

IBM[®] **Customer Engineering** **Instructional** **Systems Diagrams**

FOR INSTRUCTIONAL USE ONLY

7330 **Magnetic Tape Unit**

These Instructional Systems Diagrams are reduced-size systems pages for use in class by Customer Engineering Education. They are not necessarily at the engineering level of the latest production machines, and should not be used in trouble-shooting.

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MACHINE TYPE 7330

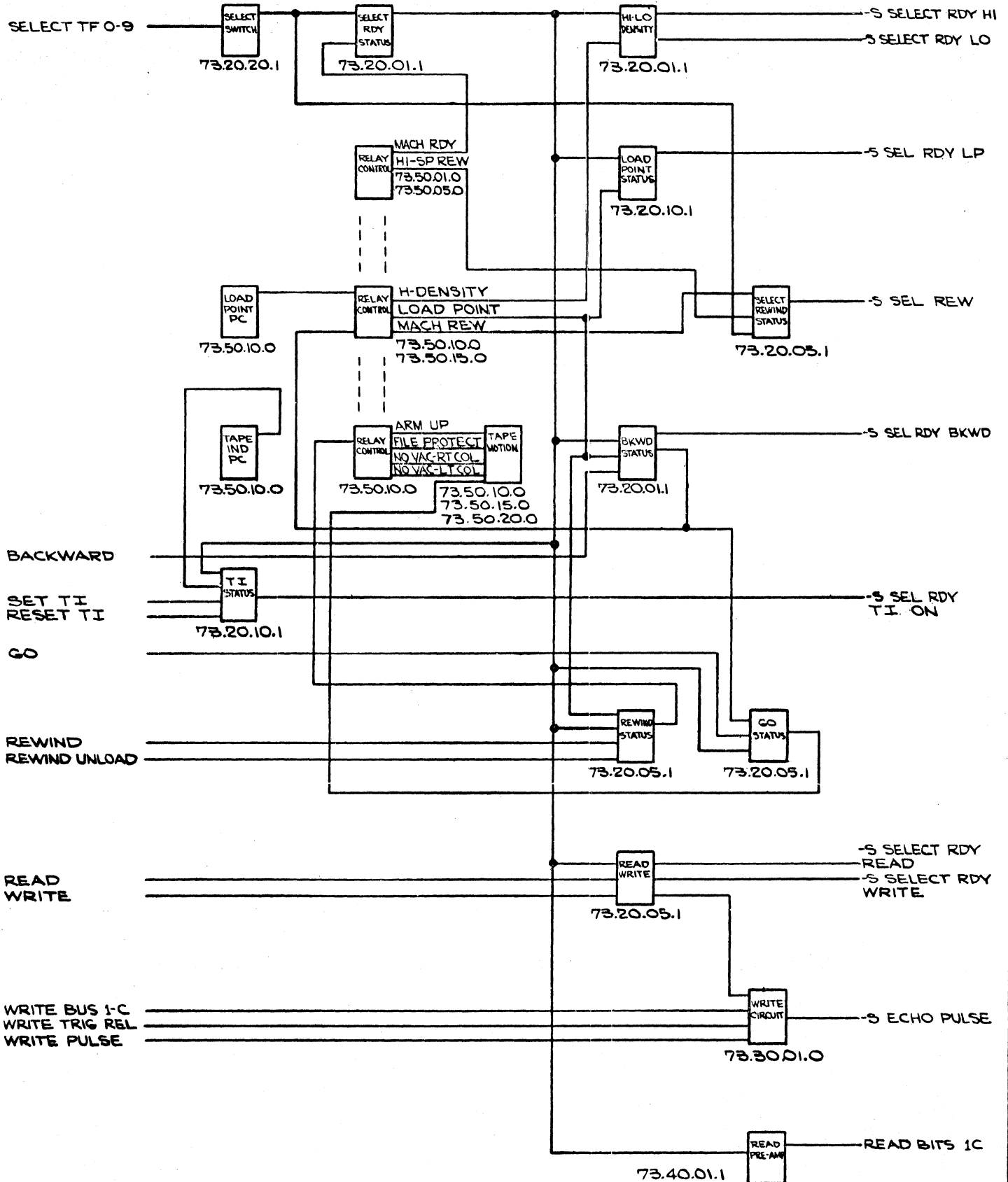
2-13-63

LOGIC NO.	DESCRIPTION	PART NO.	ENG CHG
73.00.10.0	BLOCK DIAGRAM	0556865	248747
73.00.20.0	EXTERNAL TO TD	0556889	248150G
73.00.30.0	TD TO EXTERNAL	0556890	248150G
73.00.40.0	WRITE CALL TO TAPE UNIT	0594278	252274
73.00.50.0	REWIND UNLOAD & LD REW	0594277	252274
73.04.01.0	LOCATION CHARTS	5323381	R251999
73.04.02.0	EC LAYOUT	5323383	251020
73.04.03.0	VOLT DISTRIBUTION -48	5323382	R251999
73.04.04.0	VOLT RETURN -48	5323384	251020
73.04.05.0	CIR CD LOC CHT 00A6 2 SHEETS	5323386	251020
73.04.06.0	T/C CONNECTOR RECEPTACLE	0556888	248150G
73.04.07.0	CIR CARD LOC CH 00B5	0594287	251022
73.04.08.0	WRITE HEAD WIRING	0556897	251009
73.20.01.1	SELECT BKWD REWIND	5323391	252695
73.20.05.1	READ WRITE GO REW UNLD	5323392	252695
73.20.10.1	LP TI TAPE BREAK	5323393	251020
73.20.15.1	RT LT MTR CLUTCH BKWD CLUTCH	5323394	252271
73.20.20.1	SELECT	0556871	251009
73.20.25.1	LINE CONVERSION COMMAND	0556872	249984
73.30.01.1	WRITE TR 1 2 3 4	0556873	250407
73.30.01.2	WRITE TR A B C	5323395	251020
73.30.01.3	DELAY LINES	0556858	249984
73.30.05.1	LINE CONVERSION WRITE	0594285	251022
73.40.01.1	READ PREAMPS	0556876	251009
73.50.01.0	RELAY LOGIC	0594258	251999
73.50.05.0	RELAY LOGIC	0594259	251999
73.50.10.0	RELAY LOGIC	5323385	251020
73.50.15.0	MOTION CONTROL	5323380	251020
73.50.20.0	INPUT PWR 2 SHEETS	5323378	251020
73.50.30.0	-48 VOLT POWER SUPPLY	5323379	252394
73.50.35.0	7330 TESTER	0556828	252280
A0.00.04.2	+6 VOLT REGULATOR	0337513	R251020
A0.00.04.3	+12 VOLT REGULATOR	0337514	R251020
A0.00.04.5	6-12 VOLT PWR SUP	0337521	R251020

736865

BLOCK DIAGRAM

7300.10.0



INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME				11-21-60	248150-G			X PRINT TO ENG. SPEC. NO. 859291	7300.10.0
73.00.10.0				1-11-61	248747				
DESIGN RAY 3-24-60 MODEL 7350									
DETAIL 10 8940									
CHECK RAY 8-11-60 DRAW								DWG. SIZE C	7300.10.0
APPRO LBF 10-18-60 CHECK									

P.N. 556889
FROM EXTERNAL

REFERENCE PAGE
EXTERNAL TO T.D.

PG 1 OF 1

73.00.20.0
TO T.D.

PAGE

NAME

NAME

PAGE

SEL TF 0	73.20.20.1
SEL TF 1	73.20.20.1
SEL TF 2	73.20.20.1
SEL TF 3	73.20.20.1
SEL TF 4	73.20.20.1
SEL TF 5	73.20.20.1
SEL TF 6	73.20.20.1
SEL TF 7	73.20.20.1
SEL TF 8	73.20.20.1
SEL TF 9	73.20.20.1
REWIND CALL	73.20.25.1
BKWD	73.20.25.1
SET READ	73.20.25.1
SET WRITE	73.20.25.1
GO	73.20.25.1
REW UNLD CALL	73.20.25.1
II ON	73.20.25.1
II OFF	73.20.25.1
WR BUS 1	73.30.05.1
WR BUS 2	73.30.05.1
WR BUS 4	73.30.05.1
WR BUS 8	73.30.05.1
WR BUS A	73.30.05.1
WR BUS B	73.30.05.1
WR BUS C	73.30.05.1
WR TR REL	73.30.05.1
WR PULSE	73.30.05.1

P.N. 556890
FROM T.D.

REFERENCE PAGE
T.D. TO EXTERNAL
NAME

PG 1 OF 1
NAME PAGE

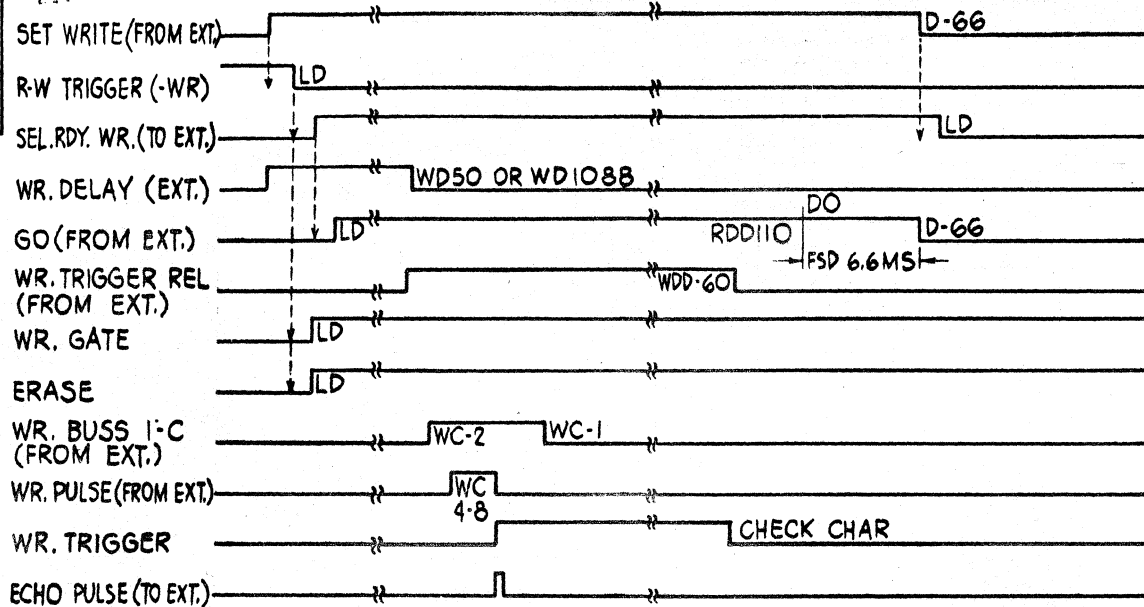
73.00.30.0
TO EXTERN

PAGE
73.20.25.1 SEL RDY H1
73.20.25.1 SEL REWIND
73.20.25.1 SEL RDY LO
73.20.25.1 SEL RDY BKWD
73.20.25.1 SEL RDY RD
73.20.25.1 SEL RDY WR
73.20.25.1 SEL RDY LP
73.20.25.1 SEL RDY TI ON
73.30.05.1 ECHO PULSE
73.30.05.1 RD BIT 1
73.30.05.1 RD BIT 2
73.30.05.1 RD BIT 4
73.30.05.1 RD BIT 8
73.30.05.1 RD BIT A
73.30.05.1 RD BIT B
73.30.05.1 RD BIT C

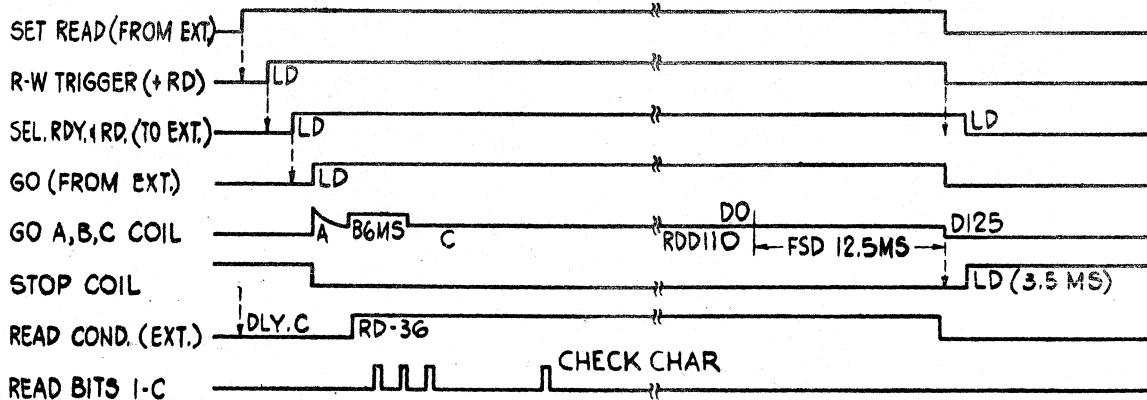
594278

WRITE CALL TO TAPE UNIT

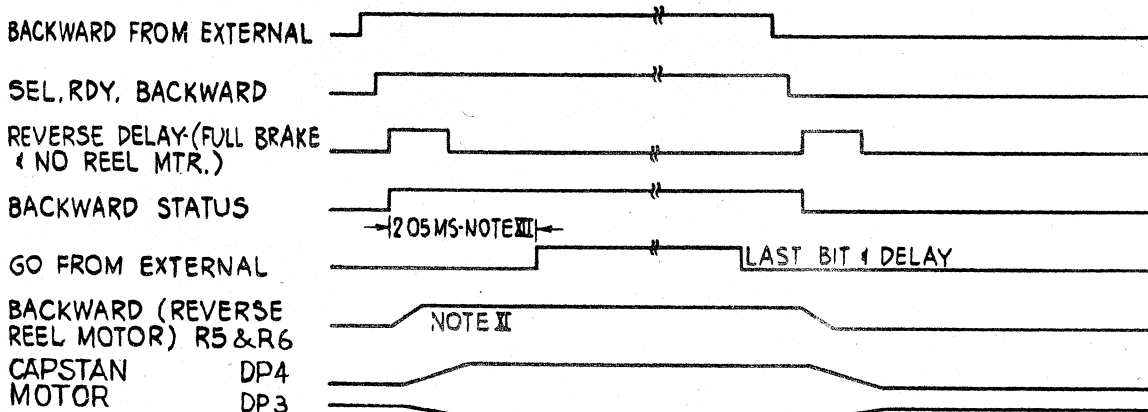
73.00.40.0



NOTE: LD IS LOGICAL DELAY INC. RESPONSE TIMES
READ CALL TO TAPE UNIT



NOTE: LD IS LOGICAL DELAY INC. RESPONSE TIMES
BACKWARD CALL TO TAPE UNIT



NOTES: I R5 & R6 POINTS WILL TRANSFER DURING REVERSE DELAY S.S. TIME
III EXTERNAL WILL ALLOW 205MS DELAY FOR CHANGING DIRECTION OF CAPSTAN MOTOR EITHER DIRECTION

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		4-17-62	250407			X PRINT TO ENG. SPEC. NO. 895291	594278
TIMING CHART		10-22-62	252274				
DESIGN	SPE 3-6-62	MODEL	7330				
DETAIL							
CHECK		DRAW	GT 3-10-62				
APPRO	RAR 3-6-62	CHECK	TNN 3-12-62				73.00.40.0

594277

REWIND UNLOAD &
LOAD REWIND TO

MASTER

73.00.50.0

HS REWIND PICK

HS REWIND-1(R110)

ARM PICK (R4)

ARM UP 1(R106)

(DP 2)

RETURN LP (R111)

HS REWIND 2 (R104)

MACH READY(R101)

ARM UP 2 (DP 1)

CAPSTAN DRIVE

MOTOR CIRCUIT

NOT FILE PROTECT(R109)

MACH VAC (R114)

HS REWIND 3 (R1)

HS REWIND 4 (R2)

TIMER MOTORS

TIMER 2

TIMER 1

LOAD POINT LP(R107)

LOAD POINT LT(R107)

REWIND PICK(73.20.01.1)

MACH REWIND (R102)

NOT FILE PROTECT(R109)

RETURN TO LP (R111)

-W MACH REWIND

+W MACH READY

+S SEL & READY(73.20.01.1)

MACH REWIND SS(73.20.05.1)

BACKWARD (R5) & (R6)

GO

LP PHOTO CELL

LP DELAY SS

LP PICK SS

LP RELAY (R107)

-S MACH REWIND 1 73.20.01.1

NOTE XI DP1 & DP2 WILL PICK AND R106 WILL DROP OUT WHEN REWIND ARM IS LOWERED.
 NOTE XII THERE IS A LOGICAL DELAY DRAWN IN AND MUST OCCUR BEFORE ANY LINE CAN CAUSE A CHANGE.
 NOTE XIII RELAY POINTS ARE SHOWN THAT CAUSE A CHANGE

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		4-17-62	250407			X PRINT TO ENG. SPEC. NO. 895291	594277
TIMING CHART		10-22-62	252274				
DESIGN	SPC 3-6-62 MODEL 7330						
CHECK							
APPRO	RAK 3-9-62	CHECK	AKK 3-8-62				73.00.50.0

LOCATION CHARTS

73.04.01.0

LOCATION	PAGE NUMBER
1 AND 2	73.50.01.0
3 AND 4	73.50.05.0
5 AND 6	73.50.10.0
7 AND 8	73.50.15.0
9 AND 10	73.50.20.0
11 AND 12	73.50.20.0
13 AND 14	73.50.30.0

WIRE CONTACT RELAYS

RELAY NO.	SIZE	TYPE	PART NO.	COIL	POINTS	NAME
101	6	S	196198	B1 B1	B1 A1 A3 B1 B5 A5	MACH RDY
102	6	S	196198	B1 B1	B1 B3 A5 A5 B3 B1	MACH REW
104	4	S	196208	B1 B1	B4 B3	H.S. REW-2
106	6	S	196198	B2 B2	A3 B1 A2 A5 A4 B2	ARM UP
107	4	LATCH	186685	B2 B2	B1 B1 A5 B2	L.P. PICK
109	4	S	196208	B3 B3	B6 B6 A5 A6	NOT F.P.*2
110	6	S	196198	B1 B1	B1 B3 B2 B4 A5	H.S. REW-1
111	4	S	196208	B3 B3	B1 B3	RTN LP
114	6	S	196198	B4 B4	B1 B3 A4 B3 A5 B2	MACH VAC

DOUBLE POLE RELAYS

RELAY NO.	PART NO.	COIL PV	POINTS	NAME
1	594284	B3	B7 B11	ARM DOWN
2	594284	B3	B7 A11	LOADED
3	5323485	B2	A11 A11	CAPSTAN MTR
4	5323485	B2	A11 A11	CAPSTAN MTR

LIGHTS

NAME	LOC
T.I. LAMP	B2
L.P. LAMP	B2
TAPE INDICATE	B2
SELECT	B2
FUSE	B2
FILE PROTECT	B5
READY	A5
HI DENSITY	B6
LO DENSITY	B6

MOTORS

NAME	LOC
LT REEL MOTOR	A7
RT REEL MOTOR	A7
TIMER MOTOR	B11
VACUUM MOTOR	B11
CAPSTAN MOTOR	A11
PRESS. BLOWER MTR	B11
PRESSURE BLOWER MTR	B11

FUSES

NO.	TYPE	PART NO.	LOC
1	1MIC	509780	A12
2	1MIC	509780	A12
3	1MIC	509780	A12
4	3FNA	334829	B11
5	3FNA	334829	B11
6			
7			
8			
9	2MIC	322892	B14
10	7MIC	503976	B14

DUO RELAYS

RELAY NO.	PART NO.	COIL	POINTS	NAME
R1	124843	B4	B7 B4 A7 B11	H.S. REW-3
R2	124843	B4	B7 B7 A5 A7	H.S. REW-4
R3	111351	B2	A1	LITES
F.P.1	556929	B3	A3 B3	NOT F.P.1
R4	111351	B4	A8	ARM PIC
R5	124843	B4	A7 A7 B7 B7	BKWD
R6	111351	B4	B2	BKWD-2

R.C. BLOCKS

R.C. NO.	POS
103	B1 B1 B2 B1
108	B3 B3 B4
112	B4 B4 B4
113	B3 B3 B2 B2

SELENIUM RECTIFIERS

NO.	PART NO.	LOC
SR1	315902	B8
SR2	315902	B8
SR3	315902	B7

SWITCHES

NAME	LOC
LO SPD REW	B1
SELECT	—
POWER CONT. SWITCH	B9
HI-LO DENSITY SWITCH	B6
MACHINE VAC RIGHT	A4
MACHINE VAC LEFT	B4
RT COL VAC SWITCH	B6
LT COL VAC SWITCH	B6
START	B1
RESET 1	A1
FUSE BAIL SW	A1
HI SPD REW	B1
ARM DOWN	B2
DOOR INTERLOCK	A1
REEL RELEASE BUTTON A	A3
TIME DELAY SWITCH	B7
REEL RELEASE BUTTON B	B8

RESISTORS

RES NO.	VALUE	LOC
1	100Ω 100W	B11
3	75Ω 10W	B8
4	75Ω 10W	B8
5	500Ω 25W	B8
6		
7	350Ω 10W	B8
8	50Ω 25W	B8
9	1.5K .5W	B6
10	10Ω 100W	B7
11	50Ω 100W	B14
12	10Ω 100W	B7
13	25Ω 25W	B7
14	500Ω 25W	B7
15	50Ω .5W	A6
16	1000Ω .2W	B2
17	500Ω .5W	B2
19	150Ω 10W	B8
21	1.5K .5W	B6
22	22Ω 1/2 W	A11
23	22Ω 1/2 W	A11
24	22Ω 1/2 W	A11
25	22Ω 1/2 W	A11
26	22Ω 1/2 W	A11

DIODES

NO.	TYPE	LOC
1	AM	A7
2	AM	A7
3	AM	A7
4	AM	A7
5	AM	B8
7	AM	A8
8	AM	A8
11	AM	A8
13	AM	B7
14	AM	B1
15	AM	B2
16	AM	B2
17	AM	B4
18	AM	A5
19		

IN PROCESS

252395

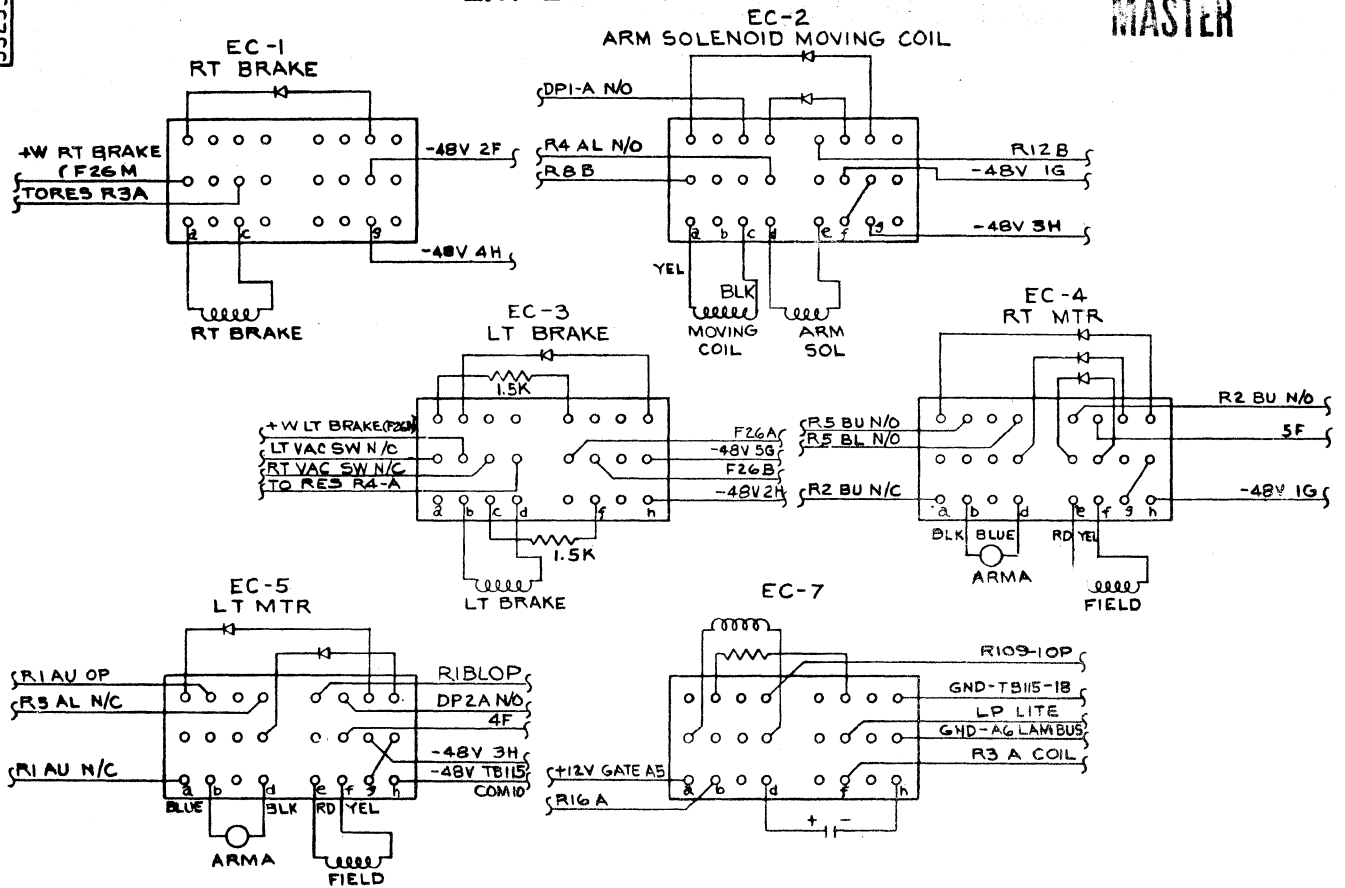
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NAME SYSTEMS DIAGRAM		6-22-62	251020			X POINT TO ENCL. DPG. NO. 895291	73.04.01.0
73.04.01.0		9-13-62	R251020A				
DESIGN P. 1-6-62 MODEL 7330		11-15-62	R251999				
DETAIL							
CHK. # 1-6-62 DRAW ALARM 2-5-62							
APPRO. 1-6-62 CHECK							

5323383

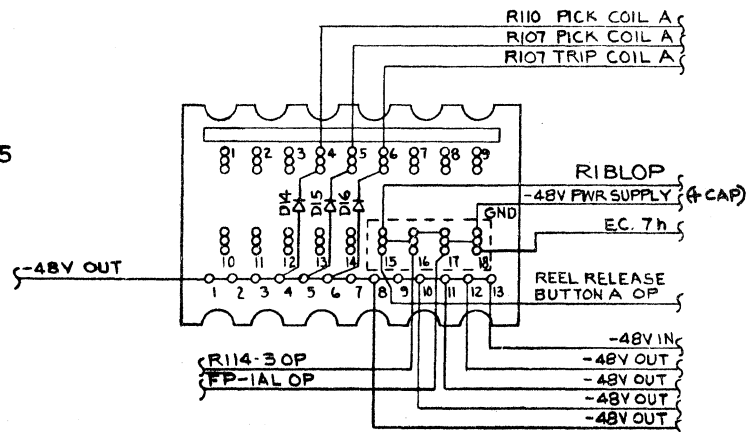
E.C. LAYOUT

73.04.02.0

MASTER



TB-115



EC-1

BRAKE RT

EC-2

SOLENOID MOVING COIL

EC-3

BRAKE LT

EC-4

DC MOTOR RT

EC-5

DC MOTOR LT

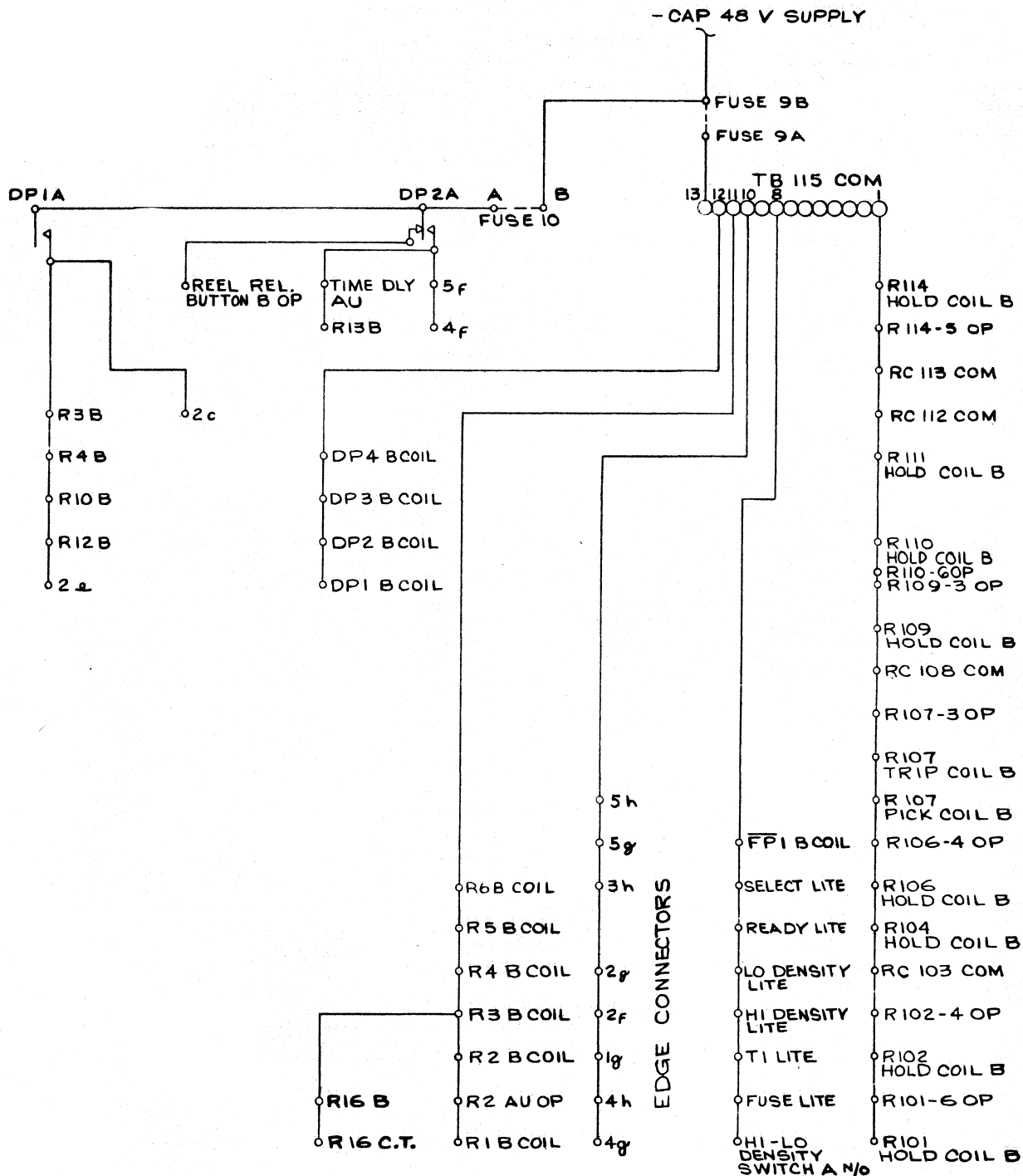
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DATE

INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM				6-22-62	251020			X PRINT TO ENG. SPEC. NO. 895291	
73.04.02.0									
DESIGN RAY 1-30-62 MODEL 7330									
DETAIL TJC 2-1-62									
CHECK RAY 2-1-62 DRAW									
APPRO RAY 2-2-62 CHECK									
Dwg. Size C									73.04.02.0

5323383

VOLT DISTRIBUTION — 48

73.04.03.0

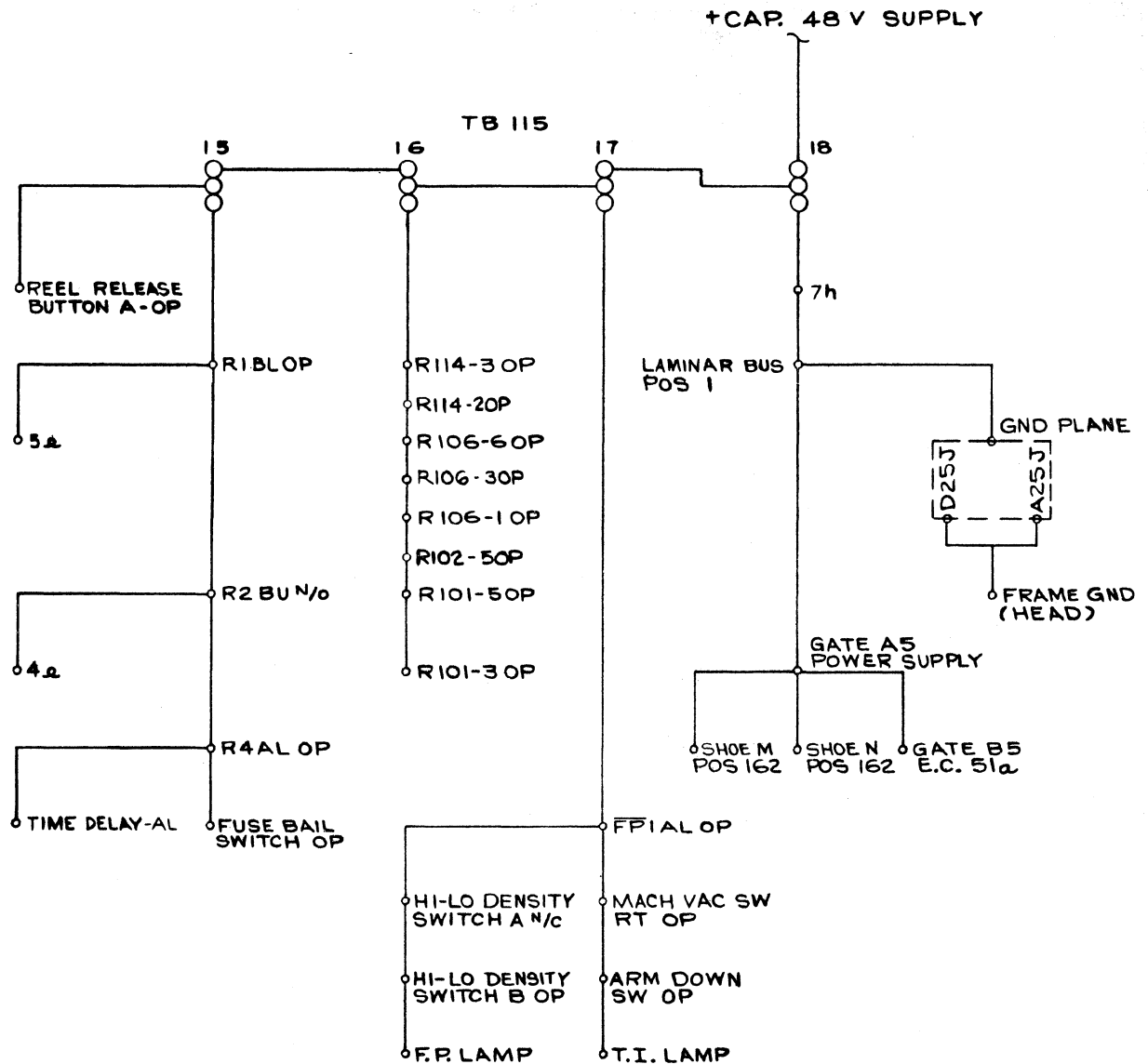


INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHARGE NO.	DATE	CHARGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		8-22-62	251020			X PRINT TO CDR. NPL. NO. 895291	5323382
73.04.03.0		11-15-62	8251999				
DESIGNER RAR	MODEL 7330						
DETAIL RAV							
CHECK TCY							
APPRO RAR							
73.04.03.0							

5323384

VOLT RETURN-48

73.04.040



230 395

INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME				8-22-62	251020			PRINT TO ENG. SPEC. NO. 895291	
73.04.04.0									
DESIGN									
DRAWN									
CHECK									
APPROV									

73.04.04.0

CARD LOCATION CHART
RUN 354
FRAME 00 MODULE A GATE 6

73.04.05.0

SHEET 1 OF 2

	F	E	D	C	B	A
01			AYWS 371043 73.20.13.1 4 G			
02			AYWS 371041 73.20.01.3 2 E			
03		NOTE XI	BP-- 371439 73.20.01.3 1 E	MR-- 371623 73.20.01.1 3 E		
04			AYWS 371041 73.20.01.3 4 E	MR-- 371623 73.20.05.1 3 E		
05		NOTE XII	BP-- 371439 73.20.01.3 1 C	MR-- 371623 73.20.03.1 3 F		
06			CD-- 371029 73.20.01.1 4 A 73.20.01.1 4 E 73.20.15.1 2 E	MR-- 371623 73.20.05.1 4 F		
07		NOTE XIII	BP-- 371439 73.20.01.3 3 C	MR-- 371623 73.20.10.1 3 A		
08			CD-- 371029 73.20.05.1 4 A 73.20.05.1 4 B 73.20.05.1 4 D	MR-- 371623 73.20.10.1 4 A		
09	556980 CAPACITOR CARD	NOTE XIV	BP-- 371439 73.20.01.3 5 C	CAH-- 371858 73.20.15.1 5H 73.20.05.1 5G		
10	WB-- 371880 73.20.05.1 1 G	NOTE XV	AYWS 371041 73.20.01.2 4 A	MR-- 371623 73.20.13.1 3 G	MP-- 371624 73.20.10.1 3 B 73.20.10.1 4 B	
11	556994 RESISTOR CARD		CD-- 371029 73.20.01.1 4 G 73.20.05.1 4 H 73.20.10.1 2 C	MR-- 371034 73.20.01.2 3 E 73.20.01.2 3 F	CRYG 371027 73.40.01.1 4 I	
12	MD-- 371497 73.20.10.1 73.20.10.1 73.20.15.1 1 E	NOTE XVI	MR-- 371034 73.20.01.2 3 C 73.20.01.2 3 D	MM-- 371624 73.20.01.2 1 G 73.20.05.1 4 G		
13			CD-- 371029 73.20.10.1 73.20.10.1 3 G 73.20.15.1 2 B	MR-- 371034 73.20.01.2 3 A 73.20.01.2 3 B	NO OPER	YAL- 370289
14	MD-- 371497 73.20.01.1 73.20.01.1 73.20.05.1 2 I	NOTE XVII	MR-- 371034 73.20.01.1 3 G 73.20.01.1 3 H	NO OPER		

NOTE
XI
MX--
371661
73.20.10.1
4 D
73.20.10.1
5 A
73.20.10.1
5 B
73.20.15.1
4 E

NOTE
XII
MX—
371661
73.20.01.1
2 D
73.20.01.1
3 D
73.20.15.1
4 D
73.20.10.1
2 A

NOTE
XIII
MX--
371661
73.20.01.1
2 B
73.20.01.1
2 E
73.20.05.1
2 G
73.20.05.1
3 H

NOTE
XIV
MX--
371661
73.30.01.1
3 I
73.20.05.1
2 E
73.20.05.1
4 A
73.20.05.1
5 D

NOTE
XV
MX--
371661
73.20.01.1
2 G
73.20.10.1
2 B
73.20.10.1
3 C
73.30.01.2
5 A

NOTE
XVI
MX--
371661
73.20.10.1
2 F
73.20.10.1
3 E
73.20.10.1
4 H
73.20.05.1
4E

NOTE
XVII
MX--
371661
73.20.10.1
2 E
73.20.15.1
4 C
73.20.10.1
4 G
73.20.15.1
5 C

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM 7304.05.O	B 2262	251020			X PRINT TO ENG. SPEC. NO. 895291	
DESIGN	RAR 14-61 MODEL 7330						
DETAIL	RAV 14-61						
CHECK	RAR 1-561 DRAW GT 2-7-62						
APPRO	CAF 1-661 CHECK RRR 2-3-62						
							7304.05.O

5323386

CARD LOCATION CHART
FRAME 00 MODULE A GATE 6
RUN 354

7304050

SHEET 2 OF 2

	F	E	D	C	B	A					
15			AR-- 371034 73.30.01.1 3 E 73.30.01.1 3 F	NO OPER	YAW-- 370452 73.30.10.1 3 E						
16	MD-- 371497 73.20.01.1 1 B 73.20.10.1 2 I 73.20.15.1 1 F		AR-- 371034 73.30.01.1 3 C 73.30.01.1 3 D	NO OPER	YAW-- 370452 73.30.10.1 3 C						
17		NOTE XXVIII	AR-- 371034 73.30.01.1 3 B 73.30.01.1 3 B	NO OPER	556981 CAPACITOR CARD						
18	MD-- 371497 73.20.05.1 1 D 73.20.05.1 1 B 73.20.15.1 1 B		LZ-- 371674 73.30.01.2 1 E		APA-- 370444 73.40.01.1 73.40.01.1 2 B	ACW-- 370100 73.40.01.1 3 B					
19		NOTE XIX	LZ-- 371674 73.30.01.2 1 C		APA-- 370444 73.40.01.1 73.40.01.1 2 C	ACW-- 370100 73.40.01.1 3 C					
20	WB-- 371890 73.20.15.1 1 D		LZ-- 371674 73.30.01.2 1 A		APA-- 370444 73.40.01.1 1 D 73.40.01.1 2 D	ACW-- 370100 73.40.01.1 3 D					
21		NOTE XX	LZ-- 371674 73.30.01.1 1 G	NOTE XXI	APA-- 370444 73.40.01.1 1 E 73.40.01.1 2 E	ACW-- 370100 73.40.01.1 3 E					
22	WB-- 371890 73.20.05.1 2 F	NOTE XXII	LZ-- 371674 73.30.01.1 1 E	CEYB 371032 73.20.01.1 3 A 73.20.01.1 3 B	APA-- 370444 73.40.01.1 1 F 73.40.01.1 2 F	ACW-- 370100 73.40.01.1 3 F					
23		NOTE XXIII	LZ-- 371674 73.30.01.1 1 C	NOTE XX	APA-- 370444 73.40.01.1 1 G 73.40.01.1 2 G	ACW-- 370100 73.40.01.1 3 G					
24	WB-- 371890 73.20.15.1 1 A		LZ-- 371674 73.30.01.1 1 A	NOTE XXIV	APA-- 370444 73.40.01.1 1 H 73.40.01.1 2 H	ACW-- 370100 73.40.01.1 3 H					
25											
26											
27											
28											

NOTE
XXVIII
MX--
371661
73.20.15.1
2 C
73.20.15.1
4 A
73.20.15.1
3 C
73.20.15.1
4 B

NOTE
XIX
MX--
371661
73.20.05.1
2 B
73.20.05.1
3 B
73.20.05.1
3 C
73.20.05.1
3 D

NOTE
XX
MX--
371661
73.20.01.1
1 C
73.20.01.1
2 A
73.20.01.1
3 C
73.20.01.1
3 I

NOTE
XXI
CEYB
371032
73.20.01.1
2 A
73.20.05.1
2 D
73.20.05.1
4 C
73.20.01.1
2 I

NOTE
XXII
MX--
371661
73.20.05.1
1 C
73.20.05.1
2 A
73.20.15.1
5 B
73.20.15.1
5 D

NOTE
XXIII
MX--
371661
73.20.01.1
2 C
73.20.01.1
3 C
73.20.01.1
4 D
73.20.05.1
4 I

NOTE
XXIV
NM--
371666
73.20.01.1
5 A
73.20.01.1
4 C
73.20.15.1
5 H
73.20.01.1
5 C

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		8-22-62	251020			PRINT TO ENR. SPEC. NO.	
7304050						895291	
DESIGN	RAV 1-14-61	MODEL	7330				
DETAIL	RAV 1-15-61	DRAW	6T 2-7-62				
CHECK	RAV 1-15-61	CHECK	RRH 2-13-62				
APPRO	LBF 1-16-61						
							7304.050

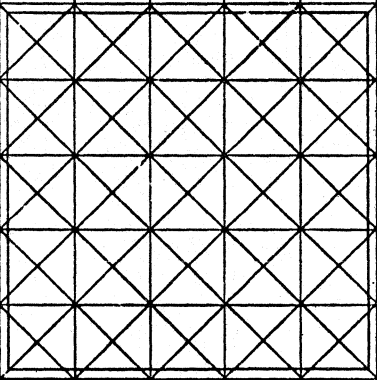
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A

T/C CONNECTOR RECEPTACLE

B

73.04.06.0

15	SHIELD	SET READ	SHIELD	SET WRITE	SHIELD	REWIND CALL	8	SHIELD	BKWD	SHIELD	GO	SHIELD	T.I. OFF	SHIELD	1	T.I. ON
30	SEL RDY BKWD	SHIELD	SEL RDY LP	SHIELD			23	SEL RDY T.I. ON	SHIELD	SEL RDY HI	SHIELD				16	
45					SHIELD	REW UNLD CALL	38	SHIELD	SEL REWIND	SHIELD	SEL RDY WRITE	SHIELD	SEL RDY READ	SHIELD	31	SEL RDY LO
60							53								46	
75							68								61	
85	SHIELD	READ BIT 2	SHIELD	READ BIT 1	81						80	SEL T.U. 1	SHIELD	SEL T.U. 0	76	SHIELD
95	READ BIT 8	SHIELD	READ BIT 4	SHIELD	91						90	SHIELD	SEL T.U. 3	SHIELD	86	SEL T.U. 2
105	SHIELD	READ BIT 6	SHIELD	READ BIT A	101						100	SEL T.U. 5	SHIELD	SEL T.U. 4	96	SHIELD
115		READ BIT C	SHIELD	111	111						110	SHIELD	SEL T.U. 7	SHIELD	106	SEL T.U. 6
125				121	121						120	SEL T.U. 9	SHIELD	SEL T.U. 8	116	SHIELD
140	-6V			+12V			133		+6V						126	
155							148								141	
170	-12V						163		GND						156	
185	WRITE BUS C	SHIELD	WRITE BUS B	SHIELD	WRITE BUS A	SHIELD	178	WRITE BUS D	SHIELD	WRITE BUS 4	SHIELD	WRITE BUS 2	SHIELD	WRITE BUS 1	171	SHIELD
200			SHIELD	WRITE PULSE	SHIELD	WR TR REL	193	SHIELD	ECHO PULSE						186	

MASTER

B

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		11-21-60	248180-G			X PRINT TO ENG. DEPT. NO. 895291	73.04.06.0
73.04.06.0							
P. 1000 RAY 13-10-60 MODEL 7330						DWG. SIZE - C	73.04.06.0
DETAIL ID 8-6-60							
CHECK RAY 8-11-60 DRAW							
APPROV B.F. 10-18-60 CHECK							

A

594287

73.04.070

CARD LOCATION CHART
FRAME 00 MODULE B GATE 5
RUN 354

	F	E	D	C	B	A				
01										
02			TCJ- 370333 73.20.20.1 4D 73.20.20.1 5A 73.20.20.1 5B 73.20.20.1 5C	TCJ- 370333 73.20.20.1 4D 73.20.20.1 5A 73.20.20.1 5B 73.20.20.1 5C						
03			TCJ- 370333 73.20.20.1 4D 73.20.20.1 5A 73.20.20.1 5B 73.20.20.1 5C	TCJ- 370333 73.20.20.1 4D 73.20.20.1 5A 73.20.20.1 5B 73.20.20.1 5C						
04			TCJ- 370333 73.20.20.1 4D 73.20.20.1 5A 73.20.20.1 5B 73.20.20.1 5C	TCJ- 370333 73.20.20.1 4D 73.20.20.1 5A 73.20.20.1 5B 73.20.20.1 5C						
05										
06			TCJ- 370333 73.20.25.1 4D 73.20.25.1 5A 73.20.25.1 5B 73.20.25.1 5C	TCJ- 370333 73.20.25.1 4D 73.20.25.1 5A 73.20.25.1 5B 73.20.25.1 5C						
07			TCJ- 370333 73.20.25.1 4D 73.20.25.1 5A 73.20.25.1 5B 73.20.25.1 5C	TCJ- 370333 73.20.25.1 4D 73.20.25.1 5A 73.20.25.1 5B 73.20.25.1 5C						
08										
09										
10										
11										
12										
13										
14										

MASTER

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		5-18-62	251022			895291	
73.04.070							
DESIGN	RAM-11-18-61	MODEL	7330				
DETAIL	RAM-11-18-61						
CHURN	RAM-11-18-61	GROUP	1D1112-61				
APPRO	LBFI-16-61	ORIGIN					
NYC: 61211						73.04.070	594287

WRITE HEAD WIRING

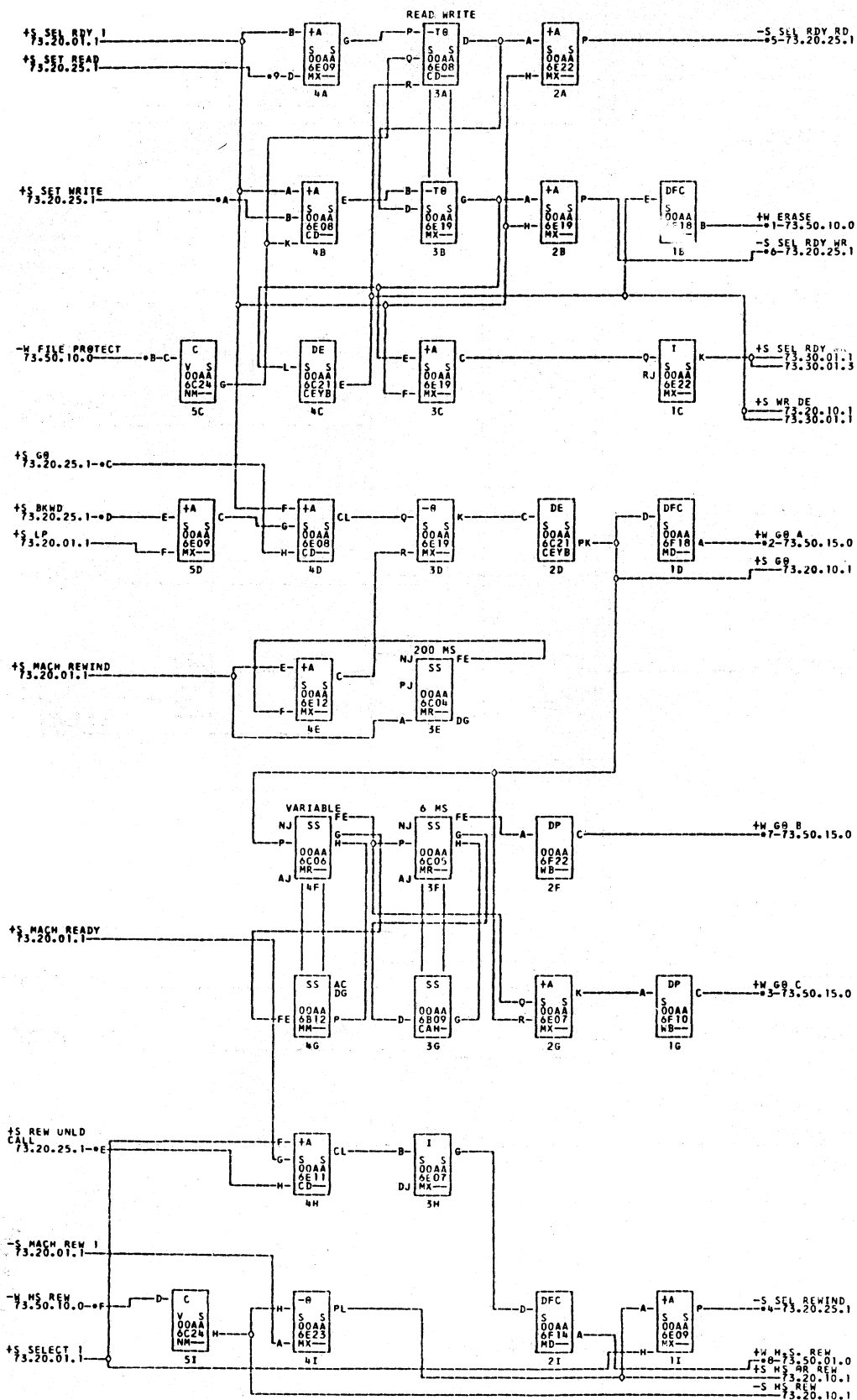
TRACK		LOGIC BLOCK PIN	EDGE CONN	HEAD PIN
1	WH	D24B	D26A	C
	BK		D26COM	R
	R	D24D	D26B	B
2	WH	D23B	D26C	D
	BK		D26COM	T
	R	D23D	D26D	S
4	WH	D22B	D26E	U
	BK		D26COM	F
	R	D22D	D26F	E
6	WH	D21B	D26G	V
	BK		D26COM	J
	R	D21D	D26H	H
A	WH	D20B	D26L	W
	BK		D26COM	L
	R	D20D	D26K	K
B	WH	D19B	D26N	X
	BK		D26COM	M
	R	D19D	D26M	Y
C	WH	D18B	D26Q	P
	BK		D26COM	N
	R	D18D	D26P	A

NOTE: +12 FP IS CONNECTED TO D26 COM VIA D25K TO D26R.
SEE PAGE 73.50.10.0

READ HEAD WIRING

TRACK		LOGIC BLOCK PIN	EDGE CONN	HEAD PIN
1	YEL	A18J	A25A	F
	R	A18A	A25B	H
2	YEL	A19J	A25C	E
	R	A19A	A25D	P
4	YEL	A20J	A25E	D
	R	A20A	A25F	N
6	YEL	A21J	A25G	C
	R	A21A	A25H	B
A	YEL	A22J	A25L	M
	R	A22A	A25M	A
B	YEL	A23J	A25N	R
	R	A23A	A25P	L
C	YEL	A24J	A25Q	J
	R	A24A	A25R	K

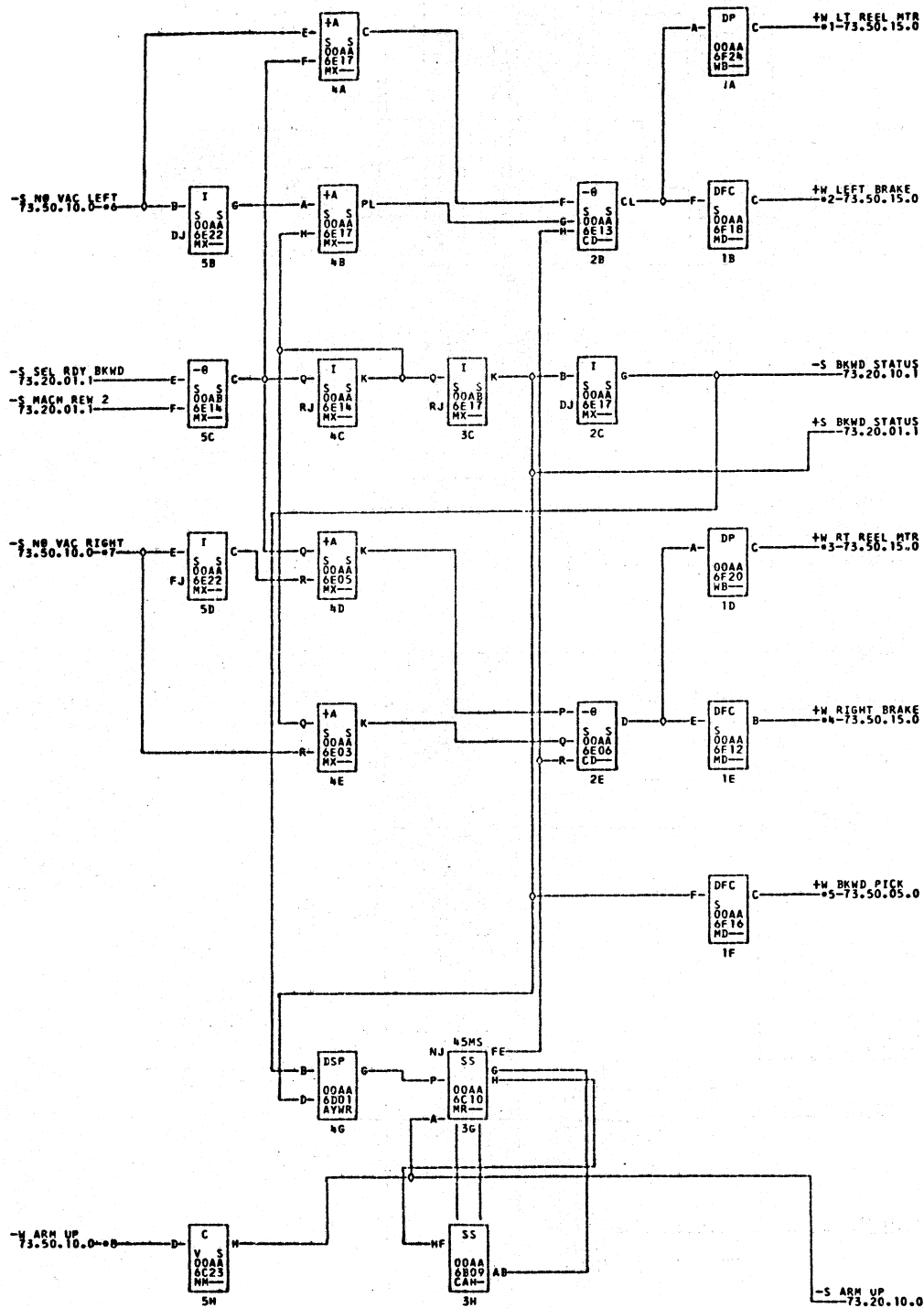
INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		11-21-60	248150-6			IF PRINT TO ENG. DESK. NO. 895191 DWG. SIZE 11"	73.04.08.0
73.04.08.0		1-11-61	248747				
DESIGN RAV 10-21-60 MODEL 7330		3-9-61	249254				
DETAIL ID 10-21-60		4-19-61	249434				
CHECK RAR 10-21-60 DRAW		2-9-62	251009				
APPRO LBF 10-21-60 CHECK							



*1--00A6C25R *2--00A6F26H *3--00A6F26C *4--00A6C26B *5--00A6C26F *6--00A6E26A *7--00A6F26G *8--00A6D25N
 *9--00A6C26E *A--00A6C26G *B--00A6D25D *C--00A6C26K *D--00A6C26C *E--00A6E26G

COMMENTS

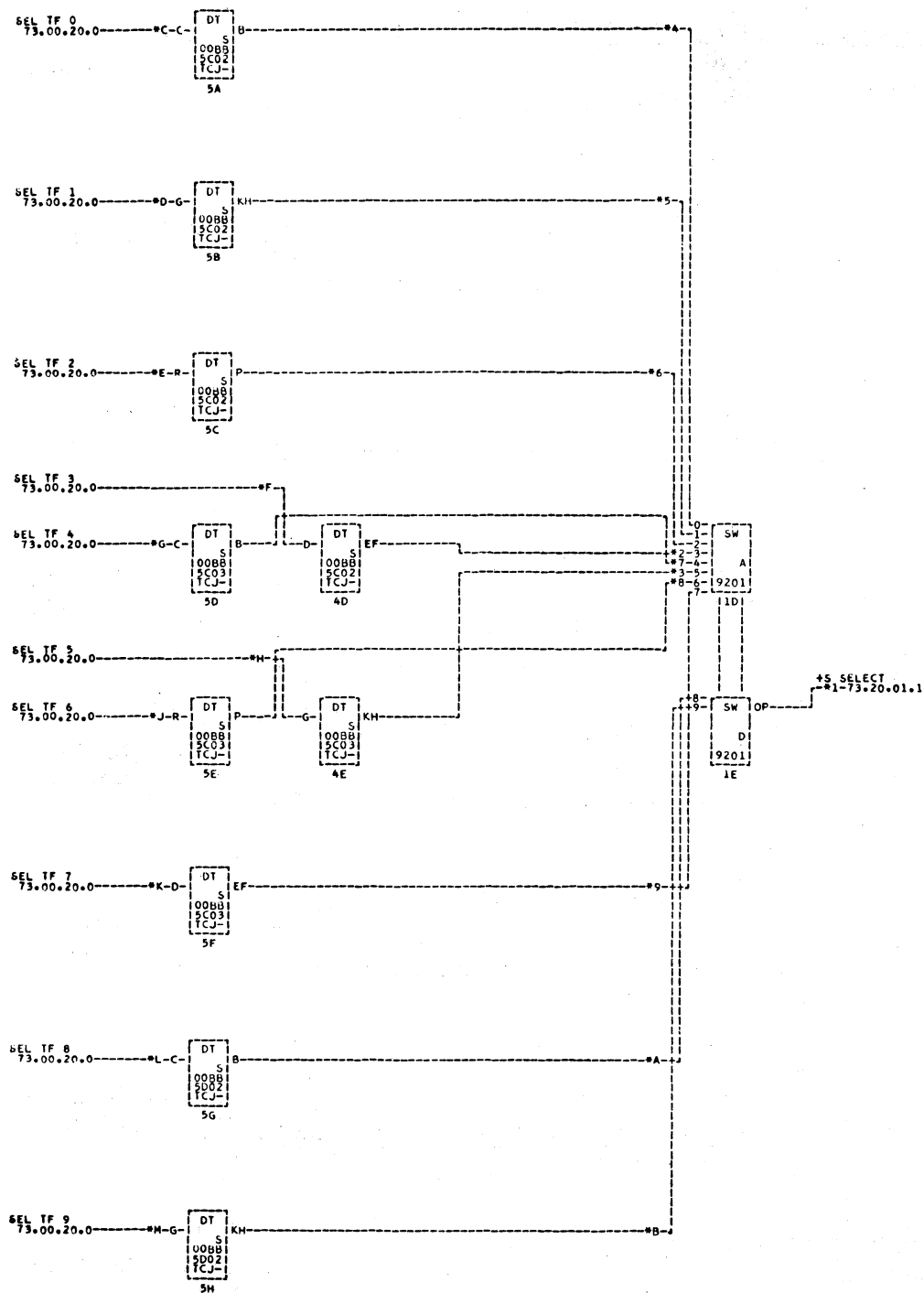
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 A 06-21-62 251020 P 12-03-62 252695



01-00A6F26D 02-00A6F26N 03-00A6F26F 04-00A6F26M 05-00A6D25L 06-00A6F26A 07-00A6F26B
 08-00A6D25F

COMMENTS

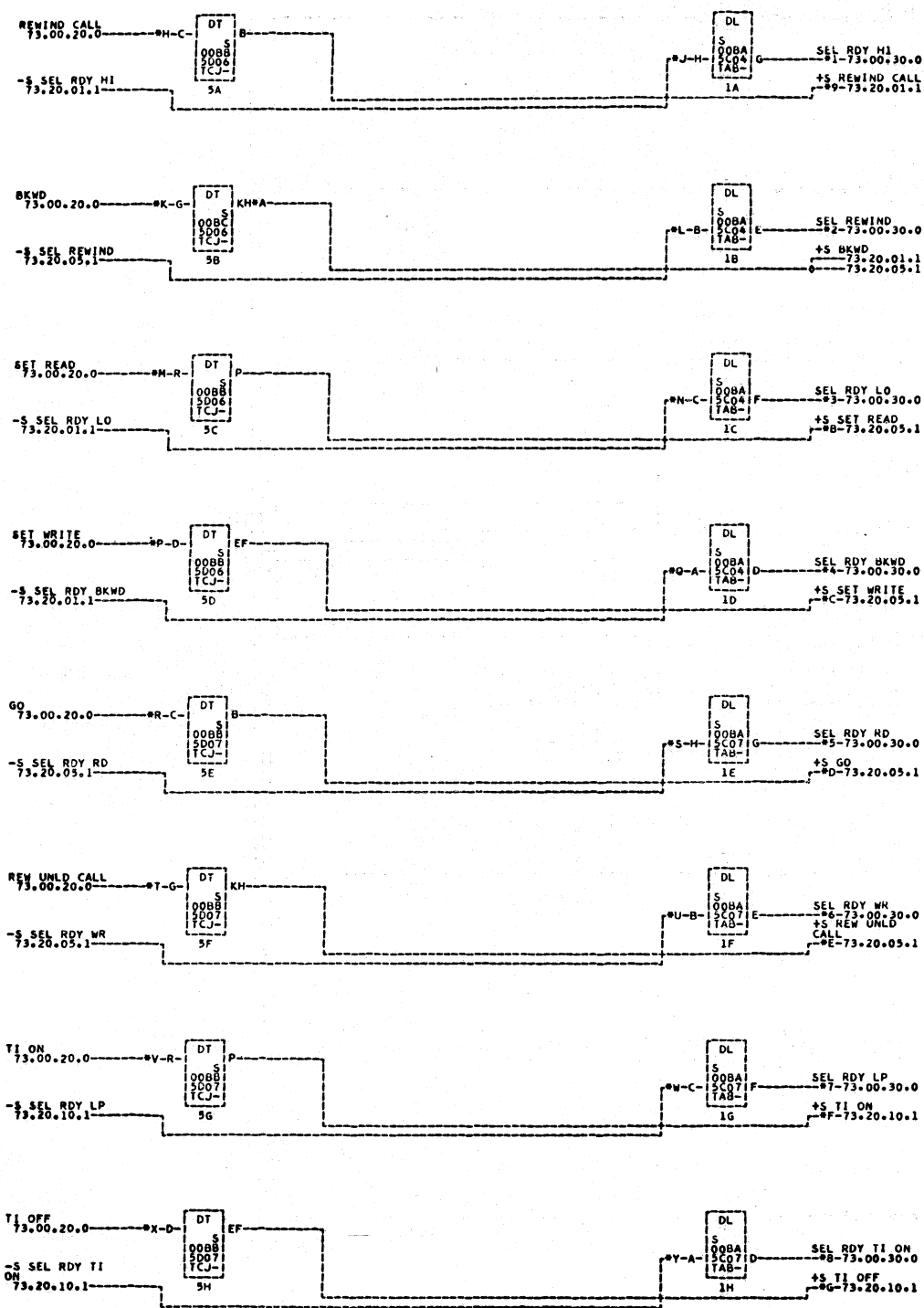
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 A 06-21-62 251020 B 09-30-62 252271



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 *7--00B5803F *8--00B5803H *9--00B5803K *10--00B5803L
 *C--00B5M077--00B5N077--00B5C01A *D--00B5M079--00B5N079--00B5C01C *E--00B5M086--00B5N086--00B5C01E
 *F--00B5M088--00B5N088--00B5C01G *G--00B5M097--00B5N097--00B5C01K *H--00B5M099--00B5N099--00B5C01M
 *J--00B5M106--00B5N106--00B5C01P *K--00B5M108--00B5N108--00B5C01R *L--00B5M117--00B5N117--00B5C01A
 *M--00B5M119--00B5N119--00B5C01C

COMMENTS

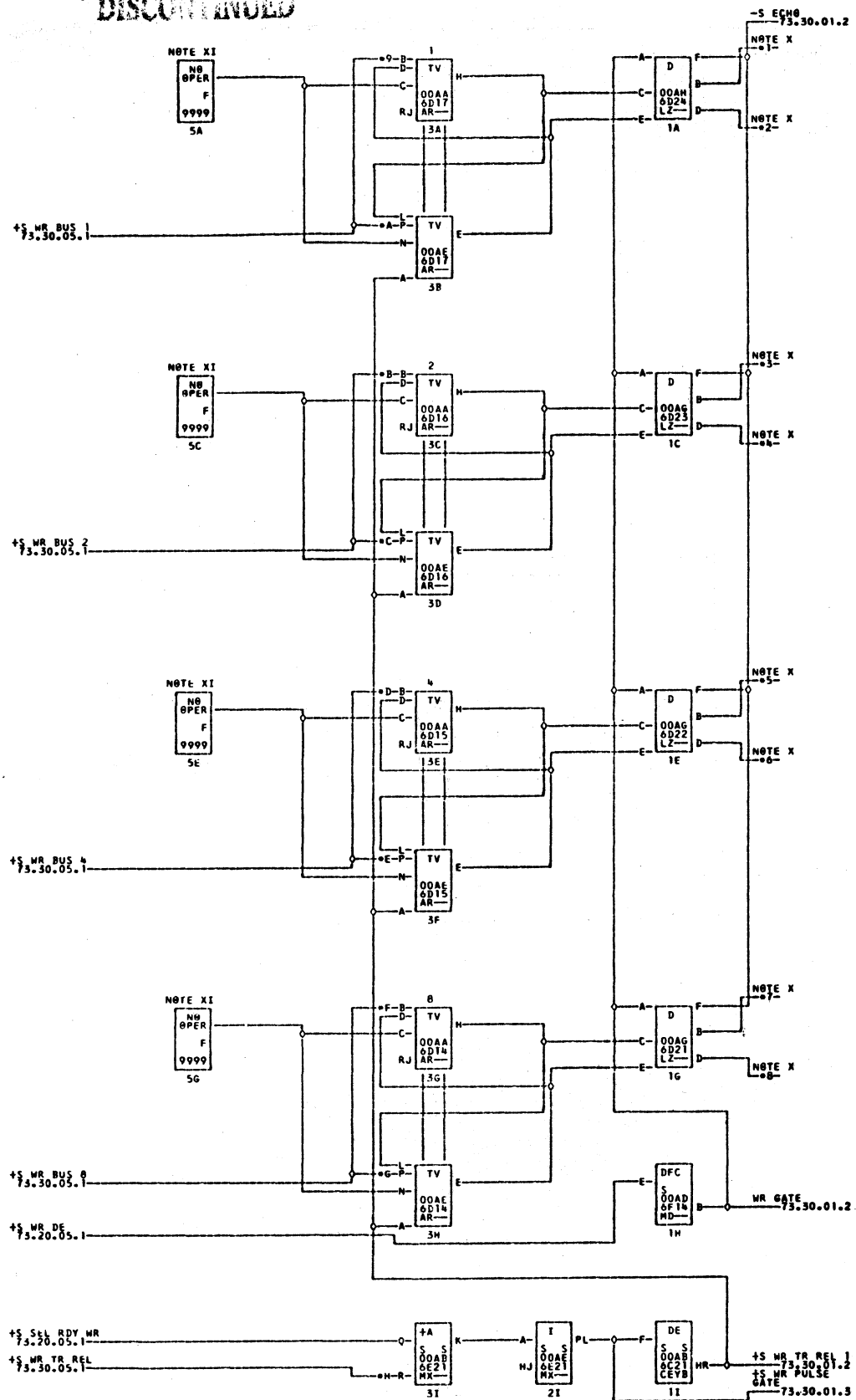
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5-00B5B02R-#P-00B5N001-00B5N002-00B5D08B-#Q-00B5B01A-00B5N001-00B5D08C
6-00B5B01C-00B5N003-00B5D08G-#R-00B5N001-00B5N005-00B5D08E
7-00B5B01I-00B5N003-00B5D08H-#S-00B5B01A-00B5N001-00B5D08F
8-00B5B01J-00B5N003-00B5D08I-#T-00B5B01A-00B5N001-00B5D08G
9-00B5B01K-00B5N003-00B5D08J-#U-00B5B01A-00B5N001-00B5D08H
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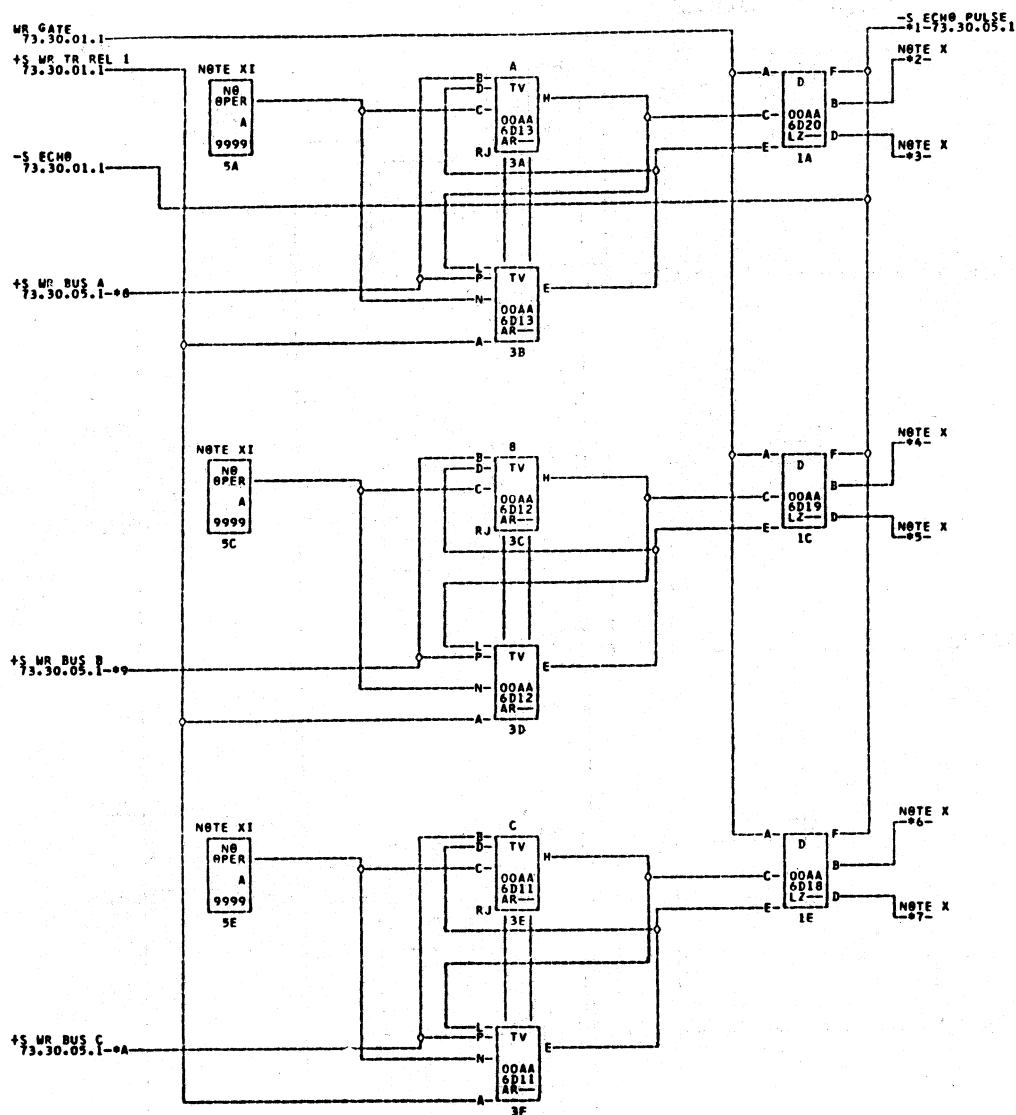
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DISCONTINUED

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 *9—00A6E25A *A—00A6E25B *B—00A6E25C *C—00A6E25D *D—00A6E25E *E—00A6E25F
 *F—00A6E25G *G—00A6E25H *H—00A6E25I

NOTE X SEE PAGE 73.04.08.0
 COMMENTS
 FOR HFAD WIRING

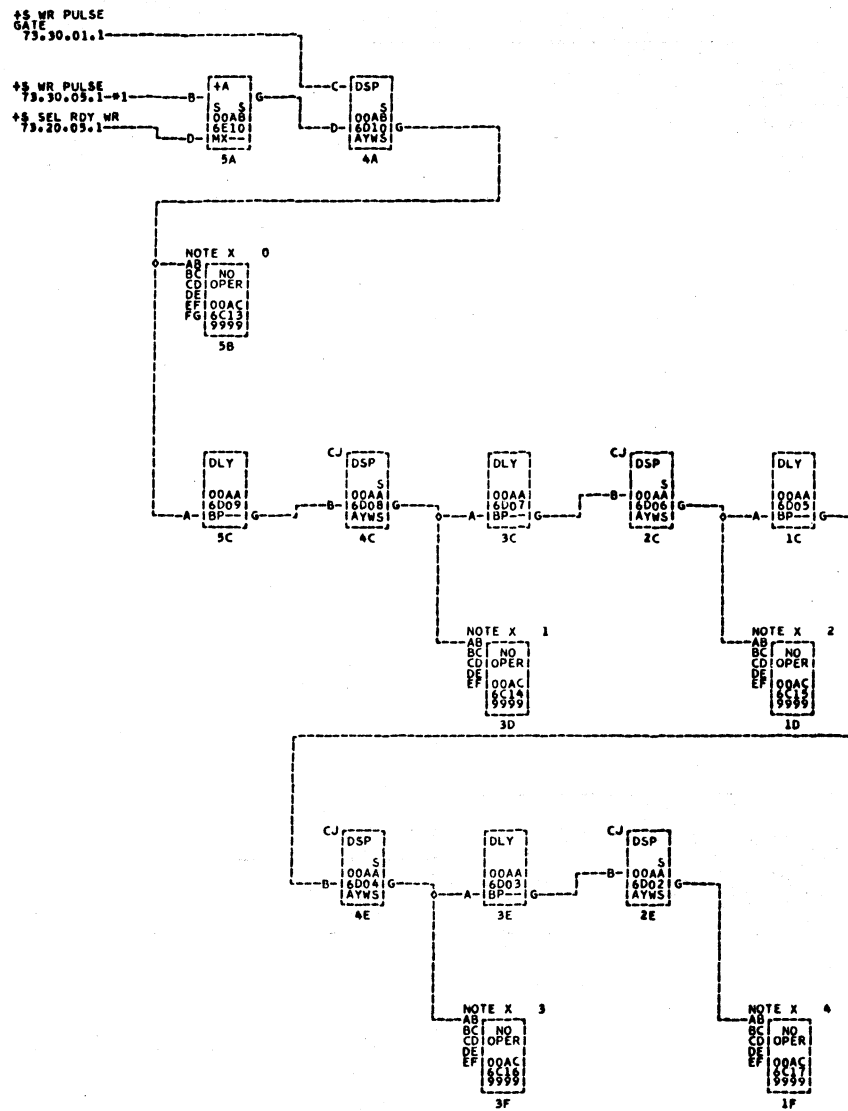
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A	10-07-60	2481506	B	12-13-60	248747	C	01-26-61	248897	D	03-01-61	249234
F	03-24-61	249434	F	10-22-61	249984	G	01-10-62	251009	H	02-26-62	250407



*1—00A6C26M *2—00A6D26L *3—00A6D26K *4—00A6D26N *5—00A6D26M *6—00A6D26Q *7—00A6D26P *8—00A6E25L
*9—00A6E25N *A—00A6E25Q

	COMMENTS
NOTE X SEE PAGE 73.04.08.0	
FOR HEAD WIRING	
NOTE XI FROM DELAY LINE TAPS	
PAGE 73.30.01.3	

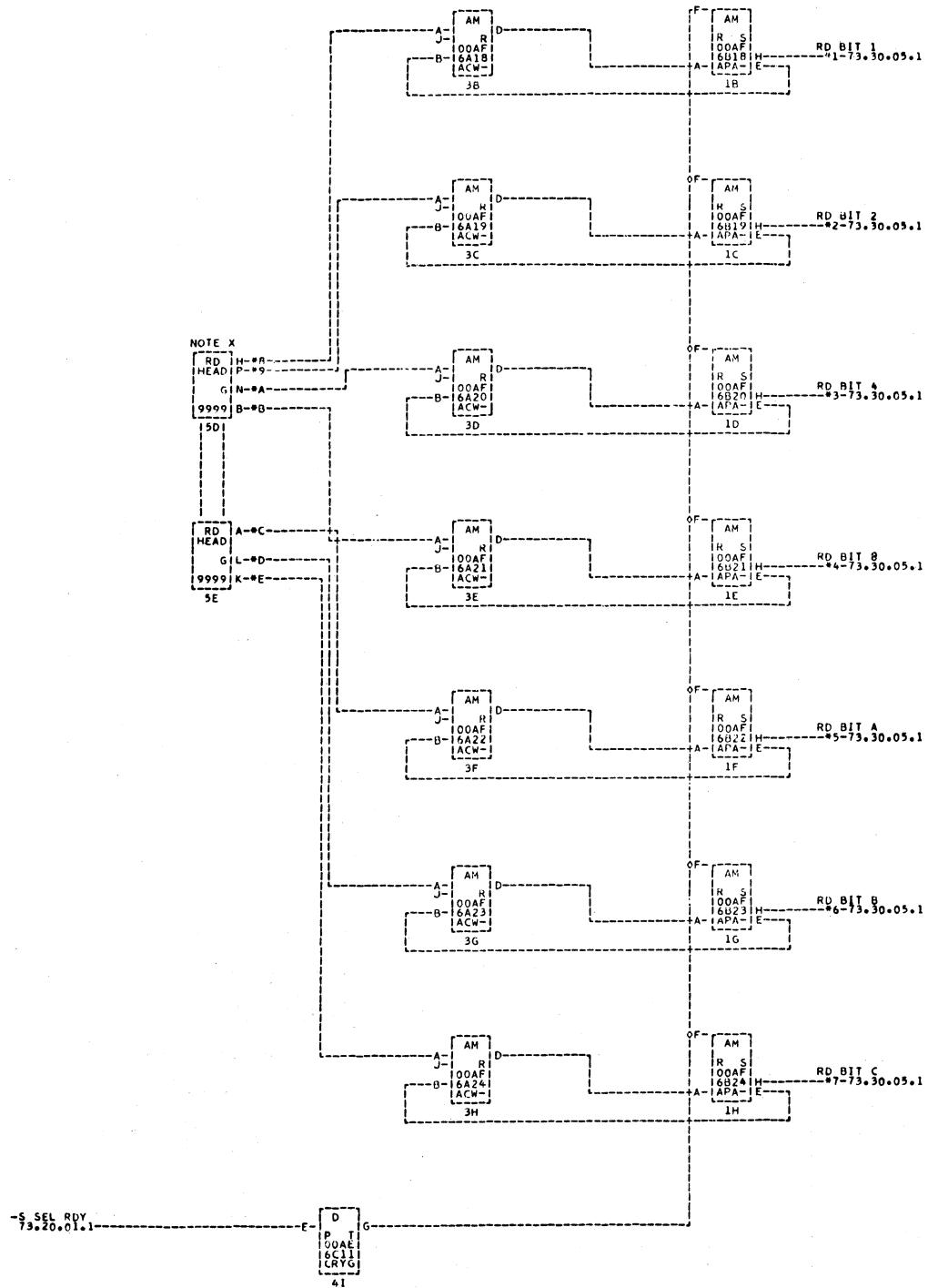
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A	06-08-62	251020									



*1--00A6C26L---

1 NOTE X THE DELAY LINE TAPS
 GO TO PAGE 73.30.01.1
 OR 73.30.01.2

TAG	DATE	E.C.NO.	TAG	DATE	E.C.NO.	TAG	DATE	E.C.NO.	TAG	DATE	E.C.NO.
A	12-13-60	248747	B	03-24-61	249434	C	10-22-61	249984			



*1--00A6B25A *2--00A6B25C *3--00A6B25E *4--00A6B25G *5--00A6B25L *6--00A6B25N *7--00A6B25Q *8--00A6A25B
 *9--00A6A25D *A--00A6A25F *B--00A6A25H *C--00A6A25J *D--00A6A25P *E--00A6A25R

NOTE X SEE PAGE 73.04.08.0
 COMMENTS
 FOR HEAD WIRING

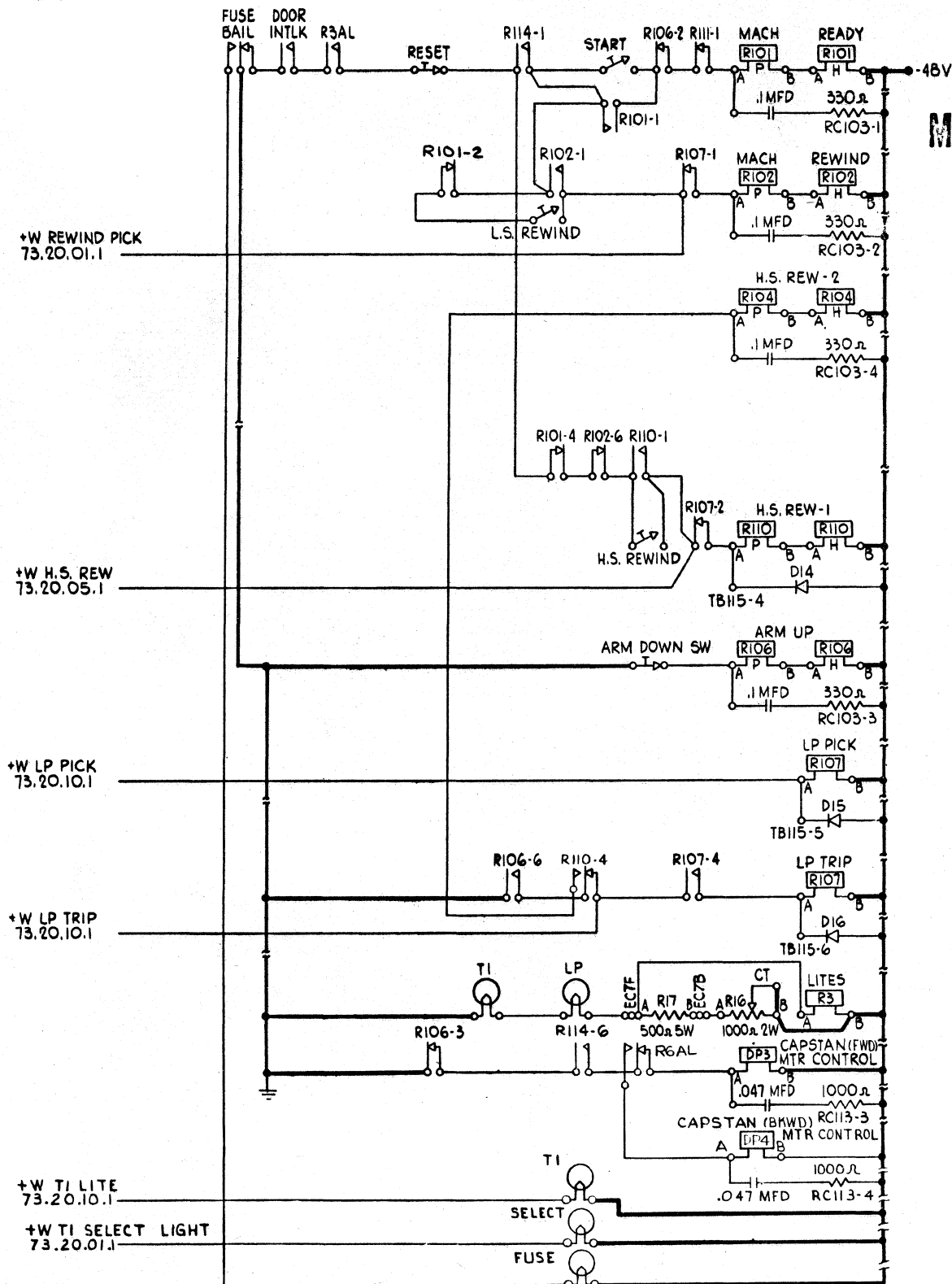
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1A	10-07-60	248150G	1B	12-13-60	248747	1C	01-26-61	248897	1D	03-01-61	249254
1E	03-24-61	249434	1F	06-14-61	249769	1G	01-10-62	251009			

594258

DWG. SIZE C

RELAY LOGIC

73.50.01.0



MASTER

NOTES

1 -48 V AND GROUND DISTRIBUTION
ARE NOT POINT TO POINT

INTERNATIONAL BUSINESS MACHINES CORP.			
NAME	SYSTEMS DIAGRAM	DATE	CHANGE NO.
DESIGN	73.50.01.0	4-17-62	250407
DETAIL	2-1-62	5-18-62	251022
CHECK	RAV 2-6-62	6-13-62	251867
APPRO	RAV 2-6-62	8-16-62	252135
		8-15-62	251999

DATE	CHANGE NO.
4-17-62	250407
5-18-62	251022
6-13-62	251867
8-16-62	252135
8-15-62	251999

DATE	CHANGE NO.
4-17-62	250407
5-18-62	251022
6-13-62	251867
8-16-62	252135
8-15-62	251999

NOTE	X PRINT TO ENG. DEPT. NO.
	895291

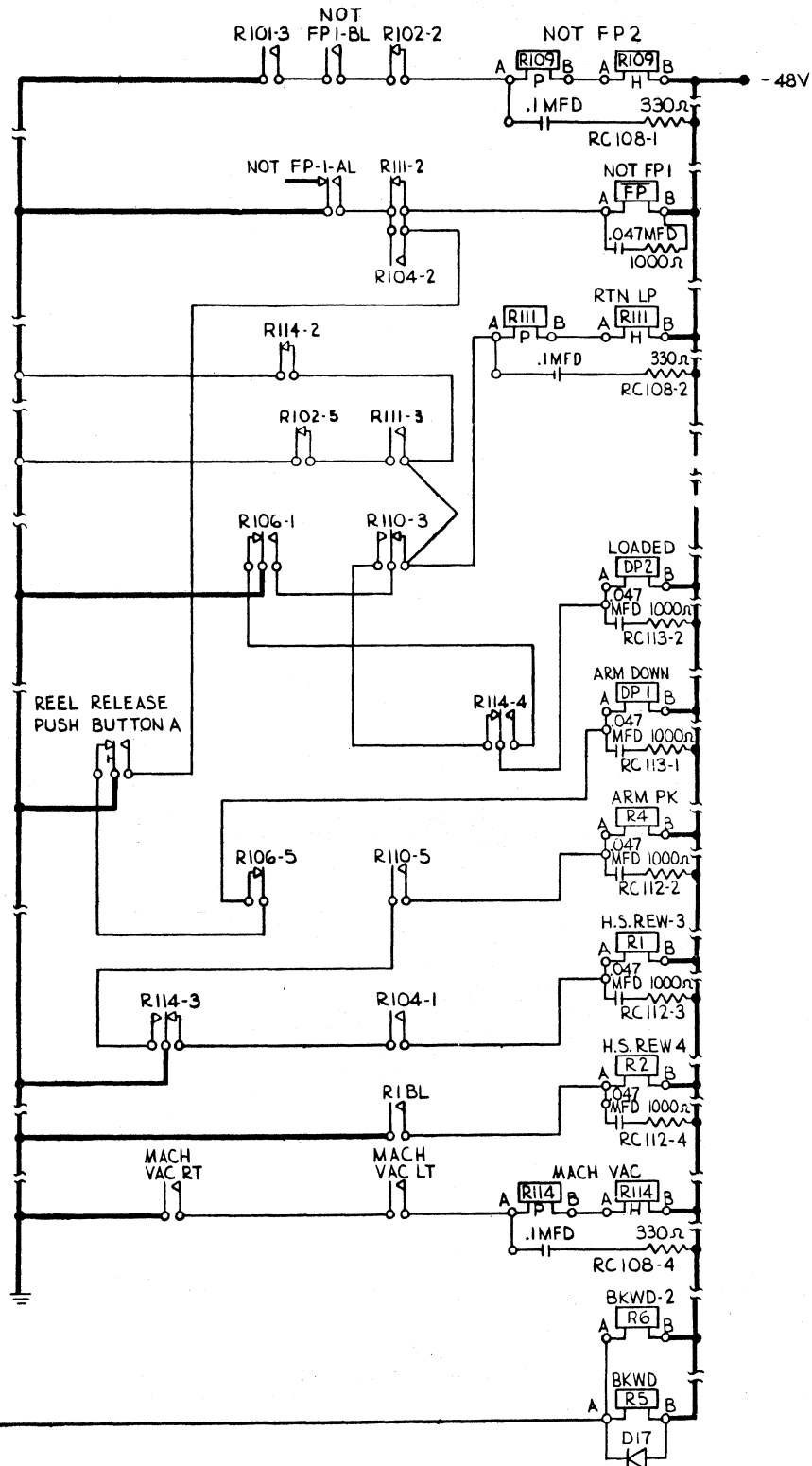
DEVELOPMENT NO.
73.50.01.0

594258

594259

DWG. SIZE C

RELAY LOGIC



→W BKWD PICK
73.20.15.1

NOTES

- X -48 AND GROUND
DISTRIBUTION ARE
NOT POINT TO POINT

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.
NAME	SYSTEMS DIAGRAM	4-17-62	750407		
DESIGN	RAR 1-6-62	6-13-62	251867		
DETAIL		9-19-62	252276		
CHECK	RAV 2-6-62	11-15-62	251999		
APPROV	RAR 2-6-62				

NOTE
X PRINT TO ENG. SPEC. NO.
895291

DEVELOPMENT NO.

73.50.05.0

594259

533385

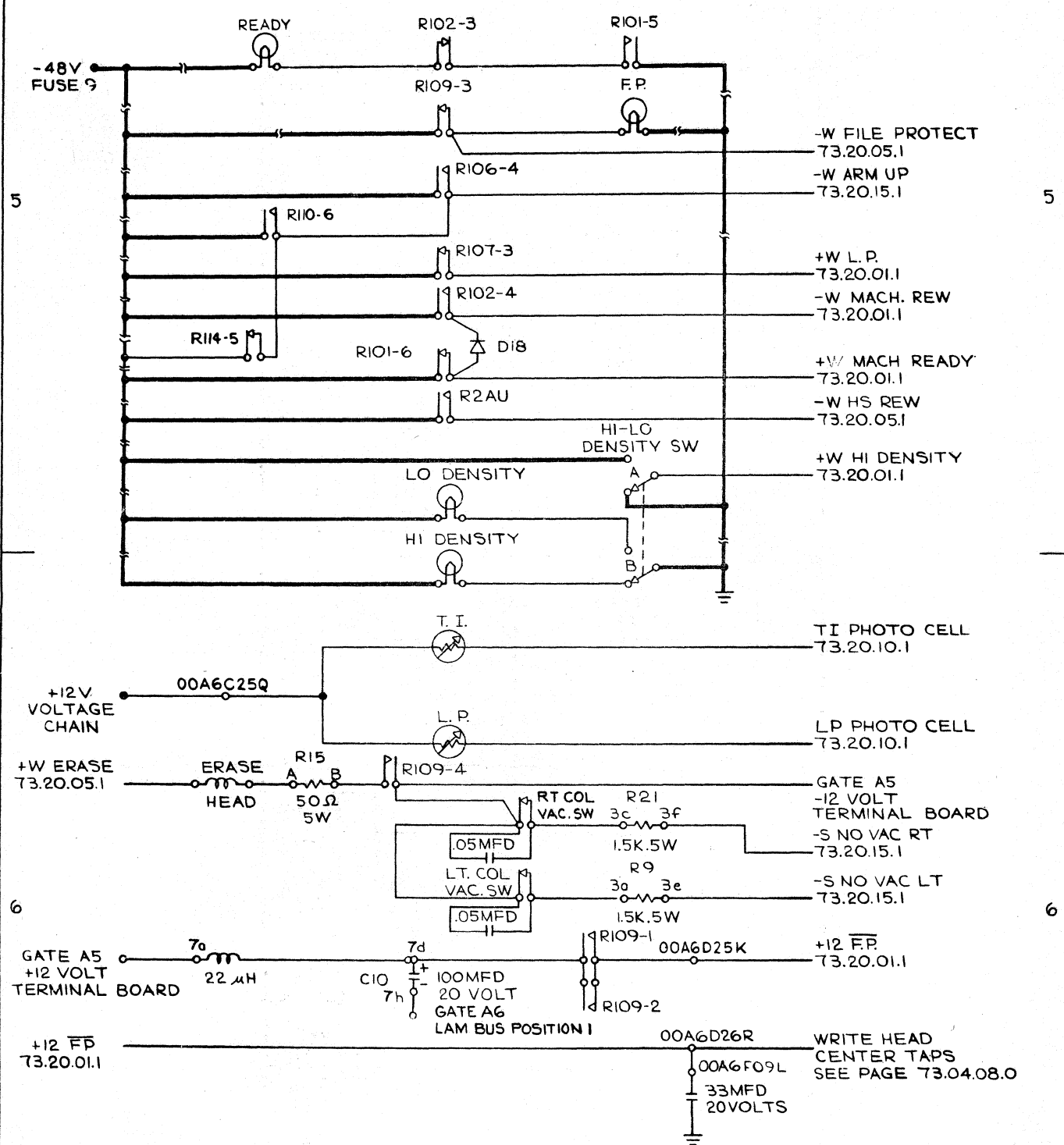
A

RELAY LOGIC

B

7350100

MASTER



NOTES
X -48 AND GROUND DISTRIBUTION
ARE NOT POINT TO POINT

INTERNATIONAL BUSINESS MACHINES CORP.				DATE		CHANGE NO.		DATE		CHANGE NO.		NOTE	DEVELOPMENT NO.
NAME				8-22-62		251020						X PRINT TO ENG. SPEC. NO. 895291	533385
DESIGNER													
DETAIL													
CHECK													
APPRO													

IN PROCESS
DATE 204 250 395

7350100

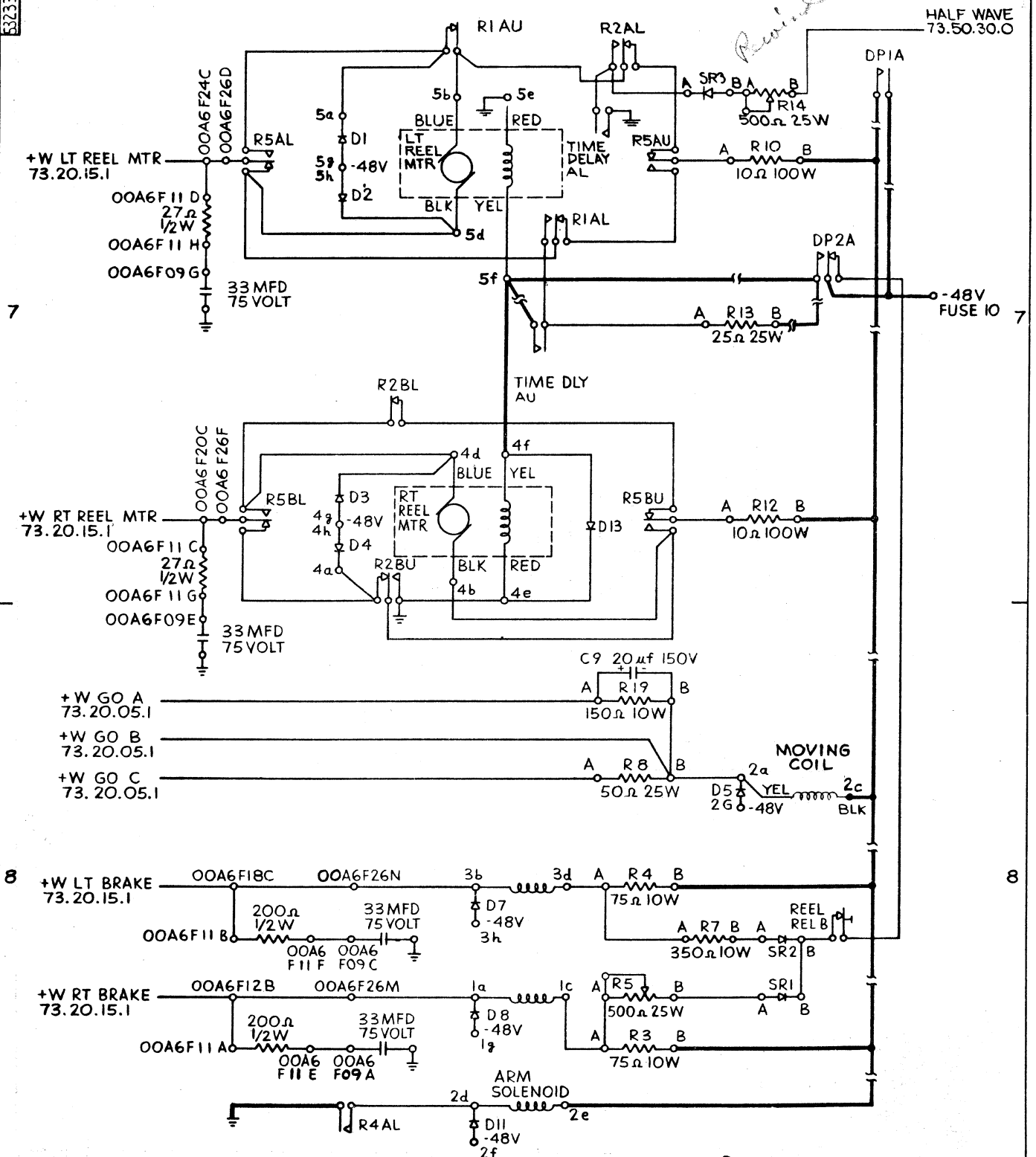
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A

MOTION CONTROL

B

73.50.15.0



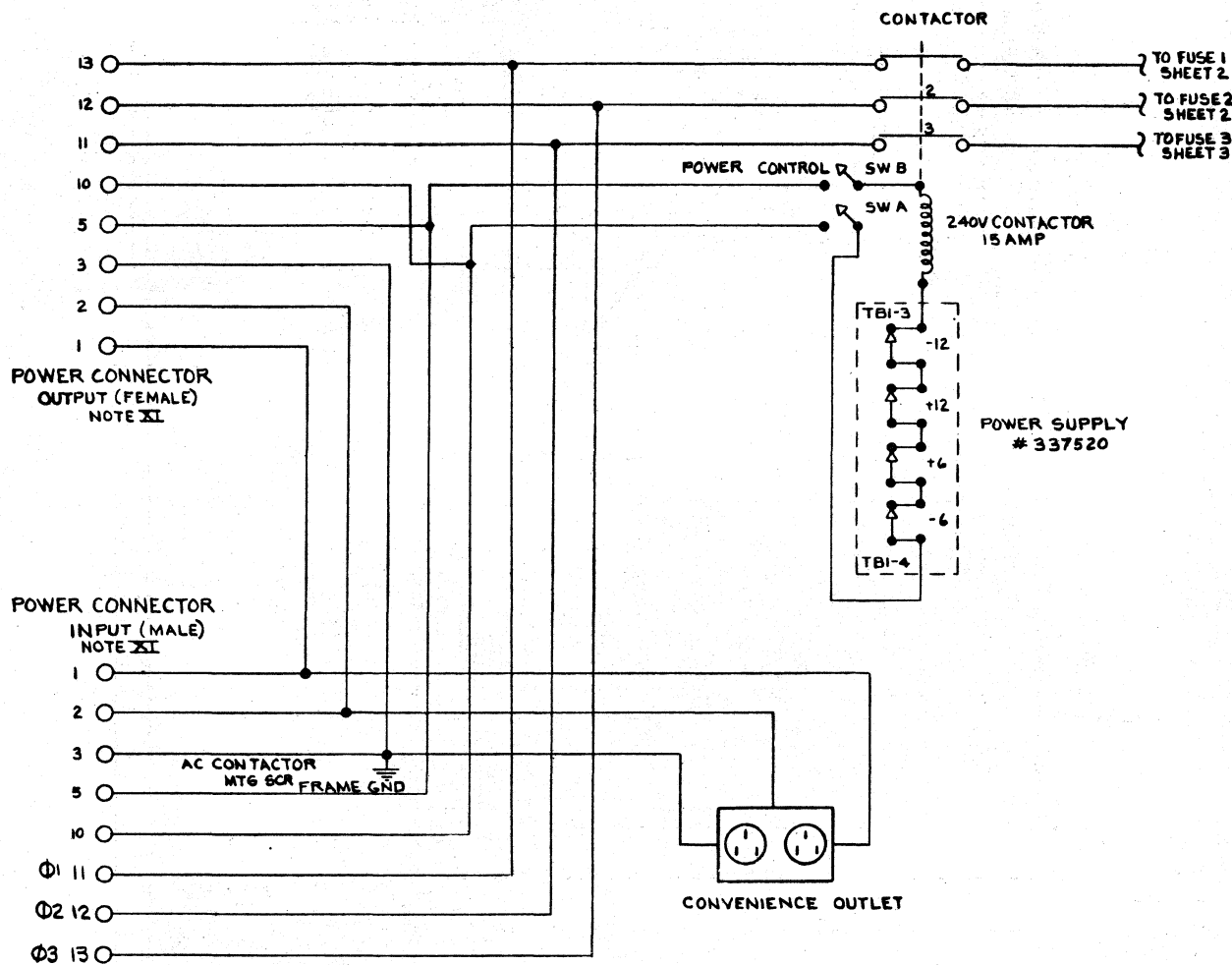
NOTES

X - 48 AND GROUND DISTRIBUTION
ARE NOT POINT TO POINT

INTERNATIONAL BUSINESS MACHINES CORP.				DATE				CHANGE NO.				NOTE				DEVELOPMENT NO.			
NAME				B 22-62				251020				X PRINT TO ENG. SPEC. NO.							
73.50.15.0												895291							
DESIGN				RAR 1-6-62				MODEL											
7330																			
DETAIL																			
CHECK				RAV 2-6-62				DRAW											
7330																			
APPRO				RAR 12-6-62				CHECK											

252395

73.50.15.0



NOTES

- XI POWER CONNECTOR POINTS
COMMONED AT THEIR DESTINATION
- XII THE OUTPUT TAPS OF THE FERRO
AND THE INPUT TAPS OF THE
ISOLATION TRANSFORMER
SHOULD BE ADJUSTED AT
OPERATING LOAD SO THAT
THE INPUT TO THE -12V AT
3 AMP REGULATOR IS
BETWEEN 14.5 AND 15.0 VOLTS
D.C.

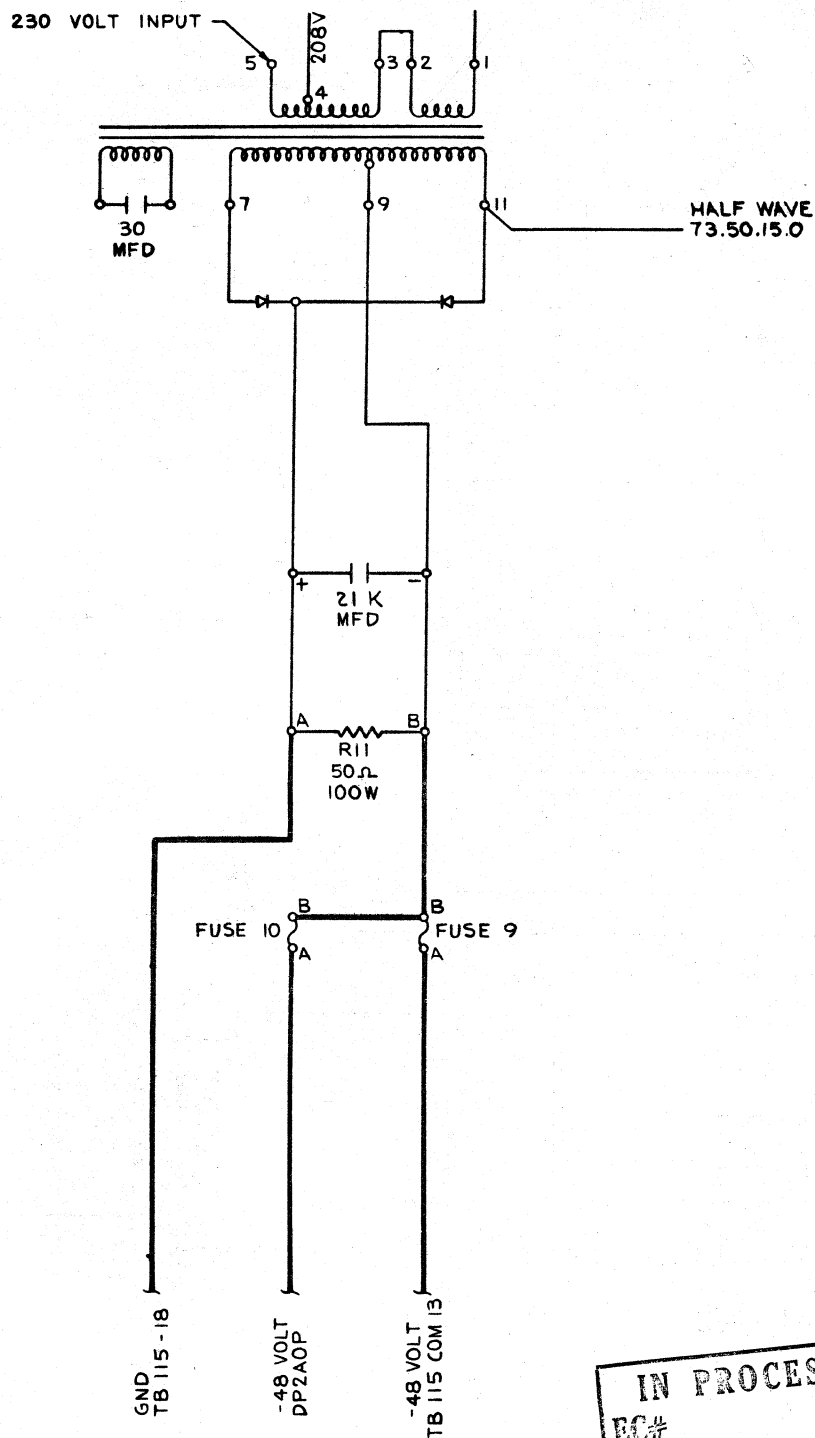
INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM	8-22-62	251020			NOTE X PRINT TO ENG. SPEC. NO. 895291	73.50.20.0
73.50.20.0		11-15-62	R251999				
DESIGN	RAV 1-23-62 MODEL 7330						
DETAIL	TJC 1-23-62						
CHECK	RAV 1-23-62 DRAW TJC						
APPRO	RAV 1-30-62 CHECK						

5323379

W.C. SIZE C

-48 VOLT POWER SUPPLY

73.50.30.0



IN PROCESS
EC#
DATE

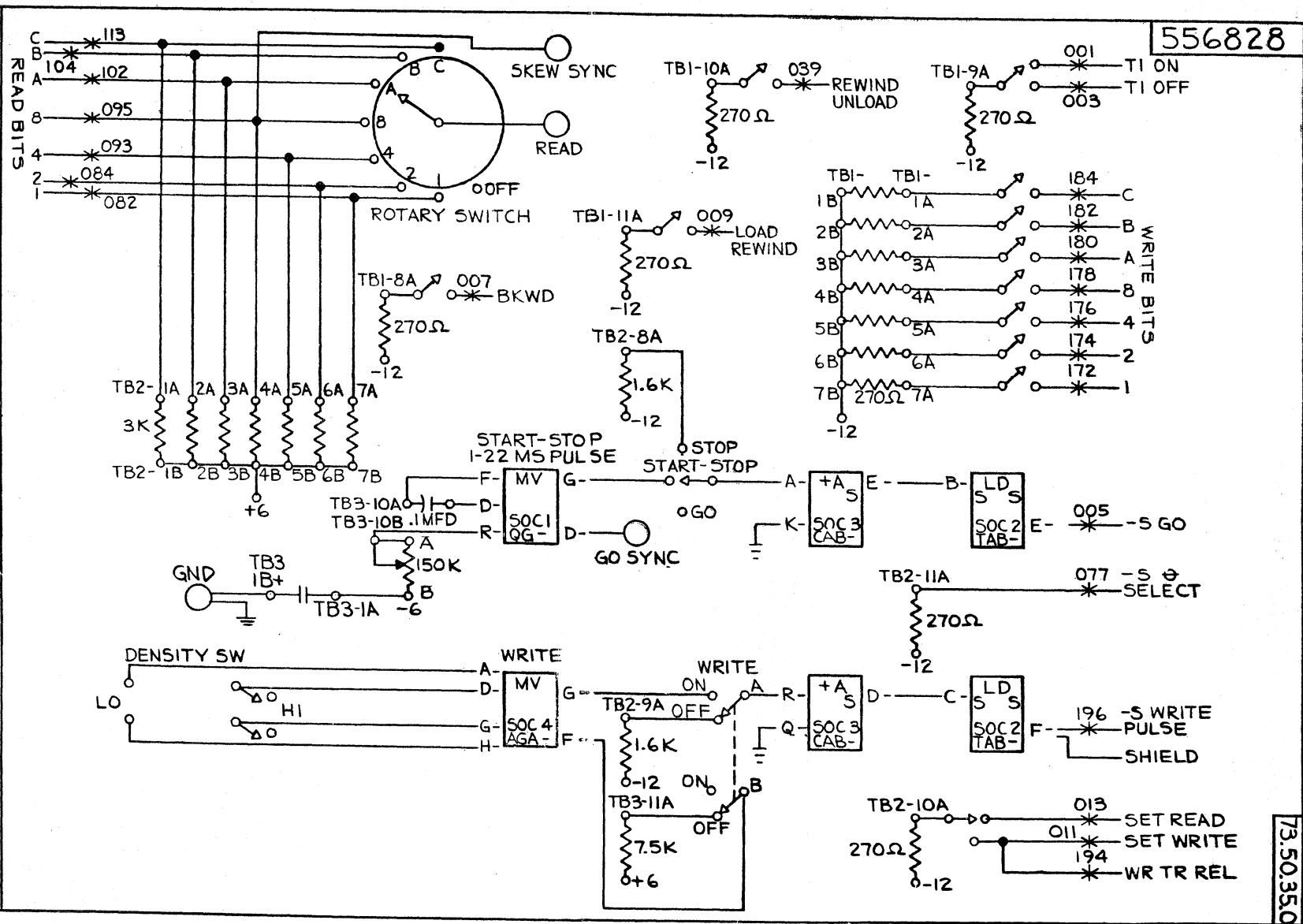
INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.	5323379
NAME	SYSTEMS DIAGRAM			8-22-62	251020			X PRINT TO ENG. SPEC. NO. 895291		
	73.50.30.0									
DESIGN	RAR	1-6-62	MODEL	7330						
DETAIL										
CHECK	RAV	2-6-62	DRAW	MARTIN	3-62					
APPRO	RAR	2-6-62	CHECK							
								ENG. SIZE C	73.50.30.0	

W.C. SIZE C

73.50.30.0

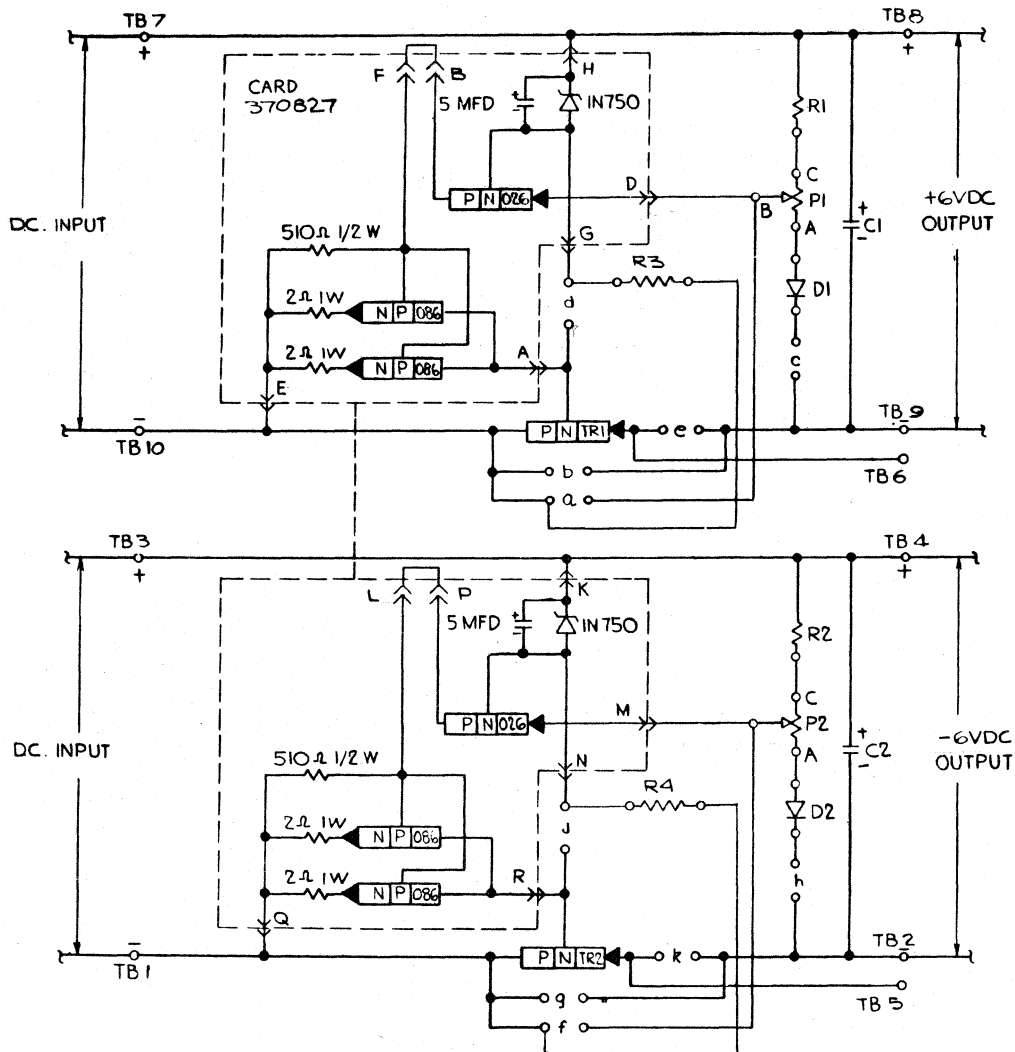
5323379

INTERNATIONAL BUSINESS MACHINES CORP.			
NAME	SYSTEM 3 DIAGRAM	DATE	1-5-61
DESIGN	JEV-B-60 MODEL 7330	CHANGE NO.	24864-A
CHECK	RAY 11-21-60	DATE	2-22-61
APPRO	18F 11-23-60	CHANGE NO.	249156
	11-23-60	DATE	8-4-61
	11-23-60	CHANGE NO.	249521
	11-23-60	DATE	10-29-62
	11-23-60	CHANGE NO.	252280
NOTE			
X PRINT TO ENG. SPEC. NO. 895291			
DWG. SIZE - B			
73.50.35.0			
556828			



556828

73.50.35.0



COMPONENT CHART			
SYMBOL	DESCRIPTION	PART NO	QTY
TR1, TR2	10B TRANSISTOR	369214	2
D1, D2	1N1692 DIODE	207398	2
P1, P2	25R 2W POT	2132014	2
C1, C2	250 MF/50VDC CAPAC	2109462	2
R1, R2	200 1W RESISTOR	509507	2

TO THE BASIC REGULATOR ASSEMBLY 342070
ADD THE COMPONENTS LISTED BELOW

FOR VOLTAGE LEVEL		+6 VDC		-6 VDC	
		COMPONENT	PART NO	COMPONENT	PART NO
TERMINALS	a	3 K Ω 1/2W	323920	7	3 K Ω 1/2W 323920
	b	75 Ω 2W	216986	9	75 Ω 2W 216986
	c	JUMPER	337519	n	JUMPER 337519
	d	220 Ω 1/2W	317007	j	220 Ω 1/2W 317007
	e	JUMPER	337519	k	JUMPER 337519
33K	a-d	2K Ω 1/2W	317019	j-k	2K Ω 1/2W 317019
1 PINS	33K	JUMPER	337530	l-p	JUMPER 337530

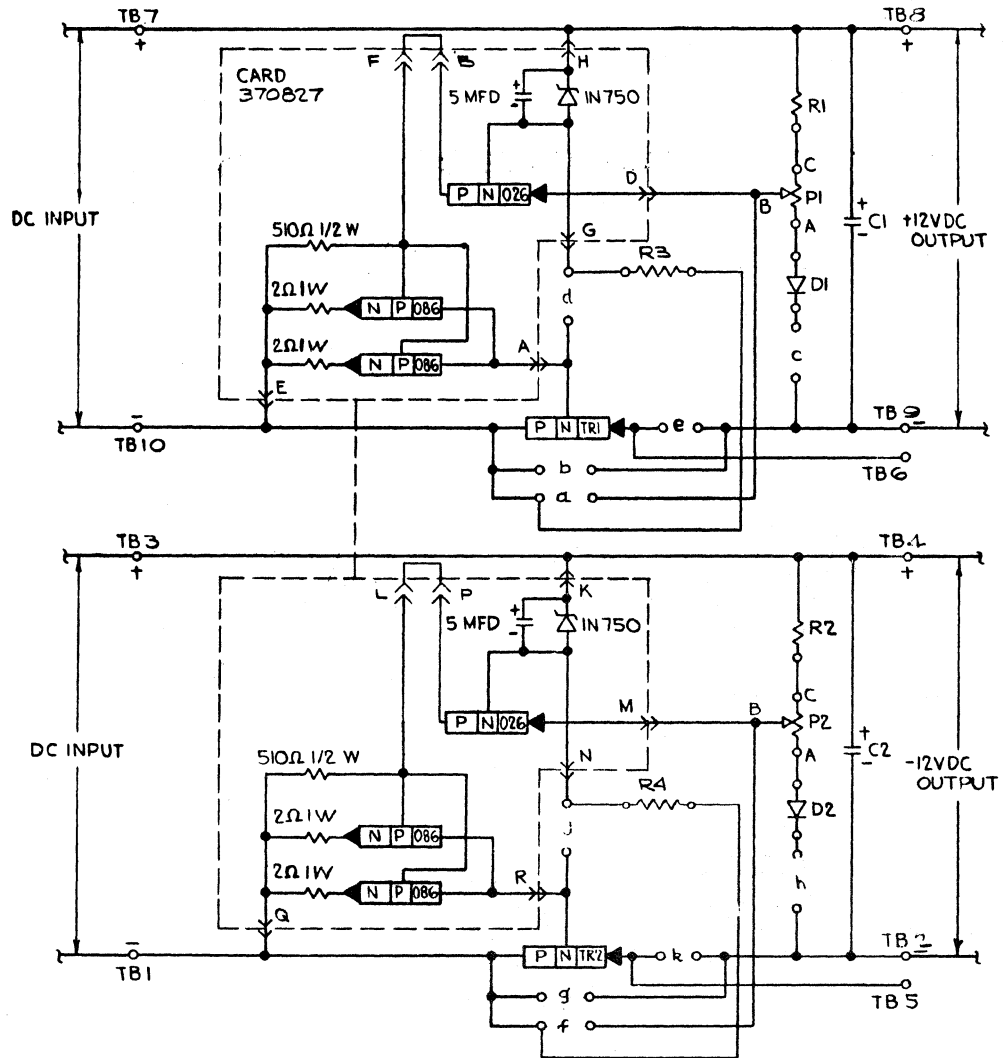
CARD SOCKET PINS B-F

INTERNATIONAL BUSINESS MACHINES CORP.		DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME SYSTEMS DIAGRAM		10-17-61	250007			X PRINT TO ENG. SPEC. NO. 855291	
DESIGN FAF 8-16-61 MODEL 7330		2-2-62	251048				
DETAIL RLB 8-16-61		8-22-62	R251020			DV. C. SIDE C	
CHECK FAF 9-10-61 DRAW DDI 7-6-61							
APPROV. JEB 9-10-61 CHECK							

337514

± 12VDC REGULATOR

A000043



COMPONENT CHART			
SYMBOL	DESCRIPTION	PART NO	QTY
TR1, TR2	108 TRANSISTOR	369214	2
D1, D2	1N692 DIODE	207398	2
P1, P2	25Ω 2W POT	2132014	2
C1, C2	250MFD@50VDC CAPAC	2109462	2
R1, R2	30Ω 1W RESISTOR	309507	2

TO THE BASIC REGULATOR ASSEMBLY 342010
ADD THE COMPONENTS LISTED BELOW

FOR VOLTAGE LEVEL	+12 VDC		-12 VDC	
	COMPONENT	PART NO	COMPONENT	PART NO
TERMINALS	a	6.2KΩ 1/2W 334914	f	6.2KΩ 1/2W 334914
	b	100Ω 2W 322888	g	100Ω 2W 322888
	c	56Ω 2W 216981	h	56Ω 2W 216981
	d	510Ω 1W 103915	j	510Ω 1W 103915
	e	JUMPER 337519	k	JUMPER 337519
	h	39KΩ 1/2W 317022	j-7	39KΩ 1/2W 317022
	k	JUMPER 337530	l-p	JUMPER 337530

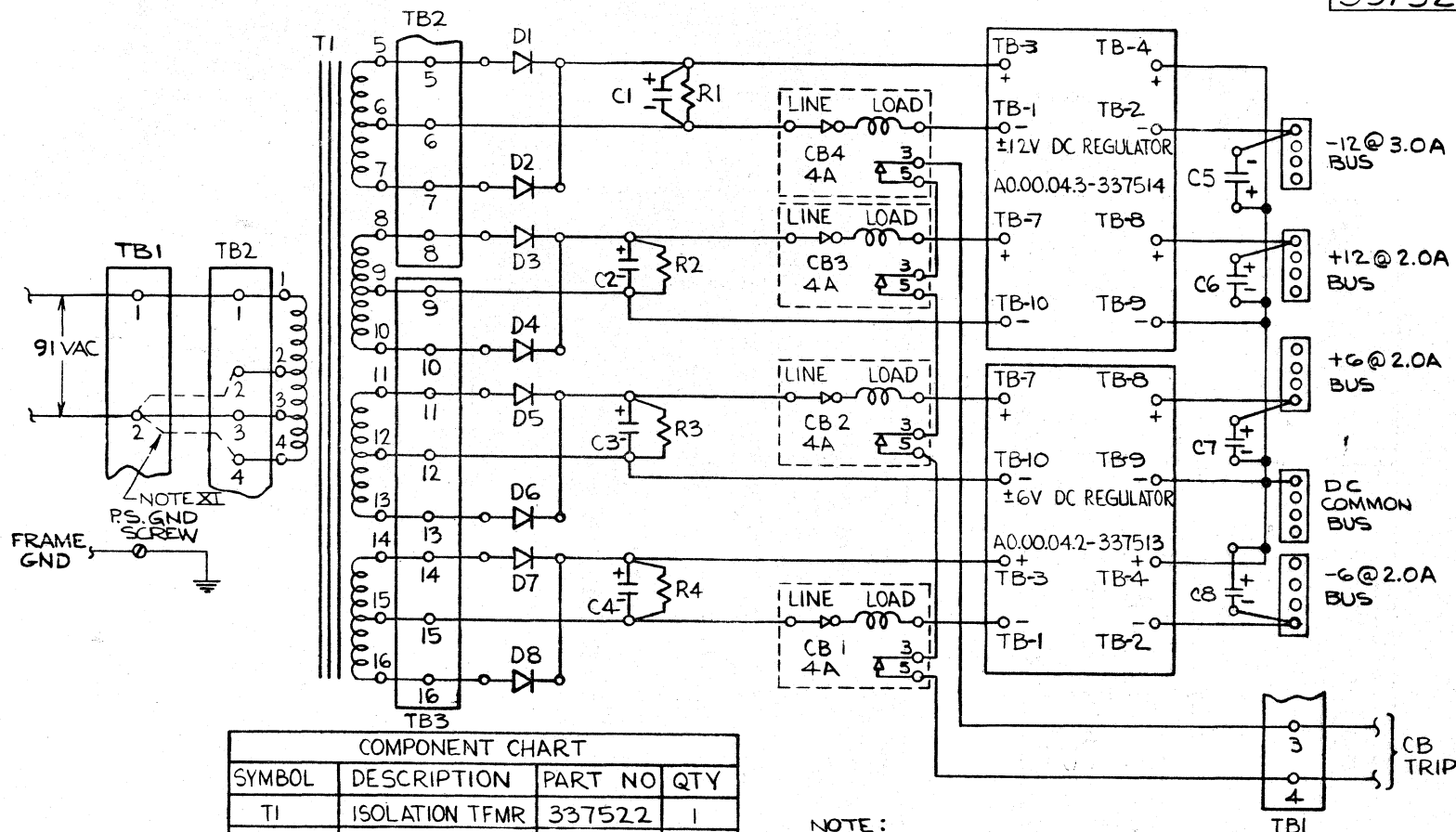
CARD SOCKET PINS

INTERNATIONAL BUSINESS MACHINES CORP.				DATE		CHANGE NO.		NOTE X PRINT TO ENG. SPEC. NO. 895291	DEVELOPMENT NO.
NAME	SYSTEMS DIAGRAM			10-17-61	250007	2-2-62	251048		
DESIGN	FAB 81-61			8-22-62	R251020				
DETAIL	RUB 81-61								
CHECK	FAB 81-61								
APPRO	FAB 81-61								
DATE	10-17-61								

A000043

337514

INTERNATIONAL BUSINESS MACHINES CORP.			
NAME	SYSTEMS DIAGRAM	DATE	CHANGE NO.
DESIGN	FAE 7A1-61	10-17-61	250007
DETAIL	R2B 8-1-61	2-2-62	251048
CHECK	DEL 8-0-61	8-22-62	R251020
APPRO	DEF 9-2-61		
NOTE			
X PRINT TO ENG. SPEC. NO. 895291			
DEVELOPMENT NO. A000045			
337521			



A000045