

SUPPORTING INFORMATION

[illegible]

DWG TBL	EC GRD ISSUE	DATE ISSUED	APPROVED	
1		10-27-90	R.L.L.	H
2-D	APP 10	5-18-50	R.L.L.	C
30	APP 2D	5-9-50	A.S.	V.J.
40	APP 3D	10-26-51	R.B.	R.L.L.
50	2D	7-30-53	A.C.C.	O.C.A.
60	2D	2-3-54	A.S.	R.L.L.
70	APP 1D	12-25-55	A.S.	V.R.B.
7B	2D	APP 2B	P.D.	R.P.
8D	2D	APP 3D	5-22-57	J.M.
90	APP 4D	7-26-58	F.G.J.	R.C.L.
			W.M.	R.C.C.
WORN DRAWING REPRODUCED WITHOUT CHANGE INFO. ON SHEETS 1,2 & 3 WAS SHOWN ON 2 SHEETS SIZE R:				
ROZ 10-19-70				
10B	2D APP 5B	3-5-71	D.H. P.J.S	E.A. L.C.B

[illegible]

WORKING LIMITS:

TYPE OF DIAL	PULSING FROM SUB.			PULSING FROM SUB.		
	2,40R5	6	7	2,40R5	6	7
MAX EXT. CKT. LOOP*	7500	12000	13000	8500	15000	14000
MAX. EXT. CKT. LOOP**	8500	14000	14000	10000	15000	15000
MAX. EXT. CKT. LOOP***	10000	14000	14000	11150	15000	15000
MIN. INS. RES.		15,000Ω			15,000Ω	

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* WHEN USING 1000Ω LOOP-LEAK B IN PULSING TEST SET
** WHEN USING 1200Ω LOOP-LEAK A IN PULSING TEST SET
*** WHEN USING 1400Ω LOOP-LEAK A IN PULSING TEST SET
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TRIPPING RANGES							
TYPE OF RING, AND DISTRICT	RINGING INTERVAL VOLTAGE				SILENT INTERVAL VOLTAGE	MAX. EXT. CKT LOOP FOR TRIPPING	
	NO. 1	NO. 350A	NO. 355A	NO. 356A		ADJ. "A"	ADJ. "B"
SUPER- IMPOSED- TUBE, ± 5 V.E.P.	84-88AC a	---	80-90 ⁽¹⁾ AC a	80-90 ⁽¹⁾ AC a	45-52	1030 Ω	1400 Ω
	45-52 DC		45-52 DC	45-52 DC	48-52	1115 Ω	1500 Ω
	(2)	(2)	65-90AC a	—	45-52	—	1400 Ω
			37-40DC		48-52	—	1500 Ω

2. 72-88, 80-88, OR 84-88AC & 37-40DC; OR 64-80, 72-80, OR 76-80 AC & 42-46 DC

REPLACING SD-31330-01 EXCEPT FOR ADDITIONS.

SD-30978-01

STEP BY STEP SYSTEMS
NO.1, 350A, 355A, OR 356A
SELECTOR CIRCUIT
REVERTING CALL
8 PARTY SEMI-SELECTIVE RINGING
AND/OR 4 PARTY SELECTIVE OR
SEMI-SELECTIVE RINGING
ARRANGED FOR 2 DIGIT OPERATION

(2P MR) (GRD CO) (R C SEL 8 PTY SEMI).

1099

AT & T CO
STANDARD

A B M ONLY FOR 350A & 356A

SD-30978-01-1
3 SHEETS

DWG SIZE

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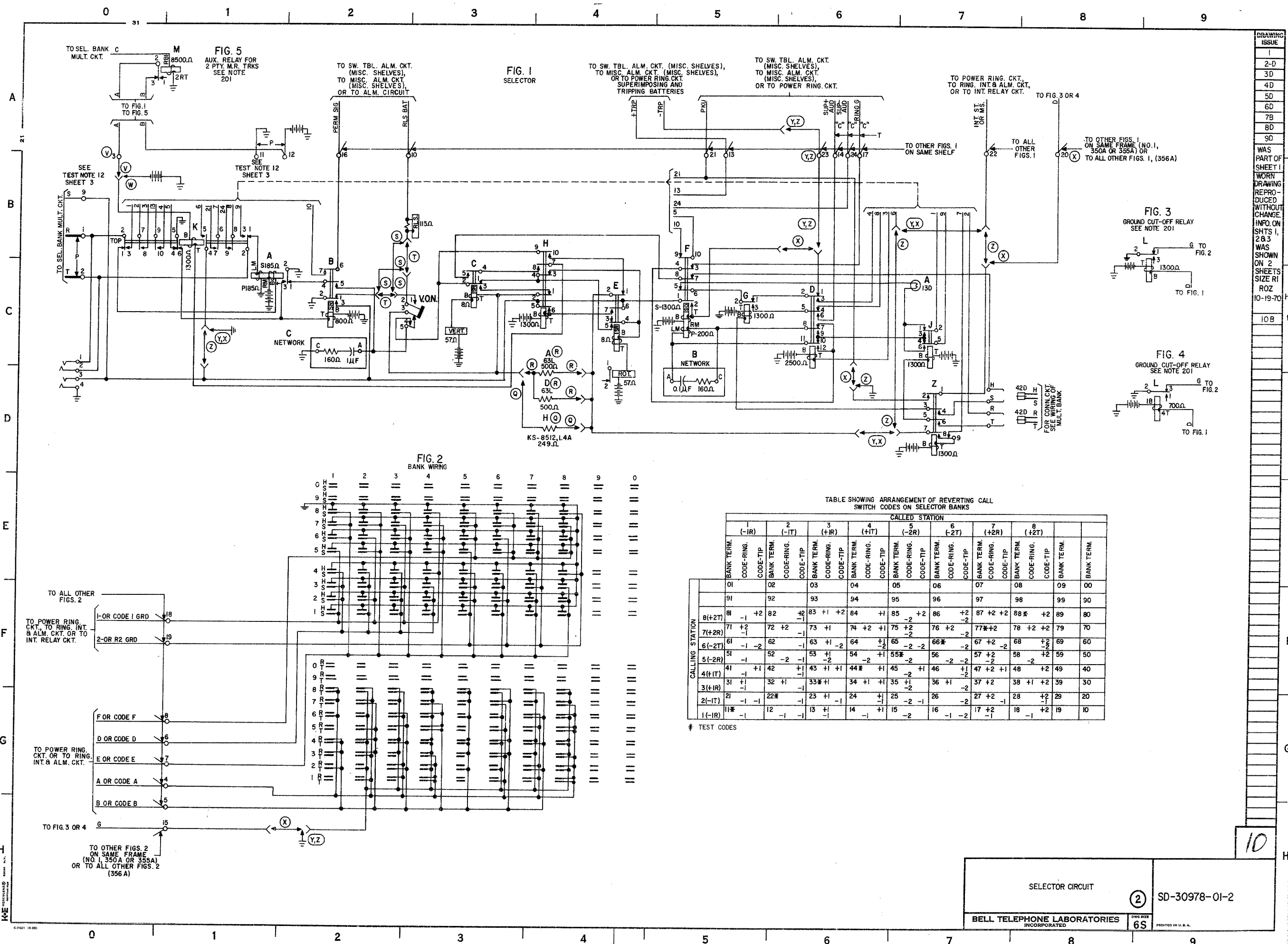


FIG. 5
AUX. RELAY FOR
2 PTY. M.R. TRKS
SEE NOTE 201

FIG. 1
SELECTOR

FIG. 2
BANK WIRING

FIG. 3
GROUND CUT-OFF RELAY
SEE NOTE 201

FIG. 4
GROUND CUT-OFF RELAY
SEE NOTE 201

TABLE SHOWING ARRANGEMENT OF REVERTING CALL
SWITCH CODES ON SELECTOR BANKS

CALLING STATION	CALLED STATION									
	1 (-IR)	2 (-IT)	3 (+IR)	4 (+IT)	5 (-2R)	6 (-2T)	7 (+2R)	8 (+2T)		
	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM. CODE-RING CODE-TIP	BANK TERM.
01		02	03	04	05	06	07	08	09	00
91		92	93	94	95	96	97	98	99	90
8(+2T)	81 -1 +2	82 -1	83 +1 +2	84 +1	85 -2 +2	86 +2 -2	87 +2 +2	88 +2	89	80
7(+2R)	71 +2 -1	72 +2 -1	73 +1	74 +2 +1	75 +2 -2	76 +2 -2	77 +2	78 +2 +2	79	70
6(-2T)	61 -1 -2	62 -1	63 +1 -2	64 +1 -2	65 -2 -2	66 -2	67 +2 -2	68 +2 -2	69	60
5(-2R)	51 -1	52 -2 -1	53 +1 -2	54 -2 +1	55 -2	56 -2 -2	57 +2	58 -2	59	50
4(+IT)	41 -1 +1	42 +1	43 +1 +1	44 +1	45 -2 +1	46 +1 -2	47 +2 +1	48 +2	49	40
3(+IR)	31 +1 -1	32 +1	33 +1	34 +1 +1	35 +1 -2	36 +1	37 +2	38 +1 +2	39	30
2(-IT)	21 -1 -1	22 -1	23 +1 -1	24 +1	25 -2 -1	26 -2	27 +2	28 +2 -1	29	20
1(-IR)	11 -1	12 -1 -1	13 +1 -1	14 -1 +1	15 -2	16 -1 -2	17 +2 -1	18 -1 +2	19	10

* TEST CODES

SD-30978-01

CIRCUIT REQUIREMENTS

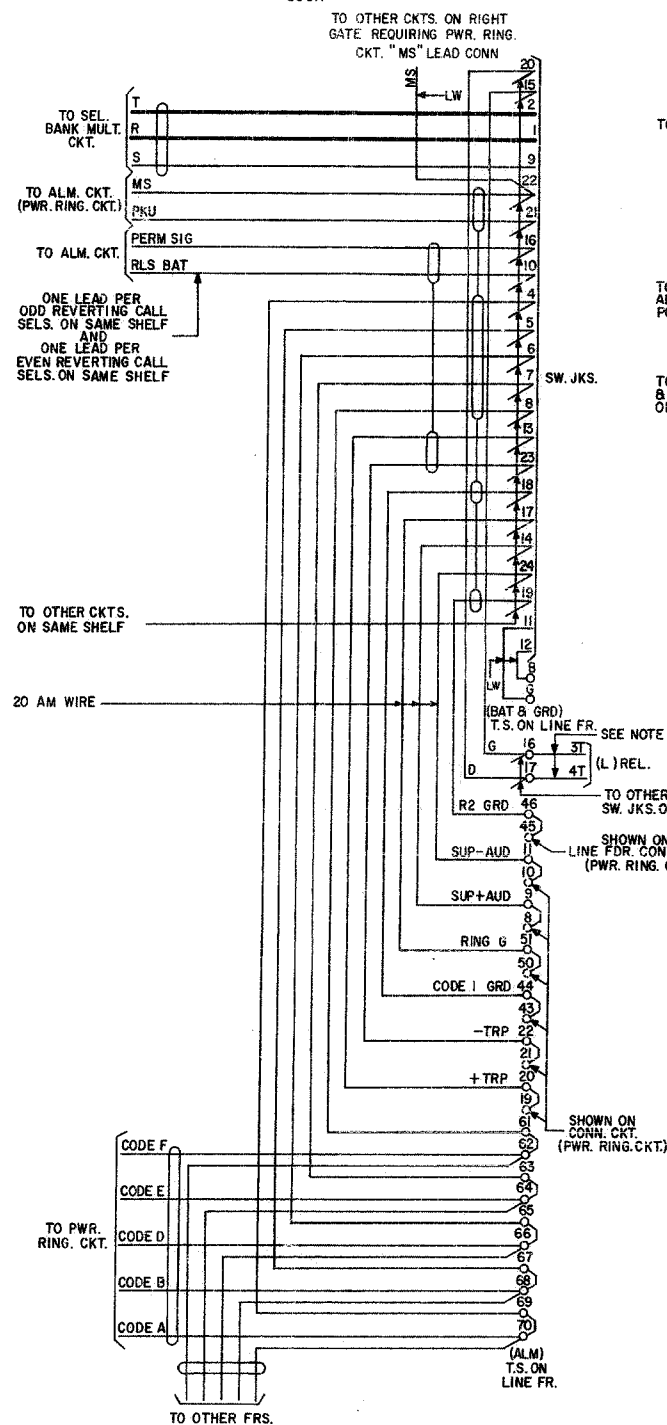
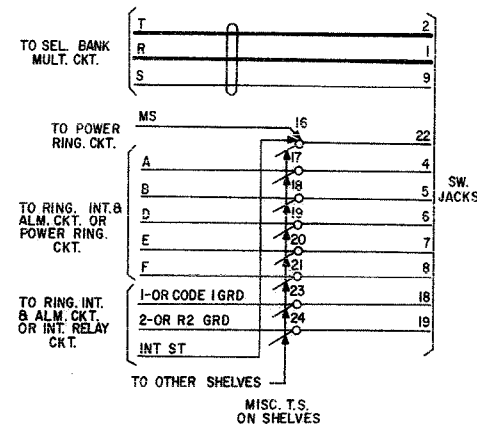
REVERTING CALL SELECTOR CIRCUIT 3-PARTY SEMI-SELECTIVE RINGING (R.C. SEL. & PTY SEMI) (2P MR) (GRD CO)

APPARATUS				MECH REQ				CIRCUIT PREPARATION				TEST SET		DIRECT CURRENT		FLOW REQ		TIME REQ		REMARKS
DESIG	CODE	FEA OR OPT	CKT. FIG.	RESID	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	TEST SEC.	READJ. SEC.	
									CONN BAT.	CONN GRD										
RELAYS																				
A	221ND		I	7-II	II		8	(B) NO (B) NO	TST. JK. 2 TST. JK. 2	TST. JK. 1 TST. JK. 1	M M	1, 2	P/S P/S	O NO	FS FS	15.1 13.9	14.8 14.4			
B	248D		I	15-4	504		27	I(A) I(A)		3(A) 3(A)	GRD. GRD.	3 3		O NO	FS FS	10.5 8.5	10 9			
									TST. JK. 1 TST. JK. 1	TST. JK. 2 TST. JK. 2	V-BR V-BR	4, 5 5	H R					-	.333	
								I(A)		3(A)	GRD.	5		NO	FS	8.5	9	.750	.500	
C	221CK		I	S-4	4		12	(VON) NO		2(H) 2(H)	GRD. GRD.	3 3		O NO	500 500	90 62	85 69			
									TST. JK. 1 TST. JK. 1	TST. JK. 2 TST. JK. 2	V-M V-M	5, 6 5	H R					-	.100	
										2(H)	GRD.	5		NO	500	62	69	.155	.140	
D	222BH		I	S-4	60		18			8T (K) 8T (K)	GRD. GRD.	7 7		O NO	FS FS	9.5 6.1	9 6.5			
E	221CJ		I	S-4	16		13	(H) NO (H) NO		3(H) 3(H)	GRD. GRD.	3 3		O NO	500 500	90 62	85 69			
									TST. JK. 1 TST. JK. 1	TST. JK. 2 TST. JK. 2	V-M V-M	5, 6 5	H R					-	.100	
								(H) NO		3(H)	GRD.	5		NO	500	62	69	.155	.140	
F	222JL		I	S-4	373		23	(G) O, 2(F)	11(D)	8(D)	B/G	8,13,14	P	O	FS	22.5	21			ADJ. "B" ADJ. "A"
							11(D)		8(D)	B/G	8,13,14	P	NO	FS	18	19.5				
							11(D)		8(D)	B/G	8,13,14	P	O		30	27				
							11(D)		8(D)	B/G	8,13,14	P	NO		23	25.5				
									2(F)	GRD.		S	O	FS	27.5	26				
									2(F)	GRD.		9	S	NO	FS	21.5	23			
G	221BY		I	4-8	125		17		3(Z) 3(Z)	GRD. GRD.		10		O NO	FS FS	12.6 10.4	12 11			
H	222DA		I	S-4	136		13	6(H) 6(H)		7(E) 7(E)	GRD. GRD.			O NO	FS FS	17 13.3	16 14			
J	221CB		I	S-4	38		13			5(Z) 5(Z)	GRD. GRD.			O NO	FS FS	12.4 10.1	11.8 10.7			
K	224M		I	S-4	214		13	(B) NO (B) NO		7(H) 7(H)	GRD. GRD.			O NO	FS FS	18 14	17 16			
L	221CA		3	7-II	10		12			B(L) B(L)	GRD. GRD.	15 15		O NO	FS FS	9.8 7.3	9.3 7.7			
L	U1393		4		132/136	H	47			T(L)	GRD.			O		18	17			
M	R429		5		3	L	20		RB(M)		BAT			O		3.8	3.6			
Z	225M		I	S-4	305		16	7(Z) 7(Z)		9(Z) 9(Z)	GRD. GRD.			O NO	FS FS	19 9.1	17 9.6			

TEST NOTES:

1. ARM. NEED NOT TOUCH CORE.
2. CONT. FOLLOW ON MAKE CONT. MIN. 8. CONT. SEPARATION ON ALL CONTS. MIN. 3.
3. FOR USE WHEN TIMING REQ. ARE NOT APPLIED.
4. TEST HOLD-USE 1400Ω LOOP IN PULSING TEST SET.
5. FOR USE WHEN TIMING REQ. ARE APPLIED.
6. TEST HOLD-USE LEAK "A" IN PULSING TEST SET.
7. TEST CONT. SEPARATION SPGS. 2-3 & 5-6 MIN. 13.
8. CONTACTS 1-2 SHALL MAKE BEFORE SPG. 1 STRIKES THE BUSHING ON SPG. 4.
9. CONTACTS 1-2 MAY MAKE & CONTACT 3-4 & 5-6 MAY BREAK.
10. CONTACT SEPARATION ON ALL CONTACTS MIN. 13.
11. AS PERMITTED BY SEQUENCE ANY TWO BREAK CONTACTS MAY BREAK.
12. SPGS. 9 & 11 TO MAKE CONTACT WHEN SELECTOR IS REMOVED.
13. REQ. FOR SPGS. 1 & 2.
14. ADJ. "A" IS SUPERSEDED BY ADJ. "B" ON ISSUE 3D.
15. THE REQUIREMENTS FORMERLY WERE:

TEST	READJ.
O	7.2
NO	5.7
	6.8
	6.1

FIG. 51
(FOR FIGS. 1 & 2)
356AFIG. 52
(FOR FIGS. 1 & 2)
NO. 1, 350A, OR 356A

DRAWING
ISSUE
1
2D
3D
4D
5D
6D
7B
8D
9D
SHEET
NO. WAS
2
WORN
DWG RE-
PRO-
DUCED
WITH-
OUT
CHANGE
INFO. ON
SHEETS
1, 2 & 3
WAS
SHOWN
ON 2
SHEETS
SIZE RI
ROZ
10-19-70
10B

10

SELECTOR CIRCUIT

②

SD-30978-01-3

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