

SHEET INDEX

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2B	FS 7 - LOOPED OFFICE ALARM CONTROL CKTS
3	APP FIG. 1
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CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER	TERM. DESIG
I-1/3		-46V TALK	FIG. 1	
I-1/3		-46V SIG (A&M ONLY)	FIG. 1	

BATTERY SYMBOL	VOLTAGE RANGE
-NE	46-52V

102.

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP CR WIR	QUANTITY
2000, 2400 OR 2500 CYCLE SUPPLY CKT			
WITHOUT CSACS & SCOTS CKT		P	ONE PER PAIR OF ODD AND EVEN SUP CKTS
WITH CSACS & SCOTS CKT		N	

103.

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITY IN UF
I	470	0.11

104.

CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT		
				STD	A&M	MD
4B	W OR X	X		W		X
5D	T	NONE		T		
7D	V OR Z	Z	302	V		Z
7D	S	NONE		S		
8D	W OR R	A		R		W
8D	Q OR P	Q		P		Q,V,Y
9B	N	NONE	106	N		
9B	N	NONE	304			N

CIRCUIT NOTES (CONT):

105.

CONNECTING ALARM CKT	CONNECT LEADS			
	I	2	3	4
ANNUNCIATOR CKT	A	DC	A	AC
AUD ALM & PILOT LAMP CKT	A	MJ	A	MH
AUD & VIS ALM CKT	G	DL	G	F
CROSSBAR NO. 5 ALM CKT		MJ		MH
PANEL BCO ALM CKT.	W	DG	W	AG
NO. 1 SXS PILOT LAMP CIRCUIT ES-30437-01 AND SD-31546-01	D	MJ	C	MN
350A SXS PILOT LAMP AND POWER ALARM CIRCUIT SD-31573-01	D	MJ	C	MN
MISCELLANEOUS ALARM CIRCUIT SD-32192-01	D	MJ	A	MN
355A MISCELLANEOUS ALARM SXS CIRCUIT SD-31980-01		HJ		MN
MISCELLANEOUS ALARM AND PILOT LAMP CIRCUIT SD-31970-01	D		A	
NO. 1 MISCELLANEOUS ALARM CIRCUIT SD-96802-01		HJ		MN

106. THE JOB ENGINEER SHALL ASCERTAIN THAT "P" OPTION HAS BEEN INCORPORATED BEFORE INCORPORATING "M" OPTION.
107. THESE LEADS ARE AVAILABLE FOR CONNECTIONS TO MAINTENANCE SYSTEMS IN ACCORDANCE WITH PLANT SERVICE SYSTEMS CENTRALIZED STATUS ALARM AND CONTROL SYSTEM (CSACS) AND SURVEILLANCE AND CONTROL OF TRANSMISSION SYSTEMS (SCOTS) INTERCONNECTION CIRCUIT.

EQUIPMENT NOTES:

201. FOR INTER-CONNECTION INFORMATION NOT PROVIDED IN THE CAD FIGURES, SEE THE APPLICATION SCHEMATIC FOR THE SYSTEM TO WHICH CONNECTIONS ARE TO BE MADE.

INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED: RESISTANCE VALUES ARE IN OHMS, CAPACITANCE VALUES ARE IN MICROFARADS.
302. ON ISSUE 7D CORRECTED OPTIONS WERE SHOWN FOR "T", "V", & "Z" TO BRING DRAWING INTO AGREEMENT WITH ADVANCED INFORMATION PREVIOUSLY PUBLISHED.
303. ON ISSUE 8D OPTION "P" WAS ESTABLISHED TO MAKE THIS CIRCUIT COMPATIBLE WITH STANDARD LOOPED ALARM LEADS. PREVIOUS ALARM LEAD ARRANGEMENTS (OPTIONS Q,V,Y) ARE RATED MD.
304. OPTION "M" WAS ESTABLISHED FOR THE MICE SYS CKTS. WHEN REQ'D. IN J98613W, AND WHEN OPTION "P" HAS NOT BEEN INCORPORATED IN J98613W.
305. OPTION "M" IN CAD 2 TO BE INCORPORATED INTO J98613W ONLY.

SUPPORTING INFORMATION

CATEGORY	NO.
EQPT DESIGN REQ	J98613
EQPT DWG	J98613-BU J98613-BW J98613-W (MFR DISC)

OPTION INDEX

APP OR WIR	LOCATION
Z	2A/FO
Y	2A/FO
X	APP FIG. 1, 2A/AO, 2A/BO
W	APP FIG. 1, 2A/AG
V	APP FIG. 1, 2A/FO
T	APP FIG. 1, 2A/A3-C3
S	APP FIG. 1, 2A/B2
R	APP FIG. 1, 2A/AO
Q	APP FIG. 1, 2A/E1, 2A/C2, 2A/HA
P	APP FIG. 1, 2A/D9, 2A/C2, 2A/HA
N	APP FIG. 1, 2A/C2, 2A/H5, 2B/A1
M	APP FIG. 1, 2A/G1, 2A/H1

DWG ISSUE	CD ISSUE	DATE ISSUED	APPROVED
1	1	1-6-58	JPT
2A	2A	10-2-58	CAF
3AR	2A	1-27-60	MAR
4B	2A	1-7-63	HOP
5D	3D	9-6-63	RRH
6B	3D	2-6-64	NJS
7D	3D	5-19-64	BRZ
8D	3D	2-14-70	DR
9B	3D	7-30-74	SWC
10B	3D	3-21-75	FWJ
11B	3D	2-9-76	DUG
12D	3D	3-24-76	BRM

**NOTICE** - NOT FOR USE OR DISCLOSURE OUTSIDE THE BELL SYSTEM EXCEPT UNDER WRITTEN AGREEMENT.

REPLACED BY SD-1C224-01

SD-98091-01 3N99

COMMON SYSTEMS  
SIGNALING  
LOAD TRANSFER CIRCUIT

FOR USE WITH A PAIR OF  
2000, 2400 OR 2600 - CYCLE  
SUPPLY CIRCUITS

ISSUE  
MFR. DISC. 12D

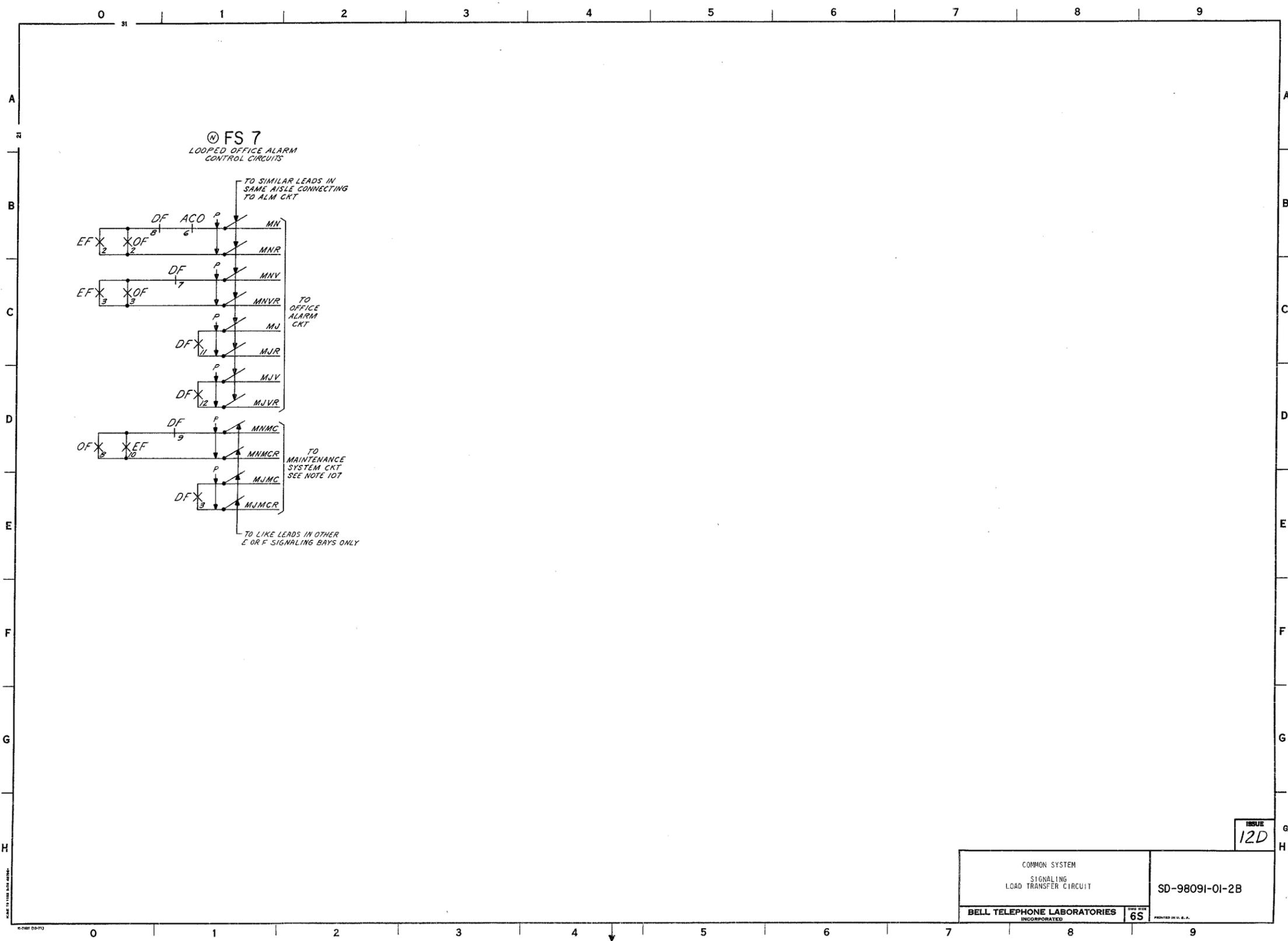
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6 SHEETS

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SD-98091-01-2B

COMMON SYSTEM  
 SIGNALING  
 LOAD TRANSFER CIRCUIT

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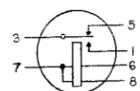
ISSUE  
 12D

APP FIG. 1

DESIG	ACO	ACO	ACO	DF	DF	DF	EF	EF	EF	ET	DESIG	
CODE	AF50	AF50	AF50	AF54	AF54	A194	AF34	AF34	AF34	AF54	CODE	
OPTION	Q	P	N	Q	P	N	Q	P	N	M	OPTION	
CONT ARR	LOC											
12				M			M	2A/H9	2B/D1	M	2A/B0	12
11												11
10	M	2A/G4	M	2A/G4	M	2A/G4	BM	2A/F1	BM	2A/G9	M	10
9												9
8	BM	2A/F1	BM		BM	2A/F1	BM	2A/E9	BM	2B/D0	M	8
7												7
6	BM	2A/F1	BM	2A/E8	BM	2B/B1	BM	2A/C2	BM	2A/B3	B	6
5												5
4	M	2A/C2	M	2A/C2	M	2A/C2	BM	2A/B2	BM	2A/A2	EM	4
3												3
2												2
1												1
COIL	2A/C3	2A/C3	2A/C3	2A/B2	2A/B2	2A/B2	2A/C1	2A/C1	2A/C1	2A/C3	2A/C3	COIL

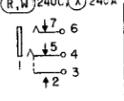
DESIG	OF	OF	OF	OT	OF	EF	DF	DF	DF	DF	DESIG	
CODE	AF34	AF34	AF34	AF54	AF34	AF34	AF34	AF54	AF54	AF54	CODE	
OPTION	Q	P	N	M	M	M	M	M	M	M	OPTION	
CONT ARR	LOC											
12	M	2A/B0	M	2A/B0	M	2A/B0	M	2A/H4	M	2A/B0	M	12
11	M		M		M							11
10	M		M		M							10
9												9
8	M		M		M	2B/D0	BM	2A/C6	M	2A/G1	M	8
7	B	2A/H4	B	7								
6	M	2A/G4	M	2A/G4	M	2A/G4	BM	2A/B6	M	2A/G4	M	6
5												5
4	M	2A/B1	M	2A/B1	M	2A/B1	M	2A/B1	BM	2A/B1	BM	4
3	M	2A/F1	M	2A/F8	M	2B/C0	M	2A/F2	M	2A/G1	M	3
2	M	2A/F1	M	2A/F8	M	2B/B0	M	2A/C2	M	2A/F1	M	2
1	M	2A/B2	M	2A/B1	M	2A/B2	M	2A/C2	M	2A/C2	M	1
COIL	2A/B1	2A/B1	2A/B1	2A/B3	2A/B1	2A/B1	2A/B1	2A/B1	2A/B1	2A/B1	2A/B1	COIL

RELAY



DESIG	EM	EM	OM	OM
CODE	291B	303F	291B	303F
OPTION	X	W	X	W
8	B1	B1	A1	A1
7	B1	B1	A1	A1
6	B1	B1	A1	A1
5	CO	CO	BO	BO
4				
3	CO	CO	BO	BO
2				
1				

JACK



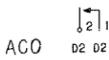
TERM. NO.	ODD OSC OUT	ODD LOAD	EVEN OSC OUT	EVEN LOAD
7	B5	B5	D5	D5
6	B5	B5	D5	D5
5	B5	B5	D5	D5
4	B5	B5	D5	D5
3	A1	B1	C1	C1
2	A1	B1	C1	C1
1	B5	B5	D5	D5

JACK

DESIG	LOC	CODE
MIX A	F6	238A
MIX B	F7	238A
REC T	G7	216A
REC R	G7	216A

KEY

5628



KEY	5628
3	D1 C1
2	D1 C1
1	D1 C1

LAMPS

DESIG	LOC	CODE
EVEN OSC	G5	2Y
GD	G5	2Y
LOAD	H5	2Y
ODD OSC	F5	2Y

RESISTORS

DESIG	LOC	CODE
R1	F0	KS-14602, 11A, 750
R2	F0	185L
R3	G6	KS-13490, 11, 1000
R4	G5	KS-13490, 11, 1000
R5	G7	KS-13490, 11, 1000

NETWORK

DESIG	LOC	CODE
ACO	C3	185A
EF	C1	185A
ET	C3	185A
OF	C1	185A
OT	B3	185A
DF	B2	185A

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COMMON SYSTEMS  
SIGNALING  
LOAD TRANSFER CIRCUIT  
BELL TELEPHONE LABORATORIES  
INCORPORATED

ISSUE  
12D  
SD-98091-01-3

DRAWING  
ISSUE  
1  
2A  
3A  
4B  
5D  
6B  
7D

CIRCUIT REQUIREMENTS														DRAWING ISSUE			
APPARATUS				MECH REQT		CIRCUIT PREPARATION				DIRECT CURRENT FLOW REQT				REMARKS	1	2A	
DESIG	CODE	OPTION	FIG.	BSP FIG.	CONT PRESS.	ARM. TRVL.	BLOCK OR INSULATE	TEST CLIP DATA	TEST SET PREP	TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK				TEST
RELAY								CONN BAT.	CONN GRD				MA.	MA.	MA.		
ACO	AF50		1	18				U(ACO)	GRD		0	23.1	22	(GD) LP LIGHTS			
								U(ACO)	GRD		NO	12.6	13.2				
DF	AF54		1	25			(EF)NO, (OF)NO	U(DF)	GRD		0	30.5	29	MAJOR ALM OPERATES & (LOAD) LP LIGHTS			
EF	AF34		1	14			(EM)O	U(EF)	GRD	1	0	27.8	26.5	MINOR ALM OPERATES & (EVEN OSC) LP LIGHTS			
EM	291B, 303F OR 303L	X W R	1	2			(EF)NO, (OF)NO, (EM)O	S(EM)	S(EM)	B/G	1, 3, R	0	-2.7	0.88	0.84		
ET	AF54		1	25			(EF)NO	U(ET)	GRD		0	30.5	29				
DF	AJ94		1	320			(EF)NO, (OF)NO, (EM)O, (ET)NO	U(DP)	GRD		0	33.6	32	MAJOR ALM OPERATES & (LOAD) LP LIGHTS			
OF	AF34		1	14			(OM)O	U(OF)	GRD	2	0	27.8	26.5	MINOR ALM OPERATES & (ODD OSC) LP LIGHTS			
OM	291B, 303F OR 303L	X W R	1	2			(OF)NO, (EM)O, (ET)NO	S(OF)	S(OF)	B/G	2, 3, R	0	-2.7	0.88	0.84		
OT	AF54		1	25			(OF)NO	U(OT)	GRD		0	30.5	29				

TEST NOTES:

- TAKE EVEN SECTION OF EQUIPMENT OUT OF SERVICE BY INSERTING DUMMY PLUGS IN (TR CUR) JK OF EVEN SUP CKT AND (EVEN OSC OUT) JK.
- TAKE ODD SECTION OF EQUIPMENT OUT OF SERVICE BY INSERTING DUMMY PLUGS IN (TR CUR) JK OF ODD SUP CKT AND (ODD OSC OUT) JK.
- SEE BSP'S 040-263-701 AND 040-263-501.
- APPLY POSITIVE POTENTIAL AS INDICATED ON FS1.
- APPLY SOAK ONLY BEFORE OPERATE REQUIREMENT.

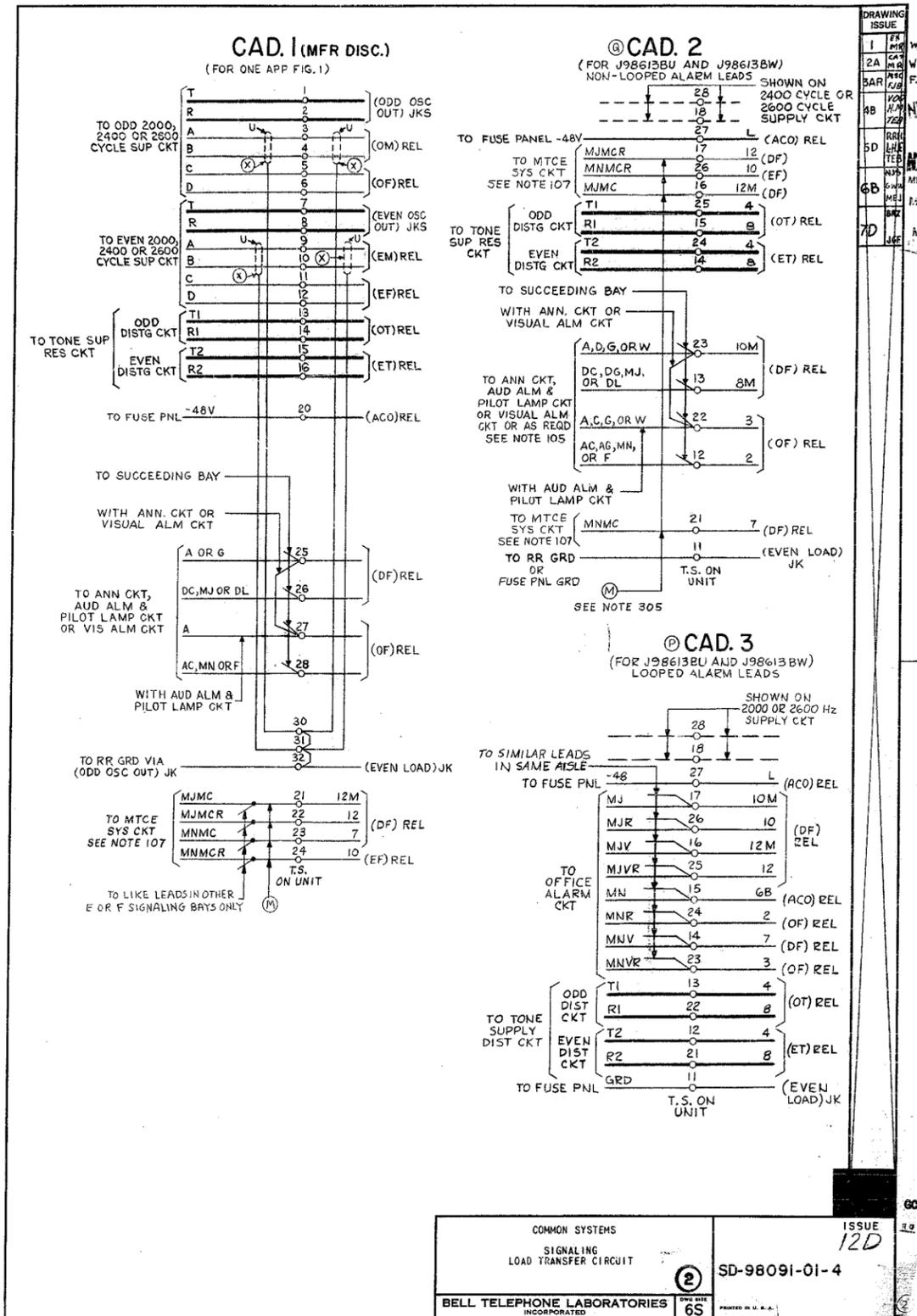
SIGNALING  
LOAD TRANSFER CIRCUIT

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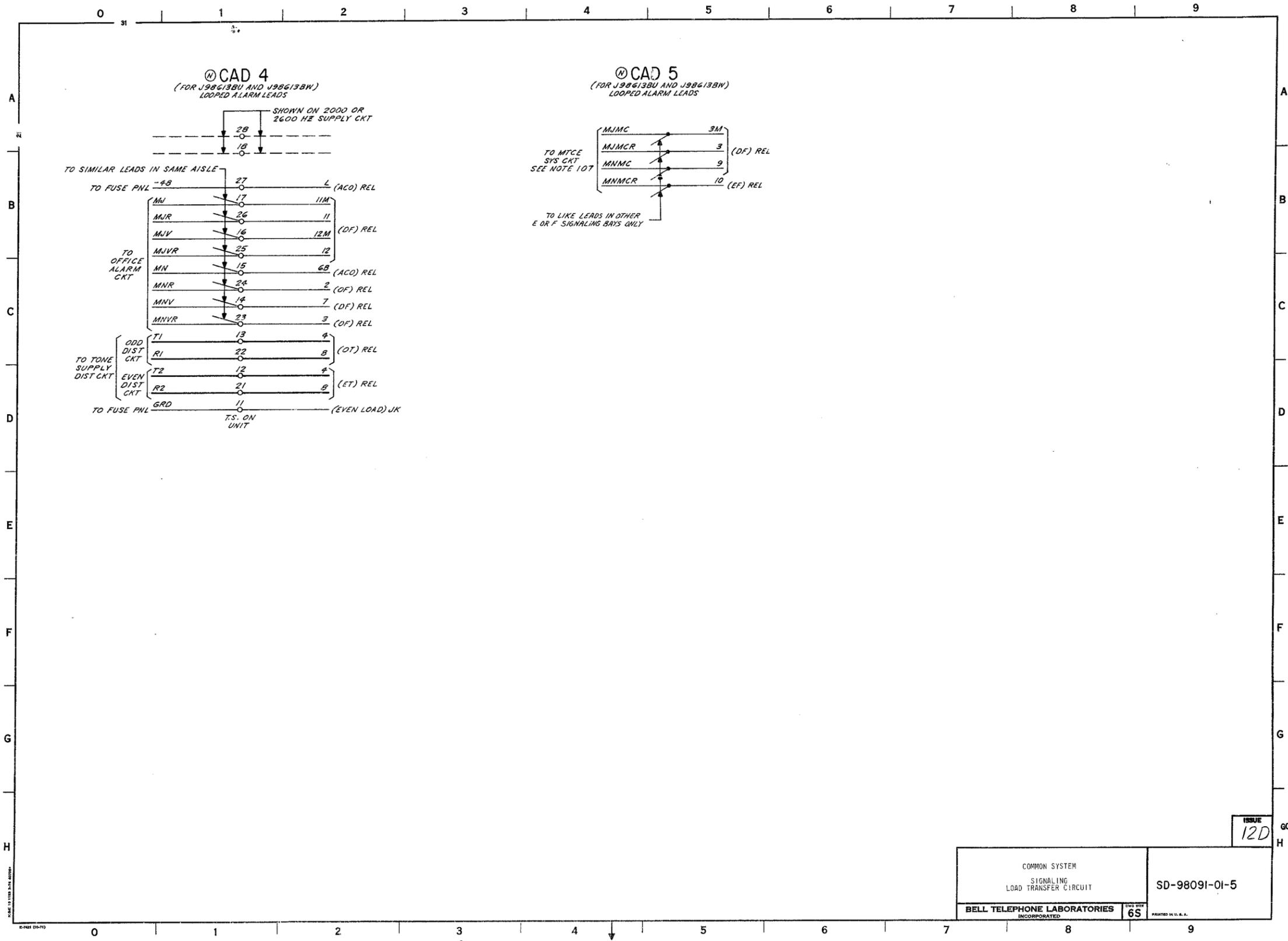
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SIGNALING  
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ISSUE  
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COMMON SYSTEM SIGNALING LOAD TRANSFER CIRCUIT		SD-98091-01-5
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