SHEET INDEX

CONTENTS	SHEET NO. PRIOR TO ISSUE 12	SHEET NO. CURRENT ISSUE	ISSUE NO. 12	13	14	SHEET NO.
SHEET INDEX SUPPORTING INFORMATION	A	A1	12	13	14	A1
OPTION INDEX	1	A2	12	13	14	A2
FS 1 INCOMING TRUNK	2	B1A	12	13	14	B1A
		B1B			14	B1B
FS 2 TEST CIRCUIT FOR TESTING ATTENDANT LOOP CKT FOR 608B OR 608D PBX FS 3 PATCHING CORDS FOR TEST CKT FS 4 BUSY LINE TRANSFER FS 5 DA TRANSFER	9	B2	12	13	14	B2
APP FIG. 1	3	C1	12	13	14	C1
APP FIG. 2,3,4,5		C2			14	C2
WORKING LIMITS CIRCUIT NOTES 101-104		D1	12	13	14	D1
CIRCUIT NOTES 105 TO END EQUIPMENT NOTES INFORMATION NOTES TRANSMISSION TEST REQT		D2			14	
SC 1 INCOMING CALL TO ATTENDANT SC 2 DISCONNECT SC 3 INCOMING CALL TO STATION SC 4 CALLED STATION FLASH FOR TRANSFER SC 5 DIAL TRANSFER CALLED STATION DIALS ATTENDANT	4 —	E1	12	12	14	E1
SC 6 BUSY LINE TRANSFER SC 7 DO NOT ANSWER TRANSFER	10	E2	12	12	14	E2
SC 8 DISCONNECT	11	E3	12	12	14	E3
SC 9 INCOMING CALL SC 10 DIRECTORY NUMBER CALL		E4			14	E4
SC 11 ATTENDANT RECALL SC 12 DIAL TRANSFER SC 13 DIAL TRANSFER CALLED PARTY DIALS ATTENDANT		E5			14	E5
SC 14 BUSY LINE TRANSFER SC 15 DONT ANSWER TRANSFER		E6			14	E6
SC 16 DISCONNECT ON CALL TO STATION SC 17 DISCONNECT ON A DIRECTORY NUMBER CALL		E7			14	E7
CKT REQT TABLE TIMING REQD.	5	F1	12	12	14	F1
CAD. 1, 2, 3	6	G1	12	12	12	G1
CAD. 4, 5, 6, 7, 8	7	G2	12	12	14	G2
CAD. 9, 10, 11	8	G3	12	12	14	G3
CAD. 12, 13		G4	12	12	14	G4
PART OF CAD 14		G5			14	G5
PART OF CAD 14, CAD 15		G6			14	G6
CAD 16-24		G7			14	G7

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 ISS	C D ISS	DWG ISS	C D ISS	DWG ISS	C D ISS
3B	2B	4B	3B	5B	3B
6AC	3B	7B	4B	8B	4B
9D	4B	10AC	5AC	11D	5AC

DWG ISS	CODE IDENT ISSUE	DATE ISSUE	DRN	APPD
12AC	5AC APP 2AC	10-8-86	GAH FLS RLS	AEK LAH RHP
13AC	5AC APP 3AC	5-2-67	CED PJS EAA	AEK LAH RHP
14B	6B	1-4-72	RFN RWK HCA CBH	AEK FLS AFR

14

SD-65812-01 1J07

PBX SYSTEMS
NO. 701B
INCOMING TRUNK CIRCUIT

ARRANGED TO TRANSFER STATION CALLS AND ROUTE DIRECTORY NUMBER CALLS TO ATTENDANT FOR USE WITH INWARD DIALING

(2)

AT&TCO STANDARD

SD-65812-01-A1
24 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

SD-65812-01-A1

OPTION INDEX

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

DRAWING ISSUE

12AC	RCZ PCJ RHP	HW
13AC	CED PJS RHP	
14B		DR

INCOMING TRUNK CIRCUIT

SD-65812-01-A2

BELL TELEPHONE LABORATORIES INCORPORATED

SHEET 6S

SD-65812-01-A2

PART OF FSI
INCOMING TRUNK

DRAWING ISSUE 14B

TO PRECEDING SWITCH OR XBR TANDEM NO.5 XBR, SXS OR NO.1 ESS CENT OFFICE (SEE NOTES 107&108)

TST &MB TST

TST D4

TO 2BI

SEE NOTE 1

TO TRAFFIC USAGE CKT OR TO TRAFFIC MEASUREMENT SYSTEM NO. IA (SEE NOTE 116)

TUOR TMS

TO PRECEDING SWITCH

TO RINGING LEAD CKT OR TO POWER DIST CKT

TO OTHER TRKS AS REQD

TO CALLS WAITING SIGNALS CKT

TO OTHER TRKS IN THE SAME CUST GRP

TO TR MEASUREMENT SYSTEM NO. IA

TO DIAL TRANSFER CKT

TEST POINT FOR TIMING TEST OF (TI) RELAY

T RELAY TIME DELAY CKT

TEST POINT FOR TIMING TEST OF (PA) REL

TO OTHER TRK CKTS HAVING THE SAME IDENT MARKS

TO INC CALL SRC IDENT CKT

TO DIAL TRANSFER CKT

TO INCOMING SELECTOR, INTERGROUP TRANSFER TRK OR DIAL TRANSFER CKT

TO 2C9

TO 2C7

TO 2CI

TO TRK & POS FDR, TO TRK FDR OR TO ATND LOOP CKT FOR 608B OR 608D PBX (SEE NOTE 110)

TO IB/E5

TO IB/CI

SHEET NOTES:

1. DENOTES FIXED SPRING OF (A) RELAY.
2. BAT. FOR PIN 4 OF CONN (T) IS OBTAINED FROM FIRST CKT ON UNIT ONLY.

14

INCOMING TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-65812-01-BIA

SD-65812-01-BIA

PART OF FS I

INCOMING TRUNK

DRAWING ISSUE 14B

TO INCOMING SELECTOR INTERGROUP TRANSFER TRK OR DIAL TRANSFER CKT

TO TRK & POS FDR, TRK FDR OR ATND LOOP CKT FOR 608B OR 608D PBX (SEE NOTE 110)

(SEE NOTES 113 & 202)

TO DIAL TRANSFER CKT

TO 287

TO NIGHT CLOSING CKT OR TO AUX SIG CUT-OFF AND MISC CKT 608B OR 608D PBX

TO TRK AND POS FDR, TRK FDR OR TO ATND LOOP CKT FOR 608B OR 608D PBX (SEE NOTE 110)

2C9

TO INCOMING SELECTOR OR DIAL TRANSFER CKT

TO INTERGROUP TRANSFER TRK

INCOMING TRUNK CIRCUIT (2)

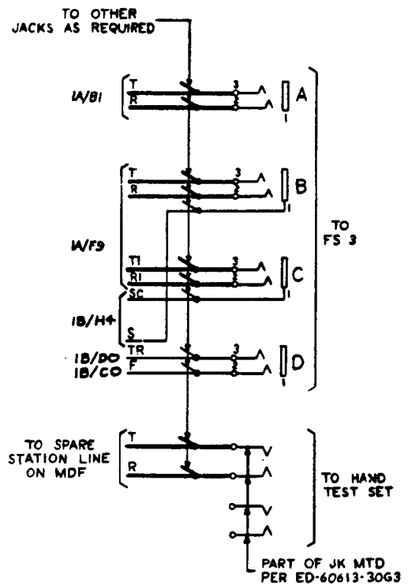
BELL TELEPHONE LABORATORIES INCORPORATED

SD-65812-01-BIB

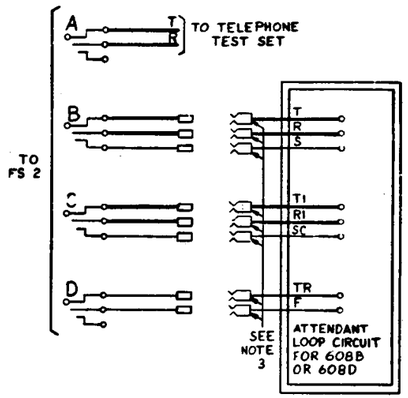
14

SD-65812-01-BIB

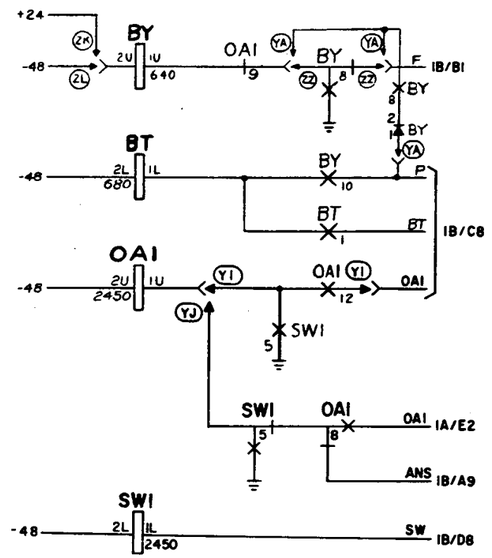
FS 2
TEST CIRCUIT FOR TESTING ATTENDANT LOOP CIRCUIT FOR 608B OR 608D PBX (SEE NOTES 1 & 2)



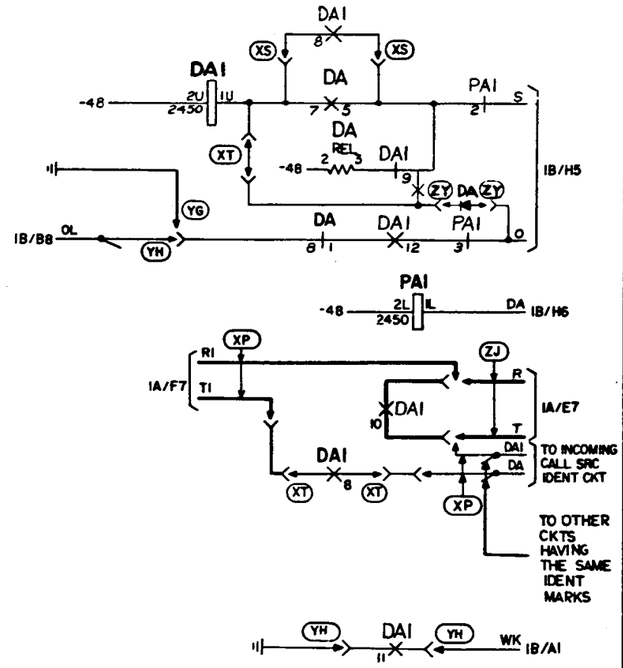
FS 3
PATCHING CORDS FOR TEST CIRCUIT (SEE NOTES 1 & 2)



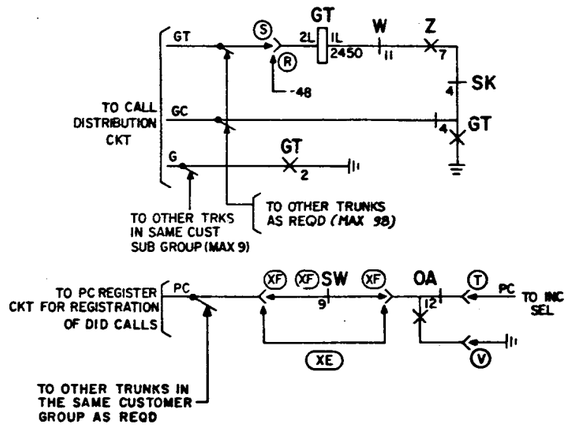
(2G) FS 4
BUSY LINE TRANSFER

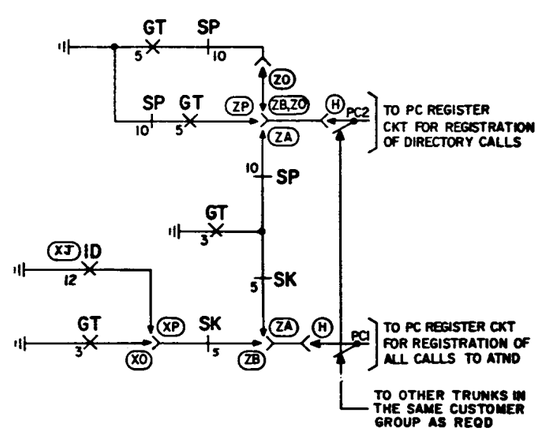


(4) FS 5
DA TRANSFER



PART OF FS 1
INCOMING TRUNK





SHEET NOTES:

1. THE JACK MOUNTING FOR THE TEST CIRCUIT SHOULD BE MOUNTED ON THE RELAY RACKS ASSOCIATED WITH THE ATTENDANT LOOP CIRCUIT.
2. THE INCOMING TRUNK WIRED TO THE TEST CIRCUIT SHOULD BE CHOSEN AS TO ITS AVAILABILITY FOR TEST PURPOSES AND SHOULD NOT BE THE FIRST OR LAST TRUNK OF A GROUP OF TRUNKS.
3. THE 624B TOOLS ARE REQUIRED TO ADAPT THE 360 TOOLS OF THE PATCHING CORDS TO THE SQUARE TERMINALS ON THE TERMINAL STRI. OF THE ATTENDANT LOOP.

DRAWING ISSUE: 5B, 7B, 10AC, 11D, 12AC, 13AC, 14B

14

INCOMING TRUNK CIRCUIT (2) SD-65812-01-B2

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-B2

APP FIG I

RELAY

DESIG	A				BT	1D			BT	OA1			BY	RV			BY	SW1							DESIG
CODE	AJ52				AK22				AK35				AK30				AK27								CODE
OPTION					XJ				ZG				YS				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							EBM	a			M	2C6			M		M								12
11							EBM	1A/E6			EBM				EBM	1B/E5	M								11
10	M	a					EBM	1A/F8			EBM				EBM	1A/C7	M	2B6							10
9							EMB	1A/E9			EMB	2B6			EMB	1A/C4									9
8	EMB	1B/G3					EMB	1B/D1			EMB	2C6			EMB	1A/B4	EMB	2B6							8
7																									7
6	EMB	b																							6
5					EMB	1A/E7			EMB	1A/E7			EMB	1B/G1					EMB	a					5
4	EBM	1B/C7			EMB	1B/D2			EMB	1B/F8			EMB	1A/E1					B						4
3					EBM	1A/D3			EBM	1A/D3			EBM	1B/D8											3
2	M	c			EBM	1A/F3			EBM	1A/B3			EBM	1B/C6					M	1A/E1					2
1					EBM	1A/F7			M	2C6			M	1B/F2					EB						1
COIL		1A/C3				1B/D8		1B/E1		2B5		2C5		1B/H2		1A/E5		2B5		2D5					COIL

(ZM) 1A/G2 a
(ZN) 1B/A8

(XF) 1B/D8 b
(XE) 1A/D7

(XF) 1A/C7 c
(XE) 1B/D6

1A/G1 a
2G6

(YI) 2C6 a
(YJ) 2D6

RELAY
B203

P
A 2 1
1B/A8
1A/C7

RELAY
KS-16615,L11

(YK) T
8 4 5 7
1B/C4
2 3
1A/F3

CAPACITOR

DESIG		LOC	CODE
A		1A/C6	439B
[1] B		1A/C6	439B
[1] R		1A/D1	
(YM) T1		1A/G4	542G

RELAY

DESIG	GT		W												OA		PA						DESIG
CODE	AK4														AJ83		AG7						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	
12			M	a											EBM	2G5	M	1A/H5					12
11			EBM	2F4											EBM	f	M	1B/G6					11
10			EBM	1A/F1											EBM	d	EBM	1B/G3					10
9			EMB	1B/B2											EBM	1B/G9	M	1B/E2					9
8			EMB	1B/B0											EMB	a	EBM	a					8
7															EBM	b							7
6															EMB	c	EBM	1A/F1					6
5	EMB	b													EMB	1A/D3	M	1B/A0					5
4	EMB	2F5													EBM	e	EBM	b					4
3	EBM	a													EBM	1B/C0	M	1A/E1					3
2	EBM	2F4													EBM	1B/E5	M	1B/D5					2
1	M	1B/E4													EBM	1B/F8	M	1A/C5					1
COIL		2F4		1B/B1												1B/F0		1B/A7					COIL

(ZA) 2G7 a
(XP) 1B/D1
(XO) 2G6

(Z8,Z0) 2F6 b
(ZP) 2F7

(YU) 1B/C3 a
(YW) 1B/E6

(YC,ZE) 1A/F2 a
(YY) 1A/F1 1B/C6

(YV) 1B/C3 1A/E3 b
(YU) 1B/D5

1A/H1 c
1B/B5

(XF,ZH) 1B/C7 d
(ZG) 1B/C8

(ZT) 1A/E2 e
(ZU) 1B/G8

(B,ZN) 1A/F1 f
(ZV) 1B/F8

(YB) 1A/G1 a
(YT,ZR) 1A/E4

(YW) 1B/E6
(ZW) 1A/G0 b
(ZM) 1B/B2

RELAY

DESIG	SK		TR						SM		T1		SP				SW						DESIG
CODE	AK4								AK4				AJ43				AJ15						CODE
OPTION									XF								XF						OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARP	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12			M	1B/C1					M	1B/B3			EBM	1A/E4			EBM	1B/F1					12
11			EBM	a					EBM	1A/F3			EBM	1A/F1			EBM	1B/G5					11
10			EBM	b					EBM	1A/C7			EBM	c			EBM	1B/D8					10
9			EMB	1A/B8					EMB	1B/E5			EBM	b			EBM	2G4					9
8			EMB	1A/D8					EMB	1B/F5			EMB	a			EMB	1A/G6					8
7													EBM	1A/H1			EBM	1B/A3					7
6													EMB	1A/D2			EMB	1B/F7					6
5	EMB	2G7							EMB				EMB	1A/B2			EMB	1B/F7					5
4	EMB	2F5							EMB	1B/C1			EBM	1B/D5			EBM	1B/E2					4
3	EBM	a							EBM				EBM	1B/B4			EBM	a					3
2	EBM	1B/E4							EBM	1B/F7			EBM	1A/B6			EBM	1A/G1					2
1	M	1A/H0							M	1B/G1			EBM	1A/D8			EBM	IA/E1					1
COIL		1B/F4		1A/G0						1B/C5		1A/F4		1B/D4				1B/E8					COIL

(ZF) 1A/F2 a
(YC,YY,ZE) 1B/E0

(ZF) 1A/E8 a
(YC,YY,ZE) 1A/E8

(YC,YY,ZE) 1A/E7 b
(ZF) 1A/E6

(ZO) 1A/C5
(XP) 1A/F6 a
(ZG) 1B/C8

(ZP) 1A/C5 b
(ZD) 1B/B8

(YW,ZN) 1A/G2
(ZB,ZO) 2F7 c
(ZP) 2F6
(ZA) 2F7

1A/H3 a
1B/A0

RELAY

DESIG	SW	T1							RV						Z						DESIG
CODE	AK4								AK4						AJ83						CODE
OPTION	XE								ZR												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	1B/B3							M	1A/E5			EBM	1B/C3					12
11			EPM	1A/F3							EBM	1B/E5			EBM	a					11
10			EPM	1A/C7							EPM	1A/C7			EBM	1B/F4					10
9			EMB	1B/E5							EMB	1A/C4			EBM	1A/F0					9
8			EMB	1B/F5							EMB	1A/B4			EMB	1A/H1					8
7															EBM	2F5					7
6															EMB	1A/D3					6
5	EMB	1B/A3							EMB						EMB	1B/C2					5
4	EMB	1B/E2							EMB						EBM	1B/C0					4
3	EPM	b							EBM						EBM	1B/A1					3
2	EPM	1A/G1							EPM						EBM	1A/E1					2
1	M	a							M						EBM	IA/E1					1
COIL		1B/E8		1A/F4								1A/E5				1B/D2					COIL

(ZH) 1A/E1 a
(ZG) 1B/C8

1A/H3 b
1B/A0

(YQ) 1A/E4 a
(XD) 1B/C4

DIODES

DESIG		LOC	CODE
(XV)	A	1A/B7	420G
(XW)	A	1A/B7	446F
(A)	B	1B/F7	420G
(XU)	BLH	1B/B5	446F
(YE,ZC)	C	1B/B7	420G
(YC,ZE)	D	1B/F3	420G
(YY)	D	1B/F3	446F
(ZE)	E	1B/F4	420G
(XV)	P	1A/C7	420G
(XW)	P	1A/C7	446F
(YM)	T1	1A/F4	446F
(XV)	W	1B/B1	420G
(XW)	W	1B/B1	446F
(YA)	BY	2B6	446F
(XZ)	WFA	1A/F0	446F

JACK

DESIG		LOC	CODE
(ZS)	TST & MB	1A/C1	290B
(ZT)	TST	1A/C1	290B

NETWORK

DESIG	LOC	CODE
PA	1B/A7	186A

RESISTOR

DESIG		LOC	CODE
(M)	CW	1A/F0	18KB
(N)	CW	1A/F0	18KF
(ZS)	MB	1A/C2	146C,4870
(ZS)	MBI	1A/C2	146C,4870
	S	1B/D3	19BM
(YM)	T1	1A/G3	144A, 0.657 MEG
(YM)	T2	1A/G3	144A, 1.35 MEG
	WK	1B/B0	19WR

TRANSFORMER (SEE NOTE 105)

DESIG		LOC	CODE
(X)	R	1A/B6	120C REP COIL
(W)	R	1A/B6	120CS REP COIL

DRAWING ISSUE
14 B

14

INCOMING TRUNK CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-65812-01-CI

SD-65812-01-CI

APP FIG 2

JACKS

DESIG	LOC	CODE
A	2B1	238A
B	2B1	238A
C	2C1	238A
D	2C1	238A

MOUNTING

DESIG	LOC	CODE
JACK MOUNTING	2D1	ED-60613-30G3

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

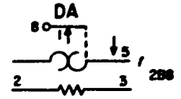
APP FIG 4

RELAY

DESIG									PA1		DA1												DESIG
CODE									AK4														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	
12											M	2B8											12
11											EBM	2D8											11
10											EBM	2C8											10
9											EM2	2B8											9
8											EM2	a											8
7																							7
6																							6
5									EMB														5
4									EM2														4
3									EBM	2B9													3
2									EBM	2B9													2
1									M														1
COIL									2C8			2B8											COIL

a: (XS) 2A8, (XT) 2D8

RELAY
KS-16615-L8
DA



DIODE

DESIG	LOC	CODE
(ZY) 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-( )

DRAWING ISSUE 14-B

14

INCOMING TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-65812-01-C2

6S

SD-65812-01-C2

CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
	1-1/3	-48V	APP FIG. 1 Z OR Y OPT 5 & 4 APP FIG. 4
	1-1/3	+24V	2 APP FIG. 1

BATTERY SYMBOL	VOLTAGE RANGE
-48	44-52V

102.

FEATURE OR OPTION			PROVIDE APP FIG	PROVIDE APP OR WRG	PROVIDE 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	STEP-BY-STEP	WITH 608 SWITCHBOARD PROVIDED		XI,XL	
		WITH CONSOLE PROVIDED AND LAMP REPEATING IS PROVIDED		XI,XL	
		WITH CONSOLE PROVIDED AND LAMP REPEATING IS NOT PROVIDED		XI, XK	
	CROSSBAR HAVING LISTED NUMBER DIGIT TRANSLATION (SINGLE DIGIT SENT)	PROVIDED		F, XH	
		NOT PROVIDED		XG, XH	
BUSY LINE TRANSFER	NOT PROVIDED			XM	
	PROVIDED SEE NOTE 113	WITH 608 SWBD OR LAMP REPEATING PROVIDED		XJ XN, XR, ZK	
		WITH 608 SWBD OR LAMP REPEATING NOT PROVIDED		XJ XN, 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	ISS 7 OR PRIOR OF SD-65830-01		YZ	
		ISS 8 OR LATER OF SD-65830-01		XA	
	CONSOLE PROVIDED PER	ISS 11 OR PRIOR OF SD-65813-01		YZ	
		ISS 12 OR LATER OF SD-65813-01		XA, XB	
INCOMING CALL IDENTIFICATION	NOT PROVIDED			XQ	
	PROVIDED SEE NOTE 115			XP,XQ 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	PROVIDE APP OR WRG	PROVIDE QUANTITY

103.

NETWORK VALUES			
NETWORK NO.	NETWORK CODE	RESISTANCE IN OHMS	CAPACITANCE IN UF
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			
3B	G	NONE	102,109	E,B,G			
3B	F	NONE	102	F			
4B	E OR P	E	102	E		B	
4P	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	Z1 OR ZJ	NONE	102,114	Z1,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	ZX	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		Y1	
14B	YK,YM, YO OR YP	YK	102, 111	YM,YN, 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	Y1,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

DRAWING ISSUE 14B

14

INCOMING TRUNK CIRCUIT (2) SD-65812-01-DI

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-DI

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:

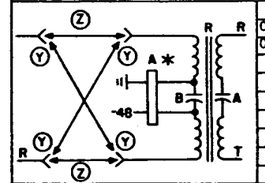
201. PROVIDE UNIT ED-99555 DASH NO. AND GROUP ASSEMBLY WHICH PROVIDES TWO CIRCUITS PER UNIT WITH EACH CONSISTING OF AN INTERNAL 2 UF CAPACITOR.

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

DRAWING ISSUE 14B

14

INCOMING TRUNK CIRCUIT (2)

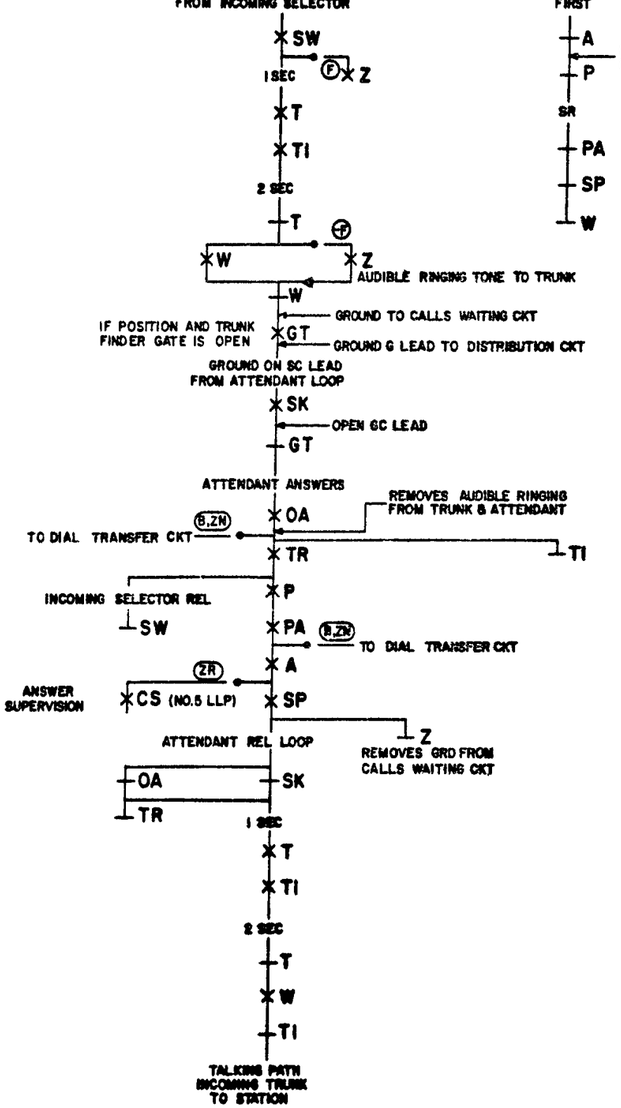
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-D2

SD-65812-01-D2

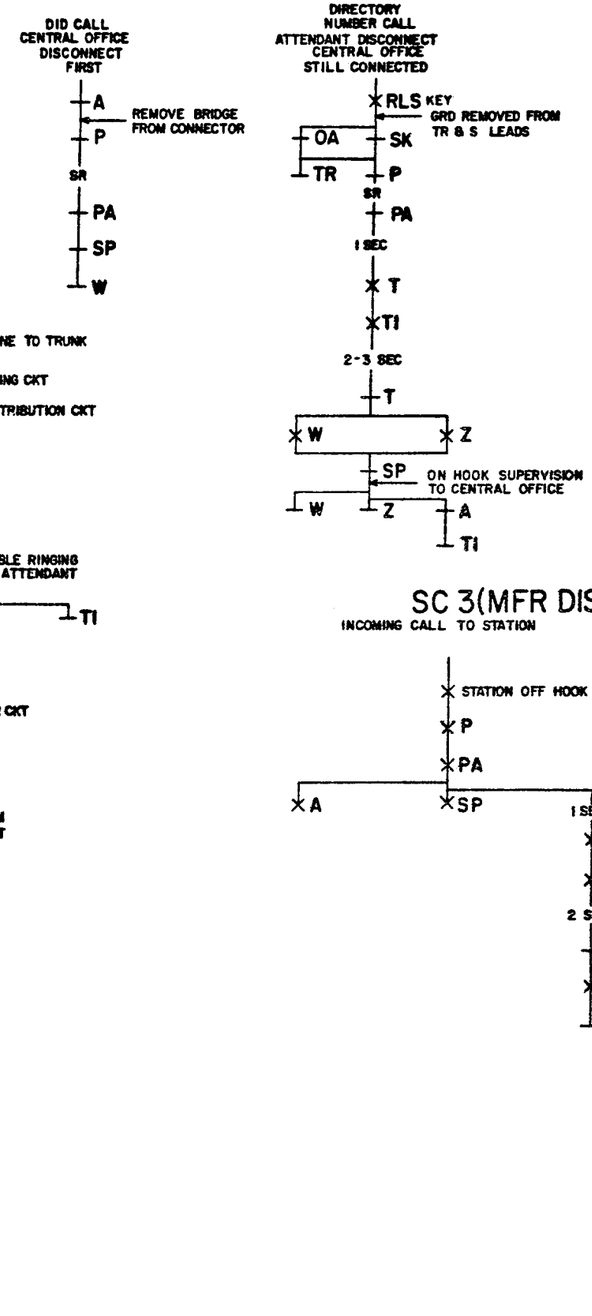
SC 1 (MFR DISC)

INCOMING CALL TO ATTENDANT



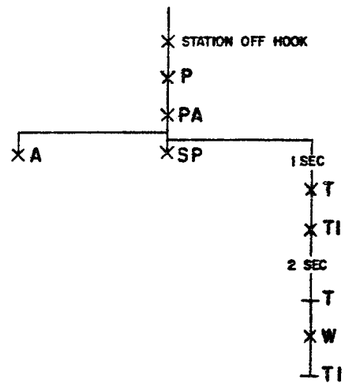
SC 2 ZQ (MFR DISC)

DISCONNECT (SEE NOTE 1)



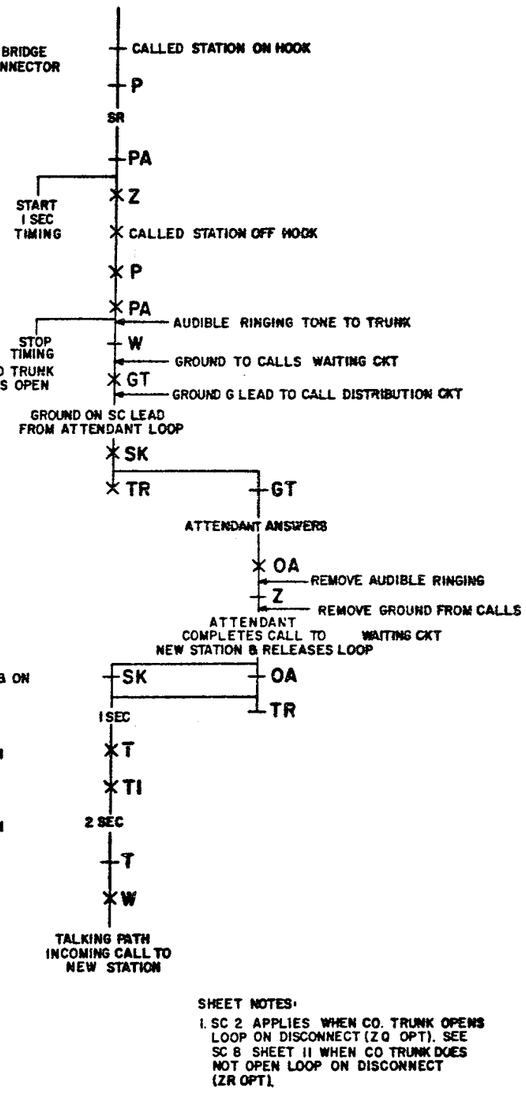
SC 3 (MFR DISC)

INCOMING CALL TO STATION

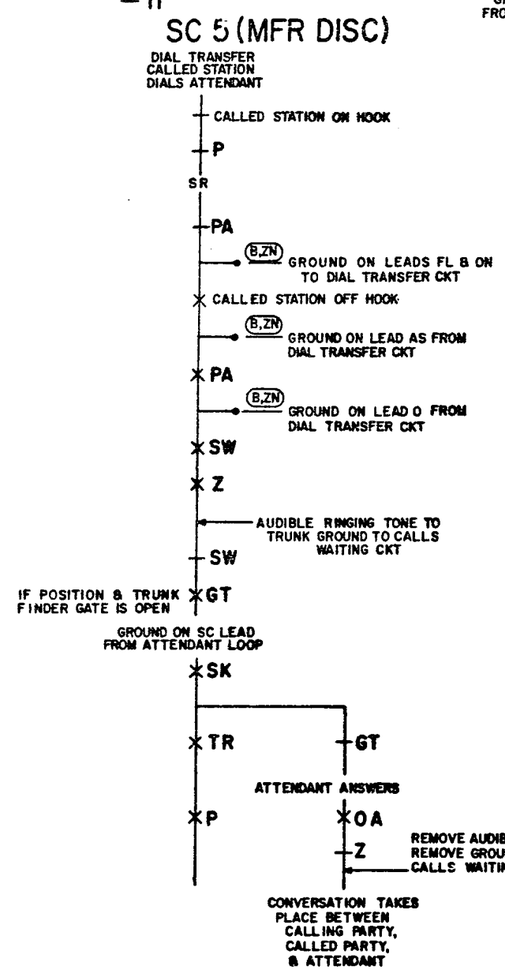


SC 4 (MFR DISC)

CALLED STATION FLASH FOR TRANSFER



SC 5 (MFR DISC)



SHEET NOTES:

1. SC 2 APPLIES WHEN CO. TRUNK OPENS LOOP ON DISCONNECT (ZQ OPT). SEE SC 8 SHEET 11 WHEN CO TRUNK DOES NOT OPEN LOOP ON DISCONNECT (ZR OPT).

DRAWING ISSUE

1	PJS MJS MJ	AY. P.D. POB
2D	OCK OSM	
3B	GJL WW P.D	
4B	FMF A.S. P.D.	
7B	TCC MP	NY
	TEF RKL	
10AC	SAN KFS	HW
	GAB	
12AC	PJS RHS	

WORN DRAWING REPRODUCED WITHOUT CHANGE 3-28-68 CED 14B LDJ DR

14

INCOMING TRUNK CIRCUIT (2)

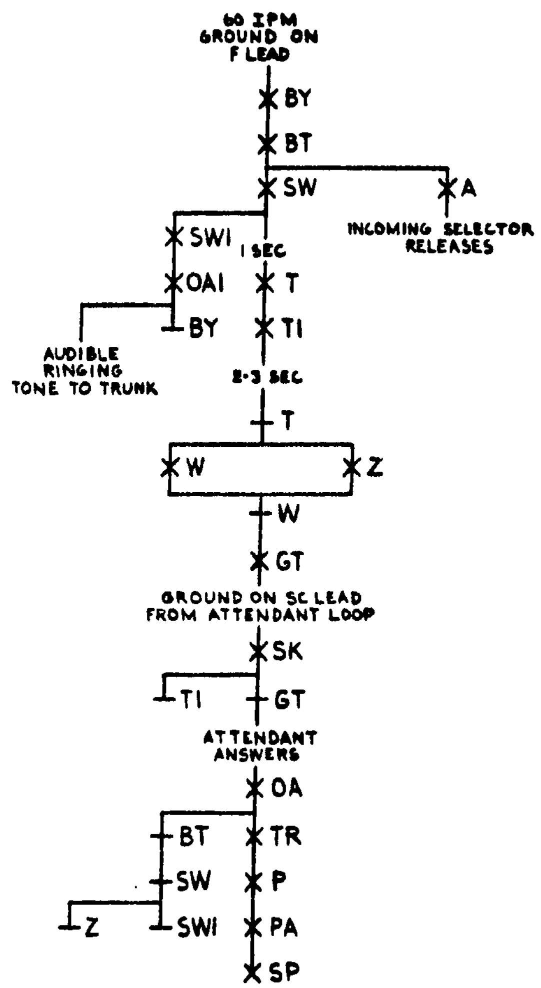
SD-65812-01-E1

BELL TELEPHONE LABORATORIES INCORPORATED 6S

1-65812-01-E1

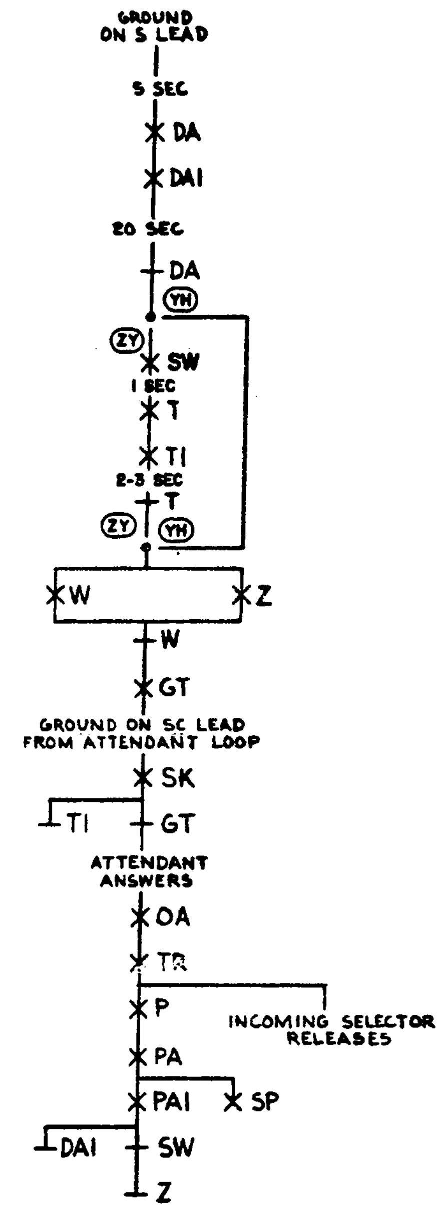
SC 6 (MFR DISC)

BUSY LINE TRANSFER



SC 7 (MFR DISC)

DO NOT ANSWER TRANSFER



14

INCOMING TRUNK CIRCUIT

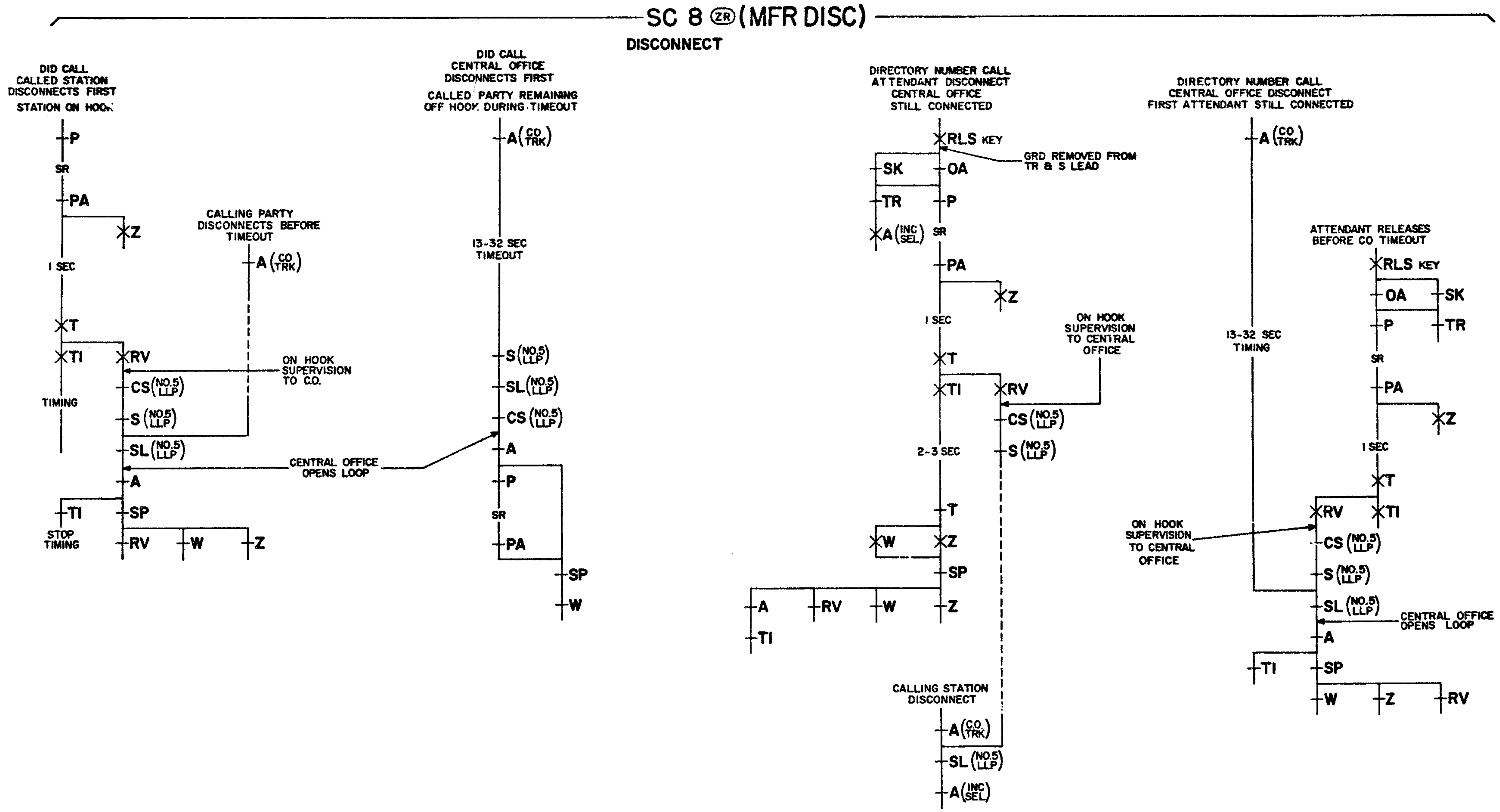
(2)

SD-65812-01-E2

BELL TELEPHONE LABORATORIES INCORPORATED

65

SD-65812-01-E2



14

INCOMING TRUNK CIRCUIT ②

SD-65812-01-E3

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-65812-01-E3

SC 9
INCOMING CALL

SEIZURE BY SERVING OFFICE COMPLETING LOOP

INC SEL SEIZED

GRD RETURNED ON LEAD S FROM INC SEL

SM

④

DONT ANS TRANSFER TIMING STARTED

TO SC15

SERVING OFFICE OUTPULSES DIGITS

DIRECTORY NUMBER

Z (INC SEL)

INC SEL GROUNDS LEAD O TO SC10

STA NO.

④

CALLED PARTY DOES NOT ANSWER

STA IDLE

STA BUSY

XN

XM

60 IPM GRD ON LEAD F BY CONN TO SC14

BUSY TONE RETURNED TO CALLING PARTY BY CONN

STA RINGING

CALLED PARTY ANSWERS

D(CONN)

CONN REVERSES BAT & GRD TOWARDS TRK

ANS SUPERVISION TO SERVING OFFICE

P

PA

SP

④

PAI

DONT ANS TRANSFER TIMING STOPPED

SM

YP

YN

1.5 SEC

TI

W

TI

CKT CONDITIONED FOR POSSIBLE TRANSFER TO SC11,SC12,OR SC16

SC 10
DIRECTORY NUMBER CALL

GROUND ON LEAD OL (FROM SC9)

SW

XH

XG

5 SEC

TI

YN

YW

W

F

XI

Z (INC SEL)

SEL CUTS THROUGH TO DIGIT COUNTER

ALL DIGITS RECEIVED

DIGIT COUNTER GROUNDS LEAD IF

XL

BY

Z

④

DONT ANSWER TRANSFER TIMING STOPPED

FROM SC11,14, OR 15

U39

ATND COMPLETES AND RELEASES

CALLED PARTY ANS

ATND LOOP FUNCTIONS TO RELEASE FDRS AND REMOVE GROUND FROM LEADS

S

SK

TR

SWITCHED LOOP EQUIPMENT RELEASED

CKT CONDITIONED FOR TRANSFER TO SC11,12 OR 16

TR

OA

E

1.4 SEL

TI

W

TI

XG

-XG

W

2108 OHM BAT CONNECTED TO LEAD F TO FDR

LEAD GC GROUNDED IF CALL DISTRIBUTION GATE IS OPEN

GT

1000 OHM BAT CONNECTED TO LEAD S TO FDR

LEAD G TO CALL DISTRIBUTION CKT GROUNDED

TRK FDR OR TRK & POS FDR FUNCTION

ATND LOOP FUNCTIONS TO GRD LEADS S & SC

SK

ATND ANS

AUDIBLE RINGING TONE TO CALLING PARTY

RESISTANCE GRD CONNECTED TO LEAD CW & LEAD L GROUNDED TO CALLS WAITING CKT

XP

ID

SRC IDENT MARK PASSED

250 MS

ID

XB

GRD REMOVED FROM LEAD TR TO FDR

GT

GRD REMOVED FROM LEAD G

1000 OHM BAT REMOVED FROM LEAD S TO FDR

CALL DISTRIBUTOR RELEASES

OA

TR

REVERSE BAT FROM ATND LOOP

XG

AUDIBLE RINGING TONE REMOVED

TI

INC SEL RELEASES

SW

XL

BY

Z

P

ANS SUPERVISION TO CENTRAL OFFICE

PA

A

SP

④

PAI

SM

ATND CONNECTED TO CALLING PARTY ABS

14

INCOMING TRUNK CIRCUIT (2)

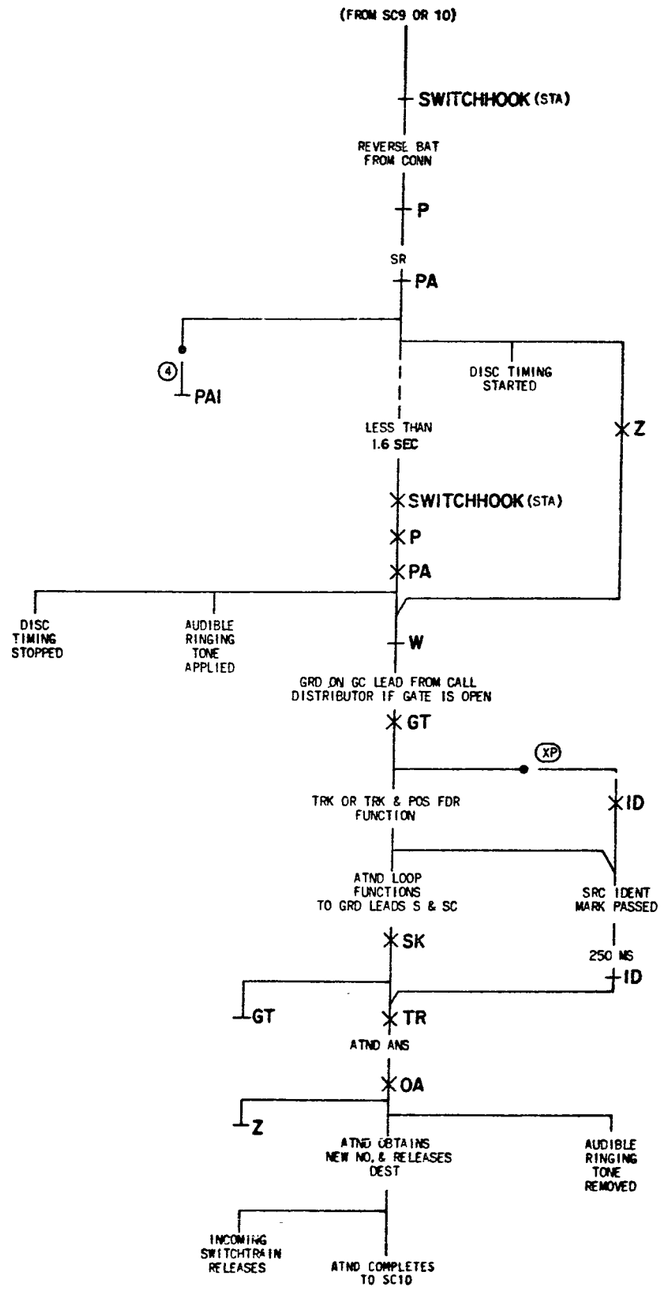
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-E4

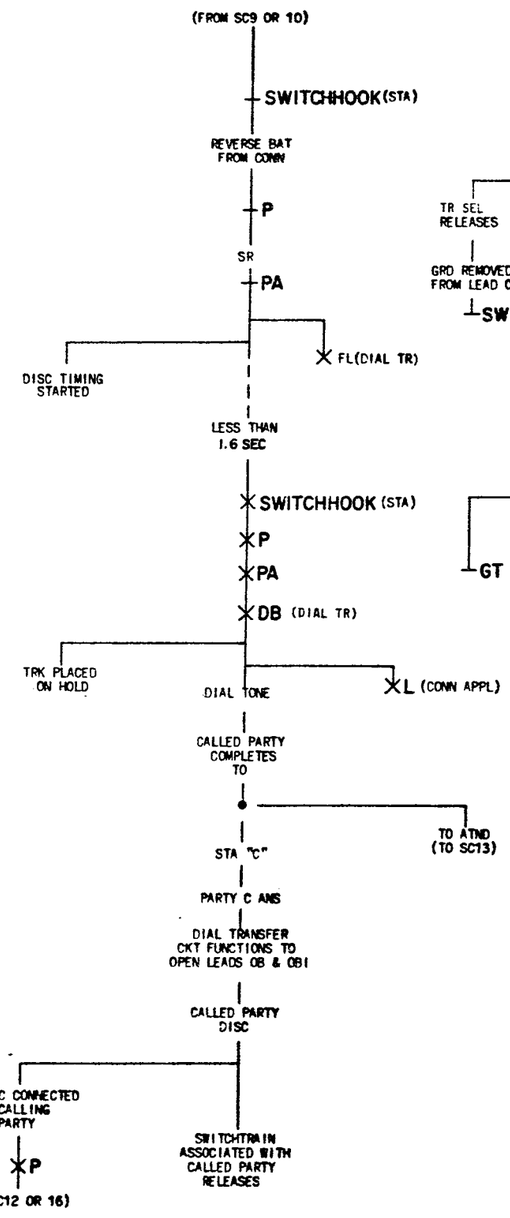
SD-65812-01-E4

DRAWING ISSUE 14B

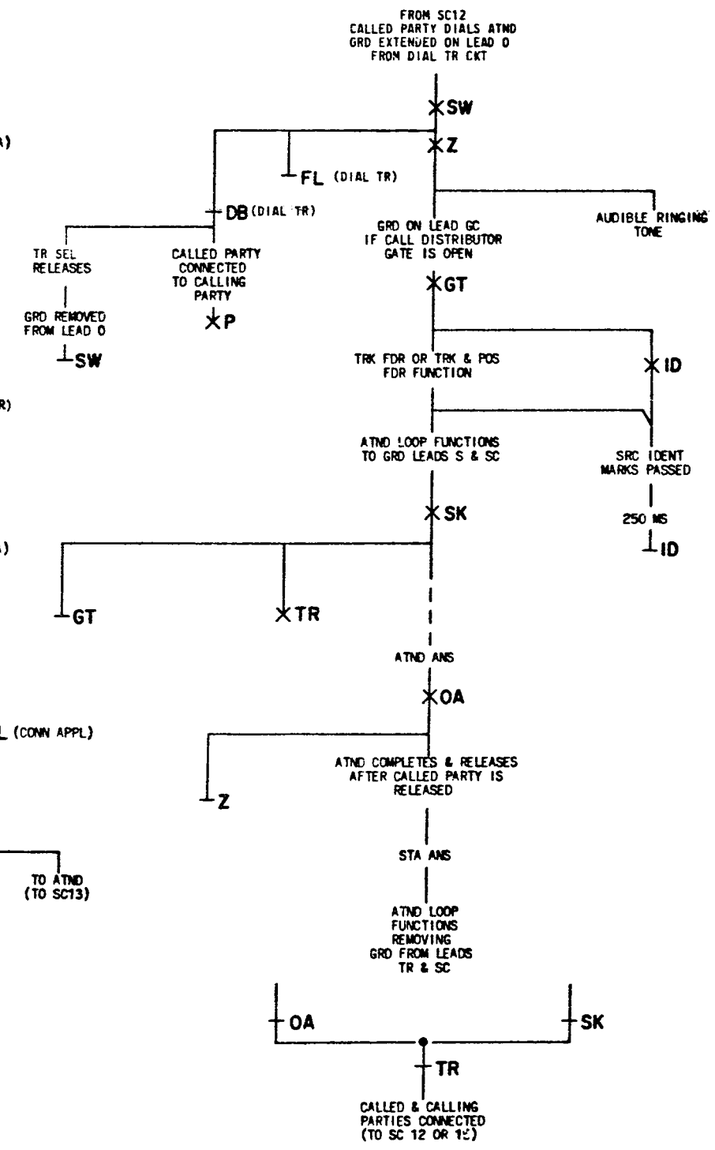
(YW) SC 11
ATTENDANT RECALL



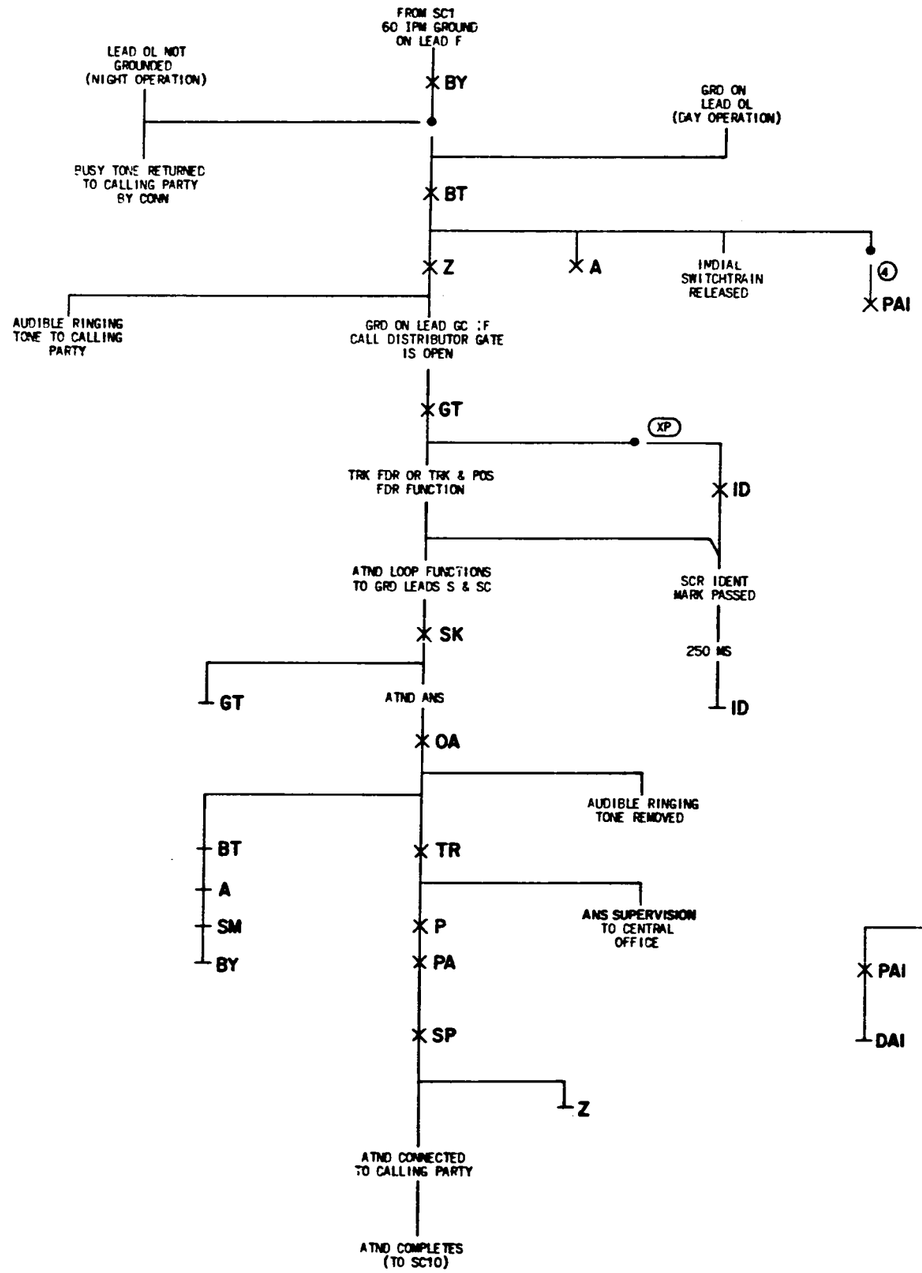
(ZN) SC 12
DIAL TRANSFER



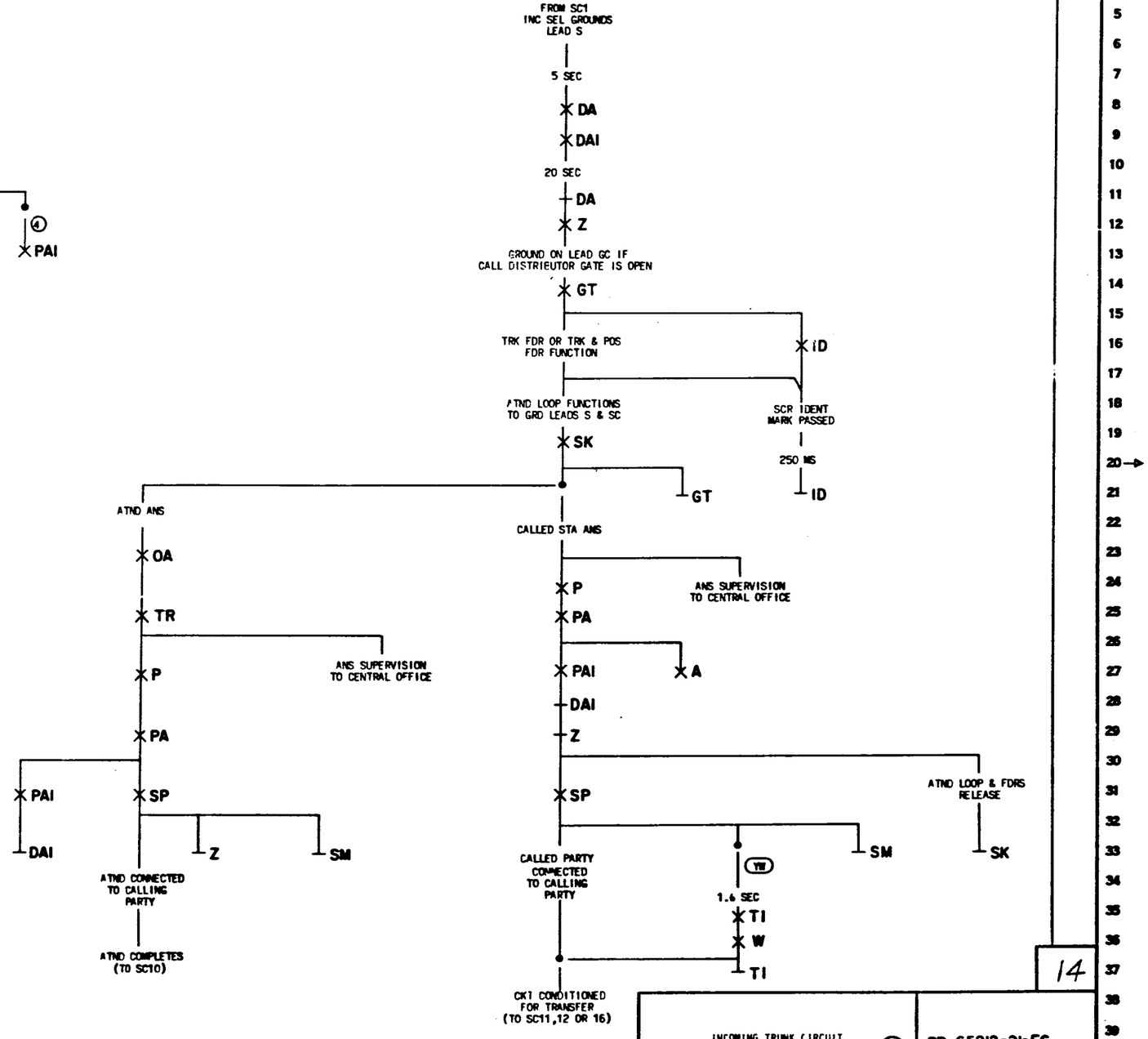
(ZN) SC 13
DIAL TRANSFER
CALLED PARTY
DIALS ATTENDANT



XN SC 14
BUSY LINE TRANSFER



4 SC 15
DONT ANSWER TRANSFER



14

INCOMING TRUNK CIRCUIT (2)

SD-65812-01-E6

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01

SC 16
DISCONNECT ON CALL TO STATION

CALLING PARTY DISCONNECTS FIRST
CENTRAL OFFICE OPENS LOOP
A
LOOP TO INDIAL SWITCHTRAIN OPENED
INCOMING SWITCHTRAIN RELEASES
P
PA
SP
(4) PAI
W
CKT NORMAL

CALLED PARTY DISCONNECT FIRST
SWITCHHOOK(STA)
REVERSE BAT FROM CONN
P
SR
PA
1.4 SEC
(YW) Z
(ZN) Z W
TI
(ZN) FL(DIAL TR)
RV
INDIAL SWITCHTRAIN RELEASES
DISC SUPERVISION TO CENTRAL OFFICE
CENTRAL OFFICE FUNCTIONS TO OPEN LOOP
A
SP
RV TI Z W
CKT NORMAL

SC 17
DISCONNECT ON A DIRECTORY NUMBER CALL

CALLING PARTY DISCONNECTS FIRST
CENTRAL OFFICE OPENS LOOP
A
(YZ) SK TR OA
FDR & ATND LOOP HELD UNTIL ATND RELEASES
LOOP OPENED
P
PA
SP
(XA) ATND LOOP FUNCTIONS TO REMOVE GROUND FROM LEADS
(XA) RV
TR S
OA SK FDR RELEASES
RV TR
CKT NORMAL

ATND DISCONNECTS FIRST
RLS NL KEY (CONSOLE)
REVERSE BAT FROM ATND LOOP
P
SR
PA
1.4 SEC
RV DISC TO CENTRAL OFFICE
TI
LOOP OPENED
ATND LOOP RELEASES
GRD REMOVED FROM LEADS
TR S
OA SK FDR RELEASES
Z W TR
CENTRAL OFFICE DISCONNECTS
A
SP
TI
Z W RV
CKT NORMAL

SD-65812-01 2 PAGES

CIRCUIT REQUIREMENTS

NO. 701B INCOMING TRUNK CIRCUIT

APPARATUS					MECH REQT			CIRCUIT PREPARATION					DIRECT CURRENT FLOW REQT					
DESIG	CODE	OPTION	FIG.		BSP FIG.	CONT PRESS	ARM TRVL	BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK MA.	TEST MA.	READJ MA.	REMARKS
RELAYS																		
A	AJ52		1		303				1L(A)	2U(A)	M		P/S	0		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		202			(SW)NO		1L(BT)	GRD			0	FS	31.5	30	MOUNTED WITH (OA1)
										1L(BT)	GRD			H		4.5	4.2	
BT	1/2AK22	XJ	1		216			(Z) NO		1L(BT)	GRD			0		27.5	26	MOUNTED WITH (ID)
BY	1/2AK27	ZG	1		218			(BT)NO		1U(BY)	GRD			0		20.5	19.5	MOUNTED WITH (SW1)
BY	1/2AK30	YS	1		202			(BT)NO		1L(BY)	GRD			0		23	22	MOUNTED WITH (RV)
DA1	1/2AK4		4		202			(SW)NO		1U(DA1)	GRD			0		11.9	11.3	MOUNTED WITH (PA1)
GT	1/2AK4		1		202			1M(GT)	2L(GT)	1L(GT)	B/G			0		11.9	11.3	MOUNTED WITH (W) S OPTION
								2M(GT)		1L(GT)	GRD			0		11.9	11.3	R OPTION
ID	1/2AK22	XJ	1		216					1U(ID)	GRD			0		27.5	26	MOUNTED WITH (BT)
OA	AJ83		1		249					U(OA)	GRD			0		13.4	12.6	
OA1	1/2AK35	ZG	1		202					1U(OA1)	GRD			0		12.4	11.8	MOUNTED WITH (BT)
P	B203		1		3		30	(PA)NO (TR)O	1M(P)	2M(P)	B/G			0		16	15	SPECIAL ADJUSTMENT ON TEST AND READJ REQUIRED
									1M(P)	2M(P)	B/G			R		6.1	6.5	
PA	AG7		1		241B			3B(SK)		U(PA)	GRD			0	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		202					1L(PA1)	GRD			0		11.9	11.3	MOUNTED WITH (DA1)
RV	1/2AK4	ZR	1		202					1U(RV)	GRD			0		11.9	11.3	MOUNTED WITH SPARE REL
RV	1/2AK30	YS	1		202					1U(RV)	GRD			0		23	22	MOUNTED WITH (BY)
SK	1/2AK4		1		202					1L(SK)	GRD			0		11.9	11.3	MOUNTED WITH (TR)
SM	1/2AK4	XF	1		202					1L(SM)	GRD			0		11.9	11.3	MOUNTED WITH (T1)
SP	AJ43		1		249					U(SP)	GRD			0		24.5	23	
SW	AJ15	XF	1		249					U(SW)	GRD			0		42.5	40.5	
SW	1/2AK4	XE	1		202			3B(SK)		1L(SW)	GRD			0		11.9	11.3	MOUNTED WITH (T1)
SW1	1/2AK27	ZG	1		218			(DA1)NO		1L(SW1)	GRD			0		11	10.5	MOUNTED WITH (BY)
T1	1/2AK4	XE,XF	1		202			9B(W)		1U(T1)	GRD			0		11.9	11.3	MOUNTED WITH (SW)OPTION XE MOUNTED WITH (SM)OPTION XF
TR	1/2AK4		1		202					1U(TR)	GRD			0		11.9	11.3	MOUNTED WITH (SK)
W	1/2AK4		1		202			4B(PA)		1U(W)	GRD			0		11.9	11.3	MOUNTED WITH (GT)
Z	AJ83		1		249			4B(PA)		U(Z)	GRD			0		13.4	12.6	

DRAWING ISSUE: 1, 2D, 3B, 5B, 6AC, 7B, 10AC, 12AC, 14B

PAGE 1

INCOMING TRUNK CIRCUIT

SD-65812-01-F1

BELL TELEPHONE LABORATORIES INCORPORATED

TIMING REQUIREMENTS

APPARATUS			CIRCUIT PREPARATION				TEST SET PREP				TIME REQ MIL-SEC		
DESIG	OPTION	FIG.	BLOCK OR INSULATE	TEST CLIP DATA CONN BK	TEST CLIP DATA CONN R	TEST CLIP DATA CONN W	SEND KEY	REC SW START	REC SW STOP	SEE NOTE	MIN	MAX	REMARKS
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	

TEST NOTES:

1. TO MEASURE TIME OF (T) RELAY, OPERATE (PA) RELAY, (W) RELAY SHOULD OPERATE WITHIN 3 TO 4 SECONDS.
2. TO MEASURE TIME OF (DA) RELAY, GROUND "S" LEAD FROM INCOMING SELECTOR, (SW) RELAY SHOULD OPERATE WITHIN 20 TO 30 SECONDS.
3. REQUIREMENTS FOR DISCONNECT TIMING
4. REQUIREMENTS FOR DIRECTORY NUMBER TIMING WITH OPTION XG.
5. TEST CLIP DATA FOR OPTION YP - A&M ONLY

   1ST CKT ON UNIT
   CONN BK - GRD
   CONN R - 2 (T) CONN
   CONN W - 11B (T1) REL

   2ND CKT ON UNIT
   CONN BK - GRD
   CONN R - 6 (T) CONN
   CONN W - 11B(T1) REL

DRAWING ISSUE: 1, 2D, 3B, 5B, 6AC, 7B, 10AC, 12AC, 14B

PAGE 2

14

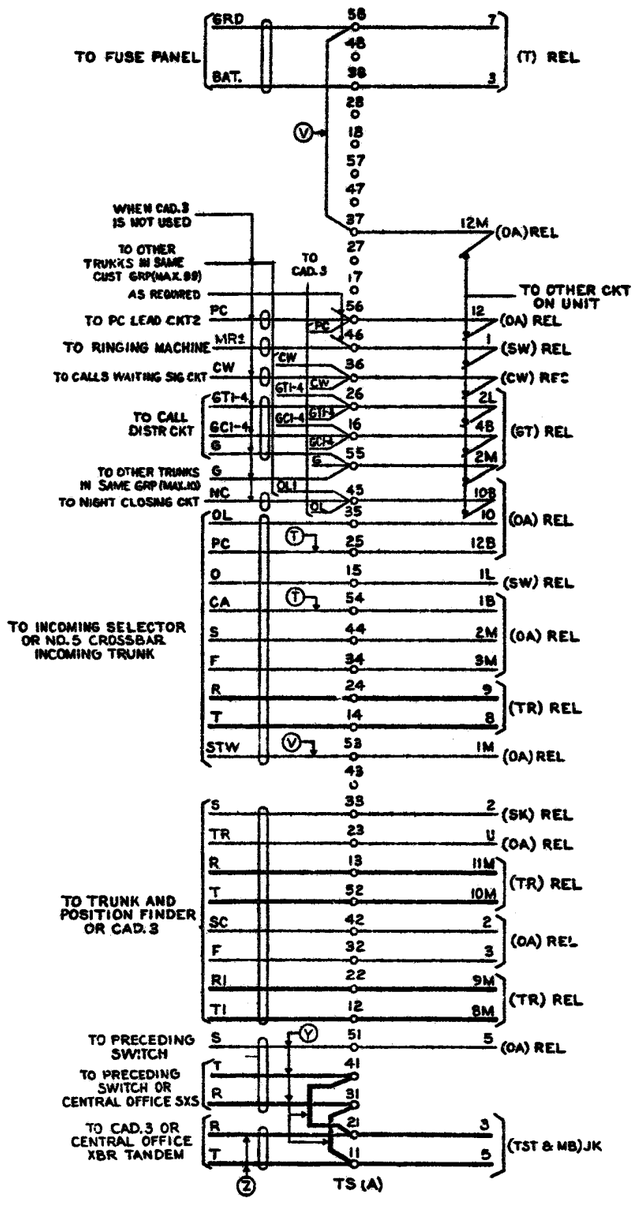
INCOMING TRUNK CIRCUIT

(2) SD-65812-01-F1

BELL TELEPHONE LABORATORIES INCORPORATED 6S

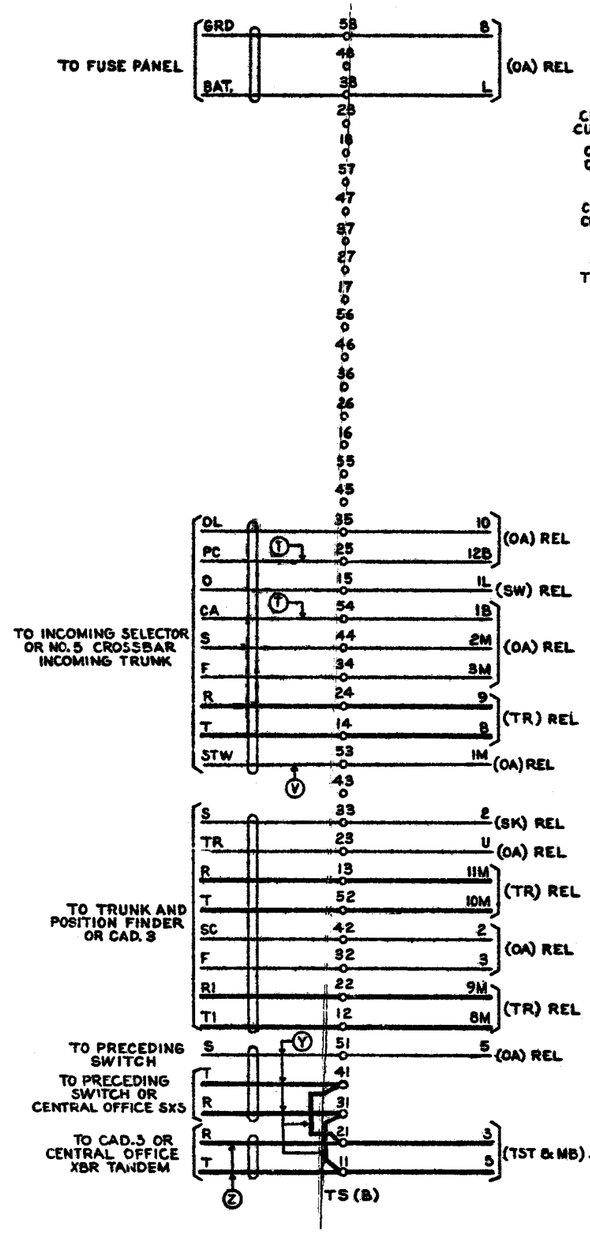
CAD. 1 (MFR DISC.)

(FOR APP FIG. 1)
CKT 1 OF UNIT



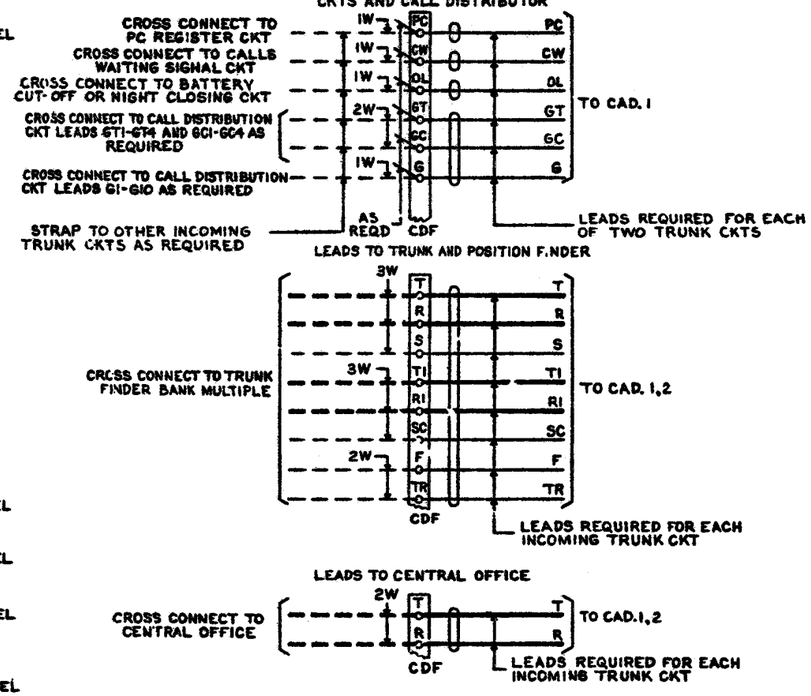
CAD. 2 (MFR DISC.)

(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.

12

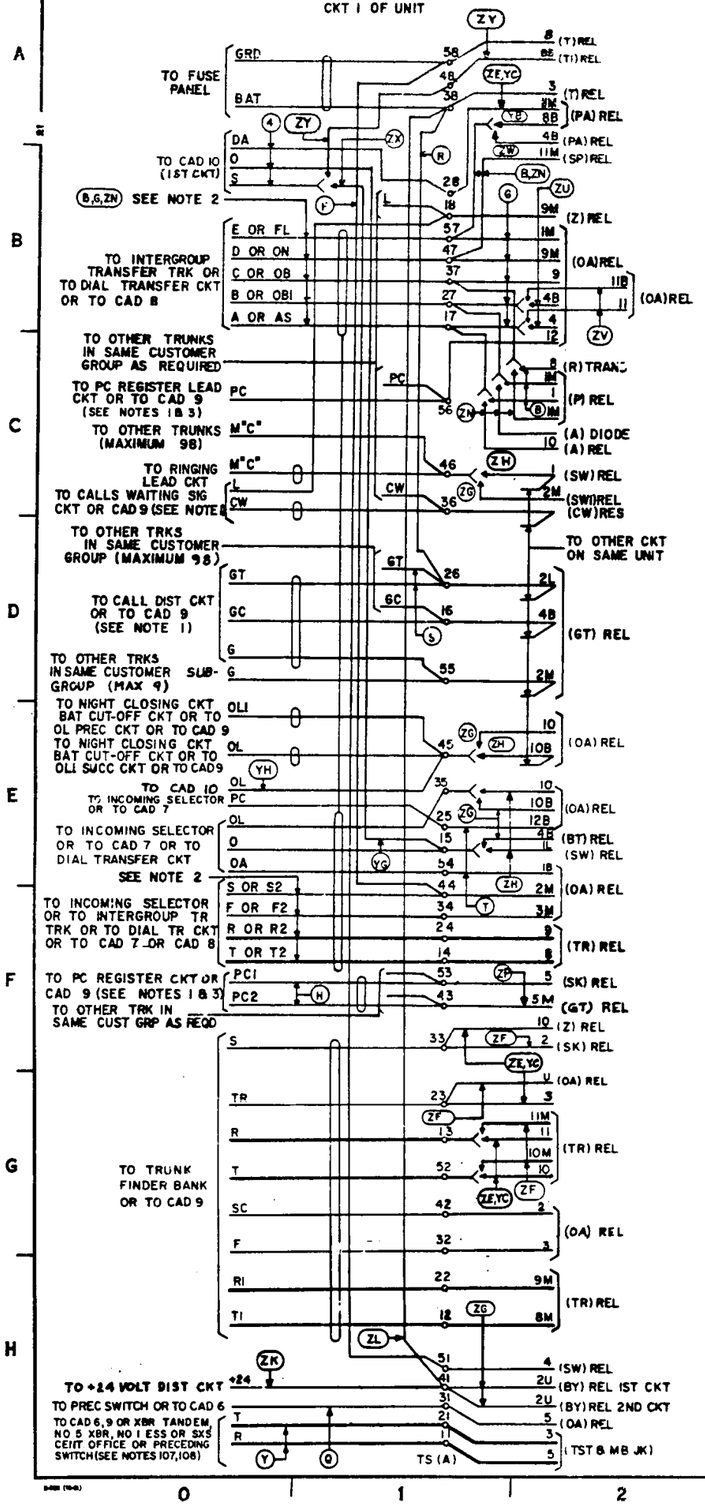
INCOMING TRUNK CIRCUIT (2) SD-65812-01-01

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-01

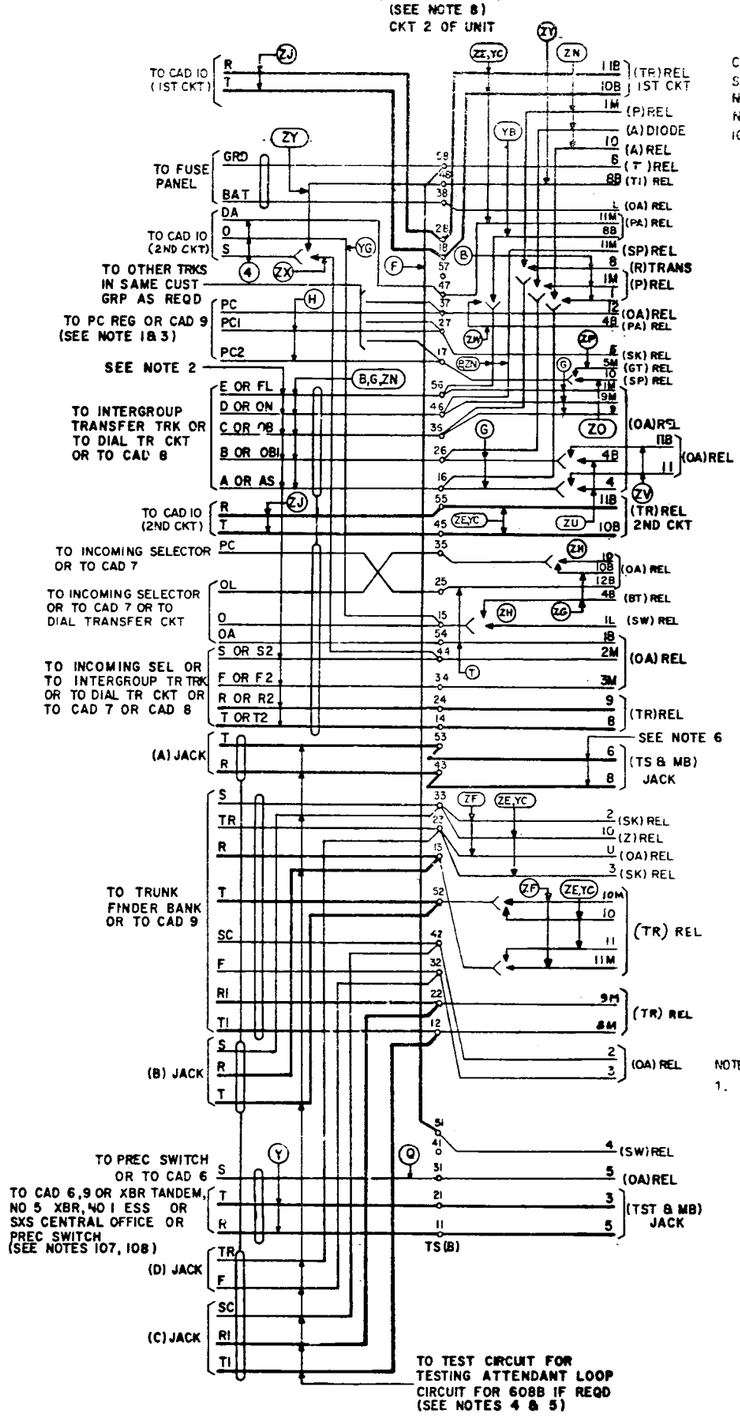
CAD .4 (MFR DISC)

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



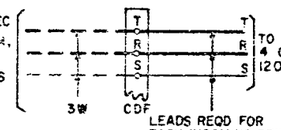
CAD 5 (MFR DISC)

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



CAD 6 (MFR DISC)

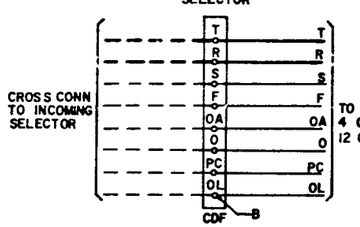
CROSS CONNECTION WHEN Y AND Q OPTION IS REQUIRED



CAD 7 (MFR DISC)

DISTRIBUTING FRAME

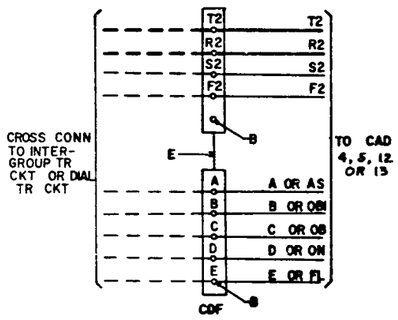
TERMINATION TO INCOMING SELECTOR



CAD 8 (MFR DISC)

DISTRIBUTING FRAME

TERMINATION TO INTERGROUP TRANSFER TRK OR DIAL TRANSFER CKT



NOTES:

1. THE OL AND OLI 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 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 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, 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 CUSTOMERS GROUP.

NOTES(CONT)

2. WHEN THE INTERGROUP TRANSFER TRUNKS OF 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. 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 TST & 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 BETWEEN PUNCHING 51 OF T.S.(A) AND TERMINAL 4 OF RELAY SW(1ST CKT) AND RECONNECT IT TO TERMINAL 4M OF RELAY SW(1ST CKT). IF APP. FIG. 4 IS PROVIDED, REMOVE THE "O" LEAD FROM 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 TERMINAL 4 OF RELAY SW(1ST CKT) TO 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 BETWEEN PUNCHING 51 OF T.S.(B) AND TERMINAL 4 OF RELAY SW (2ND CKT) AND RECONNECT IT TO TERMINAL 4M OF RELAY SW (2ND CKT). IF APP. FIG. 4 IS PROVIDED, REMOVE THE "O" 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 TERMINAL 4 OF RELAY SW (2ND CKT) TO PUNCHING 58 OF T.S.(B). CONNECT A LEAD FROM TERMINAL 3M OF RELAY SW (1ST CKT) TO PUNCHING 57 OF T.S.(B). CONNECT A LEAD FROM TERMINAL 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).

DRAWING ISSUE	
3B	GJB WWR P.D
2A	RT P.D
4B	SAK A.S P.D
5B	RMB UMA TEB
7B	TEB WF TEB
8B	SAK JFA WFJ
9D	SAK JFA KEJ
10AC	RMB SAK KEJ
12AC	GAH PJS FHF
W ORN DRAWING REPRODUCED WITHOUT CHANGE 12-6-66 P.M.C	
14B	

14

INCOMING TRUNK CIRCUIT

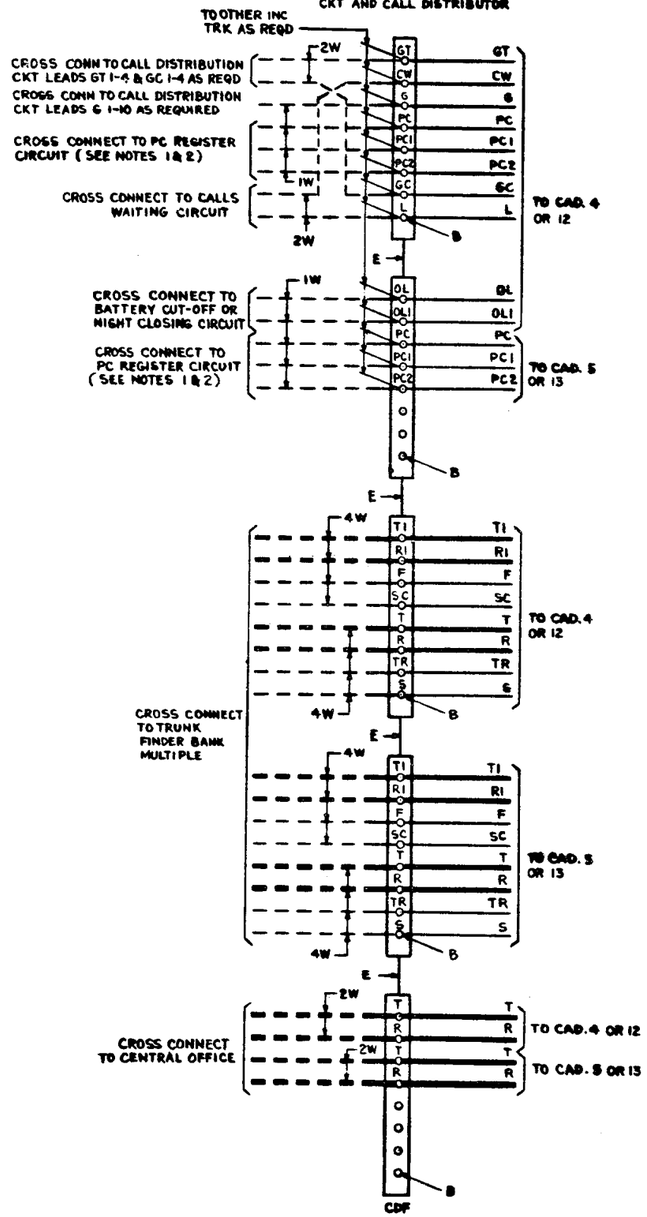
BELL TELEPHONE LABORATORIES INCORPORATED

SD-65812-01-G2

SD-65812-01-G2

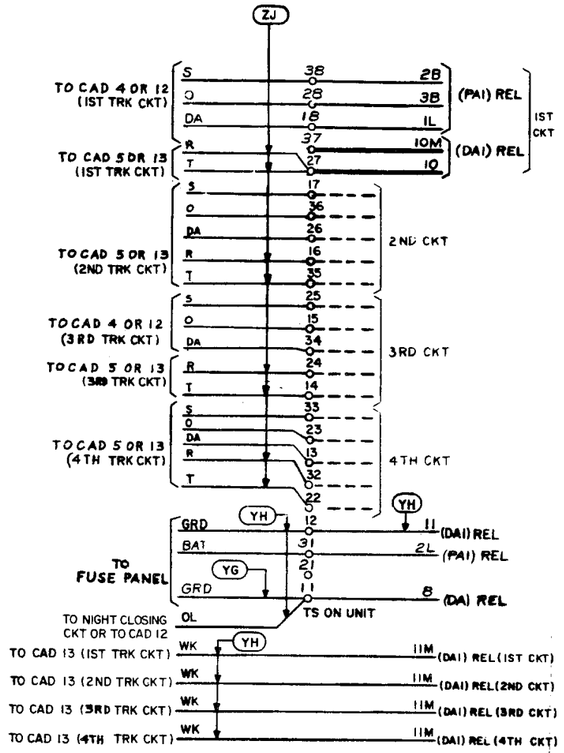
CAD.9(MFR DISC)

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



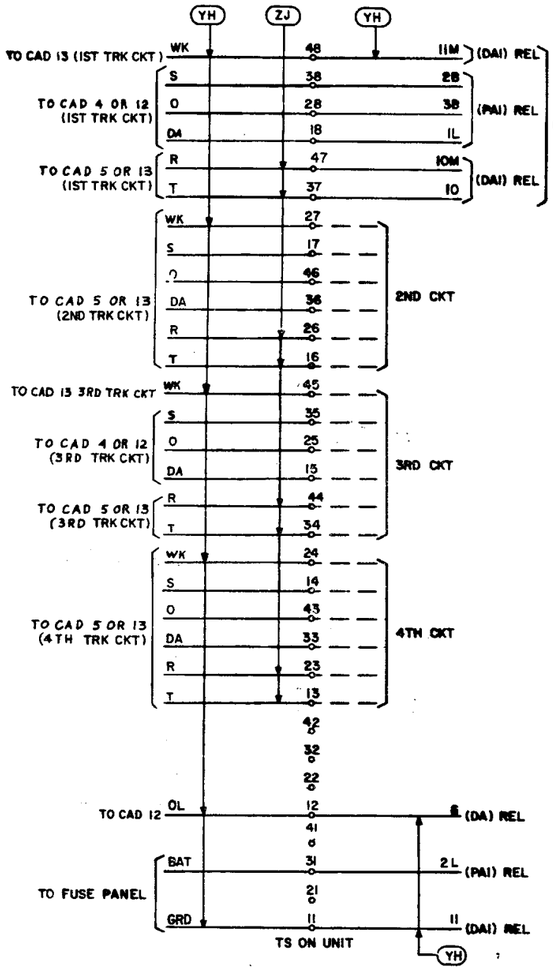
CAD. 10 (MFR DISC)

(FOR APP FIG. 4)



CAD 11 (MFR DISC)

(FOR APP FIG. 4)



SHEET NOTES:

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 GROUPS 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 CUSTOMERS GROUP.

2. 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.

DRAWING ISSUE
5B RT PD
7B TB KBG GAH PJS RHP
12AC
14B

SD-65812-01-G3

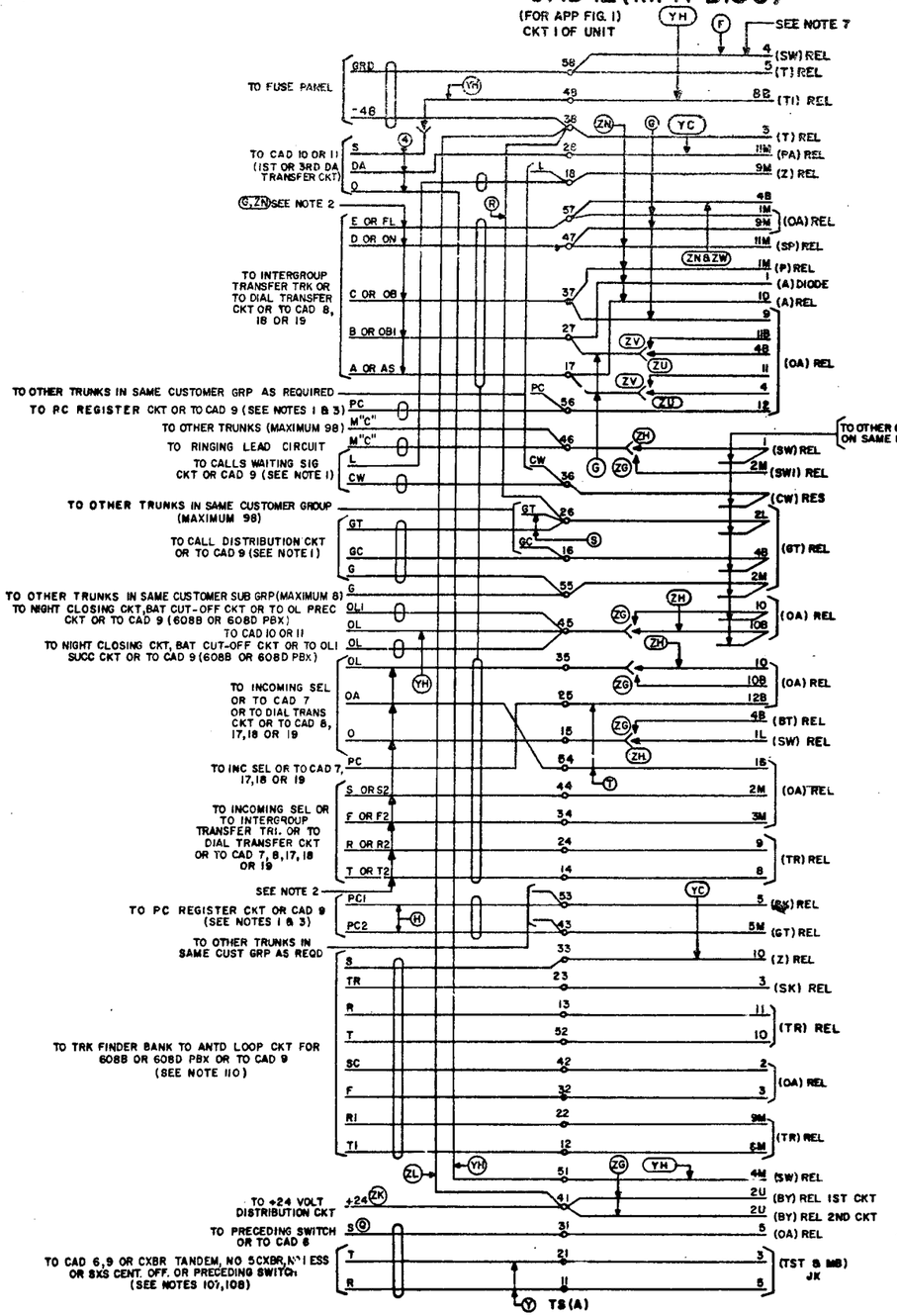
14

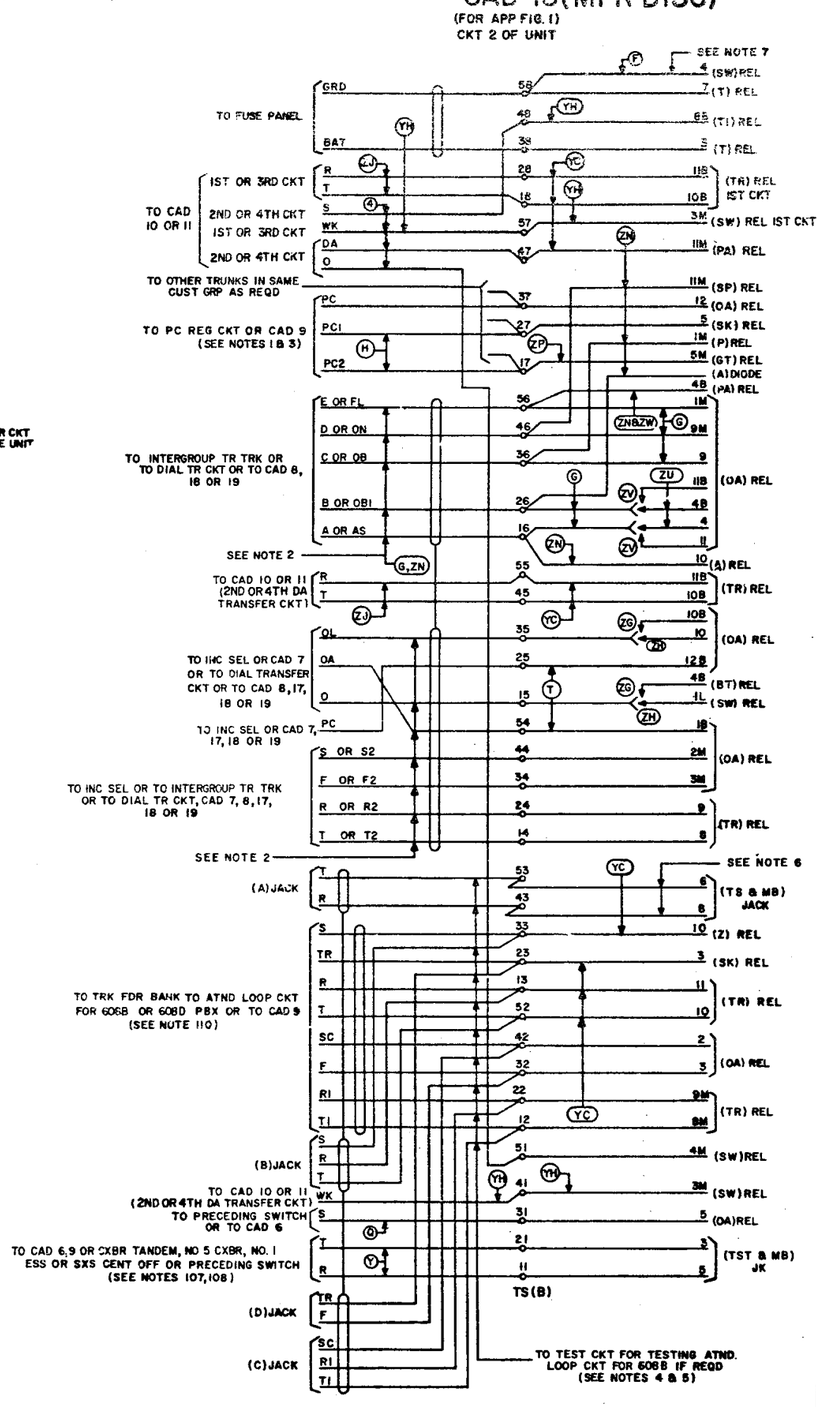
INCOMING TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 6S

SD-65812-01-G3





SHEET NOTES:

1. THE OL AND OLI 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 OLI LEADS ARE AGAIN CROSS CONNECTED TO THE SUCEEDING 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, 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 CUSTOMERS 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 SK RELAY ON CKT 1 AND CKT 2 RESPECTIVELY.

DRAWING ISSUE
2 AC FED JS RHP HW
14B DR

14

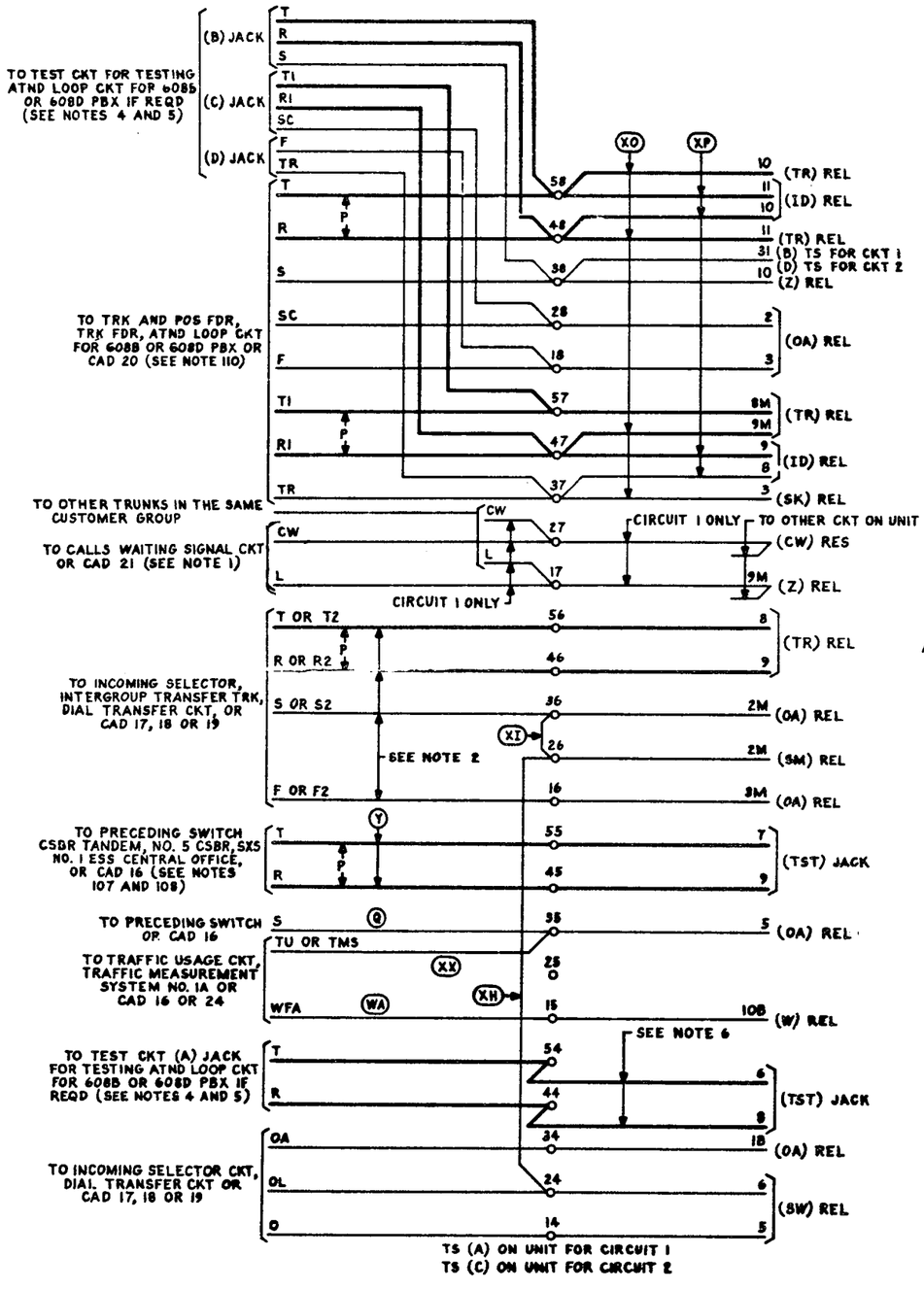
INCOMING TRUNK CIRCUIT (2)

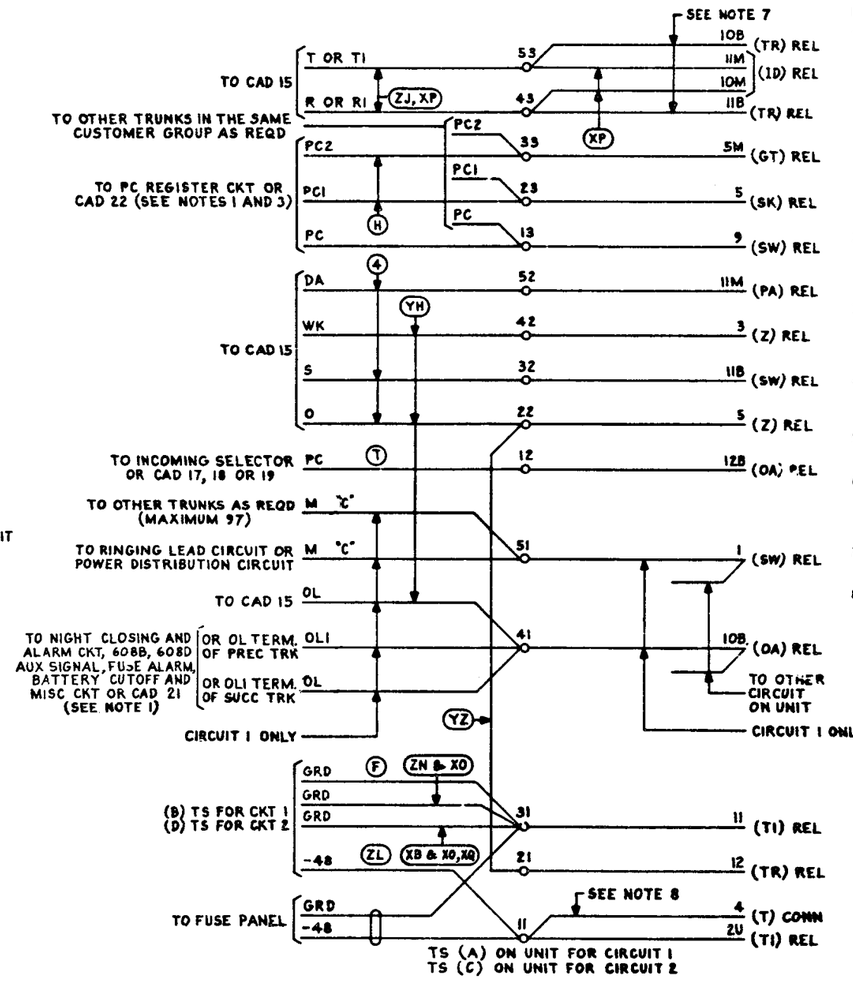
SD-65812-01-G4

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-G4

PART OF CAD 14
(FOR APP FIG. 1 AND 5)





NOTES:

1. THE CL 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 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 CUSTOMERS 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 OR 608D PBX.

5. THE INCOMING TRUNK USED FOR TESTING SHOULD NOT BE THE FIRST OR LAST TRUNK OF A GROUP OF TRUNKS.

6. THE INSTALLER SHALL RUN STRAPS FROM TERMINALS 6 & 8 OF THE TST JACK OF THE TRUNK USED FOR TESTING TO THE TERMINAL STRIP OF THAT UNIT. CKT 1 OR CKT 2 MAY BE USED FOR TESTING.

7. PROVIDED ONLY WHEN OPTION XO IS SPECIFIED. (SEE NOTE 114).

8. BAT FOR TERMINAL 4 OF CONN(T) IS OBTAINED FROM FIRST CKT ON UNIT ONLY.

DRAWING ISSUE 14B

14

INCOMING TRUNK CIRCUIT (2) SD-65812-01-G5

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-G5

PART OF CAD 14
(FOR APP FIG 1 AND 5)

TO OTHER TRUNK CIRCUITS HAVING THE SAME IDENT MARK
TO INCOMING CALL SOURCE IDENTIFICATION CKT OR CAD 23
TO OTHER TRUNK UNITS IN SAME CUSTOMER SUBGROUP (MAX. 9)
TO CALL DISTRIBUTION CKT OR CAD 21 (SEE NOTE 1)
TO OTHER TRUNK UNITS IN SAME CUSTOMER GROUP (MAX. 98)
(A) TS FOR CKT 1 (C) TS FOR CKT 2
TO DIAL TRANSFER CKT OR CAD 18
(A) TS FOR CKT 1 (C) TS FOR CKT 2
TO INTERGROUP TRANSFER TRK OR CAD 19
CIRCUIT 1 ONLY
(A) TS FOR CKT 1 (C) TS FOR CKT 2
TO +24 VOLT DISTRIBUTION CKT
TS (B) ON UNIT FOR CIRCUIT 1
TS (D) ON UNIT FOR CIRCUIT 2
TO OTHER CIRCUIT ON UNIT
CIRCUIT 1 ONLY

CAD 15
(FOR APP FIG. 4)

SEE NOTE 102
TO CAD 14
TO INCOMING CALL SOURCE IDENTIFICATION CKT OR CAD 23
TO OTHER CIRCUITS ON UNIT
TO CAD 14
2ND CKT
TO CAD 14
3RD CKT
TO CAD 14
4TH CKT
TO FUSE PANEL
TS ON UNIT
TO OTHER CIRCUITS ON UNIT

NOTES:

1. THE GC LEAD IS CROSS CONNECTED TC 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.

DRAWING ISSUE 14-B

14

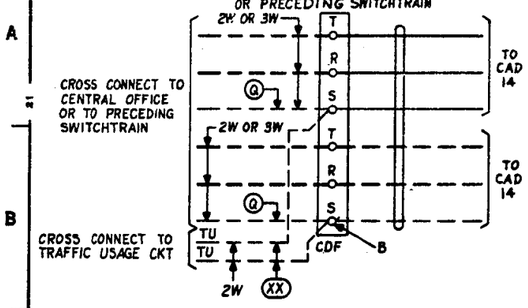
INCOMING TRUNK CIRCUIT (2)

SD-65812-01-G6

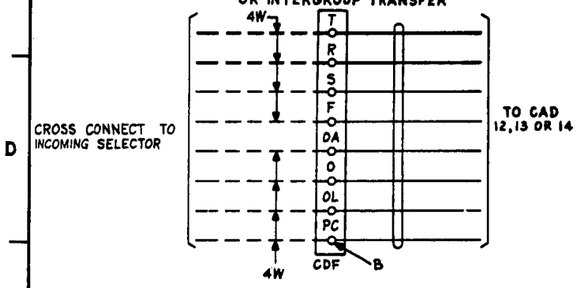
BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-G6

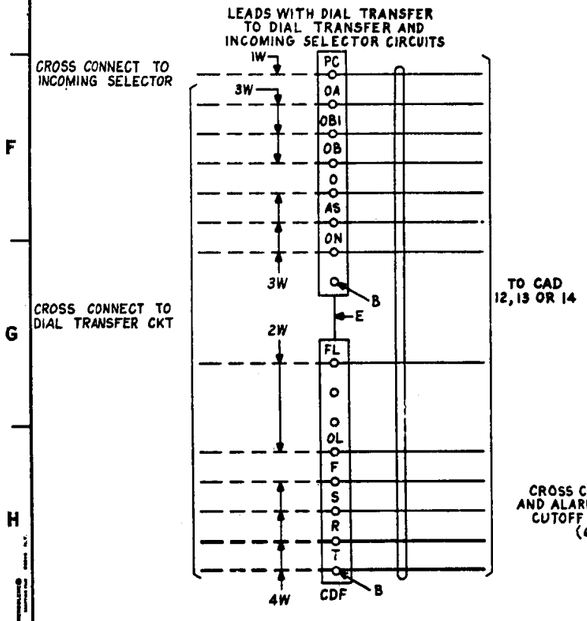
CAD 16 (FOR 2 CIRCUITS)
DISTRIBUTING FRAME TERMINATION



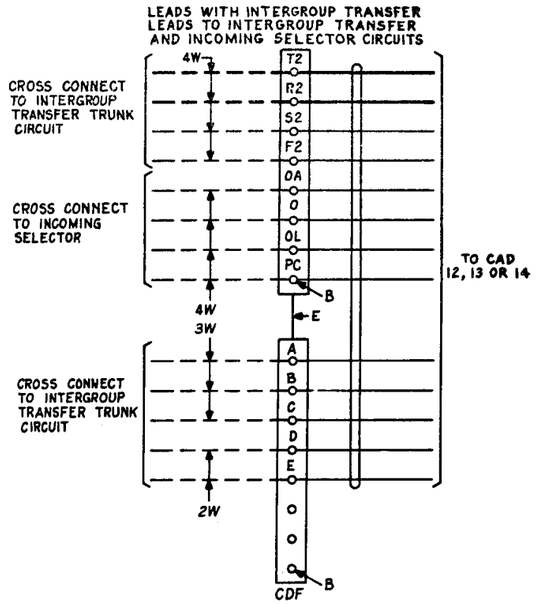
CAD 17 (FOR 1 CIRCUIT)
DISTRIBUTING FRAME TERMINATION



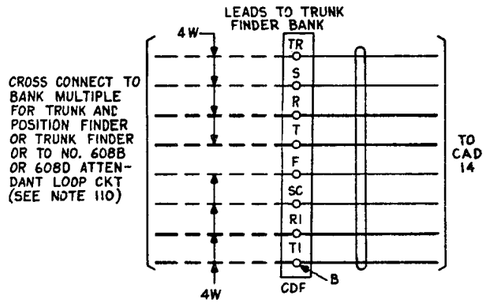
CAD 18 (FOR 1 CIRCUIT)
DISTRIBUTING FRAME TERMINATION



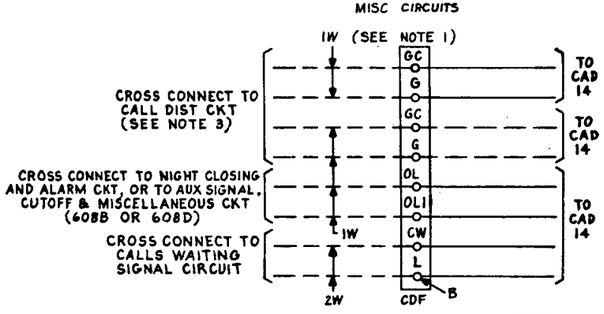
CAD 19 (FOR 1 CIRCUIT)
DISTRIBUTING FRAME TERMINATION



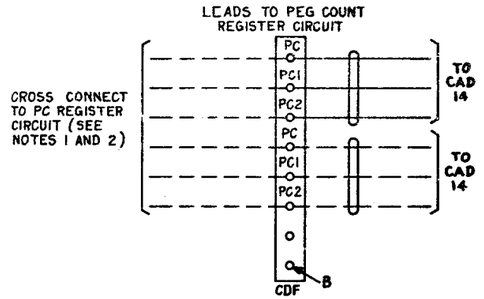
CAD 20 (FOR 1 CIRCUIT)
DISTRIBUTING FRAME TERMINATION



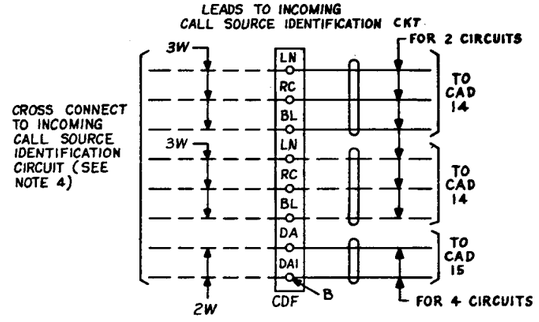
CAD 21 (FOR 2 CIRCUITS)
DISTRIBUTING FRAME TERMINATION



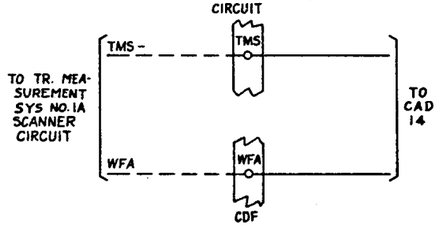
CAD 22 (FOR 2 CIRCUITS)
DISTRIBUTING FRAME TERMINATION



CAD 23
DISTRIBUTING FRAME TERMINATION



CAD 24 (FOR 1 CIRCUIT)
DISTRIBUTING FRAME TERMINATION



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 GC LEAD IS CROSS CONNECTED TO THE CONNECTING CIRCUIT ONCE ONLY FOR EACH CUSTOMERS GROUPS OF TRUNKS, MAXIMUM 99 TRUNKS.

   THE G LEAD IS CROSS CONNECTED ONCE ONLY FOR EACH SUBGROUP OF TEN TRUNKS.

   THE PC, PC1 & PC2 LEADS ARE CROSS CONNECTED ONCE ONLY FOR EACH PC REGISTER OR GROUP OF TRUNKS.

   THE L & CW LEADS ARE CROSS CONNECTED TO THE CONNECTING CKT ONCE ONLY FOR ALL TRUNKS IN EACH CUSTOMERS GROUP.

2. 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.

3. THE GC LEAD CROSS CONNECTS TO CALL DIST CKT LEADS GC 1-4 AS REQUIRED.

   THE G LEAD CROSS CONNECTS TO CALL DIST CKT LEADS G1-10 AS REQUIRED.

4. MULT LEADS LN,RC,BL,DA & DA1 TO LIKE LEADS OF OTHER TRUNK CIRCUITS HAVING THE SAME IDENT MARK.

DRAWING ISSUE 14 B

14

INCOMING TRUNK CIRCUIT (2) SD-65812-01-67

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-65812-01-67