SD-5E021-01

SHEET INDEX

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PART OF CAD 3	G3	1	1	3	4	4	4	4	G3
CAD 4	G4	1	1	1	1	5	5	5	G4

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DRAWINGS	J58829AP
CABLING DRAWINGS	SD-66920-01

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	8/22/66	EWE SAK EWS	HED LAH GFH
2D	ID APP ID	4-3-67	CED PJS RHO	HED LAH RHP
3D	ID APP 2D	11-13-67	ROZ PJS RCL	HEB LAH RHP
4D	2D	11-13-67	ROZ PJS RCL	JJM LAH RHP
5B	2D APP IB	8-28-68	PMC PJS RCL	JJM LAH LDJ
6A	2D APP 2A	1-15-69	WR PJS RHO	JJM RVL LDJ
7D	2D APPX 3D	2-26-74	GDI CBH	WVS RVL AFR

HW

DR

ISSUE 7D

SD- 5E021-01 2J07

PBX SYSTEMS
NO.756A
STATION MESSAGE REGISTER
PULSE AND SURCHARGE CIRCUIT
(STA MR PULS & SUR CKT)

A&M ONLY

SD-5E021-01-A1
14 SHEETS

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APPARATUS INDEX

DESIG	LOCATION FS	LOCATION APP FIG	LOCATION EQPT
RELAYS			
ALM	2F1	4	
COD	3A1	3	
DS	1G7	2	
H	3C0	3	
IMP	2C1	4	
MR	2B7	3	
MS	1F9	2	
NV	2B4	3	
P	1E2	1	
SX	1B2	1	
CAPACITORS			
ALM	2E0	4	
CONNECTORS			
J1	2D4	4	

DESIG	LOCATION FS	LOCATION APP FIG	LOCATION EQPT
DIODES			
ALM	2G1	4	
DS	1F6	2	
HG	3D9	3	
LP	1D1	1	
PP	1F6	2	
SI	1D6	2	
SX	1C2	1	
TR	1D1	1	
FUSE			
MR	2A6	3	
LAMP			
MR	1C2	1	
MR	2B7	3	
NV	2B4	3	
RA	2G1	4	
NETWORKS			
DS	1E6	2	
MS	1E9	2	
P	1E2	1	
SC	1L6	2	
SX	1B2	1	
IMP	2D1	4	
POWER SUPPLY			
+48V	2B2	3	
RELAY TIME DELAY			
ALM	2F2	4	

DESIG	LOCATION FS	LOCATION APP FIG	LOCATION EQPT
RESISTORS			
ALM	2F0	4	
MS	1F8	2	
TR	1D0	1	
SELECTOR			
SC	1A7 1A8	2	
THERMISTOR			
LP	1D2	1	
PP	1D3	1	

LEAD INDEX

DESIG	FS LOC	CAD LOC
ALARM, TRANSFER & TEST CKT		
EXT	2B6	
BUSY VERIFICATION AUX TRK CIRCUIT		
BVS	3G8	
INTERRUPTER CKT 756A PBX		
FFI	2C0	
LINE, LINK AND MARKER		
COD	3B1	
MR1	3C8	
MR2	3D8	
MR3	3E8	
MR4	3F8	
MR5	3B8	
MR6	3C8	
MR7	3E1	
MR8	3E1	
MR9	3D1	
MR10	3C1	
MR11	3G1	
MR12	3F1	
MR13	3B1	
MR14	3C1	
RSA	3E8	
RSB	3D8	

DESIG	FS LOC	CAD LOC
MESSAGE REGISTER CONTACT CO. END OF PBX TRK		
M	1B0	
MESSAGE REGISTER CKT		
M OR D	1C0	
TWO WAY CENTRAL OFFICE TRUNK CKT		
H	1G4	
R1	1G4	
R2	1G4	
S1	1F2	
SR	1F3	
SS1	1F3	
SS2	1F4	

OPTION INDEX

APP OR WRG	LOCATION
Z	1B1, 1C3, 1C1, APP FIG.1
Y	1D3, 1E1, 1F3, APP FIG.1
X	1B1
W	1F3
V	1G5, 1H4, 1C1
T	3B9, 3C9, 3E9, 3F9
S	3B9, 3C9, 3E9, 3F8
R	1B2, 1C2
Q	CAD1
N	CAD3
M	CAD 3
K	1F4
J	1C1, 1F3, 1G5, 1H4

DRAWING ISSUE	
1	SMK BFH
3D	RDZ RHP
4D	RDZ RHP
5B	PMC PJS LDJ
6A	WR PJS LDJ

HW

6

STATION MESSAGE REGISTER
PULSE AND SURCHARGE CIRCUIT

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FS 1
STATION MESSAGE REGISTER PULSE CKT

②FS 2
STATION MESSAGE REGISTER SURCHARGE CIRCUIT

DRAWING ISSUE		
1	EWE SMK GFA	HW
3D	ROZ PJS RMP	
4D	ROZ PJS RMP	
5B	PMC PJS LDJ	

-40 TO -56
MESSAGE REGISTER CONTACT C.O. END OF PBX TRK
TRK
MESSAGE REGISTER CKT
M OR D
-48 A-
TR 250
SX
P
S-1075
P-1175
MR
MR-
+48
LP
PP
MULT TO ALL OTHER PULSE CIRCUITS
3A0
SI
SR
SH
HD
BY
CT
RI
R2
H
TWO WAY CENTRAL OFFICE TRUNK CKT
LINE LINK & MARKER CKT
LHM
XBR SW CP
MESSAGE REGISTER CKT
LINE
AA
AB
AC
AE
AG
AF
SS2
E6
E5

SC SEL ARC 1
SC SEL ARC 2
STRAP AS REQD SEE NOTE 105
MS
DS
IMP- 200
SC ON
NI
1000
2500
MULT TO ALL OTHER SURCHARGE CKTS
ST 2C1
RMI 2G0

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5

STATION MESSAGE REGISTER PULSE AND SURCHARGE CIRCUIT ②

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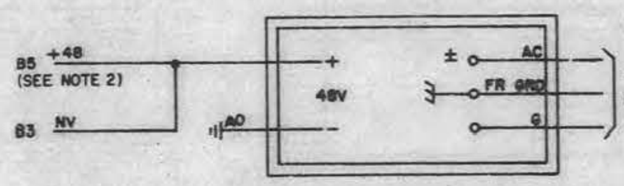
SIZE 6S

SD-5E021-01-BI

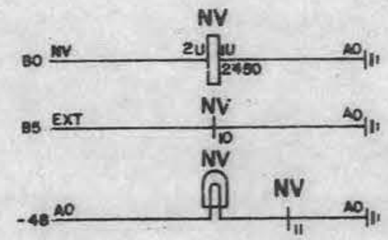
③FS 3

+48V POWER SUPPLY
KS-15620 RECTIFIER



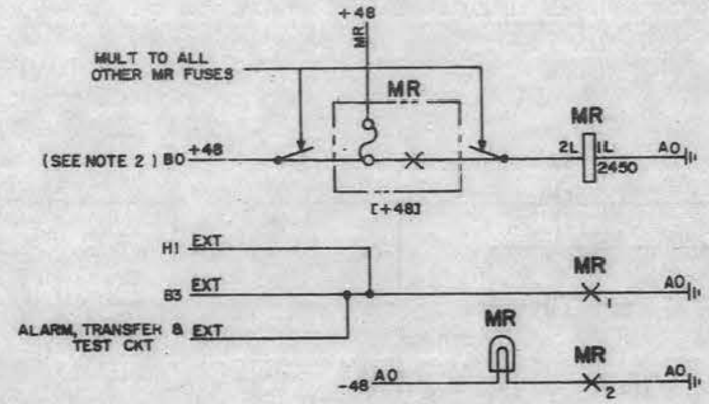
FS 4

NO VOLTAGE ALARM



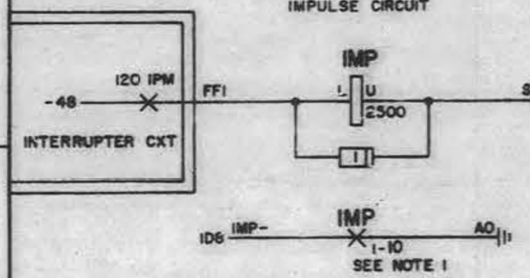
FS 5

FUSE ALARM



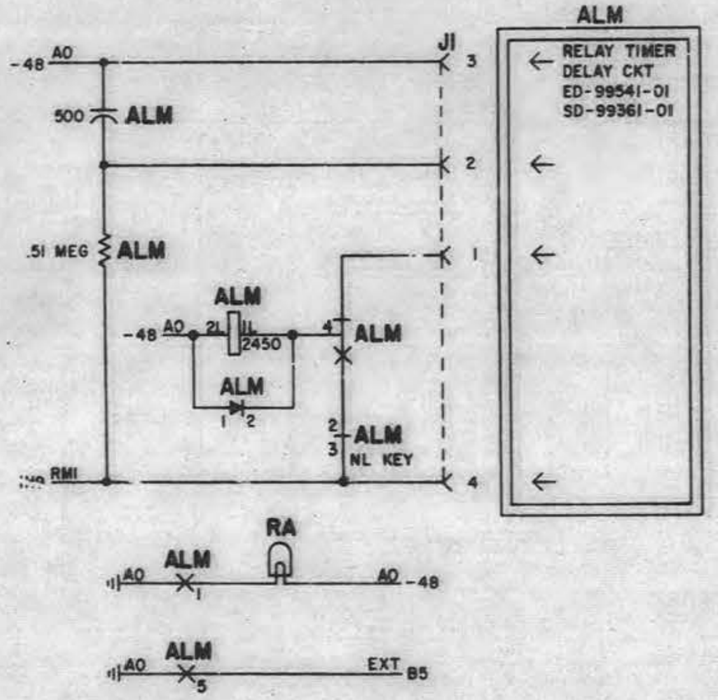
FS 6

IMPULSE CIRCUIT



FS 7

RELEASE MONITOR ALARM



NOTES:

1. IMP RELAY CONTACT 1M CONNECT TO FIRST SURCHARGE CIRCUIT FS 2, CONTACT 2M TO SECOND SURCHARGE CIRCUIT FS2, ETC.
2. NO. 14 GAUGE SOLID WIRE, KS-13385 L1 SHALL BE USED FOR THE +48V LEAD BETWEEN THE POWER SUPPLY AND THE +48V FUSES.

DRAWING ISSUE	
1	EWE SAK GFH
2D	CED RHP
3D	RDZ PJS RHP
6A	WR PJS LDJ

6

STATION MESSAGE REGISTER
PULSE AND SURCHARGE
CIRCUIT

SD-5E021-01-B2

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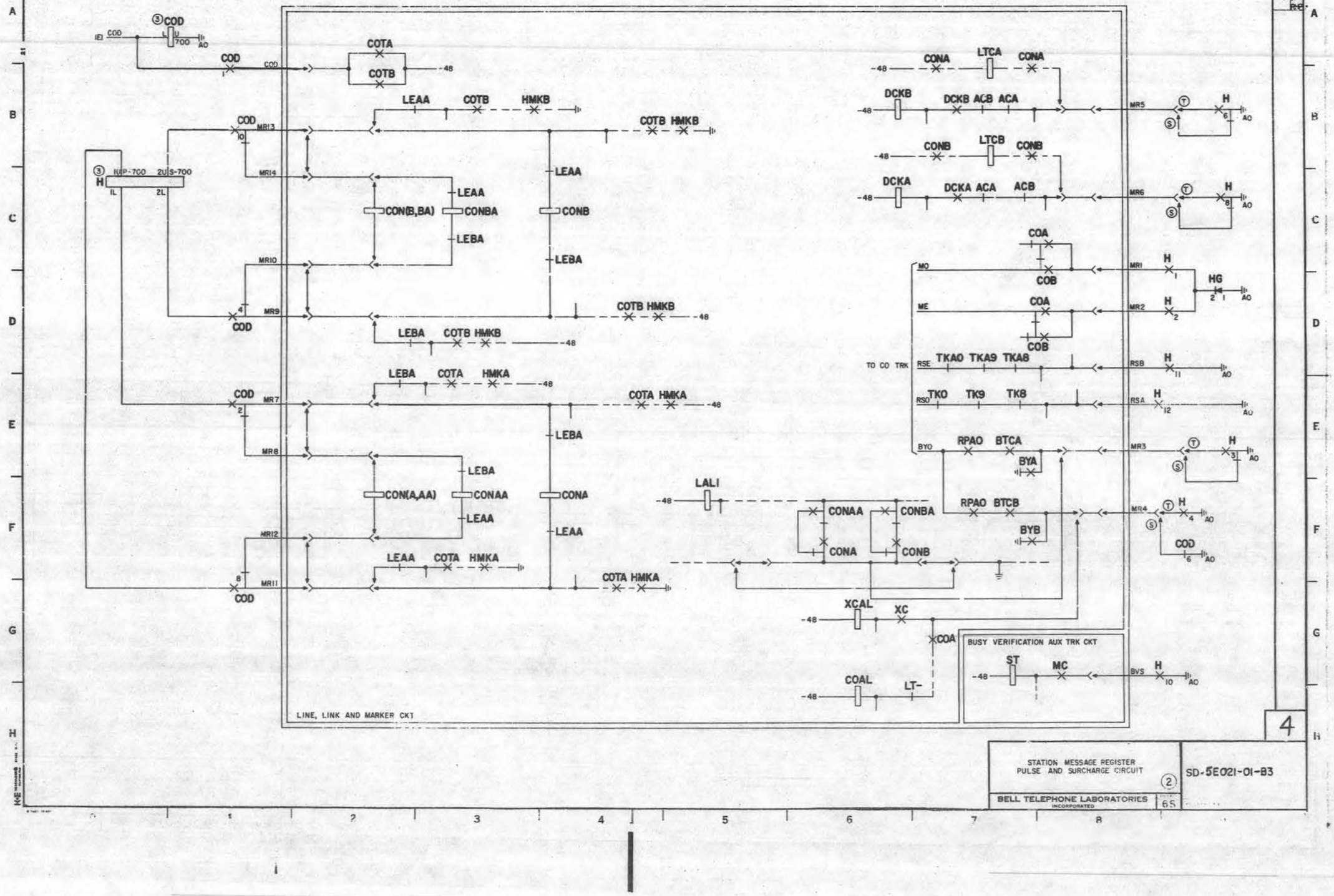
③FS 8

MARKER CONTROLLER CIRCUIT



DRAWING ISSUE		
3D	RC2	HW
4D	RC3	

4

STATION MESSAGE REGISTER
PULSE AND SURCHARGE CIRCUIT (2)

SD-5E021-01-B3

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APP FIG. 1

RELAY DESIG												P AG24 Z,Y						SX AF73						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	CONT ARR	LOC	CONT ARR	LOC	
12																								12
11																								11
10												M 1C2						EBM 1C2						10
9																								9
8												BM 1B1						EBM 1E3						8
7																								7
6												BM 1D3						EBM 1C7						6
5																								5
4												M 1F3						EBM 1F4						4
3																								3
2																								2
1																								1
COIL												1E2						1B2						COIL

DIODE

DESIG	LOC	CODE
② LP	1D1	446F
SX	1C2	446F
TR	1D1	446F

LAMP

DESIG	LOC	CODE
MR	1C2	13J (RES)

NETWORK

DESIG	LOC	CODE
P	1E2	185A
SX	1B2	185A

RESISTOR

DESIG	LOC	CODE
TR	1D0	19AM

THERMISTOR

DESIG	LOC	CODE
② LP	1D2	1C
Ⓨ PP	1E3	1D

APP FIG. 2

RELAY DESIG							DS AF84						MS AF140												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	CONT ARR	LOC	CONT ARR	LOC	
12							EM	1D8					EM	1F7											12
11													BM	1B6											11
10							M	1G0					M	1F9											10
9							B	1C6																	9
8							EBM	1G5					M	1D8											8
7							B	1E7																	7
6							B	1G6																	6
5							BM	1D9																	5
4							M	1G9																	4
3																									3
2													M	1G8											2
1							M	1G8																	1
COIL								1G7						1F9											COIL

DIODE

DESIG	LOC	CODE
DS	1F6	446F
PP	1F6	446F
S1	1E6	446F

NETWORK

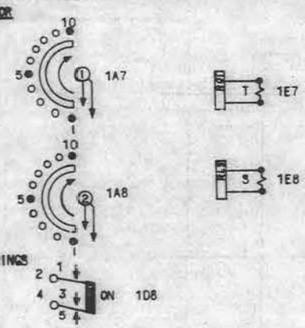
DESIG	LOC	CODE
DS	1G7	185A
MS	1F9	185A
SC	1E8	177K

RESISTOR

DESIG	LOC	CODE
MS	1F8	198M

SELECTOR

SC 204C



APP FIG. 3

RELAY DESIG	COD		H				MR	NV													DESIG
CODE	AF20		AJ72				AK4														CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EMB		BM	3E8					M												12
11	M		BM	3D9					EBM	2B4											11
10	EBM	3B1	DM	3G9					EBM	2B4											10
9			BM						EMB												9
8	EBM	3G1	BM	3C9					EMB												8
7			BM																		7
6	EMB	3F9	BM	3B9																	6
5			BM				EMB														5
4	EBM	3D1	BM	3F9			EMB														4
3			BM	3E9			EBM														3
2	EBM	3E1	BM	3D9			EBM	2B7													2
1	M	3B1	BM	3C9			M	2B7													1
COIL		3A1		3C0				2B7		2B4											COIL

DIODE

DESIG	LOC	CODE
HG	3D9	446F

FUSE

DESIG	LOC	CODE
[10] MR	2A6	70A

LAMP

DESIG	LOC	CODE
MR	2B7	2Y, RED
NV	2B4	2Y, RED

POWER SUPPLY

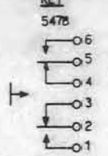
DESIG	LOC	CODE
+48V	2B1	KS-15620 LIST 15

APP FIG. 4

RELAY DESIG					ALM				IMP AF83												DESIG
CODE					AK4																CODE
OPTION																					OPTION
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12							M		M												12
11							EBM		M												11
10							EBM		M	2D1											10
9							EMB		M	2D1											9
8							EMB		M	2D1											8
7									M	2D1											7
6									M	2D1											6
5					EMB	2H0			M	2D1											5
4					EMB	2F1			M	2D1											4
3					EBM				M	2D1											3
2					EBM				M	2D1											2
1					M	2G0			M	2D1											1
COIL						2F1				2D1											COIL

KEY

5478 ALM



CAPACITOR

DESIG	LOC	CODE
ALM	2E0	KS-14136

CONNECTOR

DESIG	J1
CODE	910A
OPTION	
TERM	LOC
7	
6	
5	
4	2G2
3	2E2
2	2F2
1	2F2

DIODE

DESIG	LOC	CODE
ALM	2G1	458A

LAMP

DESIG	LOC	CODE
RA	2G1	2Y-WHITE

NET WORK

DESIG	LOC	CODE
IMP	2D1	185A

RELAY TIME DELAY

DESIG	LOC	CODE
ALM	2F2	ED-99541-01

RESISTOR

DESIG	LOC	CODE
ALM	2F0	KS-13491, LL51 MEG

DRAWING ISSUE	
1	EWE BAK GFH
3D	ROZ PJS RHP
4D	ROZ PJS RHP
6A	WR PJS LDJ

6

STATION MESSAGE REGISTER PULSE AND SURCHARGE CIRCUIT

SD-5E021-01-CI

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-5E021-01-CI

CIRCUIT NOTES

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER	TERM DESIG
A-0	1-1/3	-48V	APP FIG. 1,2,3 & 4	
A-1/9	1-1/3	-48V	APP FIG 1&2	
MP	1-1/3	+48V	APP FIG. 1 & 2	
A-0		GRD	APP FIG 1,2,3 & 4	
A-1/9		GRD	APP FIG 1&2	

BATTERY SYMBOL	VOLTAGE RANGE
-48V	45-52V
+48V	45-52.6V

102.

FEATURE OR OPTION				PROVIDE APP FIG	PROVIDE APP OR WRG	PROVIDE QUANTITY
PBX ARRANGED FOR MESSAGE REGISTRATION (SEE NOTE 204)	WITHOUT SURCHARGE: COMMON APPARATUS	+48V BAT (SYSTEM BATTERYLESS OPR)		3		ONE PER PBX
		NO VOLTAGE ALARM				
		FUSE ALARM				
	WITH SURCHARGE: COMMON APPARATUS (SEE NOTES 201 & 205)	+48V BAT (SYSTEM BATTERYLESS OPR)		3,4		
		NO VOLTAGE ALARM				
		FUSE ALARM				
		IMPULSE RELAY CKT				
		REL MONITOR ALARM				
	TRUNK ARRANGEMENTS FOR MESSAGE REGISTRATION	STA MESSAGE REGISTER ARR FOR SINGLE OR MULTIPLE PULSE DURING CALL	NO SURCHARGE	1	X	ONE PER 2-WAY C.O. TRK
			SURCHARGE (SEE NOTES 201 & 205)	1,2		
		STA MESSAGE REGISTER ARR TO CUT-OFF M LEAD SINGLE LONG PULSE	NO SURCHARGE	1	Z	
			SURCHARGE (SEE NOTES 201 & 205)	1,2		
		STA MESSAGE REGISTER ARR TO HOLD FOR SGL POST CALL M LEAD PULSE	NO SURCHARGE	1	X,Y	
			SURCHARGE (SEE NOTES 201 & 205)	1,2		

103.

NETWORK VALUES		
NETWORK NUMBER	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	470	.11
2	100	.5

104.

RECORD OF APP FIGURE, WIRING AND APPARATUS CHANGES							
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT STD	USE IN CIRCUIT A & M	USE IN CIRCUIT MD	
4D	S	T	106	S	T		
	R	NONE		Q		R	
	N	M		N		M	
5B	K	NONE	204	K			
	J	V,W	205	J		V,W	

105.

STRAPPING AT TS FOR SURCHARGE	
SURCHARGE	STRAP AT TS
6	NONE
5	36 TO 26
4	36 TO 16
3	36 TO 4[illegible]
2	36 TO 33
1	36 TO 25
0	36 TO 15

106. IF THE LINE, LINK AND MARKER CIRCUIT IS EQUIPPED WITH OPTION XK, OPTION T MUST BE PROVIDED. IF THE MARKER CIRCUIT IS EQUIPPED WITH OPTION WV, OPTION S MUST BE PROVIDED.

EQUIPMENT NOTES

201. SURCHARGE FEATURE PROVIDED BY CONNECTION TO APPLIQUE UNIT.

202. LEADS ARE PROVIDED ONLY WHEN APP. FIG. 4 IS PROVIDED.

203. THE REQUIRED LENGTH OF A25C CONNECTOR CABLE SHALL BE ORDERED SEPARATELY.

204. INSTALLER SHALL REMOVE K OPTION ONLY FOR THOSE C.O. TRUNKS REQUIRING MESSAGE REGISTRATION.

205. INSTALLER SHALL REMOVE J OPTION ONLY FOR THOSE C.O. TRUNKS REQUIRING SURCHARGE REGISTRATION.

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.

DRAWING ISSUE	
1	[illegible]
4D	RDZ PJS RHP
5B	PMC PJS LDJ

5

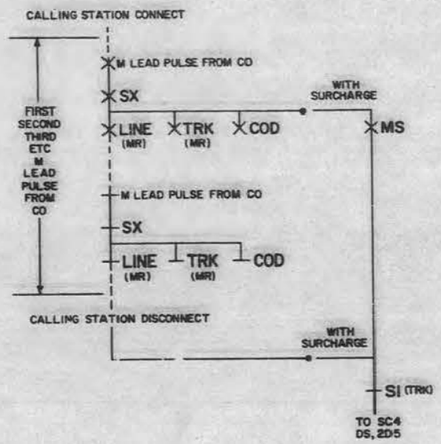
STATION MESSAGE REGISTER PULSE AND SURCHARGE CIRCUIT ②

BELL TELEPHONE LABORATORIES INCORPORATED 6S

SD-5E021-01-D1

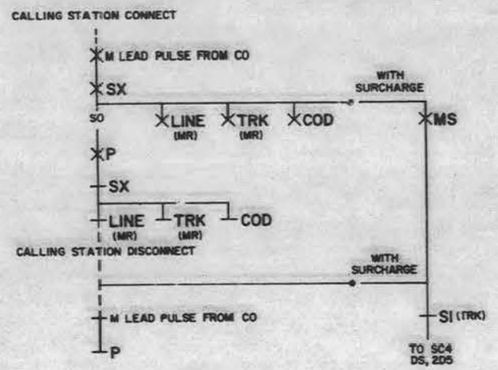
SC 1

OPERATION OF STATION MESSAGE REGISTER PULSE CKT SEE NOTE 1



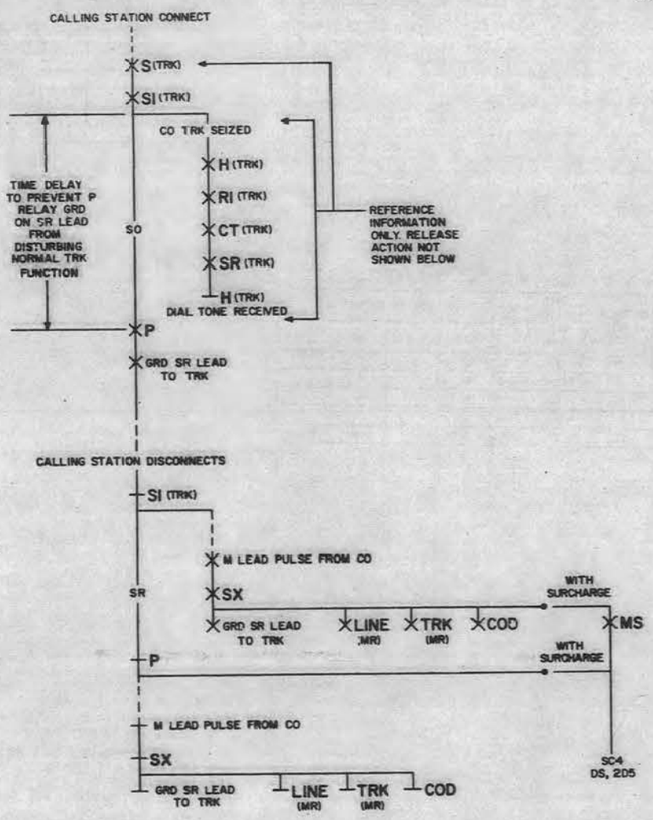
SC 2

OPERATION WITH M LEAD SINGLE LONG PULSE CUT-OFF CKT SEE NOTE 1



SC 3

OPERATION WITH HOLD CKT FOR SINGLE POST-CALL M LEAD PULSE SEE NOTE 1



SHEET NOTES:

1. SC1, 2, AND 3 ASSUMES THAT THE LINE, LINK AND MARKER CIRCUIT IS NOT IN THE PROCESS OF COMPLETING A CAMP-ON CALL TERMINATION.

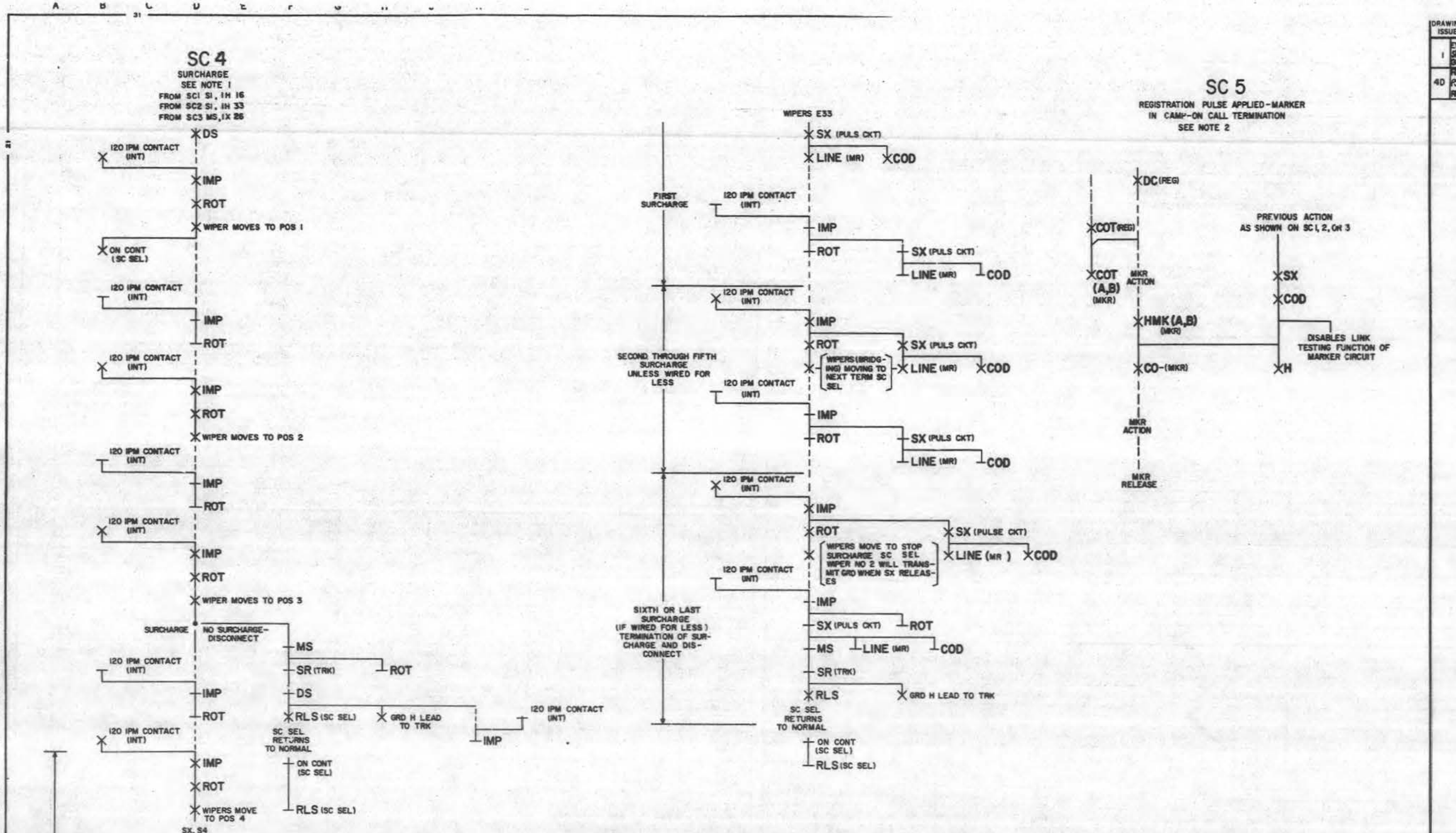
DRAWING ISSUE
1
3D
4D

4

STATION MESSAGE REGISTER PULSE AND SURCHARGE CIRCUIT (2)

SD-5E021-01-E1

BELL TELEPHONE LABORATORIES INCORPORATED 6S



SHEET NOTE:
1. SC4 ASSUMES THAT THE LINE, LINK AND MARKER CIRCUIT IS NOT IN THE PROCESS OF COMPLETING A CAMP-ON CALL TERMINATION.
2. SC5 ASSUMES THAT RELAY COD OPERATES PRIOR TO THE OPERATION OF MARKER RELAYS HMKA,B.

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STATION MESSAGE REGISTER
PULSE AND SURCHARGE
CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

(2) 6S

SD-5E021-01-E2

SD-5E021-01-E2

CIRCUIT REQUIREMENTS

APPARATUS					MECH REQT			CIRCUIT PREPARATION			TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT					REMARKS
DESIG	CODE	OPT	FIG.		BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	TEST CLIP DATA CONN GRD			TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	
RELAYS																		
ALM	1/2AK4		4		202			4(ALM)		1L(ALM)	G			0		11.9	11.3	MOUNTED WITH (SPARE)
COD	AF20		3		205				L(COD)		B			0		35.5	34	
DS	AF84		2		236			1(DS)	1U(DS)	1U(DS)	B/G			0		5.7	5.4	
H	AJ72		3		64				1U(H)	1L(H)	B/G			0		33.6	32	
									2U(H)	2L(H)	B/G			0		35.2	33.5	
IMP	AF83		4		8				L(IMP)	U(IMP)	B/G	1		0		8.2	7.8	
MR	1/2AK4		3		202			1M(MR)	2L(MR)		B	5		0		11.9	11.3	MOUNTED WITH (NV)
MS	AF140		2					1(MS)		1U(MS)	G			0		9.0	8.6	
NV	1/2AK4		3		202			10B(NV)		L(NV)	G	3		0		11.9	11.3	MOUNTED WITH (MR)
P	AG24	Y	1		188					U(P)	G	4		O	F.S.	13.7	13.0	
														H		1.6	1.5	
														R		0.7	1.0	
P	AG24	Z	1		188			8M(P)	L(P)	U(P)	B/G			O	F.S.	13.7	13.0	
														H		1.6	1.5	
														R		0.7	1.0	

CIRCUIT REQUIREMENTS

APPARATUS					MECH REQT			CIRCUIT PREPARATION			TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQT					REMARKS
DESIG	CODE	OPT	FIG.		BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA CONN BAT.	TEST CLIP DATA CONN GRD			TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA	
SX	AF73		1		203				1L (SX)	1U (SX)	B/G		P	0		15.5		
										2U (SX)	G		S	0		16.5	15.5	
SEL SC	204C		2							B(SC)	G	2	ROT	0			300	
										RM1(SC)	G	2	RLS	0			150	

TEST NOTES

1. OPEN FF1 LEAD AT U WDG OF IMP RELAY.
2. ADJUST PER BSP A468.003.
3. OPEN GRD LEAD 1U (NV) RELAY.
4. OPEN LEAD S1 AT T.S.
5. REMOVE ALL MR- FUSES.

DRAWING ISSUE	
1	EWE SKK GFH HW
3D	FQZ RJS RHP

STATION MESSAGE REGISTER
PULSE AND SURCHARGE CIRCUIT

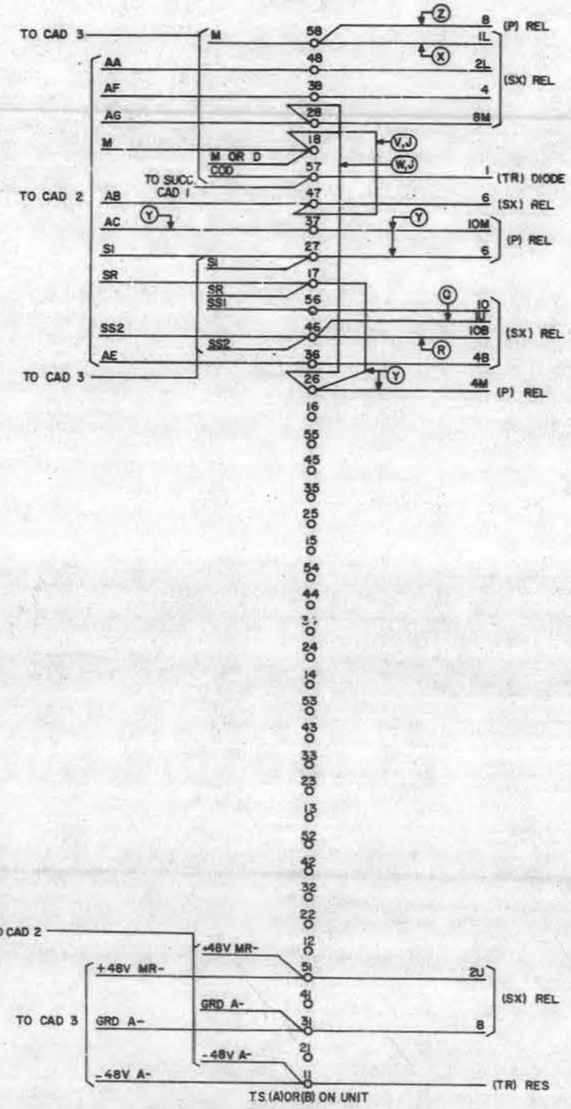
BELL TELEPHONE LABORATORIES INCORPORATED

6S

(2) SD-5E021-01-F1

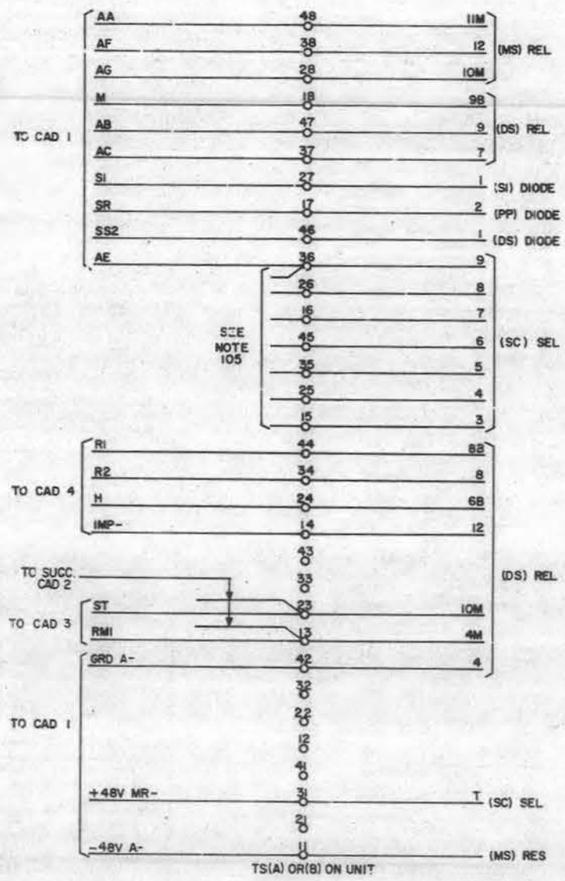
CAD 1

(FOR APP FIG. 1)
(SEE NOTE 205)



CAD 2

(FOR APP FIG. 2)



DRAWING ISSUE

1	EWE SAK GPH	HW
3D	ROZ RJS RMF	
4D	ROZ RJS RHC PMC	
5B	PJS LDJ	

SD-5E021-01-GI

STATION MESSAGE REGISTER
PULSE AND SURCHARGE
CIRCUIT

SD-5E021-01-GI

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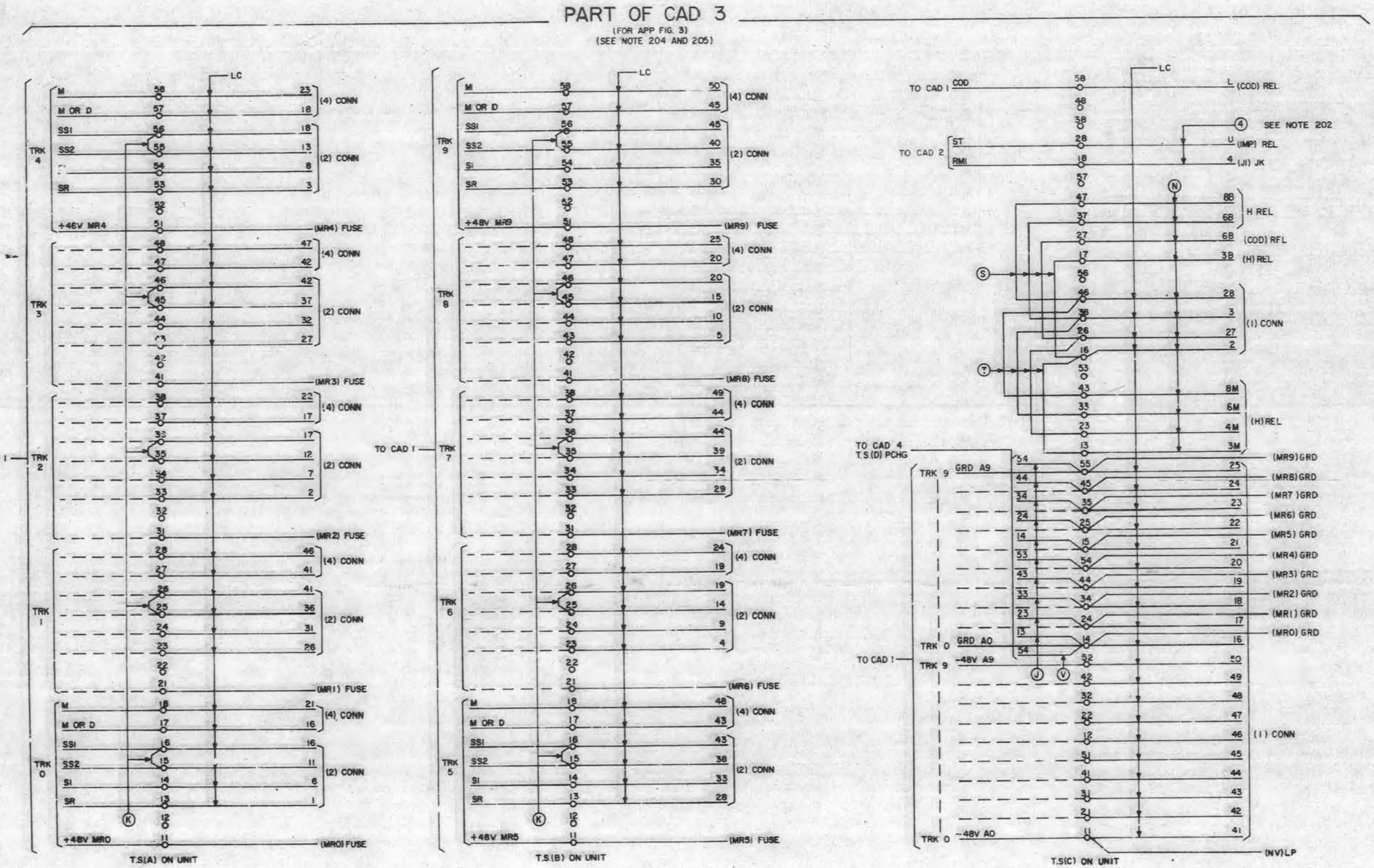

DRAWING ISSUE	
1	EWE RK BFH
3D	RDZ RHP
4D	RDZ RHP
5B	PMC PJS LDJ
6A	WR PJS LDJ

SD-5E021-01-G2

STATION MESSAGE REGISTER
PULSE AND SURCHARGE
CIRCUIT

SD-5E021-01-G2

BELL TELEPHONE LABORATORIES
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6S

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PART OF CAD 3
(FOR APP FIS. 3)

TO PWR SUP CKT (SEE SD-66920-01 CAD 11)

-48V A9 → 50 — 52
GRD A9 → 25 — 55
-48V A8 → 49 — 42
GRD A8 → 24 — 45
-48V A7 → 48 — 32
GRD A7 → 23 — 35
-48V A6 → 47 — 22
GRD A6 → 22 — 25
-48V A5 → 46 — 12 (C) T.S.
GRD A5 → 21 — 15
-48V A4 → 45 — 51
GRD A4 → 20 — 54
-48V A3 → 44 — 41
GRD A3 → 19 — 44
-48V A2 → 43 — 31
GRD A2 → 18 — 34
-48V A1 → 42 — 21
GRD A1 → 17 — 24
-48V A0 → 41 — 11
GRD A0 → 16 — 14
→ 40
→ 15
→ 39
→ 14
→ 38
→ 13
→ 37
→ 12
→ 36
→ 11

SEE NOTE 202
(C) T.S.

FFI → 35 — L (IMP) REL
TO ALM TR & TEST CKT (SEE SD-66920-01 CAD 11) EXT → 10 — 4M (MR) REL
COD → 34 — 1M
MR 14 → 9 — 10B
MR 13 → 33 — 10
MR 12 → 8 — 8B
MR 11 → 32 — 8
MR 10 → 7 — 4B (COD) REL
MR 9 → 31 — 4
MR 8 → 6 — 2B
MR 7 → 30 — 2
TO LINE, LINK & MARKER, CKT (SEE SD-66920-01 CAD 11) RSA → 5 — 12M
RSB → 29 — 11M
BV → 4 — 10M
MR 6 → 28 — 8M
MR 5 → 3 — 6M (H) REL
MR 4 → 27 — 4M
MR 3 → 2 — 3M
MR 2 → 26 — 2M
MR 1 → 1 — 1M
[1]
M N
LC

TO TWO WAY CO TRK CKT (SEE SD-66920-01 CAD 11)

→ 50
→ 25
→ 49
→ 24
→ 48
→ 23
→ 47
→ 22
→ 46
→ 21
SSI → 45 — 56
SSI → 20 — 46
SSI → 44 — 36 (B) T.S.
SSI → 19 — 26
SSI → 43 — 16
SSI → 18 — 56
SSI → 42 — 46
SSI → 17 — 36 (A) T.S.
SSI → 41 — 26
SSI → 16 — 16
SS2 → 40 — 55
SS2 → 15 — 45
SS2 → 39 — 35 (B) T.S.
SS2 → 14 — 25
SS2 → 38 — 15
SS2 → 13 — 55
SS2 → 37 — 45
SS2 → 12 — 35 (A) T.S.
SS2 → 36 — 25
SS2 → 11 — 15
SI → 35 — 54
SI → 10 — 44
SI → 34 — 34 (B) T.S.
SI → 9 — 24
SI → 33 — 14
SI → 8 — 54
SI → 32 — 44
SI → 7 — 34 (A) T.S.
SI → 31 — 24
SI → 6 — 14
SR → 30 — 53
SR → 5 — 43
SR → 29 — 33 (B) T.S.
SR → 4 — 23
SR → 28 — 13
SR → 3 — 53
SR → 27 — 43
SR → 2 — 33 (A) T.S.
SR → 26 — 23
SR → 1 — 13
[2]
LC

CROSS CONN TO C.O. (SEE NOTE 203)

M → 50 — 58
M → 25 — 48
M → 49 — 38 (B) T.S.
M → 24 — 28
M → 48 — 18
M → 23 — 58
M → 47 — 48
M → 22 — 38 (A) T.S.
M → 46 — 28
M → 21 — 18

CROSS CONN TO MR CAB (SEE NOTE 203)

M OR D → 45 — 57
M OR D → 20 — 47
M OR D → 44 — 37 (B) T.S.
M OR D → 19 — 27
M OR D → 43 — 17
M OR D → 18 — 57
M OR D → 42 — 47
M OR D → 17 — 37 (A) T.S.
M OR D → 41 — 27
M OR D → 16 — 17
→ 40
→ 15
→ 39
→ 14
→ 38
→ 13
→ 37
→ 12
→ 36
→ 11
→ 35
→ 10
→ 34
→ 9
→ 33
→ 8
→ 32
→ 7
→ 31
→ 6
→ 30
→ 5
→ 29
→ 4
→ 28
→ 3
→ 27
→ 2
→ 26
→ 1
[4]
LC

DRAWING ISSUE
1 EME 5AK GPM HW AM
3D RCZ PJ's RHP
4D RCZ PJ's RHP

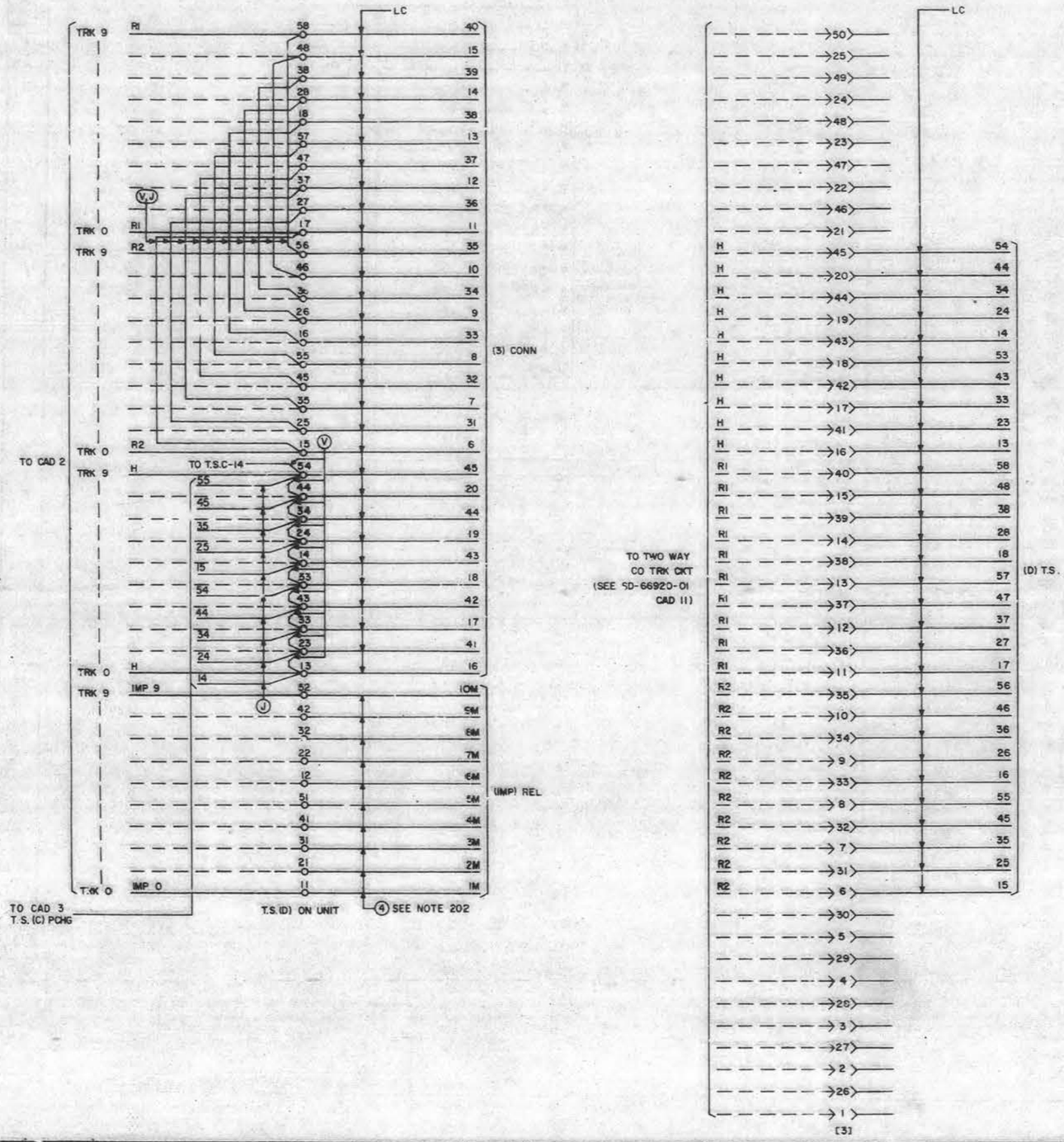
SD-5E021-01-G3

4

STATION MESSAGE REGISTER PULSE AND SURCHARGE CIRCUIT (2) SD-5E021-01-G3

BELL TELEPHONE LABORATORIES INCORPORATED — SHEET 6S

CAD 4
(SEE NOTE 205)



DRAWING ISSUE

1	BWE SAK BFH	HW
58	PMC PJS LDJ	

STATION MESSAGE REGISTER
PULSE AND SURCHARGE
CIRCUIT

SD-5E021-01-G4

BELL TELEPHONE LABORATORIES
INCORPORATED

SIZE 6S

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