

SHEET INDEX

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		74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	
SHEET INDEX	A1A*	74	75	76	77	78	79	80	81	82	83																		
SUPPORTING INFORMATION	A1B		75	75	75	75	75	75	75	75	75																		
	A2A*	74	75	76	77	78	79	80	81	82	83																		
SHEET INDEX	A2B	74	75	76	77	78	79	80	81	82	83																		
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	A4	74	75	75	77	78	78	78	81	82	83																		
	A5	74	75	76	76	76	79	79	81	82	83																		
LEAD INDEX	A6	74	75	76	76	78	78	78	78	78	78																		
	A7A*	71	71	76	77	77	77	77	77	82	82																		
	A7B	74	75	75	75	78	78	80	80	80	80																		
	A8	70	70	70	70	78	79	79	79	82	82																		
OPTION INDEX	A9	71	71	76	76	76	76	79	79	82	82																		
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FS 1 TEST CONTROL	B1	71	71	71	71	71	71	71	71	71	71																		
	E2	73	73	76	77	77	77	77	77	77	77																		
	B3	69	69	69	69	69	69	69	69	69	69																		
FS 2 TELEPHONE CKT CONNECTION AND CONTROL	B4	74	74	74	74	74	74	74	74	74	74																		
FS 3 COIN FEATURES	B5	70	70	70	70	70	70	70	70	70	70																		
FS 4 ORIGINATING CONTROL	B6A*	70	70	70	77	77	77	77	77	77	82	82																	
	B6B	74	74	74	74	74	74	74	74	74	74																		
	B7	70	70	70	77	78	78	78	78	78	83																		
	B8	72	72	72	72	72	72	72	72	72	72																		
	B9	73	73	73	73	78	78	78	78	78	82	82																	
	B10	69	69	76	76	76	76	76	76	76	76	76																	
FS 5 CONNECTION TO (ITT) JACK	B11	71	71	76	76	76	76	76	76	76	82	82																	
FS 6 TOLL ORIGINATING TEST LINES	B12A*	71	71	71	77	77	77	77	77	77	82	82																	
	B12B	66	66	66	66	66	66	66	66	66	82	82																	
FS 7 CONNECTION TO (T1) AND (T3) JACKS	B13	70	70	70	70	70	70	70	70	70	82	82																	
FS 8 TESTBOARD ACCESS	B14	58	58	58	58	58	58	58	58	58	82	82																	
FS 9 CONNECTION TO (T2) JACK	B15	70	70	70	70	70	70	70	70	70	70																		
FS 10 (TM1) AND (TM2) JACK ACCESS	B16A*	70	70	70	70	70	70	70	70	70	70																		
	B16B	54	54	54	54	54	54	54	54	54	54																		
FS 11 TANDEM/TOLL SLEEVE CONTROL	B17	69	69	69	69	69	69	69	69	69	82	82																	
FS 12 ANSWER SUPERVISION	B18	72	72	72	72	72	72	72	72	72	72																		
FS 13 TRUNK TEST/LINE TEST MULTIPLE CONTROL	B19A*	72	72	72	72	72	72	72	72	72	72																		
	B19B	74	74	76	76	76	76	76	76	76	76																		
	B19C	71	71	76	76	76	76	76	76	76	76																		
	B20	73	73	76	76	78	78	78	78	78	82	82																	
FS 14 2-WIRE TRUNK LINK AND LINE LINK TEST MULTIPLE	B21	63	63	63	63	78	78	78	78	78	78																		
FS 15 4-WIRE TRUNK LINK AND LINE LINK TEST MULTIPLE	B22	52	52	52	52	52	52	52	52	52	52																		
FS 16 RINGING DETECTION	B23	68	68	68	68	78	78	78	78	78	78																		
FS 17 TERMINATING CONTROL	B24	70	70	70	70	78	78	78	78	78	78																		
	B25A*	68	68	68	68	68	68	68	68	68	68																		
	B25B	63	63	63	63	63	63	63	63	63	63																		
FS 18 TERMINATING TEST LINES	B26	70	70	70	70	70	70	70	70	70	70																		
FS 19 CENTREX AND WIDEBAND TEST LINES	B27	71	71	71	71	71	71	71	71	71	71																		
FS 21 SIMULATED 2-WIRE TRUNK	B28	71	71	71	71	71	71	71	71	71	82	82																	
FS 22 4-WIRE TEST TRUNK APPEARANCE NO. 1 (LOCAL TERMINATING)	B29	70	70	70	70	70	70	70	70	70	70																		
FS 23 4-WIRE TEST TRUNK APPEARANCE NO. 2 (ORIGINATING)	B30	70	70	70	70	70	70	70	70	70	70																		
FS 24 4-WIRE SIMULATED TRUNK CONTROL (FOR APP. 2)	B31	50	50	50	50	50	50	50	50	50	50																		
FS 25 CONNECTION TO ATTENDANT TRUNKS	B32	62	62	62	62	62	79	79	79	79	79																		
FS 26 PHASE I CENTREX CONTROL	B33	52	52	52	52	52	52	52	52	52	52																		
FS 27 CHASING FEATURES	B34	74	75	75	75	75	79	80	80	80	80																		
	B35	50	75	75	75	75	75	75	75	75	75																		
FS 28 MULTIFREQUENCY AND "TOUCH TONE" (B) CURRENT CONTROL	B36	70	70	70	70	70	70	70	70	70	70																		

SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER.

CONTENTS	SHEET NO.	ISSUE NO.																										
		74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98		
FS 29 WIDE AREA DATA SERVICE TRUNK TESTING	B37	50	50	50	50	50	50	50	50	50	50																	
FS 30 CLASS TONE DETECTOR CKT	B38	69	69	69	69	69	69	69	69	69	69																	
FS 31 MULTILEVEL PREEMPTION CONTROL AND DETECTION	B39	70	70	70	70	70	70	70	70	70	70																	
	B40	52	52	52	52	52	52	52	52	52	52																	
	B41	64	64	64	64	64	64	64	64	64	64																	
	B42	64	64	64	64	64	64	64	64	64	64																	
FS 32 CENTREX MULTILEVEL PRECEDENCE PREEMPTION	B43	58	58	58	58	58	58	58	58	58	58																	
	B44	51	51	51	51	51	51	51	51	51	51																	
FS 33 WINK AND TONE DELAY TIMING CKT	B45																											
FS 34 CENTRALIZED ATTENDANT SIGNALING CONTROL		58	58	76	76	76	76	76	76	76	76	76																
FS 35 OFF-NETWORK ACCESS LINE SEIZURE SIGNAL TIMING TEST	B46	62	62	62	62	62	62	62	62	62	62																	
FS 36 AUTOMATIC RECYCLE CONTROL	B47	68	68	68	68	68	68	68	68	68	68																	
FS 37 TONE DETECTOR AND END OF TEST CONTROL	B48	68	68	68	68	68	68	68	68	68	68																	
FS 38 AUTOMATIC RECYCLE COUNTERS	B49	56	56	56	56	56	56	56	56	56	56																	
FS 39 AUTOMATIC RECYCLE TEST SEQUENCE CONTROL	B50	68	68	68	68	68	68	68	68	68	68																	
	B51	68	68	68	68	68	68	68	68	68	68																	
FS 40 AUTOMATIC RECYCLE ITDO AND MISCELLANEOUS TEST	B52	62	62	62	62	62	62	62	62	62	62																	
FS 41 BIT-STREAM TEST TRUNKS	B53	66	66	66	66	66	66	66	66	66	66																	
FS 42 PULSE GENERATOR	B54	57	57	57	57	57	57	57	57	57	57																	
FS 43 TRUNK IDENTIFICATION	B55	62	62	62	62	62	62	62	62	62	62																	
	B56	62	62	62	62	62	62	62	62	62	62																	
FS 44 WINK GENERATOR	B57	72	72	72	72	72	72	72	72	72	72																	
FS 45 SINGLE WINK TIMING TEST																												
FS 46 TRANSMISSION TESTING FOR ACD	B58	68	68	68	68	68	68	68	68	68	68																	
FS 47 MESSAGE REGISTER PULSE CHECKING AND SUPERVISION CONTROL	B59	74	74	74	74	74	74	74	74	81	81	81																
FS 48 MESSAGE REGISTER PULSE COUNTER CHECK	B60	74	74	74	74	74	74	74	74	74	74																	
FS 49 MESSAGE REGISTER PULSE JUNCTION TIMING AND SURCHARGE TESTS	B61	74	74	74	74	74	74	74	74	81	81	81																
FS 50 MESSAGE REGISTER PULSE JUNCTION TIMING TEST	B62	74	74	74	74	74	74	74	74	81	81	81																
FS 51 COUNTING MASTER TIMING PULSES																												
FS 52 PULSE COUNTER	B63							78	78	78	78	78	78															

SUPPORTING INFORMATION (CON'T)

CODE	RATING	TITLE	CPT	APP FIG.	CAD
J23256A	AT&TCO STD	TRUNK TEST UNIT		E,G	7,8,11,12,13, 14,15,16,18, 25,28,29,29A, 58A
J23256B	AT&TCO STD	SUPL TRK TST UNIT A		2	8,10, 16,18,29,62A
J23256C	AT&TCO STD	INTERTOLL & CAMA TRK TST UNIT		11	7,8,14 15,18,25,28,37
J23256D	AT&TCO STD	SUPL TRK TST UNIT B		1,P	7,8,12,14 15,18,21,25,28, 29A,37,39,58A
J23256E	AT&TCO STD	WADS WIDEBAND AND/OR AUTOMATIC RECYCLE TRK TST UNIT		1,16,	17
J23256F	AT&TCO STD	4-WIRE MULTILEVEL PREEMPTION TRK TST UNIT		19,26	19
J23256G	AT&TCO STD	SUPL TRK TST UNIT C		1,8,14 & 19	22
J23256H	AT&TCO STD	SUPL TRK TST UNIT D		1,22,P	24
J23256J	AT&TCO STD	SUPL TRK TST UNIT E		1,19	30
J23256K	AT&TCO STD	SUPL TRK TST UNIT F		1,11	31
J23256L	AT&TCO STD	SUPL TRK TST UNIT G		1,8,G	32,32A
J23256M	AT&TCO STD	RANGE EXTENSION TRUNK TST UNIT		1	25,33
J23256N	A&N ONLY	TRUNK TST CLASS TONE DETECTOR UNIT		24	34
J23256P	AT&TCO STD	WIDEBAND AND/OR BIT- STREAM TRK TST UNIT		1,25,36	35
J23256R	AT&TCO STD	WIDEBAND SWITCHING TST UNIT		27	51
J23256S	AT&TCO STD	TRK TST DIAL-TONE-FIRST UNIT		1,J	25,42
J23256T	AT&TCO STD	CENTREX MLPP 2-WIRE TRK TST UNIT		28	29,41
J23256U	AT&TCO STD	SUPL 4-WIRE MLP TRK TST UNIT		19	43
J23256W	AT&TCO STD	SUPL TRK TST UNIT H		1	44
J23256Y	AT&TCO STD	2-WAY AUX LINE SIG TST UNIT		29	45
J23256Z	AT&TCO STD	CENTREX CENTRALIZED ATTENDANT TRK TST UNIT		30	46
J23256AA	AT&TCO STD	TANDEM TRUNK LOOP- AROUND TRANSMISSION TEST UNIT		7,8,34	48
J23256AB	AT&TCO STD	TRK TST CALL-WAITING UNIT		31	49
J23256AC	AT&TCO STD	TOLL TRUNK LOOP- AROUND TRANS TEST UNIT		8,33	50
J23256AD	AT&TCO STD	TRK TST AUTOMATIC RECYCLE CONTROL UNIT		35	52

[illegible]

MASTER TEST FRAME
TRUNK TEST

DWG SIZE
6S

ISSUE
759

BELL LABORATORIES

SD-25918-01-

AIR

CONTENTS	SHEET NO.	ISSUE NO.																															
		59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83							
APP FIG A,B,C,D,E,F	C1	59	59	59	59	59	59	59	59	59	59	59	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70						
APP FIG G,H,J,K	C2	59	59	59	59	59	59	59	59	59	59	59	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70						
APP FIG L,M,N,O,P,Q,R,S,T	C3	59	59	59	59	63	63	63	63	63	68	68	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70						
APP FIG I	C4	59	60	61	62	63	63	65	66	67	68	69	70	71	71	73	73	73	73	77	78	78	78	78	82	83							
	C5	59	60	60	60	63	63	63	63	63	68	68	70	70	70	73	73	73	73	73	73	73	73	73	82	83							
	C6	59	59	59	62	62	64	64	64	64	68	68	68	68	68	73	73	75	75	75	75	75	75	75	82	82							
	C7	59	59	59	62	63	63	65	65	65	68	69	69	69	69	69	69	69	69	69	69	69	69	69	82	82							
	C8	59	59	59	62	62	62	62	62	62	62	62	70	71	71	71	71	71	71	71	71	71	71	71	82	82							
	C9A*	58	60	60	62	63	64	64	64	64	64	64	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
	C9B	59	59	59	62	62	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	82	82							
	C9C		60	60	62	63	63	63	66	66	68	69	69	71	71	73	74	74	76	77	77	77	77	77	77	82	83						
	C10	59	60	60	62	63	63	63	66	66	66	69	70	70	70	70	73	74	75	76	77	77	77	77	77	82	83						
APP FIG 2,3,4	C11	53	53	53	53	53	53	53	53	53	53	53	70	70	70	70	70	70	70	70	70	70	70	70	82	82							
APP FIG 5,6	C12A*	56	56	56	56	56	56	56	56	56	56	56	70	70	70	70	73	73	75	75	75	75	75	75	75	75							
APP FIG 7	C12B	58	58	58	58	58	58	58	58	58	58	58	68	68	68	68	68	68	68	68	68	68	68	68	68	68							
APP FIG 8	C12C	58	58	58	58	58	58	58	58	58	58	58	70	70	70	70	70	70	70	77	77	77	77	77	77	82							
APP FIG 9,10	C13A*	58	58	58	58	63	63	63	63	63	63	63	70	70	70	70	70	70	70	70	70	70	70	70	82	82							
APP FIG 11																																	
APP FIG 12,13	C13B	59	59	59	59	59	59	59	59	59	59	59	70	70	70	70	70	70	70	70	70	70	70	70	82	82							
APP FIG 14,15	C14	59	59	59	62	62	64	64	64	64	64	64	70	70	70	70	70	75	75	75	75	79	79	79	79	79							
APP FIG 16,17,18	C15	57	57	57	57	63	63	63	63	63	63	63	70	70	70	70	70	75	75	75	75	75	75	75	75	75							
APP FIG 19	C16	59	59	59	59	63	63	63	63	63	63	63	70	70	70	70	70	70	70	70	70	70	70	70	82	82							
	C17	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59							
	C18	59	59	59	59	63	64	64	64	64	64	64	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 20,21																																	
APP FIG 22,23,24	C19	59	60	60	60	63	63	63	63	63	63	63	70	70	70	70	70	70	70	70	70	70	70	70	82	82							
APP FIG 25	C20	58	58	58	58	63	63	63	63	63	68	68	68	71	71	71	71	71	76	76	76	76	76	76	76	76							
APP FIG 26	C21A*	59	60	60	60	63	63	63	63	63	63	63	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 27	C21B	59	59	59	59	59	59	59	59	59	59	59	70	71	71	71	71	71	71	71	71	71	71	71	71	71							
APP FIG 28	C22	58	60	60	60	60	60	60	60	60	60	60	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 29	C23	51	51	51	51	51	51	51	51	51	51	51	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 30	C24	52	59	59	59	59	59	59	59	59	59	59	69	69	69	69	69	69	75	76	76	76	76	76	76	76							
APP FIG 31	C25	58	60	60	60	63	63	63	63	63	63	63	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 33	C26	57	57	57	57	57	57	57	57	57	57	57	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 34	C27	53	53	53	53	53	53	53	53	53	53	53	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 35	C28	59	60	60	62	63	63	65	65	67	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68							
	C29A*	59	60	60	62	63	63	65	65	65	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68								
	C29B				62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62							
APP FIG 36,37,38,39	C30	59	59	59	59	59	59	59	59	59	59	59	70	70	70	70	70	70	70	70	70	70	70	70	70	70							
APP FIG 40	C31	59	59	61	61	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63	63							
APP FIG 41	C32A*	59	59	59	59	63	63	63	63	63	63	68	68	70	71	71	71	71	71	71	71	71	71	71	71	71							
APP FIG 42	C32B											68	68	70	70	72	72	72	72	72	72	72	72	72	72	72							
APP FIG 43	C33			61	61	61	61	61	61	61	61	61	61	70	70	70	70	70	76	76	76	76	76	76	76	76							
APP FIG 44	C34											67	67	69	69	72	72	72	72	72	72	72	72	72	72	72							
APP FIG 45	C35											68	68	68	68	68	68	68	68	68	68	68	68	68	68	68							
APP FIG 46	C36													70	71	71	71	71	74	74	74	74	74	74	74	74							
APP FIG 47,48	C37													70	71	71	71	71	74	74	76	76	76	76	76	76							
APP FIG 49,50,51,52,53	C38																																

[illegible]

* SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER.

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SHEET INDEX

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		59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
CAD 8	G7A	59	60	60	62	62	64	64	64	64	64	70	70	70	70	70	70	70	70	78	78	81	81	81	81	81
	G7B	59	59	61	61	61	64	65	65	65	68	69	69	69	69	69	69	76	76	76	76	76	76	76	76	76
	G7C	59	59	59	62	62	64	64	64	67	67	67	70	70	71	71	74	75	76	76	76	80	80	80	80	80
CAD 9,10,10A,11,12	G8A	59	59	59	59	59	59	59	59	59	68	68	68	68	68	68	68	68	68	68	78	78	78	78	78	
CAD 13,14,15,16,17	G8B	59	59	59	59	59	64	65	65	67	68	68	68	68	71	73	73	73	73	73	73	73	73	73	73	
CAD 18	G9	59	59	59	59	59	64	64	64	67	69	69	69	69	69	69	69	76	76	76	76	76	76	76	76	
	G10	59	59	61	61	61	64	65	65	65	65	69	69	69	69	69	69	76	76	76	76	76	76	76	76	
CAD 19	G11A	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
	G11B	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57	
CAD 20,21	G12	59	59	59	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	79	79	79	79	79	
CAD 22		59	59	59	59	59	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
CAD 23	G13	59	59	59	59	59	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
CAD 24	G14A	59	60	61	61	61	64	64	64	64	68	68	71	71	71	71	71	71	71	71	71	71	71	71	71	
CAD 25	G14B	59	59	61	61	61	64	65	65	67	68	69	71	71	71	71	74	74	74	74	78	78	78	78	78	
CAD 26,27,28	G15A	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
CAD 29,29A	G15B	59	59	59	62	63	64	65	66	66	68	68	70	70	73	73	73	76	76	76	78	78	78	78	78	
CAD 30	G16	59	60	60	60	60	64	64	64	64	68	69	71	71	71	74	74	76	76	76	76	76	76	76	76	
CAD 31		59	60	61	61	63	64	64	64	64	64	69	69	69	73	73	73	76	77	77	77	77	77	77	77	
CAD 32,32A	G17A	59	60	61	61	63	64	64	64	64	64	69	69	69	73	73	73	76	77	77	77	77	77	77	77	
CAD 33	G17B	59	59	59	59	59	64	65	65	65	65	65	65	65	65	65	65	76	76	76	76	76	76	76	76	
CAD 34,35	G18	59	60	61	61	61	64	64	64	64	64	69	71	71	71	71	71	76	76	76	76	76	76	76	76	
CAD 35A,37,38,39	G19	59	59	59	59	59	64	65	65	65	65	65	65	71	71	71	71	71	71	71	71	71	71	71	71	
CAD 40,41	G20	59	59	61	61	61	64	64	64	67	67	67	67	67	67	67	67	76	76	76	76	76	76	76	76	
CAD 42		55	55	55	55	55	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
CAD 43,44,45	G21	55	55	55	55	55	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
CAD 46		57	57	61	61	61	64	65	65	67	67	69	69	69	69	74	74	76	76	76	76	76	76	76	76	
CAD 47,48	G22	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	76	76	76	76	76	76	76	
CAD 49,50	G23	59	59	59	62	63	64	65	65	65	65	65	65	71	71	71	71	71	76	76	76	76	76	76	76	
CAD 51	G24	59	59	59	59	59	64	65	65	67	68	69	71	71	71	71	71	71	76	76	76	76	76	76	76	
CAD 52	G25	59	61	62	62	62	64	65	65	67	68	69	71	71	71	71	71	71	76	76	76	76	76	76	76	
CAD 52A,53	G26	59	61	62	62	62	64	65	65	67	68	69	71	71	71	71	71	71	76	76	76	76	76	76	76	
CAD 54,55	G27	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
CAD 55A,56,56A	G28	59	59	61	61	61	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	64	
CAD 57	G29	59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	71	71	71	71	71	71	71	71	71	
CAD 58	G30	59	59	61	61	61	64	64	64	64	68	68	70	70	71	71	74	74	76	76	76	76	76	76	76	
CAD 58A	G31	59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	71	71	71	71	71	71	71	71	71	
CAD 60,60A		59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	71	71	71	71	71	71	71	71	71	
CAD 60A,61	G32	59	59	61	61	61	64	64	64	64	68	68	70	70	71	71	74	74	76	76	76	76	76	76	76	
CAD 62	G33	59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	74	74	76	76	76	76	76	76	76	
CAD 62A	G34	59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	74	74	74	74	74	74	74	74	74	
CAD 63,63A	G35	59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	74	74	74	74	74	74	74	74	74	
CAD 64,64A	G36	59	59	61	61	61	64	64	64	64	68	68	71	71	71	71	74	74	74	74	74	74	74	74	74	
BD1,2,3,4	H1	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	
BDS	H2	52	52	52	52	52	52	52	52	52	53	53	53	53	53	53	53	53	53	53	53	53	53	52	52	

* SHEETS WITH SUFFIX A WERE FORMERLY WITHOUT A SUFFIX LETTER.

Best Available

BELL TELEPHONE LABORATORIES
INCORPORATED②
65

SD-25918-01-A20

ISSUE
83A

500

51A	
52D	
53D	
54A	
55A	
56D	
57D	
58A	

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-A3

ISSUE
32B

SD-25918-01-A4

APPARATUS INDEX																								DRAWING ISSUE			
DESIG	LOCATION			DESIG	LOCATION			DESIG	LOCATION			DESIG	LOCATION			DESIG	LOCATION			DESIG	LOCATION			DESIG	LOCATION		
	FS	APP FIG	EQPT		FS	APP FIG	EQPT		FS	APP FIG	EQPT		FS	APP FIG	EQPT		FS	APP FIG	EQPT		FS	APP FIG	EQPT		FS	APP FIG	EQPT
COMPONENT ASSEMBLIES				DIODES				KEYS				KEYS				LAMPS				LAMPS				LOUDSPEAKER SET			
CA0		19	F	VFO	12A/C7	52	AT	CC		43	MTF	NRW		28	MTF	2A	12B/B5	33	AC	F1	13G4	1	MTF				
CA1		26	F	VFI	12A/A6	53	AT	CD		41	MTF	MRP TNG		47	MTF	2SV	12B/G9	33	MTF	P2	13H4	1	MTF				
CA2		1	M	WC	5F8	1	CA28	COOT		44	MTF	NRW		28	MTF	2TAS	12B/G7	33	MTF	PAD IN	13G5.D7	A,B	MTF	TH	42E5	19	MTF
CA3		1	M	WKT	45C2	25	CA7	CDL		44	MTF	NRW		28	MTF					PAD OUT	13G5.D7	A,B	MTF				
CA4		1	M					CDL		41	MTF	HC STI		14	MTF	4E	32F0	11	MTF	PK	6F9	1	MTF				
CA5		24	N					CDL		2	MTF					4M	30G6	26	F	PK1	24A1	11	MTF				
CA6	SEE APP FIG	1	A					CDL		1	MTF	NDT		19	MTF	4PT	39A4	19	MTF	PK2	24A1	20	MTF				
CA7		25	P					CDL		28	MTF	NPND		28	MTF	A	12A/D5	8	C	PK3	27E7	36	MTF				
CA8		25	P					CDL		1	MTF	NPND		28	MTF	AA	19A/F3	1	MTF								
CA9		8	AC					CDL		M,N	MTF	NPND		28	MTF	AE	35F8	2	MTF								
CA10		8	AC					CDL		1	MTF	NPND		28	MTF	ALM	48G5	1	MTF	PRC	29F4	19	G	2B	12B/B5	33	AC
CA11		8	AC					CDL		43	MTF	NPND		28	MTF	ANS	48F5	1	MTF	PRE	41E6	19	MTF	4TS	26B8	1	C
CA12		29	Y					CDL		1	MTF	NPND		28	MTF	AS	9G0	1	MTF	PRI	43H5	28	MTF	A	2606	9	
CA13		29	Y					CDL		1	MTF	NPND		28	MTF	BSE	53D2	37	MTF	PRI A	43E2	28	MTF				
CA14		28	T					CDL		1	MTF	NPND		28	MTF	BSE1	53F2	38	MTF	PRK	37F4	17	MTF	B	12A/C3	8	C
CA15		31	AB					CDL		1	MTF	NPND		28	MTF	CAS	10H5	1	MTF	PRR	39D5	19	F				
CA16	7.41	7.41	AA,AM					CDL		13	MTF	NPND		28	MTF	CC	5G6	1	MTF								
CA17	7.41	7.41	AA,AM					CDL		13	MTF	NPND		28	MTF	CDR	8F9	41	MTF								
CA18		7	AA					CDL		18	MTF	NPND		28	MTF	CDT	8F9	41	MTF	R+	23F1	6	MTF	C	30G0	26	F
CA19		7	AA					CDL		18	MTF	NPND		28	MTF	CL1	38D2	24	MTF	R-	23F1	1	MTF	D	29H1	19	F
CA20		7	AA					CDL		18	MTF	NPND		28	MTF	CL2	38D2	24	MTF								
CA21		7	AA					CDL		18	MTF	NPND		28	MTF	CL3	38E2	24	MTF	RDY	22G2	14	MTF				
CA22	7.41	7	AA,AM					CDL		18	MTF	NPND		28	MTF	CL4	38E2	24	MTF	RF	33G6	1	MTF				
CA23		7	AA					CDL		18	MTF	NPND		28	MTF	CLS	38F2	24	MTF	RLB	8A7	1	MTF				
CA24		1	M					CDL		18	MTF	NPND		28	MTF	CND	5D1	1	MTF	RLO	20B0	42	MTF				
CA25		33	AC					CDL		18	MTF	NPND		28	MTF	CP0	6E4	11	MTF	RNO	34B2	3	MTF				
CA26		33	AC					CDL		18	MTF	NPND		28	MTF	CPT	5E1	1	MTF	RN1-19	34C2	4	MTF				
CA27		33	AC					CDL		18	MTF	NPND		28	MTF	CR	5H6	1	MTF	RN20-29	34H2	39	MTF				
CA28		35	AD					CDL		18	MTF	NPND		28	MTF	CS	34E9	1	MTF	RP	34D9	5	MTF				
CA29		40	AG					CDL		18	MTF	NPND		28	MTF	CS1	15A2	25	MTF	RS	33H6	1	MTF				
CA30		40	AG					CDL		18	MTF	NPND		28	MTF	CS2	26D1	34	MTF	RTN	43H5	28	MTF	RRC	15H5	19	CA0
CA31		41	AG					CDL		18	MTF	NPND		28	MTF	CTX	32A4	14	MTF					RST	13D7	19	CA0
CA32		41	AG					CDL		18	MTF	NPND		28	MTF									RXC	15H5	19	CA0
CA33		45	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA34		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA35		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA36		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA37		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA38		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA39		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA40		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA41		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA42		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA43		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA44		44	AK,AL					CDL		18	MTF	NPND		28	MTF												
CA45		44	AK,AL					CD																			

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				LEAD INDEX																DRAWING ISSUE		
	CONNECTING CIRCUIT TITLE	INDEX LOCATION	DESIG	LOCATION		DESIG	LOCATION		DESIG	LOCATION		DESIG	LOCATION		DESIG	LOCATION		DESIG	LOCATION			
				FS	CAD		FS	CAD		FS	CAD		FS	CAD		FS	CAD		FS	CAD		
A	2-WAY TRUNK CKT (CENTREX-AUTOVON)	6H5		2-WAY TRUNK FOR WIDEBAND SERVICE			4-WIRE TIMING TEST CKT (CONT)			ATTENDANT TRUNK CKT			AUTO. CALL DISTRIBUTION TEST ACCESS CKT			INC TRUNK CKT (CENTREX TEST)			LINE, LINE LINK AND MKR CONN CONT CKT (CONT)		501	
	2-WAY TRUNK FOR BIT-STREAM SERVICE	7B/A1	AC	53B1	28B0	LDN	42B9	12E2		2-WAY ONAL FOR USE WITH 608A SWBD			19B/F8	15B/A0	CTX3	27E1	8A/F6		TOLL ORIG TEST LINE NO. 2		51A	
	2-WAY TRUNK FOR WB SERVICE	6A1	CBY	53B1	28B0	LKR	42B9	12E2	CS	32A5	8A/B6	FT	19A/C9	15B/AG					7	12B/C9	7C/E4	52D
	4-WIRE LISTED DIRECTORY NO. TRUNK CKT	6B1	CTK3	27F4	25C4	LKRI	42B9	12E2	RO	32A5	8A/B6	R	19B/G8	15B/AG				R	26D6	201	7C/F4	53D
	4-WIRE LINE LINK CKT	6C1	E	27G4	19C3				TO	32A5	8A/B6	S	19A/C9	15B/A0				S	26D6	201	7C/G4	54A
	4-WIRE OPERATOR TANDEM TRUNK CKT	6E1	LBC	53C1	28B0	M	40F0	11A/B5				T	19A/C9	15B/A0	R	11C9, D9	8A/G6				7C/H4	
	4-WIRE TIMING TEST CKT	6F1	M	27H5	19C3										RI	27E3	8A/F6				7C/I4	
	ACCESS TEST LINE CKT FOR WB REMOTE SW	7D9	R	27G5	19C3, 23D7	OT	42B9	12E2		2-WAY ONAL FOR USE AS TEST ATND TRK		S	11C9, D9	8A/G6		27E3	8A/F6	T	26D6	201	7C/J4	
	ACC SERVICE ASSISTANCE POSITION TRUNK ARRANGED FOR RECORDING	6H2	S	27H4	19C3, 23D7							SI	11C9, D9	8A/G6		27E3	8A/F6				7C/K4	
			T	27F5	19C3, 23D7																7C/L4	
B	4-WIRE LISTED DIRECTORY NO. TRUNK CKT			4-WIRE LISTED DIRECTORY NO. TRUNK CKT		PRB1	40D0	12D7		2-WAY ONAL FOR USE AS TEST ATND TRK			AUTO. INTERCEPT SERVICE LINE CKT						CALLED MKR GR			
	ALARM CKT	6E2	SP	39A7	11A/D0	PT	40D0	11A/E7	CS	32A6	8A/D6	RO	21C6	7B/C8								
	AMA RECORDER AND RECORDER CONN CKT	6F2	ST	39A7	11A/D0				NCC	32A6	12H7	RI	21C6	7B/C8								
	AMA TRANSVERTER CKT	6H2				RG	39D0	11A/D2	RO	32A6	8A/D6											
	ATTENDANT TRUNK CKT	6A4				R2	39D0	11A/D2														
	AUTO. CALL DISTRIBUTION TEST ACCESS CKT	6A5				R3	40D0	11A/B7, 12B7														
	AUTO. INTERCEPT SERVICE LINE CKT	6B5	TT	39B7	9E7	R10	39D0	11A/D2	TO	32A6	8A/D6											
	AUTO. MON REGISTER AND SENDER TEST CKT	6D5				RA	42A4	12E2														
	AUTO. PROGRESSION TRUNK TEST CKT	6F5				RB	42A4	12E2														
	AUXILIARY LINE CKT FOR REMOTE MESSAGE REGISTRATION	7B/B2				RC	42A4	12E2														
	AUXILIARY LINE FOR LLP OR LLP-AIS LINES FOR USE WITH NO. 5 ETS	7B/D3	RO	22C5	6H3	RE	42A4	12E2														
	AUXILIARY LINE TEST CKT	7B/H2	R2	22C4	6H3																	
	CAMA TRANSVERTER CKT	6F5	R10	22C5	6H3	ST	40D0	11A/F5														
	CAMA TRUNK CKT	6G5																				
	DISTRIBUTOR AND SCANNER CKT	7B/G0	TO	22C6	6H3																	
	DISTRIBUTOR AND SCANNER APPLICATION FOR ETS (DAS ETS)	7B/A3	T2	22C4	6H3																	
	DUAL CHANNEL RECEIVER CKT	7F9	T10	22C5	6H3																	
	INC TRUNK CKT, CENTREX TEST	6A6																				
	INTERRUPTER CKT (30 IPM)	7C9																				
	LINE, LINE LINK AND CONN CKT	6C6																				
	LINE, LINE LINK AND MKR CONN CONT CKT	6F6																				
	MA TEST FR ATND TEST TRK CKT	6E9																				
	MA TEST FR CONN CKT	6G9																				
	MA TEST CONT CKT	7A0																				
	MA TEST FR JK, LP AND KEY CKT	7F1																				
	MA TEST FR POS LOOP TEST CKT	7C2																				
	MA TEST FR POS TEST CKT	7D2																				
	MA TEST FR TEL KEY AND LP CKT	7E2																				
	MA TEST FR VM TEST CKT	7G2																				
	MA TIMING CKT	7B/A2																				
	MF CURRENT SUPPLY CKT	7F4																				
	MF SIGNAL GENERATOR CKT	7A/E3																				
	MILLIWATT DISTRIBUTING CKT	7B/G1																				
	MISC CKT FOR ALL FR	7H2																				
	MISC CKT FOR RR FR	7A4																				
	MONITORING AMPLIFIER CKT	7B/D1																				
	MULTICHANNEL TONE TEST	7B/F2																				
	UNIT IN, RFACE CKT																					
	NO. 101 ESS APPLICATION SCHEMATIC	7G4																				
	NO. GROUP AND CONN CKT	7H4																				
	PATCHING MON AND TESTING JK CKT, SECOND TOLL TEST BD	7A5																				
	PLANT REG CKT	7B/A0																				
	POWER, RINGING, AND TONE DISTRIBUTION CKT	7C5																				

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LEAD INDEX	DRAWING	ISSUE
	55A	56D
	57D	

OPTION INDEX																																		
APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION							
A	2	STD 1	102,116	APP FIG 2	27	STD 480	102,104	APP FIG 27	FIG.P	STD 270	104,113, 123	APP FIG P: 7A3, A7, E3, E6, 16A/C0, H0, 25B/B6, B7, F6, F7, G5, G6, G7, H7	ZA	STD 110	102,104	34B4, D3	Z	A&M 180 MD 630	104,184	APP FIG 1	YH	STD 280	104	7A3, E3, 1002, G2, 11A9, 18C1, 21C1-E1, C2-G2, D3, E3, 23F5, G5, 26A2, B1, B2	XA	STD 320	102,104, 127	9G1, H1, 25A/F1, G1	XS	STD 370	170	APP FIG 1		
	3	STD 1	102	APP FIG 3									ZB	MD 110	104,131	APP FIG 1: 78C, F1, 24H2	ZW	STD 180 MD 630	104,184	APP FIG 1														
	4	STD 1	102	APP FIG 4	28	STD 500	102,104	APP FIG 28; 2F5 6B/86, C6					ZC	STD 110	104,131	APP FIG 1	ZX	MD 190	104	APP FIG 1, 8														
	5	STD 1	102	APP FIG 5	29	STD 62A (AC)	102	APP FIG 29	FIG.Q	MD 280	104,117, 129, 139, Q	APP FIG 129																						
	6	STD 1	102	APP FIG 6	30	STD 520	102,104	APP FIG 30					ZD	MD 110	104	APP FIG 1: 18C0, C1	ZY	STD 190	104	APP FIG 1, 2, 8	YO	MD 280	101,104, 114, 130	APP FIG 1: 7A3, E3, 8E2, 11A8, B9, H4, 26F0, F2, 33A1, A4, B6, F1, F3, F6										
B	7	STD 1	102	APP FIG 7	31	STD 520	102,104	APP FIG 31, 3G3, 16A/G4H4, 17F6, 24D1, E1, G8	FIG.R	STD 290 MD 400	104,120, 121, 122, 129, 138, 172	APP FIG R																						
	8	STD 30	102,104, 140, 144	APP FIG 8 12A/B*, C6									ZE	STD 110	104	APP FIG 1	ZZ	STD 190	102,104	34D2														
	9	STD 30 MD 190	104	APP FIG 9	33	STD 530	102,104	APP FIG 33	FIG.S	MD 280	104,118, 119, 173	APP FIG S																						
	10	STD 190	102,104	APP FIG 10	34	STD 530	101,102	APP FIG 34, 242, 10E1, G3, 17A7																										
	11	STD 240	102,104, 117	APP FIG 11: 4H5, 6A, A7, A4, 36, 37, C2, C4, 36, C7, 6B/34, 64, 12A/B9, E3, F9, 34, 24E2	35	STD 560	101,102, 104	APP FIG 35, 23B3										YA	STD 190 STD 220	102,104, 110	APP FIG K, M, 2: 3A4, 11H8, 12A/C2	YP	STD 280	104	11A2, B2, F2, G2									
	12	STD 25AC	102,104, 112	APP FIG 12	36	STD 570	102,104	APP FIG 36, 27C7					Z	STD 1	102	1488																		
	13	STD 270	102,104	APP FIG 13: 1F2, 26F0, F2	37	STD 570	102,104	APP FIG 37					Y	STD 50	102,104	5H6																		
	14	STD 270	102,104, 118, 119	APP FIG 14	38	STD 570	102,104	APP FIG 38																										
	15	STD 280	102,104, 122, 137	APP FIG 15: 1F8, 21C4, C5, 27A6	39	STD 570	102,104	APP FIG 39					X	STD 50	102,104	5H6																		
	16	STD 320	102,104, 135	APP FIG 16	40	STD 570	102,104	APP FIG 40																										
	17	STD 340	102,104, 115	APP FIG 17: 104	41	A&M 590	102A, 104	APP FIG 41																										
	18	STD 340	102,104, 115	APP FIG 18: 104	42	A&M 590	102A, 104	APP FIG 42, 43, F4, 20H1																										
	19	STD 370	102,104, 123	APP FIG 19: 1H5, 2H3, 4H5, 6A/F4, F7, 9D0, 12A/C4, C9, 13D5, 15, 15E4, 10E9, 22H0-16, 25B/G1, G6	43	STD 618	104	APP FIG 43, 5C6																										
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	21	SPL 390	104, 127	APP FIG 21: 24H5, H6, 27A8	45	A&M 590	102A, 104	APP FIG 45																										
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	23	STD 400 MD 440	104, 121, 122, 129, 138, 172	APP FIG 23	47	STD 708	102,104	APP FIG 47																										
	24	STD 440 A&M 590	102A, 104	APP FIG 24	48	STD 708	102,104	APP FIG 48																										
	25	STD 480	102,104	APP FIG 25	49	STD 788	102,104	APP FIG 49																										
	26	STD 480	102,104	APP FIG 26	50	STD 788	102,104	APP FIG 50																										
					51	STD 788	102,104	APP FIG 51																										
					52	STD 828	102,104	APP FIG 52																										
					53	STD 828	102,104, 197	APP FIG 53																										
					FIG A	STD 30 MD 140	104	APP FIG A																										
					FIG B	STD 30 MD 140	104	APP FIG B																										
					FIG C	STD 30 MD 140	104	APP FIG C 128A, B8																										
					FIG D	STD 30 MD 110	104	APP FIG D 128B																										
					FIG E	STD 30 MD 110	104, 132, 139	APP FIG E 20E1																										
					FIG F	STD 30 MD 280	104	APP FIG F 1E7, G2, 19B5, C5																										
					FIG G		104, 132, 139, 177	APP FIG G 20D7, 19, E7																										
					FIG H	STD 110 MD 270	104, 152, 161	APP FIG H: 5C1, 6B/F5, H5																										
					FIG J	STD 110 STD 270	104, 119, 123, 152, 161	APP FIG J: 6B/A5-A7, B5-B7, C2, C6, D7, F5, F6, H4, H5																										
					FIG K	STD 280	104, 114, 116	APP FIG K																										
					FIG L	A&M 280	101, 114, 115	APP FIG L																										
					FIG M	STD 280	104, 114, 116	APP FIG M																										
					FIG N	A&M 280	101, 114, 115	APP FIG N																										
					FIG O	MD 270	104	APP FIG O: 8/A1, A3, A4, B3, B4, F6, 24A, F6, H4, H7, 25B, B6, F6																										
					</																													

OPTION INDEX																															
APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REFERENCE NOTES	LOCATION				
WH	MD 43B	104	APP FIG 19, 902, E3, 29A2, B2, C3, E3, 30C1, D1	VA	STD 44D	101, 102, 104, 141	APP FIG 1	VT	MD 46D	104, 147	APP FIG J	UN	STD 48D	102, 104	1F8, 17D5, 19A/B6, E6, 19B/C3, 24F7, G7	TF	STD 50D	101, 102, 104	APP FIG 1; 5D6, G1, H2, 7C0	TY	STD 37D	102	APP FIG 19	SS	MD 52D	104, 166	12A8, E8	PK	STD 56D	101, 102, 104	APP FIG 1
				VB	STD 44D	101, 102, 104, 137	APP FIG 1	VU	STD 46D	104, 147	APP FIG J					TG	MD 50D	104, 152	12F1	TZ	STD 52D	102, 104	APP FIG 30, 11C5	ST	STD 52D	104, 166	12A8, E8	RL	STD 53D	104, 122, 129, 172, 175	APP FIG 1
WI	STD 43B	101, 102, 104	APP FIG 19, 902, E3, 1507	VC	MD 44D	104, 139	2A1, 884, E6, 21D2	VV	STD 46D	101, 102, 104	APP FIG 19; 19A/H4, 39H6	UP	MD 48D	104, 155	APP FIG 1	TH	STD 50D	104, 152	12F1					SU	MD 52D	104, 166, 167	14B0, C8, D0, E0				
WJ	MD 41AC	104	24G2	VD	STD 44D	104, 139	2A1, 884, D6, 21D2	VW	STD 44D	102, 104	28A4, C4	UQ	STD 48D	104, 155	APP FIG 1	TI	STD 50D	102, 104	APP FIG 1					SV	STD 52D	104, 166, 167	APP FIG 8				
WK	STD 41AC	102, 104	24G2	VE	STD 44D	104, 150	APP FIG 1	VX	STD 44D	102, 104	19B/C0, D0	UR	STD 48D	102, 104	1E7, 18F0	TJ	MD 48D	104, 156	APP FIG 26					SH	STD 53D	102, 104	3C1, 17A7-E7	RH	MD 56D	104, 176	APP FIG 1
WL	STD 42AR	102, 104, 115	104					VY	STD 46D	104, 150	APP FIG 1	UT	STD 48D	102, 104		TK	STD 48D	104, 156	APP FIG 26	SA	MD 62A (AC)	104, 158	APP FIG 14	SX	STD 53D	102, 104	12B/D0, F0	RO	STD 56D	102, 104, 176	APP FIG 1
				VF	STD 44D	101, 102, 104	APP FIG 1; 12A/FO, 18B4, C4, 23F6, 32A7, B7	VZ	MD 44D	104, 151	21D7, E7					TL	STD 50D	102, 104	5G1, F1, 7A5, E5, 18B1, C1, 20E2	SB	STD 62A (AC)	104, 158	APP FIG 14	SY	STD 53D	102, 104	APP FIG 13, 33	RP	STD 56D	101, 102A, 802, 15G7	APP FIG 1
WM	MD 43B	104, 134	APP FIG 11	VG	STD 44D	101, 102, 104	APP FIG 1	UA	STD 44D	102, 104, 181	APP FIG 1	UU	STD 48D	104, 153, 174	APP FIG 1; 19B/B3, E3	TM	MD 50D	104, 160	APP FIG 8	SC	STD 52D	102, 104	APP FIG 1	SZ	STD 44D	104, 139, 169	APP FIG 1	RQ	MD 55A	104, 177	1F6, D8, 19B/B6, D6
WN	STD 43B	104	APP FIG 11	VH	MD 44D	104, 191	12A/E5, 20E7	UB	STD 44D	104, 151	APP FIG 1	UV	MD 48D	104, 174	19B/B3, E3	TN	STD 50D	104, 160	APP FIG 8	SD	STD 44D	107, 104	APP FIG 1	RA	(102) STD 52D	102, 104	APP FIG 1	RS	STD 55A	104, 143, 177	APP FIG 6
WO	STD 40D	102, 104	20E5, G4	VI	STD 44D	104, 191	APP FIG 1	UC	STD 44D	102, 104	1F8	UW	STD 48D	102, 104	6A/A6, C6, 20E6, 30A8-C8, D9, G8, H7, 32D9, E8	TO	STD 50D	102, 104	APP FIG 1	SE	STD 62A (AC)	102, 104	15D5	RB	(102) STD 48D MD 52D	104, 169, 180	38G9	RT	STD 53D	104, 121, 138, 172, 175	APP FIG 1
WP	STD 44D	101, 102, 104, 127, 135	APP FIG 1	VJ	MD 44D	104, 139, 169	APP FIG 1	UD	SPL 44D	104, 136	7B5	UX	STD 48D	101, 102, 104	APP FIG 1; 11, 4E9, 32H4	TP	STD 52D	102, 104	14B1, D1	SF	STD 48D	102, 104	APP FIG 27, 27F7, G7	RC	(102) STD 48D STD 52D	104, 169, 180	38G9	RU	STD 57D	102, 104	APP FIG 1
WR	SPL 44D MD 46D	104	11E8, 21D5, E5	VL	STD 44D	104, 142	APP FIG 1	UE	STD 48D	102, 104	5D3, G3, 7C0	UY	STD 50D	102, 104	5F7, 68/C2, D6, 7F0	TQ	STD 52D	102, 104	APP FIG 8	SG	STD 53D	102, 104	1F3, 26C2	RD	STD 53D	102, 104	17A6	RV	STD 57D	101, 102, 104	APP FIG 1
WS	STD 44D MD 59D	104, 181	APP FIG 1; 4E8, G2, 7B2, E2, 10C0, D5, G0, G5, 18G2	VM	STD 44D	104, 143, 144	12A/G2, G3, 13C3	UF	STD 48D	101, 102, 104	5D3, G5	UZ	STD 50D	101, 102, 104	APP FIG 1; 68/C2, D5, D6, D7, E4	TR	STD 52D	104, 162	APP FIG 1	SH	STD 53D	102, 104	1F3, 26D3	RE	STD 53D	102, 104	16A/D3, G5	RW		102	APP FIG 1
				VN	MD 44D	104, 143, 177	APP FIG G	UG	MD 48D	104	APP FIG 1, 6	TA	A&M 50D	101, 102A, 104	APP FIG 1; 21C6	TS	STD 52D	102, 104	APP FIG 30, 1	SI	STD 52D	102, 104, 163	9G3	RF	STD 52D	102, 104	APP FIG 7, 16A/F1, H1, H3	RZ	STD 59D	102, 104	APP FIG 44, 23A7, D7, 25B/G4
WT	STD 44C	101, 104, 121, 123, 137, 138, 139, 175	APP FIG 1; 12A/C3, G0	VU	STD 44D	101, 104, 143	APP FIG G	UH	STD 48D	104	APP FIG 1	TT	STD 52D	102, 104	APP FIG 30, 45C8	TU	STD 62A (AC)	102	APP FIG 1, 15D4	SK	STD 53D	102, 104	APP FIG 7, 16A/D3, G5	RG	STD 52D	102, 104	16A/FO, H0	QA	STD 53D	102, 104	APP FIG 1, 2C6
WU	STD 44D	101, 102, 104, 137, 181	APP FIG 1; 8C7, D7, 181	VV	STD 44D	101, 104, 143	APP FIG G	UI	MD 48D	104, 152	APP FIG 1	TV	STD 52D	102, 104	APP FIG 30, 45C8	TD	STD 50D	102, 104	APP FIG 1	SL	STD 52D	102, 104	APP FIG 7	RH	STD 53D	102, 104, 171	APP FIG 1	QB	A&M 59D	102A, 104	APP FIG 41, 4F2, F3
WX	STD 41D	102, 104, 181	APP FIG 1	VP	MD 44D	104, 146	11H3	UJ	STD 48D	104, 152	APP FIG 1	TW	STD 50D	102, 104	1B1	TX	STD 50D	102, 104	1B2	SM	MD 53D	104, 165	13E0, E1	QC	A&M 59D STD 7CB	102A, 104 102	APP FIG 1	QD	A&M 59D	102A, 104	APP FIG 1
				VQ	STD 44D	104, 146	11H2, H3	UK	STD 48D	102, 104	1G8, 2A2, 10C5, G5, 11A7, H6, G7, 13C2, D1, 17D6, 18B0, 19A/B6, E6, 19B/B3, 24E9, H9, 25B/C1, F1	TC	STD 50D	102, 104	5D4, E7, F1, F4					SN	STD 53D	104, 165	13D0, D1	QE	MD 61B	104, 180	2E4	QF	STD 61B	104, 180	APP FIG 1
WY	STD 44D	104, 138, 139, 142, 175	APP FIG 1	VR	A&M 44D	104, 145	APP FIG 15	UL	STD 48D	104, 152	APP FIG 1	TE	MD 50D	104	APP FIG 1; 5E6, E7, G4, 7C0									QG	STD 59D	102A, 104	20E0				
WZ	STD 41D	101, 102, 104	APP FIG 1	VS	STD 44D	102, 104, 148	21G8																								

MASTER TEST FRAME TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES INCORPORATED

SD-25918-01-A9

ISSUE 82B

OPTION INDEX									
	APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION	APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION	
A	QH	MD 62A (AC)	104, 139, 182	4H2, 12A/H1, 18B5, C5, 19A/E8, 23G3	PG	A&M 59D	102A, 104	APP FIG. 41	A
					PH	STD 28C	102, 104	APP FIG. 1	
	QI	STD 62A (AC)	104, 139, 184	4H2, 19A/E8, 23G3	PI	MD 68A	104, 192	APP FIG. 25	
B	QJ	STD 62A (AC)	102, 104, 139	APP FIG 14, 32H1	PJ	STD 68A	104, 192	APP FIG. 1	B
	QK	STD 62A (AC)	102, 104	2005, 32G7, 68	PK	STD 69D	102, 104	APP FIG. 1	
	QL	STD 62A (AC)	102, 104	2005, 32G6, 68	PL	STD 70B MD 77B	102, 104	APP FIG. 1	
C	QM	A & M 62A (AC)	104, 183	APP FIG 1	PM	STD 69D	102, 104	APP FIG. 1, 1A7, 28E4	C
	QN	A & M 63D	104, 184	APP FIG 1	PN	MD 70B	104, 194	6B/E6, F5, F7, G4, G5, G7	
	QO	A & M 63D	104, 184	APP FIG 1	PO	STD 70B	104, 194	6B/E5, E6, F6, F7, G4, G5, G7, H7	
D	QP	A & M 63D	104, 184	APP FIG 1	PP	STD 73B	104	APP FIG. 1	D
	QQ	STD 63D	104, 184	APP FIG 1	PQ	MD 72A	104, 195		
	QR	MD 59D	104, 186	APP FIG 1	PR	STD 72A		19A/G1	
E	QS	A&M 59D	104, 186	APP FIG 1	PS	STD 73B	104, 196	APP FIG. 1, 19A/G0	E
	QT	STD 66D	102, 104	APP FIG. 1	PT	A&M 73B	102A, 104	APP FIG. 1 19B/G0, H1	
	QU	STD 59D	102, 104	23A7, 08	PU	STD 74A (AC)	102	APP FIG. 1	
F	QV	A&M 66D	104, 187	APP FIG. 1	PV	STD 77B (AC)	102, 104	APP FIG. 8	F
	QW	STD 69D	102, 104	57B2, C1, C3	PW	STD 77B (AC)	102, 104	APP FIG. 1	
	QX	STD 69D	102, 104	APP FIG. 44, 10G1, 15D3, 19A/D5, 20B7, 57B2, B7, C3, C7, D1, D6, D7, F1	PX	STD 77B (AC)	102, 104	APP FIG. 1	
G	QY	STD 69D	102, 104	APP FIG. 1	PY	STD 77B	102	6A/D7	G
	QZ	STD 69D	102, 104	APP FIG. 1	PZ	A&M 77B	102A	2B6	
	PA	STD 69D	102, 104	APP FIG. 1	OA	STD 78B	102, 104	2008	
H	PB	STD 69D	102, 104	APP FIG. 1	OB	STD 78B	102, 104	2007	H
	PC	STD 69D	104, 189	APP FIG. 1	OC	STD 11D	102	34F2	
	PD	A&M 68A	102A, 104	13D2, E2, 15G7	OD	STD 11D	102	34F2	
	PE	STD 57L	104, 190	APP FIG. 1	OE	STD 82B	102, 104	12A/B6, C6, C7	
	PF	A&M 59D	104, 190	APP FIG. 1	OF	STD 82B	102, 104	12A/B6, B7	
					OG	STD 82B	102, 104, 197	12A/A3, B6 28A4, 04	
					OH	STD 82B	102, 104	12A/B6	
					OI	STD 82B	104, 197	28A4, C4	
					OJ	STD 83A (AC)	102, 104	7D0	
					OK	STD 83A (AC)	102, 104	APP FIG 1	

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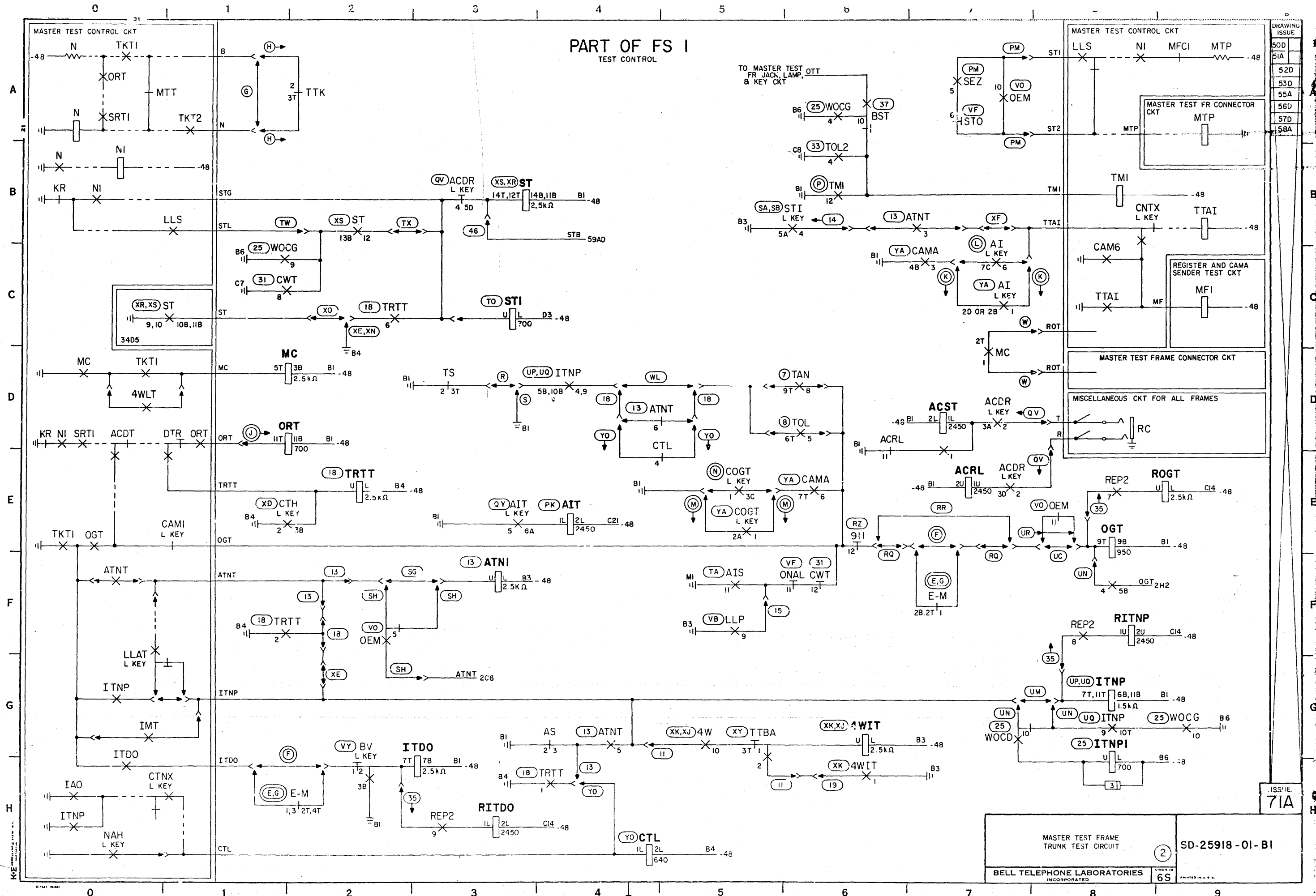
MASTER TEST FRAME
TRUNK TEST CIRCUIT

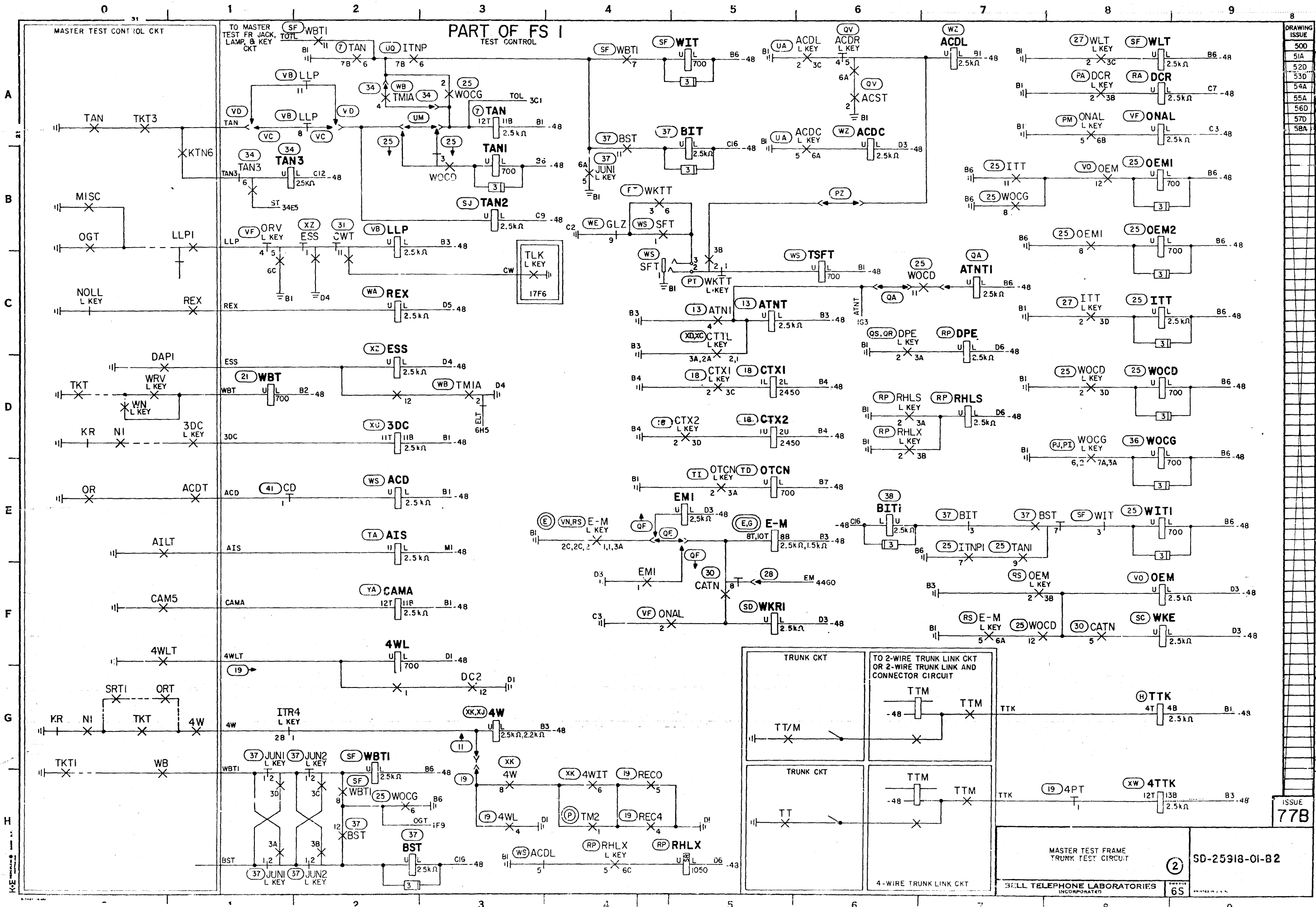
2

SD-25918-01-A10

BELL TELEPHONE LABORATORIES
INCORPORATED

6S





DRAWING
ISSUE
500
51A
52D
53D
54A
55A
56D
57D
58A

ISSUE
77B

MASTER TEST FRAME
TRUNK TEST CIRCUIT

3M TELEPHONE LABORATORIES
INCORPORATED

6S

SD-25918-01-B2

PART OF FS I

TEST CONTROL

DRAWING
ISSUE
53D
55A
56D

AUTO. PROG TRUNK TEST CKT

CAM

MA TEST CONT CKT

TKT I

CATN L KEY

TOL

TKT 3

CWI

CWRL

CWTV

CLT

CW

CLT

CWC

CWT

CLT

MA TEST FR VOLTMEETER
TEST CKT

T L KEY

KR3

MFC2

LVOK CWH

MFC

CWL

CWL

CWL

CWL

CWL

CWL

CWI

CWRL

CWL

CWL

CWL

CWL

CWL

CWL

CWL

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CWI

CWRL

CWL

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YE CAMAI

ZY CEMI L KEY

YE EM

81 -48

226

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YE CAMAI

ZY CEMI L KEY

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ZY CEMI L KEY

YE EM

81 -48

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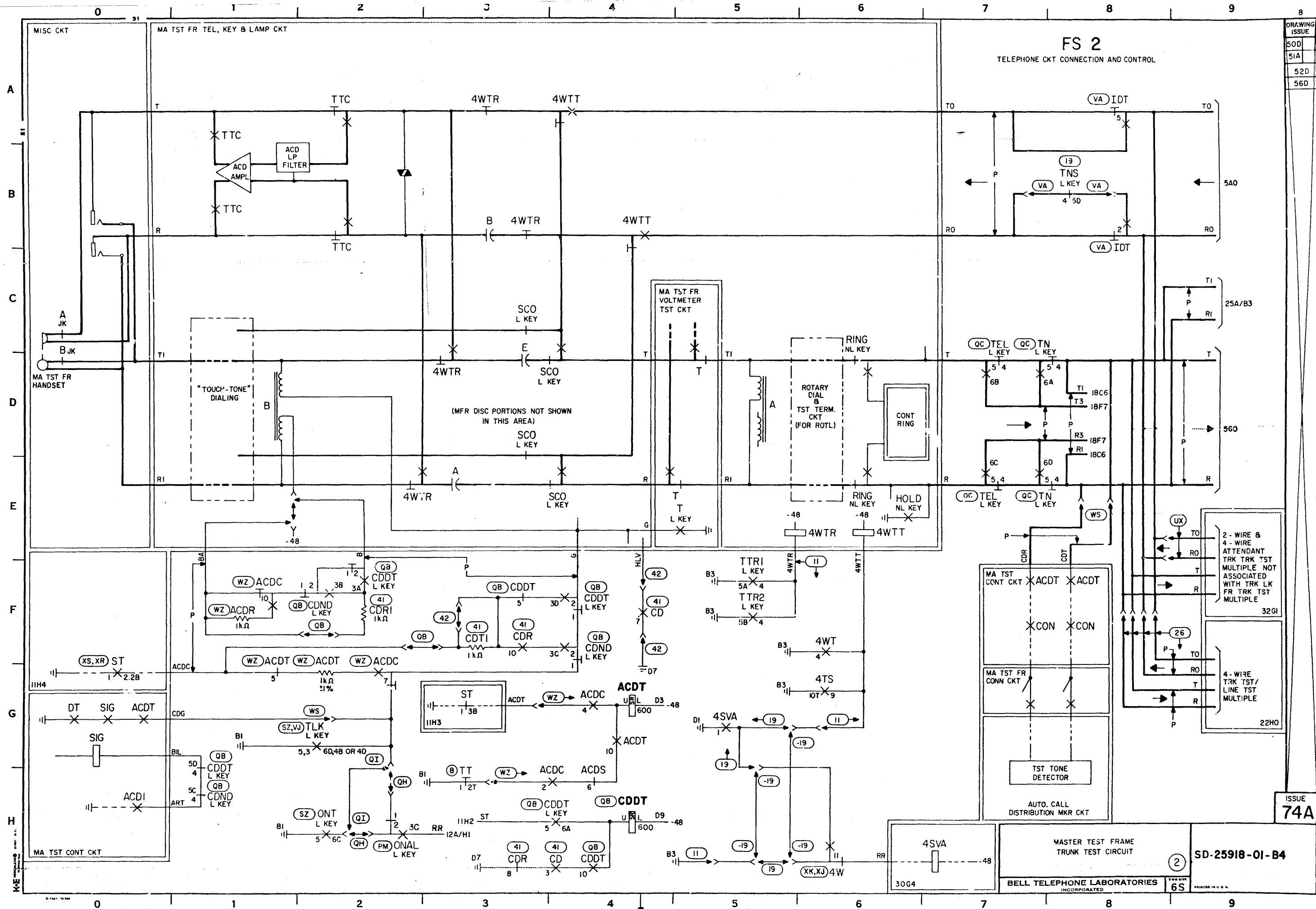
3

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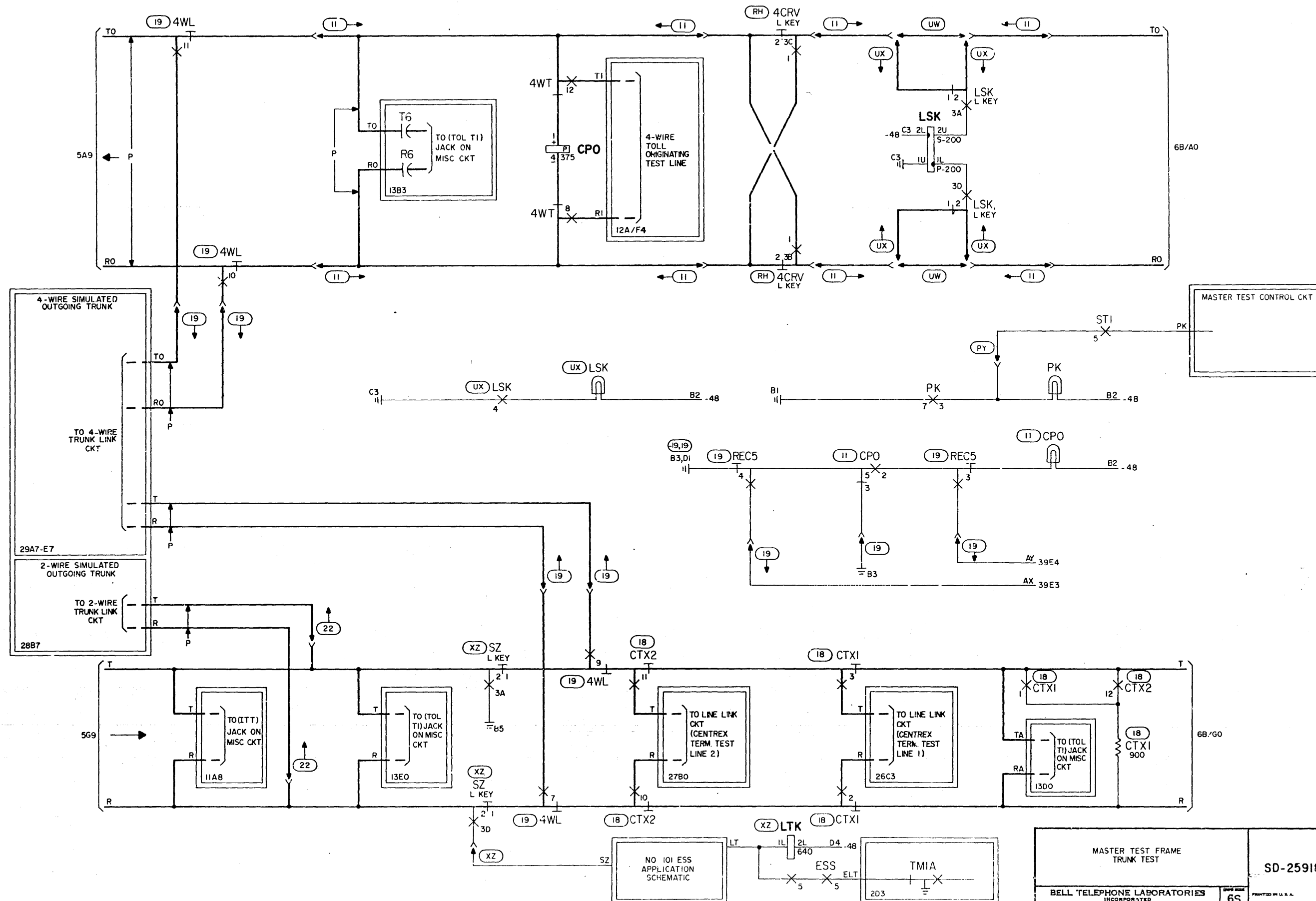
3





PART OF FS 4

ORIGINATING CONTROL



82B

SD-25918-01-B6A

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

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ORIGINATING CONTROL

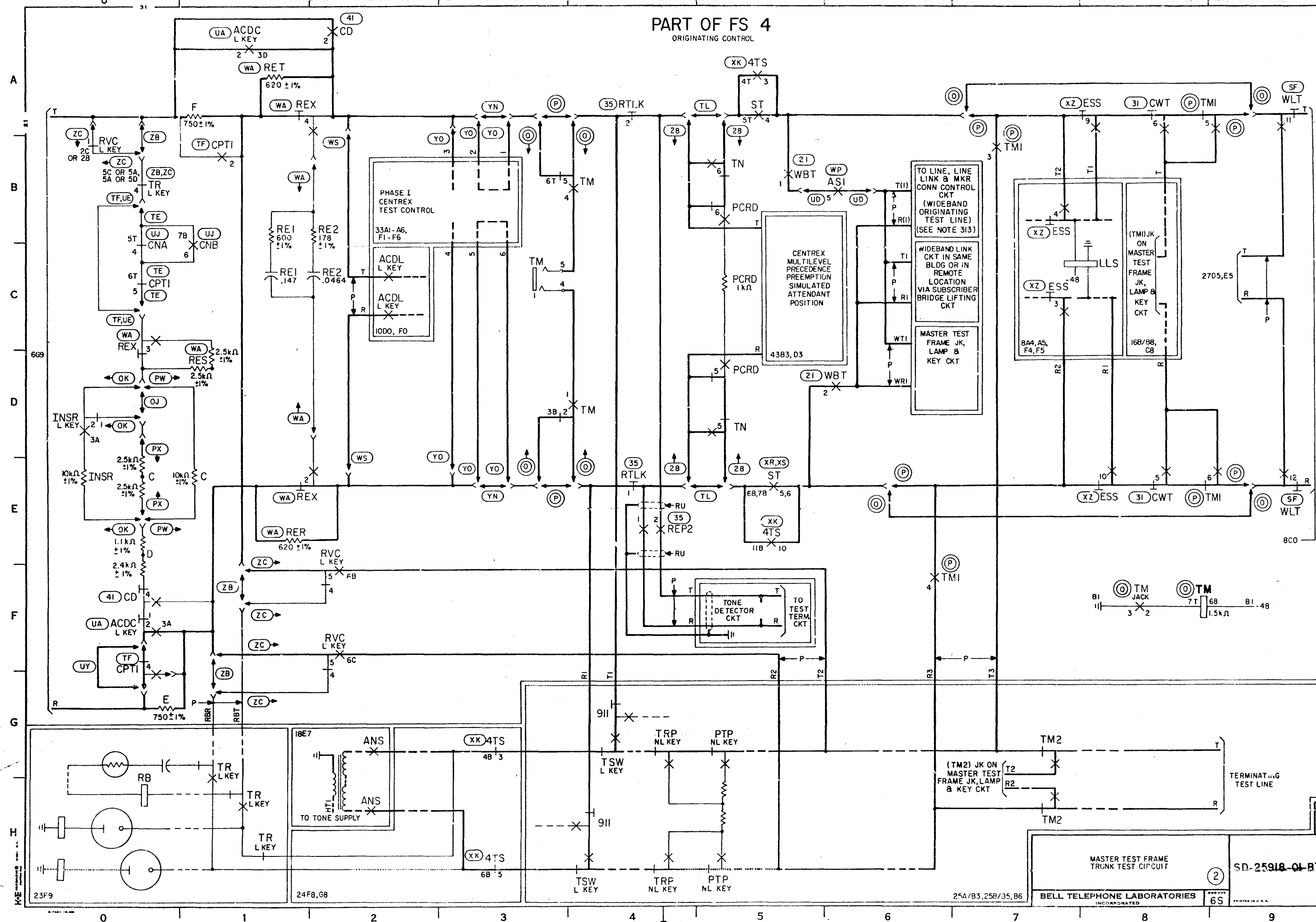


- ISSUE
74A

SD-25918-01-B68

PART OF FS 4 ORIGINATING CONTROL

DRAWING
ISSUE
50D
51A
52D
54A
55A
56D
57D
58A



ISSUE
83A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

25A/B3, 25B/35, B6

BELL TELEPHONE LABORATORIES
INCORPORATED

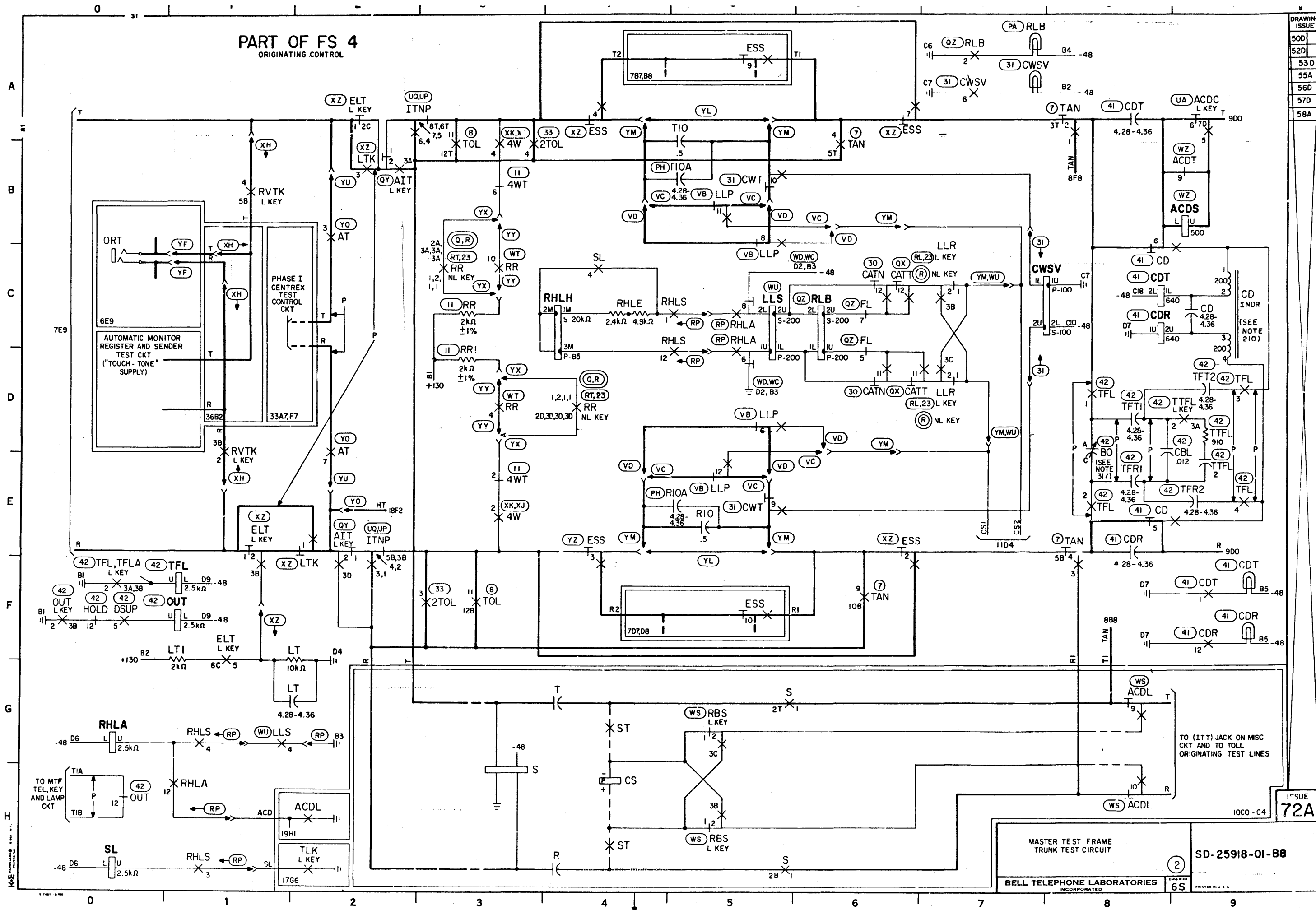
SD-25918-01-B7

6S

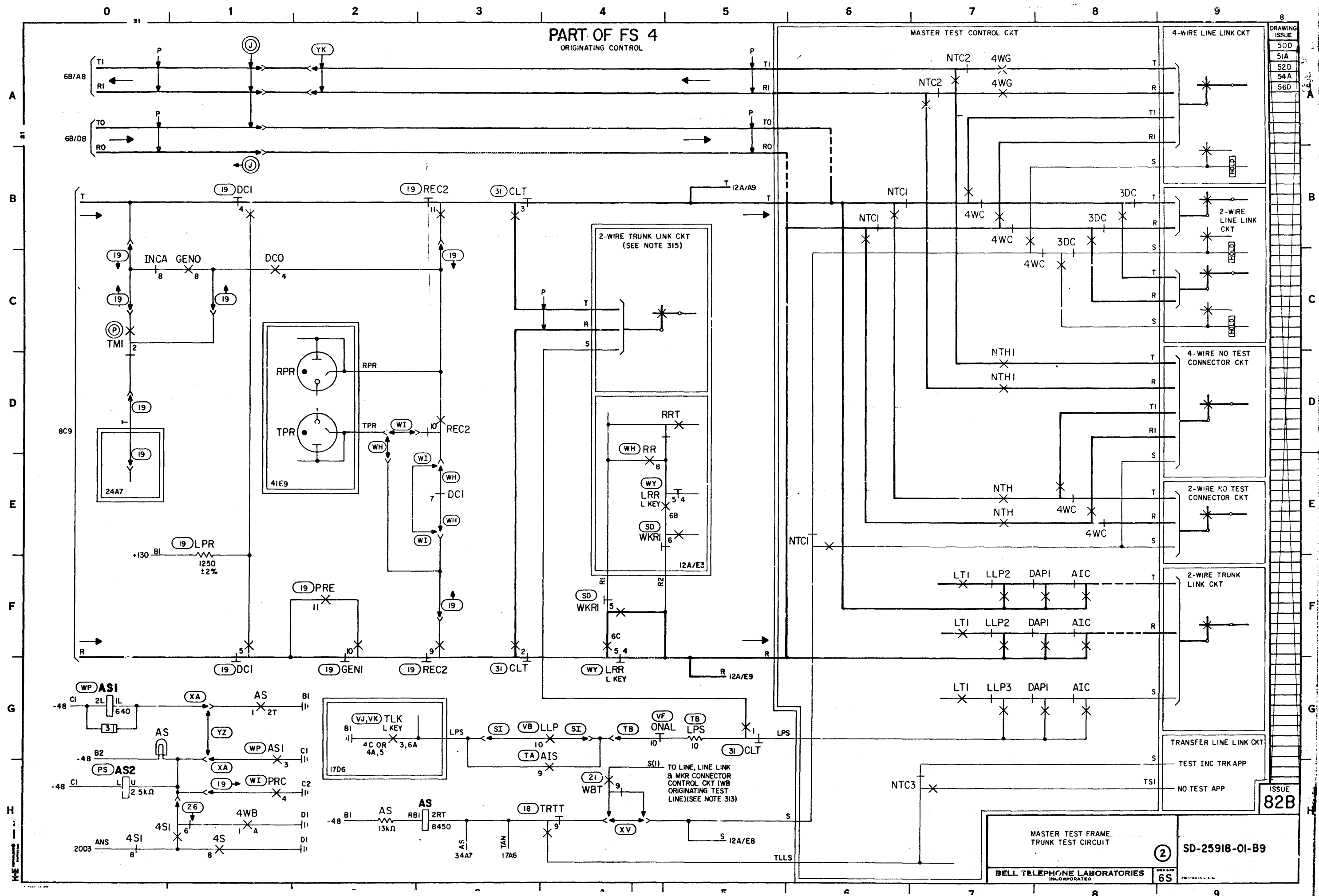
PRINTED IN U.S.A.

SD-25918-01-B7

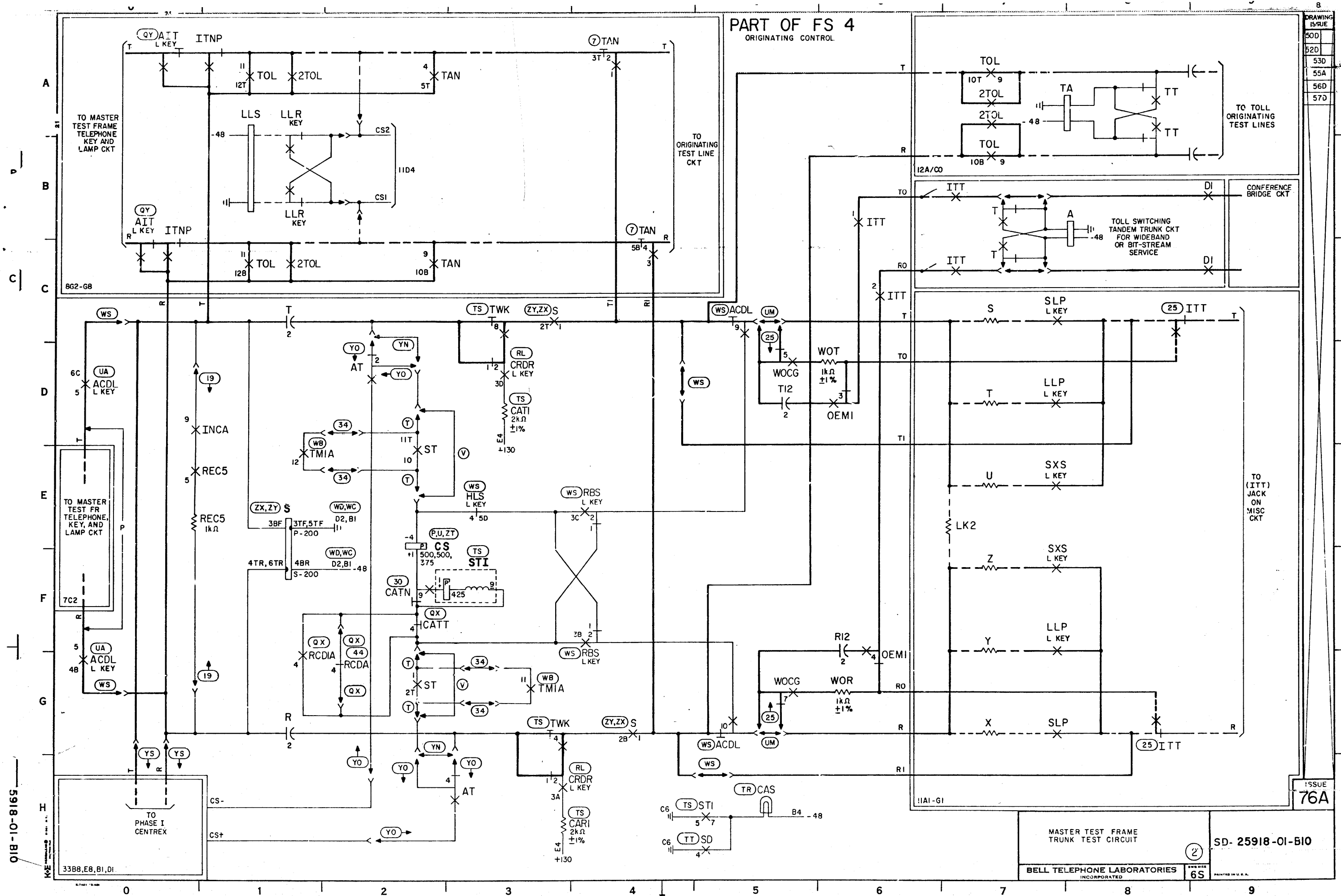
PART OF FS 4 ORIGINATING CONTROL



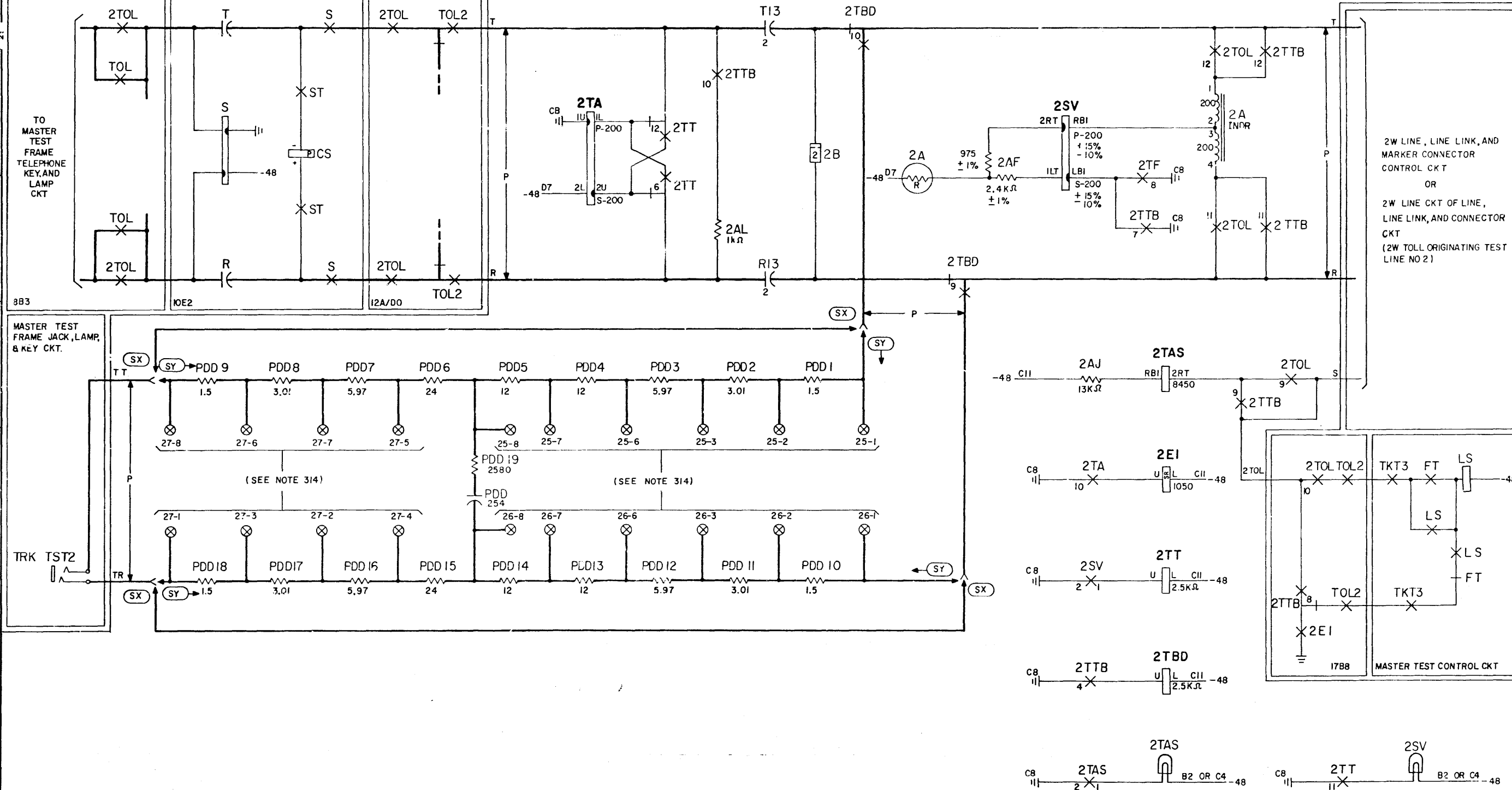
SD-25918-01-B8



SD-25918-01-B9



PART OF FS 6
TOLL ORIGINATING TEST LINES
(SEE NOTE 1)



2W LINE, LINE LINK, AND
MARKER CONNECTOR
CONTROL CKT
OR
2W LINE CKT OF LINE,
LINE LINK, AND CONNECTOR
CKT
(2W TOLL ORIGINATING TEST
LINE NO 2)

MASTER TEST CONTROL CKT

NOTES:

- ALL APPARATUS AND WIRING IS PART OF APP FIG 33
UNLESS OTHERWISE SPECIFIED.

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BEL. TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-B12B

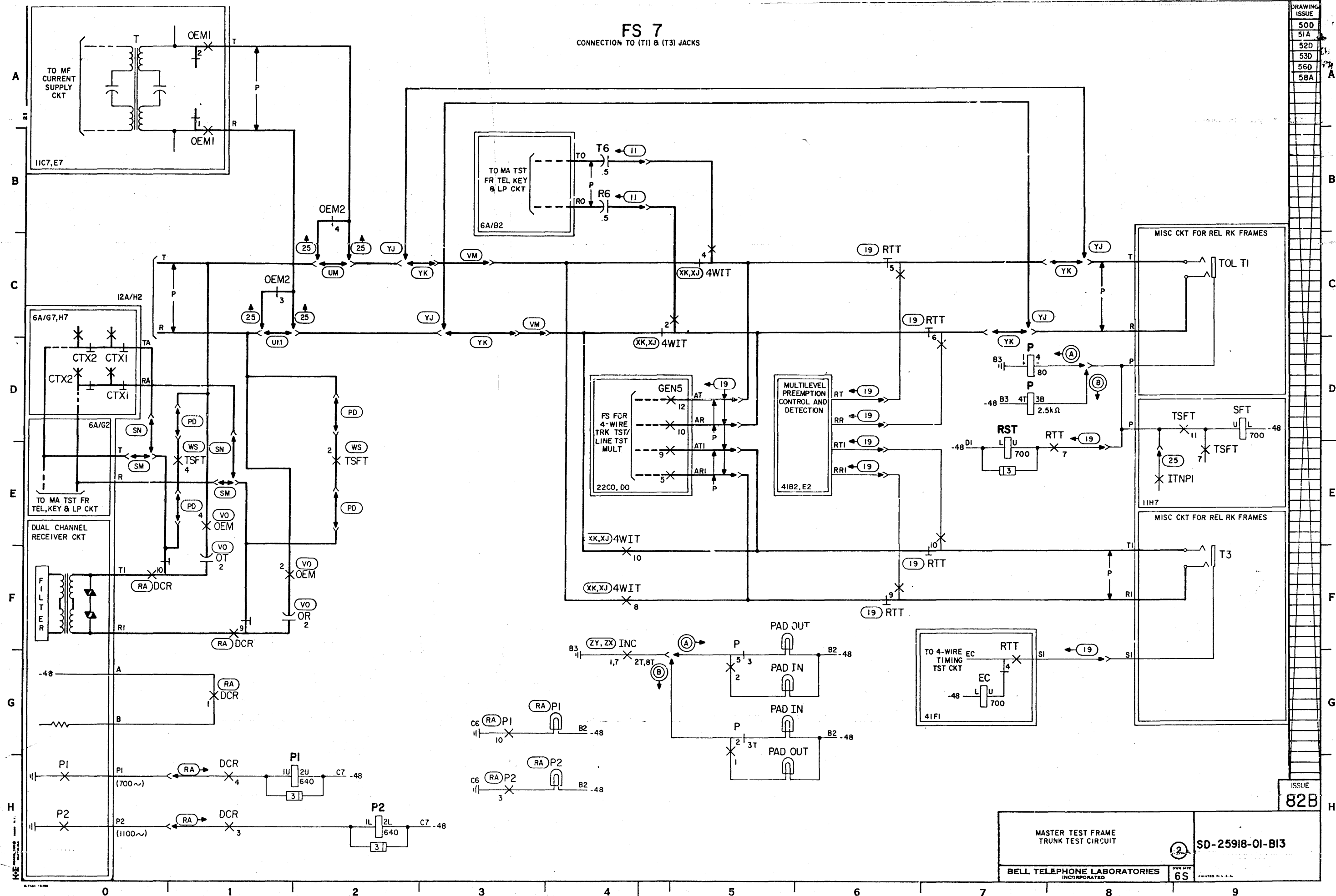
2

6S

ISSUE
82B

SD-25918-01-B12B

FS 7 CONNECTION TO (T1) & (T3) JACKS

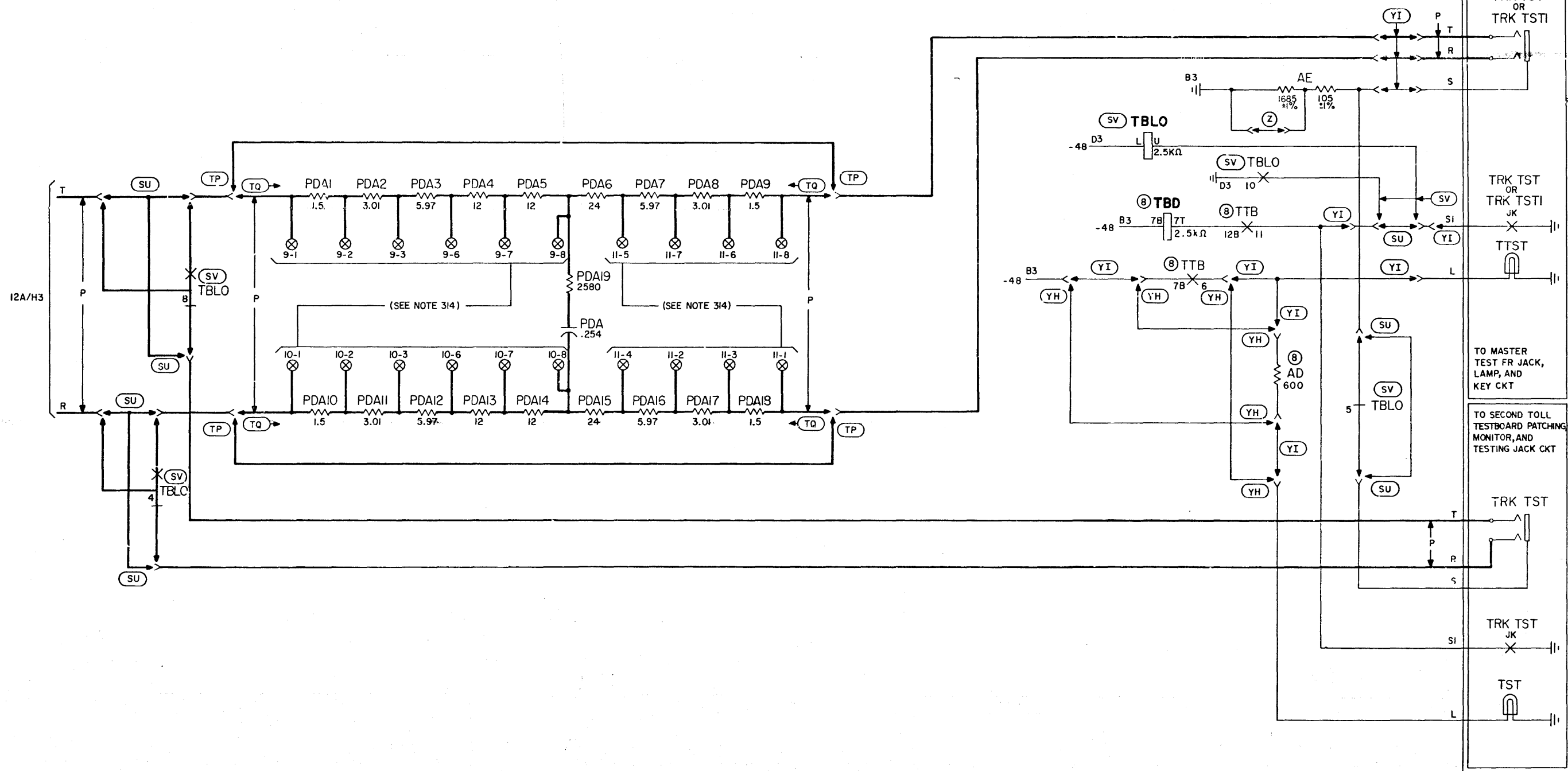


DRAWING
ISSUE
500
51A
52D
53D
56D
58A

ISSUE
82B

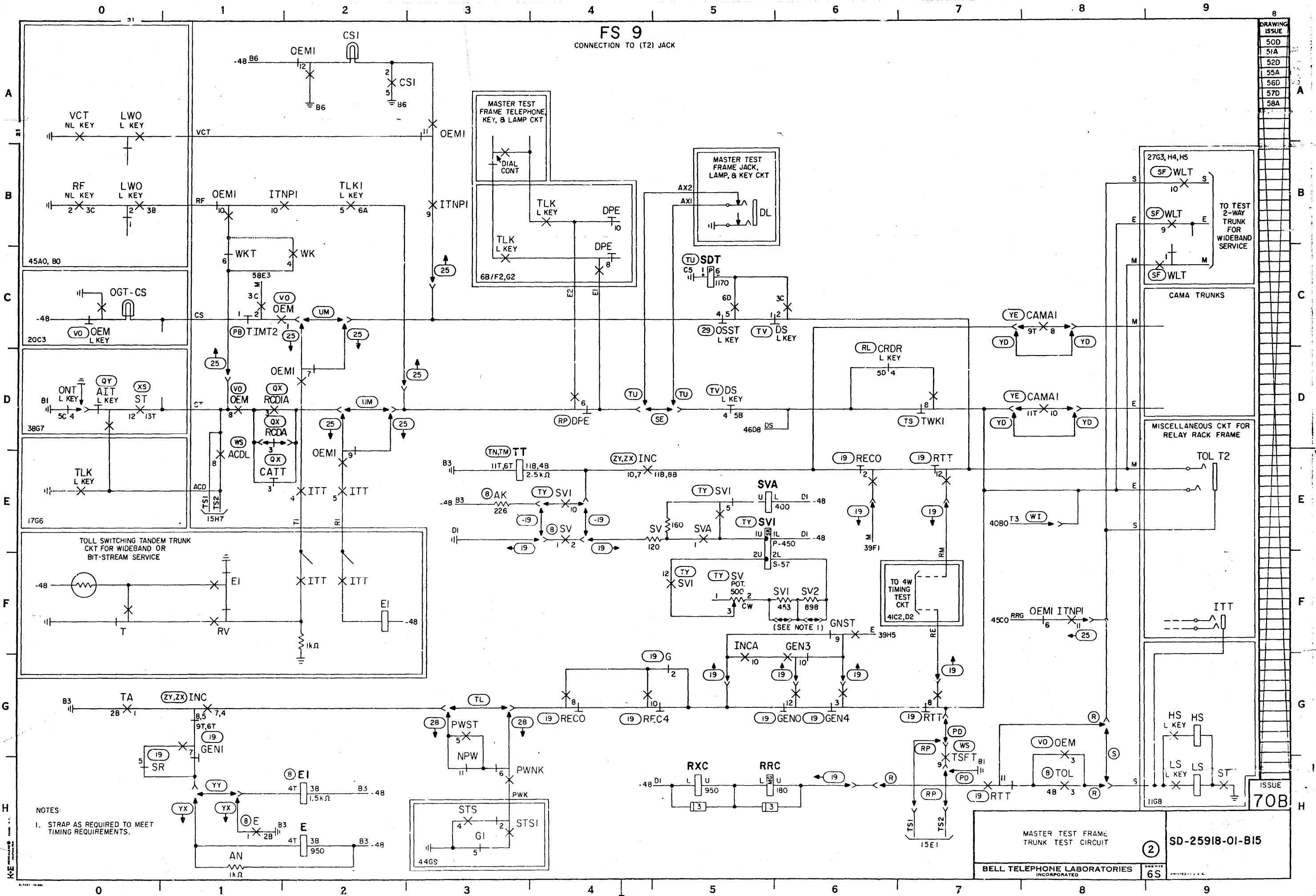
SD-25918-01-B13

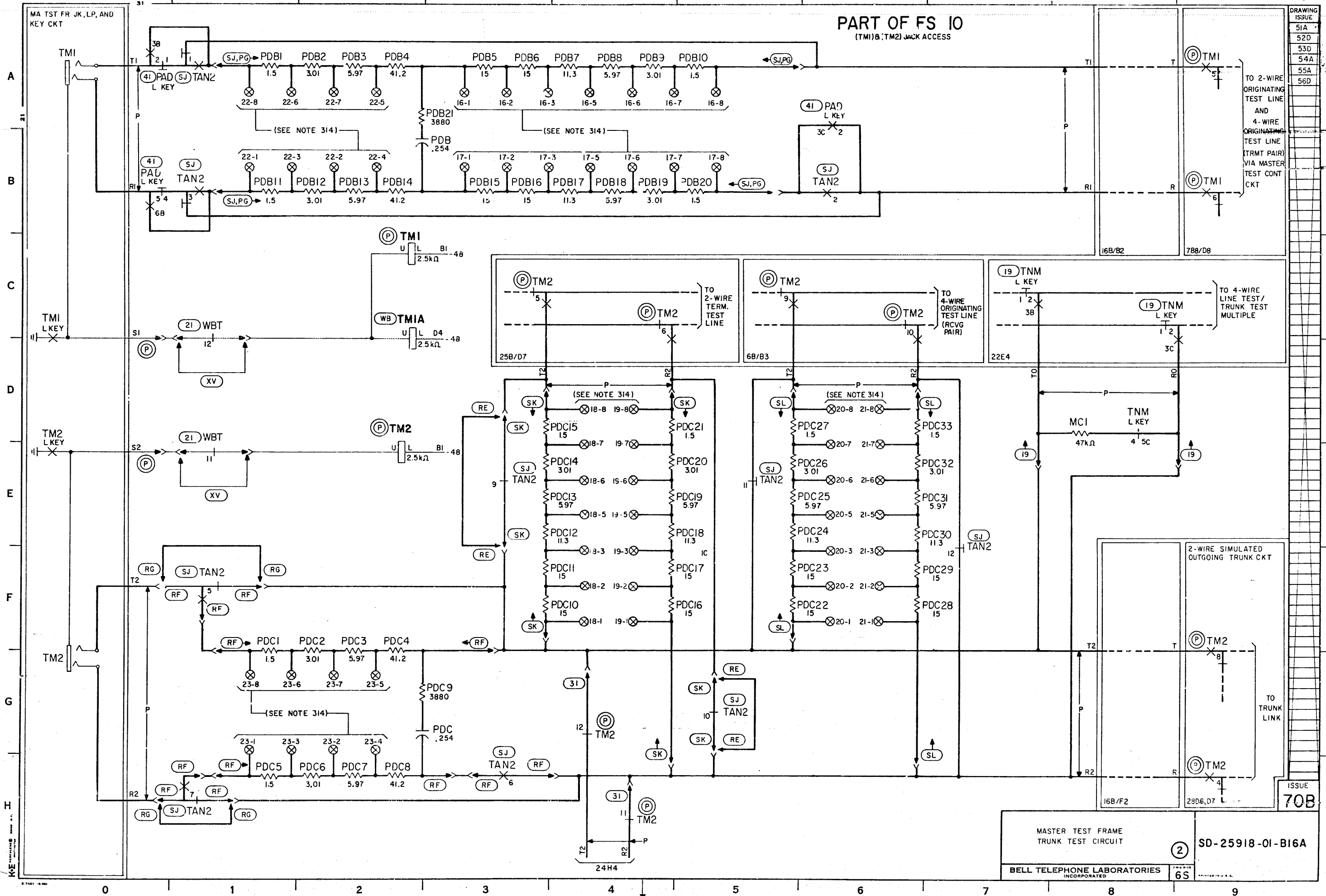
FS 8 TESTBOARD ACCESS



DRAWING
ISSUE
50D
52D
53D
58A

ISSUE
82B

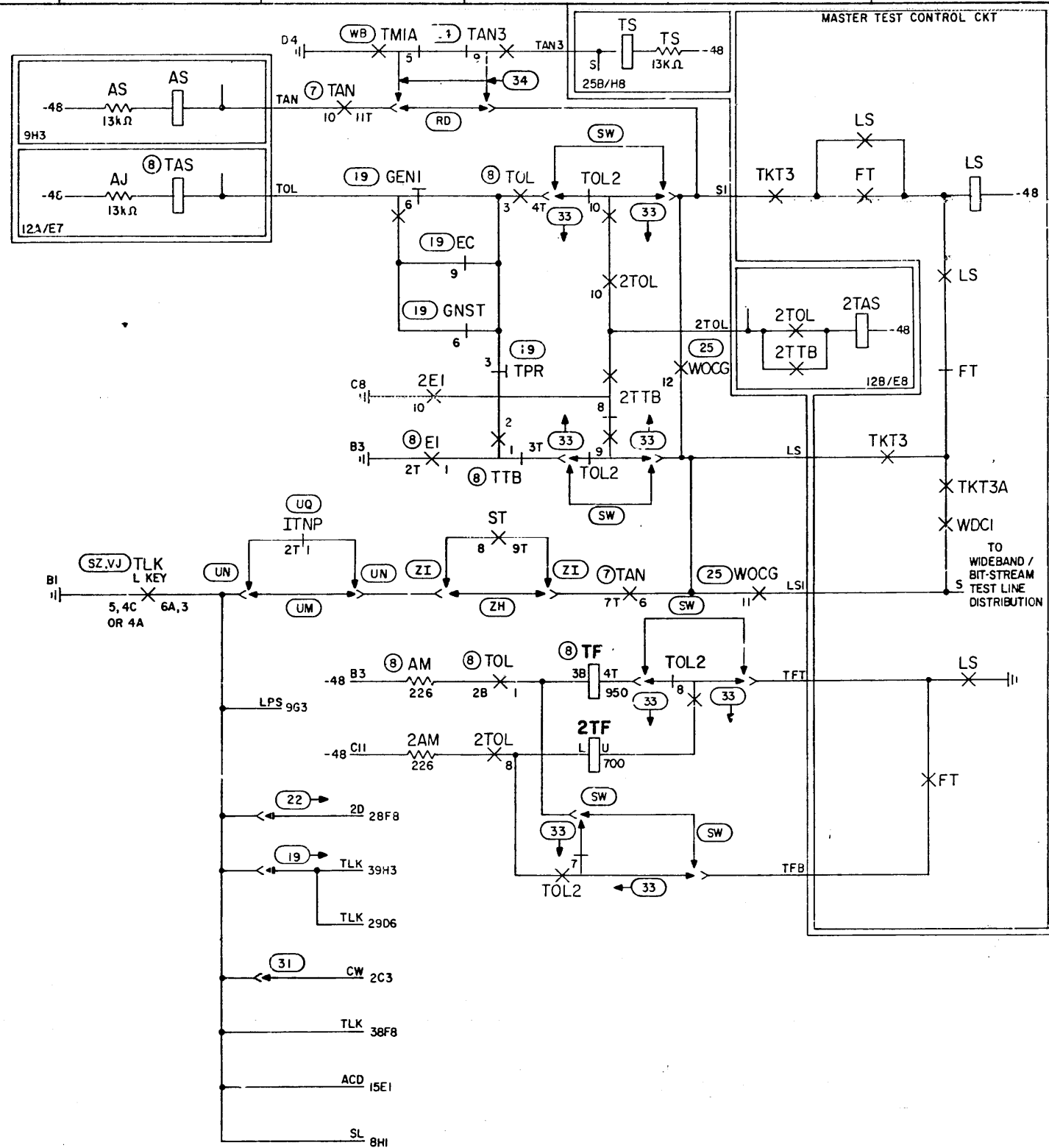




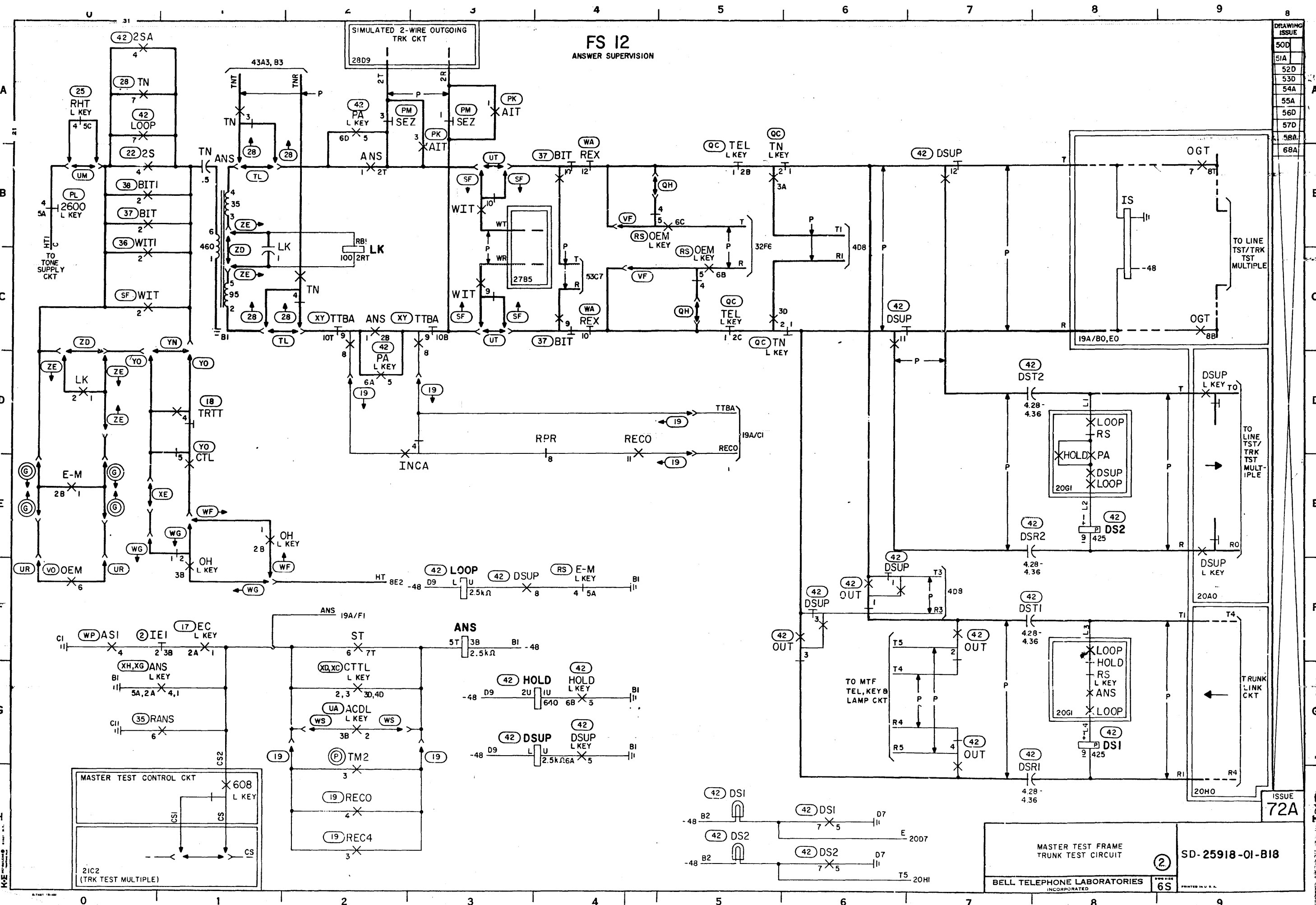
(TM1) AND (TM2) JACK ACCESS



FS II TANDEM/TOLL SLEEVE CONTROL



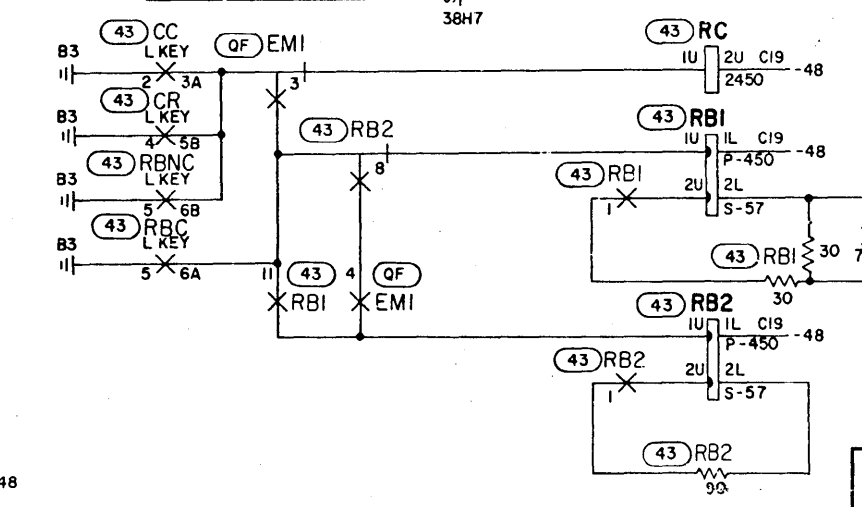
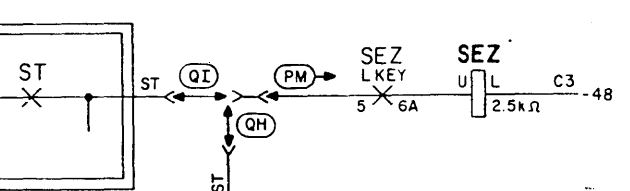
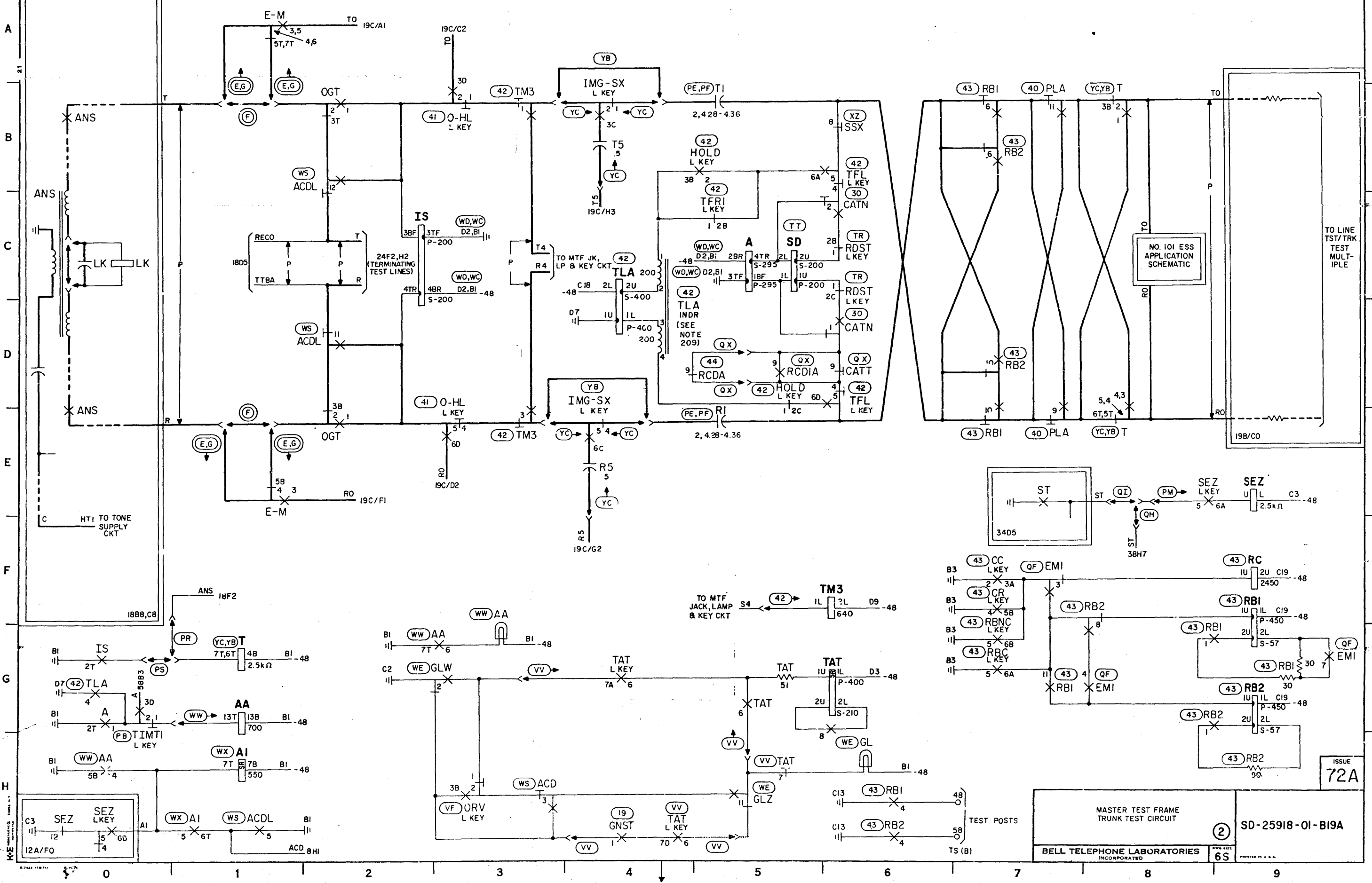
DRAWING	ISSUE
50D	
52D	
53D	
55A	
56D	
58A	
82B	



SD-25918-01-B13

DRAWING ISSUE	
500	
51A	
52D	
53D	
54A	
55A	
56D	
57D	
58A	
68A	
ISSUE 72A	
MASTER TEST FRAME TRUNK TEST CIRCUIT	
BELL TELEPHONE LABORATORIES INCORPORATED	
SD-25918-01-B13	
6S	

PART OF FS 13 TRUNK TEST/LINE TEST MULTIPLE CONTROL

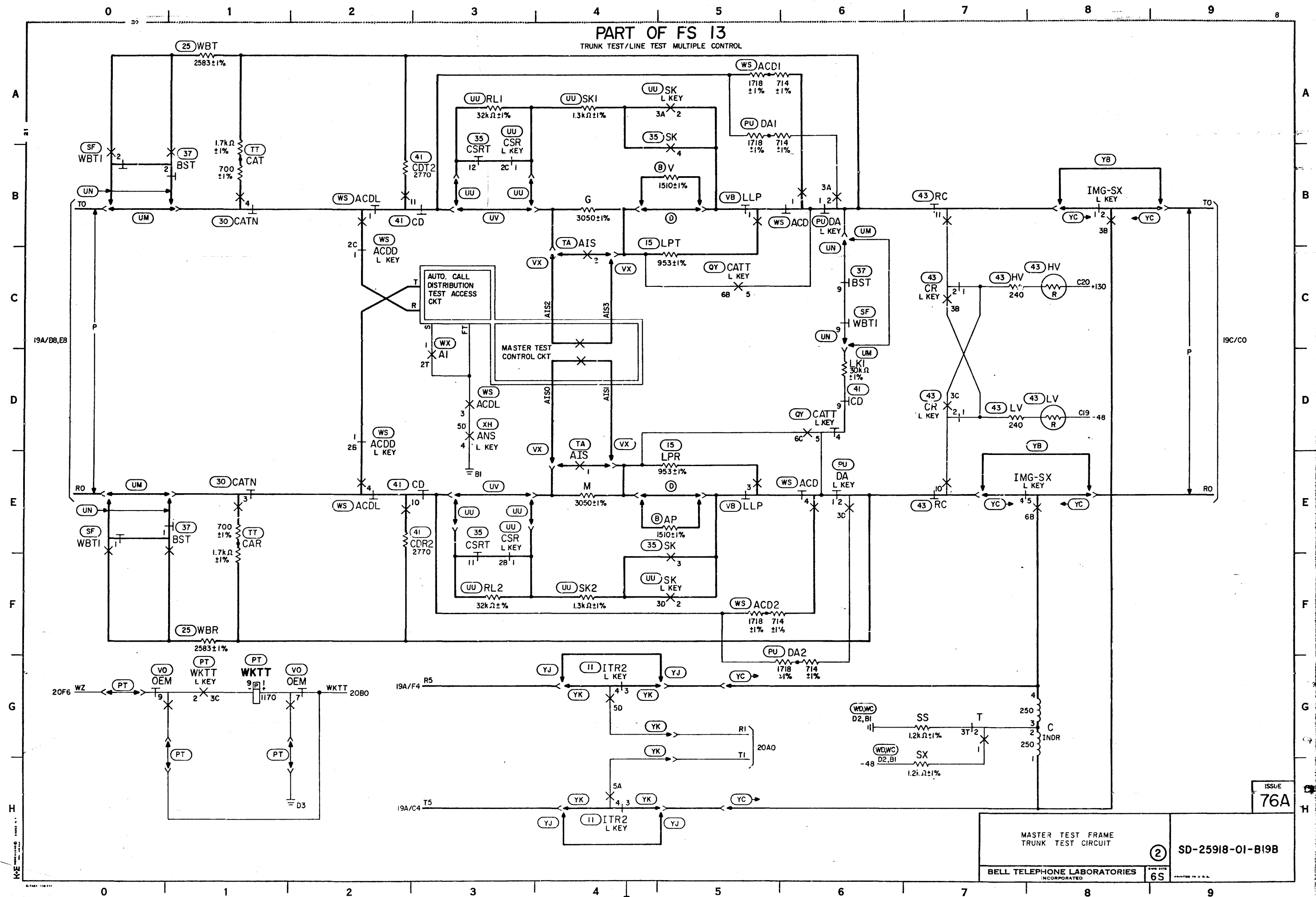


MASTER TEST FRAME
TRUNK TEST CIRCUIT

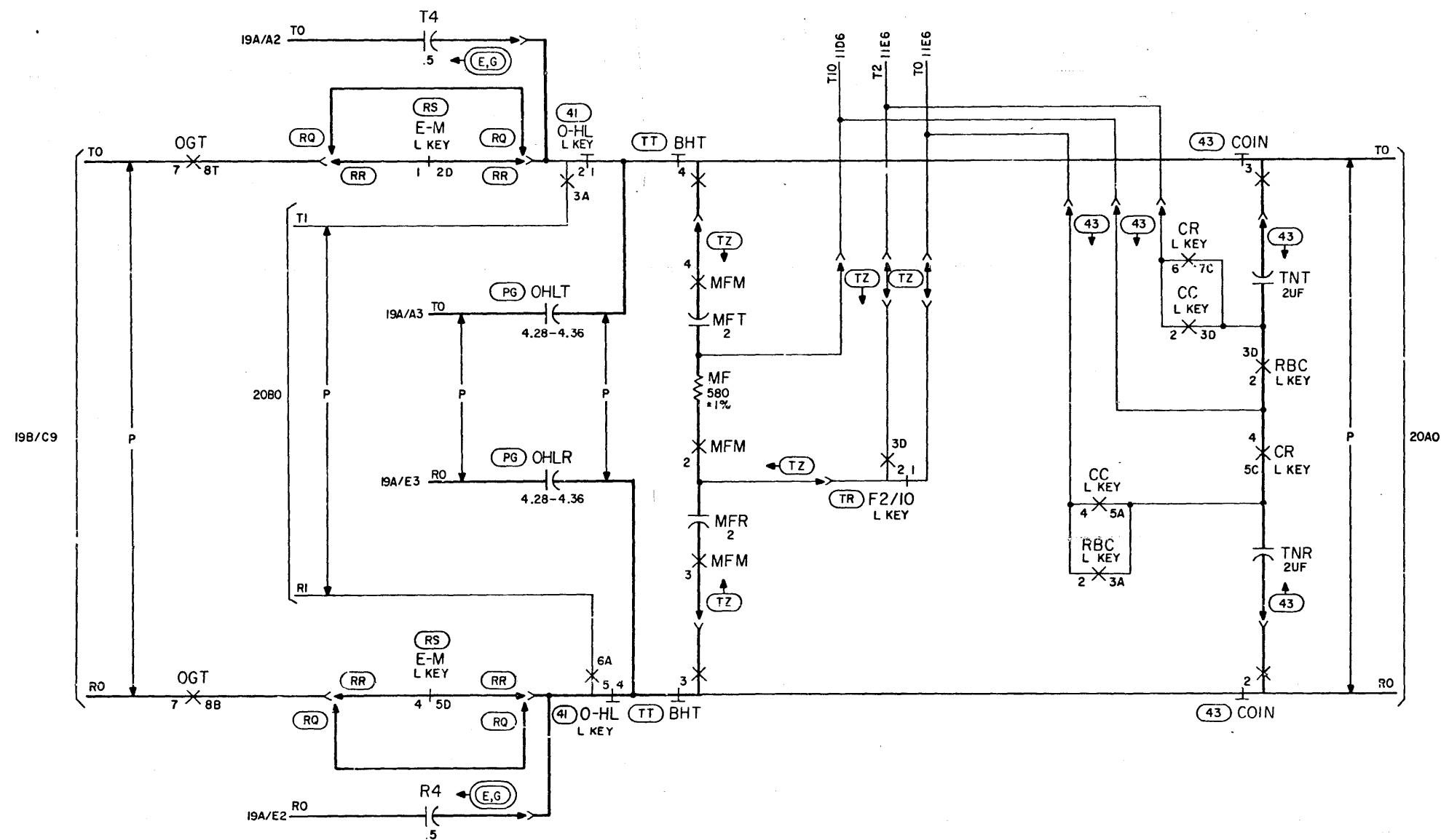
BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-B19A

6S



PART OF FS 13 TRUNK TEST/LINE TEST MULTIPLE CONTROL



ISSUE
76A

PART OF FS 13 TRUNK TEST/LINE TEST MULTIPLE CONTROL

DRAWING
ISSUE
50D
51A
54A
55A
56D
57D

21EO
(2-WIRE
TRUNK
TEST/
LINE TEST
MULTIPLE)

22GO
(4-WIRE
TRUNK
TEST/
LINE TEST
MULTIPLE)

TO ACC SERVICE
ASSISTANCE POSITION
TRUNK ARRANGED
FOR RECORDING

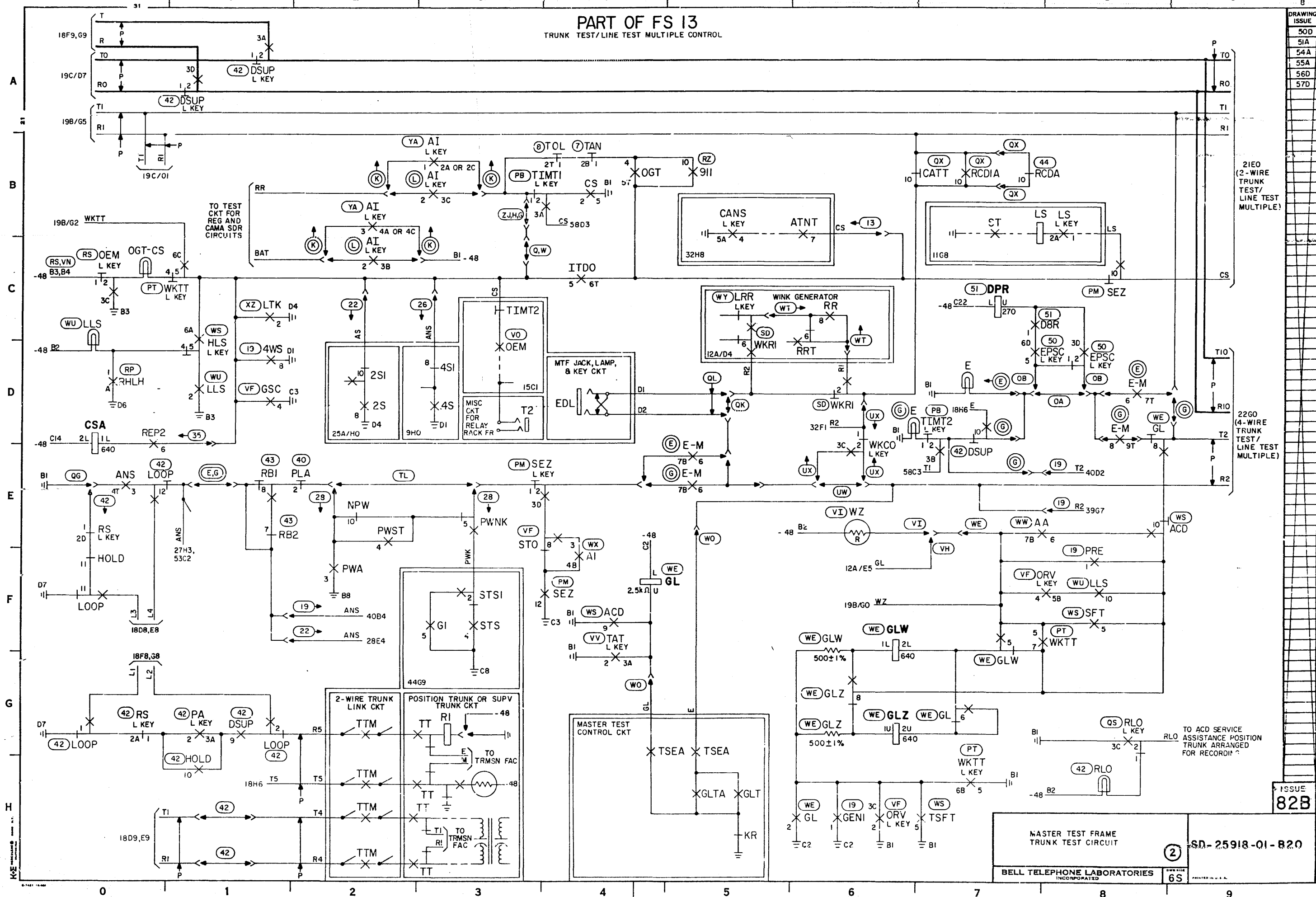
MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

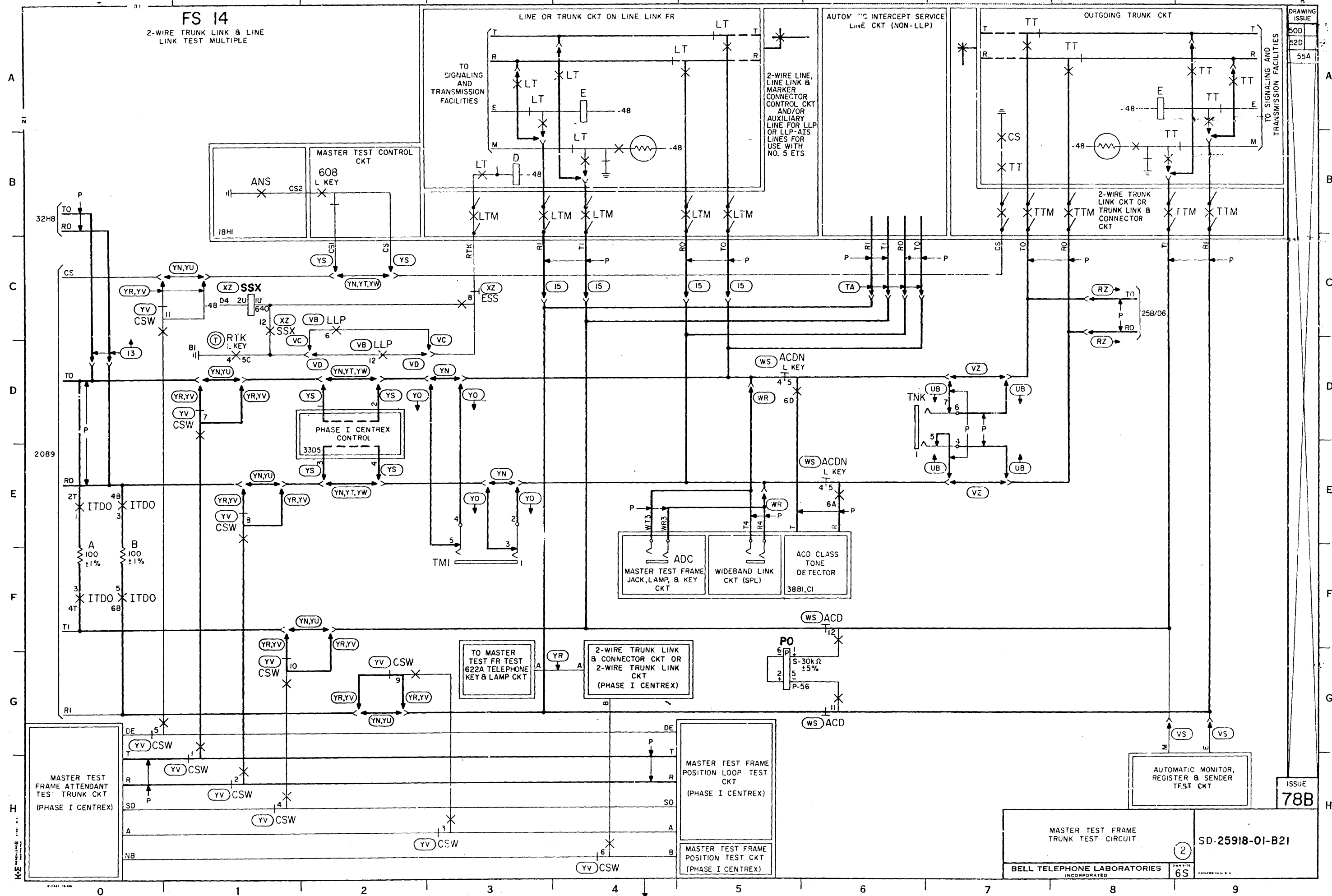
SD-25918-01-B20

ISSUE
82B

SD-25918-01-B20



2-WIRE TRUNK LINK & LINE
LINK TEST MULTIPLE



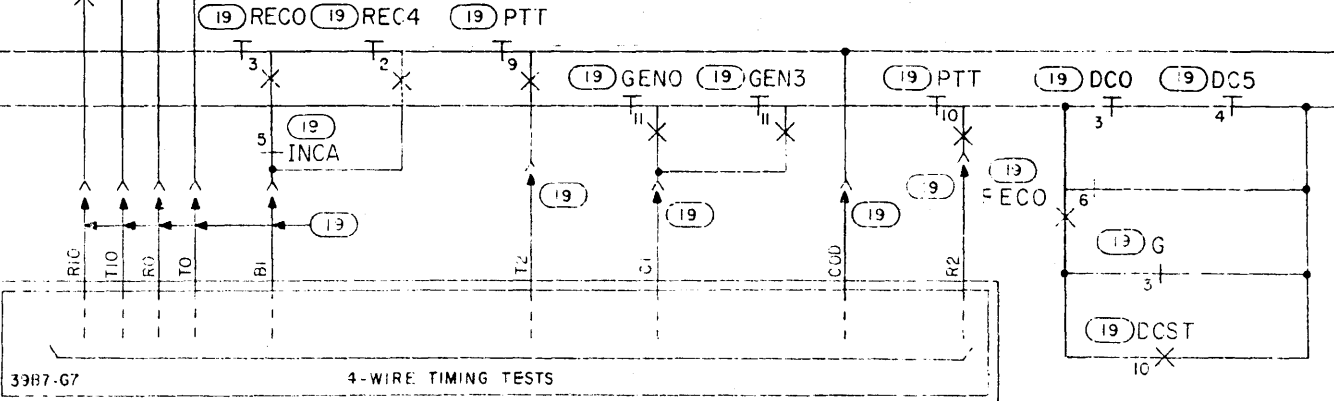
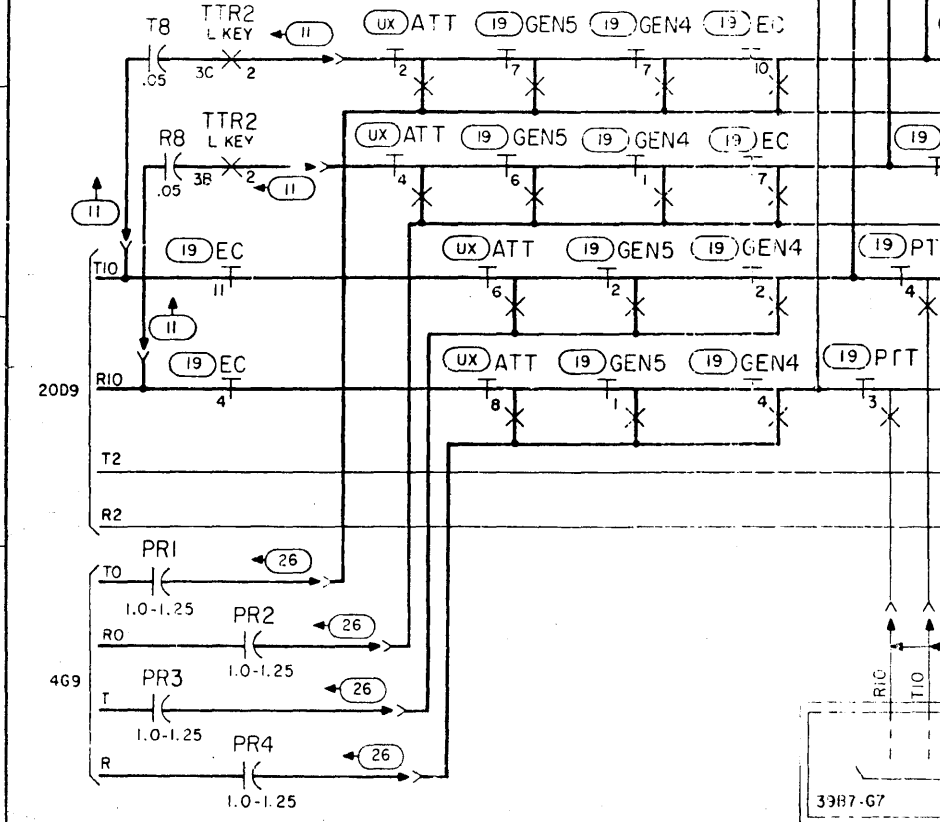
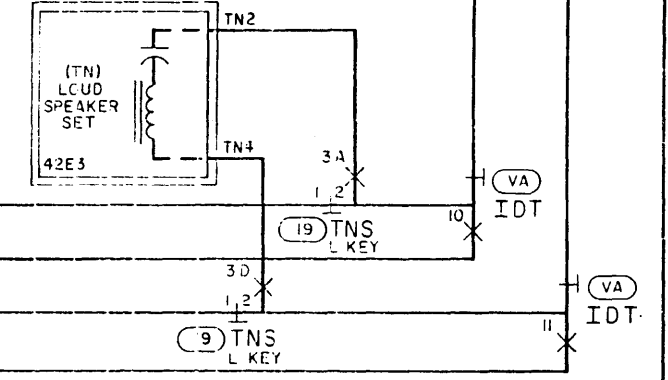
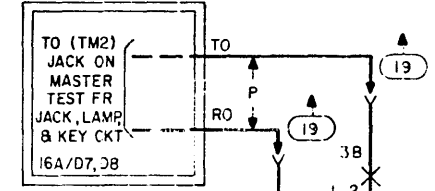
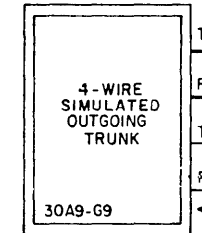
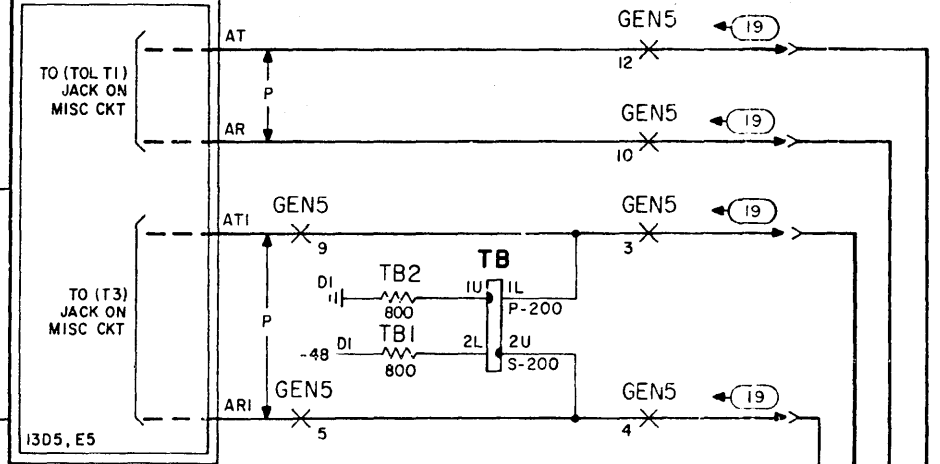
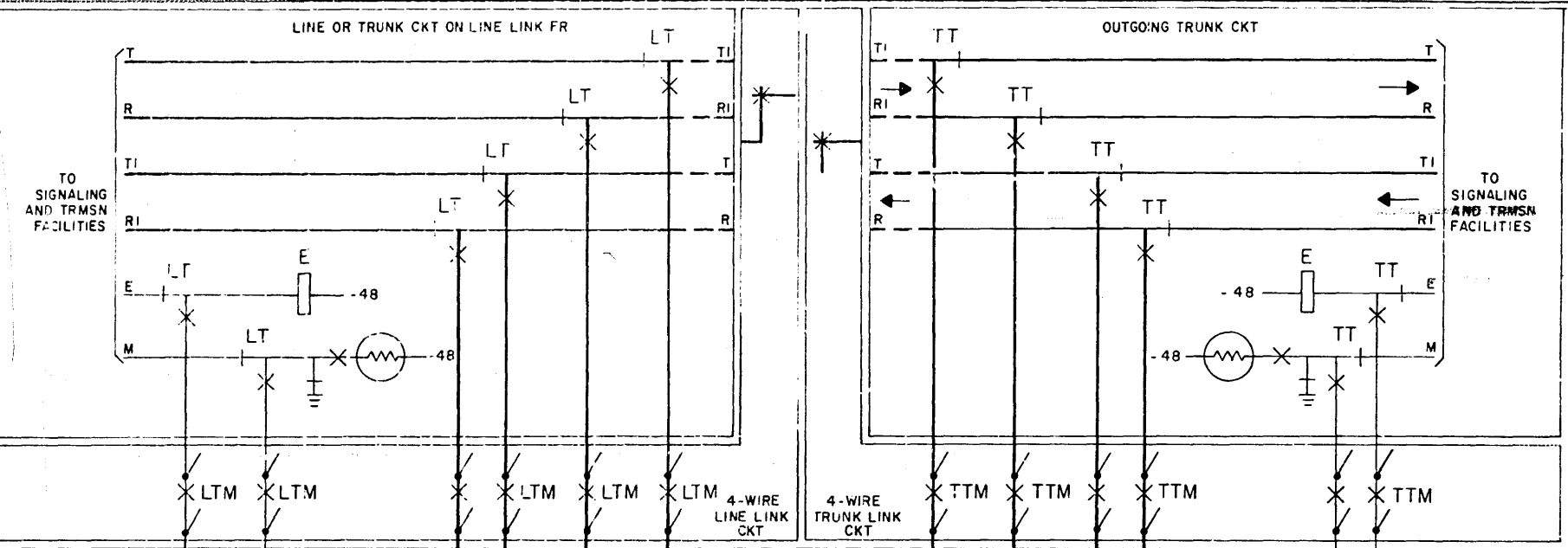
SD-25918-01-B21

ISSUE
78B

FS 15

4-WIRE TRUNK LINK & LINE LINK
TEST MULTIPLE

DRAWING
ISSUE
500
520



MASTER TEST FRAME
TRUNK TEST CIRCUIT

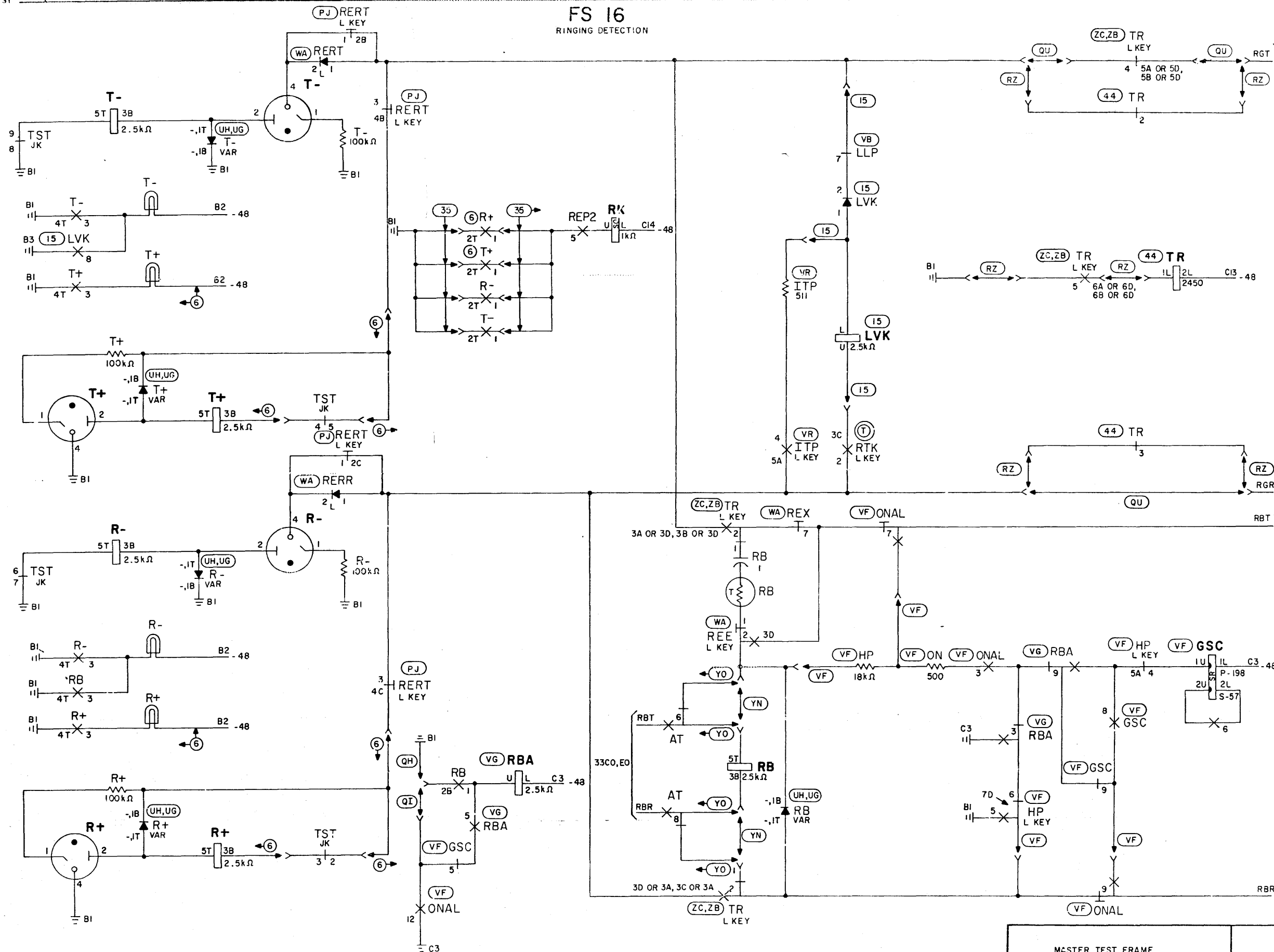
BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-822

52

SD-25918-01-822

FS 16
RINGING DETECTION



MASTER TEST FRAME
TRUNK TEST CIRCUIT

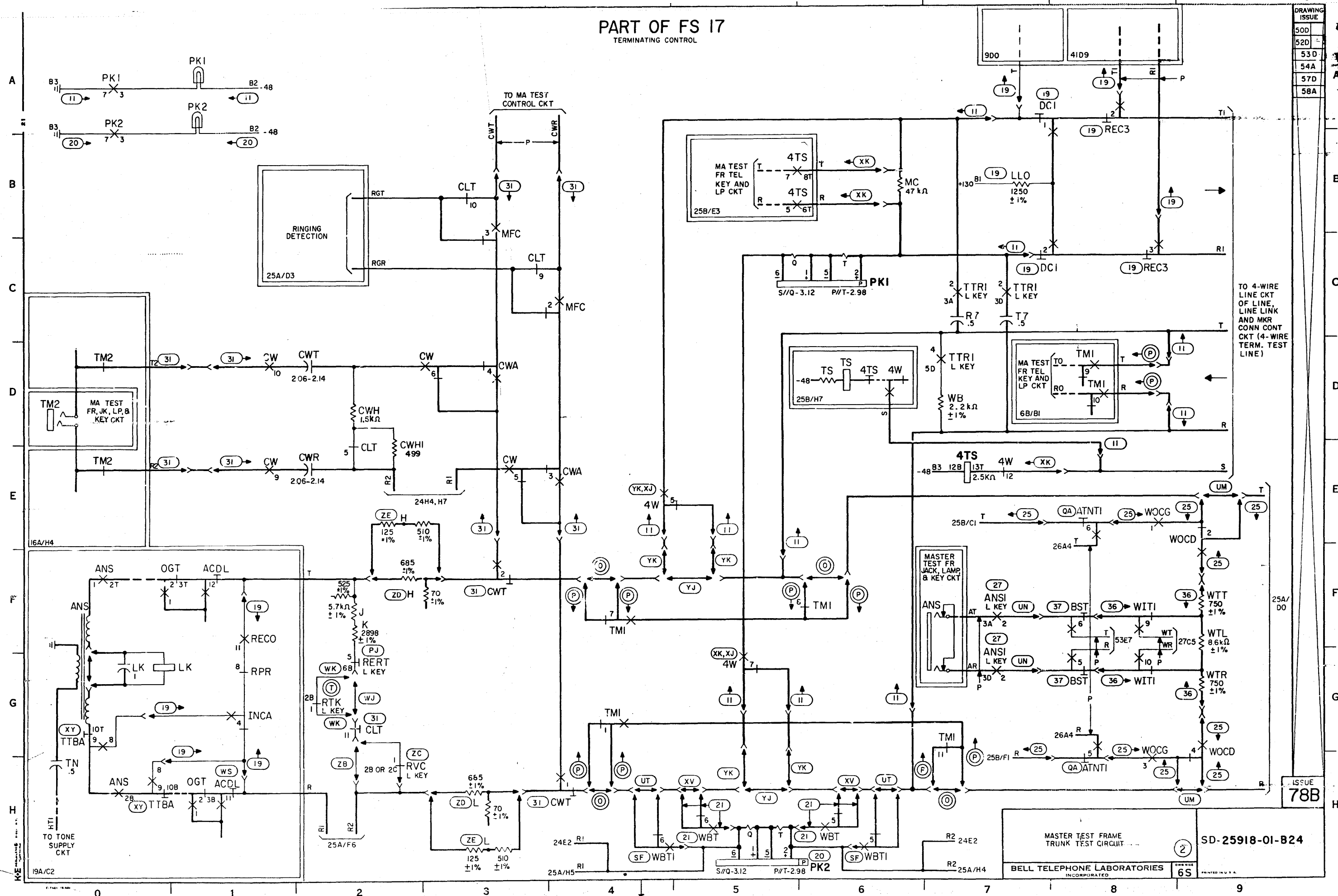
BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-823

SD-25918-01-B23

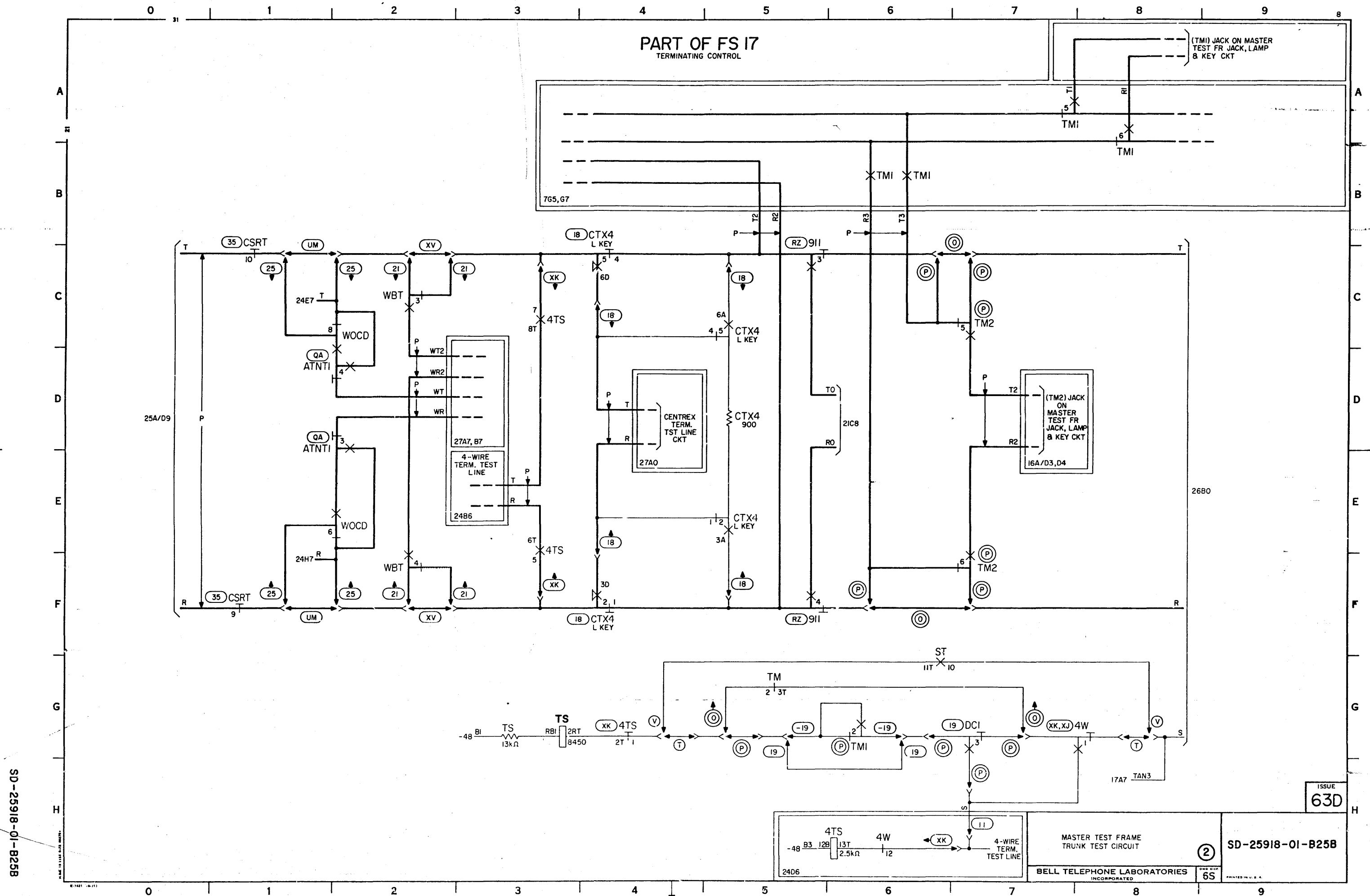
PART OF FS 17 TERMINATING CONTROL

DRAWING	ISSUE
50D	
52D	
53D	
54A	
57D	
58A	

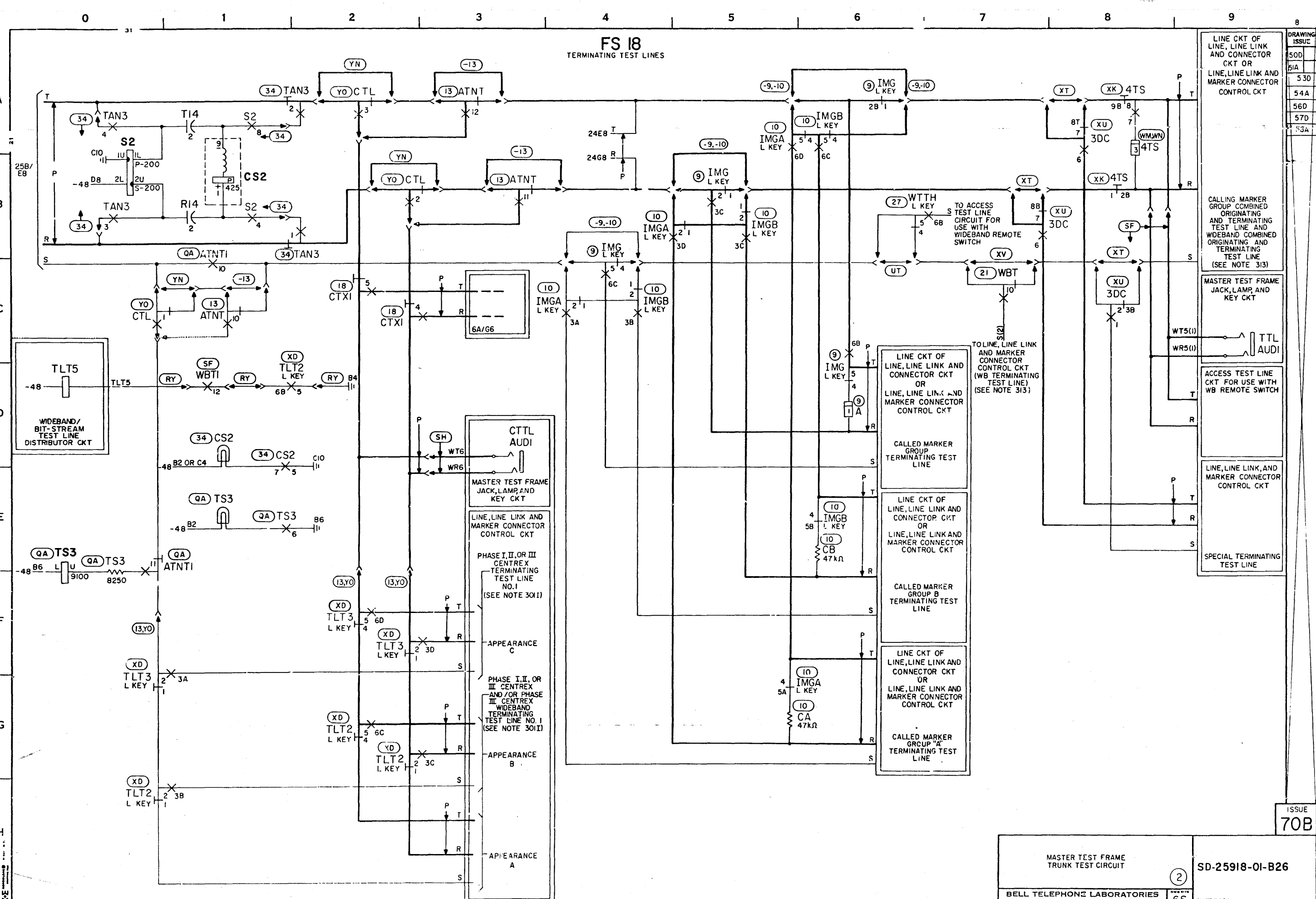


SD-25918-01-B24

MASTER TEST FRAME
TRUNK TEST CIRCUIT
BELL TELEPHONE LABORATORIES
INCORPORATED
SD-25918-01-B24
78B
65
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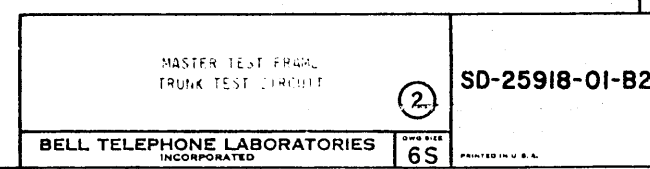
FS 18 TERMINATING TEST LINES



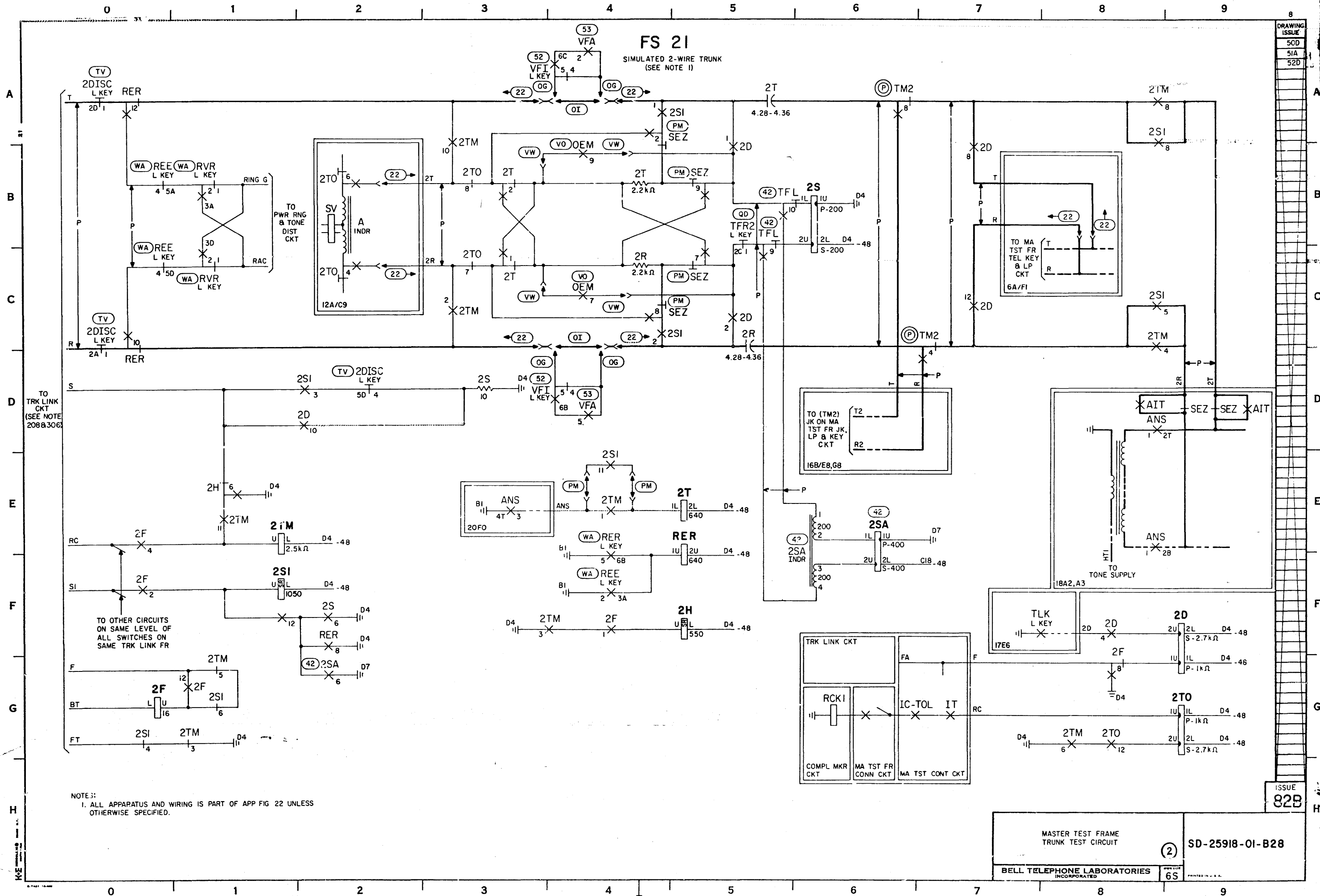
DRAWING	ISSUE
500	51A
530	54A
560	57D
570	58A

ISSUE
70B

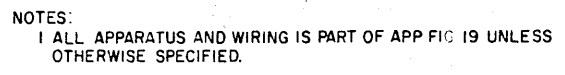
CENTREX & WIDEBAND TEST LINES



SD-25918-01-B27



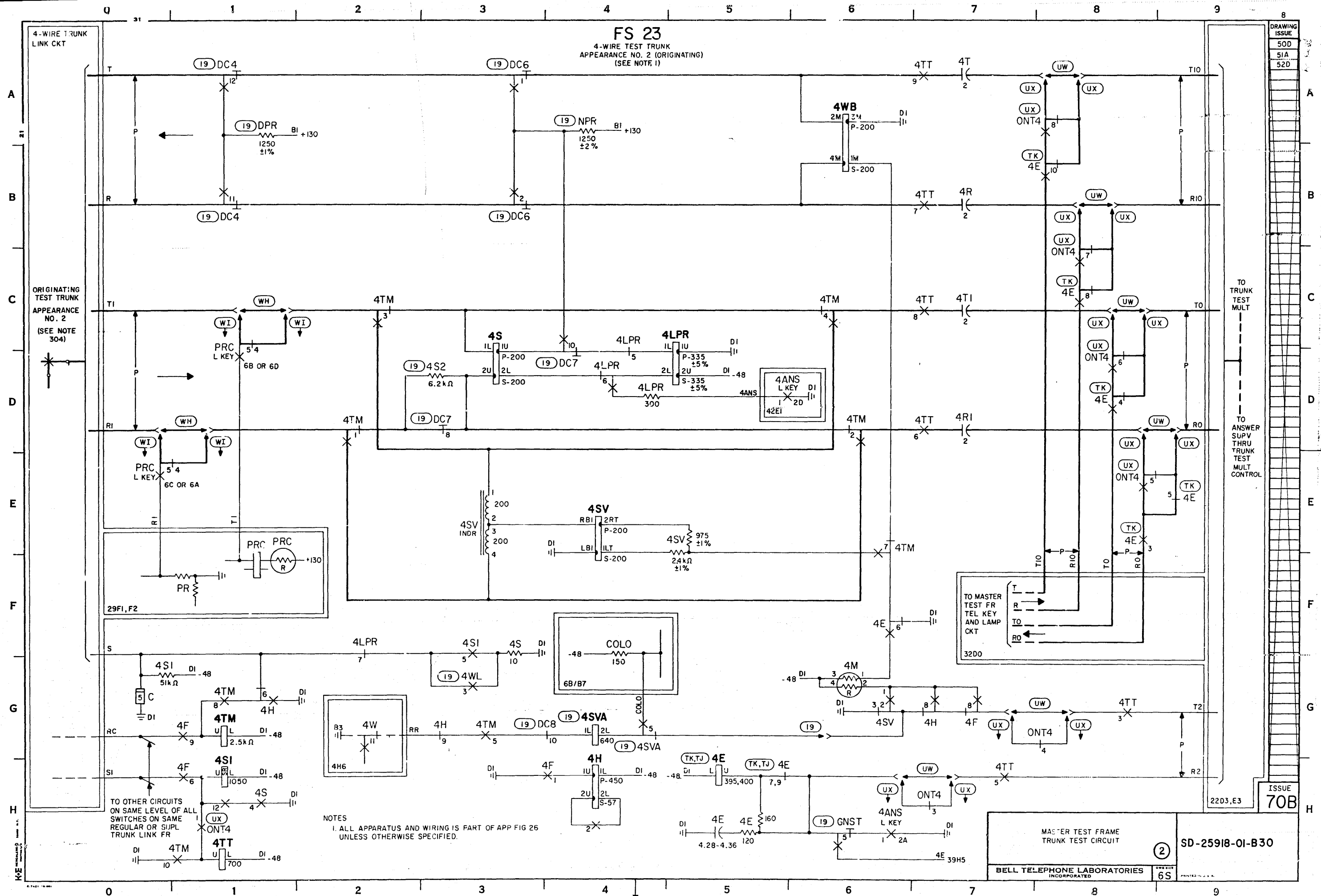
4-WIRE TRUNK LINK CKT



BELL TELEPHONE LABORATORIES
INCORPORATED

(2) SD-25918-01-B29

SD-25918-01-B29



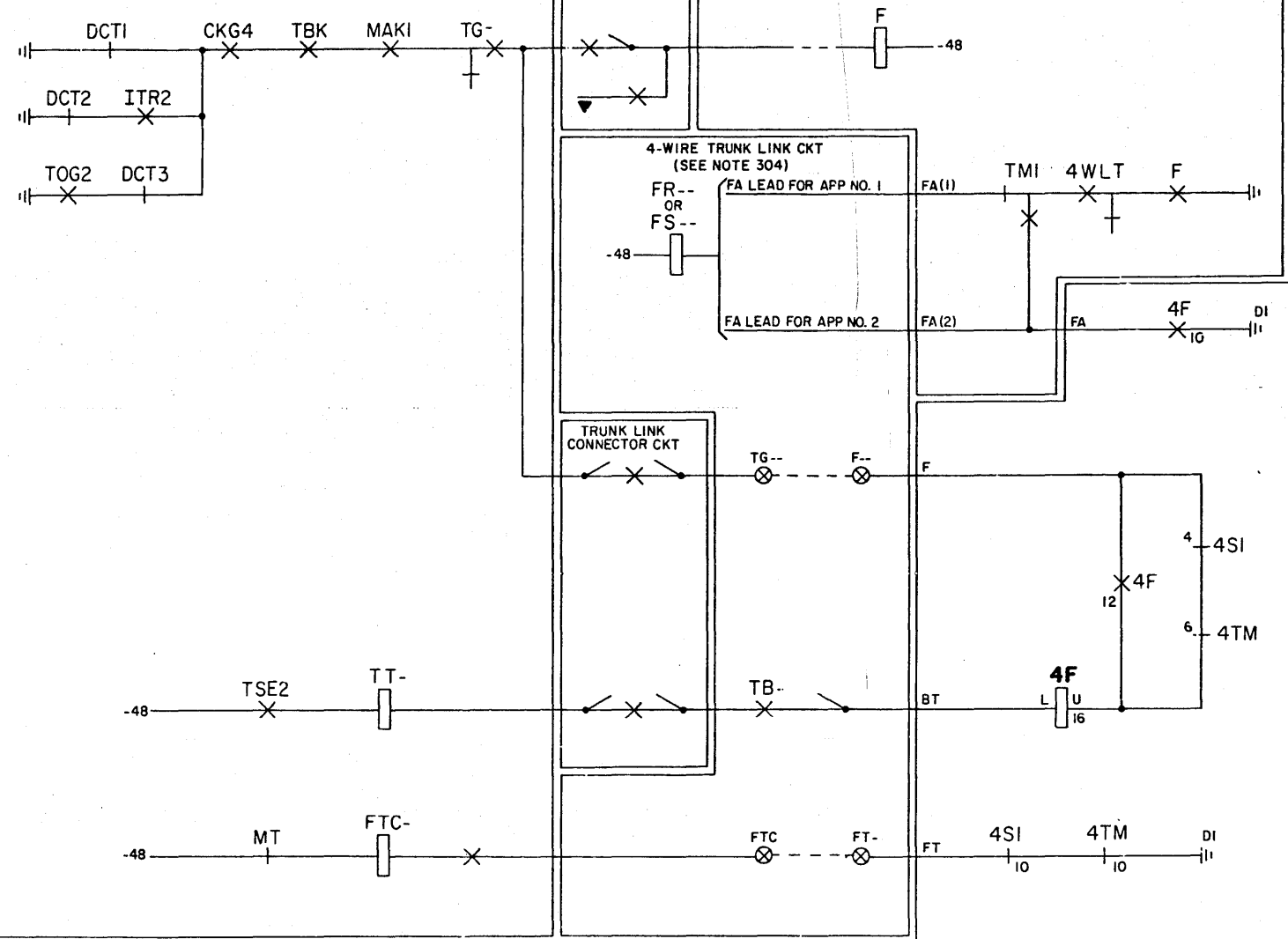
COMPLETING MARKER CKT

MASTER TEST FR
CONNECTOR CKT

MASTER TEST CONTROL CKT

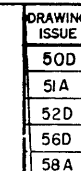
25 FS 24
4-WIRE SIMULATED
TRUNK CONTROL
(FOR APP NO. 2)

DRAWING
ISSUE
50D



SD-25918-01-B31

CONNECTION TO ATTENDANT TRUNKS



ISSUE
79A

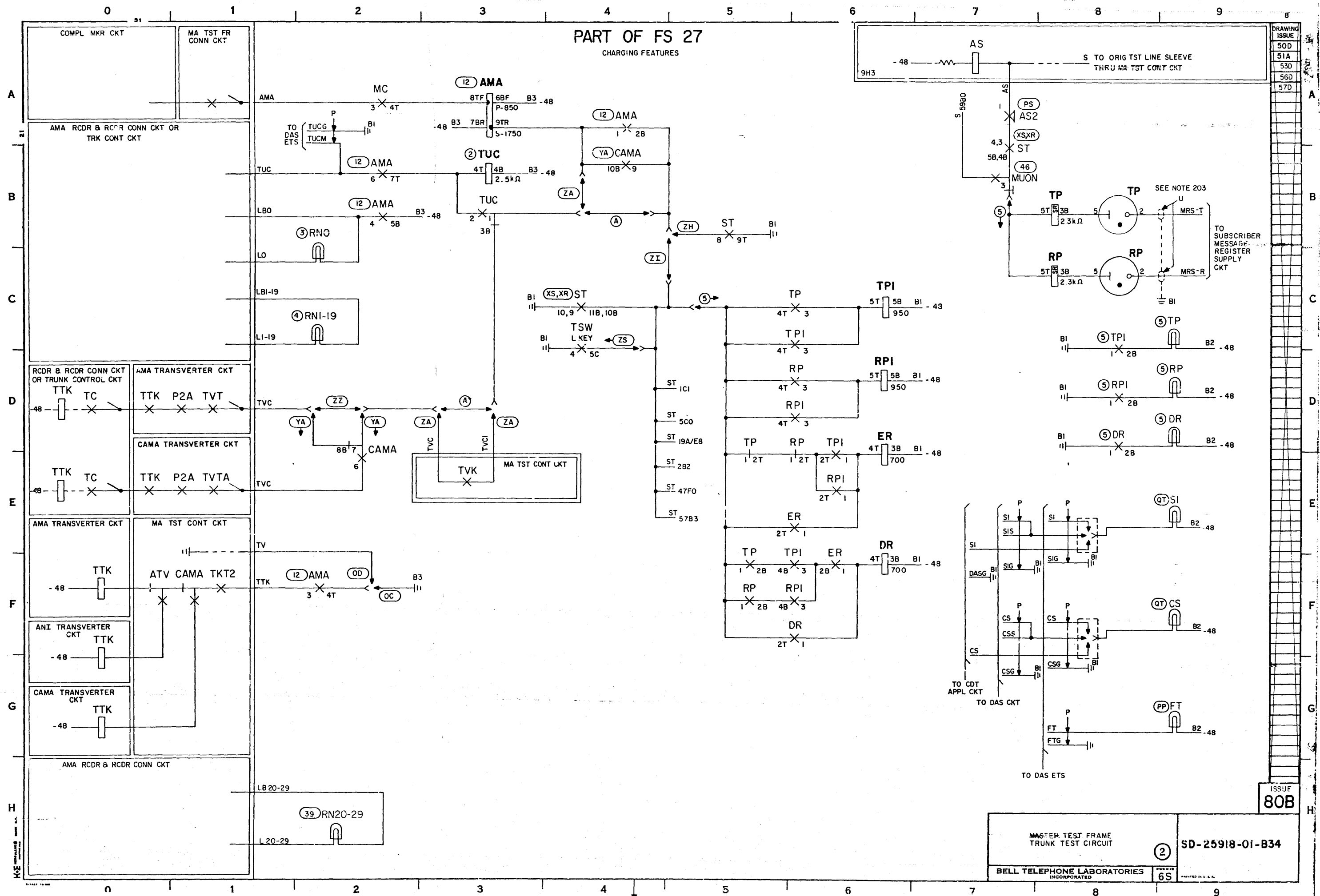
MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-B32

BELL TELEPHONE LABORATORIES
INCORPORATED

2
UWG 81
69





AMA RCDR & RCDR CONN CKT
OR
TRK CONT CKT

PART OF FS 27 CHARGING FEATURES (SEE NOTE 1)

DRAWING
ISSUE
500

ISSUE
75B

NOTES:

1. ALL APPARATUS AND WIRING ON THIS SHEET IS PART OF
APP FIG 2 UNLESS OTHERWISE SPECIFIED.

SD-25918-01-B35

MASTER TEST FRAME
TRUNK TEST CIRCUIT

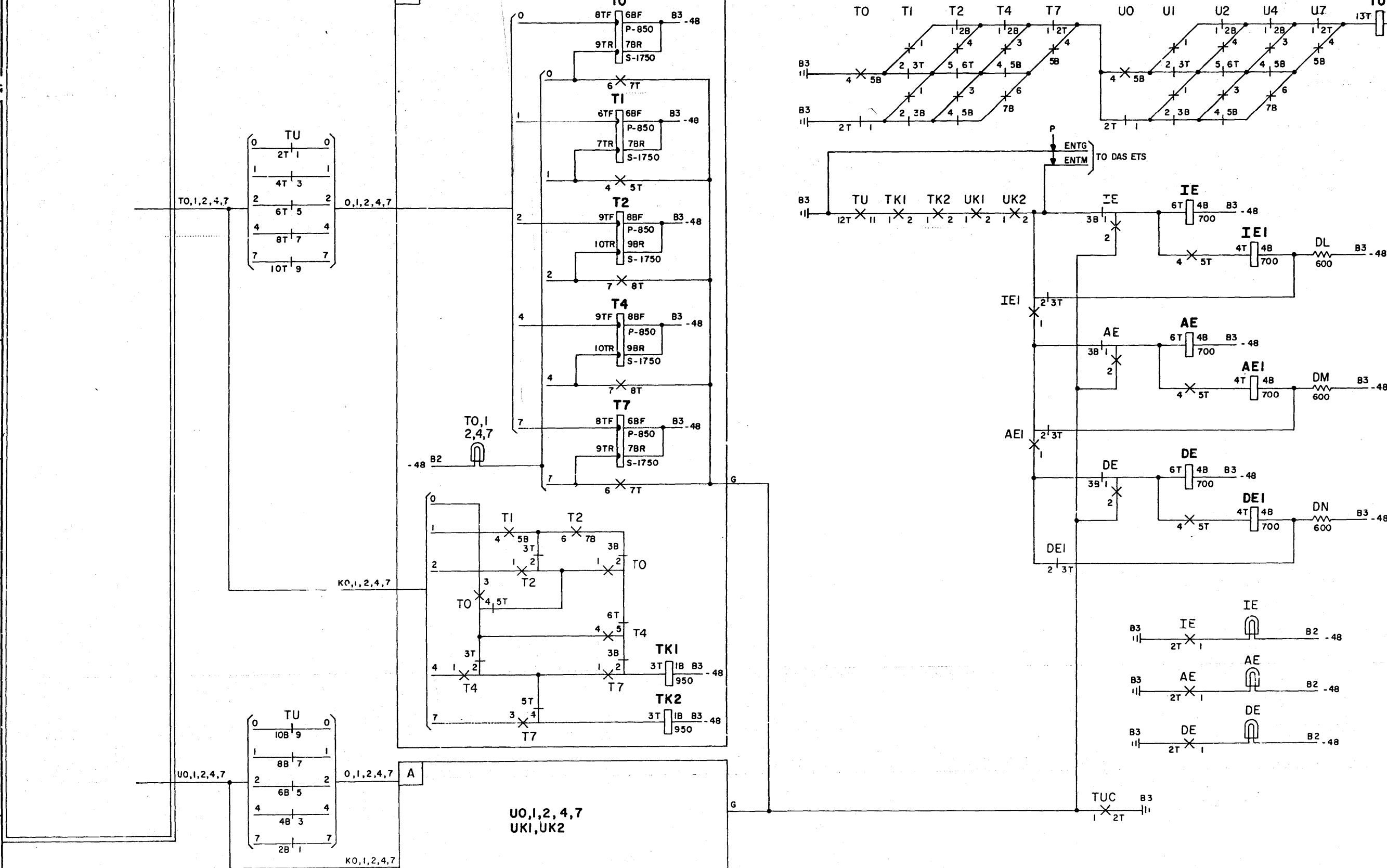
BELL TELEPHONE LABORATORIES
INCORPORATED

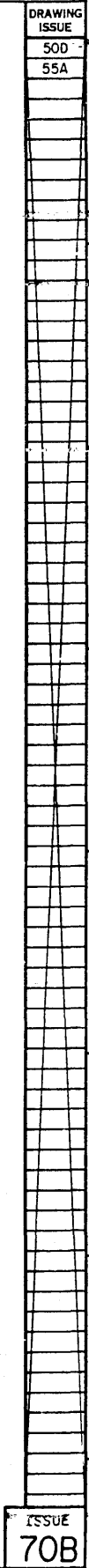
2

6S

SD-25918-01-B35

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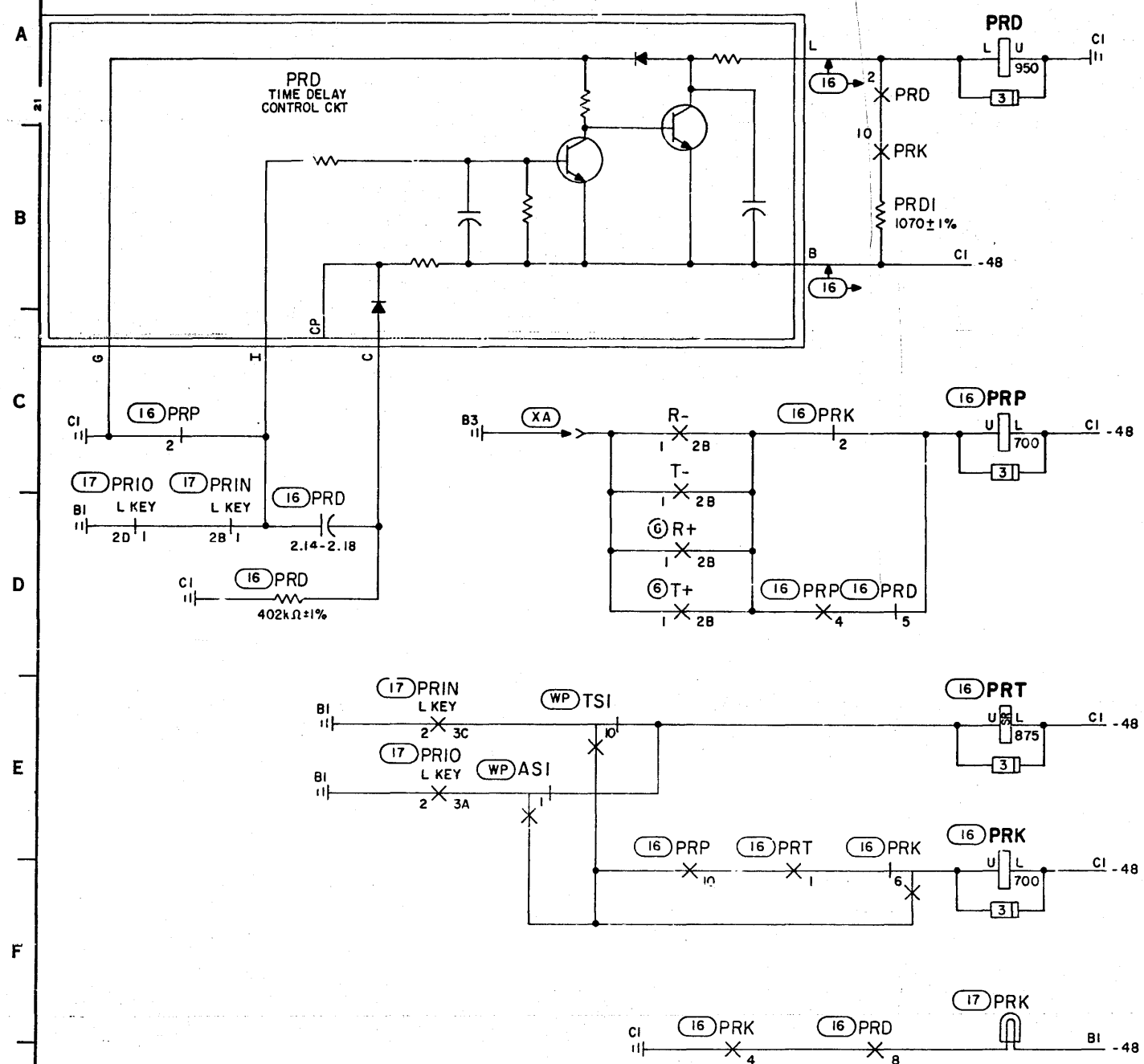
BELL TELEPHONE LABORATORIES
INCORPORATED

69

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FS 29
WIDE AREA DATA SERVICE
TRUNK TESTING

DRAWING ISSUE
50 D



SD-25918-01-B37

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-B37

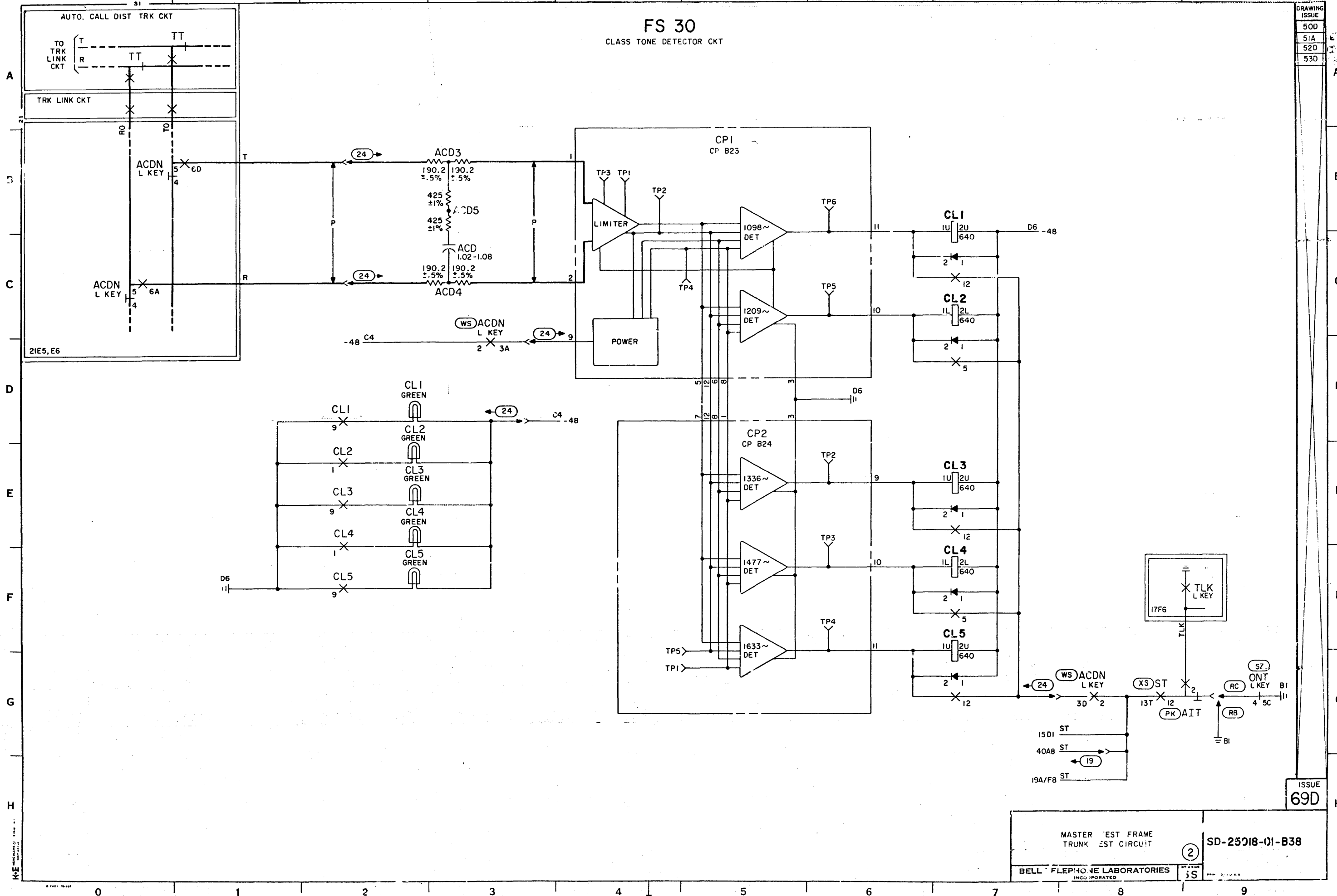
BELL TELEPHONE LABORATORIES
INCORPORATED

65

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FS 30 CLASS TONE DETECTOR CKT

DRAWING
ISSUE
50D
51A
52D
53D



SD-25918-01-B38

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-B38

ISSUE
69D

PART OF FS 31

MULTILEVEL PREEMPTION
CONTROL AND DETECTION
(SEE NOTE 1)

DRAWING
ISSUE
500
51A
52D

TO
4-WIRE
TIMING
TEST
CKT

TO
4-WIRE
TRK TEST/
LINE TEST
MULT

NOTES:
1. ALL APPARATUS AND WIRING IS PART OF APP FIG 19
UNLESS OTHERWISE SPECIFIED.

SD-25918-01-B39

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

2

SD-25918-01-B39

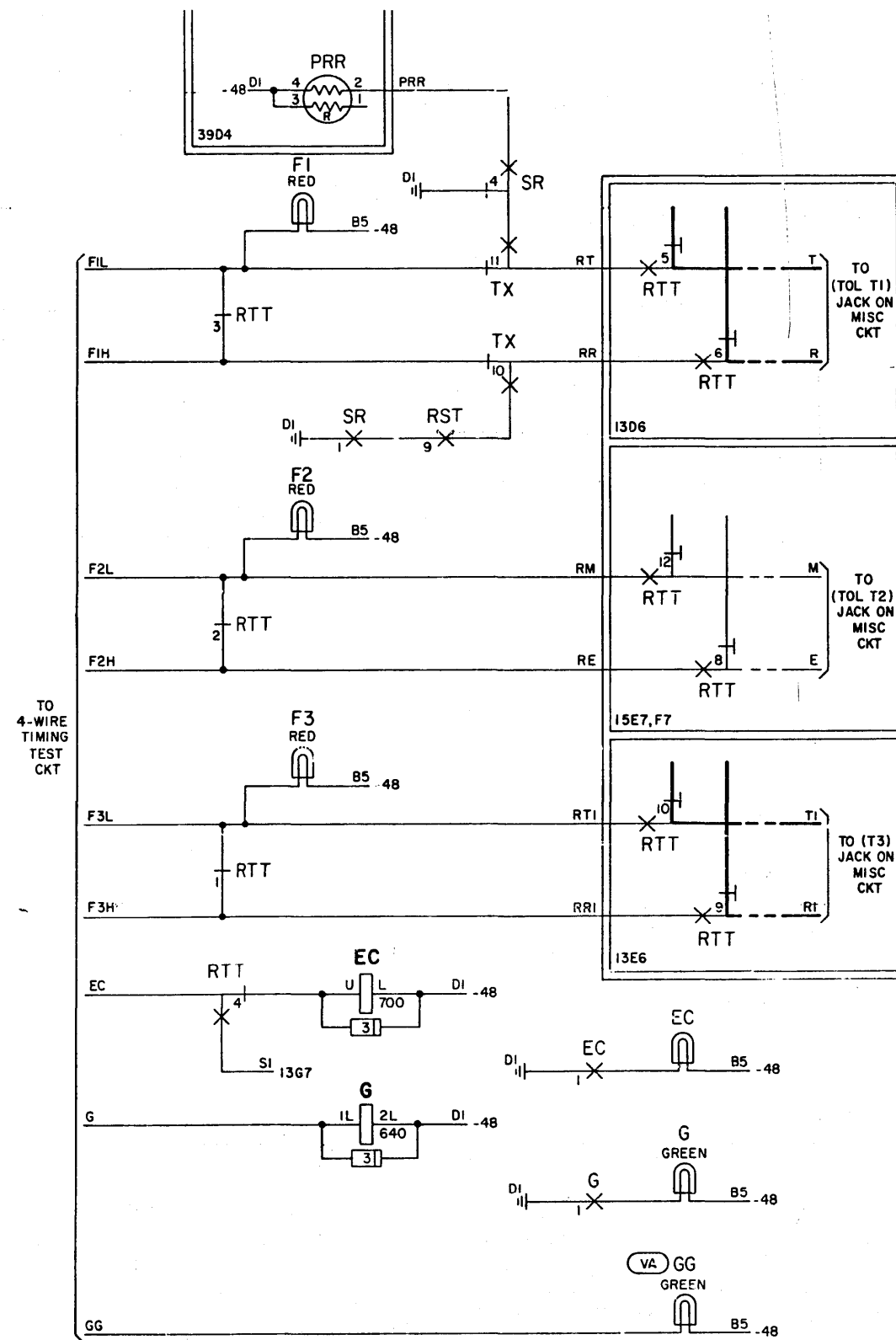
6S

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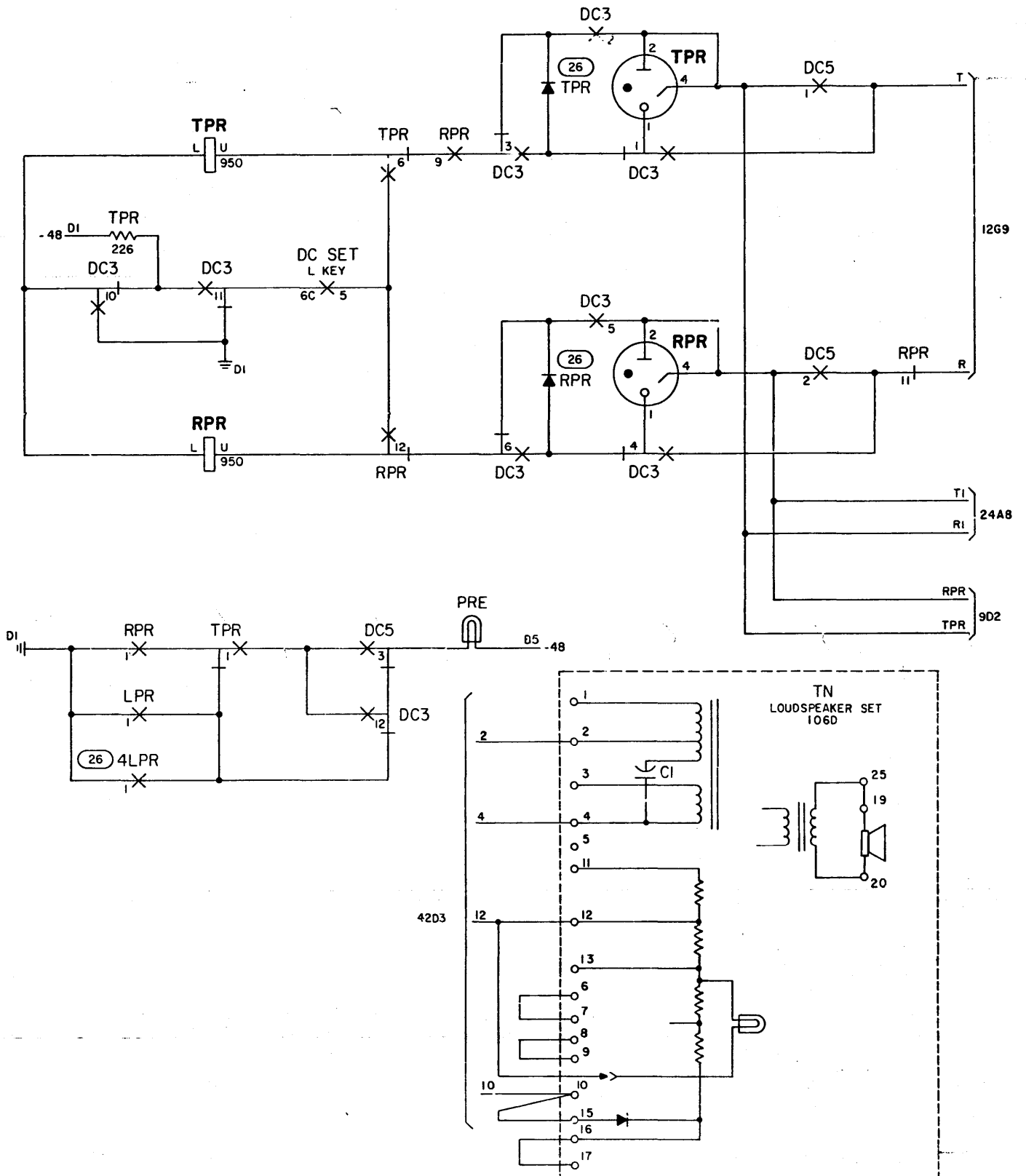
ISSUE
70B

PART OF FS 31

MULTILEVEL PREEMPTION
CONTROL AND DETECTION
(SEE NOTE 1)



NOTES:
1. ALL APPARATUS AND WIRING IS PART OF
APP FIG 19 UNLESS OTHERWISE SPECIFIED.



MASTER TEST FRAME
TRUNK TEST CIRCUIT.

BELL TELEPHONE LABORATORIES
INCORPORATED

2

SD-25918-01-B41

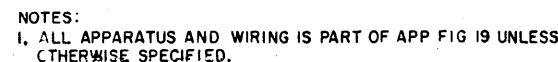
65

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SD-25918-01-B41

64D

MULTILEVEL PREEMPTION
CONTROL & DETECTION
(SEE NOTE 1)



SD - 25918 - 01 - B42

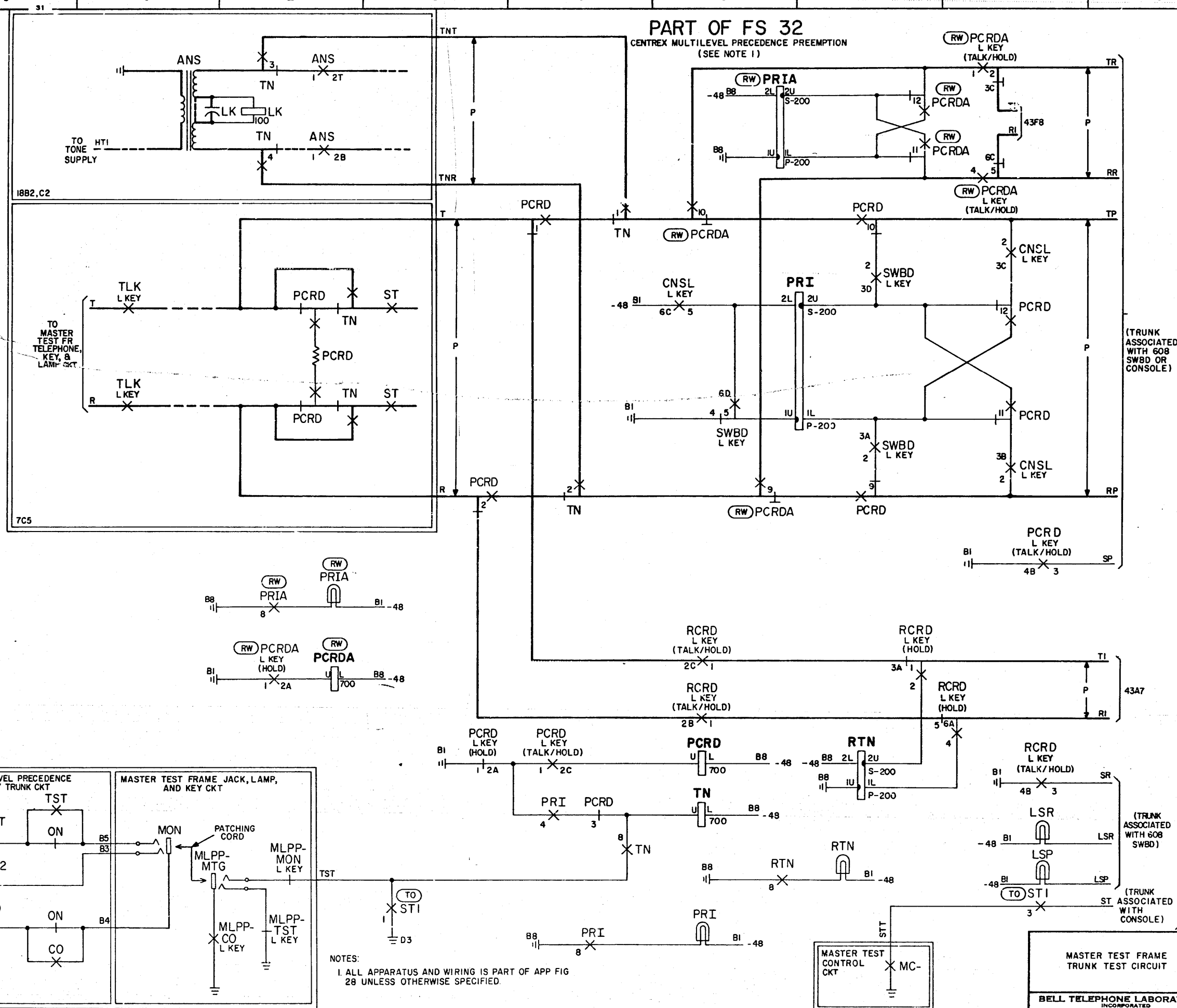
BELL TELEPHONE LABORATORIES
INCORPORATED

②

OWS 812
65

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PART OF FS 32 CENTREX MULTILEVEL PRECEDENCE PREEMPTION (SEE NOTE 1)



18B2, C2

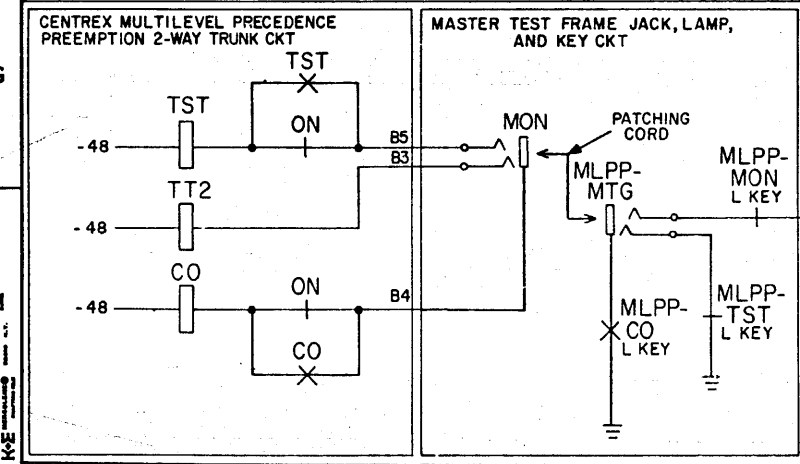
7C5

(TRUNK ASSOCIATED WITH 608 SWBD OR CONSOLE)

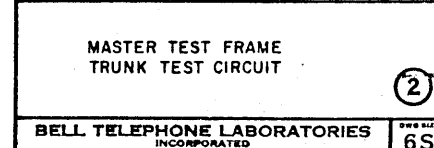
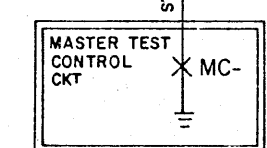
TO 2-WAY TRUNK CKT FOR ACCESS BETWEEN CENTREX AND AUTOVON

(TRUNK ASSOCIATED WITH 608 SWBD)

(TRUNK ASSOCIATED WITH CONSOLE)



NOTES:
1. ALL APPARATUS AND WIRING IS PART OF APP FIG 28 UNLESS OTHERWISE SPECIFIED.



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BELL TELEPHONE LABORATORIES INCORPORATED

6S

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SD-25918-01-B43

58

DRAWING ISSUE
50D
51A
56D
58A

PART OF FS 32

CENTREX MULTILEVEL
PRECEDENCE PREEMPTION
(SEE NOTE 1)

DRAWING
ISSUE
500
51A

A

B

C

D

E

F

G

H

A

B

C

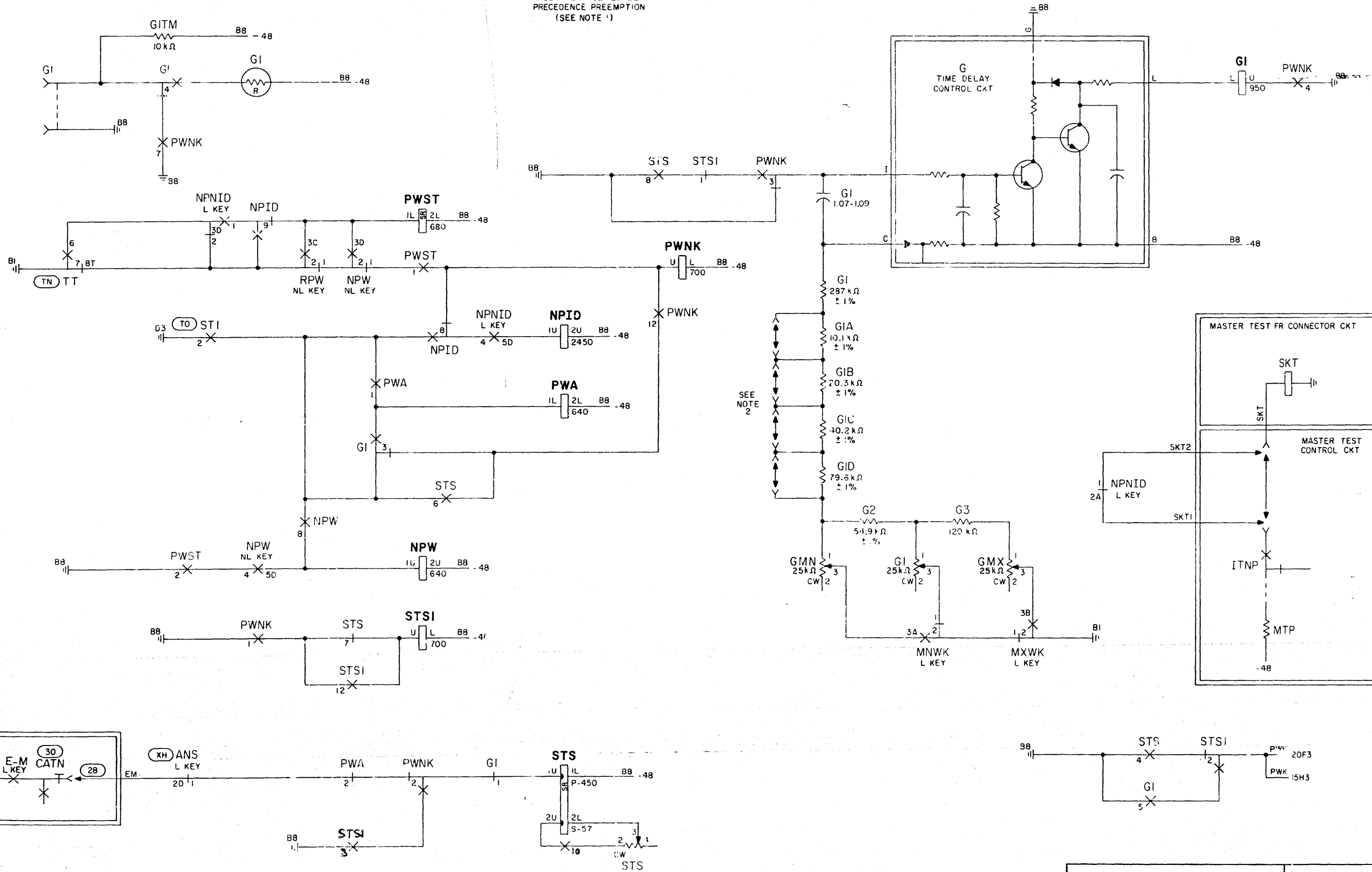
D

E

F

G

H



NOTES

1. ALL APPARATUS AND WIRING IS PART OF APP FIG. 28 UNLESS OTHERWISE SPECIFIED
2. STRAP AS REQUIRED TO MEET TIMING REQUIREMENTS.

MASTER TEST FRAME
TRUNK TEST CIRCUIT

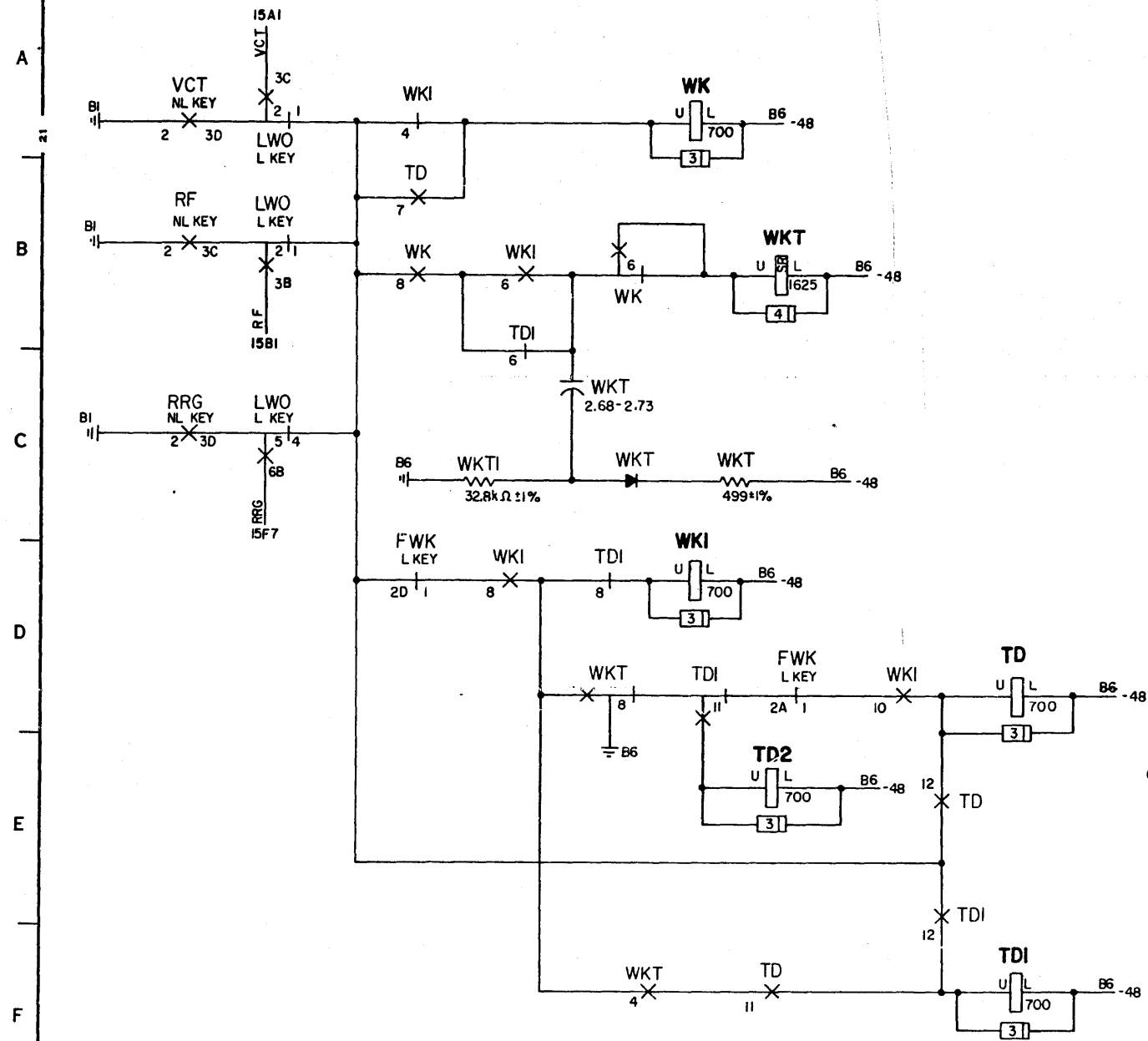
2

SD-25918-01-844

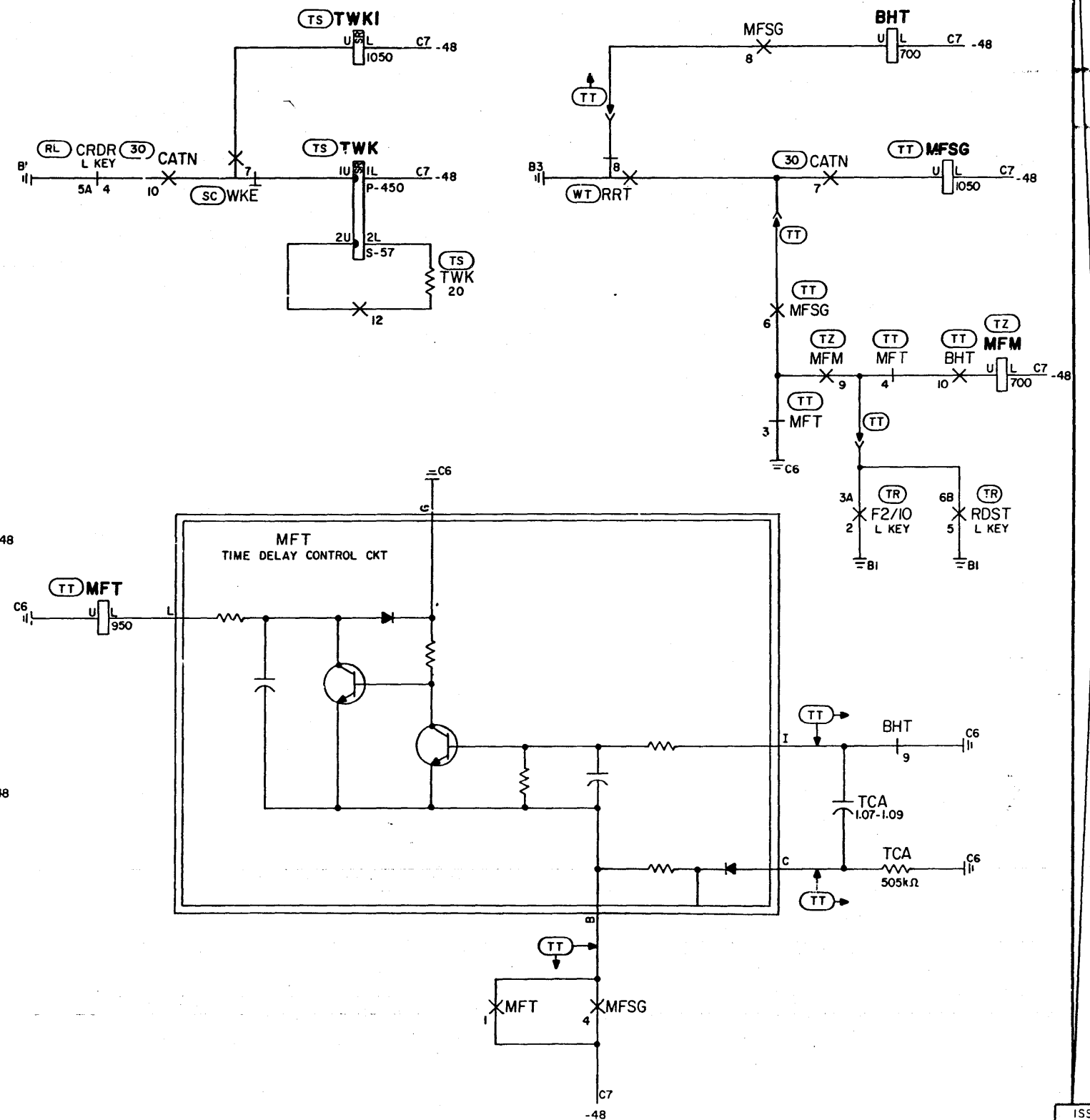
BELL TELEPHONE LABORATORIES
INCORPORATED

6S

(25) FS 33
WINK AND TONE DELAY TIMING CIRCUIT



FS 34
CENTRALIZED ATTENDANT SIGNALLING CONTROL



SD-250:8-01-B45

MASTER TEST FRAME
TRUNK TEST CIRCUIT

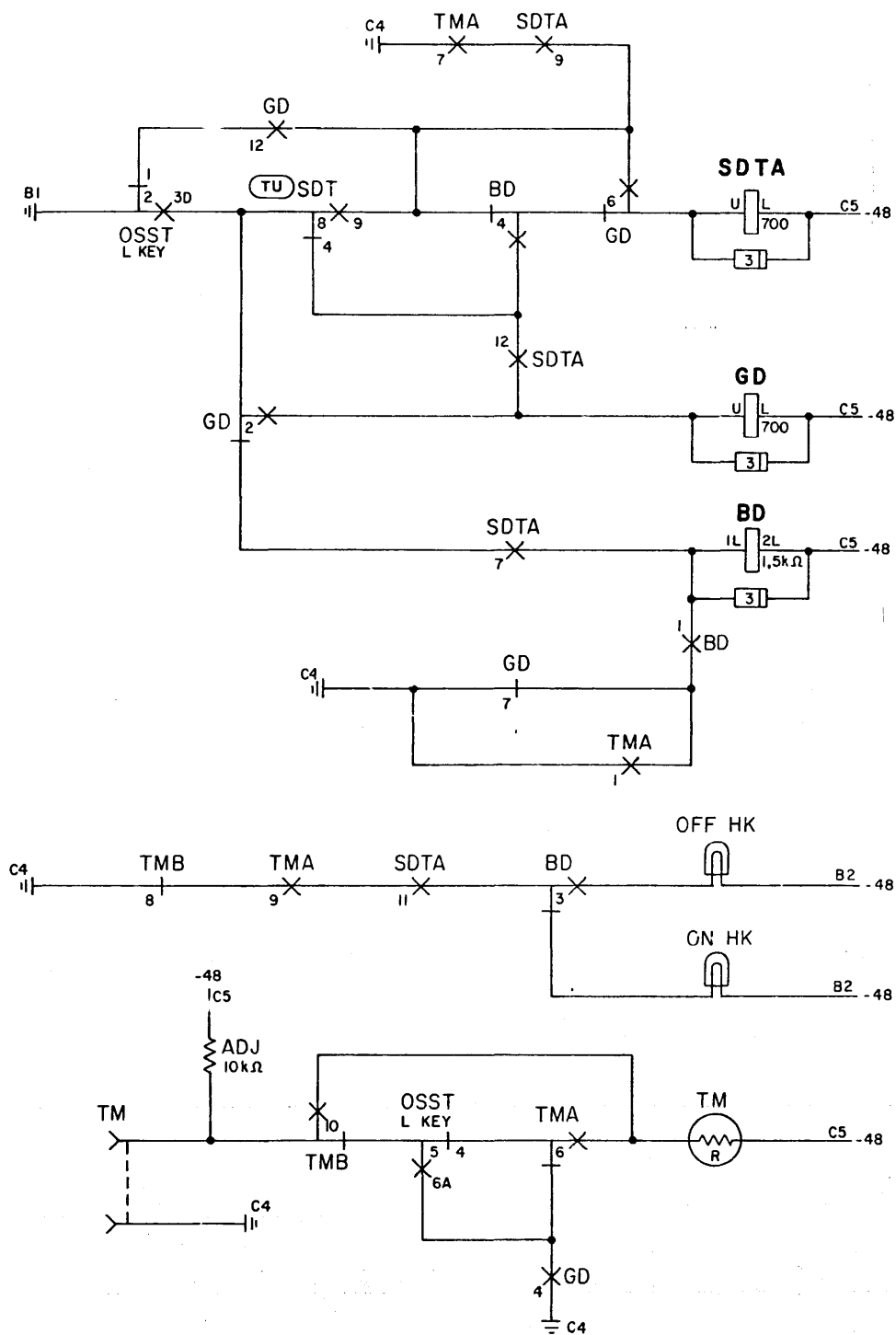
BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-B45

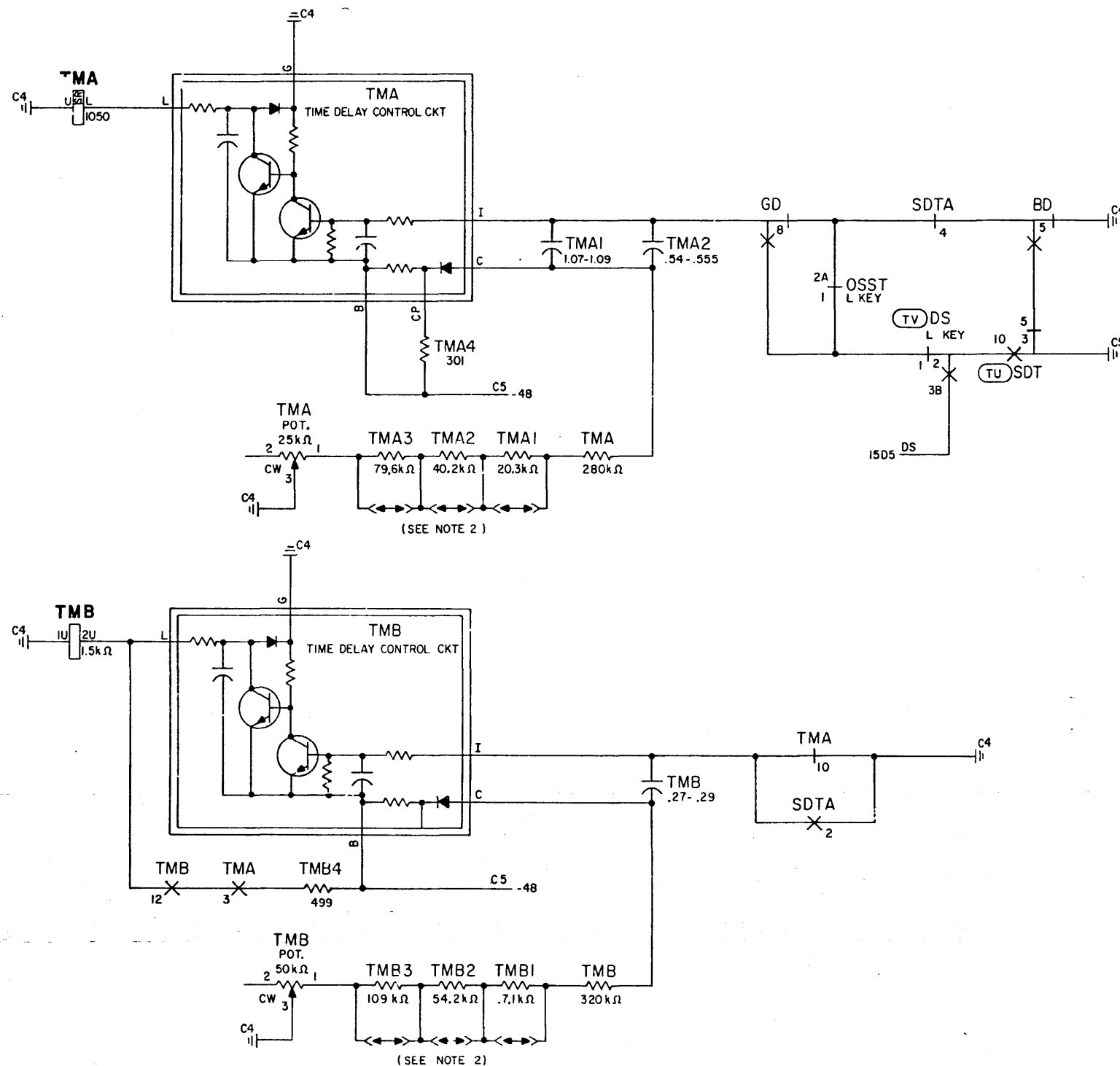
②

6

FS 35 OFF-NETWORK ACCESS LINE SEIZURE SIGNAL TIMING TEST (SEE NOTE 1)



- NOTES:
1. ALL APPARATUS AND WIRING IS PART OF APP FIG 29, UNLESS OTHERWISE SPECIFIED.
 2. STRAP RESISTORS AS REQUIRED TO MEET TIMING REQ.



MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

2

SD-25918-01-B46

63

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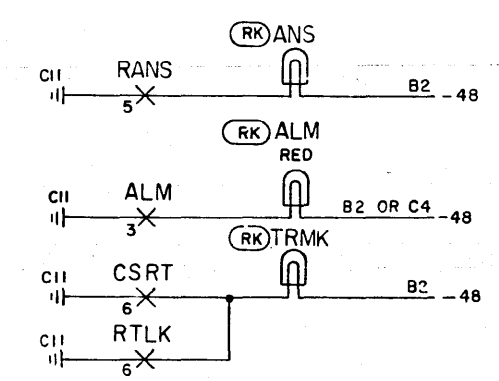
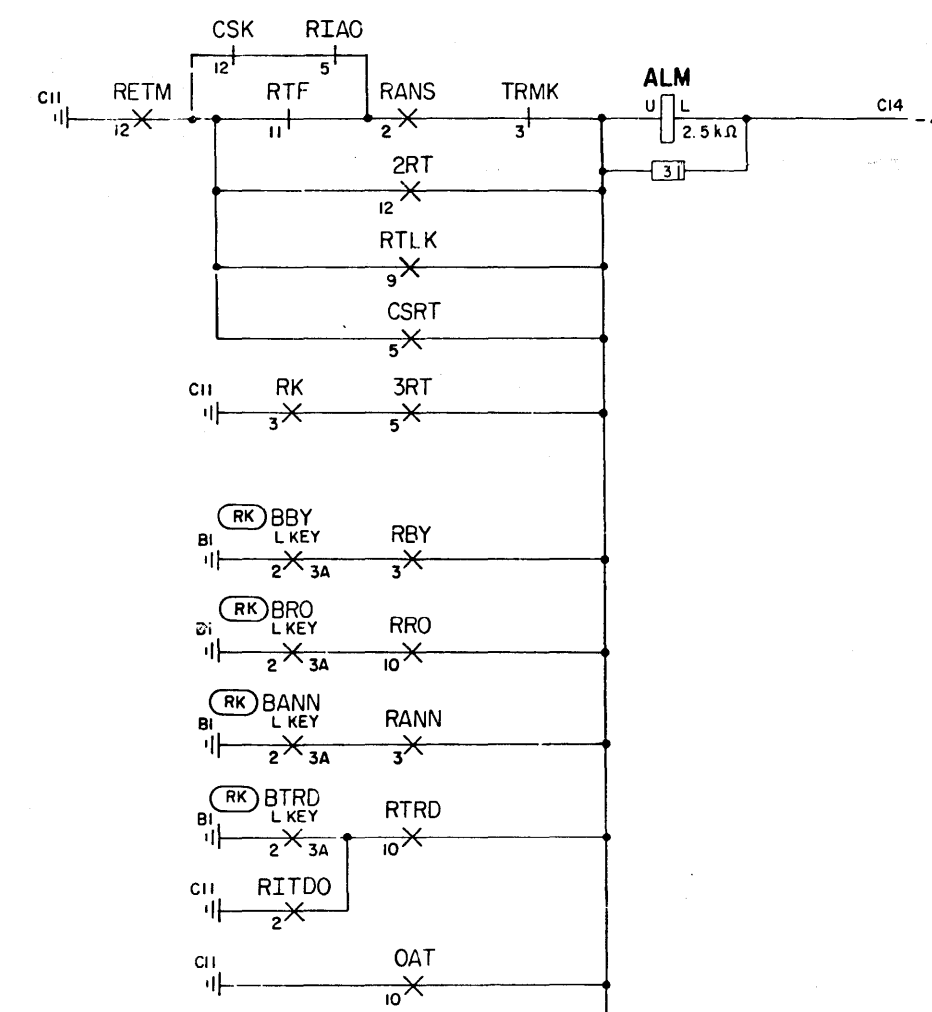
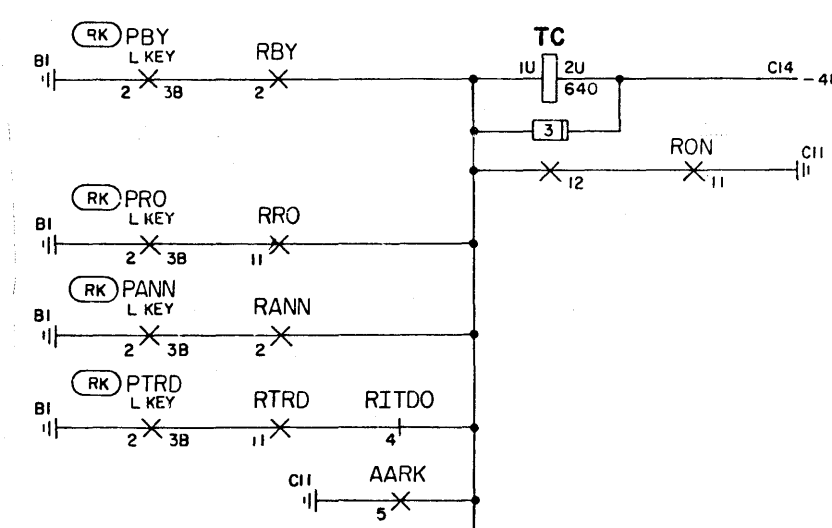
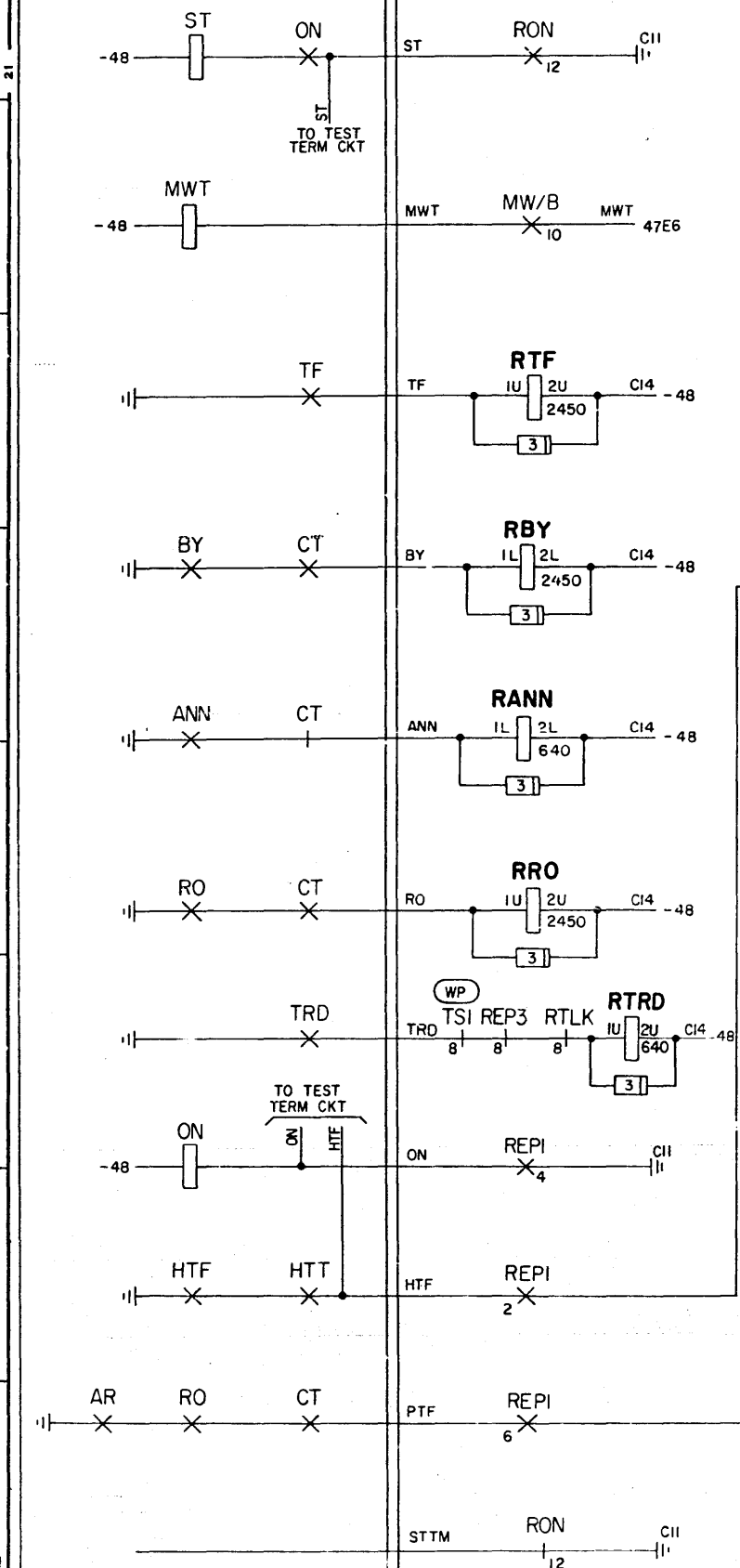
ISSUE
62A

SD-25918-01-B46

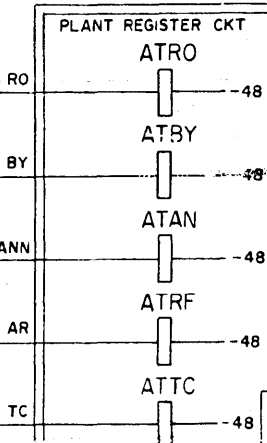
FS 37 TONE DETECTOR AND END OF TEST CONTROL (SEE NOTE 1)

DRAWING
ISSUE
56D
57D

TONE DETECTOR CKT



NOTES:
1. ALL APPRATUS & WIRING IS PART OF APP FIG. 35,
UNLESS OTHERWISE SPECIFIED.

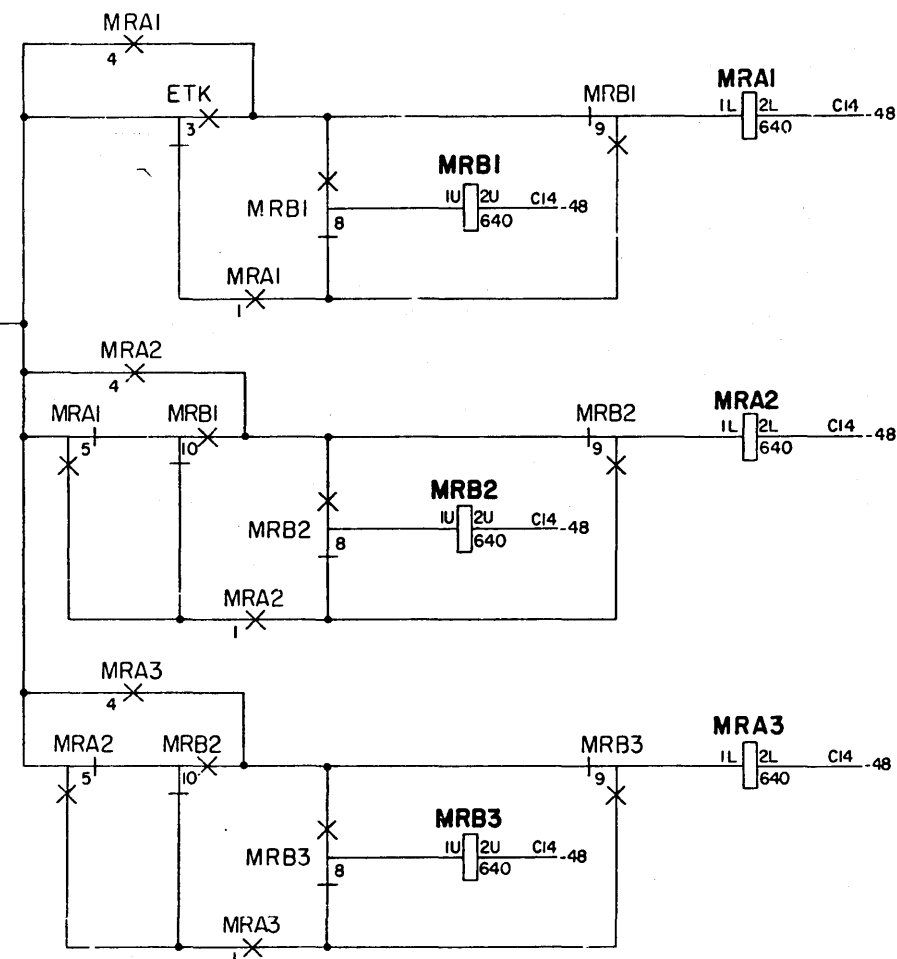
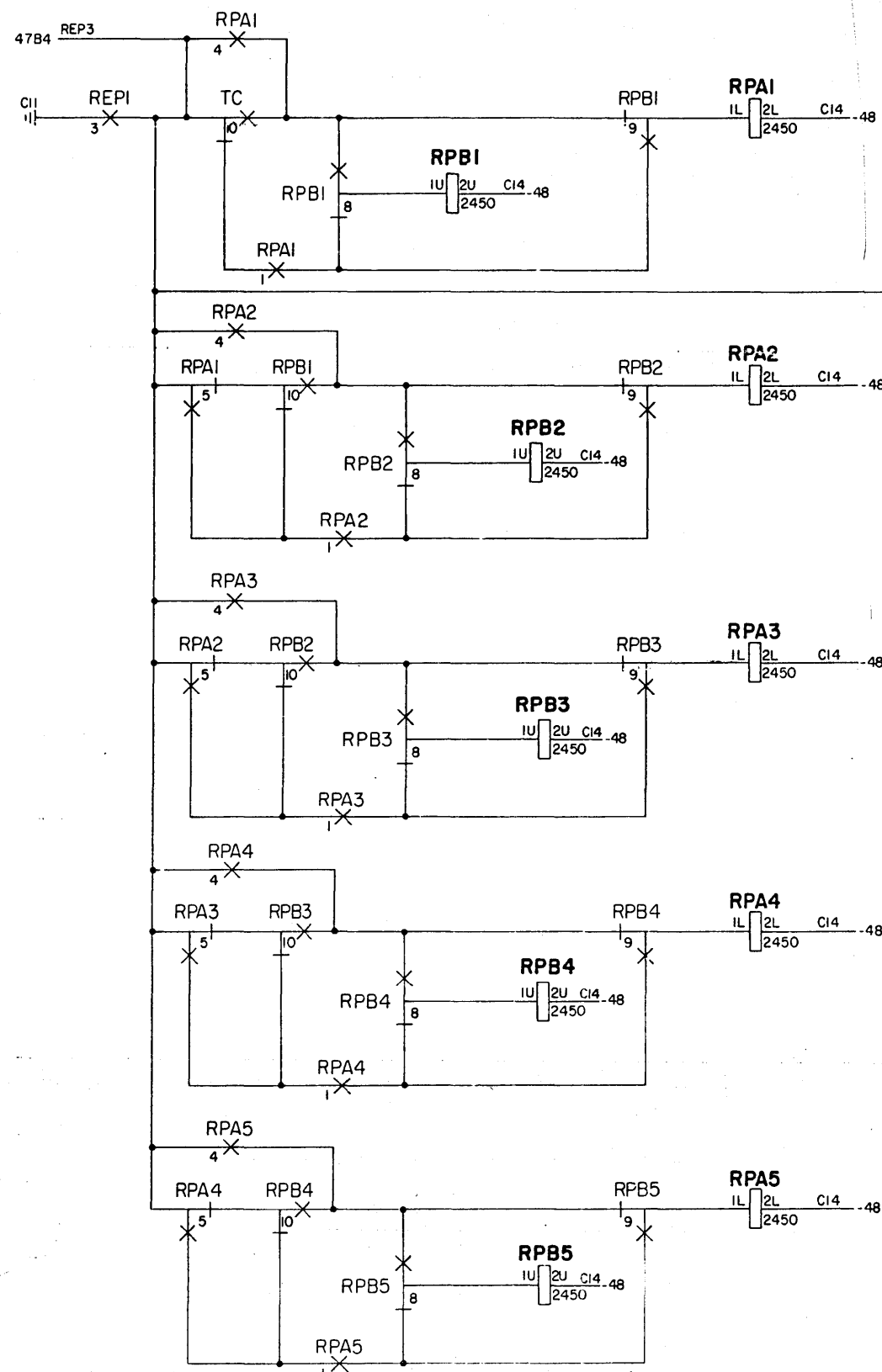


SD-25918-01-B48

FS 38
AUTOMATIC RECYCLE COUNTERS

DRAWING
ISSUE
56D

56



MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-B49

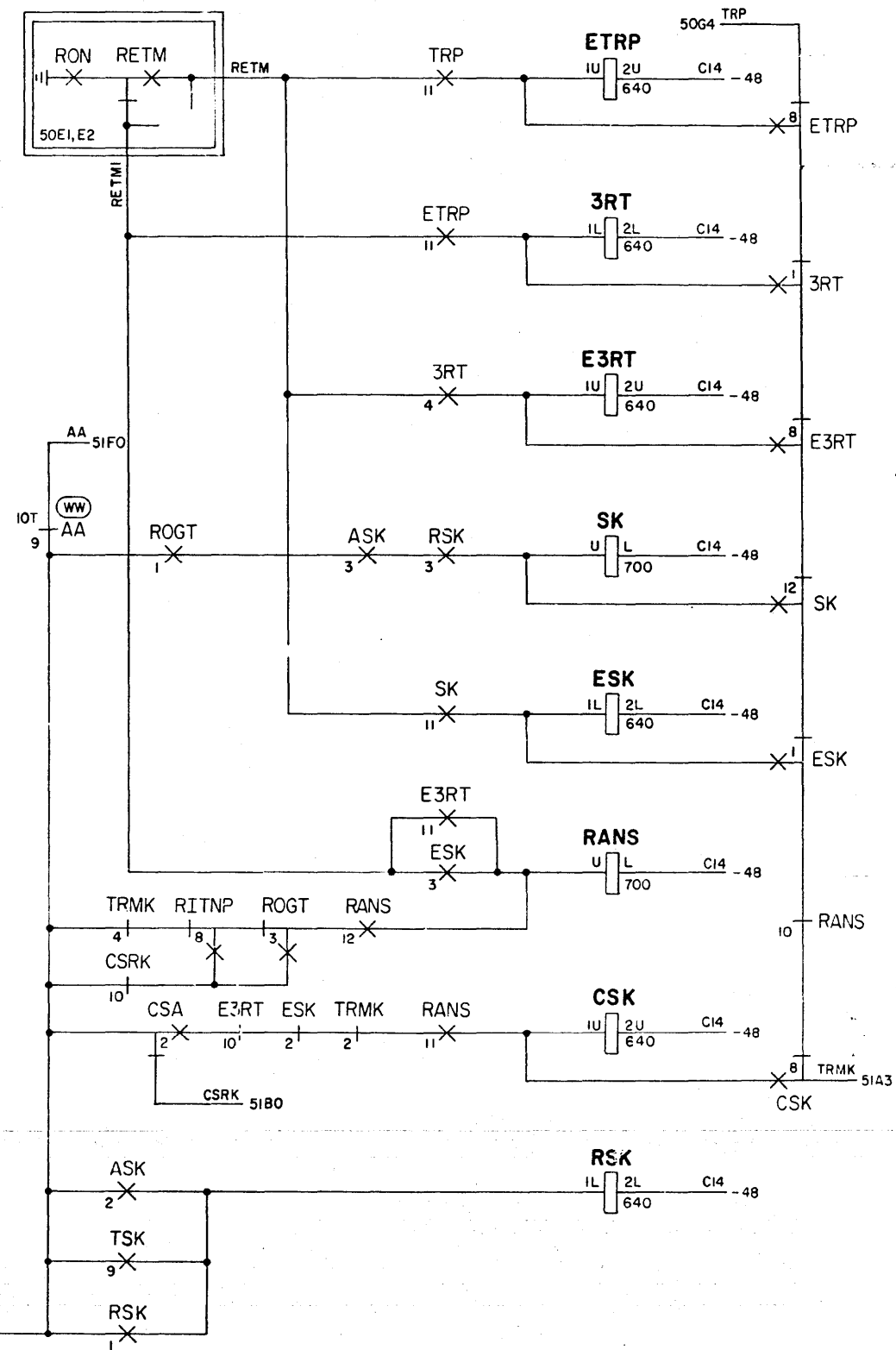
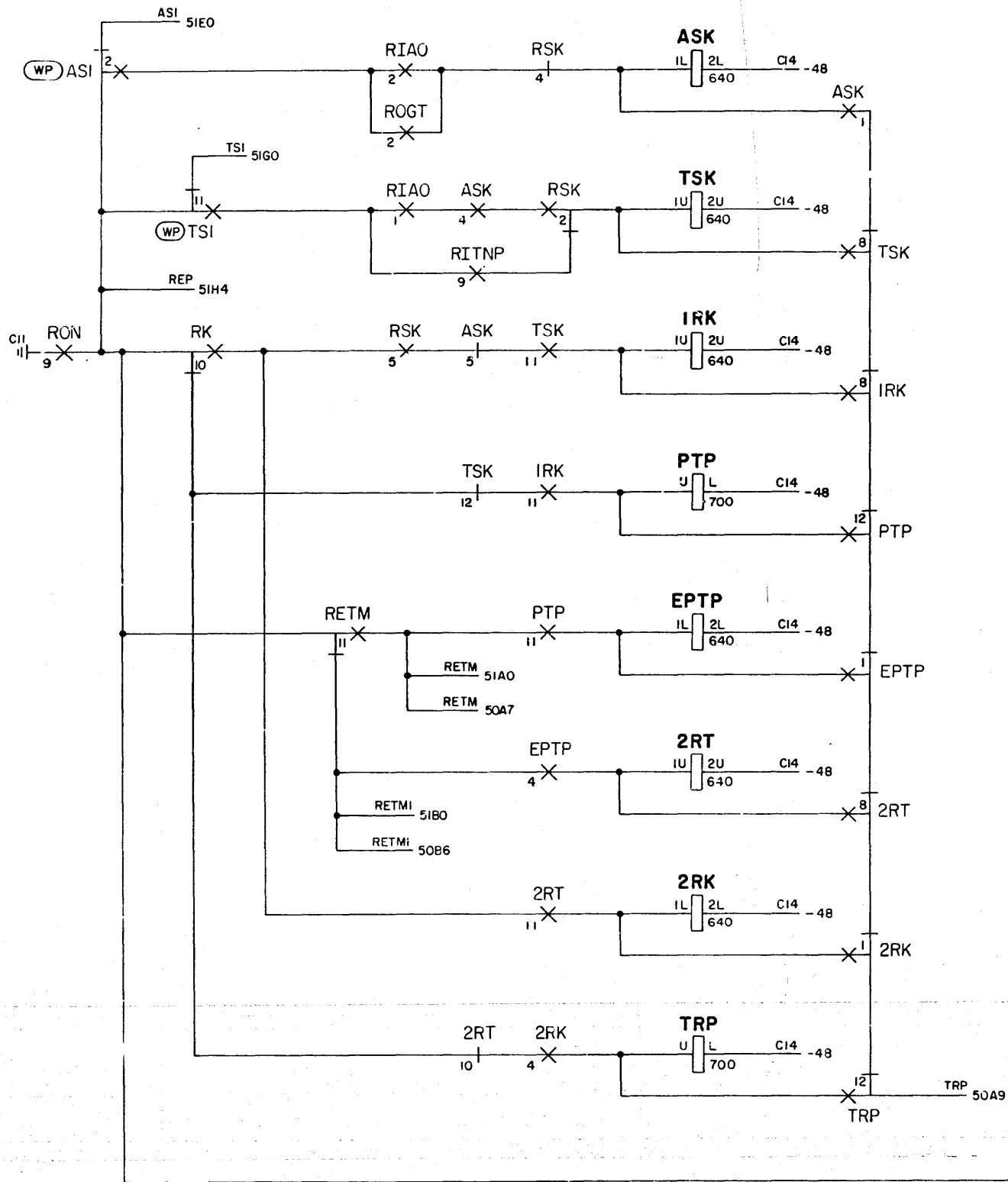
BELL TELEPHONE LABORATORIES
INCORPORATED

6S

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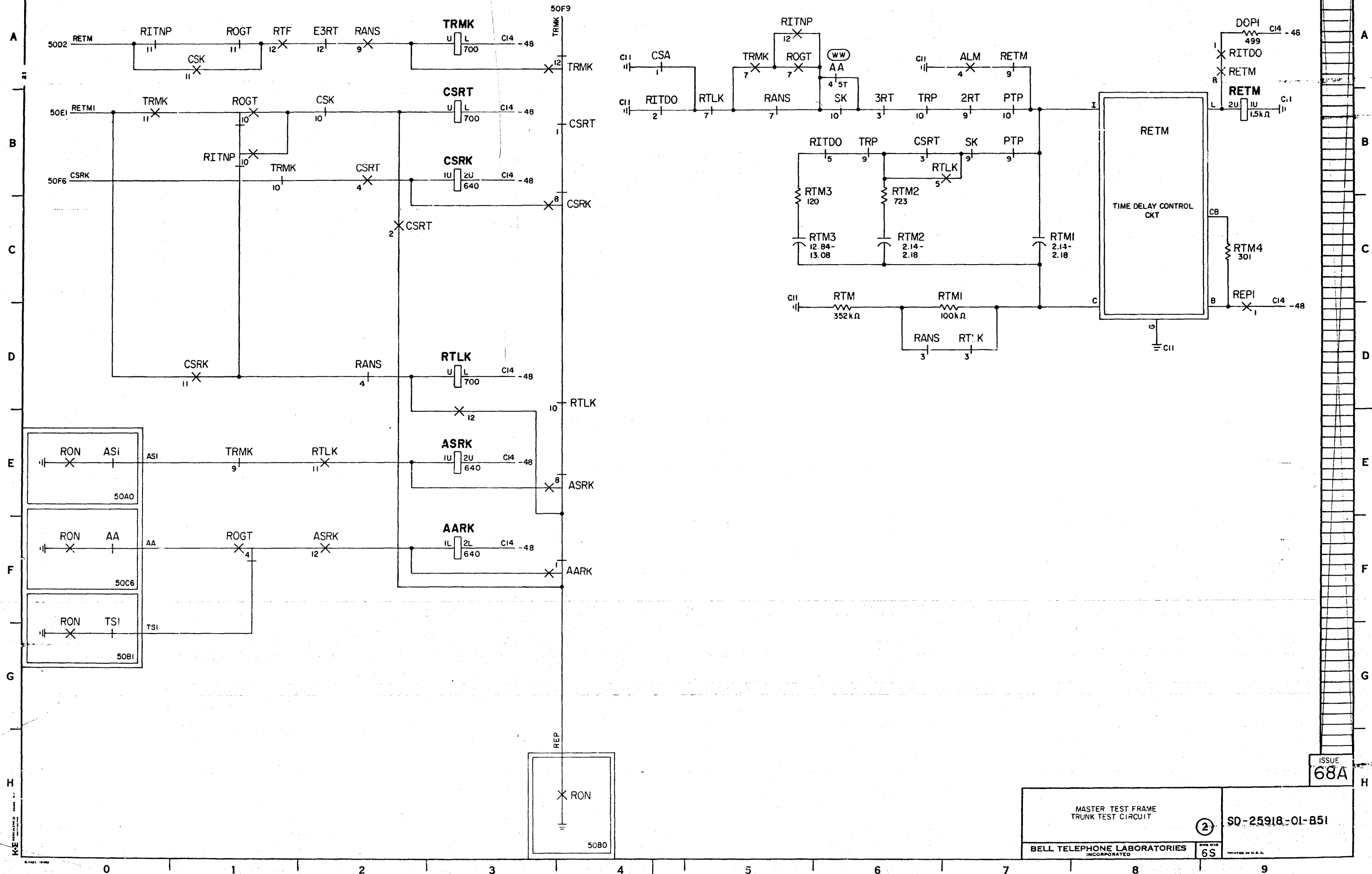
SD-25918-01-B49

PART OF FS 39
AUTOMATIC RECYCLE TEST SEQUENCE CONTROL
(SEE NOTE 1)

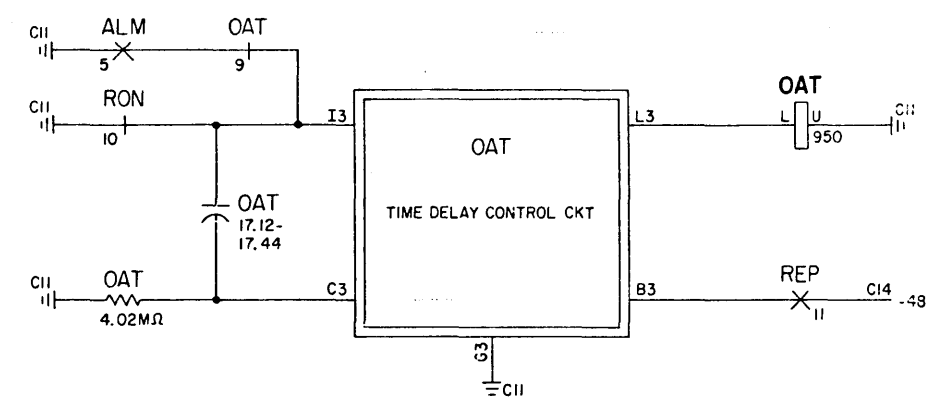
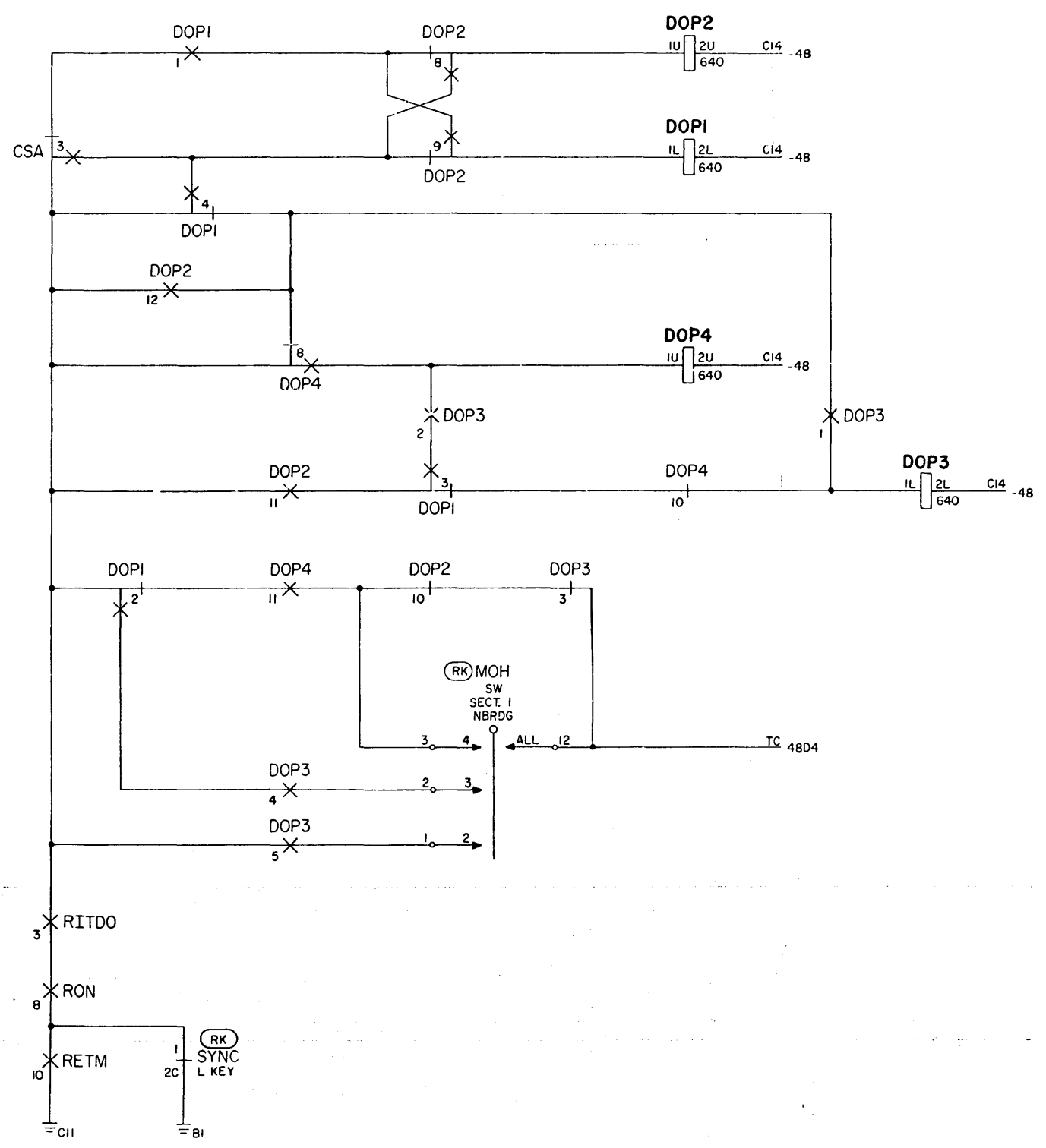


NOTES:
1. ALL APPARATUS & WIRING IS PART OF APP FIG. 35, UNLESS OTHERWISE SPECIFIED.

35 PART OF FS 39
AUTOMATIC RECYCLE TEST SEQUENCE CONTROL



FS 40
AUTOMATIC RECYCLE ITDO AND MISCELLANEOUS TEST
(SEE NOTE 1)

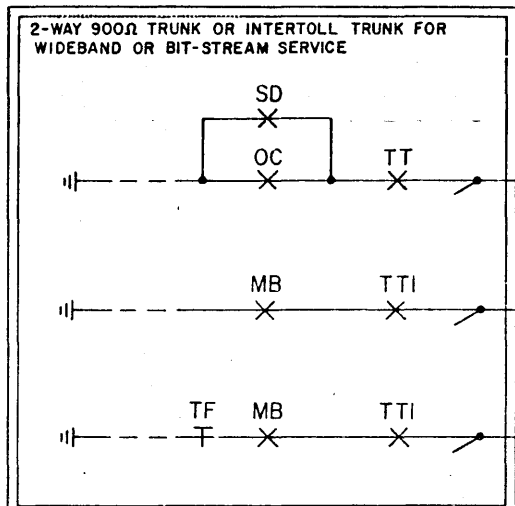
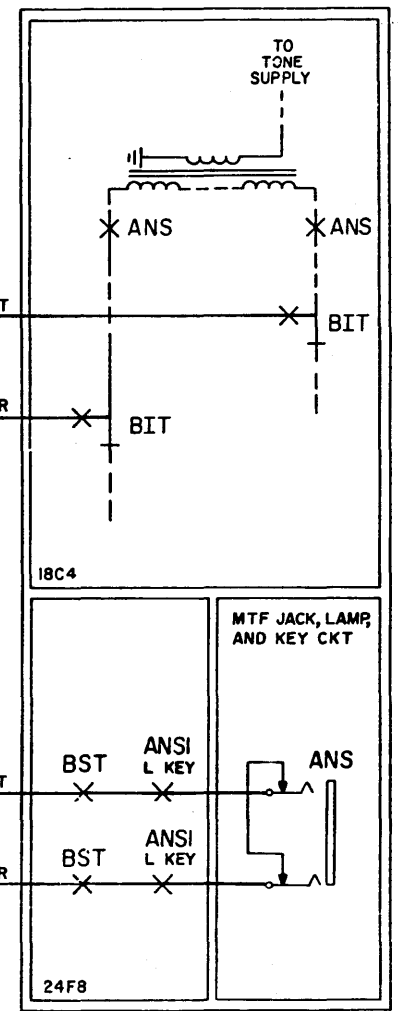
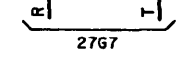
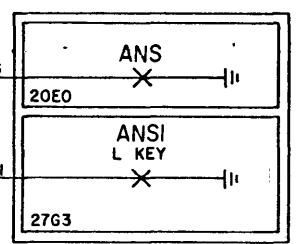


NOTES:
1. ALL APPARATUS & WIRING IS PART OF APP FIG. 35, UNLESS OTHERWISE SPECIFIED.

FS 41
BIT-STREAM TEST TRUNKS

2-WAY TRUNK FOR
BIT-STREAM
SERVICE AND
ARRANGED AS
TEST TRUNK
NUMBER 1
(SEE NOTE 316)

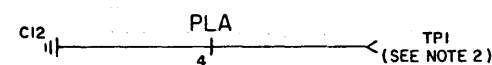
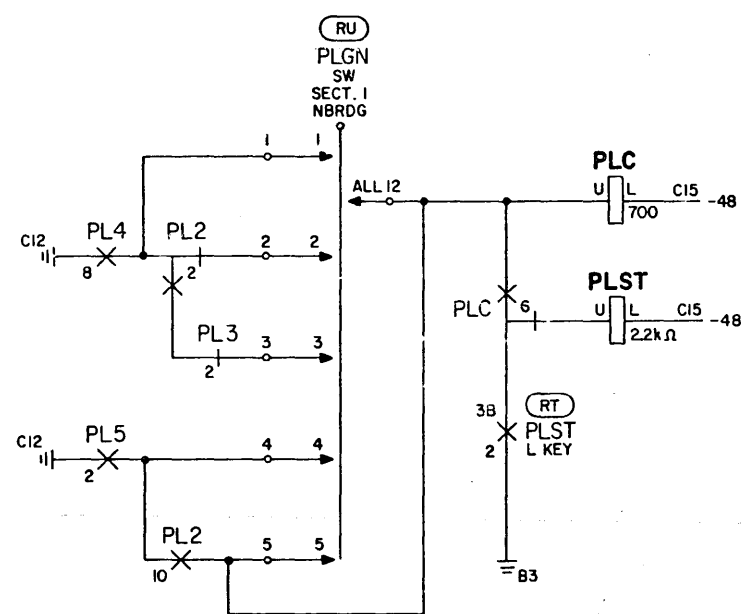
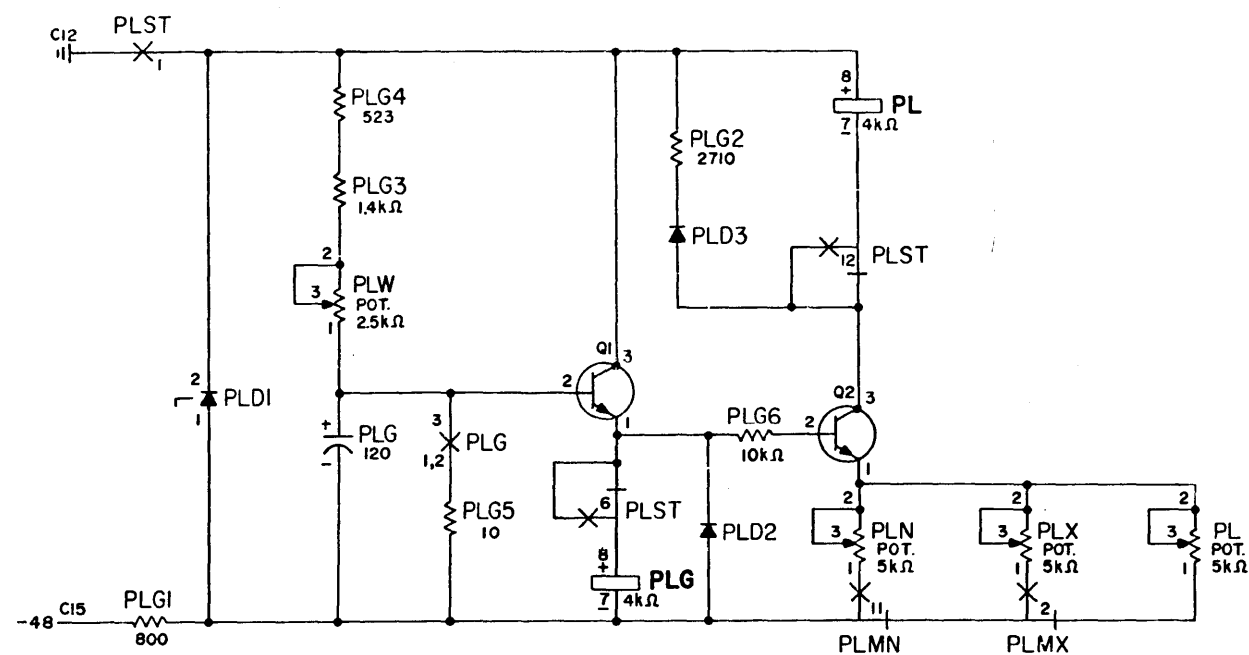
2-WAY TRUNK FOR
BIT-STREAM
SERVICE AND
ARRANGED AS
TEST TRUNK
NUMBER 2
(SEE NOTE 316)



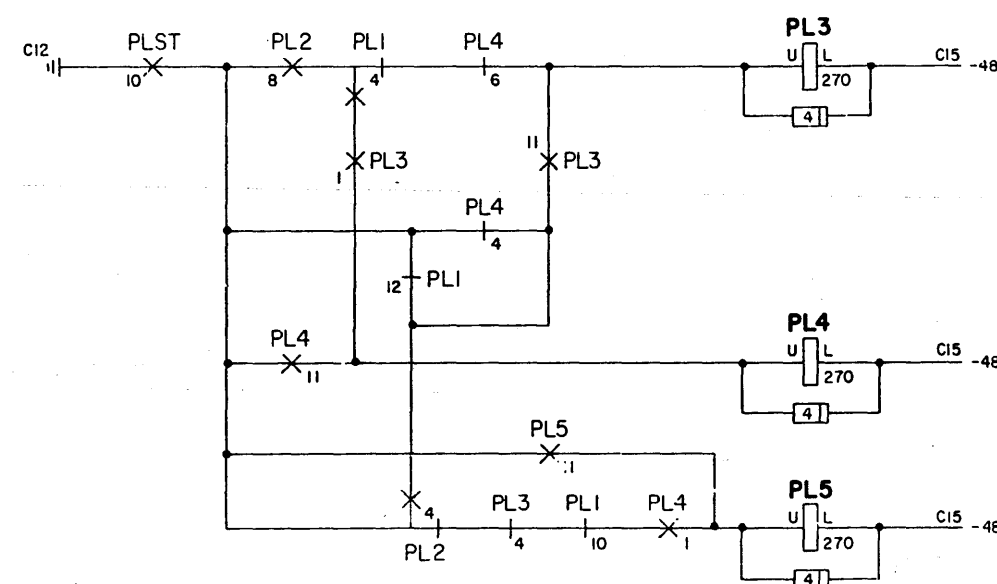
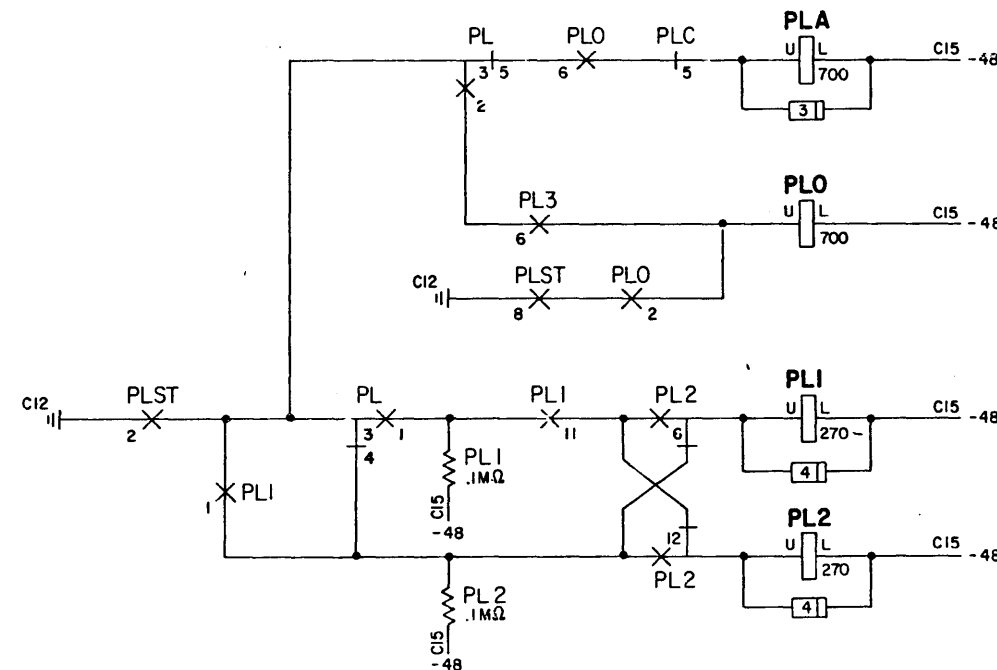
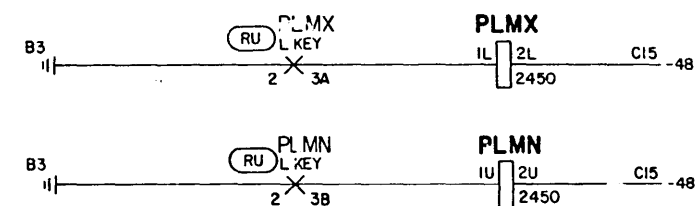
SD-25918-01-B53

FS 42

PULSE GENERATOR
(SEE NOTE 1)



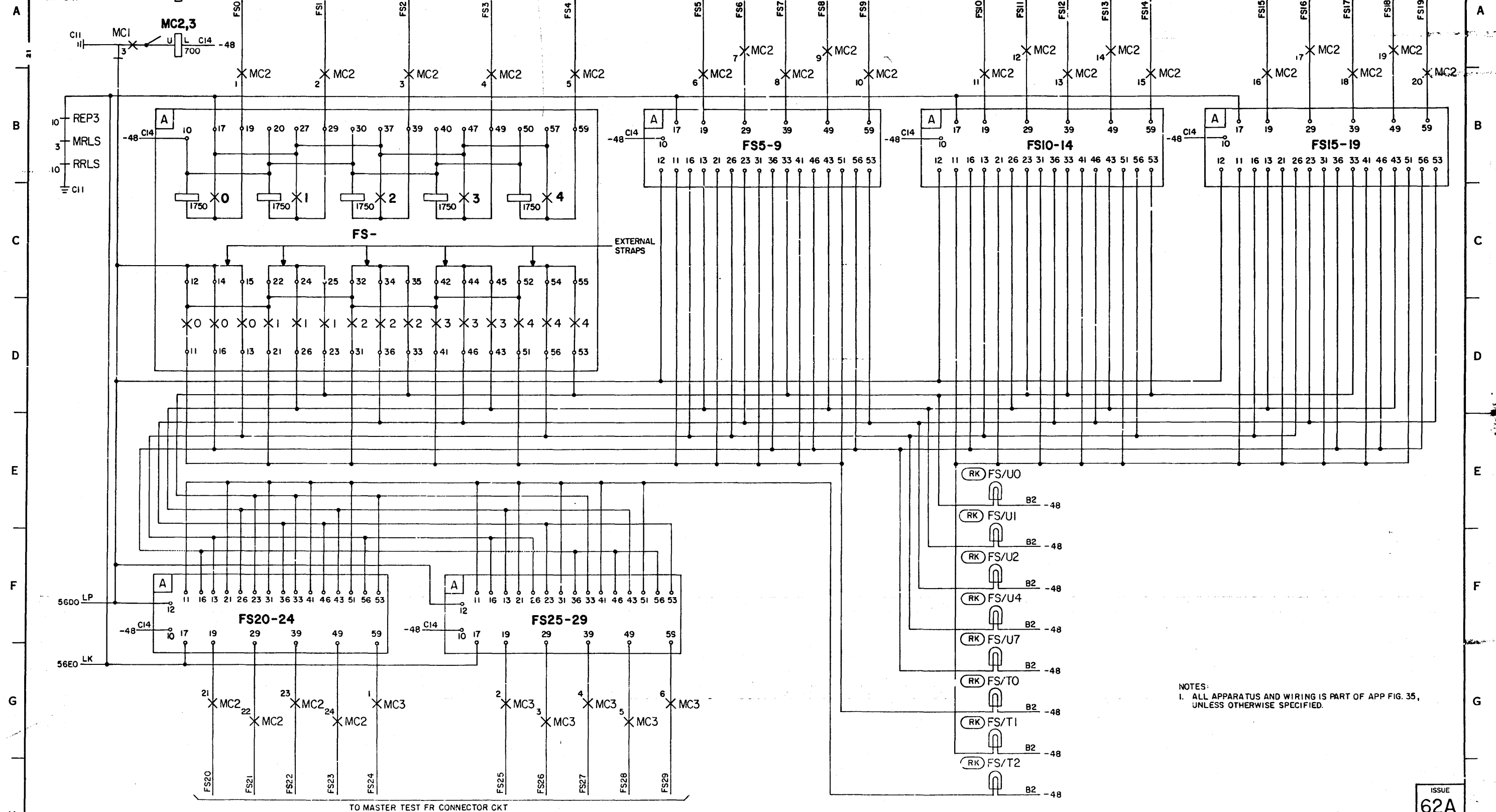
- NOTES:
1. ALL APPARATUS AND WIRING IS PART OF APP FIG. 40, UNLESS OTHERWISE SPECIFIED.
 2. TEST POINT 1 (TP1) IS TERMINAL NUMBER 7 ON COMPONENT ASSEMBLY 30.



PART OF FS 43

TRUNK IDENTIFICATION
(SEE NOTE 1)

TO MASTER TEST FR CONNECTOR CKT



NOTES:
1. ALL APPARATUS AND WIRING IS PART OF APP FIG. 35,
UNLESS OTHERWISE SPECIFIED.

ISSUE
62A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-B55

BELL TELEPHONE LABORATORIES
INCORPORATED

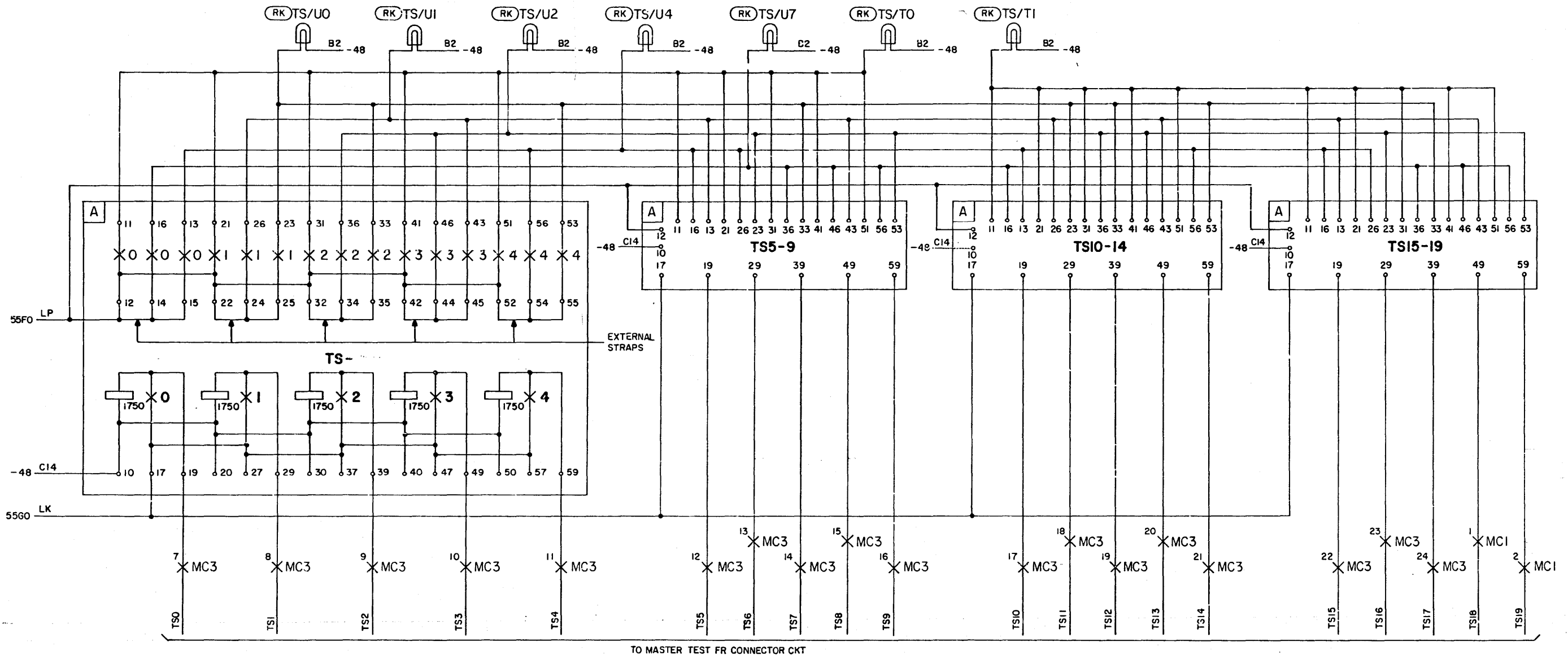
6S

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SD-25918-01-B55

PART OF FS 43

TRUNK IDENTIFICATION
(SEE NOTE 1)



NOTES:
1. ALL APPARATUS AND WIRING IS PART OF APP FIG. 35 UNLESS OTHERWISE SPECIFIED.

ISSUE
62A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

②

SD-25918-01-B56

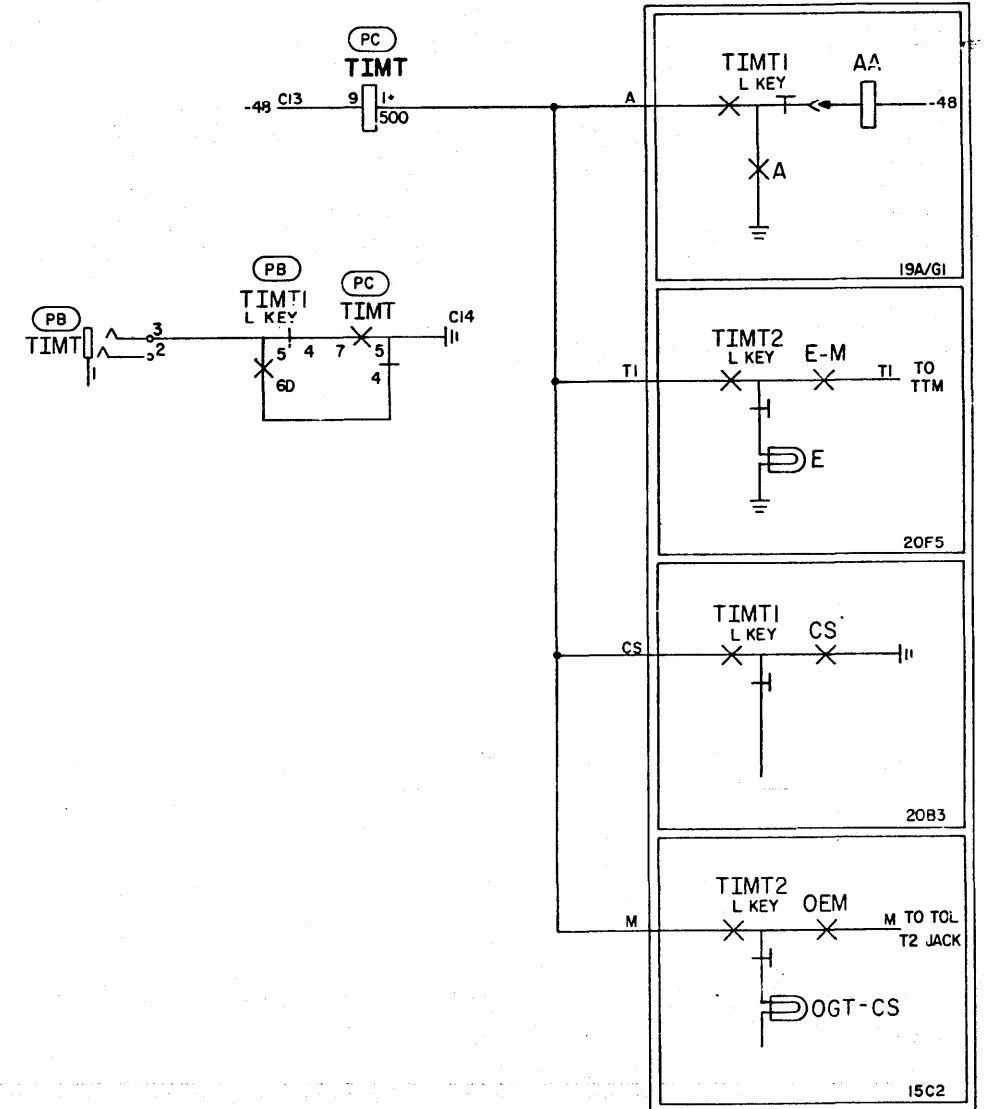
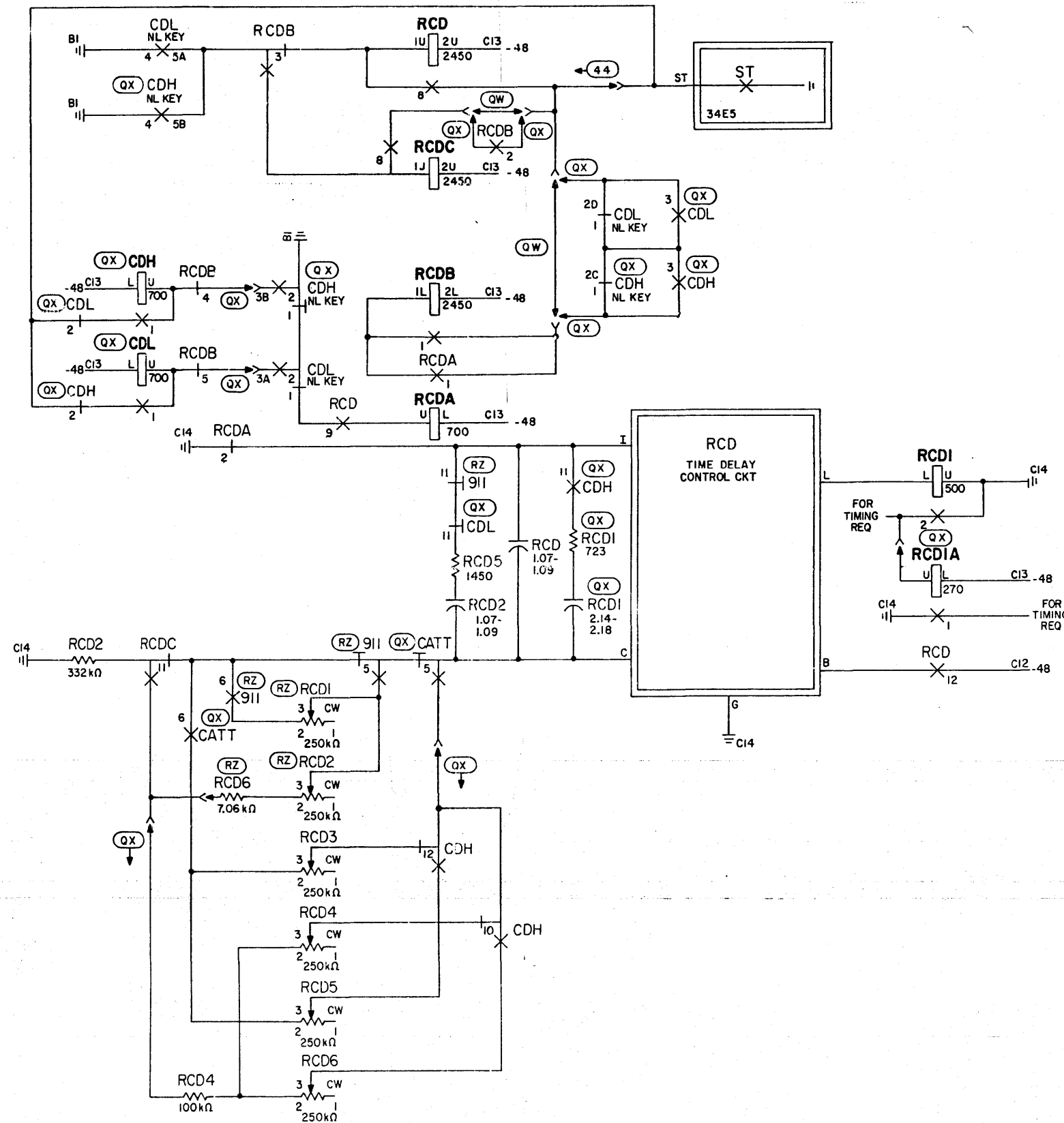
BELL TELEPHONE LABORATORIES
INCORPORATED

65

PRINTED IN U.S.A.

44 FS 44
WINK GENERATOR

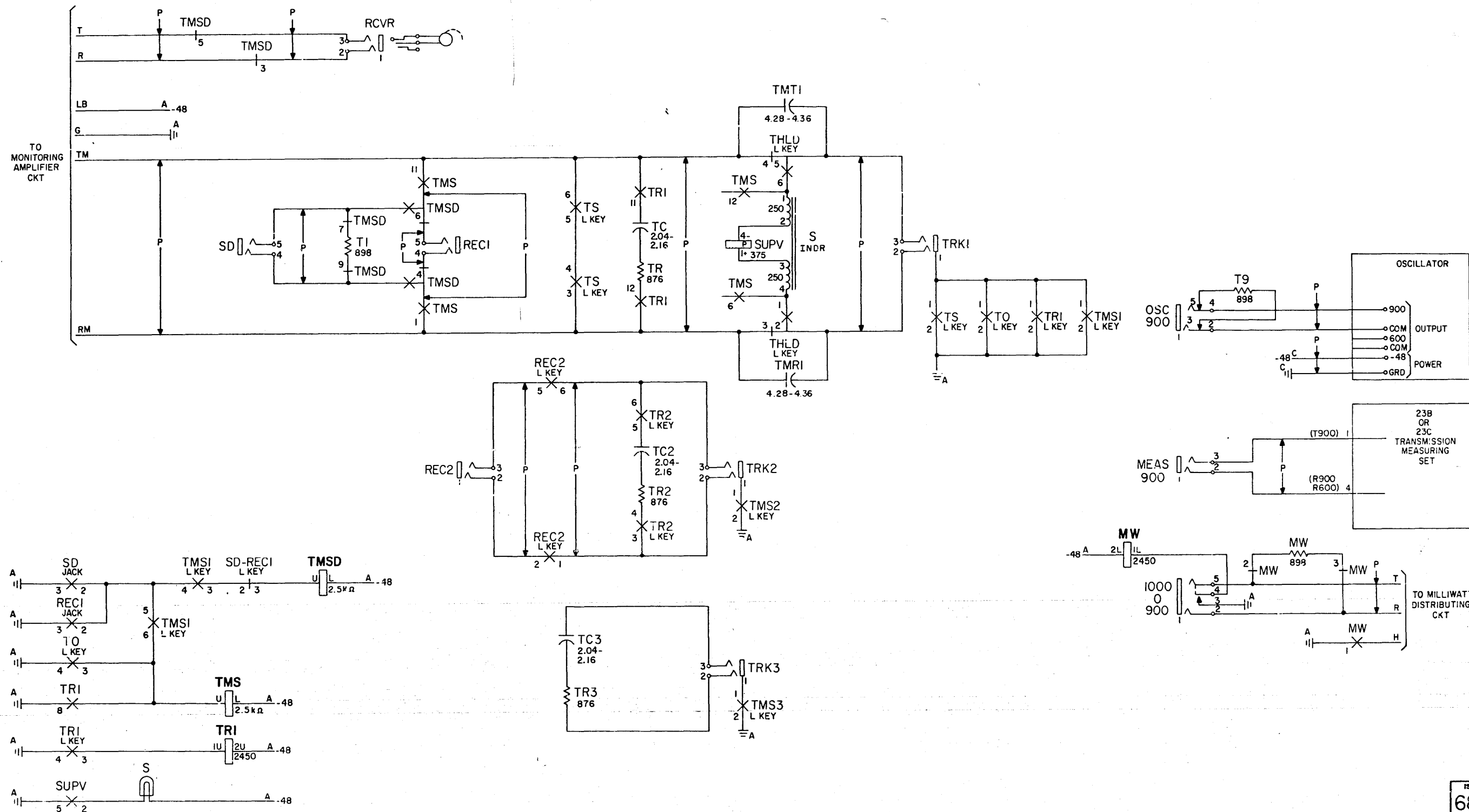
FS 45
SINGLE WINK
TIMING TEST



SD-25918-01-B57

43 FS 46

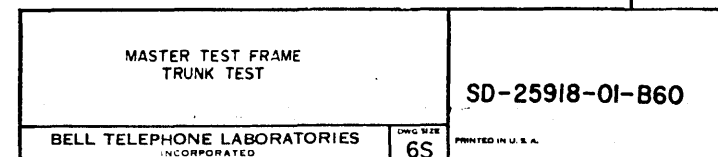
TRANSMISSION
TESTING
FOR ACD



[illegible]

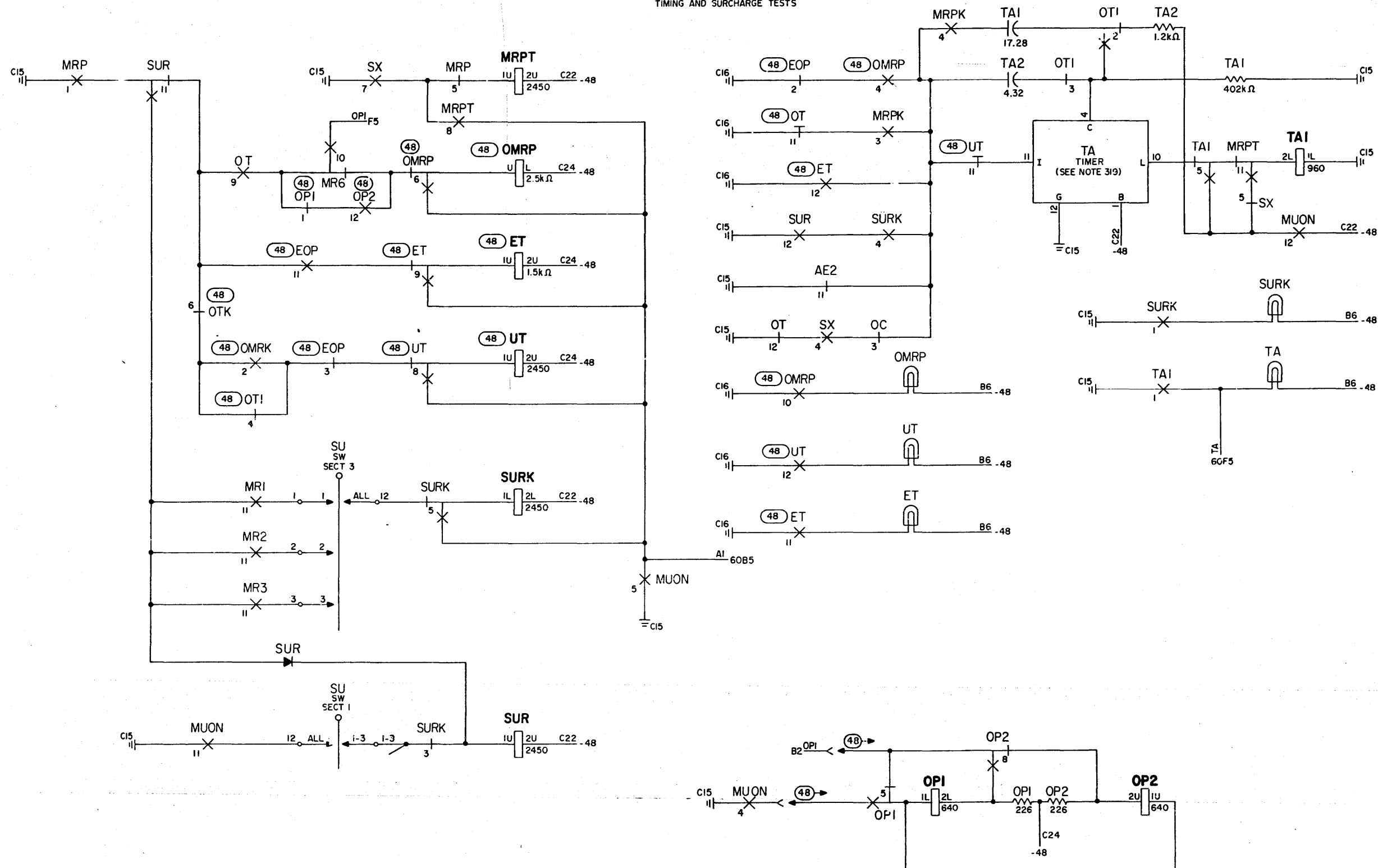
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MESSAGE REGISTER PULSE COUNTER CHECK



ISSUE
74A

(46,47) FS 49
MESSAGE REGISTER PULSE JUNCTION
TIMING AND SURCHARGE TESTS



ISSUE
81A

MASTER TEST FRAME
TRUNK TEST

BELL TELEPHONE LABORATORIES
INCORPORATED

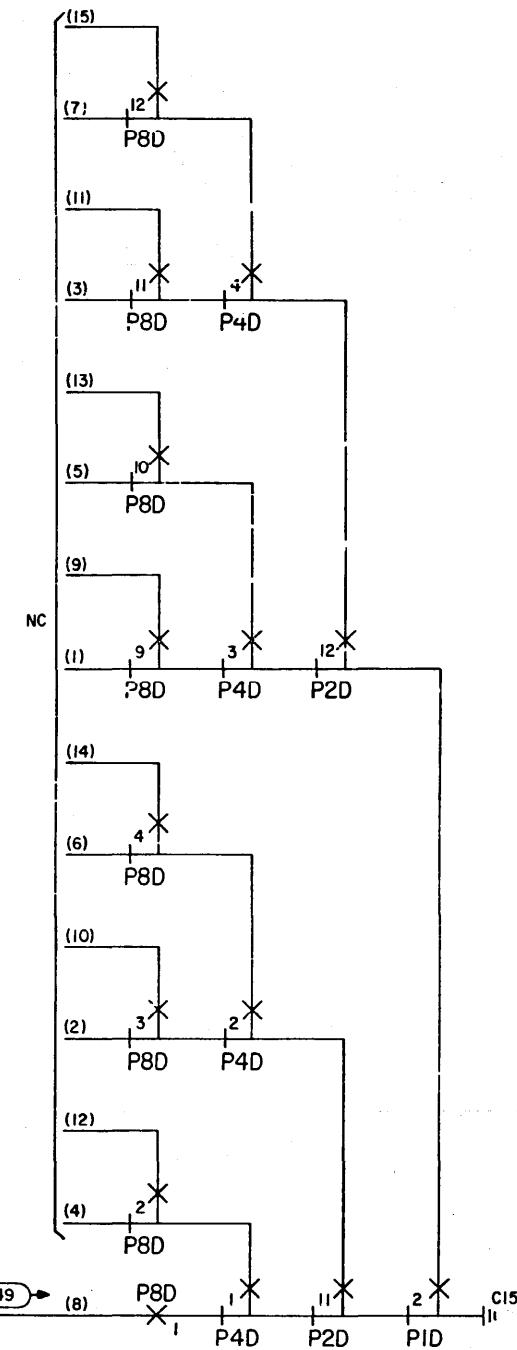
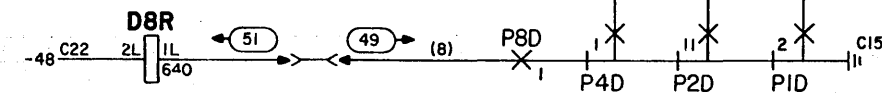
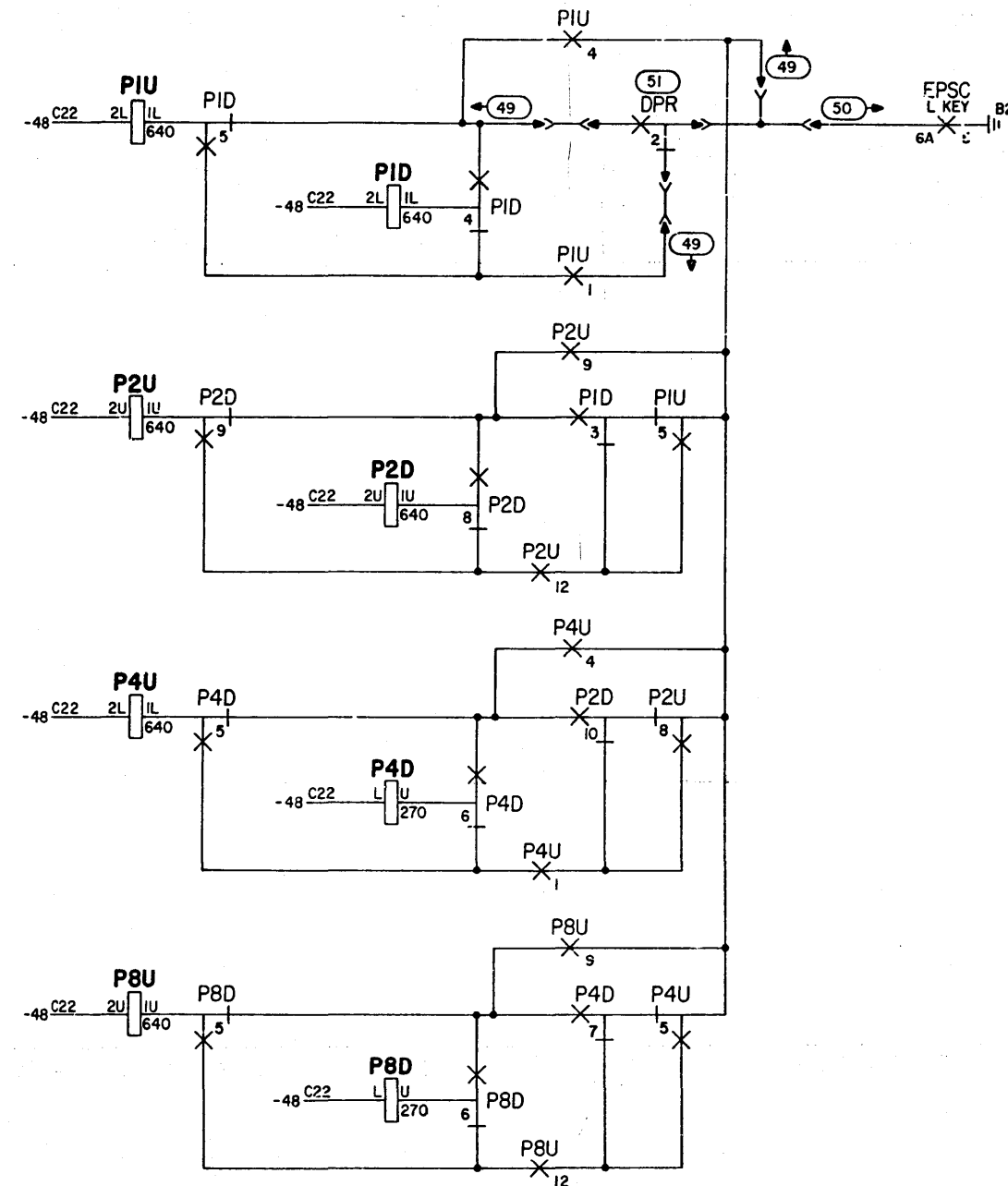
6S

SD-25918-01-B61

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FS 52 PULSE COUNTER

A
B
C
D
E
F
G
H



MASTER TEST FRAME TRUNK TEST CIRCUIT		
DWG SIZE 6S		ISSUE 78B
BELL LABORATORIES	SD-25918-01-	B63

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APP FIG A (MFR DISC)

RELAY						
DESIG	P					
CODE	2808, 239FK					
OPTION	E, F					
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP						
	3, 5, 2	BM	13F5			
BOT						
COIL			13D7			

LAMP	DESIG	LOC	CODE
OPT	PAD IN	13G5	2Y OR M1
	PAD OUT	13F5	2Y OR M1

APP FIG B (MFR DISC)

RELAY						
DESIG	P					
CODE	U113					
OPTION						
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP						
	3, 2, 1	BM	13G5			
	2, 1	M				
BOT						
COIL			13D7			

LAMP	DESIG	LOC	CODE
OPT	PAD IN	13G5	2Y OR M1
	PAD OUT	13G5	2Y OR M1

APP FIG C (MFR DISC)

INDUCTOR	DESIG	LOC	CODE
OPT	B	12A7	274J

RESISTOR	DESIG	LOC	CODE
OPT	AH	12A7	188J

APP FIG D
WIRING ONLY

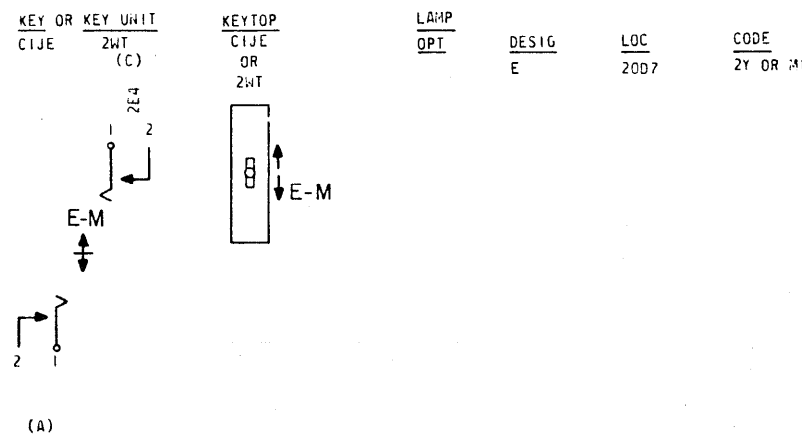
APP FIG E (MFR DISC)

RELAY						
DESIG	E-M					
CODE	U189					
OPTION						
	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP						
	7, 6	M	20D8			
	5, 4, 3	BM	18A6			
	2, 1	B	1H2			
BOT						
	2, 1	B	1F7			
	5, 4, 3	BM	18D5			
	7, 6	M	20E5			
COIL			2E5			

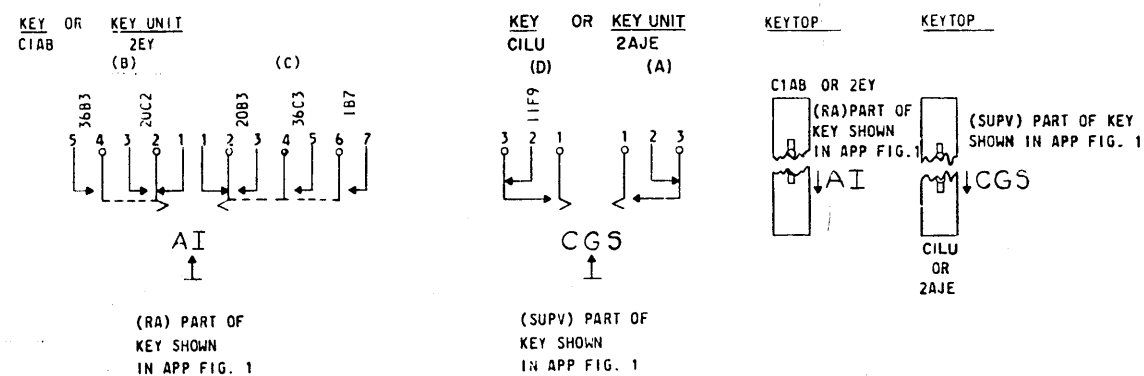
CAPACITOR	DESIG	LOC	CODE
OPT	[1] R4 T4	19A/F1 19A/A1	441C

APP FIG F (MFR DISC)

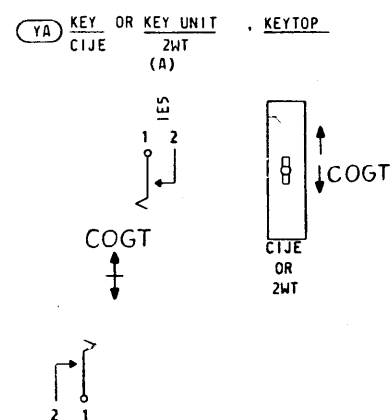
WIRING ONLY



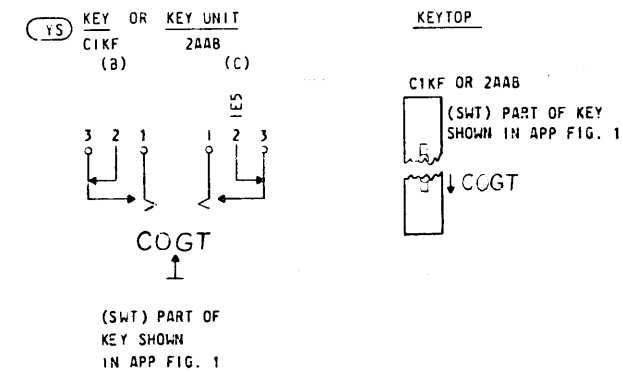
- APP FIG. L (A&M ONLY)



—APP FIG.M



—APP FIG. N(A&M ONLY)



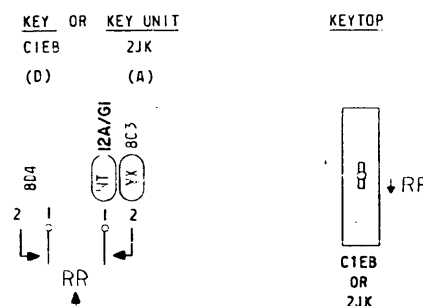
APP FIG 0 (MFR DISC.)

RELAY						
DESIG	TM					
CODE	U166					
OPTION	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP						
	6,5,4	BM	7B4			
	3,2,1	BM	25B/GS			
	3,2,1	BM	7D4			
	5,4	M				
BOT.						
COIL			7F8			

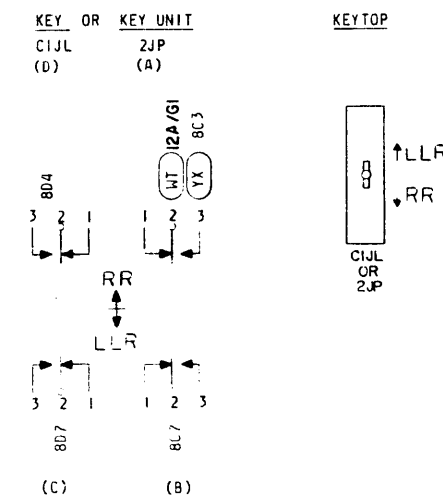
APP FIG. P

RELAY		TM1		TM1A		TM2			
CODE		AJ83		AJ33		AJ83			
OPTION		WB		WB		WB			
✕	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	1B6	EBM	10E1	EBM	16A/G4			
11	EBM	2407	EBM	KXG3	EBM	16A/H4			
10	EBM	6B/81	EBK		EBM	6B/83			
9	EBM	6B/A1	EBM		EBM	6B/A3			
8	EMB	24F6	EMB		EMB	28A6			
7	EBM	24F4	EBM		EBM				
6	EMB	768	EMB		EMB	25B/F7			
5	EMB	748	EMB	17A6	EMB	25B/C7			
4	EBM	7F6	EBM	2A2	EBM	28C7			
3	EBM	7B7	EBM		EBM	18G2			
2	EBM	a	EBM	2D3	EBM				
1	EBM	24G4	EBM		EBM	2H4			
COIL		16A/B2		16A/C2		16A/D2			

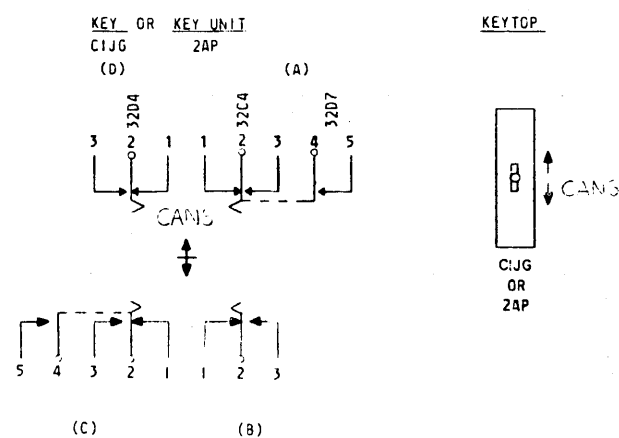
—APP FIG. Q (MFR DISC)



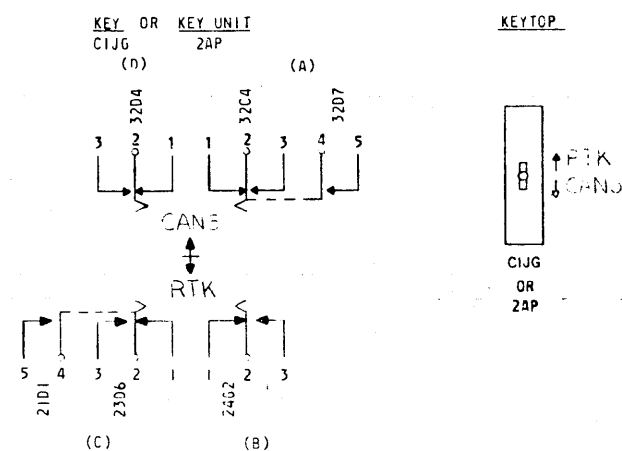
—APP FIG. R (MFR DISC)



APP FIG. S (MFR DISC)



— APP FIG. T



PART OF APP FIG 1

RELAY	DESIG	CODE	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	DESIG	CODE	OPTION
	ACB	AJ83	WS	WZ	WS	WZ	WZ	WZ	WZ	WZ	WZ	WZ	WZ	WZ	WZ	WZ	WZ	ACB	AJ83	WS
12	EBM	21F6	EBM	1886	M													EBM	21F6	EBM
11	EBM	21G6	EBM	1805														EBM	21G6	EBM
10	EBM	20E9	EBM	4F1	M													EBM	20E9	EBM
9	EBM	20F4	EBM	12A/C5														EBM	20F4	EBM
8	EBM		EBM	15E1	EBM													EBM		EBM
7	EBM		EBM	4G2														EBM		EBM
6	EBM		EBM		EBM													EBM		EBM
5	EBM		EBM		EBM													EBM		EBM
4	EBM	19B/E3	EBM	4G4	EBM	19A/E8												EBM	19B/E3	EBM
3	EBM	19A/H3	EBM		EBM	19B/F8												EBM	19A/H3	EBM
2	EBM		EBM	4H4		EBM	11B4	M										EBM		EBM
1	EBM	19B/B3	EBM		EBM	19A/B8												EBM	19B/B3	EBM
COIL	2E2	2A6	2A6	8B9	4G4	2E2	9G0	25A/F1	33G3	5D9	COIL									

2H3
19A/H1

RELAY	DESIG	CODE	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	DESIG	CODE	OPTION
	CSW	AJ5	YV	YU	YO	YO	YO	YO	YO	YO	YO	YO	YO	YO	YO	YO	YO	CSW	AJ5	YV
12	EBM	21C0	EBM	33G3														EBM	21C0	EBM
11	EBM	21G1	EBM	33G4														EBM	21G1	EBM
10	EBM	21G2	EBM	33G7														EBM	21G2	EBM
9	EBM	21G3	EBM	33G7														EBM	21G3	EBM
8	EBM	21G4	EBM	33G7														EBM	21G4	EBM
7	EBM	21G5	EBM	33G7														EBM	21G5	EBM
6	EBM	21G6	EBM	33G7														EBM	21G6	EBM
5	EBM	21G7	EBM	33G7														EBM	21G7	EBM
4	EBM	21H1	EBM	33G7														EBM	21H1	EBM
3	EBM	21H2	EBM	33G7														EBM	21H2	EBM
2	EBM	21H3	EBM	33G7														EBM	21H3	EBM
1	EBM	21H4	EBM	33G7														EBM	21H4	EBM
COIL	33H3	33H3	1H4	2A8	2C7	2C2	2C2	2C2	2C2	2C2	2C2	2C2	2C2	2C2	2C2	2C2	2C2			

RELAY	DESIG	CODE	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	DESIG	CODE	OPTION
	LLP	AJ83	VB (WRG VD)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	VB (WRG VC)	LLP	AJ83	VB (WRG VD)
12	EBM	21D2	EBM	8E5														EBM	21D2	EBM
11	EBM	2A2	EBM	8B5														EBM	2A2	EBM
10	EBM	9G4	EBM	9G4	M													EBM	9G4	EBM
9	EBM	1F5	EBM	1F5														EBM	1F5	EBM
8	EBM	8C5	EBM	2A2	EBM													EBM	8C5	EBM
7	EBM	23B6	EBM	23B6														EBM	23B6	EBM
6	EBM	8D5	EBM	21C2	EBM													EBM	8D5	EBM
5	EBM		EBM		EBM													EBM		EBM
4	EBM	3G1	EBM	3G1	EBM	8G1												EBM	3G1	EBM
3	EBM	19E7	EBM	19B/E2														EBM	19E7	EBM
2	EBM		EBM		M													EBM		EBM
1	EBM	19B/B2	EBM	19B/B2														EBM	19B/B2	EBM
COIL	2B2	2B2	8C5	6A/H5	21C1	5B1	2A8	2E5	13G2	13H2	COIL									

RELAY	DESIG	CODE	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	DESIG	CODE	OPTION
	RBA	AJ15	VG	WA	RP	RP	RP	RP	RP	RP	RP	RP	RP	RP	RP	RP	RP	RBA	AJ15	VG
12	EBM		EBM	18B4	EBM	8H0												EBM		EBM
11	EBM		EBM	16B/B7	EBM													EBM		EBM
10	EBM		EBM	18C4	EBM													EBM		EBM
9	EBM	23F7	EBM	16B/D7	EBM													EBM	23F7	EBM
8	EBM		EBM	16B/B5	EBM	8C5												EBM		EBM
7	EBM		EBM	23E6	EBM													EBM		EBM
6	EBM		EBM	16B/G8	EBM	8C5												EBM		EBM
5	EBM	23G3	EBM	16B/F4	EBM													EBM	23G3	EBM
4	EBM		EBM	7A1	EBM													EBM		EBM
3	EBM	23F7	EBM	7C0	EBM													EBM	23F7	EBM
2	EBM		EBM	7E1	EBM													EBM		EBM
1	EBM		EBM	16B/E8	EBM													EBM		EBM
COIL	23G4	2C2	8G0	2D7	2H5	12A/G2	12F2	19A/F6	11H5	8H0	COIL									

12A/B3
12A/G0

12A/F0
20F4

RELAY	DESIG	CODE	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	DESIG	CODE	OPTION
	STO	AG24	VF	TO	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV	OV	STO	AG24	VF
12	EBM		EBM		EBM													EBM		EBM
11	EBM		EBM		EBM													EBM		EBM
10	EBM		EBM		EBM													EBM		EBM
9	EBM		EBM		EBM													EBM		EBM
8	EBM	20E3	EBM		EBM													EBM	20E3	EBM
7	EBM		EBM		EBM													EBM		EBM
6	EBM	1A7	EBM		EBM													EBM	1A7	EBM
5	EBM		EBM		EBM													EBM		EBM
4	EBM	12A/F0	EBM	3G2														EBM	12A/F0	EBM
3	EBM		EBM	43H7														EBM		EBM
2	EBM		EBM	44C1														EBM		EBM
1	EBM		EBM	43H3														EBM		EBM
COIL	12C2	1C3	1E7	1D7	2C6	5F8	2F8	2F5	5E8	2C7	COIL									

RELAY	DESIG	CODE	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	DESIG	CODE	OPTION
	TS3	AJ108	QA	QF	PK	PK	PK	PK	PK	PK	PK	PK	PK	PK	PK	PK	PK	TS3	AJ108	QA
12	EBM		EBM		EBM													EBM		EBM
11	EBM		EBM		EBM													EBM		EBM
10	EBM		EBM		EBM													EBM		EBM
9	EBM		EBM		EBM													EBM		EBM
8	EBM		EBM		EBM													EBM		EBM
7	EBM		EBM		EBM													EBM		EBM
6	EBM	26E1	EBM		EBM													EBM	26E1	EBM
5	EBM		EBM		EBM													EBM		EBM
4	EBM		EBM		EBM													EBM		EBM
3	EBM		EBM		EBM													EBM		EBM
2	EBM		EBM		EBM													EBM		EBM
1	EBM		EBM		EBM													EBM		EBM
COIL	26E0	2E5	1E4	3D7	8C6	34A7	9H0													

ISSUE
83A

MASTER TEST FRAME
TRUNK TEST CIRCUIT
BELL TELEPHONE LABORATORIES
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65

PART OF APP FIG 1

RELAY			A			AI			AA			ANS			AS			CN					
DESIG			3DC						Y32T			U1182			U1250			S507			U553		
CODE			U318			UA84																	
OPTION			XU			WX			WV														
	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										12,11	M												
	10,9	M								10,9,8	BM	50C6											
	8,7,6	BM	26A8				6,5	M	19A/HI	7,6	M	19A/G3											
	5,4,3	BM					4,3	M	12G1	5,4	B	51A6	4,3	M	20E0				5,4	M			
	2,1	B		3,1	M	19A/GC	2,1	M	19B/G8	2,1,3	MB		2,1	M	18B2	3,2,1	BM	a	3,2,1	BM	5F6		
BOT	3,2,1	BM	26C8				2,1	B		2,1,3	MB		2,1	M	18C2				3,2,1	BM	a		
	5,4	M					4,3	M	20F4	5,4	M	19A/HO							5,4	M	SH5		
	8,7,6	BM	26B7				6,5	M		7,6	M	20E8											
	10,9	M								10,9,8	BM												
COIL			202						19A/HI			19A/GI			18F3			9H3			5E2		
																		9G1			5E6		
																		164			12A/F		

RELAY																					
DESIG	CNA			CNB			CNB			CP			CPT			CPT1					
CODE	U1162			U1238			U1182			U1238			280R,239GH			280CFG			U1113		
OPTION	UJ			UI			UJ			UI			M,N			RN			TE		
	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	12,11	M					12,11	M													
	10,9,8	BM					10,9,8	BM											10,9	M	
	7,6	M	SE5				7,6	M	SE5										8,7	M	SE7
	5,4	B	7C0	4,3	M	SE5	5,4	B	5D2	4,3	M	SE5							6,5,4	BM	7C0
	2,1,3	MB		2,1	B		2,1,3	MB	5D3	2,1	B	5D2	5,9,4	BM	5H5	3,5,2	BM	SE7	3,2,1	BM	
BOT.	2,1,3	MB	12A/FI	2,1	M	SE6	2,1,3	MB		2,1	M	5D0							3,2,1	BM	5G4
	5,4	M	SE6				5,4	M	5D0										6,5,4	BM	
	7,6	M					7,6	M	7C1										3,7	M	
	10,9,8	BM	5H4				10,9,8	BM	5H4										10,9	M	
	12,11	M					12,11	M													
COIL			5F5			5F5			SE5			SE5			SE2			5D4			5D9

[illegible]

RELAY	LS			MC			UGT			PK			PO			R-			RB		
DESIG	S34			U1250			U98			280H,239FJ			280CD			UA71			UA71		
CODE										J,K			WS								
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																					
							8,7	M	198/B6												
				4,3	M	34A2	6,5,4	BM	208A							4,3	M	23F1	4,3	M	23F1
	3,2,1	M	11H1	2,1	M	1C7	3,2,1	BM	188B	4,7,3	BM	6A/D6	4,7,3	BM	11H0	2,1	M	23C3	2,1	M	
				2,1	M	40G4	3,2,1	BM	18C6							2,1	M	37C2	2,1	M	23G3
							6,5,4	BM	1E8												
							8,7	M	193/E6												
BOT.																					
COIL			11G5			1D2			1E8			6B/H6			21F5			23E1			23G5

RELAY		RF			S			S			ST			ST			T			T																	
DESIG		280FG			UA114			UA1			U1031			U50			U371			U1318																	
OPTION		YO			ZY			ZX			XS			XR			YC			YB																	
		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											11,12	M	38G8																								
											11,10	M	a		11,10	M	a																				
											9,8	M			9,8	M	b																				
											7,6	M	18F2		7,6	M	18F2																				
					4,3	M	11H9				5,4	M	7A5		5,4	M	7A5	6,5,4	BM	19A/E6	5,4,3	BM	19A/E6														
	3,5,2	PM	33G5		2,1	M	10C3	2,1	M	10C3	2,1,3	EMB	10G2	3,2,1	BM	10G2	3,2,1	BM	19B/G4	2,1	M																
BOT					2,1	M	10G4	2,1	M	10G4	2,1,3	EMB	11H3	2,1	M	11H3	3,2,1	BM	19A/B6	3,2,1	BM	19A/B6															
											5,4	M	34B7	4,3	M	34B7																					
											7,6	M	7E5	6,5	M	7E5																					
											9,8	M	12A/E6	8,7	M	12A/E6																					
											11,10	M	34C4	10,9	M	34C4																					
COIL			33E2			10E1			10E1		13,12	M	1B2			1B3			19A/G1			19A/G1															
											a	(T)	10E2												(T)	10E2											
											a	(V)	25B/F6												(V)	25B/F6											
											b	(ZH)	34B5												(ZH)	34B5											
											b	(ZI)	17C7												(ZI)	17C7											

RELAY																		
DESIGN CODE OPTION	T- UA71			TS S50Z			TIK U440 H			CPT 290BA RO			RHL4 R1132 RP					
	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																		
	4,3	M	23B1															
	2,1	M	23C3	3,2,1	BM	a	3,2,1	BM	1A2	3,5,2	BM	5E7	2,A,1	BM	2000			
	2,1	M	37C2				3,2,1	BM										
BOT																		
COIL			23A1			25B/G3 1D3			26B			50A			9C4			
														</				

DRAWING ISSUE	
500	
51A	
52D	
53D	
56D	
58A	

ISSUE 33A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

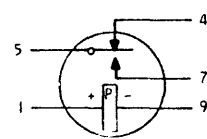
② SD-25918-01-C5

65

65

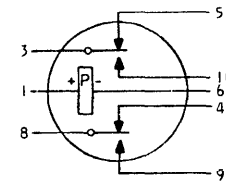
PART OF APP FIG 1

RELAY



DESIG	OLF	TIMT
CODE	316B	316B
OPTION	TF	PC
9	5H2	57B7
7	5B0	57C7
5	5B0	57C7
4		57C7
1	5H2	57B7

RELAY



DESIG	SDT	TIMT
CODE	313A	316B
OPTION	TU	PC
10	46C9	57B7
9	46B1	57C7
8	46B1	57C7
6	15C5	57C7
5	46C9	
4	46B1	
3	46C9	
1	15C5	

DIODE

OPT	DESIG	LOC	CODE
TF	OLFA	5H2	485J
TF	OLFB	5H2	485H
WT	3RT	12A/E1	446F
			OR
			420G
WA	RERR	23D2	426M
WA	RERT	23A2	426M

INDUCTOR

OPT	DESIG	LOC	CODE
YC	C	19B/G5	274J
WA	RE	16B/C6	274J

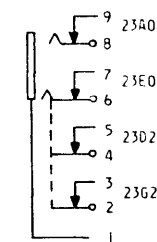
JACK

OPT	DESIG	LOC	CODE
WS	SFT	2C4	238A OR 238AM
YO	TMI	21F3	239C OR 239CM
UB	TNK	21D7	240C OR 240CM
PB	TIMT	57C6	238AM

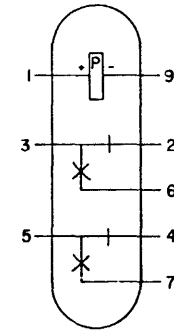
JACK

289A OR 289AM

TST



RELAY

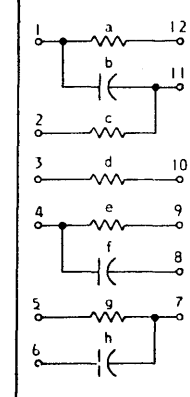


DESIG	WKTT
CODE	316W
OPTION	PT
9	19B/G1
7	20F8
6	2B4
5	20F8
4	
3	2B4
2	
1	19B/G1

CAPACITOR

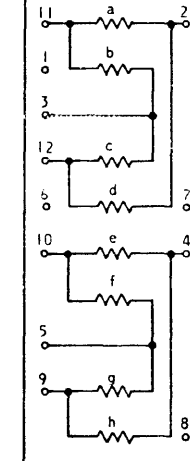
OPT	DESIG	LOC	CODE
ZE	LK	18B1	441A
XZ	LT	8G2	437QA
VF	[1] (OR1 OT1)	32F7	441C
VF	[1] (OR2 OT2)	32G7	437E
	[1] (R T)	10G1	437E OR 137E
PE	[1] (R1 T1)	19A/E3	437E OR 137E
YC	[1] (RS TS)	19A/E2	441C
YO	[1] (R9 T9)	33E1	437E OR 137E
VB	[1] (R10 T10)	8E5	441C
	RB	23E5	441A
WA	[1] (RER RET)	16B/C6	437QA
WT	RRT(RRT.1) (RRT.2)	12F1	439QA
			441QJ
	TN	18B1	441B
PF	[1] (RI TI)	19A/E5	437QA
PH	[1] (R10A T10A)	8E5	535GH

COMPONENT ASSEMBLY



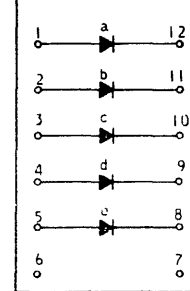
DESIG		CA2		
CODE		ED-94823-() G568		
OPTION		WA		
COMPONENT		DESIG	LOC	CODE
CAPACITOR	b	RE	163/C6	535DY
	f	RE2	7C2	5425B
	h	RE1	7C1	542AH
RESISTOR	a	RE5	163/B6	221A, 316
	c	RE4	163/C5	221A, 600
	d	RE3	163/B5	221A, 600
	e	RE2	7B2	221A, 178
	g	RE1	7B1	221A, 600

COMPONENT ASSEMBLY



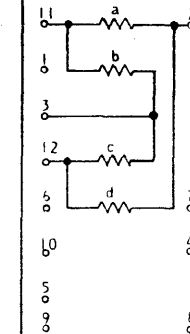
DESIG		CA3		CA4			
CODE		ED-94823-() G716		ED-94823-() G557			
OPTION		WA		WA			
COMPONENT	DESIG	LOC	CODE	DESIG	LOC	CODE	
RESISTOR	a	PD1	16B/F5	221A, 83.5	PA1	16B/F7	221A, 11
	b	PD2	16B/F5	221A, 9.76kΩ	PA2	16B/F7	221A, 73.2kΩ
	c	PD3	16B/G5	221A, 83.5	PA3	16B/G7	221A, 11
	d	PD4	16B/F5	221A, 9.76kΩ	PA4	16B/F7	221A, 73.2kΩ
	e	PC1	16B/F6	221A, 42.2	PB1	16B/F6	221A, 21
	f	PC2	16B/F6	221A, 19.8kΩ	PB2	16B/F7	221A, 38.3kΩ
	g	PC3	16B/G6	221A, 42.2	PB3	16B/G6	221A, 21
	h	PC4	16B/F5	221A, 19.8kΩ	PB4	16B/F6	221A, 38.3kΩ

COMPONENT ASSEMBLY



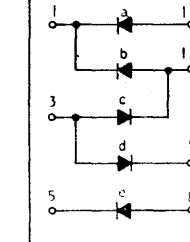
DESIG	CA6		
CODE	ED-94823-() G614		
OPTION	UH		
COMPONENT	DESIG	LOC	CODE
DIODE	a T-	23A2	400A
	b R-	23E2	400A
	c T+	23D1	400A
	d R+	23G2	400A
	e RB	23G6	400A

COMPONENT ASSEMBLY



DESIG		CA24	
CODE		ED-94823-() G715	
OPTION		WA	
COMPONENT	DESIG	LOC	CODE
RESISTOR	a P1	16B/F4	221A, 73.2
	b P2	16B/F4	221A, 11.1K
	c P3	16B/G4	221A, 73.2
	d P4	16B/F4	221A, 11.1K

COMPONENT ASSEMBLY



DESIG		CA28		
CODE		ED-94823-()G782		
OPTION		TF		
COMPONENT		DESIG	LOC	CODE
DIODE	a	OLF1	5H2	425K
	b	OL 2	5H2	
	c	OLF3	5H2	
	d	OLF4	5H2	
	e	WC	5F8	

MASTER TEST FRAME
TRUNK TEST CIRCUIT

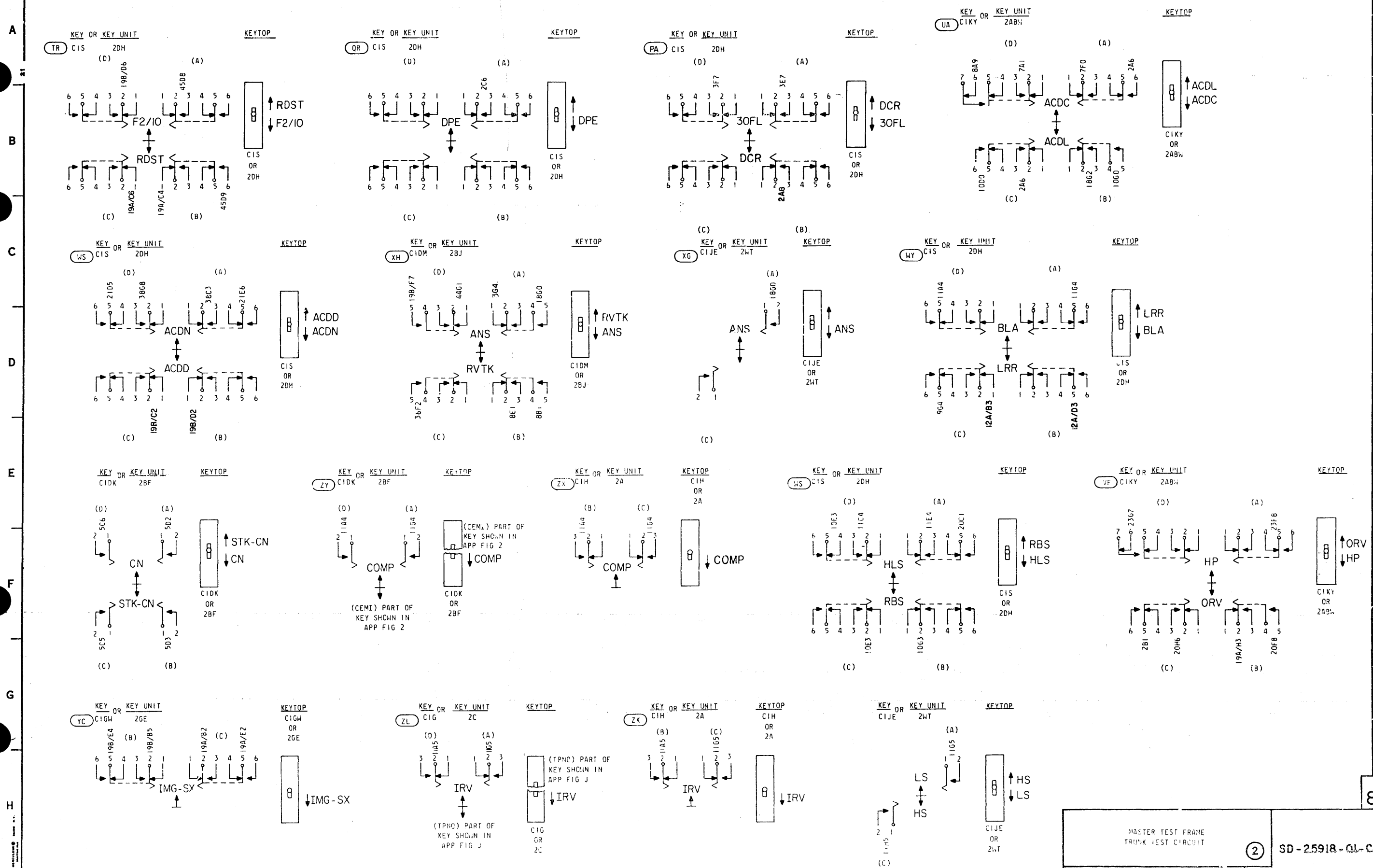
BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-C6

ISSUE
82B

SD-25918-01-C6

PART OF APP FIG 1



BELL TELEPHONE LABORATORIES
INCORPORATED

② SD-25918-01-C7

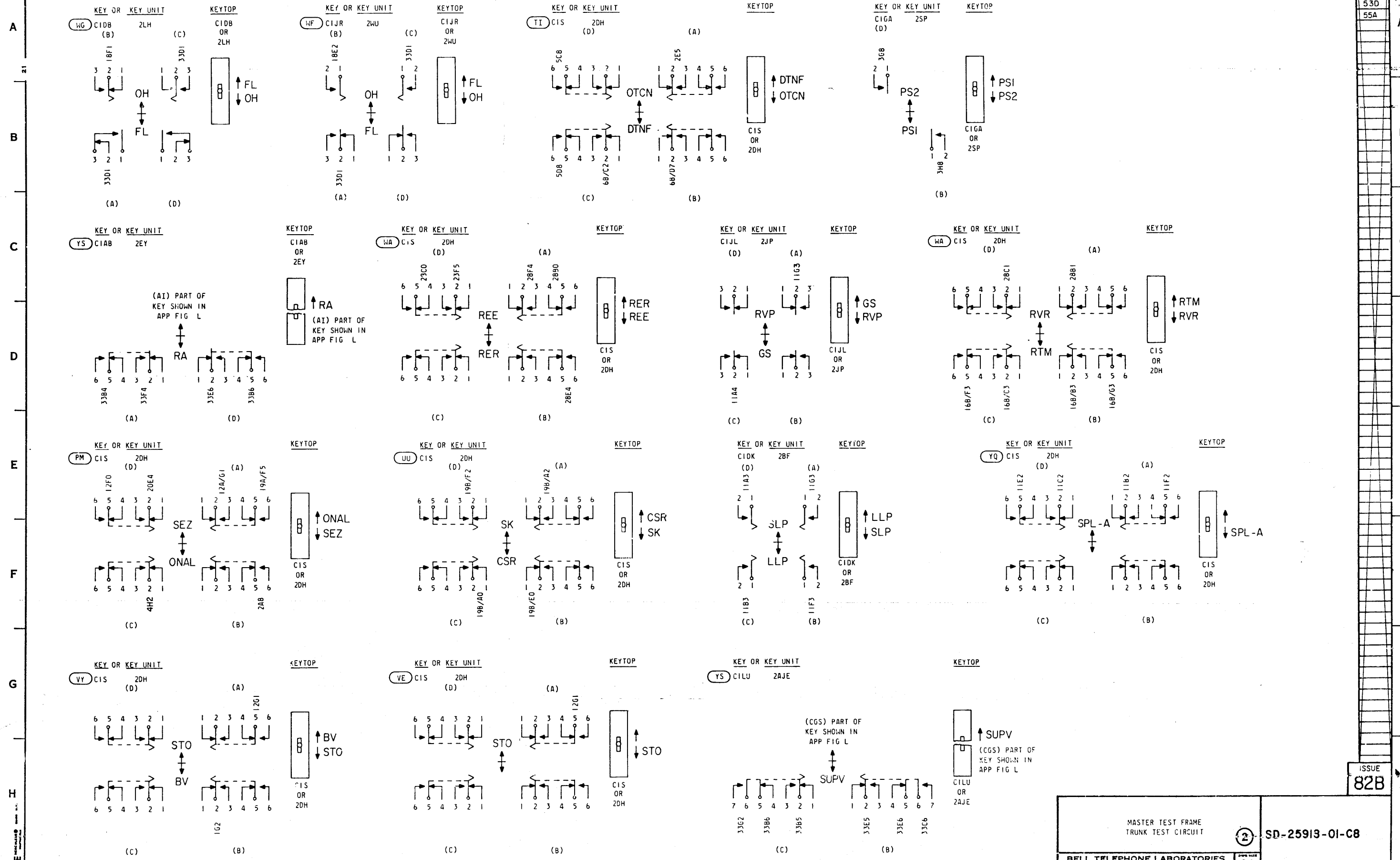
6

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PART OF APP FIG 1

DRAWING
ISSUE
50D
51A
52D
53D
55A

ISSUE
82B

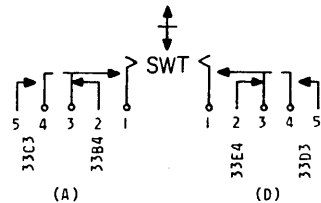


SD-25918-01-C8

PART OF APP FIG 1

KEY OR KEY UNIT
YS C1KF 2AAB

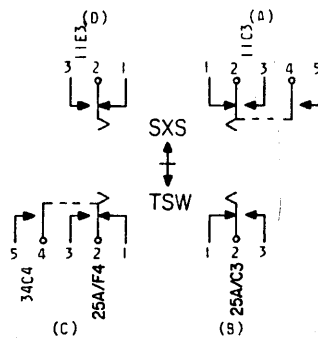
(COGT) PART OF
KEY SHOWN IN
APP FIG N



KEYTOP
C1KF
OR
2AAB

SWT
(COGT) PART OF
KEY SHOWN IN
APP FIG N

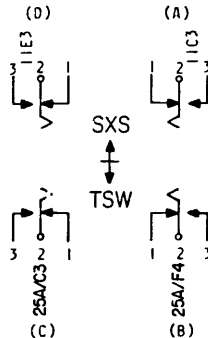
KEY OR KEY UNIT
ZS C1BY 2JH



KEYTOP

TSW
SXS
C1BY
OR
2JH

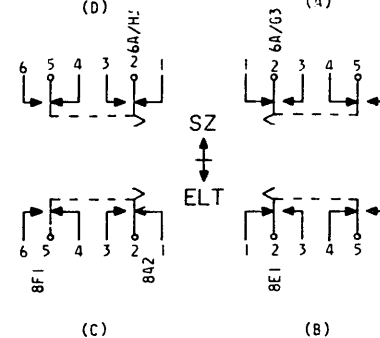
KEY OR KEY UNIT
ZR C1G 2C



KEYTOP

TSW
SXS
C1G
OR
2C

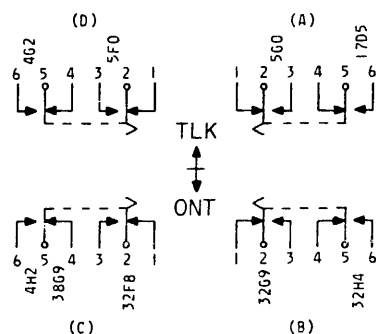
KEY OR KEY UNIT
XZ C1S 2DH



KEYTOP

ELT
SZ
C1S
OR
2DH

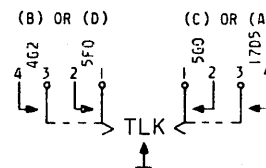
KEY OR KEY UNIT
SZ C1S 2DH



KEYTOP

ONT
TLK
C1S
OR
2DH

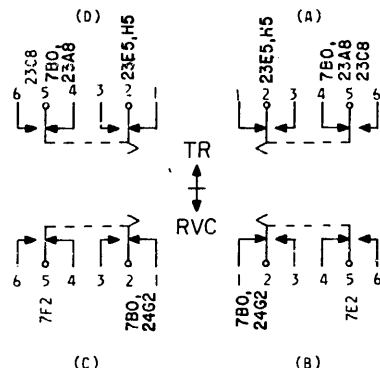
KEY OR KEY UNIT
VJ C1BM 2HW



KEYTOP

TLK
C1BM
2HW

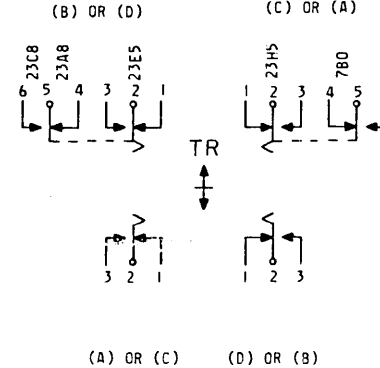
KEY OR KEY UNIT
ZC C1S 2DH



KEYTOP

RVC
TR
C1S
OR
2DH

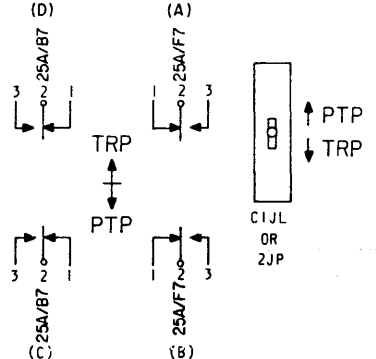
KEY OR KEY UNIT
ZB C1N 2B0



KEYTOP

TR
C1N
2B0

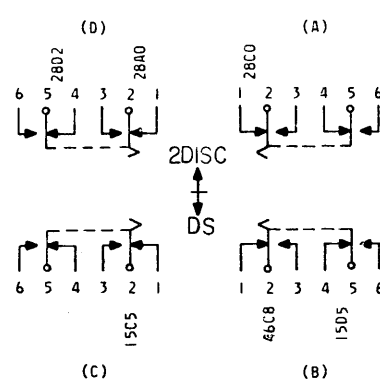
KEY OR KEY UNIT
C1JL 2JP



KEY TOP

PTP
TRP
C1JL
OR
2JP

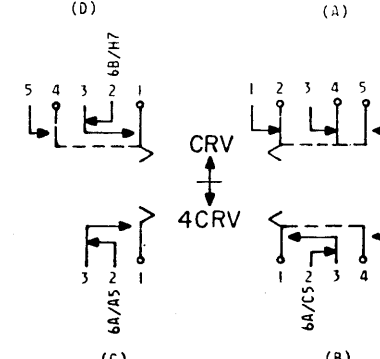
KEY OR KEY UNIT
TV C1S 2DH



KEYTOP

DS
2DISC
C1S
OR
2DH

KEY OR KEY UNIT
RH C1GB 25R

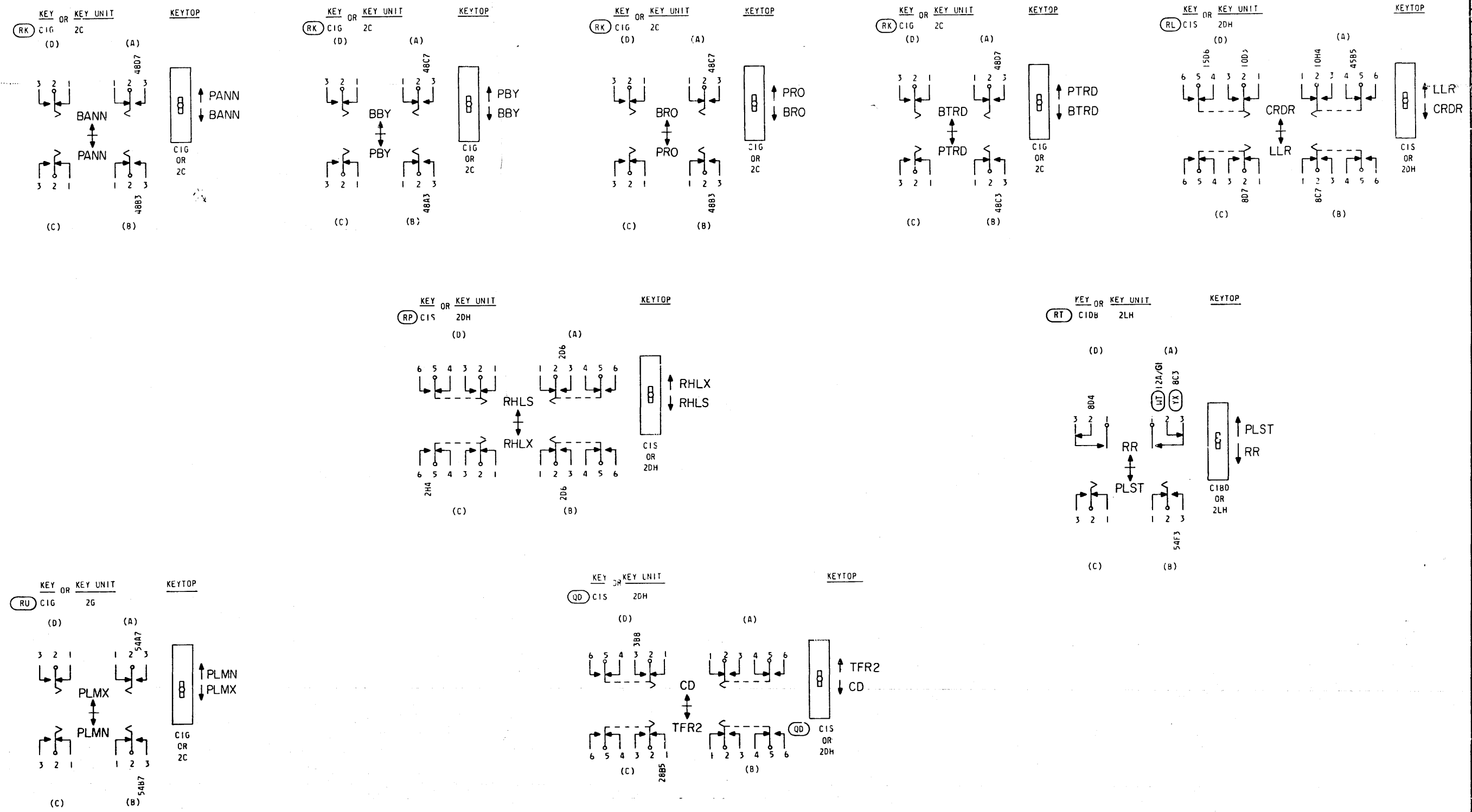


KEY TOP

4CRV
CRV
C1GB
OR
25R

ISSUE
78B

PART OF APP FIG 1



SD-25918-01-C9B

10-10-58

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

2

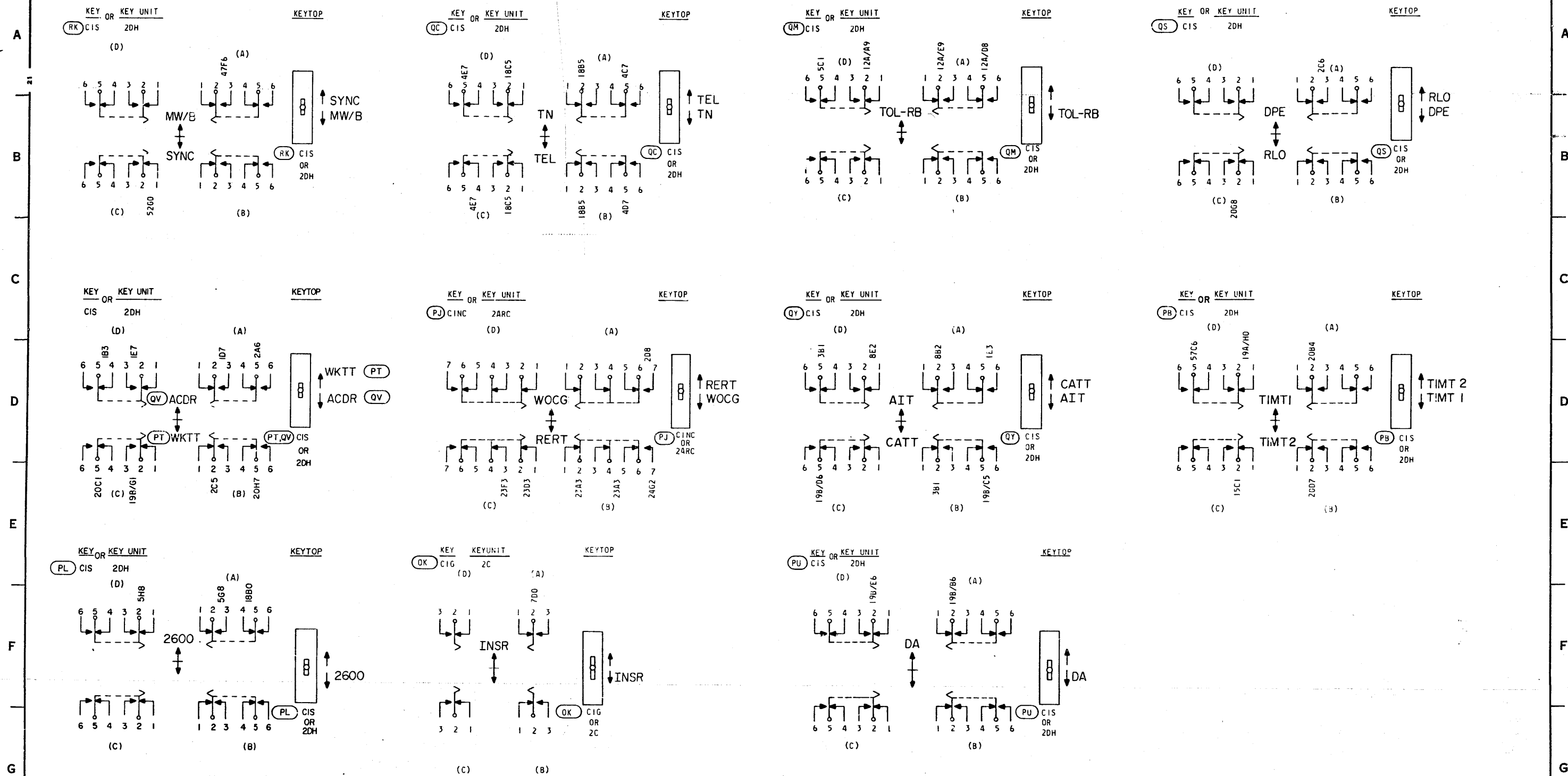
65

SD-25918-01-C9B

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ISSUE
82B

PART OF APP FIG 1



SD-25918-01-C9C

ISSUE
83A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2 SD-25918-01-C9C

BEIL TELEPHONE LABORATORIES
INCORPORATED

63

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DRAWING ISSUE
50D
52D
55A
56D
57D
58A

<u>RESISTOR</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
VF	HP	23F6	KS-19151, L1, 18kΩ
	J	24F2	195P
	K	24F2	18EK
ZE	L	24H3	19CE
ZD	L	24H3	19KA
	LK1	19B/03	106A, 30kΩ OR KS-20810, L1A, 30kΩ

ZC	L	24H3	19KA
ZD	LK1	19B/D3	106A, 30kΩ OR KS-20810, L1A, 30kΩ
	LK2	11D1	106A, 28kΩ OR KS-20810, L1A, 28kΩ

	M	19B/E1	18JE
VF	ON	23F7	18AC
QN	P	25A/E8	19YK
QD	P	25A/E8	19YK

QP	P	25A/E7	19AAH
QQ	P	25A/E7	19MM
ZF	P	25A/E6	19UE
ZG	P	25A/E9	18FL
ZU	P	25A/E6	19AAR
ZV	P	25A/E5	18DS
ZW	P	25A/E5	19ABH

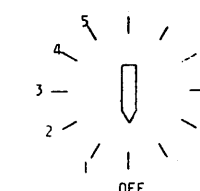
QN	Q	25A/D8	19AAB
QO	Q	25A/D8	19RM
QP	Q	25A/D7	19RM
QQ	Q	25A/D7	19RM

ZF	Q	25A/D6	19FM
ZG	Q	25A/D9	19YK
ZU	Q	25A/D6	19FM
ZV	Q	25A/D5	18GH
ZW	Q	25A/D5	18AP
	R	11B4	18AP
	R-	23E3	KS-19150, L3, 100K
	RF	11B4	18AP

WA	RER	701	18FL
WA	RES	701	19UA
WA	RET	7A1	18FL
WA	RLI	19B/10	221A 32k0 0R

UU	PL2	198/F0	KS-20810, LIA, 32kΩ 221A, 32kΩ OR KS-20810, LIA, 32kΩ
RP	RHLB	11D5	19RP
RP	RHLE	8C4	19JM

TUBE, ELECTRON				VARISTOR			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
YO	R	33E0	346C	UG	R-	23E2	30A OR 30AR
	R-	23E2	313C		RB	23G6	30A OR 30AR
	T-	23A2	313C		T-	23A2	30A OR 30AR

PLGN

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ISSUE
83A

APP FIG. 2

DRAWING
ISSUE
50D
53D

RELAY	AE			AE1			CANA			CANA1			DE			DE1			IE		
DESIG																					
CODE	U168			U735			U58			U58			U168			U735			U158		
OPTION							YA			YE											
	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							11,10	M	a	11,10	M	1508									
							9,9	M	b	9,8	M	1508									
							7,6	M	1E6	7,6	M	1282									
	5,4	M	35C8				5,4	M	11H9	5,4	N	1202	5,4	M	35E8				5,4	M	35B8
	3,2,1	BM	35F8	3,2,1	BM	3506	3,2,1	BM	383	3,2,1	BM		3,2,1	BM	35G8	3,2,1	BM	35E7	3,2,1	BM	35F8
BOT.	2,1,3	MB	35D7	3,2,1	BM	59C2	2,1	B		2,1	B		2,1,3	MB	35E7	3,2,1	BM		2,1,3	MB	35B8
							5,4,3	BM	1C7	5,4,3	BM										
							8,7,6	BM	34D2	8,7,6	BM										
							10,9	M	34B4	10,9	M	3A1									
COIL			35C8			3508			2F2			3F5			35E8			35E8			35B8

a
YE 3A2
YD 12A/E2

b
YE 3F5
YD 12A/E2

RELAY	IE1						T0			T1			T2			T4			T7			TK1		
DESIG																								
CODE	U735						U127			U103			U224			U224			U127			U1373		
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	CONT NO.	CONT ARR	LOC
TOP																								
				7,6	M	35A4				8,7	M	35B4	8,7	M	35C4	7,6	M	35D4						
				5,4,3	BM	35F3	5,4	M	35B4	6,5,4	BM	35A6	6,5,4	BM	35F4	5,4,3	BM	35G3						
	3,2,1	BM	35C6	2,1	B	35A5	3,2,1	BM	35A6	3,2,1	BM	35F3	3,2,1	BM	35F3	2,1	B	35A7	2,1	M	35B6			
	3,2,1	BM	18F0	3,2,1	BM	35E4	3,2,1	BM	35A6	2,1	B	35A6	2,1	B	35A6	3,2,1	BM	35F4						
BOT.				5,4	M	35A5	5,4	M	35E3	5,4,3	BM	35A6	5,4,3	BM	35A6	5,4	M	35A7						
										7,6	M	35E3	7,6	M	35A6									
COIL			35C8			35A4			35A4			35B4			35C4			35D4						35F4

RELAY	TK2			TU			TUC			U0			U1			U2			U4		
CODE	U1373			U826			U114			U127			U103			U224			U224		
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				12,11	M	35B5															
				10,9	B	35B1															
				8,7	B	35B1															
				6,5	B	35B1				7,6	M	35H3				8,7	M	35H3	8,7	M	35H3
				4,3	B	35B1				5,4,3	BM	35H3	5,4	M	35H3	6,5,4	BM	35AB	6,5,4	BM	35H3
	2,1	M	35B6	2,1	B	35B1	3,2,1	BM	35G7	2,1	B	35A7	3,2,1	BM	35A7	3,2,1	BM	35H3	3,2,1	BM	35H3
BOT.				2,1	B	35G1	2,1,3	MB	34B3	3,2,1	BM	35H3	3,2,1	BM	35A7	2,1	B	35AB	2,1	B	35AB
				4,3	B	35G1				5,4	M	35A7	5,4	M	35H3	5,4,3	BM	35AB	5,4,3	BM	35AB
				6,5	B	35G1										7,6	M	35H3			
				8,7	B	35G1															
				10,9	B	35G1															
				12,11	M																
COIL			35G4			35A9			34B3			35H3			35H3			35H3			35H3

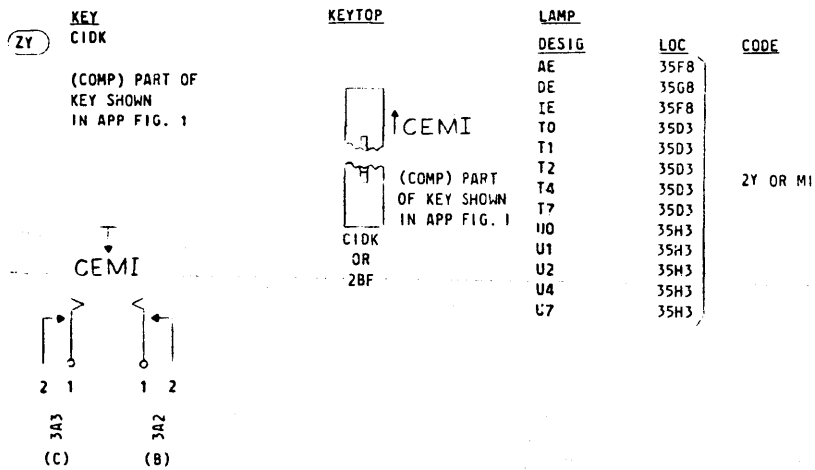
RELAY	U7			UK1			UK2														
DESIG	U127			U1373			U1373														
CODE																					
OPTION																					
✕	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP																					
	7,6	M	35H3																		
	5,4,3	BM	35H3																		
	2,1	B	35A8	2,1	M	35B6	2,1	M	35B6												
	3,2,1	BM	35H3																		
BOT.	5,4	M	35A8																		
COIL			35H3			35H3			35H3												

APP FIG. 3

LAMP
DESIG LOC CODE
RNO 34B2 2Y OR M1

APP FIG. 4

LAMP
DESIG LOC CODE
RNI-19 34C2 2Y OR M1

ISSUE
82B

MASTER TEST FRAME
TRUNK TEST CIRCUIT
BELL TELEPHONE LABORATORIES
INCORPORATED

SD-25918-01-C11
65

SD-25918-01-C11

APP FIG 5

RELAY																					
DESIG	DR			ER			RP			RPI			TP			TPI					
CODE	U422			U422			U1234			U1334			U1234			U1334					
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																					
	3,2,1	BM	34F6	3,2,1	BM	34E6	4,3	M	34D6	4,3	M	34D6	4,3	M	34C6	4,3	M	34C6			
							2,1	B	34D6	2,1	M	34E6	2,1	B	34D6	2,1	M	34D6			
	2,1	M	34D8	2,1	M	34E6	2,1	M	34F5	2,1	M	34D8	2,1	M	34E5	2,1	M	34C8			
BOT.																					
COIL			34E6			34D6			34C8			34D6			34B8			34C6			

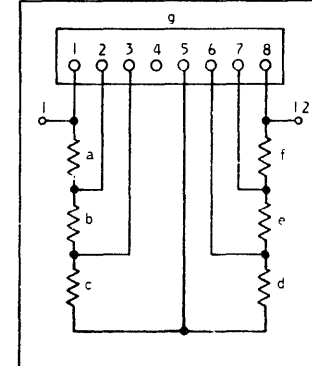
APP FIG 7

DRAWING
ISSUE
52D
53D
58AISSUE
68A

RELAY		TAN														
DESIG		U58														
CODE																
OPTION																
TOP	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.
	11, 10	M	17A6													
	9, 8	M	1D6													
	7, 6	M	17D7													
	5, 4	M	8B6													
	3, 2, 1	BM	8A8													
BOT.	2, 1	B	20B4													
	5, 4, 3	BM	8E8													
	8, 7, 6	BM	2A2													
	10, 9	M	8F6													
COIL			2A3													

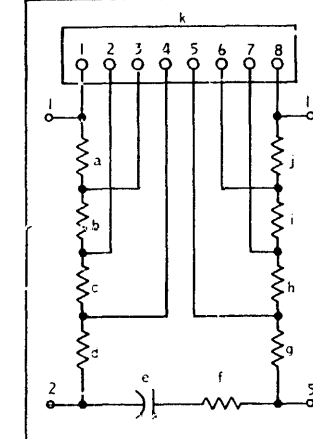
RELAY		TAN2														
DESIG		AJ5														
CODE																
OPTION																
TOP	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.
	12	EBM	16A/F7													
	11	EBM	16A/E5													
	10	EBM	16A/G5													
	9	EBM	16A/E3													
	8	EBM														
BOT.	7	EBM	16A/H1													
	6	EBM	16A/H3													
	5	EBM	16A/F1													
	4	EBM														
COIL	3	EBM	16A/B1													
	2	EBM	16A/B6													
	1	EBM	16A/B1													

COMPONENT ASSEMBLY



DESIG		CA16		CA17		CA18		CA19		CA20		CA21	
CODE		[6] ED-94823-() G705											
OPTION		SJ				SK				SL			
COMPONENT	CODE	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC
RESISTOR	a 221A, 15	PDB5	16A/A3	PDB15	16A/B3	PDC10	16A/F4	PDC16	16A/F5	PDC22	16A/F6	PDC28	16A/F7
	b 221A, 15	PDB6	16A/A3	PDB16	16A/B3	PDC11	16A/F4	PDC17	16A/F5	PDC23	16A/F6	PDC29	16A/F7
	c 221A, 11.3	PDB7	16A/A4	PDB17	16A/B4	PDC12	16A/E4	PDC18	16A/E5	PDC24	16A/E6	PDC30	16A/E7
	d 221A, 5.97	PDB8	16A/A4	PDB18	16A/B4	PDC13	16A/E4	PDC19	16A/E5	PDC25	16A/E6	PDC31	16A/E7
	e 221A, 3.01	PDB9	16A/A4	PDB19	16A/B4	PDC14	16A/E4	PDC20	16A/E5	PDC26	16A/E6	PDC32	16A/E7
	f 221A, 1.5	PDB10	16A/A5	PDB20	16A/B5	PDC15	16A/D4	PDC21	16A/D5	PDC27	16A/D6	PDC33	16A/D7
TERM. STRIP	g 318A												

COMPONENT ASSEMBLY



DESIG		CA22		CA23	
CODE		[2] ED-94823-(), G707			
OPTION		SJ		RF	
COMPONENT	CODE	DESIG	LOC	DESIG	LOC
CAPACITOR	e 535D	PDB	16A/B3	PDC	16A/G3
RESISTOR	i 221A, 1.5	PDB1	16A/A1	PDC1	16A/F1
	h 221A, 3.01	PDB2	16A/A2	PDC2	16A/F2
	g 221A, 5.97	PDB3	16A/A2	PDC3	16A/F2
	a 221A, 41.2	PDB4	16A/A2	PDC4	16A/F2
	q 221A, 1.5	PDB11	16A/B1	PDC5	16A/H1
	b 221A, 3.01	PDB12	16A/B2	PDC6	16A/H2
	c 221A, 5.97	PDB13	16A/B2	PDC7	16A/H2
	d 221A, 41.2	PDB14	16A/B2	PDC8	16A/H2
f 221A, 3880	PDB21	16A/A3	PDC9	16A/G3	
TERM. STRIP	k 318A				

MASTER TEST TIME
TRUNK TEST CIRCUITBELL TELEPHONE LABORATORIES
INCORPORATED

2

6S

SD-25918-01-C12B

SD-25918-01-C12B

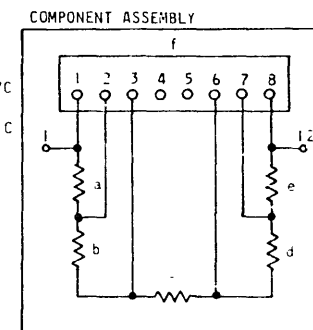
RELAY			E			E1			INC			INC			S7			TA		
DESIGN			U165			Y95			U811			U98			S520			U21		
OPTION			YX						ZY			ZX								
☒	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC		
TOP							11,10	M	a											
							9,8,7	BM	15G1											
							6,5	M		8,7	M	13F4								
							4,3	M	12A/D2	6,5,4	BM	15G1								
	3,2,1	BM	12A/C4	3,2,1	BM	17C6	2,1	M	13F4	3,2,1	BM	12A/E3	3,2,1	BM	15F4	2,1	M	304		
BOT	2,1	M	15H1	2,1	M		2,1,3	MB	345	3,2,1	BM	12A/F3				2,1	M	15G0		
							6,5,4	BM	12A/F3	6,5,4	BM									
							9,8,7	BM	12A/E3	8,7	M	15E4								
							11,10	M	15E4											
COIL	☒		15H2	☒		15H2	☒		386	☒		386	☒		12A/B5	☒		12B1		

RELAY																		
DESIG	TAS			TBD			TF			TOL			TT			TT		
CODE	5507			U199			U195			U591			U318			U1318		
OPTION													TM			TM		
☒	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										12, 11	M	B83						
										10, 9	M	12A/A0						
										8, 7	M	12B3	10, 9	M				
										6, 5	M	106	8, 7, 6	BM	4400			
				6, 5, 4	BM	12A/A3				4, 3	M	17A7	5, 4, 3	BM	1291	5, 4, 3	BM	12B1
BCT	3, 2, 1	BM	12G7	3, 2, 1	BM	12A/E2	3, 2, 1	BM	12A/C7	2, 1	B	20B4	2, 1	B	4H3	2, 1	B	4H3
				3, 2, 1	BM	12A/F2	2, 1	M	3H5	2, 1	M	17C7	3, 2, 1	BM	12C1	3, 2, 1	BM	12C1
				6, 5, 4	BM	12A/E3				4, 3	M	1	5, 4	M				
										6, 5	M	3C3	8, 7, 6	BM				
										8, 7	M	12E8	10, 9	M				
COIL	☒	☒	12A/D6	☒	☒	14B7	☒	☒	17D7	12, 11	M	8F3				☒	☒	15E3
												3C4			☒	☒	15E3	

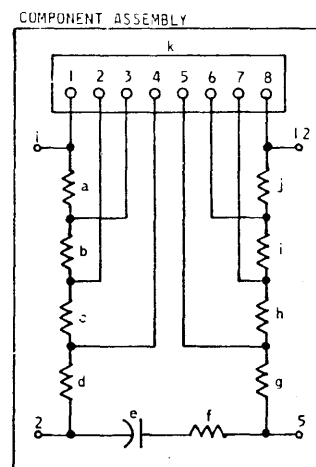
[illegible]

RELAY		
DESIG	TBLO	
CODE	AF 139	
OPTION	SV	
☒	CONT ARR	LOC
12		
11		
10	A	14B7
9	B	
8	EBM	14C1
7	R	
6	EMB	
5	B	14D3
4	EBM	14E1
3	B	
2		
1		
COIL	☒	14B7

CAPACITOR			
OPT	DESIG	LOC	CODE
{ 1 }	R2	12E2	437C OR 137C
	T2	12A2	
{ 1 }	R3	12A/E3	441C OR 141C
	T3	12A/A3	



DESIG		CA9		CA10	
CODE		[2] ED-94823-(), G708			
OPTION		TQ			
COMPONENT	CODE	DESIG	LOC	DESIG	LOC
RESISTOR	a 221A, 1.5	PD41	14B2	PD410	1402
	b 221A, 3.01	PD42	14B2	PD411	1402
	c 221A, 5.97	PD43	14B2	PD412	1402
	d 221A, 12	PD44	14B3	PD413	1403
	e 221A, 12	PD45	14B3	PD414	1403
TERM. STRIP	f 318A				

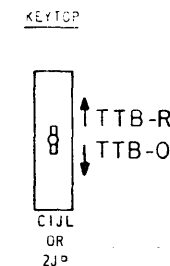
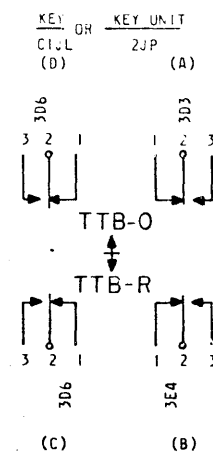


DESIG		CALL	
CODE		ED-94823-(), G706	
OPTION		TQ	
COMPONENT	CODE	DESIG	LOC
CAPACITORS	g 5550	PDA	14C3
RESISTOR	h 221A, 24	PDA6	14B3
	a 221A, 5.97	PDA7	14B4
	i 221A, 3.01	PDA8	14B4
	j 221A, 1.5	PDA9	14B4
	d 221A, 24	PDA15	14D3
	c 221A, 5.97	PDA16	14D4
	b 221A, 3.01	PDA17	14D4
	a 221A, 1.5	PDA18	14D4
TERM. STRIP	f 221A, 2580	PDA19	14C3
	k 318A		

<u>DIODE</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
PV	TT1	12A/B1	533K
PV	TT2	12A/C1	533K

<u>INDUCTOR</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
XP	A	I2C8	274J
XQ	A	I2C8	274L

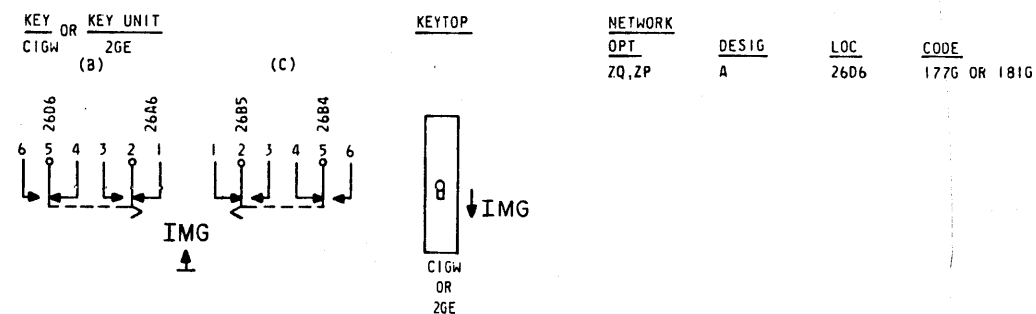
<u>RESISTOR</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
	AD	1408	18AE
	AE	1488	19ML
	AF	12A/B4	19GA
	AG	12A/C5	19SN
	AJ	12A/D6	K5-13491, L1, 13K0
	AK	15E3	18AG
	AL	12C2	18BH
	AM	17D6	18AG
YX	AN	15H1	18BH



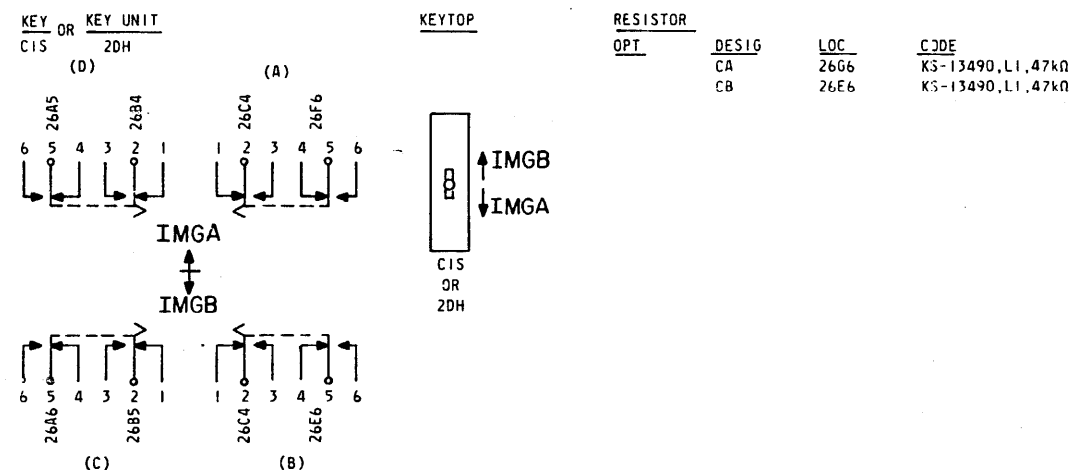
<u>LAMP</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
	A	12A/D5	131 (RES)
	TAS	12G?	2Y OR MI
	TTB	304	2Y OR MI

<u>NETWORK</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
ZQ,ZP	B	12A/C3	177D OR 181D

APP FIG 9 (MFR DISC)



APP FIG 10



PART OF APP FIG II

RELAY																
DESIG	4TS			4TTK			4WTB			CPO			PKI			
CODE	U227			U1421			U1333			28QFG			280H			
OPTION	XK			XW			XK			XJ			XK			
	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	12, 11	M	25A/H1													
	10, 9	M	4G6	11, 10, 9	BM											
	8, 7	M	25B/C3	8, 7	B											
	6, 5	M	25B/E3	6, 5	B		9, 8, 7	BM								
	4, 3	M	7A5	4, 3	B		6, 5, 4	BM								
BOT	2, 1	B	25B/G4	2, 1	B	39A5	2, 1, 3	MB	12A/D7	3, 5, 2	BM	6A/E6	4, 7, 3	BM	24A0	
	2, 1	B	26B8	2, 1, 3	MB		2, 1, 3	MB	306							
	4, 3	B	25A/B2	5, 4	M		6, 5, 4	BM								
	6, 5	B	25A/F2	7, 6	M		9, 8, 7	BM								
	9, 8, 7	BM	26A8	10, 9, 8	BM											
COIL	11, 10	M	7E5	12, 11	M											

RELAY																	DES									
DESIGN CODE	4W			4W			4WIT			4WIT			4WT			ATT			LSK			ONT4				DES
	AJ5			AJ504			AJ5			AF30			AF30			AJ5			AJ26			AJ5				CON
OPTION	XK			XJ			XK			XJ			LOC			LOC			LOC			LOC				OPT
	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	EBM	24E7					EBM			EBM			EBM	6A/B4	EBM				EBM	32E9						12
11	EBM	4H6	BM	4H6	EBM		EBM			EBM			EBM		EBM				EBM	32E8						11
10	EBM	1G5	M	1G5	EBM	13F0	EBM	13F0	EBM	12A/D7	EBM			B					EBM	32F3						10
9	EBM	3D5	BM	3D5	EBM					EBM					EBM				EBM	32F2						9
8	EBM	2H3					EBM	13F4	EBM	13F4	EBM	6A/C4	EBM	22G1	M				EBM	30A7						8
7	EBM	24G5	BM	24G5	EBM					EBM					EBM				EBM	30C8						7
6	EBM		B				EBM	2H4	EBM			EBM	8B3	EBM	22F1	BM			EBM	30D8						6
5	EBM	24E4	BM	24E4	EBM										EBM				EBM	30E8						5
4	EBM	8B3	M	8B3	EBM	13C5	EBM	13C5	EBM	4F6	EBM	22F1	M	6A/D3					EBM	30G8						4
3	EBM	32H5	BM	32H5	EBM										EBM				EBM	30H7						3
2	EBM	8E3	M	8E3	EBM	1304	EBM	1304	EBM	AE3	EBM	22E1							EBM							2
1	EBM	25B/G8	BM	25B/G8	EBM	1G6									EBM				EBM	30H1						1
COIL		2G3		2G3			1G6			1G6		3C7		32H6		6A/B6			32H6							COIL

ISSUE
82BMASTER TEST FRAME
TRUNK TEST CIRCUIT

②

SD-25918-01-C13A

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

PRINTED IN U.S.A.

DRAWING
ISSUE
51A
52D
53D



APP FIG 13

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APP FIG 14

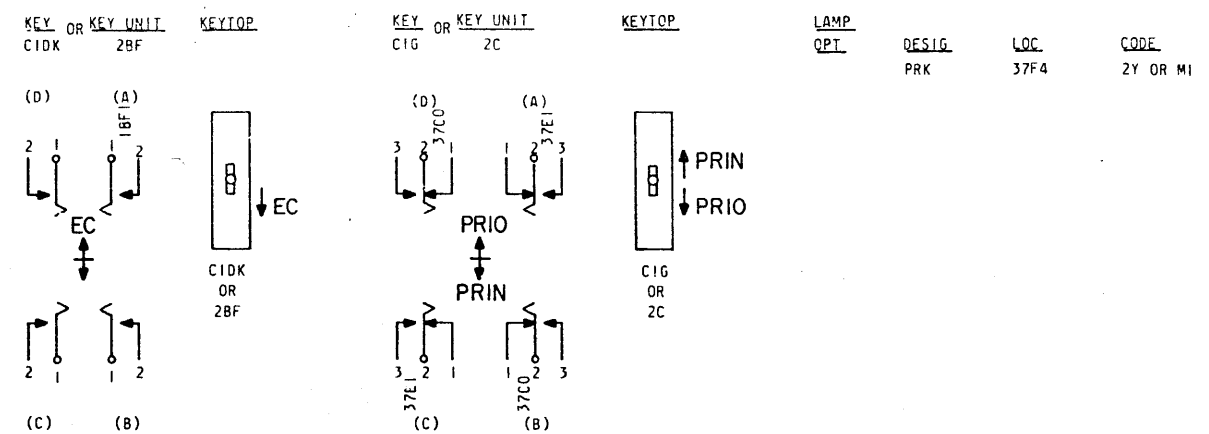
RELAY																		
DESIG	RDY																	
CODE	280BY																	
OPTION																		
X	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP																		
	3, 5, 2	BM	32G1															
BOT.																		
COIL	X	X	32C6	X	X		X	X		X	X		X	X		X	X	

APP FIG 16

RELAY		PRD		PRK		PRP		PRT									
DESIG	CODE	PRD	LOC	PRK	LOC	PRP	LOC	PRT	LOC								
OPTION																	
CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC
12	BM		EMB					M									
11	B							M									
10	BM		EBM	37B3	M	37E2											
9	B							M									
8	BM	37F3	EBM		BM		ESM										
7	B																
6	BM		EMB	37E3	BM		EBM										
5	B	37D3															
4	BM		EBM	37F2	M	37D3	EBM										
3	B							M									
2	BM	37A3	EBM	37C3	B	37C0	M										
1	B						M	37E3									
COIL		37A4		37E4		37C4		37E4									

CAPACITOR				NETWORK				RESISTOR			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
	PRD	37D1	437QA		PRD	37A4			PRD	37D0	221A, 402 kΩ OR
					PRK	37E4	185A				KS-20810, L1A, 402kΩ
					PRP	37C4			PRD1	37B3	18K4
					PRT	37E4					

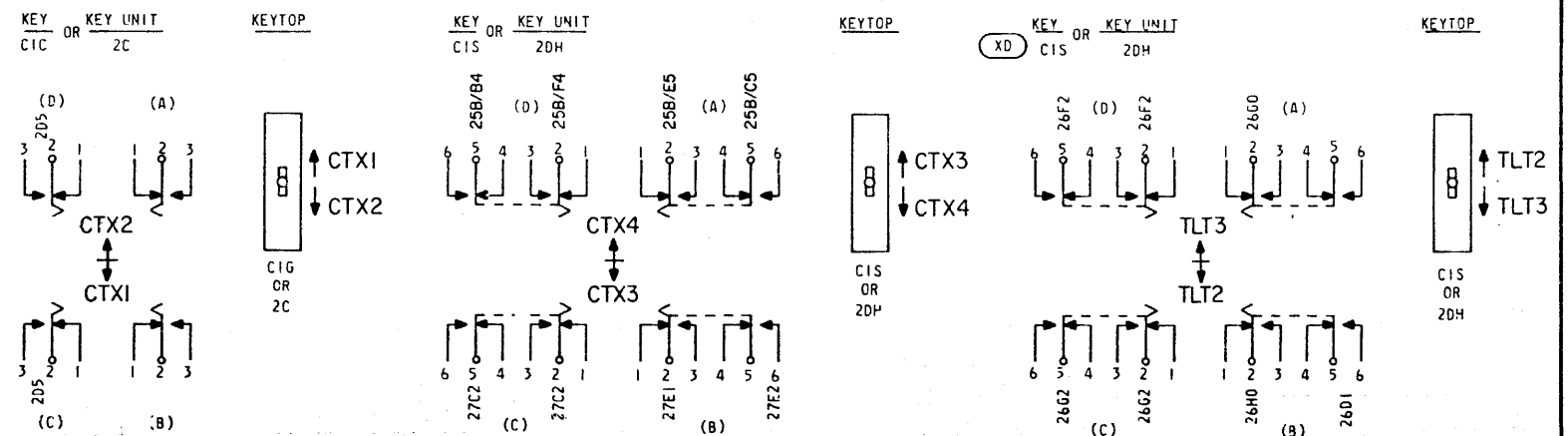
APP FIG 17



APP FIG 18

RELAY		CTX1		CTX2		TM4		TRT7		TS2							
DESIG	CODE	CTX1	LOC	CTX2	LOC	TM4	LOC	TRT7	LOC	TS2	LOC						
OPTION																	
CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC
12			M	6A/G8	EMB	27C1	EMB	11C9									
11			EBM	6A/G4	M		EBM	11D9									
10			EBM	6A/H4	EBM		EBM	11D9									
9			EMB	27C1			EBM	9H4									
8			EMB	27B1	EBM		EBM	27E1	M								
7							EBM										
6			EMB	27D1	EBM		EBM	1C2	M	27F1							
5	EMB	26C2					EBM										
4	EMB	26C2					EBM	18D1									
3	EBM	6A/G6					EBM										
2	EBM	6A/H6					EBM	1F1									
1	M	6A/G7					EBM	1H4									
COIL		2D5		2D5		27D1		1E2		27E0							

LAMP				RESISTOR			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
	TS2	27F0	27 OR M1		CTX1	6A/G8	18F8
					CTX4	25B/D5	18F8
					TS2	27E1	221A, 8250 OR KS-20810, L1A, 8250



SD-25918-01-C15

ISSUE
75BMASTER TEST FRAME
TIPK TEST CIRCUIT

SD-25918-01-C15

BELL TELEPHONE LABORATORIES
INCORPORATED

65

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PART OF APP FIG 19

RELAY		DESIG		4PT		4SVA		DC2		4WL		4WS		C00		DC0		DC1		DC3		DC4		REC5		DC5		DESIG					
CODE		AJ15		AK22		AJ15		AJ26		AJ15		AJ15		AJ15		AJ15		AJ15		AJ15		AK22		AJ15		AJ15		CODE					
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION				
12	EBM				EBM	2G3	EBM	40A8			EBM		EBM		EBM		EBM		EBM	41E6	EBM	30A1		EBM		EBM		12					
11	EBM				EBM		EBM	6A/A1			EBM	39F4	EBM	40G2	EBM		EBM	41C5	EBM	30B1				EBM	40G2	EBM		11					
10	EBM	39F7			EBM	40G6	EBM	6A/C1	B		EBM		EBM		EBM		EBM	41C4	EBM				EBM		EBM		EBM		10				
9	EBM	39C6			EBM		EBM	6A/G4			EBM		EBM		EBM	40F0	EBM	12F7	EBM				EBM	40H6	EBM		EBM		9				
8	EBM				EBM		EBM		M	20D1	EBM		EBM		EBM		EBM	12F7	EBM					EBM		EBM		EBM		8			
7	EBM	39B6			EBM		EBM	6A/H4			EBM	12A/E4	EBM	40G6	EBM	9E3	EBM	40H6						EBM	12A/F6	EBM		EBM		7			
6	EBM				EBM		EBM		BM		EBM		EBM		EBM		EBM	41D6						EBM		EBM		EBM		6			
5	EBM				EBM	30G4		EBM	39G3		EBM		EBM		EBM		EBM	9G1	EBM	41C7			EBM	10E1	EBM	12A/F6	EBM		EBM		5		
4	EBM				EBM		EBM	2H3	M	29H3	EBM	12A/A4	EBM	9C1	EBM	9B1	EBM	41D7					EBM	6A/E5	EBM	22G7	EBM		EBM		4		
3	EBM	39A5			EBM		EBM	30G3			EBM	12A/C4	EBM	22G6	EBM	25B/G7	EBM	41B6				EBM	6A/E7	EBM	41E6	EBM		EBM		EBM		3	
2	EBM				EBM	40G1		EBM	29H4		EBM	39D0	EBM		EBM	24C7	EBM	41A7					EBM	3C6	EBM	41C8	EBM		EBM		EBM		2
1	EBM	2H8			EBM	4G5		EBM	2F2		EBM	40D0	EBM		EBM	24A7	EBM	41B7				EBM	40F5	EBM	41A8	EBM		EBM		EBM		1	
COIL		39A4			EBM	30G4		42B7	2F2		29D4	42C9		42A7		42B7	42C7					42C7		42D4		42C7	COIL					COIL	

RELAY		DC6		GEN0		DC7		DC8		DCST		EC		G		LW		GEN1		GEN2		GEN3		GEN4		DESIG		
CODE		AK22		AJ15		AJ15		AJ15		AJ15		AJ15		AK22		AJ15		AK22		AJ15		AJ15		CODE		OPTION		
OPTION		CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION		
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11		EBM	22G5	EBM	29D4	EBM	29A1	EBM	40G2	EBM	22F0			EBM	39F6	EBM		EBM		EBM	22G5	EBM		EBM		11		
10		EBM	42E1	EBM	30D4	EBM	30G4	EBM	22H6	EBM	22E2			EBM		EBM	9G2			EBM	15F6	EBM		EBM		10		
9		EBM		EBM	40F1	EBM	40F1	EBM		EBM	17B6			EBM		EBM	42F0			EBM		EBM	40E6	EBM		9		
8			EBM	9C1	EBM	30D3	EBM		EBM		EBM					EBM		EBM		EBM		EBM		EBM		8		
7					EBM	EBM	29B1	EBM		EBM	22F2					EBM		EBM	15G1			EBM	22E2	EBM		7		
6					EBM		EBM		EBM		EBM					EBM		EBM	17A6			EBM		EBM		6		
5	EBM					EBM		EBM		EBM	42E6	EBM		EBM		EBM		EBM		EBM		EBM		EBM		5		
4	EBM					EBM		EBM	6B/B7	EBM	42E6	EBM	22G0	EBM		EBM		EBM	40F3	EBM	39G2		EBM	22G2	EBM		4	
3	EBM	40F1				EBM		EBM		EBM	42D6	EBM		EBM	22H6			EBM	12A/D4	EBM	39G3	EBM	12A/C4	EBM	15G6	EBM		3
2	EBM	30B3				EBM		EBM	6B/A7	EBM	42C6	EBM		EBM	15G5			EBM	39G3	EBM	39G5		EBM	22F2	EBM		2	
1	EBM	30A3				EBM	29G3	EBM		EBM	42B6	EBM	41F2	EBM	41F2		EBM	20H6	EBM			EBM		EBM	22F2	EBM		1
COIL		42D7		42C2		42E7		42E7		40E7		41E1		41F1		40A3		42C2		42C2		42E2		42D2		COIL		

RELAY		DESIG		GEN5		GNST		HBD		IDT		INCA		LPR		LX		PRB		PRC		PRE		PTT		RECO		DESIG	
CODE		AJ15		AJ15		AJ15		AJ15		AJ15		AF127		AJ15		AJ15		AF96		AF116		AJ15		AJ15		CODE			
OPTION		WI		VA		WI		WI		WI		WI		WI		WI		WI		WI		WI		WI		OPTION			
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC
12	EBM 22C2	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
11	EBM 40F5	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
10	EBM 22C2	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
9	EBM 22D0	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
8	EBM 40G1	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
7	EBM 22E1	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
6	EBM 22F7	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
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4	EBM 22D2	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
3	EBM 22D2	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
2	EBM 22F2	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
1	EBM 22G2	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC	EBM ARR	LOC
COIL	42D2	40E7	29A2	42C9	40B8	40F4	29D5	42C9	40B8	40F4	29D5	42C9	40B8	40F4	29D5	42C9	40B8	40F4	29D5	42C9	40B8	40F4	29D5	42C9	40B8	40F4	29D5	42C9	40B8

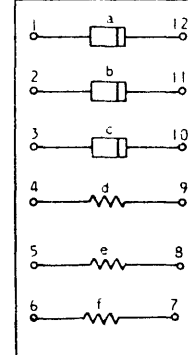
RELAY		DESIG		REC1		REC2		REC3		REST		REC4		RPR		RRC		RST		RTT		RXC		SR		SVA		DESIG		
CODE		AK22						AK22				AJ15		AJ107		AF117		AJ15		AJ15		AF26		AG33		AF116		CODE		
OPTION																												OPTION		
		CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC			
12				EBM	40G2			EBM	40G5	EBM		EBM	41D6	EBM		EBM	42F1	EBM	15E7		EBM		EBM		EBM		EBM		12	
11				EBM	9B3			EBM	40F2	EBM	39G6	EBM	41C8			EBM	42A6	EBM	15H7		EBM		EBM		EBM		EBM		11	
10				EBM	9D3			EBM	40F3	EBM	15G4	EBM	16B/C7	M	40C1	EBM	42D6	EBM	13F7	M	EBM		EBM		EBM		EBM		10	
9				EBM	9G3			EBM		EBM		EBM		M	41B6	EBM	41C2	EBM	13F6		EBM		EBM		EBM		EBM		9	
8				EBM				EBM		EBM		EBM	18D4	EBM	29G3	EBM		EBM	15G6	M	EBM		EBM		EBM		EBM		8	
7										EBM	12A/A0			EBM		EBM	40F0		EBM	13D8		EBM		EBM		EBM		EBM		7
6										EBM		EBM		EBM		EBM	42F7	EBM	13C7	M	42E8	EBM		EBM		EBM		EBM		6
5	EBM					EBM				EBM	12A/DO					EBM		EBM	13C6				EBM	15H0	EBM		EBM		5	
4	EBM					EBM				EBM	2H4	EBM		M	42E7	EBM		EBM	41E1	M	29G3	EBM	41A2	EBM		EBM		EBM		4
3	EBM					EBM	24C8			EBM	18H2	EBM	40F0			EBM		EBM	41B1				EBM		EBM		EBM		3	
2	EBM					EBM	24A8			EBM	22G4	EBM		M		EBM		EBM	41D1	M	42F8	EBM		EBM		EBM		EBM		2
1	EBM	39D0				EBM	40G3			EBM	40D1	EBM	41E5	M		EBM		EBM	41E1				EBM	41B1	EBM	42F2	EBM	15E5	COIL	
COIL		42B4		42B4		42C4		40F7		42C4		41C5		15H5		13D7		42G2		15H5		42F2		15E5		15E5		COIL		

PART OF APP FIG 19

CAPACITORS

OPT	DESIG	LOC	CODE
	PRE	39F3	437QA
[1]	R11	29C3	
	T11	29A3	437E

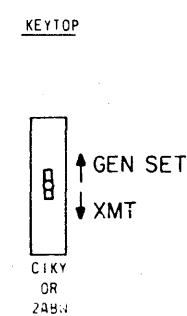
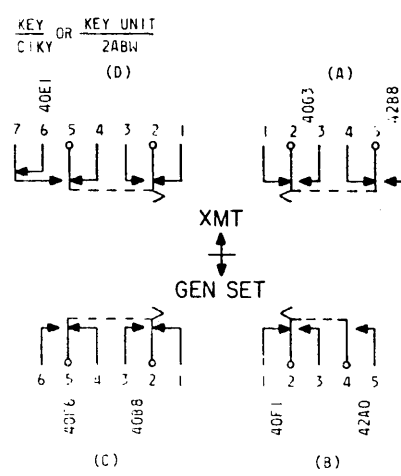
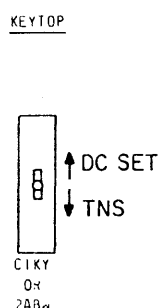
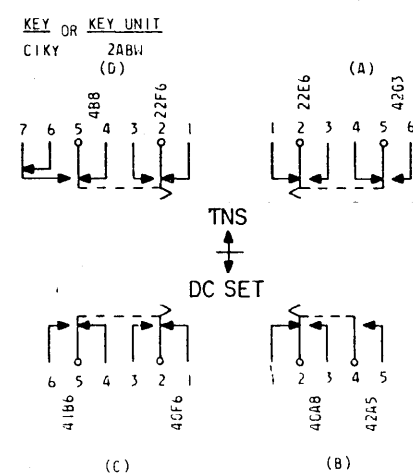
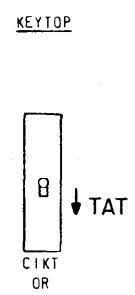
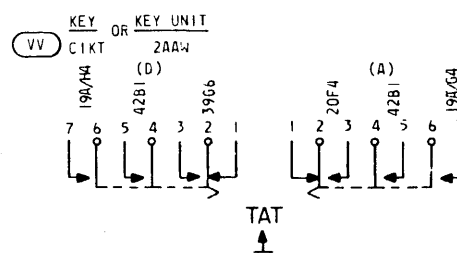
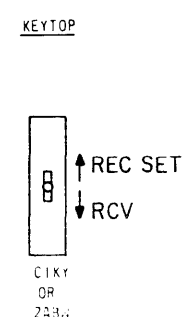
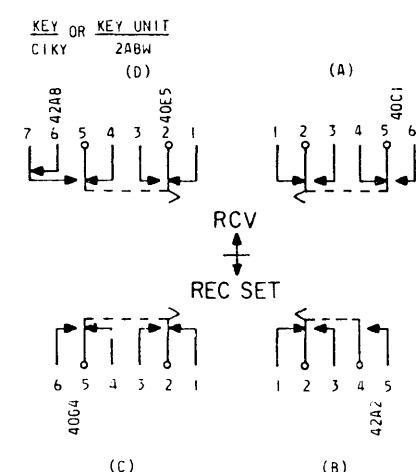
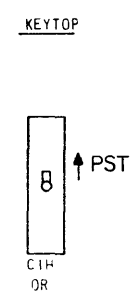
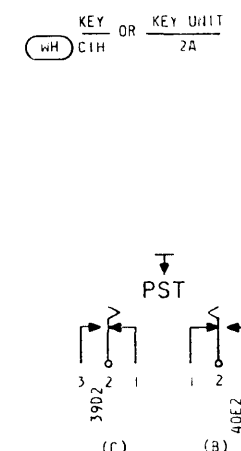
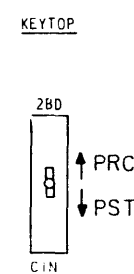
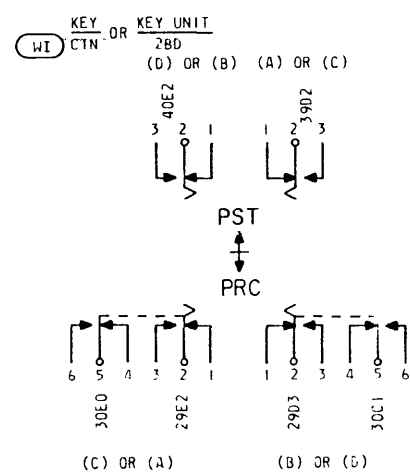
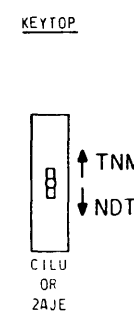
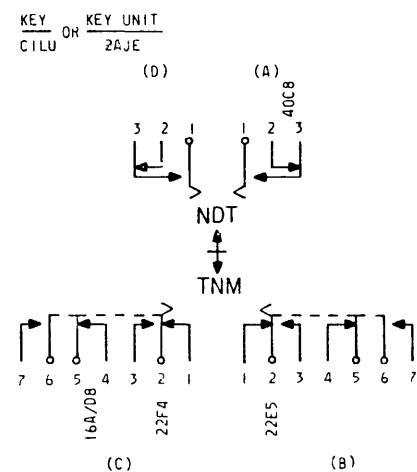
COMPONENT ASSEMBLY



DESIG	LOC	CODE
CODE	ED-74823-(), 6674	
OPTION		
COMPONENT	DESIG	LOC
	a	RST 1307
	b	RXC 15H5
	c	RRC 15H5
	d	SV1 15F6
	e	MC1 16A/D8
	f	SV2 15F6
RESISTOR		221A, 453
		KS-19150, L1, 47kΩ
		221A, 898

CONNECTOR

OPT	DESIG	LOC	CODE
TY	T11	39D1	BNC-U6-6258/U



[illegible]

NETWORKS				RESISTORS			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
D		29H1	177A				
EC		41E1	185A		4A4	29H4	18R
G		41F1	185A		4A0	29C5	44AF
LW		40A3	185A		4A4E	29D6	18AF
					COLO	6B/A6	59E

<u>POTENTIOMETER</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
TY	SV	15F5	KS-19722, LI,500

SWITCH TOP

DC, GEN, REC

5
4
3
2
1
0
OFF
10
6



APP FIG 21

RELAY		WBT		
DESIG		AJ15		
CODE				
OPTION				
12	EBM	16A/C1	CONT ARR	LOC
11	EBM	16A/D1		
10	EBM	26C7		
9	EBM	9H4		
8	EMB			
7	EBM			
6	EM3	24H5		
5	EMB	24H6		
4	EBM	25B/F2		
3	EBM	25B/C2		
2	EBM	706		
1	EB4	735		
COIL		201		

(2) SD-25918-01-C18

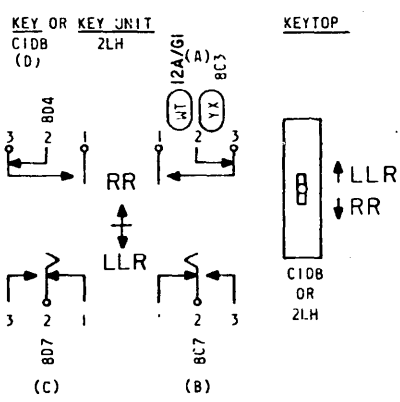
OWNERS
65

RELAY																				DESIG
CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE
OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
12	M	28F1	EM	28F1	EM															12
11		28E4																		11
10	M	28D2																		10
9																				9
8	EM	28F7	EM	28F8	EM															8
7	B		B		B															7
6	EM		EM	28E1	EM	28F2	EM	28G1												6
5																				5
4	EM	28F8	M	28E0	M															4
3																				3
2	M	28C5	M	28F0	M															2
1	M	28B5	M	28F4	M															1
COIL		28F9		28G0		28F5		28B6		28F1		28E5		28E1		28G9				COIL

RELAY																				DESIG
CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE
OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
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				RESISTOR			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
2R		28C5	437QA	2R		28C4	KS-19150, L3, 2.2kΩ
2T		28A5	437QA	2S		28D2	1BR
				2T		28B4	KS-19150, L3, 2.2kΩ

APP FIG 23 (MFR DISC)

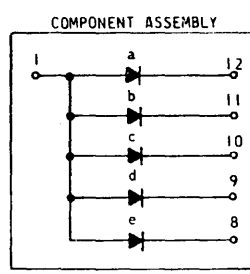


APP FIG 24

RELAY											
DESIG	CL1	CL2	CL3	CL4	CL5	CL6	CL7	CL8	CL9	CL10	CL11
CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE	CODE
OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
12	BM	38B7		BM	38E7		BM	38F7			
11	BM			BM			BM				
10	BM			BM			BM				
9	BM	38C2		BM	38E2		BM	38F2			
8	BM			BM			BM				
7											
6											
5		BM	38C7		BM	38F7		BM			
4		BM			BM			BM			
3		BM			BM			BM			
2		BM			BM			BM			
1		BM	38E2		BM	38E2		BM			
COIL		38B7	38C7		38E7	38F7		38F7			

CAPACITOR			
OPT	DESIG	LOC	CODE
	ACD	38C3	441QE

CIRCUIT PACK		
EQPT LOC	CP1	CP2
DESIG	CP1	CP2
CODE	B23	B24
OPTION		
ELEM IDENT		TERM.
TERM. FS LOC	11-3885	11-3885



DESIG			
CODE	ED-94823-()G587		
OPTION			
COMPONENT	DESIG	LOC	CODE
DIODE	a	CL1	38B7 458A
	b	CL2	38C7 458A
	c	CL3	38E7 458A
	d	CL4	38F7 458A
	e	CL5	38F7 458A

LAMP				RESISTOR			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
CL1		38D2		ACD3		38B3	19FS
CL2		38D2		ACD4		38C3	19FS
CL3		38E2		ACD5		38B3	19GH
CL4		38E2					
CL5		38F2					

PART OF APP FIG 25

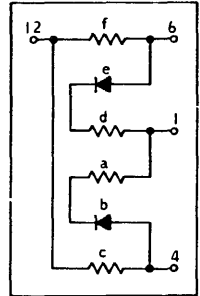
RELAY																	DESIG CODE
DESIG CODE	INTN1 AJ15	ITT AJ5	OEM1 AJ15	OEM2 AJ15	TANI AJ15	TD AJ131	TD1 AJ131	TD2 AJ131									OPTION
OPTION	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM		EBM		EBM	15A2	EBM		EBM		EBM	45E3	EBM	45E3	EBM		12
11	EBM	15F8	EBM	2B7	EBM	15A3	EBM		EBM		EBM	45F2	EBM	45D2	EBM		11
10	EBM	15B1	EBM		EBM	15B1	EBM		EBM		EBM		EBM		EBM		10
9	EBM	15B3	EBM		EBM	15E2	EBM		EBM		EBM	2E7	EBM		EBM		9
8	EBM		EBM	11G6	EBM	2B8	EBM		EBM		EBM		EBM	45D2	EBM	11C6	8
7	EBM	2E7	EBM	11G7	EBM	15D2	EBM		EBM		EBM	45B1	EBM		EBM		7
6	EBM		EBM	11A7	EBM	15F8	EBM		EBM		EBM		EBM	45B1	EBM	11E6	6
5	EBM		EBM	15E2	EBM		EBM	11B6	EBM		EBM		EBM		EBM		5
4	EBM	11D2	EBM	15E2	EBM	10G6	EBM	13B2	EBM		EBM		EBM		EBM		4
3	EBM	11C2	EBM		EBM	10D6	EBM	13C1	EBM		EBM		EBM		EBM	11B5	3
2	EBM	11H7	EBM	10C6	EBM	11B7	EBM		EBM		EBM		EBM		EBM	11C7	2
1	EBM		EBM	10B6	EBM	11F7	EBM		EBM		EBM		EBM		EBM	11E7	1
COIL		1G8		2C8		2B8		2B8		2B3		45D4		45F4		45E2	COIL

RELAY																	DESIG CODE
DESIG CODE	WK AJ15	WP1 AJ15	WKT AG9	WOC1 AJ131	WOC2 AJ131												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	
12	EBM		EBM		EBM	2F7	EBM		EBM		EBM	17B8	EBM		EBM		12
11	EBM	11C2	EBM		EBM	2C7	EBM		EBM		EBM	17D8	EBM		EBM		11
10	EBM	11D2	EBM	45D3	EBM	1G7	EBM		EBM		EBM	1G9	EBM		EBM		10
9	EBM		EBM		EBM	11G6	EBM		EBM		EBM	1C1	EBM		EBM		9
8	EBM	45B1	EBM	45D1	EBM	45D2	EBM	25B/C2	EBM	2B7	EBM		EBM		EBM		8
7	EBM		EBM		EBM	11D2	EBM	11F8	EBM	10G5	EBM		EBM		EBM		7
6	EBM	45B2	EBM	45B1	EBM	15C1	EBM	25B/E2	EBM	2H2	EBM		EBM		EBM		6
5	EBM		EBM		EBM	11D2	EBM	11B8	EBM	10D5	EBM		EBM		EBM		5
4	EBM	15C2	EBM	45A1	EBM	45F2	EBM	24G9	EBM	1A6	EBM		EBM		EBM		4
3	EBM		EBM		EBM		EBM	2B3	EBM	24G8	EBM		EBM		EBM		3
2	EBM		EBM		EBM		EBM	24E9	EBM	2A3	EBM		EBM		EBM		2
1	EBM		EBM		EBM		EBM		EBM	24E8	EBM		EBM		EBM		1
COIL		45A2		45C2		45B2		2D8		2D8							COIL

RELAY																	DESIG CODE
DESIG CODE	CS1 280FG																OPTION
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.	
TOP																	
BOT																	
COIL																	

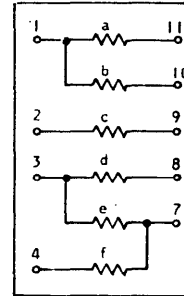
CAPACITORS		
DESIG	LOC	CODE
R12	10F6	437C
T12	10D5	
TA	11D7	439A
TB	11D7	439A
WKT(WKT.1)	45C7	439QA
(WKT.2)		441QJ

COMPONENT ASSEMBLY

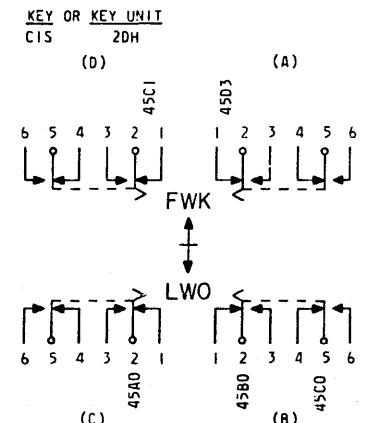


DESIG				CA7			
CODE				ED-94823-(-), G622			
OPTION							
COMPONENT	DESIG	LOC	CODE				
DIODE	e WKT	45C2	446F				
	b		446F				
RESISTOR	f WKT1	45C1	221A, 32.8kΩ				
	d WKT	45C2	221A, 499				
	a		221A, 449				
	c		221A, 32.8kΩ				

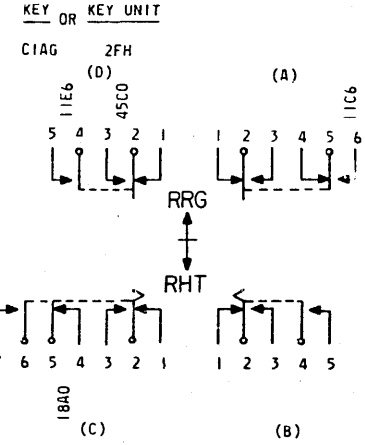
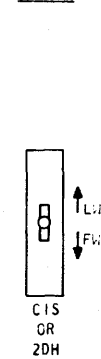
COMPONENT ASSEMBLY



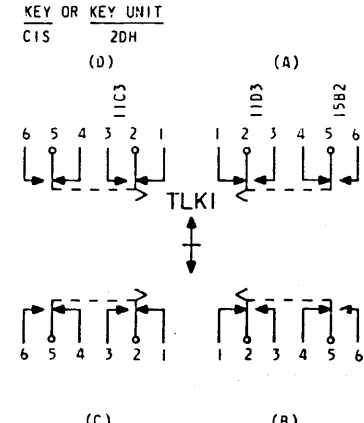
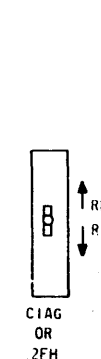
DESIG				CA8			
CODE				ED-94823-(-), G623			
OPTION							
COMPONENT	DESIG	LOC	CODE				
RESISTOR	a WBT5	27F8	KS-19151, L1, 13kΩ				
	b		KS-19151, L1, 13kΩ				
	c		221A, 750				
	d MFT	11C7	221A, 133				
	e MFS	11D7	221A, 750				
	f MFR	11E7	221A, 133				



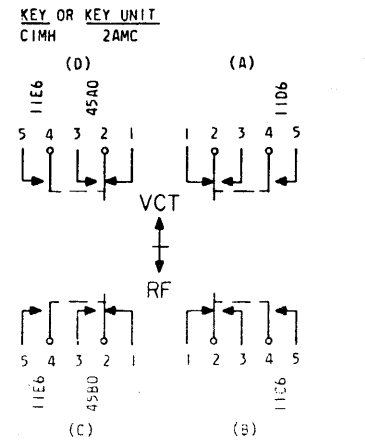
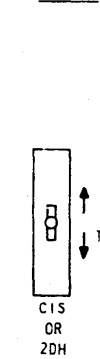
KEYTOP



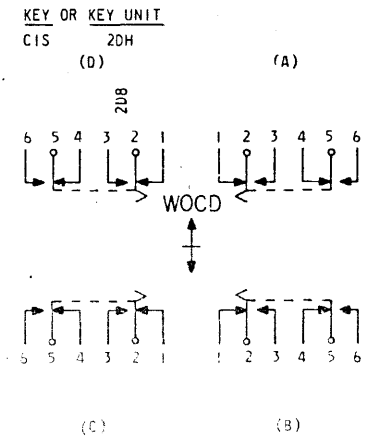
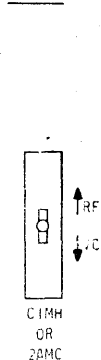
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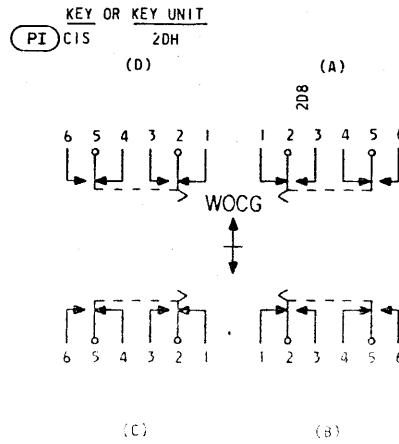
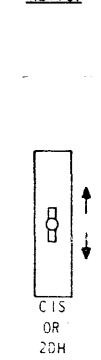
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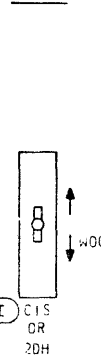
KEYTOP



KEYTOP



KEYTOP



LAMP			NETWORK			TRANSFORMER		
DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE
ITMP1	108		ITMP1	108		4R	3006	188M
ITMP2	208		ITMP2	208		4T	3006	188M
ITMP3	288		ITMP3	288		4B	3006	188M
ITMP4	288		ITMP4	288		4T	3006	188M
ITMP5	283		ITMP5	283		4B	3006	188M
ITMP6	4504		ITMP6	4504		4T	3006	188M
ITMP7	45F4		ITMP7	45F4		4B	3006	188M
ITMP8	45E2		ITMP8	45E2		4T	3006	188M
ITMP9	45A1		ITMP9	45A1		4B	3006	188M
ITMP10	45C2		ITMP10	45C2		4T	3006	188M
ITMP11	45B2		ITMP11	45B2		4B	3006	188M
ITMP12	208		ITMP12	208		4T	3006	188M
ITMP13	208		ITMP13	208		4B	3006	188M

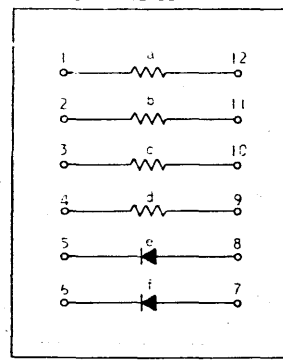
APP FIG 26

RELAY		DESIG		LOC		CODE		DESIG		LOC		CODE	
OPTION	TJ	AF116	AF502	AF95	AG38	AF127	AJ26	AG7	AJ83	AJ15			
CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR
12	M		M		M		M		M		M		M
11	M		M		M		M		M		M		M
10	M		M		M		M		M		M		M
9	B	30H6	M		M		M		M		M		M
8	EBM		EBM	30C8	EBM	30G7	EBM	40F2	M	9H1	EBM	9H0	EBM
7	B	30H6	B	30H6	B	30F2	B	30F2	B	30F2	B	30F2	B
6	EBM	30F6	EBM	30F6	EBM	30H1	EBM	30G1	EBM	30G1	EBM	30G1	EBM
5	B	30E9	B	30E9	B	30C3	B	30C3	B	30C3	B	30C3	B
4	M		EBM	30D8	M		EBM		M	30H1	EBM	31C5	EBM
3	M		M	30E8	M		M		M		M	30C2	EBM
2	M		M		M	30H4	M		M		M	30D6	EBM
1	M		M		M	30H4	M		M		M	30D2	EBM
COIL		30H5		30H5		31D4		30H4		31E5		30C1	

RELAY		DESIG		LOC		CODE		DESIG		LOC		CODE	
OPTION	4SV	5520	4WB	B325				OPTION	4SV	5520	4WB	B325	
CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR	LOC	CONT	ARR
12	M		M		M		M		M		M		M
11	M		M		M		M		M		M		M
10	M		M		M		M		M		M		M
9	B	30H6	M		M		M		M		M		M
8	EBM		EBM	30C8	EBM	30G7	EBM	40F2	M	9H1	EBM	9H0	EBM
7	B	30H6	B	30H6	B	30F2	B	30F2	B	30F2	B	30F2	B
6	EBM	30F6	EBM	30F6	EBM	30H1	EBM	30G1	EBM	30G1	EBM	30G1	EBM
5	B	30E9	B	30E9	B	30C3	B	30C3	B	30C3	B	30C3	B
4	M		EBM	30D8	M		EBM		M	30H1	EBM	31C5	EBM
3	M		M	30E8	M		M		M		M	30C2	EBM
2	M		M		M	30H4	M		M		M	30D6	EBM
1	M		M		M	30H4	M		M		M	30D2	EBM
COIL		30H5		30H5		31D4		30H4		31E5		30C1	

<u>CAPACITOR</u>			
	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
	4E	30H5	437QA
[1]	4R	30B7	437E
	4T	30A7	
[1]	4R1	30D7	
	4T1	30C7	
[1]	PR1	22H0	439C
	PR2	22H0	
[1]	PR3	22H0	
	PR4	22H0	

COMPONENT ASSEMBLY



DESIG		LOC		CODE	
OPTION	ED-94823-10319				
COMPONENT	DESIG	LOC	CODE		
DIODE	c	RPR	41C7	446F	
	f	TPR	41A7	446F	
RESISTOR	a	4S1	30G0	KS-19150, LI, 5.1kΩ	
	b	4S2	30G3	KS-19150, LI, 5.2kΩ	
	c	4AB	29H3	KS-19150, LI, 6.2kΩ	
	d	4AC	29H1	KS-19150, LI, 5.1kΩ	

CAPACITOR

DESIG	LOC	CODE
4SV	30E3	274L

LAMP	DESIG	LOC	CODE
4M	30G6	11B (RES)	

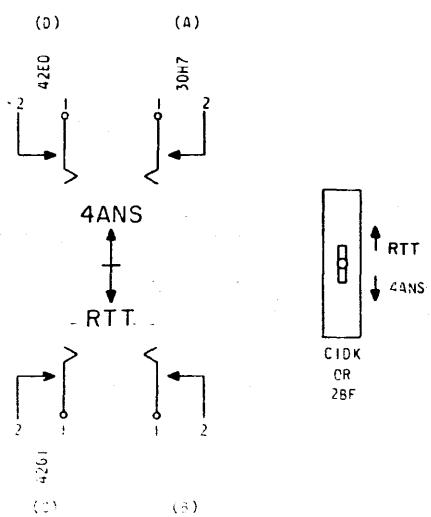
NETWORK	DESIG	LOC	CODE
C	30G0	177A	

RESISTOR	DESIG	LOC	CODE
4E	30H5	1920	
4LPH	30D4	183F	
4S	30F3	189	
4B	30E5	19155	

KEY OR KEY UNIT

DESIG	LOC	CODE
4SV	30E3	274L

KEYTOP

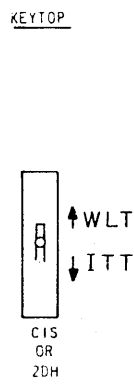
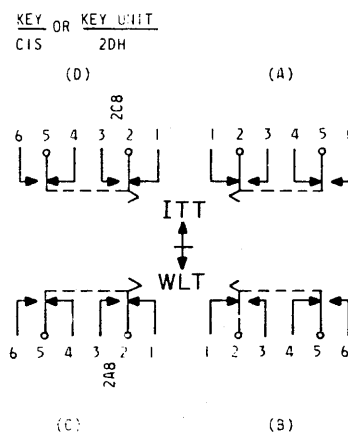
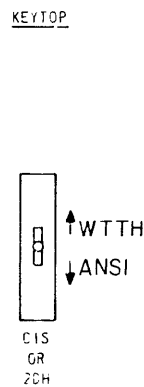
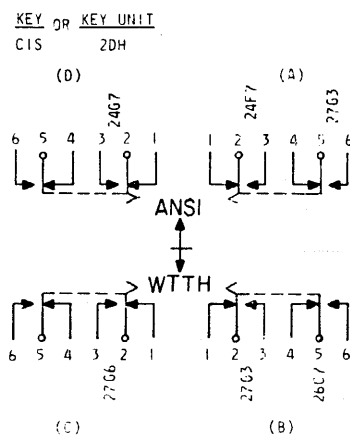


Best Available

APP FIG 27

RELAY																		RELAY																	
DESIG	WLT		WLT		WLT														DESIG															DESIG	
CODE	1J83		1J83		1J15														CODE															CODE	
OPTION	SF		SF		SF														OPTION															OPTION	
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC		
ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR			
12	EBM	7E9	EBM	2601	EBM															12												12			
11	EBM	7A9	EBM	2A2	EBM															11												11			
10	EBM	27H5	EBM		EBM	18B3														10												10			
9	EBM	27G3	EBM	19B/C3	EBM	18C3														9												9			
8	EBM		EBM	2H2	EBM															8												8			
7	EBM		EBM	2A4	EBM															7												7			
6	EBM		EBM	24H4	EBM															6												6			
5	EBM		EBM	24H6	EBM															5												5			
4	EBM		EBM		EBM	27H3														4												4			
3	EBM		EBM	27G3	EBM	2E8														3												3			
2	EBM		EBM	19A/A6	EBM	18C0														2												2			
1	EBM	27H5	EBM	19A/E6	EBM															1												1			
COIL	2A8			262		2A5														COIL												COIL			

CAPACITOR			
OPT	DESIG	LOC	CODE
SF	WR	27E5	535J
	WT	27E5	535J

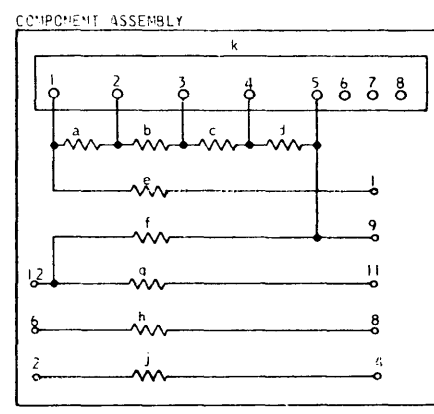


LAMP			
OPT	DESIG	LOC	CODE
	WBE	27H5	2Y OR M1

NETWORK			
OPT	DESIG	LOC	CODE
SF	WLT	2A5	185A

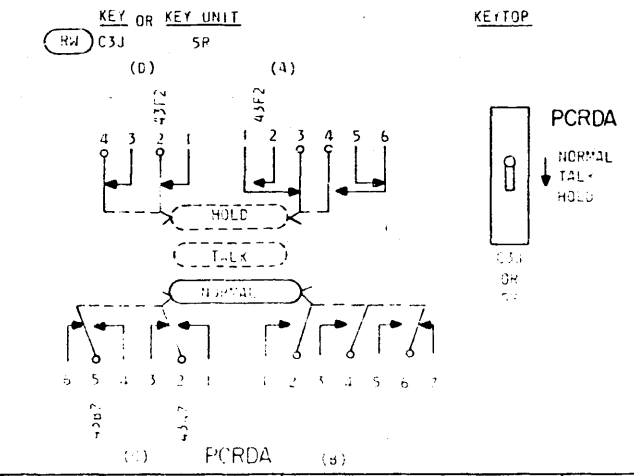
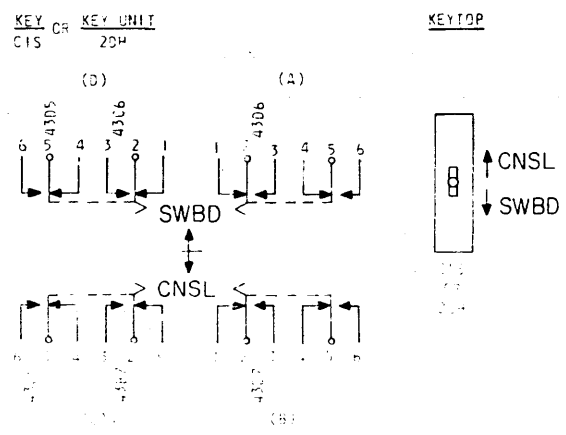
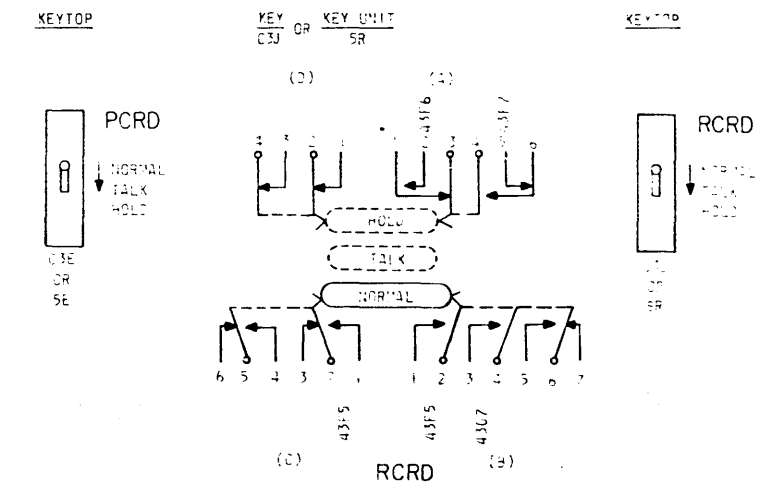
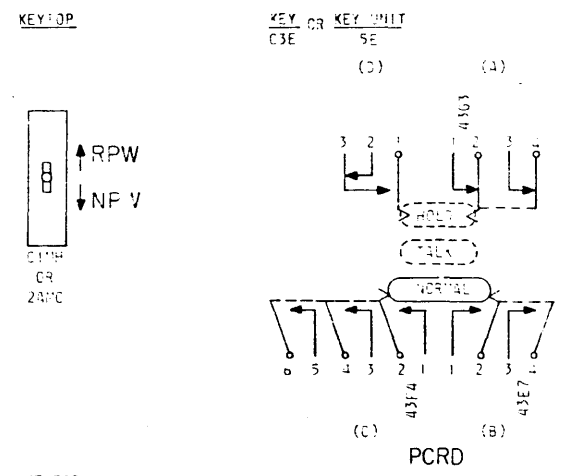
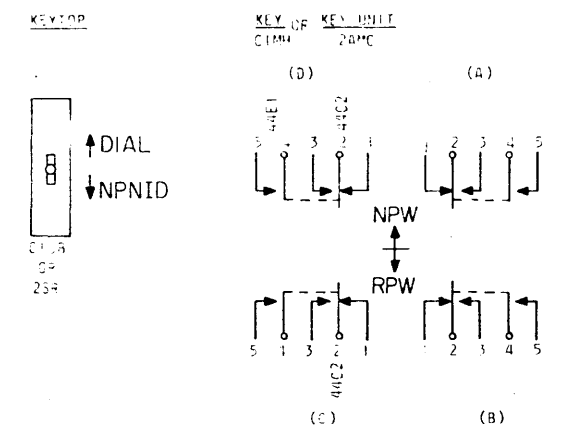
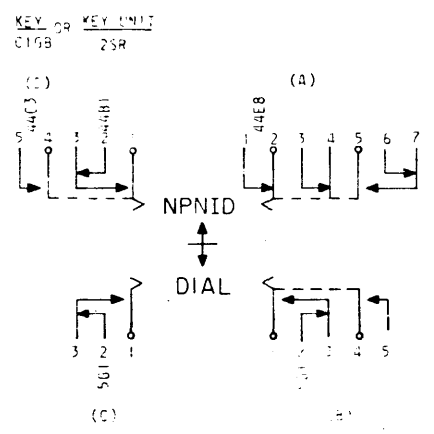
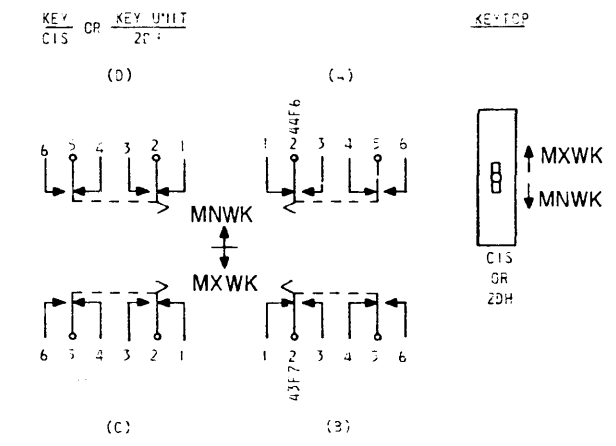
RELAY												RELAY											
DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE	DESIG	LOC	CODE
12			12			12			12			12			12			12			12		
11			11			11			11			11			11			11			11		
10			10			10			10			10			10			10			10		
9			9			9			9			9			9			9	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

CAPACITOR			
OPT	DESIG	LOC	CODE
	G1	44B5	4410A



RESISTOR			
COMPONENT	DESIG	LOC	CODE
a	G1A	44C6	221A, 10, 1kΩ
b	G1B	44D6	221A, 20, 3kΩ
c	G1C	44D6	221A, 40, 2kΩ
d	G1D	44E6	221A, 79, 6kΩ
e	G1	44C6	221A, 287kΩ
f	G2	44E6	221A, 54, 9kΩ
g	G3	44E6	221A, 120kΩ
h	PCRD	7C5	221A, 1kΩ
j	G1TM	44A1	221A, 10kΩ
TERMINAL STRIP	K		318A

CONNECTOR			
OPT	DESIG	LOC	CODE
	G1	44D0	BNC-UG-625B/U



LAMP			
OPT	DESIG	LOC	CODE
	G1	44A1	13A (NES)
	LSR	43H7	
	LSR	43H7	
	ATN	43H5	
	PHI	43H5	
	PHI	43E2	

POTENTIOMETER			
OPT	DESIG	LOC	CODE
	G1	44E6	
	GMN	44E5	XS-19722, 10, 25kΩ
	GMN	43E7	
	STS	44H4	XS-19722, 10, 10kΩ

Best Available

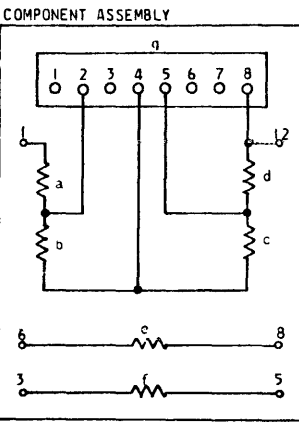
SD-25918-01-C22

APP FIG 29

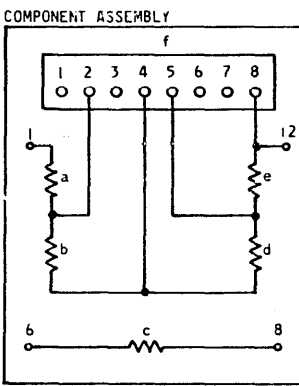
RELAY		BD		TMB		GD		SDTA		TMA										DESIG	
DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE
OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION	
12	CONT	12	LOC	12	CONT	12	LOC	12	CONT	12	LOC	12	CONT	12	LOC	12	CONT	12	LOC	12	CONT
11	ARR	11	LOC	11	ARR	11	LOC	11	ARR	11	LOC	11	ARR	11	LOC	11	ARR	11	LOC	11	ARR
10		10		10		10		10		10		10		10		10		10		10	
9		9		9		9		9		9		9		9		9		9		9	
8		8		8		8		8		8		8		8		8		8		8	
7		7		7		7		7		7		7		7		7		7		7	
6		6		6		6		6		6		6		6		6		6		6	
5		5		5		5		5		5		5		5		5		5		5	
4		4		4		4		4		4		4		4		4		4		4	
3		3		3		3		3		3		3		3		3		3		3	
2		2		2		2		2		2		2		2		2		2		2	
1		1		1		1		1		1		1		1		1		1		1	
COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL	

RELAY		BD		TMB		GD		SDTA		TMA										DESIG	
DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE	DESIG	CODE
OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION		OPTION	
12	CONT	12	LOC	12	CONT	12	LOC	12	CONT	12	LOC	12	CONT	12	LOC	12	CONT	12	LOC	12	CONT
11	ARR	11	LOC	11	ARR	11	LOC	11	ARR	11	LOC	11	ARR	11	LOC	11	ARR	11	LOC	11	ARR
10		10		10		10		10		10		10		10		10		10		10	
9		9		9		9		9		9		9		9		9		9		9	
8		8		8		8		8		8		8		8		8		8		8	
7		7		7		7		7		7		7		7		7		7		7	
6		6		6		6		6		6		6		6		6		6		6	
5		5		5		5		5		5		5		5		5		5		5	
4		4		4		4		4		4		4		4		4		4		4	
3		3		3		3		3		3		3		3		3		3		3	
2		2		2		2		2		2		2		2		2		2		2	
1		1		1		1		1		1		1		1		1		1		1	
COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL		COIL	

CAPACITOR			
OPT	DESIG	LOC	CODE
	TMA1	46C7	441QA
	TMA2	46C7	441QJ
	TMB	46F7	441QS

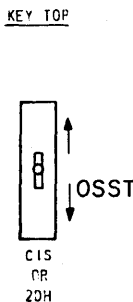
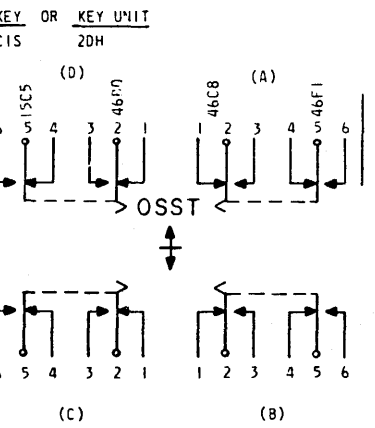


DESIG			
CODE	CA12		
OPTION	ED-94823-(), G683		
COMPONENT	DESIG	LOC	CODE
RESISTOR	a	TMA	46D7 221A, 280KΩ
	b	TMA1	46D6 221A, 20.3KΩ
	c	TMA2	46D6 221A, 40.2KΩ
	d	TMA3	46D6 221A, 79.6KΩ
	e	TMA4	46C6 221A, 301
	f	ADJ	46F0 221A, 10KΩ
TERM. STRIP	g		318A



DESIG			
CODE	CA13		
OPTION	ED-94823-(), G684		
COMPONENT	DESIG	LOC	CODE
RESISTOR	a	TMB	46G7 221A, 320KΩ
	b	TMB1	46G6 221A, 27.1KΩ
	d	TMB2	46G6 221A, 54.2KΩ
	e	TMB3	46G6 221A, 109KΩ
	c	TMB4	46F5 221A, 499
	f		318A
TERM. STRIP	f		318A

CONNECTOR			
OPT	DESIG	LOC	CODE
	TM	46F0	BNC-JG-625B/U



LAMP			
DESIG	LOC	CODE	
OFF HK	46E2	2Y OR M1	
ON HK	46F2	2Y OR M1	
TM	46F2	13A(RES)	

NETWORK			
DESIG	LOC	CODE	
BD	46C2	185A	
GD	46B2	185A	
SDTA	46B2	185A	

POTENTIOMETER			
OPT	DESIG	LOC	CODE
	TMA	46D5	KS-19722, L1, 25KΩ
	TMB	46G5	KS-19722, L1, 50KΩ

B

C

**E****F**

G

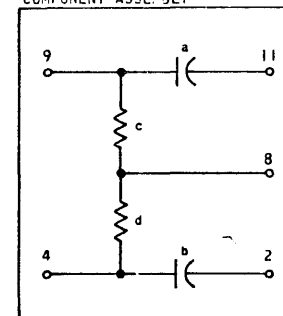
4

4

APP FIG 31

RELAY		CLT		CW		CWA		CWSV		CWT		MFC								DESIG	
CODE		AJ83		AJ15		AK49		AJ50		AJ83		AJ83								CODE	
OPTION		CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION	
		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR			
12	EBM			EBM						EBM	1F6	EBM								12	
11	EBM	24G2		EBM						EBM	2B2	EBM								11	
10	EBM	24B3		EBM	24D1					EBM	8B5	EBM								10	
9	EBM	24C3		EBM	24E1					EBM	8E5	EBM								9	
8	EBM	3G1		EBM	3E1					EBM	1C1	EBM	3H2							8	
7	EBM									EBM	3G1	EBM	3H2							7	
6	EBM	3H2		EBM	24D3					EBM	7A8	EBM								6	
5	EBM	24D2		EBM	24E3					EBM	7E8	EBM								5	
4	EBM	3H1		EBM		EBM	24D3			EBM	25A/C2	EBM								4	
3	EBM	9B3		EBM		EBM	24E4			EBM	25A/E2	EBM	24B3							3	
2	EBM	9G3		EBM	3G5	EBM				EBM	24F3	EBM	24C4							2	
1	EBM	9G5		EBM						EBM	24H4	EBM								1	
COIL		3E2		3G2		3G5		8C7		3F2		3G2								COIL	

COMPONENT ASSEMBLY



DESIG		CA15	
CODE		ED-94823-(), G732	
OPTION			
COMPONENT	DESIG	LOC	CODE
CAPACITOR	a	CWR	24E2 535J
	b	CWT	24D2 535J
RESISTOR	d	CWH	24D2 221A, 1.5kΩ
	c	CWH	24D2 221A, 499

LAMPS

OPT	DESIG	LOC	CODE
	CWSV	BA7	2Y OR MI

ISSUE
53D
57D
58A

ISSUE
70B

MASTER TEST FRAME
TRUNK TEST CIRCUIT

②

SD-25918-01-C25

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

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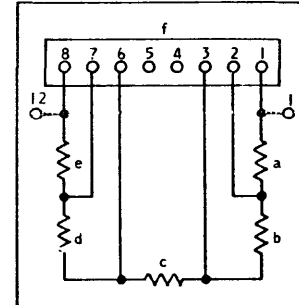
APP FIG 33

RELAY		2EI		2TA		2TBD		2TF		2TOL		2TT		2TFB		TOL2				DESIG	
CODE		AG19		AJ88		AJ83		AF32		AJ15		AF79		AJ83		AJ5				CODE	
OPTION																				OPTION	
		CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC		
		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR		ARR			
12		EBM		EBM		EBM		EBM		EBM		EBM		EBM		EBM		EBM		12	
11		EBM		EBM		EBM		EBM		EBM		EBM		EBM		EBM		EBM		11	
10		EBM	17C6	M	12B/E6	EBM	12B/A5	EBM	3H4	EBM	12B/C7	M	12B/G8	EBM	12B/C8	EBM	3C1			10	
9						EBM	12B/C6			EBM	12B/D8			EBM	12B/D8	EBM	17C7			9	
8				EMB		EMB		EMB	12B/B7	EMB	17E7	EMB		EMB	17C7	EMB	17D7			8	
7						EMB		EMB		EMB				EMB	12B/C7	EMB	17F7			7	
6				EMB		EMB		EMB		EMB	3D1	EMB	12B/C3	EMB		EMB	12A/B0			6	
5						EMB		EMB		EMB				EMB	3E1	EMB	12A/D0			5	
4				EBM		EBM		EBM		EBM	8B4	EBM		EBM	12B/F6	EBM	1B6			4	
3				EBM		EBM		EBM		EBM	8F3	EBM		EBM	3D1	EBM				3	
2		PBEM		M		EBM		EBM		EBM	12A/B0	EBM		EBM		EBM				2	
1						EBM		EBM		EBM	12A/D0	M		EBM		EBM				1	
COIL			12B/E7		12B/B3		12B/F7		17E7		3C2		12B/F7		3D2		3H5			COIL	

RELAY		25V		2TAS																	
CODE		S520		S507																	
OPTION																					
		CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC		
		NO.		NO.		NO.		NO.		NO.		NO.		NO.		NO.		NO.			
T02																					
B07																					
COIL																					

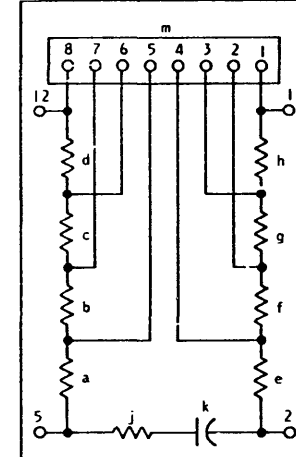
CAPACITOR		DESIG		LOC		CODE	
OPT							
[1]		R13		12B/C4		437C	
		T13		12B/A4			

COMPONENT ASSEMBLY



DESIG		CA25		CA26	
CODE		ED-94823-(), G708		ED-94823-(), G708	
OPTION		SY		SY	
COMPONENT		DESIG	LOC	DESIG	LOC
RESISTOR	a	PDD1	12B/D5	PDD10	12B/F5
	b	PDD2	12B/D4	PDD11	12B/F4
	c	PDD3	12B/D4	PDD12	12B/F4
	d	PDD4	12B/D3	PDD13	12B/F3
	e	PDD5	12B/D3	PDD14	12B/F3
TERMINAL STRIP		f		318A	

COMPONENT ASSEMBLY



DESIG		CA27	
CODE		ED-94823-(), G706	
OPTION		SY	
COMPONENT		DESIG	LOC
CAPACITOR	k	PDD	12B/E3
	a	PDD6	12B/D2
	b	PDD7	12B/D2
	c	PDD8	12B/D1
	d	PDD9	12B/D1
	e	PDD15	12B/F2
	f	PDD16	12B/F2
	g	PDD17	12B/F1
	h	PDD18	12B/F1
	j	PDD19	12B/E3
TERMINAL STRIP		m	

INDUCTOR		DESIG		LOC		CODE	
OPT							
		2A		12B/B8		274L	

KEY OR KEY UNIT
CIS 2DH

KEY TOP

LAMP
OPT

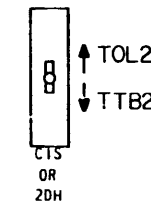
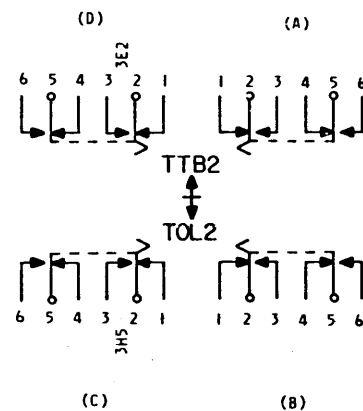
DESIG	LOC	CODE
2A	12B/B5	13A(RES)
25V	12B/G9	2Y OR MI
2TAS	12B/G7	2Y OR MI

NETWORK
OPT

DESIG	LOC	CODE
2B	12B/B5	177D

RESISTOR

OPT	DESIG	LOC	CODE
	2AF	12B/B6	19ABS
	2AJ	12B/D6	KS-19151, L1, 13KN
	2AL	12B/C4	18BH
	2AM	17E6	18AG
	TOL2	3H6	18AG



SD-25918-01-C26

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-C26

BELL TELEPHONE LABORATORIES
INCORPORATED

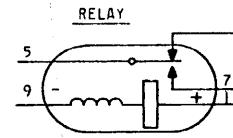
6S

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ISSUE
70B

APP FIG 34

RELAY		S2		TAN3							
DESIG		AJ26		AJ83							
CODE											
OPTION											
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC
12											
11											
10	B										
9											
8	M	26A1	EMB	17A7							
7											
6	BM		EMB	281							
5											
4	M	26B1	EMB	26A0							
3											
2											
1											
COIL		26A0	282								



DESIG	CS2
CODE	316E
OPTION	
9	26B1
8	
7	26D1
6	
5	26D1
4	
3	
2	
1	26B1

CAPACITOR
OPT

DESIG	LOC	CODE
[1] R14	26B1	437E
T14	26A1	

LAMP
OPT

DESIG	LOC	CODE
CS2	26D1	2Y OR M1

SD-25918-01-C27

DRAWING
ISSUE
56D
57D

RELAY																					
DESIG CODE	1RK		RSK		2RK		ETRP		2RT		EPTP		3RT		E3RT		AARK		TC	DESIG CODE	
	AK22				AK22				AK22				AK22				AK22				
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	OPTION
12	EBM						EBM		EBM	48B7					EBM	51A2			EBM	48A5	12
11	EBM	50C2					EBM	50B7	EBM	50F2					EBM	50E7			EBM	48H7	11
10	EBM								EBM	50G2					EBM	50F7			EBM	49A0	10
9	EBM						EBM		EBM	51B7					EBM				EBM	47A0	9
8	EBM	50C4					EBM	50A9	EBM	50E4					EBM	50C9			EBM		8
7																					7
6																					6
5			EBM	50C1	EBM							EBM		EBM	48B7			EBM	48C4		5
4			EBM	50A2	EBM	50G2					EBM	50E2	EBM	50C7				EBM			4
3			EBM	50C7	EBM						EBM		EBM	51B6				EBM			3
2			EBM	50B2	EBM						EBM		EBM					EBM			2
1			EBM	50G6	EBM	50F4					EBM	50D4	EBM	50B3				EBM	51F4		1
COIL		50B3		50G8		50F3		50A8		50E3		50D3		50B8		50B8		51F3		48A5	COIL

RELAY																					
DESIG CODE		ALM		ASK		TSK		MH/B						CSA		CSRK		DESIG CODE			
AJ5		AK22		AK47										AK22							
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	OPTION
12	EBM	48F7			EBM	50C2			M								EBM				12
11	EBM				EBM	50C2			EBM								EBM	51D1			11
10	EBM				EBM				EBM	48B1							EBM	50F6			10
9	EBM				EBM	50G6			EBM	47HC							EBM				9
8	EBM				EBM	50B4			EBM	47F0							EBM	51E4			8
7	EBM																				7
6	EBM	47F0															EBM				6
5	EBM	52A6	EBM	50C2			EBM										EBM				5
4	EBM	51A7	EBM	50B2			EBM										EBM				4
3	EBM	48G5	EBM	50C7			EBM										EBM	52B0			3
2	EBM		EBM	50G6			EBM										EBM	50F6			2
1	EBM	47G7	EBM	50A3			M										EBM	51A4			1
COIL		48A8		50A3			50B3			47F6								2000		51B3	COIL

RELAY																					
DESIG	CSK				ESK		CSRT		DOP1		DOP2		DOP3		DOP4		MCI		RTRD		DESIG
CODE	AK22				AJ15		AK22				AK22				AK22				CODE		
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION
12	EBM	4BA7			EBM	198/B0			EBM	52C0			EBM				EBM	48G7			12
11	EBM	51A1			EBM	198/E0			EBM	52D1			EBM	52D1			EBM	48C4			11
10	EBM	51B2			EBM	25B/B1			EBM	52D2			EBM	52D3			EBM	43D7			10
9	EMB				EBM	25B/F1			EMB	52B2			EMB				EMB				9
8	EMB	50F9			EMB				EMB	52A2			EMB	52C1			EMB				8
7					EMB																7
6					EMB	48G5															6
5			EMB		EMB	48B7			EMB			EMB	52F1			EMB					5
4			EMB		EBM	51B2		EBM	52B0			EMB	52F1			EMB					4
3			EBM	50E7	EBM	51B6		EBM	52D2			EBM	52D2			EBM	55A0				3
2			EBM	50F7	EBM	51C2		EBM	52D0			EBM	52C2			EBM	56E9				2
1			EBM	50D9	EBM	51D0		EBM	52A0			EBM	52C4			EBM	56E9				1
COIL		50F3		50D8		51B3		52B3		52A3		52D4		52C3		55A0		48F1		COIL	

RELAY																							
DESIG		EREP		REP		ETK		REP3		MRA1		MRB1		MRA2		MRB2		MRA3		MRB3		DESIG	
CODE		AK4				AK4				AK22				AK22				AK22				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	
12			M	47H2			M	47B3			EBM	47D1			EBM	47D2			EBM				12
11			EBM	52B9			EBM	2			EBM	47C1			EBM	47D1			EBM		47E1		11
10			EBM				EBM	55B0			EBM	49C6			EBM	49D6			EBM				10
9			EBM	47F1			EBM				EBM	49A7			EBM	49C7			EBM		49D7		9
8			EBM				EBM	48F1			EBM	49B6			EBM	49C6			EBM		49E6		8
7																							7
6																							6
5	EBM				EBM				EBM	49C5				EBM	49C5			EBM					5
4	EBM				EBM				EBM	49A6				EBM	49B6			EBM	49D6				4
3	EBM				EBM	49A6			EBM					EBM				EBM					3
2	EBM	47D3			EBM	47C0			EBM					EBM				EBM					2
1	M				M				EBM	49B6				EBM	49C6			EBM	49E6				1
COIL		47E5		47B7		47A3		47B3		49A8		49B7		49C8		49C7		49D8			49D7	COIL	

RELAY																							
DESIG CODE		MRLS		RRLS		OAT AF98		PTP A115		RANN AK22		ASRK		RANS A115		RBY AK4		RRQ		REP1 AG20		DESIG 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		
12		M	47F4			EBM	50D4			EBM	51F2			EBM	50E7			M	48F7	M	47D5	12	
11		EBM	47C3							EBM				EBM	50F7			EBM	48B4	M	48E7	11	
10		EMB	a			EBM	43E7			EBM	51B7			EBM	50E9			EBM	48D7	EBM	47F4	10	
9		EMB				B	52A7			EBM	51B7			EBM	51A2			EMB		M	47E1	9	
8		EMB				EBM				EMB	51E4			EMB				EMB		EMB	47F1	8	
7						B								EBM	51B5							7	
6						EMB								EMB	18G1					EMB	48H1	6	
5	EMB	47E4				B				EMB				EMB	48F5		EMB					5	
4	EMB	47F1				EBM				EMB				EBM	51D2		EMB			EBM	a	4	
3	EBM	5580				B				EBM	4807			EBM	51D6		EMB	48C7		M	49A0	3	
2	EBM	47D3				M				EBM	48B4			EBM	48A7		EBM	48A4		EBM	48G1	2	
1	M									EBM	48G7			EBM			M	48G7		M	51C9	1	
COIL		47D3					52A9				48D1				50E8			48D1			47E2	COIL	

RELAY																			
DESIG CODE	REP2 AJ5		REPT		RETM		RK AF85		RTF		RIA0		R1D0		R1T1P		RG0T AJ83		DESIG CODE
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	OPTION
12	EBM				M	48A6			M	51A1					M	51A5	EBM		12
11	EBM	47F7			EBM	5061			EBM	48A7					EBM	51A0	EBM	51A1	11
10	EBM	47F7			EBM	52G0	EBM	50C0							EBM	51B1	EBM	51B1	10
9	EBM	1H3			EBM	51A7	PM		EBM						EBM	50B2	EBM		9
8	EBM	1F8			EBM	51A9			EBM							50E6	EBM		8
7	EBM	1E8															EBM	51A5	7
6	EBM	20D1					EBM										EBM		6
5	EBM	2394	EBM								EBM	48A7			EBM	51B6			5
4	EBM		EBM				PM				EBM				EBM	48C1	EBM	51F1	4
3	EBM		EBM					M	48B7						EBM	52F0	EBM	50E7	3
2	EBM	7E4	EBM	47B4							EBM	50A1			EBM		EBM	50A1	2
1	EBM	7E4	M	47G2							M	50B1			M	51A9	EBM	50C6	1
COIL		47F4		47G2		51B9		2394		48C1		47F6				1H3		1E9	COIL

PART OF APP FIG 35

DRAWING
ISSUE
560
570

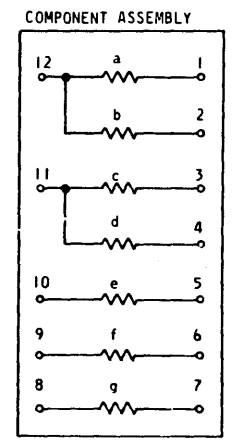
RELAY																				DESIG CODE OPTION
DESIG CODE OPTION	FON AJ83	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	RPB1 AK4	
12	EMB	a																		12
11	EMB	48H5																		11
10	EMB	52B6																		10
9	EMB	50C0																		9
8	EMB	52G0																		8
7	EMB																			7
6	EMB																			6
5	EMB																			5
4	EMB																			4
3	EMB																			3
2	EMB	55A0																		2
1	EMB																			1
COIL	47E2	49A3	49B1	49C1	49C3	49C2	49E1	49D3	49D2	49E3	49F2									COIL
a																				48A1 48H1

RELAY																				DESIG CODE OPTION
DESIG CODE OPTION	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	
12	EMB																			12
11	EMB																			11
10	EMB																			10
9	EMB																			9
8	EMB																			8
7	EMB																			7
6	EMB																			6
5	EMB																			5
4	EMB																			4
3	EMB																			3
2	EMB																			2
1	EMB																			1
COIL	49G3	49G2																		COIL
																				51D3 50C8

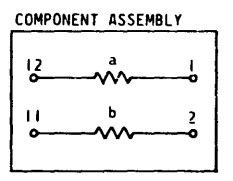
RELAY																				DESIG CODE OPTION
DESIG CODE OPTION	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	
12																				12
11																				11
10																				10
9																				9
8																				8
7																				7
6																				6
5																				5
4																				4
3																				3
2																				2
1																				1
COIL																				COIL

RELAY																				DESIG CODE OPTION
DESIG CODE OPTION	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	RPB5 AK4	
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			
OPT	DESIG	LOC	CODE
	OAT (OAT.1)	52B7	[4] 437QA
	(OAT.2)		
	(OAT.3)		
	(OAT.4)		
	REPT	47G0	437QA
	RTM1	51C7	439QA
	RMT2	51C6	439QA
	RMT3 (RMT3.1)	51C6	[3] 437QA
	(RMT3.2)		
	(RMT3.3)		



DESIG			
CODE	CA29		
OPTION	ED-94823-() 6798		
COMPONENT	DESIG	LOC	CODE
a	RTM	51C6	221A,352kΩ
b	RTM1	51C7	221A,100kΩ
c	REPT	47H0	144E,2.29MΩ
d	REPT1	47H0	221A,.898MΩ
e	OAT	52B6	144E,4.02MΩ
f	RTM2	51B6	221A,723
g	RTM3	51B5	221A,120



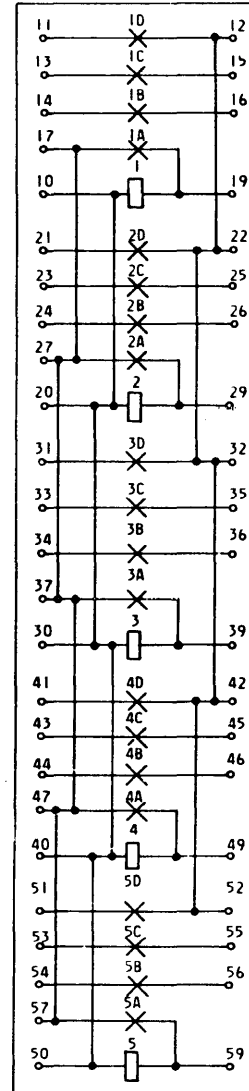
DESIG			
CODE	CA33		
OPTION	ED-94823-() 6923		
COMPONENT	DESIG	LOC	CODE
a	RTM4	51C9	221A,301
b	DOP1	51A9	221A,499

NETWORK			
OPT	DESIG	LOC	CODE
	ALM	48A8	
	RANN	48D1	
	RBY	48D1	
	RRO	48E1	185A
	RTF	48C1	
	RTRD	48F2	
	TC	48A5	

SD-25918-01-C29A

PART OF APP FIG 35

318B RELAY



DESIG	FS0	FS1	FS2	FS3	FS4	FS5	FS6	FS7	FS8	FS9	FS10	FS11	FS12	FS13	FS14	FS15	FS16	FS17	FS18	FS19	FS20	FS21	FS22	FS23	FS24	
CODE	318B					318B					318B					318B					318B					
OPTION																										
COIL	POS	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
CONT POS	A LOC	SSC2	SSC2	SSC2	SSC2	SSC2	SSB5	SSB5	SSB5	SSB5	SSB5	SSB7	SSB7	SSB7	SSB7	SSB7	SSB9	SSB9	SSB9	SSB9	SSB9	SSF1	SSF1	SSF1	SSF1	SSF1
	B LOC	SSC2	SSC2	SSC2	SSC2	SSC2	SSB5	SSB5	SSB5	SSB5	SSB5	SSB7	SSB7	SSB7	SSB7	SSB7	SSB9	SSB9	SSB9	SSB9	SSB9	SSF1	SSF1	SSF1	SSF1	SSF1
	C LOC	SSC2	SSC2	SSC2	SSC2	SSC2	SSB5	SSB5	SSB5	SSB5	SSB5	SSB7	SSB7	SSB7	SSB7	SSB7	SSB9	SSB9	SSB9	SSB9	SSB9	SSF1	SSF1	SSF1	SSF1	SSF1
	D LOC	SSC2	SSC2	SSC2	SSC2	SSC2	SSB5	SSB5	SSB5	SSB5	SSB5	SSB7	SSB7	SSB7	SSB7	SSB7	SSB9	SSB9	SSB9	SSB9	SSB9	SSF1	SSF1	SSF1	SSF1	SSF1

DESIG	FS25	FS26	FS27	FS28	FS29	TS0	TS1	TS2	TS3	TS4	TS5	TS6	TS7	TS8	TS9	TS10	TS11	TS12	TS13	TS14	TS15	TS16	TS17	TS18	TS19	
CODE	318B					318B					318B					318B					318B					
OPTION																										
COIL	POS	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
	LOC	SSF3	SSF3	SSF3	SSF3	SSF3	SSD1	SSD1	SSD1	SSD1	SSD1	SSC4	SSC4	SSC4	SSC4	SSC4	SSC6	SSC6	SSC6	SSC6	SSC6	SSC8	SSC8	SSC8	SSC8	SSC8
CONT POS	A LOC	SSF3	SSF3	SSF3	SSF3	SSF3	SSD1	SSD1	SSD1	SSD1	SSD1	SSC4	SSC4	SSC4	SSC4	SSC4	SSC6	SSC6	SSC6	SSC6	SSC6	SSC8	SSC8	SSC8	SSC8	SSC8
	B LOC	SSF3	SSF3	SSF3	SSF3	SSF3	SSD1	SSD1	SSD1	SSD1	SSD1	SSC4	SSC4	SSC4	SSC4	SSC4	SSC6	SSC6	SSC6	SSC6	SSC6	SSC8	SSC8	SSC8	SSC8	SSC8
	C LOC	SSF3	SSF3	SSF3	SSF3	SSF3	SSD1	SSD1	SSD1	SSD1	SSD1	SSC4	SSC4	SSC4	SSC4	SSC4	SSC6	SSC6	SSC6	SSC6	SSC6	SSC8	SSC8	SSC8	SSC8	SSC8
	D LOC	SSF3	SSF3	SSF3	SSF3	SSF3	SSD1	SSD1	SSD1	SSD1	SSD1	SSC4	SSC4	SSC4	SSC4	SSC4	SSC6	SSC6	SSC6	SSC6	SSC6	SSC8	SSC8	SSC8	SSC8	SSC8

RELAY

DESIG	MC2	MC3
CODE	AJ202	AJ202
OPTION		
CONT POS	LOC	LOC
	24 M	SSG2 M
	23 M	SSG1 M
	22 M	SSG1 M
CONT POS	21 M	SSG1 M
	20 M	SSB9 M
	19 M	SSA9 M
	18 M	SSB9 M
CONT POS	17 M	SSA9 M
	16 M	SSB8 M
	15 M	SSB8 M
	14 M	SSA7 M
CONT POS	13 M	SSB7 M
	12 M	SSA7 M
	11 M	SSB6 M
	10 M	SSA6 M
CONT POS	9 M	SSA5 M
	8 M	SSB5 M
	7 M	SSA5 M
	6 M	SSB4 M
CONT POS	5 M	SSB3 M
	4 M	SSB3 M
	3 M	SSB2 M
	2 M	SSB2 M
CONT POS	1 M	SSB1 M
	COIL	SSA0
		SSA0
		SSA0

APP FIG. 36

RELAY							
DESIG	WITI						
CODE	AJIS						
OPTION							
☒	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR LOC
12	EBM						
11	EBM						
10	EBM	24G8					
9	EBM	24F8					
8	EBM						
7	EBM						
6	EBM						
5	EBM						
4	EBM	27H3					
3	EBM						
2	EBM	18B0					
1	EBM						
COIL		2D8	☒		☒		☒

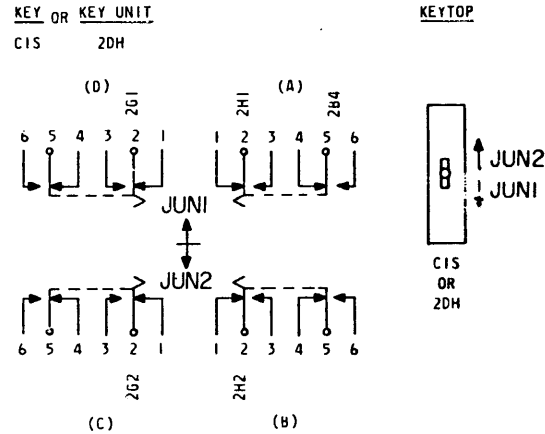
RELAY								
DESIGN CODE			PK3			WBTS		
OPTION			280H			S507		
X			CONT NO.	CONT ARR	LOC	CONT NO.	CONT ARR	LOC
TOP								
	4,7,3	BM	27E6	3,2,1	BM	27F6		
BOT								
COIL	X		27E8	X		27E8	X	

LAMP				NETWORK				RESISTOR			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
	PK3	27E6	2Y OR M1		WIT1	2D8	185A		WTL	24F9	18EM
	WBTS	26E6							WTR	24G9	18DR
									WTT	24F9	

APP FIG. 37

RELAY		BIT		BST					
DESIGN CODE		AJ83		AJ83					
OPTION	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC	
12	EBM	27G8	EBM	2H2					
11	EBM	27F8	EBM	2A4					
10	EBM	18B4	EBM	1A6					
9	EBM	18C4	EBM	19B/C3					
8	EBM		EBM						
7	EBM		EBM	2E8					
6	EBM		EBM	24F8					
5	EBM		EBM	24G8					
4	EBM	53C2	EBM						
3	EBM	2E7	EBM	53D2					
2	EBM	18B0	EBM	19A/A7					
1	EBM		EBM	19A/E7					
COIL		2A5		2H2					

CAPACITOR			
OPT	DESIG	LOC	CODE
	BR	53C5	437C
	BT	53B5	



LAMP				NETWORK			
OPT	DESIG	LOC	CODE	OPT	DESIG	LOC	CODE
	BSE	5302	2Y OR M1		BIT	245	185A
					BST	242	

APP FIG. 38

RELAY						
DESIGN		BITI				
CODE		AJB3				
OPTION						
	CONT ARR	LOC	CONT ARR	LOC	CONT ARR	LOC
12	EBM	27G8				
11	EBM	27F8				
10	EBM	53E6				
9	EBM	53E6				
8	EBM					
7	EBM					
6	EBM					
5	EBM					
4	EBM	53D1				
3	EBM					
2	EBM	18B0				
1	EBM					
COIL		2E6				

<u>CAPACITOR</u>			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
	BRI	53E5	437C
	BT1	53E5	

NETWORK			
<u>OPT</u>	<u>DESIG</u>	<u>LOC</u>	<u>CODE</u>
	BITI	2E6	185A

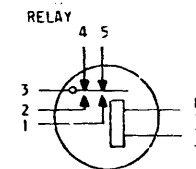
- APP FIG. 39

LAMP			
OPT	DESIG	LOC	CODE
	[10] RN20-29	34H2	2Y OR MI

APP FIG. 40

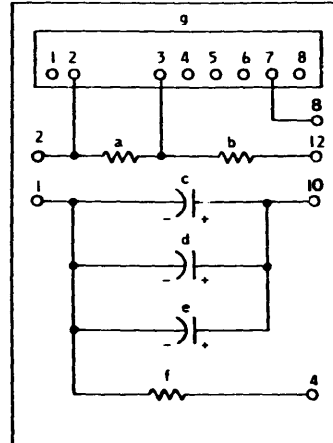
RELAY	PL1	PL2	PL3	PL4	PL5	PLA	PLC	PLMN	PLMX	PLD	DESIG
CODE	AF515	AF518	AF515	AF515	AF515	AJ131	AJ30	AK24	AK24	AF54	CODE
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	OPTION
ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	ARR	
12	BM	54G6	EMB	54E7	BM	54F7	BM	54G6	BM	54G7	EMB
11	M	54D7	M	54F7	M	54G6	M	54G7	EMB	19A/B5	EMB
10	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
9	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
8	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
7	B	54H7	EMB	54F2	B	54F7	B	54G6	EMB	19A/E5	EMB
6	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
5	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
4	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
3	M	54H7	EMB	54F2	M	54F7	M	54G6	EMB	19A/E5	EMB
2	BM	54H7	EMB	54F2	BM	54F7	BM	54G6	EMB	19A/E5	EMB
1	M	54H7	EMB	54F2	M	54F7	M	54G6	EMB	19A/E5	EMB
COIL	54D8	54E8	54F8	54G8	54H8	54I8	54J8	54K8	54L8	54M8	COIL

RELAY	PLST	DESIG
CODE	AG6	CODE
OPTION	CONT	LOC
ARR	ARR	ARR
12	EMB	54B3
11	EMB	54F5
10	EMB	54F5
9	EMB	54F5
8	EMB	54D7
7	B	54D7
6	EMB	54C2
5	EMB	54C2
4	EMB	54C2
3	EMB	54C2
2	EMB	54C2
1	M	54A0
COIL	54E3	COIL



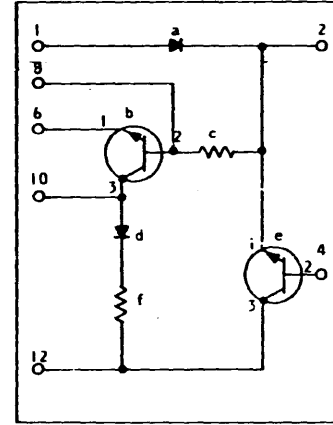
DESIG	PL	PLG
CODE	2768	2769
OPTION		
8	54A3	54C2
7	54A3	54C2
6	54A3	54C2
5	54A3	54C2
4	54A3	54C2
3	54A3	54C2
2	54A3	54C2
1	54A3	54C2

COMPONENT ASSEMBLY



DESIG		CA30		
CODE		ED-94823-(), 6087		
OPTION				
COMPONENT		DESIG	LOC	CODE
CAPACITOR	c	PLG.1		
	d	PLG.2	54C1	6088
	e	PLG.3		
RESISTOR	a	PLG5	54B1	221A, 1.4kΩ
	b	PLG4	54A1	221A, 523
	f	PLG5	54C1	221A, 10
TERMINAL STRIP	g			318A

COMPONENT ASSEMBLY



DESIG		CA31	
CODE		ED-94859-(),G188	
OPTION			
COMPONENT	DESIG	LOC	CODE
DIODE	a PLD2	54C2	445K
	d PLD3	54B2	
RESISTOR	c PLG6	54C2	221A, 10kΩ
	f PLG2	54A2	221A, 2710
TRANSISTOR	b Q2	54C3	66J
	e Q1	54B2	

DIODE
QET

DESIG
PLD1

LOC
54C0

CODE
485J

NETWORK

OPT	DESIG	LOC	CODE
	PL1	54D8	
	PL2	54E8	
	PL3	54F8	
	PL4	54G8	
	PL5	54H8	
	PLA	54I8	

POTENTIOMETER

OPT	DESIG	LOC	CODE
	PL	54C4	KS-19722, L1, 5kΩ
	PLN	54C3	KS-19722, L1, 5kΩ
	PLW	54B1	KS-19722, L1, 2.5kΩ
	PLX	54C3	KS-19722, L1, 5kΩ

RESISTOR

OPT	DESIG	LOC	CODE
	PL1	54D6	
	PL2	54E6	
	PLG1	54C0	

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-C31

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

PRINTED IN U.S.A.

ISSUE
63D

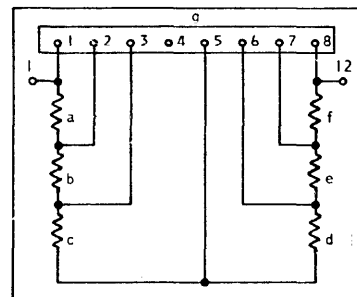
APP FIG 41

RELAY																		RELAY															
DESIG			CDT			CDT			CDT			CDT			CDT			DESIG			CDT			CDT			CDT			CDT			DESIG
CODE			AG 36			AK 22												CODE															CODE
OPTION			QB															OPTION															OPTION
CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT	LOC	LOC	CONT
12	EBM																	12															12
11	EBM	19B/B2																11															11
10	EBM	19B/E2	M	4H4														10															10
9	EBM	19B/E6	B															9															9
8	EBM		M															8															8
7	EBM	4F4	B															7															7
6	EBM	8C8	EMB															6															6
5	EBM	8E8	B	4F3														5															5
4	EBM	7F0	M															4															4
3	EBM	4H4																3															3
2	EBM	7A2																2															2
1	EBM	2E1																1															1
COIL		3B9		4H4			8C8		8C9									COIL															COIL

CAPACITOR

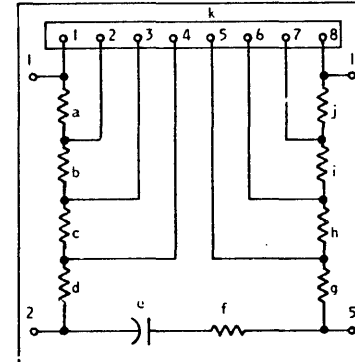
OPT	DESIG	LOC	CODE
CD	8C9		
CDR	8E8		
CDT	8A8		
PG	OHLR	19C/D3	437QA
PG	OHLT	19C/C3	

COMPONENT ASSEMBLY



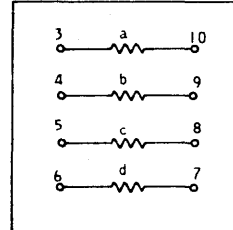
DESIG						CA16						CA17					
CODE						(2) ED-94823-(), G705											
OPTION						PG											
COMPONENT																	
RESISTOR	a	PDB5	16A/A3	221A, 15		PDB15	16A/B3	221A, 15				PDB15	16A/B3	221A, 15			
	b	PDB6	16A/A3	221A, 15		PDB16	16A/B3	221A, 15				PDB16	16A/B3	221A, 15			
	c	PDB7	16A/A4	221A, 11.3		PDB17	16A/B4	221A, 11.3				PDB17	16A/B4	221A, 11.3			
	d	PDB8	16A/A4	221A, 5.97		PDB18	16A/B4	221A, 5.97				PDB18	16A/B4	221A, 5.97			
	e	PDB9	16A/A4	221A, 3.01		PDB19	16A/B4	221A, 3.01				PDB19	16A/B4	221A, 3.01			
	f	PDB10	16A/A5	221A, 1.5		PDB20	16A/B5	221A, 1.5				PDB20	16A/B5	221A, 1.5			
TERM. STRIP						318A						318A					

COMPONENT ASSEMBLY



DESIG						CA22					
CODE						ED-94823-(), G707					
OPTION						PG					
COMPONENT											
CAPACITOR	e	PDB	16A/B3	535D							
	a	PDB11	16A/B1	221A, 1.5							
	b	PDB12	16A/B2	221A, 3.01							
	c	PDB13	16A/B2	221A, 5.97							
	d	PDB14	16A/B2	221A, 41.2							
	f	PDB21	16A/A3	221A, 3880							
	g	PDB4	16A/A2	221A, 41.2							
	h	PDB3	16A/A2	221A, 5.97							
	i	PDB2	16A/A2	221A, 3.01							
	j	PDB1	16A/A1	221A, 1.5							
TERM. STRIP						318A					

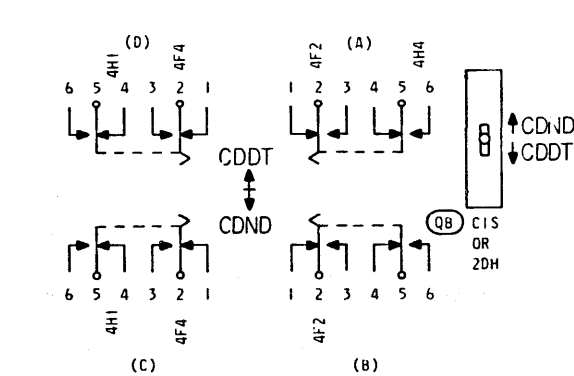
COMPONENT ASSEMBLY



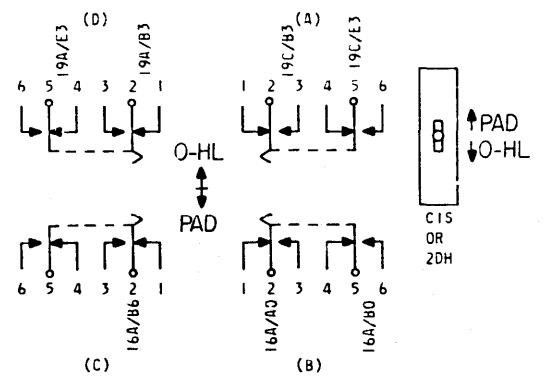
DESIG						CA32					
CODE						ED-94823-(), G874					
OPTION											
COMPONENT											
RESISTOR	a	CDR1	4F2	144E, 1kΩ							
	b	CDT1	4F3	144E, 1kΩ							
	c	CDR2	19A/E8	221A, 2770							
	d	CDT2	19A/A8	221A, 2770							

INDUCTOR

OPT	DESIG	LOC	CODE
CD	8C9		274L

KEY OR KEY UNIT
QB C1S OR 2DH

KEYTOP

KEY OR KEY UNIT
C1S OR 2DH

LAMP

OPT	DESIG	LOC	CODE
CDR	8F9		2Y OR MI
CDT	8F9		2Y OR MI

ISSUE
71AMASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-C32A

BELL TELEPHONE LABORATORIES
INCORPORATED

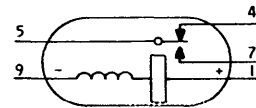
6S

APP FIG 42

RELAY																DESIG CODE OPTION
DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	
12	B	EBM	18H7	EBM	8F0	EBM	20F0	EBM	8H0	EBM	19A/B6	B				12
11		EBM	18C7	EBM	20F0	EBM	20F0	EBM		EBM	19A/D6					11
10	B	EBM	20E7	EBM	20H1	EBM		EBM		EBM	28B5	B				10
9		EBM	20G1	EBM		EBM		EBM		EBM	28B5					9
8	M	25H3	EMB	18F3	EMB			EMB		EMB		M				8
7		EMB				EMB	18A0	EMB		EMB						7
6	BM	28G2	EMB			EMB		EMB		EMB		BM				6
5		EMB	8F0			EMB		EMB		EMB						5
4	M	18A0	EBM			EBM		EBM	18G7	EBM	8E9	M	19A/G0			4
3		EBM	18F6			EBM	19A/E3	EBM	18F5	EBM	8D9					3
2	B	EBM				EBM	20G1	EBM	18F7	EBM	8E8	B				2
1		EBM	18F6			EBM	19A/B3	EBM	18A6	EBM	8D8					1
COIL	28E6	18G4	18G4	19A/F6	18F3	8F1	8F1	19A/C4								COIL

RELAY																DESIG CODE OPTION
DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	LOC	DESIG	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

RELAY

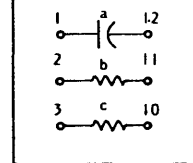


DESIG	DS1	DS2
CODE	316E	316E
OPTION		
9	18G8	18E8
8		
7	18H6	18H6
6		
5	18H6	18H6
4		
3		
2		
1	18G8	18E8

CAPACITOR

OPT	DESIG	LOC	CODE
BD	8D8		187B
DSR1	18H7		
DSR2	18E7		
DST1	18F7		
DST2	18D7		
TFR1	8E8		437QA
TFR2	8E9		
TFT1	8D8		
TFT2	8D9		
TTFL	8E9		439A

COMPONENT ASSEMBLY



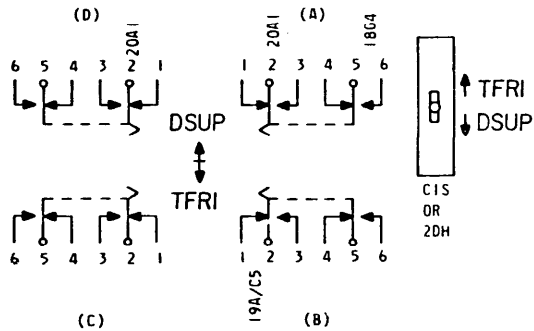
DESIG	CA36
CODE	ED-94933-(), G066
OPTION	
COMPONENT	DESIG LOC CODE
CAPACITOR	a CBL 8D9 KS-20300, L5, .012
RESISTOR	b TTFL 8D9 KS-19150, L1, .910
	c - - KS-19152, L1, 1k0

INDUCTOR

OPT	DESIG	LOC	CODE
2SA	28E5		274L
TLA	19A/C4		274L

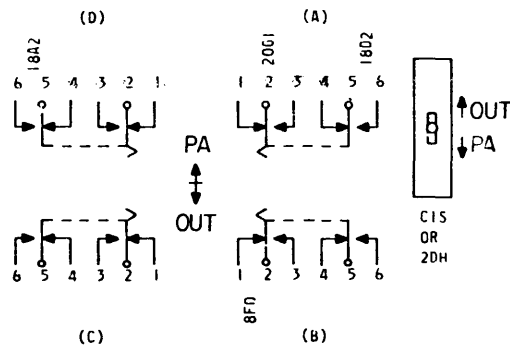
KEY OR KEY UNIT CIS 2DH

KEYTOP



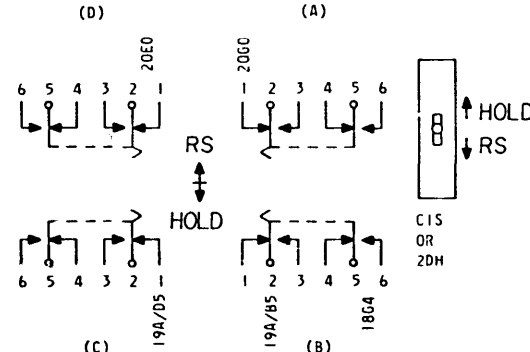
KEY OR KEY UNIT CIS 2DH

KEYTOP



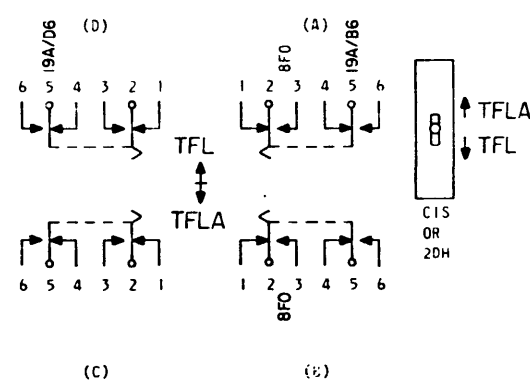
KEY OR KEY UNIT CIS 2DH

KEYTOP



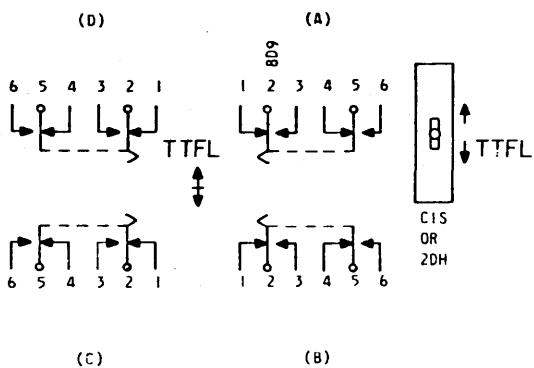
KEY OR KEY UNIT CIS 2DH

KEYTOP



KEY OR KEY UNIT CIS 2DH

KEYTOP



LAMP

OPT	DESIG	LOC	CODE
DS1	18H5		2Y OR M1
DS2	18H5		
RLO	20H8		

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

SD-25918-01-C32B

ISSUE
78B

APP FIG 43

RELAY																				RELAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
DESIG	COIN				RC				RB1				RB2																				DESIG																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
CODE	AK4								AG49																								CODE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC

CAPACITOR		
DESIG	LOC	CODE
TNR	19C/D6	437E
TNT	19C/C6	437E

KEY OR KEY UNIT
CISL 2HR

KEYTOP

KEY OR KEY UNIT
CIS 2DH

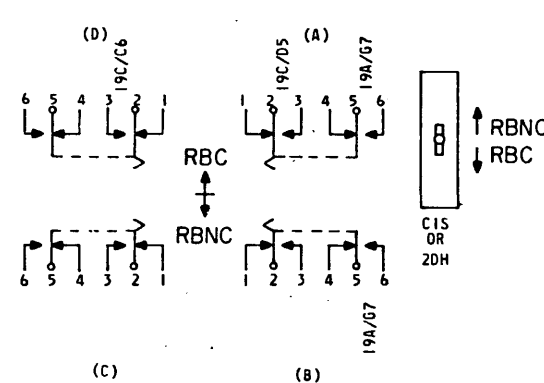
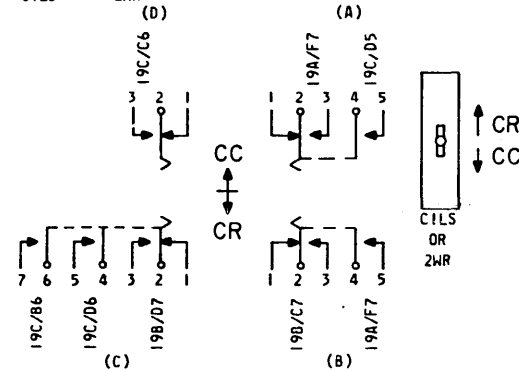
KEYTOP

LAMP

DESIG	LOC	CODE
HV	19B/C8	13L(RES)
LV	19B/D8	13L(RES)

RESISTOR

DESIG	LOC	CODE
HV	19B/C7	18AD
LV	19B/D7	18AD
RB1	19A/G9	19NY
RB2	19A/H9	18BS

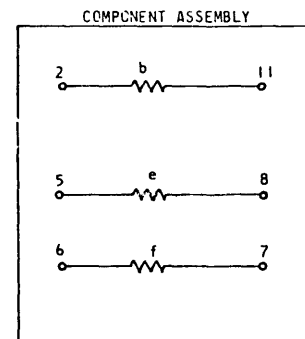


APP FIG 44

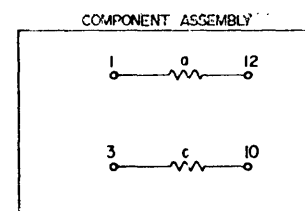
RELAY											
DESIG	911	RCD	TR	RCD1	RCD4	RCD3	RCD5	RCD1A	CDH	CDL	DESIG
CODE	AJ83	AK4		AF125	AJ15	AK4	AF504	AJ15	AJ15	AJ15	CODE
OPTION	RZ						QX				OPTION
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC
ARR		ARR		ARR		ARR		ARR		ARR	
12	EBM 1E6	M	57F4								12
11	EBM 57E2	EBM									11
10	EBM 20B4	EBM									10
9	EBM 57A/G6	EBM	57E1								9
8	EBM 57B2	EBM									8
7	EBM 25A/F5										7
6	EBM 57F1										6
5	EBM 57F2										5
4	EBM 25B/F5										4
3	EBM 25B/B5										3
2	EBM 25A/B4										2
1	EBM 25A/B3										1
COIL	3A9		57B2		23C8		57E4		57D2		57C2

RELAY											
DESIG	CATT										DESIG
CODE	AJ15										CODE
OPTION	QX										OPTION
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC
ARR		ARR		ARR		ARR		ARR		ARR	
12	EBM 8C6										12
11	EBM 806										11
10	EBM 20B7										10
9	EBM 57A/D6										9
8	EBM										8
7	EBM										7
6	EBM 57F1										6
5	EBM 57F2										5
4	EBM 10F2										4
3	EBM 15E1										3
2	EBM										2
1	EBM										1
COIL	3B2										COIL

CAPACITOR			
OPT	DESIG	LOC	CODE
	RCD	57E2	441QA
	RCD2	57E2	441QA
QX	RCD1	57E3	439QA

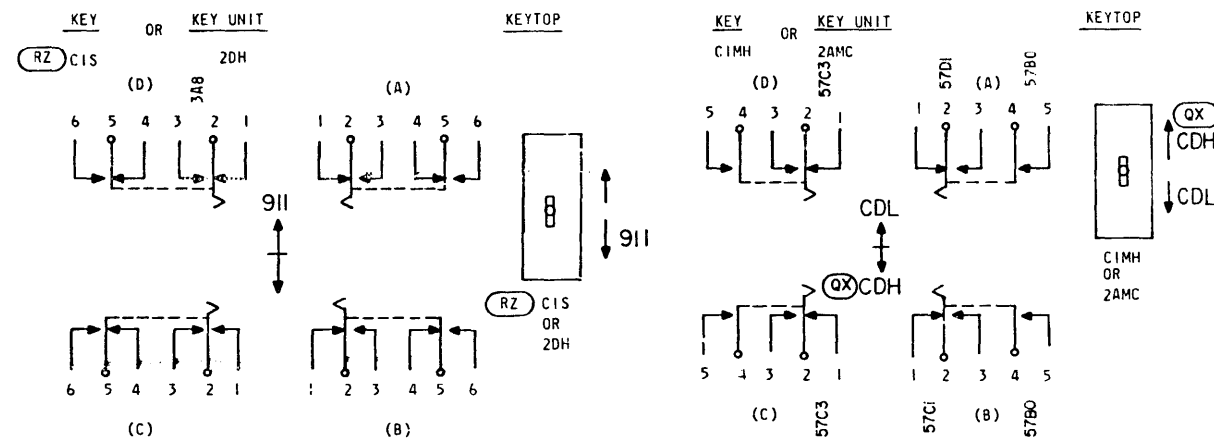


DESIG			
CA34			
CODE			
ED-94823-(), G481			
OPTION			
QX			
COMPONENT			
DESIG	LOC	CODE	
a	RCD2	57F0	221A, 332kΩ
b	RCD5	57E2	221A, 1450
c	RCD6	57G1	221A, 70.6kΩ



DESIG			
CA35			
CODE			
ED-94933-(), G112			
OPTION			
QX			
COMPONENT			
DESIG	LOC	CODE	
a	RCD1	57E3	KS-20810, 11A, 723
c	RCD4	57H1	KS-20810, 11A, 100kΩ

POTENTIOMETER			
OPT	DESIG	LOC	CODE
RZ	RCD1	57G2	KS-19722, 11, 250kΩ
RZ	RCD2	57G2	KS-19722, 11, 250kΩ
QX	RCD3-6	57G1, H1	KS-19722, 11, 250kΩ

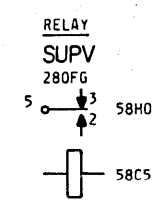


DRAWING
ISSUE

ISSUE
78B

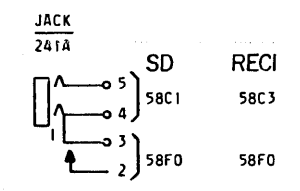
APP FIG 45

RELAY																				RELAY																			
DESIG		MW		TRI		TMS		TMSD												DESIG														DESIG					
CODE		AK4		AF79		AF113														CODE														CODE					
OPTION																				OPTION														OPTION					
CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC						
12		M	58D4	EMB	58C5															12													12						
11		EBM	58D4	M	58C3															11													11						
10		EBM		EBM																10														10					
9		EMB				B	58D2													9														9					
8		EMB	58G0	EBM		EBM		B	57C2											8														8					
7						B														7														7					
6						EBM	58D5	EBM	58C3											6														6					
5	EMB					B			57B1											5														5					
4	EMB					EBM		EBM	58D3											4														4					
3	EBM	58F9				B			57B1											3														3					
2	EBM	58F8				EBM														2														2					
1	M	58G9				M	58D3													1														1					
COIL	58F7		58G1		58G1		58F2													COIL														COIL					

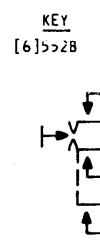
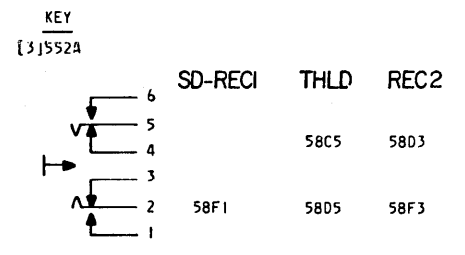


CAPACITOR				
OPT	DESIG	LOC	CODE	
	TC	58C4	439QE	
	TC2	58E4		
	TC3	58G4		
	TMR1	58D5		
	TMT1	58B5	437QA	

INDUCTOR				
OPT	DESIG	LOC	CODE	
	S	58C5	274J	



JACK				
OPT	DESIG	LOC	CODE	
	1000/0/900	58F7	249AM	
	MEAS 900	58E7	238AM	
	OSC 900	58D7	239AM	
	REC2	58E3	238AM	
	RCVR	58B2		
	TRK1	58C6		
	TRK2	58E5		
	TRK3	58G5		



DESIG	LOC	CODE	
TMS1	58F1		
TMS2			
TMS3			
TO	58G0		
TRI	58G0		
TR2	58F4		
TS	58D4		
	58D7	58E5	58G5
		58D6	58D7
			58D6

LAMP				
OPT	DESIG	LOC	CODE	
	S	59H4	2Y OR MI	

OSCILLATOR				
OPT	DESIG	LOC	CODE	
	-	58D9	KS-19260, L1	

RECEIVER				
OPT	DESIG	LOC	CODE	
	-	58B2	716D	
			E/W 310 PLUG	
			& R 20F CORD	

RESISTOR				
OPT	DESIG	LOC	CODE	
	MW	58F8	KS-20810, L1A, 898	
	T1	58C2	145A, 898 OR KS-20810, L1A, 898	
	T9	58D8	221A, 898 OR KS-20810, L1A, 898	
	TR	58D4	KS-20810, L1A, 876	
	TR2	58E4	KS-20810, L1A, 876	
	TR3	58G4	KS-20810, L1A, 876	

TRANSMISSION MEASURING SET				
OPT	DESIG	LOC	CODE	
	-	58E9	J94023B OR J94023C	

SD-25918-01-C35

APP FIG. 46

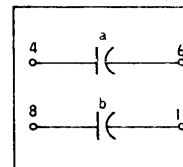
RELAY																			
DESIG	TA1	MR	MR1	MR2	MR3	MR4	MR5	MR6	MR7	DESIG	TA1	MR	MR1	MR2	MR3	MR4	MR5	MR6	MR7
CODE	AK39	AF79	AF79	AF79	AF79	AF79	AF79	AF79	AF79	CODE	AK39	AF79	AF79	AF79	AF79	AF79	AF79	AF79	AF79
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT
12	EMB	59A6	EMB	59B5	EMB	59C5	EMB	59D5	EMB	12	EMB	59A6	EMB	59B5	EMB	59C5	EMB	59D5	EMB
11	EMB	59B5	EMB	59C5	EMB	59D5	EMB	59E5	EMB	11	EMB	59B5	EMB	59C5	EMB	59D5	EMB	59E5	EMB
10	EMB	59C5	EMB	59D5	EMB	59E5	EMB	59F5	EMB	10	EMB	59C5	EMB	59D5	EMB	59E5	EMB	59F5	EMB
9	EMB	59D5	EMB	59E5	EMB	59F5	EMB	60A5	EMB	9	EMB	59D5	EMB	59E5	EMB	59F5	EMB	60A5	EMB
8	EMB	59E5	EMB	59F5	EMB	60A5	EMB	60B5	EMB	8	EMB	59E5	EMB	59F5	EMB	60A5	EMB	60B5	EMB
7	EMB	59F5	EMB	60A5	EMB	60B5	EMB	60C5	EMB	7	EMB	59F5	EMB	60A5	EMB	60B5	EMB	60C5	EMB
6	EMB	60A5	EMB	60B5	EMB	60C5	EMB	60D5	EMB	6	EMB	60A5	EMB	60B5	EMB	60C5	EMB	60D5	EMB
5	EMB	60B5	EMB	60C5	EMB	60D5	EMB	60E5	EMB	5	EMB	60B5	EMB	60C5	EMB	60D5	EMB	60E5	EMB
4	EMB	60C5	EMB	60D5	EMB	60E5	EMB	60F5	EMB	4	EMB	60C5	EMB	60D5	EMB	60E5	EMB	60F5	EMB
3	EMB	60D5	EMB	60E5	EMB	60F5	EMB	60G5	EMB	3	EMB	60D5	EMB	60E5	EMB	60F5	EMB	60G5	EMB
2	EMB	60E5	EMB	60F5	EMB	60G5	EMB	60H5	EMB	2	EMB	60E5	EMB	60F5	EMB	60G5	EMB	60H5	EMB
1	EMB	60F5	EMB	60G5	EMB	60H5	EMB	60I5	EMB	1	EMB	60F5	EMB	60G5	EMB	60H5	EMB	60I5	EMB
COIL	61B8	59A6	59B6	59C6	59D6	59E6	59F6	60A6	60B6	COIL	61B8	59A6	59B6	59C6	59D6	59E6	59F6	60A6	60B6

RELAY																			
DESIG	MRP	MRPB	MRPK	MRPT	MUON	OC	AE2	SURK	SUR	SX	DESIG	MRP	MRPB	MRPK	MRPT	MUON	OC	AE2	SURK
CODE	AK39	AK4	AK4	AK4	AK4	AK4	AK4	AK4	AK4	AK4	CODE	AK39	AK4	AK4	AK4	AK4	AK4	AK4	AK4
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT
12	EMB	59B1	EMB	59E3	EMB	61B8	EMB	61B5	EMB	12	EMB	59B1	EMB	59E3	EMB	61B8	EMB	61B5	EMB
11	EMB	59F1	EMB	60A5	EMB	61F1	EMB	61A1	EMB	11	EMB	59F1	EMB	60A5	EMB	61F1	EMB	61A1	EMB
10	EMB	59G0	EMB	60A5	EMB	62E1	EMB	62A5	EMB	10	EMB	59G0	EMB	60A5	EMB	62E1	EMB	62A5	EMB
9	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	9	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
8	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	8	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
7	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	7	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
6	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	6	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
5	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	5	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
4	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	4	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
3	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	3	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
2	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	2	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
1	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB	1	EMB	59E3	EMB	61B3	EMB	62C0	EMB	60A5	EMB
COIL	59G3	59C1	60A8	61A3	59A3	60A4	59C4	61D3	61F3	COIL	59G3	59C1	60A8	61A3	59A3	60A4	59C4	61D3	61F3

RELAY																			
DESIG	SXK	UC	DESIG	SXK	UC	DESIG	SXK	UC	DESIG	SXK	UC	DESIG	SXK	UC	DESIG	SXK	UC	DESIG	SXK
CODE	AK4	AK4	CODE	AK4	AK4	CODE	AK4	AK4	CODE	AK4	AK4	CODE	AK4	AK4	CODE	AK4	AK4	CODE	AK4
OPTION	CONT	LOC	OPTION	CONT	LOC	OPTION	CONT	LOC	OPTION	CONT	LOC	OPTION	CONT	LOC	OPTION	CONT	LOC	OPTION	CONT
12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB
11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB
10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB
9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB
8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB
7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB
6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB
5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB
4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB
3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB
2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB
1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB
COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3

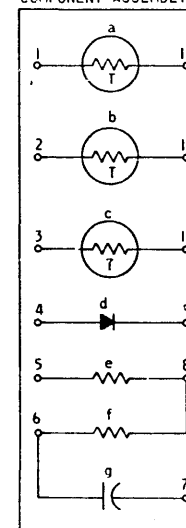
RELAY																			
DESIG	MRP	MRPB	MRPK	MRPT	MUON	OC	AE2	SURK	SUR	SX	DESIG	MRP	MRPB	MRPK	MRPT	MUON	OC	AE2	SURK
CODE	AK39	AK4	AK4	AK4	AK4	AK4	AK4	AK4	AK4	AK4	CODE	AK39	AK4	AK4	AK4	AK4	AK4	AK4	AK4
OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT	OPTION	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	CONT
12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB	59G2	12	EMB
11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB	59G2	11	EMB
10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB	59G2	10	EMB
9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB	59G2	9	EMB
8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB	59G2	8	EMB
7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB	59G2	7	EMB
6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB	59G2	6	EMB
5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB	59G2	5	EMB
4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB	59G2	4	EMB
3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB	59G2	3	EMB
2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB	59G2	2	EMB
1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB	59G2	1	EMB
COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3	60E4	COIL	59F3

COMPONENT ASSEMBLY



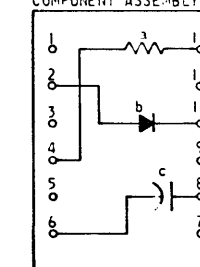
DESIG		CA37		
CODE		ED-94823-(146),G457		
OPTION				
COMPONENT		DESIG	LOC	CODE
CAPACITOR	a	TA1.(1,3)	61A6	[2]535GH
	b	TA1.(2,4)	61A6	[2]535GH

COMPONENT ASSEMBLY



DESIG		CA38		
CODE		ED-94933-(54),G149		
OPTION				
COMPONENT		DESIG	LOC	CODE
CAPACITOR	g	MRP	59H1	535G
DIODE	d	SX	59B1	446K
RESISTOR	e	TA1	61A8	KS-20810, L1A, 402K
	f	MRP	59H2	KS-20810, L1A, 505K
THERMISTOR	a	SPARE		8C
	b	OMRK	62F2	8C
	c	TON	62B1	8C

COMPONENT ASSEMBLY



DESIG		CA39		
CODE		ED-94933-(), G211		
OPTION				
COMPONENT		DESIG	LOC	CODE
CAPACITOR	c	TA2	61A6	535GH
DIODE	b	SUR	61F2	533F
RESISTOR	a	TA2	61A7	KS-20810, L1A, 1.2kΩ

TIMER (SEE NOTE 319)

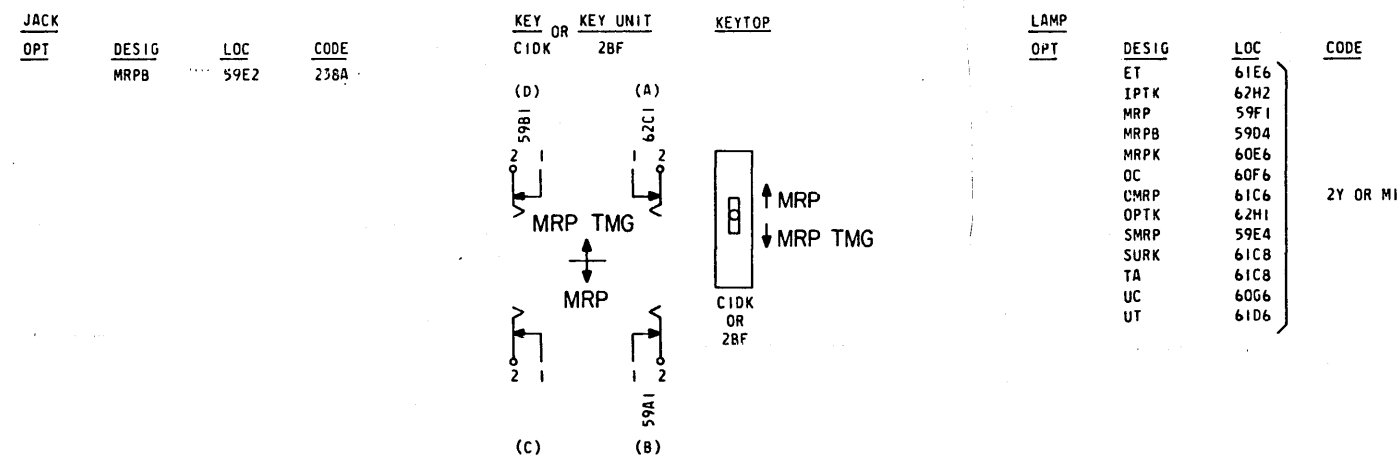
OPT	DESIG	LOC	CODE
	MRP	59G1	
	TA	61B7	

ISSUE
81AMASTER TEST FRAME
TRUNK TESTBELL TELEPHONE LABORATORIES
INCORPORATED

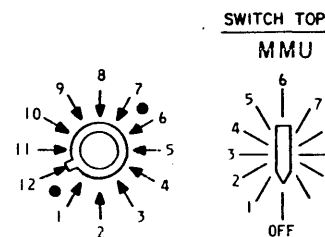
6S

SD-25918-01-C36

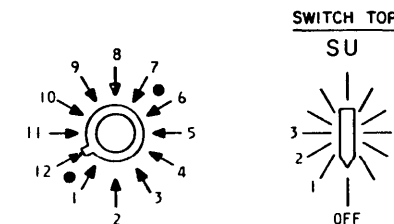
APP FIG. 47



SWITCH									
DESIG MMU									
CODE KS-14618, L42									
OPTION									
SECT.	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.
X	1-7	59A2	1-6	60A3	1	60D3	1-7	60A7	1-7
	8-11	59A2	7-11	60A3	2-7	60D3	8-11	60A7	8-11
	12	59A2	12	60A3	8-11	60D3	12	60A7	12



SWITCH									
DESIG SU									
CODE KS-14618, L41									
OPTION									
SECT.	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.
X	1-3	61F2	1	60H3	1-3	61D2	1-3	61D2	1-3
	4-11	61F2	2,3	60H3	4-11	61D2	4-11	61D2	4-11
	12	61F2	12	60H3	12	61D2	12	61D2	12

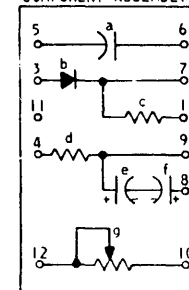


APP FIG. 48

RELAY									
DESIG									
CODE									
OPTION									
SECT.	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.
X	1-7	62A2	1-6	62F9	1	61B5	1-7	61D5	1-7
	8-11	61C2	7-11	62E9	2-7	61B5	8-11	61B6	8-11
	12	62H0	12	62E9	8-11	61B5	12	62A1	12

RELAY									
DESIG									
CODE									
OPTION									
SECT.	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.	LOC	TERM.
X	1-7	62A1	1-6	62C0	1	61B2	1-7	61B2	1-7
	8-11	62C0	7-11	62C2	2-7	61B2	8-11	61B2	8-11
	12	62C0	12	62C2	8-11	61B2	12	61B2	12

COMPONENT ASSEMBLY

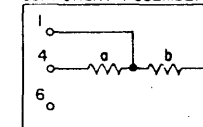


DESIG									
CODE									
OPTION									
COMP	DESIG	LOC	CODE	COMP	DESIG	LOC	CODE	COMP	DESIG
CAPACITOR	OTK	62F1	(2)KS-14504, 50uf	POTENTIOMETER	OTK	62F0	KS-19646, L2, 50kΩ	RESISTOR	OTK
	OTK	62F1	OR (2)KS-20362, L5		OTK	62G1	KS-20810, L1A, 499		OTK
	SPARE		5.70LJ, .006uf		OTK	62F1	KS-20810, L1A, 45.3kΩ		OTK

COUNTER (KESSLER-ELLIS PRODUCTS)

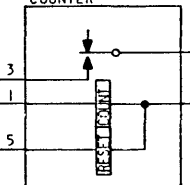
DESIG	CODE	CONTACT	COUNTER WDG	RESET WDG
CTR1	62A9	62B9	62B9	62B9
CTR2	KT359	62C1	62D9	62D9
CTR3	10 C/P/S	62C1	62E9	62E9
CTR4	48V DC	62C1	62F9	62F9

COMPONENT ASSEMBLY



DESIG									
CODE									
OPTION									
COMP	DESIG	LOC	CODE	COMP	DESIG	LOC	CODE	COMP	DESIG
RES	OP1	61G6	KS-20289, L2A, 2260HM	RES	OP2	61G7	KS-20289, L2A, 2260HM	RES	OP3
	OP2	61G7	KS-20289, L2A, 2260HM		OP3	61G8	KS-20289, L2A, 2260HM		OP4
	OP3	61G8	KS-20289, L2A, 2260HM		OP4	61G9	KS-20289, L2A, 2260HM		OP5

COUNTER



NETWORK

OPT	DESIG	LOC	CODE
CTR1	62A9	185A	185A
CTR2	62B9	185A	185A
CTR3	62C9	185A	185A
CTR4	62D9	185A	185A
CTR5	62F9	185A	185A
MTC	62A3	185A	185A

MASTER TEST FRAME
TRUNK TESTBELL TELEPHONE LABORATORIES
INCORPORATED

65

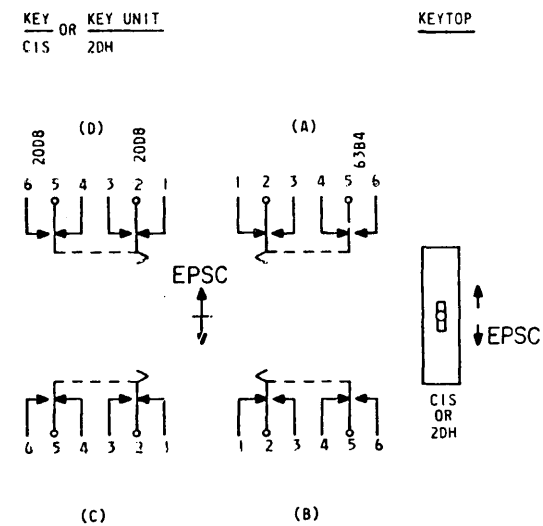
SD-25918-01-C37

ISSUE
81A

APP FIG 49

RELAY	MTD/W (P20)	MTD/W (P2U)	MTD/W (P1D)	MTD/W (P1U)	P40	MTD/W (P8U)	P80	MTD/W (P4U)	DESIG
CODE	P1D	P1U	P2D	P2U	AJ503	P4U	AJ503	P8U	CODE
OPTION	1/2 AK22	1/2 AK30	1/2 AK22	1/2 AK30		1/2 AK30		1/2 AK30	OPTION
12	CONT	LOC	CONT	LOC	CONT	LOC	CONT	LOC	12
11	EMB	63D7	EMB	63D7	EMB	63D7	EMB	63D7	11
10	EMB	63C7	EMB	63C7	EMB	63C7	EMB	63C7	10
9	EMB	63C1	EMB	63C2	EMB	63C6	EMB	63F2	9
8	EMB	63D2	EMB	63E3	EMB	63D6	EMB	63F2	8
7	EMB	63D2	EMB	63E3	EMB	63D6	EMB	63F2	7
6	EMB	63B1	EMB	63C3	EMB	63E2	EMB	63F1	6
5	EMB	63B2	EMB	63A2	EMB	63E1	EMB	63F1	5
4	EMB	63C3	EMB		EMB	63C6	EMB	63E6	4
3	EMB	63C7	EMB		EMB	63D6	EMB	63E6	3
2	EMB	63G7	EMB		EMB	63F6	EMB	63G6	2
1	EMB	M	63C2		EMB	63G6	EMB	63G6	1
COIL	63B2	63B1	63D2	63C1	63F2	63E1	63F2	63F1	COIL

APP FIG 50



APP FIG 51

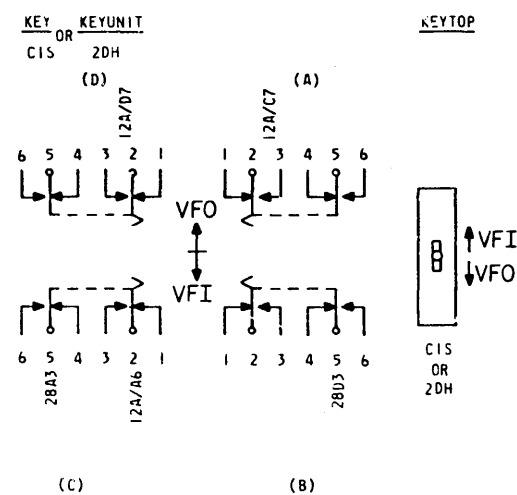
RELAY	MTD/W SPARE	DPR	DESIG	DPR
CODE	1/2 AK30	AF42		
OPTION	CONT	LOC	CONT	LOC
12	CONT	LOC	CONT	LOC
11	EMB	M		
10	EMB			
9	EMB			
8	EMB			
7	EMB			
6	EMB			
5	EMB			
4	EMB			
3	EMB			
2	EMB			
1	M	20C8	M	63B3
COIL	63G5	20C7		

APP FIG 52

RELAY			MTD/W SPARE			
DESIG	TF1		VF			
CODE	AG17		1/2 AK22			
OPTION	CONT	LOC	CONT	LOC	CONT	LOC
X	ARR		ARR		ARR	
12	EMB		EMB			
11	M	12A/C7	EMB	12A/B7		
10	EMB		EMB	12A/D8		
9	-		MB			
8	EMB		MB	12A/C6		
7	B					
6	EMB					
5	-					
4	EMB					
3	-					
2	EMB	12A/D8				
1	M					
COIL		12A/D8		12A/D7		

DIODE
OPT DESIG LOC CODE
VF0 12A/C7 533F

RESISTOR
OPT DESIG LOC CODE
VF 12A/B7 18EF



APP FIG 53

RELAY	MTD/W (VFI)	MTD/W (VFA)	DESIG	VFA
CODE	1/2 AK22	1/2 AK22		
OPTION	CONT	LOC	CONT	LOC
12	CONT	LOC	CONT	LOC
11	EMB		EMB	12A/A4
10	EMB		EMB	12A/A4
9	EMB		EMB	12A/A4
8	EMB		EMB	12A/A4
7	EMB		EMB	12A/A4
6	EMB		EMB	12A/A4
5	EMB	28D4	EMB	12A/A4
4	EMB	12A/A4	EMB	12A/A4
3	EMB	12A/A4	EMB	12A/A4
2	EMB	28A4	EMB	12A/A4
1	EMB		EMB	12A/A4
COIL	12A/A4	12A/A4		

DIODE
OPT DESIG LOC CODE
VF1 12A/A6 533F

MASTER TEST FRAME TRUNK TEST CIRCUIT		DWG SIZE 65	ISSUE 82B
BELL LABORATORIES		SD-25918-01-	
		C38	

CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	LOCATION	ONE PER
A	1-1/3	-48 SIG	JACK BAY	APP FIG. 45
B1	1-1/3	-48 SIG	MTC	APP FIG. 1, 2, 5, 7, 17, 28, J, O, P
B1	1/2HV	+130 SIG	PRTD	APP FIG. 11, 19
B2	1-1/3	-48 SIG	MTC	APP FIG. 1, 2, 5, 6, 8, 11, 14, 20, 29, 31, 33, 34, 36, 42, A, B
B2	1/2HV	+130 SIG	PRTD	APP FIG. 1, OPTION RP, XZ
B3	1-1/3	-48 SIG	MTC	APP FIG. 1, OPTION VB, WT, WU, APP FIG. 2, 8, 11, 12, 13, 14, B, E, G, T
B4	1-1/3	-48 SIG	MTC	APP FIG. 1, OPTION YD, APP FIG. 19
B5	1-1/3	-48 SIG	MTC	APP FIG. 19, 41
B6	1-1/3	-48 SIG	MTC	APP FIG. 47
B5	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION QA, APP FIG. 25, 27, 36, OPTION SF
B7	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION TD, TF
B8	1-1/3	-48 SIG	RR	APP FIG. 28
B9	1-1/3	-48 SIG	RR	APP FIG. 52, 53
C	1-1/3	-48 SIG	JACK BAY	APP FIG. 45
C1	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION WP, APP FIG. 16
C2	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION WE, APP FIG. 14, OPTION QJ, XM, APP FIG. 19, OPTION WI
C3	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION PM, VF, VG, APP FIG. 11, OPTION UX
C4	1-1/3	-48 SIG	MTC	APP FIG. 24
C4	1-1/3	-48 SIG	FUSE CONTROLLED BY MASTER TEST CONTROL CKT (SD-25800-01)	APP FIG. 1, OPTION RK, RV, APP FIG. 33, 34
C5	1-1/3	-48 SIG	RR	APP FIG. 29
C7	1-1/3	-48 SIG	MTC	APP FIG. 1, OPTION RA, APP FIG. 30
C8	1-1/3	-48 SIG	MTC	APP FIG. 31
C9	1-1/3	-48 SIG	MTC	APP FIG. 7, OPTION SJ
C10	1-1/3	-48 TALK	MTC	APP FIG. 31
C11	1-1/3	-48 SIG	MTC	APP FIG. 33
C12	1-1/3	-48 SIG	MTC	APP FIG. 34
C13	1-1/3	-48 SIG	MTC	APP FIG. 44
C14	1-1/3	-48 SIG	MTC	APP FIG. 35
C15	1-1/3	-48 SIG	MTC	APP FIG. 40
C16	1-1/3	-48 SIG	RR	APP FIG. 37, 38
C18	1-1/3	-48 TALK	PRTD VIA SEPARATE TWISTED PAIR CABLE	APP FIG. 41, 42
C19	1-1/3	-48 SIG	RR	APP FIG. 43
C20	1/2HV	+130 SIG	PRTD VIA SEPARATE TWISTED PAIR CABLE	APP FIG. 43
C21	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION PK
C22	1-1/3	-48 SIG	RR	APP FIG. 46, 49, 51
C24	1-1/3	-48 SIG	RR	APP FIG. 49
C5	1-1/3	-48 SIG	RR	APP FIG. 49
C26	1-1/3	-48 SIG	RR	APP FIG. 48
C27	1-1/3	-48 SIG	RR	APP FIG. 48

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(CONT)

DESIG	FUSE AMP	POTENTIAL	LOCATION	ONE PER
D1	1-1/3	-48 TALK	RR	APP FIG. 19, 26
D2	1-1/3	-48 TALK	PRTD VIA SEPARATE TWISTED PAIR CABLE	APP FIG. 1, 2, 8, 15, T
D3	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION QF, RA, SC, SD, VV, WZ, APP FIG. 8, OPTION SV, APP FIG. 19, OPTION VA, APP FIG. G, OPTION VO
D4	1-1/3	-48 TALK	RR	APP FIG. 1, OPTION XZ, APP FIG. 22, APP FIG. P, OPTION WD
D5	1-1/3	-48 SIG	RR	APP FIG. 1, OPTION WA
D6	1-1/3	-48 SIG	JACK BAY	APP FIG. 1, OPTION RP, APP FIG. 24
D7	1-1/3	-48 TALK	RR	APP FIG. 13
D8	1-1/3	-48 TALK	RR	APP FIG. 34
D9	1-1/3	-48 SIG	JACK BAY	APP FIG. 41, 42
E1	1/2HV	+130 SIG	PRTD	APP FIG. 19
E2	1/2HV	+130 SIG	PRTD	APP FIG. 1, OPTION UF
E3	1/2HV	+130 SIG	PRTD	APP FIG. 52
E4	1/2HV	+130 SIG	PRTD	APP FIG. 30, OPTION TS
M1	1-1/3	-48 SIG	OUTGOING SENDER AUTOMATIC INTERCEPT SERVICE FRAME	APP FIG. 1, OPTION TA
MTF	1/2HV	MRS-R	SEE NOTE 202	APP FIG. 5
MTF	1/2HV	MRS-T	SEE NOTE 202	APP FIG. 5
A		GRD	JACK BAY	APP FIG. 45
B1		GRD	MTC	APP FIG. 1, 2, 5, 6, 7, 8, 11, 15, 17, 21, 25, 27, 28, 29, 33, 37, 38, 42, 44, E, G, H, I, M, N, O, P, OPTION UX
B2		GRD	MTC	APP FIG. 50
B3		GRD	MTC	APP FIG. 1, OPTION RT, VA, WT, WU, APP FIG. 2, 8, 11, 12, 13, 14, 15, 20, 41, A, G
B3		GRD	RR	APP FIG. 20
B4		GRD	MTC	APP FIG. 1, OPTION Y, APP FIG. 18
B5		GRD	MTC	APP FIG. 19
B6		GRD	MTC	APP FIG. 47

101.
(CONT)

DESIG	FUSE AMP	POTENTIAL	LOCATION	ONE PER
B6		GRD	RR	APP FIG. 1, OPTION QA, APP FIG. 25, 36
B7		GRD	RR	APP FIG. 1, OPTION TD, TF, APP FIG. J, OPTION UZ
B8		GRD	RR	APP FIG. 28
B9		GRD	RR	APP FIG. 53
C		GRD	JACK BAY	APP FIG. 45
C1		GRD	RR	APP FIG. 1, OPTION WP, APP FIG. 16
C2		GRD	RR	APP FIG. 1, OPTION WE, APP FIG. 14, OPTION XM, APP FIG. 19, OPTION WI
C3		GRD	RR	APP FIG. 1, OPTION PM, VF, VG, APP FIG. 11, OPTION UX
C4		GRD	RR	APP FIG. 29
C5		GRD	RR	APP FIG. 1, OPTION IV
C6		GRD	RR	APP FIG. 1, OPTION RA, APP FIG. 30
C7		GRD	RR	APP FIG. 31
C8		GRD	RR	APP FIG. 33
C10		GRD	RR	APP FIG. 34
C11		GRD	RR	APP FIG. 35
C12		GRD	RR	APP FIG. 40
C13		GRD	RR	APP FIG. 43
C14		GRD	RR	APP FIG. 44
C15		GRD	RR	APP FIG. 46, 49
C16		GRD	RR	APP FIG. 48
C17		GRD	RR	APP FIG. 48
C18		GRD	RR	APP FIG. 48
D1		GRD	RR	APP FIG. 19, 26
D2		GRD	PRTD VIA SEPARATE TWISTED PAIR CABLE	APP FIG. 1, 2, 8, 15, T
D3		GRD	RR	APP FIG. 1, OPTION QF, TO, APP FIG. 8, OPTION SV, APP FIG. 19, OPTION VA, APP FIG. G, OPTION VO
D4		GRD	RR	APP FIG. 1, OPTION XZ, APP FIG. 22, APP FIG. P, OPTION WD
D6		GRD	JACK BAY	APP FIG. 1, OPTION RP, APP FIG. 24
D7		GRD	JACK BAY	APP FIG. 41, 42
M1		GRD	OUTGOING SENDER AUTOMATIC INTERCEPT SERVICE FRAME	APP FIG. 1, OPTION TA
BATTERY SYMBOL		VOLTAGE RANGE		
-48		45-50		
+130		125-135		
-130		125-135		

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MASTER TEST FRAME
TRUNK TEST

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CIRCUIT NOTES: (CONT)

102. APP FIGURES OR OPTIONS, OR BOTH, THAT ARE TO BE PROVIDED ONE PER APP FIG. 1 SHALL BE PROVIDED ONLY ONCE PER OFFICE EVEN THOUGH THEY APPEAR MORE THAN ONCE IN THE FOLLOWING TABLE:

FEATURE OR OPTION		PROVIDE		
		APP FIG.	APP OR WRG	QUANTITY
TRUNK TEST CKT		1, 12	YK	1 PER MA TEST FR
INTERTOLL TRUNKS ARRANGED FOR CONNECTION TO NO. 4 OR NO. 5 TOLL TESTBOARD			Z	
MESSAGE RATE SERVICE PROVIDED		5		1 PER APP FIG. 1
SUPERIMPOSED RINGING USED IN OFFICE		6		1 PER APP FIG. 1
TANDEM TRUNKS PROVIDED		7		1 PER APP FIG. 1
TOLL TRUNKS WITH CX OR SX SUPERVISION THROUGH THE SWITCHES OR 2-WIRE CENTREX MULTILEVEL PRECEDENCE PREEMPTION (MLPP) PROVIDED (SEE NOTE 301B)		8		1 PER APP FIG. 1
4-WIRE TRUNKS	PROVIDED	11	TY, VA, VS, VV, WE, WI, XW, XY, YK	1 PER APP FIG. 1
	NOT PROVIDED		YK, XX, TJ	
INTERMARKER GROUP TRUNKS PROVIDED (SEE NOTE 301F)		10		1 PER APP FIG. 1
PHASE II CENTREX SERVICE ONLY	ATTENDANT CONSOLE ONLY	13		1 PER APP FIG. 1
	SWBD 608A WITH OR WITHOUT ATTENDANT CONSOLE	13, 14	XF, XL	1 PER APP FIG. 1
	DIAL TRANSFER	18	XN	1 PER APP FIG. 1
TESTING OF WADS TRUNKS OR AUTOMATIC RECYCLE FEATURE PROVIDED			WP, XA	1 PER APP FIG. 1
TESTING OF WADS TRUNKS AND AUTOMATIC RECYCLE FEATURE NOT PROVIDED			YZ	
CAMA		2, 8	YA, YE	1 PER APP FIG. 1
LAMA	WITH INTERTOLL	2, 8	ZZ	1 PER APP FIG. 1
	WITHOUT INTERTOLL	2		
TESTING OF WADS TRUNKS	REQUIRED	8, 16, 17		1 PER APP FIG. 1
PHASE III CENTREX (SEE NOTE 301I)	ATTENDANT CONSOLE ONLY	13, 18	XO	1 PER APP FIG. 1
	SWBD 608A WITH OR WITHOUT ATTENDANT CONSOLE	13, 14, 18	XM, XO	1 PER APP FIG. 1
RANGE EXTENSION FOR UNIGAUGE CABLING PROVIDED (SEE NOTE 113, 131)		22	WA, PJ	
NO. 101 ESS CENTRAL OFFICE TRUNK CIRCUITS ARRANGED FOR DIRECT ACCESS DID PROVIDE (SEE NOTE 113, 129)		15	SI, TB, VB, WK, WU, YH, PH	1 PER APP FIG. 1
LINE LINK PULSING CIRCUITS PROVIDED (SEE NOTE 308)				
LINE LINK PULSING CIRCUITS, 2-WAY OFF-NET. ACCESS LINES, CALL WAITING SERVICE AND NO. 101 ESS CENTRAL OFFICE TRUNKS ARRANGED FOR DIRECT ACCESS DID NOT PROVIDE			YL	
WHERE POSITIVE COIN POTENTIAL IS USED FOR COIN COLLECT			Y	

102. (CONT)

FEATURE OR OPTION		PROVIDE		
		APP FIG.	APP OR WRG	QUANTITY
WHERE NEGATIVE COIN POTENTIAL IS USED FOR COIN COLLECT			X	
PHASE I OR II CENTREX WITHOUT DIAL TRANSFER PROVIDED OR NO CENTREX SERVICE PROVIDED			WL	
2-WIRE 2-WAY OFF-NET. ACCESS PROVIDED (SEE NOTE 309)		14, 22	QJ, TV	1 PER APP FIG. 1
ATTENDANT VERIFICATION OF THE ON-NETWORK (CALLED) STATION PROVIDED			QC	
NON-ACD OFFICE CONNECTS TO AUTOMATIC CALL DISTRIBUTION (ACD) OFFICE			WZ, UA	
AUTOMATIC INTERCEPT SERVICE USING LINE LINK PULSING PROVIDED		15	VB, VX, TB, PH	1 PER APP FIG. 1
TRUNK CKT USES REVERSE BATTERY SUPERVISION THROUGH SWITCHES AND E&M LEAD INTEROFFICE SUPERVISION		22	VH	1 PER APP FIG. 1
TRUNKS AND ASSOCIATED MARKERS ARRANGED FOR GLARE DETECTION			WO, WE	1 PER APP FIG. 1
4-WIRE MULTILEVEL PREEMPTION OR 4-WIRE 2-WAY ONAL PROVIDED		26		1 PER APP FIG. 1
4-WIRE 2-WAY ONAL (SEE NOTE 311)	PROVIDED	8	UX	
	NOT PROVIDED		UM	
2-WAY OFF-NET. ACCESS PROVIDED			PM, QL, SD, TM, TX, UR, VB, VF, VG, WE, WU, WX, YM	1 PER APP FIG. 1
	YES			
	NO		OK, UC	
COIN SERVICE IMPROVEMENTS (DIAL TONE FIRST) PROVIDED (SEE NOTE 152)	YES		RO, TF, TD, TI, UF, UZ, TC	1 PER APP FIG. 1
	NO		TC, UE, UY	
CALL WAITING SERVICE PROVIDED		20, 31	SI, TB, VB, YM, TX, TO	1 PER APP FIG. 1
TESTING OF 2-WAY AUXILIARY LINE CKT FOR ACCESS BETWEEN THE LOCAL AND THE SWITCHED SERVICES NET. (CCSA) OFFICE (SEE NOTE 131)	PROVIDED	22	TU, TV, UR	
	TIMING TEST OF AUXILIARY LINE SIGNALING PROVIDED	29		1 PER APP FIG. 1
	NOT PROVIDED		SE	
CENTREX CENTRALIZED ATTENDANT FEATURE ARRANGED TO HANDLE	LOW AND TRANSFER TRAFFIC		OW	
	AND OFFICE IS MAIN OFFICE		QX, QY, PB, PC	
	AND OFFICE IS SATELLITE OFFICE		PK, QZ	
	DIAL ZERO TRAFFIC AND OFFICE IS	22	PK, PM, QY	1 PER APP FIG. 1
	MAIN OFFICE			
	SATELLITE OFFICE			
TRANSFER TRAFFIC ONLY	OFFICE IS PRIMARY OFFICE WITH		TS, RA, SC	
	REV BAT. SUPV			
	E&M SUPV	30		
	OFFICE IS SECONDARY OFFICE WITH		TT, QZ, SD, TZ	
	REV BAT. SUPV			
	E&M SUPV			
2dB PAD CKT (IN TOLL ORIGINATING TEST LINE NO. 1)	PROVIDED (SEE NOTE 314)		TQ	1 PER APP FIG. 8
	NOT PROVIDED		TP	

102. (CONT)

FEATURE OR OPTION		PROVIDE		
		APP FIG.	APP OR WRG	QUANTITY
PHASE III CENTREX STATIONS ARRANGED FOR WIDEBAND	YES		QA	1 PER APP FIG. 8
	NO		SH, RY, SG, RX	
LOOP AROUND TRMSN TESTING OF 2-WIRE TOLL TRUNKS WITH CX OR SX SUPERVISION THROUGH THE SWITCHES	PROVIDED	33		1 PER APP FIG. 8
	NOT PROVIDED		SW	
2dB PAD CKT IN TOLL ORIGINATING TEST LINE NO. 2	PROVIDED (SEE NOTE 314)		SY	1 PER APP FIG. 33
	NOT PROVIDED		SK	
LOOP AROUND TRMSN TESTING OF 2-WIRE TANDEM TRUNKS	PROVIDED	34	WB	1 PER APP FIG. 7
	NOT PROVIDED		RD	
2dB PAD CKT (IN TANDEM ORIGINATING TEST LINE)	PROVIDED (SEE NOTE 314)		SJ	
	LOOP AROUND TRMSN TESTING OF 2-WIRE TANDEM TRUNKS		SK, RF	1 PER APP FIG. 7
	NOT PROVIDED		RE	
	4-WIRE		SL, RF	
	NEITHER LOOP AROUND TRMSN TESTING OF 2-WIRE TANDEM TRUNKS NOR 4-WIRE PROVIDED		RG	
	NOT PROVIDED		RG, RE	
AUTOMATIC RECYCLE FEATURE		35	RK	1 PER APP FIG. 1
WIDEBAND SERVICE PROVIDED (SEE NOTE 312 & 313)	WITH OPERATOR TRUNKS	25, 36	TX, UN, UR	
	YES	20, 27	SF	
	NO		UT	
BIT STREAM SERVICE PROVIDED (SEE NOTE 316)		27, 37		
	WITH OPERATOR TRUNKS	25, 38	TX, UN, UR	1 PER APP FIG. 1
	NEITHER WIDEBAND NOR BIT STREAM OPERATOR TRUNKS PROVIDED		UM	
2-WAY TRUNK CIRCUITS FOR WIDEBAND OR BIT STREAM SERVICE CONNECTING TO TT2, CVP2A, OR CVP2B TERMINALS PROVIDED			RV	
2-WIRE CENTREX MULTILEVEL PRECEDENCE PREEMPTION (MLPP)	PROVIDED	28	RW	1 PER APP FIG. 1
	WITH ATTENDANT CONSOLE		TO, TW, TX	
	WITHOUT ATTENDANT CONSOLE		TL	
	NOT PROVIDED			
OUTGOING TRUNKS TO TSP(S) PROVIDED AND THESE TRUNKS ARE ARRANGED FOR (MULTIPLE WINK COIN CONTROL)		40	RU	1 PER APP FIG. 1
PHASE III CENTREX STATIONS ARRANGED FOR WIDEBAND	WITH OPERATOR TRUNKS		QA	1 PER APP FIG. 1
	YES		SH, RY	
	NO		SG, RX	

102. (CONT)

FEATURE OR OPTION		PROVIDE		
		APP FIG.	APP OR WRG	QUANTITY
CAMA OR LAMA SERVICE PROVIDED	RCOR OR TRUNK CONTROL LAMP 0	3		1 PER RCOR OR TRUNK CONTROL 0
	RCOR OR TRUNK CONTROL LAMP 1-19	4		1 PER RCOR FOR RCOR 1-19 OR 1 PER TRUNK FOR TRUNK CONTROL CKT 1-19
	RCOR LAMP 20-29	39		1 PER RCOR FOR RECORDERS 20-29
911 EMERGENCY REPORTING SERVICE	PROVIDED	20	RZ	1 PER APP FIG. 1
	NOT PROVIDED		QU	
OUTGOING TRUNKS TO TSP(S) PROVIDED AND THESE TRUNKS ARE NOT ARRANGED FOR MULTIPLE WINK COIN CONTROL AND TESTING OF THESE TRUNKS WITHOUT OPERATOR ASSISTANCE IS REQUIRED		43		1 PER APP FIG. 1
LAMA-COMPUTER AND SWITCHING CONTROL CENTER (LAMA-C/SCC)			QT	1 PER APP FIG. 1
NO. 5 ELECTRONIC TRANSLATION SYSTEM (ETS)			QT, PP	
CALL DATA TRANSMITTER (CDT)			QT	
TESTING OF TOLL OR TANDEM TRUNKS IN AN INCOMING MODE WITHOUT THE USE OF A SERVICE OUTGOING TRUNK		22		1 PER APP FIG. 1
MULTICHANNEL TONE TEST UNIT PROVIDED			PL	1 PER APP FIG. 1
MESSAGE REGISTER PULSE JUNCTOR ARRANGED FOR SINGLE MESSAGE UNIT OR MULTIMESSAGE UNIT PULSING IN LAMA OFFICE	AND ARRANGED FOR TIMING	46, 47		1 PER APP FIG. 1
		48		
OUTGOING TRUNKS FOR INFORMATION SERVICE (DIRECTORY ASSISTANCE) TESTED			PU	
TESTING OF WIRE SPRING 2-WAY INTERTOLL TRUNK PROVIDED			PV	
TESTING OF 600ms OPEN FEATURE OF PERMANENT SIGNAL AND COMMON OVERFLOW TRUNK			PY, RH, TO	
TESTING OF DIGIT 8 CUT-THROUGH ENHANCED PRIVATE SWITCHED COMMUNICATION SERVICE TRUNK (EPSCS)	PROVIDED	49, 50, 51	OB	
	NOT PROVIDED		OA	
ANY CIRCUIT AUTO. PROG TRK TST OR TRK TST REG OR LINE VERIFICATION OR REMOTE OFFICE TESTING	PROVIDED		ZA, OD	
	NOT PROVIDED		OD	
	AMA (APP FIG. 2) PROVIDED		A, OC	
	NOT PROVIDED		OC	

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MASTER TEST FRAME
TRUNK TEST

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CIRCUIT NOTES: (CONT)

102.
(CONT)

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP OR WRG	QUANTITY
MINIMUM INSULATION RESISTANCE FOR OFFICE IS			
15,000		PW	
10,000		PX	
AND SOME CIRCUITS REQUIRE 15,000	YES	OK	
	NO	OJ	
BUSY LINE VERIFICATION OF TOLL TRUNKS PROVIDED			
YES	52	OF	
APP FIG 22 PROVIDED (SEE NOTE 197)	YES	53	OG
	NO		OH
NO		OE	

102A.
(A8M
ONLY)

FEATURE OR OPTION	PROVIDE		
	APP FIG.	APP OR WRG	QUANTITY
AUTOMATIC INTERCEPT SERVICE WITHOUT USING LINE LINK PULSING PROVIDED		TA,TB	1 PER APP FIG. 1
OFFICE IS AN AUTOMATIC CALL DISTRIBUTION (ACD) OFFICE	WITH SOME REMOTE POSITIONS	24	
	ARRANGED TO SERVE INTERCEPT TRAFFIC	YES NO	RP PD
ACD CLOSE DOWN SERVICE PROVIDED	CLOSE DOWN TRUNKS TERMINATED IN ANOTHER ACD OFFICE	41	QD,PG QB
ANNOUNCEMENT TO THE ACD OPERATOR PROVIDED			QC
OPERATOR TRANSFER IN THE ACD OFFICE	PROVIDED (SEE NOTE 306)	22,41, 42,45	TV,QB, QC,QD, PG
	NOT PROVIDED		QG
INTEGRITY CHECK WINK PROVIDED IN ACD LINE CIRCUITS		PT, PZ	1 PER APP FIG. 1

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MASTER TEST FRAME
TRUNK TEST

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CIRCUIT NOTES: (CONT)

NETWORK VALUES		
NETWORK NO.	RESISTANCE IN OHMS	CAPACITANCE IN UF
1	560	0.25
2	560	1.0
3	470	0.11
4	120	0.3
5	150	1.0

RECORD OF APP 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&M	MD
30	APP FIG. 8	NONE	102	APP FIG. 8		
	APP FIG. 9	NONE	102	APP FIG. 9		
	APP FIG. A OR B	NONE		APP FIG. A, B		
	APP FIG. C OR D	NONE		APP FIG. C, D		
	APP FIG. E OR F	APP FIG. F		APP FIG. E, F		
50	X OR Y	Y	102	X, Y		
	Q OR W	W		Q		W
	V OR T	V		T		V
	S OR R	S		R		S
	P OR U	U		P		U
60	M OR N	N		M		N
	J OR K	K		J		K
	H OR G	G		H		G
	E OR F	F		E		F
	B OR D	D		B		D
110	APP FIG. G	APP FIG. G	132, 135	APP FIG. G		APP FIG. G
	A OR ZA	A	102	ZA, A		
	ZB OR ZC	ZB	131	ZC		ZB
	ZD OR ZE	ZD		ZE		ZD
	ZF OR ZG	ZF		ZG		ZF
	ZH OR ZI	ZH		ZI		ZH
	APP FIG. H OR J	APP FIG. H	119, 123	APP FIG. H, J		
	G, H, ZJ	ZJ	152, 161	ZJ		H
	ZK OR ZL	ZK		ZL		ZK
	ZM, ZN	NONE	157	ZM, ZN		APP FIG. A, B, C
15B	ZP OR ZO	ZP		ZQ		ZP
16B	ZR OR ZS	ZR		ZS		ZR
17B	ZT	P OR U		ZT		P
180	ZU, ZV OR ZW	ZF OR ZG	102, 102A	ZW	ZG, ZU	ZV
190	YA, ZY, ZY, ZZ	ZX, ZZ	102	YA, ZY, ZZ	APP FIG. 10	ZX
200	YB, CY, YC	YB	107, 108	YC		YB
220	YD, YE	YA & YD OR NONE	102, 108, 110	YA, YE		YD
230	YF	NONE	111	YF		
240			102	APP FIG. 11		
	YJ, YK	YJ	102	YJ, YK		
	YI	YH	168	YI		YH
25AC	ELECTRON TUBES			413B		413A
	APP FIG. 12	APP FIG. 2 AND 12 OR NONE	112	APP FIG. 12		
27D	APP FIG. 13	NONE	102	APP FIG. 13		
	APP FIG. 14	NONE	102	APP FIG. 14		
	APP FIG. O OR P	APP FIG. O	113, 123	APP FIG. P		APP FIG. O
			119, 123	APP FIG. J		APP FIG. H
28D			102, 122	APP FIG. 15		APP FIG. F, H
	PH	NONE	102	PH		

RECORD OF APP 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&M	MD	SPL
28D	APP FIGURES K, L, M, N	APP FIG. K, M	114, 115, 116	APP FIG. K, M	APP FIG. L, N		
	YN, YO, YP, YQ, YR, YS, YT, YU, YV, OR YW	YN, YP	114, 115	YN, YP	YR, YS, YV	YC, YQ, YT, YU, YW	
	YM OR YL	YL	102	YM, YL			
	APP FIG. Q OR R	APP FIG. Q & 11 CR NONE	117, 120	APP FIG. R		APP FIG. Q	
	APP FIG. S OR T	APP FIG. S & 14 OR NONE	118, 119, 173	APP FIG. T		APP FIG. S	
320	YY OR YX	APP FIG. 8 WITH YX OR NONE	120, 121, 123	YY		YX	
	APP FIG. 16, 17, XA OR YZ	YZ	102, 127	APP FIG. 16, 17, XA, YZ			
	APP FIG. 18	NONE	102, 115	APP FIG. 18			
	XB	NONE	123	XB			
	XE	NONE	115		XE		
340		XC & XF WITH APP FIG. 13 OR NONE	102, 125	XF, XD		XC	
	XC, XD OR XF						
	XL OR XM	XL WITH APP FIG. 14 OR NONE	102	XL, XM			
	XE, XN OR XO	APP FIG. 18 OR NONE	102	XN, XO			
	TY	NONE	102	TY			
36AR	XJ OR XK	XJ	123	XK		XJ	
			305			XB	
			102, 123	APP FIG. 19			
	XP OR XQ	XP	173	XQ		XP	
	XR OR XS	XR	170	XS		XR	
370	XT OR XU	XT	126	XT		XU	
	XX OR XZ	XX	102	XX, XY			
	APP FIG. 20, 21, OR XV	XV	127	XV		APP FIG. 20, 2	
	APP FIG. 23	APP FIG. R OR NONE	129, 138, 172	APP FIG. 23		APP FIG. R	
			310				
400			129, 139, 149, 174	WW			
			102, 102A, 197	XZ, WA, WB, WO	APP FIG. 22		
	WC OR WD	WC	133	WD		WC	
	WF, WG	WF WITH YD OR NONE	114, 115, 130	WG	WF		
	WJ OR WK	WJ	102	WK		WJ	
41AC			102, 115	WL			
42AR			102, 115	WI		WM	
43B	WH CR	WH	102	WI		WM	
	WM OR WN	WM WITH XK OR NONE	134, 123	WN		WM	
	WP	WP WITH APP FIG. 16 OR NONE	102, 127, 135	WP			
	VJ OR SZ	VJ	139, 169	SZ		VJ	

RECORD OF APP 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&M	MD	SPL
440	YY OR WT	YY WITH WT OR NONE	102, 137, 181	WS, WU, WX			
			121, 123, 137, 138, 139, 175	WT			
			138, 139, 142, 175	WT			
			102	UC			
			102, 148	VS			
460	VB	VB WITH APP FIG. 15 OR NONE	102, 137	VB			
	VC OR VD	VC	139	VD		VC	
			102	VE, VF, VG			
	VH OR VI	VH WITH WE OR NONE	191	VI		VH	
	WE	WE WITH APP FIG. 8 OR NONE	102, 140, 181	WE			
480	VM	VM WITH APP FIG. 8 OR NONE	143, 144	VM			
	VO	VN	143, 177	VO		VN	
	VQ	VP	146	VQ		VP	
			145	VR			
	UB	VZ	151	UB		VZ	
500	UD		102, 24				
			136				UD
	SD	NONE	102	SD			
520	VT OR VU	VT	147	VU		VR	
			102	VV			
			150	VY		VE	
	RB OR RC	VF WITH RC, UC WITH RB OR NONE	102, 169, 179	RB, RC			
	UM, UN, OR APP FIG. 25	UM	102	UM, UN, APP FIG. 25			
540	UP, UQ	UP	155	UQ		UP	
	UM OR UX	UM	102	UM, UX			
	APP FIG. 26	APP FIG. 19 WITH APP FIG. 26 OR NONE	102	APP FIG. 26			
	TJ OR TK	TJ	156	TK		TJ	
	APP FIG. 20	APP FIG. 20 OR NONE	102, 127	APP FIG. 20			
560	UR	VF WITH UR OR NONE	102	UR			
	APP FIG. 27 OR UT	UT	102	APP FIG. 27, UT			
	SF	NONE	102	SF			
	UG OR UH	UG		UH		UG	
	UI OR UJ	UI	152	UJ		UI	
580	UU OR UV	UV	153, 174	UV		UV	
	UE OR UF	UE	102, 164	UE, UF			

RECORD OF APP 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&M	MD	SPL
500	TC OR TD	TC	102	TC, TD			
	TE OR TF	UF WITH TE OR NONE	102	TF		TE	
	TG OR TH	TG OR NONE	152	TH		TG	
	TI	NONE	102	TI			
	TA	NONE	102A	TA			
520	TB	APP FIG. 15 WITH TB OR NONE	102, 102A	TB			
	APP FIG. 28 & RW, OR TL	TL	102	APP FIG. 28 & RW, TL			
	TM OR TN	TM	160	TN		TM	
	TO	NONE	102	TO			
	TW	VF WITH TW OR NONE	102	TW			
540	TX	UR WITH TX OR NONE	102	TX			
	UY OR UZ	APP FIG. J WITH UY OR NONE	102	UY, UZ			
	SL	NONE	102	SL			
	SI	APP FIG. 15 WITH SI OR NONE	102	SI			
	APP FIG. 31	NONE	102	APP FIG. 31			
560	APP FIG. 30	NONE	102	APP FIG. 30			
	TR	NONE	162	TR			
	TS	NONE	102	TS			
	TT	NONE	102	TT			
	TZ	NONE	102	TZ			
580	SC	NONE	102	SC			
	JACKS			238AM		238A	
				240CM		240C	
				289AM		289A	
	TP OR TQ	TP	102, 163	TP, TQ			
600	SJ	NONE	102, 163	SJ			
	SS OR ST	SS	166	ST		SS	
	SU OR SV	YI WITH SU OR YH OR NONE	166, 167	SV		SU	
	RA	NONE	102	RA			
	RB OR RC	VF WITH RC, OR UC WITH RB, OR NONE	169, 179	RC		RB	
620	RF OR RG	RG	102	RF, RG			

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G

H

CIRCUIT NOTES: (CONT)

105. THE DIFFERENCE BETWEEN THE (INC) RELAYS IS INDICATED IN APP FIG 8.
106. THE DIFFERENCE BETWEEN THE (S) RELAYS IS INDICATED IN APP FIG 1.
107. THE DIFFERENCE BETWEEN THE (T) RELAYS IS INDICATED IN APP FIG 1.
108. YC OPTION IS REQUIRED WHEN TEST OF SUBSCRIBER TO TRUNK INTERMARKER GROUP TRUNKS WITH SX SUPERVISION OUTGOING IS REQUIRED.
109. WHEN THE AUTOMATIC PROGRESSION TRUNK TEST CIRCUIT IS EQUIPPED TO TEST CMA TRUNKS YE OPTION IS REQUIRED.
110. OPTION YD WAS FORMERLY PART OF OPTION YA.
111. WHEN ANY ORIGINATING REGISTERS ARE ARRANGED FOR PUSHBUTTON OPERATION OPTION YF IS REQUIRED.
112. PRIOR TO ISSUE 25AC APP FIG 12 WAS A PART OF APP FIG 2. APP FIG 12 IS REQUIRED IN ANY OFFICE ARRANGED FOR ANI.
113. WHEN LOOP AROUND TRUNK TESTING, RANGE EXTENSION FOR UNIGAUGE CABLING TESTING, NO. 101 ESS DIRECT ACCESS DID CENTRAL OFFICE TRUNK TESTING, 2dB PAD CKT IN TANDEM ORIGINATING TEST LINE, CALL WAITING SERVICE TESTING, OR CENTREX TRUNK TESTING IS REQUIRED, APP FIG P MUST BE PROVIDED.
114. WHERE PHASE I CENTREX SERVICE WAS PROVIDED, THE FOLLOWING ARRANGEMENTS APPLY:
(A) WHERE CUSTOMERS HAVE CONSOLES ONLY OPTIONS WF, YD, YR, YT, AND YV WERE PROVIDED WITH APP FIGURES K AND M.
(B) WHERE CUSTOMERS HAVE 608A SWITCHBOARDS ONLY, OPTIONS WF, YD, YS, AND YU WERE PROVIDED WITH APP FIGURES L AND N.
(C) WHERE CUSTOMERS HAD BOTH 608A SWITCHBOARDS AND CONSOLES, OPTIONS WF, YD, YR, YS AND YV WERE PROVIDED WITH APP FIGURES L AND N.
(D) WHERE INCOMING TRUNKS WERE EQUIPPED WITH AJ29 TYPE (A) RELAY, OPTION YQ WAS PROVIDED.
115. WHEN PHASE I CENTREX SERVICE WAS PROVIDED AND ARRANGED FOR CONSOLE OPERATION ONLY, OPTION YT AND APP FIGURES K AND M MUST BE REMOVED AND OPTION YS AND APP FIGURES L AND N MUST BE ADDED TO CONVERT TO OPERATION WITH BOTH CONSOLES AND 608A SWITCHBOARDS.
WHEN PHASE I CENTREX SERVICE WAS PROVIDED AND ARRANGED FOR 608A SWITCHBOARD OPERATION ONLY, OPTION YU MUST BE REMOVED AND OPTIONS YR AND YV MUST BE ADDED TO CONVERT TO OPERATION WITH BOTH 608A SWITCHBOARDS AND CONSOLES.
WHEN PHASE I CENTREX TRUNKS ARE ARRANGED FOR DIAL TRANSFER, APP FIG 18 AND OPTIONS WG AND XE MUST BE PROVIDED, AND OPTIONS WF AND WL MUST BE REMOVED. (SEE NOTE 3011).
116. PRIOR TO ISSUE 28D APP FIGURES K AND M WERE PART OF APP FIGURES 1 AND 2 RESPECTIVELY.
117. PRIOR TO ISSUE 78D APP FIG Q WAS PART OF APP FIG 11.
118. PRIOR TO ISSUE 28D APP FIG S WAS PART OF APP FIG 14.
119. WHEN APP FIG 14 IS FURNISHED, APP FIG J AND YF OPTION MUST BE PROVIDED, AND APP FIG S OR T MUST BE PROVIDED.
120. WHEN WADS TRUNK TESTING IS REQUIRED APP FIG R AND YY WIRING MUST BE PROVIDED.
121. TO PROVIDE AN ACCURATELY TIMED RERING SIGNAL FOR USE IN TESTING INTERTOLL TRUNKS, OPTION YY & WT MUST BE PROVIDED AND APP FIG R OR APP FIG 23 OR OPTION RT MUST BE PROVIDED.
122. WHEN APP FIG 15 IS FURNISHED, APP FIG R OR APP FIG 23 OR OPTION RL MUST BE PROVIDED.
123. IF MULTILEVEL PREEMPTION IS ADDED (APP FIG 19) OPTIONS XJ, XP, & YX MUST BE REMOVED & REPLACED BY OPTIONS XK, XQ, & YY RESPECTIVELY. OPTION XB SHOULD BE REMOVED & APP FIGURES P, J, & OPTION WT MUST BE ADDED.
124. OPTION XH MUST REPLACE OPTION XG IN OFFICES WHERE "TOUCH-TONE" RECEIVERS ARE ASSOCIATED WITH REVERTING CALL TRUNKS OR WHERE 2-WIRE CENTREX MULTILEVEL PRECEDENCE PREEMPTION (MLPP) IS PROVIDED, OR WHERE CALL WAITING SERVICE IS PROVIDED.
125. OPTION XD IS REQUIRED FOR PHASE III CENTREX OPERATION.
126. (SPL) OPTION XU PROVIDES ADDITIONAL TERMINATING TEST LINE APPEARANCE. OPTION XT MUST BE REMOVED WHEN XU IS PROVIDED.
127. (SPL) APP FIGURES 20, 21, AND OPTION WP MUST BE PROVIDED & WIRING XV MUST BE REMOVED AND OPTION YZ MUST BE REPLACED BY OPTION XA FOR TESTING INTERIM WIDEBAND SWITCHING.
128. NOTE CANCELED.
129. APP FIG Q OR R MUST BE REMOVED AND REPLACED WITH APP FIG 23 OR OPTION RL AND OPTION WW MUST BE PROVIDED WHEN THE FOLLOWING IS ADDED:
(A) CONNECTION TO NO. 101 ESS CENTRAL OFFICE TRUNK CIRCUITS ARRANGED FOR DIRECT ACCESS DID.
130. PRIOR TO ISSUE 41AC OPTION WF WAS PART OF OPTION YO.
131. IF RANGE EXTENSION FOR UNIGAUGE CABLING OR IF THE 2-WAY AUXILIARY LINE CKT FOR ACCESS BETWEEN THE LOCAL OFFICE AND THE SWITCHED SERVICES NETWORK (CCSA) OFFICE IS ADDED, OPTION ZB MUST BE REMOVED AND REPLACED BY OPTION ZC. OPTION ZC WAS ORIGINALLY FURNISHED WHEN TESTING OF REVERTIVE CALL TRUNKS WAS PROVIDED.
132. IF MARKER GLARE DETECTION OR TRUNK OR LINE CKT USING E&M LEAD SUPERVISION IS ADDED, APP FIG E MUST BE REMOVED AND REPLACED BY APP FIG G.
133. WD OPTION IS REQUIRED TO PROVIDE FOR MAKING NOISE MEASUREMENTS.
134. PRIOR TO ISSUE 43B, OPTION WM WAS PART OF OPTION XK.
135. PRIOR TO ISSUE 44D, OPTION WP WAS PART OF APP FIG 16.
136. (SPL) OPTION UD MUST BE PROVIDED FOR TESTING THE INTERIM INTEROFFICE WIDEBAND SWITCHING FEATURE.
137. PRIOR TO ISSUE 44D, OPTION WT WAS PART OF OPTION YY AND OPTIONS VB & WU WERE PART OF APP FIG 15.
138. OPTIONS WT, WY, AND EITHER APP FIG Q OR R OR 23 OR OPTION RT ARE REQUIRED TO PROVIDE AN ACCURATELY TIMED RERING SIGNAL FOR USE ON LOCAL OR TANDEM OUTGOING TESTS.
139. IF 2-WAY OFF-NET, ACCESS LINES ARE ADDED, OPTIONS VC & VJ MUST BE REMOVED AND REPLACED BY OPTIONS VD & SZ, RESPECTIVELY. ALSO OPTIONS WT, WM & WY MUST BE ADDED. APP FIG E MUST BE REMOVED AND REPLACED BY APP FIG G.
140. PRIOR TO ISSUE 44D, OPTION WC WAS PART OF APP FIG 8.
141. WHEN INTEROFFICE DISTORTION TESTING IS ADDED, OPTION VA MUST BE PROVIDED.
142. OPTIONS VL AND WY ARE REQUIRED TO TEST NON-OPERATE REQUIREMENTS OF (A) RELAYS IN BY-LINK TRUNK CIRCUITS.
143. OPTIONS VO, VS AND VM MUST BE PROVIDED AND OPTION VN REMOVED WHEN THE FOLLOWING CIRCUITS ARE ADDED:
(A) TRUNK CIRCUITS USING REVERSE BATTERY SUPERVISION THRU SWITCHES AND E&M LEAD INTEROFFICE SUPERVISION.
(B) REMOTE LINE CIRCUITS FOR 2-WAY OFF-NET, ACCESS CONTROL.
(C) 2-WAY AUXILIARY LINE CIRCUITS FOR ACCESS BETWEEN THE LOCAL OFFICE AND THE SWITCHED SERVICES NETWORK (CCSA) OFFICE.
(D) INCOMING TRUNK CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION USING E&M LEAD SUPERVISION.
(E) TOLL SWITCHING TANDEM TRUNK CIRCUITS FOR WIDEBAND OR BIT-STREAM SERVICE USING E&M LEAD SUPERVISION.
144. PRIOR TO ISSUE 44D, OPTION VM WAS PART OF APP FIG 8.
145. (A&M ONLY) OPTION VR MUST BE PROVIDED IN PHASE II CENTREX OFFICES ARRANGED FOR LINE LINK PULSING SERVICE.
146. IF CONNECTION TO AN AUTOMATIC CALL DISTRIBUTION OFFICE IS ADDED, OPTION VP MUST BE REMOVED AND REPLACED BY OPTION VQ.
147. WHERE APP FIG J IS PROVIDED AND IF ANY ORIGINATING REGISTERS ARE EQUIPPED WITH 316L TYPE TIP PARTY LINE TEST RELAY (TP), OPTIONS ZM & VT MUST BE REMOVED AND REPLACED WITH OPTIONS ZN & VU RESPECTIVELY.

148. WHEN MULTILEVEL PREEMPTION IS ADDED TO OFFICES PROVIDED WITH AN AUTOMATIC MONITOR, REGISTER AND SENDER TEST CKT, OPTION VS MUST BE ADDED.
149. IF LINE CIRCUITS FOR AUTOMATIC INTERCEPT SERVICE WITH REVERSE BATTERY SUPERVISION OR LINE CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION WITH REVERSE BATTERY SUPERVISION OR ATTENDANT OUTGOING TRUNK CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION ARRANGED TO HANDLE DIAL ZERO TRAFFIC ARE ADDED, OPTION WM MUST BE PROVIDED.
150. IF 2-WIRE 2-WAY OFF-NET, ACCESS LINES OR LINE BUSY VERIFICATION TRUNK CIRCUITS FOR CENTREX SERVICE ARE ADDED, OPTION VE MUST BE REMOVED, IF PROVIDED, AND REPLACED BY OPTION VY.
151. IF THE OFFICE IS AN AUTOMATIC CALL DISTRIBUTION (ACD) OFFICE OR IF 2-WIRE 2-WAY OFF-NET, ACCESS IS PROVIDED, OR IF 2-WIRE CENTREX MULTILEVEL PRECEDENCE PREEMPTION (MLPP) IS PROVIDED, OPTION VZ MUST BE REMOVED AND REPLACED BY OPTION UB.
152. WHEN COIN SERVICE IMPROVEMENTS (DIAL TONE FIRST) IS PROVIDED, OPTIONS UI, TG, AND APP FIG H MUST BE REMOVED AND REPLACED BY OPTIONS UJ, TH, AND APP FIG J, RESPECTIVELY.
153. OPTION UU IS PROVIDED TO FURNISH A MORE COMPLETE CHECK OF THE OUTGOING TRUNK (CS) RELAY, INCLUDING A RELEASE TEST AND AN APPLICATION OF SOAK PRIOR TO THE OPERATE TEST.
154. NOTE CANCELED.
155. WHEN TESTING OF THE WIDEBAND OR BIT-STREAM FEATURE IS PROVIDED, OPTION UP MUST BE REMOVED AND REPLACED BY OPTION UQ.
156. WHEN 4-WIRE 2-WAY OFF-NET, ACCESS IS PROVIDED, OPTION TJ, IF FURNISHED, MUST BE REMOVED AND REPLACED BY OPTION TK.
157. PRIOR TO ISSUE 34D, OPTIONS ZM AND ZN WERE PART OF NOTE 102. OPTION ZM WAS FURNISHED FOR USE WITH TEST SET TESTING OF ORIGINATING REGISTERS WITH NO TIP PARTY STATION GROUND GREATER THAN 1KΩ ± 10% AND OPTION ZN WAS FURNISHED FOR USE WITH TEST SET TESTING OF ORIGINATING REGISTERS WITH ANY T-P PARTY STATION GROUND GREATER THAN 1KΩ ± 10%.
158. WHEN 2-WIRE 2-WAY OFF-NET, ACCESS LINES ARE PROVIDED, OPTION SA, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTION SB.
159. NOTE CANCELED.
160. WHEN 2-WIRE CENTREX MULTILEVEL PRECEDENCE PREEMPTION (MLPP) IS PROVIDED, OPTIONS TM AND S, AND APP FIGURES H AND Q, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTIONS TN AND R, AND APP FIGURES J AND P.
161. PRIOR TO ISSUE 27D, APP FIGURES H AND J WERE INCLUDED IN NOTE 102. APP FIG H WAS PROVIDED WHEN ORIGINATING REGISTER TESTS WERE MADE WITH THE AUTOMATIC MONITOR CIRCUIT. APP FIG J WAS PROVIDED WHEN ORIGINATING REGISTER TESTS WERE MADE BY TEST SET TESTING.
162. OPTION TR MUST BE PROVIDED WHEN THE CENTREX CENTRALIZED ATTENDANT FEATURE ARRANGED TO HANDLE TRANSFER TRAFFIC ONLY IS PROVIDED.
163. WHEN OPTION TQ IS PROVIDED, TEST PAD(A) MUST BE READJUSTED WHEN THE FOLLOWING FEATURES ARE ADDED:
1. 4-WIRE MULTILEVEL PREEMPTION
WHEN OPTION SJ IS PROVIDED, TEST PADS (B) & (C) MUST BE READJUSTED WHEN THE FOLLOWING FEATURES ARE ADDED:
1. RANGE EXTENSION FOR UNIGAUGE CABLING.
2. CALL WAITING SERVICE.
3. NO. 101 ESS CENTRAL OFFICE TRUNK CIRCUITS ARRANGED FOR DIRECT ACCESS DID.
4. LINE LINK PULSING.
5. 2-WAY OFF-NET, ACCESS LINES.
6. 4-WIRE MULTILEVEL PREEMPTION
7. AUTOMATIC CALL DISTRIBUTION.
8. WIDEBAND SERVICE.
9. ACCURATELY TIMED RERING SIGNAL FOR USE ON LOCAL OR TANDEM OUTGOING TESTS.
10. TESTING NON-OPERATE REQUIREMENTS OF (A) RELAY IN BY-LINK TRUNKS.
11. BIT-STREAM SERVICE
164. PRIOR TO ISSUE 50D, AND SUBSEQUENT TO ISSUE 48D, OPTION UP (WITH TE) WAS SPECIFIED WHEN THE FEATURE "COINLESS ACCESS TO THE OPERATOR" (SUBSEQUENTLY CALLED COIN SERVICE IMPROVEMENTS (DIAL TONE FIRST)) WAS PROVIDED AND UE OPTION WAS SPECIFIED WHEN THAT FEATURE WAS NOT PROVIDED. IN ADDITION, UI OPTION HAD TO BE REMOVED AND REPLACED BY OPTION UJ.
165. WHEN PHASE III CENTREX STATIONS ARRANGED FOR WIDEBAND ARE ADDED, OPTION SM, IF PROVIDED, MUST BE REMOVED & REPLACED BY OPTION SN.
166. WHEN 2dB TEST PADS ARE PROVIDED IN THE TOLL ORIGINATING TEST LINE, OPTIONS SS & SU, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTIONS ST & SV.
167. WHEN LOCKOUT OF THE SECOND TOLL TESTBOARD PATCHING, MONITORING & TESTING JACKS CIRCUIT IS REQUIRED FROM THE MA TEST FR JK, LP, & KEY CIRCUIT, OPTION SU, IF PROVIDED, MUST BE REMOVED & REPLACED BY OPTION SV.
168. IF LOOP AROUND TRANSMISSION TESTING OF 2-WIRE INTERTOLL TRUNKS HAVING SIMPLEX SUPERVISION IS REQUIRED, OPTION YH, IF PROVIDED, MUST BE REMOVED & REPLACED BY YJ.
169. IF WIDEBAND OR BIT-STREAM SERVICE OR IF 2-WAY OFF-NET ACCESS OR IF INCOMING TRUNK CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION ARRANGED TO HANDLE TRANSFER TRAFFIC ONLY WITH E&M LEAD SUPERVISION ARE PROVIDED, OPTIONS VJ AND RB, IF PROVIDED, MUST BE REMOVED AND REPLACED BY SZ AND RC.
170. OPTION XR MUST BE REMOVED AND REPLACED BY OPTION XS WHEN THE FOLLOWING IS PROVIDED:
A. MULTILEVEL PREEMPTION.
B. 2-WAY OFF-NET ACCESS LINES.
C. OFFICE CONNECTS TO AN AUTO. CALL DISTRIBUTION OFFICE.
D. RECORDING COMPLETING OR TOLL SWITCHING TANDEM TRUNKS FOR WIDEBAND SERVICE.
E. 2-WIRE CENTREX MULTILEVEL PRECEDENCE PREEMPTION (MLPP).
F. INCOMING TRUNK CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION WITH E & M LEAD SUPERVISION.
G. CALL WAITING SERVICE.
H. OPERATOR TRUNKS FOR BIT-STREAM SERVICE.
171. WHERE IMPROVED CHANNEL TESTING IS REQUIRED, OPTION RH MUST BE PROVIDED.
172. APP FIG Q, OR R, OR 23, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTIONS RL AND RT WHEN THE FOLLOWING IS PROVIDED:
A. 2-WAY OFF-NET ACCESS.
B. CENTREX CENTRALIZED ATTENDANT.
C. COIN SERVICE IMPROVEMENTS (MULTIPLE WINK COIN CONTROL).
APP FIG S, IF PROVIDED, MUST BE REMOVED AND APP FIG T MUST BE PROVIDED WHEN THE FOLLOWING ARE ADDED:
A. CONNECTION TO NO. 101 ESS CENTRAL OFFICE TRUNK CIRCUITS ARRANGED FOR DIRECT ACCESS DID.
B. LINE LINK PULSING.
173. APP FIG S, IF PROVIDED, MUST BE REMOVED AND APP FIG T MUST BE PROVIDED WHEN THE FOLLOWING ARE ADDED:
A. CONNECTION TO NO. 101 ESS CENTRAL OFFICE TRUNK CIRCUITS ARRANGED FOR DIRECT ACCESS DID.
B. LINE LINK PULSING.
174. WHEN THE AUTOMATIC RECYCLE FEATURE IS ADDED, OPTIONS UU AND WM MUST BE PROVIDED, AND OPTION UV MUST BE REMOVED.
175. OPTIONS WT AND WY MUST BE PROVIDED FOR TESTING LINE CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION ARRANGED TO HANDLE TRANSFER TRAFFIC ONLY WITH E&M LEAD SUPERVISION, OR FOR TESTING LINE CIRCUITS FOR CTX AND OPERATION ARRANGED TO HANDLE LDN AND TRANSFER TRAFFIC.
176. WHEN COIN POTENTIAL RECYCLE IS PROVIDED IN AN OFFICE WITH COIN SERVICE IMPROVEMENTS (DIAL TONE FIRST), OPTION RN, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTION RO.
177. APP FIG G WITH OPTION RS (INSTEAD OF VN) AND OPTION RR INSTEAD OF RQ MUST BE PROVIDED WHERE OUTGOING OR 2-WAY E & M TRUNK CIRCUITS WHICH CAN BE ACCESSED IN A SUBSCRIBER OUTGOING MODE ONLY ARE PROVIDED. THESE TRUNKS INCLUDE TRUNKS WITH E&M SUPERVISION TO TSP(S) OFFICES 2-WAY 9000 TRUNKS OR INTERTOLL TRUNKS FOR WIDEBAND OR BIT STREAM SERVICE. ACD CLOSE DOWN TRUNKS WITH E&M SUPERVISION, AND OUTGOING, POSITION, AND SERVICE ASSISTANT POSITION TRUNKS WITH E&M SUPERVISION IN AN ACD OFFICE ARRANGED FOR OPERATOR TRANSFER IN ADDITION, THE ABOVE OPTIONS SHOULD BE FURNISHED WHERE IT IS DESIRED TO CHECK SUPERVISION, ON A SUBSCRIBER OUTGOING TYPE CONNECTION OF TRUNKS WHICH CAN BE ACCESSED IN EITHER A SUBSCRIBER OUTGOING OR A TANDEM OUTGOING MODE.
178. NOTE CANCELED.

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CIRCUIT NOTES: (CONT)

179. SUBSEQUENT TO ISSUE 480 AND PRIOR TO ISSUE 520, NOTE 102 SPECIFIED RC OPTION IF EITHER WIDEBAND SERVICE OR 2-WAY OFF-NET ACCESS WERE PROVIDED, AND SPECIFIED RB OPTION IF NEITHER WIDEBAND SERVICE NOR 2-WAY OFF-NET ACCESS WERE PROVIDED.

180. WHEN OUTGOING TRUNKS WHICH ARE NOT ARRANGED FOR COIN SERVICE IMPROVEMENTS (MULTIPLE WINK COIN CONTROL) ARE PROVIDED TO TSP(S) AND TESTING OF THESE TRUNKS WITHOUT OPERATOR ASSISTANCE IS REQUIRED, OPTION QE, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTION QF.

181. IF THE OFFICE IS AN ACD OFFICE, OPTIONS UA, WE, WS, WU AND WX MUST BE PROVIDED.
(MFR DISC)

182. SUBSEQUENT TO ISSUE 440 AND PRIOR TO ISSUE 62A, OPTION QH, WHICH WAS REQUIRED FOR 2-WAY OFF-NETWORK ACCESS, WAS PROVIDED IN ALL OFFICES. ON ISSUE 62A, OPTION QH WAS RATED MFR DISC AND REPLACED BY OPTION QI. SUBSEQUENT TO ISSUE 62A, OPTION QI WAS PROVIDED AFTER DATE STANDARD AND REQUIRED IN ALL OFFICES EQUIPPED WITH 2-WAY OFF-NETWORK ACCESS.

183. IF INTERTOLL TRUNKS (NOT ARRANGED FOR WIDEBAND OR BIT STREAM SERVICE) WITH REVERSE BATTERY SUPERVISION THROUGH THE SWITCHES ARE PROVIDED, AND IF THE NEW NUMBERING PLAN ARRANGEMENT OF TRANSLATOR AND CLASS LEADS WITH INTERCHANGEABLE AREA AND NPA CODES AND TOLL INFORMATION CODES IS NOT PROVIDED, AND IF A MORE FLEXIBLE ARRANGEMENT OF INCOMING TRUNK CLASS ASSIGNMENTS IS NOT PROVIDED, OPTION QM MUST BE ADDED.
(A&M ONLY)

184. WHEN IMPROVED PRETRIP AND TRIP TESTING OF THE RINGING TRIP (RT) RELAYS IN INCOMING AND INTRAOFFICE TRUNKS IS PROVIDED, OPTION ZW, ZV, ZU, ZG OR ZF, IF PROVIDED, MUST BE REMOVED AND REPLACED BY ONE OF THE FOLLOWING OPTIONS:

- A. OPTION QQ, IF THE MINIMUM SUBSCRIBER LINE LEAK IS 15kΩ AND THE MAXIMUM SUBSCRIBER LOOP IS 1740Ω;
 - B. OPTION QP, IF THE MINIMUM SUBSCRIBER LINE LEAK IS 15kΩ AND THE MAXIMUM SUBSCRIBER LOOP IS 1630Ω;
 - C. OPTION QO, IF THE MINIMUM SUBSCRIBER LINE LEAK IS 15kΩ AND THE MAXIMUM SUBSCRIBER LOOP IS 1560Ω; OR
 - D. OPTION QN, IF THE MINIMUM SUBSCRIBER LINE LEAK IS 10kΩ AND THE MAXIMUM SUBSCRIBER LOOP IS 1560Ω.
- (A&M ONLY)

185. WHEN 911 EMERGENCY REPORTING SERVICE IS PROVIDED, OR WHEN THE CENTREX CENTRALIZED ATTENDANT FEATURE ARRANGED TO HANDLE LON AND TRANSFER TRAFFIC IS PROVIDED, APP FIG. 44, IF NOT PROVIDED, MUST BE ADDED.

186. WHEN AN ACD OFFICE IS ARRANGED TO SERVE INTERCEPT TRAFFIC, OPTION QS OR QR MUST BE PROVIDED. WHEN AN ACD OFFICE IS ARRANGED FOR OPERATOR TRANSFER IN THE ACD OFFICE, OPTION QR, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTION QS.

187. WHEN REMOTE CONTROL OF ACD LINE CKT TESTS IS REQUIRED, OPTION QV MUST BE PROVIDED.

188. NOTE CANCELLED

189. OPTION PA MUST BE PROVIDED WHEN THE CENTREX CENTRALIZED ATTENDANT FEATURE IS PROVIDED.

190. WHEN OPERATOR TRANSFER IN THE ACD OFFICE IS PROVIDED, OPTION PE MUST BE REMOVED AND REPLACED BY OPTION PF.
(A&M ONLY)

191. WHEN TRUNKS AND ASSOCIATED MARKERS ARE ARRANGED FOR GLARE DETECTION AND APP FIG. 8 IS NOT PROVIDED OR WHEN 2-WAY OFF-NET, ACCESS LINES ARE PROVIDED, OPTION VH, IF PROVIDED, MUST BE REMOVED AND OPTION VI MUST BE PROVIDED.

192. WHEN WIDEBAND OR BIT-STREAM OPERATOR TRUNKS ARE PROVIDED, OPTION PJ OR PI MUST BE FURNISHED. WHEN RANGE EXTENSION FOR UNIGAUGE CABLING IS PROVIDED, OPTION PL, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTION PJ.

193. WHEN 2-WAY OFF-NETWORK ACCESS LINES OR ATTENDANT INCOMING TRUNK CIRCUITS FOR CENTREX CENTRALIZED ATTENDANT OPERATION ARRANGED TO HANDLE DIAL ZERO TRAFFIC ARE ADDED, OPTION QH, IF PROVIDED, MUST BE REMOVED AND REPLACED BY OPTION QI.

194. WHEN TEST SET TESTING IS USED AND WHEN ORIGINATING REGISTERS ARE ARRANGED FOR CENTREX SERVICE OR FOR TOLL DIVERSION, OPTION PN MUST BE REMOVED AND OPTIONS PO AND RH MUST BE ADDED.

195. OPTION PQ, IF PROVIDED, MUST BE REMOVED AND REPLACED BY PR IF ANY OF THE FOLLOWING IS FURNISHED:

- A. ANNOUNCEMENT TO THE ACD OPERATOR.
- B. OPERATOR TRANSFER IN THE ACD OFFICE.

196. OPTION PS PROVIDES MEANS TO ISOLATE MESSAGE REGISTER PULSE DETECTION CIRCUITRY DURING MARKER FUNCTIONS.

197. IN AN OFFICE WITH BUSY LINE VERIFICATION OF TOLL TRUNKS AND ARRANGED WITH APP FIG 22 AND APP FIG 53 (OPTION OG FURNISHED) OPTION OI MUST BE REMOVED.

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INFORMATION NOTES:

301. (A) THE LINE CIRCUITS ASSOCIATED WITH THE ORIGINATING AND TERMINATING TEST LINES SHALL HAVE THE WINDINGS OF THEIR (L) RELAYS DISCONNECTED.
- (B) ALL TEST LINES ASSOCIATED WITH THIS CKT AND ASSIGNED TO HUNTING GROUPS SHALL HAVE THEIR NS & LS PUNCHINGS CROSS CONNECTED. (SEE NOTE 307)
- (C) 1. ORIGINATING TEST LINES
2-WIRE:
THE LOCAL ORIGINATING TEST LINE SHALL BE ASSIGNED A CHARGE NO. IN THE NO. GROUP. AN (SC) RELAY SHALL BE ASSOCIATED WITH THE TENS BLOCK IN WHICH THE NO. APPEARS. RINGING COMBINATION 10 SHALL BE USED. WHEN TANDEM OR INTERTOLL TRUNKS ARE PROVIDED THIS TEST LINE SHALL ALSO HAVE A TRUNK NO. (SEE MASTER TEST CONTROL CKT FOR ASSIGNMENT). WHEN THE OUTGOING FEATURES OF INTERTOLL TRUNKS ARE TO BE TESTED, ANOTHER ORIGINATING TEST LINE (TOLL ORIGINATING) SHALL BE ASSIGNED WHICH SHALL BE FOR USE WITH THESE TRUNKS ONLY. THIS TEST LINE SHALL HAVE A TRUNK NO. ONLY (SEE MASTER TEST CONTROL CKT FOR ASSIGNMENT).
4-WIRE:
THE LOCAL ORIGINATING TEST LINE SHALL HAVE AN AOC CLASS OF SERVICE EXCEPT WHEN MULTILEVEL PREEMPTION IS PROVIDED AND THEN CLASS OF SERVICE IS CN. THE TOLL ORIGINATING TEST LINE SHALL BE TREATED SIMILAR TO THE 2-WIRE TOLL ORIGINATING TEST LINE.

2. TERMINATING TEST LINES

- 2-WIRE:
THIS TEST LINE SHALL BE ASSIGNED A CHARGE NO. IN THE NO. GROUP WHEN THE OFFICE IS PROVIDED WITH ONLY A 4-WIRE RINGING SELECTOR SWITCH, A FREE NO. MUST ALSO BE ASSIGNED. THIS FREE NO. MAY BE IN THE SAME OR DIFFERENT TENS BLOCK AS THE CHARGE NO. THE CHARGE NO. (AND THE FREE NO. IF REQUIRED) MAY BE IN THE SAME TENS BLOCK AS THE ORIGINATING TEST LINE NUMBERS. AN (SC) RELAY SHALL BE ASSOCIATED WITH EACH TENS BLOCK IN WHICH THIS TEST LINE NO. APPEARS. RINGING COMBINATION 10 SHALL BE USED FOR EACH NO. SEE ALSO PARAGRAPH G & H ON SHEET DB.
4-WIRE:
THIS TEST LINE SHALL HAVE AN AOC CLASS OF SERVICE AND THE FOLLOWING CROSS CONNECTIONS:
* (a) RNA- TO LPTI
** (b) RNA- TO RCTIO
*** (c) RNB- TO TST

* REQUIRED FOR MULTILEVEL PREEMPTION
** REQUIRED FOR TENS BLOCK SCREENING (MULTILEVEL PREEMPTION NOT PROVIDED).
***REQUIRED FOR MULTILEVEL PREEMPT ON AND TENS BLOCK SCREENING

WIDEBAND:
THESE TEST LINES SHALL BE ARRANGED FOR TERMINATING SERVICE ONLY. RINGING COMBINATION 01 SHALL BE USED.

301. (D) FOR TESTING INCOMING TRUNKS FROM OPERATORS FROM THE SWITCHBOARD POSITION, AS MANY ADDITIONAL CHARGE NUMBERS SHALL BE ASSIGNED TO THE TERMINATING TEST LINE, ONE PER RINGING COMBINATION, AS ARE REQUIRED TO TEST FOR ABILITY TO RING ALL STATION CODES USED IN THE OFFICE. THE FOLLOWING RINGING COMBINATIONS ARE SUFFICIENT FOR TESTING THE TYPE OF SERVICE INDICATED.

TYPE OF SERVICE	RINGING COMBINATION
INDIVIDUAL LINES ONLY	01
2 PARTY ONLY	01,11
2 AND 4 PARTY SEMI-SELECTOR	01,12
2 AND 4 PARTY SELECTOR	01,07
8 PARTY SEMI-SELECTOR	
4 WIRE RINGING SELECTOR	
SWITCH ONLY	01,07,08,17
5 WIRE OR COMBINATION OF	
6 AND 4 WIRE	01,03,07,12
10 PARTY DIVIDED CODE	01,03,05,12,14

(THESE MAY BE COMBINED AS REQUIRED)

- (E) IN AN OFFICE WITH BOTH PHYSICAL AND THEORETICAL NUMBERS OR PHYSICAL, THEORETICAL AND EXTRA THEORETICAL NUMBERS, THE TEST LINE NUMBERS SHALL BE IN A NUMBER 5 BLOCK CONTAINING NON-TERMINATING NUMBERS.
- (F) WHEN INTERMARKER GROUP TRUNKS ARE PROVIDED THERE SHALL BE A SEPARATE TERMINATING TEST LINE IN EACH MARKER GROUP CONNECTOR EXCLUSIVELY. TO EACH APP FIG. 9 OR 10. (CALLED MARKER GROUP APPEARANCE) OF THE OTHER MARKER GROUP OR GROUPS (SEE NOTE 303, FIG.101,102). THE TEST LINE IN THE CALLED MARKER GROUP SHALL HAVE A FREE NO. WITH RINGING COMBINATION 01 AND CHARGE NUMBERS AS REQUIRED TO TEST FOR ABILITY TO RING ALL STATION CODES AS DESCRIBED IN PARAGRAPH D ABOVE. THE NO. ASSIGNED TO THE CHARGE NO. WITH RINGING COMBINATION 01 SHALL BE THE SAME AS THAT FOR THE CHARGE NO. WITH RINGING COMBINATION 10 IN THE CALLING MARKER GROUP (SEE PARAGRAPH C ON SHEET DB). WHEN THE CALLED MARKER GROUP HAS OFFICE A AND OFFICE B NUMBERS THE ABOVE TERMINATING TEST LINE NUMBERS SHALL BE ASSIGNED IN BOTH OFFICES AND THE SAME NUMBERS SHALL BE USED IN BOTH OFFICES.
- (G) WHEN SEPARATE GROUPS OF INCOMING TRUNKS ARE USED FOR TERMINATING TO OFFICE A AND B NUMBERS THE TERMINATING TEST LINE NUMBERS REFERRED TO IN PARAGRAPH C ON SHEET DB, SHALL BE ASSIGNED IN BOTH OFFICES AND THE SAME NUMBERS SHALL BE USED IN EACH OFFICE.
- (H) WHEN PHASE II CENTREX TRUNKS ARE PROVIDED THERE SHALL BE A SEPARATE TERMINATING TEST LINE WITH A CLASS OF SERVICE RESERVED FOR PHASE II CENTREX TESTING. THIS SHALL BE THE SAME CLASS OF SERVICE AS IS ASSIGNED TO THE PHASE II CENTREX TEST ATTENDANT TRUNK. THIS TERMINATING TEST LINE SHALL BE ASSIGNED A CHARGE TERMINATING PHASE II CENTREX NO. AND A CHARGE LISTED DIRECTORY NO. THESE NUMBERS MAY BE IN THE SAME OR DIFFERENT TENS BLOCK AND MAY BE IN THE SAME TENS BLOCK AS THE ORIGINAL TEST LINE. AN (SC) RELAY SHALL BE ASSOCIATED WITH EACH TENS BLOCK IN WHICH THESE NUMBERS APPEAR. A CROSS CONNECTION SHALL BE MADE AT THE HMOF BETWEEN THE NS AND SI PUNCHINGS. RINGING COMBINATION 10 SHALL BE ASSIGNED TO THE TERMINATING PHASE II CENTREX NO. AND THE RINGING COMBINATION ASSIGNED FOR ALL LISTED DIRECTORY NUMBERS SHALL BE ASSIGNED TO THE TEST LISTED DIRECTORY NO. IF THE PHASE II CENTREX OFFICE IS ARRANGED FOR LINE LINK PULSING SERVICE, ANOTHER DIRECTORY NUMBER SHOULD BE ASSIGNED TO THE CENTREX TERMINATING TEST LINE WITH ITS RINGING COMBINATION ASSIGNED TO RCT 15.

301. (I) WHEN PHASE I OR PHASE II CENTREX TRUNKS ARE PROVIDED AND ARRANGED FOR DIAL TRANSFER, TWO CENTREX TERMINATING TEST LINES (CTX1 AND CTX2) SHALL BE PROVIDED. CTX1 SHALL BE ASSIGNED 3 LINE APPEARANCES (A,B AND C) AND THE CLASS OF SERVICE ASSIGNED TO THESE APPEARANCES AND TO THE LINE APPEARANCE OF CTX2 SHALL BE AS FOLLOWS.

CTX1 (A) MANUAL TEST CLASS
CTX1 (B) 5-DIGIT DIAL TRANSFER TEST CLASS (CONSOLE)
CTX1 (C) 4-DIGIT DIAL TRANSFER TEST CLASS (NO CONSOLE)
CTX2 SAME AS CTX1 (B)

FOR PHASE I CENTREX THE CLASS OF SERVICE ASSIGNED TO CTX1 (B) AND CTX2 SHALL BE THE SAME CLASS OF SERVICE THAT IS WIRED INTO THE TEST INCOMING TRUNK CIRCUIT.

FOR PHASE II CENTREX SERVICE THE CLASS OF SERVICE WIRED INTO THE TEST INCOMING TRUNK SHALL BE THE SAME AS ASSIGNED TO CTX1 (A).

FOR PHASE I OR PHASE II CENTREX THE CLASS OF SERVICE CROSS CONNECTION IN THE COMPLETING MARKER FOR CTX1 (A) AND CTX1 (B) SHALL OPERATE THE ROUTE RELAY ASSOCIATED WITH THE CENTREX TEST ATTENDANT TRUNK.

TWO ADDITIONAL CLASSES OF SERVICE (CTX3 AND CTX4) NOT ASSOCIATED WITH TEST LINES MUST BE RESERVED FOR TESTING WITH THE FOLLOWING RESTRICTIONS. BOTH CLASSES SHALL BE 4-DIGIT DIAL TRANSFER WITH NON CONSOLE CROSS CONNECTION IN THE DIAL TONE MARKER AND NO LR RELAY CROSS CONNECTION IN THE COMPLETING MARKER.

THE CLASSES OF SERVICE ASSIGNED TO CTX1 (C), CTX3 AND CTX4 SHALL USE ALL OF THE 2 OUT OF 5 CLASS LEADS. FOR EXAMPLE: CTX1 (C), 11; CTX3,66; AND CTX4,77.

THE NUMBER ASSIGNMENT FOR CTX1 (A) SHALL BE AS SPECIFIED IN NOTE 301H. THE REMAINING TEST LINES SHALL BE ASSIGNED NUMBERS AS FOLLOWS:

CTX1 (B) AND CTX1 (C) - A CHARGE NUMBER IN EVERY NUMBER SERIES IN WHICH CENTREX NUMBERS APPEAR

CTX2 - ANY CHARGE NUMBER

WHEN PHASE III CENTREX TRUNKS OR PHASE III CENTREX WIDEBAND TRUNKS OR BOTH ARE PROVIDED, TWO CENTREX TERMINATING TEST LINES (CTX1 AND CTX2) SHALL BE PROVIDED. CTX2 SHALL BE ASSIGNED A 4-DIGIT MANUAL CLASS OF SERVICE WHICH IS THE SAME CLASS OF SERVICE ASSIGNED TO THE CENTREX TEST ATTENDANT TRUNK AND THE WIDEBAND CENTREX TEST ATTENDANT TRUNK. CTX1 SHALL HAVE 3 LINE LINK APPEARANCES DESIGNATED (A),(B) AND (C). IF PHASE III CENTREX WIDEBAND IS PROVIDED, CTX1 (A) AND (B) AND CTX2 SHALL HAVE ASSOCIATED LINE SWITCH APPEARANCES ON THE WIDEBAND LINK.

THE CLASS OF SERVICE ASSIGNED TO (A) SHALL BE A 4-DIGIT DIAL TRANSFER TEST CLASS. APPEARANCE (B) SHALL BE ASSIGNED A 5-DIGIT DIAL TRANSFER CLASS AND APPEARANCE (C) SHALL BE ASSIGNED A 4-DIGIT DIAL TRANSFER CLASS.

THE CLASS OF SERVICE ASSIGNED TO (B) AND (C) MAY BE A WORKING CUSTOMERS CLASS OF SERVICE. FURTHER, THE CLASSES OF SERVICE SELECTED FOR APPEARANCES (A),(B) AND (C) MUST USE ALL POSSIBLE 2 OUT OF 5 CLASS LEADS. FOR EXAMPLE: APPEARANCE (A),11; APPEARANCE (B),66; AND APPEARANCE (C),77.

EQUIPMENT NOTES:

201. EQUIPMENT INFORMATION FOR THIS CIRCUIT: FRAME EQUIPMENT, ED-26466-01 (MFR DISC.), J23252A,J23252U (A&M ONLY), J23252AA,J23252AH,J23252BC; COMPONENT ASSEMBLY, ED-94823; UNIT EQUIPMENT DRAWINGS, J23256A,J23256B,J23256C,J23256D, J23256E,J23256F,J23256G,J23256H,J23256J,J23256K,J23256L, J23256M,J23256N,J23256P,J23256R,J23256S,J23256T,J23256U, J23256W,J23256Y,J23256Z,J23256AA,J23256AB,J23256AC,J23256AD, J23256AE,J23256AF,J23256AG,J23256AH,J23256AJ,J23256AK, J23256AL,J23256AM,J23256AN,J23256AP,J2796KH,AND J23255D.
202. THE (MTF) FUSES FOR THE MESSAGE REGISTER SUPPLY ARE LOCATED ON THE FUSE PANEL OF THE FIRST MESSAGE REGISTER OR FIRST MESSAGE TIMING FRAME IN THE OFFICE OR THE MESSAGE REGISTER UNIT ON RELAY RACK.
203. PRIOR TO ISSUE 100, LEADS MRS-T AND MRS-P WERE C WIRING.
204. CAD 1,2, AND 3 WERE RATED (MFR DISC.) AND SUPERCEDED BY ADDED CADS 4,5 AND 6 RESPECTIVELY ON ISSUE 100.
205. PRIOR TO ISSUE 14D (MFR DISC.) WAS NOT SHOWN FOR LEAD P IN CAD 6 OR FOR CONNECTION OF (TUC) RELAY TO TERMINAL 82 IN CAD 5.
206. THE R0,R2 AND R10 LEADS FROM THE MF CURRENT SUPPLY CIRCUIT SHALL BE LEFT DEAD AND INSULATED AT THE POSITION OF THE KEYS.
207. THE SHIELDED CABLE DESIGNATED (RU) SHALL BE 760A OR 761A CABLE. THE 760A CABLE SHALL HAVE A MAXIMUM LENGTH OF 775 FEET AND THE 761A CABLE SHALL HAVE A MAXIMUM LENGTH OF 550 FEET. THESE LENGTHS ARE BASED ON THE FACT THAT THE MAXIMUM CAPACITANCE OF THE CABLE SHALL BE 0.01 uF.
208. THE T&R LEADS FROM THE SIMULATED 2-WIRE TRUNK (FS22) TO THE TRUNK LINK SHALL NOT EXCEED 200 FEET OF 24 GAUGE CABLE IN AN ACD OFFICE.
209. THE T&R LEADS FROM THE (TLA) INDUCTOR, THROUGH THE TEST ACCESS CKT, TO THE TRUNK LINK SHALL NOT EXCEED 200 FEET OF 24 GAUGE CABLE.
210. THE T&R LEADS FROM THE (CD) INDUCTOR, THROUGH THE MASTER TEST CONTROL CKT, TO THE LINE LINK SHALL NOT EXCEED 250 FEET OF 24 GAUGE CABLE.
211. LEADS GS & GSI SHALL BE 22GA PAIRED WIRE IN CABLE FOR RUNS OF 0-100 FEET AND SHALL BE 20GA PAIRED WIRE FOR RUNS OF 100-150 FEET PER NOTE 201E OF SD-95867-01.
212. THE UNDESIGNATED HALF OF THE T0, T2, T10 PAIRS SHALL BE LEFT DEAD AND INSULATED AT THE TRUNK TEST CKT END. USE 22GA PAIRED WIRE CABLES FOR RUNS OF 0-100 FEET AND 22GA SHIELDED WIRE IN CABLE (EU) FOR RUNS OF 100-150 FEET PER NOTE 201E OF SD-95867-01.

DRAWING
ISSUE
51A
52D
53D
55A
57D
58A

ISSUE
76A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-DB

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SD-25918-01-DB

INFORMATION NOTES: (CONT)

301.(I) CTX1 (A) SHALL BE ASSIGNED A FREE AND A CHARGE NUMBER AND CTX2 A CHARGE NUMBER ONLY IN THE SAME NUMBER SERIES- ADDITIONAL CHARGE NUMBERS SHALL BE ASSIGNED TO CTX1 (A) AND CTX2 IN ANY OTHER NUMBER SERIES THAT SERVES 4 DIGIT CENTREX CUSTOMER GROUPS, OR WIDEBAND CENTREX CUSTOMER GROUPS, OR BOTH, IF BOTH ARE PROVIDED. CTX1 (B) AND (C) MAY BE ASSIGNED ANY CHARGE WORKING NUMBER. ALL CENTREX AND WIDEBAND CENTREX TERMINATING TEST LINES SHALL HAVE A "TST" TERMINATING TREATMENT CROSS CONNECTION. IF PHASE III CENTREX WIDEBAND IS PROVIDED IN AN OFFICE WHERE CTX1 (A) AND (B) AND CTX2 ARE ON LINE LINK FRAMES NOT ARRANGED FOR WIDEBAND, THESE TEST LINES MUST BE MOVED TO LINE LINK FRAMES SERVING WIDEBAND CUSTOMERS.

(J) IF ANY TRUNKS ARRANGED FOR TERMINATING SERVICE ARE RESTRICTED TO A PARTICULAR NUMBER SERIES, ALL ASSOCIATED TERMINATING TEST LINES SHALL HAVE AN ASSIGNMENT IN THAT NUMBER SERIES.

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

303. NOTE CANCELED.

DRAWING
ISSUE
51A
52D
53D
57D

57

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

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INCORPORATED

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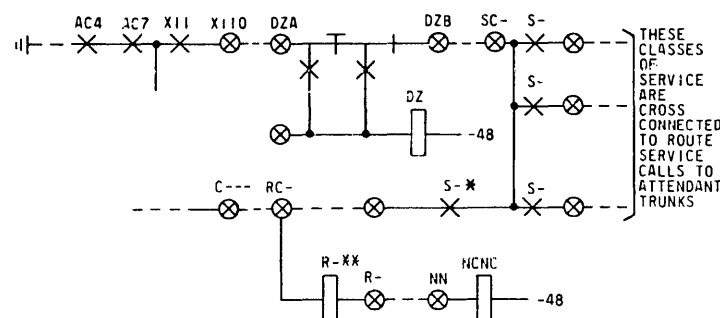
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INFORMATION NOTES: (CONT)

304. THE TWO 4W TRUNK LINK APPEARANCES SHALL BE LOCATED ON THE SAME TRUNK LINK FRAME. THE SIMULATED 4-WIRE OUTGOING TRUNK CKT (FS 23) SHALL BE ASSIGNED AN OFFICE CODE. THIS OFFICE CODE SHALL BE SCREENED IN THE MARKER AS FOLLOWS:
- (A) AUXILIARY LINES SCREENED TO A ROUTE RELAY GIVING A CP- TO NPC CROSS CONNECTION.
 - (B) 2-WAY TRUNKS TO PBX AND INCOMING 2-WAY INTERTOLL TRUNKS SCREENED TO A ROUTE RELAY GIVING A CP- TO NPM CROSS CONNECTION.

305. PRIOR TO ISSUE 370, OPTION XB WAS PROVIDED FOR PREEMPTION TONE TO THE ORIGINATING END WHEN TESTING PREEMPTION OF A TOG CALL BY A SOG CALL.

306. (A) THE SIMULATED 2-WIRE TRUNK APPEARANCE SHALL BE ASSIGNED AN OFFICE CODE AND BE LOCATED ON THE SAME TRUNK LINK FRAME AS THE 2-WIRE TRUNK APPEARANCE OF THE MASTER TEST CONTROL CIRCUIT.
- (B) WHEN INCOMING ATTENDANT TRUNKS FOR CENTRALIZED ATTENDANT OPERATION ARRANGED TO HANDLE DIAL ZERO TRAFFIC ARE PROVIDED, THE FOLLOWING CROSS CONNECTIONS MUST BE MADE:
- (1) IN THE DIAL TONE MARKER A CLASS OF SERVICE USED FOR TESTING MUST BE CROSS CONNECTED TO THE (PBX) RELAY CROSS CONNECTION.
 - (2) IN THE COMPLETING MARKER THE SAME CLASS OF SERVICE MUST BE CROSS CONNECTED TO THE MARKER ROUTE RELAY ASSOCIATED WITH THE 2-WIRE TRUNK IN APP FIG. 22 (SEE PART A OF NOTE 306). BELOW IS AN EXAMPLE OF HOW THIS CROSS CONNECTION CAN BE IMPLEMENTED IN THE COMPLETING MARKER:



* OPERATED BY CLASS OF SERVICE USED FOR TESTING
 ** ROUTE RELAY FOR SIMULATED 2-WIRE TRUNK (FS 21)

307. PRIOR TO ISSUE 438, THE FOLLOWING WAS IN INFORMATION NOTES 301 (B) AND 301 (C):

- (A) THE ORIGINATING TEST LINE SHALL BE ASSIGNED A CHARGE NUMBER IN THE NUMBER GROUP. AN (SC) RELAY SHALL BE ASSOCIATED WITH THE TENS BLOCK IN WHICH THE NUMBER APPEARS, BUT NO SLEEVE LEAD SHALL BE CONNECTED BETWEEN THE LINE HOLD MAGNET AND THE (SC) RELAY TO PREVENT SUBSCRIBER ACCESS TO THE TEST LINE. RINGING COMBINATION 10 SHALL BE USED. WHEN TANDEM OR INTERTOLL TRUNKS ARE PROVIDED, THIS LINE SHALL ALSO HAVE A TRUNK NUMBER. (SEE MASTER TEST CONTROL CKT FOR ASSIGNMENT.) WHEN THE OUTGOING FEATURES OF INTERTOLL TRUNKS ARE TO BE TESTED, ANOTHER ORIGINATING TEST LINE SHALL BE ASSIGNED WHICH SHALL BE FOR USE WITH THESE TRUNKS ONLY. THIS LINE SHALL HAVE A TRUNK NUMBER ONLY. (SEE MASTER TEST CONTROL CKT FOR ASSIGNMENT.)
- (B) THE TERMINATING TEST LINE SHALL BE ASSIGNED A CHARGE NUMBER AND A FREE NUMBER IN THE SAME NUMBER GROUP. THESE NUMBERS MAY BE IN THE SAME OR IN A DIFFERENT TENS BLOCK AND MAY BE IN THE SAME TENS BLOCK AS THE ORIGINATING TEST LINE NUMBERS. AN (SC) RELAY SHALL BE ASSOCIATED WITH EACH TENS BLOCK IN WHICH THESE TEST LINE NUMBERS APPEAR, BUT NO SLEEVE LEAD SHALL BE CONNECTED BETWEEN THE LINE HOLD MAGNET AND THE (SC) RELAY TO PREVENT SUBSCRIBER ACCESS TO THEM. RINGING COMBINATION 10 SHALL BE USED FOR EACH NUMBER. (SEE PARAGRAPH G AND H OF NOTE 301.)

308. WHEN AN OFFICE IS EQUIPPED WITH LINE LINK PULSING CIRCUITS AND ACCESS TO THESE CIRCUITS CAN ONLY BE GAINED BY AN ORIGINATING CODE POINT, A TANDEM SCREENING POINT SHALL BE ASSIGNED IN THE MARKER FOR TEST ACCESS.
309. WHEN AN OFFICE IS ARRANGED FOR 2-WIRE 2-WAY OFF-NET. ACCESS, TEST ATTENDANT TRUNK CKT, SD-27851-01 MUST BE PROVIDED. IF REMOTE LINE CIRCUITS FOR SWITCHED CONNECTION ARE PROVIDED, ONE MANUAL TEST CLASS OF SERVICE FOR ALL REMOTE LINE CIRCUITS MUST BE ASSIGNED IN THE DIAL TONE MARKERS. THIS CLASS OF SERVICE SHOULD CAUSE THE ROUTE RELAY ASSOCIATED WITH THE TEST ATTENDANT TRUNK TO OPERATE IN THE COMPLETING MARKER. THIS CLASS OF SERVICE WILL RESULT IN THE MARKER ROUTING TEST CALLS ORIGINATED FROM THE REMOTE LINE CKT TO THE TEST ATTENDANT TRUNK, INSTEAD OF A SERVICE ATTENDANT TRUNK.
310. THE ARMATURE TRAVEL OF THE (A) RELAY MUST BE CHANGED FROM 0 TO 23 MAX WHEN THIS CKT IS MODIFIED PER ISSUE 400 OR LATER.
311. WHEN AN OFFICE IS ARRANGED FOR 4-WIRE 2-WAY OFF-NET. ACCESS, TEST ATTENDANT TRUNK CKT, SD-27844-01, MUST BE PROVIDED, AND A MANUAL TEST CLASS OF SERVICE MUST BE ASSIGNED.
312. WHEN AN OFFICE IS ARRANGED FOR WIDEBAND SERVICE, A 2-WAY TRUNK FOR USE IN A WIDEBAND SERVICE, ARRANGED AS A TEST TRUNK, MUST BE PROVIDED AND SHALL BE ASSIGNED AN OFFICE CODE. IN ADDITION, WHEN PHASE III CENTREX STATIONS ARRANGED FOR WIDEBAND SERVICE ARE PROVIDED, THE TEST TRUNK SHALL BE ARRANGED FOR CENTREX WITH WIDEBAND.
313. WIDEBAND TEST LINES MUST BE ASSIGNED TO THE SAME LINE LINK FRAMES AS WIDEBAND CUSTOMERS. IF WIDEBAND IS PROVIDED IN AN OFFICE WHERE THE ORIGINATING TEST LINES AND COMBINED TEST LINES ARE ON LINE LINK FRAMES NOT EQUIPPED FOR WIDEBAND, THESE TEST LINES MUST BE RELOCATED ON LINE LINK FRAMES ARRANGED FOR WIDEBAND.
314. THE ADJUSTMENT OF PADS A,B,C, AND D IS DESCRIBED IN BSP 218-246-701.
315. THE SIMULATED 2-WIRE INCOMING TRUNK FOR TESTING CALL WAITING SERVICE SHALL BE ASSIGNED TO AN APPEARANCE ON THE 2-WIRE TRUNK LINK FRAME. AN INCOMING CLASS CROSS CONNECTION MUST BE PROVIDED FOR THIS APPEARANCE.
316. WHEN AN OFFICE IS ARRANGED FOR BIT STREAM SERVICE, A 2-WAY TRUNK FOR BIT STREAM SERVICE, ARRANGED AS A TEST TRUNK, MUST BE PROVIDED AND SHALL BE ASSIGNED AN OFFICE CODE. IN ADDITION, WHEN BIT STREAM DELAYED CALL OPERATOR TRUNKS ARE PROVIDED, A SECOND 2-WAY TRUNK FOR BIT STREAM, ARRANGED AS A TEST TRUNK, MUST BE PROVIDED AND SHALL BE ASSIGNED ANOTHER OFFICE CODE.
317. WITH A TEST CALL ESTABLISHED FROM THE ORIGINATING TEST LINE TO THE SIMULATED 2-WIRE TRUNK (FS 21), THE (TFL) KEY OPERATED AND THE 2-WIRE TRUNK TERMINATED AT THE MASTER TEST FRAME JACK, LAMP, AND KEY CKT, THE (BO) CAPACITOR SHOULD BE ADJUSTED TO OBTAIN THE MAXIMUM ECHO RETURN LOSS POSSIBLE AT THE (TMI) JACK IN THE MASTER TEST FRAME JACK, LAMP, AND KEY CKT.
318. THE (CTR-)COUNTERS ARE PREDETERMINING COUNTERS AND COUNT DOWN FROM THE MANUALLY PRESET NUMBER TO OPERATE END OF (ETM) TIMING RELAY.

COUNTER NUMBER	PRESET TO	EQUALS
5	300	5 MINUTES
4	240	4 MINUTES
3	180	3 MINUTES
2	120	2 MINUTES
1	60	1 MINUTE

319. COMPLETE DELINEATION OF THE TIMERS IS SHOWN ON THE TIME DELAY CONTROL CKT, SD-94820-01.

ISSUE
78B

MASTER TEST FRAME
TRUNK TEST

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CROSS CONNECTION NOTES:

401. CROSS CONNECT TERMINALS TP1, TP2, RP1, RP2, ETC AS REQUIRED TO OBTAIN 10dB $\pm$ 0.1dB INSERTION LOSS BETWEEN THE (TM1) AND (TM2) JACKS OF THE MASTER TEST FRAME JACK, LAMP, AND KEY CKT WITH THE (REX) RELAY OPERATED AND WITH THE RANGE EXTENDER AMPLIFIER BY-PASSED ("A" RELAY NORMAL IN RANGE EXTENDER CKT).

402. TERMINAL STRIP C

INITIAL AND OVERTIME INTERVAL TIMING							
NUMBER OF MU's	INITIAL PERIOD TIMING	CROSS CONNECT		NUMBER OF MU's	OVERTIME PERIOD TIMING	CROSS CONNECT	
		FROM	TO			FROM	TO
1	5 MIN	IP1(15)	5M(58)	1	5 MIN	OP1(36)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)
2	5 MIN	IP2(25)	5M(58)	2	5 MIN	OP2(46)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)
3	5 MIN	IP3(35)	5M(58)	3	5 MIN	OP3(56)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)
4	5 MIN	IP4(45)	5M(58)	4	5 MIN	OP4(17)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)
5	5 MIN	IP5(55)	5M(58)	5	5 MIN	OP5(27)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)
6	5 MIN	IP6(16)	5M(58)	6	5 MIN	OP6(37)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)
7	5 MIN	IP7(26)	5M(58)	7	5 MIN	OP7(47)	5M(58)
	4 MIN		4M(48)		4 MIN		4M(48)
	3 MIN		3M(38)		3 MIN		3M(38)
	2 MIN		2M(28)		2 MIN		2M(28)
	1 MIN		1M(18)		1 MIN		1M(18)

ISSUE
70BMASTER TEST FRAME
TRUNK TEST

SD-25918-01-011

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INCORPORATEDCWB 332
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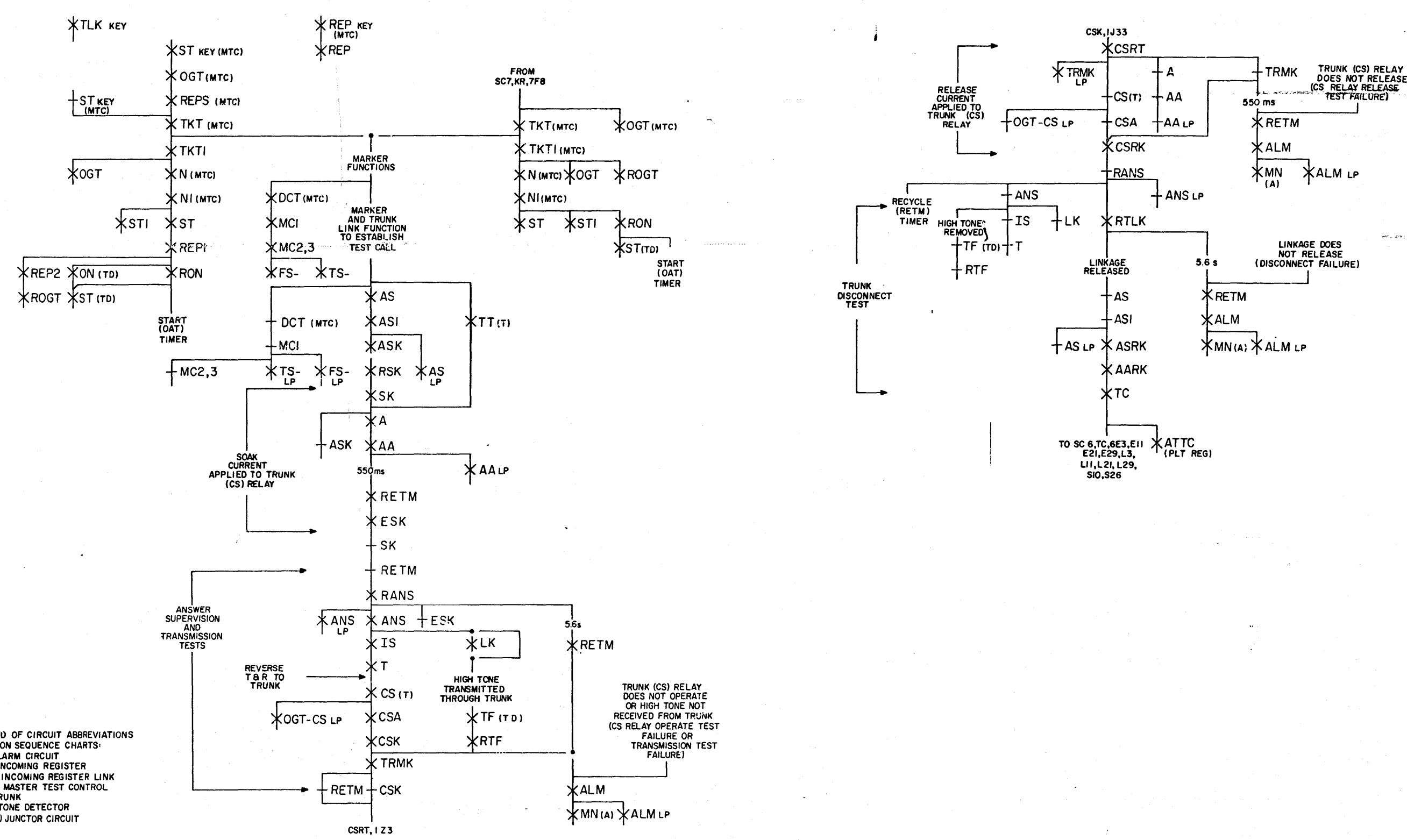


SC I

AUTOMATIC RECYCLE ON OUTGOING (OGT) TRUNK TEST
(SEE NOTE 1)

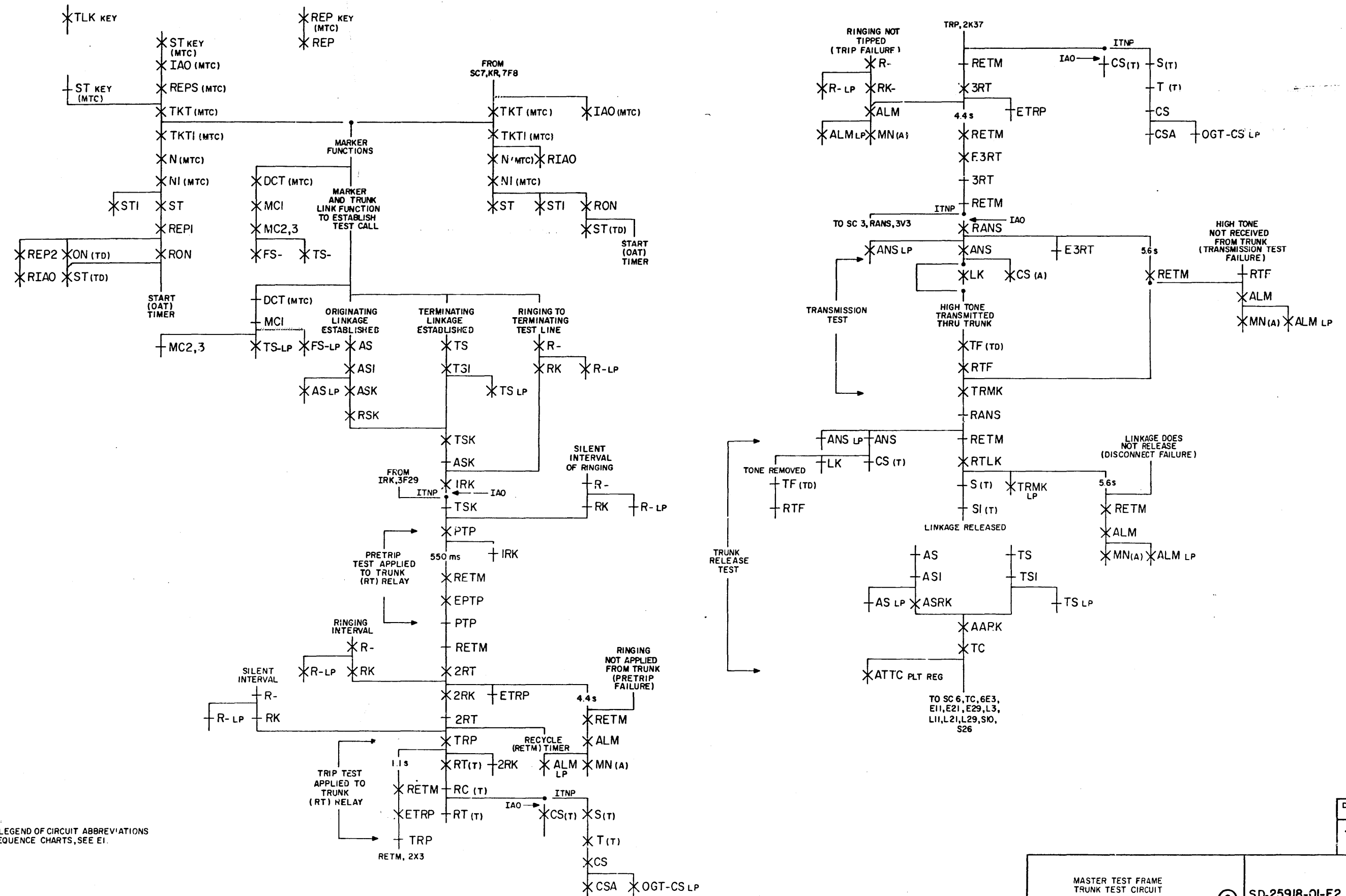
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NOTES:
1. LEGEND OF CIRCUIT ABBREVIATIONS
USED ON SEQUENCE CHARTS:
(A) ALARM CIRCUIT
(IR) INCOMING REGISTER
(IRL) INCOMING REGISTER LINK
(MTC) MASTER TEST CONTROL
(T) TRUNK
(TD) TONE DETECTOR
(JCTR) JUNCTURE CIRCUIT



SD-25918-01-E1

AUTOMATIC RECYCLE ON INTRA-OFFICE (IAO) TRUNK TEST
(SEE NOTE 1)



NOTES:
1. FOR LEGEND OF CIRCUIT ABBREVIATIONS
ON SEQUENCE CHARTS, SEE EI.

DRAWING
ISSUE

70B | 3

MASTER TEST FRAME
TRUNK TEST CIRCUIT

②

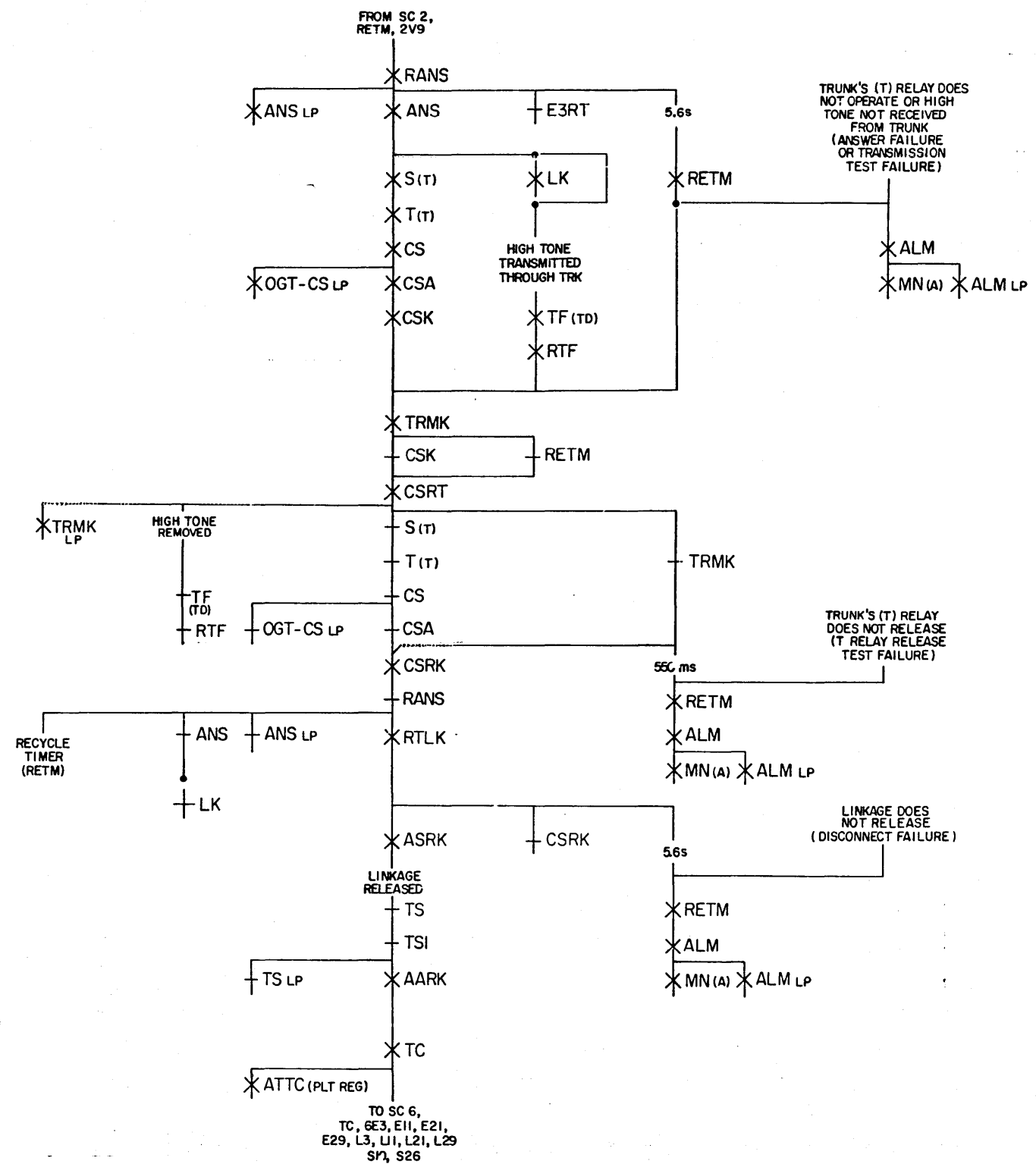
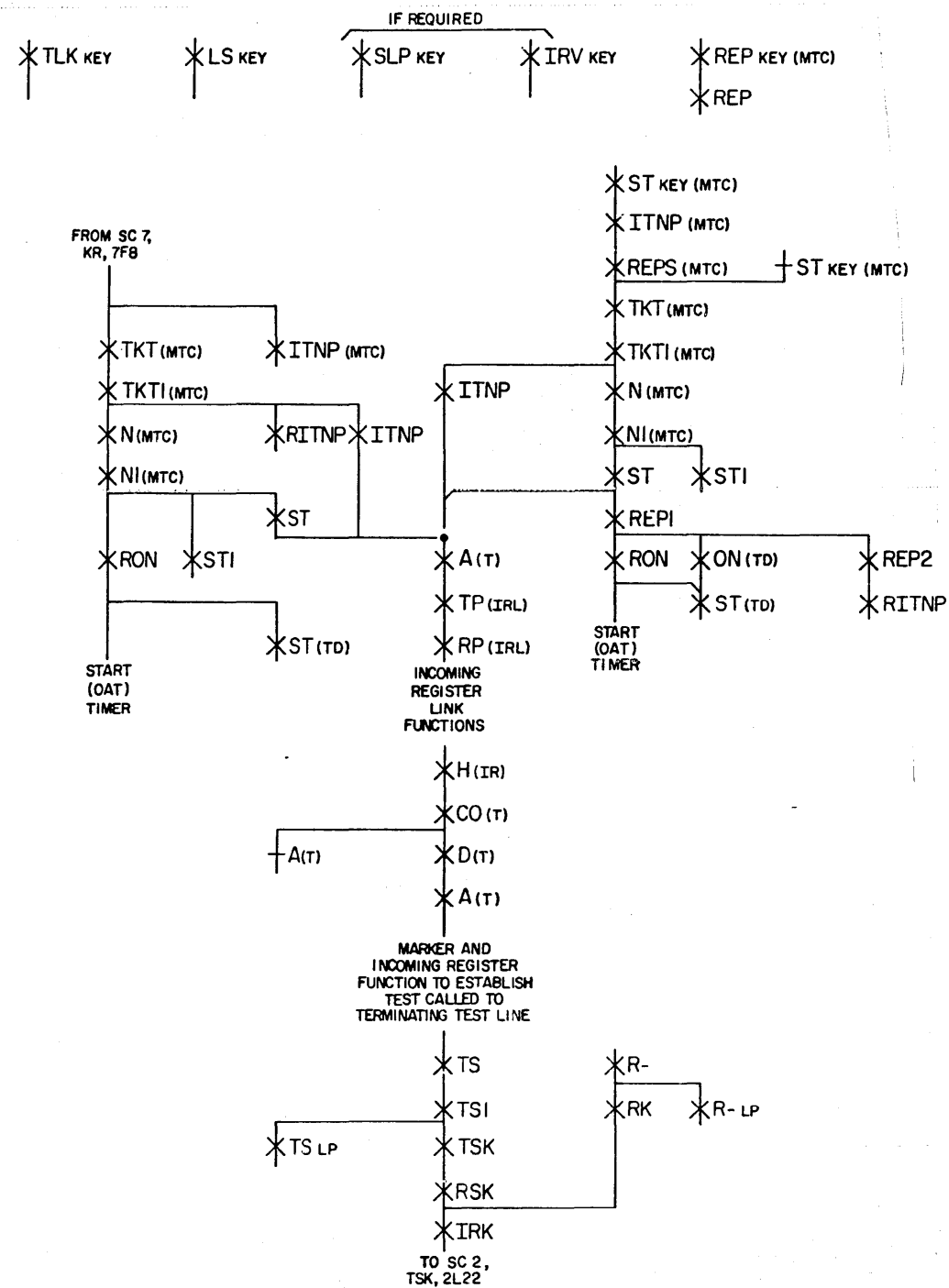
SD-25918-01-E2

BELL TELEPHONE LABORATORIES
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SC 3 AUTOMATIC RECYCLE ON INCOMING (ITNP) TRUNK TEST (SEE NOTE 1)



NOTES:
1. FOR LEGEND OF CIRCUIT ABBREVIATIONS ON SEQUENCE CHARTS, SEE E1.

SD-25918-01-E3

ISSUE
70B

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-E3

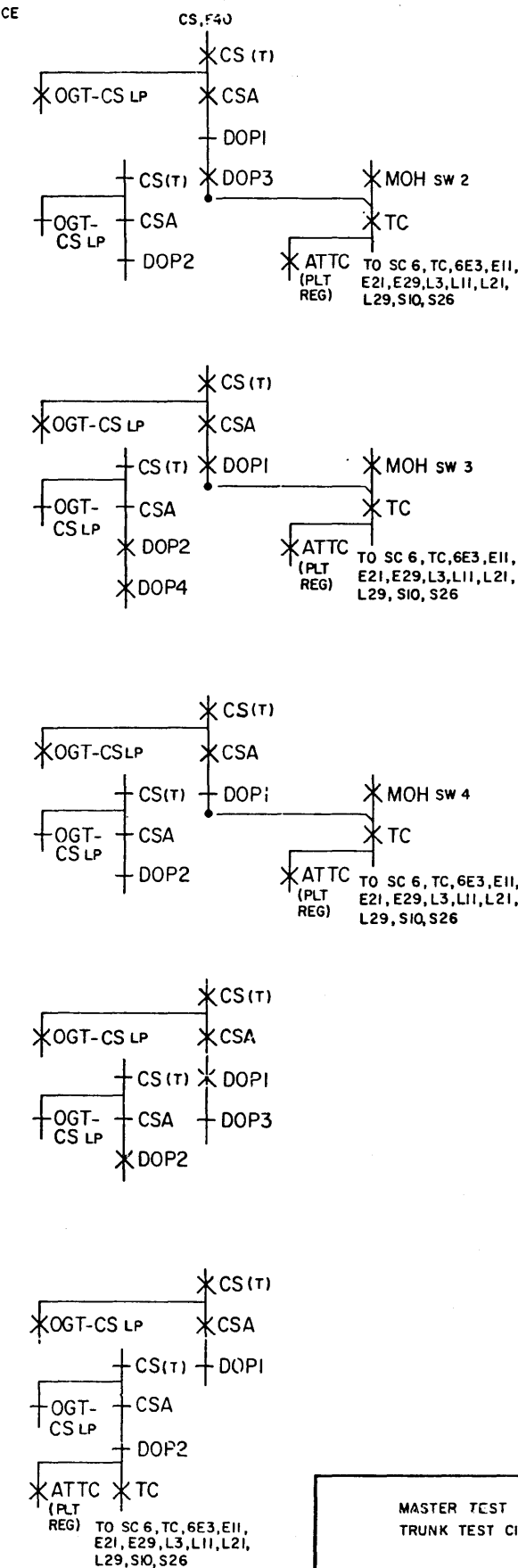
BELL TELEPHONE LABORATORIES
INCORPORATED

6S

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NUMBER OF PULSES FROM TEST LINE IN DISTANT OFFICE

<u>NON-SYNC TEST LINE</u>	<u>SYNC TEST LINE</u>
1	2
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
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54	54
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56	56
57	57
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66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
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92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100



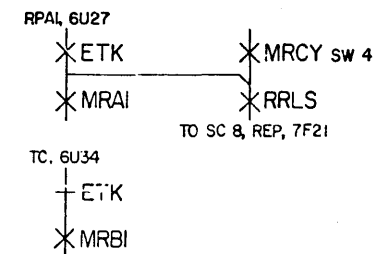
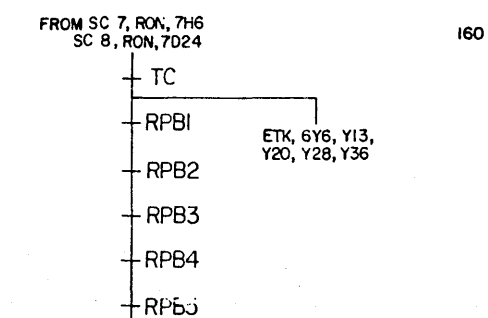
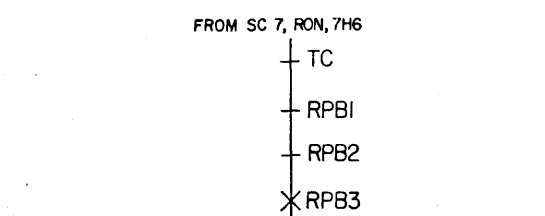
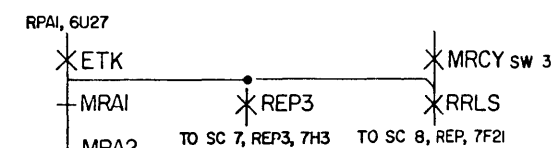
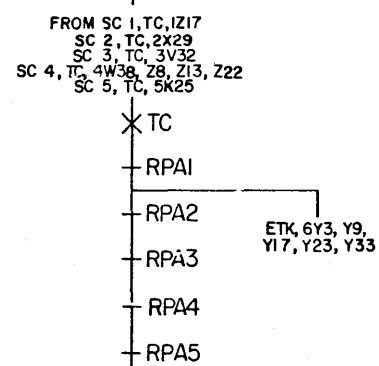
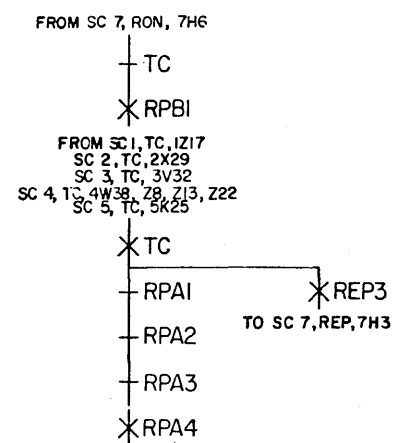
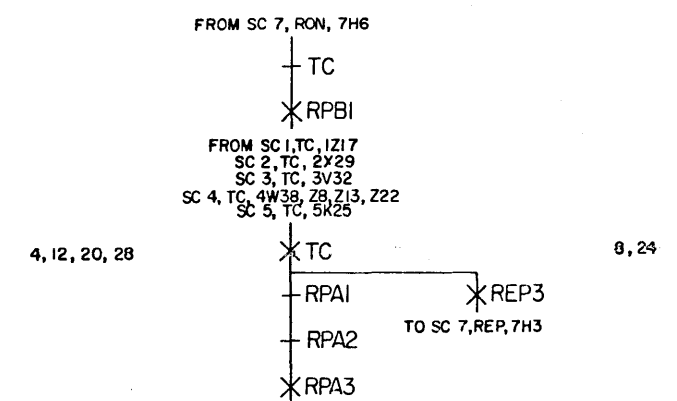
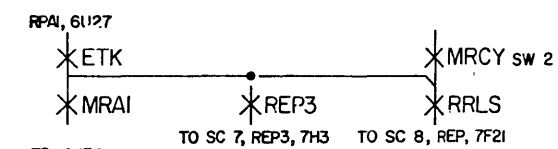
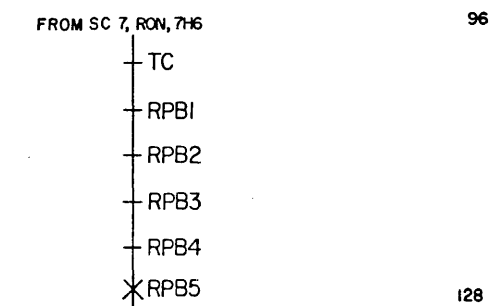
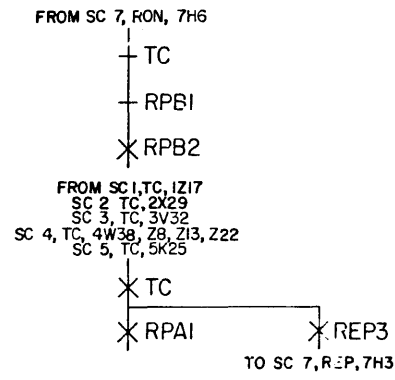
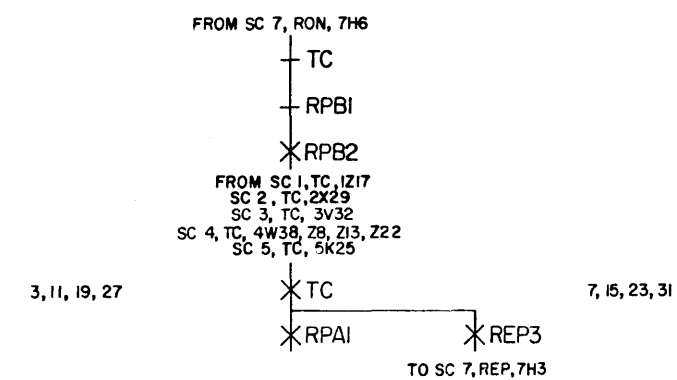
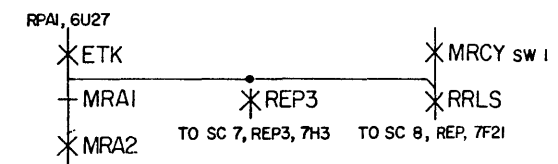
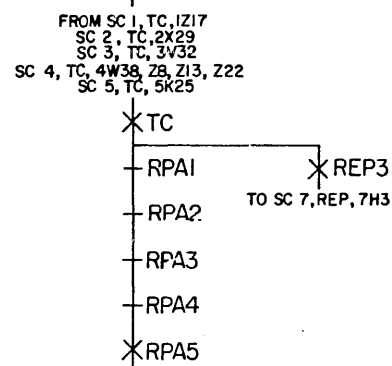
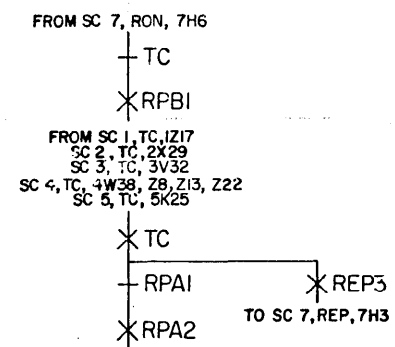
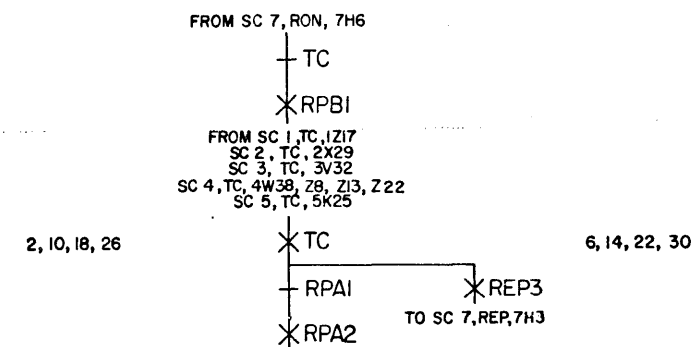
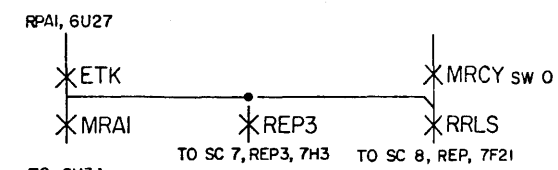
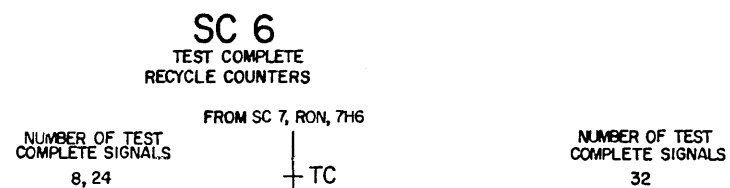
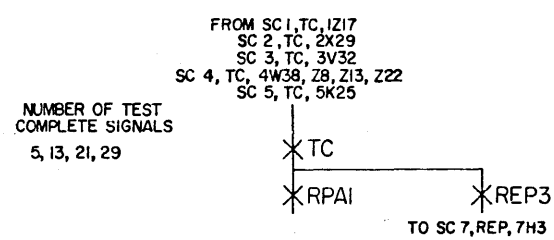
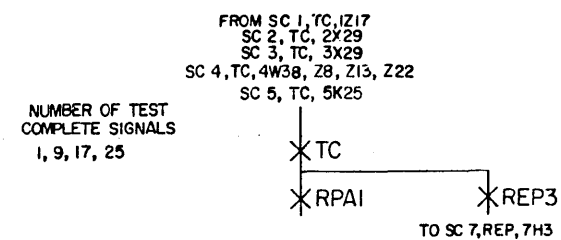
ISSUE
62A

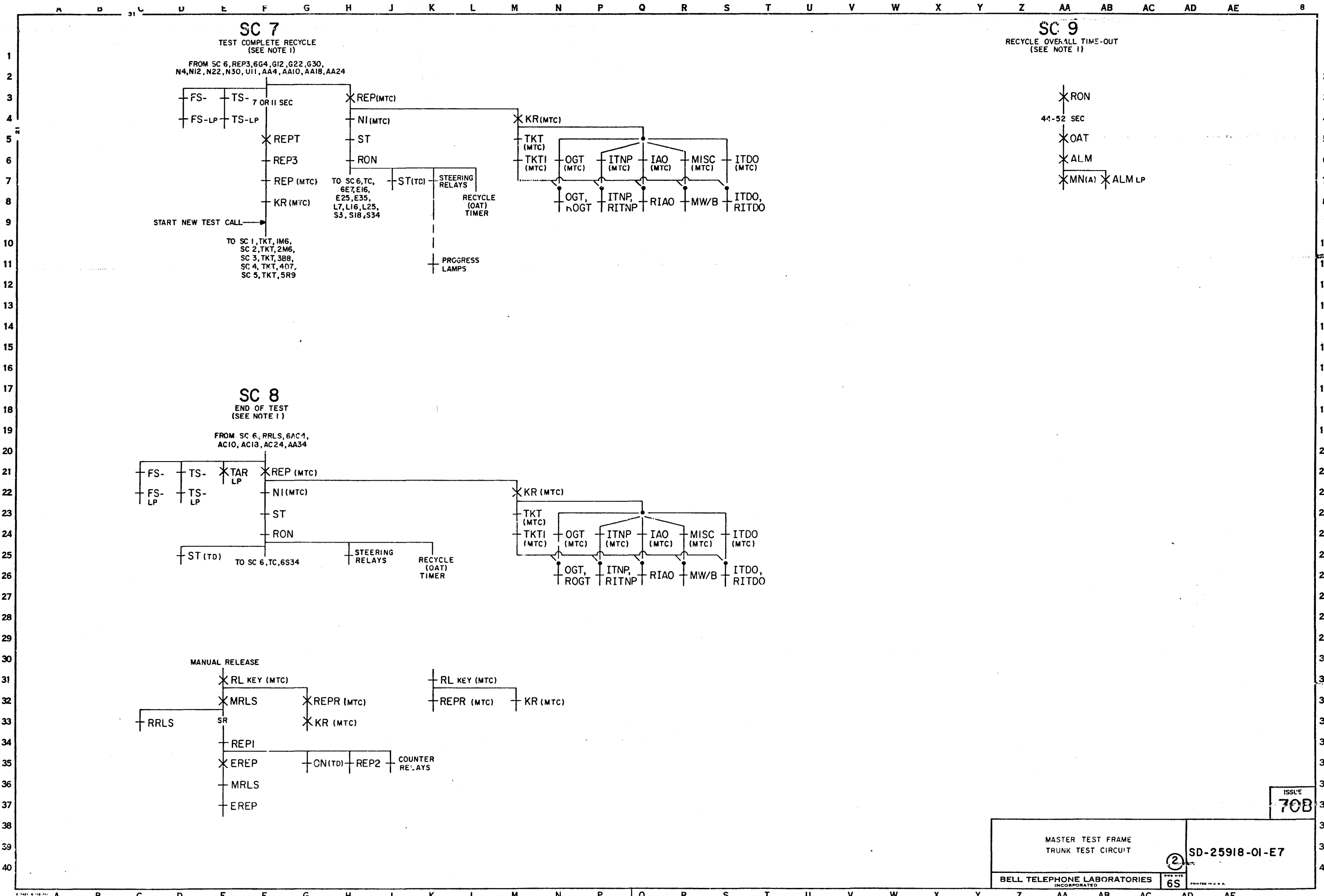
② SD-25918-01-E4

BELL TELEPHONE LABORATORIES
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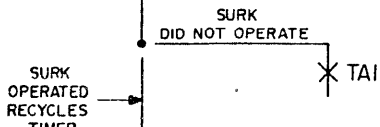
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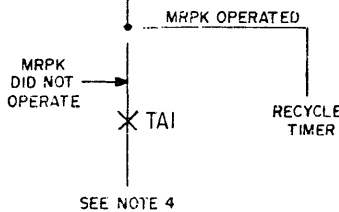


SD-25918-01-E7

SC 10



SC 11



- NOTES:
1. FOR LEGEND OF CIRCUIT ABBREVIATIONS ON SEQUENCE CHARTS, SEE E1.
 2. ASSUME (SU) SWITCH SET TO 2 (TWO SURCHARGE UNITS).
 3. ASSUME (MMU) SWITCH SET TO 3 (THREE MULTIMESSAGE UNITS).
 4. IF INSUFFICIENT PULSES RECEIVED, (UC) RELAY (UNDERCHARGE) OPERATES TO LIGHT (UC) LAMP FOLLOWING FIVE SECOND TIME OUT. IF TOO MANY PULSES RECEIVED, (OC) RELAY (OVERCHARGE) OPERATES TO LIGHT (OC) LAMP, PREVENT MRPK OPERATION, AND CAUSE TIME OUT.

ISSUE
74A

MASTER TEST FRAME
TRUNK TEST

SD-25918-01-E8

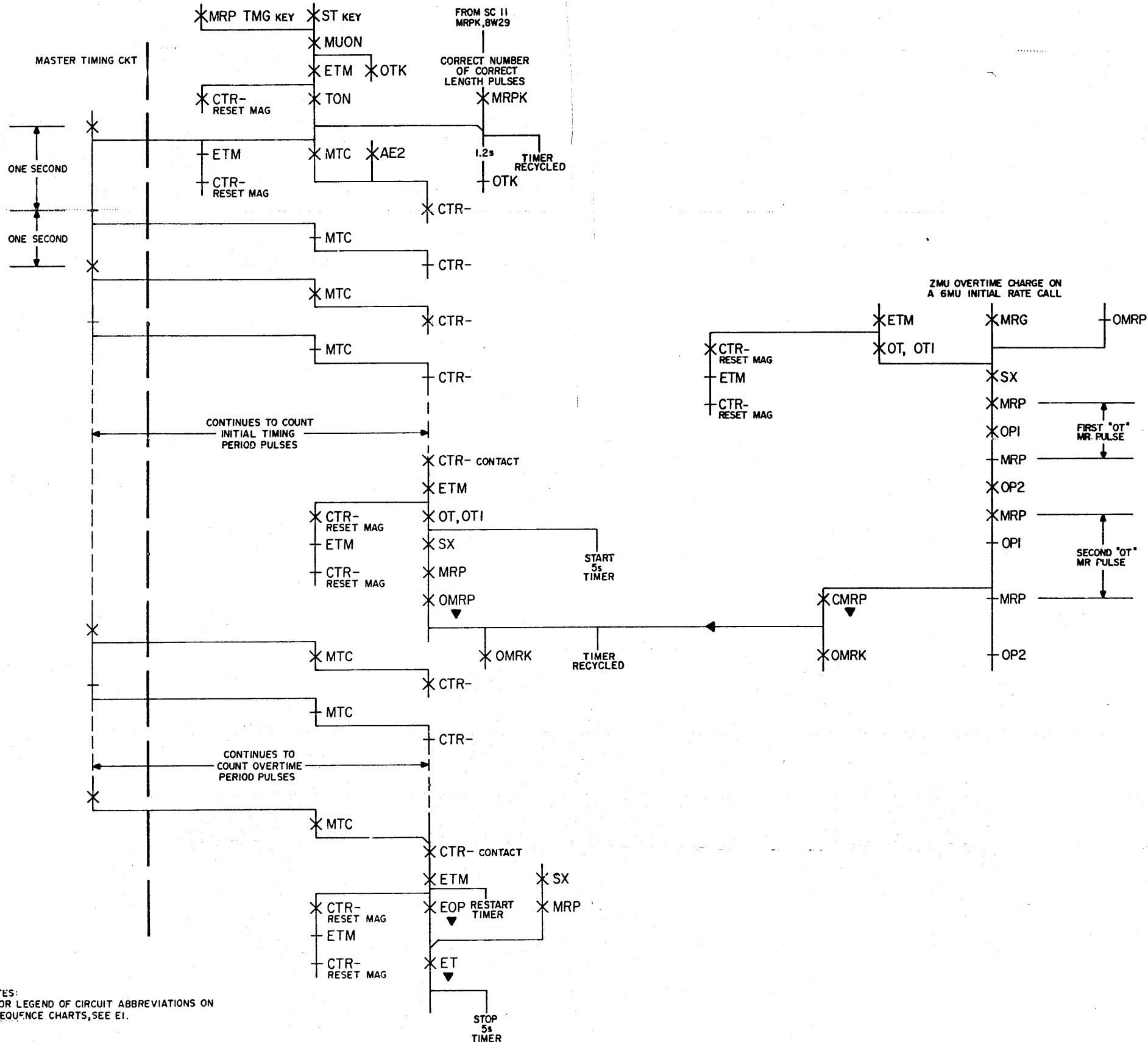
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INCORPORATED

69

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

SC 12

CHECKING INITIAL AND OVERTIME PULSING
MULTIMESSAGE UNIT BILLING



NOTES:
1. FOR LEGEND OF CIRCUIT ABBREVIATIONS ON
SEQUENCE CHARTS, SEE E1.

ISSUE
81A

MASTER TEST FRAME
TRUNK TEST

SD-25918-01-E9

BELL TELEPHONE LABORATORIES
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6S

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DRAWING
ISSUE
514
520
530
55A
56D

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																			
IRK	1/2AK22		35	215			(PTP)0		1U(1RK)	GRD			0		27.5	26	MOUNTED WITH (RSK)		
2D	AF532		22	204			8B(2F)		1U(2D)	GRD		P	0		21	20			
									2U(2D)		S	0	FS		11.5	10.9			
2E1	AG19		33	4058					U(2E1)	GRD	16		H		2	1.8			
												R			1	1.3			
2F	AF95		22	244			8M(2F)		U(2F)	GRD					30	115	CONN DIR BAT. TO L(2F)		
2H	AG26		22	2228					U(2H)	GRD			0	FS	26.5	25			
												H			4.1	3.9			
												R			2.1	2.5			
2RK	1/2AK22		35	216			(ETRP)0		1L(2RK)	GRD			0		27.5	26	MOUNTED WITH (ETRP)		
2RT	1/2AK22		35	216					1U(2RT)	GRD			0		27.5	26	MOUNTED WITH (EPTP)		
2S	AJ26		22	558				1L(2S)	2U(2S)	M		P/S	0		16.5	15.5			
												R			6.4	6.8			
2S1	AG7		22	2418					U(2S1)	GRD			0	FS	17.5	16.5			
												H			3.2	3			
2SA	AJ138		42	56				1L(2SA)	2U(2SA)	M		P/S	0		12.6	12			
												R			5.2	5.5			
2SV	S520		33		10				12(2TTB)	GRD		P	0		15	14.2			
												NO			12.1	12.8			
2T	1/2AK22		22	216					1L(2T)	GRD			0		27.5	26	MOUNTED WITH (RER)		
2TA	AJ88		33	303				1L(2TA)	2U(2TA)	M		P/S	0		26.5	25			
2TAS	S507		33						9(2TTB)	GRD			0	FS	1.1	1			
												NO			.8	.9			
2TBD	AJ83		33	249					U(2TBD)	GRD			0		13.3	12.6			
2TF	AF32		33	208			L(2TF)		U(2TF)	B/G			0		32.5	30.5			
2TM	AF64		22	219					U(2TM)	GRD			0		11.2	10.6			
2TO	AF532		22	204					1U(2TO)	GRD		P	0		21	20			
2TOL	AJ15		33	249					2U(2TO)	GRD		S	0		11.5	10.9			
2TT	AF79		33	205					U(2TT)	GRD			0		43	40.5			
2TTB	AJ83		33	249			(2TA)NO		U(2TTB)	GRD			0		9.7	9.2			
													0		13.3	12.6			
3DC	U318	XU	1	150/179	H	50			T(3DC)	GRD			0		11.7	11.1			
3RT	1/2AK22		35	216					1L(3RT)	GRD			0		27.5	26		MOUNTED WITH (E3RT)	
4E	AF502	TK	26	231					U(4E)	GRD			0		80	72			
	AF116	TJ		285											58.5	55.5			
4F	AF95		26	244			10(4F), (4TT)NO		U(4F)	GRD			0		130	115		CONN DIR BAT. TO L(4F)	
													NO		40	43			
4H	AG38		26	2138					1U(4H)	GRD		P	0	FS	49.5	47			
												H			8.4	7.9			
												R			5.2	6			
							2(4H)	2L(4H)	2U(4H)	B/G		S	0	100	61.5				
4LPR	AF127		26	215				1L(4LPR)		+130		P	0		58	55			
									2L(4LPR)	GRD		S	0		58				
4PT	AJ15		19	249					U(4PT)	GRD			0		43	40.5			
4S	AJ26		26	558				1L(4S)	2U(4S)	M	1	P/S	0		16.5	15.5			
4S1	AG7		26	2418					U(4S1)	GRD			0		17.5	16.5			
												H			3.2	3			
												R			1.6	1.9			

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	
4SV	S520		26	8		10	(4TM)0	3(4TM)					P	0		15	14.2	
							(4TM)0, (4E)0, 6M(4E)	7(4TM)				2	S	0		15.5		
4SVA	1/2AK22		19	216			5(4SVA)	2L(4SVA)	1L(4SVA)	B/G				0		29	26	MOUNTED WITH (DC2)
4TM	AJ83		26	249					U(4TM)	GRD				0		13.3	12.6	
4TS	U227	XK	11	119/103			9, 10T(4TS), 12B(4A)		13T(4TS)	GRD				0		11.1	10.5	
4TT	AJ15		26	249			10, 11(4TT)		U(4TT)	GRD				0		45	40.5	
4TTK	U1421	XW	11	169/161	H	56	1(4PT)		12T(4TTK)	GRD				0		14.5	13.8	
4W	AJ504	XJ	11	57			11M(4W)		U(4W)	GRD				0		12.4	11.2	
	AJ5	XK		220												13.3	12.6	
4WB	B-325		26	6		30	(4E)0	9(4TT)	7(4TT)	M			P/S	0	FS	.9	.8	
4WIT	AF30	XJ	11	217					U(4WIT)	GRD				0		8.7	8.2	
	AJ5	XK		220												13.3	12.6	
4WL	AJ15		19	249			(DC7)0		U(4WL)	GRD				0		43	40.5	
4WS	AJ26		19	558				1L(4WS)	2U(4WS)	M	1		P/S	0		16.5	15.5	
4WT	AF30		11	217					U(4WT)	GRD				0		8.7	8.2	WINDING ALONE
																46.5	44	CKT COMB. (4WT) & (TOL)
4WTB	U1333		11	126/126	H	59			10T(4WTB)	GRD				0		30.5	29	
911	AJ83	RZ	1	249					U(911)	GRD				0		13.3	12.6	
A	UAB4		1	205/136		SPL		1B(T)	3B(T)	M	18		P/S	0	25	6.4	6.1	ARM. TRVL 0
																1.7	1.8	ARM. TRVL 23 MAX
																0		
A1	Y321	WX	1	238/200		35			T(A1)	GRD	3			0	FS	19.5	18.5	
																3.6	3.4	
																1.8	2.1	
AA	U1182	HW	1	197/161		59			T(AA)	GRD				0		31.5	30	
AARK	1/2AK22		35	216					1L(AARK)	GRD				0		27.5	26	MOUNTED WITH (TC)
ACD	AJ83	WS	1	249					U(ACD)	GRD				0		13.3	12.6	
ACDC	AJ83	WZ	1	249					U(ACDC)	GRD				0		13.3	12.6	

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

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SD-25918-01-F1

SD-25918-01-F1

CIRCUIT REQUIREMENTS																			
APPARATUS				MECH REQ			CIRCUIT PREPARATION				SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS	DRAWING ISSUE	
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP		TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA			
ACDL	AJ83	W5	1	249					U(ACDL)	GRD			0		13.3	12.6			
ACDS	AF145	W2	1	269				L(ACDS)	U(ACDS)	B/G			0		17	16			
ACDT	AG36	W2	1	296B					U(ACDT)	GRD	4		0	FS	15.5	14.7			
ACRL	1/2 AK4	QV	1	202					U(ACRL)	GRD			0		11.9	11.3	MOUNTED WITH (ACST)		
ACST	1/2 AK4	OV	1	202					U(ACST)	GRD			0		11.9	11.3	MOUNTED WITH (ACRL)		
AE	UI68		2	108/106	H	47	4T(AE), 2T(AE1)		T(AE)	GRD			0		19.5	18.5			
AE1	U735		2	132/132	H	47	3B(E)		T(AE1)	GRD			0		17.5	16.5			
AE2	1/2 AK4	46		202			6(TAI)		U(AE2)	GRD			0		11.9	11.3	MOUNTED WITH (OC)		
AIS	AJ83	TA	1	249					U(AIS)	GRD			0		13.3	12.6			
AIT	1/2 AK4	PK	1	202					U(AIT)	GRD			0		11.9	11.3			
ALM	AJ5		35	220					U(ALM)	GRD			0		13.3	12.6			
AMA	UI27		12	148/108	H	47			TF(AMA)	GRD		P	0		22	20.5			
									TR(AMA)	GRD		S	0		18				
ANS	UI250		1	111/101	H	29			T(ANS)	GRD			0		6.3	6			
AS	S507		1						3B(ST)	GRD	5		0	FS	1.1	1			
													NO		.8	.9			
AS1	1/2AK22	WP	1	216					U(AS1)	GRD			0		27.5	26	MOUNTED WITH (TS1)		
AS2	AJ5	PS	1	220					U(AS2)	GRD			0		13.3	12.6			
ASK	1/2AK22	35		216			(TSK)O		U(ASK)	GRD			0		27.5	26	MOUNTED WITH (TSK)		
ASRK	1/2AK22	35		216			(TSRK)O		U(ASRK)	GRD			0		27.5	26	MOUNTED WITH (RANN)		
AT	AJ5	Y0	1	220					U(AT)	GRD			0		13.3	12.6			
ATNI	AJ83		13	249					U(ATNI)	GRD			0		13.3	12.6	WINDING ALONE		
															29.5	28	CKT COMB. (ATNI)&(ATNT)		
ATNT	AJ83		13	249					U(ATNT)	GRD			0		13.3	12.6	WINDING ALONE		
															29.5	28	CKT COMB. (ATNI)&(ATNT)		
ATN	AJ83	QA	1	249					U(ATNT1)	GRD			0		13.3	12.6			
ATT	AJ5	UX	11	220					U(ATT)	GRD			0		13.3	12.6			
BD	1/2AK47		29	202			7(GE)		U(BD)	GRD			0		13.2	12.5	MOUNTED WITH (TMB)		
BHT	AJ15	TT	30	249					U(BHT)	GRD			0		43	40.5			
BIT	AJ83		37	249					U(BIT)	GRD			0		13.3	12.6			
BST	AJ83		37	249					U(BST)	GRD			0		13.3	12.6			
CAMA	U58	YA	2	127/150	H	50			U(CAMA)	GRD			0		11.3	10.7			
CAMA1	U58	YE	2	127/150	H	50			U(CAMA1)	GRD			0		11.3	10.7			
CATN	AJ83		30	249					U(CATN)	GRD			0		13.3	12.6			
CATT	AJ15	QX	44	249					U(CATT)	GRD			0		43	40.5			
CD	AJ83		41	217					U(CD)	GRD			0		13.3	12.6			
CDT	AG36	QB	41	296B					U(CDT)	GRD	4		0		15.5	14.7			
CDH	AJ15	QX	44	249					U(CDH)	GRD			0		43	40.5			
CDL	AJ15	QX	44	249					U(CDL)	GRD			0		43	40.5			
CDR	1/2AK22	41		216				2U(CDR)	BAT.				0		27.5	26	MOUNTED WITH (CDT)		
CDT	1/2AK22	41		216					U(CDT)	GRD			0		27.5	26	MOUNTED WITH (CDR)		
CL1	1/2AK6		24	2					U(CL1)	GRD			0		29	27.5	MOUNTED WITH (CL2)		
CL2	1/2AK6		24	2					U(CL2)	GRD			0		29	27.5	MOUNTED WITH (CL1)		

CIRCUIT REQUIREMENTS																			
APPARATUS				MECH REQ			CIRCUIT PREPARATION				SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS	DRAWING ISSUE	
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP		TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA			
CL3	1/2AK6		24	2					U(CL3)	GRD			0		29	27.5	MOUNTED WITH (CL4)	51A	52D
CL4	1/2AK6		24	2					U(CL4)	GRD			0		29	27.5	MOUNTED WITH (CL3)	53D	55A
CL5	1/2AK6		24	2					U(CL5)	GRD			0		29	27.5	MOUNTED WITH SPARE	56D	57D
CLT	AJ83		31	249			B(CW)		U(CLT)	GRD			0		13.3	12.6		58A	
CN	U553		1	108/108	H	47		B(CN)	T(CN)	B/G			0		59	56			
													NO		37	39.5			
CNA	U1182	UJ	1	197/161	H	59	(CN)O		T(CNA)	GRD			0		31.5	30			
	U1238	UI		110/101		35									14	13.3			
CNB	U1182	UJ	1	197/161	H	59			T(CNB)	GRD			0		31.5	30			
	U1238	UI		110/101		35									14	13.3			
COD	AJ15		19	249					U(COD)	GRD			0		43	40.5			
COIN	1/2AK4		43	202					U(COIN)	GRD			0		11.9	11.3	MOUNTED WITH (RC)		
CP	239GN	N	1	A				B(CN)	IT(CNB)	B/G		S	0		-40	1.9			
	OR 280R	M											NO		OC	.7			
CPO	280FG		11	B				8B(4WT)	12B(4WT)	B/G			0		-14	.2			
													NO		3.9	3.7			
													R		14	1.4			
CPT	280FG	RH	1	B			(CNB)O	IT(CNB)	5T(CNB)	B/G			0		-14	.2			
													NO		3.9	3.7			
													R		14	1.4			
CPT	280BA	RO	1	B			(CNB)O	IT(CNB)	5T(CNB)	B/G			0		-120	1.9			
													NO		8.8	8.3			
													NO		120	2.2			
													R		1.3	1.4			
CPT1	AJ15	TF	1	249					U(CPT1)	GRD			0		43	40.5			
	U1113	TE		114/114		50			U(CPT1)						22.5	21			
CS	206GU	U						2T(S)	28(S)	B/G	6		0		-13	5.4	5.4	WITH V OPTION	
	OR 2800	P	1	B				10T(ST)	1T(ST)	B/G			0		-13	5.2	5.4	WITH T OPTION	
													NO		1.4	1.5			
													NO		2				
													NO		1.4	1.5			
													R		13	1.4	1.5		
													NO		3				
													NO		1.4	1.5			
													NO		3.9	3.7			
													R		14	1.4	1.5		

MASTER TEST FRAME
TRUNK TEST CIRCUITBELL TELEPHONE LABORATORIES
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ISSUE
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CIRCUIT REQUIREMENTS

APPARATUS				FIG.	MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW FEQT					REMARKS
DESIG	CODE	OPT	BSP FIG.		CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WOG	TEST FOR			AFTER SOAK MA	TEST MA	READJ MA			
								CONN BAT.	CONN GRD										
CS1	280FG		25					5(WKT)	7(WKT)	B/G				0		-14		3	OPERATE (TLK1) KEY
														NO			2		
														0		3.9	3.7		
														R	14	1.4	1.5		
CS2	316E		34											0	9		3		
														R			3		
CSA	1/2AK22		35						1L(CSA)	GRD				0		27.5	26	MOUNTED WITH (CSRK)	
CSK	1/2AK22		35						1U(CSK)	GRD				0		27.5	26	MOUNTED WITH (ESK)	
CSRK	1/2AK22		35				(CSRK)0		1U(CSRK)	GRD				0		27.5	26	MOUNTED WITH (CSA)	
CSRT	AJ15		35				(CSRK)0		U(CSRT)	GRD				0		43	40.5		
CSW	AJ5	YV	1						U(CSW)	GRD				0		13.3	12.6		
CSWI	1/2AK22	YU	1						1U(CSWI)	GRD				0		27.5	26	MOUNTED WITH (CTL)	
CTL	1/2AK22	YO	1						1L(CTL)	GRD				0		27.5	26	MOUNTED WITH (CSWI)	
CTX	AJ29		14					1L(CTX)	2U(CTX)	B/G	1.7, 8	P/S		0		FS	7.9	7.5	
														R			3.6	3.8	
CTX1	1/2AK4		18						1L(CTX1)	GRD				0			11.9	11.3	MOUNTED WITH (CTX2)
CTX2	1/2AK4		18						1L(CTX2)	GRD				0			11.9	11.3	MOUNTED WITH (CTX1)
CW	AJ15		31				(CWA) NO		U(CW)	GRD				0		43	40.5		
CWA	1/2AK4		31						1L(CWA)	GRD				0		11.9	11.3	MOUNTED WITH SPARE	
CWSV	AJ50		31					1L(CWSV)	2U(CWSV)	M	P/S			0		10.5	10		
														NO		5.2	5.5		
CWT	AJ83		31				8(CW)		U(CWT)	GRD				0		13.3	12.6		
DBR	1/2AK30		51				(PID)0		1L(DBR)	GRD				0		23.5	22	MOUNTED WITH SPARE	
DC0	AJ15		19						U(DC0)	GRD				0		43	40.5		
DC1	AJ15		19						U(DC1)	GRD				0		43	40.5		
DC2	1/2AK22		19						1U(DC2)	GRD				0		27.6	26	MOUNTED WITH (45VA)	
DC3	AJ15		19						U(DC3)	GRD				0		43	40.5		
DC4	1/2AK22		19						1U(DC4)	GRD				0		27.5	26	MOUNTED WITH (REC5)	
DC5	AJ15		19						U(DC5)	GRD				0		43	40.5		
DC6	1/2AK22		19						1L(DC6)	GRD				0		27.5	26	MOUNTED WITH (GENO)	
DC7	AJ15		19						U(DC7)	GRD				0		43	40.5		
DC8	AJ15		19						U(DC8)	GRD				0		43	40.5		
DCM	AJ83	RA	1						U(DCM)	GRD				0		13.3	12.6		
DCST	AJ15		19						U(DCST)	GRD				0		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 PHES	ARM. TRVL	BLOCK OR INSULATE			TEST CLIP DATA		TEST WDG	TEST FOR		AFTER SOAK MA
DE	U168		2	108/106	H	47	4T(DE), 2T(DE1)		1(DE)	GRD		0		19.5	18.5	
DE1	U735		2	132/132	H	47	38(DE)		1(DE1)	GRD		0		17.5	16.5	
DOP1	1/2AK22		35	216			(CSA)0		1L(DOP1)	GRD		0		27.5	26	MOUNTED WITH (DOP2)
DOP2	1/2AK22		35	216					1U(DOP2)	GRD		0		27.5	26	MOUNTED WITH (DOP1)
DOP3	1/2AK22		35	216					1L(DOP3)	GRD		0		27.5	26	MOUNTED WITH (DOP4)
DOP4	1/2AK22		35	216			(DOP3)0		1U(DOP4)	GRD		0		27.5	26	MOUNTED WITH (DOP3)
DPE	AJ125	RP	1	299					U(DPE)	GRD		0		10.9	10.3	
DPR	AF42		51	224					U(DPR)	GRD		0		100	75	
DR	U422		5	132/101	H	47			T(DR)	GRD		0		14.4	13.7	
DS1,2	316E		42	2								0	9	3		
DSUP	AJ83		42	249					U(DSUP)	GRD		0		13.3	12.6	
E	U165	YX	8	132/101	H	47			T(E)	GRD	9	0		19	18	WINDING ALONE
														39.9	37.8	
E1	Y95		8	175/115	H	47			T(E1)	GRD		0		21	20	
												H	27.5	2.4	2.2	
												R		9	1.2	
E3RT	1/2AK22		35	216			(SK)0		1U(E3RT)	GRD		0		27.5	26	MOUNTED WITH (3RT)
EC	AJ15		19	249					U(EC)	GRD		0		43	40.5	
E-M	U189	E		148/148	H	47			T(E-M)	GRD		0		10.1	9.6	
	U1262	G		149/183										12.9	12.2	
EMI	AJ83	QF	1	249					U(EMI)	GRD		0		13.3	12.6	
END	AG2	XM	14	36B					U(END)	GRD		0		12.4	11.8	
												H	FS	2.1	2	
												R		1.1	1.4	
END1	AG4	XM	14	39B					U(END1)	GRD		0		12.4	11.8	REMOVE (RDY) LAMP FROM SOCKET
												H	FS	1.7	1.6	
												R		9	1.2	
EOP	AJ75		48	291					U(EOP)	GRD		0		6.9	6.5	
EPTP	1/2AK22		35	216			(2RT)0		1L(EPTP)	GRD		0		27.5	26	MOUNTED WITH (2RT)
ER	U422		5	132/101	H	47			T(ER)	GRD		0		14.4	13.7	
EREP	1/2AK4		35	202					1L(EREP)	GRD		0		11.9	11.3	MOUNTED WITH (REP)
ESK	1/2AK22		35	216			(CSK)0		1L(ESK)	GRD		0		27.5	26	MOUNTED WITH (CSK)
ESS	AJ83	XZ	1	249					U(ESS)	GRD		0		13.3	12.6	
ET	1/2AK47		48	202					1U(ET)	GRD		0		13.2	12.5	MOUNTED WITH (DMRK)
ETK	1/2AK4		35	202					1L(ETK)	GRD	17	0		11.9	11.3	MOUNTED WITH (REP3)
												0	36	12.8	12.1	
ETM	AG1		48	35B					U(ETM)	GRD				2.7	2.5	
												R		1.3	1.6	
ETRP	1/2AK22		35	216			(3RT)0		1U(ETRP)	GRD		0		27.5	26	MOUNTED WITH (2RK)
FL	AF113	TT	30	273					U(FL)	GRD		0		8.7	8.2	
FS0-29	318B		35				(MRLS)0		19,29,39, 49,59(FS-)	GRD	19	0		14		
												R		1.1		
G	1/2AK22		19	216					1L(G)	GRD		0		27.5	26	MOUNTED WITH (LH)
G1	AJ107		28	226				L(G1)	U(G1)	B/G	1	0		13.4	12.7	SEE TIMING REQ
GD	AJ15		29	249			(SDTA)0		U(GD)	GRD		0		43	40.5	

MASTER TEST FRAME
THUNK TEST CIRCUIT

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BELL TELEPHONE LABORATORIES
HUNTSVILLE, ALA.

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CIRCUIT REQUIREMENTS																			
APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET	SEE TEST	DIRECT CURRENT FLOW REQ				REMARKS		
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK MA	TEST MA	READJ MA			
								CONN BAT.	CONN GRD										
GEN0	I/2AK22		19	216					1U(GEN0)	GRD			0		27.5	26	MOUNTED WITH (DC6)		
GEN1	AJ15		19	249					U(GEN1)	GRD			0		43	40.5			
GEN2	I/2AK22		19	216					1L(GEN2)	GRD			0		27.5	26	MOUNTED WITH (GEN3)		
GEN3	I/2AK22		19	216					1U(GEN3)	GRD			0		27.5	26	MOUNTED WITH (GEN2)		
GEN4	AJ15		19	249					U(GEN4)	GRD			0		43	40.5			
GEN5	AJ15		19	249					U(GEN5)	GRD			0		43	40.5			
GL	AF9	WE	1	213					U(GL)	GRD			0		8.7	8.2			
GLW	I/2AK30	WE	1	202			6B(GL),5(GLW)	2L(GLW)	2M(GL)	B/G			0		24.5	22	MOUNTED WITH (GLZ)		
GLZ	I/2AK30	WE	1	202			6B(GL),5(GLW)	2U(GLZ)	2M(GL)	B/G			0		23.5	22	MOUNTED WITH (GLW)		
GNST	AJ131		19	336			2M(GNST)		U(GNST)	GRD			0		46.5	42			
GSC	AG27	VF	1	458					1U(GSC)	GRD	P	U	FS	34	32				
													H		4.8	4.5			
													R		2.7	3.5			
GTK	280BA	UZ	J	B				7(CPT1)	12(CPT1)	B/G		0	-120		2.6				
													NO		1.9				
													0		8.8	8.3			
													NO	120	2.2	2.4			
													R		1.3	1.4			
HBD	AJ88	WI	19	303			(PRE)0	1L(HBD)	2U(HBD)	M	P/S	0	FS	26.5	25				
													R		6.7	7.1			
HOLD	I/2AK22		42	216					1U(HOLD)	GRD			0		27.5	26	MTL WITH (TM3)		
HS	S38		1						RBI(HS)	2R(HS)	B/G		0		1.7	1.6			
													NO		1.3	1.4			
IDT	AJ15	VA	19	249				1M(IDT)	U(IDT)	GRD			0		45	40.5			
IE	U168		2	108/106	H	47	4T(IE), 2T(IE1)		1(IE)	GRD			0		20.5	18.5			
IE1	U235		2	132/132	H	47	3B(IE)		T(IE1)	GRD			0		17.5	16.5			
INC	UB11	ZY	8	178/163	H	59			T(INC)	GRD			0		17	16			
INCA	AJ15		19	249					U(INCA)	GRD			0		43	40.5			
IS	UA1		1	205/205	H	SP		BF(IS)	TR(IS)	M	P/S	0	FS	20	19		ARM. TRVL 23 MAX		
													NO		13.5	14.2			
													R		10.2	10.8			

CIRCUIT REQUIREMENTS																		
APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS
DESIG	CODE	OPT	F.G.	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									
ITDC	U594		I		123/120	H	35		T(ITDC)	GRD			0		6.9	6.5		
ITNP	U166	UP	I		121/108	H	50		T(ITNP)	GRD		0			13.1	12.4	WINDING ALONE	
	U333	UQ			150/150			(ATNI)NO	T(ITNP)	GRD				22.5	21.5	CKT COMB. (ATNI)&(ITNP)		
														15.5	14.4	WINDING ALONE		
									T(ITNP)	GRD					26.5	25.0	CKT COMB. (ATNI)&(ITNP)	
ITNPI	AJ15		25		249				U(ITNPI)	GRD			0		43	40.5		
ITT	AJ5		25		220				U(ITT)	GRD			0		13.3	12.6		
LK	S512	ZE	I					RBI(LK)	2RT(LK)	B/G			0		11.6	11		
													NO		9.4	9.9		
LLP	AJ83	VB	I		249				U(LLP)	GRD			0		13.3	12.6		
LLS	AJ88	WU	I		303			1L(LLS)	2U(LLS)	M	P/S	0		26.5	25			
												R		6.7	7.1			
LOOP	AJ83		42		249				U(LOOP)	GRD			0		13.3	12.6		
LPR	AF127		19		215			1L(LPR)		+130	P	0		58	55			
										2L(LPR)	GRD		S		58			
LS	S34		I					RBI(LS)	2RT(LS)	B/G			0		28	26.5		
													R		12	12.7		
LSK	AJ26	UX	11		558				1L(LSK)	2U(LSK)	M	P/S	0		16.5	15.5		
LTK	I/2AK22	XZ	I		216				1L(LTK)	GRD			0		27.5	26	MOUNTED WITH (SSX)	
LVK	AF67		15		207				L(LVK)	U(LVK)	B/G		0		7.2	6.8		
LW	I/2AK22		19		216				2U(LW)	BAT.			0		27.5	26	MOUNTED WITH (G)	
LX	AJ15		19		249		(TX)NO		U(LX)	GRD			0		43	40.5		
MC	U1250		I		111/101	H	29		T(MC)	GRD			0		6.3	6		
MC1	I/2AK22		35		216				1L(MC1)	GRD			0		27.5	26	MOUNTED WITH (RTRD)	
MC2,3	AJ202		35		500				U(REL TST)	GRD			0		43	40.5	WINDING ALONE	
															95	90	PAR. COMB. (MC2) & (MC3)	
MFC	AJ83		31		217				U(MFC)	GRD			0		13.3	12.6		
MFM	AJ15	TT	30		249				(MFC)	GRD			0		43	40.5		
MASTER TEST FRAME TRUNK TEST CIRCUIT BELL TELEPHONE LABORATORIES INCORPORATED SD-25918-01-F																		

DRAWING ISSUE

51A

53D

ISSUE

63D

MASTER TEST FRAME
TRUNK TEST CIRCUIT

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SD-25918-01-F4

BELL TELEPHONE LABORATORIES
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SD-25918-01-F4

CIRCUIT REQUIREMENTS

APPARATUS				MECH REQ			CIRCUIT PREPARATION				TEST SET PREP	SEE TEST NOTE	DIRECT CURRENT FLOW REQ					REMARKS
DESIG	CODE	GPT	FIG.	BSP FIG.	CONT PRES	ARM TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST WOG			TEST FOR	AFTER SOAK MA	TEST MA	READJ MA		
								CONN BAT.	CONN GRD									
MFSG	AG4	TT	30	398			(BHT)NO		U(MFSG)	GRD			0	12.4	11.8	MOUNTED WITH (TAI)		
													H	1.7	1.6			
													R	0.9	1.2			
MFT	AJ107	TT	30	226				L(MFT)		BAT.			0	13.4	12.7	MOUNTED WITH (TAI)		
MR	1/2AK39		46	221					U(MR)	GRD			0	11.2	10.7			
MR1-7	AF79		46	205					U(MR-)	GRD			0	9.7	9.2			
MRA1	1/2AK22		35	216			(ETK)O		U(MRA1)	GRD			NO	4.8	4.5	MOUNTED WITH (MRB1)		
MRA2	1/2AK22		35	216			(MRB1)O		IL(MRA2)	GRD			0	27.5	26			
MRA3	1/2AK22		35	216			(MRB2)O		IL(MRA3)	GRD			0	27.5	26			
MRB1	1/2AK22		35	216					U(MRB1)	GRD			0	27.5	26	MOUNTED WITH (MRA1)		
MRB2	1/2AK22		35	216					U(MRB2)	GRD			0	27.5	26			
MRB3	1/2AK22		35	216					U(MRB3)	GRD			0	27.5	26			
MRLS	1/2AK4		35	202			(ERE)O		IL(MRLS)	GRD			0	11.9	11.3	MOUNTED WITH (RPLS)		
MRP	1/2AK39		46	221			5(MRP)	2L(MRP)		BAT.			0	17.6	16			
MRPB	1/2AK39		46	221					U(MRPB)	GRD			C	11.3	10.7			
MRPK	1/2AK4		46	202					IL(MRPK)	GRD			0	11.9	11.3	MOUNTED WITH (MRPT)		
MRPT	1/2AK4		46	202					U(MRPT)	GRD			0	11.9	11.3			
MTC	1/2AK8		48	204					IL(MTC)	GRD			0	17	16			
MUOH	AF64		46	219					U(MUOH)	GRD			0	11.2	10.6	MOUNTED WITH (TRI)		
MW	1/2AK4		45	202					IL(MW)	GRD			0	11.9	11.3			
MW/B	1/2AK47		35	202					IL(MW/B)	GRD			0	13.2	12.5			
NCC	AJ83	QJ	14	249					U(NCC)	GRD			0	13.3	12.6	OPERATE (STI) KEY		
NPID	1/2AK35		28	202					U(NPID)	GRD			0	12.4	11.8			
NPW	1/2AK22		28	216					U(NPW)	GRD			0	27.5	26			
OAT	AF98		35	245				L(OAT)		BAT.			0	14.9	14.1	SEE TIMING REQ		
OC	1/2AK4		46	202					IL(OC)	GRD			0	11.9	11.3			
OEM	AJ83	VM	G	249					U(OEM)	GRD			0	13.3	12.6			
OEM1	AJ15		25	249					U(OEM1)	GRD			0	43	40.5	MOUNTED WITH (AE2)		
OEM2	AJ15		25	249					U(OEM2)	GRD			0	43	40.5	MOUNTED WITH (ET)		
OGT	U98		I	118/118	H	50			T(OGT)	GRD			0	23.5	22	MOUNTED WITH (ET)		
OLF	316B	TF	I	I							10		0	7.5	2.4			
													R	.65				
OLFA	AJ27	TF	I	213					U(OLFA)	GRD			0	15	14.2	MOUNTED WITH (OP2)		
OMRK	1/2AK47		48	202					U(OMRK)	GRD			0	13.2	12.5			
OMRP	AF13		48	215					U(OMRP)	GRD			0	13.1	12.4			
ONAL	AJ83	VF	I	249					U(ONAL)	GRD			0	13.3	12.6	MOUNTED WITH (OP1)		
ONT4	AJ5	UX	11	220					U(ONT4)	GRD			0	13.3	12.6			
													0	27.5	26			
OP1	1/2AK22			216			OP2(NO) 8(OP2)		IL(OP1)	GRD			0	57.1	54.4	WDG ALONE		
													0	57.1	54.4			
													0	57.1	54.5			
OP2	1/2AK22			216			OP1 (NO) 5 (OP1)		U(OP2)	GRD			0	27.5	26	MOUNTED WITH OP2		
													0	57.1	54.5			
													0	57.1	54.5			
OPT	U1113		J	114/114	H	50			T(OPT)	GRD			0	22.5	21	WINDING ALONE		
OT	AJ5		48	220					U(OT)	GRD			0	13.3	12.6			
													0	29.5	28			
OT1	1/2 AK4		48	202					IL(OT1)	GRD			0	11.9	11.3	PAR COMB (OT) & (OT1)		
													0	26.5	25			
													0	43	40.5			
OTCN	AJ15	TD	I	249					U(OTCN)	GRD			0	6.3	4.7	MOUNTED WITH (UT)		
OTK	AG40		48	50					U(OTK)	GRD			H	0.9	0.8			
													R	0.4	0.5			
OUT	AJ83		42	249					U(OUT)	GRD			0	13.3	12.6	MOUNTED WITH (P1)		
													0	.7				
													0	2.9	2.7			
P	239FK OR 280B	F A E	B					4(P)		NGB			NO	-30	.6	MOUNTED WITH (P10)		
													R	30	.7			
													0	7.4	7			
P1	1/2AK22	RA	I	216					U(P1)	GRD			0	27.5	26	MOUNTED WITH (P20)		
P1D	1/2AK22		49	216					IL(P1D)	GRD			0	27.5	26			
P1U	1/2AK30		49	202			(DPR)O		IL(P1U)	GRD			0	23.5	22			
P2	1/2AK22	RA	I	216					IL(P2)	GRD			0	27.5	26	MOUNTED WITH (P2U)		
P2D	1/2AK22		49	216					U(P2D)	GRD			0	27.5	26			
P2U	1/2AK30		49	202			(P1D)O		U(P2U)	GRD			0	23.5	22			
P4Q	AJ503		49	249					U(P4Q)	GRD			0	95	90	MOUNTED WITH (P1U)		
P4U	1/2AK30		49	202			(P2D)O		IL(P4U)	GRD			0	23.5	22			
P8Q	AJ503		49	249					U(P8Q)	GRD			0	95	90			
P8U	1/2AK30		49	202			(P4Q)O		U(P8U)	GRD			0	23.5	22	MOUNTED WITH (P4U)		
PCRD	AJ15		29	249					U(PCRD)	GRD			0	43	40.5			
PCROA	AJ15	RH	28	249					U(PCROA)	GRD			0	43	40.5			
PK	239FJ OR 280H	K J	I	B				6(PK)	2(PK)	B/G		P//T ISW S//Q	0		3.5	MOUNTED WITH (P4U)		
													NO	-150	2.5			
													0		13.7			
													R	150	1	1.1		

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								
PK1	280H		11					4M(4W)	2(PK1)	B/G		P//T 1SW S//Q	0 NO 0 R	-150 150	3.5 2.5 13.7 1.1		
PK2	280H		20					6(PK2)	2(PK2)	B/G		P//T 1SW S//Q	0 NO 0 R	-150 150	3.5 2.5 13.7 1.1		
PK3	280H		36					10(WIT1)	2(PK3)	B/G		P//T 1SW S//Q	0 NO 0 R	-150 150	3.5 2.5 13.7 1.1		
PL	276B		40					12(PLST)	12(PLST)	1(PLST)	B/G		0 NO R	9 2.3 .2	3 2.3 2		
PL1	AF515		40					6(PL2)	U(PL1)	GRD			0	95	90		
PL2	AF518		40					12(PL2)	U(PL2)	GRD			0	105	95		
PL3	AF515		40						U(PL3)	GRD			0	95	90		
PL4	AF515		40					(PL1)O	U(PL4)	GRD			0	95	90		
PL5	AF515		40						U(PL5)	GRD			0	95	90		
PLA	AJ131		40						U(PLA)	GRD			0	44.5	42		
PLC	AJ30		40						U(PLC)	GRD			0	28.5	27		
PLG	276B		40					6(PLST)	6(PLST)	GRD			0 NO R	9 2.3 .2	3 2.3 2		
PLMN	1/2AK24		40						1U(PLMN)	GRD			0	7.8	7.4	MOUNTED WITH (PLMX)	
PLMX	1/2AK24		40						1L(PLMX)	GRD			0	7.8	7.4	MOUNTED WITH (PLMN)	
PLO	AF34		40						U(PLO)	GRD			0	28	26.5		
PLST	AG6		40						U(PLST)	GRD			0	18	9.3	8.8	
PO	280CD	WS	1					2M(ACD)	1M(ACD)	B/G		P/S	0	5			
PRB	AJ15	WI	19						U(PRB)	GRD			0	43	40.5		
PRC	AF96	WI	19						1L(PRC)	GRD		P	0	100	95		
PRD	AJ65		16						L(PRD)	BAT.			0	80	85		
PRE	AF116		19						U(PRE)	GRD			0	14.9	14.2		
PRI	AJ26		28					(CNSL)KEY O	2U(PRI)	M		P/S	0	58.5	55.5		
PRIA	AJ26	RW	28						1L(PRIA)	2U(PRIA)	M		P/S	0	16.5	15.5	
PRK	AF32		16						U(PRK)	GRD			0	32	30.5		
PRP	AF114		16						U(PRPP)	GRD			0	24.5	23		
													0	20	15.5	14.5	
PRT	AG28		16						U(PRT)	GRD			0 H R	2.5 1.1	2.3 1.3		
PTP	AJ15		35						U(PTP)	GRD			0	43	40.5		
PTT	AJ72		19						1U(PTT) 2U(PTT)	GRD		P S	0 C	3 35.5	3.2 33.5		
PWA	1/2AK22		28						1L(PWA)	GRD			0	27.5	26	MOUNTED WITH (NPH)	
PWJK	AJ15		28						U(PWJK)	GRD			0	43	40.5		
PWST	1/2AK35		28					7.8T(TT)	1L(PWST)	GRD			0	31.5	30	MOUNTED WITH (NFIN)	
R-	UA71		1					111/101	H	29			0 NO	4.7 3.0	4.4 3.2		
R+	UA71		6					111/101	H	29			0 NO	4.7 3.0	4.4 3.2		
RANN	1/2AK22		35							1L(RANN)	GRD		0	27.5	26	MOUNTED WITH (ASRK)	
RANS	AJ15		35							U(RANS)	GRD		0	43	40.5		
RB	UA71		1					111/101	H	29			0 NO	4.7 3	4.4 3.2	OPERATOR KEY	
RB1	AG49		43						(RB2)O	1U(RB1)	GRD		P H R	59 8.4 5.9	56 8 6.6		
RB2	AG49		43							1U(RB2)	GRD		P H R	59 8.4 5.9	56 8 6.6		
RBA	AJ15	VG	1							U(RBA)	GRD		0	43	40.5		
RBY	1/2AK4		35							1L(RBY)	GRD		0	11.9	11.3	MOUNTED WITH (RPO)	
RC	1/2AK4		43							1U(RC)	GRD		0	11.9	11.3	MOUNTED WITH (CCIN)	

MASTER TEST FRAME
TRUNK TEST CIRCUIT

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BELL TELEPHONE LABORATORIES
INCORPORATED

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CIRCUIT REQUIREMENTS

APPARATUS				MECH REQ			CIRCUIT PREPARATION				DIRECT CURRENT FLOW REQ				REMARKS		
DESIG	CODE	OPT	FIG.	BSP FIG.	CONT PRES	ARM. TRVL	BLOCK OR INSULATE	TEST CLIP DATA		TEST SET PREP	SEE TEST NOTE	TEST WDG	TEST FOR	AFTER SOAK MA		TEST MA	READJ MA
								CONN BAT.	CONN GRD								
RRC	AF117		19	222					U(RRC)	GRD			0		28.5	27	
													NO		16	17	
RRLS	1/2AK4		35	202			(REP)0		U(RRLS)	GRD			0		11.9	11.3	MOUNTED WITH (RRLS)
RRO	1/2AK4		35	202					U(RRO)	GRD			0		11.9	11.3	MOUNTED WITH (RBY)
RRT	AG9	WT	1	246			2B(CN) OR 1B(CNA)		U(RRT)	GRD			0	FS	9.4	8.9	
													H		1.2	1.1	
													R		.9	.8	
RSK	1/2AK22		35	216					U(RSK)	GRD			0		27.5	26	MOUNTED WITH (URK)
RST	AJ15		19	249			7M(RST)		U(RST)	GRD			0		45	40.5	
RTF	1/2AK4		35	202					U(RTF)	GRD			0		11.9	11.3	MOUNTED WITH (RIAO)
RTLK	AJ15		35	249			(TSRK)0		U(RTLK)	GRD			0		43	40.5	
RTN	AJ26		28	558				1L(RTN)	2U(RTN)	M		P/S	0		16.5	15.5	
RTPD	1/2AK22		35	216					U(RTPD)	GRD			0		27.5	26	MOUNTED WITH (DOP5)
RTT	AJ15		19	249					U(RTT)	GRD			0		43	40.5	
RXC	AF26		19	5			(PIT)NO		U(RXC)	GRD			0		10.2	9.7	
													0		20	19	
S	UA1	ZX	1	205/205	H	SPL			BF(S)	TR(S)	M		P/S	NO	13.5	14.2	ARM. TRVL 23 MAX
													R		10.2	10.8	
													0		15.3	14.7	
	UA114	ZY	1	111/101	H	29			BF(S)	TR(S)	M		P/S	NO	7.2	7.6	
													R		6.5	6.9	
S2	AJ26		34	558				1L(S2)	2U(S2)	M		P/S	0		16.5	15.5	
SD	AJ57	TT	30	237				1U(SD)		BAT.			P	0	40	38	
									2U(SD)	GRD			S		40	38	
SOT	313A	TU	1	1							10		0	14	4.6		
													R		2		
SDTA	AJ15		29	249			(TMA)NO		U(SDTA)	GRD			0		43	40.5	
SEZ	AJ83	PM	1	249					U(SEZ)	GRD			0		13.3	12.6	
SFT	AJ15	WS	1	249					U(SFT)	GRD			0		43	40.5	
SK	AJ15		35	249					U(SK)	GRD			0		43	40.5	
SL	AJ83	RP	1	249					U(SL)	GRD			0		13.3	12.6	
													0		14.7	14	
SR	AG33		19	3058					U(SR)	GRD			H	FS	2.5	2.3	
													R		1.3	1.5	
SSX	1/2AK22	XZ	1	216					U(SSX)	GRD			0		27.5	26	MOUNTED WITH (LTK)
															10.3	9.8	WINDING ALONE
ST	U50	XR	1	127/112	H	47			T(ST)	GRD			0		55.3	52.5	PAR. COMB. (ST) & (ST1)
														13	12.3	WINDING ALONE	
	U1031	XS		210/210		44			14T(ST)	GRD					70	66	PAR. COMB. (ST) & (ST1)
ST1	AJ15	TO	1	249					U(ST1)	GRD			0		43	40.5	WINDING ALONE
															57	55.5	PAR. COMB. (ST) & (ST1)
STI	316E	TS	30	2							10		0	9	3		
													R		.8		
STO	AG24	VF	1	188					U(STO)	GRD			0		13.7	13	
													0		48.5	46	SEE TIMING REQ
STS	AG37		28	2978					U(STS)	GRD			P	FS	6.3	5.9	
													H		2.9	4.6	
								2L(STS)	2U(STS)	B/G		S	0		63.5		
STSI	AJ15		28	249					U(STSI)	GRD			0		43	40.5	
													0		-14	0.3	
													NO		-14	0.2	
													0		-14	3.9	3.7
													R	14	1.4	1.5	
SUR	1/2AK4		46	202					U(SUR)	GRD			0		11.9	11.3	MOUNTED WITH (SURK)
SURK	1/2AK4		46	202					U(SURK)	GRD			0		11.9	11.3	MOUNTED WITH (SUR)

MASTER TEST FRAME
TRUNK TEST CIRCUIT

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BELL TELEPHONE LABORATORIES

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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			
SV	S520		8		10			4B(TTB)		BAT.	13	P	0	15	14.2				
								1T(TF)	GRD	14	S	0	NO	12.1	12.8				
SVI	AG53	TY	19	249B			12M(SVI)	2L(SVI)	2U(SVI)	B/G		S	0	90	80				
								1U(SVI)	GRD		P	0	FS	65	62				
											H			12	11.4				
												R		5.9	6.6				
SVA	AF116		19	285			5B(SVI)		U(SVA)	GRD			0		58.5	55.5			
SX	AJ125		46	299				U(SX)		BAT.			0		10.9	10.3	MOUNTED WITH (UC)		
SXK	1/2 AK4		46	202					IL(SXK)	GRD			0		11.9	11.3			
T	U1318	YB	1	160/132	H	47			T(T)	GRD			0		9.4	8.9			
	U1371	YC		121/132		50									11.9	11.3			
T-	UA71		1	111/101	H	29			T(T-)	B(T-)	B/G	11	0		4.7	4.4			
													NO		3	3.2			
T+	UA71		6	111/101	H	29			B(T+)	T(T+)	B/G	11	0		4.7	4.4			
													NO		3	3.2			
T0	U127		2	148/108	H	47	(TU)0		TF(T0)	GRD		P	0		22	20.5	REMOVE (T0) LAMP		
									TR(T0)			S			18				
T1	U103		2	108/108	H	47	(TU)0		TF(T1)	GRD		P	0		20	19	REMOVE (T1) LAMP		
									TR(T1)			S			16.5				
T2,4	U224		2	118/148	H	50	(TU)0		TF	REL	GRD	P	0		25.5	24	REMOVE ASSOC (T-) LAMP		
									TR	TSI		S			20.5				
T7	U127		2	148/108	H	47	(TU)0		TF(T7)	GRD		P	0		22	20.5	REMOVE (T7) LAMP		
									TR(T7)			S			18				
TA	UA1		8	205/205	H	SPL		8F(TA)	TR(TA)	M		P/S	0	FS	20	19	ARM. TRVL 23 MAX		
													NO		13.5	14.2			
TAI	1/2AK39		46	221			5(TAI)	2L(TAI)		BAT.			0		17.6	16	MOUNTED WITH (MR)		
TAN	U58		7	27/150	H	50			T(TAN)	GRD			0		11.3	10.7	WINDING ALONE		
															25.5	24	CKT COMB. (TAN)&(TAN2)		
TAN1	AJ15		25	249					U(TAN1)	GRD			0		43	40.5			
TAN2	AJ5	SJ	7	220					U(TAN2)	GRD			0		13.3	12.6	WINDING ALONE		
TAN3	AJ83		34	249					U(TAN3)	GRD			0		29.5	28	CKT COMB. (TAN)&(TAN2)		
															13.3	12.6			
TAS	S507		8						7B(ST)	GRD			0	FS	1.1	1			
													NO		.8	.9			
TAT	AG14	VV	19	458				8M(TAT)	2L(TAT)	2U(TAT)	B/G	3	P	0	FS	31.5	30		
													S		34	30.5			
TB	AJ26		19	558				1L(TB)	2U(TB)	M		P/S	0		16.5	15.5			
TBD	U199		8	121/121	H	50			T(TBD)	GRD			0		11	10.4			
TBLO	AF139	SV	8	256					U(TBLO)	GRD			0		8.3	7.9			
TC	1/2AK22		35	216					1U(TC)	GRD			0		27.5	26	MOUNTED WITH (AARK)		
TD	AJ131		25	336					U(TD)	GRD			0		44.5	42			
TD1	AJ131		25	336					U(TD1)	GRD			0		44.5	42			
TD2	AJ131		25	336					U(TD2)	GRD			0		44.5	42			

CIRCUIT REQUIREMENTS																	DRAWING ISSUE	
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 W/G			TEST FOR	AFTER SOAK MA	TEST MA	READJ MA		
TF	U165		8	132/01	H	47		B(TF)	T(TF)	B/G		0		19	18			
TF1	AG17		52	2718			(VF)0		U(TF1)	GRD		0	FS	9.3	9.8			
TFL	AJ83		42	249					U(TFL)	GRD		0		1.7	1.6			
TIMT	3168	PC	1	1								0		0.8	1.0			
TK1	U1373		2	101/136	H	29			T(TK1)	GRD		0		13.3	12.6			
TK2	U1373		2	101/136	H	29			T(TK2)	GRD		0		2.4				
TLA	AJ138		42	56				1L(TLA)	2U(TLA)	M		0		13.5	12.8			
TM	U166		0	121/108	H	50			T(TM)	GRD		0		12.6	12			
TM1	AJ83		P	249					U(TM1)	GRD		0		5.2	5.5			
												0		13.1	12.4			
												0		13.3	12.6	WINDING ALONE		
												0		30	28	CKT COMB. (TM1)&(TM1A)		
TM1A	AJ83	WB	P	249					U(TM1A)	GRD		0		13.3	12.6	WINDING ALONE		
												0		30	28	CKT COMB. (TM1)&(TM1A)		
TM2	AJ83		P	249					U(TM2)	GRD		0		13.3	12.6			
TM3	1/2AK22		42	216					1L(TM3)	GRD		0		27.5	26	MTD WITH (HOLD)		
TM4	AF79		18	205					U(TM4)	GRD		0		9.7	9.2			
TMA	AG61		29	3438				6(TMA)		BAT		0	36	18	17			
TMB	1/2AK47		29	202				2U(TMB)		BAT		0		13.2	12.5	MOUNTED WITH (BD)		
TMS	AF79		45	205					U(TMS)	GRD		0		9.7	9.2			
TMSD	AF113		45	273					U(TMSD)	GRD		0		8.6	8.2			
TN	AJ15		28	249					U(TN)	GRD		0		43	40.5			
TOL	U591		8	119/113	H	35						0		26.5	25	WINDING ALONE		
									T(TOL)	GRD				35.5	33.5	CKT COMB. (TOL)&(4WT)		
TOL2	AJ5		33	220					U(TOL2)	GRD		0		13.3	12.6			
TON	1/2 AK4		48	202					1U(TON)	GRD		0		11.9	11.3	MOUNTED WITH (SPARE)		
TP	U1234		5	110/101	H	35		8(TP)		BAT	15	0		7.9	7.5			
TP1	U1334		5	111/111	H	29	(RP)0		T(TP1)	GRD		0		14.3	13.6			
TP2	AJ107		19	226					U(TPR)	GRD		0		13.4	12.7			
TR	1/2AK4		44	202					1L(TR)	GRD		0		11.9	11.3	MOUNTED WITH (RCD)		
TR1	1/2AK4		45	202					1U(TR1)	GRD		0		11.9	11.3	MOUNTED WITH (MW)		
TRMK	AJ15		35	249			(CSRT)0		U(TRMK)	GRD		0		43	40.5			
TRP	AJ15		35	249					U(TRP)	GRD		0		43	40.5			
TRTT	AJ5		18	220			(ANTI), (CTL),(1TNP), (ST)NO		U(TRTT)	GRD		0		13.3	12.6			
									11T(ST)			0		1.1	1	WITH V OPTION		
									(TM)0			NO		.8	.9	WITH T OPTION		
									2T(TM)			0		1.1	1	AND APP FIG 0		
									2B(TM1)			NO		.8	.9	AND APP FIG 0		
									2B(TM1)			0		1.1	1	WITH T OPTION		
									1,2T(4TS)			NO		.8	.9	AND APP FIG P		
									2T(4TS)			0		1.1	1	WITH T OPTION		
												NO		.8	.9	AND APP FIG P & 19		
TS1	1/2AK22	WP	1	216					1U(TS1)	GRD		0		27.5	26	MOUNTED WITH (AS1)		
TS2	AJ108		18	2			8B(TRTT)		U(TS2)	GRD	1	0		2.2	2.1			
TS3	AJ108	QA	1	2					U(TS3)	GRD	1	0		2.2	2.1			
TSO-19	318B		35				(MRLS)0		19,29,39,49, 59(TS-1)	GRD	19	0		14				
												R		1.1				
MASTER TEST FRAME TRUNK TEST CIRCUIT																	ISSUE 82B	
BELL TELEPHONE LABORATORIES INCORPORATED																	SD-25918-01-F7	

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		
TSFT	AJ15	WS	1	249					U(TSFT)	GRD		0		43	40.5	MOUNTED WITH (ASK)		
TSK	1/2AK22		35	216			(1RK)0		1U(TSK)	GRD		0		27.5	26			
TT	U318	TN	8	150/179	H	50			B(TT)	BAT.		0		11.7	11.1			
	U1318	TM		160/132										9.4	8.9			
TTB	U188		8	161/161	H	53	4T(TTB), (TTBA)NO		T(TTB)	GRD		0		19.5	17.5			
TTBA	U1072	XY	8	197/161	H	59			13T(TTBA)	GRD		0		18	17			
TTK	U440	H	1	132/132	H	47			T(TTK)	GRD		0		8.9	8.3			
TU	U826		2	124/124	H	59			T(TU)	GRD		0		20	19			
TUC	U114		2	132/106	H	47			T(TUC)	GRD		0		9.7	9.2			
TWK	AG38	TS	30	2138					1U(TWK)	GRD	P	0	H	FS	49.5	47		
															R	8.4		7.9
															S	5.2		6.0
							12M(TWK)	2L(TWK)	2U(TWK)	B/G		S	C	100	80	70		
TWK1	AG60	TS	30	4198					U(TWK1)	GRD		0	H	FS	21.5	20.5		
															R	3.3		3.1
																1.7		2.0
TX	AJ15		19	249			(SR)NO, 8M(TX)		U(TX)	GRD		0		45	40.5			
U0	U127		2	148/108	H	47	(TU)0		TF(U0) TR(U0)	GRD		P S	0		22 18	20.5	REMOVE (U0) LAMP	
U1	U103		2	108/108	H	47	(TU)0		TF(U1) TR(U1)	GRD		P S	0		20 16.5	19	REMOVE (U1) LAMP	
U2,4	U224		2	118/148	H	50	(TU)0		TF TR	REL IST	GRD	P S	0		25.5 20.5	24	REMOVE ASSOC (U-) LAMP	
U7	U127		2	148/108	H	47	(TU)0		TF(U7) TR(U7)	GRD		P S	0		22 18	20.5	REMOVE (U7) LAMP	
UC	1/2AK4		46	202					1U(UC)	GRD			0		11.9	11.3	MOUNTED WITH (SXX)	
UK1	U1373		2	101/136	H	29			T(UK1)	GRD			0		13.5	12.8		
UK2	U1373		2	101/136	H	29			T(UK2)	GRD			0		13.5	12.8		
UT	1/2AK4		48	202					1U(UT)	GRD			C		11.9	11.3	MOUNTED WITH (OTI)	
VF	1/2AK22		52	216					1U(VF)	GRD			0		27.5	26	MOUNTED WITH SPARE	
VFA	1/2AK22		53	216					1L(VFA)	GRD			0		27.5	26	MOUNTED WITH (VFI)	
VFI	1/2AK22		53	216			8(VFI), (VFA)NO	2U(VFI)	1U(VFI)	B/G			0		29	25	MOUNTED WITH (VFA)	
W	1/2AK8		19	204			9B(W), 5B(TX)		1U(W)	GRD	I		0	R	9.6	8.7	MOUNTED WITH (Z)	
															1.6	1.8		
WB	B325		19	5			REJO	1L(DUB)	Z(GB)	M		P/S	0	FS	9	8	WITH 4H OPTION	
								1L(CHD)	1L(CHD)									

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	
WBT	AJ15		21	249					U(WBT)	GRD		0		43	40.5		
WBT1	AJ83	SF	27	249					U(WBT1)	GRD		0		13.3	12.6		
WBTS	S507		36						2RT(WBTS)	GRD		0 NO	FS	1.1 .8	1 .9		
WC	AF32	TD	1	208			12(WC)		U(WC)	GRD		0		32.5 65.5	30.5 59.5	WINDING ALONE CKT COMB. (WC) & (ZC)	
WIT	AJ15	SF	27	249					U(WIT)	GRD		0		43	40.5		
WIT1	AJ15		36	249					U(WIT1)	GRD		0		43	40.5		
WK	AJ15		25	249			4B(WK1)		U(WK)	GRD		0		43	40.5		
WK1	AJ15		25	249					U(WK1)	GRD		0		43	40.5		
																OPERATE (F.WK) KEY	
WKE	AJ83	SC	1	249					U(WKE)	GRD		0		13.3	12.6		
WKRI	AJ83	SD	1	249					U(WKRI)	GRD		0		13.3	12.6		
WKT	AG9		25	2468			(WK1)NO. 6(WK)		U(WKT)	GRD		0 H R		9.4 1.2 .8	8.9 1.1 .9		
WKT1	316W	PT	1	5								0 R	14		4.6 2		
WLT	AJ83	SF	27	249					U(WLT)	GRD		0		13.3	12.6		
WOC	AJ131		25	336					U(WOC)	GRD		0		44.5	42		
WOCG	AJ131		25	336					U(WOCG)	GRD		0		44.5	42		
Z	1/2AK8		19	204			5B(TX), (W)0		1L(Z)	GRD		0		16.9	16	MOUNTED WITH (W)	
ZC	AJ500	TD	1	226			12(WC)		U(ZC)	GRD		0		18 45.5	17 43	WINDING ALONE CKT COMB. (WC) & (ZC)	

ISSUE
82BMASTER TEST FRAME
FROM TEST CIRCUIT

SD-25918-01-F8

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 WIG			TEST FOR	AFTER SOAK MA	TEST MA	READJ MA		
COUNTERS																		
CTRI-5	KT359		48						1 (CTR)		GRD	C	0			54.8	KESSLER ELLIS PRODUCTS	
									5 TEST			R				187		
DIODES																		
SX	446K		46								20						MTD ON (CA38) CPNTA	
ELECTRON TUBES																		
R	346C		1		SEE BSP													
R-	313C		1		SEE BSP													
R+	313C		6		SEE BSP													
RP	413A		5		SEE BSP													
RP	413B		5		SEE BSP													
RPR	313C		19		SEE BSP													
T-	313C		1		SEE BSP													
T+	313C		6		SEE BSP													
TP	413A		5		SEE BSP													
TP	413B		5		SEE BSP													
TPR	313C		19		SEE BSP													

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		

ISSUE
74A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-F9A

BELL TELEPHONE LABORATORIES
INCORPORATED

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TIMING REQUIREMENTS													
APPARATUS			CIRCUIT PREPARATION				TEST SET PREP			SEE TEST NOTE	TIME REQ. ms		REMARKS
DESIG	FEATURE OR OPTION	FIG.	BLOCK OR INSULATE	TEST CLIP DATA			SEND KEY	REC SW			MIN	MAX	
				CONN BK	CONN R	CONN H		START	STOP				
MRP		46	(SXX) NO. (MRPT) NO	BAT.	U(SX)	4M(MRP)	MK	OC	GRD		200	300	
OAT		35	(REP) O. ALM NO							8			
OTK		48	(MUON) O. (SUR) NO. 28 (SXX). 5M (MUON)	GRD	U(OTK)	8M(OTK)	BK	GRD	OC OR 48V		1200	1300	ADJUST (OTK1) POT., LOCATED ON CA (OTK), TO OBTAIN TIME OF 1200-1300ms
RB1		43	(RB2) O. (RB2) O. (EMI) O	GRD	U(RB1)	4(RB1)	BK	GRD	OC	I	50	94	
RB2		43		GRD	U(RB2)	4(RB2)	BK	GRD	OC	I	64	122	
RCD		44	9(RCD). (RCD) O	GRD	U(RCDA)	2(RCD1)	MK	48	GRD	I	40	76	
RCD	RZ	44	9(RCD). (RCD) O. (911) O	GRD	U(RCDA)	2(RCD1)	MK	48	GRD	I	492	605	
RCD	RZ	44	9(RCD). (RCD) O. (911) O. (RCD) O	GRD	U(RCDA)	2(RCD1)	MK	48	GRD	I	300	320	ADJUST (RCD1) POT. TO OBTAIN TIME OF 300 TO 320 ms
RCD	QX	44	9(RCD). (RCD) O. (CDL) O. (CATT) O	GRD	U(RCDA)	2(RCD1)	MK	48	GRD	I	422	430	ADJUST (RCD2) POT. TO OBTAIN TIME OF 422 TO 430 ms
RCD	QX	44	9(RCD). (RCD) O. (CDL) O. (RCD) O. (CATT) O	GRD	U(RCDA)	1(RCD1A)	MK	OC	GRD	I, 10			
RCD	QX	44	9(RCD). (RCD) O. (CDL) O. (RCD) O. (CATT) O	GRD	U(RCDA)	1(RCD1A)	MK	OC	GRD	I	415	425	ADJUST (RCD4) POT. TO OBTAIN TIME OF 415 TO 425 ms
RCD	QX	44	9(RCD). (RCD) O. (CDH) O. (CATT) O	GRD	U(RCDA)	1(RCD1A)	MK	OC	GRD	I	1100	1200	ADJUST (RCD5) POT. TO OBTAIN TIME OF 1100 TO 1200 ms
RCD	QX	44	9(RCD). (RCD) O. (CDH) O. (RCD) O. (CATT) O	GRD	U(RCDA)	1(RCD1A)	MK	OC	GRD	I	1600	1700	ADJUST (RCD6) POT. TO OBTAIN TIME OF 1600 TO 1700 ms
REPT		35	(REP) O. (MW/B) O										
REPT		35	(REP) O	GRD	U(REP3)	1M(REPT)	MK	48	GRD	I	6500	7500	
RETM		35	4(REP). (REP2) NO. (ALM) NO. (REP1) O. 8(ETRP)	GRD	U(2RT) U(TRP) U(PTP) U(RANS)	12M(RETM)	MK	OC	GRD		4050 1000 500 5200	4750 1200 590 6000	
RRT	WT	1		GRD	U(RRT)	6(RRT)	BK	GRD	BAT.	I	70	95	
STS		28		GRD	U(STS)	48(STS)	BK	OC	GRD	I	95	125	
TA		46	(MUON) O. (OTI) O. (MRPK) O	GRD	U(AE2)	1M(TAI)	MK	48	GRD	II	4600	5400	
TAI		46	(MUON) O	GRD	U(AE2)	1M(TAI)	MK	48	GRD	II	1000	1400	
WKT		25		GRD	U(WKT)	8(TD1)	BK	GRD	BAT.	I	70	95	

TIMING REQUIREMENTS														DRAWN	ISSUE	
APPARATUS			CIRCUIT PREPARATION				ELECTRONIC COUNTER PREPARATION				SEE TEST NOTE	TIME REQ. ms		REMARKS		
DESIG	FEATURE OR OPTION	FIG.	BLOCK OR INSULATE	ELECTRONIC COUNTER TRIGGER OUTPUT CABLE CONNECTION		START TRIGGER		STOP TRIGGER		MIN		MAX				
				START	STOP	LEVEL VOLTS	SLOPE	LEVEL VOLTS	SLOPE							
G1		28		(G1) CONNECTOR		-30	+	-30	-	2,3,4	342	348	(MNXK) AND (MXWK) KEYS NORMAL - ADJUST POT. (G1) FOR TIME OF 345ms			
											370	305	(MNXK) KEY OPERATED - ADJUST POT. (GMN) FOR TIME OF 300ms			
											430	435	(MXWK) KEY OPERATED - ADJUST POT. (GMX) FOR TIME OF 435ms			
SVI		19		(TM1) CONNECTOR		-30	+	-30	-	2,5	178	202	ADJUST POT. (SV) FOR TIME OF 200ms			
TMA		29		(TM) CONNECTOR		-30	+	-30	-	2,7	450	454	ADJUST POT. (TMA) AND STRAP RESISTORS (TMA1-3), AS REQUIRED, FOR TIME OF 450ms			
TMB		29		(TM) CONNECTOR		-30	+	-30	-	2,6,7	548	550	ADJUST POT. (TMB) AND STRAP RESISTORS (TMB1-3), AS REQUIRED, FOR TIME OF 550ms			
														</		

10-100000-01

31 TIMING REQUIREMENTS FOR (PG) PULSE GENERATOR

1. PREPARATION

CONNECT BATTERY AND GROUND TERMINALS ON PERCENT BREAK METER TO BATTERY AND GROUND SUPPLIES RESPECTIVELY.

CONNECT P TERMINAL ON PERCENT BREAK METER TO TERMINAL 7 ON COMPONENT ASSEMBLY 3J.

ADJUST CURRENT FLOW

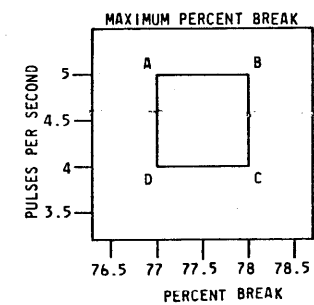
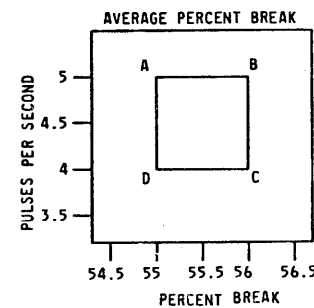
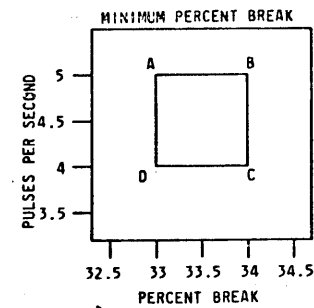
BLOCK (PLC) NUMBER

BLOCK (PLST) 0 TO START PULSING

2. WITH THE (PLMN) KEY OPERATED, VARY THE (PLW) POTENTIOMETER AND STRAP THE (PLG3) RESISTOR, AS REQUIRED, TO ADJUST THE PULSES PER SECOND, AND VARY THE (PLN) POTENTIOMETER TO ADJUST THE PERCENT BREAK. IF THE POINT OF INTERSECTION OF THE PERCENT BREAK AND THE PULSES PER SECOND LINES FALLS WITHIN THE AREA ENCLOSED BY A, B, C, AND D ON THE MINIMUM PERCENT BREAK GRAPH, THE PULSE GENERATOR MINIMUM PERCENT BREAK PULSE IS SATISFACTORY.

3. WITH THE (PLMN) AND (PLMX) KEYS NORMAL, VARY THE (PL) POTENTIOMETER TO ADJUST THE PERCENT BREAK FOR THE AVERAGE PULSE. SINCE THE NUMBER OF PULSES PER SECOND WAS ADJUSTED IN STEP 2, IT NEED NOT BE READJUSTED. IF THE POINT OF INTERSECTION OF THE PERCENT BREAK AND PULSES PER SECOND LINES FALLS WITHIN THE AREA ENCLOSED BY A, B, C, AND D ON THE AVERAGE PERCENT BREAK GRAPH, THE PULSE GENERATOR AVERAGE PERCENT BREAK PULSE IS SATISFACTORY.

4. WITH THE (PLMX) KEY OPERATED, VARY THE (PLX) POTENTIOMETER TO ADJUST THE PERCENT BREAK FOR THE MAXIMUM PULSE. IF THE POINT OF INTERSECTION OF THE PERCENT BREAK AND THE PULSES PER SECOND LINES FALLS WITHIN THE AREA ENCLOSED BY A, B, C, AND D ON THE MAXIMUM PERCENT BREAK GRAPH, THE PULSE GENERATOR MAXIMUM PERCENT BREAK PULSE IS SATISFACTORY.



DRAWING
ISSUE
570

57

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-F10

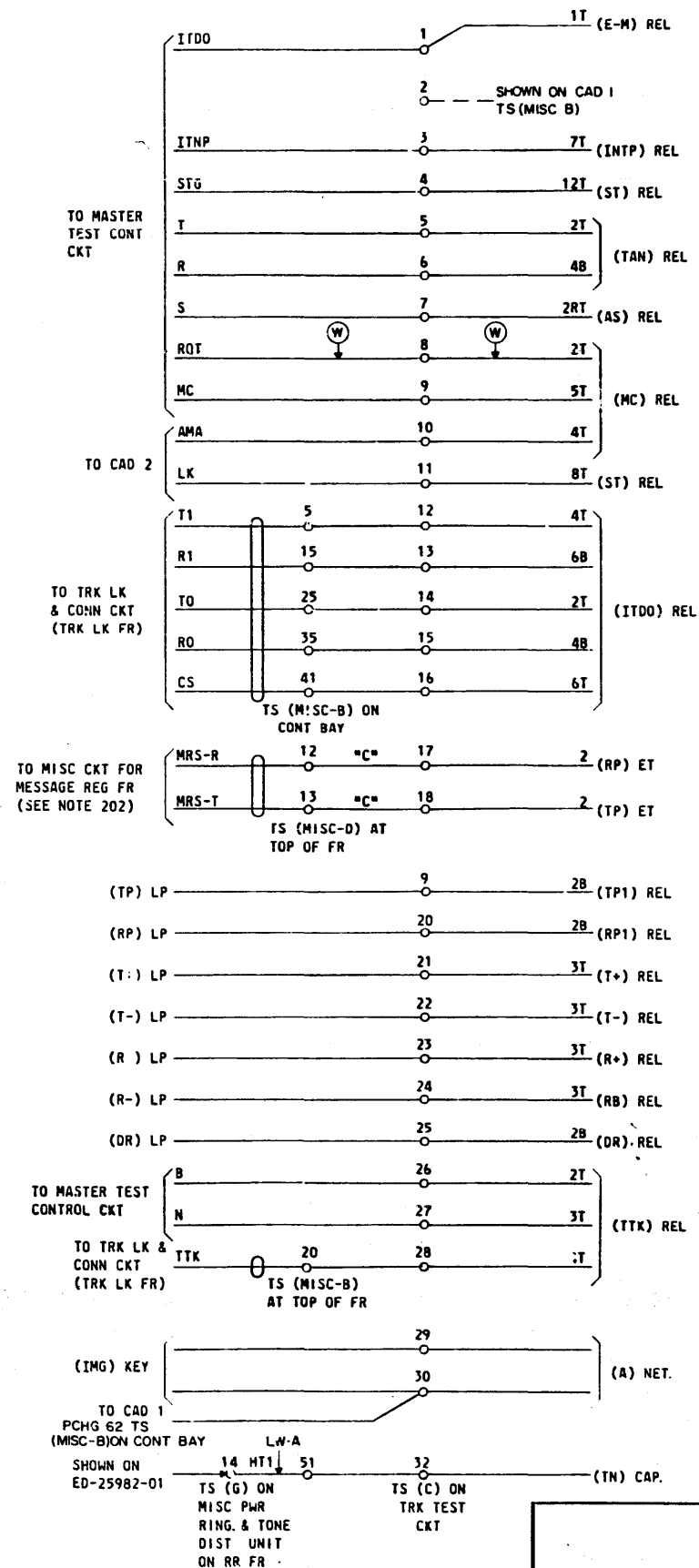
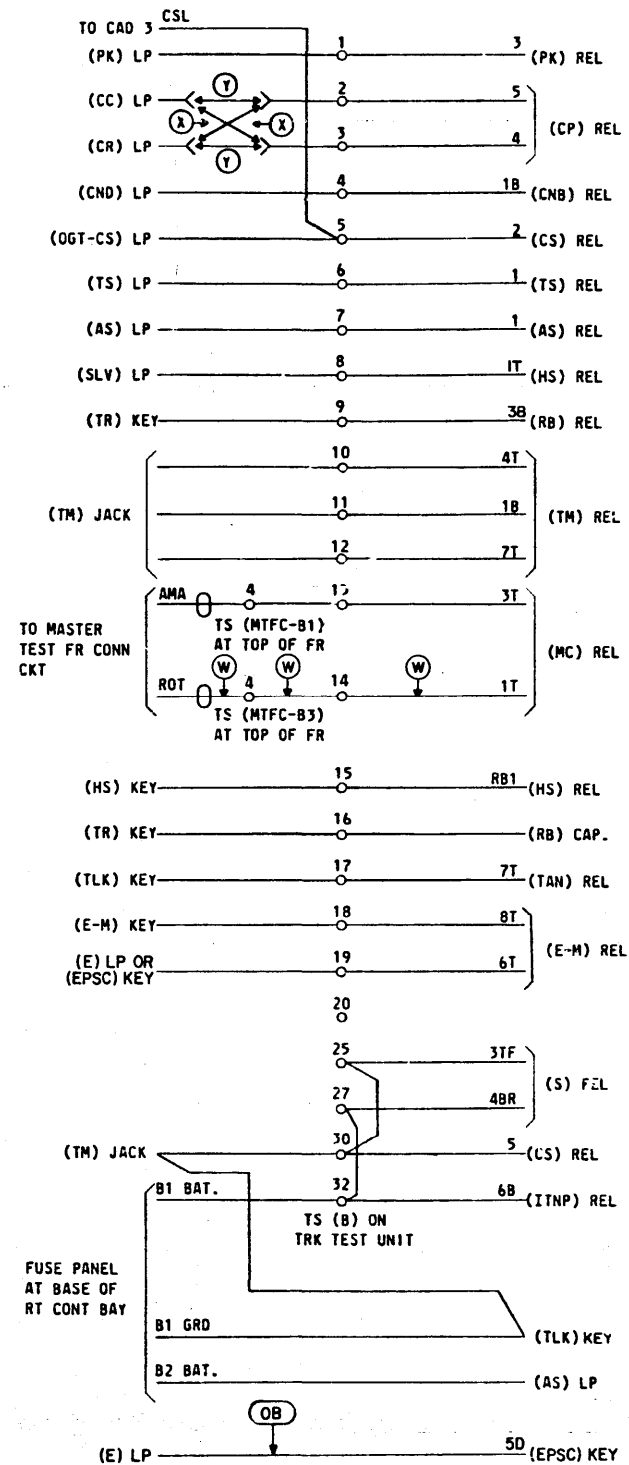
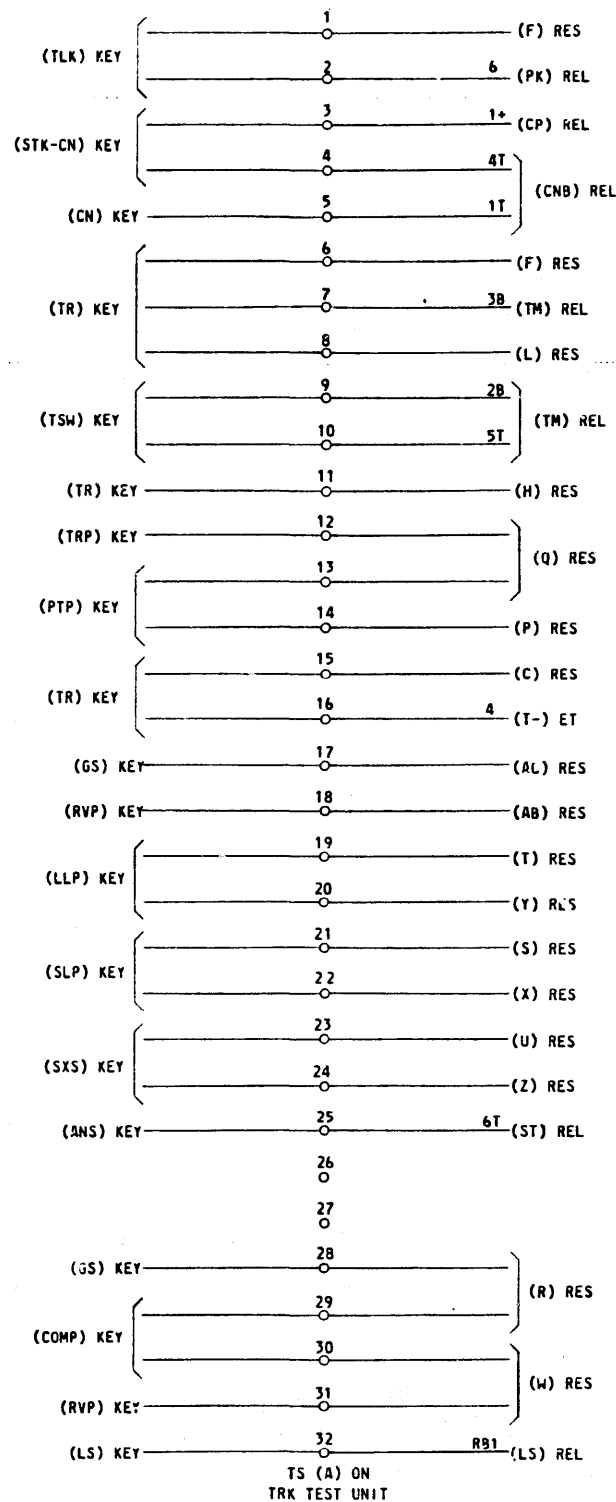
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65

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SD-25918-01-F10

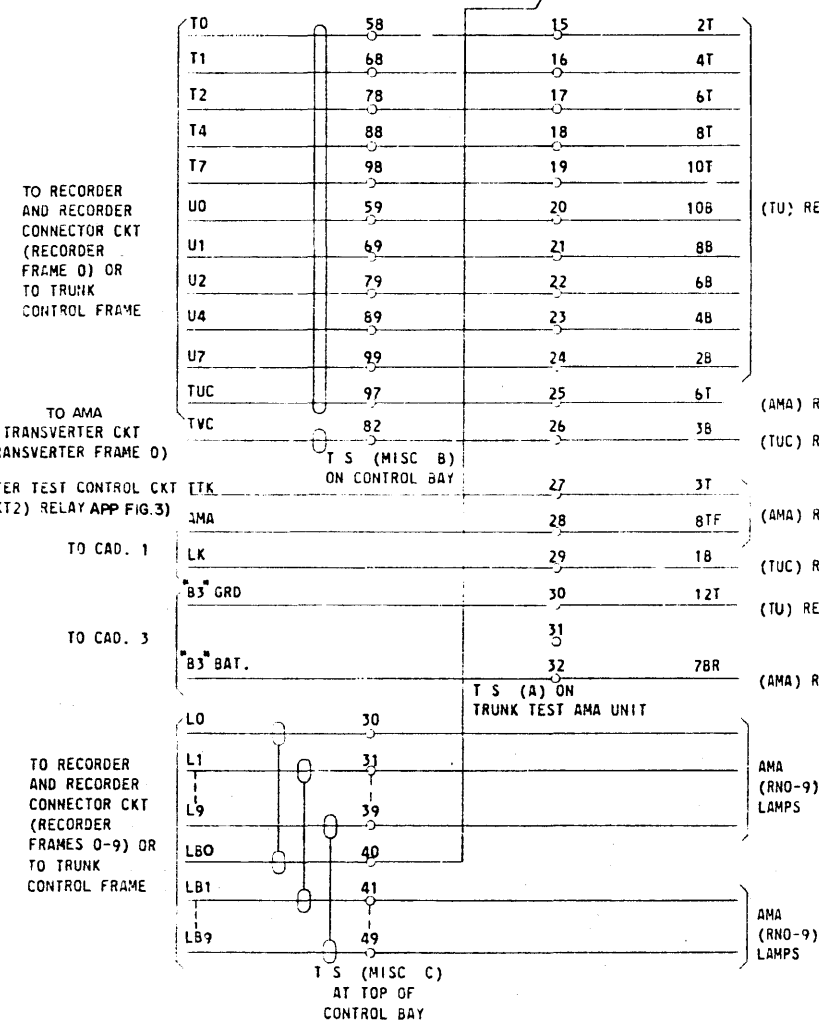
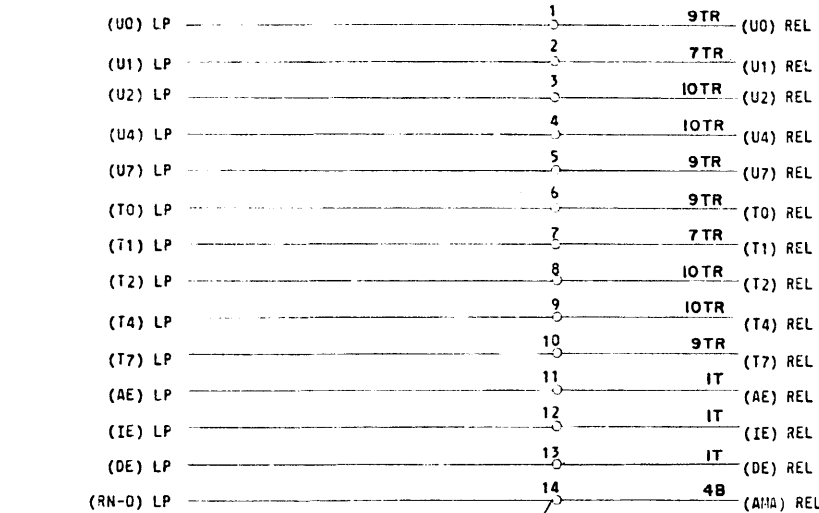
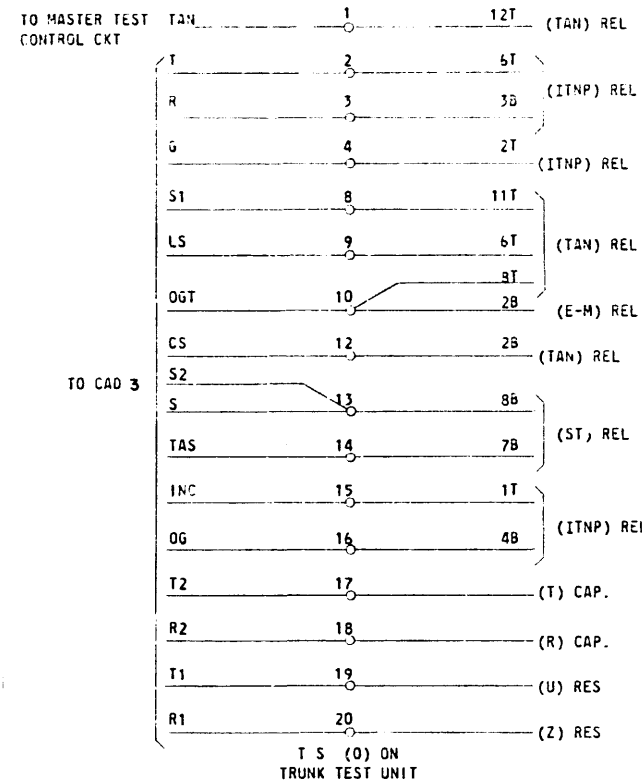
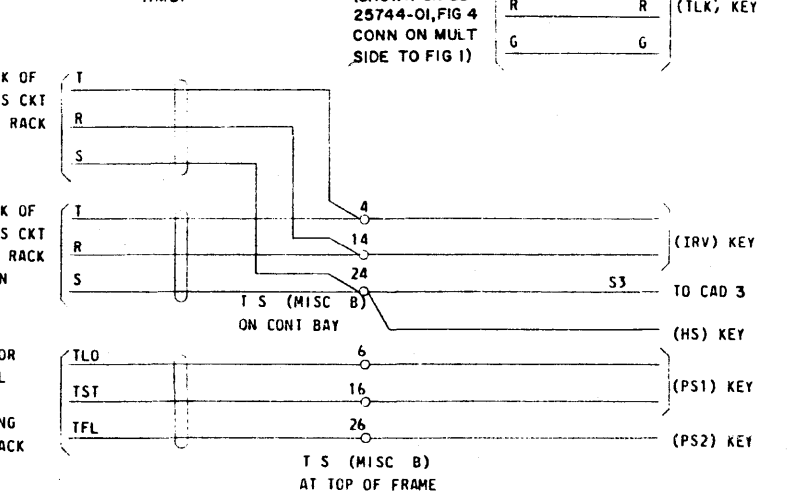
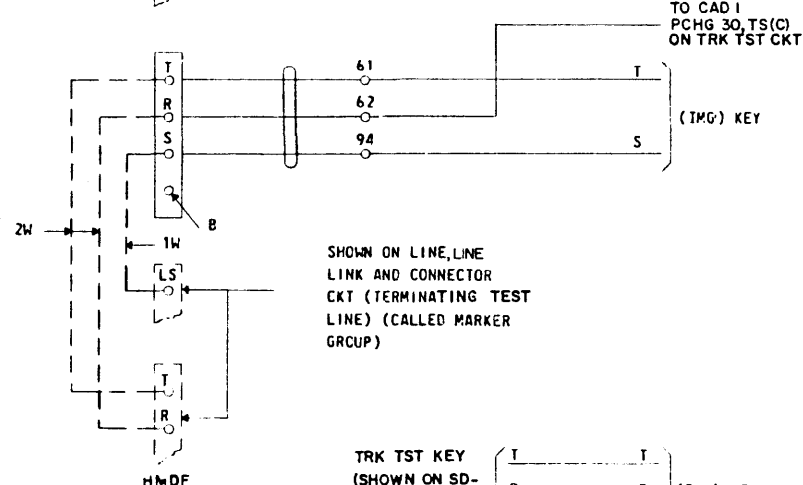
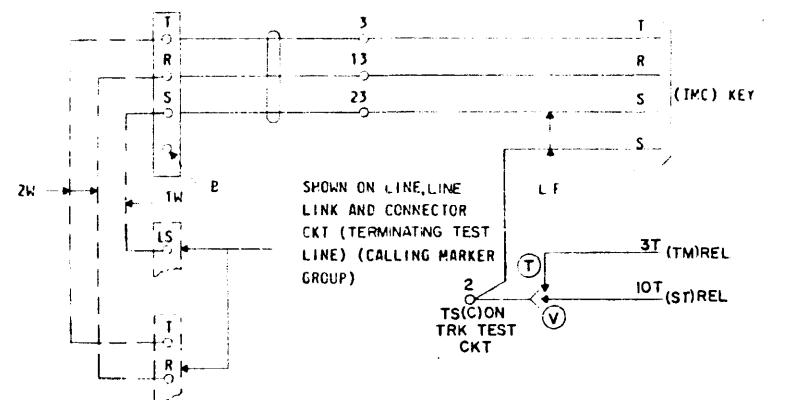
PART OF CAD 1 (MFR DISC.) (FOR APP FIGURES 1,5,6,7,9,E & F)



PART OF CAD 1 (MFR DISC.) (FOR APP FIG. 1, 5, 6, 7, 9, E & F)

CAD 2 (MFR DISC.) (FOR APP FIG. 2, 3 & 4)

DRAWING
ISSUE
280
46D LEO

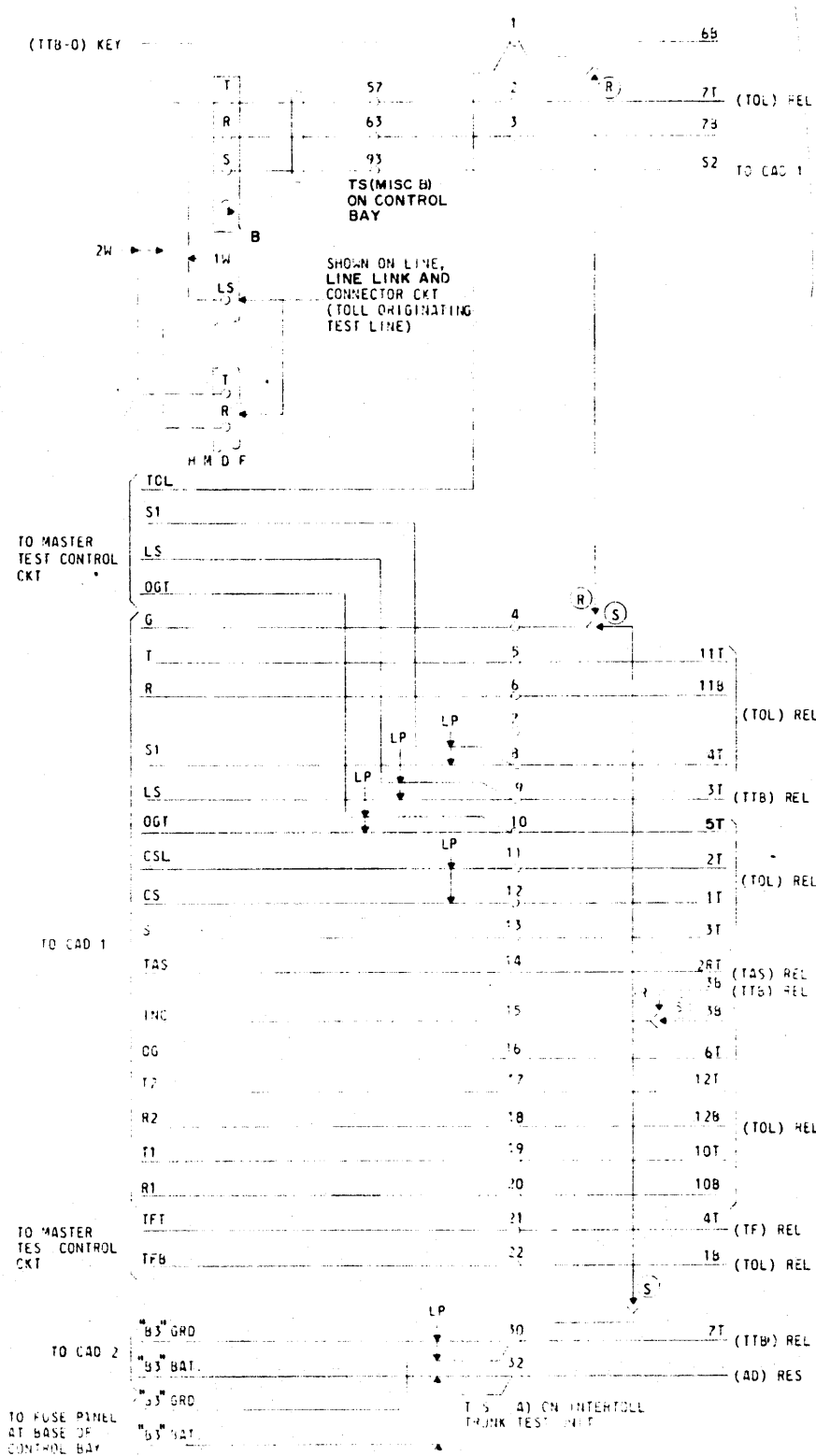


46

CAD 3 (MFR DISC.)
(FOR APP FIG. 8.A&B)

PART OF CAD 4 (MFR DISC.)
(FOR APP FIG 1, 5, 6, 7, 10, E, F, G, H, & J)

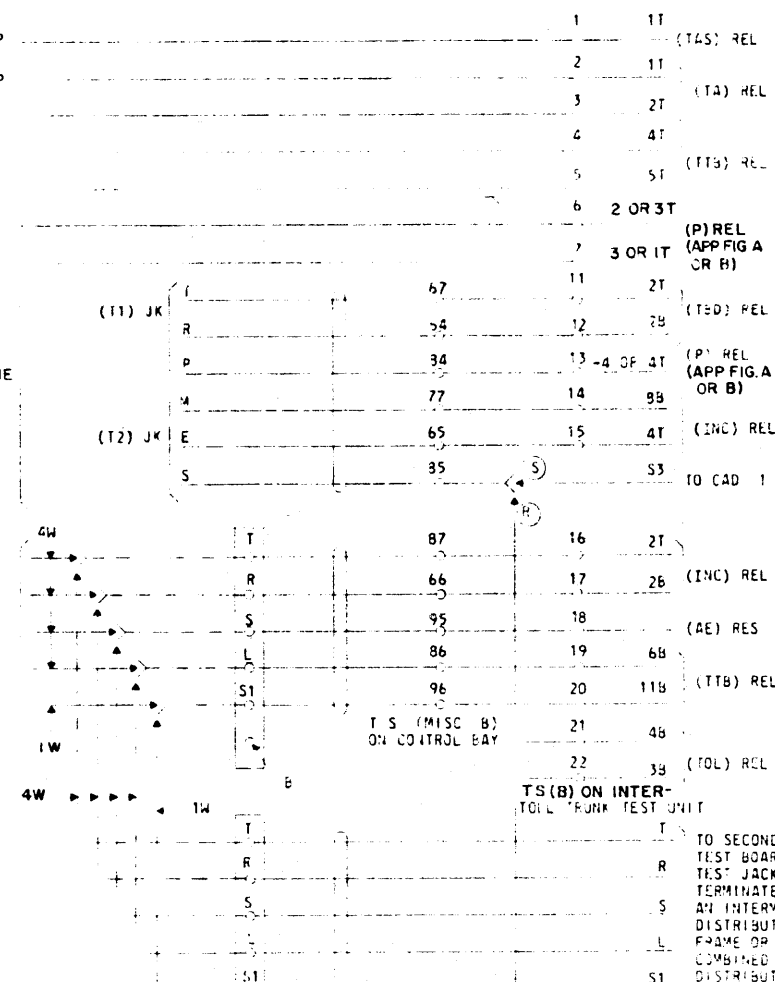
280	1.1	1.1
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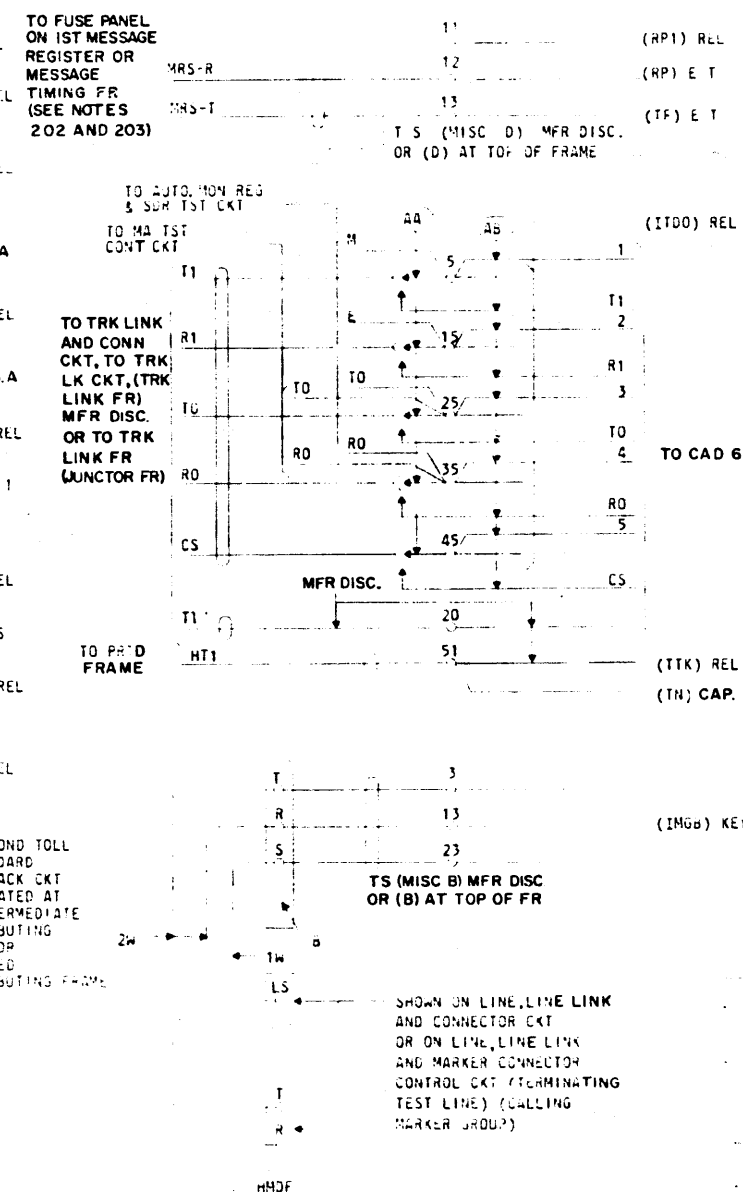
TO MISCELLANEOUS
RELAY RACK FRAME
NEAREST TEST FRAME
EQUIPPED WITH
INTERTOLL TRUNKS

TO SECOND TOLL
TEST BOARD
JACK CKT
TERMINATED AT
THE MAIN
DISTRIBUTING
FRAME

12 CAD 33



TO SECOND TOLL
TEST BOARD
TEST JACK CKT
TERMINATED AT
AN INTERMEDIATE
DISTRIBUTING
FRAME OR
COMBINED
DISTRIBUTING FR



(IMGB) KEY

SHOWN ON LINE, LINE LINK
AND CONNECTOR CKT
OR ON LINE, LINE LINK
AND MARKER CONNECTOR
CONTROL CKT (TERMINATING
TEST LINE) (CALLING
MARKER GROUP)

SD-25918-01-G3

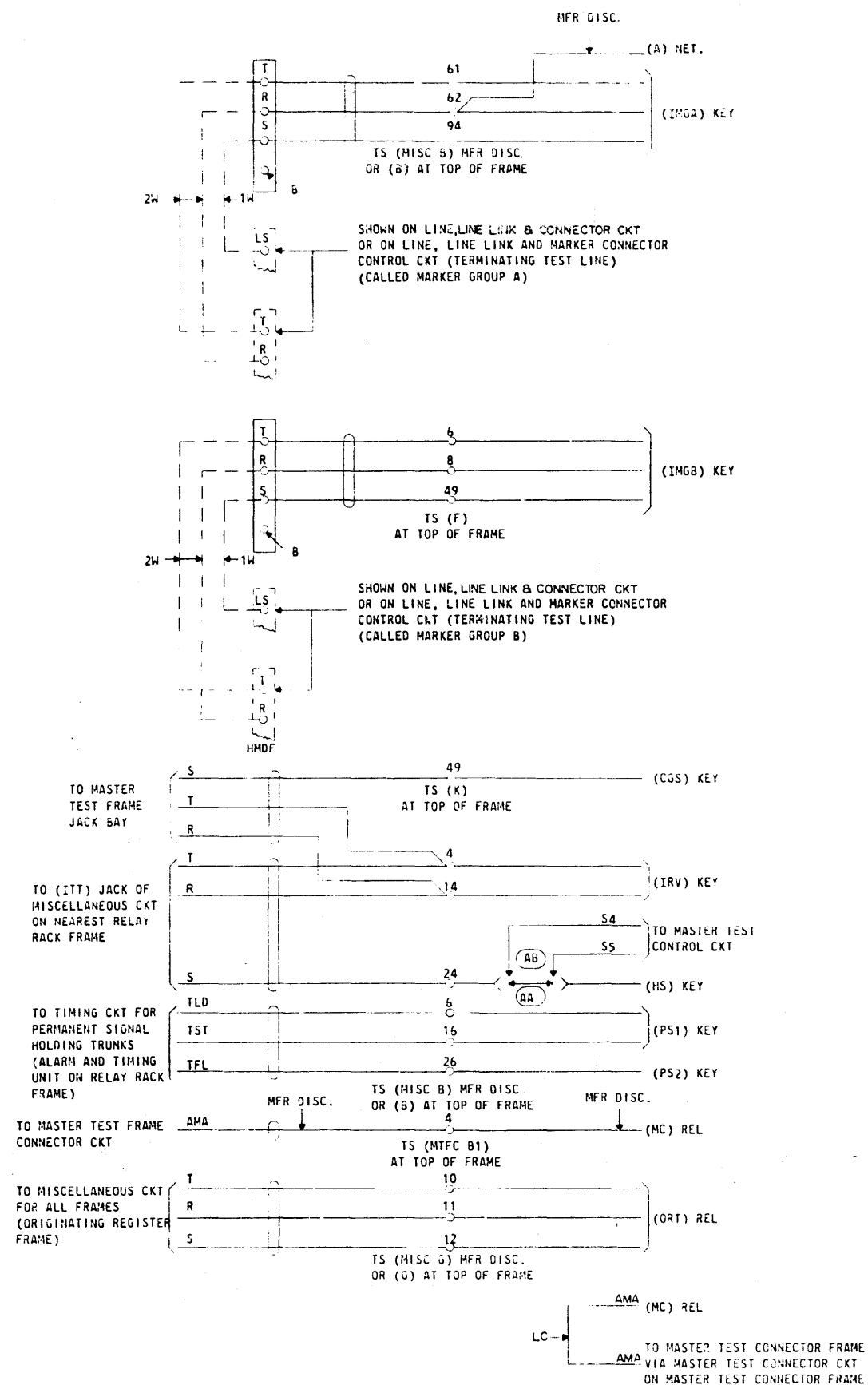
Best Available
X

28

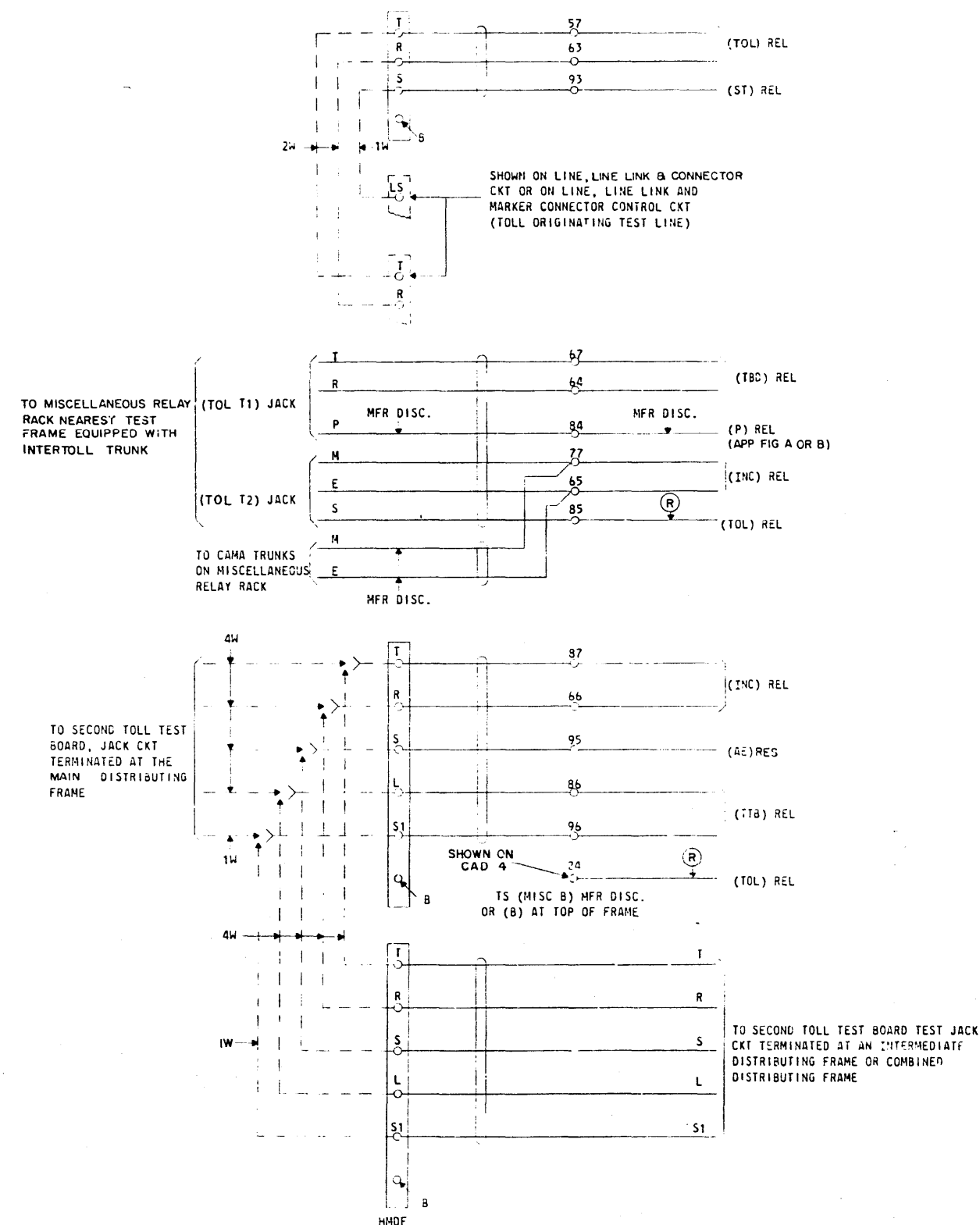
400000-A 001010 NO. 5 MASTER TEST FRAME TRUNK TEST CIRCUIT	SD-25918-01-G3
BELL TELEPHONE LABORATORIES	6S

SD-25918-01-G3

PART OF CAD 4 (MFR DISC.) (FOR APP FIGURES 1,5,6,7,10,E,F,G,H,I,J)



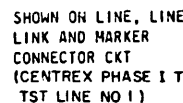
CAD 5 (MFR DISC.) (FOR APP FIGURES 8, A, S, B)



SD-25918-01-G4

ST-410
K-100
K-100

(FOR CAD 1)

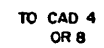


SHOWN ON
ATTENDANT
TRK CKT
(ES-26270-01)

SHOWN ON
POSITION
LOOP CKT

SHOWN ON
622-AI TST —
TEL CONN CKT

LAMP TRANSVERTER
AND MAKE BUSY CKT



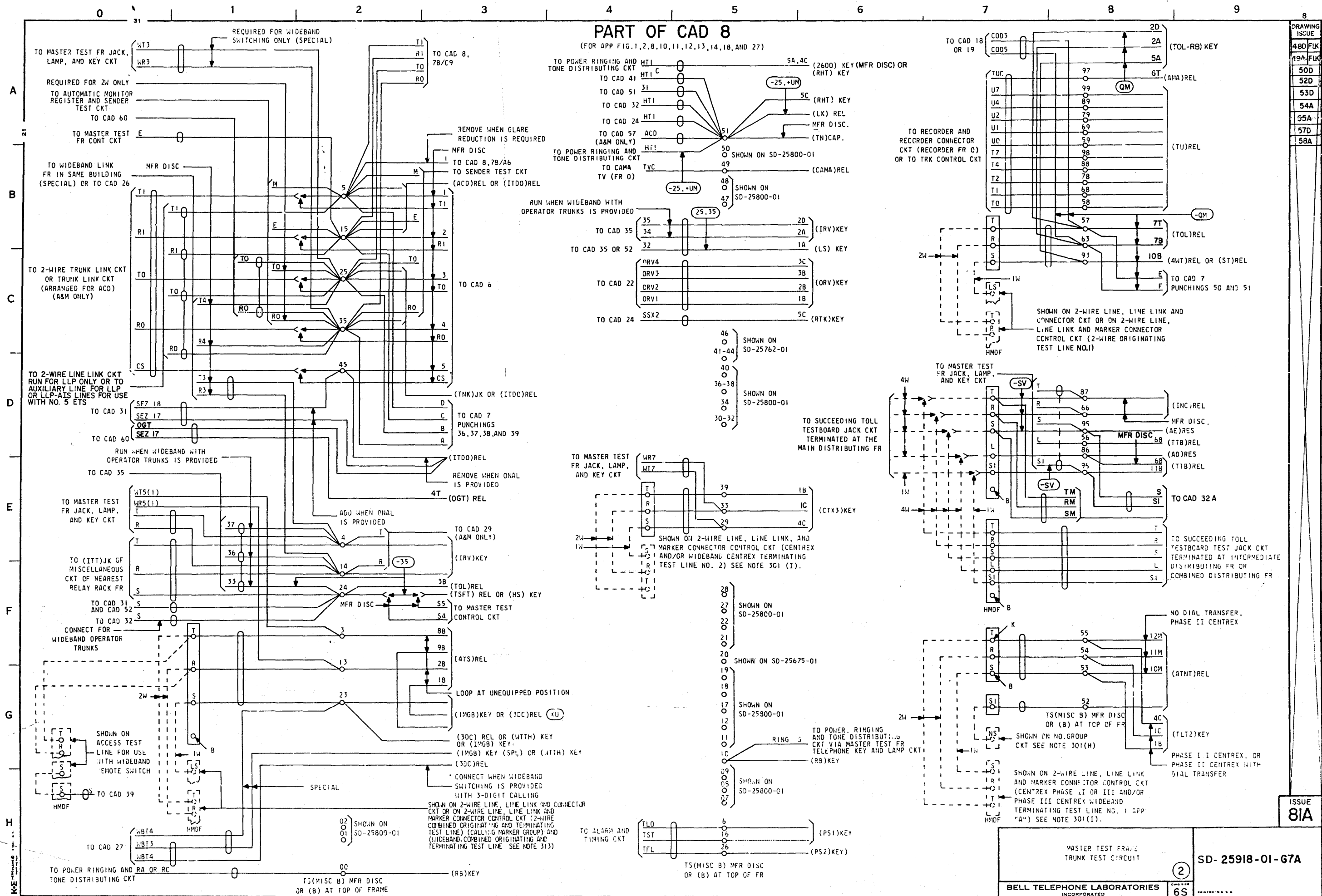
TO 2W
TRUNK
FRAME

TO
JACK
BAY

TO CAD
4 OR 8

SHOWN ON
ATTENDANT
TRK CKT
(ES-26503-01)





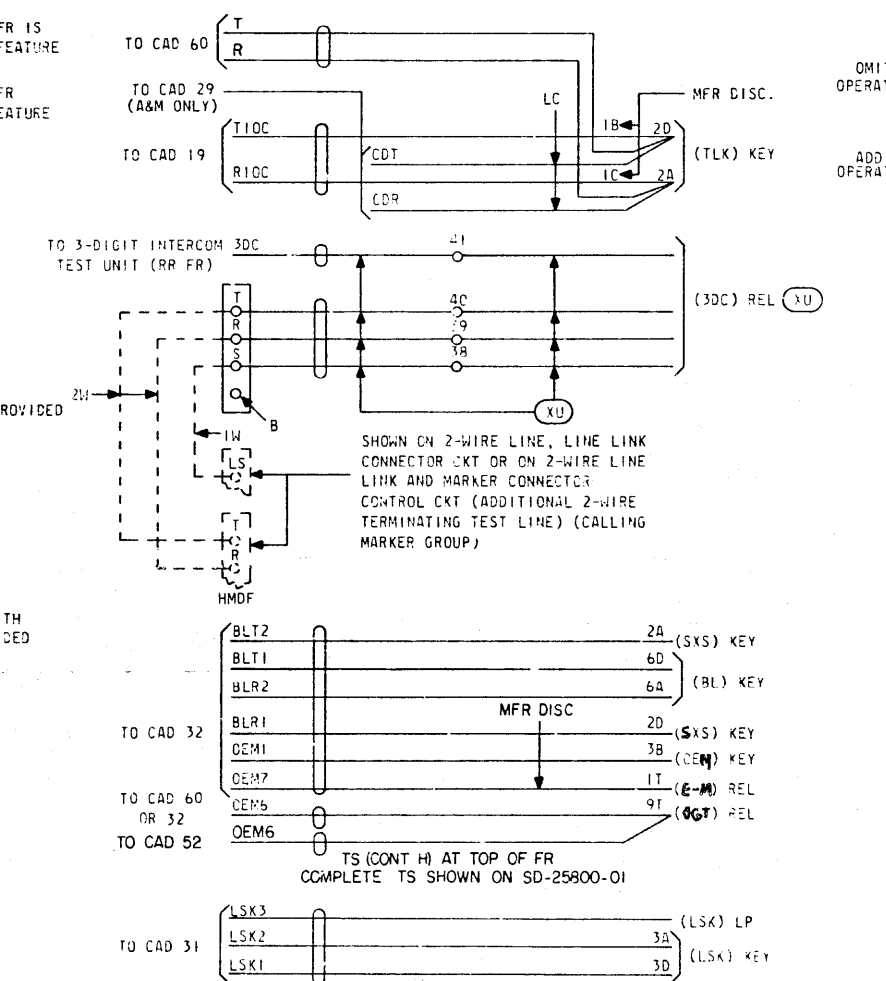
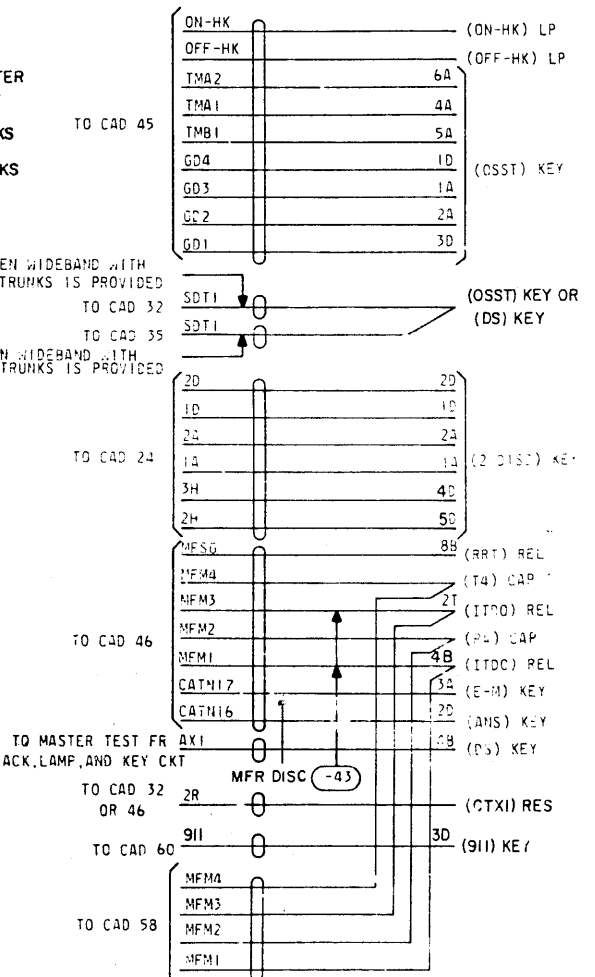
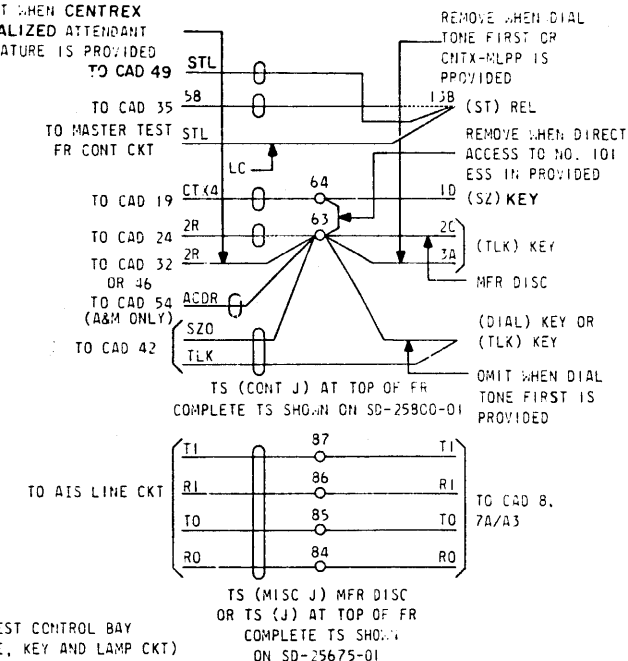
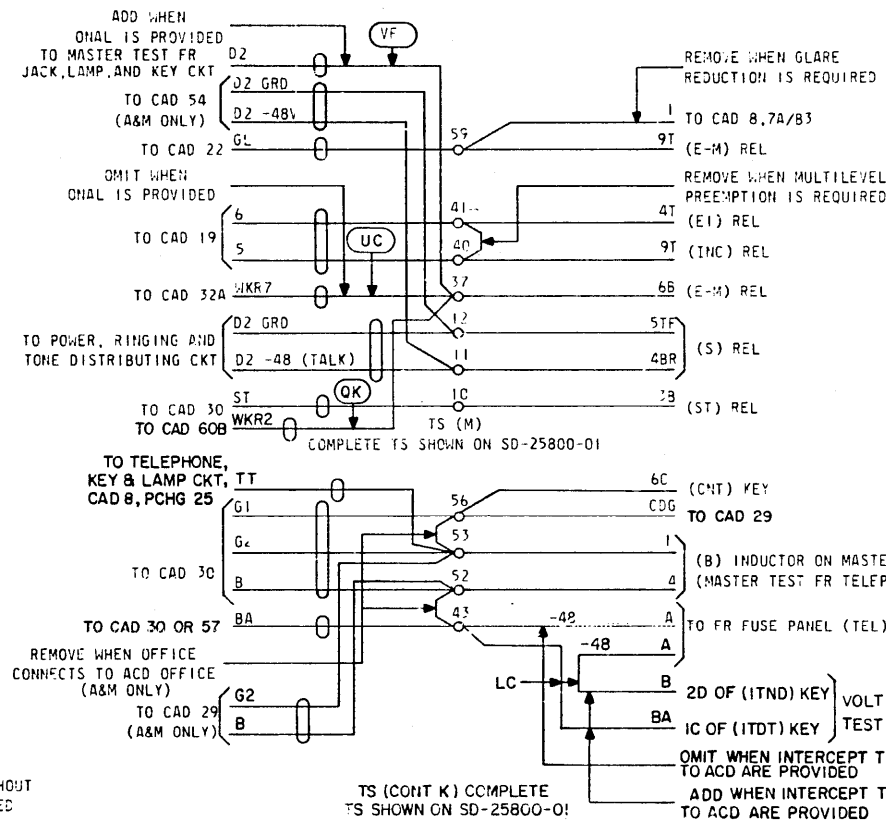
PART OF CAD 8

(FOR APP FIG. 1, 2, 8, 10, 11, 12, 13, 14, 29, AND 30)

OMIT WHEN CENTREX
CENTRALIZED ATTENDANT
FEATURE IS PROVIDED
TO CAD 49

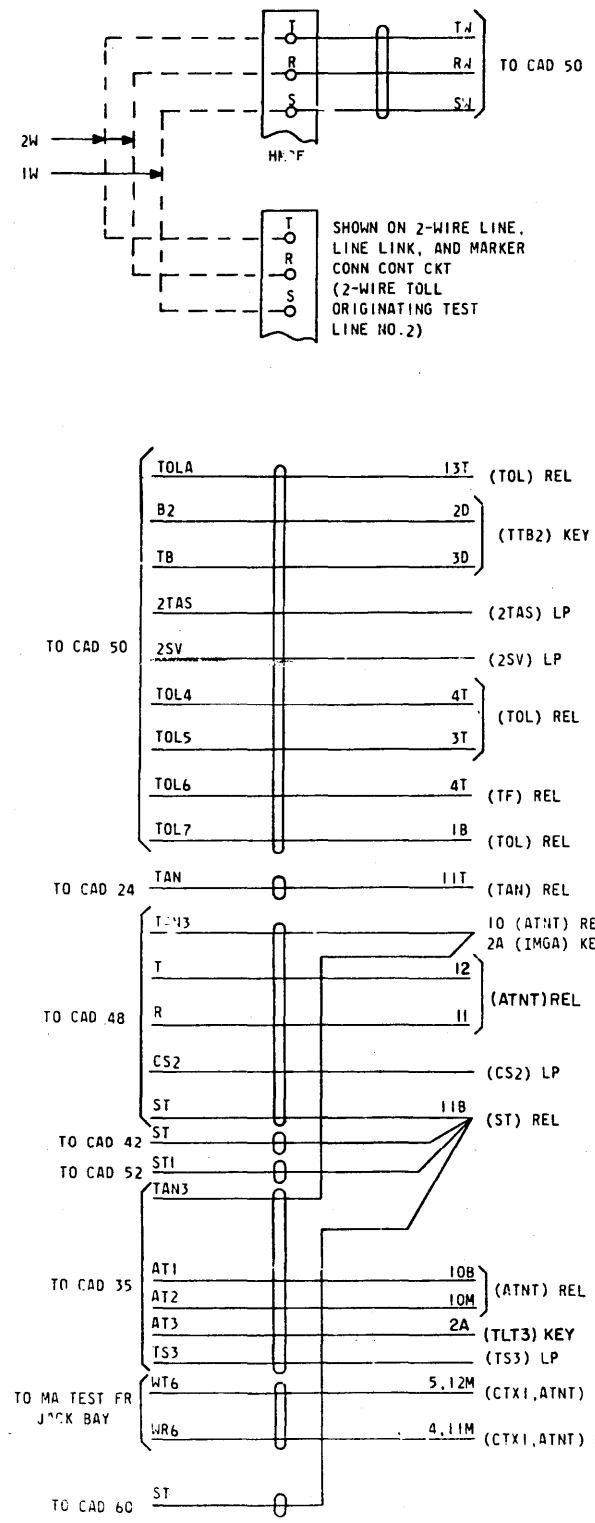
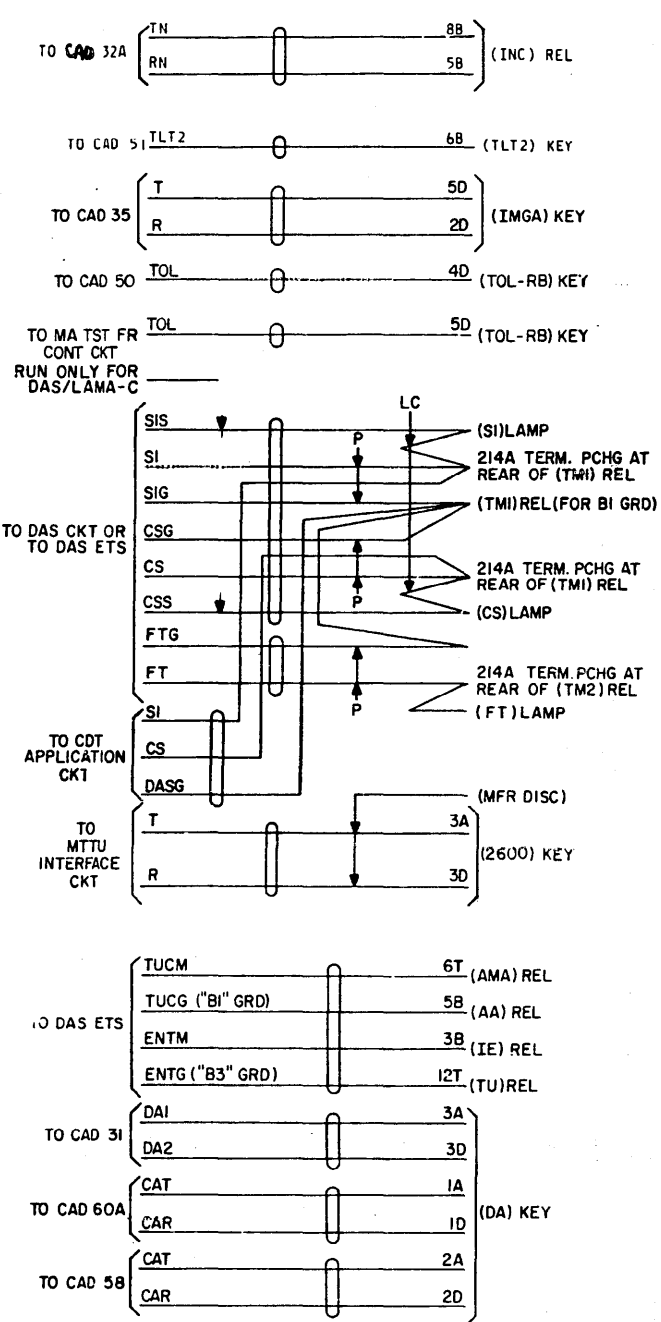
REMOVE WHEN DIAL
TONE FIRST OR
CENTX-MLPP IS
PROVIDED

DRAWING
ISSUE
480 FLK
49A FLK
500
51A
520
530
54A
560
58A



SD-25918-01-67B

PART OF CAD 8 (FOR APP FIG 1, 8, 10, 13, 32, 33, AND 34)



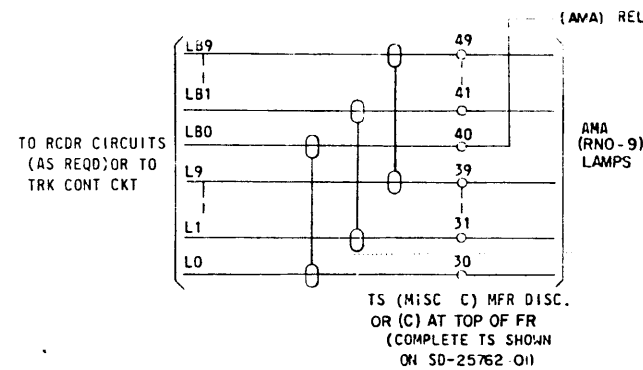
SHOWN ON 2-WIRE LINE.
LINE LINK, AND MARKER
CONN CONT CKT
(2-WIRE TOLL
ORIGINATING TEST
LINE NO. 2)

DRAWING
ISSUE
53D
54A
55A
57D
58A

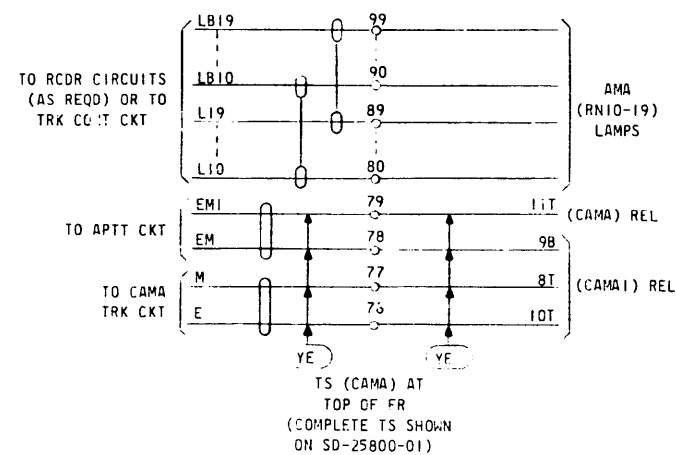
ISSUE
80B

SD-25918-01-G7C

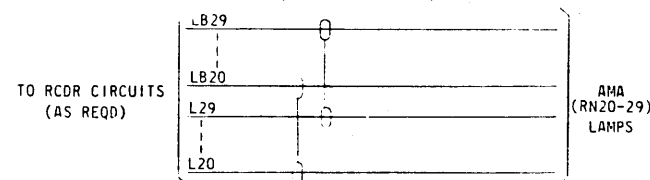
CAD 9
(FOR APP FIG. 3, 4, & 12)



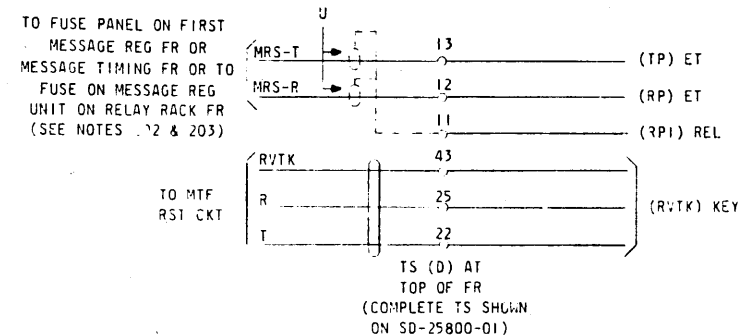
CAD 10
(FOR APP FIG. 2, 3 & 4)



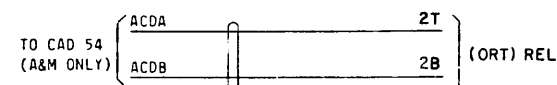
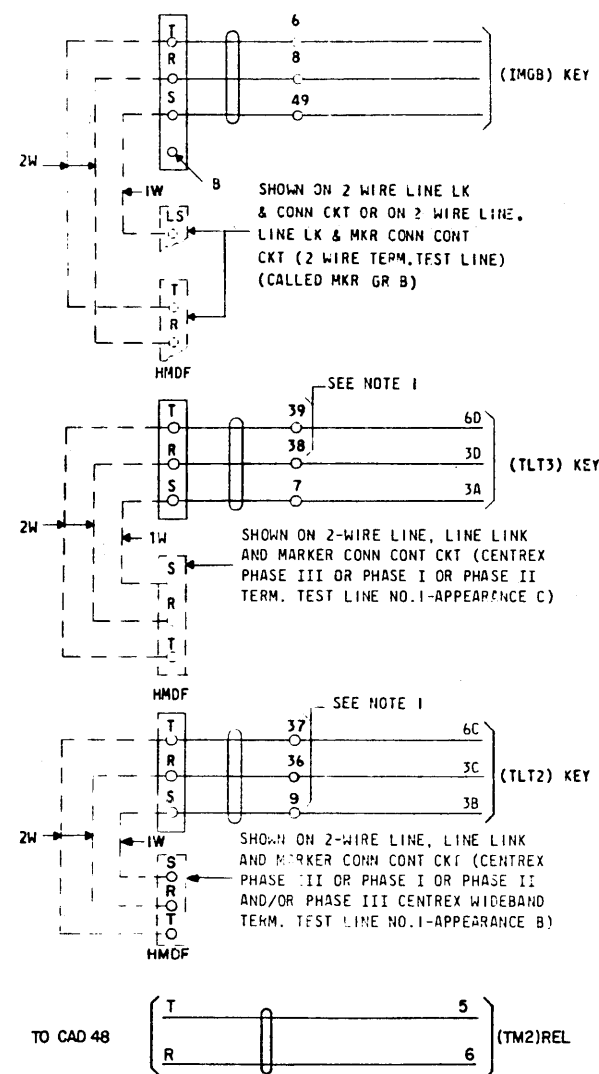
CAD 10A
(FOR APP FIG. 39)



CAD 11
(FOR APP FIG. 1 & 5)



CAD 12
(FOR APP FIG. 1, 10, 13, 14, 15, 18, J, AND P)



TO MASTER TEST FR JACK, LP, AND KEY CKT OR MASTER TEST FR JACK, LP, AND KEY CKT FOR ACD (A&M ONLY)

TO CENTREX ATTENDANT TRK CKT FOR 2-WAY OFF. NETWORK ACCESS CONT WITH 608A SWBD

TO PHASE II CENTREX ATTENDANT TRK ARRANGED FOR USE WITH 608A SWBD AND ARRANGED FOR USE AS TEST ATTENDANT TRK OR TO PHASE III CENTREX ATTENDANT TRK ARRANGED FOR USE WITH 608A SWBD

OMIT WHEN RANGE EXT IS PROVIDED

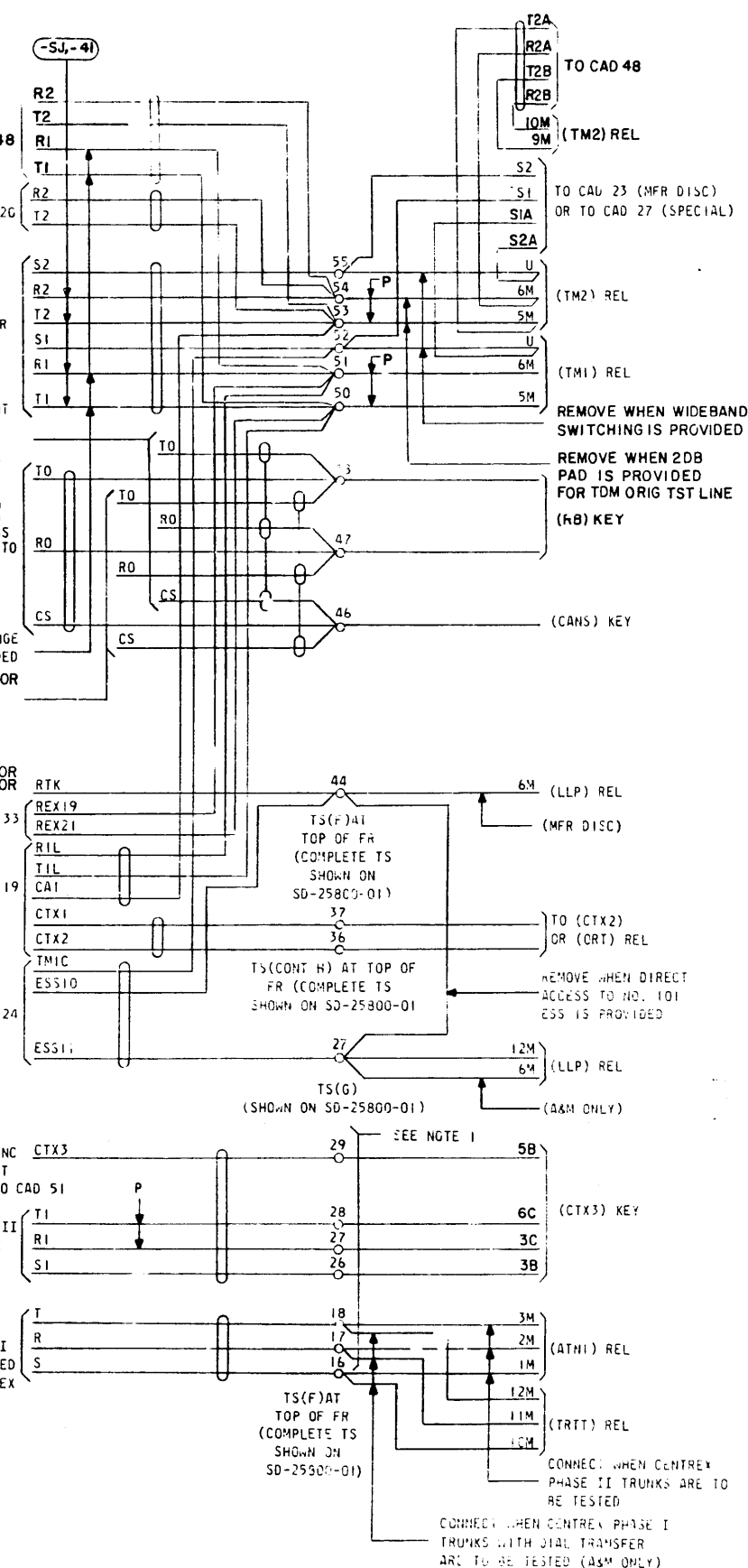
TO CENTREX ATTENDANT TRK FOR 2-WAY OFF. NETWORK ACCESS CONT ARRANGED FOR USE AS TEST ATTENDANT TRK

TO 2-WIRE LINE LINK CKT OR TO AUXILIARY LINE FOR LP OR LLP-AIS LINES FOR USE WITH NO. 5 ETS

TO PHASE I OR PHASE II CENTREX TEST INC TRK CKT OR TO PHASE III CENTREX INC TRK CKT ARRANGED AS A TEST TRK OR RELAY RACK FR OR TO CAD 51

TO PHASE I OR PHASE II CENTREX TEST INC TRK CKT ON RELAY RACK FR

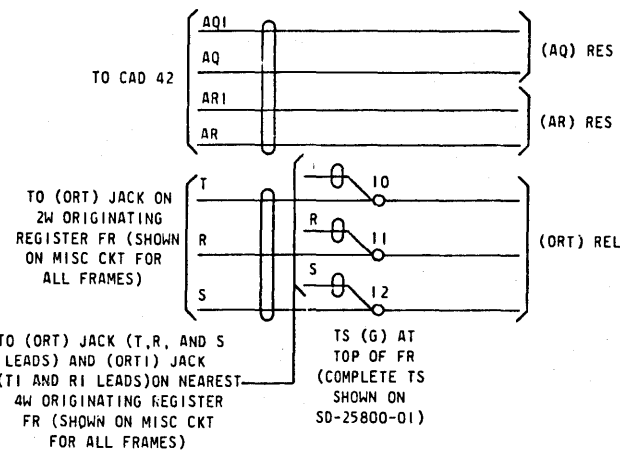
TO PHASE II CENTREX TEST INC TRK CKT OR TO PHASE III CENTREX INC TRK CKT ARRANGED AS A TEST TRK, OR TO CENTREX TEST INC TRK CKT PHASE I (A&M ONLY)



NOTES:
1. IN OFFICES ARRANGED FOR ACD, CONNECT PER CAD 29.

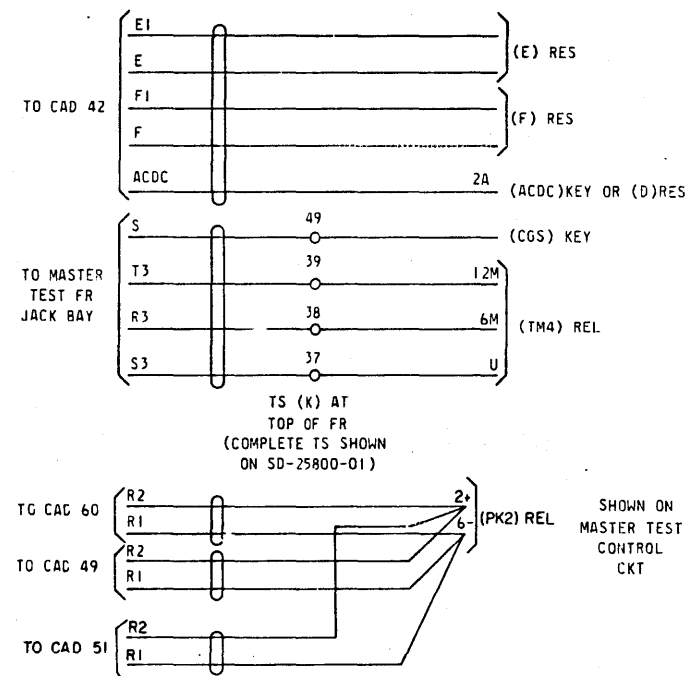
CAD 13

(FOR APP FIG J)



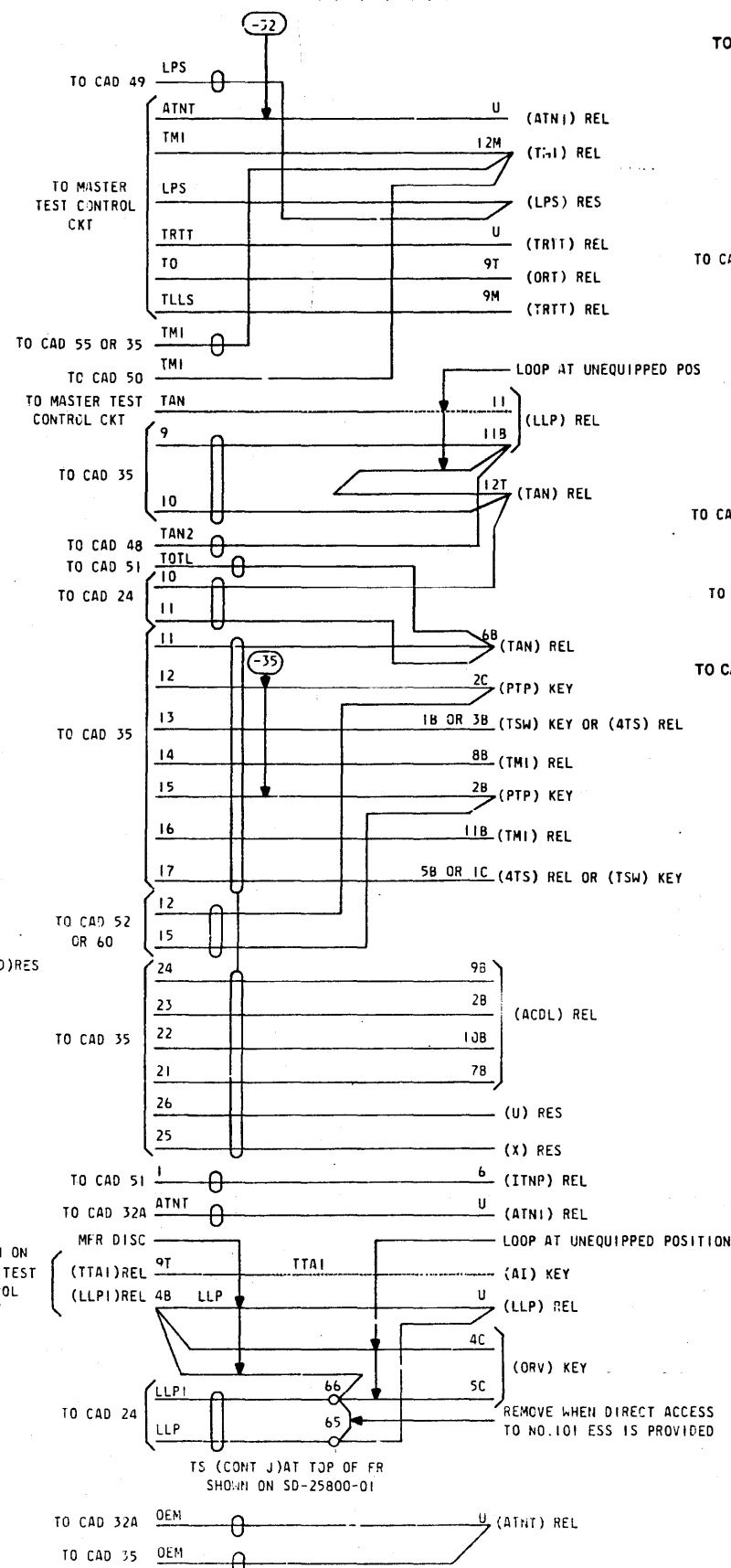
CAD 14

(FOR APP FIG 18, K, AND L)



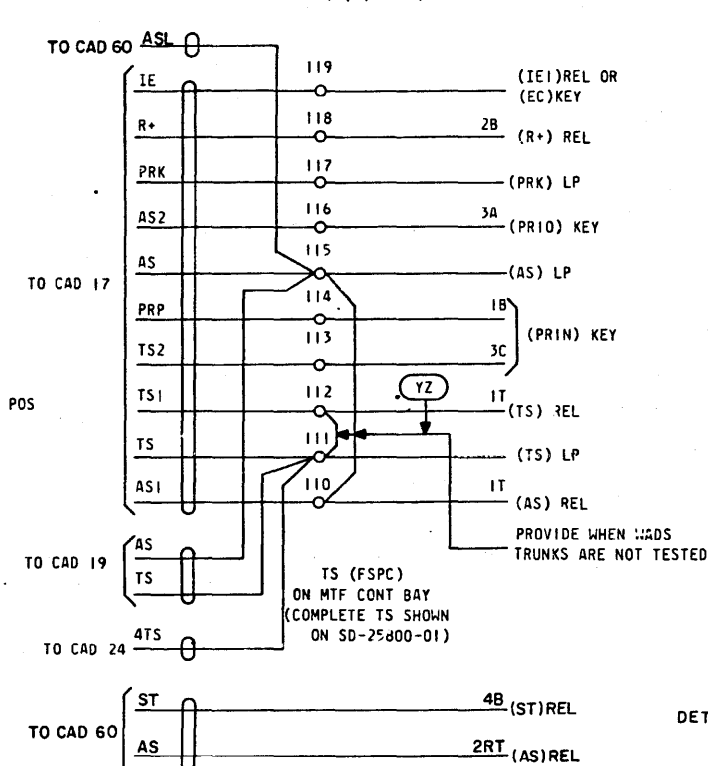
CAD 15

(FOR APP FIG 1, 7, 11, 13, 15, K, L, AND P)



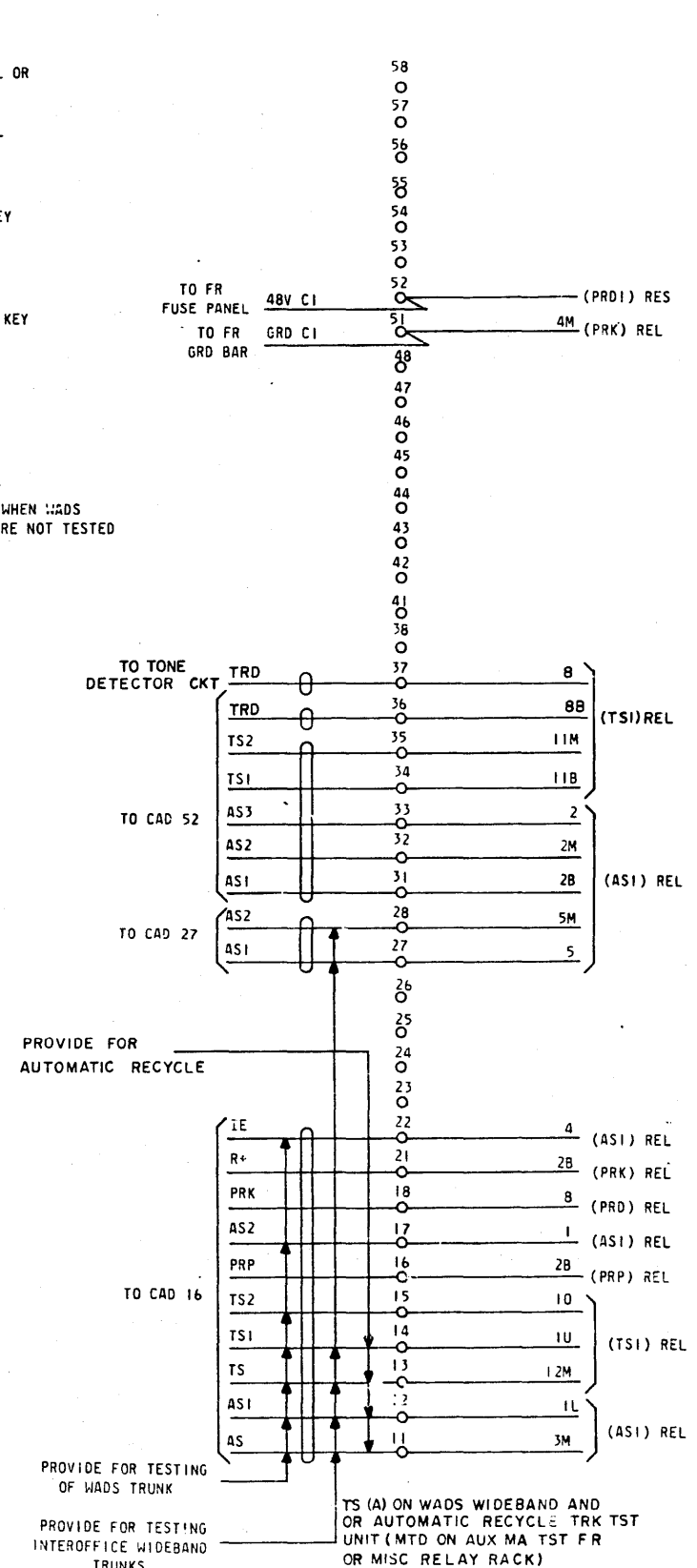
CAD 16

(FOR APP FIG 1, 2, 6, & 17)



CAD 17

(FOR APP FIG 1 & 16)



SD-25918-01-G8B

MASTER TEST FRAME
TRUNK TEST CIRCUIT

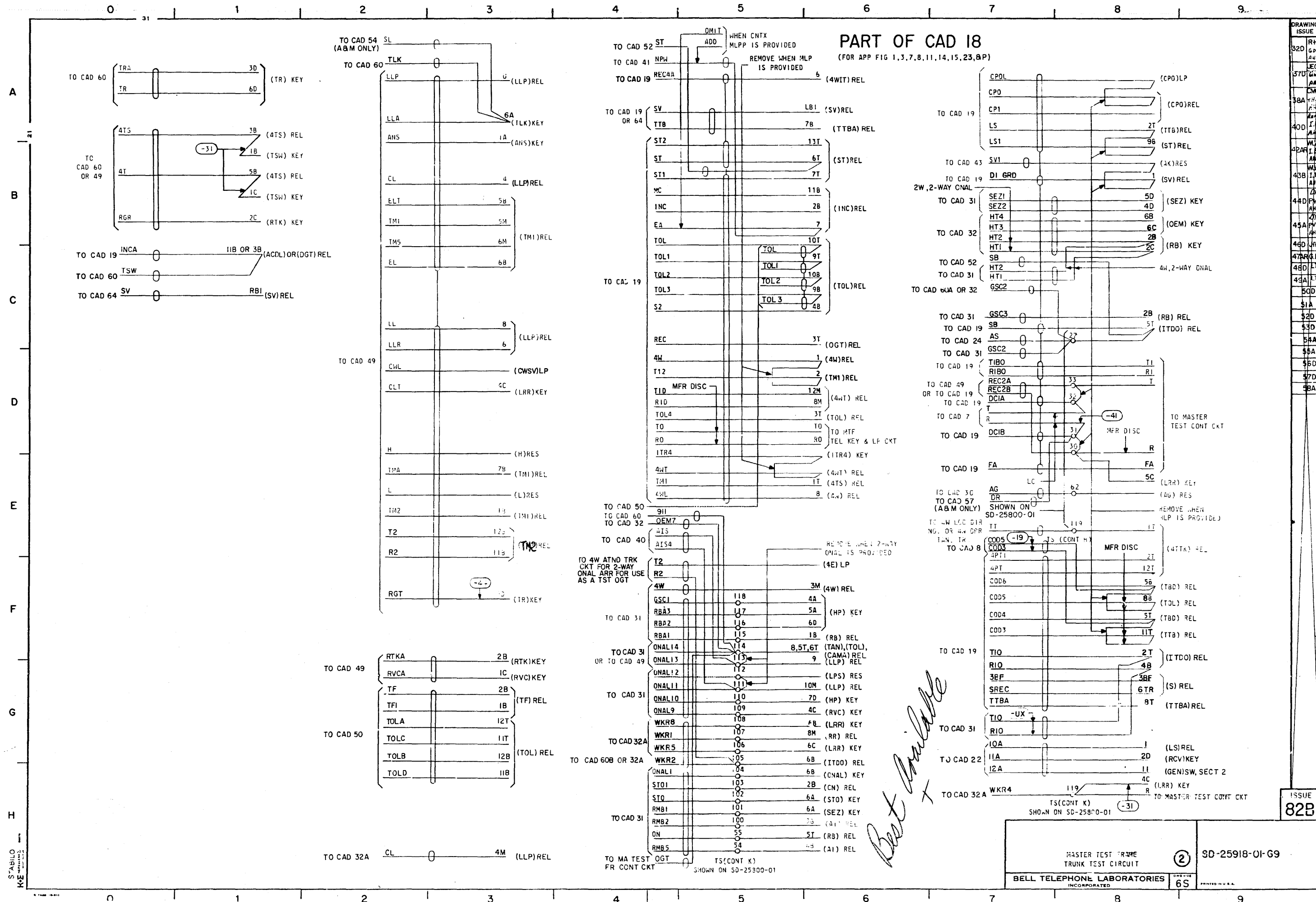
2

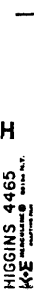
SD-25918-01-G8B

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

PRINTED IN U.S.A.





TO
TO
(M
TO
TO
TO
TO F

TO
TL

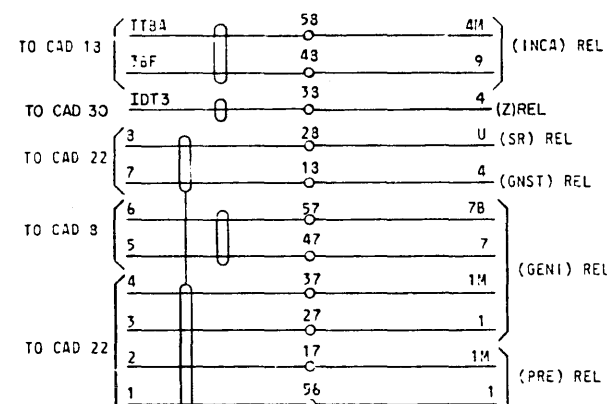
TS

0 1 2 3 4 5 6 7 8 9

PART OF CAD 19

(FOR PART OF APP FIG. 19)

A



B

C

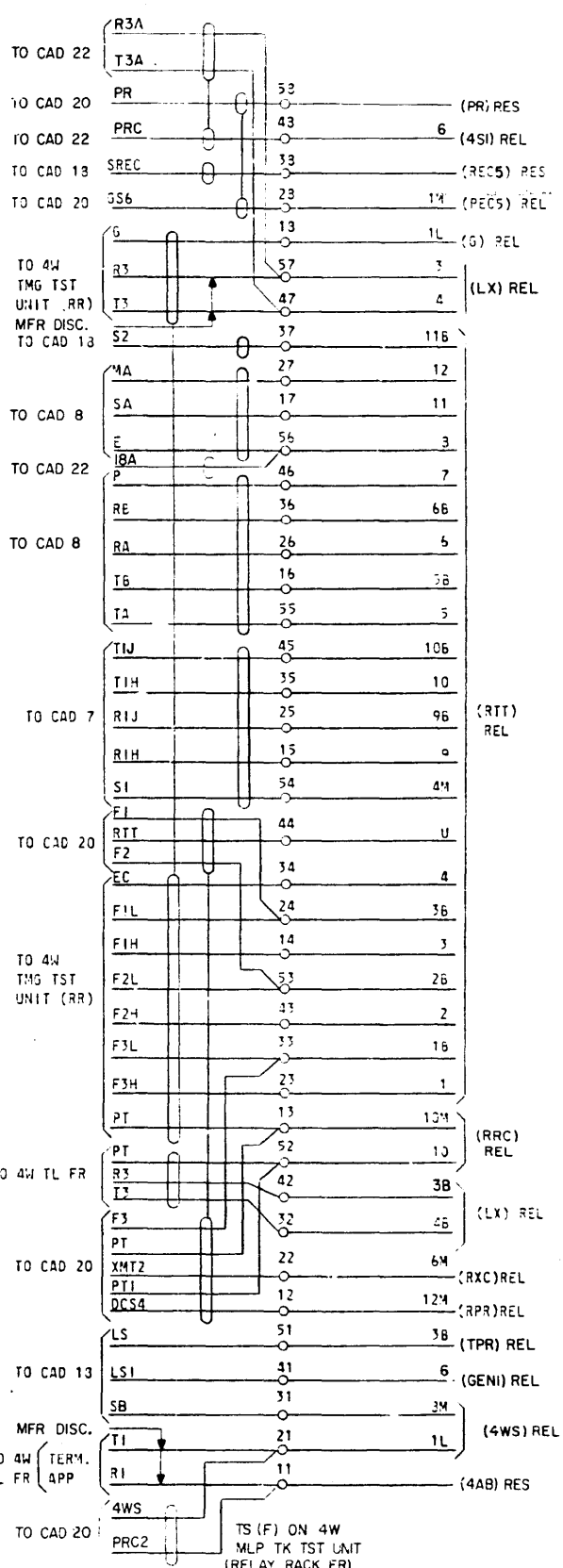
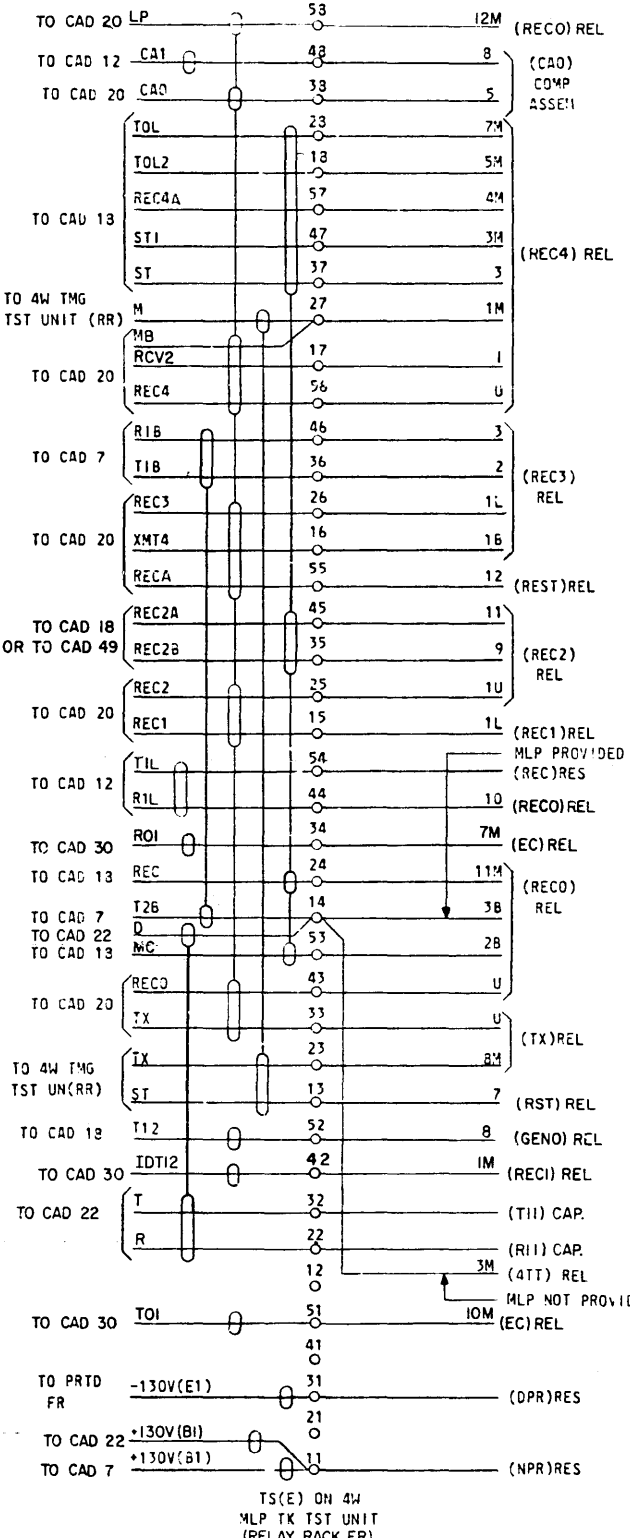
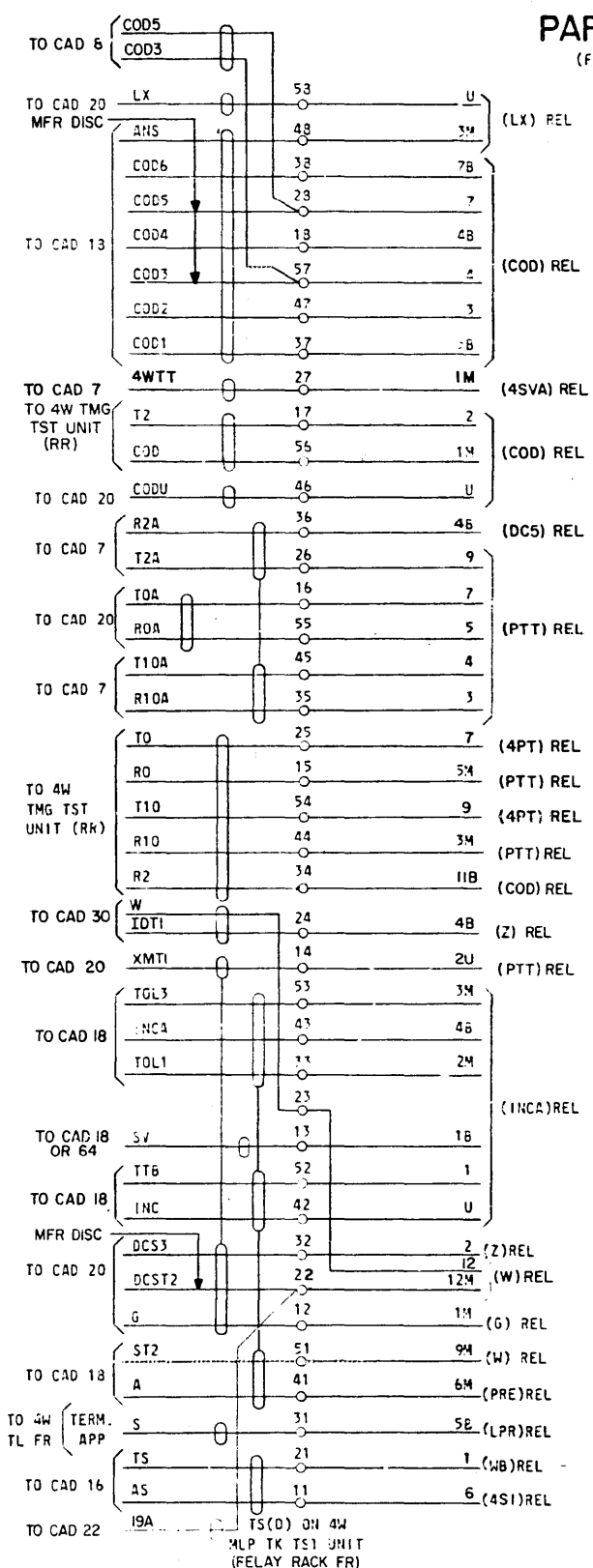
D

E

F

G

H



DRAWING
ISSUE
37D
38A
40D
42A
43B
44D
45A
46D
48D
51A
52D

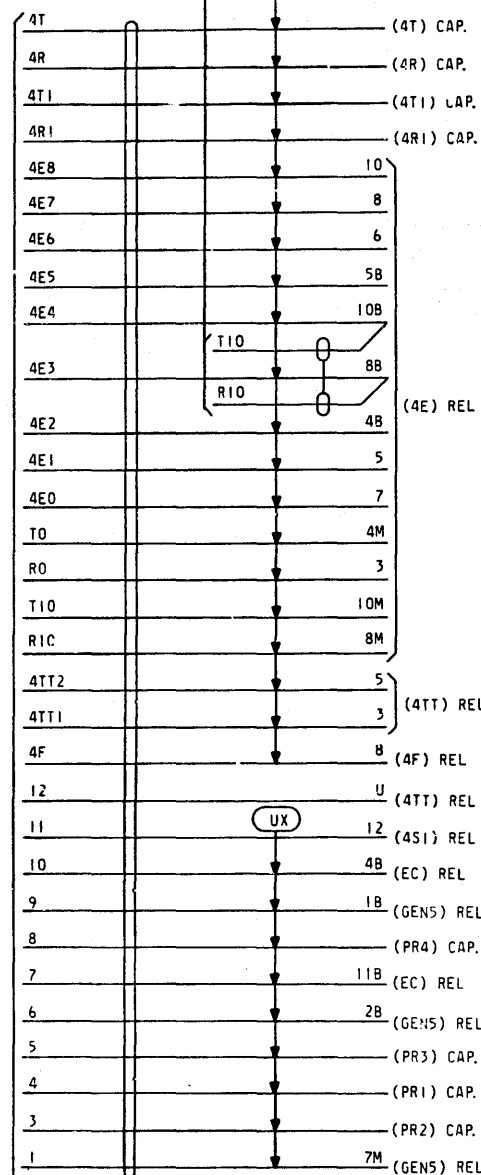
ISSUE
82B

SD-25918-01-G11A

PART OF CAD 19

FOR FIG. 26

TO CAD 18 4W, 2-WAY ONAL



DRAWING	ISSUE
480	LT
500	
51A	
52D	
57D	

57

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-G11B

BELL TELEPHONE LABORATORIES
INCORPORATED

6S

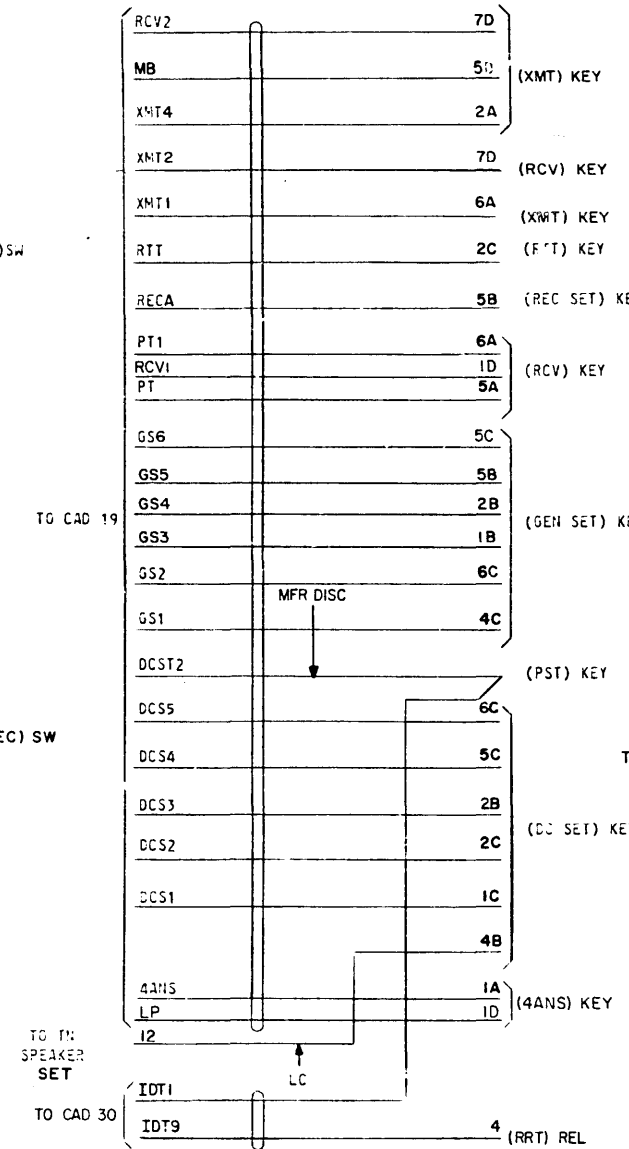
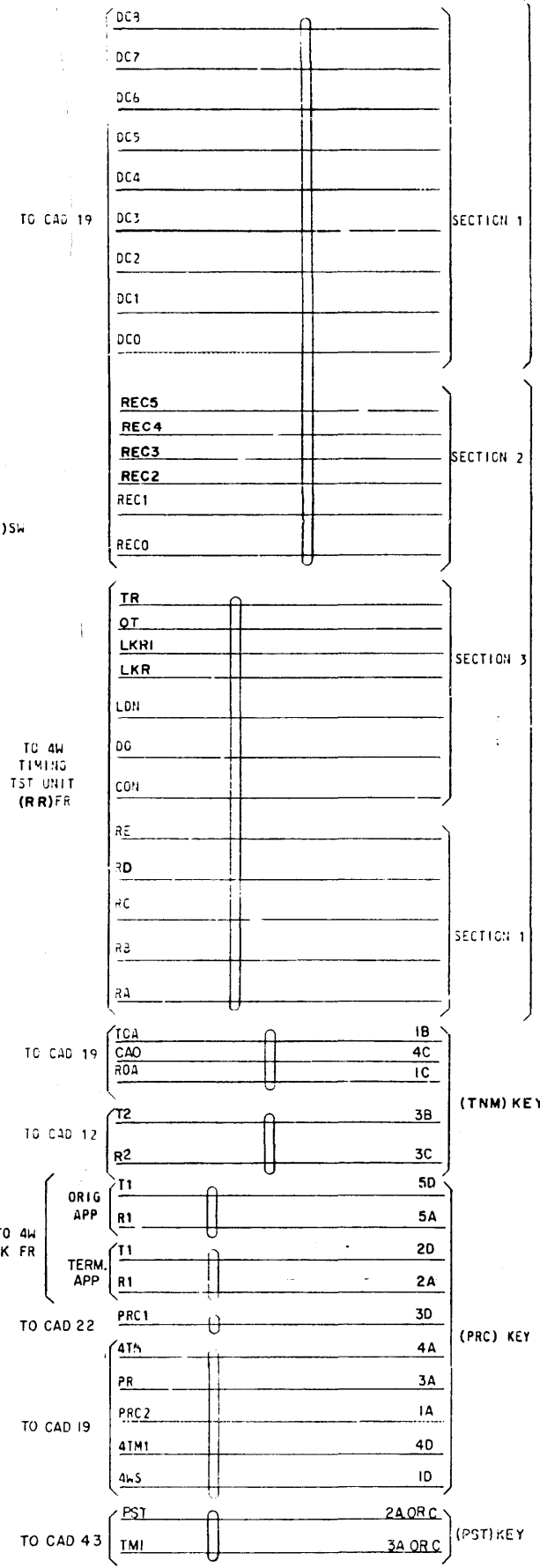
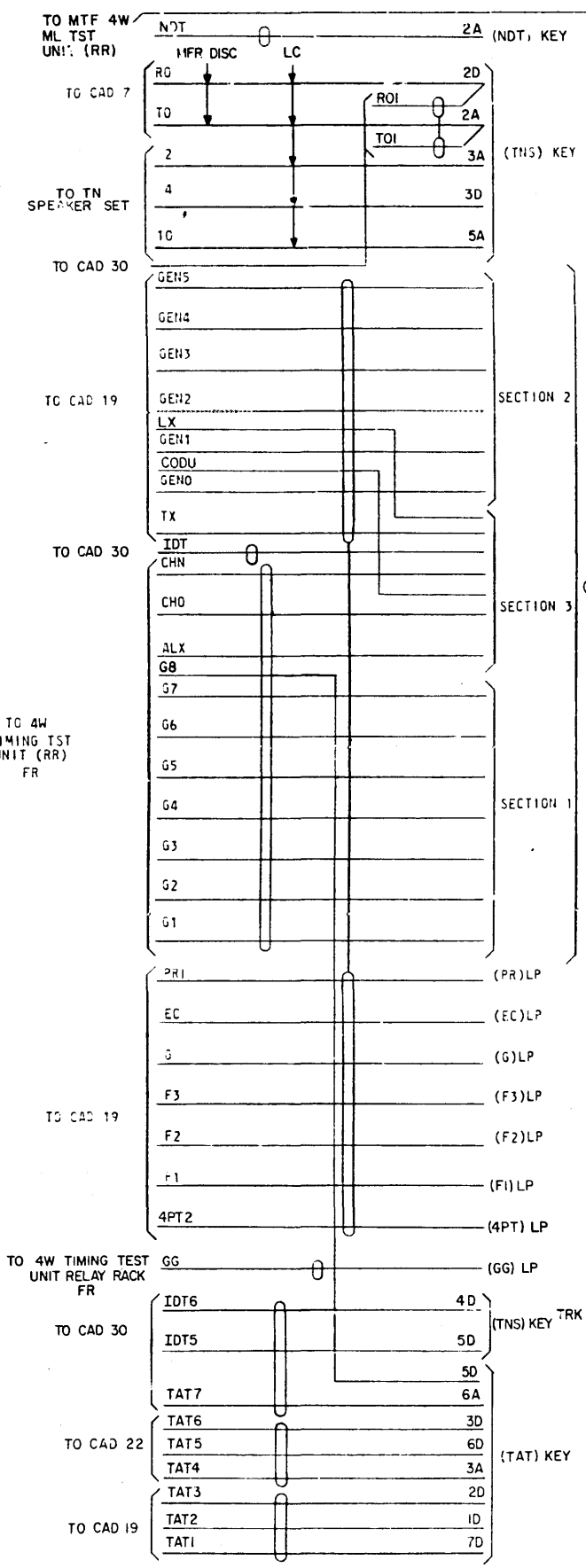
PRINTED IN U.S.A.

SD-25918-01-G11B

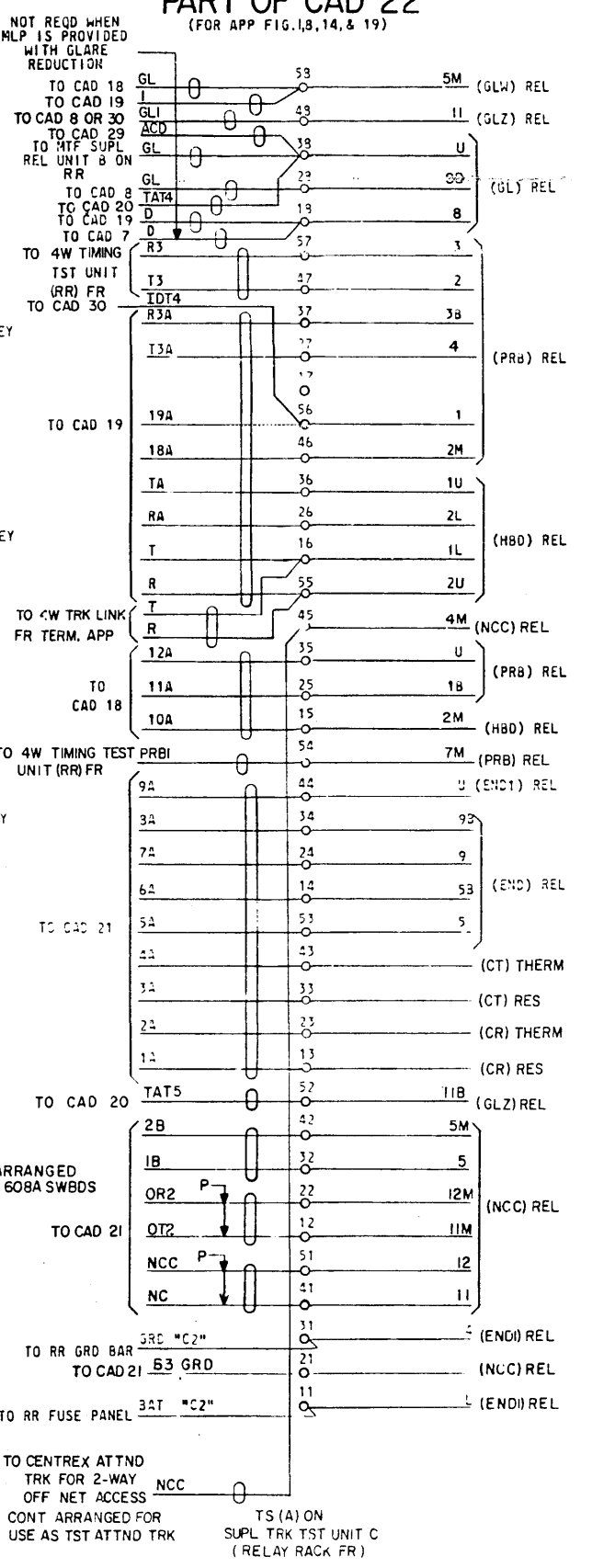
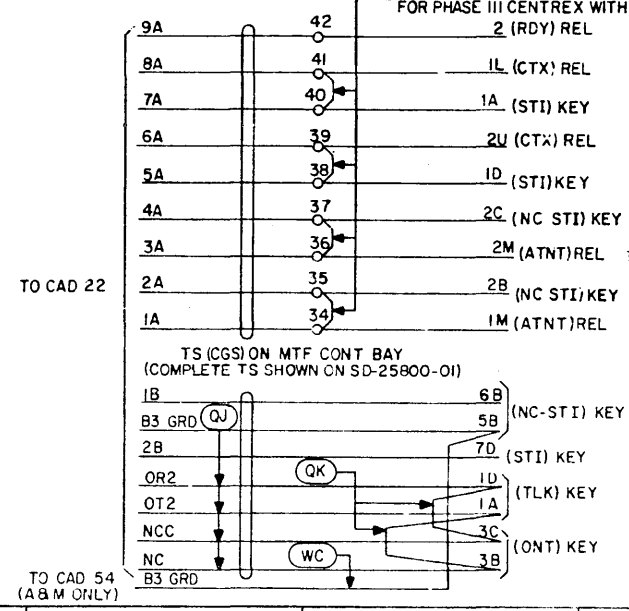
CAD 20
(FOR PART OF APP FIG. 19)

PART OF CAD 22
(FOR APP FIG. 1, 8, 14, & 19)

A
B
C
D
E
F
G
H

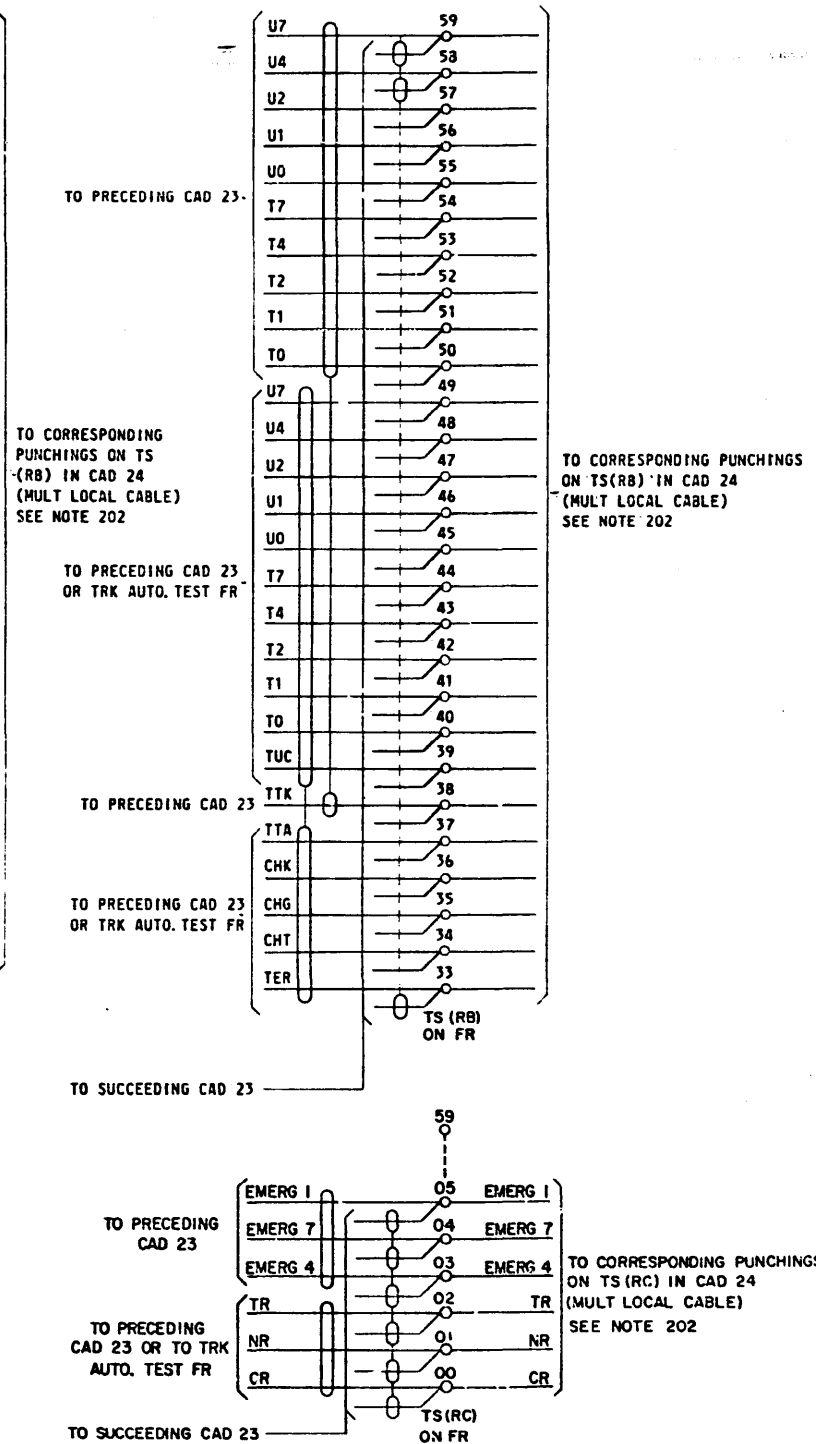
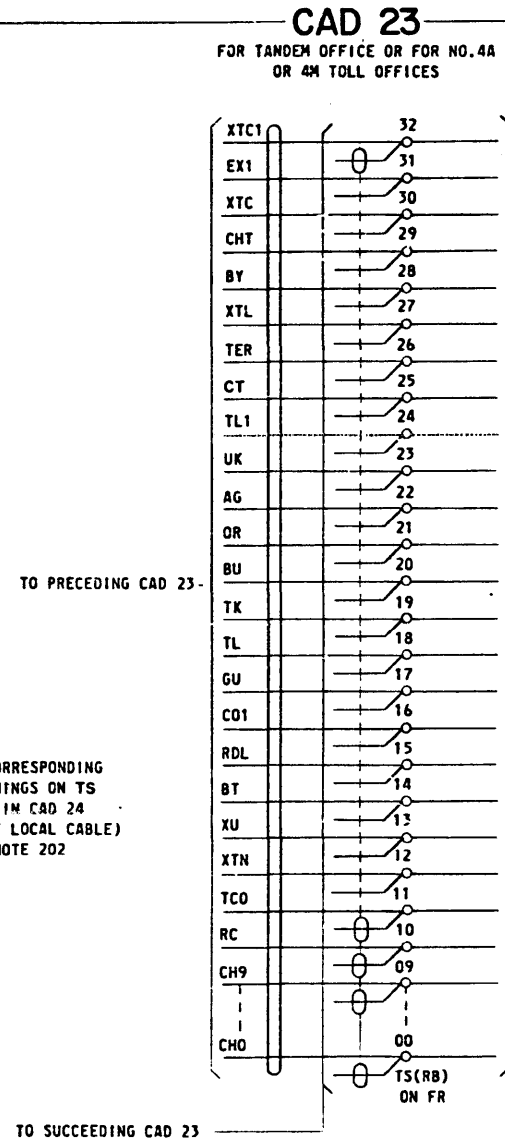
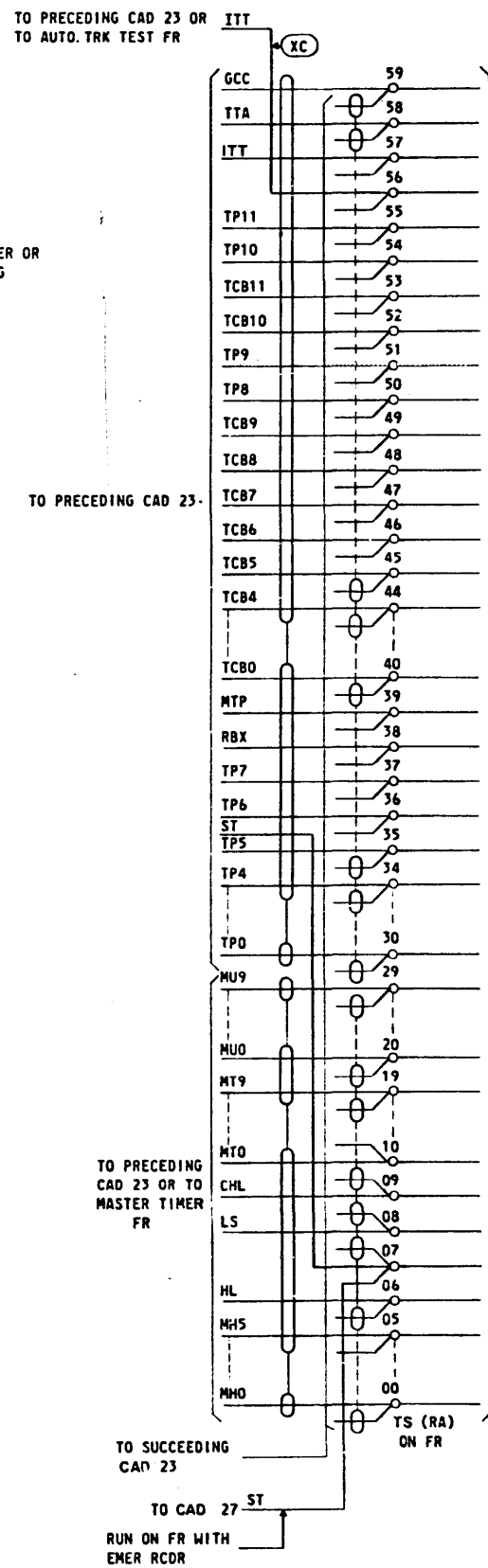
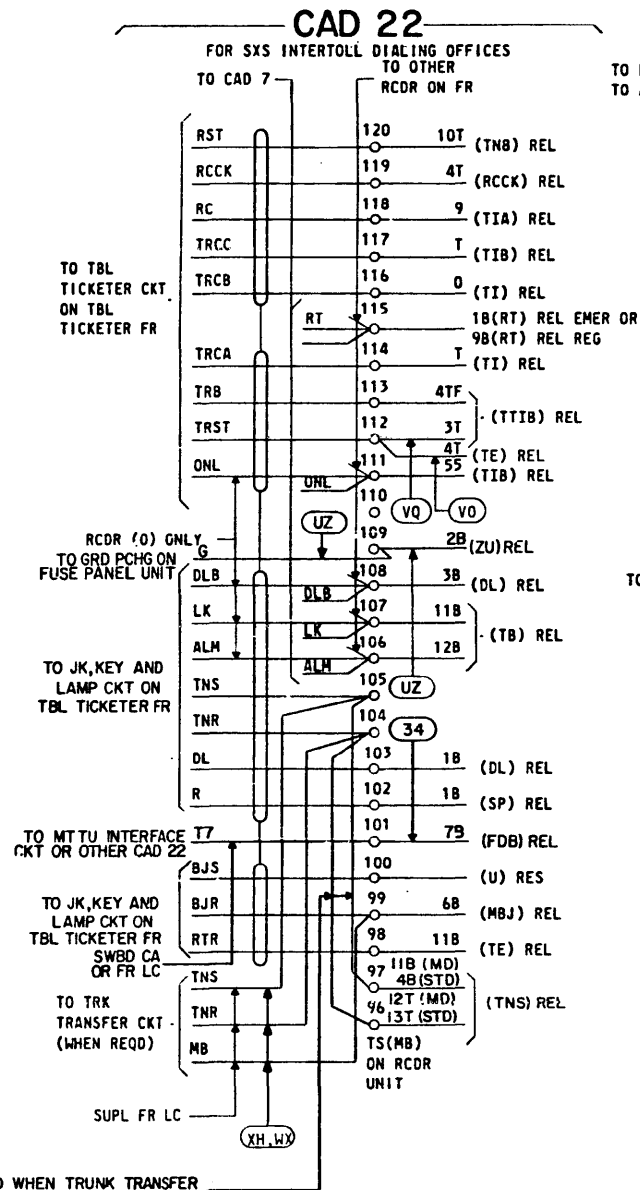


CAD 21
(FOR APP FIG. 14)



SD-25918-01-G12

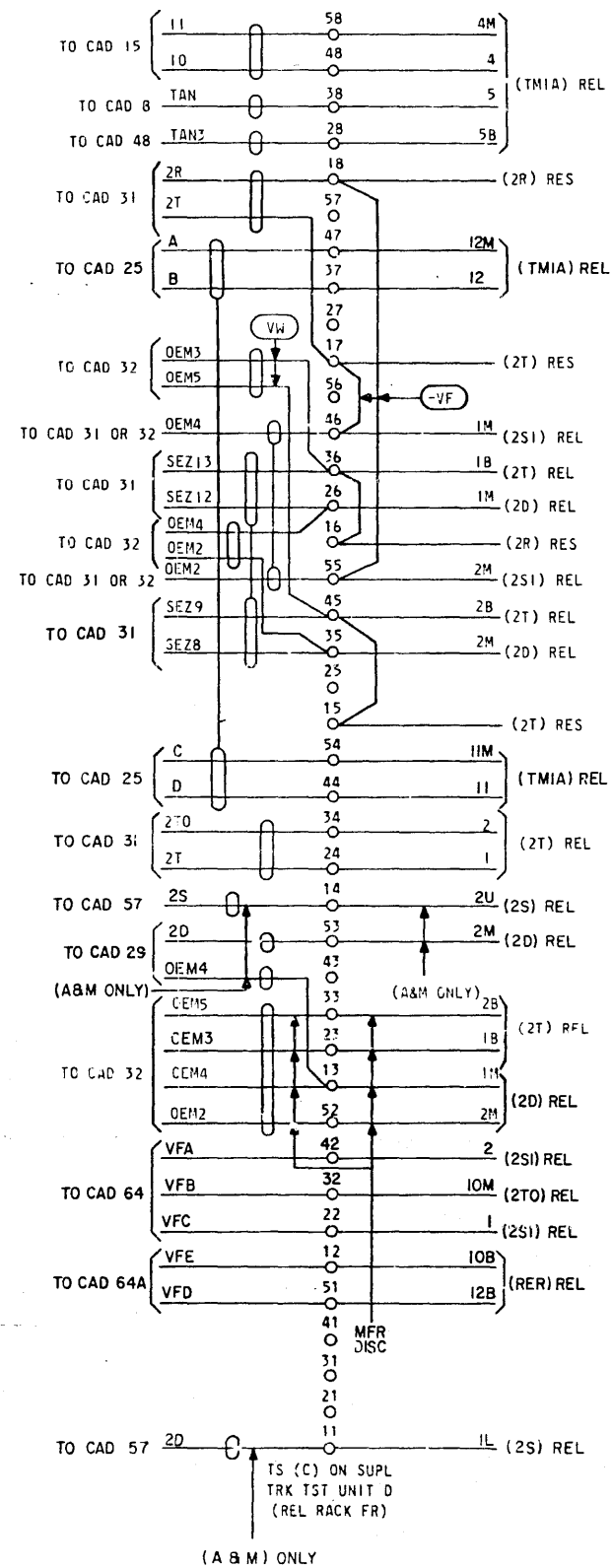
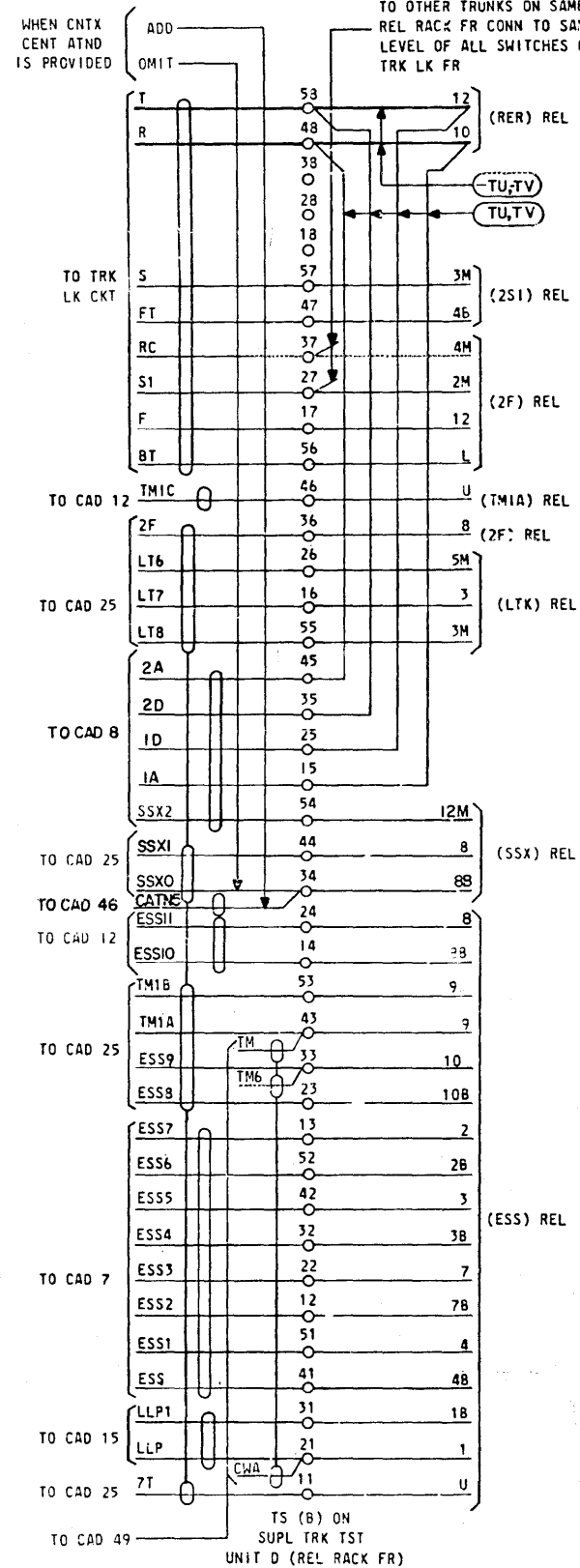
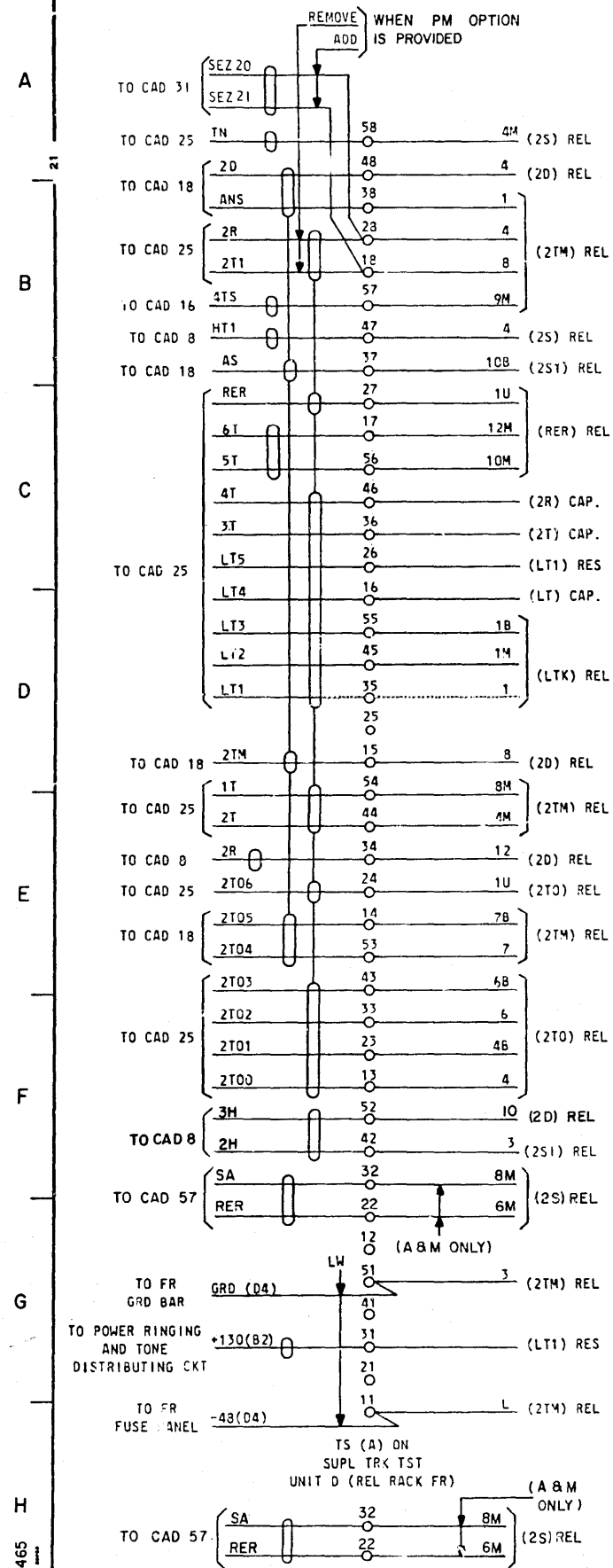
K. MIERLY



(FOR APP F!G. 1,22, AND P)

WHEN CNTX
CENT ATND
IS PROVIDED

TO OTHER TRUNKS ON SAME
- REL RACK FR CONN TO SAME
LEVEL OF ALL SWITCHES ON SAME
TRK LK FR



DRAWING ISSUE	
40D	LFT I 8 AND
43B	JEG I.B. AND
44D	CK PVS AND BY
45A	PVS AND
45D	LEO
47A	LEO
48D	LT
49A	LT
	50D
	51A
	52D
	53D
	54A
	55A
	56D
	57D

ISSUE
82B

MASTER TEST FRAME
TRUNK TEST CIRCUIT

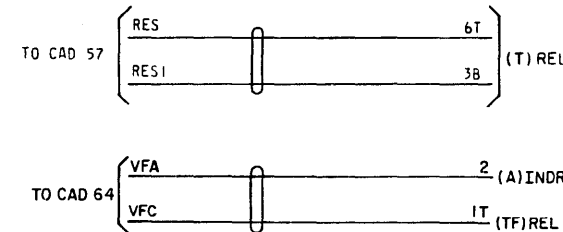
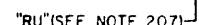
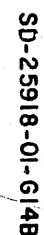
SD-25918-01-G14A

BELL TELEPHONE LABORATORIES
INCORPORATED

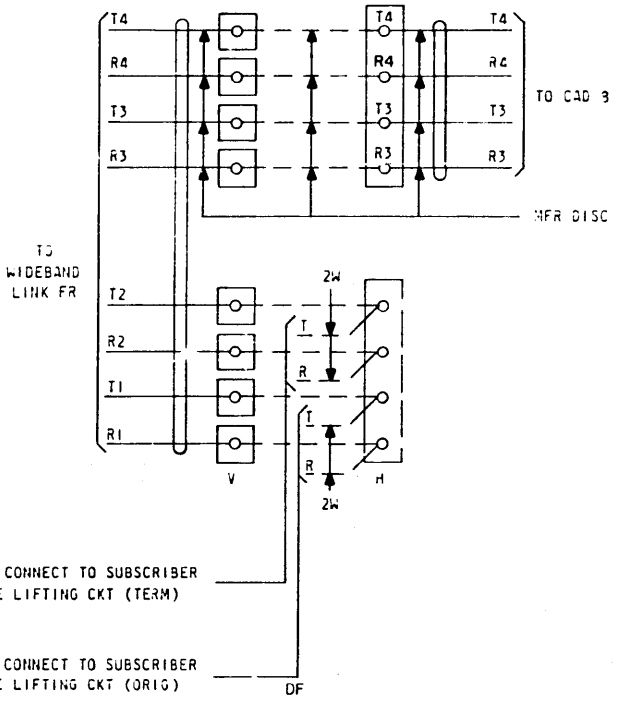
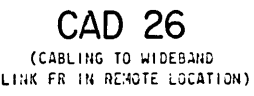
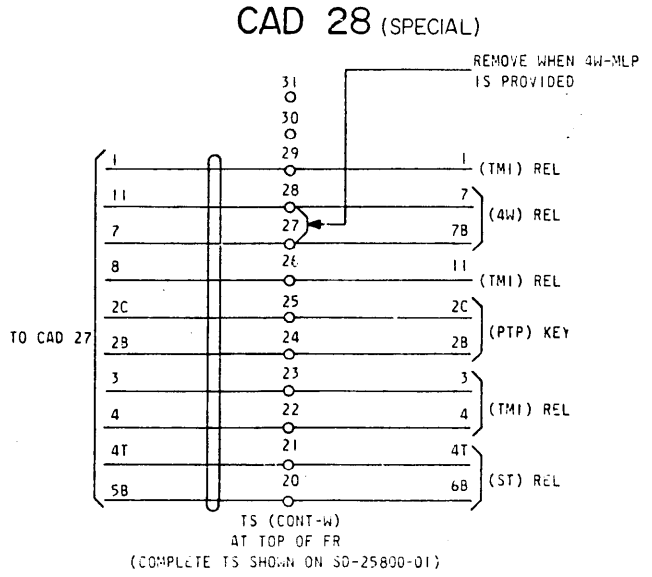
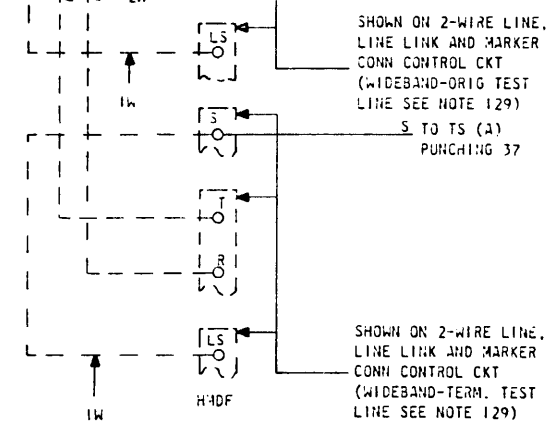
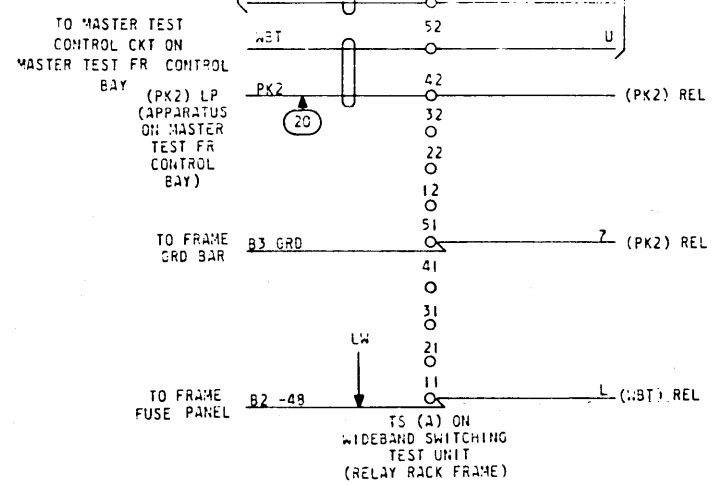
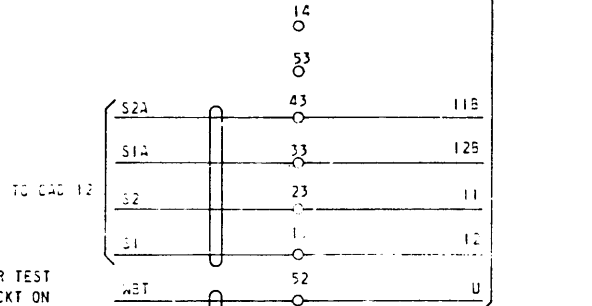
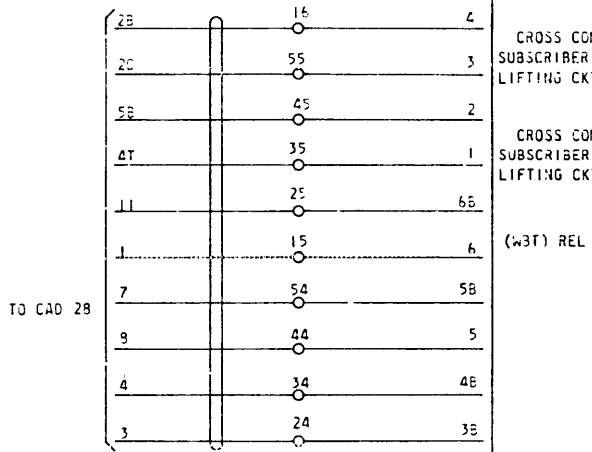
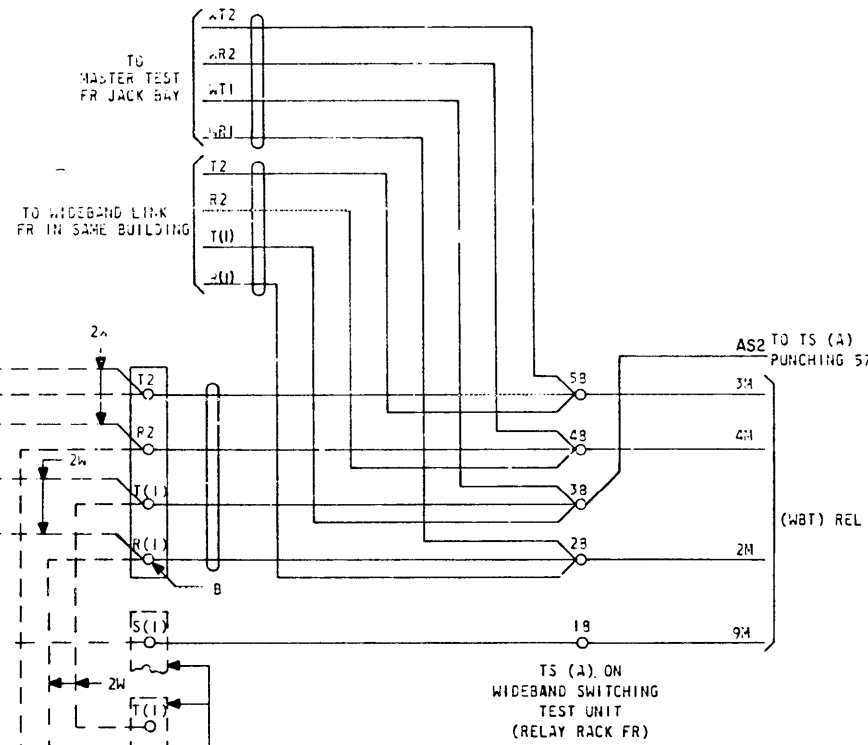
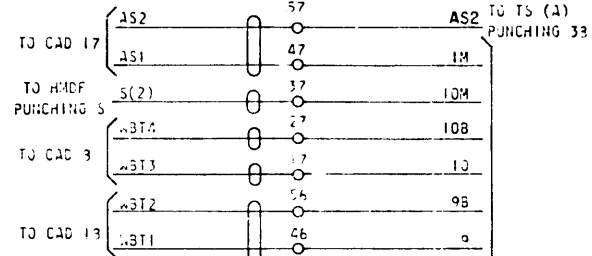
2
Dress size
65

PRINTED IN U.S.A.

(FOR APP FIG 1.8 AND P)



(FOR APP FIG 20 AND 21)



DRAWING ISSUE	
44D	RVN PVS AND
45A	LP PVS AND
46D	LEO
47AR	JW
49A	ME
50D	
51A	
56D	

ISSUE
59D

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-G15A

BELL TELEPHONE LABORATORIES
INCORPORATED

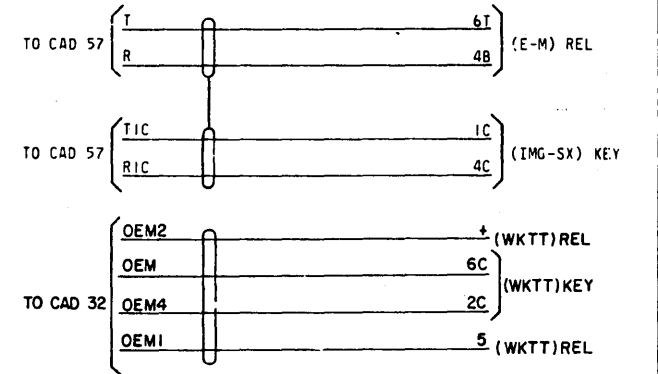
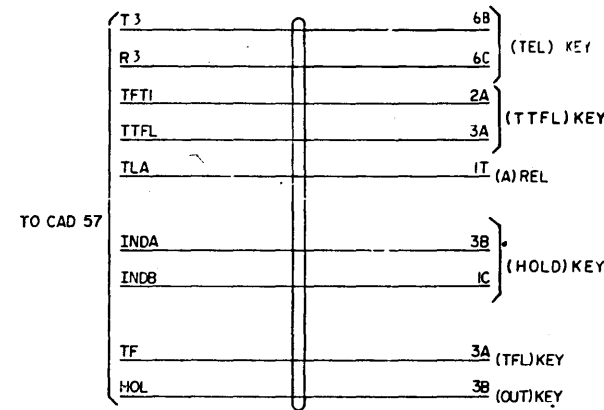
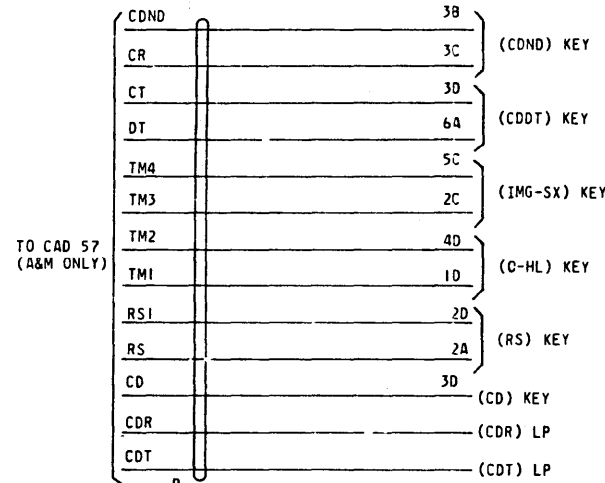
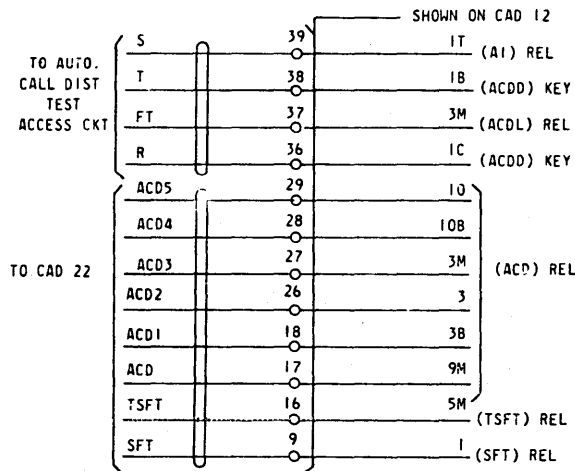
2
OWN SIZE
6S

PRINTED IN U. S. A.

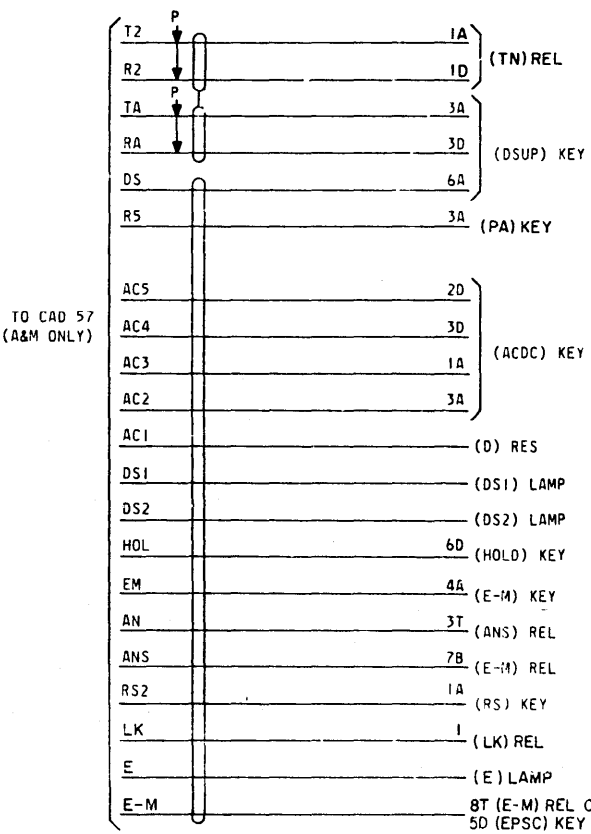
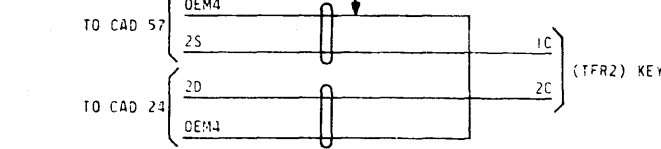
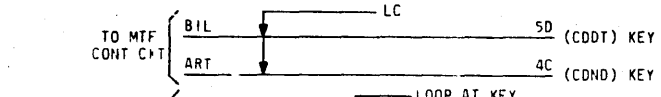
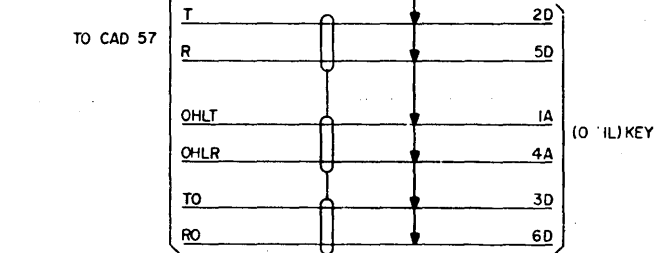
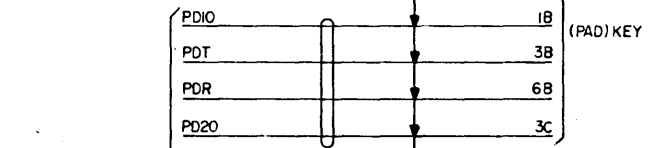
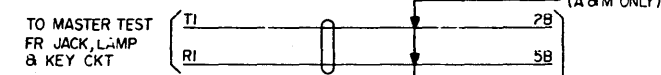
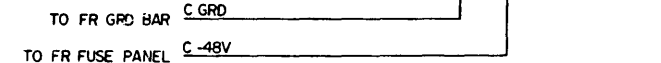
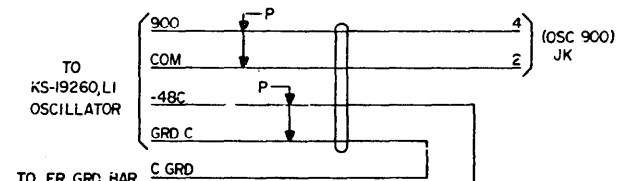
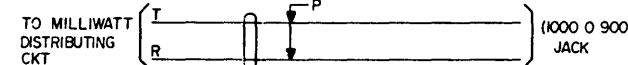
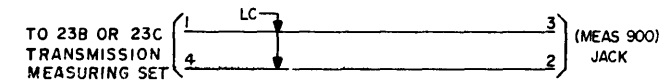
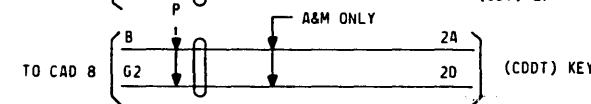
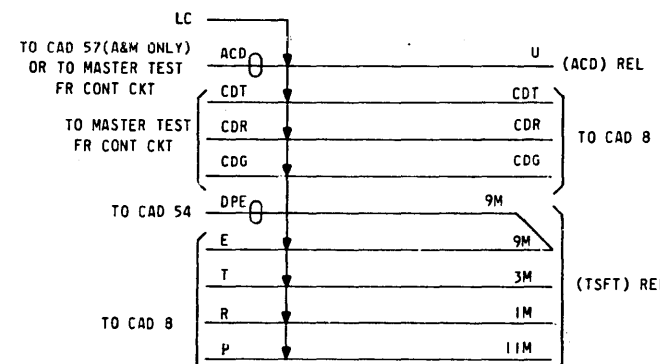
PRINTED IN U. S. A.

CAD 29

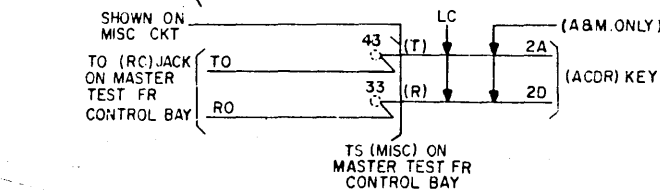
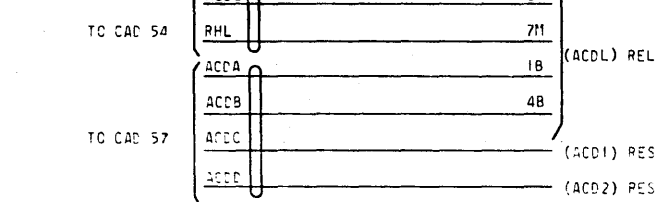
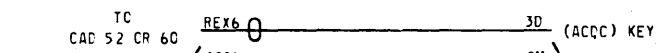
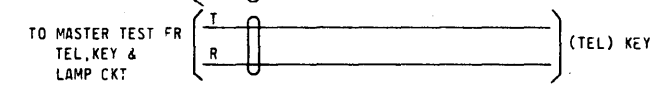
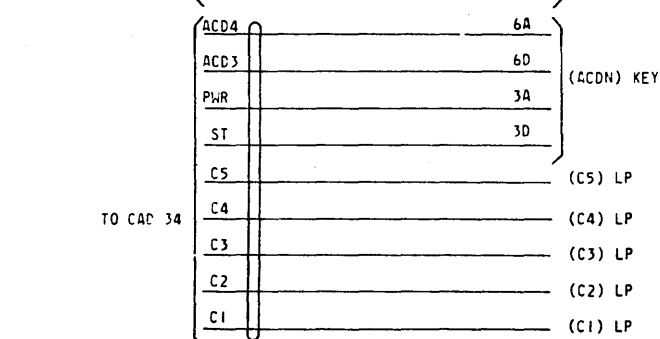
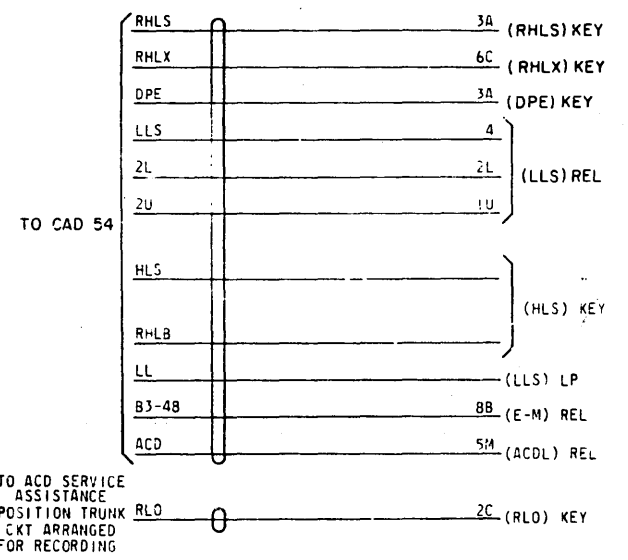
(FOR APP FIG 1,24,41 & 42)
FOR AUTOMATIC DISTRIBUTION OFFICE



TS (F) AT
TOP OF FR (COMPLETE)
TS SHOWN ON SD-25800-01



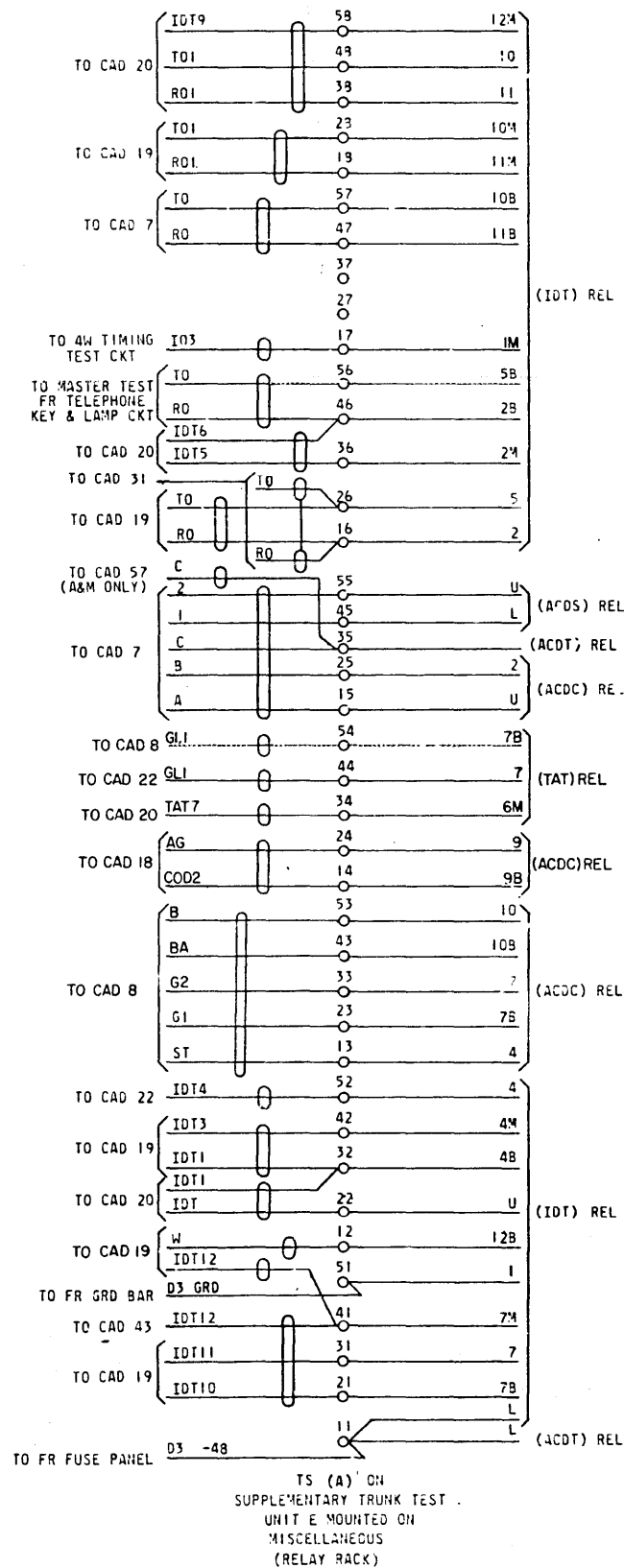
CAD 29A (FOR APP FIG. E, G & I)



SD-25918-01-615B

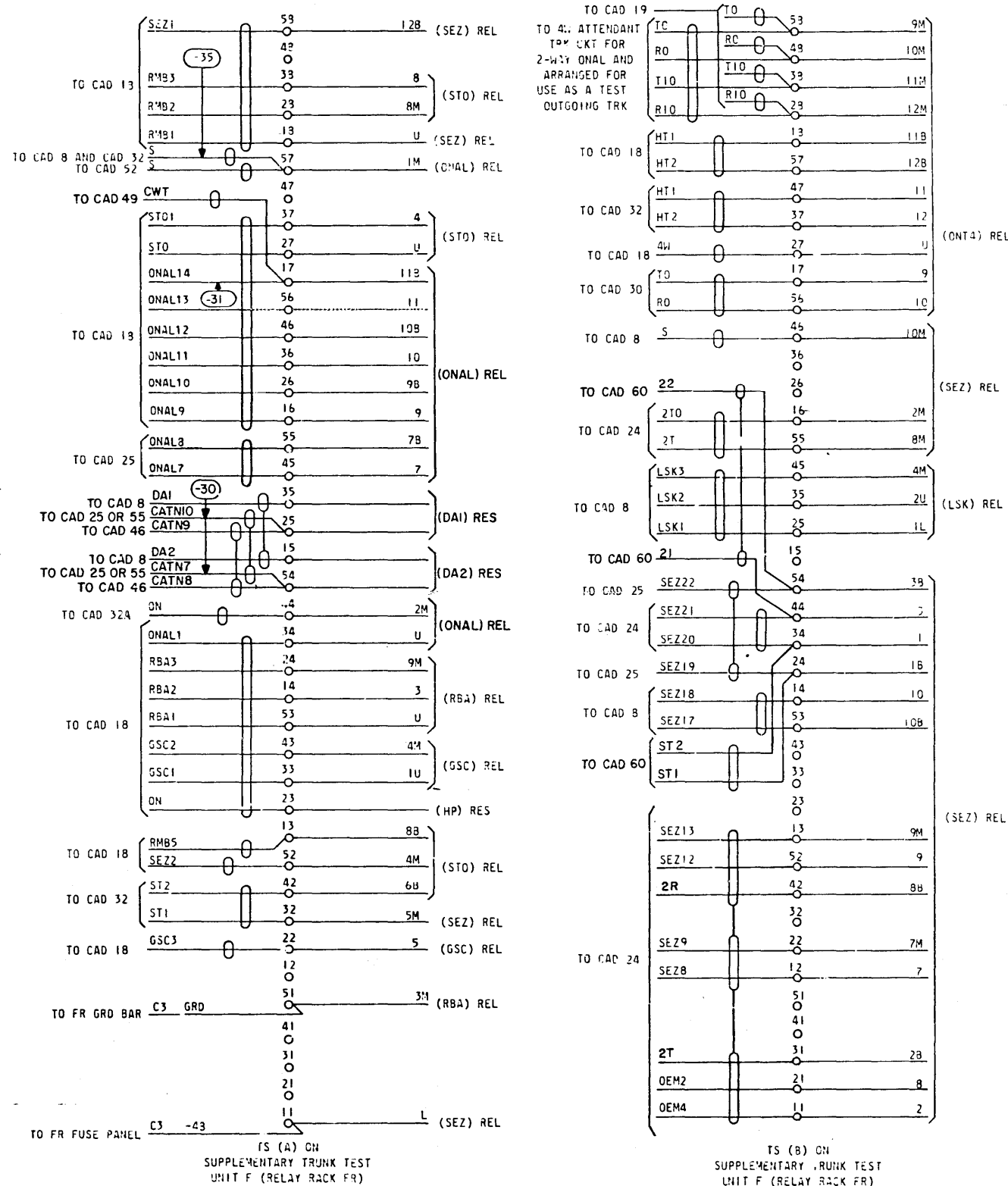
CAD 30

(FOR APP FIG 1 & 19)



PART OF CAD 31

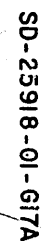
(FOR APP FIG 1)



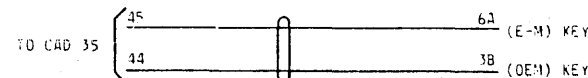
DRAWING
ISSUE
44D
45A
46D
47A
48D
49A
50D
51A
52D
54A
55A
56D
58A

ISSUE
76A

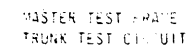
(FOR APP FIG 1, & 11)



(FOR APP FIG G)



(FOR APP FIG 1)

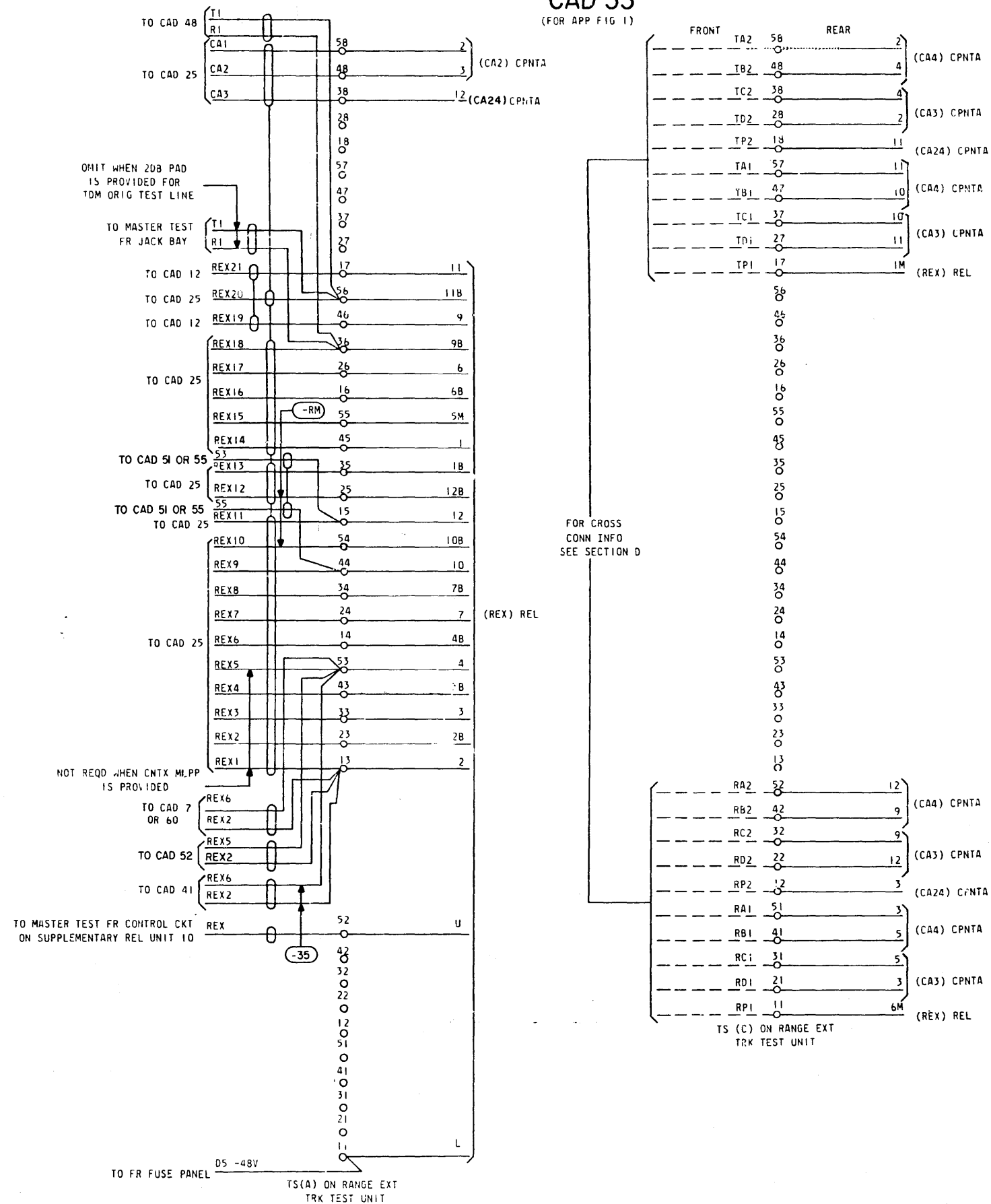


②

65

SD-25918-01-G17A

(FOR APP FIG 1)



DRAWING
ISSUE
51A
52D
54A
56D

ISSUE
76A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-G178

BELL TELEPHONE LABORATORIES
INCORPORATED

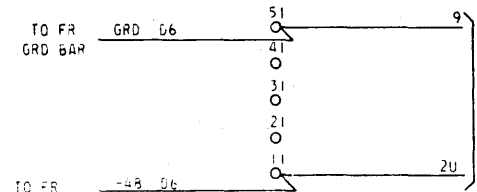
②

65

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(FGR APP FIG 24)

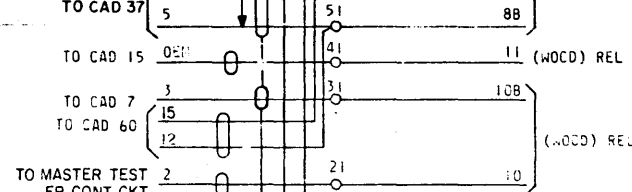
TEST LINE APPEARANCE NO. 2)



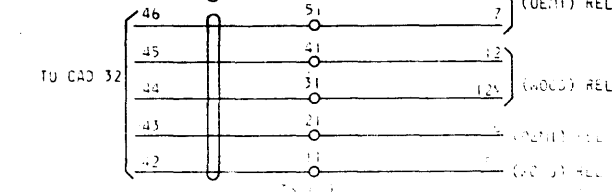
Best Available
X

	L	REL
En	BAT.	10 ER

(FOR APP FIG.25 AND 36)



A number line with a closed circle at -1 and an open circle at 2. The region between -1 and 2 is shaded.



UNIT

FROM Test Circular 1

BELL TELEPHONE LABORATORIES
INCORPORATED

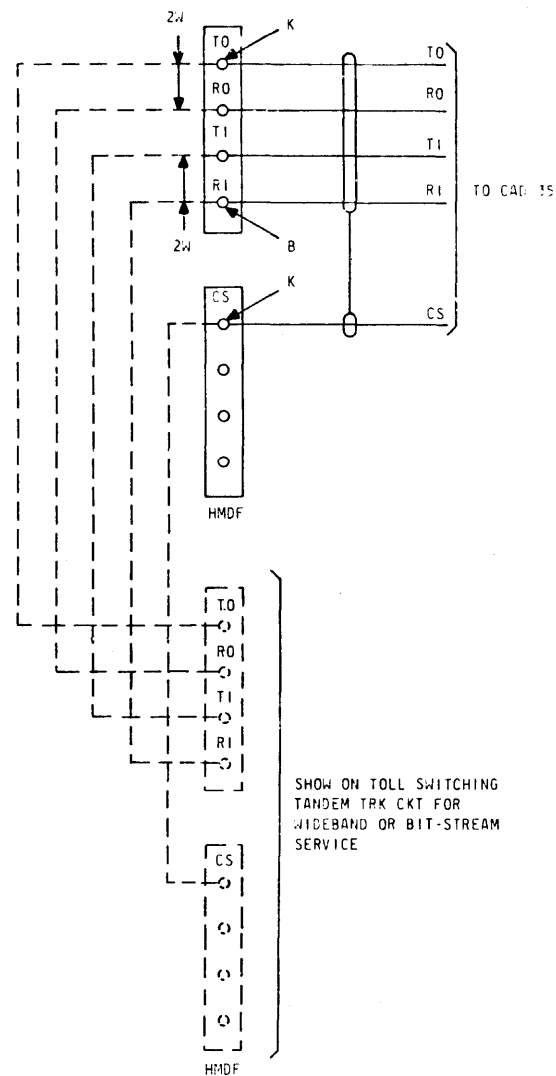
2
DWE SIZE
6S

SD-25918-01-G18

ISSUE
76A

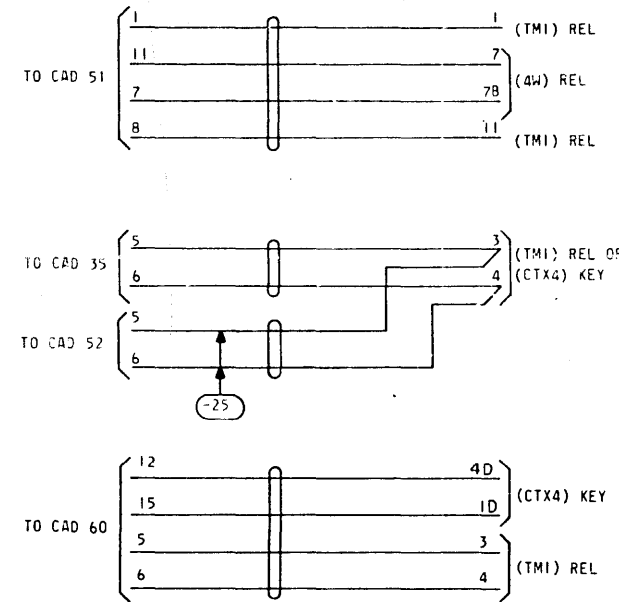
SD-25918-01-G18

CAD 35A



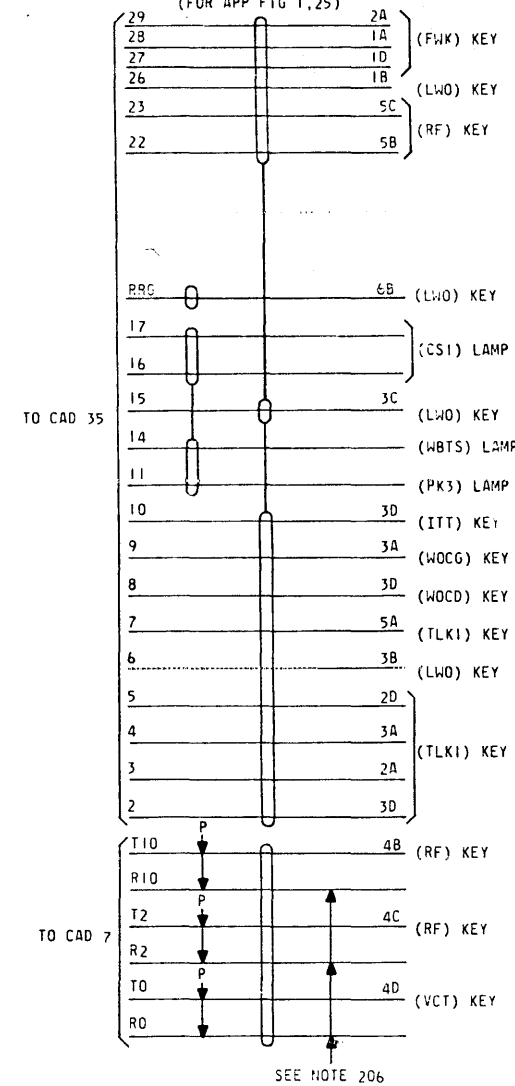
CAD 37

(FOR APP FIG P AND I!)



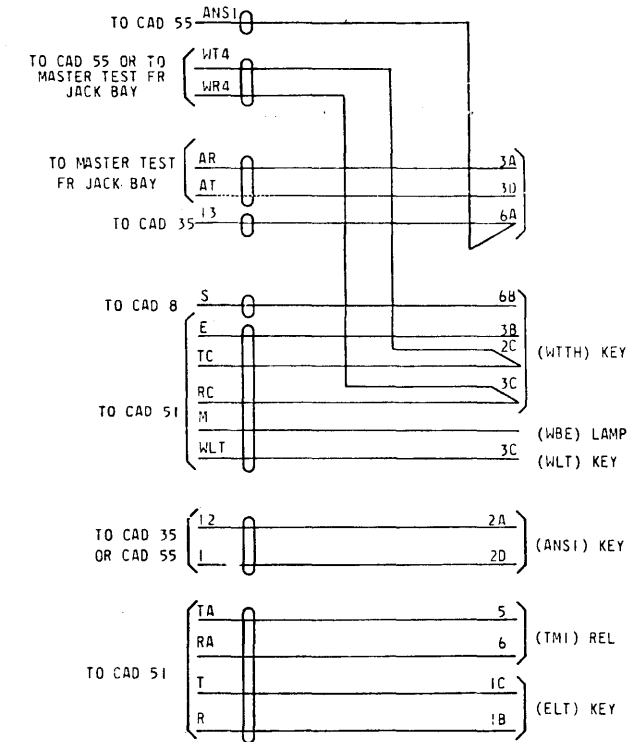
CAD 38

(FOR APP FIG 1,25)



CAD 39

(FOR APP FIG 20,27)



DRAWING
ISSUE
53D
54A
55A
56D
57D
58A

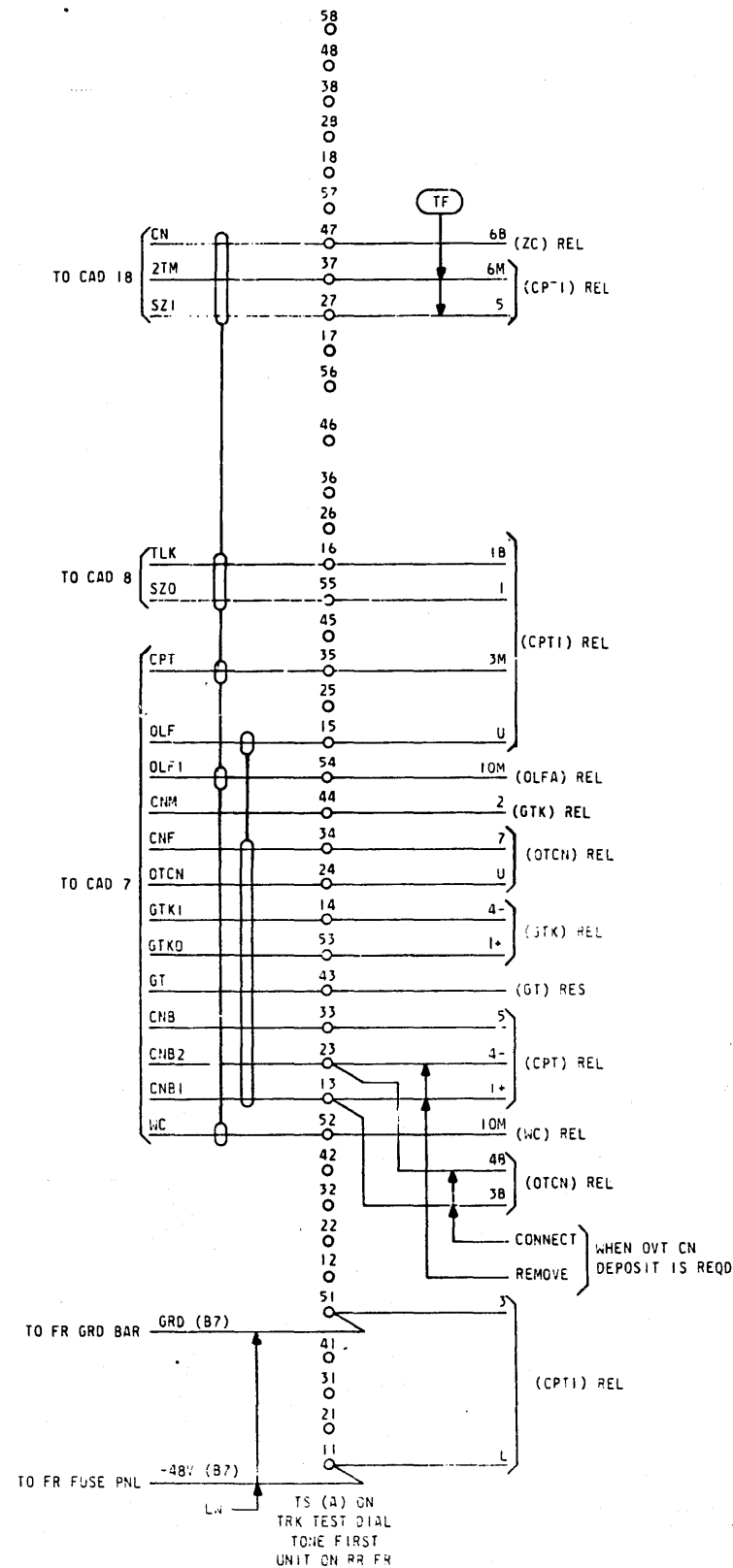
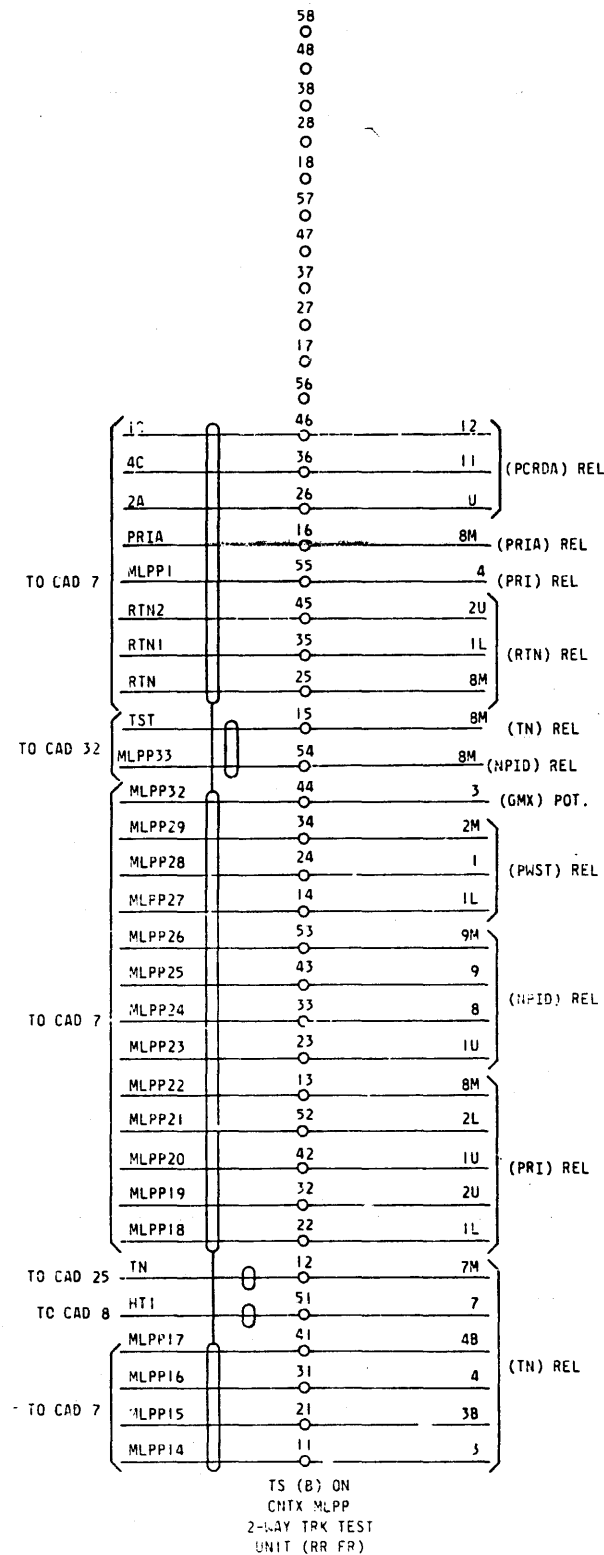
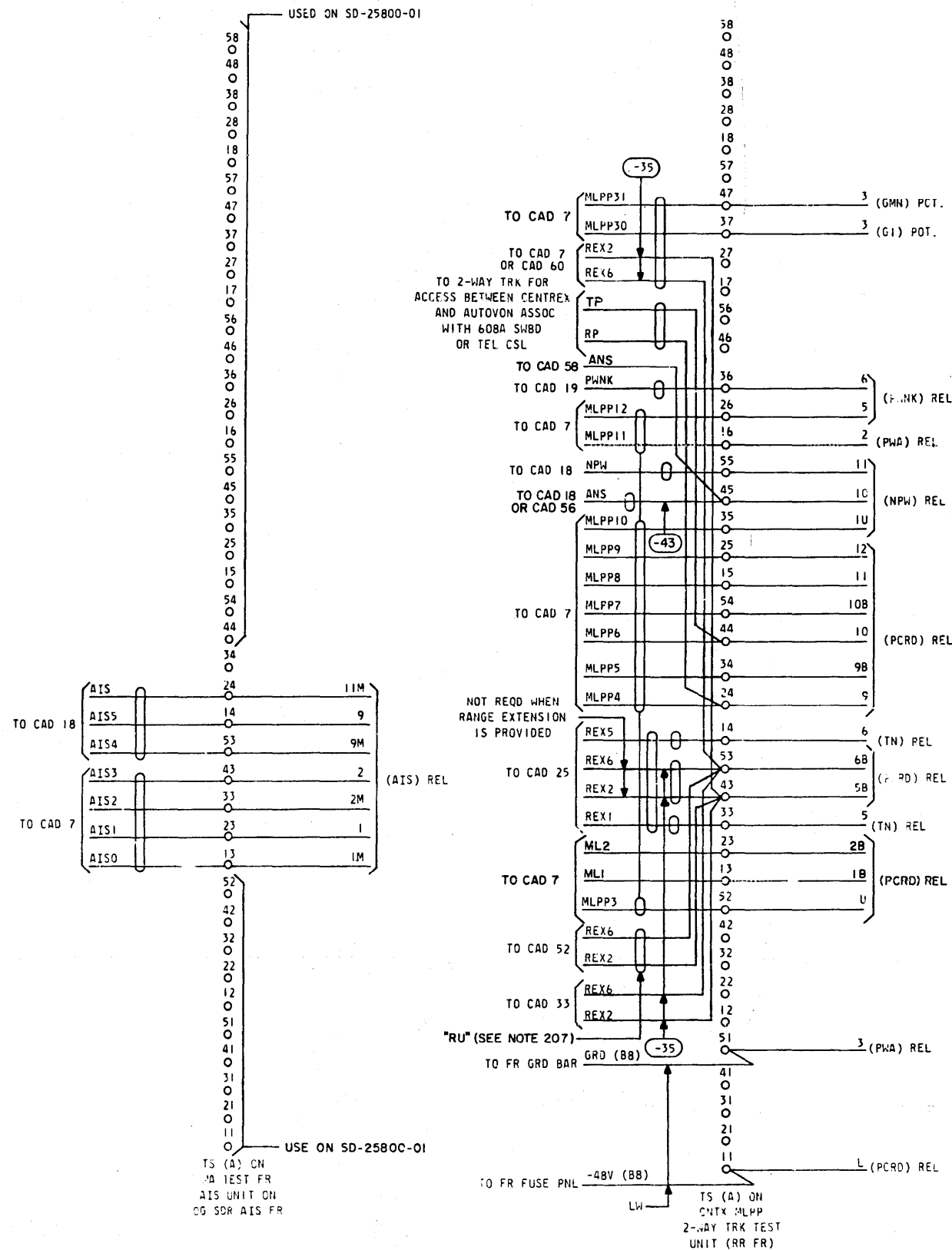
ISSUE
71A

CAD 40 (A&M ONLY) (FOR APP FIG 1)

CAD 41 (FOR APP FIG 1 AND 28)

PART OF CAD 42 (FOR APP FIG 1 AND J)

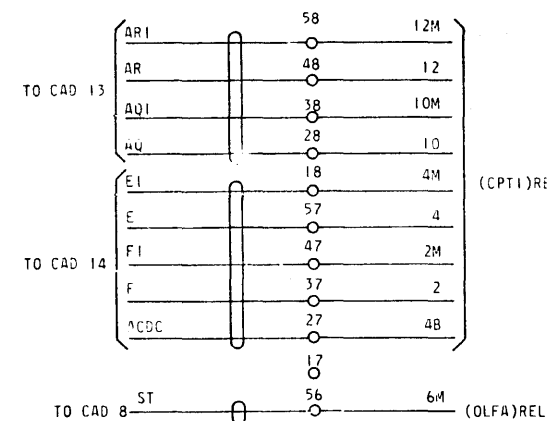
DRAWING
ISSUE
50D
51A
54A
55A
56D
57D
58A



ISSUE
76A

PART OF CAD 42

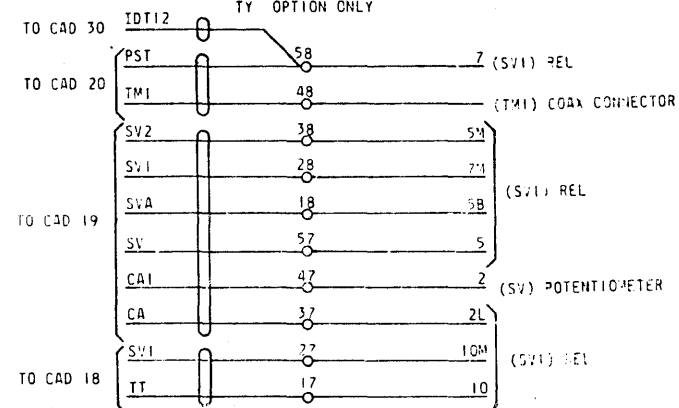
(FOR APP FIG 1 AND J)



TS(B) ON
TRK TEST DIAL
TONE FIRST
UNIT ON RR FR

CAD 43

(FOR APP FIG 19)
TY OPTION ONLY



TO CAD 19

DI GRD

78 (SV1) REL

(TM1) CONNECTOR
GROUNDING TERMINAL

TO CAD 19

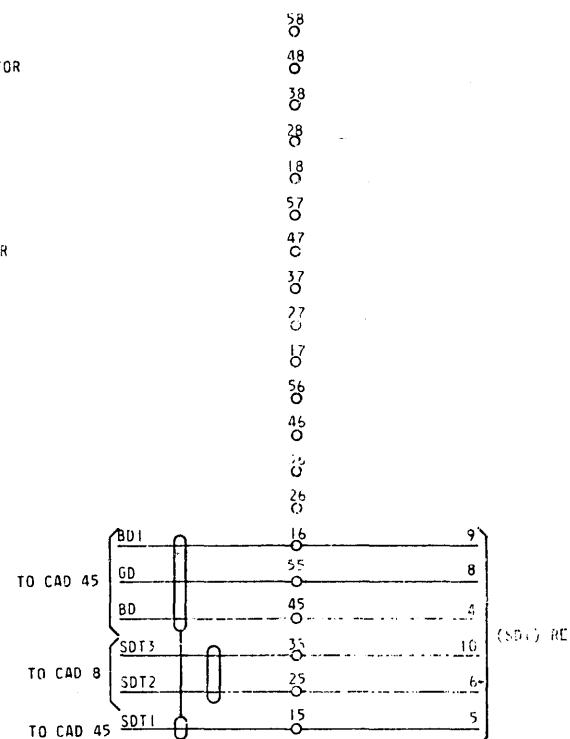
DI -48V

1L (SV1) REL

TS (A) ON
SUPPLEMENTARY 4-W
MLP TRK TEST UNIT

CAD 44

(FOR APP FIG 1) TU OPTION



TO FRAME
GRD BAR

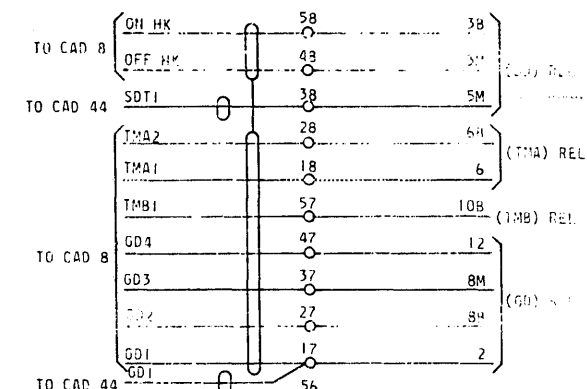
C5 GRD

1+ (SDT) REL

TS (A) ON
SUPL TRK TEST UNIT H
(RR FR)

CAD 45

(FOR APP FIG 29)



TO CAD 44

BD1

4B (BD) REL

TO FRAME GRD BAR

C4 GRD

U (TMA) REL

TO FRAME FUSE
PANEL

C5 -48V

(TM) REL LP

TS (A) ON 2-WAY
AUXILIARY LINE
SIGNALING TEST UNIT
(RR FR)

ISSUE
64D

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-G21

BELL TELEPHONE LABORATORIES
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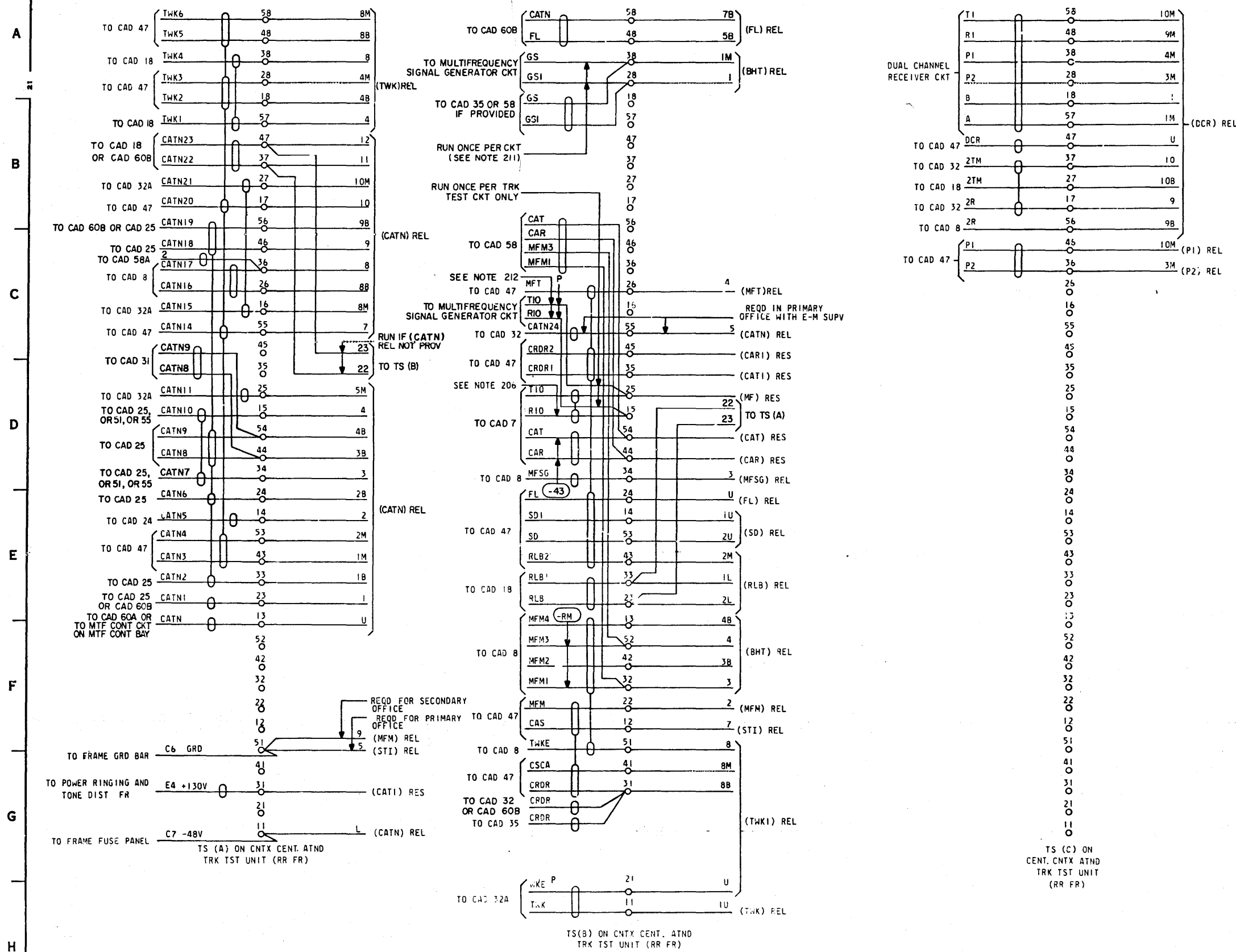
2

6S

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SD-25918-01-G21

CAD 46 (FOR APP FIG 30)



SD-25918-01-G22

(FGR APP FIG 1 & 30)



(FOR APP FIG 7,8 & 34)



	A
--	---

		B
--	--	---

			C
--	--	--	---

		D
--	--	---

			E
--	--	--	---

	G
--	---

ISSUE 76A

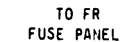
②

SD-25918-01-623

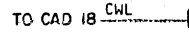
69

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(FOR APP FIG 31)

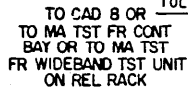


TALK BATTERY — TS (A) ON TRK TST
CALL WAITING UNIT



TS (B) ON TRK TST
CALL WAITING UNIT

(FOR APP FIG 8 AND 33)



TS (A) ON TOLL TRK
LOOP-AROUND TRANSMISSION TST UNIT
ON REL RACK FR



TS (B) ON TOLL TRK
LOOP-AROUND TRANSMISSION TST UNIT
ON REL RACK FR

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

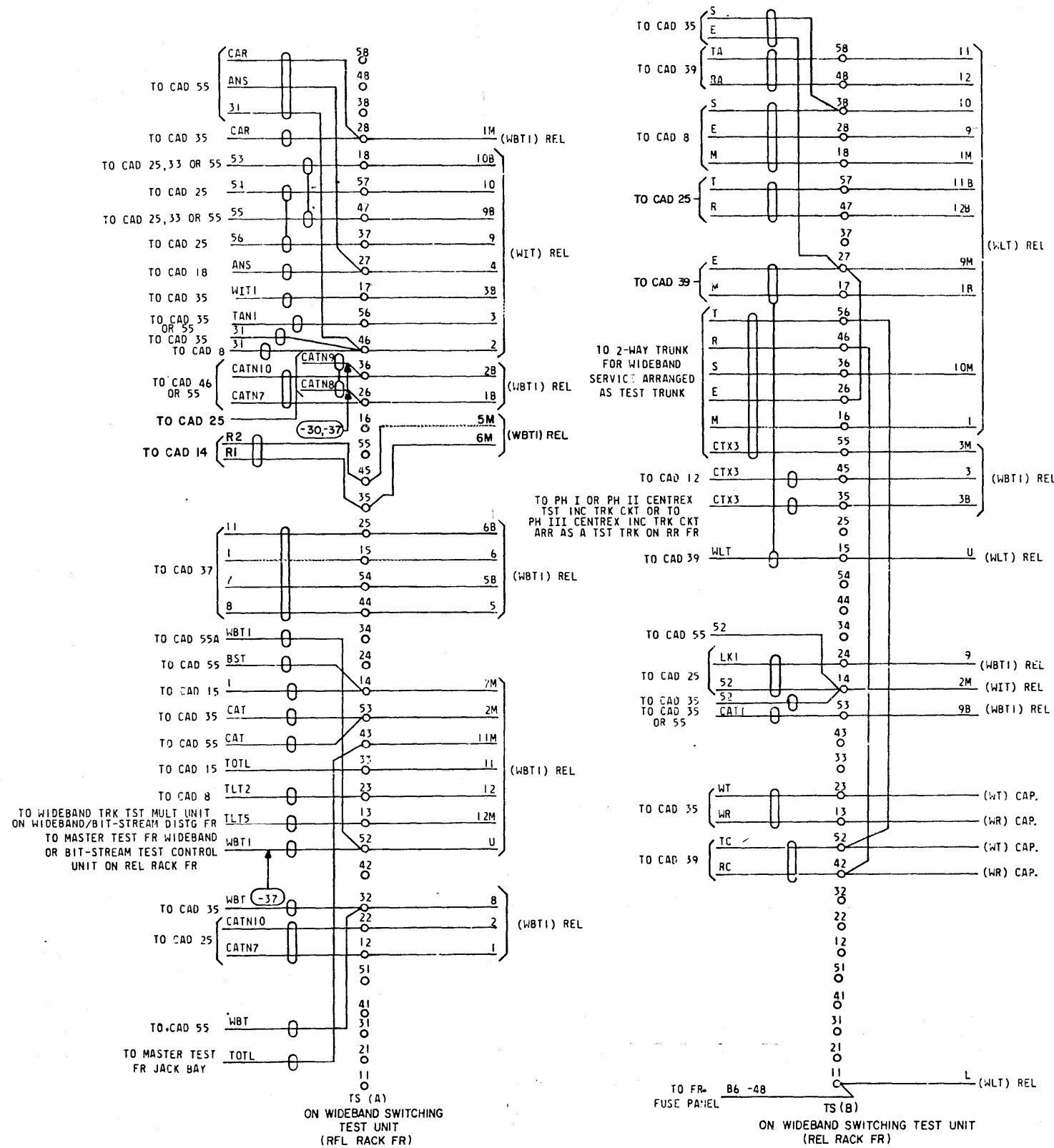
2
DWG SIZE
6S

SD-25318-01-G24

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ISSUE
76A

CAD 51 (FOR APP FIG. 27)

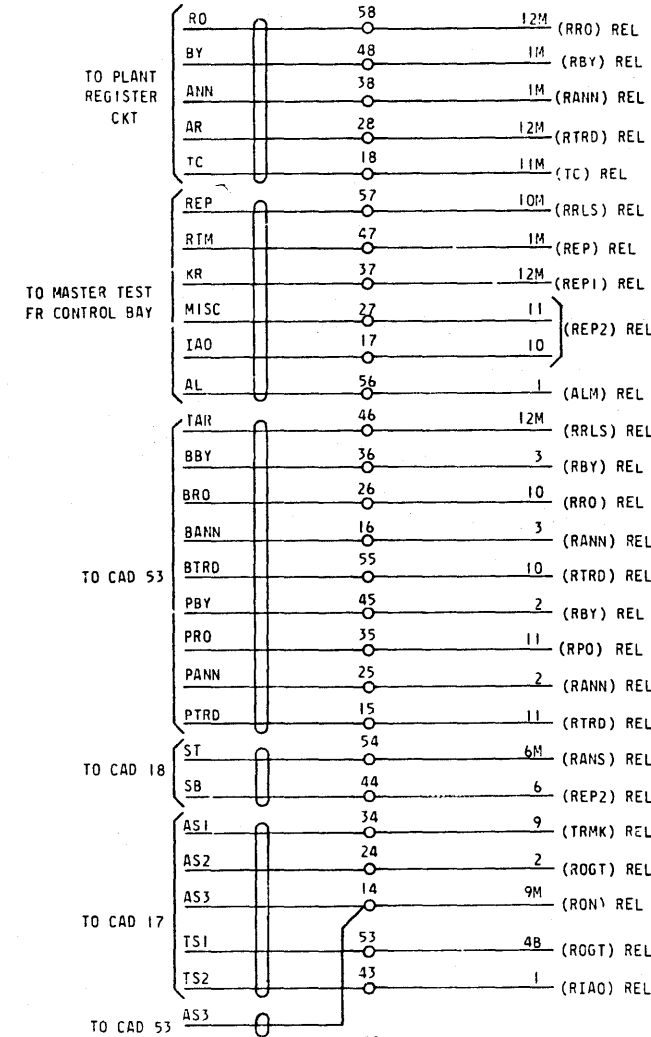
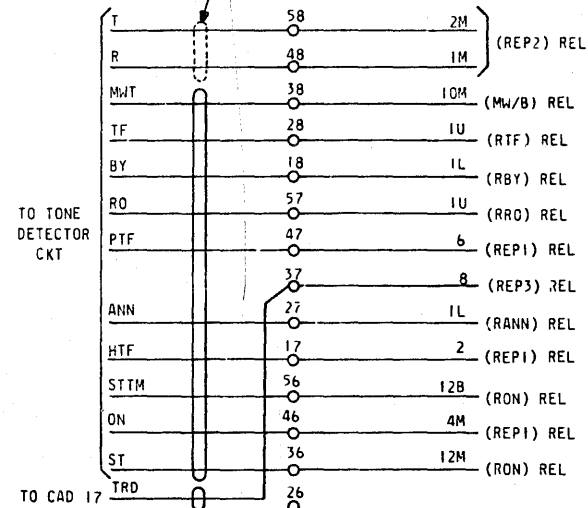
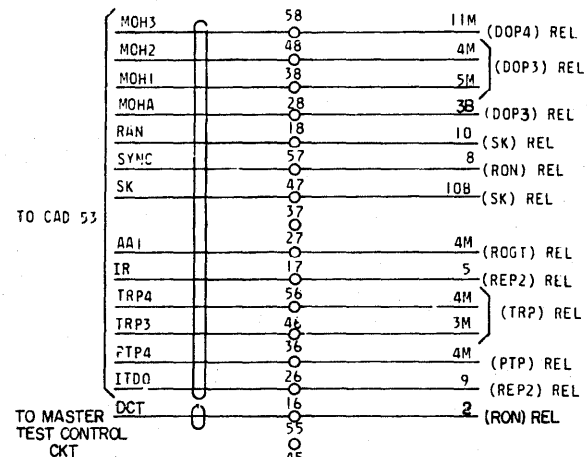


DRAWING
ISSUE
54A
55A
57D
58A

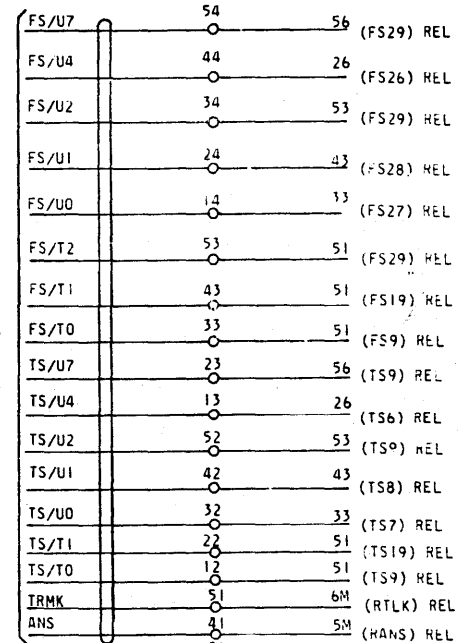
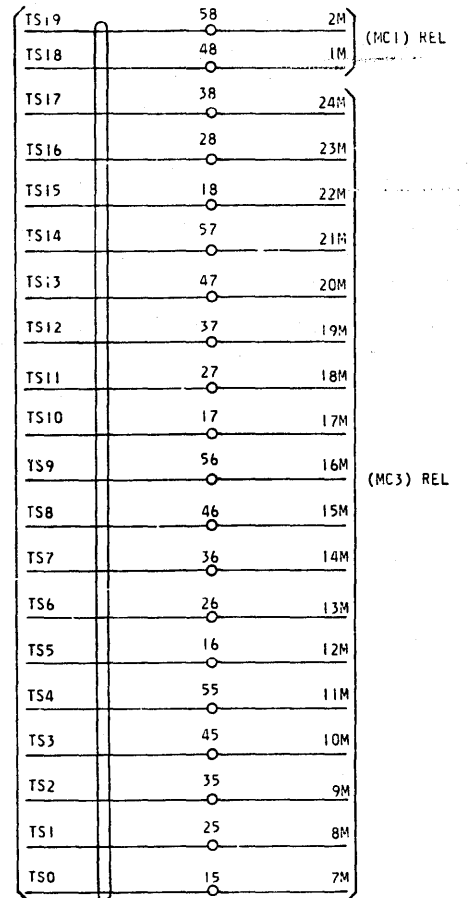
ISSUE
76A

PART OF CAD 52 (FOR APP FIG. 35)

"RU"(SEE NOTE 207)



TO MASTER TEST FR CONNECTOR CKT

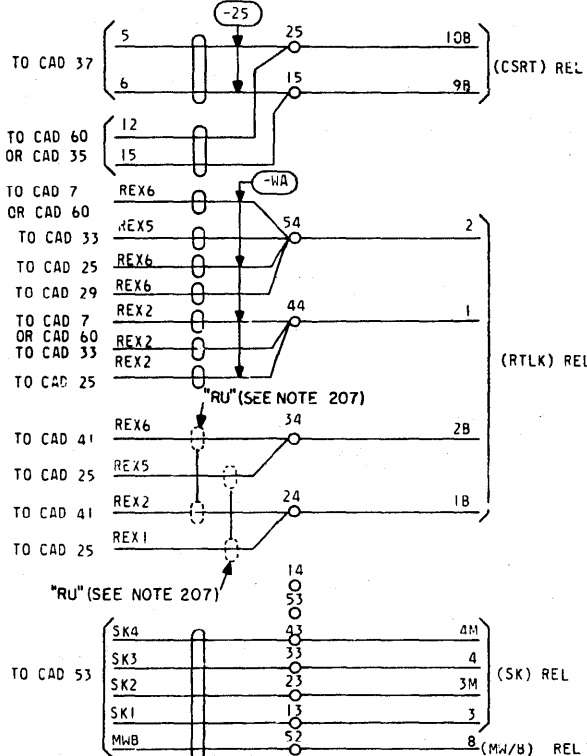


TS (A) ON AUTOMATIC RECYCLE CONTROL UNIT

TS (B) ON AUTOMATIC RECYCLE CONTROL UNIT

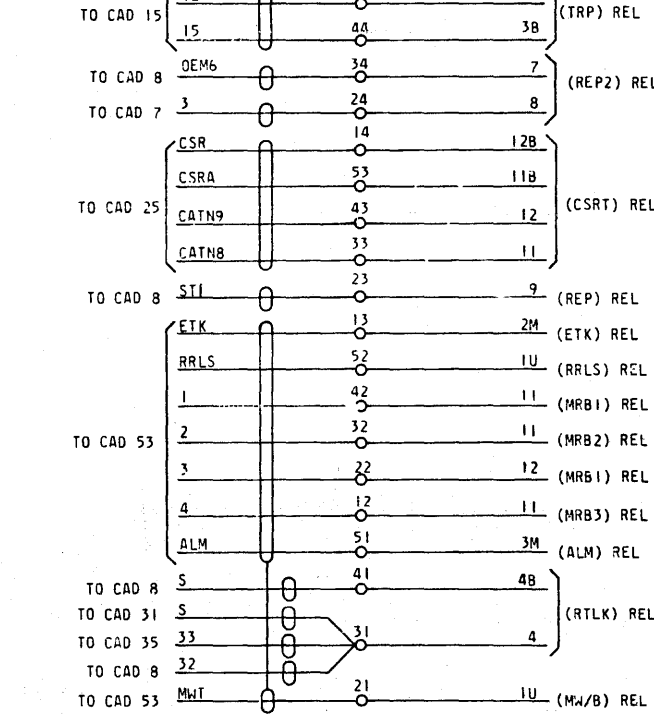
TS (C) ON AUTOMATIC RECYCLE CONTROL UNIT

TS (D) ON AUTOMATIC RECYCLE CONTROL UNIT



TO OTHER CKT REQUIRING SAME AISLE PILOT

TO ALM CKT AISLE PILOT ASSOC WITH MASTER TEST FR



TS (A) ON AUTOMATIC RECYCLE CONTROL UNIT

TS (B) ON AUTOMATIC RECYCLE CONTROL UNIT

TS (C) ON AUTOMATIC RECYCLE CONTROL UNIT

TS (D) ON AUTOMATIC RECYCLE CONTROL UNIT

SD-25918-01-G26A

MASTER TEST FRAME TRUNK TEST CIRCUIT

SD-25918-01-G26A

BELL TELEPHONE LABORATORIES INCORPORATED

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PART OF CAD 52 (FOR APP FIG. 35)

FS29	58	6M
FS28	48	5M
FS27	38	4M
FS26	28	3M
FS25	18	2M
FS24	57	1M
FS23	47	24M
FS22	37	23M
FS21	27	22M
FS20	17	21M
FS19	56	20M
FS18	46	19M
FS17	36	18M
FS16	26	17M
FS15	16	16M
FS14	55	15M
FS13	45	14M
FS12	35	13M
FS11	25	12M
FS10	15	11M
FS9	54	10M
FS8	44	9M
FS7	34	8M
FS6	24	7M
FS5	14	6M
FS4	53	5M
FS3	43	4M
FS2	33	3M
FS1	23	2M
FS0	13	1M

(MC3) REL

(MC2) REL

TS (E) ON
AUTOMATIC RECYCLE
CONTROL CKT

CAD 52A (FOR APP FIG. 1) RK OPTION

FS/U7	(FS/U7) LP
FS/U4	(FS/U4) LP
FS/U2	(FS/U2) LP
FS/U1	(FS/U1) LP
FS/U0	(FS/U0) LP
FS/T2	(FS/T2) LP
FS/T1	(FS/T1) LP
FS/T0	(FS/T0) LP
TS/U7	(TS/U7) LP
TS/U4	(TS/U4) LP
TS/U2	(TS/U2) LP
TS/U1	(TS/U1) LP
TS/U0	(TS/U0) LP
TS/T1	(TS/T1) LP
TS/T0	(TS/T0) LP
TRMK	(TRMK) LP
ANS	(RANS) LP

TO CAD 52

CAD 53 MASTER TEST FR CONTRL BAY

ITDO	7T	(ITDO) REL
IR	IT	(R+) REL
IRP4	3D	(IRP) KEY
IRP3	3A	(IRP) KEY
PTP4	3C	(PTP) KEY
MOH3	3	(MUH) SW SECT. I
MOH2	2	(MUH) SW SECT. I
MOH1	1	(MUH) SW SECT. I
MOHA	12	(MUH) SW SECT. I
MWB	2A	(MW/B) KEY
MWT	3A	(MW/B) KEY
SYNC	1C	(SYNC) KEY
PAN	4T	(AA) REL
SK	5T	(AA) REL
AA1	10T	(AA) REL
AS3	9T	(AA) REL
SK4	3A	(SK) KEY
SK3	2A	(SK) KEY
SK2	3D	(SK) KEY
SK1	2D	(SK) KEY
ETK	12	(MRCY) SW SECT. I
RRLS	1	(MRCY) SW SECT. I
1	2	(MRCY) SW SECT. I
2	3	(MRCY) SW SECT. I
3	4	(MRCY) SW SECT. I
4	5	(MRCY) SW SECT. I
ALM		(ALA) LP
TAR		(TAR) LP
BBY	3A	(BBY) KEY
BRO	3A	(BRO) KEY
BANN	3A	(BANN) KEY
BTRD	3A	(BTRD) KEY
PBY	3B	(PBY) KEY
PRO	3H	(PRO) KEY
PANN	3B	(PANN) KEY
PTRD	3B	(PTRD) KEY

TO CAD 52

TO CAD 52

ISSUE
68A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

2

SD-25918-01-6268

BELL TELEPHONE LABORATORIES
INCORPORATED

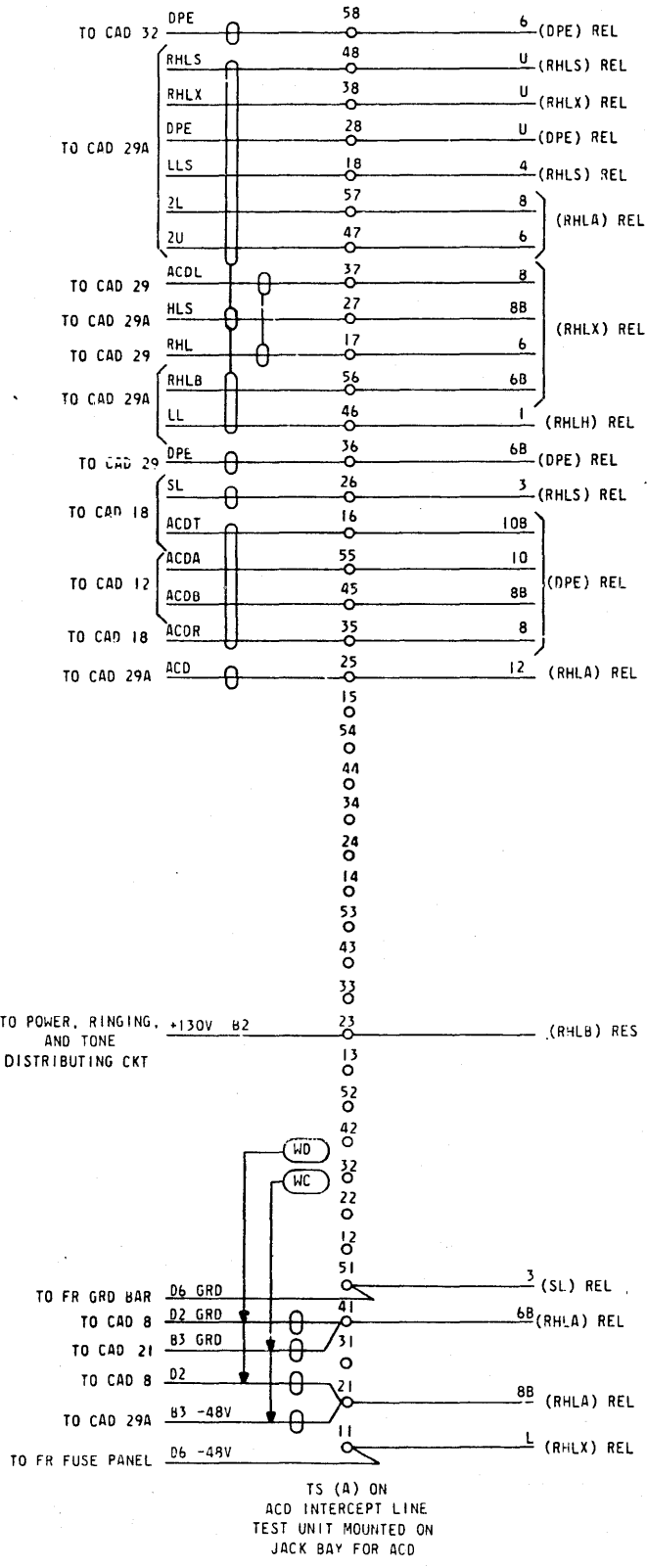
6S

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SD-25918-01-6268

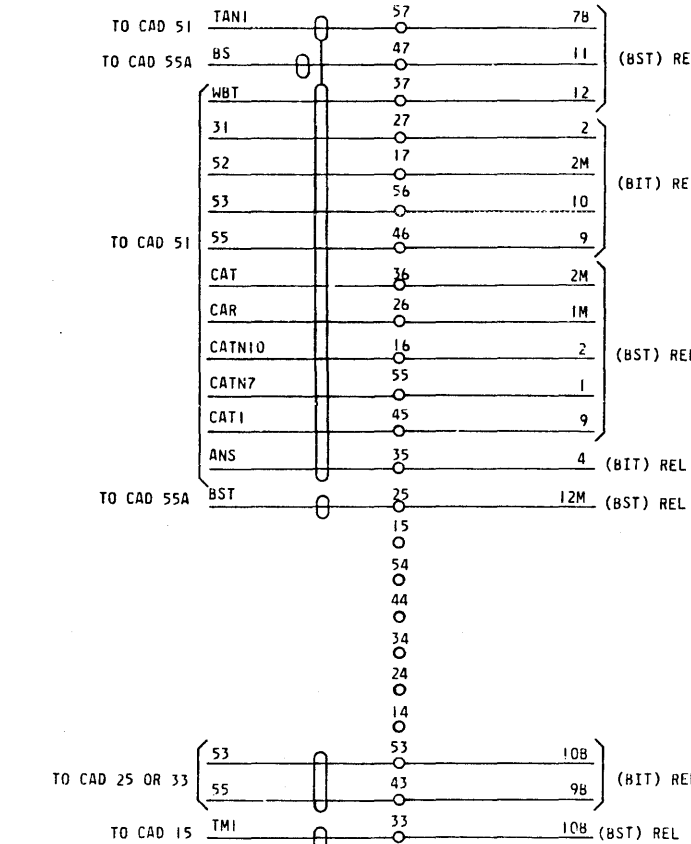
CAD 54 (A & M ONLY) (FOR APP FIG 1, 2P OPTION)

A
B
C
D
E
F
G
H



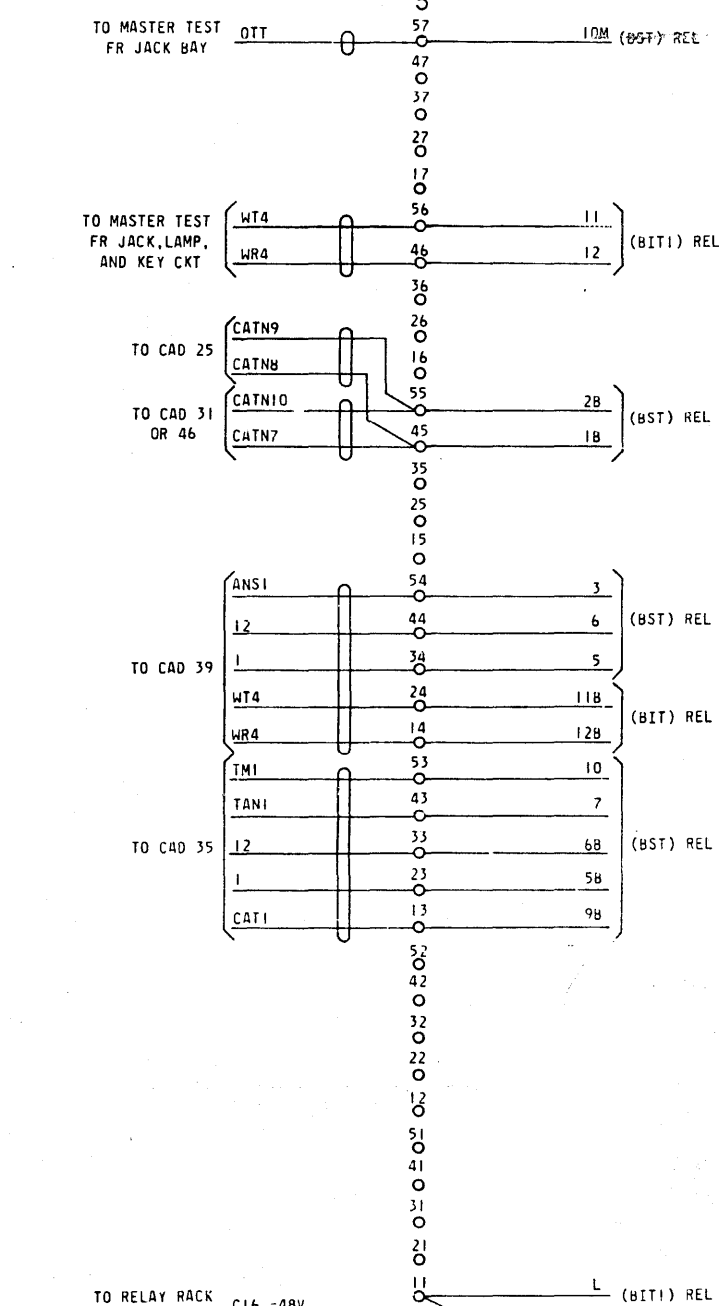
CAD 55 (FOR APP FIG. 37 & 38)

TO 2-WAY TRK CKT FOR BIT-STREAM SERVICE ARRANGED AS A TEST TRK (FOR DELAYED CALL OPERATOR TRK)



TS (A) ON SUPPLEMENTARY BIT-STREAM TRK TEST UNIT

TO 2-WAY TRK CKT FOR BIT-STREAM SERVICE ARRANGED AS A TEST TRK

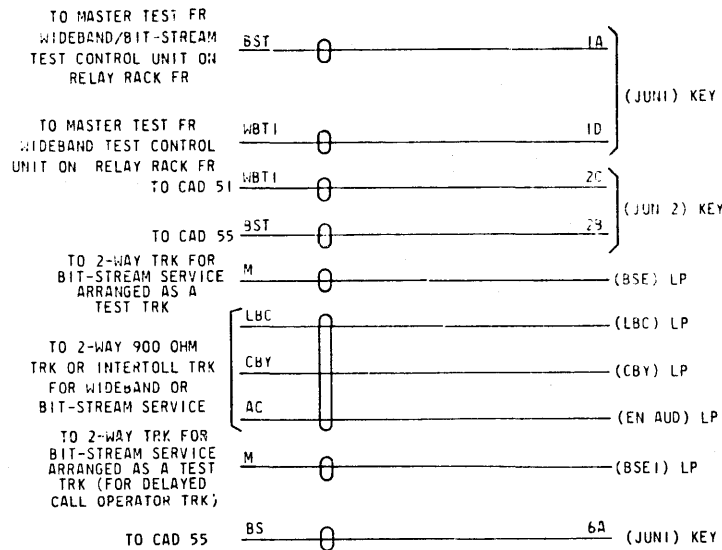


TS (B) ON SUPPLEMENTARY BIT-STREAM TRK TEST UNIT

SD-25918-01-627

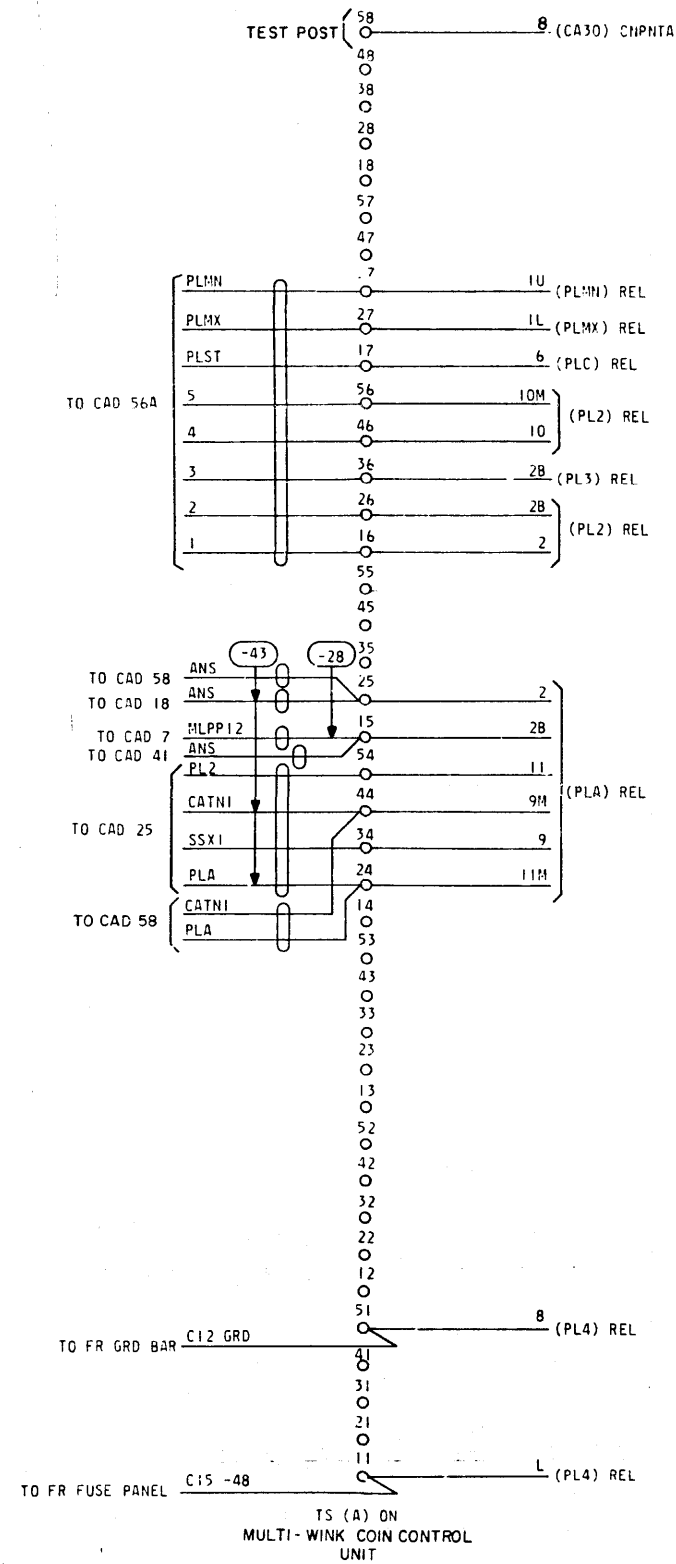
CAD 55A

(APP FIG. 1, 37, 38, RV OPTION)



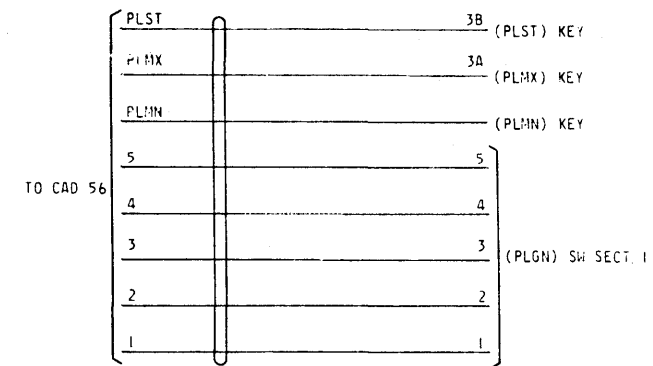
CAD 56

(FOR APP FIG. 40)



CAD 56A

(FOR APP FIG. 1)



DRAWING
ISSUE
57D

ISSUE
76A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

②

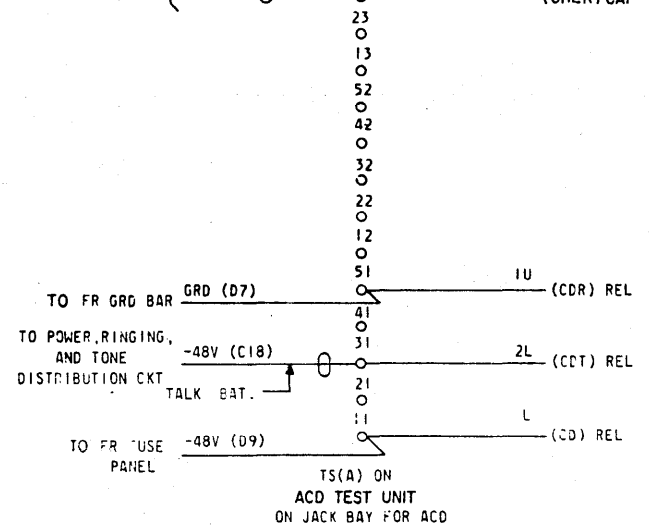
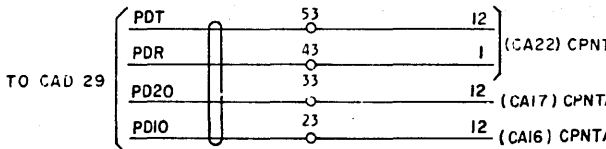
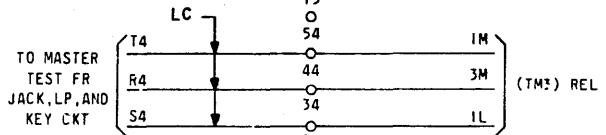
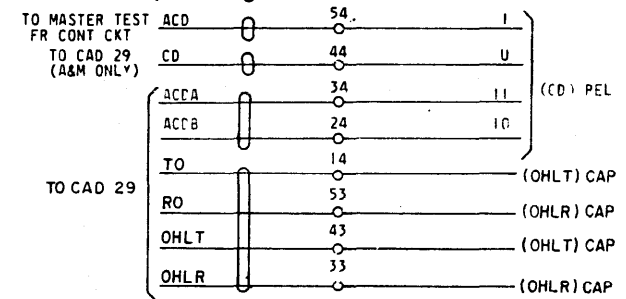
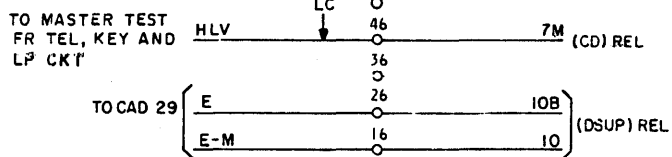
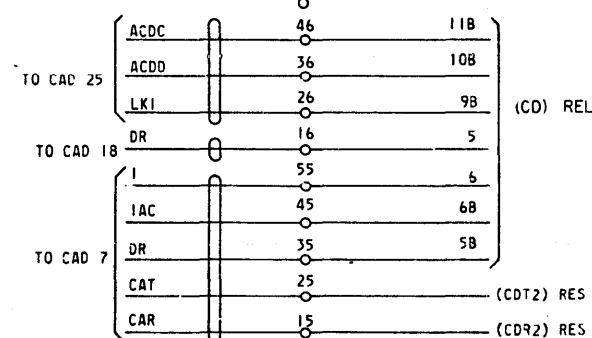
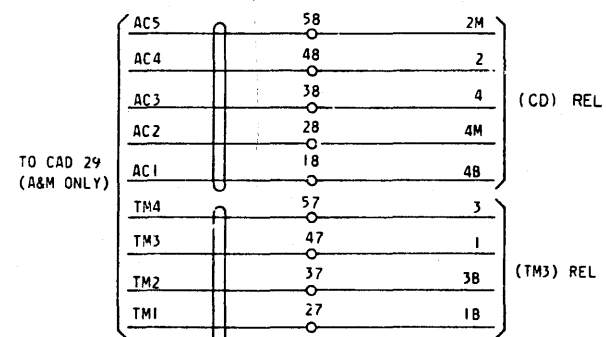
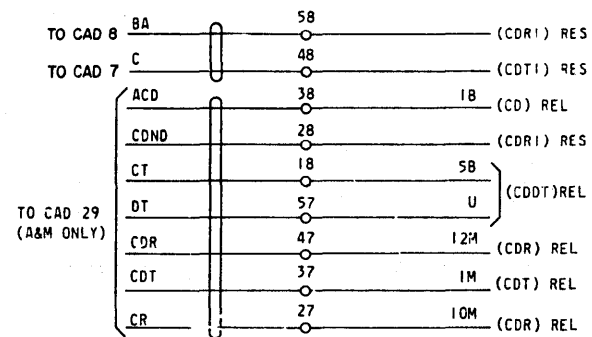
SD-25918-01-628

6S

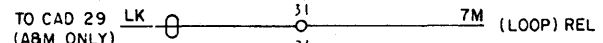
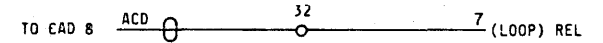
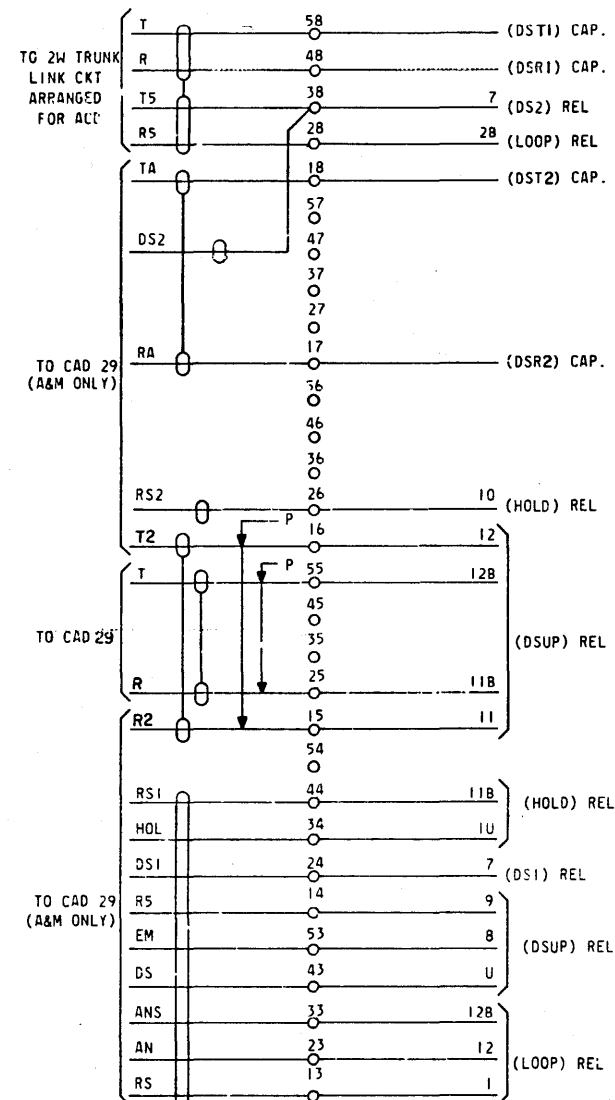
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PART OF CAD 57 (A&M ONLY)

(FOR APP FIG. 41 AND 42
AND FIG. 1 "PF" OPT)



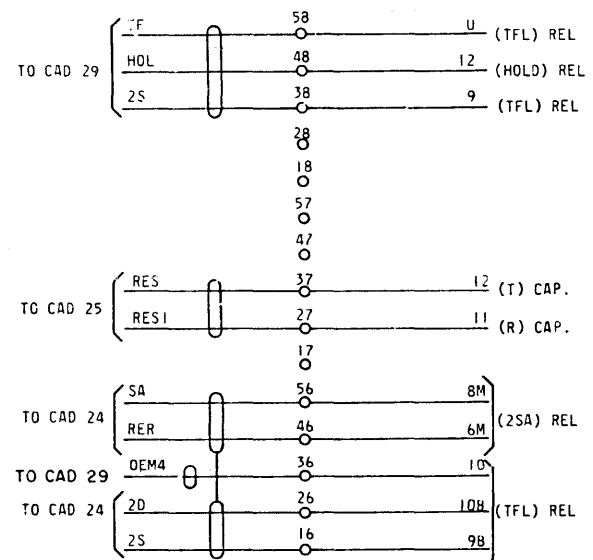
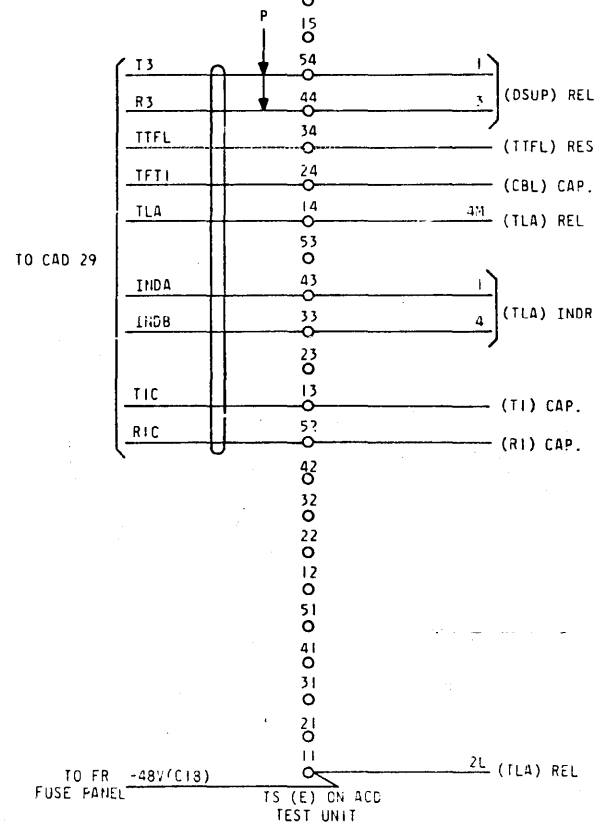
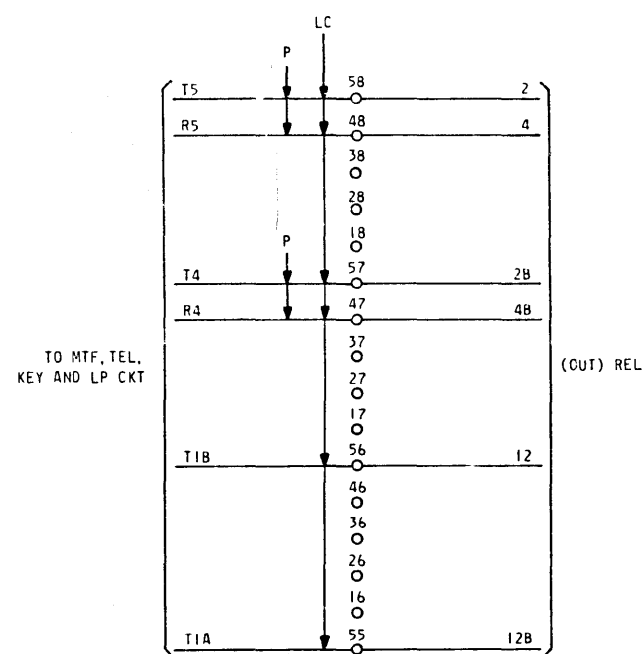
TS(B) ON ACD TEST UNIT ON JACK BAY FOR ACD



TS (C) ON ACD TEST UNIT ON JACK BAY FOR ACD

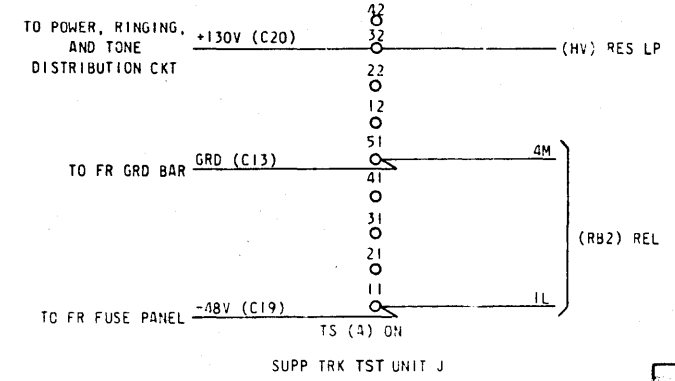
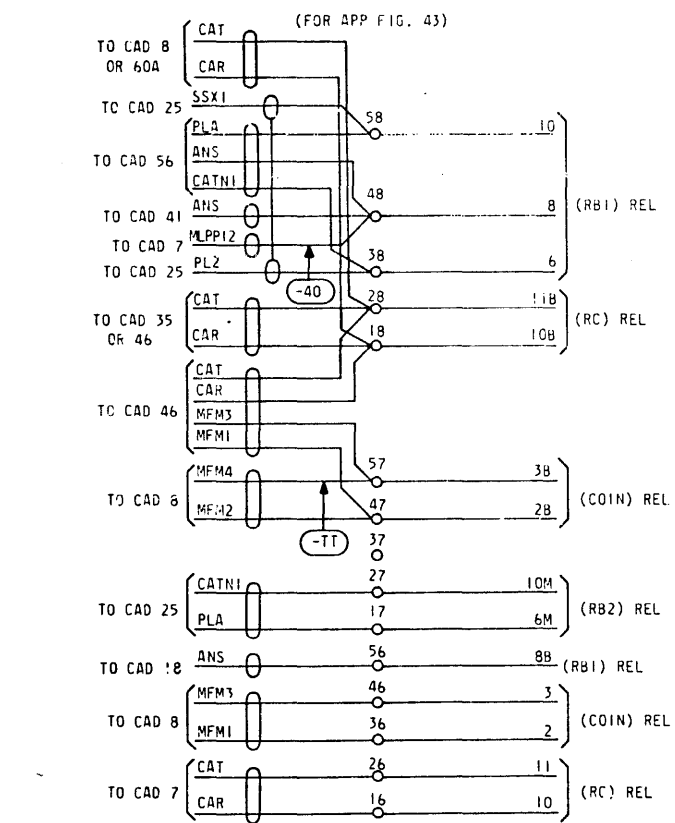
SD-25918-01-G29A

PART OF CAD 57



TS (F) ON ACC TEST UNIT

PART OF CAD 58



76A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
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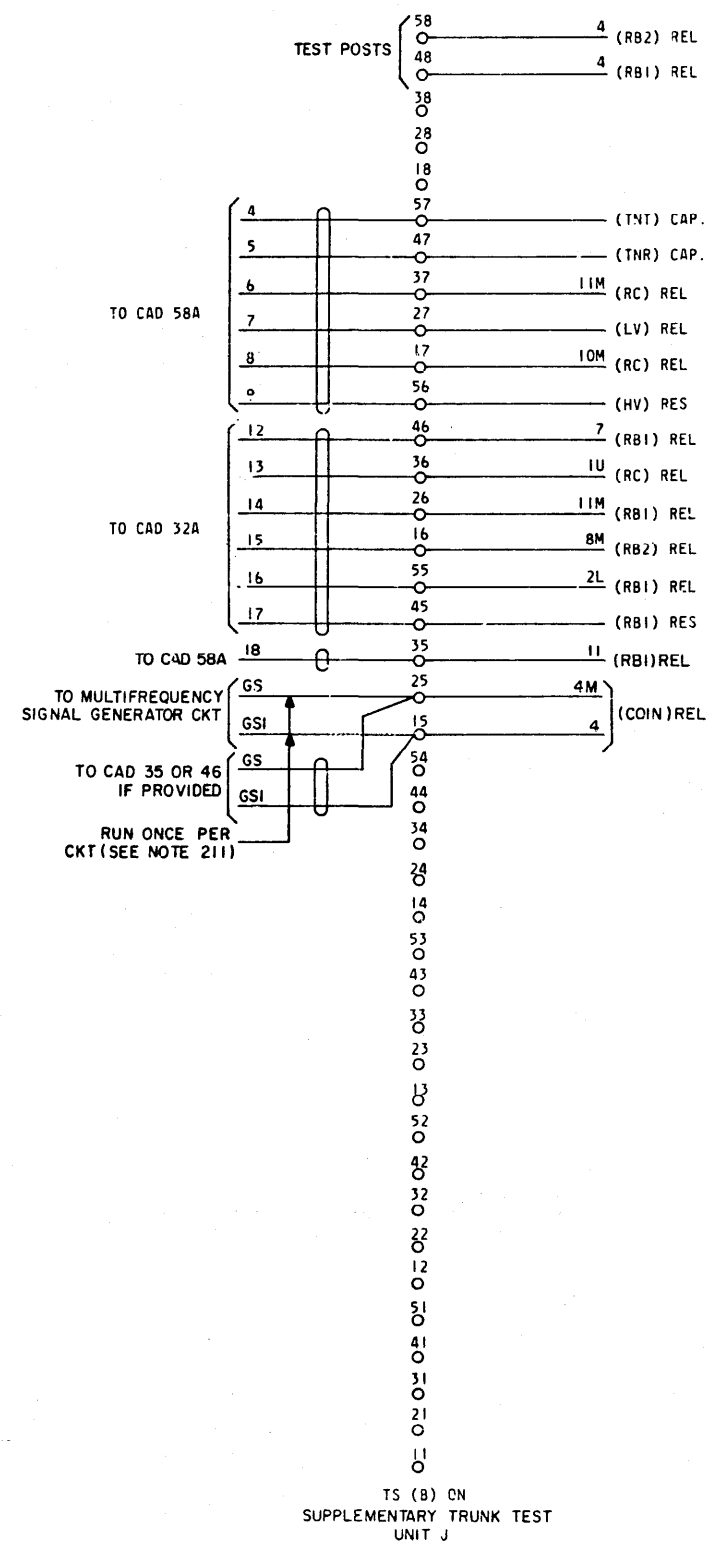
3D-25918-01-G29B

6S

SD-25918-01-G29B

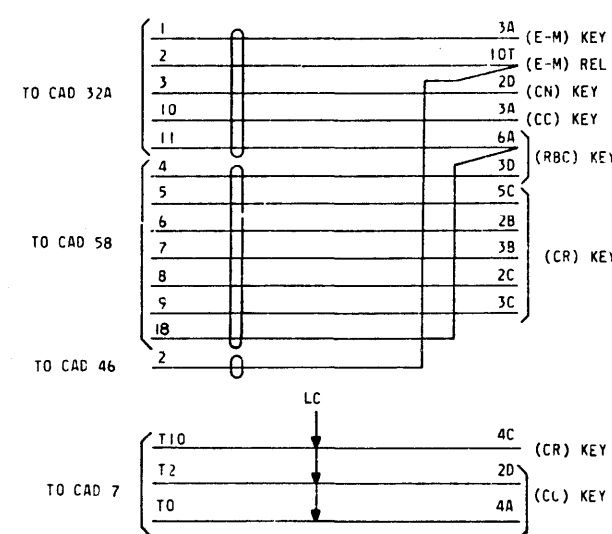
PART OF CAD 58

(FOR APP FIG. 43)



CAD 58A

(FOR APP FIG. E, G, I, AND 43)

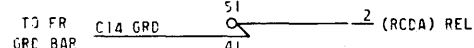
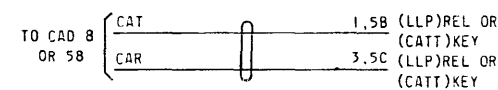
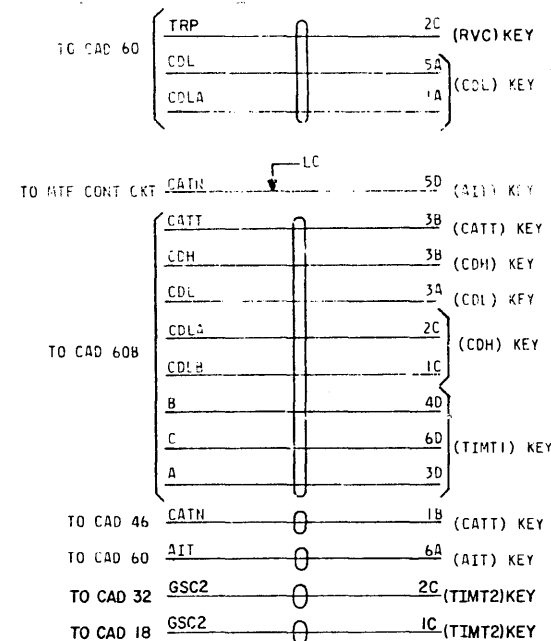
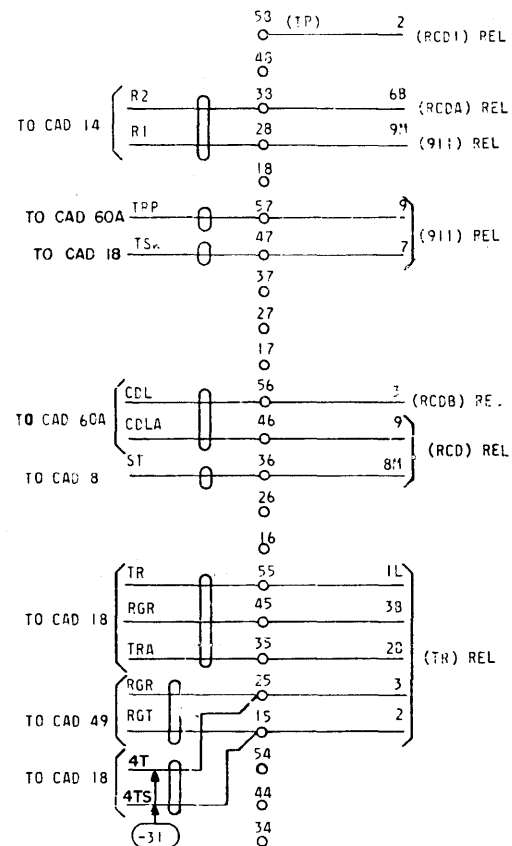
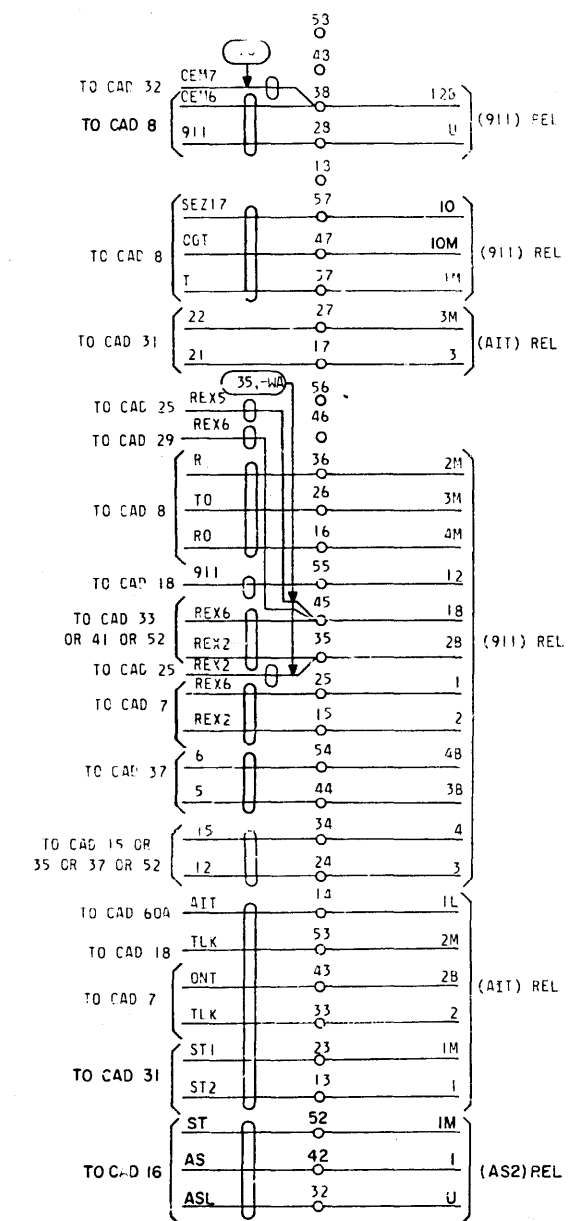


SD-25918-01-630

CAD 60

(FCR APP FIG 44)

CAD 60A



TS (A) ON
SUPPLEMENTARY
TRK TST UNIT K
(MFR DISC.)
OR SUPPLEMENTARY
TRK TST UNIT L

TS (B) ON
SUPPLEMENTARY
TRK TST UNIT K
(MFR DISC.)
OR SUPPLEMENTARY
TRK TST UNIT L

ISSUE
81A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

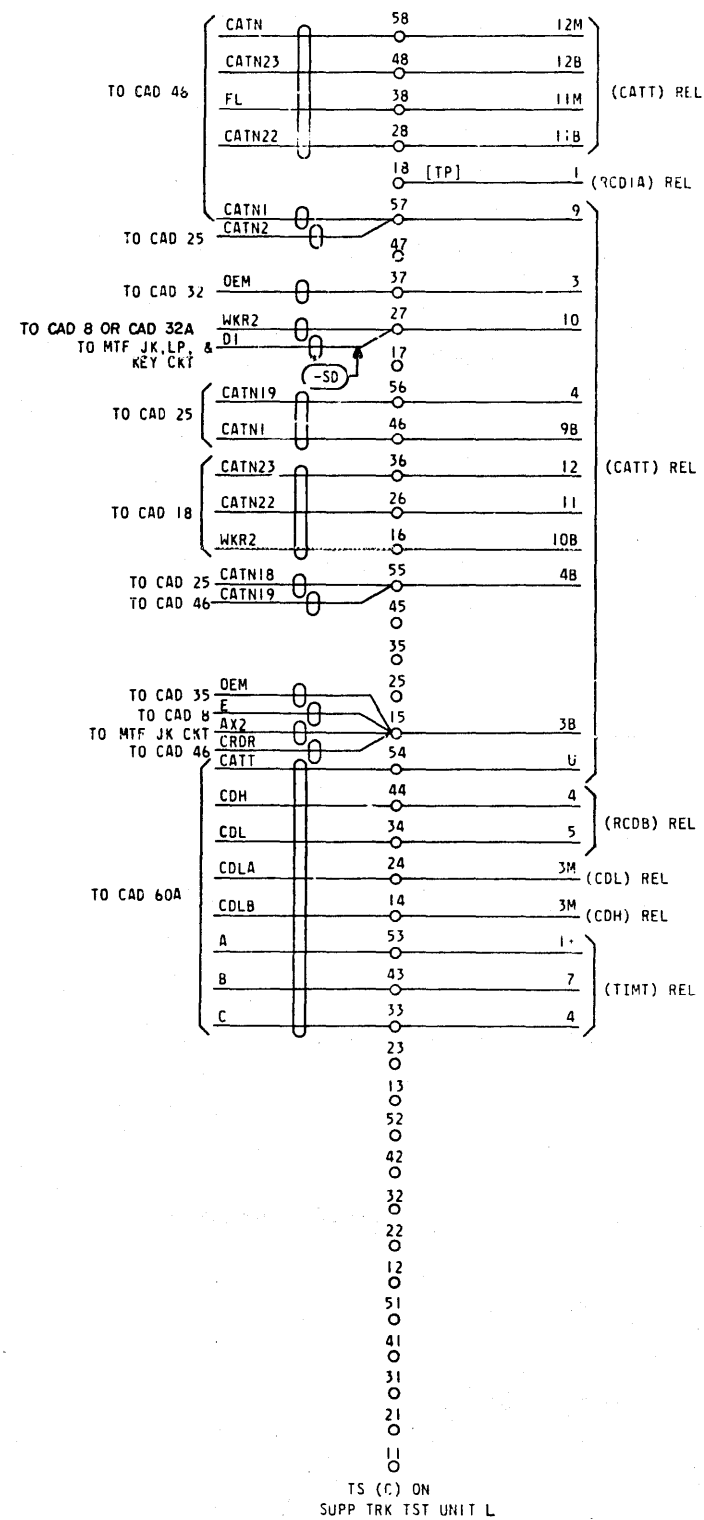
BELL TELEPHONE LABORATORIES
INCORPORATED

②
6S

SD-25918-01-G31

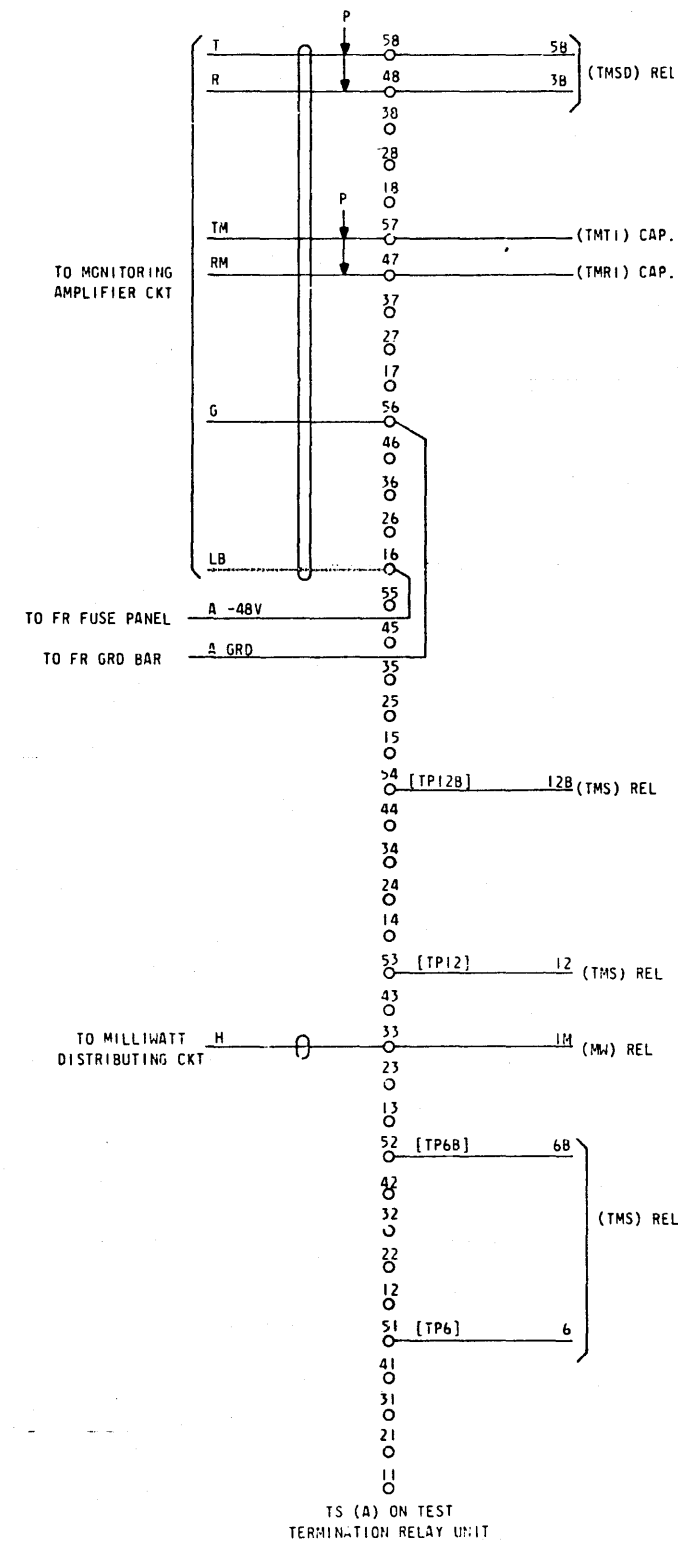
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CAD 60B



CAD 61

(FOR APP FIG. 45)



SD-25918-01-G32

76A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

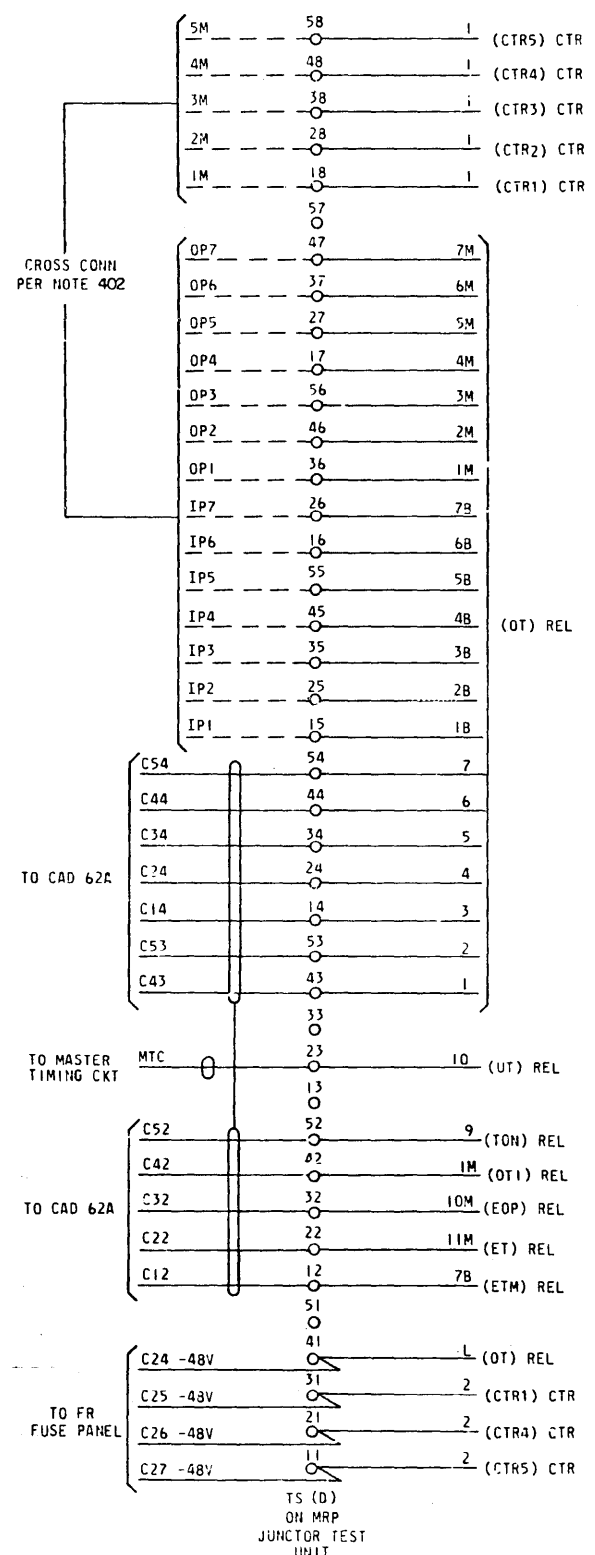
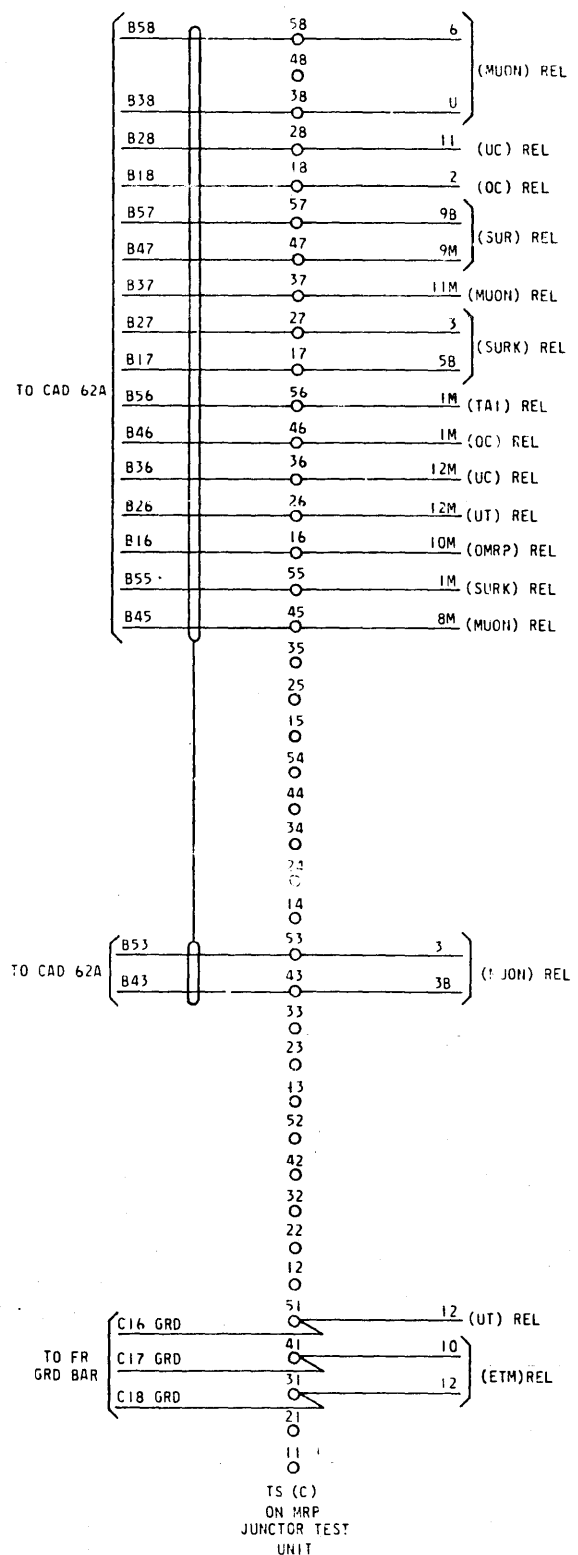
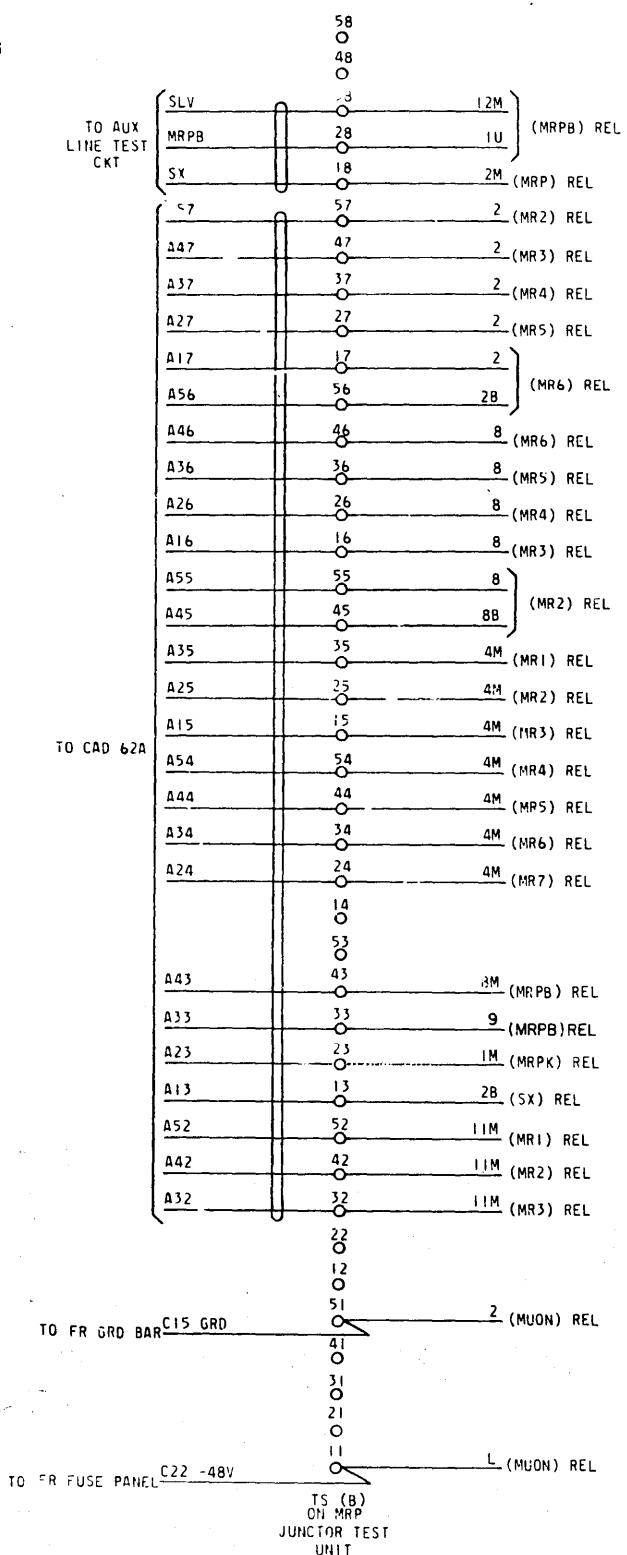
6S

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CAD 62 (FOR APP FIG. 46, 47, 48)

A
B
C
D
E
F
G
H



ISSUE
76A

CAD 62A (FOR APP FIG. 2,46,47,48)

A57	1		
A47	2		
A37	3		
A27	4	SECT. 2	
A17	5		
A56	6		
A46	7		
A36	6		
A26	5		
A16	4	SECT. 3	
A55	3		
A45	2		
A35	1	(MMU)SW	
A25	2		
A15	3		
A54	4	SECT. 4	
A44	5		
A34	6		
A24	7		
TO CAD 62			
A52	1		
A42	2	SECT. 3	
A32	3	(SU)SW	
A43		MRPB2 (MRPB)LP	
A33		MRP (MRP)LP	
A23		MRPK (MRPK)LP	
A13		SMRF (SMRF)LP	
C12	12ALL		
C54	7		
C44	6		
C34	5		
C24	4	SECT. 5	
C14	3	(MMU)SW	
C53	2		
C43	1		

B58	AE	TO 12B(AE1)	
B38	1	SECT. 1	
B28	12ALL	SECT. 2	
B18	12ALL	SECT. 4	(MMU)SW
B57	12ALL	SECT. 3	
B47	12ALL	SECT. 2	
B37	12ALL	SECT. 1	(SU)SW
B27	1	SECT. 1	
B17	12ALL	SECT. 3	
B56	TA	(TA)LP	
B46	OC	(OC)LP	
B36	UC	(UC)LP	
B26	UT	(UT)LP	
B16	OMRP	(OMRP)LP	
B55	SURK	(SURK)LP	
B45	1A	(MRP TMG)KEY	
B53	4B	(ST) REL	
B43	5T	(TP) REL	
C52	2A	(MRP TMG)KEY	
C42	IPTK	(IPTK)LP	
C32	OPTK	(OPTK)LP	
C22	ET	(ET)LP	

TO AUXILIARY	T1	3	
LINE TEST CKT	R1	2	(MRPB) JK

ISSUE
74A

MASTER TEST FRAME
TRUNK TEST CIRCUIT

SD-25918-01-G34

BELL TELEPHONE LABORATORIES
INCORPORATED

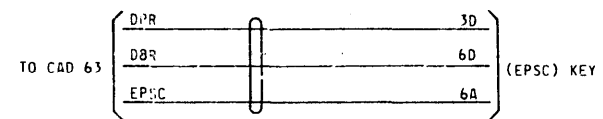
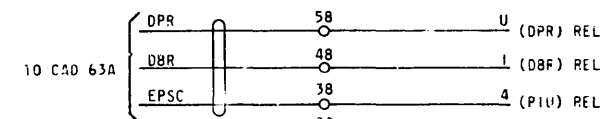
6S

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CAD 63

(FOR APP FIGURES 49 AND 5')

CAD 63A



58
48
38
28
18
57
47
37
27
17
56
46
36
26
16
55
45
35
25
15
54
44
34
24
14
53
43
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23
13
52
42
32
22
12
51
41
31
21
11

TO FR C15
GRD BAR

2 (PIU) REL

TO FR C22 -48V
FUSE PANEL

L (DPR) REL

TS (A) ON
DIAL PULSE
COUNTING UNIT

MASTER TEST FRAME
TRUNK TEST CIRCUIT

DWG SIZE

15:06

78B

BELL LABORATORIES

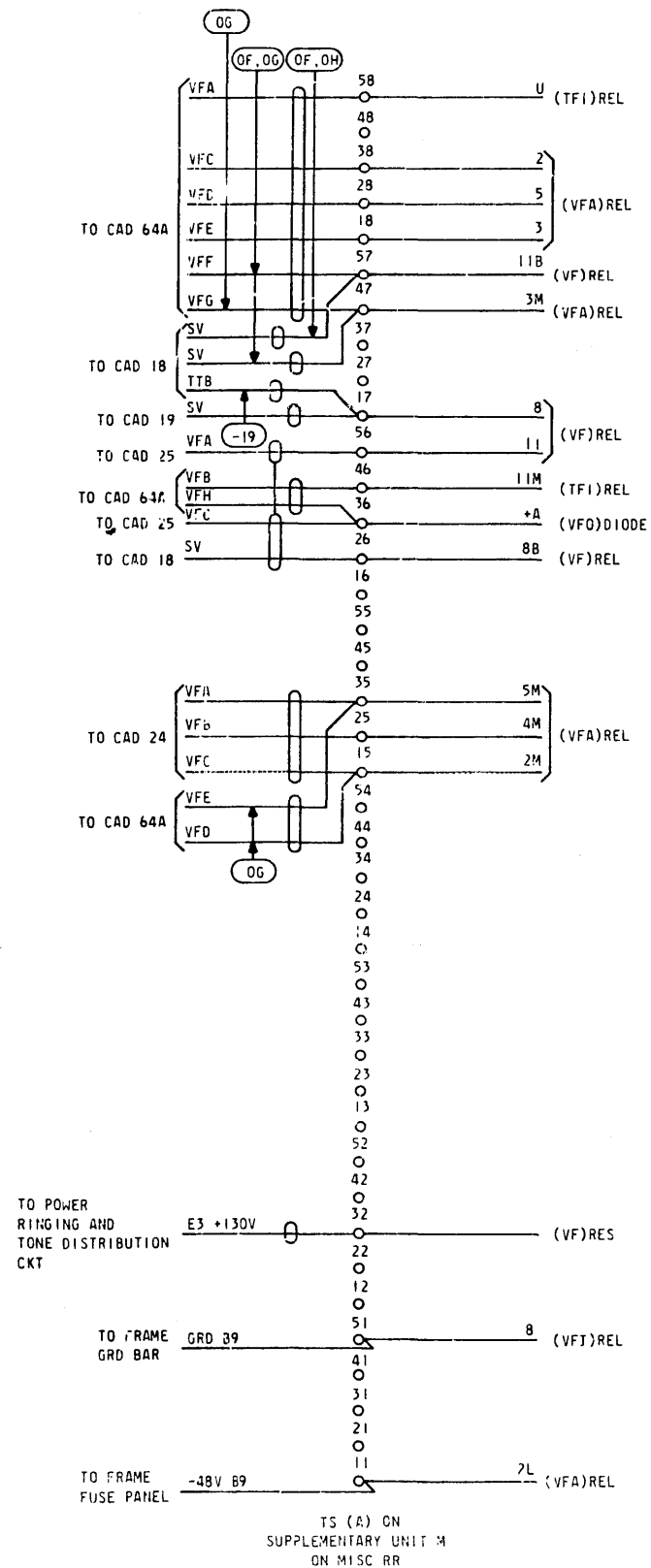
SD-25912-01-

G35

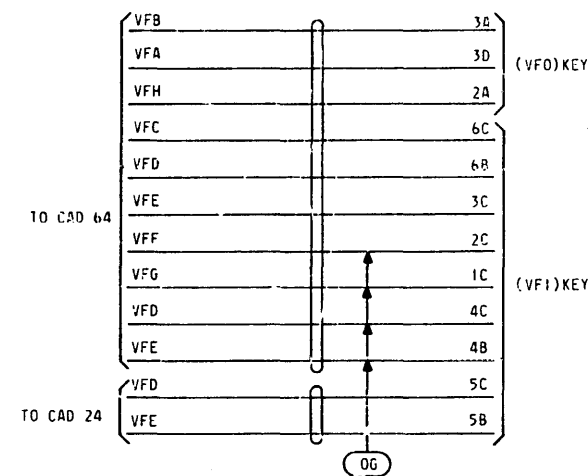
0 1 2 3 4 5 6 7 8 9

CAD 64

(FOR APP FIG 52 AND 53)



CAD 64A



MASTER TEST FRAME
TRUNK TEST CIRCUIT

DWG SIZE
65

ISSUE
82B

SELL LABORATORIES

SD-25918-01-

G36

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A

B

C

D

E

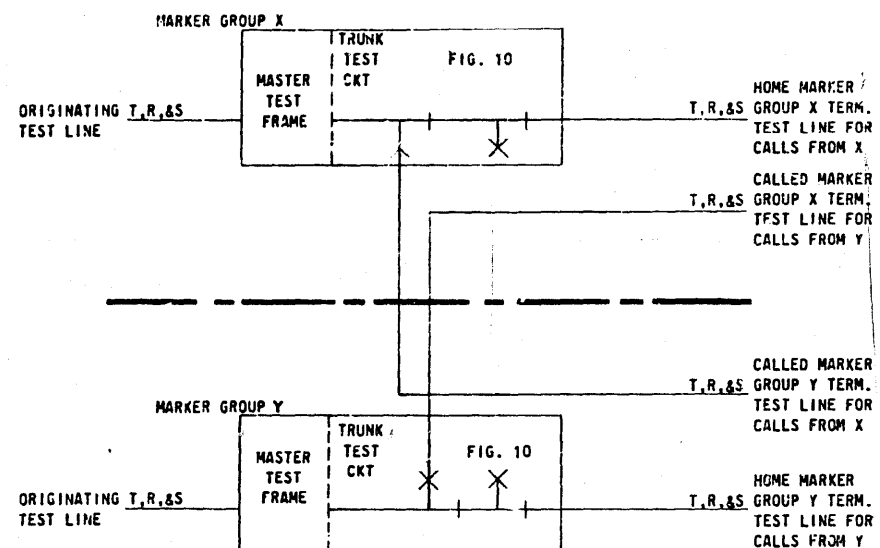
F

G

H

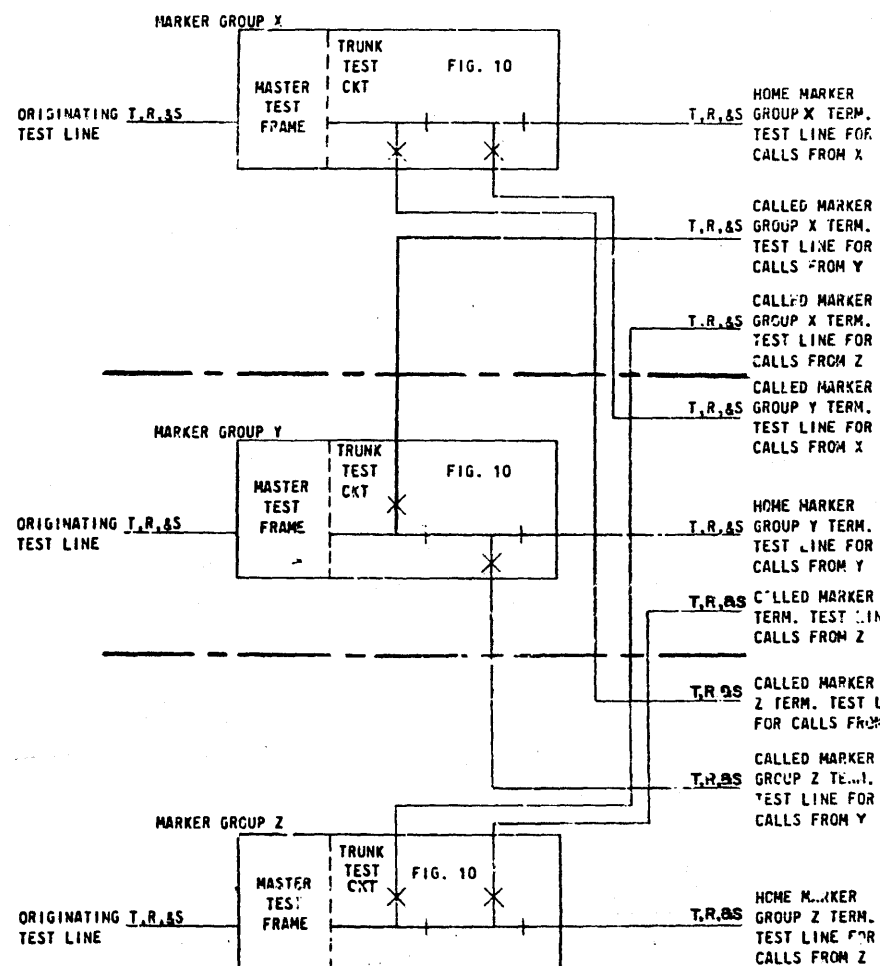
BD 1

2 MARKER GROUPS



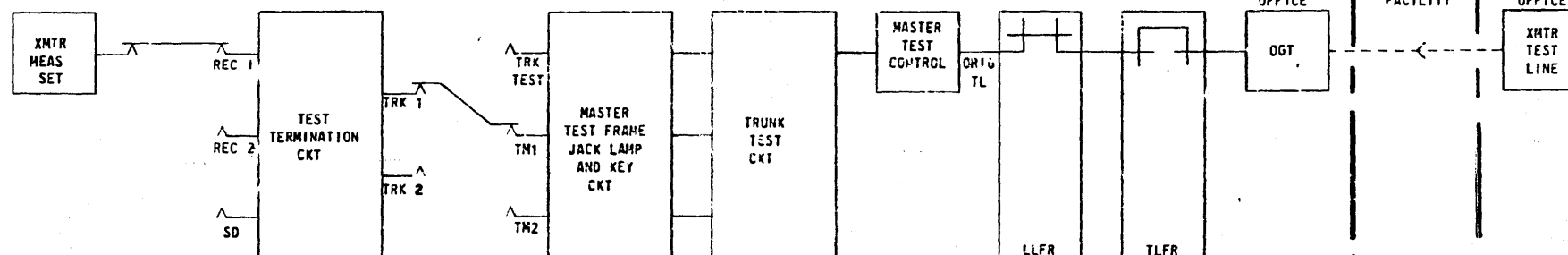
BD 2

3 MARKER GROUPS

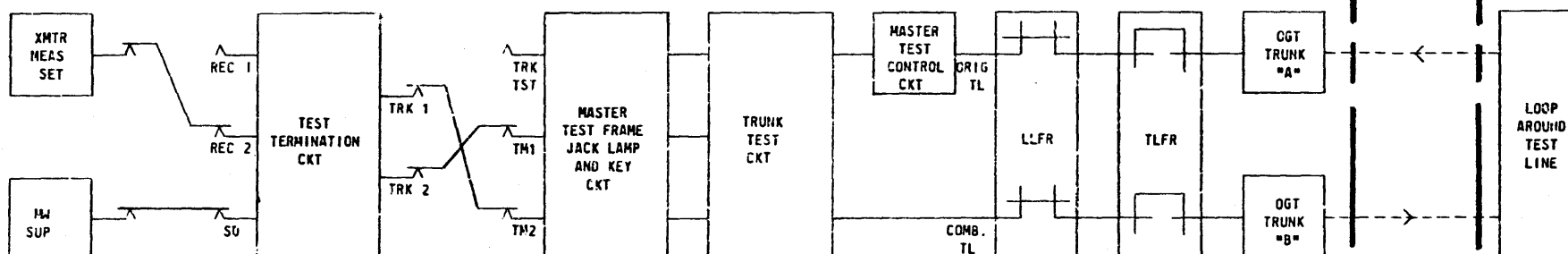


BD 3

LOOP AROUND TEST
STEP 1

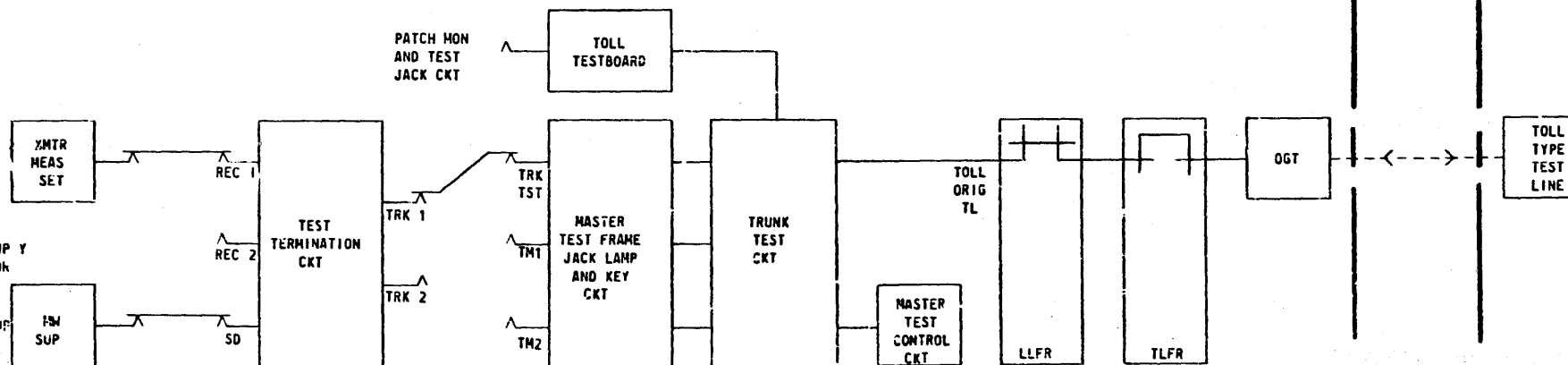


STEP 2



BD 4

MISC TOLL CLASS TESTS



SD-25918-01-H1

STABLO

MASTER TEST FRAME
TRUNK TEST CIRCUIT

BELL TELEPHONE LABORATORIES
INCORPORATED

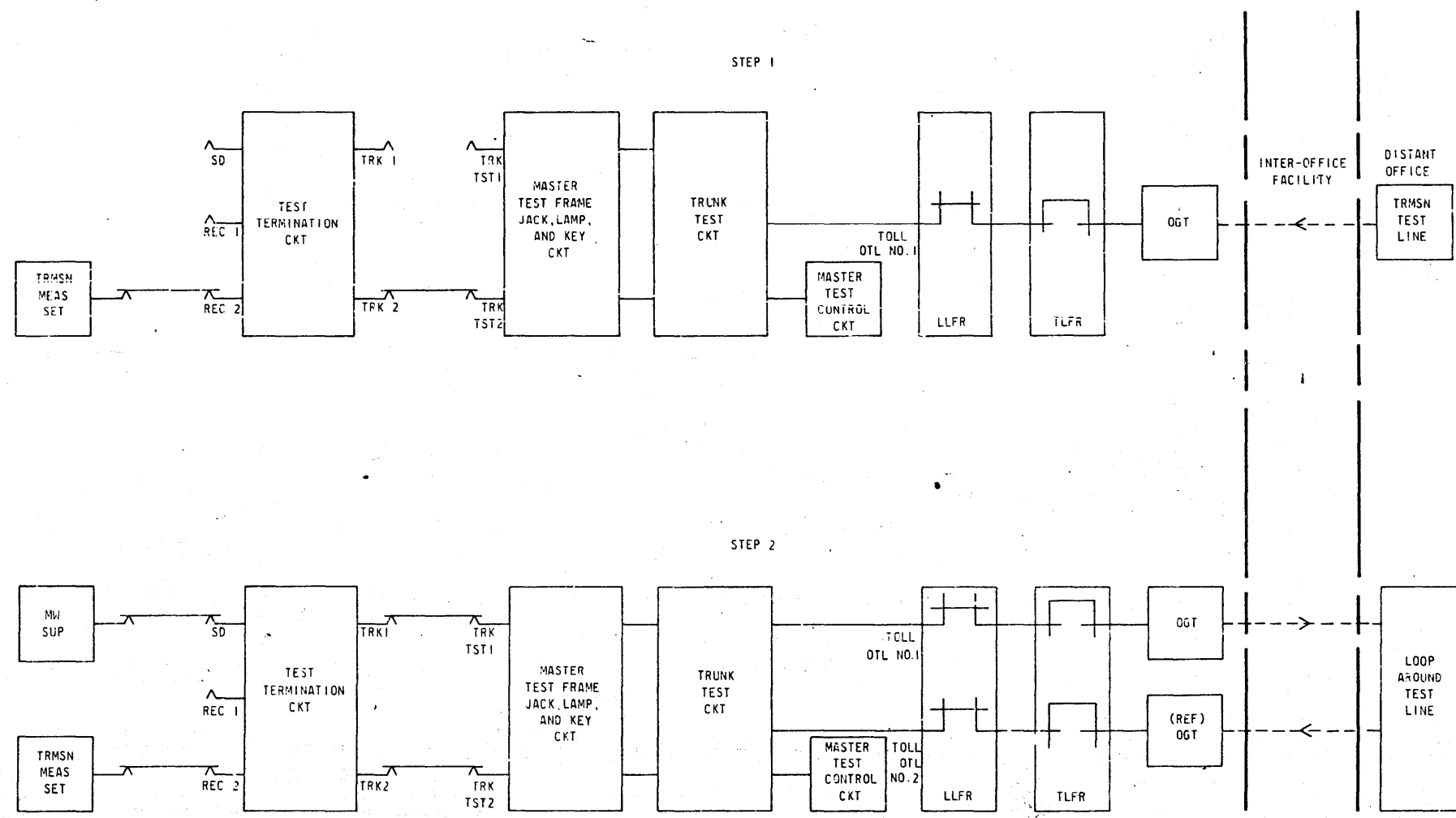
2

6S

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BD 5 LOOP AROUND TOLL CLASS TESTS



DRAWING
ISSUE
53D

53

SD-25918-01-H2