CONTROL CKT. FOR MARKER CONN.

TO OTHER FS 2 SERVED BY SAME MARKER

TO OTHER MKR. CONN. ON SAME FR

TO ORIG. REG. MARKER CONN. REG. PART. MKR. CONN. CKT.

TO ORIG. REG. MARKER CONN. REG. PART. MKR. CONN. CKT.

TO PREFERENCE CONTROL CKT. FOR MARKER CONN.

TO COMB OR COMPLETING MKR. CKT.

ORIGINATING REGISTER MARKER CONNECTOR CIRCUIT MARKER PART

BELL TELEPHONE LABORATORIES, INC

ISSUE 22D

SD-26023-01-3

PRINTED IN U.S.A.

SD-26023-01-3

BELL TELEPHONE LABORATORIES, INC

ISSUE	DATE	BY	CHK	APP
1				
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CIRCUIT REQUIREMENTS																
SD-26023-01																
ORIGINATING MARKER CONNECTOR CIRCUIT, MARKER PART																
APPARATUS				MECH REQ			CIRCUIT PREPARATION				DIRECT CURRENT FLOW REPT			REMARKS		
DESIG	CIRCUIT	OPTION	FIG	BSP FIG	CONT PRCS	ARM TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	SEE NOTE	TEST WDG	TEST FOR		AFTER SOAK MA.	
								CONN BAT.	CONN GRD.							TEST MA.
MA	286G, 286A	ZD, ZC	1						T(MA)	SPD	1	0		185	175	
MB, MC, MD, ME	286H, 286E	ZD, ZC	1						T REL TST	GRD.	1	0		85	80	WDG. ALONE
MF	286G, 286A	ZD, ZC	2						T(MA)	SPD	1	0		185	175	CKT COMB. (MB) & (MC) OR (MD) & (ME) RELS.
MG	286H, 286E		3						T(MG)	SPD	1	0		85	80	

DWG
ISS
1
2D
3D
4B
5D
6D
7D
8D
13D
21D

DWG
ISS
1
2D
3D
4B
5D
6D
7D
8D
13D
21D

TEST NOTES:
1. TEST DURING LIGHT TRAFFIC

SD-26023-01 PAGE 1

SD-26023-01-4

ORIGINATING REGISTER
MARKER CONNECTOR CIRCUIT
MARKER PART
SD-26023-01-4

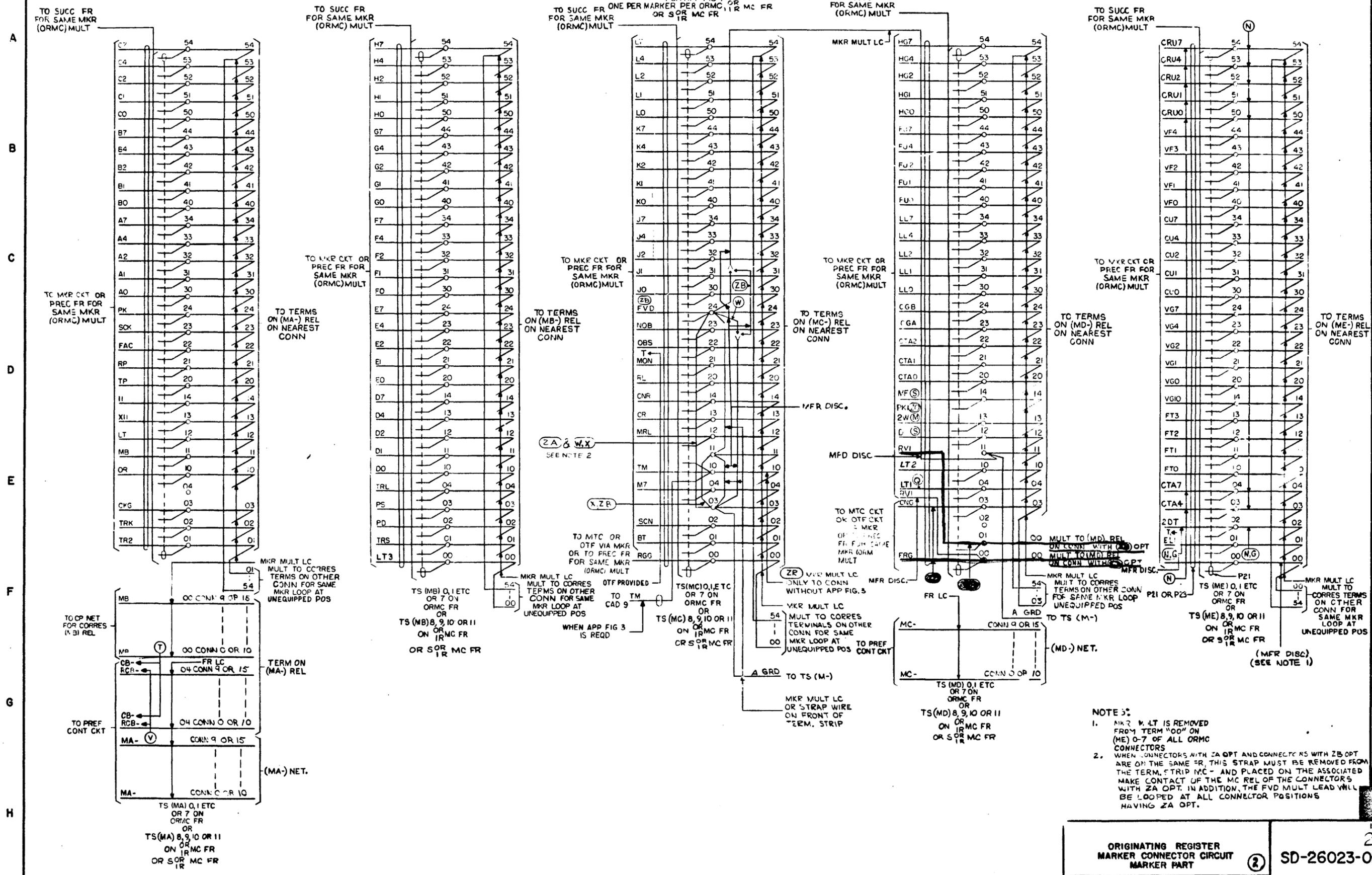
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EM23-A (11-51)

BELL TELEPHONE LABORATORIES, INC
PRINTED IN U.S.A.

ORIGINATING REGISTER
MARKER CONNECTOR CIRCUIT
MARKER PART
SD-26023-01-4
65

21

PART OF CAD 2



NOTE 3:
 1. MKR MULT IS REMOVED FROM TERM "00" ON (ME) 0-7 OF ALL ORMC CONNECTORS
 2. WHEN CONNECTORS WITH ZA OPT AND CONNECTORS WITH ZB OPT ARE ON THE SAME FR, THIS STRAP MUST BE REMOVED FROM THE TERM. STRIP MC- AND PLACED ON THE ASSOCIATED MAKE CONTACT OF THE MC REL OF THE CONNECTORS WITH ZA OPT. IN ADDITION, THE FVD MULT LEAD WILL BE LOOPED AT ALL CONNECTOR POSITIONS HAVING ZA OPT.

ORIGINATING REGISTER MARKER CONNECTOR CIRCUIT MARKER PART		2	SD-26023-01-6A
BELL TELEPHONE LABORATORIES, INC.			

ISSUE 250
 DRAWING 65
 PRINTED IN U.S.A.

SD-26023-01-6A

DRAWING	ISSUE
1	53
2D	54
3D	55
4B	56
5D	57
6D	58
7D	59
8D	60
9D	61
10D	62
11D	63
12D	64
13D	65
14D	66
15D	67
16D	68
17D	69
18D	70
19D	71
21D	72

DRAWING REQUIR-
 BISHED
 WITHOUT
 CHANGE
 7-20-70

PART OF CAD 2

FOR APP FIG 3
 ONE PER MARKER PER DRMC, OR MC FR
 OR 5 IR MC FR

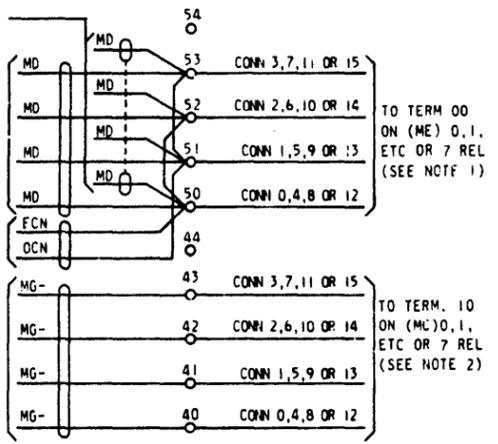
DRAWING
 ISSUE
 19D
 21D

ISSUE
 25D

TO SUCC FR
 FOR SAME MKR
 WHEN CAD 5 IS
 NOT PROVIDED

TO CAD 5 OR
 TO PREC FR FOR
 SAME MKR WHEN
 CAD 5 IS NOT
 PROVIDED

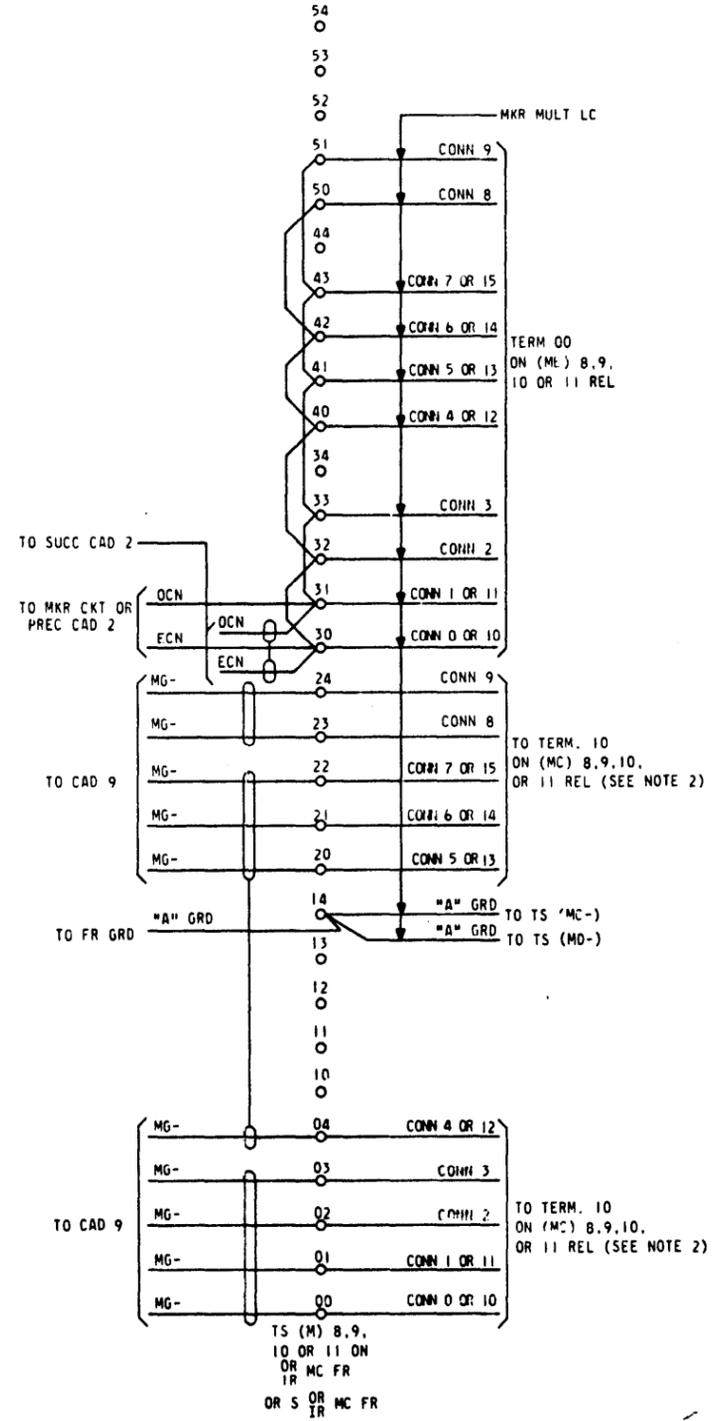
TO MKR CKT FROM
 FIRST CAD 2 WHEN
 CAD 5 IS NOT
 PROVIDED



TO CAD 9

TO TERM 00
 ON (ME) 0,1,
 ETC OR 7 REL
 (SEE NOTE 1)

TO TERM. 10
 ON (MC) 0,1,
 ETC OR 7 REL
 (SEE NOTE 2)



TO SUCC CAD 2

TO MKR CKT OR
 PREC CAD 2

TO CAD 9

TO FR GRD

TO TERM 00
 ON (ME) 8,9,
 10 OR 11 REL

TO TERM. 10
 ON (MC) 8,9,10,
 OR 11 REL (SEE NOTE 2)

TO TS (MC-)
 TO TS (MD-)

TO TERM. 10
 ON (MC) 8,9,10,
 OR 11 REL (SEE NOTE 2)

TO TS (M) 8,9,
 10 OR 11 ON
 OR MC FR
 OR 5 IR
 MC FR

NOTES

1. MKR MULT IS REMOVED FROM TERM "00" ON (ME) 0-7 OF ALL DRMC CONNECTORS.
2. MKR MULT IS REMOVED FROM TERM. 10 ON (MC) 0-11 OF ALL DRMC CONNECTORS WHEN APP FIG 3 IS REQU.

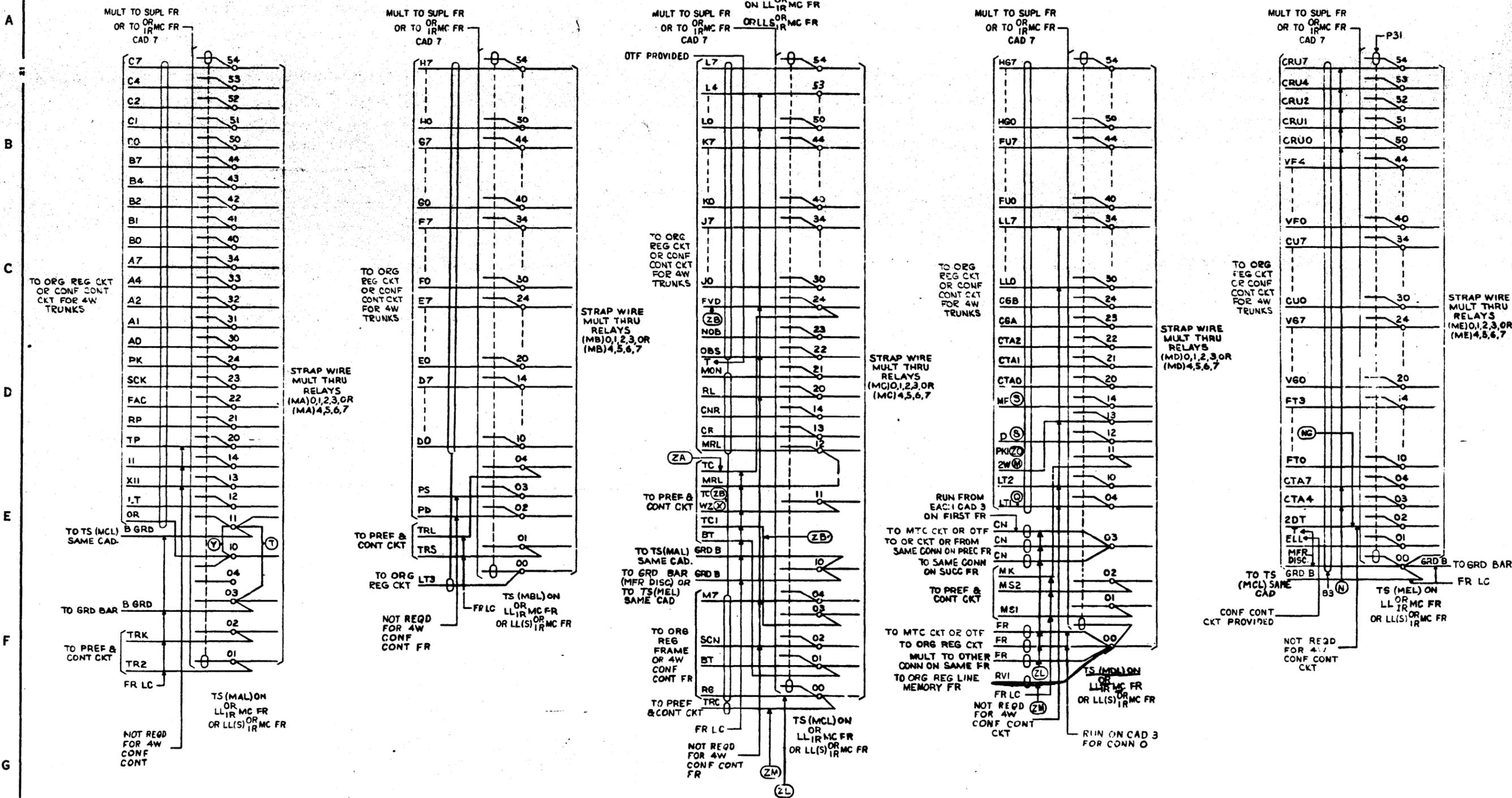
SD-26023-01-6B

ORIGINATING REGISTER MARKER CONNECTOR CIRCUIT MARKER PART		2	SD-26023-01-6B
BELL TELEPHONE LABORATORIES INCORPORATED		6S	

0 1 2 3 4 5 6 7 8 9

CAD. 3
FOR APP FIG. 1
ONE PER CONNECTOR
ON LL IR MC FR
OR LL(S) IR MC FR

DRAWING ISSUE	
5D	JER
6D	WNCB
7D	WNCB
8D	WNCB
9D	WNCB
10D	WNCB
11D	WNCB
12D	WNCB
13D	WNCB
14D	WNCB
15D	WNCB
16D	WNCB
17D	WNCB
18D	WNCB
19D	WNCB
20D	WNCB



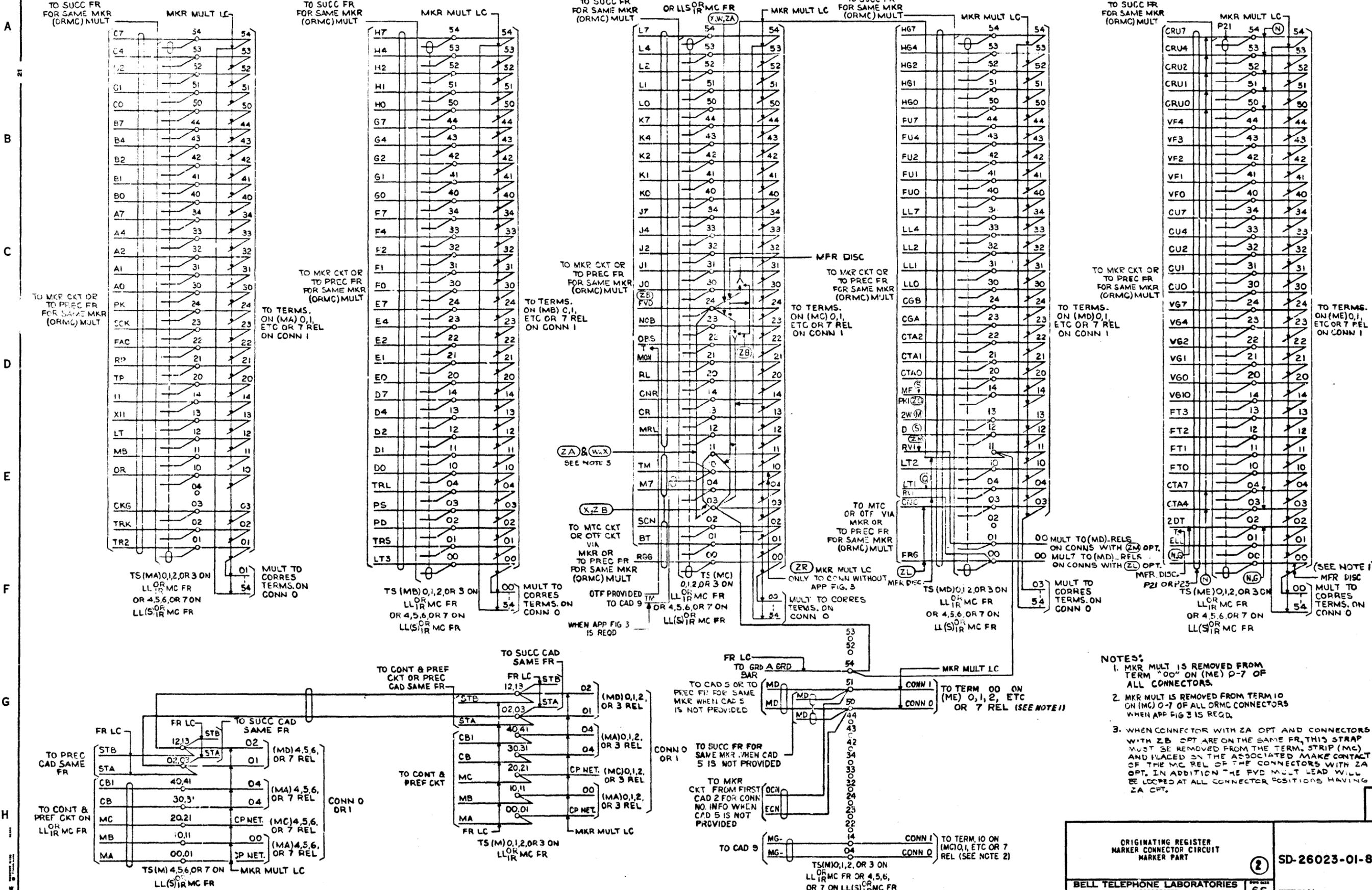
ISSUE
23A

SD-26023-01-7

ORIGINATING REGISTER MARKER CONNECTOR CIRCUIT MARKER PART	② SD-26023-01-7
BELL TELEPHONE LABORATORIES INCORPORATED	6S

CAD. 4

FOR APP FIG. 1
ONE PER MKR FOR GRMC ON
LL OR MC FR



- NOTES:
1. MKR MULT IS REMOVED FROM TERM "00" ON (ME) 0-7 OF ALL CONNECTORS.
 2. MKR MULT IS REMOVED FROM TERM 10 ON (MC) 0-7 OF ALL ORMC CONNECTORS WHEN APP FIG 3 IS RECD.
 3. WHEN CONNECTOR WITH ZA OPT AND CONNECTORS WITH ZB OPT ARE ON THE SAME FR, THIS STRAP MUST BE REMOVED FROM THE TERM. STRIP (MC) AND PLACED ON THE ASSOCIATED MAKE CONTACT OF THE MC REL OF THE CONNECTORS WITH ZA OPT. IN ADDITION THE FVD MULT LEAD WILL BE LOOPEL AT ALL CONNECTOR POSITIONS HAVING ZA OPT.

ORIGINATING REGISTER
MARKER CONNECTOR CIRCUIT
MARKER PART

SD-26023-01-8

BELL TELEPHONE LABORATORIES
INCORPORATED

65

DRAWING ISSUE

5D
6D
7D
8D
9D
10D
11D
12D
13D
14D
15D
16D
17D
18D
19D
20D

SD-26023-01-8

24B

SD-26023-01-8

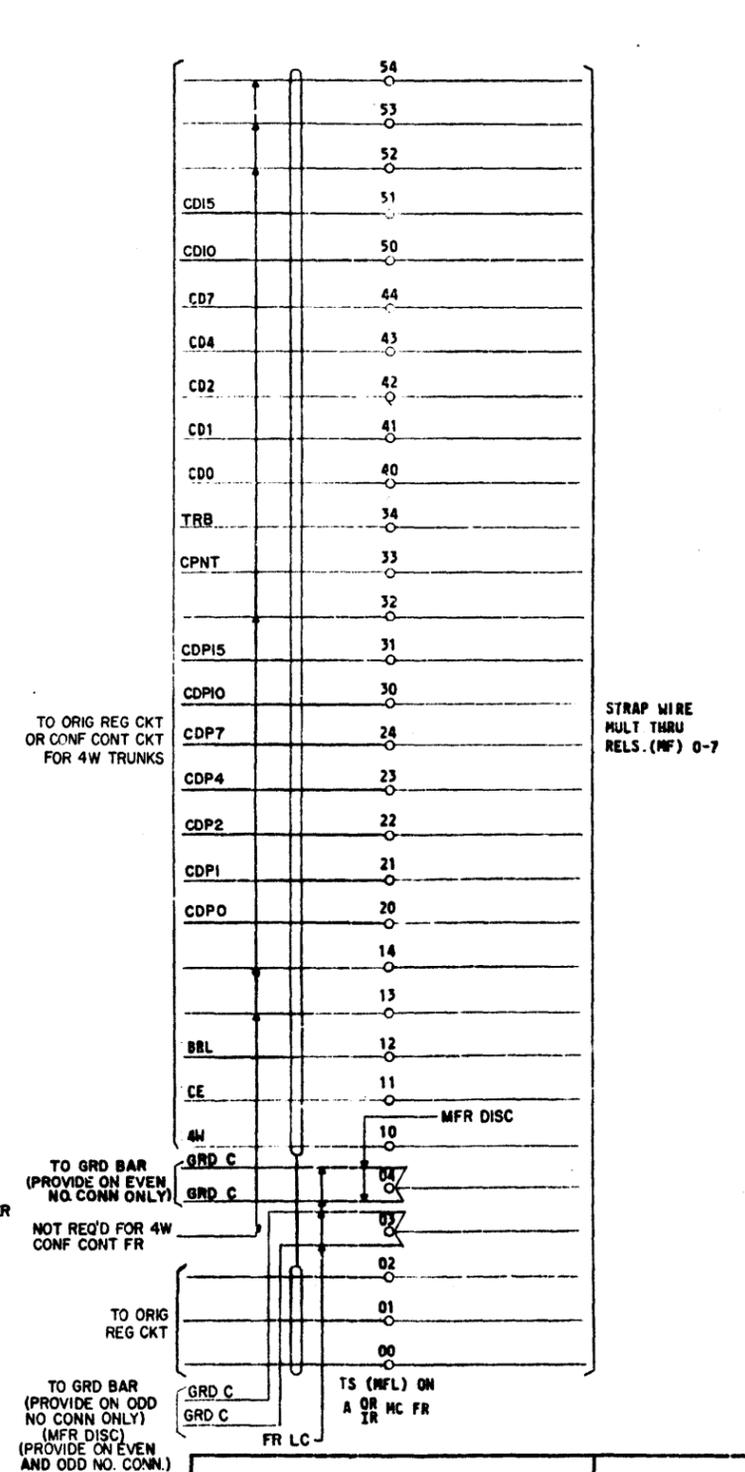
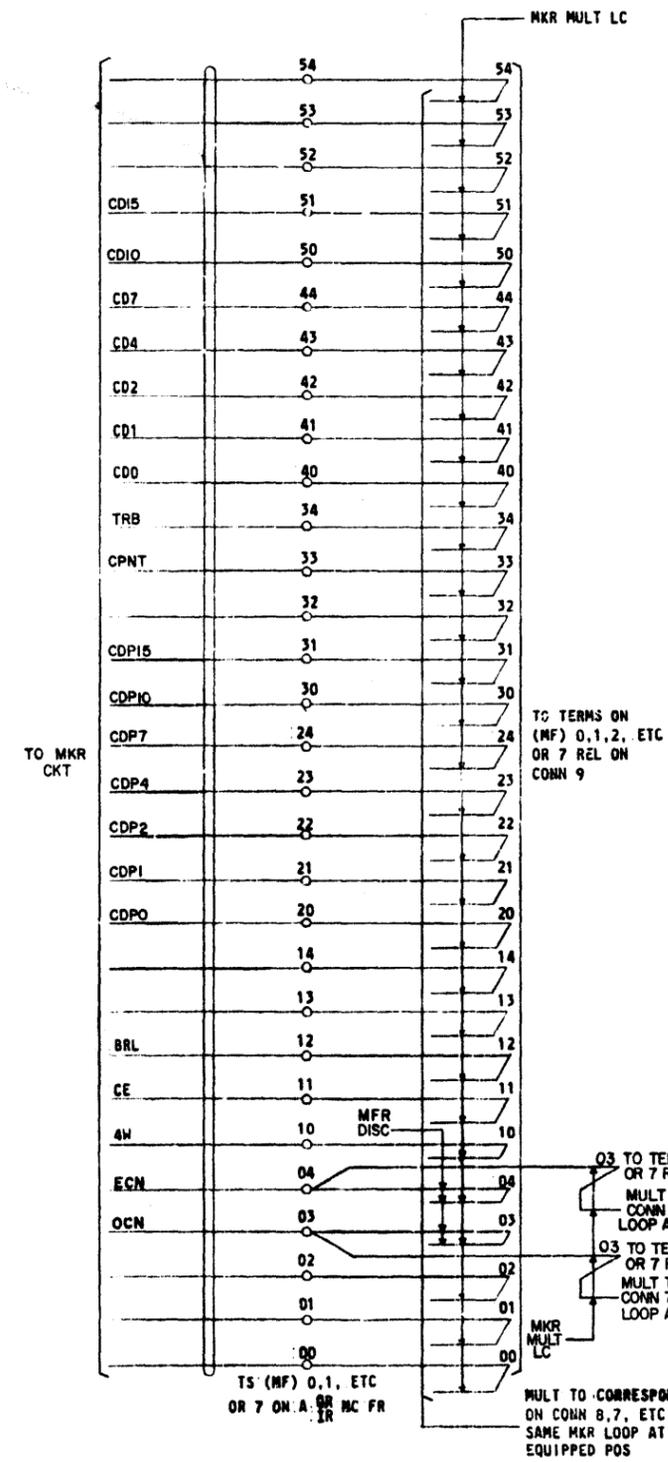
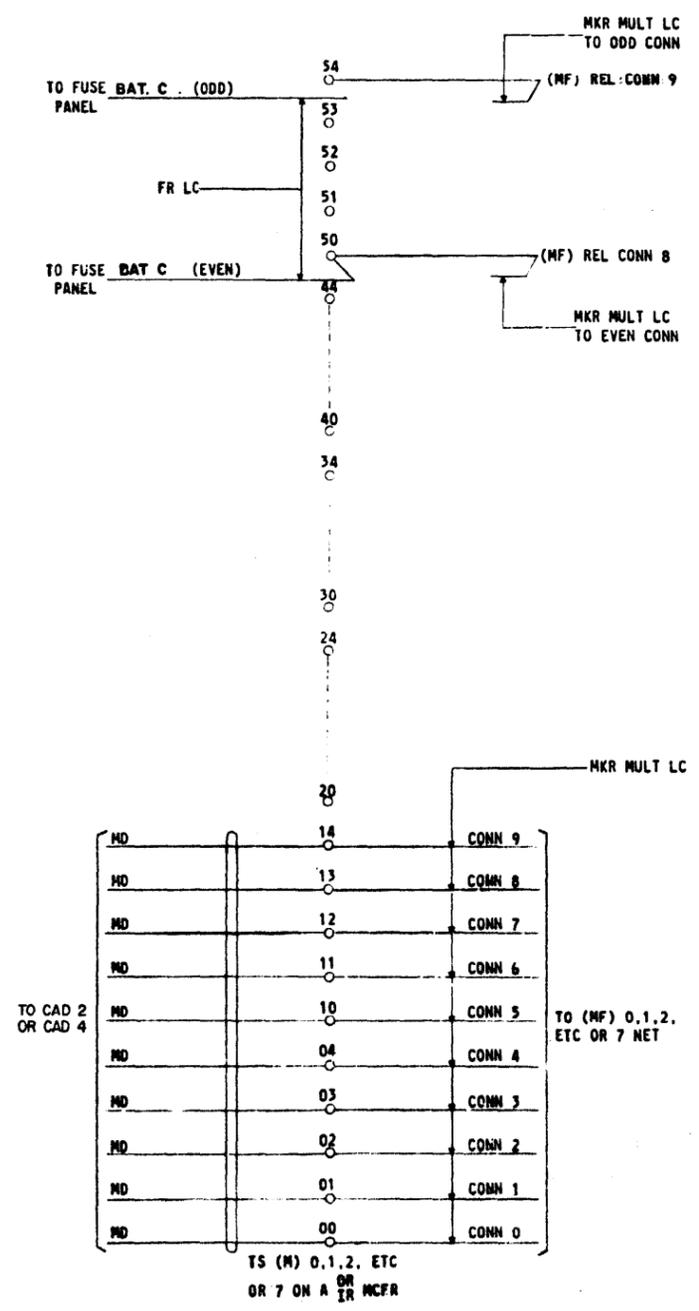
DRAWING ISSUE	
80	WJC
10A	CF
2D	CB
14AR	CA
15D	CB
15D	CB

CAD 5

FOR APP FIG. 2
ONE PER MKR PER A OR MC FR

CAD 6

FOR APP FIG. 2
ONE PER 4 WIRE CONN



SD-26023-01-9

ISSUE
22D

LEAD INDEX (CONT)

A
B
C
D
E
F
G
H

DESIG	FS LOC	CAD LOC
COMB OR COMPL MKR CKT		
2CT	3H3	6C8 8C8
2A	3E8	6C6 8C6
2N	3C8	9E4
11	3C6	6C0 8C0
AD,1,2,4,7	3A3	6C0 8C0
BD,1,2,4,7	3A3	6C0 8C0
BPL	3E8	9C4
BT	7A3	6C4 8C4
CO,1,2,4,7	3B3	6C0 8C0
CDO,1,2,4,7	3D8	9C4
CDIO,15	3D8	9E3
CDPO,1,2,4,7,10,15	3D8	9E3
CE	7D8	9G4
CGA,B	3B7	6C6 8C6
CKG	3B3	6C0 8C0
CNR	3B3	6C4 8C4
CPNT	3C8	9C3
CR	3C3	6C4 8C4
CRUD,1,2,4,7	3H3	6C8 8C8
CTAO,2	3B3	6C6 8C6
CTA4,7	3H3	6C8 8C8
CUO,1,2,4,7	3C3	6C8 8C8
D	3H3	6C6 8C6
DO,1,2,4,7	3C3	6C2 8C2
EO,1,2,4,7	3C4	6C2 8C2
ECN	3G8	9G4 6B/BO 6B/D4
ELL	3D8	6C8 8C8
FO,1,2,4,7	3D3	6C2 8C2
FAC	3D3	6C0 8C0
FTO-3	3D3	6C8 8C8
FUO,1,2,4,7	3D3	6C6 8C6
FVD	3C6	
GO,1,2,4,7	3D3	6C2 8C2
HO,1,2,4,7	3E3	6C2 8C2
HGO,1,2,4,7	3E3	6C6 8C6

DESIG	FS LOC	CAD LOC
COMB OR COMPL MKR CKT		
JO,1,2,4,7	3E3	6C4 8C4
KO,1,2,4,7	3E3	6C4 8C4
LO,1,2,4,7	3E3	6C4 8C4
LLO,1,2,4,7	3F3	6C6 8C6
LT	3F3	6C0 8C0
LT1	3F3	6C6 8C6
LT2	3A6	6E6 8E6
LT3	3A6	6F2 8F2
MO,1,2,4	3C6	12D0
M7	3F3	6C4 8C4
MB	3F3	6C0 8C0
MF	3H3	6C6 8C6
MON	3G3	6C4 8C4
MRL	3G3	6C4 8C4
N7	3C6	12D0
NCB	3G3	6C4 8C4
OES	3G3	6C4 8C4
OCK	3H8	9G4 6B/BO 6B/D4
OR	3A6	6C0 8C0
PD	3A6	6C2 8C2
PK	3A6	6C0 8C0
PK1	3D8	6C6 8C6
PS	3B6	6C2 8C2
RL	3B6	6C4 8C4
RP	3B6	6C0 8C0
RVI	3G6	6C6 8C6
SCK	3C6	6C0 8C0
SCN	3C6	6C4 8C4
T	3G3	6F8 8F8

DESIG	FS LOC	CAD LOC
COMB OR COMPL MKR CKT		
TM	3C6	6C8 8C4
TP	3C6	6C0 8C0
TRB	3D8	9C3
TR2	3D6	6C0 8C0
TRK	3E6	6C0 8C0
TRL	3E6	6C2 8C2
TRS	3E6	6C2 8C2
VFO,1,2,4,7,10	3D6	6C8 8C8
X11	3D6	6C0 8C0

CONFERENCE CONTROLLER CKT		
4W	3D9	9E7
AO,1,2,4,7	3A5	5C0 7C0
BO,1,2,4,7	3A5	5C0 7C0
BRL	3D9	9E7
BT	3A5	5E4 7F4
CO,1,2,4,7	3B5	5C0 7C0
CDO,1,2,4,7	3D9	9E7
CDIO,15	3F9	9E7
CDPO,1,2,4,7,10,15	3F9	9E7
CE	3D9	9E7
CGA,B	3B5	5C6 7C6
CNR	3B5	5C4 7C4
CPNT	3C9	9E7
CR	3C5	5C4 7C4
CRUD,1,2,4,7	3H5	5C5 7C8
CTAO-2	3B5	5C6 7C6
CTA4,7	3H5	5C6 7C8
CUO,1,2,4,7	3B5	5C8 7C8
D	3H5	5C6 7C6
DO,1,2,4,7	3C5	5C2 7C2
EO,1,2,4,7	3C5	5C2 7C2
ELL	3E9	5C8 7C8

DESIG	FS LOC	CAD LOC
CONFERENCE CONTROLLER CKT		
FC,1,2,4,7	3D5	5C2 7C2
FTO-3	3D5	5C8 7C8
FUO,1,2,4,7	3D5	5C6 7C6
FVD	3G7	5C4 7C4
GO,1,2,4,7	3D5	5C2 7C2
HO,1,2,4,7	3E5	5C2 7C2
HGO,1,2,4,7	3E5	5C6 7C6
JO,1,2,4,7	3E5	5C4 7C4
KO,1,2,4,7	3E5	5C4 7C4
L7	3E5	5C4 7C4
LT	3F5	5C0 7C0
LT2	3A7	
MF	3H5	
MON	3G5	5C4 7C4
MRL	3G5	5C4 7C4
NOB	3G5	5C4 7C4
OR	3A7	5D0 7C0
PK	3A7	5C0 7C0
RG	3B7	5E4 7F4
RP	3B7	5C0 7C0
SCK	3B7	5C0 7C0
TRB	3E9	9E7
VFO-4	3C7	5C8 7C8
VGO,1,2,4,7	3C7	5C8 7C8
VG10	3C7	5C8

DRAWING	ISSUE
12D	PAT
13D	ALL
14A	REV
15C	REV
17C	REV
18D	REV
19D	REV
21D	REV

SD-26023-01-10

CAD 7

(FOR APP FIG 1)
ONE PER CONNECTOR PER OR MC FRAME
OR S IR MC FR

CAD 8

(FOR APP FIG 3)
ONE PER CONNECTOR ON
AUXILIARY ORMC UNIT

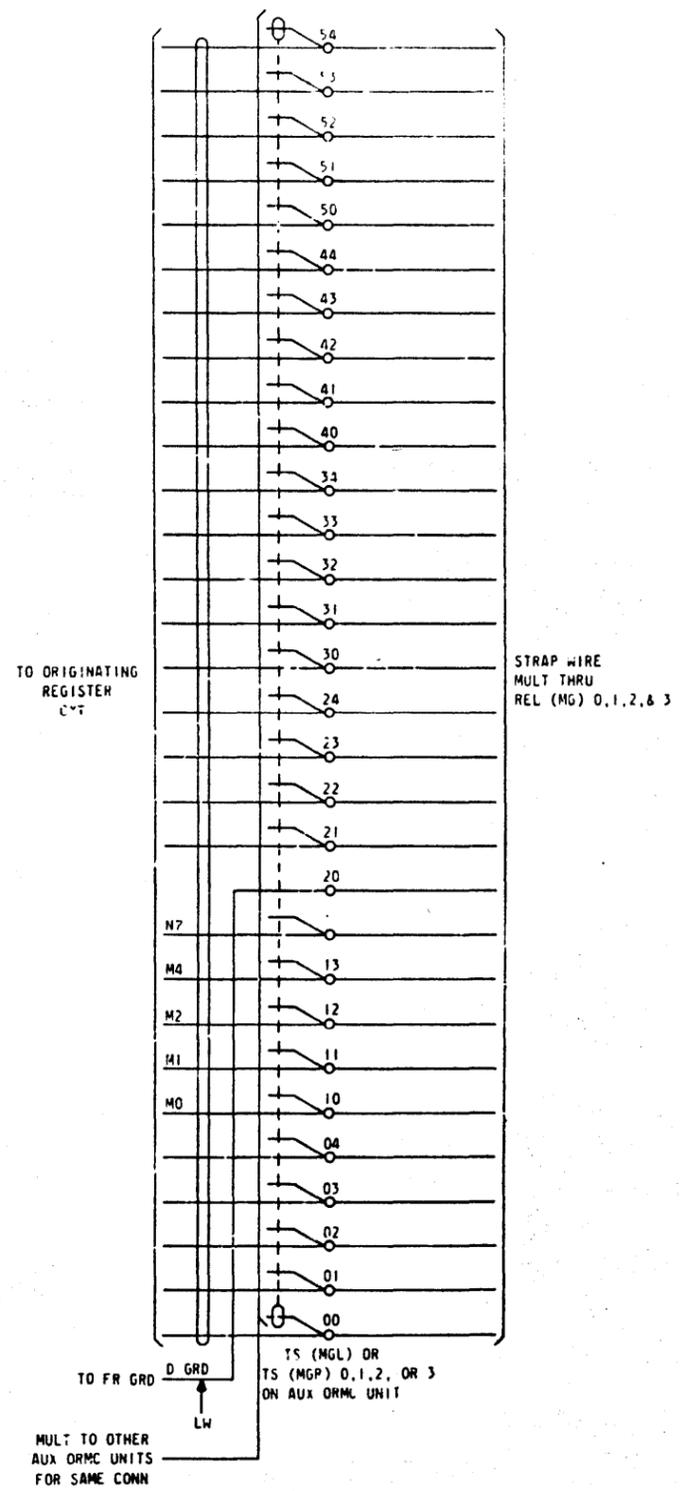
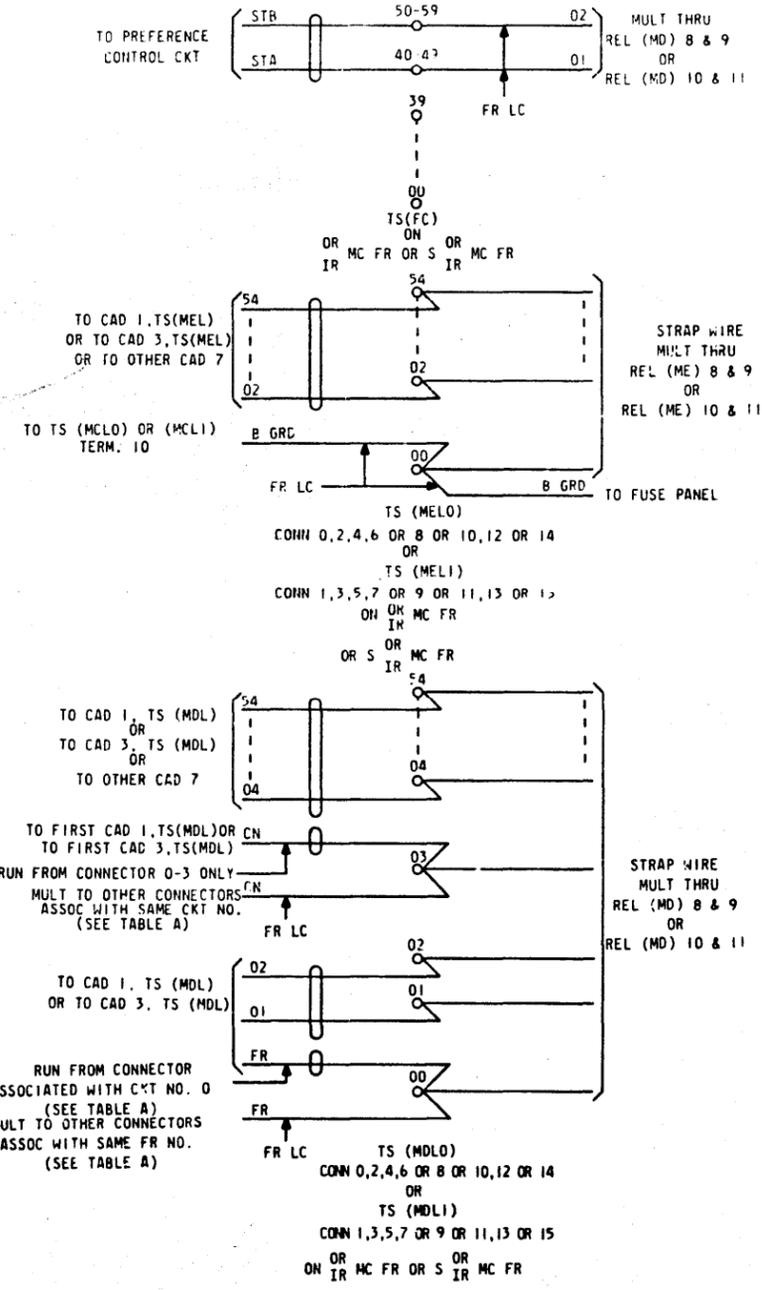
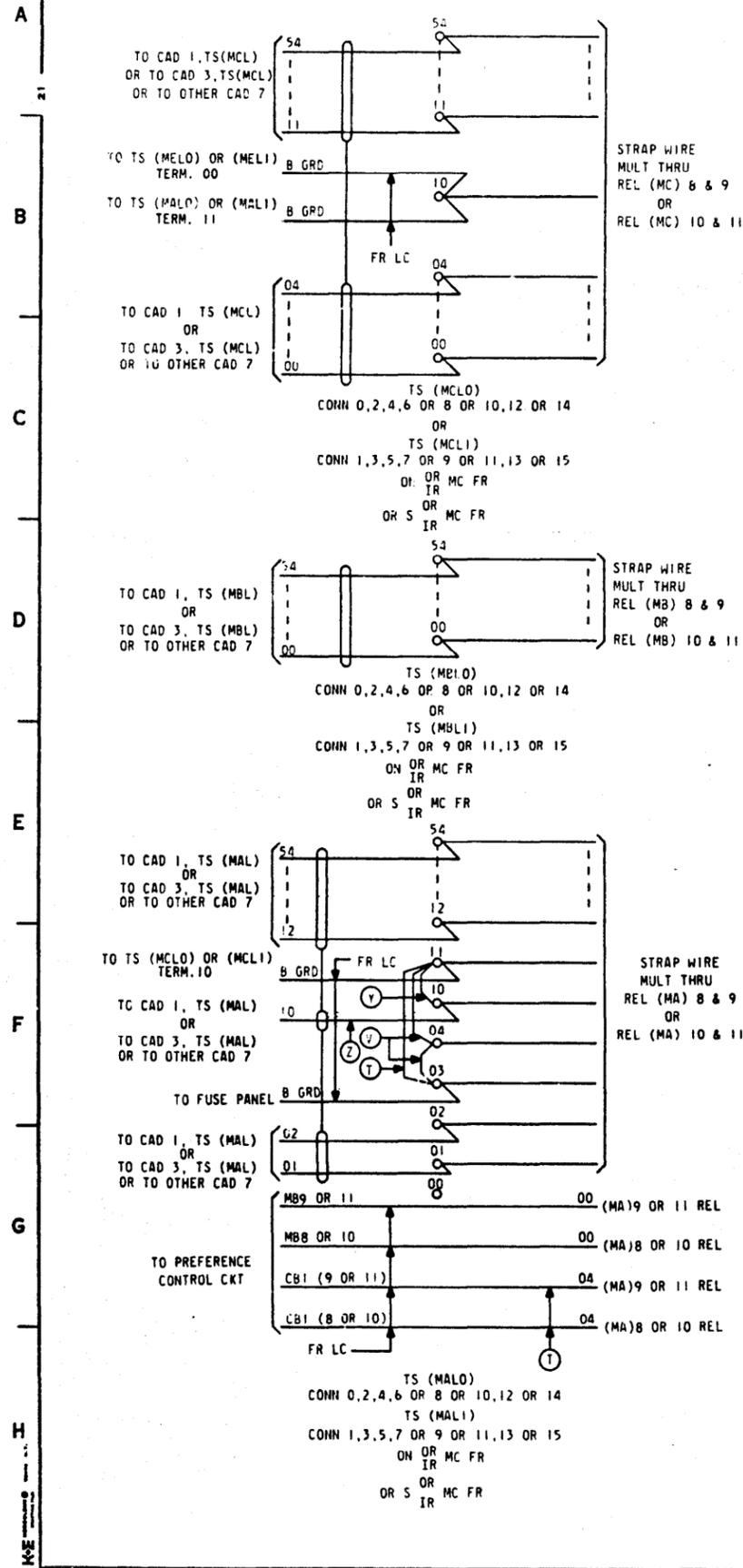


TABLE A

FR NO.	CONN NO.	OR/IRMC		FR NO.	CONN NO.	S OR/IR	
		CONN NO.	MARKERS 8,9			CONN NO.	MARKERS 8,9
0	0	0		3	0	12	0
	1	1			1	13	
	2	2			2	14	
	3	3			3	15	
1	0	4	0	1			
	1	5					
	2	6					
	3	7					
2	0	8	0	1			
	1	9					
	2	10					
	3	11					

1. THE CN (CONNECTOR NO.) LEAD OF OR IR MC FR S OR IR MC FR SHALL BE CABLED TO AGREE WITH ASSOCIATED PART OF CONNECTOR ON ORMC FRAME.

2. THE FR LEAD OF THE OR IR MC FR S OR IR MC FR SHALL BE CABLED TO AGREE WITH FR NO. OF THE ASSOCIATED ORMC FR.

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ISSUE
19D
21D

ISSUE
25D

ORIGINATING REGISTER
MARKER CONNECTOR CIRCUIT
MARKER PART

SD-26023-01-11

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INCORPORATED

6S

