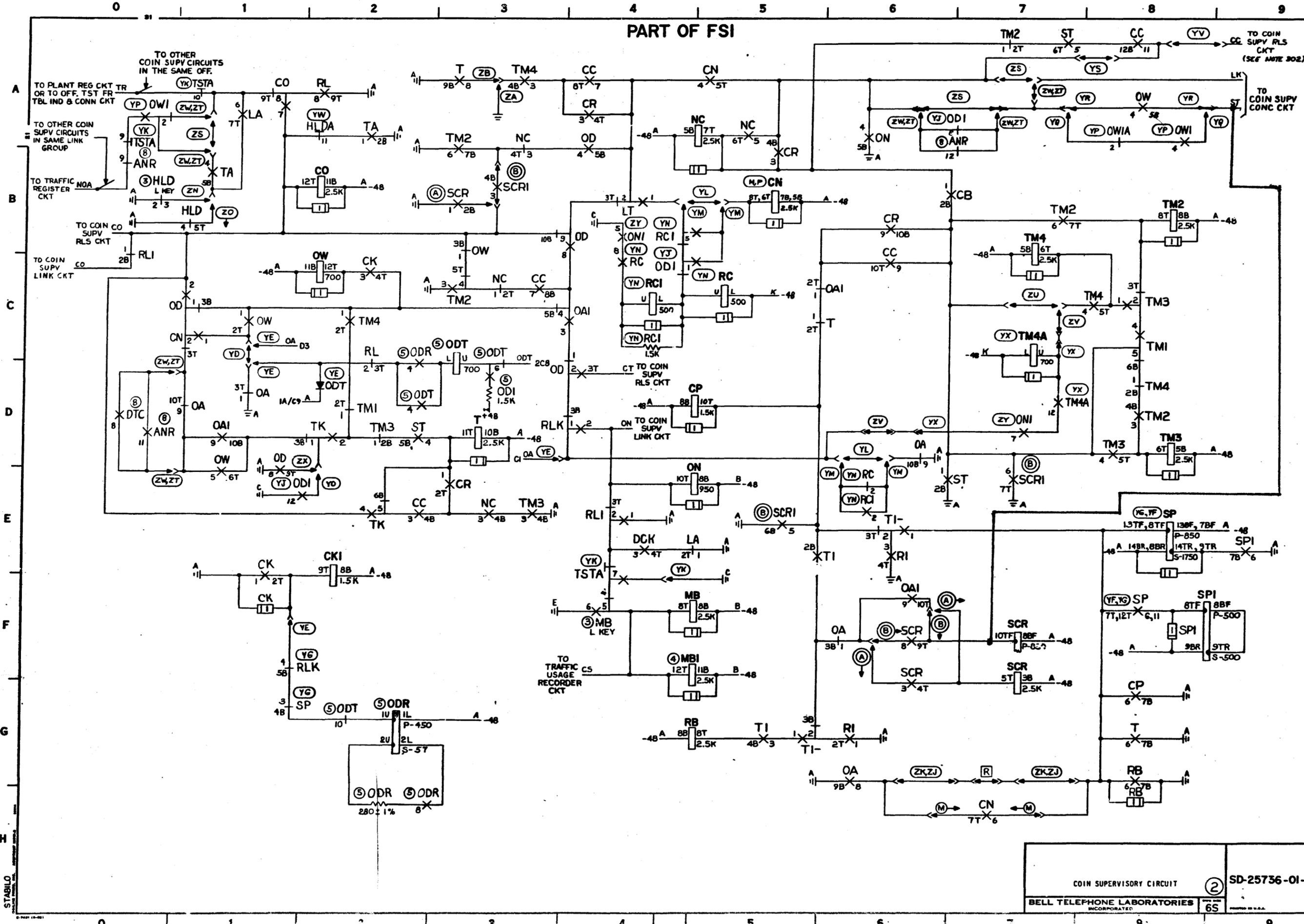


PART OF FSI



DRAWING
ISSUE
248
260
280
310
32A

SD-25736-01-B3

DRAWING
ISSUE
38A

COIN SUPERVISORY CIRCUIT		②	SD-25736-01-B3
BELL TELEPHONE LABORATORIES INCORPORATED		65	

PART OF FS I

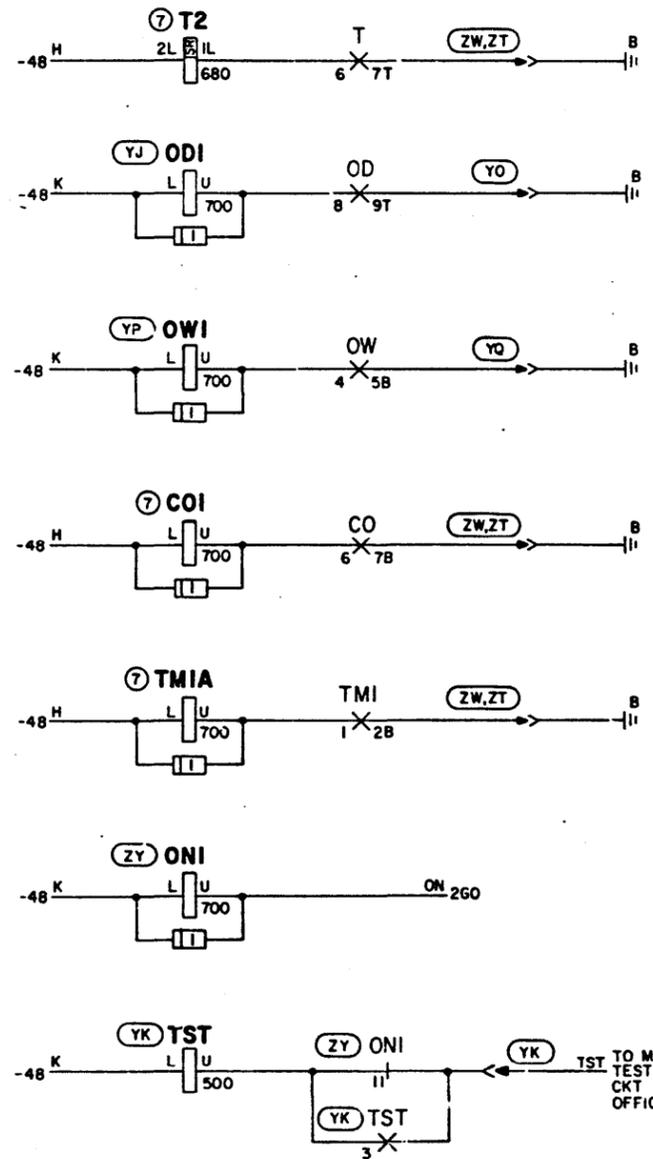
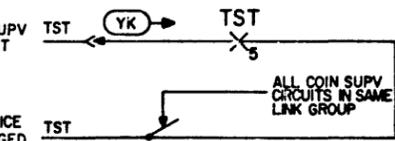
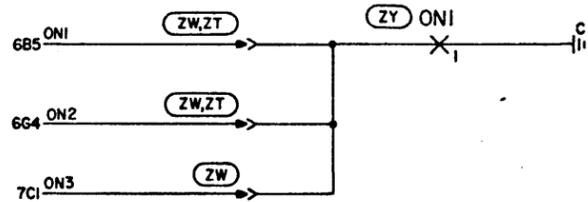
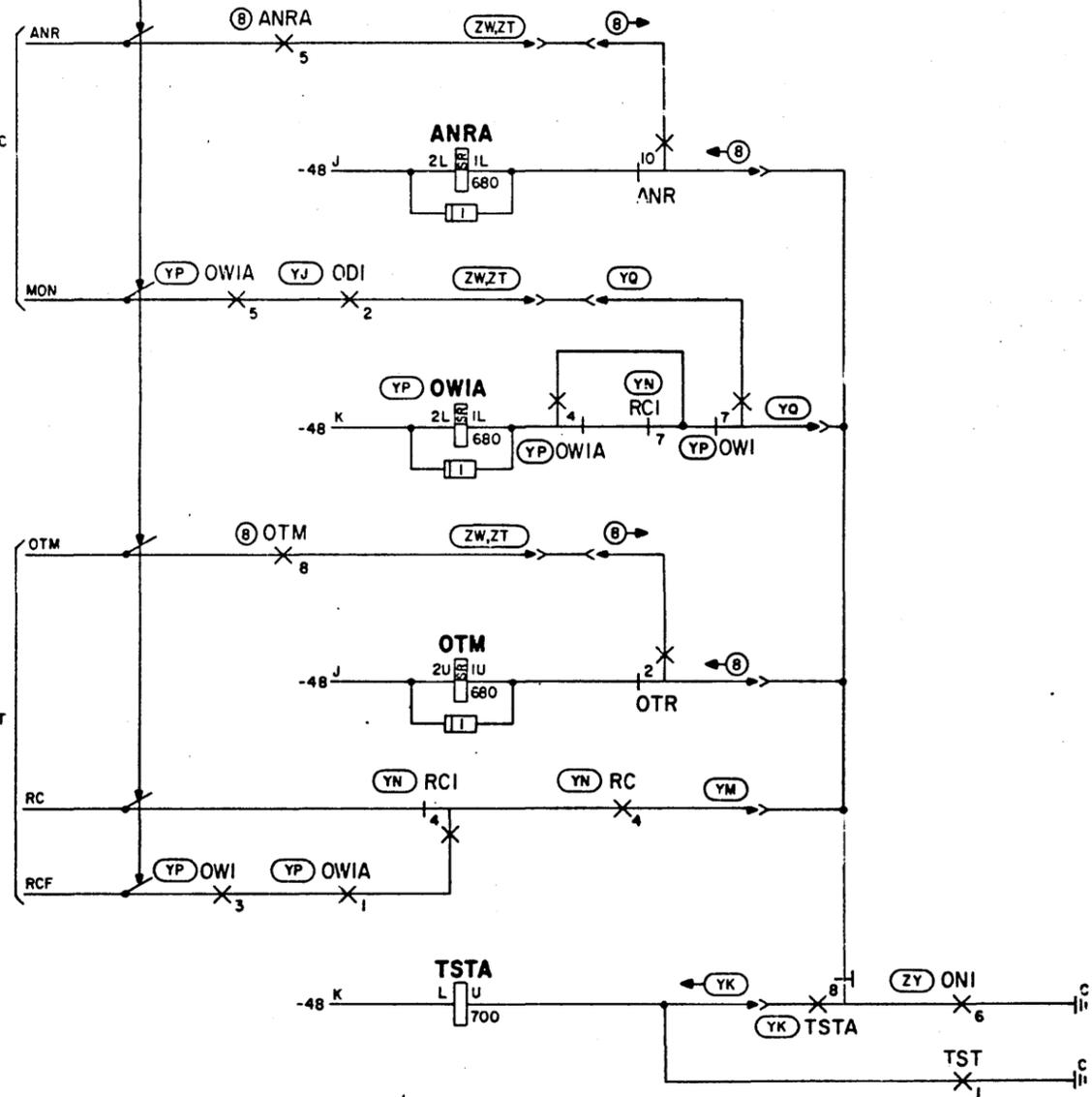
TO ALL COIN SUPV CIRCUITS
IN SAME LINK GROUP
WHERE THE SAME FEATURES
HAVE BEEN PROVIDED

TO TRAFFIC
REG
CKT

TO PLANT
REG
CKT

TO COIN SUPV
LINK CKT

TO INTRAOFFICE
TRUNK ARRANGED
FOR TESTING COIN
SUPV CIRCUITS



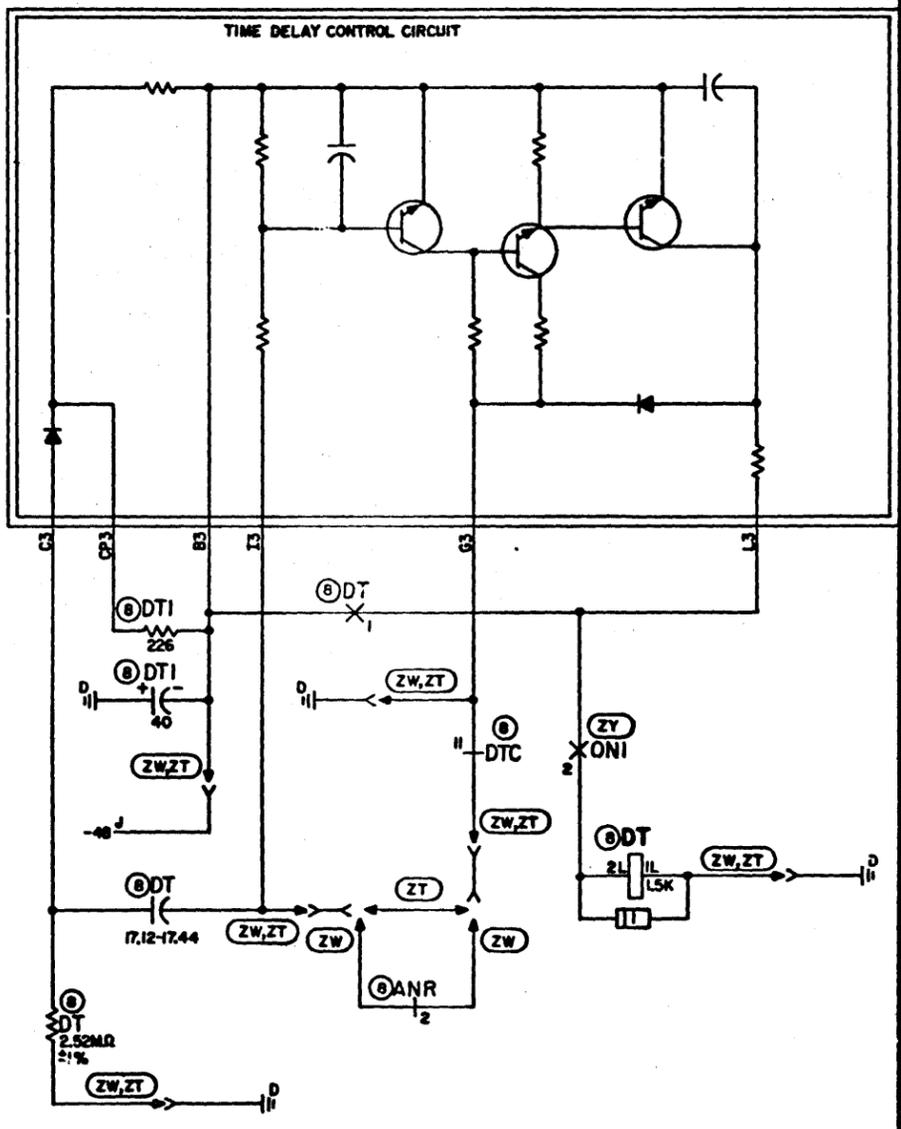
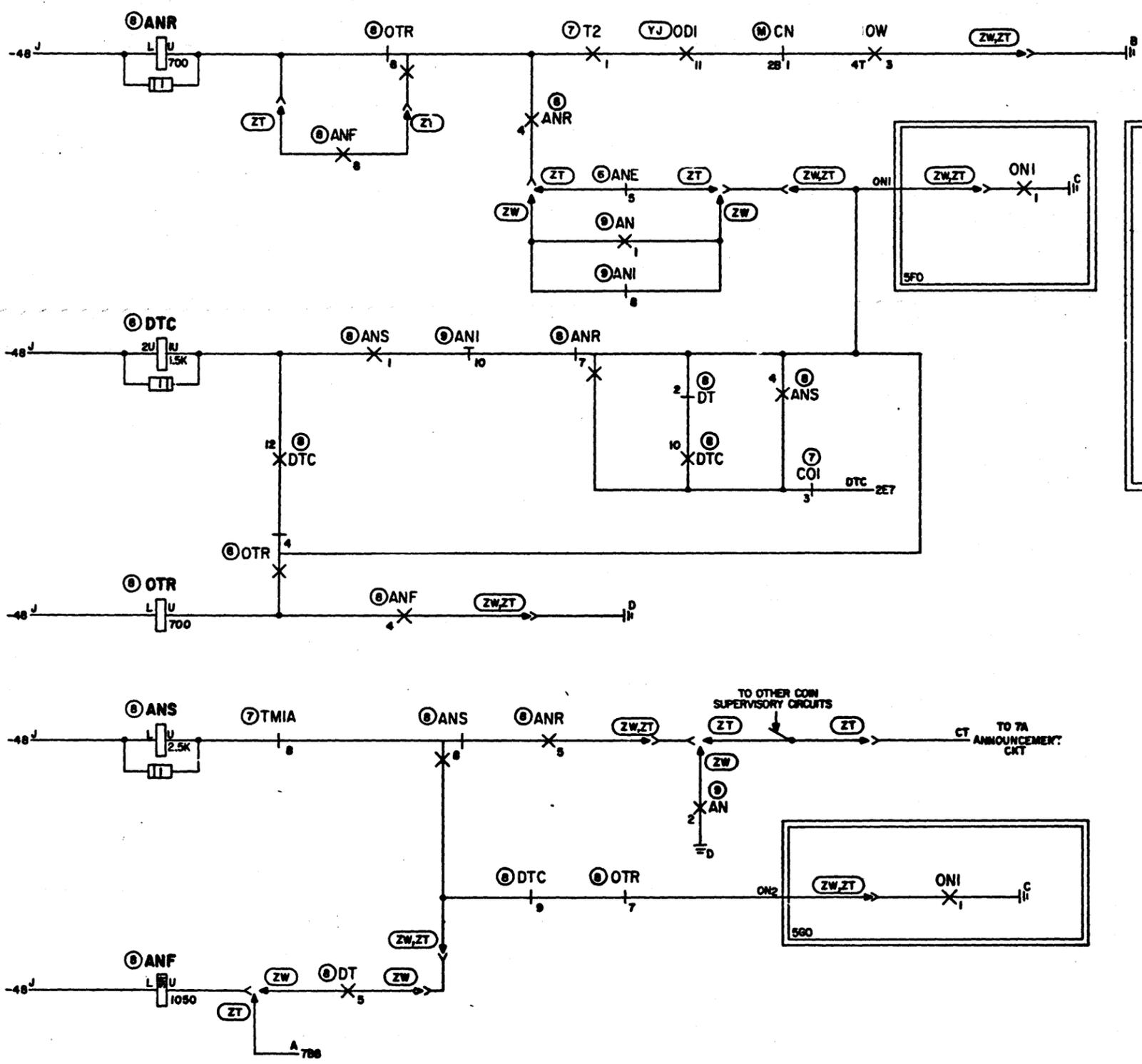
DRAWING
ISSUE
31D

ISSUE
38A

FS 2
OVERTIME ANNOUNCEMENT
6A OR 7A ANNOUNCEMENT MACHINE

DRAWING
ISSUE
31D

ISSUE
38A



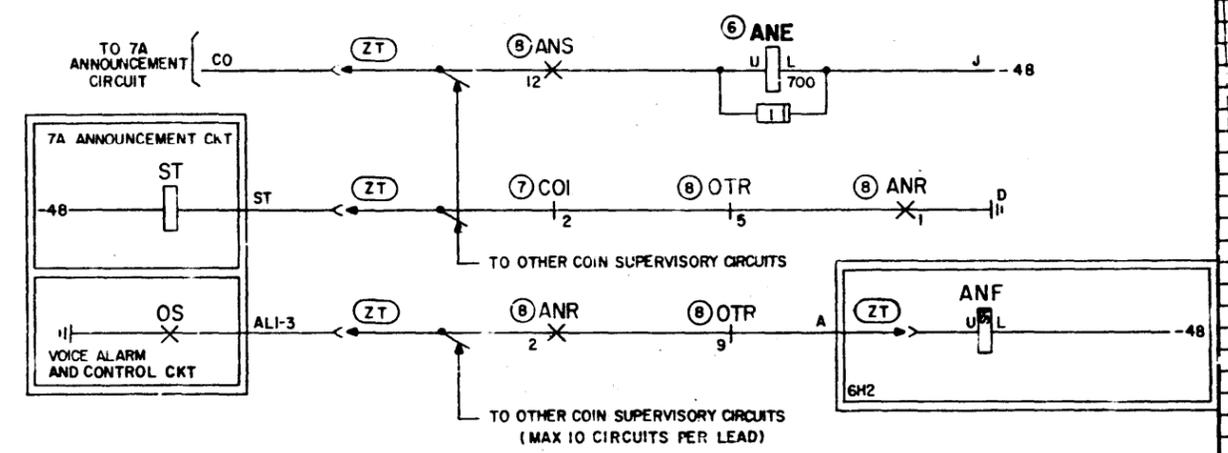
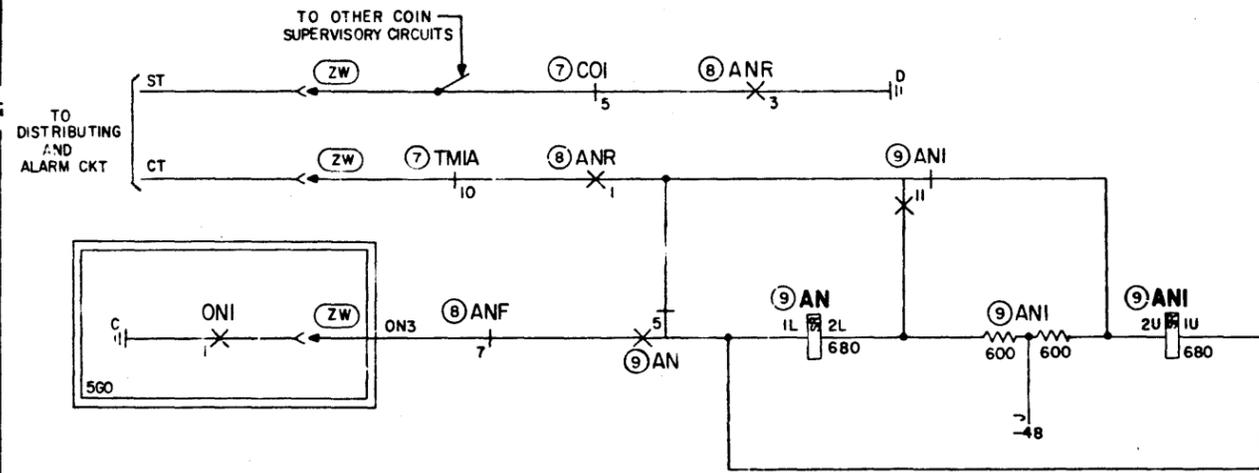
0 1 2 3 4 5 6 7 8 9

FS 3 6A MACHINE ANNOUNCEMENT CONTROL

FS 4 7A MACHINE ANNOUNCEMENT CONTROL

A
B
C
D
E
F
G
H

DRAWING ISSUE
310
38A
H



SD-25736-01-87

COIN SUPERVISORY CIRCUIT		(2)	SD-25736-01-87
BELL TELEPHONE LABORATORIES INCORPORATED		65	

APP FIG. A

RELAY						
DESIG	SCR					
CODE	U1229					
OPTION						
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP						
	4,3	M	3F6			
	2,1	M	1B/E7			
	2,1	M	3E3			
BOT.						
COIL			3F7			

APP FIG. B

RELAY									
SCR			SCP1						
U-300			U10P1						
OPTION									
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP	0,8	M	3FA	10,9	M	2E2			
	7,6	M	1B/E7	8,7,6	BM	3E7			
	5,4	M	2G6	5,4,3	BM	1B/H3			
	3,2,1	BM	2A7	2,1	B	2G6			
	2,1	B	1A/C2	2,1	M	2B7			
	5,4,3	BM	2E2	4,3	M	3E3			
	7,6	M	2A5	6,5	M	3E5			
				9,7	M	1B/G4			
BOT.									
COIL						2E3			

P - 3F7
 S - 2A6

THERMISTOR

DESIG	LOC	CODE
SCR	2E2	IC

CAPACITOR

DESIG	LOC	CODE
A	2D7	437QA
A	2D7	26EC
A1	2D6	437QA
A2	2D6	439QA
L	2D8	KS-13368, L3, 1000 PF

RESISTOR

DESIG	LOC	CODE
D	2D7	145A, 4.99 MEG
D	2D7	141C
E	2C5	18BA

TUBE, ELECTRON

DESIG	LOC	CODE
TA	2C7	346C OR B

RELAY

RELAY						
DESIG	A					
CODE	U447					
OPTION						
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP						
	5,4	M	2E4			
	2,1,3	BM	2D3			
	3,2,1	BM				
BOT.						
COIL			2C3			

DIODE

DESIG	LOC	CODE
XHH	2D4	446F

NF TUBE

DESIG	LOC	CODE
A	2C3	185A

RESISTOR

DESIG	LOC	CODE
XHH	2C4	KS-14603, L1A, L1B

* SEE SECTION D EQUIPMENT NOTE 214

PART OF APP FIG. 1

RELAY																					
DESIG	AL			AL			CB			CC			CK			CK1			CN		
CODE	U1216			U1329			U488			U81			U1250			U1258			U1329		
OPTION	ZL						ZM						M								
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP																					
				7,6	M	-				12,11	M	1A/G6				10,9	M	3C6			
										8,7	M	3A4				6,5	M	1B/BB			
	5,4	M	4A5	5,4	M	4A5				4,3	M	1A/F7	4,3	M	3C2	6,5,4	BM	1B/DB	5,4	M	3A5
	3,2,1	BM	a	3,2,1	BM	a	2,1	M	1A/A1	2,1	M	1A/BB	2,1	M	3E1	3,2,1	BM	1A/ES	3,2,1	BM	3C1
	2,1	M	4E6	2,1	B	2C2	2,1	M	3B7	2,1	M	1B/G4	2,1	M	2D4	2,1	B	-	2,1	B	6A4
	4,3	M	4B5	4,3	M	4B5				4,3	M	3E2			5,4,3	BM	1A/H5	4,3	M	1A/B1	
				6,5	M	4E6				6,5	M	1A/CO			7,6	M	1B/H6	6,5	M	1A/BB	
										8,7	M	3C3			10,9	M	1A/D1				
										12,11	M	3B8									
BOT.																					
COIL			4B6			4B6			1B/H4			1A/G6			1A/F8			3E2			3B5

a 1B/EB 4C5
 a 1B/EB 4C5

RELAY																					
DESIG	CH			CO			CP			CR			DCK			DS			H		
CODE	U216			U1312			U1319			U57			U1335			U41			U1408		
OPTION	P																				
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC												
TOP																					
				11,10	M	1B/E7				10,9	M	1A/F5									
				9,8,7	BM	3A1	9,8	M	1B/BB	8,7	M	2B6									
				6,5	B	4B4	7,6	M	2A3	6,5	M	1B/H5							8,7	M	2H7
	5,4	M	3A5	4,3	B	1A/D7	5,4	M	1B/AB	4,3	M	3A4	4,3	M	3E4				6,5,4	BM	2H4
	3,2,1	BM	3C1	2,1	B	1A/B7	3,2,1	BM	1B/BA	2,1	M	3L3	2,1	M	1A/G7	2,1	M	2A4	2,1,3	BM	2D0
	2,1	M	1A/BB	2,1	B	1B/G6	2,1	B	2A3	2,1	M	1A/BB	3,2,1	MM	2D1	2,1	M	-	2,1	B	a
	4,3	M	1A/B1	5,4,3	BM	1B/F6	5,4,3	BM	1B/CA	4,3	M	3B5							4,3	B	b
				6,7,6	BM	a	7,6	M	3GB	6,5	M	1A/C1							6,5	B	c
				10,9	M	1B/F7				8,7	M	1A/G5									
										10,9	M	3B6									
BOT.																					
COIL			3B5			3B2			3D5			1A/E6			2D1				1B/B1		2C1

a ZS 1B/E8
 ZW, ZT 5C8

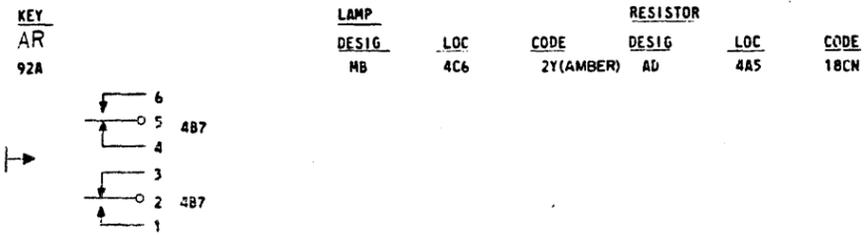
- a (N) 2C0
- a (Q) 2A1
- b (N) 2A1
- b (Q) 2B0
- c (N) 2B0
- c (Q) 2C0

RELAY																					
DESIG	HL			LA			LT			MB			NC			OA			OA1		
CODE	U1318			U1310			S63			U530			U270			Y141			U533		
OPTION	ZO																				
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP																					
				7,6	M	3A1				7,6	M	4A1	6,5	M	3A5	10,9,8	BM	3D1	10,9	M	3F6
	5,4,3	BM	3B1	5,4,3	BM	2E0				5,4	M	4A1	4,3	B	3A3	7,6	M	1A/A1	8,7,6	BM	1B/H4
	2,1	B	2G3	2,1	B	3E4	3,2,1	BM	3B4	3,2,1	BM	4A1	2,1	B	3C3	2,1,3	MB	a	2,1	B	3C6
	3,2,1	BM	a	2,1	B	2A0				3,2,1	BM	4A1	2,1	B	1A/C1	2,1,3	MB	3F6	2,1	B	1B/H2
				4,3	B	2C1				5,4	M	4A1	4,3	M	3E3	5,4	M	1A/D4	5,4,3	BM	3C4
				6,5	M	4B5				7,6	M	4D5				7,6	M	2B5	8,7,6	BM	2B5
																10,9,8	BM	b	10,9	M	3,1
																12,11	M	2C5			
BOT.																					
COIL			2G2			2H5			1A/C8			3F5			3A5			2E6			2B5

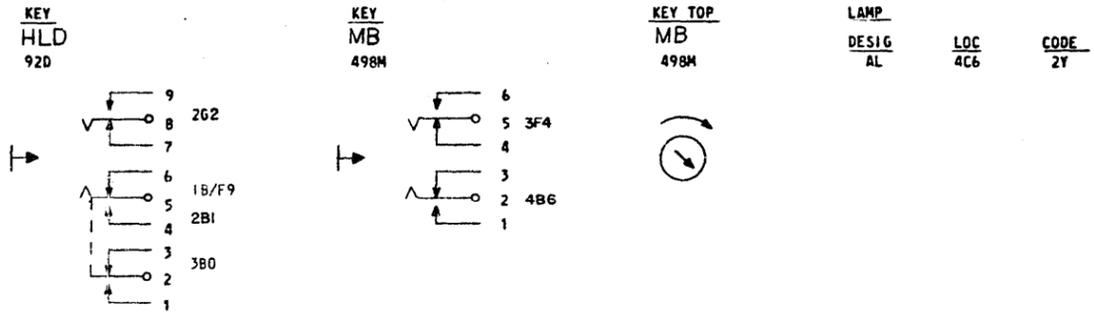
a 1B/F9 2B1
 a 1A/F2 3D1
 b 3D6 3G6

RELAY																					
DESIG	OD			ON			OH			RB			RL			RL1			RS		
CODE	U982			U179			U1326			U237			U179			U293			U141		
OPTION																					
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP																					
	13,12	M	1A/E7							11,10	M	1A/F2				9,8	M	3A2			
	11,10	M	2A5							9,8	M	2A0	9,8,7	BM	3D1	7,6	M	1B/E8			
	9,8	M	a	9,8	M	2A0	7,6	M	2G0	6,5	M	3D1	7,6	M	-	7,6	M	1B/E8			
	7,6	M	1A/C2	7,6	M	2A5	5,4	M	2A5	4,3	M	b	5,4	M	1A/B6	5,4	M	4B4			
	5,4	M	1A/C8	5,4	M	2A5	5,4	M	2A5	4,3	M	a	5,4	M	1A/B6	5,4	M	4B4			
	1,2,3	BM	3D3	3,2,1	BM	2H7	2,1	M	3C1	3,2,1	BM	a	3,2,1	BM	3E4	3,2,1	BM	3E4	3,2,1	BM	2B1
	2,1,3	MB	3C1	3,2,1	BM	2D3	2,1,3	MB	3B3	3,2,1</											

APP FIG. 2



APP FIG. 3



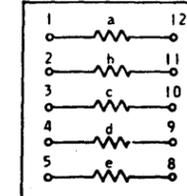
APP FIG. 4

RELAY			NETWORK			RESISTOR		
DESIG	MBI		DESIG	LOC	CODE	DESIG	LOC	CODE
CODE	U50		M8i	3F5	185A OR 184A	AS	4C1	
OPTION						AT	4C1	
	CONT NO	CONT ARR	LOC	CONT NO	CONT ARR	LOC	CONT NO	CONT ARR
TOP	11,10	M	4C1					
	9,8	M	4C1					
	7,6	M	4C1					
	5,4	M	4C1					
	3,2,1	M	4C1					
BOT.	2,1	M	4C1					
	4,3	M	4C1					
	6,5	M	4C1					
	9,7	M	4C1					
	10,9	M	4C1					
COIL			3F5					

APP FIG. 5

RELAY			CAPACITOR		
DESIG	QDR	ODT	DESIG	LOC	CODE
CODE	AG53		QDR	1B/D2	437A
OPTION	AF20		ODT	1A/A6	
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR
12	EBM	1B/D2	EMB		
11	EBM	2B8	M		
10	EBM	1A/A5	EBM	3G2	
9	EBM	2E0			
8	EMB	3H2	EBM		
7	EBM	2B3			
6	EMB		EMB	3C3	
5	EMB				
4	EBM	3C2	EBM	3D2	
3	EBM	1B/D2			
2	EBM	2B8	EBM		
1	EBM	1B/A2	M		
COIL		3G2		3C3	

COMPONENT ASSEMBLY



DESIG				CA1	
CODE				ED-94823-(),G790	
OPTION					
COMPONENT	DESIG	LOC	CODE		
RESISTOR	a	OD1	3D3	KS-19152,L1-1.5KΩ	
	b	OD2	2A8	221A,459KΩ	
	c	ODR	3H2	221A,280	
	d	OR	1B/D3		
	e	OT	1A/A6	KS-19150,L3,100KΩ	

RESISTOR

DESIG	LOC	CODE
LT	1A/C9	19J6
*OD1	3D3	KS-19152,L1-1.5KΩ
*OD2	2A8	221A OR 145A,459KΩ
*ODR	3H2	221A,280KΩ
*OR	1B/D3	
*OT	1A/A6	KS-19150,L3,100KΩ

* SEE SECTION D EQUIPMENT NOTE 214.

DRAWING
ISSUE

33D

COIN SUPERVISORY CIRCUIT

SD-25736-01-C4

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

MADE IN U.S.A.

SD-25736-01-C4

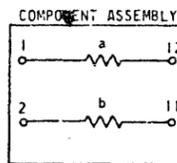
STABULO

APP FIG 6

RELAY		DESIGN																DESIGN		
CODE		AJ15																CODE		
OPTION																		OPTION		
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	
12	EBM																			12
11	EBM																			11
10	EBM																			10
9	EBM																			9
8	EBM																			8
7	EBM																			7
6	EBM																			6
5	EBM	6B3																		5
4	EBM																			4
3	EBM																			3
2	EBM																			2
1	EBM																			1
COIL		7A8																		COIL

CAPACITOR

DESIG	LOC	CODE
AR	4G3	437QA
AT	4G2	437QA



DESIGN CA4

DESIGN	LOC	CODE
CA4		ED-94823-(-), G805

OPTION

COMPONENT	DESIGN	LOC	CODE
RESISTOR	a	TA	4H2
	b	RA	4H3

221A,412

NETWORK

DESIG	LOC	CODE
ANE	7A8	185A

APP FIG 7

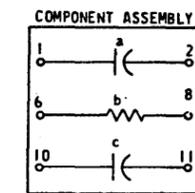
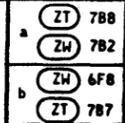
RELAY		DESIGN																DESIGN		
CODE		AJ15																CODE		
OPTION																		OPTION		
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	
12	EBM																			12
11	EBM																			11
10	EBM																			10
9	EBM																			9
8	EBM																			8
7	EBM																			7
6	EBM																			6
5	EBM	7A2	F1A																	5
4	EBM		EM3																	4
3	EBM	ED4	EBM																	3
2	EBM	7B7	EBM	2F8																2
1	EBM	1B/D9	M	6A3																1
COIL		5C7		5A7																COIL

NETWORK

DESIG	LOC	CODE
CO1	5C7	185A
TM1A	5D7	185A

APP FIG 8

RELAY		DESIGN																DESIGN		
CODE		AJ15																CODE		
OPTION																		OPTION		
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	
12	EBM		3B6																	12
11	EBM	3D0																		11
10	M		5B2																	10
9	EBM		3R0																	9
8	EBM	6B2	EBM	1A/D2																8
7	B	7B1	EBM	6C3																7
6	EBM		EBM	1A/D1																6
5	B	2B5	EBM	6F3	EMB	5A1														5
4	M	6E2	EBM	6B3	EMB															4
3			EBM	7A2	EBM															3
2			EBM	b	EBM															2
1	EBM		a	M																1
COIL		6G1		6A1		5B2		5D2		6E1		6F8		6C1		6E1				COIL



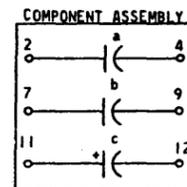
DESIGN CA0

DESIGN	LOC	CODE
CA0		ED-94823-(-), G801

OPTION

COMPONENT	DESIGN	LOC	CODE
CAPACITOR	a	DT.4	6F7
	c	DT.3	6F7
RESISTOR	b	DT	6F6

535GH
140E,2.52 MH



DESIGN CA1

DESIGN	LOC	CODE
CA1		ED-94823-(-), G802

OPTION

COMPONENT	DESIGN	LOC	CODE
CAPACITOR	a	DT.2	6F7
	b	DT.1	6F7
	c	DT1	6E7

535GH
KS-16390, L8

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

NETWORK

DESIG	LOC	CODE
ANR	6A1	185A
ANRA	5B2	
ANS	6E1	
DT	6F8	
DTC	6C1	
OTM	5D2	

RESISTOR

DESIG	LOC	CODE
DT1	6E7	KS-8512, L6C, 226

SD-25736-01-C5

ISSUE 38A

COIN SUPERVISORY CIRCUIT

SD-25736-01-C5

BELL TELEPHONE LABORATORIES INCORPORATED

65

APP FIG 9

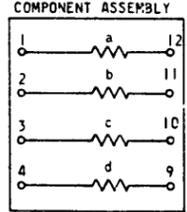
DRAWING ISSUE
31D

RELAY		AK41																DESIG	
DESIG	CODE	AN		ANI														CODE	OPTION
OPTION		CONT	LOC																
X	12																		12
	11			EBM	7B3														11
	10			EBM	6C2														10
	9			EBM															9
	8			EMR	6C3														8
	7																		7
	6																		6
	5	EMR	7C2																5
	4	EMR																	4
	3	EBM																	3
	2	EBM	6F4																2
	1	M	6B3																1
	COIL		7B2		7B4														COIL

RELAY																		DESIG	
DESIG	CODE																	CODE	OPTION
OPTION		CONT	LOC																
X	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

CAPACITOR

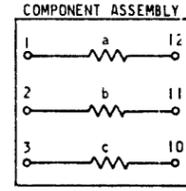
DESIG	LOC	CODE
BR	4G2	437QA
BT	4F2	437QA



DESIG CA2

DESIG	LOC	CODE	
ED-94823-(), 6803			
OPTION	DESIG	LOC	CODE
RESISTOR	a	R1	4F1
	b	R2	4G1
	c	R3	4F1
	d	R4	4G1

221A, 301



DESIG CA3

DESIG	LOC	CODE	
ED-94823-(), 6804			
OPTION	DESIG	LOC	CODE
RESISTOR	a	R5	4F1
	b	R6	4G1
	c	R7	4G2

221A, 1K1

RESISTOR

DESIG	LOC	CODE
ANI	7B3	19EY

SD-25736-01-06

COIN SUPERVISORY CIRCUIT

2 SD-25736-01-06

BELL TELEPHONE LABORATORIES

INCORPORATED 65

31

CIRCUIT NOTES: (CONT)

121. (MFR DISC)	FEATURE OR OPTION		PROVIDE		
			APP FIG.	APP OR WRG	QUANTITY
WHERE OPERATOR MONITORING FOR COIN DEPOSIT IS REQUIRED (SEE NOTES 113 AND 122)	LOCAL OPERATION	WITHOUT OVERTIME MACHINE ANNOUNCE- MENT (60 IPM FLASH)		ZU	
		WITH OVERTIME MACHINE ANNOUNCE- MENT (120 IPM FLASH)		ZV	
	REMOTE OPERATION WITH OR WITHOUT OVERTIME MACHINE ANNOUNCEMENT (120 IPM FLASH)			ZV	
WHERE OPERATOR MONITORING FOR COIN DEPOSIT IS NOT REQUIRED				ZU	

122. A. PRIOR TO ISSUE 37D:
 (1) OPTION YX WAS PART OF OPTION ZY, AND
 (2) OPTIONS ZU AND ZV WERE TO BE APPLIED IN ACCORDANCE WITH NOTE 121.
- B. COMMENCING WITH ISSUE 37D:
 (1) OPTIONS YX AND ZV ARE RATED MFR DISC., AND
 (2) OPTION ZU IS RATED AFTER DATE STANDARD BECAUSE 60 IPM FLASH IS MADE STANDARD FOR ALL CASES MENTIONED IN NOTE 121.
- C. TO IMPLEMENT 60 IPM FLASH IN CIRCUITS MANUFACTURED PRIOR TO ISSUE 37D:
 (1) WHERE OPTION ZU IS APPLIED: NO CHANGE, OR
 (2) WHERE OPTION ZV IS APPLIED: REMOVE ZV AND APPLY ZU.
123. OPTION YY MUST BE ADDED TO PROVIDE FOR CENTRALIZED STATUS, ALARM, AND CONTROL SYSTEM (CSACS). WHERE OPTION YY IS ADDED, OPTION YU MUST BE PROVIDED.

EQUIPMENT NOTES:

- 201. RES (AK) SHALL BE CONNECTED DIRECTLY TO 2B(RL).
- 202. MOUNT THE 239 TYPE RELAY ON 3-1/2" CENTERS VERTICALLY AND HORIZONTALLY WITH RESPECT TO ALL APPARATUS EXCEPT THAT NO RESTRICTIONS ARE REQUIRED WHEN MOUNTING THESE RELAYS ADJACENT TO CAPACITORS, NON-INDUCTIVE APPARATUS OR OTHER 239 TYPE RELAYS.
- 203. WHEN THE (TA) TUBE IS EQUIPPED WITH SLEEVE TYPE TERMINALS, THE HOLD IN TERMINAL 2 SHALL BE FILLED WITH SOLDER.
- 204. CONNECT ONE TERMINAL OF CAPACITOR (L) DIRECTLY TO TERMINAL 1 OR 2 OF TUBE (TA).
- 205. SLEEVING SHALL BE APPLIED TO TERMINALS 4RB AND LB1 OF (R1) RELAY.
- 206. THE +130V AND -130V FUSES FOR EVEN NUMBERED CIRCUITS SHALL CONNECT TO SEPARATE FEEDERS FROM THOSE FOR ODD NUMBERS CIRCUITS.
- 207. PRIOR TO ISSUE 110 PCHG. 23, 28, AND 32 ON T S (D) AND 30 AND 32 ON T S (A) WERE CONNECTED TO FRAME FUSE PANEL AND CAD B WAS NOT SHOWN. IN CAD 6 TERM. 14 WAS TERM. 35.
- 208. JOB RECORDS NEED NOT BE MAINTAINED FOR OPTIONS W,R,Y,Z,ZZ, YA, AND YH.
- 209. PRIOR TO ISS. 16B, OPTION R AND WIRING TO TERM. 17B AND 18B WERE NOT SHOWN IN CAD 1.
- 210. IN CROSS CONNECTION CADS 1 & 7 THE TERMINAL NUMBERS TO THE LEFT OF THE SLANT LINE APPLY TO 227 TYPE TERMINAL STRIPS AND TERMINAL NUMBERS TO THE RIGHT APPLY TO D TYPE TERMINAL STRIPS. PRIOR TO ISSUE 18D ONLY NUMBERS FOR 227 TYPE TERMINAL STRIPS WERE SHOWN.
- 211. PRIOR TO ISS 19D, THE HL LEAD WAS SHOWN CONNECTING TO THE MASTER TEST FRAME JACK BAY VIA THE MDF.
- 212. CONNECT TERMINAL 2 OF TUBES (RL), (RS) AND (TM) DIRECTLY TO CAPACITORS (R), (S) AND (C), RESPECTIVELY.
- 213. ON UNITS MANUFACTURED PER ISSUE 24B AND SUBSEQUENTLY, GROUND SHALL BE SUPPLIED TO THIS CIRCUIT DIRECTLY FROM THE RR FRAME GROUND BAR TO CONTACT 1B OF THE (CK) RELAY. ALL OTHER GROUND POINTS ON THIS CIRCUIT SHALL BE WIRED USING CONTACT 1B OF THE (CK) RELAY AS THE ORIGINATING POINT.
- 214. THESE COMPONENTS ARE INDIVIDUALLY MOUNTED ON A&M ONLY UNITS PER J23058B, J23058BL, AND J23058BM. THESE SAME COMPONENTS ARE MOUNTED ON COMPONENT ASSEMBLIES WHEN PROVIDED FOR THE CURRENTLY STANDARD UNITS PER J23058 BS.

INFORMATION NOTES:

- 301. UNLESS OTHERWISE SPECIFIES: RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS, VALUES PRECEDED BY THE SYMBOL +(PLUS) OR -(MINUS) ARE IN VOLTS.
- 302. WHEN THIS CIRCUIT IS USED WITH TRUNK CIRCUITS NOT ARRANGED FOR OVERTIME COIN COLLECTION THE COIN SUPERVISORY RELEASE CIRCUIT IS NOT FURNISHED.
- 303. THE RES OF U1404 RELAY (RLK) MFR PRIOR TO THE 2ND QUARTER OF 1949 WAS 14Ω.
- 304. WHEN 6A MACHINE ANNOUNCEMENT IS REQUIRED PROVIDE OPTIONS ZZ OR YA AS FOLLOWS:

WHEN LOSS IN TRUNK CONDUCTOR AND IN OUTGOING TRUNK IN DISTANT OFFICE IS	PROVIDE OPT
0-1.9dB	NONE
2.0-3.9dB	ZZ
4.0-5.9dB	YA

WORKING LIMITS

RELAY	MAX EXT CKT LOOP RES	MAX EXT CKT RES	MIN INS RES	MIN EXT CKT VOLTS	MAX EARTH POTENTIAL
CB	1500Ω		10,000Ω		±10V
LT	1500Ω		10,000Ω		YB ±20V, YC ±5V
S	1500Ω		10,000Ω		±20V
TI		6000Ω	30,000Ω	+112V OR -112V	±20V
RI		6000Ω	30,000Ω	+112V OR -112V	±20V

TRANSMISSION TEST REQUIREMENTS
(1kHz LOSC BETWEEN 6000 TERMINATIONS)

OPT	TEST A TO D	TEST B TO F WITH			TEST C TO D	MAX ALLOWABLE CIRCUIT LOSS (dB)	
		YA OPT	ZZ OPT	NEITHER YA NOR ZZ OPT		OPT	
S	1.7	13.8	15.4	16.7	6.3	S	1.4
U	1.8	13.9	15.5	16.8	6.4	U	1.6
T	0.7	12.8	14.4	15.7	5.3	T	0.4
V	0.9	13.0	14.6	15.9	5.5	V	0.7
ZG	1.4	13.5	15.1	16.4	6.0	ZG	1.1
ZH	1.5	13.6	15.2	16.5	6.1	ZH	1.3

INDIVIDUAL APPARATUS LOSSES (dB)					
APPARATUS	DESIG	CODE	MAX. LOSS	MIN. LOSS	REMARKS
CAPACITOR	ODR, ODT	4UF	19.6	17.5	
	G, H, J, K, M, N				
	AT, AR	.52-.58UF	3.7	2.7	
	BT, BR	4.2B-4.32UF	18.6	17.9	
RELAY	S	239FH, 280AA	1.9		WDG ALONE TESTED IN SHUNT ACROSS 6000 LINES
REPEATING COIL	T, TI	94F	1.1		S OPT
	T, TI	94F	1.3		U OPT
	T, TI	120C	0.4	0.2	T OPT
	T, TI	120D	0.7	0.4	V OPT
	T, TI	120CS	1.1	0.5	ZG OPT
	T, TI	120DS	1.3	0.8	ZH OPT
RESISTOR	RI-4	301Ω	2.1	1.8	TST IN SERIES
	RS, 6	1000Ω	5.4	5.1	TST IN SERIES
	R7	1000Ω	2.4	2.2	TST IN SHUNT
	T, R	15Ω	0.2		TST IN SERIES
	TA, RA	412Ω	2.7	2.3	TST IN SERIES

* INDICATES APPARATUS FOR WHICH INDIVIDUAL LOSSES ARE NOT REQUIRED.

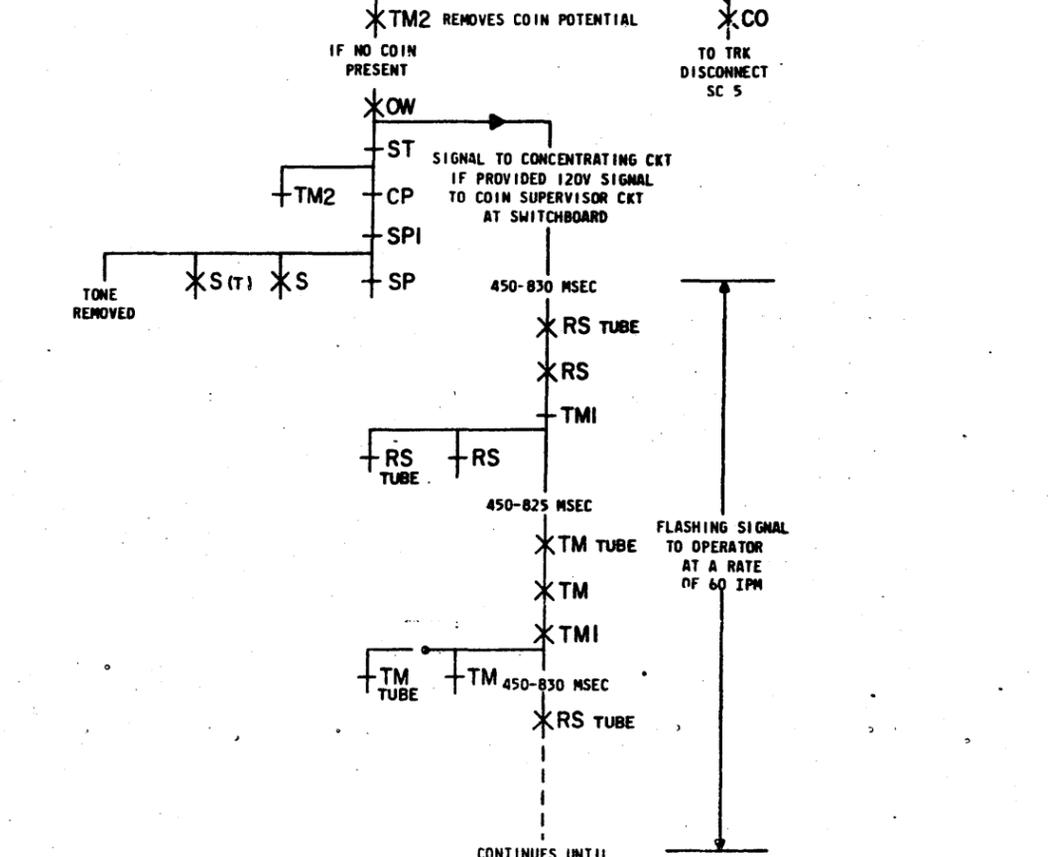
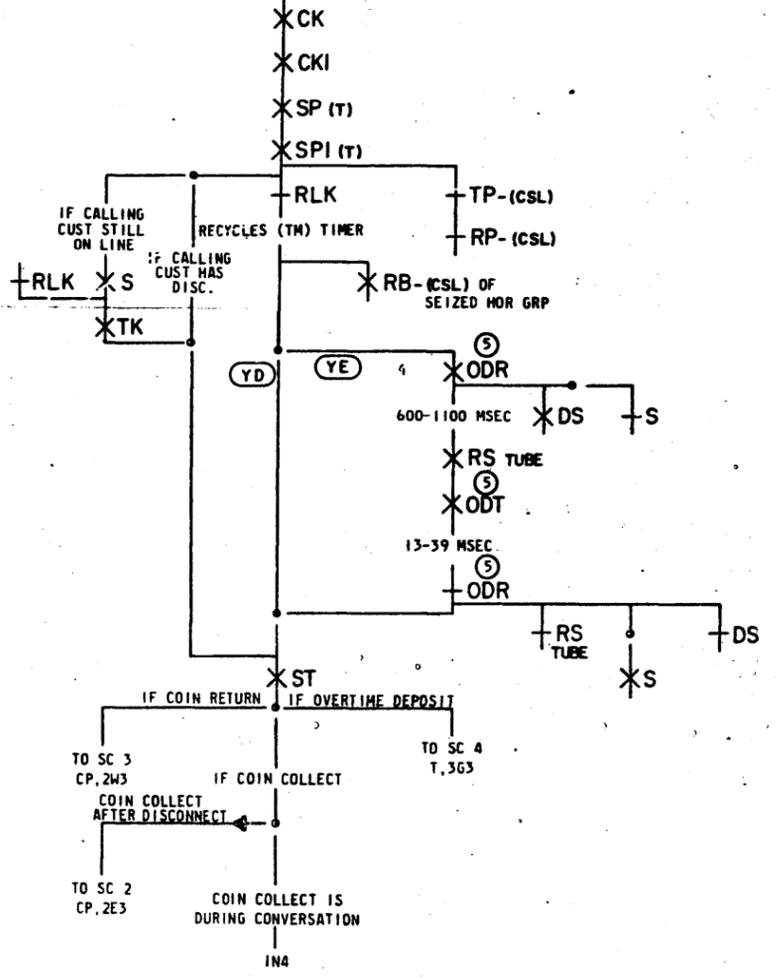
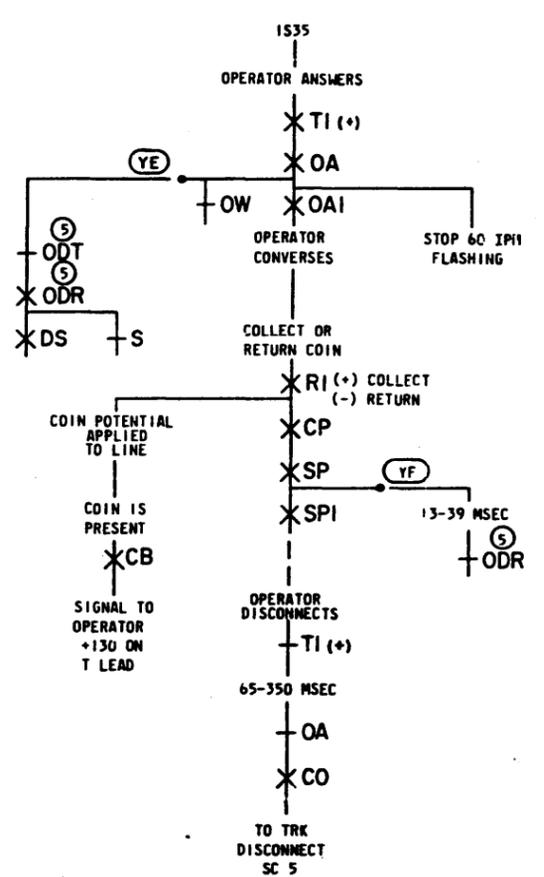
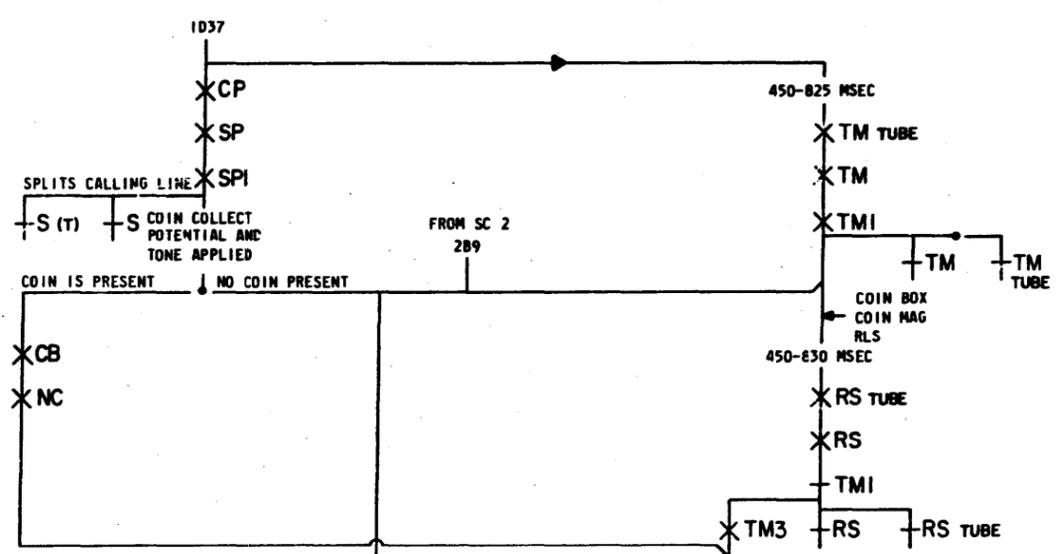
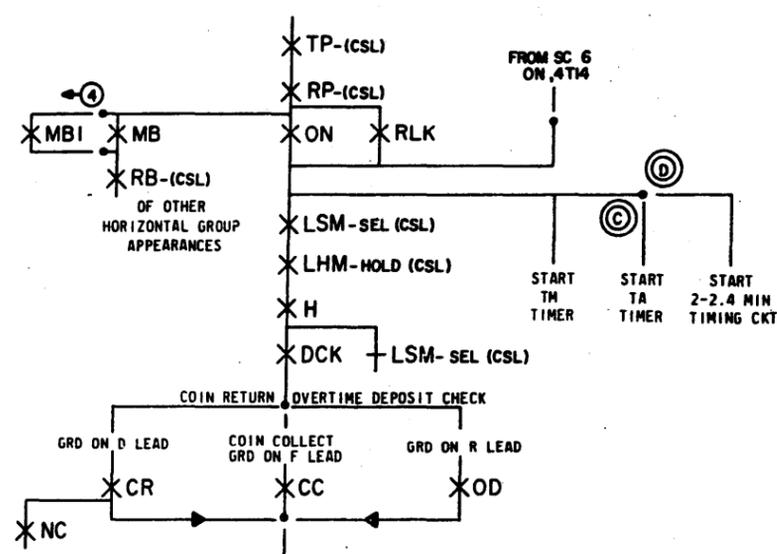
SD-25736-01-D2

DRAWING ISSUE 37D

SC I

SEIZURE BY LINK CKT

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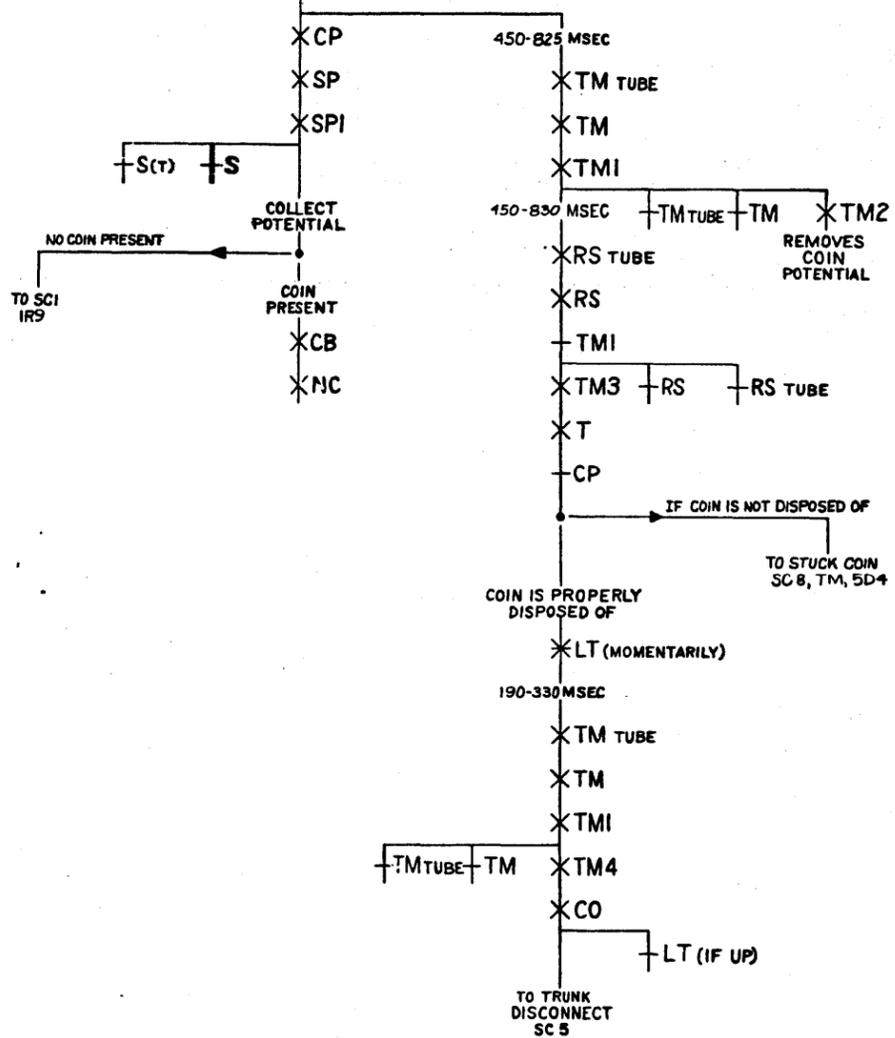


SD-25736-01-E1

DRAWING	PC
ISSUE	CB
24B	1
26D	1
31D	1

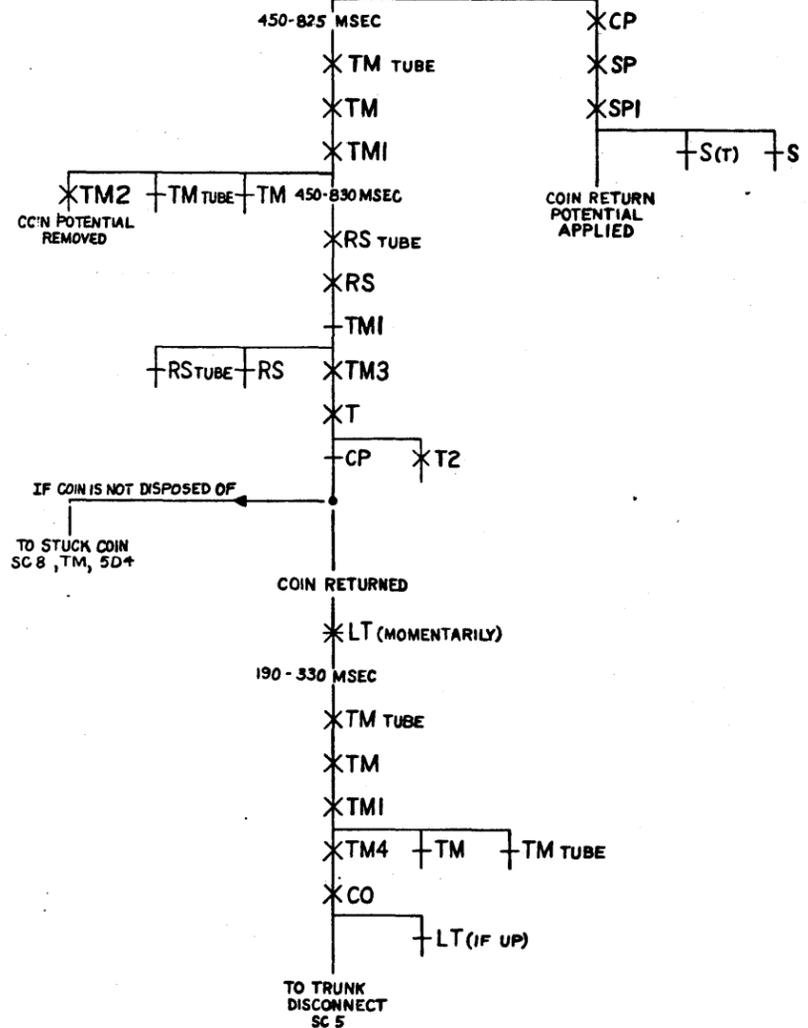
SC 2

COIN COLLECTION AFTER DISCONNECT
(CC OPERATED TK RELEASED)
FROM SC 1, 1B35



SC 3

COIN RETURN
(CR & NC OPERATED)
FROM SC 1
ST, 1B92



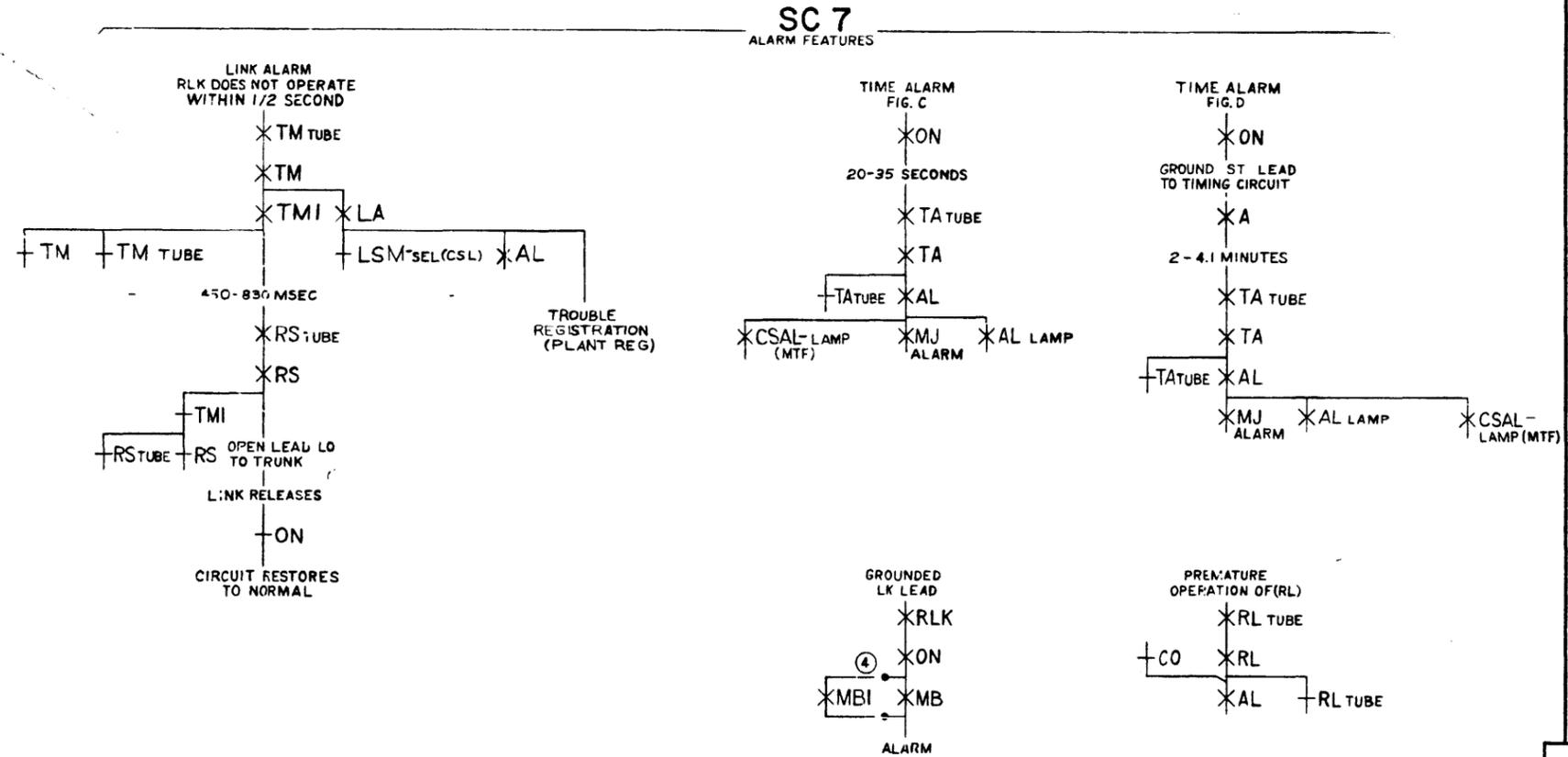
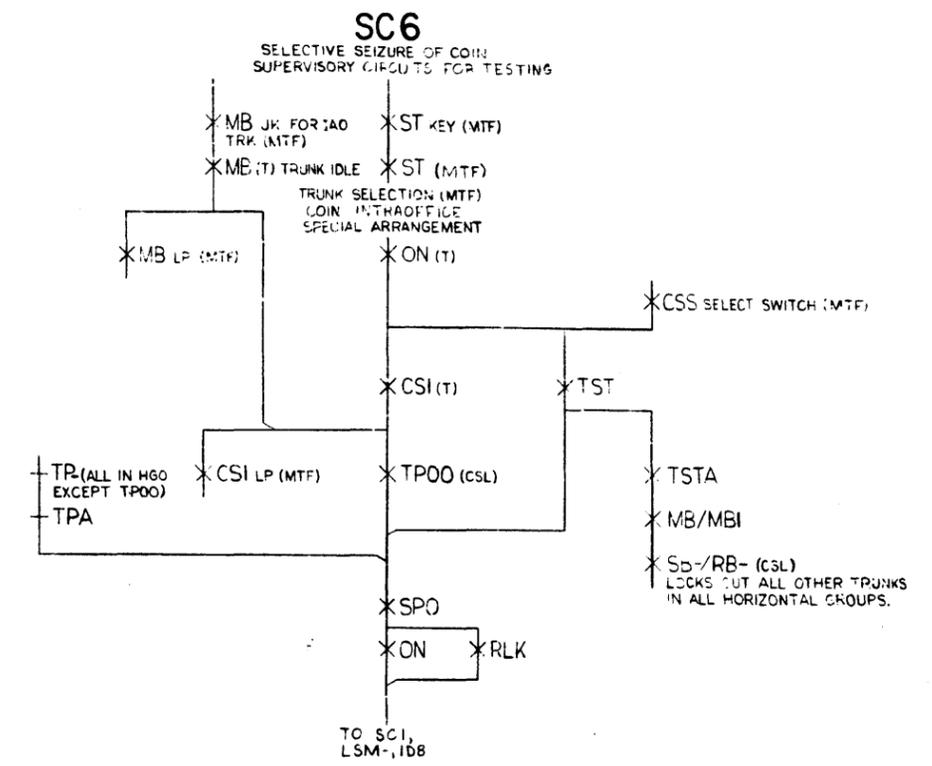
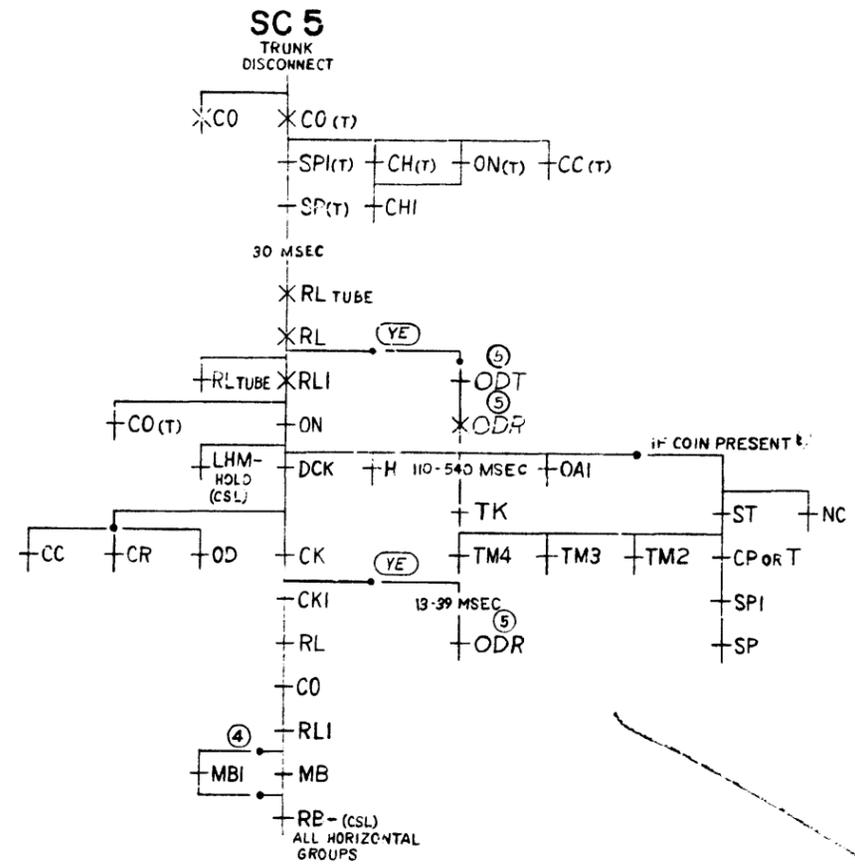
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SD-25736-01-E2

31

COIN SUPERVISORY CIRCUIT		②	SD-25736-01-E2
BELL TELEPHONE LABORATORIES		6S	PRINTED IN U.S.A.



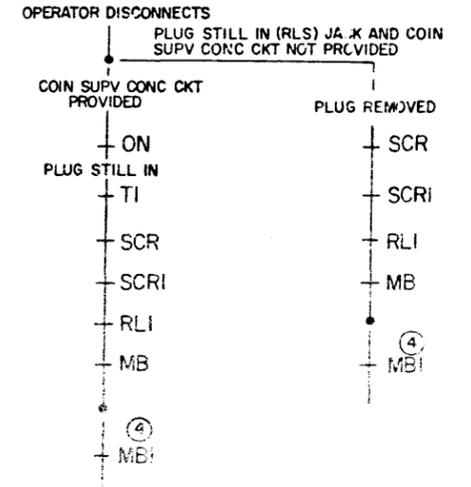
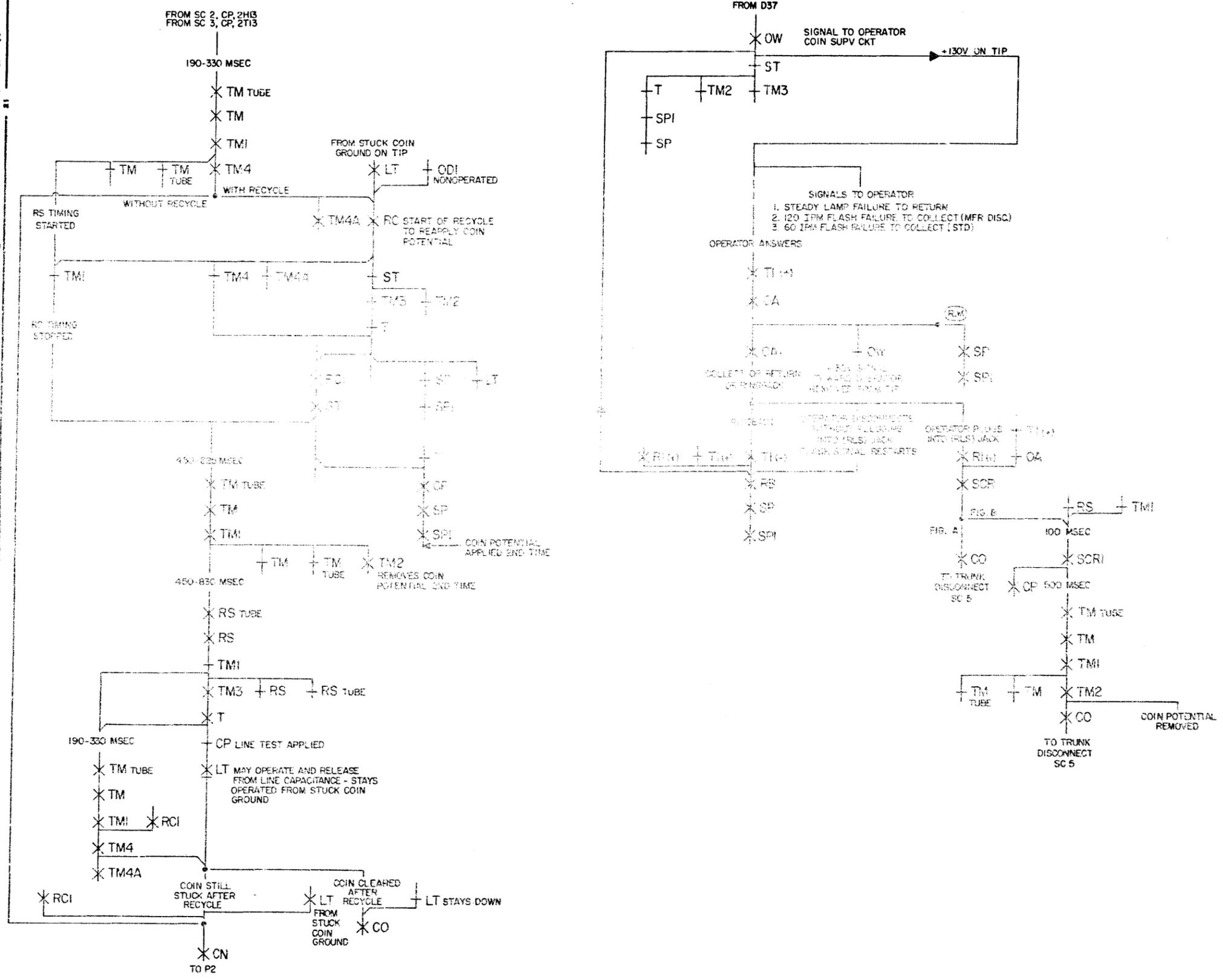
SD-25736-01-E4

STABLO

SC 8 STUCK COIN

DRAWING
ISSUE
31D

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ISSUE
37D

SD-25736-01

CIRCUIT REQUIREMENTS

APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT			FLOW REQ	REMARKS
DESIG	CODE	OPT	FIG	BSP FIG	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG			TEST FOR	AFTER SOAK MA	TEST MA		
RELAYS																	
A	U447		D	130/132	H	47	(TA)NO		T(A)	GRD			0	9.9	9.4		
AL	U216	ZL	I	108/111	H	47	5T(AL)	B(AL)		BAT.			0	7.6	7.2		
	U1329	ZM		145/120									0	9.1	8.6		
AN	AK41		9	202			11(ANI)		11(AN)	GRD			0	69.5	66	PAR. COMB. (AN) REL WITH (ANI) REL	
ANI							5(AN)		1U(ANI)				0	31.5	30	WDG ALONE	
ANE	AJ15		6	249					U(ANE)	GRD			0	43	40.5		
ANF	AG16		8	2338					U(ANF)	BAT.			0	FS	17.5	16.5	WHEN OPTION ZW IS FURNISHED SEE TIMING REQUIREMENT TABLE
									U(ANF)	GRD			0	17.5	16.5	WHEN OPT'D: ZT IS FURNISHED	
													0	1.1	1.4		
ANR	AJ12		8	220			(OTR)O		U(ANR)	GRD			0	43	40.5		
ANRA	1/2 AK41		8	202					1L(ANRA)	GRD			0	48	31.5	30	MTD WITH (OTM) REL
													0	4.5	4.2		
ANS	AJ83		8	249					U(ANS)	GRD			0	13.2	12.6		
CB	U486		I	205/205	H	29		B(CB)	T(CB)	B/G			0	60	57		
													NO	40	42.5		
													R	18	19		
CC	UB1		I	113/113	H	29	(DCK)O, 12T(CC)		T(CC)	GRD			0	22	20.5		
													NO	10.4	11		
CK	U1250		I	111/101	H	29		B(CK)		BAT.			0	6.3	6		
CK1	U1258		I	118/148	H	50			T(CK1)	GRD			0	14.9	14.1		
CN	U1329	M	I	145/120	H	47			T(CN)	GRD			0	9.1	8.6		
	U216	P		108/111									0	7.6	7.2		
CO	U1312		I	103/150	H	50			T(CO)	GRD			0	11.9	11.3		
CO1	AJ15		7	249					U(CO1)	GRD			0	43	40.5		
CP	U1319		I	117/148	H	47			T(CP)	GRD			0	12.3	11.7		
CR	U57		I	112/112	H	29	(DCK)O, 10T(CR)		T(CR)	GRD			0	20	19		
													NO	10.4	11		
DCK	U1335		I	111/104	H	44	(M)NO, 2B(DCK)		TF(DCK)	GRD	P	0	49	46.5			
									TR(DCK)	GRD	S	0	15				
DS	UA1		I	205/205	H	23			BF(DS)			FS	19	18			
									TR(DS)				R	9.1	9.6		
DT	AK47		8	202					2L(DT)	BAT.			0	13.2	12.5		
DTC									1U(DTC)	GRD			0				
H	U1408		I	153/138	H	53			T(H)	GRD			0	44.5	42		
HLD	U1318	ZO	I	160/132	H	47			6T(HLD)	GRD			0	20	19	PAR. COMB. (HLD) REL WITH (HLDA) REL	
HLDA	AJ83	YW	I	249					U(HLDA)				0	29.5	28	(HLD) WDG ALONE	
													0	9.4	8.9	(HLDA) WDG ALONE	
													0	13.3	12.6		
LA	U1310		I	148/137	H	47			T(LA)	GRD			0	10.2	9.7	OPERATE (HLD) KEY	
LT	S63		I			10			4T(OD)	GRD			0	8	7.6		
													NO	6.4	6.8		
													R	3.6	3.8		

CIRCUIT REQUIREMENTS

APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT			FLOW REQ	REMARKS
DESIG	CODE	OPT	FIG	BSP FIG	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG			TEST FOR	AFTER SOAK MA	TEST MA		
MB	U530		I	145/145	H	47	2T(RLI)		T(MB)	GRD			0	20.5	19.5	CKT COMB. (MB) WITH (MB1) REL	
MB1	U50		4	127/112									2	23.5	22	(MB1) WDG ALONE	
													0	9.2	8.7		
													0	10.3	9.8		
NC	U270		I	137/110	H	41			T(NC)	GRD			0	8.3	7.9		
DA	Y141		I	198/161	H	59			T(OA)	GRD			0	FS	50.5	48	
													H	11	10.4		
													R	2.5	2.9		
OAI	U333		I	150/150	H	50			T(OAI)	GRD			0	15.5	14.4		
OD	U982		I	207/161	H	53	(DCK)O, 13T(OD)		T(OD)	GRD			0	25.5	24		
													NO	10.4	11		
OD1	AJ15	YJ	I	249					U(OD1)	GRD			0	43	40.5		
ODR	AG53		5	249			11M(ODR)		1U(ODR)	GRD			P	0	FS	65	62
													H	12	11.4		
													R	5.9	6.6		
							8M, 11M(ODR)	2L(ODR)	2U(ODR)	B/G			S	0	100	85	
ODT	AF20		5	205			4M, 6M(ODT)	L(ODT)	U(ODT)	B/G			0	37.5	34		
ON	U179		I	117/145	H	47	3T(RLI)		T(ON)	GRD			0	19.5	18.5		
ONI	AJ15	ZY	I	249					U(ONI)	GRD			0	43	40.5		
OTM	1/2 AK41		8	202					1U(OTM)	GRD			0	48	31.5	30	MTD WITH (ANRA) REL
													H	4.5	4.2		
OTR	AJ15		8	249					U(OTR)	GRD			0	43	40.5		
OW	U1326		I	178/141	H	53			T(OW)	GRD			0	22.5	21		
OW1	AJ15	YP	I	249					(OD1)O, 12(ANR)	GRD			0	43	40.5		
OWIA	1/2 AK35	YP	I	202					1L(OWIA)	GRD			0	48	31.5	30	
													H	4.5	4.2		
RI	2668		I	2	H	15	(ST)O	RT(RI)	LT(RI)	B/G			0	10.5	10	FOR 1T, 2T, 1B, 2B SPRINGS	
													NO	7.6	8		
													R	3.8	4		
													0	10.5	10	FOR 3T, 4T, 3B, 4B SPRINGS CONNECT LT(RI) TO 1B(M)	
													NO	7.6	8		
													R	3.8	4		
RB	U237		I	145/145	H	47			T(RB)	GRD			0	9.2	8.7		
RC	AJ43	YN	I	249					U(RC)	GRD			0	24.5	23		
RC1	AJ81	YN	I	220					U(RC1)	GRD			0	33.5	31.5	PAR. COMB. (RC1) REL WITH (RC1) RES WINDING ALONE	
													0	24.5	23		
RL	U179		I	117/145	H	47	4B(CK1)		T(RL)	BAT.			0	19.5	18.5	SEE TIMING REQ TABLE	
RL1	U293		I	132/110	H	47			T(RL1)	GRD			0	17.5	16.5		
RLK	U1404	YF	I	215/146	H	47			T(RLK)	GRD			0	155	145		
	U1442	YG	I	197/197	H	59			T(RLK)	GRD			0	205	195		
RS	U141		I	132/132	H	47			T(RS)	BAT.			0	18.5	17.5	SEE TIMING REQ TABLE	

SD-25736-01-F1

COIN SUPERVISORY CIRCUIT

SD-25736-01-F1

BELL TELEPHONE LABORATORIES INCORPORATED

6S

CIRCUIT REQUIREMENTS																			
APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS	
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG			TEST FOR	AFTER SOAK MA	TEST MA	READJ MA			
								CONN BAT.	CONN GRD										
S	239FH	H	1		B			5B(SPI)	4T(CKI)	B/G		O	-150	3.6	CKT COMB.(S)REL AND (R)RES				
	280AA	G									NO		2.2						
								4(S)	1(S)	B/G		O	-40	0.9	WINDING ALONE				
											NO		0.6						
SCR	U1228	A		111/101	H	29			T(SCR)	GRD		P	0	6.3					
	U300	B		117/148		47			TF(SCR)			S	0	21					
SCR1	U1081	B		150/109	H	50			T(SCR1)	GRD		S	0	17					
SP	U90	YF	1	145/123	H	47	6T(SP)		TF(SP)	GRD		P	0	18					
	U1446	YG	1	162/162	H				TR(SP)			S	0	13.5					
									TF(SP)	GRD		P	0	23.5					
									TR(SP)			S	0	18					
SPI	U669		1	312/312	H	68	(SP)NO		TF(SPI)	GRD		P/S	0	24.5					
ST	U148		1	120/108	H	47			T(ST)	GRD			0	9					
T	U1261		1	150/117	H	50		T(T)	GRD				0	13.3					
T1	266B		1	2	H	15	(CA)NO	RT(T1)	LT(T1)	B/G		O	10.5	10	FOR 1T, 2T, 1B, 2B SPRINGS				
								RT(T1)	GRD			O	10.5	10	FOR 3T, 4T, 3B, 4B, SPRINGS CONNECT LT(T1) TO 1B(H)				
												NO	7.6	8					
												R	3.8	4					
												R	3.8	4					
T1-	U162		1	108/132	H	47			T(T1-)	GRD			0	18					
T2	1/2AK35		7	202					IL(T2)	GRD		O	FS	31.5	30				
												H	4.9	4.2					
TA	U540		1	102/108	H	53			T(TA)	GRD			0	10.7	10.1	SEE TIMING REQ TABLE			
TK	Y111		1	180/153	H	53	(CA)O		T(TK)	GRD		O	FS	39	37				
												H	7.9	7.5					
												R	1.4	1.8					
TM	U1254		1	111/101	H	29			T(TM)	BAT.			0	9.4	8.9	SEE TIMING REQ TABLE			
TM1	U934		1	159/139	H	59			T(TM1)	GRD			0	29.5	28	OPERATE (HLD) KEY			
TM1A	AJ15		7	249					U(TM1A)	GRD			0	43	40.5				
TM2	U189		1	148/148	H	47	5B(TM1)		T(TM2)	GRD			0	10.1	9.6				
TM3	U143		1	108/110	H	47			T(TM3)	GRD			0	8.8	8.3				
TM4									T(TM4)										
TM4A	AJ15	YX	1	249					U(TM4A)	GRD			0	43	40.5				
TST	AJ43	YK	1	249					U(TST)	GRD			0	24.5	23				
TSTA	AJ15								U(TSTA)					43	40.5				

CIRCUIT REQUIREMENTS																				
APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS		
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WDG			TEST FOR	AFTER SOAK MA	TEST MA	READJ MA				
								CONN BAT.	CONN GRD											
ELECTRON TUBES																				
RL	313CC		1																	
RS	313CC		1																	
TA	346B OR 346C		C																5	
TM	313CC		1																	
TIME REQ																				
DT																			7	LONG TIME CYCLE
RL																			6	TO REPEAT TIMING TEST MOMENTARILY RELEASE (CKI)REL
RS																			6	(ON)O, (ANF)NO
RS																			6	(LA)NO (TM3)O
RS																			6	4B(SP)
TA																			8	
TM																			6	6T(TM1) (T1)O (T2)O (TM4)O
																				OPTION ZV
																				OPTION ZV
																				OPTION ZV
																				OPTION ZV

TEST NOTES:

- | TEST SET PREP | OPTION |
|---------------|--------|
| GRD | YB |
| GRD | YC |
- CURRENT FLOW REQUIREMENTS WHEN APP FIG. 4 IS NOT FURNISHED OR FOR TEST OF THE (MB) REL WDG ALONE.
- | TEST SET PREP | WDG | OPTION |
|---------------|-----|--------|
| BAT. | P | YD |
| GRD | S | YE |
| H | P/S | YF |
- WHEN OPTION YD IS PROVIDED, TEST WINDING FOR CONTINUITY ONLY. BLOCK RELAY DS OPERATED.
- USE COLD CATHODE TUBE TEST SET CONNECT BK TO 2B(ON) REL AND W TO 3B(ON) REL. TEST REQUIRED FOR THE 346B TUBES ARE:

	SG ION	AG DROP (AT 20mA)	AG FWD POT.
MIN VOLTS	62	72RX	=
MAX VOLTS	89	90RX	180R

6. USE TEST SET FOR TIMING TESTS.

DESIG	TEST CLIP DATA			TEST SET PREP			TIME REQ ms		OPT
	CONN BK	CONN R	CONN W	SEND KEY	REC SW	START	STOP	MIN	
RL	GRD	1B(CO)	8T(RL)	BK	DC	GRD	10	20	
RS	GRD	Y(TM1)	2T(TM)	MK	GRD	DC	450	850	
RS	GRD	1U(ODR)	10(ODT)	MK	GRD	DC	190	330	ZV
							600	1100	YF & YG
TM	GRD	T(ON)	T(TM1)	MK	48V	GRD	450	825	ZS
							190	330	ZV & ZY

- WHEN (OTC) REL IS OPERATED, (DT) REL SHOULD OPERATE BETWEEN 23 AND 27 SECONDS.
- WHEN APP FIG. C IS PROVIDED, TEST TUBE & (TA) REL FOR OPERATION BY OPERATING (ON) REL. (TA) REL SHALL OPERATE IN MIN 20 MAX. 35 SECONDS.

* CONNECT GRD TO 3B(ON) REL AG FWD POT. TEST ONLY.
 ** SHORT-CRT RES(E) FOR AG DROP TEST ONLY.

SD-25736-01-F2

DRAWING ISSUE 37D

COIN SUPERVISORY CIRCUIT

SD-25736-01-F2

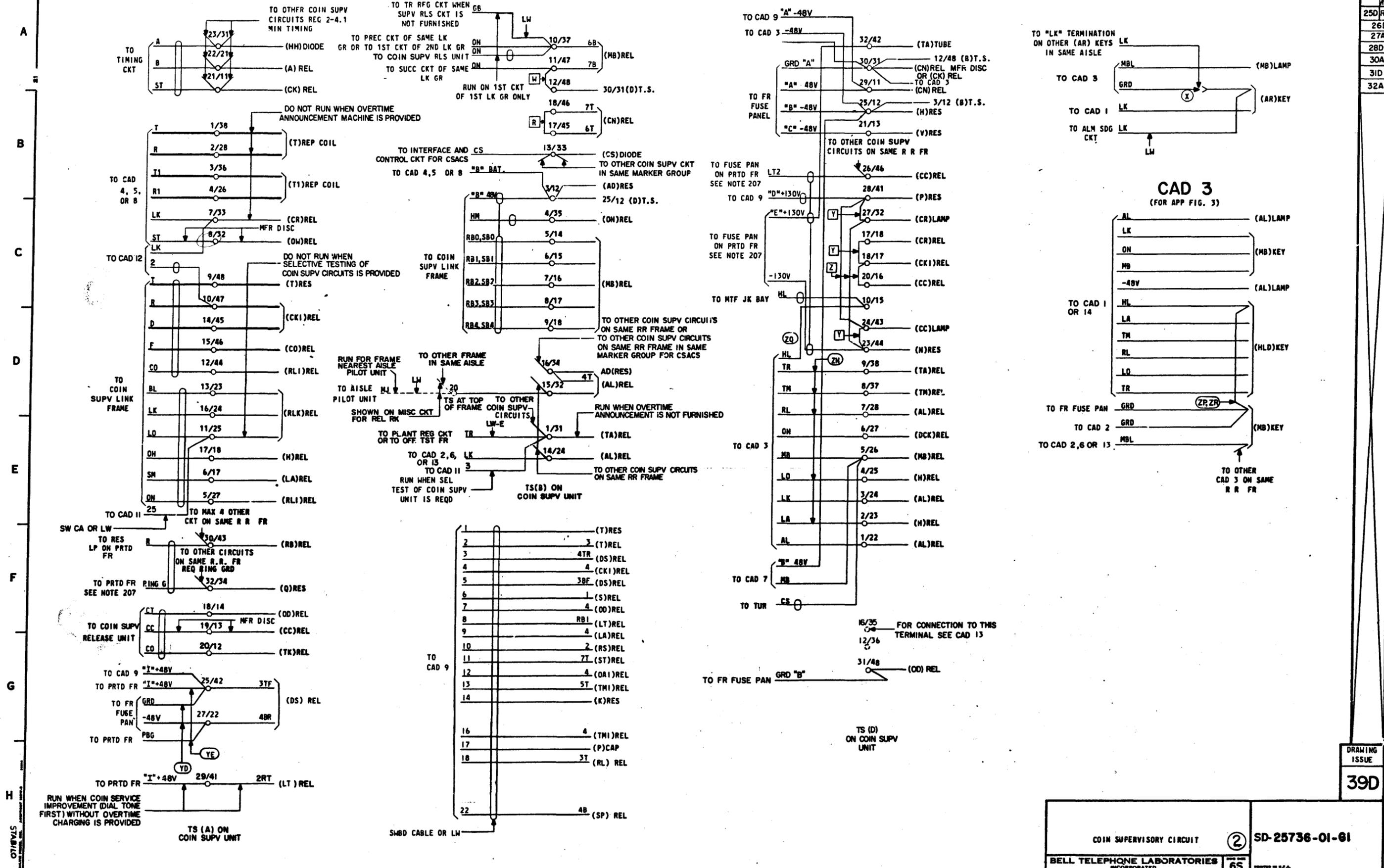
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6S

CAD 1 (MFR DISC)
(FOR APP FIG. 1,2BD)

CAD 2 (MFR DISC)
(FOR APP FIG. 2)

CAD 3
(FOR APP FIG. 3)



DRAWING ISSUE

24B	KMG
25D	THA
26D	AND
27AR	
28D	
30A	
31D	
32A	

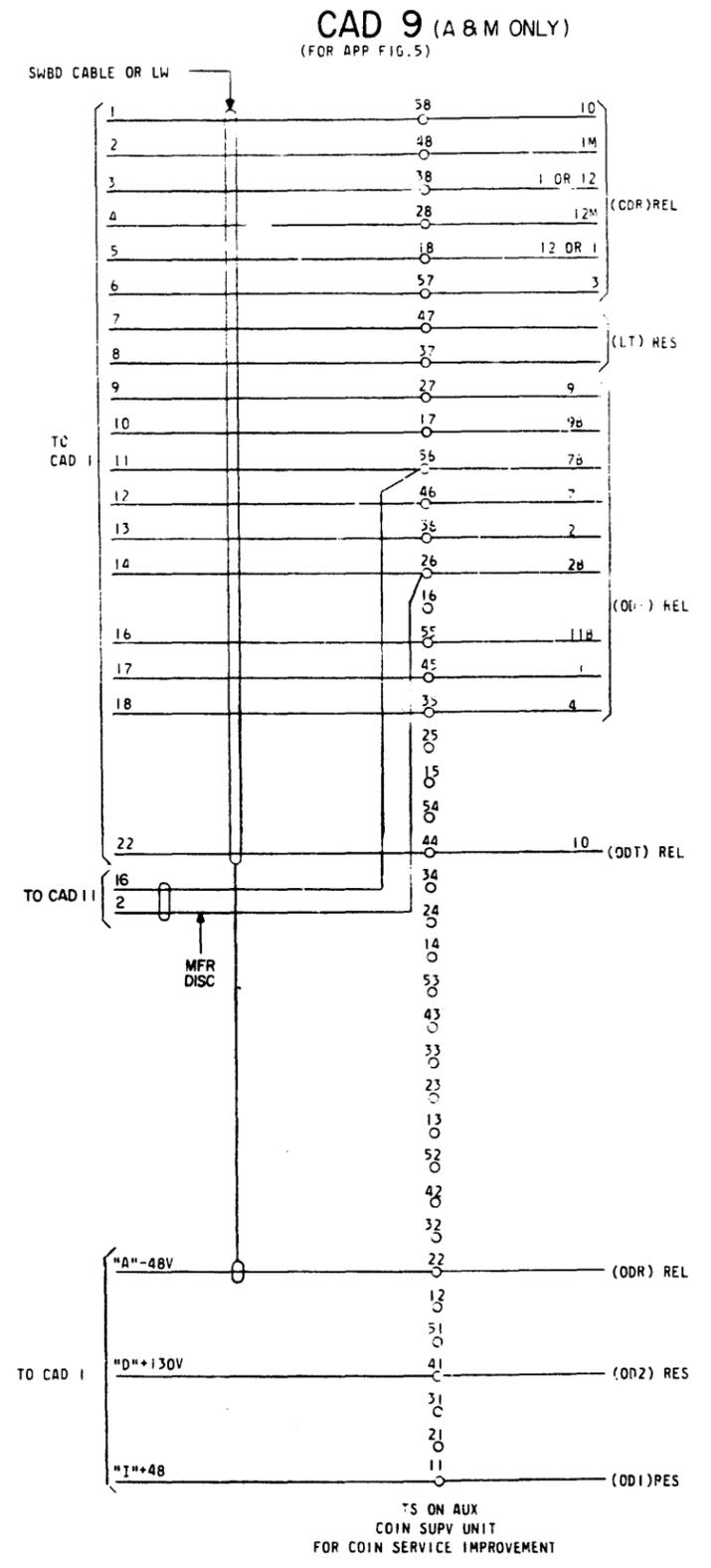
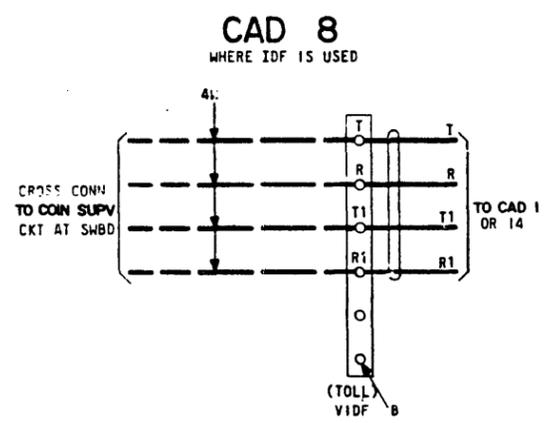
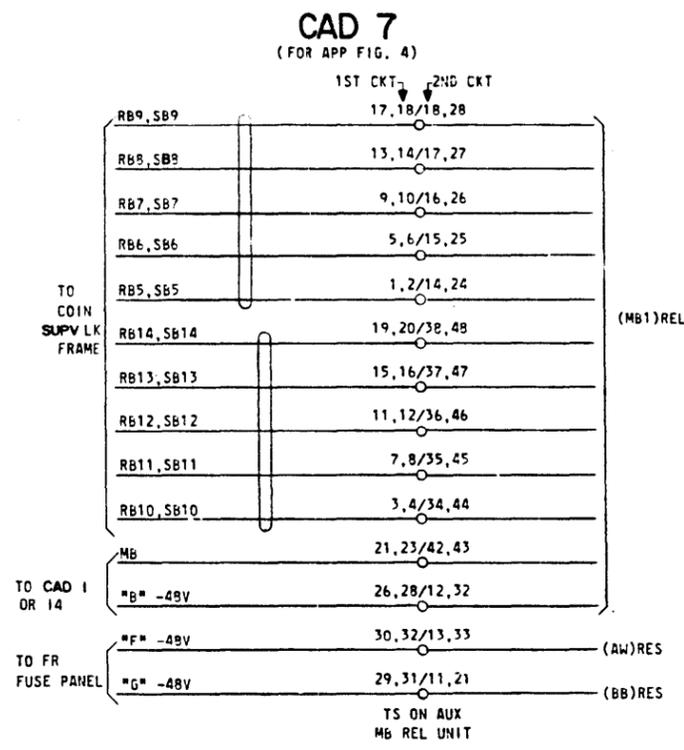
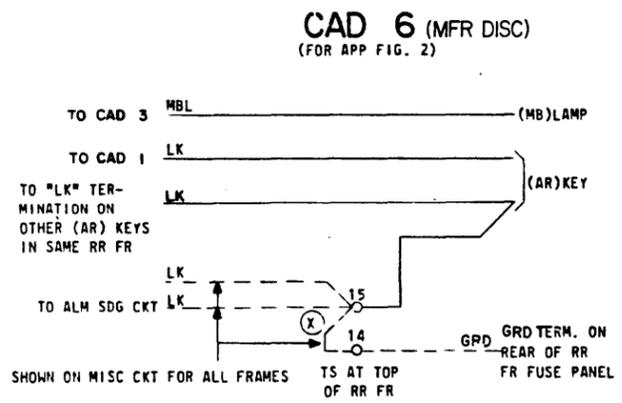
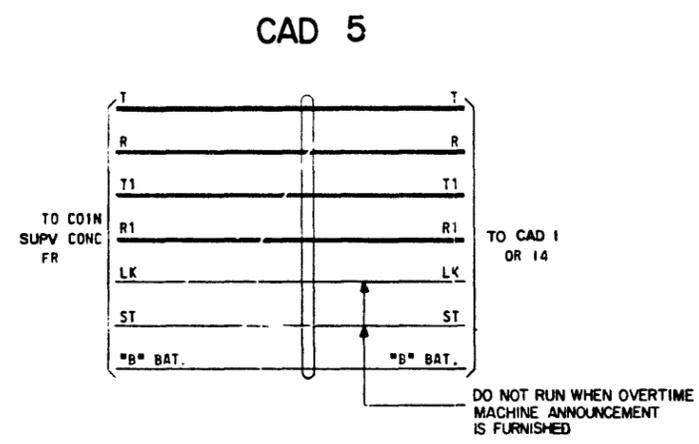
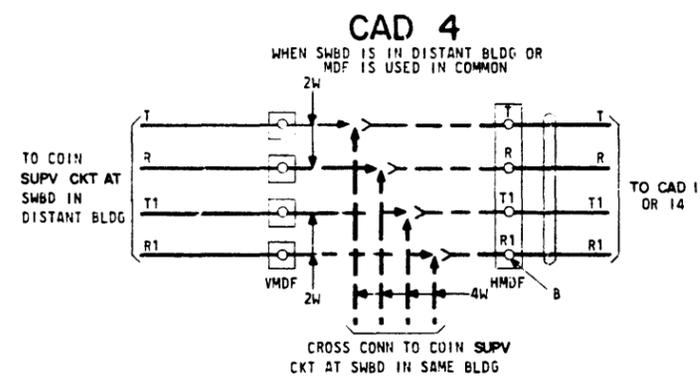
DRAWING ISSUE
39D

COIN SUPERVISORY CIRCUIT **2** SD-25736-01-61

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SD-25736-01-61

A
B
C
D
E
F
G



DRAWING ISSUE
24B KML
24B YNJ
24B WJD
26D
28D
30A
31D

DRAWING ISSUE
37D

SD-25736-01-G2

STABLO

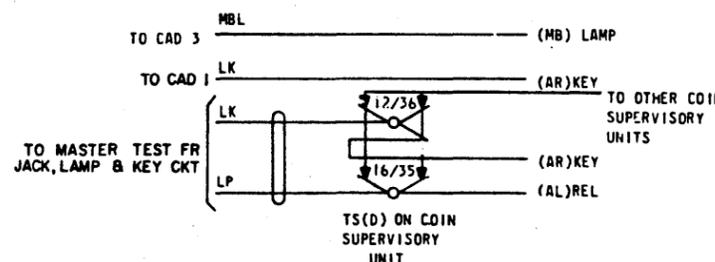
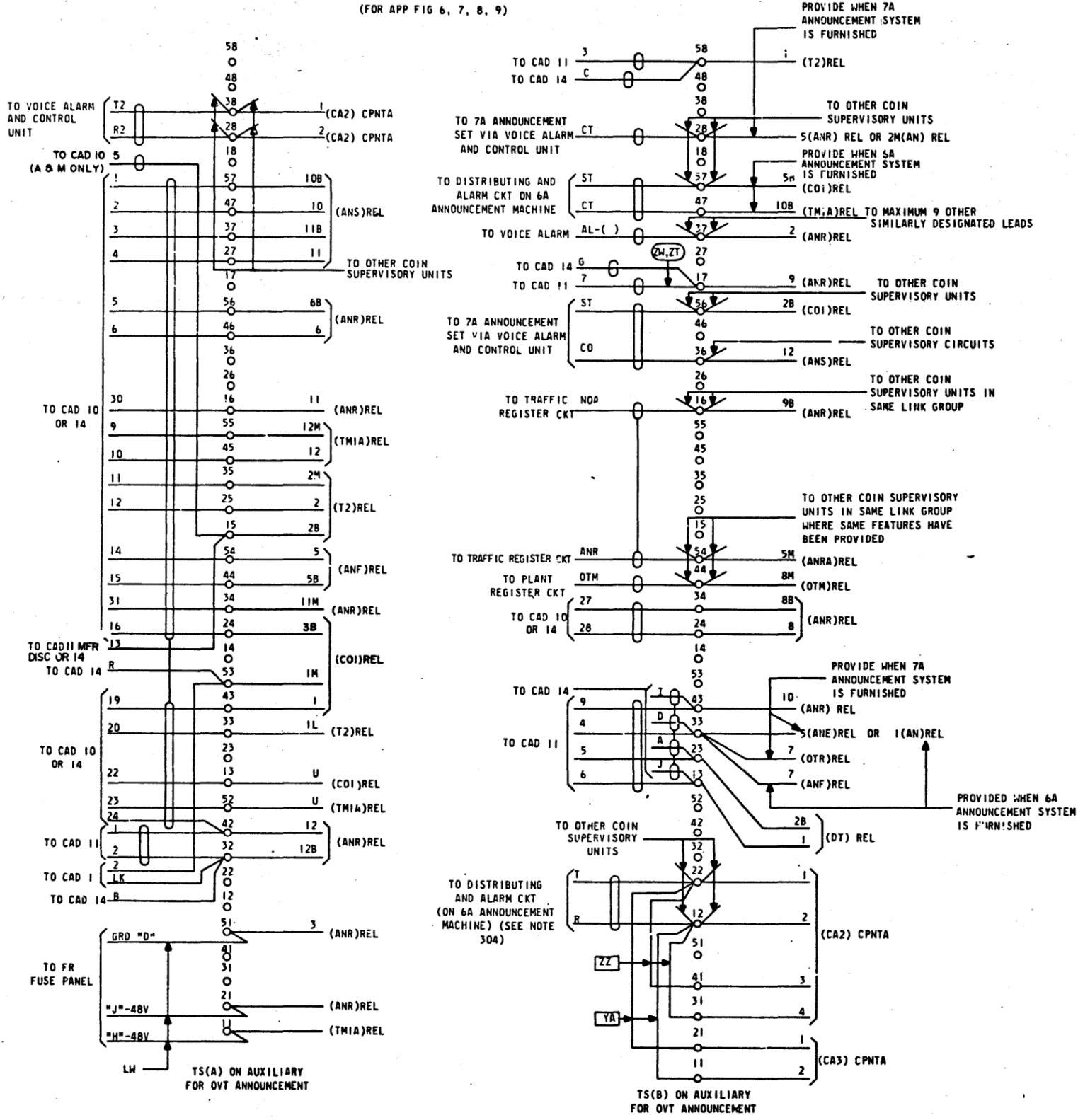
CAD 12

(FOR APP FIG 6, 7, 8, 9)

CAD 13 (MFR DISC)

DRAWING ISSUE 310

A
B
C
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E
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H



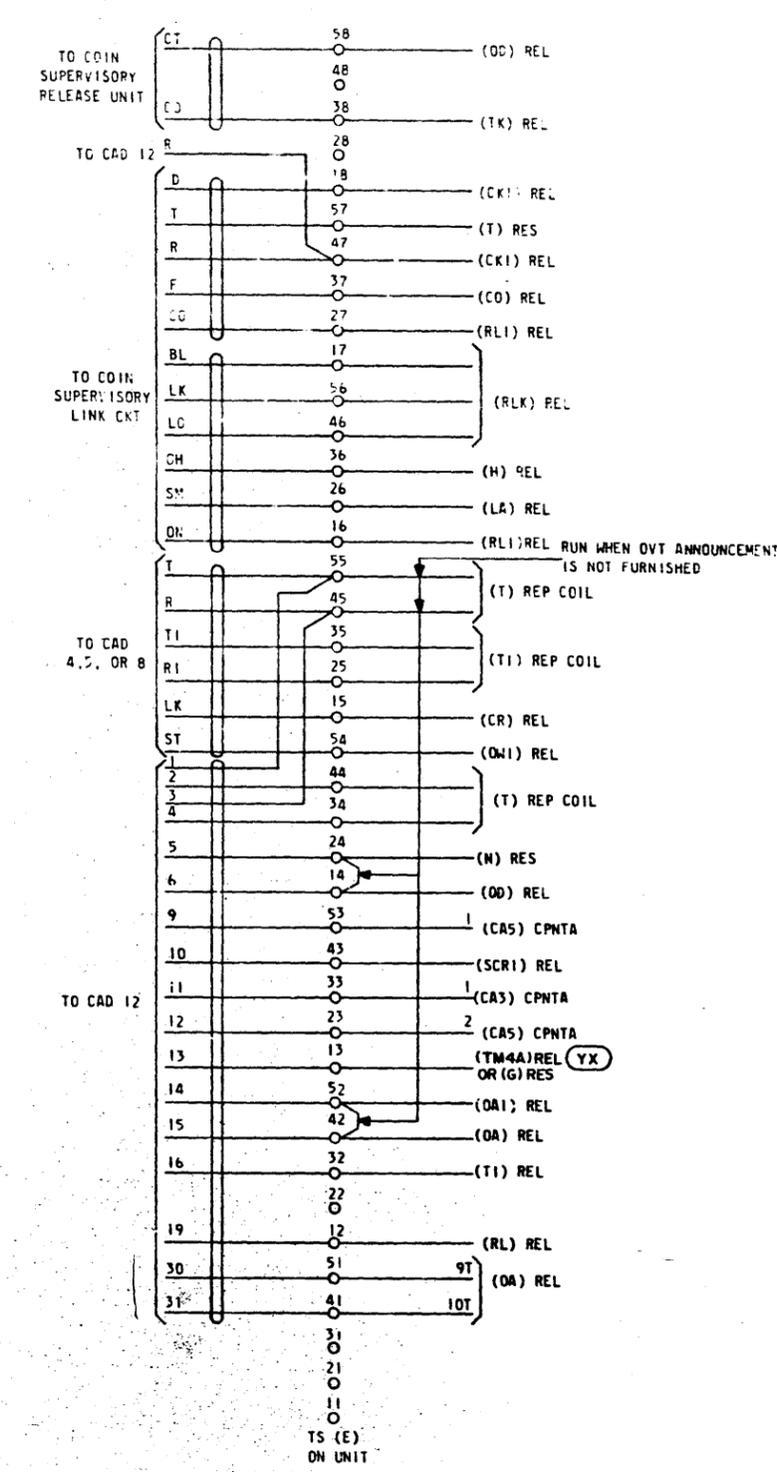
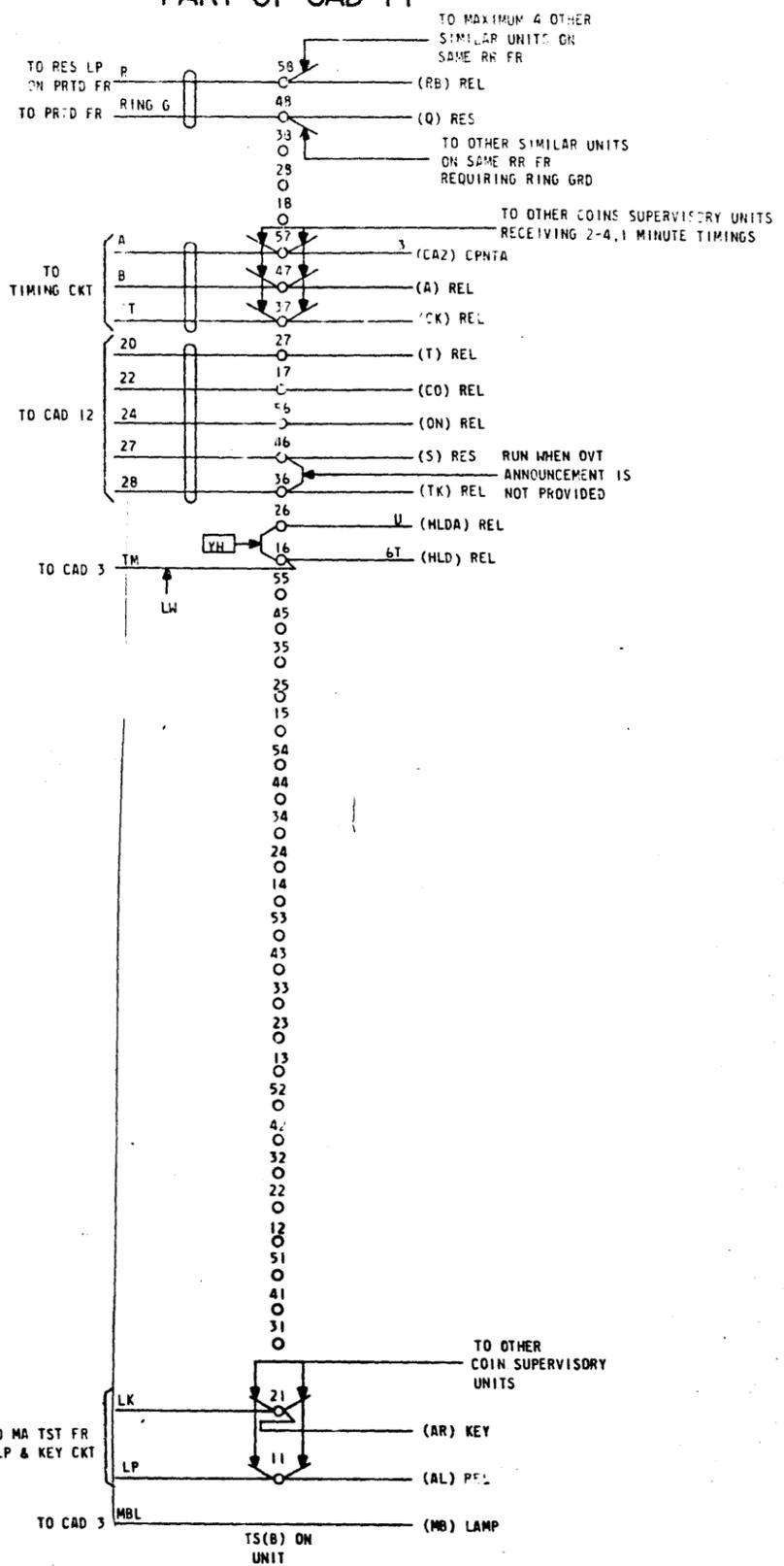
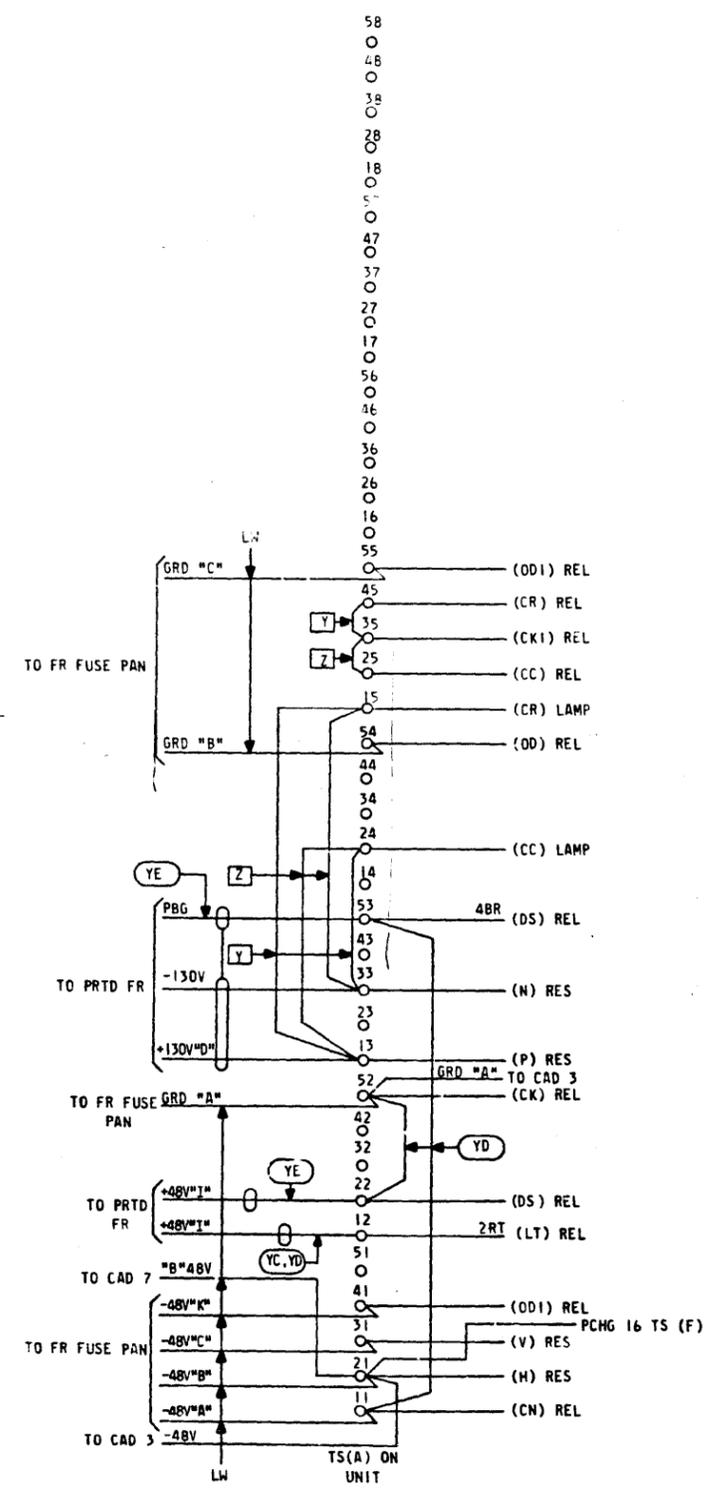
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DRAWING ISSUE 390

SD-25736-01-64

PART OF CAD 14

DRAWING ISSUE
31D



DRAWING ISSUE
39D

SD-25736-01-65

COIN SUPERVISORY CIRCUIT

2 SD-25736-01-65

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