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DESIG	LOCATION		
	FS	APP FIG.	EQPT
RELAYS			
CT	1E7	1	
	2F9	2	
DD	3D3	3	
	5C3	9	
H	1G7	1	
	2F6	2	
JK	3D1	3	
	5C1	9	
JS	5D1	9	
N	5G4	12	
OP	5D7	10	
	6D2	14	
R	4E7	3	
	5F6	9	
R1	2B7	2	
S	1C3	1	
	2C4	2	
S1	1B7	1	
	2B4	2	
SR	1B6	1	
	2B8	2	
T	5B3	9	
TS	5C8	10	
	6B2	14	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
JACKS			
ANS	3C6	4	
MULT	5B5	9	
	4F1	8	
N	5H1	11	
T	3F8	6	
	4C2	7	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
THERISTORS			
R	4D6	3	
	5G6	9	
S	5B8	10	
	6B3	14	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
LAMPS			
BL	4B2	7	
INDG	3H5	5	
L	4E2	7	
TRK	3D7	4	
	3G8	6	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
VARIATORS			
D	4D8	3	
	5F7	9	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
NETWORKS			
C	1B8	1	
	2B6	2	
SR	1B6	1	
	2B8	2	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
CAPACITORS			
A	1D6	1	
	2E8	2	
D	2B9	2	
E	1C3	1	
	2C4	2	
R	4D5	3	
	4B6	3	
	5G6	9	
R1	4C6	3	
TS	5B8	10	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
RESISTORS			
A	3E2	3	
B	1G8	1	
	2D5	2	
D	1G7	1	
	2B8	2	
E	3B1	3	
F	3B2	3	
H	2F7	2	
	5D2	9	
J	1E3	1	
	2D5	2	
J'	1E5	1	
	2E6	1	
L	2G7	2	
N	5F8	9	
R	4B6	3	
	5H6	11	
S1	1B3	1	
	2B2	2	
	3C7	3	
	3D3	3	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
DIODES			
A	1F7	1	
	2G8	2	
DL	2D2	2	
R	4D7	3	
	5F6	9	
S	3D4	3	
	5D6	10	
	6E1	14	

SD-5E001-01-A3

TRUNK CONTROL		ISSUE 10B
BELL TELEPHONE LABORATORIES INCORPORATED		SD-5E001-01-A3
6S	6S	PRINTED IN U.S.A.

LEAD INDEX CONNECTING CIRCUITS

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CIRCUIT TITLE	CKT LEAD INDEX LOC
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (MULT JACK CKT FOR 552A,552D OR 605A)	4A2
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (MULT JACK FOR 607A OR 607B)	4D2
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (MULT JACK CKT FOR 608A)	4F2
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (NIGHT JACK CKT FOR 552A,552D OR 605A)	4A4
552A,552D OR 605A PBX AUXILIARY BUZZER OR NIGHT ALARM CKT	4D4
608A OR 608D,6VAC LAMP RELAY CKT	4E4
608D JACK CKT	4E4
756A PBX LINE LINK AND MARKER CKT	4G4
ANI CKT	4A5
ATTENDANT SEL CKT	4D5
ATTENDANT TRK CKT (TOLL DIVERTING)	4A7
AUX SIG,FA,BCO AND MISC CKT	4D7
AUX TRK CKT	4E7,4A8
C.O. IND SUB'S LINE CKT	4D8
CORD TEL DIAL BUZ RINGING AND BAT. CKT	4F8
IDLE TRK INDICATING CKT	5A0
INTERCEPT TRK CKT (701PK)	5B0
INTRA-PBX PROTECTION OF SERVICE	5C0
LINE OR TRK ACCESS CKT	5E0
LONG LINE CKT	5A1
LONG TRK CKT	5B1
NIGHT ALARM CKT	5D1
NIGHT TRANSFER CKT	5E1
POWER FAILURE TRANSFER CKT	5H1
POWER RINGING CKT	5A3
POWER SUPPLY CKT FOR AC BUSY AND IDLE IND	5C3
RINGING LEADS CKT	5C3
RINGING RANGE EXTENDING CKT	5D3
ROTS CKT	5A4
SEL CKT	5D4
SEL CONN CKT	5A6
STATION MESSAGE REG PULSE CKT	5E6
STATION MESSAGE REG SURCHARGE CKT	5H6
TOLL DIVERTING TONE CKT	5A7
TOLL DIVERTING TRK CKT	5D7
TRAFFIC MEASUREMENT SYSTEM NUMBER 1A	5D7
TRAFFIC MEASUREMENT SYSTEM NO. 1A CONN CKT	5E7
TRAFFIC REG CKT	5F7
TRAFFIC USAGE RECORDER CKT	5G7

DESIG	LOCATION	
	FS	CAD
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (MULT JACK CKT FOR 552A,552D OR 605A)		
BL	3B0	3D1,5G9,7G2
BL1	3B0	3D1,5G9,7G2
L	4F5	3E1,5G9,7G2
R	3C0	3E1,5F9,7F2
S	3D0	3E1,5F9,7F2
S1	3D0	3D1,5F9,7G2
T	3C0	3E1,5F9,7F2

DESIG	LOCATION	
	FS	CAD
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (NIGHT JACK CKT FOR 552A,552D OR 605A)		
R	1B0,2B0	1G1,2C1,7A6,10B4,11C0,13B5
S	1B0,2B0	1G1,2C1,7B5,8B1,8G1,10D4,11E4,11F4,13B5
SL	1B0,2B0	1G1,2C1,7B6,10D4,11E4,11F4,13B5
T	1B0,2A0	1G1,2C1,7A6,10B4,11C0,13B5

DESIG	LOCATION	
	FS	CAD
ANI CKT		
A	1A6,2A3	1B1,2H1,8B7,10E4,11G4,12G5
B	1A6,2A3	1B1,2H1,8B7,10E4,11G4,12H0,12H5
P1	3C5,5D3	3F1,4F1,4F6,8C7
S1	1A6,2A3	1B1,2H1,8B7,10E4,11D4,12F0,12F5
S2	1A6,2A3	1B1,2H1,8B7,10E4,11D4,12F0,12F5

DESIG	LOCATION	
	FS	CAD
ATTENDANT TRK CKT (TOLL DIVERTING)		
R	5E5,6F1	1C1,2D1,6D0,6D7,10F0,11B0,12A5
S	5E5,6F1	1C1,2D1,6D0,6D7,10F0,11B0,12A5
S1	5E5,6F1	1C1,2D1,6D0,6D7,10F0,11B0,12A5
T	5E5,6F1	1C1,2D1,6D0,6D7,10F0,11B0,12A5

DESIG	LOCATION	
	FS	CAD
AUX TRK CKT (CONT)		
T	1A3,2A2	1E1,2C1,10C4,11E0,12D0,12E5
T1	1H3,2H3	1D1,2C1,10D0,11C4,12D0,12C5
TD	5C9,6E4	10E4,11F4,12G0,12G5

DESIG	LOCATION	
	FS	CAD
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (MULT JACK CKT FOR 607A OR 607B)		
L	5F8	4C1,4D5,5B8,5G5
R	5D0	4C5,4D1,5A8,5G5
S	5D0	4C5,4D1,5A8,5G5
T	5A0	4C5,4D1,5A8,5G5

DESIG	LOCATION	
	FS	CAD
552A,552D OR 605A PBX AUXILIARY BUZZER OR NIGHT ALARM CKT		
A	4E1	
B	4E1	

DESIG	LOCATION	
	FS	CAD
608A OR 608D,6VAC LAMP RELAY CKT		
IND	3A1	3D0,6H2,7C8

DESIG	LOCATION	
	FS	CAD
608D JACK CKT		
L	4F5	3E0,6B5,6G8,7B9,7D6
R	3C0	3E0,6A5,6F8,7A9,7C6
S	3D0	3E0,6A5,6G8,7B9,7D6
SL	3C0	3D0,6B5,6G8,7B9,7D6
T	3C0	3E0,6A5,6F8,7A9,7C6

DESIG	LOCATION	
	FS	CAD
552A,552B,552D,552E,605A,607A,607B,608A OR 608B JACK CKT (MULT JACK CKT FOR 608A)		
L	4F5	3E1,6B5,6G2,7B9,7D6
R	3C0	3E1,6A5,6F2,7A9,7C6
S	3D0	3E1,6A5,6G2,7B9,7D6
SL	3D0	3D1,6A5,6G2,7B9,7D6

DESIG	LOCATION	
	FS	CAD
ATTENDANT SEL CKT		
R	1H0,2C0,2F0,2H0	1A1,1H1,2A1,2D1,6A1,6A6,6B1,6B6,10B4,10C4,11D0,11E0,11F0,12A0,12E0,12E5
S	1H0,2C0,2F0,2H0	1A1,1H1,2A1,2D1,6A1,6A6,6B1,6B6,8C1,8H1,10D4,11D0,11E4,12A0,12D0,12D5
T	1H0,2C0,2F0,2H0	1A1,1H1,2A1,2D1,6A1,6A6,6B1,6B6,10C4,10B4,11D0,11E0,11F0,12A0,12E0,12E5

DESIG	LOCATION	
	FS	CAD
AUX SIG, FA, BCO AND MISC CKT		
BL	5F4	6H2
IL	5F4	6H2
IND	3A1,5F4	3D1,3D5,6H2,7F6,7C9
NA	4F5	3F1,7E0

DESIG	LOCATION	
	FS	CAD
AUX TRK CKT		
A BAT	3E0,5E0	3H1,3H5,4G1,4G6
B	1H3,2H3	1D1,2C1,10D0,11C4,12B0,12B5
BL	1H3,2H3	1D1,2C1,10D0,11C4,12B0,12C5
DD	1H3,2H3	1D1,2C1,10D0,11C4,12C0,12C5
DL	1A3,2A2	1D1,2C1,10C4,11C4,12E0,12D5
L	3D8,3G9,4E3,4F5	3E1,3F5,4C1,4D6
R	1A3,2A2	1E1,2C1,10C4,11E0,12D0,12E5
R1	1H3,2H3	1D1,2C1,10D0,11C4,12D0,12C5

DESIG	LOCATION	
	FS	CAD
C.O. IND SUB'S LINE CKT		
R	1C8,2D9	5A0,5B5,5D1,5E3,7A0,10E0,11D4,12D0,12D5
T	1C8,2D9	5A0,5B5,5D1,5E3,7A0,10E0,11D4,12D0,12D5

DESIG	LOCATION	
	FS	CAD
CORD TEL DIAL BUZ RINGING AND BAT. CKT		
A	4E1	
B	4E1	

DESIG	LOCATION	
	FS	CAD
756A PBX LINE LINK AND MARKER CKT		
ATB	2H6	12B5
R2	2H1	12F5
S2	2H1	12F5
T2	2H1	12F5

TRUNK CIRCUIT

SD-5E001-01-A4

BELL TELEPHONE LABORATORIES INCORPORATED

ISSUE 10B

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SD-5E001-01-A4

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DESIG	LOCATION	
	FS	CAD
IDLE TRK INDICATING CKT		
IL	5F4	4F1, 4E6, 5B7, 5G4, 6B4, 6G1, 7B7, 7E4
L	3G5	

DESIG	LOCATION	
	FS	CAD
LONG LINE CKT		
R	1C2, 2C3	5B0, 7C0
R1	1C2, 2C3	5B0, 7C0
T	1C2, 2C3	5B0, 7C0
T1	1C2, 2C3	5B0, 7C0

DESIG	LOCATION	
	FS	CAD
POWER RINGING CKT		
B	1E8, 2A4	1B0, 2E1, 10C0, 11F0, 12B3, 12B8
MS	1E8, 2A4	1B0, 2E1, 10C0, 11F0, 12B3, 12B8

DESIG	LOCATION	
	FS	CAD
ROTS CKT		
R	1H2, 2H2, 5B9, 6D4	1H1, 2E1, 2H1, 6B0, 6B5, 6C0, 12B0, 12B5, 12F0, 12F5
S	1H2, 2H2, 5B9, 6D4	1H1, 2E1, 2H1, 6B0, 6B5, 6C0, 12B0, 12B5, 12E0, 12F5
T	1H2, 2H2, 5B9, 6D4	1H1, 2E1, 2H1, 6B0, 6B5, 6C0, 12B0, 12B5, 12F0, 12F5

DESIG	LOCATION	
	FS	CAD
SEL CONN CKT		
R	1H2, 2H2, 5B9, 6D4	1A1, 1H1, 2E1, 2H1, 5G0, 6B0, 6C0, 10B0, 10C4, 11B0, 11D0, 12B0, 12F0, 12B5, 12F5
S	1H2, 2H2, 5B9, 6D4	1A1, 1H1, 2E1, 2H1, 5G0, 6B0, 6C0, 10B0, 10E4, 11B0, 11F4, 12B0, 12E0, 12B5, 12F5
T	1H2, 2H2, 5B9, 6D4	1A1, 1H1, 2E1, 2H1, 5G0, 6B0, 6C0, 10B0, 10C4, 11B0, 11D0, 12B0, 12F0, 12B5, 12F5

DESIG	LOCATION	
	FS	CAD
TOLL DIVERTING TONE CKT		
R	5E5, 6F1	1C1, 2D1, 6D0, 6D6, 10F0, 11B0, 12A1, 12A5
S	5E5, 6F1	1C1, 2D1, 6D0, 6D6, 10F0, 11B0, 12A1, 12A5
S1	5E5, 6F1	1C1, 2D1, 6D0, 6D6, 10F0, 11B0, 12A1, 12A5
T	5E5, 6F1	1C1, 2D1, 6D0, 6D6, 10F0, 11B0, 12A1, 12A5

INTERCEPT TRK CKT (701PK)		
M	2E9	6E7, 12C8

LONG TRK CKT		
R	1C8, 2D9	5A0, 5B5, 5D4, 5E4, 7A0, 10E0, 11D4, 12D0, 12D5
T	1C8, 2D9	5A0, 5B5, 5D4, 5E4, 7A0, 10E0, 11D4, 12D0, 12D5

POWER SUPPLY CKT FOR AC BUSY AND IDLE IND		
AC	5F0	4G1, 4F5

RINGING LEADS CKT		
M	1D8, 2E9	1B1, 2E1, 10B0, 11F0, 12C3, 12C8

DESIG	LOCATION	
	FS	CAD
SEL CKT		
R	1H2, 2H2, 5B9, 6D4	1A1, 1H1, 2E1, 2H1, 5F0, 6B0, 6C0, 6B6, 6C6, 10B0, 10C4, 11B0, 12B0, 12F0, 12B5, 12F5
S	1H2, 2H2, 5B9, 6D4	1A1, 1H1, 2E1, 2H1, 5F0, 6B0, 6C0, 6B6, 6C6, 10B0, 10E4, 11B0, 11F4, 12B0, 12E0, 12B5, 12F5
T	1H2, 2H2, 5B9, 6D4	1A1, 1H1, 2E1, 2H1, 5F0, 6B0, 6C0, 6B6, 6C6, 10B0, 10C4, 11B0, 11D0, 12B0, 12B5, 12F0, 12F5

TOLL DIVERTING TRK CKT		
R	2D9	12D0, 12D5
T	2D9	12D0, 12D5

TRAFFIC MEASUREMENT SYSTEM NUMBER 1A		
TMS	1F0, 2F0	12D0, 12D5
WFA	4E5, 5H7	3E1, 4G1, 4G6

INTRA-PBX PROTECTION OF SERVICE		
R1	1B8, 1C8, 2C9, 2D9	1H1, 2H1, 10E0, 11C4, 12D0, 12D5
S1	1B8, 2C9	1H1, 2H1, 10F4, 11C4, 12D0, 12D5
T1	1B8, 1C8, 2C9, 2D9	1H1, 2H1, 10E0, 11C4, 12D0, 12D5

NIGHT ALARM CKT		
RB	5G8	4E1, 4E6

RINGING RANGE EXTENDING CKT		
DD	1E0, 2D0	1A1, 2A1, 10C0, 11B4, 12C0, 12C5
DL2	1E0, 2D0	1A1, 2A1, 10C0, 11F0, 12C0, 12D5
R	1B0, 1C0, 1C8, 1H2, 2B0, 2D9, 2H2, 4G2, 5H2	1E1, 1G1, 1H1, 2C1, 2F1, 2H1, 5A0, 5B5, 5D3, 5E3, 7B4, 10B4, 10C4, 10E0
T	1B0, 1C0, 1C8, 1H2, 2B0, 2D9, 2H2, 4G2, 5H2	1E1, 1G1, 1H1, 2C1, 2F1, 2H1, 2H2, 5A0, 5B5, 5D4, 5E4, 7B4, 10B4, 10C4, 10E0, 11C0, 11C4, 11D4, 12D0, 12D5, 12F0, 12F5, 12G0, 12G5
TR	3F0, 5E3	3E0, 3E5, 4E1, 4E5, 8C8

TRAFFIC MEASUREMENT SYSTEM NO. 1A CONN CKT		
DLWCK	1G0, 2F0	12D0, 12D5
DSET	3G5, 5D3	3A1, 4D1, 4D6

LINE OR TRK ACCESS CKT		
R	1C8, 2D9	5A0, 5B5, 5D4, 5E4, 7A0, 10E0, 11C3, 12D0, 12D5
S	1H1, 2H1	8E8, 10E4, 11G4, 12E0, 12E5
T	1C8, 2D9	5A0, 5B5, 5D4, 5E4, 7A0, 10E0, 11C3, 12D0, 12D5
TR	3F0, 5E3	3E0, 3E5, 4E1, 4E5, 8C8

NIGHT TRANSFER CKT		
R	1H2, 2H2	1H1, 2E1, 2H1, 10B0, 10C4, 11B0, 12F0, 12F5
S	1H2, 2H2	1H1, 2E1, 2H1, 10B0, 10E4, 11B0, 11F4, 12E0, 12F5
T	1H2, 2H2	1H1, 2E1, 2H1, 10B0, 10C4, 11B0, 12F0, 12F5

TRAFFIC REG CKT		
BR	1B0, 2G0	1D1, 2F1, 10C0, 11F0, 12H0, 12H5
K	1B0, 2G0	1D1, 2F1, 6E2, 6E7, 10C0, 11F0, 12H0, 12H5

STATION MESSAGE REG PULSE CKT		
S1	1H6, 2H4	1C1, 2G1, 10F4, 11F4, 12G0, 12G5
SR	1H6, 2H4	1C1, 2G1, 10F4, 11F4, 12H0, 12H5
SS1	1H6, 2H4	1C1, 2G1, 10F4, 11F4, 12E0, 12E5
SS2	1H6, 2H4	1C1, 2G1, 10F4, 11F4, 12D0, 12D5

STATION MESSAGE REG SURCHARGE CKT		
H	1H6, 2H7	1E1, 2H1, 10D0, 11B4, 12C3, 12C8

TRAFFIC USAGE RECORDER CKT		
TR	1F8, 2E9	1G1, 2F1, 7E6, 10F4, 11E4, 12H0, 12H5

TRUNK CIRCUIT		
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6S

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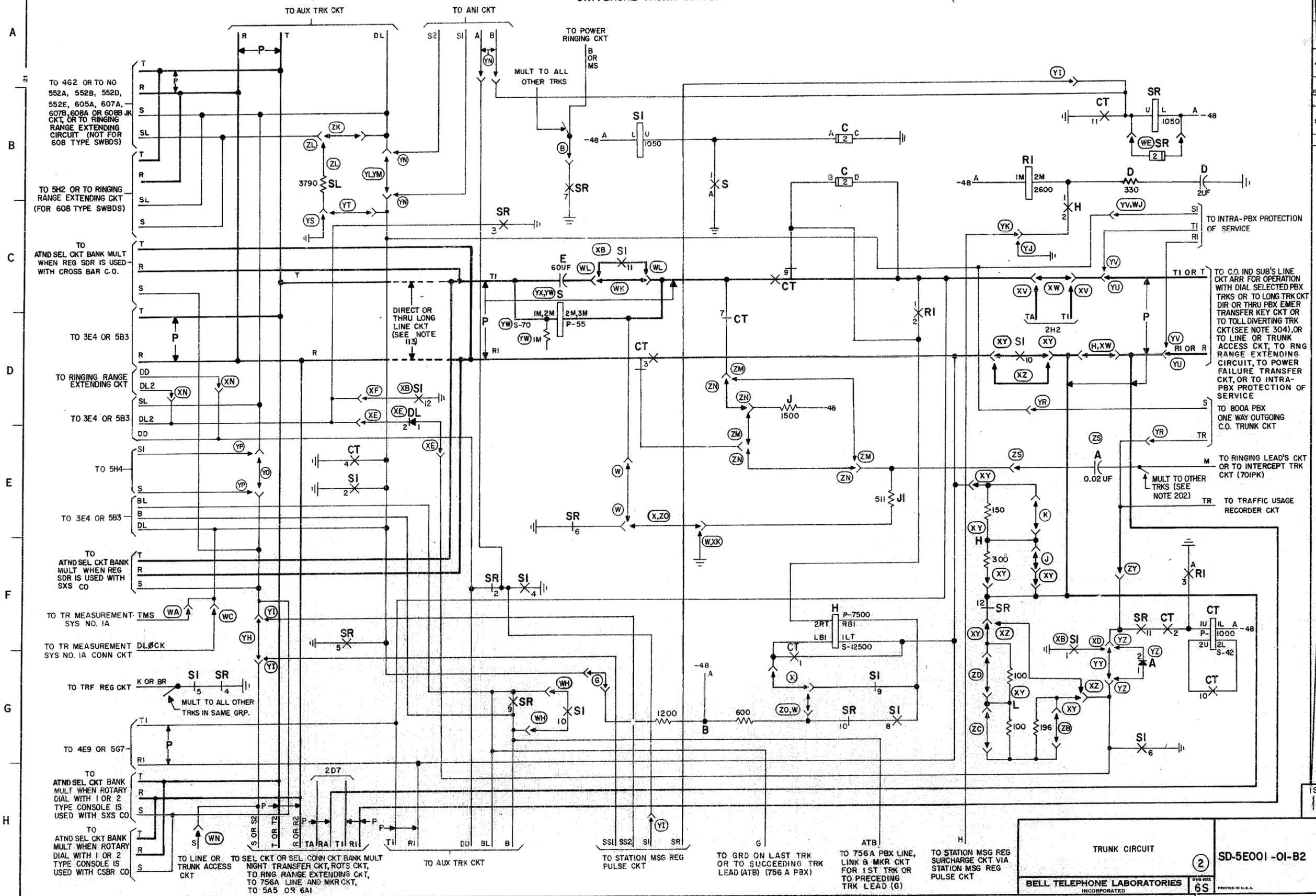
ISSUE 10B

SD-5E001-01-A5

100-110011



# FS2 UNIVERSAL TRUNK CIRCUIT



SD-5E001-01-B2

DRAWING	ISSUE
1	GAP
2	SAK
3	KF.
4	2D
5	SAK
6	KF.
7	PUS
8	SAK
9	GFH
10	FED
11	PJB
12	RHP
13	CEP
14	LBU
15	SAK
16	RNF
17	PKC
18	PJS
19	LD
20	8B

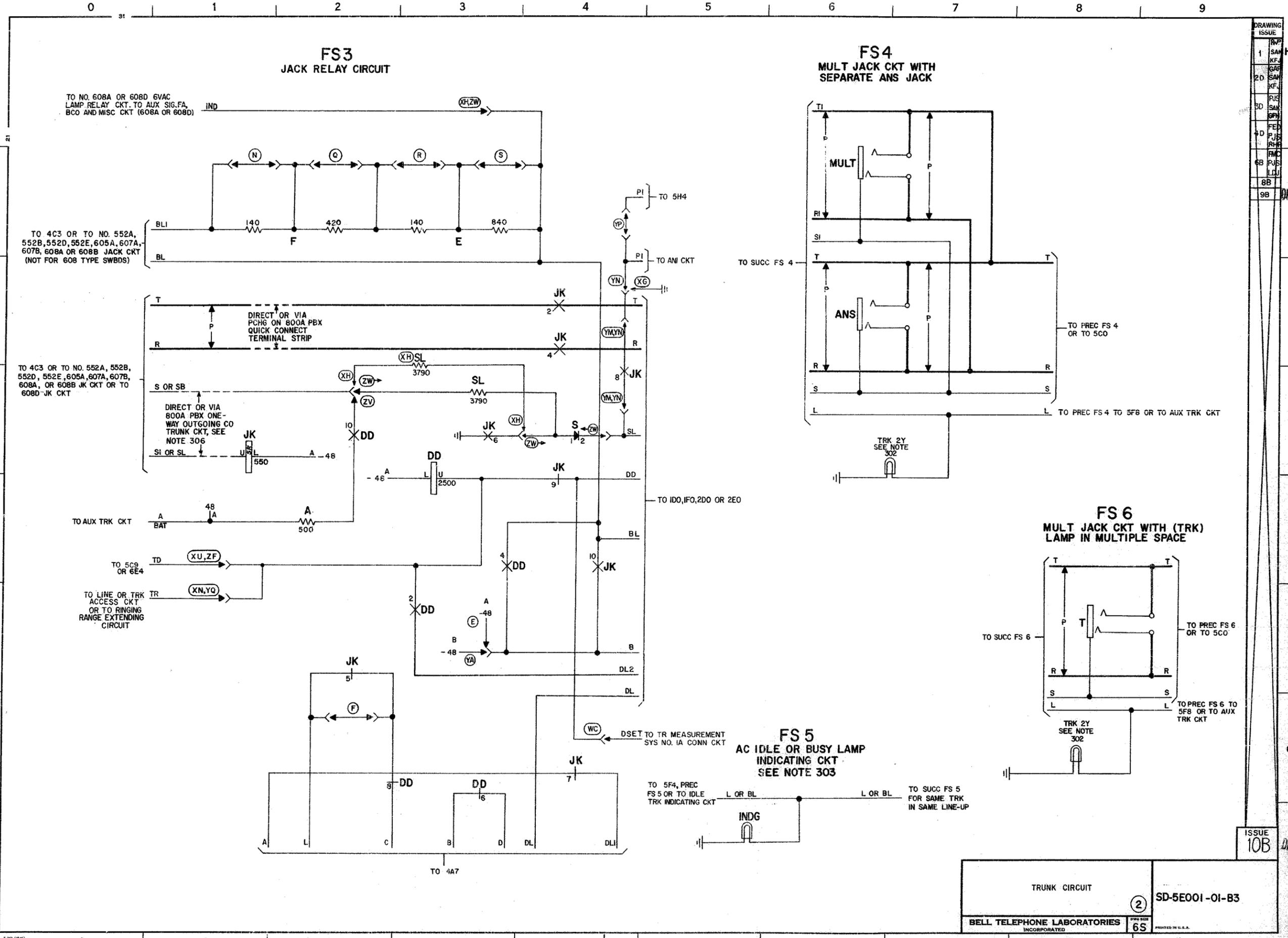
ISSUE  
10B

TRUNK CIRCUIT

SD-5E001-01-B2

BELL TELEPHONE LABORATORIES  
INCORPORATED

6S



DRAWING ISSUE	
1	HW
2D	A
3D	B
4D	C
5D	D
6B	E
8B	F
9B	G

ISSUE  
10B

SD-5E001-01-B3

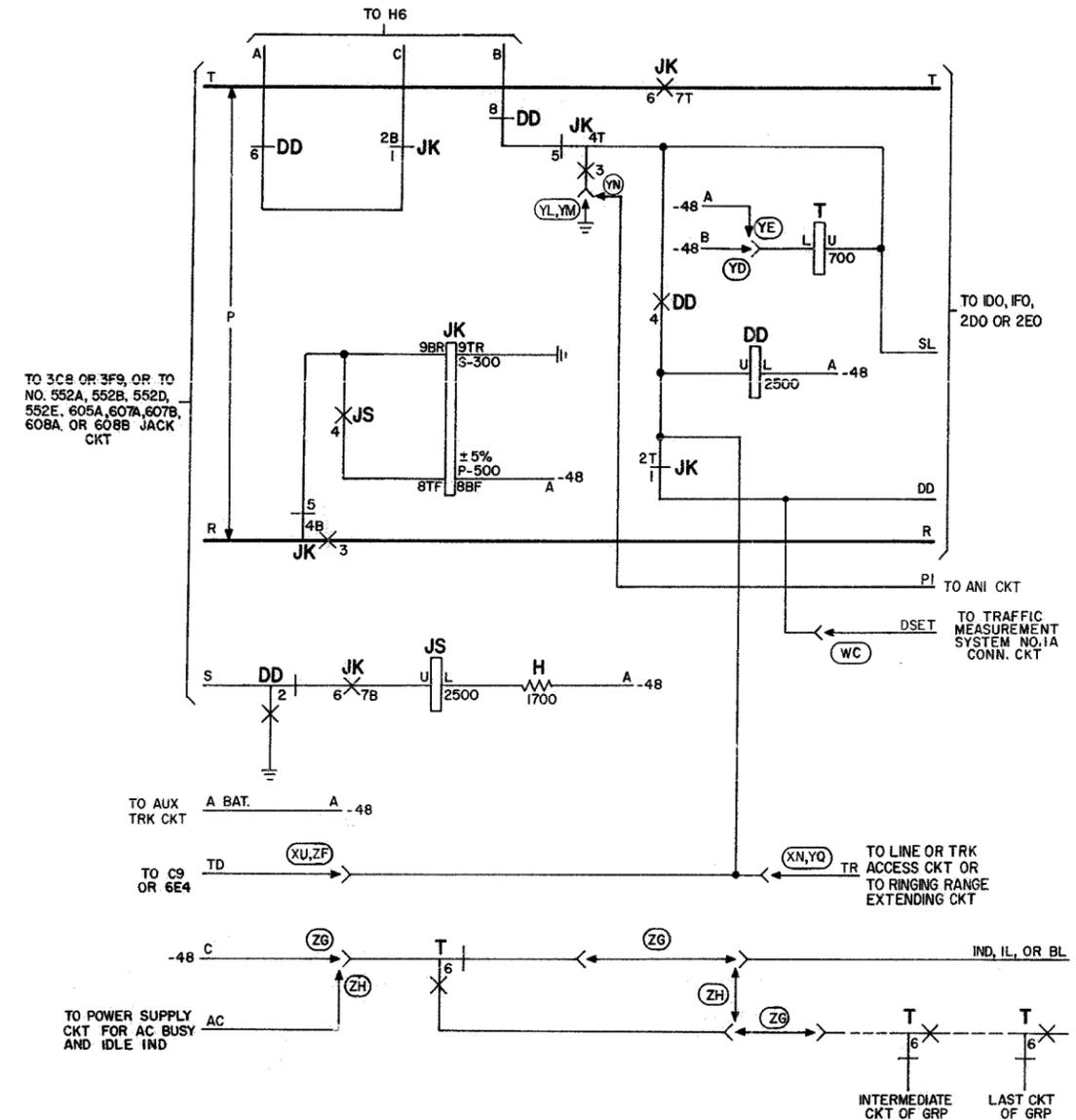
TRUNK CIRCUIT		②	SD-5E001-01-B3
BELL TELEPHONE LABORATORIES INCORPORATED			

L-701 (10-4)

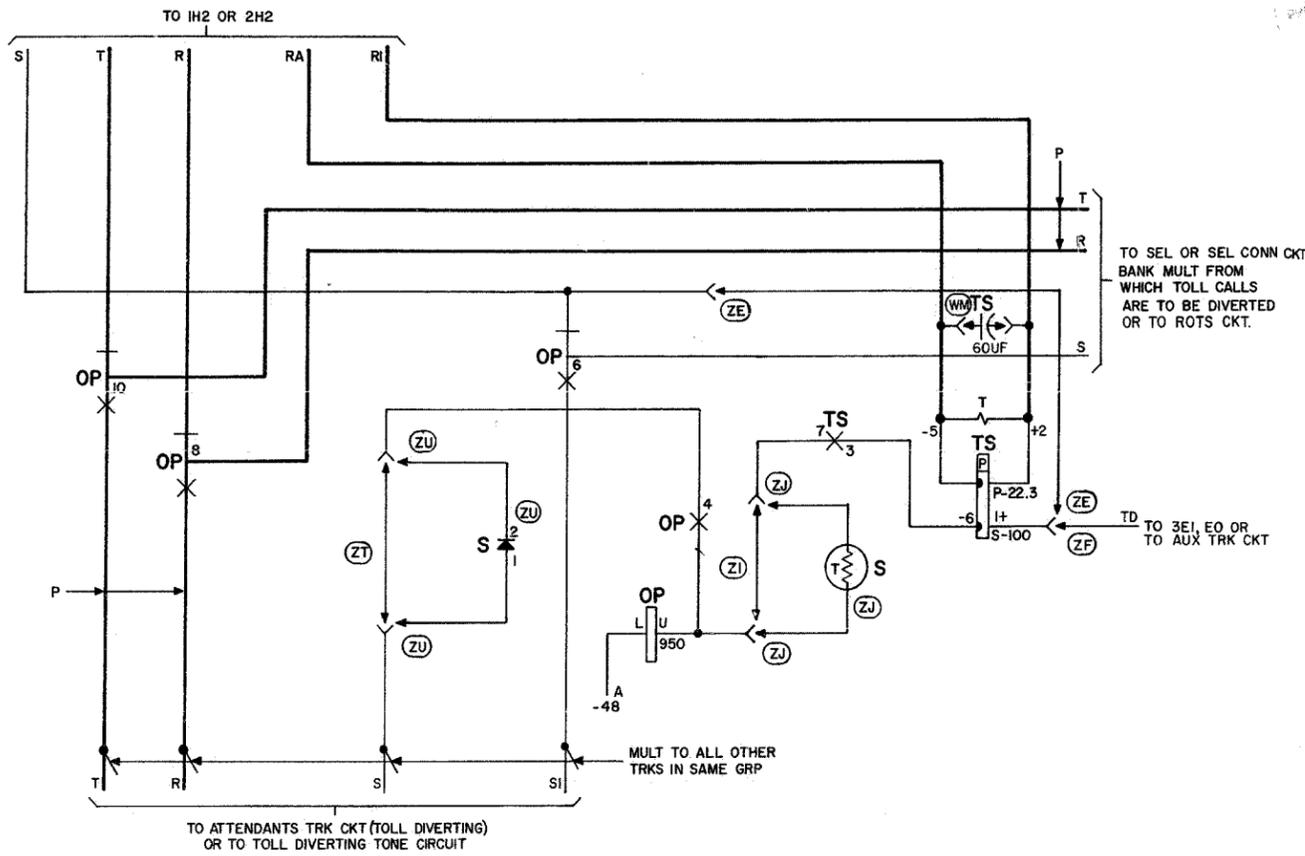


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G  
H

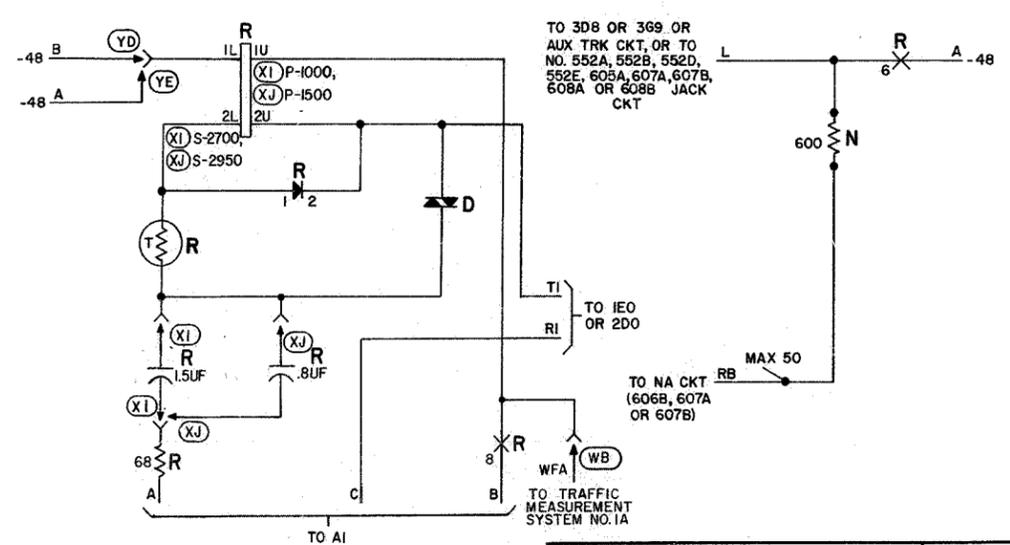
### FSIO JACK RELAY CIRCUIT



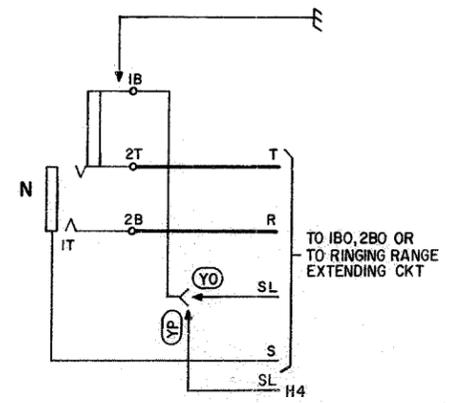
### FSII (MFR DISC) TOLL DIVERTING CIRCUIT



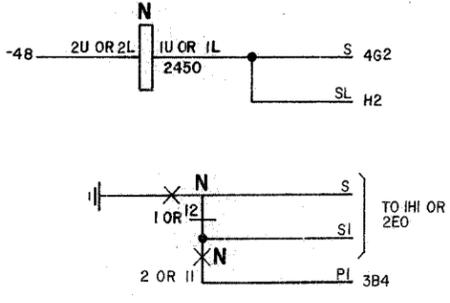
### FSI3 RINGING CIRCUIT



### FSI2 NIGHT JACK CIRCUIT



### FSI4 NIGHT OPERATION



DRAWING ISSUE	
1	HW
2D	A
3D	B
4D	C
6B	D
8B	E
	F
	G
	H

ISSUE 10B

TRUNK CIRCUIT

SD-5E001-01-B5

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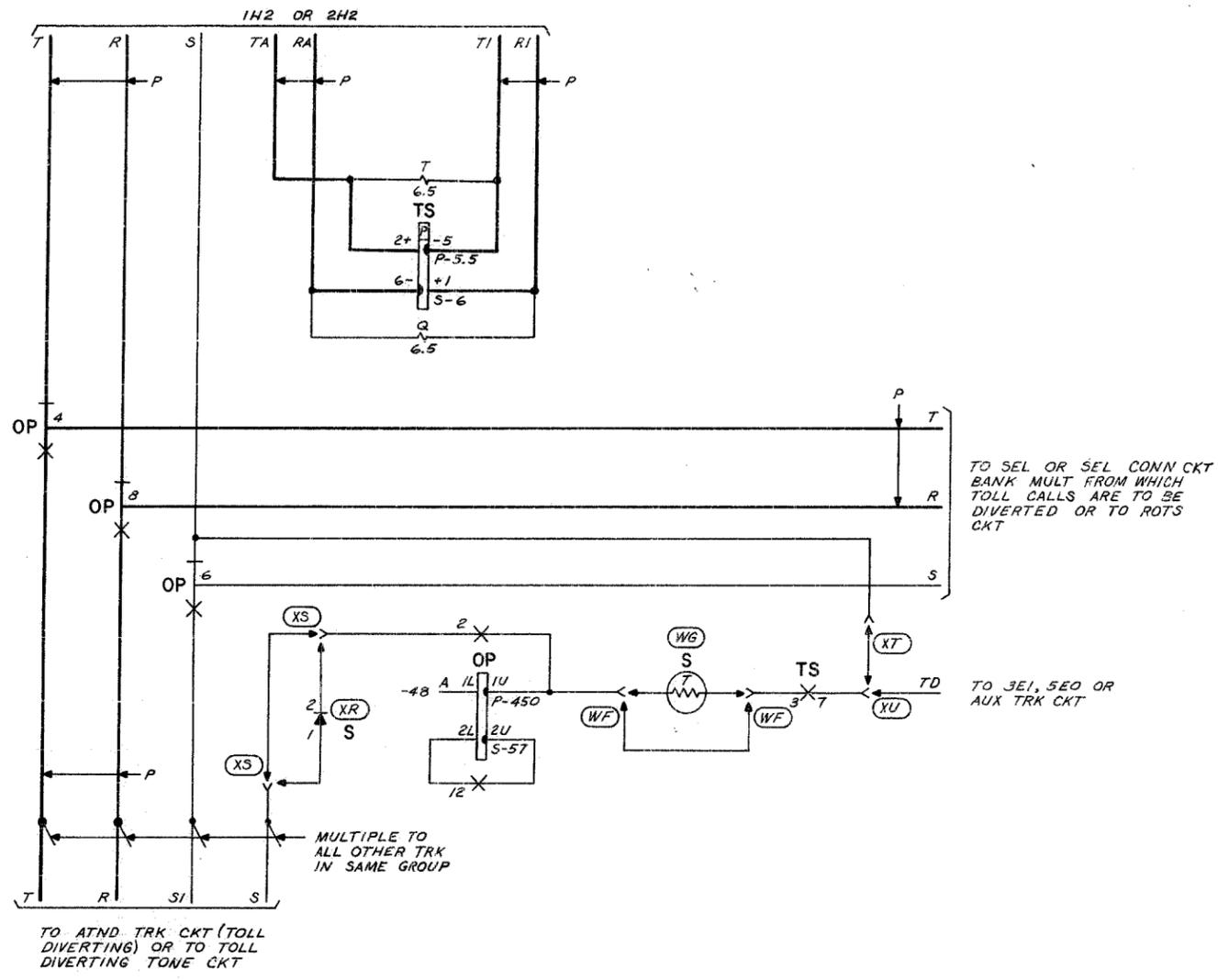
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SD-5E001-01-B5

FS15  
TOLL DIVERTING CIRCUIT

A  
B  
C  
D  
E  
F  
G  
H

A  
B  
C  
D  
E  
F  
G  
H

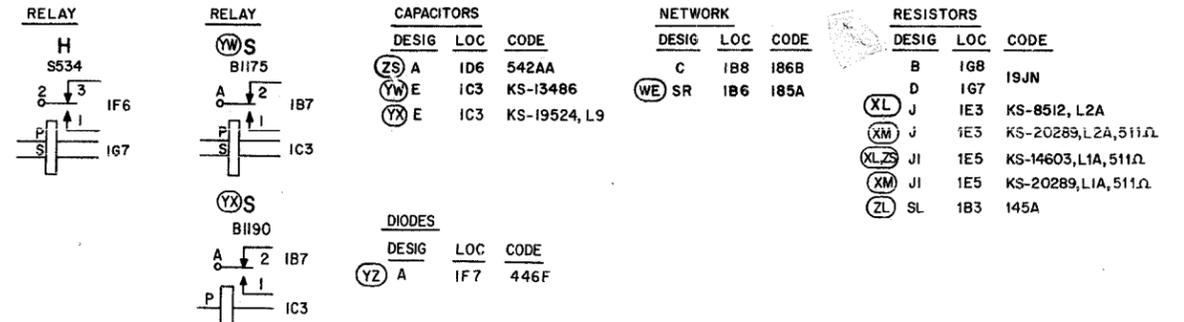


SD-5E001-01-B6

FS15 TOLL DIVERTING CIRCUIT		ISSUE 10B
TRUNK CIRCUIT		SD-5E001-01-B6
BELL TELEPHONE LABORATORIES INCORPORATED	6S	PRINTED IN U.S.A.

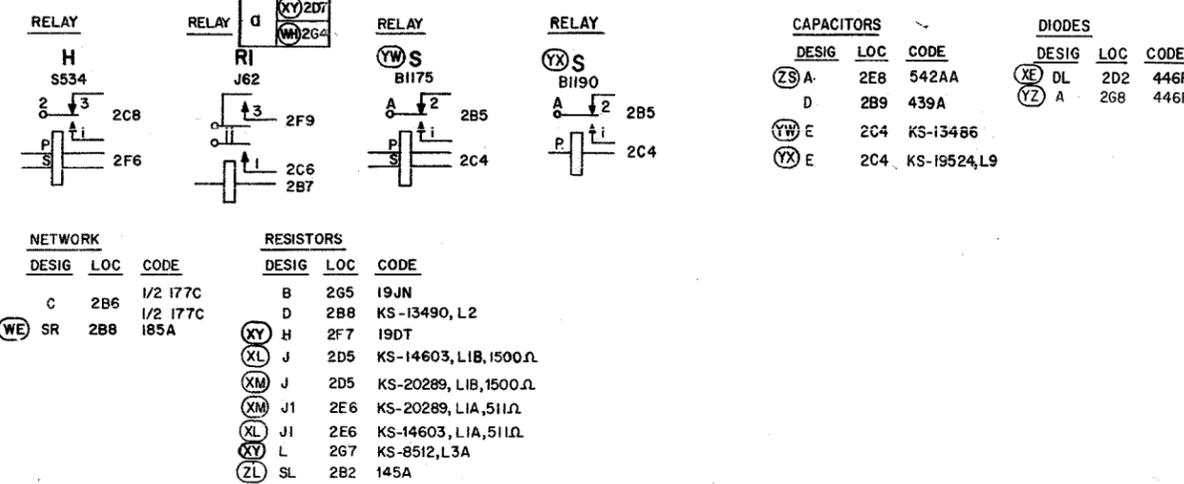
APP FIG. 1

DESIG	CT		SR		SI		S1		DESIG
	CODE	AG44	AG43	AG2	AG1	XA	XB	CODE	
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION
12	EM	IF5	BM	IF7			M	IG7	12
11	M	IF7	M	IE8			M	IC4	11
10	M	IF6	BM	IF8	M	ID1	M	ID1	10
9	BM	ID4	M	IF4	B	IG7	B	IG7	9
8			BM	IE5	M	IF7	M	IF7	8
7	BM	IC5	M	IE1	B	IB2	B	IB2	7
6			BM	IB2	M	IE4	M	IE4	6
5	BM		M	B	B		B		5
4	M	IB7	BM	IG7	M	IF5	M	IF5	4
3	BM		M	IF4			B		3
2	M		BM		M	IE6	M	IE6	2
1	M	ID7	M		M	IF7	M	IF7	1
COIL	IE7		IB6		IB7		IB7		COIL



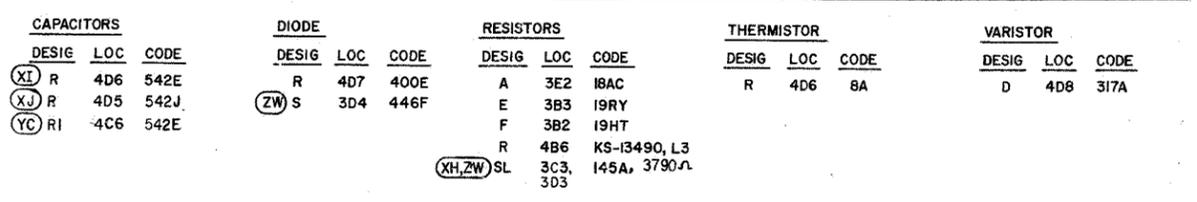
APP FIG. 2

DESIG	CT		SR		SI		S1		DESIG
	CODE	AG44	AG43	AG2	AG1	XA	XB	CODE	
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION
12	EM		BM	2F7			M	2D2	12
11	M	2B8	M	2F8			M	2C4	11
10	M	2G9	BM	2G6	M	Q	M	2D7	10
9	BM	2C5	M	2F3	B	2G6	B	2G6	9
8			BM		M	2G6	M	2G6	8
7	BM	2C5	M	2B4	B		B		7
6			BM	2E4	M	2G8	M	2G8	6
5	BM		M	2F2	B	2G1	B	2G1	5
4	M	2E2	BM		M	2F3	M	2F3	4
3	BM	2D4	M	2C3			B		3
2	M	2F9	BM	2F3	M	2E2	M	2E2	2
1	M	2F5	M		M	2G8	M	2G8	1
COIL	2F9		2B8		2D7		2B4		COIL

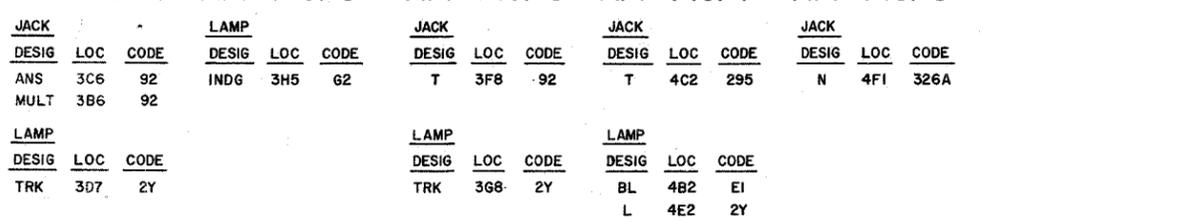


APP FIG. 3

DESIG	DD		JK		R		R		DESIG
	CODE	AF115	AF158	AF534	AJ48	XJ	XJ	CODE	
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION
12									12
11									11
10	M	3D2	M	3E4			M		10
9			B	3D4					9
8	EBM	3G2	M	3D4	EBM	4E6	M	4E6	8
7			B	3G4					7
6	B	3G3	M	3D4	EBM	4F7	M	4F7	6
5			B	3F2					5
4	M	3E4	M	3C4			M	4G7	4
3									3
2	EBM	3F3	M	3C4					2
1									1
COIL	3D3		3D1		4E7		4E7		COIL



APP FIG. 4 APP FIG. 5 APP FIG. 6 APP FIG. 7 APP FIG. 8



BRAWING ISSUE  
1 SAK  
2D KFU  
3D SAM  
4D KFU  
5D RHP  
6D RHP  
7B PLS  
8B PLS  
9B PLS

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APP FIG. 9

RELAY		DD		JS		R		R		T										DESIG		
CODE		AF115		AF15		AF534		AJ48		AF56										CODE		
OPTION						XI		XJ												OPTION		
12	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	12
11																						11
10	M								M													10
9																						9
8	EBM	5B1		M			EBM	5H7	M	5H7												8
7				EMB																		7
6	B	5B0		EMB			EBM	5F9	M	5F9					EBM	5F1						6
5																						5
4	M	5B2		M	5C1				M													4
3																						3
2	EBM	5D1																				2
1																						1
COIL		5C3		5D1		5F6		5F6				5F3										COIL

RELAY

JK UI070

DESIG LOC CODE

(X) R 566 542E

(X) R 566 542J

VARISTOR

DESIG LOC CODE

D 5F7 317A

DIODE

DESIG LOC CODE

R 5F6 400E

RESISTORS

DESIG LOC CODE

H 5D2 19D3

N 5F8 19AE

R 5H6 X5-13450.13

THERMISTOR

DESIG LOC CODE

R 562 6A

APP FIG. 12

RELAY		N		I		N														DESIG		
CODE		AK23																		CODE		
OPTION		YP		YP																OPTION		
12	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	12
11																						11
10																						10
9																						9
8																						8
7																						7
6																						6
5																						5
4																						4
3																						3
2	BM	5H4																				2
1	BM	5H4																				1
COIL		5G4		5G4																		COIL

APP FIG. 13 (MFR DISC.)

CABLE

DESIG LOC CODE

ED-1E073-C1-G1

APP FIG. 10 (MFR DISC)

RELAY		OP																		DESIG		
CODE		AF11C																		CODE		
OPTION																				OPTION		
12	R																					12
11																						11
10	EBM	5C4																				10
9																						9
8	ESM	5C5																				8
7																						7
6	EMB	5C6																				6
5																						5
4	EBM	5C7																				4
3																						3
2																						2
1																						1
COIL		5D7																				COIL

RELAY

TS

DESIG LOC CODE

(M) TS 158 4-1102-113

(Z) S 508 446F

(Z) S 508 1C

DIODE

DESIG LOC CODE

S 508 446F

THERMISTOR

DESIG LOC CODE

S 508 1C

APP FIG. 11

JACK

DESIG LOC CODE

N 5H1 510A

APP FIG. 14

RELAY		OP																		DESIG		
CODE		AG38																		CODE		
OPTION																				OPTION		
12	EM	6D2																				12
11																						11
10	M																					10
9	S																					9
8	EBM	6D0																				8
7	B																					7
6	EMB	6D1																				6
5	B																					5
4	EBM	6C0																				4
3																						3
2	M	6D2																				2
1																						1
COIL		6D2																				COIL

RELAY

TS 280H

DIODE

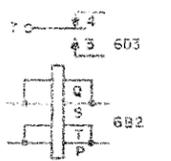
DESIG LOC CODE

(XR) S 6E1 446F

THERMISTOR

DESIG LOC CODE

(WG) S 6D3 1C



SD-5E001-01-C2

TRUNK CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

ISSUE 10B

SD-5E001-01-C2

6S

CIRCUIT NOTES:

DESIG	AMP	POTENTIAL FUSED	ONE PER
A	1-1/3	48V SIG	CKT
XB	1-1/3	48V SIG	10 CKTS
C	1-1/3	48V SIG	FIRST CKT OF INDICATING LAMP GRP
AC	1-1/3	6V AC SUPPLY	CKT
X BAT. "B" SHALL BE SUPPLIED THRU THE BAT. CUT-OFF CKT.			
	1-1/3	48V SIG	10 APP FIG. 12

FEATURE OR OPTION	APP FIGS.	PROVIDE	
		APP OR WRG	QUANTITY
OUT-GOING OR 2-WAY TRUNK (NOTE 114)	701A, 701B, 702A, 711A, 711B OR 740E (NOTE 106)	1	Z
	701PK, 711PK OR 756A (NOTE 305)	2	XK
			ZO
			X
701B PBX REG SDR EQUIP FOR DIAL TONE MONITORING (NOTE 108)		YES	ZM
		NO	ZN
756A PBX ALL TRUNKS BUSY			WH
2 DIGIT PBX (SWBD'S OTHER THAN 606B, 607A OR 607B)			G
USED WITH LONG LINE CKT ARRANGED TO REPEAT RINGING AND RINGING SOURCE IS NOT IN CONSTANT OPERATION			B
AUDIBLE SIGNAL WHEN CONNECTION TO TOLL SUB-LINE CKT IS	REQD		ZS
	NOT REQD		ZR
STATION MESSAGE REGISTER PULSE CKT IS	REQD	WITH STATION MSG REG SURCHARGE CKT	YI, YK
	NOT REQD	WITHOUT STATION MSG REG SURCHARGE CKT	YI, YJ
			YH, YJ
AUTOMATIC NUMBER IDENTIFICATION	REQD	NIGHT JACK	YN, YP, YQ, YR
			YN, YO, YW
			YM, YO, XG
INTRA PBX PROTECTION OF SERVICE			WJ
WHEN RINGING RANGE EXTENDING CKT IS REQD			XN
WHEN TRAFFIC USAGE RECORDER IS REQD			ZY
CONNECTION TO TRAFFIC MEASUREMENT SYSTEM NO. 1A		WAITING TIME FOR ATTENDANT	WB
		TRUNK BUSY OUTGOING	WC
		TRUNK BUSY	WA
LINE OR TRK ACCESS CKT FOR TOUCH-TONE CALLING REQD			WN
TOLL DIVERTING	14	OUTGOING TRK ONLY	XV, XR, XT
		WITH NIGHT JACK	XV, XS, XT
		WITHOUT NIGHT JACK	XV, XU
		TWO-WAY TRUNK	XV, XU
		NOT PROVIDED	XW
CALLS FALSELY DIVERTED TO PBX ATTENDANT ON CALLS THRU PANEL AND CROSSBAR OFFICES WHEN TANDEM OFFICE FINDS ALL TRUNKS BUSY		YES	WG
		NO	WF

CIRCUIT NOTES: (CONT)

FEATURE OR OPTION	APP FIG	PROVIDE	
		APP OR WRG	QUANTITY
SWBD APPLIQUE FOR TWO-WAY TRUNK	3	F, YC, ZV	1 PER APPLIQUE
		XH, WD	
		ZV	
		E	
		YA	
		N	
		N, R	
		Q	
		N, Q, R	
		S	
		R, S	
		N, R, S	
		Q, S	
		Q, R, S	
		V	
		V	
		T	
		YQ	
		YE	
		YD	
		YQ	
		YB	
		7	1 PER APPEARANCE
		6	
		4	
		8	1 PER APPEARANCE
		11	YT, ZL
		5	ZG
			ZH

CIRCUIT NOTES: (CONT)

NETWORK NO.	NETWORK VALUES	
	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	1000	0.56
2	470	0.50

CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD
3D	YL, YM, YN OR ZK	YL & ZK	102	YM, YN		YL, ZK
3D	YO OR YP	YO	102	YO, YP		
4D	YQ	NONE	102	YQ		
4D	YR	NONE	102	YR		
4D	YS OR YT	YS	102	YT		YS
4D	YU OR YV	YU	102	YU, YV		
4D	YX OR YZ	YX	102	YX		YX
5AC	YY OR YZ	YY	102	YY, YZ		
	XA OR XB	XA				XA
	YY, YZ, XC OR XD	YY, YZ OR XC	111	XD		YY, YZ
	XE OR XF	XE		XF		XE
6B	ZW OR XH	ZW OR XH	102	XH		ZW
6B	XI OR XJ	XI		XJ		XI
6B	W OR XK	W, X OR ZD	102	XK		W
7B	XL OR XM	XL		XM		XL
8B	XN	NONE	102	XN		
9B	XO OR XP	XO		XP		XO
	XR	ZU		XR		ZU
	XS	ZT		XS		ZT
	XT	ZE		XT		ZE
	XU	ZF		XU		ZF
	XV, XW	XW, H		XV, XW		H
	ZM, ZN	ZM, ZN	108	ZM		ZN
	YR	YR	109			YR
10B	XZ	XY, J, K, ZB, ZC, ZD		XZ		XY, J, K, ZB, ZC, ZD
	WA, WB, WC	NONE		WA, WB, WC		
	WD	ZQ		WD		ZQ
	WE	NONE		WE		
	WF, WG	ZI, ZJ		WF, WG		ZI, ZJ
	WH	NONE		WH		
	WI	XP		WI		XP
	WJ	YV		WJ		YV
	WK, WL	WK	111	WL		WK
	WM	NONE	112	WM		
	WN	NONE	102	WN		

CIRCUIT NOTES: (CONT)

- 105. THE OPTIONS TO BE USED WITH APP FIG. 1 OR 2 WHEN CONNECTED TO A LONG TRUNK CIRCUIT ARE THE SAME AS THE OPTIONS USED WHEN APP FIG. 1 OR 2 IS CONNECTED TO THE LOCAL CENTRAL OFFICE. WHEN THIS CIRCUIT IS CONNECTED TO THE PBX AND CIRCUIT, THE DIAL LONG LINE SHOULD NOT BE USED AS SHOWN. A GROUND START LONG LINE CIRCUIT SHOULD BE PROVIDED BETWEEN THE TRUNK AND THE CENTRAL OFFICE.
- 106. APP FIG. 2 MAY BE USED WITH 701A, 701B, 702A, 711A, 711B OR 740E PBX'S WHEN IT IS DESIRED TO HAVE A TRUNK CIRCUIT WHICH CAN BE USED INTERCHANGEABLY WITH BOTH SXS AND ANY OTHER TYPE CENTRAL OFFICE.
- (MD) 107. WHEN ADDING APP FIG. 3 TO AN 800A PBX, OPTION XH MUST BE ADDED IF OPTION ZW WAS PROVIDED.
- 108. WHEN THIS CIRCUIT IS USED WITH REGISTER SENDERS NOT EQUIPPED FOR DIAL TONE MONITORING OPTION ZN MUST BE FURNISHED. IF REGISTER SENDER IS NOT USED, FURNISH ZM OPTION.
- 109. THE USE OF THIS CIRCUIT WITH THE 800A PBX HAS BEEN DELETED. THIS CIRCUIT HAS NEVER BEEN USED WITH THE 800A PBX AND ITS FUTURE USE IS NOT CONTEMPLATED.
- 110. THE USE OF THIS TRUNK WITH THE 756A PBX IS ONE-WAY OUTGOING ONLY.
- 111. WHEN OPTIONS XD OR WL ARE USED, XB OPTION MUST BE PROVIDED TO FURNISH THE ADDITIONAL S1 RELAY CONTACTS.
- 112. OPTION WM IS TO BE LOCALLY INSTALLED AND WIRED TO PROVIDE AN IMPROVED BALANCE WHERE NOISE IS ENCOUNTERED WHEN THIS CIRCUIT IS CONNECTED TO MARGINAL CABLE FACILITIES.
- 113. THE USE OF A LONG LINE CIRCUIT BETWEEN THIS TRUNK AND THE FIRST SELECTOR IS MFR DISC.
- 114. THIS TRUNK PROVIDES 2-WAY OPERATION ONLY WITH SWITCHBOARDS OR AUXILIARY TRUNKS. THE AUXILIARY TRUNK MAY BE USED WITH 5 OR 6 TYPE CONSOLES OR KEY SETS AS AN ATTENDANT FACILITY IN PLACE OF SWITCHBOARDS OR IN CONJUNCTION WITH SWITCHBOARDS.

SD-5E001-01-D1

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TRUNK CIRCUIT		SD-5E001-01-D1	
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EQUIPMENT NOTES:

- (MD) 201. UNITS PER APP FIGS. 2 AND 3 ARE EQUIPPED WITH ALL OPTIONAL EQUIPMENT FOR THE 701PK AND 711PK PBX'S. THE OPTIONS REQUIRED FOR EACH INSTALLATION SHALL BE PROVIDED BY THE APPLICATION OR REMOVAL OF STRAPS.
202. MULT M LEADS IN GROUPS AS SPECIFIED BY RINGING LEADS CKT.

INFORMATION NOTES:

301. GROUPS OF 11 LAMPS SHALL BE CONNECTED TO "BL" LEAD. THE GROUP OF LESS THAN 11 LAMPS SHALL BE CONNECTED TO "BL1" LEAD. A MAXIMUM OF 44 (BL) LAMPS MAY BE CONNECTED.
302. MAXIMUM 8 TRUNK LAMPS MAY BE CONNECTED TO "L" LEAD.
303. THE VOLTAGE ACROSS THE TERMINALS OF THE G2 LAMP AT THE END OF THE MULTIPLE FARTHEST FROM THE AC SUPPLY SHALL BE 4.5V-5.0V.
304. THIS CIRCUIT SHALL BE CONNECTED TO A MANUAL OR DIAL OFFICE LINE CIRCUIT OR LONG LINE CIRCUIT ARRANGED FOR USE WITH A DIAL SELECTED PBX TRUNK CKT BY HAVING GROUND CONNECTED TO THE TIP CONDUCTOR ONLY WHEN BUSY.
305. EARLY VERSIONS OF THE 701PK AND 711PK PBX'S ARE FURNISHED IN ACCORDANCE WITH INFORMATION AVAILABLE FOR OTHER 701 PBX'S.
- (MD) 306. TREATMENT OF LEAD SB FOR BUSY LAMP, OR BUSY GROUND IS COVERED IN 800A PBX ONE WAY OUTGOING C.O. TRUNK CKT DRAWINGS.
307. SEE SHEET D3.

TRANSMISSION TEST REQUIREMENTS  
(1000 CYCLE LOSS BETWEEN 600Ω LINES)

MAX. ALLOWABLE CIRCUIT LOSS (db)	
WITH OPTION "H"	0.1
WITH FS 11	0.4
WITH FS 15	0.2
WHEN FS 3 & 9 WITH "F" OPTION IS USED ADD 0.1 (db) TO LOSSES SHOWN ABOVE.	
ALLOWABLE INDIVIDUAL APPARATUS LOSSES (db)	
APPARATUS	DESIG CODE MAX. LOSS MIN. LOSS REMARKS
RELAY	TS 280H 0.2 P/T,S/R/Q
RELAY	TS 280CY 0.4 P/T IN PAR TESTED IN SERIES
RELAY	S (YW) B1175 (YX) B1190 0.6 P/S IN PAR

X INDICATES APPARATUS FOR WHICH INDIVIDUAL LOSSES ARE NOT REQUIRED.

44-52V

WORKING LIMITS: \*\*

MAX. EXT. CKT. RES. TO GROUND	MAX. EXT. CKT. LOOP AT 45V	MAX. EXT. CKT. LOOP AT 47.5V	MIN. INS RES	EARTH POTENTIAL
(H) RELAY	1800Ω	2590Ω	30,000Ω	
"X" OPTION	2170Ω	3120Ω	50,000Ω	
	2570Ω	3670Ω	100,000Ω	
(H) RELAY	4265Ω		X	0V,+20V
"H" RELAY	2365Ω		X	-5V,+20V
"W" OR "X" OPTION	990Ω		X	-10V,+20V
	140Ω		X	-13V,+20V

ELECTROLYTIC CAPACITOR TEST REQUIREMENTS  
(1000 CYCLE TEST USING 73A TEST SET BETWEEN 600Ω LINES)

OVERALL LOSS				
TEST	TEST SET TERMINALS	CONNECT TO	MIN. LOSS IN db	REMARKS
CAP.(E)	3-6	2M (S) 3M	5.4	
ALLOWABLE INDIVIDUAL APPARATUS LOSSES				
APPARATUS	DESIG CODE	TEST CONNECTIONS	MIN. LOSS IN db	REMARKS
CAPACITOR	E (YW) KS-13486 (YX) KS-19524 L9	3-6 OR A,B C,D	5.4	

CAUTION: DISCHARGE CAPACITORS IN ACCORDANCE WITH A 200 SECTION BSP COVERING THE TESTING OF ELECTROLYTIC CAPACITORS. DO NOT SHORT CIRCUIT CAPACITORS.

X PANEL, MANUAL, OR CROSSBAR 20,000Ω; STEP BY STEP 30,000Ω

WITHOUT LONG LINE EQPT THE COMBINED TRUNK AND STATION MIN. INSULATION RESISTANCE SHOULD NOT BE LESS THAN THESE FIGURES.

\*\* WITHOUT LONG LINE EQPT. THE COMBINED LOOP OF MAX. EXTENSION STATION AND MAX. TRUNK CONDUCTOR LOOP PLUS THE SERIES RES. OF THE CORD CKT. WHEN FIG. 3 IS USED SHALL NOT EXCEED THE SUBSCRIBER LOOP RANGE OF CONNECTING CENTRAL OFFICE LESS.

WITHOUT APP FIG. 10	58Ω
WITH APP FIG. 10	82Ω

TRUNK CIRCUIT

SD-5E001-01-D2

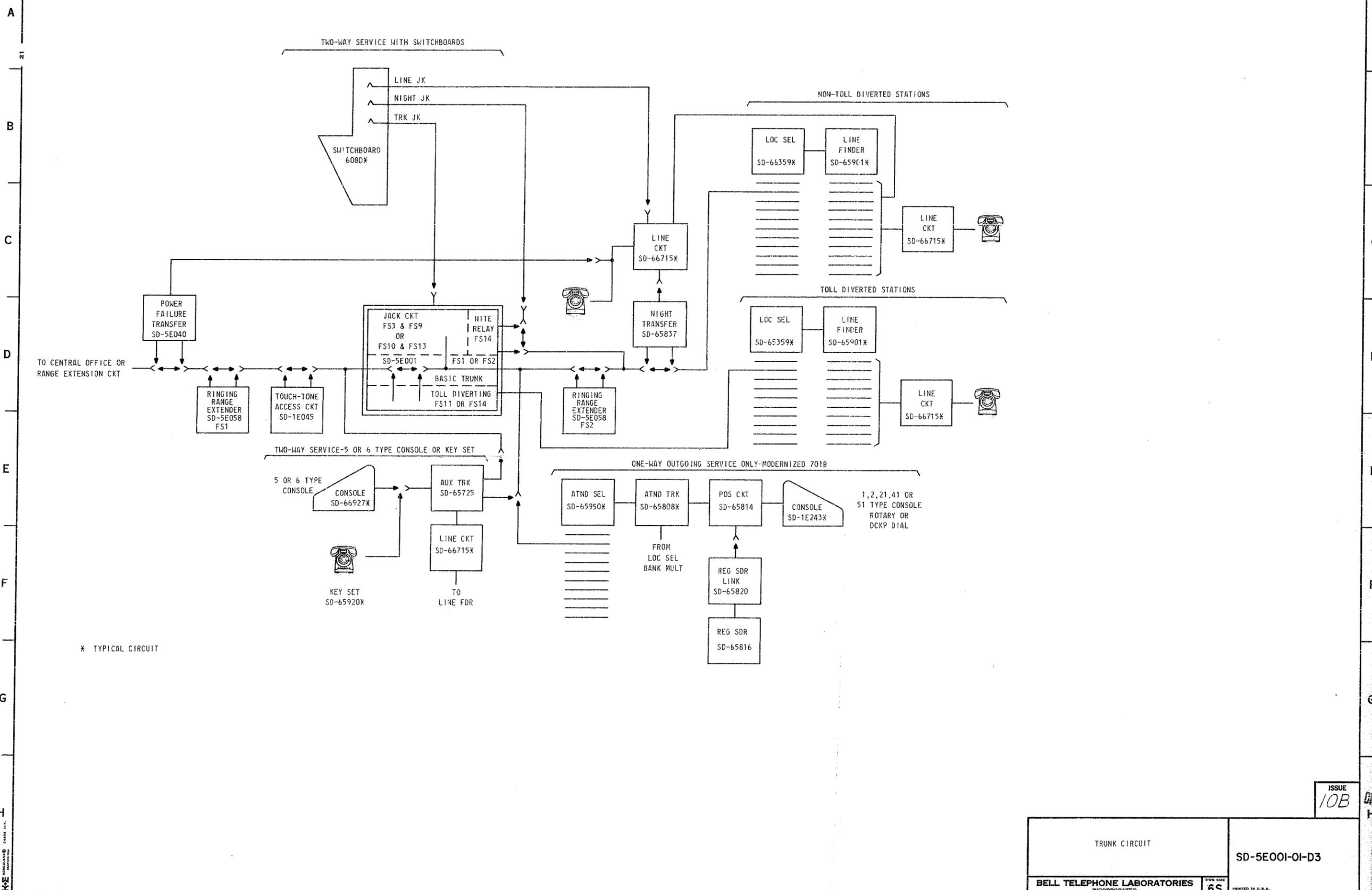
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SD-5E001-01-D2

INFORMATION NOTES: (CONT)  
 307. INTERRELATIONSHIP OF TRANSMISSION PATHS WITH VARIOUS CONNECTING CIRCUITS.



\* TYPICAL CIRCUIT

SD-5E001-01-D3

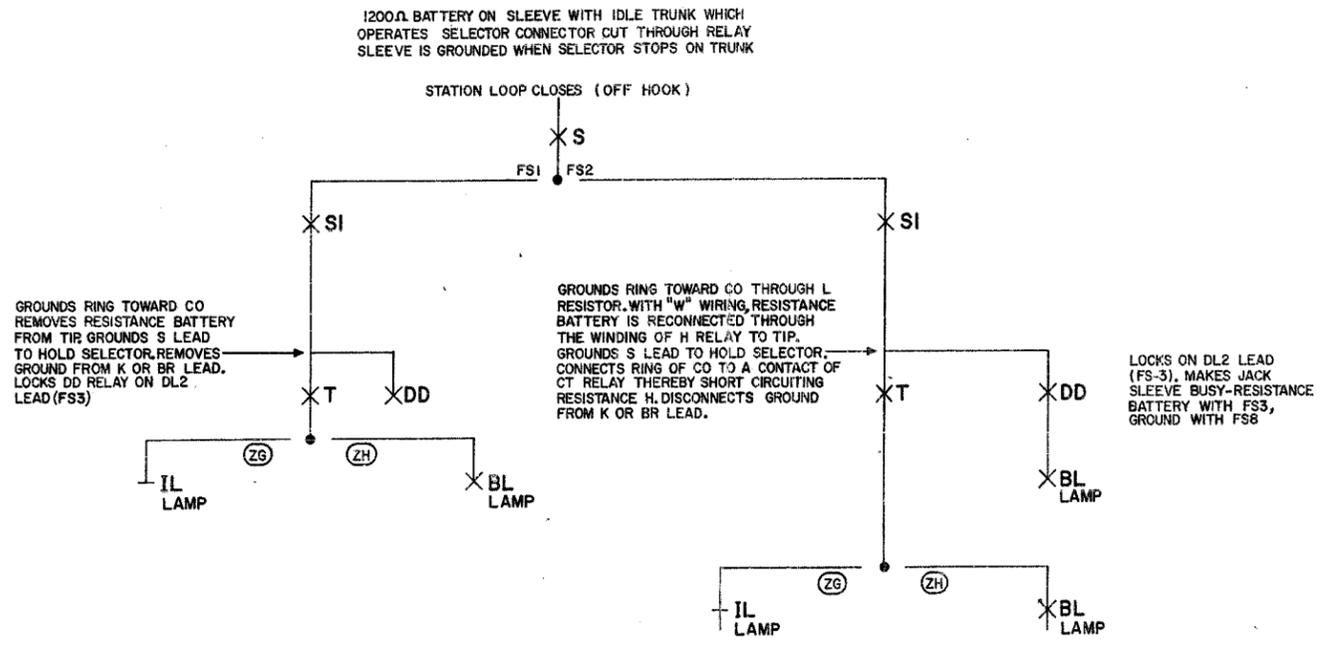
ISSUE  
10B

TRUNK CIRCUIT	SD-5E001-01-D3
BELL TELEPHONE LABORATORIES INCORPORATED	6S PRINTED IN U.S.A.

DRAWING	1	HW
ISSUE	1	1
	2B	2
	4D	3

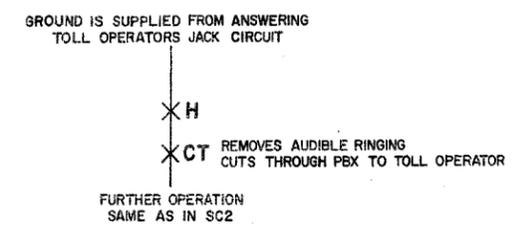
### SC1 OUTGOING CALL TO CENTRAL OFFICE FROM STATION

START OF CALL FS1 OR 2

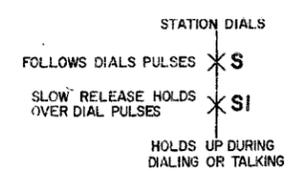


### SC3 CONNECTED TO TOLL SUBSCRIBERS

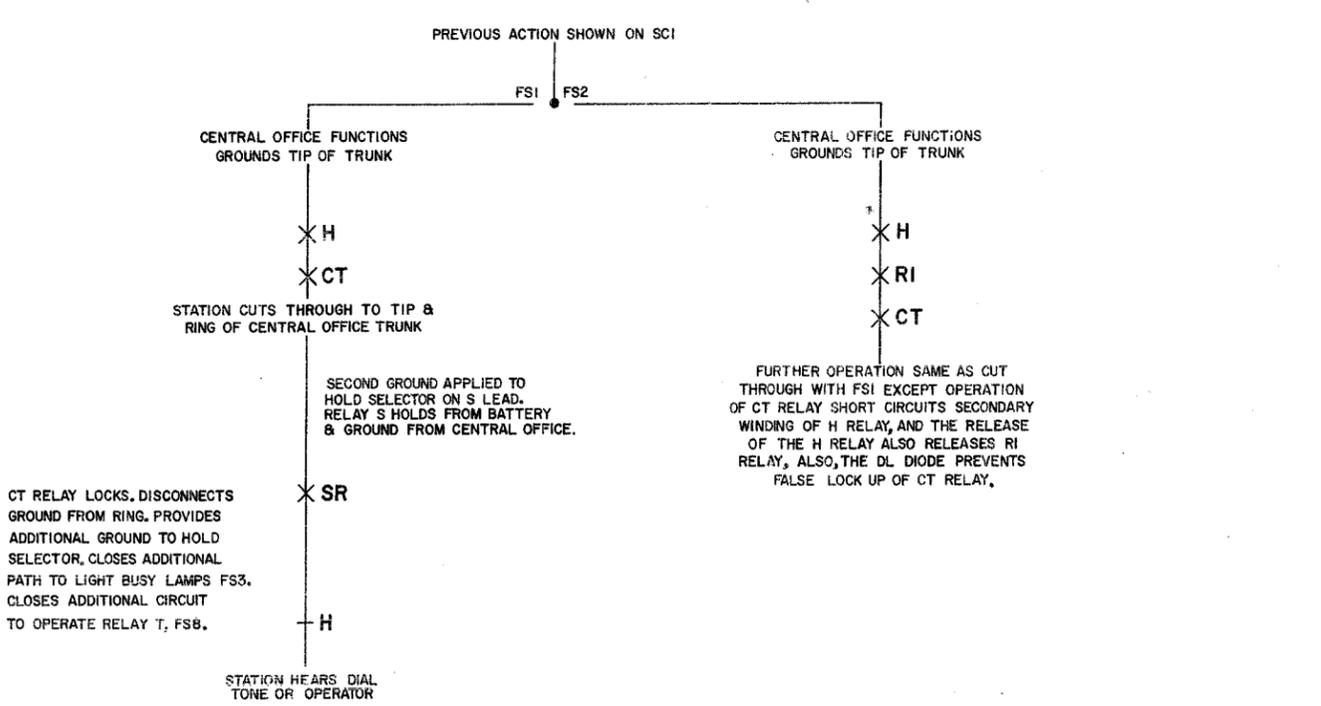
LINE CIRCUIT-AUDIBLE RINGING FURNISHED CALLING STATION WITH ZS OPTION



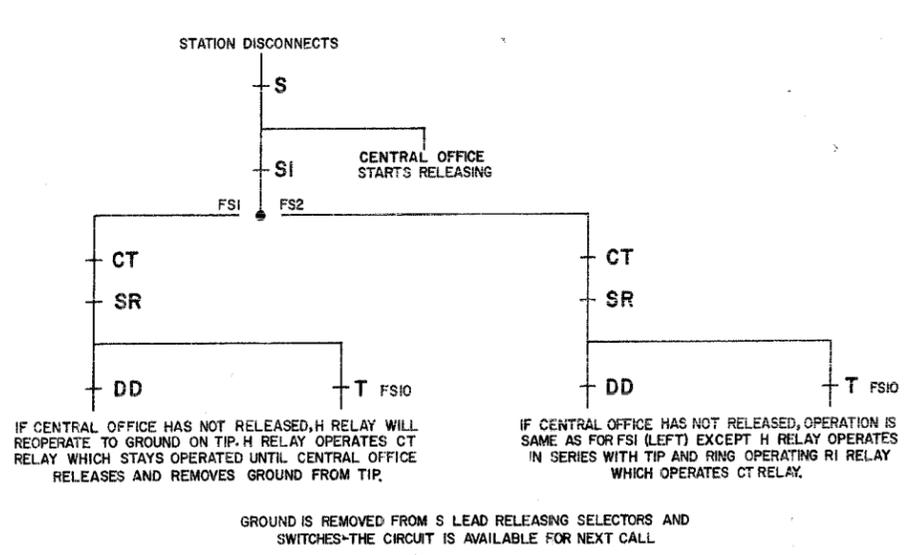
### SC4 DIALING AND TALKING



### SC2 CUT THROUGH



### SC5 DISCONNECTION



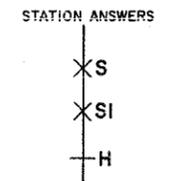
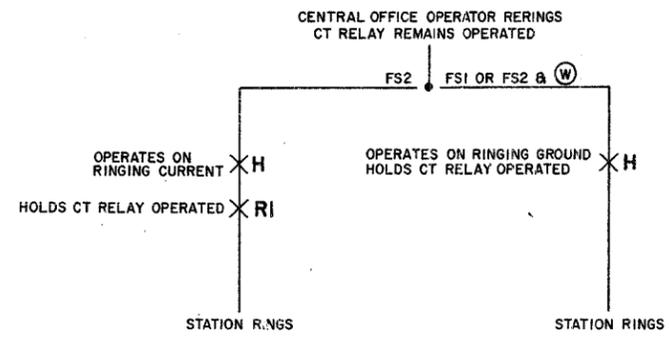
SD-5E001-01-E1

TRUNK CIRCUIT	SD-5E001-01-E1
BELL TELEPHONE LABORATORIES INCORPORATED	6S PRINTED IN U.S.A.

DRAWING ISSUE	
1	SAK HW
2D	KFJ
	GAF
	SAK
	KFJ
4D	FED
	RJS
	GPH

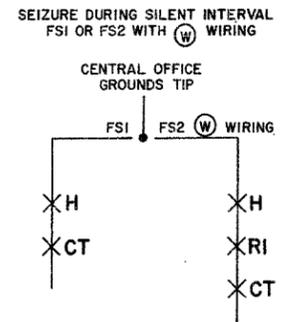
### SC6 RECALL ON A DIAL SELECTED CALL

STATION HANGS UP - TRUNK STARTS RELEASE, BUT HOLDS UNDER CONTROL OF CENTRAL OFFICE WHICH DOES NOT RELEASE

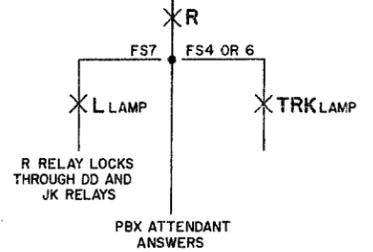
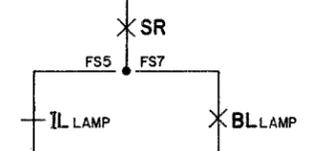


### SC7 INCOMING CALL FROM CENTRAL OFFICE

RELAY H IS CONNECTED TO THE TRUNK AWAITING SIGNAL FROM CENTRAL OFFICE



CT RELAY CONNECTS TRUNK TO JACK CIRCUIT THROUGH S RELAY. GROUNDS LEAD S. PREPARES OWN LOCKING PATH THROUGH SR RELAY



SEIZURE DURING SILENT INTERVAL FS2, (X) WIRING

SAME AS SEIZURE WITH FS2 (W) WIRING EXCEPT H RELAY IS BRIDGED ACROSS TIP AND RING RATHER THAN TIP AND BATTERY

SEIZURE DURING RINGING INTERVAL FS1 OR FS2 (W) WIRING

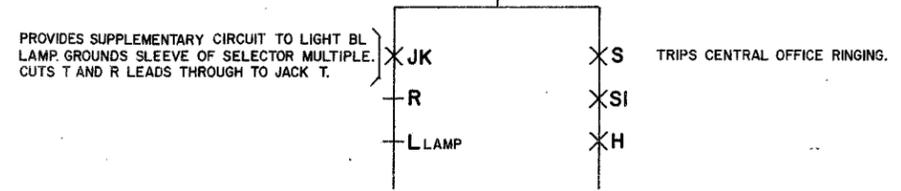
RELAY H OPERATES BECAUSE OF GROUND ON TIP. BALANCE OF OPERATION SAME AS FOR SEIZURE DURING SILENT INTERVAL FOR FS1 OR FS2 (W) WIRING

SEIZURE DURING RINGING INTERVAL WITH FS2 (X) WIRING

RELAY H OPERATES ON CENTRAL OFFICE RINGING CURRENT. BALANCE OF OPERATION SAME AS FOR SEIZURE DURING SILENT INTERVAL FOR FS2 (X) WIRING

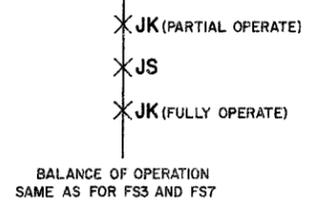
### SC8 PBX ATTENDANT ANSWERS FS3 AND FS7

ATTENDANT PLUGS CORD IN JACK T TO ANSWER



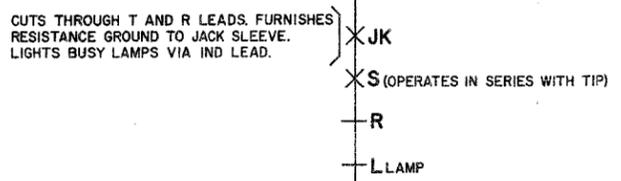
### FS4 AND FS6

ATTENDANT PLUGS CORD IN JACK T TO ANSWER

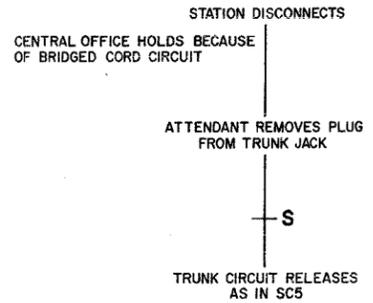


### SC9 PBX ATTENDANT ANSWERS FS3 USED WITH 608A OR 608D PBX

ATTENDANT PLUGS INTO JACK TO ANSWER CALL



### SC10 DISCONNECTION ON INCOMING CALLS



TRUNK CIRCUIT

SD-5E001-01-E2

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DATE 1965

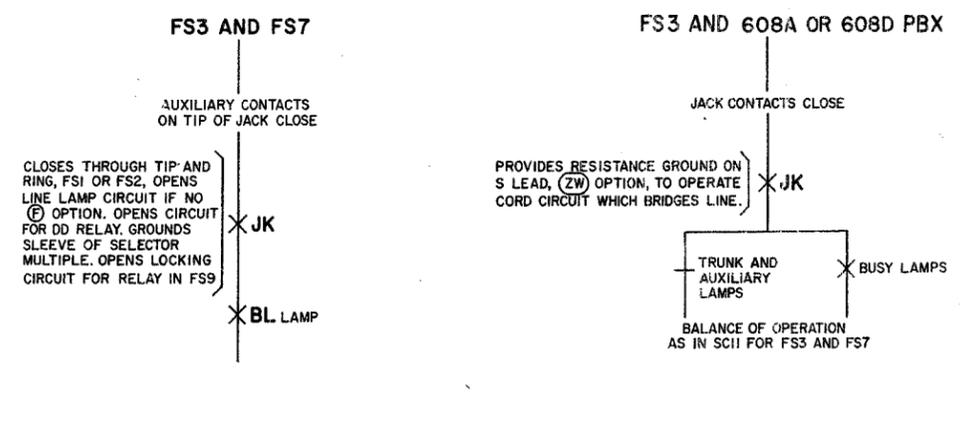
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SD-5E001-01-E2

DRAWING ISSUE	
1	WPA SAK KFJ
2D	GAP SAK KFJ
40	FED PLS RHP
HW	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
16	
17	
18	
19	
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27	
28	
29	
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32	
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38	
39	
40	

### SC11

OUTGOING CALL FROM MANUAL APPEARANCE  
ATTENDANT PLUGS CORD INTO JACK, FS4, FS6, OR FS7

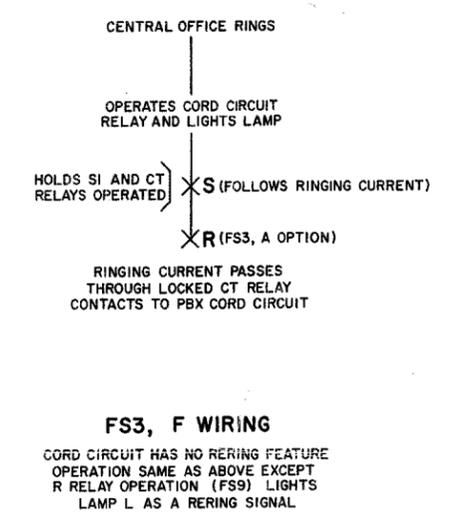


### DIALING AND TALKING

THE CORD CIRCUIT CLOSURE ON THE TIP AND RING LEADS CAUSES THE TRUNK TO START THE CENTRAL OFFICE AS IN SC1 AND SC2

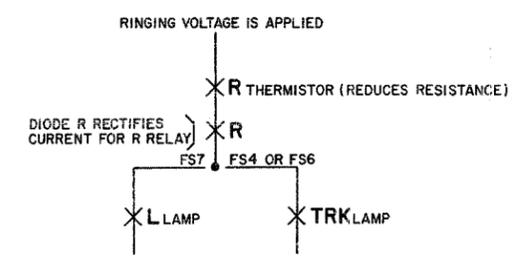
### SC12

RERING WHEN CONNECTION IS ESTABLISHED AT MANUAL POSITION



### SC13

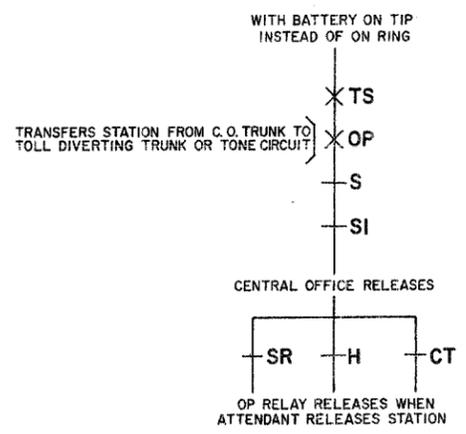
RINGING RELAY CIRCUIT  
FS9 AND FS13



### SC14

TOLL DIVERTING-FSII

USED WITH CENTRAL OFFICES HAVING BATTERY REVERSAL OF T AND R AFTER DIALING



SD-5E001-01-E3

TRUNK CIRCUIT

SD-5E001-01-E3

BELL TELEPHONE LABORATORIES INCORPORATED

65

CIRCUIT REQUIREMENTS																				DRAWING ISSUE
NO. 701A, 701B, 701PK, 702A, 71A, 711B, 711PK OR 740E 1 WY TRK CKT; NO. 701A, 701B, 701PK, OR 740E 2-WAY TRK CKT																				1 SAK KFI 2D SAK KFI 3D SAK KFI 4D SAK KFI 6B PJS LJU 10B
APPARATUS			MECH RECT			CIRCUIT PREPARATION					DIRECT CURRENT FLOW REOT					REMARKS				
DESIG	CODE	OPT	BSP FIG.	CONT PRES	ARM. TRVL	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA						
						CONN BAT.	CONN GRD													
RELAYS																				
CT	AG44	1,2	2818			4(CT) FIG.1 11(CT) FIG.2	1U (CT)	GRD	1	P	9	FS	2.4	21.5						
							1U (CT)	GRD	1	P	H	FS	4.0	3.3						
							1U (CT)	GRD	1	P	R	FS	2.1	2.4						
DD	AF115	3	274			2 (DD)	U (DD)	GRD	6				7.4	6.7						
DD	AF115	9	274			4 (DD)	U (DD)	GRD	6				7.4	6.7						
H	SS34	1			SPL	(S1) 0, (SR) 0, (CT) NO	9 (S1)	BAT.	2	P	0	FS	3.3	3.1						
							9 (S1)	BAT.		P	NO	FS	2.4	2.6						
							9 (S1)	BAT.		P	R	FS	2.2	2.3						
H	SS34	2			SPL	(S1) 0, (SR) 0, (CT) NO	9 (S1)	BAT.	2	P	0	FS	5.3	3.1						
							9 (S1)	BAT.		P	NO	FS	2.4	2.6						
							9 (S1)	BAT.		P	R	FS	2.2	2.3						
							9 (S1)	9B (S1)	M	3	P/S	C	1.7							
							9 (S1)	9B (S1)	M	3	P/S	R	1							
JK	AF158	3	36				U (JK)	GRD					24	23						
							U (JK)	GRD					11.5	12.2						
JK	U1070	9	317/317	H	59	BR (JK)		BAT.	4	S	0	130	51.5	49						
						BR (JK)		BAT.		S	0			130						
						BR (JK)		BAT.	5	S	NO		95	100						
						4M (JS)	1 (JS)	M		P/S	0		34							
JS	AF15	9	216				U (JS)	GRD					7	6.7						
N	1/2AK23	YP	12	3			U (N)	GRD					7.8	7.4						
N	1/2AK23	YP	12	3			IL (N)	GRD					7.8	7.4						
OP	AF110	10	272			10M(OP)	U(OP)	GRD					17	15.5						
OP	AG38	14	2138				U(OP)	GRD	8	P	0		49.5	47						
									8	P	H		8.4	7.9						
									8	P	R		5.2	6.0						
R	AF534	XI	3,9	201		(JK) 0	1L (R)	GFD		P	0		21	20						
							2L (R)	2U (R)	B/G		S	0	11.3	10.8						
													AC	AC						
R	AJ48	XJ	3,9	3		(JK) 0	1U (R)	GRD	7	P	0		8.4	8						
							2L (R)	2U (R)	B/G		S	0	5.4	5.1						
													AC	AC						
RT	J62	2	5	23		CT (NO)	2M (RT)	GRD					3.5	3.3						
S	B1175	YW	1,2	8	30	(S1) NO (CT) NO	2M (S)	BAT.		P	0	150	5.8	5.5						
							2M (S)	BAT.		P	R	150	3	3.2						
S	B1190	YX	1,2	8	30	(S1) NO (CT) NO	1M (S)	BAT.		P	0	150	5.8	5.5						
							1M (S)	BAT.		P	R	150	3	3.2						

TEST NOTES: (CONTINUED)

- PRIMARY WINDING REQUIREMENTS-SECONDARY SHORTED.
- ARMTR TRAVEL  $40 \pm 1$ . ARMTR BASE GAP SPL  $30 \pm 2$ .
- REQUIREMENT FOR "X" OPTION ONLY.
- TO MAKE 6T-7T, 6B-7B, ONLY SPRINGS 6T-7T, 6B-7B SHALL MAKE BEFORE TOP OR BOTTOM STUD STRIKES BUFFER SPRING.
- WITH THIS CURRENT, STUD GAPS OF 4T, 4B SPRINGS SHALL BE PERCEPTIBLE. 6T-7T, 6B-7B MAY MAKE.
- WHEN AUX TRK CKT SD-65725-01 IS CONN TO THIS CKT, BLOCK REL (AT) OF THAT CKT OPERATED.
- TEST AND READJ REL (R) FS 9 OR 13 FOR OPERATION ON RING CURRENT WITH EITHER A OR B REQUIREMENT:
  - BY RINGING FROM CENTRAL.
  - BY CONNECTING MIN 95V, MAX 111V, 1100 TO 1200 RPM. RINGING CURRENT (CONTINUED)

THROUGH A 12C OR 13C RES LAMP AND 7000Ω NON INDUCTIVE RES TO 3M (CT) APP FIG. 2 OR 9M(CT) APP FIG. 1 AND RING GRD TO 9(CT) APP FIG. 2 OR 7M(CT) APP FIG. 1 REVERSE CONNECTIONS AND REPEAT TEST B.

8: REQUIREMENTS APPLY TO PRIMARY WINDING WITH SECONDARY WINDING SHORT CIRCUITED.

TRUNK CIRCUIT  
SD-5E001-01-F1  
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INCORPORATED  
PRINTED IN U. S. A.

CIRCUIT REQUIREMENTS																				DRAWING ISSUE	
NO. 701A, 701B, 701PK, 702A, 71A, 711B, 711PK OR 740E 1 WY TRK CKT; NO. 701A, 701B, 701PK, OR 740E 2-WAY TRK CKT																				1 SAK KFI 2D SAK KFI 3D SAK KFI 4D SAK KFI 6B PJS LJU 10B	
APPARATUS			MECH RECT			CIRCUIT PREPARATION					DIRECT CURRENT FLOW REOT					REMARKS					
DESIG	CODE	OPT	BSP FIG.	CONT PRES	ARM. TRVL	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA							
						CONN BAT.	CONN GRD														
S1	AG2	XB	1,2	343									0	FS	12.4	11.8					
													H	FS	2.1	2					
													R	FS	1.1	1.4					
S1	AG1	XC	1,2	353									0	FS	12.8	12.1					
													H		2.7	2.5					
													R		1.3	1.6					
S3	AG43		1,2	348									0	FS	16.5	15.5					
													H	FS	3.5	3.3					
													R	FS	1.7	2					
I	AF56		9	209									0		27	25.5					
TS	230CY		10	B									5 (TS)	2 (TS)	B/G	P//T	0	-85	1.7		
													4 (SR) FIG. 1	5 (TS)	2 (TS)	B/G	P//T	NO	-85	1.2	
													10 (SR) FIG. 2	5 (TS)	2 (TS)	B/G	P//T	0	-85	8.2	7.8
													5 (TS)	2 (TS)	B/G	P//T	R	85	2.4	2.6	
													DP (NO)	1 (TS)	GRD	1	S	0		25.5	
TS	280H		14	B									4(SR) FIG. 1	5(TS)	1(TS)	B/G	P//T	0	-150	3.5	
													9(S1) FIG. 1	5(TS)	1(TS)	B/G	IN	NO	-150	2.5	
													9(CT) FIG. 2	5(TS)	1(TS)	B/G	SERIES	0	-150	13.7	13.0
													SHORT 2(TS)	5(TS)	1(TS)	B/G	WITH	R	-150	1.0	1.1
													TO 6(TS)				S//Q				

TEST NOTES:

- CONN DIRECT BAT. TO 6 (TS). WITH APP FIG. 10, REMOVE WIRE FROM 1 (TS).

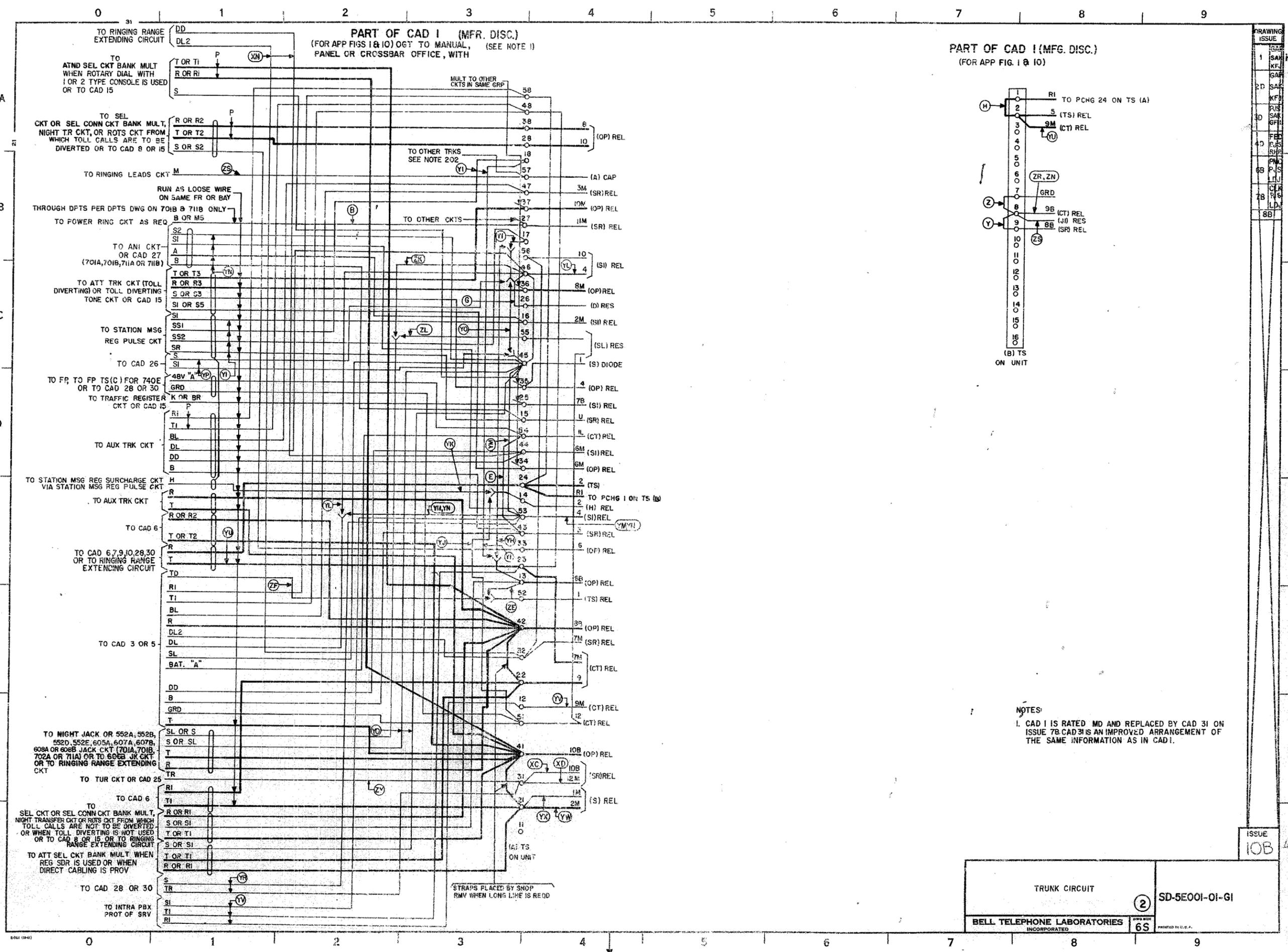
TRUNK CIRCUIT  
SD-5E001-01-F1  
BELL TELEPHONE LABORATORIES  
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SD-5E001-01-F1

(2 PAGES) PAGE 1

(2 PAGES) PAGE 2

ISSUE 10B



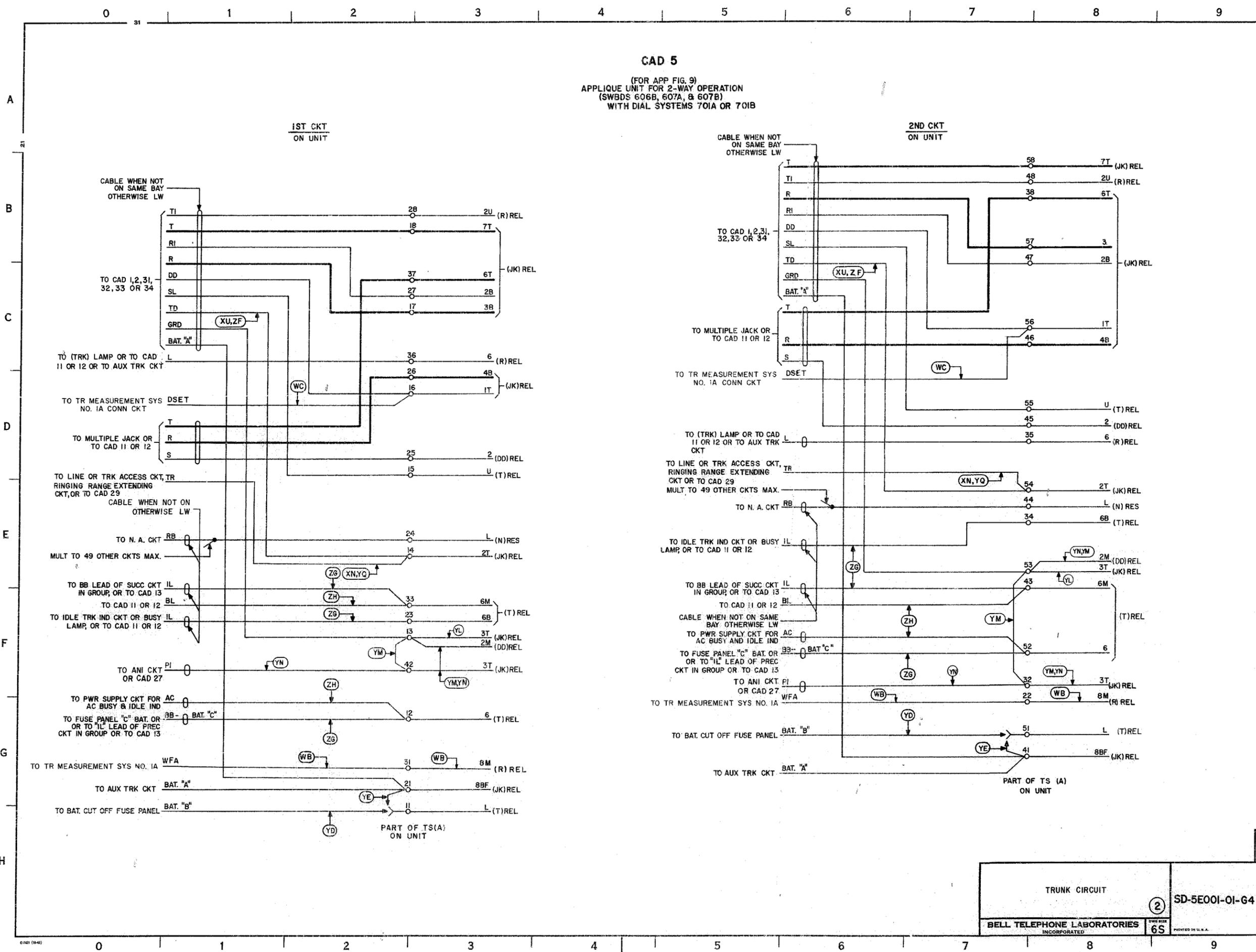
SD-5E001-01-G1

TRUNK CIRCUIT		②	SD-5E001-01-G1
BELL TELEPHONE LABORATORIES INCORPORATED		6S	PRINTED IN U.S.A.

ISSUE  
10B







**CAD 5**  
 (FOR APP FIG. 9)  
 APPLIQUE UNIT FOR 2-WAY OPERATION  
 (SWBDS 606B, 607A, & 607B)  
 WITH DIAL SYSTEMS 701A OR 701B

1ST CKT  
ON UNIT

2ND CKT  
ON UNIT

1	HW
2D	A
3D	B
4D	C
5D	D
6D	E
7D	F
8D	G
9D	H

ISSUE  
10B

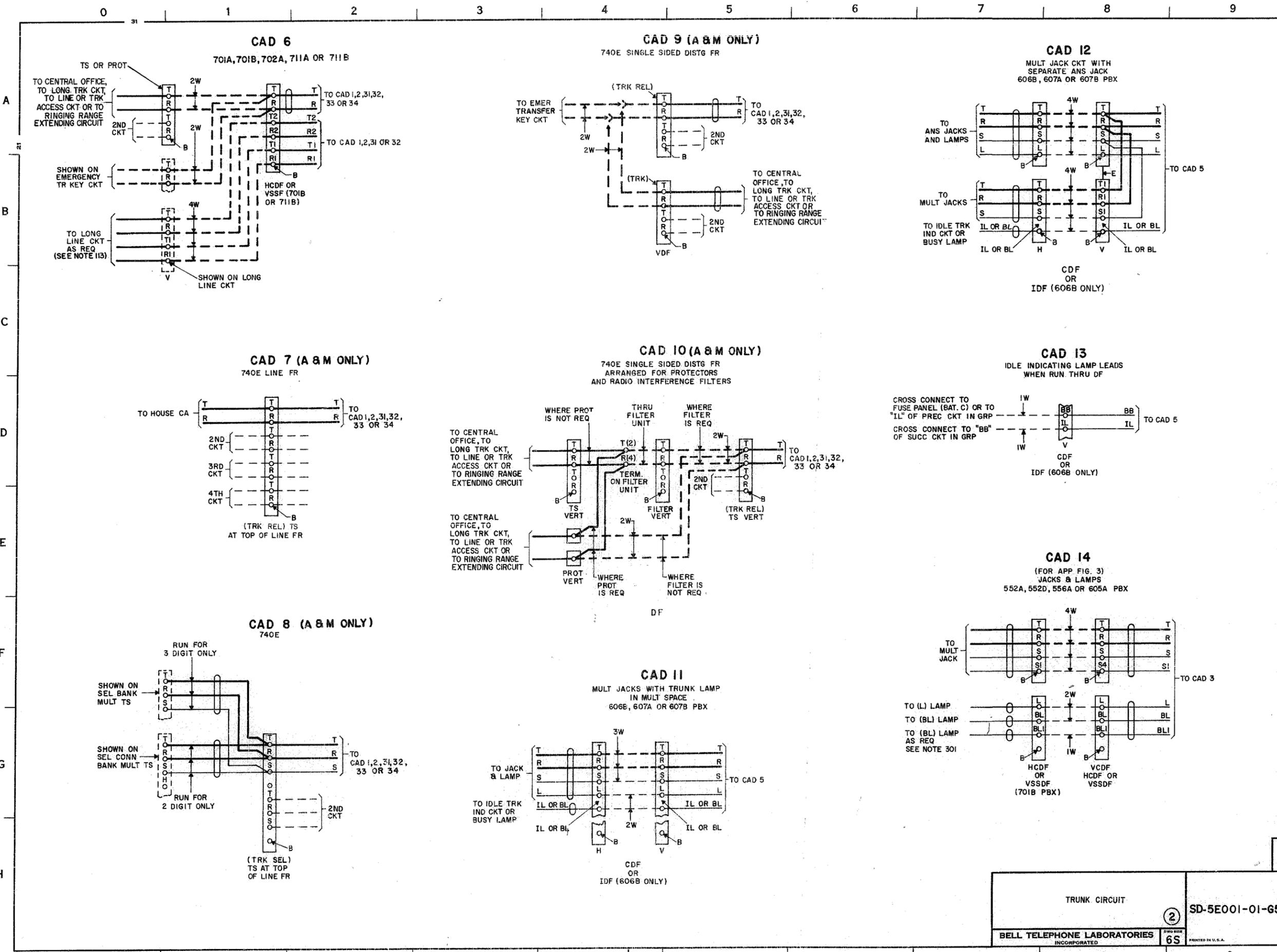
TRUNK CIRCUIT

② SD-5E001-01-G4

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SD-5E001-01-G4



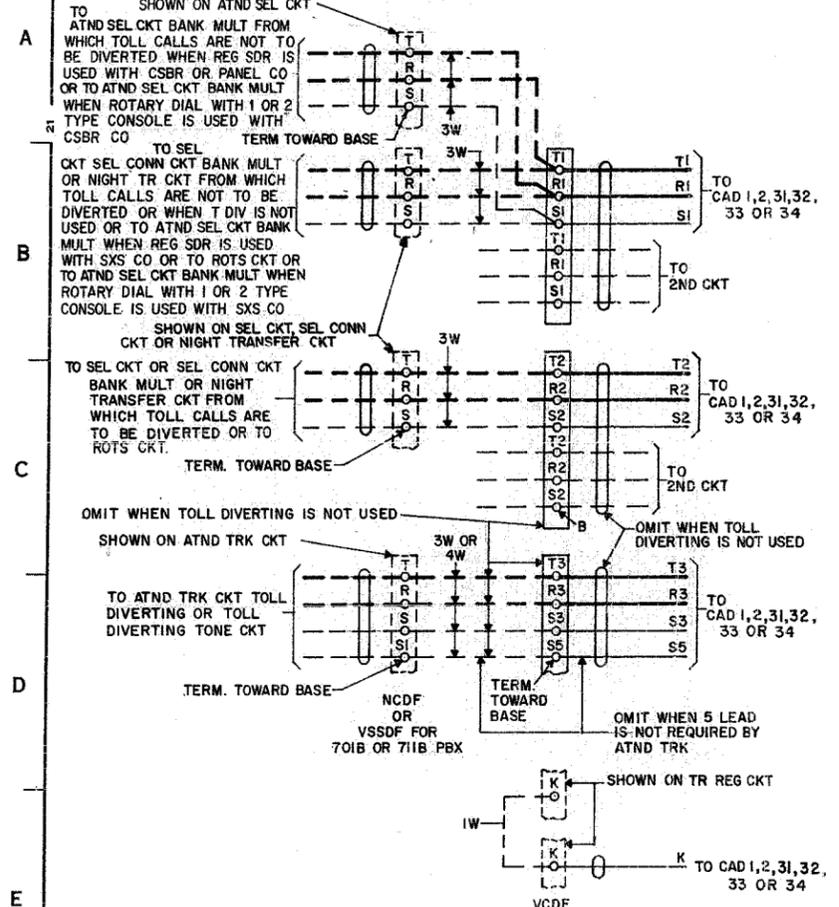
DRAWING	ISSUE
1	SAK
20	JFF
40	KFJ
70	GAF
80	SAK
90	KFJ
100	PJS
110	GFH
120	CLK
130	PJS
140	LDM
150	BB

SD-5E001-01-65

TRUNK CIRCUIT	<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span>	SD-5E001-01-65
BELL TELEPHONE LABORATORIES INCORPORATED		6S PRINTED IN U.S.A.

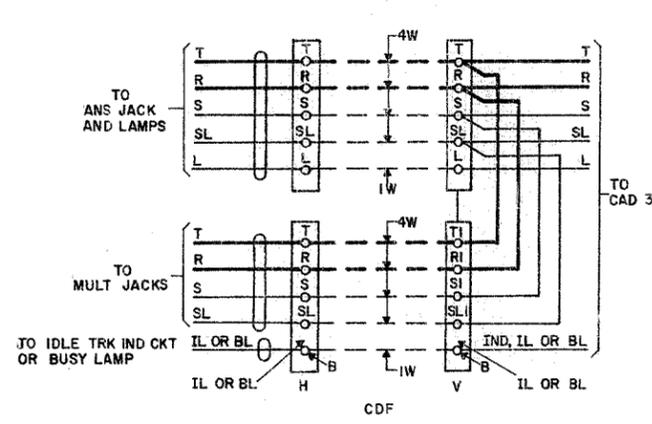
CAD 15

(FOR APP FIG. 1 & 2 WITH OR WITHOUT APP FIG. 10 OR 14)  
LEADS TO SEL, AND/OR ATND SEL, SEL CONN  
ATND TRK AND/OR TOLL DIVERTING TONE CKT



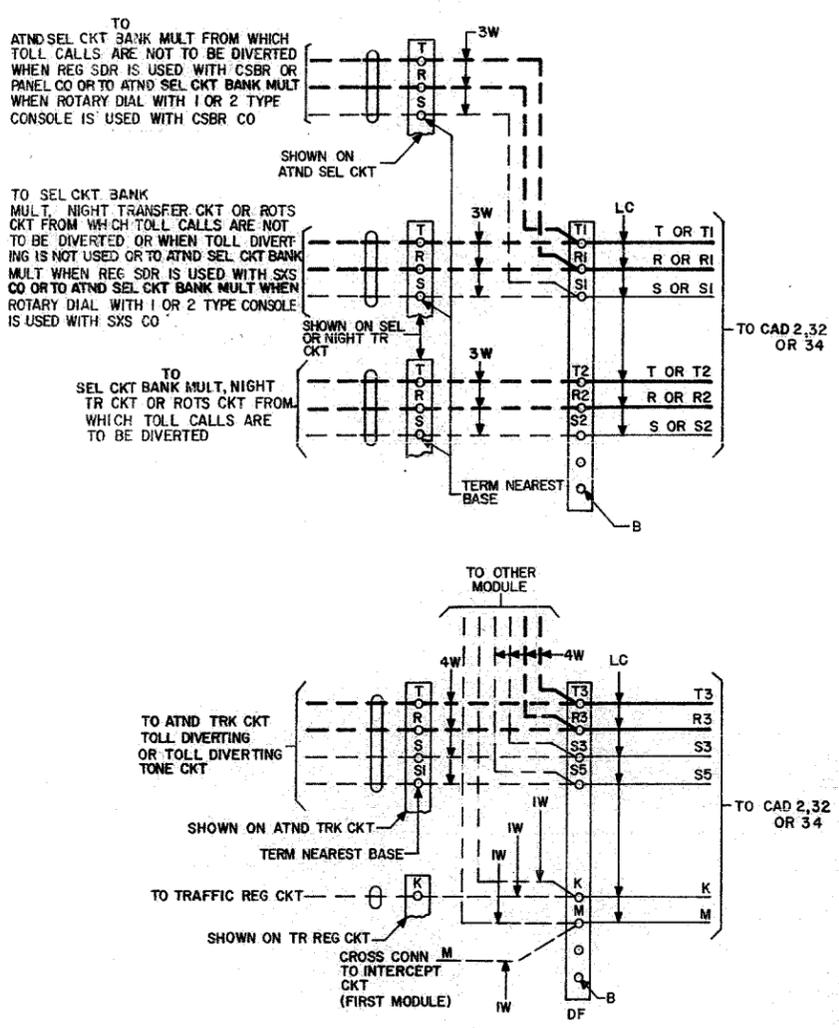
CAD 17

(FOR APP FIG. 3)  
MULT JACK CKT WITH  
SEPARATE ANS JACK  
608A OR 608D PBX



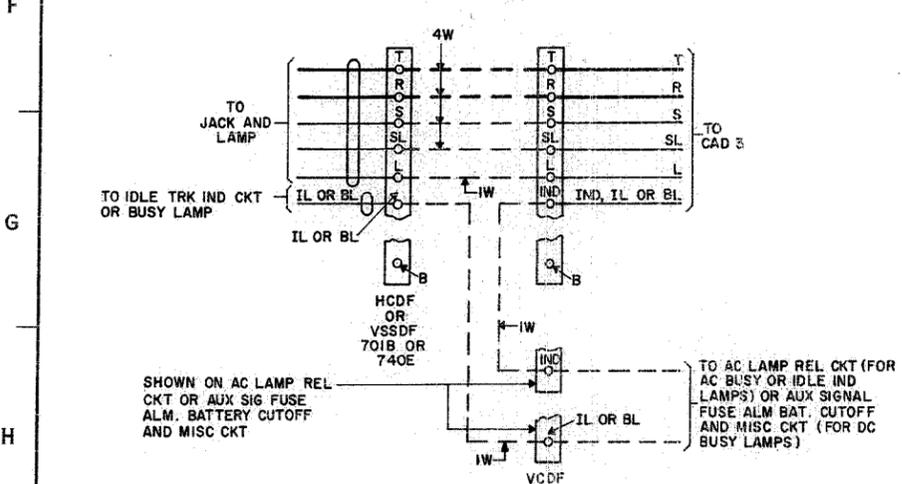
CAD 18

(FOR APP FIG. 2 WITH OR WITHOUT APP FIG. 10 OR 14)  
LEADS TO SEL AND/OR ATT SEL  
ATND TRK AND/OR TOLL DIVERTING TONE CKT  
701PK & 71PK PBX



CAD 16

(FOR APP FIG. 3)  
MULT JACKS WITH TRUNK LAMP  
IN MULT SPACE  
608A OR 608D PBX



DRAWING ISSUE

1	JFF	HW
2	SAF	
3	SAF	
4	PJS	
5	RHM	
6	PJS	
7	LDJ	
8	CLK	
9	PJS	
10	LDJ	

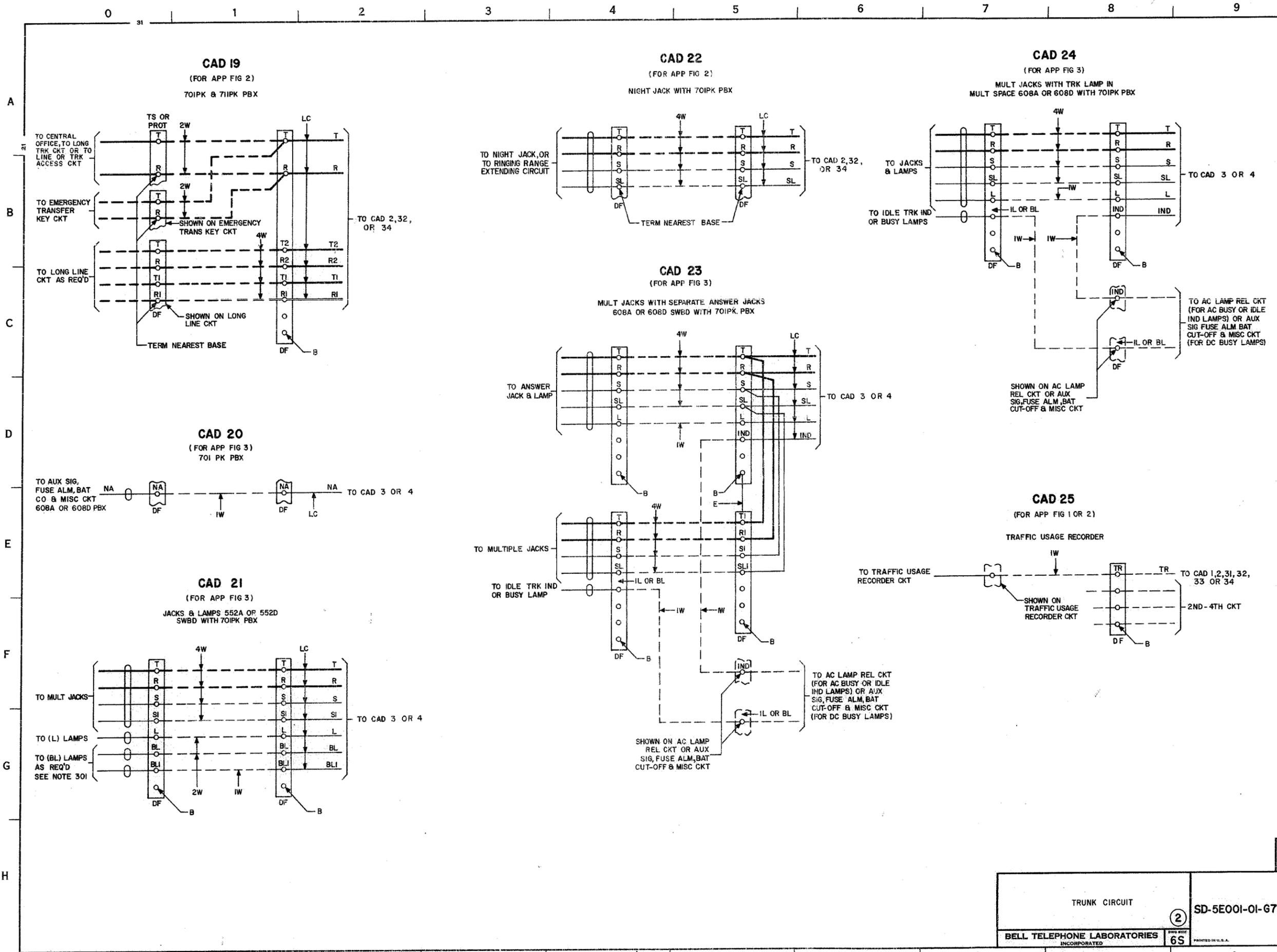
SD-5E001-01-66

TRUNK CIRCUIT

2 SD-5E001-01-66

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DRAWING	1
ISSUE	10B
REV	
BY	
CHKD	
APP'D	
DATE	

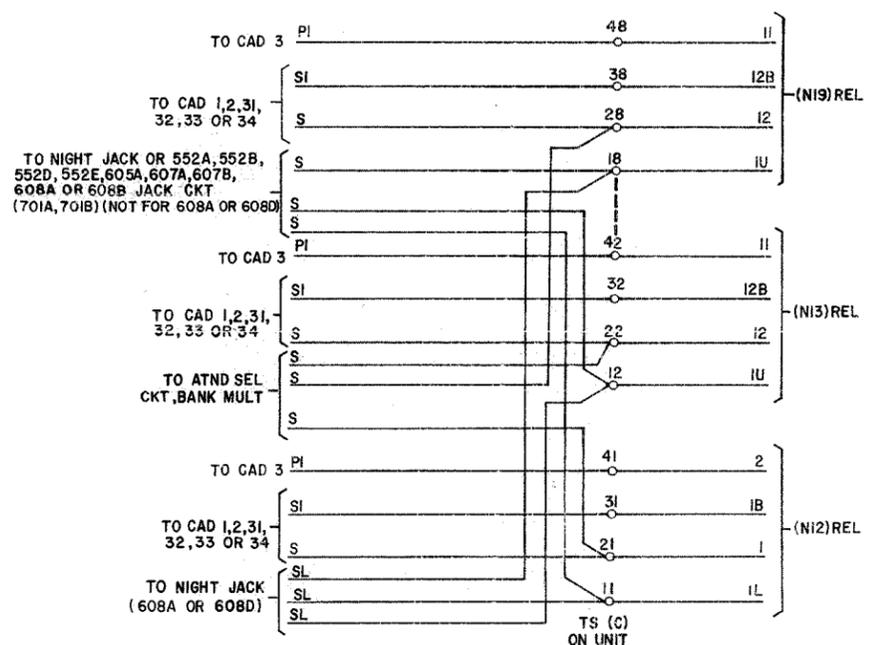
SD-5E001-01-67

TRUNK CIRCUIT		2 SD-5E001-01-67
BELL TELEPHONE LABORATORIES <small>INCORPORATED</small>		

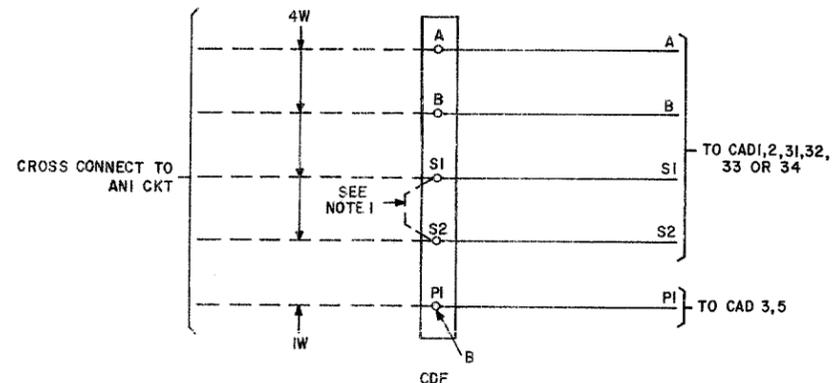
ISSUE 10B

DRAWING	HW
ISSUE	
30	PJS
31	SAK
32	GFL
40	FEL
41	PJS
42	RHM
6B	FMS
6C	PJS
6D	LDL
7B	CLM
7C	PJS
7D	LDL
8B	

**CAD 26**  
(FOR APP FIG 12)  
APPLIQUE UNIT FOR NIGHT OPERATION WITH  
AUTOMATIC NUMBER IDENTIFICATION

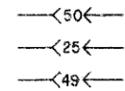


**CAD 27**  
(FOR APP FIG 1,2,3 & 9)  
AUTOMATIC NUMBER IDENTIFICATION  
WITH 701A,711A,701B,OR 711B



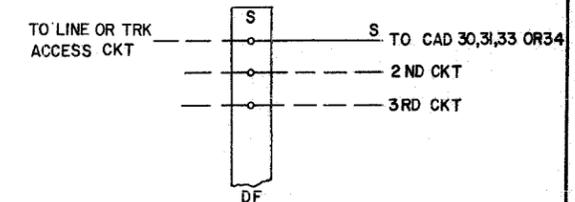
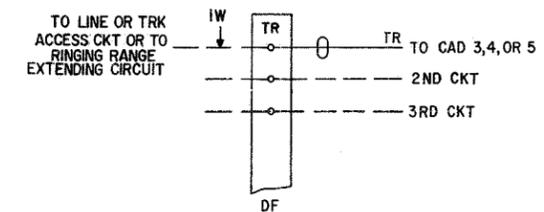
**CAD 28 (MFR. DISC.)**

CONN TO 800A PBX  
WITH 608A OR 608D SWBD

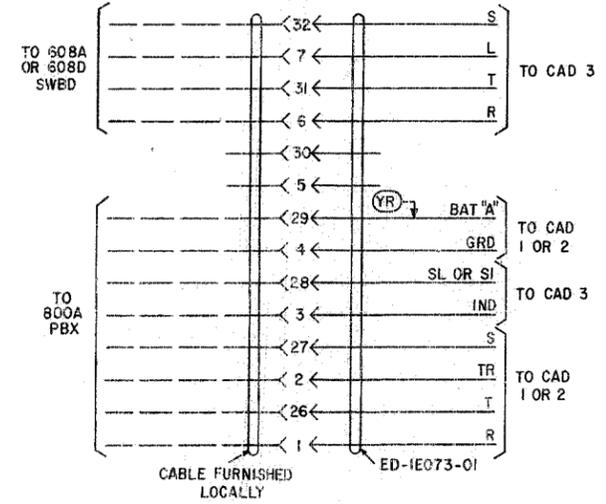
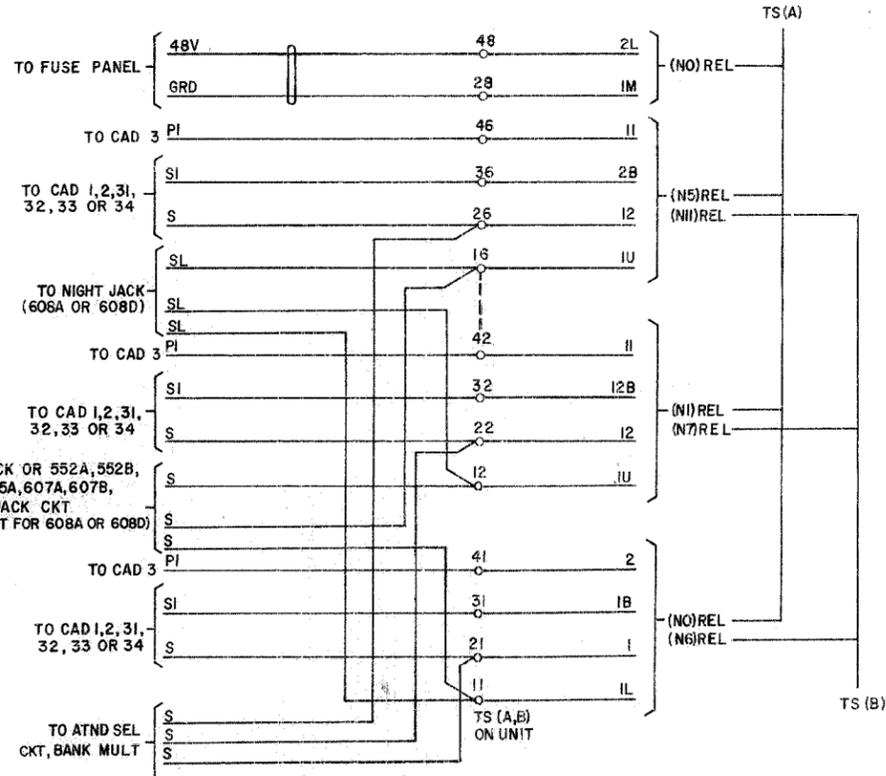


**CAD 29**

CONN TO LINE OR TRK  
ACCESS CKT OR TO RINGING  
RANGE EXTENDING CIRCUIT



SHEET NOTES:  
1. STRAP S1 & S2 TERMINALS WHEN TRUNK IS CABLED PER CAD 27, OPTION YN, AND AUTOMATIC NUMBER IDENTIFICATION IS NOT PROVIDED, OPTION YM.



TRUNK CIRCUIT

SD-5E001-01-68

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6S

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SD-5E001-01-68

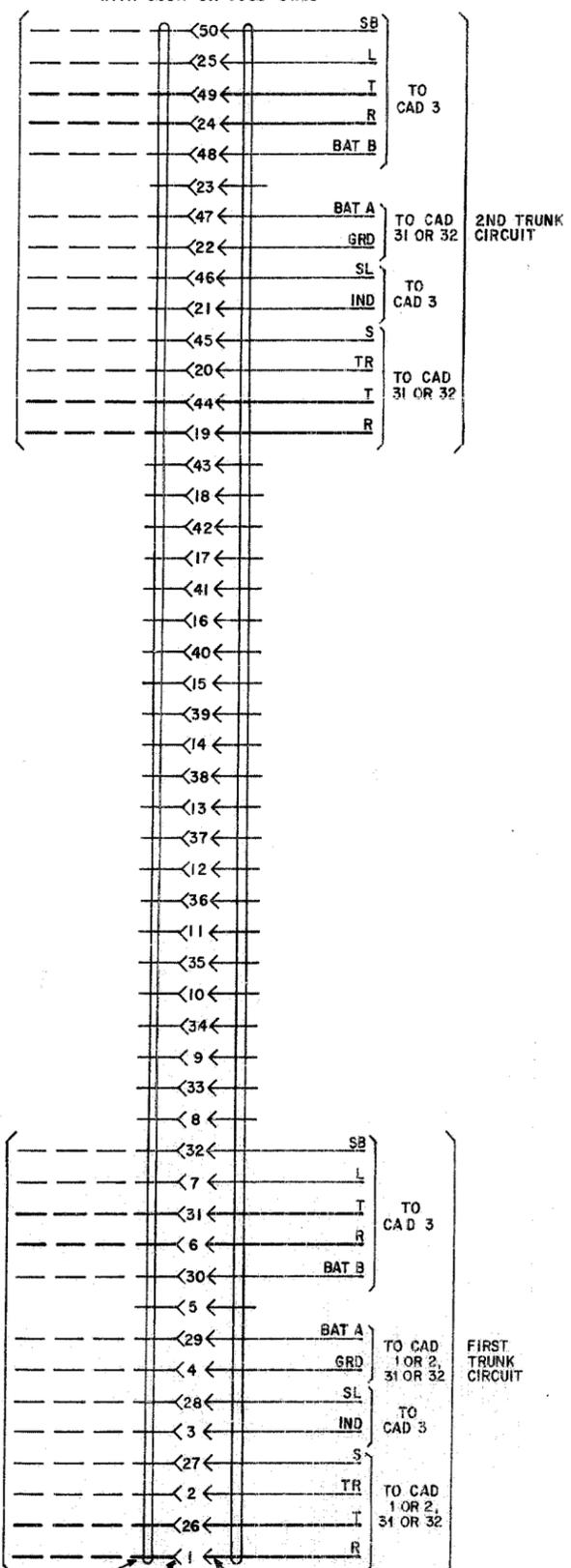
0 1 2 3 4 5 6 7 8 9

### CAD 30 (MFR DISC.)

CONN TO 800A PBX  
WITH 608A OR 608D SWBD

A  
B  
C  
D  
E  
F  
G  
H

TO TERMINAL  
PCHGS ON 800A  
PBX QUICK CONN  
TS FIELD



TO TERMINAL  
PCHGS ON 800A  
PBX QUICK CONN  
TS FIELD

FIRST  
TRUNK  
CIRCUIT

SEE SHEET  
NOTE 1  
KS 16690  
CONN  
KS 16689  
PLUG  
ED-1E073-01-G1  
CONN CABLE

NOTES:  
1. THE KS-16690 CONNECTOR AND CABLE NEEDED  
TO CONNECT TO 800A IS NOT SUPPLIED WITH  
THE 800A QUICK CONNECT FIELD AND MUST BE  
SUPPLIED LOCALLY.

DRAWING  
ISSUE  
6B PJS  
LD  
8B

A  
B  
C  
D  
E  
F  
G  
H

SD-5E001-01-69

TRUNK CIRCUIT	②	SD-5E001-01-69
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ISSUE  
10B

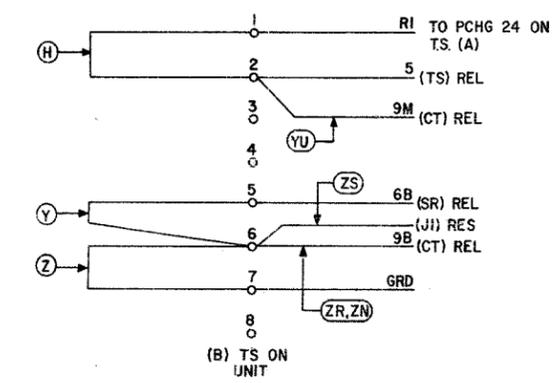
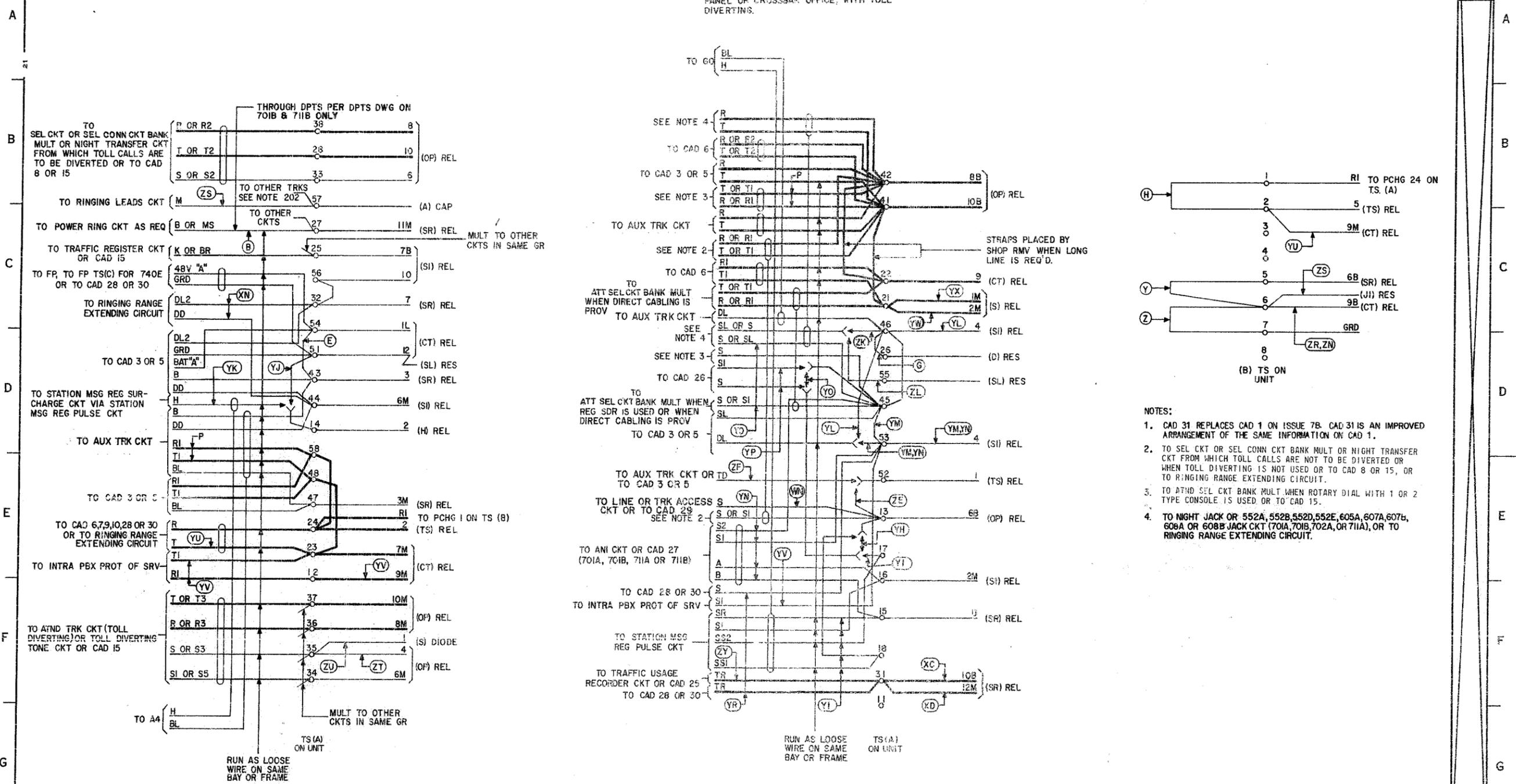
0 1 2 3 4 5 6 7 8 9

# CAD 31 (MFR DISC)

(SEE NOTE 1)

(FOR APP FIGS. 1 & 10) OGT TO MANUAL,  
PANEL OF CROSSBAR OFFICE, WITH TOLL  
DIVERTING.

DRAWING  
ISSUE  
7B  
PUSH  
LD.  
8B



- NOTES:
- CAD 31 REPLACES CAD 1 ON ISSUE 7B. CAD 31 IS AN IMPROVED ARRANGEMENT OF THE SAME INFORMATION ON CAD 1.
  - TO SEL CKT OR SEL CONN CKT BANK MULT OR NIGHT TRANSFER CKT FROM WHICH TOLL CALLS ARE NOT TO BE DIVERTED OR WHEN TOLL DIVERTING IS NOT USED OR TO CAD 8 OR 15, OR TO RINGING RANGE EXTENDING CIRCUIT.
  - TO ATND SEL CKT BANK MULT WHEN ROTARY DIAL WITH 1 OR 2 TYPE CONSOLE IS USED OR TO CAD 15.
  - TO NIGHT JACK OR: 552A, 552B, 552D, 552E, 605A, 607A, 607b, 608A OR 608B JACK CKT (701A, 701B, 702A, OR 711A), OR TO RINGING RANGE EXTENDING CIRCUIT.

SD-5E001-01-G10

TRUNK CIRCUIT	SD-5E001-01-G10
BELL TELEPHONE LABORATORIES INCORPORATED	ISSUE <b>10B</b>





LEAD DESTINATION TABLE  
FOR APP FIG 1 OR 2 & 14

RUN	TO	LEAD DESIG	OPTION	APP FIG. 1 & 14 CAD 33		APP FIG. 7 & 14 CAD 34		TO DISTRIBUTING FRAME CAD					
				TS (A)	TS (B)	TS (A)	TS (B)	A		B			
								CAD FIG.	LEAD DESIG	CAD FIG.	LEAD DESIG		
1	INTRA-PBX PROTECTION OF SERVICE CKT	S1	WJ	35	35								
2	CENTRAL OFFICE INDIVIDUAL SUBSCRIBERS LINE CKT ARR FOR OPERATION WITH DIAL SELECTED PBX TRK OR TO LONG TRK CKT DIRECT OR THRU PBX EMER TRANSFER KEY CKT, OR TOLL DIVERTING TRK CKT (SXS CENTRAL OFFICE ONLY) OR TO LINE OR TRUNK ACCESS CKT, OR TO RINGING RANGE EXTENDING CKT, OR TO INTRA-PBX PROTECTION OF SERVICE CKT, OR TO POWER FAILURE TRANSFER CKT (SEE NOTE 304).	T OR T1		15	15			6,7, 9,10, OR 19	T				
		R OR R1		25	25				R				
3	RINGING LEADS CKT	M	ZS		14								
4	RINGING LEADS CKT OR TO INTERCEPT TRK CKT(701 PK)	M	ZS			14	18	M					
5	POWER RINGING CKT	B OR MS	B		15	15							
6	TRAFFIC USAGE RECORDER CKT	TR	ZY	21	21		25	TR					
7	STATION MESSAGE REG SURCHARGE CKT VIA STATION MESSAGE REG PULSE CKT	H	YK		33	33							
8	STATION MESSAGE REG PULSE CKT	SS1 SS2 S1 SP	YI	53 54 42 41	53 54 42 41								
9	TRAFFIC MEASUREMENT SYSTEM NO. 1A	TMS	WA	35	35								
10	TRAFFIC MEASUREMENT SYSTEM NO. 1A CONNECTING CKT	DLOCK	WC	35	35								
11	AUX TRK CKT FOR USE WITH KEY TELEPHONE SETS OR 5 OR 6 TYPE CONSOLES	T R T1 R1 DD DL B BL TD		14 24 15 25 36 44 56 45 52	14 24 16 26 36 44 56 46 52								
12	SEL CKT OR SEL CONN CKT BANK MULT OR NIGHT CKT WITHOUT TOLL DIVERTING, OR ROTARY OUT-TRUNK SWITCH OR RINGING RANGE EXTENDING CKT	T R S		13 23 53	13 23 53	15 OR 18	T1 R1 S1	8	T R S				
13	ATND SEL CKT BANK MULT WHEN ROTARY DIAL WITH 1 OR 2 TYPE CONSOLE IS USED WITH ALL CENTRAL OFFICE EXCEPT SXS	T R S		24 14 54	24 14 54	15 OR 18	T1 R1 S1						
14	ATND SEL CKT BANK MULT WHEN ROTARY DIAL WITH 1 OR 2 TYPE CONSOLE IS USED WITH SXS CENTRAL OFFICE.	T R S		14 24 54	14 24 54	15 OR 18	T1 R1 S1						
15	ATND SEL CKT BANK MULT WHEN REG SDR IS USED WITH ALL CENTRAL OFFICE EXCEPT SXS	T R S		24 14 54	24 14 54	15 OR 18	T1 R1 S1						
16	ATND SEL CKT BANK MULT WHEN REG SDR IS USED WITH SXS CENTRAL OFFICE	T R S		14 24 54	14 24 54	15 OR 18	T1 R1 S1						
17	JACK RELAY CKT AND RINGING CKT (APP FIG. 3) CAD FIG. 3	T R T1 R1 SL B BL DD DL DL2 TD		13 23 15 25 43 56 46 36 33 45 52	13 23 16 26 43 56 46 36 33 45 52								
		-48 (A) GRD		11 31	11 31								
18	JACK RELAY CKT AND RINGING CKT (APP FIG. 9) CAD 5	T R T1 R1 SL DD TD		13 23 15 25 43 36 52	13 23 16 26 43 36 52								
		-48 (A) GRD		11 31	11 31								
19	RINGING RANGE EXTENDING CKT	DD DL2	XN	36 45	36 45								
20	TRAFFIC REG CKT	K OR BR		11	11	15,18	K						
21	NIGHT OPERATION RELAY CKT (APP FIG. 12) CAD 26	S S1	YP	54 44	54 44								

LEAD DESTINATION TABLE (CONT)  
FOR APP FIG 1 OR 2 & 14

RUN	TO	LEAD DESIG	OPTION	APP FIG. 1 & 14 CAD 33		APP FIG. 2 & 14 CAD 34		TO DISTRIBUTING FRAME CAD				
				TS (A)	TS (B)	TS (A)	TS (B)	A		B		
								CAD FIG.	LEAD DESIG	CAD FIG.	LEAD DESIG	
22	NIGHT JACK CKT (APP FIG. 11) OR TO RINGING RANGE EXTENDING CKT	T R S SL		13 23 32 43	13 23 32 43			22	T R S SL			
23	NIGHT JACK CKT (APP FIG. 8) OR TO NO. 552A, 552B, 552D, 552E, 605A, 607A, 607B, 608A OR 608B JACK CKT OR TO RINGING RANGE EXTENDING CKT	T R S SL		13 23 43 32	13 23 43 32			22	T R S SL			
24	PBX AUTOMATIC NUMBER IDENTIFICATION CKT	A B S1 S2	YN	42 41 33 43	42 41 33 43			27	A B S1 S2			
25	ATND TRK CKT, (TOLL DIVERTING) OR TO TOLL DIVERTING TONE CKT	T R S S1		18 28 38 48	18 28 38 48			15 OR 18	T3 R3 S3 S5			
26	SEL CKT OR SEL CONN CKT BANK MULT FROM WHICH TOLL CALLS ARE TO BE DIVERTED OR TO ROTARY OUT-TRUNK SWITCH CKT	T R S		17 27 37	17 27 37			15 OR 18	T2 R2 S2	8	T R S	
27	TO GRD LAST CKT OR TO ATB LEAD SUCCEEDING CKT (756A) PBX	G			46							
28	TO 756A PBX LINE, LINK & MKR CKT FOR FIRST CKT OR TO G LEAD PRECEDING CKT (756A PBX)	ATB			56							
29	TO 756A PBX LINE, LINK & MKR CKT	T2 R2 S2			13 23 53							
30	TO LINE OR TRUNK ACCESS CKT	S	WN	53	53			29	S			

OPTIONAL INSTALLER STRAPS

OPTION	APP FIG. 1 AND 14 CAD 33				APP FIG. 2 AND 14 CAD 34			
	TS (A)		TS (B)		TS (A)		TS (B)	
	FROM	TO	FROM	TO	FROM	TO	FROM	TO
G	33	34			33	34		
X							34	35
Y			34	35				
Z			31	34				
WF	47	57			47	57		
WH					55	56		
XK							31	34
XS	38	58			38	58		
XT	52	53			52	53		
XW	25	26			25	26		
	15	16			15	16		
YH	53	54			53	54		
YJ			31	33			31	33
YM	33	43			33	43		
YO	44	54			44	54		
ZM			25	26			25	26
			24	27			24	27
ZN			26	27			26	27
			24	25			24	25
ZD							34	35
							28	38
ZR			24	34				

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ISSUE  
10B

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