

SHEET INDEX

CONTENTS	SHEET NO.		ISSUE NO.																																																								SHEET NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	PRIOR ISSUE	CURRENT ISSUE	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWINGS	J58837D J58837CP J58837CR

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.

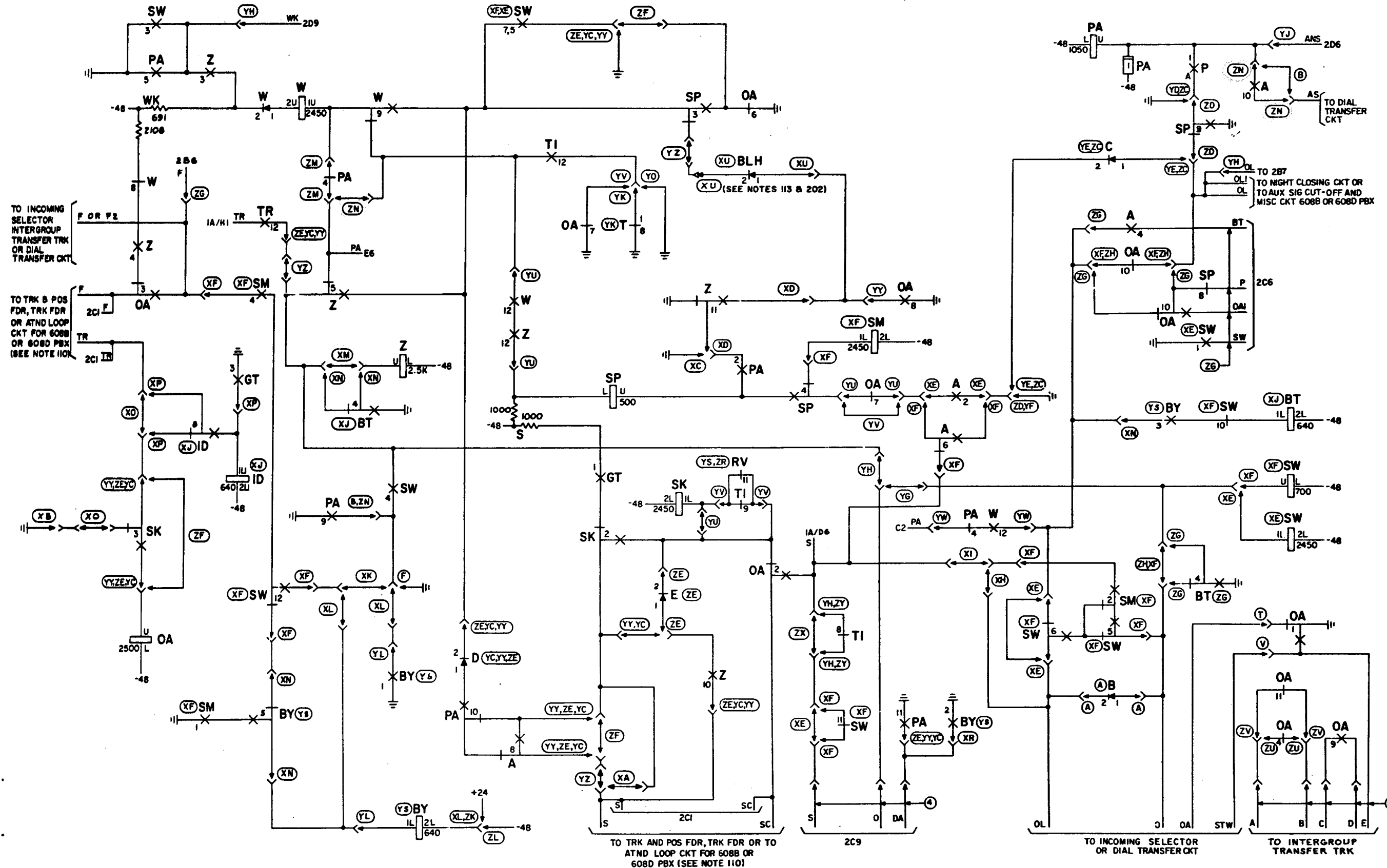
DWG 122	C D 128	DWG 153	C D 158	DWG 158	C D 158
3B	2B	4B	3B	5B	3B
5AC	3B	7B	4B	8B	4B
9D	4B	10AC	5AC	11D	5AC
DWG 153	EE OR ISSUE	DATE ISSUE	DRN	APPO	
12AC	5AC APP 2AC	10-25-67	GAH AEK RLS	AEK LAH RFP	
13AC	5AC APP 3AC	5-2-67	CJD PJS	AEK LAH	
			EAH RFP		
14B	6B	1-4-72	RFP RWH HCA CBA	AEK FLS AFR	

OPTION INDEX

APP OR WRG	LOCATION	APP OR WRG	LOCATION	APP OR WRG	LOCATION	APP OR WRG	LOCATION
4	APP FIG. 4, 2A8	ZN	IA/B7, IA/C7, IA/F1	YT	IA/B4, IA/C4, IA/E3	XR	IB/G6
Z	IA/B0, IA/C0		IA/F2, IA/G1, IB/A8, IB/B2, IB/E2			XS	2A8
Y	IA/B0, IA/C0	ZO	IA/C5, IA/C6, 2F7	YU	IA/D7, IB/C3, IB/D3, IB/D5, IB/E4		
X	APP FIG. 1	ZP	IA/C5, IA/C5, 2F7	YV	IA/D7, IA/E3, IB/B4, IB/D5, IB/E5	XT	2B8, 2D8
W	APP FIG. 1	ZQ	IA/B3, IA/C4			XU	APP FIG. 1, IB/B5
V	IB/F8, 2G5	ZR	APP FIG. 1, IA/B4, IA/C4, IA/E3	YW	IA/B7, IA/F2, IB/E6	XV	APP FIG. 1
T	IB/F8, 2G5	ZS	APP FIG. 1, IA/C1, IA/E1	YX	IA/F1	XW	APP FIG. 1
S	2F4	ZT	APP FIG. 1, IA/E1	YY	APP FIG. 1, IA/E2, IA/E7, IA/E8, IA/F1, IA/H1, IB/A4, IB/C2, IB/C5, IB/F0, IB/F3, IB/F4, IB/G3, IB/G5, IB/G6	XX	IA/D1
R	2F4	ZU	IB/G8			XY	IA/F0
Q	IA/G0	ZV	IB/G8	YZ	IB/C2, IB/B4, IB/G4	XZ	APP FIG. 1, IA/F0
N	APP FIG. 1, IA/F0	ZW	IA/G0			WA	IA/F0
M	APP FIG. 1	ZX	IB/F5	XA	IB/G4		
K	IA/D1	ZY	APP FIG. 4, 2B9, IB/F5	XB	IB/E0		
J	IA/D1	ZZ	2B6	XC	IB/D4		
H	2F7, 2G7	YA	APP FIG. 1, 2B6	XD	IB/C5, IB/D4		
G	IB/G9	YB	IA/G0	XE	APP FIG. 1, IA/D7, IB/D6, IB/E8, IB/F7, IB/G5, 2G4		
F	IB/F2	YC	APP FIG. 1, IA/E7, IA/E8, IA/F2, IA/H1	XF	APP FIG. 1, IA/D7, IA/E1, IB/C1, IB/C7, IB/D7, IB/E6, IB/E7, IB/E8, IB/F1, IB/F7, IB/G5, 2G4		
E	IA/C7, IA/E1, IA/G1		IB/A3, IB/C2, IB/F0, IB/F3, IB/F4, IB/G3, IB/G5, IB/G6	XG	IA/F1		
B	IA/C6, IA/C7, IA/F1, IA/G1, IB/A8, IB/E2	YE	APP FIG. 1, IB/B8, IB/D7	XH	IB/F6		
A	APP FIG. 1, IB/G7	YF	IB/B4, IB/D7	XI	IB/E6		
ZA	2F7, 2G7	YG	IB/E6, 2B7	XJ	APP FIG. 1, IA/B3, 2C9, 2G9		
ZB	2F7, 2G7	YH	IB/A1, IB/B8, IB/E5, IB/F5, 2C7, 2D8, 2D9	XK	IB/F2		
ZC	APP FIG. 1, IB/A8, IB/B8, IB/D7	YI	2C6	XL	IB/F2, IB/H3		
ZD	IB/B8, IB/D7	YJ	IA/E2, IB/A8, 2C5	XM	IA/A2, IA/A3, IA/D2, IA/D3		
ZE	APP FIG. 1, IA/E7, IA/E8, IA/F2, IA/H1, IB/A3, IB/C2, IB/F0, IB/F3, IB/F4, IB/G3, IB/G5, IB/G6	YK	APP FIG. 1, IA/E3, IA/E4, IA/F3, IB/D4	XN	IA/B2, IA/B3, IA/D2, IA/D3, IA/E1, IA/F7, IB/D2, IB/D7, IB/G1		
ZF	IA/E2, IA/E6, IA/E8, IB/A4, IB/C7, IB/D5, IB/E1, IB/G4	YL	IB/F2, IB/H2				
ZG	APP FIG. 1, 2A5, IA/B2, IA/B3, IA/D2, IA/D3, IA/E1, IB/B1, IB/C7, IB/C8, IB/E8	YM	APP FIG. 1	XO	IA/E7, IA/E8, IA/F8, IA/G1, IB/D0, IB/E0, 2G6		
ZH	IA/A2, IA/A3, IA/D2, IA/D3, IA/E1, IB/C7, IB/E7	YN	IA/D3, IA/F3, IA/F4, IA/F5, IA/G4				
ZI	IA/E7	YO	IB/B4	XP	IA/E7, IA/E9, IA/F8, IA/G1, IB/D0, IB/D1, 2C8, 2D9, 2G7		
ZJ	IA/E7	YP	APP FIG. 5				
ZK	IB/H3, 2B5	YQ	IA/E4	XQ	IA/E9		
ZL	IB/H3, 2B5						
ZM	IA/B7, IA/F2, IB/B2	YS	APP FIG. 1, IA/B4, IB/G6				

DRAWING
ISSUE
12AC
13AC
14B

PART OF FS I INCOMING TRUNK



SD-65812-01-B1B

0 1 2 3 4 5 6 7 8 9

APP FIG 2

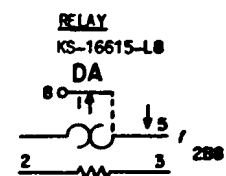
JACKS			MOUNTING		
DESIG	LOC	CODE	DESIG	LOC	CODE
A	2B1	238A	JACK	201	ED-60813-30G3
B	2B1	238A	MOUNTING		
C	2C1	238A			
D	2C1	238A			

APP FIG 3

CORDS		
DESIG	LOC	CODE
A	2B3	2W42A
B	2B3	3W4A E/W 624B TOOL
C	2C3	3W4A E/W 624B TOOL
D	2C3	2W17A E/W 624B TOOL

APP FIG 4

RELAY																		DESIG	
CODE	OPTION	AK4																CODE	OPTION
12	CONT ARR	LOC	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
11																			11
10																			10
9																			9
8																			8
7																			7
6																			6
5																			5
4																			4
3																			3
2																			2
1																			1
COIL																			COIL



DIODE			
DESIG	LOC	CODE	
DA	2B9	446F	

APP FIG 5

CONNECTOR		
DESIG	LOC	CODE
YP	T	1A/G4 910A

RELAY DELAY TIMER UNIT (SEE NOTE 201)		
DESIG	LOC	CODE
YP	T	1A/G5 ED-99555-()

CIRCUIT NOTES:

DESIG	FUSE AMP	POTENTIAL	ONE PER
1-1/3	-48V		APP FIG. 1 Z OR Y OPT & 4 APP FIG. 4
1-1/3	+24V		2 APP FIG. 1
BATTERY SYMBOL		VOLTAGE RANGE	
-48		44-52V	

FEATURE OR OPTION		APP FIG	APP OR WRG	QUANTITY
INCOMING TRUNK		1		1 PER CKT
		5		1 PER 2 CKT
TYPE OF TRANSFER ARRANGEMENTS PROVIDED	DIAL TRANSFER SEE NOTE 109		ZN, ZW	
	ATND RECALL		E, YW	
INTERGROUP TRANSFER REQD SEE NOTE 109			G, ZV	
TRUNK CONNECT BETWEEN 1ST AND 2ND SELECTORS			Q	
TYPE OF SERVING OFFICE	WITH 608 SWITCHBOARD PROVIDED		XL, XL	
	LAMP REPEATING IS PROVIDED		XL, XL	
	LAMP REPEATING IS NOT PROVIDED		XI, XK	
	CROSSBAR HAVING LISTED NUMBER DIGIT TRANSLATION (SINGLE DIGIT SENT)	PROVIDED	F, XM	
		NOT PROVIDED	XG, XM	
BUSY LINE TRANSFER	NOT PROVIDED		XM	
	PROVIDED SEE NOTE 113		XJ, XM, XR, ZK	
	WITH 608 SWBD OR LAMP REPEATING NOT PROVIDED		XJ, XM, XR, ZL	
120 IPM VISUAL INDICATION REQD FOR ATND			ZI	
DON'T ANSWR TRANSFER	PROVIDED	4	YH	1 PER CKT
	120 IPM VISUAL INDICATION REQUIRED FOR ATND SEE NOTE 114		ZJ	
ATND LOOP CKTS FOR	608 SWITCHBOARD PROVIDED PER		YJ	
	ISS 7 OR PRIOR OF SD-65830-01		YJ	
	ISS 8 OR LATER OF SD-65830-01		XA	
	CONSOLE PROVIDED PER		YJ	
	ISS 11 OR PRIOR OF SD-65813-01		YJ	
	ISS 12 OR LATER OF SD-65813-01		XA, XB	
	NOT PROVIDED		XO	
INCOMING CALL IDENTIFICATION		PROVIDED SEE NOTE 115	XP, XO, XJ	
TRAFFIC USAGE RECORDER SEE NOTE 116			XX	
TEST CKT FOR TESTING ATND LOOPS FOR 608 SWITCHBOARD		2,3		1 PER INSTALLATION
IF TEST CKT IS NOT ACCESSIBLE TO ALL ATND LOOPS		2		AS REQD
TRAFFIC MEASUREMENT SYSTEM NO. 1A	TRUNK BUSY SEE NOTE 116		XX	
	ATND WAITING TIME		WA	

102.
(CONT)

FEATURE OR OPTION	PROVIDE	
	FIG	QUANTITY

103.

NETWORK VALUES			
NETWORK		RESISTANCE IN OHMS	CAPACITANCE IN UF
NO.	CODE		
1	186A	120	0.30

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
3B				T		V
3B	Q	Z OR Y AND Q	102,106, 107,108	Q, Y		Z
3B	R OR S	R	102	R, S		
3B	M OR N	M		N		M
3B	J OR K	K		J		K
3B	H	NONE		H		
3F	G	NONE	102,109	E, B, G		
3F	F	NONE	102	F		
4B	E OR P	E	102	E		B
4B	A	NONE		A		
4B	ZA OR ZB	ZA		ZB		ZA
6AC	ZC OR ZD	ZD		ZC		ZD
7B	ZE OR ZF	ZF		ZE		ZF
7B	ZG OR ZH	ZH	102	ZG, ZH		
7B	ZI OR ZJ	NONE	102,114	ZI, ZJ		
7B	FIG. 4	NONE	102	4		
7B	ZK OR ZL	NONE	102	ZK, ZL		
7B	ZM OR ZN	B, E OR ZW	102	ZM, ZN		B
8B	ZO OR ZP	ZO		ZP		ZO
10AC	ZQ OR ZR	ZQ	102	ZQ, ZR		
10AC	ZS OR ZT	ZS		ZT		ZS
10AC	ZU OR ZV	ZU	102	ZV		ZU
10AC	ZW OR YB	YB	102	ZW		YB
10AC	ZX OR ZY	ZY	102	ZY		ZX
10AC	Z7 OR YA	AA	102	YA		Z7
10AC	YC	ZE		YC		ZE
12AC	YD, YE OR YF	ZD OR ZC	102	YD, YE YF		ZC
12AC	YG OR YH	ZY, YG	102	YH		ZY, YG
13AC	YL OR YJ	ZG OR ZH	102	YJ		YL
14B	YK, YH, YO OR YP	YK	102, 111	YH, YH, YP	YO	YK
14B	YQ	YQ				YQ
14B	ZQ, ZR, YS OR YT	ZQ OR ZR	112	YS, YT	ZR	ZQ
14B	YU OR YV	YU		YV		YU
14B	YE OR YF	YE OR YF		YF		YE
14B	YW	ZM OR ZN	102	YW		ZM
14B	YC, YX, YY YZ, XA, XB	YC & YX	102	YY, YZ, XA, XB		YC, YX
14B	XC OR XD	XC		XD		XC
14B	A, XE OR XF	A AND XE		XF		A, XE
14B	XG	XG	102	XG		
14B	XH OR XI	NONE	102	XH, XI		
14B	XL, XK OR YL	NONE	102	XK, XL, YL		
14B	YA	YA OR NONE				YA
14B	YJ	YI, JY OR NONE				YJ
14B	XJ	ZG OR NONE	102	XJ		

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
14B	ZH, ZG, XM OR XN	ZH OR ZG	102	XM, XN		ZH, ZG
14B	XO OR XP	XO	102	XO, XP		
14B	XQ	NONE	102,115	XQ		
14B	XR	NONE	102	XR		
14B	XS OR XT	XS		XT		XS
14B	XU	NONE	113,202	XU		
14B	R OR S	R OR S		R		S
14B	XV OR XW	XV		XW		XV
14B	XX	NONE	102,116	XX		
14B	XY, XZ OR WA	XY	102	XZ, WA		XY

WORKING LIMITS
MAX EXT CKT LOOP RES-2000
MAX INS RES -15,000

INCOMING TRUNK CIRCUIT

2

SD-65812-01-D1

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

PRINTED IN U.S.A.

CIRCUIT NOTES (CONT):

- 105. USE OPTION W ONLY IF REQUIRED BY GOVERNMENT RESTRICTIONS ON OPTION X.
- 106. PRIOR TO ISSUE 3B, OPTION Q WAS PART OF OPTION Y.
- 107. WHEN THIS TRUNK IS CONNECTED TO A CROSSBAR TANDEM OFFICE THE T&R ARE TO BE REVERSED IN THE CO OR AT THE PBX.
- 108. PRIOR TO ISSUE 3B, WHEN THIS TRUNK WAS CONNECTED TO A CROSSBAR TANDEM OFFICE THE T&R WERE REVERSED AT THE PBX.
- 109. DIAL TRANSFER CIRCUIT AND INTERGROUP TRANSFER CIRCUIT MAY NOT BE PROVIDED SIMULTANEOUSLY.
- 110. WITH SINGLE POSITION SINGLE CORD OPERATION OF THE 608B OR 608D PBX, THIS TRUNK CAN BE CONNECTED DIRECTLY TO THE 608B OR 608D PBX ATND LOOP CKT.

(A&M ONLY)

- 111. PROVIDE OPTION YO IF OPTION YV IS NOT PROVIDED.
- 112. OPTION 7R IS RETAINED FOR FIELD APPLICATION ONLY, TO BE USED IN PLACE OF OPTIONS YS AND YT IF OPTION ZR WAS PROVIDED AND OPTION XP IS NOT REQUIRED.
- 113. PROVIDE OPTION XU WITH OPTION XN IF OPTION YZ IS PROVIDED.
- 114. OPTION ZJ CANNOT BE PROVIDED IF OPTION XP IS PROVIDED.
- 115. IF ATND LOOP CKTS FOR CONSOLES ARE PROVIDED PER ISSUE 12 OR LATER OF SD-65813-01 AND OPTION XP IS SPECIFIED PROVIDE XQ IN PLACE OF OPTION XB.
- 116. WHEN OPTION XX IS PROVIDED AND THIS CIRCUIT IS TAKEN OUT OF SERVICE DURING A TRAFFIC STUDY BY PLACING A GROUND ON LEAD S, A RECORD OF HOW LONG THE TRUNK WAS OUT OF SERVICE SHOULD BE SENT TO THE DEPARTMENT MAKING THE STUDY.

EQUIPMENT NOTES:

- 201. PROVIDE UNIT ED-99555 DASH NO. AND GROUP ASSEMBLY WHICH PROVIDES TWO CIRCUITS PER UNIT WITH EACH CONSISTING OF AN INTERNAL 2 UF CAPACITOR.
- 202. THE 446F DIODE (OPTION XU) SHALL BE PROVIDED AND INSTALLED BY THE INSTALLER ON A JOB BASIS.

INFORMATION NOTES:

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

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

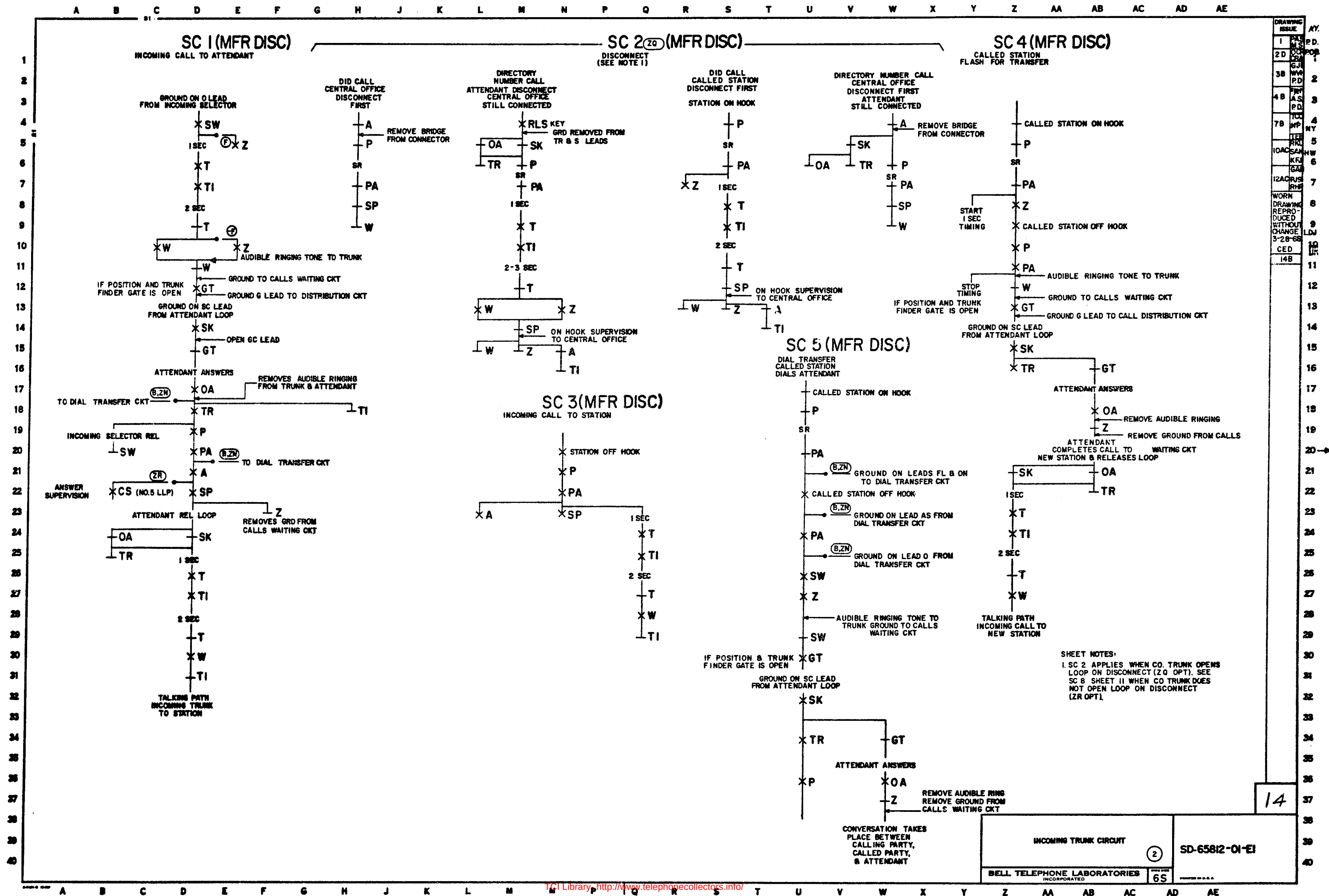
	MAX ALLOWABLE CKT LOSS (db)
OPTION X	0.4
OPTION W	1.1

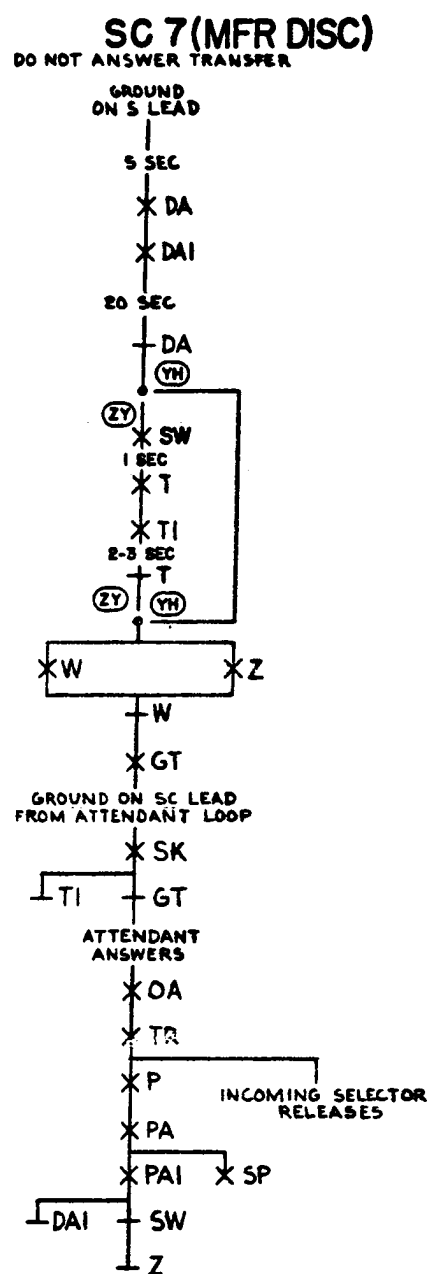
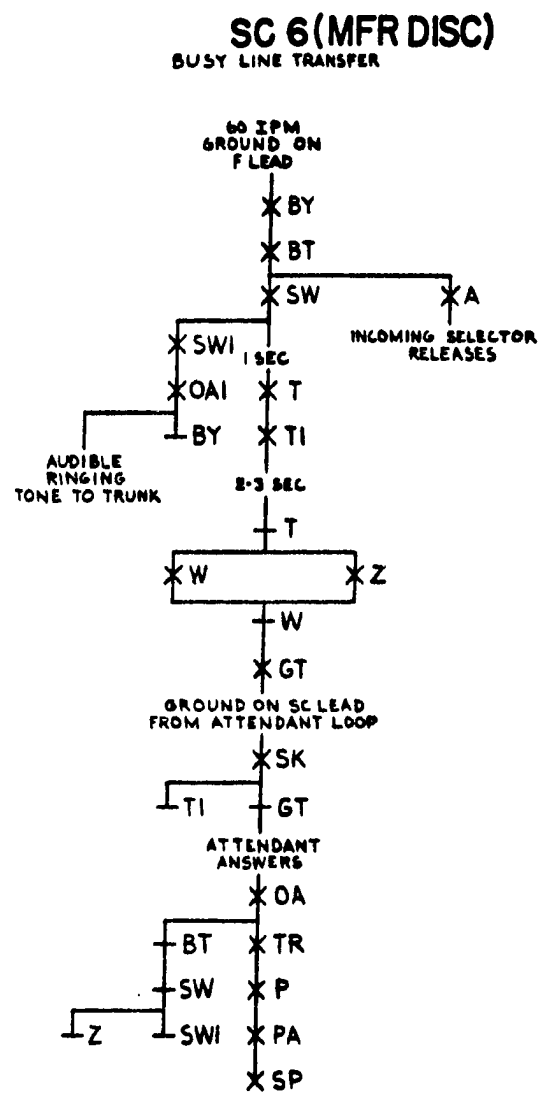
ALLOWABLE INDIVIDUAL APPARATUS LOSSES (db)					
APPARATUS	DESIG	CODE	MAX LOSS	MIN LOSS	REMARKS
CAPACITOR	A, B	2UF	13.7	11.7	
REP COIL	R	120C	0.4	0.2	OPTION X +
REP COIL	R	120CS	1.1	0.5	OPTION W +

+ SEE NOTE 105.

* INDICATES APPARATUS FOR WHICH INDIVIDUAL LOSSES ARE NOT REQD

SD-65812-01-02





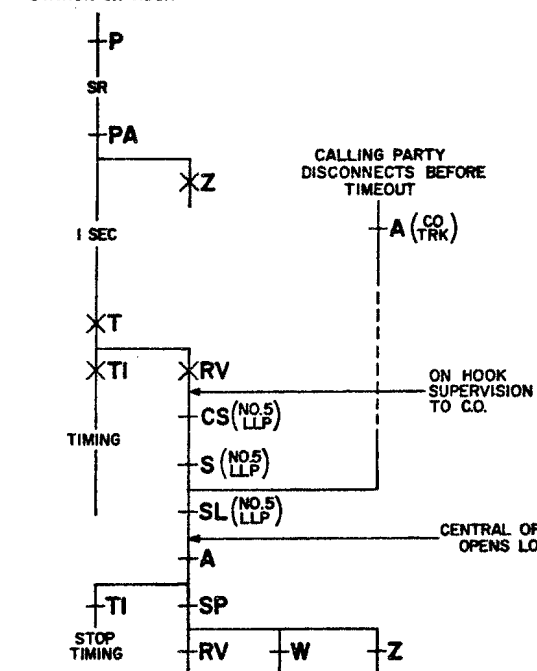
DRAWING
ISSUE
7B
12AC PLS
14B

14

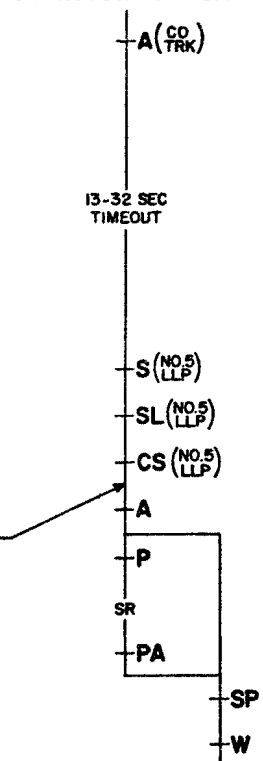
SD-65812-01-E2

SC 8 (ZR) (MFR DISC) DISCONNECT

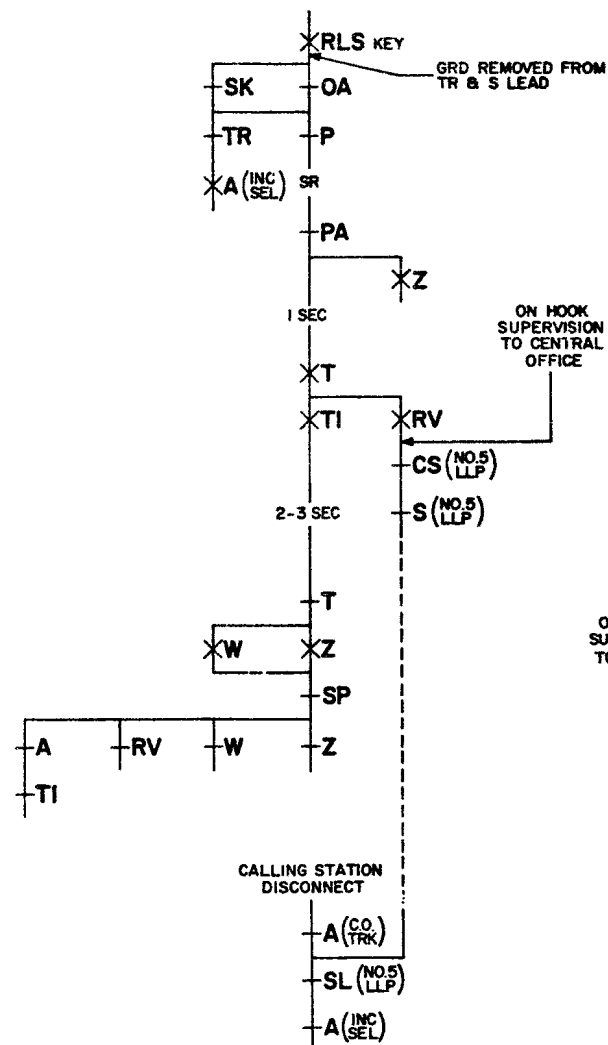
DID CALL
CALLED STATION
DISCONNECTS FIRST
STATION ON HOOK



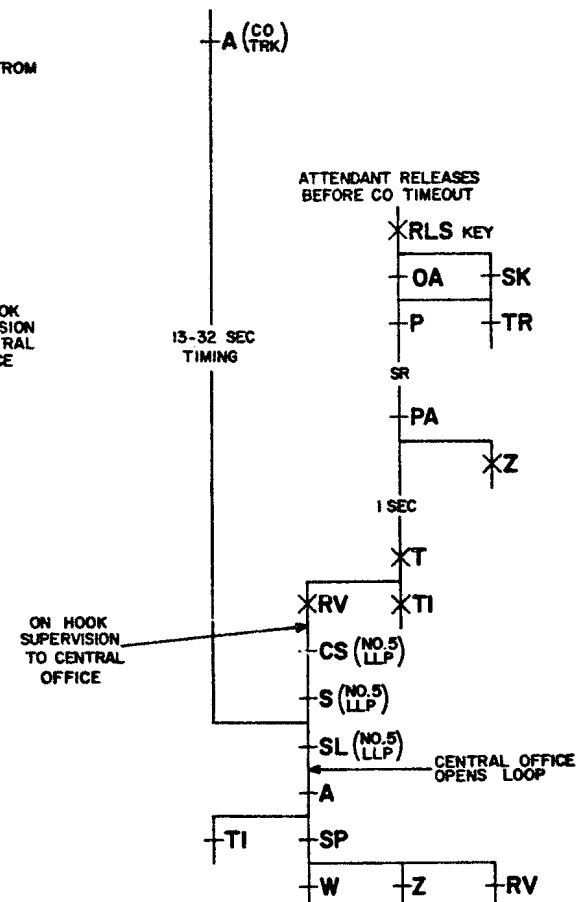
DID CALL
CENTRAL OFFICE
DISCONNECTS FIRST
CALLED PARTY REMAINING
OFF HOOK DURING TIMEOUT



DIRECTORY NUMBER CALL
ATTENDANT DISCONNECT
CENTRAL OFFICE
STILL CONNECTED

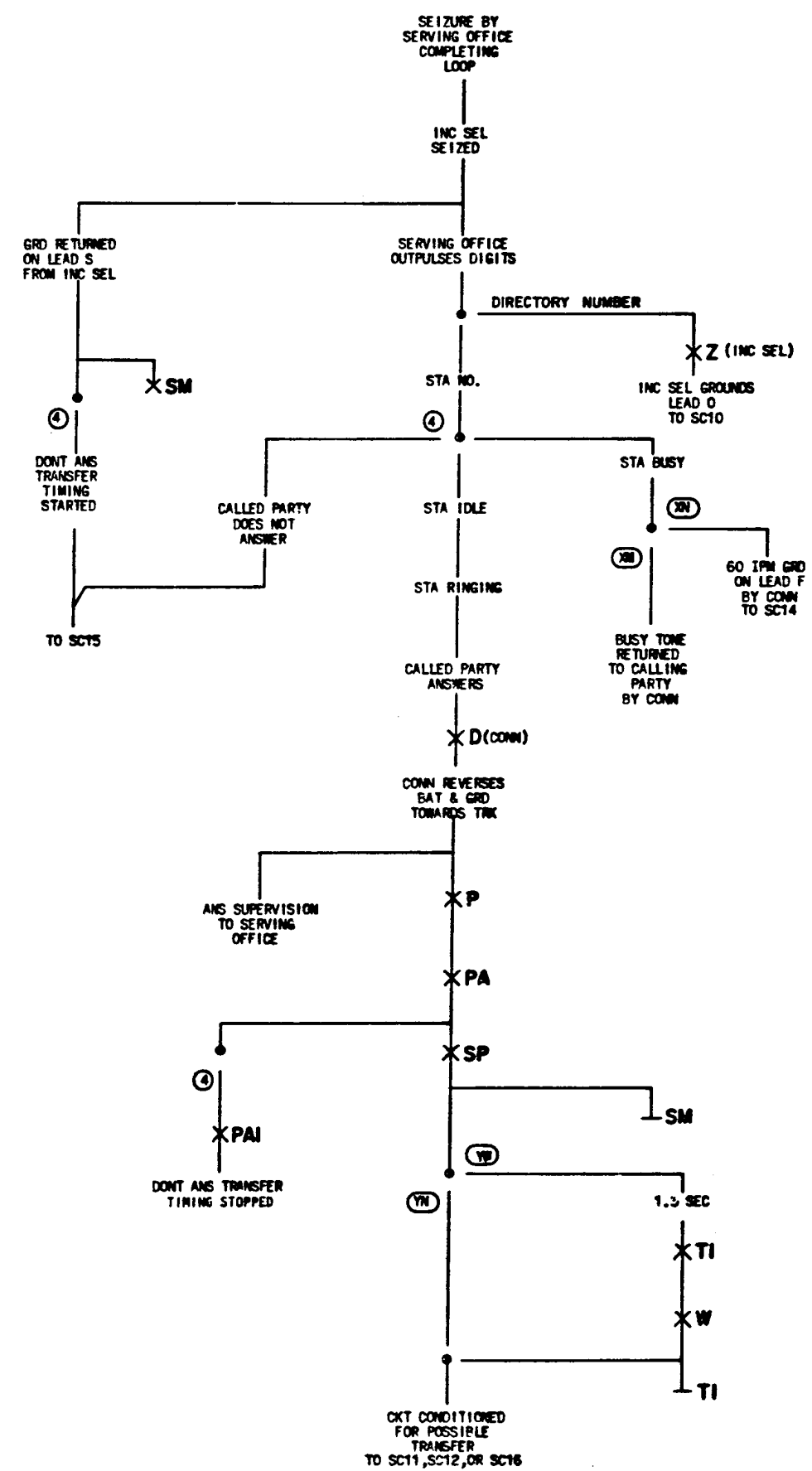


DIRECTORY NUMBER CALL
CENTRAL OFFICE DISCONNECT
FIRST ATTENDANT STILL CONNECTED



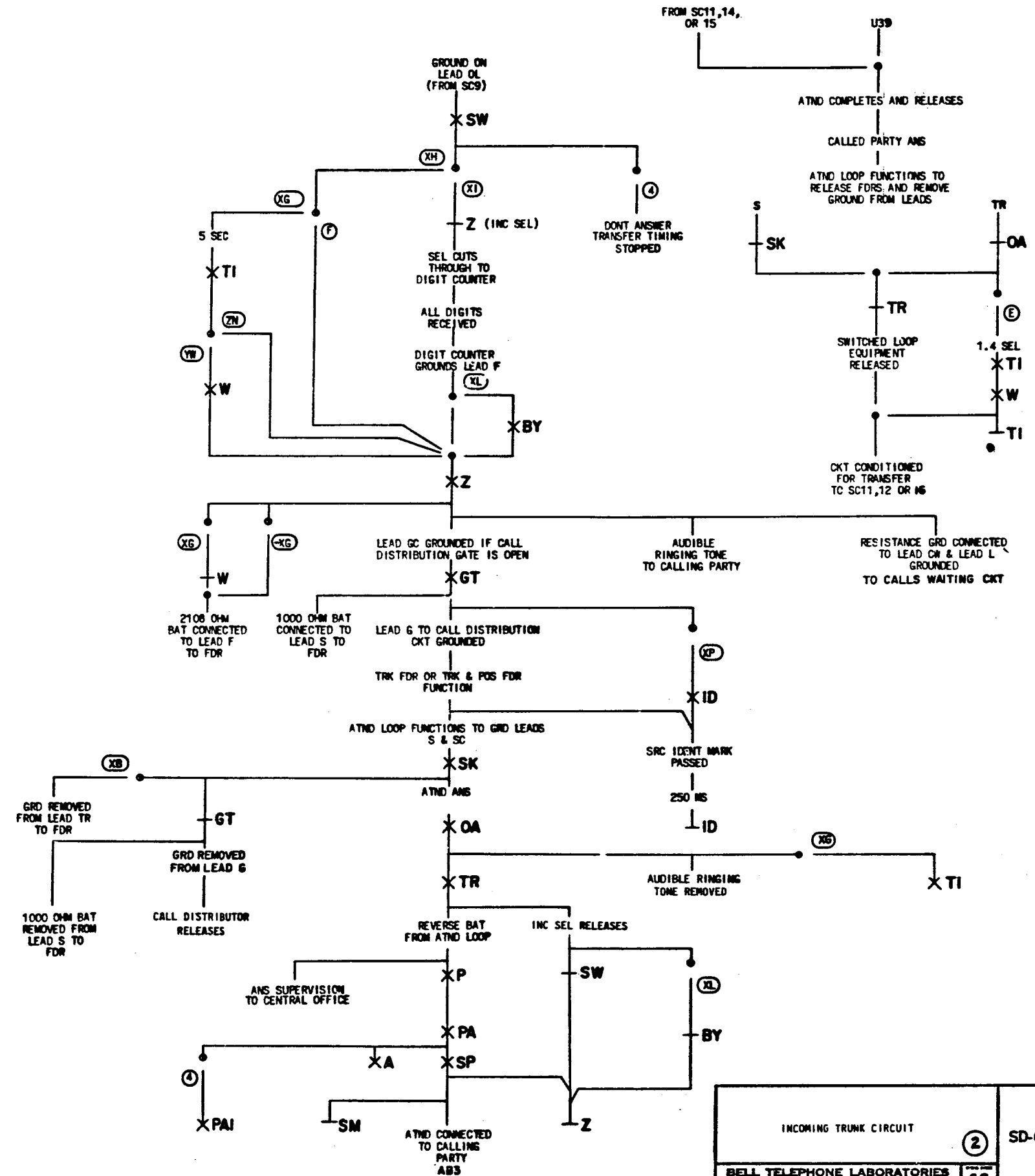
SC 9

INCOMING CALL

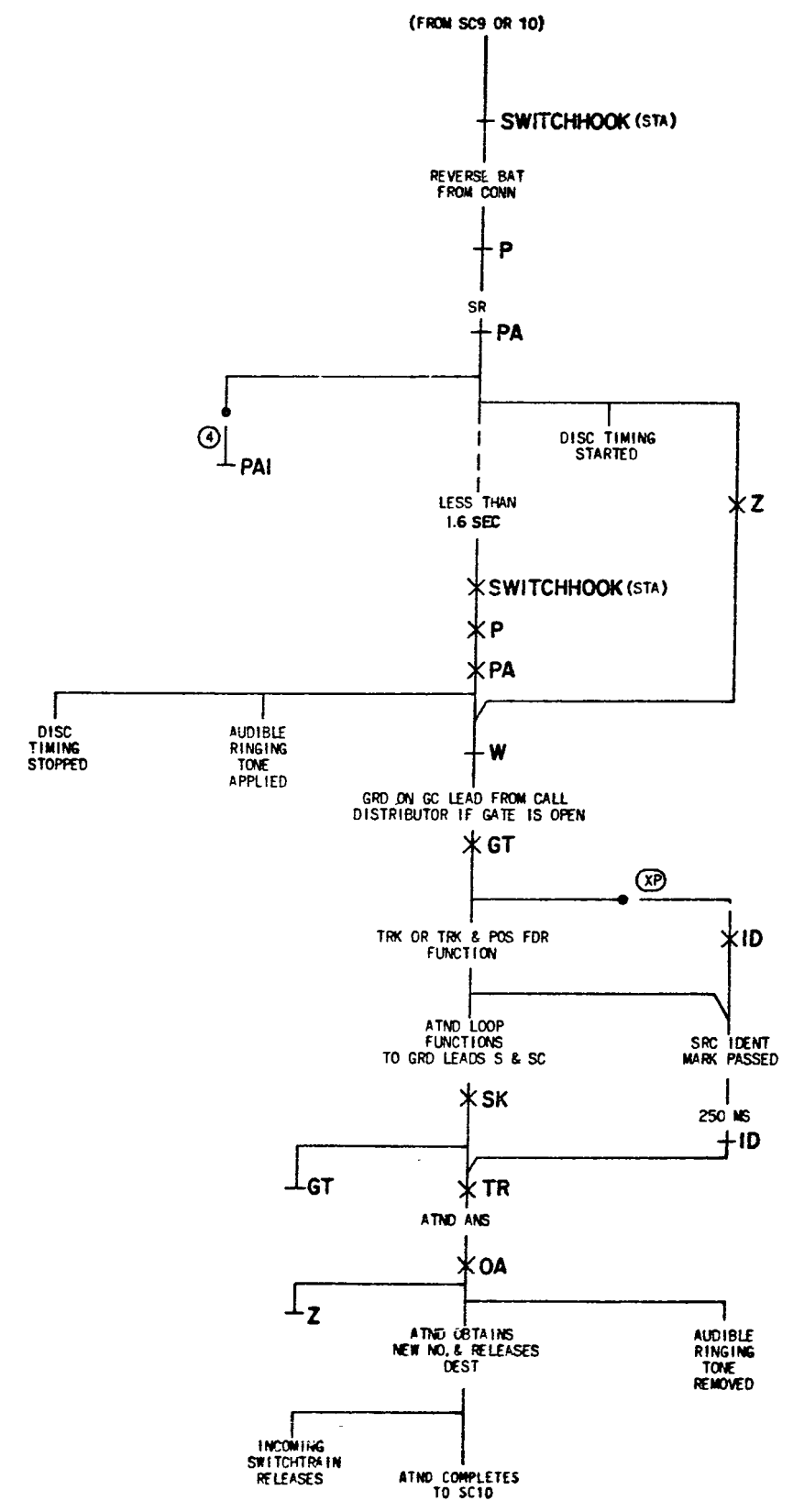


SC 10

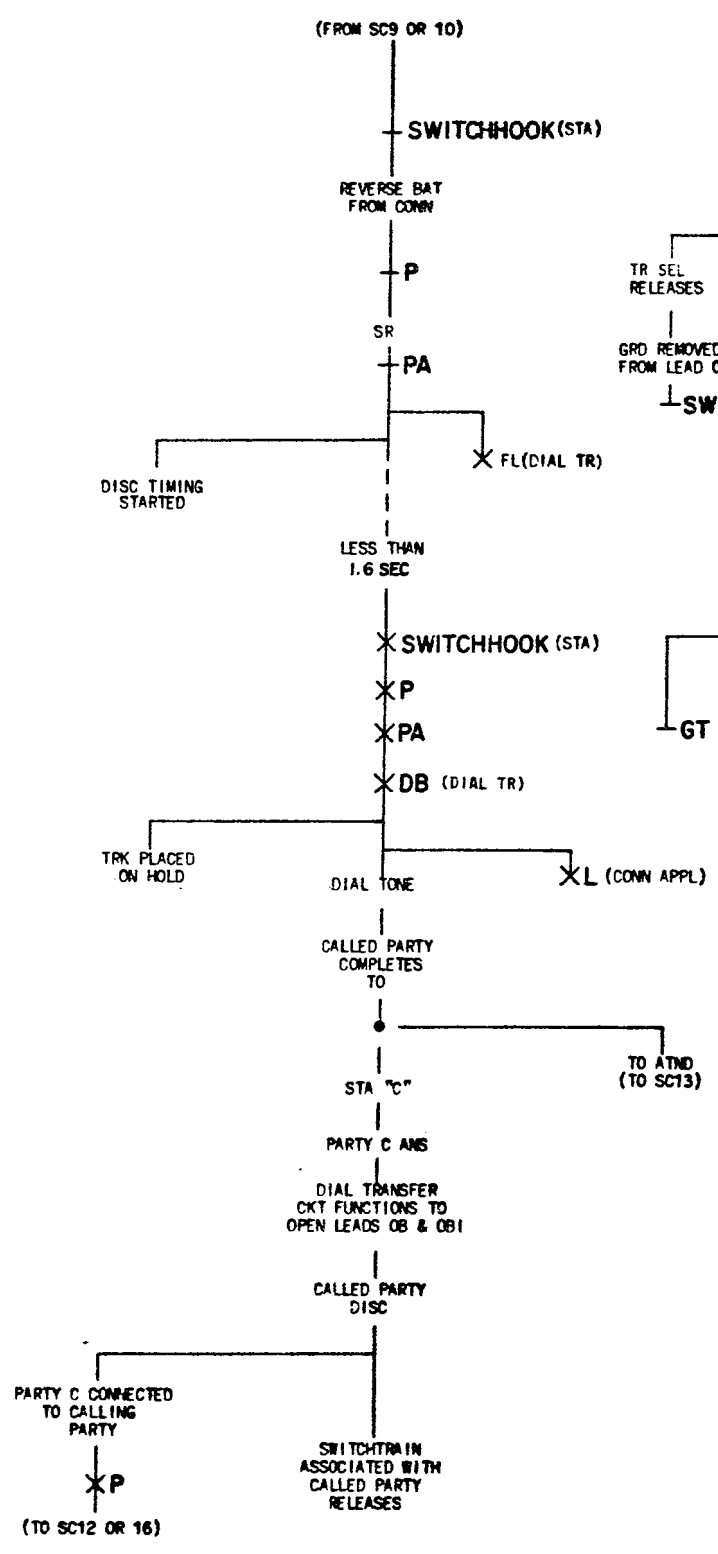
DIRECTORY NUMBER CALL



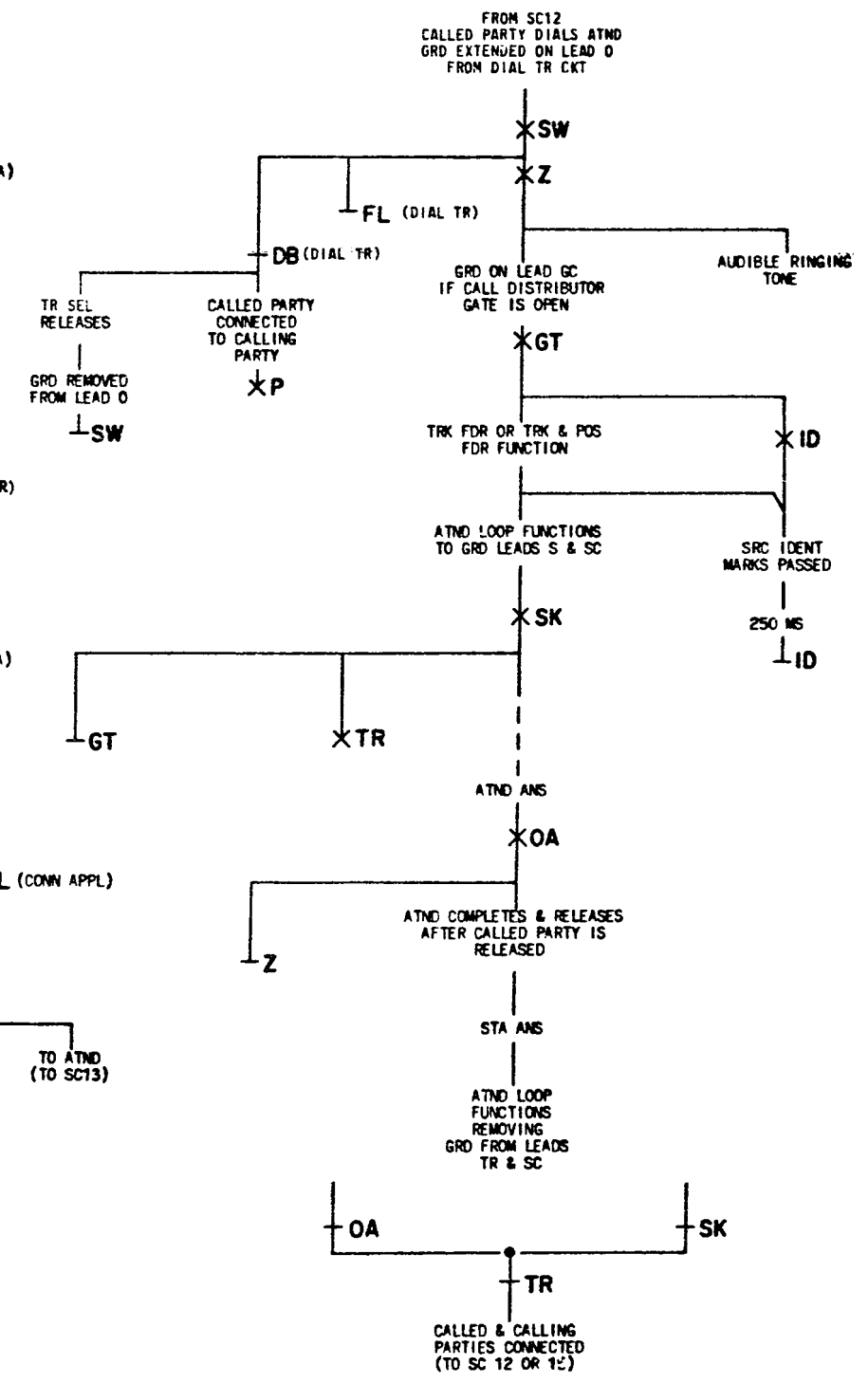
SC II
ATTENDANT RECALL



SC 12
DIAL TRANSFER



SC 13
DIAL TRANSFER
CALLED PARTY
DIALS ATTENDANT

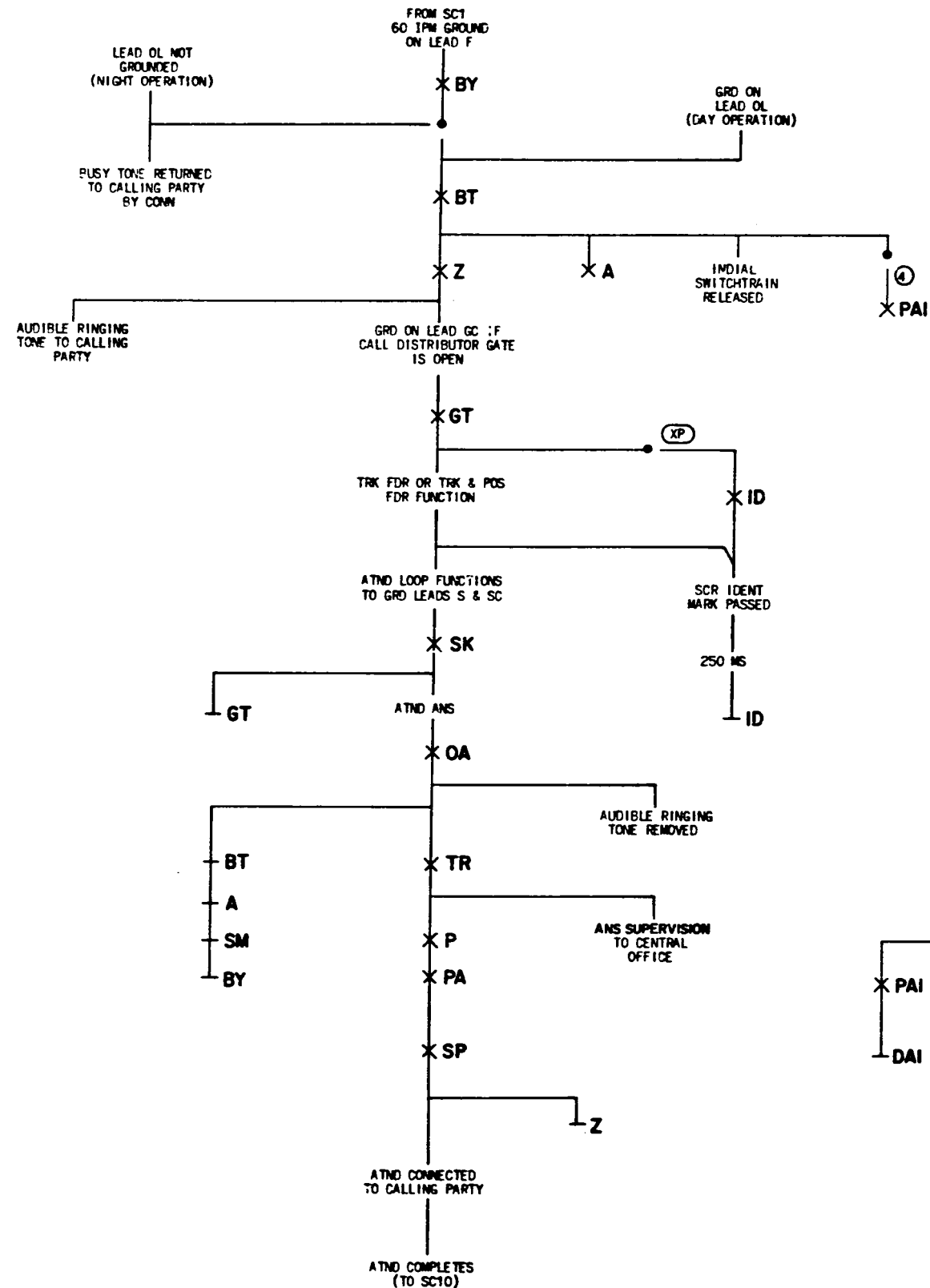


SD-65812-01-E5

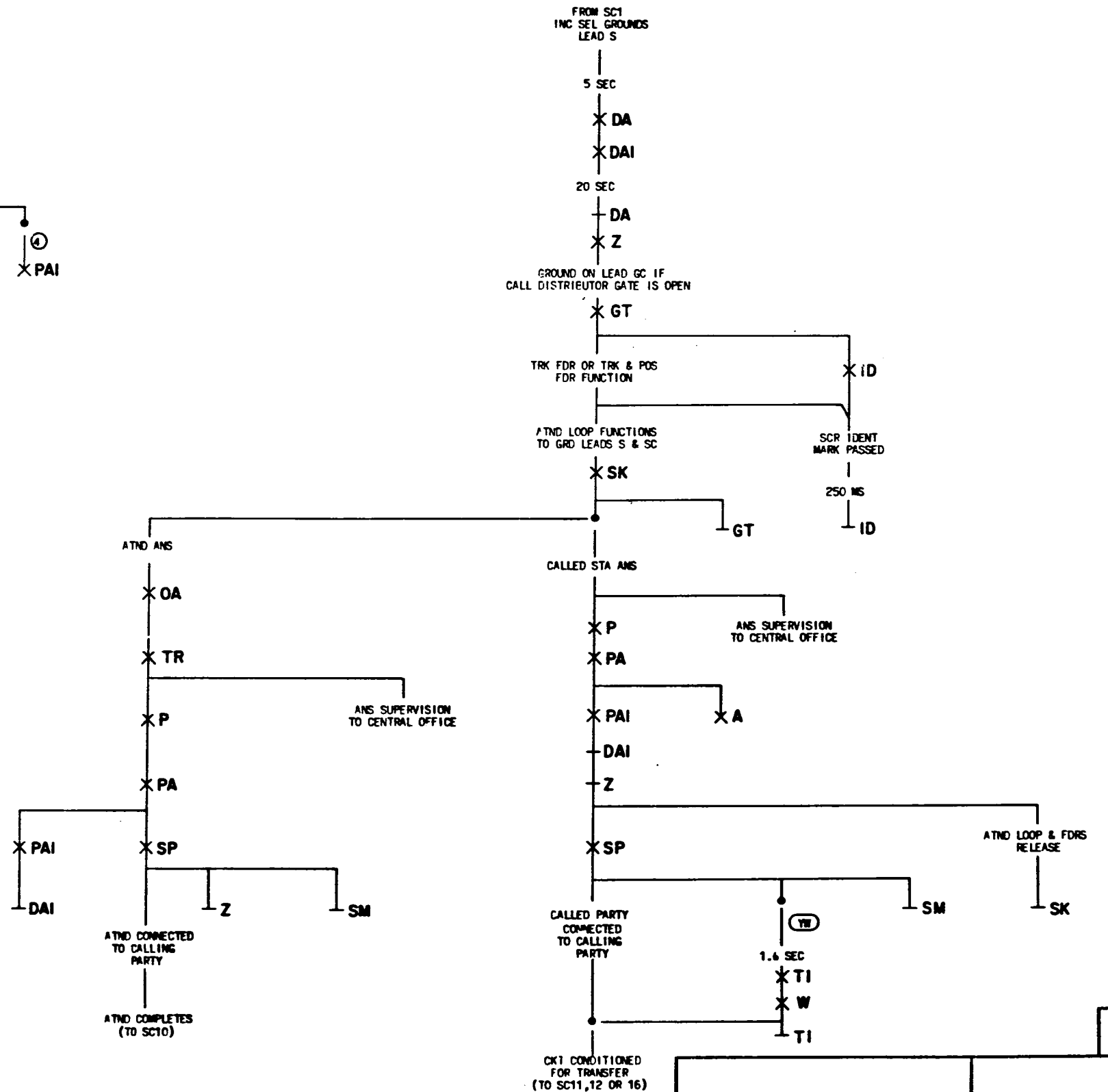
A B C D E F G H J K L M N P Q R S T U V W X Y Z AA AB AC AD AE

DRAWING
ISSUE
14B

SC 14
BUSY LINE TRANSFER



SC 15
DONT ANSWER TRANSFER



SD-65812-01

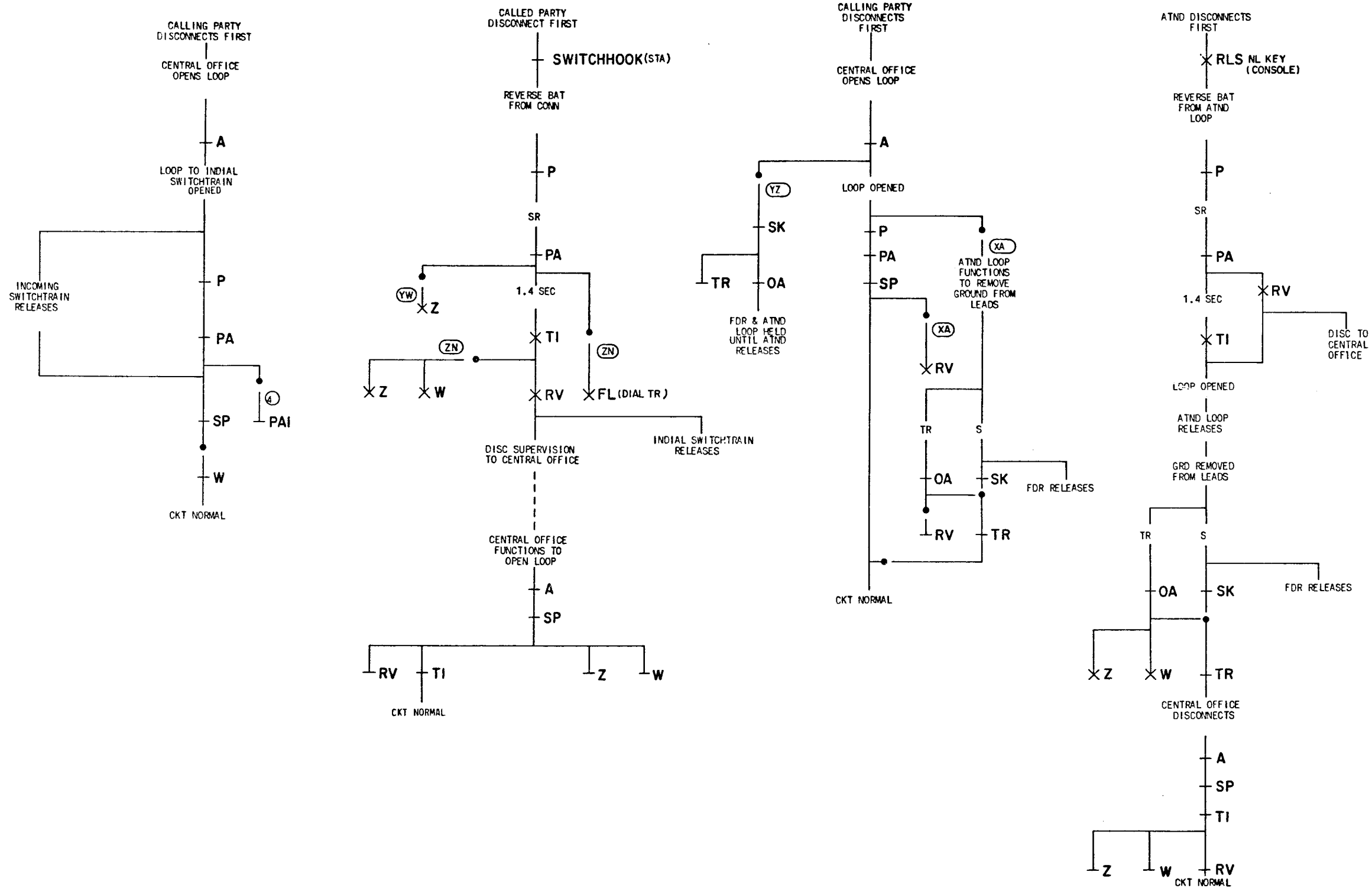
INCOMING TRUNK CIRCUIT		2	SD-65812-01-E6
BELL TELEPHONE LABORATORIES INCORPORATED		65	

A B C D E F G H J K L M N P Q R S T U V W X Y Z AA AB AC AD AE

DRAWING
ISSUE
14B

SC 16
DISCONNECT ON
CALL TO STATION

SC 17
DISCONNECT ON A
DIRECTORY NUMBER CALL



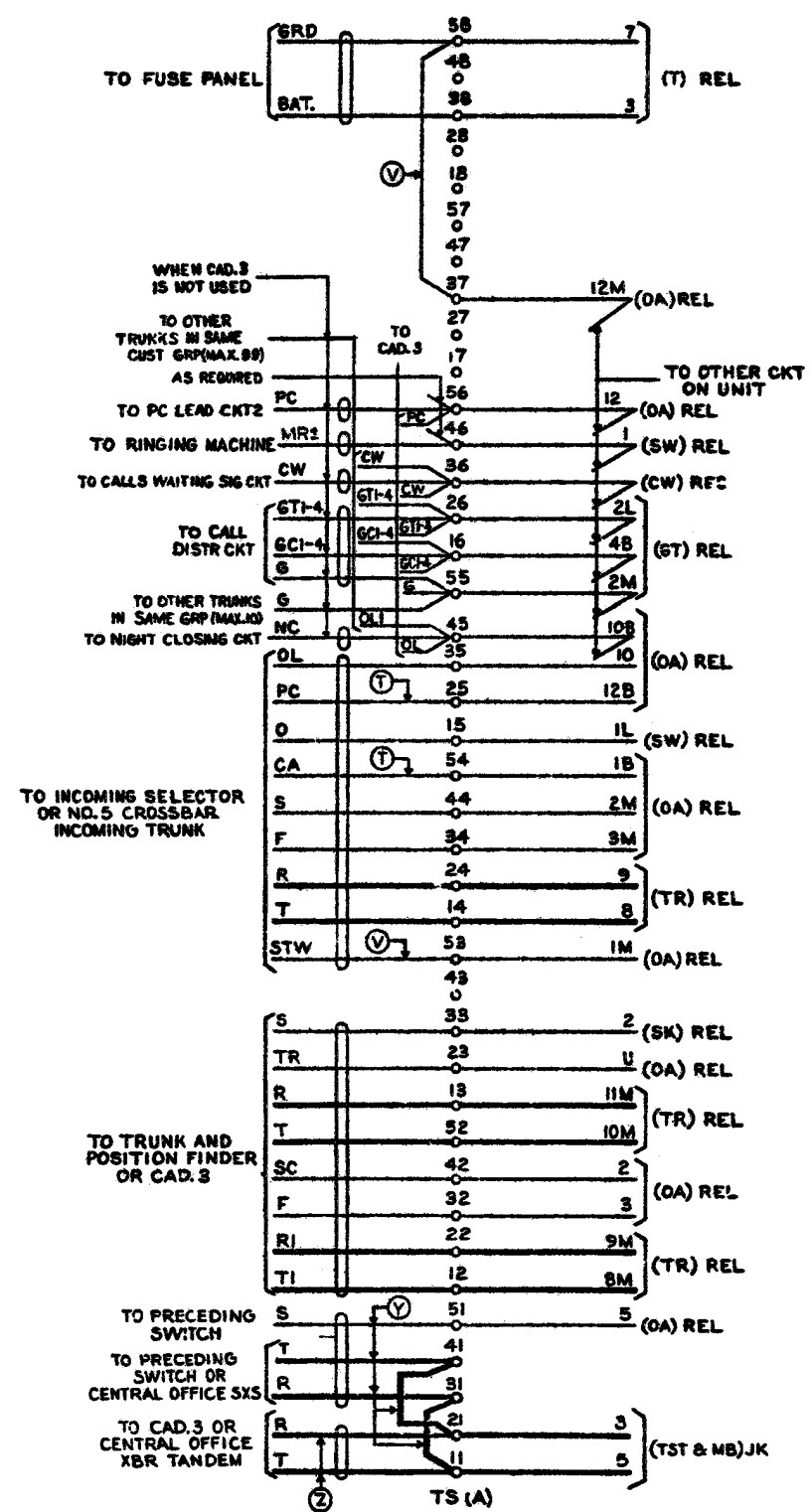
SD-65812-01-E7

APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP		DIRECT CURRENT FLOW TEST				REMARKS	
DESIG	CODE	OPTION	FIG.	IMP FIG	CONT PRESS	ARM TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK	TEST	READJ		
								CONN SAT.	CONN BRD									TEST WDG
RELAYS																		
A	AJS2		1						1L(A)	2U(A)	M		P/S	O		13.4	12.6	PRI AND SEC IN SERIES AIDING
									1L(A)	2U(A)	M		P/S	R		3.1	3.3	
BT	1/2AK35	ZG	1				(SW)NO			1L(BT)	GRD			O	FS	31.5	30	MOUNTED WITH (DA1)
										1L(BT)	GRD			H		4.5	4.2	
BT	1/2AK22	XJ	1				(Z) NO			1L(BT)	GRD			O		27.5	26	MOUNTED WITH (1D)
BY	1/2AK27	ZG	1				(BT)NO			1U(BY)	GRD			O		20.5	19.5	MOUNTED WITH (SW1)
RY	1/2AK30	YS	1				(BT)NO			1L(RY)	GRD			O		23	22	MOUNTED WITH (RV)
DA1	1/2AK4		4				(SW)NO			1U(DA1)	GRD			O		11.9	11.3	MOUNTED WITH (PA1)
GT	1/2AK4		1				4(GT)	2L(GT)	1L(GT)	B/G				O		11.9	11.3	MOUNTED WITH (W) S OPTION
							2M(GT)		1L(GT)	GRD				O		11.9	11.3	R OPTION
ID	1/2AK22	XJ	1						1U(ID)	GRD				O		27.5	26	MOUNTED WITH (BT)
OA	AJB3		1						U(OA)	GRD				O		13.4	12.6	
OA1	1/2AK35	ZG	1							1U(DA1)	GRD			O		12.4	11.8	MOUNTED WITH (BT)
P	B203		1			30	(PA)NO (TR)O	1M(P)	2M(P)	B/G				O		16	15	SPECIAL ADJUSTMENT ON TEST AND READJ REQUIRED
								1M(P)	2M(P)	B/G				R		6.1	6.5	
PA	AG7		1				3B(SK)			U(PA)	GRD			O	36	17.5	16.5	
										U(PA)	GRD			H	36	3.2	3	
										U(PA)	GRD			R	36	1.6	1.9	
PA1	1/2AK4		4							1L(PA1)	GRD			O		11.9	11.3	MOUNTED WITH (DA1)
RV	1/2AK4	ZR	1							1U(RV)	GRD			O		11.9	11.3	MOUNTED WITH SPARE REL
PV	1/2AK30	YS	1							1U(PV)	GRD			O		23	22	MOUNTED WITH (BY)
SK	1/2AK4		1							1L(SK)	GRD			O		11.9	11.3	MOUNTED WITH (TR)
SM	1/2AK4	XF	1							1L(SM)	GRD			O		11.9	11.3	MOUNTED WITH (T1)
SP	AJ43		1							U(SP)	GRD			O		24.5	23	
SW	AJ15	XF	1							U(SW)	GRD			O		42.5	40.5	
SW	1/2AK4	XE	1				3B(SK)			1L(SW)	GRD			O		11.9	11.3	MOUNTED WITH (T1)
SW1	1/2AK27	ZG	1				(DA1)NO			1L(SW1)	GRD			O		11	10.5	MOUNTED WITH (BY)
T1	1/2AK4	XE, XF	1				9B(U)			1U(T1)	GRD			O		11.9	11.3	MOUNTED WITH (SW)OPTION XE
																		MOUNTED WITH (SM)OPTION XF
TR	1/2AK4		1							1U(TR)	GRD			O		11.9	11.3	MOUNTED WITH (SK)
W	1/2AK4		1				4B(PA)			1U(W)	GRD			O		11.9	11.3	MOUNTED WITH (GT)
Z	AJB3		1				4B(PA)			U(Z)	GRD			O		13.4	12.6	

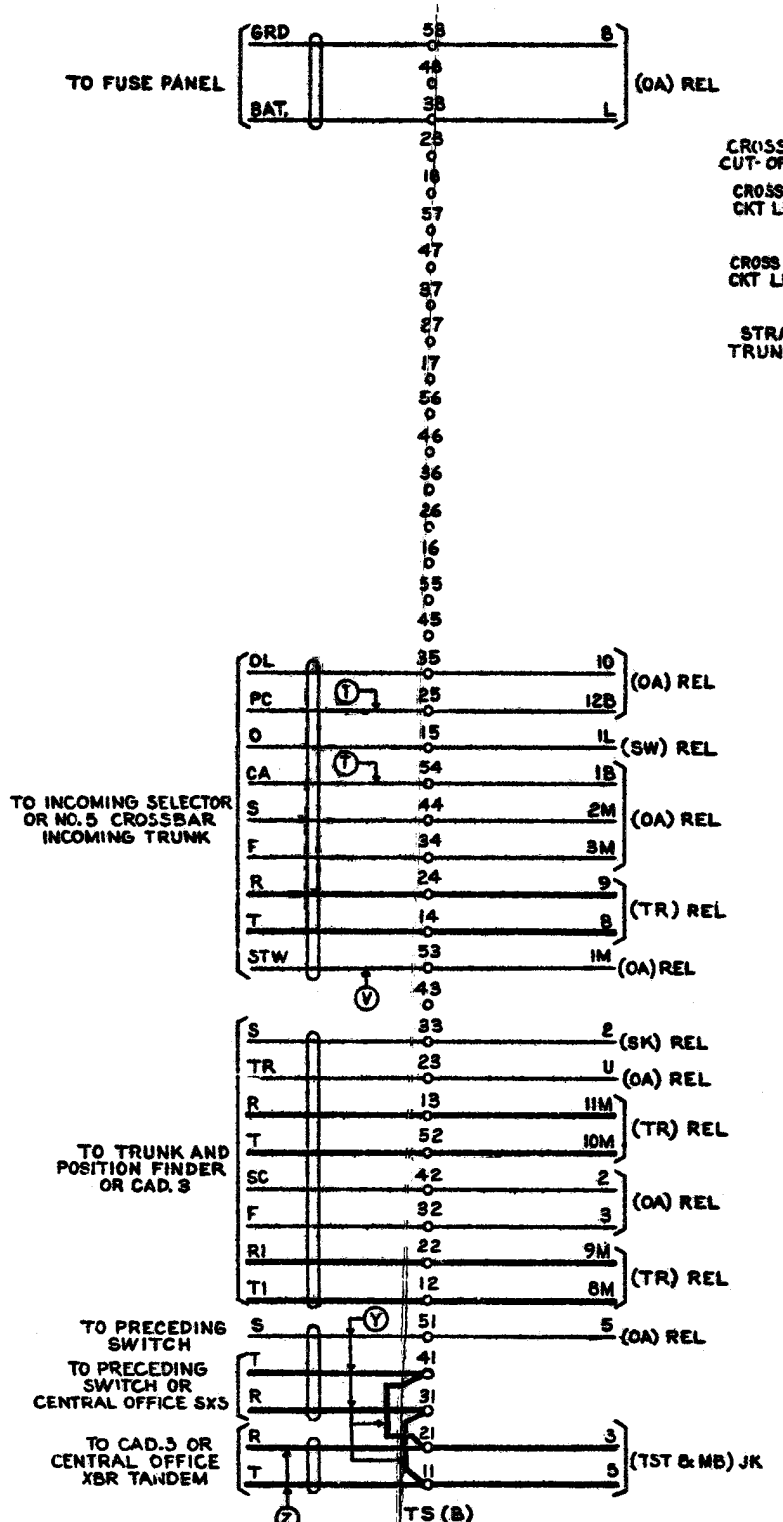
SD-65812-01-F1

TIMING REQUIREMENTS														DRAWING ISSUE	
APPARATUS			BLOCK OR INSULATE	CIRCUIT PREPARATION			TEST SET PREP			SEE NOTE	TIME REQ		REMARKS		
DESIG	OPTION	FIG.		TEST CLIP DATA			SEND KEY	REC SW			MIL-SEC				
				CONN BK	CONN R	CONN W		START	STOP		MIN	MAX			
DA		4								2					
PA		1	3B(SK)	GRD	U(PA)	12(PA)	BK	GRD	O.C.		155	365			
T	XK	1								1					
T1	YN	1	(W)NO (Z)NO	GRD	45(TSB)	25(TSB)	M	GRD	O.C.	3.5	1500	1700			
T1	YN	1	(W)NO (Z)NO 3B(SW)	GRD	45(TSB)	25(TSB)	M	GRD	O.C.	4.5	4700	5200			
												</			

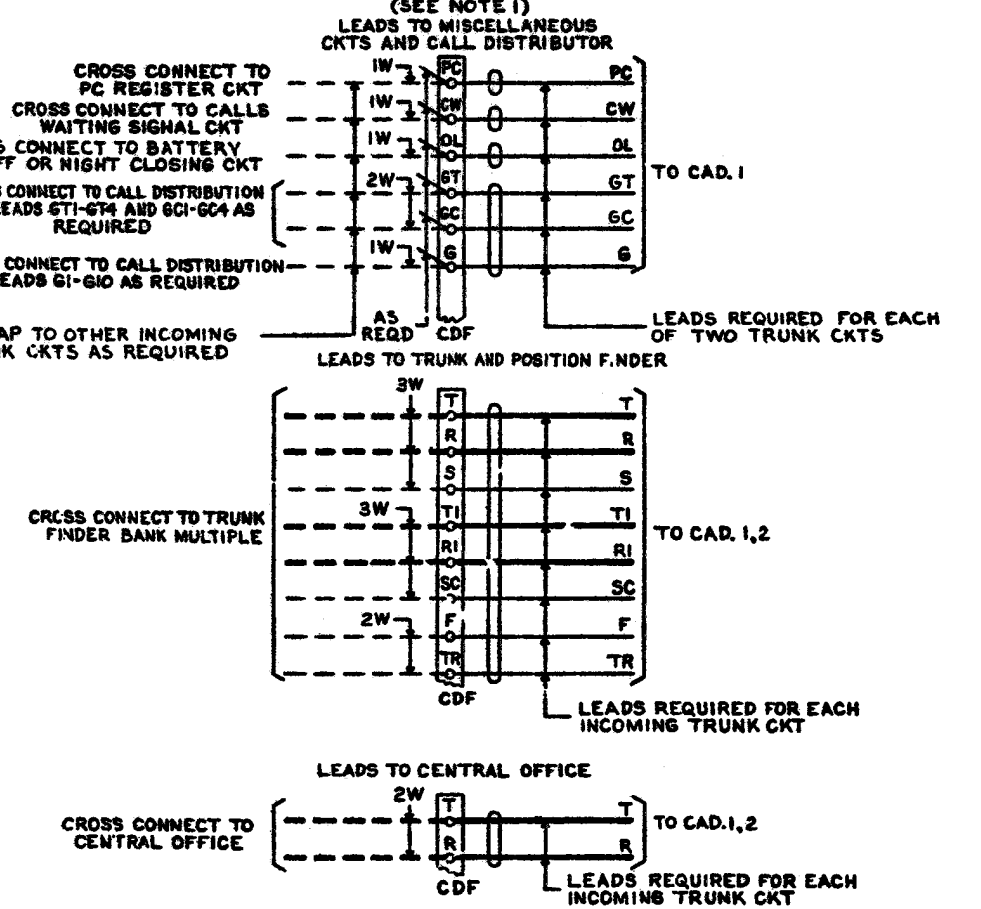
CAD. 1 (MFR DISC.)
(FOR APP FIG. 1)
CKT 1 OF UNIT



CAD. 2 (MFR DISC.)
(FOR APP FIG. 1)
CKT 2 OF UNIT



CAD. 3 (MFR DISC.)
(FOR APP FIG. 1)
INCOMING TRUNK UNIT
(SEE NOTE 1)

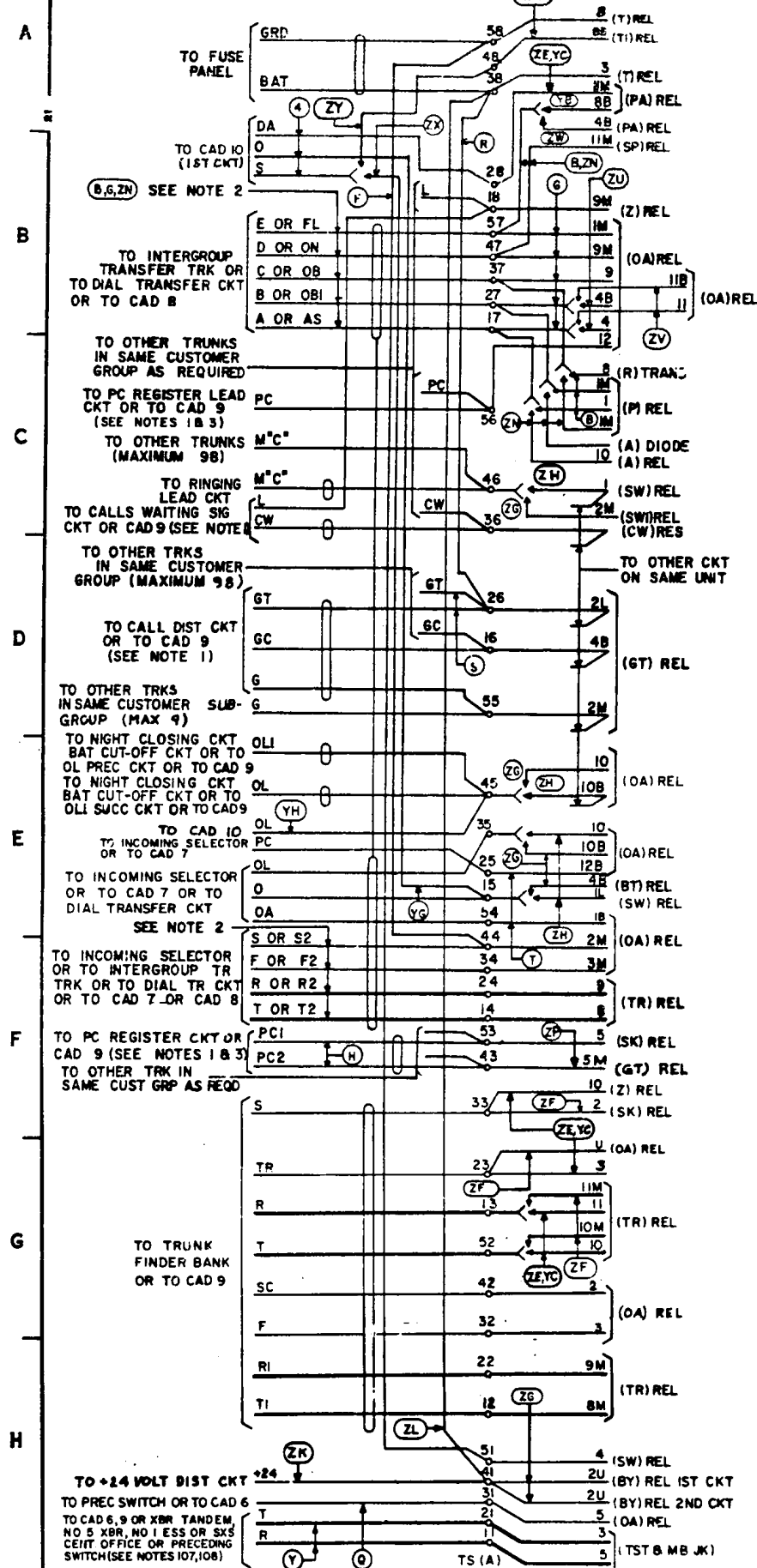


- SHEET NOTES:**
1. THE OL AND OL1 LEADS ARE CROSS CONNECTED ONCE ONLY ON THE FIRST AND LAST TRUNKS, RESPECTIVELY, OF A CUSTOMERS GROUP OF 99 TRUNKS OR LESS. WHEN THE MAXIMUM NUMBER OF TRUNKS (99) IS EXCEEDED, THE OL AND OL1 LEADS ARE AGAIN CROSS CONNECTED TO THE SUCCEEDING CONNECTING CIRCUIT.
 - THE GT AND GC LEADS ARE CROSS CONNECTED TO THE CONNECTING CIRCUIT ONCE ONLY FOR EACH CUSTOMERS GROUP OF TRUNKS, MAXIMUM 99 TRUNKS.
 - THE G LEAD IS TO BE CROSS CONNECTED ONCE ONLY FOR EACH SUBGROUP OF TEN TRUNKS.
 - THE PC LEAD IS TO BE CROSS CONNECTED ONCE ONLY FOR EACH PC REGISTER OR GROUP OF TRUNKS.
 - THE CW LEAD IS TO BE CROSS CONNECTED TO THE CONNECTING CKT ONCE ONLY FOR ALL TRUNKS IN EACH CUSTOMERS GROUP.

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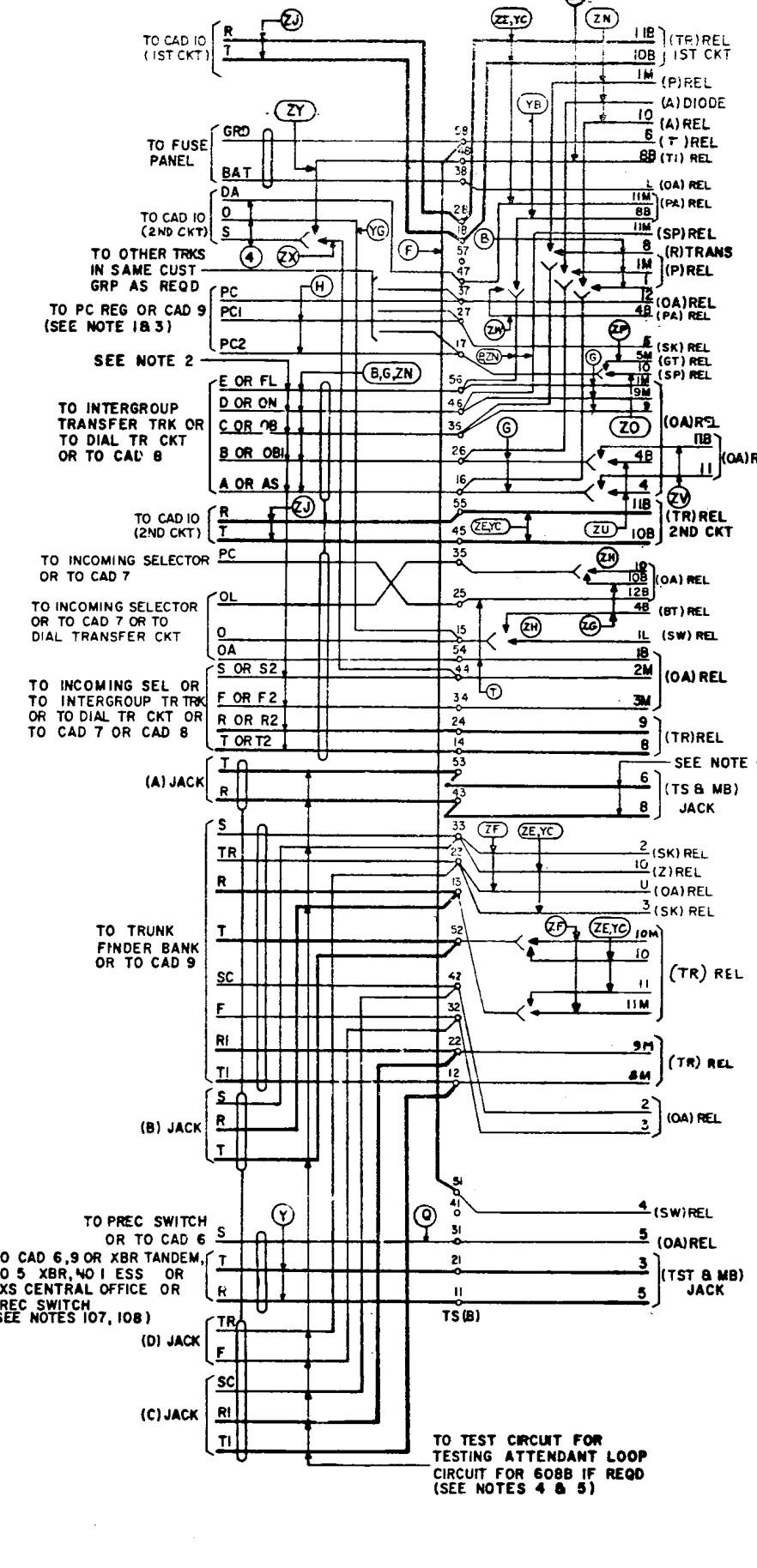
CAD 4 (MFR DISC)

(FOR APP FIG 1)
(SEE NOTE 7)
CKT 1 OF UNIT



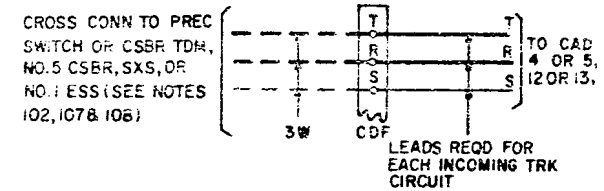
CAD 5 (MFR DISC)

(FOR APP FIG 1)
(SEE NOTE 8)
CKT 2 OF UNIT



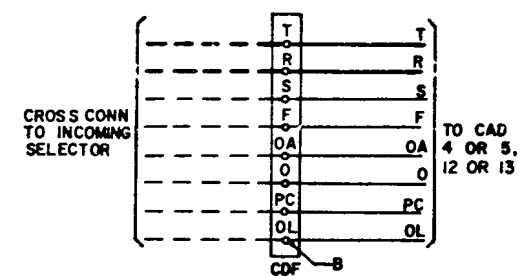
CAD 6 (MFR DISC)

CROSS CONNECTION WHEN Y AND Q OPTION IS REQUIRED



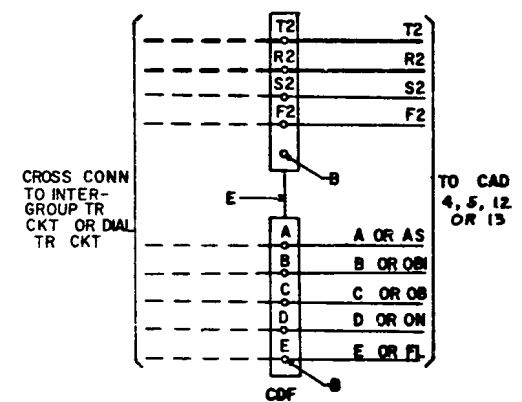
CAD 7 (MFR DISC)

DISTRIBUTING FRAME
TERMINATION TO INCOMING SELECTOR



CAD 8 (MFR DISC)

DISTRIBUTING FRAME
TERMINATION TO INTERGROUP TRANSFER TRK OR DIAL TRANSFER CKT

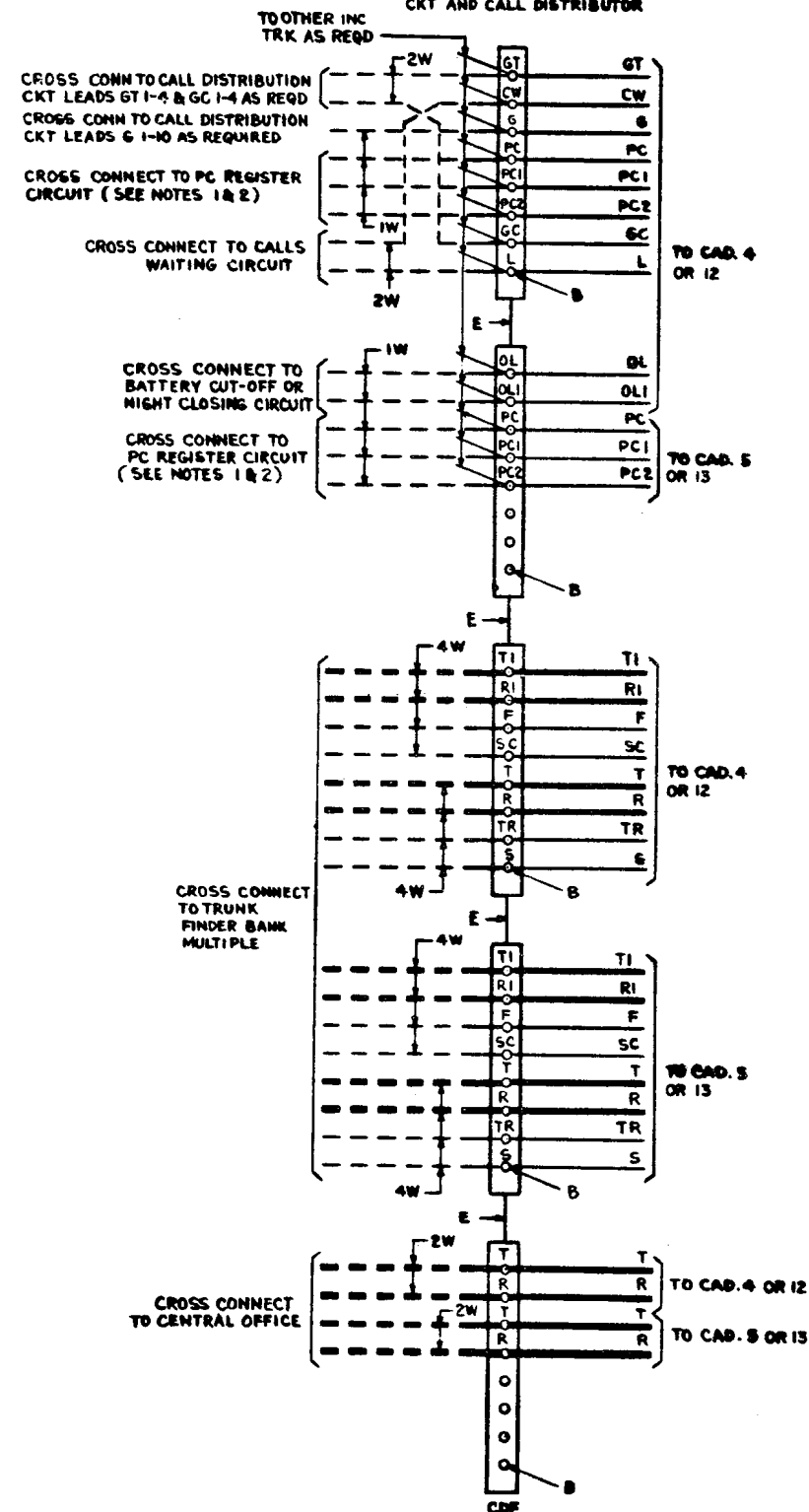


- NOTES:
1. THE OL AND OL1 LEADS ARE CROSS CONNECTED ONCE ONLY ON THE FIRST AND LAST TRUNKS, RESPECTIVELY, OF A CUSTOMER'S GROUP OF 99 TRUNKS OR LESS. WHEN THE MAXIMUM NUMBER OF TRUNKS (99) IS EXCEEDED, THE OL AND OL1 LEADS ARE AGAIN CROSS CONNECTED TO THE SUCCEEDING CONNECTING CIRCUIT.
 2. THE GT AND GC LEADS ARE CROSS CONNECTED TO THE CONNECTING CIRCUIT ONCE ONLY FOR EACH CUSTOMER'S GROUP OF TRUNKS, MAXIMUM 99 TRUNKS.
 3. THE G LEAD IS TO BE CROSS CONNECTED ONCE ONLY FOR EACH SUBGROUP OF TEN TRUNKS.
 4. THE PC, PC1 & PC2 LEADS ARE TO BE CROSS CONNECTED ONCE EACH PC REGISTER OR GROUP OF TRUNKS.
 5. THE L & CN LEADS ARE TO BE CROSS CONNECTED TO THE CONNECTING CKT ONCE ONLY FOR ALL TRUNKS IN EACH CUSTOMER'S GROUP.

- NOTES (CONT)
2. WHEN THE INTERGROUP TRANSFER TRUNKS OR DIAL TRANSFER CIRCUIT ARE LOCATED ON THE SAME MISC RELAY RACK RUN AS LOOSE WIRE, OTHERWISE RUN IN CABLE.
 3. PC PROVIDES FOR REGISTRATION OF ALL OLD CALLS. PC1 PROVIDES FOR REGISTRATION OF ALL CALLS TO ATTENDANT. PC2 PROVIDES FOR REGISTRATION OF DIRECTORY NUMBER CALLS.
 4. ONCE INCOMING TRUNK PER INSTALLATION IS REQUIRED FOR TESTING ATTENDANT LOOP CIRCUITS FOR 608B.
 5. THE INCOMING TRUNK USED FOR TESTING SHOULD NOT BE THE FIRST OR LAST TRUNK OF A GROUP OF TRUNKS.
 6. INSTALLER SHALL RUN STRAPS FROM TERMINALS 6 & 8 OF THE 1ST 2 MB JACK OF THE TRUNK USED FOR TESTING TO THE TERMINAL STRIP OF THAT UNIT.
 7. CAD 4, RATED "MFR DISC" ON ISSUE 12 OF THIS DRAWING IS REPLACED BY CAD 12. TO CONVERT A TERMINAL STRIP FURNISHED PER CAD 4 TO CAD 12, THE FOLLOWING CHANGES MUST BE MADE:
IF OPTION "F" IS PROVIDED, REMOVE THE STRAP BETWEEN PUNCHINGS 51 AND 58 OF T.S.(A). DISCONNECT THE APPARATUS END OF THE LEAD FROM PUNCHING 51 OF T.S.(A) AND RECONNECT IT TO PUNCHING 41 OF RELAY SW (1ST CKT) AND RECONNECT IT TO PUNCHING 15 OF T.S.(A) AND RECONNECT IT TO PUNCHING 51 OF T.S.(A). IF OPTION "F" IS PROVIDED, CONNECT A LEAD FROM PUNCHING 58 OF T.S.(A). IF APP. FIG. 4 IS PROVIDED, CONNECT "OL" LEAD TO PUNCHING 45 OF T.S.(A).
 8. CAD 5, RATED "MFR DISC" ON ISSUE 12 OF THIS DRAWING IS REPLACED BY CAD 13. TO CONVERT A TERMINAL STRIP FURNISHED PER CAD 5 TO CAD 12, THE FOLLOWING CHANGES MUST BE MADE:
IF OPTION "F" IS PROVIDED, REMOVE THE STRAP BETWEEN PUNCHINGS 51 AND 58 OF T.S.(B). DISCONNECT THE APPARATUS END OF THE LEAD FROM PUNCHING 51 OF T.S.(B) AND RECONNECT IT TO PUNCHING 41 OF RELAY SW (2ND CKT). IF APP. FIG. 4 IS PROVIDED, REMOVE THE "OL" LEAD FROM PUNCHING 15 OF T.S.(B) AND RECONNECT IT TO PUNCHING 51 OF T.S.(B). IF OPTION "F" IS PROVIDED, CONNECT A LEAD FROM PUNCHING 58 OF T.S.(B). CONNECT A LEAD FROM PUNCHING 3M OF RELAY SW (1ST CKT) TO PUNCHING 57 OF T.S.(B). CONNECT A LEAD FROM PUNCHING 3M OF RELAY SW (2ND CKT) TO PUNCHING 41 OF T.S.(B). IF APP. FIG. 4 IS PROVIDED, CONNECT "WK" LEADS TO PUNCHINGS 41 AND 57 OF T.S.(B).

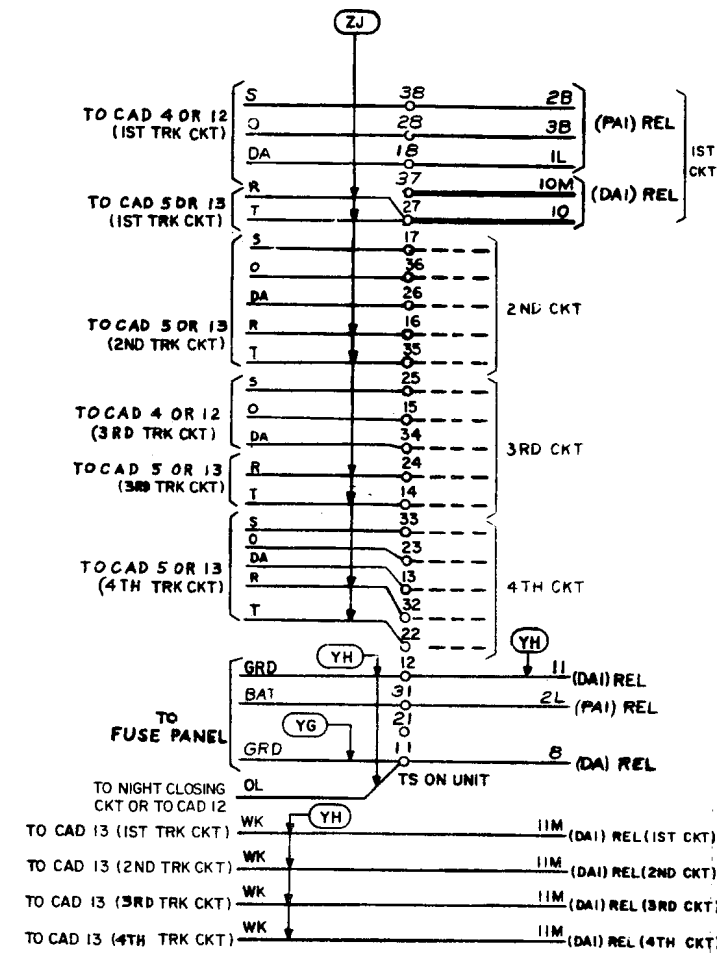
CAD.9 (MFR DISC)

(FOR APP FIG. 1)
INCOMING TRUNK UNIT
SEE NOTE 1
LEADS TO MISCELLANEOUS
CKT AND CALL DISTRIBUTOR



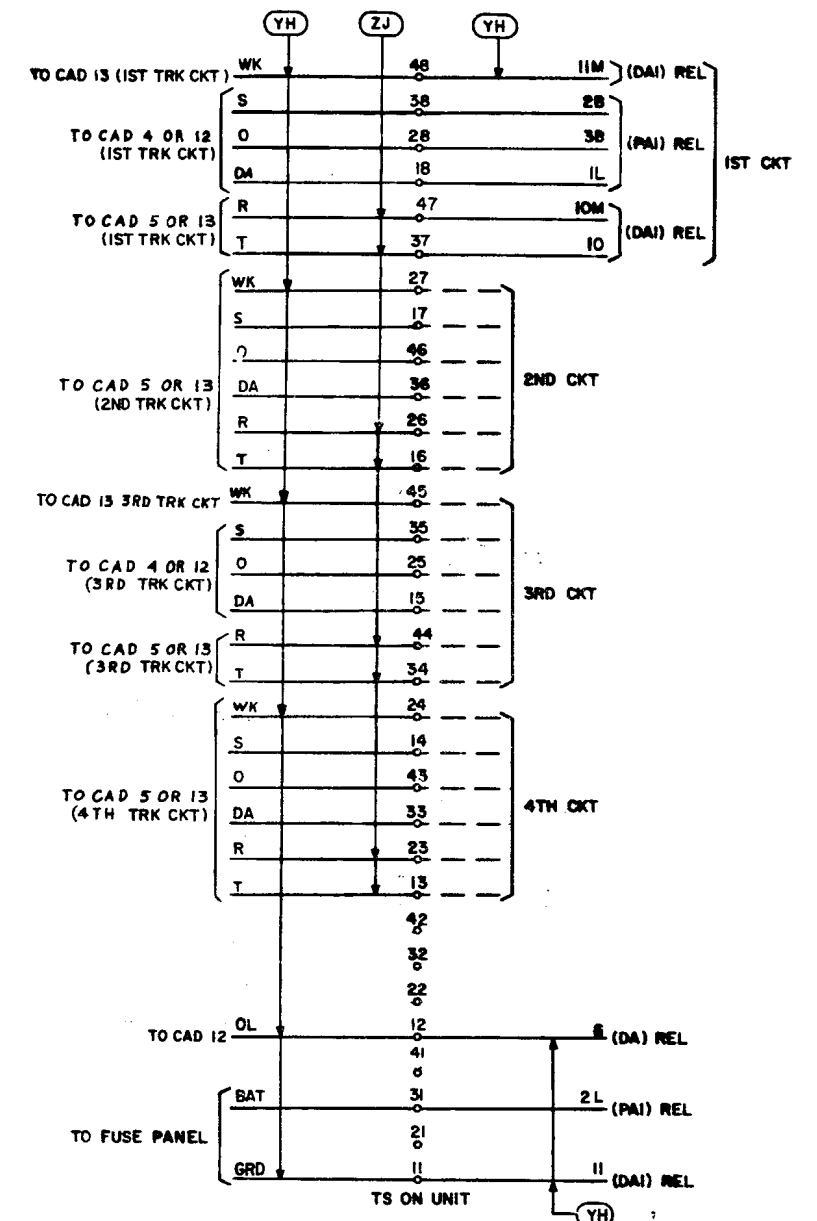
CAD. 10 (MFR DISC)

(FOR APP FIG. 4)



CAD 11 (MFR DISC)

(FOR APP FIG. 4)



SHEET NOTES:

- THE OL AND OL1 LEADS ARE CROSS CONNECTED ONCE ONLY ON THE FIRST AND LAST TRUNKS, RESPECTIVELY, OF A CUSTOMER'S GROUP OF 99 TRUNKS OR LESS. WHEN THE MAXIMUM NUMBER OF TRUNKS (99) IS EXCEEDED, THE OL AND OL1 LEADS ARE AGAIN CROSS CONNECTED TO THE SUCCEEDING CONNECTING CIRCUIT.
THE GT AND GC LEADS ARE CROSS CONNECTED TO THE CONNECTING CIRCUIT ONCE ONLY FOR EACH CUSTOMER'S GROUP OF TRUNKS, MAXIMUM 99 TRUNKS.
THE G LEAD IS TO BE CROSS CONNECTED ONCE ONLY FOR EACH SUBGROUP OF TEN TRUNKS.
THE PC, PC1 & PC2 LEADS ARE TO BE CROSS CONNECTED ONCE ONLY FOR EACH PC REGISTER OR GROUP OF TRUNKS.
THE L & CW LEADS ARE TO BE CROSS CONNECTED TO THE CONNECTING CKT ONCE ONLY FOR ALL TRUNKS IN EACH CUSTOMER'S GROUP.
- PC PROVIDES FOR REGISTRATION OF ALL DID CALLS.
PC1 PROVIDES FOR REGISTRATION OF ALL CALLS TO ATTENDANT.
PC2 PROVIDES FOR REGISTRATION OF DIRECTORY NUMBER CALLS.

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INCOMING TRUNK CIRCUIT

2

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CAD 12 (MFR DISC)

(FOR APP FIG. 1)
CKT 1 OF UNIT

YH F SEE NOTE 7

CAD 13 (MFR DISC)

(FOR APP FIG. 1)
CKT 2 OF UNIT

SEE NOTE 7

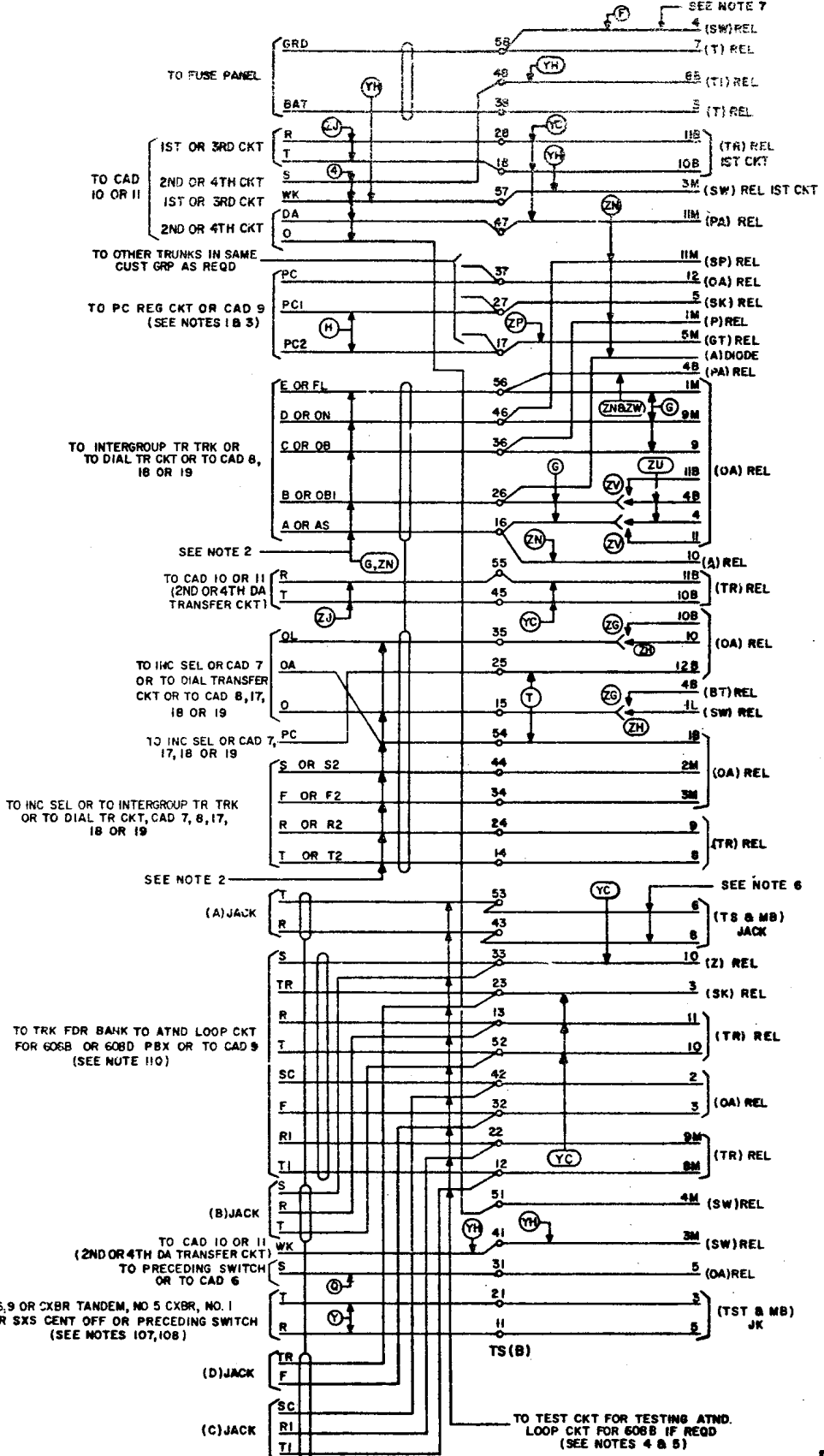
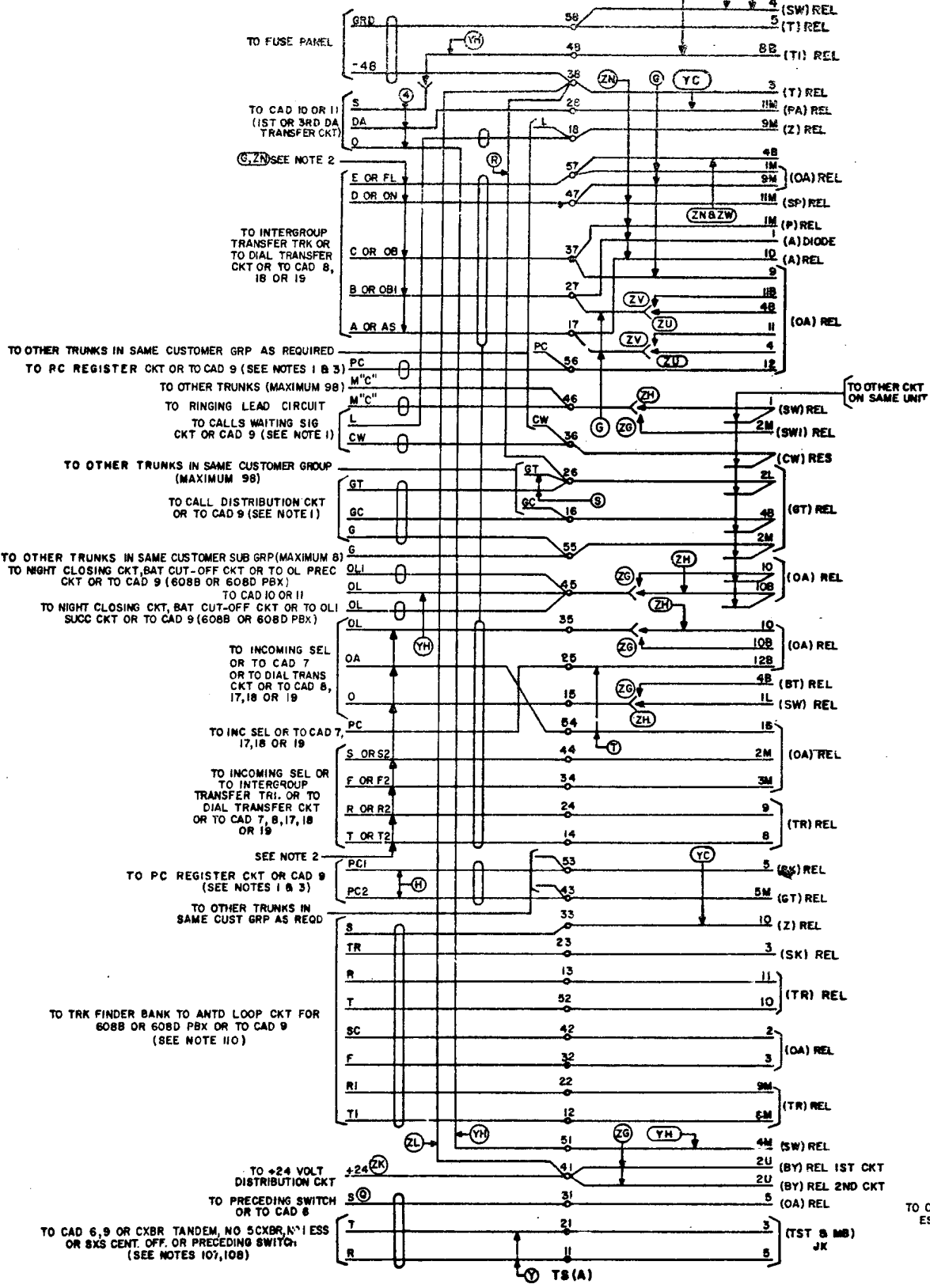
SHEET NOTES:

1. THE OL AND OLI LEADS ARE CROSS CONNECTED ONCE ONLY ON THE FIRST AND LAST TRUNKS, RESPECTIVELY, OF A CUSTOMER GROUP OF 99 TRUNKS OR LESS. WHEN THE MAXIMUM NUMBER OF TRUNKS (99) IS EXCEEDED, THE OL AND OLI LEADS ARE AGAIN CROSS CONNECTED TO THE SUCCEEDING CONNECTING CIRCUIT.
THE GT AND GC LEADS ARE CROSS CONNECTED TO THE CONNECTING CIRCUIT ONCE ONLY FOR EACH CUSTOMER GROUP OF TRUNKS, MAXIMUM 99 TRUNKS.
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THE PC, PC1 & PC2 LEADS ARE TO BE CROSS CONNECTED ONCE EACH PC REGISTER OR GROUP OF TRUNKS.
THE L & CW LEADS ARE TO BE CROSS CONNECTED TO THE CONNECTING CKT ONCE ONLY FOR ALL TRUNKS IN EACH CUSTOMER GROUP.
2. WHEN THE INTERGROUP TRANSFER TRUNKS OR DIAL TRANSFER CIRCUIT ARE LOCATED ON THE SAME MISC RELAY RACK RUN AS LOOSE WIRE; OTHERWISE RUN IN CABLE.
3. PC PROVIDES FOR REGISTRATION OF ALL DID CALLS. PC1 PROVIDES FOR REGISTRATION OF ALL CALLS TO ATTENDANT. PC2 PROVIDES FOR REGISTRATION OF DIRECTORY NUMBER CALLS.
4. ONE INCOMING TRUNK PER INSTALLATION IS REQUIRED FOR TESTING ATTENDANT LOOP CIRCUITS FOR 608B.
5. THE INCOMING TRUNK USED FOR TESTING SHOULD NOT BE THE FIRST OR LAST TRUNK OF A GROUP OF TRUNKS.
6. INSTALLER SHALL RUN STRAPS FROM TERMINALS 6 & 8 OF THE TST AND MB JACK OF THE TRUNK USED FOR TESTING TO THE TERMINAL STRIP OF THAT UNIT.
7. WHEN OPTION "F" IS NOT REQUIRED, THE INSTALLER SHALL REMOVE THE LEAD FROM PUNCHING 58 OF TS(A) AND TS(B) TO TERMINAL 4 OF THE SW RELAY ON CKT 1 AND CKT 2 RESPECTIVELY.

A
B
C
D
E
F
G
H

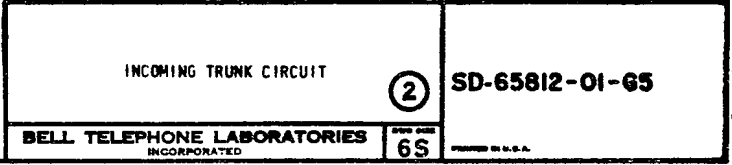
DRAWING
ISSUE
FED
240-105
14B

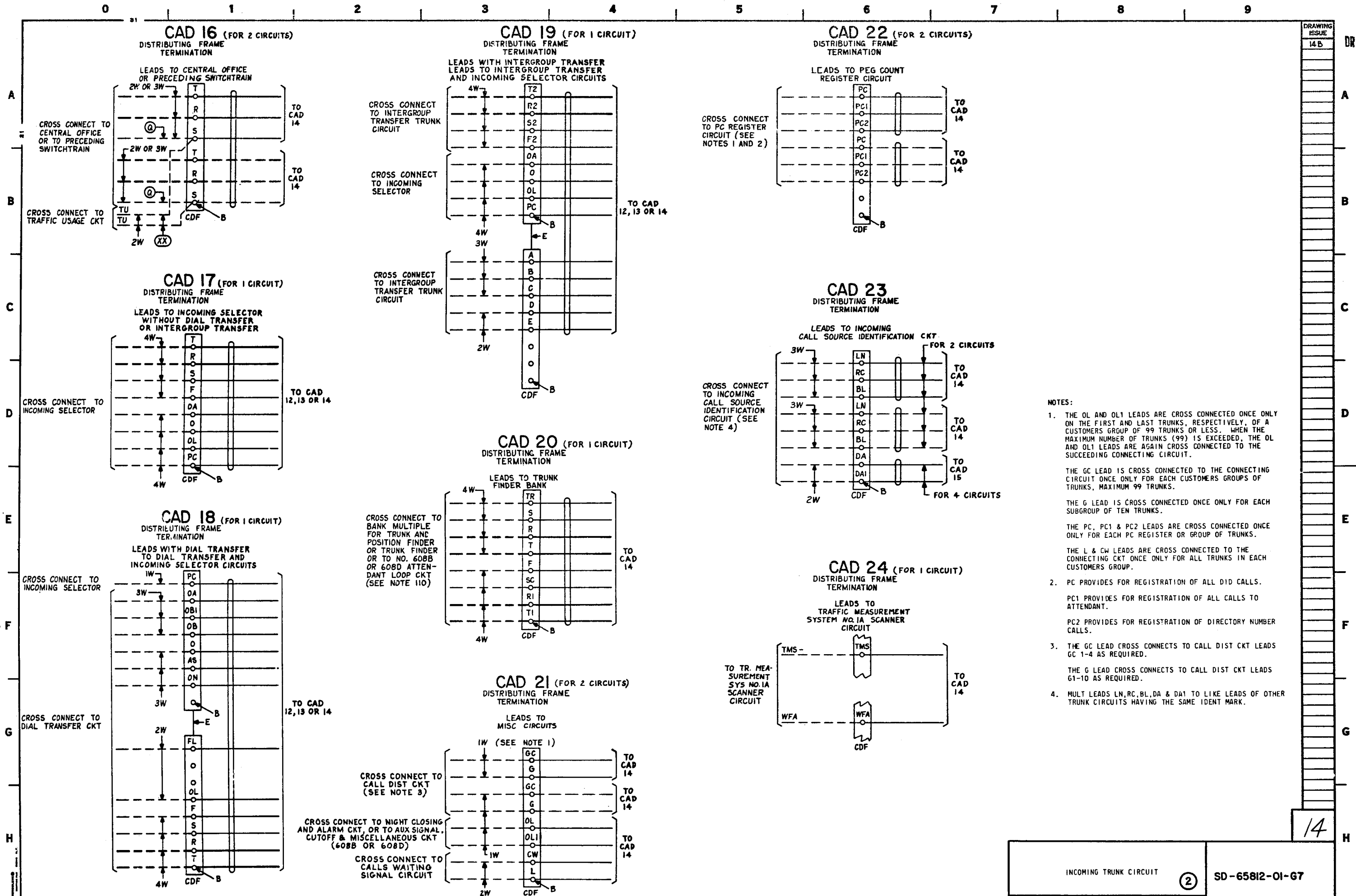
A
B
C
D
E
F
G
H



SD-65812-01-64

(FOR APP FIG. 1 AND 5)



DRAWING
ISSUE
14 B

14

INCOMING TRUNK CIRCUIT

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