

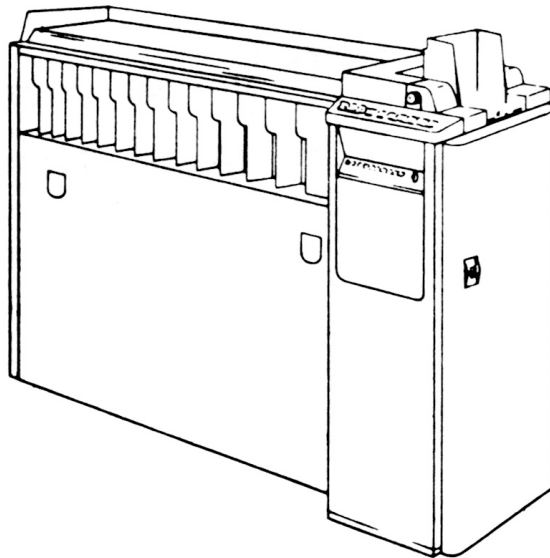
# IBM

## Wiring Diagram

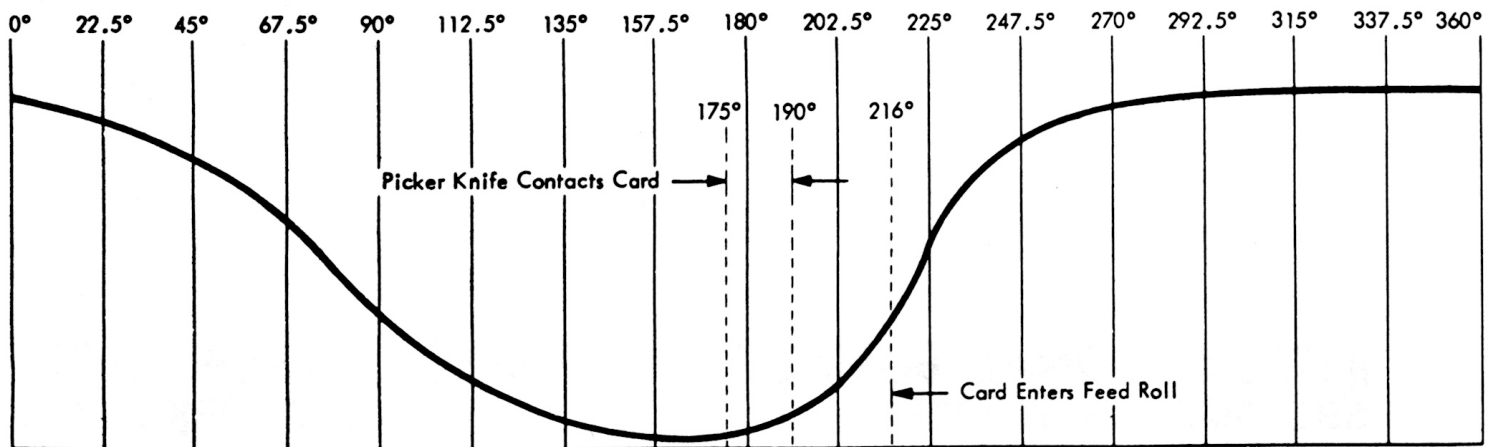
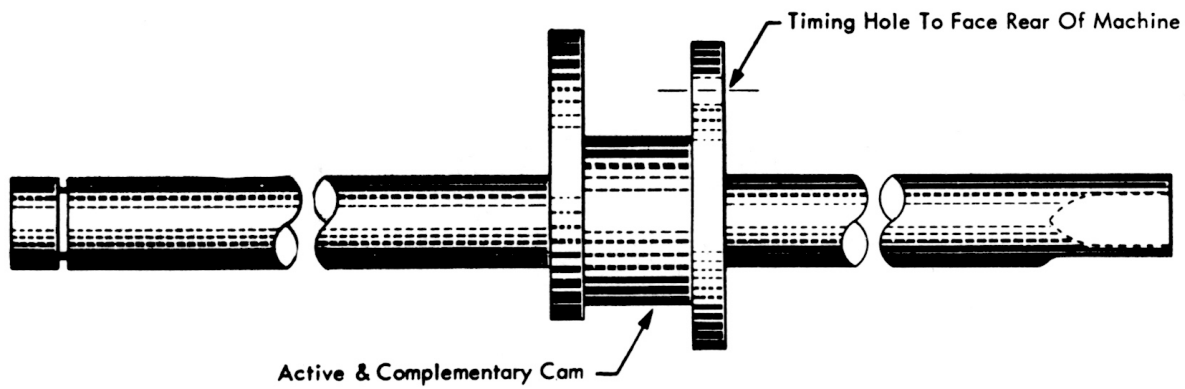
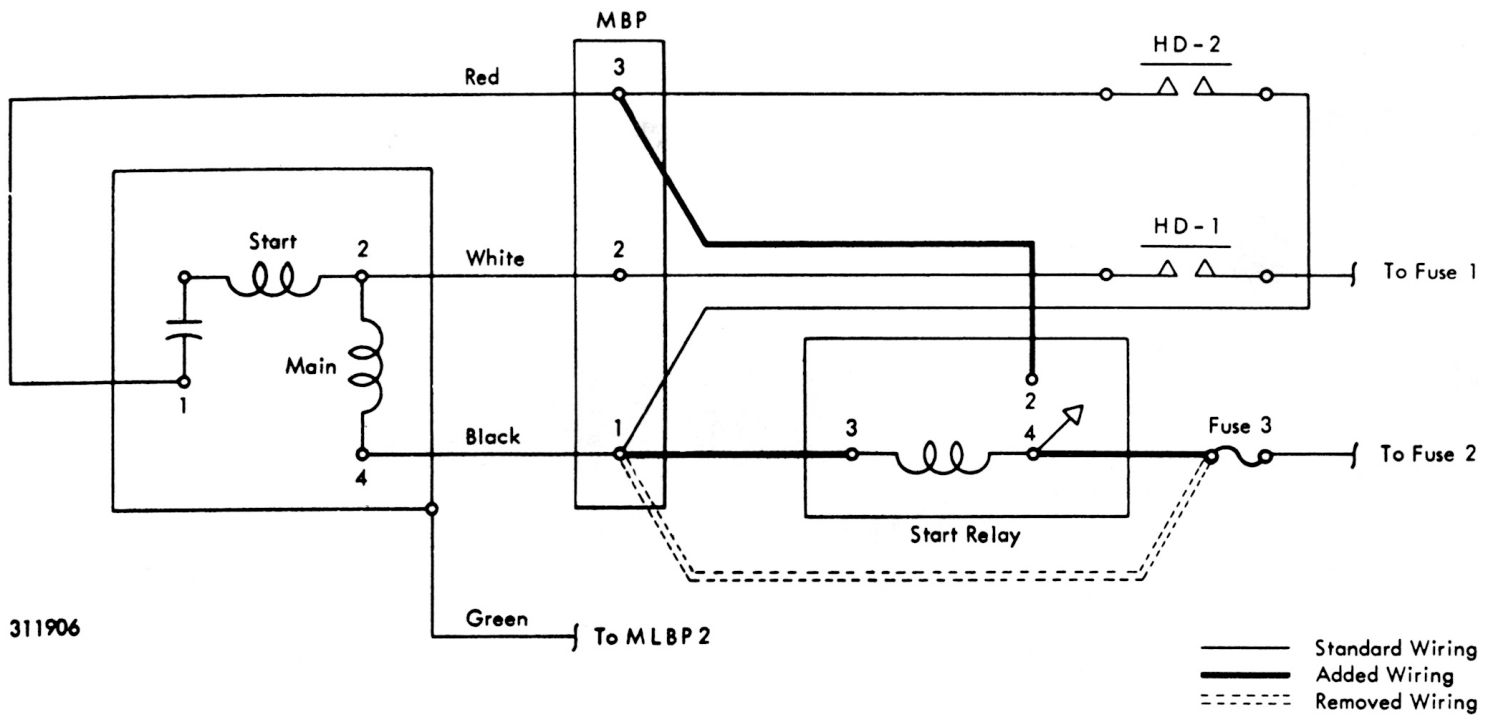
DIAGRAM NO. 336001-G  
TYPE- 083

MACHINE SERIAL NO.-

NUMERIC SORTER

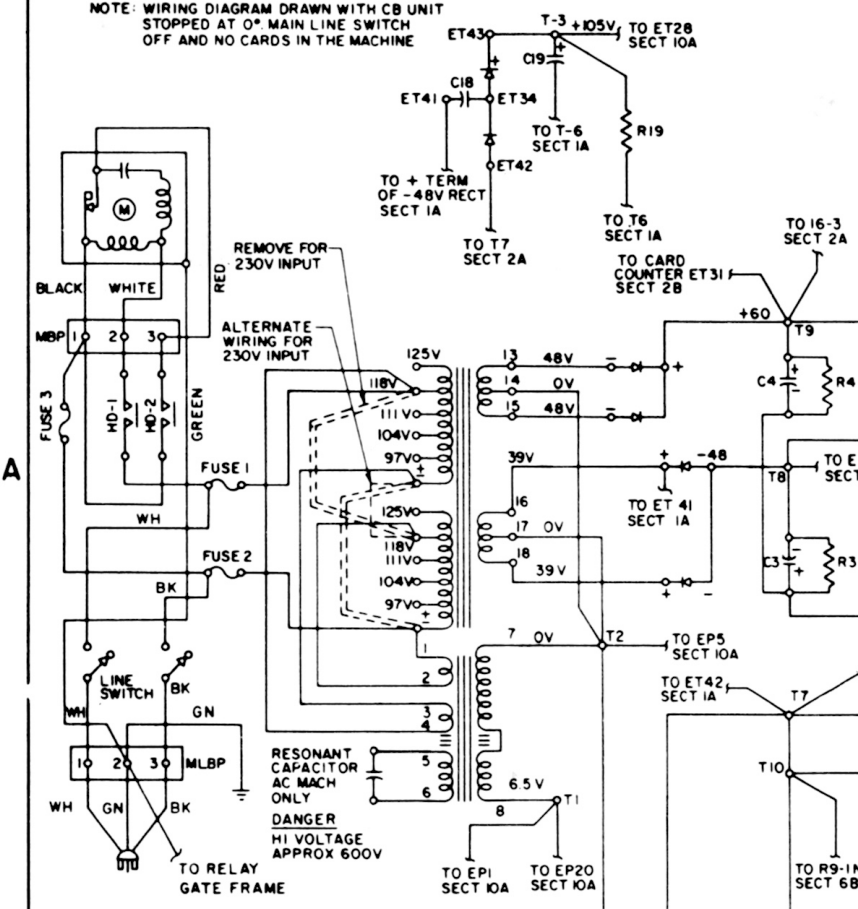


**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
590 MADISON AVENUE  
NEW YORK 22, N.Y.



WIRING DIAGRAM SUPPLEMENT

NOTE: WIRING DIAGRAM DRAWN WITH CB UNIT STOPPED AT 0° MAIN LINE SWITCH OFF AND NO CARDS IN THE MACHINE

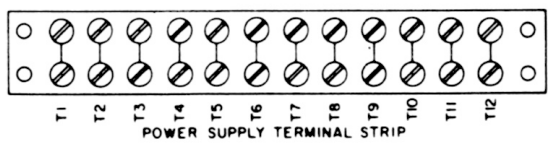


ARC SUPPRESSORS RESISTORS AND CAPACITORS	LOC	PART NO
R-1	10KΩ 1W	2A 317063
R-2	10KΩ 1W	2A 317063
R-3	500Ω 10W	2A 282436
R-4	1000Ω 10W	317330
R-6-17	390Ω 2W	6 336567
R-18	240Ω 2W	2A 301881
R-19	15K 1W	1A 317434
R-20	390Ω 1W	2A 335019
R-21	390Ω 1W	2A 335019
R-22	500Ω 10W	7A 282436
R-23	10KΩ 2W	2A 317150
C-1	1000 MFD	2A 226417
C-2	1000 MFD	2A 226417
C-3	2500 MFD	2A 218704
C-4	1000 MFD	2A 336788
C-10-13	40 MFD	1A 225620

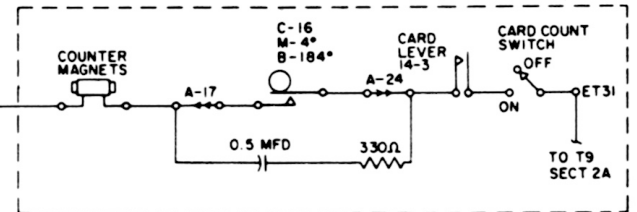
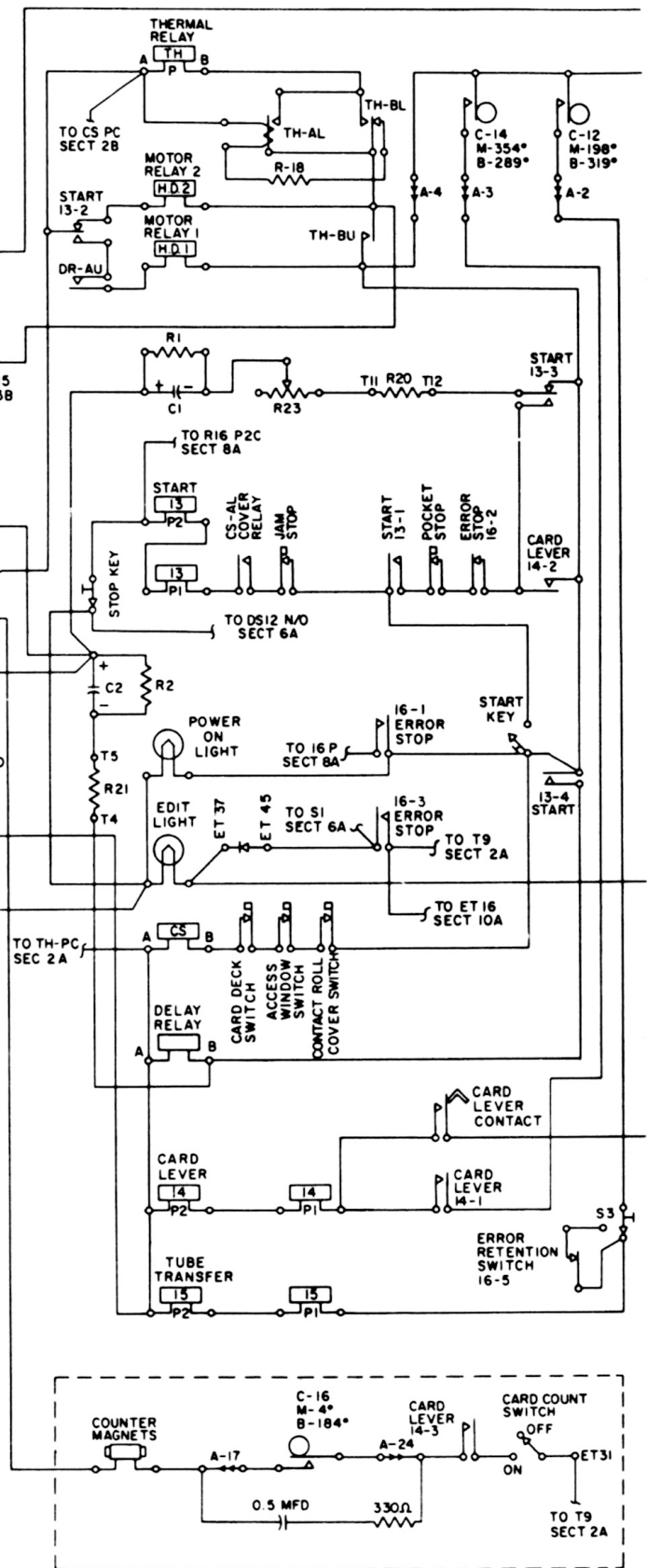
LINE VOLTAGE	TERM BLOCK TAP
93-100	97P
100-107	104P
107-114	111P
114-121	118P
121-130	125P
187-201	97S
201-215	104S
215-229	111S
229-243	118S
243-257	125S

P - PRIMARY WINDINGS CONNECTED IN PARALLEL  
S - PRIMARY WINDINGS CONNECTED IN SERIES

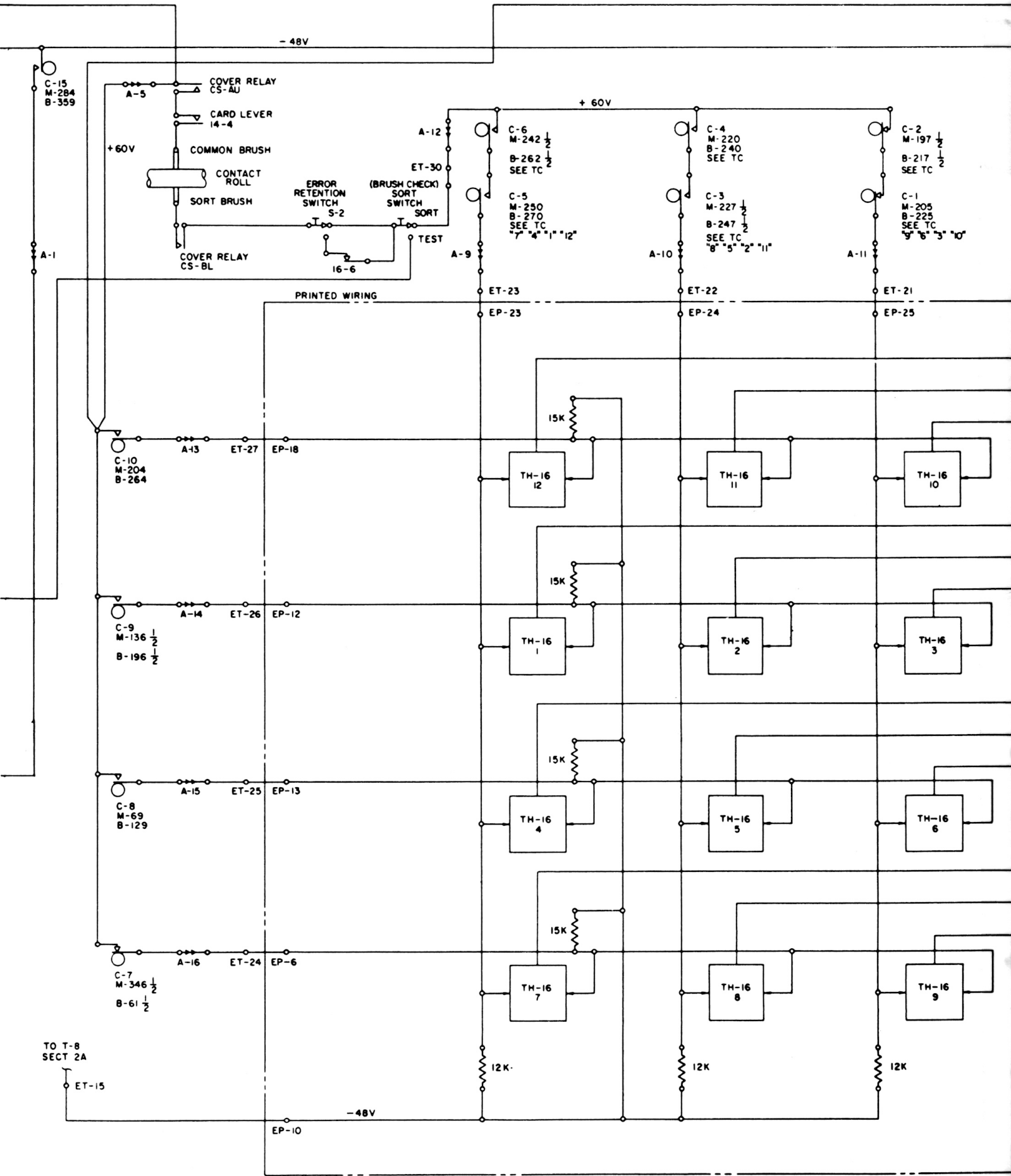
RATED VOLTAGE	NO LOAD VALUE	MINIMUM UNDER LOAD
+60 DC	60 TO 65	54
-48 DC	49 TO 55	-46
6.5 AC	—	6.2
+105 DC	—	92

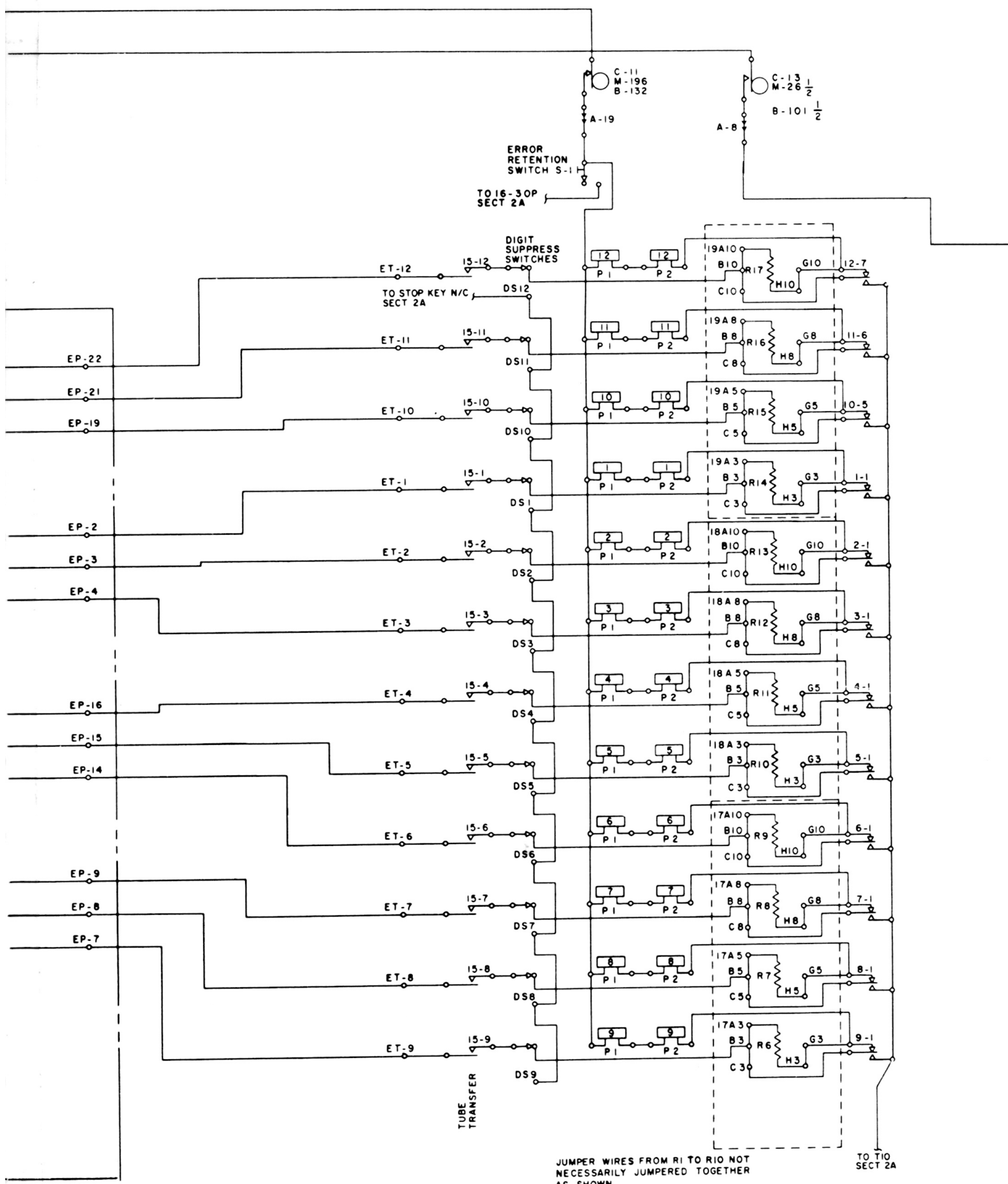


INPUT	FUSE 1	FUSE 2	FUSE 3	FUSE 4	FUSE 5	MOTOR ASSEM
118	60 92734 2ALT	92734 2ALT	107666 5ALT			336546
208	60 228391 16LTL	228391 16LTL	107663 25LTL			336795
230	60 228391 16LTL	228391 16LTL	107663 25LTL			336795
118	50 92734 2ALT	92734 2ALT	107666 5ALT			336871
208	50 228391 16LTL	228391 16LTL	107663 25LTL			336872
230	50 228391 16LTL	228391 16LTL	107663 25LTL			336872
118	25 92734 2ALT	92734 2ALT	107666 5ALT			336882
208	25 228391 16LTL	228391 16LTL	107664 32LTL			336883
230	25 228391 16LTL	228391 16LTL	107664 32LTL			336883
118	DC 107664 32LTL	107664 32LTL	107664 32LTL	92734 2ALT	92734 2ALT	336843
230	DC 228391 16LTL	228391 16LTL	228391 16LTL	92734 2ALT	92734 2ALT	336848
150	60 228391 16LTL	228391 16LTL	107666 5ALT			336895



CAMS NOT NECESSARILY JUMPERED TOGETHER AS SHOWN





ERROR RETENTION SWITCH S-1  
TO 16-30P SECT 2A

DIGIT SUPPRESS SWITCHES

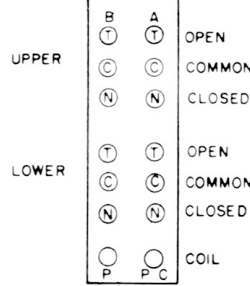
TO STOP KEY M/C SECT 2A

TUBE TRANSFER

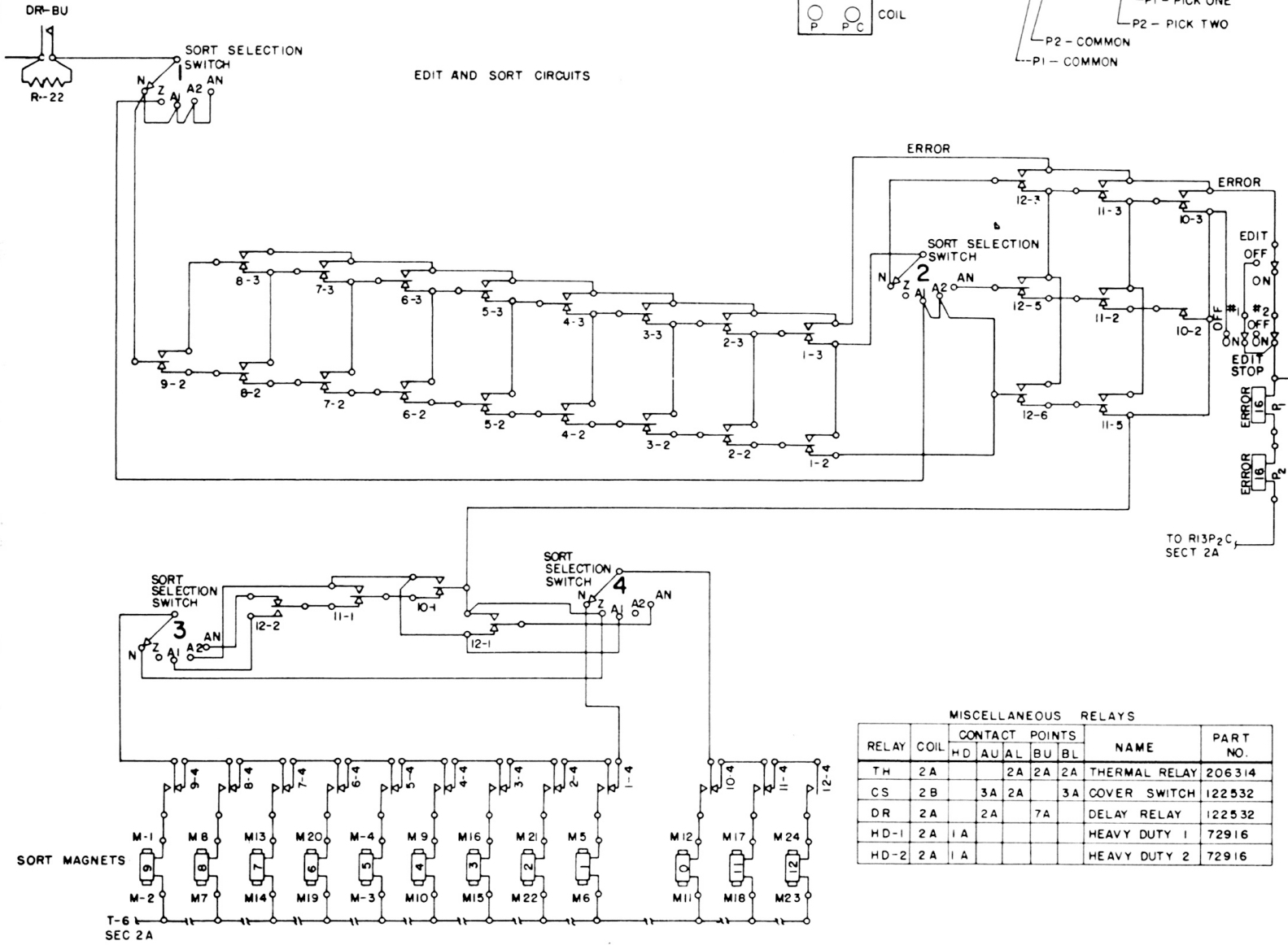
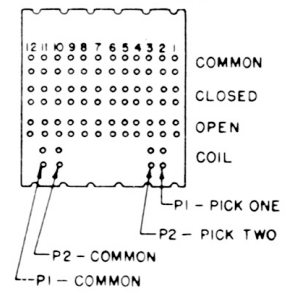
JUMPER WIRES FROM R1 TO R10 NOT NECESSARILY JUMPED TOGETHER AS SHOWN

TO T10 SECT 2A

TYPICAL DUO RELAY



12 POSITION WIRE CONTACT RELAY



MISCELLANEOUS RELAYS

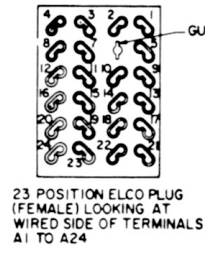
RELAY	COIL	CONTACT POINTS				NAME	PART NO.
		HD	AU	AL	BU		
TH	2A		2A	2A	2A	THERMAL RELAY	206314
CS	2B		3A	2A	3A	COVER SWITCH	122532
DR	2A		2A		7A	DELAY RELAY	122532
HD-1	2A	1A				HEAVY DUTY 1	72916
HD-2	2A	1A				HEAVY DUTY 2	72916

WIRE CONTACT RELAYS

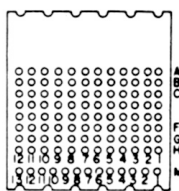
RELAY NO	COILS		CONTACT POINTS												NAME	SIZE	TYPE	PART NUMBER		
	P1	P2	1	2	3	4	5	6	7	8	9	10	11	12						
1	6A	6A	6A	8A	8A	7B											1 SORT CONTROL RELAY	4	2P	196207
2	6B	6B	6B	8A	8A	7B											2 SORT CONTROL RELAY	4	2P	196207
3	6B	6B	6B	8A	8A	7B											3 SORT CONTROL RELAY	4	2P	196207
4	6B	6B	6B	7A	7A	7B											4 SORT CONTROL RELAY	4	2P	196207
5	6B	6B	6B	7A	7A	7B											5 SORT CONTROL RELAY	4	2P	196207
6	6B	6B	6B	7A	7A	7B											6 SORT CONTROL RELAY	4	2P	196207
7	6B	6B	6B	7A	7A	7B											7 SORT CONTROL RELAY	4	2P	196207
8	6B	6B	6B	7A	7A	7B											8 SORT CONTROL RELAY	4	2P	196207
9	6B	6B	6B	7A	7A	7B											9 SORT CONTROL RELAY	4	2P	196207
10	6A	6A	7B	8A	8A	8B	6A										10 SORT CONTROL RELAY	6	2P	196197
11	6A	6A	7B	8A	8A	8B	8A	6A									11 SORT CONTROL RELAY	6	2P	196197
12	6A	6A	7B	7B	8A	8B	8A	8A	6A								12 SORT CONTROL RELAY	12	2P	196187
13	2A	2A	2A	2A	2A	2A											START	4	2P	196207
14	2B	2B	2B	2A	2B	3A											CARD LEVER	4	2P	196207
15	2B	2B	6A	6B	6B	6B	6B	6B	6B	6B	6A	6A	6A				TUBE TRANSFER	12	2P	196187
16	8A	8A	2A	2A	2B		2B	3A									ERROR	6	2P	196197

DATE	CHANGE NO
3-15-60	203123
9-14-60	107313 B

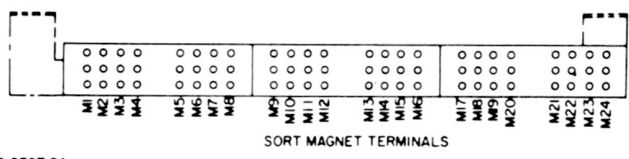
MISCELLANEOUS CONTACTS AND SWITCHES	
NAME	LOCN
CARD LEVER SWITCH	2B
START KEY	2A
STOP KEY 1	2A
COVER SWITCH	2B
JAM SWITCH	2A
SORT SWITCH	3A
POCKET STOP CONTACT	2A
EDIT STOP SWITCH 1	8A
EDIT STOP SWITCH 2	8A
SORT SELECTION SWITCH	7-8
SORT BRUSH	3A
EDIT SWITCH	8A
DIGIT SUPPRESS SWITCHES	6
RC UNIT 17	6B
RC UNIT 18	6B
CARD DECK SWITCH	2B
RC UNIT 19	6A
ERROR RETENTION	2B,3A,6A



23 POSITION ELCO PLUG (FEMALE) LOOKING AT WIRED SIDE OF TERMINALS A1 TO A24



RESISTOR CAPACITOR UNIT (REAR VIEW)

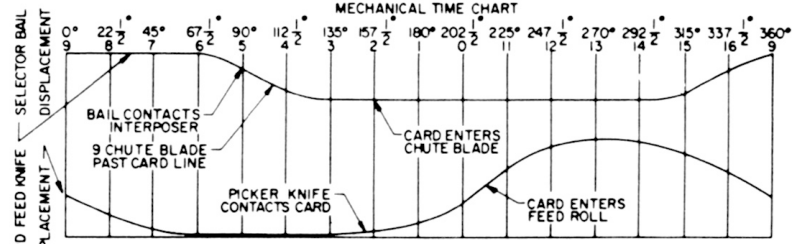


SORT MAGNET TERMINALS

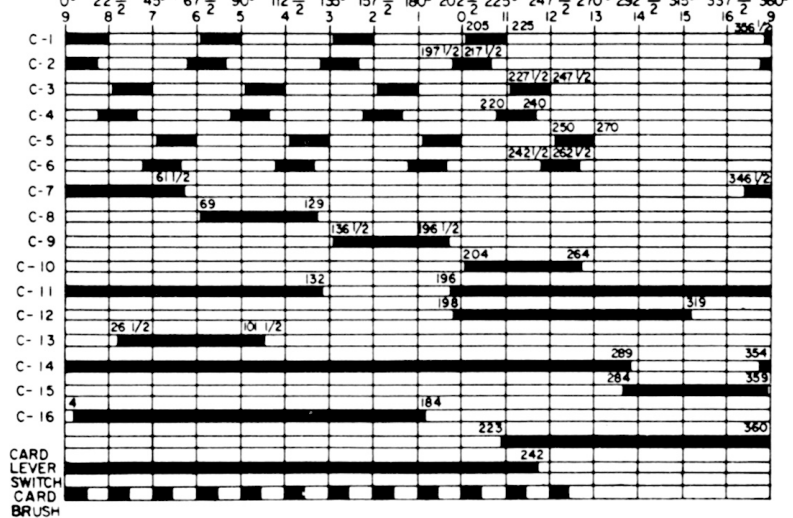
16-1 N/O SECT 2A

SORTING PATTERN CHART

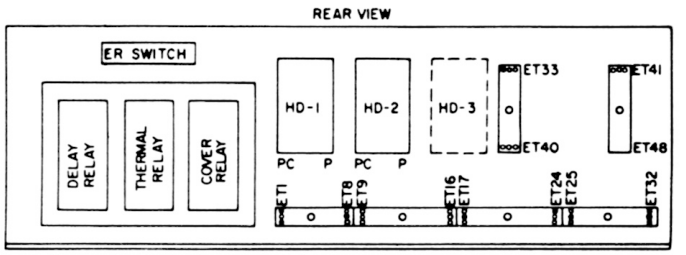
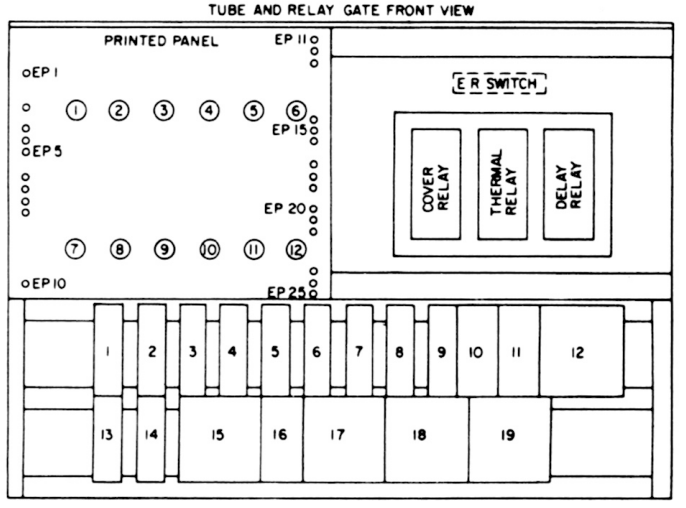
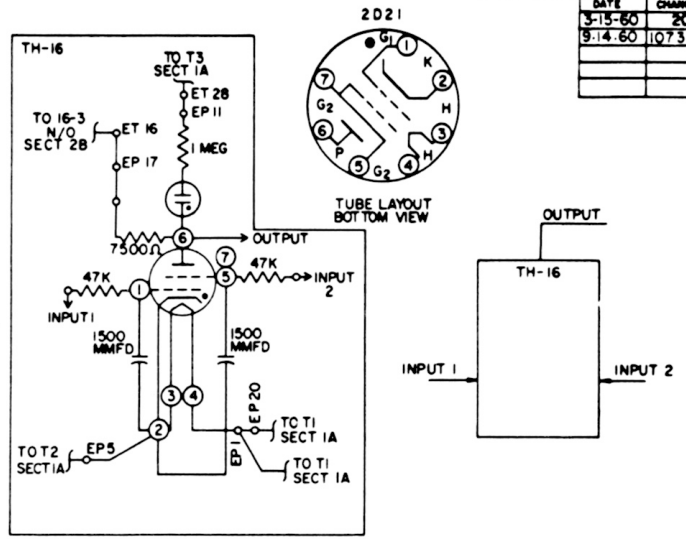
SORTING PHASE SWITCH POSITION	POCKETS												REJECTS (NORMAL)	EDIT OR EDIT STOP ON ERRORS	
	9	8	7	6	5	4	3	2	1	0	11	12			
NUMERIC	9	8	7	6	5	4	3	2	1	0	11	12	BLANKS	MORE THAN ONE PUNCH	
ZONE										S-Z	J-R	A-1	12	NO ZONE PUNCH/BLANK	MORE THAN ONE ZONE
ALPHABET 1	I	H	G	F	E	D	C	B	A	S-Z	J-R	11		1-9 & 12 BLANKS	MORE THAN ONE ZONE OR DIGIT
ALPHABET 2	RZ	QY	PX	OW	NV	MU	LT	KS	J					NUMBERS	MORE THAN ONE ZONE OR DIGIT
ALPHABET NUMERIC	9	8	7	6	5	4	3	2	1	0	J-R	A-1	12	S-Z BLANKS	MORE THAN ONE ZONE OR DIGIT



ELECTRICAL TIME CHART



CARD LEVER SWITCH CARD BRUSH



CAM NO	LOCN	NAME	CAM PART NUMBER	STYLE	MAKE TIME	TOL IN DEG	BREAK TIME	TOL IN DEG
1	4 A	CODING CAM	336712		205	±1/2	225	±1
2	4 A	CODING CAM	336118		197 1/2	±1	217 1/2	±1/2
3	4 A	CODING CAM	336118		227 1/2	±1/2	247 1/2	±1
4	4 A	CODING CAM	336118		220	±1	240	±1/2
5	3 A	CODING CAM	336118		250	±1/2	270	±1
6	3 A	CODING CAM	336118		242 1/2	±1	262 1/2	±1/2
7	3 B	CODING CAM	336119		346 1/2	+0,-1	161 1/2	+1,-0
8	3 B	CODING CAM	336116		69	+0,-1	129	+1,-0
9	3 B	CODING CAM	336116		136 1/2	+0,-1	196 1/2	+1,-0
10	3 A	CODING CAM	336116		204	+0,-1	264	+1,-0
11	6 A	RELAY PICK	336121		196	±1	132	±1
12	2 A	TUBE TRANSFER	336120		198	±1	319	±1
13	6 A	SORT PULSE	336119		261 1/2	±1	101 1/2	±1
14	2 A	CARD LEVER HOLD	336121		354	±1	285	±1
15	3 A	CARD LEVER PICK	336119		284	±1	359	±1
16	2 B	CARD COUNTER	336117		4	±1	184	±1

CARD LEVER TIMING

2 B	C L CONTACT	336761	223	±5	---	---
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INTERNATIONAL BUSINESS MACHINES CORP			
NAME	WIRING DIAGRAM-		
SORTER (NUMERIC)			
DESIGN	WSW 2-9-60	MODEL	083
DETAIL	SCALE	NONE	
CHECK	RLR 2-9-60	DRAW	
APPROV	RLJ 2-9-60	CHECK	