SHEET INDEX (INITIATED ON ISSUE 2)

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* SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER

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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 LATEST ISSUE NUMBER OF THE DRAWING AS A WHOLE.

SUPPORTING INFORMATION

CATEGORY	NO.
EQPT DESIG REQT	J28759
EQPT DRAWINGS	J28759A J28759B J28759C J28759AA,AB,ETC J28759BA,BB,ETC J28759CA,CB,ETC
JUNCTOR DISTRIBUTION	J27551

DWG ISS	CD ISSUE	DWG ISS	CD ISSUE	DWG ISS	CD ISSUE
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4AR	8D APP 4AR	5D	8D	9B	8D APP 9B
7B	8D APP 7B	8D	8D APP 8D	9B	8D APP 9B
10B	8D APP 10B	11D	8D APP 11D	12D	8D APP 12D
13A	8D APP 13A	14A	8D APP 14A	14D	8D APP 14D
14D	8D APP 14D	17AC	8D APP 17AC	18D	8D APP 18D
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22D	8D APP 22D	23A	8D APP 23A	24B	8D APP 24B
25A	8D APP 25A	28D	8D APP 28D		

DWG ISSUE	CD ISSUE	DATE ISSUED	DRAWN/APPD
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28D	3D APP 23D	8-12-68	DM KEG JBS MFF AND
29D	4D	5-7-69	JRR RJM RPC AND
30D	4D APP 1D	12-15-69	KMI CR KEG RPC AND
31A	4D APP 2A	12-15-69	KMI CR KEG MFF AND
32A	4D APP 3A	10-5-72	JES 6DL WJM RPC EDM
33D	4D APP 4D	10-5-72	JES 6DL WJM RPC EDM
34A	4D APP 5A	9-2-71	GB RA CSL RPC TMJ
35D	4D APP 6D	9-2-71	GB RA CSL RPC TMJ
36A	4D APP 7A	9-27-73	MD MD REF RBC TMJ
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38A	4D APP 9A	8-16-74	CDI KEG JES RBC TMJ
39D	4D APP 10D	8-16-74	CDI KEG JES RBC TMJ
40A	4D APP 11A	6-30-75	CDI KMI RGB RJM TMJ
41B	4D APP 12B	6-30-75	CDI KMI RGB RJM TMJ
42B	4D APP 13B	5-27-76	CDI KMI RF RJM TMJ
43B	4D APP 14B	5-27-76	CDI KMI RF RJM TMJ
44B	4 D APP 15B	4-18-77	CDI KEG DLK RJM RCA
45B	4D APP 16B	1-16-78	CDI DSP TB RJM RCA
46A	4D APP 17A	1-16-78	CDI DSP TB RJM RCA

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

ISSUE 46A

REPLACING SD-25550-01 FOR DIAL TONE MARKER PART

1CO2

CROSSBAR SYSTEMS

NO. 5
DIAL TONE MARKER CIRCUIT

AT&TCO STANDARD

(2) (CTM)

SD-26001-01-AI
156 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED

SYS 5 ESS 6S

SD-26001-01-AI

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* SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER

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	(GLH1) TO (MAN)	F4	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22					
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	(PLN) TO (TGCK)	F6	23	23	23	30	30	30	30	30	30	30	30	30	30	30	30	41	41	41	41	41					
	(TGCK) TO (XAJC)	F7	22	28	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30					
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ISSUE 46A

DIAL TONE MARKER CIRCUIT

SD-26001-01-A2

BELL TELEPHONE LABORATORIES

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* SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER

DRAWING ISSUE
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28D OBS.
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30D
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34A
35D

ISSUE 46A

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-A3

BELL TELEPHONE LABORATORIES INCORPORATED. 6S

SD-26001-01-A3

CBL-142 (8-66)

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* - DIAL TONE MKR FR (DTM)
S - SUPPLEMENTARY DIAL TONE MKR (SDTM)

X-GT2 Panel

DRAWING ISSUE
28D
30D
33D

ISSUE 45B

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LO-9	19H2	11	18
OAT	25F1	13	11
SDT	25E7	13	12
SDT1	25D6	13	12
TBT	25F7	3	45
TH1	20A/D6	9	28
TH2	20A/D7	9	28
TH3	20A/D7	9	28
TO-9	19H6	11	18
TRTP	25G1	13	11
WT	25A2	13	12
WT1	25A0	13	12
XMG	7F6	14	16
XLH1	20A/D0	9	25
XPG	18F6	14	9

DESIG	LOCATION FS	APP FIG	EQPT
DIODES			*
JH	20A/C5	9	28
JO-9	19H4	11	18
LH	20A/F1	9	28
LO-9	19H3	11	18
MJ	32B1	10	21
MN	32C1	10	21
TH	20A/D7	9	28
TO-9	19H5	11	18

* - DIAL TONE MKR FR (DTM)

DESIG	LOCATION FS	APP FIG	EQPT
INDUCTORS			*
CONB	24A1	19	4
CONI	24C4	9	25
TH	20A/C7	9	26

LAMPS			*
CON	24D2	15	2
CONA	24B6	15	2
CS	12B8	15	2
CSA	12H1	15	2
F	34A0	15	2
MG	7E5	15	2
MGB	7G9	15	2
JC	17A0	15	2
JG	17F6	15	2
JS	22H0	15	2
LBS0,1	11B7	15	2
LBS2	11A7	15	2
LC	19H5	15	2
LFS	11H2	15	2
LG	11D4	15	2
LGLA	0H9	15	2
LR	16D3	15	2
LS	22G0	15	2
LSA	22G1	15	2
LV	22H6	15	2
PN	14A0	15	2
PNA	14A0	15	2
TB	4D4	15	2
TBS0-4	3E6	15	2
TBS5	3G6	15	2
TFS	3B0	15	2
TSM	22F8	15	2
TXP	20A/D7	15	2
TXP1	20A/D8	15	2
VGA	6A0	15	2
VGB	12B0	15	2
WSM	38E8	15	2
WSMA	38F8	15	2

DESIG	LOCATION FS	APP FIG	EQPT
NETWORKS			*
ASM	22F8	10	23
CHT	21D2	10	23
CON2	24B1	9	24
CONA	24B1	19	4
ETS	4G2	7	32
ETS1	4G2	7	32
JCKO	21H2	10	23
JSO	22F2	11	16
JS1-9	22G4	11	16
LFS	11H3	3	45
LLT	19H0	9	26
OC1,2	26D4	10	22
OTS	4H3	7	32
OTS1	4H2	7	32
SMO-9	22F0	11	17
SZA	15A7	4	41
SZB	15A7	4	41
SZC	15B7	4	41
SZD	14C7	4	41
TFS	3B4	3	45
TG1	4A4	10	21
TSM	22E7	7	32
V	12B1	6	36
VGA	6B5	10	23

RESISTORS				*
CHA	21A2	11	17
CON1	24E3	9	25
CON2	24E4	9	25
CON3	24D4	9	25
CON4	24C4	9	25
CON5	24C5	9	25
CON6	24D6	9	25
CON7	24F4	9	25
CON8	24F3	9	24
CON9	24F3	9	24
CONA	24C2	19	4
CONB	24C2	19	4
CONC	24B2	19	4
COND	24A2	19	4
CONE	24A5	19	4
CONF	24B5	19	4
CONG	24A0	19	4
CONH	24A0	19	4
CONJ	24B1	19	4
CONK	24A5	19	4

DESIG	LOCATION FS	APP FIG	EQPT
RESISTORS			*
CLO	37D1	8	30
CU1	37C1	8	30
CU2	37B1	8	30
CU4,7	37A1	8	30
CSGA	37F5	8	31
CSGB	37F5	8	31
CSGC	37G5	3	44
CSRO	37D5	23	5
CSR1	37C5	23	5
CSR2	37B5	23	5
CSR4,7	37A5	23	5
CSTO,1,2,4,7	12G4	8	30
CTO-2	12E4	8	29
DCT1	20A/G4	9	25
DCT2	20A/H3,H5	9	25
DCT3	20A/G4	5	38
DCT4,5	20A/E3	9	26
DCT6	20A/F4	9	27
DCT7	20A/E5	9	26
DTA	24D6	9	26
DTB	24E7	9	27
ETA	4G1	7	32
ETS	4G1	16	63
F	34A0	14	7
F4	13C0	16	63
FM	2A9	3	45
FR	8GC	16	63
GLH	24C5	9	25
GLHA	24A6	19	4
HFA	28C7	12	13
HFA1	28D6	12	13
HGG,1,2,4,7	9F1	6	37
HMF	20B/A1	9	25
HMS	20B/A1	9	25
HMT	20B/A3	9	25
HTT1-5	25F5	13	11
JO-9	19H4	11	18
JC	17A0	14	7
JCK	22E1	10	23
JCKC	21H2	10	23
JG	17C6	14	7
JH	20A/D4	9	28
JHI	20A/D4	9	27
JS	22G1	14	7
JSA	22H3	14	7
JS1-9	22G4	11	16
LC	19H7	14	7
LDT1-4	25C1	13	12
LFS	11H3	3	45
LH	20A/G2	9	28
LLG,1,2,4,7	9B1	11	16
LO-9	19H2	11	18
LLT	19H0	9	26
LGLA	8H8	28	REL R
LR1,2	16F4	14	7
MJ	28E9	12	13
MT8	15F3	6	36

DESIG	LOCATION FS	APP FIG	EQPT
RESISTORS			*
OAT1-4	25F1	13	11
OBS2	8F8	10	23
OTA	4A1	7	32
OTS	4H0	16	63
RCTB	24G4	9	25
SDT1-5	23D7	13	12
SF	25B8	10	23
SM0-9	22E0	11	17
TBT1	25F7	3	45
TBT2	25F7	3	45
TBT3	25F7	3	45
TBT4	25F8	3	45
TFS	3B3	3	45
TG1	4A4	10	21
TH1,2	20A/E6	9	28
TH3	20A/E7	9	28
TO-9	19H5	11	18
TRA	28E2	12	14
TRST	31D1	12	14
TRT1-4	25G1	13	11
TS	22F6,G6	14	7
TSM	22E8	7	32
V	12A1	6	36
VFO-4	9F5	6	36
VGG,1,2,4,7,10	9C5	6	35
VGA	6B5	10	23
WGA	38F4	30	REL R
WGB	38E4	30	REL R
WT1-4	25A1	13	12
XCW	11B/C6	14	7
XLH1	20B/H1	9	25
XLH2	20B/G1	9	25
XLH3	20B/G3	9	25
XLH4	20A/D0	9	25
XLH5	20B/G0	9	26

DESIG	LOCATION FS	APP FIG	EQPT
TRANSFORMERS			*
CON	24C3	9	24
CONA	24A1	19	4

DESIG	LOCATION FS	APP FIG	EQPT
TUBES,ELECTRON			*
CON	24F2	9	25
CONA	24E1	19	4
HTT	25F4	13	11
LDT	25E1	13	12
OAT	25F1	13	11
SDT	25D6	13	12
TBT	25F6	3	45
TRTR	25G1	13	11
WT	25A1	13	12

DRAWING ISSUE: 28D DM, 30D, 33D

ISSUE 39D

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-A5

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-A5

LEAD INDEX CONNECTING CIRCUITS

CIRCUIT TITLE	LEAD INDEX TABLE LOC
ALL MARKERS BUSY CKT	6A3
AUTOMATIC MONITOR REGISTER AND SENDER TEST CKT	6B3
DISTRIBUTOR AND SCANNER APPLICATION CKT FOR ETS	6C3
ETS POWER AND DATA INTERFACE CKT	6G3
FROM LAST MARKER TO FIRST DT MARKER	6H3
GROUP BUSY CKT	6A4
INTERFACE AND CONTROL CKT	7A7
LINE INS TEST CONTROL CKT	6B4
LINE INS TEST CONTROL CKT (LINE LINK FR)	6B4
LINE INS TEST CONTROL CKT (TRUNK LINK FR)	6E4
LINE, LINE LINK AND CONN CKT	8A0
LINE LINK CONN CKT	8A0
LINE LINK MARKER CONN CKT	8C0
MARKER CONN CKT	8D0
MASTER TEST CONTROL CKT	6A5
MASTER TEST FR CONN CKT	6F5
MASTER TEST FR JACK, LAMP, AND KEY CKT	7C1
MASTER TRAFFIC CONTROL CKT	7A2
MISC CKT	7B3
OFFICE TEST FR TEST CKT	7E2
OFFICE TEST FR TROUBLE IND AND CONN CKT	7G2
PLANT REGISTER CKT	7E5
POWER RINGING AND TONE FR CKT	7G5
PREFERENCE CONTROL CKT FOR LINE LINK MARKER CONN	8D2
PREFERENCE CONTROL AND MAKE BUSY CKT FOR LINE LINK CONTROL	8A2
PREFERENCE CONTROL AND MAKE BUSY CKT FOR TRUNK LINK CONTROL	8G2
TRAFFIC REGISTER CKT	7B6
TRAFFIC USAGE RECORDER CKT	7G6
TRANSFER LINE LINK CONN CKT	8A1
TRANSFER LINE LINK MARKER CONN CKT	8D1
TRANSFER TRUNK LINK CONN CKT	8G1
TRUNK LINK AND CONN CKT	8G0
TRUNK LINK CONN CKT	8G0
TRUNK LINK OR TRANSFER TRUNK LINK CKT	8G2

LEAD INDEX

DESIG	LOCATION FS	LOCATION CAD
ALL MARKERS BUSY CKT		
AB	28A/F8	

DESIG	LOCATION FS	LOCATION CAD
AUTOMATIC MONITOR REGISTER AND SENDER TEST CKT		
M	32F1	
ORS	32F1	
ST	32E1	

DESIG	LOCATION FS	LOCATION CAD
DISTRIBUTOR AND SCANNER APPLICATION CKT FOR ETS		
2P	35H8	54C0
2P3W	35H8	54C0
2W	27E6	54H0
4W	27E6	54H0
ACB	35H8	54C0
AD	35A3	54C0
ADMR	35A3	54C0
CN	35H8	54C0
CTO,1,2,4,7	12G8	54D2
CUO,1,2,4,7	37D3	54D2
DTG	35F0	54C0
DTGG	35F0	54F0
DVO	20B/E9	54D2
FTO-3	10D6	54H0
FUO,1,2,4,7	10D6	54H0
GTL	13F4	54C0
GTLG	13H4	54F0
HGTO-9	7A4	54D2
KOS	35F0	54F0
LTR	25H7	54C0
LTRG	25H7	54F0
MAN	35H8	54C0
MCN	35A3	54C0
MPBX	36B8	54C0,D2
MT	32A5	54D2
MTK	31C2	54D2
NCSL	35H8	54C0
NPBX	35H8	54D2
PBX	35A3	54C0
PBXS	35H8	54C0
PKT	35H8	54C0
PLN	35H8	54C0
PLN5	35A3	54C0
PLN7	35A3	54C0
PLNC	35A3	54C0
RV	36B8	54C0,D2
SNK	27B3	54C0
SNKG	27B3	54F0
ST	13C5	54D2
TAO	36B8	54C0,D2
TRF	27E6	54D2
VFTG-4	8A4	54D2
VGTO-11	6H6	54D2
XTRK	30G6	54C0
XTRKG	30G6	54F0

DESIG	LOCATION FS	LOCATION CAD
ETS POWER AND DATA INTERFACE CKT		
MB	28A/F1	54A7
MBG	28A/F1	54A7

DESIG	LOCATION FS	LOCATION CAD
FROM LAST MARKER TO FIRST DT MARKER		
AC AND DC AUD	24D0	
± AUD RING & "C"	24D0	

DESIG	LOCATION FS	LOCATION CAD
GROUP BUSY CKT		
RHG	27H2	
RHM	27G2	
RHRO-3	27H2	

DESIG	LOCATION FS	LOCATION CAD
LINE INS TEST CONTROL CKT		
MB	28E1	
MII	28E1	

DESIG	LOCATION FS	LOCATION CAD
LINE INS TEST CONTROL CKT (LINE LINK FR)		
BS	11D1	
BSC	11B8	
BSI	11B8	
CGA,B,C	12C6	
CSO0-29	12A5	
DTK	11A2	
G	11B2	
HGO-9	7E7	
HGK	7F7	
LBO-9	1962	
LFK	11D2	
LHO-4	1950	
LIT		CAD 35
LLO-9	1962	
NC	32H1	
SMO-9	22E0	
STO-59	11A/D8	
VO-4	12A2	
VFTO-4	8D6	
VGBO-11	12B2	

DESIG	LOCATION FS	LOCATION CAD
LINE INS TEST CONTROL CKT (TRUNK LINK FR)		
BSO-5	3E7	
CK	3C8	
JO-9	1964	
L	16F6	
LCK	1968	
LHO-9	1968	
LK	1768	
MDX	21G2	
PR	16L6	
R	16E6	
RK	1768	
SF	16E6	
STO-29	387	
SZA	1586	
SZB	1586	
SZC	1586	
TTF	16E6	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST CONTROL CKT		
CGA,CGA1	12F0	
CGB,CGB1	12F0	
CGC	12B0	
CHT	32H6	
CWL	11B/G5	
ETSO-1	4B0	
FTCO-19	1D0	
FTC20-29	33C0	
LLF	32G7	
LOL	11F4	
LP	32E7	
MT4	32C7	
MT8	1505	
MT9	32C7	
NCN	11B/G3	
NOL	11F4	
NOLL	11F4	
OSTO,1	4B0	
RLK	11B/H5	
TTO-9	4B0	
WSD	32E7	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
2P	35B8	
4DG	35B8	
5DG	35B8	
ACB	35G8	
AM	27A1	
AOT	12D2	
ART	24D8	
ATT	24B8	
BRT	24E9	
BT	26H4	
BTT	24E9	
CGA	37H7	
CGB	37H7	
CGC	37H7	
CHO-9	21F4	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
CHA	21A2	
CHE	20A/C9	
CI	31E4	
CK	3B6	
CKG	23E0	
CKG2	23E9	
CN	35B8	
CON	24E9	
CPJO,1,2,4,7	37D7	
CSCO-29	12C6	
CSG1	12A1	
CSG2	12A1	
CTO,1,2,4,7	12C8	
CUO,1,2,3,7	37D3	
CWF	23E0	
CWF1	11B/E4	
CWF2	11B/E4	
CWK	11B/E3	
CWL	11B/G4	
CWT	11B/G4	
D	26E7	
DAT1	12C1	
DCT	23E0	
DCT1	23E0	
DIS	23A0	
DIS1	23A0	
DTK	11A2	
EF	34F6	
EXB	31G4	
EXG	31G4	
EXT	2585	
FAK	22G7	
FCG	20A/G6	
FCK	2G5	
FM	21G7	
FML	2B6	
FSO-29	3E0	
FTO-3	10A8	
FTTO-3	10A8	
FTC	2B6	
FTCK	2B6	
FTK1	8A4	
FTTO-5	10H4	
FUO,1,2,4,7	10A8	
FUTG,1,2,4,7	10A8	
FUTO-9	10A0	
G	11A2	
GLH	20A/C9	
GTZ	20A/C9	
GTL	13A0	
HGTO,1,2,4,7	9F3	
HGK	7F7	
HGTO-9	7A4	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
HMSI	20B/B9	
HTKI	7F7	
HTR	25G4	
NC	3568	
NCK	11B/G4	
NTH	32H2	
JCO-9	17A5	
JCK	21G7	
JGO-4	16B0	
JSO0-5	15B1	
JXP1	20A/C9	
JXPA	20A/C9	
KJSC	15E5	
LCK	1968	
LDT	25A4	
LFK	11D4	
LHM	20A/B0	
LHMT	20A/B0	
LK	1767	
LK2	23C9	
LK3	23C9	
LLO,1,2,4,7	983	
LLJ	20A/C9	
LOLL	11F4	
LTR	20B/D9	
LXP1	20A/C9	
LXPA	20B/D9	
M	32G2	
MAK1	3E0	
MAN	35B8	
MB	28F1	
MF	26E7	
MII	28F1	
MKA	31F4	
MKB	31E4	
MLF	26E7	
MLFA	26E7	
MOI	23E0	
MRL	26H4	
MT	32A6	
MT5	5F6	
MT7	18H6	
MT2K	31B4	
MT3K	31B4	
MT8K	31D4	
MT9K	31C4	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
MXT	30A0	
NC	3568	
NCK	11B/G4	
NTH	32H2	
OBS1,2	8F9	
OCI	26H8	
PO-9	1705	
PA,B,C	18E4	
PBX	3505	
PE	16E6	
PKT	35B8	
PNR	18A9	
PR	16B7	
RA	27C9	
RC	13A0	
RCCK	32F3	
RCY	27C8	
RF	34F6	
RK	1767	
RK1,2,3	13A0	
RLK	11B/G4	
ROA	27C1	
RON	31G4	
RTG-3	26E7	
SDT	25A4	
SEF	34F6	
SF	16C6	
SL	20A/C9	
SNK	27C1	
SQA	15D1	
STP1,2	21G7	
TB	27C8	
TBK	4F6	
TBC	4F6	
TBT	27C8	
TC1	28H5	
TCHO-9	18D4	
TCHK	18D4	
TDCT	23E0	

DRAWING ISSUE
28D JLP
30D
33D

ISSUE 43B

SD-26001-01-A6

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-A6

BELL TELEPHONE LABORATORIES INCORPORATED 6S

LEAD INDEX CONNECTING CIRCUITS

CIRCUIT TITLE	LEAD INDEX TABLE LOC
ALL MARKERS BUSY CKT	6A3
AUTOMATIC MONITOR REGISTER AND SENDER TEST CKT	6B3
DISTRIBUTOR AND SCANNER APPLICATION CKT FOR ETS (DAS-ETS)	6C3
ETS POWER AND DATA INTERFACE CKT	6G3
FROM LAST MARKER TO FIRST DT MARKER	6H3
GROUP BUSY CKT	6A4
INTERFACE AND CONTROL CKT	7A7
LINE INS TEST CONTROL CKT	6B4
LINE INS TEST CONTROL CKT (LINE LINK FR)	6B4
LINE INS TEST CONTROL CKT (TRUNK LINK FR)	6E4
LINE, LINE LINK AND CONN CKT	8A0
LINE LINK CONN CKT	8A0
LINE LINK MARKER CONN CKT	8D0
MARKER CONN CKT	8D0
MASTER TEST CONTROL CKT	6A5
MASTER TEST FR CONN CKT	6F5
MASTER TEST FR JACK, LAMP, AND KEY CKT	7C1
MASTER TRAFFIC CONTROL CKT	7A2
MISC CKT	7B2
OFFICE TEST FR TEST CKT	7E2
OFFICE TEST FR TROUBLE IND AND CONN CKT	7G2
PLANT REGISTER CKT	7E5
POWER RINGING AND TONE FR CKT	7G5
PREFERENCE CONTROL CKT FOR LINE LINK MARKER CONN	8D2
PREFERENCE CONTROL AND MAKE BUSY CKT FOR LINE LINK CONTROL	8A2
PREFERENCE CONTROL AND MAKE BUSY CKT FOR TRUNK LINK CONTROL	8G2
TRAFFIC REGISTER CKT	7B6
TRAFFIC USAGE RECORDER CKT	7G6
TRANSFER LINE LINK CONN CKT	8A1
TRANSFER LINE LINK MARKER CONN CKT	8D1
TRANSFER TRUNK LINK CONN CKT	8G1
TRUNK LINK AND CONN CKT	8G0
TRUNK LINK CONN CKT	8G0
TRUNK LINK OR TRANSFER TRUNK LINK CKT	8G2

LEAD INDEX

DESIG	LOCATION FS	LOCATION CAD
ALL MARKERS BUSY CKT		
AB	28A/F6	

DESIG	LOCATION FS	LOCATION CAD
AUTOMATIC MONITOR REGISTER AND SENDER TEST CKT		
M	32F1	
ORS	32F1	
ST	32E1	

DESIG	LOCATION FS	LOCATION CAD
DISTRIBUTOR AND SCANNER APPLICATION CKT FOR ETS		
2P	35H8	54C0
2PMR	35H8	54C0
2W	27E6	54H0
4W	27E6	54H0
ACB	35H8	54C0
AO	35A3	54C0
AOMR	35A3	54C0
CN	35H8	54C0
CO,1,2,4,7	12G8	54D2
CUO,1,2,4,7	37D3	54D2
DTG	35F0	54C0
DTGG	35FC	54F0
DVO	20B/E9	54D2
FTO-3	10D6	54H0
FUO,1,2,4,7	10D6	54H0
GTL	13F4	54C0
GTLG	13F4	54F0
HGTO-9	7A4	54D2
KGI	35F0	54F0
LTR	25H7	54C0
LTRG	25H7	54F0
MAN	35H8	54C0
MCN	35A3	54C0
MPBX	36B8	54C0,D2
MPL	35F3	54C0
MT	32A5	54D2
MTK	31C2	54D2
NCSL	35H8	54C0
NPBX	35H8	54D2
OPX	35A3	54C0
PBX5	35H8	54C0
PKI	35H8	54C0
PLN	35H8	54C0
PLN5	35A3	54C0
PLN7	35A3	54C0
PLNC	35A3	54C0
RV	36B8	54C0,D2
SNK	27B3	54C0
SNKG	27B3	54F0
ST	13C5	54D2
TAO	36B8	54C0,D2
TRF	27E6	54D2
TRST	32D3	54H0
VFTO-4	8A4	54D2
VGTO-11	6H6	54D2
XTRK	30G6	54C0
XTRKG	30G6	54F0

DESIG	LOCATION FS	LOCATION CAD
ETS POWER AND DATA INTERFACE CKT		
MB	28A/F1	54A7
MBG	28A/F1	54B7

DESIG	LOCATION FS	LOCATION CAD
FROM LAST MARKER TO FIRST DT MARKER		
AC AND DC AUD	24D0	
± AUD RING G "C"	24D0	

DESIG	LOCATION FS	LOCATION CAD
GROUP BUSY CKT		
RBD	27H2	
RBI	27G2	
RBRO-3	27H2	

DESIG	LOCATION FS	LOCATION CAD
LINE INS TEST CONTROL CKT		
MB	28E1	
MIT	28E1	

DESIG	LOCATION FS	LOCATION CAD
LINE INS TEST CONTROL CKT (LINE LINK FR)		
BS	11D1	
BSO	11B8	
BSI	11B8	
CGA,B,C	12C6	
CSOO-29	12A5	
DTK	11A2	
G	11B2	
HGO-9	7E7	
HGK	7F7	
LBO-9	19G2	
LFK	11D2	
LHO-4	19SC	
LIT		CAD 35
LLO-9	19G2	
NT	32H1	
SMO-9	22E0	
STO-59	11A/C8	
VO-4	12A2	
VFTO-4	8D6	
VGBO-11	12B2	

DESIG	LOCATION FS	LOCATION CAD
LINE INS TEST CONTROL CKT (TRUNK LINK FR)		
BSO-5	3E7	
CK	3C8	
JO-9	19G4	
L	16F6	
LCK	19G8	
LHO-9	19G8	
LK	17C8	
MDK	21G2	
PR	16E6	
R	16E6	
RK	17C8	
SF	16E6	
STO-29	3B7	
SZA	15B6	
SZB	15B6	
SZC	15B6	
TTF	16C6	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST CONTROL CKT		
CGA,CGA1	12F0	
CGB,CGB1	12F0	
CGC	12B0	
CHT	32H6	
CWL	11B/G5	
ETSO,1	4G0	
FTCO-19	1D0	
FTC20-29	33C0	
LLF	32G7	
LOL	11F4	
LP	32E7	
MT4	32C7	
MT8	15D5	
MT9	32C7	
NCW	11B/G3	
NOL	11F4	
NOLL	11F4	
OSTO,1	4G0	
RLK	11B/H5	
TTO-9	4D0	
WSD	32E7	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
2P	35B8	
4DG	35B8	
5DG	35B8	
AC8	35G8	
AN	27A1	
AOT	12D2	
ART	24D8	
ATT	24B8	
BRT	24E9	
BT	26H4	
BTT	24F9	
CGA	37H7	
CGB	37H7	
CGC	37H7	
CHO-9	21A4	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
CHA	21A2	
CHE	20A/C9	
CI	31E4	
CK	3B6	
CKG	23E0	
CKG2	23E0	
CN	35B8	
CON	24E9	
CRUO,1,2,4,7	37D7	
CSOO-29	12C6	
CSG1	12A1	
CSG2	12A1	
CTO,1,2,4,7	12G8	
CUO,1,2,4,7	37D3	
CWF	23E0	
CWF1	11B/B4	
CWF2	11B/B4	
CWK	11B/E3	
CWL	11B/G4	
CWT	11B/G4	
D	26E7	
DAT1	12C1	
DCT	23E0	
DCT1	23E0	
DIS	23A0	
DIS1	23A0	
DTK	11A2	
EF	34F6	
EXB	31G4	
EXG	31G4	
EXT	25B5	
FAK	22G7	
FCG	20A/G6	
FCK	2G5	
FM	21G7	
FML	2B6	
FSO-29	3E0	
FTO-3	10A8	
FT'O-3	10A8	
FTC	2B6	
FTCK	2B6	
FTK1	8A4	
FTTO-5	10H4	
FUO,1,2,4,7	10A8	
FU'O,1,2,4,7	10A8	
FUTO-9	10A0	
G	11A2	
GLH	20A/C9	
GT2	20A/C9	
GTL	13A0	
HG'O,1,2,4,7	9F3	
HGK	7F7	
HGTO-9	7A4	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
HMS1	20B/B9	
HTK1	7F7	
HTR	25G4	
JCO-9	17A5	
JCK	21G7	
JGO-4	16B0	
JSQO-5	15B1	
JXP1	20A/C9	
JXPA	20A/C9	
KJSQ	15E5	
LCK	19G8	
LDT	25A4	
LFK	11D4	
LHM	20A/B0	
LHMT	20A/B0	
LK	17G7	
LK2	23C9	
LK3	23C9	
LLO,1,2,4,7	9B3	
LLJ	20A/C9	
LOLL	11F4	
LTR	20B/D9	
LXP1	20A/C9	
LXPA	20B/D9	
M	32G2	
MAK1	3E0	
MAN	35B8	
MB	28F1	
MF	26E7	
MIT	28F1	
MKA	31F4	
MKB	31E4	
MLF	26E7	
MLFA	26E7	
MO1	23E0	
MRL	26H4	
MT	32A6	
MT5	5F6	
MT7	18H6	
MT2K	31B4	
MT3K	31B4	
MT8K	31D4	
MT9K	31C4	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
MXT	30A0	
NC	35B8	
NCW	11B/G4	
NTH	32H2	
OBS1,2	8F9	
OC1	26H4	
PO-9	14D2	
PA,B,C	18E9	
PBX	35C5	
PE	18E6	
PK1	35B8	
PNR	18A9	
PR	16B7	
RA	27C9	
RC	13A0	
RCCK	32F3	
RCY	27C8	
RF	34F6	
RK	17G7	
RK1,2,3	13A0	
RLK	11B/G4	
ROA	27C1	
RON	31G4	
RTO-3	26E7	
SDT	25A4	
SEF	34F6	
SF	16C6	
SL	20A/C9	
SNK	27C1	
SQA	15D1	
STP1,2	21G7	
TB	27C8	
TBK	4F6	
TBO	4F6	
TBT	27C8	
TC1	28H5	
TCHO-9	18D4	
TCHK	18D4	
TDCT	23E0	

DRAWING ISSUE
28D JLF
30D
33D

ISSUE 46A

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-A6

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-16

LEAD INDEX

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
TSO-5	26E7	
THGTO-9	7A4	
TK	21G7	
TLH	20A/C9	
TM	28F1	
TR1	23E0	
TR2	26H4	
TR5	32F3	
TRK	26H4	
TRL	26H4	
TRR	23E0	
TRS	26H4	
TRST	31D4	
TRT	24E9	
TSO-9	4F6	
TSE	5F6	
TSE1,2	5E6	
TSM	24E9	
TTF	16C6	
TTT	24E9	
TVFTO-4	8A4	
TVGTO-11	6H5	
VF'O-4	9A7	
VFTO-4	8A4	
VG'O,1,2,4, 7,10	9A7	
VGA	6H5	
VGTO-11	6H5	
VTK1	6H5	
WAT	12E0	
WT	25A4	
XAB	30D8	
XBT	30F8	
XCH	30B9	
XCL	30C8	
XCS	30B8	
XCW	30D8	
XF	30C8	
XHG	30C8	
XJG	30C8	
XJS	30D8	
XLC	30D8	
XLG	30E8	
XLH	20A/C9	
XLR	30E8	
XLS	30G8	
XLV	30E8	
XPG	30G8	
XSL	30G8	
XTC	30A8	
XTC1	30A8	
XTG1	30A8	
XTRK	30H8	
XTRL	30H8	
XTS	30F8	

DESIG	LOCATION FS	LOCATION CAD
MASTER TEST FR CONN CKT		
XTS1	30F8	
XVGA	30A8	
XVG5	30F8	
XWB	30D8	

MASTER TEST FR JACK, LAMP, AND KEY CKT		
AC-DC AUD	24D0	
± AUD	24D0	
AMB	28D1	
AN	27A1	
"C" ± AUD	24E1	
DCT	24E6	
DL	32G5	
DLB	32G5	
FG	28D6	
GD	27A1	
LK	32D1	
MB	28D1	
MBL	28D1	
MJ	32C1	
MN	32C1	
RING G	24D0	
"C" RING G	24E0	
WDC1	38F0	
WGA	38E4	
WGB	38E4	
WTK	38D0	

DESIG	LOCATION FS	LOCATION CAD
MASTER TRAFFIC CONTROL CKT		
AMB	28A/F6	

MISC CKT		
AR	28E7	
B	28E7	
FA	28C7	
FA1	28C7	
FG	28D7	
TA	28D8	
TRT	28D8	
+130V	28C7	

OFFICE TEST FR TEST CKT	
CWK	11B/E3
CWL	11B/G4
CWT	11B/F5
GLH	27E9
DIS	23A0
MB	28E2
LXP1	20A/F9
MT13	27E9
NCW	11B/G4
REC	32C4
RLK	11B/G4
TRST	32D4

OFFICE TEST FR TROUBLE IND AND CONN CKT		
CHO-9	21A4	
CI	31H2	
CON	24E9	
CTO,1,2,4,7	12G8	
CUO,1,2,4,7	37D3	
CWF	23E0	
CWK	11B/C3	
D	26E7	

DESIG	LOCATION FS	LOCATION CAD
OFFICE TEST FR TROUBLE IND AND CONN CKT		
DCTI	23E0	
DISI	23A0	
DL	32H4	
EXB	31H3	
EXG	31H3	
FAK	22G7	
FCG	20A/G6	
FSO-4	3E0	
FTCK	2B6	
FUO,1,2,4,7	10A8	
FUTO-9	10A0	
GLH	20A/C9	
GT2	20A/C9	
HG'O,1,2, 4,7	9E3	
HGK	7F7	
HGTO-9	7A4	
HMS1	20B/B9	
JCK	21G7	
JGO-4	16B0	
JXP1	20A/C9	
LCK	19G8	
LFK	11D4	
LK	17G7	
LOLL	11F4	
LXP1	20A/C9	
MAK1	3E0	
MF	27E7	
MKA	31H2	
MKB	31H2	
MST	24F6	
MXT	30A0	
OBS	8F9	
ROCK	32F3	
RK	17G7	
RK3	13A0	

DESIG	LOCATION FS	LOCATION CAD
OFFICE TEST FR TROUBLE IND AND CONN CKT		
SDT	25A4	
SL	20A/C9	
STP2	21G7	
TCHK	18D3	
T	21G7	
TR	24F6	
TR2	26H4	
TRB	32F3	
TRS	26H4	
TRST	31H3	
TSO-9	4F6	
VF'O-4	9A7	
VFTO-4	8A4	
VG'O,1,2,4 7,10	9A7	
VGTO-11	6H5	
WT	25A4	
XCW	30F6	
XLH	20A/C9	

PLANT REGISTER CKT		
DTPC	27H5	
MST	24G6	
TR	24G6	

POWER RINGING AND TONE FR CKT		
AC-DC AUD OR ± AUD	* 24B0	
E	25H3	
MB	28F5	

DESIG	LOCATION FS	LOCATION CAD
POWER RINGING AND TONE FR CKT		
RING G	24B0	

* .1F COMP MKR IN OFFICES WITH LESS THAN 12 MARKERS

TRAFFIC REGISTER CKT		
BA	27E5	
BD	27G5	
BMF	27F5	
BRO-3	27G5	
DT	27G1	
FMP	27H5	
FMP(4 WIRE)	27H5	
FMP(TR)	27H5	
OF	27F1	
PCA	27E5	
PCD	27F5	
PCL	27E3	
PCM	27E3	
PCMF	27F5	
PCRO-3	27E5	
TPC	27G5	
TPC(4 WIRE)	27G5	
TPC(TR)	27G5	

TRAFFIC USAGE RECORDER CKT		
MB	28F8	
MBM	28F8	

DESIG	LOCATION FS	LOCATION CAD
INTERFACE AND CONTROL CKT		
1TR	32A1	
2TR	32A1	
MB	28A/D1	
PC	27G8	

DRAWING ISSUE
28D ULP
30D

ISSUE 39D

SD-26001-01-A7

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-A7

BELL TELEPHONE LABORATORIES INCORPORATED 6S PRINTED IN U.S.A.

"P" TYPE CONNECTORS	WIRE SPRING CONNECTORS			
DESIGNATION	DESIGNATION	DESIGNATION	DESIGNATION	LOC
TRUNK LINK & CONN CKT	LINE LINK CONN CKT	TRANSFER LINE LINK CONN CKT	PREFERENCE CONTROL & MAKE BUSY CKT FOR LINE LINK CONTROL	
BS	BS	BS		11D1
BSO-1	BSO-1	BSO-1		11B8
BS2	BS2	BS2		11A8
GSOO-39	GSOO-29	GSOO-29		12B5
	CGA	CGA		12C5
	CGB	CGB		12C5
	CGC	CGC		12C5
	CKK			11C 22
	CKL	CKL		11B 82
	CKT	CKT		11B/E2
	DAT	DAT		12D3
G	G	G		11B1
HGO-9	HGO-9	HGO-9		7E2
HGK	HGK	HGK		7F7
LBO-9	LBO-9	LBO-9		19F2
LFK	LFK	LFK		11E1
LHO-9	LHO-9	LHO-9		19F0
LLO-9	LLO-9	LLO-9		19F2
LVK	LVK	LVK		32J7
LGL	LGL			11F1
LOLL	LOLL			11E1
NBX	NBX			11B/C2
NDAT	NDAT	NDAT		12D3
NGL	NGL			11F1
NT	NT	NT		32H1
OF	OF	OF		27F1
SMO-9	SMO-9	SMO-9		22D1
			STO-3 (T-), STO-59 (2W), STO-39 (4W) T-B	11E8 11D8
STO-59				CAD 33
T-B				12B2
VO-4	VO-4	VO-4		11B/E2
VFTO-4	VFTO-4	VFTO-4		8D6
VGBX-11	VGBX-11	VGBX-11		12C2
VGT-11	VGT-11	VGT-11		12C1
XGL	XGL			11B/E2

MARKER CONN CKT	LINE LINK MARKER CONN CKT	TRANSFER LINE LINK MARKER CONN CKT	PREFERENCE CONTROL CKT FOR LINE LINK MARKER CONN	
AMB				28A/F6
BT	BT	BT		26F3
CBSO-59			CBSO-59(2W),CBOO-39(4W),CBO-3(TR)	28C5
CKG	CKG	CKG		23B3
CLG	LNG			CAD 32
D			D	28C5
DTK	DTK	DTK		11A1
FRG	FRG			CAD 32
FTO-3	FTO-3	FTO-3		19C7
FUO,1,2,4,7	FUO,1,2,4,7	FUO,1,2,4,7		19C7
HGTO-9	HGTO-9	HGTO-9		7D7
LFS	LFS	LFS		11F8
MAK			MAK	28A5
MB		MB		28C5
MCOO-59			MCOO-59(2W),MCOO-39(4W),MCO-3(TR)	26B2
MCK			MCK	28A5
MSK			MSK	28A5
OBS	OBS			8G7
OGT,2	OGT,2	OGT,2		26D3
T	TC	TC		26H5
T-	T-	T-		26H5
TM	TM	TM		28H5
TM2	TM2	TM2		26F3
TMX	TMX	TMX		26D3
TRL	TRL	T-L		26F3
TRS	TRS	TRS		24D3
VGAO-11	VGAO-11	VGAO-11		6A7
VGTO-11	VGTO-11	VGTO-11		6B7

"P" TYPE CONNECTORS	WIRE SPRING CONNECTORS				
DESIGNATION	DESIGNATION	DESIGNATION	DESIGNATION	DESIGNATION	LOC
TRUNK LINK & CONN CKT	TRUNK LINK CONN CKT	TRANSFER TRUNK LINK CONN CKT	PREFERENCE CONTROL AND MAKE BUSY CKT FOR TRUNK LINK CONN	TRUNK LINK OR TRANSFER TRUNK LINK CKT	
2F	2F				35E8
10LF	10LF				19C8
	12LF				4H8
	ACB				35D8
ALC	ALC	ALC			9F8
ART	ART	ART			27A8
ASM	ASM	ASM			27A8
AST	AST	AST			9F9
ATT	ATT	ATT			24C8
	BAT	BAT			23B8
BSO-4	BSO-4				3F8
	BSO,2,4	BSO,2,4			3F9
BSS	BSS				36B
BTO-9	BTO-9				40B
	BTT	BTT			24A8
	CGA,CGB,CGC	CGA,CGB,CGC			37G7
CK			CK		30B
CN	CN	CN			35F8
	CNUO,1,2,4,7	CNUO,1,2,4,7			37C7
CTO-2	CTO-2	CTO-2			12C8
	CT4,7	CT4,7			12E8
CUO,1,2,4,7	CUO,1,2,4,7	CUO,1,2,4,7 DAT			37E7 35A8
DT	DT				27G1
EF	EF				34C5
FAK	FAK	FAK			22G8
FBE-	FBE-	FBE-			11B, 33C8
FBO-	FBO-	FBO- FGO,1,2			18B, 33C8
FK	FK	FK		FBO-19	12D9 10C8
FTO-3	FTO-3				13B0 10B7
FTTO-19					1A8
FTO20-29					1A8 3348
	FTO-D				1A8
	FTO-MF			FTO-MF	1A,8B
FUO,1,2,4,7	FTO-RG-3 FUO,1,2,4,7			FTO-RG-3	1A,8A 10B7
GO,GOA	GO,GOA	GO,GOA			17C8
GT-4	GT-4	GT-4			17E8
HGO,1,2,4,7	HGO,1,2,4,7	HGO,1,2,4,7			9H5,H8
JO-9	JO-9	JO-9			19F4
JCO-9	JCO-9				17B6
		JCO,1			17C6
JSO-9	JSO-9	JSO-9			22D4
L	L	L			16F6
LCC	LCT				CAD 30
LO-8	LO-8	LO,1			14D4
LCK	LCK	LCK			14D4
LHO-9	LHO-9	LHO-9			19F8
LK	LK	LK			19F9
					17G8
LLO,1,2,4,7	LLO,1,2,4,7 LCLP				9A8
LVK	LVK	LVK			11G1
MAK	MAK	MAK			22H8
MAL	MAN				3H8
M	M				35F8
					32G1
MBK	MBK	MBK			21G2
	ML2				2E6, 2F6
		NC			35A8
	NFBX				35H8
	PBX5	PBX5			35B8
	PLC				35C8
OBS	OBS				8F7
OF	OF	OF			27F1

"P" TYPE CONNECTORS	WIRE SPRING CONNECTORS				
DESIGNATION	DESIGNATION	DESIGNATION	DESIGNATION	DESIGNATION	LOC
TRUNK LINK & CONN CKT	TRUNK LINK CONN CKT	TRANSFER TRUNK LINK CONN CKT	PREFERENCE CONTROL AND MAKE BUSY CKT FOR TRUNK LINK CONN	TRUNK LINK OR TRANSFER TRUNK LINK CKT	
	P				35E8
PO-9	PO-9				14D2
		FX,8			14D2
RA	RA				16D7
R	R	R			16E6
RC	RC	RC			13B0
RF	RF				34A5
RK	RK				36D8
		PK			17G8
SI	SI	SI			19F9
	SBAT				22D5
	SBCT				22D5
SEF	SEF				34E6
SF	SF	SF			16E6
	ST-				3A8
	STO-3				3B8
			STO-29		3A8
SZA	SZA	SZA			15A6
SZB	SZB	SZ-			15A6
SZC	SZC	SZC			15A6
TBO-5	TBO-5				4E8
TBK	TBK				4H8
TGO-9	TGO-9				4C8
TLF	TLF	TLF			32F7
TPA	TPA				CAD 30
TSK	TSK				CAD 30
	TSM	TSM			24D8
TST	TST				CAD 30
TSX	TSX	TSX			22D8
TTF	TTF				16D8
VFO-4	VFO-4				9F8
VGO,1,2,4,7,10	VGO,1,2,4,7,10				9C8
	WAT				12E0
	WBK				38D2
	WGA				38D0
	WGB				38D5
	WFK				38D7
	WSC				38D3
	WSM				38D8
	AWB				38D2

DRAWING ISSUE
30D
33D
34A

ISSUE 39D

DIAL TONE MARKER CIRCUIT

(2) SD-26001-01-A8

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-A8

OPTION INDEX

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
2	STD 1	102B(1)	APP FIG 2
17	STD 5D	102B(2), 104	APP FIG 17
18	STD 5D	102B(2), 104	APP FIG 18
19	STD 12D	102B(9), 104, 105(8), (17)	APP FIG 19,24CC, D2
2C	STD 12D	102B(3), 104, 105(4), 105(6),(20)	APP FIG 2C
22	STD 11B	102B(7), 104,109	APP FIG 22,12A7
23	STD 11B	102B(7), 104, 105(4), 105(5), 106(1)	APP FIG 23,12A7
24	STD 13D	102B(10), 104, 106(1), 109	APP FIG 24, 36E1,E2
25	STD 16D	102B(7), 104	APP FIG 25, 12H0
26	A&M 16D	104, 106(1)	APP FIG 26, 12H0
27	STD 16D	102B(8), 104 105(20)	APP FIG 27,12D4
28	STD 22D	102B(17), 104, 105(11)	APP FIG 28,11A/E2, F2,H2,13CI
29	STD 28D	102B(20), 104	APP FIG 29
30	STD 30D	102B(8), 104 105(20)	APP FIG 30, 29E7
31	STD 45B	102B(6)	APP FIG 31,35F5,G0

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
Z	STD 1	102B(4)	APP FIG 2,6
Y	STD 1	102B(3)	APP FIG 1,2,12,14,17, 1G7,26A4 B4,B8,D7
X	STD 1 / A&M 11B	104, 105(3), 106(1), 109	APP FIG 8
W	STD 1 / MD 5D	104, 105(10)	APP FIG 9 20A/D1,E1,G1, 20B/C5,F8,23G8, 35D6
V	MD 5D	104, 400(14)	APP FIG 1,2,5 2B1,B2,14E6,16F4, 17C2,C5,18B9, 21E8,34C2
T	STD 5D	102C, 104, 105(1), 105(9), 109, 400(14)	APP FIG 1,2,5,14, 2A1,A2,13E1,14E6,H1, 17C5,F2,G2,H5
S	A&M 5D	102B(5), 104	10A4,E4,13F1
R	STD 5D	102B(5), 104, 105(1), 105(4)	10A4,E4,13F2
Q	STD 5D	102B(2), 104,109	166,2G8,16A8, 20A/F2,F5,21E8, 25D4,31B3
N	STD 5D	102B(2), 104, 105(1), 109	APP FIG 5,9,15, 14B,10F5,14C9, 16A7,17B0,B1, 33EC,GC
K	MD 5D	104	20A/C8,D9,E8,F9, 20B/D8
J	STD 5D	102C, 104, 105(2)	20A/D9,E9,F9, 20B/C8
H	MD 5D	104	13C4,D4,20A/B5,C7, D1,E1,G1,20B/A6,C5, 23G8,35D6
G	STD 5D	102C, 104, 105(2), 105(4), 105(10)	APP FIG 8,9,20A/C4, C5,C7,D1,D6,F2,G1, 20B/C5,23G8
F	STD 6B	102C, 104, 105(6)	6H0,7E0,8F0,13E0
E	MD 6B	104	6H0,7E0,8F0,13E0 26G5
D	STD 6B	102C, 104	APP FIG 4
b	MD 6B	104	APP FIG 3
A	STD 6B	102C, 104	APP FIG 3, 25F7

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
ZA	MD 6B	104	27F6,F7,F8,F9, G1,H8
ZB	STD 6B	102C, 104, 105(4), (18), (22), 109	27F6,F7,G7
ZC	MD 6B	104	6G8,23B2
ZD	STD 6B	102C, 104	6G8,23C2
ZF	MD 8D	104	27E2,G6
ZG	STD 7B	102C, 104	APP FIG 6,13F3
ZH	STD 8D	102C, 104,	27G0
ZI	MD 7B	104	2A6,
ZL	STD 7B	102C, 104	2A6,3C5
ZM	MD 10B	104	24F8
ZN	STD 10B	102C, 104	24F8,
ZO	STD 10B	102C, 104, 105(4)	28A/F6
ZP	STD 10B	102C, 104	26G5
ZQ	MD 10B	104	32F1
ZR	STD 10B / MD 35D	104, 114, 119	32E1
ZS	STD 11B	102B(6), 104, 105(4), 106(1)	APP FIG 8, 35H6
ZT	STD 11B	102B(6), 104, 106(1)	13C6
ZU	STD 12D	102B(3), 104	26A7,A8,B7
ZV	STD 12D	102B(3), 104, 105(4), 105(6) 105(20)	APP FIG 1,2,12,14,17, 1G7,26A3,A4,A7, A8,B3,B4,B8,C7, E6
ZW	STD 12D	102B(3), 104	APP FIG 20
ZX	STD 12D	102B(9), 104, 109	1F6,3A7,B0
ZY	STD 12D	102B(9), 104,109	APP FIG 1,2,4,5, 2E6
ZZ	STD 12D	102B(3), 104	APP FIG 20

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
YB	A&M 11B	104, 106(1), 109	APP FIG 6,8,15, 12A7,B1,E2
YC	STD 11B	102C, 104, 105(4), 109	APP FIG 8,12A6, E7,F7,G3,H3
YD	STD 11B	102B(7), 104, 106(1)	APP FIG 14
YE	STD 11B	102B(7), 104, 105(4)	APP FIG 8,14, 37B4
YF	MD 12D	104	APP FIG 9
YG	STD 12D	102C, 104, 105(4), 106(1)	APP FIG 9
YH	A&M 13D	104, 105(3), 106(1), 109	12A7,F8,13E8
YI	A&M 13D	104, 106(1)	APP FIG 8,14,13C8,E8 37B4,35H6
YJ	A&M 15D	102B(6), 104	35G6
YK	STD 15D	102B(6), 104, 105(4), 105(12)	APP FIG 7, 35B6,D5,D6
YL	MD 15D	104	APP FIG 7
YM	STD 15D	102C, 104	APP FIG 7
YN	STD 16D	102B(11), 104, 109	20A/G8, 28E1, 30A1, 31D3, E2, F2, G3, 32G4
YO	STD 16D	102B(11), 104	20A/G8,28E1,31D3,E2, F2,G3,32C3,G4
YP	MD 15D	104	APP FIG 9,11, 19H0
YQ	STD 15D	102C, 104,	APP FIG 9,11
YR	MD 15D	104	APP FIG 19
YS	STD 15D	102B(9), 104	APP FIG 19
YT	STD 15D	102C, 104	APP FIG 14
YU	STD 16D	102B(8), 104, 105(7)	APP FIG 8,12F4, G4,13B5,C8,H5, 20B/G8,35E0,H6, 36E3
YV	STD 16D	102B(8), 104, 106(2), 109	APP FIG 6,19, 8G0,12F1,24D5, 35E0,H6,36E3
YW	STD 16D	102B(8), 104, 105(17), 106(2), 109	APP FIG 1,6,9,16,19, 4F7,11F6,13A1,F8 28C1

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
YX	STD 16D	102B(8), 104, 106(2)	APP FIG 2,1A4-H4
YY	STD 16D	102B(9), 104,109	APP FIG 1,2,12,15,19, 3D3,E3,24H4
YZ	STD 16D	104, 106(2)	APP FIG 3,12G1
XA	A&M 16D	104, 105(5), 105(12), 106(2)	APP FIG 7,8,13B5,C8 35C7,E0,H6, 36E3
XB	STD 16D	102B(7), 104	APP FIG 15, 35C1,D1
XC	STD 16D	102B(7), 104,109	35A1-D1
XD	STD 16D	102B(7), 104, 106(1)	35D1-F1,D2
XE	A&M 16D	104, 106(1), 109	APP FIG 8
XF	A&M 16D	104, 106(1)	APP FIG 8,15
XG	STD 16D	102B(7), 102B(10), 104, 105(4), 106(1), 109	36E5,E7
XH	A&M 16D	104, 106(1)	36E4,E5,E6
XI	MD 18D	104	20B/D3
XJ	STD 18D	102C, 104	20B/C2
XK	STD 18D	102B(12), 104	APP FIG 12
XL	STD 18D	102B(13), 104	APP FIG 9
XM	STD 18D	102B(13), 104, 105(9), 105(10), 109	APP FIG 9, 20A/H3
XN	STD 18D	102B(14), 104, 105(6), 105(15)	APP FIG 20,4B7, C7,E6,F7,13A1, D2,26F7,27B7,C7
XO	STD 18D	102B(14), 104	4B7,C7
XP	STD 18D	102B(13), 104	APP FIG 5, 20A/F3,F4
XQ	STD 18D	102B(13), 104,109	APP FIG 5, 20A/F4

DRAWING ISSUE

27AR	
28D	
30D	
33D	
35D	

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-A9

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-A9

OPTION INDEX

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
XR	MD 18D	104	APP FIG 9,14
XS	STD 18D	102C, 104, 109	APP FIG 9
XT	STD 18D	102C,104, 105(6), (23)	APP FIG 10
XU	MD 20D STD 33D	102C,104, 109, 118	27H8
XV	STD 33D	102C, 104	27E8
XW	A&M 20D	102B(15), 102C, 104	30A7
XX	STD 20D	102B(15), 104, 105(7)	30A0,A1
XY	MD 19A	104	22F4,G4
XZ	STD 19A	102C, 104, 105(4,14)	22F4,G4
WA	STD 20D MD 22D	104, 113	27G7
WB	STD 19A	102C, 104, 105(8)	20B/D1
WC	STD 19A	102B(8), 104, 106(2), 109	12E6,E7,F7,G4
WD	MD 20D	104, 109	APP FIG 9
WE	STD 20D	102C, 104	APP FIG 9
WF	MD 22D	101A, 104	
WG	STD 22D	101A, 102C, 104	
WH	STD 21A	102B(9), 104, 109	2E6,10B3,D3,E3,F3
WJ	STD 22D	102B(16), 104	30D8
WK	STD 22D	102B(16), 104	30C7
WL	STD 18D	102B(13), 104, 109	20A/F3
WM	STD 18D	102B(13), 104	20A/F3,F4
WN	MD 22D	104	APP FIG 7,9,10,14 20A/C2,20B/H4
WO	STD 22D	102C, 104	APP FIG 7,9,10,14 20A/C2,20B/A7,H4

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
WP	MD 22D	104, 109	APP FIG 14
WQ	STD 22D	102C, 104 105(26)	27H7
WR	STD 22D	102B(2), 104	16G,2G8,31B3
WS	A&M 23A	104, 105(9)	APP FIG 5
WT	STD 23A	104, 105(10), 109	APP FIG 9
WU	STD 24A	102B(15), 104, 105(7)	30A7
WV	MD 23A	104	APP FIG 12
WW	STD 23A	102C, 104, 105(11), (16)	APP FIG 12,15
WX	STD 24D	102C, 104	25F3
WY	STD 26D	102C, 104, 109, 115	APP FIG 2
WZ	STD 24D	102C, 104, 114, 119	32F1
VA	STD 26D	102B(11), 104	11E2,F2
VB	STD 26D	102B(9), 104, 109	20A/G7
VC	STD 26D	102B(9), 104, 109	20A/G7
VD	STD 26D	102B(8), 104, 105(12), 109, 116	35C7
VE	MD 26D	104, 109	20A/H4
VF	STD 26D	102B(13), 104, 105(25)	20A/H4
VG	STD 28D	102B(8), 104	13A9
VH	MD 26D	104	APP FIG 10
VI	STD 28D	102C,104, 105(13)	APP FIG 10
VJ	STD 28D	102B(2), 104	21E8,F8,..03,34H2
VK	STD 28D	102B(19), 104	20A/G2,H2,H3, 22D2,E3,G2
VL	STD 28D	102B(19), 104, 105(14)	20A/G2,22E3,G2, G4

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
VM	STD 28D	102B(19), 104, 105(14)	APP FIG 10,20A/G2,H3
VN	STD 28D	102C, 104, 105(13)	APP FIG 15,28
VO	STD 28D	102C, 104, 105(14)	APP FIG 14
VP	STD 28D	102C, 104, 105(14)	APP FIG 15
VQ	STD 28D	102C, 104	28F3
VR	STD 28D	102C, 104, 105(11), (16)	25G7
VS	STD 28D	102B(14), 102C, 104, 105(15)	27C1
VT	MD 28D	104	22F7
VU	STD 28D	102C, 104	22F7
VV	MD 28D	104, 109	APP FIG 13, 25G8, 27F9, 32C3,C4,D4
VW	STD 28D	102B(11), 102C, 104, 105(16),109 (24)	27F9,32C2,C3,D4
VX	STD 30D	102B(8) 104	38F4,F9 APP FIG. 30
VY	STD 30D	102B(8) 104	APP FIG 8,9,15,27,9H4, 12D2,38D3
UA	STD 30D	102C,104, 105(17), (19)	APP FIG.3
UB	STD 30D	102B(21) 104 106	13B5
UC	STD 30D	102B(21) 109,105 (17)	APP FIG.14,20A/F0, 23C6,F4,29H5 30F4
UD	STD 30D	102B(9) 104,	APP FIG.9,14 11B/C2, F2,23E5,F4,G2,29H2
LE	STD 30D	102B(9), 104 105(17)	APP FIG. 9,24F8
UF	STD 30D	104 109	APP FIG.9,24F8
UG	STD 30D	102C 104 105(18)	27F8
UH	STD 30D	102C,104, 105(18)	27F8
UI	STD 30D	102C,104 105(19)	32G7
UJ	MD 30D	104	20A/C2
UK	STD 30D	104, 105(21)	20A/C2
UL	STD 30D	104	
UM	STD 30D	104, 105(24)	11B/F4,23A0
UN	STD 30D	102B(17), 104, 109	11A/A7

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
UO	MD 30D	104, 109	24D2
UP	MD 33D	104, 109	32C2,C4
UQ	STD 33D	102B(11), 102C,104, 105(23)(24)	32C4,C2
US	STD 33D	102B(22), 104	34G5
UT	STD 37D	102C, 104	APP FIG 9
UV	MD 37D	104	20A/G4
UW	MD 37D	104	APP FIG 9,19
UX	STD 37D	102C, 104	APP FIG 9,19
UY	STD 37D	104, 109	APP FIG 14
UZ	MD 37D	102C, 104	APP FIG 14
TA	A&M 37D	102B(19) 104	APP FIG 14
TB	STD 37D	102B(19) 104	20A/H4
TC	STD 37D	102B (19), 104	20A/H4
TD	MD 39D	102B(25), 104	32C1
TE	STD 39D	102B(25), 102C,104	APP FIG. 10, 32A1, B2
TF	STD 41B	102B(6), 104, 118	APP FIG 7, 35E7
TG	STD 41B	102B(6) 104	APP FIG 7, 35E5
TH	MD 43B	104,109	13G3
TI	STD 43B	102B(8), 104	13E3
TJ	STD 43B	102B(23), 104	13D3
TK	STD 43B	102B(23), 104	13D5
TL	STD 43B	102B(23), 104	13C2
TM	A&M 43B	102B(23), 104	13C2
TN	MD 43B	104	2C6
TO	STD 43B	102C,104	2C6
TP	MD 43B	102B(24), 104	27H5
TQ	STD 43B	102C,104, 109	27H5

APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION
TR	STD 44B	102B(25)	32B1,B2
TS	STD 46A	102B(23), 104, 123	13D4

DRAWING ISSUE
27AR
28D
30D
33D
34A
35D

ISSUE 46A

DIAL TONE MARKER CIRCUIT — (2) SD-26001-01-A10

BELL TELEPHONE LABORATORIES INCORPORATED — DWG SIZE 6S

SD-26001-01-A10

FS1

IDLE TRK LK FR TEST

TO MASTER TEST CONTROL CKT.

TO OTHER MKRS.

FTC19 L U 400 (1)

FTC-19 MT19 10

FTC10-18 L U 400 (1)

FTC-18 MT19 9

FTC-17 MT19 8

FTC-16 MT19 7

FTC-15 MT19 6

FTC-14 MT19 5

FTC-13 MT19 4

FTC-12 MT19 3

FTC-11 MT19 2

FTC-10 MT19 1

FTC-9 L U 400 (1)

FTC-9 MT9 10

FTC-8 MT9 9

FTC-7 MT9 8

FTC-6 MT9 7

FTC-5 MT9 6

FTC-4 MT9 5

FTC-3 MT9 4

FTC-2 MT9 3

FTC-1 MT9 2

FTC0 L U 400 (1)

FTC0 MT9 1

MT14 1C

MT14 9

MT14 8

MT14 7

MT14 6

MT14 5

MT14 4

MT14 3

MT14 2

MT14 1

MT4 10

MT4 9

MT4 8

MT4 7

MT4 6

MT4 5

MT4 4

MT4 3

MT4 2

MT4 1

-48

(YX) FCR10-13

(YZ) (YY) FCM10

FCD10

(ZW) FCR0-3

FCM0

FCD0

FTC-FR19 (YX)

FTC-FR18 (YX)

FTC-FR17 (YX)

FTC-FR16 (YX)

FTC-FR15 (YX)

FTC-FR14 (YX)

FTC-FR13 (YX)

FTC-FR12 (YX)

FTC-FR11 (YX)

FTC-FR10 (YX)

FTC-FR9 (YW)

FTC-FR8 (YW)

FTC-FR7 (YW)

FTC-FR6 (YW)

FTC-FR5 (YW)

FTC-FR4 (YW)

FTC-FR3 (YW)

FTC-FR2 (YW)

FTC-FR1 (YW)

FTC-FR0 (YW)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YX)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

FTC- (YW)

TR TRK LK FR3

TR TRK LK FR2

TR TRK LK FR1

TR TRK LK FR0

FTC-FR10-18

FTC-FR0-9

(2) (YX)

(2) (YW)

TO CORRESPONDING FC-RELAYS FOR OTHER DIAL TONE MKRS. ASSOC WITH THE CORRESPONDING TRK LK FR. (SEE NOTE 117)

(TRANSFER FRAMES)

(4 WIRE FRAMES)

(2 WIRE FRAMES)

FTC-MF

FTC-RO-3

FTC-D

(2) FB10-19 L U 400 (1)

(2) BC10 a

(ZY) BCA10 a

(YX) BCB10 a

FBO-9 L U 400 (1)

BC0 a

(ZY) BCA0 a

(YW) BCB0 a

(2 WIRE FRAMES) FBO OR FBE

(4 WIRE FRAMES) FBO OR FBE

(TR FRAMES) FBO OR FBE SEE TABLE A

FBO-19

SEE TABLE A

BCA0 L U 270 (1)

4WO 8 (ZY)

DTO 8 (YW)

BCB0 U L 270 (1)

BCB10 U L 270 (1)

BCA10 L U 270 (1)

BC0 L U 270 (1)

2WO 8 (YY)

FML 10

MT9 BC D 2TC6

BC10 L U 270 (1)

FCK L U 270 (1)

(22) FCR20-25 11

(2) FCR10-15 11

FCR0-3 11

(2) FCC10 11

FCD0 11

FCD20 11

(ZW) FCM20 11

(2) FCM10 11

FCM0 11

BC20 L U 270 (1)

MT29 11

FML 4

D 6

(Y,Z) MF 6

RO-3 1

(Z) MLF 17

(Y,Z) MF 17

D 17

TRANSFER TRK LK CKT

FTC- MF RO-3 FT-

TRANSFER TRK CKT ON

TRK LK & CONN CKT ASSOC WITH THIS MKR

FTC- D MF RO-3 FT-

OR CKT ON

FBO M-ODD MARKERS

FBE M-EVEN MARKERS

TRANSFER TRK LK CONN CKT

ODD MARKERS FB EVEN MARKERS

TABLE A

RELAY	CONT	CONTROL FB-LEAD	FROM 2d OR 4W TRK LK FR	OR FROM TR TRK LK FR
BC10 BCA10 BCB10	10	19	19	
	9	18	18	
	8	17	17	3
	7	16	16	
	6	15	15	
	5	14	14	
	4	13	13	
	3	12	12	2
	2	11	11	
	1	10	10	
BC0 BCA0 BCB0	10	9	9	
	9	8	8	
	8	7	7	1
	7	6	6	
	6	5	5	
	5	4	4	
	4	3	3	
	3	2	2	0
	2	1	1	
	1	0	0	

DRAWING ISSUE

1 BS

2D FNR

3D FNR

4AR OCP SW

5D RSW

9S CM NM

8D US

16D POT DM AMB

18D MD AMB

22D RB AMB

26D GS

30D

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

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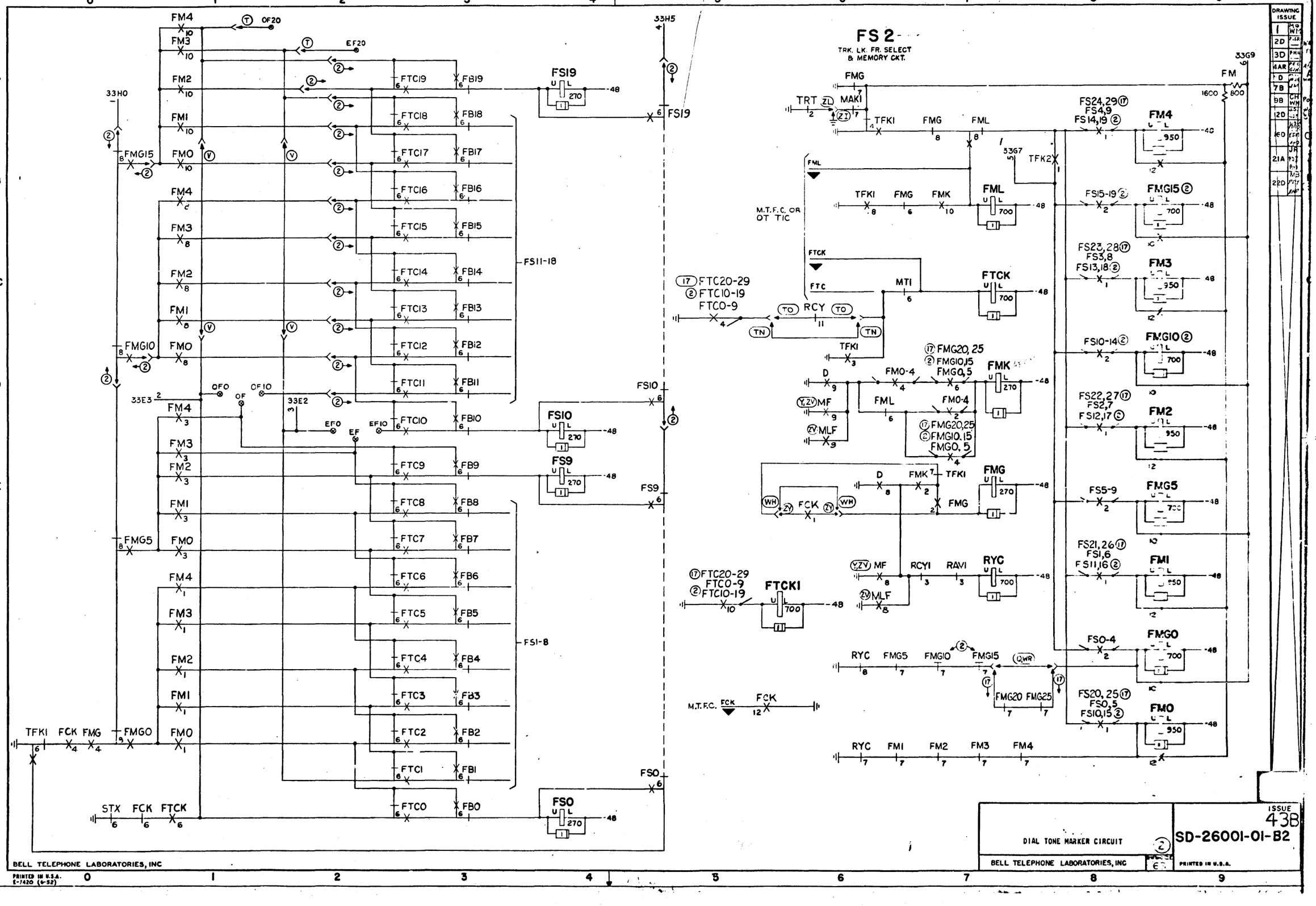

SD-26001-01-B2

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DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

ISSUE 43B

SD-26001-01-B2

PRINTED IN U.S.A.

FS3

TRK. LK. FR. SEIZURE

TRUNK LINK AND CONN. CKT. ASSOC WITH THIS MARKER. (SEE NOTE 117)

TABLE A		
ST LEAD	RELAY	CONTACT
19		12
18		11
17		10
16	(YY) (ZY) 2WIO, 4WIO	9
15		8
14		7
13		6
12		5
11		4
10		3
9		2
8		1
7		12
6		11
5		10
4	(YY) (ZY) 2WO, 4WO	9
3		8
2		7
1		6
0		5

TABLE B				
FS-RELAY	DT-RELAY	B CONTACT	ST-LEAD a	ST-LEAD b
19		12	3	19
18		11	3	18
17		10	3	17
16		9	3	16
15	(YX) DT10	7	3	15
14		5	2	14
13		4	2	13
12		3	2	12
11		2	2	11
10		1	2	10
9		12	1	9
8		11	1	8
7		10	1	7
6		9	1	6
5	(YW) DTO	7	1	5
4		5	0	4
3		4	0	3
2		3	0	2
1		2	0	1
0		1	0	0

DRAWING ISSUE	
1	WH
2D	
3D	
5D	
7B	
9B	
12D	
16D	
18D	
20D	
28D	
30D	
33D	

BELL TELEPHONE LABORATORIES, INC

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

SD-26001-01-B3

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SD-26001-01-B3

PRINTED IN U.S.A. E-7421 (6-62)

FS4

TEST FOR IDLE REG OR TRUNK

MASTER TEST CONTROL CKT

TO OTHER MARKS

TT9 TT8 TT7 TT6 TT5 TT4 TT3 TT2 TT1 TT0

TSE2 MT5 WN,WO TT4 TT3 TT2 TT1 TT0 P-4000±10% S-1000±10% S-4000±10% S-200±1%,±2% P-10±10%,12±10% P-2.7 ±15%

TS4 TS3 TS2 TS1 TS0 TSE1 MT6 ETSI ETS ETA 2500 SQI OTA 2500 OTSI OTS

BT9 BT8 BT7 BT6 BT5 BT4 BT3 BT2 BT1 BT0

TO OTHER WIRE SPG MKRS

ETS-0 ETS-1 OTS-0 OTS-1

ETS 90 ETS 62 OTS 62

WN,WO ETS OTS

YL,YM OT

DCT DCTI TGI 33.000 TGI RCY2 RYC RCY ANN

XTGI P-1175

MF D TG0 TG1 TG2 TG3 TG4 TG5 TG6 TG7 TG8 TG9

R0 R1 R2 R3 RG0 RG1 RG2 RG3

XTG ANTG

TP RCI DISI DT ANN

TBI TB2 TB3 TB4 TB5 TB0 TB1 TB2 TB3 TB4 TB5 TB0-5 ANTB XTB

YW,YZ LT TBO TS9 TS8 TS7 TS6 TS5 TS4 TS3 TS2 TS1 TS0 TBK

TBT TBK P-1175 270

FS4,9,14,19 FS3,8,13,18 FS2,7,12,17 FS1,6,11,16 FS0,5,10,15

TRUNK LINK & CONN CKT

ORIG REG CKT OR TRK CKT

2 WIRE OR 4 WIRE TRUNK LINK & CONN CKT

TRANSFER TRK LINK & CONN CKT

TBO-4

M- TG0-9 F ON MB F TB- TBO-5 TBK

DRAWING ISSUE

1	
2D	PW
3D	FWD
4AR	SYS
9B	CH NM
12D	CL DOP
15D	PRT CON
16D	DS CON
18D	PS
20D	CON LW
22D	JR SYS

CROSSBAR SYSTEMS

NO. 5 DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

SD-2000:-0104 22

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FS5

REGISTER OR TRK PREFERENCE

OT
2L 2U
S-690 ±15%
11

TSO
L U
270
1

TSI
L U
270
1

TS2
L U
270
1

TS3
L U
270
1

TS4
L U
270
1

-48

OT 8 (YM)

TLC 7

TSEI 10

TBK 4

MAKI 2

CONT 4 WORN STRAPED TO 2

TSO 6 — 4 — 3.7 7.5 (WN,WO) TTO

TSI 6 — 4 — 3.7 7.5 (WN,WO) TTI

TS2 6 — 4 — 3.7 7.5 (WN,WO) TT2

TS3 6 — 4 — 3.7 7.5 (WN,WO) TT3

TS4 6 — 4 — 3.7 7.5 (WN,WO) TT4

JSQ0 7
JSQ1 7
JSQ2 7
JSQ3 7
JSQ4 7
JSQ5 7

JSL
JSP
JSM

TSEI
L U
270
2

-48

MTI 10 TSEI — T2

MASTER TEST FRAME CONN. CKT.

MULT. TO CONN. RELS. FOR OTHER MKRS.

MASTER TEST CONTROL CKT.

WHEN A PARTICULAR TRK. IS TO BE SELECTED

KTS

TSE2
L U
270

-48

TSE2 — T2

MT5
L U
700

MT6 12 — MT5 — T3

TSEI 2 TSE

MT6
L U
700

MT6 6

MT15 10

DRAWING ISSUE

2D	FRS	
3D	FBR	
4AR	PTW	
15D	EDW AND	
16D	DS SM AND	
22D	PH PAS AND	

CROSSBAR SYSTEMS
NO. 5
DIAL TONE MARKER CIRCUIT
(2)
SD-26001-01-B5

BELL TELEPHONE LABORATORIES, INC
6S

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SD-26001-01-B5

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VGT0 VGT1 VGT2 VGT3 VGT4 VGT5 VGT6 VGT7 VGT8 VGT9 VGT10 VGT11

VGA VGG2 VGG1

VTK1

FSG

VGR

GK

VGT9

VGT4

VGT10

VGT3

VGT8

VGT5

VGT11

VGT1

VGT7

VGT6

VGT0

VGT2

XVCA DISI

VGA

VGA

VGT8-11 VGT0-7

LINE, LINE LINK & CONN CKT

VGAC-11

VGG1

VTK D

MF

MLF

VGG2

YZV

LINE LINK MARKER CONN CKT

VTK VGR TRK TR2B M-

TR2B

VTK

GK VGG1 VGG2 HGG VFG HMT1

GK VTK

VGR

TO DAS-ETS

VTK1

TR2B GK CKG1

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

ISSUE 43B

SD-26001-01-B6

SD-10-10093-05

PRINTED IN U.S.A.

D 3 · MF 3 · MLF 3 · (Y,ZV) · -48 · HGTO · HGR 4 · HTK 2 · SQO 4 · JSQO 11 · JSQ5 11 · JSQ1 11 · JSQ2 11 · JSQ3 11 · JSQ4 11 · JSQO 12 · JSQ5 12 · JSQ1 12 · JSQ2 12 · JSQ3 12 · JSQ4 · RCY1 X 2 · (E) 4 · (F) 12

HGT0 · HGT1 · HGT2 · HGT3 · HGT4 · HGT5 · HGT6 · HGT7 · HGT8 · HGT9 · HGR

L U 270 · I

M.T.E.C. OR OT TIC

TO DAS-ETS

HGG 1 · HGTO 1 · THGTO · HGG 2 · HGT1 1 · THGT1 · HGG 3 · HGT2 1 · THGT2 · HGG 4 · HGT3 1 · THGT3 · HGG 5 · HGT4 1 · THGT4 · HGG 7 · HGT5 1 · THGT5 · HGG 8 · HGT6 1 · THGT6 · HGG 10 · HGT7 1 · THGT7 · HGG 11 · HGT8 1 · THGT8 · HGG :2 · HGT9 1 · THGT9 · GK 4

HGG · DTK 0 · TR2B 8 · HTK · HTK 6 · HGR 2 · (Y,ZV) · MF 4 · MLF 4 · D 4

FS 7 HORIZONTAL GROUP SELECTION

DT FOR MKR # 3

HGG

8 M · 6 M

LINE LINK MKR CONN. CKT. · LINE, LINE LINK & CONN. CKT.

HGTO-9 · M- · VGAC-11 · L-

LLC1 22 · HGTO-9 3 · HGO-9 · M- · HGO-9

LINE IN. TEST CONTROL CKT · CO · CO · HGK

HG (M) · XHG · HGK · -48 · P 27 · .01 μF · 16 · 2 · M- · HGO-9 · HG 300

HTKI · HGK 4 · HTKI 6 · M.T.E.C. OR OT TIC

HGT9 HGT8 HGT7 HGT6 HGT5 HGT4 HGT3 HGT2 HGT1 HGTO HGG HGB (M) -48

8 - (MKR # 3)

DT MKR # 3 Gnd to 6 VW. to (8)

DRAWING ISSUE

6B	AR A P.D.	J.F.O.
9B	CH WM	P.D.
12D	PG JDH	&CB
16D	TSG BMH AMP	CB A

N DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED · 6S

ISSUE 43B · SD-26001-01-B7

FS8
VERTICAL FILE SELECTION

D 13
MF 13 ← YZV
MLF 13
5 RCYI

YW VFT0
L U
270, 700
-48
11
VFT0
JSQC 5

YV, YW VFT3
L U
270, 700
-48
11
VFT3
SQO 10
JSQ5 5
JSQ3 5

YV, YW VFT1
L U
270, 700
-48
11
VFT1
JSQ1 5

YV, YW VFT2
L U
270, 700
-48
11
VFT2
JSQ2 5

YV, YW VFT4
L U
270, 700
-48
11
VFT4
JSQ4 5

E 5
E 15

YV, YW FR
L U
270, 16
YV
YW
-48
FR 90
11
GK 10
RCYI 7
YW
YW
FR 10
DTO 6

FTKI
L U
270
-48
11

MTFC OR OPTIC

VFG 1
VFTC
VFTO MTII 4 VFTC
VFTO 3 TVFTO

VFG 4
VFT3
VFT3 MTII VFT3
VFT3 3 TVFT3

VFG 2
VFTI
VFTI MTII 5 VFTI
VFTI 3 TVFTI

VFG 3
VFT2
VFT2 MTII 6 VFT2
VFT2 3 TVFT2

VFG 6
VFT4
VFT4 MTII 8 VFT4
VFT4 3 TVFT4

VFG 7
FTKI

TO DAS-ETS

VFTO-4 ← VFTO-4

VFG
L U
270
-48
11
SNK 6
DL2 7
RCYI
D
MLF 5
MF 5
VFG FR 10

LINE, LINE LINK AND CONN. CKT.
LINE INSUL. TEST CONTROL CKT
CO
M-
LGC-II
LO-4
TRK CKT
CF
VFTO-4

VFT4 8
VFT3 6
VFT2 6
VFTI 6
VFTC 6
7,10

FS 33
SERVICE OBSERVING RECORDER

-44 OCT
TR2A 5
YHV OBSI 6,7
OBS2 7
8
CKGI 15

ORIG. REG CKT.
OBS
-48
F!
TRK. LINES CONN. CKT.
M-
OBS

OBS2 2U 2L
S-300
P-300
1U 1L
YHV OBSI 2,1
OBS2
450 ±1%
450 ±1%
-48

OBS2 OBS2 6
OBSI
TO MTFC
OBS
TO OTTC

SERVICE OBS. CKT.
-48
240
CK
LK
10
TM

OBS. LINE CKT.
A SL

LINE LINK MAIN. CONN. CKT.
M-
OBS
TK 10

YH YI OBSI
U L
400, 500
-48
YH OBSI 4
CKGI 16
YI OBSI 6
1
4
YI OBSI 2E
LOLA
YN LOLA 480
LOLA R
+130
H9

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES, INC
DWG SIZE 6S
ISSUE 433
SD-26001-01-88
PRINTED IN U.S.A.

SD-26001-01-88

BELL TELEPHONE LABORATORIES, INC

PRINTED IN U.S.A. E-7420 (6-52)

FS9

TRANSMITTAL AND CHECK OF CH-, HG-, VG-, AND VF INF.

37F1 XC5

CLLI L U 700 -48 GTL2 GTL3

CLL2 L U 700 -48 GTL2 GTL3

LL7 2000 CH0 CH7 CH8 CH9 LL7 — M.T.E.C.

LL4 2000 CH0 CH4 CH5 CH6 LL4

LL2 2000 CH2 CH3 CH6 CH9 LL2

LL1 2000 CH CH3 CH5 CH8 LL1

LL0 2000 CH1 CH2 CH4 CH7 LL0

VGC1 L U 700 -48 GTL2 GTL3

VGC2 L U 700 -48 GTL2 GTL3

VG10 2000 VGT10 VGT11 — M.T.E.C. OR OT TIC

VG7 2000 VGT0 VGT7 VGT8 VGT9

VG4 2000 VGT0 VGT4 VGT5 VGT6

VG2 2000 VGT2 VGT3 VGT6 VGT9

VG1 2000 VGT1 VGT3 VGT5 VGT8 VGT11

VG0 2000 VGT1 VGT2 VGT4 VGT7 VGT10

XVHF TX

P-200±1% P-230±10% S-1000±1% S-210±10%

HGC1 L U 700 -48 GTL2 GTL3

HGC2 L U 700 -48 GTL2 GTL3

HG7 2000 HGT0 HGT7 HGT8 HGT9 — M.T.E.C. OR OT TIC

HG4 2000 HGT0 HGT4 HGT5 HGT6

HG2 2000 HGT2 HGT3 HGT6 HGT9

HG1 2000 HGT1 HGT3 HGT5 HGT8

HG0 2000 HGT1 HGT2 HGT4 HGT7

VFC L U 700 -48 GTL2 GTL3

VF4 2000 VFT4 — M.T.E.C. OR OT TIC

VF3 2000 VFT3

VF2 2000 VFT2

VF1 2000 VFT1

VF0 2000 VFT0

LL0/7 — TRUNK LINK & CONN. CKT. M- F1 — ORIGINATING REGISTER CKT. LL0/7 -48

VG0/10 — M- F1 VG0/10 -48

VF0-4 — M- F1 VF0-4 -48

HG0/7 — M- F1 HG0/7 -48

VY — HG0/7 — TRANSFER TRUNK LINK CONN CKT M- — TRANSFER TRUNK CKT FOR WIDEBAND CALLS LF2 TU0/7 -48

DRAWING ISSUE	
1	OLR LINK
2D	BBT
3D	TRK
13D	PRD DEC AND
15D	PRM COM AND
16D	DS COM ANT
18D	BB LINK AND
	JNR
22D	PRT RMS
30D	
34A	

SD-26001-01-B9

BELL TELEPHONE LABORATORIES, INC

PRINTED IN U.S.A. E-7420 (4-52)

DIAL TONE MARKER CIRCUIT

34

SD-26001-01-B9

BELL TELEPHONE LABORATORIES, INC

2 6S

PRINTED IN U.S.A.

FS 10

LINE LINK FRAME NUMBER REGISTER

MTFC OR OT TIC

FUT9 FUT8 FUT7 FUT6 FUT5 FUT4 FUT3 FUT2 FUT1 FUT0

FTB0 FTB1 FTB2 FTB3 FTB4 FTB5

FTA0 FTA1 FTA2 FTA3 FTA4

FTS0 FTS1 FTS2 FTS3

FTT0 FTT1 FTT2 FTT3 FTT4 FTT5

TTF0

4WT

MT15

FT0 FT1 FT2 FT3

FT0-3 FU0,1,2,4,7

TRIG REG CKT

TRK LK & CONN CKT

LINE LK MKR CONN CKT

TO DAS-ETS

GTLI GTU

FT3 FT2 FT1 FT0 FU7 FU4 FU2 FU1 FU0

OC GTL3 GTU

DRAWING ISSUE 12D 16D 21A

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD- 26001-01-B10

ISSUE 4SB

6S

SD-26001-01-B10

PART OF FS 11

LINE LINK FRAME SEIZURE

LINE LINK MKR CONN CKT

LINE, LINE LINK & CONN. CKT

LINE, LINE LINK & CONN. CKT ASSOC WITH THIS MKR. (SEE NOTE 117)

LINE INS. TEST CONTROL CKT.

LINE INS. TEST CONTROL CKT. FTA

DTK

TR2A

DT

TK

ONX

CO

LLC2

LLCI

RVC

DISI

TRLA

MRLI

TO OTHERS ON SAME LINE LK FR

TO OTHERS FOR SAME LINE LK FR

LGO-11

HGO-9

VGBO-11

BS

LFK

LLCI

HGK

XLG

LG

LFK MTFC OR OT TIC

LOL

NLL

MTI3

LOLA

TO OTHER MARKERS

LOLL TO MTFC OR OT TIC

LOL TO MTC

CICO-9

CILO-9

NOL

HG-

LOLF

30.5K

NOLA

NOLL

NOL

TO MTC

LOLP

GTL2

LFS

LFK

LCI

TFKI

SP

LFS 33,000

LBS2

LBS0

LBS1

ST 40-59

FTT5

ST50-59

FTT4

ST40-49

FTS3

FTT3

ST30-39

FTS2

FTT2

ST20-29

FTS1

FTT1

ST10-19

TTFO

(2 WIRE) ST00-39

(TRANSFER) STO-3

4 WIRE) ST00-39

FTS0

FTTO

ST9

ST8

ST7

ST6

ST5

ST4

ST3

ST2

ST1

ST0

FUT9

FUT8

FUT7

FUT6

FUT5

FUT4

FUT3

FUT2

FUT1

FUT0

MTI5

FTA

ST-

TR

E

MP

ME

M4

LFS

ST 26031

LINE LINK MKR CONN CKT 26024

DRAWING ISSUE

1	V C		
12D	WH		
13D	BK		
5D	MU		
8D	VI		
9B	WH		
12D	BK		
16D	BK		
22D	BK		
23A	YEL		
25A	GRY		
26D	GRY		
28D	RD		
30D			
33D			

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

ISSUE 37D

SD-26001-01-BIIA

SIZE 2

SUB SIZE 6S

PRINTED IN U.S.A.

SD-26001-01-BIIA

PART OF FS II

LINE LINK
FRAME SEIZURE

LINE LINK AND CONNECTOR CKT

CALL WAITING LINK CKT

LBY — M- — CWL — (UD) CWL — IU 2U 640 — I — -48

NCW/LP- -48 — VFO-4 — (UD) VFTO-4 6

TO MASTER TEST CONTROL CKT
CWF2 — (UA) MT2 6
CWF1 — (UA) MT2 5
TO OTHER MARKERS

(UD) XCW — IL IU — P-8 — S-850 ±15%
(UD) XCW — 43.2 ±2%
(UD) CWL — 8
FG — (UD) FTKI — 12A0

NCW — M- — NCW — (UD) NCW — IL 2L 640 — I — -48

DCT — M- — CWK — (UD) CWK — IU 2U 640 — I — -48
CWK — TO MASTER TEST FRAME CONNECTOR CKT OR OT TEST AND OT TIC

X- — SP -48 — XCW — (UD)
(UD) CWF — 3
(UD) XCW — 4
(UD) RLK — 2L IL 145
(UD) RLH — 10
TRI — 6
TRST — 12
XCW — (UD) XAVGB — -48 — 29H6

CWT -48 — CWT — (UD)
(UD) (UM) MT13 — 2 — CWT TO OT TST CKT
(UA) MT2 — 4

CWL — (UD) (UL) — 12 — (UM) CWL — 1
NCW — (UD) (UL) — 5 — (UM) NCW — 2
RLK — (UD) (UL) — 2 — (UM) RLK — 3
TO OTHER MARKERS
CWL
NCW
RLK
TO MASTER TEST CONTROL CKT
TO OT TEST
TO OTHER DIAL TONE MARKERS

DRAWING ISSUE
30C
33D

ISSUE
36A

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-B11B

BELL TELEPHONE LABORATORIES INCORPORATED 65

SD-26001-01-B11B

PART OF FS 12 SEE SHEET B35

CLASS OF SERVICE REGISTER & CHECKER

MTFC

LINE INS TEST CONT CKT

TO MTFC

TO ALL OTHER MARKERS

TO MASTER TEST CONTROL CKT

TO OTHER WS DIAL TONE MARKERS

WIDEBAND TRANSFER TRK CKT

TRF TRK LINK CONN CKT

LINE, LINE LINK & CONN CKT

DON'T ANSWER AUX TRK CKT OR WIDEBAND 2-WAY TRUNK

TRK LK CONN CKT

ORIG REG CKT OF TR TRK CKT

TO MTFC OR OT TIC AND TO DAS-ETS

DRAWING ISSUE

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-B12

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-B12

FS 13

CHECK OF REGISTER MEMORY CKT

TO MTFC OR OT TIC

ON FI | LV M- | RC

ON FI | LV M- | FK

ORG REG CKT OR TRANSFER TRK CKT

TRK LINK AND CONN CKT

GTL RK1 RK2 RK3 RC

ONX CKGI RCYI RAM RK3 GTL1

DT ANN RK1 RK2 RK3

ANNA OC GTU

CHA DCTI FTKI GTL3

CST3-9 CSTO-2 CSUO-9

TO DAS-ETS

TR2A NOLA LOLP LOLF LOLA

F4 RK2 RK1 CN 2P MAN MPBX MCN AOMR AC8 WBT AO

XCF SEE TABLE A XVHF XC5 DIS2 TRLA

FTO FT1 FT2 FT3 FU0 FU1 FU2 FU4 FU7

ANN RCY2 FTKI

PLN7 PLNC PLN5 PLN NCSL PBX7 PBX5 PBX DTB

TAO RV MPBX WB2 NDAT WAT DAT

DTA CN AC8 NPBX

CSGA,CGAI CSGC CSGB,CGBI CSGK

CSRK2 CSRK1 CSR9 CSR8 CSR1 CSR0

HGC2 HGC1 ABK WGA WGB WB2

CTO CT1 CT2 CS0 CS1------CS8 CS9

RK3 DT GTL1 GTL2 TO DAS ETS GTLG GTL

CSUO CSU1---CSU8 CSU9 CSTK2 CSTK1 CSTO CST1 CST2 CST3-----CST8 CST9

VGC1 VGC2 VFC HGC1 HGC2 CLL1 CLL2 CUK1 CUK2

TABLE A

CONTACT	OPTION	
	XR,WP	WO
MAKE	3	7
ARMATURE	7	5
BREAK	4	4

ISSUE 43B

DIAL TONE MARKER CIRCUIT

SD-26001-01-813

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-813

FS 13
CHECK OF REGISTER MEMORY CKT

ON FI LV M- RC OC GTU
ON FI LV M- FK
ORG REG CKT OR TRANSFER TRK CKT
TRK LINK AND CONN CKT
TO MTFC OR OT TIC
GTL RK1 RK2 RK3 RC
ONX CKOI RCYI RAVI RK3
DT ANN RK1 RK2
ANNA CHA DCTI FTKI
GTL1 GTL3 RK3
PLN7 PLNC PLN5 PLN PLNC NCSL PBX7 PBX5 PBX
DTB
CST3-9 CSTO-2 CSU0-9
ST TO DAS-ETS
TR2A NOLA LOLP LOLF
F4 RK2 RK1 LOLA
CN 2P MAN MPL MPLA MCN MPXB AOMR AC8 WBT AO
NCSL PLN5 PLN PBX5 PBX AC8 NPBX
DTA CN AC8
TAO RV MPBX WB2 NDAT WAT DAT
CSGA,CGAI CSGC CSGB,CGBI
XCF P-1175 SEE TABLE A XVHF XCS DIS2 TRLA
FTO FT1 FT2 FT3 FU0 FU1 FU2 FU4 FU7
TI TJ TS TK TH
CT0 CT1 CT2 YB YH YI
CS0 CS1 CS8 CS9
RK3 GTL1 GTL2 TO DAS ETS CTLG GTL
CSGK CSRK2 CSRK1 CSR9 CSR8 CSR1 CSR0 HGC2 HGC1 ABK WGA WGB WB2
CSTO CSTI CSTK2 CSTKI CSU0 CSUI CSU8 CSU9
VGC1 VGC2 VFC HGC1 HGC2 CLL1 CLL2 CUK1 CUK2

TABLE A

CONTACT	OPTION	
	XR,WP	WO
MAKE	3	7
ARMATURE	7	5
BREAK	4	4

ISSUE 46A

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

SD-26001-01-B13

SD-26001-01-B13

FS 14

PATTERN RELAY CONTROL

PN -48 R

PNA -48 R

POA P0 P1A P1 P2A P2 P3 P4 P5A P5 P6A P6 P7A P7 P8A P8 P9A P9 — L U 270 — MTFC

P0-9

LO-8

TRK LK & CONN CKT

M-

P0-9 LO-8

CROSS CONNECT

FTB0 FTB1 FTB2 FTB3 FTB4 FTB5

FUT0,1 FUT2,3 FUT4,5 FUT6,7 FUT8,9

20F 40F 60F

FTA0 FTA1 FTA2 FTA3

TTF STF PR 2TLF 2-3TLF 3TLF 4TLF 5TLF 6TLF 7TLF 8TLF 9TLF 10TLF

DRAWING ISSUE:	
5D	BELL SYSTEM CHANGES
9B	
23A	GEN. APP.

DIAL TONE MARKER CIRCUIT

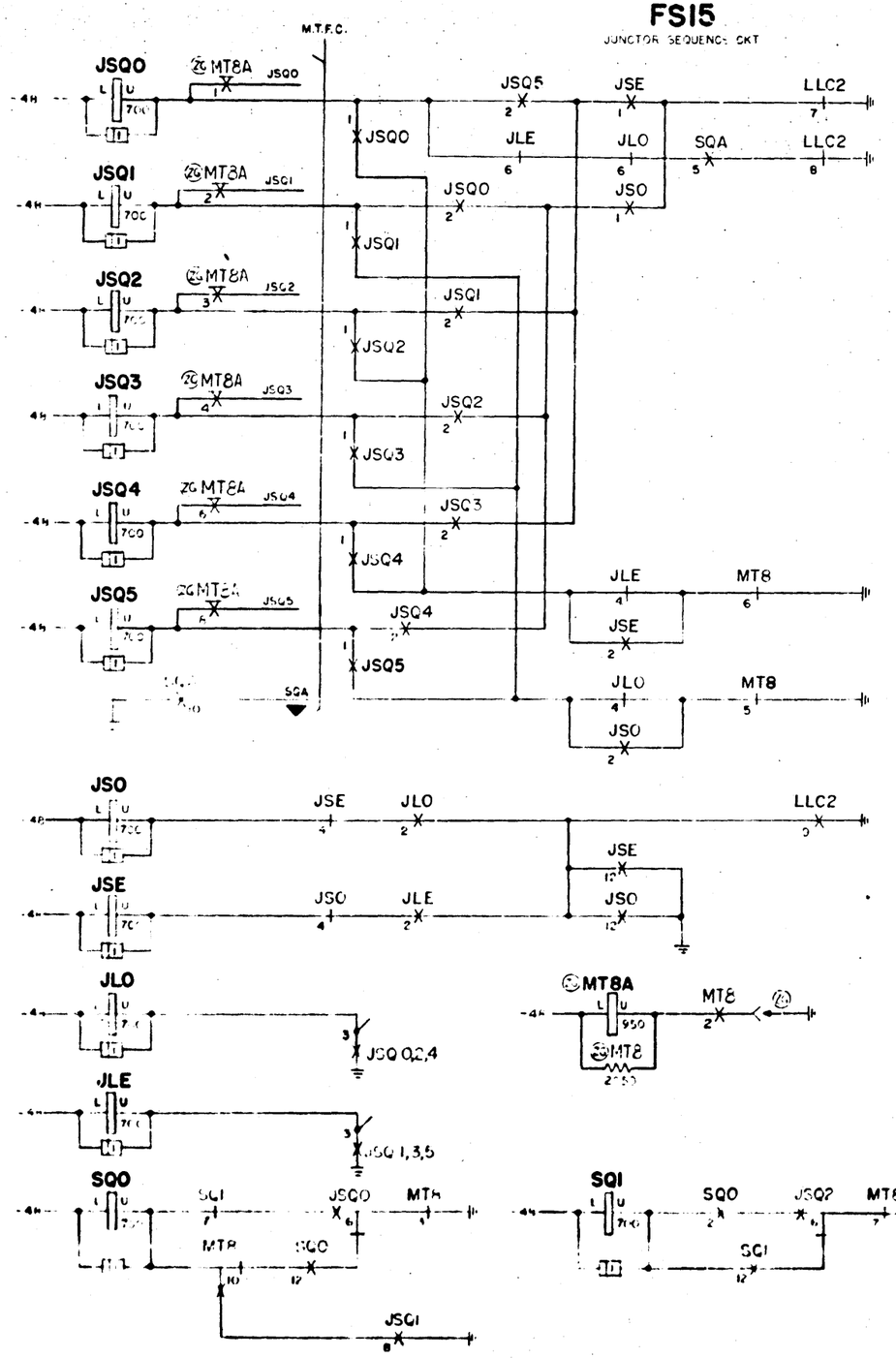
SD-26001-01-B14

BELL TELEPHONE LABORATORIES INCORPORATED

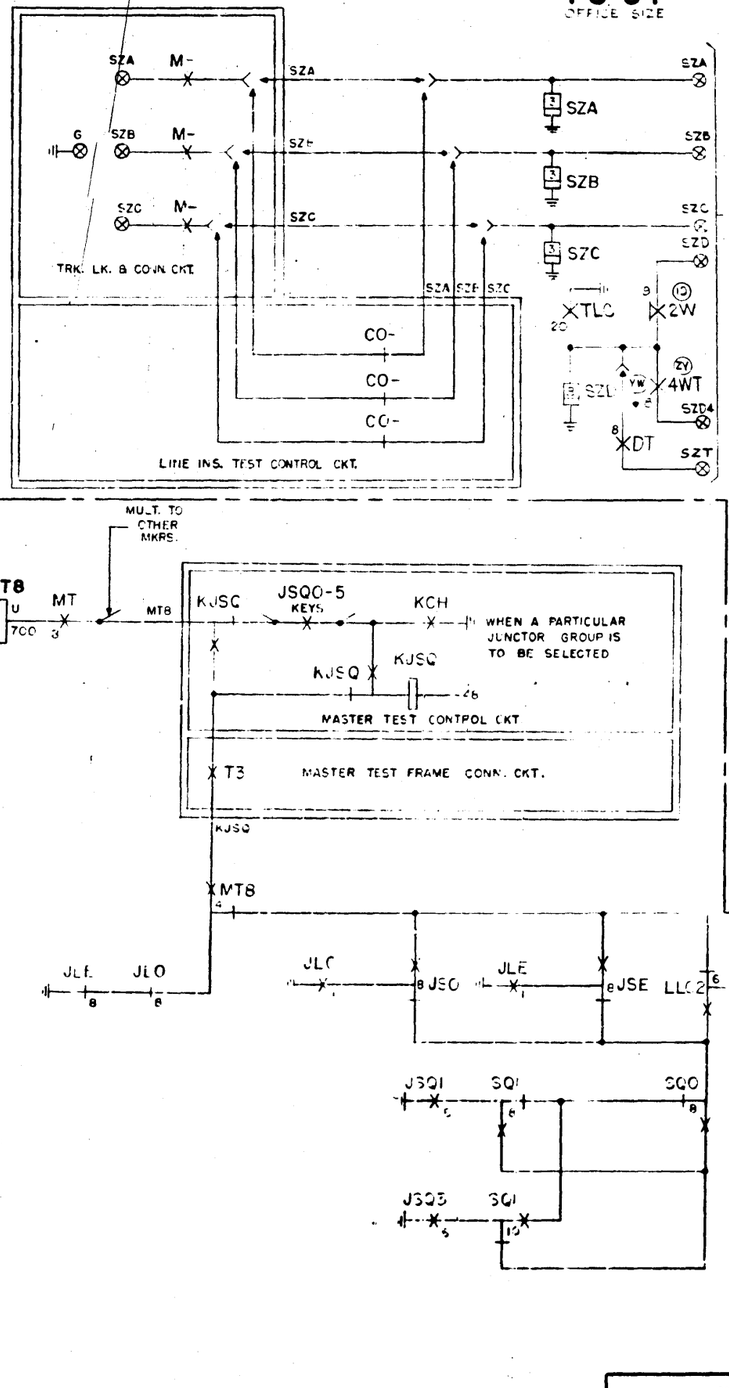
2 6S

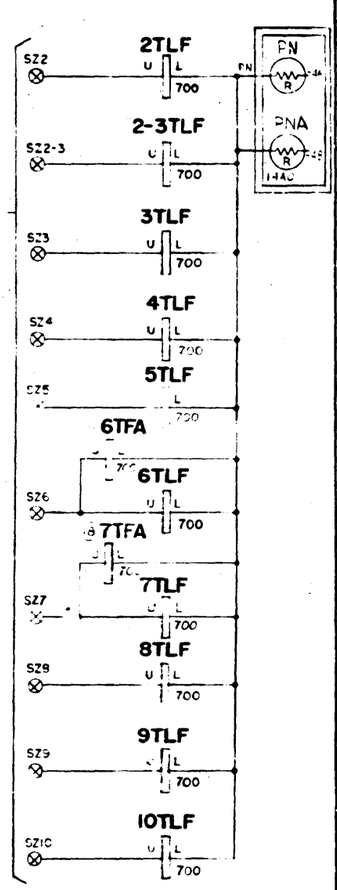
SD-26001-01-B14

FS15
JUNCTOR SEQUENCE CKT



FS 34
OFFICE SIZE





DRAWING ISSUE	
1	SA WM
2D	PBL
3D	PHL
5D	NJL
7D	CH
9B	PBL
12D	PHL
16D	TBD NJL

BELL TELEPHONE LABORATORIES, INC

CROSSBAR SYSTEMS NO. 5 DIAL TONE MARKER CIRCUIT (2)	SD-26001-01-BIS
BELL TELEPHONE LABORATORIES, INC	65

16

FS 16
JUNCTOR GROUP SELECTION

DRAWING ISSUE	
8D	ELW 2A
9B	CH WEC PPH
12D	WD7
15D	PBH ESM AMP
16D	YBD ABR AMP
22D	PTH TSX BMD
23A	XMT ABA AMP
28D	TM
30D	
32A	
33D	

JG0 JG1 JG2 JG3 JG4 — JGO JG1 JG2 JG3 JG4 — STP1 STP2 — 3G — 10TLF 9TLF 8TLF 4TLF 3TLF 2TLF 5TLF 4TLF 7TLF 6TLF 2-3TLF — JLO JLE JSQ0 JSQ1 JSQ3 JSQ4 JSQ5 — LLC1 — P0 P1 P2 P3 P4 P5 P6 P7 P8 P9 — P9A P8A P7A P6A P5A P2A P1A P0A — P3 P4 — MTFC OR OT TIC — -48

RQ 7Q STF PR TTF — 6TLF 8TLF 9TLF 7TLF — SPT DT 2W TLC 4WT — SF MTFC PR TTF

TRK LINK & CONN CKT — M- SF PR TTF — LINE INS TEST CONTROL CKT — CO- — SER/RX R/RA ER/RB SEL/LX L/LA EL/LB

XLR LR LRI LR2 PR BX — FUT1,3,5,7,9 FUT0,2,4,6,8 — JGO JG1 JG2 JG3 JG4 — DTB

10LV 12LV 4WT

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED 6S

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SD-26001-01-B16

SD-26001-01-B16

FS17

TRK. LK FR. JUNCTOR GROUP CONTROL

TRUNK LINK & CONN. CKT.

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

SD-26001-01-BI7

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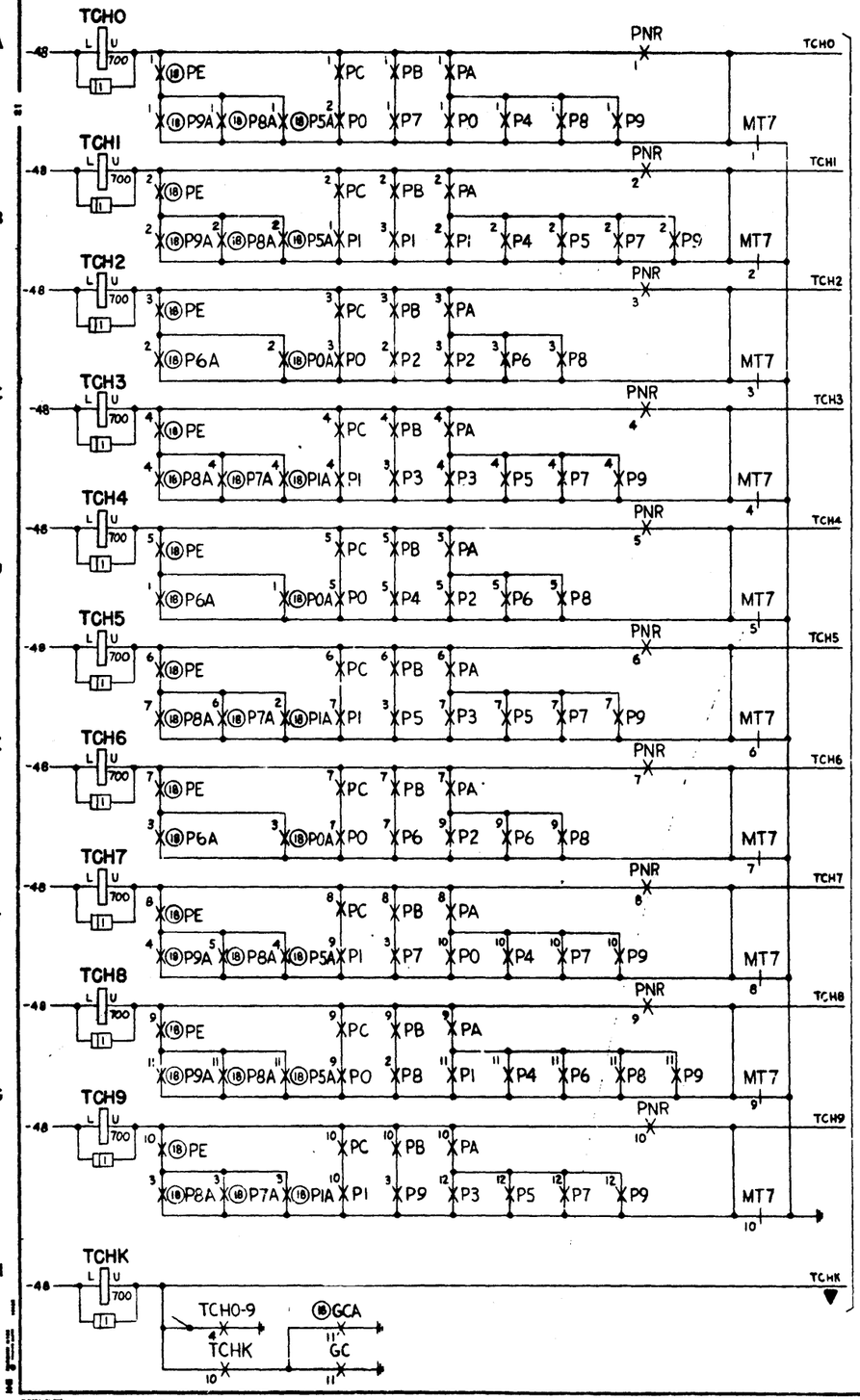
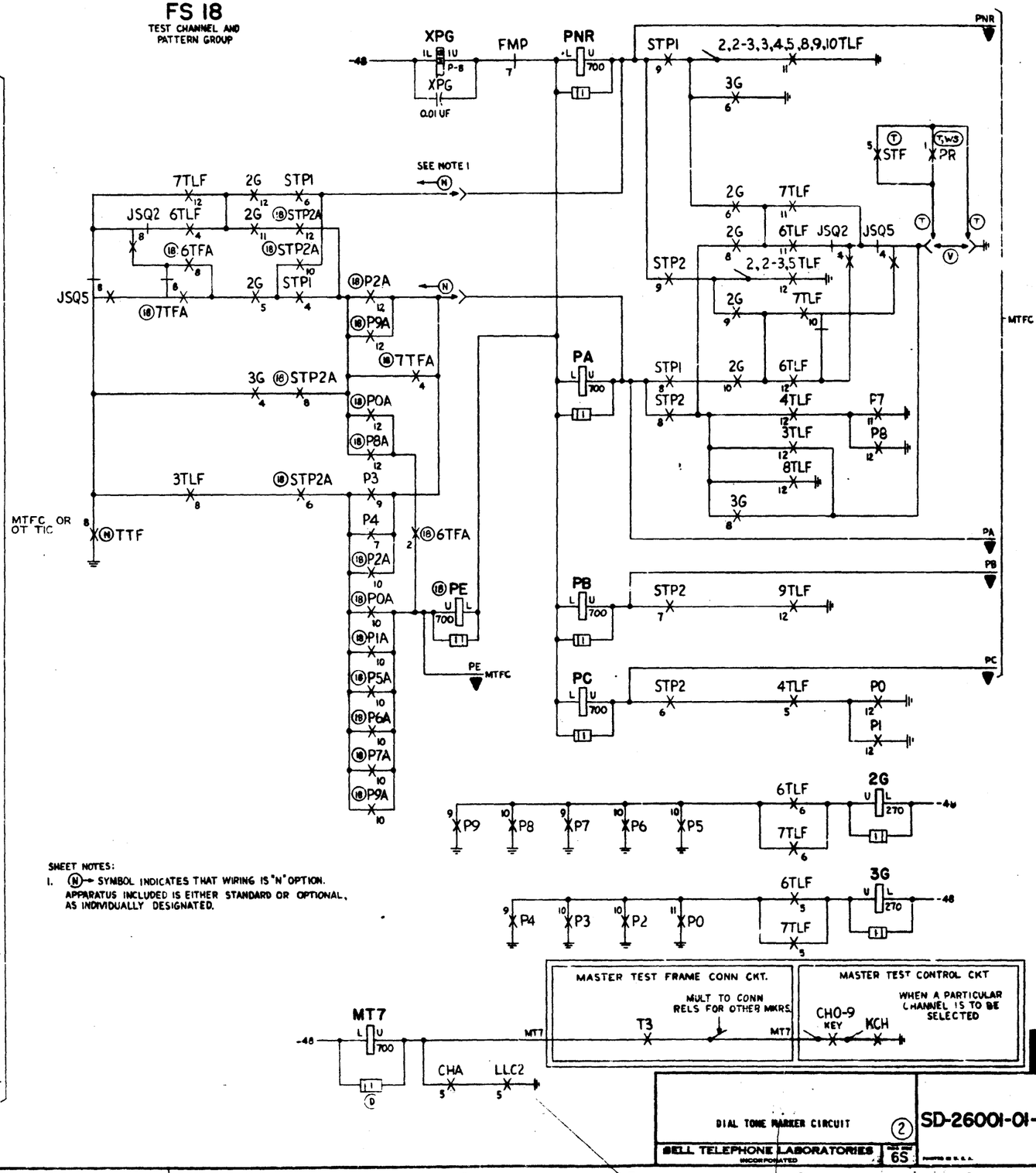
FS 18

TEST CHANNEL AND PATTERN GROUP





SHEET NOTES:

1. (N)→ SYMBOL INDICATES THAT WIRING IS "N" OPTION. APPARATUS INCLUDED IS EITHER STANDARD OR OPTIONAL, AS INDIVIDUALLY DESIGNATED.

DRAWING ISSUE: 5D, 6B, 9B, 13D, 16D, 23A

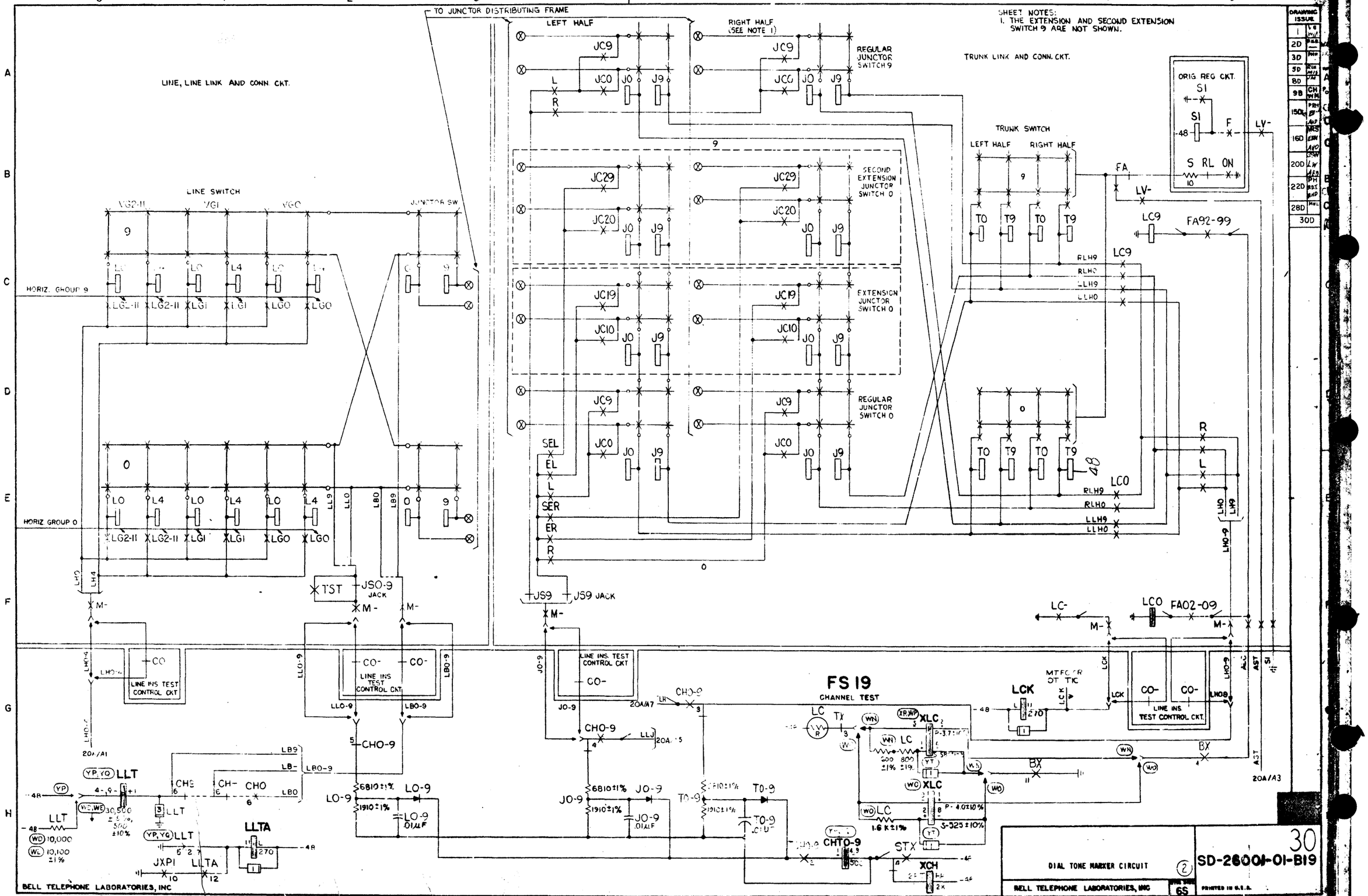
DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-BI8

BELL TELEPHONE LABORATORIES INCORPORATED

23

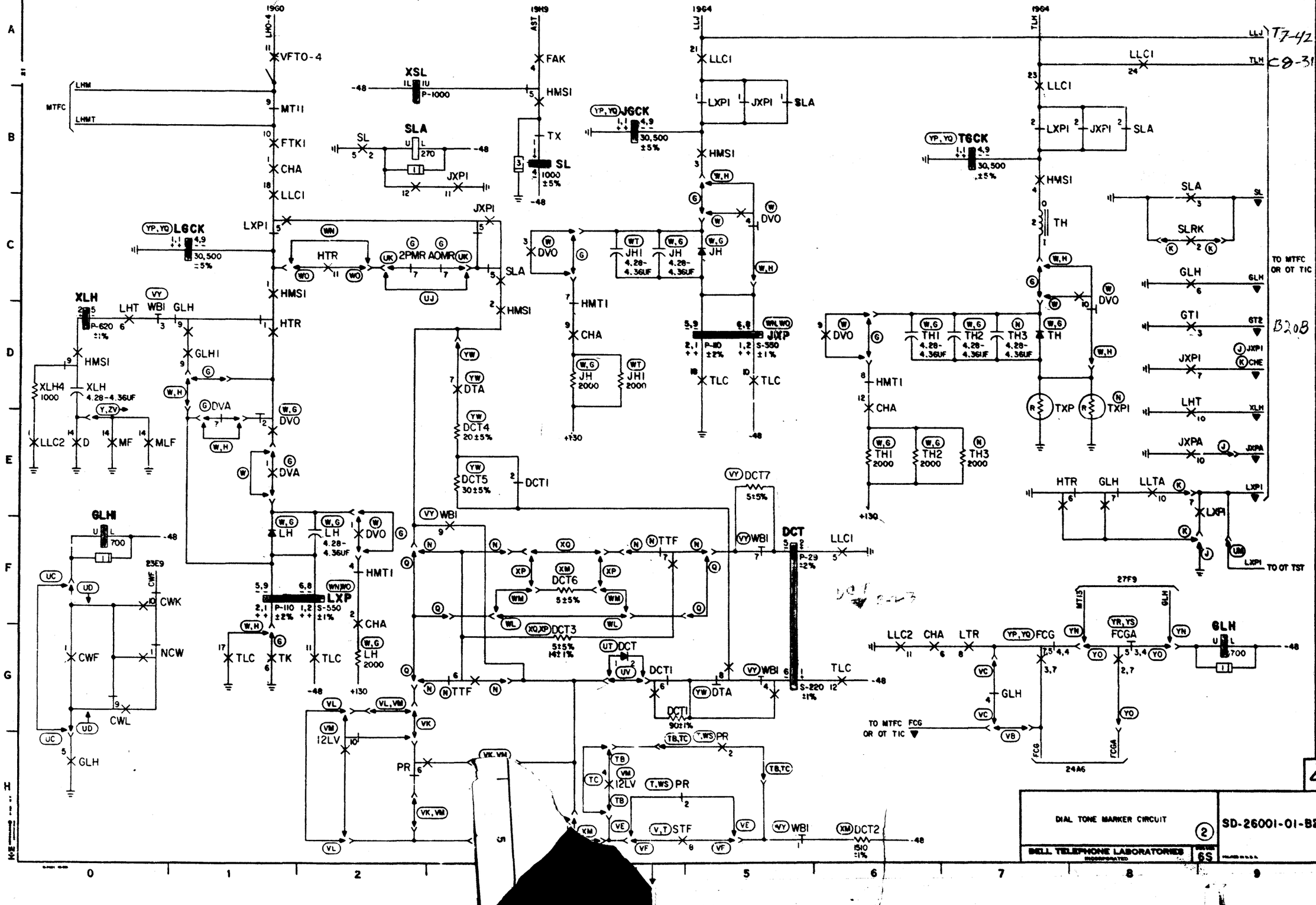
SD-26001-01-BI8



618-10-10092-SD

PART OF FS 20

HOLD MAGNET OPERATION



DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-B20A

ISSUE 40A

ISSUE 6S

SD-26001-01-B20A

PART OF FS 20
HOLD MAGNET OPERATION

CKGI 3 — HMF 2000 — HMF
HMS 6500 — HMS

HMT — HMT 2+ 5− P-200 ±1% — 48
CKGI 14 — HMT 4.28-4.36UF — HMT 226 6 + − S-2600. ±1%
CHA 8

HTR 5 — (W) DVO
CKGI 2 — RYC 5 — (W,H) — AOMR 10 — 2PMR 10 — DVA 10 — (G) — (W,H) HMT 7 3 — HMTI U L 270 — 48
(WO) HMTI (WO) 3

LLCI 20 — HMSI 12 — TRB 8 — HMSI U L 270 — 48 — HMSI TO MTFC OR OT TIC

SLA 6 — 3,4 5 2,7 (YP,YQ) JGCK 3,4 5 2,7 — LLTA 8 — JXPA 8 — JXPI 8 — LXPA 8 — LXPI 8 — XAJS 2 — XSL 8 — SP 8 — (VH,VI) OBS1 7,2 — OBS2 5 — RK3 10 — HMTI 1 — MRL 7 — TRTR 5 — TRI 10
(YP,YQ) LGCK 2,7 5 3,4 — (YP,YQ) TGCK
TR2A 7

HMTI 6 — LXPA 6 — JXPA 6 — LLTA 6 — (W,H) — (G) — (G) — DTK 6 — SLRK U L 700 — 48

(XJ) — (XI) — TK 2 — GTI 2 — SLRK 12

LXPA 10 — (J) — LXPA

LLTA 4 — JXPI 4 — HTR 4 — GLH 2 — UD RLK 1 — CONI 10 — LHT 4 — LXPA 7 — LXPI 9 — RK3 4 — LTR 6 — GTLI 6 — (YW) DTA 6 — (XN) ANNA 6 — LTR U L 2500 — 48 — TO MTFC
(K) — LTR

(WB) JXPA 2 — LXPA 2 — HTR 2 — (WB)
GTI 5 — LXPI 3 — SP 11 — GTI U L 270 — 48

LHT 2 — D 15 — FTKI 7 — XLH 4 7 3 — TRST 9 — GLH 3 — HTR 12 — LHT U L 700 — 48
LHT 12
MF 15 — (Y,ZV) — LHT 1
MLF 15
(YW) DTB 1
(YW) XLH5 90±1%
XLH2 210±1%
4 — GKGI
XLH1 270±1%
-48

XLH + 6 − S-640 ±1% — CKGI 5 — XLH3 500 — 48

JXPA 12 — (WN,WO) JXP 7,5 3,7 4,4 — JXPA U L 270 — 48
LLCI 9 — JXPI 12 — JXPA 4 — JXPI U L 270 — 48

LXPA 12 — (WN,WO) LXP 7,5 3,7 4,4 — LXPA U L 270 — 48
LLCI 19 — (WN) — (WO) LXPI 6 — LXPA 4 — (WO) — (WN) — LXPI 12 — LXPI U L 270 — 48

(G) DVO 6 — (G) DVA U L 270 — 48
DVO — TO DAS-ETS
LLC2 3 — HTR 3 — (W) — (W,G) DVO U L 700 — 48 — (G)
12 — DCTI
(29) WBT 11
(YW) DTB 8 — (YU)
(YK) PBX5 3
(YK) PLN 3
(XA) NCSL 3
(TF) PBX7 3
MCN 12
(G) 2PMR 12 — (XK) AC8 3 — (ZS,YI) PBX 12 — 2P 12 — AO 12 — CN 12 — MAN 12

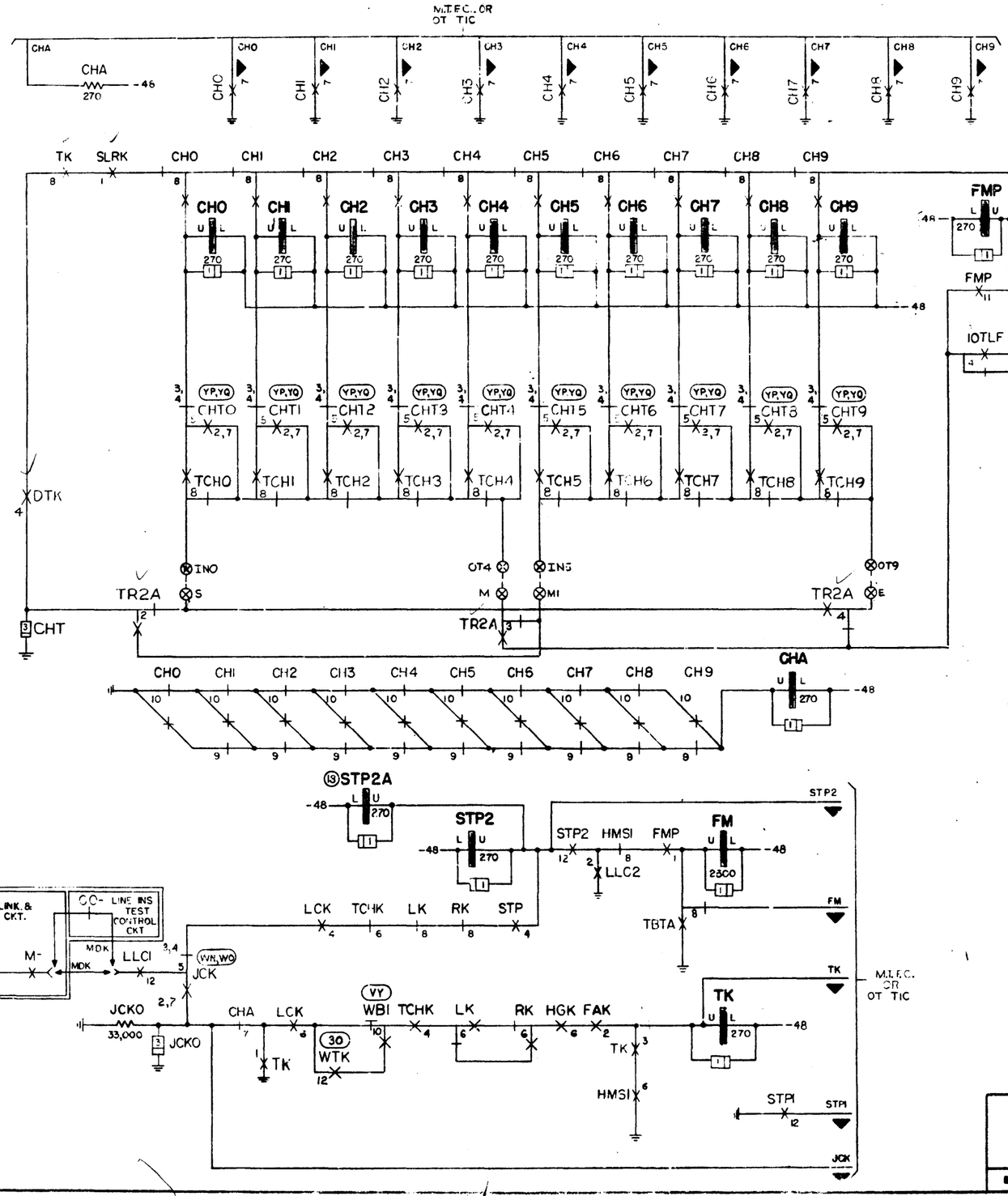
DRAWING ISSUE
27AR KYC AFC
28D KYC AFC
30D

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2) — SD-26001-01-B208
BELL TELEPHONE LABORATORIES INCORPORATED — 5S

SD-26001-01-B2C3

FS 21
CHANNEL SELECTION



DRAWING ISSUE

1	
2D	
3D	
5D	
9B	
15D	
16D	
22D	
23A	
28D	
30D	

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

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SD-26001-01-B21

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LINE, LINE LINK & CONN CKT

TO LINE SWITCH 1-9

TO LINE JUNCTOR SWITCH 1-9

VG2-11

VGI

VGO

JUNCTOR SWITCH

HGO L9

HGO LJ9

HGO LO

HGO LJO

TO TRUNK LINK JUNCTOR SWITCH LEVELS

LS9 LJ9

LSO LJO

SMO SM9

SMO-9

M-

CO-

LINE INSULATION TEST CONTROL CKT

SMO-9 33,000

SMO-9

XLS IU IL WP-8

CHO-9

ONX 6

LS R -48

LSA R -48

SWITCH O LEFT HALF RIGHT HALF

10 LEVEL REGULAR OR EXTENSION JUNCTOR SWITCH

JC- J9

JC- JO

TO LINE LINK JUNCTOR SWITCH

SWITCH O

12 LEVEL COMBINED JUNCTOR SWITCH

JC- J9

JC- JO

SB JB

SA JA

TO SWITCHES 1-9

TO TRUNK SWITCH VERTICAL

TRUNK LINK & CONN CKT

TRUNK SWITCH O LEFT HALF RIGHT HALF

TO TRUNK SWITCH 1-9

TO OTHER (FA-) RELAYS ON SAME LEVEL ON OTHER TRUNK SWITCHES

T9 FA09 LV9

T2 FA02 LV2

TO FA03-FA09

A FA02

TO OTHER LV RELAYS

TO JUNCTOR SWITCH VERTICAL

LCI-9 LCO

WN,WO JCK 4,9 1,1 1000±10%, 3500±10%

JCK 7500

VK VL VM 12LV 12 IOLV 10 TX 5 -48

JSO JSI-9 SBAI SBA2

XJSA -48 2

XJSA -48 33,000 ±5% UZ

WN,WO XJS 5,9 2,1 P-10±10%, 12±10%

JS 1000±1% 1,2 6,8 S-200±1%, 200±2%

TA JSB 4990±1% YT XJS 1

ONX 7

CHO 12 XY XZ -48

3 JSO

CHI-9 12

JSI-9 3

JSI-9 33,000

UZ XJSI 1

VO XJSI 2 8 S-200±10% 9 1 P-12±10%

UY JZ JSA 300±1%, 422±5%

BX 12 BX 10

JS R -48

ONX 5

XTSI IL IU P-1175 -48

TSE1 8

TSX M-

3 TSM TSM 33,000

FS 22 FRAME SELECT MAGNET OPERATE

WN,WO XTS 2,1 5,9 P-10±10%, 12±10%

ONX 8

FAK 8 ASM M-

6,8 1,2 S-200±1%, 200±2%

4 ASM

YT XTS 1

VU VT 10 SLA

3 ONX

TS -48 800±1% 600±1% WO WN

TS 1070±1% -48

ONX 4 TSM R -48

TO MTFC OR OT TIC FAK

TO OTHER (FA-) RELAYS ON SAME LEVEL ON OTHER TRUNK SWITCHES

FAK L U 270 1 -48

LV R -48

XLV IL IU P-2.7

LVK

M- LV2-9 FA-

M- LV2-9 LV2-9

XJSB 2 -48

XJSB 33,000±5% -48

DRAWING ISSUE

28D MS FK

31A

32A

ISSUE 37D

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-B22

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-B22

FS 23
DISCONNECT CKT

TO OT TST DIS (LM)

TO MTFC OR OT TIC DISI / DIS

LINE LINK MARKER CONNECTOR CKT — M- — CKG

CKG2 -48 L U 270 I — XT

CKGI -48 L U 270 I

DISI -48 L U 270 I

DIS2 -48 L U 270 II

DISI 6 — (ZC) DISI 11 (ZC) — (ZD) (ZD)

CKG2 — 6 TRLA — MOI

5 MTI — 1 TRR — TM 5

TRL -48 L U 2.5kΩ — 8 TRL — TRI 1 — TRST 4 — TRB 10 — TRTR 7

TRR -48 L U 700 — TRI 7 — TRR — CWF

TO 24 T4-24 B57B

CWF -48 2L 1L 640 — CWF 20A/FO

TO MTFC OR OT TIC

TRI -48 L U 700 — TRR 7 — SDT 10 — TRT 8

TRI

SP -48 L U 270 — MXT 3 — COX 2

LDT 10 — WT 10

(UD) RLH -48 2U 1U 955 — (UD) CWK 11 — (UD)

CKG — CKGI 10 — (UD) RLH 12 — (UD) CWF 2 — CONI 6 — GLHI 6 — (UC) (UD)

DCTI — DCTI 1 — DCTI 11

DCTI -48 L U 270 I — RK2 8 — RK1 8 — SP 4 — MT15 7 — (VY) WBI 2 — (30) WDCI 3

5582 T053 T453 — TDCT

DCT — B20A

TRLA -48 L U 700 — TRL 6

MTI 4 — TRR 4 — TRI 4 — TRS 6 — GK 8 — VTKI 12 — VGR 7 — VTK 12 — FM! 1

2 TRTR

FTKI 12 — (YV,YW) FR 7,8 — RCYI 11

HTKI 4 — HGR 7 — HTK 4 — TFK2 7

OC 1 — RAVI 8 — CKGI 9

(UC) (UC) FMK 12 — FML 12 — LK3 — TO MTFC

(UD) (UD) XVGB 3 2 1 — (UD) CWL 10 — 5 CWF (UD)

NCW 2 — CWK 12 — (UD)

(UD) NCW 3

1 MTI — LK2

8 LHT

(UD)

10 TRR — (UD) XAVGB 10 (UD) — (UD)

4 CWF — (UD)

RLH 11 — (UD) WT 7

(UD) RYC 11

1 GTI — 3 7 4 DCT — DCTI 3

(H,W) (G) 10 SLRK (H,W) (G)

DRAWING ISSUE: 30D 33D 34A

ISSUE 36A

DIAL TONE MARKER CIRCUIT (2) — SD-26001-01-823

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

SD-26001-01-823

FS24
CONTINUITY AND FCG CKT

CONG 3200±1% +130 GLHI GTI (YR,YS) CONA CONC .004-.006 μF -4,-9 .50±10% 500±10% CONH 12,000 CONJ 12,000

CONA REP COIL CONB INDR 400 RW COND 200,000 CONA CONC 20,000 CONB .2058-.2142 μF BX CONB 150,000 CONA 1000 CONA .02025-.02045 μF

CON REP COIL CON1 INDR 400 RW CON4 200,000 CON3 20,000 CON1 CON2 .2058-.2142 μF CON3 .004-.006 μF

CONE 500±1% FCGA CONK 17,000 GLHA 1500 1000 GLH CONF 500 500±1% CON1 1500 CON5 500±1% GLH 1000 CON6 500±1% FCG -6,-8 TLC 5,9 P-415±10% P-1110±10% DTA 5160±5% 2500±5% FCGB DTB 2500±5% 2W CONA CON1 270 LLCI

RCTA GTI FAK BTT BRT ATT ART TSM

TRUNK LINK & CONN CKT: M-LV-F-T-J- J-L-

LINE, LINE LINK & CONN CKT: M-LV-FA-T-J- J-L- M LV-FA T- J- J- L-

REC SUBS LINE SEND SUBS LINE

TRK CKT TF LF

MTF JK LAMP & KEY CKT CCT GLHI TR2B WB1

TTT CON BRT BTT TRT TSM MTFC OR OTTIC

DMST MST MTR TR PLANT REG CKT OR OTTIC SEE NOTE 1

TR2A TRI TRR MT13 MB DISA CONI GLHI

MTF, JK, LAMP AND KEY CKT: ACV ACVI

RCTB 1150±1% 1150±1% CONI LXPI SP RCTB 1625

ONX HTR LCK 2W JLO RCTB RCTA 700 DTA 4WT SQO

FROM LAST D.T. MARKER AC-DC AUD "C" RINGS "C" AUD AUD AC DC -48 CHA A.C

NOTES:
1. MST LEAD IS MULTIPLED TO OTHER DIAL TONE MARKERS WHEN FURNISHED WITH MTF, BUT NOT MULTIPLED WHEN FURNISHED WITH OFFICE TEST FR.

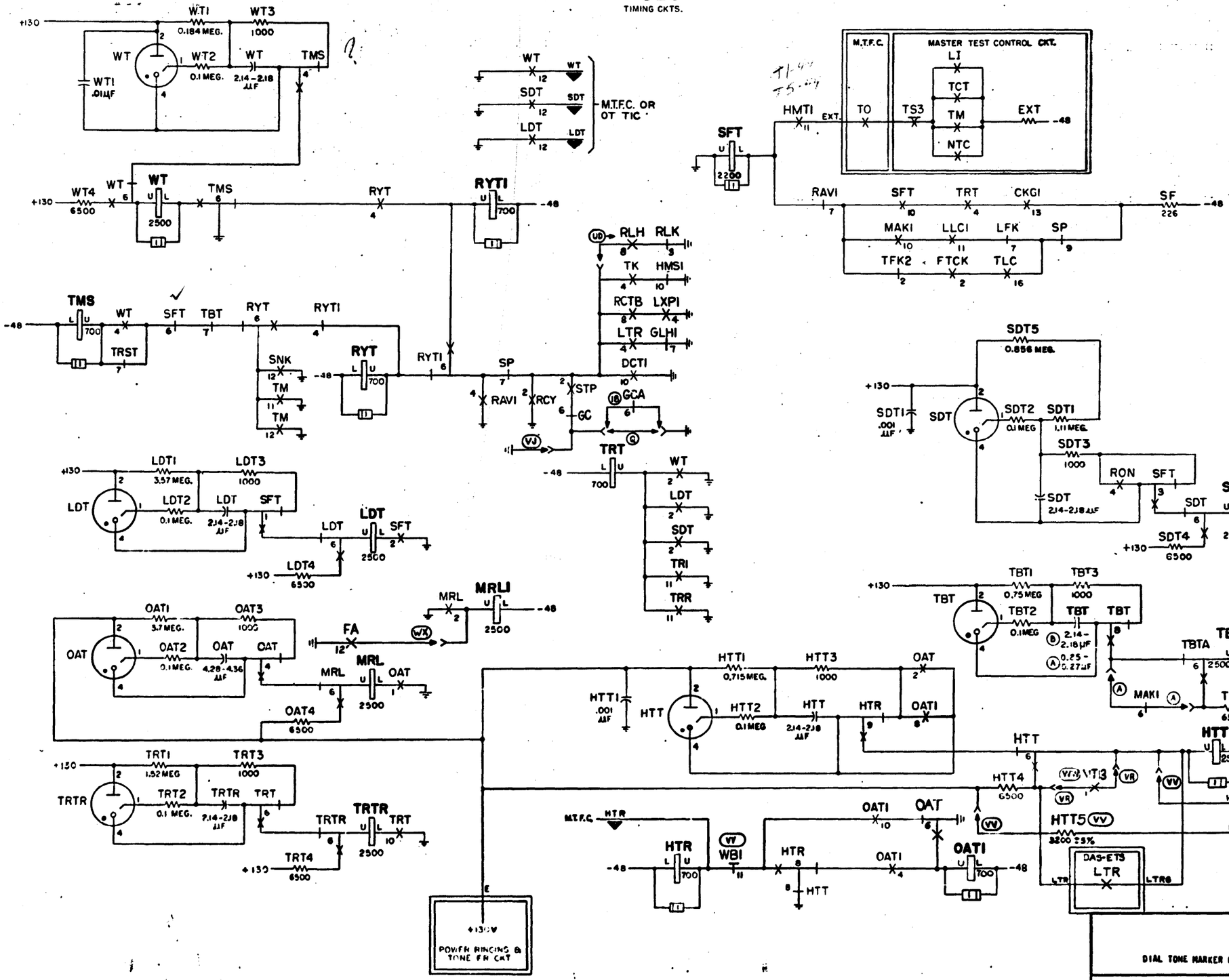
DRAWING ISSUE
12D J.S. GB
15D GH AJ MJ
16D CB A PES JW
18D CB
20D JW AD PH
22D MT AJ KW
26D CB CM
28D
30
33D

ISSUE 39D

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES INCORPORATED 6S
SD-26001-01-B24

SD-26001-01-B24

FS25
TIMING CKTS.



DRAWING ISSUE

1	WM
2D	
3D	
5D	
6B	
6D	
23A	
24D	
29D	
30D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

ISSUE 43B

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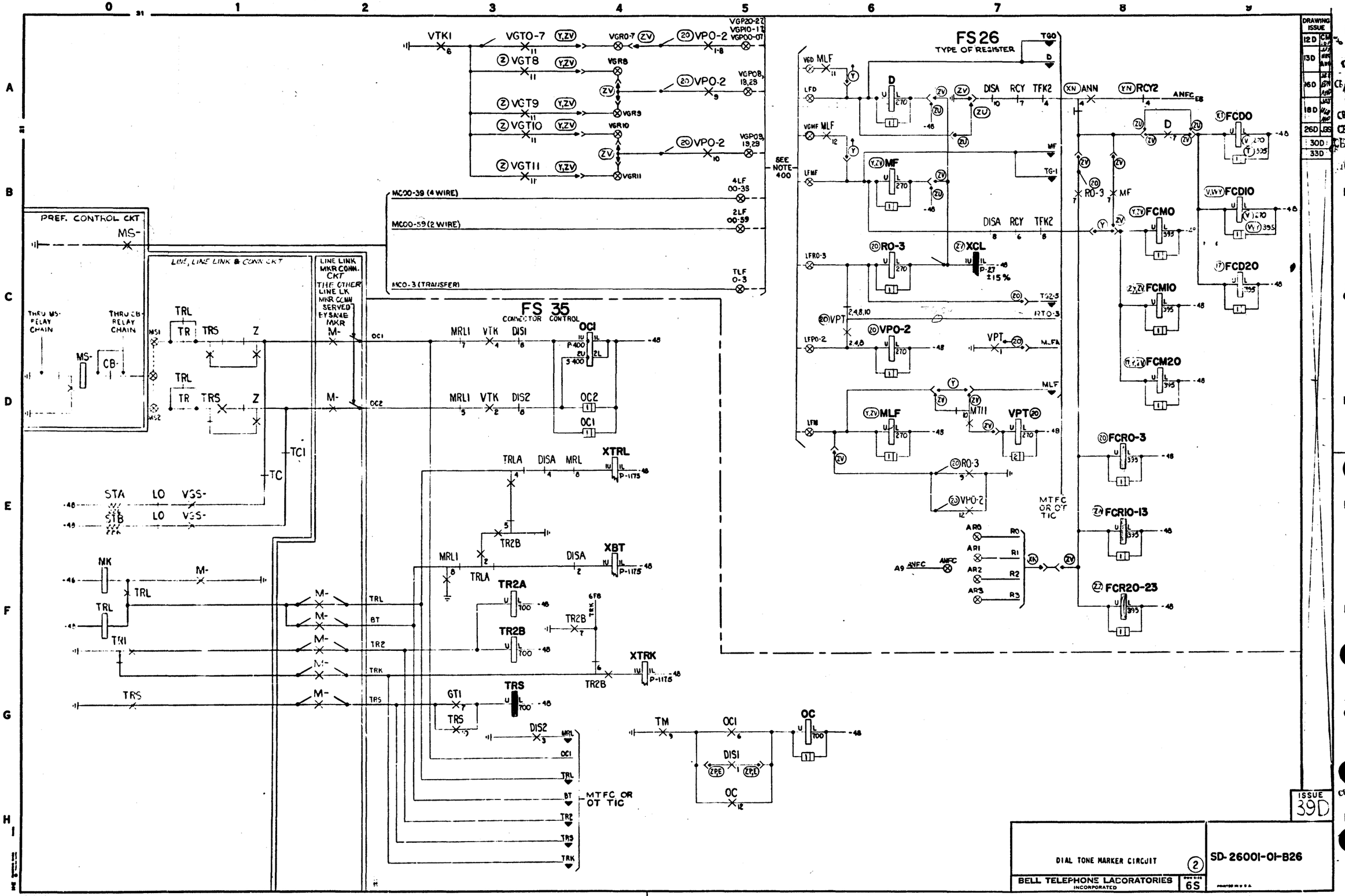
SD-26001-01-B25



DRAWING ISSUE

12D	CM
13D	
16D	
18D	
26D	DS
30D	
33D	

ISSUE 39D

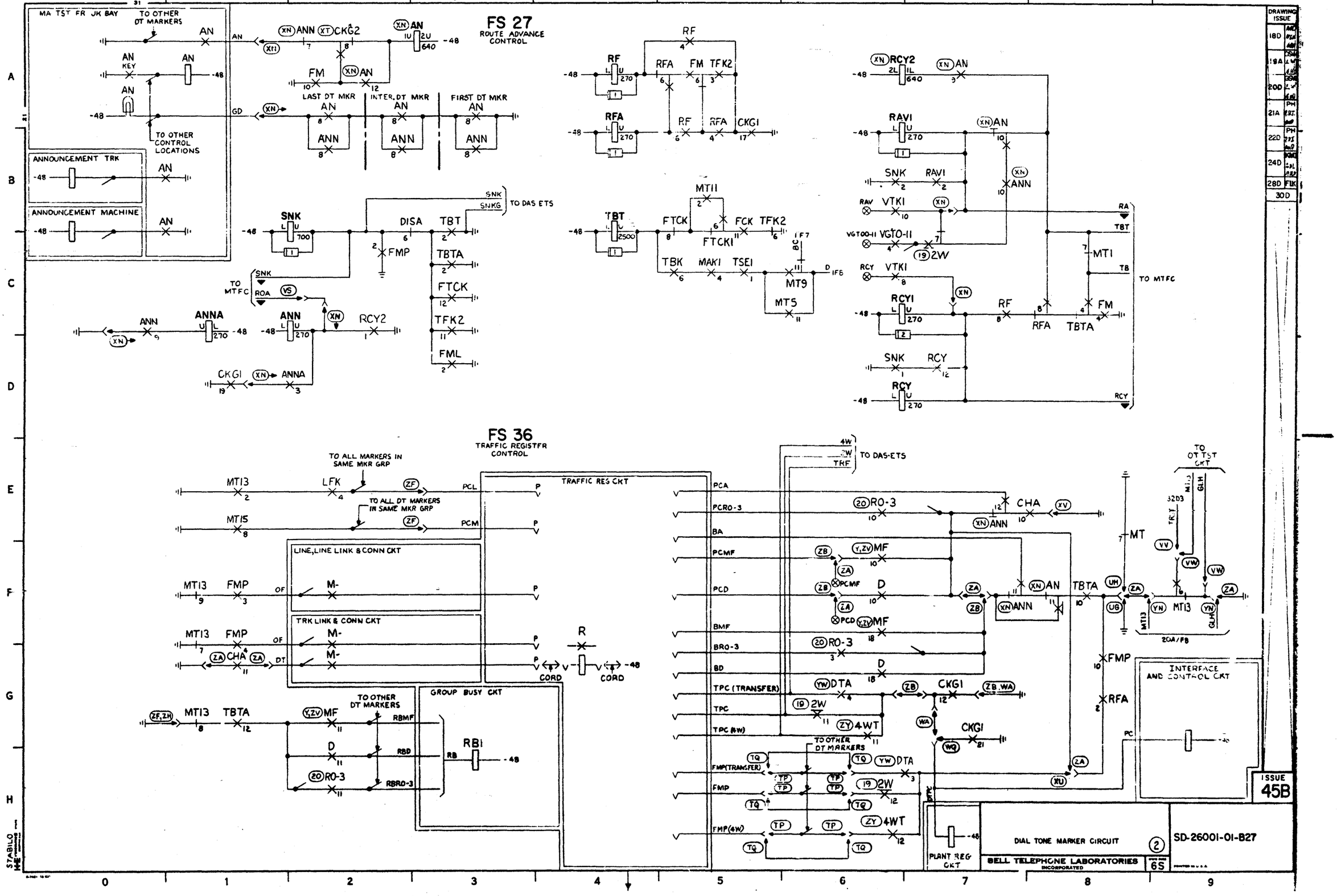
DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-826

6S

SD-26001-01-826



SD-26001-01-827

FS 27
ROUTE ADVANCE CONTROL

FS 36
TRAFFIC REGISTER CONTROL

MA TST FR JK BAY
TO OTHER DT MARKERS
TO OTHER CONTROL LOCATIONS
ANNOUNCEMENT TRK
ANNOUNCEMENT MACHINE
LAST DT MKR
INTER. DT MKR
FIRST DT MKR
TO DAS ETS
TO MTFC
TO ALL MARKERS IN SAME MKR GRP
TO ALL DT MARKERS IN SAME MKR GRP
LINE, LINE LINK & CONN CKT
TRK LINK & CONN CKT
TRAFFIC REG CKT
GROUP BUSY CKT
TO OTHER DT MARKERS
CORD
CORD
TO DAS-ETS
TO OTHER DT MARKERS
TO OT TST CKT
INTERFACE AND CONTROL CKT
PLANT REG CKT
20A/F8

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)
SD-26001-01-827
BELL TELEPHONE LABORATORIES INCORPORATED
6S

SD-26001-01-827

STABILO K+E

SD-26029

FIRST PREFERRED LINE LINK MKR CONN FRAME ASSOC WITH THIS MKR (SEE NOTE 117)

INT. PREFERRED LINE LINK MKR CONN FRAME ASSOC WITH THIS MKR (SEE NOTE 117)

LAST PREFERRED LINE LINK MKR CONN FRAME ASSOC WITH THIS MKR (SEE NOTE 117)

MCK (ST) MAK (ST) MSK (ST) MCK- MAK- MSK- CONN- FIRST MS- INT. MS- LAST MS- TO OTHER CONN D M- CB -48 MCK(E) MAK(E) MSK(E)

MSK MCK MAK L U 700

INTERFACE AND CONTROL CKT

SCAN POINT MB

(YY) MCB3 24 23 12 11 (YW) (YW) CB LL FR 3 CB LL FR 2 CB LL FR 1 CB LL FR 0 TO TRANSFER FRAMES

FS 28
MARKER BUSY & FUSE ALARM CONTROL CKT.

MCBO MCB1 (18) MCB2 (YY) MCB3 CB LL FR 00 CB LL FR 09 CB LL FR 10 CB LL FR 19 CB LL FR 20 CB LL FR 29 CB LL FR 30 CB LL FR 39 CB LL FR 40 CB LL FR 49 CB LL FR 50 CB LL FR 59 CB LL FR 60 CB LL FR 69 CB LL FR 70 CB LL FR 79

TO 2 WIRE FRAMES ASSOC WITH THIS MKR

TO 4 WIRE FRAMES

HFA L U 2500 HFA 10,000 +130V

MJ 800 TRA TAL HFA1 290 HFA 10 FA L U 2500 FA FA1 MJ

MFG 48V M.T.F. JACK LAMP & KEY CKT. FG FA1 FA1 FA 7

MISC. CKT. +130V CLOSED BY BLOWN FUSE FA FA1 MJ

ALARM CKT. MJ

FG FA3 FA2 TA TRT TRA TAL AR AR KEY B

UNO3 M-D- BG- M-D-MB M.T. F. JACK LAMP AND KEY CKT. MBL AMB MB TM BX

TAL L U 2500 TAL MRLI TRTR TRTR

TRA L U 2500 TRA 1000 TRB TRA TRA FA FAI L U 2500 FAI

MB TO OT TST (YO) (YN)

LINE INS. TEST CONTROL CKT. MCK MS MB MIT MC MS -48 MIT FA FAI

M9 -48V POWER RINGING AND TONE FR. CKT.

MB L U P-1175 2L 2U S-1075 MB FAI -48

MCBO AMB L U 2000

AB AMB AMB AB TO OTHER DIAL TONE MARKERS OR TO ALL MARKERS BUSY CKT (SEE NOTE 117)

OAT L U 700 OAT OAT1 MB MB MCBO L U 700

M.T.F.C. MIT TO ETS POWER AND DATA INTERFACE CKT MBS MB

MCBI L U 700

AMB MCBI (ZO) 23 (ZO) AMB AMB TO OTHER DIAL TONE MARKERS OR TO MASTER TRAFFIC CONTROL CKT OR TO MARKER CONN CKT (SEE NOTE 117)

TM L U 270 MAK MCK MSK TM MXT TRLA DIS2 CKGI SNK MCBO MSK VTK (VQ) (VQ)

(18) MCB2 L U 700

(YY) MCB3 L U 700

TRAFFIC USAGE RECORDER CKT. MAK MCBI MB MR MBM

DISA L U 270 DISA DIS2 TRLA MB MCBO TM

LINE LINK MKR. CONN. CKT.

TO OTHER LL M.C. SERVED BY SAME MKR. TO OTHER M- RELAYS IN SAME LL M.C.

XTC XTCI IL IU R1175 STX MAK TR2A OC TC TCI -48 M.T.F.C. TCI

DIAL TONE MARKER CIRCUIT (2)

ISSUE 43B

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BELL TELEPHONE LABORATORIES, INC

FS 29
AUXILIARY CROSS DETECTING RELAYS

TX
L U
700
NO CONNECTIONS

XLG
-48 2L 2U S-400 XLG 4

XATS
-48 L U 700 XATS 4
3,7 (W1,W0) XTS
7,5 ONX
5 (V0) XJSI 7
7,5 (W1,W0) XJS 10
3,7 XAJS 4
XAJS
-48 L U 700

XALC
-48 L U 700 XALC 4
(XR,WP,W0) XLC
(SEE TABLE A)
CKGI 7
RCYI 10

ONX
-48 L U 700 RAVI 5 DCTI 8
1

XAF
-48 L U 700 XAF 4
COX 12 (W1,W0) XF 3,5 3,7
6 TRST

XAJC
-48 L U 700 XAJC 4
COX 6 (V1,W0) XJC 3,5 3,7
5 TRST

XACH
-48 L U 700 XACH 4
1 2 XCH

COX
-48 L U 700 MXT 1 COX 10
(UD) 8 XAVGB
DISI 3 TRB 4
TRLA 9 TRTR 12
(UD)

TABLE A

CONTACT	OPTION	
	XR,WP	WO
MAKE	3	7
ARMATURE	7	5
BREAK	4	4

LOLA NOLA
10 2
XCF (2B) (2A)
-48 2L 2U S-1075 XCF 4

XTGI
-48 2L 2U S-1075 XTGI (Y,W) 4

XVGA
-48 2L 2U 400 XVGA 4

XCL
-48 2L 2U S-690 XCL (V) 4

XTC
-48 2L 2U S-1075 XTC 4

XTCI
-48 2L 2U S-1075 XTCI 4

XBT
-48 2L 2U S-1075 XBT 4

XLS
-48 2L 2U S-850 XLS 4

XTRK
-48 2L 2U S-1075 XTRK 4

XTRL
-48 2L 2U S-1075 XTRL 4

XTSI
-48 2L 2U S-1075 XTSI 4

XPG
-48 2L 2U S-850 XPG 4

XSL
-48 2L 2U S-2700 XSL 4

XAJG
-48 L U 700 XAJG 4
3,7 (WN,WO) XJG 7,5

XALR
-48 L U 700 XALR 4
3,7 (WN,WO) XLR 7,5

XHG
-48 2L 2U S-630 XHG 4

XLV
-48 2L 2U S-690 XLV 4

XAVGB
-48 L U 700 XAVGB 4
(UC) XVGB 1 2
(UD) XCW 118 /E5

XABI
U L 700 -48
(VX) XABI 4 7 XAB 5

(30) XWB 38E1

DRAWING ISSUE
1
2D
3D
9B
12D
22D
28D
30D
34A

DIAL TONE MARKER CIRCUIT
(2)
BELL TELEPHONE LABORATORIES, INC
$S
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34
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SD-26001-01-B29

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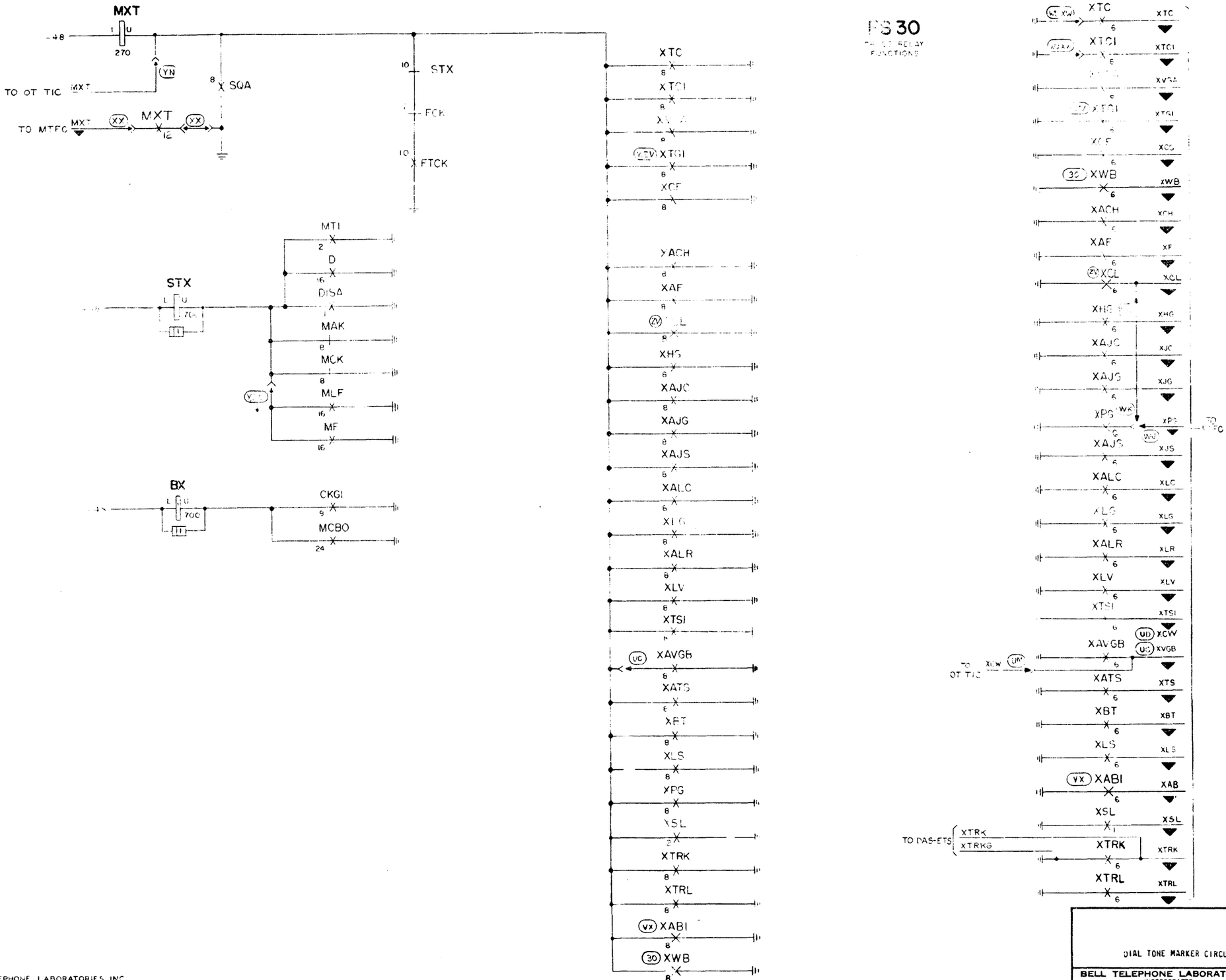
MXT
-48
1
U
270
TO OT TIC MXT
YN
8
SQA
TO MTFC MXT
XY
MXT
12
XX
10
STX
FCK
10
FTCK
STX
L
U
70C
11
MTI
2
D
16
DISA
MAK
8
MCK
8
MLF
16
MF
16
BX
L
U
70C
11
CKGI
9
MCBO
24
XTC
8
XTCI
8
XVRA
8
YZV XTGI
8
XCF
8
XACH
8
XAF
8
ZV XCL
8
XHG
8
XAJC
8
XAJG
8
XAJS
6
XALC
6
XLG
8
XALR
6
XLV
8
XTSI
6
UC XAVGB
6
XATS
6
XBT
8
XLS
8
XPG
8
XSL
8
XTRK
8
XTRL
8
VX XABI
8
30 XWB
8
PS 30
OF OF RELAY FUNCTIONS
WX XW
XTC
6
XZAA
XTCI
6
XVRA
6
ZZ XTGI
6
XCF
6
32 XWB
6
XACH
6
XAF
6
ZV XCL
6
XHG
6
XAJC
6
XAJG
6
XPG
WX
6
WJ
XAJS
6
XALC
6
XLG
6
XALR
6
XLV
6
XTSI
6
UD XCW
UC XVGB
XAVGB
6
TO OT TIC
XCW
UM
XATS
6
XBT
6
XLS
6
VX XABI
6
XSL
6
TO DAS-ETS
XTRK
XTRKG
XTRK
6
XTRL
6
XPG
30
DRAWING ISSUE
1 WM
2D AWE
3D FMR
19B CHM WM
12D J E
16D KMD EDM APR
20D SSV
22D PH
24D KMT CTL
30D
DIAL TONE MARKER CIRCUIT
2
BELL TELEPHONE LABORATORIES INCORPORATED
SIZE 6S
SD-26001-01-B30
ISSUE 43B
BELL TELEPHONE LABORATORIES, INC
PRINTED IN U.S.A. E-7421 (1-52)
SD-26001-01-B30

FS 31
MISC. CONTROL
WITH M.T.F.

MASTER TEST FRAME CONN. CKT.

MASTER TEST CONTROL CKT

MT1 12 — MT2K — T2

MT4 11 — (2WR) — MT14 11 — MT3K — T3 — FS KEY — NTFS KEY — TKS

MT24 11 (17) (17)

MT9 12 — MT9K — T3

TO DAS-ETS MTK

7 (ZO) MT8A

MT8 9 — MT8K — T3

NTC — FI — KTS — KJSQ — KCH — KJSQ — TS KEY — NTTS KEY — NTB

KEY JSQ5 — KEY JSQ0

MT8K — MT8K — MT8K — -48

KCH

MC — FAA KEY — FAB KEY — MFCI — -48

-48 — TRST 226 — TRTR 9 — TRB 5 — TRST 3 (YO) (YN) — TRST — MPR-

TRST 2 — TRST 1 (YO) (YN) — MKB — MKB2 — -48

7 TRB — (YO) (YN) — CI — M- — M-

(YO) (YN) — MKA — MKA2 — -48

RON L U 700 — -48 — RON — RON — ONE SET OF CONTACTS FOR EACH MKR.

EXB

EXG — (YO) (YN) EXG — C5 — R5 — EX

EXB — (YO) (YN) EXB — C5

OT TIC

MKA CI MKR TRST LYB EXG

MPR2 MPR2 B4 B4

MKA2 MKB BX EXG

-48 -48 -48

DRAWING ISSUE

1	WM
2D	KFR
3D	FMB
5D	
7B	
9B	CH WM
16D	TBD
18D	
22D	MB

SD-26001-01-B31

BELL TELEPHONE LABORATORIES, INC

PRINTED IN U.S.A. E-7421 (1-52)

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

ISSUE 4 3B

SD-26001-01-B31

FS 32
MARKER TEST
RELAY OPERATION

INTERFACE AND CONTROL CKT

MASTER TEST FRAME CONN. CKT.

MASTER TEST CONTROL CKT.

MASTER TEST FRAME JK, LP, & KEY CKT

AUTO. MONITOR REG. & SENDER TEST CKT.

ORIG. REG CKT OR TRANSFER TRUNK CKT

TRUNK LINK & CONN CKT

NO. TEST CONN CKT

LINE, LINE LINK & CONN CKT

LINE INS TST CONTROL CKT

TRK. LINK & CONN CKT.

LINE, LINE LK. & CONN CKT.

MASTER TEST FRAME TROUBLE INDICATOR & CONNECTOR CKT

MASTER TEST CONTROL CKT

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

SD-26001-01-B32

ISSUE 44B

FS 32
MARKER TEST
RELAY OPERATION

INTERFACE ALL. CONTROL CKT

MASTER TEST FRAME JK, L.P. & KEY CKT

AUTO. MONITOR REG. & SENDER TEST CKT.

ORIG. REG CKT. OR TRANSFER TRUNK CKT

TRUNK LINK & CONN CKT

NO. TEST CONN CKT

LINE, LINE LINK & CONN CKT

MASTER TEST FRAME CONN. CKT.

MASTER TEST CONTROL CKT.

MASTER TEST FRAME TROUBLE INDICATOR & CONNECTOR CKT

TRK LINK & CONN CKT

LINE, LINE LK. & CONN CKT

LINE INS TST CONTROL CKT

TO ALL OTHER MKRS

MULT TO OTHER W.S. D.T. MKRS.

MULT. TO ALL OTHER MKRS.

MULT. TO OTHER W.S. D.T. MARKERS

TO OTHER MKRS.

MULT. TO ALL OTHER MKRS IN SAME MKR. GROUP

TO OTHER D.T. MARKERS

WHEN A PARTICULAR TRUNK LINK FRAME IS TO BE SELECTED

WHEN A PARTICULAR TRUNK LINK FRAME IS TO BE SELECTED WITHOUT FIRST TESTING FOR ICLE TRUNK ON THE FRAME

BELL TELEPHONE LABORATORIES, INC

DIAL TONE MARKER CIRCUIT

SD-26001-01-B32

ISSUE 16A

PRINTED IN U.S.A.

SD-26001-01-B32

(17) FS37
IDLE TRK LK FR TEST AUXILIARY

TO OTHER MARKERS

TO MASTER TEST FRAME CONTROL CKT.

(ZZ) FCR20-23
(Y,ZV) FCM20
FCD20

TO OTHER CORRESPONDING (FC-) RELAYS FOR OTHER DIAL TONE MARKERS ASSOCIATED WITH THE CORRESPONDING TRK LK FRAME

FTC29 L U 400
FTC21-28 L U 400
FTC20 L U 400

MT24 / MT29 — FTC29 10, FTC28 9, FTC27 8, FTC26 7, FTC25 6, FTC24 5, FTC23 4, FTC22 3, FTC21 2, FTC20 1

FTC-,FR29 10
FTC-,FR28 9
FTC-,FR27 8
FTC-,FR26 7
FTC-,FR25 6
FTC-,FR24 5
FTC-,FR23 4
FTC-,FR22 3
FTC-,FR21 2
FTC-,FR20 1

FB29 L U 400 — -48
FB21-28 L U 400 — -48
FB20 L U 400 — -48

BC20: FB29 10, FB28 9, FB27 8, FB26 7, FB25 6, FB24 5, FB23 4, FB22 3, FB21 2, FB20 1

FB29-28

FTC-(D)
FTC-(MF)
FTC-(RO-3)
FTC-(L)
FT-
ORIG REG CKT ON
FTC-(MF)
FTC-(RO-3)

TRUNK LINK & CONN CKT ASSOCIATED WITH THIS MKR

TO OTHER ODD MARKERS
FBO
M-

TO OTHER EVEN MARKERS
FBE
M-

FS 38
TRK LK FR SELECTION AND MEMORY CIRCUIT AUXILIARY

FM4 — 2 200
FM3 — 3 202
FM2
FM1
FM0
FMG25 — 6
FMG20 — 6
OF30
EF30

FTC29 FB29
FTC28 FB28
FTC27 FB27
FTC26 FB26
FTC25 FB25
FTC24 FB24
FTC23 FB23
FTC22 FB22
FTC21 FB21
FTC20 FB20

FS29 U L 270 — -48
FS20 U L 270 — -48

FS 21-28

FS20 — 4 2A5

-2B0

FMG20
FS20-24 — 2
FMG25
FS25-29 — 2

5 2B7
6 2A9

DRAWING ISSUE
30D
98
12D
300

DIAL TONE MARKER CIRCUIT (2)
SD-26001-01-B33
ISSUE 30D
BELL TELEPHONE LABORATORIES

SD-26001-01-B33

FS39

TRUNK LINK JUNCTOR FRAME SELECTION
(SEE NOTE 1)

F (R) — (W1,W2) XF — (W1,W0) F 1700±1%, 1920±1% — P-10±10% 12±10% 6F — S-200 ±1% ±2% — (Y1) — BX

FTB0 — FTB1 — JG0 — JG1 — (N) TTF

P6 — 3TLF — (18) P7A — P9A — P2 — P3 — P4 — (15) P0A — P1A — P5A

(N) TTF — 2TLF — (18) P7A — JG3 — (T) STF — (T,WS) PR

JG2 — JG1 — JG4

STF — (N) TTF — JG1 — 4TLF — (18) FTA2 — 5TLF — 7TLF — 8TLF — 9TLF — (15) 6TFA — (18) P8A — P0A — P2A — P9A

JG4 — P6 — (18) P7A — JG2 — 7TLF — 6TLF — P2 — P0

FTB2 — JG0 — FTB3 — (VJ) — (N) (18) FTB4 — JG0 — (18) FTB5 — PR

JG1 — JG4 — 40F — JG2 — P0 — P1 — P3 — JG2 — P2 — P4 — P7 — P8 — 20F

(US) — FUT4,5 — FUTO-3

RF — M- — RF

EF — M- — EF

SEF — M- — SEF

TRK LK & CONN CKT

RF, EF, SEF — MTFC

DRAWING ISSUE		
5D	JG1	
9B	CH	WN
15D	PRH	DM
	AMP	
22D	PH	TBS
	AMP	
23A	KM1	
	GDL	
	ABH	
28D	DM	
33D		
35D		

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

35

SD-26001-01-B34

SD-26001-01-B34

PART OF FS 12

CLASS OF SERVICE REGISTER & CHECKER

TO DAS-ETS

TRUNK LINK & CONN CKT

TRANSFER TRUNK CKT

ORIGINATING REGISTER CKT

MASTER TEST FRAME CONNECTOR CKT

DRAWING ISSUE

16D	ALT CON AND
18D	RLP
19A	SSW
26D	JGS
28D	MRK
30D	

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-B35

SD-26001-01-B35

PART OF FS 12

CLASS OF SERVICE REGISTER & CHECK R

TO DAS-ETS

CST9 CST8 CST7 CST6 CST5 CST4 CST3 CSA0-9 CS90-99 CS80-89 CS70-79 CS60-69 CS50-59 CS40-49 CS30-39

GTL2 CT2 CST2 GTL3 DTA CTI CSTI CTO CSTO CGBI CGAI CSO-9 CSU0-9 CSA0-9 CS20-29 CSO-9 CSU0-9 CS10-19 CSO-9 CSU0-9 CS00-09

DTG DTGG KGI TO DAS-ETS

AO AOMR PBX PLNC PLN5 PLN7 MCN

ZSYI MASTER TEST FRAME CONNECTOR CKT

NCSL DT GTL2 PLNC PBX5 PLN PLN7 2P 2PMR PBX7 MAN CN AC8 WBT NPBX GTL3 GTL2 MCN MPBX AOMR AO CN 2P DTB

TRUNK LINK & CONN CKT

TRANSFER TRUNK CKT

ORIGINATING REGISTER CKT

LKF N DAT TST LKF 5D F PBX5 F PLN F 2P F SSR F MAN F CN M- LV- F DD8 F DD9

DRAWING ISSUE

16D	MLT CONF AMP
18D	RLR
19A	SSW LINE
26D	LGS
28D	WIRE
300	

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-B35

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

SD-26001-01-B35

STABILO

FS 45
CLASS OF SERVICE RATE REGISTER

DRAWING ISSUE
16D TBD
300

TO DAS-ETS
PV
MPBX
TAO

TAO
MPBX
RV

CSR50-59 CSR20-29 CSR40-49 CSR10-19 CSR30-39 CSR00-09

CSA0-9 CGBI CGAI CT2 CTI CSGB CTO CSR0-9 CSGA

GTL3 GTL2 DTA WB2

TRUNK LINK CONN CKT
ORIGINATING REGISTER CKT
M-
RV

ISSUE
43B

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES INCORPORATED
6S
SD-26001-01-B36

SD-26001-01-B36

FS 46

TRANSMITTAL AND CHECK OF CU-, CRU-, CGA, CGB, AND CGC INFORMATION

SEE NOTE 1

CUK1 CUK2 CSRK1 CSRK2 CSGK CGAI CGBI

CU7 CU4 CU2 CU1 CU0

CS-0 CS-7 CS-8 CS-9 CS-4 CS-5 CS-6 CS-2 CS-3 CS-1

CSR7 CSR0 CSR4 CSR5 CSR6 CSR2 CSR9 CSR1 CSR8 CSR0 CSR7

CRU7 CRU4 CRU2 CRU1 CRU0

MTFC

TO MTFC OR OT TIC AND TO DAS-ETS

GTL3 GTL2

XCS TX XCS 9A1 XCS 12H3

CONTACT 13E0

CSGA CSGB CSGC CGA CGB CGC

CGA,B,C

TRUNK LINK & CONN CKT

ORIGINATING REGISTER CKT

TRANSFER TRUNK CKT

CRU0,1,2,4,7

CU0,1,2,4,7

M- F LKF

CRU0/7 CGA, CGB CU0/7 CU0/7 CGA,CGB, CGC CRU0/7

-48

SHEET NOTE:

1. CS-RELAYS ARE DESIGNATED CSO-9 "YB" OPTION OR CSUO-9 "YC" OPTION. WHERE TWO CONTACT NO. ARE SHOWN "YB" OPTION USES CONTACT 6, "YC" OPTION USES CONTACT 3.

DRAWING ISSUE

16D	NSC	
18D	BB LW PH	
22D		
24D		

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-837

SIZE 6S

SD-26001-01-837

STABILOK

WIDEBAND TRANSFER LINK CKT

DIAL TRANSFER TRUNK CKT

WIDEBAND TRANSFER TRUNK CKT

TRANSFER TRUNK LINK CONNECTOR CKT

DRAWING ISSUE 300 33D

LVO-3 SWITCH GROUP "B"

VB00-19 2910

LVO-3 SWITCH GROUP "A"

VA00-19 2910

LKF

F- 270

CK 130

DC 45

DK FO-9 DC -48

SC -48

DK FO-9

DK DK DC CK -48

XSM

DK

700 -48

ON

XSM XSM XSM L U 16 FO-9 -48

F9 LA/B- SEL 9

FK -48

F9 F8 F1 F0

FO LA/B- SEL 0

F- F-

M- M- M- M- M- M- M-

XWB WBK WSC WGA WGR WFK WSM

FS 47
WIDEBAND TRANSFER LINK CONTROL

(VY) LXPI 10

(30) XWB L U 700 -48 23E7 XWP 1

(30) WB2 7

TO MASTER TEST FRAME CONNECTOR CKT

WGB WGA

(30) WDCI L U 700 -48

WDCI

(30) WTK

(VX) XAB 9 1 P-230 ±10% 8 2 S-210 ±10% -48

(30) WB2 8

(VX) WGB 2kΩ 9 (VX) WGB

(VX) WGA 2kΩ 9 (VX) WGA

(VX) ABK L U 700 -48

(30) WTK 3

JXPA 7

(VY)

(30) WTK L U 700

(30) WTK 5

(30) WDCI 7

ONX 2

(VY) WSM R -48

(VY) WSMA R -48

(VX) WGA L U 700 -48 WGA

(VX) WGB L U 700 -48 WGB

FR0 FUT0 1 (30) WTK 2 (VX)

FR1 FUT1 1

FR2 FUT2 1

FR3 FUT3 1

33

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-B38

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-B38

APP. FIG. 1

RELAY

DESIG	2W0		4W0		BC0		BCA0		[10]FB0-9		BCB0		FCD0		FCD0		FCM0		FMG0		FMG5		DTO		DESIG
CODE	AF132		AF132		AF504		AF504		AF4		AF504		AF501		AF504		AF501		AF311		AF511		AF132		CODE
OPTION	YY		ZY				ZY				/W		T		V		Y,ZV						YW		OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	3A7	M	3B7	M		M				M		BM		M		BM						M	3B7	12
11	M	3A7	M	3B7	M		M				M		M	1G8	M	1G8	M	1H8					M	3B7	11
10	M	3A7	M	3B7	M	1C6	M	1C6	M		M	1D6	BM	1E4	M	1E4	BM	1E4	M	2G9	M	2E9	M	3B7	10
9	M	3A7	M	3B7	M	1C6	M	1C6			M	1D6	M	1E4	M	1E4	M	1E4					M	3B7	9
8	BM	1F6	BM	1D6	M	1C6	M	1C6	BM		M	1D6	BM	1E4	M	1E4	BM	1F4	BM	2F0	BM	2D0	BM	1D7	8
7	M	3A7	M	3B7	M	1C6	M	1C6			M	1D6	M	1F4	M	1F4	M	1F4	B		B	2G6	M	3B7	7
6	BM	3A1	BM	3A1	M	1C6	M	1C6	BM	2F3	M	1D6	BM	1F4	M	1F4	BM	1F4	BM	2D7	BM	2D7	BM	8G2	6
5	M	3A7	M	3B7	M	1C6	M	1C6			M	1D6	M	1G4	M	1G4	M	1G4					M	3B7	5
4	M	3A7	M	3B7	M	1C6	M	1C6	M		M	1D6	BM	1G4	M	1G4	BM	1G4	M	2E7	M	2E7	M	3B7	4
3	M	3A7	M	3B7	M	1C6	M	1C6			M	1D6	M	1G4	M	1G4	M	1G4					M	3B7	3
2	M	3A7	M	3B7	M	1C6	M	1C6			M	1D6	BM	1H4	M	1H4	BM	1H4					M	3B7	2
1	M	3A7	M	3B7	M	1C6	M	1C6			M	1D6	M	1H4	M	1H4	M	1H4					M	3B7	1
COIL		3F4		3E4		1F6		1E6		1C6		1D7		26A9		26A9		26B8		2G9		2E9		3G4	COIL

RELAY

DESIG	[10]FS0-9		[10]FTC0-9		MT4		MT9																		DESIG
CODE	AF40		AF527		AJ12		AJ12																		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EM				EBM		EBM	31C3																	12
11					EBM	31B2	EBM	27C6																	11
10	M	4F7	M	2F5	EBM	1E1	EBM	1E3																	10
9					EBM	1E1	EBM	1E3																	9
8	EBM	3A5	BM		EBM	1E1	EBM	1F3																	8
7	B				EBM	1F1	EBM	1F3																	7
6	EMB	2D5	BM	2F2	EBM	1F1	EBM	1F3																	6
5					EBM	1F1	EBM	1G3																	5
4	M	3E1	M	2C5	EBM	1G1	EBM	1G3																	4
3					EBM	1G1	EBM	1G3																	3
2	M	2D8			EBM	1H1	EBM	1H3																	2
1	M	2D8			EBM	1H1	EBM	1H3																	1
COIL		2D4		1G2		32B5		32D5																	COIL

NETWORK

DESIG	LOC	CODE
(ZY) 2W0	3F4	185A
(ZY) 4W0	3D4	185A
BC0	1F7	185A
(ZY) BCA0	1E6	185A
(YW) BCB0	1D7	185A
[10]FB0-9	1C6	185A
(V,T) FCD0	26A8	185A
(Y,ZV) FCM0	26C8	185A
FMG0	2G9	185A
FMG5	2E9	185A
[10]FS0-9	2D4	185A
[10]FTC0-9	1F2	185A
(YW) DTO	3G4	185A

APP. FIG. 2

RELAY

DESIG	ZW10		4W10		BC10		BCA10		[10]FB10-19		BCB10		FCD10		FCD10		FCM10		FMG10		FMG15		DTO		DESIG
CODE	AF132		AF132		AF504		AF504		AF4		AF504		AF501		AF504		AF501		AF511		AF511		AF132		CODE
OPTION	YY		ZY		Z		ZY				YX		WY		V		Y,ZV						YX		OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	3A7	M	3B7	M		M				M		BM		M		BM						M	3B7	12
11	M	3A7	M	3B7	M		M				M		M	1G8	M	1G8	M	1H8					M	3B7	11
10	M	3A7	M	3B7	M	1B6	M	1B6	M		M	1C6	BM	1A4	M	1A4	BM	1B7	M	2D9	M	2B9	M	3B7	10
9	M	3A7	M	3B7	M	1B6	M	1B6			M	1C6	M	1B4	M	1B4	M	1B4					M	3B7	9
8	BM		BM		M	1B6	M	1B6	BM		M	1C6	BM	1B4	M	1B4	BM	1B4	BM	2B1	BM	2A1	BM		8
7	M	3A7	M	3B7	M	1B6	M	1B6			M	1C6	M	1B4	M	1B4	B	2D7	B	2G7	M	3B7			7
6	BM		BM		M	1B6	M	1B6	BM	2C3	M	1C6	BM	1C4	M	1C4	BM	1C4	BM	2D7	BM	2D7	BM		6
5	M	3A7	M	3B7	M	1B6	M	1B6			M	1C6	M	1C4	M	1C4	M	1C4					M	3B7	5
4	M	3A7	M	3B7	M	1B6	M	1B6	M		M	1C6	BM	1C4	M	1C4	BM	1C4	M	2E7	M	2E7	M	3B7	4
3	M	3A7	M	3B7	M	1B6	M	1B6			M	1C6	M	1D4	M	1D4	M	1D4					M	3B7	3
2	M	3A7	M	3B7	M	1B6	M	1B6			M	1C6	BM	1D4	M	1D4	BM	1D4					M	3B7	2
1	M	3A7	M	3B7	M	1B6	M	1B6			M	1C6	M	1D4	M	1D4	M	1D4					M	3B7	1
COIL		3F4		3E4		1F6		1F6		1B6		1E7		26B9		26B9		26C8		2D9		2B9		3H4	COIL

RELAY

DESIG	[10]FS10-19		[10]FTC10-19		MT14		MT19																		DESIG
CODE	AF40		AF527		AJ12		AJ12																		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EM				EBM		EBM																		12
11					EBM	31B3	EBM																		11
10	M	4F7	M	2F5	EBM	1A1	EBM	1A3																	10
9					EBM	1A1	EBM	1B3																	9
8	EBM	3A5	BM		EBM	1B1	EBM	1B3																	8
7	B				EBM	1B1	EBM	1B3																	7
6	EMB	2D5	BM	2C2	EBM	1B1	EBM	1C3																	6
5					EBM	1C1	EBM	1C3																	5
4	M	3E1	M	2C5	EBM	1C1	EBM	1C3																	4
3					EBM	1C1	EBM	1D3																	3
2	M	2D8			EBM	1D1	EBM	1D3																	2
1	M	2D8			EBM	1D1	EBM	1D3																	1
COIL		2D4		1C2		32C5		32D5																	COIL

NETWORK

DESIG	LOC	CODE
(ZY) 2W10	3F4	185A
(ZY) 4W10	3D4	185A
BC10	1F6	185A
(ZY) BCA10	1F6	185A
[10]FB10-19	1B6	185A
(V,T) FCD10	26B9	185A
(Y,ZV) FCM10	26C8	185A
FMG10	2D9	185A
FMG15	2B9	185A
[10]FS10-19	2D4	185A
[10]ETC10-19	1C2	185A
(YX) BCB10	1E7	185A
(YX) DTO	3H4	185A

DRAWING ISSUE

12D	3E9
16D	
18D	
26D	

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-CI

BELL TELEPHONE LABORATORIES INCORPORATED — SIZE 6S

SD-26001-01-CI

APP. FIG 3

DESIG / CODE / OPTION	FCK AF51E	FMO AF35	(2) FM1-4 AF35	FMG AF519	FMK AF516	FML AF523	FTCK AF524	FTCK1 AF522	TBK AF514	TBT AF1C	TBTA AF9		DESIG / CODE / OPTION
	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	
12	EM 26S	26S	M 2C9	M	EM 23C8	M 23C8	M 27C3		M	EM	EM 27G1		12
11	F 27B5	1 33F1	M 33F1										11
10	BM	M 2A1	M 2A1	M	M 2B7	BM 1F7	M 30A3	M 3A3	M	M 25F8	M 27F8		10
9		F	M								B		9
8	BM	M 2C1	M 2C1	EM 2A7	EBM	EM 2A7	EBM 27B5	BM	M 4H7	EBM 25F7	EBM 21G5		8
7	B 30A3	B	B 2H7	B 2A6						B 25C1	B		7
6	BM 2H1	M 33G1	M 33G1	BM 2B7	EMB	BM 2D6	EBM 2H0	BM 27C5	M 27C5	EMB 4H7	EMB 25F6		6
5		F	E								B		5
4	BM 2C7	M 2D6	M 2D6	M 2H0	M	BM 1H7	3A3	M	M 5B4	M	EBM 27C8		4
3	M	M 2E1	M 2E1										3
2	BM	M 2C7	M 2C7	M 2E7	M 2E6	M 27D3	M 25C6		M	M 2783	M 27C3		2
1	M 2E6	M 1G1	M 1G1			M 23A8							1
COIL	1G7	2D9	2D9	2E7	2C7	2E7	2C7	2F5	4H6	2784	25F8		COIL

* 4 WORN STRAPPED TO 2

DESIG / CODE / OPTION		TFK1 AF51B	TFK2 AF515			CSGC AJ512 YZ	MT2 AJ12 UA						DESIG / CODE / OPTION
	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	
12		EMB 3C2	BM			EBM	EBM 32G7						12
11		M 3J6	M 27C3			EBM	EBM						11
10		EBM	SM			EBM	EBM						10
9						EBM	EBM						9
8		EBM 2B6	BM 2E87			EMB 13D6	EBM						8
7		B 2E7	B 2338				EBM						7
6		EMB 2D6	BM 27B5			EMB 13D8	EBM 11B/C4						6
5							EBM 11B/C4						5
4		EBM 2A6	BM 25A7				EBM 11B/C4						4
3		M 2DE	M 27A5				EBM 11B/C4						3
2		EBM 11H1	BM 25C6				EBM 11B/C4						2
1		M 3A2	M 28B				EBM 11B/C4						1
COIL		3C6	3C3			12F3	32G3						COIL

DESIG / CODE / OPTION																			DESIG / CODE / OPTION
	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	
12																			12
11																			11
10																			10
9																			9
8																			8
7																			7
6																			6
5																			5
4																			4
3																			3
2																			2
1																			1
COIL																			COIL

DESIG / CODE / OPTION																			DESIG / CODE / OPTION
	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	
12																			12
11																			11
10																			10
9																			9
8																			8
7																			7
6																			6
5																			5
4																			4
3																			3
2																			2
1																			1
COIL																			COIL

NETWORKS

DESIG	LOC	CODE
FCK	1G7	185A
(2) FM0-4	2D9	185A
FMG	2E7	185A
FMK	2C7	185A
FML	2B7	185A
FTCK	2C7	185A
FTCK1	2E1	185A
LFS	11H3	1/2 177C
TBK	4H6	185A
TBT	2784	185A
TFK1	3C6	185A
TFK2	3C3	185A
	11H3	1/2 177C
(YZ) CSGC	12F3	185A

RESISTORS

DESIG	LOC	CODE
FH	2A9	19JP
LFS	11H3	KS-13490,L3 33,000
TBT1	25E7	145A-0.75 MEG
TBT2	25E7	KS-13490,L3 0.1 MEG
TBT3	25E7	KS-13490,L3 1000
TBT4	25F8	18KJ
TFS	3B3	KS-13490,L3 33,000
(YZ) CSGC	37G5	KS-13492,L1, 2000

CAPACITORS

DESIG	LOC	CODE
B) TBT	25F7	4390A
A) TBT	25F7	4410R

ELECTRON TUBES

DESIG	LOC	CODE
TBT	25F7	313CC

DRAWING ISSUE

4AR	CAS	
5D		
16B		
12D		
16D		
18D		
30D		

ISSUE 29D

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-C2

BELL TELEPHONE LABORATORIES, INC 6S

SD-26001-01-C2

APP. FIG. 4

DESIG	2G		3G		2TLF		2-3TLF		3TLF		4TLF		5TLF		6TLF		7TLF		8TLF		9TLF		10TLF		DESIG
CODE	AF504		AF504		AF507		AF507		AF507		AF507		AF507		AF507		AF507		AF507		AF507		AF507		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	18B5	M		M	18AR	M	18AR	M	18C8	M	18C8	M	18BB	M	18C8	M	18B4	M	18D8	M	18E8	M		12
11	M	18B5	M		M	18AR	M	18AR	M	18A2	M	18A8	M	18AR	M	18B8	M	18B8	M	18A8	M	18A8	M	18A8	11
10	M	18C8	M		BM	34C2	BM	18H3	BM	34A2	BM	17B1	BM	17B1	BM	34G2	BM	18C6	BM		BM		BM		10
9	M	18C8	M		M	14H1	"		M	14H2	M	14H2	M	14H3	M	14H1	M	14H2	M	14H2	M	14H2	M	14H3	9
8	M	18D6	M	18D8	BM		BM	18J2	BM	18D4	BM	34D2	BM	34E2	BM	18C4	BM	34G2	BM		BM		BM		8
7	M		M		B		b		B		B		B		B		b		B		B		B		7
6	M	18P8	M	15A8	BM	16H2	BM	16G2	BM		BM		BM		BM	18F8	BM	18F8	BM		BM		BM		6
5	M	18B5	M		M	16E2	M	16F4	M	16B2	M	18E8	M	16F2	M	18D6	M	18C8	M		M		M		5
4	M	16G2	M	18C5	BM	18C2	BM	18J2	BM		BM		BM	16B3	BM	18B4	BM	34E2	BM	34E2	BM	34E2	BM	21C7	4
3	M	16F2	M	16L2	M	16B4	M	16J2	M	16G2	M	16B2	M	16F2	M	16B6	M	16D2	M	16B7	M	16B7	M		3
2	M	16D2	M	16F2	M	16H2	M	16E2	M	16H2	M	16F2	M	16D2	M	16D2	M	16F2	M	16B2	M	16B2	M	16A2	2
1	M	16D2	M	16A2	M	16F2	M	16E2	M	16D2	M	16C2	M	16C2	M	16G2	M	16C7	M	16B2	M	16A2	M	16A4	1
COIL		18F4		16G8		15A9		15A9		15B9		15B9		15C9		15C9		15D9		15D9		15E9		15E9	COIL

DESIG	GC		JGO		JG1		JG2		JG3		JG4		MT7		PO		P1		P2		P3		P4		DESIG
CODE	AF507		AJ503		AJ503		AJ503		AJ503		AJ503		AJ12		AF521		AF521		AF521		AF521		AF521		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	21C9	EBM	34H2	EBM	34E4	EBM	34F4	EBM		EBM	34E4	EBM		M	18C9	M	18F9	M		M	18H1	M	34B3	12
11	M	18H1	EBM	16E5	EBM	16F5	EBM	16G5	EBM	16E5	EBM	16G5	EBM		M	18G7	M	18G1	M		M	34B3	M	18G2	11
10	BM		EBM	16F6	EBM	16E6	EBM	16F6	EBM	16F6	EBM	16F6	EBM	18H3	M	18F1	M	18H1	M	18G7	M	18G7	M	18F2	10
9	M	17C8	EBM		EBM	34D2	EBM	34G2	EBM		EBM	34F2	EBM	18G3	M	18G1	M	18F1	M	18E2	M	18D6	M	18G6	9
8	BM		EMB	34H2	EMB	17F6	EMB	17E6	EMB	17E6	EMB	17D6	EBM	18F3	BM	34G3	BM	18A5	BM	16A5	BM	16A6	BM	16A6	8
7	B	21E8	EBM	17F6	EBM	17F6	EBM	17E6	EBM	17E6	EBM	17D6	EBM	18F3	M	18E1	M	18E1	M	34G3	M	18E1	M	18D5	7
6	BM	25D4	EMB		EMB		EMB		EMB		EMB		EBM	18F3	BM	16A5	BM	16A5	BM	16A5	BM	16A6	BM	16A6	6
5	M	17F8	EMB		EMB		EMB	34G5	EMB		EMB		EBM	18D3	M	18D1	M	34F4	M	18D1	M	34F4	M	18D1	5
4	BM	17E8	EBM	17C7	EBM	17D7	EBM	17E7	EBM	17E7	EBM	17F7	EBM	18C3	BM	34F4	BM	18C1	BM	34G4	BM	18C1	BM	34G4	4
3	M	17E8	EBM	17A1	EBM	17B1	EBM	17C1	EBM	17A1	EBM	17B1	EBM	18C3	M	18C1	M	18B1	M	18C1	M	18C1	M	16B8	3
2	M	17D8	EBM	17C7	EBM	34A2	EBM	34F5	EBM		EBM		EBM	18B3	M	18A1	M	18B1	M	18C1	M	16B8	M	18B2	2
1	M	17D8	EBM	34A2	EBM	34D4	EBM	34D4	EBM	34C1	EBM	34E4	EBM	18A3	M	18A1	M	18B1	M	34B3	M		M	18A2	1
COIL		21E9		16A0		16B0		16B0		16C0		16C0		18H5		14A0		14B0		14B0		14C0		14C0	COIL

DESIG	P5		P6		P7		P8		P9		PA		PB		PC		PNR		STP		STPI		STP2		DESIG
CODE	AF521		AF521		AF521		AF521		AF521		AF506		AF506		AF506		AF506		AF516		AF507		AF504		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	18H2	M	34A3	M	18H2	M	18D9	M	18H2	M		M		M		M				M	21H6	M	21F5	12
11	M		M	18G2	M	18C9	M	18G2	M	18G2	M		M		M		M				M		M	21E8	11
10	M	18F7	M	18F7	M	18F2	M	18F6	M	18F2	M	18G1	M	18G1	M	18G1	M	18G2	M	21C8	BM	21C8	M	21C7	10
9	M		M	18L2	M	18F7	M	18E2	M	18F6	M	18G1	M	18G1	M	18G1	M	18F2			M	18A7	M	18B7	9
8	BM	16A6	BM	16A6	BM	16A7	BM	16A7	BM	16A7	M	18F1	M	18F1	M	18F1	M	18F2	EBM	21E8	BM	18C7	M	18C7	8
7	M	18E2	M	18E1	M	18E2	M		M	18E2	M	18E1	M	18E1	M	18E1	M	18E2			B		M	18E7	7
6	BM	16A6	BM	16A6	BM	16A7	BM	16A7	BM	16A7	M	18E1	M	18E1	M	18E1	M	18D2	EMB	21C8	BM	18B5	M	18E7	6
5	M		M	18D2	M	34H4	M	18D2	M		M	18D1	M	18D1	M	18D1	M	18D2			M		M	16C1	5
4	BM	18C2	BM		BM	18C2	BM	33H3	BM	18C2	M	18C1	M	18C1	M	18C1	M	18C2	M	21C4	BM	18B5	M	16C1	4
3	M	18F1	M	18C2	M	18F1	M	18E2	M	18H1	M	18C1	M	18C1	M	18C1	M	18B2			M	16B1	M	16B1	3
2	M	18H2	M	34G3	M	18B2	M	18G1	M	18B2	M	18B1	M	18B1	M	18B1	M	18B2	M	25D4	M	16B1	M	16B1	2
1	M		M		M	18A1	M	18A2	M	18A2	M	18A1	M	18A1	M	18A1	M	18A2			M	16A1	M	16A1	1
COIL		14D0		16E0		14F0		14F0		14F0		18C7		18E7		18E7		16A7		21C8		21B8		21F4	COIL

DESIG	6TP3				4WT																				DESIG
CODE	AF14				AJ16																				CODE
OPTION					ZY																				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12					EBM	27H6																			12
11					EBM	27G6																			11
10	M	21C8			EBM	10F4																			10
9					EBM	16G7																			9
8	BM				EMB	15C7																			8
7					EBM	10E4																			7
6	BM	21B9			EMB	24H8																			6
5					EMB	16C8																			5
4	M	21D8			EBM	10C4																			4
3					EBM																				3
2	B				EBM	10B3																			2
1					EBM																				1
COIL		21D9				3E4																			COIL

NETWORKS

DESIG	LOC	CODE
2G	18F8	185A
3G	18G8	185A
(2W) 4WT	3E4	185A
[5] GC	21E9	185A
[5] JGO-4	16B0	185A
(D) MT7	18H5	185A
[10] PO-9	14D0	185A
[3] PA, PB, PC	18D7	185A
PNR	16A7	185A
STP	21D8	185A
STPI	21B8	185A
STP2	21F4	185A
STP3	21D9	185A
SZA	15A7	‡177C
SZB	15A7	‡177C
SZC	15B7	‡177C
SZD	15C7	‡177C

DRAW 15S
1
2S
3D
5D
6S
8D
9S
12D
18D
21A
28D
33D
35D

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

SIZE 6S

PRINTED IN U.S.A.

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SD-26001-01-C3

SD-26001-01-C3

E-74SS-A (2-63)

APP FIG. 5

RELAY

DESIG	7Q		20F		40F				FTC		FTI		FTI		FT2		FT2		FT3		FT3				DESIG
CODE	AF506		AF506		AF506				AF522		AF522		AF523		AF522		AF523		AF522		AF523				CODE
OPTION											V		T		V		T		V		T				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	17H5	M		M								M				M				M				12
11	M	17HN	M	1NE6	M	1NE6																			11
10	M	17HN	M	3NC4	M	3NC4			M	1004	M		BM		M		BM	13E1	M		BM	13E1			10
9	M	17G4	M	17E2	M	17C2																			9
8	M	17G4	M	1NC4	M	1NE4			BM		BM	13D1	BM	13D1	BM	13E1	BM	13E1	BM	13E1	BM	13E1			8
7	M	17F4	M	1NF4	M	1ND4																			7
6	M	17F4	M	1NF4	M	1ND4			BM	13D1	BM	13D1	BM	13D1	BM	13E1	BM	13E1	BM	13E1	BM	13E1			6
5	M	17E4	M	1NE4	M	1NC4																			5
4	M	17D4	M	1NG4	M	1NC4			M	1004	M	10C4	BM	10C4	M	1004	BM	1004	M	10E4	BM	10E5			4
3	M		M	1NC4	M	1NE4																			3
2	M	17C4	M	1NE4	M	1LBN							M	10C5			M	10H4			M				2
1	M	17C4	M	1NE4	M	1NAN							M	10F6			M	10F4			M				1
COIL		16C5		1NG0		1NH0				10C8		10C8		10C8		10B5		10B6		10A9		16A9			COIL

DESIG	FTE0		FTE1		FTE2		FTE3		(N)FTE0-3		FTTC		FTTI		FTT2		FTT3				FU.		FUI		DESIG
CODE	AF506		AF506		AF506		AF506		AF 506		AF506		AF506		AF506		AF506				AF523		AF523		CODE
OPTION									ZY																OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	34A1	M	34A1	M	34N1	M	3NH1	M		M		M		M		M				M	10E2	M	10D2	12
11	M	17H3	M	17H3	M	17H3	M	17H2	M		M		M		M		M								11
10	M	17G3	M	17G3	M	17G3	M	17G2	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6			BM	10C2	BM	10B2	10
9	M	17E3	M	17E3	M	17E3	M	17F3	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6							9
8	M	17D3	M	17D3	M	17E3	M	17C3	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6			BM		BM	13G2	8
7	M	17C3	M	17C3	M	17C3	M	17D3	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6							7
6	M	17A2	M	17A2	M	17A2	M	17B2	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6			BM	13F2	BM	13G2	6
5	M	1NE5	M	1NE5	M	1NC5	M		M	11E6	M	11F6	M	11E6	M	11D6	M	11C6							5
4	M	14C5	M	14C5	M	14E5	M		M	11E6	M	11F6	M	11E6	M	11D6	M	11C6			SM		BM		4
3	M	14C5	M	14C5	M	14F5	M	1NH5	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6							3
2	M	1NE5	M	1NE5	M	1NE5	M	1NG5	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6			M	10C2	M	10F2	2
1	M	1NA5	M	14C5	M	14E5	M	1NC5	M	11E6	M	11F6	M	11E6	M	11D6	M	11C6			M	10C2	M	10C1	1
COIL		10A2		10C2		10D2		10E2		10D3		10B2		10C2		10D2		10F2				10C8		10F8	COIL

RELAY

DESIG	FU2		FU6		FU7		[4] FUT0-3		[6] FUT 4-9		GTL1		GTU				MTIE		PR		PR		RQ		DESIG
CODE	AF523		AF523		AF523		AF34		AF34		AF521		AF504				AF34		AF522		AJ501		AF508		CODE
OPTION																			V		T, WS				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	10A2	M	10D1	M	10A1	M	14B6	M	1NB6	N	10A8	M	10A8			M	10H3			EBM	21E6	M	17H4	12
11							M	34G6	M	34G6	M	10B8	M	10B8			M	1063			EBM	34D2	M	17H4	11
10	BM	10C2	BM	10C1	BM	10B1	M	16E5	M	16E5	M	10C5	M	10C8			M	5G5	M	34H2	EBM	34H2	M	17H4	10
9											M	10C8	M	10C8							EBM	1NC2	M	17G4	9
8	BM	13G2	BM	13G2	BM	13H2	M	1105	M	1105	BM		M	13B1			M	27E1	BM	16B7	EMB	16B7	M	17G4	8
7							B		B		M	13F5	M				B	23G3			EBM	1NG1	M	17F4	7
6	BM	13G2	BM	13G2	BM		M	17E3	M	17E3	BM	20B/D6	M				M	11H4	BM	20A/H2	EMB	20A/H2	M	17F4	6
5											M	10D8	M	10D8							EMB	16F4	M	17E4	5
4	BM	13G2	BM	13G2	BM	13H2	M	1703	M	17E3	BM	10E8	M	10E8			M	10F4	M	1NH0	EBM	1NH0	M	17E4	4
3							M	14A9	M	1NB9	M	10F8	M	10F8			M	1004			EBM	17C2	M	17D3	3
2	M	1051	M	1051	M	1001	M	17A3	M	17A3	M	10G8	M	10G8			M	1004			EBM	0	M	17D4	2
1	M	1051	M	1051	M	1041	M	3B6	M		M	10G8	M	10G8			M	10B4			EBM	18A9	M	17C4	1
COIL		10F8		10E8		10D8		10D1		10D1		13A3		10H8				32C4		1605		1605		16B5	COIL

(TB) 20A/H5
(VE 20A/H4

RELAY

DESIG	STF		STF		TTF																				DESIG
CODE	AF522		AJ501		AJ501																				CODE
OPTION	V		T		N																				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12			EBM	21F8	EBM	21F8																			12
11			EBM	34D2	EBM	16B7																			11
10	M	34D1	EBM	34D1	EBM	1NF2																			10
9			EBM	1NF2	EBM	17C1																			9
8	BM	20A/H4	EMB	20A/H4	EMB	16D4																			8
7			EBM	1NC1	EBM	20A/F4																			7
6	BM	16E4	EMB	16F4	EMB	20A/G3																			6
5			EMB	18A8	EMB	1NH0																			5
4	M	1NH1	EBM	1NH1	EBM	1NH0																			4
3			EBM		EBM	34D1																			3
2			EBM		EBM	34C2																			2
1			EBM		EBM	34A2																			1
COIL		16C5		16C5		16D2																			COIL

NETWORK

DESIG	LOC	CODE
7Q	16C5	185A
20F	14G1	185A
40F	14H1	185A
FTO	10C8	185A
(V,T) FTI	10C8	185A
(V,T) [2] FT2,3	10B8	185A
[2] FTB0,1	10A2	185A
[2] FTB2,3	10F3	185A
(ZY) [4] FTS0-3	10D3	185A
[2] FTT0,1	10E4	185A
[2] FTT2,3	10F4	185A
[5] FU0,1,2,4,7	10F8	185A
[10] FUT0-9	10D1	185A
GTL1	13A3	185A
GTU	10H8	185A
(V,T,WS) PR	1605	185A
RQ	16B5	185A
(V,T) STF	16C5	185A
(N) TTF	16D5	185A

RESISTOR

DESIG	LOC	CODE
(XQ) DCT3	20A/G4	18CJ
(XP) DCT3	20A/G4	19EF

DRAWING ISSUE

5D	PRM 1A1E, 1A, MEC
11D	MEC DRM 1E-4
12D	
15D	PRM EDM AND
16D	PEC EDM AND
18D	MD L W
21A	AND EP PSF AND
23A	SCNT CDC AND
26D	GS
28D	REL
30D	
33D	
35D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

6S

ISSUE 43B

SD-26001-01-C4

SD-26001-01-C4

APP FIG. 6

RELAY

DESIG	FP		FTK1		GK		HGG		HGR		HGTO		(8)HGT1-8		HTK		HTK1		JLE		JLO		FR		DESIG
CODE	AF519		AF519		AF519		AJ507		AF519		AF42		AF42		AF516		AF514		AF507		AF507		AJ506		CODE
OPTION	YV,YW																						YW		OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M		M	23B6	M	6H8	M	7H3	M		EMB	7A1	EMB	7E1	EM		M		M		M				12
11							M	7G3			M		M						M		M				11
10	M		M	20A/B1	M	8G2	M	7F3	M		EBM	9E2	EMB	9F2	M		M		BM		BM	24W3	M	8G1	10
9							M	6G8											M	16E3	M	16C3			9
8	BM		BM		BM	23A6	BM	7F3	BM		EBM	9F2	EBM	9F2	EBM		M		BM	15F5	BM	15F5	EBM	23B7	8
7	B	2387	B	20B/E1	B		M	7E3	B	2387	B		B	7H7					B		B				7
6	BM	887	BM	13F2	BM	6H4	BM	7G8	BM		EMB		EMB		EMB	786	M	7G7	BM	15A2	BM	15A3	EBM	9B7	6
5							M	7D3											M		M				5
4	M		M	13C2	M	7H1	BM	7C3	M	7A1	EBM	7A1	EBM	7E1	M	2387	M	2386	BM	15D3	BM	15D3	EBM		4
3							M	7C3			M	7D6	K	7D6					M		M				3
2	M		M	12A0	M	6A1	M	7B3	M	7C6	EBM	7G8	EBM	7G6	M	7A1	M		M	15F2	M	15E2			2
1							M	7A3			M	7A3	M	7E3					M	15F7	M	15F6			1
COIL		8G1		8H1		6G7		7A5		7H1		7A1		7E1		7B5		7F5		15G0		15F0		8G1	COIL

RELAY

DESIG	JSE		JSO		JSQ0		JSQ1		JSQ2		JSQ3		JSQ4		JSQ5		MT8		MT11		SQ0		MT8A		DESIG
CODE	AF523		AF523		AF82		AF82		AF82		AF82		AF82		AF82		AF53		AF53		AF52		AF33		CODE
OPTION																							ZG		OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	15E3	M	15F3	EM	7E2	EM	7F2	EM	7G2	EM	7G2	EM	7H2	EM	7E2					M	15H1	M		12
11					M	7B2	M	7B2	M	7C2	M	7D2	M	7D2	M	7B2							M		11
10	BM		BM		M	6G1	M	6F1	M	6D1	M	6B1	M	6E1	M	6G1	BM	15H1	BM	2607	BM	8C2	M		10
9					M	6H1	M	6F1	M	6D1	M	6B1	M	6C1	M	6E1	B	3103	B	20A/B1			M		9
8	BM	15F7	BM	15F6	EBM		EBM	15H2	EBM	18B4	EBM		EBM		EBM	18C4	BM	15F8	BM	8F4	BM	15G6	M	15D1	8
7					M	583	M	5C3	M	5E3	M	5F3	M	5G3	M	583	B	15G4	B	8C4			B	31C3	7
6	BM		BM		EMB	15G1	EMB	15G6	EMB	15G4	EMB	15G6	EMB		EMB	1803	BM	15D3	BM	8E4	BM	6H2	M	11C1	6
5					K	882	M	8D2	M	8E2	M	8C2	M	PF2	M	8C2	B	15D3	B	8D4			B		5
4	BM	15E1	BM	15F1	EBM	1883	EBM	18C3	EBM	1886	EBM	1882	EBM	18C3	EBM	1889	BM	15F5	BM	8A4	BM	7A2	M	15C1	4
3					M	15F1	M	15G1	M	15C2	M	15C2	M	15D2	M	15G1	B	15G2	B	12A1			M	15B1	3
2	M	1503	M	15E3	M	1582	M	1582	M	15C2	M	15C2	M	15D2	M	15A2	M	15F3	M	27B5	M	15G3	M	15A1	2
1	M	15A3	M	1583	M	15A1	M	1581	M	1581	M	15C1	M	15D1	M	15D1					M	24W3	M	15A1	1
COIL		15E0		15F0		15A0		1580		1580		15C0		15D0		15D0		15D4		3284		15G0		15F3	COIL

RELAY

DESIG	SQ1		SQA		VFG		VFTO		[4]VFT1-4		VGG1		VGG2		VGR		VGTO		[7]VGT1-7		[4]VGT8-11				DESIG
CODE	AF54		AF87		AF520		AF518		AF518		AF520		AF520		AF519		AF518		AF518		AF518				CODE
OPTION							YV		YV				Z								Z				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	15H3			M	8B6	EMB	8B1	EMB	8D1	M	6G7	M	6G7	M		EMB	6G1	EMB	6E1	EMB	6E1			12
11					M		M	20A/A1	M	20A/A1	M	6F4	M	6E4			M	26A3	M	26A3	M	26A3			11
10	BM	15G7	EBM	15D1	M		EBM	8B1	EBM	8D1	M	6G4	M	6C4	M		EBM	9B6	EBM	9C6	EBM	9A7			10
9					M	6G8					M	6E4	M	6B4											9
8	BM	15G7	EMB	30A1	M		EBM	8H6	EBM	8H5	M	6B4	M	6D4	BM	6H8	EBM	9B6	EBM	9D6	EBM	9D7			8
7	B	15G1			B	8H3	B		B	8H5	B	6A0	B	6A0	B	23A7	B		B	6A1	B	6A3			7
6	BM	4H1	EMB		M	8F3	EMB	11B/C3	EMB	11B/C3	M		M		BM		EMB	6B6	EMB	6B6	EMB	6B6			6
5	B	4H2	EM	15A3																					5
4	BM	4H1	EB		M	8C3	EBM	9H6	EBM	9F6	M	6D4	M		M		EBM	0	EBM	0	EBM	0			4
3					M	8E3	M	8F3	M	8D3	M	6H4	M				M	12B1	M	12B1	M	12B1			3
2	M	4H2			M	8D3	EBM		EBM		M	6E4	M		M	6F7	EBM	6A1	EBM	6A1	EBM	6A2			2
1					M	8A3	M	12B1	M	12B1	M	6G4	M				M	6H3	M	6F3	M	6C3			1
COIL		15G3		15F9		8A6		8A1		8D1		6D7		6D7		6A0		6G0		6D0		6C0			COIL

(E) 6G1 a (28) 27C6 — (E) 6E1 a (28) 27C6 — (E) 6E1 a (28) 27C6

RELAY

DESIG	VFTO		[4]VFT1-4				VTK		VTK1																DESIG
CODE	AF100		AF100				AF519		AF514																CODE
OPTION	YW		YW																						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EMB	6B1	EMB	8D1			M	23A7	M	23A6															12
11	M	20A/A1	M	20A/A1																					11
10	EBM		EBM	8H5			M	6F7	M	27B6															10
9	M		M																						9
8	EBM	8H6	EBM	8H5			BM	6H8	M	27C6															8
7							B	6E7																	7
6	EMB	11B/C3	EMB	11B/C3			BM	28G3	M	26A3															6
5																									5
4	EBM	9G6	EBM	9F6			M	26D3	M	6H5															4
3	M	8B3	M	8D3																					3
2	EBM		EBM				M	26D3	M	12C1															2
1	M	12B1	M	12A1																					1
COIL		8A1		8D1				6F7		6A5															COIL

NETWORKS

	DESIG	LOC	CODE
(YV,YW)	FR	8G1	185A
	FTK1	8H1	185A
	GK	8H7	185A
	HGG	7A5	185A
	HGR	7H1	185A
	HGTO	7A1	185A
	(8)HGT1-8	7E1	185A
	HTK	7B5	185A
	HTK1	7F5	185A
	JLE	15G0	185A
	JLO	15F0	185A
	JSE	15E0	185A
	JSO	15E0	185A
	JSQ0	15A0	185A
	[2]JSQ1,2	1580	185A
	[2]JSQ3,4	15C0	185A
	JSQ5	15D0	185A
	SQ0	15G0	185A
	SQ1	15G3	185A
	SQA	15F9	185A

	DESIG	LOC	CODE
(YB)	V	12B1	185A
	VFG	8A6	185A
(YV,YW)	[8]VFT0-4	8D1	185A
	VGG1	6D7	185A
	VGR	6A0	185A
	VGT0	6H0	185A
	[7]VGT1-7	6B0	185A
(Z)	[4]VGT8,11	6D0	185A
	VTK	6E7	185A
	VTK1	6B8	185A

RESISTORS

DESIG	LOC	CODE
[6]HG0,1,2,4,7	9F1	KS-13492,L1 2000
(ZG) WT8	15F3	KS-8512,L4A 2050
V	12B1	KS-13490,L3 33,000
[5] VF0-4	9F5	KS-13492,L1 2000
[5] VG0,1,2,4,7	9C5	KS-13492,L1 2000
(Z) VG10	9A5	KS-13492,L1 2000

DRAWING ISSUE

4AR C.A.S. 5D 6B 7B 9B 11D 12D 16D 18D 28D 30D 33D

SD-26001-01-C5

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

ISSUE 43B

SD-26001-01-C5

APP. FIG. 7

DESIG	MT5		MT6		OT		TSO-4		TSE1		TSE2		OT		PBX5		PLN		PLN5		PLNC		NCSL		DESIG
CODE	AF24		AJ15		AF508		AF516		AJ507		AJ509		AJ510		AF518		AF516		AF518		AF513		AF518		CODE
OPTION				YL										YM		YK		YK		YK		XA		XA	OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M		EBM	5F5			EMB		M	5B4	M				EMB		EMB		EMB		EMB		EMB		12
11	M	27C6	EBM				M		M		M				M		M	13A5	M	35C7	M	35C7	M		11
10	M	4A1	EBM	4G2	M		EBM		M		M	4A1			EBM		EBM	13B6	EBM		EBM		EBM		10
9	M	4A1	EBM						M		M	4B1													9
8	M	4B1	EMB		M		EBM		BM	22D7	BM	4B1	M	5A1	EBM	1337	EBM	1387	EBM		EBM		EBM	1386	8
7	M	4B1	EBM		B	4G4	B		M		M	4C1	B	4G4	B	1327	b	1327	B	1326	B	13A6	B	13C6	7
6	M	4C1	EMB	5G5	M		EMB	5D1	BM	4G2	BM	4C1	M		EMB	1347	EMB	1386	EMB	13A5	EMB	13B4	EMB	13C5	6
5	M	4D1	EMB						M		M	4D1	B												5
4	M	4E1	EBM	4G2	M		EBM	4D3	BM	4 3	BM	4D1	M	4G4	EBM		EBM	2D5	EBM		EBM	1-46	EBM	13A1	4
3	M	4E1	EB				M	4F5	M		M	4E1			M	206/67	M	206/67	M	35D4	M	35B7	M	206/67	3
2	M	4F1	EBM	4G2	M	4G4	EBM	4D2	M	5F5	M	4E1			EBM		EBM		EBM		EBM		EBM		2
1	M	4F1	EBM	4G3			M	4F5	M	27C5	M	4F1			M	3597	M	3507	M	3587	M	35C4	M	35A6	1
COIL		5F5		5G1		4H3		5D1		5D5		5D5		P-4H3 S-5A1		35B7		35E7		35D4		35C4		35A7	COIL

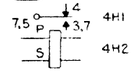
DESIG	PBX7		PLN7																						DESIG
CODE	AF518		AF516																						CODE
OPTION	TF		TG																						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EMB		EMB																						12
11	M		M																						11
10	EBM		EBM																						10
9																									9
8	EBM		EBM																						8
7	b		B																						7
6	EMB		EMB																						6
5																									5
4	EBM		EBM																						4
3	M		M																						3
2	EBM		EBM																						2
1	M		M																						1
COIL																									COIL

RELAYS

[2] ETS, OTS

(WN) 280AF

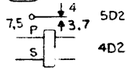
(WO) 316R



[5] TTO-4

(WN) 280FK

(WO) 316K



NETWORKS

DESIG	LOC	CODE
ETS	4H1	½ 177K
ETS1	4G2	185A
(YM) OT	5A1	185A
OTS	4G1	½ 177K
OTS1	4H2	185A
[5] TSO-4	5D1	185A
TSE1	5D5	186A
TSM	22E7	½ 177C
(YK) PBX5	35B7	185A
(YK) PLN	35E7	185A
(YK) PLN5	35D5	185A
(XA) PLNC	35C4	185A
(XA) NCSL	35A7	185A
(TG) PLN7	35D4	183A
(TF) PBX7	35E6	185A

RESISTORS

DESIG	LOC	CODE
ETA	4G1	18EF
OTA	4H1	18EF
TSM	22E8	KS-13490, L3 33,000

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

DRAWING ISSUE

1	JR WM	
2D	PMB	WMH
3D	PMH	JRO
4AR	CAB WMH	AK
8D	WMH WJT	A
9B	CJ WH	TEP
		POB

WORN DRAWING REPRODUCED WITHOUT CHANGE 3-14-61 A.U.L.

15D	PMH EBM AMP	AUD
16D	WJT EBM AMP	B
18D	AMD LMV AMD	C
19A	RLP LMV AMD	
22D	EP TDT AMD	
23A	KMI EDL AMD	
28D	MEL	

ISSUE 423

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-C6

6S

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SD-26001-01-C6

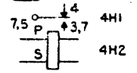
APP. FIG. 7

DESIG	MT5		MT6		OT		[5] TSO-4		TSE1		TSE2		OT		PBX5		PLN		PLN5		PLNC		NCSL		DESIG
CODE	AF24		AJ15		AF508		AF516		AJ507		AJ507		AJ510		AF518		AF518		AF518		AF518		AJ18		CODE
OPTION					YL								YM		YK		YK		YK		YA		XA		OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M		EBM	5F5			EMB		M	5B4	M				EMB		EMB		EMB		EMB		EMB		12
11	M	27C6	EBM				M		M		M				M		M	13A5	M	35C7	M	35C7	M		11
10	M	4A1	EBM	4G2	M		EBM		M		M	4A1			EBM		EBM	13B6	EBM		EBM		EBM		10
9	M	4A1	EBM						M		M	4B1													9
8	M	4B1	EMB		M		EBM		BM	22D7	BM	4B1	M	5A1	EBM	13B7	EBM	13B7	EBM		EBM		EBM	13B6	8
7	M	4B1	EBM		B	4G4	B		M		M	4C1	B	4G4	B	13C7	B	13C7	B	13C6	B	13A6	B	13C6	7
6	M	4C1	EMB	5G5	M		EMB	5D1	BM	4G2	BM	4C1	M		EMB	13A7	EMB	13B6	EMB	13B4	EMB	13B4	EMB	13B6	6
5	M	4D1	EMB						M		M	4D1	B												5
4	M	4E1	EBM	4F2	M		EBM	4D3	BM	4F3	BM	4D1	M	4G4	EBM		EBM	35D6	EBM		EBM	13B6	EBM	13A5	4
3	M	4E1	EBM				M	4F5	M		M	4E1			M	20BA67	M	20BA67	M	35D4	M	35B7	M	20BA67	3
2	M	4F1	EBM	4G2	M	4G4	EBM	4D2	M	5F5	M	4E1			EBM		EBM	35G0	EBM		EBM		EBM		2
1	M	4F1	EBM	4G3			M	4F5	M	27C5	M	4F1			M	35B7	M	35C7	M	35B7	M	35C4	M	35A6	1
COIL		5F5		5G4		4H3		5D1		5D5		5D5		P-4H3 S-5A1		35B7		35B7		35D4		35C4		35A7	COIL

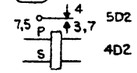
DESIG	PBX7		PLN7																						DESIG
CODE	AF518		AF516																						CODE
OPTION	TF		TG																						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EMB		EMB																						12
11	M		M	35C6																					11
10	EBM		EBM																						10
9																									9
8	EBM	13C7	EBM																						8
7	B		B																						7
6	EMB		EMB	13A4																					6
5																									5
4	EBM		EBM																						4
3	M	20BA67	M	35E4																					3
2	EBM		EBM																						2
1	M		M	35C6																					1
COIL				35D4																					COIL

RELAYS

[2] ETS, OTS
- (WN) 280AF
- (WQ) 316R



[5] TTO-4
- (WN) 280FK
- (WO) 316K



NETWORKS

DESIG	LOC	CODE
ETS	4H1	½ 177K
ETS1	4G2	185A
(YM) OT	5A1	185A
OTS	4G1	½ 177K
OTS1	4H2	185A
[5] TSO-4	5D1	185A
TSE1	5D5	186A
TSM	22E7	½ 177C
(YK) PBX5	35B7	185A
(YK) PLN	35B7	185A
(YK) PLN5	35D5	185A
(XA) PLNC	35C4	185A
(XA) NCSL	35A7	185A
(TG) PLN7	35D4	185A
(TF) PBX7	35E6	185A

RESISTORS

DESIG	LOC	CODE
ETA	4G1	18EF
OTA	4H1	18EF
TSM	22E8	KS-13490,L3 33,000

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

DRAWING ISSUE

1	AR WM
2D	PBX —
3D	PBX —
4AR	CAM WM LNG JUN
8D	LNG WM
9B	CO WM

WORN DRAWING REPRODUCED WITHOUT CHANGE 3-14-81 A.J.L.

15D	PBX ESM AND
16D	NOT ESM AND
18D	AND LW AND
19A	RLP LW AND
22D	EP NOT AND
23A	OAU LOC AND
28D	REL

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

SD-26001-01-C6

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93-10-10036 03

APP FIG. 8

RELAY

DESIG	GTL2		GTL3		DESIG
CODE	AJ700		AJ700		CODE
OPTION					OPTION
	CONT ARR	LOC	CONT ARR	LOC	
24	K	35C6	M		24
23	M	35B6	M		23
22	M	d	M	35D5	22
21	M	36E2	M	36E1	21
20	M	35C5	M	12D2	20
19	M	37C3	M	37D3	19
18	M	37D4	M	37D4	18
17	M	35F6	M		17
16	M	35F6	M	13B3	16
15	M	a	M	a	15
14	M	b	M	b	14
13	M	c	M	c	13
12	M	12C2	M		12
11	M	9F4	M	9F4	11
10	M	9D4	M	9D4	10
9	M	9B4	M	9B4	9
8	M	9H0	M	9H0	8
7	M	9F0	M	9F0	7
6	M	9D0	M	9D0	6
5	M	9B0	M	9B0	5
4	M	37D0	M	37D0	4
3	M	37B0	M	37B0	3
2	M	35C0	M	35E0	2
1	M	11H2	M	10M8	1
COIL		13F6		13B2	COIL

a (YB) 12C7 (YE,YI) 37B4 — (YB) 12F8 (YE,YI) 37B4

b (YB) 12C7 (YC) 12H4 — (YB) 12E8 (YC) 12H3

c (YB) 12C7 (YC) 12G4 — (YB) 12D8 (YC) 12G3

d (XA) 35B6 (VY) 12D1

RELAY

DESIG	2P		2PMR				AO		AOMR		CGA1		CGA1		DESIG
CODE	AF519		AF518				AF519		AF518		AF132		AF522		CODE
OPTION			G						G		XF		XE		OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	20B/G8	EMB	20B/F8			M	20B/G8	EMB		M				12
11			M	35D7					M	35B4	M				11
10	M		EBM	20B/A7			M		EBM	20B/A6	M	37F6	M	37F6	10
9											M				9
8	BM		EBM				BM		EBM		BM		BM		8
7	B	13C3	B	20A/C2			B		B	20A/C3	M	36D4			7
6	BM	13D2	EMB				BM	13C6	EMB		BM	13D8	BM	13D8	6
5											M	36D5			5
4	M		EBM	35D6			M	35A4	EBM	13D4	M	36D6	M		4
3			M						M	35H5	M	35C1			3
2	M	35H6	EBM				M	35H6	EBM	13C4	M	35E1			2
1			M						M		M	35E1			1
COIL		35D7		35D7				35A4		35B4		37E4		37E4	COIL

RELAY

DESIG	CGB1		[2]CLL1,2		CGB1		CN		CSO		[9]CS1-9				CSGA		CSGB				CSGK				DESIG
CODE	AF522		AF522		AF132		AF519		AF529		AF529				AJ502		AJ502				AF522				CODE
OPTION	XE				XF				YB		YE				YE,YI		YE,YI				YE,YI				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12					M		M	20B/G8	M	0	M	0			EBM		EBM								12
11					M				M	35E2	M	35E2			EBM		EBM								11
10	M	37G6	M		M	37G6	M		M	35F2	M	35F2			EBM		EBM				M				10
9					M										EBM	13D8	EBM	13D8							9
8	BM		BM		BM		BM		EBM	13E4	EBM	13E4			EMB		EMB				BM				8
7					"	36D4	B		B	13E4															7
6	BM	13D8	BM		BM	13D8	BM	13C2	EBM	37A1	EBM	37A2			EMB	36D7	EMB	36D6			BM				6
5					M	36D5																			5
4	M		M	13H2	M	36D6	M	13C8	EBM	37A1	EBM	37C2			EBM	37F6	EBM	37F6			M	13E8			4
3					M	35C1			M	12B7	M	12B7			EBM		EBM								3
2					M	35E1	M		M	12B7	M	12B7			EBM		EBM								2
1					M	35E1			M	12B7	M	12B7			EBM		EBM								1
COIL		37F4		9C0		37F4		35F7		12B7		12B7				12D3		12E3				37G4			COIL

a (XG) 35E2 (XF) 12H0 — a (XG) 35E2 (XF) 12H0

RELAY

DESIG	CSTO		[2]CSTX1,2				CSUO		[9]CSU1-9				CTO		CT1		CT2		CUK1		CUK2		DESIG
CODE	AJ502		AJ502				AF522		AJ502		AJ502		AF519		AF519		AF519		AF522		AF522		CODE
OPTION	YC		YC				YC		YC		YC		YB		YB		YB						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	13B3	EBM	13B3					EBM	35E2	EBM	35E2	M		M		M						12
11	EBM		EBM						EBM	35E2	EBM	35E2											11
10	EBM		EBM	13G6			M		EBM	35F2	EBM	35F2	M		M		M		M		M		10
9	EBM	13G6	EBM	13G6					EBM		EBM												9
8	EMB	12E5	EMB	12E5			BM		EMB	13B4	EMB	13B4	BM		BM		BM		BM		BM		8
7													B		B	13E6	B	13E6					7
6	EMB		EMB				BM		EMB	12H0	EMB	12H0	BM	13E6	BM	13E6	BM	13E6	BM		BM		6
5																							5
4	EBM	35F0	EBM	35D0			M	13H5	EBM	37A1	EBM	37C2	M	35F0	M	35E0	M	35D0	M	13H3	M	13H3	4
3	EBM		EBM						EBM	37A1	EBM	37A2											3
2	EBM	12G5	EBM	12H5					EBM		EBM	13H4	M	36D6	M	36D8	M	36D4					2
1	EBM	12F5	EBM	12G5					EBM	13H4	EBM	13H4											1
COIL		12A9		12A9		12F3		12B9		12B9				12D8		12E8				37A0		37D0	COIL

RELAY

DESIG	[2]HGC1,2		MAN				MCN		NPBX		PBX		RK1		RK2		RK3				VFC		[2]VGC1,2		DESIG
CODE	AF522		AF519				AF519		AF519		AF519		AF508		AF508		AF519				AF522		AF522		CODE
OPTION											ZS,YI														OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12			M	20B/H8			M	20B/H7	M	35G6	M	20B/G8					M								12
11																									11
10	M	13F9	M	13D3			M	35F6	M		M	13B8	M		M		M	20B/B6			M		M		10
9																									9
8	BM		BM				BM		BM		BM	13A7	M	23G3	M	23G2	BM				BM		BM		8
7			B	13C3			B	13C4	B		B	13C7	B		B		B	13F4							7
6	BM		BM	13D3			BM	13D3	BM	13C8	BM		M	13A1	M	13A1	BM	13A3			BM		BM		6
5																									5
4	M	13H2	M	35E4			M	35E4	M		M	35B3	M	13B2	M	13B2	M	20B/D5			M	13H2	M	13H1	4
3																									3
2			M	35H5			M	35F.	M		M		M		M		M	13A1							2
1																									1
COIL		9G0		35E7				35E4		35G7		35B4		13D0		13C0		13B3				9E4		9C4	COIL

RELAY

2808A

(X) CGA 37E4 — (X) CGB 37G4

5 — 3 — 2 — 12E2 — 12E2

NETWORK

DESIG	LOC	CODE
2P	35D7	185
(G) 2PMR	35D7	185A
AO	35A4	185A
(G) AOMR	35B4	185A
(XE,XF) CGA1	37E4	185A
(XE,XF) CGB1	37F4	185A
[2] CLL1,2	9C0	185A
CN	35F7	185A
(YE,YI) CSGA	12D3	185A
(YE,YI) CSGB	12E3	185A
(YE,YI) CSGK	37G4	185A
(YC) [3] CSTO-2	12A9	185A
(YC) [2] CSTX1,2	12F3	185A
(YC) [10] CSUO-9	12B9	185A
(YB) CTO	12D8	185A
(YB) [2] CT1,2	12E8	185A
CUK1	37A0	185A
CUK2	37D0	185A

NETWORK (CONT)

DESIG	LOC	CODE
GTL2	13F6	185A
GTL3	13B2	185A
[2]HGC1,2	9G0	185A
MAN	35E7	185A
MCN	35E4	185A
(ZS,YI) NPBX	35G7	185A
(ZS,YI) PBX	35B4	185A
RK2	13D1	186A
RK3	13B3	185A
VFC	9E4	185A
[2] VGC1,2	9C4	185A

RESISTORS

DESIG	LOC
(YE,YI) CSGA	37F5
(YE,YI) CSGB	37F5
(YC) CSTO,1,2,4,7	12G4
(YU) CTO-2	12E4
CUO	37D1
CU1	37C1
CU2	37B1
CU4	37A1
CU7	37A1

CODE

KS-13492,L1,2000

DRAWING ISSUE

31D	CBM WFC CBM
112D	LBP
130	WFM #&C A&Q
150	PRM EBM AUC PEC WAA
160	#HO
180	JAT LW AAD RLP
194	LW AAD
220	EP PAT AAD
280	PEC
300	

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

6S

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APP. FIG. 9

DESIG	CON1		DCT1		DVA				GLH		GLH1		GTI		HMS1		HMT1		HTR		JXPA		JXP1		DESIG
CODE	AF519		AF515		AF515				AJ501		AJ501		AJ503		AJ503		AF518		AJ501		AF519		AJ503		CODE
OPTION					G																				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	24E5	BM	20B/F8	BM				EBM	24C8	EBM	24C6	EBM	24C7	EBM	20B/B5	EMB		EBM	20B/E2	M	20B/E5	EBM	20B/C4	12
11			M	23G2	M				EBM	24D6	EBM	24D6	EBM	24D7	EBM	22F1	M	2585	EBM	20A/C2			EBM	20A/B3	11
10	M	20B/D3	BM	25D4	BM	20B/A7			EBM		EBM	24A6	EBM	24D7	EBM	25C4	EBM	6G9	EBM	25C6	M	20A/E8	EBM	19H1	10
9									EBM	20A/D1	EBM	20A/D1	EBM	24E3	EBM	20A/DC			EBM	25F6			EBM		9
8	BM	24G3	BM	29E3	BM				EMB		EMB	24AQ	EMB	24A0	EMB	21F5	EBM	20A/D5	EMB	25H5	BM	20B/B3	EMB	20B/B3	8
7	B	24B5	B	4A4	B	20A/D1			EBM	25C4	EBM	25C4	EBM	2603	EBM		B	20A/C4	EBM	24M2	B	3864	EBM	20A/D8	7
6	BM	a	BM	20A/C4	BM				EMB	20B/C6	EMB	2303	EMB	24A7	EMB	21H5	EMB	20B/C2	EMB	20A/E7	BM	20B/C3	EMB		6
5									EMB	20A/A8	EMB	24B6	EMB	20B/E1	EMB	20A/C7			EMB	20B/A6			EMB	20A/C3	5
4	B	24E3	BM	13C1	BM				EBM	20A/D7	EBM	24E6	EBM	24B7	EBM	20A/B7	EBM	20A/F2	EBM	20B/C3	M	20B/F5	EBM	20B/D7	4
3			M	23G7	M				EBM	20A/E2	EBM	b	EBM	20A/D8	EBM	20A/D8	M	20B/A7	EBM	20B/C8			EBM		3
2	M	b	BM	20A/E3	BM				EBM	20B/B4	EBM	d	EBM	20B/C4	EBM	20A/C3	EBM		EBM	20A/D1	M	20B/D1	EBM	20A/B8	2
1			M	23G1	M	20A/E1			EBM	24B6	EBM	24E3	EBM	2305	EBM	20A/C5	M		EBM	20A/D1			EBM	20A/B5	1
COIL		24D6		23G1		20B/E8				20A/G9		20B/E0		20B/E6		20B/A8		20B/A8		24H11		20B/G6		20B/F6	COIL

DESIG	LHT		LLTA		LTR		LXPA		LXP1		RCTA		RCTB		SLA		SLFA				RCTA				DESIG
CODE	AF523		AF515		AF505		AF519		AJ503		AF524		A69		AJ503		AF523				AF32				CODE
OPTION											YF										YG				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	20B/E2	M	19H1			M	20B/C2	EBM	25H2	M				EBM	20A/B2	M	20B/C4			EMB				12
11									EBM	2504					EBM										11
10	BM	20A/D5	M	20A/E8			M	20B/C6	EBM	38D3	M				EBM	22C7	BM	23G8			EBM	24D7			10
9									EBM	AB/D5					EBM										9
9	BM	23D6	BM	20B/E3	EBM	20A/G7	BM	20A/C4	EMB	20B/C4	EBM	24C7	EBM	25C4	EMB		BM								8
7							B	20A/C4	EBM	20A/E4					EBM										7
6	BM	20B/D6	M	20B/C4	EMB	20B/D3	BM	20A/C7	EMB	20B/C4	EBM	24D7	EBM	24H4	EMB	20B/B1	BM								6
5									EMB	20B/A6			B		EMB	20A/C3									5
4	M	20B/D4	M	20B/D1	EBM	25C4	M	20B/C8	EBM	25C4	M		M	24G4	EBM		BM								4
3									EBM	19H4					EBM										3
2	M	20B/E1	M				M	20A/D1	EBM	24A7	M				EBM	20A/C8	M	20A/C8			EBM	24B7			2
1	M	20A/F1							EBM	24A4/B5					EBM	20A/B5	M	21B2							1
COIL		20B/E3		19H1		20C/D8		20B/G6		20B/H6		24H4		24G4		20A/C4		20B/C8				24H4			COIL

(YP) FCG 280AE

(YP) JGCK 280CU

(WN) JXP 280FM

(YP) LGCK 280CU

(YF) CON 29CF

(YP) LLT 280CU

LXP 280FM

SL 280CB

(YP) TGCK 280CU

(XS) XLH 280GE, (XR) 280BE

(YQ) CON 316B

(YQ) FCG 316D

(XS) HMT 280FY, (XR) 280A

316A: (YQ) JGCK, (YQ) LGCK, (YQ) TGCK

316B: (YQ) LLT

(YW) FCGB

316C: (WO) JXP, (WO) LXP

DESIG	TTFS		DVC		DVD		CWK		CWF		CWL		NCW		RLH		RLK								DESIG
CODE	AF506		AJ502		AJ502		AK22				AK501				AK31										CODE
OPTION	Y		Y		G		UD		UD		UD		UD		UD		UD								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M		EBM		EBM		EBM	23E0			BM	11B/G2			BM	23G2									12
11	M		EBM	20B/A7	EBM		EBM	23F2			BM				BM	23E6									11
10	M		EBM	20A/C8	EBM		EBM	20A/F1			BM	23C7			BM	11B/F3									10
9	M		EBM	12H/A6	EBM		EMB				BM	20A/G0			BM	24C6									9
8	M		EBM		EMB		EMB				BM	11B/C5			BM	25C4									8
7	M		EBM																						7
6	M		EBM		EMB	20B/E8																			6
5	M								EMB	23C7			BM	11B/G2											5
4	M	11E7	EBM		EBM				EMB	23F5			BM												4
3	M	11E7	EBM		EBM				EBM	11B/E3			BM	23D6			B	25C4							3
2	M	11E7	EBM		EBM	20A/E1			EBM	23G2			BM	23C6			M	11B/B2							2
1	M	11E7	EBM		EBM				EBM	20A/G0			BM	20A/			M	20B/D1							1
COIL		11A7				20B/E8		11B/D3		23E1		11B/B3		11B/		23F1		11B/E1							COIL

CAPACITORS

DESIG	LOC	CODE
CON1	24E4	475AC
CON2	24E3	475F
CON3	24F2	441P
HMT	20B/A2	437QA
(WG) JH	20A/C4	437QA
(WT) JHI	20A/C4	437QA
(WG) LH	20A/F2	437QA
(WG) TH1	20A/D6	437QA
(WG) TH2	20A/D7	437QA
(L) TH3	20A/D7	437CA
XLH	20A/D0	437CA

IND COILS

DESIG	LOC	CODE
CON1	24C4	221H
TH	20A/C7	200CL

REP COIL

DESIG	LOC	CODE
CON	24C3	94M

ELECTRON TUBE

DESIG	LOC	CODE
CON	24E2	313CA

DIODES

DESIG	LOC	CODE
(WG) JH	20A/C5	KS-18701,L3
(WG) LH	20A/F1	KS-18701,L3
(WG) TH	20A/D7	KS-18701,L3
(UT) DCT	20A/G4	426F

NETWORKS

DESIG	LOC	CODE
CON1	24D6	185A
(UD) CWK	11B/D3	185A
CWL	11B/B3	185A
DCT1	23G1	185A
DVA	20B/E8	185A
DVD	20B/E8	185A
GLH	20F/G9	185A
GLH1	20A/E0	185A
GTI	20B/E6	185A
HMS1	20B/B8	185A
HMT1	20B/A8	185A
HTR	25H4	185A
JXP1	20B/F6	185A
JXPA	20B/E6	185A
LHT	20B/E3	185A
LLT	19H0	1/2 177C
LLTA	19H1	185A
LTR	20B/D8	185A
LXP1	20B/H6	185A
LXPA	20B/G6	185A
(UD) NCW	11B/C3	185A
RCTA	24F7	185A
RCTB	24E7	185A
SL	20A/B4	1/2 177C
SLA	20A/B2	185A
SLRK	20B/C8	1/2 177C
(YW) TTFO	10A4	185A
(UW) CON2	24D3	186A
(UX) CON2A	24D3	186B
(UX) CON2B	24D3	186B

RESISTORS

DESIG	LOC	CODE
CON1	24E3	/S-13490,L3,1000
CON2	24E4	145A 180,000
CON3	24D4	145A 20,000
CON4	24C4	145A 200,000
CON5	24A4	18AP
CON6	24D6	18AP
CON7	24F3	18FR
CON8	24F3	145A 12,000
CON9	24F3	145A 12,000
(XL) DCT2	20A/H3	18T
(XM) DCT3	20A/H5	18DA
DCT1	20A/G4	18BS
GLH	24C6	19BM
HMF	20B/A1	18BA
HMS	20B/A1	18KJ
HMT	20B/A3	18AG
(WG) JH	20A/D4	18BA
(WT) JHI	20A/D4	18BA
(WG) LH	20A/G2	18BA
RCTB	24G4	19TL
(WG) TH1	20A/E6	18BA
(WG) TH2	20A/E6	18BA
(L) TH3	20A/E7	198A
(WD) LLT	19H0	18KF
(WE) LLT	19H0	221A 10,100
XLH1	20B/H1	18FA
XLH2	20B/G1	18FD
XLH3	20B/G3	18AC
XLH4	20A/D0	18BH
(YW) DCT4	20A/E3	18S
(YW) DCT5	20A/E3	18J
(XM) DCT6	20A/F4	18CJ
(YL) DCT7	20A/E5	18CJ
(YW) DTA	24D6	19WM
DTB	24E7	18EF
XLH5	20B/G0	18BS

SD-26001-01-C8

ISSUE 42B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC 6S

SD-26001-01-C8

APP. FIG. 9

DESIG	CON1		DCT1		DVA				GLH		GLH1		GT1		HMS1		HMT1		HTR		JXPA		JXP1		DESIG
CODE	AF619		AF615		AF615				AJ601		AJ501		AJ603		AJ563		AF618		AJ501		AF619		AJ503		CODE
OPTION					G																				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	24E5	BM	20B/F5	BM				EBM	24C5	EBM	24B6	EBM	24C7	EBM	20B/B5	EMB		EBM	20A/E2	M	20B/E5	EBM	20B/F4	12
11			M	23G2	M				EBM	24B6	EBM	24A6	EBM	24D7	EBM	3RF1	M	2585	EBM	20A/C2			EBM	20A/B3	11
10	M	20B/D3	BM	25D4	BM	20B/A7			EBM		EBM	24A6	EBM	24D7	EBM	25C4	EBM	669	EBM	25G8	M	20B/E8	EBM	19H1	10
9									EBM	20A/D1	EBM	20A/D1	EBM	24E3	EBM	20A/D0			EBM	25F6			EBM		9
8	BM	24B3	BM	25E3	BM				EMB		EMB	24A0	EMB	24A0	EMB	21F5	EBM	20B/D5	EMB	25H5	BM	20B/B3	EMB	20B/B3	8
7	B	24B5	B	4A4	B	20A/D1			EBM	20A/E8	EBM	25C4	EBM	26G3	EBM		B	20A/C4	EBM	24R2	B	3864	EBM	20A/D8	7
6	BM	a	BM	20A/C4	BM				EMB	20A/C8	EMB	23G3	EMB	24A7	EMB	2185	EMB	20B/C2	EMB	20A/E7	BM	20B/C3	EMB		6
5									EMB	20A/M0	EMB	24B6	EMB	20B/E1	EMB	20A/B3			EMB	20B/R6			EMB	20A/C3	5
4	M	24E3	BM	13C1	BM				EBM	20A/G7	EBM	24E6	EBM	24B7	EBM	20A/B7	EBM	20A/F2	EBM	20B/D3	M	20B/F5	EBM	20B/D2	4
3			M	23G7	M				EBM	20B/E2	EBM		EBM	20A/D8	EBM	20A/B5	BM	20B/B7	EBM	20B/E8			EBM		3
2	M	b	BM	20A/E3	BM				EBM	20B/D2	EBM	Q	EBM	20B/C4	EBM	20A/B3	EBM		EBM	20A/D1	M	20B/D1	EBM	20A/B8	2
1			M	23G1	M	20A/E1			EBM	24B6	EBM	24E3	EBM	23G5	EBM	20A/C1	M		EBM	20A/D1			EBM	20A/B5	1
COIL		24D6		23G1		20B/E8				20B/G9		20B/E0		20B/E6		20B/B8		20B/A8		24H11		20B/E6		20B/F6	COIL

DESIG	LNT		LLTA		LTR		LXPA		LXP1		RCTA		RCTB		SLA		SLRK				RCTA				DESIG
CODE	AF823		AF619		AF505		AF619		AJ603		AF624		AG9		AJ603		AF623				AF32				CODE
OPTION											YF										YG				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	OC	CONT ARR	LOC	CONT ARR	LOC	
12	M	20B/C7	M	19H1			M	20B/G5	EBM	20B/M4	M				EBM	20A/B2	M	20B/C4			EMB				12
11									EBM	24G4					EBM										11
10	BM	20A/D6	M	20A/E8			M	20B/C8	EBM	38D3	M				EBM	22F7	BM	23G8			EBM	24D7			10
9									EBM	20B/D5					EBM										9
8	BM	23G2	BM	20B/B2	EBM	20A/G7	BM	20B/G4	EMB	20A/M4	EBM	24C7	EBM	25C4	EMB		BM				EBM	24C7			8
7			B				B	20B/D4	EMB	20A/L9			B		EBM										7
6	BM	20A/D0	BM	25B/C4	EMB	20B/D4	BM	20B/C3	EMB	20B/M3	EBM	24G7	EBM	24M4	EMB	20B/B1	BM				EMB				6
5									EMB	20A/C1			B		EMB	20A/C3									5
4	BM	20B/D4	M	20B/D1	EBM	25C4	M	20B/H5	EBM	26C4	M		M	24G4	EBM		M				EBM	24A7			4
3									EBM	20B/E4					EBM	20A/B9									3
2	M	20A/E1	M				M	20B/D1	EBM	20A/B7	M				EBM	20A/B8	M	20B/C8			EBM	24B7			2
1	M	20B/F1							EBM	20A/G5					EBM	20B/G5	M	21B2							1
COIL		20A/E3		19H1		20B/D8		20B/G6		20B/M6		24M4		24G4		20B/B2		20B/C8				24H4			COIL

(UE) 24D2
a (UD) 23G3
b (UF) 24D2
(UE) 24F9

RELAYS
DCT
(XS) 280FW
(XR) 280AK
7 → 4 → 2365
3 → 20A/F5

(YP) FCG 280AE
7 → 4 → 20A/G7
3 → 24D5

(YV) 24D5
a (YW) 24C5
b (UE) 24G8
(UF) 24F9

(YP) JGCK 280CU
5 → 3 → 20B/B2
2 → 20A/G4

(WN) JXP 280FM
7 → 4 → 20B/E5
3 → 20A/D5

(YP) LGCK 280CU
5 → 3 → 20B/BI
2 → 20A/C1

(YP) CON 280F
5 → 3 → 24D5
2 → 24F2

(YP) LLT 280CU
5 → 3 → 19H.
2 → 19H0

LXP
(WN) 280 FM
7 → 4 → 20B/G5
3 → 20A/F2

SL 280CB
5 → 3 → 20A/B2
2 → 20A/B4

(YP) TGCK 280CU
5 → 3 → 20B/B2
2 → 20A/B7

XLH
(XS) 280GE
(XR) 280BE
7 → 4 → 20B/EI
3 → P-20A/CO S-20B/G2

(YQ) CON 316B
5 → 4 → 24D5
7 → 24F2

(YQ) FCG 316D
5 → 4 → 20A/G7
7 → 24D5

HMT
(XS) 280FV
(XR) 280A
7 → 4 → 20B/A8
1 → 20B/A3

316A
5 → 4 → 7

(YQ) JGCK	(YQ) LGCK	(YQ) TGCK
20B/B2	20B/BI	20B/B2
20A/B4	20A/C1	20A/B7

316B
5 → 4 → 7

(YQ) LLT
19H1
19H0

(YW) FCGB
24D4
24D7

316C
5 → 4 → 7

(WO) JXP	(WO) LXP
20B/E5	20B/G5
20A/D5	20A/F2

NETWORKS

DESIG	LOC	CODE
CON1	24D6	185A
(UD) CWK	IIB/D3	185A
CWL	IIB/B3	185A
DCT1	23G1	185A
(G) DVA	20B/E8	185A
(W5) DVO	20B/E8	185A
GLH	20A/G9	185A
GLH1	20A/E0	185A
GT1	20B/E6	185A
HMS1	20B/B8	185A
HMT1	20B/A8	185A
HTR	25H4	185A
JXP1	20B/F6	185A
JXPA	20B/E6	185A
LNT	20B/E3	185A
LLT	19H0	1/2 177C
LLTA	19H1	185A
LTR	20B/D8	185A
LXP1	20B/M6	185A
LXPA	20B/G6	185A
(UD) NCW	11B/C3	185A

DESIG	LOC	CODE
RCTA	24F7	185A
RCTB	24E7	185A
SL	20A/B4	1/2 177C
SLA	20A/B2	185A
SLRK	20B/C8	1/2 177C
(YM) TTFO	10A4	185A
(UW) CON2	2403	186A
(UX) CON2A	2403	186B
(UX) CON2B	2403	186B

RESISTORS

DESIG	LOC	CODE
CON1	24E3	KS-13490,L3,1000
CON2	24E4	1N5A 180,000
CON3	24B0	1N5A 20,000
CON4	24E4	1N5A 200,000
CON5	24M4	1N4P
CON6	24B6	18AP
CON7	24F3	16FR
CON8	24F3	1N5A 12,000
CON9	24F3	1N5A 12,000
(XL) DCT2	20A/H3	18T
(XM) DCT2	20A/H5	18DA
DCT1	20A/G4	18BS
GLH	24C6	19BM
HMF	20B/A1	18BA
HMS	20B/A1	18KJ
HMT	20B/A3	18AG
(WG) JH	20A/D4	18BA
(WT) JH1	20A/D4	18BA
(WG) LH	20A/G2	18BA
LLTA	19H1	18TL
(WG) TH1	20A/E6	18BA
(WG) TH2	20A/E6	18BA
(N) TH3	20A/E7	18BA
(WD) LLT	19H0	18KF
(WE) LLT	19H0	2.1A 10,100

DESIG	TTFO		DVO		DVO		CWK		CWF		CWL		NCW		RLH		RLK								DESIG
CODE	AF506		AJ502		AJ502		AK22				AK501				AK31										CODE
OPTION	YW		W		G		UD		UD		UD		UD		UD		UD								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M		EBM		EBM		EBM	23E0			BM	11B/G2			BM	23G2									12
11	M		EBM	20B/A7	EBM		EBM	23F2			BM				BM	23E6									11
10	M		EBM	20A/C8	EBM		EBM	20A/F6			BM	23C7			BM	11B/F3									10
9	M		EBM	20A/D6	EBM		EMB				BM	20A/G0			BM	24C6									9
8	M		EMB		EMB		EMB				BM	11B/C6			BM	25C4									8
7	M																								7
6	M		EMB		EMB	20B/E8																			6
5	M								EMB	23C7			BM	11B/G2											5
4	M	11E7	EBM	20A/C5	EBM				EMB	23F5			BM												4
3	K	11E7	EBM	20A/C3	EBM				EBM	11B/E3			BM	23D6			B	25C4							3
2	M	11E7	EBM	20A/E1	EBM	20A/E1			EBM	23G2			BM	23C6			M	11B/B2							2
1	M	11E7	EBM	20A/F2	EBM				EBM	20A/G0			BM	20A/C1			M	20B/D3							1
COIL	10A4		20B/E8		20B/E8		11B/D3		23E1		11B/B3		11B/C3		23F1		11B/E3								COIL

CAPACITORS

DESIG	LOC	CODE
CON1	24E4	K75AC
CON2	24E3	K75F
CON3	24F2	K41P
HMT	20B/A2	K37QA
(WG) JH	20A/C4	437QA
(WT) JH1	20A/C4	437QA
(WG) LH	20A/F2	437QA
(WG) TH1	20A/D6	437QA
(WG) TH2	20A/D7	437QA
(N) TH3	20A/D7	K37QA
XLH	20A/D0	K37QA

IND COILS

DESIG	LOC	CODE
CON1	24C4	221H
TH	20A/C7	200CL

REP COIL

DESIG	LOC	CODE
CON	24C3	0A4M

ELECTRON TUBE

DESIG	LOC	CODE
CON	24E2	313CA

DIODES

DESIG	LOC	CODE
(WG) JH	20A/C5	KS-18701,L3
(WG) LH	20A/F1	KS-18701,L3
(WG) TH	20A/D7	KS-18701,L3
(UT) DCT	20A/G4	426F

DESIG	LOC	CODE
XLH1	20B/H1	18FA
XLH2	20B/G1	18FD
XLH3	20B/G3	18AC
XLH4	20A/D0	18BH
(YW) DCT4	20A/E3	18S
(YW) DCT5	20A/E3	18J
(XM) DCT6	20A/F4	18CJ
(YT) DCT7	20A/E5	18CJ
(YH) DTA	24D6	19MH
DTB	24E7	18EF
XLH5	20B/G0	18BS

DRAWING ISSUE

4AF	CAS, DLW
5D	ECK, PAT, WFC
11D	ECK, PAT, WFC
12D	ECK, LBH
15D	PRH, EDW, PAT
16D	FED, BMF, AHT
18D	JAT, LW, AND
19A	FLP, LW, AND
20D	LW, AND
21A	GP, TPF, PHD
22D	GP, MDF, PHD
23A	PMW, DM
27AR	DM
28D	DM
30D	
38D	

DIAL TONE MARKER CIRCUIT	(2)	ISSUE 45B
BELL TELEPHONE LABORATORIES, INC	6S	SD-26001-01-CB

APP. FIG. 10

DESIG CODE OPTION	CKG1 AJ700		LLC1 AJ702		TLC AJ700				DESIG CODE OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
24	M		M	20A/A8	M	24A5			24
23	M		M	20A/A7	M	3G6			23
22	M	32C2	M	7D5	M				22
21	M	27G7	M	20A/A5	M	16G7			21
20	M	6H4	M	20A/B	M	15B7			20
19	M	27D1	M	20B/B4	M	3C6			19
18	M	3B1	M	20A/B1	M	20A/D5			18
17	M	27A5	M		M	20A/D1			17
16	M	8G9	M		M	25G7			16
15	M	8E9	M	11A7	M	24D5			15
14	M	20A/A2	M	11C1	M				14
13	M	25B1	M	16A4	M				13
12	M	27G7	M	21G2	M	20A/E6			12
11	M	28G3	M	25C6	M	20A/G2			11
10	M	23G1	M	24E4	M	20A/D3			10
9	M	23B7	M	20B E2	M				9
8	M	30C2	M	21EB	M				8
7	M	29D4	M	21D9	M	5B4			7
6	M	25G6	M	21E9	M	3B6			6
5	M	20B/B2	M	20A/F6	M	3G6			5
4	M	20B/H1	M	11D2	M	3F6			4
3	M	20B/C2	M	11B7	M	3F6			3
2	M	20B/A5	M	11A7	M	3P6			2
1	M	16A2	M	11H3	M	3G6			1
COIL		23B1		11C4	M	3B3			COIL

DESIG CODE OPTION	CHA AJ503		DIS1 AF516		DIS2 AF518		DISA AF515		DTK AF522		CKG2 AJ503 XT		DESIG CODE OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	20A/C6	EMB	3B2	EMB		BM				EBM		12
11	EBM	27G1	M	23B3	M	28H2	M	28H2			EBM		11
10	EBM	27E8	EBM	11C3	EBM		BM	26A7	M		EBM		10
9	EBM	20A/D4									EBM		9
8	EMB	20B/A2	EBM	26B2	EBM	26D3	BM	26F7	BM	7A6	EMB	27A2	8
7	EBM	21H3	B	4E6	B	8A7	B	24F8			EBM		7
6	EMB	20A/G6	EMB	23B2	EMB		BM	27B2	BM	20F5	EMB	3C32	6
5	EMB	18H6									EMB	32B4	5
4	EBM	24C1	EBM	6A4	EBM		BM	26E3	M	21D2	EBM		4
3	EBM	3E1	M	29H3	M	24G3	M				EBM		3
2	EBM	20A/F2	EBM		EBM	13C0	BM	26F4			EBM		2
1	EBM	20A/B1	M	26H5	M	28G3	M	30C2			EBM		1
		21E6		23A3		23B3		28H1		11A3		23A1	COIL

DESIG CODE OPTION	FAK AF517		FM AF10		FMP AF517		HGK AF508				LCK AF514		LFK AF511		LK AF522		LLC2 AF507		MAK1 AF519		OBS1 AF27 VH		OBS1 AJ101 VI		DESIG CODE OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EM	24D7	EM		EM						M						M		M	3F1			EBM		12
11	M	24D8			M	21B7											M	20A/G0					M		11
10	M	24C8	M	27A2	M	27G6	M				M	24H3	M	11H2	M		BM		M	25C6	M		EBM		10
9																	M	15E4							9
8	EBM	20B/A2	EBM		EBM		M	11D3			M		BM	11D3	BM	21G4	BM	15A4	BM		M				8
7	B		B		B	18A6	B						B	25C6			B	15A4	B	2AB	B	20B/C	M	8E7	7
6	EMB		EMB	27A5	EMB	21B8	M	21H5			M	21H3	BM		BM	21H4	BM	15F8	BM	25E7	M	9E7	CMB	8G9	6
5																	M	18H6							5
4	M	24C3	M	27C8	M	27F1	M	7G7			M	21G3	M	27E2	M	3C6	BM	12A5	M	25C5	M	8G5	M	8B4	4
3	M	24B5			M	27F1											M	27E5							3
2	M	21H5	M		M	27C2	M				M						M	21F5	M	5B4	M	9E8	EBM	20B/B6	2
1	M	24A8			M	21F5											M	27E3					M	9E8	1
COIL		22B7		21F6		21B7		7F6				19G7		11E3		17G8		12C1		3H6		8G8		8G8	COIL

RELAYS

JCK
(W,W) 28G8
(W) 31EM
5 — 3,4 — 21G3
2,7
27B2

DESIG CODE OPTION	OBS2 AF101		OC AF523		OC1 AF510		RAV1 AF48		RCY AF48		RCY1 AF48		RF AF44		RFA AF519		RK AF522		RYC AF507		SNK AF523				DESIG CODE OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12			M	26H5			M		M	27D7	M	6B1			M				M		M	25C2			12
11							B	13A2	B	2C6	B	23B7							M	23G5					11
10			BM				BM		BM		BM	29E4	M		M		M		BM		BM				10
9							B	3B1	B	3B1	B	8A7							M	4A5					9
8	M	8E7	BM	10H8			BM	23B6	BM		BM		M	27C7	BM	27C8	BM	21G4	BM	2G6	BM				8
7	B	8E7					B	25B5	B	25A7	B	8G2			B				B	2H8					7
6	M	8F8	BM	28H5	M	26G5	BM		BM	26C7	BM		M	27A5	BM	27A5	BM	21H4	BM						6
5	B	20B/A3					B	29E3	B	4E5	B	8A2							M	20B/A5					5
4			BM	28H5			BM	25D8	BM		BM		M	27A5	M	27A5	M	3C6	BM		BM	28G3			4
3							B	2F7	B	4A5	B	2F7							M						3
2			M	13B1			M	27B7	M	25D3	M	7H2			M	27D8			M	27B6					2
1			M	29B6			B		B	12A0	B	13A2							M	11C3	M	27D6			1
COIL		8E7		26G6		26D4		27A6		27C6		27D6		27A4		27A4		17G8		2F1		27F2			COIL

DESIG CODE OPTION	SP AF48		TCHK AF522		TK AF515		TR2A AJ12		TR2B AJ12						10LV AJ501 VM		12LV AJ501 VM								DESIG CODE OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M				BM		EBM		EBM						EBM	22D3	EBM	22D2							12
11	B	20B/E5			M	11B3	EBM	13C1	EBM						EBM		EBM								11
10	BM		M	18H0	BM	8G7	EBM	28H5	EBM	32C2					EBM	22E3	EBM	20A/H2							10
9	B	25C7					EBM	28H5	EBM	24F6					EBM		EBM								9
8	BM	20B/B5	BM		BM	21B2	EBM	17D7	EBM	7B6					EMB		EMB								8
7	B	25D3			B		EBM	20B/B6	EBM	26F4					EBM	22G3	EBM								7
6	BM		BM	21G4	BM	20A/G1	EBM	24F6	EBM	26G4					EMB		EMB	22G3							6
5	B						EBM	8E6	EBM	26E4					EMB		EMB								5
4	BM	23G3	M	21H4	BM	25C4	EBM	21D6	EBM	6H2					EBM		EBM	20A/H4							4
3	B	3A2			M	21G6	EBM	21E4	EBM	3C6					EBM		EBM								3
2	M	24G3			BM	20B/C3	EBM	21D2	EBM	6H1					EBM		EBM								2
1	B	11H2			M	21H3	EBM	11B2	EBM	6H1					EBM		EBM								1
COIL		23F1		18H1		21G6		26F4		26G3						16G7		16H7							COIL

NETWORK

DESIG	LOC	CODE
ASM	22F3	177J
CHA	21E6	185A
CHT	21D2	177C
CKG1	23B1	185A
(XT) CKG2	23A1	185A
DIS1-2	23A3	185A
DISA	28H1	185A
DTK	11A3	185A
FAK	22B7	185A
FM	21F6	185A
FMP	21B7	185A
HGK	7F6	186A
JCK0	21H2	177C
LCK	19G7	185A
LFK	11E3	185A
LK	17G8	185A
LLC1	11C4	185A
MAK1	3H6	185A
(V4,VI OBS1	8E7	185A
OBS2	26G6	185A
OC	26D4	185A
OC1	26D4	185A
OC2	27A6	185A
RAV1		

DESIG	LOC.	CODE
RCY1	27C6	186A
RF	27A4	185A
RFA	27A4	185A
RK	17G8	185A
RYC	2F7	185A
SNK	27B2	185A
TCHK	18H0	185A
TG1	4A4	186A
TK	21G6	185A
TLC	3B3	185A
VGA	6B4	177C
10LV	16G7	185A
12LV	16H7	185A

RESISTORS

DESIG	LOC.	CODE
JCK	22E1	KS-13492, L1 7500
JCKO	21H2	KS-13490, L3 33,000
OB52	8F8	19MC
SF	25B	18AG
TG1	4A4	KS-13490, L3 33,000
VGA	6A5	KS-13490, L3 33,000

DIODE

DESIG	LOC	CODE
(TE) MJ	32B1	426F
(TE) MN	32C1	426F

DRAWING ISSUE

1	
2D	
13D	
14A	
15D	
16B	
18D	
22D	
23A	
28D	
30D	
32A	
33D	

SD-26001-01-C9

ISSUE 43B

SD-26001-01-C9

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC — DWG SIZE 6S — PRINTED IN U.S.A.

E-7422-A (2-52)

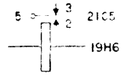
APP FIG. 11

RELAY DESIG	CHO	[9]CHI-9		[10]TCHO-9														DESIG
CODE	AJ503	AJ503		AF524														CODE
OPTION																		OPTION
	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	
12	EBM / 22F4	EBM / 22G4		M														12
11	EBM / 22F1	EBM / 22F1																11
10	EBM / 21E2	EBM / 21E2		M														10
9	EBM	EBM / 21F4																9
8	EMS / 21B4	EMS / 21B4		EBM 21D5														8
7	EBM / 21A5	EBM / 21A5																7
6	EMS / 19H1	EMS / 19H1		EBM														6
5	EMS / 19H4	EMS / 19H4																5
4	EBM / 19J4	EBM / 19J4		M 19H2														4
3	EBM / 19C5	EBM / 19C6																3
2	EBM / 9C2	EBM / 9C2		M 19H6														2
1	EBM / 9B2	EBM / 9B2																1
COIL	21B4	21B4		19E1														COIL

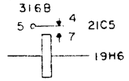
RELAY DESIG																		DESIG
CODE																		CODE
OPTION																		OPTION
	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	
12																		12
11																		11
10																		10
9																		9
8																		8
7																		7
6																		6
5																		5
4																		4
3																		3
2																		2
1																		1
COIL																		COIL

RELAY

(YP) [10] CHTO-9
28CJ



(YO) [10] CHTO-9
31GB



CAPACITOR

DESIG	LOC	CODE
[10] JO-9	19H4	~~KS-13368,L3,.01UF~~
[10] LO-9	19H2	KS-13369,L29,.01UF
[10] TO-9	19H6	

DIODE

DESIG	LOC	CODE
[10] JO-9	19H4	KS-15724,L3
[10] LO-9	19H3	KS-15724,L3
[10] TO-9	19H6	KS-15724,L3

NETWORK

DESIG	LOC	CODE
[10] CHO-9	21B5	185A
JSO	22F4	1/2 177C
[9] JSI-9	22G4	1/2 177C
[10] SMO-9	22F0	177J
[10] TCHO-9	18E1	185A

RESISTOR

DESIG	LOC	CODE
CHA	21A2	18EJ
[10] JO-9	19H4	19ABL
[9] JSI-9	22G4	KS-13490,L3 33,000
[10] LO-9	19H2	19ABL
LLO	9D1	KS-13492,L1 2000
LL1	9C1	KS-13492,L1 2000
LL2	9B1	KS-13492,L1 2000
LL4	9B1	KS-13492,L1 2000
LL7	9A1	KS-13492,L1 2000
[10] SMO-9	22E0	KS-13490,L3 33,000
[10] TO-9	19H5	19ABL

RELAY DESIG																		DESIG
CODE																		CODE
OPTION																		OPTION
	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	
12																		12
11																		11
10																		10
9																		9
8																		8
7																		7
6																		6
5																		5
4																		4
3																		3
2																		2
1																		1
COIL																		COIL

RELAY DESIG																		DESIG
CODE																		CODE
OPTION																		OPTION
	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	CONT ARR / LOC	
12																		12
11																		11
10																		10
9																		9
8																		8
7																		7
6																		6
5																		5
4																		4
3																		3
2																		2
1																		1
COIL																		COIL

DRAWING ISSUE

1	E.S. W.M.	
2D	P.H.B.	W.H.N.
3D	P.H.B.	

LOST DRAWING REPRODUCED WITHOUT CHANGE 7-29-58 AEZ

15D	PRH	
2PD	EB	
28D		

DIAL TONE MARKER CIRCUIT

(2)

SD-26001-01-C10

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 6S

ISSUE 39D

SD-26001-01-C10

APP. FIG. 12

DESIG	D		MCB0		MCB1		MF		MLF		MCB3		DESIG
CODE	AJ700		AJ702		AJ702		AJ700		AJ700		AJ702		CODE
OPTION							Y,ZV		YZV		YY		OPTION
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	X
24	M	4A7	M	30E2	M	28F8	M	4B7	M		M	28C1	24
23	M	4A7	M	28H3	M	28A F5	M	4A7	M		M	28C1	23
22	M	32F1	M	28D4	M	28D5	M	32E2	M		M	28D5	22
21	M		M	28D4	M	28D5	M		M		M	28D5	21
20	M	3D2	M	28D4	M	28D5	M	3E2	M		M	28D5	20
19	M		M	28D4	M	28D5	M		M		M	28D5	19
18	M	27C6	M	28D4	M	28D5	M	27F6	M		M	28D5	18
17	M	1H8	M	28D4	M	28D5	M	1G8	M	1G8	M	28D5	17
16	M	30C2	M	28E4	M	28D5	M	30D2	M	30D2	M	28D5	16
15	M	20S/E6	M	28D4	M	28D5	M	20B/F0	M	20B/F0	M	28D5	15
14	M	20A/E0	M	28D4	M	28D5	M	20A/E0	M	20A/E0	M	28D5	14
13	M	8A2	M	28D4	M	28D5	M	8A2	M	8A2	M	28D5	13
12	M	3C1	M	28F4	M		M	3C1	M	26A6	M	28C1	12
11	M	27H2	M	2EM2	M		M	27G2	M	26A6	M	28C1	11
10	M	27F6	M	28D4	M	28D5	M	27F6	M	3C1	M	28D5	10
9	M	2D6	M	28D4	M	28D5	M	2D6	M	2D6	M	28D5	9
8	M	2E6	M	28D4	M	28D5	M	2F6	M	2E6	M	28D5	8
7	M	26B8	M	28D4	M	28D5	M	26BA	M		M	28D5	7
6	M	1F8	M	28D4	M	28D5	M	1F8	M		M	28D5	6
5	M	8F8	M	28D4	M	28D5	M	8B8	M	8B8	M	28D5	5
4	M	7C6	M	28D4	M	28D5	M	7B6	M	7E0	M	28D5	4
3	M	7A0	M	28D4	M	28D5	M	7A0	M	7B0	M	28D5	3
2	M		M	28D4	M	28D5	M		M		M	28D5	2
1	M	6D8	M	28D4	M	28D5	M	6E8	M	6E8	M	28D5	1
COIL	X	26A6	X	28F4	X	28F4	X	26B7	X	26D6	X	28G4	COIL

DESIG	AMB		DL		FA		AC8		DESIG
CODE	AG8		AF59		AF60		AF518		CODE
OPTION							XK		OPTION
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	X
12					M	25F2	EMB		12
11							M		11
10			M		M	28F1	EBM		10
9									9
8	M	28A/F4	M		M		EBM	13C8	8
7	B				B	28D7	B	13C8	7
6	BM		M	32G4	M		EMB	13C5	6
5									5
4	M	28A/F5	M	32F4	M		EBM	13D5	4
3							M	70B/F8	3
2					M	28E4	EBM		2
1							M		1
COIL	X	28F4	X	32F4	X	28D7	X	35G7	COIL

DESIG	FAI		HFA		LP		MAK		MB		MCK		MRLI		MSK		MT		MTI						DESIG
CODE	AF10		AF59		AF115		AF523		AF21		AF522		AF9		AF522		AF34		AJI5						CODE
OPTION																									OPTION
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	X
12	EM	28F1					M						EM				M	32H1	EBM	31B1					12
11																	M	32E7	EBM	a					11
10	M	28D7	M	28D7	M		BM		M	28F8	M		M	28D3	M		M	32D5	EBM	5D5					10
9									B				B	11C4					EBM	12E2					9
8	EBM	28E4	M		EBM		BM	30C2	EBM	28F3	BM	30D2	EBM	26F3	BM	28F3	M	15D5	EMB	12F2					8
7	B								B	24GB			B	26D3			B	27E8	EBM	27C8					7
6	EMB		M		B	32G7	BM	28G2	EMB	28F3	BM	28G1	EMB		RM	28G1	M	32C5	EMB	2C6					6
5									B	28D1			B	26D3					EMB	23C3					5
4	M	28D7	M		M		BM	28F8	M		M		EBM	3B2	M		M	32D4	EBM	23A4					4
3									B	28H2							M	32B4	EBM	12E2					3
2	M	28E4			EBM	32F7	M	28H4	M	28H2			M				M	32B4	EBM	30B2					2
1							M	28H4									M	32A4	EBM	23C8					1
COIL	X	28E4	X	28C7	X	32E6	X	28B9	X	28E2	X	28A9	X	25F3	X	28B0	X	32A5	X	32A3	X		X		COIL
																			(YV)	12F2					
																			(YZ)	12G2					

DESIG	MT13		MT13		RCCK		RON		TAL		TM		TRI		TRA		TRB		TRL		TRLA		TRR		DESIG
CODE	AF53		AJI2		AF50		AF51		AF59		AJ507		AF55		AF60		AF54		AF67		AJI5		AJI5		CODE
OPTION	WV		WW																						OPTION
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	X
12			EBM	11E2							M	25D2	M				M	32E4			EBM		EBM		12
11			EBM	11F3							M	25D2	M	25E4							EBM	3R2	EBM	25F4	11
10	BM	32C3	EBM	32C3	M		M		M	28D9	M	26G4	BM	20B/E2	M	28E6	BM	23D4			EBM	11C4	EBM	23F5	10
9	B	27F1	EBM	7F1							M	26G4	M	24F7							EBM	29H3	EBM	24G7	9
8	BM	27G1	EBM	27G	BM		M		M	28D3	BM		BM		M	28E3	BM	20E/F8	LBM	23D2	EMB		EMB		8
7	B	27F1	EBM	27F1							M		B	23D2	B	28E3	B	31F1			EBM	12F0	EBM	23E2	7
6	BM	27F9	EBM	27F9	BM	32G3	M		M		BM		BM	11B/E4	M	32F4	RM	28E3	EMB	23M2	EMB	23C2	EMB		6
5	B	24F7	EBM	24F7							M	32D4					B	31D2			EMB		EMB	32D4	5
4	BM	32D1	EBM	32D1	M		M	25D7	M	28D9	BM	32C4	BM	23A4	M	28D9	BM	29HA	LBM		LBM	2LE3	EBM	23A1	4
3	B		EBM	1G3							M		M	32F4							EBM	28G4	EBM	32F4	3
2	M	2	LBM	2							M	28H3	M	32G3	M		M	32F4			EBM	2FF3	EBM	32G3	2
1			EBM	2							M	28D1	M	23D2							EBM	23H1	EBM	23C3	1
COIL	X	32B4	X	32B4	X	32F3	X	31F8	X	28D2	X	28B1	X	23E1	X	28E2	X	32E4	X	23D1	X	23H1	X	23E3	COIL
	(ZF)	27E1	(ZF)	27E1																					
	(UW)	11B/F4	(UW)	11B/F4																					

DESIG	TRS		TRST																						DESIG
CODE	AF50		AF64																						CODE
OPTION																									OPTION
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	X
12			EMB	11B/F4																					12
11			M	32C2																					11
10	M	26G4	M	32E4																					10
9			BM	20B/E2																					9
8	BM		M	32D2																					8
7			BM	25D1																					7
6	BM	23A5	EMB	29F3																					6
5			BM	29F3																					5
4	M		M	23D4																					4
3			BM	31D2																					3
2			M	31E1																					2
1			M	31E2																					1
COIL	X	26G4	X	32D4	X		X		X		X		X		X		X		X		X		X		COIL

NETWORKS

	DESIG	LOC	CODE
(KK)	ACB	35G7	185A
	AMB	28F4	185A
	D	26A6	185A
	MAK	28D9	185A
	MCBO	28F4	185A
	MCK	28A9	185A
(Y)	MF	26B7	185A
(Y)	MLF	26B7	185A
	MSK	28B0	185A
	RON	31F2	185A
	TM	28B1	185A
(YY)	MCB3	26G4	185A

RESISTORS

DESIG	LOC	CODE
HFA	28C7	K5-13492,L1 10,000
HFAI	28D6	18DF
MJ	28E9	18CN
TRA	28E2	18BH
TRST	31D1	18AQ

DRAWING ISSUE

1	6A	MB
2D	P2	JPD
3D	P3	—
4AR	CM	AL
5D	CM	A
6B	P2	
8D	P4	
9B	CM	B
10B	P4	
11D	P4	C
12D	P4	CB
14D	P4	C
15D	P4	B
22D	P4	C
23A	P4	
24D	P4	C
28D	P4	CB
30D		C
34A		CB

DIAL TONE MARKER CIRCUIT (2)	ISSUE 39D
BELL TELEPHONE LABORATORIES, INC	SIZE 65 — SD-26001-01-C11

PRINTED IN U.S.A.

SD-26001-01-C11

C-7422-A (2-62)

APP FIG. 13

RELAY

DESIG		HTT		LDT		MRL		OAT		OATI		RYT		RYTI		SDT		SFT		TMS				DESIG
CODE		AF50[illegible]		AF10		AF10		AF523		AF511		AF522		AF512		AF10		AJ504		AF512				CODE
OPTION																								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12					EM	25E3	EM		M	28F2							EM	25A2							12
11																			BM						11
10					M	23F4			BM		M	25G6	M				M	23E4	M	25B6					10
9																			BM						9
8			EBM	25H5	EBM		EBM	26E4	BM		BM	25F6	BM		EBM		EBM				EBM				8
7					B		B	208/87			B	28F3					B		BM						7
6			EMB	25C7	EMB	25EC	EMB	25F2	BM	22G6	BM		BM	25C2	EMB	25C3	EMB	25E8	E	25C1	EMB	25B1			6
5																			BM						5
4			EBM		M	305	M		EM	25F2	M	25H6	M	25B2	EBM	25C2	M	305	M	25E8	EBM	25A2			4
3																			BM	25E7					3
2					M	25E4	M	25F3	M	25F6							M	25E4	M	25E2					2
1									M	25F3									BM	25E1					1
COIL				25G8		25E2		25F2		28F2		25H6		25C2		25E3		25E8		25B1		25C0			COIL

DESIG		TRT		TRTR		WT																		DESIG
CODE		AF114		AF9		AF1[illegible]																		CODE
OPTION																								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12			EM	23H4	EM	25A2																			12
11																									11
10	M	25G2	M	32E6	M	23F4																			10
9			E	3106																					9
8	EB	23E4	EBM	28F2	EBM																				8
7			E	2304	B	123E6																			7
6	BM	25G2	EBM	25G2	EMB	25E1																			6
5			B	208/87																					5
4	M	25B6	EBM	2ED3	M	25C1																			4
3																									3
2	E	2A6	M	2384	M	25D4																			2
1																									1
COIL		25D4		25G2		25B1																			COIL

DESIG																								DESIG
CODE																								CODE
OPTION																								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

DESIG																								DESIG
CODE																								CODE
OPTION																								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

CAPACITORS

DESIG	LOC	CODE
HTT	25F5	439QA
HTT1	25F4	~~KS-13368,L3,.001UF~~ KS-13368,L34,.001UF
LDT	25E1	439QA
OAT	25F1	437QA
SDT	25E7	439QA
SDT1	25D6	~~KS-13368,L3,.001UF~~ KS-13368,L34,.001UF
TRTR	25G1	439QA
WT	25A2	439QA
WT1	25A0	~~KS-13368,L3,.01UF~~ KS-13368,L29,.01UF

NETWORKS

DESIG	LOC	CODE
HTT	25G8	185A
OAT1	25H7	185A
RYT	25C2	185A
RYT1	25B3	185A
SFT	25B5	185A
TMS	25C0	185A
WT	25B1	185A

RESISTORS

DESIG	LOC	CODE
HTT1	25F5	145A
HTT2	25F5	0.715 MEG KS-13490,L3
HTT3	25F5	0.1 MEG KS-13490,L3 1000
HTT4	25F7	18KJ
(VV) HTT5	25G7	18DN
LDT1	25D1	145A, 3.57 MEG
LDT2	25E1	KS-13490,L2
LDT3	25D2	0.1 MEG KS-13490,L2 1000
LDT4	25E2	18KJ
OAT1	25F1	145A
OAT2	25F1	3.7 MEG KS-13490,L3
OAT3	25F2	0.1 MEG KS-13490,L3 1000
OAT4	25F2	18KJ
SDT1	25D7	145A
SDT2	25D7	1.11 MEG KS-13490,L3
SDT3	25D7	0.1 MEG KS-13490,L3 1000
SDT4	25E8	18KJ
SDT5	25C7	145A
TRT1	25G1	0.856 MEG 145A
TRT2	25G1	1.52 MEG KS-13490,L3
TRT3	25G2	0.1 MEG KS-13490,L3 1000
TRT4	25M2	18KJ
WT1	25A1	145A
WT2	25A1	0.184 MEG KS-13490,L3
WT3	25A2	0.1 MEG KS-13490,L3 1000
WT4	25B0	18KJ

TUBES, ELECTRON

DESIG	LOC	CODE
HTT	25F4	313CC
LDT	25E1	313CC
OAT	25F1	313CC
SDT	25D6	313CC
TWTR	25G1	313CC
WT	25A1	313CC

DRAWING ISSUE

1	J.R. W.M.
2D	FHR —
3D	FHR J.J.
WORK DRAWING REPRODUCED WITHOUT CHANGE 9-28-56 J.R.J.	
7B	JW
12D	JW JRF
18D	AMD LW AMD
28A	KNI AMD MFF
28D	
30D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

SIZE 6S

ISSUE 43B

SD-26001-01-C12

SD-26001-01-C12

APP. FIG. 14

DESIG	BX		COX		MXT		ONX		SX		TX		XACH		XAF		XAJC		XAJG		XAJS		XALC		DESIG
CODE	AF507		AF513		AF515		AF506		AF507		AJ12		AF51		AF51		AF51		AF51		AF114		AF51		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	22H5	EM	29E	BM	30A1	M	13A1	M		1 HM														12
11	M	19H7			M	29F3	M	11B3	M		1 BM														11
10	BM	22H4	EBM	30G3	BM		M	29C4	BM	30A3	EBM	9E0	M		M		M		M		M		M		10
9	M	22H1			M		M	24H2	M		1 BM	37E1													9
8	BM		EBM		BM		M	22E0	BM	30A1	EBM	17A0	M	30C4	M	30C4	M	30D4	M	30D4	BM	30D4	M	30D4	8
7	B	24A1			B		M	29H2	B	30A4	EBM														7
6	BM	24C1	EM	29F	BM		M	22H0	BM	30A2	EBM	2H0	M	30B7	M	30B7	M	30C7	M	30D7	BM	30D7	M	30D7	6
5	M	22H3					M	22H1	M		EBM	22H5													5
4	BM	19H9	BM		BM		M	11B7	BM	30A6	EBM		M	29G4	M	29E4	M	29F4	M	29F6	M	29C9	M	29D4	4
3	M	17A1			M	29F5	M	22E7	M		EBM	19H6													3
2	M	34A1	EBM	29F3	BM		M	34F8	M		EBM										B	20B/B4			2
1	M	17F4			M	29G4	M		M		EBM	20A13													1
COIL		22E1		29G2		30A1		29E7		40C1		29A3		29G3		29E3		29F3		29F5		29C2		29D3	COIL

DESIG	XALR		XATS		XAVGB		XBT		XCF		XHG		XLG		XLS		XLV		XP6		XSL		XTC		DESIG
CODE	AF51		AF51		AF51		AF71		AF71		AF104		AF102		AF96		AF97		AF96		AF12		AF71		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																					M				12
11																					M				11
10	M		M		M	23F6	M		M												M		V		10
9																									9
8	M	30E4	M	30F4	M	(a)	M	30G4	M	30B4	M	30C4	M	30E4	M	30G4	M	30E4	M	30G4	BM	20E/E8	V	30A4	8
7																									7
6	M	30E7	M	30F7	M	30F7	M	30F7	M	30B7	M	30C7	M	30E7	M	30G7	M	30E7	M	30D7	BM		V	30A7	6
5																									5
4	M	29G6	M	29B4	M	29H6	M	29C6	M	29A6	M	29G6	M	29B4	M	29C6	M	29H6	M	29E6	M	29E6	M	29B6	4
3																					M				3
2							M		M												M	30G4	M		2
1																					M	30G7			1
COIL		29G5		29B3		29H5		(a)		(a)		(a)		(a)		(a)		(a)		(a)		(a)		(a)	COIL
					(a) UC	30F4	(a)	P-26F5 S-29C5	(a)	P-13D0 S-29A5	(a)	P-7F6 S-29G5	(a)	P-11D3 S-29B3	(a)	P-22F0 S-29C5	(a)	P-22H7 S-29H5	(a)	P-18A5 S-29E5	(a)	P-20A/K2 S-29E5	(a)	P-28H4 S-29B5		
					(a) UD	23W2																			

(XR) 280AP
(WP) 280GF — 7→4, 5→3
(WO) 316T — 5→4, 7→7
(WN) 280AF — 7→4, 3→3
(WO) 316R — 5→4, 7→7
(WN) 280BJ — 7→4, 3→3
(WO) 316U — 5→4, 7→7
(VO) 316R — 5→4, 7→7

RELAYS

	XCH	XCS	XVHF	XF	XJG	XJS	XLR	XTS	XJC	XJSI
	S514	12E0	13D0	29F3	29F6	29C3	29G6	29B3	29F3	29C3
2→	29D3									
1→	19H7	37E0	9E0	34A0	17C7	22G2	16E4	22E6	17A1	22H4

(XR) 280BJ
(WP) 280GG — 7→4, 3→3
(WO) 316U — 5→4, 7→7

XLC: 29D2 / 19H7

XVGB: S65
(YD) (YE, YI) S6B — 2→9, 1→1
(UC) 29H6
(UD) 23C6
12C0

CAPACITORS

DESIG	LOC	CODE
XHG	7F6	~~KS-19368, L3, .01UF~~
XPG	18A5	~~KS-19368, L24, .01UF~~

NETWORKS

DESIG	LOC	CODE
BX	34F1	185A
ONX	29F2	185A
STA	30G1	185A
XF	34A0	185A
(YT) XJC	17A1	185A
XJS	17C6	185A
XJG	22G2	185A
XJSI	22H4	185A
(UZ) XJSA	22F2	186A
XJSB	22H6	186A
(YT) XLC	16G7, H7	185A
XLR	16E4	185A
XTS	22F6	185A

RESISTANCES

DESIG		LOC	CODE
(WN, WO)	F	34A0	18DS, 18JU
(WN, WO)	JC	17A0	195R, 186E
	JG	17C6	18CP
	JS	22G1	18BM
(UY, UZ)	JSA	22H3	18BU, 18BK
(TA)	JSB	22G1	221A, 4990
(WN, WO)	LC	19G7	195R, 18GE
	LR	16E4	18AU
	LR1	16F4	19LP
(T)	LR2	16F4	18JP
(WN, WO)	TS	22C6, F6	18HA, 195R
(UL)	XCW	11B/C6	18FE
(UZ)	XJSA	22F2	KS-19150, L1, 33,000
(UZ)	XJSB	22H6	KS-19150, L1, 33,000

DESIG	XTC1		XTC1		XTRR		XTRL		XTS1		XVGA		XCL		XCW										DESIG
CODE	AF71		AF71		AF71		AF71		AF71		AF102		AJ510		AF96										CODE
OPTION			Y,ZV										ZV		UD										OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10	M		M		M		M		M																10
9																									9
8	M	30A4	M	30E4	M	30H4	M	30H4	M	30F4	M	30A4	M	30C4	M										8
7													B												7
6	M	30A7	M	30B7	M	30H7	M	30H7	M	30F7	M	30A7	M	30C7	M										6
5													B												5
4	M	29C4	M	29A1	M	29D6	M	29D6	M	29L6	M	29B6	M	29B6	M	11B/E3									4
3																									3
2	M		M		M		M		M																2
1																									1
COIL		(a)		(a)		(a)		(a)		(a)		(a)		(a)		11B/C5									COIL
	(a)	P-29A4 S-29B5	(a)	P-4A5 S-29A5	(a)	P-26C4 S-29D5	(a)	P-27E4 S-29D5	(a)	P-22D6 S-29E5	(a)	P-6A3 S-29B5	(a)	P-26C7 S-29B5											

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

DRAWING ISSUE: 1, 2D, 3D, 5D, 9B, 11D, 12D, 13D, 15D, 16D, 18D, 20D, 22D, 28D, 30D, 34A, 34A

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES, INC
DWG SIZE 65
SD-26001-01-C13
ISSUE 39D
PRINTED IN U.S.A.

SD-26001-01-C13

E-7488-A (8-62)

APP. FIG. 15

LAMPS

DESIG	LOC	CODE
CON	24D2	13D
(YY) CONA	24B0	13D
(YB) CS	12B8	13J
F	34A0	13J
HG	7E5	13J
HGB	769	13J
JC	17A0	13J
JG	17F6	13J
JS	22H0	13J
(YB,XF) CSA	12H1	13J

DESIG	LOC	CODE
[2] LBSO,1	11B7	13J
(WW) LBS2	11A7	13J
LC	19H6	13J
LFS	11H2	13J
LG	11D4	13J
(VN) LOLA	8H9	13L
LR	16D3	13J
LS	22G0	13J
LSA	22G1	13J
LV	22H6	13J
PN	14A0	13J
(N) PNA	14A0	13J
TXP	20A/D7	13J
(N) TXP1	20A/D8	13J

DESIG	LOC	CODE
TB	4D4	13J
[5] TBSO-4	3E6	13J
(VP) TBS5	3G6	13J
TFS	38D	13J
TSM	22F7	13J
VGA	6A0	13J
VGB	12B0	13J
(VY) WSM	38E8	13J
(VY) WSMA	38F8	13J

APP. FIG. 16

RESISTANCES

DESIG	LOC	CODE
ETS	4G1	KS-5643, L427 90
F4	13C0	KS-5643, L427 90
OTS	4H1	KS-5643,L427 62
(YW) FR	8G0	KS-5643, L427 90

DRAWING ISSUE

1	WM
2D	BR
3D	FBR
5D	RLD PAH
11D	RZH
12D	DP WJT
16D	GPM JBM KWK
23A	GD AR
28D	MMC
30D	
33D	

SD-26001-01-C14

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

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ISSUE 3D

SD-26001-01-C14

⑰ APP FIG. 17

RELAY

DESIG	BC20				[10]FB20-29		FCD20		FCM20				FMG20		FMG25				[10]FS20-29		[10]FTC20-29				DESIG
CODE	AF504				AF4		AF501		AF501				AF511		AF511				AF40		AF527				CODE
OPTION									Y, ZV																OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M						BM		BM										EM						12
11	M						M	186	M	186															11
10	M	33A7			M		BM	33A4	BM	33A4			M	33D8	M	33E8			M		M	2F5			10
9	M	33A7					M	33A4	M	33A4															9
8	M	33B7			BM		BM	33B4	BM	33B4			BM	33H0	BM	33F0			EBM	3A6	BM				8
7	M	33B7					M	33B4	M	33B4			B	2G7	B	2G7			B						7
6	M	33B7			BM	33G3	BM	33C4	BM	33C4			BM	2D7	BM	2D7			EBM	33G5	BM	33G3			6
5	M	33B7					M	33C4	M	33C4															5
4	M	33C7			M		BM	33D4	BM	33D4			M	2E7	M	2E7			M	3F1	M	2C5			4
3	M	33C7					M	33D4	M	33D4															3
2	M	33C7					BM	33D4	BM	33D4									M	33F7					2
1	M	33C7					M	33D4	M	33D4									M	2D8					1
COIL		1G6				33B6		26C9		26C8				33F8		33G8				33G4		33C2			COIL

RELAY

DESIG	MT24		MT23																						DESIG
CODE	AJ12		AJ12																						CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM		EBM																						12
11	EBM	33B3	EBM	1H7																					11
10	EBM	33A1	EBM	33A3																					10
9	EBM	33A1	EBM	33B3																					9
8	EBM	33B1	EBM	33B3																					8
7	EBM	33B1	EBM	33B3																					7
6	EBM	33C1	EBM	33C3																					6
5	EBM	33C1	EBM	33C3																					5
4	EBM	33C1	EBM	33C3																					4
3	EBM	33D1	EBM	33D3																					3
2	EBM	33D1	EBM	33D3																					2
1	EBM	33D1	EBM	33D3																					1
COIL		3285		32E5																					COIL

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

NETWORK

DESIG	LOC	CODE
BC20	1B7	185A
10 FB20-29	33B6	185A
FCD20	26C9	185A
(Y, ZV) FCM20	26C8	185A
FMG20	33F8	185A
FMG25	33G8	185A
[10] FS20-29	33G4	185A
[10] FTC20-29	33C2	185A

DRAWING ISSUE

5D	
7B	
12D	
16D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC 6S

ISSUE 43B

SD-26001-01-C15

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[18] APP FIG. 18

RELAY

DESIG	MCB2			
CODE	AJ702			
OPTION				
	CONT ARR	LOC	CONT ARR	LOC
24	M			
23	M			
22	M	28D5		
21	M	28D5		
20	M	28D5		
19	M	28D5		
18	M	28D5		
17	M	28D5		
16	M	28D5		
15	M	28D5		
14	M	28D5		
13	M	28D5		
12	M			
11	M			
10	M	28D5		
9	M	28D5		
8	M	28D5		
7	M	28D5		
6	M	28D5		
5	M	28D5		
4	M	28D5		
3	M	28D5		
2	M	28D5		
1	M	28D5		
COIL		28D4		

RELAY

DESIG	60F				6TFA		7TFA				FTA0		FTA1		FTA2		DESIG
CODE	AF522				AF523		AF522				AF523		AF523		AF523		CODE
OPTION																	OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12					M						M	14C7	M	14D7	M	14E7	12
11																	11
10	M	17C2			EM	34F2	M				BM		BM		EM	34C3	10
9																	9
8	BM	14C9			BM	18E4	BM	18C4			BM	14E7	BM	14D7	EM	14E7	8
7																	7
6	BM				BM	21G8	BM				BM		BM		EM	21G8	6
5																	5
4	M				BM		M	18C4			BM	14A7	BM	14C7	EM	14C7	4
3																	3
2					M	18D6					M	14A7	M	14C7	M	14B7	2
1					M	17BQ					M	14A7	M	14B7	M	14A7	1
COIL		14H3				15C9		15D9				10B2		10C2		10D2	COIL

RELAY

DESIG	FTA3		FTAN				FTBN		FTB5				FTTN		FTT5		GCA				POA		PTA		DESIG
CODE	AF523		AF522				AF506		AF506				AF506		AF506		AF507				AF517		AF517		CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	14F7					M	34H1	M	34H1			M		M		M	21C9			EM	19C6	EM		12
11							M	17H2	M				M		M		M	18H1			M	34F2	M		11
10	BM		M				M	17G2	M				M	11B6	M	11B6	BM				M	18E6	M	19E6	10
9							M	17F2	M				M	11B6	M	11B6	M	17C8							9
8	BM	14F7	BM				M	17E2	M	17E2			M	11B6	M	11B6	BM				EBM	16B7	EBM	19E7	8
7							M	17D2	M	17D2			M	11B6	M	11B6	B	21E8			E	16B7	B	19E7	7
6	EM	21G8	BM	21F8			M	17A2	M	17B2			M	11B6	M	11B6	BM	25D4			EMB	34C3	EMB	34C3	6
5							M	14G7	M	14H7			M	11B6	M	11B6	M								5
4	BM	14F7	M				M	14G7	M	14G7			M	11B6	M	11B6	BM	17F9			M		M	19D1	4
3							M	14G7	M				M	11B6	M	11B6	M	17E8			M	18E1	M	19D1	3
2	M	14C7					M	14F7	M				M	11B6	M	11B6	M				M	18C1	M	19E1	2
1	M	14B7					M	14F7	M				M	11B6	M	11B6	M	17D8			M	19C1	M		1
COIL		10F2		10G2				10G3		10H2				10G3		10H3		21F9				11A1		11A1	COIL

RELAY

DESIG	PZA		P5A		P6A		P7A		P8A		P9A				PE				STP2A						DESIG
CODE	AF517		AF517		AF517		AF517		AF521		AF517				AF506				AF514						CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EM	19C6	EM		EM	34C3	M	19C6	M	19C6	EM	19C6	M		M		M	19C6	M		M		M		12
11	M		M	19G1	M		M	34F2	M	19G1	M	19G1	M		M		M	19D6	M		M		M		11
10	M	19F6	M	19E6	M	19E6	M	19C6	M	34E3	M	19E6	M		M		M	19D6	M	19E6	M		M		10
9															M		M	19D6							9
8	EBM	19A7	EBM	19E6	EBM	19E6	EBM	19E6	M	19E6	EBM	19E6	EBM	19E6	M	19D6			M	19D6						8
7	B	19A7	B	19E6	B	19E6	B	19E6	M	19D6	B	19E6	B	19E6	M	19E6			M	19E6						7
6	EMB		EMB	34C3	EMB		EMB	19D6	EMB	19E6	EMB	34E3	EMB	19E6	M	19D6			M	19D6						6
5															M	19D6									5
4	M		M	19E1	M		M	19C6	M	19D6	M	19E6	M	19E6	M	19D6			M	19D6						4
3	M	34E7	M		M	19E1	M	19D6	M	34E3	M	19E6	M	19E6	M	19D6			M							3
2	M		M	19E1	M	19D6	M	34C3	M	19E6	M	19E6	M	19E6	M	19D6			M							2
1	M		M	19A1	M	19A1	M	19A1	M	19A1	M	19A1	M	19A1	M	19A1			M							1
COIL		21E1		19E1		19E1		19E1		19E1		19E1		19E1		19E6				21E4						COIL

DESIG																									DESIG
CODE																									CODE
OPTION																									OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																									12
11																									11
10																									10
9																									9
8																									8
7																									7
6																									6
5																									5
4																									4
3																									3
2																									2
1																									1
COIL																									COIL

NETWORK

	DESIG	LOC	CODE
	BCF	15H3	185A
[2]	FTA0,1	10B2	185A
	FTA2	10D2	185A
[2]	FTA3,N	10C2	185A
[2]	FTBN,5	10H2	185A
[2]	FTTN,5	10G3	195A
	GCA	21F9	185A
	MCB2	28G4	185A
	POA	11A1	185A
	PIA	14A1	195A
	P2A	14B1	185A
	P5A	14D1	185A
	P6A	11E1	195A
	P7A	11E1	195A
	P8A	11F1	185A
	P9A	14F1	185A
	PE	10E6	185A
	STP2A	21F4	185A

DRAWING ISSUE

5D	MLW MWS
9B	CH MWL
12D	DEH EP
22D	

CROSSBAR SYSTEMS

DIAL TONE MARKER CIRCUIT (2)

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SD-26001-01-C16

BELL TELEPHONE LABORATORIES, INC

6S

SD-26001-01-C16

APP FIG. 19

RELAY DESIG	2W				DT		DTA		DTB												DESIG
CODE	AJ15				AJ15		AJ15		AJ15												CODE
OPTION					YW		YW		YW												OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	27H6			EBM	13F5	EBM	3E6	EBM	12F7											12
11	EBM	27G6			EBM	13C3	EBM	24D4	EBM	12E7											11
10	EBM	16C8			EBM	3A1	EBM	24C5	EBM	12D7											10
9	EBM	15B7			EBM	3A1	EBM	24D6	EBM	13B5											9
8	EMB	24D6			EMB	15C7	EMB	20A/G5	EMB	20B/G7											8
7	EBM	27C7			EBM	16C7	EBM	20A/D3	EBM	13C9											7
6	EMB				EMB	35D7	EMB	20B/D6	EMB	16G7											6
5	EMB	24H3			EMB	35A7	EMB	24H3	EMB	12G4											5
4	EBM				EBM	13A2	EBM	27G5	EBM	12F4											4
3	EBM				EBM	10B4	EBM	27H6	EBM	35H6											3
2	EBM				EBM	4D7	EBM	B	EBM	13C2											2
1	EBM				EBM	4E5	EBM	13B8	EBM	20B/F1											1
COIL		3G4				3H5		3H5		3E5											COIL

(YU) 35E0
(XA) 36E3

(YR) CONA
28DF
5 — 3 — 24D5
2 — 24A0

(YR) FCGA
28DD
5 — 3 — 20A/G8
2 — 24B6

(YS) CONA
31BB
5 — 4 — 24D5
7 — 24A0

(YS) FCGA
31BB
5 — 4 — 20A/G8
7 — 24B6

CAPACITOR

DESIG	LOC	CODE
CONA	24C2	475AC
CONB	24C1	475F
CONC	24A1	441P

INDUCTOR

DESIG	LOC	CODE
CONB	24A2	321H

NETWORK

DESIG	LOC	CODE
2W	3G4	185A
(UW) CONA	24B1	186A
(UX) [2] CONA1,2	24B1	186B
(YW) DT	3H5	185A
(YW) DTA	3H5	185A
(YW) DTB	3E5	185A

RESISTOR

DESIG	LOC	CODE
(YY) CONA	24C2	KS13490,L3, 1000
CONB	24A1	145A,180,000
CONC	24B1	145A, 20,000
COND	24A2	145A, 200,000
CONE	24A5	18AP
(YV) CONF	24B5	18AP
(YW) CONF	24B5	19KY
CONG	24A0	18FR
CONH	24A0	145A,12,000
CONJ	24B0	145A,12,000
(YR) CONK	24A5	18BA
(YS) CONK	24B5	18JW
(YV) GLHA	24B6	19BM
(YW) GLHA	24B6	19KY

TRANSFORMER

DESIG	LOC	CODE
CONA	24B2	94M(REP COIL)

TUBE,ELECTRON

DESIG	LOC	CODE
CONA	24C2	313CA

APP FIG. 20

RELAY DESIG	[4]FCR0-3		[4]FCR10-13		[4]FCR20-23		[4]RO-3		[3]VP0-2		VPT		AN		RCY2		ANN		ANNA						DESIG
CODE	AF501		AF501		AF501		AJ507		AF504		AF42		AK30				AJ503		AF42						CODE
OPTION			ZW		ZZ								XN		XN		XN		XN						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	BM		BM		BM		M	32E2	M	26E7	EMB		M	27A2			EBM	27E7	EMB						12
11	M	1F7	M	1F7	M	1F6	M	27H2	M		M		EBM	27F8			EBM	27F7	M	13B1					11
10	BM	1E4	BM	1A4	BM	33C4	M	27E6	M	26B5	EBM	26C6	EBM	27A7			EBM	27B7	EBM						10
9	M	1E4	M	1A4	M	33C4	M	26E7	M	26B5			EMB	27A7			EBM	27C0							9
8	BM	1E4	BM	1A4	BM	33C4	BM		M	26A5	EBM	26C6	EMB	27A2			EMB	27B2	EBM						8
7	M	1E4	M	1A4	M	33C4	M	26B8	M	26A5	B						EBM	27A2	B						7
6	BM	1E4	BM	1A4	BM	33C4	BM	4C6	M	26A5	EMB						EMB	13E2	EMB	20B/D6					6
5	M	1E4	M	1A4	M	33C4	M		M	26A5					EMB	13F2	EMB	13A2							5
4	BM	1E4	BM	1A4	BM	33C4	BM		M	26A5	EBM	26C6			EMB	26A8	EBM	26A8	EBM						4
3	M	1E4	M	1A4	M	33C4	M	27G6	M	26A5	M				EBM	4B4	EBM	4E7	M	27D2					3
2	BM	1E4	BM	1A4	BM	33C4	M	3E2	M	26A5	EBM	26C6			EBM	4F7	EBM	4B5	EBM						2
1	M	1E4	M	1A4	M	33C4	M	16B	M	26A5	M	26D7			M	27C2	EBM	4A6	M						1
COIL		26D8		26E8		26F8		26C6		26D6		26D7		27A3		27A6		27C2		27C1					COIL

NETWORKS

	DESIG	LOC	CODE
	[4] FCR0-3	26D8	
(ZW)	[4] FCR10-13	26E8	
(ZZ)	[4] FCR20-23	26F8	
	[4] RO-3	26C6	185A
	[3] VP0-2	26D6	
	VPT	26D7	186A

DRAWING ISSUE

12D	DEH 4DP PRM MEC AHD
13D	PRH EPM AHD
15D	PEC EPM AHD
18D	LW AHD
19A	RLP EPM AHD
21A	EP PST AHD
22D	EP TAC AHD
24D	KMT GDL AHD MEC
29D	
30D	
32A	

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-C17

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

SD-26001-01-C17

(22) APP FIG. 22

RELAY

DESIG	[7] CST3-9																				DESIG
CODE	AJ502																				CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	13B7																			12
11	EBM																				11
10	EBM	13G7																			10
9	EBM	13J7																			9
8	EMB																				8
7																					7
6	EMB																				6
5																					5
4	EBM	13C7																			4
3	EBM																				3
2	EBM	12F6																			2
1	EBM	12F5																			1
COIL		12A9																			COIL

NETWORKS

DESIG	LOC	CODE
[7] CST 3-9	12G1	185A

(23) APP FIG. 23

RELAY

DESIG	CSR0	[10] CSR1-4	C	CSRK 2																DESIG
CODE	AJ502	AJ502	AF522	AF522																CODE
OPTION																				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM		EBM																		12
11	EBM		EBM																		11
10	EBM		EBM	13G8	M		M														10
9	EBM	13C8	EBM	13G8																	9
8	EMB	13C7	EMB	36C6	BM		BM														8
7																					7
6	EMB	36C7	EMB	36C7	BM		BM														6
5																					5
4	EBM	37A2	EBM	37B6	M	13E8	M	13E9													4
3	EBM	37A2	EBM	37B6																	3
2	EBM		EBM																		2
1	EBM		EBM																		1
COIL		12B9		12B9		37A4		37D4													COIL

NETWORKS

DESIG	LOC	CODE
[10] CSR0-9	12F1	185A
CSRK1	37A4	185A
CSRK2	37D4	185A

RESISTORS

DESIG	LOC	CODE
CSRC	37D5	
CSR1	37C5	
CSR2	37B5	KS-13492, L1, 2000
CSR4	37A5	
CSR7	37B5	

(24) APP FIG. 24

RELAY

DESIG	MPBX		RV		TAO																DESIG
CODE	AF515		AF519		AF519																CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	BM		M		M	36D7							M	—							12
11	M												M	—							11
10	BM	35F6	M		M								M	35A2							10
9													M	35A2							9
8	BM	13A6	B4	13B6	BM	13A8							M	35B2							8
7	B	13A6	B	13B9	B	13A8							M	35B2							7
6	BM	13C6	BM		BM								M	35C2							6
5													M	35C2							5
4	BM	36E6	M		M								M	35D2							4
3	M												M	—							3
2	BM		M		M								M	—							2
1	M												M	—							1
COIL		36C8		36C8		36B8								12H1							COIL

NETWORKS

DESIG	LOC	CODE
MPBX	36C8	185A
RV	36C8	185A
TAO	36C8	185A

(25) APP FIG. 25

DESIG	[10] CSA0-9																				DESIG
CODE	AF504																				CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	—																			12
11	M	—																			11
10	M	35A2																			10
9	M	35A2																			9
8	M	35B2																			8
7	M	35B2																			7
6	M	35C2																			6
5	M	35C2																			5
4	M	35D2																			4
3	M	—																			3
2	M	—																			2
1	M	—																			1
COIL		12H1																			COIL

NETWORKS

DESIG	LOC	CODE
[10] CSA0-9	12H1	185A

(26) APP FIG. 26

DESIG	[10] CSA0-9																				DESIG
CODE	AF504																				CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	M	—																			12
11	M	—																			11
10	M	36C4																			10
9	M	36C5																			9
8	M	36C6																			8
7	M	36C4																			7
6	M	35C2																			6
5	M	35C2																			5
4	M	35D2																			4
3	M	35C2																			3
2	M	36C5																			2
1	M	36C6																			1
COIL		12H1																			COIL

NETWORKS

DESIG	LOC	CODE
[10] CSA0-9	12H1	185A

(27) APP FIG. 27

DESIG	DAT		NDAT		WAT		WBI				DESIG
CODE	AF518		AF518		AF518		AJ501				CODE
OPTION					VY		VY				OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EMB	—	EMB	—	EMB		EBM				12
11	M	—	M	—	M		EBM	2505			11
10	EBM	—	EBM	—	EBM		EBM	21G4			10
9							EBM	20A/E3			9
8	EBM	13B9	EBM	13A9	EBM	13B9	EMB				8
7	B	—	B	—	B	13B9	EBM	20A/F5			7
6	EMB	—	EMB	—	EMB		EMB	3H3			6
5							EMB	24F5			5
4	EBM	—	EBM	—	EBM		EBM	20A/G5			4
3	M	12C1	M	12D2	M	12D1	EBM	20A/E3			3
2	EBM	—	EBM	—	EBM		EBM	23G4			2
1	M	—	M	—	M		EBM	20A/H5			1
COIL		12C1		12D2		12D1		3C4			COIL

NETWORKS

DESIG	LOC	CODE
DAT	12C1	185A
NDAT	12D2	185A
(VY) WAT	12D1	185A
(VY) WBI	3C4	185A

DRAWING ISSUE

11D	ECB	WEC					
13D	WFH	WEC	AWH				
15D	PRN	CSM	AWH				
16D	FEC	BM	AR				
18D	RLB	LAV	AMD				
300							

ISSUE 43B

SD-26001-01-C19

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-C19

BELL TELEPHONE LABORATORIES INCORPORATED — DWG SIZE 6S — PRINTED IN U.S.A.

APP FIG. 28

RELAY

DESIG	LOLA			LOLP			NOLA												DESIG
CODE	AJ503			AF16			AJ503												CODE
OPTION																			OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	11H2			M		EBM												12
11	EBM	13D1					EBM												11
10	EBM	29A6			M		EBM												10
9	EBM	8H8					EBM												9
8	EMB				EBM		EMB												8
7	EBM				B		EBM												7
6	EMB				EBM	13C1	EMB												6
5	EMB						EMB												5
4	EBM				EBM		EBM												4
3	EBM						EBM												3
2	EBM				M		EBM	29A6											2
1	EBM				M		EBM	13C1											1
COIL		11E3				11G2		11F3											COIL

RELAY

LOLF
316A
5 — 4 — 13C2
7 — 11F2

NETWORK

DESIG	LOC	CODE
LOLA	11E3	185A
LOLP	11G2	185A
NOLA	11F3	185A

RESISTOR

	DESIG	LOC	CODE
(VN)	LOLA	8H8	18JY

APP FIG. 29

RELAY

DESIG	WBT									
CODE	AJ503									
OPTION										
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12	EBM	35H4								
11	EBM	20B/F7								
10	EBM									
9	EBM									
8	EMB									
7	EBM									
6	EMB	13C5								
5	EMB									
4	EBM	13D5								
3	EBM									
2	EBM									
1	EBM									
COIL		35G6								

NETWORK

DESIG	LOC	CODE
WBT	35G6	185A

APP FIG. 30

RELAY

DESIG	ABK				W82		WGA		WGB		WDC1		WTK		XAB1		XWB				DESIG
CODE	AJ501				AJ501		AJ501		AJ501		AJ501		AJ501		AF51		AJ501				CODE
OPTION	VX				VX		VX		VX						VX						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM				EBM		EBM		EBM		EBM		EBM	21H3			EBM				12
11	EBM				EBM	13G9	EBM		EBM		EBM		EBM				EBM				11
10	EBM				EBM	13B9	EBM		EBM		EBM		EBM		M		EBM				10
9	EBM				EBM		EBM	38F4	EBM	38F5	EBM		EBM	38G1			EBM				9
8	EMB				EMB	38E3	EMB	13F9	EMB	13G9	EMB		EMB		M	30H4	EMB	30H4			8
7	EBM				EBM	38E2	EBM		EBM		EBM	38E8	EBM				EBM				7
6	EMB				EMB		EMB		EMB		EMB		EMB		M	30G7	EMB	30B7			6
5	EMB				EMB		EMB		EMB		EMB		EMB	38E7			EMB				5
4	EBM	13F9			EBM	36E1	EBM		EBM		EBM		EBM		M	29E7	EBM				4
3	EBM				EBM		EBM		EBM		EBM	23H4	EBM	38G4			EBM				3
2	EBM				EBM		EBM		EBM		EBM		EBM	38F9			EBM				2
1	EBM				EBM	3H3	EBM		EBM		EBM		EBM				EBM	38E1			1
COIL		38G3				3C4		38F6		38G6		38F1		38E6		2907		38E1			COIL

RELAY

XAB
(VX) 316T
5 — 4 — 29E7
7 — 38E3

NETWORKS

	DESIG	LOC	CODE
(VX)	ABK	38G3	
	WB2	3C4	
	WDC1	38F1	
(VX)	WGA	38F6	185A
(VX)	WGB	38G6	
	WTK	38E6	
	XWB	38E1	

RESISTORS

	DESIG	LOC	CODE
(VX)	WGA	38F4	KS-13492,L1,2kΩ
(VX)	WGB	38E4	KS-13492,L1,2kΩ

APP FIG 31

RELAY

DESIG	MPL		MPLA					
CODE	AK8							
OPTION								
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12			M					
11			M	35F6				
10			EBM	13D3				
9			EMB	35H5				
8			EM	-				
7								
6								
5	EM	35G6						
4	B							
3	EBM	13C3						
2	EBM	35G1						
1	M	35H5						
COIL		35F4		35F1				

NETWORK

OPT	DESIG	LOC	CODE
	MPL	35F4	185A
	MPLA	35F1	185A

DRAWING ISSUE

22D	EP EPT
23A	VN VX WB
28D	UN
30D	

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-C20

BELL TELEPHONE LABORATORIES INCORPORATED 6S

APP FIG. 28

RELAY

DESIG	LOLA			LOLP			NOLA														DESIG
CODE	AJ503			AF16			AJ503														CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	11H2			M				EBM												12
11	EBM	13D1							EBM												11
10	EBM	29A6			M				EBM												10
9	EBM	8H8							EBM												9
8	EMB				EBM				EMB												8
7	EBM				B				EBM												7
6	EMB				EBM	13C1			EMB												6
5	EMB								EMB												5
4	EBM				EBM				EBM												4
3	EBM								EBM												3
2	EBM				M				EBM	29A6											2
1	EBM				M				EBM	13C1											1
COIL		11E3				11G2				11F3											COIL

RELAY

1.0LF
316A

5 — 4 — 13C2
7 — 11F2

NETWORK

DESIG	LOC	CODE
LOLA	11E3	185A
LOLP	11G2	185A
NOLA	11F3	185A

RESISTOR

	DESIG	LOC	CODE
VN	LOLA	8H8	18JY

APP FIG. 29

RELAY

DESIG	WBT									
CODE	AJ503									
OPTION										
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12	EBM	35H4								
11	EBM	20E7								
10	EBM									
9	EBM									
8	EMB									
7	EBM									
6	EMB	13C5								
5	EMB									
4	EBM	13D5								
3	EBM									
2	EBM									
1	EBM									
COIL		35G6								

NETWORK

DESIG	LOC	CODE
WBT	35G6	185A

APP FIG. 30

RELAY

DESIG	ABK			WB2		WGA		WGB		WDC1		WTK		XAB1		XWB				DESIG
CODE	AJ501			AJ501		AJ501		AJ501		AJ501		AJ501		AF51		AJ501				CODE
OPTION	VX					VX		VX						VX						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM			EBM		EBM		EBM		EBM		EBM	21H3			EBM				12
11	EBM			EBM	13G9	EBM		EBM		EBM		EBM				EBM				11
10	EBM			EBM	13B9	EBM		EBM		EBM		EBM		M		EBM				10
9	EBM			EBM		EBM	38F4	EBM	38F5	EBM		EBM	38C1			EBM				9
8	EMB			EMB	38E3	EMB	13F9	EMB	13G9	EMB		EMB		M	30H4	EMB	30H4			8
7	EBM			EBM	38E2	EBM		EBM		EBM	38E8	EBM				EBM				7
6	EMB			EMB		EMB		EMB		EMB		EMB		M	30G7	EMB	30B7			6
5	EMB			EMB		EMB		EMB		EMB		EMB	38E7			EMB				5
4	EBM	13F9		EBM	36E3	EBM		EBM		EBM		EBM		M	29C7	EBM				4
3	EBM			EBM		EBM		EBM		EBM	23H4	EBM	38G4			EBM				3
2	EBM			EBM		EBM		EBM		EBM		EBM	38F9			EBM				2
1	EBM			EBM	3H3	EBM		EBM		EBM		EBM				EBM	38E1			1
COIL		38G3			3C4		38F6		38G6		38F1		38E4		29D7		38E1			COIL

RELAY

XAB
316T

VX — 5 — 3 — 29E7
7 — 38E3

NETWORKS

	DESIG	LOC	CODE
VX	ABK	38G3	
	WB2	3C4	
	WDC1	38F1	
VX	WGA	38F6	185A
VX	WGB	38G6	
	WTK	38E6	
	XWB	38E1	

RESISTORS

	DESIG	LOC	CODE
VX	WGA	38F4	KS-13492.L1,2.Ω
VX	WGB	38E4	KS-13492.L1,2.Ω

DRAWING ISSUE

22D	EP PDT
23A	KM
28D	DM
30C	

ISSUE 41B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-C20

BELL TELEPHONE LABORATORIES INCORPORATED 6S

PRINTED IN U.S.A.

SD-26001-01-C20

CIRCUIT NOTES:
101(A). 1-1/3 AMP 48 VOLT SIG BATTERY FUSES PER MARKER

DESIG	BATTERY SUPPLY FOR FIG.	BATTERY SUPPLY FOR APPARATUS
A0	1	FCDO,MT9 & FCMO RELAYS MT4 CONTACTS 1-5
	3	FCK RELAY
A1	1	MT4 REL MT4 CONTACTS 6-10 & 2WO RELAY
	3	TFK1-2 RELAYS
A2	1	BCO,FBO-4,FMGO,FMG5, & BCAO RELAYS
A3	1	FB5-9,FSO-9 & 4WO RELAYS
A4	2	FCD10,MT19 & FCM10 RELAYS MT14 CONTACTS 1-5
A5	2	MT14 REL MT14 CONT 6-10,2W1G,4W1O & 4WT REL
A6	2	BC10,FB10-14,FMG10,FMG15 & BCA10 RELAY
A7	2	FB15-19 & FS10-19 RELAYS
A8	3	ALL FIG. 3 EXCEPT FCK, & TKF1-2 RELAYS
A9	15	PN & PNA LAMPS
	4	2G & 3G RELAYS
A10	4	GC,JGO-4,STP,STP1,STP2,STP3, & MT7 RELAYS
A11	5	GTL1,GTU,FUO/7, & FTO-3 RELAYS
A12	5	MT15,FTTO-3,2OF,4OF,RQ,7Q,STF,PR,FUTO-9, FTBO-3 & TTF RELAYS
A13	6	HGTO-3, MT11, VFTO-1, & VGTO-3 RELAYS
A14	6	HGT4-6, VFT2-3, VGR, VGT4-7
A15	6	HGT7-9, VFT4, VTK, VGT6-11
A16	6	HGG,FTK1,VFG,FR,GK,VGG1-2 RELAYS
A17	6	HTK.HGR,MT8,MT8A,JSQO-5,JLE,JLO,JSE,JSO,SQO, SQ1 & SQA RELAYS
A18	7	MT5, TSE1-2, TSO-4, MT6 RELAYS
	16	ETS & OTS RESISTOR
A19	7	OT RELAY
	8	CLL1-2,CUK1-2,GTL2-3,HGC1-2,VFC & VGC1-2 RELAYS
A20	3	CSG RELAY
	8	RK3, CTO-2, CGA1 OR CSTK1, CGB1 OR CSTK2, AOMR, PBX, CSGA, CSGB & CSGK RELAYS
A21	8	2H2PWR,AO,CN,MAN & MCN RELAYS
A22	10	10LV,12LV,CHA,LCK,TCHK,LK,RK,FAK,TK & SNK RELAYS, JCK RESISTOR
A23	10	DTK, LFK, MAK1, OC, OC1 & OBS1 RELAYS, OBS2 RESISTOR
A24	10	LLC1-2, TLC, CKG1,CKG2 & RYC RELAYS, DCT2 RESISTOR
A25	10	RCY,RCY1,RAV1,FMP,FM,RF & RFA RELAYS, TG1 RESISTOR, TG1 NETWORK
A26	10,12	SP,TR2A,TR2B,DIS1-2&,DISA RELAYS, OPTION "WG" TR1 RELAY
A27	11	CHO-9 & TCHO-9 RELAYS, CHA & JS1-9 RESISTOR
A28	12	D,MAK,MCK,MSK,TM,MF & MLF RELAYS FA1 CONT 8
A29	5,12,18	AMB,FTSO-3,MB,MCBO-3,MRL1,RCCK,RON,TAL, TRR,TRL,TRLA,TRB,TRS & TRST RELAYS, FA1 CONTACT 8, OPTION "WF" TR1 RELAY
A30	12	MT,MT1,MT13,LP & AC8 RELAYS TRA,TRST,MJ & HFA1 RESISTORS
A31	9	CWF,CWX,CWL,NCW & RLH RELAYS, KLH RESISTOR
	10	SF RESISTOR
	13	RYT,RYT1,TMS,OAT,OAT1 & TRT RELAYS "DC" CROSS CONNECTION TERMINAL (B24)
A32	14	ONX,STX,MXT,COX,XBT,XLS,XTC,XTC1,XTRK, XTRL,XCH & XCL RELAYS
A33	14	XSL,XACH,XATS,XTS1,XPG,XCF,XAJS,BX,XCS,XTG1, XALC & XVHF RELAYS,XJSA & XJSB NETWORKS, TS, XJSA & XJSB RESISTORS
A34	14	XAF RELAY
	15	F LAMP
A35	14	XHG RELAY
	15	HG LAMP
A36	15	HGB LAMP
A37	14	XAJC RELAY
	15	JC LAMP
A38	14	XAJG RELAY
	15	JG LAMP
A39	16	F4 RESISTOR
	15	CS LAMP, OR CSUG-9 RELAYS (FIG. 8)
A40	15	WSM LAMP
A41	30	ENTIRE APP FIG 30
A42	15	WSMA LAMP

CIRCUIT NOTES: (CONT)
101(A). 1-1/3 AMP 48 VOLT SIG BATTERY FUSES PER MARKER (CONT)

DESIG	BATTERY SUPPLY FOR FIG.	BATTERY SUPPLY FOR APPARATUS
B0	15	JS LAMP
B1	15	LC LAMP
B2	15	LFS LAMP
B3	14	XLG RELAY
	15	LG LAMP
B4	14	XALR RELAY
	15	LR LAMP
B5	15	LBSO LAMP
B6	15	LBS1 LAMP
B7	15	LS LAMP
B8	15	LSA LAMP
B9	14	XLV RELAY
	15	LV LAMP
B10	15	TB LAMP
B11	15	TBSO LAMP
B12	15	TBS1 LAMP
B13	15	TBS2 LAMP
B14	15	TBS3 LAMP
B15	15	TBS4 LAMP
B16	15	TFS LAMP
B17	15	TSM LAMP
B18	14	XVGA RELAY
	15	VGA LAMP
B19	14	XAVGB RELAY
	15	VGB LAMP
	16	FR RESISTOR
B20	9	HMT1,HMS1,LXP1,LXPA & JXP1 RELAYS
B21	9	JXPA,LLTA,SLA,SLRK,SL,DVO,HMT & LLT RELAYS XLH1,XLH3,RCTB, & LLT RESISTORS
B22	9	DCT1,HTR,LHT,LTR,GLH,GLH1,GT1,RCTA,RCTB, CON1 & DVA RELAYS
B23	7	FCD20,FCM20 & MT29 RELAYS MT24 CONTACTS 1-5
B24	17	MT24 RELAY,MT24 CONTACTS 6-10
B25	17	BC20,FB20-24,FMG20 & FMG25 RELAYS
B26	17	FB25-29 & FS20-29 RELAYS
B27	7	PBX5, PLN & PLN5 RELAYS
	18	FTT4-5 & STP2A RELAYS
	29	ENTIRE APP FIG 29
	31	ENTIRE APP FIG 31
B28	18	6OF,GCA,FTAO-4 & FTB4-5 RELAYS
B29	22	ENTIRE APP FIG 22
	8	CSTO-2,NPBX RELAYS
B30	23,24	ENTIRE APP FIG 23 & 24
B31	19	2W,FCRO-3,FCR10-13,FCR20-23,VPO-2 & VPT RELAYS
	20	
B32	15	CSA LAMP
B33	1	DTO,BCDO RELAYS
	2	DT10,BCD10 RELAYS
	5	TTFO RELAY
	7	NCSL,PLNC OR PBX7,PLN7 RELAYS
	19	DT,DTA,DTB RELAYS
B34	27	ENTIRE APP FIG 27
	20	AN,ANN,ANNA & RCY2 RELAYS
B35	28	ENTIRE APP FIG 28
B36	15	LBS2 LAMP
B37	15	TBS5 LAMP
MBX	12	SHOWN ON FS 28,28E5

* POWER RINGING & TONE FRAME CKT

101(B). 1/2 AMP HIGH VOLTAGE +130 VOLT BATTERY FUSES PER MARKER

DESIG	BATTERY SUPPLY FOR FIG.	BATTERY SUPPLY FOR APPARATUS
CO	13	LDT,SDT,TBT,TRTR & WT TUBES, SDT1 & WT1 CAPACITORS, LDT4,SDT4,TRT4,TBT4,TBT1,WT1, WT4,SDT5,TRT1, LDT1, & DTA RESISTORS
	19	CONG, CONK RESISTORS
	9	CON 7 RESISTOR
C1	9	LH,JH,TH1-3 RESISTORS
	15	LOLA LAMP
E*	13	HTT & OAT TUBES, HTT1, HTT4 & OAT4 RESISTORS, HTT1 CAPACITOR

*POWER RINGING & TONE FR CKT (SEE NOTE 203)

CIRCUIT NOTES: (CONT)
101(C). GROUND LEADS PER MARKER

DESIG	GROUND SUPPLY FOR FIG.	GROUND SUPPLY FOR APPARATUS
0	1	ENTIRE APP FIG 1
	2	ENTIRE APP FIG 2
	27	ENTIRE APP FIG 27
	30	ENTIRE APP FIG 30
1	3	ENTIRE APP FIG 3
2	4	ENTIRE APP FIG 4 EXCEPT MT7 RELAY
3	5	ENTIRE APP FIG 5
4	6	ENTIRE APP FIG 6
	7	ENTIRE APP FIG 7
5	8	RK1,RK2,RK3,MAN,CGA1,CGB1,GTL2,2P,AO,MCN, AOMR,PBX & CN RELAYS
	10	JCK,10LV,12LV RELAYS
	11	CHO-9 & TCHO-9 RELAYS. JSO-9,SMO-9 & JK NET.
6	8	GTL3,CGA & CGB RELAYS
	25,26	CSAO-9 RELAYS
7	10	CHA,TK,SNK,TR2B,DIS2 & DISA RELAYS, JCKO & VGA RESISTORS,ASM,CHT,JCKO & VGA NETWORKS
8	10	MAK1,OC,OBS2,TLC,HGK & DTK RELAYS
	15	TXP & TXP1 LAMPS
9	10	LLC1 RELAY
10	10	CKG1,CKG2 RELAY & DTB RESISTOR
11	10	RCY,RCY1,RAV1,RYC,FMP & FM RELAYS
12	12	D,MF & MLF RELAYS CONTACTS 1 TO 12
	29	ENTIRE APP FIG 29
13	12	D,MF & MLF RELAYS CONTACTS 13 TO 24,MAK,MCK, MSK,TM,MB,LP,DL,FA,FA1,AC8 & HFA RELAYS
14	12	MCBO,MT,MT1,TAL,TRA,TRB & MT13 RELAYS
15	12	MCB1,TR1,MRL1,TRL,TRLA,TRR & TRST RELAYS
16	13	ENTIRE APP FIG 13
17	14	ONX,STX,MXT & BX RELAYS
18	14	COX RELAY
19	14	ENTIRE APP FIG 14 EXCEPT ONX,STX,MXT,XCH, COX & BX RELAYS
20	14	"MSK-(ST)","MCK-(ST)","MSK-(E)" & "D" LEAD TO LLMC "S1" LEAD TO TL "G" CROSS CONNECTION TERMINAL "180" LEAD TO MTFC
21	28	LOLF RELAY & LOLA CONTACT 9
	10	LLC2 RELAY
	4	MT7 RELAY
22	9	HMS1,LXP1,JXP1,SLA,LLT,SL,LGCK,JGCK,TGCK,CHF, HMT1,DVO,DVA,JXPA,LXPA,CWL & NCW RELAYS
23	9	DCT1,FCG,HTR,LHT,GLH,GLH1,GT1,CON1 & RLH RELAYS, CON4,CON9 & GLH RESISTORS,LLT & SL NETWORKS,CON1 & CON3 CAPACITORS
	19	ENTIRE APP FIG 19
24	17	ENTIRE APP FIG 17
25	18	MCB2 CONTACTS 1-10 & MCB3 CONTACTS 1-12
		MCB2 CONTACTS 13-22 & MCB3 CONTACTS 13-24
26	18	MCB2 & MCB3 RELAY CONTACTS 13-22
27	18	ENTIRE APP FIG 18 EXCEPT MCB2 RELAY
28	20	ENTIRE APP FIG 20 & XTB PCMG

BATTERY SYMBOL	VOLTAGE RANGE
-48	45-50V
+130	125-135V

101(D).

DESIG	FIG.	RINGING SUPPLY FUSING	
* AC-DC AUD OR * AUD	15	1/2 AMP HIGH VOLTAGE FIRST DIAL TONE MARKER ONLY	SUPPLY ONLY IN OFFICES WITH MORE THAN 12 MARKERS
* RINGING GROUND	9,19	FIRST DIAL TONE MARKER ONLY	ONLY IN OFFICES WITH MORE THAN 12 MARKERS

* OBTAINED FROM POWER RINGING AND TONE DISTRIBUTION FR

DRAWING ISSUE
15D PRM SDM AMP
16D NSC EW AMP
18D 4WO LW AMP
19A FLS LV AMP
21A EP PAC
22D EP PJ 4WT
23A 10WL 6WL 4WO
28D SDM
30D
33D

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STABILOID

CIRCUIT NOTES: (CONT)

102(A).

FEATURES PROVIDED	APP FIG	QUANTITY
TRUNK LINK FRAME SELECTOR FOR TLF 0-9	1	1 OF EACH PER MKR
TRUNK LINK FRAME MEMORY AND CHECK UNIT	3	
JUNCTOR GROUP, PATTERN AND OFFICE SIZE UNIT	4	
LINE LINK FRAME NO. AND REGISTRATION UNIT	5	
CALLING LINE VERTICAL GROUP, HORIZONTAL GROUP, VERTICAL FILE SELECTION UNIT	6	
ORIGINATING REGISTER TEST AND SELECTION UNIT	7	
CLASS OF SERVICE AND REGISTRATION CHECK UNIT	8	
HOLD MAGNET OPERATE UNIT	9	
CONTROLLER UNIT "A"	10	
CHANNEL TEST AND SELECTION UNIT	11	
CONTROLLER UNIT B	12	
TIMING UNIT	13	
CROSS DETECTION UNIT	14	
RESISTANCE LAMP UNIT	15	
50 WATT RESISTANCE UNIT	16	

102(B).

PAR	FEATURE OPTIONS				PROVIDE: APP FIG	APP OR WRG	QUANTITY
1	TRUNK LINK FRAME SELECTION FOR TLF 10-19 OR TR TLF 3,4				2		1 PER MKR
2	TRIPLE TLF OPERATION (2 WIRE ONLY)	PROVIDED				N	
		5 TLF TRIPLE OPERATION ONLY				VJ	
		OTHER THAN 5 TLF TRIPLE OPERATION (5 TLF TRIPLE OPERATION MAY USE APPFIG 18 INSTEAD OF VJ)	MARKER HAS ACCESS TO HIGHER NUMBERED TLF (SEE NOTE 117)	YES	18		1 PER MKR
				NO; OFFICE IS PATTERN NORMAL		VJ	
				NO; OFFICE IS PATTERN NORMAL: YES			
		MORE THAN 20 TLF	YES	MARKER HAS ACCESS TO HIGHER NUMBERED TLF	17		1 PER MKR
				YES		WR	
				NO			
		NOT PROVIDED				Q	
3	NO. OF ORIGINATING REGISTER GROUPS PROVIDED	ONE GROUP				ZU	1 PER MKR
		TWO GROUPS				Y,ZU	
		THREE TO SIX GROUPS OR OVERFLOW ANNOUNCEMENT TRUNK GROUP			20	ZV	
		OFFICE EQUIPPED WITH TLF 10-19 OR TRANSFER TLF 3,4				ZW	
		MARKER HAS ACCESS TO TLF 20-29				ZZ	
4	OVER 390 LINES PER LINE LINK FRAME OR OVER 400 TRUNKS PER TRANSFER LINE LINK FRAME					Z	

102(B). (CONT)

PAR	FEATURE OPTIONS				PROVIDE: APP FIG	APP OR WRG	QUANTITY
5	LINE LINK MARKER CONNECTOR INDICATES TENS DIGITS OF LINE LINK FRAME BY GROUNDING	ONE LEAD				S	
		TWO LEADS				R	
6	WHEN LINE SWITCHING OF PBX STATIONS IS PROVIDED	AND OFFICE IS EQUIPPED FOR CLASS OF SERVICE SELECTION ON TENS AND UNITS BASIS (SID)	YES			ZS	
			NO			ZT	
		ONE OUT OF 30 BASIS (A&M ONLY)					SEE NOTE 106
		WITH SEPARATE REGISTER GROUPS, ONE GROUP FOR PBX CUSTOMERS, AND ONE FOR NON-PBX CUSTOMERS WHICH DOES NOT PROVIDE THE NPBX LEAD				YJ	
		WITH 4 AND 5 DIGIT DIALING OF INTRA-PBX CALLS OR PRIVATE LINE NETWORK OPERATION OR BOTH				YK	
		DIGIT 8 CUT-THROUGH			31		1 PER MKR
		WITH 7 DIGIT DIALING OF INTRA-PBX CALLS (PHASE III CTX ONLY)				TF	
		PRIVATE LINE NETWORK OPERATION IS PROVD				TG	
7	CLASS OF SERVICE SELECTION ON TENS AND UNITS BASIS (SEE NOTE 106)	CLASS 00-29				XD	
		CLASS 30-99			22		1 PER MKR
		WITH LIMITED TRANSLATION OF CS-POINTS				XC	
		WITH FULL TRANSLATION OF CS-POINTS			25	XB	
		20 RATE TREATMENTS	YES		23	YE, XG	1 PER MKR
			NO			YD	
8	PHASE III CENTREX (SEE NOTES 105(4), 106(2),& 111)						
	YES	MARKER CONTROLS TRANSFER NETWORK (SEE NOTE 117)	YES			YW, YU, VD, TI	
		OVER 2 TRANSFER TLF				YX	
		DON'T ANSWER TRANSFER			27		1 PER MKR
		AND DON'T ANSWER AUXILIARY TRUNKS NOT PROVIDED				VC	
		WIDEBAND SWITCHING OF CENTREX STATIONS PROVIDED			30	VY	
		WIDEBAND TRANSFER LINK CAPACITY GREATER THA 80 VERTICALS				VX	
		NO				WC, VD, UB, YV	
	NO					YV, WC	
9	2W NETWORK ONLY					ZX	
	4W NETWORK		YES			ZY	
			NO			WN	
	4W OR TRANSFER NETWORK PROVIDED	YES	MARKER CONTROLS 4W NETWORK OR TRANSFER NETWORK		19	YS, YT, VC, UF	1 PER MKR
			MARKER CONTROLS ONLY 2W NETWORK (SEE NOTE 117)			ZX, VB, UE	
		NO				VB, UE	
10	REVERSAL OF TIP AND RING LEADS FOR ATTENDANT TRUNKS AND TIE LINE LINE WITH CENTREX (FOR USE WITH CLASS OF SERVICE SELECTION ON TENS AND UNITS BASIS) (SEE NOTE 106)				24	XG	1 PER MKR

102(B) (CONT)

PAR	FEATURE OPTIONS				PROVIDE: APP FIG	APP OR WRG	QUANTITY
11	OFFICE TEST FRAME TEST CKT	PROVIDED			YM,YW, UQ		
		WITH RANGE EXTENSION FOR UNIGAUGE CABLING				VA	
		NOT PROVIDED				YO	
12	PREFIX DIGIT 8 INDICATED TO ORIGINATING REGISTER FROM CUSTOMER CLASS OF SERVICE					XK	
13	PAIRED LINE LINK FRAME OPERATION	YES				XM,VF	
		TRIPLE TLF DISTRIBUTION PROVIDED (N OPTION)	YES			XP	
			NO			WM	
		NO	YES			XQ	
			NO			WL	
		NO				XL	
14	TRUNK GROUP PROVIDED FOR OVERLOAD ANNOUNCEMENT		YES			XN,VS	
			NO			XO	
15	MARKER GROUP PROVIDES MXT TROUBLE INDICATION		YES			XX,WJ	
			NO			XW	
16	WHEN MTFC IS ARRANGED TO TRANSLATE TROUBLE PUNCH INDICATIONS TO A 2/5 BASIS		YES			WK	
			NO			WJ	
17	RANGE EXTENSION FOR UNIGAUGE CABLING				28	UN	1 PER MKR
19	ANY TRUNK LINK FRAME EQUIPPED WITH 12 LEVEL JUNCTOR SWITCHES	YES	(XJS) RELAY CODE IS 280AF (WN OPTION PROVIDED)			TA	
			ANY TRUNK LINK FRAME EQUIPPED WITH 10 LEVEL JUNCTOR SWITCHES OR 4 WIRE TRUNK LINK FRAMES PROVIDED OR TRANSFER TRUNK LINK FRAMES PROVIDED	YES		VM	
				NO; PAIRED LINE LINKS PROVIDED		TB	
				NO; PAIRED LINE LINKS PROVIDED: NO		VL	
				NO; PAIRED LINE LINKS PROVIDED: PAIRED LINE LINKS PROVIDED		TC	
		NO				VK	
20	WIDEBAND CLASS INDICATION TO ORIGINATING REGISTER (SEE NOTE 118)				29		1 PER MKR
21	CALL WAITING SERVICE PROVIDED	YES				UD	
		OFFICE TEST FRAME TEST CKT PROVIDED	YES			UM	
			NO			UL	
		NO				UC	
22	PERMANENT JUNCTOR DISTRIBUTION WITH LESS THAN 4 TRUNK LINK FRAMES					US	
23	ETS PROVIDED	YES (SEE NOTE 123)				TK,TS	
		AND CENTREX IS PROVIDED	YES	PHASE III		TL	
				PHASE I,II: WITH DIAL TRF		TM	
				PHASE I,II: WITHOUT DIAL TRF		TL,TJ	
			NO			TL,TJ	

102(B) (CONT)

PAR	FEATURE OPTIONS			PROVIDE: APP FIG	APP OR WRG	QUANTITY
24	TO PROVIDE SECOND FAILURE TO MATCH TRAFFIC REGISTER PEG COUNTS (FMP) ON A ONE PER MARKER BASIS	YES			TQ	
		NO (A&M ONLY)			TP	
25	INTERFACE AND CONTROL (I&C) CKT (SEE NOTE 105(3), 122)	PROVIDED	X OPT PROVIDED IN I&C CKT		TD, TR	
			X OPT NOT PROVIDED IN I&C CKT (A&M ONLY)		TE	
		NOT PROVIDED			TD	

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CIRCUIT NOTES: (CONT)

102(C). FEATURES AND OPTIONS PROVIDED AFTER DATE OF INTRODUCTION INTO MANUFACTURE. WHEN ADDING THESE FEATURES TO EXISTING MARKERS PROVIDE THE CORRESPONDING OPTIONS

	APP FIG	APP OR WRG	QUANTITY
60 LINE LINK FRAME, 30 TRUNK LINK FRAME		T	
IMPROVED CKT ARRANGEMENT FOR TROUBLE RECORDER INDICATION OF LINE LINK AND TRUNK LINK FRAME SWITCH OPERATION FOR TROUBLE ANALYSIS		J	
DUAL VOLTAGE OPERATION OF ALL HOLD MAGNETS SERVING NON-MESSAGE REGISTER LINES AND ALL HOLD MAGNETS EXCEPT LINE HOLD MAGNETS OF MESSAGE REGISTER LINES ON BOTH LIGHT AND HEAVY TRAFFIC		G	
ELIMINATE NON-PRODUCTIVE TROUBLE CARDS ASSOCIATED WITH CALLING LINE IDENT — FOR NEW MARKERS		F	
ELIMINATE NON-PRODUCTIVE TROUBLE CARDS ASSOCIATED WITH CALLING LINE IDENT — TO IMPROVE EXISTING MARKERS AND NEW MARKERS		ZD	
ADDITION OF 185A CONTACT PROTECTION NETWORK ON (MT7) RELAY		D	
MODIFICATION OF (TBT) TIMER TO PROVIDE TRAFFIC DATA WHICH IS UNIFORM WITH THE U-TYPE MARKERS		A	
MARKER GROUP EQUIPPED FOR IMPROVED CHANNEL TESTING WITH MTF		UI	
PREVENT FALSE OPERATION OF (JSQ-) RELAYS ON SERVICE CALLS		ZG	
FALSE OPTION CREATED FOR RECORD PURPOSES ONLY		ZH	
PREVENT MARKER BLOCKAGE DUE TO THE INABILITY OF A MARKER TO SEIZE A TRUNK LINK FRAME		ZL	
PREVENT SCORING OF THE PLANT REGISTERS WHEN THE MARKER IS MADE BUSY		ZN	
SHORT CYCLE GATE OPERATION FOR LINE LINK MARKER CONNECTOR		ZO	
INSURE MARKER RELEASE IF (OCI) RELAY IS SLOW OPERATING		ZP	
CLASS OF SERVICE SELECTION ON TENS AND UNITS BASIS		YC	
TO EXPAND (RCTA) RELAY CONTACTS FOR 4W OPERATION		YG	
TO INSURE CORRECT INDICATION OF THE TS- LEAD TO THE MTFC		YM	
REPLACEMENT OF 280 TYPE RELAYS FOR IMPROVED CKT RELIABILITY		YQ, XS, XE, WO	
PROTECTION FOR CONTACTS CONTROLLING POLAR RELAYS		YT	
PREVENT CROSS-POINT FAILURES CAUSED BY RELAYS LOCKED UP AFTER CALL COMPLETED		XJ	
RELAY FOR ADDITIONAL OFF-NORMAL GROUNDS		XT	
TO INSURE THE RELEASE OF (JCK) RELAY WHEN DIAL TRANSFER IS PROVIDED		XZ	
TO PREVENT FALSE OPERATION OF TRUNK RELAYS WHEN DIAL TRANSFER OR 4W IS PROVIDED		WB	
TO INSURE MARKER RELEASE IF A-29 FUSE OPERATES		WG	
TO PROVIDE TOTAL SEIZURE PEG COUNT FOR MTF PLANT REGISTER		WQ	
ADDITIONAL SELECTION EQUIPMENT FOR GENERAL USE		WI, VI, UA	
PREVENT LOCK UP WITH (CO) FUSE BLOWN		WX	

102(C). (CONT) FEATURES AND OPTIONS PROVIDED AFTER DATE OF INTRODUCTION INTO MANUFACTURE. WHEN ADDING THESE FEATURES TO EXISTING MARKERS PROVIDE THE CORRESPONDING OPTIONS

	APP FIG	APP OR WRG	QUANTITY
MORE THAN 10 TRUNK LINK FRAMES		WY	
SERVICE OBSERVING ON UNIGAUGE LINES		VN	
BS5 BATTERY SUPPLY TO TRUNK LINK CONNECTOR		VP	
PREVENT POSSIBLE "GLH" FAILURES DUE TO OPERATION OF RELAY (MB) DURING A SERVICE CALL		VQ	
FORCE TEST CALLS TO LIGHT TRAFFIC		VR	
PROVIDE "ROA" TROUBLE PUNCH TO INDICATE OVERLOAD ANNOUNCEMENT OPERATION		VS	
REDUCE EROSION OF (FAK) CONTACT B		VU	
POSITIVE TEST CALL CONTROL WITH OTF		VW	
INSURE OPERATE AND LOCK PATH FOR MT13 RELAY		UQ	
NEW REQUIREMENTS FOR TRAFFIC REGISTER PEG COUNTS WITH OR WITHOUT TRAFFIC USAGE RECORDER		ZB, XV	
TO PREVENT FALSE REGISTRATIONS OVER BD AND BMF LEADS ON MTF TESTS		UH	
PREVENT POSSIBLE PERMATURE RELEASE OF THE 316 TYPE LXP RELAY ON CALLS FROM MESSAGE RATE LINES		UK	
TO PROVIDE FOR FLEXIBLE ASSIGNMENT OF ORIGINATING REGISTER GROUPS TO BE MONITORED		WZ	
TO PROVIDE TROUBLE RECORD ON OPEN PRIMARY WINDING OF (OCT) RELAY		UT	
IMPROVED CONTACT PROTECTION NETWORK FOR CONTINUITY TEST CKT		UX	
TO PROVIDE FOR TRUNK LINK FRAMES EQUIPPED WITH 12 LEVEL JUNCTOR SWITCHES		VO	
TO INSURE PROPER FUNCTIONING OF JUNCTOR SELECT CROSS DETECTION		UZ	
TO INSURE RELEASE OF THE FTCK RELAY DURING A RECYCLE ON TEST CALLS		TO	
TO PROVIDE SECOND FAILURE TO MATCH PEG COUNTS		XU	

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CIRCUIT NOTES: (CONT)

102(C).

FEATURES AND OPTIONS PROVIDED AFTER DATE OF INTRODUCTION INTO MANUFACTURE. WHEN ADDING THESE FEATURES TO EXISTING MARKERS PROVIDE THE CORRESPONDING OPTIONS	PROVIDE APP FIG	PROVIDE APP OR WRG	PROVIDE QUANTITY
60 LINE LINK FRAME, 30 TRUNK LINK FRAME		T	
IMPROVED CKT ARRANGEMENT FOR TROUBLE RECORDER INDICATION OF LINE LINK AND TRUNK LINK FRAME SWITCH OPERATION FOR TROUBLE ANALYSIS		J	
DUAL VOLTAGE OPERATION OF ALL HOLD MAGNETS SERVING NON-MESSAGE REGISTER LINES AND ALL HOLD MAGNETS EXCEPT LINE HOLD MAGNETS OF MESSAGE REGISTER LINES ON BOTH LIGHT AND HEAVY TRAFFIC		G	
ELIMINATE NON-PRODUCTIVE TROUBLE CARDS ASSOCIATED WITH CALLING LINE IDENT — FOR NEW MARKERS		F	
ELIMINATE NON-PRODUCTIVE TROUBLE CARDS ASSOCIATED WITH CALLING LINE IDENT — TO IMPROVE EXISTING MARKERS AND NEW MARKERS		ZD	
ADDITION OF 185A CONTACT PROTECTION NETWORK ON (MT7) RELAY		D	
MODIFICATION OF (TBT) TIMER TO PROVIDE TRAFFIC DATA WHICH IS UNIFORM WITH THE U-TYPE MARKERS		A	
MARKER GROUP EQUIPPED FOR IMPROVED CHANNEL TESTING WITH MTF		UI	
PREVENT FALSE OPERATION OF (JSQ-) RELAYS ON SERVICE CALLS		ZG	
FALSE OPTION CREATED FOR RECORD PURPOSES ONLY		ZH	
PREVENT MARKER BLOCKAGE DUE TO THE INABILITY OF A MARKER TO SEIZE A TRUNK LINK FRAME		ZL	
PREVENT SCORING OF THE PLANT REGISTERS WHEN THE MARKER IS MADE BUSY		ZN	
SHORT CYCLE GATE OPERATION FOR LINE LINK MARKER CONNECTOR		ZO	
INSURE MARKER RELEASE IF (OCI) RELAY IS SLOW OPERATING		ZP	
CLASS OF SERVICE SELECTION ON TENS AND UNITS BASIS		YC	
TO EXPAND (RCTA) RELAY CONTACTS FOR 4W OPERATION		YG	
TO INSURE CORRECT INDICATION OF THE TS- LEAD TO THE MTFC		YM	
REPLACEMENT OF 280 TYPE RELAYS FOR IMPROVED CKT RELIABILITY		YQ, XS, WE, WD	
PROTECTION FOR CONTACTS CONTROLLING POLAR RELAYS		YT	
PREVENT CROSS-POINT FAILURES CAUSED BY RELAYS LOCKED UP AFTER CALL COMPLETED		XJ	
RELAY FOR ADDITIONAL OFF-NORMAL GROUNDS		XT	
TO INSURE THE RELEASE OF (JCK) RELAY WHEN DIAL TRANSFER IS PROVIDED		XZ	
TO PREVENT FALSE OPERATION OF TRUNK RELAYS WHEN DIAL TRANSFER OR 4W IS PROVIDED		WB	
TO INSURE MARKER RELEASE IF A-29 FUSE OPERATES		WG	
TO PROVIDE TOTAL SEIZURE PEG COUNT FOR MTF PLANT REGISTER		WQ	
ADDITIONAL SELECTION EQUIPMENT FOR GENERAL USE		WW, WT, WA	
PREVENT LOCK UP WITH (CO) FUSE BLOWN		WX	

102(C). (CONT)

FEATURES AND OPTIONS PROVIDED AFTER DATE OF INTRODUCTION INTO MANUFACTURE. WHEN ADDING THESE FEATURES TO EXISTING MARKERS PROVIDE THE CORRESPONDING OPTIONS	PROVIDE APP FIG	PROVIDE APP OR WRG	PROVIDE QUANTITY
MORE THAN 10 TRUNK LINK FRAMES		WY	
SERVICE OBSERVING ON UNIGAUGE LINES		VN	
BSS BATTERY SUPPLY TO TRUNK LINK CONNECTOR		VP	
PREVENT POSSIBLE "GLH" FAILURES DUE TO OPERATION OF RELAY (MB) DURING A SERVICE CALL		VQ	
FORCE TEST CALLS TO LIGHT TRAFFIC		VR	
PROVIDE "ROA" TROUBLE PUNCH TO INDICATE OVERLOAD ANNOUNCEMENT OPERATION		VS	
REDUCE EROSION OF (FAK) CONTACT 8		VU	
POSITIVE TEST CALL CONTROL WITH OTF		VW	
INSURE OPERATE AND LOCK PATH FOR MT13 RELAY		UQ	
NEW REQUIREMENTS FOR TRAFFIC REGISTER PEG COUNTS WITH OR WITHOUT TRAFFIC USAGE RECORDER		ZB, XV	
TO PREVENT FALSE REGISTRATIONS OVER BD AND BMF LEADS ON MTF TESTS		UH	
PREVENT POSSIBLE PERMATURE RELEASE OF THE 316 TYPE LXP RELAY ON CALLS FROM MESSAGE RATE LINES		UK	
TO PROVIDE FOR FLEXIBLE ASSIGNMENT OF ORIGINATING REGISTER GROUPS TO BE MONITORED		WZ	
TO PROVIDE TROUBLE RECORD ON OPEN PRIMARY WINDING OF (DCT) RELAY		UT	
IMPROVED CONTACT PROTECTION NETWORK FOR CONTINUITY TEST CKT		UX	
TO PROVIDE FOR TRUNK LINK FRAMES EQUIPPED WITH 12 LEVEL JUNCTOR SWITCHES		VO	
TO INSURE PROPER FUNCTIONING OF JUNCTOR SELECT CROSS DETECTION		UZ	
TO INSURE RELEASE OF THE FTCK RELAY DURING A RECYCLE ON TEST CALLS		TO	
TO PROVIDE SECOND FAILURE TO MATCH PEG COUNTS		XU	

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SPEC'L NOTES: (CONT'D)

103.

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN μF
1	27	0.01
2	120	0.30
3	510	0.5
4	100	1.0
5	130	0.5
6	1000	0.5

104.

RECORD OF APP 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	
	G	W OR H	102C, 105(2)	G		W,H	
	V OR T	V	102C, 105(1), 109	T		V	
	S OR R	S	102B (5), 105 (1,4)	R	S		
	Q,N, FIG.17, FIG.18	Q	102B (2), 105(1), 109	Q,N, FIG.17, FIG.18			
	K OR J	K	102C, 105(2)	J		K	
9B	E OR F	E	102C, 105(6)	F		E	
	A OR B	B	102C	A		B	
	ZB OR ZB	ZA	102C, 105(4, 18,22), 109	ZB		ZB	
		NONE	102C	A			
		ZC	102C	ZC		ZC	
7B			102C	A			
			102C	A			
8B		ZA	102C, 105	ZA		ZA	
			102C	A			
	ZA OR ZA		102C	ZA		ZA	
	ZM	NONE OR E	102C	ZB			
10B	ZL OR ZM	ZL	102C, 105(4)	ZL		ZL	
	ZC	NONE	102C, 104, 109	ZC			
	Z OR ZT	ZT	102B (2), 105(4), 106(3)	ZA, ZT			
11B	FIG.22, FIG.23	NONE	102B (2), 105 (4,5), 106(1), 109	FIG.22, FIG.23			
	YB OR Y	YB OR YB & X	102C, 105(6), 106(1), 109	YB	YB, Y		
	YD OR YE	YD	102B (7), 105(2), 106(1)	YD, YE			

X THIS IS A FALSE OPTION

104.

RECORD OF APP 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	
10D	ZX,ZY, FIG.19	ZX	102B (9), 105 (8,17), 109	ZX,ZY, FIG.19			
	ZW,ZV, FIG.20	ZU	102B (7,105 (4,5, 20), 107	ZW,Z FIG.20			
	ZU	NONE	102B(3)	ZU			
	ZZ	NONE	102B (3)	ZZ			
	YF OR YG	YF	102C, 105(4)	YG		YF	
13D	YE,YE OR YI	YD OR YE	102B (7), 105(4), 106(1)	YD, YE		YI	
	FIG.24	NONE	102B (10), 106(1)	FIG.24			
	YH	YB	105(3), 106(1), 108, 109			YB, YH	
15D	YJ	NONE	102B (6)			YJ	
	YK	NONE	102B (6), 105 (4,12)	YK			
	YL,YM	YL	102C	YM		YL	
	YP,YQ	YP	102C, 109	YQ		YP	
	YR,YS	YR OR NONE	102B (9)	YS		YP	
	YT	NONE	102C	YT			
16D	YN,YO	YO	102B (11), 109	YN, YO			
	YU	NONE	102B (8), 105 (2)	YU			
	YV,XA	YV	102B (8), 105 (5,12), 106(2), 109	YV	XA		
	YW	NONE	102B (8), 105 (17), 106(2)	YW			
	YX	NONE	102B (8), 106(2)	YX			
	YY,ZY	ZY OR NONE	102B (9), 109	YY, ZY			
	YZ	NONE	106 (2)	YZ			
	XB	NONE	102B (7)	XB			
	XC, FIG.22	FIG.22 OR NONE	102B (7), 109	XC, FIG.22			
	XD,XE OR XF,X	XD AND X OR NONE	102B (7), 105(3), 106(1), 109	XD		XE, XF, X	
	XG,XH, FIG.24	FIG. 24 OR NONE	102B (7,10), 105(4), 106(1), 109	XG, FIG.24		XH	

104.

RECORD OF APP 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	
16D	FIG.25 FIG.26	NONE	102B (7), 106(1)	FIG.25	FIG.26		
	FIG.27	NONE	102B (8), 105 (2,9)	FIG.27			
18D	XX	NONE	102B (12)	XX			
	XM,XL	XL	102B (13), 105	XM,XL			
	XP,XQ	XQ OR NONE	102B (9,10, 12),109	XP,XQ			
	WP,WL	WL OR M	102C	WP,WL			
	XN,XO	XO OR NONE	102B (14), 105 (6,15)	XN,XO			
	XR,XS	XP	102C, 109	XS		XR	
	XT	NONE	102C, 105(6)	XT			
	XI,XJ	XI	102C	XJ		XI	
19A	WB	NONE	102C, 105 (8)	WB			
	WC	YC AND WC OR NONE	102B (8), 106 (2), 109	WC			
	XY, XZ	XY	102C, 105 (4,14)	XZ		XY	
20D	WA	NONE	113	WA			
	WD, WE	XD AND YQ OR NONE	102C, 109	WE		JD	
	XU, XV	XV AND XB OR NONE	118	XV*		XU	
	XW, XX	XW	102B (15), 105(27)	XX	XW		
21A	WH	WH AND ZX OR ZY	102B (9), 109	WH			
22D	WJ,WK	WJ	102B (16)	WJ,WK			
	WF,WG	WF	102B 102C	WG		WF	
	WN,WO, WF	WN,WP & YS OR WN & XR	102C, 105(14, 21),109	WC		WN,WP	
	WQ	YR OR NONE	102C, 105(26)	WC		WA	
	APP FIG 28	NONE	102B (17), 105 (11)	APP FIG 28			
	WR	Q AND WP OR FIG.17	102B (2)	WR			
23A	WS	T OR V	105(9)		WS		
	WT	XM OR NONE	105 (10), 109	WT			
	XV,WU	NONE	102C, 105 (11,16, 17)	WU		WV	

X THIS IS A FALSE OPTION

104.

RECORDS OF APP FIGURES, WIRING NO APPARATUS CHANGES							
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT STD	A&M	MD	
24D	ZJ	XK OR NONE	102B (12), 105 (7)	ZJ			
	ZR,ZQ, Z	ZQ OR ZR	102C, 114, 119	Z, ZR		ZQ	
	XJ	NONE	102C	XJ			
25D	XY	Y OR NONE	102C, 109, 115	XY			
	VA	NONE	102B (11)	VA			
	VB	VB,VH & ZX OR ZY	102B (9), 109	VB			
	VC	VC & ZY OR ZX	102B (9), 109	VC			
	VD	VD,YV & YK, OR XA & YK OR NONE	102B (8), 105 (12), 109, 116	VD			
	VE,VF	VE & XM OR XL	102B (13), 105(25) 109	VF		VE	
	VG	NONE	102B(8)	VG			
	VH,VI	VH	102C 105 (13)	VI		VH	
	VJ	NONE	102B (2)	VJ			
	VK, VL, VM, VO	VK	102B (19), 102C 105 (14) 109	VK, VL, VM, VO			
	VN	NONE	102C, 105 (13)	VN			
	APP FIG. 29	NONE	102B (20)	APP FIG 29			
	VP	NONE	102C, 105 (14)	VP			
	VQ	NONE	102C	VQ			
	VR	NONE	102C, 105 (14)	VR			
	VS	NONE	102B, (14), 102C 105 (15)	VS			
	VT,VU	VT	102C	VU		VT	
	VV,VW	VV & YN OR YO	102B (11), 102C, 105 (16, 24), 109	VW		VV	

DRAWING ISSUE

30D

33D

35D

ISSUE 39D

DIAL TONE MARKER CKT (2) SD-26001-01-D2A

BELL TELEPHONE LABORATORIES INCORPORATED SIZE 6S

SD-26001-01-D2A

CIRCUIT NOTES: (CONT)

104. (CONT)

RECORD OF APP 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	
30D	UA	NONE	102C, 105 (17,19)	UA			
	UB	NONE	102B (8), 106(2)	UB			
	UC,UD	UC	102B (21), 105 (17)	UC, UD			
	UE, UF, UO	UE & UO WITH FIG.19 OR UE ALONE	102B (9), 105 (17), 109	UE, UF		UO	
	UG,UH	UG WITH ZB OR ZC	102C, 105 (18), 109	UH		UG	
	UI	NONE	102C, 105 (19)	UI			
	VX,VY, FIG.30	NONE	102B (8), 105 (20)	VX,VY, FIG.30			
	UJ,UK	UJ	102C, 105 (21)	UK		UJ	
	UL,UM	NONE	102B (21), 105 (24)	UL, UM			
	UN	UN WITH FIG.28 OR NONE	102B (17), 105 (17), 109	UN			
33D	XU, XV	XU, XV AND ZB OR NONE	102C, 105 (22,28), 109, 118	XU, XV			
	UP, UQ	VV OR VW WITH UP	102B (11), 102C, 105 (23, 24), 109	UQ		UP	
	US	NONE	102 (22)	US			
35D	ZR		114, 119			ZR	
37D	UT,UV	UV	102C	UT		UV	
	UW,UX	UW	102C, 109	UX		UW	
	TA	NONE	102B (19), 105 (14)		TA		
	TB,TC	NONE	102B (19), 105 (14,25)	TB, TC			
	UY,UZ	UY WITH VO OR NONE	102C, 105 (14), 109	UZ		UY	
39D	TD,TE	TD	102B (25), 122	TE		TD	
41B	TF,TG	NONE	102B (6), 118	TF,TG			

104.

RECORD OF APP 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	
43B	TH,TI, TJ,TK, TL,TM, TS	TH WITH YW OR NONE	102B (8,23), 105 (27), 106(2), 123	TI,TJ, TK,TL, TS	TM	TH	
	TN,TO	TN	102C	TO		TN	
	TP, TQ	TP WITH XU OR NONE	102B (24), 105 (28)	TQ	TP		
44B	TR	NONE	102B (25)	TD,TR	TE		
45B	APP FIG. 31	NONE	102B (6)	APP FIG. 31			

104.

RECORD OF APP 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	

104.

RECORD OF APP 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	

DRAWING ISSUE
30D
33D
35D

ISSUE 16A

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-D2B

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-D2B

CIRCUIT NOTES: (CONT)

105. CO-ORDINATING OPTIONS FOR THE MARKER

PAR	MKR ISS	FEATURE, FIGURE OR OPTION	PROVIDE APP FIG.	PROVIDE APP OR WRG	QUANTITY
1	5D	R OR N OPTION		T	
2	5D	G OPTION		J	
3	13D	X OPTION		YH	
4	16D	WHEN PHASE III CENTREX OR PHASE I,II CENTREX WITH DIAL TRANSFER IS PROVIDED	20, 23	G,R,XG, XZ,YC, YE,YG, YK,ZB, ZO,ZS, ZV	1 PER MKR
5		WHEN XA OPTION IS PROVIDED	23		1 PER MKR
6	18D	WHEN XN OPTION IS PROVIDED	20	ZV,F, XT	1 PER MKR
7	20D	WHEN YU OPTION IS PROVIDED		XX,WU	
8	19A	WHEN APP FIG 19 IS PROVIDED		WB	
9	23A	WHEN XM OPTION IS PROVIDED & T OPTION IS NOT PROVIDED		WS	
10		WHEN XM OPTION IS PROVIDED WITH G OR W OPTION		WT	
11	28D	WHEN APP FIG 28 OR OPTION VR IS PROVIDED		WU	
12	15D	WHEN YK OPTION IS PROVIDED AND XA OPTION IS NOT PROVIDED		VD	
13	28D	WHEN VN OPTION IS PROVIDED		VI	
14	36A	WHEN VL OR VM OPTION IS PROVIDED		VO,VP	
				XZ,UZ	
		WITH WN OPTION		TA	
		WITH XM OPTION (VL)		TC	
		WITH XM OPTION (VM)		TB	
15	28D	WHEN XN OPTION IS PROVIDED		VS	
16		WHEN YW OPTION IS PROVIDED		VR,WW	
17		WHEN UD OPTION IS PROVIDED		UA,WW, UN	
		WITH APP FIG. 19		UF	
18	30D	WHEN ZB OPTION IS PROVIDED		UH	
19		WHEN UI OPTION IS PROVIDED		UA	
20		WHEN APP FIG. 30 AND VY OPTION IS PROVIDED	20, 27	ZV	
21		WHEN WO OPTION IS PROVIDED		UK	
22	33D	WHEN XU OPTION IS PROVIDED		ZB	
23		WHEN UQ OPTION IS PROVIDED		XT	
24	30D	WHEN UM OPTION IS PROVIDED		ZH,VW, UQ	
25	37D	WHEN TB OR TC OPTION IS PROVIDED		VF	
26	44B	WHEN INTERFACE AND CONTROL CKT IS PROVIDED		WQ	
27	43B	WHEN OPTIONS YW & TK ARE PROVIDED		TI	
28	44B	WHEN OPTION TQ IS PROVIDED		XU	

CIRCUIT NOTES: (CONT)

106. (A&M ONLY)

PAR	FEATURE OR OPTION				APP FIG	PROVIDE APP OR WRG	QUANTITY	SEE NOTE
1	CLASS OF SERVICE ON ONE OUT OF 30 BASIS					YB		
		20 RATE TREATMENTS PROV	YES		23	YI,XG	1 PER MKR	108, 110
			NO			YD,YM		109
				LINE SWITCHING OF PBX STATION CALLS PROVIDED YES		ZS		
				LINE SWITCHING OF PBX STATION CALLS PROVIDED NO		ZT		
				OVER 30 CLASSES		X		
				WHEN CENTREX IS PROVIDED		XH		110
		CENTREX WITH 60 CLASSES OR FULL TRANSLATION OF 60 CS-POINTS WITH 60 CLASSES	YES		26	XF	1 PER MKR	110
			NO			XD		
				OVER 30 CLASSES		XE		108
		WHEN CENTREX IS PROVIDED			24		1 PER MKR	110
2	DIAL TRANSFER FEATURES FOR PHASE I AND PHASE II CENTREX (SEE NOTES 105(4,7) & 111)	YES	MARKER CONTROLS TRANSFER NETWORK (SEE NOTE 117) YES			YW, YZ, XA, WC, TI		
				WITH OVER 2 TRANSFER TRUNK LINK FRAMES		YX		
				NO		UB, WC, YV		
		NO				YV		

CIRCUIT NOTES: (CONT)

107. PRIOR TO ISSUE 12D, 1ST AND 2ND REGISTER GROUPS WERE DESIGNATED DIAL AND MULTIFREQUENCY RESPECTIVELY.

108. IN EXISTING OFFICES WITH RATE TREATMENT PROVIDED AND WITH CLASS OF SERVICE SELECTION ON A ONE OUT OF THIRTY BASIS, THE MAXIMUM NO. OF CUSTOMER CLASSES IS REDUCED TO TWENTY.

109.

PRIOR TO ISSUE	OPTION	WAS PART OF OPTION
13D	YH	YB
16D	YY	ZY
	XC	22
	XE	X
	XG	24
18D	WL	Q
	XQ	N
19A	WC	YC
20D	WD	YQ
	XU	ZB
21A	WH	ZX
22D	WP	XS
23A	WT	XM
CONTINUED AT RIGHT		

CONTINUED FROM LEFT		
26D	WY	T
	VC	ZY
	VB	WH
	VD	YV
	VE	XM
28D	VV	YH
30D	UG	ZB
	UN	28
	UO	19
33D	UP	VW
37D	UY	VO
	UW	FIG.9&19
43B	TH	YW
	TP	XU

110. OFFICES REQUIRING CENTREX FEATURES WITH CLASS OF SERVICE SELECTION ON A ONE OUT OF THIRTY BASIS WILL NOT PROVIDE TWENTY RATE TREATMENTS SUBSEQUENT TO ISSUE 16D EXCEPT IN EXISTING OFFICES EQUIPPED WITH RATE TREATMENT.

111. THE FOLLOWING FEATURES CAN BE APPLIED ONLY IN A MARKER GROUP ARRANGED FOR CLASS OF SERVICE SELECTION ON A UNITS AND TENS BASIS:

1. DIAL TRANSFER
2. DON'T ANSWER TRANSFER
3. PHASE III CENTREX

112. CANCELLED

113, WA RATED MFR DISC ON ISSUE 22D.

114. SUBSEQUENT TO ISSUE 10B AND PRIOR TO ISSUE 24D, OPTION ZR WAS PROVIDED ON AN AFTER DATE STANDARD BASIS. SUBSEQUENT TO ISSUE 24D, OPTION ZR OR OPTION WZ IS PROVIDED ON AN OPTIONAL FEATURE BASIS. SEE NOTE 102B(18). (MFR DISC.)

115. PRIOR TO ISSUE 26D, PROVIDE OPTION WY WHEN MORE THAN 10 TRUNK LINK FRAMES ARE EQUIPPED.

116. PRIOR TO ISSUE 26D, PROVIDE OPTION VD WHEN PHASE III CENTREX IS PROVIDED WITH PRIVATE LINE NETWORK OPERATION.

117. IN OFFICES WITH MORE THAN FOUR DIAL TONE MARKERS, DTM 0 AND 1 WILL HAVE FULL ACCESS TO ALL LINE LINK AND TRUNK LINK FRAMES. DTM 2-5 MAY HAVE EITHER FULL OR LIMITED ACCESS TO THE LINE LINK AND TRUNK LINK FRAMES. THE LIMITED ACCESS MARKERS HAVE ACCESS TO EITHER THE LOWER NUMBERED OR HIGHER NUMBERED LINE LINK AND TRUNK LINK FRAMES. EACH LINE LINK FRAME HAS ACCESS TO FOUR DIAL TONE MARKERS AND EACH TRUNK LINK FRAME IS ACCESSED BY FOUR DIAL TONE MARKERS.

TO MAINTAIN OFFICE BALANCE, HIGHER AND LOWER DIVISIONS MUST NOT BE UNBALANCED BY MORE THAN FIVE LINE LINK FRAMES, NOR MORE THAN THREE TRUNK LINK FRAMES. THE CENTREX TRANSFER LINE LINK AND TRANSFER TRUNK LINK FRAMES ARE ACCESSED BY DTM 0-3 ONLY.

THE LINE INSULATION TEST CIRCUIT MUST BE ASSOCIATED WITH A MARKER HAVING ACCESS TO ALL FRAMES.

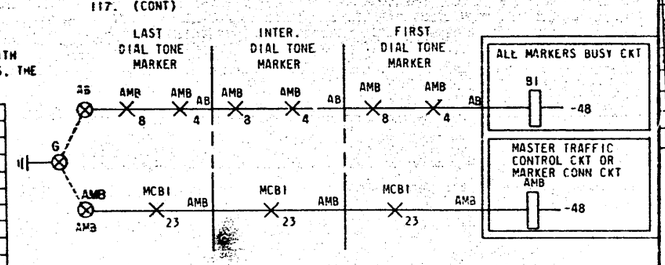
DIAL TONE MARKER ASSIGNMENT, TO CONNECTORS FOR LIMITED ACCESS, IS SHOWN IN EQUIPMENT NOTE 204.

INTERMARKER CONNECTIONS FOR THE ALL MARKERS BUSY SIGNAL TO THE ALL MARKERS BUSY CIRCUIT AND TO THE MASTER TRAFFIC CONTROL CKT ARE SHOWN BELOW.

A. FOUR OR LESS DIAL TONE MARKERS OR MORE THAN FOUR DIAL TONE MARKERS, FULL ACCESS PROVIDED FOR ALL MARKERS, AND TRANSFER NETWORK NOT PROVIDED.

CIRCUIT NOTES: (CONT)

117. (CONT)



(SEE NEXT SHEET FOR REMAINDER OF NOTE 117 AND NOTES 118 & 119)

120. THE WIDEBAND CLASS INDICATION TO ORIGINATING REGISTER FEATURE, APP FIG. 29, CANNOT BE PROVIDED IN THE SAME MARKER GROUP WITH 7 DIGIT DIALING OF INTRA-PBX CALLS, OPTION TF.

121. PROVIDE THIS OPTION IN ALL MARKERS OF A GROUP IF ANY OF THE MARKERS ARE SO EQUIPPED.

122. ON ISSUE 44B OPTION TD WAS RERATED STANDARD AND OPTION TE WAS RERATED A&M ONLY. OPTION TE WAS ADDED AFTER DATE STD ON ISSUE 39D AND RERATED A&M ONLY ON ISSUE 44B. OPTION TD WAS RERATED FEATURE STANDARD ON ISSUE 44B. WHEN THE ASSOCIATED INTERFACE AND CONTROL CKT (SD-28075-01) IS EQUIPPED WITH OPTION X, THE MARKER PER ISSUE 44B REQUIRES OPTION TR AND TD. HOWEVER, FOR THOSE MARKERS EQUIPPED WITH OPTION TE IT IS NOT NECESSARY TO REMOVE OPTION TE WHEN THE INTERFACE AND CONTROL CKT IS EQUIPPED WITH OPTION X.

123. REMOVE OPTION TS WHEN MKR IS WIRED FOR ETS BUT MUST OPERATE IN THE NON-ETS MODE. JOB RECORDS NEED NOT BE MAINTAINED FOR OPTION TS.

DRAWING ISSUE	
23A	KM
24D	KM
25D	JS
28D	MS
30D	
33D	
35D	

ISSUE 46A

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-D2C

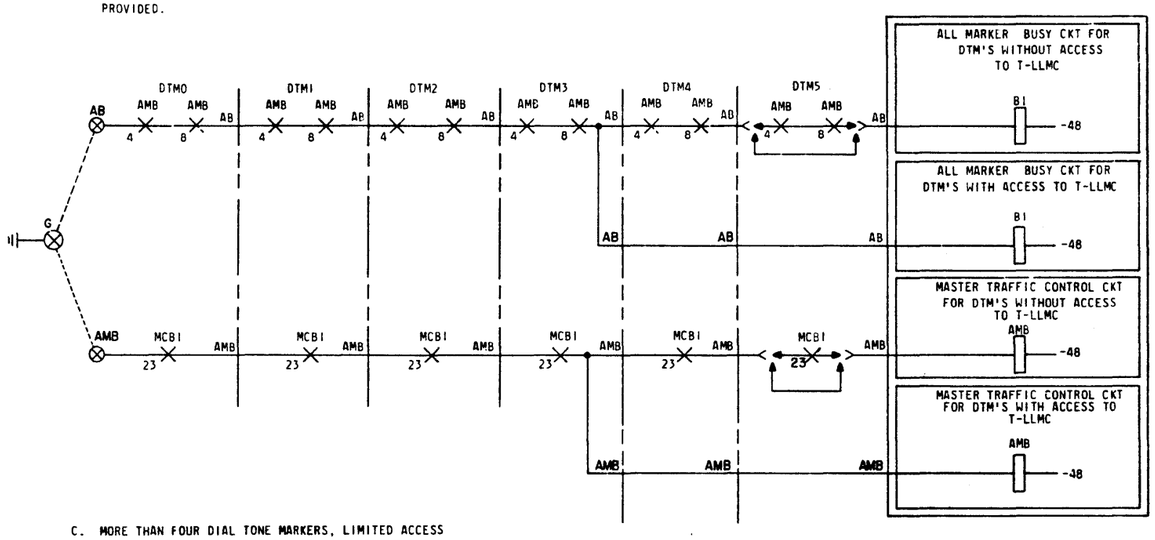
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-D2C

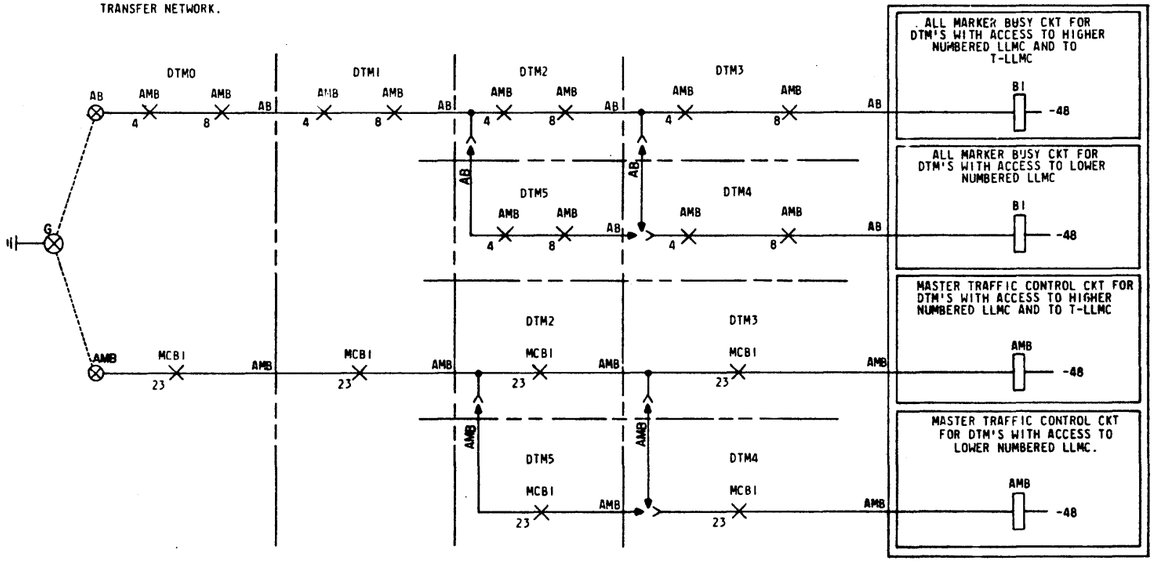
HIGGINS 4465

CIRCUIT NOTES: (CONT)

117. B. MORE THAN FOUR DIAL TONE MARKERS, FULL ACCESS PROVIDED FOR ALL MARKERS, AND TRANSFER NETWORK PROVIDED.



C. MORE THAN FOUR DIAL TONE MARKERS, LIMITED ACCESS PROVIDED FOR SOME MARKERS, WITH OR WITHOUT THE TRANSFER NETWORK.



118. OPTION XU RERATED TO STD ON ISSUE 33D.

119. OPTION ZR RATED MFR DISC. ON ISSUE 35D. OPTION WZ IS PROVIDED ON AN AFTER DATE STANDARD BASIS.

EQUIPMENT NOTES:

201. WHEN REGULAR CONNECTOR FRAMES ARE ADDED TO EXISTING COMBINED CONNECTOR FRAMES, THE LEAD DESIGNATION NUMBERING FOR THE ADDED REGULAR CONNECTOR FRAMES SHALL BEGIN ONE NO. HIGHER THAN THE HIGHEST NO. ON THE LAST COMBINED CONNECTOR FRAME AND CONTINUE IN GROUPS NORMALLY EMPLOYED ON REGULAR CONNECTOR FRAMES.

202. THE LEADS IN CADS 8,12, AND 33, WHICH REFER TO THIS NOTE MUST BE CONNECTED IN MARKER GROUP WHERE LINE LINK PULSING OR CENTREX PAD CONTROL IS PROVIDED, AND IN ALL MARKER GROUPS WITH LINE LINK CONNECTORS MANUFACTURED PER SD-26031-01, ISSUE 9D OR LATER.

203. SUBSEQUENT TO ISSUE 30D, THE +130(E) LEAD IS ASSIGNED TO A BUS BAR FUSE ON THE POWER, RINGING, AND TONE DISTRIBUTION FRAME THAT IS FED FROM A DIFFERENT SUPPLY FEEDER THAN THE 3 AMP SUPPLY FUSE OF THE SAME MARKER.

204. FOR WIRE SPRING MARKER GROUPS EQUIPPED WITH WIRE SPRING CONNECTORS THE DIAL TONE MARKER ASSIGNMENT TO CONNECTORS IS SHOWN IN TABLE A BELOW AND TABLE B SHOWS THE DIVISION (GRADING PATTERN) OF WIRE SPRING CONNECTORS FOR LIMITED ACCESS MARKERS.

TABLE A

WIRE SPRING DIAL TONE MARKER ACCESS TO WIRE SPRING CONNECTORS				
NO. OF WIRE SPRING DIAL TONE MARKERS	TO ALL CONNECTORS (FULL ACCESS)	TO LOWER NUMBERED CONNECTORS	TO HIGHER NUMBERED CONNECTORS	TO TRANSFER NETWORK
4 OR LESS	ALL	-	-	ALL
5	0,1,2	4	3	0,1,2,3
6	0,1	4,5	2,3	0,1,2,3

TABLE B

WIRE SPRING CONN ASSIGNMENT FOR WIRE SPRING DIAL TONE MARKERS				
CONN TYPE	NO. OF CONNECTORS AT TIME OF GRADING	MAX CONN GROWTH WITHOUT CHANGING GRADING PATTERN	GRADING PATTERN	
			LOWER NUMBERED CONN GROUP	HIGHER NUMBERED CONN GROUP
LLC OR LLMC	35-44	45	00-19	20-UP
	45-54	55	00-24	25-UP
	55-60	60	00-29	30-UP
TLC	18-22	23	00-09	10-UP
	23-26	28	00-12	13-UP
	27-30	30	00-14	15-UP

FOR MARKER GROUPS EQUIPPED WITH BOTH U AND Y AND WIRE SPRING DIAL TONE MARKERS AND WITH U AND Y CONNECTORS, THE DIAL TONE MARKER ASSIGNMENT TO CONNECTORS IS SUCH THAT LIMITED ACCESS MARKERS HAVING ACCESS TO THE HIGHER NUMBERED GROUP OF CONNECTORS BE OF THE SAME TYPE AS THOSE FOR THE LOWER NUMBERED GROUP OF CONNECTORS. IT IS PREFERABLE THAT THE WIRE SPRING MARKERS BE FULL ACCESS. TABLE C SHOWS THE DIVISION (GRADING PATTERN) OF U AND Y CONNECTORS FOR LIMITED ACCESS MARKERS.

TABLE C

U AND Y CONN ASSIGNMENT FOR DIAL TONE MARKERS				
CONN TYPE	NO. OF CONNECTORS AT TIME OF GRADING	MAX CONN GROWTH WITHOUT CHANGING GRADING PATTERN	GRADING PATTERN	
			LOWER NUMBERED CONN GROUP	HIGHER NUMBERED CONN GROUP
LLC OR LLMC	19-26	29	00-11	12-UP
	27-34	37	00-15	16-UP
	35-40	40	00-19	20-UP
TLC	9-12	15	00-05	06-UP
	13-16	19	00-07	08-UP
	17-20	20	00-09	10-UP

205 CAD 58 IS ADDED ON ISSUE 43B FOR THE ADDITION OF DISTRIBUTOR AND SCANNER APPLICATION FOR ETS (DAS-ETS). TAO,MPBX, AND RV LEADS ARE SHOWN AS BOTH SCANNER AND DISTRIBUTOR LEADS, HOWEVER, ONLY THE DISTRIBUTOR LEADS ARE SENT TO THE DAS-ETS. THE APPROPRIATE FUNCTIONAL STRAP CONNECTIONS ARE MADE ON THE DAS-ETS FRAME.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS. CAPACITANCE VALUES ARE IN MICROFARADS. VALUES PRECEDED BY THE SYMBOL +(PLUS) OR -(MINUS) ARE IN VOLTS.

DRAWING ISSUE: 30D, 33D, 35D

ISSUE 43B

DIAL TONE MARKER CIRCUIT

SD-26001-01-D2D

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-D2D

CROSS CONNECTION INFORMATION

400.

TERM DESIG	PART	LOCATION FS	BLOCK	SECT #
2LF00-59	2	26B5	D	4
			**A	2
2P	1	35D6	D	3
2PMR	1	35E6	D	3
4LF00-39	2	2635	C	2
			**A	3
AB	12	28B/B3	C	(PCHG 11-)
AC	9	24C1	D	2
ACB	1,19	35G6	D	4
AMB	12	28B/F3	C	1
ANFC	17	26E6	** A	2
ANTB	17	4F6	** A	4
ANTG	17	4D6	** A	2
AO	1	35A3	D	3
AOMR	1	35B3	D	3
ARO-3	17	26E7,F7	** A	2
AUD	9	24C1	D	2
CN	1	35F6	D	3
CS00-99	1,19	35C2	D	3
CSR00-59	16,19	36C4-6	TS ON RATE TREATMENT RELAY UNIT	
CST3-9	1	35C2	D	3
DC	9	24C1	D	2
E1,E2	6	21D4	D	2
EF	14	2D2	D	1
EF0				
EF10		2D2		2
EF20		2A2		
EF30		33F2		
EXB EXG	10	31H3	D	4
FRO-3	20	38G7	D	3
G	12	28B/D3	C	1(PCHG119)
HMT	13	20B/A1	D	4
HMF				
HMS				
IN1	6	21D4	D	2
IN2				
JSH	7	5C3	D	2
JSL				
JSP				
LFD	2,3	26A6	D	4
			**A	3
LFMF	2,3	26B6	D	4
			** A	3
LFM	2	26D6	D	4
LFRO-3	2,3	26C6	**A	3
LFPO-2	2	26D6	**A	2
(LLMC-E) MAK MCK MSK	8	28A5	D	4
(LLMC-ST) MAK MCK MSK	8	28A5	C	4
MAK(ST) MCK(ST) MSK(ST) MAK(E) MCK(E) MSK(E)	8	28A0 / 28A9	D	4
MAN	1,19	35E6	D	3
MCN	1	35E3		
MPBX	16	36C7	TS ON RATE TREATMENT RELAY UNIT	

CROSS CONNECTION INFORMATION (CONT)

400.

TERM DESIG	PART	LOCATION FS	BLOCK	SECT #
NCSL	1	35A6	D	3
OF	14	2D1	D	1
OF0				
OF10		2D1		2
OF20		2A1		
OF30		33H1		
OT1	6	21D4	D	2
OT2				
PBX	1	35C3	D	2
PBX5	1	3586	C	3
PBX7	1	35E5	C	3
PR	4	1687	D	1
PCD	11	27F6	C	1
PCMF				
PLN	1	35C5	C	3
PLN5		35D3		
PLN7	1	35D3	C	3
PLNC	1	35C3	D	3
RG-3	15	3E3	C	1
R2W	15	3F4	C	1
R4W	15	3D3	C	1
RAV	17	27B6	**A	4
RCY	17	27C6	**A	4
RDP	15	3D3	C	1
RDT	15	3F3	C	1
RGO-3	17	4B7,C7	**A	4
RMF	15	3D3	C	1
RV	16,19	36C7	TS ON RATE TREATMENT RELAY UNIT	
S1,S2	6	21D4	D	2
SF	4	16B7	D	1
SPF				
SPF4	4	16C7	D	4
SPT	4	16C7	D	2
ST	18	32E2	**A	
STO-3				
STD				
STMF				
SZ2-10	5	1588	D	1
SZA				
SZB				
SZC				
SZD			D	4
SZD4		15C7	D	4
SZT				
T&O	16,19	36B7	TS ON RATE TREATMENT RELAY UNIT	
TB1-5	17	4E7	**A	4
TG2-9	17	4B7,C7,D7	**A	2
TLFO-3	2	26C5	**C	2
TTF	4	16D7	D	1
VGD	3	26C5	D	3
VGMF				
VGP00-29	3	26A5	**A	3
VGRO-11	3	26C5	D	3
VGT00-11	17	27C6	**A	2
WB	15	3C4	C	1
WBT	1	35F6	D	3
WGA	20	38F7	D	3
WGB	20	38G7	D	3
XTB	17	4F7	**A	4
XTG	17	4D6	**A	2

* INDICATES MECH SECTIONS OF TS AS NO. LEFT TO RIGHT

** INDICATES PUNCHINGS ARE LOCATED ON TS BLOCK OF THE REGISTER GROUP SELECT UNIT.

WIRE REQUIRED: 24 GAUGE TYPE BU

A. USE WHITE FOR MAK, BLACK FOR MCK, AND RED FOR MSK CONNECTIONS.

B. USE GREEN FOR ALL OTHER CONNECTIONS.

CROSS CONNECTION INFORMATION (CONT)

400.

PART	CONDITION				CONNECT FROM	TO	CONDITION	REFER
1	TYPE OF SUB LINE ASSOC WITH CS-PUNCHING AS ASSIGNED IN LINE LINK FRAME				CS00-99 CST3-9	MAN	MANUAL LINES	
						MCN	MANUAL COIN LINES	
						CN	COIN LINE OR CENTREX TERMINATING TEST LINES	
	POTS LINES WITH OR WITHOUT CENTREX LINES					2P	2 PARTY LINE (NON MESSAGE REGISTER)	
						2PMR	2 PARTY LINES WITH MESSAGE REGISTERS	
						ACB	ACCESS 8 FROM PRIVATE LINE NETWORK	
						AO	ALL OTHERS (NON MESSAGE REGISTERS)	
						AOMR	ALL OTHER LINES WITH MESSAGE REGISTERS	
						WBT	WIDE BAND PBX TRUNK (LINE)	
	FOUR WIRE LINES				CS00-99 CST3-9	2F	2 DIGIT INTERCOM DIALING	
						PLN	4 DIGIT INTERCOM DIALING	
						AO	ALL OTHER LINES	
	CENTREX LINES: PHASE I,II MANUAL TRANSFER ONLY	4 OR 5 DIGIT DIALING OF INTRA PBX CALLS WITHIN THE SAME MKR GROUP, OR PRIVATE LINE NET. OPERATION, OR BOTH FURNISHED	NOT PRIVATE LINE NET.		CS00-99 CST3-9	PBX	PBX LINES WITH DIRECT SWITCHING OF STATION CALLS	
			PRIVATE LINE NET.	NOT PRIVATE LINE NET.	CS00-99 CST3-9	PBX	4 DIGIT	3582
						PBX5	5 DIGIT	
				PRIVATE LINE NET.	CS00-99 CST3-9	PLN	4 DIGIT	
						PLN5	5 DIGIT	
	PHASE I,II MANUAL & DIAL TRANSFER	LISTED DIR.NO. CALLS ROUTED VIA THE TRUNK LINK FR	NOT PRIVATE LINE NET.		CS00-99 CST3-9	PBX	4 DIGIT	
						PBX5	5 DIGIT	
			PRIVATE LINE NET.		CS00-99 CST3-9	PLN	4 DIGIT	
						PLN5	5 DIGIT	
		LISTED DIR.NO. CALLS ROUTED VIA THE LINE LINK FR.	NOT PRIVATE LINE NET.		CS00-99 CST3-9	NCSL	4 DIGIT	
			PRIVATE LINE NET.		CS00-99 CST3-9	PLNC	4 DIGIT	
	PHASE III	PRIVATE LINE NETWORK CUSTOMER	NO		CS00-99 CST3-9	PBX	4 DIGIT	
			YES			PBX5	5 DIGIT	
						PBX7	7 DIGIT	
						PLN	4 DIGIT	
						PLN5	5 DIGIT	
						PLN7	7 DIGIT	
2	ORIGINATING REGISTER GROUP REQUIRED BY LINE LINK FRAMES				2LF00-59 (2W FRAMES) 4LF00-39 (4W FRAMES) TLF 0-3 DIAL	LFO	1ST ORIG GROUP	
						LFMF	2ND ORIG GROUP	
						LFRO	3RD ORIG GROUP ALL LINES ON A LINE	
						LFP1	4TH ORIG GROUP LINK FRAME USE SAME	
						LFR2	5TH ORIG GROUP REG GROUP	2685
						LFR3	6TH ORIG GROUP	
						LFM		
						LFPO	MIXED LLF (TWO ORIG REG GROUPS ONLY)	LINES ON LINE LINK FRAME USE VERT GROUP TO INDICATE REG GROUP REQUIRED (SEE PART 3)
						LFP1	MIXED LLF PATTERN 0 (SIX ORIG REG GROUPS)	
						LFP2	MIXED LLF PATTERN 1 (SIX ORIG REG GROUPS) MIXED LLF PATTERN 2 (SIX ORIG REG GROUPS)	
3	WHEN VERT GR ON LINE LINK FRAME IS USED TO INDICATE GR REQUIRED	TO ORIG REG GROUPS			VGRO-11	VGD	1ST ORIG GR	26C5
						VGMF	2ND ORIG GR	
		SIX ORIG REG GROUPS			VGP00-09 (PATTERN 0)	LFD	1ST ORIG REG GR	2685
						LFMF	2ND ORIG REG GR	
					VGP10-19 (PATTERN 1)	LFRO	3RD ORIG REG GR	
						LFR1	4TH ORIG REG GR	
					VGP20-29 (PATTERN 2)	LFR2	5TH ORIG REG GR	
						LFR3	6TH ORIG REG GR	
4a	SINGLE, PAIRED OR TRIPLED TRUNK LINK FRAME OPERATION				SPT (TRANSFER) SPF(2W) SPF4(4W)	SF	SINGLE TRUNK LINK FRAME OPERATION	16C7 SEE NOTE 401
						PR	PAIRED TRUNK LINK FRAME OPERATION	
						TTF	TRIPLED TRUNK LINK FRAME OPERATION (2W ONLY) (FOR EXCEPTION SEE 4b)	
4b	SIZE 5 OR SIZE 10 TRIPLE DISTRIBUTION				STP (TRANSFER) SPF(2W) SPF4(4W)	PR	TRUNK LINK FRAMES EQUIPPED WITH ONLY ONE EXTENSION FRAME (EITHER FIRST OR SECOND EXTENSION FR)	
4c	PERMANENT JUNCTOR DISTRIBUTION				SPF	PR	UP TO 40 LINE LINK FRAMES	
						TTF	OVER 40 LINE LINK FRAMES	
5	OFFICE SIZE AS DETERMINED BY THE NO. OF SINGLE TRUNK LINK FRAMES OR TRUNK LINK FRAME PAIRS OR TRIPLES.				SZ2-10	SZD	2 WIRE OFFICE OPERATES AS SINGLE SIZE	1588
						SZD4	4 WIRE OFFICE OPERATES AS SINGLE SIZE	
						SZA	SIZE "A" OFFICE (2W OR 4W) OPERATES AS	
						SZB	SIZE "B" A VARIABLE SIZE DURING ADDITIONS	
						SZC	SIZE "C" & TRANSISIONS	
						SZT	DIAL TRANSFER OFFICE OPERATES AS SINGLE SIZE	
6	CHANNEL SELECTOR PREFERENCE SETTING	ALTERNATE SETTING PERIODICALLY TO AID IN DETECTING CHANNEL TROUBLES AND TO EQUALIZE APPARATUS USAGE			S M MI E	INO OT4 IN5 OT9	INITIAL PREFERENCE SETTING	2104
					S M MI E	IN5 OT9 INO OT4	ALTERNATE PREFERENCE SETTING	IDENTICAL CROSS CONNECTIONS MUST BE MAINTAINED IN ALL MARKERS TO INSURE MAXIMUM OFFICE LOADING
7	ORIG REG PREFERENCE TO EQUALIZE REG USAGE				JSP	JSL	4 OR LESS ORIG REG PER TL	DETERMINED BY NETWORK WITH LARGEST NO. OF REGISTERS PER TL IN COMBINED 2W & 4W OFFICES	5C3
						JSL	4 & 5 ORIG REG PER TL	
						JSH	5 OR MORE ORIG REG PER TL	

DRAWING ISSUE

1	CCR WM
2D	PLN
3D	PMR
5D	MAN MCN
9D	CN WM
15D	CCR EPH AMP
16D	BB EW AMP
18D	JAT LW AMP
19A	PEC LW AMP
22D	EP TDC AMP
24D	WMI BBL AMP
26D	JGS WMI
28D	WMI
30D	
33D	
35D	

ISSUE 42B

SD-26001-01-D3

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-D3

BELL TELEPHONE LABORATORIES INCORPORATED

CODE IDENT 65

400. CROSS CONNECTION INFORMATION

TERM DESIG	PART	LOCATION FS	BLOCK	SECT #
2LF00-59	2	26B5	D	4
			**A	2
2P	:	35D6	D	3
2PMR	1	35E6	D	3
4LF00-39	2	26B5	C	2
			**A	3
AB	12	28B/B3	C	(PCHG 11)
AC	9	24C1	D	2
ACB	1,19	35G6	D	4
AMB	12	28B/F3	C	1
AMFC	17	26E6	** A	2
AMTB	17	4F6	** A	4
AMTG	17	4D6	** A	2
AO	1	35A3	D	3
AOMR	1	35B3	D	3
ARO-3	17	26E7,F7	** A	2
AUD	9	24C1	D	2
CN	1	35F6	D	3
CS00-99	1,19	35C2	D	3
CSR00-59	16,19	36C4-6	TS ON RATE TREATMENT RELAY UNIT	
CST3-9	1	35C2	D	3
DC	9	24C1	D	2
E1,E2	6	21D4	D	2
EF	14	2D2	D	1
EF0				
EF10		2D2		2
EF20		2A2		
EF30		33F2		
EX6 EXG	10	31H3	D	4
FRO-3	20	38G7	D	3
G	12	28B/D3	C	1(PCHG119)
HMT	13	20B/A1	D	4
HMF				
HMS				
IN1	6	21D4	D	2
IN2				
JSH	7	5C3	D	2
JSL				
JSP				
LFD	2,3	26A6	D	4
			**A	3
LFMF	2,3	26B6	D	4
			**A	3
LFM	2	26D6	D	4
LFRO-3	2,3	26C6	**A	3
LFPO-2	2	26D6	**A	2
(LLMC-E)	8	28A5	D	4
MAK				
MCK				
MSK				
(LLMC-ST)	8	28A5	C	4
MAK				
MCK				
MSK				
MAK(ST)	8	28A0	D	4
MCK(ST)				
MSK(ST)				
MAK(E)		28A9		
MCK(E)				
MSK(E)				
MAN	1,19	35E6	D	3
MCN	1	35E3		
MPBX	16	36C7	TS ON RATE TREATMENT RELAY UNIT	

400. CROSS CONNECTION INFORMATION (CONT)

TERM DESIG	PART	LOCATION FS	BLOCK	SECT #
MPL	1	35F3	D	4
NCSL	1	35A6	D	3
OF	14	2D1	D	1
OFO				
OF10		2D1		2
OF20		2A1		
OF30		33H1		
OT1	6	21D4	D	2
OT2				
PBX	1	35C3	D	2
PBX5	1	35B6	C	3
PB47	1	35E5	C	3
PR	4	16B7	D	1
PCD	11	27F6	C	1
PCMF				
PLN	1	35C5	C	3
PLN5		35D3		
PLN7	1	3503	C	3
PLNC	1	35C3	D	3
RO-3	15	3E3	C	1
R2W	15	3F4	C	1
R4W	15	3D3	C	1
RAV	17	27B6	** A	4
RCV	17	27C6	** A	4
RDP	15	3D3	C	1
RDT	15	3F3	C	1
RGO-3	17	487,C7	** A	4
RMF	15	3D3	C	1
RV	16,19	36C7	TS ON RATE TREATMENT RELAY UNIT	
S1,S2	6	21D4	D	2
SF	4	16B7	D	1
SPF				
SPF4	4	16C7	D	4
SPT	4	16C7	D	2
ST	18	32E2	** A	
STO-3				
STD				
STMF				
SZ2-10	5	15B8	D	1
SZA				
SZB				
SZC				
SZD			D	4
SZD4		15C7	D	4
SZT	16,19	36B7	TS ON RATE TREATMENT RELAY UNIT	
TAO	17	4E7	** A	4
TB1-5	17	487,C7,D7	** A	2
TG2-9	2	26C5	**C	2
TLFO-3	4	16D7	D	1
TTF				
VGD	3	26C5	D	3
VGMF				
VGP00-29	3	26A5	**A	3
VGRO-11	3	26C5	D	3
VGT00-11	17	27C6	** A	2
WB	15	3C4	C	1
WBT	1	35F6	D	3
WGA	20	38F7	D	3
WGB	20	38G7	D	3
XTB	17	4F7	**A	4
XTG	17	4D6	**A	2

- INDICATES MECH SECTIONS OF TS AS NO. LEFT TO RIGHT.
- ** INDICATES PUNCHINGS ARE LOCATED ON TS BLOCK OF THE REGISTER GROUP SELECT UNIT.

WIRE REQUIRED: 24 GAUGE TYPE BU
A. USE WHITE FOR MAK, BLACK FOR MCK, AND RED FOR MSK CONNECTIONS.
B. USE GREEN FOR ALL OTHER CONNECTIONS.

400. CROSS CONNECTION INFORMATION (CONT)

PART	CONDITION	CONNECT FROM	CONNECT TO	CONDITION	REFER
1	TYPE OF SUB LINE ASSOC WITH CS-PUNCHING AS ASSIGNED IN LINE LINK FRAME	CS00-99 CST3-9	MAN	MANUAL LINES	3582
			MCN	MANUAL COIN LINES	
			CN	COIN LINE OR CENTREX TERMINATING TEST LINES	
			2P	2 PARTY LINE (NON MESSAGE REGISTER)	
			2PMR	2 PARTY LINES WITH MESSAGE REGISTERS	
			AC8	ACCESS 8 FROM PRIVATE LINE NETWORK	
			AO	ALL OTHERS (NON MESSAGE REGISTERS)	
			AOMR	ALL OTHER LINES WITH MESSAGE REGISTERS	
			WBT	WIDE BAND PBX TRUNK (LINE)	
	POTS LINES WITH OR WITHOUT CENTREX LINES				
	FOUR WIRE LINES	CS00-99 CST3-9	2P	2 DIGIT INTERCOM DIALING	
			PLN	4 DIGIT INTERCOM DIALING	
			AO	ALL OTHER LINES	
	PHASE I,II CENTREX MANUAL TRANSFER ONLY AND NON-CENTREX LINES WITH LINE SWITCHING OF PBX LINES — 4 OR 5 DIGIT DIALING OF INTRA PBX CALLS: NO	CS00-99 CST3-9	PBX	PBX LINES WITH DIRECT SWITCHING OF STATION CALLS	
	WITHIN THE SAME MKR GROUP, OR PRIVATE LINE NET. OPERATION, OR BOTH FURNISHED: YES — NOT PRIVATE LINE NET.	CS00-99 CST3-9	PBX	4 DIGIT	
			PBX5	5 DIGIT	
			PLN	4 DIGIT	
			PLN5	5 DIGIT	
	PRIVATE LINE NET	CS00-99 CST3-9	MPL	DIGIT 8 CUT THROUGH LINES	
	PHASE I, II CENTREX MANUAL & DIAL TRANSFER — LISTED DIR. NO. CALLS ROUTED VIA THE TRUNK LINE FRAME: NOT PRIVATE LINE NET.	CS00-99 CST3-9	PBX	4 DIGIT	
			PBX5	5 DIGIT	
	PRIVATE LINE NET.	CS00-99 CST3-9	PLN	4 DIGIT	
			PLN5	5 DIGIT	
			MPL	DIGIT 8 CUT THROUGH LINES	
	LISTED DIR NO. CALLS ROUTED VIA THE LINE LINK FRAME: NOT PRIVATE LINE NET.	CS00-99 CST3-9	NCSL	4 DIGIT	
	PRIVATE LINE NET.	CS00-99 CST3-9	PLNC	4 DIGIT	
	PHASE III CENTREX — PRIVATE LINE NETWORK CUSTOMER: NO	CS00-99 CST3-9	PBX	4 DIGIT	
			PBX5	5 DIGIT	
			PBX7	7 DIGIT	
			PLN	4 DIGIT	
			PLN5	5 DIGIT	
			PLN7	7 DIGIT	
	PRIVATE LINE NETWORK CUSTOMER: YES		MPL	DIGIT 8 CUT THROUGH LINES	
2	ORIGINATING REGISTER GROUP REQUIRED BY LINE LINK FRAMES	2LF00-59 (2W FRAMES)	LFO	1ST ORIG GROUP	2685
			LFMF	2ND ORIG GROUP	
			LFRO	3RD ORIG GROUP — ALL LINES ON A LINE	
			LFR1	4TH ORIG GROUP — LINK FRAME USE SAME	
			LFR2	5TH ORIG GROUP — REG GROUP	
			LFR3	6TH ORIG GROUP	
		4LF00-39 (4W FRAMES)	LFM		
			LFP0	MIXED LLF (TWO ORIG REG GROUPS ONLY) — LINES ON LINE LINK FRAME USE VERT GROUP TO-INDICATE REG GROUP REQUIRED (SEE PART 3)	
			LFP1	MIXED LLF PATTERN 0 (SIX ORIG REG GROUPS)	
		TLF 0-3 DIAL	LFP2	MIXED LLF PATTERN 1 (SIX ORIG REG GROUPS)	
				MIXED LLF PATTERN 2 (SIX ORIG REG GROUPS)	
3	WHEN VERT GR ON LINE LINK FRAME IS USED TO INDICATE GR REQUIRED — TO ORIG REG GROUPS	VGRO-11	VGD	1ST ORIG GR	26C5
			VGMF	2ND ORIG GR	
	SIX ORIG REG GROUPS	VGP00-09 (PATTERN 0)	LFD	1ST ORIG REG GR	2685
			LFMF	2ND ORIG REG GR	
		VGP10-19 (PATTERN 1)	LFRO	3RD ORIG REG GR	
			LFR1	4TH ORIG REG GR	
		VGP20-29 (PATTERN 2)	LFR2	5TH ORIG REG GR	
			LFR3	6TH ORIG REG GR	
4a	SINGLE, PAIRED OR TRIPLED TRUNK LINK FRAME OPERATION	SPT (TRANSFER)* SPF(2W) SPF4(4W)	SF	SINGLE TRUNK LINK FRAME OPERATION	16C7 (SEE NOTE 401)
			PR	PAIRED TRUNK LINK FRAME OPERATION	
			TTF	TRIPLED TRUNK LINK FRAME OPERATION (2W ONLY) (FOR EXCEPTION SEE 4b)	
4b	SIZE 5 OR SIZE 10 TRIPLE DISTRIBUTION	STP (TRANSFER) SPF(2W) SPF4(4W)	PR	TRUNK LINK FRAMES EQUIPPED WITH ONLY ONE EXTENSION FRAME (EITHER FIRST OR SECOND EXTENSION FR)	
4c	PERMANENT JUNCTOR DISTRIBUTION	SPF	PR	UP TO 40 LINE LINK FRAMES	
			TTF	OVER 40 LINE LINK FRAMES	
5	OFFICE SIZE AS DETERMINED BY THE NO. OF SINGLE TRUNK LINK FRAMES OR TRUNK LINK FRAME PAIRS OR TRIPLES.	SZ2-10	SZD	2 WIRE OFFICE OPERATES AS SINGLE SIZE	1588
			SZD4	4 WIRE OFFICE OPERATES AS SINGLE SIZE	
			SZA	SIZE "A" — OFFICE (2W OR 4W) OPERATES AS	
			SZB	SIZE "B" — A VARIABLE SIZE DURING ADDITIONS	
			SZC	SIZE "C" — & TRANSISIONS	
			SZT	DIAL TRANSFER OFFICE OPERATES AS SINGLE SIZE	
6	CHANNEL SELECTOR PREFERENCE SETTING — ALTERNATE SETTING PERIODICALLY TO AID IN DETECTING CHANNEL TROUBLES AND TO EQUALIZE APPARATUS USAGE	S	INO	INITIAL PREFERENCE SETTING — IDENTICAL CROSS CONNECTIONS MUST BE MAINTAINED IN ALL MARKERS TO INSURE MAXIMUM OFFICE LOADING	21D4
		M	OT4		
		MI	IN5		
		E	OT9		
		S	IN5	ALTERNATE PREFERENCE SETTING	
		M	OT9		
		MI	INO		
		E	OT4		

DRAWING ISSUE
1 ECC
20 PMC
30 PMC
50 PMC
90 CM
150 CCC ADM AMC
BB EPC
180 ADC
IAT
180 ALT AMC
190 ALT PEC
220 LPC PMC
240 MMC GSL
260 JGS
280 PMC
300
330
350

ISSUE 458

SD-26001-01-03

DIAL TONE MARKER CIRCUIT (2) | SD-26001-01-03
BELL TELEPHONE LABORATORIES INCORPORATED | 6S

400. CROSS CONNECTION INFORMATION: (CONT)

PART	CONDITION		CONNECT FROM	CONNECT TO	CONDITION		REFER
7	ORIG REG PREFERENCE TO EQUALIZE REG USAGE		JSP	JSL	4 OR LESS ORIG REG PER TL	DETERMINED BY NETWORK WITH LARGEST NO. OF REGISTERS PER TL IN COMBINED 2W & 4W OFFICES	5C3
				JSL	4 & 5 ORIG REG PER TL		
				JSH	5 OR MORE ORIG REG PER TL		
8	PREFERENCE CONTROL FOR LINE LINK MARKER CONNECTOR		(MKR) MAK(ST) MCK(ST) MSK(ST)	(LLMC-ST) MAK- MCK- MSK-	MARKER START ENTRANCE INTO MKR CONN CHAIN (EACH MKR SHOULD BE CONNECTED TO A DIFFERENT ENTRANCE POINT TO DISTRIBUTE PREF FOR LL)		28A5 (NOTE 402)
			(LLMC-E) MAK- MCK- MSK-	(LLMC-ST) MAK- MCK- MSK-	FROM PRECEDING TO SUCCEEDING LINE LINK MARKER CONNECTOR PREFERENCE IN CHAIN		
			(LLMC-E) MAK- MCK- MSK-	(MKR) MAK(E) MCK(E) MSK(E)	END OF LINE LINK MARKER CONNECTOR CHAIN TO MKR "END" PUNCHINGS		
9	OFFICE RINGING SUPPLY USED FOR CONTINUITY TEST ; ROVIDES A -48 VOLT REFERENCE LEVEL	YES / NO	AC	DC	AC-DC AUDIBLE RINGING		24C1 (NOTE 404)
				AUD	± AUDIBLE RINGING		
10	EXTRA PUNCHES FOR MAINTENANCE USE			EXB	BAT. POTENTIAL FOR TBL IND		31H3
				EXG	GRD POTENTIAL FOR TBL IND		
11	PEG COUNT	1ST ORIG REG GR	PCD		NO REQUIREMENTS HAVE BEEN ESTABLISHED FOR THIS FEATURE		27F5
		2ND ORIG REG GR	PCMF				
12	GROUND FOR ALL MARKER BUSY CIRCUIT		AB&AMB	G	APPLY ON LAST MARKER (MARKER GROUP CONTAINS ONLY FULL ACCESS MARKERS)		28D3
					APPLY ON MARKER ^ (MARKER GROUP CONTAINS LIMITED ACCESS MARKERS (SEE NOTE 117))		
13	CROSSBAR SWITCH SELECT FINGER DAMPING CONES		MMT	MMF	CONES PROVIDED ON ALL (LL) & (TL) SWITCHES		20H4
				MMS	CONES OMITTED ON ANY (LL) OR (TL) SWITCH		
14	CLOSURE OF FTC-PREF CKT "V" OPT ON (MFR DISC.)		EF	EF0	MAX OF 10 (TL) IN THE OFFICE		2D2 .
				EF10	OVER 10 (TL) IN THE OFFICE		
			OF	OF0	MAX OF 10 (TL) IN THE OFFICE		
				OF10	OVER 10 (TL) IN THE OFFICE		
	CLOSURE OF FTC- PREF CKT "T" OPTION (STD)	FOR MARKERS WORKING WITH TRUNK LINK FRAMES WHOSE HIGHEST NO. IS: TRUNK LINK FRAMES 0-9	EF	EF0			
		TRUNK LINK FRAMES 10-19	EF	EF10			2D2,2A2
			EF0	EF20			
		TRUNK LINK FRAMES 20-29	EF	EF10			2D2
			EF20	EF30			2A2,33H2
		TRUNK LINK FRAMES 0-9	OF	OF0			2D2
		TRUNK LINK FRAMES 10-19	OF	OF10			
			OF0	OF20			2D2,2A2
		TRUNK LINK FRAMES 20-29	OF	OF10			2D2
			OF20	OF30			2A2,33H1
15	TYPE OF NETWORK EACH ORIG REG GROUP SERVES		RDP	R2W	2-WIRE NETWORK		3G4
			RMF RO-3	R4W	4-WIRE NETWORK		
				RDT	DIAL TRANSFER NETWORK NON-WIDEBAND ROUTE		
				WB	DIAL TRANSFER NETWORK WIDEBAND ROUTE		
16	TYPE OF CUSTOMER GROUP SERVICE LINE ASSOCIATED WITH CSR - PUNCHING AS ASSIGNED IN LINE LINK FRAME		CSR00-59	MPBX	MANUAL PBX LINE		36C7
				RV	REVERSE OF TIP AND RING REQUIRED IN ORIG REG		36D7
				TAO	TREATMENT ALL OTHER		36B7
17	ANNOUNCEMENT TRK FR CONN		AMFC	ARO-3	FR CONN ROUTE FOR ANNOUNCEMENT TRUNKS		26E7
	ROUTE ADVANCE		RAV	VGT	VERTICAL GR DENIED ACCESS TO ANNOUNCEMENT TRUNKS		27B6
	RECYCLE		RCY	00-11	VERTICAL GR WITH ACCESS TO ANNOUNCEMENT TRUNKS		27C6
	ORIGINATING REG GROUPS		RGO-3	T62-5	TEST REG GROUPS		4C7 (NOTE 403)
	ANNOUNCEMENT TRK GROUPS		ANTG		TEST TRK GROUPS		
	UNUSED TRK GROUPS		XTG	T66-9	CROSSED TRK GR TEST		
	ANNOUNCEMENT TRK BLOCK		ANTB	TB1-5	TRK BLOCK		
	UNUSED TRK BLOCK		XTB		CROSSED TRK BLOCK TEST		
18	CALLS TO ORIGINATING REGISTER GROUPS TO BE MONITORED		ST	STD	1ST ORIG REG GR		32E2
				STMF	2ND ORIG REG GR		
				STO	3RD ORIG REG GR		
				ST1	4TH ORIG REG GR		
				ST2	5TH ORIG REG GR		
				ST3	6TH ORIG REG GR		

400. CROSS CONNECTION INFORMATION: (CONT)

PART	CONDITION			CONNECT FROM	CONNECT TO	CONDITION	REFER
19	TWO-WAY OFF-NET ACCESS LINES			CS-	MAN	FIRST LINE LINK APPEARANCE	
					AC8	SECOND LINE LINK APPEARANCE	
		RATE TREATMENT PROVIDED IN MARKER GROUP		CSR-	TAO	FIRST LINE LINK APPEARANCE	
			ACCESS LINE ASSOCIATED WITH CENTREX CUSTOMER GROUP: NO		TAO	SECOND LINE LINK APPEARANCE	
			ACCESS LINE ASSOCIATED WITH CENTREX CUSTOMER GROUP: YES		RV		
20	WIDEBAND SWITCH GROUP ASSIGNMENT FOR WIDEBAND TRUNKS			FRO-3	WGA	WIDEBAND TRUNKS ON TRANSFER LINE LINK FRAME ASSIGNED TO SWITCH GROUP "A" OF WIDEBAND TRANSFER LINK CKT	38G7
					WGB	WIDEBAND TRUNKS ON TRANSFER LINE LINK FRAME ASSIGNED TO SWITCH GROUP "B" OF WIDEBAND TRANSFER LINK CKT	

CROSS CONNECTION NOTES:

401. WHEN MAKING JUNCTOR ADDITIONS OR TRANSITIONS REMOVE "SPF" (2W) OR "SPF4", (4W) CROSS CONNECTION IN THE MARKER AND CONNECT THE "G" CROSS CONNECTION TERMINAL TO EITHER THE "SF", "PR" OR "TTF" CROSS CONNECTION TERMINALS IN THE TRUNK LINK AND CONNECTOR CIRCUIT WHICHEVER IS REQUIRED. IF VARIABLE SIZE FRAME INDICATIONS ARE REQUIRED, REMOVE "SZD" (2W) OR "SZO" (4W) CROSS CONNECTION IN THE MARKER AND CONNECT THE "SZA", "SZB" AND "SZC" CROSS CONNECTIONS IN THE MARKER AND TRUNK LINK FRAME FOR FRAME SIZE INDICATION. SEE J SPECIFICATION COVERING JUNCTOR DISTRIBUTION.

402. (SEE SHEET D5).

403. WHEN PROVISIONS ARE MADE FOR OVERLOAD ANNOUNCEMENTS TO BE SUBSTITUTED FOR DIAL TONE DURING EMERGENCY OVERLOAD CONDITIONS, ALL OF THE FOLLOWING TERMINALS MUST BE CROSS-CONNECTED (SEE NOTE 400 PART 17): ONE OF THE "ARO-3" TERMINALS TO "AMFC", EACH "VGTO-11" TO EITHER "RAV" OR "RCY", ONE "TG2-9" TERMINAL TO "ANTG", REMAINING "TG2-5" TO RESPECTIVE "RGO-3" TERMINALS, REMAINING "TG6-9" TERMINALS TO "XTG", ONE "TB1-5" TERMINAL TO "ANTB", AND REMAINING "TB1-5" TERMINALS TO "XTB".

404. THESE CROSS CONNECTIONS MUST BE MADE TO BALANCE OUT ANY DC CURRENTS DUE TO THE RINGING MACHINE VOLTAGES.

DRAWING ISSUE: 35D, 36D, 24D, 30D

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2) — SD-26001-01-D4

BELL TELEPHONE LABORATORIES INCORPORATED — PAGE 6S

SD-26001-01-D4

STABILO

400. CROSS CONNECTION INFORMATION: (CONT)

PART	CONDITION		CONNECT FROM	CONNECT TO	CONDITION	REFER
8	PREFERENCE CONTROL FOR LINE LINK MARKER CONNECTOR		(MKR) MAK(ST) MCK(ST) MSK(ST)	(LLMC-ST) MAK- MCK- MSK-	MARKER START ENTRANCE INTO MKR CONN CHAIN (EACH MKR SHOULD BE CONNECTED TO A DIFFERENT ENTRANCE POINT TO DISTRIBUTE PREF FOR LL)	28A5 (NOTE 402)
			(LLMC-E) MAK- MCK- MSK-	(LLMC-ST) MAK- MCK- MSK-	FROM PRECEDING TO SUCCEEDING LINE LINK MARKER CONNECTOR PREFERENCE IN CHAIN	
			(LLMC-E) MAK- MCK- MSK-	(MKR) MAK(E) MCK(E) MSK(E)	END OF LINE LINK MARKER CONNECTOR CHAIN TO MKR "END" PUNCHINGS	
9	OFFICE RINGING SUPPLY USED FOR CONTINUITY TEST PROVIDES A -48 VOLT REFERENCE LEVEL	YES	AC	DC	AC-DC AUDIBLE RINGING	24C1 (NOTE 404)
		NO		AUD	± AUDIBLE RINGING	
10	EXTRA PUNCHES FOR MAINTENANCE USE			EXB	BAT. POTENTIAL FOR TBL IND	31H3
				EXG	GRD POTENTIAL FOR TBL IND	
11	PEG COUNT	1ST ORIG REG GR	PCD		NO REQUIREMENTS HAVE BEEN ESTABLISHED FOR THIS FEATURE	27F5
		2ND ORIG REG GR	PCMF			
12	GROUND FOR ALL MARKER BUSY CIRCUITS		AB&AMB	G	APPLY ON LAST MARKER (MARKER GROUP CONTAINS ONLY FULL ACCESS MARKERS)	28D3
					APPLY ON MARKER 0 (MARKER GROUP CONTAINS LIMITED ACCESS MARKERS (SEE NOTE 117))	
13	CROSSBAR SWITCH SELECT FINGER DAMPING CONES		MMT	MMF	CONES PROVIDED ON ALL (LL) & (TL) SWITCHES	20H4
				MMS	CONES OMITTED ON ANY (LL) OR (TL) SWITCH	
14	CLOSURE OF FTC-PREF CKT "Y" OPTION (MFR DISC.)		EF	EF0	MAX OF 10 (TL) IN THE OFFICE	2D2
				EF10	OVER 10 (TL) IN THE OFFICE	
			OF	OF0	MAX OF 10 (TL) IN THE OFFICE	
				OF10	OVER 10 (TL) IN THE OFFICE	
	CLOSURE OF FTC- PREF CKT "I" OPTION(STD)	FOR MARKERS WORKING WITH TRUNK LINK FRAMES WHOSE HIGHEST NO. IS: TRUNK LINK FRAMES 0-9	EF	EF0		
		TRUNK LINK FRAMES 10-19	EF	EF10		
		TRUNK LINK FRAMES 20-29	EF0	EF20		2D2,2A2
		TRUNK LINK FRAMES 0-9	EF	EF10		2D2
		TRUNK LINK FRAMES 10-19	EF20	EF30		2A2,33H2
		TRUNK LINK FRAMES 20-29	OF	OF0		2D2
		TRUNK LINK FRAMES 0-9	OF	OF10		
		TRUNK LINK FRAMES 10-19	OF0	OF20		2D2,2A2
		TRUNK LINK FRAMES 20-29	OF	OF10		2D2
			OF20	OF30		2A2,33H1
15	TYPE OF NETWORK EACH ORIG REG GROUP SERVES		RDP RMF RO-3	R2W	2-WIRE NETWORK	3G4
				R4W	4-WIRE NETWORK	
				RDT	DIAL TRANSFER NETWORK NON-WIDEBAND ROUTE	
				WB	DIAL TRANSFER NETWORK WIDEBAND ROUTE	
16	TYPE OF CUSTOMER GROUP SERVICE LINE ASSOCIATED WITH CSR - PUNCHING AS ASSIGNED IN LINE LINK FRAME		CSRGO-59	MPBX	MANUAL PBX LINE	36C7
				RV	REVERSE OF TIP AND RING REQUIRED IN ORIG REG	36D7
				TAO	TREATMENT ALL OTHER	36B7
17	ANNOUNCEMENT TRK FR CONN		ANFC	ARO-3	FR CONN ROUTE FOR ANNOUNCEMENT TRUNKS	26E7
	ROUTE ADVANCE		RAV	VGT	VERTICAL GR DENIED ACCESS TO ANNOUNCEMENT TRUNKS	27B6
	RECYCLE		RCY	00-11	VERTICAL GR WITH ACCESS TO ANNOUNCEMENT TRUNKS	27C6
	ORIGINATING REG GROUPS		RGO-3	TG2-5	TEST REG GROUPS	4C7 (NOTE 403)
	ANNOUNCEMENT TRK GROUPS		ANTG		TEST TRK GROUPS	
	UNUSED TRK GROUPS		XTG	TG6-9	CROSSED TRK GR TEST	
	ANNOUNCEMENT TRK BLOCK		ANTB	TB1-5	TRK BLOCK	
	UNUSED TRK BLOCK		XTB		CROSSED TRK BLOCK TEST	
18	CALLS TO ORIGINATING REGISTER GROUPS TO BE MONITORED		ST	STO	1ST ORIG REG GR	32E2
				STMF	2ND ORIG REG GR	
				STO	3RD ORIG REG GR	
				ST1	4TH ORIG REG GR	
				ST2	5TH ORIG REG GR	
				ST3	6TH ORIG REG GR	

400. CROSS CONNECTION INFORMATION: (CONT)

PART	CONDITION			CONNECT FROM	CONNECT TO	CONDITION	REFER
19	TWO-WAY OFF-NET ACCESS LINES			CS-	MAN	FIRST LINE LINK APPEARANCE	
					AC8	SECOND LINE LINK APPEARANCE	
		RATE TREATMENT PROVIDED IN MARKER GROUP		CSR-	TAO	FIRST LINE LINK APPEARANCE	
			ACCESS LINE ASSOCIATED WITH CENTREX CUSTOMER GROUP NO		TAO	SECOND LINE LINK APPEARANCE	
			ACCESS LINE ASSOCIATED WITH CENTREX CUSTOMER GROUP YES		RV		
20	WIDEBAND SWITCH GROUP ASSIGNMENT FOR WIDEBAND TRUNKS			FRO-3	WGA	WIDEBAND TRUNKS ON TRANSFER LINE LINK FRAME ASSIGNED TO SWITCH GROUP "A" OF WIDEBAND TRANSFER LINK CKT	38G7
					WGB	WIDEBAND TRUNKS ON TRANSFER LINE LINK FRAME ASSIGNED TO SWITCH GROUP "B" OF WIDEBAND TRANSFER LINK CKT	

CROSS CONNECTION NOTES:

401. WHEN MAKING JUNCTOR ADDITIONS OR TRANSITIONS REMOVE "SPF" (2W) OR "SPF4", (4W) CROSS CONNECTION IN THE MARKER AND CONNECT THE "G" CROSS CONNECTION TERMINAL TO EITHER THE "SF", "PR" OR "TTF" CROSS CONNECTION TERMINALS IN THE TRUNK LINK AND CONNECTOR CIRCUIT WHICHEVER IS REQUIRED. IF VARIABLE SIZE FRAME INDICATIONS ARE REQUIRED, REMOVE "SZD" (2W) OR "SZD" (4W) CROSS CONNECTION IN THE MARKER AND CONNECT THE "SZA", "SZB" AND "SZC" CROSS CONNECTIONS IN THE MARKER AND TRUNK LINK FRAME FOR FRAME SIZE INDICATION. SEE J SPECIFICATION COVERING JUNCTOR DISTRIBUTION.

402. (SEE SHEET D5).

403. WHEN PROVISIONS ARE MADE FOR OVERLOAD ANNOUNCEMENTS TO BE SUBSTITUTED FOR DIAL TONE DURING EMERGENCY OVERLOAD CONDITIONS, ALL OF THE FOLLOWING TERMINALS MUST BE CROSS-CONNECTED (SEE NOTE 400 PART 17): ONE OF THE "ARO-3" TERMINALS TO "ANFC", EACH "VGTO-11" TO EITHER "RAV" OR "RCY", ONE "TG2-9" TERMINAL TO "ANTG", REMAINING "TG2-5" TO RESPECTIVE "RGO-3" TERMINALS, REMAINING "TG6-9" TERMINALS TO "XTG", ONE "TB1-5" TERMINAL TO "ANTB", AND REMAINING "TB1-5" TERMINALS TO "XTB".

404. THESE CROSS CONNECTIONS MUST BE MADE TO BALANCE OUT ANY DC CURRENTS DUE TO THE RINGING MACHINE VOLTAGES.

DRAWING ISSUE

15D	MM, DM, AM
16D	TBR, EM, AM
18D	JJP, LW, AM
24D	KNT, SA, AM
30D	

ISSUE 37D

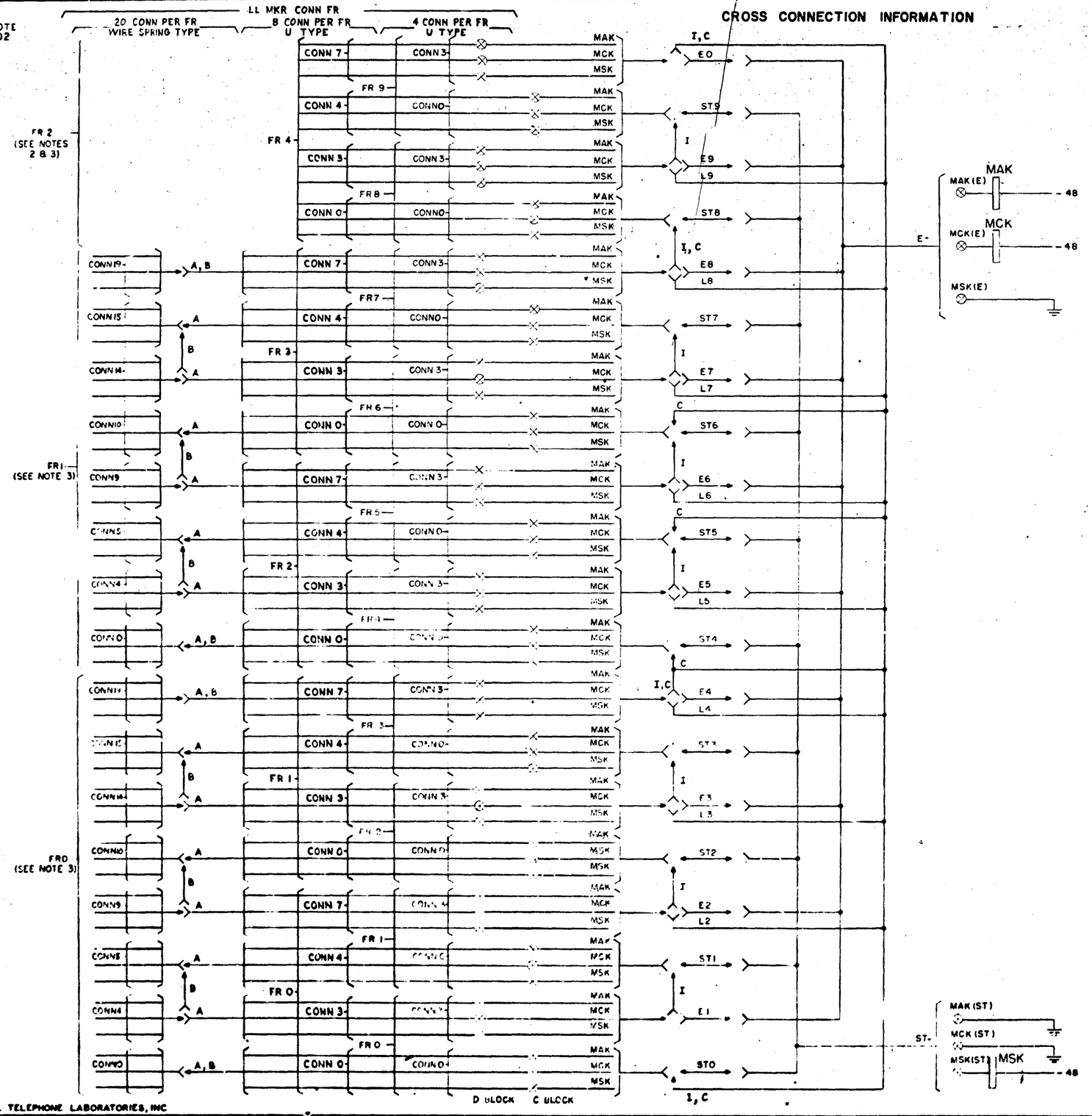
DIAL TONE MARKER CIRCUIT (2) SD-26001-01-D4

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-10-D4

STAP LO K-E

CROSS CONNECTION INFORMATION



SHEET NOTES:

1. AS DETERMINED BY LINE LINK MARKER CONN FOR PREFERENCE REQUIREMENTS, CONNECT START ST- TO STO-9 AND END E- TO EO-9 RESPECTIVELY. FOR U TYPE MARKER CONNECTORS HAVING INTERMEDIATE MARKER PREFERENCE USE I OPTION.*

MARKER AND MARKER FRAME WIRING FOR	FOR WIRE SPRING MARKER CONNECTOR FRAMES						
	INTERCONNECTIONS BETWEEN GROUPS OF FIVE CONNECTORS ARE MADE IN THE MARKER (A&M ONLY)			INTERCONNECTIONS BETWEEN GROUPS OF FIVE CONNECTORS ARE MADE IN THE MARKER CONNECTORS (STD)			
	OPTIONS			OPTIONS			
	A	E	I	A	B	C	E
HIGHEST MKR FR (ST-)	X			X			
INTERMEDIATE MKR FR *	X		X		X	X	
LOWEST MKR FR (E-)	X	X		X			X

* WHERE OFFICES HAVE LESS THAN 60 CONNECTORS, AND STO IS NOT THE START LEAD, THE LAST EQUIPPED CONNECTOR ON THE LOWEST PREFERRED FRAME WILL USE A AND L WIRING INSTEAD OF B, C OR I WIRING.

2. FRAME 2, CONNECTORS 0-19 (FOR MORE THAN 40 LINE LINK FRAMES) ARE CROSS CONNECTED IN A MANNER SIMILAR TO THE OTHER CONNECTORS SHOWN.

3. FOR OFFICES WITH 5 OR 6 DIAL TONE MARKERS - CONNECT ONLY TO CONNECTORS ASSOC WITH THIS DIAL TONE MARKER (SEE NOTE 117).

ISSUE 2
150 PBM EPY AMP CB
300 CB

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-D5

BELL TELEPHONE LABORATORIES, INC — DWG SIZE 6S — PRINTED IN U.S.A.

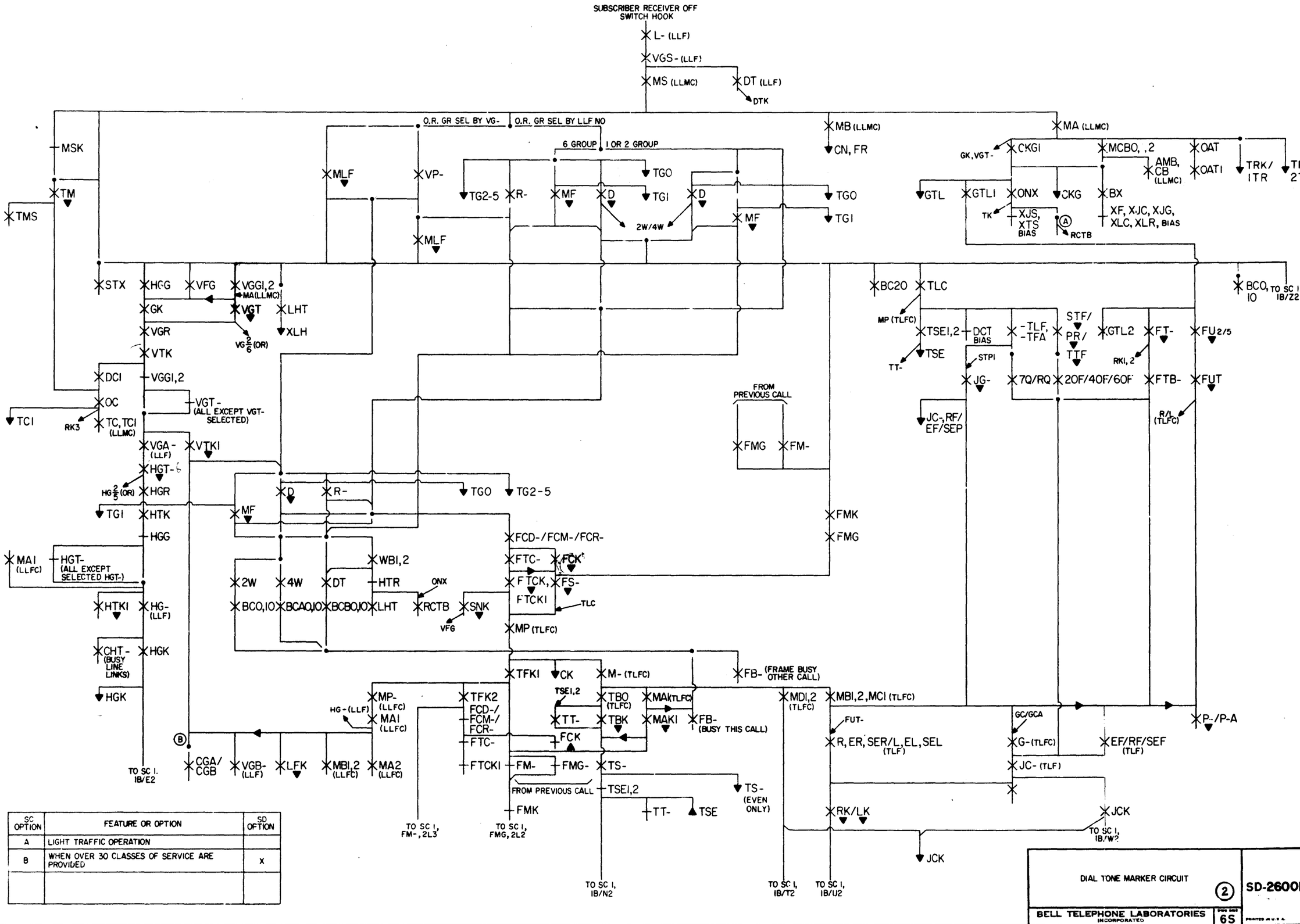
SD-26001-01-D5

BELL TELEPHONE LABORATORIES, INC

PRINTED IN U.S.A. E-7420 (6-62)

PART OF SC 1

DIAL TONE OVERALL OPERATION



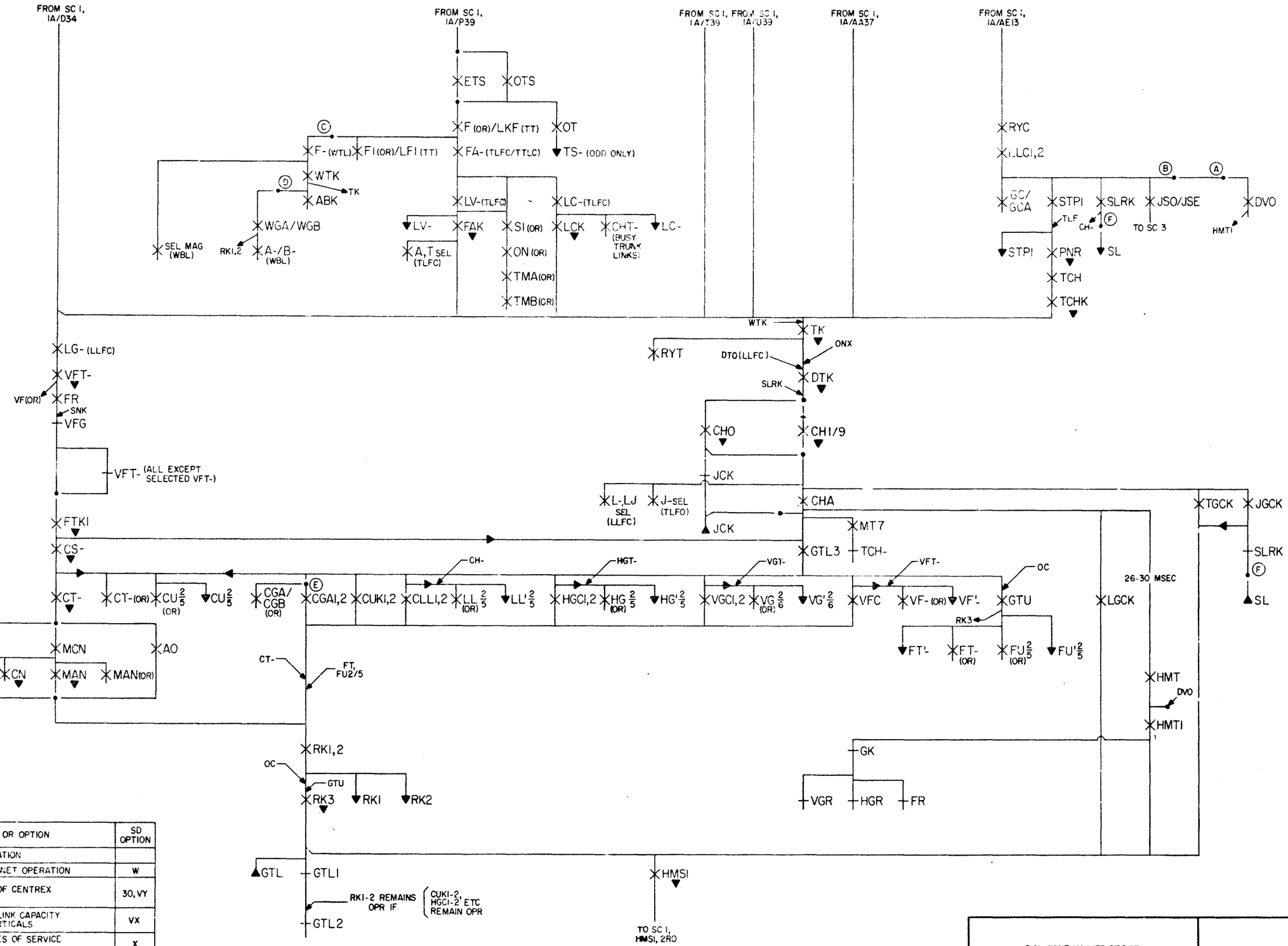
SC OPTION	FEATURE OR OPTION	SD OPTION
A	LIGHT TRAFFIC OPERATION	
B	WHEN OVER 30 CLASSES OF SERVICE ARE PROVIDED	X

DIAL TONE MARKER CIRCUIT (2) SD-26001-0

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-E1A

PART OF SC 1
DIAL TONE OVERALL OPERATION



SC OPTION	FEATURE OR OPTION	SD OPTION
A	HEAVY TRAFFIC OPERATION	
B	HIGH SPEED HOLD MAGNET OPERATION	W
C	WIDEBAND SWITCHING OF CENTREX STATION PROVIDED	30, VY
D	WIDEBAND TRANSFER LINK CAPACITY GREATER THAN 60 VERTICALS	VX
E	WHEN OVER 30 CLASSES OF SERVICE ARE PROVIDED	X
F	MFR DISC.	K

DRAWING ISSUE 30D

ISSUE 42B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-EIB

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 6S

PRINTED IN U.S.A.

PART OF SC 1

DIAL TONE
OVERALL OPERATION

FROM 8C13
HMSI, L34

1Z32

HTR — LIGHT TRAFFIC OPERATION — HMSI — HEAVY TRAFFIC OPERATION

OPERATED FROM PREVIOUS CALL

SC2
2AA4

TFK2, IA/L31

FMK, IA/M36

FMG
FM-
FMG-
FOR THIS CALL
FMK
FML
BC0, 10, 20
FB-

SC2
3Z17 OR 3Z24

LGCK — LXP — L- HOLD (LLFC) — J- HOLD (LLFC) — JXP — J- HOLD (TLFC) — JGCK — T- HOLD (TLFC) — TGCK

LXPA — LXP — LLT — JXPA — JXP — SL

LXPI — LLTA — JXPI — SLA

DCT — CHE — GTI — SL

DCTI — GT2

HTR — SL TUBE (OBSL) — RYTI

SL (OBSL)

OBSI

OBS (OR) — CK(SO)

OBS2 — LK(SO) — LOLA — LL(SO)

RYT — F(OR)/LKF(TT) — ETS/OTS,OT — GTL3 — RYT — ONX

F- (WTL)

FA (TLFC) — FI (OR) — CN — MAN — 2P — AO — CT- — GTU — DTK — L-,LJ- SEL (LLFC) — T-,J-,A SEL (TLFC) — RCTA, RCTB

SL — LC- (TLFC) — FAK — LV- (TLFC) — WTK — L (OR) — DCT — CGAI/CGBI — VFC — CLLI-2 HGCI-2 — VGCI-2 CUKI-2 — CU½, HG½, LL½, VG½, VF½, FT½, FU½ — MCN — RKI-2 — FT-

LC- — LCK — CHT- — LV- — WGA/WGB — SR (OR) — DISI-2 — DISI — RKI-2 — FTB-

FU½ — FUT-

TBO (TLFC) — VGA- (LLFC) — OCI — MS (LLMC) — CKGI — TLC — DISA — LLCI-2 — JC- — RF/EF/SEF (TLFC) — P-/P-A — JC (TLFC) — R,ER,SER/L,EL, SEL (TLFC)

TBK — D,TGO — MA (LLMC) — MB (LLMC) — MAK MCK MSK — OBSI CKG — OBSI, OBS2 — RK3, HMT, HMTI — VGT — MAI (TLFC) — MDI-2 (TLFC) — MBI-2, MCI (TLFC) — MP- (TLFC) — PR/SF/TTF — PR/STF/TTF — TS- — TLF -TFA — SNK — GLH, LTR — STPI — HMSI — GC/GCA — CH- — CS- — HG- (LLFC) — MT7 — MP- (LLFC) — MA2 LG- MBI-2 — GT1 — CONI — JG- — JCK — LXPI — LXPA — JXPI — CGA/CGB — DVO — JCK — RK/LK — CHT-

VTK — DISI, TRK — DISI-2 — FT- FU½ — TM — OBS2 — VTKI — MAKI — TFKI — CK — M (TLFC) — 7Q/RQ — 20F/40F/60F — GLHI — PNR — TK — G- (TLFC) — TCHK — CHA — CHT- — HGK — MAI (LLFC) — LFK — LCT — GT2 — CON — RT/EF/SEF — VGB- (LLFC) — JXPA — CHE — SLA — SL — JCTR SEQ CHANGE SCB

OAT — MCBO-1-2 — OC — TCI

DISA — BX AMB (LLMC) — CB — TC,TCI (LLMC) — STX

MLF — VP- — MLF

D/MF/R- — MLF — D/MF/R-

FCD/FCM/FCR — 2W/4W/DT-/WB-

R- — D/MF — D/MF — FCD/FCM

2W/4W/DT-/WB- — FCR — MLF — FCD/FCM — 2W/4W — 2W/4W/DT-/WB

HTK, FMK — VFT- — HGT — RYC

FTKI — HTKI — DCTI

RYTI — DCTI

SC OPTION	FEATURE OR OPTION	SD OPTION
A	HEAVY TRAFFIC OPERATION	
B	LIGHT TRAFFIC OPERATION	
C	HIGH SPEED HOLD MAGNET OPERATION	W
D	WHEN OVER 30 CLASS OF SERVICE ARE PROVIDED	X
E	MANUFACTURE DISCONTINUED	V
F	INCLEARD SWITCHING OF CENTREX STATIONS PROVIDED	30, VV

DRAWING ISSUE

1	ALC AM
2D	KM
3D	VBH
4AR	DEL AM
5D	DEL LW AM
9D	DEL LW AM MF
28D	MF
30D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

DATE 6S

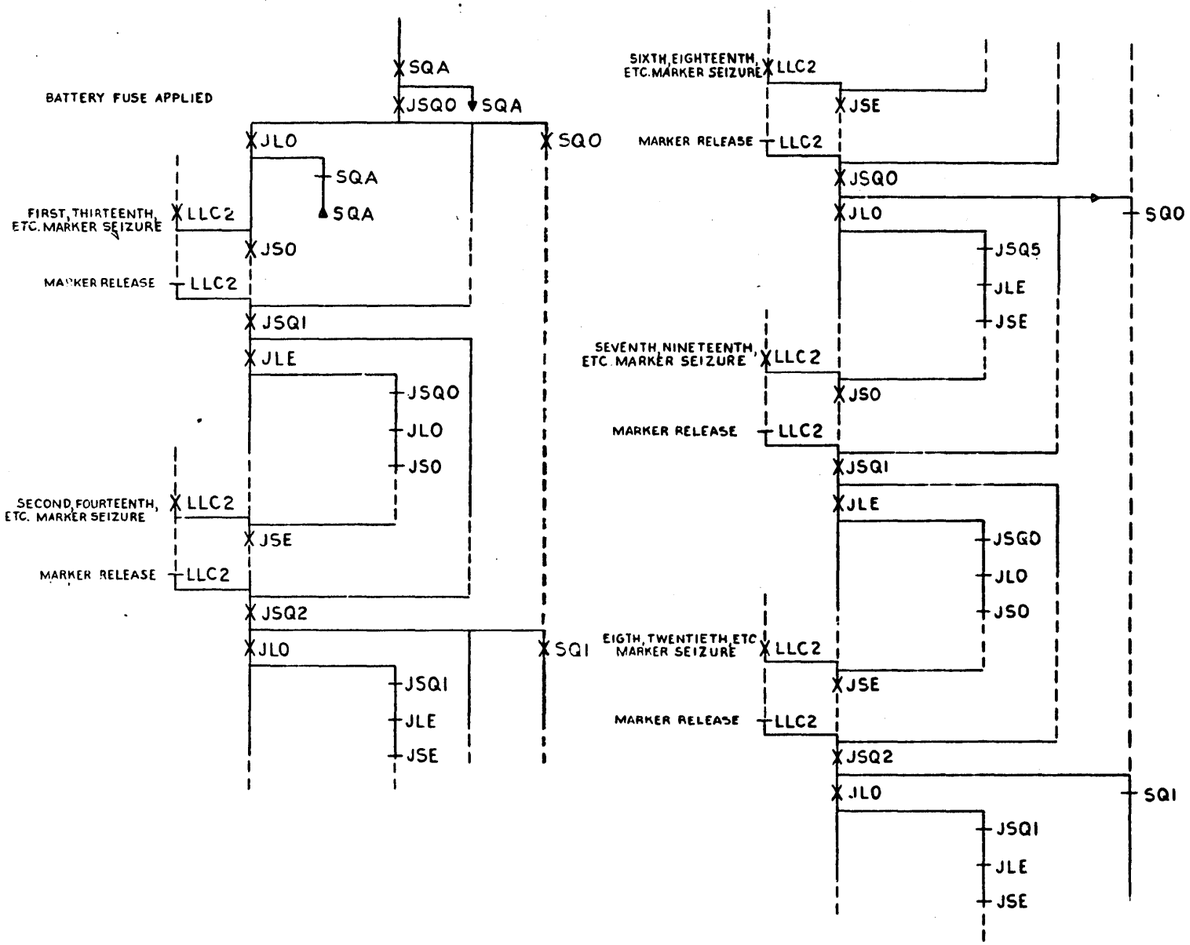
ISSUE 42B

SD-26001-01-E2

SD-26001-01-E2

SC3

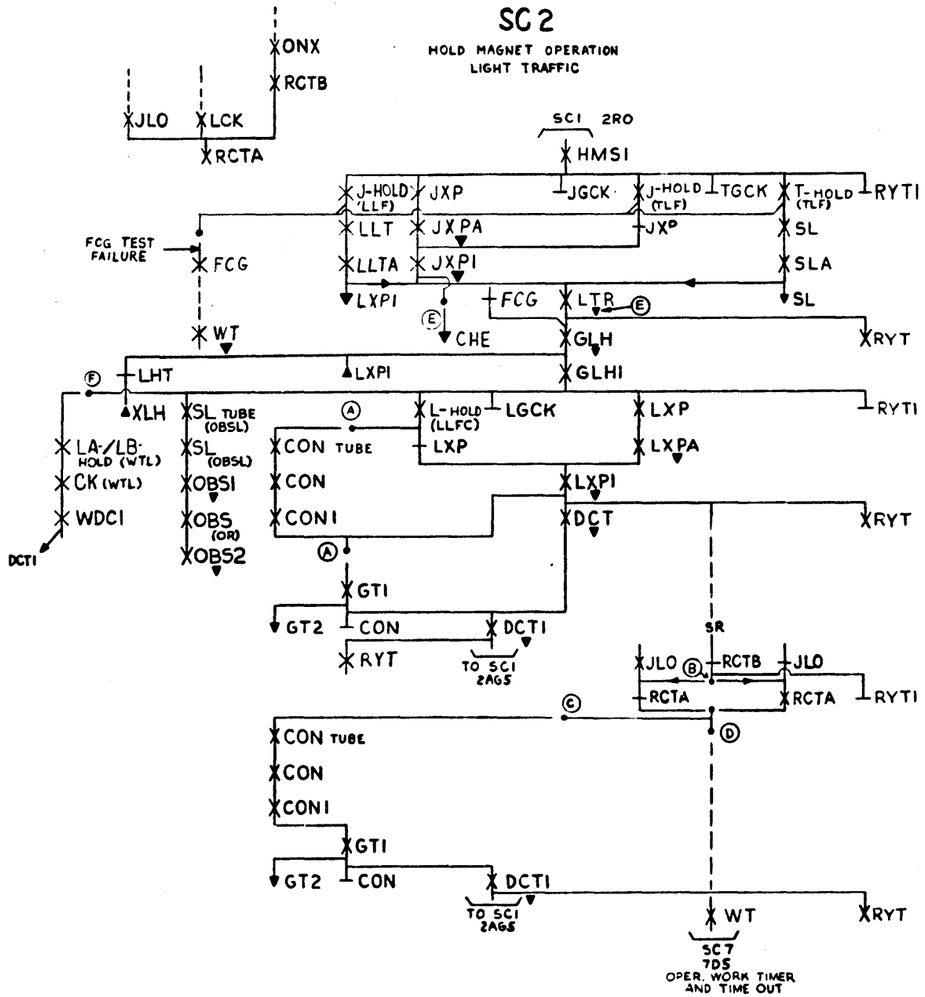
JUNCTOR SEQUENCE OPERATION



	LLC2 OPERATES	LLC2 RELEASES
ODD MARKER USAGES	JS0 OPER	JSQ1,3,OR 5 & JLE OPER
EVEN MARKER USAGES	JSE OPER	JSQ0,2,OR 4 & JL0 OPER

SC2

HOLD MAGNET OPERATION
LIGHT TRAFFIC



SC OPTION	FEATURE	SD OPTION
A	CON TEST SUCCESSFUL	
B	CON TEST FAILURE TIP AND RING LEADS REVERSED	
C	CON TEST SUCCESSFUL WITH TIP AND RING LEADS REVERSED	
D	CON TEST FAILURE WITH TIP AND RING LEADS REVERSED, TIME OUT	
E	MFR DISC	K
F	WIDEBAND SWITCHING OF CENTREX STATIONS PROVIDED	3C, VY

DRAWING ISSUE

1	
2D	
3D	
4AR	
5D	
300	

DIAL TONE MARKER CIRCUIT

ISSUE 42B

SD-26001-01-E3

BELL TELEPHONE LABORATORIES, INC

SC 4

FIRST JUNCTOR RETEST AND RECYCLE

(FIRST JCTR RETEST)

FROM SC1

TK

DTK ONE OR MORE IDLE CHANNELS — RYT — CH- TO SC1 1222

IOTLF OPERATED — ALL CHANNELS BUSY

IOTLF NORMAL

STP

GC/GCA

STP3

STP1

G- (TLFC)

JC-

JCK

PA/PNR

JG-

TCH-

RER SER/L, EL SEL (TLFC)

RF/EF/SEF(TLFC)

TCHK

RK/LK

CHT-

TK

STP2/STP2A

DTK

PNR/PA/PB/PC/PE

JG-

GC/GCA

TCHi-

RER SER L EL SEL (TLFC)

RF/EF/SEF(TLFC)

G-(TLFC)

RYT1

TCHK

RK/LK

JC-(TLFC)

JCK

TK

DTK ONE OR MORE IDLE CHANNELS — RYT — CH- TO SC1 1222

ALL CHANNELS BUSY

FMP

PNR/PA/PB/PC

TCH-

TCHK

TK

DTK

FM

RF

RCY, RCY1 — RCY

TLC

(R) RCTA RCTB — ONX — VFT- — (S-CT- — FR — RYC — LLCI-2

AT-SEL (TLFC) — FTKI

CGA/CGB — MP- (LLFC) — MAI — LFK — MBI-2, LG-, VGB (LLFC) — MA2 (LLFC) — CHT- — HG- (LLFC) — HGK — GC/GCA STP STP2/STP2A/STP3 — JC- — JG- — RF/EF/SEF — FM — KFA — TO SC5 RFA, SK17 — (C)(A) FMP — DVO FTC-

TFKI — FS- — FTCK

MP- (TLFC) — TFKI — CK — FML — FMG — SNK — RCY, RCY1 — RCY — BCO, BC10, BC20 — FB-

MCI (TLFC) — MDI-2 (TLFC) — MAI (TLFC) — MAKI — TS- — P-/PA — LCK — JC- (TLFC) — RF/EF/SEF,TLFC) — RK/LK

SF/FR/TTF — 2G/3G — TLF/TFA — TQ/RQ — PR/STF/TTF — 20F/40F/60F

MBI-2 (TLFC) — CHT- — JCK — G- (TLFC) — LC- (TLFC) — R,ER,SER/L,EL,SEL (TLFC) SEF/RF/EF (TLFC) RK/LK

F (OR) — FA- (TLFC) — FI (OR) — LV- (TLFC)

TBO (TLFC) — TBK — FAK

GTLI — GTL — OTS,OT/ETS — FT- — FUS — GTL2 — FTB- — FUT-

(RECYCLE)

(B) ONX — RCTB — XJS,XTS BIAS — VFG — VFT

FCDO, FCDIO, FCD20 — FCK — FTCK — FTC- — FTCKI — FS-

TLC — TSEI-2 — TSE

GTLI — STF/PR/TTF — TLF/TFA PTR — TQ/RQ — 20F/40F/60F — FT- — FTB- R/L (TLFC) — FUS — FUT- G(TLFC) — GC/GCA JC- TLF/TFA — GTL2 — GTL

RYC — LLCI-2 — RYT1

(C)(A) SLRK — DVO — SL

STPI — JG- — PNR — TCH- — TCHK

SNK

MP — LLCI — MAI (LLFC) — TFK2 — FCDO, FCDIO, FCD20 — FCK — FTC- — FTCKI

CK — TFKI — MP- (TLFC)

M (TLFC) — TBO (TLFC) — TBK — MAI (TLFC) — MAKI — TT- — TS- — TSEI-2 — ETS — OTS — TSE — TT- — F (OR) — OT — FI (OR) — FA- (TLFC) — LV- (TLFC) — FAK — LC- (TLFC) — LCK — CHT- (BUSY TLFC) — A,T- SEL (TLFC)

FB- FRAME BUSY THIS CALL

MDI-2 (TLFC) — M3I-2, MCI — R,ER,SER/L,EL, SEL (TLFC) — RK/LK — G- (TLFC) — JC- (TLFC) — JCK — CHT- (BUSY JCTRS)

RF/EF/SEF(TLFC) — P-/P-A

(D) CGA/CGB — VGB- (LLFC) — HG- (LLFC) — HGK — CHT- (BUSY LLFC) — MBI-2 (LLFC) — MA2 (LLFC) — LFK — PREVIOUS OPERATION OF MGT-

LG- (LLFC) — VFG — VFT — FR — VFG — VFT- (ALL EXCEPT SELECTED VFT-) — FTKI — CS- — CT-

FM- — FMG- — FM- & FMG- INITIALLY OPERATED — FMK — FMG — FML — BCO, BC10, BC20 — FB-

TO SC5 SA02 — ALL CHANNELS BUSY — TK — DTK ONE OR MORE IDLE CHANNELS — RYT — CH- TO SC1 1222

SC OPTION	FEATURE OR OPTION	SD OPTION
A	HEAVY TRAFFIC OPER	
B	LIGHT TRAFFIC OPER	
C	HIGH SPEED HOLD MAG OPER	W
D	WHEN OVER 30 CLASS OF SERVICE ARE PROVIDED	X

DRAWING ISSUE

1	
2D	
3D	
4AR	
5D	
18D	

SD-26001-01 CROSSBAR SYSTEMS DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC — 6S

18

SD-26001-01-E4

SD-26001-01-E4

SC5

SECOND JUNCTOR RETEST AND ROUTE ADVANCE

(SECOND JUNCTOR RETEST)

FROM SC4 4K42

TK

DTK — ONE OR MORE IDLE CHANNELS — RYT

IOTLF OPERATED — ALL CHANNELS BUSY — CH- TO SC1 12Z2

IOTLF NORMAL

STP

GC/GCA

STP3 — G- (TLFC)

STP1 — JC-

PA/PNR — STP1 — JG- — JCK

TCH- — R,ER,SER/L,EL,SEL (TLFC) — RF/EF/SEF (TLFC)

TCHK — RK/LK — CHT-

TK — STP2/STP2A

DTK — PNR/PA/PB/PC/PE — JG- — GC/GCA — RYTI

TCH- — R,ER/L,EL (TLFC) — RF/EF/SEF (TLFC) — G- (TLFC)

TCHK — RK/LK — JC- (TLFC)

JCK — CHT-

TK

DTK — ONE OR MORE IDLE CHANNELS

ALL CHANNELS BUSY — CH- TO SC1 12Z2

FROM SC12 RAVI, 7Q37 — FROM SC4 RF8, 4K23

(ROUTE ADVANCE)

AN — RFA — AN — FMP

FM — NO OVERLOAD ANNOUNCEMENT — OVERLOAD ANNOUNCEMENT

FROM SC13 RAVI, 9H10

RAVI — RA

PTLR/PA/PB/PC/PE

TCH-

TCHK — ONX — RCTA, RCTB — ATT-SEL (TLFC) — DTK — TBC (TLFC) — OCI,VGA- (LLFC) — CKGI — MS (LLMC) — MAK, MCK, MSK — D,TGO — D

TK — TBY — MA (LLMC) — ANN — RF, RFA — MB (LLMC) — FT-FUSE

TRK — DISI — VGR — VTK — DISI-2 — TM — VGT- — HTK, FMK, VTK — HGT- — VFT- — LHT

GK — VTGD1, 2 — OC — VTKI — HTKI — FTKI — XLH

VGT- — BY — RB (LLMC) — LISA — AMB — TC, TCI (LLMC)

STX

OC — DISI-2 — DISI

DISA — DVO — FM — LLCI-2

FMP — SNK — RAVI — RA — CC/GCA, STP, STP2/ STP2A, STP3 — HG- — HGK

JCTR SEG CHANGE JC3

CGA, CGB — CS- — LG-, VGB- (LLFC)

MP- (LLFC) — MAI (LLFC) — LFK

MA2 (LLFC) — MBI-2 (LLFC) — CHT- — SL — SLRK

JG- — RF/EF/SEF — JC-

RYC

F (OR) — FI (OR)

ETS — OTS,OT — FA- (TLFC) — LV- (TLFC)

MAI (TLFC) — MAKI — MDI-2 (TLFC) — LCK — MCI (TLFC) — JC- (TLFC) P-/P-A — MP- (TLFC) — TFFI — FS-

PR/STF/ TTF — CK — FTCK — FML — PR/STF/ TTF — M (TLFC) — TFK2

TLC

-TLF/-TFA — 20F/ 40F/ 60F — 70/P2

TS- — TS-

MBI-2 (TLFC) — JCK, CHT- — RK/LK, RF/EF/ SEF (TLFC) — PER/SER/ L,EL,SEL (TLFC) — FAK, GT (TLFC), LC- (TLFC)

GTL1

GTL — GTL2 — FT- — FTB- — FUT

FU5 — CT-

SC OPTION	FEATURE OR OPTION	SE OPTION
A	HEAVY TRAFFIC OPER.	
B	LIGHT TRAFFIC OPER.	
C	HIGH SPEED HOLD MAG OPER.	W
D	WHEN OVER 30 CLASS OF SERVICE ARE PROVIDED	X

DRAWING ISSUE

1	
2D	FNR
3D	FNR
4AR	RTP C&A
5D	RLP LW 4AD
18D	RLP LW 4AD

SD-26001-01 CROSSBAR SYSTEMS

DIAL TONE MARKER CIRCUIT

SD-26001-01-ES

BELL TELEPHONE LABORATORIES, INC

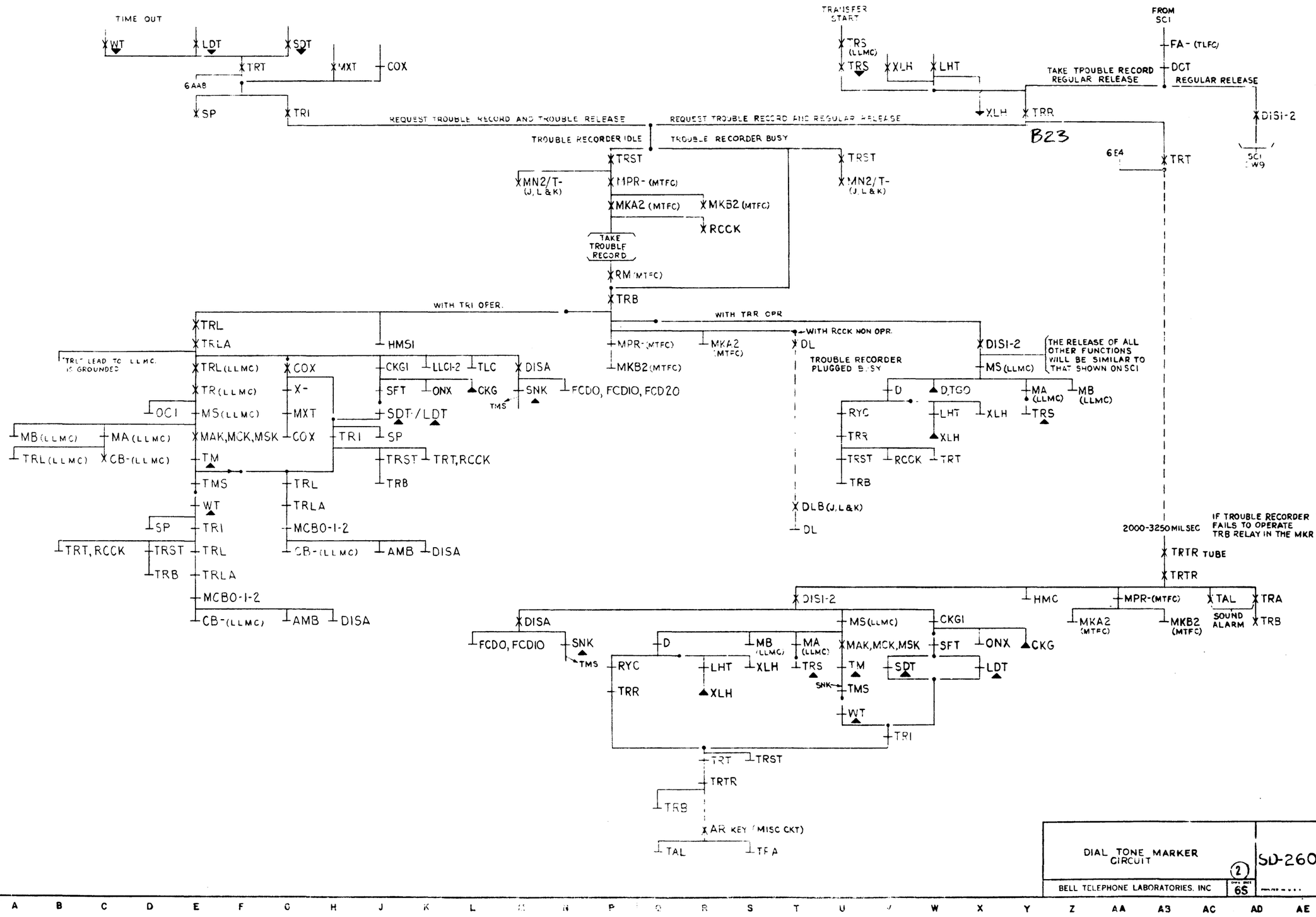
2 65

18

SD-26001-01-ES

SC6

OPERATION WITH THE TROUBLE RECORDER



DRAWING ISSUE

1	WM
2D	F.R.C.
3D	FWM
4AR	
5D	

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

SHEET 2 OF 65

ISSUE 37D

SD-26001-01-E6

SD-26001-01-E6

SC7
WORK TIMER

SNK, TM, RYT, TBT, SFT

OPERATION OF SFT STOPS AND RECYCLES THE WORK TIMER AND THE RELEASE OF SFT RESTARTS THE WORK TIMER.

TMS

245-456 MIL SEC

WT

TO SC 6, 6C3

RECYCLE POINT FOR WT OPERATION

HMSI, TK, DCTI, RLH, LXPI, LTRA, GC/GCA, STP, RCY, RAVI, RA

RYT, TMS, RYTI, RYT, TMS

STOP WT & RECYCLE

EACH RECYCLE RETURNS WORK TIMER TO INITIAL CONDITION.

CON FAILURE WITH CWL

WT, CWF, RLK, SP(CWL), GTI

SCI

DCT, TRR

TBL RECORD NORMAL RELEASE

SC8
SEIZE FRAME TIMER

SEIZURE OF LLFC INITIATED

LLCI, MAKI

24-66 MIL SEC

SFT

LLFC SEIZED

LFK

SFT

SEIZURE OF TLFC INITIATED

TLC, FTCK

24-66 MIL SEC

SFT

TLFC SEIZED

TFK2

SFT

SFT

DISABLE WORK TIMER

2600-4250 MIL SEC

RON

SDT TUBE

SDT

SDT TUBE

TO SC 6 6G3

4600-7500 MIL SEC

LDT TUBE

LDT

LDT TUBE

TO SC 6 6E3

SC9
OVER ALL TIMER

MA (LLMC)

OAT

9.6-15.4 SEC

OAT TUBE

MRL

MRL1, HMS1

"BT" LEAD TO LLMC IS GROUNDED

TLC, OAT TUBE, MS (LLMC), TRL (LLMC), BT, OCI, LLCI-2, TAL ALARM

MP- (TLFC)

TFK1, CK

MAK, MCK, MSK, MA (LLMC), D, D, TGO

FTCK, FML, TFK2, TM, CKG1, TRL (LLMC)

SNK

MCBO-1-2

OAT, MRL, BT

RELEASE OF OTHER FUNCTIONS SIMILAR TO THAT SHOWN ON SC1, EXCEPT THE DIS1,2 RELAYS WILL NOT BE OPERATED

AR KEY (MISC), TAL

SC10
HEAVY TRAFFIC TIMER

MARKER RELEASE

OAT, HTR, OAT1

NEXT MARKER SEIZURE

OAT

MARKER FUNCTIONS UNDER HEAVY TRAFFIC OPERATION IF RESEIZED IN LESS THAN 1 SECOND AFTER RELEASE FROM PREVIOUS CALL

HEAVY TRAFFIC

LIGHT TRAFFIC

960-1600 MIL SEC

HTT TUBE, HTT, HTR, HTT TUBE, HTT

ON NEXT SEIZURE MARKER WILL COMPLETE LIGHT TRAFFIC FUNCTIONS

SC12
ALL REG. BUSY

FCK, FTCK

TBT

1000-1500 MIL SEC

TBT TUBE

TBTA

RB (GRP BUSY) OVERLOAD ANNOUNCEMENT

FM NO OVERLOAD ANNOUNCEMENT

TBT TUBE

AN

TO SC 13 3P7

AN, RAVI

TO SC 5, 5J16

ISSUE	
1	ACE VM
2D	FRR —
3D	FRR —
4AR	CAS VM
5D	AUTO AJ
18D	DB LW AND
30D	

DIAL TONE MARKER CIRCUIT

(2)

BELL TELEPHONE LABORATORIES, INC

6S

30

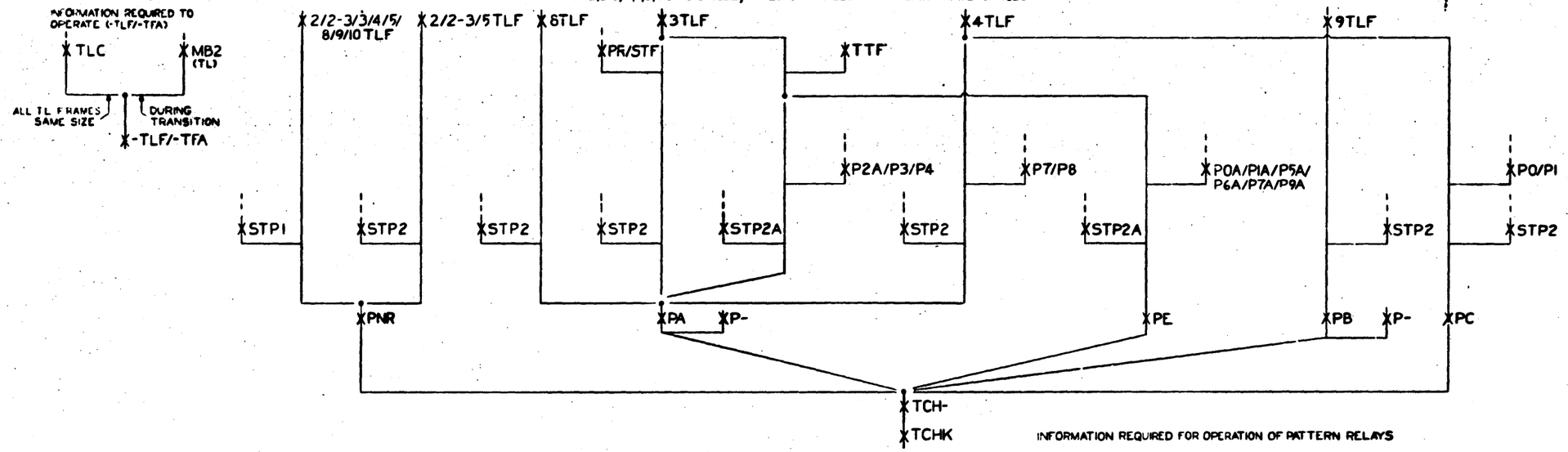
SD-26001-01-E7

SD-26001-01-E7

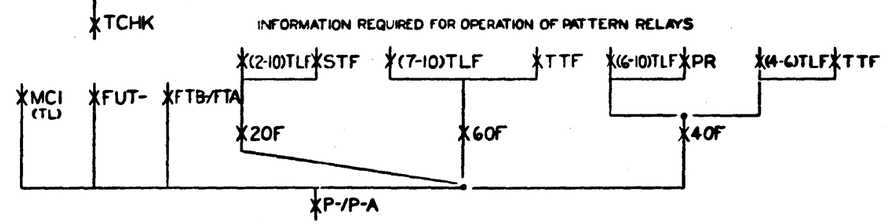
SC II

OPERATION OF (TCH 0-9) RELAYS

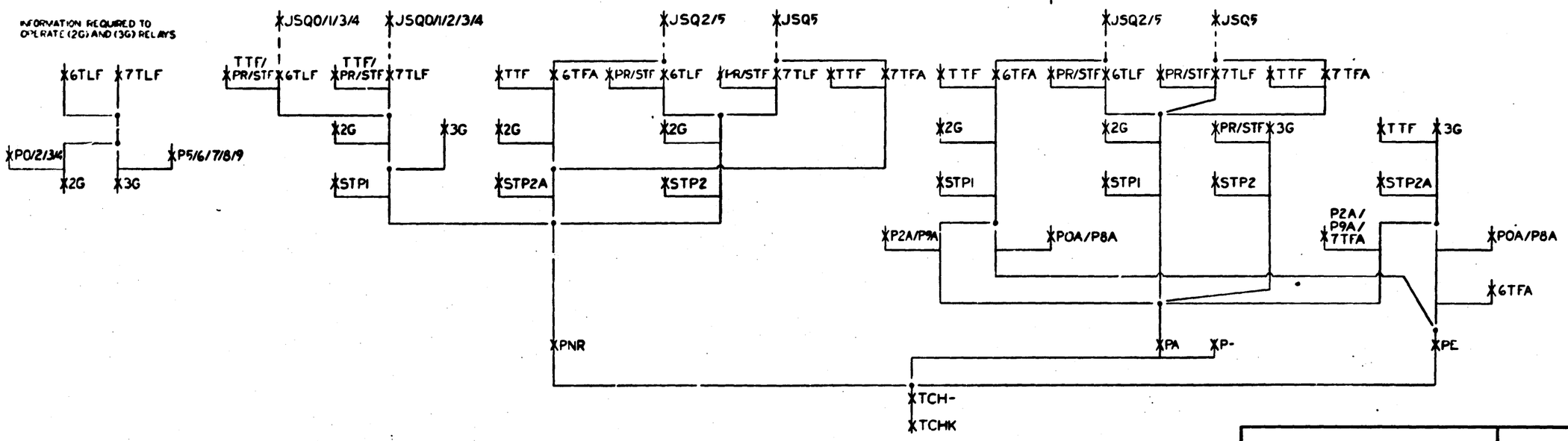
INFORMATION REQUIRED FOR OPERATION OF (TCH-) RELAYS IN 2,2-3,4,5,8,9 OR 10 SINGLE, PAIRED OR TRIPLED TRUNK LINK FRAME OFFICES



INFORMATION REQUIRED FOR OPERATION OF PATTERN RELAYS



INFORMATION REQUIRED FOR OPERATION OF (TCH-) RELAYS IN 6 OR 7 SINGLE, PAIRED OR TRIPLED TRUNK LINE FRAME OFFICES



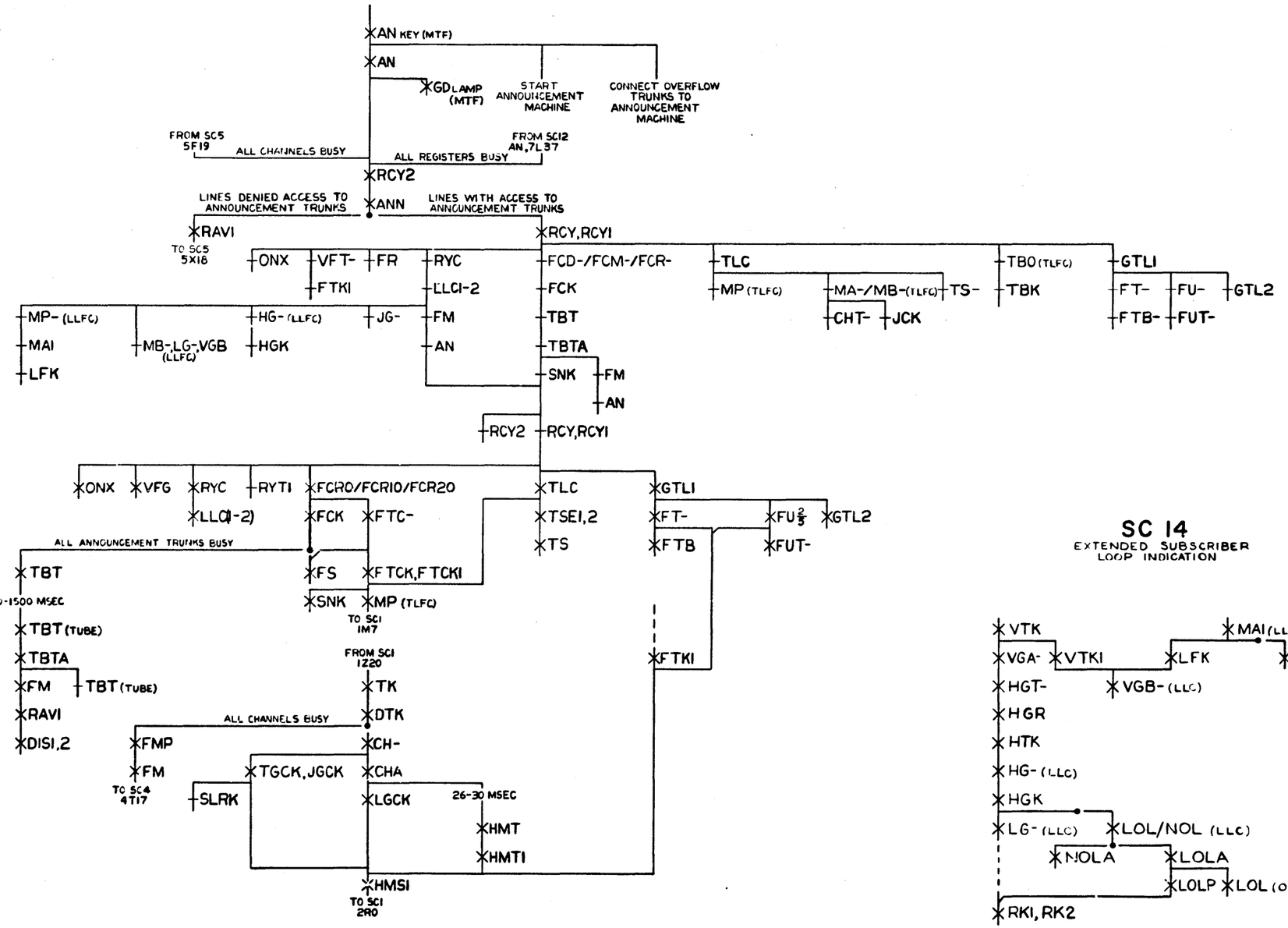
DIAL TONE MARKER CIRCUIT	SD-26001-01-E8
BELL TELEPHONE LABORATORIES INCORPORATED	6S

DRAWING ISSUE

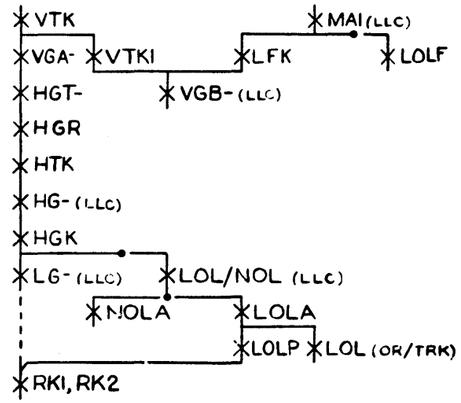
SD

83-10-001-SD

SC 13
OVERLOAD ANNOUNCEMENT OPERATION



SC 14
EXTENDED SUBSCRIBER LOOP INDICATION



DRAWING ISSUE
18D FLR LWR AWD
22D AFB PBX AWD

22

CROSSBAR SYSTEMS
NO. 5
DIAL TONE MARKER CIRCUIT
(2)
SD-26001-01-E9
BELL TELEPHONE LABORATORIES INCORPORATED
DRAWING SIZE 6S

63-10-1002-SD

STAEILO

SC-26001-01 21 PAGES

CIRCUIT REQUIREMENTS

DIAL TONE MARKER CIRCUIT (D.T. MKR)

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER S. AK. MA.	TEST MA.	READJ MA.	REMARKS
RELAYS																	
2G	AF504		4	8					U(2G)	GRD			0		80	72	
2P	AF519		8	27					U(2P)	GRD			0		72.5	69	
2PMR	AF518	G	8	224			11(2PMR)		U(2PMR)	GRD			0		100	95	
2TLF	AF507		4	26					U(2TLF)	GRD			0		37	35	
2-3TLF	AF507		4	26					U(2-3TLF)	GRD			0		37	35	
2W	AJ15		19	249									0		42.5	40.5	WINDING ALONE
									U(2W)	GRD			0		95	90	(2W) & (2W0) IN PAR.
									U(2W)	GRD			0		130	125	(2W),(2W0)&(2W10) IN PAR.
2W0	AF132	ZY	1	61									0		34.5	32.5	WINDING ALONE
									U(2W0)	GRD			0		80	72	(2W0)&(2W) IN PAR.
									U(2W0)	GRD			0		105	100	(2W0).(2W)&(2W10) IN PAR.
2W10	AF132	ZY	2	61									0		34.5	32.5	WINDING ALONE
									U(2W10)	GRD			0		105	100	(2W10),(2W0)&(2W) IN PAR.
3G	AF504		4	8					U(3G)	GRD			0		80	72	
3TLF	AF507		4	26					U(3TLF)	GRD			0		37	35	
4TLF	AF507		4	26					U(4TLF)	GRD			0		37	35	
4W0	AF132	ZY	1	61									0		34.5	32.5	WINDING ALONE
									U(4W0)	GRD			0		80	72	(4W0)&(4WT) IN PAR.
									U(4W0)	GRD			0		105	100	(4W0),(4WT)&(4W10) IN PAR.
4W10	AF132	ZY	2	61									0		34.5	32.5	WINDING ALONE
									U(4W10)	GRD			0		105	100	(4W10),(4W0)&(4WT) IN PAR.
4WT	AJ13	ZY	4	249									0		42.5	40.5	WINDING ALONE
									U(4WT)	GRD			0		95	90	(4WT)&(4W0) IN PAR.
									U(4WT)	GRD			0		130	125	(4WT),(4W0)&(4W10) IN PAR.
5TLF	AF507		4	26					U(5TLF)	GRD			0		37	35	
6TFA	AF523		18	19									0		29.5	28	WINDING ALONE
									U(6TFA)	GRD			0		66	62.5	(6TLF)&(6TFA)IN PAR.
6TLF	AF507		4	26					U(6TLF)	GRD			0		37	35	
									U(6TLF)	GRD			0		85	80	(6TLF)&(6TFA)IN PAR.
7Q	AF506		5	8					U(7Q)	GRD			0		30.5	29	
7TFA	AF522		18	18									0		23.5	22	WINDING ALONE
									U(7TFA)	GRD			0		51.5	49	(7TLF)&(7TFA)IN PAR.
7TLF	AF507		4	26					U(7TLF)	GRD			0		37	35	
									U(7TLF)	GRD			0		85	80	(7TLF)&(7TFA)IN PAR.
8TLF	AF507		4	26					U(8TLF)	GRD			0		37	35	
9TLF	AF507		4	26					U(9TLF)	GRD			0		37	35	

DRAWING ISSUE

15D	PRH EPM AHD
16D	KEG EPM AHD
18D	DAB LW AHD
21A	PH PDT AHD
22D	MFS PMC AHD
28D	FJK
30D	

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SD-26001-01-F1

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-F1

PRINTED IN U.S.A.

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.	REMARKS
10LV	AJ501	VM	10	249					U(10LV)	GRD			0		42.5	40.5	
10TLF	AF507		4	26					U(10TLF)	GRD			0		37	35	
12LV	AJ501	VM	10	249					U(12LV)	GRD			0		42.5	40.5	
20F	AF506		5	8					U(20F)	GRD			0		30.5	29	
40F	AF506		5	8					U(40F)	GRD			0		30.5	29	
60F	AF522		18	18					U(60F)	GRD			0		23.5	22	
ABK	AJ501	VX	30	249					U(ABK)	GRD			0		42.5	40.5	
AC8	AF518	XK	7	224					U(AC8)	GRD			0		100	95	
AMB	AG8		12	448			12(MCB0)		U(AMB)	GRD	1		0	20	7.7	7.3	
							12(MCB0)		U(AMB)	GRD			H	20	1.1	1	
							12(MCBC)		U(AMB)	GRD			R	20	0.5	0.7	
AN	12AK30	XN	20	202					10(AN)	GRD			0		23.5	22	MOUNTED WITH RCY2
ANN	AJ503	XN	20	249			4(ANN)		U(ANN)	GRD			0		95	90	
ANNA	AF42	XN	20	224					U(ANNA)	GRD			0		100	95	
AO	AF519		8	27					U(AO)	GRD			0		72.5	69	
AOMR	AF518	G	8	224					U(AOMR)	GRD			0		100	95	
BC0	AF504		1	8									0		80	72	WINDING ALONE
									U(BC0)	GRD			0		180	160	(BC0)AND(BC10) IN PAR.
BC10	AF504		2	8									0		80	72	WINDING ALONE
									U(BC10)	GRD			0		180	160	(BC0)&(BC10)IN PAR.
BC20	AF504		17	8					U(BC20)	GRD			0		80	72	
BCA0	AF504	ZY	1	8									0		80	72	WINDING ALONE
									U(BCA0)	GRD			0		180	160	(BCA0)&(BCA10) IN PAR.
BCA10	AF504	ZY	2	8									0		80	72	WINDING ALONE
									U(BCA10)	GRD			0		180	160	(BCA10)&(BCA0) IN PAR.
BCB0	AF504	YW	1	8									0		80	72	WINDING ALONE
									U(9CB0)	GRD			0		180	160	(BCB0)&(BCB10)IN PAR
BCB10	AF504	YW	2	8									0		80	72	WINDING ALONE
									U(BCB10)	GRD			0		180	160	(BCB0)&(BCB10)IN PAR.
BX	AX507		14	26					U(BX)	GRD			0		37	35	
CGA	280BA	X	8	B				9(MT1)	FRAME GRD	NGB			0	-120		2.6	
								9(MT1)	FRAME GRD	NGB			NO	-120		1.9	
								9(MT1)	FRAME GRD	NGB			0	-120	13.2	12.5	
								9(MT1)	FRAME GRD	NGB			R	-120	2.4	2.9	
CGA1	AF132	XF	8	61					U(CGA1)	GRD			0		34.5	32.5	
CGA1	AF522	XE	8	18					U(CGA1)	GRD			0		23.5	22	
CGB	280BA	X	8	B				3(MT1)	FRAME GRD	NGB			0	-120		2.6	
								3(MT1)	FRAME GRD	NGB			NO	-120		1.9	
								3(MT1)	FRAME GRD	NGB			0	-120	13.2	12.5	
								3(MT1)	FRAME GRD	NGB			R	-120	2.4	2.9	
CGB1	AF132	XF	8	61					U(CGB1)	GRD			0		34.5	32.5	
CGB1	AF522	XE	8	18					U(CGB1)	GRD			0		23.5	22	
CHO-9	AJ503		11	249					U REL TST	GRD			0		95	90	
CHA	AJ503		10	249					U(CHA)	GRD			C		95	90	
CHTO-9	280J	YP	11	B			4(STX)	4(STX)	2(TCHO-9)	B/G		P	0	-12		0.3	CONNECT TO(TCHO-9) CONTACTS CORRESPONDING TO(CHTO-9) RELAYS.
							4(STX)	4(STX)	2(TCHO-9)	B/G		P	NO	-12		0.2	
							4(STX)	4(STX)	2(TCHO-9)	B/G		P	0	-12	2	1.9	
							4(STX)	4(STX)	2(TCHO-9)	B/G		P	NO	-12	1.1	1.2	
							4(STX)	4(STX)	2(TCHO-9)	B/G		P	R	12	0.6	0.7	
CHTO-9	316B	YQ	11										0	7.5	2.4		
													R		0.6		
													NO		1.5		

DRAWING ISSUE

15D	PRH EPM AHD
16D	KEG EPM AHD
18D	DAB LW AHD
21A	PH PDT AHD
22D	MFS PMC AHD
28D	FJK
30D	

TEST NOTES:

1. ON MASTER TEST FRAME INSERT PLUG IN LLMC MB JACKS OF CONNECTORS SERVED BY MARKER UNDER TEST. THE MARKER MB PLUG SHOULD THEN BE REMOVED. THE TEST CAN ALSO BE MADE DURING LIGHT TRAFFIC PERIODS WITH THE MB PLUG REMOVED.

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ISSUE 42B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

SD-26001-01-F1

PRINTED IN U.S.A.

CIRCUIT REQUIREMENTS

DRAWING ISSUE: 16D, 18D, 22D, 30D

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG	CONT PRES	ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS
CKG	AJ790		10	500					U(CKG1) GRD				O		90	85	WINDING ALONE
													O		200	190	CKG1 & CKG2 IN PARALLEL
CKG2	AJ503	XT	10	249					U(CKG2) GRD				O		95	90	WINDING ALONE
													O		210	200	CKG1 & CKG2 IN PARALLEL
CLL1	AF522		8	18					U(CLL1) GRD				O		23.5	22	
CLL2	AF522		8	18					U(CLL2) GRD				O		23.5	22	
CN	AF59		8	27					U(CN) GRD				O		72.5	69	
CON	280F	YP	9	5			9(GT1)	4(CON)	9(GT1) B/G				O	-16		0.4	
							9(GT1)	4(CON)	9(GT1) B/G				NO	-16		0.3	
							9(GT1)	4(CON)	9(GT1) B/G				O	-16	1.6	1.5	
							9(GT1)	4(CON)	9(GT1) B/G				R	16	0.3	0.4	
CON	316R	YS	9										O	2.5	2.4		
													R		0.6		
													NC		1.5		
CON1	AF519		9	27					U(CON1) GRD				O		72.5	69	
CONA	280F	YP	19	5			8(GT1)	4(CONA)	8(GT1) B/G				O	-16		0.4	
							8(GT1)	4(CONA)	8(GT1) B/G				NO	-16		0.3	
							8(GT1)	4(CONA)	8(GT1) B/G				O	-16	1.6	1.5	
							8(GT1)	4(CONA)	8(GT1) B/G				R	16	0.3	0.4	
CONA	316R	YS	19										O	2.5	2.4		
													R		0.6		
													NO		1.5		
COX	AF513		14	206					U(COX) GRD				O		32.5	30.5	
CSO-9	AF529	YB	5	247					1U REL GRD			P	O		49	46.5	
									2U TST GRD			S	O		51.5		
									3U GRD			T	O		51.5		
CSAO-9	AF504	25, 26		8					U REL GRD TST				O		80	72	
CSGA	AJ502	YE	8	234					U(CSGA) GRD				O		40	38	
CSGB	AJ502	YE	8	234					U(CSGB) GRD				O		40	38	
CSGC	AJ502	YZ	8	234					U(CSGC) GRD				O		40	38	
CSGK	AF522	YE	8	19					U(CSGK) GRD				O		23.5	22	
CSRO-9	AJ502		23	234					U REL GRD TST				O		40	38	
CSRK1	AF522		23	19					U(CSRK1) GRD				O		23.5	22	
CSRK2	AF522		23	18					U(CSRK2) GRD				O		23.5	22	
CST0-2	AJ502	YC	8	234					U REL GRD TST				O		40	38	
CST3-9	AJ502		22	234					U REL GRD TST				O		40	38	
CSTK1	AF522	YC	8	19					U(CSTK1) GRD				O		23.5	22	
CSTK2	AF522	YC	8	18					U(CSTK2) GRD				O		23.5	22	
CSU0-9	AJ502	YC	8	234					U REL GRD TST				O		40	38	
CTO-2	AF519	YS	8	27					U REL GRD TST				O		72.5	69	
DK	AF522		6	19					U(DK2) GRD				O		23.5	22	
DL	AF59		12	3					U(DL) GRD				O		5.8	5.2	
DT	AJ15	YK	19	249					U(DT) GRD				O		42.5	40.5	WINDING ALONE
DTO	AF132	YK	1	61					U(DTO) GRD				O		34.5	32.5	WINDING ALONE
DTA	AJ15	YK	19	249					U(DTA) GRD				O		42.5	40.5	WINDING ALONE
DTK	AF522		10	18					U(DTK) GRD				O		23.5	22	
DV2	AF519	C	9	31					U(DV2) GRD				O		95	90	
DVO	AJ502	W,G	9	234					U(DVO) GRD				O		40	38	
ETS	280AF	WN	7	8				5(SQ1)	2(SQ1) NGB	3	S		O	-45		1.1	
								5(SQ1)	2(SQ1) NGB	3	S		NO	-45		0.8	
								5(SQ1)	2(SQ1) NGB	3	S		O	-45	4.5	4.2	
								5(SQ1)	2(SQ1) NGB	3	S		R	45	0.9	1	
							(DTS)O	6(SQ1)	2(MT6) NGB	3	P		O		10.3		
ETS	316R	WQ	7								P		O	40	13.3		
											P		R		33		
											S		O		5.4		
FE	AF60		12	12					U(FE) GRD				O		6.5	6.2	WINDING ALONE
								L(FA)	BAT. 1,2				O		41	38.5	
FA1	AF10		12	214			2(FA1)		U(FA1) GRD				O		8	7.2	
FAK	AF517		10	223					U(FAK) GRD				O		85	80	
FBO-9	AF4		1	18					U REL GRD TST				O		36.5	34.5	
FB10-19	AF4		2	18					U REL GRD TST				O		36.5	34.5	
FB20-29	AF4		17	18					U REL GRD TST				O		36.5	34.5	
FCDO	AF501	T	1	34					U(FCDO) GRD	7			O		80	75	WINDING ALONE
							(RCY)O		U(FCDO) GRD	7			O		180	170	
							(RCY)O		U(FCDO) GRD	8			O		240	225	
FCDC	AF504	V	1	8					U(FCDO) GRD	7			O		80	72	WINDING ALONE
							(RCY)O		U(FCDO) GRD	7			O		180	160	
FCD10	AF501	T	2	34					U(FCD10) GRD	7			O		80	75	WINDING ALONE
							(RCY)O		U(FCD10) GRD	7			O		180	170	
							(RCY)O		U(FCD10) GRD	8			O		240	225	
FCD1O	AF504	V	2	8					U(FCD10) GRD	7			O		80	72	WINDING ALONE
							(RCY)O		U(FCD10) GRD	7			O		180	160	
FCD20	AF501	T	17	34					U(FCD20) GRD	8			O		80	75	WINDING ALONE
							(RCY)O		U(FCD20) GRD	8			O		240	225	

TEST NOTES:

1. CONNECT DIRECT GRD TO U(FA) RELAY AND REMOVE THE (FA) LAMP IN ASSOCIATED CKT.
2. CKT COMB. OF (FA) RELAY AND (FA1) RESISTOR IN MISC FR CKT.
3. DO NOT USE CONTACT CLOSURE TEST SET WHEN ADJUSTING THIS RELAY.
4. (DIS1) & (DIS2) IN PAR.
5. (DT), (DTO) & (DTA) IN PAR.
6. (DT), (DTO), (DT10) & (DTA) IN PAR.
7. (FCDC) & (FCD10) IN PAR.
8. (FCDO), (FCD10) & (FCD20) IN PAR.

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DIAL TONE MARKER CIRCUIT — SD-26001-01-F2 — BELL TELEPHONE LABORATORIES INCORPORATED

PAGE 4

DIAL TONE MARKER CIRCUIT (2) — SL 6001-01-F2 — BELL TELEPHONE LABORATORIES INCORPORATED — 6S

ISSUE 40A

SD-26001-01-F2

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA.	DIRECT CURRENT FLOW REQT TEST MA.	DIRECT CURRENT FLOW REQT READJ MA.	REMARKS
FCG	28DAE	YP	9	8				15(TLC)	11(GLH)	B/G		P	O	-23		0.6	
								15(TLC)	11(GLH)	B/G		P	NO	-23		0.4	
								15(TLC)	11(GLH)	B/G		P	O	-23	2.4	2.2	
								15(TLC)	11(GLH)	B/G		P	R	23	0.6	0.7	
								12(GLH1)		BAT.		S	O		0.9		
FCG	316D	YQ	9									P	O	8.0	2.7		
												P	R		0.7		
												P	NO		1.7		
												S	O	4.5	1.5		
												S	R		0.4		
												S	NO		0.9		
FCGA	28DD	YR	19	8				1(GLH)	24(TLC)	B/G			O	-13		0.3	
								1(GLH)	24(TLC)	B/G			NO	-13		0.2	
								1(GLH)	24(TLC)	B/G			O	-13	3.9	3.7	
								1(GLH)	24(TLC)	B/G			R	13	1.4	1.5	
FCGA	316B	YS	19										O	7.5	2.4		
													R		0.6		
													NO		1.5		
FCGB	316B	YW	9										O	7.5	2.4		
													R		0.6		
													NO		1.5		
FCK	AF515		3	31					U(FCK)	GRD			O		95	90	
FCM0	AF501	Y, ZV	1	34			(RCY)O		U(FCM0)	GRD			O		80	75	WINDING ALONE
							(RCY)O		U(FCM0)	GRD			C		240	225	(FCM0)&(FCM10)IN PAR (FCM0).(FCM10)& (FCM20) IN PAR.
FCM10	AF501	Y, ZV	2	34			(PCY)O		U(FCM10)	GRD			O		80	75	WINDING ALONE
							(RCY)O		U(FCM10)	GRD			O		240	225	(FCM0)&(FCM10)IN PAR (FCM0) (FCM10) &(FCM20) IN PAR.
FCM20	AF501	Y, ZV	17	34			(RCY)O		U(FCM20)	GRD			O		80	75	WINDING ALONE
													O		240	225	(FCM0) (FCM10)& (FCM20) IN PAR.
FCR0-3	AF501		20	34					U REL TST	GRD	1		O		80	75	WINDING ALONE
										GRD	2		O		240	225	
FCR 10-13	AF501	ZW	20	34					U REL TST	GRD	3		O		80	75	WINDING ALONE
										GRD	4		O		240	225	
FCR 20-23	AF501	ZZ	20	34					U REL TST	GRD	5		O		80	75	WINDING ALONE
										GRD			O		240	225	
FM	AF10		10	214					U(FM)	GRD			O		7.6	7.2	
FMC-4	AF33		3	16			(RYC).(FMG). (TFK1)O(TMS) (MXT)NO		U REL TST	GRD			O		13.5	12.8	
FMG	AF519		3	27					U(FMG)	GRD			O		72.5	69	
FMG0 5,10, 15	AF511		1	32			(RYC).(FMG). (TFK1)O(TMS) (MXT)NO		U REL TST	GRD			O		24.5	23	
FMG20 25	AF511		17	32			(RYC).(FMG). (TFK1)O.(TMS) (MXT)NO		U REL TST	GRD			O		24.5	23	
FMK	AF516		3	221					U(FMK)	GRD			O		66.5	63	
FML	AF523		3	19			(SMK)NO		U(FML)	GRD			O		29.5	28	
FMP	AF517		10	223			(TMS)NO		U(FMP)	GRD			O		85	80	

TEST NOTES:

1. RELAYS FCR0-3 AND FCR10-13 IN PARALLEL RESPECTIVELY.
2. RELAYS FCR0-3,FCR10-13, AND FCR20-23 IN PARALLEL RESPECTIVELY.
3. RELAYS FCR10-13, AND FCR0-3 IN PARALLEL RESPECTIVELY.
4. RELAYS FCR10-13, FCR0-3, AND FCR20-23 IN PARALLEL RESPECTIVELY.
5. RELAYS FCR20-23, FCR0-3, AND FCR10-13 IN PARALLEL RESPECTIVELY.

DRAWING ISSUE: 15D PRM GDA AMD; 16D KEG DA AMD; 18D CB LL AMD; 20D RLR LW AMD

SD-26001-01-F3

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA.	DIRECT CURRENT FLOW REQT TEST MA.	DIRECT CURRENT FLOW REQT READJ MA.	REMARKS
FR	AF519	YV	6	27					U(FR)	GRD			O		72.5	69	
FR	AJ506	YW	6	267					U(FR)	B/G			O		80	76	
FS0-9	AF40		1	222					U REL TEST	GRD			O		73	69.5	
FS10-19	AF40		2	222					U REL TEST	GRD			O		73	69.5	
FS20-25	AF40		17	222					U REL TEST	GRD			O		73	69.5	
FTO	AF522		5	18					U(FTO)	GRD			O		23.5	22	
FT1-3	AF522	V	5	18					U REL	GRD			O		23.5	22	
FT1-3	AF523	T	5	19					U TEST	GRD			O		29.5	28	
FTA0-3	AF523		18	19					REL				O		29.5	28	WINDING ALONE
									U TEST	GRD			O		66	62.5	(FTA-)&(FTB-)IN PAR.
FTA4	AF522		18	18									O		23.5	22	WINDING ALONE
									U(FTA4)	GRD			O		52.5	49	(FTA4)&(FTB4)IN PAR.
FTB0-3	AF506		5	8					U REL	GRD			O		30.5	29	
									U TEST	GRD			O		68	64.5	(FTA-)&(FTB-)IN PAR.
FTB4	AF506		18	8									O		30.5	29	WINDING ALONE
									U(FTB4)	GRD			O		68	64.5	(FTA4)&(FTB4)IN PAR.
FTB5	AF506		18	8					U(FTB5)	GRD			O		30.5	29	
FTC0-9	AF527		1	18			(FTCK)NO		U REL TEST	GRD			O		36.5	34.5	
FTC10-19	AF527		2	18			(FTCK)NO		U REL TEST	GRD			O		36.5	34.5	
FTC20-29	AF527		17	18			(FTCK)NO		" REL TEST	GRD			O		36.5	34.5	
FTCK	AF524		3	210					U(FTCK)	GRD			C		27	25.5	
FTCK1	AF522		3	18					U(FTCK1)	GRD			O		23.5	22	
FTK1	AF519		6	27					U(FTK1)	GRD			O		72.5	69	
FTS0-3	AF506	ZY	5	8					U REL TEST	GRD			O		30.5	29	
FTT0-3	AF506		5	8					U REL TEST	GRD			O		30.5	29	
FTT4, 5	AF506		18	8					U REL TEST	GRD			O		30.5	29	
FU0, 1, 2,4,7	AF523		5	19					" REL TEST	GRD			O		29.5	28	
FUT0-9	AF34		5	14					U REL TEST	GRD			O		28	26.5	
GC	AF507		4	26					U(GC)	GRD			O		37	35	
GCA	AF507		18	26					U(GCA)	GRD			O		37	35	
GK	AF519		6	27					U(GK)	GRD			O		72.5	69	
GLH	AJ501		9	269					U(GLH)	GRD			O		42.5	40.5	

DRAWING ISSUE: 15D PRM GDM AMD; 16D KEG DA AMD; 18D CB LL AMD; 20D RLR LW AMD

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.	REMARKS
GLH1	AJ501		9	249					U(GLH1)	GRD			0		42.5	40.5	
GT1	AJ503		9	249			(HMT1)O		U(GT1)	GRD			0		95	90	
GTL1	AF521		5	21					U(GTL1)	GRD			0		90	85	
GTL2	AJ700		8	500					U(GTL2)	GRD			0		90	85	
GTL3	AJ700		8	500					U(GTL3)	GRD			0		90	85	
GTU	AF504		5	8					U(GTU)	GRD			0		80	72	
HFA	AF59		12	3				U(HFA)		BAT.			0		5.5	5.2	
HGC1	AF522		8	18					U(HGC1)	GRD			0		23.5	22	
HGC2	AF522		8	18					U(HGC2)	GRD			0		23.5	22	
HGG	AJ507		6	21					U(HGG)	GRD			0		100	95	
HGK	AF508		10	11					U(HGK)	GRD			0		80	72	
HGP	AF519		6	27					U(HGR)	GRD			0		72.5	69	
HGTO-9	AF42		6	224					U REL TEST	GRD			0		100	95	
HMSI	AJ503		9	249			(HMT1)O		U(HMS1)	GRD	2		0		95	90	
HMT	280A	XR	9	4				FRAME BAT.		NGB	3	P	C	-65	3	1.5	SEE TIMING REQ.
	280FY	XS						FRAME BAT.		NGB	3	P	NO	-65	O.C.	1.1	PAGE 18
								B(CHA)	FRAME BAT.	NGB		S	O		0.5		
HMT1	AF518		9	224					U(HMT1)	GRD			0		100	95	
HTK	AF516		6	221					U(HTK)	GRD			0		66.5	63	
HTK1	AF514		6	5				L(HTK1)		BAT.			0		57.5	54.5	
HTR	AJ501		9	249			(HTT)O		U(HTR)	GRD			O		42.5	40.5	
HTT	AF505		13	207			6(HTT)	U(HTT)	L(HTT)	B/G			O		81	7.7	SEE TIMING REQ
																	PAGE 18
JCK	316M	WO	10										O	33	1.1		
													R		0 3		
JCR	280BY	WN	10	8			(TR)O	FRAME BAT.	5(TR)	NGB			C	-5		0.3	
							(TR)O	FRAME BAT.	5(TR)	NGB			NO	-5		0.2	
							(TR)O	FRAME BAT.	5(TR)	NGB			O	-5	1.6	1.5	
							(TR)O	FRAME BAT.	5(TR)	NGB			R	5	0.5	0.6	
JGCK	280CL	YP	9	8				1(JXP1)	FRAME GRD	NGB	1		C	-90		7.5	
								1(JXP1)	FRAME GRD	NGB	1		NO	-90		5.5	
								1(JXP1)	FRAME GRD	NGB	1		C	-90	61	58	
								1(JXP1)	FRAME GRD	NGB	1		P	90	17	18	
JGCK	316A	YQ	9										O	3	1		
													R		0.2		
													NO		0.6		
JGO	AJ503		4	249					U(JGC)	GRD			O		95	90	
JGT-G	AJ503		4	249					U REL TEST	GRD			O		95	90	
JLE	AF507		6	26					U(JLE)	GRD			C		37	35	
JLO	AF507		6	26			6(JLE)		U(JLO)	GRD			O		37	35	
JSE	AF523		6	19					U(JSE)	GRD			O		29.5	28	

TEST NOTES:

1. CONNECT 500Ω ± 1% RESISTANCE ACROSS TEST LEADS.
2. THE AUTOMATIC MONITOR REC & SENDER TEST CKT SHOULD BE RELEASED WHEN ADJUSTING THIS RELAY.
3. CONNECT "CONN GRD" LEAD TO "HMT" CROSS CONNECTION TERMINAL.

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DRAWING ISSUE: 15D PBM EPM MHP; 16D RNW EW MHP; 18D DEB LW AHP; 22D PH PPT AMP

NO.5 DIAL TONE MARKER CIRCUIT	SD-26001-01-F4
BELL TELEPHONE LABORATORIES INCORPORATED	

SD-26001-01-F4

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT.	FIG	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.	REMARKS
JSO	AF523		6	19					U(JSO)	GRD			O		29.5	28	
JSQC-5	AF82		6	235			(MT8)O		U REL TST	GRD			O		42.5	40.5	
JXP	280FM	WN	9	8				3(HMS1)	18(TLC)	B/G		P	O	-34		0.8	
								3(HMS1)	18(TLC)	B/G		P	NO	-34		0.6	
								3(HMS1)	18(TLC)	B/G		P	O	-34	3.3	3.1	
								3(HMS1)	18(TLC)	B/G		P	R	34	0.7	0.8	
								3(HMS1)	10(TLC)	B/G		S	O		3.1		
JXP	316C	WO	9									P	O	18	59		
												P	R		1.6		
												S	O	18	56		
												S	R		1.5		
JXP1	AF503		9	249					U(JXP1)	GRD			O		95	90	
JXPA	AF519		9	27			(JXP)O		U(JXPA)	GRD			O		72.5	69	
LCK	AF514		10	5					U LCK	GRD			O		57.5	54.5	
LDT	AF10		13	214			(TRT)NO	L(LDT)	U(LDT)	B/G			O		7.6	7.2	SEE TIMING REQ PAGE 18
LFK	AF511		10	32					U(LFK)	GRD			C		24.5	23	
LGCK	280CU	YP	9	8				1(HMS1)	FRAME GRD	NGB	2		O	-90		7.5	
								1(HMS1)	FRAME GRD	NGB	2		NO	-90		5.5	
								1(HMS1)	FRAME GRD	NGB	2		O	-90	61	58	
								1(HMS1)	FRAME GRD	NGB	2		R	90	17	18	
LGCK	316A	YQ	9										O	3	1		
													R		0.2		
													NO		0.6		
LHT	AF523		9	19					U(LHT)	GRD			O		29.5	28	
LK	AF522		10	18					U(LK)	GRD			O		23.5	22	
LLC1	AJ702		10	500					U(LLC1)	GRD			O		42.5	40.5	WINDING ALONE
													O		95	90	(LLC1)&(LLC2)IN PAR.
LLC2	AF507		10	26					U(LLC2)	GRD			O		37	35	WINDING ALONE
													C		65	80	(LLC1)&(LLC2)IN PAR.
LLT	280CU	YP	9	8				FRAME BAT.	6(CH9)	NGB	2		O	-90		7.5	
								FRAME BAT.	6(CH9)	NGB	2		NO	-90		5.5	
								FRAME BAT.	6(CH9)	NGB	2		O	-90	61	58	
								FRAME BAT.	6(CH9)	NGB	2		R	90	17	18	
LLT	316B	YQ	9										O	7.5	2.4		
													R		0.6		
													NO		1.5		
LLTA	AF519		9	27					U(LLTA)	GRD			O		72.5	69	
LP	AF115		12	274					U (LP)	GRD	1		O		7.1	6.7	
LOLA	AJ503		28	249					U (LOLA)	GRD			O		95	90	
LOLF	316A		28										O	3	1		
													R		0 26		
LOLP	AF16		28	204					U(LOLP)	GRD			O		30.5	29	
LTR	AF505		9	207					U (LTR)	GRD			O		81	7.7	
LXP	280FM	WN	9	8				9(GLH1)	2(LXP)	B/G		P	O	-34		0.8	
								9(GLH1)	2(LXP)	B/G		P	NO	-34		0.6	
								9(GLH1)	2(LXP)	B/G		P	O	-34	3.3	3.1	
								9(GLH1)	2(LXP)	B/G		P	R	34	0.7	0.8	
								9 (GLH1)	11 (TLC)	B/G		S	C		3.1		
LXP	316C	WO	9									P	O	18	59		
												P	R		1.6		
												S	O	18	56		
												S	R		1.5		
LXP1	AJ503		9	249					U(LXP1)	GRD			O		95	90	
LXPA	AF519		9	27			(LXP)O		U(LXPA)	GRD			O		72.5	69	
MAK	AF523		12	19			(TM)NO		U(MAK)	GRD	3		O		29.5	28	
MAK1	AF519		10	27					U(MAK1)	GRD			O		72.5	69	
MAN	AF519		8	27					U(MAN)	GRD			O		72.5	69	

TEST NOTES:

1. LP KEY FOR THE MARKER UNDER TEST MUST BE IN "OUT" POSITION.
2. CONNECT 500Ω ± 1% RESISTANCE ACROSS TEST LEADS.
3. INSULATE MS- RELAY CONTACT IN THE FIRST PREFERRED MARKER CONN IN THE PREFERENCE CHAIN WHICH CONTROLS THE LEAD ASSOCIATED WITH THE RELAY BEING TESTED.

PAGE 8

DRAWING ISSUE: 15D PBM EPM MHP; 16D RNW EW MHP; 18D DEB LW AHP; 22D PH PPT AMP

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CROSSBAR SYSTEMS NO.5 DIAL TONE MARKER CIRCUIT (2)	SD-26001-01-F4
BELL TELEPHONE LABORATORIES INCORPORATED	6S

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA.	DIRECT CURRENT FLOW REQT TEST MA.	DIRECT CURRENT FLOW REQT READJ MA.	REMARKS
MB	AF21		12	228			(MCBO,1)O		1U(MB)	GRD	2	P	O		20.5	19.5	
							(MCBO,1)O		1U(MB)	GRD	2	P	NO		8.4	8.9	
							(MCBO,1)O 7(OAT1)		2U(MB)	GRD	2	S	O		22		
MCBO	AJ702		12	500									O		42.5	40.5	WINDING ALONE
							6(MB)		U(MCBO)	GRD	1		O		95	90	(MCBO)&(MCB1) IN PAR.
							6(MB)		U(MCBO)	GRD	1		O		130	125	(MCBO),(MCB1)&(MCB2) IN PAR.
MCB1	AJ702		12	500									O		42.5	40.5	WINDING ALONE
							6(MB)		U(MCB1)	GRD	1		O		95	90	(MCBO)&(MCB1) IN PAR.
							6(MB)		U(MCB1)	GRD	1		O		130	125	(MCBO),(MCB1)&(MCB2) IN PAR.
MCB2	AJ702		18	500									O		42.5	40.5	WINDING ALONE
							6(MB)		U(MCB2)	GRD	1		O		130	125	(MCBO),(MCB1)&(MCB2) IN PAR.
MCB3	AJ702	YY	12	500									O		42.5	40.5	WINDING ALONE
							6(MB)		U(MCB3)	GRD			O		130	125	(MCB3),(MCBO)&(MCB1) IN PAR.
MCK	AF522		12	18			(TM)NO		U(MCK)	GRD	3		O		23.5	22	
MCN	AF519		8	27					U(MCN)	GRD			O		72.5	69	
MF	AJ700	Y, ZV	12	500			8(DISA)		U(MF)	GRD			O		90	85	
MLF	AJ700	Y, ZV	12	500					U(MLF)	GRD			O		90	85	
MPBX	AF515		24	31					U(MPBX)	GRD			O		95	90	
MPL	1/2AKB		31	204					1L(MPL)	GRD			O		17	16	MTD WITH (MPLA)
MPLA	1/2AKB		31	204					1U(MPLA)	GRD			O		9.2	8.7	MTD WITH (1MPL)
MRL	AF10		13	214				L(MRL)	U(MRL)	B/G			O		7.6	7.2	SEE TIMING REQ PAGE 18
MRL1	AF9		12	213					U(MRL1)	GRD			O		8.7	8.2	
MSK	AF522		12	18			(TM)NO		U(MSK)	GRD	3		O		23.5	22	
MT	AF34		12	14					U(MT)	GRD			O		28	26.5	
MT1	AJ15		12	249					U(MT1)	GRD			O		42.5	40.5	WDG ALONE (SEE MT2)
MT2	AJ12	UA	3	220					U(MT2)	GRD			O		95	90	(MT)&(MT2) IN PAR
MT4	AJ12		1	220									O		42.5	40.5	WINDING ALONE
									U(MT4)	GRD			O		95	90	(MT4)&(MT14) IN PAR.
									U(MT4)	GRD			O		150	140	(MT4)&(MT14)&(MT24) IN PAR.
MT5	AF24		7	8					U(MT5)	GRD			O		30.5	29	
MT6	AJ15		7	249			6(MT6)		U(MT6)	GRD			O		42.5	40.5	
MT7	AJ12		4	220					U(MT7)	GRD			O		42.5	40.5	
MT8A	AF33		6	16									O		13.4	12.8	WINDING ALONE
									U(MT8A)	GRD			O		20.5	19.5	(MT8)&(MT8A) RES IN PAR.
MT8	AF53		6	24			(SQA)NO		U(MT8)	GRD			O		31.5	30	
MT9	AJ12		1	220									O		42.5	40.5	WINDING ALONE
									U(MT9)	GRD			O		95	90	(MT9)&(MT19) IN PAR.
									U(MT9)	GRD			O		150	140	(MT9),(MT19)&(MT29) IN PAR.
MT11	AF53		6	24					U(MT11)	GRD			O		31.5	30	
MT13	AF53	WV	12	24					U(MT13)	GRD			O		31.5	30	
MT13	AJ12	W	12	220					U(MT13)	GRD			O		42.5	40.5	
MT14	AJ12		2	220									O		42.5	40.5	WINDING ALONE
									U(MT14)	GRD			O		95	90	(MT4)&(MT14) IN PAR.
									U(MT14)	GRD			O		150	140	(MT4),(MT14)&(MT24) IN PAR.
MT15	AF34		5	14					U(MT15)	GRD			O		28.	26.5	

DRAWING ISSUE: 15D, 16D, 18D, 22D, 23A, 28D, 30D

TEST NOTES:

1. ON MASTER TEST FRAME INSERT PLUG IN LLMC MB JACKS OF CONNECTORS SERVED BY MKR UNDER TEST. THE MKR MB PLUG SHOULD THEN BE REMOVED. THE TEST CAN ALSO BE MADE DURING LIGHT TRAFFIC PERIODS, WITH THE MB PLUG REMOVED.
2. ON MASTER TEST FRAME REMOVE MKR MB PLUG.
3. INSULATE MS- RELAY CONTACT, IN THE FIRST PREFERRED MARKER CONN IN THE PREFERENCE CHAIN WHICH CONTROLS THE LEAD ASSOCIATED WITH THE RELAY BEING TESTED.

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA.	DIRECT CURRENT FLOW REQT TEST MA.	DIRECT CURRENT FLOW REQT READJ MA.	REMARKS
MT19	AJ12		2	220					U(MT19)	GRD			O		42.5	40.5	WINDING ALONE
									U(MT19)	GRD			O		95	[illegible]	(MT9)&(MT19) IN PAR.
									U(MT19)	GRD			O		150	140	(MT9),(MT19)&(MT29) IN PAR.
MT24	AJ12		17	220					U(MT24)	GRD			O		42.5	40.5	WINDING ALONE
									U(MT24)	GRD			O		150	140	(MT4),(MT14)&(MT24) IN PAR.
MT29	AJ12		17	220					U(MT29)	GRD			O		42.5	40.5	WINDING ALONE
									U(MT29)	GRD			O		150	140	(MT9),(MT19)&(MT29) IN PAR.
MXT	AF515		14	31			(TR1)NO		U(MXT)	GRD			O		95	90	
NCSL	AF518	XA	7	224					U(NCSL)	GRD			O		100	95	
NCW	1/2AK501	UD	9	2					1L(NCW)	GRD			O		28.9	27.5	MTD WITH (CWL)
NDAT	AF518		27	224					U(NDAT)	GRD			O		100	95	
NOLA	AJ503		28	249					U(NOLA)	GRD			O		95	90	
NPBX	AF519	YS, YI	8	27					U(NPBX)	GRD			O		72.5	69	
OAT	AF523		13	19			8M(MB) (MRL)NO		U(OAT)	GRD			O		29.5	28	
OAT1	AF511		13	32			(HTR)O		U(OAT1)	GRD			O		24.5	23	
OBS1	AF27	VH	10	11					U(OBS1)	GRD			O		36.5	34.5	
OBSI	AJ101	VI	10	323					U(OBSI)	GRD			O		18	17	
OBS2	AF101		10	41					1U(OBS2)	GRD		P	O		44	41.5	
									1U(OBS2)	GRD		P	NO		28.5	30	
									2L(OBS2)	GRD		S	O		39	37	CONNECT DIRECT BAT. TO 2U(OBS2) REL
OC	AF523		10	19					U(OC)	GRD			O		29.5	28	
OC1	AF510		10	1					1U(OC1)	GRD		P	O		20	19	
									2U(OC1)	GRD		S	O		20.5	19.5	
ONX	AF506		14	8					U(ONX)	GRD			O		30.5	29	
OT	AF508	YL	7	11				L(OT)	U(OT)	NGB			O		80	72	
OT	AF510	YM	7	39			(SQI) NO	1L(OT)	1U(OT)	B/G		P	O		250	240	
							5(SQI)	1L(OT)	1U(OT)	B/G		P	NO		205	215	
							6(TSO)		2U(OT)	GRD		S	O		49.5		
OTS	356R	WO	7									P	O	40	13.3		
												P	R		3.3		
												S	O		5.4		
OTS	280AF	WN	7	8				6(SQ1)	4(SQ1)	NGB	1	S	O	-45		1.1	
								6(SQ1)	4(SQ1)	NGB	1	S	NO	-45		0.8	
								6(SQ1)	4(SQ1)	NGB	1	S	O	-45	4.5	4.2	
								6(SQ1)	4(SQ1)	NGB	1	S	R	45	0.9	1.0	
							ETS(O)	5(SQ1)	L(OT)	NGB	1	P	O		10.3		
PO-9	AF521		4	21					U REL	GRD			O		90	85	
									U TEST	GRD			O		200	190	PAR.COMB.OF(P-)&(P-A)
POA, P1A, P2A, P5A, P6A, P7A, P9A	AF517		18	23					U REL TEST	GRD			O		85	80	WINDING ALONE
													O		190	180	PAR.COMB.OF(P-)&(P-A)
PBA	AF521		18	21					U(PBA)	GRD			O		90	85	WINDING ALONE
													O		200	90	PAR.COMB.OF(PBA)&(PB)
PA	AF506		4	8			7(FMP)	L(PA)	U(PA)	B/G			O		30.5	29	
PB	AF506		4	8			7(FMP)	L(PB)	U(PB)	B/G			O		30.5	29	
PBX	AF519	ZS, YI	8	27					U(PBX)	GRD			O		72.5	69	
PBX5	AF518	YK	7	224					U(PBX5)	GRD			O		100	95	
PBX7	AF518	TF	7	224					U(PBX7)	GRD			O		100	95	
PC	AF506		4	8			7(FMP)	L(PC)	U(PC)	B/G			O		30.5	29	
PE	AF506		18	8					U(PE)	GRD			O		30.5	29	

DRAWING ISSUE: 15D, 16D, 18D, 22D, 23A, 28D, 30D

TEST NOTES:

1. DO NOT USE CONTACT CLOSURE TEST SET WHEN ADJUSTING THIS RELAY.

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG	CONT PRES	ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.	REMARKS
MB	AF21		12	228			(MCBO,1)G		1U(MB)	GRD	2	P	G		20.5	19.5	
							(MCBO,1)G		1U(MB)	GRD	2	P	NO		8.4	8.9	
							(MCBO,1)G 7(OAT1)		2U(MB)	GRD	2	S	0		22		
MCBO	AJ702		12	500									0		42.5	40.5	WINDING ALONE
							6(MB)		U(MCBO)	GRD	1		0		95	90	(MCBO)&(MCB1) IN PAR.
							6(MB)		U(MCBO)	GRD	1		0		130	125	(MCBO),(MCB1)&(MCB2) IN PAR.
MCB1	AJ702		12	500									0		42.5	40.5	WINDING ALONE
							6(MB)		U(MCB1)	GRD	1		0		95	90	(MCBO)&(MCB1) IN PAR.
							6(MB)		U(MCB1)	GRD	1		0		130	125	(MCBO),(MCB1)&(MCB2) IN PAR.
MCB2	AJ702		18	500									0		42.5	40.5	WINDING ALONE
							6(MB)		U(MCB2)	GRD	1		0		130	125	(MCBO),(MCB1)&(MCB2) IN PAR.
MCB3	AJ702	YY	12	500									0		42.5	40.5	WINDING ALONE
							6(MB)		U(MCB3)	GRD			0		130	125	(MCB3),(MCBO)&(MCB1) IN PAR.
MCK	AF522		12	18			(TM)NO		U(MCK)	GRD	3		0		23.5	22	
MCN	AF519		8	27					U(MCN)	GRD			0		72.5	69	
MF	AJ70C	T, ZV	12	500			8(DISA)		U(MF)	GRD			0		90	85	
MLF	AJ70C	T, ZV	12	500					U(MLF)	GRD			0		90	85	
MPBX	AF515		24	31					U(MPBX)	GRD			0		95	90	
MRL	AF10		13	214				L(MRL)	U(MRL)	B/G			0		7.6	7.2	SEE TIMING REQ PAGE 18
MRL1	AF9		12	213					U(MRL1)	GRD			0		8.7	8.2	
MSK	AF522		12	18			(TM)NO		U(MSK)	GRD	3		0		23.5	22	
MT	AF34		12	14					U(MT)	GRD			0		28	26.5	
MT1	AJ15		12	249					U(MT1)	GRD			0		42.5	40.5	WDG ALONE (SEE MT2)
MT2	AJ12	UA	3	220					U(MT2)	GRD			0		95	90	(MT1)&(MT2) IN PAR.
MT4	AJ12		1	220									0		42.5	40.5	WINDING ALONE
									U(MT4)	GRD			0		95	90	(MT4)&(MT14) IN PAR.
									U(MT4)	GRD			0		150	140	(MT4)&(MT14)&(MT24) IN PAR.
MT5	AF24		7	8					U(MT5)	GRD			0		30.5	29	
MT6	AJ15		7	249			6(MT6)		U(MT6)	GRD			0		42.5	40.5	
MT7	AJ12		4	220					U(MT7)	GRD			0		42.5	40.5	
MT8A	AF33		6	16									0		13.4	12.8	WINDING ALONE
									U(MT8A)	GRD			0		20.5	19.5	(MT8)&(MT8A) RES IN PAR.
MT8	AF53		6	24			(SQA)NO		U(MT8)	GRD			0		31.5	30	
MT9	AJ12		1	220									0		42.5	40.5	WINDING ALONE
									U(MT9)	GRD			0		95	90	(MT9)&(MT19) IN PAR.
									U(MT9)	GRD			0		150	140	(MT9),(MT19)&(MT29) IN PAR.
MT11	AF53		6	24					U(MT11)	GRD			0		31.5	30	
MT13	AF53	WV	12	24					U(MT13)	GRD			0		31.5	30	
MT13	AJ12	WW	12	220					U(MT13)	GRD			0		42.5	40.5	
MT14	AJ12		2	220									0		42.5	40.5	WINDING ALONE
									U(MT14)	GRD			0		95	90	(MT4)&(MT14) IN PAR.
									U(MT14)	GRD			0		150	140	(MT4),(MT14)&(MT24) IN PAR.
MT15	AF34		5	14					U(MT15)	GRD			0		28.	26.5	

DRAWING ISSUE: 35D OTS EFM AMP; 16D KEG EW AFT; 18D DB LW MP; 22D PH FOX AMP; 23A KWT GPL AJ2 MRL; 28D; 300

TEST NOTES:

1. ON MASTER TEST FRAME INSERT PLUG IN LLMC MB JACKS OF CONNECTORS SERVED BY MKR UNDER TEST. THE MKR MB PLUG SHOULD THEN BE REMOVED. THE TEST CAN ALSO BE MADE DURING LIGHT TRAFFIC PERIODS, WITH THE MB PLUG REMOVED.
2. ON MASTER TEST FRAME REMOVE MKR MB PLUG.
3. INSULATE MS- RELAY CONTACT, IN THE FIRST PREFERRED MARKER CONN IN THE PREFERENCE CHAIN WHICH CONTROLS THE LEAD ASSOCIATED WITH THE RELAY BEING TESTED.

DIAL TONE MARKER CIRCUIT — SD-26001-01-F5

BELL TELEPHONE LABORATORIES INCORPORATED — PRINTED IN U.S.A.

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT.	FIG.	MECH REQT BSP FIG	CONT PRES	ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.	REMARKS
MT19	AJ12		2	220									0		42.5	40.5	WINDING ALONE
									U(MT19)	GRD			0		95	90	(MT9)&(MT19) IN PAR.
									U(MT19)	GRD			0		150	140	(MT9),(MT19)&(MT29) IN PAR.
MT24	AJ12		17	220									0		42.5	40.5	WINDING ALONE
									U(MT24)	GRD			0		150	140	(MT4),(MT14)&(MT24) IN PAR.
MT29	AJ12		17	220									0		42.5	40.5	WINDING ALONE
									U(MT29)	GRD			0		150	140	(MT9),(MT19)&(MT29) IN PAR.
MXT	AF515		14	31			(TR1)NO		U(MXT)	GRD			0		95	90	
NCSL	AF518	XA	7	224					U(NCSL)	GRD			0		100	95	
NCW	1/2AK501	UD	9	2					1L(NCW)	GRD			0		28.9	27.5	MTD WITH (CWL)
NDAT	AF518		27	224					U(NDAT)	GRD			0		100	95	
NOLA	AJ503		28	249					U(NOLA)	GRD			0		95	90	
NPBX	AF519	YS, YI	8	27					U(NPBX)	GRD			0		72.5	69	
OAT	AF523		13	19			8M(MB) (MRL)NO		U(OAT)	GRD			0		29.5	28	
OAT1	AF511		13	32			(HTR)O		U(OAT1)	GRD			0		24.5	23	
OBS1	AF27	VH	10	11					U(OBS1)	GRD			0		36.5	34.5	
OBSI	AJ101	VI	10	323					U(OBSI)	GRD			0		18	17	
OBS2	AF101		10	41					1U(OBS2)	GRD		P	0		44	41.5	
									1U(OBS2)	GRD		P	NO		28.5	30	
									2L(OBS2)	GRD		S	0		39	37	CONNECT DIRECT BAT. TO 2U(OBS2) REL
OC	AF523		10	19					U(OC)	GRD			0		29.5	28	
OC1	AF510		10	1					1U(OC1)	GRD		P	0		20	19	
									2L(OC1)	GRD		S	0		20.5	19.5	
ONX	AF506		14	8					U(ONX)	GRD			0		30.5	29	
OT	AF508	YL	7	11				L(OT)	U(OT)	NGB			0		80	72	
OT	AF510	YM	7	39			(SQI)NO	IL(OT)	1U(OT)	B/G		P	0		250	240	
							5(SQI)	IL(OT)	1U(OT)	B/G		P	NO		205	215	
							6(TSO)		2U(OT)	GRD		S	0		49.5		
OTS	316R	WO	7									P	0	40	13.3		
												P	R		3.3		
												S	0		54		
OTS	280AF	WN	7	8				6(SQ1)	4(SQ1)	NGB	1	S	0	-45		1.1	
								6(SQ1)	4(SQ1)	NGB	1	S	NO	-45		0.8	
								6(SQ1)	4(SQ1)	NGB	1	S	0	-45	4.5	4.2	
								6(SQ1)	4(SQ1)	NGB	1	S	R	45	0.9	1.0	
							ETS(O)	5(SQ1)	L(OT)	NGB	1	P	0		10.3		
PG-9	AF521		4	21					U REL	GRD			0		90	85	
									U TEST	GRD			0		200	190	PAR.COMB.OF(P-)&(P-A)
P0A, P1A, P2A, P5A, P6A, P7A, P9A	AF517		18	223					U REL TEST	GRD			0		85	80	WINDING ALONE
													0		190	180	PAR.COMB.OF(P-)&(P-A)
P8A	AF521		18	21					U(P8A)	GRD			0		90	85	WINDING ALONE
													0		200	190	PAR.COMB.OF(P8A)&(P8)
PA	AF506		4	8			7(FMP)	L(PA)	U(PA)	B/G			0		30.5	29	
PB	AF506		4	8			7(FMP)	L(PB)	U(PB)	B/G			0		30.5	29	
PBX	AF519	ZS, YI	8	27					U(PBX)	GRD			0		72.5	69	
PBX5	AF518	YK	7	224					U(PBX5)	GRD			0		100	95	
PBX7	AF518	TF	7	224					U(PBX7)	GRD			0		100	95	
PC	AF506		4	8			7(FMP)	L(PC)	U(PC)	B/G			0		30.5	29	
PE	AF506		18	8					U(PE)	GRD			0		30.5	29	

DRAWING ISSUE: 5D OTS EFM AMP; 6D KEG EW AFT; 18D DB LW MP; 22D PH FOX AMP; 23A KWT GPL AJ2 MRL; 22D; 300

TEST NOTES:

1. DO NOT USE CONTACT CLOSURE TEST SET WHEN ADJUSTING THIS RELAY.

ISSUE 4D

DIAL TONE MARKER CIRCUIT (2) — 26001-01-F5

BELL TELEPHONE LABORATORIES INCORPORATED — 6S — PRINTED IN U.S.A.

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA	READJ MA.	REMARKS
PLN	AF516	YK	5	224					U(PLN)	GRD			O		100	95	
PLN5	AF516	YK	7	224					U(PLN5)	GRD			O		100	95	
PLNC	AF618	XA	7	224					U(PLNC)	GRD			O		100	95	
PNR	AF526		4	1			7(PNR)	L(PNR)	U(PNR)	B/G			O		10.5	9	
PP	AF501	TWS	5	249					U(PP)	GRD			O		43	40.5	
PP	AF522	Y	5	18					U(PP)	GRD			O		23.5	22	
PLN7	AF516	YG		224					U(PLN7)	GRD			O		100	95	
PLSR	AJ50C		5	21			10(CIS2), (MLF)NO		U REL TEST	GRD			O		100	95	
RA1	AF48		10	28					U(RAV1)	GRD			O		95	90	
RCCK	AF50		13	18					U(RCCK)	GRD			O		23.5	22	
									U(RCCK)	GRD			NO		12.6	13.2	
RCTA	AF52	YC	9	208					U(RCTA)	GRD			O		32.5	30.5	
RCTA	AF524	YF	9	210					U(RCTA)	GRD			O		27	25.5	
RCTB	AD4		9	208									O	19	9.4	8.9	
													H	19	1.2	1.1	WINDING ALONE
													R	19	0.8	0.9	
									U(RCTB)	GRD			O	34	17	16	COMB.OPT.(RCTB) REL
									U(RCTB)	GRD			H	32	2	1.8	AND (RCTB)
									U(RCTB)	GRD			R	34	1.7	1.5	RESISTANCE
RCY	AF48		10	28									O		95	90	WINDING ALONE
									U(RCY)	GRD			O		210	200	(RCY)&(RCY1)IN PAR.
RCY1	AF48		10	28									O		95	90	WINDING ALONE
									U(RCY1)	GRD			O		210	200	(RCY)&(RCY1)IN PAR.
RCY2	J2AK30	XN	20	202				U(RCY2)	IL(RCY2)	GRD			O		23.5	22	MOUNTED WITH(AN)
RF	AF44		10	3					U(RF)	GRD			O		50.5	48	
RFA	AF519		10	27					U(RFA)	GRD			O		72.5	69	
													R		16.5	17	
RK	AF5		10	18					U(RK)	GRD			O		23.5	22	
RK1	AF508		9	11				L(RK1)		BAT.			O		80	72	
RK2	AF508		8	11					U(RK2)	GRD			O		80	72	
RK3	AF519		6	27					U(RK3)	GRD			O		72.5	69	
RLH	J22K7	UE	9	16					IU(RLH)	GRD			O		21.8	22.5	KEY WITH (RLY)
RLY	J22K7	UC	9	16				2(REL)		BAT.			O		30.5	29	KEY WITH (RLH)
RON	AF5		10	3					U(RON)	GRD			O		20.5	19.5	
RQ	AF508		5	5					U(RQ)	GRD			O		30.5	29	
RV	AF519	24		27					U(RV)	GRD			O		72.5	69	
RYC	AF501		10	26					U(RYC)	GRD			O		37	35	
RYT	AF522		13	18			6(TMS)		U(RYT)	GRD			O		23.5	22	
RYT1	AF512		13	207					U(RYT1)	GRD			O		26.5	25	
SDT	AF10		11	214				L(SDT)	U(SDT)	B/G			O		7.6	7.2	SEE TIMING REQ.. PAGE 18

DRAWING ISSUE: 1 JMR, 2D WWL, 30 PAC, 44AR CJG, 50 KJS, 98 MEA, 108 CH, 110 WKE, 120 DJM, 130 WJG, 150 WKC, 160 CBM, 180 JBB, 230 PRH, 300 WFC AMD

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DIAL TONE MARKER CIRCUIT — SD-26001-01-F6 — BELL TELEPHONE LABORATORIES INCORPORATED

SD-26001-01-F6

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA	READJ MA.	REMARKS
SFT	AJ504		13	57			(SDT)NG (LDT)NO	L(SFT) -(SFT)		BAT. BAT.			O NG		11.8 6.7	11.2 7.1	SEE TIMING REQ., PAGE 18
SL	2BCNB		9	5			(TX)O (TA)O (TA)O (TX)O	FRAME BAT. FRAME BAT. FRAME BAT.	1(TX) 1(TA) 1(TX) 1(TX)	NGB NGB NGB NGB			O NO O NO	-45 -45 -45 45	20 6	1.8 1.3 19 8.5	
SLA	AJ503		9	249					U(SLA)	GRD			O		95	90	
SLRK	AF523		9	19					U(SLRK)	GRD			O		29.5	28	
SNK	AF523		10	19			(TMS)NG		U(SNK)	GRD			O		29.5	28	
SP	AF48		10	28			7(TRR)		U(SP)	GRD			O		95	90	
SQ0	AF52		6	19			(MTB)O		U(SQ0)	GRD			O		29.5	28	
SQ1	AF54		6	25			(MTB)O		U(SQ1)	GRD			O		30.5	29	
SQ4	AF87		5	240			(MTB)O (JL01)O (MXT)NO		U(SQ4) U(SQ4)	GRD GRD			O NO		14.7 9.1	13.6 9.5	
STF	AF522	Y	5	18					U(STF)	GRD			O		23.5	22	
STF	AJ501	T	5	249					U(STF)	GRD			O		43	40.5	
STP	AF516		4	221					U(STP)	GRD			O		66.5	63	
STP1	AF507		4	26					U(STP1)	GRD			O		37	35	
STP2	AF504		4	8					U(STP2)	GRD			O		80	72	
									U(STP2)	GRD			O		180	160	PAR.COMB.(STP2)& (STP2A)
STP2A	AF514		19	5									O		57.5	54.5	WINDING ALONE
									U(STP2A)	GRD			O		135	125	PAR.COMB.OF (STP2A)& (STP2)
STP3	AF114		4	54					U(STP3)	GRD			O		24.5	23	
STX	AF507		14	26					U(STX)	GRD			O		37	35	
TAL	AF50		12	3					U(TAL)	GRD	2		O		5.5	5.2	
TAO	AF519	24		27					U(TAO)	GRD			O		72.5	69	
TBK	AF514		5	5					U(TBK)	GRD			O		57.5	54.5	
TBT	AF10		3	214					U(TBT)	GRD			O NO		7.6 4.2	7.2 4.5	
TBTA	AF9		3	213			(TMS)NO (MAK)O	U(TBTA)	L(TBTA)	B/G			O		8.7	8.2	SEE TIMING REQ.. PAGE 18
TCHK 9	AF524		11	210					U REL TEST	GRD			O		27	25.5	
TCHK	AF522		10	18					U(TCHK)	GRD			O		23.5	22	
TFK1	AF518		3	224			(FTCK)NO (TMS)NO		U(TFK1)	GRD			O		100	95	
TFK2	AF515		3	31			(FTCK)NO (TMS)NO		U(TFK2)	GRD			O		95	90	
TOCK	2BCCU	Y	9	8				2(JXP1) 2(JXP1) 2(JXP1) 2(JXP1)	FRAME GRD FRAME GRD FRAME GRD FRAME GRD	NGB NUB NGB NGB	1 1 1 1		O NO O R	-90 -90 -90 90	61 17	7.5 5.5 58 18	

TEST NOTES:

1. CONNECT 500Ω±1% RESISTANCE ACROSS TEST LEADS.
2. HOLD (AR) KEY UPR ON MISC FR CKT WHEN APPLYING CURRENT FLOW REQ.

DRAWING ISSUE: 1 JMR, 2D PAC, 30 CJG, 44AR KJS, 50 MEA, 98 CH, 108 WKE, 110 WJG, 120 WKC, 130 CBM, 150 PRH, 160 WFC AMD, 180 JBB, 230 KEG, 300 KMT EDL RHD

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ISSUE 4E

DIAL TONE MARKER CIRCUIT (2) — SD-26001-01-F6 — BELL TELEPHONE LABORATORIES INCORPORATED — 6S

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA.	DIRECT CURRENT FLOW REQT TEST MA.	DIRECT CURRENT FLOW REQT READJ MA.	REMARKS
TGCK	316C	YJ	9										0	3	1		
													R		0.2		
													NO		0.6		
TK	AF515		10	31					U(TK)	GRD			0		95	90	
TLC	AJ70C		10	500					U(TLC)	GRD			0		90	85	
TM	AJ507		12	21			(TMS)NO		U(TM)	GRD			0		100	95	
TMS	AF512		13	207			(WT)NO		U(TMS)	GRD			0		26.5	25	
TR1	WF55		12	26			7(TRR) (TRST)NO (TRR)NO		U(TR1)	GRD			0		37	35	
TR2A	AJ17		10	220									0		42.5	40.5	WINDING ALONE
									U(TR2A)	GRD			0		95	90	(TR2A) &(TR2B)IN PAR
TR2B	AJ12		10	220									0		42.5	40.5	WINDING ALONE
									U(TR2B)	GRD			0		95	90	(TR2A)&(TR2B)IN PAR.
TRA	AF60		12	12					U(TRA)	GRD	5		0		6.6	6.2	
TRB	AF54		12	25					U(TRB)	GRD			0		30.5	29	
TRL	AF67		12	207					U(TRL)	GRD			0		7.2	6.8	
TRLA	AJ15		12	249					U(TRLA)	GRD			0		42.5	40.5	
TRR	AJ15		12	249			(TRB)NO (TRT)NO (TRST)NO		U(TRR)	GRD			0		42.5	40.5	
TRS	AF50		12	18					U(TRS)	GRD			0		23.5	22	
									U(TRS)	GRD			NO		12.6	13.2	
TRST	AF64		12	219			(MT13)O (TRB)O		U(TRST)	GRD			0		11.1	10.6	
TRT	AF114		13	54					U(TRT)	GRD			0		24.5	23	
TRTR	AF9		13	213				L(TRTR)	U(TRTR)	B/G			0		8.7	8.2	SEE TIMING REQ. PAGE 18
TSO-4	AF518		7	224					U REL TEST	GRD			0		100	95	
TSE1	AJ507		7	21			(MT1)O		U(TSE1)	GRD			0		100	95	
TSE2	AJ507		7	21			(MT1)C		U(TSE2)	GRD			0		100	95	
TTO-4	280FK	WN	7	8			(MT6)O (TSO-4)O	2,4,6,8,10 (TSE2)	4(TSO-4)	B/G	1,3,4	P	U	-60		1.1	
										B/G	1,3,4	P	NO	-60		0.8	
										B/G	3,4	P	O	-6	1.7	1.6	
										B/G	3,4	P	R	6	0.5	0.6	
								1,3,5,7,9 (TSE2)	2(TSO-4)	B/G	3,4	S	O		2		
TTO-4	316K	WO	7									P	O	7.5	2.5		
												P	NO		16		
												P	R		0.8		
												S	O		2.7		
TTF	AJ501	N	5	249					U(TTF)	GRD			O		43	40.5	
TTFO	AF506	YW	9	8					U(TTFO)	GRD			O		30.5	29	
TX	AJ12		14	220							2						
VFC	AF522		8	18					U(VFC)	GRD			0		23.5	22	
VFG	AF520		6	15					U(VFG)	GRD			0		72.5	69	

DRAWING ISSUE: 1, 2D, 3D, 6B, 12D CBM WG RM, 15D DM AMD, 16D KEG DM AMD, 22D JR DOT AMD, 28D REL, 30D

TEST NOTES:

1. CONNECT 500Ω±1% RESISTANCE ACROSS TEST LEADS.
2. NO ELECTRICAL ADJUSTMENTS REQUIRED; MECHANICAL ADJUSTMENTS REQUIRED.
3. 2,4,6,8 & 10 CONTACT OF (TSE2) IS ASSOCIATED WITH PRI WDG OF (TTO-4) RESPECTIVELY. 1,3,5,7 & 9 CONTACT OF (TSE2) IS ASSOCIATED WITH SEC. WDG OF (TTO-4) RESPECTIVELY. (TSO-4) IS ASSOCIATED WITH (TTO-4) RESPECTIVELY. USE ONLY ONE OF (TSE2) CONTACTS AND OPERATE ONLY ONE OF (TSO-4) RELAYS ASSOCIATED WITH RESPECTIVE (TTO-4) RELAYS.
4. INSULATE ARMATURE OF ONE OTHER TTO-4 RELAY WHEN CONTACT CLOSURE TEST SET IS USED.
5. HOLD (AR) KEY OPR ON MISC FR CKT WHEN APPLYING CURRENT FLOW REQ.

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SOAK MA.	DIRECT CURRENT FLOW REQT TEST MA.	DIRECT CURRENT FLOW REQT READJ MA.	REMARKS
VFTO-4	AF518	YV	6	224					U REL TEST	GRD			0		100	95	
VFTO-4	AF100	YW	6	252					U REL TEST	GRD			0		41.5	39.5	
VGC1,2	AF522		8	16					U REL TEST	GRD			0		23.5	22	
VGG1	AF520		6	15									0		72.5	69	WINDING ALONE
									U(VGG1)	GRD			0		165	155	(VGG1)&(VGG2)IN PAR.
VGG2	AF520	Z	6	15									0		72.5	69	WINDING ALONE
									U(VGG2)	GRD			0		165	155	(VGG1)&(VGG2)IN PAR.
VGR	AF519		6	27					U(VGR)	GRD			0		72.5	69	
									U(VGR)	GRD			R		16.5	17	
VGTO-5	AF518		6	224					U REL TEST	GRD			0		100	95	
VGT6,7	AF518		6	224					U REL TEST	GRD			0		100	95	
VGT8,9	AF518	Z	6	224					U REL TEST	GRD			0		100	95	
VGT10,11	AF518	Z	6	224					U REL TEST	GRD			0		100	95	
VPO-2	AF504		20	8			(MLF)NO		U REL TEST	GRD			0		80	72	
VPT	AF42		20	224					U(VPT)	GRD			0		100	95	
VTK	AF519		6	27					U(VTK)	GRD			0		72.5	69	
									U(VTK)	GRD			R		16.5	17	
VTK1	AF514		6	5				L(VTR1)		BAT.			0		57.5	54.5	
WAT	AF518	VY	27	224					U(WAT)	GRD			0		100	95	
WB1	AJ501	VY	27	249											42.5	40.5	WINDING ALONE
									U(WB1)	GRD			0		95	90	(WB2)&(WB1)IN PAR.
WB2	AJ501		30	249											42.5	40.5	WINDING ALONE
									U(WB2)	GRD			0		95	90	(WB2)&(WB1)IN PAR.
WBT	AJ503		29	249					U(WBT)	GRD			0		95	90	
WDC1	AJ501		30	249					U(WDCT1)	GRD			0		95	90	
WGA	AJ501	VX	30	249					U(WGA)	GRD			0		42.5	40.5	
WGB	AJ501	VX	30	249					U(WGB)	GRD			0		42.5	40.5	
WT	AF10		12	214				L(WT)	U(WT)	B/G			0		7.6	7.2	SEE TIMING REQ. PAGE 18
WTK	AJ501		30	249				L(WTK)		BAT			0		42.5	40.5	
XAB	316T	JX	30									P	O	16	5.3		
												P	NO		3.3		
												P	R		1.4		
												S	O		5.6		
XABI	AF51	VX	30	3			(MXT)NO (COX)O		U(XABI)	GRD			0		20.5	19.5	
XACH	AF51		12	3			(MXT)NO (COX)O		U(XACH)	GRD			0		20.5	19.5	
XAF	AF51		14	3			(COX)O		U(XAF)	GRD			0		20.5	19.5	
XAJC	AF51		16	3			(MXT)NO (COX)O		U(XAJC)	GRD			0		20.5	19.5	

DRAWING ISSUE: 1, 2D, 3D, 6B, 12D CBM WG RM, 15D DM AMD, 16D KEG DM AMD, 22D JR DOT AMD, 28D REL, 30D

CIRCUIT REQUIREMENTS

DRAWING ISSUE: 22D PH 28D PH 30D

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS
XAJG	AF51		14	3			(COX)O, (MXT)NO		U(XAJG)	GRD			0		20.5	19.5	
XAJS	AF114		14	54			(COX)O, (MXT)NO		U(XAJS)	GRD			0		24.5	23	
XALC	AF51		14	3			(COX)O, (MXT)NO		U(XALC)	GRD			0		20.5	19.5	
XALR	AF51		14	3			(COX)O, (MXT)NO		U(XALR)	GRD			0		20.5	19.5	
XATS	AF51		14	3			(COX)O, (MXT)NO		U(XATS)	GRD			0		20.5	19.5	
XAVGB	AF51		14	3			(COX)O, (MXT)NO		U(XAVGB)	GRD			0		20.5	19.5	
XBT	AF71		14	4			(COX)O, (MXT)NO		1U(XBT)	GRD		P	0		12.4	11.8	
									2U(XBT)	GRD		S	0		13.1		
XCF	AF71		14	4			(COX)O, (MXT)NO		1U(XCF)	GRD		P	0		12.4	11.8	
									2U(XCF)	GRD		S	0		13.1		
XCH	S514		14				(XACH)NO		4(STX)	GRD			0		2	1.9	
									4(STX)	GRD			NO		1.6	1.7	
XCL	AJ510	ZV	14	39			(COX)O		1U(XCL)	GRD		P	0		255	240	
							(MXT)NO		1U(XCL)	GRD		P	NO		200	215	
									2U(XCL)	GRD		S	0		29.5		
XCS	280AP	XR	14	B			(XCF)NO, (TX)O	FRAME BAT.	9(TX)	NGB		P	0	-65		1.5	
	280GF	WP						FRAME BAT.	9(TX)	NGB		P	NO	-65		1.1	
								FRAME BAT.	9(TX)	NGB		P	0	-65	6.6	6.2	
								FRAME BAT.	9(TX)	NGB		P	NO	-65	3.2	3.4	
											1	S					
XCS	316T	WO	14									P	0	16	5.3		
												P	NO		5.3		
												P	R		1.4		
												S	0		5.6		
XC..	AF96	WO	14	46				1L(XC..)	1U(XC..)	B/G		P	0		100	95	
								1L(XC..)	1U(XC..)	B/G		P	NO		80	85	
XF	AF102	..	14	B			(XAF)NO, (BX)NO	2(BX)	FRAME BAT.	NGB		S	0	-FS		1.1	
								2(BX)	FRAME BAT.	NGB		S	NO	-FS		0.8	
								2(BX)	FRAME BAT.	NGB		S	0	-FS	3.8	3.6	
								2(BX)	FRAME BAT.	NGB		S	R	FS	0.6	0.7	
								FRAME BAT.	12(FTBO)	NGB		P	0		8.9		
XF	316R	.0	14									P	0	40	13.3		
												P	R		3.3		
												S	0		5.4		
XHG	AF102		14	46			(COX)O, (MXT)NO		1U(XHG)	GRD		P	0		215	205	
									1U(XHG)	GRD		P	NO		170	190	
									2U(XHG)	GRD		S	0		62		
XJC	280BS	WN	14	B			(TX)O, (XAJC)NO, (BX)NO	8(TX)	3(JGC)	B/G		P	0	-315		7.5	
								8(TX)	3(JGC)	B/G		P	NO	-315		5.5	
								8(TX)	3(JGC)	B/G		P	0	-315	29	27.5	
								8(TX)	3(JGC)	B/G		P	R	315	6.2	6.6	
								3(BX)	3(TX)	B/G		S	0		1.6		
XJC	316J	WO	14									P	0	150	52		
												P	R		14		
												S	0		3.0		
XJG	280AF	WN	14	B			(XAJS)NO, (BX)NO	5(BX)	8(JG4)	B/G		S	0	-90		1.1	
								5(BX)	8(JG4)	B/G		S	NO	-90		0.8	
								5(BX)	8(JG4)	B/G		S	0	-90	3.8	3.6	
								5(BX)	8(JG4)	B/G		S	R	30	6.6	6.7	
								8(JG4)	8(TR2A)	B/G		P	0		8.9		

NOTES:

1. NO ELECTRICAL ADJUSTMENTS REQUIRED.

DIAL TONE MARKER CIRCUIT

SD-26001-01-F8A

BELL TELEPHONE LABORATORIES INCORPORATED

CIRCUIT REQUIREMENTS

DRAWING ISSUE: 22D PH 28D PH 30D

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS
XJG, XJS	316R	WO	14									P	0	40	13.3		
												P	R		3.3		
												S	0		5.4		
XJS	280AR	WN	14	B				7(ONX)	5(ONX)	B/G		S	0	-35		1.1	
								7(ONX)	5(ONX)	B/G		S	NO	-35		0.8	
								7(ONX)	5(ONX)	B/G		S	0	-35	3.8	3.6	
								7(ONX)	5(ONX)	B/G		S	R	35	0.6	0.7	
								5(ONX)	12(CHO)	B/G		P	0		8.9		
XJSI	316R	VO	14									P	0	40	13.3		
												P	R		3.3		
												S	0		5.4		
XLC	280BJ	XR	14	B			(XALC) NO, (TX)O, (BX)NO	3(TX)	4(BX)	B/G		P	0	-315		7.5	
	280GG	WP						3(TX)	4(BX)	B/G		P	NO	-315		5.5	
								3(TX)	4(BX)	B/G		P	0	-315	29	27.5	
								3(TX)	4(BX)	B/G		P	R	315	6.2	6.6	
								11(BX)	3(TX)	B/G		S	0		1.6		
XLC	316U	WO	14									P	0	150	52		
												P	R		14		
												S	0		3.0		
XLG	AF102		14	46			(COX)O, (MXT)NO		1U(XLG)	GRD		P	0		170	165	
									1U(XLG)	GRD		P	NO		140	145	
									2U(XLG)	GRD		S	0		49		
XLH	280BE	XR	9	B			HMS1(O)	6(LHT)	9(HMS1)	B/G	1	P	0	-13		0.3	
	280GE	XS						6(LHT)	9(HMS1)	B/G	1	P	NO	-13		0.2	
								6(LHT)	9(HMS1)	B/G	1	P	0	-13	1.2	1.1	
								6(LHT)	9(HMS1)	B/G	1	P	R	13	0.2	0.3	
							(HTR)O	7(FTK1)	1(LHT)	B/G		S	0		3.9		
XLR	280AF	WN	14	B			(XALR)NO, (BX)NO	1(BX)	FRAME BAT.	NGB		S	0	-45		1.1	
								1(BX)	FRAME BAT.	NGB		S	NO	-45		0.8	
								1(BX)	FRAME BAT.	NGB		S	0	-45	3.8	3.6	
								1(BX)	FRAME BAT.	NGB		S	R	45	0.6	0.7	
								FRAME BAT.	10(FUTO)	NGB		P	0		8.9		
XLR	316R	WO	14									P	0	40	13.3		
												P	R		3.3		
												S	0		5 4		
XLS	AF96		14	46			(COX)O, (MXT)NO	1L(XLS)		BAT.		P	0		100	95	
								1L(XLS)		BAT.		P	NO		80	85	
									2U(XLS)	GRD		S	0		29.5		
XLV	AF97		14	46			(COX)O, (MXT)NO		1U(XLV)	GRD		P	0		225	215	
									1U(XLV)	GRD		P	NO		190	190	
									2U(XLV)	GRD		S	0		44		
XPG	AF96		14	46			(COX)O, (MXT)NO		1U(XPG)	GRD		P	0		100	95	
									1U(XPG)	GRD		P	NO		80	85	
									2U(XPG)	GRD		S	0		29.5		
XSL	AF12		14	20			(COX)O, (MXT)NO		1U(XSL)	GRD		P	0		19.5	18.5	
									2U(XSL)	GRD		S	0		11.7		
XTC	AF71		14	4			(COX)O, (MXT)NO		1U(XTC)	GRD		P	0		12.4	11.8	
									2U(XTC)	GRD		S	0		13.1		
XTC1	AF71		14	4			(COX)O, (MXT)NO		1U(XTC1)	GRD		P	0		12.4	11.8	
									2U(XTC1)	GRD		S	0		13.1		
XTG1	AF71	Y, ZY	14	4			(COX)O, (MXT)NO		1U(XTG1)	GRD		P	0		12.4	11.8	
									2U(XTG1)	GRD		S	0		13.1		
XTRK	AF71		14	4			(COX)O, (MXT)NO		1U(XTRK)	GRD		P	0		12.4	11.8	
									2U(XTRK)	GRD		S	0		13.1		
XTRL	AF71		14	4			(COX)O, (MXT)NO		1U(XTRL)	GRD		P	0		12.4	11.8	
									2U(XTRL)	GRD		S	0		13.1		

NOTES:

1. THE AUTOMATIC MONITOR REG. & SENDER TEST CKT SHOULD BE RELEASED WHEN ADJUSTING THIS RELAY.

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-F8A

BELL TELEPHONE LABORATORIES INCORPORATED 6S

CIRCUIT REQUIREMENTS

DRAWING ISSUE: 22D PH PRC AMP 30D

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.		MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS
XTS	280AF	WN	14		B				8(ONX)	3(ONX)	B/G		S	0	-45		1.1	
									8(ONX)	3(ONX)	B/G		S	NO	-45		0.8	
									8(ONX)	3(ONX)	B/G		S	0	-45	3.8	3.6	
									8(ONX)	3(ONX)	B/G		S	R	45	0.6	0.7	
								(TSE1)0	8(FAK)	8(ONX)	B/G		P	0		8.9		
XTS	316R	WD	14										P	0	40	13.3		
													P	R		3.3		
													S	0		5.4		
XTS1	AF71		14		4			(COX)0,		1U(XST1)	GRD		P	0		12.4	11.8	
								(MXT)NO		2U(XST1)	GRD		S	0		13.1		
XVGA	AF102		14		46			(COX)0,	1L(XVGA)	1U(XVGA)	B/G		P	0		170	165	
								(MXT)NO	1L(XVGA)	1U(XVGA)	B/G		P	NO		140	145	
										2U(XVGA)	GRD		S	0		49		
XVGB	S65	YD	14					(XAVGB)NO,		14(LLC1)	GRD			0		73.5	70	
								(LLC1)0		14(LLC1)	GRD			NO		59	62.5	
XVGB	S68	YE, YI	14					(XAVGB)NO,		14(LLC1)	GRD			0		160	150	
								(LLC1)0		14(LLC1)	GRD			NO		120	130	
XVHF	280AP	XR	14		B			(TX)0,	FRAME BAT.	10(TX)	NGB		P	0	-65		1.5	
	280GF	WP						(XCF)NO	FRAME BAT.	10(TX)	NGB		P	NO	-65		1.1	
									FRAME BAT.	10(TX)	NGB		P	0	-65	6.6	6.2	
									FRAME BAT.	10(TX)	NGB		P	NO	65	3.2	3.4	
												1	S					
XVHF	316T	WD	14										P	0	16	5.3		
													P	NO		3.3		
													P	R		1.4		
													S	0		5.6		
XWB	AJ501		30		249			(COX)0,		U(XWB)	GRD			0		42.5	40.5	
								(MXT)NO										

NOTES:

1. ELECTRICAL ADJUSTMENTS NOT REQUIRED.

DIAL TONE MARKER CIRCUIT — SD-26001-01-F88

BELL TELEPHONE LABORATORIES INCORPORATED

CIRCUIT REQUIREMENTS

DRAWING ISSUE: 22D PH PRC AMP 30D

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.		MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS

DIAL TONE MARKER CIRCUIT (2) — SD-26001-01-F88

BELL TELEPHONE LABORATORIES INCORPORATED — SYS DOC 6S

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	MECH REQT BSP FIG	MECH REQT CONT PRES	MECH REQT ARM TRVL	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BAT	TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READ MA	REMARKS
ELECTRON TUBES																	
CON	313CA		9								1						
CON	313CA		19								1						
HTT	313CC		13								1						
LDT	313CC		13								1						
DAT	313CC		13								1						
DDT	313CC		13								1						
TDT	313CC		3								1						
TDTP	313CC		13								1						
HT	313CC		13								1						

TEST NOTES:

1. SEE BSP

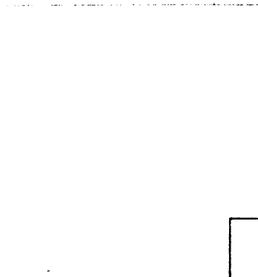
DRAWING ISSUE: 18D DE, 4-W, AHD, BH; 21A KC, JMT, MRS; 22D KC, JMT

CIRCUIT REQUIREMENTS

APPARATUS DESIG	CODE	OPT	FIG	BSP FIG	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN A	TEST CLIP DATA CONN B	RESISTANCE R (OHMS)	SEE TEST NOTE	TEST FOR	MAX VOLTAGE	REMARKS
LO-9	KS-15724, L3		11		4(STX)(TCH-)0	4 (STX)	2 (TCH-)		2,4,5,8	FWD RES	1.0	
					(STX)0(TCH-)0	2 (TCH-)			2,4,7,8	REV RES	1.0	70° F
											1.5	90° F
											2.5	110°F
LH	KS-15701, L3	AG	9			9 (GLH1)	1 (DVO)	500	3,4,5	FWD RES	1.0	
						1 (DVO)	9 (GLH1)	500	3,4,6	REV RES	0.25	70°F
											0.37	90°F
											0.62	110°F
TO-9	KS-15724, L3		11		4(STX)(TCH-)0	4 (STX)	2 (TCH-)		2,4,5,8	FWD RES	1.0	
					(STX)0(TCH-)0	2 (TCH-)			2,4,7,8	REV RES	1.0	70° F
											1.5	90°F
											2.5	110°F
TH	KS-15701, L3	AG	9			4 (HMS1)	9 (DVO)	500	3,4,5	FWD RES	1.0	
						9 (DVO)	4 (HMS1)	500	3,4,6	REV RES	0.25	70° F
											0.37	90° F
											0.62	110° F

TEST NOTES:

1. MAKE ALL VOLTAGE MEASURMENTS WITH VOLTMETERS WITH SENSITIVITIES OF 20,000 OHMS PER VOLT D C OR HIGHER. THE KS-14510 VOLTMETER IS SATISFACTORY.



4. TEMPERATURE RANGE 70° F TO 110° F.
5. MEASURE VOLTAGE ACROSS DIODE.
6. MEASURE VOLTAGE ACROSS RESISTOR (R).
7. MEASURE VOLTAGE ACROSS 1910 OHM SECTION OF THE (JO-9),(LO-9), OR (TO-9) RESISTOR ASSOCIATED WITH THE DIODE UNDER TEST.
8. CIRCUIT PREPARATION INFORMATION APPLIES TO (TCH-) RELAY ASSOCIATED WITH DIODE UNDER TEST

DRAWING ISSUE: 18D DE, 4-W, AHD, BH; 21A KC, JMT, MRS; 22D KC, JMT

DIAL TONE MARKER CIRCUIT — SD-26001-01-F9

BELL TELEPHONE LABORATORIES INCORPORATED

CROSSBAR SYSTEMS
NO. 5
DIAL TONE MARKER CIRCUIT (2) — SD-26001-01-F9

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

TIMING REQUIREMENTS

APPLY AFTER TURNOVER ONLY

DRAWING ISSUE: 18D JAT 4-WIRE AND; 22D PRS PAT AND

APPARATUS DESIG	APPARATUS CODE	APPARATUS FEATURE OR OPTION	APPARATUS FIG	APPARATUS RATING	CIRCUIT PREPARATION BLOCK OR INSULATE	TEST CLIP DATA CONN BK	TEST CLIP DATA CONN R	TEST CLIP DATA CONN W	TEST SET PREP SEND KEY	TEST SET PREP REC SW START	TEST SET PREP REC SW STOP	SEE TEST NOTE NO	TEST FOR	TIME REQT MIL-SEC MIN	TIME REQT MIL-SEC MAX	REMARKS
RELAYS																
HMT			9		(CKG1)O (CHA)O (RYC)O (DVA)O WHEN OPTION "G" IS PROVIDED	GRD	B(CHA)	U(HMT1)	BK	-48	GRD			40.5 26	50 30	6500 OHMS BIAS 2000 OHMS BIAS
HTT			13		B(HTR)	GRD	U(HTR1)	B(HTT)	MK	GRD	O C			960	1600	
LDT			13		(TRTR)NO (TR1)NO	BAT.	L(SFT)	12(LDT)	MK	O C	GRD			4600	7500	
MRL			13		(TAL)NO (TRST)NO							1,2				
SDT			13		(TRTR)NO (TR1)NO	BAT.	L(SFT)	12(SDT)	MK	O C	GRD			2600	4250	
TBTA			3			GRD	U(TBT)	U(FM)	MK	-48	GRD			1000	1500	"B" OPTION
					(MAK1)O	GRD	U(TBT)	U(FM)	MK	-48	GRD			120	185	"A" OPTION
TRTR			13		(TRA)NO (TAL)NO	GRD	U(TRT)	2(TRTR)	MK	-48	GRD			2000	3250	
WT			13		(TRST)NO (TRTR)NO	GRD	U(TMS)	U(TRT)	MK	-48	GRD			285	456	

TEST NOTES:

1. TO MEASURE THE TIME OF THE (MRL) TIMER, OPR REL (DAT). REL (MRL) SHOULD OPERATE IN MIN 9.6 SEC AND MAX 15.4 SEC.
2. TIMES (DAT) TUBE.

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DIAL TONE MARKER CIRCUIT — SD-26001-01-F10

BELL TELEPHONE LABORATORIES INCORPORATED

DRAWING ISSUE: 18D JAT 4-WIRE AND; 22D PRS PAT AND

22

CROSSBAR SYSTEMS
NO. 5
DIAL TONE MARKER CIRCUIT (2)
SD-26001-01-F10

BELL TELEPHONE LABORATORIES INCORPORATED — 65

CAD INDEX

INDEX FOR APP FIG.

APP FIG.	FRAME OR UNIT	CAD	SHEET
1	J28759AA	1	G2
2	J28759AW	2	G2
3	J28759AB	3	G2
4	J28759AC	4	G3
5	J28759AD	5	G4
6	J28759AE	6	G5
7	J28759AF	7	G6
8	J28759AG, AT, AX	8	G6
9	J28759AH, AI	9	G6
10	J28759AJ	10	G7
11	J28759AK	11	G7
12	J28759AL	12	G8
13	J28759AM	13	G8
14	J28759AN	14	G9
15	J28759AO	15	G9
16	J28759AP	16	G9
17	J28759AA	17	G10
18	J28759BA	18	G10
19	J28759AU	19	G11
20	J28759AW	20	G11
21	-	-	
22	J28759AR	22	G11
23	J28759AS	23	G11
24	J28759AR, AX	24	G11
25	J28759AY	125	G12
26	J28759AY	126	G12
27	J28759AR	127	G12
28	J28759AZ	128	G12
29	J28759AL	129	G12
30	J28759AV	130	G13
31	J28759AC	131	G13

INDEX FOR SWITCHBOARD CABLING AND CROSS CONNECTIONS

DESCRIPTION	FRAME	CAD	SHEET
SWBC CABLE TO OTHER MKRS IN SAME GR	J28759A,B	25,25A	G20A,B
SWBD CABLE TO MASTER TEST FRAME	J28759A	26	G20B
SWBD CABLE TO RELAY RACK FR	J28759A,AW	27	G21
SWBD CABLE TO TRAFFIC REGISTER FR	J28759A,AW	28	G21
SWBD CABLE TO TRUNK LINK FRAMES	J28759A,B	29	G21
SWBD CABLE TO TRUNK LINK CONN. FR	J28759A,B	30	G22,G23
SWBD CABLE TO ORIG REG LINE MEMORY FRAME	J28759A	31	G24
SWBD CABLE TO LINE LINK MKR CONN FRAME	J28759A,B	32	G24, G25AB,C
SWBD CABLE TO LINE LINK CONN FRAME	J28759A,B	33	G26,G27
SWBD CABLE TO MA TST CONN FOR DT MKRS	J28759A	34	G27,G28, G29
SWBD CABLE TO LINE INSULATION TEST FR	J28759AB	35	G29,G30
SWBD CABLE TO PRTC FR	J28759A	36	G31
SERVICE & TRAFFIC CROSS CONNECTIONS	J28759A	37	G31
SWBD CABLE TO TRAFFIC USAGE RECORDER FR	J28759A	38	G31
SWBD CABLE TO TRK LK CONN FR (U-TYPE)	J28759A	39	G32, G33
SWBD CABLE TO LLMC FR J28151C (U-TYPE)	J28759A	40A	G34, G35
SWBD CABLE TO LLMC FR J28151N (U-TYPE)	J28759A	40B	G35, G36
SWBD CABLE TO LLC FR (U-TYPE)	J28759A	41	G37,G38
SWBD CABLE TO MA TST CONN (MTC) OR TO SUPL MA TST CONN FR (S4TC)	J28759A	42	G39,G40 G41,G42
SWBC CABLE FROM SUPL DT MKR FR TO DT MKR FR	J28759B	43	G43 G44
SWBD CABLE FROM DT MKR FR TO SUPL DT MKR FR	J28759A	44	G45, G46
SWBD CABLE FROM SUPL DT MKR FR TO LLMC FR	J28759B	45	G47
SWBD CABLE FROM DT MKR REG GR SEL UNIT ON RELAY RACK TO TRUNK LINK FRAMES	J28759AW	46	G48A
SWBD CABLE MULT OF FIG- LEADS		46A	G48A
SWBD CABLE TO TRK LK CONNECTORS SERVING 4 WIRE TRK LK FRAMES	J28759A	47	G48B
SWBD CABLE TO LINE LINK CONNECTORS SERVING 4 WIRE LINE LINK FRAMES	J28759A	48	G48B
SWBD CABLE TO DT MKR REG GR SEL UNIT ON RELAY RACK	J28759A	49	G49A
SWBD CABLE TO DT MKR FR FROM DT MKR REG GR SEL UNIT	J28759AW	50	G49A
CROSS CONN FOR COMBINED NETWORKS AND MORE THAN 2 REGISTER GROUPS	J28759A,AW	51	G49B
SWBD CABLE TO OFFICE TEST FR	J28759A	52	G50
SWBD CABLE TO T-LIM LL/TL C FRAME	J28759A	53	G51,G52
SWBD CABLE FROM DT MKR RANGE EXTENSION UNIT	J28759AZ	54	G53
SWBD CABLE FROM DT MKR FR TO DT MKR RANGE EXTENSION UNIT	J28759A	55	G53
SWBD CABLE TO WIDEBAND TRANSFER LINK UNIT	J28759A	56	G53
SWBD CABLE FROM WIDEBAND TRANSFER LINK CONTROL UNIT	J28759AV	57	G53
SWBD CABLE TO DAS-ETS CKT	J28759A	58	G54
DAS-ETS TERMINAL STRIP ON DTM	J28759A	58A	G55
SWBD CABLE FROM DTM TO THE ETS POWER AND DATA INTERFACE CKT (PDI)	J28759A	59	G56

DRAWING ISSUE

16D	MD CPK AMP
18D	DF LM MAG MTS
22D	MD PAT AMP
300	

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G1

BELL TELEPHONE LABORATORIES INCORPORATED SHEET 6S

SD-26001-01-G1

STABILO

CAD INDEX

INDEX FOR SWITCHBOARD CABLING AND CROSS CONNECTIONS

DESCRIPTION	FRAME	CAD	SHEET
SWBD CABLE TO OTHER MKRS IN SAME GR	J28759A,B	25,25A	G20A,B
SWBD CABLE TO MASTER TEST FRAME	J28759A	26	G20B
SWBD CABLE TO RELAY RACK FR	J28759A,AW	27	G21
SWBD CABLE TO TRAFFIC REGISTER FR	J28759A,AW	28	G21
SWBD CABLE TO TRUNK LINK FRAMES	J28759A,B	29	G21
SWBD CABLE TO TRUNK LINK CONN. FR	J28759A,B	30	G22,G23
SWBD CABLE TO ORIG REG LINE MEMORY FRAME	J28759A	31	G24
SWBD CABLE TO LINE LINK MKR CONN FRAME	J28759A,B	32	G24, G25A,B,C
SWBD CABLE TO LINE LINK CONN FRAME	J28759A,B	33	G26,G27
SWBD CABLE TO MA TST CONN FOR DT MKRS	J28759A	34	G27,G28, G29
SWBD CABLE TO LINE INSULATION TEST FR	J28759Ab	35	G29,G30
SWBD CABLE TO PRTD FR	J28759A	36	G31
SERVICE & TRAFFIC CROSS CONNECTIONS	J28759A	37	G31
SWBD CABLE TO TRAFFIC USAGE RECORDER FR	J28759A	38	G31
SWBD CABLE TO TRK LK CONN FR (U-TYPE)	J28759A	39	G32, G33
SWBD CABLE TO LLMC FR J28151C (U-TYPE)	J28759A	40A	G34, G35
SWBD CABLE TO LLMC FR J28151N (U-TYPE)	J28759A	40b	G35, G36
SWBD CABLE TO LLC FR (U-TYPE)	J28759A	41	G37,G38
SWBD CABLE TO MA TST CONN (MTC) OR TO SUPL MA TST CONN FR (SMTC)	J28759A	42	G39,G40 G41,G42
SWBD CABLE FROM SUPL DT MKR FR TO DT MKR FR	J28759b	43	G43 G44
SWBD CABLE FROM DT MKR FR TO SUPL DT MKR FR	J28759A	44	G45, G46
SWBD CABLE FROM SUPL DT MKR FR TO LLMC FR	J28759b	45	G47
SWBD CABLE FROM DT MKR REG GR SEL UNIT ON RELAY RACK TO TRUNK LINK FRAMES	J28759AW	46	G48A
SWBD CABLE MULT OF FTC- LEADS		46A	G48A
SWBD CABLE TO TRK LK CONNECTORS SERVING 4 WIRE TRK LK FRAMES	J28759A	47	G48B
SWBD CABLE TO LINE LINK CONNECTORS SERVING 4 WIRE LINE LINK FRAMES	J28759A	48	G48B
SWBD CABLE TO DT MKR REG GR SEL UNIT ON RELAY RACK	J28759A	49	G49A
SWBD CABLE TO DT MKR FR FROM DT MKR REG GR SEL UNIT	J28759AW	50	G49A
CROSS CONN FOR COMBINED NETWORKS AND MORE THAN 2 REGISTER GROUPS	J28759A,AW	51	G49B
SWBD CABLE TO OFFICE TEST FR	J28759A	52	G50
SWBD CABLE TO T-LLM $\frac{LL}{TL}$ C FRAME	J28759A	53	G51,G52
SWBD CABLE FROM DT MKR RANGE EXTENSION UNIT	J28759AZ	54	G53
SWBD CABLE FROM DT MKR FR TO DT MKR RANGE EXTENSION UNIT	J28759A	55	G53
SWBD CABLE TO WIDEBAND TRANSFER LINK UNIT	J28759A	56	G53
SWBD CABLE FROM WIDEBAND TRANSFER LINK CONTROL UNIT	J28759AV	57	G53
SWBD CABLE TO DAS-ETS CKT	J28759A	58	G54
DAS-ETS TERMINAL STRIP ON DTM	J28759A	58A	G55
SWBD CABLE FROM DTM TO THE ETS POWER AND DATA INTERFACE CKT (PDI)	J28759A	59	G56

INDEX FOR APP FIG.

APP FIG.	FRAME OR UNIT	CAD	SHEET
1	J28759AA	1	G2
2	J28759AB	2	G2
3	J28759AC	3	G2
4	J28759AD	4	G3
5	J28759AE	5	G4
6	J28759AE	6	G5
7	J28759AF	7	G6
8	J28759AG,AT, AX	8	G6
9	J28759AH,AI	9	G6
10	J28759AJ	10	G7
11	J28759AK	11	G7
12	J28759AL	12	G8
13	J28759AM	13	G8
14	J28759AN	14	G9
15	J28759AO	15	G9
16	J28759AP	16	G9
17	J28759AA	17	G10
18	J28759BA	18	G10
19	J28759AU	19	G11
20	J28759AW	20	G11
21	-	-	
22	J28759AR	22	G11
23	J28759AS	23	G11
24	J28759AR,AX	24	G11
25	J28759AY	125	G12
26	J2 759AY	126	G12
27	J28759AR	127	G12
28	J28759AZ	128	G12
29	J28759AL	129	G12
30	J28759AV	130	G13

DRAWING ISSUE

16D MD FRM AND

18D DS LM AND MS PAT AM

22D

300

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G1

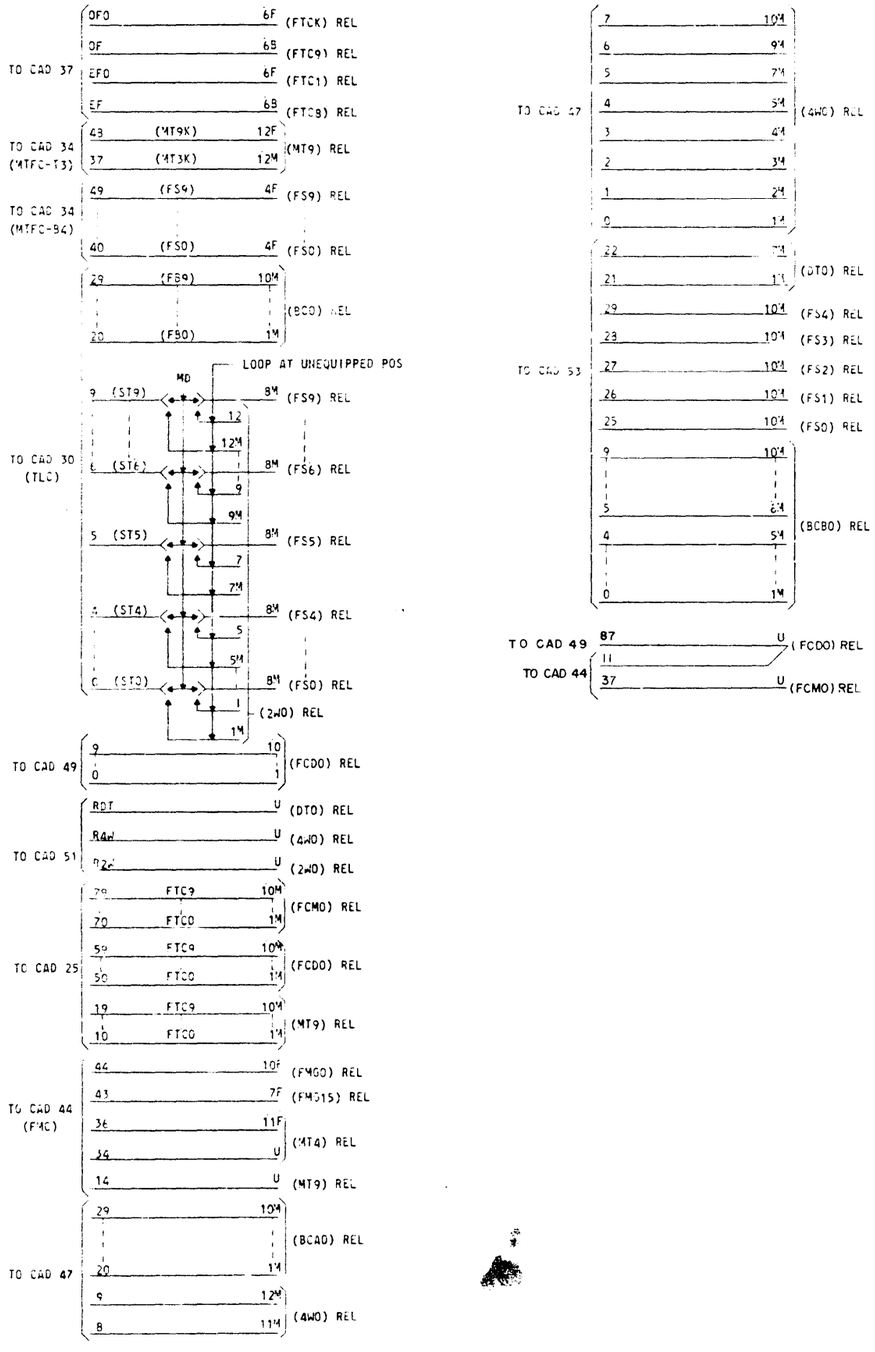
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-G1

STABILO

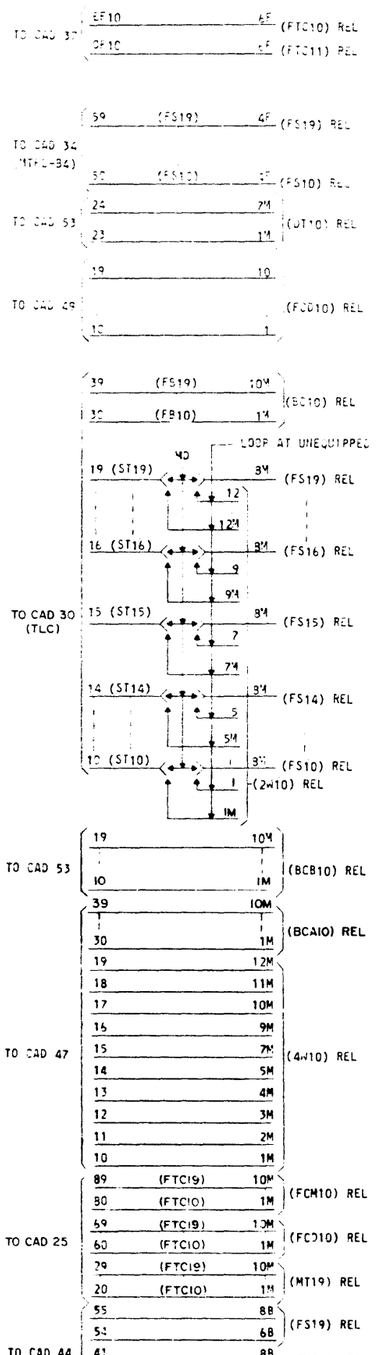
CAD 1

(FOR APP FIG. 1)



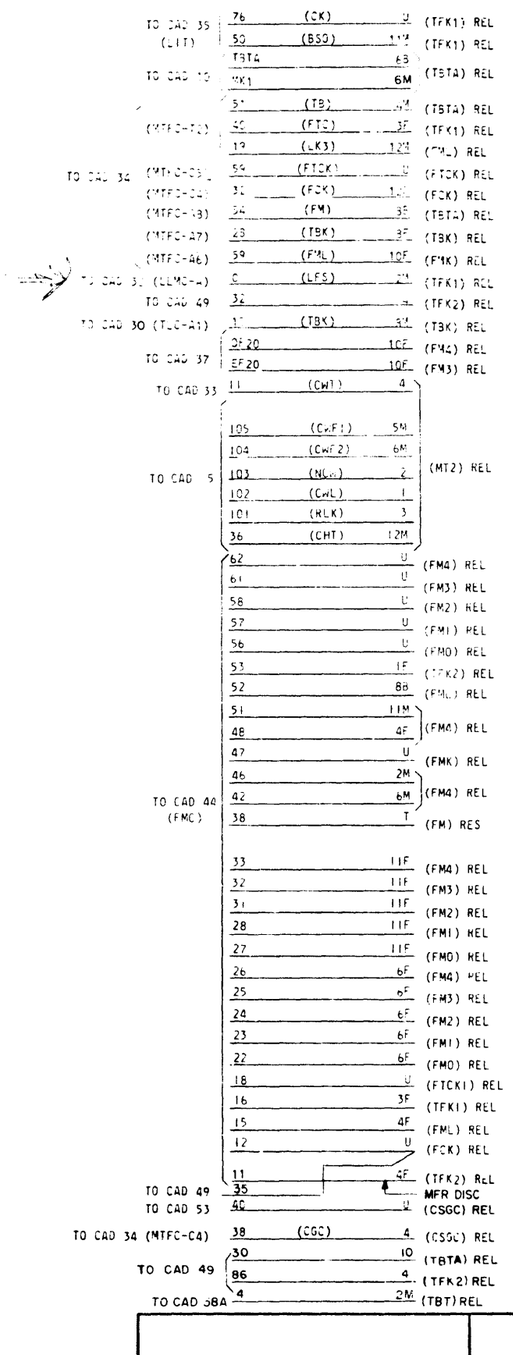
CAD 2

(FOR APP FIG. 2)



CAD 3

(FOR APP FIG. 3)



DRAWING ISSUE

26D	EM 8PM AMC
18D	TC 4 MT AMD
30D	
33D	

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G2

BELL TELEPHONE LABORATORIES INCORPORATED — CODE 6S — PRINTED IN U.S.A.

SD-26001-01-G2

SCALE NONE

CAD 4
(FOR APP FIG. 4)

TO CAD 37 (SZ)	SZ10	U	(10TLF) REL
	SZ3	U	(3TLF) REL
	SZ2-3	U	(2-3TLF) REL
	SZ2	U	(2TLF) REL
TO CAD37(MD) OR CAD 19	SZD	B	(SZD) NET
TO CAD 37 (SZ)	SZC	B	(SZC) NET
	SZB	B	(SZB) NET
	SZA	B	(SZA) NET
TO CAD 35 (LIT)	59 (R)	11M	(JGO) REL
	57 (L)	10M	(JGO) REL
TO CAD 34 (MTFC-T3)	59 (TCH9)	10M	(PNR) REL
	50 (TCHO)	1M	
	49 (MT7)	U	(MT7) REL
(MTFC-C4)	35 (STP2)	4F	(STP) REL
	34 (STP1)	12F	(STP1) REL
(MTFC-A7)	49 (PNR)	U	(PNR) REL
	48 (PC)	U	(PC) REL
	47 (PB)	U	(PB) REL
	46 (PA)	U	(PA) REL
(MTFC-A6)	54 (JG4)	U	(JG4) REL
	50 (JGO)	U	(JGO) REL
TO CAD 30 (TLC-C1)	54 (P9)	U	(P9) REL
	50 (P5)	U	(P5) REL
	44 (P4)	U	(P4) REL
	40 (P0)	U	(P0) REL
TO CAD 30 (TLC-B2)	54 (G4)	5M	(GC) REL
	50 (G0)	1M	
	44 (G0A)	9M	
	21 (EF)	12M	(JGO) REL
	20 (RF)	1M	
TO CAD 30 (TLC-M)	51 (SEF)	8M	
TO CAD25	100(FNP-4W)	12M	(4WT) REL
TO CAD 26	05(TCP-4W)	11M	
TO CAD37	SZD4	8	
	SPF4	5	

TO CAD 44 (60/30)	89	U	(P8) REL
	88	9M	(JG4) REL
	87	10M	(2TLF) REL
	86	U	(P7) REL
	85	7M	(P0) REL
	84	3M	
	83	5M	
	82	U	(P6) REL
	81	U	(P5) REL
	77	7F	(P4) REL
	76	U	(P2) REL
	75	U	(P1) REL
	74	2F	(P3) REL
	73	2M	
	72	10M	(3TLF) REL
	70	U	(P0) REL
	67	12F	(GC) REL
	66	11F	
	65	9M	
	64	9F	
	63	7F	
	62	4F	(STP3) REL
	61	6B	(GC) REL
	60	5M	
	59	3F	
	58	4M	
	57	2F	
	56	1M	
	55	1F	
	41	8F	(JG0) REL
	11	3M	(JG2) REL
	8	5M	(2G) REL
	5	U	(7TLF) REL
	4	9M	(JG1) REL
	3	10M	(4TLF) REL
	2	10F	(2TLF) REL
	1	L	(6TLF) REL
	0	U	(6TLF) REL

	119	8M	(4TLF) REL
	117	8M	(P0) REL
	116	4F	(STP) REL
	115	11F	(2G) REL
	114	4F	(STP1) REL
	113	4M	
	112	6F	
	111	4F	(3G) REL
	110	8F	(3TLF) REL
	109	9M	(P3) REL
TO CAD 44 (60/30)	108	10F	(PC) REL
	99	1F	
	98	L	
	97	9M	(P0) REL
	96	9M	(P1) REL
	95	1M	
	94	2M	(P0) REL
	93	U	(P9) REL
	92	7M	(P1) REL
	91	4M	
	90	10M	
	29	U	(GC) REL

DRAWING ISSUE
5D
6B
8D
9B
12D
16D
20D
33D

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33

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES INCORPORATED
SD-26001-01-G3
65

CAD 5

(FOR APP FIG. 5)

TO CAD 56

FR3		1M	(FUT3) REL
FR2		1M	(FUT2) REL
FR1		1M	(FUT1) REL
FR0		1M	(FUT0) REL
17		1	

TO CAD 31

(ORLM-D2)

13	(FT3)	12M	
10	(FT0)	9M	

(ORLM-D1)

44	(FU7)	5M	(GTU) REL
43	(FU4)	4M	
42	(FU2)	3M	
41	(FU1)	2M	
40	(FU0)	1M	

TO CAD 30 (TLC - G1)

34	(JC9)	4M	(FUT 8) REL
33	(JC8)	4M	(FUT 6) REL
32	(JC7)	4M	(FUT 4) REL
31	(JC6)	4M	(FUT 2) REL
30	(JC5)	4M	(FUT 0) REL
24	(JC4)	2M	(FUT 8) REL
23	(JC3)	2M	(FUT 6) REL
22	(JC2)	2M	(FUT 4) REL
21	(JC1)	2M	(FUT 2) REL
20	(JC0)	2M	(FUT 0) REL

14	(L8)	8F	
13	(L7)	7F	
12	(L6)	6F	
11	(L5)	5F	(20F) REL
10	(L4)	4F	
4	(L3)	3F	
3	(L2)	2F	
2	(L1)	1F	
1	(L0)	1F	(40F) REL

TO CAD 25 — 92 (PCM) 8F (MT15) REL.

(22) (MFR DISC)

TO CAD 58 (LLC-ST)

ST39	(ST39)	10M	
ST30	(ST30)	1M	(FTT3) REL
ST29	(ST29)	10M	
ST20	(ST20)	1M	(FTT2) REL
ST19	(ST19)	10M	
ST10	(ST10)	1M	(FTT1) REL
ST9	(ST9)	10M	
STO	(STO)	1M	(FTT0) REL

TO CAD48

ST39		10M	
ST30		1M	(FTS3) REL
ST29		10M	
ST20		1M	(FTS2) REL
ST19		10M	
ST10		1M	(FTS1) REL
ST9		10M	
STO		1M	(FTS0) REL

TO CAD 32 (FU)

FU7	(FU7)	5M	
FU4	(FU4)	4M	
FU2	(FU2)	3M	
FU1	(FU1)	2M	
FU0	(FU0)	1M	(GTL1) REL

TO CAD 32 (FT)

FT3	(FT3)	12M	
FT0	(FT0)	9M	

TO CAD 37

PR	(PR)	U	(PR) REL
SF	(SF)	U	(STF) REL
TTF		U	(TTF) REL

TO CAD 34

(MTFC-C4)

53	(FTT3)	4F	
50	(FTT0)	1F	(MT15) REL
49	(FUT9)	U	(FUT9) REL
40	(FUT0)	U	(FUT0) REL

(MTFC-A7)	26	(GTL)	U	(GTL1) REL
(MTFC-A6)	27	(LTR)	6F	
(MTFC-T2)	53	(TDCT)	7F	(MT15) REL

TO CAD 44

120	4M		(RQ) REL
130	6M		(FTB2) REL
129	6M		(FUT8) REL
128	10M		(FTB2) REL
127	6M		(FUT6) REL
126	9M		(FTB0) REL
125	6M		(FUT4) REL
124	6M		(7Q) REL
123	6M		(FUT2) REL
122	6M		(FUT0) REL
121	6M		(FTB3) REL
35	12F		(TTF) REL
9	5F		
54	12F		(MT15) REL
53	10F		
52	9F		
51	8F		
50	7F		
49	6F		(FTT3) REL
48	5F		
47	4F		
46	3F		
45	2F		
44	1F		
43	11F		(MT15) REL
42	12M		
40	12F		(FTB3) REL
39	8F		(20F) REL
38	7F		
37	11M		(MT15) REL
28	6F		(20F) REL
27	4M		(MT15) REL
26	5F		(20F) REL
25	3F		(FUT8) REL
24	3F		(FUT4) REL
23	3M		(MT15) REL
22	4F		(20F) REL
21	3F		
20	2F		
19	2M		(MT15) REL
18	3F		(FUT6) REL
17	1F		(20F) REL
16	3F		(FUT2) REL
15	3F		(FUT0) REL
14	1F		(40F) REL
13	1M		(MT15) REL
12	6F		(FUT2) REL
10	3M		(FUT0) REL

DRAWING ISSUE

1	
2D	
3D	
5D	
6B	
8D	
12D	
16D	
30D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

US

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CAD 6

(FOR APP. FIG. 6)

41	(VGT11)	11M	
40	(VGT10)	10M	(VGG2) REL
34	(VGT9)	9M	
33	(VGT8)	8M	
32	(VGT7)	11M	
31	(VGT6)	10M	
30	(VGT5)	9M	
24	(VGT4)	8M	
23	(VGT3)	4M	(VGG1) REL
22	(VGT2)	3M	
21	(VGT1)	2M	
20	(VGTO)	1M	

TO CAD 32 (LLMC-A)

44	(VF4)	4F	(VFT4) REL
40	(VFO)	4F	(VFTO) REL
24	(VG7)	10F	(VGT9) REL
23	(VG4)	10F	(VGT6) REL
22	(VG2)	8F	(VGT9) REL
21	(VG1)	8F	(VGT11) REL
20	(VG0)	8F	(VGT10) REL
14	(VG10)	10F	(VGT11) REL

TO CAD 31 (ORLM - D2)

54	(HG7)	10F	(HGT5) REL
53	(HG4)	10F	(HGT6) REL
52	(HG2)	8F	(HGT9) REL
51	(HG1)	8F	(HGT8) REL
50	(HG0)	8F	(HGT7) REL

TO CAD 31 (ORLM - D1)

34	(VGB9)	3M	(VGT9) REL
33	(VGB8)	3M	(VGT8) REL
32	(VGB7)	3M	(VGT7) REL
31	(VGB6)	3M	(VGT6) REL
30	(VGB5)	3M	(VGT5) REL
24	(VGB4)	3M	(VGT4) REL
20	(VGB0)	3M	(VGTO) REL
14	(VGB11)	3M	(VGT11) REL
13	(VGB10)	3M	(VGT10) REL
12	(HGK)	U	(HGK) REL

TO CAD 33 (LLC-A1)

41	(VGA11)	6M	(VGT11) REL
40	(VGA10)	6M	(VGT10) REL
34	(VGA9)	6M	(VGT9) REL
33	(VGA8)	6M	(VGT8) REL
32	(VGA7)	6M	(VGT7) REL
30	(VGA5)	6M	(VGT5) REL
24	(VGA4)	6M	(VGT4) REL
20	(VGA0)	6M	(VGTO) REL
14	(HGT9)	12M	
13	(HGT8)	11M	
12	(HGT7)	10M	
11	(HGT6)	8M	
10	(HGT5)	7M	(HGG) REL
4	(HGT4)	5M	
3	(HGT3)	4M	
2	(HGT2)	3M	
1	(HGT1)	2M	
0	(HGTO)	1M	

TO CAD 32 (LLMC-B)

84		6	(FTK1) REL
VGTO		4	(VGTO) REL
VGT11		4	(VGT11) REL
RAV		10M	(VTK11) REL
RCY		8M	

TO CAD 49

44	(LH4)	11F	(VFT4) REL
40	(LHO)	11F	(VFTO) REL
34	VFT4	8B	(MT11) REL
30	(VFTO)	4B	
24	(V4)	1F	(VFT4) REL
20	(VO)	1F	(VFTO) REL

(LLC-B2)

54	(HG9)	3M	(HGT9) REL
50	(HG5)	3M	(HGT5) REL
44	(HG4)	3M	(HGT4) REL
40	(HGO)	3M	(HGTO) REL

(LLC-A1)

TO CAD 33

29	(HGT9)	12F	
28	(HGT8)	11F	
27	(HGT7)	10F	
26	(HGT6)	8F	
25	(HGT5)	7F	
24	(HGT4)	5F	(HGG) REL
23	(HGT3)	4F	
22	(HGT2)	3E	
21	(HGT1)	2F	
20	(HGTO)	1F	
19	(VFT4)	6F	
18	(VFT3)	4F	
17	(VFT2)	3F	(VFG) REL
16	(VFT1)	2F	
15	(VFTO)	1F	

TO CAD 34 (MTFC-C4)

11	(VGT11)		
10	(VGT10)		
9	(VGT9)		(VGG2) REL
8	(VGT8)		
7	(VGT7)		
6	(VGT6)		
5	(VGT5)		
4	(VGT4)		
3	(VGT3)		(VGG1) REL
2	(VGT2)		
1	(VGT1)		
0	(VGTO)		

(MTFC-A8)	8	(VTK1)	4F (VTK1) REL
(MTFC-A6)	26	(FTK1)	7F (VFG) REL
	25	(HTK1)	6F (HTK1) REL
(MTFC-A7)	24	(SOA)	10F (SOA) REL

TO CAD 34

24	(VF4)	6	(VFT4) REL
20	(VFO)	6	(VFT0) REL

TO CAD 33

7	8M	(JSQ3) REL
6	6M	(JSQ2) REL

TO CAD 44

TO CAD 16 — FR — L — (FR) REL

CONNECT WHEN DIAL TRANSFER IS PROVIDED

JSM		7F	(JSQ2) REL
JSL		7F	(JSQ0) REL
JSP		7F	(JSQ5) REL
VGR11		11F	(VGT11) REL
VGRO		11F	(VGTO) REL

TO CAD 37

46	(KJSQ)	4M	(MT8) REL
45	(JSQ5)	U	(JSQ5) REL
40	(JSQ0)	U	(JSQ0) REL
	SMFR DISC		
39	(MT8K)	9F	(MT8) REL

33	(LHMT)	9B	
32	(LHM)	9F	(MT11) REL
31	(CSG2)	3B	
30	(CSG1)	3F	

TO CAD 34 (MTFC-T3)

19	(TVFT4)	8F	
18	(TVFT3)	7F	
17	(TVFT2)	6F	(MT11) REL
16	(TVFT1)	5F	
15	(TVFTO)	4F	
14	(VGA)	6F	(VGTO) REL

45	(JSQ5)	8M	
44	(JSQ4)	6M	
43	(JSQ3)	4M	(MT8A) REL
42	(JSQ2)	3M	
41	(JSQ1)	2M	
40	(JSQ0)	1M	

TO CAD 49	36	10M	
TO CAD 34 (MTFC-C5)	37	10	(MT11) REL
TO CAD 37 (LFM)	LFM	10B	

CONNECT WHEN 3 TO 6 OR16 RE6 GROUPS ARE PROVIDED. LOOP WHEN LESS THAN 3 GROUPS ARE PROVIDED.

DRAWING ISSUE
1
2D
3D
5D
6B
7B
12D
13D
16D
18D
19A
30D
35D

SD-26001-01-G5

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G5

BELL TELEPHONE LABORATORIES, INC 6S 35

CAD 7

(FOR APP FIG 7)

TO CAD 30 — (TLC-A1)

34	(BT9)	4M		
33	(BT8)	2M		(TS4) REL
32	(BT7)	4M		
31	(BT6)	2M		(TS3) REL
30	(BT5)	4M		
24	(BT4)	2M		(TS2) REL
23	(BT3)	4M		
22	(BT2)	2M		(TS1) REL
21	(BT1)	4M		
20	(BT0)	2M		(TS0) REL
11	(TSX)	8F		(TSE1) REL

TO CAD 16

OTS	MFR DISC. 5→7		(OTS) REL
ETS	5→7		(ETS) REL

TO CAD 25

43	(OTS1)	4F	
42	(OTS0)	1M	(MT6) REL
41	(ETS1)	10F	
40	(ETS0)	2M	
9	(TT9)	10M	
0	(TT0)	1M	(MT5) REL

A&M ONLY

TO CAD 37 — NCSL — U — (NCSL) REL

(MTFC-T3)	38	(MT5)	12M	(MT6) REL
(MTFC-T2)	42	(TSE2)	U	(TSE2) REL
(MTFC-C5)	52	(TSE)	2F	(TSE1) REL

TO CAD 34 — (MTFC-A7)

9	(TS9)	3F	(TS4) REL
8	(TS8)	1F	
7	(TS7)	3F	(TS3) REL
6	(TS6)	1F	
5	(TS5)	3F	(TS2) REL
4	(TS4)	1F	
3	(TS3)	3F	(TS1) REL
2	(TS2)	1F	
1	(TS1)	3F	(TS0) REL
0	(TS0)	1F	

PLN7	U	(PLN7) REL
PBX7	U	(PBX7) REL
PLN	U	(PLN) REL
PLN5	U	(PLN5) REL
PBX5	U	(PBX5) REL

TO CAD 37

TO CAD 31 — 1, 2

49	1M	(PBX5) REL
48	1M	(PLN) REL

TO CAD 34 (MTFC-C5)

TO CAD 37 — PLNC — U — (PLNC) REL

A&M ONLY

SEE NOTE 202

A&M ONLY. DO NOT CONNECT WHEN LLP OR CENTREX PAD CONTROL IS PROVIDED

CAD 8

(FOR APP FIG 8)

DO NOT CONNECT WHEN CENTREX WITH 60 CLASSES OR FULL TRANSLATION OF 60 CS- POINTS IS PROVIDED

TO CAD 55 (LLC-A1)

4		U	(CSGB) REL
3		U	(CSGA) REL
11	(CGA)		
54	(CS29)	3U	(CS9) REL
50	(CS25)	3U	(CS5) REL
44	(CS24)	3U	(CS4) REL
40	(CS20)	3U	(CS0) REL

34	19 (CS19)	2U	U	(CS9) (CSU9) REL
30	15 (CS15)	2U		(CS5) (CSU5) REL
24	14 (CS14)	2U	U	(CS4) (CSU4) REL
20	10 (CS10)	2U	U	(CS0) (CSU0) REL
14	(CS9)	1U		(CS9) REL
10	(CS5)	1U		(CS5) REL
4	(CS4)	1U		(CS4) REL
2	02 (CS2)	1U	U	(CS2) (CST2) REL
1	01 (CS1)	1U	U	(CS1) (CST1) REL
0	00 (CS0)	1U	U	(CS0) (CST0) REL

A&M ONLY

TO CAD 33 (LLC-B1)

TO CAD 34 — 48 (2PMR) REL

TO CAD 31 — (ORLM-D2)

53		48 (2PMR) REL		
34	(CU7)	6F	3F	(CS9) (CSU9) REL
33	(CU6)	6F	3F	(CS6) (CSU9) REL
32	(CU2)	4F		(CS9) (CSU9) REL
31	(CU1)	4F		(CS8) (CSU8) REL
30	(CU0)	4F		(CS7) (CSU7) REL

A&M ONLY

(ORLM-D1)

24	(CGB)	U	4F	(CGB1) (CSGB) REL
23	(CGA)	U	4F	(CGA1) (CSGA) REL
22	(GT2)		13F	WHEN RATE TREATMENT IS PROVIDED
21	(CT1)		14F	(GTL3 REL.
20	(CT0)		13F	
04		U		(NPBX) REL

CONNECT ONLY WHEN RATE TREATMENT IS NOT PROVIDED

TO CAD 16 — F4 — L (RK2) REL

TO CAD 53 — 45 — 12M — (GTL2) REL

LOOP AT UNEQUIPPED POSITION

TO CAD 37

CST9		10M	(CSA9) REL
CST3		4M	

TO CAD 22

CST9			
CST3			

TO CAD 58A — 13, 11, 1 — U, 2F, 2M — (GTL3) REL

YV, XA

TO CAD 37 — (2PMR) REL

2PMR	U		(2PMR) REL
AOMR	U		(AOMR) REL
CS29	12F		(CS9) (CSU9) REL
CS20	12F		(CS0) (CSU0) REL
CS19	11F		(CS9) (CSU9) REL
CS10	11F		(CS0) (CSU0) REL
CS09	10F		(CS9) (CSU9) REL
CS00	10F		(CS0) (CSU0) REL
2P	4F		(2PMR) REL A&M ONLY
AO	U		(AO) REL
CN	U		(CN) REL
MAN	U		(MAN) REL
MCN	U		(MCN) REL
PBX	U		(PBX) REL

TO CAD 34 — (MTFC-C4)

13			10M	A&M ONLY (CGB1) REL.
12			10M	(CGA1) REL.

(MTFC-A7)

23	(RK3)		2F	(RK3) REL
22	(RK2)		6F	(RK2) REL
21	(RK1)		6F	(RK1) REL

TO CAD 36

CONNECT ONLY WHEN RATE TREATMENT IS NOT PROVIDED

(MTFC-A6)

31	(CT2)		U	(CT2) REL
30	(CT1)		U	(CT1) REL
29	(CT0)		U	(CT0) REL

TO CAD 53

49		8	(CST0) REL
50		8	(CST1) REL
51		8	(CST2) REL
54	(WAT)	22	(GTL2) REL

TO CAD 49

85		11	(RK2) REL
93		6	(RK3) REL
102		4	(RK9) REL

TO CAD 55

28		1M	(GTL2) REL
27		6	(GN) REL
26		U	(RK2) REL

TO CAD 56

16		10M	(HGCI) REL
15		6M	(CSGA) REL
14		21	(GTL2) REL

TO CAD 58A — 6, 12 — 2F, U — (GTL2) REL

CAD 9

(FOR APP FIG 9)

TO CAD 52

7	(CWL)	12	(CWL) REL
6	(NCW)	5	(NCW) REL
5	(RLK)	2	(RLK) REL
RING 6		4	(CON) VT

TO CAD 37

HMF			(HMF) RES
HMS			(HMS) RES
HMT		+2	(HMT) REL

MTFC-T2

00	(BTT)	6	(GTI) REL
01	(BRT)	4B	

TO CAD 34

49	(EXT)	11F	(HMTI) REL.
24	(TRR)	8M	(LHT) REL

(MTFC-T2)

14	(LK2)	8B	(LHT) REL
3	(TRT)	11B	(GTI) REL
2	(TTT)	12F	(GTI) REL

(MTFC-A1C)

12	(CWF)	1L	(CWF) REL

(MTFC-C4)

57	(DCT)	3	(DCT) REL.
56	(SL)	3F	(SLA) REL
37	(CON)	4F	(GLH) REL

(MTFC-C5)

45	(HTR)	U	(HTR) REL

(MTFC-B4)

27	(HMSI)	U	(HMSI) REL.

(MTFC-A8)

7	(XLH)	10F	(LHT) REL
1	(DCT1)	1F	(DCT1) REL
0	(LXPI)	7F	(LXPI) REL
	(JXPI)		
5	(CHE)	7F	(JXPI) REL
47	(JXPA)	10F	(JXPA) REL

(MTFC-A6)

34	MFR DISC. (FCG) +1 +2		(FCG) REL
	(FSG)	4	(GLH) REL
33	(GT2)	3F	(GTI) REL
32	(GLH)	6F	(GLH) REL
37	(LXPA)	10F	(LXPA) REL.

TO CAD 32 (LLMC-A)

44	(TRS)	7M	(GTI) REL

TO CAD 53

55	(NSC)	10M	(LXPI) REL

TO CAD 56

13		7B	(JXPA) REL

TO CAD 58A

14		U	(DVO) REL

MFR DISC.

TO CAD 26

16	(ST)	11F	(HMSI) REL
0	(CCT)	4M	(GLHI) REL.

TO CAD 53

35		4M	(TTFO) REL
34		3M	
33		2M	
32		1M	

TO CAD 25 — 93 — (ORS) — 11M — (HMSI) REL

TO CAD 49

103		U	(LTR) REL
34		11	(HMSI) REL

TO CAD 33

31	(CWL)	1U	(CWL) REL
13	(NCW)	1L	(NCW) REL
30	(CWK)	1U	(CWK) REL

DRAWING ISSUE

1	
2D	
3D	
4AR	
5D	
6S	
8D	
9B	
0B	
1D	
2D	
3D	
15D	
16D	
17AC	
18D	
19A	
21A	
22D	
24D	
28D	
30D	
33D	

DIAL TOKE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

SHEET 6S

ISSUE 43B

SD-26001-01-G6

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CAD 7

(FOR APP FIG 7)

SEE NOTE 202
A&M ONLY. DO NOT CONNECT WHEN LLP OR CENTREX PAD CONTROL IS PROVIDED

TO CAD 30 (TLC-A1)
34 (BT9) 4M (TS4) REL
33 (BT8) 2M
32 (BT7) 4M (TS3) REL
31 (BT6) 2M
30 (BT5) 4M (TS2) REL
24 (BT4) 2M
23 (BT3) 4M (TS1) REL
22 (BT2) 2M
21 (BT1) 4M (TS0) REL
20 (BT0) 2M
11 (TSX) 8F (TSE1) REL

TO CAD 16
OTS — MFR DISC. 5 → 7 (OTS) REL
ETS — 5 → 7 (ETS) REL

TO CAD 25
43 (OTS1) 4F
42 (OTS0) 1M (MT6) REL
41 (ETS1) 10F
40 (ETS0) 2M
9 (TT9) 10M (MT5) REL
0 (TT0) 1M

A&M ONLY
TO CAD 37 NCSL U (NCSL) REL

(MTFC-T3) 38 (MTS) 12M (MT6) REL
(MTFC-T2) 42 (TSE2) U (TSE2) REL
(MTFC-C5) 52 (TSE) 2F (TSE1) REL

TO CAD 34
(MTFC-A7)
9 (TS9) 3F (TS4) REL
8 (TS8) 1F
7 (TS7) 3F (TS3) REL
6 (TS6) 1F
5 (TS5) 3F (TS2) REL
4 (TS4) 1F
3 (TS3) 3F (TS1) REL
2 (TS2) 1F
1 (TS1) 3F (TS0) REL
0 (TS0) 1F

PLN7 U (PLN7) REL
PBX7 U (PBX7) REL
TO CAD 37 PLN U (PLN) REL
PLN5 U (PLN5) REL
PBX5 U (PBX5) REL
TO CAD 31 1
2

TO CAD 34 (MTFC-C5) 49 1M (PBX5) REL
48 1M (PLN) REL
TO CAD 37 A&M ONLY PLNC U (PLNC) REL

CAD 8

(FOR APP FIG 8)

DO NOT CONNECT WHEN CENTREX WITH 60 CLASSES OR FULL TRANSLATION OF 60 CS- POINTS IS PROVIDED

TO CAD 35 (LLC-A1)
4 U (CSGB) REL
3 U (CSGA) REL
11 (CGA)
54 (CS29) 3U (CS9) REL
50 (CS25) 3U (CS5) REL
44 (CS24) 3U (CS4) REL
30 (CS20) 3U (CS0) REL

TO CAD 33 (LLC-B1)
34 19 (CS19 3U) U → (CS9) (CSU9) REL
30 15 (CS15) 2U → (CS5) (CSU5) REL
24 14 (CS14 2U) U → (CS4) (CSU4) REL
20 10 (CS10 2U) U → (CS0) (CSU0) REL
14 (CS9) 1U (CS9) REL
10 (CS5) 1U (CS5) REL
4 (CS4) 1U (CS4) REL
2 02 (CS2) 1U U → (CS2) (CST2) REL
1 01 (CS1) 1U U → (CS1) (CST1) REL
0 00 (CS0) 1U U → (CS0) (CST0) REL A&M ONLY

53 4B (2PMR) REL
TO CAD 31 (ORLM-D2)
34 (CU7) 6F 3F → (CS9) (CSU9) REL
33 (CU4) 6F 3F → (CS6) (CSU9) REL
32 (CU2) 4F → (CS5) (CSU9) REL
31 (CU1) 4F → (CS8) (CSU8) REL
30 (CU0) 4F → (CS7) (CSU7) REL A&M ONLY

(ORLM-D1)
24 (CGB) U 4F → (CGB1) → (CSGB) REL
23 (CGA) U 4F → (CGA1) → (CSGA) REL
22 (CT2) 6F
21 (CT1) 4F (GTL3 REL.
20 (CT0) 2F
WHEN RATE TREATMENT IS PROVIDED
CONNECT ONLY WHEN RATE TREATMENT IS NOT PROVIDED

TO CAD 58A 04 U
82 6F (NPBX) REL
TO CAD 16 F4 L (RK2) REL
TO CAD 53 48 12M (GTL2) REL

LOOP AT UNEQUIPPED POSITION
TO CAD 37 CST9 10M
CST3 4M (CSA9) REL
TO CAD 22 CST9
CST3
TO CAD 58A 13 U
11 2F (GTL3) REL
1 2M
YY, YA

TO CAD 34
2PMR U (2PMR) REL
AOMR U (AOMR) REL
CS29 12F → (CS9) (CSU9) REL
CS20 12F → (CS0) (CSU0) REL
CS19 11F → (CS9) (CSU9) REL
CS10 11F → (CS0) (CSU0) REL
CS09 10F → (CS9) (CSU9) REL
CS00 10F → (CS0) (CSU0) REL
2P 4F (2PMR) REL A&M ONLY
AO U (AO) REL
CN U (CN) REL
MAN U (MAN) REL
MCN U (MCN) REL
PBX U (PBX) REL

TO CAD 37
(MTFC-C4)
13 10M (CGB1) REL. A&M ONLY
12 10M (CGA1) REL.
(MTFC-A7)
23 (RK3) 2F (RK3) REL
22 (RK2) 6F (RK2) REL
21 (RK1) 6F (RK1) REL

TO CAD 34
(MTFC-A6)
31 (CT2) U (CT2) REL
30 (CT1) U (CT1) REL
29 (CT0) U (CT0) REL
CONNECT ONLY WHEN RATE TREATMENT IS NOT PROVIDED

TO CAD 53
49 8 (CST0) REL
50 8 (CST1) REL
51 8 (CST2) REL
54 (WAT) 22 (GTL2) REL

TO CAD 49
85 U (RK2) REL
93 2 (RK3) REL
102 4 (RK3) REL

TO CAD 55
28 1M (GTL2) REL
27 6 (CN) REL
26 U (RK2) REL

TO CAD 56
16 10M (HGCI) REL
15 6M (CSGA) REL
14 2I (GTL2) REL

TO CAD 58A
6 2F (GTL2) REL
12 U
7 4F (CLL2) REL
81 6F (AO) REL
83 9F (CSGA) REL

CAD 9

(FOR APP FIG 9)

TO CAD 52
7 (CWL) 12 (CWL) REL
6 (NCW) 5 (NCW) REL
5 (RLK) 2 (RLK) REL
RING G 4 (CON) VT
TO CAD 37 HMF (HMF) RES
HMS (HMS) RES
HMT +2 (HMT) REL

(MTFC-T2)
00 (BTT) 6
01 (BRT) 4B (GTI) REL

(MTFC-T2)
49 (EXT) 11F (HMTI) REL
24 (TRR) 8M (LHT) REL
(MTFC-T2) 14 (LK2) 8B (LHT) REL
3 (TRT) 11B (GTI) REL
2 (TTT) 12F (GTI) REL
(MTFC-A16) 12 (CWF) 1L (CWF) REL

(MTFC-C4)
57 (DCT) 3 (DCT) REL
56 (SL) 3F (SLA) REL
37 (CON) 4F (GLH) REL
(MTFC-C5) 45 (HTR) U (HTR) REL
(MTFC-B4) 27 (HMSI) U (HMSI) REL.

(MTFC-A6)
7 (XLH) 10F (LHT) REL
1 (DCTI) 1F (DCTI) REL
0 (LXPI) 7F (LXPI) REL
(JXPI)
5 (CHE) 7F (JXPI) REL
47 (JXPA) 10F (JXPA) REL

(MTFC-A6)
MFR DISC. +1 +2
54 (FCG) (FCG) REL
(FCG) 4 (GLH) REL
33 (GT2) 3F (GTI) REL
32 (GLH) 6F (GLH) REL
37 (LXPA) 10F (LXPA) REL

TO CAD 32 (LLMC-A1) 44 (TRS) 7M (GTI) REL
TO CAD 55 [illegible] (ASC) 12M ([illegible]) REL
TO CAD 56 13 7B (JXPA) REL
TO CAD 58A 14 U (DVC) REL

TO CAD 26
MFR DISC.
16 (ST) 11F (HMSI) REL
0 (CCT) 4M (GLHI) REL

TO CAD 53
35 4M
34 3M
33 2M (TTFO) REL
32 1M

TO CAD 25 93 (ORS) 11M (HMSI) REL

TO CAD 49
103 U (LTR) REL
34 11 (HMSI) REL

TO CAD 33
31 (CWL) 1U (CWL) REL
13 (NCW) 1L (NCW) REL
30 (CWK) 1U (CWK) REL

DRAWING ISSUE
1 ALL
2D FMB
3D FMB
4AR CAN GA
5D ALL
6B COM PD
8D ALL
9E CH VIN
10B ALL
11D ALL
12D ALL
13D DCT JDP AND MET
15D EPM AND BB
16D EPM AND SS
17AC EPM AND
18D CS SW AND AB
19A SW AND MS
21A PAT AND MS
22D PAT AND CK
24D SN AND REL
28D
33D

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES, INC
6S
ISSUE 46A
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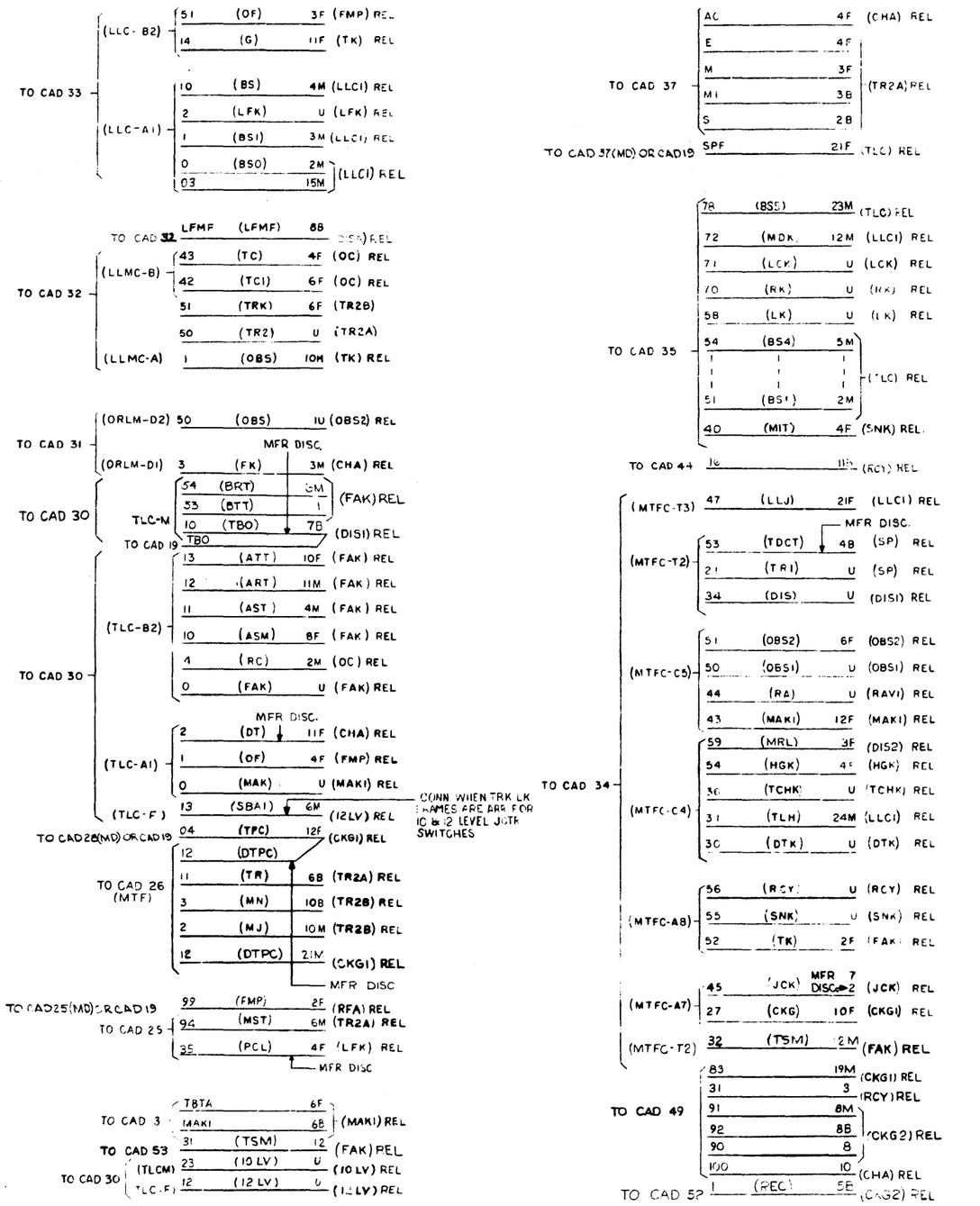
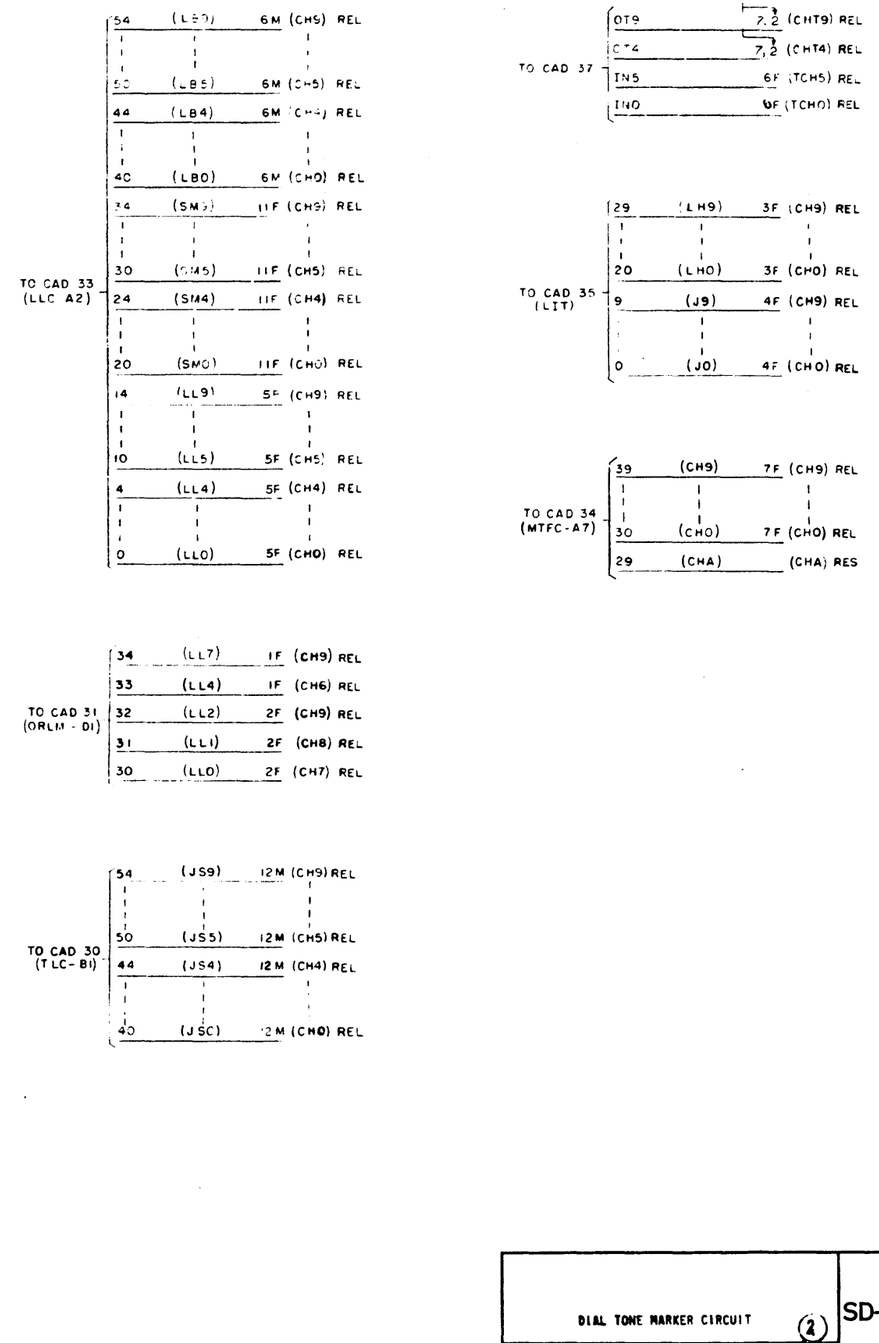
CAD 10

(FOR APP FIG 10)



CAD 11

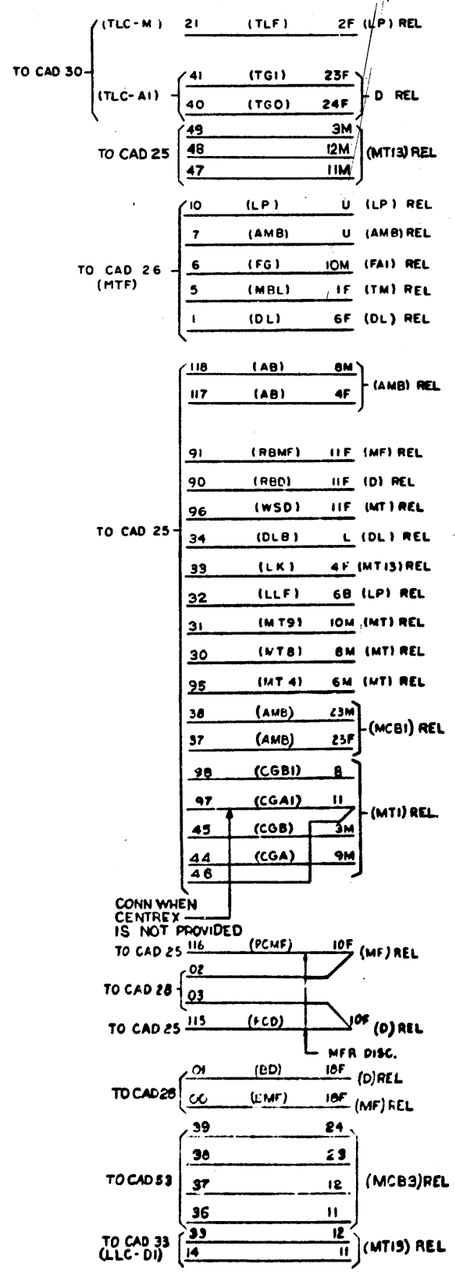
(FOR APP FIG 11)

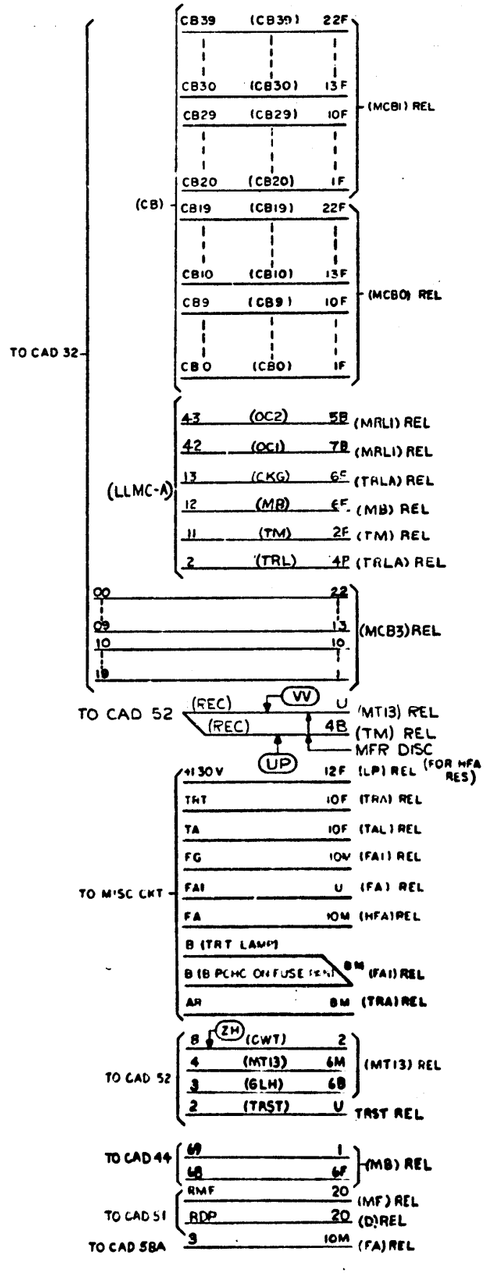


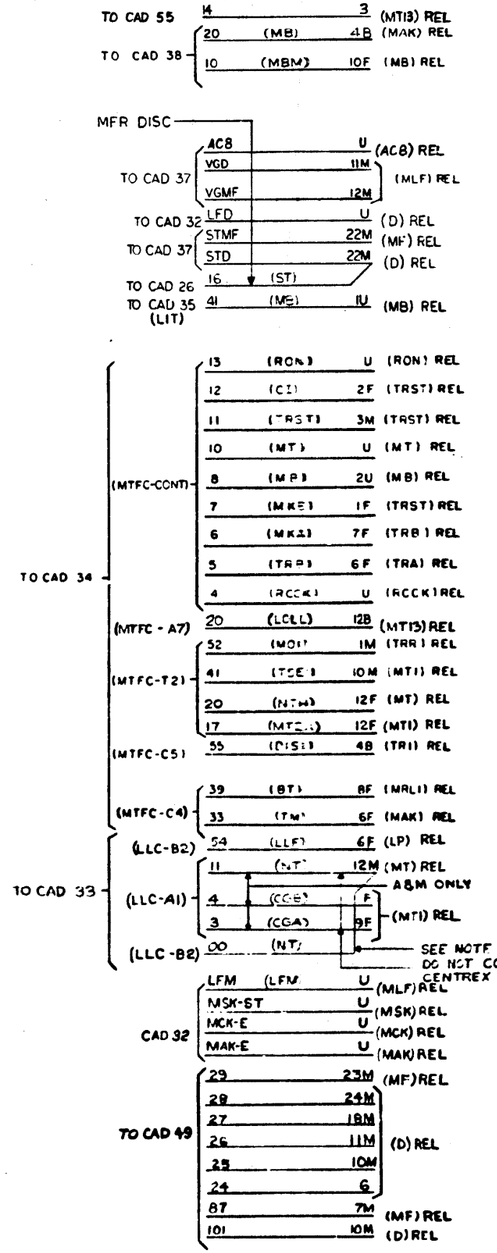
DRAWING ISSUE

1
2D
3D
5D
6B
8D
12D
13D
15D
15D
18D
19A
20D
22D
23A
28D
30D
33D CR

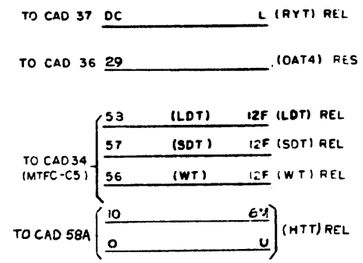
CAD 12
(FOR APP FIG. 12)







CAD 13
(FOR APP FIG. 13)



DRAWING ISSUE

1	
2D	
3D	
4AR	
5D	
5B	
8D	
9B	
10B	
11D	
12D	
15D	
16D	
17AC	
18D	
23A	
24D	
28D	
33D	
35D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

ISSUE 43B

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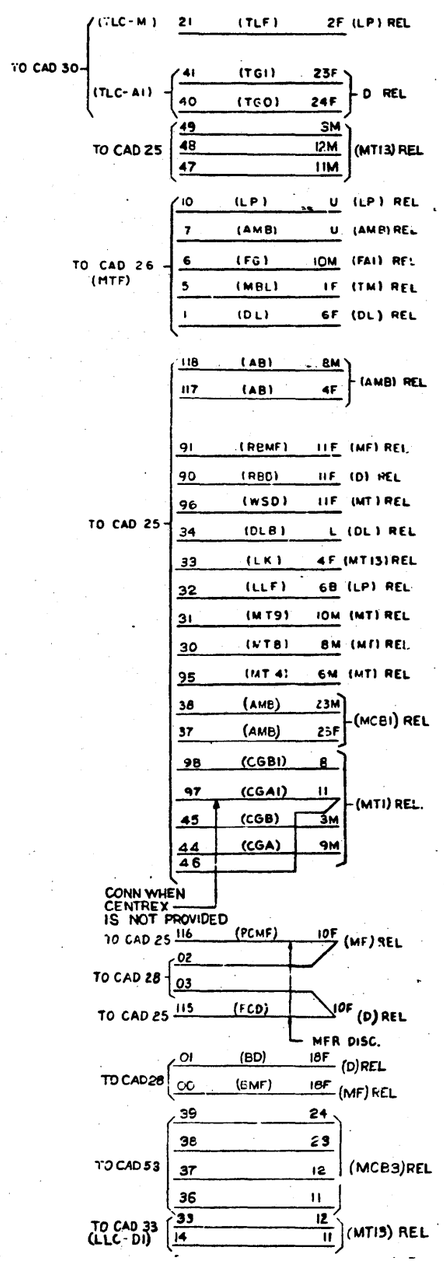
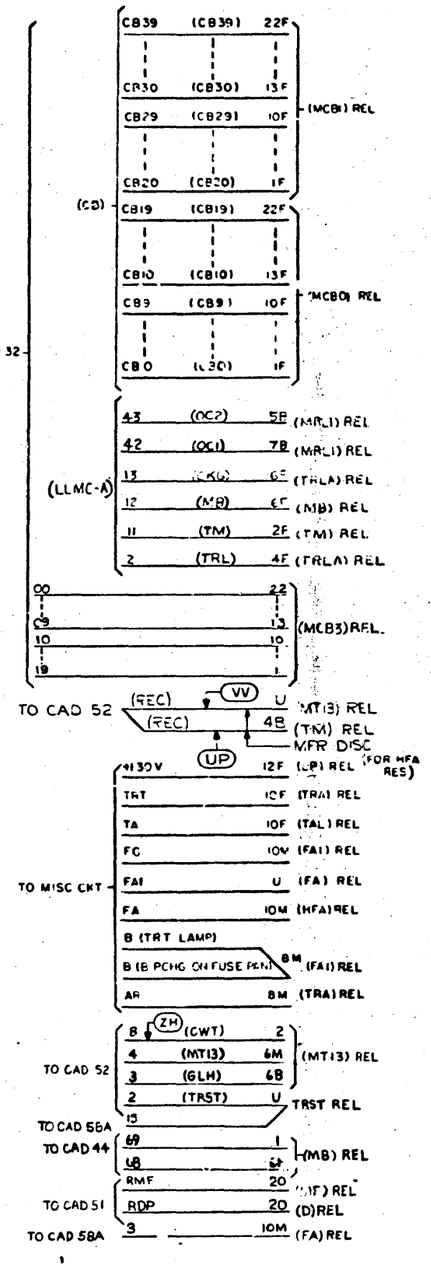
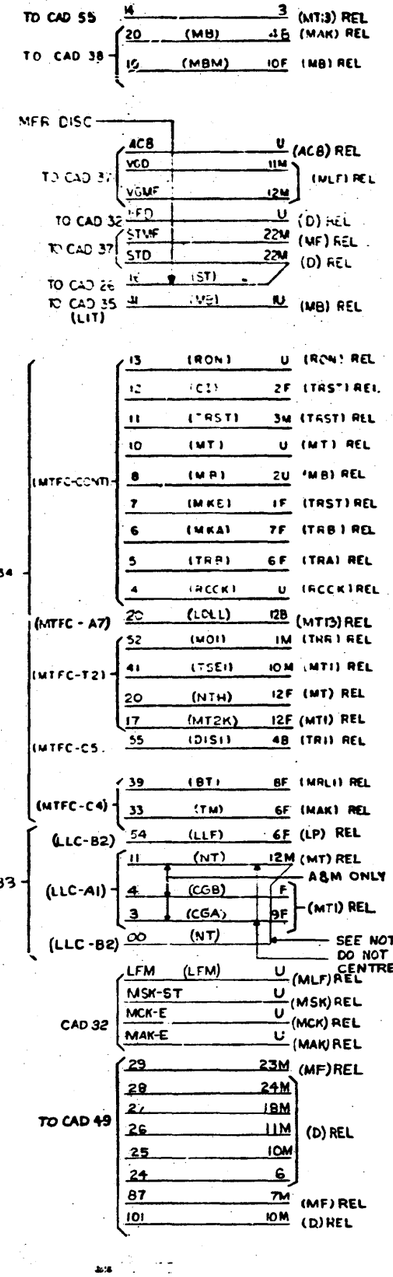
SD-26001-01-G8

CAD 12

(FOR APP FIG. 12)

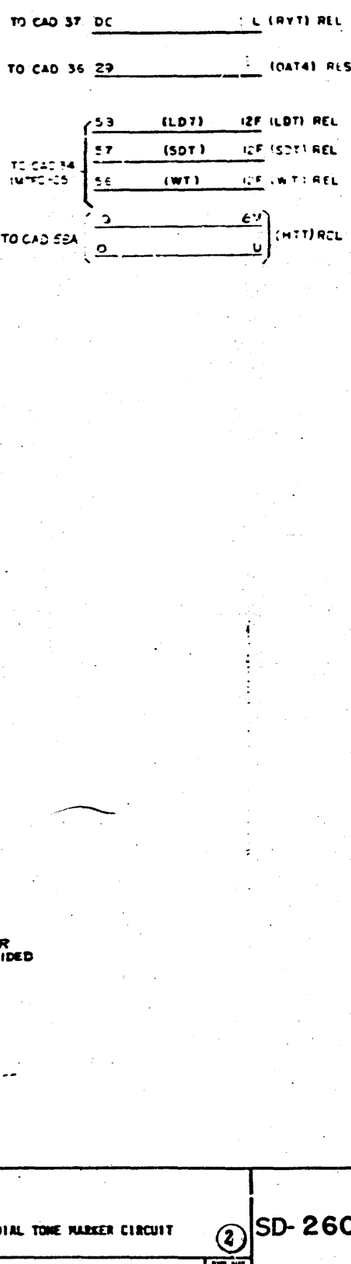






CAD 13

(FOR APP FIG. 13)



DRAWING ISSUE

1	
2D	
3D	
4AB	
5D	
6B	
8D	
8B	
10B	
10D	
12D	
15D	
16D	
17BC	
18D	
23A	
24D	
28D	
33D	
35D	

SD-26001-01-G8

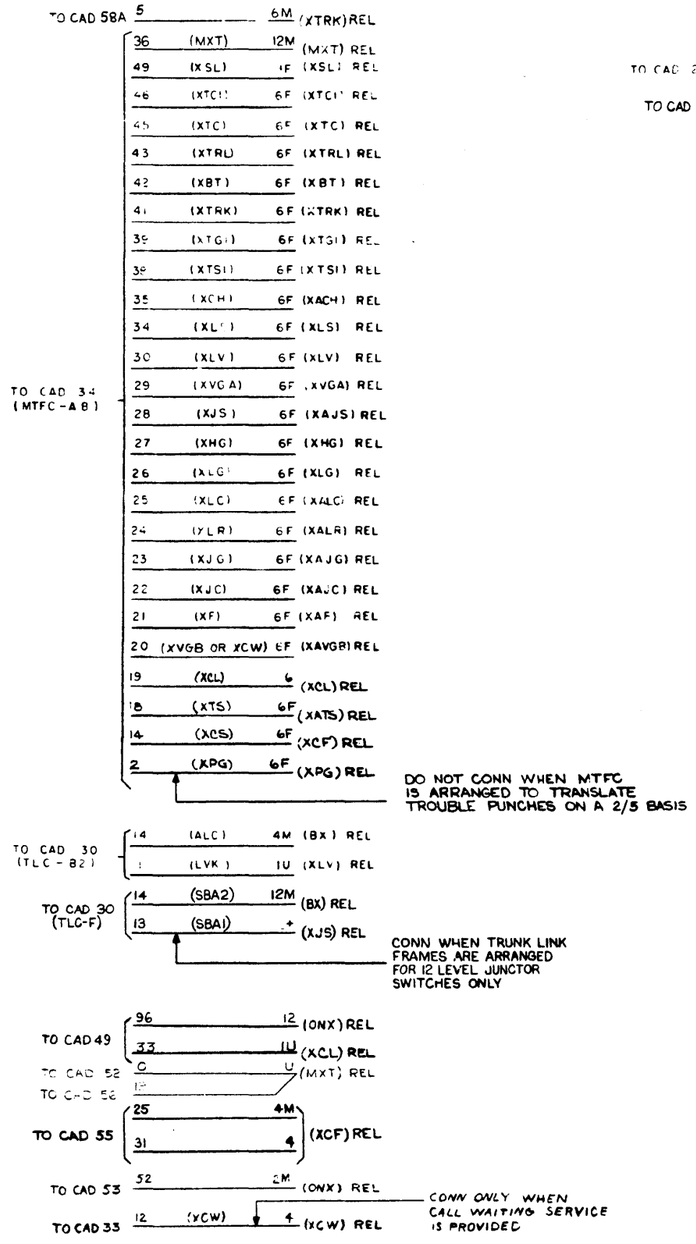
DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC 6S

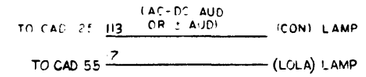
ISSUE 16A

SD-26001-01-G8

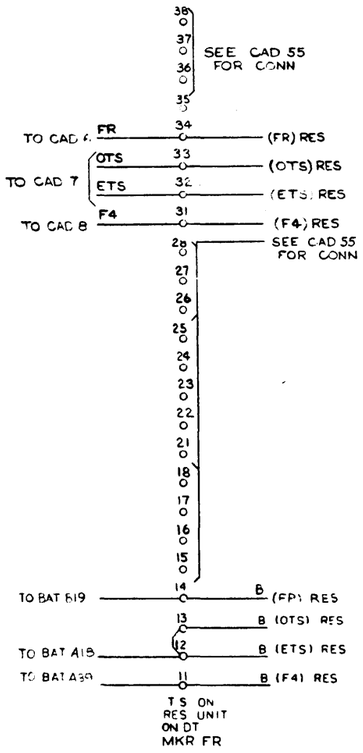
CAD 14
(FOR APP FIG 14)



CAD 15
(FOR APP FIG 15)



CAD 16
(FOR APP FIG 16)



DRAWING ISSUE

2D	FM A
3D	FM B
5D	393 ARC
65	CALL PD
120	J88
6D	MAR CAP AND
180	SS LV AND
200	PEC LV AND
220	MS CAP AND
280	DM
300	
330	

SD-26001-01-69

DIAL TONE MARKER CIRCUIT (2)		ISSUE 43B
BELL TELEPHONE LABORATORIES, INC	6S	SD-26001-01-G9

CAD 17
(FOR APP FIG.17)

71	10	(FCO 20) REL
70	1	
69	1F	(FS 25) REL
40	1F	
39	1F	
38	1F	
37	1F	(FS 25) REL
36	8F	
35	6F	
34	2M	(FS 20) REL
33	1M	
32	8M	
31	6M	
30	6F	(FMG 25) REL
29	4M	
27	7F	
26	7B	
25	8M	
24	8F	(FMG 20) REL
23	10M	
22	U	(CM 20) REL
21	11M	TO CAD 43 (FMC)
20	11F	(MT 24) REL
19	U	
18	6B	(FTC 29) REL
17	6B	(FTC 28) REL
16	6F	(FTC 29) REL
15	6F	
14	6F	
13	6F	
12	6F	
11	6F	
10	6F	
9	6F	
8	6F	(FTC 21) REL
7	10F	
6	6F	(FTC 20) REL
5	4F	
4	11B	
3	U	(MT 29) REL
2	11M	
1	11F	(FCD 20) REL
0	U	

TO CAD 43 (GRD)	0	(G24)	4M (FTC 29) REL
	3	(B26)	L (FB 25) REL
TO CAD 43 (BAT)	2	(B25)	L (FB 24) REL
	1	(B24)	L
	0	(B23)	1B (MT 24) REL
	22	(FS 29)	4F (FS 29) REL
	20	(FS 27)	4F (FS 27) REL
	14	(FS 26)	4F (FS 26) REL
TO CAD 34 (MTFC - B6)	10	(FS 22)	4F (FS 22) REL
	14	(FS 21)	4F (FS 21) REL
	03	(FS 20)	4F (FS 20) REL
	9	(FTC 29)	10M TO OTHER TLL SEL UNITS ON SDT MKR FR (MT 29) REL
TO CAD 25 (CFC)	0	(FTC 20)	1M
	139	(FTC 29)	10M (FCM 20) REL
	130	(FTC 20)	1M
TO CAD 29 (FTC)	129	(FTC 29)	10M (FCD 20) REL
	120	(FTC 20)	1M
		(FB0 29) (FBE 29)	10M (BC 20) REL
	59		
		(FB0 20) (FBE 20)	1M
TO CAD 30 (TLC)	50		
	49	(ST 29)	8M (FS 29) REL
	40	(ST 20)	8M (FS 20) REL

130	6M	
129	11F	
128	10M	(FTB4) REL
127	10F	
126	9M	
125	9F	
124	8M	
123	8F	(FTB5) REL
122	7F	
121	6M	
120	11M	(FTB4) REL
119	10F	(FTA2) REL

TO CAD 43 (SDT MKR FR)

CAD 18
(FOR APP FIG.18)

41	12M	
40	12F	
39	5F	(FTB4) REL
38	2F	
37	U	
35	6F	(FTA4) REL
30	6M	(F9A) REL
29	6B	(FTA2) REL
28	8F	(FTA3) REL
27	U	
26	8F	
25	2M	(FTA2) REL
24	1M	
23	U	
22	8F	
21	2F	TO CAD 43 (60/30) (FTA1) REL
20	1F	
19	U	
18	4M	
17	4F	
16	2M	(FTA0) REL
15	1M	
14	1F	
13	U	
12	10M	
11	10F	
10	8F	(60F) REL
9	U	
8	8M	
7	8F	
6	6B	(7TFA) REL
5	U	
4	10F	
3	1M	
2	1F	(6TFA) REL
1	L	
0	U	
ST59	10M	
ST50	1M	(FTT5) REL
ST49	10M	TO CAD 33
ST40	1M	(FTT4) REL

81	U	(P5A) REL
77	10F	
76	U	(P1A) REL
75	U	
74	8F	
73	7F	
72	6F	(P0A) REL
70	U	
69	L	
68	U	(MCB2) REL
67	12F	
66	11F	
65	9M	
64	9F	
63	7B	
62	7F	
61	6F	TO CAD 43 (60/30) (GCA) REL
60	4M	
59	4F	
58	3M	
57	3F	
56	1M	
55	1F	
54	U	(FTT5) REL
53	10F	
52	9F	
51	8F	
50	7F	
49	6F	
48	5F	(FTT4) REL
47	4F	
46	3F	
45	2F	
44	1F	
43	U	
42	U	(FTB5) REL
CB59	22F	
CB50	13F	(MCB2) REL
CB49	10F	TO CAD 32
CB40	1F	

TO CAD 43 (GRD)	3	(G27)	8M (60F) REL
	2	(G26)	13M (MCB2) REL
	1	(G25)	1M
TO CAD 43 (BAT)	5	(B28)	L (FTB5) REL
	4	(B27)	L (FTT5) REL
	117		12M (P7A) REL
	116		U
	115		12M
	114		12F
	113		10M
	112		10F (STP2A) REL
	111		8M
	110		6M
	109		6F
	108		10F
	107		9F
	106		8F
	105		7F
	104		6F
	103		5F (PE) REL
TO CAD 43 (60/30)	102		4F
	101		3F
	100		2F
	99		1F
	98		L
	97		11M
	96		4M
	95		2M (P9A) REL
	94		1M
	93		U
	92		7M
	91		4M
	90		3M (P8A) REL
	89		U
	88		12F
	87		2F (P7A) REL
	86		U
	85		3M
	84		2M
	83		1M (P6A) REL
	82		U
	30		U (PE) REL
TO CAD 34 (MTFC - 36)	02		U (FTT5) REL
	01		U (FTT4) REL

DRAWING ISSUE

5D	
6B	
12D	
16D	
30D	

CROSSBAR SYSTEMS
NO. 5
DIAL TONE MARKER CIRCUIT (21)

BELL TELEPHONE LABORATORIES INCORPORATED

BW-B 6S

ISSUE 12D

SD-26001-01-GIO

SD-26001-01-GIO

CAD 19
(FOR APP FIG. 19)

LOOP AT UNEQUIPPED POS

TO CAD 10 99 — 12 — TO CAD 25 99 — 12M
TO CAD 10 04 — 11 — TO CAD 28 04 — 11M (2W) REL
TO CAD 37 SPF — 10 — TO CAD 10 SPF — 10M
TO CAD 37 SZD — 9 — TO CAD 4 SZD — 9M
TO CAD 49 82 — 7
TO CAD 58A 2 — 12
TO CAD 37 SZT — 8M — SPT — 7M (DT) REL
TO CAD 53 30 (NC) — 5M
TO CAD 31 1 (PLN) — 6B
TO CAD 56 12 — 7
TO CAD 58A 13 — 2B (DTB) REL

TO CAD 28 C6 — 4M
TO CAD 25 112 — 3M (DTB) REL
TO CAD 58A 1 — 2
(YU)

LOOP AT UNEQUIPPED POSITION
TO CAD 10 TBD — MFR DISC. — 2
TO CAD 30 (TLC-M) 10 — 2B
TO CAD 49 68 — 2B (DT) REL
TO CAD 30 (TLC-B2) 03 — 1
TO CAD 34 (MTFC-A8) 10 — 1B
TO CAD 58A 7 — 11B

TO CAD 50

CAD 20

TO CAD 51:
LFR3 U (R3) REL
LFR2 U (R2) REL
LFR1 U (R1) REL
LFR0 U (R0) REL
LFM 9 (R3) REL
29 10
20 1 (VP2) REL
LFP2 U
19 10
10 1 (VP1) REL
LFP1 U
09 10
00 1 (VP0) REL
LFP0 U
RGO-3
74 (NILFA) 1
73 (R3) 10
72 (R2) 8
71 (R1) 4
70 (R0) 2 (VPT) REL
59 10M
50 1M (VPC) REL
47 (TG5) 6 (R3) REL
44 (TG2) R63 6 (R0) REL
39 R60 L (VP0) REL
37 11M (FCR0) REL
36 U
33 L
32 7M
29 6B
28 6M
27 3M
26 11M
25 10M
24 1 (VPT) REL
23 (R3) 2 (R3) REL
22 (R2) 2 (R2) REL
21 (R1) 2 (R1) REL
20 (R0) 2 (R0) REL

LOOP AT UNEQUIPPED POS
49 11
11M (FCR 20) REL
11
11M (FCR 10) REL
11
(FCR 0) REL
49A 11
11M (FCR 21, REL
11
11M (FCR 11) REL
11
(FCR 1) REL
48 11
11M (FCR 22) REL
11
11M (FCR 12) REL
11
(FCR 2) REL
48A 11
11M (FCR 23) REL
11
11M (FCR 13) REL
11
(FCR 3) REL
19 (FCR 19) 10
10 (FCR 10) (FCR10) REL
9 (FCR 9) 10
0 (FCR 0) (FCR0) REL
69 (FCR 29) 10
60 (FCR 20) (FCR 20) REL

TO CAD 214 218 CR 23:
3 (RBR 3) 11 (R3) REL
0 (RBR0) 11 (R0) REL
27 (BR3) 3 (R3) REL
24 (BR0) 3 (R0) REL
TO CAD 28:
23 (PCR 3) 10 (R3) REL
20 (PCR 0) 10 (R0) REL

119 10M
110 1M (FCR 23)
109 10M
100 1M (FCR 22)
99 10M
90 1M (FCR 21)
89 10M
80 1M (FCR 20)
79 10M
70 1M (FCR 13)
69 10M
60 1M (FCR 12)
TO CAD 46:
59 10M
50 1M (FCR 11)
49 10M
40 1M (FCR 10)
39 10M
30 1M (FCR 3)
29 10M
20 1M (FCR 2)
19 10M
10 1M (FCR 1)
09 10M
00 1M (FCR 0)

TO CAD 28:
9 12M
8 11M (ANN) REL
94 7B
81 10
80 10B
91 12M (AN) REL
92 12
93 5M
90 7
89 3B (ANN) REL
88 3
TO CAD 50
30 11
31 1B (AN) REL
87 4B
86 4
85 6 (ANN) REL
83 3M (ANNA) REL
82 10 (ANN) REL
XTG 2B
ANTG 2 (ANN) REL
ANTB 2B (RCY2) REL
TO CAD 51:
99 8
98 8M (ANN) REL
100 12
TO CAD 50:
84 5B (RCY2) REL
97 11
96 11M (ANNA) REL
40 L (ANN) REL
34 12 (R3) REL

TO CAD 51:
ST3 12M (R3) REL
STO 12M (R0) REL
ANFC 4 (RCY2) REL
AR3 7 (R3) REL
ARO 7 (R0) REL
TO CAD 50:
102 6M (ANNA) REL
103 6 (ANN) REL
75 (FCA) U
101 12B

CAD 22
(FOR APP FIG. 22)

TO CAD 33 (LLC-B1):
09 (CS3) U (CST9) REL
08 (CS8) U (CST8) REL
03 (CS3) U (CST3) REL
TO CAD 31:
7 (CT7) 1 (CST9) REL
4 (CT4) 1 (CST6) REL
2 (CT2) 2 (CST9) REL
1 (CT1) 2 (CST8) REL
0 (CT0) 2 (CST7) REL

MFR DISC.
CST9 — 4 — CST9 4 (CST9) REL
CST8 — 4 — CST8 4 (CST8) REL
CST7 — 4 — CST7 4 (CST7) REL
TO CAD 37:
CST6 — 4 — CST6 4 (CST6) REL
CST5 — 4 — CST5 4 (CST5) REL
CST4 — 4 — CST4 4 (CST4) REL
CST3 — 4 — CST3 4 (CST3) REL
TO CAD 8

CAD 23
(FOR APP FIG. 23)

TO CAD 56: 9 — 9 (CSR0) REL
TO CAD 33 (LLC-B1):
29 (CS 23) U (CSR 9) REL
28 (CS 28) U (CSR 8) REL
21 (CS 21) U (CSR 1) REL
20 (CS 20) U (CSR 0) REL
TO CAD 31:
4 (CRU7) 3 (CSR 9) REL
3 (CRU4) 3 (CSR 6) REL
2 (CRU 2) 4 (CSR 9) REL
1 (CRU1) 4 (CSR 3) REL
0 (CRU0) 4 (CSR 7) REL

CAD 24
(FOR APP FIG. 24)

TO CAD 126 — TAO — TAO U (TAO) REL
TO CAD 23: MFBX U (MFBX) REL; RV 4

58 57 56 55 54 53 52 51 48 47 46 45 44 43 42 41

TO CAD 58:
TAO 37 TAO
MPBX 36 MPBX — TO CAD. 24
RV 35 RV
38
54 TO CAD. 31 (ORLM-D2)
CSR 19 34 8 (CSR9) REL
CSR 16 31 8 (CSR6) REL
CSR 15 28 8 (CSR5) REL
CSR 10 23 8 (CSR0) REL
CSR 09 22 6 (CSR9) REL
CSR 08 21 6 (CSR8) REL
CSR07 18 6 (CSR7) REL
CSR00 11 6 (CSR0) REL
FOR X CONN INFO SEE NOTE 40G
TO RATE TREATMENT RELAY UNIT

DRAWING ISSUE
11D
12D
13D
14A
15D
19P
19A
20D
21A
24D
26D
28D
30D
33D

ISSUE 46A

DIAL TONE MARKER CIRCUIT
BELL TELEPHONE LABORATORIES INCORPORATED
SHEETS 6S
SD-26001-01-GII

SD-26001-01-GII

CAD 19
(FOR APP FIG. 19)

LOOP AT UNEQUIPPED POS

TO CAD 10 99 12
TO CAD 25 99 12M
TO CAD 10 04 11
TO CAD 28 04 11M (2W) REL
TO CAD 37 SPF 10
TO CAD 10 SPF 10M
TO CAD 37 SZD 9
TO CAD 4 SZD 9M
TO CAD 49 88 7
TO CAD 58A 2 12
TO CAD 37 SZT 8M
SPT 7M
TO CAD 53 30 (NC) 5M
TO CAD 31 1 (PLN) 6B (DT) REL
TO CAD 56 12 7
TO CAD 58A 13 2B (DT8) REL

TO CAD 28 06 4M
TO CAD 25 112 3M (DT8) REL
TO CAD 58A 1 2
(YU)

LOOP AT UNEQUIPPED POSITION

TO CAD 10 TBO 2
MFR DISC.
TO CAD 30 (TLC-M) 10 2B
TO CAD 49 88 2B (DT) REL
TO CAD 30 (TLC-B2) 03 1
TO CAD 34 (MTFC-A8) 10 1B

TO CAD 50

CAD 20

TO CAD 51

LFR3 U (R3) REL
LFR2 U (R2) REL
LFR1 U (R1) REL
LFR0 U
LFM 9 (R0) REL
29 10
20 (VP2) REL
LFP2 U
19 10
10 (VP1) REL
LFP1 U
09 10
00 (VP0) REL
LFP0 U
R60-9

74 (MLFA) 1
73 (R3) 10
72 (R2) 8
71 (R1) 4
70 (R0) 2
69 10M
50 1M (VPC) REL
47 (TGS) 6 (R3) REL
44 (TG2) R03 6 (R0) REL
R60
39 (VP0) REL
37 11M (FCR0) REL
36 U (VPT) REL
33 L
32 7M
29 6B
28 6M
27 3M
26 11M
25 10M
24 1 (R0) REL.
23 (R3) 2 (R3) REL
22 (R2) 2 (R2) REL
21 (R1) 2 (R1) REL
20 (R0) 2 (R0) REL

49 LOOP AT UNEQUIPPED POS
11
11M (FCR 20) REL
11
11M (FCR 10) REL
11 (FCR 0) REL
49A 11
11M (FCR 21) REL
11
11M (FCR 11) REL
11 (FCR 1) REL
48 11
11M (FCR 22) REL
11
11M (FCR 12) REL
11 (FCR 2) REL
48A 11
11M (FCR 23) REL
11
11M (FCR 13) REL
11 (FCR 3) REL
19 (FCR 19) 10 (FCR 10) REL
10 (FCR 10) 1
9 (FCR 9) 10 (FCR0) REL
0 (FCR 0) 1
69 (FCR 29) 10 (FCR 20) REL
60 (FCR 20) 1

TO CAD 27A 27B OR 27C
3 (RBR3) 11 (R3) REL
0 (RBR0) 11 (R0) REL
27 (BR3) 3 (R3) REL
TO CAD 28
24 (BR0) 3 (R0) REL
23 (PCR 3) 10 (R3) REL
20 (PCR 0) 10 (R0) REL

119 10M
110 1M (FCR 23)
109 10M
100 1M (FCR 22)
99 10M
90 1M (FCR 21)
89 10M
80 1M (FCR 20)
79 10M
70 1M (FCR 13)
69 10M
TO CAD 46
60 1M (FCR 12)
59 10M
50 1M (FCR 11)
49 10M
40 1M (FCR 10)
39 10M
30 1M (FCR 3)
29 10M
20 1M (FCR 2)
19 10M
10 1M (FCR 1)
09 10M
00 1M (FCR 0)

TO CAD 28
9 12M
8 11M (ANN) REL
94 7B
81 10
80 10B
91 12M (AN) REL
92 12
93 5M
90 7
89 3B (ANN) REL
88 3
80 11 (AN) REL
31 1B
87 4B
86 4 (ANN) REL
85 6
83 3M (ANNA) REL
82 10 (ANN) REL
XT6 2B
ANT6 2 (ANN) REL
TO CAD 51
ANT8 2B (RCV2) REL
99 8
98 8M (ANN) REL
100 12
TO CAD 50
84 5B (RCV2) REL
97 11
96 11M (ANNA) REL
40 L (ANN) REL
34 12 (R3) REL

TO CAD 51
ST3 12M (R3) REL
ST0 12M (R0) REL
ANFC 4 (RCV2) REL
AR3 7 (R3) REL
AR0 7 (R0) REL
TO CAD 50
102 6M (ANNA) REL
103 6
75 (R0A) U (ANN) REL
101 12B

TO CAD 33 (LLC-B1)
09 (CS9) U (CST9) REL
08 (CS8) U (CST8) REL
03 (CS3) U (CST3) REL
TO CAD 31
7 (CT7) 1 (CST9) REL
4 (CT4) 1 (CST6) REL
2 (CT2) 2 (CST9) REL
1 (CT1) 2 (CST8) REL
0 (CT0) 2 (CST7) REL

MFR DISC.
CST9 4 (CST9) REL
CST8 CST9 4 (CST8) REL
CST7 CST8 4 (CST7) REL
TO CAD 37
CST6 CST7 4 (CST6) REL
CST5 CST6 4 (CST5) REL
CST4 CST5 4 (CST4) REL
CST3 CST4 4 (CST3) REL
TO CAD 8 CST3

CAD 22
(FOR APP FIG. 22)

TO CAD 56 9 9 (CSR0) REL
TO CAD 33 (LLC-B1)
28 (CS 29) U (CSR9) REL
28 (CS 28) U (CSR8) REL
21 (CS 21) U (CSR 1) REL
20 (CS 20) U (CSR 0) REL

TO CAD 31
4 (CRU7) 3 (CSR9) REL
3 (CRU4) 3 (CSR 6) REL
2 (CRU 2) 4 (CSR 9) REL
1 (CRU 1) 4 (CSR 8) REL
0 (CRU 0) 4 (CSR 7) REL

CAD 24
(FOR APP FIG. 24)

TO CAD 126 TAO
TAO U (TAO) REL
TO CAD 23 MPBX
MPBX U
RV 4 (MPBX) REL
RV

58 57 56 55 54 53 52 51
48 47 46 45 44 43 42 41

CAD 23
(FOR APP FIG. 23)

TO CAD 58
TAO
MPBX
RV
38
TAO 37 TAO
MPBX 36 MPBX TO CAD. 24
RV 35 RV
34 TO CAD. 51 (ORLM-D2)

CSR 19 34 8 (CSR 9) REL
CSR 16 31 8 (CSR 6) REL
CSR 15 28 8 (CSR 5) REL
CSR 10 23 8 (CSR 0) REL
CSR 09 22 6 (CSR 9) REL
CSR 08 21 6 (CSR 8) REL
CSR 07 18 6 (CSR 7) REL
CSR 00 11 6 (CSR 0) REL
FOR X CONN INFO SEE NOTE 4C0
TS ON RATE TREATMENT RELAY UNIT

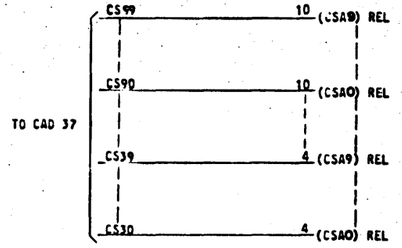
DRAWING ISSUE
11D
12D
13D
14A
15D
19D
19A
20D
21A
24D
26D
28D
30D
33D (C)

ISSUE 43B

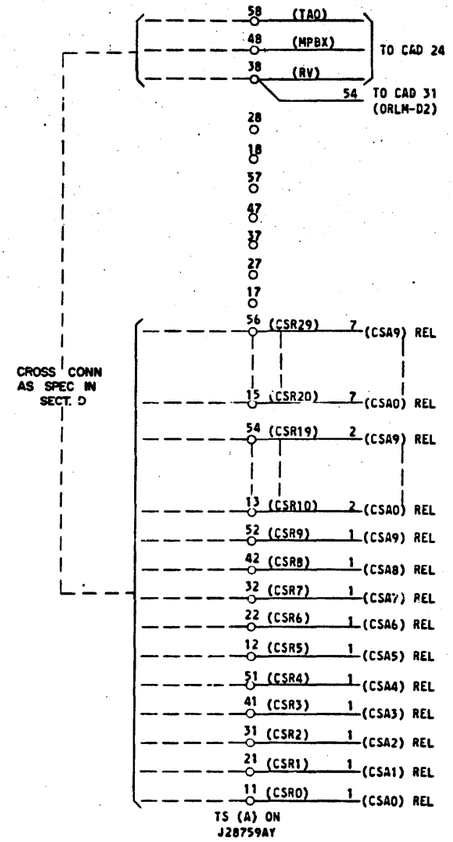
DIAL TONE MARKER CIRCUIT
BELL TELEPHONE LABORATORIES INCORPORATED
SD-26001-01-GII
SHEET 2 6S

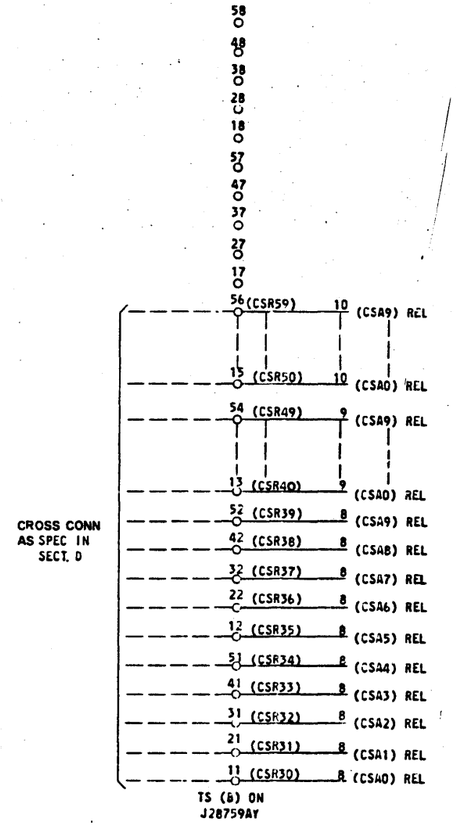
SD-26001-01-GII

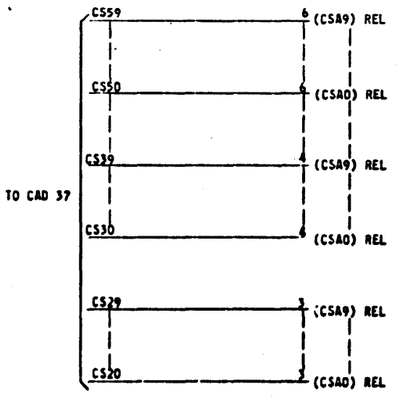
CAD 125
(FOR APP FIG. 25)



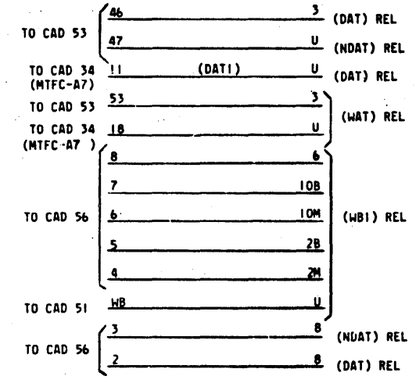
CAD 126
(FOR APP FIG. 26)



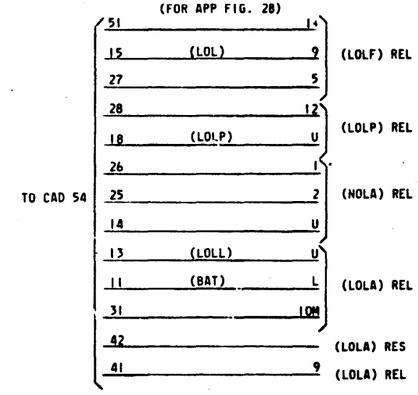




CAD 127
(FOR APP FIG. 27)
(DT MKR 0-3 ONLY)



CAD 128
(FOR APP FIG. 28)



CAD 129
(FOR APP FIG. 29)

DRAWING ISSUE	
16D	RLC KMS MJB
19A	PEC KW AJR
22D	MS PAT MJB
23A	CK PAL MJB RWK
28D	
30D	
33D	

33

DIAL TONE MARKER CIRCUIT 2 SD-26001-01-G12

BELL TELEPHONE LABORATORIES INCORPORATED DESIGN CS

SD-26001-01-G12

CAD 130
(FOR APP FIG 30)
(DTM 0-3 ONLY)

CAD 131
(FOR APP FIG 31)

DO — CONNECT WHEN WIDEBAND TRANSFER LINK CAPACITY IS GREATER THAN 80 VERTICALS

DO NOT

48		4	(ABK) REL
48A		11M	
55	(WB)	U	
37		1M	
38		4	
28		4B	
25	(XWB)	7M	(WB2) REL
36		10	
26		10B	
57		11	
47		11B	
58		2M	
18		3	
15	(WFK)	5M	(WTK) REL
TO CAD 57 34	(WTK)	9M	
27		12	
17		12M	
24	(WDC1)	U	
56		3	(WDC1) REL
46		3M	
35	(XWB)	1M	
53	(XWB)	6	(XWB) REL
45		8	
14	(XAB)	6	(XAB1) REL
43		U	
44	(WGA)	9	(WGA) REL
33		U	
54	(WGB)	9	(WGB) REL
11	(BAT AA1)	1	(XWB) REL
51	(GRD Q)	U	(WTK) REL

TO CAD 37 MPL — 1L (MPL) REL

DRAWING ISSUE 30D

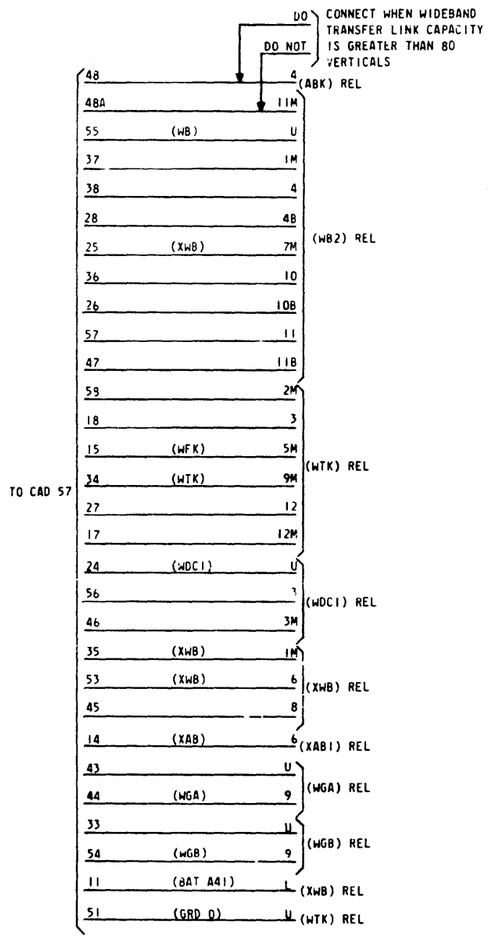
ISSUE 45B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-613

BELL TELEPHONE LABORATORIES INCORPORATED 6S

CAD 130

(FOR APP FIG 30)
(DTM 0-3 ONLY)



DRAWING ISSUE 300

30

DIAL TONE MARKER CIRCUIT

(2) SD-26001-01-013

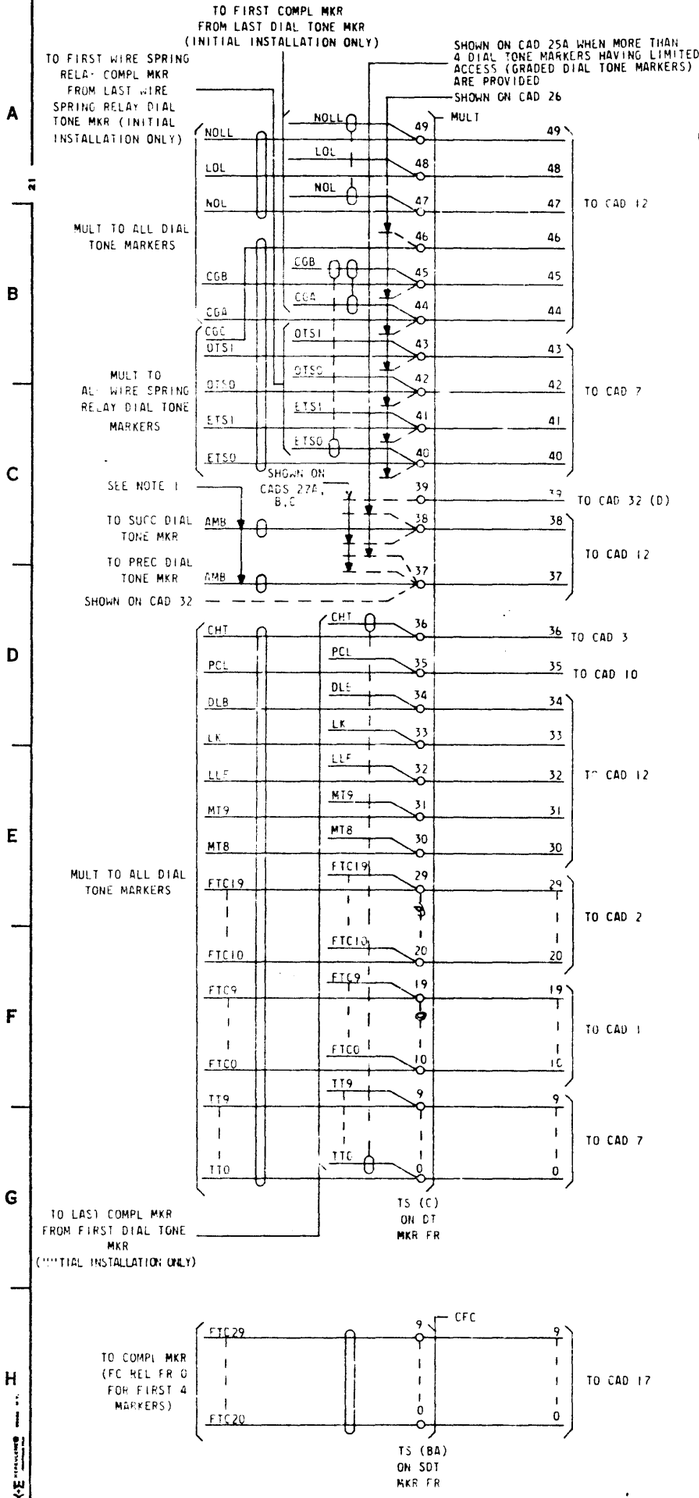
BELL TELEPHONE LABORATORIES INCORPORATED

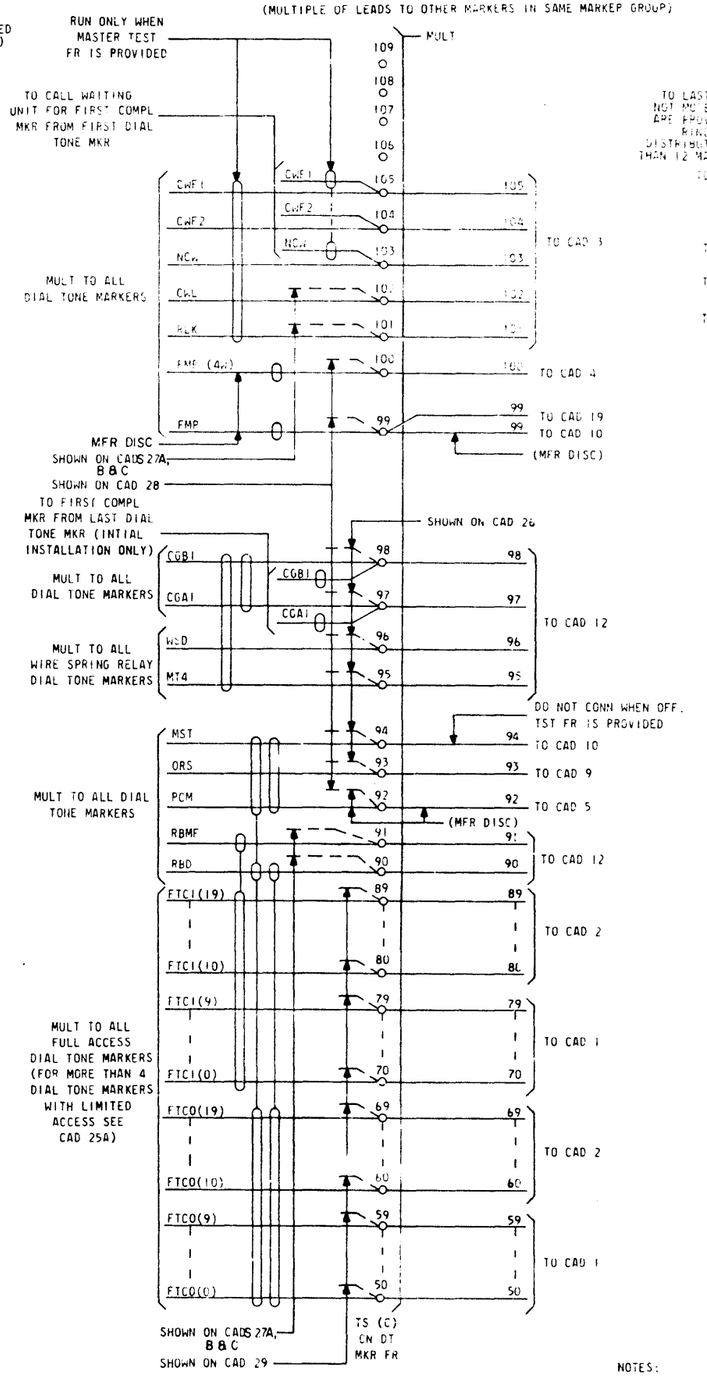
6S

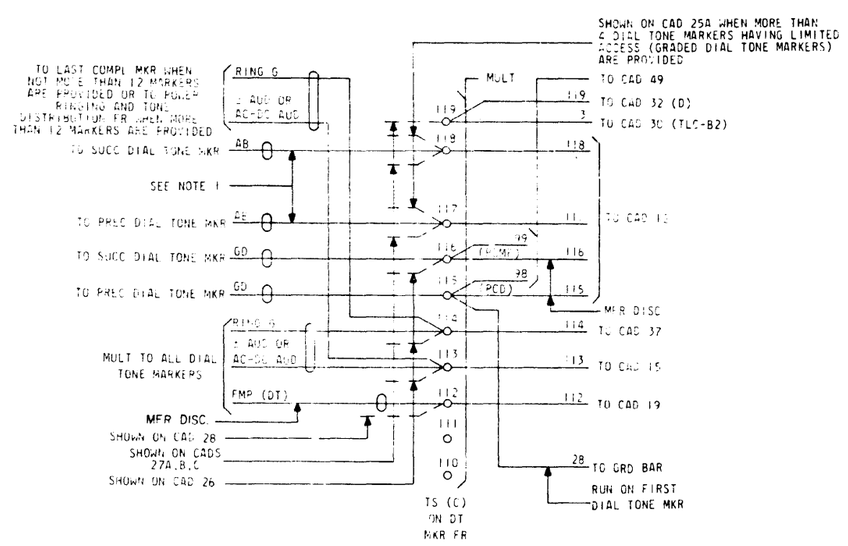
SD-26001-01-013

CAD 25

(MULTIPLE OF LEADS TO OTHER MARKERS IN SAME MARKER GROUP)

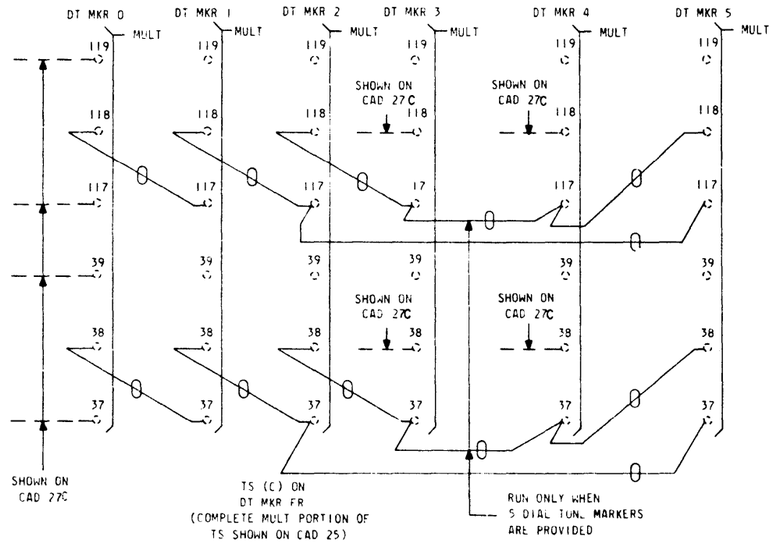






PART OF CAD 25A

(MULTIPLE OF LEADS TO OTHER MARKERS IN SAME MARKER GROUP WHEN MORE THAN 4 DIAL TONE MARKERS HAVING LIMITED ACCESS (GRADED DIAL TONE MARKERS) ARE PROVIDED. SEE NOTE 204)



NOTES:

1. RUN FOR THE FIRST 4 DIAL TONE MARKERS WHEN LIMITED ACCESS PROVIDED, OR FOR ALL MARKERS WHEN FULL ACCESS PROVIDED.

DRAWING ISSUE: 30D, 33D

ISSUE 43B

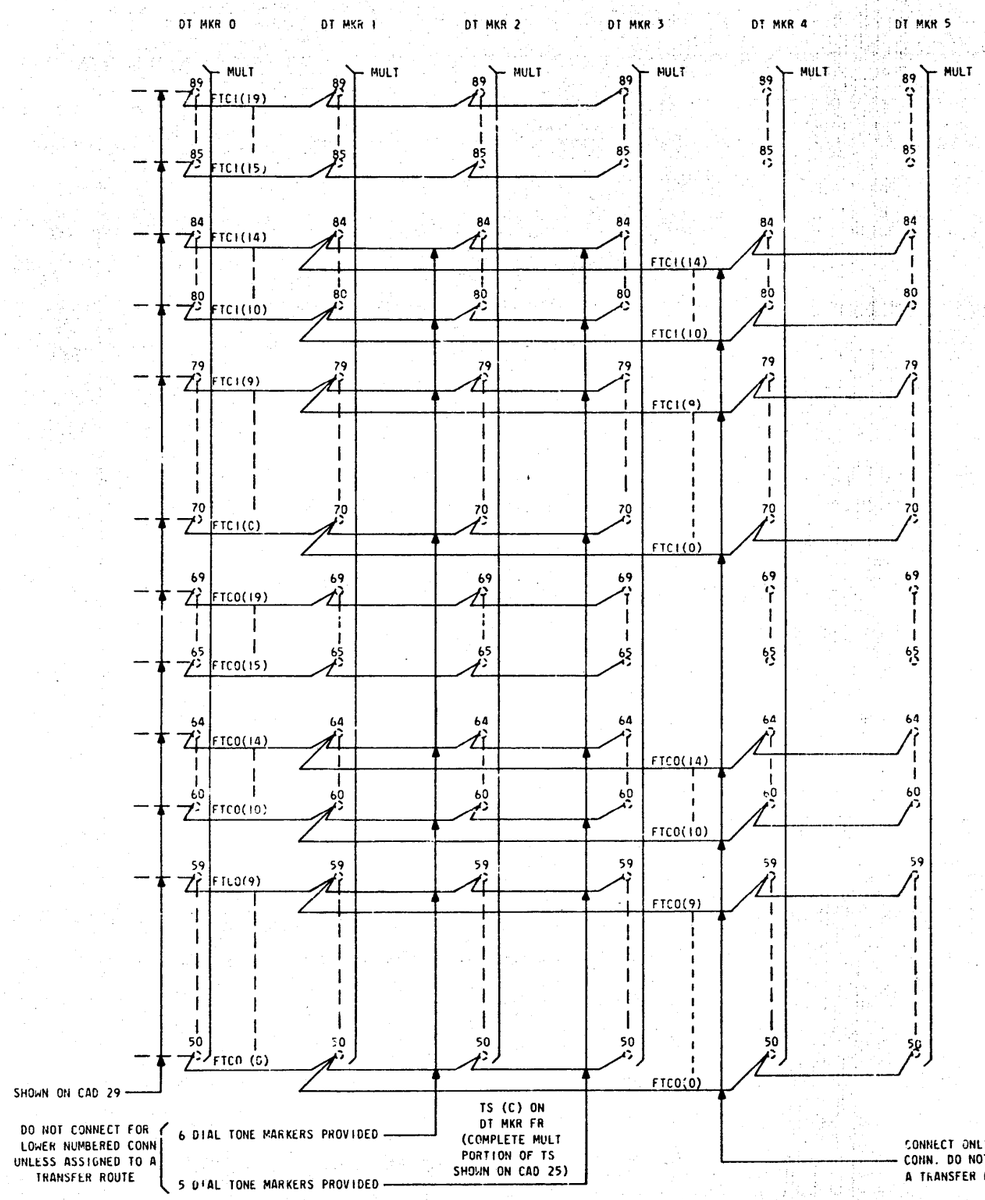
DIAL TONE MARKER CIRCUIT (2) 26001-01-G20A

BELL TELEPHONE LABORATORIES INCORPORATED — SIZE 6S

SD-26001-G20A

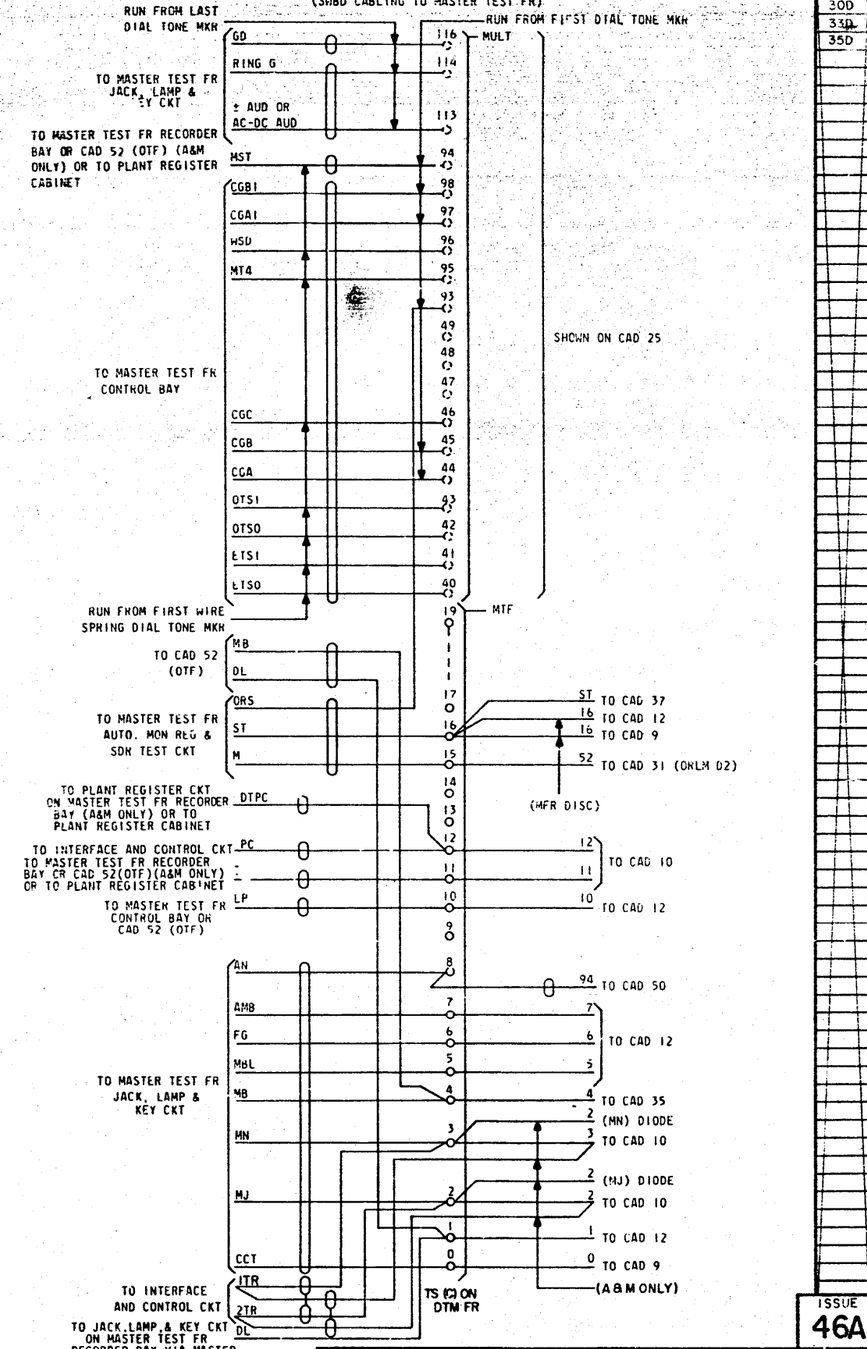
PART OF CAD 25A

(MULTIPLE OF LEADS TO OTHER DIAL TONE MARKERS IN SAME MARKER GROUP WHEN MORE THAN 4 DIAL TONE MARKERS HAVING LIMITED ACCESS (GRADED DIAL TONE MARKERS) ARE PROVIDED. SEE NOTE 204.



CAD 26

(SWBD CABLING TO MASTER TEST FR)



DRAWING ISSUE
300
35D
35D

ISSUE 46A

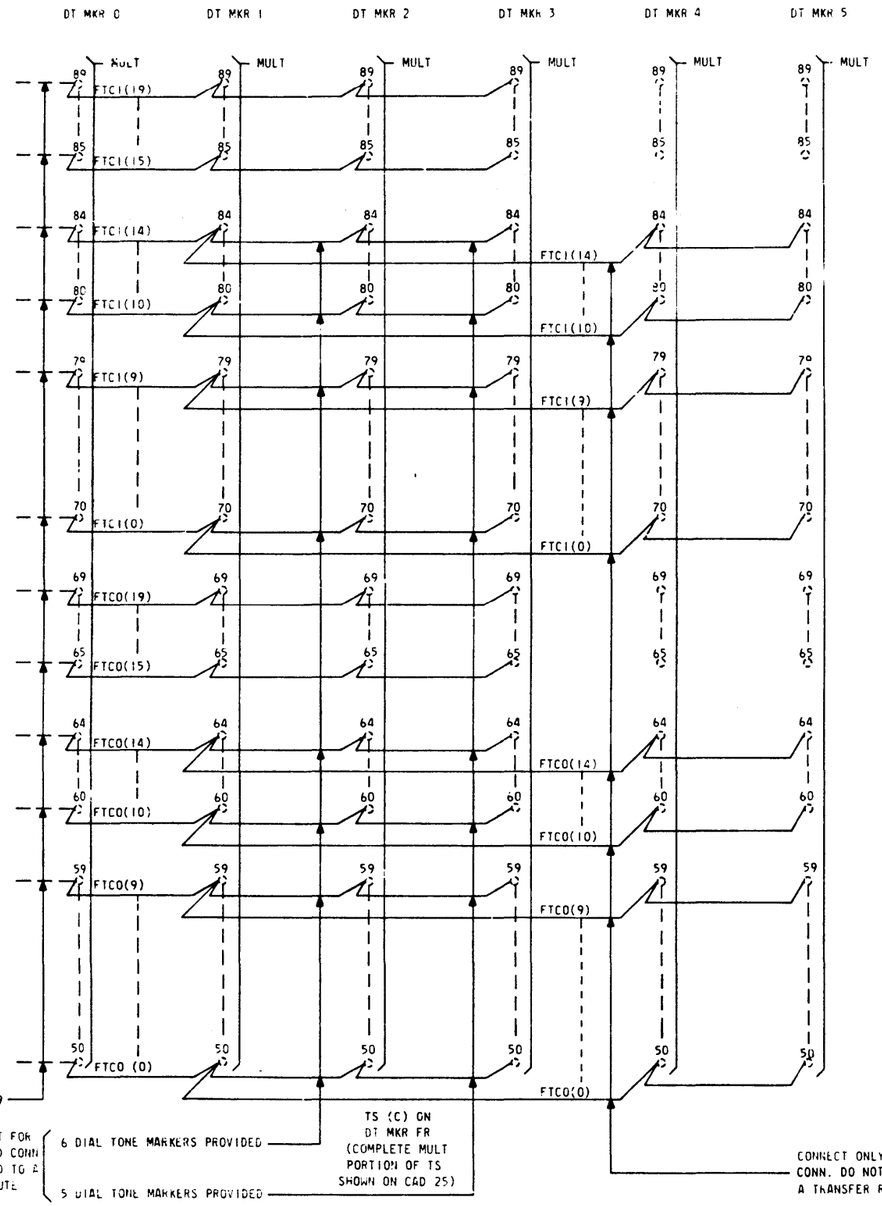
DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G20B

BELL TELEPHONE LABORATORIES INCORPORATED SIZE 6S

SD-26001-01-G20B

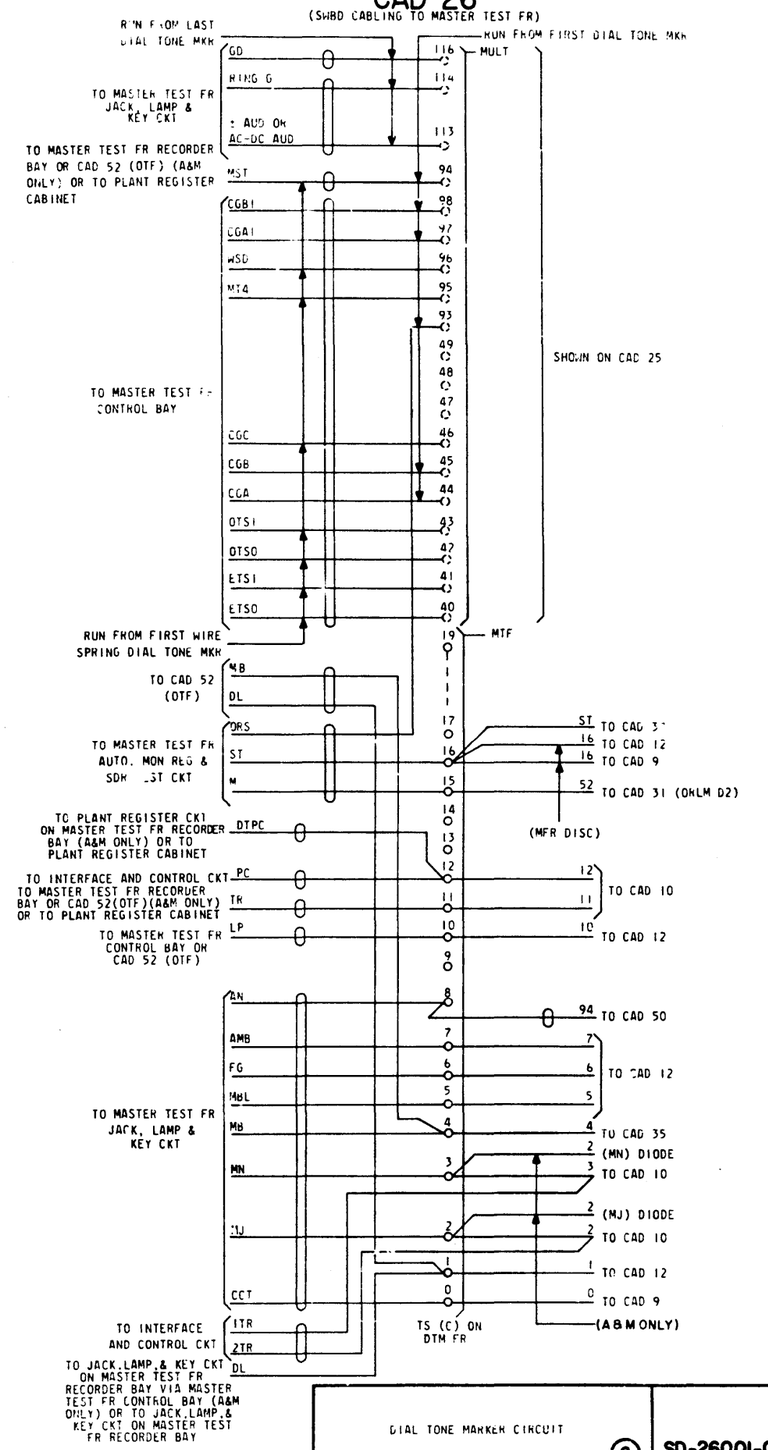
PART OF CAD 25A

(MULTIPLE OF LEADS TO OTHER DIAL TONE MARKERS IN SAME MARKER GROUP WHEN MORE THAN 4 DIAL TONE MARKERS HAVING LIMITED ACCESS (GRADED DIAL TONE MARKERS) ARE PROVIDED. SEE NOTE 204.



CAD 26

(SWBD CABLING TO MASTER TEST FR)



DRAWING ISSUE
30D
33D
35D

ISSUE 44B

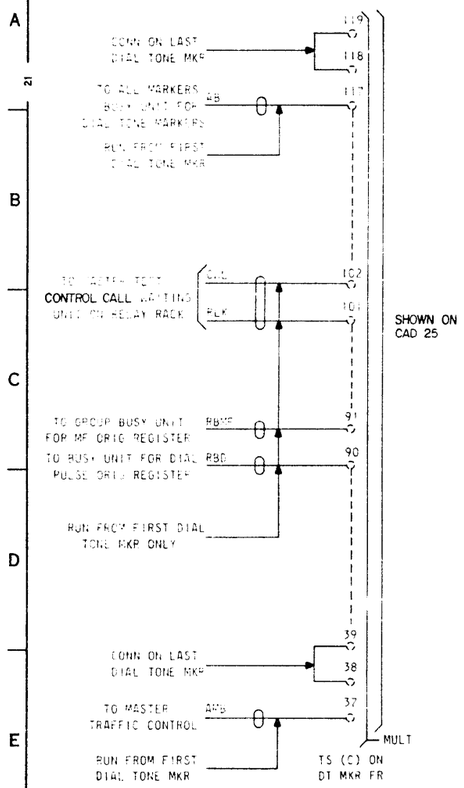
DIAL TONE MARKER CIRCUIT (2) SD-26001-01-620B

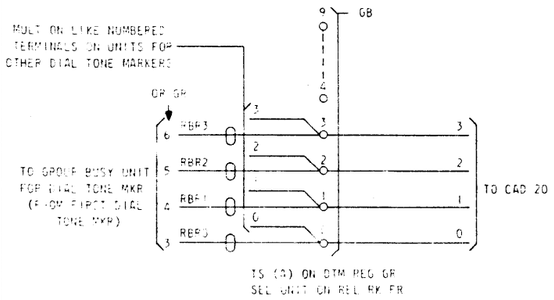
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-620B

CAD 27A

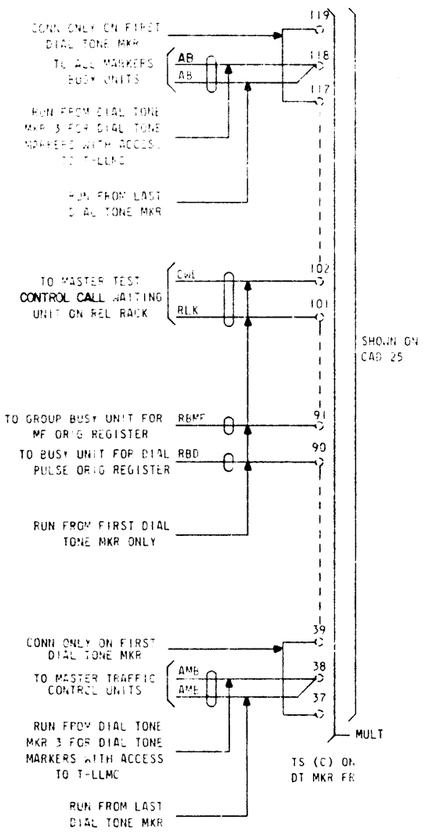
SWITCHBOARD CABLING TO RELAY RACK FOR DIAL TONE MARKERS HAVING FULL ACCESS AND TRANSFER NETWORK NOT PROVIDED OR FOUR OR LESS DIAL TONE MARKERS WITH TRANSFER NETWORK

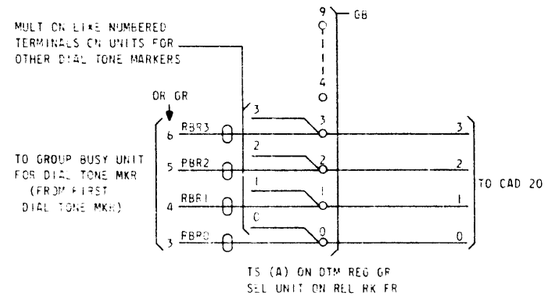




CAD 27B

SWITCHBOARD CABLING TO RELAY RACK FRAME FOR MORE THAN FOUR FULL ACCESS DIAL TONE MARKERS, AND TRANSFER NETWORK PROVIDED





SD-26001-01-G20C

ISSUE 39D

DIAL TONE MARKER CIRCUIT

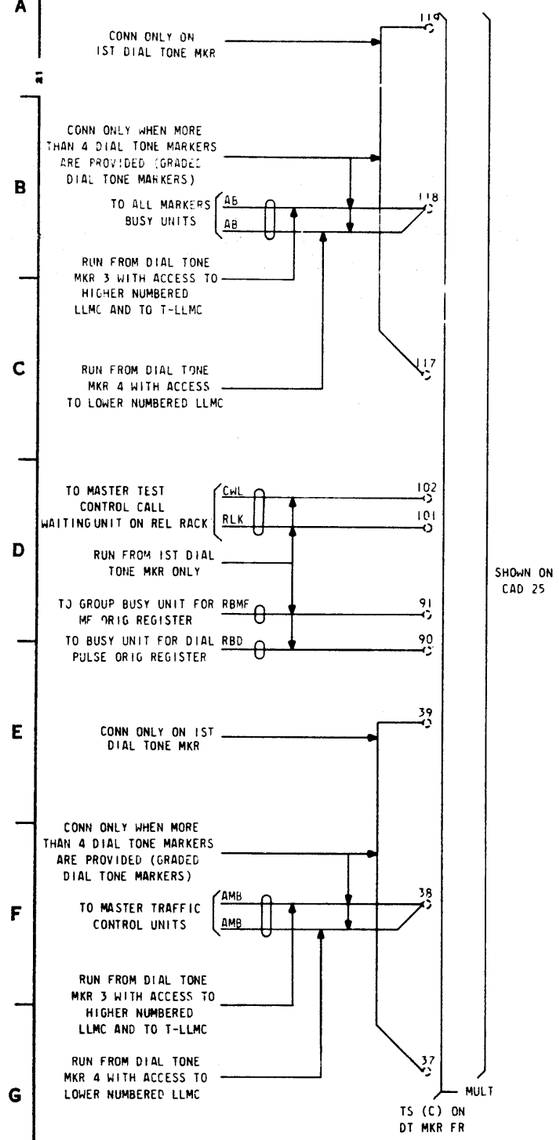
SD-26001-01-G20C

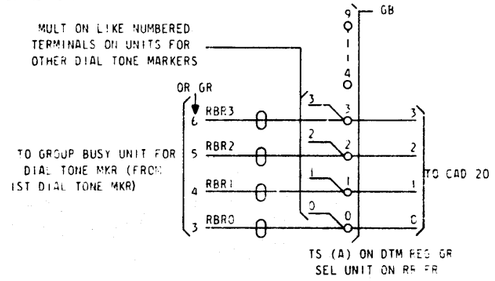
BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 6S

CAD 27C

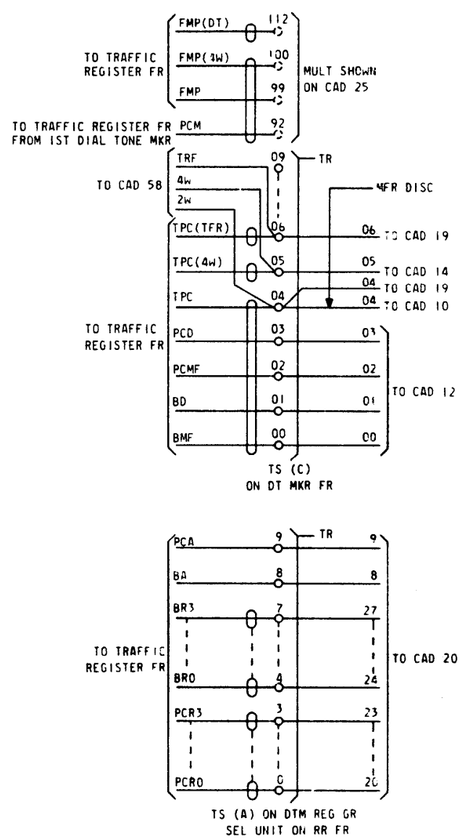
SWITCHBOARD CABLING TO RELAY RACK FRAME FOR MORE THAN FOUR DIAL TONE MARKERS, LIMITED ACCESS PROVIDED FOR SOME MARKERS, WITH OR WITHOUT THE TRANSFER NETWORK





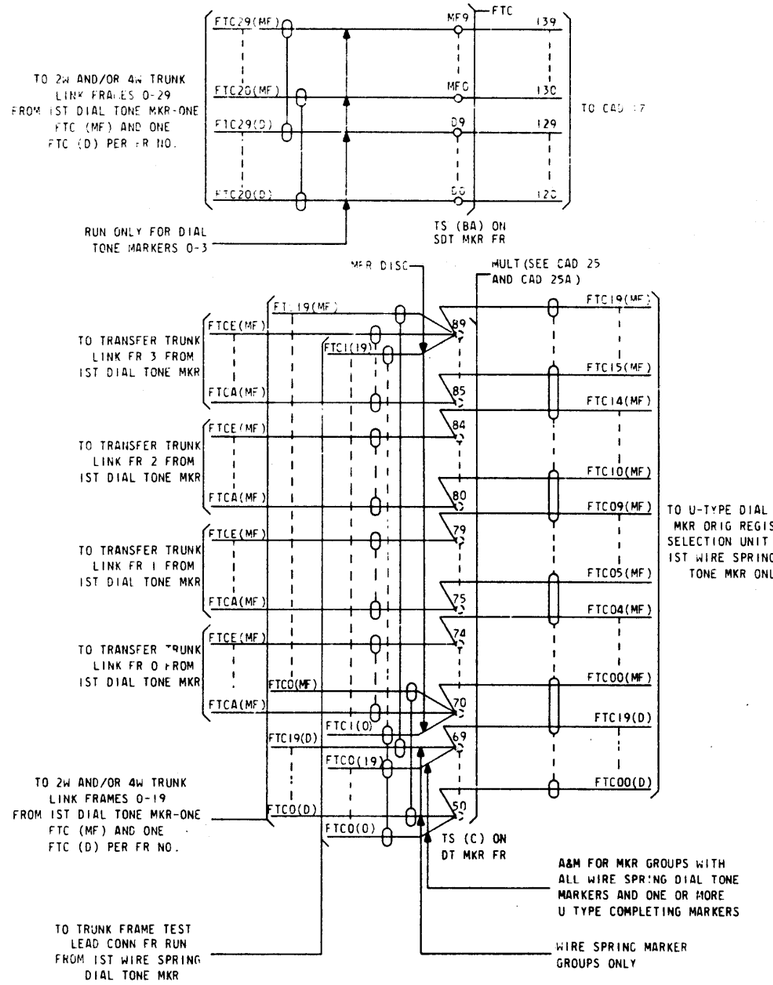
CAD 28

SWITCHBOARD CABLING TO TRAFFIC REGISTER FRAME



CAD 29

SWITCHBOARD CABLING TO TRUNK LINK FRAMES (FOR 1ST TWO ORIGINATING REGISTER GROUPS)



DRAWING ISSUE
30D
33D

ISSUE 43B

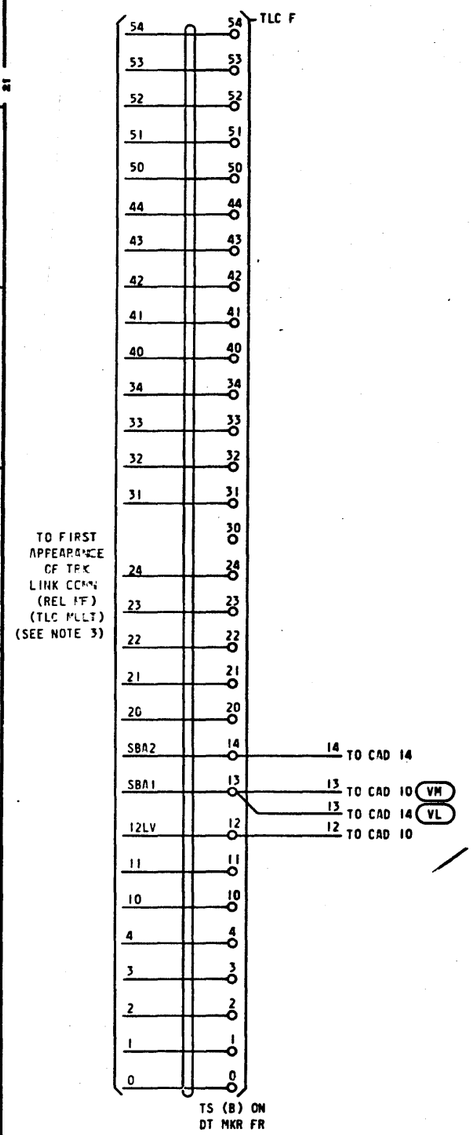
DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G21

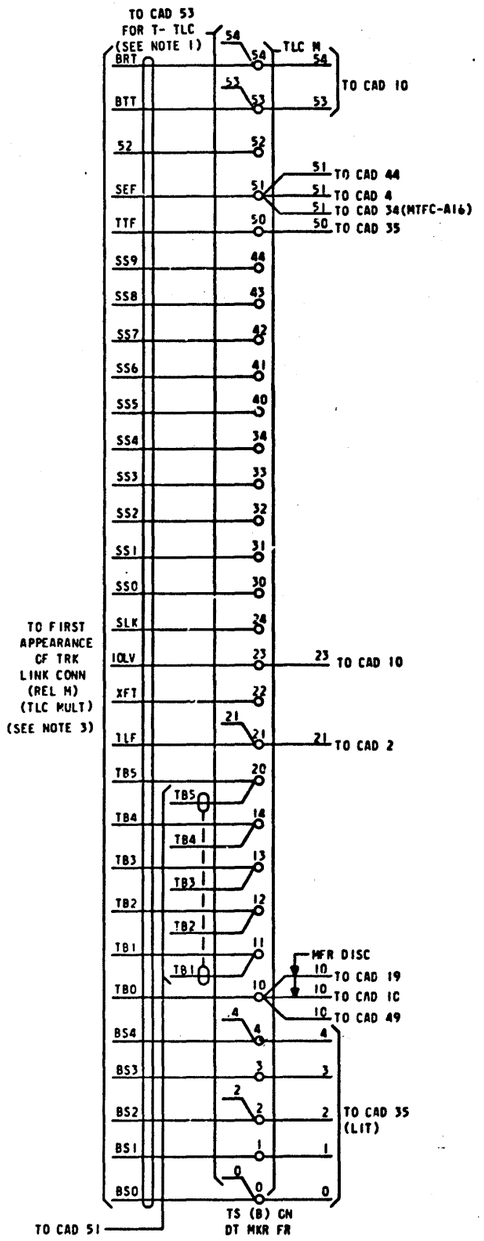
BELL TELEPHONE LABORATORIES INCORPORATED — SIZE 6S — PRINTED IN U.S.A.

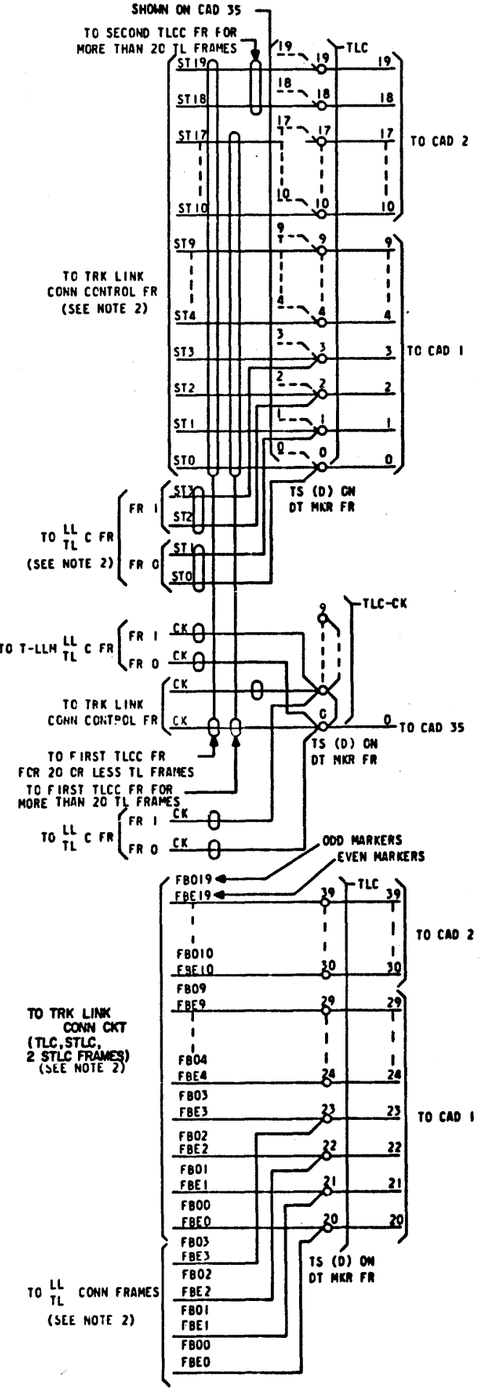
SD-26001-01-G21

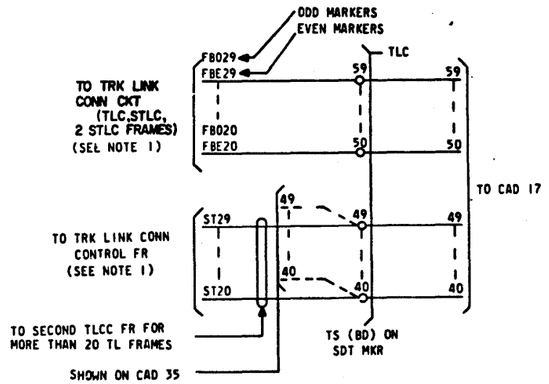
PART OF CAD 30

(SWITCHBOARD CABLE CONNECTIONS TO TRUNK LINK CONN)









NOTES:

1. RUN ONLY FOR DT MARKER 0-3, WHEN LIMITED ACCESS PROVIDED, OTHERWISE ONE / MKR.
2. FOR LIMITED ACCESS DT MKR, RUN ONLY FOR TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).
3. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE
28D JLF
30D
33D

ISSUE 39D

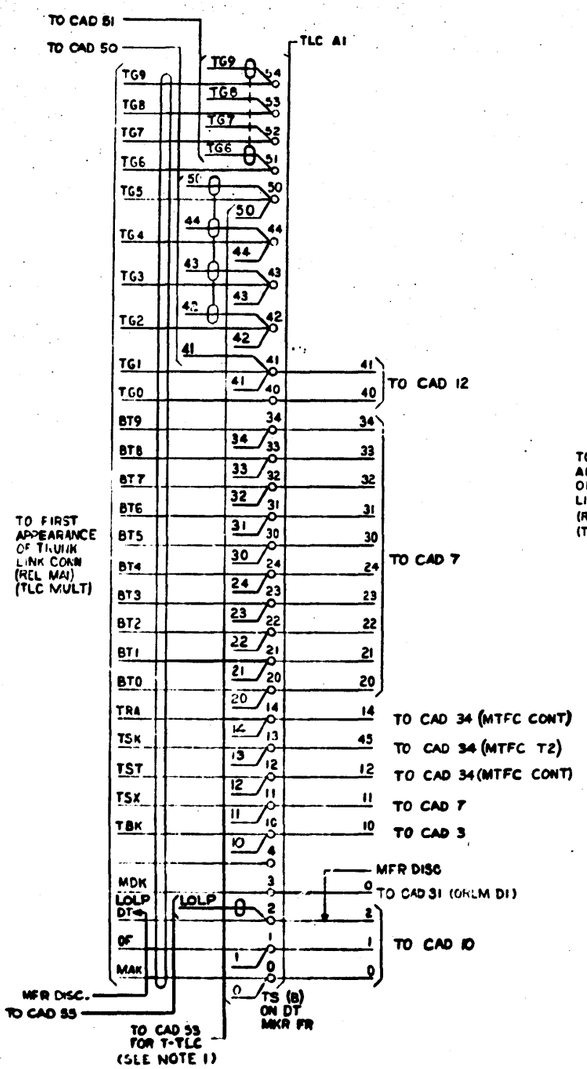
DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G22

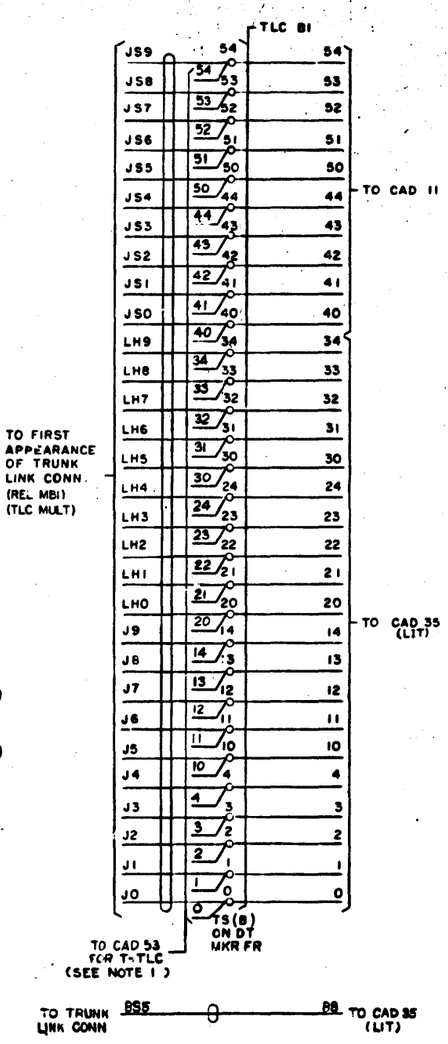
BELL TELEPHONE LABORATORIES INCORPORATED 6S

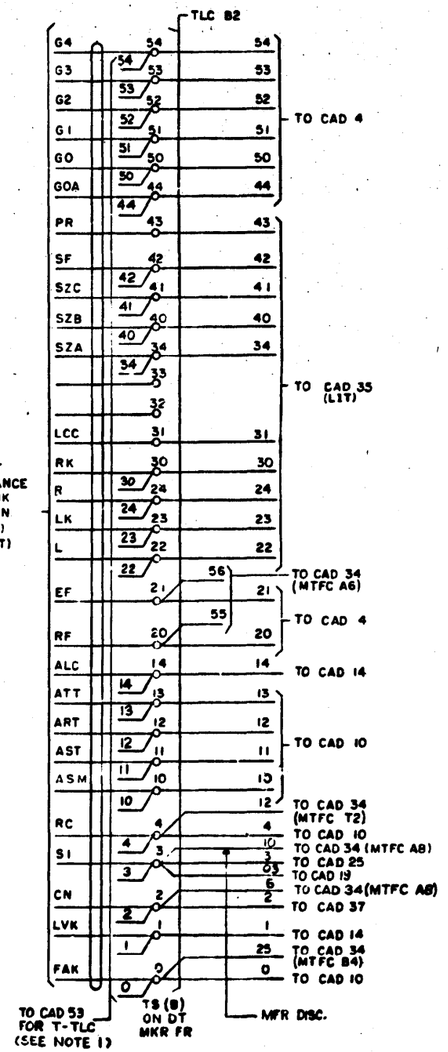
SD-26001-01-G22

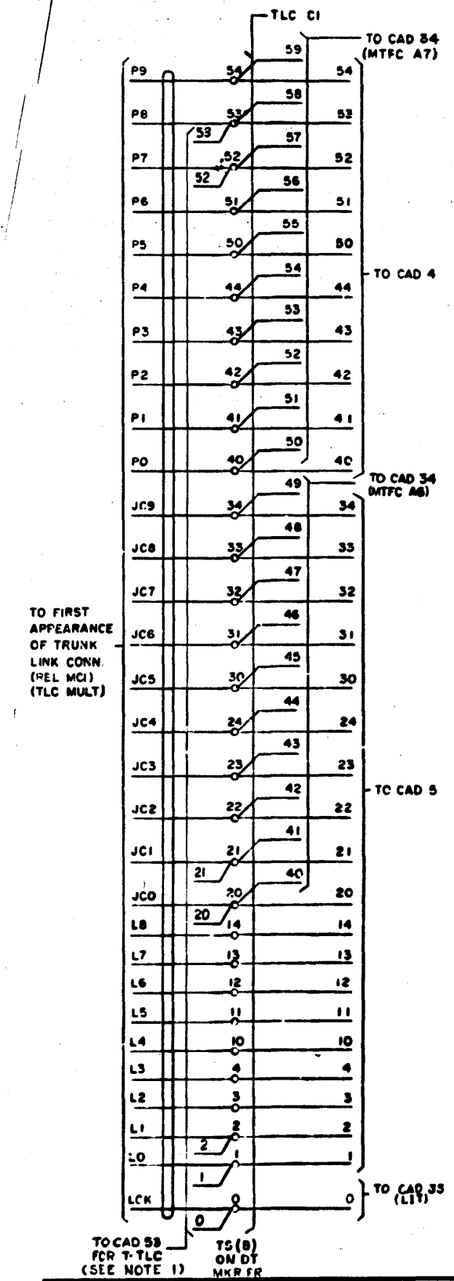
PART OF CAD 30

(SWITCHBOARD CABLE CONNECTIONS TO TRUNK LINK CONN.)
(SEE SHEET NOTE 2)









NOTES:

1. RUN ONLY FOR DT MKR 0-3.
2. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204)

DRAWING ISSUE

1	
3D	
4AR	
5D	
6B	
8D	
9B	
10B	
12D	
13D	
16D	
18D	
22D	
28D	
30D	

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

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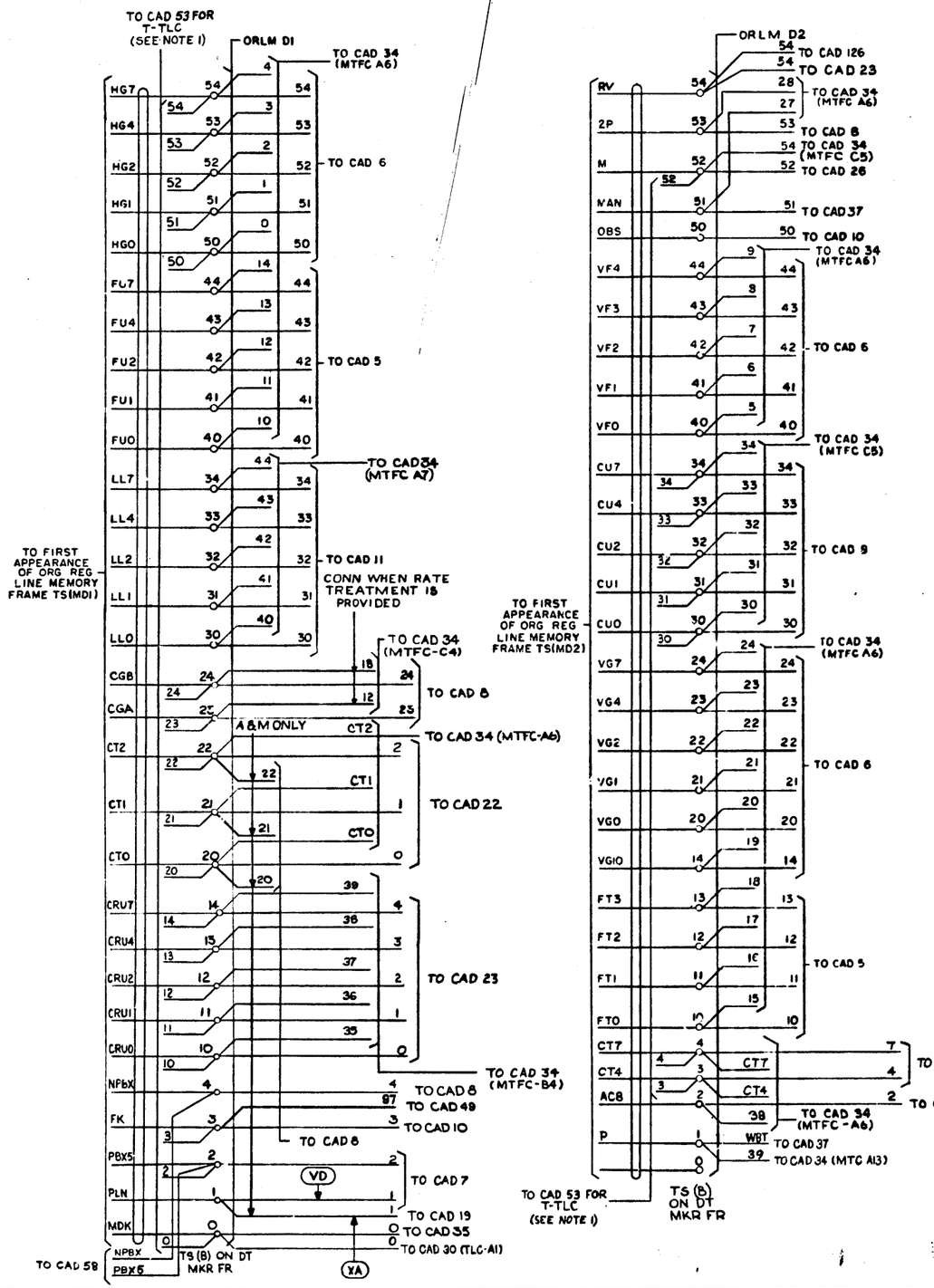
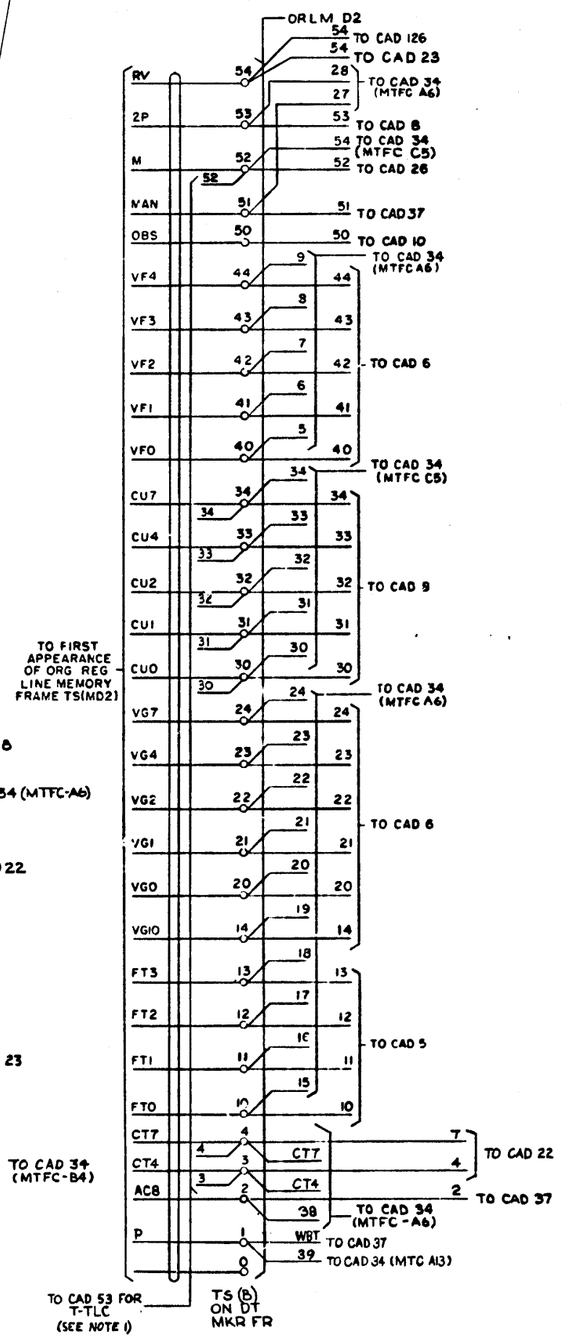
SD-26001-01-023

SD-26001-023

CAD 31

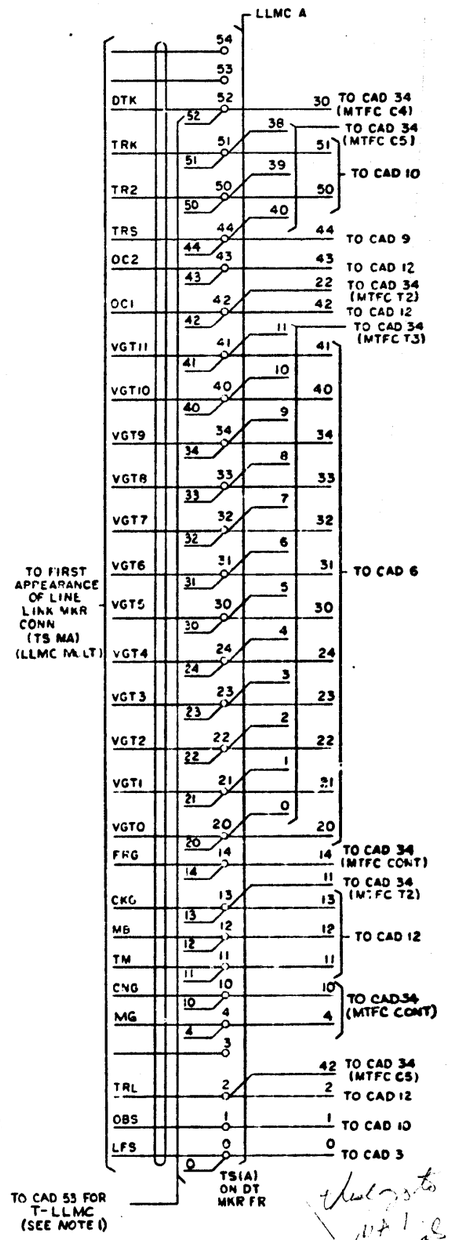
(SWITCHBOARD CABLING TO ORG REG LINE MEMORY FRAME)
(SEE NOTE 2)

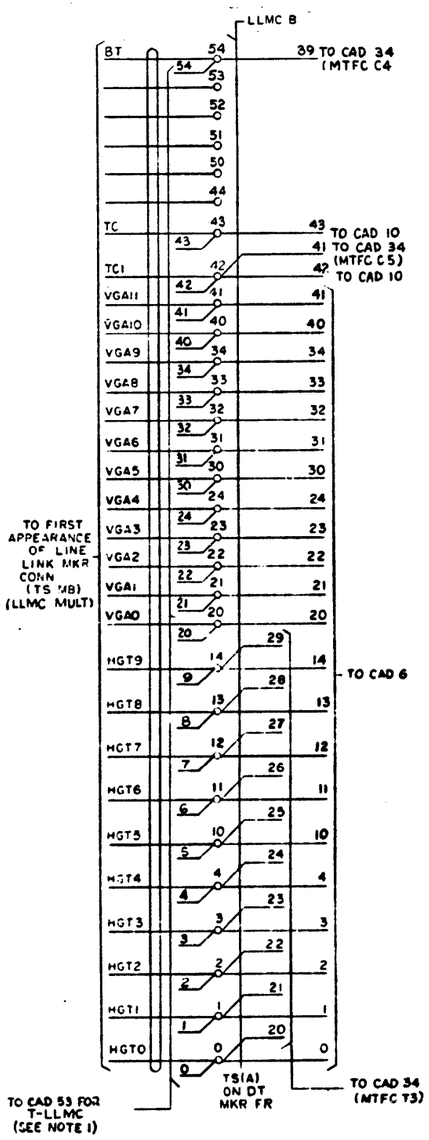




PART OF CAD 32

(SWITCHBOARD CABLES TO LINE LINK MARKER CONN)
(SEE NOTE 3)





NOTES:
1. RUN ONLY FOR DT MKR 0-3
2. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204)
3. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204)

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

6S

ISSUE 43B

SD-26001-01-G24

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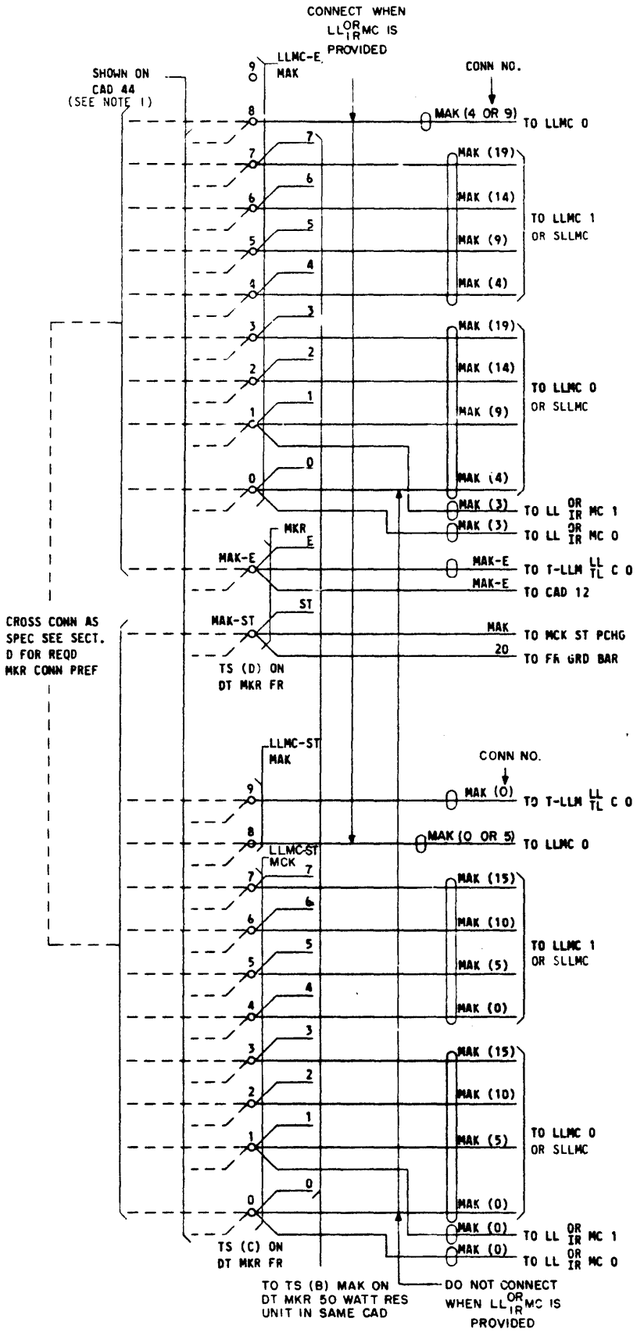
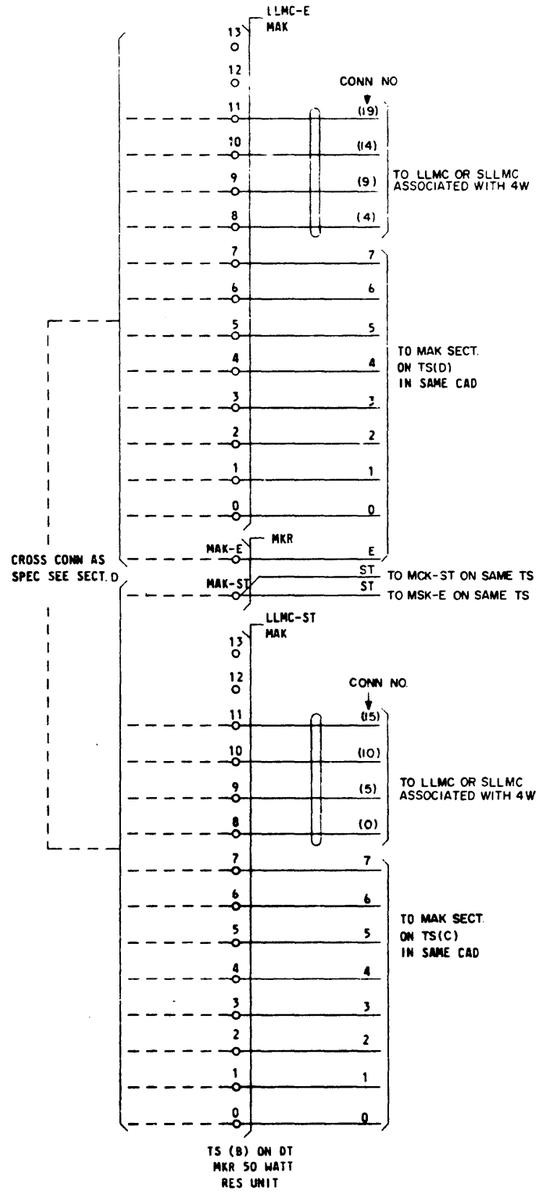
DRAWING ISSUE

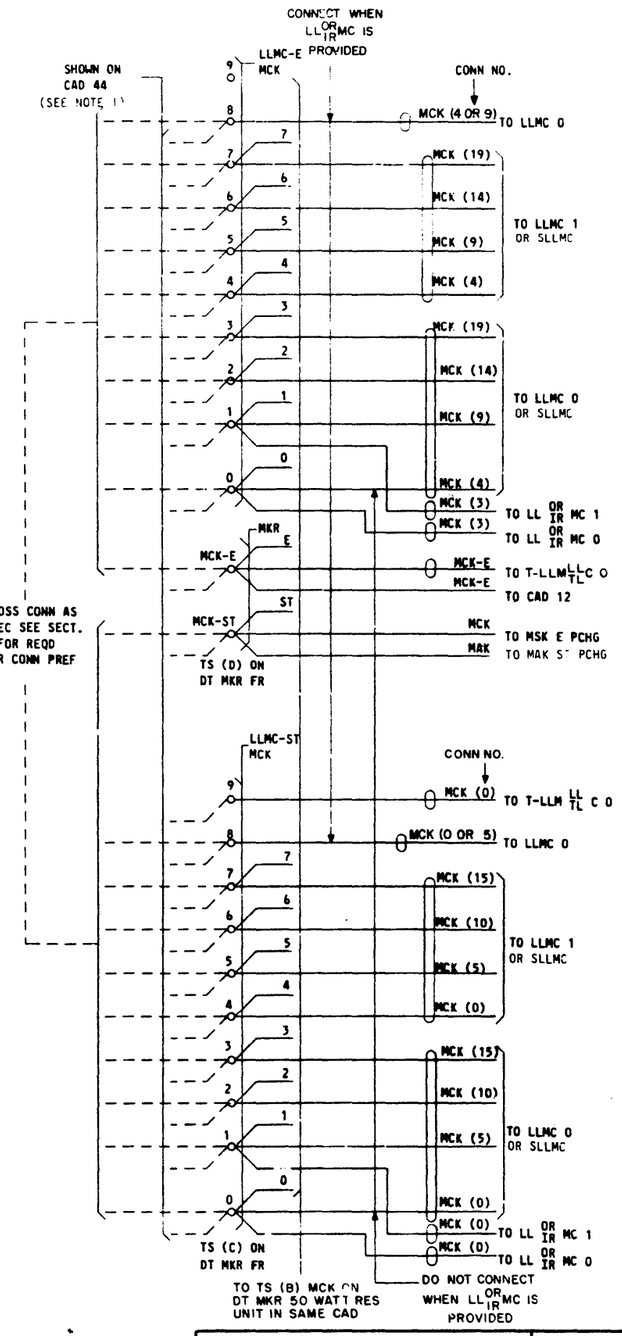
1	
2D	
3D	
4AR	
5D	
7B	
10B	
11D	
12B	
13D	
14A	
15D	
16D	
18D	
21A	
26D	
28D	
30D	
34A	

PART OF CAD 32

SWITCHBOARD CABLES TO LINE LINK MARKER CONNECTORS (SEE NOTE 1)







NOTES:
1. FOR LIMITED ACCESS DT MKR, RUN ONLY FOR LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE
18D
24D
30D

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G25A

BELL TELEPHONE LABORATORIES INCORPORATED

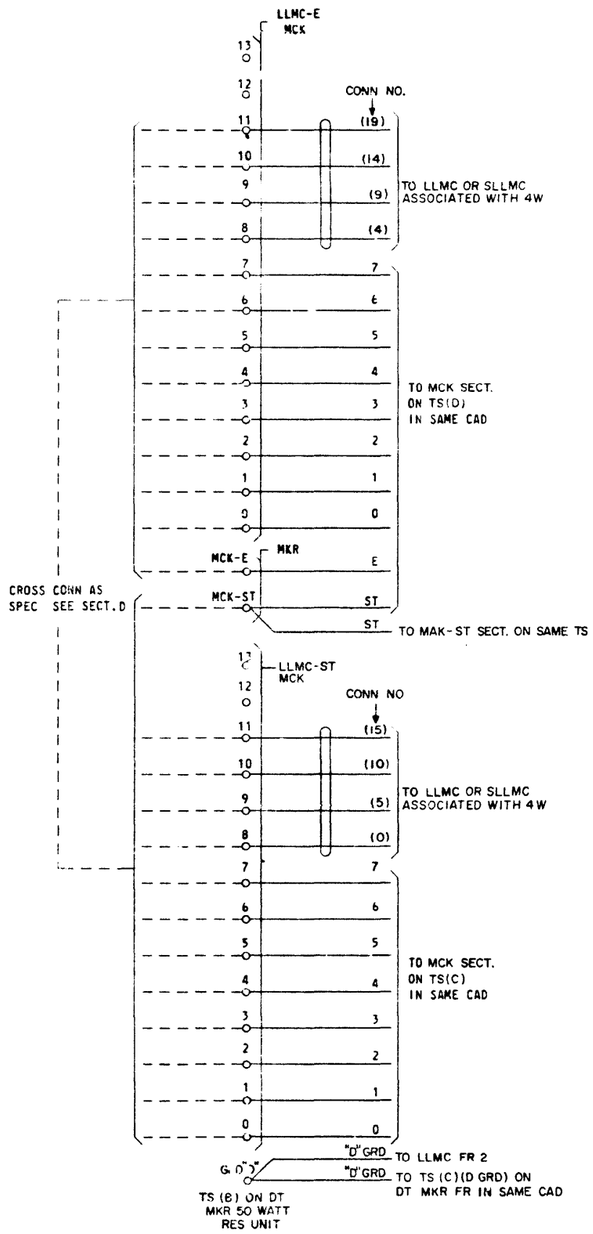
SD-26001-01-G25A

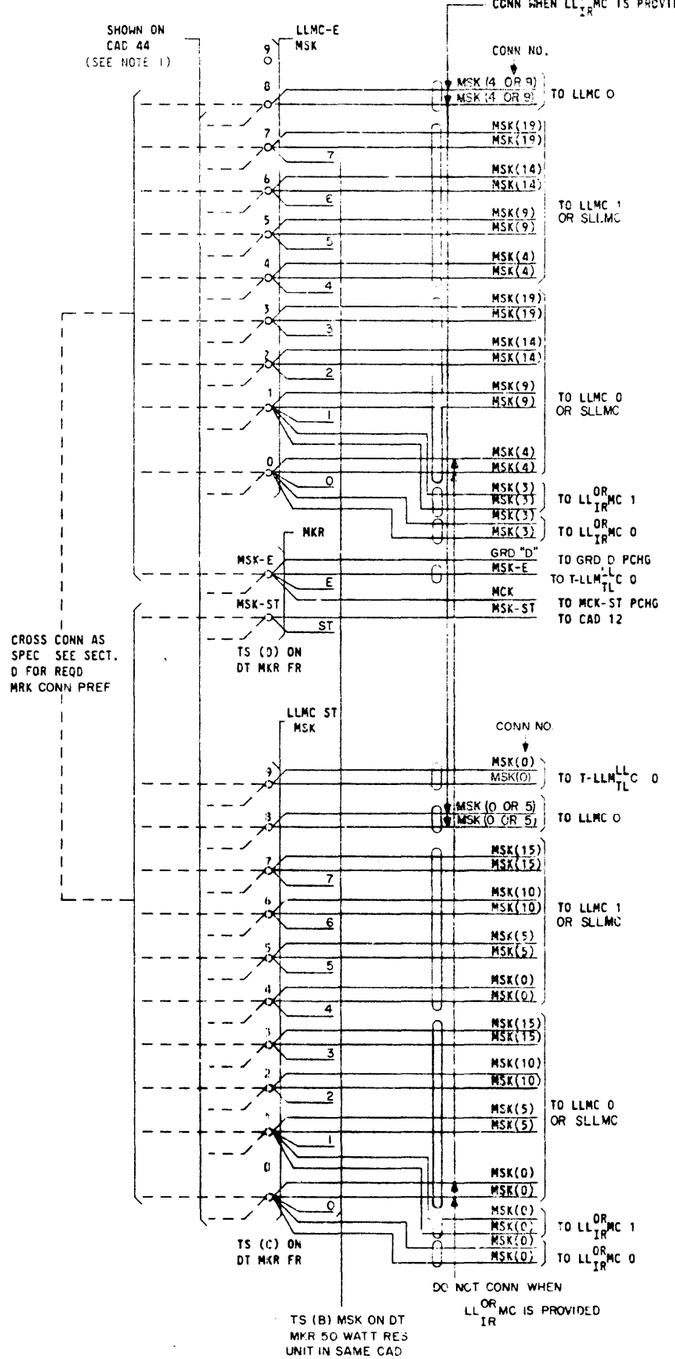
STABILO

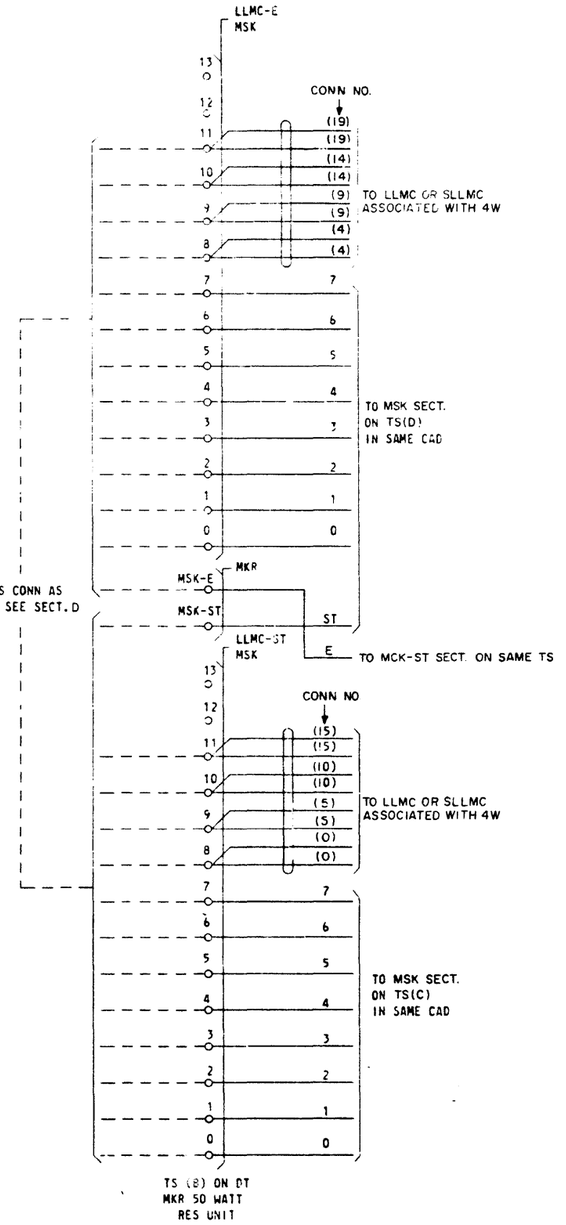
PART OF CAD 32

SWITCHBOARD CABLES TO LINE LINK MARKER CONNECTORS

(SEE NOTE 1)







NOTES:
1. FOR LIMITED ACCESS DT MKR, RUN ONLY FOR LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 2G4).

DRAWING ISSUE
18D
24D
30D

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G25B

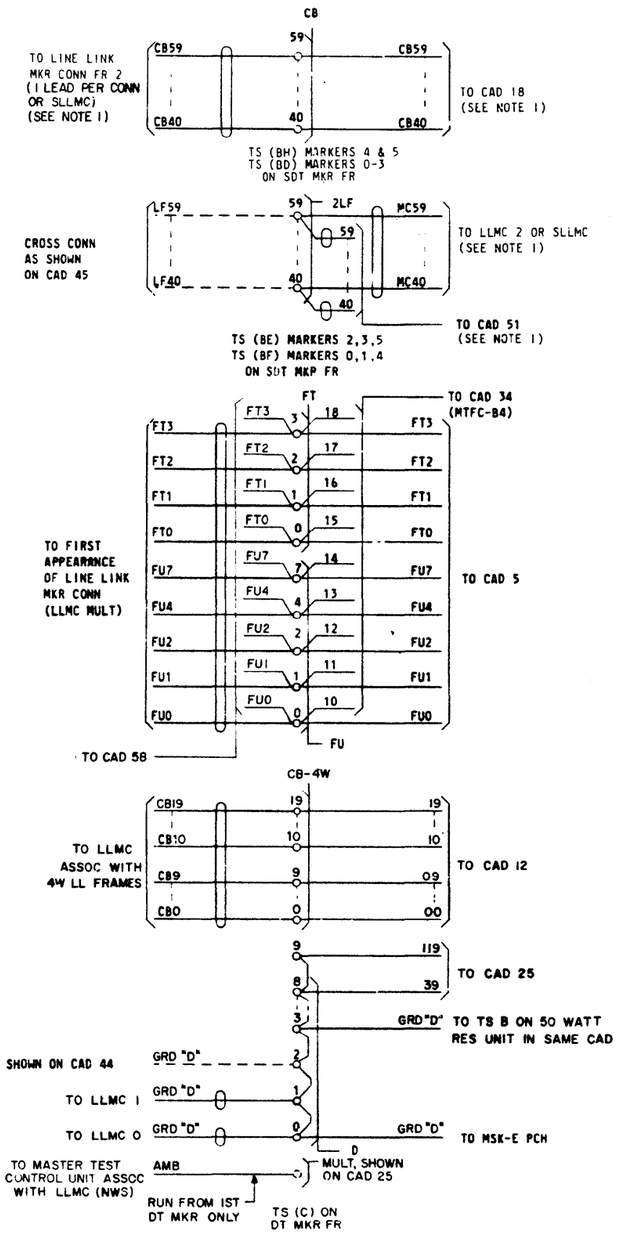
BELL TELEPHONE LABORATORIES INCORPORATED

SPECIFICATION 6S

SD-26001-01-G25B

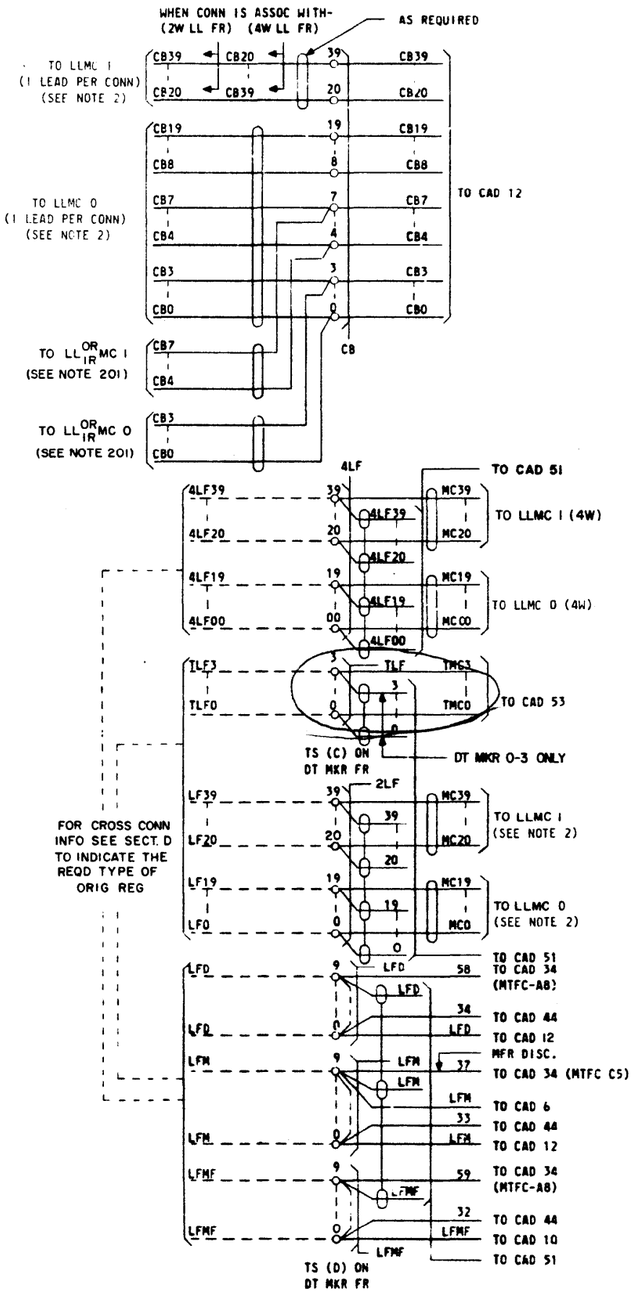
STABILOK

PART OF CAD 32
(SWITCHBOARD CABLES TO LINE LINK MARKER CONNECTORS)

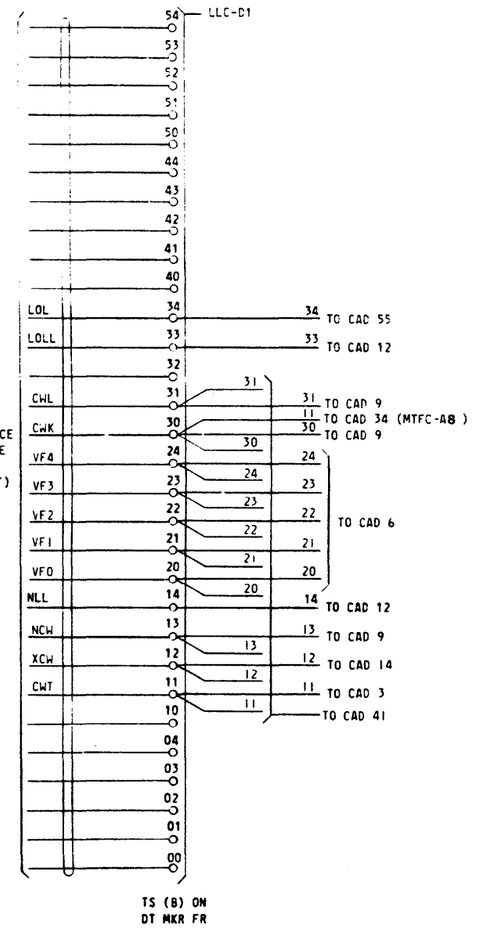


NOTES:

1. RUN ONLY FOR DT MKR 0-3 FOR LIMITED ACCESS, OTHERWISE ONE/MKR.
2. FOR LIMITED ACCESS DT MKR, RUN ONLY FOR LLMC IN ASSOCIATED CONN GROUP. (SEE NOTE 204)
3. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR LLC IN ASSOCIATED CONN GROUP. (SEE NOTE 204)



PART OF CAD 33
(SWITCHBOARD CABLING TO LINE LINK FRAME)



DRAWING ISSUE
18D FES
23A CK
30D
33D

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2) SD-26001-01-G25C

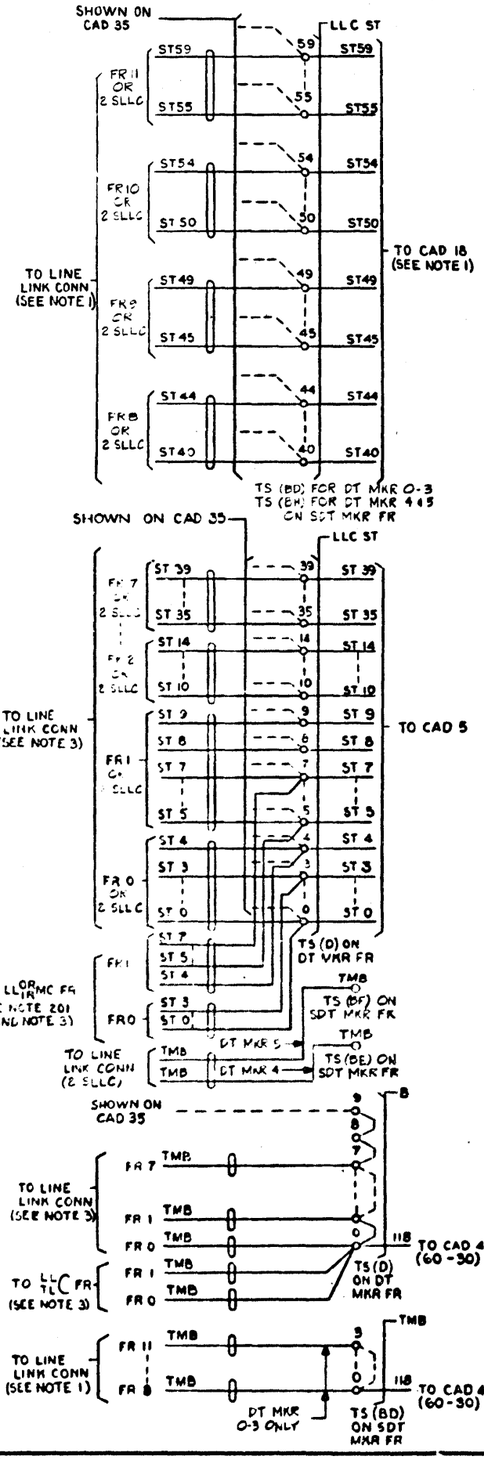
BELL TELEPHONE LABORATORIES INCORPORATED SIZE 6S

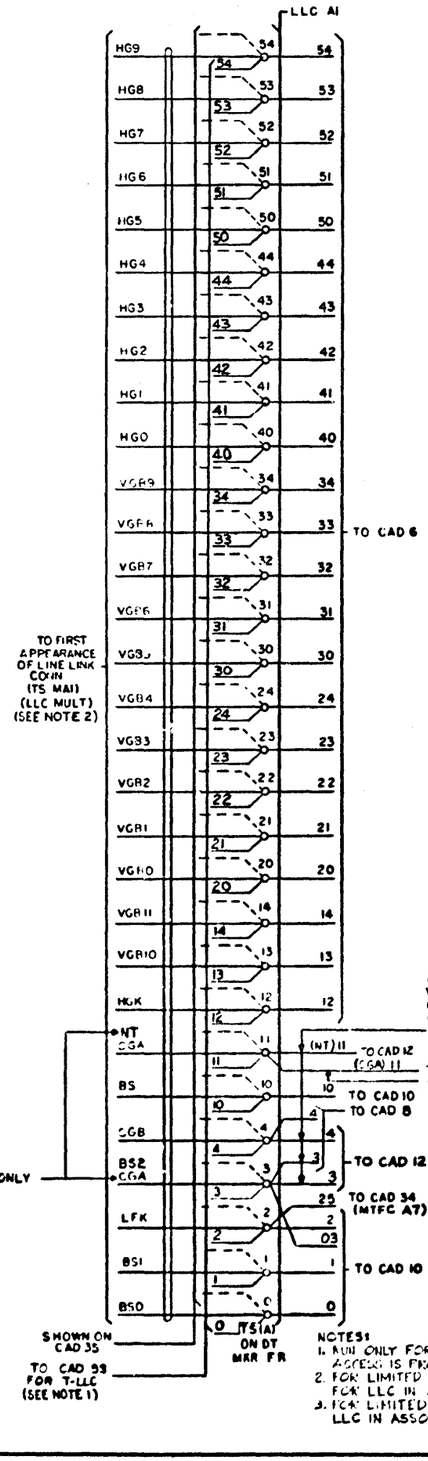
SD-26001-01-G25C

STABILOHM

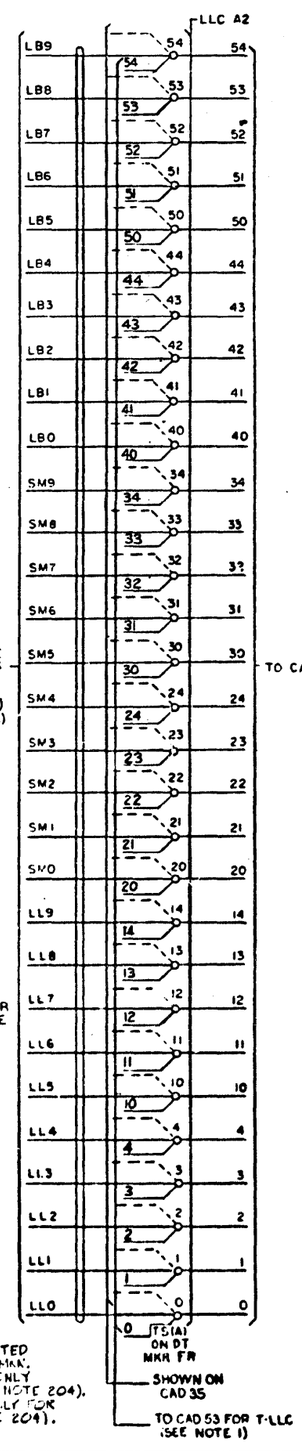
PART OF CAD 33

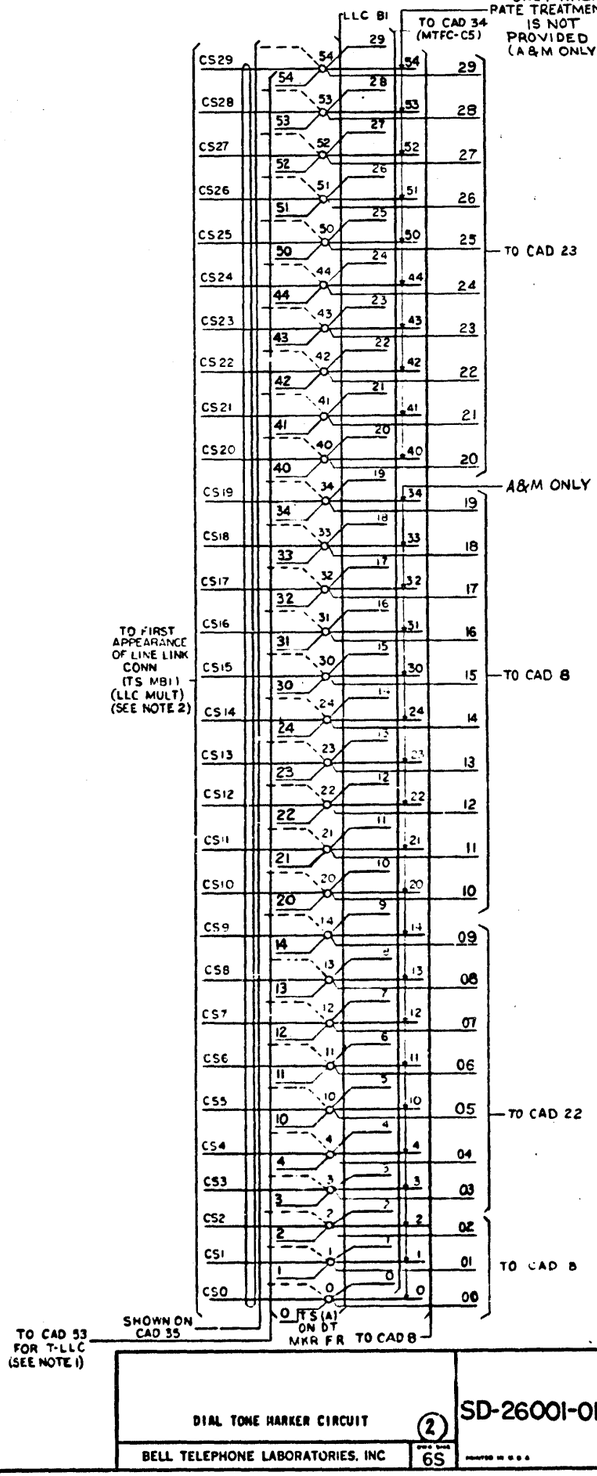
(SWITCHBOARD CABLING TO LINE LINK CONN)





NOTES:
1. RUN ONLY FOR DT MKR 0-3, WHEN LIMITED ACCESS IS PROVIDED, OTHERWISE CUT/MKR.
2. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR LLC IN ASSOC CONN GROUP (SEE NOTE 204).
3. FOR LIMITED ACCESS DT MKR, RUN ONLY FOR LLC IN ASSOC CONN GROUP (SEE NOTE 204).





DRAWING ISSUE	
1	WM
2D	PMM
3D	PMM
5D	WM
9B	CM
10B	MFT
11D	MFT
15D	WM
16D	WJT
17AC	WMT
23A	CDL
25A	RAR
300	
330	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

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ISSUE 39D

SD-26001-01-G26

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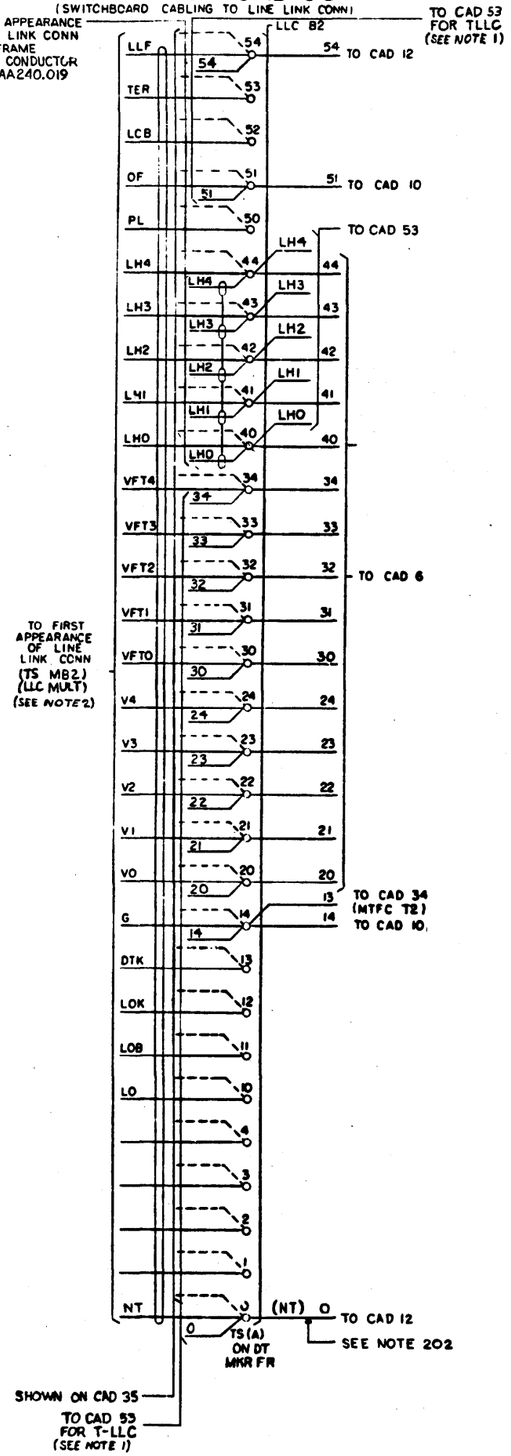
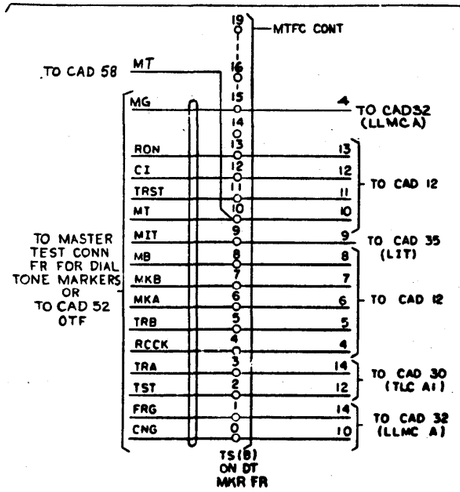
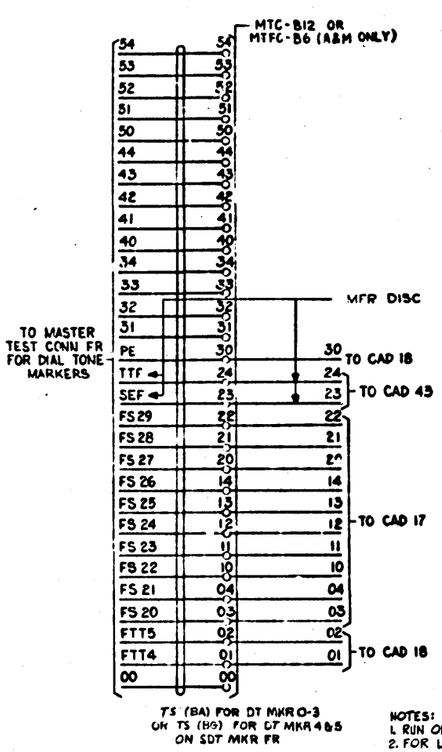
PART OF CAD 33

(SWITCHBOARD CABLING TO LINE LINK CONN)

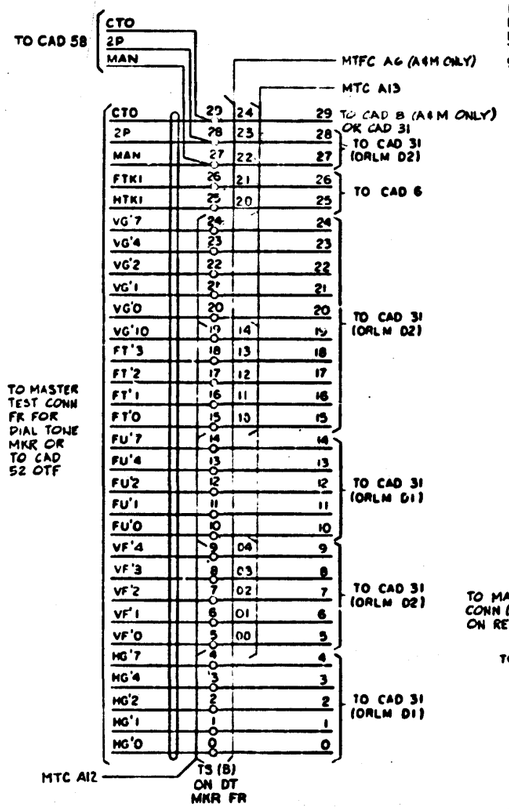


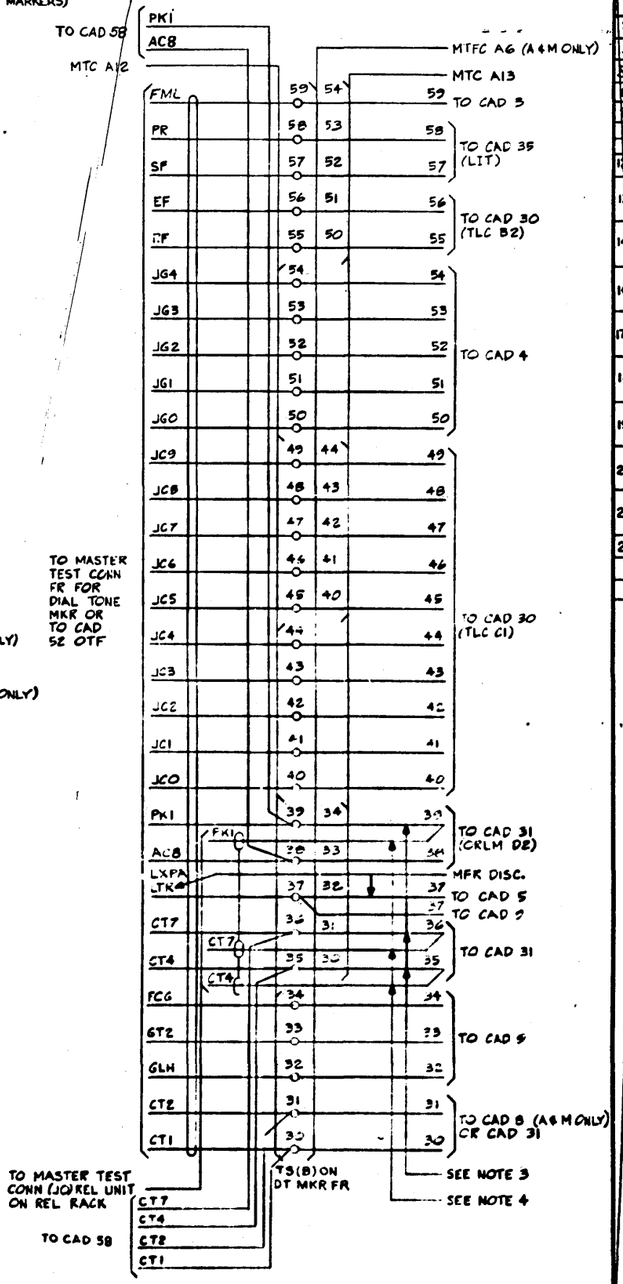




PART OF CAD 34

(SWITCHBOARD CABLING TO MASTER TEST CONN FR FOR DIAL TONE MARKERS)





NOTES:
1. RUN ONLY FOR DT MKR 0-3.
2. FOR LIMITED ACCESS DT MKR, MULT ONLY FOR LLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).
3. DO NOT CONNECT WHEN THE MASTER TEST CONN IS ARRANGED FOR DOUBLE SIDED TBL RECORD CARDS PER TABLE IF OF SD-25805-01.
4. CONNECT WHEN THE MASTER TEST CONN IS ARRANGED FOR DOUBLE SIDED TROUBLE RECORD CARDS PER TABLE IF OF SD-25805-01.

DRAWING ISSUE

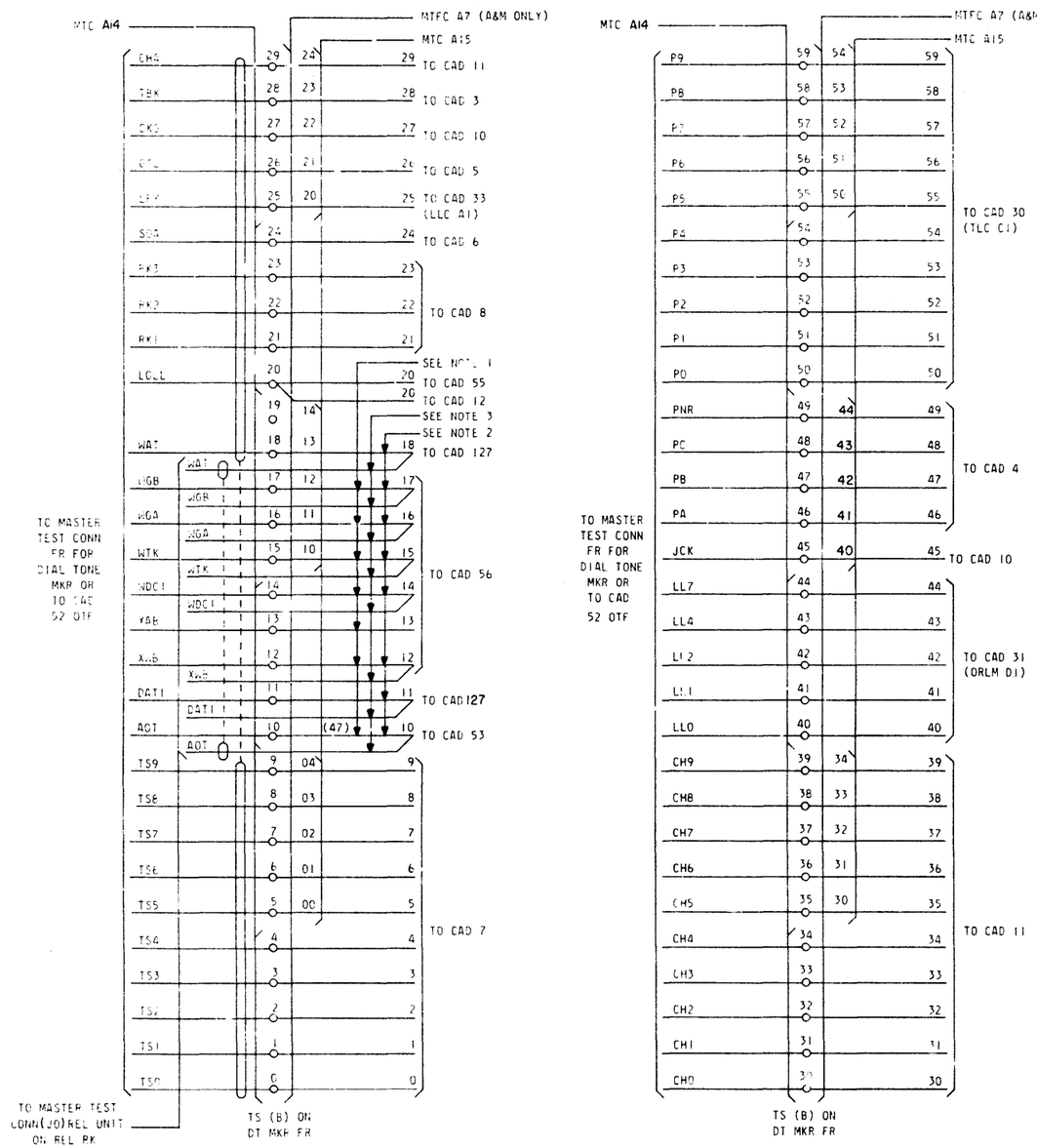
26	
30	
50	
80	
98	
10B	
11D	
12D	
13D	
14A	
16D	
17AC	
18D	
19A	
22D	
23A	
28D	
30D	
33D	

DIAL TONE MARKER CIRCUIT (2)	ISSUE 43B
BELL TELEPHONE LABORATORIES, INC 6S	SD-26001-01-G27A

SD-26001-01-G27A

PART OF CAD 34

SWITCHBOARD CABLING TO MASTER TEST CONNECTOR FRAME FOR DIAL TONE MARKERS



NOTES:

1. RUN ONLY FOR DIAL TONE MKR 0-3.
2. DO NOT CONNECT WHEN THE MASTER TEST CONN IS ARRANGED FOR DOUBLE SIDED TROUBLE RECORD CARDS PER TABLE IF OF SD-25805-01.
3. CONNECT WHEN THE MASTER TEST CONN IS ARRANGED FOR DOUBLE SIDED TROUBLE RECORD CARDS PER TABLE IF OF SD-25805-01.

ISSUE 38A

DIAL TONE MARKER CIRCUIT

SD-26001-01-G27B

BELL TELEPHONE LABORATORIES INCORPORATED

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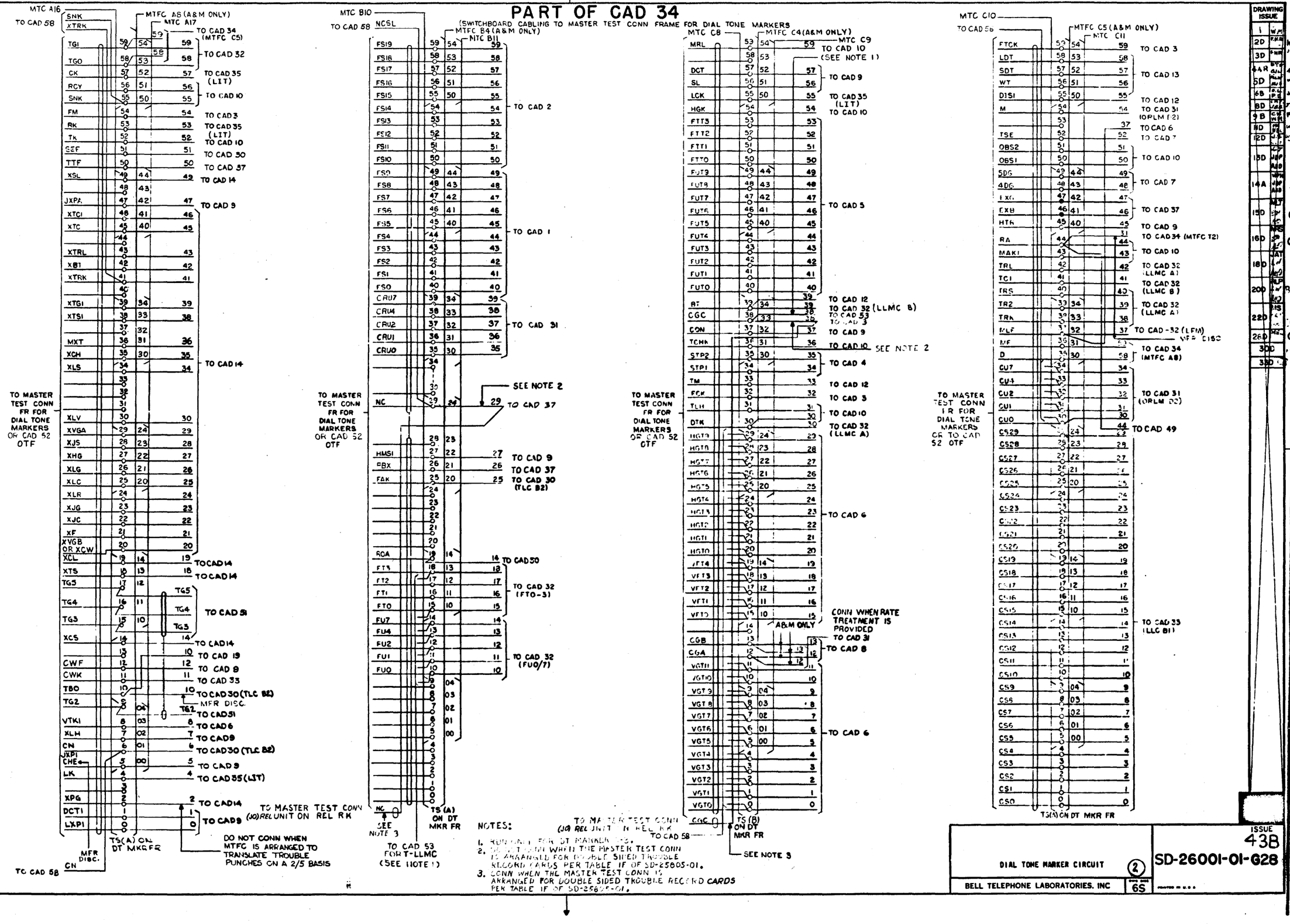
SD-26001-01-G27B

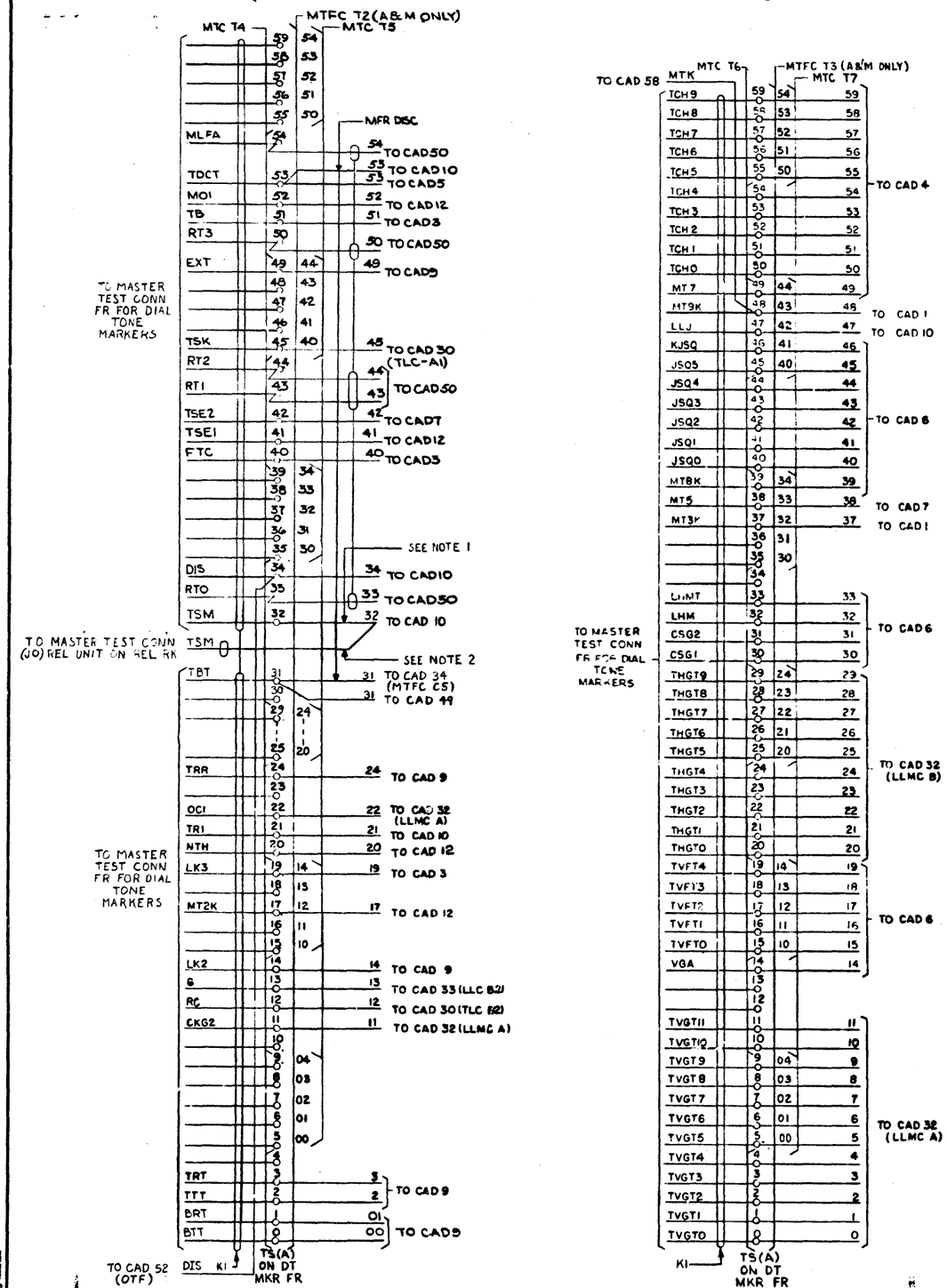
PART OF CAD 34



SD-26001-01-G28

PART OF CAD 34

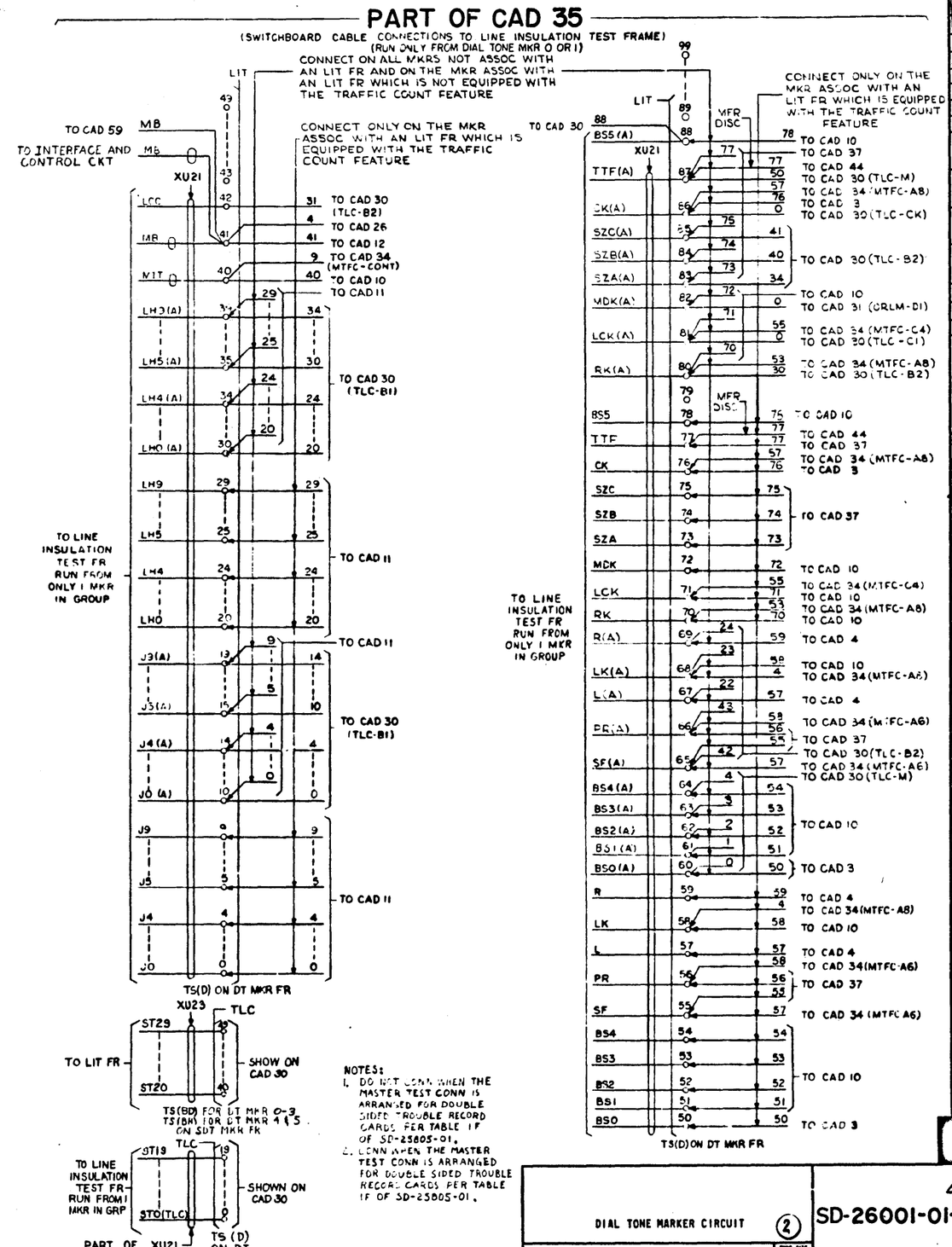
(SWITCHBOARD CABLING TO MASTER TEST CONN FR FOR DIAL TONE MKR)



PART OF CAD 35

(SWITCHBOARD CABLE CONNECTIONS TO LINE INSULATION TEST FRAME)

(RUN ONLY FROM DIAL TONE MKR 0 OR 1)



NOTES:
1. DO NOT CONN WHEN THE MASTER TEST CONN IS ARRANGED FOR DOUBLE SIDED TROUBLE RECORD CARDS PER TABLE IF OF SD-25805-01.
2. CONN WHEN THE MASTER TEST CONN IS ARRANGED FOR DOUBLE SIDED TROUBLE RECORD CARDS PER TABLE IF OF SD-25805-01.

DRAWING ISSUE

1	
2D	
3D	
5D	
9D	
9B	
1D	
2D	
13D	
15D	
18D	
23A	
28D	
30D	
33D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

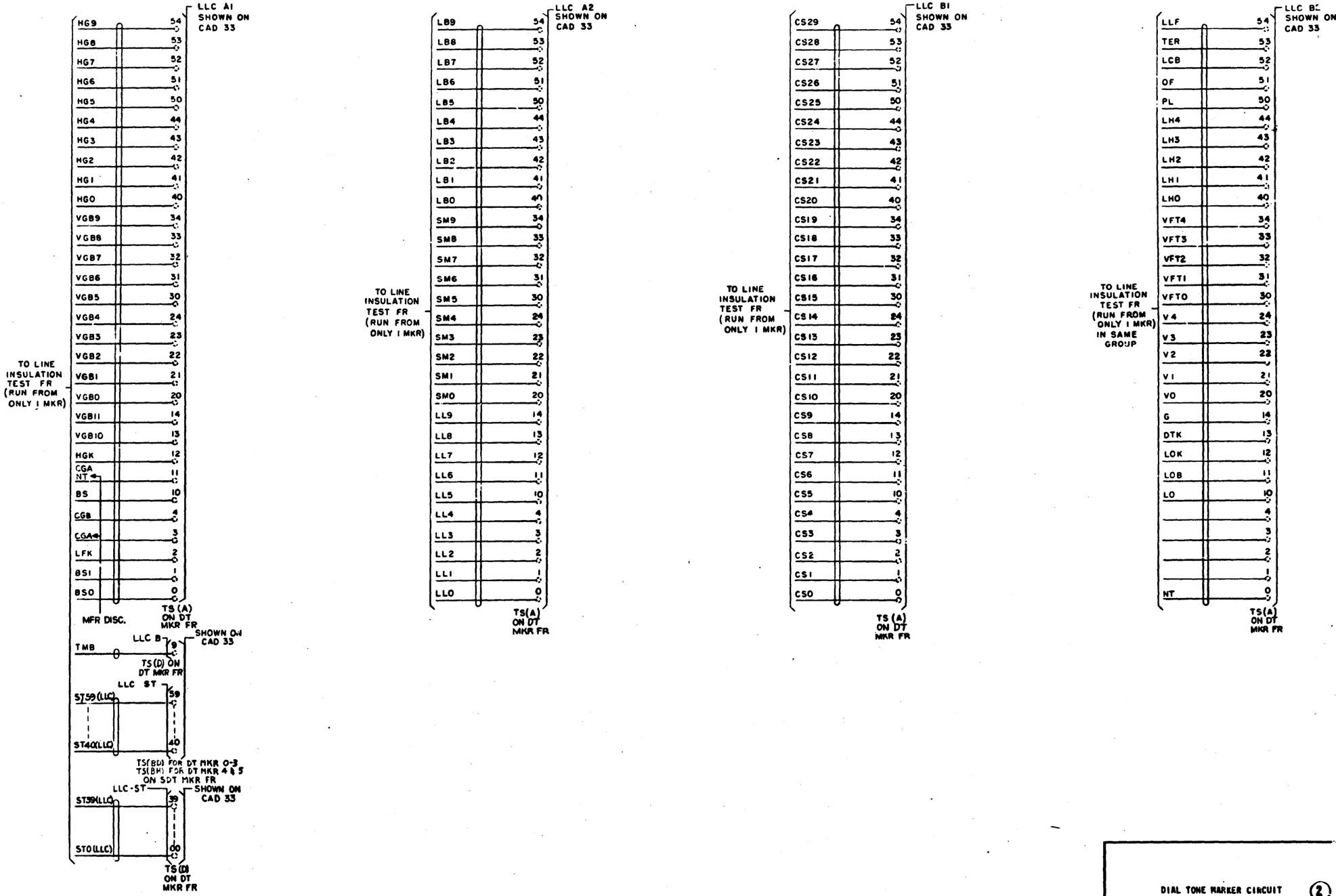
ISSUE 43B

SD-26001-01-G29

SD-26001-01-G29

PART OF CAD 35

(SWITCHBOARD CABLE CONNECTIONS TO LINE INSULATION TEST FR)
(RUN ONLY FROM DIAL TONE MKR 0 OR 1)



DRAWING ISSUE
1
2D
3D
5D
6S
8D
9B
150
200
300

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

6S

ISSUE 39D

SD-26001-01-G30

SD-26001-01-G30

CAD 36

(FOR SWBD CABLE CONNECTIONS TO PRTD FR)

SEE NOTE 203

TO FUSE PANEL ON POWER RINGING & TONE DISTRIBUTION FRAME

46V(MB) 49 MISC 6 TO MISC CKT (TRT LP)

+130V(E) 29 29 TO CAD 13

+130V(FEEDER) 19 TO 130V BUS ON FUSE PAN. B

SHOWN ON MISC CKT — TS (E) ON DT MKR FR

CONNECT WHEN CENTREX WITH 60 CLASSES OR FULL TRANSLATION OF 60 CS- POINTS IS PROVIDED (A&M ONLY) 29 20 TO CAD 126

CS29 29 CS29
CS20 20 CS20
CS19 19 CS19 TO CAD 8
CS10 10 CS10
CS09 09 CS09
CS00 00 CS00

CST9 9 CST CST9 MFR DISC.
CST8 8 CST8
CST7 7 CST7
CST6 6 CST6 TO CAD 22
CST5 5 CST5
CST4 4 CST4
CST3 3 CST3

CROSS CONN FOR TYPE OF SUBSCRIBER CLASS OF SERVICE

TO CAD 58

PBX 0 PBX 26 TO CAD 34 (MTFC-B4)
PB TO CAD 8
2P 9 2P 2 TO CAD 30 (TLC-B2)
SI TO CAD 31 (ORLM-D2)
2P 0 2P
AO 9 AO
AO 0 AO
CN 9 CN
CN 0 CN
MAN 2 MAN TO CAD 8
MAN 0 MAN
MCN 2 MCN
MCN 0 MCN
2PMR 2 2PMR
2PMR 0 2PMR
AOMR 2 AOMR
AOMR 0 AOMR
WBT 2 WBT
WBT 0 WBT TO CAD 129
WBT TO CAD 31 (ORLM-D2)
HMF
HMS HMS TO CAD 9
HMT HMT

CROSS CONN FOR FAST OR SLOW HOLD MAG TIMING

TO CAD 58 2PMR AOMR — TS (D) ON DT MKR FR

TO CAD 58

PLN7 PLN7 PLN7
PLN7 0 PLN7
PLN7 PBX7 PBX7
PBX7 PBX7
PBX5 PBX5 PBX5
PBX5 0 PBX5
PLN5 PLN5 PLN5 TO CAD 7
PLN5 PLN5 0 PLN5
PLN PLN PLN
PLN 0 PLN

TS (C) ON DT MKR FR

NCSL 2 NCSL 29 TO CAD 34 (MTFC-B4)
NCSL 0 NCSL (A&M ONLY)
PLNC 2 PLNC TO CAD 7
PLNC 0 PLNC
(A&M ONLY)
ACB TO CAD 31 (ORLM-D2)
ACB 0 ACB TO CAD 12

CS99 CS CS99
CS90 90 CS90
CS69 69 CS69 TO CAD 125
CS60 60 CS60
CS59 59 CS59
CS50 50 CS50
CS39 39 CS39 TO CAD 125 OR 126
CS30 30 CS30
ST 38 TO CAD 49
ST TO CAD 26

CROSS CONN FOR ST LEAD TO AUTO MON TEST

STD
STMF TO CAD 12

TS (D) ON DT MKR FR

CAD 37

(DIAL TONE MKR SERVICE AND TRAFFIC CROSS CONNECTIONS FOR SECTION D)

SZT T SZ SZT TO CAD 19
MFR DISC.
SZD4 D4 SZD4 TO CAD 4
SZD D SZD TO CAD 4
SZD TO CAD 19
SZC C 75 SZC
SZB B 74 SZB
SZA A 73 SZA

CROSS CONN FOR OFFICE SIZE OPR IN TERMS OF NO OF TRK LK FRS

TO CAD 35 TO CAD 4

SZ10 10 SZ10
SZ3 3 SZ3 TO CAD 4
SZ2-3 2-3 SZ2-3
SZ2 2 SZ2

TTF TTF 77 TTF TO CAD 35
PR PR 56 PR TO CAD 5
SF SF 55 SF
50 TO CAD 34 (VTFC-A16)

CROSS CONN "SPF" TO "SF" OR "PR" TO INDICATE SINGLE OR PAIRED TRK LINK FRS

SPT SPT SPT
SPF TO CAD 19
SPF SPF SPF TO CAD 10
SPF4 SPF4 SPF4 TO CAD 4

MFR DISC. STRAP WHEN THREE TO SIX ORIG REG GROUPS ARE PROVIDED

VGR
VGR11 11 VGR11
VGR10 10 VGR 0
VGR9 9 59 VGR9
VGR8 8 58 VGR8 TO CAD 8
VGR7 7 57 VGR7
VGR0 0 50 VGR0
TO CAD 50

CROSS CONN FOR TYPE OF ORG REG SERVED BY VARIOUS LINE LK OR VERT GRPS

VGD D VGD
VGMF MF VGMF TO CAD 12
TS (D) ON DT MKR FR VG

CROSS CONN EF TO EF0 FOR 10 OR LESS TRK LK FRAMES OR EF TO EF10 AND EF0 TO EF20 FOR 11-20 TRK LK FRAMES OR EF TO EF10 AND EF20 TO EF30 FOR 21 TO 30 TRK LK FRAMES

EF30 EF30 21 TO CAD 44
EF20 EF20 EF20 TO CAD 3
EFI0 EFI0 EFI0 TO CAD 2
EF0 EF0 EF0 TO CAD 1
EF EF EF

CROSS CONN JSP TO JSL FOR 4 OR LESS ORG REG PER TLF OR JSP TO JSH FOR MORE THAN 4 ORG REG PER TLF

JSH JSH JSH
JSL JSL JSL TO CAD 6
JSP JSP JSP

ALTERNATE CROSS CONN OF S & MI TO ING & INS AND M & E TO OT4 & OT9 TO EQUALIZE WEAR ON RELAYS IN CHAN TEST UNIT

OT9 OT9 OT9 TO CAD 11
OT4 OT4 OT4
E E E TO CAD 10
M M M

INS INS INS TO CAD 11
ING ING ING
MI MI MI TO CAD 10
S S S

FOR TBL RECORD TSTS CONN EXB TO ANY TST POINT WITH BAT APPEARANCE AND EXG TO ANY TST POINT WITH GRD APPEARANCE

EXG EXG 47 TO CAD 34 (MTFC C5)
EXB EXB 46

CONN AUD TO DC FOR AC-DC AUD SUPPLY OR AUD TO AC FOR ± AUD SUPPLY

RING G TO CAD 9
AUD AUD 114 TO CAD 25
DC DC DC TO CAD 13
AC AC AC TO CAD 10
TS (D)

CROSS CONN OF TO OF0 FOR 10 OR LESS TRK LK FRAMES OR OF TO OF10 AND OF0 TO OF20 FOR 11-20 TRK LK FRAMES OR OF TO OF10 AND OF20 TO OF30 FOR 21-30 TRK LK FRAMES

CF30 OF30 17 TO CAD 44
OF20 OF20 OF20 TO CAD 3
OF10 OF10 OF10 TO CAD 2
OF0 OF0 OF0 TO CAD 1
OF 0?
TS (D) ON DT MKR FR

CAD 38

(FOR SWBD CABLE CONNECTIONS TO TRAFFIC USAGE RECORDER FR)

TO TRAFFIC USAGE RECORDER FR

MB 20 MISC 20 TO CAD 12
MBM 10 10
TS (B) ON DT MKR FR

DRAWING ISSUE

2D	
3D	
5D	
11D	
12D	
13D	
14A	
15D	
16D	
18D	
24D	
28D	
30D	
33D	

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G31

BELL TELEPHONE LABORATORIES, INC 6S

SD-26001-01-G31

CAD 36

(FOR SWBD CABLE CONNECTIONS TO PRTD FR)

SEE NOTE 203

TO FUSE PANEL ON POWER RINGING & TONE DISTRIBUTION FRAME

48V(MB) 49 MISC 8 TO MISC CKT (TRT LP)

+130V(E) 29 29 TO CAD 13

+130V(FEEDER) 19 TO 130V BUS ON FUSE PAN. B

SHOWN ON MISC CKT — TS (E) ON DT MKR FR

TO CAD 58

PLN7 PLN7 PBX7 PBX7 PBX5 PBX5 PLN5 PLN5 PLN PLN — TO CAD 7

TS (C) ON DT MKR FR

NCSL 2 NCSL 29 TO CAD 34 (MTFC-84)

NCSL 0 NCSL (A&M ONLY)

PLNC 2 PLNC

PLNC 0 PLNC (A&M ONLY) TO CAD 7

TO CAD 58 PLNC

ACB TO CAD 31 (ORLM-D2)

ACB 0 ACB TO CAD 12

CS99 CS90 CS69 CS60 — TO CAD 125

CS59 CS50 CS39 CS30 — TO CAD 125 OR 126

ST 30 TO CAD 49

ST TO CAD 26

CROSS CONN FOR ST LEAD TO AUD MON TEST

STD

STMF TO CAD 12

TS (D) ON DT MKR FR

(A&M ONLY)

CONNECT WHEN CENTREX WITH 60 CLASSES OR FULL TRANSLATION OF 60 CS- POINTS IS PROVIDED

29 20 TO CAD 126

CS29 CS20 CS19 CS10 CS09 CS00 — TO CAD 8

CST9 CST8 CST7 CST6 CST5 CST4 CST3 — MFR DISC.

TO CAD 22

CROSS CONN FOR TYPE OF SUBSCRIBER CLASS OF SERVICE

TO CAD 58

PBX AO MCN PBX 2P 2P AO AO CN CN — TO CAD 8

PBX 26 TO CAD 34 (MTFC B4)

PBX TO CAD 6

2P 2 TO CAD 30 (TLC-B2)

2P 51 TO CAD 31 (ORLM-D2)

MAN MAN MCN MCN 2PMR 2PMR AOMR AOMR MPL MPL — TO CAD 131

WBT WBT — TO CAD 129

WBT TO CAD 31 (ORLM-D2)

HMF HMS HMT — TO CAD 9

CROSS CONN FOR FAST OR SLOW HOLD MAG. TIMING

TS (D) ON DT MKR FR

TO CAD 58 2PMR AOMR MPL

CAD 37

(DIAL TONE MKR SERVICE AND TRAFFIC CROSS CONNECTIONS FOR SECTION D)

SZF T SZT TO CAD 19

MFR DISC.

SZD4 D4 SZD4 TO CAD 4

SZD D SZD TO CAD 4

SZD TO CAD19

SZC C 75 SZC

SZB B 74 SZB

SZA A 73 SZA

TO CAD 35 TO CAD 4

CROSS CONN FOR OFFICE SIZE OPR IN TERMS OF NO OF TRK LK FRS

SZ10 10 SZ10

SZ3 3 SZ3 TO CAD 4

SZ2-3 2-3 SZ2-3

SZ2 2 SZ2

TO CAD 35

TTF TTF 77 TTF

PR PR 56 PR TO CAD 5

SF SF 55 SF

50 TO CAD 34 (MTFC-A16)

CROSS CONN "SPF" TO "SF" OR "PR" TO INDICATE SINGLE OR PAIRED TRK LINK FRS

SPT SPT SPT

SPF SPF SPF TO CAD 19

5PF4 5PF4 5PF4 TO CAD 10

MFR DISC. TO CAD4

STRAP WHEN THREE TO SIX ORIG REG GROUPS ARE PROVIDED

VGR

VGR11 11 VGR11

VGR10 10 VGR10 52

VGR9 9 VGR9

VGR6 6 VGR6 TO CAD6

VGR7 7 VGR7 53 57

VGR0 0 VGR0 50

TO CAD 50

CROSS CONN FOR TYPE OF ORG REG SERVED BY VARIOUS LINE LK FR VERT GRPS

VGD D VGD

VGMF MF VGMF TO CAD 12

TS(D) ON DT MKR FR VG

CROSS CONN EF TO EF0 FOR 10 OR LESS TRK LK FRAMES OR EF TO EF10 AND EF0 TO EF20 FOR 11-20 TRK LK FRAMES OR EF TO EF10 AND EF20 TO EF30 FOR 21 TO 30 TRK LK FRAMES

EF30 EF30 21 TO CAD 44

EF20 EF20 EF20 TO CAD 3

EF10 EF10 EF10 TO CAD 2

EF0 EF0 EF0 TO CAD 1

EF EF EF

CROSS CONN JSP TO JSL FOR 4 OR LESS ORG REG PER TLF OR JSP TO JSH FOR MORE THAN 4 ORG REG PER TLF

JSH JSH JSH

JSL JSL JSL TO CAD 6

JSP JSP JSP

OT9 OT9 OT9 TO CAD 11

OT4 OT4 OT4

E E E TO CAD 10

M M M

ALTERNATE CROSS CONN OF S & MI TO IN0 & IN5 AND M & E TO OT4 & OT9 TO EQUALIZE WEAR ON RELAYS IN CHAN TEST UNIT

IN5 IN5 IN5 TO CAD 11

IN0 IN0 IN0

MI MI MI TO CAD 10

S S S

FOR TBL RECORD TSTS CONN EXG TO ANY TST POINT WITH BAT APPEARANCE AND EXG TO ANY TST POINT WITH GRD APPEARANCE

EXG EXG 47

EXB EXB 46 TO CAD 34 (MTFC C5)

CONN AUD TO DC FOR AC-DC AUD SUPPLY OR AUD TO AC FOR ± AUD SUPPLY

AUD AUD RING G TO CAD 9

114 TO CAD 25

DC DC DC TO CAD 13

AC AC AC TO CAD 10

TS (D)

CAD 38

(FOR SWBD CABLE CONNECTIONS TO TRAFFIC USAGE RECORDER FR)

TO TRAFFIC USAGE RECORDER FR

MB 20 MISC 20 TO CAD 12

MBM 10 10

TS(E) ON DT MKR FR

CROSS CONN OF TO OF0 FOR 10 OR LESS TRK LK FRAMES OR OF TO OF10 AND OF0 TO OF20 FOR 11-20 TRK LK FRAMES OR OF TO OF10 AND OF20 TO OF30 FOR 21-30 TRK LK FRAMES

CF30 OF30 17 TO CAD 44

OF20 OF20 OF20 TO CAD 3

OF10 OF10 OF10 TO CAD 2

OF0 OF0 OF0 TO CAD 1

OF OF OF

TS(D) ON DT MKR FR

DRAWING ISSUE

2D	
3D	
5D	
11D	
12D	
13D	
14A	
15D	
16D	
18D	
24D	
28D	
30D	
33D	

ISSUE 45B

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G31

BELL TELEPHONE LABORATORIES, INC

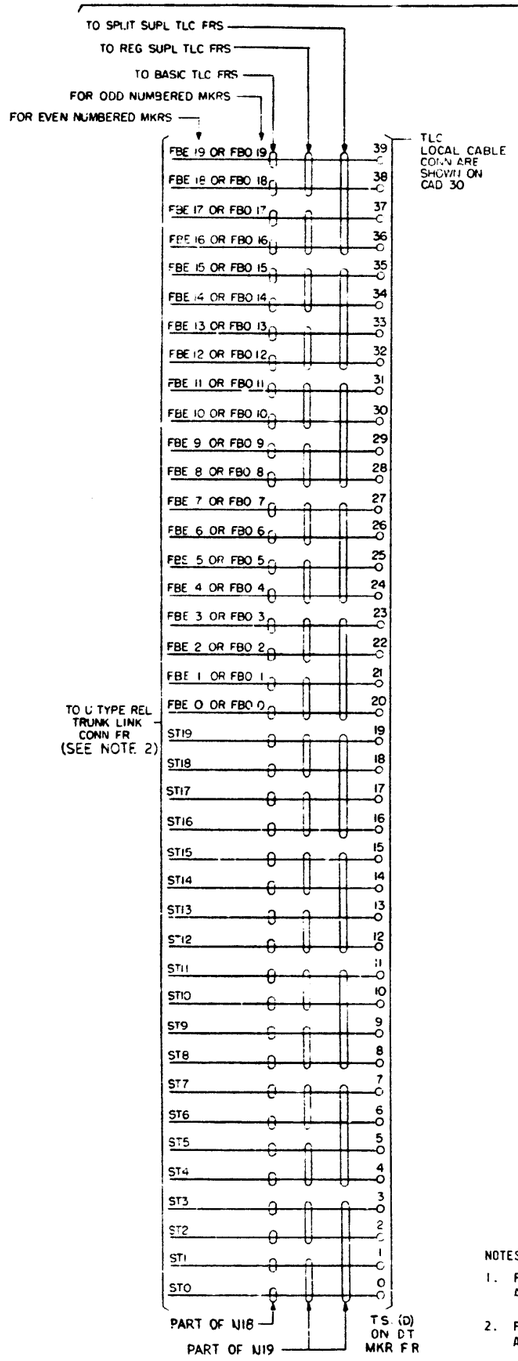
65

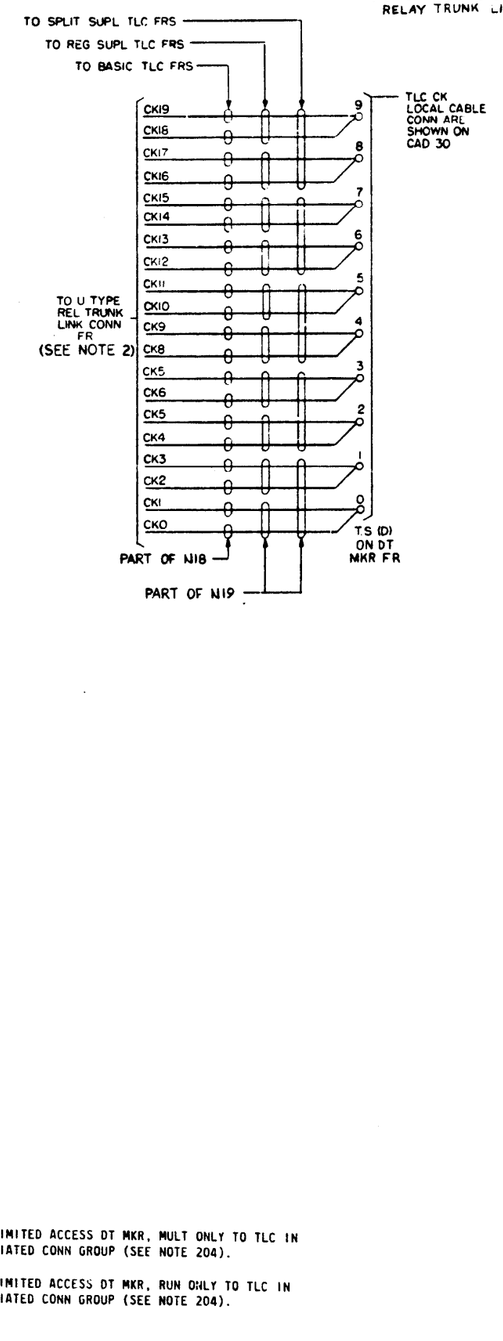
ED-10-10096-US

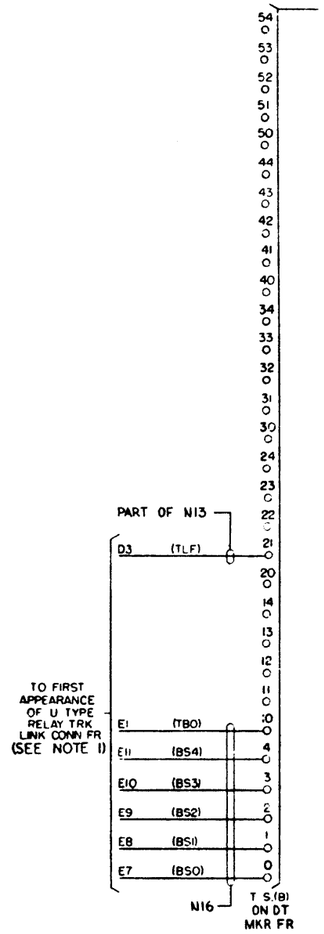
PART OF CAD 39

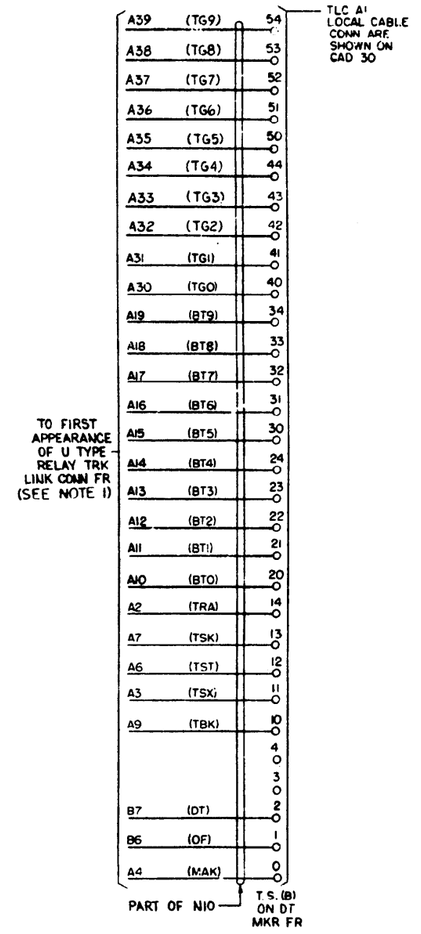
(A B M ONLY)

(FOR SWITCHBOARD CABLE CONNECTIONS TO U TYPE RELAY TRUNK LINK CONNECTOR FRAMES









NOTES:

1. FOR LIMITED ACCESS DT MKR, MULT ONLY TO TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

2. FOR LIMITED ACCESS DT MKR, RUN ONLY TO TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE	
1	
2D	
3D	
5D	
16D	
35D	

DIAL TONE MARKER CIRCUIT (2)

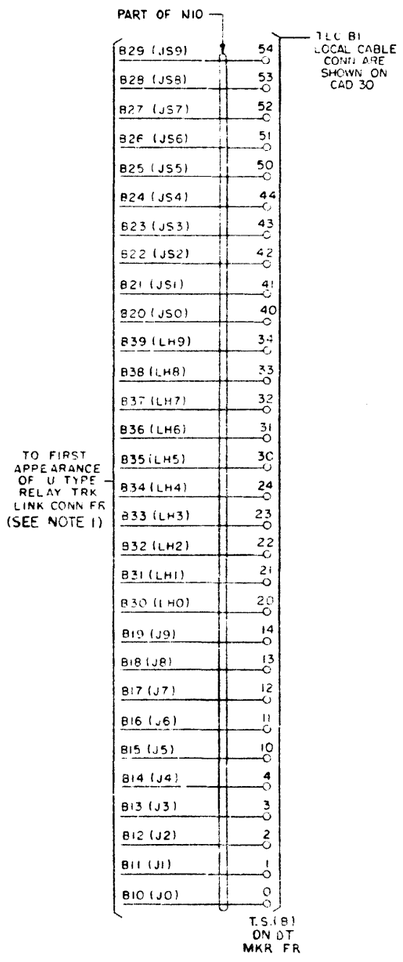
BELL TELEPHONE LABORATORIES, INC 6S

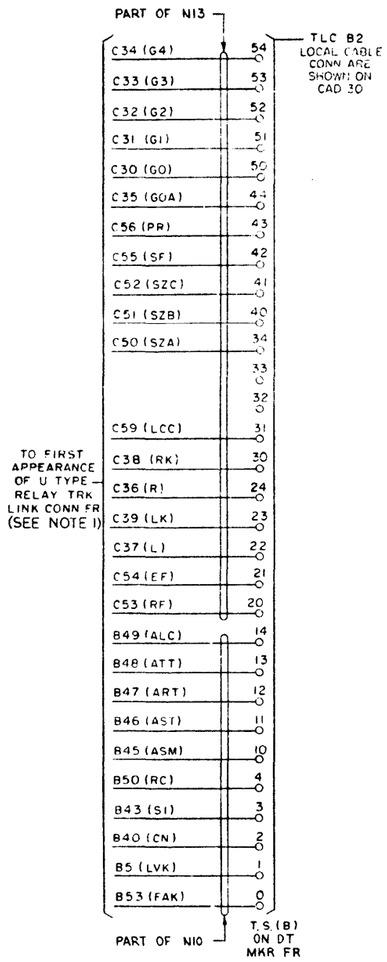
35

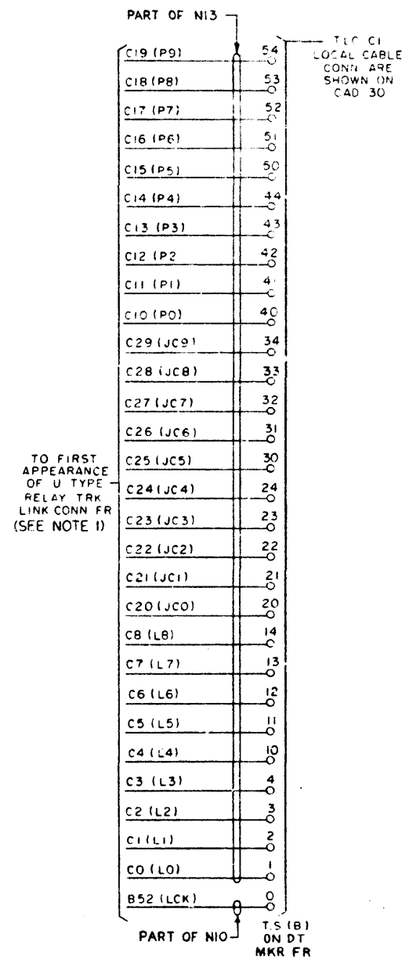
SD-26001-01-032

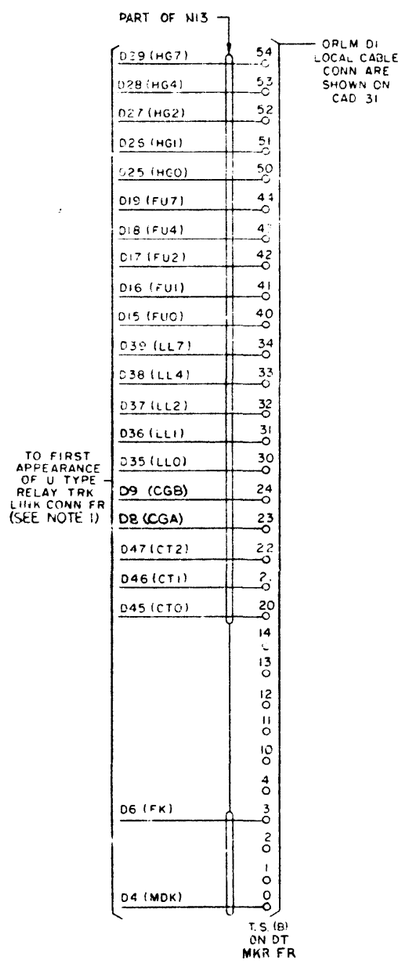
SD-26001-01-032

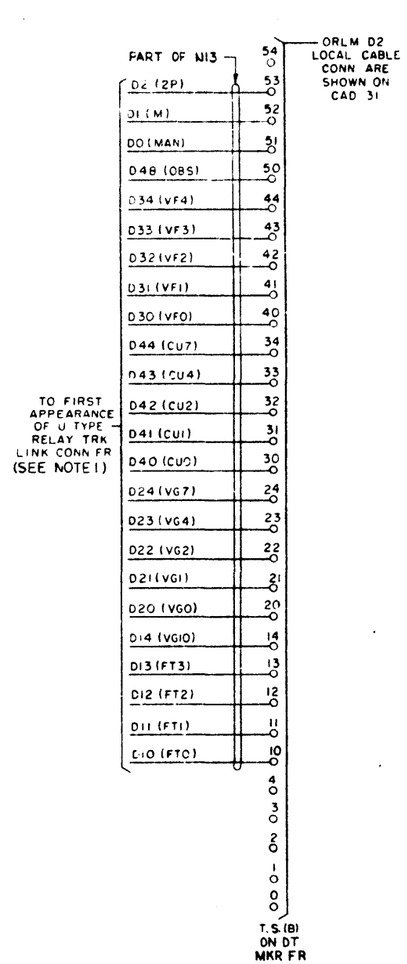
PART OF CAD 39











NOTES:

1. FOR LIMITED ACCESS D1 MXR, MULT ONLY TO TLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE: 1 (FEB '71 PM); 3D; 5D; 9B (CH); 16D (MAR '72); 18D (JAN '73 LW MD); 35D

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

6S

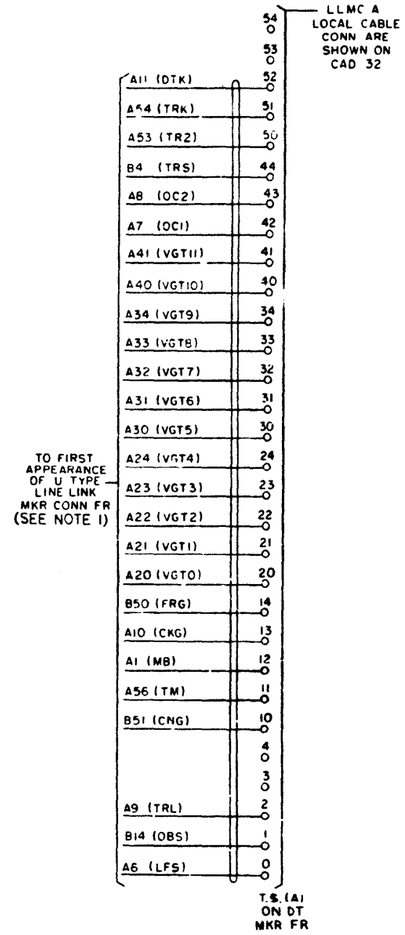
35

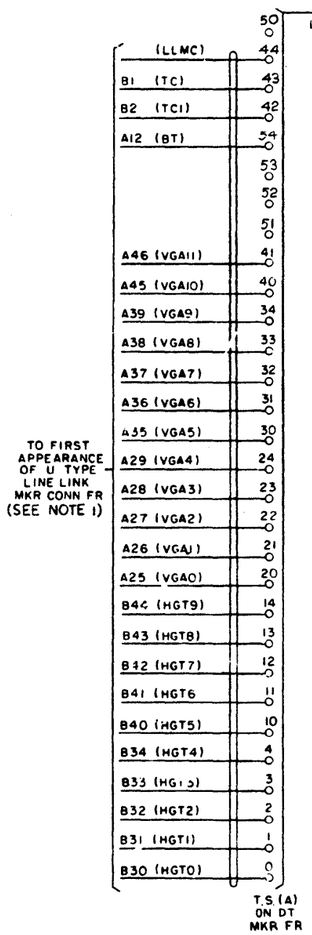
SD-26001-01-633

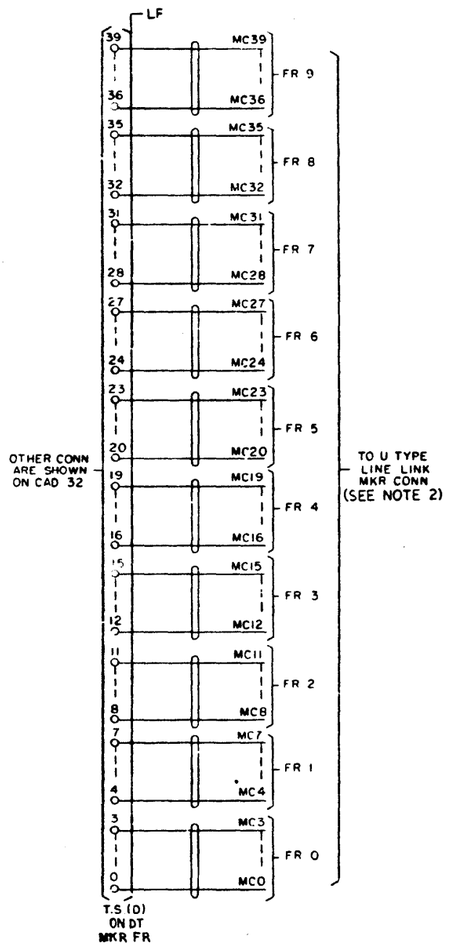
SD-26001-01-633

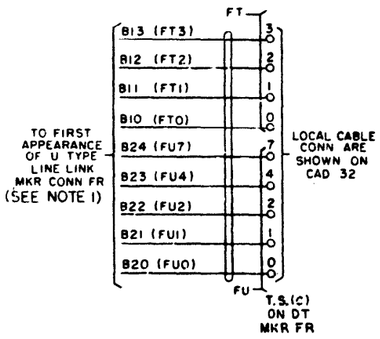
PART OF CAD 40A

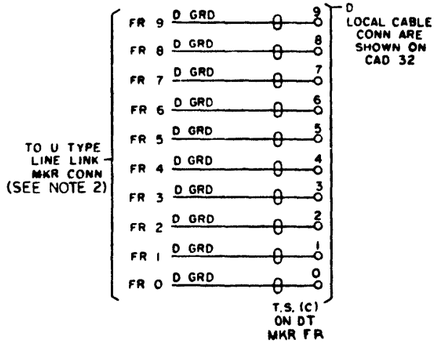
(A & M ONLY)
FOR SWITCHBOARD CABLE CONNECTIONS TO
U TYPE RELAY LINE LINK MARKER CONNECTOR
FRAMES J28151C (4 CONN SIZE)











NOTES:

1. FOR LIMITED ACCESS DT MKR, MILT ONLY TO LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).
2. FOR LIMITED ACCESS DT MKR, RUN ONLY TO LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

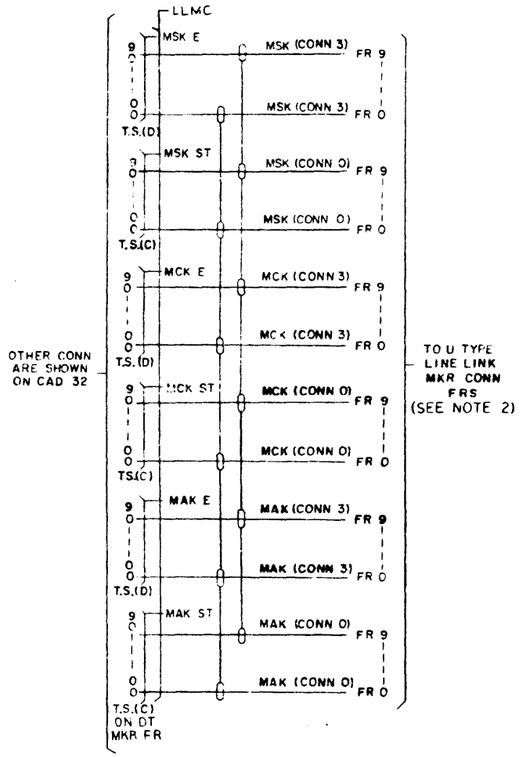
DRAWING ISSUE
1
2D
3D
5D
16D
35D

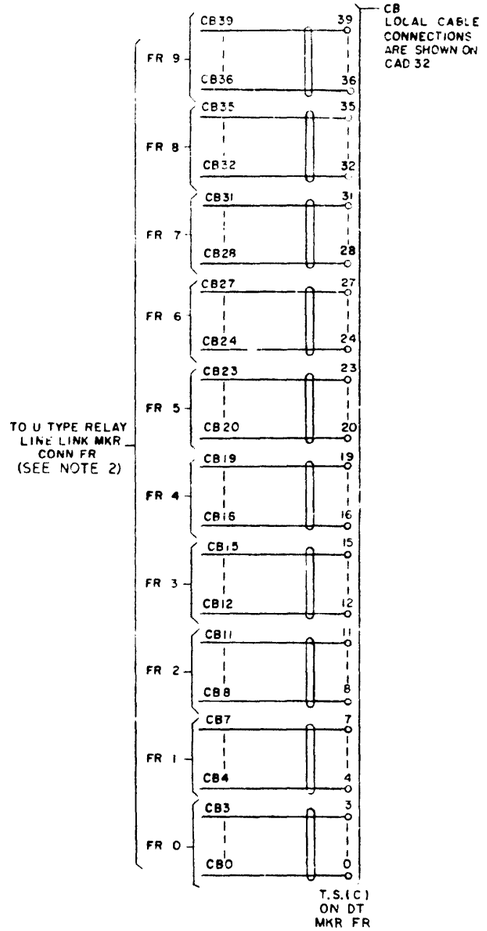
SD-26001-01-634

DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES, INC
6S

SD-26001-01-634

PART OF CAD 40A

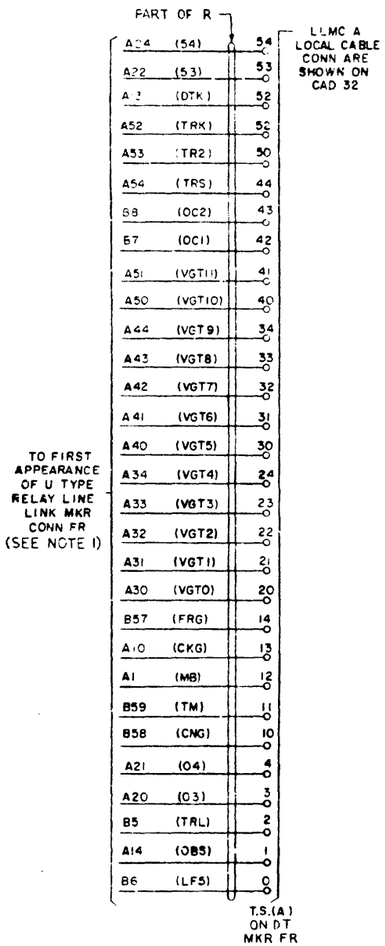


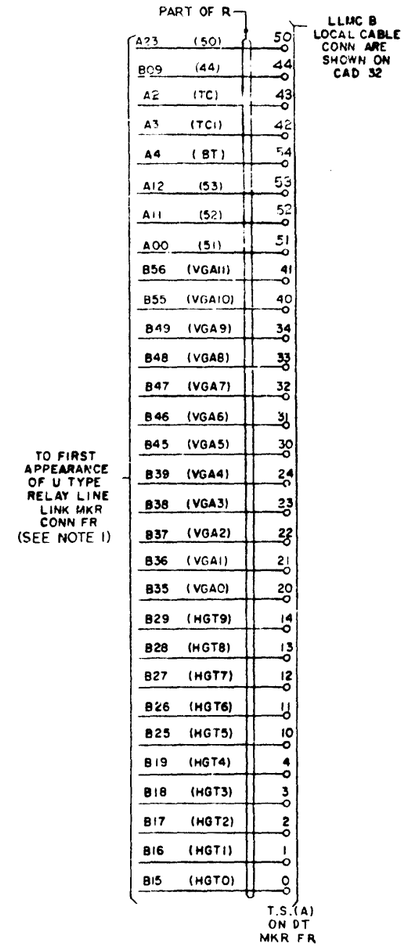


PART OF CAD 40B

(ABM) ONLY

FOR SWITCHBOARD CABLE CONNECTIONS TO U TYPE RELAY LINE LINK MARKER CONNECTOR FRAME J2815 IN (8 OR 16 CONN SIZE)





NOTES:

1. FOR LIMITED ACCESS DT MKR, MULT ONLY TO LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

2. FOR LIMITED ACCESS DT MKR, RUN ONLY TO LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE	
1	F.C. [illegible]
2D	F.R.B. —
3D	F.R.B. —
4AR	[illegible]
5D	[illegible]
16D	[illegible]
35D	

DIAL TONE MARKER CIRCUIT (2)

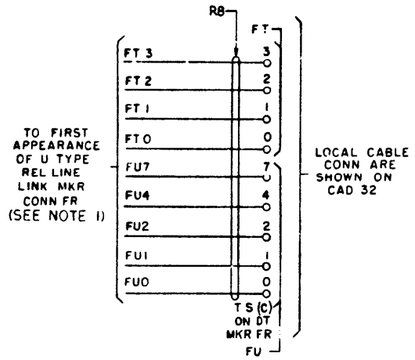
BELL TELEPHONE LABORATORIES, INC 65

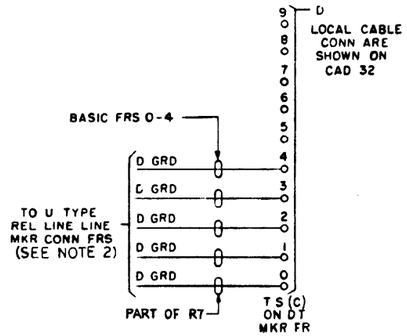
35

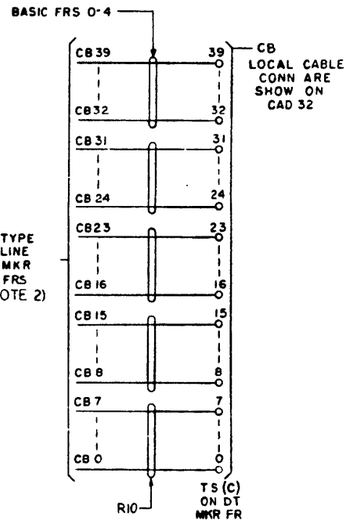
SD-26001-01-G35

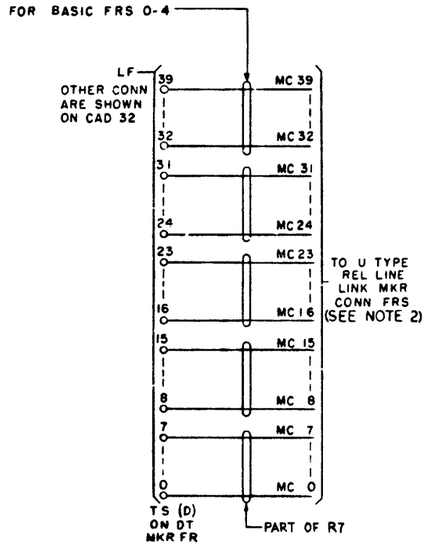
SD-26001-01-G35

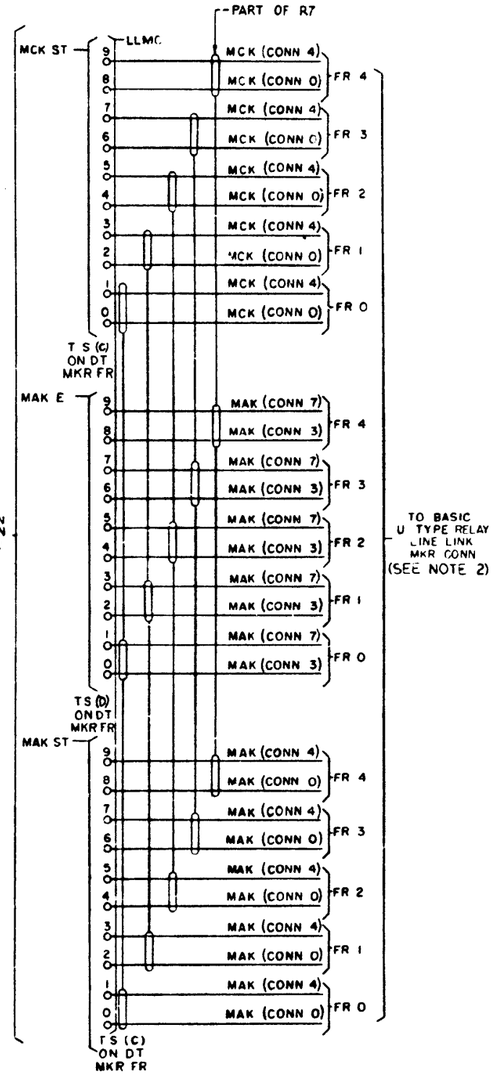
PART OF CAD 40B

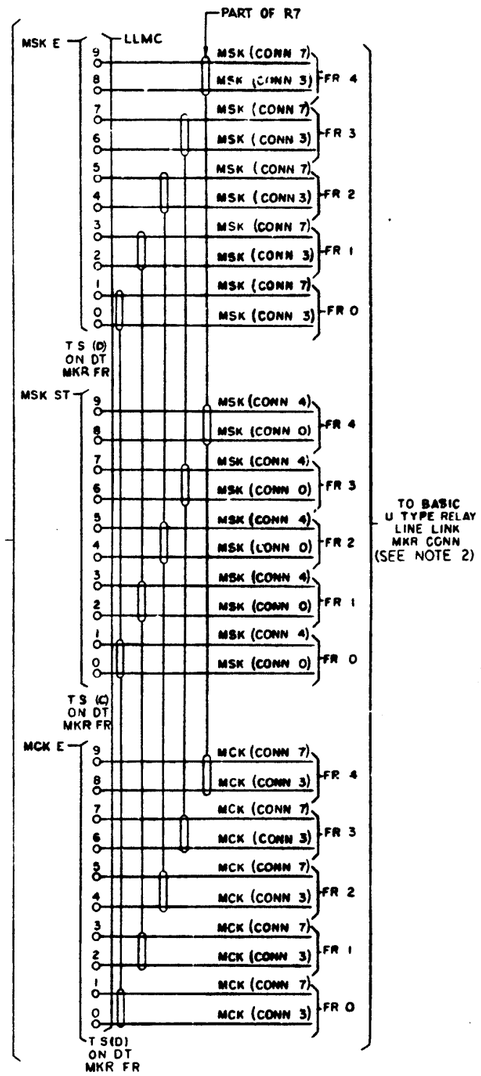












NOTES:

1. FOR LIMITED ACCESS DT MKR, MULT ONLY TO LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

2. FOR LIMITED ACCESS DT MKR, RUN ONLY TO LLMC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE

1	
2D	
3D	
5D	
7B	
16D	
35D	

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DIAL TONE MARKER CIRCUIT (2)

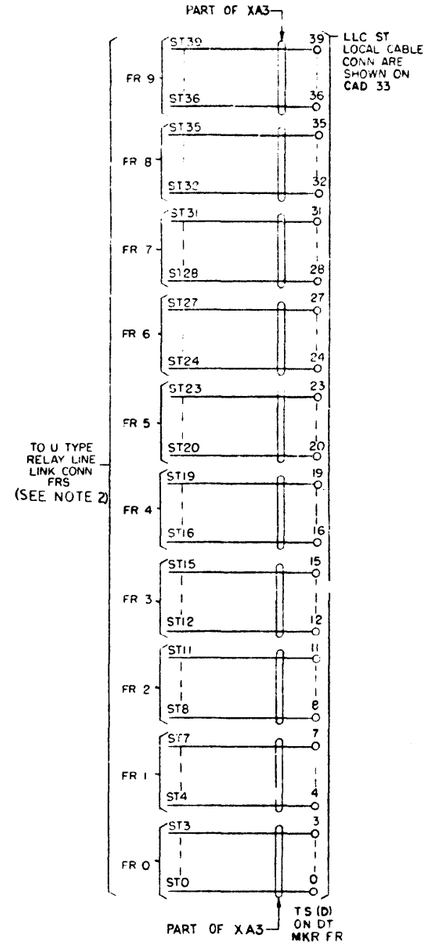
BELL TELEPHONE LABORATORIES, INC 6S

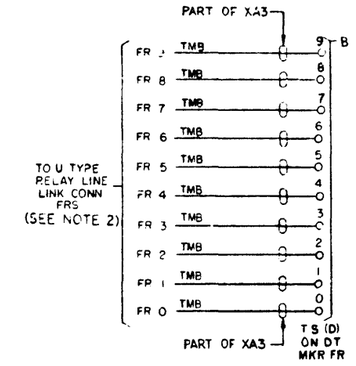
35

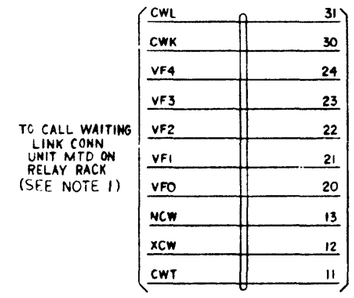
SD-26001-01-636

PART OF CAD 41

(A & M ONLY)
FOR SWITCHBOARD CABLE CONNECTIONS TO
U TYPE RELAY LINE LINK CONNECTOR FRAMES







NOTES:

1. FOR LIMITED ACCESS DT MKR,MULT ONLY TO LLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).
2. FOR LIMITED ACCESS DT MKR,RUN ONLY TO LLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE

1	ORIG
3D	F.R.S.
5D	ADD CAD 41 MKR. FOR A&M
16D	
30D	
35D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

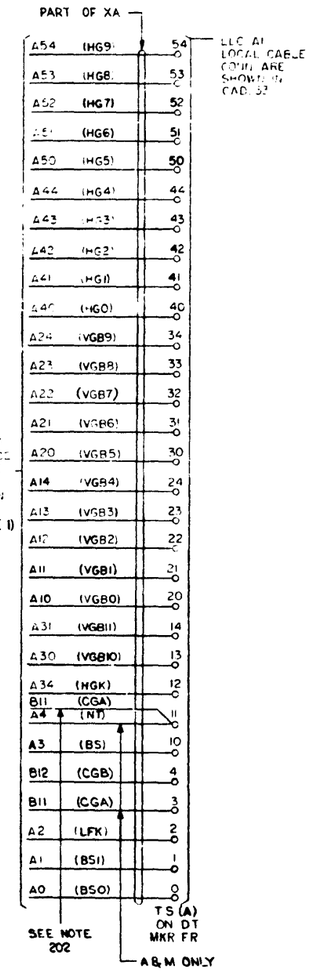
6S

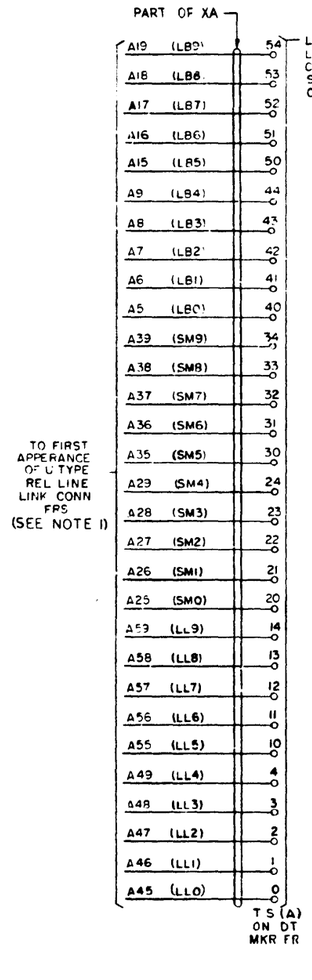
35

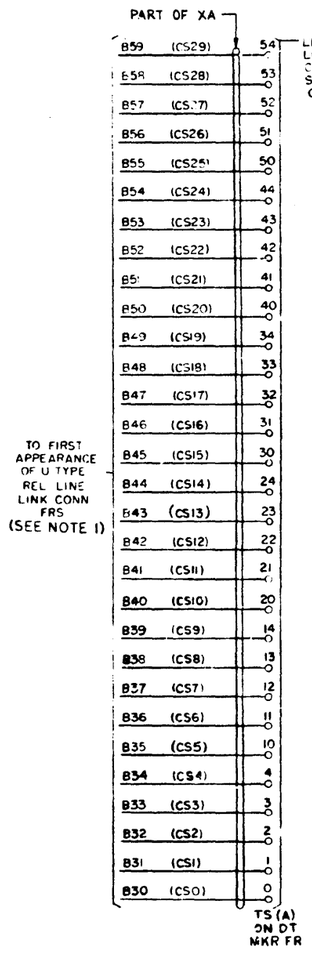
SD-26001-01-G37

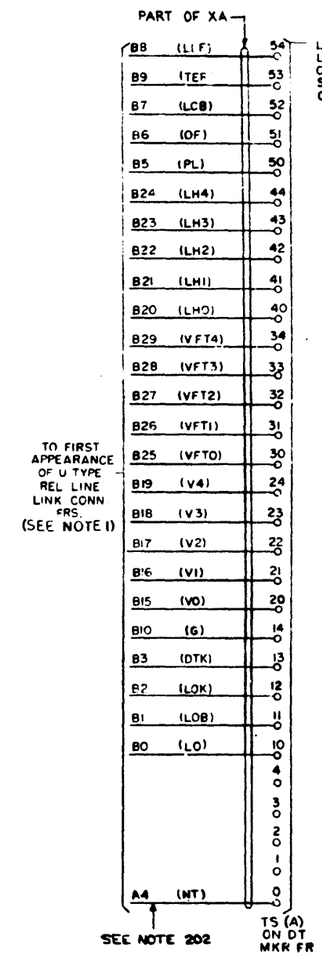
SD-26001-01-G37

PART OF CAD 41









NOTES:

1. FOR LIMITED ACCESS DT MKR, MULT ONLY TO LLC IN ASSOCIATED CONN GROUP (SEE NOTE 204).

DRAWING ISSUE

1	FOR MFR
2D	PWR
3D	FAIL
5D	
16D	
18D	
35D	

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES, INC

2 / 45

35

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SD-26001-01-G38

PART OF CAD 42

SWITCHBOARD CABLING TO MASTER TEST CONNECTOR (MTC) FRAME OR SUPPLEMENTARY MASTER TEST CONNECTOR FRAME (SMTC) WHEN THE MASTER TEST CONNECTOR FOR DIAL TONE MARKERS (DMTC) IS NOT FURNISHED

29	(CTO)	29	A6 LOCAL CABLE CONN. ARE SHOWN IN CAD 34
28	(2P)	28	
27	(MAN)	27	
26	(FTKI)	26	
25	(HTKI)	25	
24	(VG'7)	24	
23	(VG'4)	23	
22	(VG'2)	22	
21	(VG'1)	21	
20	(VG'0)	20	
19	(VG'10)	19	
18	(FT'3)	18	
17	(FT'2)	17	
16	(FT'1)	16	
15	(FT'0)	15	
14	(FU'7)	14	
13	(FU'4)	13	
12	(FU'2)	12	
11	(FU'1)	11	
10	(FU'0)	10	
9	(LF'4)	9	
8	(LF'3)	8	
7	(VF'2)	7	
6	(VF'1)	6	
5	(VF'0)	5	
4	(HG'7)	4	
3	(HG'4)	3	
2	(HG'2)	2	
1	(HG'1)	1	
0	(HG'0)	0	

TO MASTER TEST CONN FR OR SUPL MASTER TEST CONN FR (REL AC)

K34 — T5 (H) ON DT MKR FR

59	(FML)	59	A6 LOCAL CABLE CONN. ARE SHOWN IN CAD 34
58	(FR)	58	
57	(SF)	57	
56	(FF)	56	
55	(RF)	55	
54	(JG4)	54	
53	(JG3)	53	
52	(JG2)	52	
51	(JG1)	51	
50	(JG0)	50	
49	(JC9)	49	
48	(JC8)	48	
47	(JC7)	47	
46	(JC6)	46	
45	(JC5)	45	
44	(JC4)	44	
43	(JC3)	43	
42	(JC2)	42	
41	(JC1)	41	
40	(JC0)	40	
39	(TTK)	39	
38	(LB)	38	
37	(LTR)	37	
36		36	
35	(GT5)	35	
34	(FCG)	34	
33	(GT2)	33	
32	(GLH)	32	
31	(CT2)	31	
30	(CT1)	30	

TO MASTER TEST CONN FR OR SUPL MASTER TEST CONN FR (REL AD)

K34 — T5 (B) ON DT MKR FR

29	(CHA)	29	A7 LOCAL CABLE CONN. ARE SHOWN IN CAD 34
28	(TBK)	28	
27	(CKG)	27	
26	(GTL)	26	
25	(LFK)	25	
24	(SQA)	24	
23	(RK3)	23	
22	(RK2)	22	
21	(RK1)	21	
20	(SRT)	20	
19	(TS19)	19	
18	(TS18)	18	
17	(TS17)	17	
16	(TS16)	16	
15	(TS15)	15	
14	(TS14)	14	
13	(TS13)	13	
12	(TS12)	12	
11	(TS11)	11	
10	(TS10)	10	
9	(TS9)	9	
8	(TS8)	8	
7	(TS7)	7	
6	(TS6)	6	
5	(TS5)	5	
4	(TS4)	4	
3	(TS3)	3	
2	(TS2)	2	
1	(TS1)	1	
0	(TS0)	0	

TO MASTER TEST CONN. FR. OR SUPL. MASTER TEST CONN. FR (REL AI)

K34 — T5 (B) ON DT MKR FR

59	(P9)	59	A7 LOCAL CABLE CONN. ARE SHOWN IN CAD 34
58	(P8)	58	
57	(P7)	57	
56	(P6)	56	
55	(P5)	55	
54	(P4)	54	
53	(P3)	53	
52	(P2)	52	
51	(P1)	51	
50	(P0)	50	
49	(FNR)	49	
48	(PC)	48	
47	(PB)	47	
46	(PA)	46	
45	(JCK)	45	
44	(LL7)	44	
43	(LL4)	43	
42	(LL2)	42	
41	(LL1)	41	
40	(LLO)	40	
39	(CH9)	39	
38	(CH8)	38	
37	(CH7)	37	
36	(CH6)	36	
35	(CH5)	35	
34	(CH4)	34	
33	(CH3)	33	
32	(CH2)	32	
31	(CH1)	31	
30	(CHO)	30	

TO MASTER TEST CONN FR OR SUPL. MASTER TEST CONN FR. (REL AI)

K34 — T5 (B) ON DT MKR FR

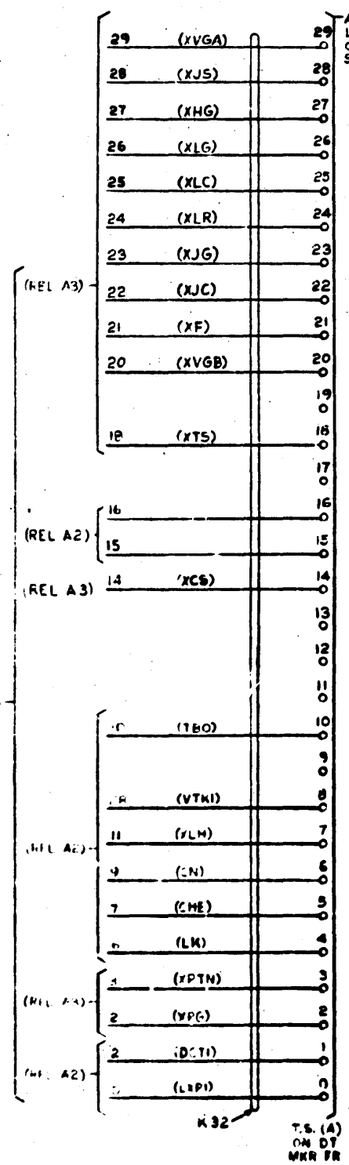
DRAWING ISSUE

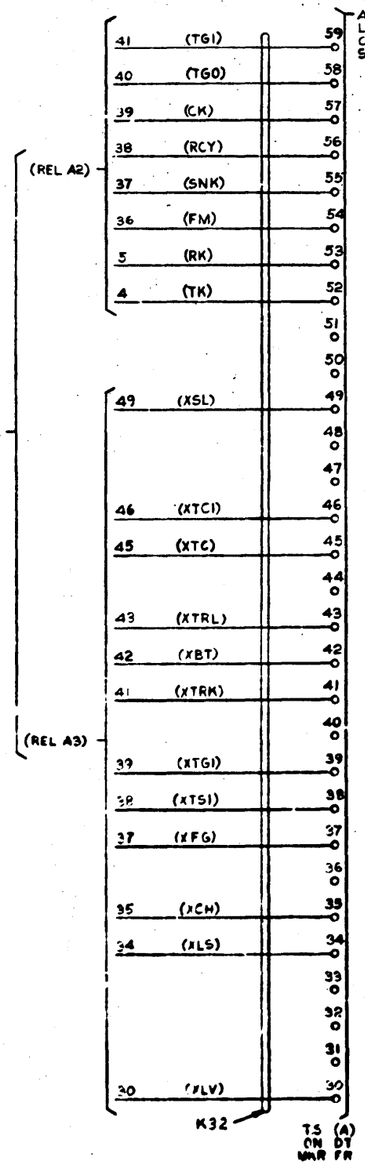
3D	FHB
4AR	GTP
5D	RJC
16D	MB FW

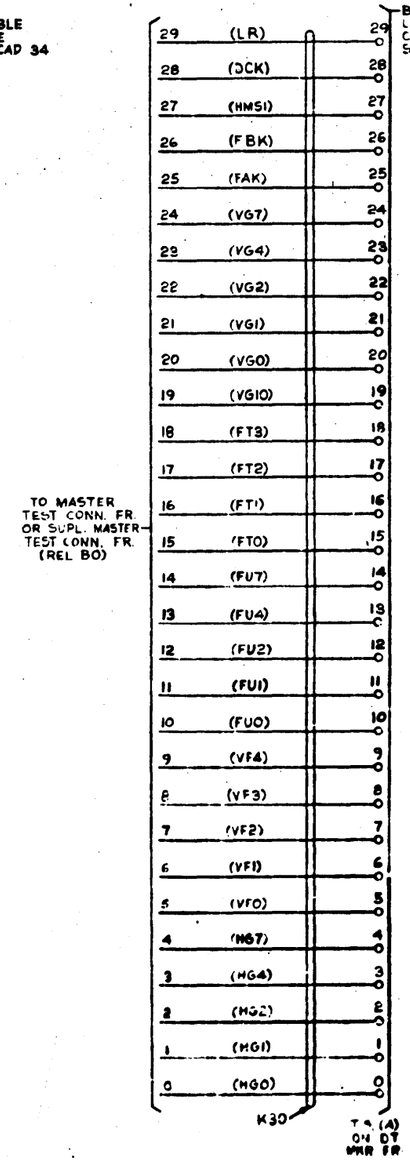
CROSSBAR SYSTEMS NO.5 DIAL TONE MARKER CIRCUIT (2)		SD-26001-01-G39
BELL TELEPHONE LABORATORIES, INC	65	

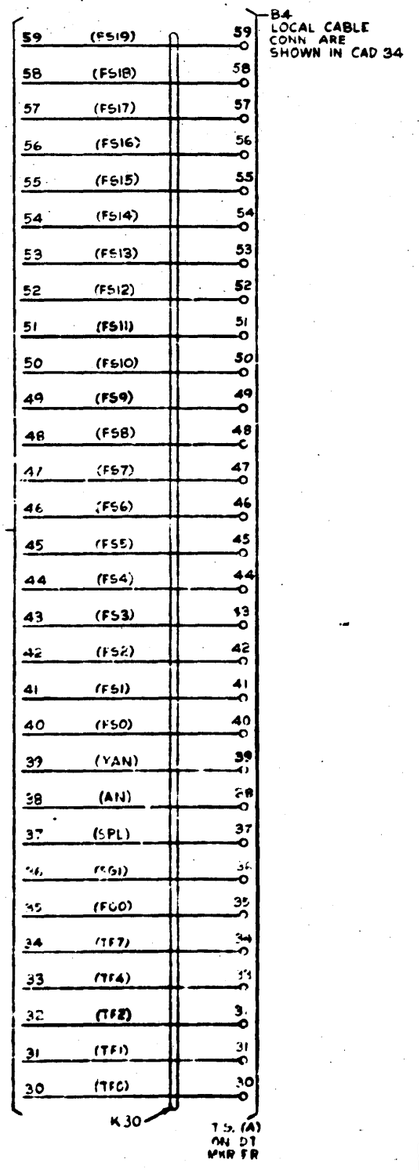
PART OF CAD 42

SWITCHBOARD CABLING TO MASTER TEST CONNECTOR (MTC) FRAME OR SUPPLEMENTARY MASTER TEST CONNECTOR FRAME (SMTC) WHEN THE MASTER TEST CONNECTOR FOR DIAL TONE MARKERS (DMTC) IS NOT FURNISHED









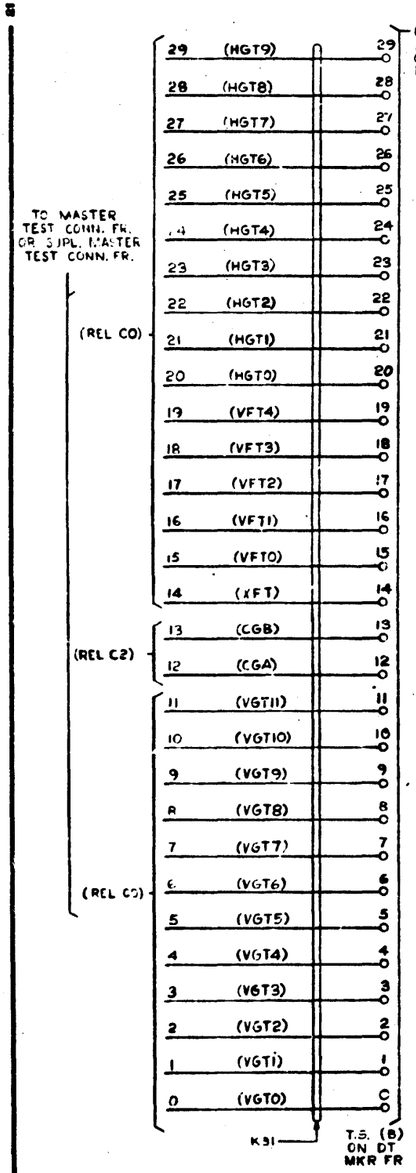
DRAWING ISSUE
3D
4AR
5D
16D

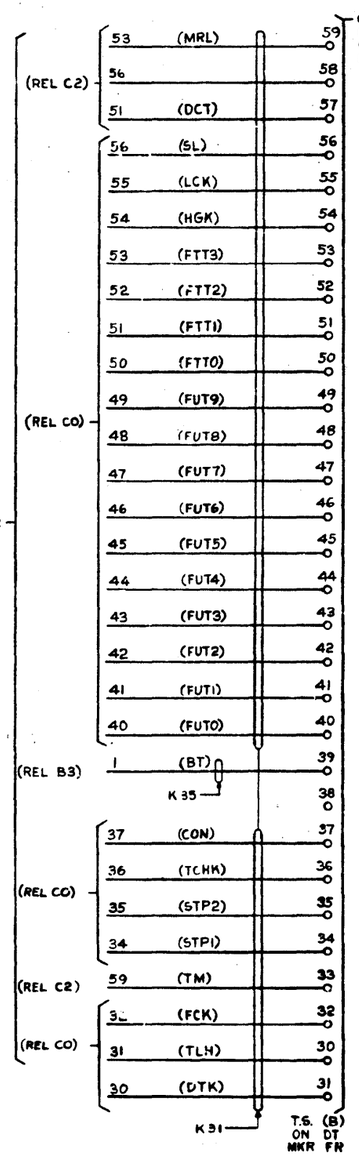
CROSSBAR SYSTEMS
NO.5
DIAL TONE MARKER CIRCUIT (2)
BELL TELEPHONE LABORATORIES, INC
6S
16
SD-26001-01-G40

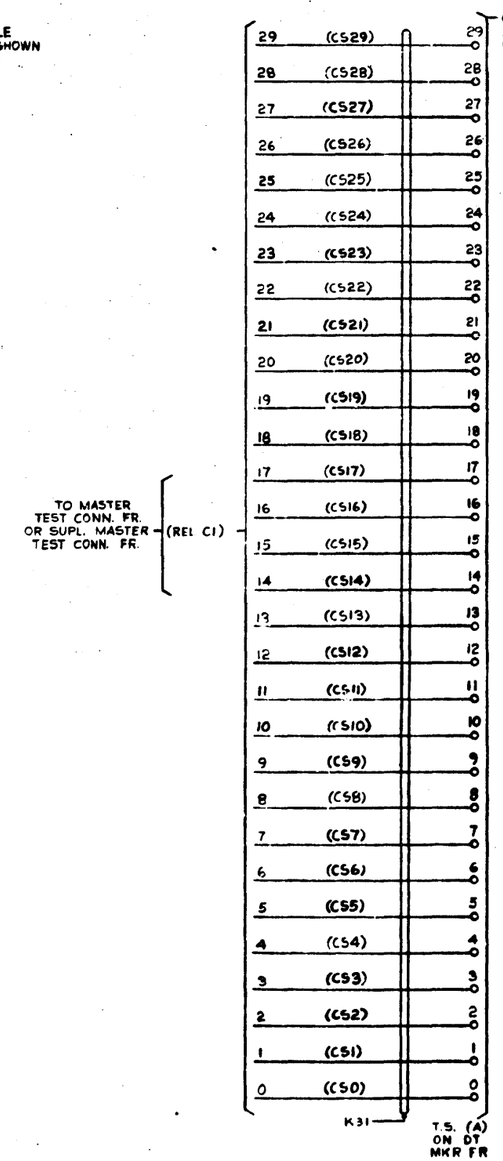
SD-26001-01-G40

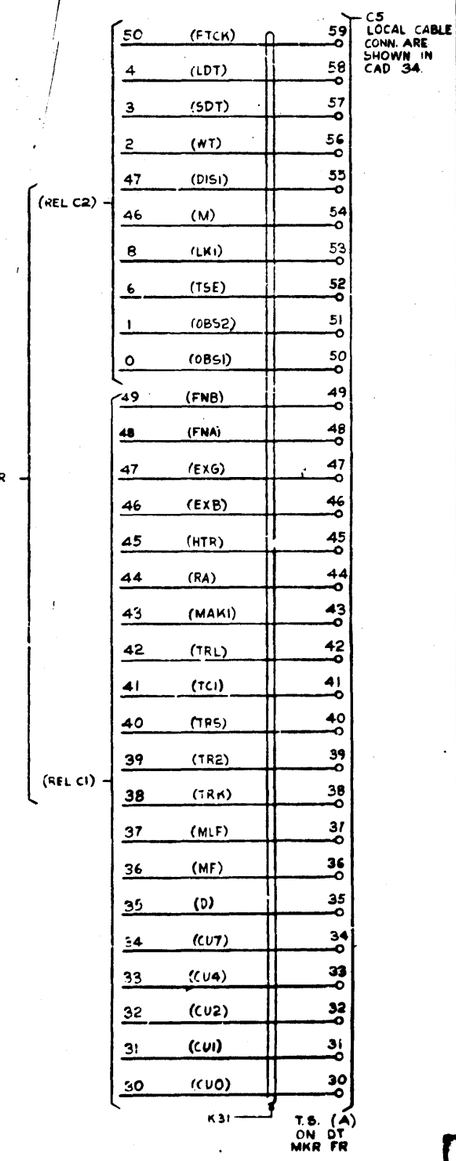
PART OF CAD 42

SWITCHBOARD CABLING TO MASTER TEST CONNECTOR (MTC) FRAME OR SUPPLEMENTARY MASTER TEST CONNECTOR FRAME (SMTC) WHEN THE MASTER TEST CONNECTOR FOR DIAL TONE MARKERS (DMTC) IS NOT FURNISHED









DRAWING ISSUE
3D
4AR
8D
ISD

CROSSBAR SYSTEMS NO.5 DIAL TONE MARKER CIRCUIT (2)	SD-26001-01-641
BELL TELEPHONE LABORATORIES, INC	65

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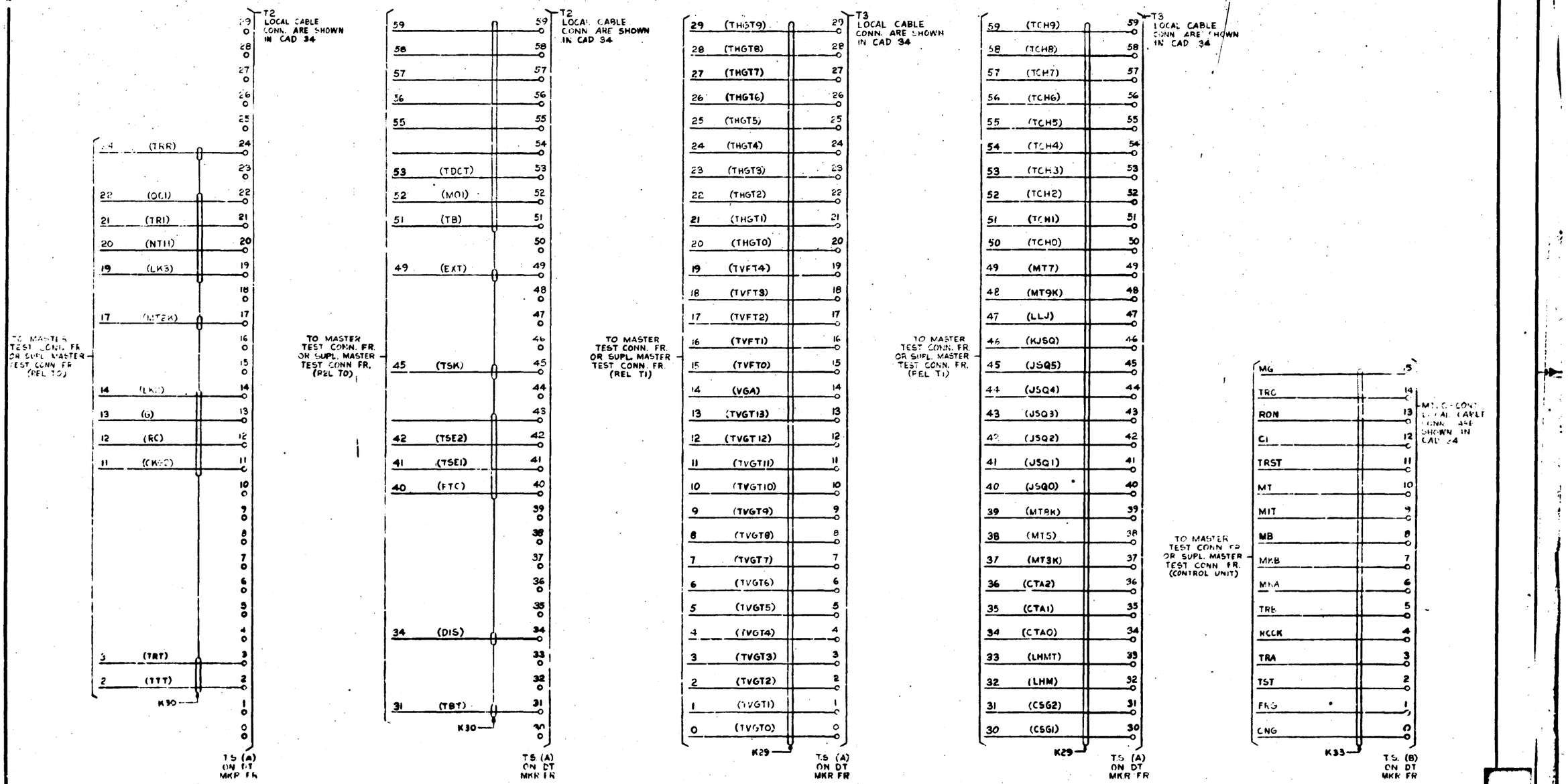
PART OF CAD 42

SWITCHBOARD CABLING TO MASTER TEST CONNECTOR (MTC) FRAME OR SUPLEMENTARY MASTER TEST CONNECTOR FRAME (SMTC) WHEN THE MASTER TEST CONNECTOR FOR DIAL TONE MARKERS (DMTC) IS NOT FURNISHED



DRAWING ISSUE
3D
4AR
5D
8D
12D
16D

CROSSBAR SYSTEMS

NO.5
DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES, INC

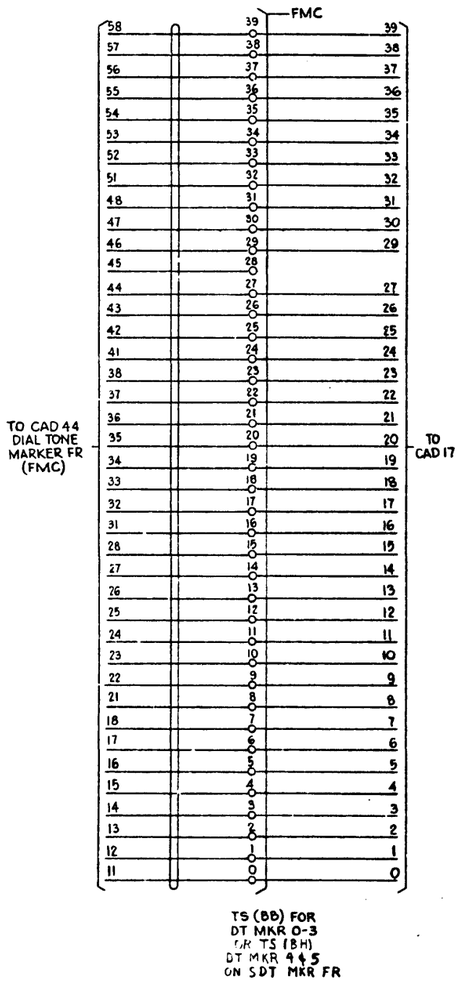
SD-26001-01-G42

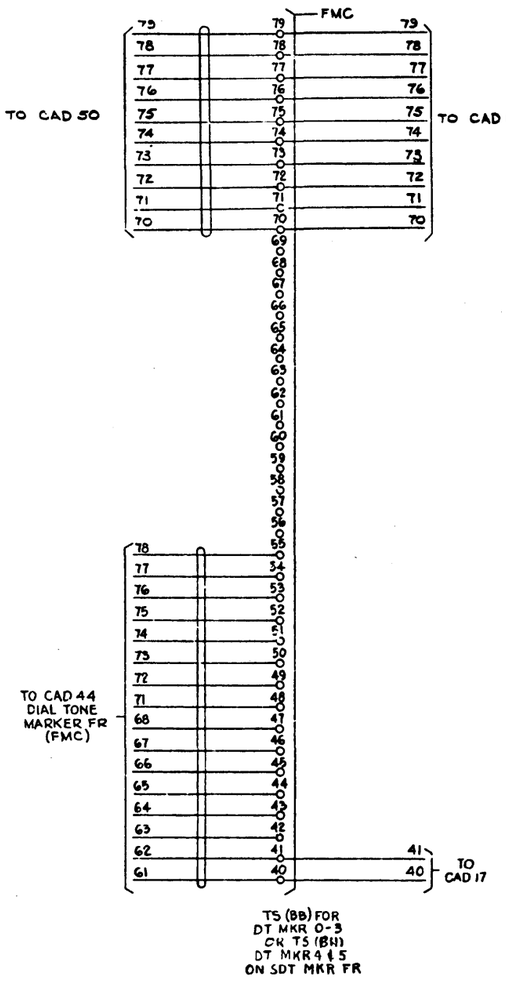
16a

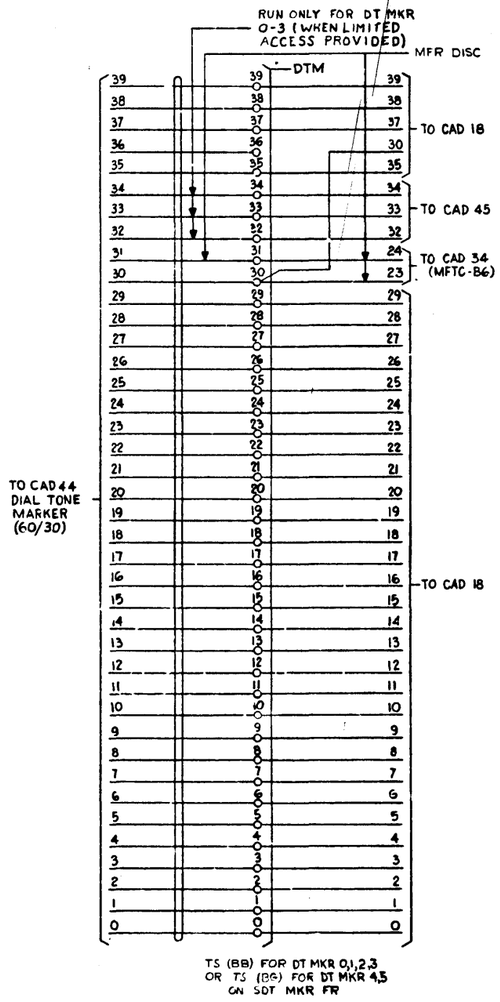
SD-26001-01-G42

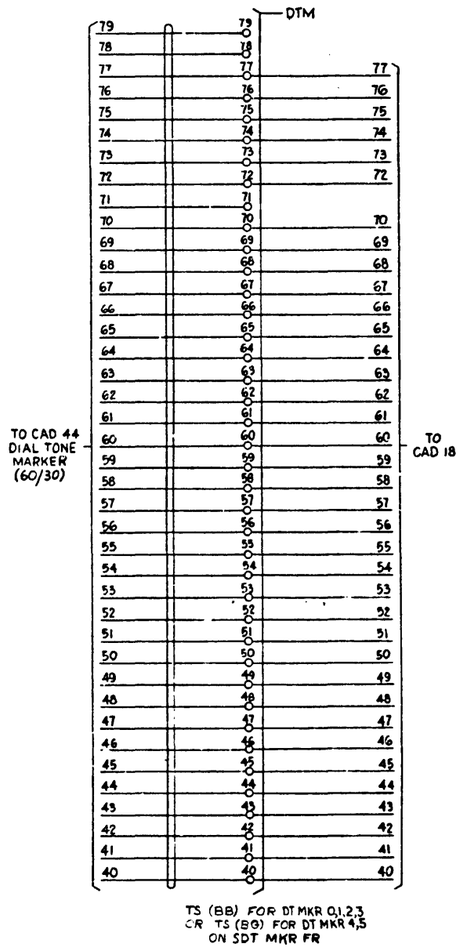
PART OF CAD 43

SWITCHBOARD CABLING TO DIAL TONE MARKER FR







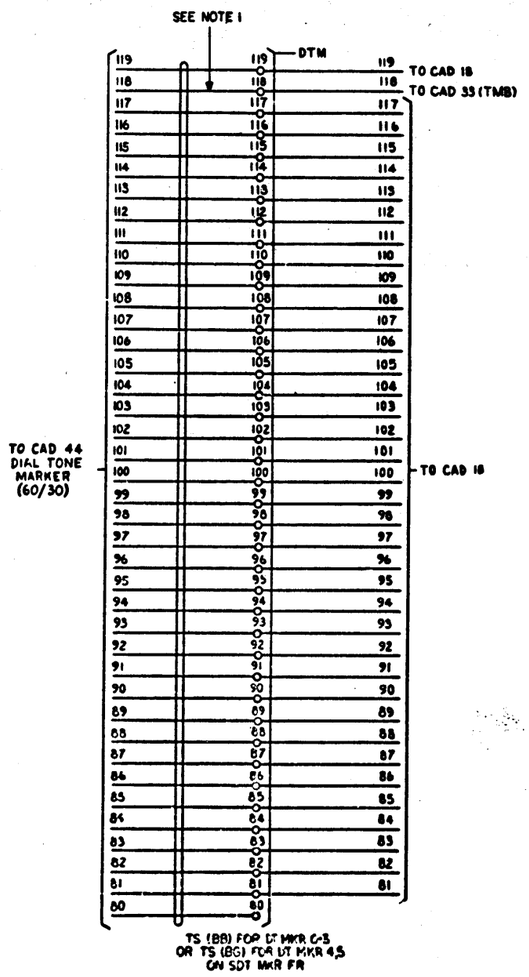


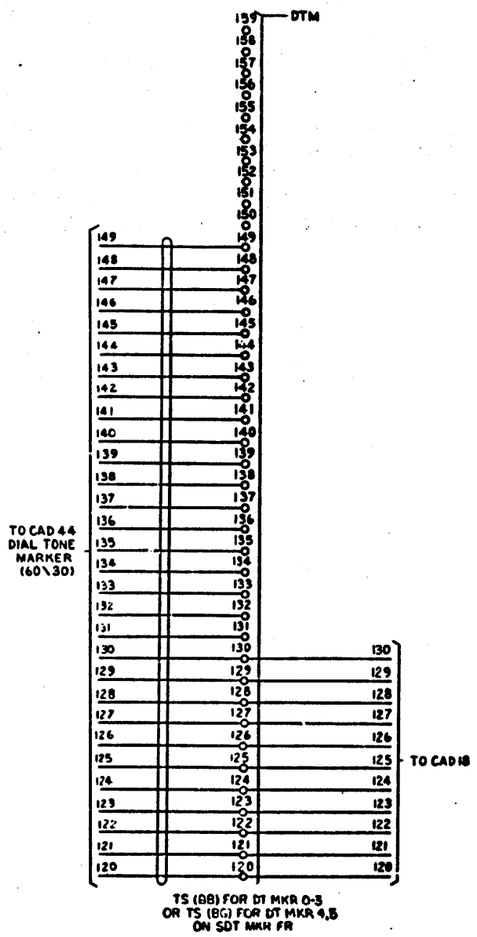
ISSUE
5D
6B
12D
60
30D
33D

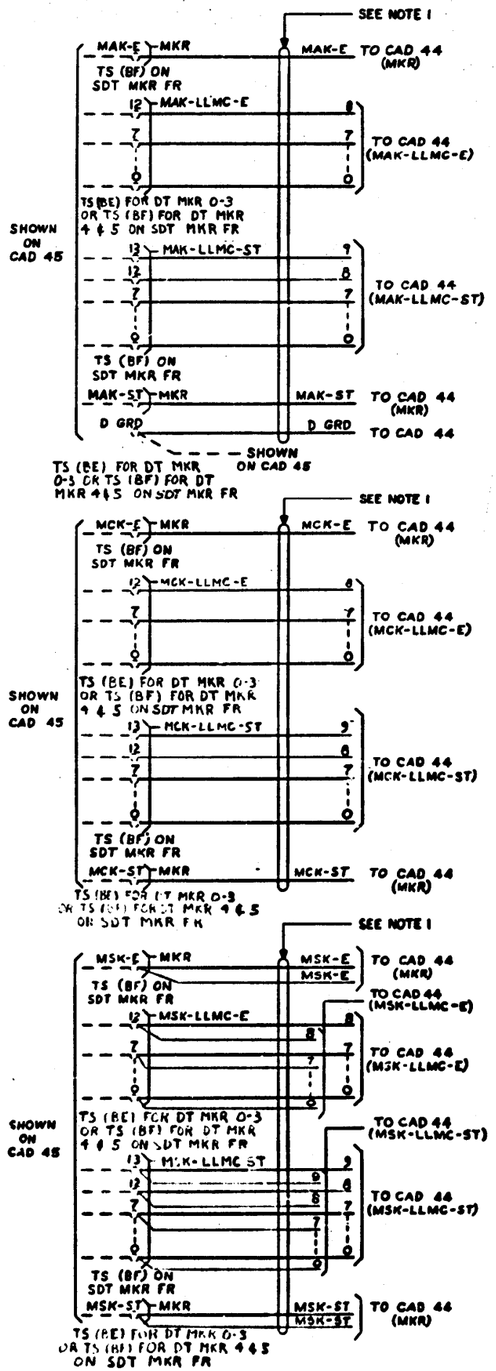
DIAL TONE MARKER CIRCUIT (2)	ISSUE 39D
BELL TELEPHONE LABORATORIES INCORPORATED	SD-26001-01-G43
6S	

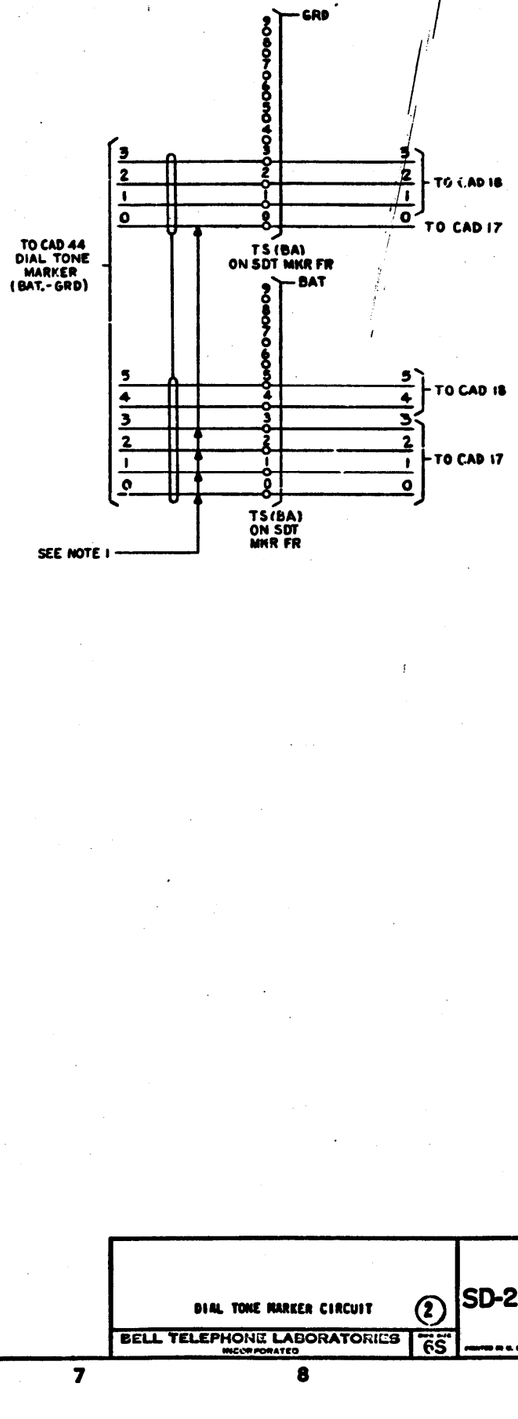
PART OF CAD 43

SWITCHBOARD CABLING TO DIAL TONE MKR FR









NOTES:
1. RUN ONLY FOR DT MKR 0-3 WHEN LIMITED ACCESS PROVIDED, OTHERWISE ONE/MKR.

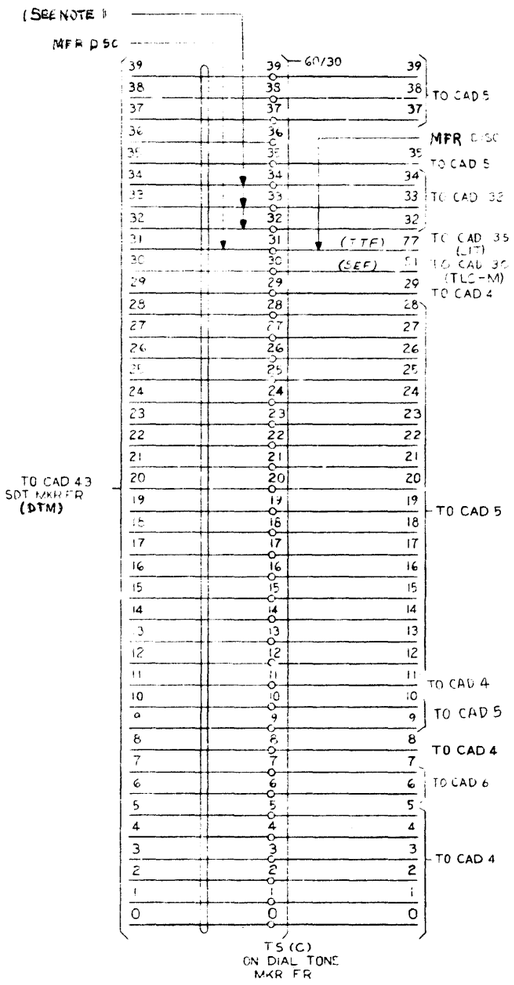
DRAWING ISSUE
5D
4S
9B
6D
30D

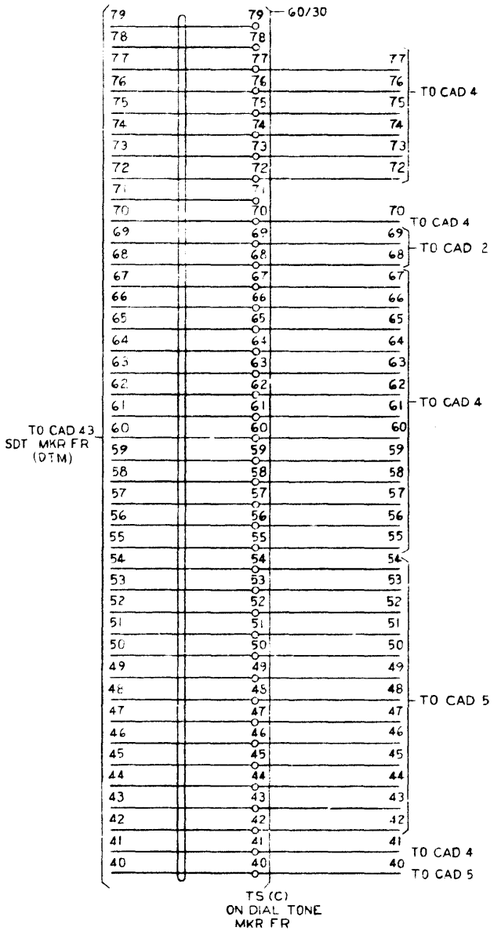
DIAL TONE MARKER CIRCUIT (2)	ISSUE 43B	
BELL TELEPHONE LABORATORIES INCORPORATED	6S	SD-26001-01-G44

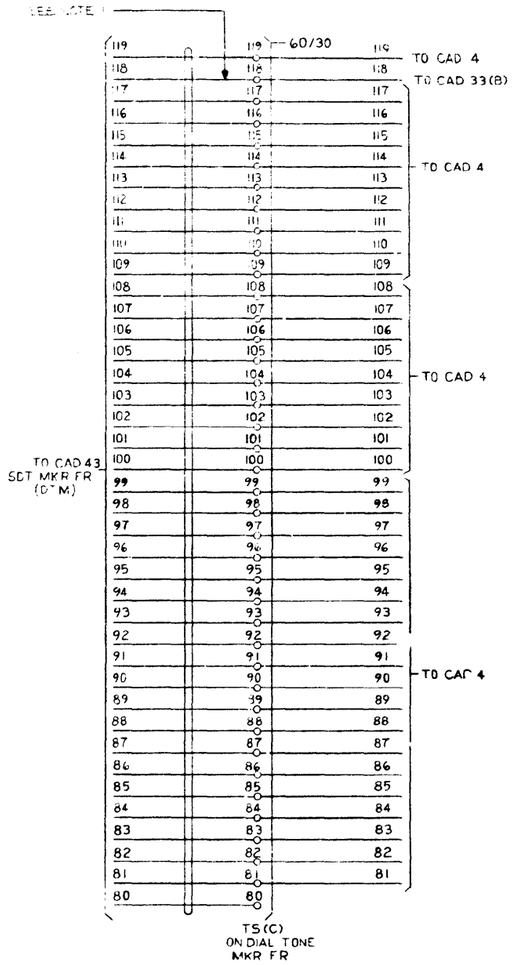
SD-26001-01-G44

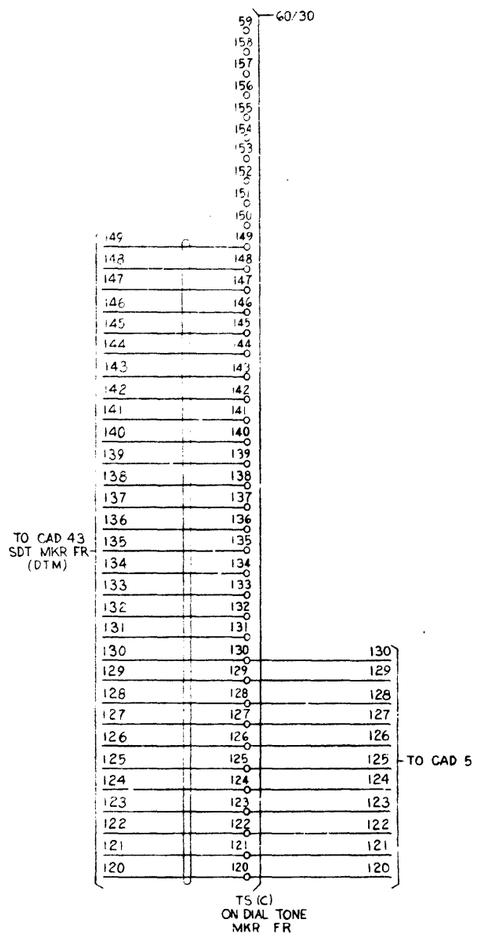
PART OF CAD 44

SWITCHBOARD CABLING TO SDT MKR FR









NOTE :
1. RUN ONLY FOR DT MKR C-3 WHEN LIMITED ACCESS PROVIDED, OTHERWISE ONE/MKR.

DRAWING ISSUE

5D	
6B	
16D	
30D	
33D	

SD-26001-01-G45

DIAL TONE MARKER CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

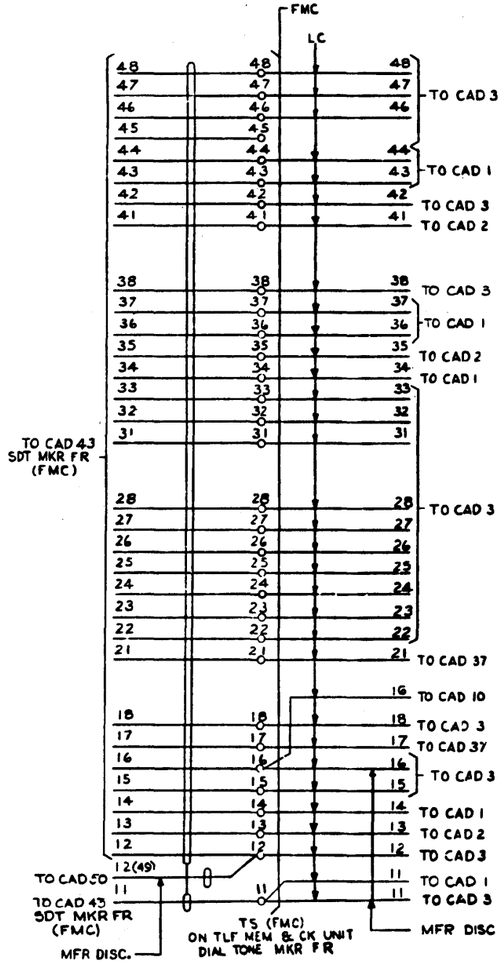
2 6S

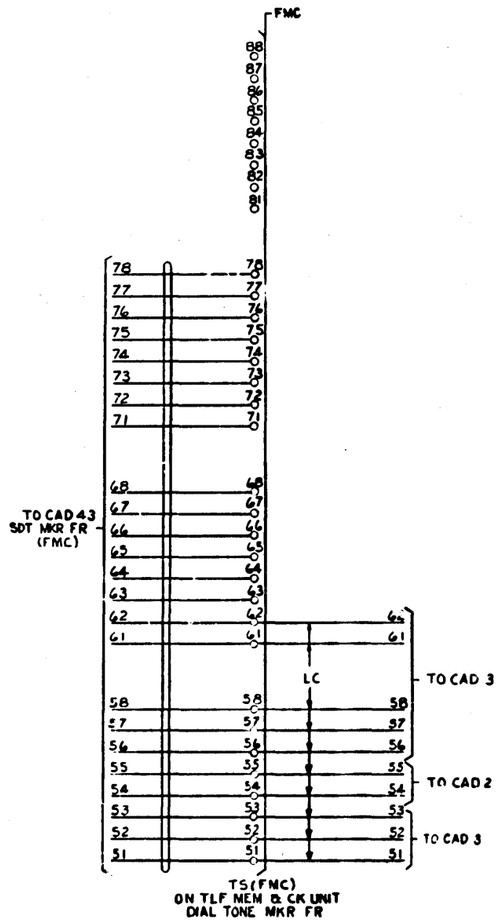
ISSUE 39D

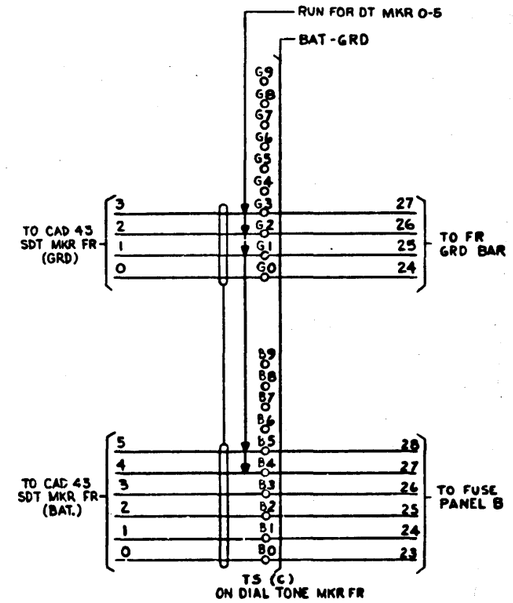
SD-26001-01-G45

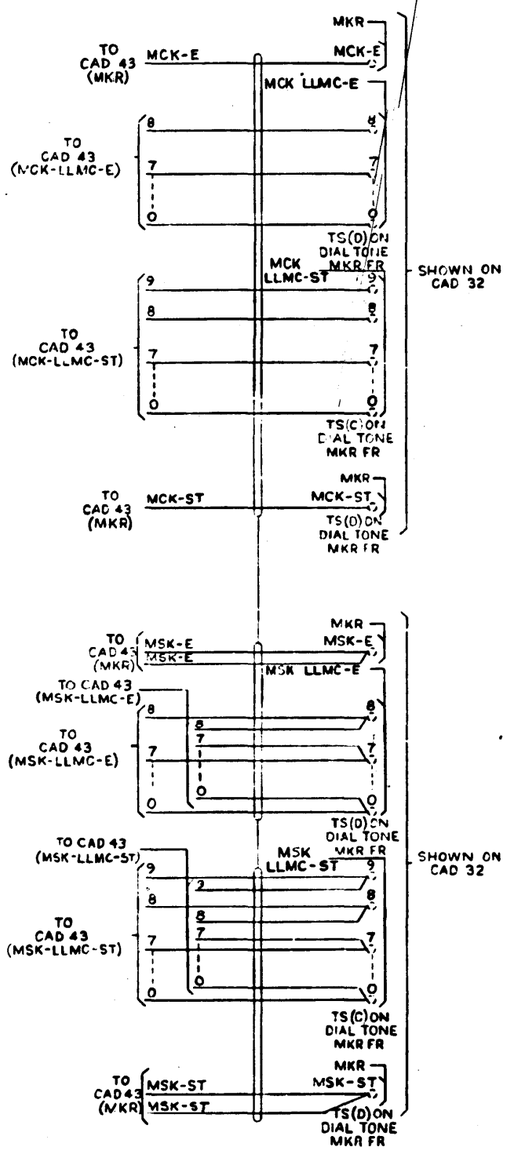
PART OF CAD 44

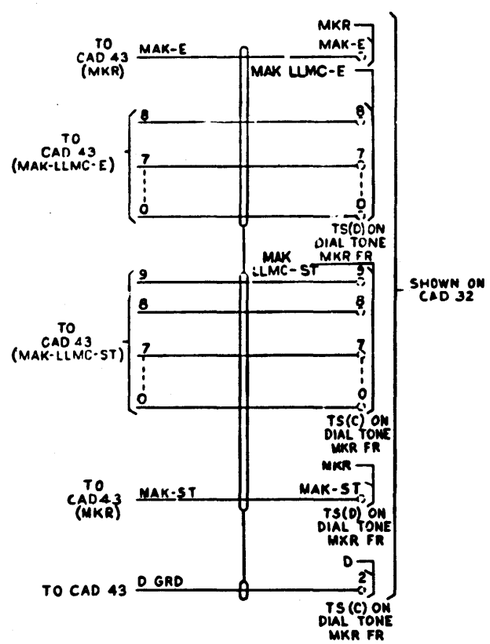
SWITCHBOARD CABLING TO SDT MKR FR











DRAWING ISSUE	
5D	MKT ADD DEL
6B	PA. PB
9B	CK WR
12D	STR PRF
15D	MKT EQM AM
16D	PEC EQM APP
30D	
33D	

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

FORM 6S

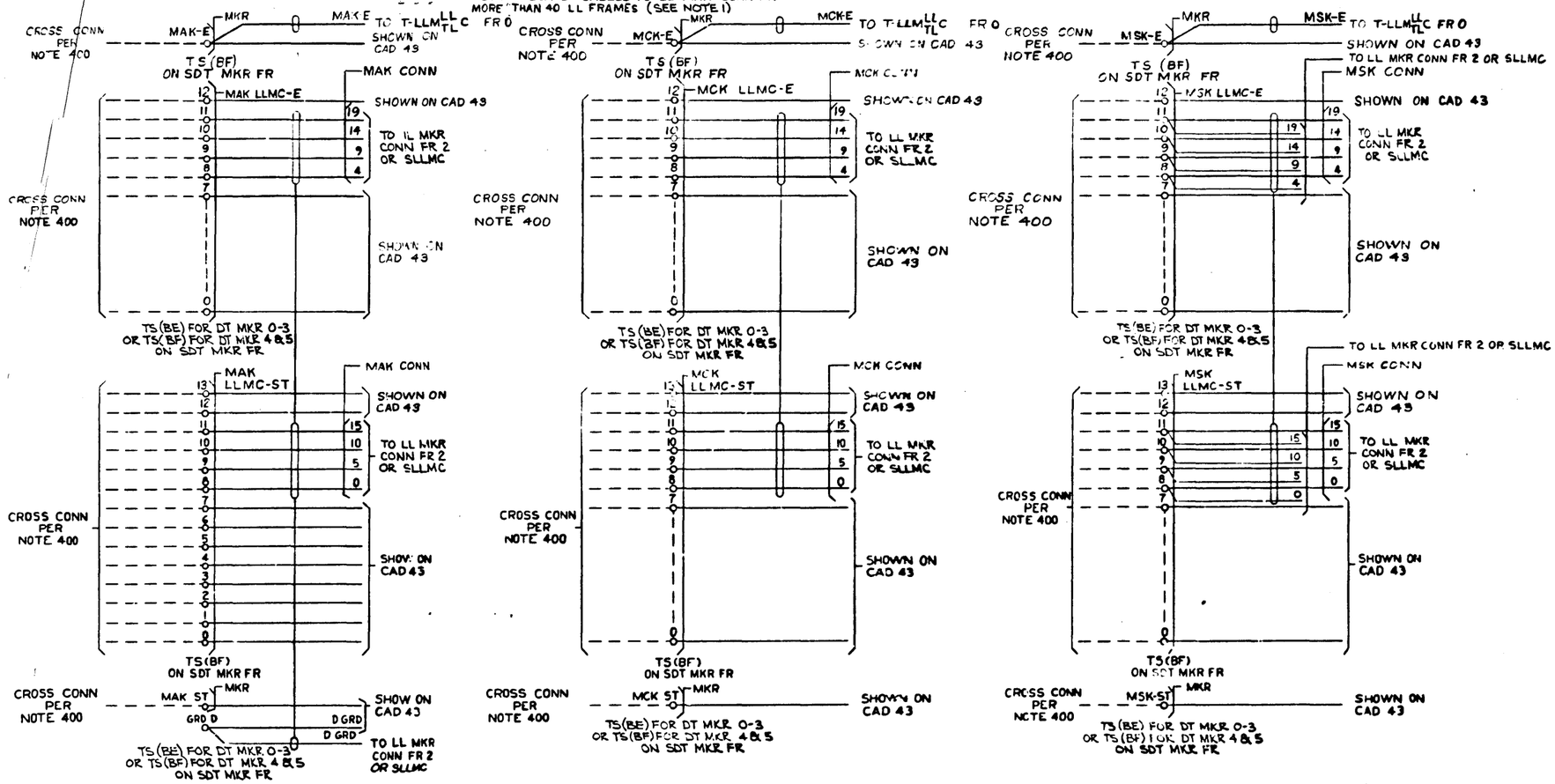
ISSUE 43B

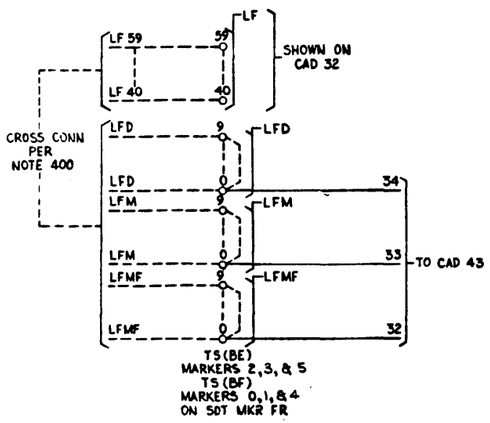
SD-26001-01-G46

SD-26001-01-G46

CAD 45

SWITCHBOARD CABLES TO LL MKR CONN FR
MORE THAN 40 LL FRAMES (SEE NOTE 1)





NOTE:
1. RUN ONLY FOR DT MKR 0-3 WHEN LIMITED ACCESS PROVIDED, OTHERWISE ONE/MKR.

ISSUE
5D
9B
16D
30D

ISSUE 43B

DIAL TONE MARKER CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

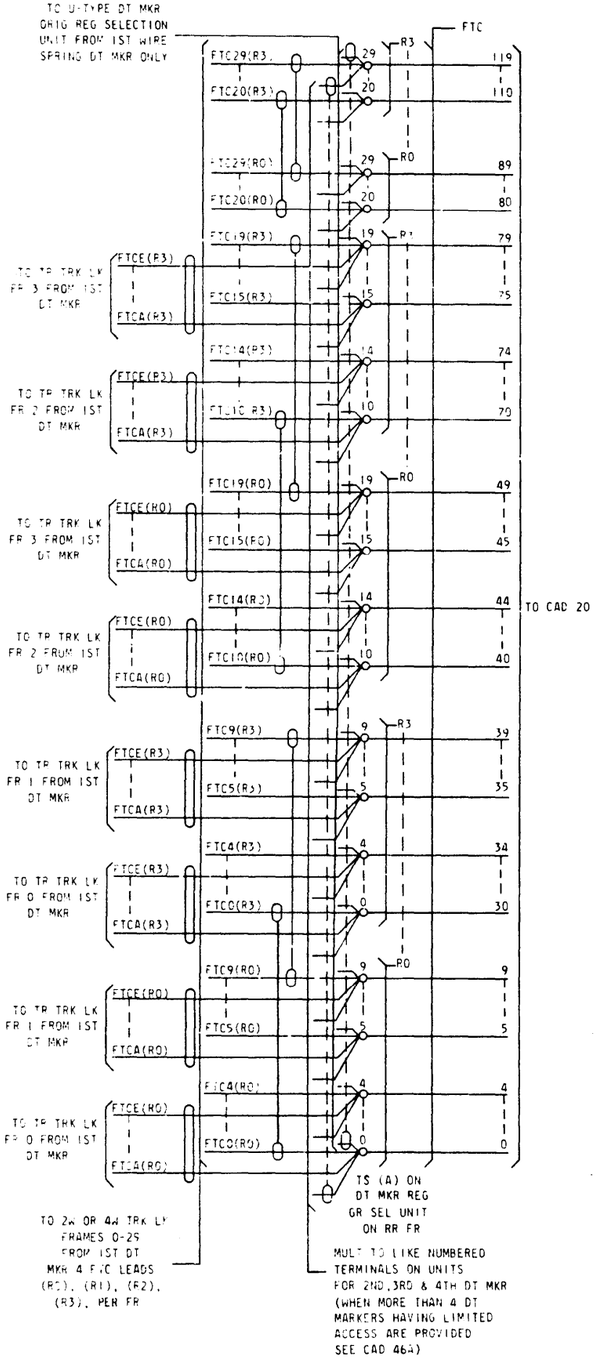
SHEET NO. 65

SD-26001-01-G47

SD-26001-01-G47

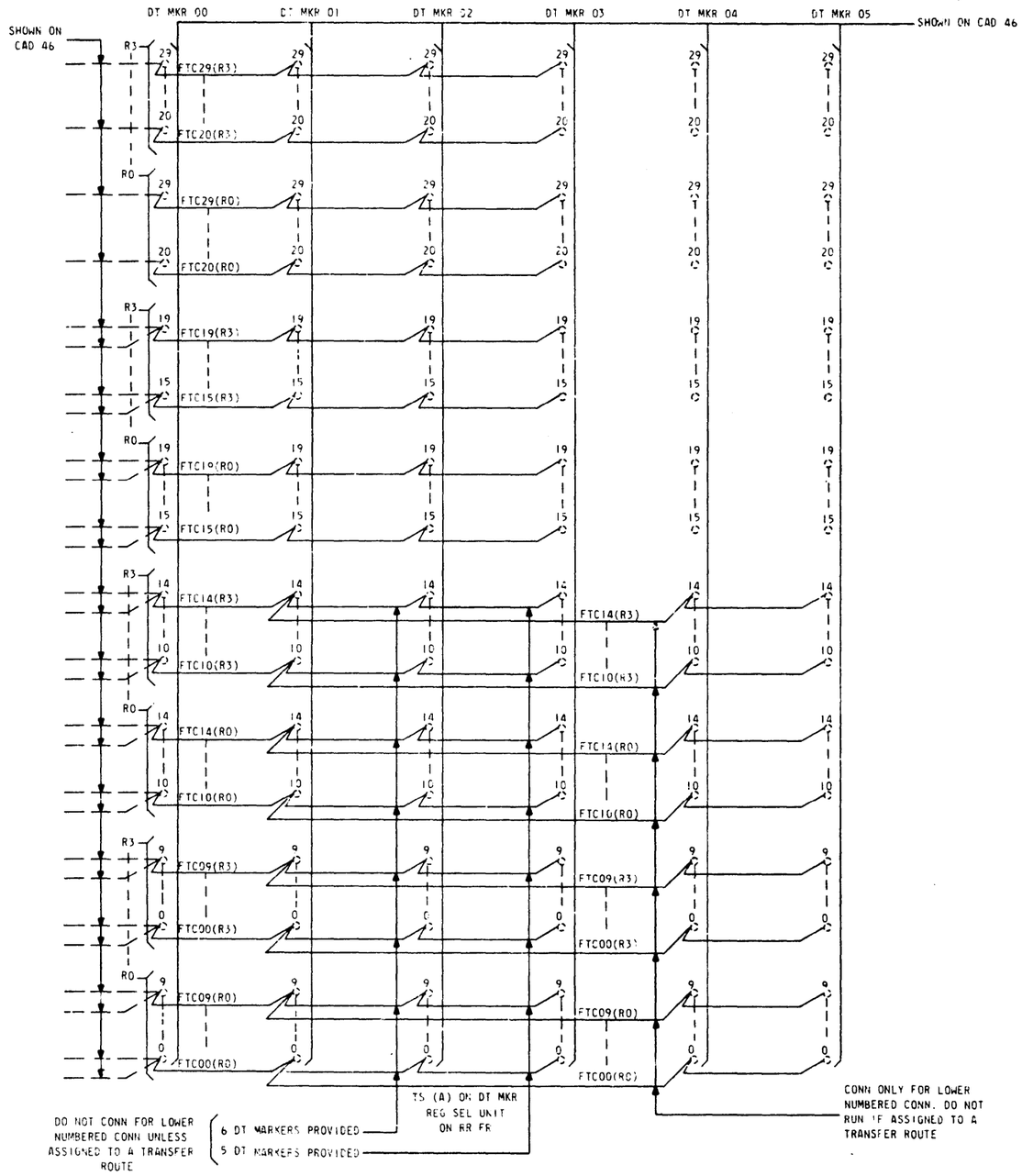
CAD 46

(SHOD CABLE TO TC FRAMES WHEN MORE THAN 2 GRP ARE REQUIRED)



CAD 46A

(SHOD CABLE MULTIPLE OF FTC - LEADS FOR MORE THAN 2 REG GROUPS WHEN MORE THAN 4 DT MARKERS HAVING LIMITED ACCESS ARE PROVIDED. SEE NOTE 204)



DRAWING ISSUE 30D

ISSUE 39D

DIAL TONE MARKER CIRCUIT

(2) SD-26001-01-G48A

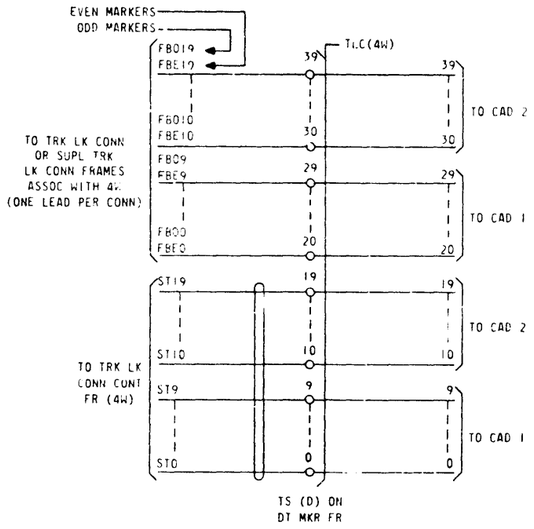
BELL TELEPHONE LABORATORIES INCORPORATED

SHTS SIZE 6S

SD-26001-01-G48A

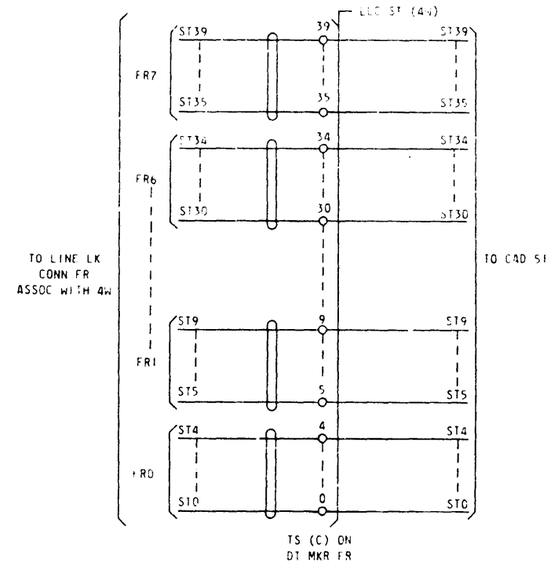
CAD 47

(SWBD CABLE TO TRK LK CONN FR (4W)



CAD 48

(SWBD CABLE TO LINE LK CONN FR (4W)



DRAWING ISSUE 33D

33

DIAL TONE MARKER CIRCUIT (2)

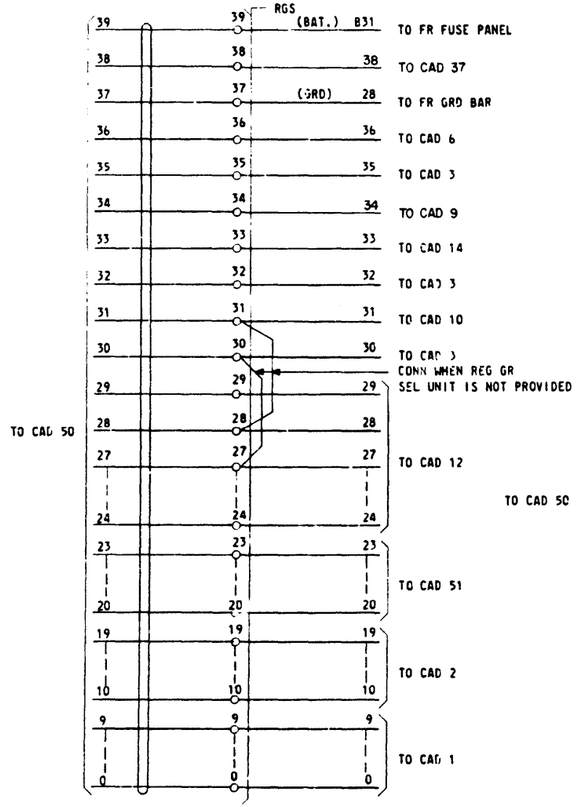
SD-26001-01-G48B

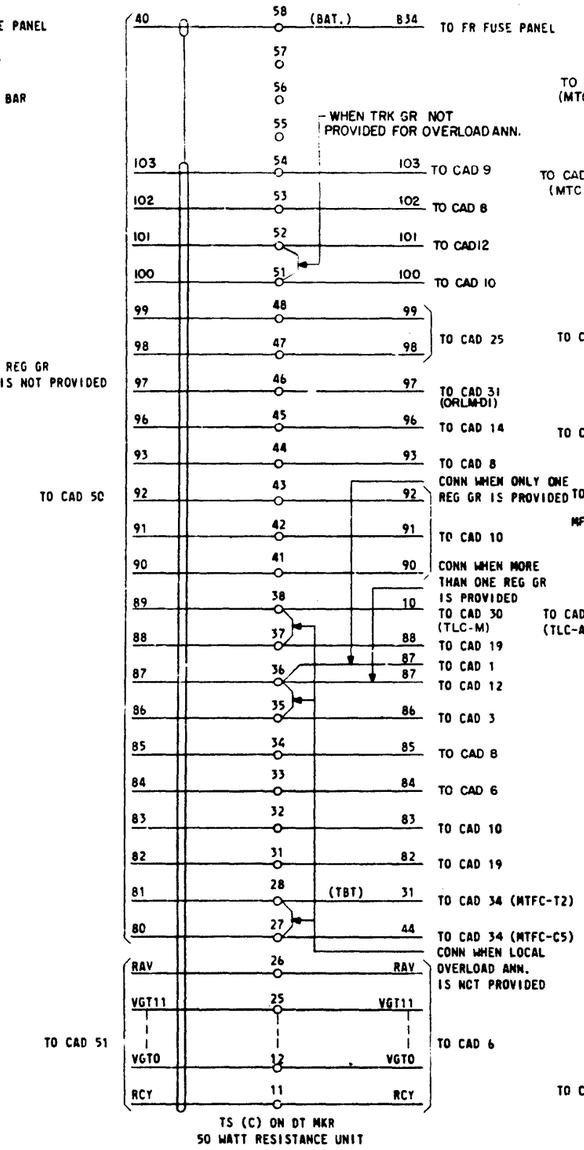
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-G48B

CAD 49

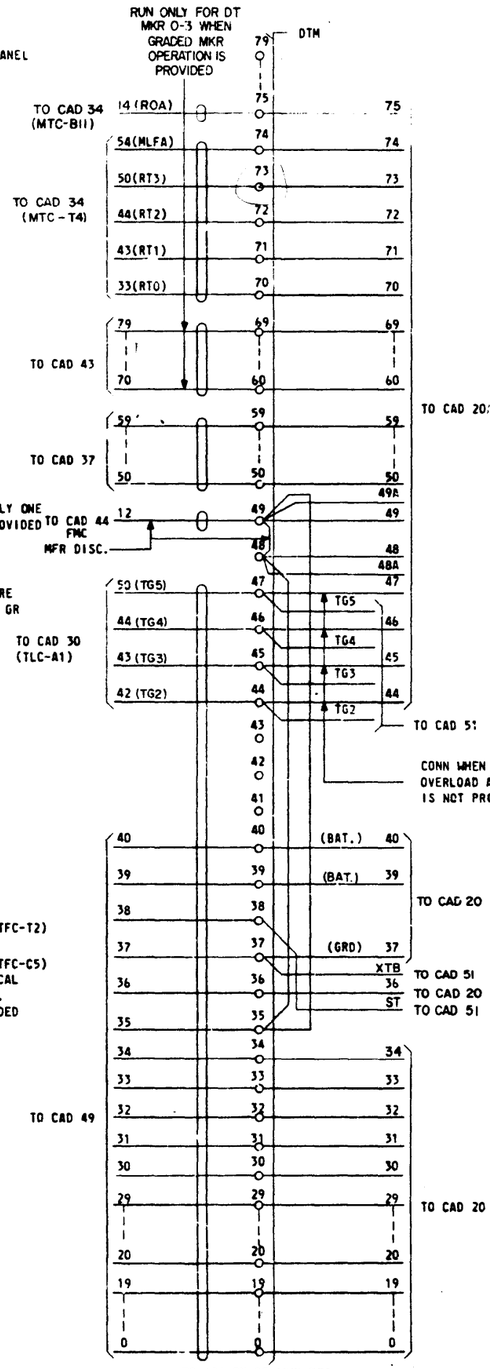
(SWBD CABLE TO DT MKR REG GR SEL UNIT ON RR)

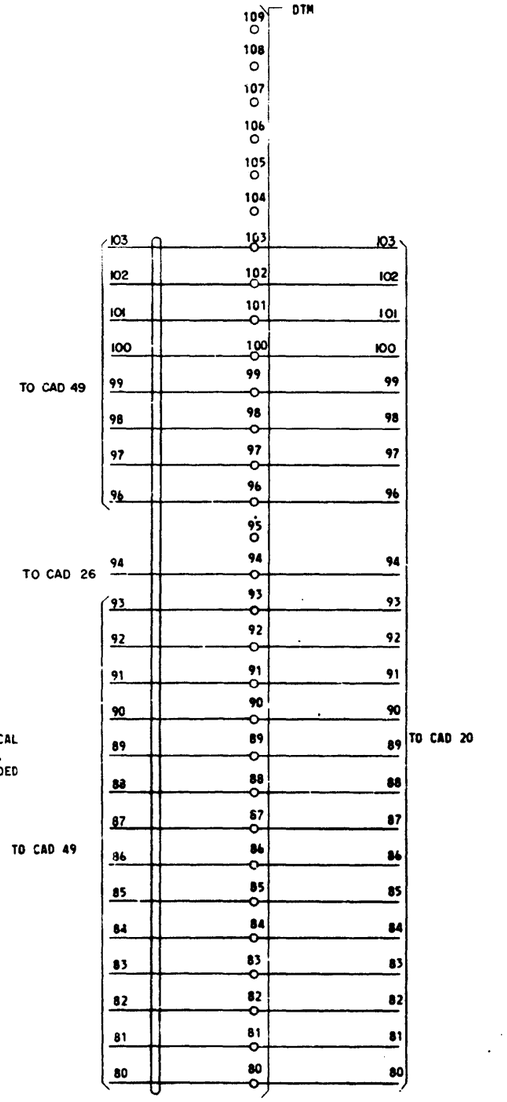




CAD 50

(SWBD CABLE TO DT MKR FROM DT MKR REG GR SEL UNIT)





DRAWING ISSUE

18D	
19A	
21A	
24D	
28D	
30D	

ISSUE 39D

DIAL TONE MARKER CIRCUIT (2)

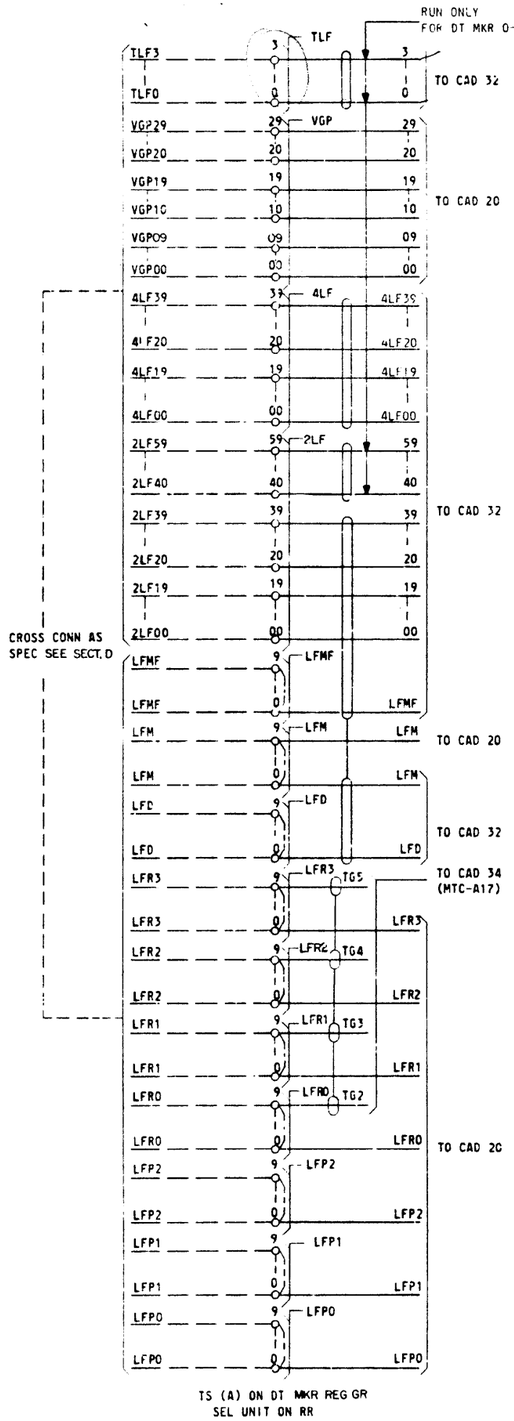
BELL TELEPHONE LABORATORIES INCORPORATED

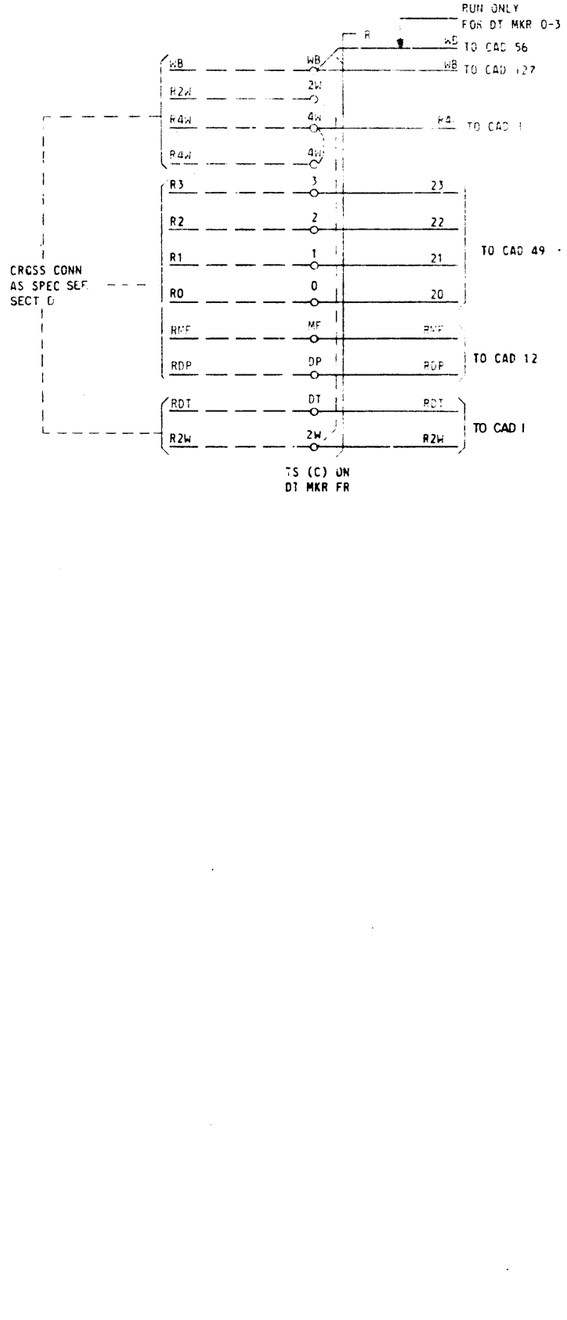
SD-26001-01-G49A

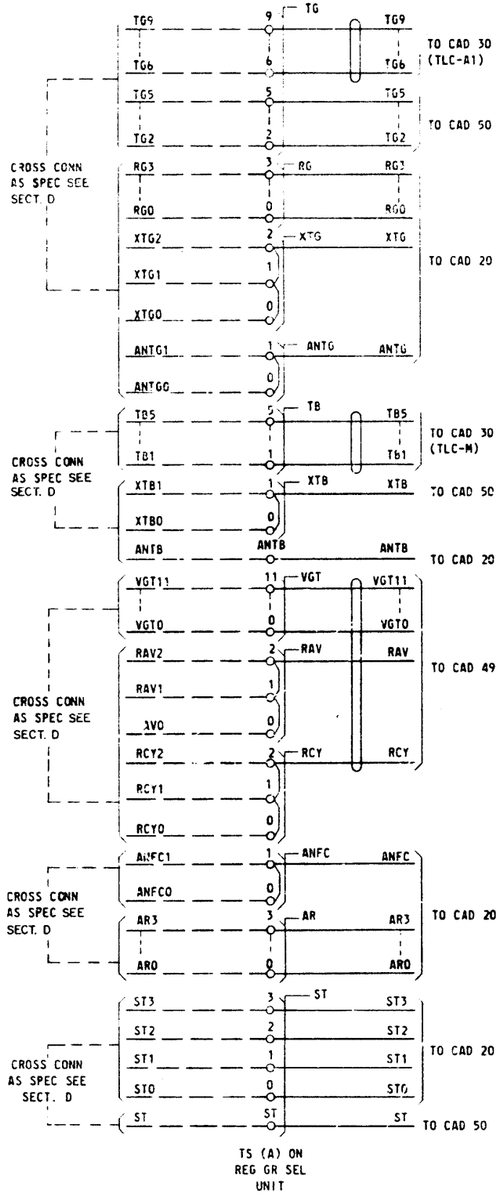
SD-26001-01-G49A

CAD 51

(CROSS CONN FOR 2W-4W AND TR NETWORKS AND MORE THAN 2 ORIG REG GR)







DRAWING ISSUE

18D	29 4W 49A
24D	CR 60L 64A
30D	

ISSUE 39D

DIAL TONE MARKER CIRCUIT (2)	SD-26001-01-G498
BELL TELEPHONE LABORATORIES INCORPORATED	DWG SIZE 6S

PRINTED IN U.S.A.

SD-26001-01-G498

STABILO

E-7421 10-69

CAD 52

SWBD CA TO OFFICE TEST FR

MULT AT OFFICE TST FR TO OFFICE TST FR TST CKT

XCW RK TK CWF CWK XLH LK DCT1 LXP1 JXP1 GLH JG4 JG3 JG2 JG1 JG0 CT7 CT4 FCG GT2 CT2 CT1 CT0 TR MST DL MB LFK JCK CH9 CH8 CH7 CH6 CH5 CH4 CH3 CH2 CH1 CH0 RK3 TS9 TS8 TS7 TS6 TS5 TS4 TS3 TS2 TS1 TS0 LOLL

TO CAD 34 (MTFC-A8)

TO CAD 34 (MTFC-A6)

(A&M ONLY)

TO CAD 26

TO CAD 34 (MTFC-A7)

TO OFFICE TST FR TBL INDICATOR CONN CKT

TO OFFICE TST FR TST CKT

TO OFFICE TST FR TBL INDICATOR CONN CKT

TO OFFICE TST FR TBL INDICATOR CONN CKT

FS4 FS3 FS2 FS1 FS0 HMS1 FAK VG'7 VG'4 VG'2 VG'1 VG'0 VG'10 FU7 FU4 FU2 FU1 FU0 VF'4 VF'3 VF'2 VF'1 VF'0 HG'7 HG'4 HG'2 HG'1 HG'0 FUT2 FUT1 FUT0 CON TCHK STP2 HGT9 HGT8 HGT7 HGT6 HGT5 HGT4 HGT3 HGT2 HGT1 HGT0 VFT4 VFT3 VFT2 VFT1

TO CAD 34 (MTFC-B4)

TO CAD 34 (MTFC-C4)

VFTO VGT11 VGT10 VGT9 VGT8 VGT7 VGT6 VGT5 VGT4 VGT3 VGT2 VGT1 VGT0 CI TRST MKB MKA TRB RCCK

TO CAD 34 (MTFC-C4)

TO CAD 34 (MTFC-CONT)

SL LCK HGK FUT9 FUT8 FUT7 FUT6 FUT5 FUT4 FUT3 FTCK DIS1 OBS EXG EXB TRS TR2 MF D CU7 CU4 CU2 CU1 CU0 MAKI SDT WT

TO CAD 34 (MTFC-C4)

TO CAD 34 (MTFC-C5)

OTF

CWT 8 — TO CAD 12

CWL 7 — TO CAD 9

NCW 6 — TO CAD 9

RLK 5 — TO CAD 9

MTI3 4 — TO CAD 9

GLH 3 — TO CAD 12

TRST 2 — TO CAD 12

REC 1 — TO CAD 12

MXT 0 — TO CAD 14

TO OFFICE TEST FR TEST CKT

TO OFFICE TST FR TBL INDICATOR CONN CKT

TS (D) ON DT MKR

MFR DISC

TO CAD 10

TO OFFICE TST FR TST CKT — DIS — DIS TO CAD 34 (MTFC-T2)

DRAWING ISSUE

16D	GAL DW AM
18D	DS LW AM
13A	FS LW AM MS PCT AM
22D	PCT AM CK
23A	GAL AM AM
28D	AM
30D	
33D	

ISSUE 37D

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G50

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-26001-01-G50

PART OF CAD 53

SWBD CA, TO T-LLM LL/TL C FRAME
(RUN ONLY FOR DT MKR 0-3)

RUN ON CENTREX PHASE I OR II ONLY

HG9	54
HG8	53
HG7	52
HG6	51
HG5	50
HG4	44
HG3	43
HG2	42
HG1	41
HG0	40
VGB9	34
VGB8	33
VGB7	32
VGB6	31
VGB5	30
VGB4	24
VGB3	23
VGB2	22
VGB1	21
VGB0	20
VGB11	14
VGB10	13
HK9	12
NT C0A	11
BS	10
C0B	4
C0A	3
LFK	2
BSI	1
BSC	0
LB9	54
LB8	53
LB7	52
LB6	51
LB5	50
LB4	44
LB3	43
LB2	42
LB1	41
LB0	40
SM9	34
SM8	33
SM7	32
SM6	31
SM5	30
SM4	24
SM3	23

TO 1ST APPEARANCE OF TR L LK CONN

TO CAD 33 (LLC-A1)

TO CAD 33 (LLC-A2)

SM2	22
SM1	21
SM0	20
LL9	14
LL8	13
LL7	12
LL6	11
LL5	10
LL4	4
LL3	3
LL2	2
LL1	1
LL0	0
CS29	54
CS28	53
CS27	52
CS26	51
CS25	50
CS24	44
CS23	43
CS22	42
CS21	41
CS20	40
CSI9	34
CSI8	33
CSI7	32
CSI6	31
CSI5	30
CSI4	24
CSI3	23
CSI2	22
CSI1	21
CSI0	20
CS9	14
CS8	13
CS7	12
CS6	11
CS5	10
CS4	4
CS3	3
CS2	2
CSI	1
CSO	0
LLF	54
OF	51
VFT4	34
VFT3	33

TO 1ST APPEARANCE OF TR L LK CONN

TO CAD 33 (LLC-B1)

TO CAD 33 (LLC-B2)

RUN ON CENTREX PHASE III ONLY

RUN ON CENTREX PHASE I OR II ONLY

VFT2	32
VFT1	31
VFT0	30
V4	24
V3	23
V2	22
V1	21
V0	20
G	14
BRT	54
BTT	53
TLF	21
BS4	4
BS2	2
BSO	0
TG5	50
TG4	44
TG3	43
TG2	42
TG1	41
BTG9	34
BTG8	33
BTG7	32
BTG6	31
BTG5	30
BTG4	24
BTG3	23
BTG2	22
BTG1	21
BTG0	20
TRA	14
TSK	13
TSF	12
TSY	11
TBK	10
OF	1
MAK	0
JS9	54
JS8	53
JS7	52
JS6	51
JS5	50
JS4	44
JS3	43
JS2	42
JS1	41
JS0	40

TO 1ST APPEARANCE OF TR L LK CONN

TO CAD 33 (LLC-B2)

TO CAD 30 (TLC-M)

TO 1ST APPEARANCE OF TR TRK LK CONN

TO CAD 30 (TLC-A1)

TO CAD 30 (TLC-B1)

LH9	34
LH8	33
LH7	32
LH6	31
LH5	30
LH4	24
LH3	23
LH2	22
LH1	21
LH0	20
J9	14
J8	13
J7	12
J6	11
J5	10
J4	4
J3	3
J2	2
J1	1
J0	0
G4	54
G3	53
G2	52
G1	51
G0	50
G0A	44
SF	42
SZC	41
SZB	40
SZA	34
RK	30
R	24
LK	23
L	22
ALC	14
ATT	13
ART	12
AST	11
ASM	10
RC	4
S1	3
CN	2
LVK	1
FAK	0

TO CAD 30 (TLC-B2)

TO CAD 30 (TLC-A0)

DRAWING ISSUE

16D	GGA FR AMP FLP LW AMP
19A	
30D	

30

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G51

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

SD-26001-01-G51

STABILO

PART OF CAD 53

SWITCHBOARD CABLE TO LL/TL MC FRAME

RUN ONLY FOR DT MKR 0-3

DRAWING ISSUE
18D
18D
19A
30D
33D
34A

TO FIRST APPEARANCE OF TRANSFER LINE LINK MARKER CONN

VGT11	41	
VGT10	40	
VGT9	34	
VGT8	33	
VGT7	32	
VGT6	31	
VGT5	30	
VGT4	24	
VGT3	23	
VGT2	22	
VGT1	21	TO CAD 32 (LLMC-A)
VGT0	20	
FRG	14	
CKG	13	
MG	12	
TM	11	
CNG	10	
MG	4	
TRL	2	
LFS	0	
CT7	4	
CT4	3	
CU7	34	
CU4	33	TO CAD 31 (ORLM-D2)
CU2	32	
CU1	31	
CU0	30	
P8	53	
P7	52	
JC1	21	
JC0	20	TO CAD 30 (TLC-C1)
L1	2	
L0	1	
LCK	0	
CGC	38	TO CAD 34 (MTFC-C4)
CG6	24	
CGA	23	
CT2	22	
CT1	21	
CT0	20	
CRU7	14	
CRU4	13	TO CAD 31 (ORLM-D1)
CRU2	12	
CRU1	11	
CRU0	10	
FK	3	
PBX5	2	
WDK	0	
M	52	TO CAD 31 (ORLM-D2)

TO T-LLMC 2,3 ON T-LLM LL/TL C FRAME 1

TO TLLMC 0,1 ON T-LLM LL/TL C FRAME 0

MC3	TMC3	
MC2	TMC2	TO CAD 32
MC1	TMC1	
MC0	TMC0	
FT3	18	
FT0	15	
FU7	14	
FU4	13	TO CAD 34 (MTFC-B4)
FU2	12	
FU1	11	
FU0	10	
BT	54	
TC	43	
TC1	42	
VGA11	41	
VGA10	40	
VGA9	34	
VGA8	33	
VGA7	32	
VGA6	31	
VGA5	30	
VGA4	24	
VGA3	23	
VGA2	22	TO CAD 32 (LLMC-6)
VGA1	21	
VGA0	20	
HGT9	14	
HGT8	13	
HGT7	12	
HGT6	11	
HGT5	10	
HGT4	4	
HGT3	3	
HGT2	2	
HGT1	1	
HGT0	0	
DTK	52	
TRK	51	
TR2	50	TO CAD 32 (LLMC-A)
TRS	44	
OC2	43	
OC1	42	
HG7	54	
HG4	53	
HG2	52	TO CAD 31 (ORLM-D1)
HG1	51	
HG0	50	

TO FIRST APPEARANCE OF TRANSFER LINE LINK MARKER CONN

TO FIRST APPEARANCE OF TRANSFER TRUNK LINK CONN

RUN ONLY WHEN WIDEBAND SWITCHING OF CENTREX STATIONS IS PROVIDED

TO T-TLC ON T-LLM LL/TL C FRAME	FBO	49	49 TO CAD 8
	DAT	48	48 TO CAD 34 (MTFC A7)
TO T-LLC ON T-LLM LL/TL C FRAME	NDAT	47	47 TO CAD 127
TO T-TLC TO LAST APPEARANCE OF TRANSFER LINE LINK CONN	DAT	46	46
TO FIRST APPEARANCE OF TRANSFER LINE LINK CONN	LH4	45	LH4
	LH3	44	LH3 TO CAD 33 (LLC-B2)
	LH2	43	LH2
	LH1	42	LH1
	LH0	41	LH0
RUN ON CENTREX PHASE I OR II ONLY	CGC	40	40 TO CAD 3
TO T-LLMC 2,3 ON T-LLM LL/TL C FRAME 1	CB3	39	39
	CB2	38	38 TO CAD 12
TO TLLMC 0,1 ON T-LLM LL/TL C FRAME 0	CB1	37	37
	CB0	36	36
TO TLLC 2,3 ON T-LLM LL/TL C FRAME 1	ST3	35	35
	ST2	34	34 TO CAD 9
TO TLLC 0,1 ON T-LLM LL/TL C FRAME 0	ST1	33	33
	STO	32	32
TO FIRST APPEARANCE OF TRANSFER TRUNK LINK CONN	TSM	31	31 TO CAD 10
	NC	30	30 TO CAD 19
	TB4	29	29
	TB3	28	28
	TB2	27	27
	TB1	26	26
	TB0	25	25 TO CAD 1
TO T-TLC 2,3 ON T-LLM LL/TL C FRAME 1	ST3	24	24
	ST2	23	23
TO TTLC 0,1 ON T-LLM LL/TL C FRAME 0	ST1	22	22
	STO	21	21

TO T-LLM L/L C FRAME 1

T-TL CONN 3	FBO(E) FBE(E)	20	20
	FBO(A) FBE(A)	15	15 TO CAD 2
T-TL CONN 2	FBO(E) FBE(E)	11	14
	FBO(A) FBE(A)	10	10

TO T-LLM LL/TL C FRAME 0

T-TL CONN 1	FBO(E) FBE(E)	9	9
	FBO(A) FBE(A)	5	5 TO CAD 1
T-T.. CONN 0	FBO(E) FBE(E)	4	4
	FBO(A) FBE(A)	0	0

EVEN MARKERS

ODD MARKERS

TS (C) ON DT MKR FR

TO T-LLC ON T-LLM LL/TL C FRAME

WAT	55	TO CAD 9
WAT	54	TO CAD 8
WSM	53	TO CAD 127
FG2	52	TO CAD 14
FG1	51	51
WSC	50	50 TO CAD 8

TS (D) ON DT MKR FRAME

34

DIAL TONE MARKER CIRCUIT (2)

SD-26001-01-G52

BELL TELEPHONE LABORATORIES INCORPORATED

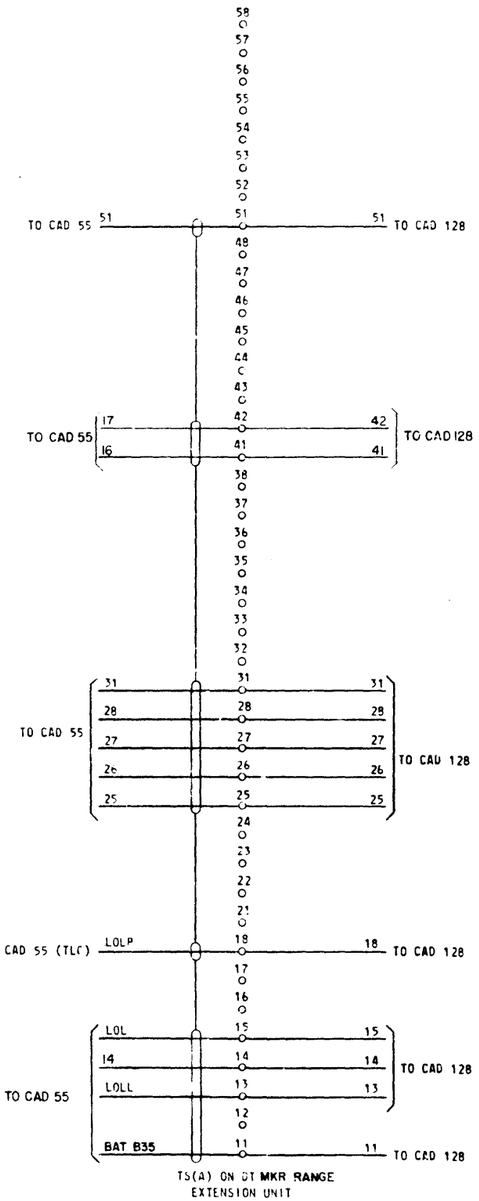
6S

SD-26001-01-G52

STABILO

CAD 54

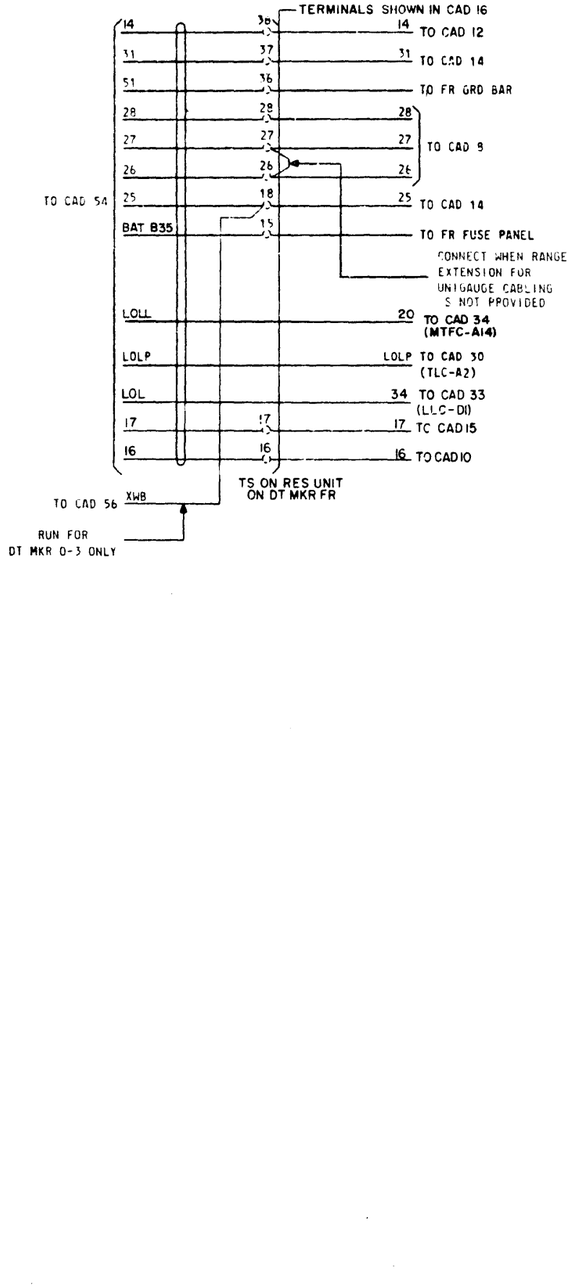
SWBD CA FROM DT MKR RANGE EXTENSION UNIT



TS(A) ON DT MKR RANGE EXTENSION UNIT

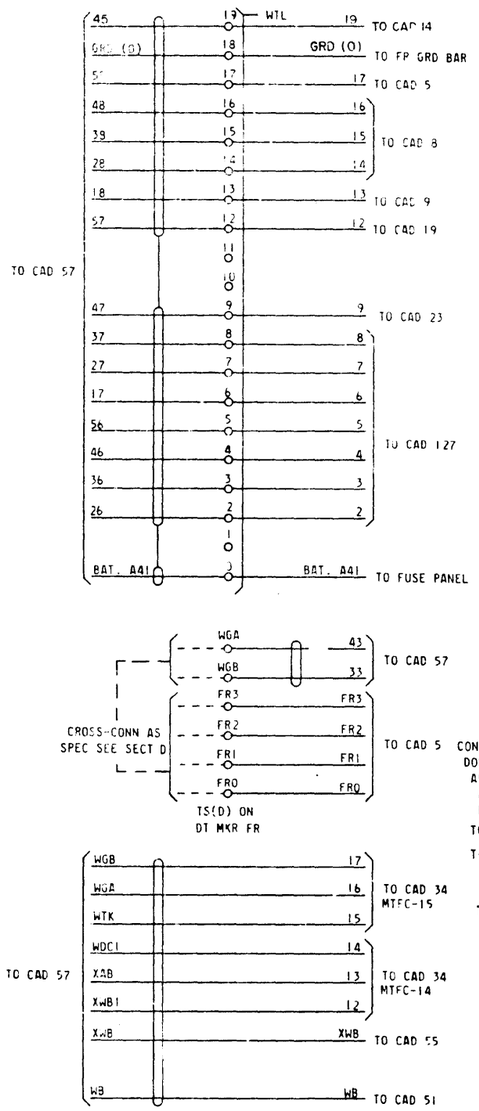
CAD 55

SWBD CA FROM DT MKR FR TO DT MKR RANGE EXTENSION UNIT ON RR



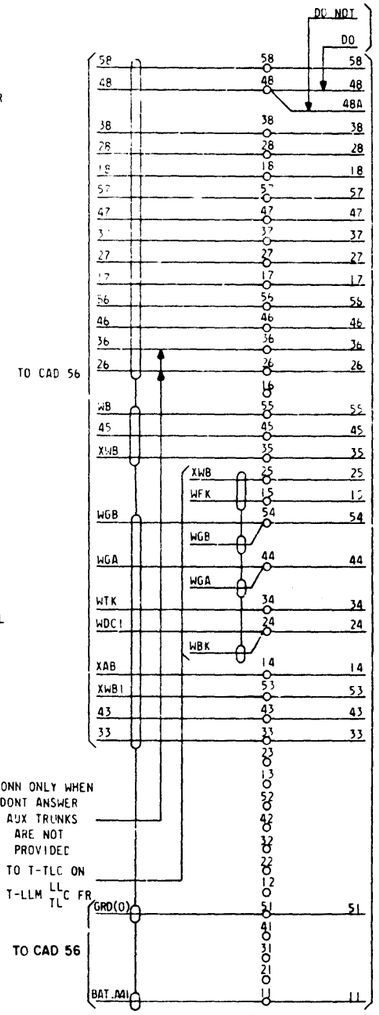
CAD 56

(SWBD CA TO WIDEBAND TRANSFER LINK CONTROL UNIT, DT MKR 0-3 ONLY)



CAD 57

(SWBD CA FROM WIDEBAND TRANSFER LINK CONTROL UNIT, DT MKR 0-3 ONLY)



TS(A) ON WB TR LK CONT. UNIT ON RR

DRAWING ISSUE

22D	BS	
23A	CK	
28D		
30D		
33D		

33

DIAL TONE MARKER CKT (2) SD-26001-01-G53

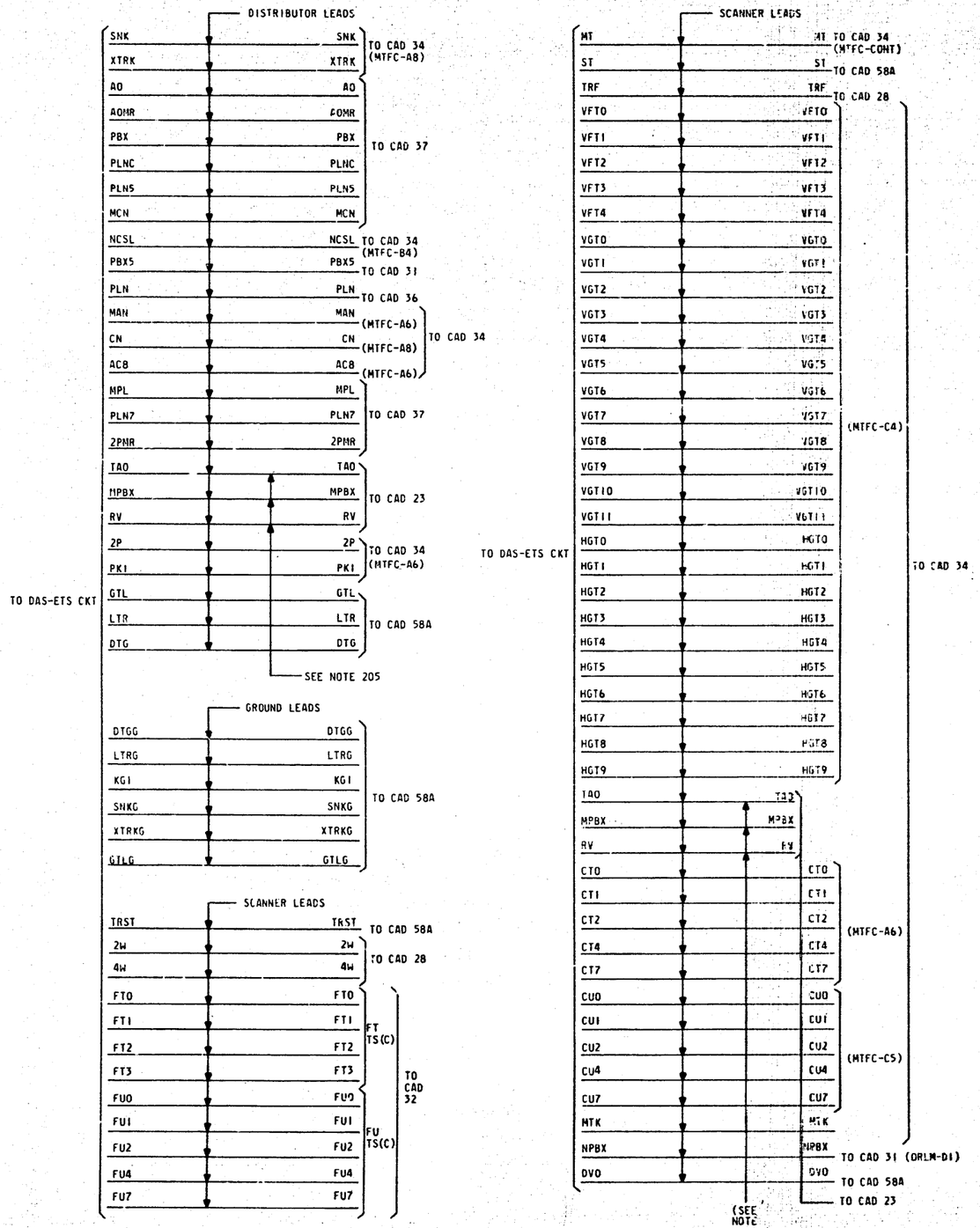
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-26001-01-G53

KIMBERLY

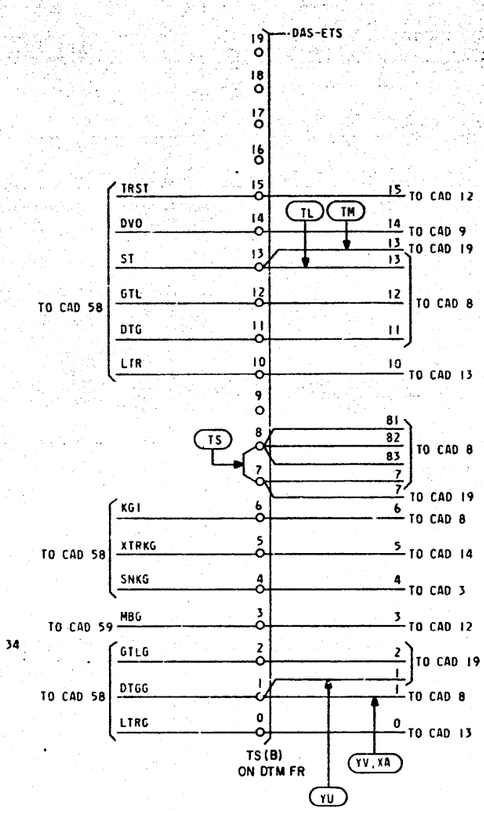
CAD 58

SWITCHBOARD CABLE FROM DTM TO DAS-ETS CKT



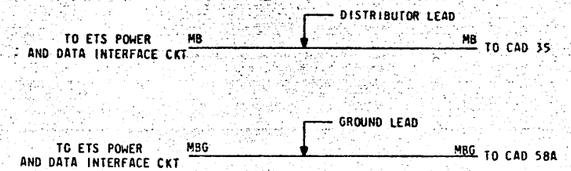
CAD 58A

DAS-ETS TERMINAL STRIP



CAD 59

SWITCHBOARD CABLE FROM DTM TO THE ETS POWER AND DATA INTERFACE CKT (PDI)



ISSUE 46A

DIAL TONE MARKER CIRCUIT

SD-26001-01-G54

BELL TELEPHONE LABORATORIES INCORPORATED

DRAWING SIZE 6S

SD 26001-01