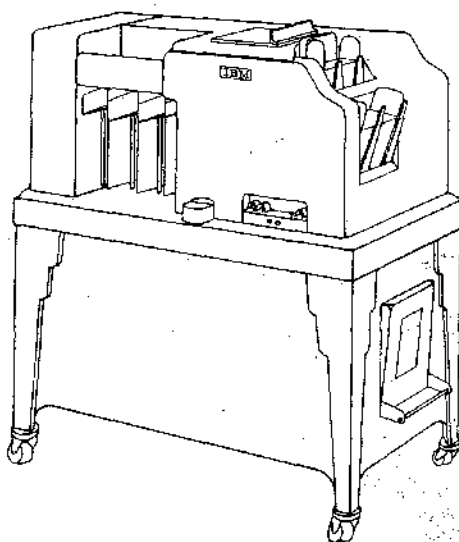
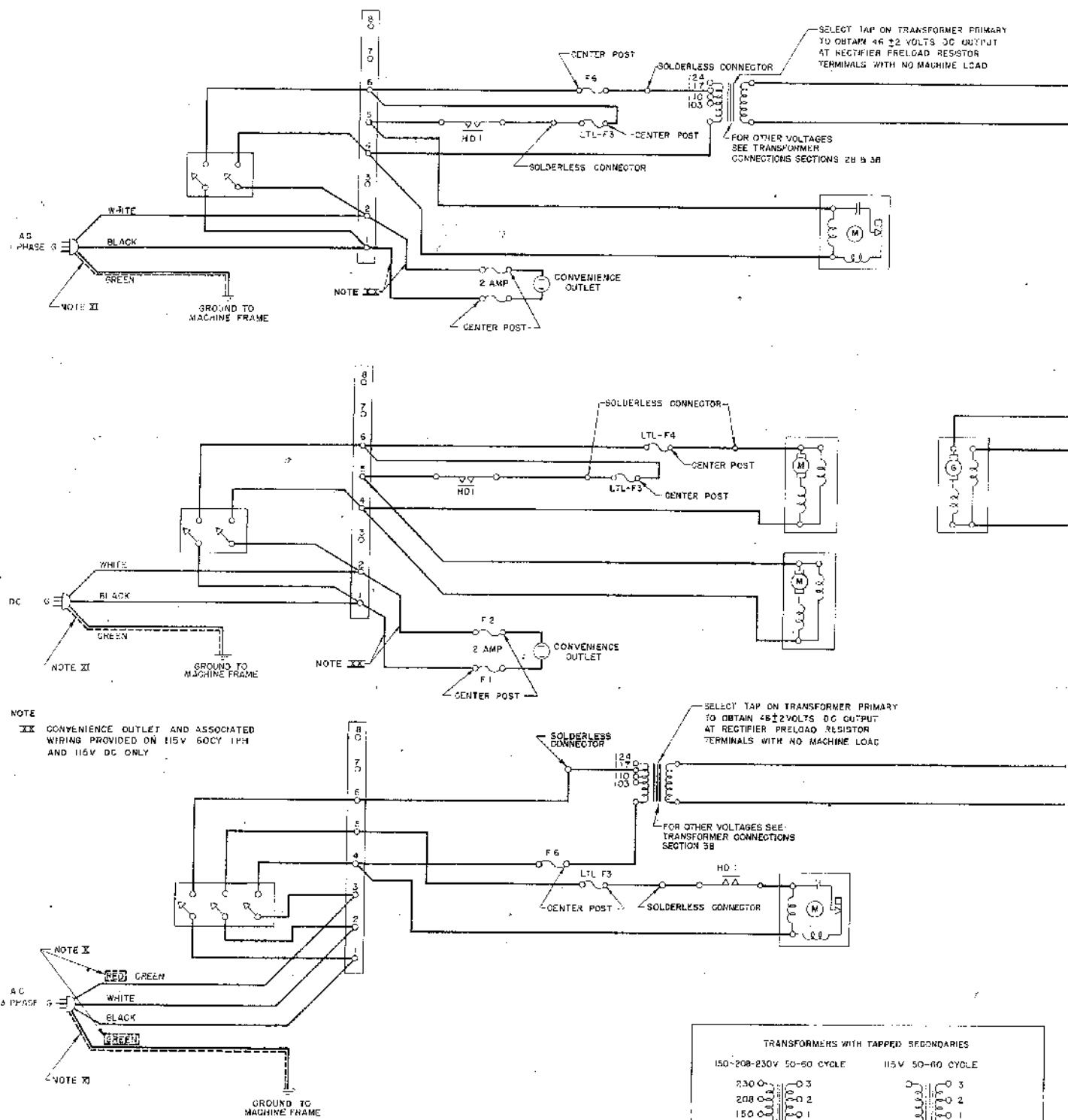


IBM Wiring Diagram

DIAGRAM NO. 159762U
TYPE-077
COLLATOR
MACHINE SERIAL NO-



INTERNATIONAL BUSINESS MACHINES CORPORATION
590 MADISON AVENUE
NEW YORK 22, N.Y.



NOTE XX CONVENIENCE OUTLET AND ASSOCIATED WIRING PROVIDED ON 115V 60CY 1PH AND 115V DC ONLY

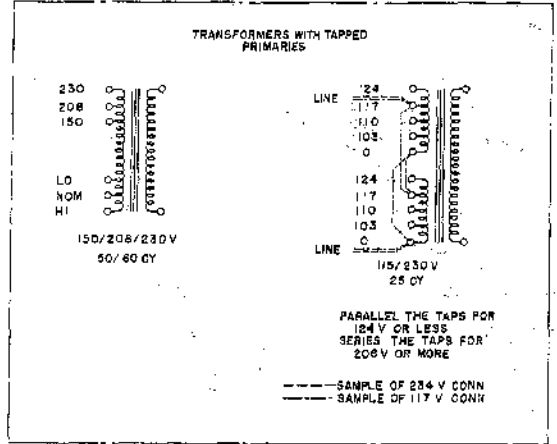
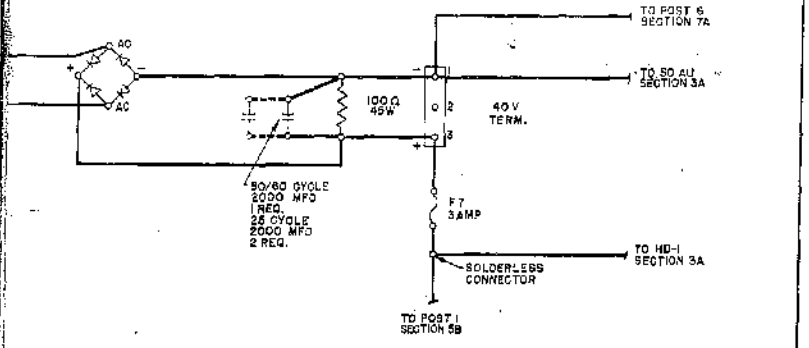
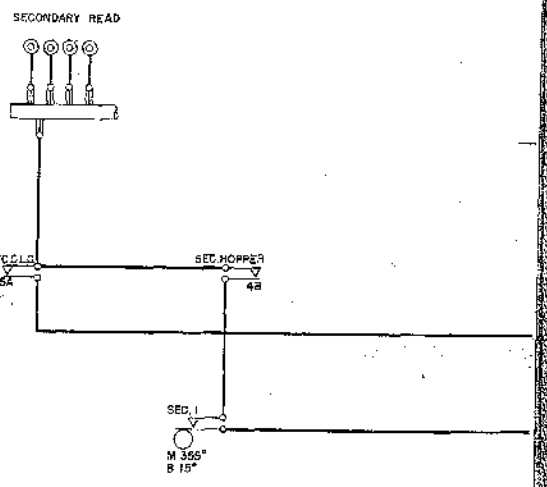
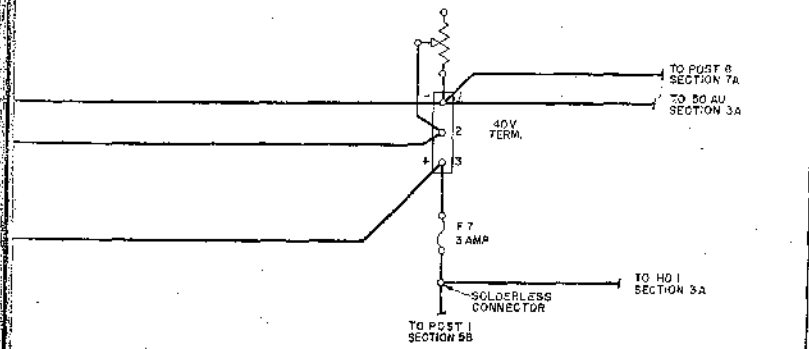
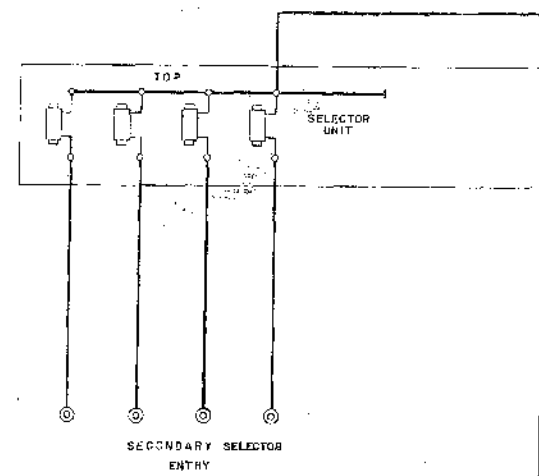
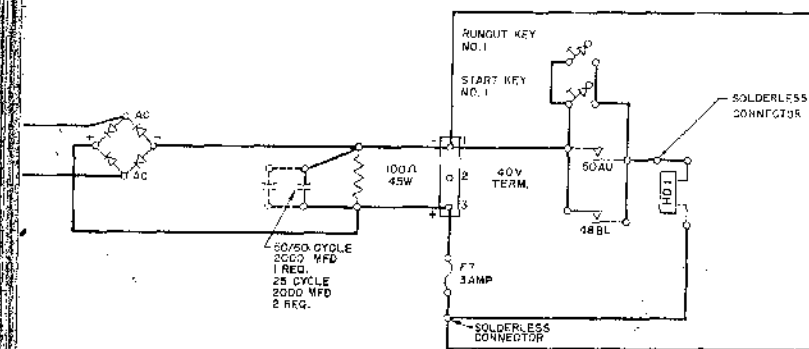
SELECT TAP ON TRANSFORMER PRIMARY TO OBTAIN 46 ±2 VOLTS DC OUTPUT AT RECTIFIER PRELOAD RESISTOR TERMINALS WITH NO MACHINE LOAD

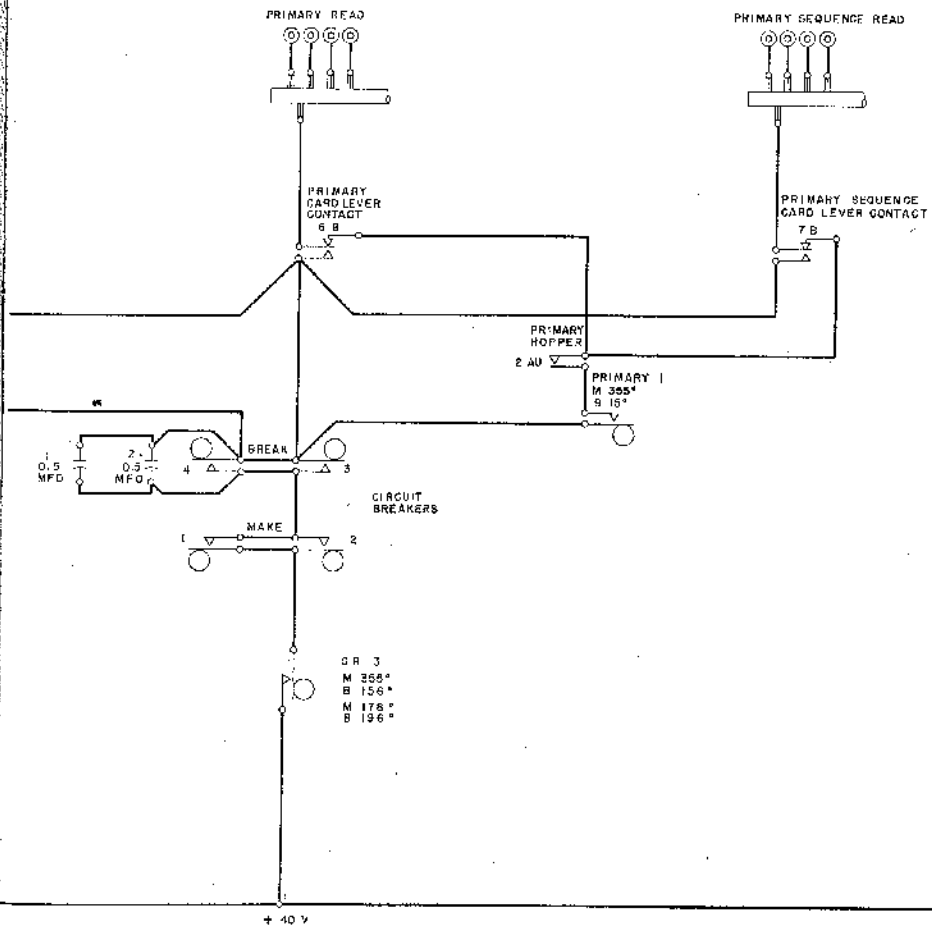
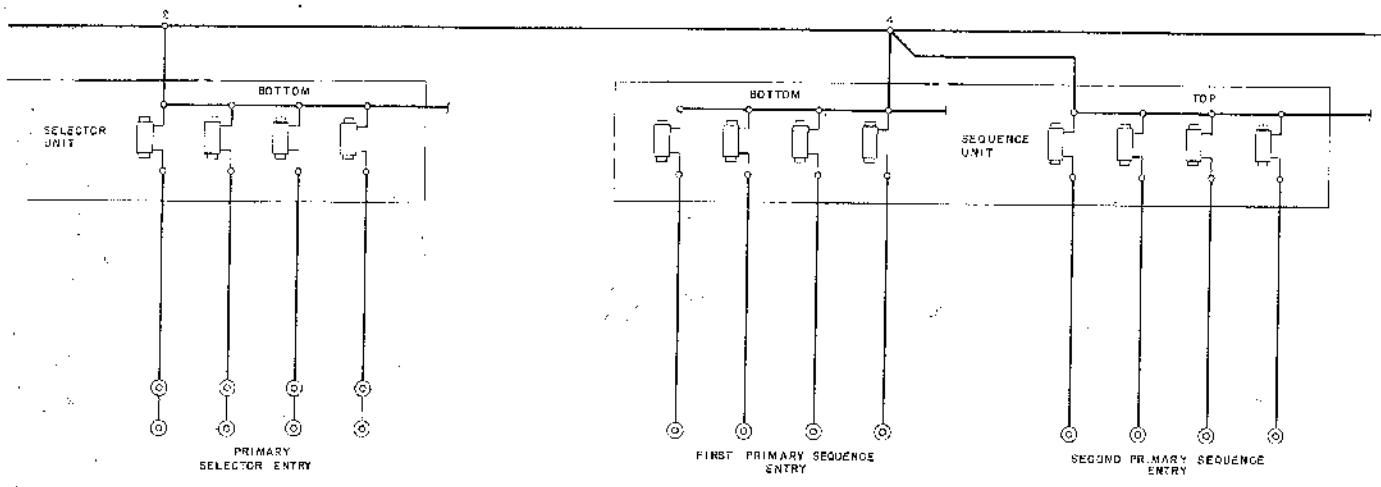
FOR OTHER VOLTAGES SEE TRANSFORMER CONNECTIONS SECTION 3B

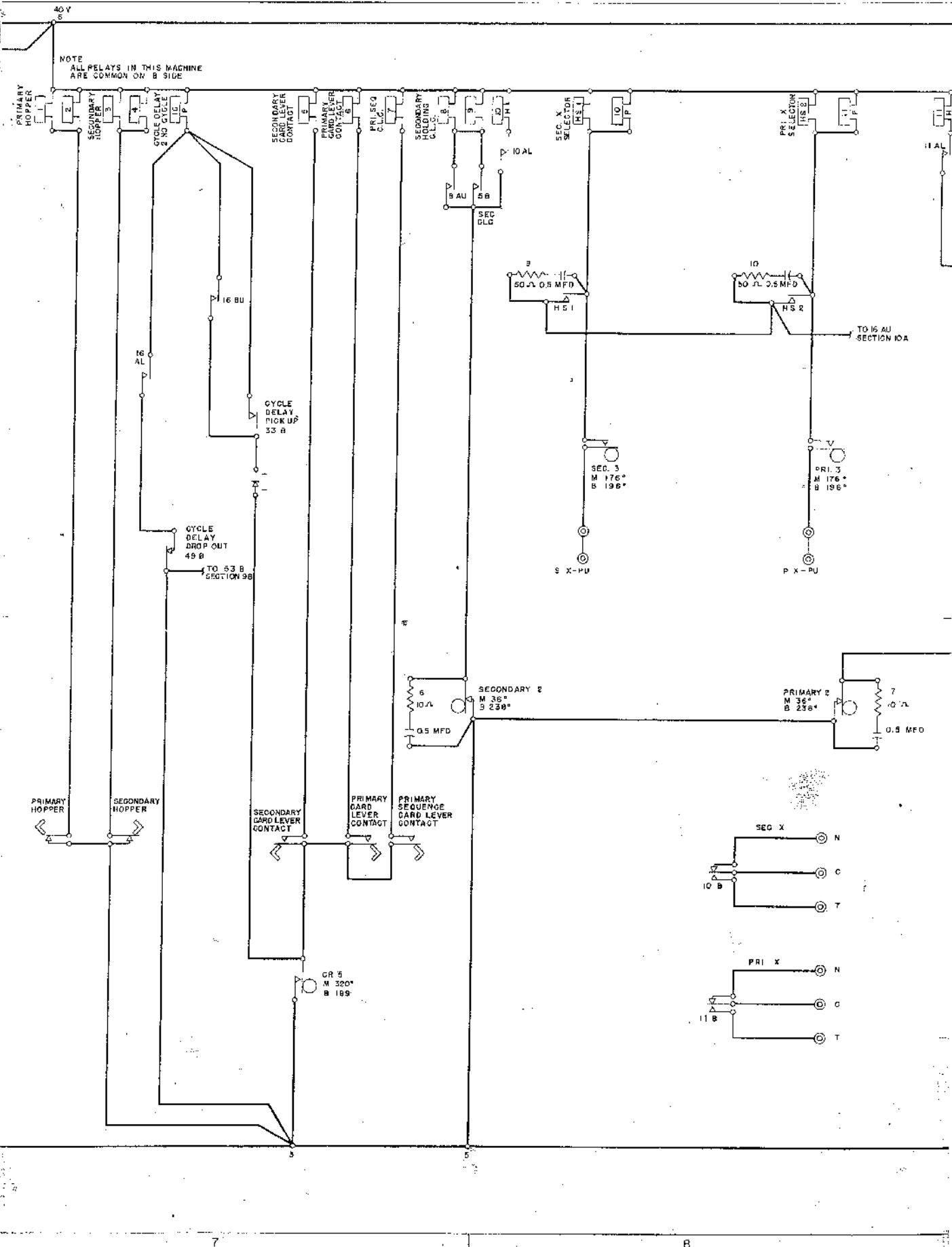
TRANSFORMERS WITH TAPPED SECONDARIES

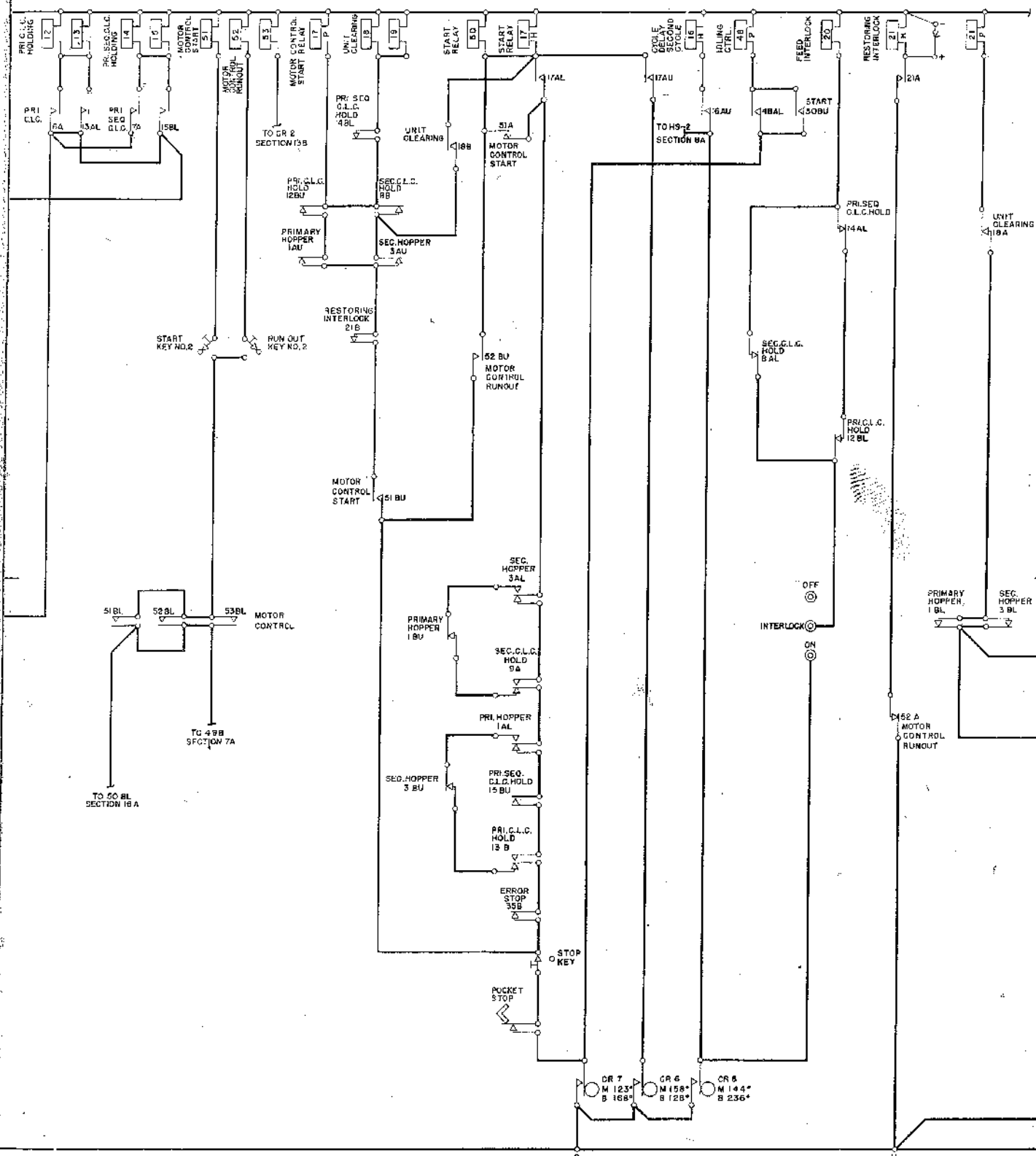
150-200-230V 50-60 CYCLE	115V 50-60 CYCLE
CONNECT TO PROPER INPUT VOLTAGES	
115-230V 25 CYCLE	SELECT TAP ON TRANSFORMER SECONDARY TO OBTAIN 46 ±2 VOLTS D.C. AT RECTIFIER PRELOAD RESISTOR TERMINALS WITH NO MACHINE LOAD
FOR 115V JUMPER 1 TO 3 AND 2 TO 4	
FOR 230V JUMPER 2 TO 3	

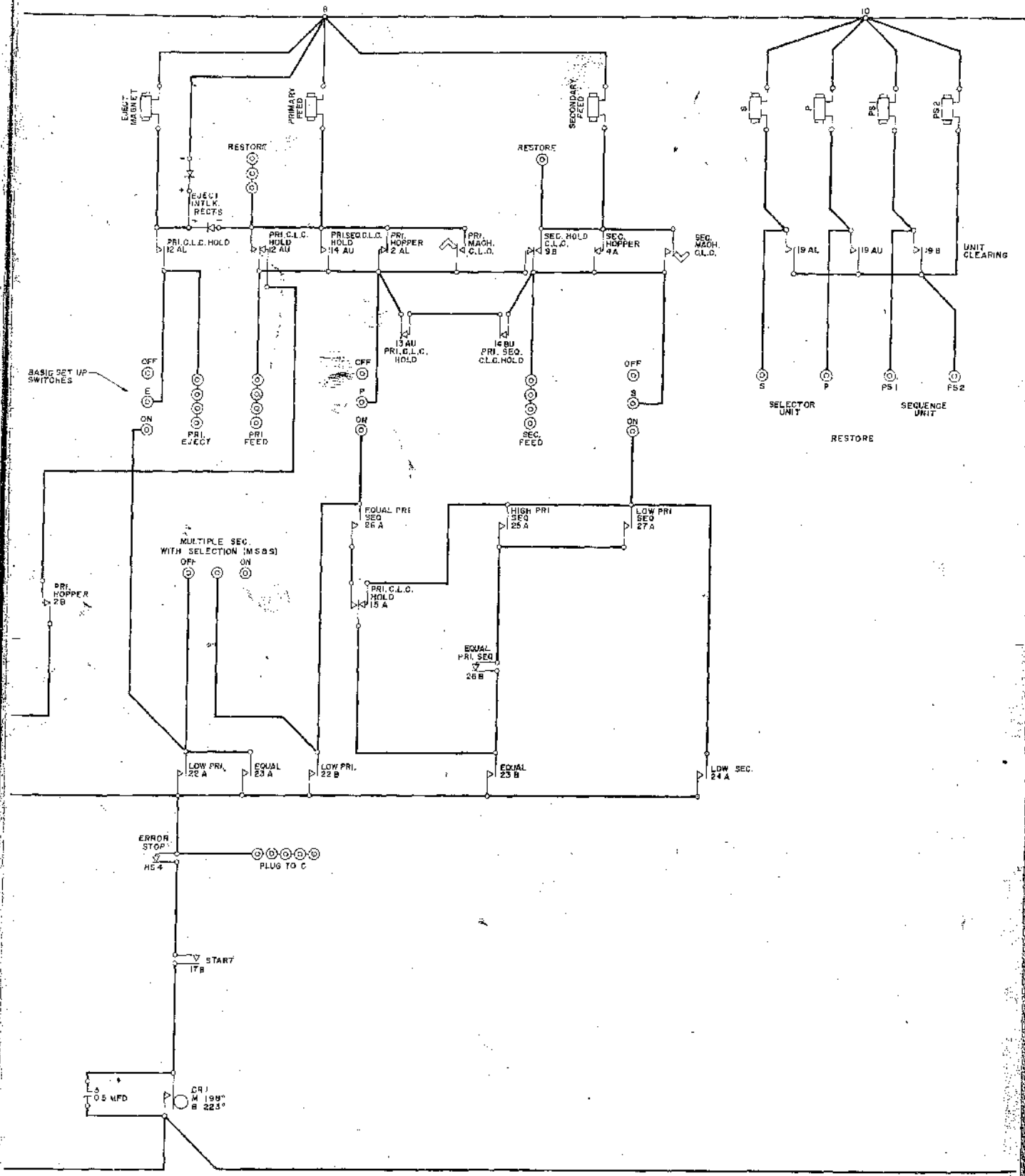
POWER SUPPLY			FUSE 1		FUSE 2		LONG TIME LAG FUSE 3		LONG TIME LAG FUSE 4		FUSE 6		FUSE 7	
VOLTS	CYCLE	PHASE	AMP	PART NO.	AMP	PART NO.	AMP	PART NO.	AMP	PART NO.	AMP	PART NO.	AMP	PART NO.
115	60	1	2.0	3344	2.0	3344	4.0	107665			2.0	107603		
1.5	50	1					5.0	107666			2.0	107603		
115	50	3					5.0	107666			2.0	107603		
115	25	1					4.0	107665			2.0	107603		
1.5	DC	-	2.0	3344	2.0	3344	3.2	107664	3.2	107664				
50	60	1					3.2	107664			1.0	107799		
208	60	1					2.5	107663			1.0	107799		
208	60	3					2.5	107663			2.0	107805		
208	50	1					2.5	107663			2.0	107805		
208	50	3					2.5	107663			2.0	107805		
230	60	1					2.0	92734			1.0	107799		
230	50	3					2.0	92734			1.0	107799		
230	50	1					2.5	107663			1.0	107799		
230	50	3					2.5	107663			1.0	107799		
230	25	1					2.0	92734			1.0	107799		
230	DC	-					2.0	92734	2.0	92734				

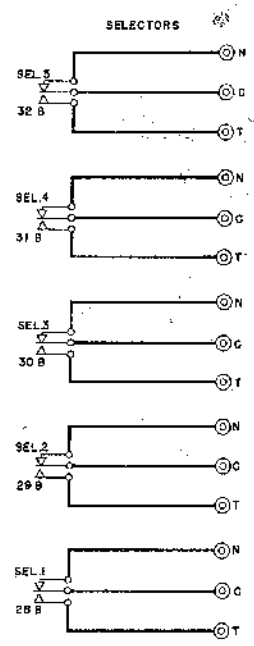
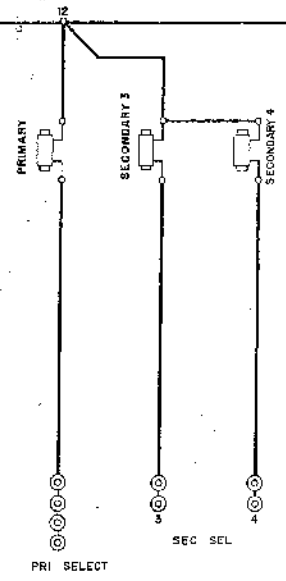
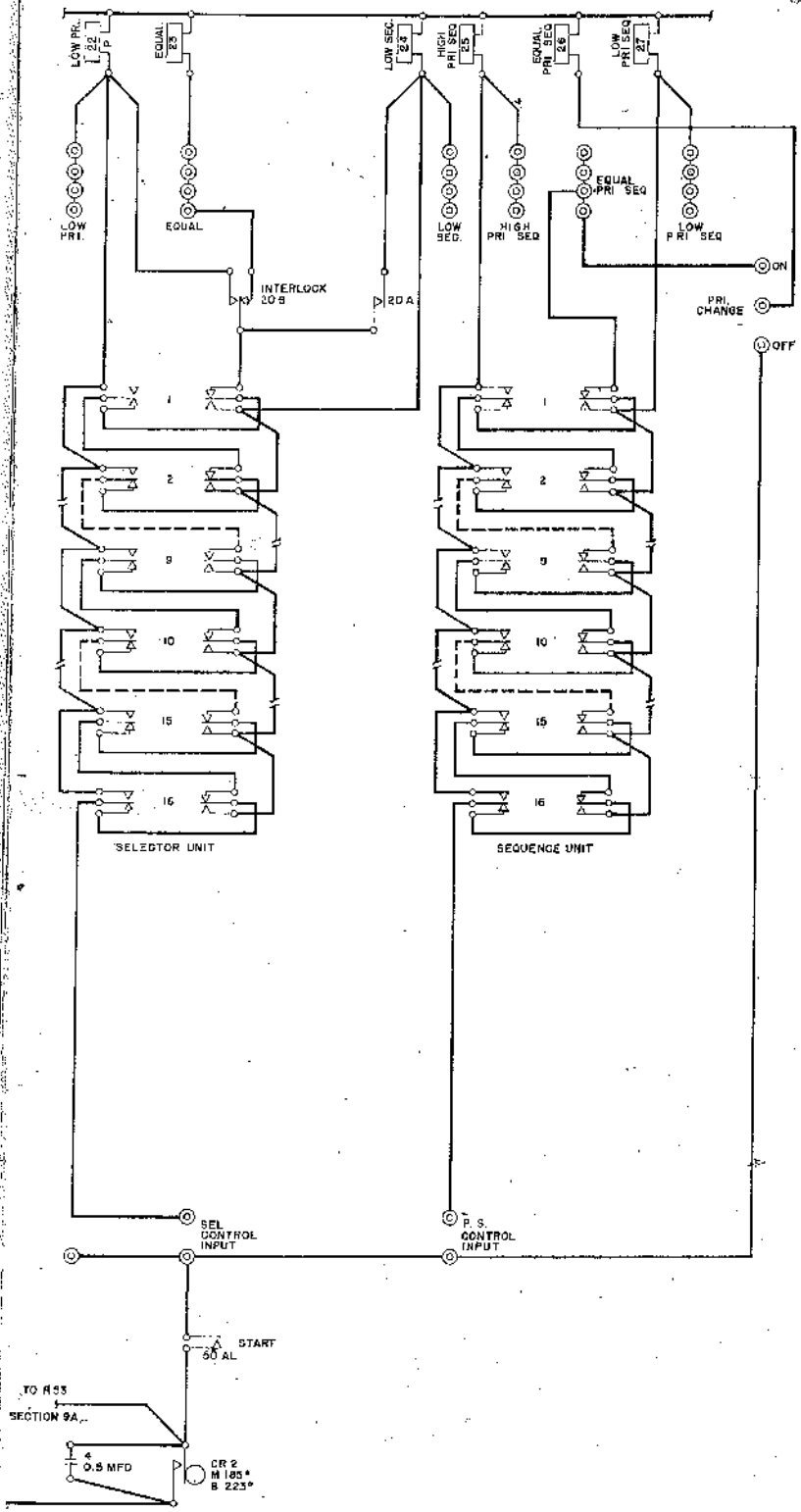


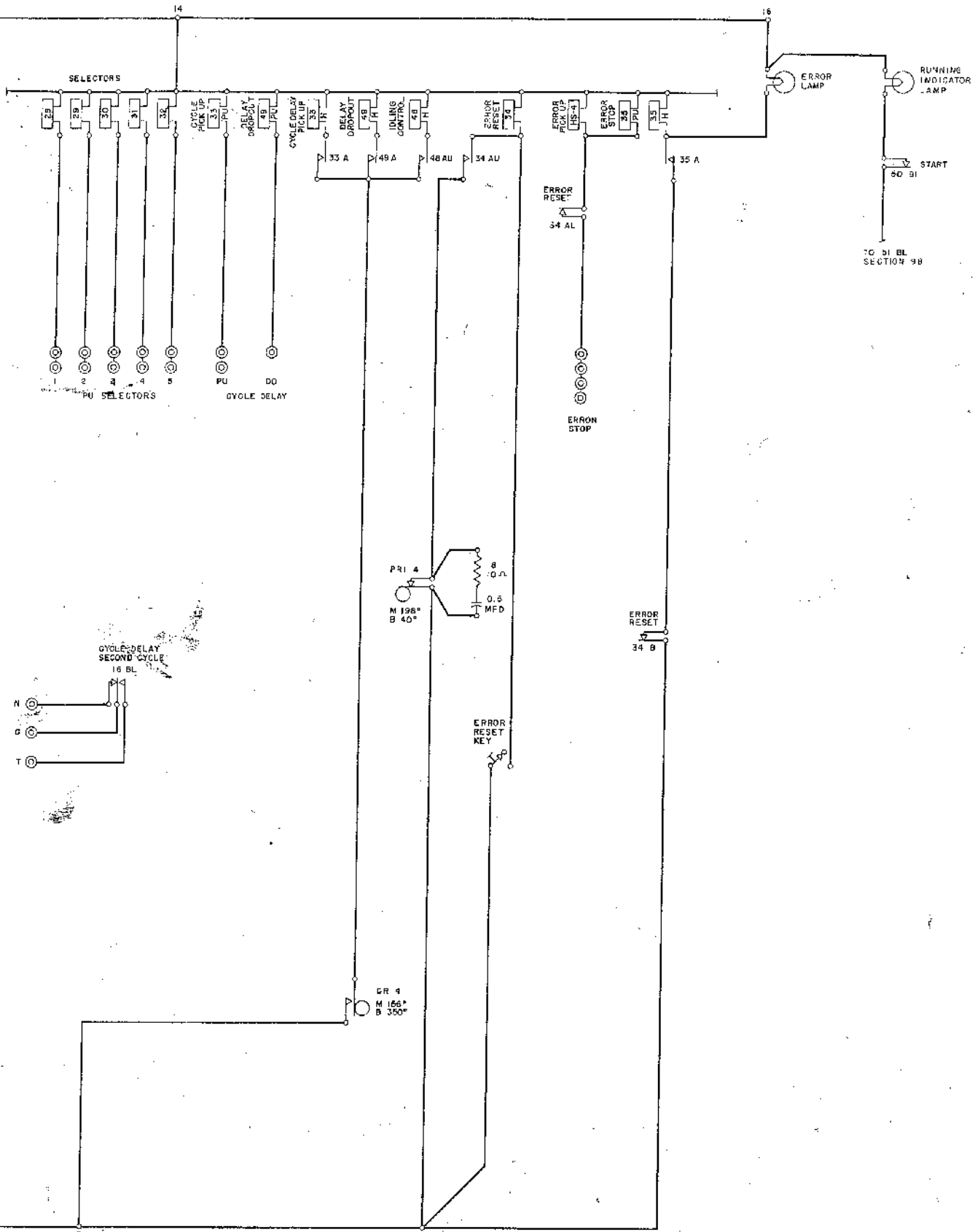












DUO RELAYS

POSTS

CAPACITORS

RELAY NO.	COIL			CONTACT POINTS				NAME	ABBREVIATION	PART NO.
	PV	H		AL	AU	BL	BU			
1	7A			9B	9A	9B	9B	PRIMARY HOPPER	PRI. HOPPER	124843
2	7A			11A	9B	1A		PRIMARY HOPPER	PRI. HOPPER	12338A
3	7A			9B	9A	10B	9B	SECONDARY HOPPER	SEC. HOPPER	124843
4	7A			12A		4B		SECONDARY HOPPER	SEC. HOPPER	111351
5	7A			4B		5A		SECONDARY CARD LEVER CONTACT	SEC. C.L.C.	111354
6	7A			9A		9B		PRIMARY CARD LEVER CONTACT	PRI. C.L.C.	111351
7	7A			3A		9B		PRIMARY SEQUENCE CARD LEVER CONTACT	PRI. SEQ. C.L.C.	111351
8	7A			10A	7A	9A		SECONDARY CARD LEVER CONTACT HOLD	SEC. C.L.C. HOLD	127436
9	7A			9B		11A		SECONDARY CARD LEVER CONTACT HOLD	SEC. C.L.C. HOLD	124843
10	9A	8A		8A		8B		SECONDARY X SELECTOR	SEC. X SELECTOR	122449
11	9A	8A		8A		8B		PRIMARY X SELECTOR	PRI. X SELECTOR	123442
12	9A			11A	11A	10A	9A	PRIMARY CARD LEVER CONTACT HOLD	PRI. C.L.C. HOLD	124843
13	9A			9A	11A	9B		PRIMARY CARD LEVER CONTACT HOLD	PRI. C.L.C. HOLD	124843
14	9A			10A	11A	9A	11A	PRIMARY SEQUENCE CARD LEVER CONTACT HOLD	PRI. SEQ. C.L.C. HOLD	124843
15	9A			11A		9A	9B	PRIMARY SEQUENCE CARD LEVER CONTACT HOLD	PRI. SEQ. C.L.C. HOLD	121843
16	7A	10A		7A	10A	15B	7A	CYCLE DELAY SECOND CYCLE		285021
17	9A	9A		10A	10A	11B		START RELAY		159758
18	9A			10A		9A		UNIT CLEARING		11531
19	9A			12A	12A	12A		UNIT CLEARING		122932
20	10A			13A		13A		FEED INTERLOCK		111351
21	10A	10A		10A		9A		RESTORING INTERLOCK		11334
22	15A			11B		11B		LOW PRIMARY	LOW PRI.	11334
23	15A			11B		11B		EQUAL	EQUAL	11334
24	15A			12B		11B		LOW SECONDARY	LOW SEC.	11334
25	15A			11A		11A		HIGH PRIMARY SEQUENCE	HIGH PRI. SEQ.	11334
26	15A			11A		11B		EQUAL PRIMARY SEQUENCE	EQUAL PRI. SEQ.	114456
27	15A			12A		12A		LOW PRIMARY SEQUENCE	LOW PRI. SEQ.	111334
28	15A			14B		14B		SELECTOR 1	SEL. 1	114456
29	15A			14B		14B		SELECTOR 2	SEL. 2	114456
30	15A			14B		14B		SELECTOR 3	SEL. 3	114456
31	15A			14B		14B		SELECTOR 4	SEL. 4	114456
32	15A			14B		14B		SELECTOR 5	SEL. 5	114456
33	15A	15A		15A		7A		CYCLE DELAY PICKUP		12105B
34	15A			16A	15A	16A		ERROR RESET		127456
35	16A	16A		16A		9B		ERROR HOLD		121877
48	10A	15A		10A	15A	3A		IDLING CONTROL	IDLING CTRL.	12770G
49	15A	15A		15A		7A		CYCLE DELAY DROPOUT		153673
50	9A			13B	3A	16A	10A	START RELAY		128293
51	9A			9A		9B	9A	MOTOR CONTROL RELAY START		125828
52	9A			10B		9B	9A	MOTOR CONTROL RELAY RUNOUT		125828
53	9A					9B		MOTOR CONTROL RELAY		121053

NO.	LOCATION
1	5B
2	5A
3	7B
4	8A
5	9B
6	7A
7	15B
8	11A
9	10B
10	12A
11	10B
12	14A
13	15B
14	16A
15	
16	16A

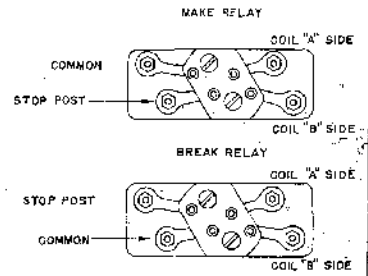
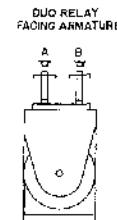
NO.	LOCATION
1	5B
2	5B
3	11B
4	13B
5	
6	7B
7	9B
8	15A
9	8A
10	8A

MISCELLANEOUS ITEMS

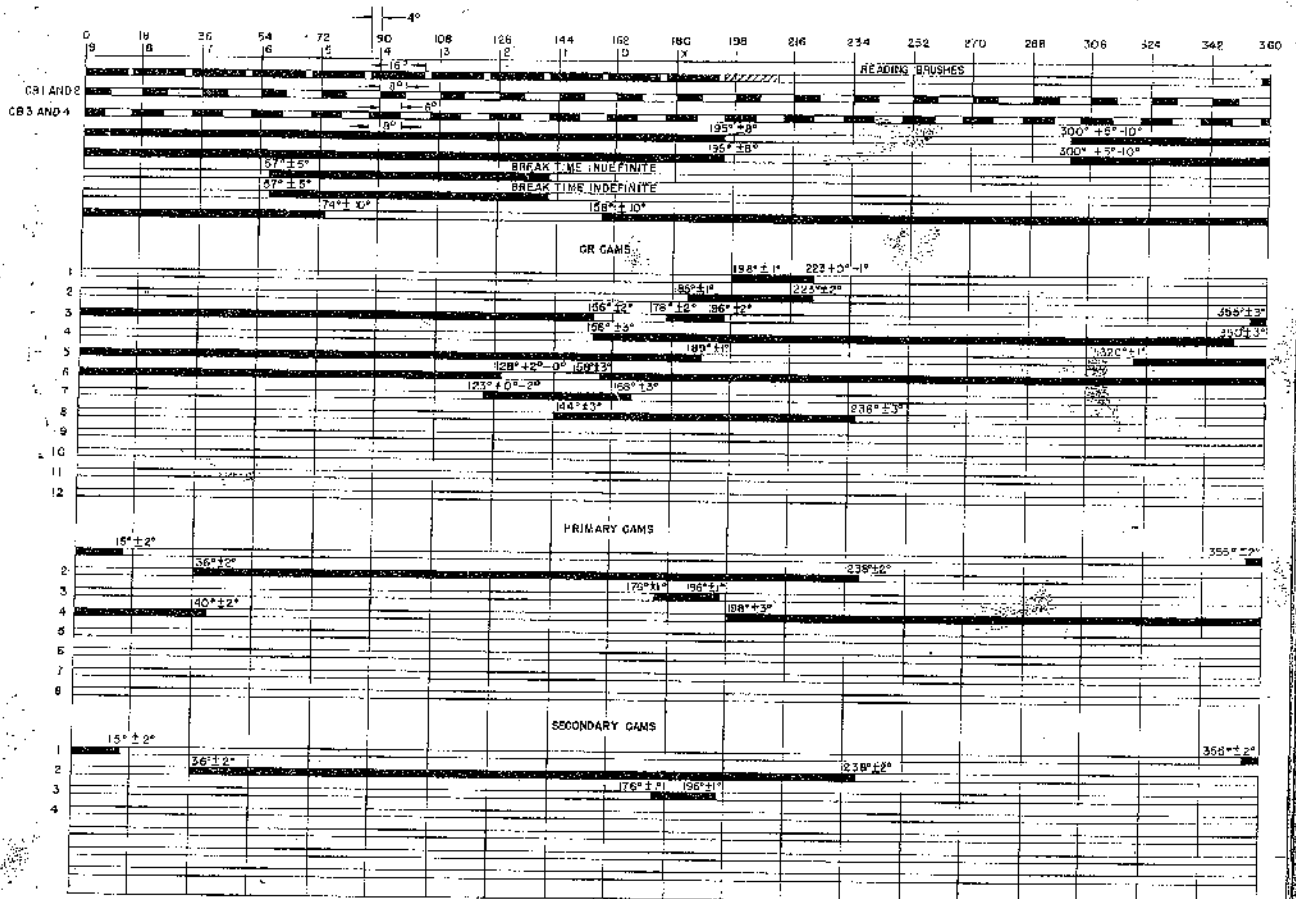
NAME	ABBREVIATION	LOC.
PRIMARY HOPPER	PRI. HOPPER	7B
SECONDARY HOPPER	SEC. HOPPER	7B
SECONDARY CARD LEVER CONTACT	SEC. C.L.C.	7B
PRIMARY CARD LEVER CONTACT	PRI. C.L.C.	7B
PRIMARY SEQUENCE CARD LEVER CONTACT	PRI. SEQ. C.L.C.	7B
POCKET STOP		9B
PRIMARY MACHINE CARD LEVER CONTACT	PRI. MACH. C.L.C.	11A
SECONDARY MACHINE CARD LEVER CONTACT	SEC. MACH. C.L.C.	12A
SELECTOR UNIT CONTACTS		13B
SEQUENCE UNIT CONTACTS		13B
RUNOUT KEY 1		3A
START KEY 1		3A
STOP KEY		9B
START KEY 2		9A
RUNOUT KEY 2		9A
ERROR RESET KEY		15B
SELECTOR UNIT MAGNETS		4 3 5A
SEQUENCE UNIT MAGNETS		5 9 6A
EJECT MAGNET		11A
PRIMARY FEED MAGNET		11A
SECONDARY FEED MAGNET		12A
RESTORING MAGNETS		12A
PRIMARY SELECT MAGNETS		14A
SECONDARY SELECT MAGNET		14A
RELAY 218 RECTIFIER		10A
EJECT INTERLOCK RECTIFIER	EJECT INTLK. RECT.	11A

H.S. RELAYS

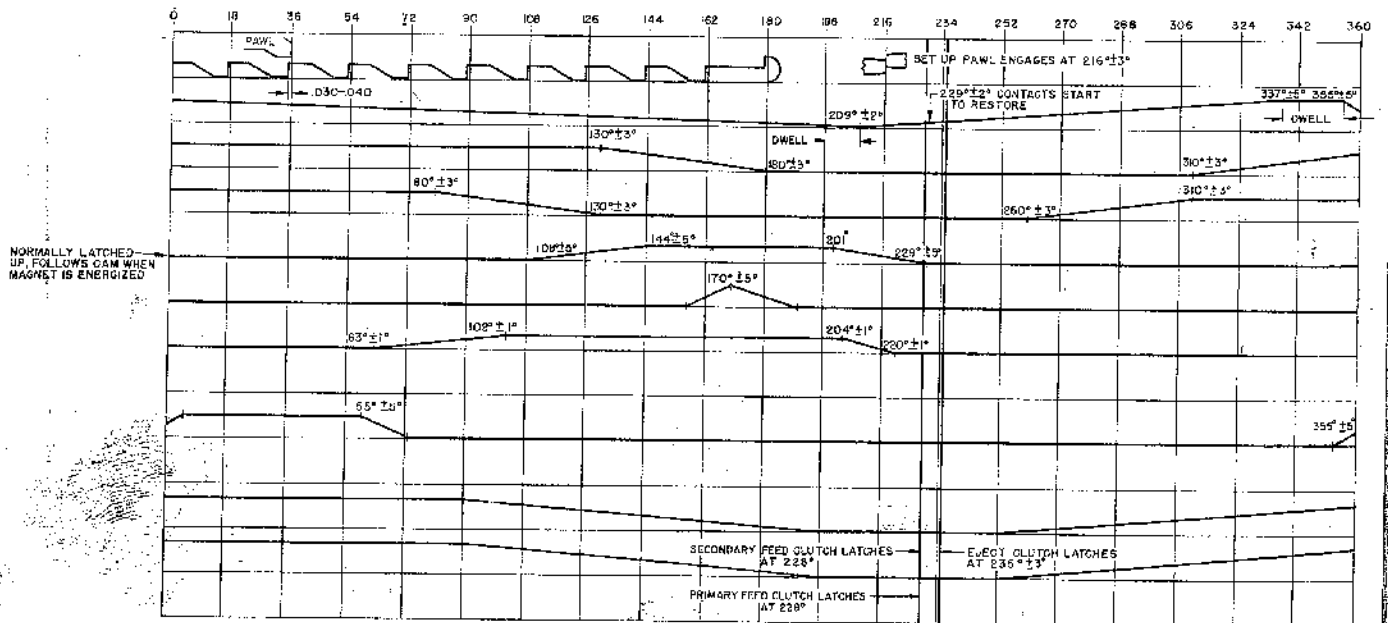
RELAY NO.	COIL			CONTACT POINTS				PART NO.
	PV	H		AL	AU	BL	BU	
2	8A			8A				166739
2	8A			8A				166739
4	10A			11B				166740



ELECTRICAL TIME CHART



MEDICAL TIMING



SHEET 11
OF 11 SHEETS
STANDARD
CODE
NONE

RELEASED
FOR ASSEM
104400

QTY
159762U

DATE	CHANGE NO.
SEE INDEX CARD	
10-31-45	7366
4-25-48	6593-A
3-13-51	17924-A
10-8-51	18512-A
11-29-51	18512
11-29-51	17165-A
5-1-52	17655-E
8-26-52	19915
9-23-52	19224-B
10-23-52	18998-A
11-7-52	19229-C
1-25-53	19262-A
10-19-53	757-B
4-25-54	1085
11-8-54	2005-D

NO	LOC	MAKE	TOL IN DEG	BREAK	TOL IN DEG	ADJUSTION	NAME	PART NO.	CONTACT AIR GAP
3 B	5 B	SEE CHART	±1°	SEE CHART	±1°		10 LOBE CIRCUIT BREAKER	166813	.027-.033
3 B	4 B	SEE CHART	±1°	SEE CHART	±1°		10 LOBE CIRCUIT BREAKER	166813	.027-.033

PRIMARY CARD LEVER CONTACT 1 AND 2

SECONDARY CARD LEVER CONTACT

PRIMARY HOPPER CONTACT

SECONDARY HOPPER CONTACT

PRIMARY AND SECONDARY MACHINE CARD LEVER CONTACT

NO	LOC	MAKE	TOL IN DEG	BREAK	TOL IN DEG	ADJUSTION	NAME	PART NO.	CONTACT AIR GAP
1	11 B	198°	±1°	223°	±0°		FUNCTION CONTROL IMPULSE	186796	.02-040
2	13 B	185°	±1°	223°	±2°		UNIT CONTROL IMPULSE	222151	.012-040
4	5 B	SEE CHART		SEE CHART			BRUSH READING CONTROL	159750	.012-040
4	15 B	156°	±3°	306°	±3°		PCD SECOND CYCLE PICKUP	168006	.012-040
5	7 B	320°	±1°	89°	±2°		CARD LEVER CONTROL	159751	.012-040
5	10 B	158°	±3°	128°	±2°		RUN CONTROL HOLD	159752	.012-040
7	10 B	123°	±3°	168°	±3°		RUN CONTROL TEST	166801	.012-040
8	10 B	144°	±3°	230°	±3°		FEED INTERLOCK	159753	.012-040

5 B	355°	±2°	16°	±2°			8 RUNOUT IMPULSE	142165	.012-.018
2	8 B	36°	±2°	238°	±2°		CARD LEVER AND "X" HOLD	142166	.012-.018
3	8 A	175°	±1°	196°	±1°		"X" PICKUP	142165	.012-.018
4	15 A	198°	±2°	10°	±2°		PRIMARY CYCLE DELAY AND ERROR	142166	.012-.018

1	4 B	355°	±2°	15°	±2°		9 RUNOUT IMPULSE	142165	.012-.018
2	8 B	36°	±2°	238°	±2°		CARD LEVER AND "X" HOLD	142166	.012-.018
3	8 A	176°	±1°	196°	±1°		"X" PICKUP	142165	.012-.018

SET UP RATCHET AND PAWL

RATCHET SETUP BAIL

RESTORING MAGNET ARMATURE KNOCK-OFF

RESTORING PAWL RESET CAM

PRIMARY AND SECONDARY SELECT CAMS

SELECT MAGNET ARMATURE KNOCK OFF

FEED CLUTCH LATCH LEVER

EJECT CLUTCH ARMATURE LATCH CAM

CARD FEED CAM

NOTES
 X ON GROUNDED MACHINES ONLY
 XI WIRING FOR GROUNDED MACHINES ONLY

INTERNATIONAL BUSINESS MACHINES CORP.			
MACH.	COLLATOR	MODEL	377
NAME WIRING DIAGRAM - NUMERIC			
DRW	CLP	11-29-50	SCALE NONE
CHECK	FDC	12-15-50	TRAC. MOE 3-29-51
APPRO	D F	12-13-50	CHEK A.D.B. Z.S.