

SHEET INDEX

CONTENTS	SHEET NO.	ISSUE NO.																								
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FS 1 INCOMING TRUNK TEST	B1	1	2	3																						
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CIRCUIT NOTES INFORMATION NOTES	D1	1	2	2																						
SC1 INCOMING SEIZURE SC2 INCOMING CALL COMPLETION (MODE A) SC3 INCOMING CALL COMPLETION (MODE B)	E1		2	2																						
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SC7 DISCONNECT BY LTD TESTER SC8 TIMED DISCONNECT SC9 CIRCUIT CALLED WHILE RTC-FE IS BUSY	E3		2	2																						
CIRCUIT REQUIREMENTS TABLE TIMING REQUIREMENTS	F1	1	2	2																						

CONTENTS	SHEET NO.	ISSUE NO.																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
CAD 1 & 2	G1	1	2	2																						
BD 1 DEDICATED SERVICE BD 2 NONDEDICATED SERVICE BD 3 NIGHT TEST COVERAGE DAY & NIGHT OFFICES DEDICATED	H1	1	1	1																						
BD 4 NIGHT TEST COVERAGE DAY & NIGHT OFFICES NONDEDICATED BD 5 NIGHT TEST COVERAGE DAY OFFICE DEDICATED & NIGHT OFFICE NONDEDICATED	H2	1	1	1																						

SHEET INDEX NOTES

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

SUPPORTING INFORMATION

CATEGORY	NO.
EQUIPMENT DWG	J93016DB

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

ISSUE
3ASD-97558-01
INIO
COMMON SYSTEMS
FAR-END TEST TRUNK FOR INCOMING
REMOTE TESTING FROM LTDAT&T
STANDARDSD-97558-01-A1
12 SHEETSBELL TELEPHONE LABORATORIES
INCORPORATED

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APPARATUS INDEX

EQPT LOC	APP FIG.	
	NO.	SH NO.
CIRCUIT PACKS		
DESIG		
TMR	I	C1

DESIG	LOCATION		
	FS	APP FIG.	EQPT
CAPACITORS			
C1		IC6	I
C2		ID6	I
C3		IA6	I
C4		IA6	I
C5		IA3	I
C6		IB3	I

DESIG	LOCATION		
	FS	APP FIG.	EQPT
RELAYS			
ANS	IF7	I	
BY	IG7	I	
BYI	IH4	I	
CT	IE7	I	
CTI	IF7	I	
CTF	IF2	I	
DIS	IE4	I	
DISI	IE6	I	
NC	IH7	I	
OH	IG4	I	
S	IC2	I	
S1	IE2	2	
S2	IF4	I	
ST	IF1	I	
TMI	IB7	I	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
CAPACITORS			
C1	IC6	I	
C2	ID6	I	
C3	IA6	I	
C4	IA6	I	
C5	IA3	I	
C6	IB3	I	

DIODES			
DI	IE8	I	
DIS	IF4	I	
DISI	IE6	I	

DESIG	LOCATION		
	FS	APP FIG.	EQPT
RESISTORS			
R2	1E3	1	
R3	1E3	1	
R4	1A6	1	
R5	1A8	1	

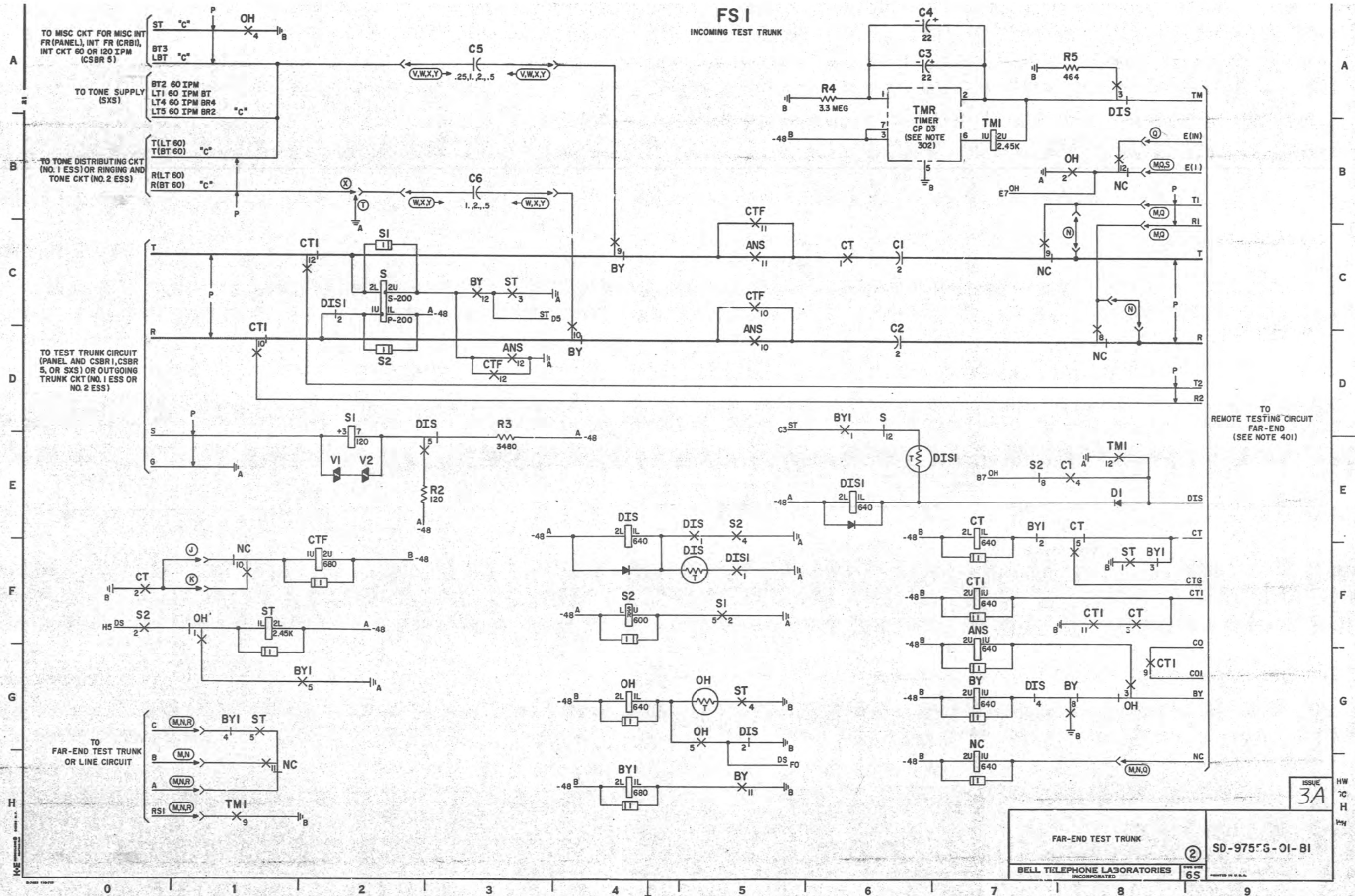
THERMISTORS			
DIS	IF5	I	
DISI	IE6	I	
OH	IG5	I	

VARISTORS		
V1	IE2	2
V2	IE2	2

OPTION INDEX	
APP OR WRG	LOCATION
Y	APP FIG. I
X	APP FIG. I, IB2
W	APP FIG. I
V	APP FIG. I
T	IB2
S	IB8
R	IHI
Q	IB8, IC8, IH8
N	IC8, IHI, IH8
M	IB8, IC8, IHI, IH8
K	IF1
J	IF1

SD-97558-01-A2

ISSUE
2AR



APP FIG. 1

RELAY																		DESIG	
CODE																		CODE	
OPTION																		OPTION	
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	

CIRCUIT PACKS (TIMER)		
DESIG	LOC	CODE
TMR	IB6	D3

CAPACITORS		
DESIG	LOC	CODE
C1	IC6	439A
C2	ID6	439A
C3	IA6	608A
C4	IA6	608A
C5	IA3	(V) 441D
C5	IA3	(W) 439H
		(X) 437E
C6	IB3	(Y) 441C

DIODES		
DESIG	LOC	CODE
D1	IE8	446F
DIS	IF4	446F
DISI	IE6	446F

NETWORKS		
DESIG	LOC	CODE
ANS	IG7	185A
BY	IG7	
BYI	IH4	
CT	IF7	
CTI	IF7	
CTF	IF2	
NC	IH7	
OH	IG4	
S	ID2	
SI	IC2	
S2	IF4	
ST	IG1	

RELAY																		DESIG	
CODE																		CODE	
OPTION																		OPTION	
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	

RESISTORS		
DESIG	LOC	CODE
R2	IE3	18D
R3	IE3	KS-20289, L6C, 3480
R4	IA6	KS-19150, L1, 3.3 MEG
R5	IA8	KS-14603, L2A, 464

THERMISTORS		
DESIG	LOC	CODE
DIS	IF5	BA
DISI	IE6	
OH	IG5	

RELAY																		DESIG	
CODE																		CODE	
OPTION																		OPTION	
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	

APP FIG. 2

RELAY			
LOC	DESIG	CODE	
2 C	IF5	SI	328A
5 C			
10 C			
7	IE2		

VARISTORS		
DESIG	LOC	CODE
V1	IE2	100A
V2	IE2	100A

SD-97558-01-CI

ISSUE
3A

FAR-END TEST TRUNK

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101.

DESIG	FUSE AMP	POTENTIAL	ONE PER
A	1-1/3	-48V SIG	APP FIG. I
B	1-1/3	-48V SIG	APP FIG. I
A		GRD	APP FIG. I
B		GRD	APP FIG. I
<u>BATTERY SYMBOL</u>			<u>VOLTAGE RANGE</u>
-48			45-52V

103.

NETWORK VALUES		
NETWORK NO:	RESISTANCE IN OHMS	CAPACITANCE IN UF
I	470	0.11

104.

[illegible]

105. A FOURTH ARRANGEMENT WHERE BY THE DAY OFFICE IS NON-DEDICATED AND THE NIGHT OFFICE IS DEDICATED IS NOT PROVIDED FOR. OPTION N SHOULD BE USED IN PLACE OF THIS FOURTH ARRANGEMENT.

102.

FEATURE OR OPTION				APP FIG.	PROVIDE APP OR WRG	Q:JANTITY
INCOMING TRUNK CKT	WITH ASSOC CENTRAL OFFICE	PRECISE TONE	ESS	12	X	ONE PER CKT
			CSBR		T,Y	
			SXS		V	
		REGULAR TONE	PANEL CSBR		T,Y	
			SXS		T,W	
CALL BACK TO REGULAR OFFICE ONLY	DEDICATED			S		
	NON-DEDICATED			R		
CALL BACK TO DAY OFFICE AND NIGHT OFFICE (SEE NOTE 105)	DAY AND NIGHT OFFICES DEDICATED			Q		
	DAY AND NIGHT OFFICES NON-DEDICATED			N		
	DAY OFFICE DEDICATED AND NIGHT OFFICE NON - DEDICATED			M		
CALL BACK TO OFFICE	NIGHT OFFICE	HANDLED BY CAMA OPERATOR	K			
	DAY OFFICE		J			

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

302. THE TIMING CYCLE OF (TMR) TIMER MAY BE CHECKED USING A WATCH, BY MANUALLY OPERATING (ON) RELAY IN SD-99311-01, AND OBSERVING THAT (TMI) RELAY OPERATES IN 85-120 SECONDS.

SD-97558-01-D

ISSUE
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FAR-END TEST TRUNK

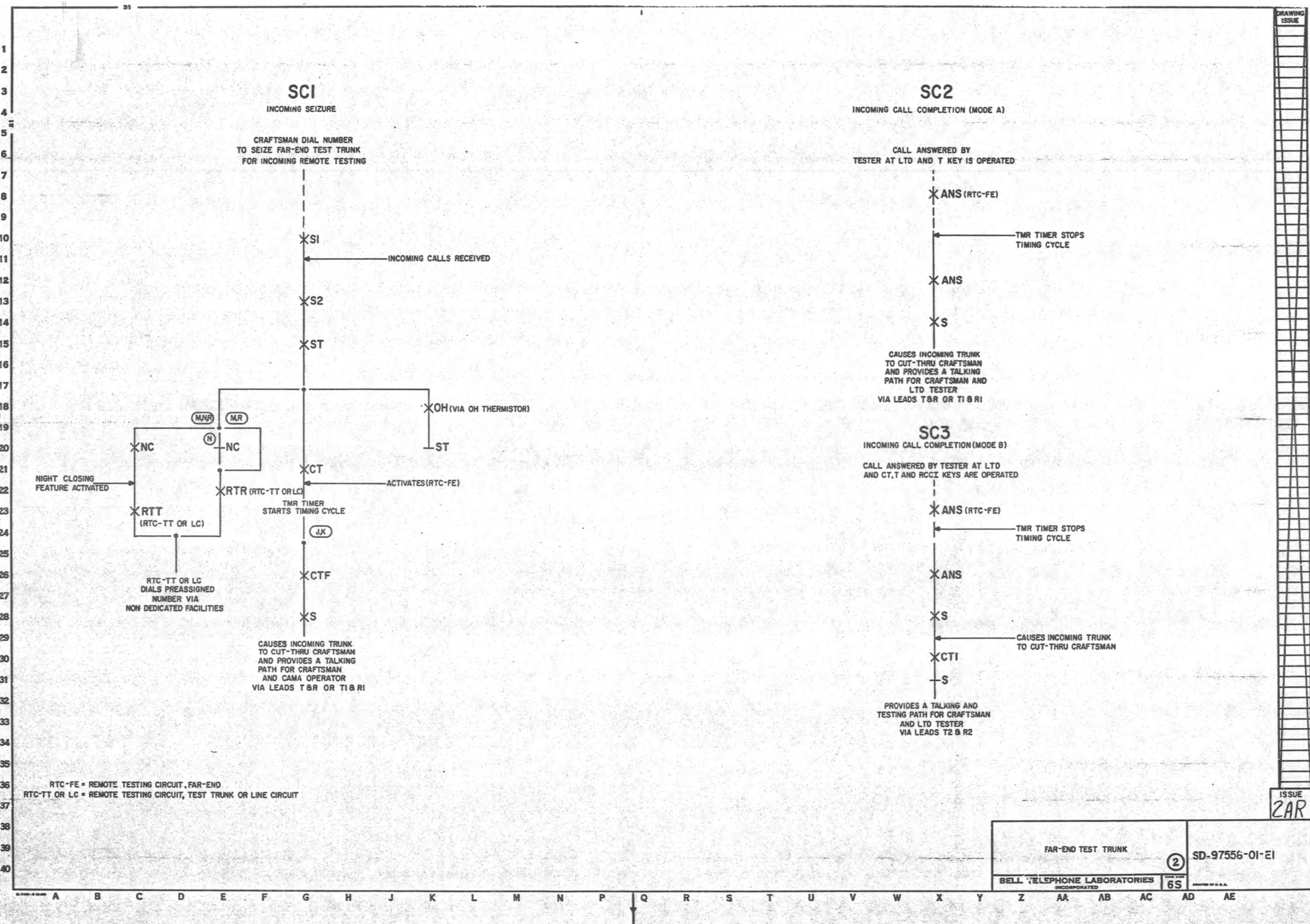
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SD-97558-01-E1

SC4

TESTING INCOMING LINE (MODE A)

LTD TESTER OPERATES
CT KEY

X CTI

S

TRANSFERS T&R OR T1&R1
OF INCOMING LINE TO
LEADS T2 & R2

SC5

TESTING ALTERNATE INCOMING LINE (MODE A)

LTD TESTER OPERATES
AND RELEASES CT KEY

X CTI

X CTR (RTC-FE)

CT

CTI

X S

CRAFTSMAN PUT ON HOLD

SC6

INCOMING CALL NOT ANSWERED

CRAFTSMAN HANGS UP BEFORE TMR TIMER
TIMES OUT (100 SEC)

S

INCOMING TEST TRUNK
REMOVES GROUND FROM SLEEVE LEAD

SI

S2

LEAD DIS GROUNDED
TO INITIATE DISCONNECT IN RTC-FE

X DISI

X DIS (VIA DIS THERMISTOR)

OH

TMR TIMER
RESET

RTC-FE FINISHES
DISCONNECT CYCLE

CT

DISI

(JK)

DIS

CTF

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FAR-END TEST TRUNK

(2)

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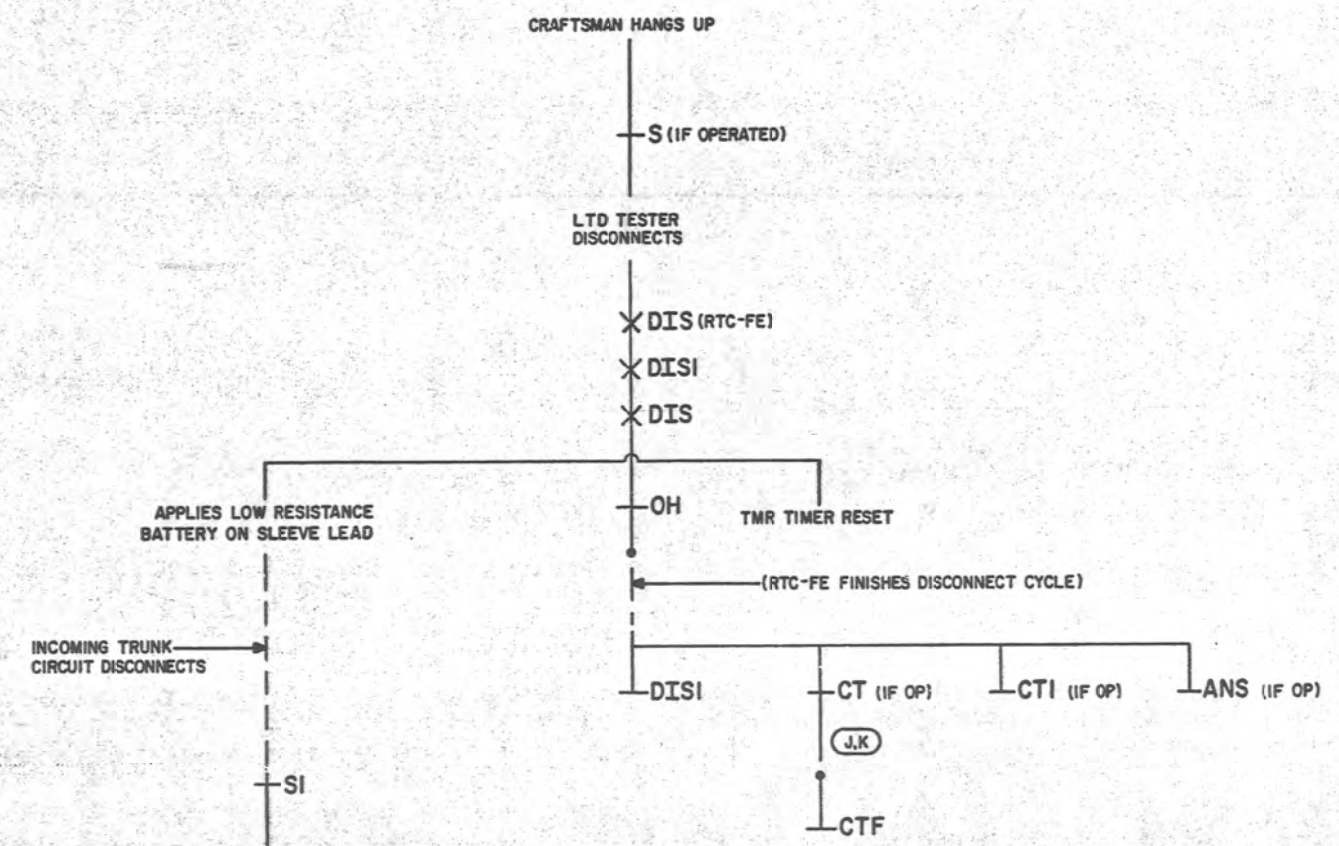
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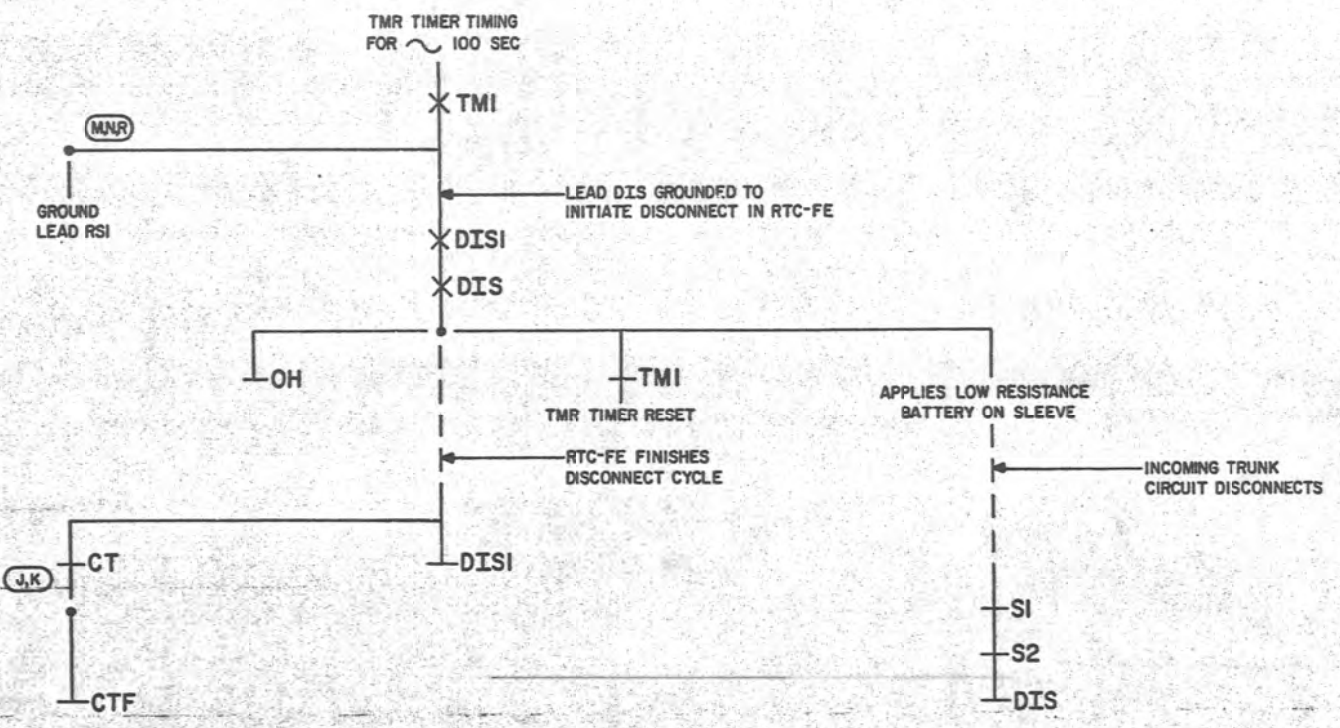
AA AB AC AD AE

A B C D E F G H J K L M N P Q R S T U V W X Y Z AA AB AC AD AE

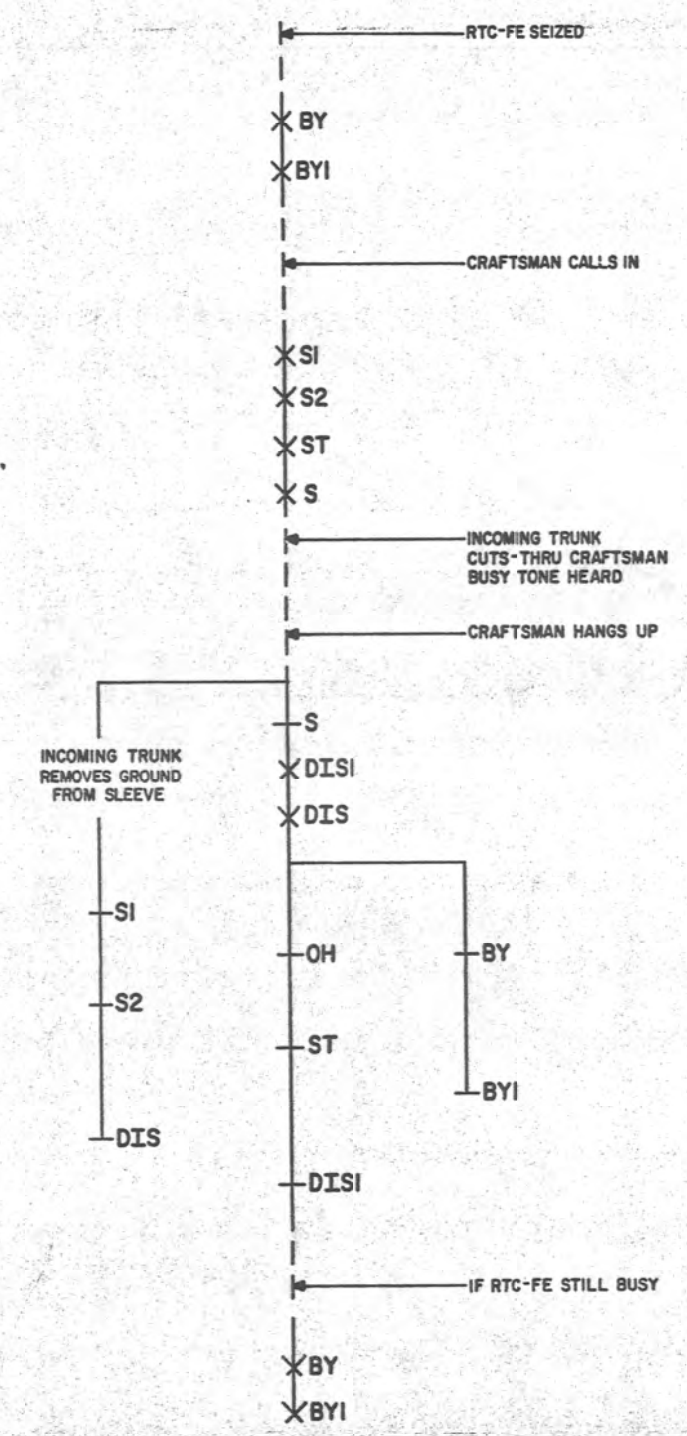
SC7 DISCONNECT BY LTD TESTER



SC8 TIMED DISCONNECT



SC9 CIRCUIT CALLED WHILE RTC-FE IS BUSY



SD-97558-01-E3

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		
RELAYS																		
ANS	1/2AK4	I		202			11M(ANS)		IU(ANS)			O		12	11.3	MTD WITH (DISi)		
BY	1/2AK30	I		202			4B(DIS)		4U(BY)	GRD		O		23	22	MOUNTED WITH (DIS)		
BYI	1/2AK41	I		202					1L(BYI)	GRD		O		31.5	30	MOUNTED WITH (D)		
												H	48	4.4	4.2			
CT	1/2AK22	I		216			2B(BYI)		1L(CT)	GRD		O		28.5	26	MOUNTED WITH (CTI)		
CTI	1/2AK22	I		216			3M(CT)		IU(CTI)	GRD		O		28.5	26	MOUNTED WITH (CT)		
CTF	1/2AK41	I		202			11M(CTF)		IU(CTF)	GRD		O		31.5	30	MTD WITH (BYI)		
												H	48	4.4	4.2			
DIS	1/2AK30	I		202					1L(DIS)	GRD		O		23	22	MOUNTED WITH (BY)		
DISI	1/2AK4	I		202			1M(DISI)		1L(DISI)	GRD		O		12	11.3	MTD WITH(ANS)		
NC	1/2AK22	I		216					IU(NC)	GRD		O		28.5	26	MOUNTED WITH (OH)		
OH	1/2AK22	I		216			2B(DIS),2B(NC)		1L(OH)	GRD		O		28.5	26	MOUNTED WITH (NC)		
S	AJ102	I		75			12B(CTI),10B(CTI), 10H(NO),(BY)10, (ST)10	2L(S)	IU(S)	M	1,2,4	P/S	O		14.7	14		
												R		5.8	6.1			
S1	328A	I					(S2) NO	7(S)	+3(S)	B/G		O	16.5	5.5				
												NO		3				
												R		1.5				
S2	AG15	I		221			2M(S2)		U(S2)	GRD		O		18.5	17.5			
												H		2.5	2.3			
												R		.3	.6			
ST	1/2AK4	I		202			12B(CTI),3B(BYI), 10B(D),11B(NC)		1L(ST)	GRD		O		12	11.3	MOUNTED WITH (TMI)		
TMI	1/2AK4	I		202			3M(DIS)	2U(TMI)	IU(TMI)	B/G	3	O		12	11.3	MOUNTED WITH (ST)		

[illegible]

1. CONTACT MAKE 5, NO MAKE 8.5, READJUST; MAKE 3.5, NO MAKE 10, TEST.
2. ARMATURE BACK TENSION MINIMUM 20 GRAM READJUST, 15 GRAM, TEST.
3. REMOVE TIMER (TMR) CP-D3 BEFORE MAKING TEST.
4. CONTACT BREAK 13 READJUST, 11.5 TEST, NO BREAK 16.5, READJUST, 18 TEST.
5. APPLY -48V BATTERY TO 26(TMI) AND OBSERVE THAT RELAY (TMI) OPERATES IN 85-115 SECONDS, USING A STOP-WATCH, SWEEP SECOND HAND WATCH OR EQUIVALENT.

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2000年12月

SD-97558-01-F1

CAD 1 (FOR APP FIG.1)

CAD 2

DISTG FRAME LEADS TO TEST TRUNK
CKT OR OUTGOING TRUNK CKT

CROSS CONN TO
TEST TRUNK CKT
(ELECTROMECHANICAL
OFFICES) OR OUTGOING
TRK CKT (ESS OFFICES)

TO CAD 1

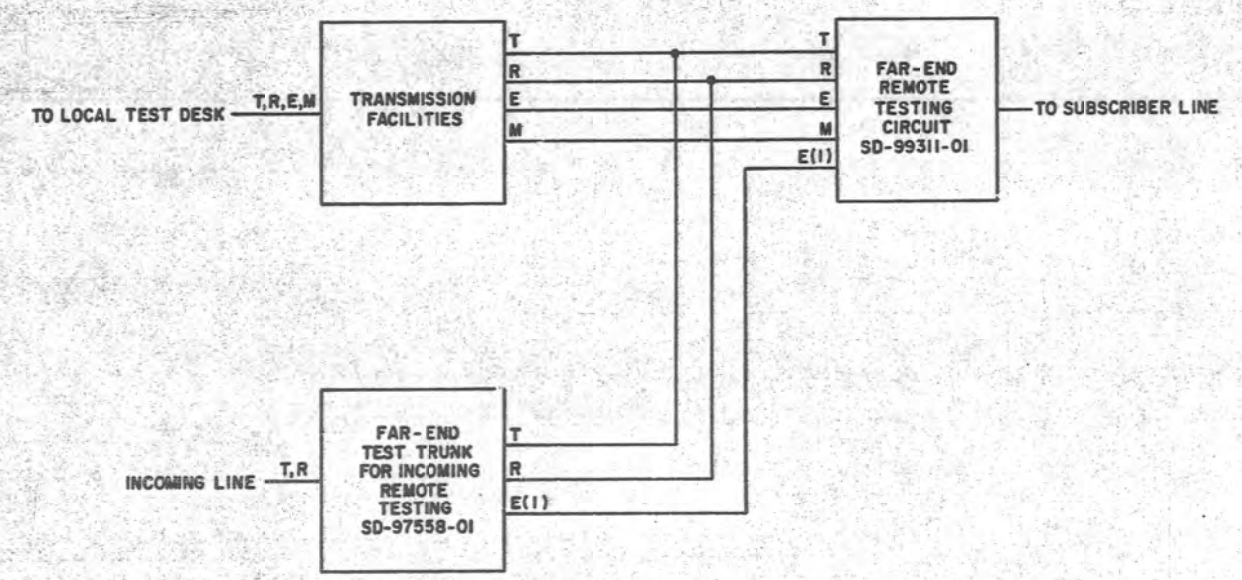
TO
REMOTE TEST
CKT FAR-END
(SEE NOTE 401)

SD-97558-01-G1

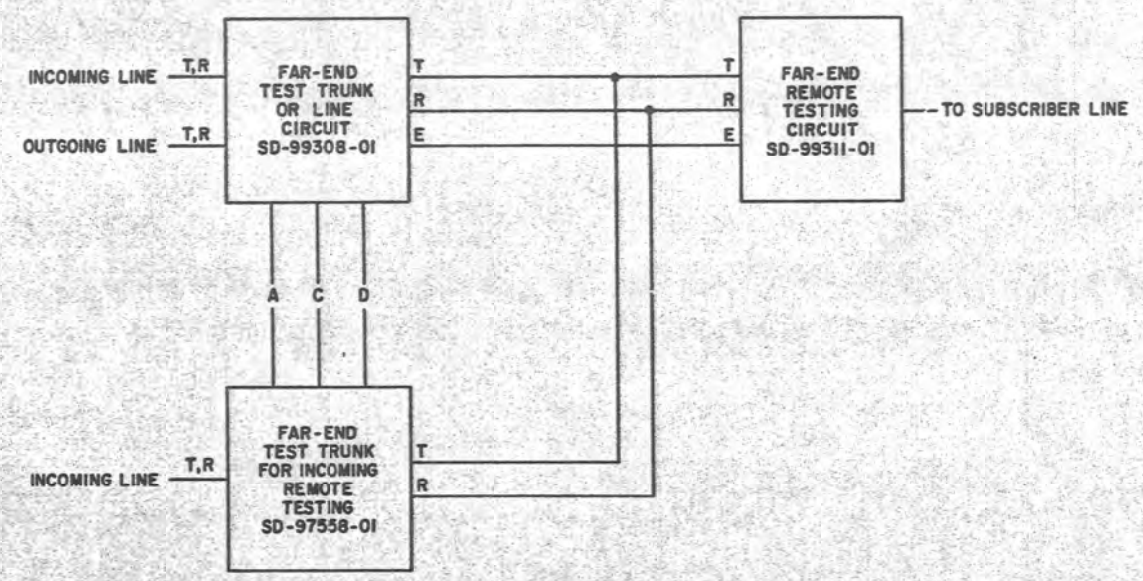
0 1 2 3 4 5 6 7 8 9

A
B
C
D
E
F
G
H

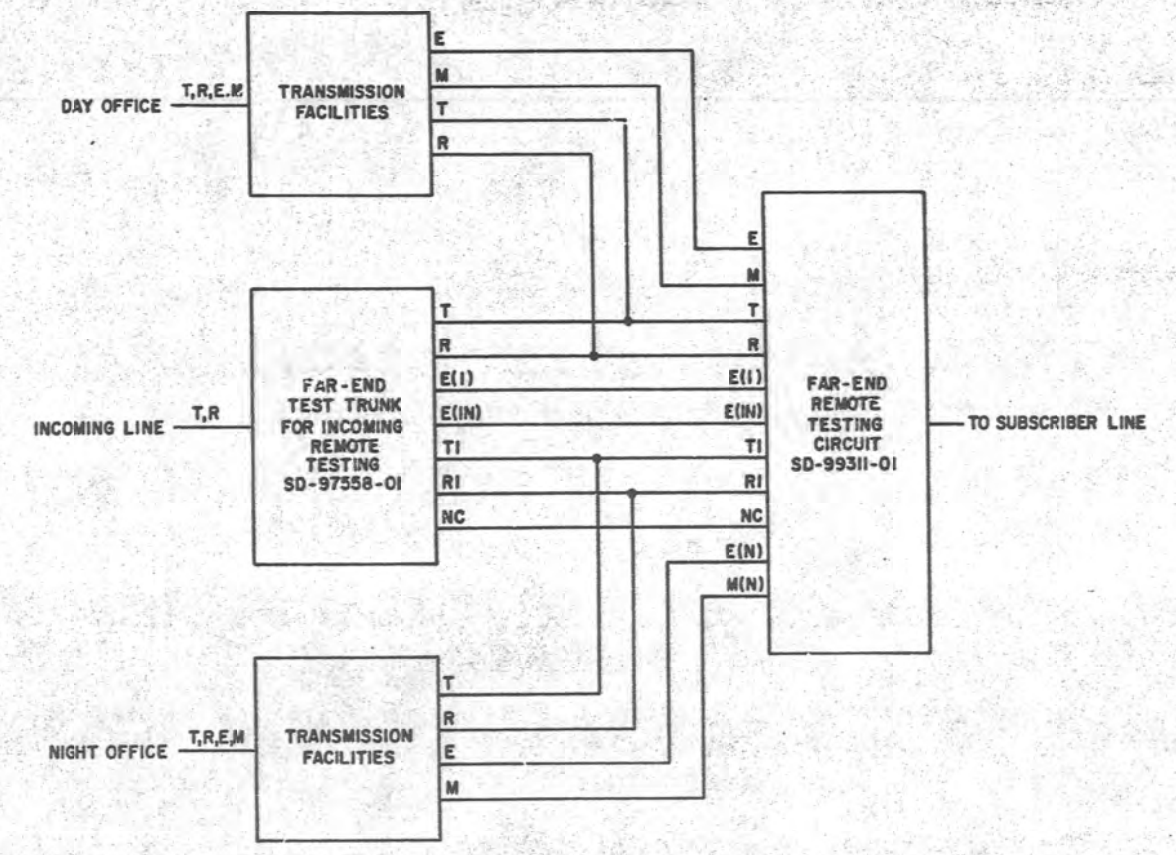
BD 1 DEDICATED SERVICE



BD 2 NON-DEDICATED SERVICE



BD 3 NIGHT TEST COVERAGE DAY & NIGHT OFFICES DEDICATED

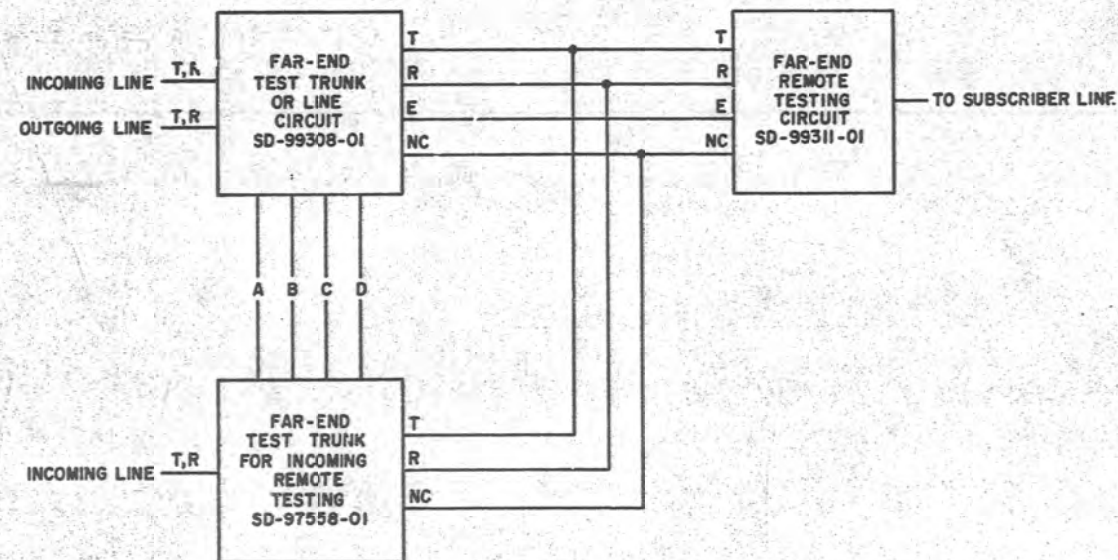


SD-97558-01-HI

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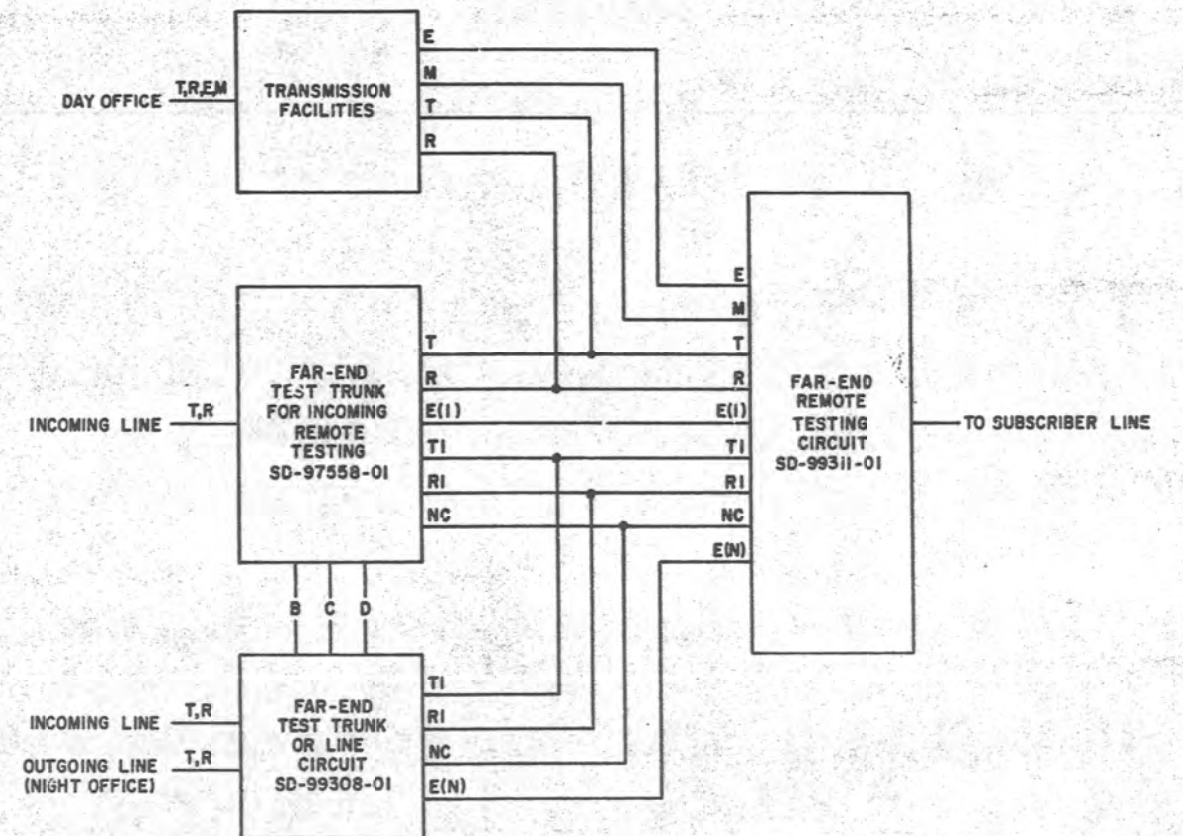
BD 4

NIGHT TEST COVERAGE
DAY & NIGHT OFFICES NON-DEDICATED



BD 5

NIGHT TEST COVERAGE
DAY OFFICE DEDICATED &
NIGHT OFFICE NON-DEDICATED



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FAR-END TEST TRUNK		2	SD-97558-01-H2
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