SD-35004-01

SHEET INDEX

CONTENTS	SHEET NO.	ISSUE NO. 1	2	3	4	5	6
SHEET INDEX SUPPORTING INFORMATION	A1	1	2	3	4	5	6
APPARATUS INDEX	A2	1	1	3	4	4	4
LEAD INDEX OPTION INDEX	A3	1	2	3	4	5	6
FS 1 TRUNK CKT	B1	1	2	3	4	5	6
FS 2 ALARM TIMER CKT FS 3 WINK DETECTOR CKT	B2	1	2	3	3	3	3
FS 4 COIN REFUND AND RERING CONTROL CKT	B3	1	2	2	2	2	2
FS 5 TWO PARTY SELECTIVE OR FOUR PARTY SEMI-SELECTIVE, CODE RINGING (AC-DC AUD) OR FOUR PARTY SELECTIVE, EIGHT PARTY SEMI-SELECTIVE CODE RINGING (SUP AUD) FS 6 INTERRUPTER CKT	B4	1	1	1	1	1	1
APP FIG. 1	C1	1	2	3	4	4	4
APP FIG. 2,3 & 4	C2	1	2	2	2	2	2
APP FIG. 5	C3	1	2	3	4	4	4
APP FIG. 6	C4	1	1	1	1	1	1
CIRCUIT NOTES EQUIPMENT NOTES INFORMATION NOTES WORKING LIMITS	D1	1	2	3	4	5	6

CONTENTS	SHEET NO.	ISSUE NO. 1	2	3	4	5	6
SC 1 CALL TO BUREAU SEIZURE	E1	1	1	1	1	1	1
SC 2 COIN REFUND (FOR CALLS ORIGINATING FROM COIN STATIONS)	E2	1	1	1	1	1	1
SC 3 BUREAU ANSWERS CALL, CALLING PARTY DISCONNECTS FIRST	E3	1	1	1	1	5	5
SC 4 CALL TO BUREAU (CALL ORIGINATED VIA A TANDEM OFFICE, TRUNK NOT ARRANGED FOR DIGIT ABSORPTION, OPTION K)	E4	1	1	1	1	5	5
SC 5 DISCONNECT (FORCED DISCONNECT ON CALLING PARTY)	E5	1	1	1	1	1	1
SC 6 WINK DETECTION FOR RERING (CALL ANSWERED BY BUREAU, TALKING PATH COMPLETED)	E6	1	1	1	1	5	5
SC 7 RERING (SXS OFFICES WITH AC-DC AUDIBLE RINGING MACHINES)	E7	1	1	1	1	5	5
SC 8 RERING (SXS OFFICES WITH SUP ± AUDIBLE RINGING MACHINES)	E8	1	1	1	1	5	5
SC 9 SUPERVISION ON ANSWERED CALL (CALLING STATION GOES ON-HOOK, CALL ORIGINATED FROM A COIN OR LOCAL STATION, OPTION J OR K)	E9	1	1	1	1	5	5
SC 10 ALARM (BUREAU SEIZES TRUNK, NO CALL TO BUREAU)	E10	1	1	1	1	5	5
CIRCUIT REQUIREMENTS TABLE	F1	1	1	1	4	4	4
TIMING REQUIREMENTS TABLE	F2	1	1	1	1	1	1
CAD 1, 2, 3, 4, 5 & 6	G1	1	2	3	3	5	6
CAD 7, 8 & 9	G2	1	2	3	3	3	3
CAD 10, 11, 12	G3	1	1	3	3	3	3

DATA ISSUE	CD ISSUE	DATE ISSUED	DRAWN	APP
1	1	1-19-73	PJS	
2A	1 APP 1A	12-5-73	PJS	
3B	1 APP 2B	3-26-74	PJS	
4B	1 APP 3B	2-3-75	PJS	
5BU	1 APP 4BU	3-4-76	PJS	
6D	1 APP 5D	5-19-76	PJS	

SHEET INDEX NOTES

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

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWINGS	J33013BD-( ) J33013E-( )
EQUIPMENT DESIGN REQT	814-520-150
KEYSHEET DRAWINGS	
SXS NO. 1	SD-31359-01
SXS NO. 350A	SD-31364-01
SXS NO. 355A	SD-31780-01
SXS NO. 356A	SD-32149-01
SXS NO. 360A	SD-31230-01
SXS NO. 35E97	SD-32325-01
MAINTENANCE BSP	226-534-500

ISSUE 6D

1099

STEP BY STEP SYSTEMS
NO. 1, 350A, 355A, 356A, 360A, 35E97
TRUNK CIRCUIT
FOR "911" EMERGENCY SERVICE

(5% SRV) (2)

AT&TCO STANDARD

A&M ONLY FOR 350A, 356A, 360A & 35E97

SD-35004-01-A1

27 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED

ISSUE 8S

APPARATUS INDEX

EQPT LOC	APP FIG. NO.	APP FIG. SH NO.
CIRCUIT PACKS		
TMI/TM2	5	C3
TR	1	CI

DESIG	LOCATION FS	APP FIG.	EQPT
COMPONENT ASSEMBLIES			
CAI		1	CAI
CA2		5	CA3
CA3			CA4
CA4			

RELAYS			
A	ICI	1	
AI	3D5	5	
AL1	2BI	4	
AL2	2CI	4	
B	IE3	1	
C	IE3	1	
CO	ID7	1	
D	IC2	1	
DI	2F6	5	
F	IC5	1	
INT	4B7	6	

DESIG	LOCATION FS	APP FIG.	EQPT
RELAYS			
L	IC8	1	
LK	3H2	5	
P	IG6	1	
R	3G5	5	
RC	ID4	1	
RCC	2F8	5	
RV	IG2	1	
RVI	3G3	5	
ST	3E7	5	
STP	3G8		
STPI	3H5		
TI	2C7	5	
T2	2C6	5	
TR	3C8	5	
W	IE6	2	
W	3F3	5	
WI	4C4	5	

DESIG	LOCATION FS	APP FIG.	EQPT
RELAYS			
Y	4CI	5	
Z	IE7	2	
Z	3F4	5	
ZI	4B2	5	

CAPACITORS			
CR	3E2	5	CA4
D3	IG5	1	CAI
R	IC2	1	
RT	IB4	1	CAI
T	IB2	1	
TN	IB7	1	CAI

CONNECTORS			
TM	2C6	5	

DIODES			
DI	2C5	5	CA4
D2	2D6	5	CA4
RV	IG2	1	CAI
TR	3D8	5	CA4

DESIG	LOCATION FS	APP FIG.	EQPT
JACKS			
A	ICI	1	
AI	3BI	5	
B	SEE APP FIG.	1	
BI			

KEYS			
ACO	SEE APP FIG. 1		

LAMPS			
AL	IF8	1	

RESISTANCE LAMPS			
CR	3E2	5	
R	IA5	3	
RL	4DI	5	
SJP+	4EI		
SJP-	4EI		

DESIG	LOCATION FS	APP FIG.	EQPT
RESISTORS			
A	2C7	5	CA4
B	IC3	1	CAI
CR	3E2	5	CA4
D3	IG4	1	CAI
RI	2B6	5	CA2
R2	2B6		
R3	2B7		
R4	2B7		
R5	2D6		
R6	2D6		
R7	2D7		
R8	2D7		
R9	2D8		
RIO	3B4		CA3
RII	3C4		CA3
W	IE6	2	
W	3F3	5	CA3
WI	4C4	5	CA3
Z	IE8	2	
Z	3E4	5	CA3
ZI	4A2	5	CA3

SOCKET			
TH	—	4	

DESIG	LOCATION FS	APP FIG.	EQPT
THERMAL TIME DELAY RELAYS			
TH	SEE APP FIG. 4		

ISSUE 4B

TRUNK CIRCUIT ② SD-35004-01-A2

BELL TELEPHONE LABORATORIES INCORPORATED 6S

LEAD INDEX

DESIG	LOCATION FS	LOCATION CAD
60 & 120 IPM INT & INT ALARM CKT		
120A, 120 IPM BR3 OR 120 IPM	IF9	IE0
60 IPM	3G0	2D0

AUDIBLE AND VISUAL ALARM CKT		
AD	2D0	IA4
AH	2D0	IA4
F	2C0	IA4
G	2D0	IA4
GRD	2D0	IB4
MN	2C0, 2D0	IA4
MNG	2C0	IA4
R	2D0	IA4
RP	2D0	IA4
RPG	2D0	IB4
W	2D0	IA4

COIN CONTROL SUPPLY CKT		
CC-	3E0	

DESIG	LOCATION FS	LOCATION CAD
EMERGENCY SERVICE BUREAU		
R	IB9	ID9
T	IC9	ID9

LOCAL OR INCOMING SELECTOR BANK MULT CKT		
R	IC0	IA0, IC7
S	ID0	IA0, IC7
T	IB0	IA0, IB7

DESIG	LOCATION FS	LOCATION CAD
LOCAL SELECTOR BANK MULT CKT (COIN)		
R	3D0	2B0, 3A0
S		2B0, 3B0
T	3C0	2B0, 3A0

LOCAL SELECTOR BANK MULT CKT (NON-COIN)		
R	3B0	2A0, 3B0
S	3C0	2B0, 3B0
T	3A0	2A0, 3B0

PILOT LAMP CKT		
C	2D0	IB4
CG	2D0	IB4
MN	2C0, 2D0	IA4, IB4
MNG	2C0	IA4

DESIG	LOCATION FS	LOCATION CAD
POWER RINGING CKT OR MISC ALARM CKT		
60 IPM	3G0	
60 IPM BUSY	IA7	GO
60 IPM LT	IA7	GO
120A	IF9	IE0
120 IPM	IF9	IE0
120 IPM BUSY	IA7	IE0
120 IPM BR3	IF9	IE0
120 IPM LT	IA7	IE0
AC-DC AUD	4D0	2D0
BR	IH0	IG0
BT2	IA8	IF0
BT2 60 IPM	IA8	IG0
BT2 120 IPM	IA6	IE0
CODE I GEN	IA5	IF0
CODE I GEN-I± -RI	IA5	IF0
D	2D0	IA4
DG	2D0, 4D0	IB4, 2D0
EST	2C0	IA4
GEN I	IA5	IF0
GEN G	IA4, 4D0	IF0, 2D0
GRD	2C0	IA4
INT ST	IE9	IF0
LB	IH0	IG0
LT	IA8	IF0
LTI 60 IPM BT	IA7	IG0
LTI 120 IPM BR2	IA6	IE0
LTI 120 IPM T3	IA5	IE0
LT5 60 IPM BR2	IA7	IG0
LT5 60 IPM BT	IA7	IG0
MN	2C0, 2D0	IA4, IB4
MNG	2C0	IA4
MNR	2D0	IB4
MRRI	IA5	IF0
MR SUP-	IA5	IF0
MS	IE9	IF0
RING GRD	IA4, 4D0	IF0, 2C0
RMST	IE9	IF0
SUP+AUD	4E0	2D0
SUP-AUD	4E0	2D0

DESIG	LOCATION FS	LOCATION CAD
TOTALIZER CKT		
TT-	IH0	IA7, IB0
TU-	IH0	IA7, IB0

TRAFFIC REGISTER CKT		
M	IE0	IF7
BR	IH0	3C0
LB	IH0	3G0

TRAFFIC USAGE RECORDER CKT		
TT-	IH0	IA7, IB0
TU-	IH0	IA7, IB0

OPTION INDEX

APP OR WRG	LOCATION
2	APP FIG. 2, ID5, ID6, IE5, IF3, IF5
3	APP FIG. 3
5	APP FIG. 5
W	IB3, IC3
V	IC3, IG1, IG2
T	IC6, ID6, IF4, IF5
S	ID6, IE6, IF4, IF5
R	ID5, ID6
Q	IC2
N	2C1, 2D1
M	2C1, 2D1
K	IB0, IB1, IB7, IC0, IC1, IE1, IG1, ID1, IC8, IE1, IE2, IF0, IF2, IG1
J	IA8, IB1, IB2, IB5, IB8, IC1, IC2, IC3
H	3D6

APP OR WRG	LOCATION
G	3D8, 3E3
F	APP FIG. 5, 4C2, 4E2, 4E3
E	APP FIG. 5, 4D2, 4E3
B	2B7
A	2B6
ZA	2B7
ZB	2D8
ZC	2D7
ZD	2D6
ZE	2D7
ZF	IF3
ZG	APP FIG. 1
ZH	APP FIG. 1, ID2
ZI	IH0
ZJ	IH0
ZK	IB7, C7
ZL	APP FIG. 1
ZM	IA8
ZN	IA8
ZO	IA8
ZP	IA8

APP OR WRG	LOCATION

SD-35004-01-A3

ISSUE 6D

TRUNK CIRCUIT (2) | SD-35004-01-A3

BELL TELEPHONE LABORATORIES INCORPORATED

FS I
TRUNK CKT

TO POWER RINGING CKT OR MISC ALARM CKT

RING GRD OR GEN G

MAX 9 OTHER FIG. 1

MAX 9 OTHER FIG. 1

MINI, MF SUPP CODE 1 GEN. CODE 1 GEN – 1½ – RI OR GEN I

TO ALL OTHER FS1 IN SAME TRK GROUP

LT1 120 IPM B62, LT1 150 IPM, T3, B12 150 IPM, 120 IPM BUSY ON 150 IPM LT

TO ALL OTHER FS1 IN SAME TRK GROUP

LT1 60 IPM BT, LT5 60 IPM B62, LT5 60 IPM BT, 60 IPM LT, 60 IPM B12

TO ALL OTHER FS1 IN SAME TRK GROUP

TO EMERGENCY SERVICE

TO LOCAL OR INCOMING SELECTOR BANK CKT

TO TRAFFIC REGISTER CKT

TO TRAFFIC USAGE RECORDER CKT OR TO TOTALIZER CKT

TO TRAFFIC REGISTER CIRCUIT OR TO MISC ALARM CKT (REG)

TO ALL OTHER CKTS IN SAME GROUP

MS OR RMST OR INT ST

TO POWER RINGING CKT OR MISC ALARM CKT

TO ALL OTHER FS1 IN SAME TRK GROUP

120A, 120 IPM BR3 OR 20 IPM

TO 60 & 120 IPM INT & INT ALARM CKT OR POWER RINGING CKT

TO ALL OTHER FS1 IN SAME TRK GROUP

TR TIMER CP 03

ISSUE 6D

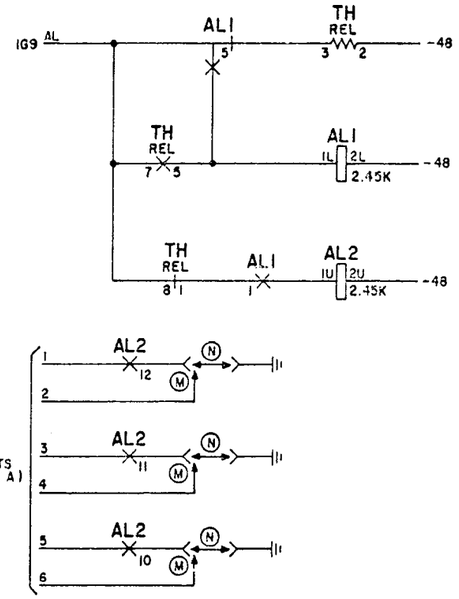
TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES

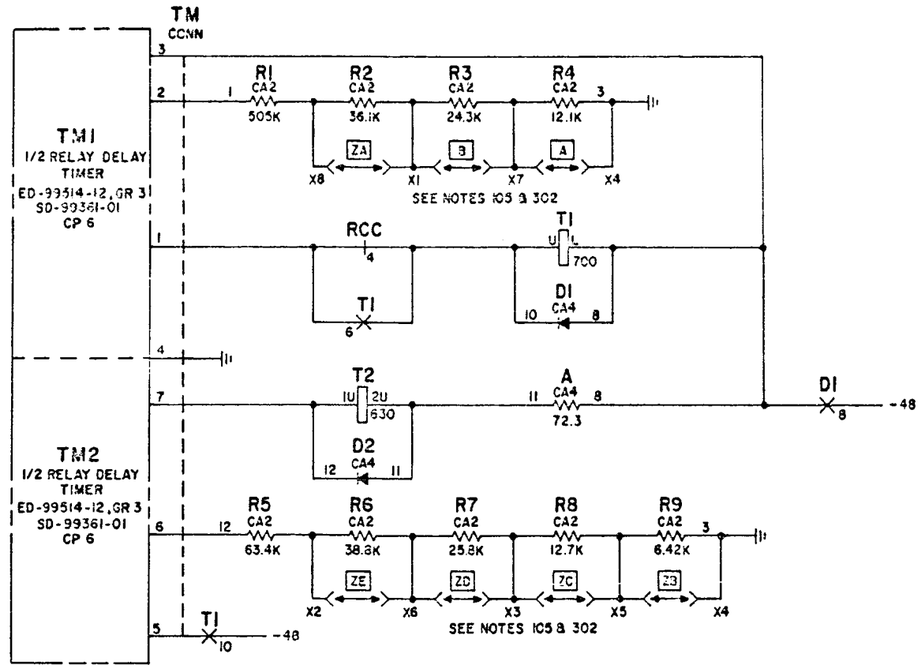
SD-35004-01-81

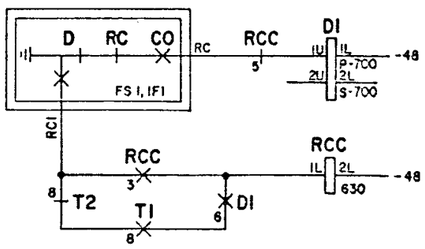
SD-35004-01-81

FS 2
ALARM TIMER CKT



FS 3
WINK DETECTOR CKT





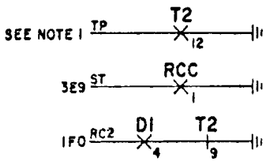


TABLE A

OPTION N			OPTION M						CONNECTING CIRCUIT
1	3	5	1	2	3	4	5	6	
MN	D		MN	MNG	D	DG			MISC ALARM CKT (P SIG TIMING)
F									ALARM CKT
F, MN	G		MN	MNG	GP	GPG			AUDIBLE & VISUAL ALARM CKT
MN		C	MN	MNG			C	CG	PILOT LAMP CKT
EST	MN		EST	ESTR	MN	MNR			MISC ALARM CKT
		MN					MN	MNG	PILOT LAMP AND POWER ALARM CKT
MN			MN	MNG					MISC ALARM CKT (ALARM CONTROL)
	PL								MISC ALARM CKT (AISLE PILOTS)

NOTES:
1. FOR TEST PURPOSES ONLY.

ISSUE 3B

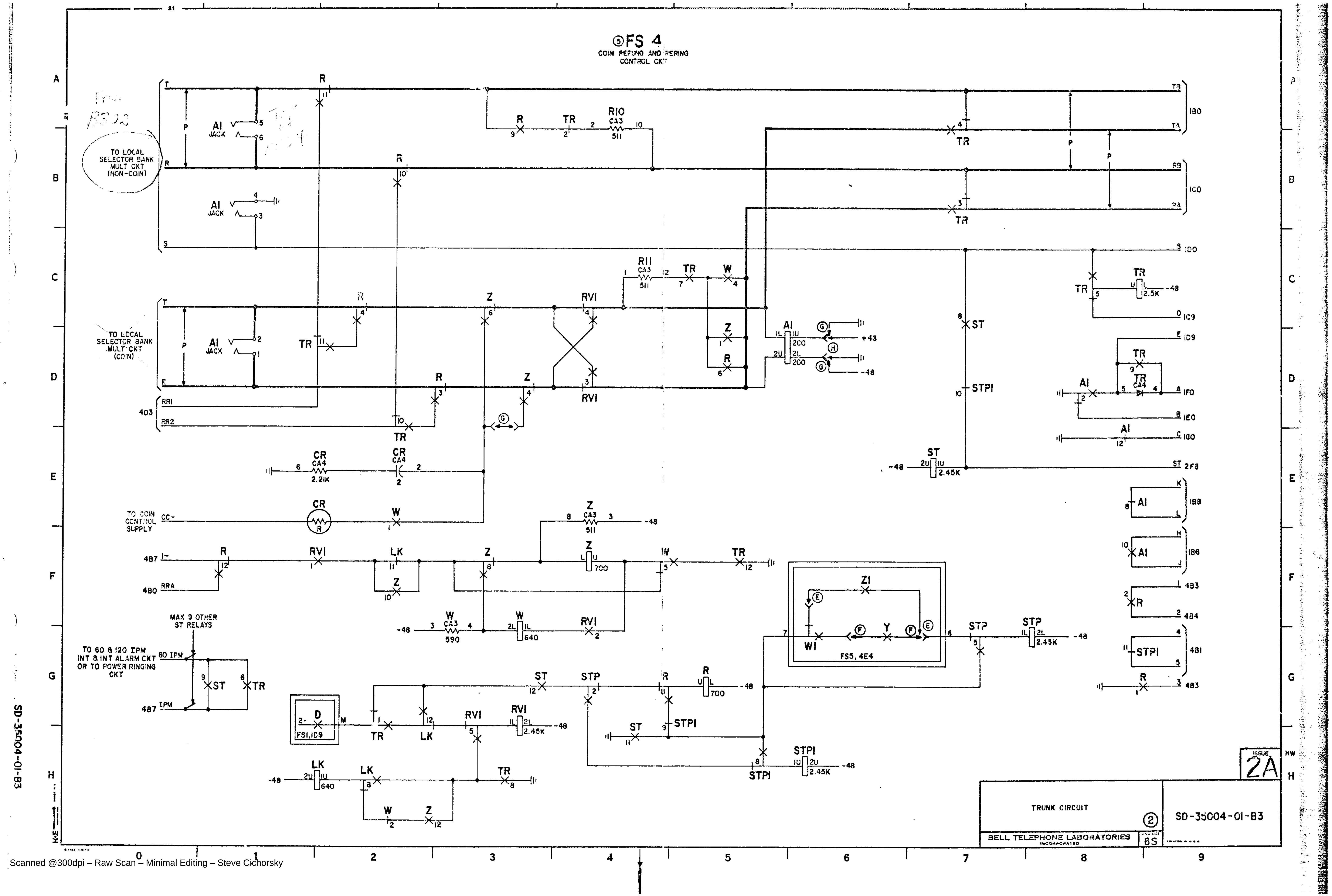
TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

SD-35004-01-B2

65

SD-35004-01-B2

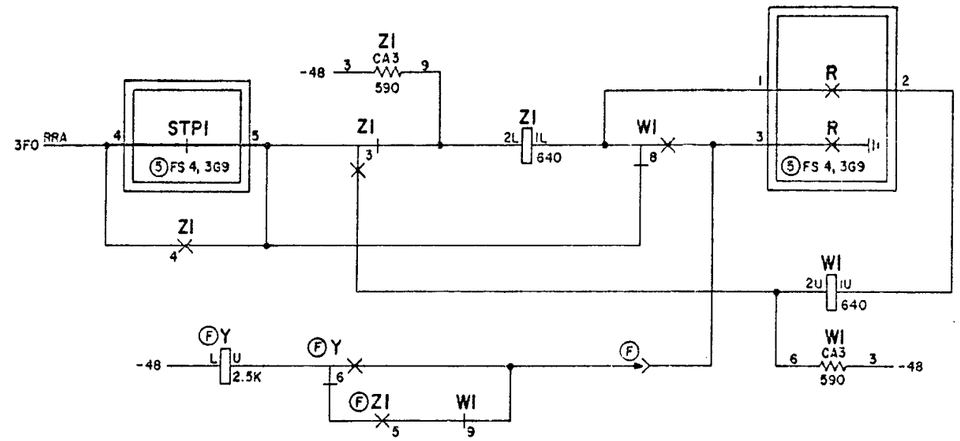


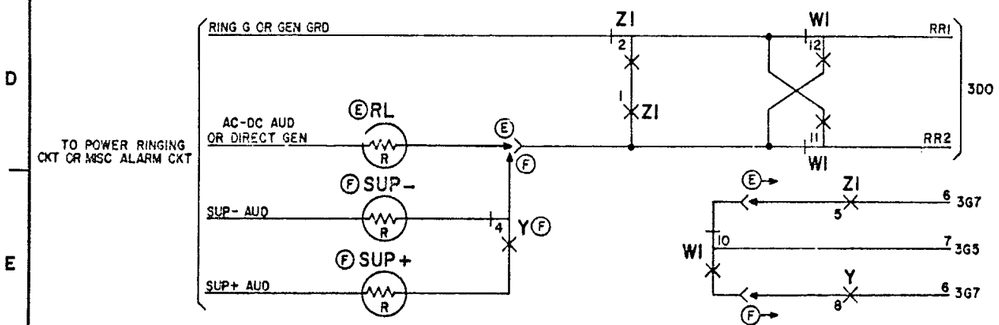
FS 4
COIN REFUND AND RERING CONTROL CKT
TO LOCAL SELECTOR BANK MULT CKT (NON-COIN)
TO LOCAL SELECTOR BANK MULT CKT (COIN)
AI JACK
R10 CA3 511
R11 CA3 511
TR
RVI
Z
W
CR CA4 2.21K
CR CA4
TO COIN CONTROL SUPPLY
Z CA3 511
W CA3 590
MAX 9 OTHER ST RELAYS
TO 60 & 120 IPM INT & INT ALARM CKT OR TO POWER RINGING CKT
60 IPM
IPM
FS1,1D9
FS5, 4E4
ZI
WI
STP
STPI
LK
ST
180
1C0
1D0
1C9
1D9
1F0
1E0
1G0
2F8
1B8
1B6
4B3
4B4
4B1
4B7
4B0
4D3
TRUNK CIRCUIT
BELL TELEPHONE LABORATORIES INCORPORATED
SD-35004-01-B3
ISSUE 2A
6S

Scanned @300dpi – Raw Scan – Minimal Editing – Steve Cichorsky

FS 5

2 PARTY SELECTIVE OR 4 PARTY
SEMI-SELECTIVE, CODE RINGING (AC-DC AUD)
OR 4 PARTY SELECTIVE, 3 PARTY
SEMI-SELECTIVE CODE RINGING (SUP AUD)





(6) FS 6

INTERRUPTER CKT

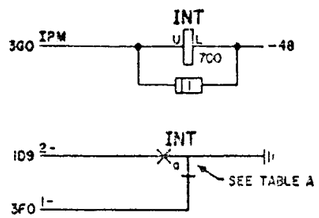


TABLE A

CONTACT NO.	LEAD NO.
12M	
12B	
11M	
11B	
10M	2-10
10B	1-10
9M	2-9
9B	1-9
8M	2-8
8B	1-8
7M	2-7
7B	1-7
6M	2-6
6B	1-6
5M	2-5
5B	1-5
4M	2-4
4B	1-4
3M	2-3
3B	1-3
2M	2-2
2B	1-2
1M	2-1
1B	1-1

ISSUE 1

TRUNK CIRCUIT (2)

SD-35004-01-B4

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-35004-01-B4

APP FIG. 1

RELAY

DESIG	A				B				C		CO				D						DESIG
CODE	AJ66				AG16				AG27		AF79				AJ110						CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	B	IG1									EMB										12
11											M	IG2			M	IF8					11
10	M	IB5			M	IC5					EBM	IC5			M	IB7					10
9									B	IG1											9
8	B	IA8			EBM	IE2			M		EBM	IC8			EBM	IF2					8
7					B				B	IC5											7
6					EBM	IH1			M	IE1	EMB	IC5			EMB	IG3					6
5					B	IC3			B												5
4					M	IG2			M	IE5	EBM	IB5			M	IC8					4
3																					3
2	BM	IE1									EBM	IG4			M	IF2					2
1											M	IF1			M						1
COIL		IC1				IE3				IE3		IG7				IC2					COIL

RELAY

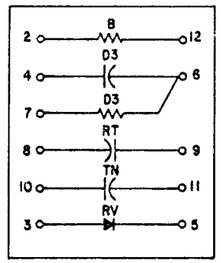
DESIG	F								L								P		RV		DESIG
CODE	AJ118								AJ110								AK35				CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12																			M	IG2	12
11									M	IE8									EBM	IG9	11
10									M	IG8									EBM	IF9	10
9																			B	IC5	9
8									EBM	IF8									EMB	IB3	8
7																					7
6	B	IB4							EMB	IC1											6
5																	EMB	IE2			5
4									M	IB7							EMB				4
3																	EBM	IB6			3
2									M								EBM	IE2			2
1									M	IG1							M	IC1			1
COIL		IC5								IC6								IG6		IG2	COIL

CIRCUIT PACK (TIMER)

DESIG	LOC	CODE
TR	IG6	D3

COMPONENT ASSEMBLY
ED-35010-( ),GR 2 E/W

DESIG
CAI



CAPACITORS

DESIG	LOC	CODE
D3	IG5	538GH
RT	IB4	542W
TN	IB7	542C

DIODES

DESIG	LOC	CODE
RV	IG2	446F

RESISTORS

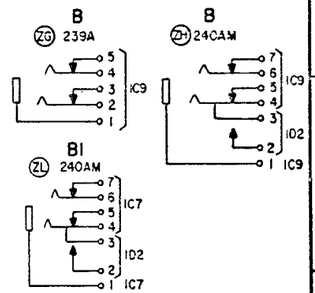
DESIG	LOC	CODE
B	IC3	KS-14603, L1AD, 511
D3	IG4	147A, 4.02 MEG

CAPACITORS

DESIG	LOC	CODE
T	IB2	437E
R	IC2	

JACKS (TEST)

DESIG	LOC	CODE
A	IC1	534C



RELAY

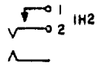
DESIG	RC																				DESIG
CODE	AG33																				CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12							EM	IE8													12
11																					11
10							M														10
9							B	IG1													9
8							EBM	IC4													8
7							B	IF1													7
6							EMB	IG4													6
5							B														5
4							EBM	IB4													4
3																					3
2							M	IC4													2
1							M	IC8													1
COIL								IC4													COIL

RELAY

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

KEY
547A

ACO



LAMPS

DESIG	LOC	CODE
AL	IF8	MI

SD-35004-01-C1

ISSUE 4B

TRUNK CIRCUIT (2) SD-35004-01-C1

BELL TELEPHONE LABORATORIES INCORPORATED 6S

APP FIG. 2

RELAY

DESIG							W		Z		DESIG
CODE							AK30				CODE
OPTION											OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12									M	1C6	12
11									EBM	1E3	11
10									EBM	1F5	10
9									EMB		9
8									EMB	1E7	8
7											7
6											6
5							EMB				5
4							EMB	1E6			4
3							EBM	1D5			3
2							EBM	1F4			2
1							M				1
COIL								1E6		1E7	COIL

RESISTORS

DESIG	LOC	CODE
W	1E6	KS-14603, L1AD, 590
Z	1E8	

APP FIG. 3

LAMP

DESIG	LOC	CODE
R	1A5	130 (RES)

APP FIG. 4

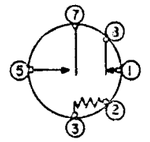
RELAY

DESIG	AL1		AL2								DESIG
CODE	AK4										CODE
OPTION											OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12			M	2C1							12
11			EBM	2D1							11
10			EBM	2D1							10
9			EMB								9
8			EMB								8
7											7
6											6
5	EMB	2A1									5
4	EMB										4
3	EBM										3
2	EBM										2
1	M	2C1									1
COIL		2B1		2C1							COIL

SOCKET

DESIG	LOC	CODE
TH	—	KS-13364, L3

THERMAL TIME DELAY RELAY



DESIG	TH
CODE	KS-13615, L20
OPTION	
8	2C1
7	2B1
6	
5	2B1
4	
3	2A1
2	2A1
1	2C1

SD-35004-01-C2

ISSUE 2A HW

TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-35004-01-C2

APP FIG. 5

RELAY

DESIG		A1				D1				DESIG
CODE		AJ56				AG58				CODE
OPTION										OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC		
12			B	3E8						12
11										11
10			M	3F8						10
9										9
8			B	3E3			M	2C9		8
7							B			7
6							M	2F6		6
5										5
4							M	2F9		4
3										3
2			BM	3D8						2
1										1
COIL				3D5				2F6		COIL

RELAY

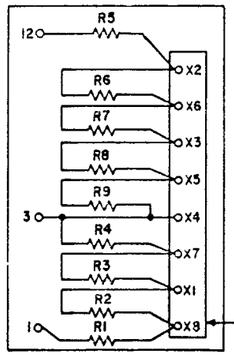
DESIG		R		RCC		T2		DESIG
CODE		AJ19		AK35				CODE
OPTION								OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC		
12		BBM 3F1			M	2E3		12
11		BBM 3A2			M			11
10		BBM 1B2			M			10
9		BBM 1B3			B	2F9		9
8		BMB 3G5			B	2F5		8
7								7
6		BMB 3D5						6
5			B	3E5				5
4		BBM 3D2	B	2C5				4
3		BBM 3D3	M	2F5				3
2		BBM 2F8	M					2
1		BBM 3D8	M	2F9				1
COIL		3G5		2F5		2C5		COIL

CIRCUIT PACKS

DESIG	LOC	CODE
[1] (TM1 RELAY DELAY TIMER CP6 / TM2 RELAY DELAY TIMER CP6)	2C5	ED-99514( ) SD-99361-01

COMPONENT ASSEMBLY — DESIG

ED-35010-( ), GR 3 E/W — CA2



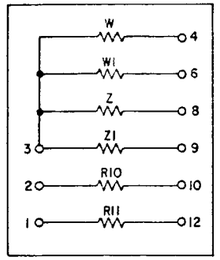
318A TERMINAL STRIP (MOUNTED ON COMPONENT ASSEMBLY)

RESISTORS

DESIG	LOC	CODE
R1	2B6	505K
R2		36.1K
R3	2B7	24.3K
R4		12.1K
R5	2D6	~~2811A~~ KS-20810,L1A, 53.4K
R6		38.3K
R7	2D7	25.8K
R8		12.7K
R9	2D8	6.42K

COMPONENT ASSEMBLY — DESIG

ED-35010-( ), GR 4 E/W — CA3



RESISTORS

DESIG	LOC	CODE
RIO	3B4	KS-14603, L1AD, 511
RII	3C4	
W	3F3	KS-14603, L1AD, 590
WI	4C4	
Z	3E4	KS-14603, L1AD, 511
ZI	4A2	KS-14603, L1AD, 590

RELAY

DESIG	RVI	ST	STP	STPI			TR	T1			DESIG
CODE	AK49		AK4				AJ83	AF51			CODE
OPTION											OPTION
	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	
12		M 3G3		M			EBM 3F5				12
11		EBM 3H4		EBM 3G8			EBM 3D2				11
10		EMB		EBM 3D7			EBM 3D2	M 2E6			10
9		EMB 3G1		EMB 3D5			EBM 3D8				9
8		EMB 3C7		EMB 3H5			EMB 3H3	M 2F5			8
7							EBM 3C5				7
6							EMB 3G1	M 2C6			6
5	EMB 3G3		EMB 3G7				EMB 3C8				5
4	EMB 3C4		EMB				EBM 3B7	M			4
3	EMB 3D4		EBM				EBM 3B7				3
2	EBM 3F4		EBM 3G4				EBM 3B4				2
1	M 3F2		M				EBM 3G2				1
COIL	3G3	3E7	3G8	3H6			3C8	2C7			COIL

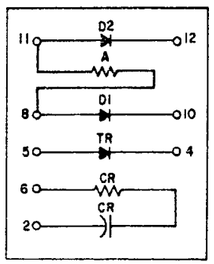
RELAY

DESIG	W	LK			Y		Z	ZI	WI		DESIG
CODE	AK22				AF67 F		AF16	AK22			CODE
OPTION											OPTION
	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	CONT ARR LOC	
12		EBM 3G2					M 3H3		EBM 4D3		12
11		EBM 3F2							EBM 4D3		11
10		EBM					M 3F2		EBM 4E3		10
9		EMB							EMB 4C2		9
8		EMB 3H2			EBM 4E3		EBM 3F3		EBM 4B3		8
7							B				7
6					EMB 4C2		EBM 3C3				6
5	EMB 3F4							EMB 9			5
4	EMB 3C5				EBM 4E2		EBM 3D3	EBM 4B1			4
3	EBM							EBM 4B2			3
2	EBM 3H2						M	EBM 4C2			2
1	EBM 3E2						M 3D5	EBM 4C2			1
COIL	3F3	3H2			4C1		3F4	4B2	4C4		COIL

(E) 4E3
(F) 4C2

COMPONENT ASSEMBLY — DESIG

ED-35010-( ), GR 5 E/W — CA4



CAPACITORS

DESIG	LOC	CODE
CR	3E2	542AG

DIODES

DESIG	LOC	CODE
D1	2C7	458A
D2	2D6	458A
TR	3D8	446F

RESISTORS

DESIG	LOC	CODE
A	2C7	KS-14603, L1CD, 72.3
CR	3E2	KS-14603, L1CD, 2.2K

CONNECTORS

DESIG	LOC	CODE
TM	2C6	910A

JACKS

DESIG	LOC	CODE
AI	3B1	5548

LAMPS

DESIG	LOC	CODE
CR	3E2	13L(RES)
(E) RL	4D1	13C(RES)
(F) SUP-	4E1	
(F) SUP+	4E1	

ISSUE 48

TRUNK CIRCUIT (2) SD-35004-01-C3

BELL TELEPHONE LABORATORIES INCORPORATED — 6S

SD-35004-01-C3

APP FIG 6

RELAY

DESIG			INT			
CODE			AJI2			
OPTION						
X	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12			EBM			
11			EBM			
10			EBM	487		
9			EBM	487		
8			EBM	487		
7			EBM	487		
6			EBM	487		
5			EBM	487		
4			EBM	487		
3			EBM	487		
2			EBM	487		
1			EBM	487		
COIL	X		X	487	X	

NETWORK

DESIG	LOC	CODE
INT	487	185A

SD-35004-01-C4

TRUNK CIRCUIT ②		SD-35004-01-C4
BELL TELEPHONE LABORATORIES INCORPORATED	DATE ISSUED 8S	ISSUE 1 HW

CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
	1-1/3	-48V SIG	APP FIG. 1 & 2
	1-1/3	-48V SIG	APP FIG. 4
	1-1/3	-48V SIG	APP FIG. 5
	1-1/3	-48V SIG	APP FIG. 6
	1-1/3	+48	APP FIG. 5, OPTION H
		GRD	APP FIG. 1 & 2
		GRD	APP FIG. 4
		GRD	APP FIG. 5
		GRD	APP FIG. 6
		+48V GRD	APP FIG. 5, OPTION H
	1/2HZ	CC-	APP FIG. 5
	1/2 HZ	MRRI, MR SUP-, GEN I, +-RI	MAX 10 CKTS
	1/2 HZ	AC-DC AUD, SUP- AUD, SUP+ AUD	APP FIG. 5
	X1/2 HZ	LT2	TRK GR

BATTERY SYMBOL	VOLTAGE RANGE
-48	45-52
+48	45-52

* IN NO. 1 AND 350A OFFICE ONLY

CIRCUIT NOTES (CONT):

102.

FEATURE OR OPTION	PROVIDE APP FIG.	PROVIDE APP OR WRG	PROVIDE QUANTITY

102.

FEATURE OR OPTION			PROVIDE APP FIG.	PROVIDE APP OR WRG	PROVIDE QUANTITY
911 TRUNK	LOCAL SELECTOR ACCESS		1	ZF	1 PER TRK
	INCOMING SELECTOR ACCESS			K	
NUMBER OF DIGITS TO BE ABSORBED IN TRUNK		2	2	S	1 PER TRK (SEE NOTE 106)
		1		T	
		NONE		R	
RINGING LAMP			3		1 PER 10 FIG.
ALARM TIMER CKT	ALARM LEADS PAIRED WITH GROUND	NO	4	N	1 PER TRK GR
		YES		M	
REVERSE BATTERY SUPERVISION TO BUREAU		YES		V	(SEE NOTE 108)
		NO		W	
SLEEVE BATTERY RESISTOR REQUIRED FOR 3ESS7 OFFICE				Q	
EMERGENCY RINGBACK (LOCAL SELECTOR ACCESS ONLY) (SEE NOTE 107)	NO		3 J	K	
	YES	AC-DC RINGING		E	1 PER TRK
		SUPERIMPOSED RINGING		F	
		COIN FIRST PAYSTATIONS		G	1 PER TRK (SEE NOTE 109)
		DIAL TONE FIRST PAYSTATIONS		H	
		INTERRUPTER RELAY	6		1 PER 20 TRKS
LAST TRUNK BUSY REGISTER (SEE NOTE 108)				ZJ	1 LEAD PER LAST SEL MULT TRK
ALL TRUNK BUSY REGISTER (SEE NOTE 108)				ZI	1 PER TRK GR
CALLING PARTY DISCONNECTS FIRST	DIRECT TRUNK (LOCAL SELECTOR ACCESS) STEADY LOW TONE	METALLIC FACILITY TO 911		ZN, ZO OR ZP	SEE NOTE 110
		CARRIER OR RANGE EXTENDER FACILITY TO 911		ZN	
	TANDEM TRUNK (INCOMING SELECTOR ACCESS) RECORDER TONE TO 911				SEE NOTE 111

103.

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	470	0.11

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	
38	ZG OR ZH	ZG		ZH		ZG	
	ZJ OR ZI	NONE	102	ZJ, ZI			
48	ZK OR ZL	ZK		ZL		ZK	
58U	ZM, ZO, OR ZN	ZM	102	ZO, ZN		ZM	
60	ZP	NONE	102	ZP			

CIRCUIT NOTES (CONT):

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	

105. THE TIMING REQUIREMENTS OF TM1 & TM2 CAN BE MET BY ADDING OR REMOVING STRAPS. EACH APPROXIMATELY 12K CHANGE IN RESISTANCE WILL VARY THE TIMING OF TM1 10 MILLISECONDS, EACH 6.4K CHANGE IN RESISTANCE WILL VARY THE TIMING OF TM2 5 MILLISECONDS.

106. OPTION R & W SHOULD BE SPECIFIED FOR USE WITH INCOMING SELECTOR ACCESS.

107. EMERGENCY RING BACK CANNOT BE FURNISHED WITH DIAL POST PAYMENT TELEPHONE SERVICE.

108. INSULATE CONTACT 6B, RELAY (B) IF CIRCUIT IS TO BE MADE BUSY FOR A PROLONGED PERIOD OF TIME.

109. IF THE ENTIRE OFFICE IS ARRANGED FOR DIAL TONE FIRST OPERATION BUT ONE OR MORE TELEPHONES ARE COIN FIRST OPERATION, THE DIAL TONE FIRST OPTIONS SHALL BE FURNISHED IN THIS CIRCUIT.
IF SEPARATE DIAL TONE FIRST LINE GROUPS AND COIN FIRST LINE GROUPS ARE EQUIPPED, SEPARATE 911 COIN TRUNK GROUPS MUST BE FURNISHED.

110. OPTION ZO FURNISHES NON PRECISE STEADY LOW TONE (LT).
OPTION ZN FURNISHES PRECISE STEADY LOW TONE (BT2).
OPTION ZP FURNISHES NON PRECISE LOW TONE (LT2).

111. THE TRUNK WILL RELEASE ON CALLING PARTY DISCONNECTS PERMITTING RELAY L TO OPERATE AND FURNISH RECORDER TONE.

INFORMATION NOTES:

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

302. JOB RECORDS NEED NOT BE MAINTAINED FOR OPTIONS A, B, ZA, ZB, ZC, ZD OR ZE.

EQUIPMENT NOTES:

201. PRIOR TO ISSUE 3B, THE LEAD BETWEEN 6B OF (B) RELAY AND TERMINAL 52 OF TS(A) OR (C) ON CAD 1 WAS NOT SHOWN.

WORKING LIMITS:

MAX EXT CKT LOOP (SUB)	-45 MIN 1400	-48 MIN 1500
MAX EXT CKT LOOP (TO EMER SRV BUREAU)	-45 MIN 1600	-48 MIN 1700
MIN INS RES (SUB)	15,000	
MIN INS RES (TO EMER SRV BUREAU)	30,000	
MAX EARTH POTENTIAL	± 3V	

ISSUE 6D

TRUNK CIRCUIT (2)

SD-35004-01-01

BELL TELEPHONE LABORATORIES INCORPORATED

SD-35004-01-01

SC 1
CALL TO BUREAU SEIZURE

CALL ORIGINATED FROM A COIN STATION

AI
B
RC
TR
INT (PULSING AT 60 IPM)
TO SC 2, 2Q3

CALL ORIGINATED FROM A COIN (OPTION K) OR LOCAL STATION

A
B
RC

(T) TR TIMER 15 SEC
P
SR
C
B
RC
TR
INT
TR TIMER
SR
P
PRECEDING SWITCH TRAIN RELEASED
A/AI
SR
C
TRAFFIC REGISTER OPERATED

ONE DIGIT ABSORPTION (2,T)

IST DIGIT DIALED INTO TRUNK
A/AI
C
A/AI
W
SR
C
Z
TR TIMER

(2,3) TWO DIGIT ABSORPTION

(R) NO DIGITS ABSORBED

(S) TR TIMER 15 SEC
P
SR
C
B
RC
TR
INT
TR TIMER
SR
P
PRECEDING SWITCH TRAIN RELEASED
A/AI
SR
C
TRAFFIC REGISTER OPERATED

IST DIGIT DIALED INTO TRUNK
A/AI
C
A/AI
W
SR
C
Z
TR TIMER

(S) TR TIMER 15 SEC
P
SR
C
B
RC
TR
INT
TR TIMER
SR
P
PRECEDING SWITCH TRAIN RELEASED
A/AI
SR
C
TRAFFIC REGISTER OPERATED

2ND DIGIT DIALED INTO TRUNK
A/AI
C
A/AI
W
SR
C
TR TIMER

CO

RINGING TONE TO SUBSCRIBER, BUREAU SIGNALED

TO SC 3, 3Q2

ISSUE HW

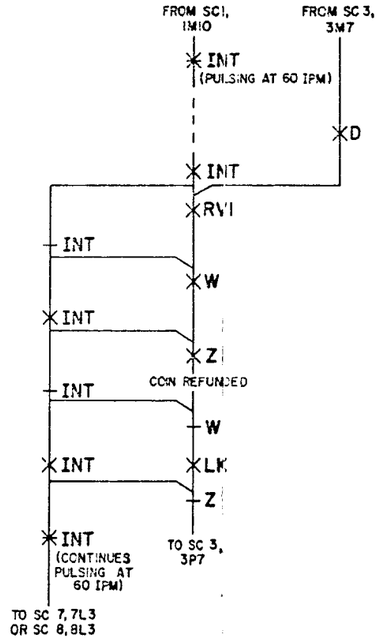
TRUNK CIRCUIT (2) SD-35004-01-EI

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-35004-01-EI

SC 2
COIN REFUND

(FOR CALLS ORIGINATING FROM COIN STATIONS)



TRUNK CIRCUIT	②	SD-35004-01-E2	
BELL TELEPHONE LABORATORIES INCORPORATED	6S		ISSUE HW

SD-35004-01-E2

SC 3

BUREAU ANSWERS CALL,
CALLING PARTY DISCONNECTS FIRST

FROM SC 1, 1Q36

BUREAU ANSWERS

F

RC

COIN REFUND (5) D F

TO SC 2, 2S3

FROM SC2, 2Q17

Z

TALKING LOOP COMPLETED

FROM SC 7, 7N28 OR SC 3, 8Y33

CALLING PARTY DISCONNECTS FIRST

CALL ORIGINATED FROM A COIN STATION (5) (5) CALL ORIGINATED FROM A LOCAL STATION

FROM SC 7, 7N[illegible] OR SC 3, 8Y33

(K)

CALL ORIGINATED FROM A COIN OR LOCAL STATION

(V) AI

RV

C

STEADY LOW TONE TO BUREAU

REVERSE BATTERY SUPERVISION TO BUREAU

BUREAU DISCONNECTS

D

DISCONNECT AFTER RERING

RCC

GROUND REMOVED FROM LEAD "MS"

STEADY LOW TONE TO BUREAU REMOVED

DI

ST

TMI TIMER

450 MSEC

TI

TM2 TIMER

100 MSEC

T2

SR

B

STPI

STP

TR

LK

RVI

INT

(2,S OR T)

W/Z

TRAFFIC REGISTER OPERATED

CO

PRECEDING SWITCH TRAIN RELEASED

A (V)

STEADY LOW TONE TO BUREAU REMOVED

GROUND REMOVED FROM LEAD "MS"

PRECEDING SWITCH TRAIN RELEASED

INT

STP

STPI

ISSUE 5BU

TRUNK CIRCUIT (2)

SD-35004-01-E3

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-35004-01-E3

SC 4

CALL TO BUREAU

(CALL ORIGINATED VIA A TANDEM OFFICE, TRUNK NOT ARRANGED FOR DIGIT ABSORPTION, OPTION K)

SEIZURE

X A

X B

X RC

X CO

RINGING TONE TO SUBSCRIBER, BUREAU SIGNALED

BUREAU ANSWERS

X F

RC — F

X D

TALKING LOOP COMPLETED

CALLING PARTY DISCONNECTS FIRST

A

X C — SR

B

SR — TRAFFIC REGISTER OPERATED — CO — PRECEDING SWITCH TRAIN RELEASED

X L

C — TO SC 10, 1003

SD-35004-01-E4

ISSUE 5BU

TRUNK CIRCUIT (2) SD-35004-01-E4

BELL TELEPHONE LABORATORIES INCORPORATED 65

SC 5

DISCONNECT
(FORCED DISCONNECT ON CALLING PARTY)

CALLING PARTY OFF-HOOK

BUREAU DISCONNECTS

D ⑤

GROUND REMOVED FROM LEAD "MS"

TR TIMER
15 SEC

FORCED DISCONNECT AFTER RERING

RCC

DI

ST

TMI TIMER
450 MSEC

(LOCAL ACCESS)

STP STPI INT

TI

TM2 TIMER
100 MSEC

T2

P

CALL ORIGINATED FROM A LOCAL STATION ⑤ ⑤ CALL ORIGINATED FROM A COIN STATION

K

CALL ORIGINATED FROM A COIN OR LOCAL STATION, OR VIA A TANDEM OFFICE

C SR B CO A TR TIMER TRAFFIC REGISTER OPERATED

2,SORT W/Z

DI TI T2 TM2 TIMER TMI TIMER

SR P

PRECEDING SWITCH TRAIN RELEASED

C SR B A TRAFFIC REGISTER OPERATED

2,SORT W/Z

CO TR TIMER

SR P

PRECEDING SWITCH TRAIN RELEASED

C SR B CO A1 TRAFFIC REGISTER OPERATED

2,SORT W/Z

TR TIMER

SR P DI TI TM2 TIMER T2 TMI TIMER

TR INT LK RVI

PRECEDING SWITCH TRAIN RELEASED

ISSUE

TRUNK CIRCUIT ②

SD-35004-01-E5

BELL TELEPHONE LABORATORIES INCORPORATED

SIZE 6S

SD-35004-01-E5

SC 6

WINK DETECTION FOR RERING

(CALL ANSWERED BY BUREAU, TALKING PATH COMPLETED)

ALL PARTIES ON ORIGINATING END ON-HOOK

ANY PARTY ON ORIGINATING END OFF-HOOK

CALLING PARTY DISCONNECTS FIRST

A/AI

STEADY LOW TONE TO BUREAU REMOVED

C

V

RV

REVERSE BATTERY SUPERVISION TO BUREAU

D

D

DI

DI

RELAY D REOPERATES IN LESS THAN 450 MSEC

RELAY D REOPERATES BETWEEN 450-550 MSEC

TMI TIMER

TMI TIMER

TMI TIMER

TMI TIMER

450 MSEC

450 MSEC

TI

TI

TM2 TIMER

TM2 TIMER

100 MSEC

T2

RELAY D REOPERATES AFTER 550 MSEC BUT BEFORE RELAY B RELEASES

D

DI

TMI TIMER

TI

T2

TM2 TIMER

RCC

LEAD "ST" GROUNDED

TO SC 7, 7P3,7S3 OR SC 8, 8P3,8S3

D

DI

TI

TMI TIMER

TM2 TIMER

ISSUE 5BU

TRUNK CIRCUIT

2

SD-35004-01-E6

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-35004-01-E6

SC 7

RERING

(SXS OFFICES WITH AC-DC AUDIBLE RINGING MACHINES)

CALL ORIGINATED FROM A COIN STATION

FROM SC 2, 2N19

INT (PULSING AT 60 IPM)

INT

FROM SC 6, 5V34 LEAD "ST" GROUNDED

ST

CALL ORIGINATED FROM A LOCAL STATION

FROM SC 6, 5V34 LEAD "ST" GROUNDED

ST

INT

R

INT

WI

RING PARTY SIGNALED

A/AI

V

RV

SR

C

STEADY LOW TONE TO BUREAU REMOVED

INT

ZI

TIP PARTY SIGNALED

INT

WI

TIP RING AND BRIDGE PARTIES SIGNALED

INT

STP

TIP RING AND BRIDGE PARTIES SIGNALED

INT (CONTINUES PULSING AT 60 IPM)

ZI

STPI

R

OPENS LOCKING PATH OF RELAY ST TO "3" LEAD

RINGING DISCONNECTED

ANY PARTY ON ORIGINATING END OFF-HOOK

TALKING LOOP COMPLETED

N24

ALL PARTIES ON ORIGINATING END ON-HOOK

A/AI

C

STEADY LOW TONE TO BUREAU

V

RV

REVERSE BATTERY SUPERVISION TO BUREAU

PARTY ANSWERS

A/AI

STEADY LOW TONE TO BUREAU REMOVED

SR

C

V

RV

TALKING LOOP COMPLETED

Y23

FORCED DISCONNECT OF PARTY

FROM SC 5, 5Q3

PARTY DISCONNECTS FIRST

FROM SC 3, 3G12 & 3Y12

RECYCLE RERING

RELAY D RECPERATES BETWEEN 450-550 MSEC

D

DI

TMI TIMER

450 MSEC

TI

TM2 TIMER

RCC

ST

STP

(LOCAL ACCESS)

STPI

INT

D

DI

TMI TIMER

TI

TM2 TIMER

RCC

LEAD "ST" GROUNDED

TO P3 OR S3

ISSUE 5BU

TRUNK CIRCUIT

2

SD 35004-01-E7

BELL TELEPHONE LABORATORIES INCORPORATED

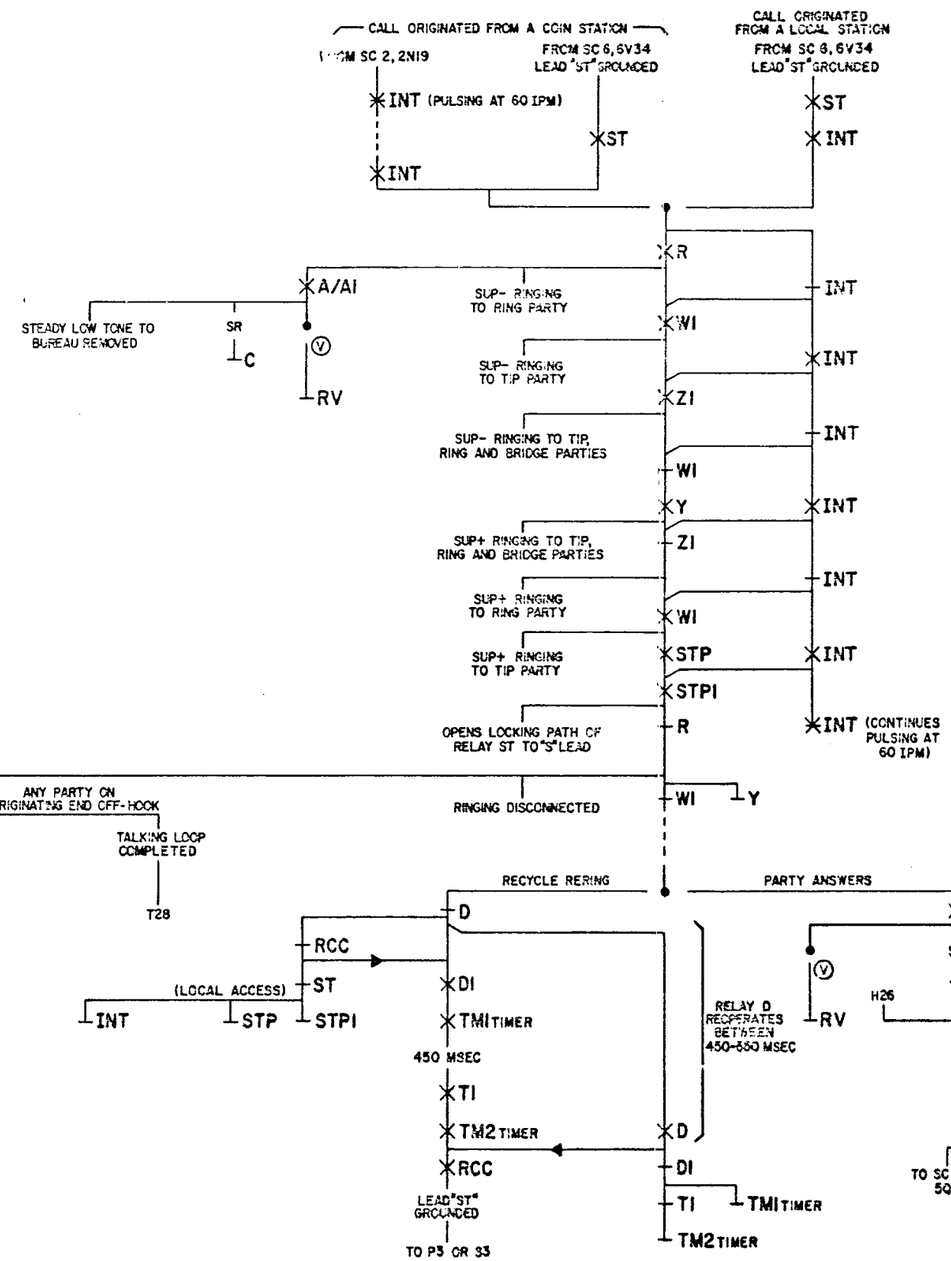
TIME FILE 6S

SD-35004-01-E7

SC 8

RERING

(SXS OFFICES WITH SUP± AUDIBLE RINGING MACHINES)



ISSUE 5BU

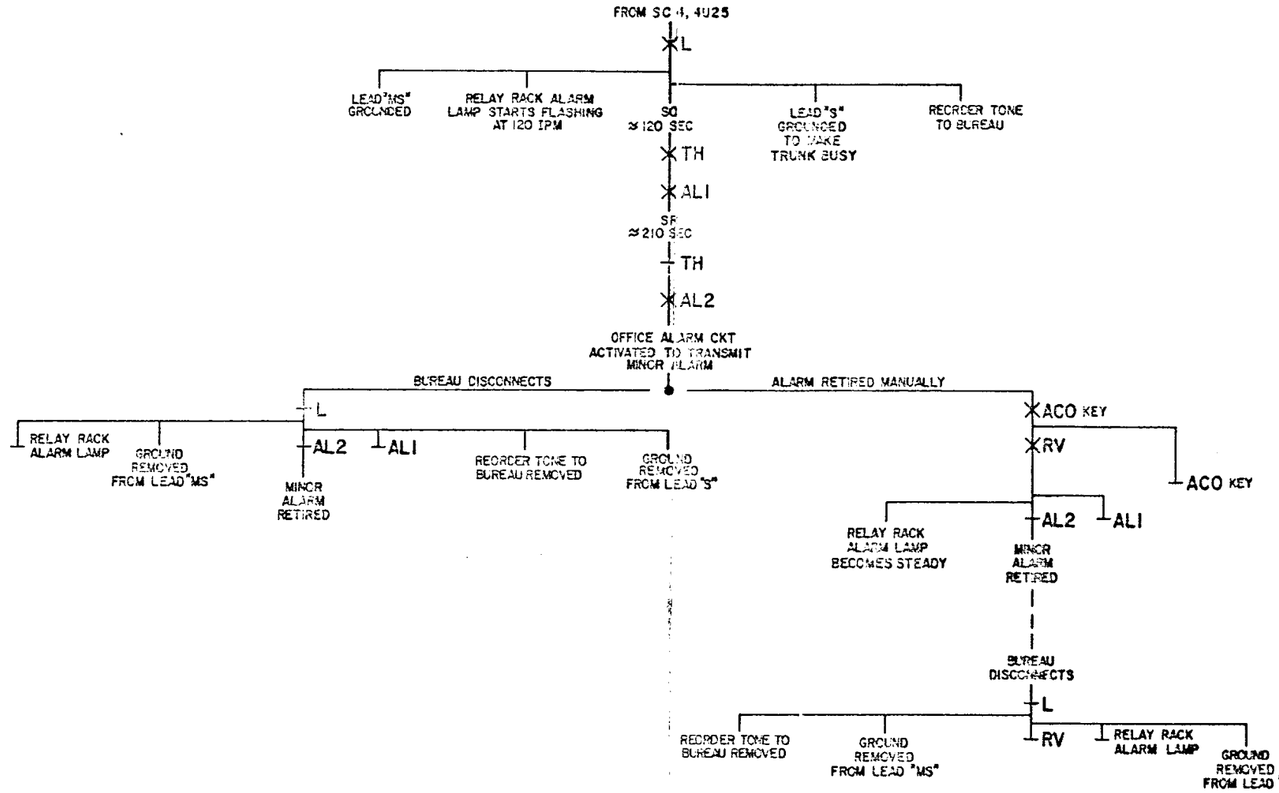
TRUNK CIRCUIT	(2)	SD-35004-01-E8
BELL TELEPHONE LABORATORIES INCORPORATED	PAGE 6S	

SD-35004-01-E8

SC 10

ALARM

(BUREAU SEIZES TRUNK, NO CALL TO BUREAU)



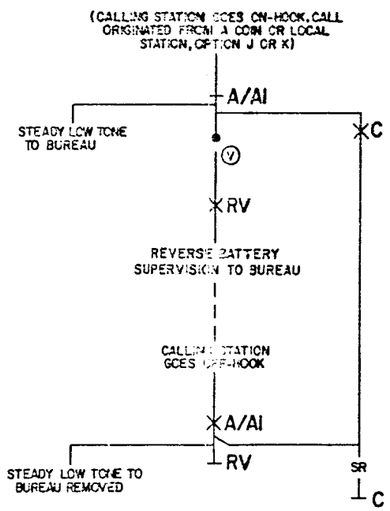
ISSUE 5BU

TRUNK CIRCUIT ②	SD-35004-01-E10
BELL TELEPHONE LABORATORIES INCORPORATED	6S

SD-35004-01-E10

SC 9

SUPERVISION ON ANSWERED CALL



SD-35004-01-E9

ISSUE 5BU

TRUNK CIRCUIT	②	SD-35004-01-E9
BELL TELEPHONE LABORATORIES INCORPORATED	6S	

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL.	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS
RELAYS																	
A	AJ66		1	58				TST JK A-2	TST JK A-1	M	1,2	P/S	O		16.5	15.5	
													R		6.4	6.8	
AI	AJ66		5	58				TST JK AI-2	TST JK AI-1	M	1,2	P/S	O		16.5	15.5	
													R		6.4	6.8	
ALI	1/2AK4		4	202					IL (ALI)	GRD	7	B	O		11.9	11.3	MOUNTED WITH AL2
AL2	1/2AK4		4	202					IU (AL2)	GRD	7	T	O		11.9	11.3	MOUNTED WITH ALI
B	AG16		1	2338					U (B)	GRD			O		17.5	16.5	
													H		2.6	2.1	
													R		1.1	1.4	
C	AG27		1	458					IU (C)	GRD		P	O		34	32	
												P	H		48	43	
												P	R		2.7	3.4	
							8M(C)	2L (C)	2U (C)	B/G	2	S	O		49.5	45	
CO	AF79		1	205			68(CO)		U (CO)	GRD			O		10	9.2	
													NO		4.3	4.5	
D	AJ110		1	319				IL (D)	2U (D)	M		P/S	O	31	20	19.5	
													R		2.9	3.2	
DI	AG58		5	388					IU	GRD	5,6	P	O	42	14.5	13.8	
													NO		6.9	7.3	
													H		2.1	2	
													R		1.2	1.5	
F	AJ118		1	53			(CO)NO,(RC)NO	U(F)	L (F)	B/G	3		O	-50	22	21	
													NO		18	19	
INT	AJ12		6	220					U	GRD	6		O		42.5	40.5	
L	AJ110		1	319			4M(L)	IL(L)	2U(L)	M		P/S	O	31	20	19.5	
													R		2.9	3.2	
LK	1/2AK22		5	216					IU	GRD	6	T	O		27.5	25	MOUNTED WITH W
P	1/2AK35		1	202				2L(P)	IL (P)	B/G	4	B	O	48	31.5	30	MOUNTED WITH RV
													H		4.4	4.2	

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL.	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	REMARKS
R	AJ9		5	234					U	GRD	6		O		40	38	
RC	AG33			3058			68(F)		U (RC)	GRD			O	30	14.7	14	
													H		2.5	2.3	
													R		1.3	1.5	
RCC	1/2AK46		5	19					IL	GRD	5,6		O	60	23.5	25	MOUNTED WITH F2
													NO		20	21.5	
													R		4.7	5	
RV	1/2AK33		1	202					IU (RV)	GRD		T	O		12.5	11.3	MOUNTED WITH P
RVI	1/2AK49		5	224					IL	GRD	6	B	O		11.9	11.3	MOUNTED WITH ST
ST	1/2AK49		5	224			108(STPI)		IU	GRD	6	T	O		11.9	11.3	MOUNTED WITH RVI
STP	1/2AK4		5	202					IL	GRD	6	B	O		11.9	11.3	MOUNTED WITH STPI
STPI	1/2AK4		5	202					IU	GRD	6	T	O		11.9	11.3	MOUNTED WITH STP

TEST NOTES:

1. ARMATURE BACK TENSION MIN 20 GRAMS READJUST, 15 GRAMS TEST.
2. ADJUSTED ON LIGHT CONTACT FORCE.
3. CONTACT BREAK 5, NO BREAK 8.5 READJUST; BREAK 3.5, NO BREAK 10, TEST
4. REMOVE TIMER (TR).
5. REMOVE CP6 TIMER.
6. SEE BSP 226-160-300; METHOD OF TAKING EQUIPMENT OUT OF SERVICE.
7. REMOVE TIMER (TH).

ISSUE 4B

TRUNK CIRCUIT (2)

BELL TELEPHONE LABORATORIES INCORPORATED

FORM 6S

SD-35004-01-F1

SD-35004-01-F1

CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT	APPARATUS FIG.		MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TRVL.	CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BAT.	CIRCUIT PREPARATION TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT TEST WDG	DIRECT CURRENT FLOW REQT TEST FOR	DIRECT CURRENT FLOW REQT AFTER SCAN MA	DIRECT CURRENT FLOW REQT TEST MA	DIRECT CURRENT FLOW REQT READJ MA	REMARKS
T1	AF31		5		3			(DI)O		U	GRD	1, 2		0		20.5	19.5	
T2	V2AK48		5		19			(DI)O		IU	GRD	1, 2	T	0	60	26.5	25	MOUNTED WITH RCC
														NO		20	21.5	
														K		4.7	5	
TR	AJ83		5		249			5W(TR)		U	GRD	2		0		13.2	12.8	
W	V2AK30		2		202			88(Z), 118(Z)		IL (W)	GRD		B	0		23	22	MOUNTED WITH Z
W	V2AK22		5		216					IL	GRD	2	B	0		27.5	26	MOUNTED WITH LX
WI	V2AK22		5		216					IU	GRD	2	T	0		27.5	26	MOUNTED WITH ZI
Y	AF87	F	5		207					U	GRD	2		0		7.2	6.8	
Z	AF16		5		204			5B(Y)		U	GRD	2		0		30.5	29	
Z	V2AK30		2		202			68(Z), 48(W)		IU(Z)	GRD		T	0		23	22	MOUNTED WITH W
ZI	V2AK22		5		216			88(WI)		IL	GRD	2	B	0		27.5	26	MOUNTED WITH WI

TEST NOTES:

1. REMOVE CP 6 TIMER.
2. SEE BSP 226-160-300; METHOD OF TAKING EQUIPMENT OUT OF SERVICE.

TIMING REQUIREMENTS

APPARATUS DESIG	APPARATUS OPTION	APPARATUS FIG.		CIRCUIT PREPARATION BLOCK OR INSULATE	CIRCUIT PREPARATION TEST CLIP DATA CONN BK.	CIRCUIT PREPARATION TEST CLIP DATA CONN R	CIRCUIT PREPARATION TEST CLIP DATA CONN W	TEST SET PREP SEND KEY	TEST SET PREP REC SW START	TEST SET PREP REC SW STOP	SEE TEST NOTE	TEST FOR	TIME REQ MIL-SEL MIN	TIME REQ MIL-SEL MAX	REMARKS
T1		5			GRD	IU (DI)	8(T1)	MK	OC	48V	1, 2	0	440	460	
T2		5		6 (T1) 4 (RCC) (DI) O	GRD	U(T1)	12M(T2)	MK	OC	GRD	1, 2	0	93	103	

TEST NOTES:

1. SEE BSP 226-160-300; METHOD OF TAKING EQUIPMENT OUT OF SERVICE.
2. SEE NOTES 105 AND 302.

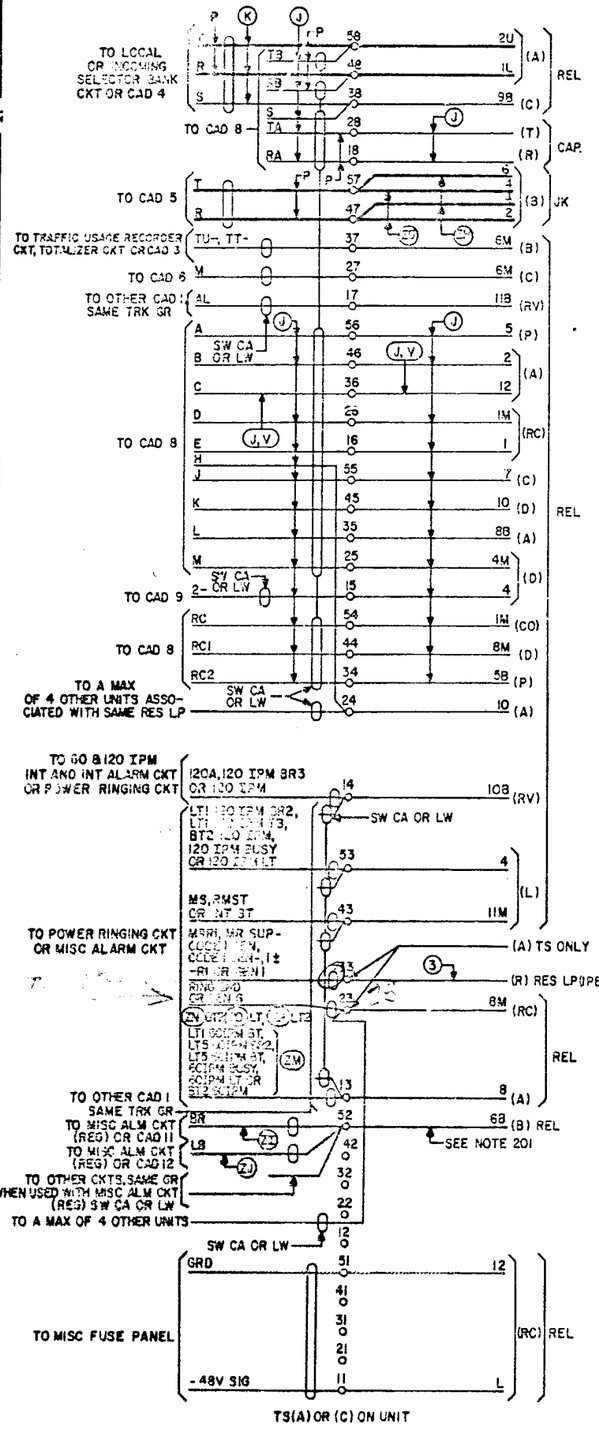
SD-35004-01-F2

ISSUE 1 HW

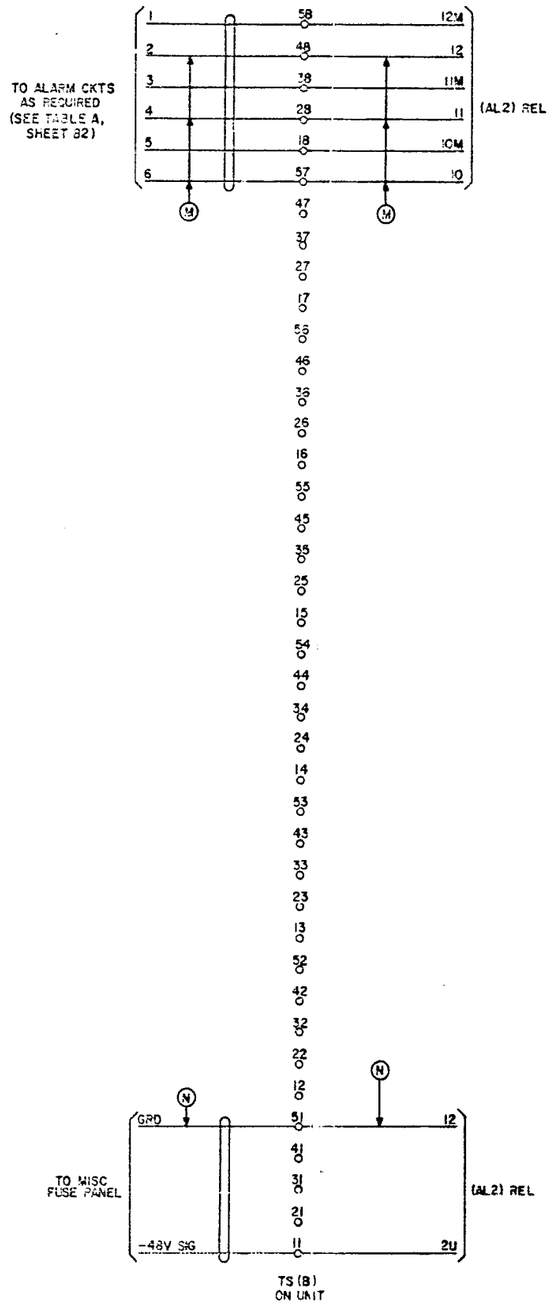
TRUNK CIRCUIT (2) SD-35004-01-F2

BELL TELEPHONE LABORATORIES INCORPORATED 6S

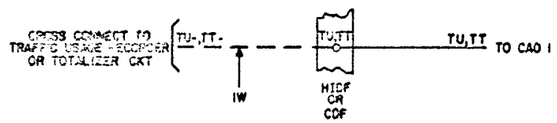
CAD 1
(FOR APP FIG. 1 & 3)



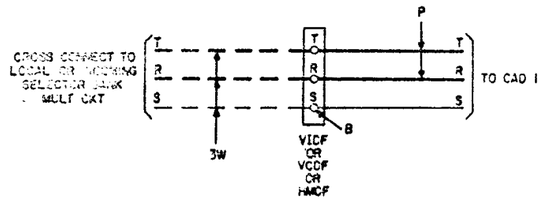
CAD 2
(FOR APP FIG. 2)



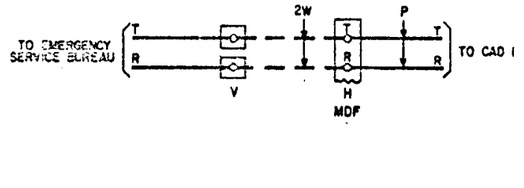
CAD 3
(FOR APP FIG. 1)



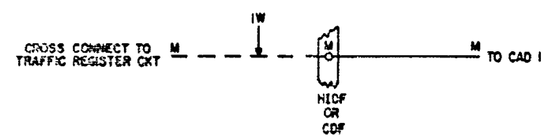
CAD 4
(FOR APP FIG. 1)



CAD 5
(FOR APP FIG. 1)



CAD 6
(FOR APP FIG. 1)



ISSUE 6D

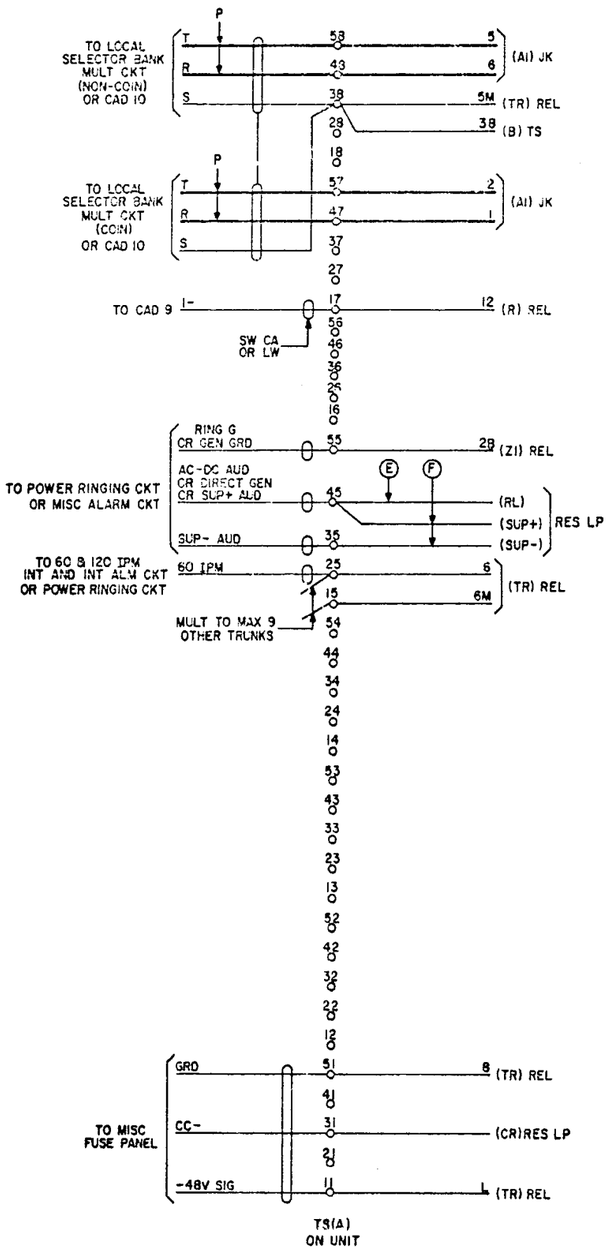
TRUNK CIRCUIT (2)

SD-35004-01-GI

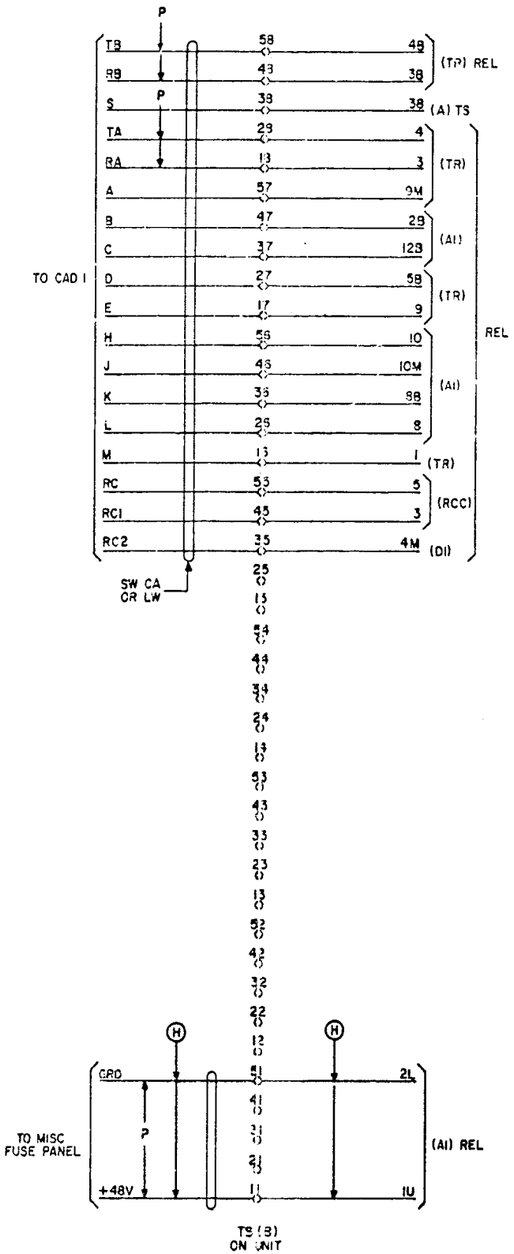
BELL TELEPHONE LABORATORIES INCORPORATED

6S

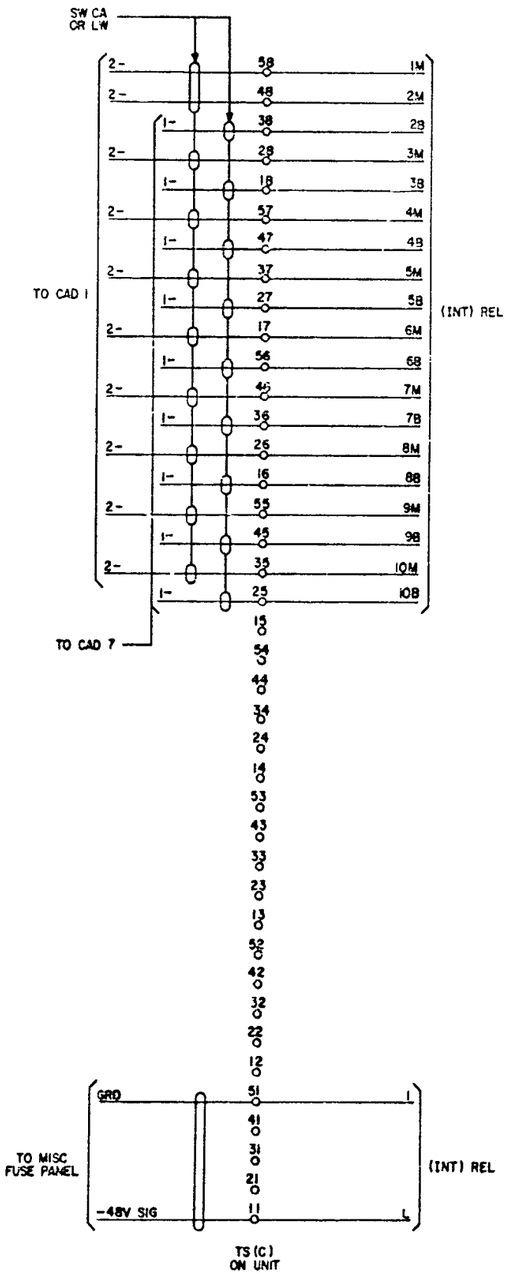
CAD 7
(FOR APP FIG. 5)



CAD 8
(FOR APP FIG. 5)



CAD 9
(FOR APP FIG. 6)

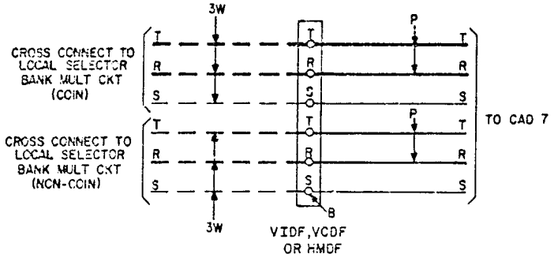


SD-35004-01-G2

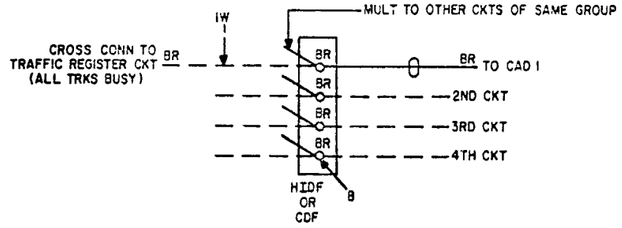
ISSUE 3B

TRUNK CIRCUIT ②	SD-35004-01-G2
BELL TELEPHONE LABORATORIES INCORPORATED	6S

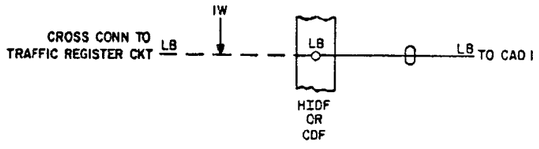
CAD 10
(FOR APP FIG. 5)



CAD 11
(FOR APP FIG. 1)



CAD 12
(FOR APP FIG. 1)



SD-35004-01-G3

ISSUE 3B

TRUNK CIRCUIT

SD-35004-01-G3

BELL TELEPHONE LABORATORIES INCORPORATED