

537356

0029.10.0

KEYBOARD & CAM REFERENCE

MASTER

MECHANICAL TIME CHART
CARD FEED MECHANISM

CARD CLUTCH FEED CLUTCH 60 RPM 1° = 2.78 MS
CARD FEED CLUTCH LATCHES AT 0°
CARD FEED MECHANISM
CARD FEED ROLL 273°
ENGAGES NEXT CARD 300°
CARD AGAINST GUIDE RAIL 91°
ENGAGES NEXT CARD 307°
20° 45° - CARD REGISTERED
CARD RELEASED 65°
9° 22' 45' 60' - CARD GRIPPED 67°
5° 48' - CARD ENGAGED & STARTED
33° 29' - CARD REGISTERED
8° 13' - CARD STOP DOWN
59° 47' - CARD STOP UP
8° - CARD STARTS
45° - CARD IN STACK POSITION.
16° - CARD RELEASED
71° 30' - CARD STARTS
6° - CARD STARTS
91° 94° 92° - GRIPPER OPENS
115° 92° - GRIPPER CLOSES
216° - CLOSES
202° - OPENS
PUNCH MECHANISM
PUNCHES RISE 126°
21° - KNOCK-OFF STRIKES ARMATURES
76° 15' - PIN CONTACT MAKE
176° 15' - PIN CONTACTS BREAK
9° 100' - PRESSURE PLATE STARTS
166° - PRESSURE RATE STOPS

STEM POS	GRAPHIC		CARD CODE		BAILS		LATCHES	
	ALPHA	NUMERIC	ALPHA	NUMERIC	ALPHA	NUMERIC	ALPHA	NUMERIC
1		ERROR RESET						
2		MULTI-PUNCH						
3		NUMERIC						
4	Q	+	11-8	12-8-6	13,9	12,8,6		
5	A		12-1		15,3			
6	@	#	8-4	8-3	9,7	8,2		
7	Z		0-9		1,11			
8	W	-	0-6	0-8-5	14	14,8,4	X	
9	S	>	0-2	0-8-6	14	14,8,6	X	
10	%	?	0-8-4	0-8-3	14,9,7	14,8,2	X	
11	X	7	0-7	0-8-7	14	14,8	X	X
12	E	3	12-5	11-8-5	15	10,8	X	X
13	D	:	12-4	8-2	15,7	8	X	X
14	*	\$	11-8-4	11-8-3	7,9	8,2	X	X
15	C	"	12-3	8-7	15,5	8	X	X
16	R	¢	11-9	12-8-2	13,11	12,8	X	X
17	F	;	12-6	11-8-6	15	10,8	X	X
18	<	.	12-8-4	12-8-3	9,7	8,2	X	X
19	V	=	0-5	6-8	1	8,6	X	X
20	T	0-8-2	0-3	0-8-2	14,5	14,8	X	X
21	G	~	12-7	11-8-7	15	10,8	X	X
22		MASTERCARD					X	X
23	B	1	12-2	11-8-2	15	10,8	X	X
24	Y	1	0-8	12-8-7	1,9	12,8	X	X
25	H	'	12-8	8-5	15,9	8,4		
26	DUP							
27	N	¢	11-5	12-8-5	13	12,8	X	X
28	U	1	0-4	1	1,7		X	X
29	J	4	11-1	4	13,3		X	X
30	-	-	11	11	13,7	10	X	X
31	M	7	11-4	7	13,7		X	X
32	I	2	12-9	2	15,11		X	X
33	K	5	11-2	5	13	4	X	X
34	/	0	0-1	0	14,3	14	X	X
35	'	8	0-8-3	8	19,5	8	X	X
36	0	3	11-6	3	13	2	X	X
37	L	6	11-3	6	13,5	6	X	X
38		SPACE						
39	.	9	12-8-3	9	15,9,5		X	X
40	P	&	11-7	12	13	12	X	X
41		SKIP					X	X
42		RELEASE					X	X
43		AUX DUP					X	X
44		FEED					X	X
45		REGISTER					X	X
46		PROG 2					X	X
47		ALPHA					X	X
48		LEFT ZERO					X	X
49		LEFT ZERO					X	X
50		PROG 1					X	X

ODD NUMBER BAILS ON RIGHT SIDE OF KEYBOARD
EVEN NUMBER BAILS ON LEFT SIDE OF KEYBOARD

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	12-30-64	205199			X PRINT TO ENG. SPEC. NO. 895291	537356
DESIGN	WT 11-23-64 MODEL						537356
CHECK	LF 11-23-64 DRAW						0029.10.0
APPRO	DKC 11-23-64 CHECK						

S.B. 60, 10, 11

5406556
 01046

MODEL "B" 29 WIRING DIAGRAM INDEX

NAME	SECTION	PART NO
POWER SUPPLY 60 CYCLE		5761451
POWER SUPPLY 50 CYCLE		5761461
NUM KYBD-INTERPOSER MAG-PIN SENSE	1 AND 2	960865
64 CHARACTER KYBD	3 AND 4	5405944
CARD FEED-PROG SELECT - PRINT	5 AND 6	5405916
DUP-CLEAR-RELEASE - CARD LEVER	7 AND 8	5405958
PCH CLUTCH-MP-ALPHA - KYBD RESTORE	9 AND 10	5405939
SKIP - ESC MAG	11 AND 12	5405948
FIELD SIZE - ENCODE	13 AND 14	960785
IA REG DECODE-READOUT	15 AND 16	5405957
BIT REG AND LZ REGISTER - SMS CARD	17, 18, 19, 20, 21, 22	960866
COMPONENT LOCATION	23 AND 24	960867
KEYBOARD AND CAM REFERENCE		5373561
PRINT - SMS CARD		375105
ARC SUPP - SMS CARD		375106
ENCODE - SMS CARD		375107
COMBINATION KYBD CODE CHART		5367164
NUMERIC KYBD CODE CHART		5367184

FOR ENGINEERING USE

PREVIOUS ASSIGNED PAGE(S) PART NUMBER(S)
 INDEX PAGE(S) P/N 5406555

LOGIC PAGE(S) P/N 5405938, 5405955, 5405956

REPLACED BY P/N(S) 960865, 960866, 960867

NOTES

- I PRINT TO ENG SPEC 895291
- II PART NUMBERS, 5406551 THRU 5406600 ARE RESERVED FOR MODEL "B" INDEX PAGES. (ENG NOTE)
- III LAST BALLON USED (25) NOT USED 11, 24, 26, 41-48, 72, AND 87 (ENG NOTE)

CIRCUIT AND PACKAGING STANDARD		DATE	
APPROVAL	DATE	CHARGE NO.	DATE
		APPROVAL	DATE
		CHARGE NO.	DATE
		920126	21 NOV 69
		920364	19 JAN 70
INTERNATIONAL BUSINESS MACHINES CORP.			
NAME SYSTEMS DIAGRAM			
W D INDEX			
DESIGN	REP	DATE	SCALE
ENGR	ARC L	21 NOV 69	1/4" = 1"
DRWG	REV	21 NOV 69	1/4" = 1"
APP'D	CHK'D	21 NOV 69	1/4" = 1"

5406556
 5406556

C

5761451

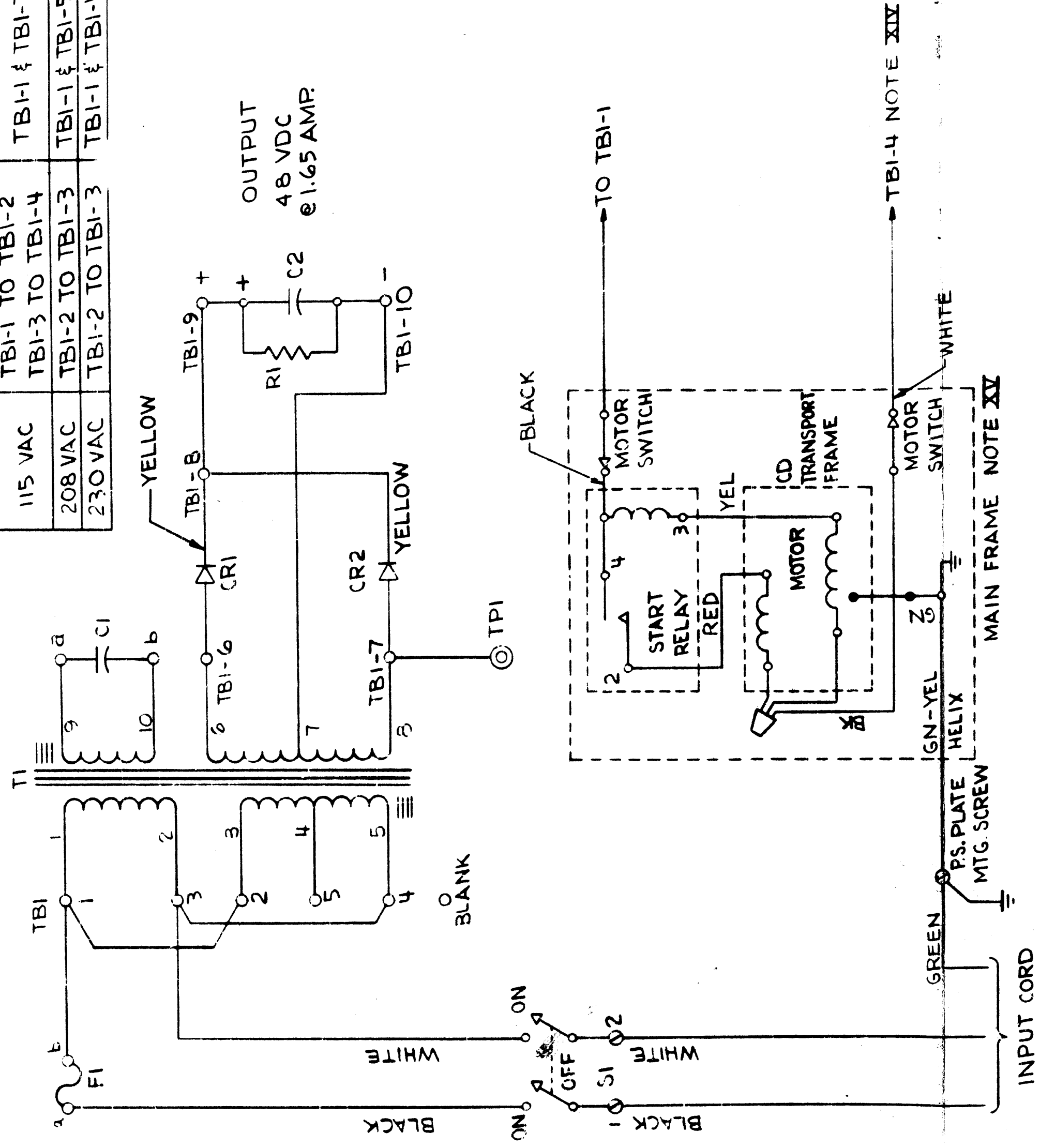
POWER SUPPLY 60 HZ

REFERENCE DRAWING

YF337

PRIMARY JUMPERS

AC INPUT	JUMPERS	LINE
115 VAC	TBI-1 TO TBI-2 TBI-3 TO TBI-4	TBI-1 & TBI-3
208 VAC	TBI-2 TO TBI-3	TBI-1 & TBI-5
230 VAC	TBI-2 TO TBI-3	TBI-1 & TBI-4



SYMBOL	DESCRIPTION	PART NO
T1	FERRO REGULATOR	5761559
CR1 & CR2	2A. FLANGLSS RECTIFIER	5323537
C1	CAPACITOR 6MFD 330 VAC	2159748
C2	CAPACITOR 5000MFD 55VDC	208222
R1	RESISTOR 500 Ω 10W	338571
S1	SWITCH	521428
F1	FUSE 4A	1143492

NOTE XI

NOTES

- XI FACTORY WIRED FOR 115V AC
- XII FOR 208/230V INPUT, USE 615683 (2A) FUSE
- XIII WIRING DIAGRAM 5253883 APPLIES TO UNITS PRIOR TO EC708099 LEVEL
- XIV FOR 208V INPUT, CONNECT THIS LEAD TO TBI-5
- XV MAIN FRAME INF FOR THE 029 GROUP

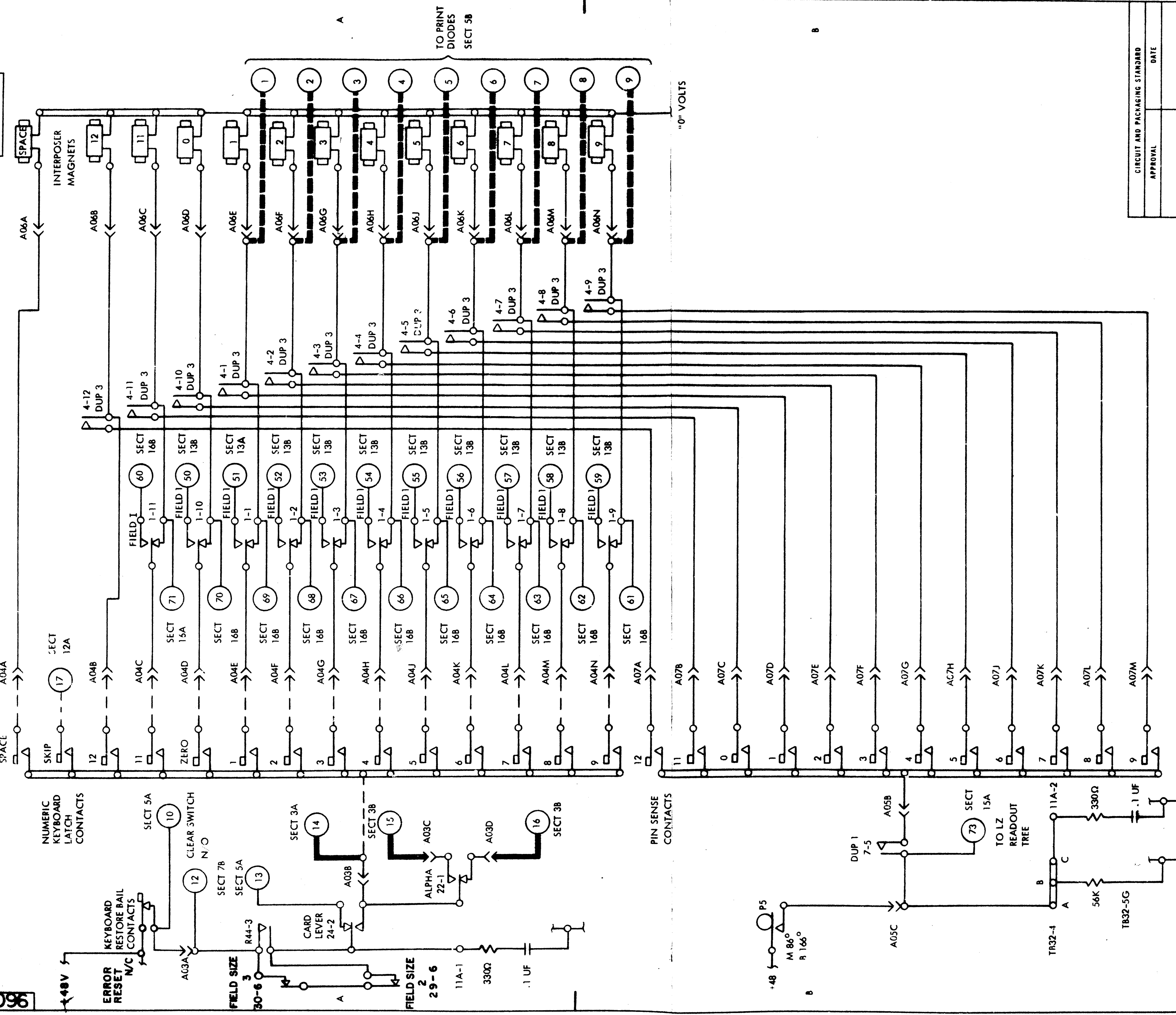
INTERNATIONAL BUSINESS MACHINES CORP.	DATE	CHARGE NO.
NAME WIRING DIAGRAM -	20 JUL 66	708099
48V DC 1.65A P/S 60HZ	10 APR 67	709472
DESIGNER	3 NOV 67	710705
DETAILS	6 MAR 68	710998-A
CHECK	10 OCT 68	711702-A
APPRO		

DEVELOPMENT NO.	5761451
NOTE	X PRINT TO ENG. SPEC. NO. 895291
CHARGE NO.	
DATE	

STANDARDS
CODE
598096

CARD CODE
2

MOD "B" NUMERIC KEYBOARD-INTERPOSER MAGNETS AND PIN SENSE



NOTES
X PRINT TO ENG SPEC 895291
X POINT TO POINT WIRING FOR -48V AND "0" VOLT NETS
X SHOWN ON REF PAGE

REVISION	DATE	APPROVAL	CHANGE NO.	DATE	APPROVAL
1	21 NOV 69		920126		
2	5 JAN 70		950084		

DESIGN	SCALE	INSTRUMENT	INSTRUMENT	INSTRUMENT	INSTRUMENT
SCALE	SCALE	SCALE	SCALE	SCALE	SCALE
INSTRUMENT	INSTRUMENT	INSTRUMENT	INSTRUMENT	INSTRUMENT	INSTRUMENT

CIRCUIT AND PACKAGING STANDARD	APPROVAL	DATE

DEVELOPMENT NO.	960865
960865	

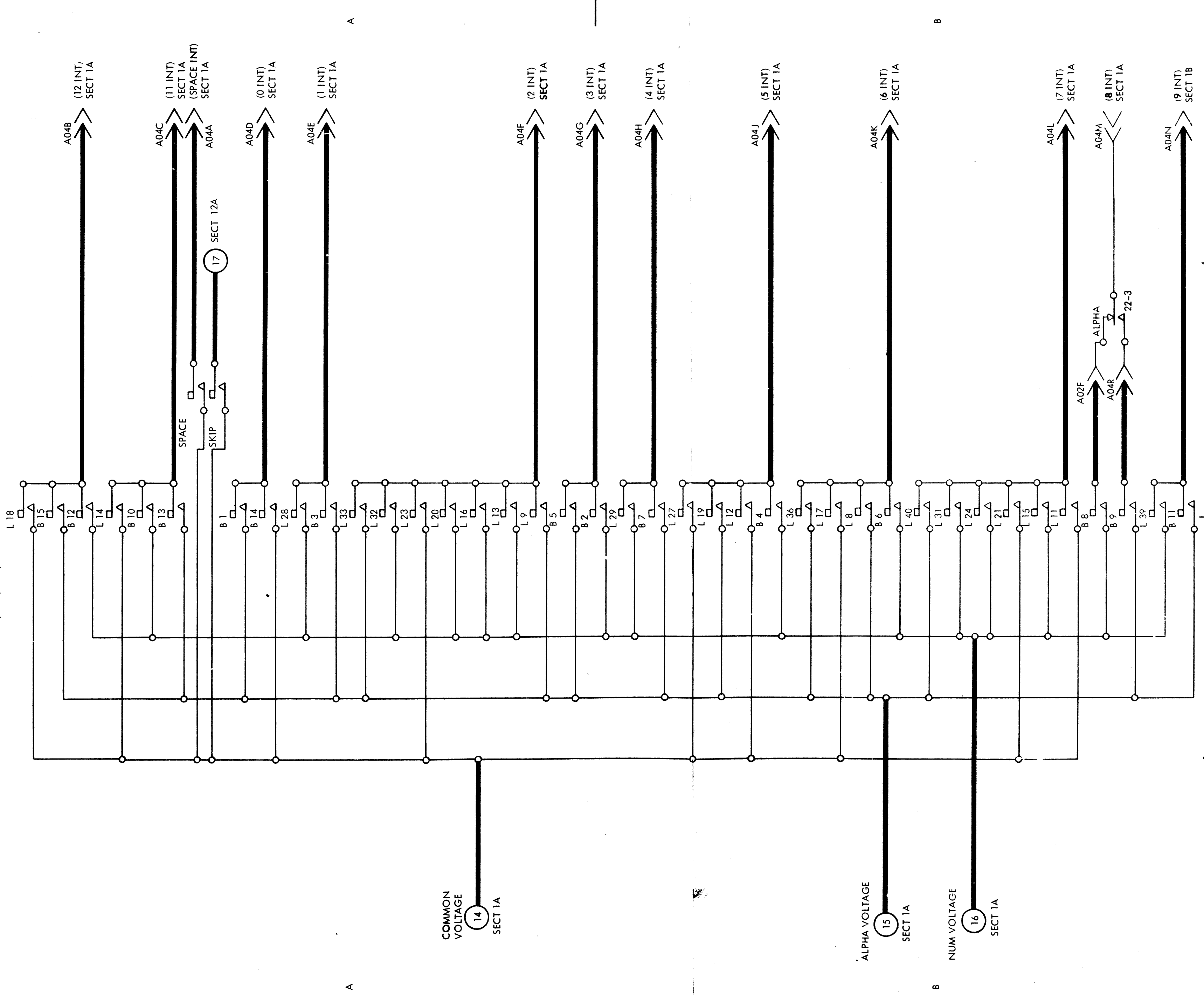
C

5405944

MOD "A", "B", "C", "10" & "11" 64 CHARACTER KEYBOARD

4

3



NOTES

XI POINT TO POINT WIRING FOR -48V AND "0" VOLT NETS SHOWN ON REF PAGE

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	19 SEP 66	205636 - G			X PRINT TO ENCL. SPEC. NO. 895291	5405944
DESIGNER	EB	11 SEP 66	205811-A				
DETAIL	AG	19 SEP 66					
CHECK	RAS	19 SEP 66					
APPROV	RSS	19 SEP 66					

STANDARD CODE
5405916

5

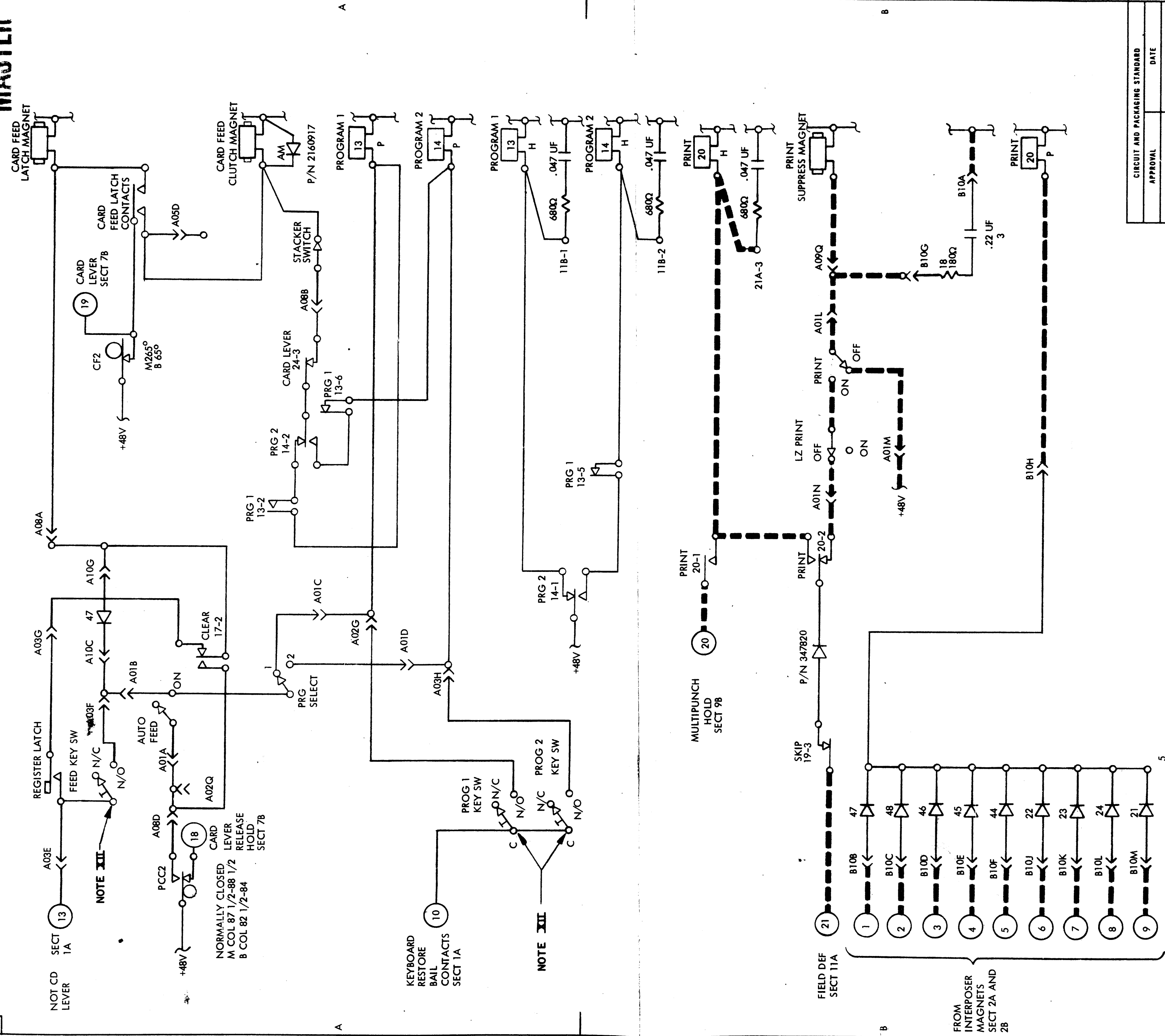
1

6

CARD CODE

MOD "A" AND "B" CARD FEED-PROG SELECT-PRINT

MASTER



- NOTES
- XI PRINT TO ENG SPEC NO 895291
 - XI POINT TO POINT WIRING FOR +48V AND "0" VOLT NETS SHOWN ON REF PAGE
 - XII A STRAP CONTACT KEYBOARD MAY BE INSTALLED ON THIS M/C

C

INTERNATIONAL BUSINESS MACHINES CORP.		DATE		CHANGE NO.		APPROVAL		DATE		CHANGE NO.		APPROVAL		DATE		DEVELOPMENT NO.	
NAME SYSTEMS DIAGRAM		11 OCT 68		206435												5405916	
CD FEED-PROG SEL-PRINT		23 MAR 71		920307													
DESIGN EB		15 SEP 66		MODEL													
DETAIL AG		05 SEP 66		SCALE													
CHECK RAS		05 SEP 66		DRAW		IDI		JALEGG									
APPR		RSS		05 SEP 66		CHECK											

CIRCUIT AND PACKAGING STANDARD
APPROVAL
DATE

5405958

STANDARDS CODE

7

CARD CODE

8

MASTER

The diagram illustrates the electrical control circuit for a keyboard restore and release mechanism. It is divided into two main sections, A and B.

Section A: This section shows the power supply and initial control logic. It starts with a +48V BKSP line that passes through a STAR WHEEL COMMON (SECT 12B) and a STAR WHEEL (SECT 14-3). The circuit then branches into several paths: one through A09C and A09J to a STAR WHEEL; another through A09E and A01F to a CREDIT 41-2; and a third through A03K and A03J to a KEYBOARD RESTORE (SECT 9B). Other components include P/N 347820, ESC INTLK 2 (SECT 9-2), READOUT INTLK (SECT 43-3), SKIP (SECT 19-2), and various duplicate (DUP) contacts (DUP 1, 2, 3, 4, 7-1, 7-2, 8-1, 8-2, 8-3, 8-4).

Section B: This section details the release and clearing logic. It features a +48V line that goes through a PCC 2 N/C (SECT 5A) and a RELEASE LATCH CONTACT. The circuit includes several relays and switches: A01K (KEYBOARD RESTORE BAIL CONTACT N/C), A07R (CLEAR SWITCH), A07Q (READ CARD LEVER), A06P (DETAIL CARD LEVER), and A02N (CARD LEVER). It also shows timing components like capacitors (CF2 SECT 6A, CF3) and resistors (680Ω, 11B-4, 11B-3, 11A-3, 21A-1, 21A-2, 24, 16). The circuit concludes with CLEAR (SECT 17-1, 17-3, 17-4, 17-5, 17-6) and RELEASE (SECT 16) contacts.

NOTES

XI PRINT TO ENG SPEC NO 895291
 XII POINT TO POINT WIRING FOR +48V AND "0" VOLT NETS SHOWN ON REF PAGE
 XIII CF 3 TIMING FOR VLCD AND/OR HSS M90° ± 2° B 300° ± 5°
 XIV FACTORY REMOVE EC 920064 OCT 69
 XV FACTORY INSTALL EC 920064 OCT 69
 XVI A STRAPCONTACT KEYBOARD MAY BE INSTALLED ON THIS M/C

CIRCUIT AND PACKAGING STANDARD APPROVAL DATE

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		11 OCT 68	20435					
DUP-CLEAR-REL-CD LEVER		4 NOV 69	92 00 6 4					
DESIGN LEB 15 SEP 66 MODEL		23 MAR 71	920307					
DETAIL TAG 95 SEP 66 SCALE								
CHECK RAS 95 SEP 66 DRAW								
APPRO RRS 95 SEP 66 CHECK								

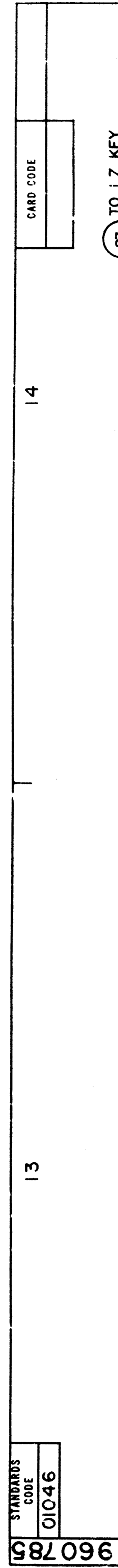
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STANDARD CODE
01046

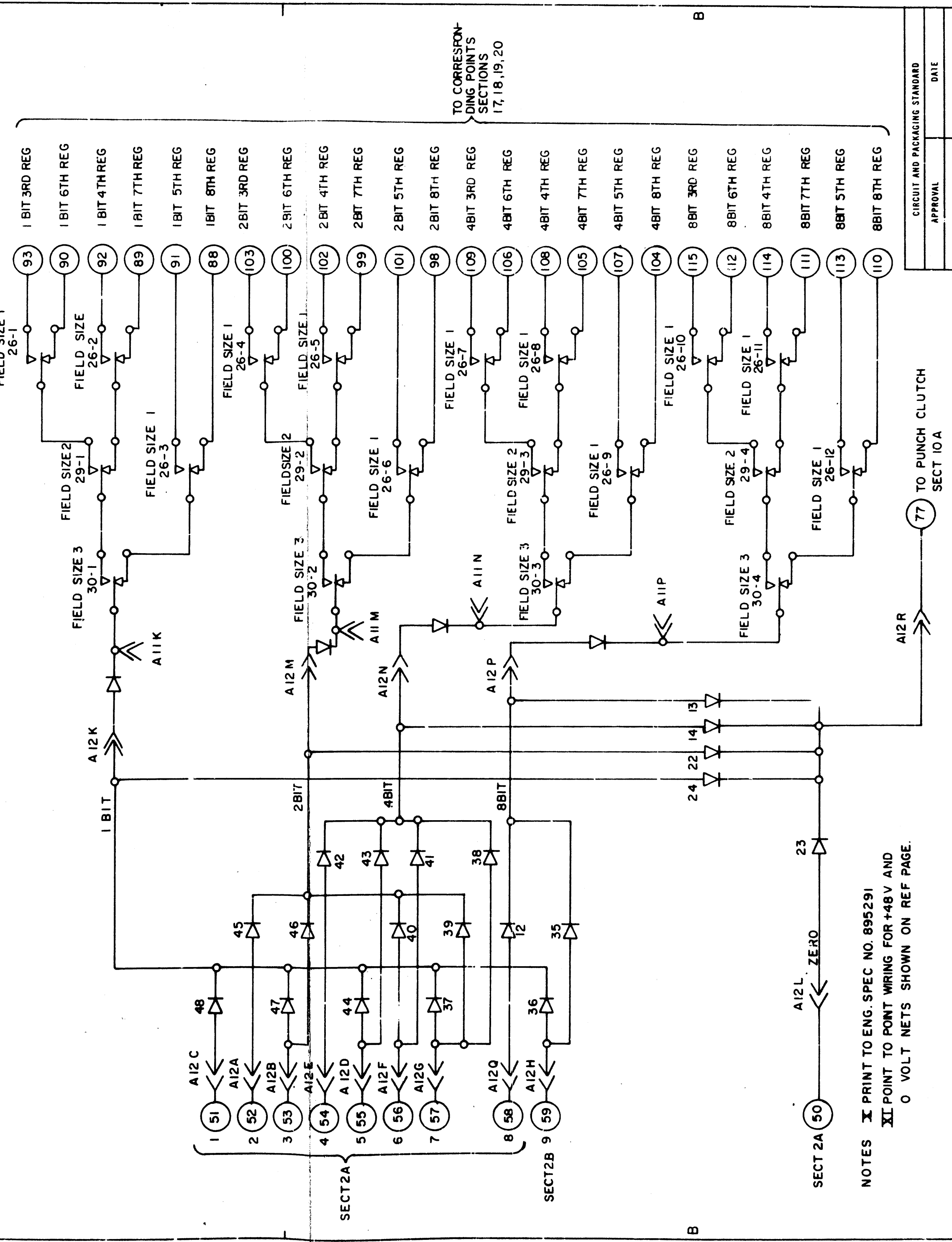
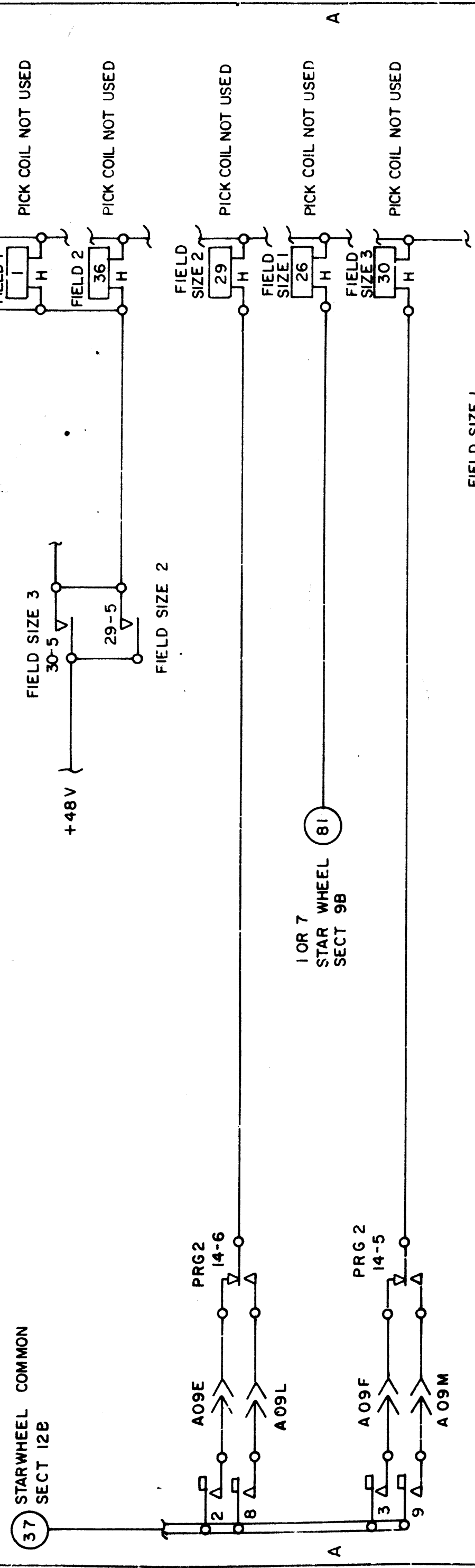
13

14

CARD CODE



MOD "B" FIELD SIZE - ENCODE



NOTES
 I PRINT TO ENG. SPEC NO. 895291
 XI POINT TO POINT WIRING FOR +48V AND
 O VOLT NETS SHOWN ON REF PAGE.

DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
11 JUN 69	920086					
14 JUL 69	920086A					
4 NOV 69	920064					
9 APR 70	920064A					

960785

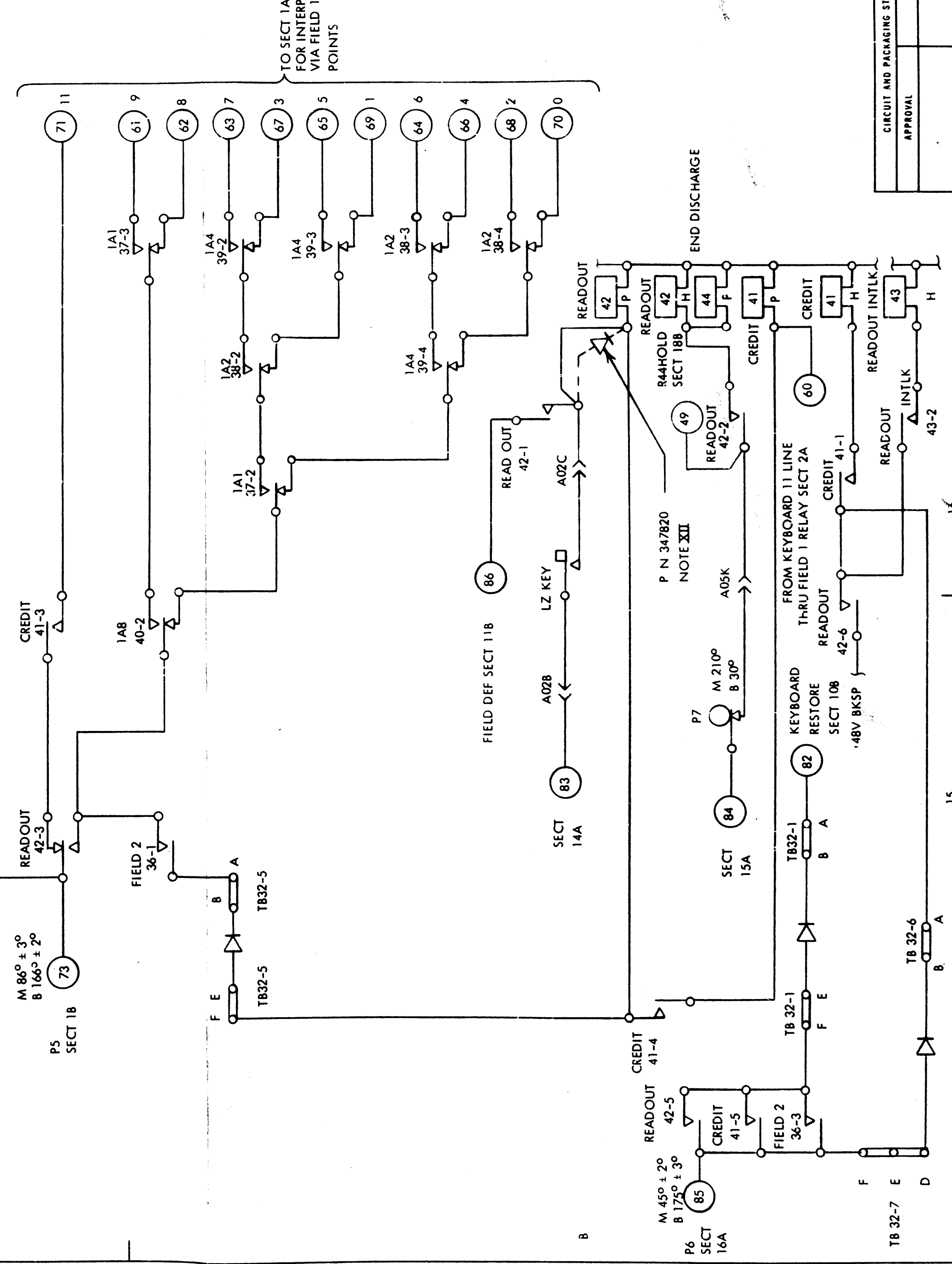
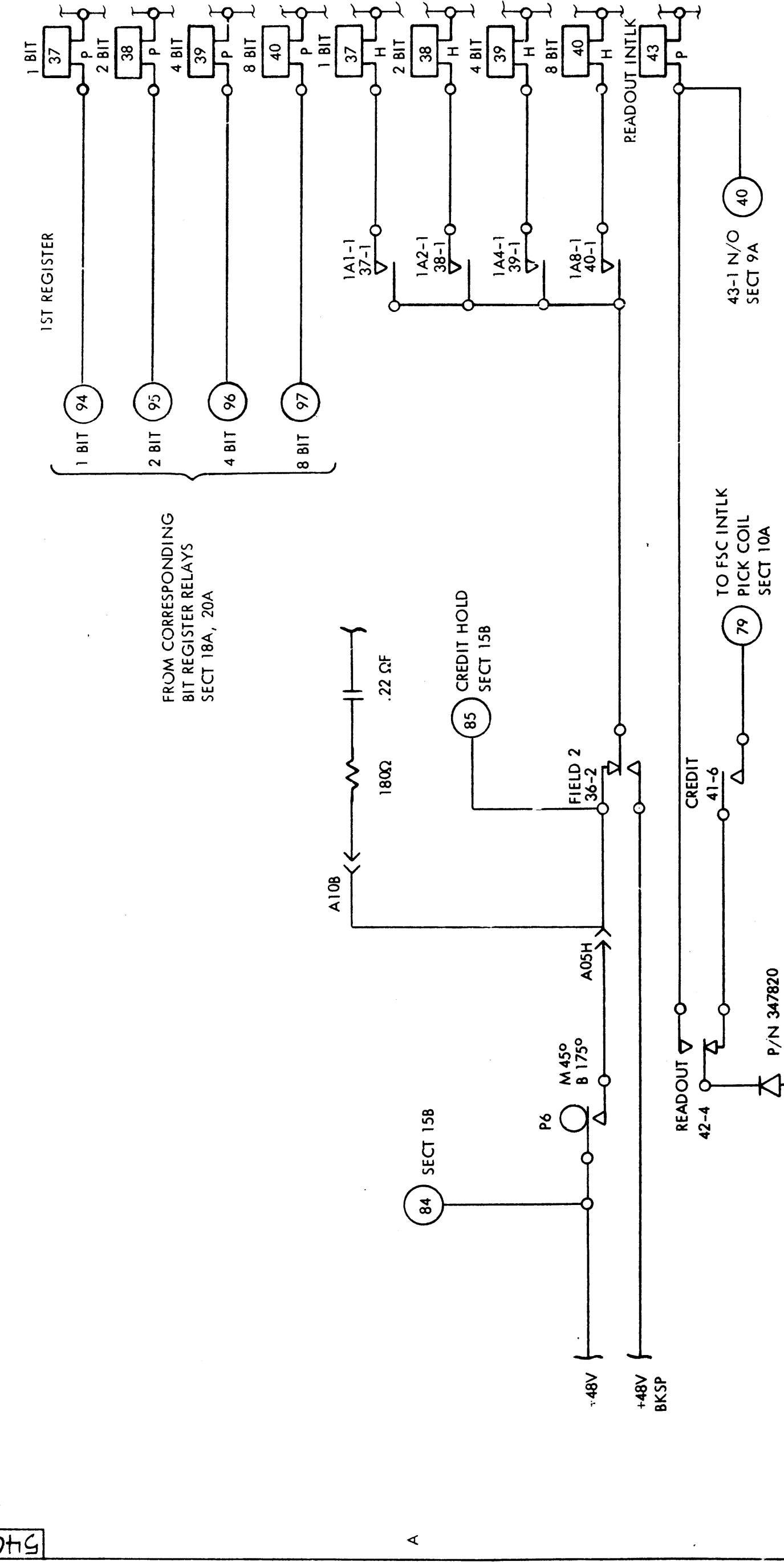
STANDARD CODE
5405957

15

MOD "B" 1A REGISTER DECODE-READOUT

16

CARD CODE



NOTES

X PRINT TO ENG SPEC NO 895291

XI POINT TO POINT WIRING FOR 48V AND 0 VOLT NETS SHOWN ON REF PAGE

XII DIODE NOT REQUIRED ON NON-PRINT. JUMPER IS INSTALLED ON NON-PRINT MACHINES

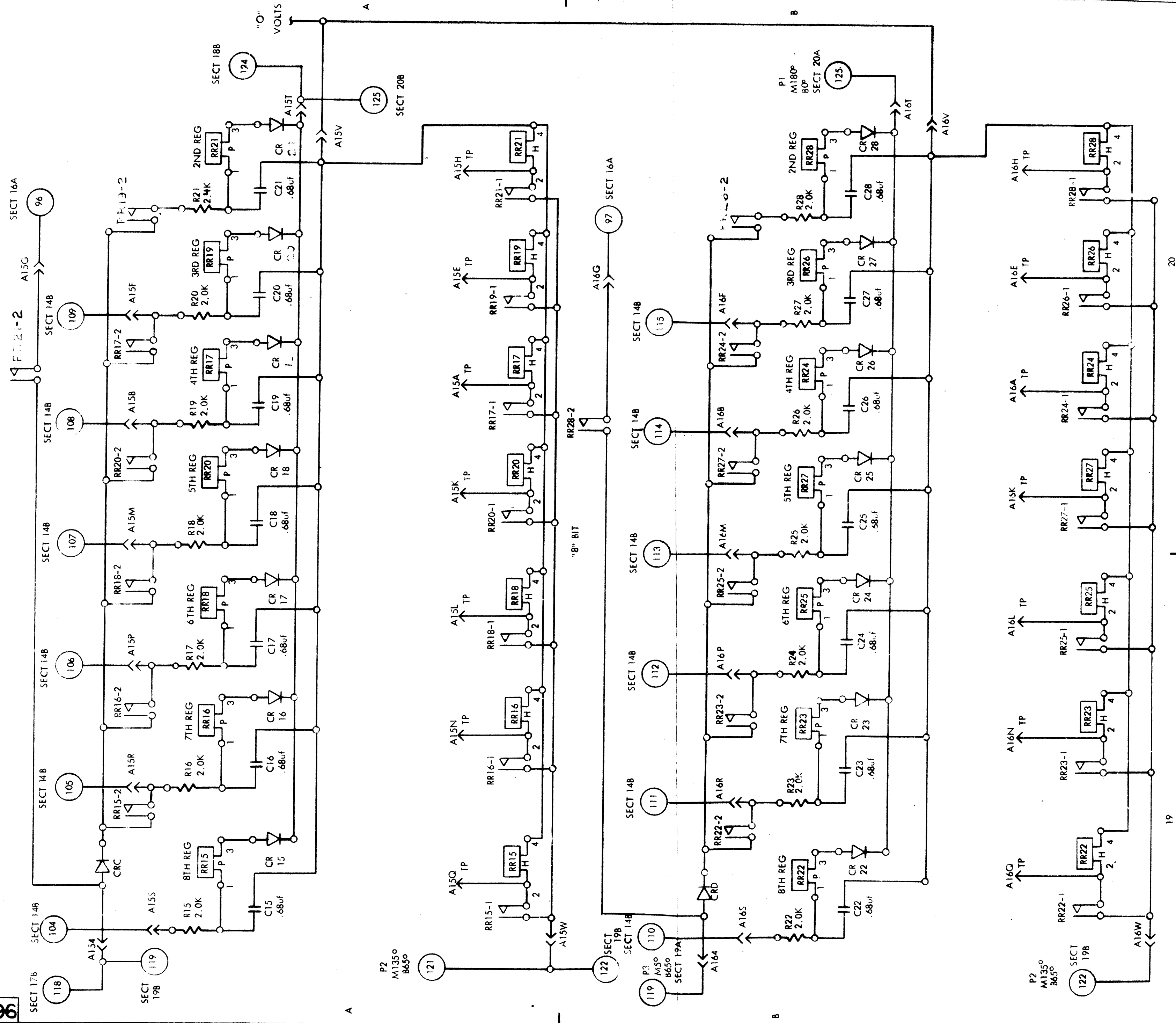
NAME	DATE	CHANGE NO.	APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
INTERNATIONAL BUSINESS MACHINES CORP.	18SEP68	206331-C					5405957
SYSTEMS DIAGRAM							
1A REG DECODE - READOUT							
DESIGN EB 15SEP66 MODEL							
DRAW AG 95EP66 SCALE							
CHECK RAS 95EP66 DRAW IDI 2AUG68							
APPD R55 95EP66 CHECK							

CIRCUIT AND PACKAGING STANDARD	
APPROVAL	DATE

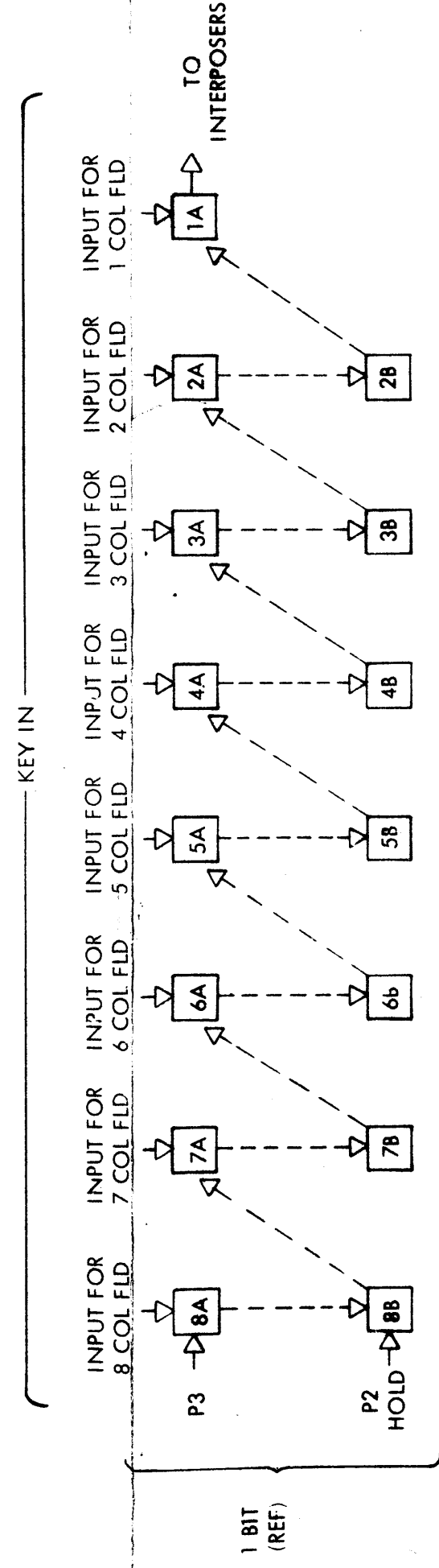
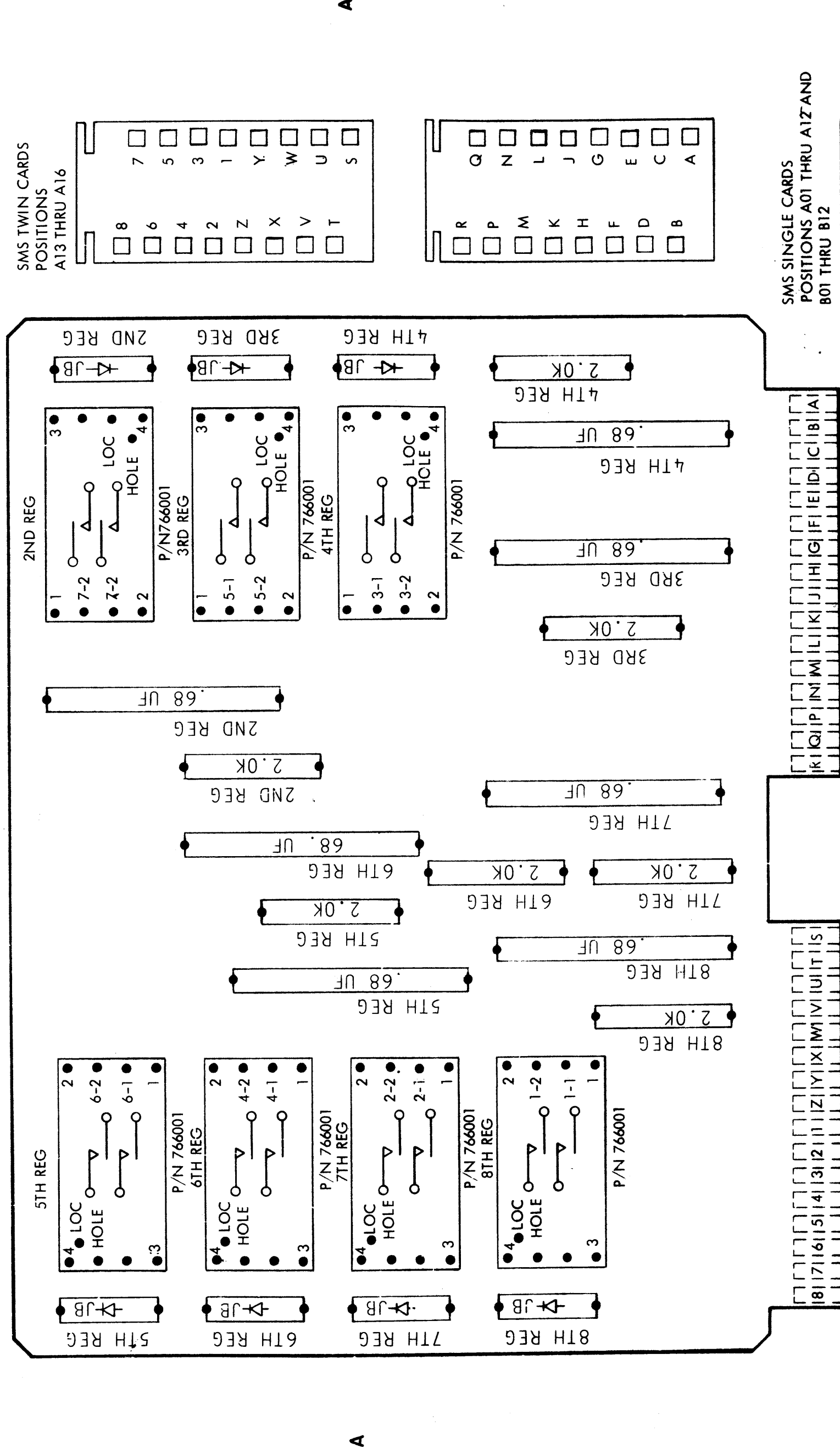
15

16

17

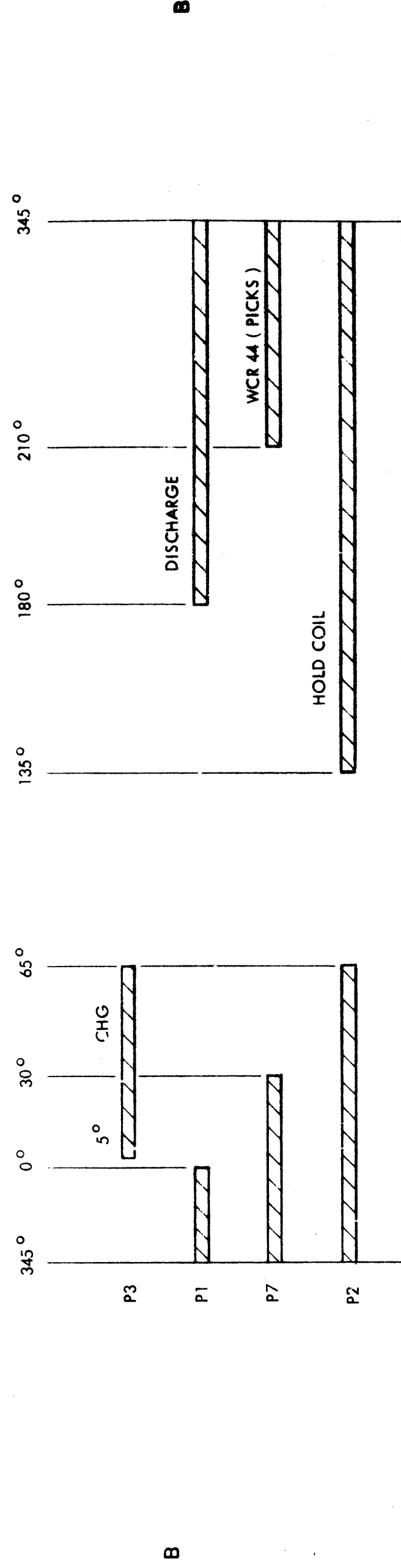


INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
SYSTEMS DIAGRAM		21 NOV 69	920126			X PRINT TO ENL. SPEC. NO. 895291	960866
DESIGNED BY	ENGINEER P. BIRNBOIM (DORSEL)						
CHECKED BY	J. L. BIRNBOIM (M.V. BIRNBOIM)						
APPROVED BY	W. H. HANCOCK (CHECK)						998096



VIEW - TOP OF OPEN GATE (WIRING SIDE)

LOGIC FLOW THROUGH BIT REGISTER



INTERNATIONAL BUSINESS MACHINES CORP.
 PAPER TWIN CARD ASSEMBLY LEFT
 ZERO REGISTER
 DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]

NOTE
 X PRINT TO ENG. SPEC. NO.
 895291

DEVELOPMENT NO.

CHANGE NO.

DATE

CHANGE NO.

DATE

CHANGE NO.

DATE

CHANGE NO.

DATE

CHANGE NO.

DATE

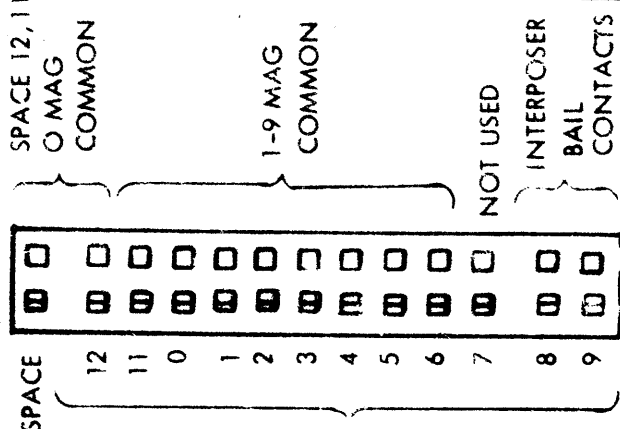
CHANGE NO.

DATE

998096

STANDARD CODE
01046
798096

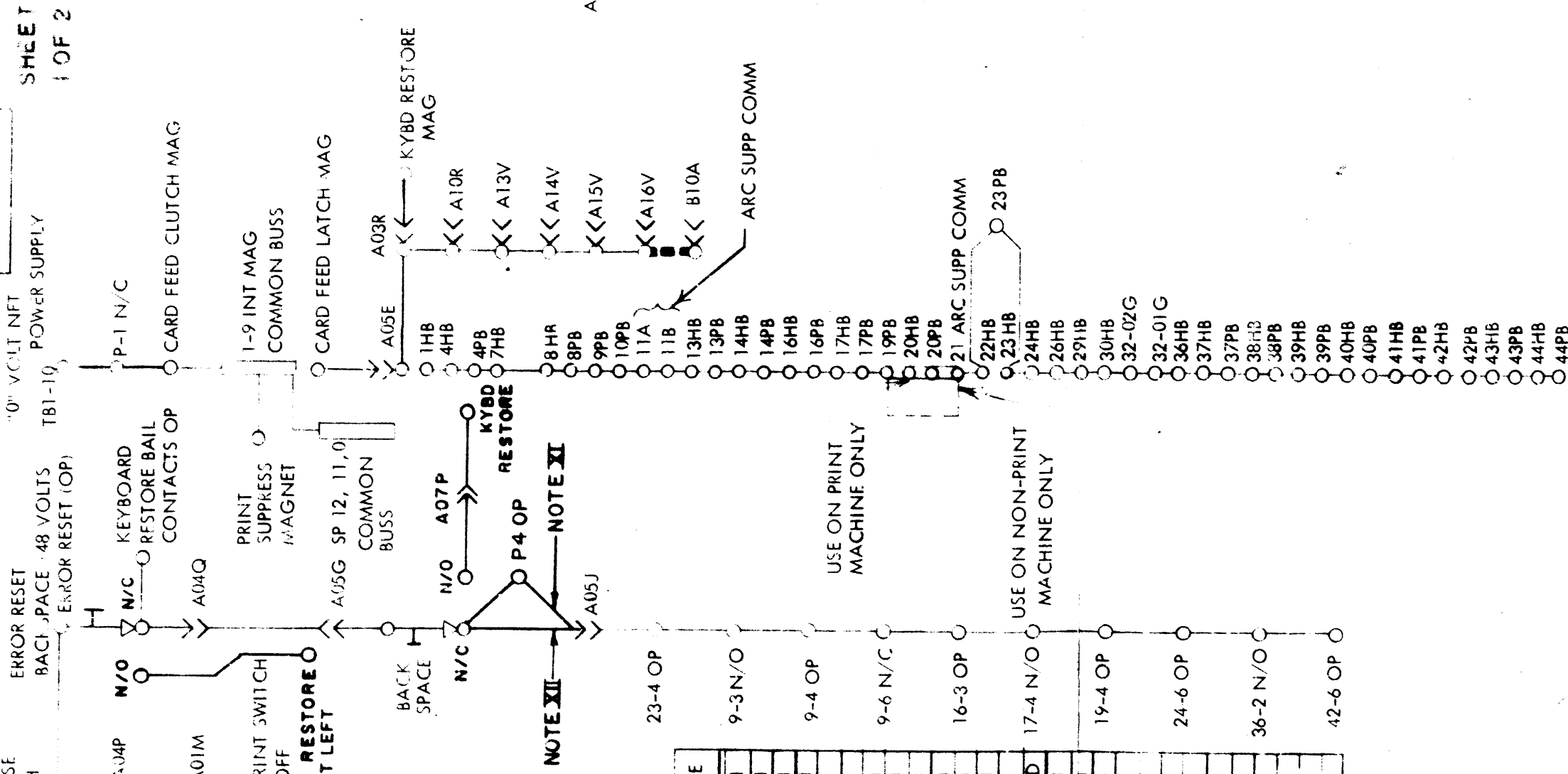
PUNCH UNIT TERM BLOCK
FACING WRINKLED LUGS



DISCRETE COMPONENTS	FROM	TO	SECT
2160917	ACROSS CD	FD MAG	6A
347820	19-3 N/C	20-20P	5B
347820	7-6 N/O	8-5 N/C	8A
347820	9-2 N/O	11A-3	8A
347820	42-4 OP	42-3 OP	15A
5404119	A03R	A06R	10A
347820	42-1 N/O	42 PA	16B
5404119	A12 K	A11 K	13A
5404119	A12 M	A11 M	13B
5404119	A12 N	A11 N	14B
5404119	A12 P	A11 P	14B

23

24



WIRE CONTACT RELAY LOCATION

RELAY	N/O	COIL	1	2	3	4	5	6	7	8	9	10	11	12	PART NO	COIL TYPE
FIELD 1	14A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	255735	PU HRH
DUP 1	8B	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	2A	255735	PU HRH
DUP 2	8A	8A	7B	10A	12A	1B	9B	—	—	—	—	—	—	—	196198	PU HRH
ESC INLK 2	9	10A	12A	8A	9A	7A	—	—	—	—	—	—	—	—	196198	PU HRH
PROGRAM 1	13	6A	6A	6A	11A	11B	6A	6B	—	—	—	—	—	—	338273	HSP
PROGRAM 2	14	6A	6B	6A	7A	9B	13A	13A	—	—	—	—	—	—	196198	PU HRH
RELEASE	16	8B	8B	8B	9B	11A	12A	—	—	—	—	—	—	—	196198	PU HRH
CLEAR	17	8B	8B	8B	5A	8B	8B	8B	—	—	—	—	—	—	196198	PU HRH
PRINT	19	12A	12A	12A	8A	5B	7B	17A	17A	—	—	—	—	—	196198	PU HRH
ALPHA	20	6B	6B	5B	—	—	—	—	—	—	—	—	—	—	196208	PU HRH
MULTIPUNCH	22	10B	10B	1A	12A	4B	—	—	—	—	—	—	—	—	196208	PU HRH
CARD LEVER	23	10B	10A	9A	12A	11B	—	—	—	—	—	—	—	—	196198	PU HRH
FIELD SIZE 1	24	8R	8B	8A	1A	6A	11B	11A	7A	—	—	—	—	—	196198	PU HRH
FIELD SIZE 2	29	14A	14A	14B	14B	14B	14A	14A	1A	—	—	—	—	—	196198	PU HRH
FIELD SIZE 3	30	14A	14A	14B	14B	14B	14A	14A	1A	—	—	—	—	—	196198	PU HRH
FIELD 2	36	14A	15B	15A	15B	9B	—	—	—	—	—	—	—	—	196198	PU HRH
TAZ REG	37	16A	16A	16A	16B	16B	—	—	—	—	—	—	—	—	196208	PU HRH
TAZ REG	38	16A	16A	16A	16B	16B	—	—	—	—	—	—	—	—	196208	PU HRH
TAZ REG	39	16A	16A	16A	16B	16B	—	—	—	—	—	—	—	—	196208	PU HRH
CREDIT	40	16A	16A	16A	15B	15B	—	—	—	—	—	—	—	—	196198	PU HRH
READOUT	41	16B	16B	16B	8A	15A	15B	15A	—	—	—	—	—	—	196198	PU HRH
READOUT INLK	42	16B	16B	16B	16B	15A	15A	15B	—	—	—	—	—	—	196198	PU HRH
END DISCHARGE	44	16A	16B	9A	16B	8A	—	—	—	—	—	—	—	—	196208	PU HRH
															196208	PU HRH

* DO NOT INSERT WIRES

CONNECTOR CHART

SMS CARD NAME	ARC SUPP	EN-CODE	BIT 1 REG	BIT 2 REG	BIT 4 REG	BIT 8 REG	BIT PRINT
A	A01	A02	A01	A04	A05	A06	A07
B	5A	12A	1A	2A	2A	1B	6A
C	5A	15B	1A	1A	1B	2A	1B
D	5A	MCI	1A	1A	1B	2A	1B
E	7A	DUP	5A	1A	24A	2A	1B
F	8A	4B	5A	1A	11B	2A	1B
G	11A	5A	1A	24A	2A	1B	7B
H	11A	5A	1A	15A	7A	1B	9A
J	7B	7A	1A	11B	2A	1B	10A
K	7B	7A	1A	11B	2A	1B	9B
L	6B	XSKIP	0A	1A	24A	2A	1B
M	6B	XSKIP	0A	1A	VLD	2A	1B
N	6B	9B	1B	HLS	2B	12B	11A
P	MCI	11A	10B	24A	HSS	7B	10B
Q	5A	10B	24A	MCI	8B	8B	12B
R	8B	10B	4R	HSS	10A	7B	1A
S							
T							
U							
V							
W							
X							
Y							
Z							
1							
2							
3							
4							
5							
6							
7							
8							

LEGEND

- PRINT FEATURE WIRING
- COMBINATION KEYBOARD WIRING
- NUMERIC KEYBOARD WIRING

NOTES
 X PRINT TO ENG SPEC 895291
 XI FACTORY REMOVE EC 920064 - NOV. 69
 XII FACTORY INSTALL EC 920064 - NOV. 69

24

NAME	DATE	CHANGE NO	APPROVAL	DATE	CHANGE NO	APPROVAL	DEVELOPMENT NO
SYSTEMS DIAGRAM	21 NOV 69	920126		9 JAN 70	920064		960867
COMPONENT LOCATION	9 APR 70	920064A					798096

5373561

KEYBOARD & CAM REFERENCE

00.29.10.0

MECHANICAL TIME CHART
CARD FEED MECHANISM

STEM POS	GRAPHIC		CARD CODE		BAILS		LATCHES	
	ALPHA	NUMERIC	ALPHA	NUMERIC	ALPHA	NUMERIC	ALPHA	NUMERIC
1	ERROR	RESET						
2	MULTI	PUNCH						
3	NUMERIC							
4	Q	+	11-8	12-8-6	13,9	12,8,6		
5	A		12-1		15,3			
6	@	#	8-4	8-3	9,7	8,2		
7	Z		0-9		1,11			
8	W	-	0-6	0-8-5	14	14,8,4	X	
9	S	>	0-2	0-8-6	14	14,8,6	X	
10	%	,	0-8-4	0-8-3	14,9,7	14,8,2		
11	X	7	0-7	0-8-7	14	14,8	X	X
12	E	>	12-5	11-8-5	15	10,8	X	X
13	D	:	12-4	8-2	15,7	8	X	
14	*	\$	11-8-4	11-8-3	7,9	8,2	X	X
15	C	"	12-3	8-7	15,5	8	X	
16	R	f	11-9	12-8-2	13,11	12,8	X	
17	F	;	12-6	11-8-6	15	10,8	X	X
18	<	.	12-8-4	12-8-3	9,7	8,2	X	X
19	V	=	0-5	6-8	1	8,6	X	
20	T	0-8-2	0-3	0-8-2	14,5	14,8	X	
21	G	-	12-7	11-8-7	15	10,8	X	X
22	MASTER	CARD					X	X
23	B	|	12-2	11-8-2	15	10,8	X	X
24	Y	|	0-8	12-8-7	19	12,8	X	
25	H	/	12-8	8-5	15,9	8,4		
26	DUP							
27	N	(	11-5	12-8-5	13	12,8	X	X
28	U	1	0-4	1	1,7		X	
29	J	4	11-1	4	13,3		X	
30	-	-	11	11	13	10		
31	M	7	11-4	7	13,7		X	
32	I	2	12-9	2	15,11		X	
33	K	5	11-2	5	13	4	X	
34	/	0	0-1	0	14,3	14	X	
35	,	8	0-8-3	8	19,5	8	X	
36	0	3	11-6	3	13	2	X	
37	L	6	11-3	6	13,5	6	X	
38	SPACE						X	X
39	.	9	12-8-3	9	15,9,5		X	X
40	P	&	11-7	12	13	12	X	X
41	SKIP						X	X
42	RELEASE						X	X
43	AUX	DUP					X	X
44	FEED						X	X
45	REGISTER						X	X
46	PROG	2					X	X
47	ALPHA						X	X
48	LEFT	ZERO					X	X
49	LEFT	ZERO					X	X
50	PROG	1					X	X

ODD NUMBER BAILS ON RIGHT SIDE OF KEYBOARD
EVEN NUMBER BAILS ON LEFT SIDE OF KEYBOARD

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	12-30-64	205199			X PRINT TO ENG. SPEC. NO. 895291	5373561
DESIGN	WT 11-23-64						
MODEL	00.29.10.0						
DETAIL							
CHECK	F 11-23-64						
APPRO	JKC 11-23-64						00.29.10.0

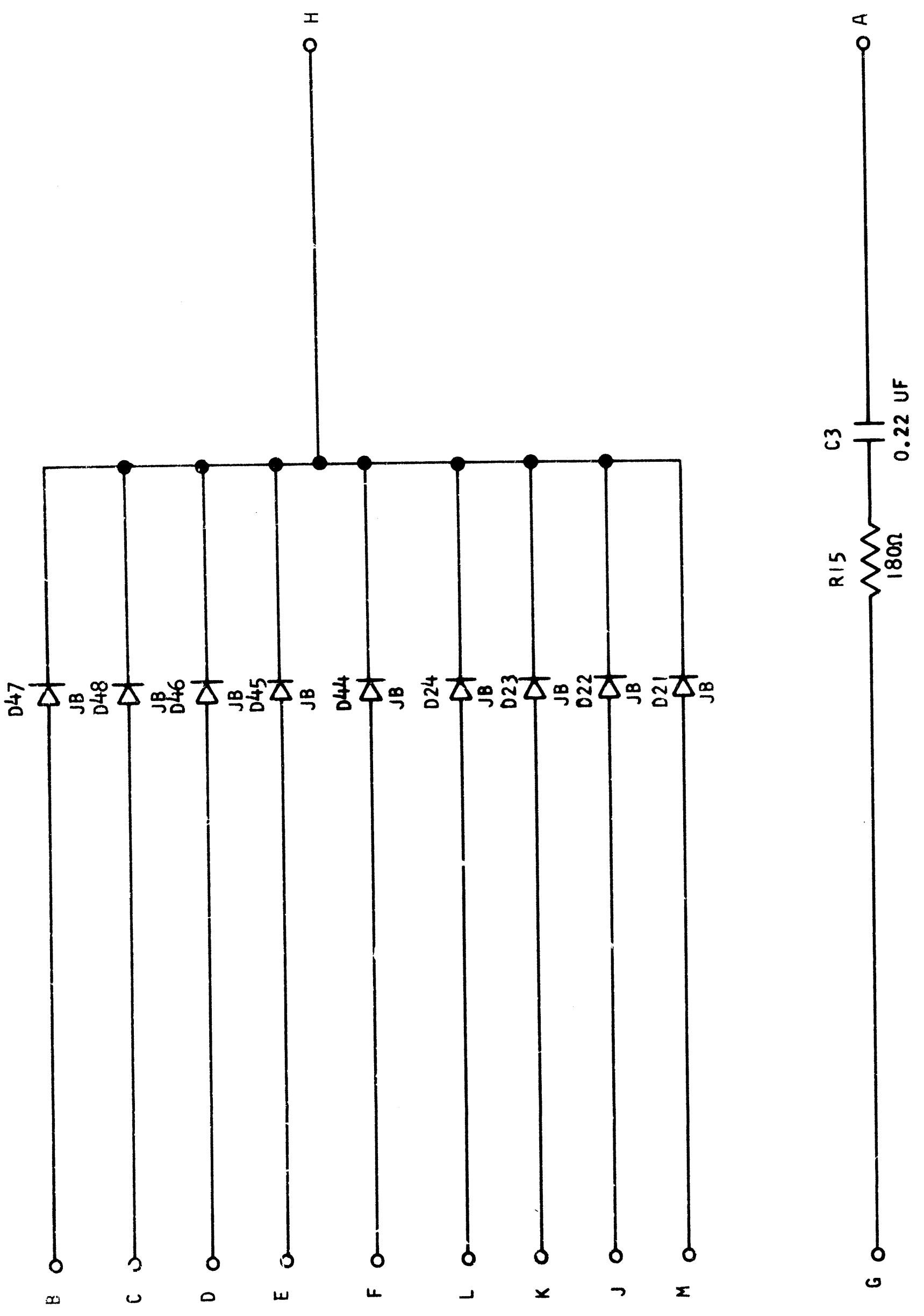
U.S. GOV. NO. 44-111

1-428-34 HMOA

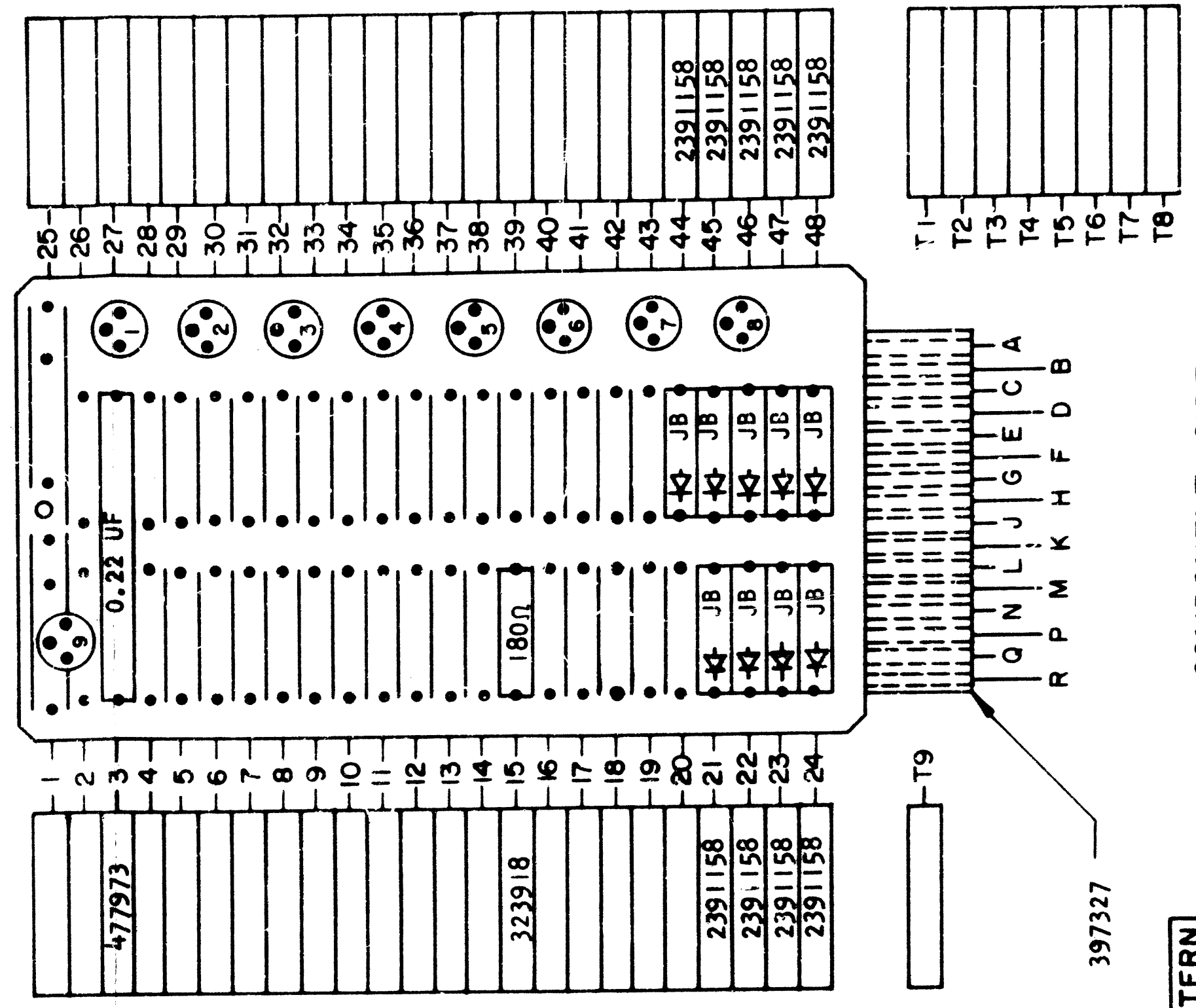
375105
 STANDARDS CODE
 2-7045
 F F H -

375105

PRINT
 MOUNT CARD ON 1.0 INCH CENTERS - NOTE XIII



- NOTES
- X CIRCUIT MUST CONFORM TO ENGINEERING SPECIFICATION
 - XI ASSEMBLE TO ENGINEERING SPECIFICATION 895396 AND 891999
 - XII ALL RESISTORS ARE 1/2 WATT AND ± 5% UNLESS OTHERWISE NOTED
 - XIII MAXIMUM HEIGHT COMPONENTS MAY PROJECT ABOVE COMPONENT SIDE OF CARD WILL BE .640



B MFG. ENG. *RW* DATE *5-31-66*

CIRCUIT AND PACKAGING STANDARD

APPROVAL *KAT APP* DATE *5/6/66*

HOLE PATTERN 493457

INTERNATIONAL BUSINESS MACHINES CORP.

DESIGN	VE	5APR66	MODEL	SMS
DETAIL	VE	5APR66	SCALE	NONE
CHECK	VE	5APR66	DRAW	VE
APPRO			CHECK	CF C

DATE *4-7-66*

DEVELOPMENT NO. 375105

PA-3400 A

COMPONENT SIDE

APPROVAL	DATE	CHANGE NO.	APPROVAL	DEVELOPMENT NO.
<i>KAT</i>	<i>1 JUN 66</i>	<i>126540</i>	<i>KAT</i>	<i>PA-3400 A</i>

62-3987-2 6-22-61

F F J -

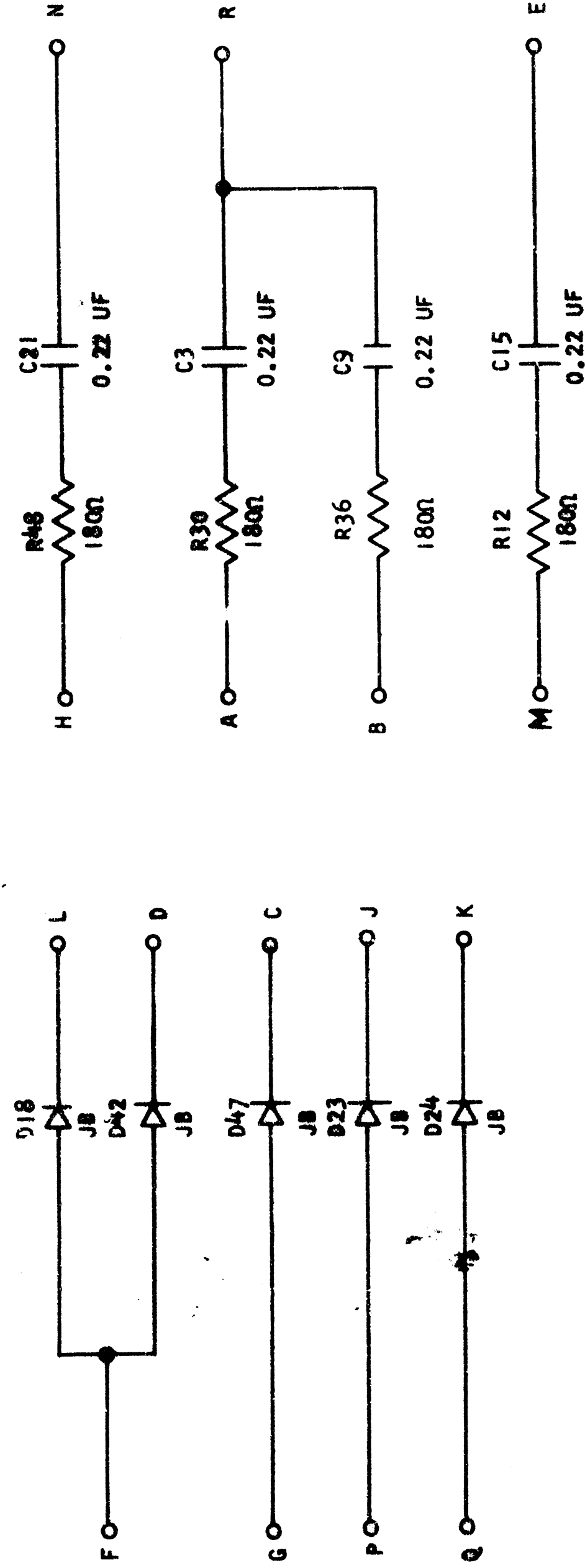
375106

STANDARDS
CODE
2-7045

375106

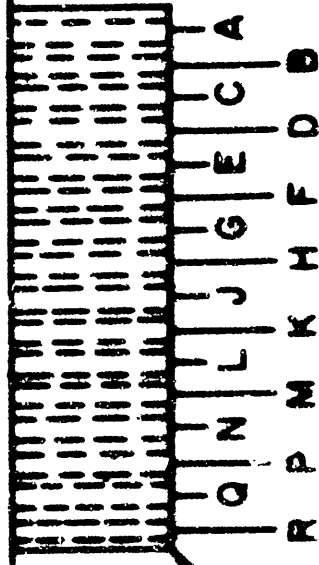
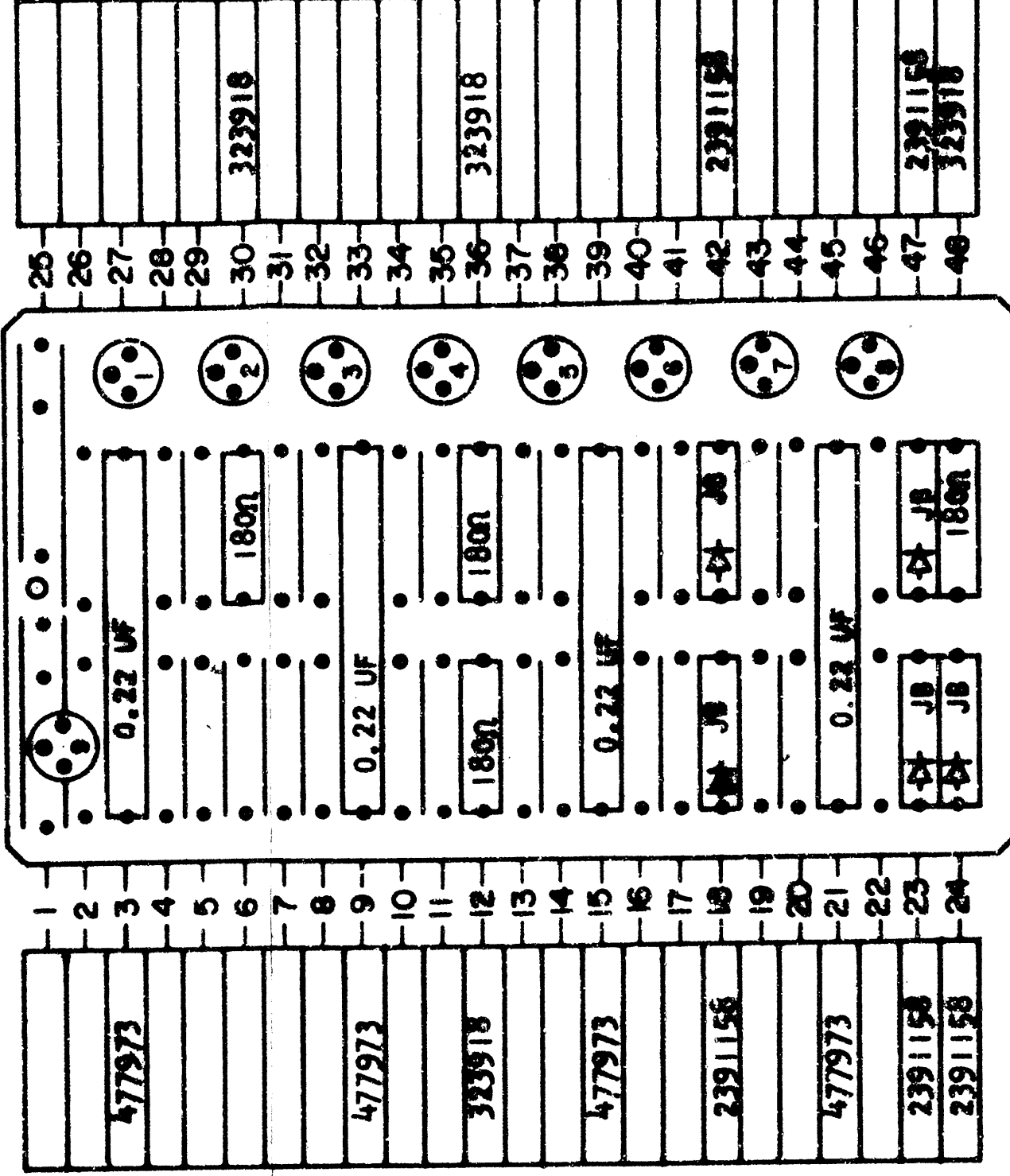
ARC SUPPRESSION

MOUNT CARD ON 1.0 INCH CENTERS - NOTE XIII



NOTES

- I CIRCUIT MUST CONFORM TO ENGINEERING SPECIFICATION
- II ASSEMBLE TO ENGINEERING SPECIFICATION 895396 AND 891999
- III ALL RESISTORS ARE 1/2 WATT AND ± 5% UNLESS OTHERWISE NOTED
- IV MAXIMUM HEIGHT COMPONENTS MAY PROJECT ABOVE COMPONENT SIDE OF CARD WILL BE .640



B MFG. ENG. PW 26APR67
 CIRCUIT AND PACKAGING STANDARD
 APPROVAL DATE

KAT WTB 5/6/66
 HOLE PATTERN 493457

NAME	DATE	CHANGE NO.	APPROVAL
INTERNATIONAL BUSINESS MACHINES CORP.	1 JUL 66	126946	WTR
ARC SUPPRESSION	16 FEB 67	131075	GWS
	27 APR 67	131083	GWS

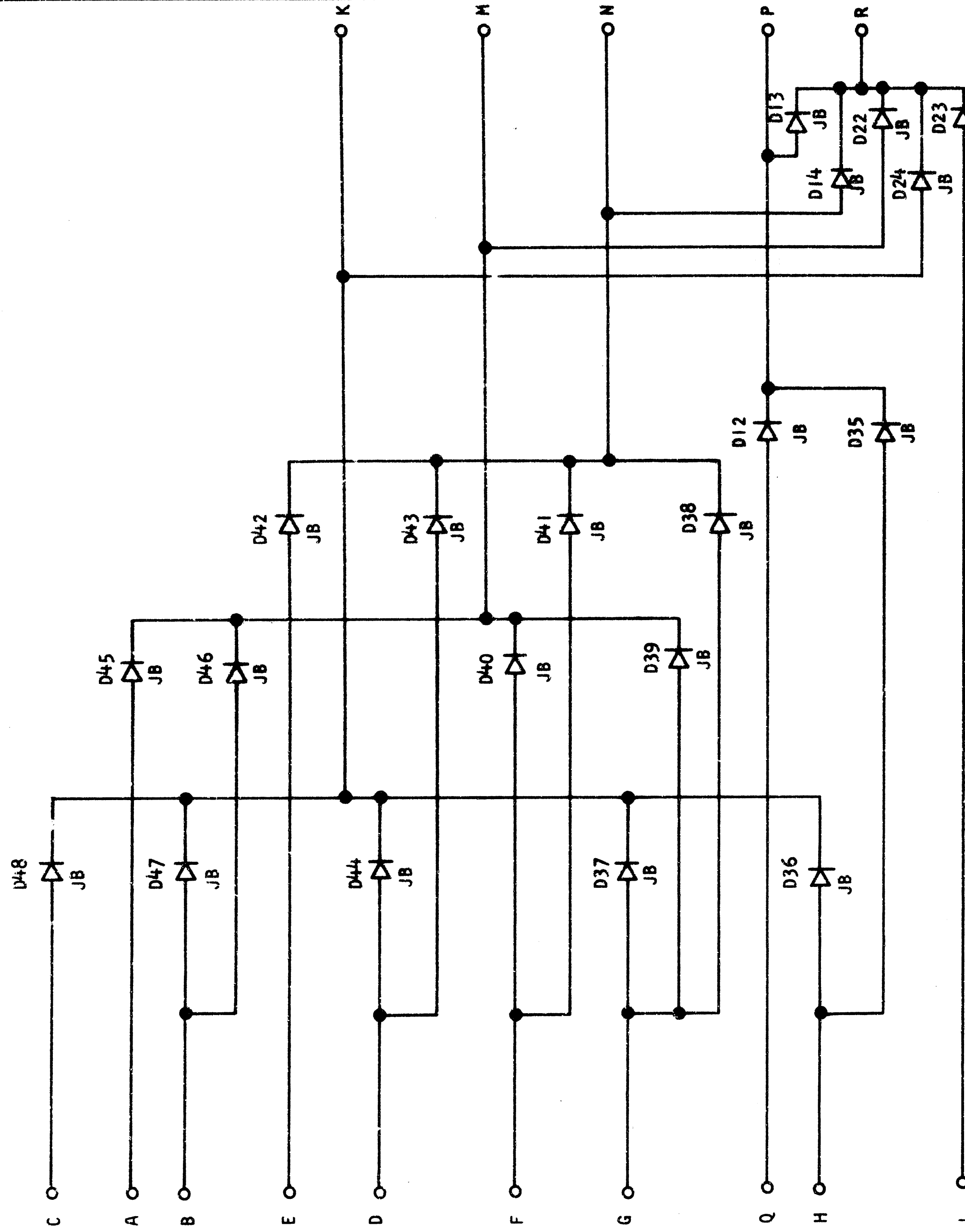
COMPONENT SIDE

DEVELOPMENT NO.	375106
PA-3401A	

82-3987-2 6-22-61

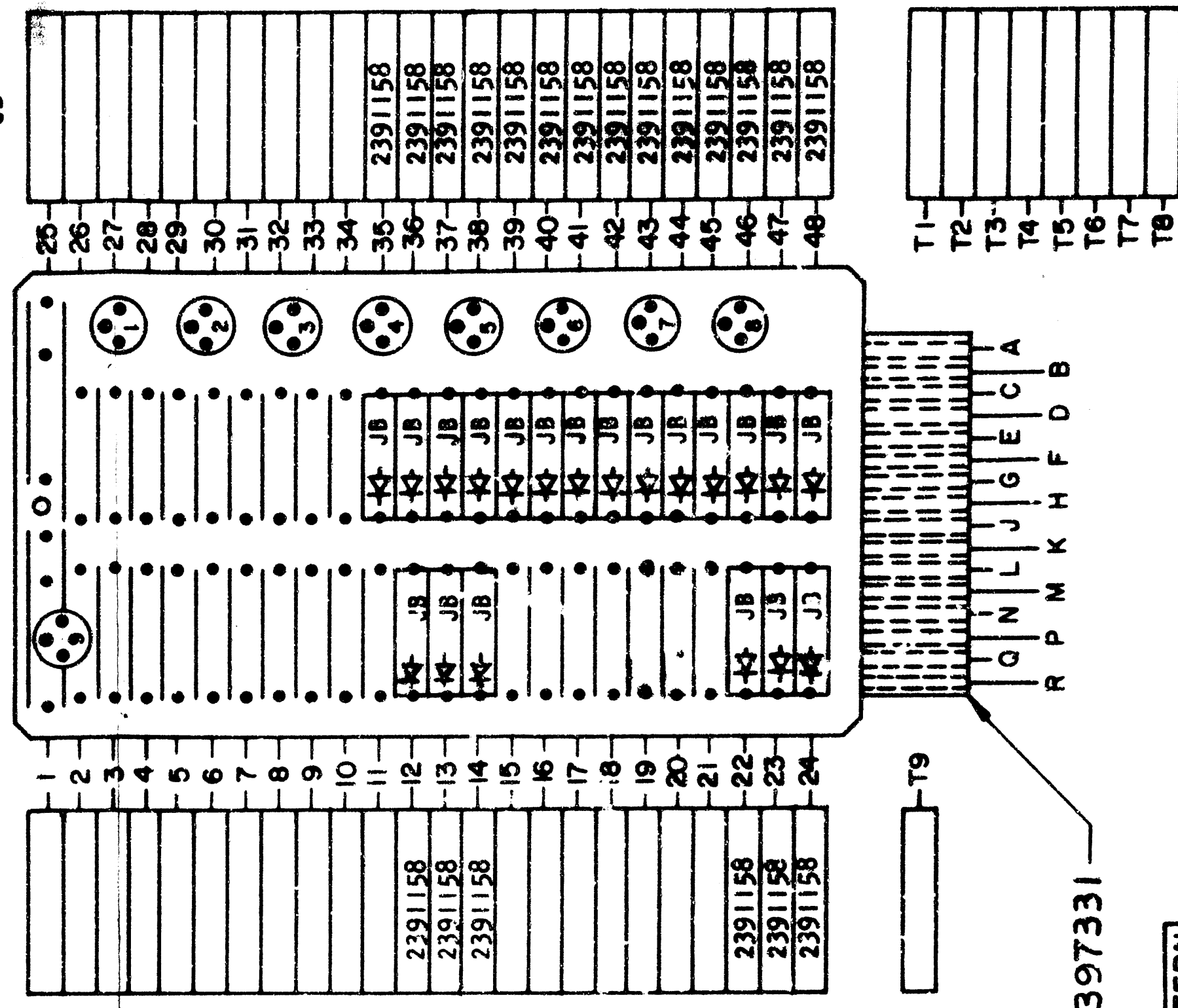
375107

ENCODE



375107	F F K -
STANDARDS CODE	2-7045

NOTES
 X CIRCUIT MUST CONFORM TO ENGINEERING SPECIFICATION
 XI ASSEMBLE TO ENGINEERING SPECIFICATION 895396 AND 891999



B MFG. ENG. PK 5-31-66
 CIRCUIT AND PACKAGING STANDARD

APPROVAL DATE
 KMTAPP 5/6/66

HOLE PATTERN 493457

INTERNATIONAL BUSINESS MACHINES CORP.	
NAME	CARD ASM TSTR -
DESIGN	VE 5APR66 MODEL SMS
DETAIL	VE 5APR66 SCALE NONE
CHECK	VE 5APR66 DRAW VE 5APR66
APPRO	CHECK CFC 4-11-66

DATE	1 JUN 66
CHANGE NO.	126540
APPROVAL	PKX
DATE	
CHANGE NO.	
APPROVAL	

DEVELOPMENT NO.	PA-3402 A
375107	

COMPONENT SIDE

82-3987-2 6-22-61

FEATURES

PAGES

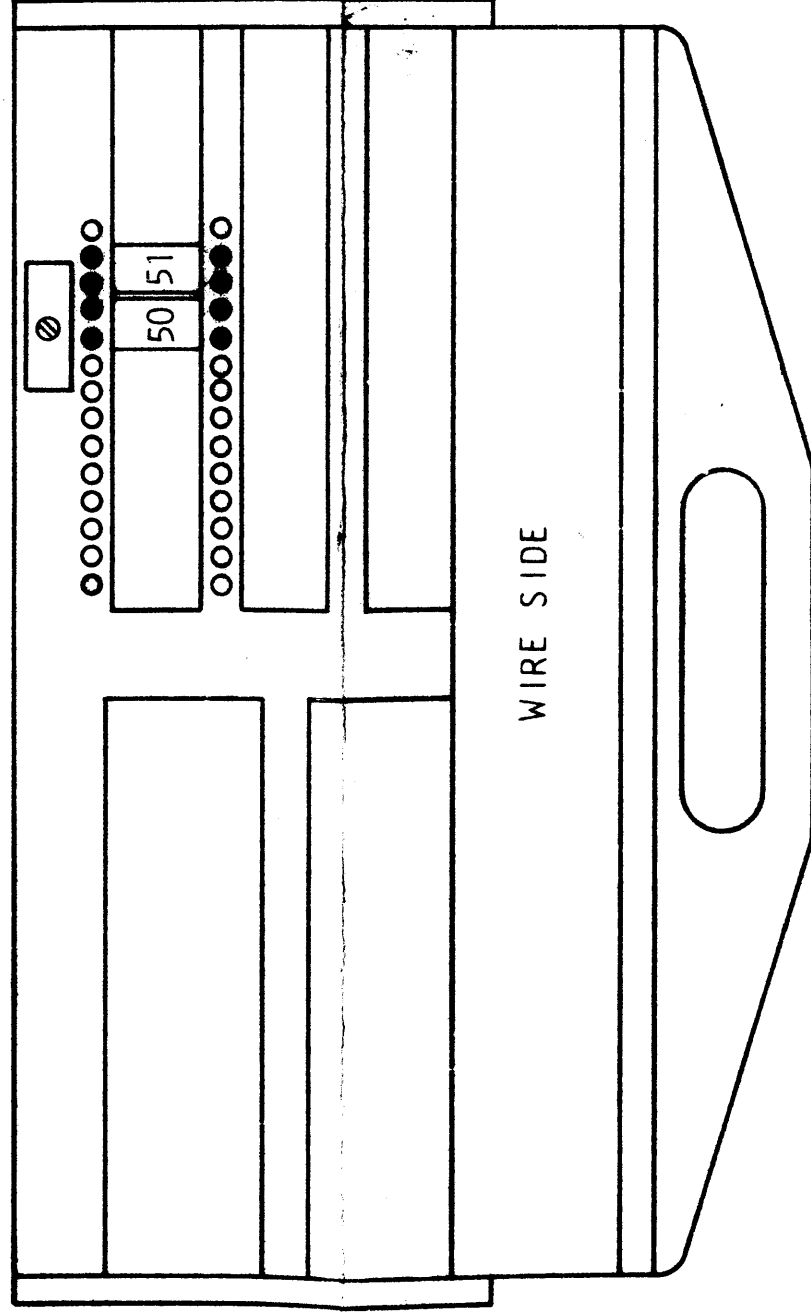
MASTER

NAME	SECTION
X-SKIP FEATURE	1, 2, 7, 10, 11, 12, 16

ADD

PART NO.	DESCRIPTION	FROM	TO
196208	RELAY 50-4 POS		
196208	RELAY 51-4 POS		
347820	DIODE	PLT-EC2-D	CATH-EC2-H
347820	DIODE	PLT-EC2-B	CATH-EC2-F
347820	DIODE	PLT-EC2-C	CATH-EC2-G
347820	DIODE	PLT-EC2-A	CATH-EC2-E
347820	DIODE	PLT-51PB	CATH-51PA
5404119	DIODE-SLIP ON	PLT-A12R	CATH-A10M
5404119	DIODE-SLIP ON	PLT-A02M	CATH-A04C
205330	BRASS JPR	50 HA	50-1 N/O
205330	BRASS JPR	51 HA	51-1 N/O
205331	BRASS JPR	50 HB	50 PB
205331	BRASS JPR	51 HB	51 PB
5406373	CABLE		

EC NO. 2



DELETE

PART NO.	DESCRIPTION	FROM	TO
GATE	JPR	8-6 N/O XII	*9-6 OP XII
GATE	CABLE	*A10M XII	A12R XII
GATE	CABLE	*1-11 N/C XII	41-3 N/O XII
GATE	JPR	1-11 N/C XII	*4-11 OP XII
GATE	CABLE	*4-11 OP XII	A06C XII
GATE	CABLE	1-11 N/O XII	*41PA XII

KEYBUTTONS
COMBINATION KEYBOARDS-REPLACE DASH KEYBUTTON
WITH KEYBUTTON P/N 5353766
NUMERIC KEYBOARD - REPLACE II KEYBUTTON WITH
KEYBUTTON P/N 5422188

* DENOTES WIRE END TO BE REMOVED AND TAPED

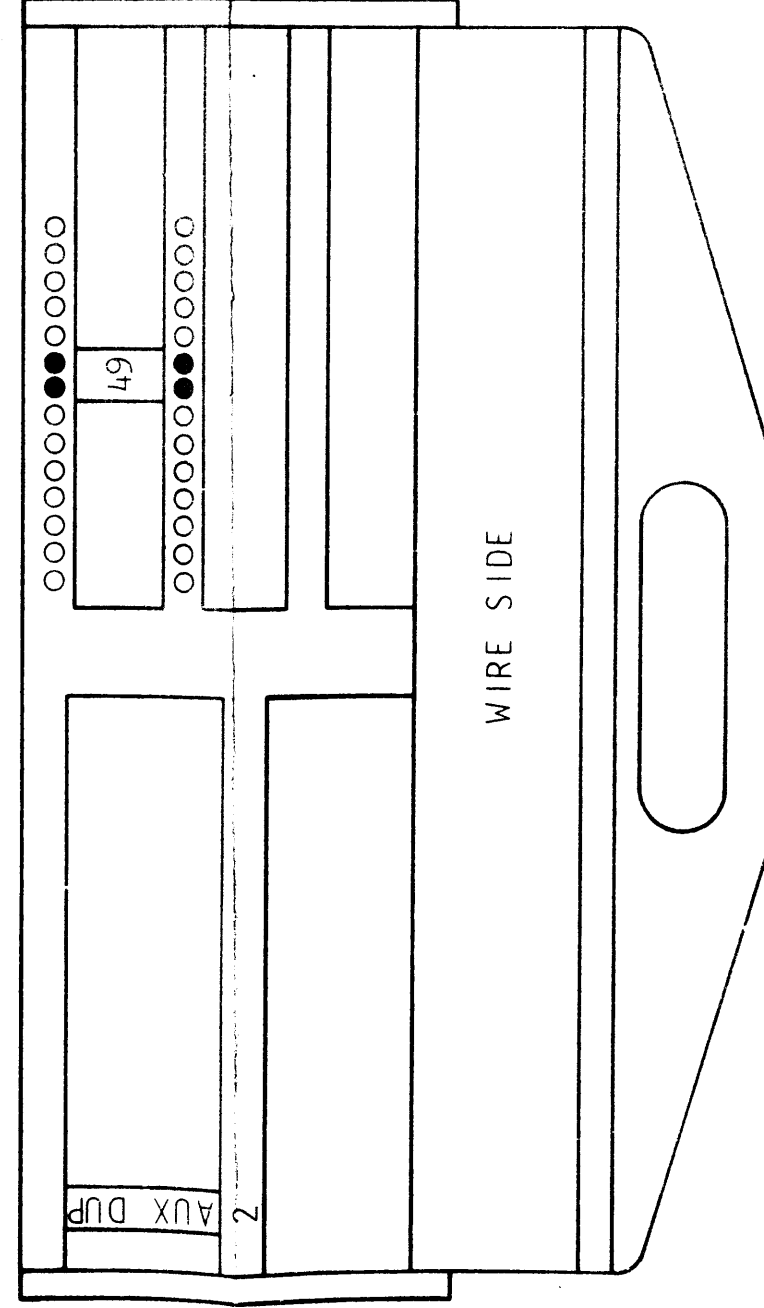
INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHARGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	19OCT66	205745 B			X PRINT TO ENG. SPEC. NO.	5405964
DESIGN / AG		14FEB67	205854			895291	
CHECK / RAS		17 JUL 67	205859				
APPRO / PH							

MASTER

NAME	SECTION
AUX DUP FEATURE	1, 2, 8

ADD

PART NO.	DESCRIPTION	FROM	TO
205330	BRASS JPR	49HA	49-1 N/O
196208	RELAY 49-4 POS	---	---
5406097	CABLE	---	GATE
5406064	CABLE	CD TRANS	GATE



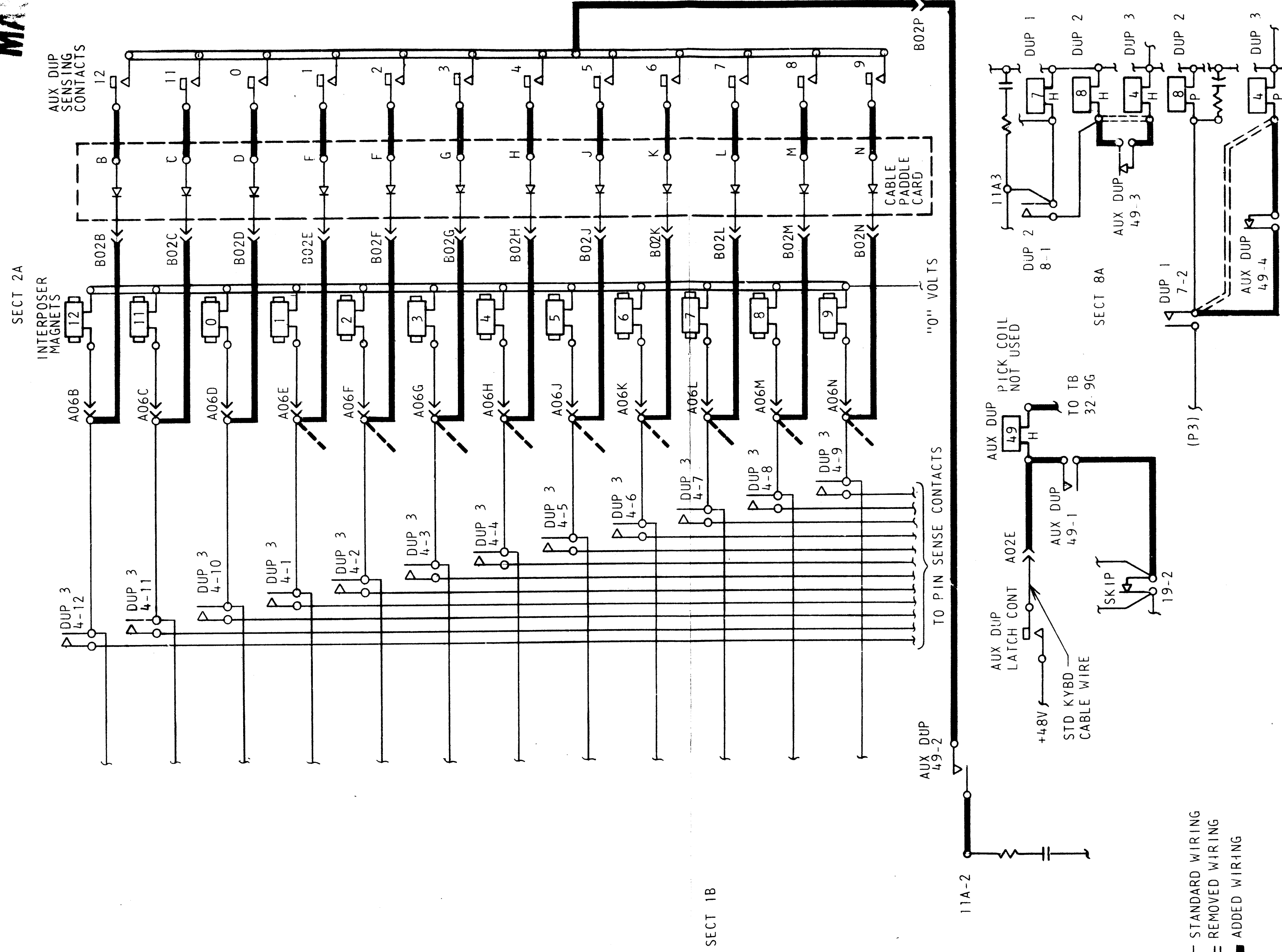
DELETE

PART NO.	DESCRIPTION	FROM	TO
GATE	CABLE	*8 HA XII	4 HA XII
GATE	CABLE	4 PA XII	*7-2 N/O XII

* DENOTES WIRE ENDS TO BE REMOVED AND TAPED

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	19OCT66	205745 B			X PRINT TO ENG. SPEC. NO. 895291	5405965
DESIGN	AG 15EP66 MODEL	14FEB67	205854				
CHECK RAS	15EP66 DRAW 1 DI	12JUL67	206089				
APPROV FH	35EP66 CHECK						

MASTER



- STANDARD WIRING
- - - REMOVED WIRING
- ▬ ADDED WIRING

NOTES
 XII STANDARD WIRES ARE SHOWN FOR REFERENCE ONLY. CONSULT MACHINE LOGIC DIAGRAMS FOR DETAIL WIRING
 XIII REMOVE THIS LEAD AND TAPE END

INTERNATIONAL BUSINESS MACHINES CORP.	
NAME	SYSTEMS DIAGRAM
DESIGN AG	ISEP/64
MODEL	205854
CHECK RAS	ISEP/64
APPROV	FH
DATE	19 OCT 66
CHANGE NO.	205745 B
DATE	14 FEB 67
CHANGE NO.	205854
DATE	12 JUL 67
CHANGE NO.	206089

NOTE
 X PRINT TO ENG. SPEC. NO. 895291

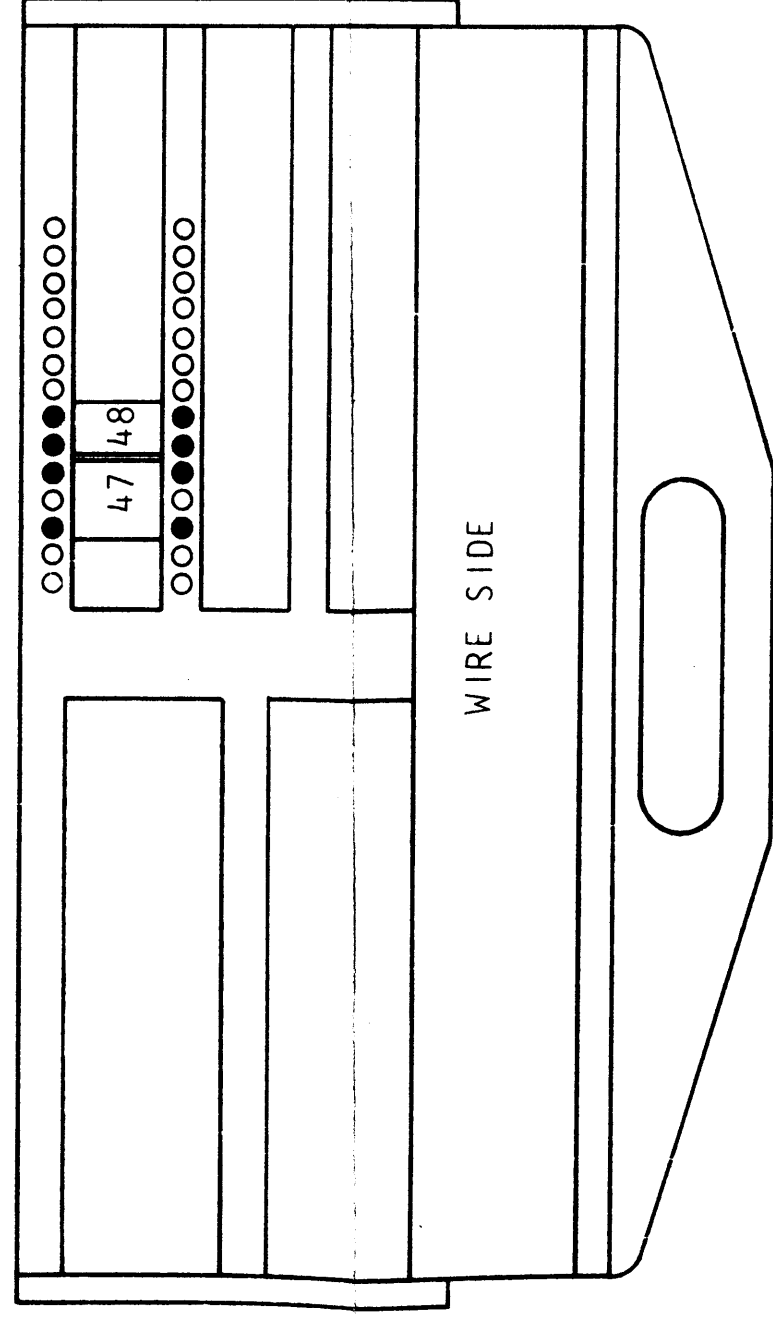
5405966

INDEX PAGE
29 WIRING DIAGRAM SUPPLEMENT
MODELS A, B & C

SHEET 1 OF 2

MASTER

NAME	SECTION
MCI FEATURE	5, 7, 8, 9, 11



ADD

PART NO.	DESCRIPTION	FROM	TO
196198	RELAY 47-6 POS		
196208	RELAY 48-4 POS		
205330	BRASS JPR	47 HA	47-1 N/O
205331	BRASS JPR	47 HB	47 PB
205331	BRASS JPR	48 HB	48 PB
205329	BRASS JPR	48 PA	48-1 N/O
347820	DIODE	PLT-47 PB	CATH-47 PA
347820	DIODE	PLT-48-2 N/O	CATH-48 HA
347820	DIODE	PLT-32-10 E	CATH-32-10B
347820	DIODE	PLT-32-11 E	CATH-32-11B
5406087	CABLE		GATE
STD TRANS	CABLE WIRE	REG MAG	INT 3 COM
STD TRANS	CABLE WIRE	A05Q	REG MAG
STD SWITCH	CABLE WIRE	ADAS N/O	MC SW/OP
STD SWITCH	CABLE WIRE	A01P	MC SW/NO
STD KYBD	CABLE WIRE	MC LATCH/NO	48 VOLTS
STD KYBD	CABLE WIRE	MC LATCH/OP	A02D

DELETE

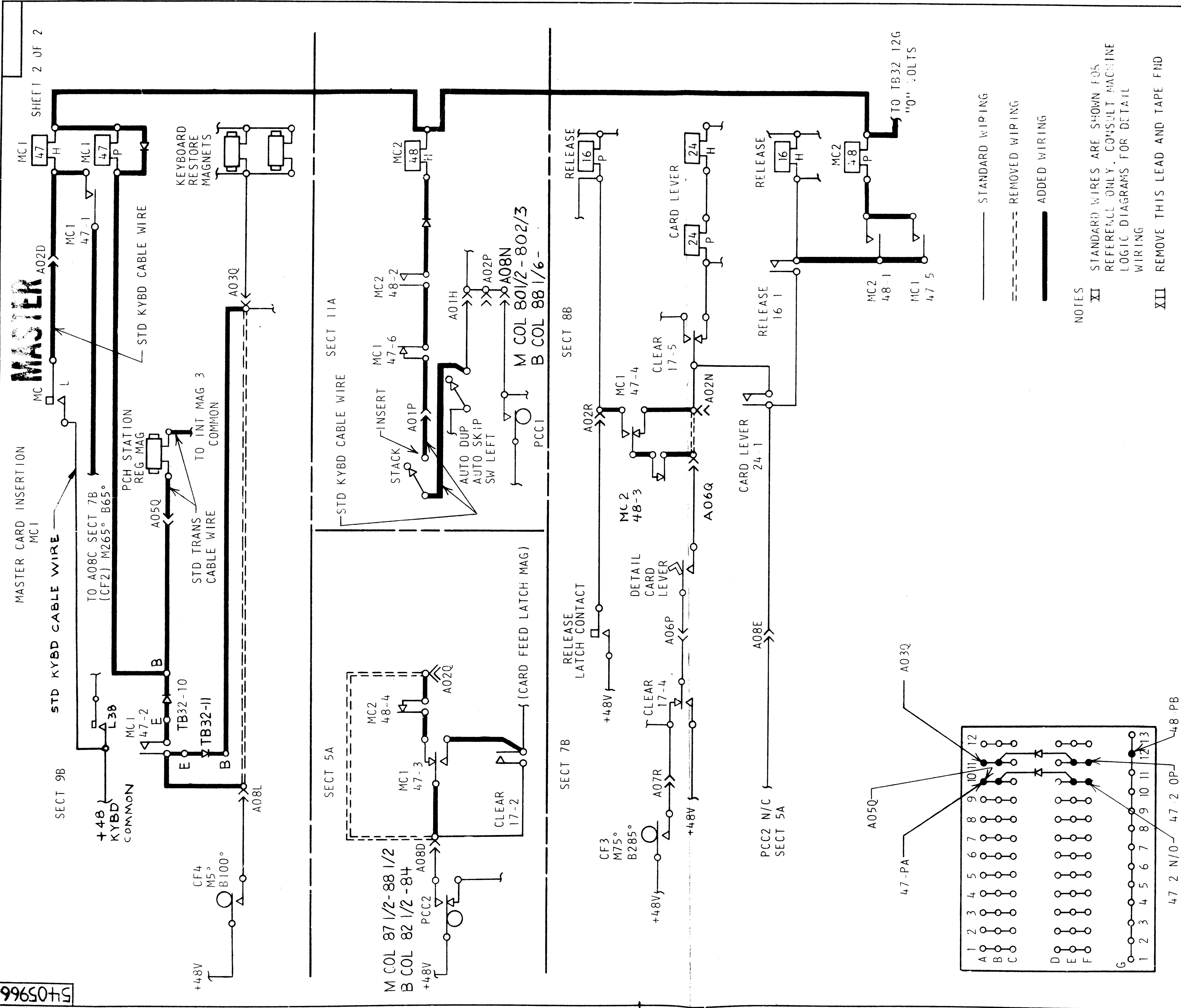
PART NO.	DESCRIPTION	FROM	TO
	CABLE	* A03Q XII	A08L XII
	CABLE	* A02Q XII	A08D XII
	CABLE	* A02N XII	A06Q XII

* DENOTES WIRE END TO BE REMOVED AND TAPED.

PRINT SUITABLE FOR EC MA KUP

INTERNATIONAL BUSINESS MACHINES CORP.	
NAME | SYSTEMS DIAGRAM	
DESIGN | AG | 15 SEP 66 | MODEL	
DETAIL	
CHECK | RAS | 15 SEP 66 | DRAW | IDI | 100KT 6A	
APPRO | FH | 15 SEP 66 | CHECK	

DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
19 OCT 66	203745 B			X PRINT TO ENG. SPEC. NO. 895291	5405966
14 FEB 67	205854				
12 JUL 67	206089				
15 JAN 69	920013				



_____ STANDARD WIRING
 - - - - - REMOVED WIRING
 _____ ADDED WIRING

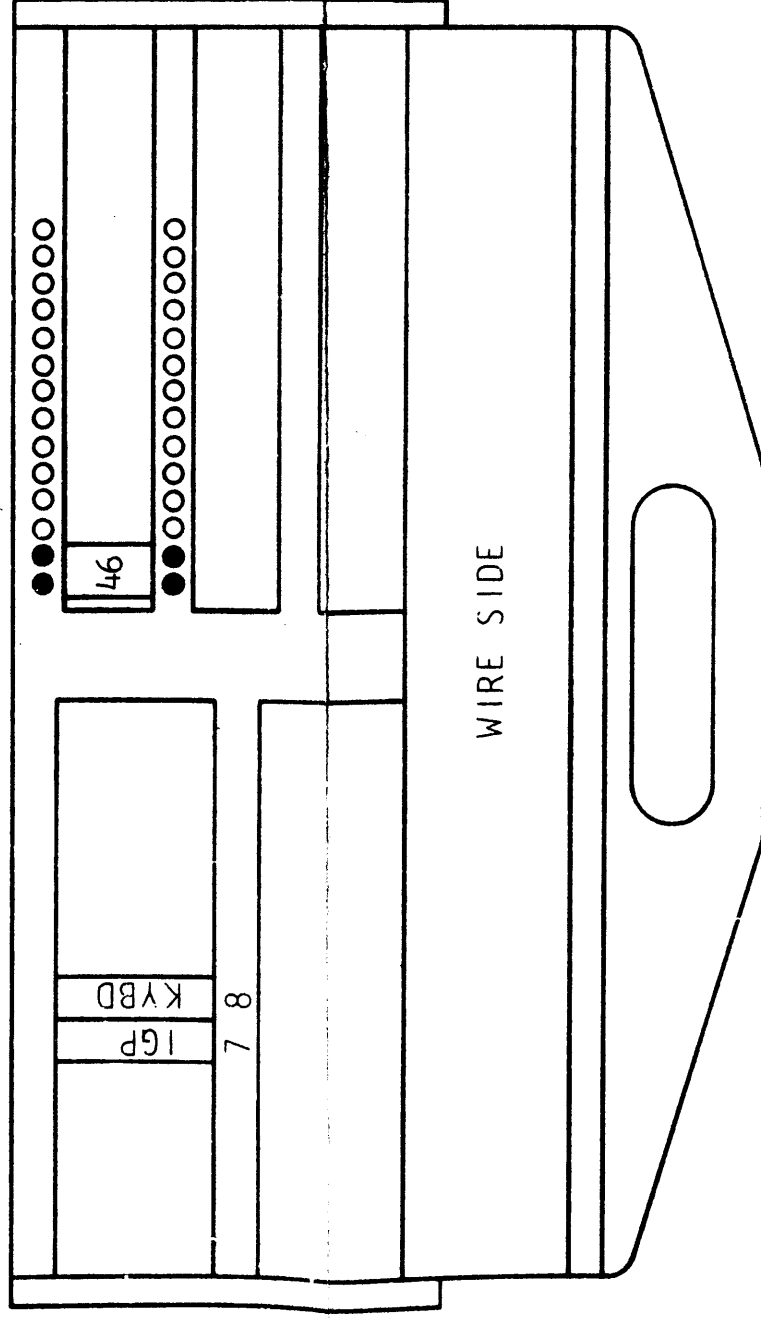
NOTES
 XI STANDARD WIRES ARE SHOWN FOR REFERENCE ONLY. CONSULT MACHINE LOGIC DIAGRAMS FOR DETAIL WIRING
 XII REMOVE THIS LEAD AND TAPE END

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	19 OCT 66	205745 B			X PRINT TO ENG. SPEC. NO. 895291	5405966
DESIGN	AG 15 SEP 66	14 FEB 67	205854				
DETAIL	RAS 15 SEP 66	12 JUL 67	206089				
CHECK	FT 15 SEP 66	15 JAN 69	920013				
APPRO	FT 15 SEP 66						

TERMINAL BLOCK 32
COMPONENT SIDE

MASTER

NAME	SECTION
IGP FEATURE	7, 8



ADD

PART NO.	DESCRIPTION	FROM	TO
196208	RELAY 46-4 POS		
205330	BRASS JPR	46 HA	46-1 N/O
205331	BRASS JPR	46 HB	46 PB
347820	DIODE	PLT-17-6 N/O	CATH-16 PA
5406358	CABLE		GATE
5406067	CABLE	KYBD	GATE
5406063	CABLE	CD TRANS	GATE
TRANSPORT	CABLE-STD	A05N	P6 OP

DELETE

PART NO.	DESCRIPTION	FROM	TO
GATE	JPR	*17 PA XII	17-3 OP
GATE	JPR	17-3 N/O	*17-6 N/O XII
GATE	JPR	*16 PA XII	*17-6 N/O XII
GATE	CABLE	A07R XII	*17-4 N/C XII
GATE	JPR	*17-4 N/C XII	17-6 OP

* DENOTES WIRE ENDS TO BE REMOVED AND TAPED

INTERNATIONAL BUSINESS MACHINES CORP.	
NAME	SYSTEMS DIAGRAM
DESIGN AG	15SEP66
DETAIL	MODEL
CHECK RAS	15SEP66
APPRO	FH 35EP66
DRAW	ID1 18OCT66
CHECK	

DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
19OCT66	205745 B			X PRINT TO ENG. SPEC. NO. 895291	
14FEB67	205854				
12JUL67	206089				
1OCT69	920094				

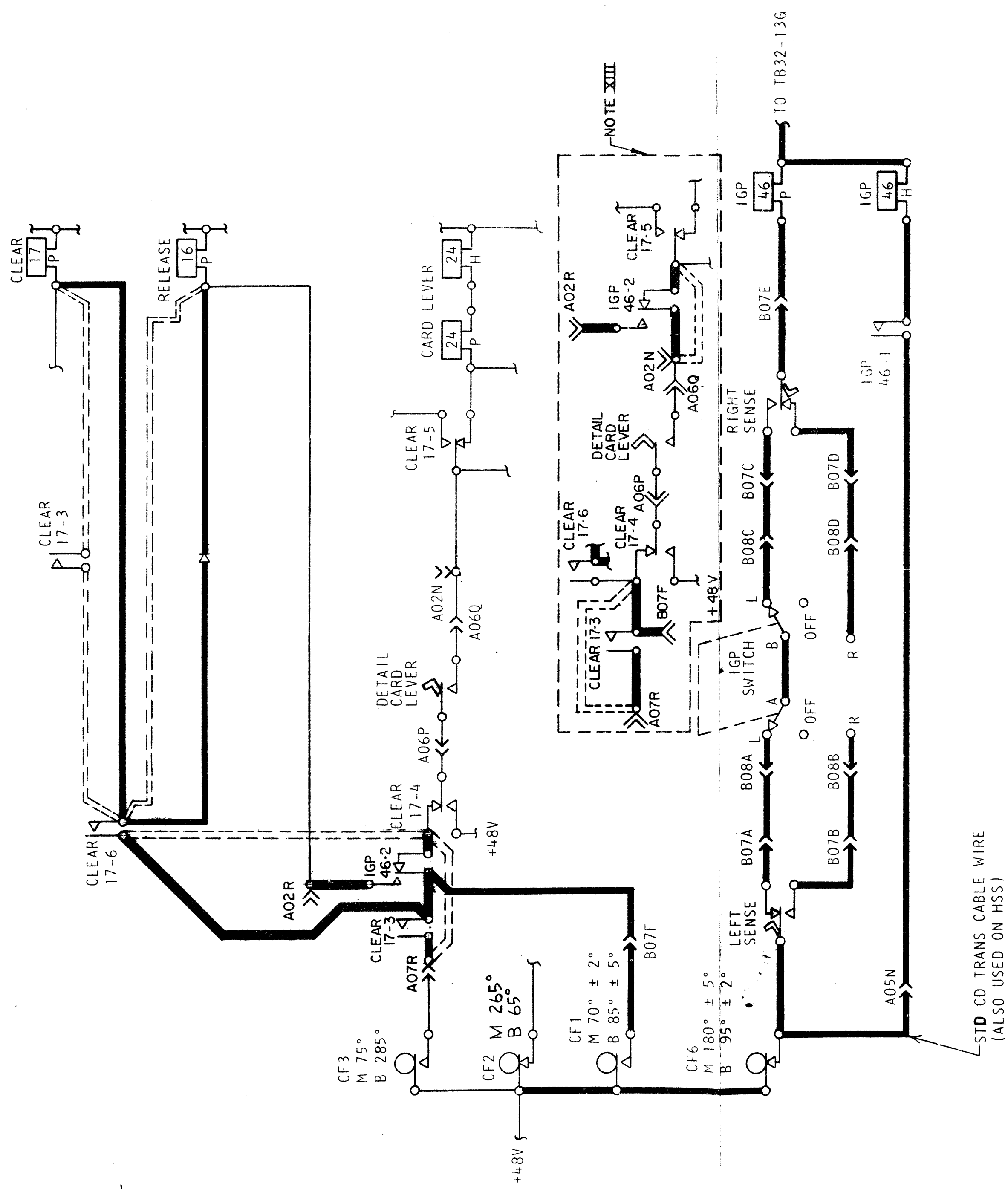
5405967

INTERSPERSED GANG PUNCH
IGP

SECT 7B

SECT 8B

MASTER



PART NAME	PART NO.
CAM CF-1	311384
CAM CF-6	315381
SWITCH IGP	382297
SWITCH RIGHT SENSE	5404396
SWITCH LEFT SENSE	5404296

- STANDARD WIRING
- - - REMOVED WIRING
- ADDED WIRING

NOTES
 XI STANDARD WIRES ARE SHOWN FOR REFERENCE ONLY. CONSULT MACHINE LOGIC DIAGRAMS FOR DETAIL WIRING
 XII REMOVE THIS LEAD AND TAPE END
 XIII WIRING BEFORE EC920094 OCT 1969

INTERNATIONAL BUSINESS MACHINES CORP.		CHARGE NO.		DATE		CHARGE NO.		DATE		CHARGE NO.		DATE		NOTE		DEVELOPMENT NO.	
NAME	SYSTEMS DIAGRAM	19OCT66	203745 B	19OCT66	203745 B	14FEB67	205854	12 JUL 67	206089	11 OCT 69	920094	X PRINT TO ENG. SPEC. NO.	895221				5405967
DESIGN	AG 15EP66	MODEL															
CHECK	PAS 15EP66	DRAW	IDI 16OCT66														
APPRO	PH 35EP66	CHECK															

5405968

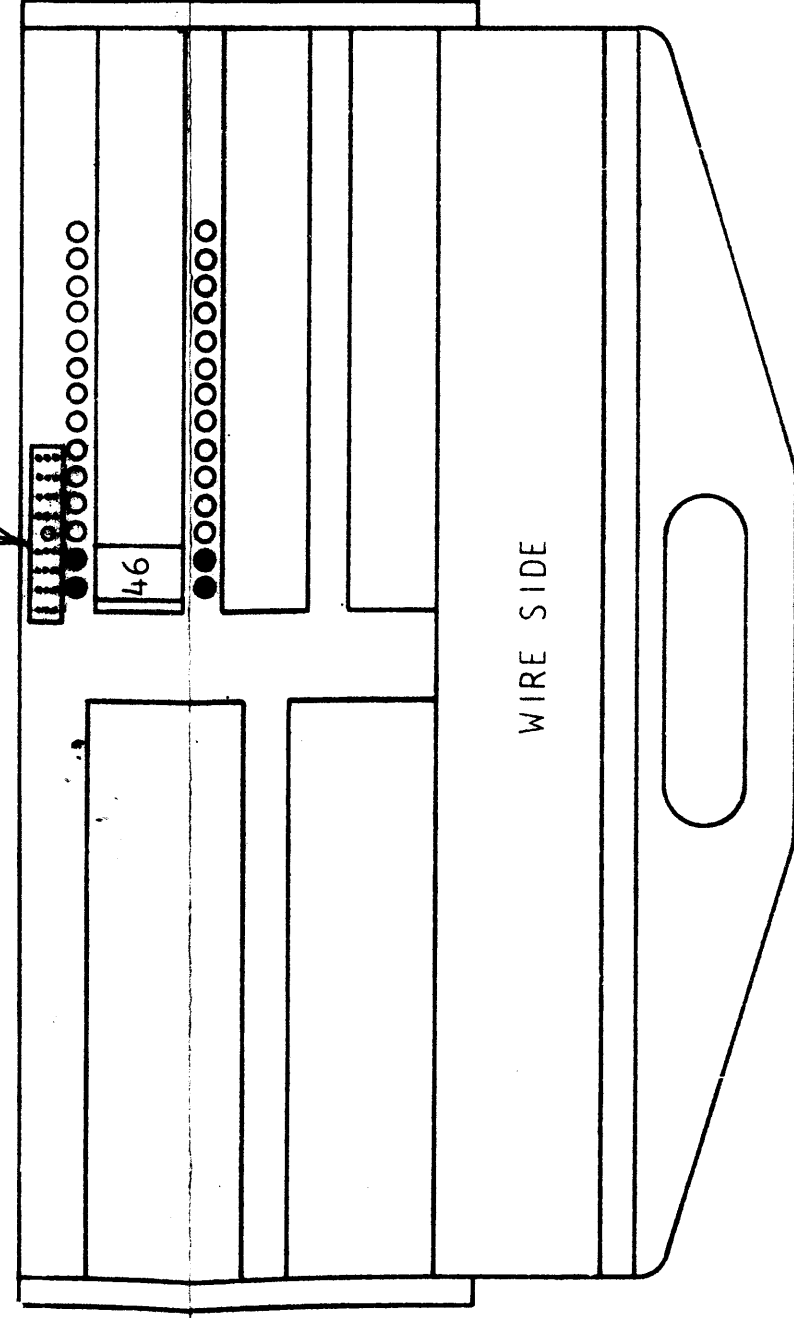
INDEX PAGE
29 WIRING DIAGRAM SUPPLEMENT
MODELS A, B & C

SHEET 1 OF 2

MASTER

NAME	SECTION
HSS FEATURE	9, 10, 11, 12
KYBD, VLCD AND CAM	P/N 5404109

EDGE CONNECTOR NO. 3



ADD

PART NO.	DESCRIPTION	FROM	TO
196206	RELAY 46-4 POS		
205329	BRASS JPR	46 PA	46-1 N/O
5820454	RESISTOR 180Ω	EC-G	EC-A
5400890	CAPACITOR .22 UF	EC-G	EC-B
347820	DIODE	PLT-32-12E	CATH-32-12B
TRANSPORT	CABLE ASM	A05N	P6 OP
205331	BRASS JPR'S USED	48-2 N/O	48-3 N/O
205331	WITH HSS/VLCD	48-2 OP	48-3 OP
5406353	CABLE		GATE
STD TRANS	CABLE WIRES	ECA	A05P
129245	JUMPER	ECB	P1 COM
347820	DIODE	EC3-3b	46-4N0
		PLT-EC3-2b	CATH-EC3-2G

DELETE

PART NO.	DESCRIPTION	FROM	TO
GATE	CABLE	A08R XII	*23-4 N/C XII
GATE	CABLE	A08J XII	*10-1 N/O XII
GATE	CABLE	*A08K XII	14-4 OP XII

ADD

PART NO.	DESCRIPTION	FROM	TO
5406353	CABLE	TB32-8F	46-3 N/C XIV

DELETE

PART NO.	DESCRIPTION	FROM	TO
GATE	CABLE	TB32-8F	A08J XIV

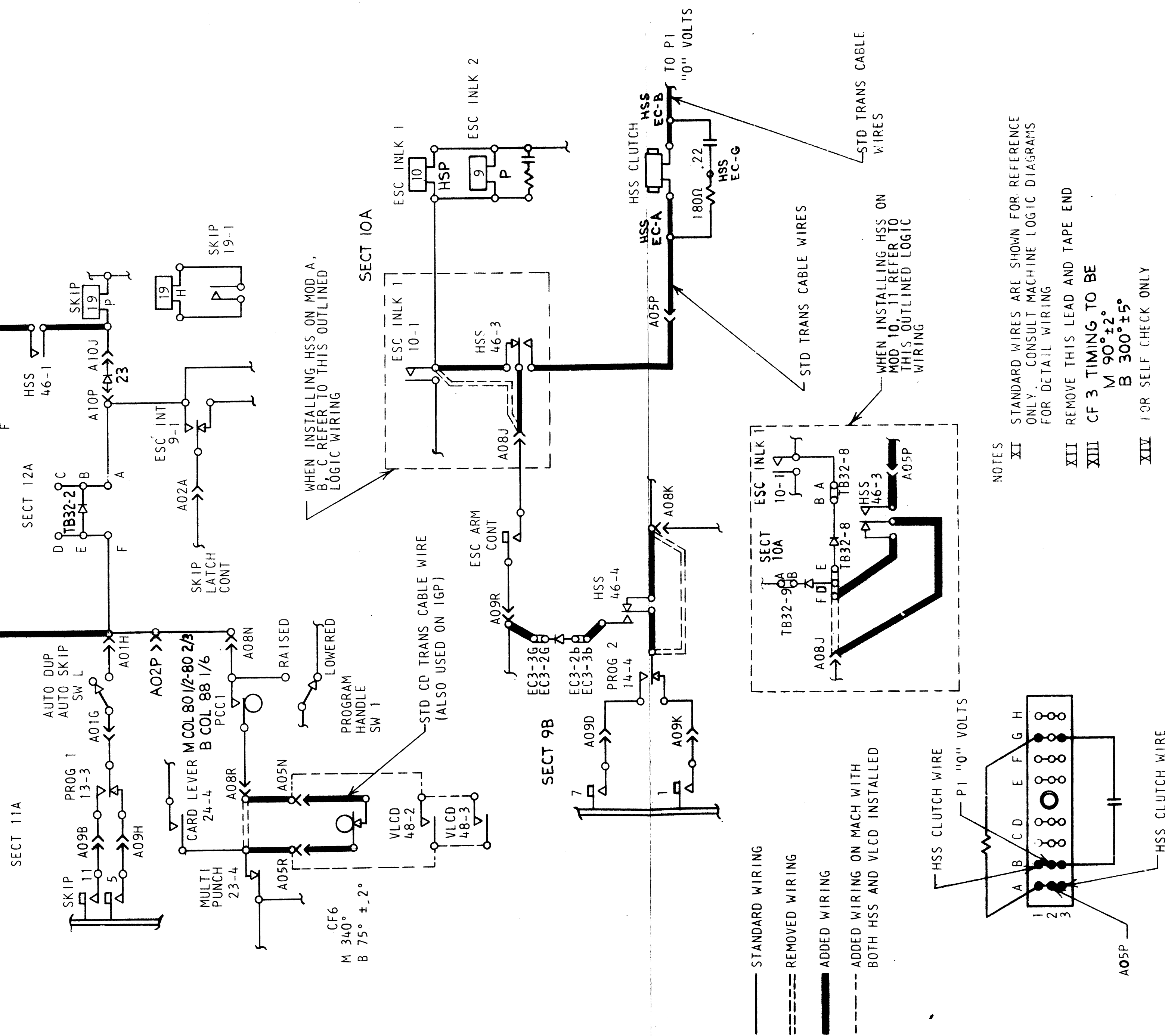
* DENOTES WIRE ENDS TO BE REMOVED AND TAPED

INTERNATIONAL BUSINESS MACHINES CORP.			
NAME	SYSTEMS DIAGRAM	DATE	CHANGE NO.
AG	MODEL	19OCT66	205745 B
DETAIL		14FEB67	205854
CHECK	RAS	12 JUL 67	206089
APPRO	FH	2FEB68	206295
		11 OCT 69	92009 4

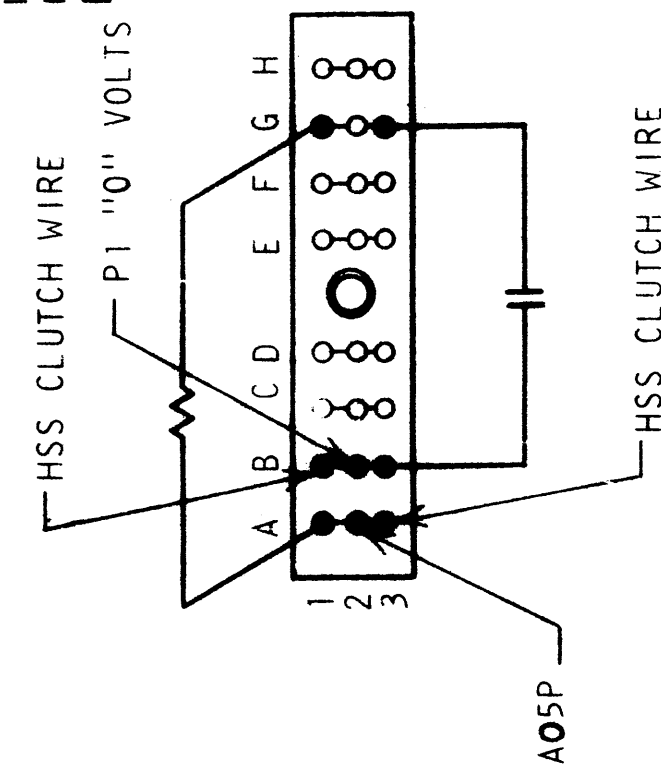
NOTE	CHANGE NO.	DATE	DEVELOPMENT NO.
X PRINT TO ENR. SPEC. NO. 895291			

HIGH SPEED SKIP
HSS

MASTER



- STANDARD WIRING
- - - REMOVED WIRING
- ADDED WIRING
- - - ADDED WIRING ON MACH WITH BOTH HSS AND VLCD INSTALLED



EDGE CONNECTOR IS LOCATED ON HSS UNIT

- NOTES
- XI STANDARD WIRES ARE SHOWN FOR REFERENCE ONLY. CONSULT MACHINE LOGIC DIAGRAMS FOR DETAIL WIRING
 - XII REMOVE THIS LEAD AND TAPE END
 - XIII CF 3 TIMING TO BE
M 90°±2°
B 300°±5°
 - XIV FOR SELF CHECK ONLY

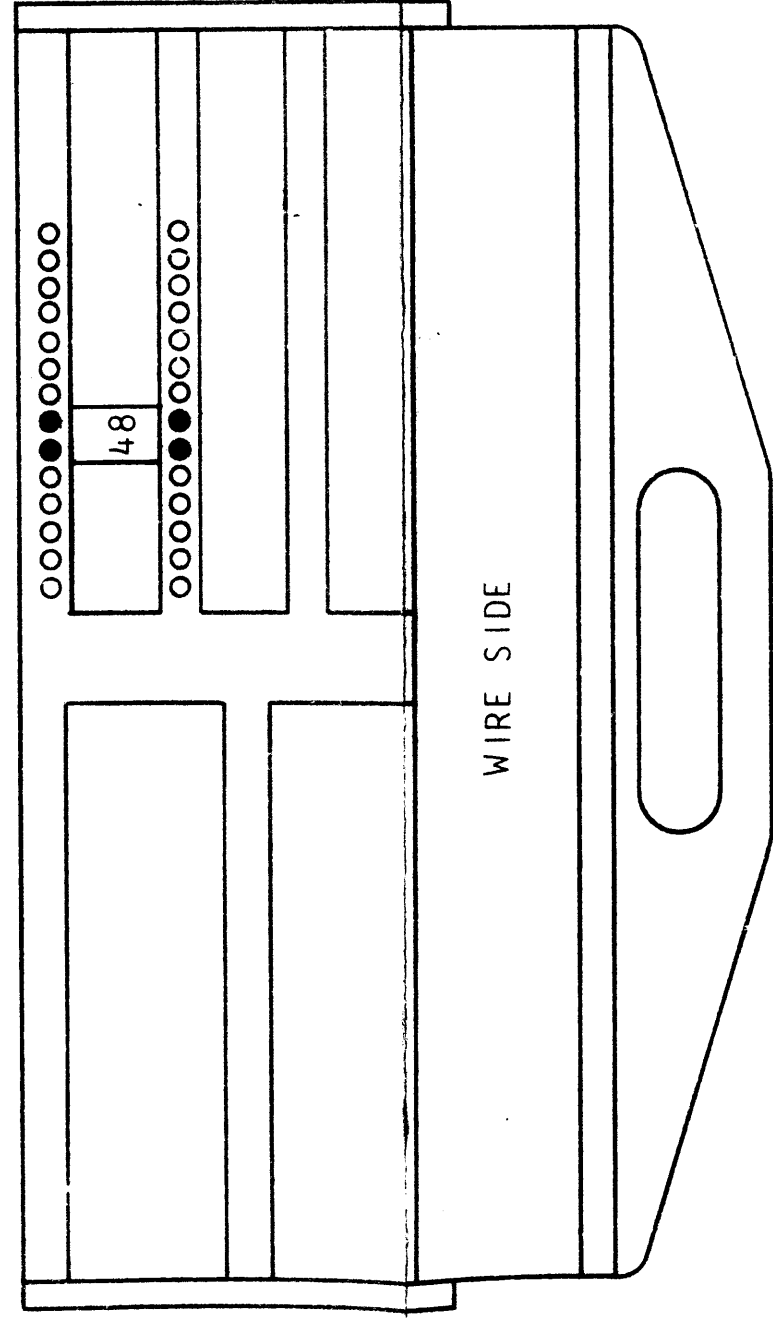
INTERNATIONAL BUSINESS MACHINES CORP.		SYSTEMS DIAGRAM		DATE		CHANGE NO.		DATE		CHANGE NO.		NOTE	
NAME	AG	DESIGN	AG	19OCT66	205745 B	14FEB67	205854					X PRINT TO ENG. SPEC. NO.	
DETAIL	RAJ	CHECK	RAJ	12JUL67	206089	2FEB68	206795					895291	
APPRO	EH	APPRO	EH	19OCT66	920094	1OCT69	920094						

MASTER

NAME	SECTION
VLCD FEATURE	9, 10, 11, 12
KYBD, VLCD AND CAM	P/N 5404109

ADD

PART NO.	DESCRIPTION	FROM	TO
205331	BRASS JPR	48 HA	48-1 N/O
347820	DIODE	PLT-32-11E	CATH-32-11B
347820	DIODE	PLT-32-10E	CATH-32-10B
347820	DIODE	PLT-32-10G	CATH-32-10C
347820	DIODE	PLT-48PB	CATH-48HB
5404119	DIODE-SLIP ON	PLT-A08L	CATH-A07P
196208	RELAY 48-4 POS		
5406363	CABLE		GATE
	STD CARD TRANS	A05M	AUX MAG
	CABLE WIRES	AUX MAG	INT MAG



DELETE

PART NO.	DESCRIPTION	FROM	TO
GATE	CABLE	A03Q	* A08L XII
GATE	CABLE	* A01H XII	* A02P XII

* DENOTES WIRE END(S) TO BE REMOVED AND TAPED

INTERNATIONAL BUSINESS MACHINES CORP.			
NAME	SYSTEMS DIAGRAM	DATE	19OCT66
DESIGN AG	15EP66	CHANGE NO.	205745 B
DETAIL	MODEL		205854
CHECK	RAS 15EP66	DATE	14FEB67
APPRO	FH 15EP66	DATE	12 JUL 67
	DRAW	DATE	206089
	CHK	DATE	
	CHK	DATE	

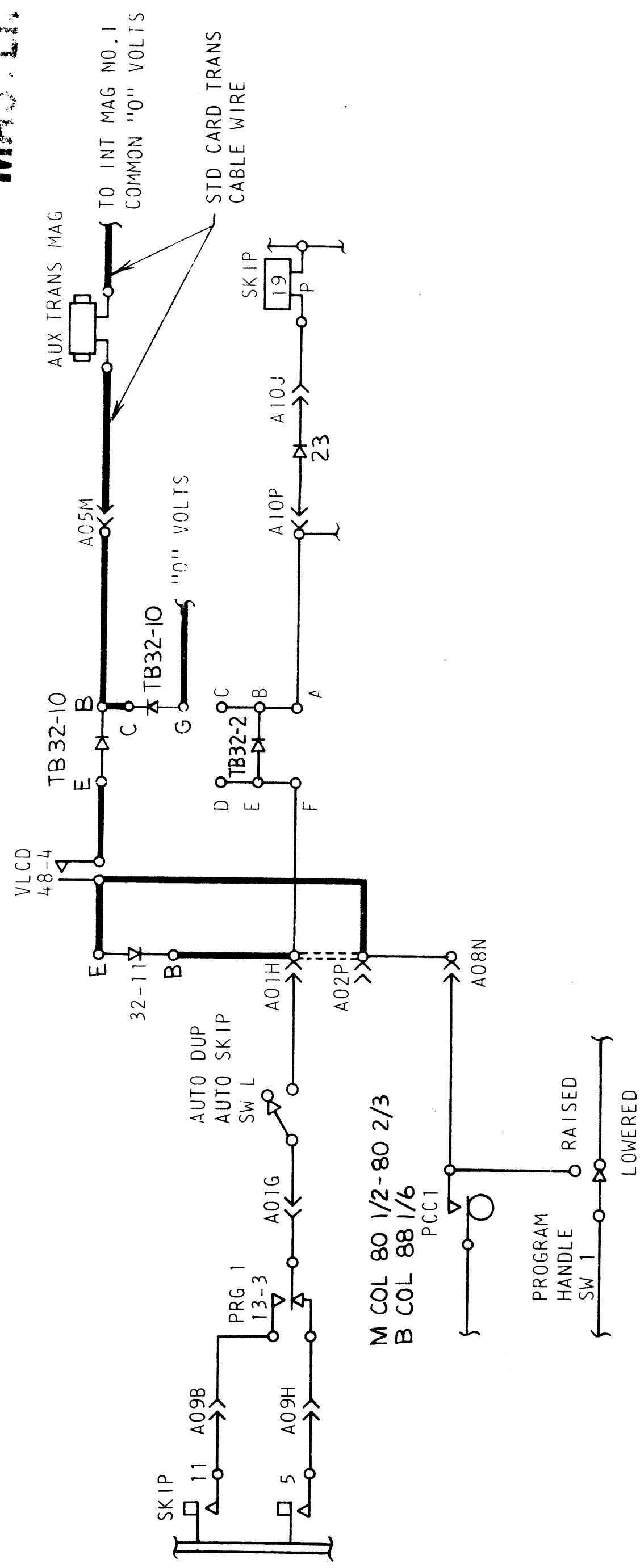
DEVELOPMENT NO.	NOTE
5405969	X PRINT TO ENG. SPEC. NO. 895291

VARIABLE LENGTH CARD DEVICE
VLCD

SECT 11A

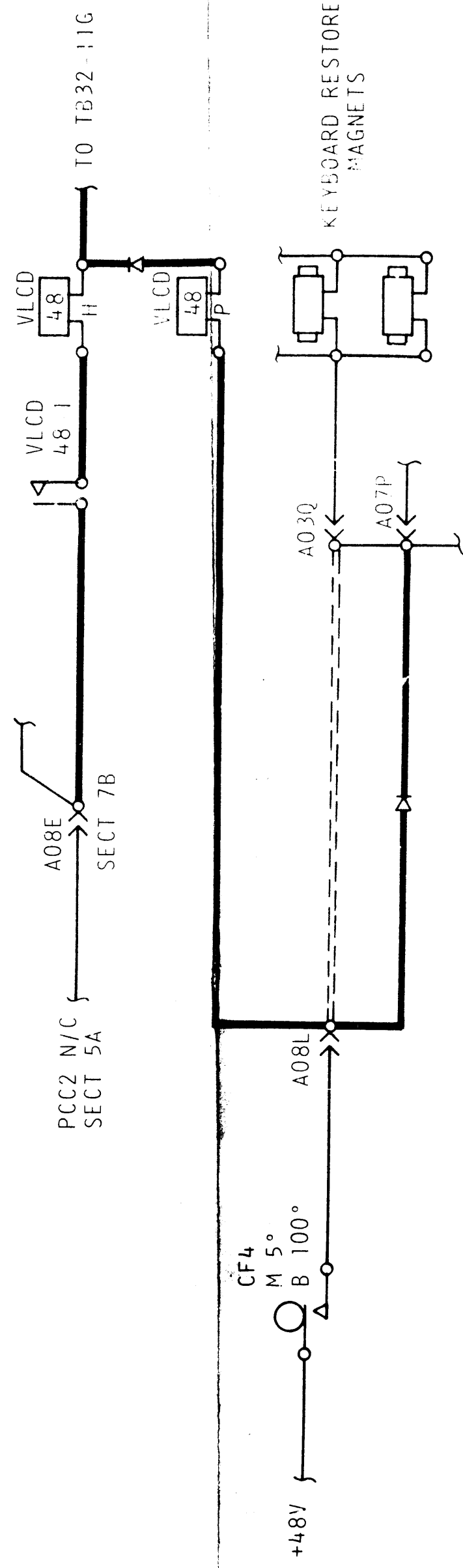
SECT 12A

MASTER

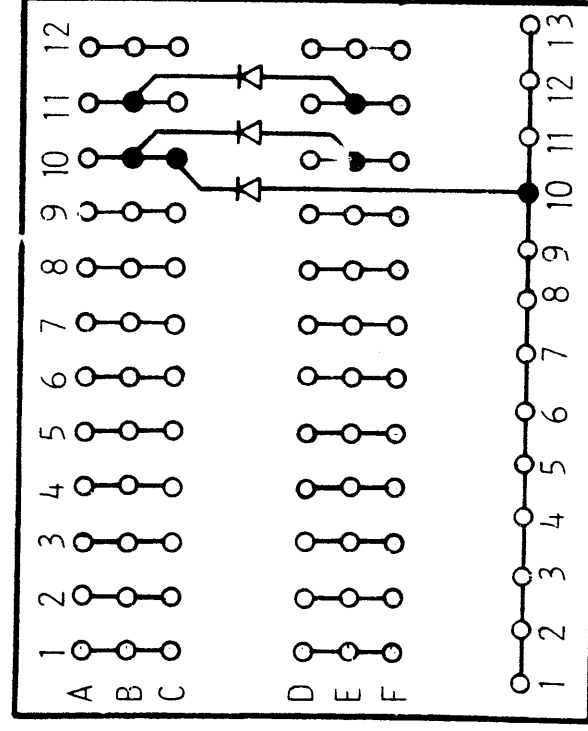


SECT 9B

SECT 10B



- STANDARD WIRING
- - - - - REMOVED WIRING
- ADDED WIRING



NOTES

- XI STANDARD WIRING IS SHOWN FOR REFERENCE ONLY. CONSULT MACHINE LOGIC DIAGRAMS FOR DETAIL WIRING.
- XII REMOVE THIS LEAD AND TAPE END

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE
NAME	SYSTEMS DIAGRAM	19OCT66	205745 B			X PRINT TO ENG. SPEC. NO. 893291
DESIGN	AG 15SEP66	14FEB67	205854			
CHECK	RAS 15SEP66	12JUL67	206089			
APPRO	FH 35SEP66					

5404109

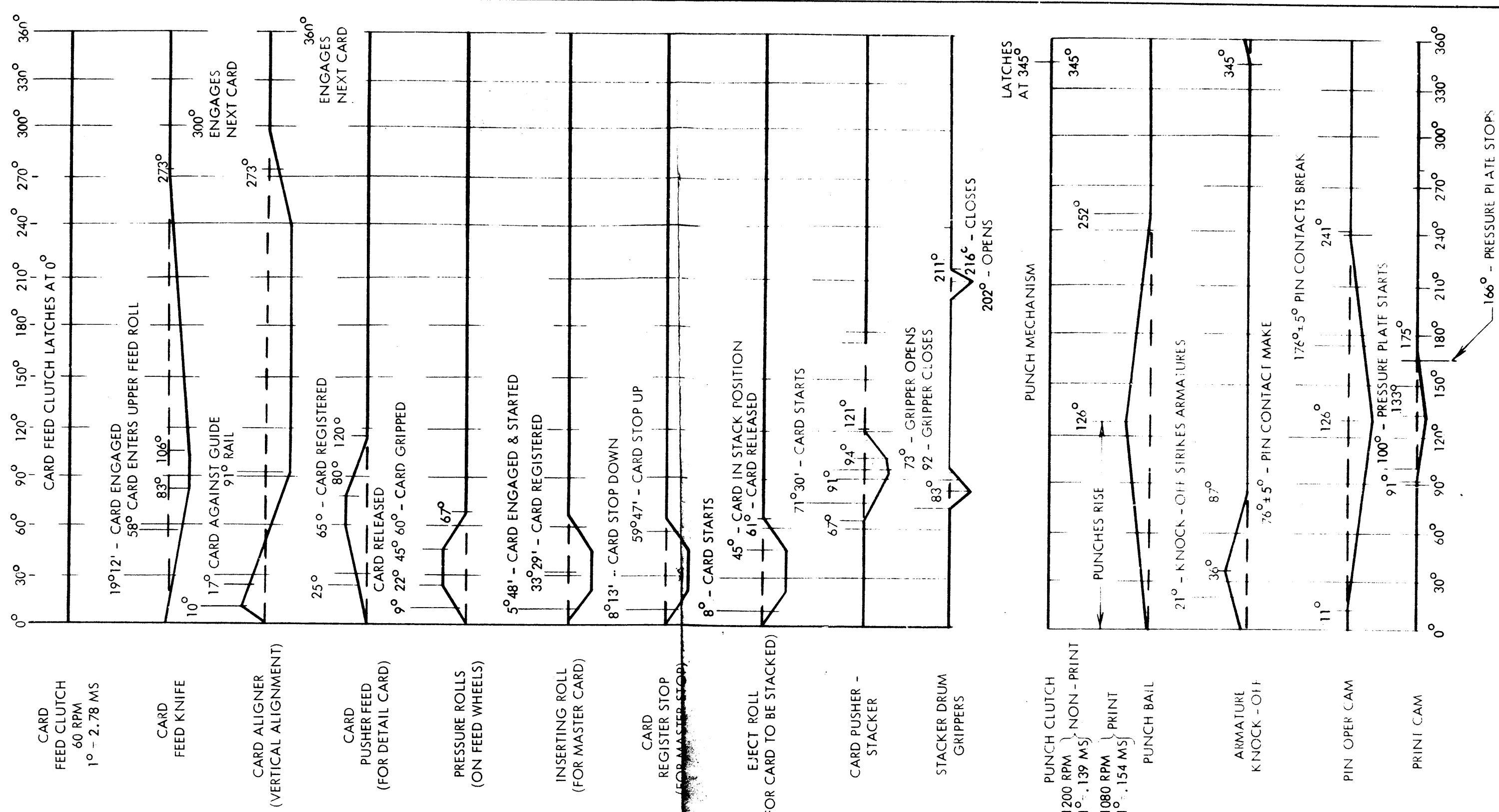
KEYBOARD VLCD & CAM REFERENCE

0229.100

STEM POS	GRAPHIC		CARD CODE		BAILS		LATCHES	
	ALPHA	NUMERIC	ALPHA	NUMERIC	ALPHA	NUMERIC	ALPHA	NUMERIC
1		ERROR RESET						
2		MULTI PUNCH						
3		NUMERIC						
4	Q	+	11-8	12-8-6	13-9	12-8-6		
5	A		12-1		15-3			
6	@	#	8-4	8-3	9-7	8-2		
7	Z		0-9		1-11			
8	W	-	0-6	0-8-5	14	14-8-4	X	
9	S	>	0-2	0-8-6	14	14-8-6	X	
10	%	.	0-8-4	0-8-3	14-9-7	14-8-2		
11	X	?	0-7	0-8-7	14	14-8	X	X
12	E	)	12-5	11-8-5	15	10-8	X	X
13	D	:	12-4	8-2	15-7	8		X
14	*	S	11-8-4	11-8-3	7-9	8-2	X	X
15	C	"	12-3	8-7	15-5	8		X
16	R	¢	11-9	12-8-2	13-11	12-8		X
17	F	;	12-6	11-8-6	15	10-8	X	X
18	<	*	12-8-4	12-8-3	9-7	8-2	X	X
19	V	=	0-5	6-8	1	8-6		X
20	T	0-8-2	0-3	0-8-2	14-5	14-8		X
21	G	—	12-7	11-8-7	15	10-8	X	X
22	MASTER CARD							
23			12-2	11-8-2		11-8	X	X
24	Y	|	0-8	12-8-7	1-9	12-8		X
25	H	!	12-8	8-5	15-9	8-4		
26	DUP							
27	N	(	11-5	12-8-5	13	12-8	X	X
28	U	1	0-4	1	1-7			X
29	J	4	11-1	4	13-3			X
30	-	-	11	11	13	10		
31	M	7	11-4	7	13-7			X
32	I	2	12-9	2	15-11			X
33	K	5	11-2	5	13	4		X
34	/	0	0-1	0	14-3	14		
35	,	8	0-8-3	8	1-9-5	8		
36	0	3	11-6	3	13	2		X
37	L	6	11-3	6	13-5	6		
38	SPACE							
39	.	9	12-8-3	9	15-9-5			X
40	P	&	11-7	12	13	12		X
41	SKIP							
42	RELEASE							
43	AUX DUP							
44	FEED							
45	REGISTER							
46	PROG 2							
47	ALPHA							
48	LEFT ZERO							
49	LEFT ZERO							
50	PROG 1							

ODD NUMBER BAILS ON RIGHT SIDE OF KEYBOARD
EVEN NUMBER BAILS ON LEFT SIDE OF KEYBOARD

MECHANICAL TIME CHART
CARD FEED MECHANISM



INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	7-13-65	205333	X PRINT TO ENG. SPEC. NO.	
DESIGN	02.29.10.0	25 MAY 66	205639	895291	5404109
CHECK	526-65				
APPROV	RLJ 526-65				
DETAIL	02.29.10.0				
GT	4-19-65				
MODEL	526-65				
CHKM	DJR 4-21-65				