SHEET INDEX

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CIRCUIT PACK 1 CIRCUIT PACK 2	J1	1	J1

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWINGS	J53045A J53045B J53045C J53045D J53045E J53045F J53045G J53045H
EQUIPMENT DESIGN REQUIREMENTS	J53045 (AA 321.635)

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 ISSUE	CD ISSUE	DATE ISSUED	DRAWN	APPD
1	1	3-26	RSK JPK	TLH FWR

KYS

SD-69566-01

STATION SYSTEM

A WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT

AT&TCO STANDARD

(2)

SD-69566-01-A1
18 SHEETS

BELL TELEPHONE LABORATORIES INCORPORATED

DWG SIZE 6S

(5)

APPARATUS INDEX

DESIG	LOCATION FS	APP FIG.	EQPT
RELAYS			
C1, 2, 3	4F7	7	
EB	2A8	4	
EX-A,C	2F8	4	
EX-B,D	2E8	4	
EX-E	2C8	4	
GC-	5A2	8	
LB	1E1	1	
LB1	1D1	1	
LS-	5A5	9	
QN	2H3	3	
P-	3B7	5	
PT	2H2	3	
PU	2E5	2	
R	4E1	6	
RL	4L1	6	
RL1, 2, 3	4E7	7	
RU	4F3	6	
TB	2J2	3	

DESIG	LOCATION FS	APP FIG.	EQPT
JACKS			
BUS IN	1G7	1	
BUS OUT	1A7	1	
LINE IN	1G1	1	
LINE OUT	1B1	1	

LAMPS			
RL	4D3	6	

RESISTORS			
R1,2,3,4	1D4	10	
R5	1D1	10	
R6	1D1	10	
R7,8	1C7	1	
R9,10	1G8	1	
R11,12	2J2	3	
R13	2F4	3	
R14	2F3	3	
R15	4D2	6	

THERMISTORS			
TH	4D3	6	

AMPLIFIERS			
REC	1B3	1	
TB	1D7	11	
TRS	1F3	1	

CAPACITORS			
C1	1E1	10	
C2	1G9	1	
C3	4D2	6	
R	2F2	3	
T	2F1	3	

TRANSFORMERS			
T1	1B6	1	
T2	1F7	1	
T3	1B2	1	
T4	1F2	1	

DIODES			
A,C	2F7	4	
B,D	2E7	4	
CR1	2E2	1	
CR2	2D1	1	
D3	2E4	2	
D4	2H3	3	
D5	2H4	3	
E	2C7	4	
RV1	4C3	6	
RV2	4D3	6	

TRANSISTORS			
Q1	1E1	10	

VARISTORS			
VR1	4D3	6	

OPTION INDEX

APP. OR WRG.	LOCATION
Z	1B8, 1F8, 2B0, 2B5
Y	1B4,
X	1B7, 1G7, 2B0
W	1B4, 1G5
V	1B2, 1F2
T	2D5
S	2A0
R	2E5
Q	2D5, 2E5
N	2E5
M	2D5
K	2C4
J	1D7
H	2D5
G	1B2, 1F2
F	4C3,
E	1F4,1G4
B	4F0, 4H2
A	1B5, 1G6
ZA	1G4
ZB	1B3
ZC	2C4

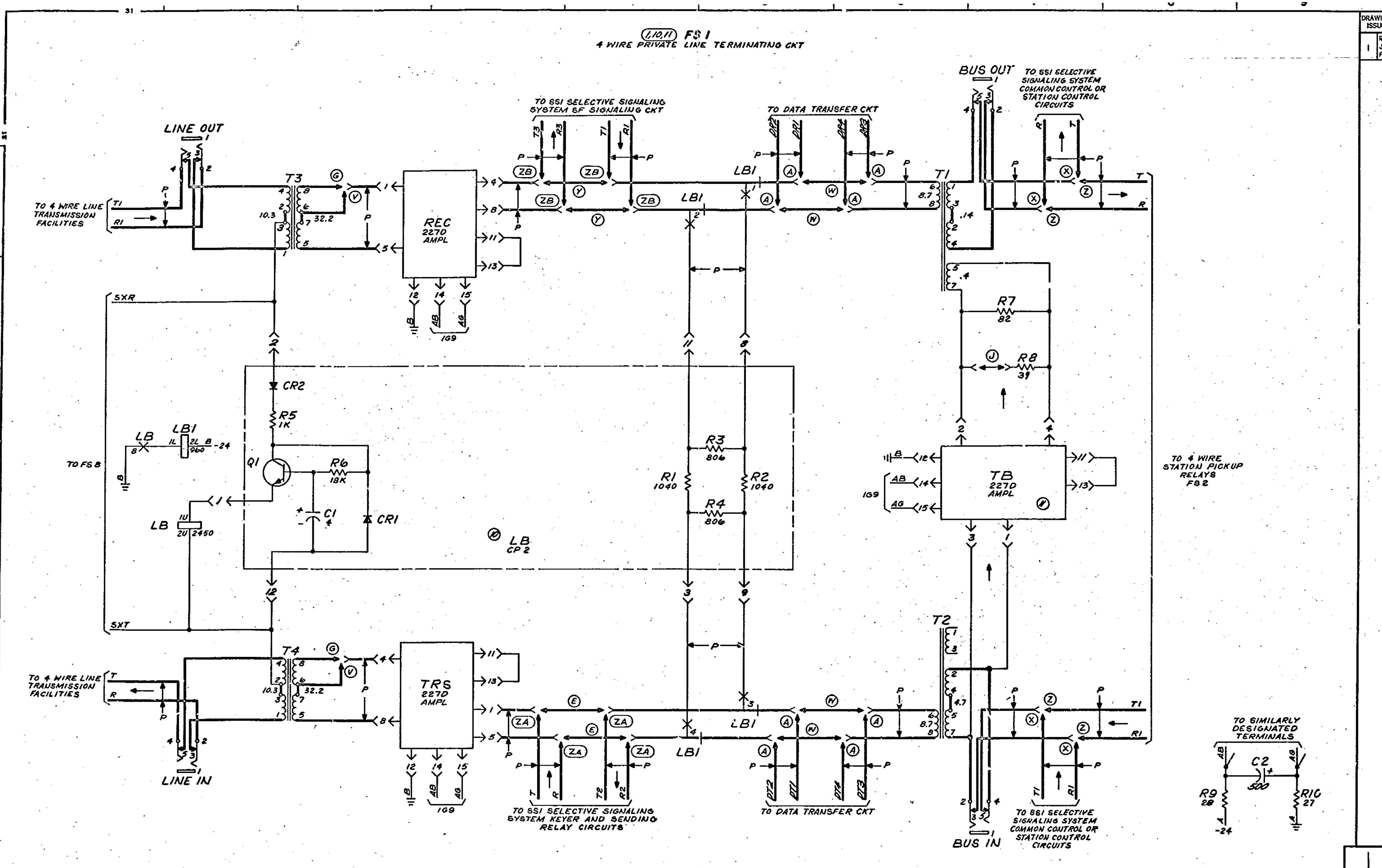
DRAWING ISSUE	
1	RSK JPK PEG

4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT (2)

SD-69566-01-A2

BELL TELEPHONE LABORATORIES INCORPORATED — SIZE 6S

SD-69566-01-A2



(1,10,11) FS 1
4 WIRE PRIVATE LINE TERMINATING CKT
LINE OUT
LINE IN
BUS OUT
BUS IN
TO 4 WIRE LINE TRANSMISSION FACILITIES
TO SSI SELECTIVE SIGNALING SYSTEM SF SIGNALING CKT
TO DATA TRANSFER CKT
TO SSI SELECTIVE SIGNALING SYSTEM COMMON CONTROL OR STATION CONTROL CIRCUITS
REC 227D AMPL
TRS 227D AMPL
TB 227D AMPL
TO 4 WIRE STATION PICKUP RELAYS FS 2
TO FS 8
LB CP 2
TO SSI SELECTIVE SIGNALING SYSTEM KEYER AND SENDING RELAY CIRCUITS
TO SIMILARLY DESIGNATED TERMINALS

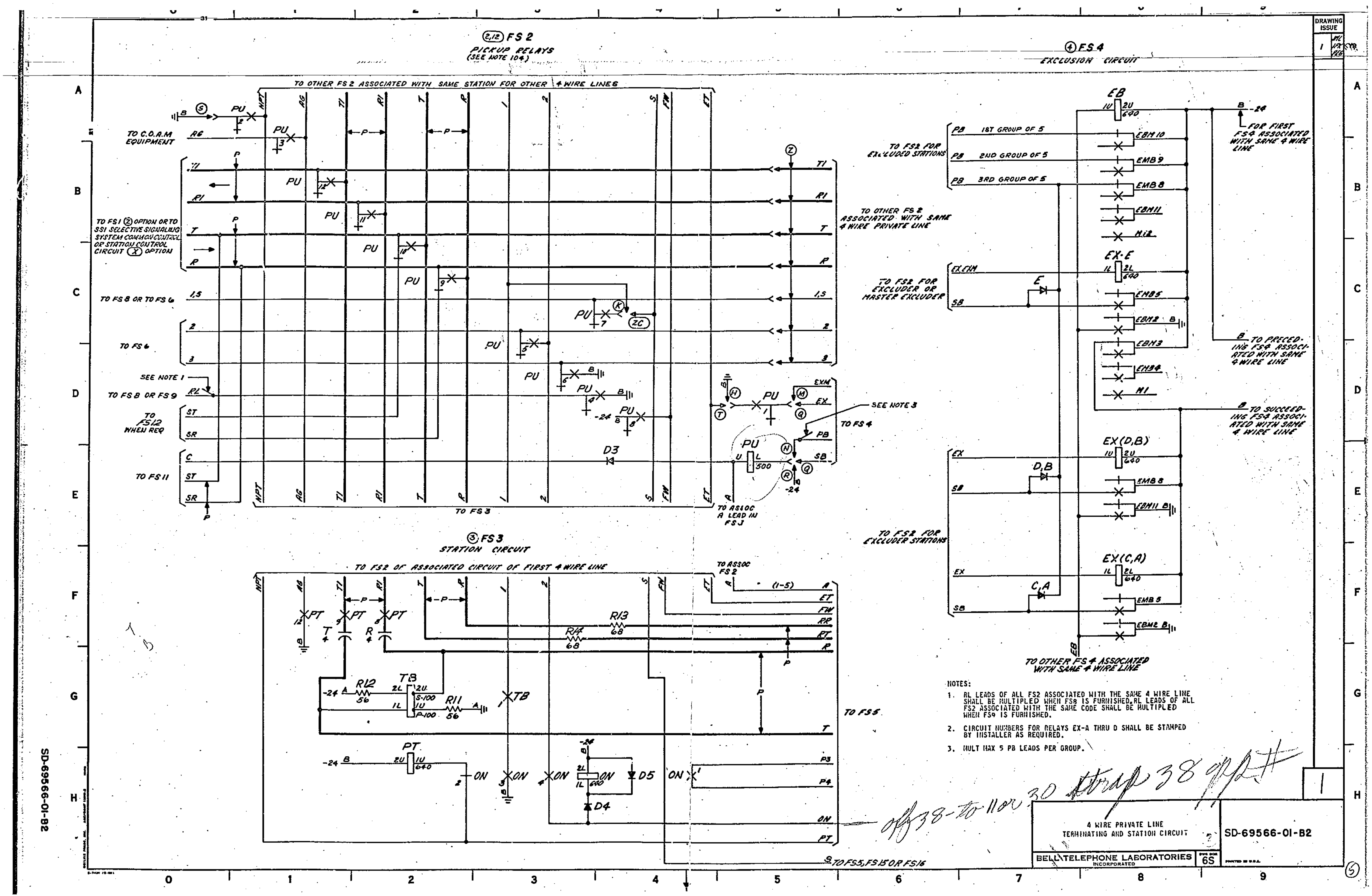
DRAWING ISSUE 1

4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT

SD-69566-01-B1

BELL TELEPHONE LABORATORIES INCORPORATED

6S



(2,12) FS 2
PICKUP RELAYS
(SEE NOTE 104)
(4) FS 4
EXCLUSION CIRCUIT
(3) FS 3
STATION CIRCUIT
TO OTHER FS 2 ASSOCIATED WITH SAME STATION FOR OTHER 4 WIRE LINES
TO C.O.A.M EQUIPMENT
TO FS1 (Z) OPTION OR TO SSI SELECTIVE SIGNALING SYSTEM COMMON CONTROL OR STATION CONTROL CIRCUIT (X) OPTION
TO FS 8 OR TO FS 6
TO FS 6
SEE NOTE 1
TO FS 8 OR FS 9
TO FS12 WHEN REQ
TO FS 11
TO FS 3
TO OTHER FS 2 ASSOCIATED WITH SAME 4 WIRE PRIVATE LINE
SEE NOTE 3
TO FS 4
TO ASSOC A LEAD IN FS 3
TO FS2 FOR EXCLUDED STATIONS
1ST GROUP OF 5
2ND GROUP OF 5
3RD GROUP OF 5
FOR FIRST FS4 ASSOCIATED WITH SAME 4 WIRE LINE
TO FS2 FOR EXCLUDER OR MASTER EXCLUDER
TO PRECEDING FS4 ASSOCIATED WITH SAME 4 WIRE LINE
TO SUCCEEDING FS4 ASSOCIATED WITH SAME 4 WIRE LINE
TO FS2 FOR EXCLUDER STATIONS
TO OTHER FS 4 ASSOCIATED WITH SAME 4 WIRE LINE
TO FS2 OF ASSOCIATED CIRCUIT OF FIRST 4 WIRE LINE
TO ASSOC FS 2
TO FS5
TO FS5, FS15 OR FS16

NOTES:

1. RL LEADS OF ALL FS2 ASSOCIATED WITH THE SAME 4 WIRE LINE SHALL BE MULTIPLED WHEN FS8 IS FURNISHED. RL LEADS OF ALL FS2 ASSOCIATED WITH THE SAME CODE SHALL BE MULTIPLED WHEN FS9 IS FURNISHED.
2. CIRCUIT NUMBERS FOR RELAYS EX-A THRU D SHALL BE STAMPED BY INSTALLER AS REQUIRED.
3. MULT MAX 5 PB LEADS PER GROUP.

off 38 to 11 or 30 strap 38 op 11

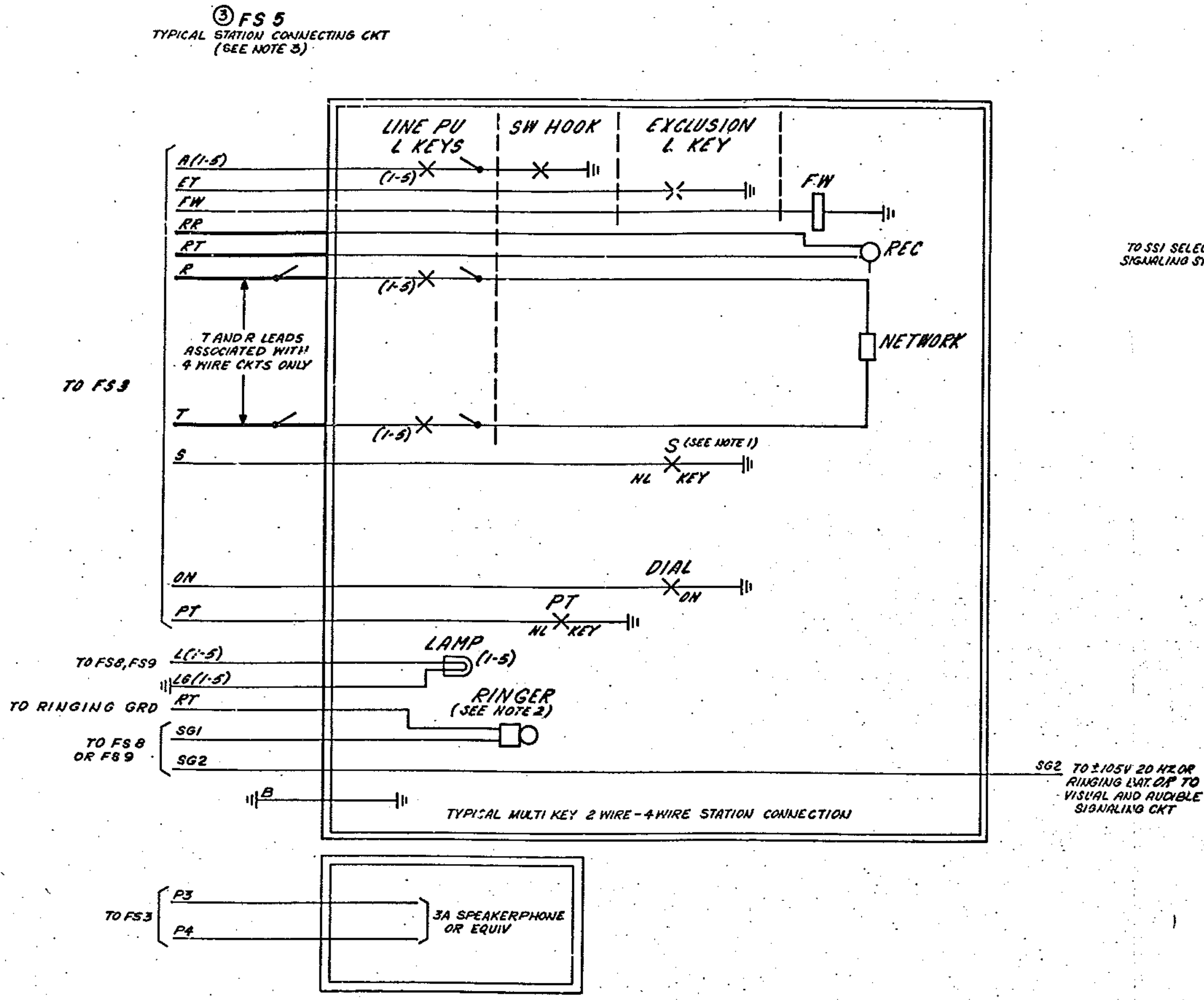
4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT

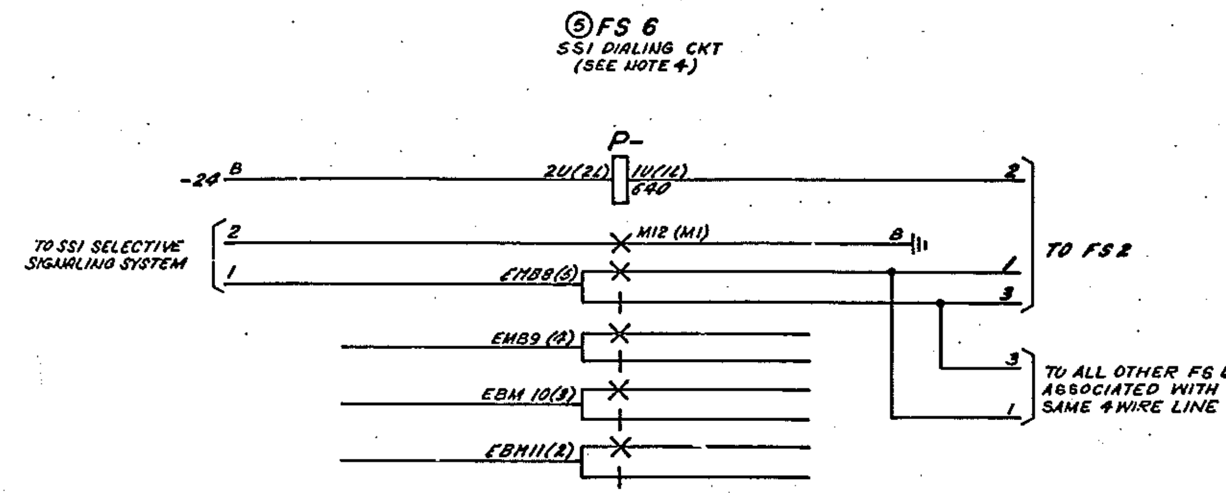
SD-69566-01-B2

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-69566-01-B2





NOTES:

1. THE "S" LEAD MAY BE CONNECTED TO THE "A" LEAD OF AN UNUSED LINE PICKUP KEY MODIFIED TO BE NONLOCKING FOR USE AS THE "S" KEY, OR A SEPARATE DESK MOUNTED KEY MAY BE PROVIDED.

2. RINGER MAY BE PART OF 2W-4W TEL SET OR AUXILIARY BELL OR BUZZER.

3. MULTIPLE CIRCUIT KEYS, LAMPS AND LEADS ARE NUMBERED 1-5 TO AGREE WITH 5-CIRCUIT STATION SETS. THESE CIRCUIT NUMBERS MAY DIFFER FOR TELEPHONE CONSOLE CONNECTION.

4. RELAY DESIGNATIONS, CONTACT AND TERMINAL NUMBERS IN ( ) ARE ASSOCIATED WITH THE LOWER HALF OF THE AK30 RELAY IN FS6.

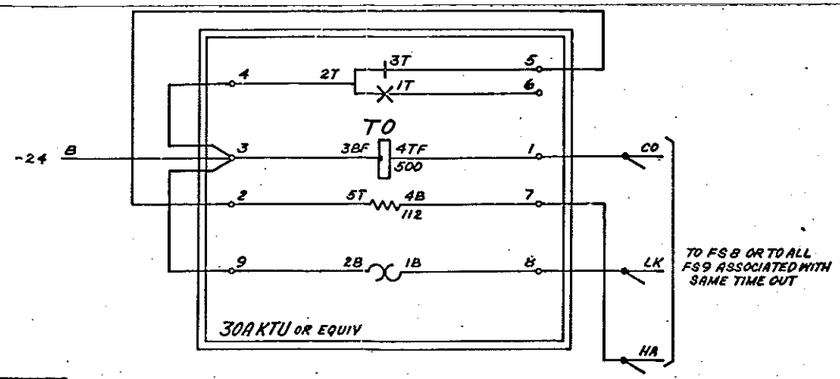
4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

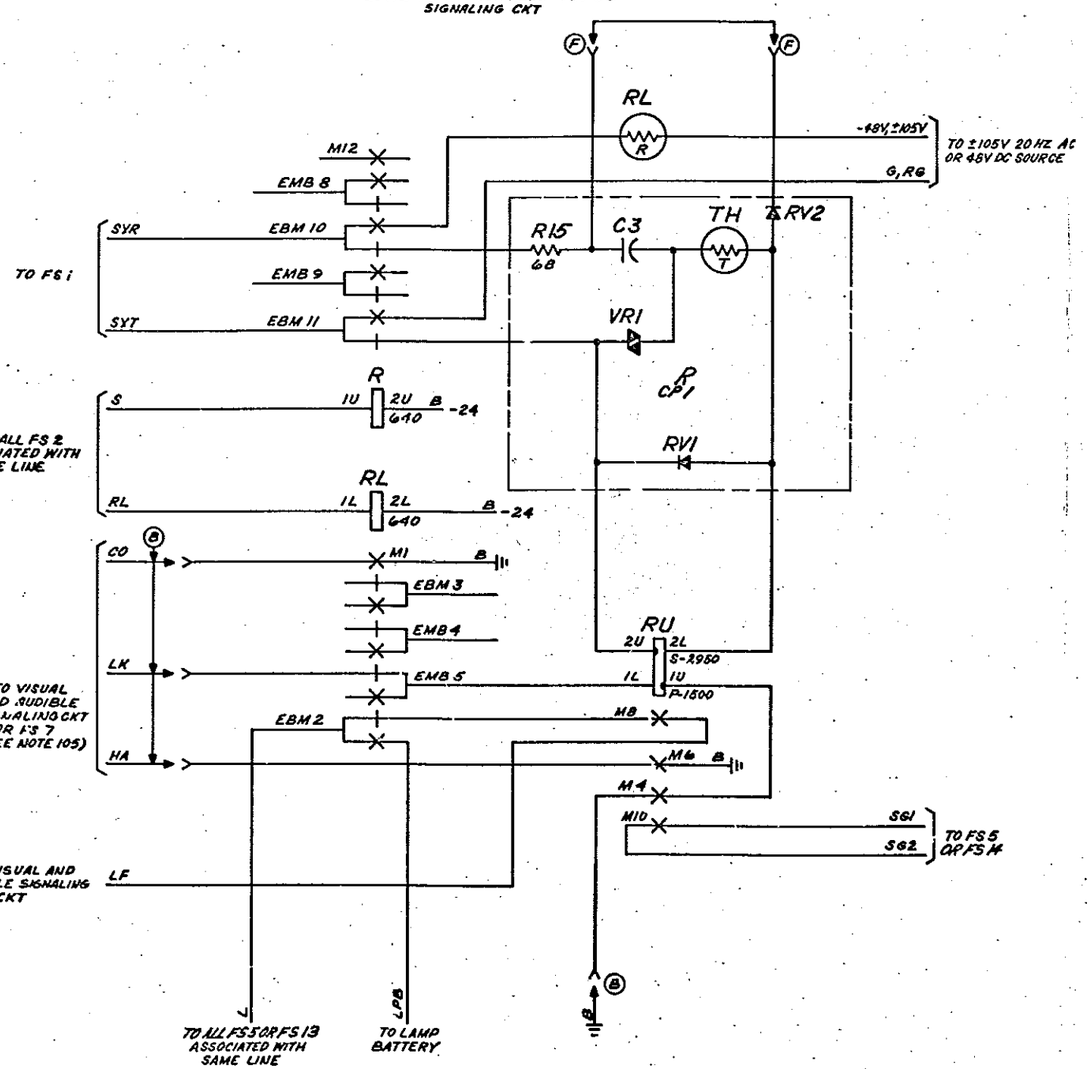
SD-69566-01-B3

DRAWING ISSUE
1. RSK JPK PEO KTO

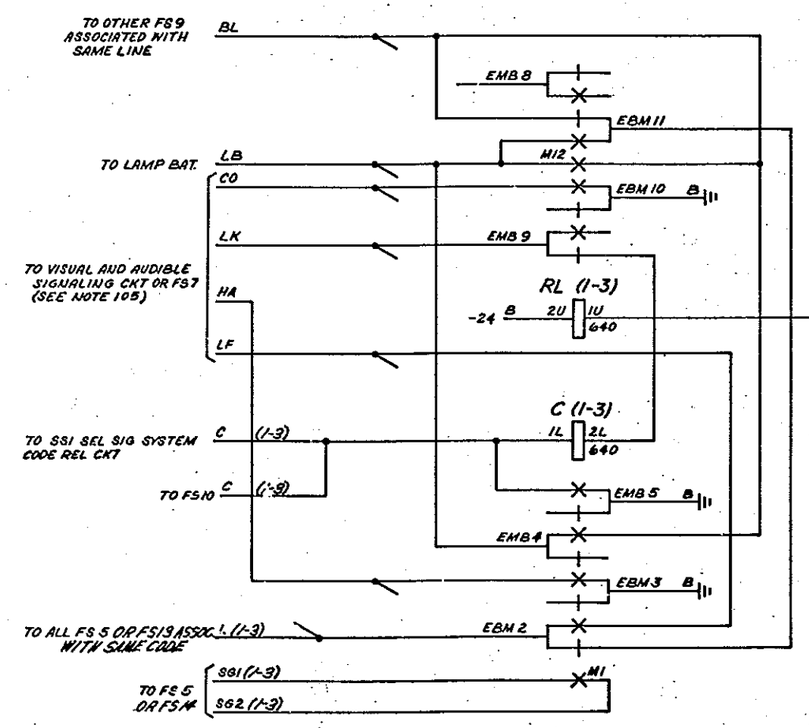
FS 7
TIME OUT CKT



⑥ FS 8
20 HZ AC OR POLARIZED 48V DC SIGNALING CKT



⑦ FS 9
SELECTIVE SIGNALING RECEIVE CKT

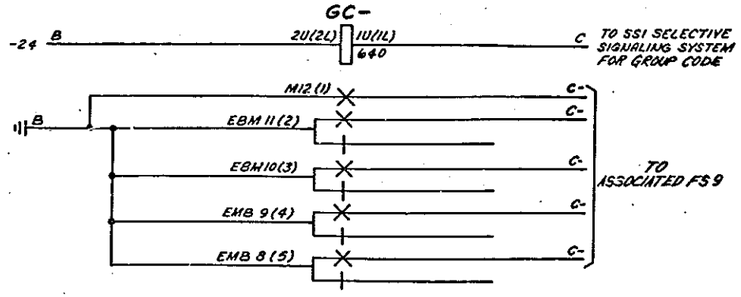


4 WIRE PRIVATE-LINE TERMINATING AND STATION CIRCUIT (2)	SD-69566-01-B4
BELL TELEPHONE LABORATORIES INCORPORATED	SHEET 65

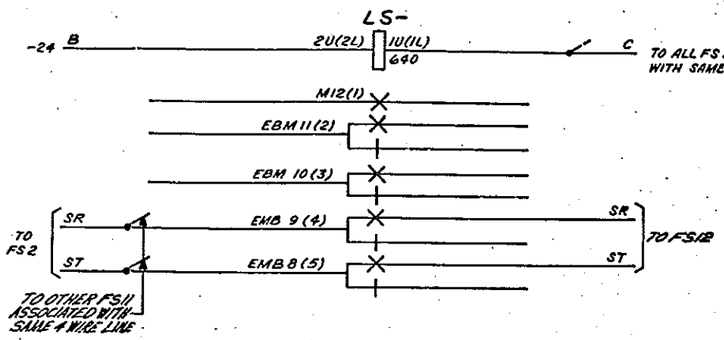
SD-69566-01-B4

DRAWING ISSUE
1 RSM JPK CYS PEG

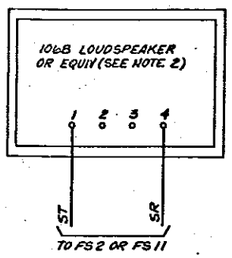
⑧ FS 10
GROUP CODE CKT
(SEE NOTE 1)



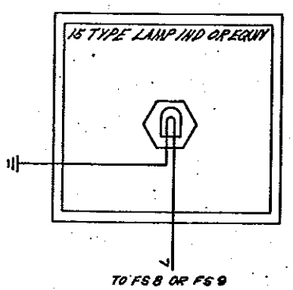
⑨ FS 11
LOUDSPEAKER CONTROL CKT
(SEE NOTE 1)



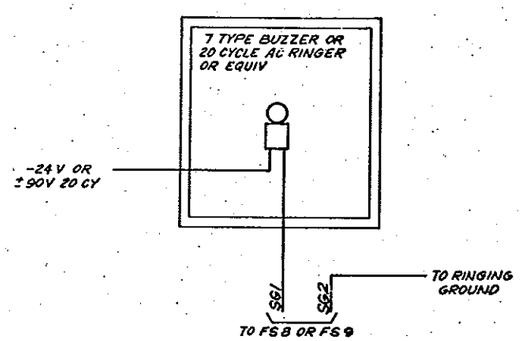
FS 12
LOUDSPEAKER



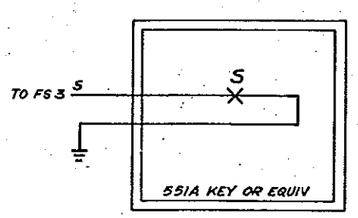
FS 13
VISUAL INDICATOR



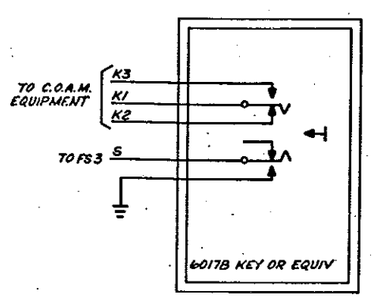
FS 14
BUZZER OR BELL



FS 15
KEY



FS 16
KEY



NOTES:

1. RELAY DESIGNATIONS, CONTACT AND TERMINAL NUMBERS IN ( ) ARE ASSOCIATED WITH THE LOWER HALF OF THE AK30 RELAY ON FS10 AND 11.
2. SEE BSP SECTION 463-220-100 FOR CONNECTION OF POWER TO 106B L.S.

4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT	SD-69566-01-B5
BELL TELEPHONE LABORATORIES INCORPORATED	SHEET NO. 6S

SD-69566-01-B5

APP FIG. 1

RELAY

DESIG	LB		LB1					
CODE	AK10							
OPTION								
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12	BH							
11	H							
10	H							
9	H							
8	H	1D1						
7								
6								
5			H					
4			BH	1F5				
3			BH	1F5				
2			BH	1B5				
1			BH	1B5				
COIL		1E1		1D1				

AMPLIFIER

DESIG	LOC	CODE
REC	1B3	227D
TRS	1F3	227D

CAPACITOR

DESIG	LOC	CODE
C2	1G9	KS-16953,500

JACK

DESIG	LOC	CODE
BUS IN	1G7	239C
BUS OUT	1A7	239C
LINE IN	1G1	239C
LINE OUT	1B1	239C

RESISTOR

DESIG	LOC	CODE
R7	1C7	KS-13490,L2,92
R8	1C7	KS-13490,L1,39
R9	1H8	59S, 270
R10	1H8	KS-13490,L2,27

TRANSFORMER

DESIG	LOC	CODE
T1	1B6	2563AA
T2	1F7	2563AA
T3	1B2	2536AA
T4	1F2	2536AA

APP FIG. 2

RELAY

DESIG	PU			
CODE	AJ43			
OPTION				
	CONT ARR	LOC	CONT ARR	LOC
12	EBM	2B1		
11	EBM	2B2		
10	EBM	2C2		
9	EBM	2C2		
8	EMB	2D4		
7	EBM	2C4		
6	EMB	2D3		
5	EMB	2D3		
4	EBM	2D3		
3	EBM	2B1		
2	EBM	2A1		
1	EBM	2D5		
COIL		2E5		

DIODE

DESIG	LOC	CODE
D3	2E4	446F

APP FIG. 3

RELAY

DESIG	ON		PT				TB			
CODE	AK30						AJ134			
OPTION										
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12			M	2F1			B			
11			EBM							
10			EBM							
9			EMB	2F1						
8			EMB	2F2						
7										
6										
5	EMB									
4	EMB	2H3								
3	EBM	2H3								
2	EBM	2H2					M			
1	M	2H2					M	2G3		
COIL		2H3		2H2				2G2		

CAPACITOR

DESIG	LOC	CODE
R	2F2	437A
T	2F1	437A

DIODE

DESIG	LOC	CODE
D4	2H3	420G
D5	2H4	420G

RESISTOR

DESIG	LOC	CODE
R11	2G2	18FH
R12	2G2	18FH
R13	2F4	18FE
R14	2F3	18FE

APP FIG. 4

RELAY

DESIG	EB		EX-E				EX-A		EX-B		EX-C		EX-D			
CODE	AK30						AK30				AK30					
	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							M				M			
11	EBM	2B8							EBM	2E8			EBM	2E8		
10	EBM	2A8							EBM				EBM			
9	EMB	2B8							EMB				EMB			
8	EMB	2B8							EMB	2E8			EMB	2E8		
7																
6																
5			EMB	2C8			EMB	2F8			EMB	2E8				
4			EMB				EMB				EMB					
3			EBM	2D8			EBM				EBM					
2			EBM	2C8			EBM	2F8			EBM	2E8				
1			M				M				M					
COIL		2A8		2C8				2F8		2E8		2F8		2E8		

DIODE

DESIG	LOC	CODE
A	2F7	420G
B	2E7	420G
C	2F7	420G
D	2E7	420G
E	2C7	420G

DRAWING ISSUE 1

4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT

SD-69566-01-C1

BELL TELEPHONE LABORATORIES INCORPORATED

6S

SD-69566-01-C1

APP FIG. 5

RELAY

DESIG	P-		P-			
CODE	AK30					
OPTION						
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12	M	3B7				
11	EBM					
10	EBM					
9	EMB					
8	EMB	3B7				
7						
6						
5			EMB	3B7		
4			EMB			
3			EBM			
2			EBM			
1			M	3B7		
COIL		3B7		3B7		

APP FIG. 6

RELAY

DESIG	RL		R				RU			
CODE	AK30						AJ48			
OPTION										
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12			M							
11			EBM	4D1						
10			EBM	4D1			M	4G3		
9			EMB							
8			EMB				M	4G3		
7										
6							M	4G3		
5	EMB	4F1								
4	EMB						M	4G3		
3	EBM									
2	EBM	4G1								
1	M	4F1								
COIL		4E1		4E1				4F3		

DESIG	CPS1	
CODE	ED-69525-(.) GRP1	
TERM	EQUIPMENT	LOCATION
12		
11	R15	4D2
10		
9	RV2	4D3
8		
7		
6		
5	VR1	4D3
4		
3	C3	4D2
2		
1	FV2	4E3

LAMP

DESIG	LOC	CODE
RL	4D3	13C (RES)

APP FIG. 7

RELAY

DESIG	C1		RL1		C2		RL2		C3		RL3					
CODE	AK30				AK30				AK30							
OPTION																
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT LOC	ARR
12			M	4D7			M	4D7			M	4D7				
11			EBM	4D7			EBM	4D7			EBM	4D7				
10			EBM	4D7			EBM	4D7			EBM	4D7				
9			EMB	4E7			EMB	4E7			EMB	4E7				
8			EMB				EMB				EMB					
7																
6																
5	EMB	4F7			EMB	4F7			EMB	4F7						
4	EMB	4F7			EMB	4F7			EMB	4F7						
3	EBM	4G7			EBM	4G7			EBM	4G7						
2	EBM	4G7			EBM	4G7			EBM	4G7						
1	M	4G7			M	4G7			M	4G7						
COIL		4F7		4E7		4F7		4E7		4F7		4E7				

APP FIG. 8

RELAY

DESIG	GC-		GC-			
CODE	AK30					
OPTION						
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12			M	5B2		
11			EBM	5B2		
10			EBM	5B2		
9			EMB	5B2		
8			EMB	5B2		
7						
6						
5	EMB	5B2				
4	EMB	5B2				
3	EBM					
2	EBM					
1	M					
COIL		5A2		5A2		

APP FIG. 9

RELAY

DESIG	LS-		LS-			
CODE	AK30					
OPTION						
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12			M			
11			EBM			
10			EBM			
9			EMB	5B5		
8			EMB	5B5		
7						
6						
5	EMB	5B5				
4	EMB	5B5				
3	EBM					
2	EBM					
1	M					
COIL		5A5		5A5		

APP FIG. 10

DESIG	CPS2	
CODE	ED-69524-(.) GRP1	
TERM	EQUIPMENT	LOCATION
12	C1	1F1
11	R1	1D4
10		
9	R2	1F5
8	R3	1D5
7		
6		
5		
4		
3	R1	1F5
2	CR2	1C1
1	Q1	1E1

APP FIG. 11

AMPL

DESIG	LOC	CODE
T8	1D7	2270

APP FIG. 12

RELAY

DESIG	PU			
CODE	2298 KTU			
OPTION				
	CONT ARR	LOC	CONT ARR	LOC
12	EBM	2B1		
11	EBM	2B2		
10	EBM	2C2		
9	EBM	2C2		
8	EMB	2D4		
7	EBM	2C4		
6	EMB	2D3		
5	EMB	2D3		
4	EBM	2D3		
3	EBM	2B1		
2	EBM	2A1		
1	EBM	2D5		
COIL		2E5		

DIODE

DESIG	LOC	CODE
D3	2E4	446F

DRAWING ISSUE

1	RSK JPK PEG

4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT (2)

SD-69566-01-C2

BELL TELEPHONE LABORATORIES INCORPORATED

65

1

CIRCUIT NOTES:

101.

DESIG.	APP. FIG.	CURRENT AMPS	POT.
TALK A	1	.060	14-28V DC
SIG.B	2 OR 12	.075	16-28V DC
TALK A	3	.060	14-28V DC
SIG.B	3	.080	16-28V DC
SIG.B	4	.080	16-28V DC
SIG.B	5	.040	16-28V DC
SIG.B	6	.060	16-28V DC
SIG.B	7	.120	16-28V DC
SIG.B	8	.040	16-28V DC
SIG.B	9	.040	16-28V DC

102.

FEATURE OR OPTION				APP FIG	APP OR WRG	QUANTITY
4 WIRE LINE TERMINATION CIRCUIT	OUTWARD SIGNALING	WITH SS1 SELECTIVE SIGNALING SYSTEM	WITHOUT PRIVACY OR STATION LOCKOUT DURING DIALING	1	Z,ZA	1 PER 4 WIRE TERMINATION
			WITH PRIVACY OR STATION LOCKOUT DURING DIALING		X,ZA	
		WITH 20 HZ AC OR 48V DC SIMPLEX OR LOUDSPEAKER SIGNALING	WITHOUT SS1 PRIVACY OR STATION LOCKOUT INWARD		E,Z	
			WITH SS1 PRIVACY OR STATION LOCKOUT INWARD		E,X	
	INWARD SIGNALING	WITH SS1 SELECTIVE SIGNALING	WITHOUT PRIVACY OR STATION LOCKOUT DURING DIALING		Z,ZB	
			WITH PRIVACY OR STATION LOCKOUT DURING DIALING		X,ZB	
		WITH 20HZ AC OR 48V DC SIMPLEX OR LDSPKR			Y,Z	
	TRNSN	150 OHM			G	
		600 OHM			V	
	DATA SERVICE	REQUIRED			A	
		NOT REQUIRED			W	
	LOOPBACK TEST CIRCUIT	REQUIRED		10		
		NOT REQUIRED				
	OR PREMISE TALK BACK AMPLIFIER	REQUIRED		11		
		NOT REQUIRED			J	
PICKUP RELAY CIRCUIT	SIGNALING	WITH SS1 SELECTIVE SIGNALING SYSTEM	WITHOUT PRIVACY OR STATION LOCKOUT DURING DIALING	2 OR 12	Z, K	1 PER STATION PER 4 WIRE LINE
			WITH PRIVACY OR STATION LOCKOUT DURING DIALING		X, K	
		WITH 20HZ AC OR 48V DC SIMPLEX OR LDSPKR			ZC, Z	
	PUSH TO TALK	PROVIDED			S	
		NOT PROVIDED			R	
	EXCLUSION	FOR NON-EXCLUDED STATION			H,R	
		FOR MASTER EXCLUDER STATION			Q	
		FOR EXCLUDER-EXCLUDED STATIONS			N	
		FOR EXCLUDED STATIONS			T	
		MANUAL EXCLUSION			H	
		AUTOMATIC EXCLUSION				

CIRCUIT NOTES: (CONTD)

102. (CONTD)

FEATURE OR OPTION			APP FIG.	APP OR WRG	QUANTITY
STATION CIRCUIT	FOR SS1 SELECTIVE SIGNALING		3		1 PER STATION
	FOR 20 HZ AC OR 48V DC SIMPLEX OR VOICE SIGNALING				
ON PREMISE EXCLUSION CIRCUIT			4		1 PER EXCLUDER STATIONS PER 4 WIRE LINE
SS1 SELECTIVE SIGNALING SEE NOTE 105	DIAL CIRCUIT FOR OUTWARD DIALING	WITH PRIVACY OR STATION LOCKOUT	5		1 PER 2 STATIONS PER LINE
		WITHOUT PRIVACY OR STATION LOCKOUT			1 PER 2 4-WIRE TERMINATIONS
	SELECTIVE SIGNALING REC. CKT FOR INWARD SIGNALING		7		1 PER 3 CODES
	GROUP CODE CIRCUIT		8		1 PER GROUP OF 10 CODES OR 1 PER 2 GROUPS OF 5 CODES
	TIMEOUT CIRCUIT				1 PER GROUP OF STATIONS ON SAME TIMEOUT
20 HZ AC SIMPLEX SIGNALING SEE NOTE 105	NOT LOCKED IN		6		1 PER 4 WIRE TERMINATION
	LOCKED IN WITH TIMEOUT			B	
48V DC SIMPLEX SIGNALING SEE NOTE 105	NOT LOCKED IN			F	1 PER 4 WIRE TERMINATION
	LOCKED IN WITH TIMEOUT			EB	
LOUDSPEAKER CONTROL CIRCUIT			9		1 PER 2 STA. GROUPS (EACH SERVED BY ONE LDSPKR.)

CIRCUIT NOTES: (CONTD)

103.

RECORD OF 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 & H	HD	

104. OPTION 2 PROVIDES APP FIG 2.1 AJ43 RELAY FOR EACH FS 2 WITH FIVE CATS PER MOUNTING PLATE, FOR SINGLE CIRCUIT ADDITIONS OPTION 12 PROVIDES 229B KTU WITH ONE AJ43 RELAY.

105. TO PROVIDE INTERRUPTED RINGING AND FLASHING LAMP SIGNALS WITH TIME OUT, A 232B KTU VISUAL AND AUDIBLE SIGNALING CIRCUIT OR EQUIVALENT SHOULD BE FURNISHED. WHEN INTERRUPTED RINGING AND FLASHING LAMP SIGNALS ARE NOT REQUIRED, FS 7 OR EQUIVALENT SHOULD BE PROVIDED FOR 20 CYCLE AC, -48 DC LOCKED IN SIGNALING OR FOR SS1 SELECTIVE SIGNALING.

EQUIPMENT NOTES:

201. WHEN A PICK-UP RELAY CKT PER APP. FIG. 12 IS SPECIFIED, INSTALLER SHALL MOUNT (D3) DIODE ON 229B KTU IN ACCORDANCE WITH CAD 12. ALSO, INSTALLER SHALL STAMP (PU) ON RELAY.

202. WHEN UNIT J53045H-( ) IS PROVIDED FOR EITHER APP. FIG. 5, 8 OR 9, INSTALLER SHALL STAMP UNIT AND RELAY DESIGNATIONS AS REQUIRED.

APP. FIG.	UNIT DESIG.	REL DESIG.
5	SS1 DIAL	P
8	GRP CODE	GC
9	LS CONT	LS

DRAWING ISSUE

KYS

4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT (2)

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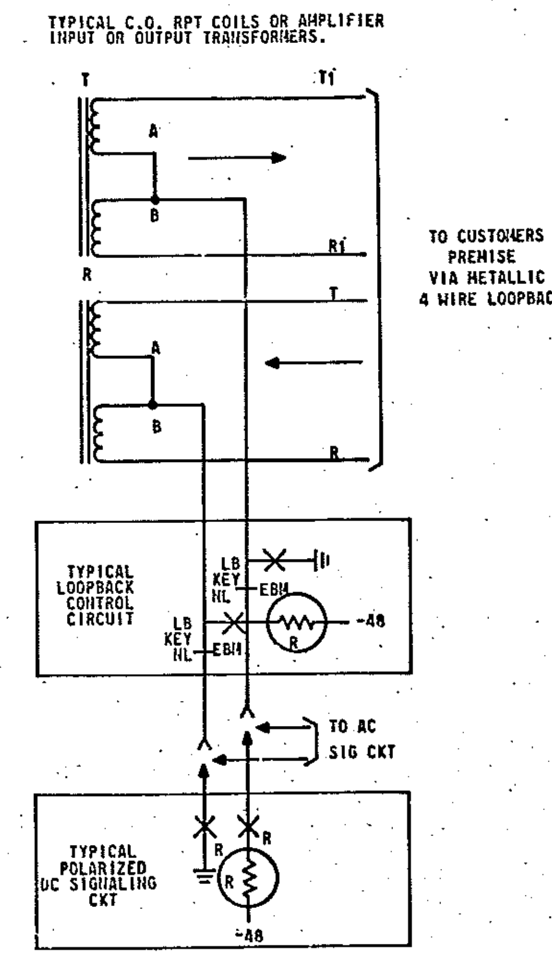
INFORMATION NOTES:

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.

INFORMATION NOTES: (CONT)

302. TYPICAL CENTRAL OFFICE ARRANGEMENT FOR LOOPBACK CONTROL AND POLARIZED DC SIMPLEX SIGNALING.



NOTES:

1. RL LEADS OF ALL FS 2 ASSOCIATED WITH THE SAME 4 WIRE LINE SHALL BE MULTIPLED WHEN FS 8 IS FURNISHED. RL LEADS OF ALL FS 2 ASSOCIATED WITH THE SAME CODE SHALL BE MULTIPLED WHEN FS 9 IS FURNISHED.

4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT

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CIRCUIT REQUIREMENTS

DRAWING ISSUE: 1 (RSK UPK PEG)

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	APPARATUS LOC.	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:																		
C(1-3)	1/2 AK30		9	4F8	202				2L (C1-3)	1L (C1-3)	GRD			0		23.1	22	MOUNTED WITH RL(1-3)
EP	1/2 AK30		4	2A8	202				2U (EP)	1U (EP)	GRD			0		23.1	22	
EX-(A-E)	1/2 AK30		4	2C8	202				2U (EX)	1U (EX)	GRD			0		23.1	22	
									2L (EX)	1L (EX)	GRD			0		23.1	22	
GC-	1/2 AK30		10	5B1	202				2U (GC)	1U (GC)	GRD			0		23.1	22	
									2L (GC)	1L (GC)	GRD			0		23.1	22	
LB	1/2 AK10		1	1E2	7				2U (LB)	1U (LB)	GRD			0		7.8	7.4	MOUNTED WITH LB1
LB1	1/2 AK10		1	1E2	7				2L (LB1)	1L (LB1)	GRD			0		16.3	15.5	MOUNTED WITH LB
LS-	1/2 AK30		9	5A5	202				2U (LS)	1U (LS)	GRD			0		23.1	22	
									2L (LS)	1L (LS)	GRD			0		23.1	22	
ON	1/2 AK30		3	2H3	202				2L (ON)	1L (ON)	GRD			0		23.1	22	MOUNTED WITH PT
P-	1/2 AK30		6	3B7	202				2U (P-)	1U (P-)	GRD			0		23.1	22	
									2L (P-)	1L (P-)	GRD			0		23.1	22	
PU	AJ43		2	2E5	294				L (PU)	U (PU)	GRD			0		24.2	23	
PT	1/2 AK30		3	2F1	202				2U (PT)	1U (PT)	GRD			0		23.1	22	MOUNTED WITH ON
R	1/2 AK30		8	4E1	202				2U (R)	1U (R)	GRD			0		23.1	22	MOUNTED WITH RL
RL	1/2 AK30		8	4E1	202				2L (RL)	1L (RL)	GRD			0		23.1	22	MOUNTED WITH R
RL (1-3)	1/2 AK30		9	4E7	202				2U (RL1-3)	1U (RL1-3)	GRD			0		23.1	22	MOUNTED WITH C(1-3)
RU	AJ48		8	4F3	3				1L (RU)	1U (RU)	GRD		S	0		8.4	8	
														NO		6.1	6.5	

TEST NOTES:

1. ARMATURE BACK TENSION MIN 20 GRAMS READJUST, 15 GRAMS TEST.

PAGE

4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT

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CIRCUIT REQUIREMENTS

APPARATUS DESIG	APPARATUS CODE	APPARATUS OPT.	APPARATUS FIG.	APPARATUS LOC.	MECH REQT BSP FIG.	MECH REQT CONT PRES	MECH REQT ARM. TR...	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																		
TP	AJ134		3	2H4	8				2L (TP)	1U (TB)	M	1	P/S	0		14.4	13.7	
TO	271A		7	4B4	132/1				3BF (TO)	4TF (TO)	GRD			0		16.5	15.5	

4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT

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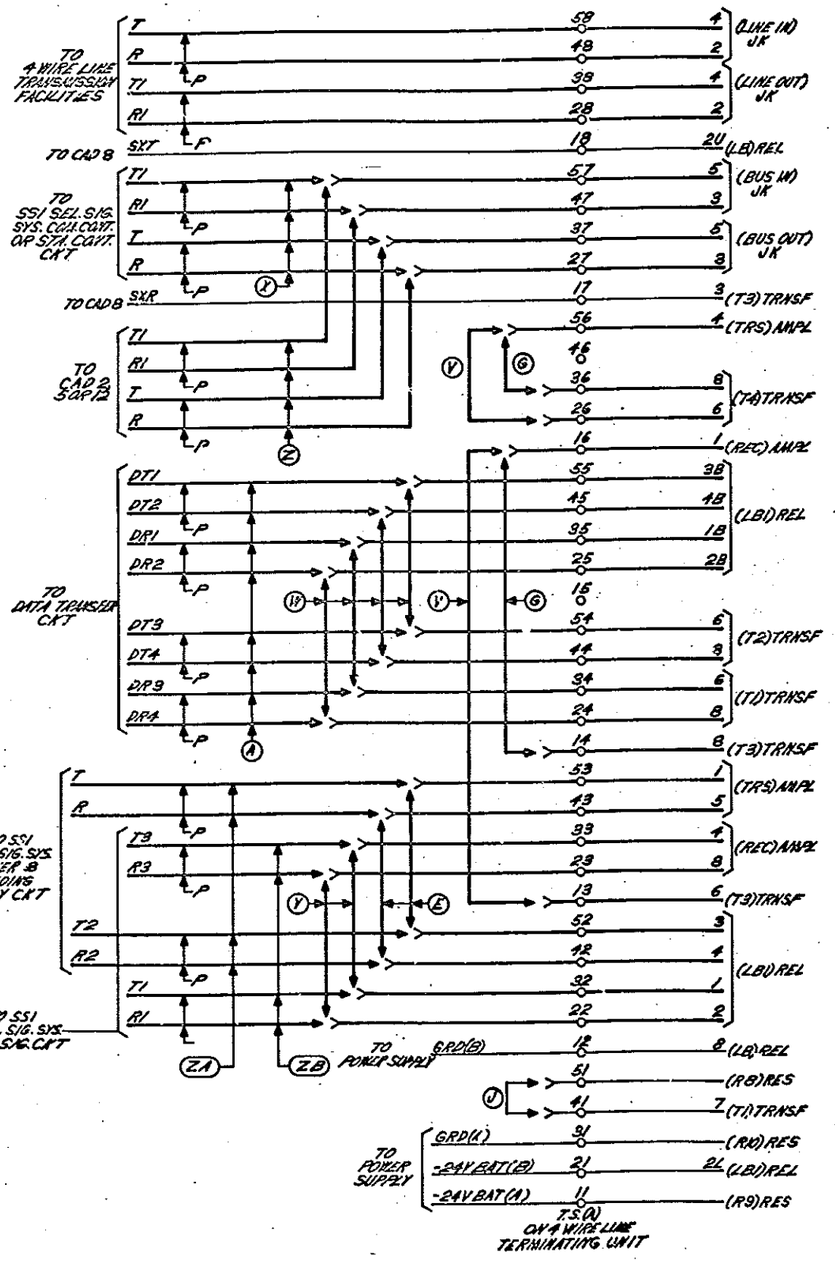
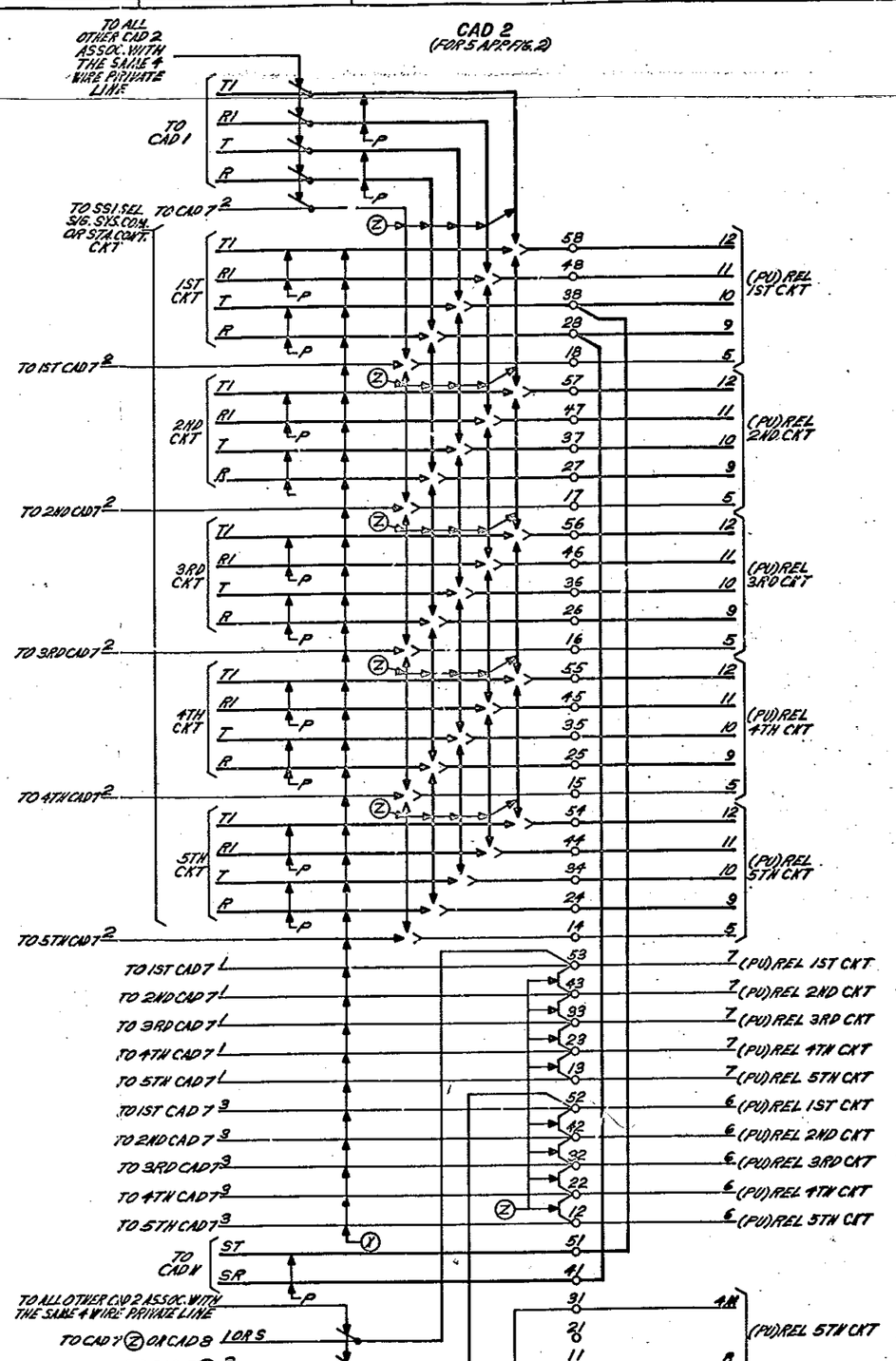
CAD 1
(FOR IMPP FIGS. 1, 10 & 11)



CAD 2
(FOR 5 APP. FIG. 2)



4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT (2)

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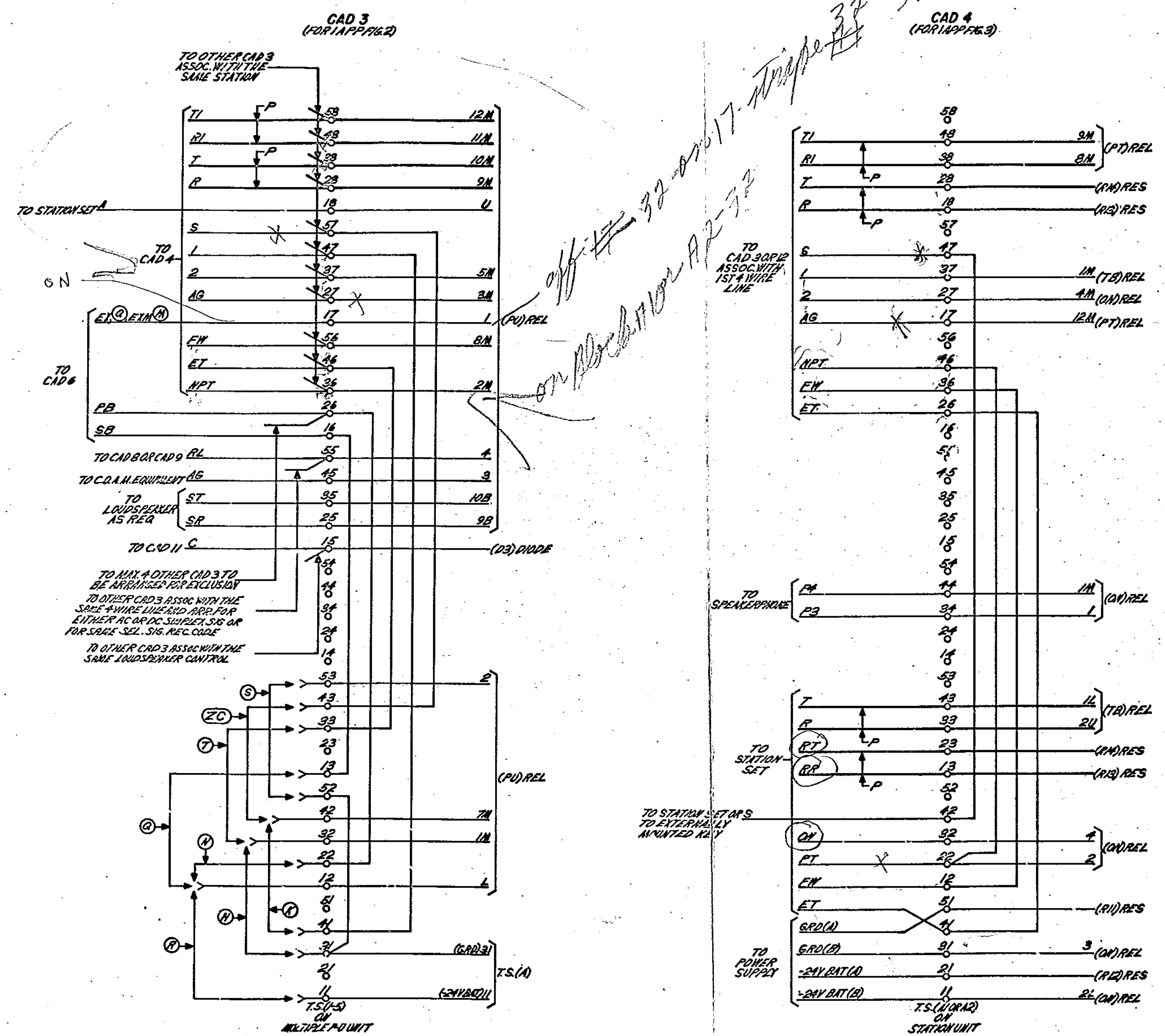
(5)



4 WIRE PRIVATE LINE

TERMINATING AND STATION CIRCUIT

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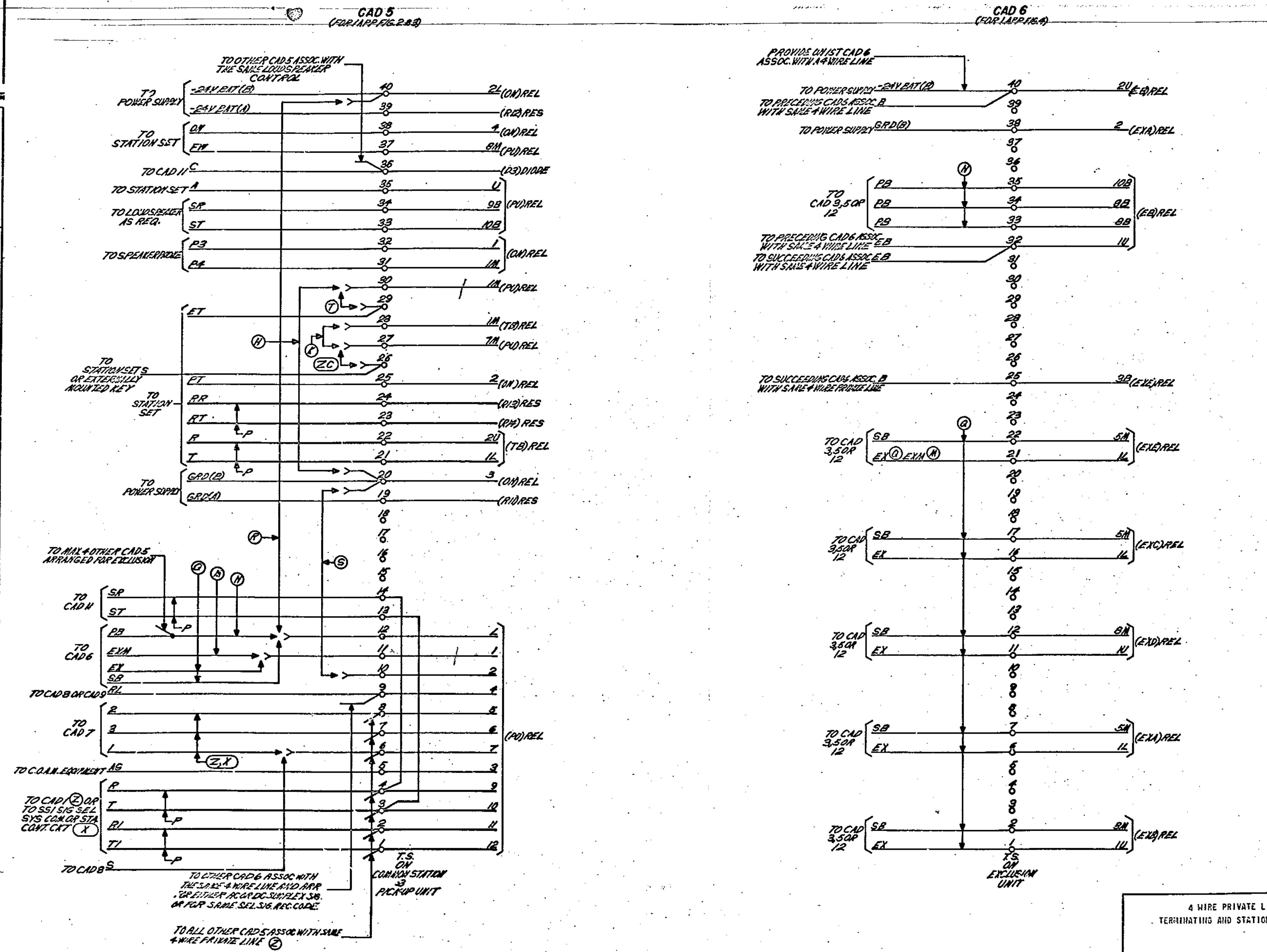

4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT

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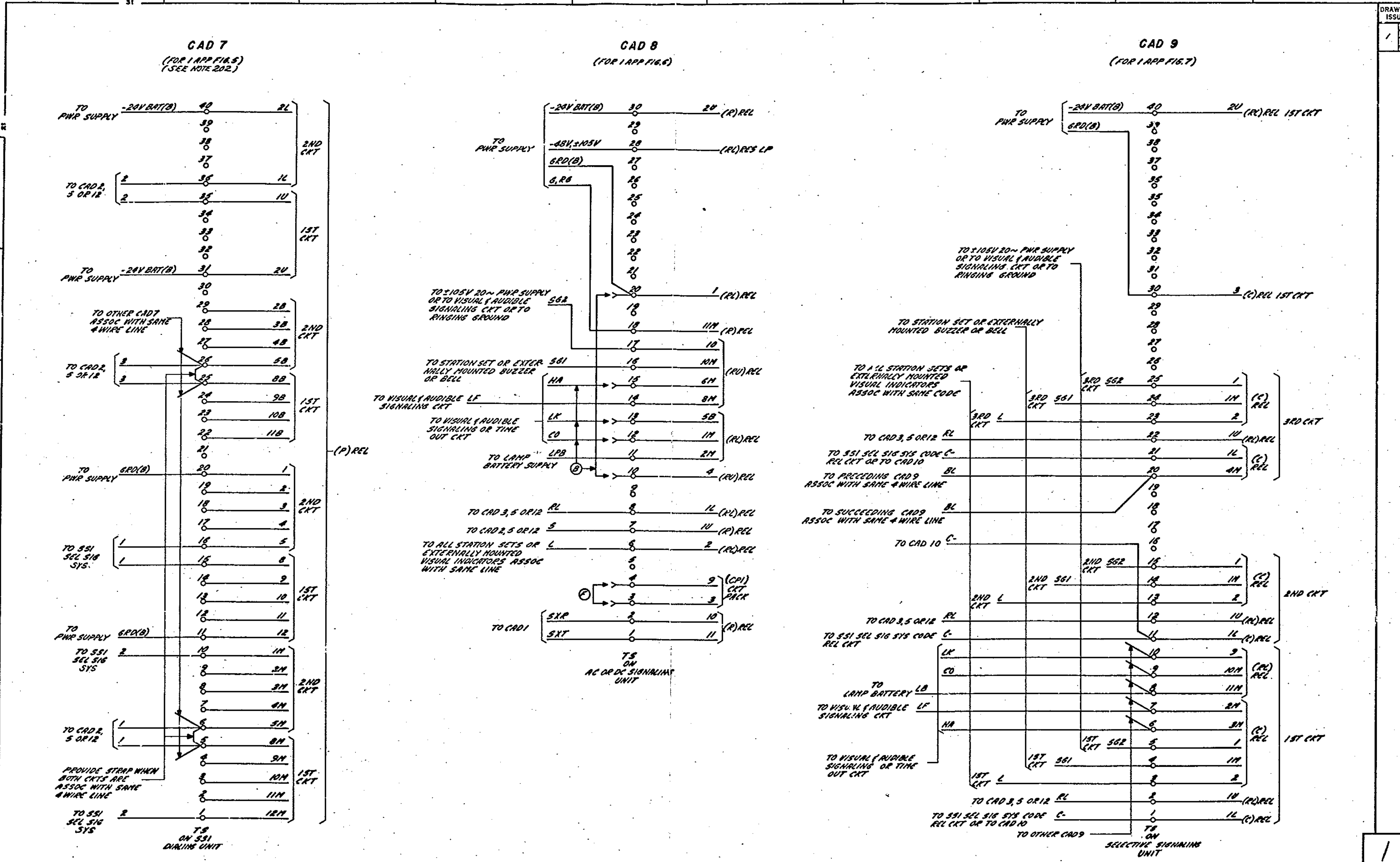
SD-69566-01-G3



4 WIRE PRIVATE LINE TERMINATING AND STATION CIRCUIT

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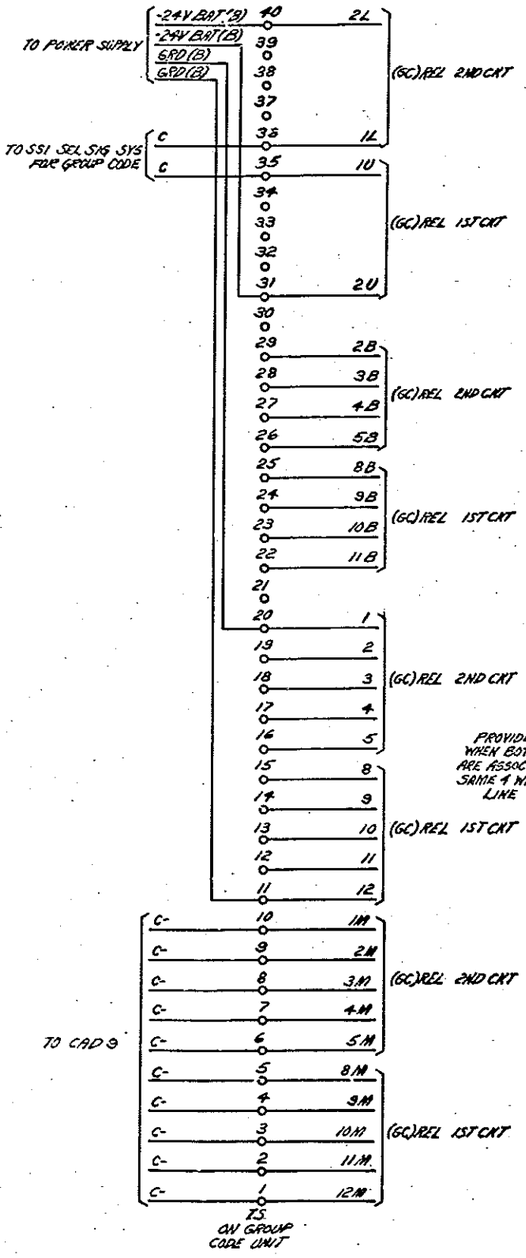
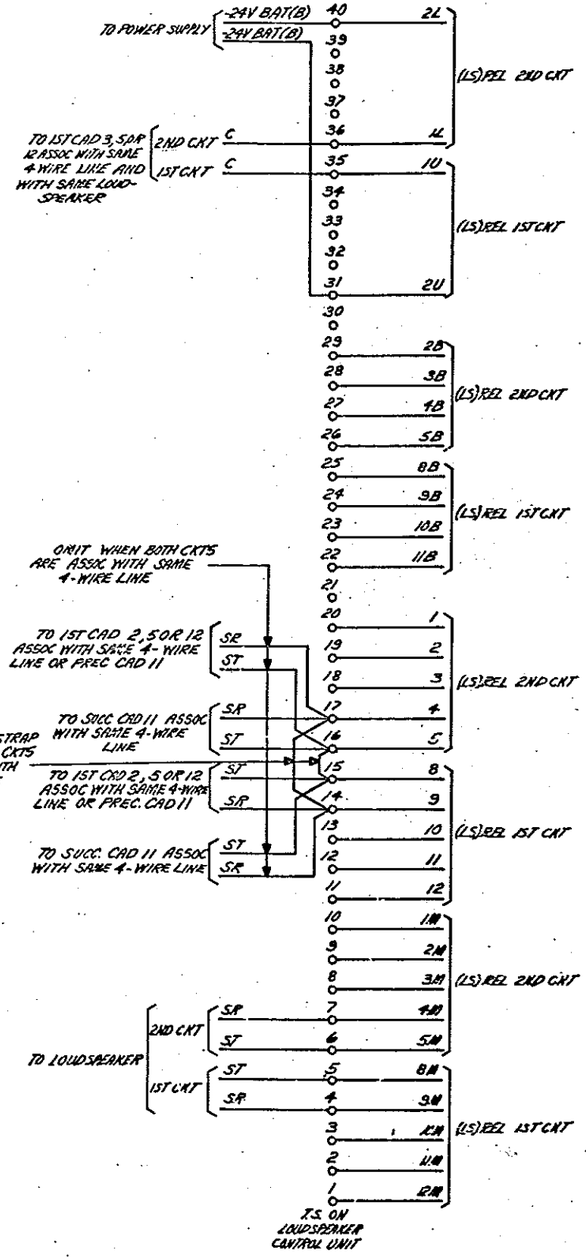
CAD 10

(FOR I APP FIG 8)
(SEE NOTE 202)



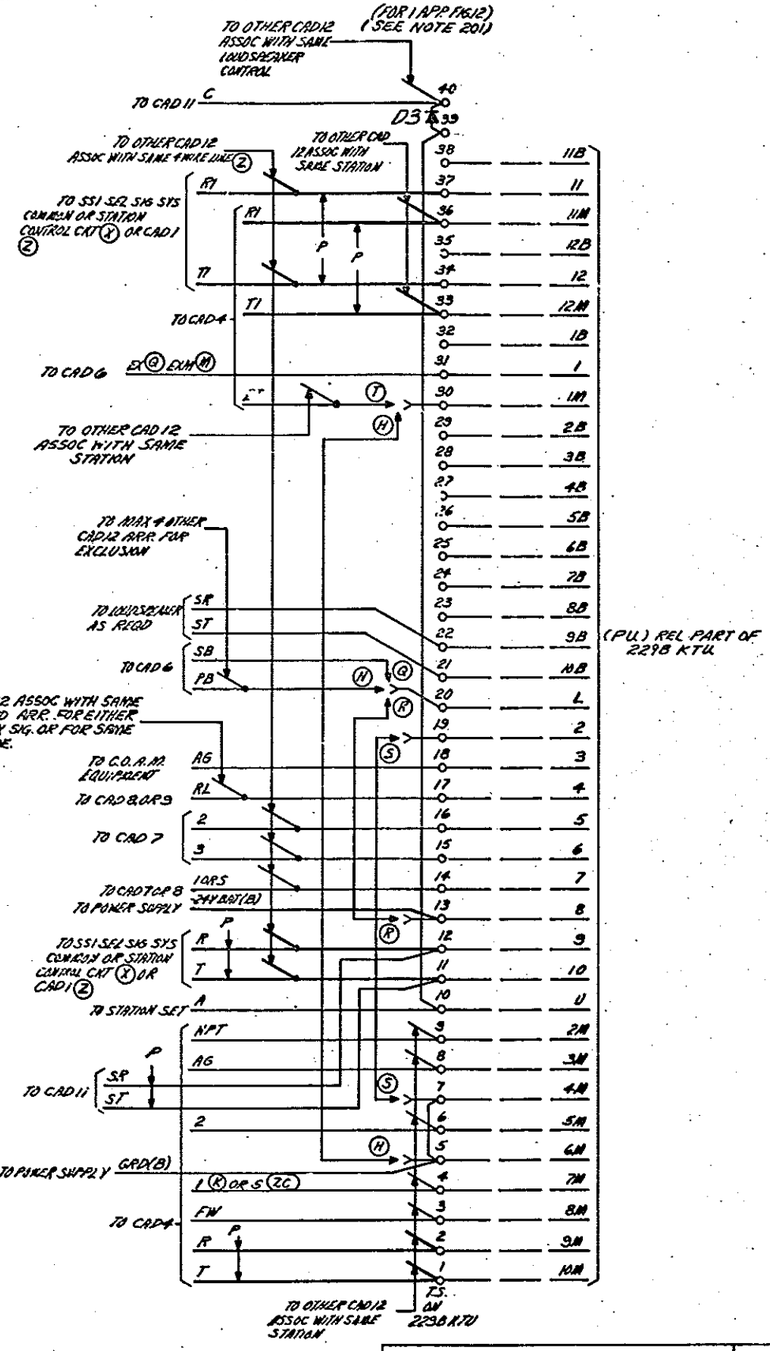
CAD 11

(FOR I APP FIG 9)
(SEE NOTE 202)



CAD 12

(FOR I APP FIG 12)
(SEE NOTE 201)



4 WIRE LINE TERMINATING AND STATION CIRCUIT (2)	SD-69566-01-65
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1

(5)

CPS 1

COMPONENT LIST

CAPACITOR

DESIG	CODE
C3	701C, 2.05MF

DIODE

DESIG	CODE
RV1	400E
RV2	400B

RESISTOR

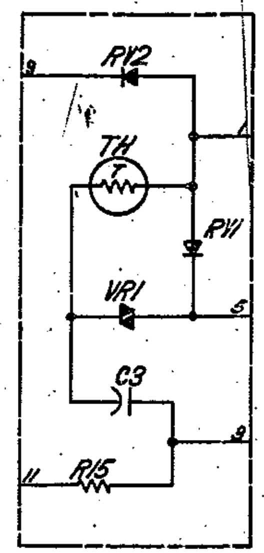
DESIG	CODE
R15	221A, 68.1Ω

THERMISTOR

DESIG	CODE
TH	8A

VARISTOR

DESIG	CODE
VR1	317A



CPS 2

COMPONENT LIST

CAPACITOR

DESIG	CODE
C1	KS-14337

DIODE

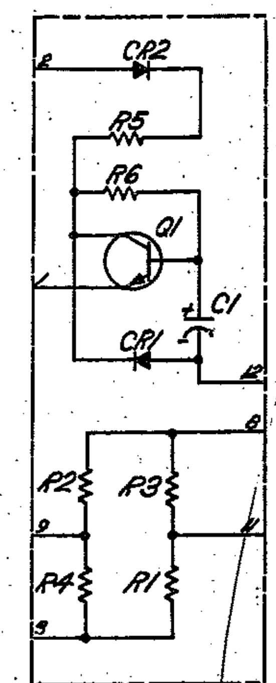
DESIG	CODE
CR1	426AH
CR2	420B

RESISTORS

DESIG	CODE
R1	238A, 2230 ± 1% ZG
R1	238A, 1040 ~ ZF
R2	238A, 2230 ± 1% ZG
R2	238A, 1040 ~ ZF
R3	238A, 681 ± 1% ZG
R3	238A, 806 ~ ZF
R4	238A, 681 ± 1% ZG
R4	238A, 806 ~ ZF
R5	221A, 1K ~
R6	238A, 18K ~

TRANSISTORS

DESIG	CODE
Q1	16L



MANUFACTURING REFERENCES

CATEGORY	NO.
CIRCUIT PACK CODE AND ASSEMBLY DRAWING	
CP 1	SD-69525- ( ) GROUP 1
CP 2	SD-69524- (*) GROUP 1
CONNECTOR ON FRAME	
CP 1	NONE
CP 2	KS-19437,L1

DRAWING ISSUE: 1, 2B

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4 WIRE PRIVATE LINE
TERMINATING AND STATION CIRCUIT

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