

CONTENTS

1622 READER-PUNCH LOGIC DIAGRAM

MACHINE SERIAL NO. 10695

DESCRIPTION	LOGIC	PART NO	ENGINEERING CHANGE LEVEL					
			802300 802474	802300B 802592	802300A 802458A	802365 802603A	802363 802603G	802455 802603K
CONTENTS		615100						
		615101						
		615102						
		615103						
		615104						
		615105						
DATA FLOW CHART	04.01.00.1	615106	802603A					
READER START AND RUN	04.02.00.1	615107	802300 802458A	802300A 802603A	802365	802363	802455	802474
READER CLUTCH AND CONTROL	04.02.01.1	615108	802300 802458A	802300A 802603A	802365 802603G	802363	802455	802474
READER READ	04.02.02.1	615109	802300	802365	802603A	802603K		
PUNCH START AND RUN	04.02.03.1	615110	802300	802455	802603A	802603G		
PUNCH CLUTCH AND CONTROL	04.02.04.1	615111	802300	802365	802455	802474	802603A	802603G
PUNCH READ AND PUNCH	04.02.05.1	615112	802300 802603A	802365	802363	802455	802592	802458A
C E AID	04.02.06.1	615113	802300	802458A	802603A			
SWITCH LOCATIONS	04.03.00.1	615114	802300	802300B	802603A			
GENERAL	04.03.01.1	615115	802300	802365	802455			
READER CAM TIMING	04.03.02.1	615116	802300	802365	802455	802603A		
CAM LOCATIONS	04.03.03.1	615117	802300	802365	802458A	802603A		
PUNCH CAM TIMING	04.03.04.1	615118	802300	802365	802458A	802603A	802603G	
TIMING REFERENCE	04.03.05.1	615119	802300	802458A	802603A			
RES,CAP AND DIODE LOCATIONS	04.03.06.1	615120	802300 802603G	802365	802363	802455	802458A	802603A
RELAY GATE	04.03.07.1	615121	802300	802365	802455	802603A	802603G	
READ RESISTORS AND INTEGRATORS	04.03.08.1	615122	802300	802363	802455	802603A		
RELAY LOCATIONS	04.03.09.1	615123	802300	802300A	802455	802458A	802603A	802603G
POWER SUPPLY DETAIL ±3V AT 5A, 1250W BULK SPLY	04.03.10.1	615124	802300	802603A				
POWER SUPPLY DETAIL +12V AT 8A	04.03.11.1	615125	802300	802603A				
POWER SUPPLY DETAIL -12V AT 16A	04.03.12.1	615126	802300	802603A				
POWER SUPPLY DETAIL -20V AT 15A	04.03.13.1	615127	802300	802603A				
MECHANICAL TIMING	04.03.14.1	615128	802300					
		615129						
PANEL A1 VOLTAGE DISTRIBUTION	04.04.01.1	615130	802300	802363				
PANEL A2 VOLTAGE DISTRIBUTION	04.04.01.2	615131	802300	802363	802603A	802603K		
A GATE CONNECTORS	04.04.01.5	615132	802300	802455	802603A			
READ BRUSHES TO BUFFER	04.04.01.8	615133	802300					
PUNCH CHECK BRUSHES TO BFR	04.04.01.9	615134	802300					
MEMORY ARRAY READ LINES	04.04.02.3	615135	802300	802603A				
MEMORY ARRAY WRITE LINES	04.04.02.4	615136	802300					
MEMORY ARRAY SENSE AND INHIBIT	04.04.02.5	615137	802300					
CORE MEMORY ARRAY	04.04.02.8	615138	802300	802300B				
A GATE "T" CONNECTORS	04.04.03.2	615139	802300	802300A	802363	802455	802592	802603A
A1 PANEL CARD LOCATION	04.04.03.3	615140	802300	802363	802592	802603A		
A1 PANEL CARD LOCATION	04.04.03.4	615141	802300	802300A	802455	802603A		
A2 PANEL CARD LOCATION	04.04.03.5	615142	802300	802363	802592	802603A		
A2 PANEL CARD LOCATION	04.04.03.6	615143	802300	802363	802592	802603A		
READER INTEGRATORS	04.04.04.1	615144	802300	802455	802603A			
PUNCH INTEGRATORS	04.04.04.3	615145	802300	802455	802592	802603A	802603G	
C E CONTROLS	04.04.05.1	615146	802300	802603A				
RESET	04.05.07.1	615147	802300	802603A				
PRIORITY RING	04.10.03.1	615148	802300					
OSCILLATOR	04.10.04.1	615149	802300	802300A	802603A			

FIELD B/M'S INSTALLED	
DATE	B/M NO.

NOTE
 I PRINT TO ENG SPEC 894698
 XI COMPLETE DIAGRAM CAN
 BE ORDERED UNDER
 PART NO. 615100

- | | |
|------------|---------|
| EC 802300 | 3-10-61 |
| EC 802300B | 4-3-61 |
| EC 802300A | 4-17-61 |
| EC 802365 | 4-24-61 |
| EC 802363 | 5-1-61 |
| EC 802455 | 5-15-61 |
| EC 802474 | 6-13-61 |
| EC 802592 | 6-16-61 |
| EC 802458A | 7-24-61 |
| EC 802603A | 12-4-61 |
| EC 802603G | 1-9-61 |
| EC 802603K | 1-25-61 |

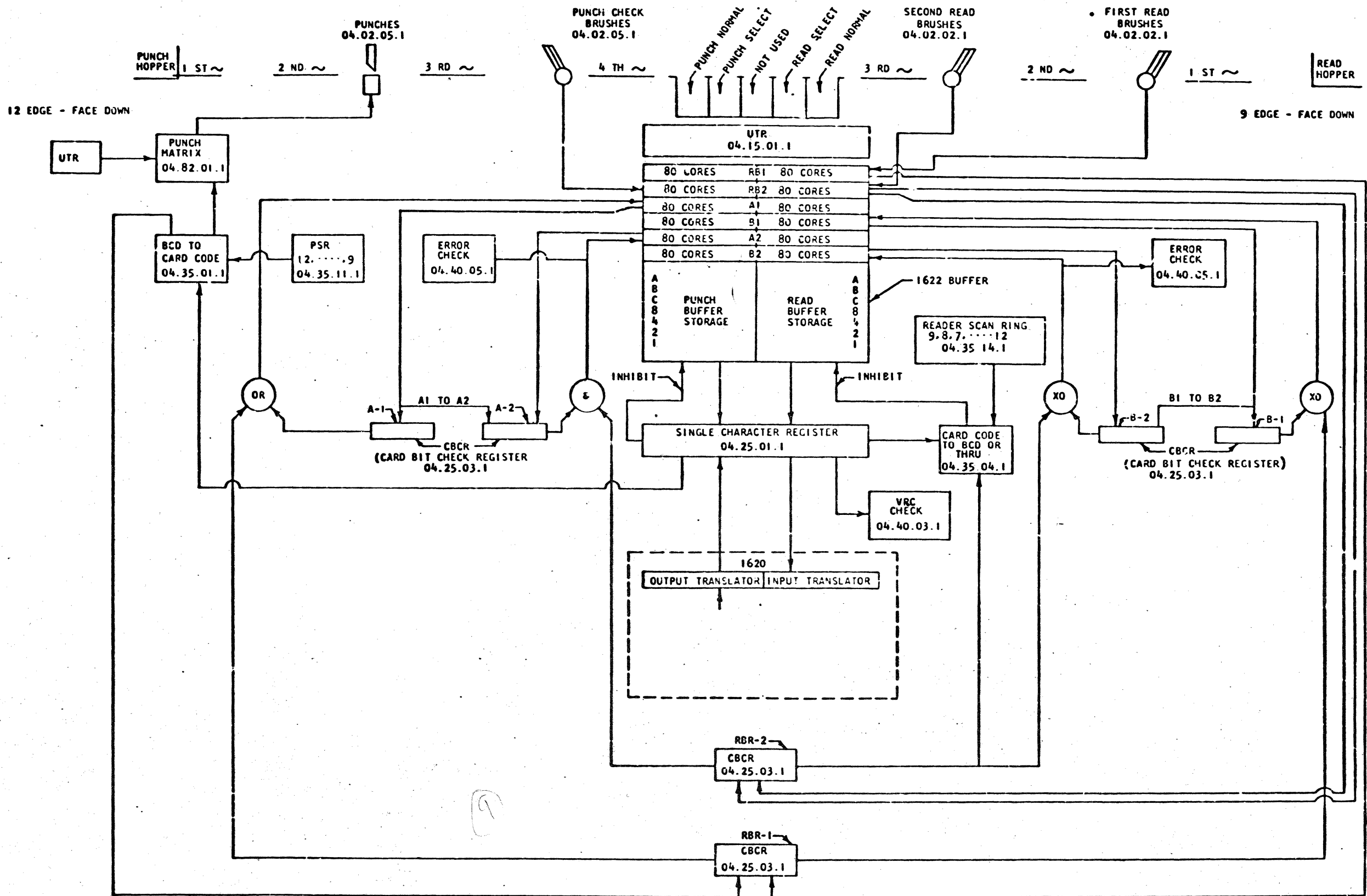
INTERNATIONAL BUSINESS MACH CORP					
NAME	LOGIC DIAGRAM-READER,PUNCH				
DESIGN	BTM	1-10-61	MODEL	1622	
DETAIL	BTM	1-10-61	SCALE	NONE	
CHECK	BTM	1-10-61	DRAW		
APPRO	BTM	1-11-61	CHECK	KJF	1-10-61

615100 J

SHEET 1 OF 2

DESCRIPTION	LOGIC	PART NO	ENGINEERING CHANGE LEVEL					
CLOCK PSN 0-1-2-3	04.10.05.1	615150	802300					
CLOCK PSN 4-5-6-7	04.10.06.1	615151	802300	802592	802458A			
CONTROLS	04.10.07.1	615152	802300	802363	802458A	802603A		
RD RB SCN AND TRF RD ACCR LAT'S	04.10.08.1	615153	802300	802363	802603A	802603G		
PCH SCN AND TRF PCH ACCR LAT'S	04.10.08.2	615154	802300	802363	802592	802603A		
CONTROLS SCAN	04.10.08.3	615155	802300	802363	802603A			
TRANSFER TO 1620	04.10.09.1	615156	802300	802363	802603A			
TRANSFER FROM 1620	04.10.09.2	615157	802300	802603A				
ERROR LATCHES	04.10.10.1	615158	802300	802363	802455	802592	802603A	
READY LATCHES	04.10.11.1	615159	802300	802363	802455	802592	802603A	802603G
BUFFER READ DRIVE PUNCH SELN	04.10.12.1	615160	802300	802603A				
UNITS RING 0-1-2-3	04.15.01.1	615161	802300	802363				
UNITS RING 4-5-6-7	04.15.02.1	615162	802300	802363				
UNITS RING 8-9, TENS RING 0-1	04.15.03.1	615163	802300	802363				
TENS RING 2-3-4-5	04.15.04.1	615164	802300					
TENS RING 6-7	04.15.05.1	615165	802300	802363	802592	802603A		
READ PUNCH DISCONNECT	04.15.06.1	615166	802300	802363	802455	802603A		
SINGLE CHAR REGISTER 8-4-2-1	04.25.01.1	615167	802300	802603A				
SINGLE CHAR REGISTER A-B-C	04.25.02.1	615168	802300	802603A				
CARD BIT CHECK REGISTER	04.25.03.1	615169	802300	802592	802603A			
BUFFER C-A-B-8-4-2-1 SENSE AMPS	04.30.01.1	615170	802300	802458A	802603A			
BUFFER CHECK PLANES A1-B1-A2-B2 ROW BIT PLANES 1,2 SENSE AMPS	04.30.02.1	615171	802300	802455	802592	802458A	802603A	
Z DRIVERS C-A-B-8-4-2-1-XY,X,Y	04.30.03.1	615172	802300	802603A				
READER/PUNCH BUFFER READ/WRITE X DRIVERS (UNITS)	04.30.04.1	615173	802300	802458A	802603A			
READER/PUNCH BUFFER READ/WRITE Y DRIVERS (TENS)	04.30.05.1	615174	802300	802458A	802603A			
READ/WRITE DECODE SWITCHES X (UNITS)	04.30.06.1	615175	802300					
READ/WRITE DECODE SWITCHES Y (TENS)	04.30.07.1	615176	802300					
DRIVER RESISTORS	04.30.08.1	615177	802300					
BCD TO HOLLERITH CODING	04.35.01.1	615178	802300	802458A	802603A			
BCD TO HOLLERITH CODING	04.35.02.1	615179	802300					
HOLLERITH TO BCD CODING	04.35.04.1	615180	802300	802603A				
PUNCH SCAN RING 12-11-0-1	04.35.11.1	615181	802300	802603A				
PUNCH SCAN RING 2-3-4-5	04.35.12.1	615182	802300	802603A				
PUNCH SCAN RING 6-7-8-9	04.35.13.1	615183	802300	802363	802603A			
READER SCAN RING 9-8-7-6	04.35.14.1	615184	802300	802603A				
READER SCAN RING 5-4-3-2	04.35.15.1	615185	802300	802603A				
READER SCAN RING 1-0-11-12	04.35.16.1	615186	802300	802363	802603A			
C BIT CORRECTION	04.40.02.1	615187	802300	802603A				
		615188						
VRC CHECK	04.40.03.1	615189	802300	802603A				
READ PUNCH CHECK ANY HOLE AND ODD/EVEN	04.40.05.1	615190	802300	802603A				
PUNCH SELECT	04.82.01.1	615191	802300					
PUNCH MAG DRIVERS NO 1 TO 16	04.82.03.1	615192	802300					
PUNCH MAG DRIVERS NO 17 TO 32	04.82.04.1	615193	802300					
PUNCH MAG DRIVERS NO 33 TO 48	04.82.05.1	615194	802300					
PUNCH MAG DRIVERS NO 49 TO 64	04.82.06.1	615195	802300	802603K				
PUNCH MAG DRIVERS NO 65 TO 80	04.82.07.1	615196	802300					
DATA LINE DRIVERS	04.83.01.1	615197	802300					
CONTROL LINE DRIVERS	04.83.04.1	615198	802300					
DATA LINE TERMINATORS	04.83.05.1	615199	802300					
CONTROL LINE TERMINATORS	04.83.06.1	615200	802300	802603A				
		615201						
AC POWER DISTRIBUTION	04.90.10.1	615202	802300	802603A				
AC REGULATOR AND DC SUPPLIES	04.90.20.1	615203	802300	802365	802603A			
DC DISTRIBUTION AND GND RETURNS	04.90.35.1	615204	802300	802365	802363	802603A		
POWER SUPPLY SEQUENCING	04.90.40.1	615205	802300	802300B	802458A	802603A		
VOLTAGE SEN RELAYS & METERING	04.90.45.1	615206	802300	802458A	802603A	802603G		

615106
EC 802603A



WHERE USED 615100

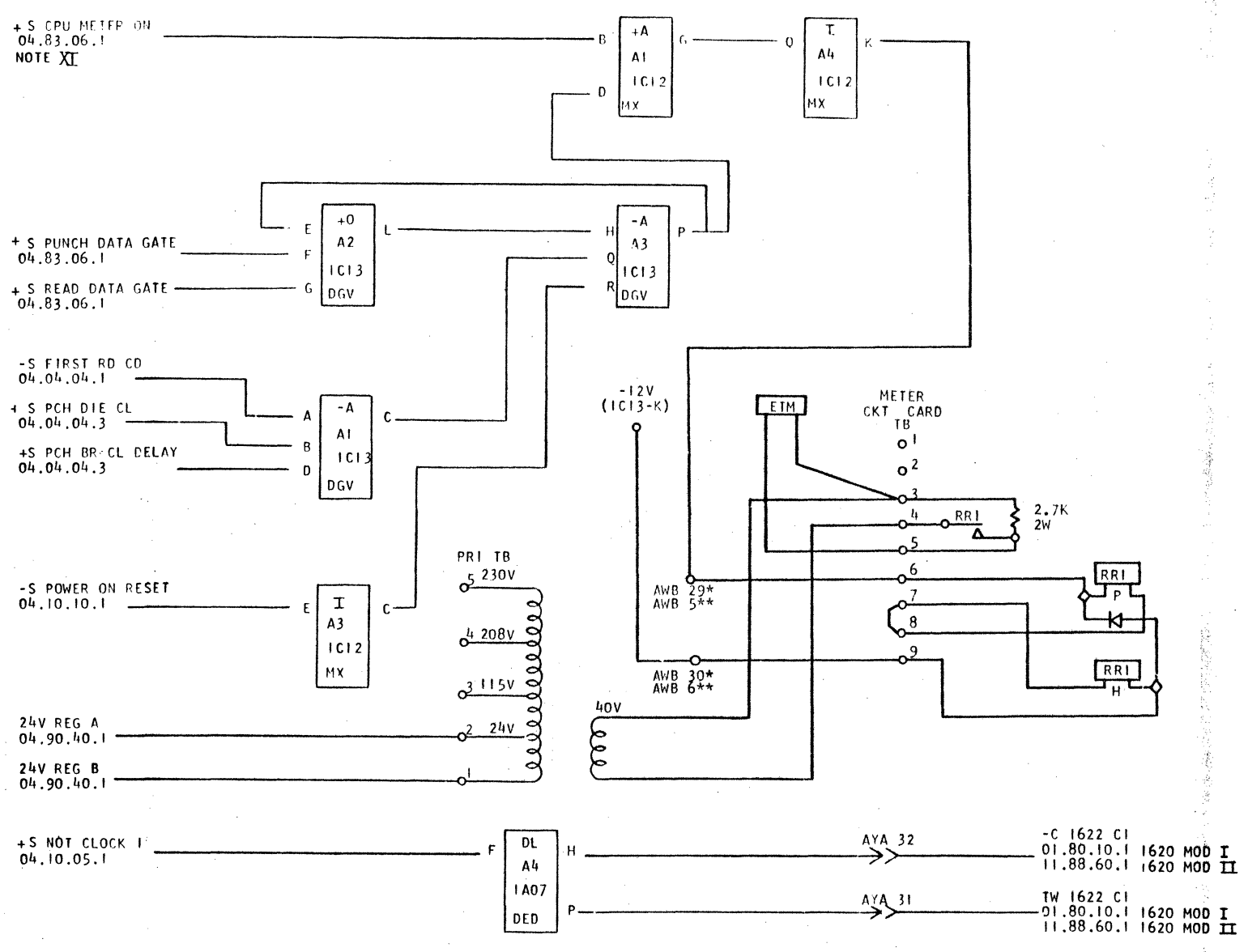
DATA FLOW CHART

1622

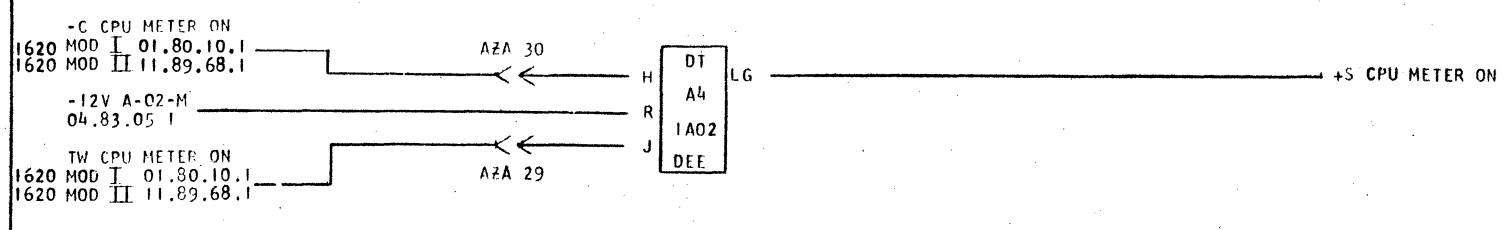
04.01.00.1

605354

PROCESS METER



SUPPLEMENT TO SECTION 04.83.06.1



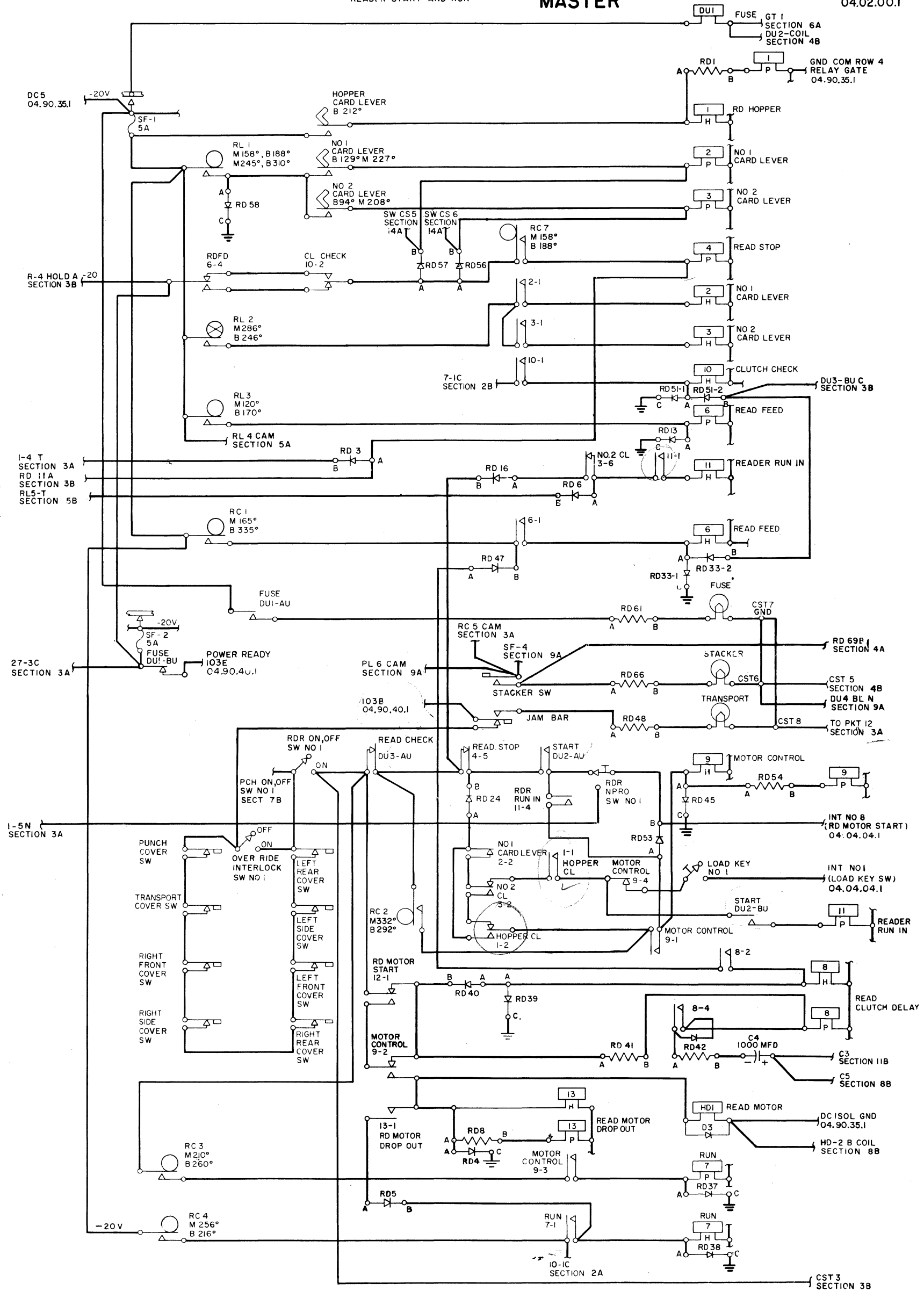
- NOTES
- XI SECTION 04.83.06.1, CIRCUIT IA02 (A4) WAS ALTERED AS SHOWN ABOVE.
 - XII INDICATES LOCATIONS USED FOR MACHINE W/D SUFFIX J AND LATER
 - * INDICATES LOCATIONS USED FOR MACHINE W/D SUFFIX *-H

INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME METER-PROCESS				9-13-63	805772C			NOTE X PRINT TO ENG. SPEC. NO. 894947	
				10-22-63	805772 H				
DESIGN		MODEL							
DETAIL									
CHECK		DPAW	DJH	8-29-63					605354
APPRO		CHECK							

READER START AND RUN

MASTER

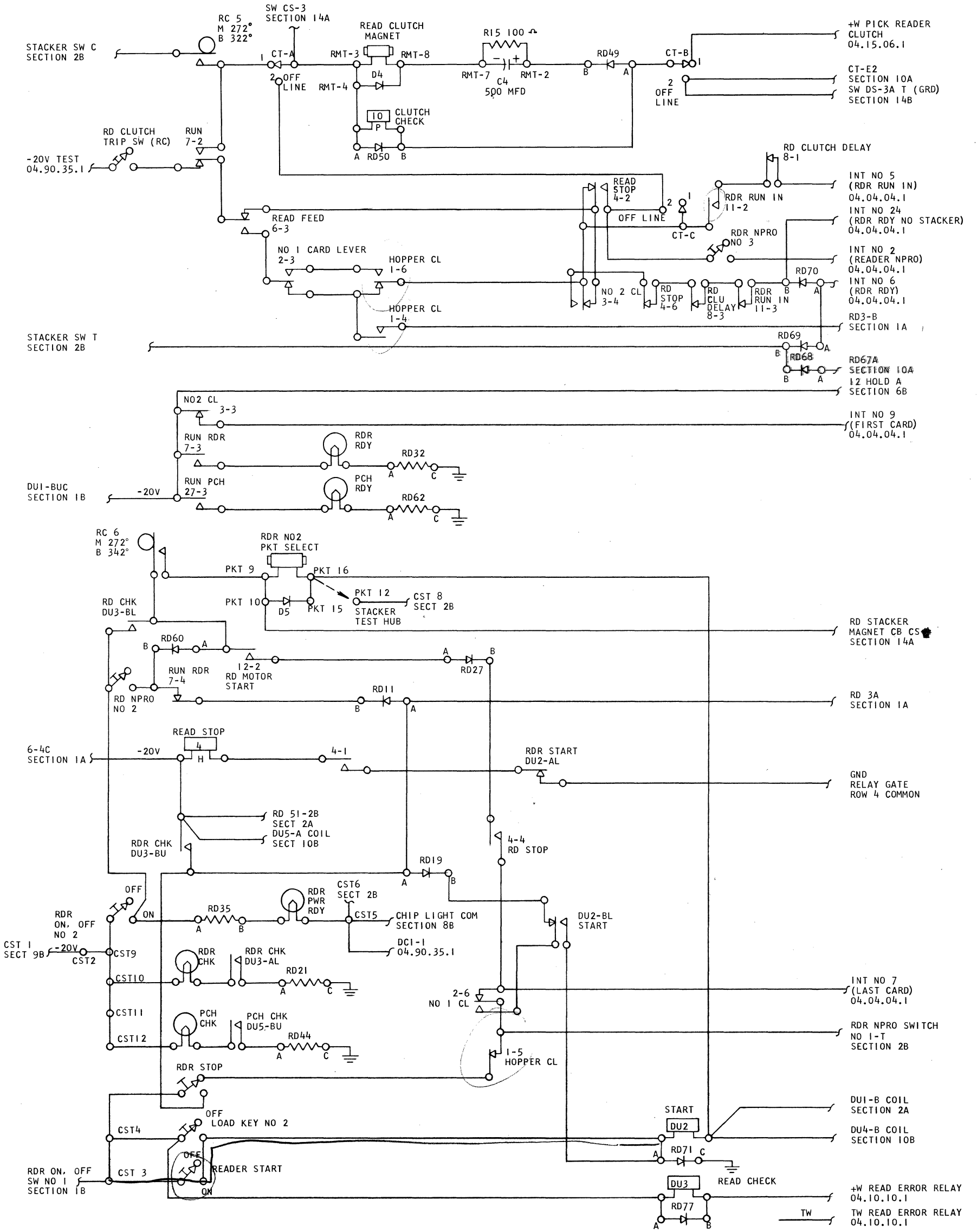
DISCONTINUED



EC. 804316,804316A

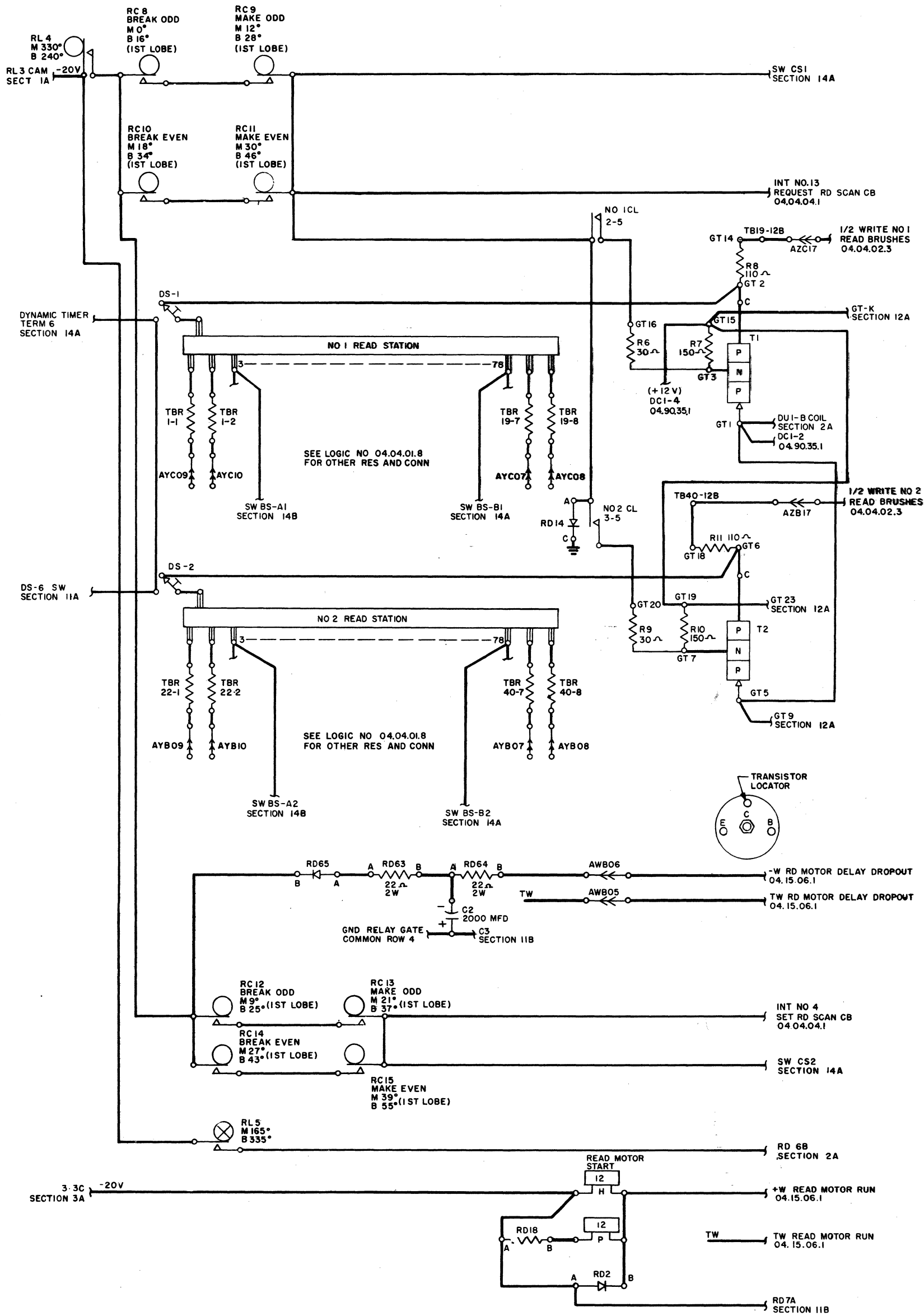
READER CLUTCH AND CONTROL

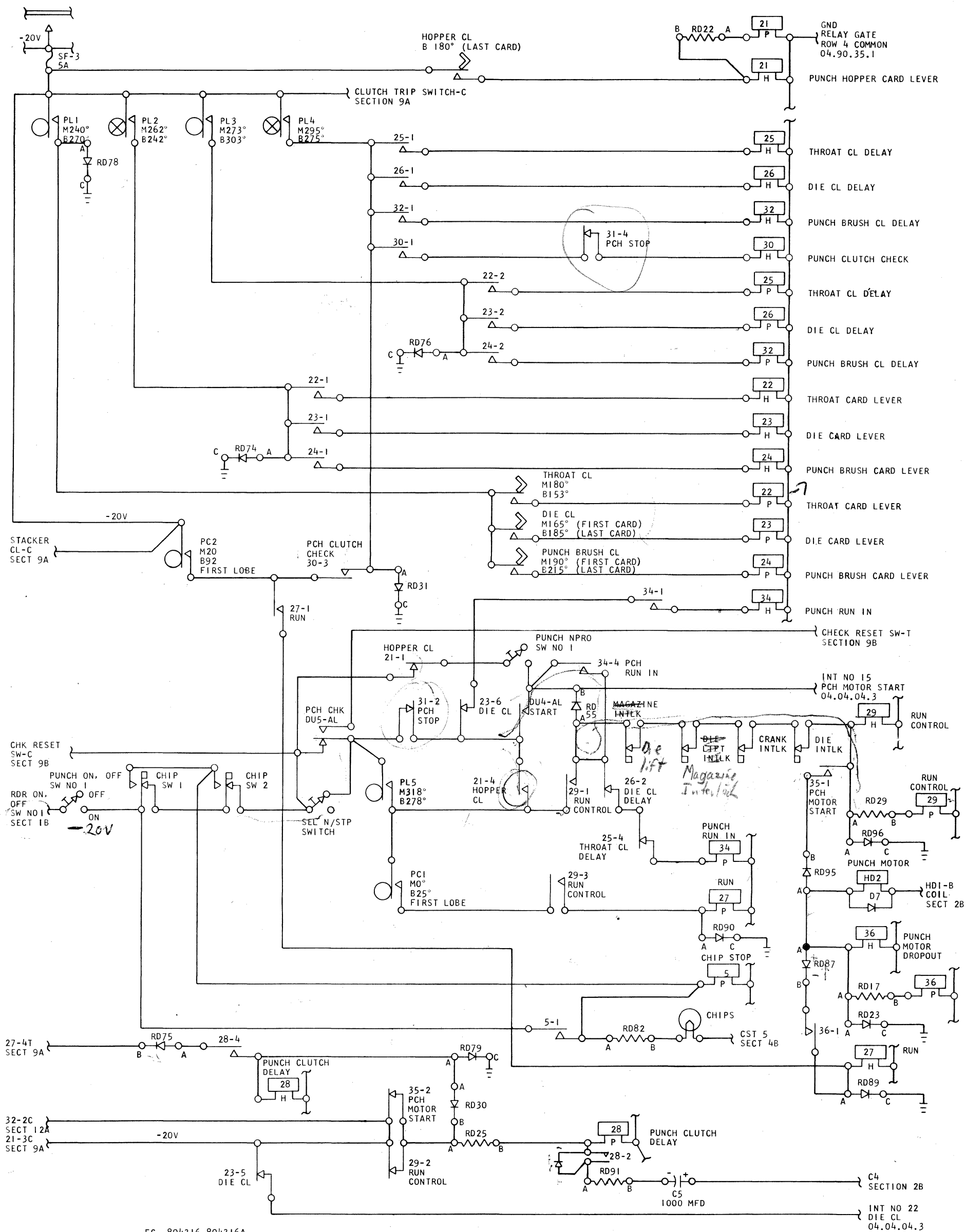
04.02.01.1



615108

EC 802300, 802300A, 802365, 802363, 802455, 802474, 802458A, 802603A, 802603G

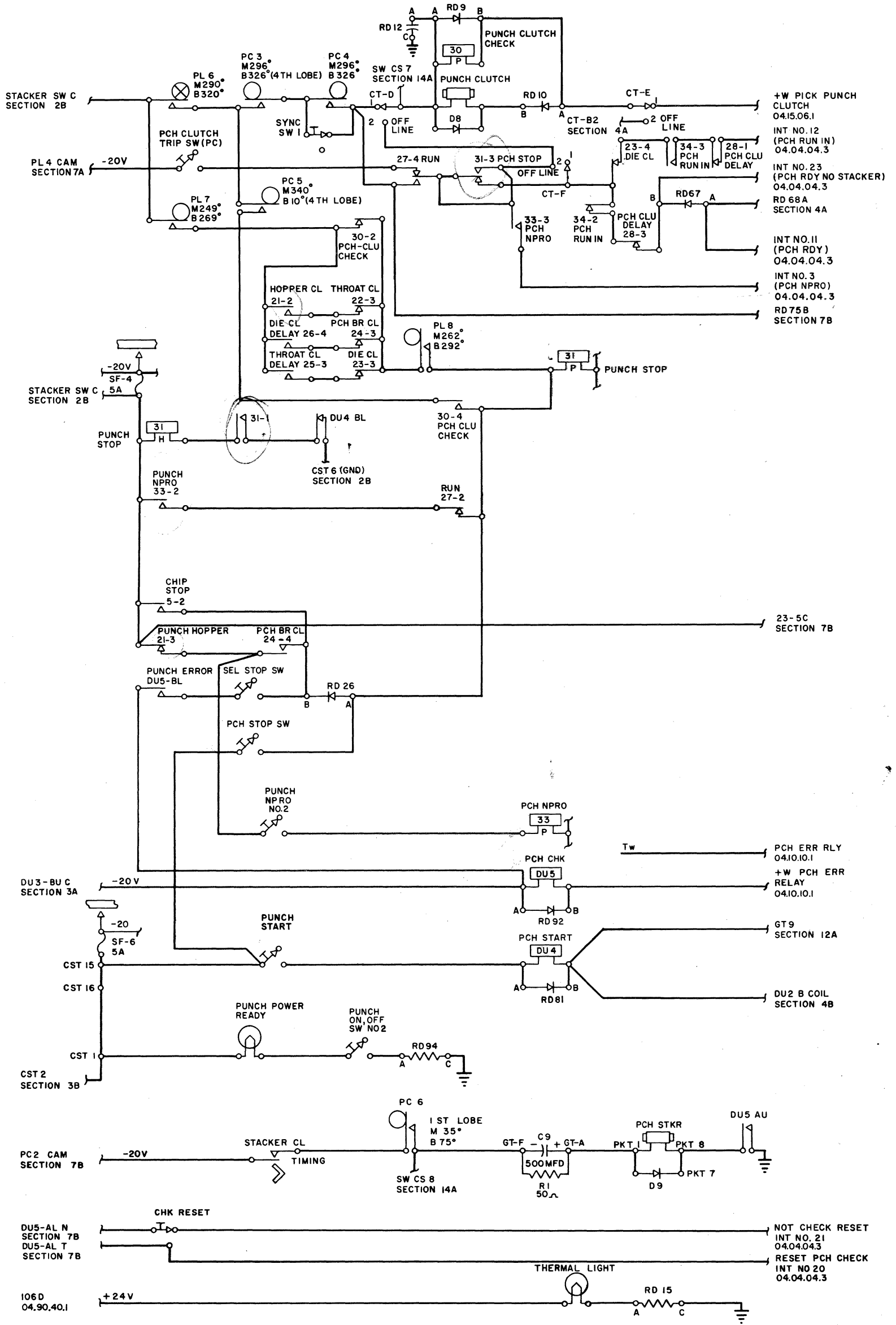




EC. 804316,804316A

PUNCH CLUTCH AND CONTROL

04.02.04.1



WIRING SIDE PCH MAG
CONN AND DIODE ASM

17 (1)	(8) 24
9	16
1	8

D

17 (1)	(8) 24
9	16
1	8

C

17 (1)	(8) 24
9	16
1	8

B

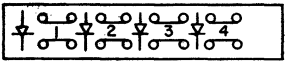
17 (1)	(8) 24
9	16
1	8

A

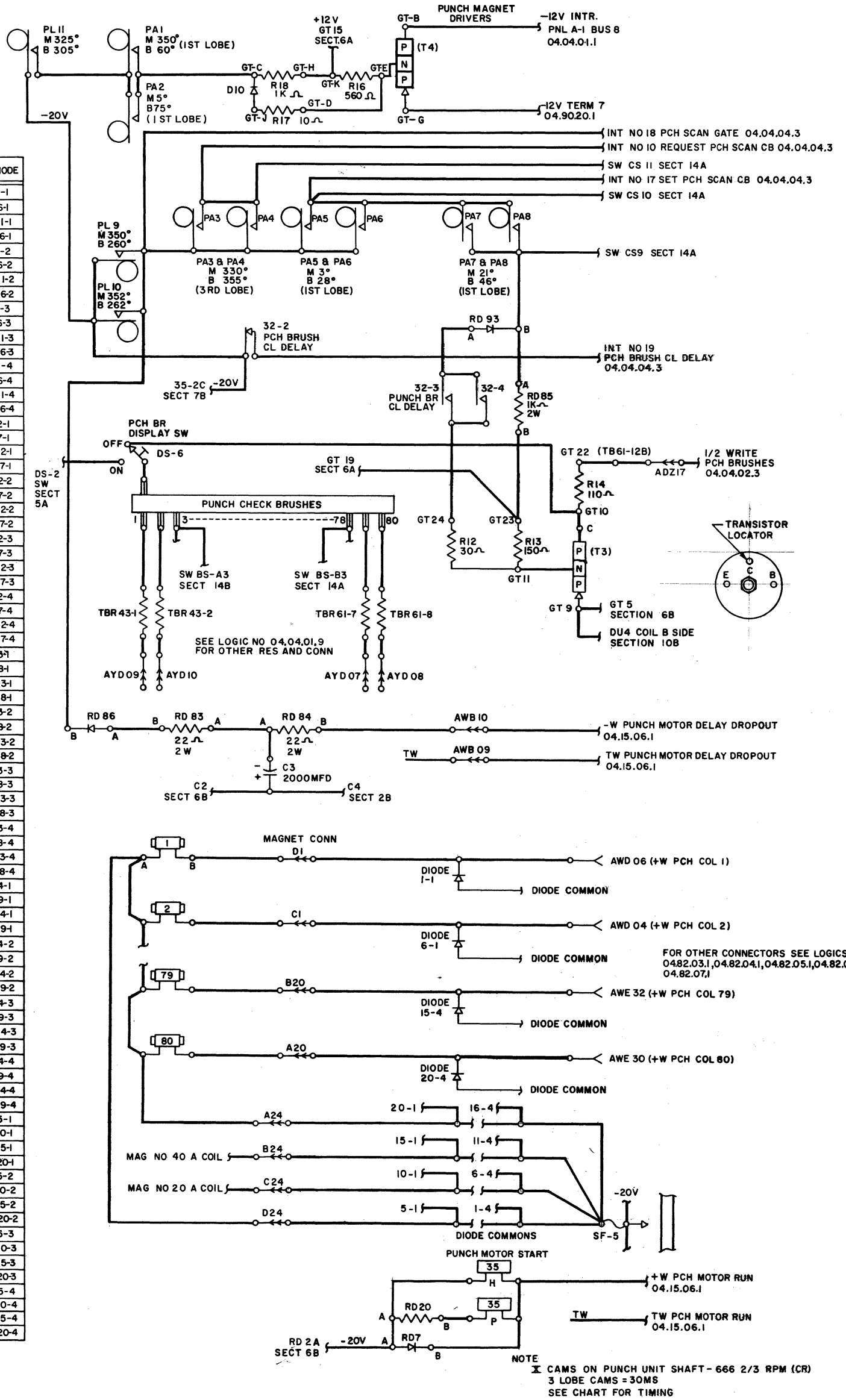
1	4
2	
3	
4	
5	
6	
7	
8	
9	
10	

11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

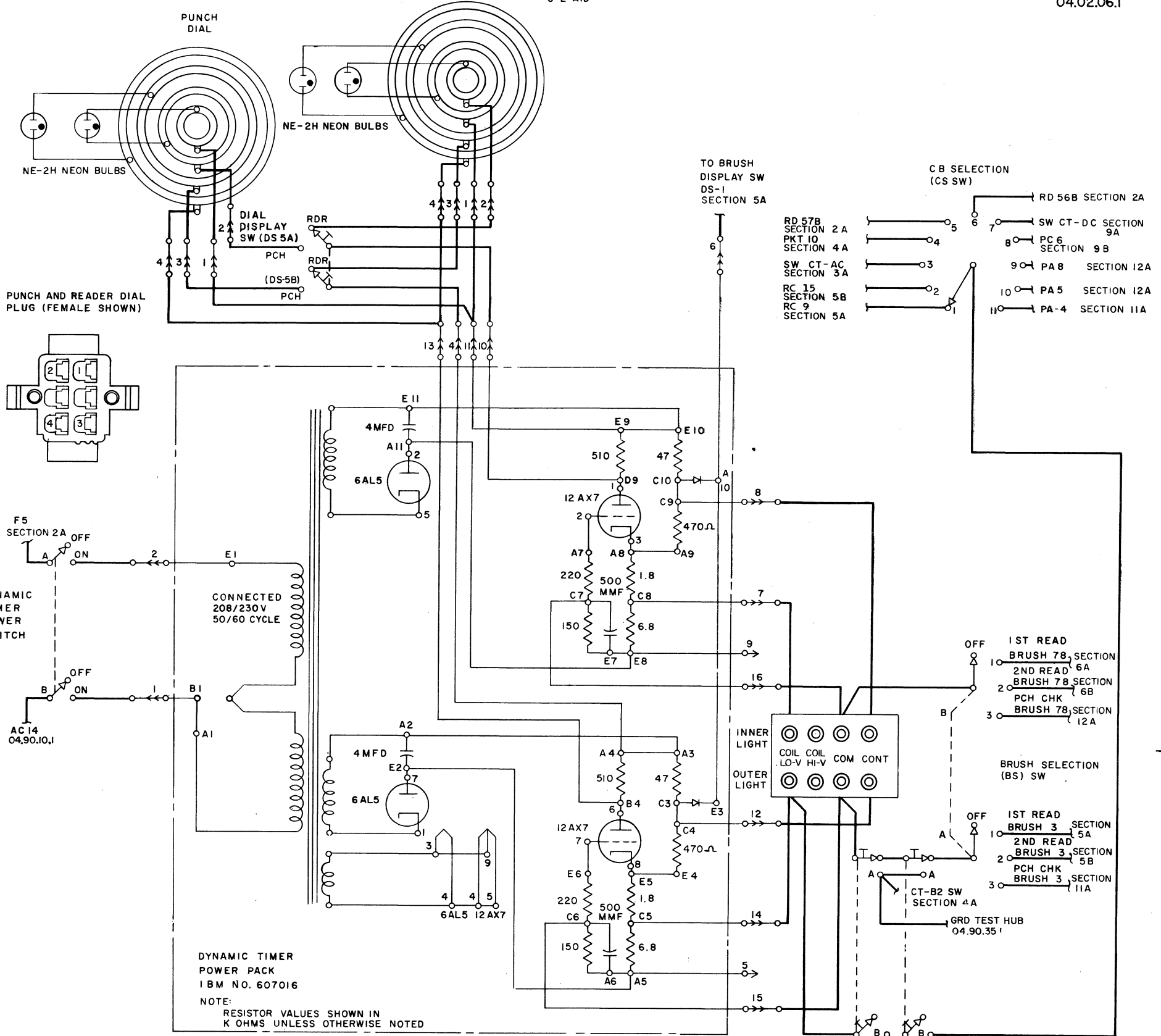
PCH MAG	CONN	DIODE
1	DI	1-1
2	CI	6-1
3	BI	11-1
4	AI	16-1
5	D2	1-2
6	C2	6-2
7	B2	11-2
8	A2	16-2
9	D3	1-3
10	C3	6-3
11	B3	11-3
12	A3	16-3
13	D4	1-4
14	C4	6-4
15	B4	11-4
16	A4	16-4
17	D5	2-1
18	C5	7-1
19	B5	12-1
20	A5	17-1
21	D6	2-2
22	C6	7-2
23	B6	12-2
24	A6	17-2
25	D7	2-3
26	C7	7-3
27	B7	12-3
28	A7	17-3
29	D8	2-4
30	C8	7-4
31	B8	12-4
32	A8	17-4
33	D9	3-1
34	C9	8-1
35	B9	13-1
36	A9	18-1
37	D10	3-2
38	C10	8-2
39	B10	13-2
40	A10	18-2
41	D11	3-3
42	C11	8-3
43	B11	13-3
44	A11	18-3
45	D12	3-4
46	C12	8-4
47	B12	13-4
48	A12	18-4
49	D13	4-1
50	C13	9-1
51	B13	14-1
52	A13	19-1
53	D14	4-2
54	C14	9-2
55	B14	14-2
56	A14	19-2
57	D15	4-3
58	C15	9-3
59	B15	14-3
60	A15	19-3
61	D16	4-4
62	C16	9-4
63	B16	14-4
64	A16	19-4
65	D17	5-1
66	C17	10-1
67	B17	15-1
68	A17	20-1
69	D18	5-2
70	C18	10-2
71	B18	15-2
72	A18	20-2
73	D19	5-3
74	C19	10-3
75	B19	15-3
76	A19	20-3
77	D20	5-4
78	C20	10-4
79	B20	15-4
80	A20	20-4



PACKAGED DIODE 222355



C E AID

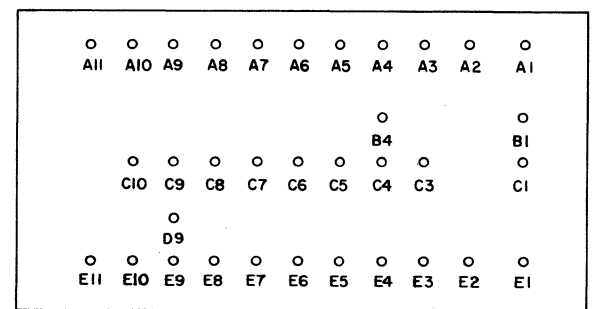


CAM DISPLAY

1. REQUEST RD SCAN CB
2. SET RD SCAN CB
3. RD CLUTCH MAGNET
4. RD STACK MAGNET
5. NO 1 CL B CAM
6. NO 2 CL B CAM
7. PCH CLUTCH MAGNET
8. PCH STACK MAGNET
9. PCH IMP CB
10. SET PCH SCAN CB
11. REQUEST PCH SCAN CB

BRUSH DISPLAY

1. 1ST READ BR 3 AND 78
2. 2ND READ BR 3 AND 78
3. PCH CHECK BR 3 AND 78



DYNAMIC TIMER POWER PACK TERMINAL BOARD

COVER INTERLOCKS

PUNCH	1B
TRANSPORT	
RIGHT FRONT	
RIGHT SIDE	
LEFT REAR	
LEFT SIDE	
LEFT FRONT	
RIGHT REAR	▼

PUNCH INTERLOCKS

MAGAZINE	7B
DIE LIFT	8B
CRANK	8B
DIE	8B

MISCELLANEOUS SWITCHES

STACKER	2B
JAM BAR	2B

CONTROL KEY AND LIGHT PANEL

LIGHTS	LOC	SWITCHES	LOC
PUNCH CHECK	3B	PUNCH ON OFF	7B, 9B
PUNCH READY	3B	PUNCH N P R O	7B, 9B
POWER READY (PUNCH)	9B	READER START	3B
FUSE	2A	CHECK RESET	9B
STACKER	2B	READER STOP	3B
TRANSPORT	2B	LOAD KEY	2B, 3B
CHIPS	8B	READ N P R O	2B, 4A, 4A
THERMAL	10B	READER ON OFF	1B, 3B
READER CHECK	3B	PUNCH START	9B
READER READY	3B	PUNCH STOP	9B
POWER READY (READY)	3B	SELECT STOP N/STOP	9B, 7B

VOLTAGE TEST-HUB

GND	04.90.35.1

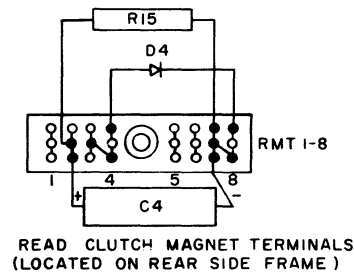
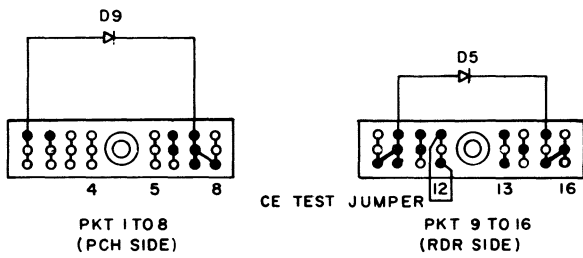
SERVICE SWITCHES

NAME	TYPE	CIRCUITS	LOCATION	USE
DS-1	* MC	1	5A	1ST READ BRUSH DISPLAY
DS-2	MC	1	5A	2ND READ BRUSH DISPLAY
DS-3	MC	2	14B	READ CAM DISPLAY
DS-4	MC	2	14B	PUNCH CAM DISPLAY
PC	MC	1	9A	PUNCH CLUTCH TRIP
RC	MC	1	3A	READ CLUTCH TRIP
DS-5	TOGGLE	2	13A	DIAL SELECTION (READ OR PUNCH)
TIMER	TOGGLE	2	13A	POWER ON TIMER
CS	ROTARY	1-11 POS	14A	CAM SELECTION
BS A,B	ROTARY	2-5 POS	14B, 14A	BRUSH SELECTION
CT A-E	ROTARY	6-2 POS	3A, 4A, 4A, 9A, 10A	OFF LINE CARD FEED
SYNC	MC	1	9A	SYNCS PUNCH CLUTCH PULSES
RS	TOGGLE	2	1B, 04.04.05.1	OVER RIDE INTERLOCK SWITCH
A1, A2	TOGGLE	2	04.90.35.1	MARGINAL CHECK
SW2 1-2	TOGGLE	2	04.90.40.1	AC POWER CONTROL
DS-6	MC	1	11A	PUNCH BRUSH DISPLAY

* MOMENTARY CONTACT

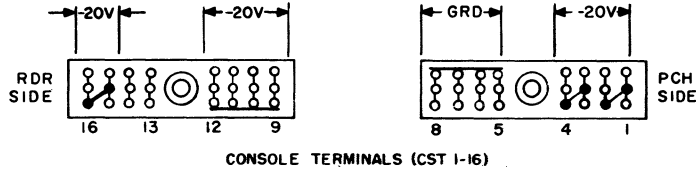
PKT LOCATION	
1	10B
2	—
3	—
4	—
5	—
6	—
7	10B
8	10B
9	3A
10	3A
11	—
12	3A
13	—
14	—
15	3A
16	3A

RMT LOCATION	
1	—
2	4A
3	3A
4	3A
5	—
6	—
7	3A
8	3A



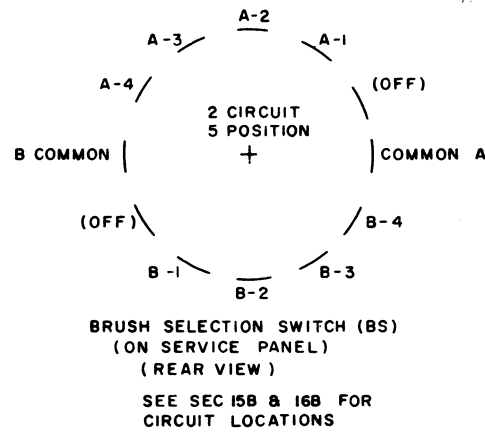
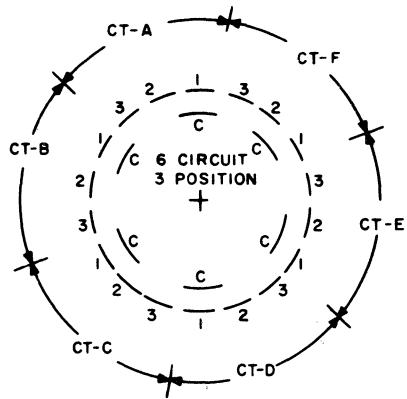
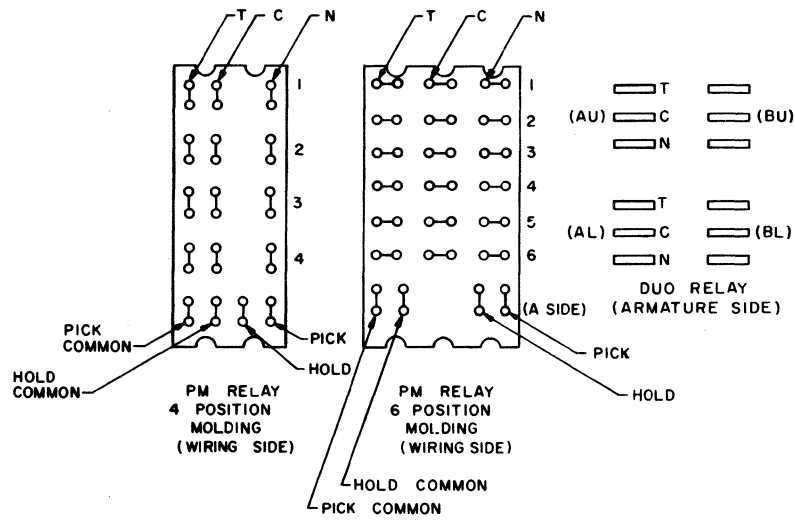
POCKET TERMINALS (PKT) (LOCATED ON FRONT SIDE FRAME)

CST LOCATION	
1	9B
2	3B
3	3B
4	3B
5	4B
6	2B
7	2A
8	2B
9	3B
10	3B
11	3B
12	3B
13	—
14	—
15	9B
16	9B



TYPE	SIZE	PART NO	DESCRIPTION	NO	COIL RESISTANCE	
					PICK	HOLD
1	FOUR	719003	HIGH SPEED	719009	70±7Ω	700±70Ω
2	SIX	719007	STANDARD	719011	105±15.5Ω	600±60Ω
3	FOUR	719005	STANDARD	719010	126±12.6Ω	700±70Ω

PERMISSIVE MAKE RELAY



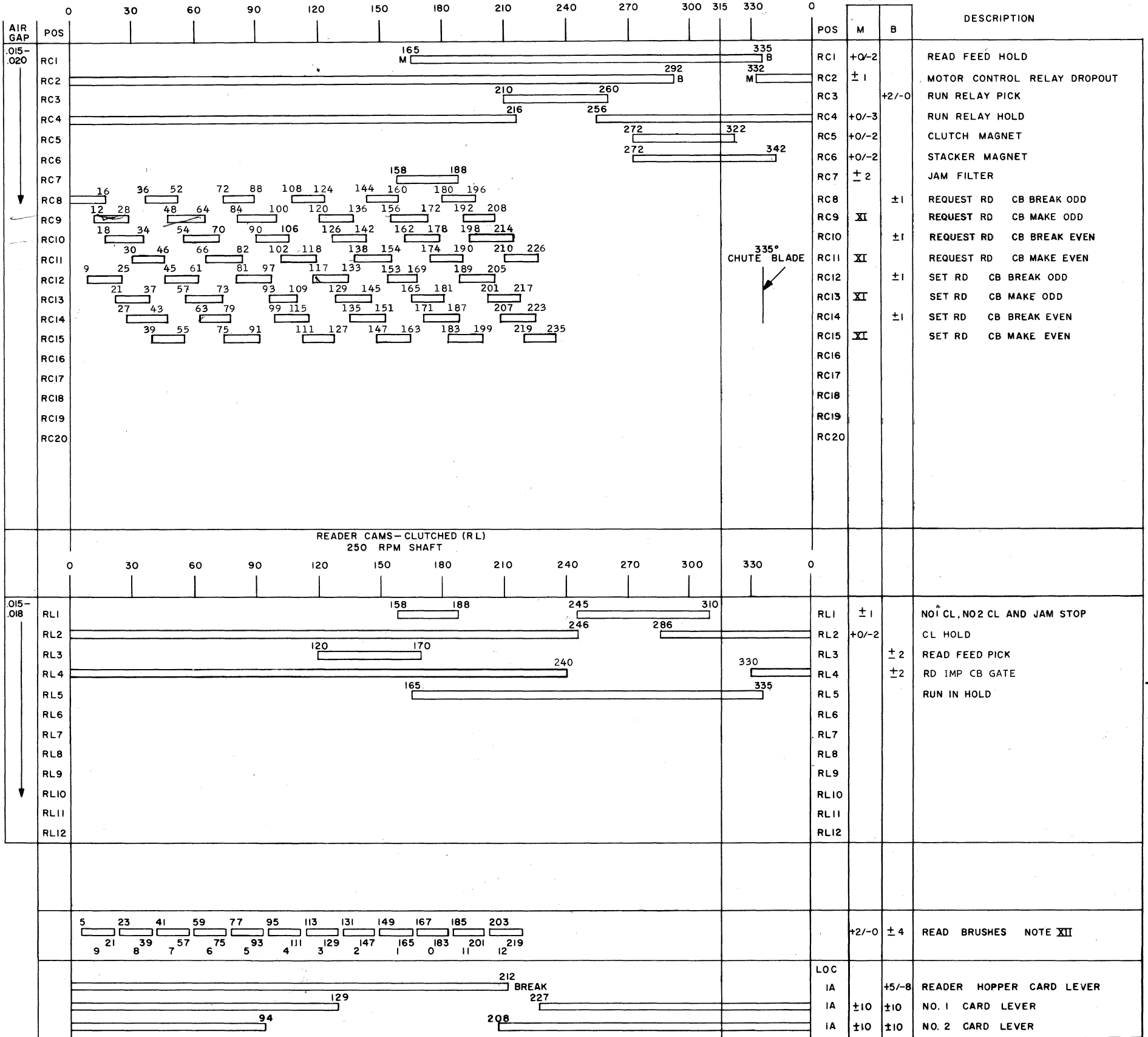
READER CAM TIMING

04.03.02.1

TIMING CHART
READER CAMS - CONTINUOUS RUNNING (RC)
250 RPM SHAFT - 18°/CP - 15°/MS

CLUTCH LATCH TIME

TOLERANCE NOTE X



NOTE

- X TOLERANCE ON ALL CAMS TO BE ±4° UNLESS OTHERWISE NOTED.
- XI ADJUST MAKE TIME TO GIVE NOT MORE THAN 5° NOR LESS THAN 3° OVERLAP WITH BREAK CAM.
- XII WHEN CHECKING BRUSH TIMINGS:
 1. USE ALTERNATE HOLES IN COLS 3 AND 78 TO AVOID TIMING ERROR INDICATIONS CAUSED BY BACK CIRCUITS.
 2. THE RD ERROR BYPASS SWITCH AND OVERRIDE INTERLOCK SWITCH MUST BE OPERATED TO BYPASS ERROR INDICATIONS.

READER CAMS
CONTINUOUS RUNNING (RC)-1 1/16" DIA 250 RPM

POS	LOC	PART NO	DESCRIPTION		RETURN VOLTS	CAM JUMPER	
			LOBES	DUR		CAM SIDE	
RC 1	1A	602121	1	170°	-20	○ ○	
RC 2	1B	602128	1	320°	-	○ ○	
RC 3	1B	602113	1	50°	-	○ ○	
RC 4	1B	602128	1	320°	-20	○ ○	
RC 5	3A	602113	1	50°	-20	○ ○	
RC 6	3A	602114	1	70°	-20	○ ○	
RC 7	2A	602110	1	30°	-	○ ○	
RC 8	5A	602132	6	18°	-20	○ ○	
RC 9	5A	602132	6	18°	-	○ ○	
RC 10	5A	602132	6	18°	-20	○ ○	
RC 11	5A	602132	6	18°	-	○ ○	
RC 12	5B	602132	6	18°	-20	○ ○	
RC 13	5B	602132	6	18°	-	○ ○	
RC 14	5B	602132	6	18°	-20	○ ○	
RC 15	5B	602132	6	18°	-	○ ○	
RC 16							
RC 17							
RC 18							
RC 19							
RC 20							

CLUTCHED CAMS (RL)-1 1/16" DIA 250 RPM

POS	LOC	PART NO	DESCRIPTION		RETURN VOLTS	CAM JUMPER	
			LOBES	DUR		CAM SIDE	
RL 1	1A	609326	2	30/65°	-20	○ ○	
RL 2	1A	602128	1	320°	-20	○ ○	
RL 3	1A	602113	1	50°	-20	○ ○	
RL 4	5A	608607	1	270°	-20	○ ○	
RL 5	5B	602121	1	170°	-20	○ ○	
RL 6						○ ○	
RL 7						○ ○	
RL 8						○ ○	
RL 9						○ ○	
RL 10						○ ○	

PUNCH CAMS
CONTINUOUS RUNNING (PC)-2" DIA 125 RPM

POS	LOC	PART NO	DESCRIPTION		RETURN VOLTS	CAM JUMPER	
			LOBES	DUR		CAM SIDE	
PC 1	7B	255425	4	25°	-	○ ○	
PC 2	7A	255472	4	72°	-20	○ ○	
PC 3	9A	255430	4	30°	-	○ ○	
PC 4	9A	255030	1	30°	-	○ ○	
PC 5	9A	255430	4	30°	-	○ ○	
PC 6	9B	255440	4	40°	-20	○ ○	
PC 7						○ ○	
PC 8						○ ○	
PC 9						○ ○	

CONTINUOUS RUNNING (PA)-1" DIA 666 2/3 RPM

POS	LOC	PART NO	DESCRIPTION		RETURN VOLTS	CAM JUMPER	
			LOBES	DUR		CAM SIDE	
PA 1	11A	607592	3	70°	-20	○ ○	
PA 2	11A	607592	3	70°	-20	○ ○	
PA 3	11A	609029	3	25°	-	○ ○	
PA 4	11A	609029	3	25°	-	○ ○	
PA 5	11A	609029	3	25°	-	○ ○	
PA 6	11A	609029	3	25°	-	○ ○	
PA 7	11A	609029	3	25°	-12	○ ○	
PA 8	11A	609029	3	25°	-12	○ ○	
PA 9						○ ○	
PA 10						○ ○	
PA 11						○ ○	
PA 12						○ ○	

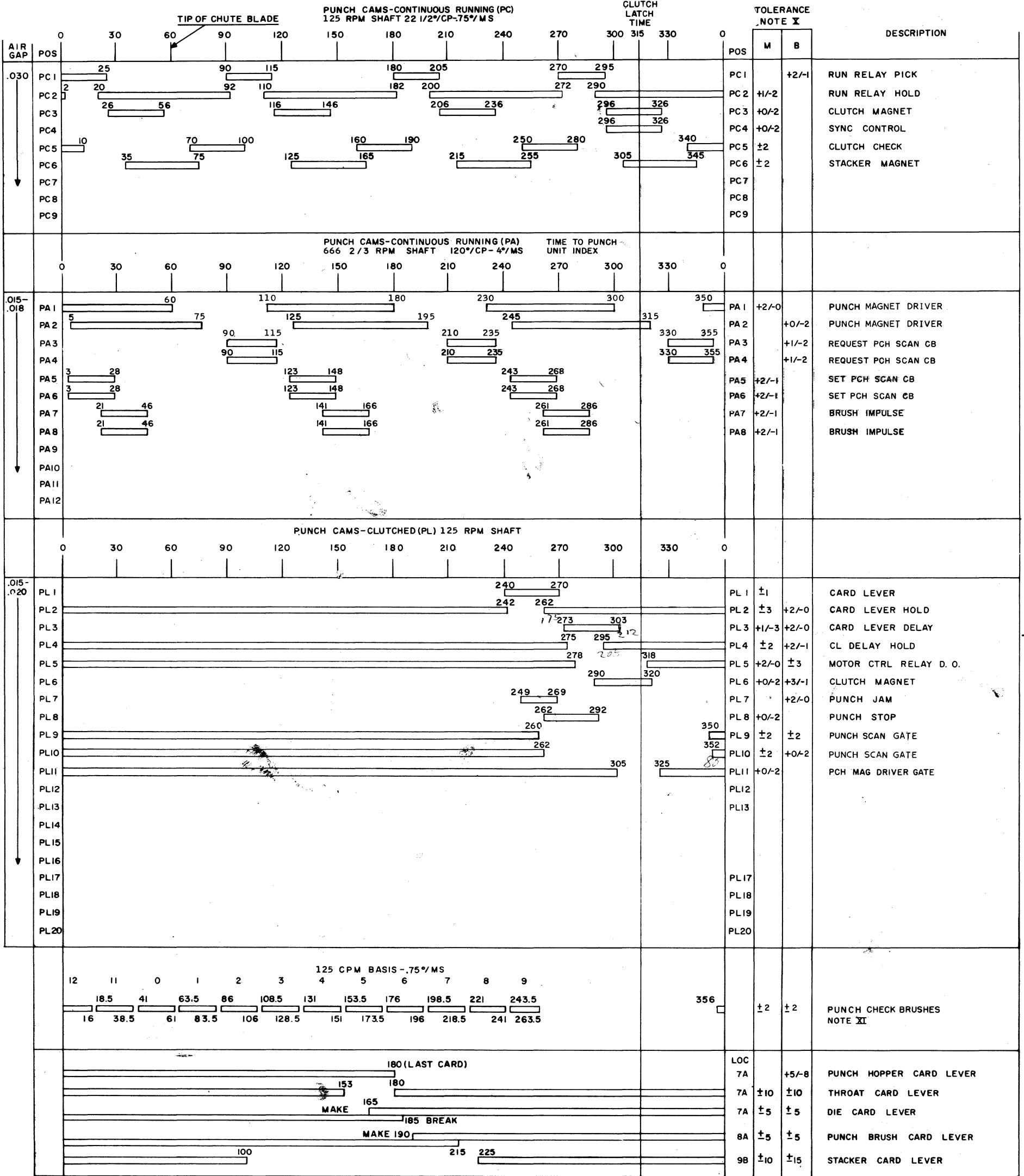
CLUTCHED CAMS (PL)-1 1/16" DIA- 125 RPM

POS	LOC	PART NO	DESCRIPTION		RETURN VOLTS	CAM JUMPER	
			LOBES	DUR		CAM SIDE	
PL 1	7A	607114	1	30°	-20	○ ○	
PL 2	7A	602129	1	340°	-20	○ ○	
PL 3	7A	607114	1	30°	-20	○ ○	
PL 4	7A	602129	1	340°	-20	○ ○	
PL 5	7B	602128	1	320°	-	○ ○	
PL 6	9A	607114	1	30°	-20	○ ○	
PL 7	9A	607730	1	20°	-20	○ ○	
PL 8	9A	607114	1	30°	-	○ ○	
PL 9	11A	608607	1	270°	-	○ ○	
PL 10	11A	608607	1	270°	-	○ ○	
PL 11	11A	602129	1	340°	-20	○ ○	
PL 12						○ ○	
PL 13						○ ○	
PL 14						○ ○	
PL 15						○ ○	
PL 16						○ ○	
PL 17						○ ○	
PL 18						○ ○	
PL 19						○ ○	
PL 20						○ ○	

PUNCH CAM TIMING

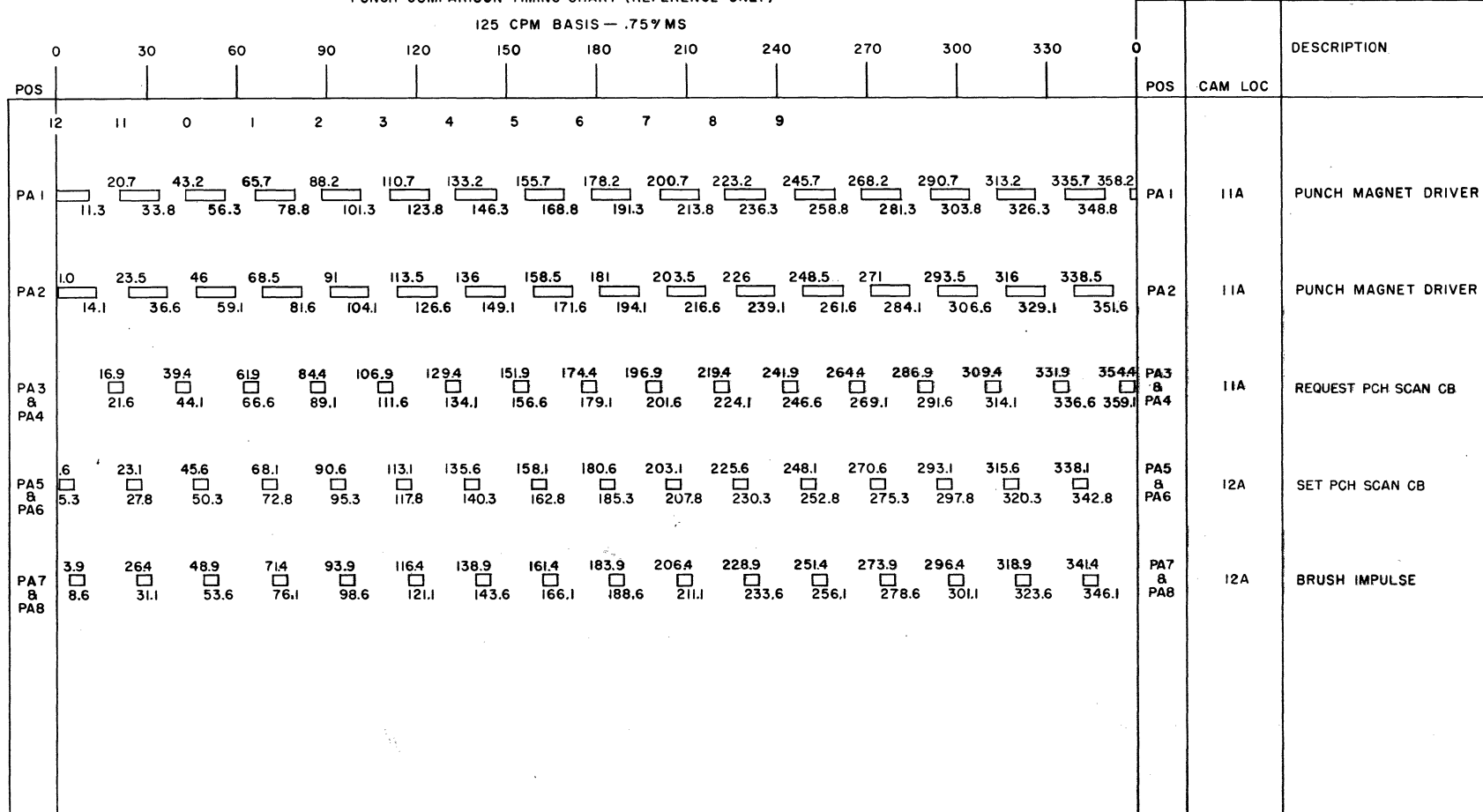
04.03.04.1

TIMING CHART

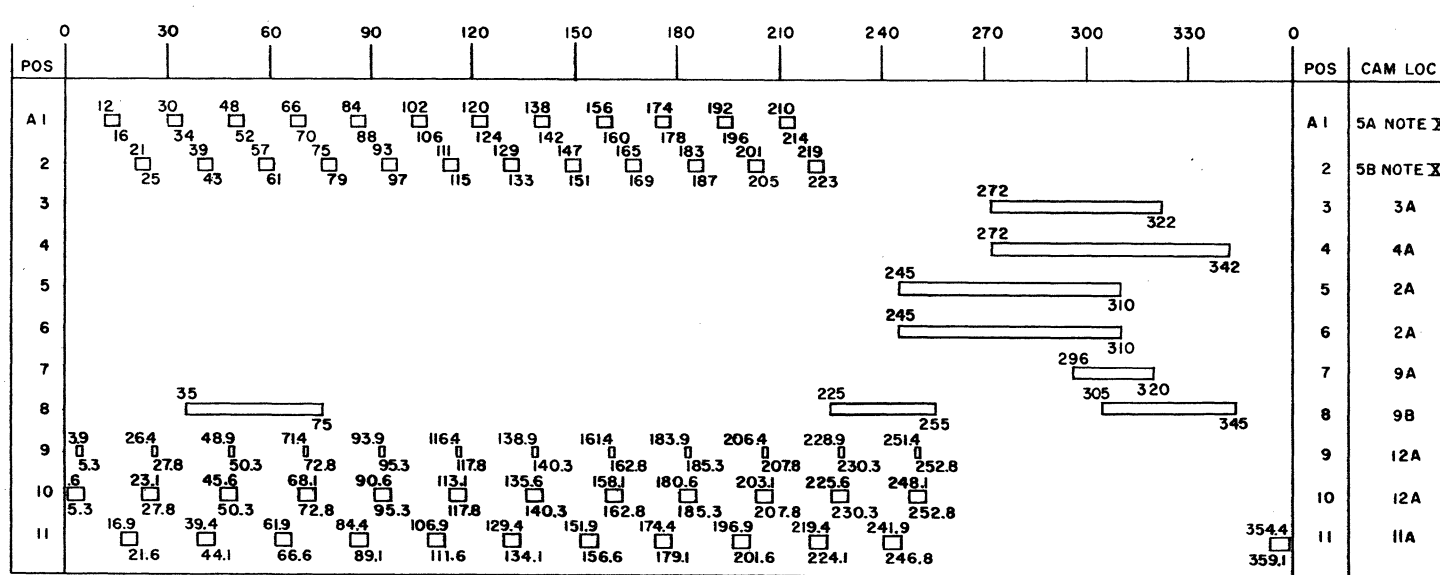


NOTES
 X TOLERANCE ON ALL CAMS TO BE ±4° UNLESS OTHERWISE NOTED
 XI WHEN CHECKING BRUSH TIMINGS USE ALTERNATE HOLES IN COLUMNS 3 AND 78 TO AVOID TIMING ERROR INDICATIONS CAUSED BY BACK CIRCUITS

PUNCH COMPARISON TIMING CHART (REFERENCE ONLY)



CB SELECTOR SWITCHES (REFERENCE ONLY)



SEE INDIVIDUAL CAM TIMING FOR CAM TOLERANCES

NOTE
 X CB SELECTOR SWITCH POSITIONS 1 AND 2
 ADJUST MAKE TIME TO GIVE NOT MORE
 THAN 5° NOR LESS THAN 3° OVERLAP
 WITH BREAK CAM.

RESISTORS					
NO	DIAGRAM LOCATION	OHMS	WATTS	PART NO	PHYSICAL LOCATION
1	10B	50	5.0	609522	RELAY GATE
6	6A	30	10	609423	RELAY GATE
7	6A	150	10	2102626	RELAY GATE
8	6A	110	2	609393	RELAY GATE
9	6A	30	10	609423	RELAY GATE
10	6A	150	10	2102626	RELAY GATE
11	6A	110	2	609393	RELAY GATE
12	12A	30	10	609423	RELAY GATE
13	12A	150	10	2102626	RELAY GATE
14	12A	110	2	609393	RELAY GATE
15	3A	100	5	316029	RD C L MAGNET
16	12A	560	2	615414	RELAY GATE
17	11A	10	5	603212	RELAY GATE
18	11A	1000	2	615420	RELAY GATE
19	04.90.40.1	200	2	328451	PWR SEQUENCE PANEL
20	04.04.05.1	390	1	2114246	ELECTRONIC CE PANEL
21	04.04.05.1	1000	1	315970	ELECTRONIC CE PANEL
22	04.04.05.1	1000	1	315970	ELECTRONIC CE PANEL
23	04.04.05.1	1000	1	315970	ELECTRONIC CE PANEL
24	04.90.45.1	16000	0.5	2128831	MARG METER PANEL
25	04.90.45.1	32000	0.5	2128833	MARG METER PANEL
26	04.90.45.1	16000	0.5	2128831	MARG METER PANEL
27	04.90.45.1	16000	0.5	2128831	MARG METER PANEL
28	04.90.45.1	100	0.5	443793	PWR SEQUENCE PANEL

DIODES				
NO	DWG LOC	PART NO	PHYSICAL LOCATION	
1				
2				
3	2B	609397	HDI COIL - CONT PANEL	
4	3A	609414	RD CLU MAGNET COIL	
5	3B	609414	RD STACK MAG COIL	
6				
7	8B	609397	HD2 COIL - CONT PANEL	
8	10A	609397	PCH CLU MAGNET COIL	
9	10B	609414	PCH STKR MAGNET COIL	
10	11A	599917	RELAY GATE	
1-1	12B	222355	DIODE AND CONNECTOR ASM	
10	↓	↓	↓	
20-4	↓	↓	↓	

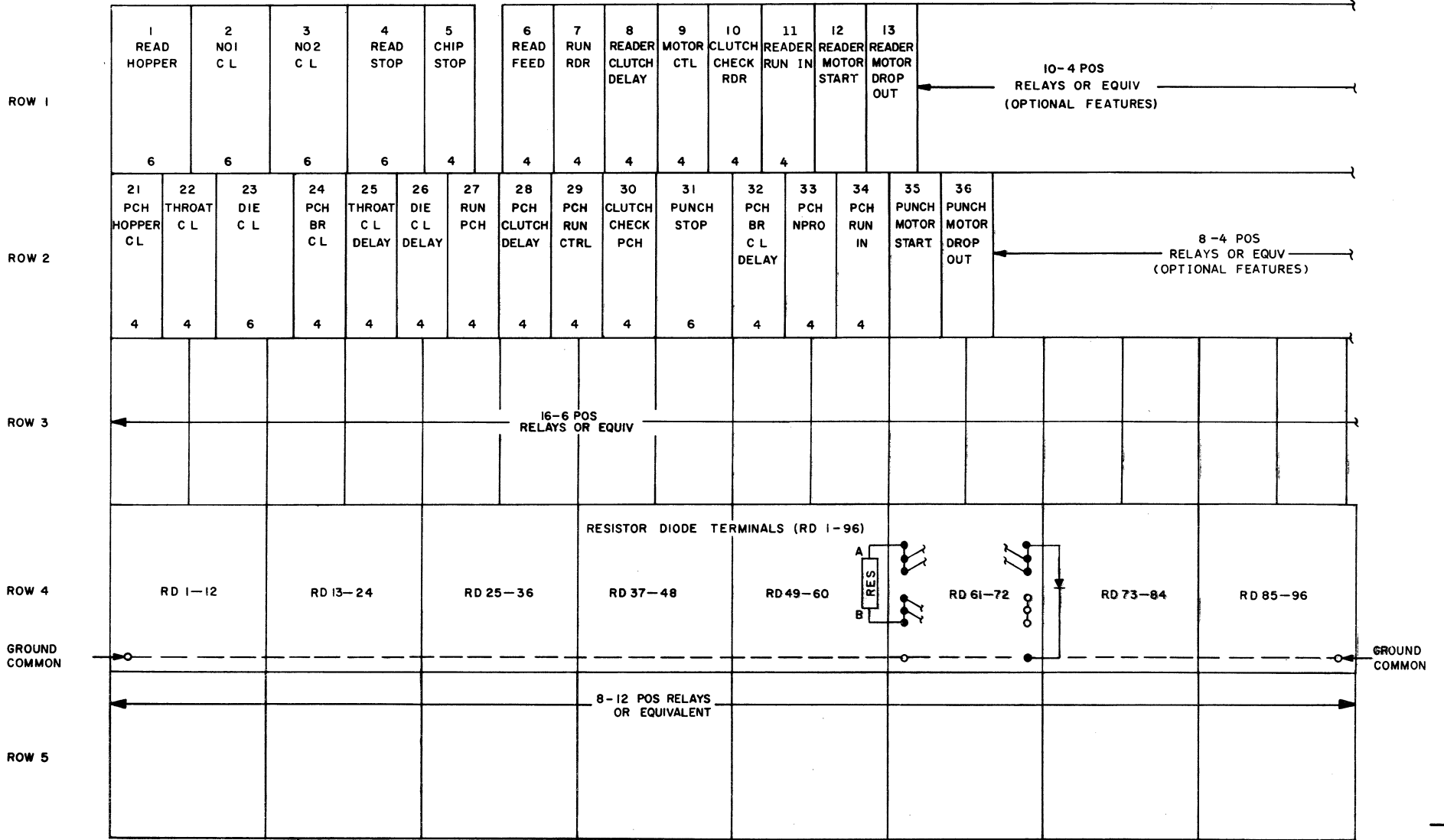
ON RELAY GATE					
RESISTOR DIODES (RD 1-48)					
POS	LOC	OHMS	WATTS	PART NO *	
1	2A	1K	1	315970	
2	6B			A	
3	1A			802175	
4	2B			A	
5	1B			802175	
6	2A			802175	
7	11B			A	
8	2B	150	2	719343	
9	10A			A	
10	10A			805231	
11	4B			802175	
12	9A	1/2MFD	CAPAC	513570	
13	2A			A	
14	6A			A	
15	10B	390	1	2114246	
16	2A			802175	
17	8B	150	2	719343	
18	6B	150	2	719343	
19	4B			802175	
20	11B	150	2	719343	
21	3B	240	1	609416	
22	8A	150	2	719343	
23	8B			A	
24	2B			802175	
25	8B	150	2	719343	
26	9B			802175	
27	3B			802175	
28					
29	8B	150	2	719343	
30	8B			802175	
31	7B			A	
32	3A	240	1	609416	
33-1,2	2A			1=A, 2=B	
34	3A				
35	3B	240	1	609416	
36					
37	2B			A	
38	2B			A	
39	2B			A	
40	2B			802175	
41	2B	150	2	719343	
42	2B	10	1	609417	
43					
44	3B	240	1	609416	
45	2B			A	
46					
47	2A			802175	
48	2B	240	1	609416	

ON RELAY GATE					
RESISTOR DIODES (RD 49-96)					
POS	LOC	OHMS	WATTS	PART NO *	
49	4A			805231	
50	3A			A	
51-1,2	2A			1=A, 2=B	
52					
53	2B			802175	
54	2B	150	2	719343	
55	8B			802175	
56	2A			802175	
57	2A			802175	
58	1A			A	
59					
60	3B			802175	
61	2A	240	1	609416	
62	3A	240	1	609416	
63	5B	22	2	471803	
64	6B	22	2	471803	
65	5B			805231	
66	2B	240	1	609416	
67	10A			B	
68	4A			B	
69	4A			9	
70	4A			B	
71	4B			A	
72					
73					
74	7A			A	
75	7B			802175	
76	7A			A	
77	4B			A	
78	7A			A	
79	8B			A	
80					
81	10B			A	
82	8B	240	1	609416	
83	11B	22	2	471803	
84	11B	22	2	471803	
85	12A	1000	2	2103552	
86	11B			805231	
87	8B			802175	
88					
89	8B			A	
90	8B			A	
91	8B	10	1	609417	
92	10B			441318	
93	12A			802175	
94	10B	240	1	609416	
95	8B			802175	
96	8B			A	

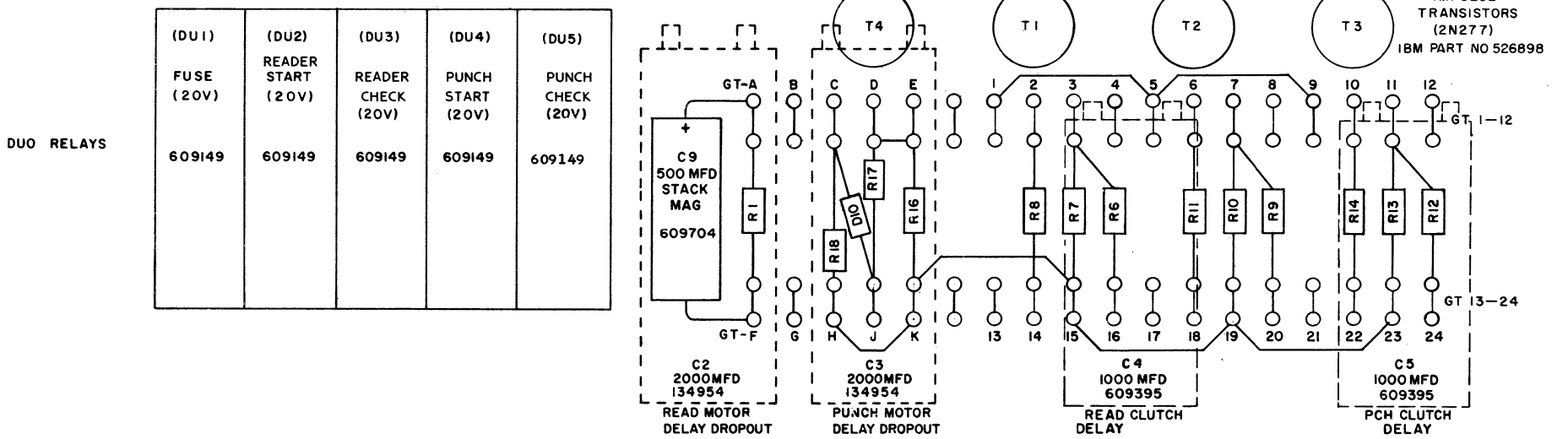
* - PART NUMBER
A - 441318 - DIODE ASM
B - 615354 - DIODE ASM

CAPACITORS						
NO	DWG LOC	MFD	VOLTS	PART NO	PHYSICAL LOCATION	
1	3A	500	25DC	609490	RD CLU MAG	
2	5A	2000	60DC	134954	RELAY GATE	
3	11B	2000	60DC	134954	RELAY GATE	
4	2B	1000	25DC	609395	RELAY GATE	
5	2B	1000	25DC	609395	RELAY GATE	
6						
7						
8	04.04.05.1	1	200DC	2103102	ELECTRONIC CE PANEL	
9	10B	500	25DC	609704	RELAY GATE	

RELAY GATE COMPONENTS (FRONT VIEW)



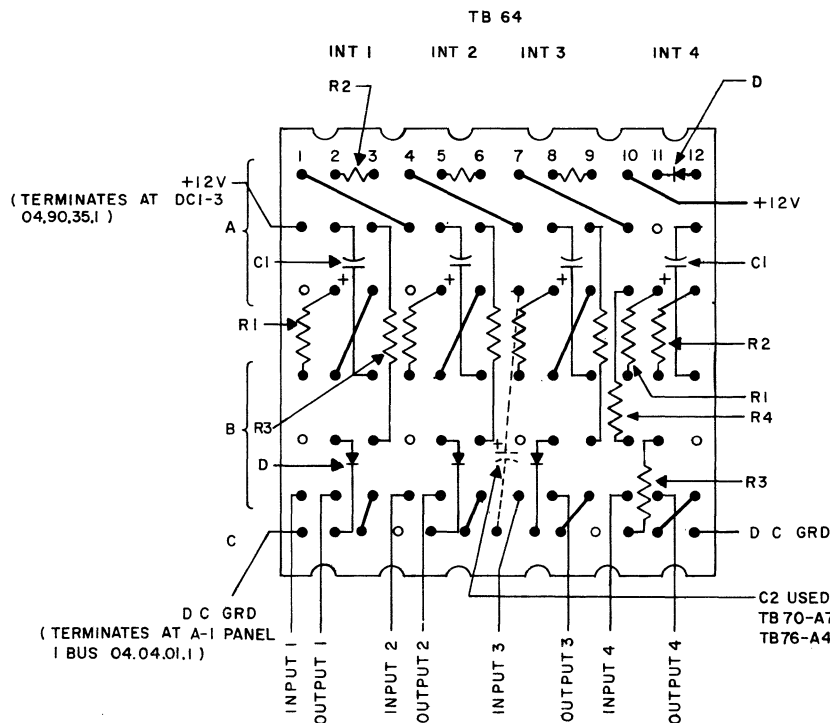
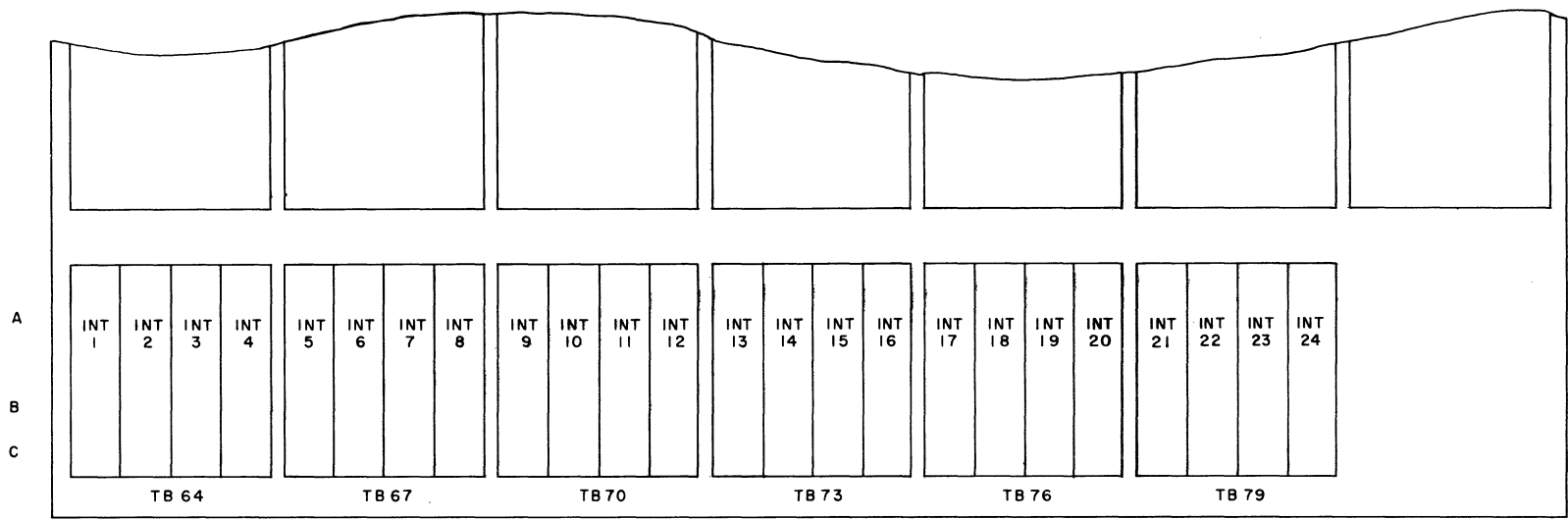
(GT) GATE TERMINALS



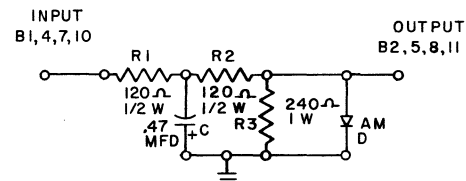
GT LOCATION						
A	10B	1	6A	11	12A	21
B	12A	2	6A	12	—	22
C	11A	3	6A	13	—	23
D	11A	4	—	14	6A	24
E	12A	5	6B	15	6A	
F	10B	6	6A	16	6A	
G	12A	7	6B	17	—	
H	12A	8	—	18	6A	
J	11A	9	12A	19	6A	
K	12A	10	12A	20	6A	

READ RESISTORS AND INTEGRATORS
GATE D
COMPONENT SIDE

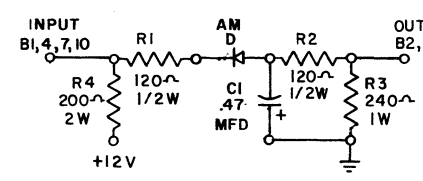
04.03.08.1



PART	PART NUMBER
R1	615039
R2	615039
R3	615390
R4	328451
C1	615356
C2	615418
D	615354

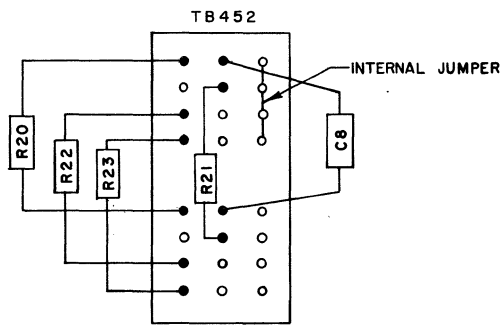


TYPE "A" INTEGRATOR
INT 1,2,3,5,6,7,9,11,12,14,18,
19,20,21,22,23,24



TYPE "B" INTEGRATOR
INT 4,8,10,13,15,17

(INPUT/OUTPUT AND JUMPER LEADS APPEAR ON BACK SIDE)



LOCATED ON PANEL ASM
C.E. ELECTRONIC AID

INT	LOGIC
1	04.04.04.1
2	04.04.04.1
3	04.04.04.3
4	04.04.04.1
5	04.04.04.1
6	04.04.04.1
7	04.04.04.1
8	04.04.04.1
9	04.04.04.1
10	04.04.04.3
11	04.04.04.3
12	04.04.04.3
13	04.04.04.1
14	04.04.04.1

INT	LOGIC
15	04.04.04.3
16	
17	04.04.04.3
18	04.04.04.3
19	04.04.04.3
20	04.04.04.3
21	04.04.04.3
22	04.04.04.3
23	04.04.04.3
24	04.04.04.1

MASTER

LOC	OHMS	TOLERANCE	PART NO	DESCRIPTION
3A	3.3	± 0.2	609005	READ CLUTCH MAGNET COIL
10A	11.0	± 0.5	609073	PUNCH CLUTCH MAGNET COIL

HEAVY DUTY RELAYS

RELAY	COIL	CONTA	CONT B	T1,2	L1,2	PART NO	DESCRIPTION
HD 1	2B	04.90.10.1				609154	READ MOTOR
HD 2	8B	04.90.10.1				609154	PUNCH MOTOR
K 2	04.90.40.1			04.90.10.1	04.90.10.1	2128748	208V AC MAIN LINE

DUO RELAYS

RELAY	COILS		CONTACT POINTS				PART NO	DESCRIPTION
	P	H	AU	BU	AL	BL		
DU 1	2A		1A	1B			609149	FUSE
DU 2	4B		2B	2B	4B	4B	609149	READER START
DU 3	4B		1B	3B	3B	4B	609149	READER CHECK
DU 4	10B				6B	9A	609149	PUNCH START
DU 5	10B		10B	3B	7B	9B	609149	PUNCH CHECK

PM RELAYS

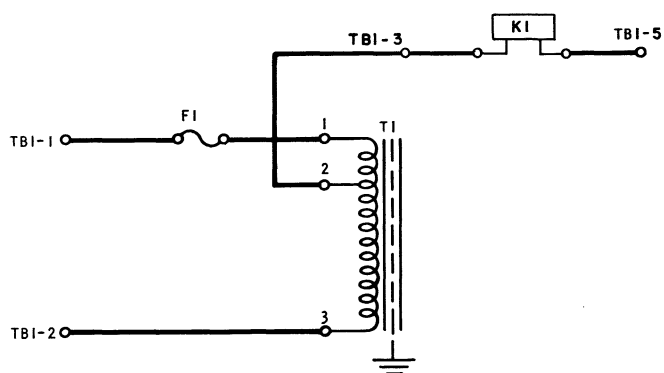
RELAY	COILS		CONTACT POINTS						DESCRIPTION	SIZE	TYPE
	P	H	1	2	3	4	5	6			
1	2A	2A	2B	2B	2B	3A	3B	3A	READ HOPPER C L	6	2
2	2A	2A	2A	2B	3A		6A	3B	NO 1 C L	6	2
3	2A	2A	2A	2B	3A	4A	6A	2A	NO 2 C L	6	2
4	2A	3B	3B	4A		3B	2B	4A	READ STOP	6	2
5	8B		8B	9A					CHIP STOP	4	3
6	2A	2A	2A		3A	1A			READ FEED	4	1
7	2B	2B	2B	3A	3A	3B			RUN - READER	4	3
8	2B	2B	4A	2B	4A	2B			RUN - DELAY - READ	4	3
9	2B	2B	2B	1B	2B	2B			MOTOR CTRL - RDR	4	3
10	3A	2A	2A	1A					READ CLUTCH CHECK	4	1
11	2B	2A	2A	4A	4A	2B			READER RUN IN	4	1
12	6B	6B	1B	3B					READ MOTOR START	4	3
13	2B	2B	1B						READ MOTOR DROPOUT	4	3
14											
15											
16											
17											
18											
19											
20											
21	8A	8A	7B	9A	9A	8B			PUNCH HOPPER C L	4	3
22	8A	8A	7A	8A	9A				THROAT C L	4	1
23	8A	8A	7A	8A	9A	10A	7B	8B	DIE C L	6	2
24	8A	8A	7A	8A	9A				PUNCH BR C L	4	1
25	8A	8A	7A		9A	8B			THROAT C L DELAY	4	1
26	8A	8A	7A	8B		9A			DIE C L DELAY	4	1
27	8B	8B	7B	10A	3A	9A			RUN - PUNCH	4	3
28	8B	7B	10A	8B	10A	7B			PUNCH CLUTCH DELAY	4	3
29	8B	8B	8B	7B	8B				PUNCH RUN CONTROL	4	3
30	10A	8A	7A	9A	7A	10A			PUNCH CLUTCH CHECK	4	1
31	10A	9A	9A	7B	10A	7A			PUNCH STOP	6	2
32	8A	8A	7A	11A	12A	12A			PUNCH BR C L DELAY	4	1
33	10B			9A	10A				PUNCH NPRO	4	1
34	8B	8B	8B	10A	10A	8B			PUNCH RUN IN	4	1
35	12B	12B	8B	7B					PUNCH MOTOR START	4	3
36	8B	8B	8B						PUNCH MOTOR DROPOUT	4	3

(SEE LOGIC 04.03.01.1 FOR RELAY TYPE CHART)

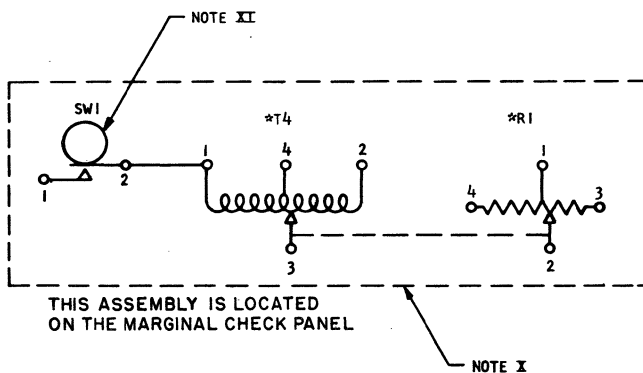
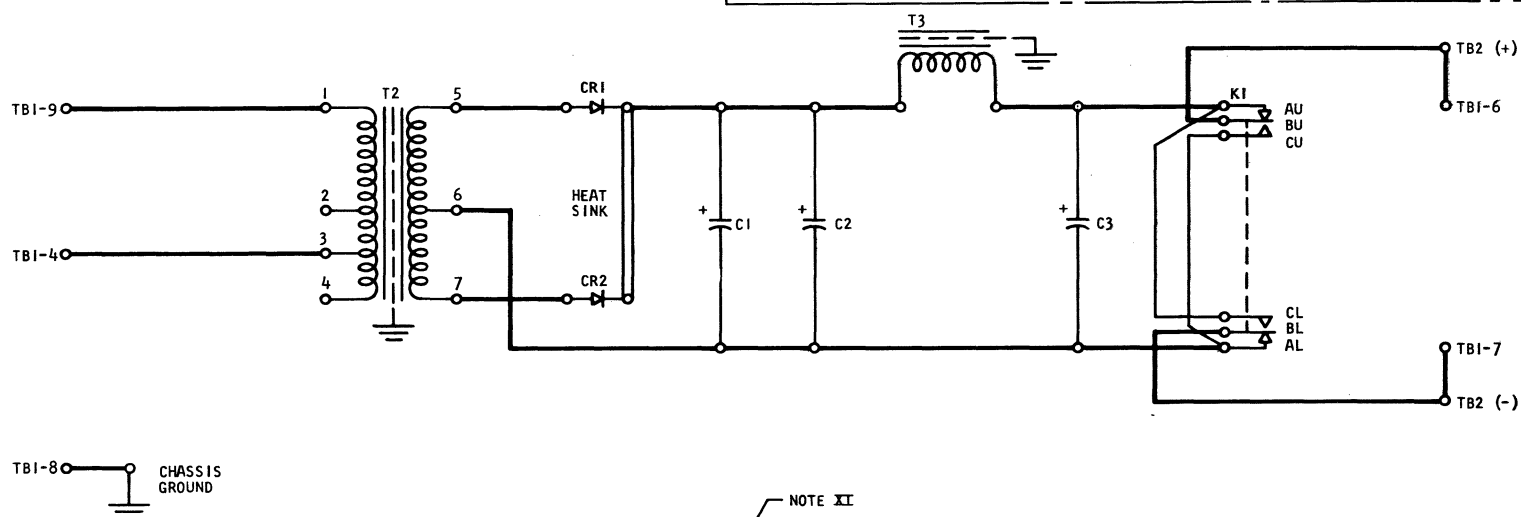
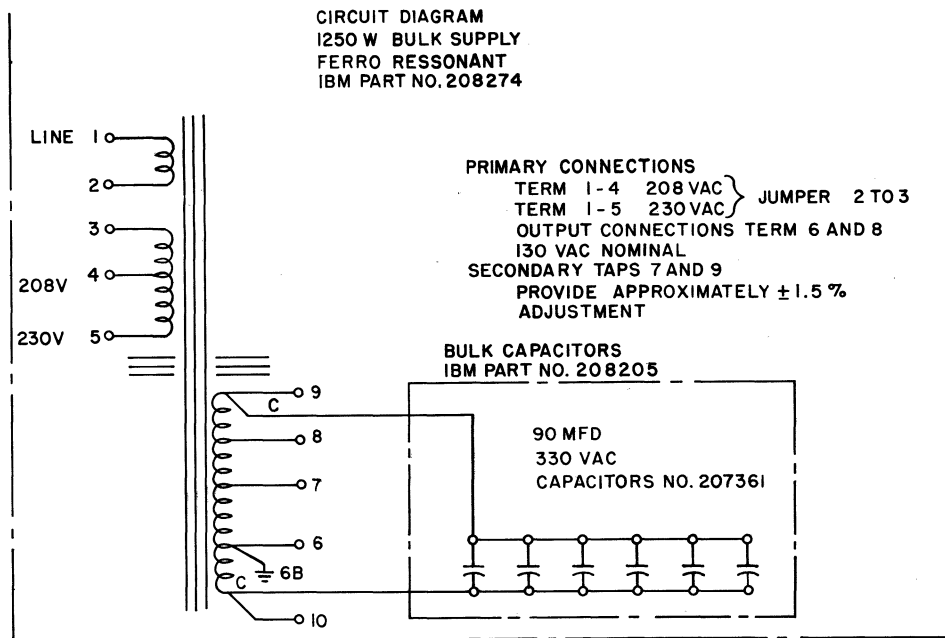
POWER SEQUENCE RELAY

NO	PART NO	NAME	COIL	1	2	3
101	2128689	FANS	04.90.40.1	04.90.40.1	04.90.10.1	
102	2128689	READY	↓	04.90.40.1	04.90.40.1	04.90.40.1
103	2128689	NORMAL	↓	04.90.40.1	04.90.40.1	04.90.40.1
104	2128696	THERMAL	↓		04.90.40.1	04.90.40.1
106	615421	-12V SENSING	04.90.45.1	04.90.40.1		04.90.40.1
107	615421	+12V SENSING	↓	↓		
108	615421	-20V SENSING	↓	↓		
109	615421	POWER ON	04.90.40.1	04.90.40.1		

POWER SUPPLY DETAIL
CIRCUIT DIAGRAM
±3V AT 5A
IBM PART NO. 477270

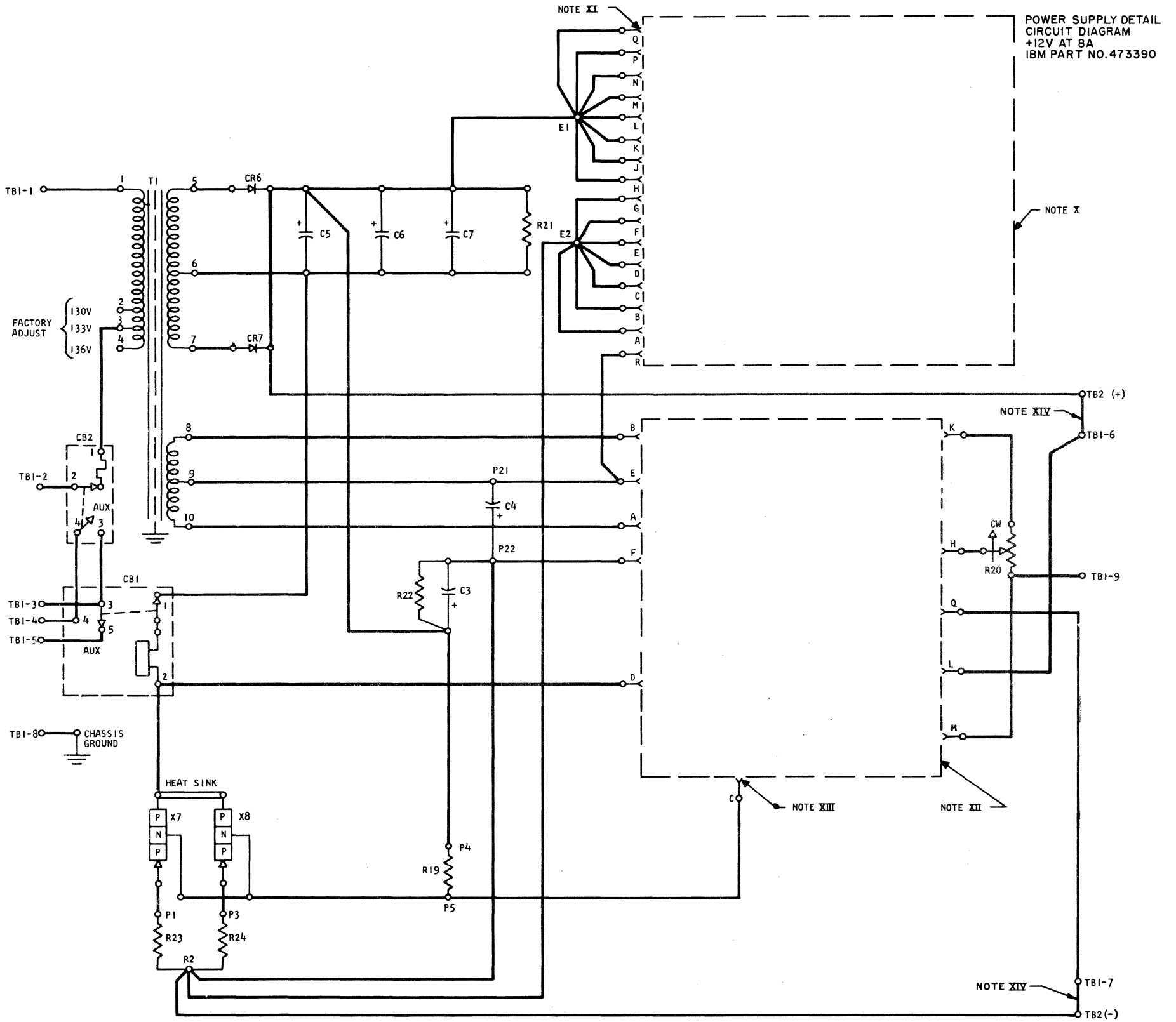


CIRCUIT DIAGRAM
1250 W BULK SUPPLY
FERRO RESSONANT
IBM PART NO. 208274



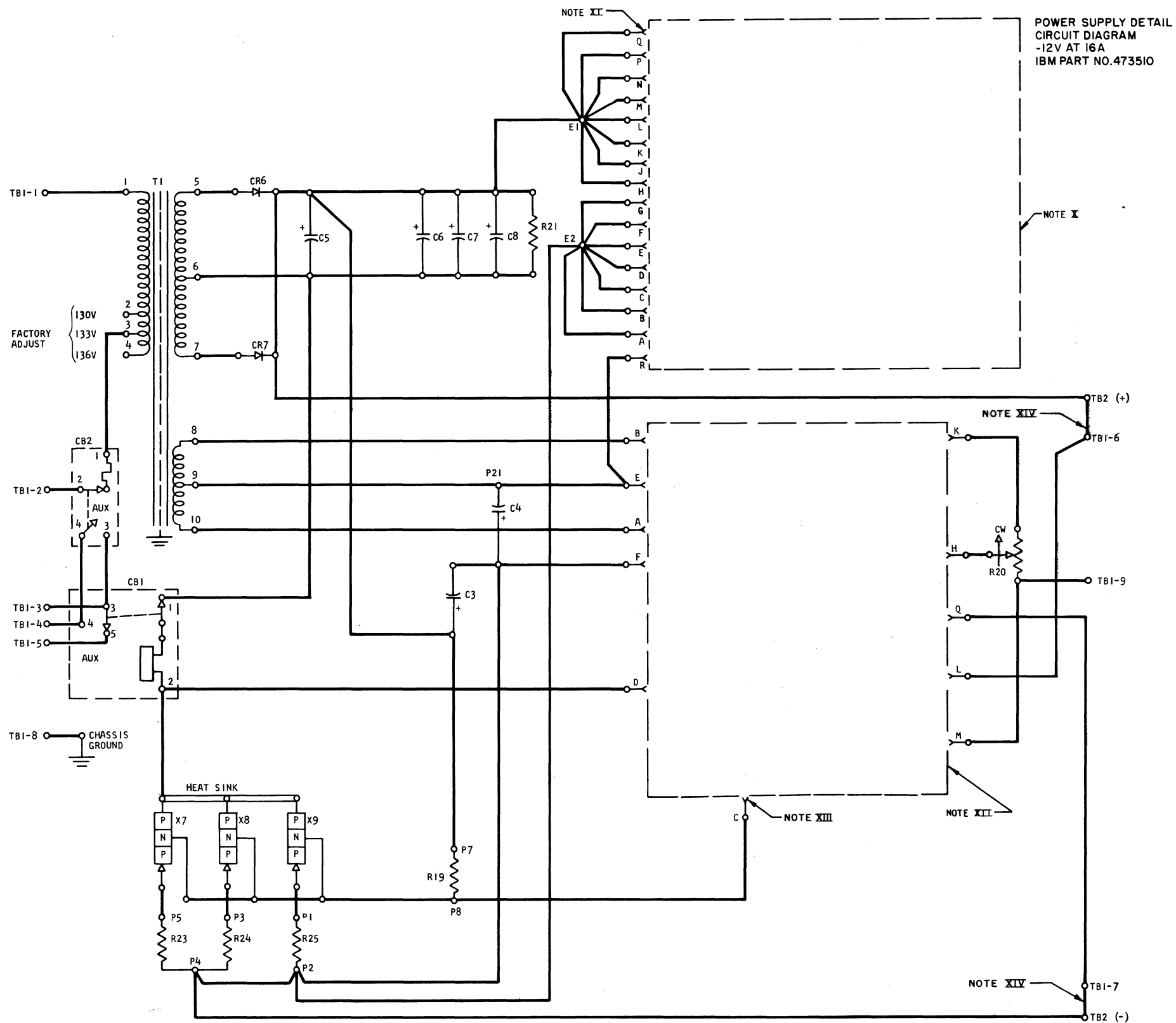
COMPONENT CHART					
CODE	PART NO.	DESCRIPTION	CODE	PART NO.	DESCRIPTION
C1-3	598343	CAPACITOR 25,000 MFD 6V DC	SW1	228093	MICRO SWITCH
CR1-2	598479	RECTIFIER CELL	T1	219994	TRANSFORMER AUTO
			T2	220596	TRANSFORMER ISOLATION
F1	78952	FUSE 0.8 AMPS	T3	219993	FILTER CHOKE
			*T4	208993	TRANSFORMER VARIABLE, AUTO
K1	208257	RELAY			
*R1	207376	RHEOSTAT 1 OHM 100W	TB1		TERMINAL BLOCK
			TB2		TERMINAL BLOCK

- NOTES
- X VOLTAGE ADJUSTMENT ASSEMBLY 220815
WIRING LIST, VOLTAGE ADJUSTMENT TO POWER SUPPLY
VARIAC 1 TO TBI-2
2 TO TBI-3
3 TO TBI-9
4 TO TBI-4
RHEOSTAT 1 TO TBI-6
2 TO TBI-7
SWITCH 1 TO TBI-5
 - * INDICATES COMPONENTS ON ASSEMBLY
 - XI SWITCH 1 ACTUATING CAM ON SHAFT OF *T4



COMPONENT CHART					
CODE	PART NO.	DESCRIPTION	CODE	PART NO.	DESCRIPTION
			R20	207340	POTENTIOMETER 250 OHM 1/2W
C3	208230	CAPACITOR 7,000MFD 13V DC	R21	528139	RESISTOR 100 OHM 5W
C4	207310	CAPACITOR 100 MFD 25V DC	R22	321200	RESISTOR 330 OHM 1W
C5-7	501544	CAPACITOR 10,000 MFD 25V DC	R23-26	207324	RESISTOR 0.1 OHM 5W
CB1	208204	CIRCUIT BREAKER			
CB2	220915	CIRCUIT BREAKER			
CR6-7	598479	RECTIFIER CELL	T1	473466	TRANSFORMER
E1-2	2102430	CONNECTOR	TB1		TERMINAL BLOCK
A & B		RECEPTACLE	TB2		TERMINAL BLOCK
R19	335138	RESISTOR 200 OHM 2W	X7-10	369214	TRANSISTOR

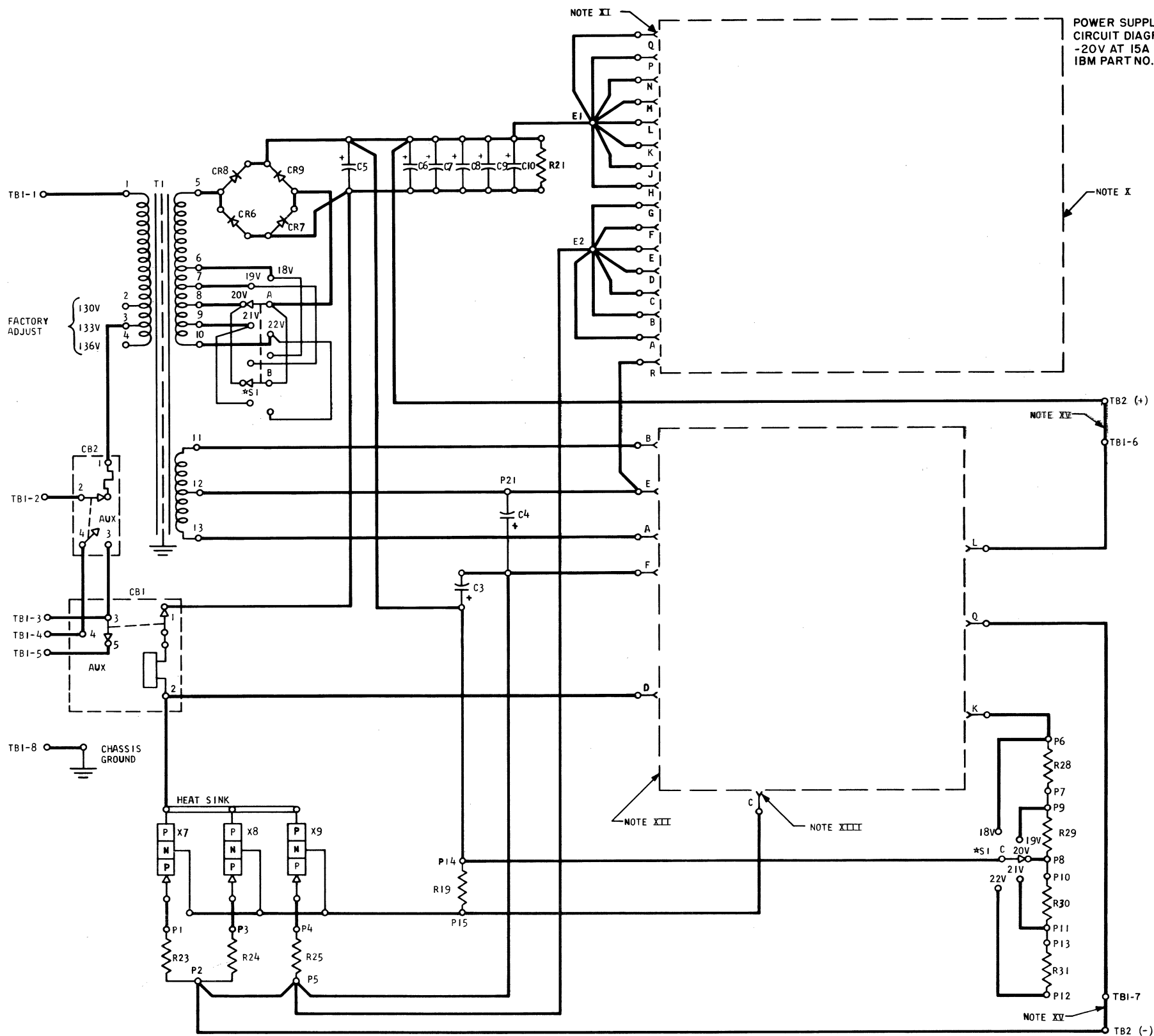
- NOTES
 X OVERVOLTAGE CARD ASSEMBLY 370576
 XI UNIT RECEPTACLE "B"
 XII FOR REFERENCE TO GROUND USE COMPONENT CARD ASSEMBLY 370610
 XIII UNIT RECEPTACLE "A"
 XIV FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB1-6 AND TB1-7



COMPONENT CHART					
CODE	PART NO.	DESCRIPTION	CODE	PART NO.	DESCRIPTION
			R20	207340	POTENTIOMETER 250 OHM 1/2W
C3	208228	CAPACITOR 5,000 MFD 19V DC	R21	221517	RESISTOR 75 OHM 10W
C4	208229	CAPACITOR 700 MFD 15V DC			
C5-8	208221	CAPACITOR 11,000 MFD 19V DC	R23-25	207324	RESISTOR 0.1 OHM 5W
CB1	207350	CIRCUIT BREAKER			
CB2	220917	CIRCUIT BREAKER			
			T1	473596	TRANSFORMER
CR6-7	127324	RECTIFIER CELL			
E1-2	2102430	CONNECTOR	TB1		TERMINAL BLOCK
			TB2		TERMINAL BLOCK
A & B		RECEPTACLE	X7-9	369214	TRANSISTOR
R19	335138	RESISTOR 200 OHM 2W			

- NOTES
 X OVERVOLTAGE CARD ASSEMBLY 370576
 XI UNIT RECEPTACLE "B"
 XII FOR REFERENCE TO GROUND USE COMPONENT CARD ASSEMBLY 370610
 XIII UNIT RECEPTACLE "A"
 XIV FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SENSE BETWEEN TB1-6 AND TB1-7

POWER SUPPLY DETAIL
CIRCUIT DIAGRAM
-20V AT 15A
IBM PART NO. 473430

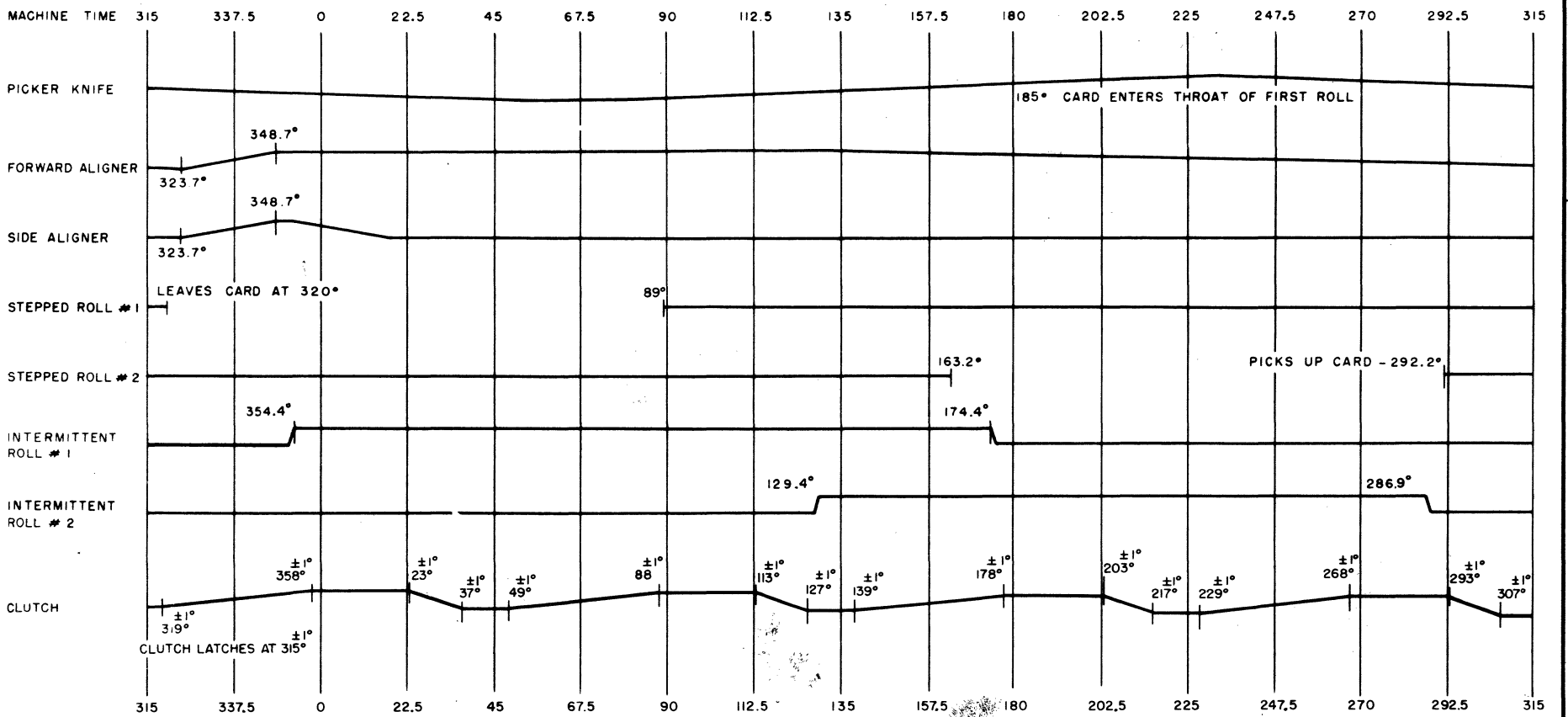
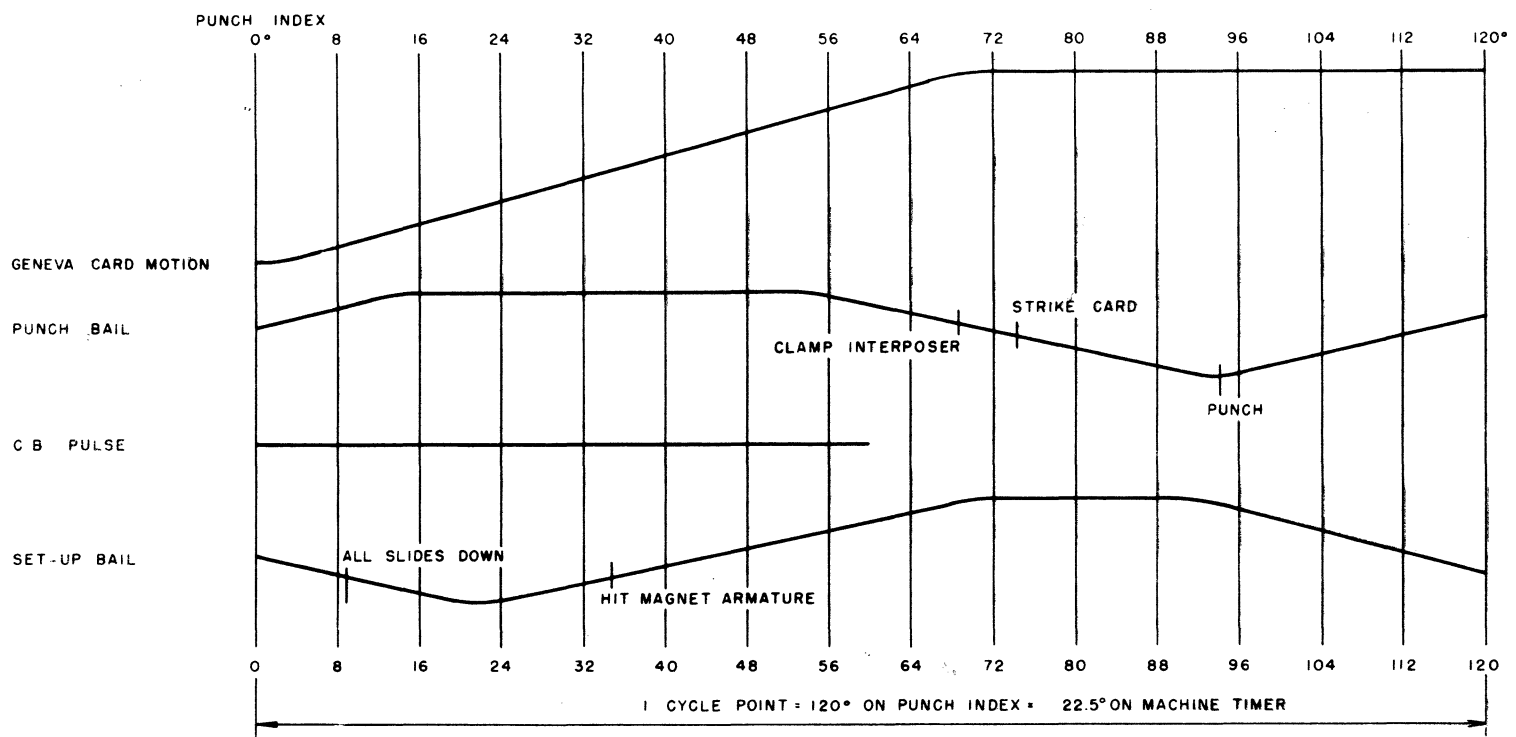


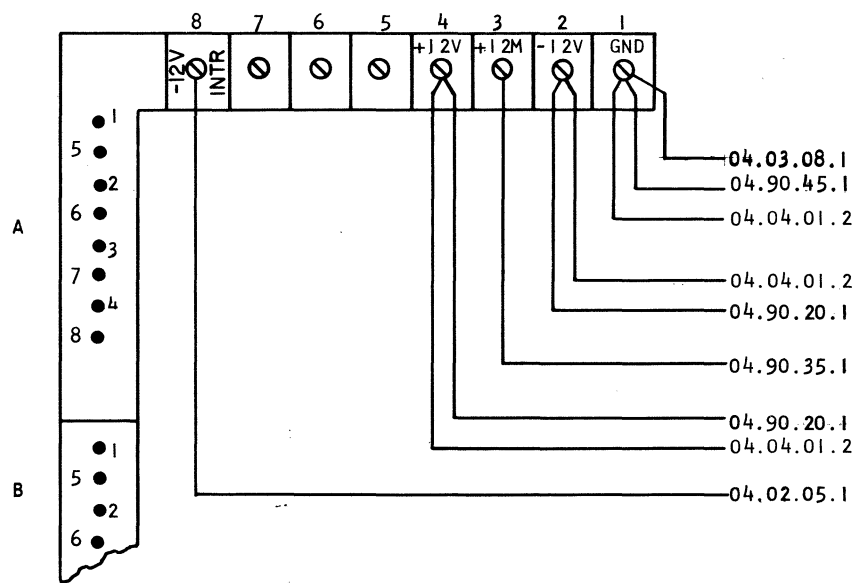
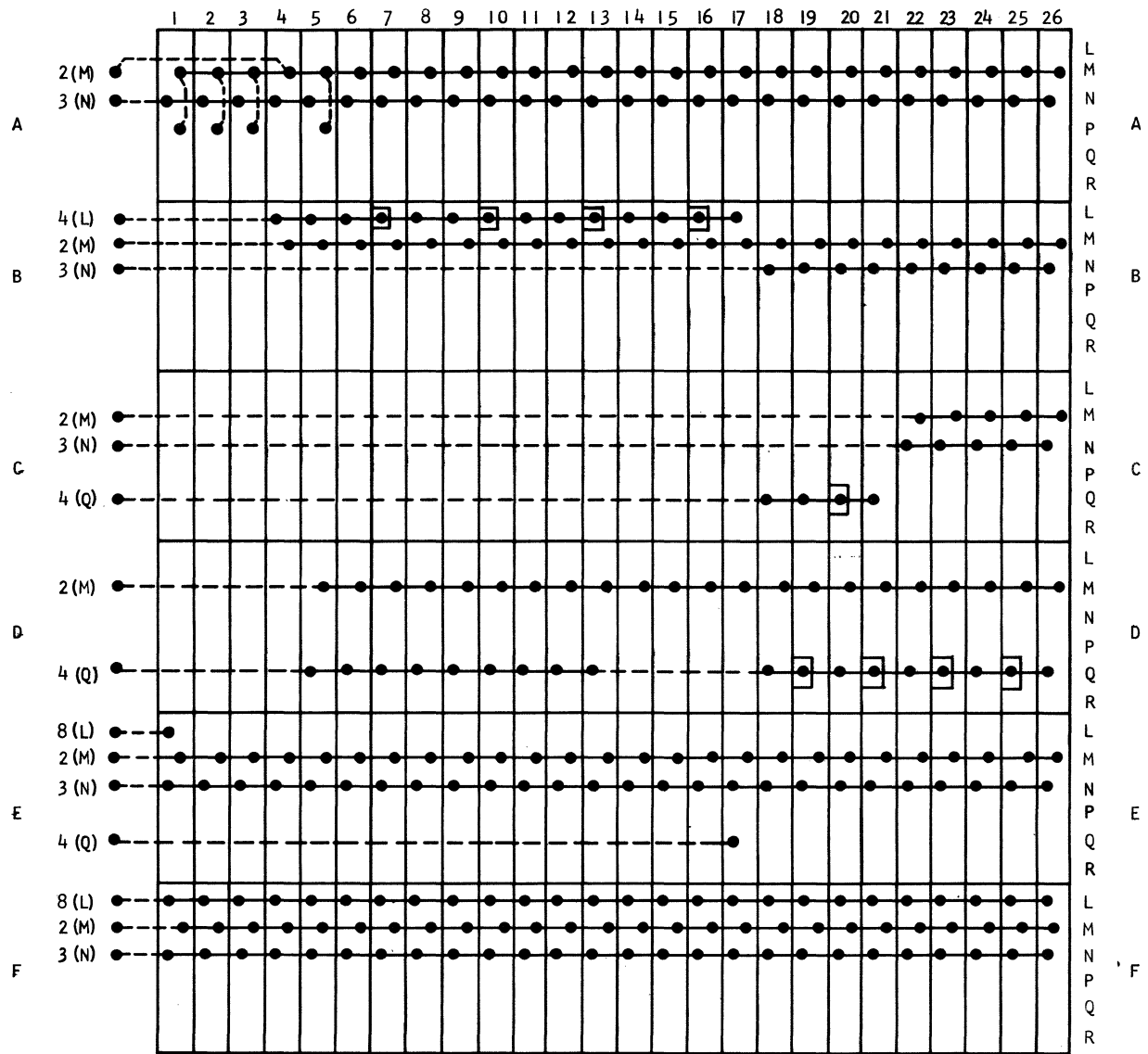
COMPONENT CHART

CODE	PART NO.	DESCRIPTION	CODE	PART NO.	DESCRIPTION
C3	208238	CAPACITOR 10,000 MFD 33V DC	R21	208825	RESISTOR 25 OHM 50W
C4	208229	CAPACITOR 700 MFD 15V DC	R23-25	207324	RESISTOR 0.1 OHM 5W
C5-10	208238	CAPACITOR 10,000 MFD 33V DC	R28-31	207365	RESISTOR 200 OHM 5W
CB1	207350	CIRCUIT BREAKER			
CB2	220918	CIRCUIT BREAKER	S1	504297	SWITCH
CR6-9	127324	RECTIFIER CELL	T1	473416	TRANSFORMER
E1-2	2102430	CONNECTOR	TB1		TERMINAL BLOCK
A & B		RECEPTACLE	TB2		TERMINAL BLOCK
R19	207336	RESISTOR 250 OHM 5W	X7-9	369214	TRANSISTOR




- NOTES
I OVERVOLTAGE CARD ASSEMBLY NOT USED
II UNIT RECEPTACLE "B"
XII COMPONENT CARD ASSEMBLY 370611
XIII UNIT RECEPTACLE "A"
XIV *SWITCH (S1) MUST NOT BE TURNED WITHOUT UNLOADING SUPPLY BY OPENING CB1
XV FOR REMOTE SENSING REMOVE JUMPERS INDICATED AND SEMSE BETWEEN TBI-6 AND TBI-7

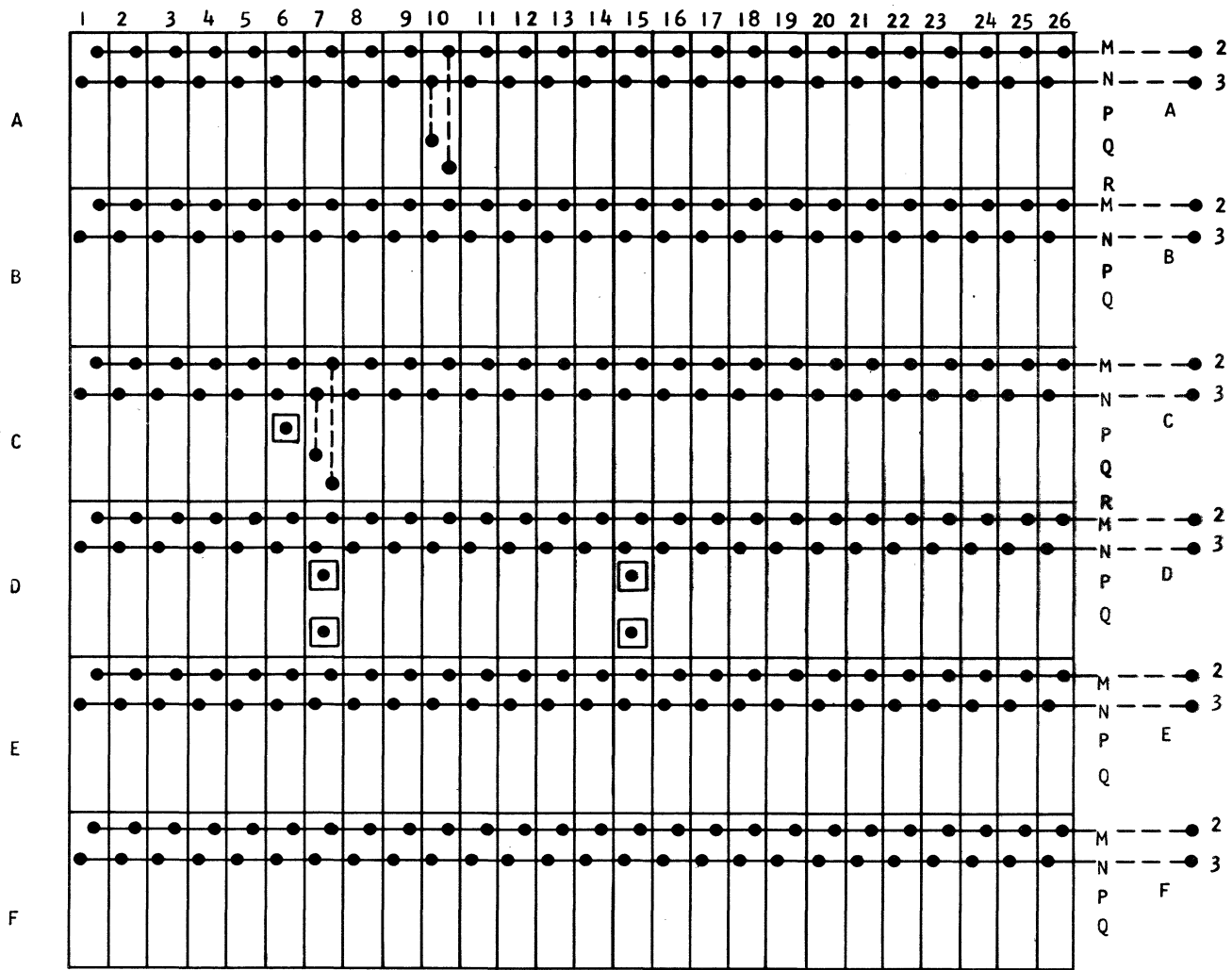
TIMING CHART -1622
666 2/3 RPM
1/3 REV = 1 CYCLE POINT





NOTES

-  PART NO 124589
15 MFD 20V CAPACITOR TO J PIN
-  INDICATES JUMPER WIRE
-  INDICATES VOLTAGE CHAIN
- PIN J GROUND ON ALL SOCKETS



NOTES

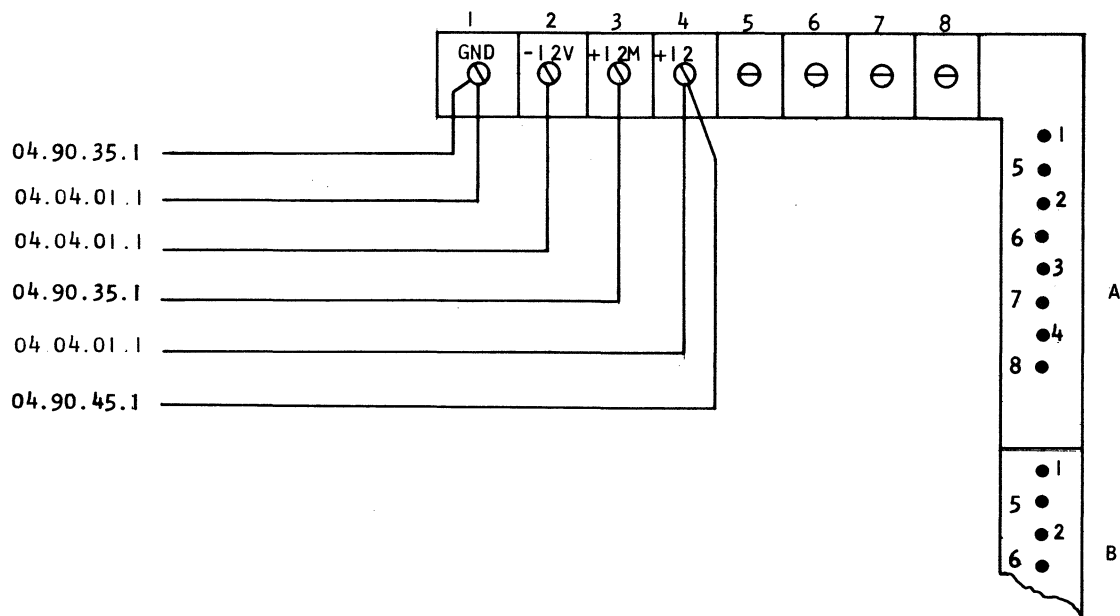
----- INDICATES JUMPER WIRE

———— INDICATES VOLTAGE CHAIN

PIN J GROUND ON ALL SOCKETS

◻ PART NO 615417 .0068 MFD
1000 V CAPACITOR ASSEMBLED TO PINS
AT FOLLOWING LOCATIONS

- D07-B TO D08-J
- D07-Q TO D08-J
- D15-F TO D16-J
- D15-P TO D16-J
- C06-A TO C06-J



W CONNECTORS

	WA	WB	WC	WD	WE
1		04.04.04.3	04.04.04.1	04.82.03.1	04.82.07.1
2		04.04.04.3	04.04.04.1	04.82.03.1	04.82.07.1
3		04.04.04.3	04.04.04.1	04.82.03.1	04.82.06.1
4		04.04.04.3	04.04.04.1	04.82.03.1	04.82.06.1
5		04.02.02.1	04.04.04.1	04.82.03.1	04.82.07.1
6		04.02.02.1	04.04.04.1	04.82.03.1	04.82.07.1
7		04.04.04.1	04.04.04.1	04.82.03.1	04.82.07.1
8		04.04.04.1	04.04.04.1	04.82.03.1	04.82.07.1
9		04.02.05.1	04.04.04.1	04.82.03.1	04.82.07.1
10		04.02.05.1	04.04.04.1	04.82.03.1	04.82.07.1
11		04.15.06.1	04.04.04.1	04.82.03.1	04.82.07.1
12		04.15.06.1	04.04.04.1	04.82.03.1	04.82.07.1
13		04.15.06.1	04.04.04.1	04.82.03.1	04.82.07.1
14		04.15.06.1	04.04.04.1	04.82.03.1	04.82.07.1
15		04.04.04.3	04.04.04.1	04.82.03.1	04.82.07.1
16		04.04.04.3	04.04.04.1	04.82.03.1	04.82.07.1
17		04.04.04.3	04.04.04.3	04.82.03.1	04.82.07.1
18		04.04.04.3	04.04.04.3	04.82.03.1	04.82.07.1
19		04.04.04.3	04.04.04.3	04.82.03.1	04.82.07.1
20		04.04.04.3	04.04.04.3	04.82.03.1	04.82.07.1
21		04.04.04.1	04.04.04.3	04.82.03.1	04.82.07.1
22		04.04.04.1	04.04.04.3	04.82.03.1	04.82.07.1
23		04.04.04.3	04.04.04.3	04.82.03.1	04.82.07.1
24		04.04.04.3	04.04.04.3	04.82.03.1	04.82.07.1
25		04.04.04.1	04.15.06.1	04.82.03.1	04.82.07.1
26		04.04.04.1	04.15.06.1	04.82.03.1	04.82.07.1
27		04.04.04.3	04.15.06.1	04.82.03.1	04.82.07.1
28		04.04.04.3	04.15.06.1	04.82.03.1	04.82.07.1
29			04.10.10.1	04.82.03.1	04.82.07.1
30			04.10.10.1	04.82.03.1	04.82.07.1
31		04.04.04.3	04.10.10.1	04.82.04.1	04.82.07.1
32		04.04.04.3	04.10.10.1	04.82.04.1	04.82.07.1

X CONNECTORS

	XA	XB	XC	XD	XE
1		04.04.01.8	04.04.01.8	04.04.01.9	04.82.06.1
2					04.82.06.1
3					04.82.06.1
4					04.82.06.1
5					04.82.06.1
6					04.82.06.1
7					04.82.06.1
8					04.82.06.1
9					04.82.06.1
10					04.82.06.1
11					04.82.06.1
12					04.82.06.1
13					04.82.06.1
14					04.82.06.1
15					04.82.06.1
16					04.82.06.1
17					04.82.06.1
18					04.82.06.1
19					04.82.06.1
20					04.82.06.1
21					04.82.06.1
22					04.82.06.1
23					04.82.06.1
24					04.82.06.1
25					04.82.06.1
26					04.82.06.1
27					04.82.06.1
28					04.82.06.1
29					04.82.06.1
30					04.82.06.1
31					04.82.07.1
32					04.82.07.1

Y CONNECTORS

	YA	YB	YC	YD	YE
1	04.83.05.1	04.04.01.8	04.04.01.8	04.04.01.9	04.82.04.1
2	04.83.05.1				04.82.04.1
3	04.83.05.1				04.82.05.1
4	04.83.05.1				04.82.05.1
5	04.83.05.1				04.82.05.1
6	04.83.05.1				04.82.05.1
7	04.83.05.1				04.82.05.1
8	04.83.05.1				04.82.05.1
9	04.83.05.1				04.82.05.1
10	04.83.05.1				04.82.05.1
11	04.83.05.1				04.82.05.1
12	04.83.05.1				04.82.05.1
13	04.83.05.1				04.82.05.1
14	04.83.05.1				04.82.05.1
15	04.83.04.1				04.82.05.1
16	04.83.04.1				04.82.05.1
17	04.83.04.1				04.82.05.1
18	04.83.04.1				04.82.05.1
19	04.83.04.1				04.82.05.1
20	04.83.04.1				04.82.05.1
21	04.83.06.1				04.82.05.1
22	04.83.06.1				04.82.05.1
23	04.83.06.1				04.82.05.1
24	04.83.06.1				04.82.05.1
25	04.83.06.1				04.82.05.1
26	04.83.06.1				04.82.05.1
27	04.83.06.1				04.82.05.1
28	04.83.06.1				04.82.05.1
29	04.83.06.1				04.82.05.1
30	04.83.06.1				04.82.05.1
31					04.82.05.1
32					04.82.05.1

Z CONNECTORS

	ZA	ZB	ZC	ZD	ZE
1	04.83.01.1	04.04.01.8	04.04.01.8	04.04.01.9	04.82.04.1
2	04.83.01.1				04.82.04.1
3	04.83.01.1				04.82.03.1
4	04.83.01.1				04.82.03.1
5	04.83.01.1				04.82.04.1
6	04.83.01.1				04.82.04.1
7	04.83.01.1				04.82.04.1
8	04.83.01.1				04.82.04.1
9	04.83.01.1				04.82.04.1
10	04.83.01.1				04.82.04.1
11	04.83.01.1				04.82.04.1
12	04.83.01.1				04.82.04.1
13	04.83.01.1				04.82.04.1
14	04.83.01.1				04.82.04.1
15	04.83.04.1				04.82.04.1
16	04.83.04.1				04.82.04.1
17	04.83.04.1	04.02.02.1	04.02.02.1	04.02.05.1	04.82.04.1
18	04.83.04.1				04.82.04.1
19	04.83.06.1				04.82.04.1
20	04.83.06.1				04.82.04.1
21	04.83.06.1				04.82.04.1
22	04.83.06.1				04.82.04.1
23	04.83.04.1				04.82.04.1
24	04.83.04.1				04.82.04.1
25	04.83.04.1				04.82.04.1
26	04.83.04.1				04.82.04.1
27	04.83.06.1				04.82.04.1
28	04.83.06.1				04.82.04.1
29	04.83.06.1				04.82.05.1
30	04.83.06.1				04.82.05.1
31	04.83.04.1				04.82.04.1
32	04.83.04.1				04.82.04.1

PLANE	SIDE	PIN	CONNECTOR	RESISTOR	1ST. RD BR NO
7	A	7	AYC 09	TBR 1-1	1
		6	10	1-2	2
		5	11	1-3	3
		4	12	1-4	4
		3	13	1-5	5
	C	3	14	1-6	6
		4	15	1-7	7
		5	16	1-8	8
		6	17	1-9	9
		7	18	1-10	10
	A	12	19	1-11	11
		11	20	1-12	12
		10	21	4-1	13
		09	22	4-2	14
		08	23	4-3	15
	C	08	24	4-4	16
		09	25	4-5	17
		10	26	4-6	18
		11	27	4-7	19
		12	28	4-8	20
	A	17	29	4-9	21
		16	30	4-10	22
		15	31	4-11	23
		14	32	4-12	24
		13	AZC 01	7-1	25
	C	13	02	7-2	26
		14	03	7-3	27
		15	04	7-4	28
		16	05	7-5	29
		17	06	7-6	30
	A	22	07	7-7	31
		21	08	7-8	32
		20	09	7-9	33
		19	10	7-10	34
		18	11	7-11	35
	C	18	12	7-12	36
		19	13	10-1	37
		20	14	10-2	38
		21	15	10-3	39
		22	16	10-4	40
5	A	7	AXC 01	10-5	41
		6	02	10-6	42
		5	03	10-7	43
		4	04	10-8	44
		3	05	10-9	45
	C	3	06	10-10	46
		4	07	10-11	47
		5	08	10-12	48
		6	09	13-1	49
		7	10	13-2	50
	A	12	11	13-3	51
		11	12	13-4	52
		10	13	13-5	53
		09	14	13-6	54
		08	15	13-7	55
	C	08	16	13-8	56
		09	17	13-9	57
		10	18	13-10	58
		11	19	13-11	59
		12	20	13-12	60
	A	17	21	16-1	61
		16	22	16-2	62
		15	23	16-3	63
		14	24	16-4	64
		13	25	16-5	65
	C	13	26	16-6	66
		14	27	16-7	67
		15	28	16-8	68
		16	29	16-9	69
		17	30	16-10	70
	A	22	31	16-11	71
		21	32	16-12	72
		20	AYC 01	19-1	73
		19	02	19-2	74
		18	03	19-3	75
	C	18	04	19-4	76
		19	05	19-5	77
		20	06	19-6	78
		21	07	19-7	79
		22	08	19-8	80

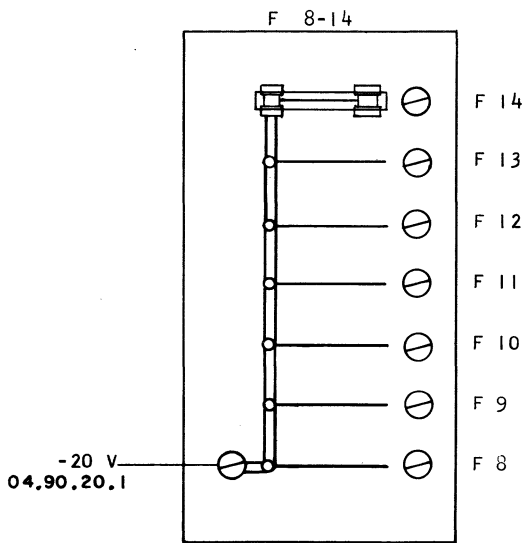
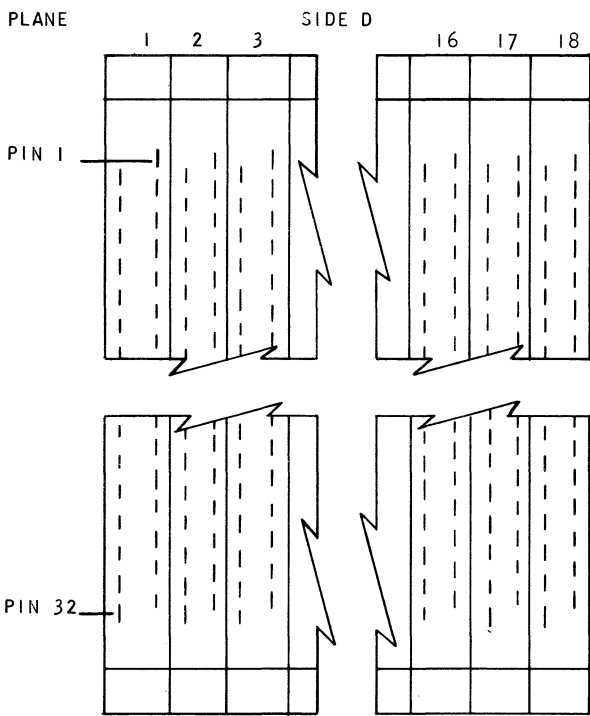
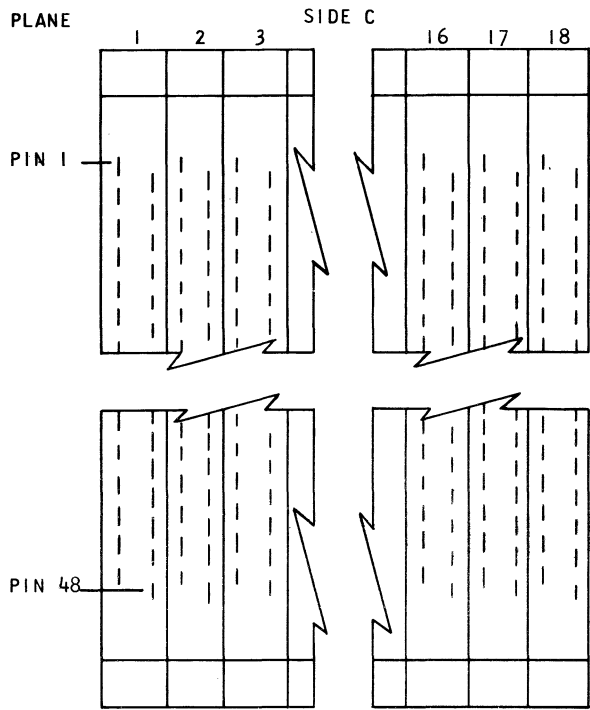
PLANE	SIDE	PIN	CONNECTOR	RESISTOR	2ND RD BR NO
3	A	7	AYB 09	TBR 22-1	1
		6	10	22-2	2
		5	11	22-3	3
		4	12	22-4	4
		3	13	22-5	5
	C	3	14	22-6	6
		4	15	22-7	7
		5	16	22-8	8
		6	17	22-9	9
		7	18	22-10	10
	A	12	19	22-11	11
		11	20	22-12	12
		10	21	25-1	13
		09	22	25-2	14
		08	23	25-3	15
	C	08	24	25-4	16
		09	25	25-5	17
		10	26	25-6	18
		11	27	25-7	19
		12	28	25-8	20
	A	17	29	25-9	21
		16	30	25-10	22
		15	31	25-11	23
		14	32	25-12	24
		13	AZB 01	28-1	25
	C	13	02	28-2	26
		14	03	28-3	27
		15	04	28-4	28
		16	05	28-5	29
		17	06	28-6	30
	A	22	07	28-7	31
		21	08	28-8	32
		20	09	28-9	33
		19	10	28-10	34
		18	11	28-11	35
	C	18	12	28-12	36
		19	13	31-1	37
		20	14	31-2	38
		21	15	31-3	39
		22	16	31-4	40
1	A	7	AXB 01	31-5	41
		6	02	31-6	42
		5	03	31-7	43
		4	04	31-8	44
		3	05	31-9	45
	C	3	06	31-10	46
		4	07	31-11	47
		5	08	31-12	48
		6	09	34-1	49
		7	10	34-2	50
	A	12	11	34-3	51
		11	12	34-4	52
		10	13	34-5	53
		09	14	34-6	54
		08	15	34-7	55
	C	08	16	34-8	56
		09	17	34-9	57
		10	18	34-10	58
		11	19	34-11	59
		12	20	34-12	60
	A	17	21	37-1	61
		16	22	37-2	62
		15	23	37-3	63
		14	24	37-4	64
		13	25	37-5	65
	C	13	26	37-6	66
		14	27	37-7	67
		15	28	37-8	68
		16	29	37-9	69
		17	30	37-10	70
	A	22	31	37-11	71
		21	32	37-12	72
		20	AYB 01	40-1	73
		19	02	40-2	74
		18	03	40-3	75
	C	18	04	40-4	76
		19	05	40-5	77
		20	06	40-6	78
		21	07	40-7	79
		22	08	40-8	80

NOTE
SEE 04.04.01.5 FOR
CONNECTOR LOGIC
LOCATIONS.

PLANE	SIDE	PIN	CONNECTOR	RESISTOR	PUNCH BR NO
3	A	27	AYD 09	TBR 43-1	1
		28	10	43-2	2
		29	11	43-3	3
		30	12	43-4	4
		31	13	43-5	5
	C	31	14	43-6	6
		30	15	43-7	7
		29	16	43-8	8
		28	17	43-9	9
		27	18	43-10	10
	A	32	19	43-11	11
		33	20	43-12	12
		34	21	46-1	13
		35	22	46-2	14
		36	23	46-3	15
	C	36	24	46-4	16
		35	25	46-5	17
		34	26	46-6	18
		33	27	46-7	19
		32	28	46-8	20
	A	37	29	46-9	21
		38	30	46-10	22
		39	31	46-11	23
		40	32	46-12	24
		41	AZD 01	49-1	25
	C	41	02	49-2	26
		40	03	49-3	27
		39	04	49-4	28
		38	05	49-5	29
		37	06	49-6	30
	A	42	07	49-7	31
		43	08	49-8	32
		44	09	49-9	33
		45	10	49-10	34
		46	11	49-11	35
	C	46	12	49-12	36
		45	13	52-1	37
		44	14	52-2	38
		43	15	52-3	39
		42	16	52-4	40

PLANE	SIDE	PIN	CONNECTOR	RESISTOR	PUNCH BR NO
I	A	27	AXD 01	TBR 52-5	41
		28	02	52-6	42
		29	03	52-7	43
		30	04	52-8	44
		31	05	52-9	45
	C	31	06	52-10	46
		30	07	52-11	47
		29	08	52-12	48
		28	09	55-1	49
		27	10	55-2	50
	A	32	11	55-3	51
		33	12	55-4	52
		34	13	55-5	53
		35	14	55-6	54
		36	15	55-7	55
	C	36	16	55-8	56
		35	17	55-9	57
		34	18	55-10	58
		33	19	55-11	59
		32	20	55-12	60
	A	37	21	58-1	61
		38	22	58-2	62
		39	23	58-3	63
		40	24	58-4	64
		41	25	58-5	65
	C	41	26	58-6	66
		40	27	58-7	67
		39	28	58-8	68
		38	29	58-9	69
		37	30	58-10	70
	A	42	31	58-11	71
		43	32	58-12	72
		44	AYD 01	61-1	73
		45	02	61-2	74
		46	03	61-3	75
	C	46	04	61-4	76
		45	05	61-5	77
		44	06	61-6	78
		43	07	61-7	79
		42	08	61-8	80

NOTE
SEE 04.04.01.5 FOR
CONNECTOR LOGIC LOCATIONS.



1 AMP INSTANTANEOUS FUSES ONLY
PART NUMBER 6325

READ LINES SIDE C (BOTTOM SIDE)

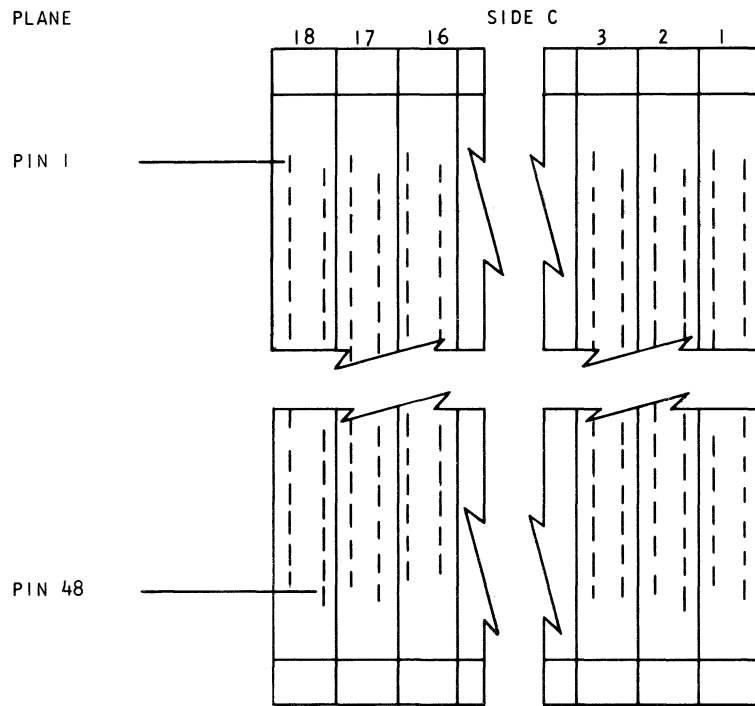
PLANE	PIN	NAME	LOGIC
02	4	-R RD RDR T 0	04.30.05.1
02	6	-R R/P RD T 1	04.30.07.1
02	8	-R RD RDR T 2	04.30.05.1
02	10	-R R/P RD T 3	04.30.07.1
02	16	-R RD RDR T 4	04.30.05.1
02	18	-R R/P RD T 5	04.30.07.1
02	20	-R RD RDR T 6	04.30.05.1
02	22	-R R/P RD T 7	04.30.07.1
02	28	-R RD PCH T 0	04.30.05.1
02	32	-R RD PCH T 2	04.30.05.1
02	40	-R RD PCH T 4	04.30.05.1
02	44	-R RD PCH T 6	04.30.05.1
18	4	-R R/P RD T 0	04.30.07.1
18	6	-R RD RDR T 1	04.30.05.1
18	8	-R R/P RD T 2	04.30.07.1
18	10	-R RD RDR T 3	04.30.05.1
18	16	-R R/P RD T 4	04.30.07.1
18	18	-R RD RDR T 5	04.30.05.1
18	20	-R R/P RD T 6	04.30.07.1
18	22	-R RD RDR T 7	04.30.05.1
18	30	-R RD PCH T 1	04.30.05.1
18	34	-R RD PCH T 3	04.30.05.1
18	42	-R RD PCH T 5	04.30.05.1
18	46	-R RD PCH T 7	04.30.05.1

READ LINES SIDE D (WIRE WRAP SIDE)

PLANE	PIN	NAME	LOGIC
02	10	-R R/P RD U 1	04.30.06.1
02	14	-R R/P RD U 3	04.30.06.1
02	18	-R R/P RD U 5	04.30.06.1
02	22	-R R/P RD U 7	04.30.06.1
02	24	RDR PCH BUFR RD DRVR	04.30.04.1
02	26	-R R/P RD U 9	04.30.06.1
18	8	-R R/P RD U 0	04.30.06.1
18	12	-R R/P RD U 2	04.30.06.1
18	16	-R R/P RD U 4	04.30.06.1
18	20	-R R/P RD U 6	04.30.06.1
18	24	-R R/P RD U 8	04.30.06.1
18	26	RDR PCH BUFR RD DRVR	04.30.04.1

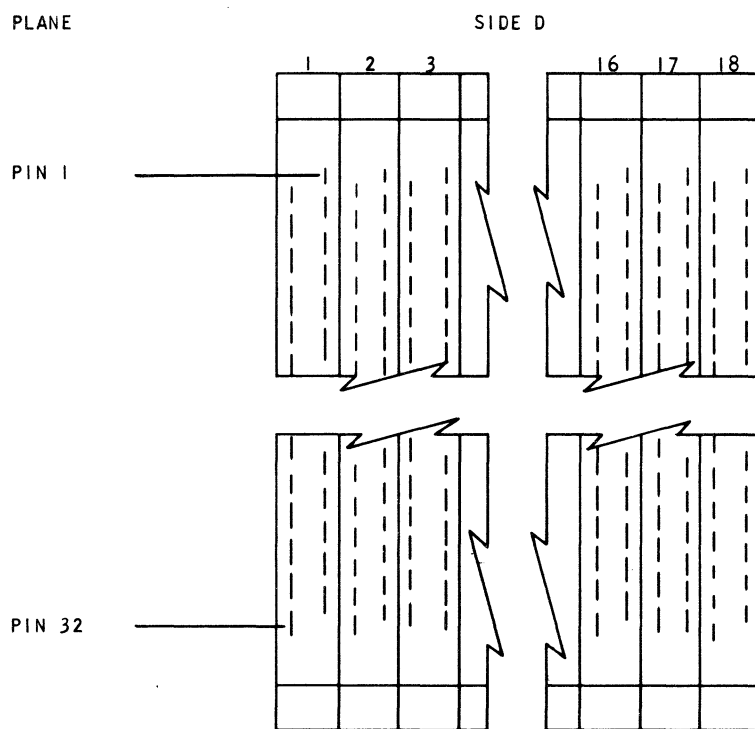
MISCELLANEOUS WIRES SIDE D (WIRE WRAP SIDE)

PLANE	PIN	NAME	LOGIC
3	1	-20V FUSED F 12	NS
3	31	-20V FUSED F 13	NS
2	29	1/2 WRITE 2ND RD BRUSH	04.02.02.1
2	32	-20V FUSED F 14	NS
5	2	-20V FUSED F 10	NS
5	32	-20V FUSED F 11	NS
7	1	-20V FUSED F 11	NS
7	31	-20V FUSED F 10	NS
6	29	1/2 WRITE 1ST RD BRUSH	04.02.02.1
2	31	1/2 WRITE PCH BRUSH	04.02.05.1
1	2	-20V FUSED F 8	NS
1	32	-20V FUSED F 9	NS



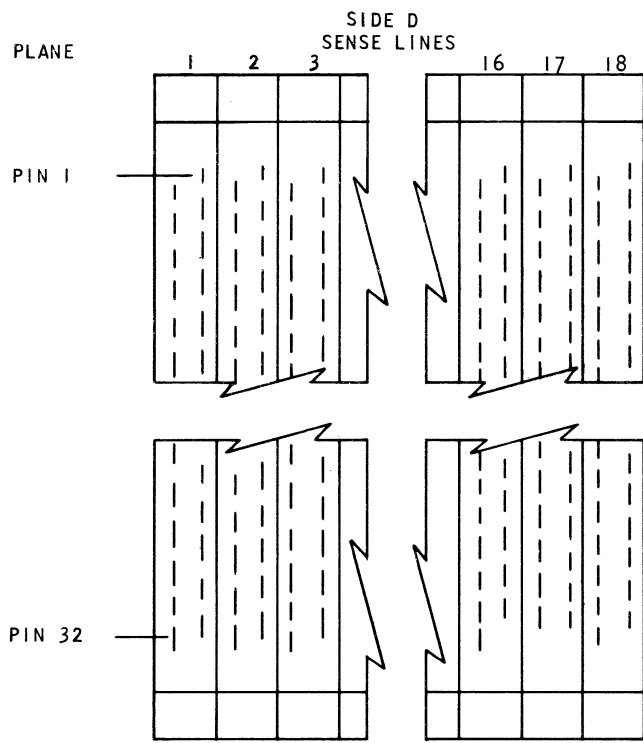
WRITE LINES SIDE C (BOTTOM SIDE)

PLANE	PIN	NAME	LOGIC
04	3	-R R/P WR T 0	04.30.07.1
04	5	-R WR RDR T 1	04.30.05.1
04	7	-R R/P WR T 2	04.30.07.1
04	9	-R WR RDR T 3	04.30.05.1
04	15	-R R/P WR T 4	04.30.07.1
04	17	-R WR RDR T 5	04.30.05.1
04	19	-R R/P WR T 6	04.30.07.1
04	21	-R WR RDR T 7	04.30.05.1
04	29	-R WR PCH T 1	04.30.05.1
04	33	-R WR PCH T 3	04.30.05.1
04	41	-R WR PCH T 5	04.30.05.1
04	45	-R WR PCH T 7	04.30.05.1
18	3	-R WR RDR T 0	04.30.05.1
18	5	-R R/P WR T 1	04.30.07.1
18	7	-R WR RDR T 2	04.30.05.1
18	9	-R R/P WR T 3	04.30.07.1
18	15	-R WR RDR T 4	04.30.05.1
18	17	-R R/P WR T 5	04.30.07.1
18	19	-R WR RDR T 6	04.30.05.1
18	21	-R R/P WR T 7	04.30.07.1
18	27	-R WR PCH T 0	04.30.05.1
18	31	-R WR PCH T 2	04.30.05.1
18	39	-R WR PCH T 4	04.30.05.1
18	43	-R WR PCH T 6	04.30.05.1



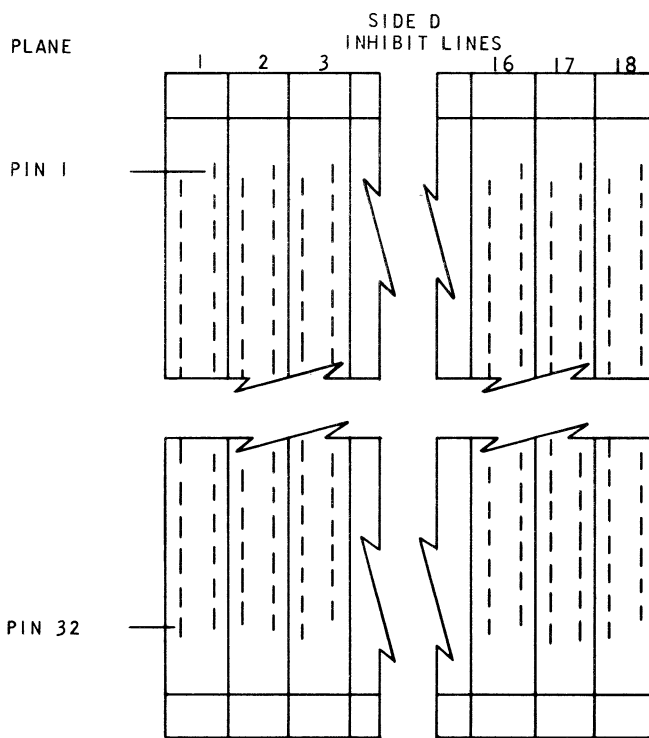
WRITE LINES SIDE D (WIRE WRAP SIDE)

PLANE	PIN	NAME	LOGIC
04	7	-R R/P WR U 0	04.30.06.1
04	11	-R R/P WR U 2	04.30.06.1
04	15	-R R/P WR U 4	04.30.06.1
04	19	-R R/P WR U 6	04.30.06.1
04	23	-R R/P WR U 8	04.30.06.1
04	25	RDR PCH BUFR WR DRVR	04.30.04.1
18	9	-R R/P WR U 1	04.30.06.1
18	13	-R R/P WR U 3	04.30.06.1
18	17	-R R/P WR U 5	04.30.06.1
18	21	-R R/P WR U 7	04.30.06.1
18	23	RDR PCH BUFR WR DRVR	04.30.04.1
18	25	-R R/P WR U 9	04.30.06.1



SENSE LINES SIDE D(WIRE WRAP SIDE)

PLANE	PIN	NAME	LOGIC
18	1	SEN C BIT	04.30.01.1
18	4	SEN WIND C BIT	04.30.01.1
17	1	SEN A BIT	04.30.01.1
17	4	SEN WIND A BIT	04.30.01.1
16	1	SEN B BIT	04.30.01.1
16	4	SEN WIND B BIT	04.30.01.1
15	1	SEN 8 BIT	04.30.01.1
15	4	SEN WIND 8 BIT	04.30.01.1
14	1	SEN 4 BIT	04.30.01.1
14	4	SEN WIND 4 BIT	04.30.01.1
13	1	SEN 2 BIT	04.30.01.1
13	4	SEN WIND 2 BIT	04.30.01.1
12	1	SEN 1 BIT	04.30.01.1
12	4	SEN WIND 1 BIT	04.30.01.1
11	1	SEN CK PLN B2	04.30.02.1
11	4	SEN WIND CP B2	04.30.02.1
10	1	SEN CK PLN A2	04.30.02.1
10	4	SEN WIND CP A2	04.30.02.1
9	1	SEN CK PLN B1	04.30.02.1
9	4	SEN WIND CP B1	04.30.02.1
8	1	SEN CK PLN A1	04.30.02.1
8	4	SEN WIND CP A1	04.30.02.1
2	3	SEN RD RB2	04.30.02.1
2	4	SEN WIND RD RB2	04.30.02.1
6	3	SEN RB1	04.30.02.1
6	4	SEN WIND RB 1	04.30.02.1
2	2	SEN PCH RB2	04.30.02.1
2	1	SEN WIND PCH RB2	04.30.02.1

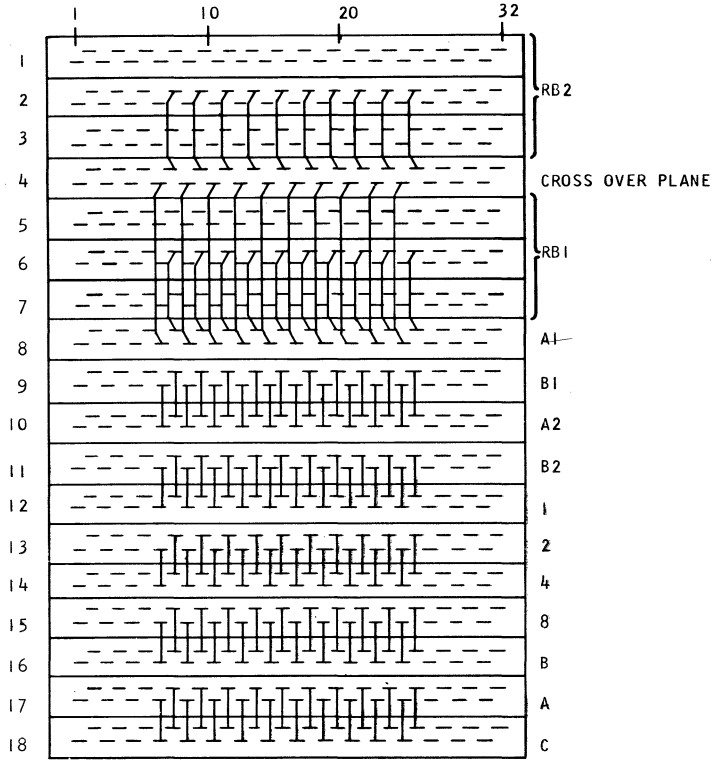


INHIBIT LINES SIDE D (WIRE WRAP SIDE)

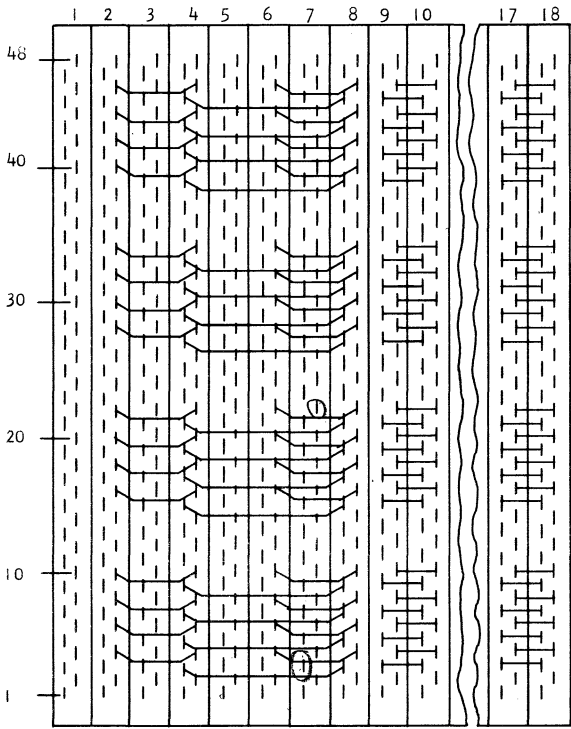
PLANE	PIN	NAME	LOGIC
18	29	-R INH RES C	04.30.08.1
18	32	-R INH C BIT	04.30.03.1
17	29	-R INH A BIT	04.30.03.1
17	32	-R INH RES A	04.30.08.1
16	29	-R INH RES B	04.30.08.1
16	32	-R INH B BIT	04.30.03.1
15	29	-R INH 8 BIT	04.30.03.1
15	32	-R INH RES 8	04.30.08.1
14	29	-R INH RES 4	04.30.08.1
14	32	-R INH 4 BIT	04.30.03.1
13	29	-R INH 2 BIT	04.30.03.1
13	32	-R INH RES 2	04.30.08.1
12	29	-R INH RES 1	04.30.08.1
12	32	-R INH 1 BIT	04.30.03.1
11	29	-R INH B2 BIT	04.30.03.1
11	32	-R INH RES B2	04.30.08.1
10	29	-R INH RES A2	04.30.08.1
10	32	-R INH A2 BIT	04.30.03.1
9	29	-R INH B1 BIT	04.30.03.1
9	32	-R INH RES B1	04.30.08.1
8	29	-R INH RES A1	04.30.08.1
8	32	-R INH A1 BIT	04.30.03.1

*SIDE B
PLANE 7*

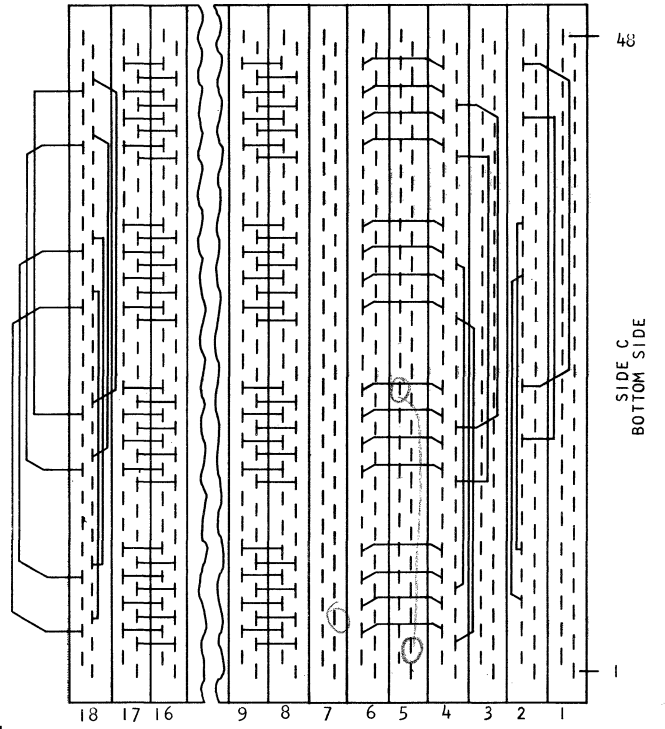
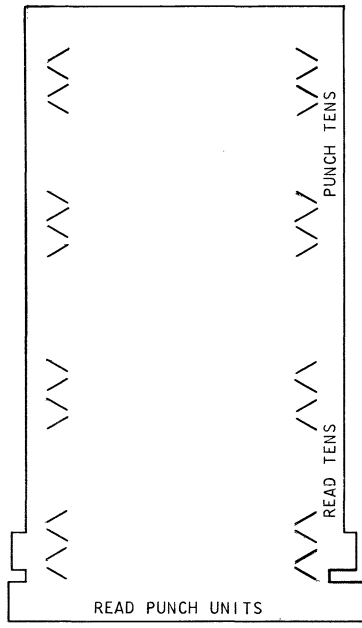
SIDE B
CARD SIDE



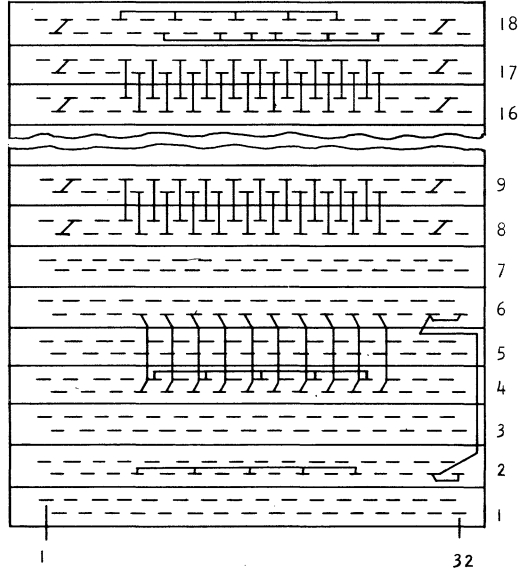
*SIDE C
PLANE 5
3-22*



SIDE A
TOP SIDE



SIDE C
BOTTOM SIDE



SIDE D
WIRE WRAP SIDE

NOTE

ALL X AND Y DRIVE LINES, EXCEPT ROW BIT HALF-WRITE LINES, GO STRAIGHT THROUGH THE PLANES.

ROW BIT HALF-WRITE LINES TERMINATE AS FOLLOWS:

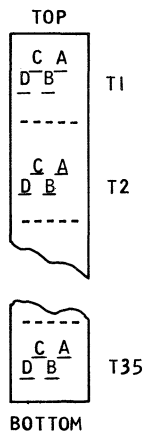
- FIRST READ-SIDE D PLANE 6 PIN 29
- SECOND READ-SIDE D PLANE 2 PIN 29
- PUNCH CHECK-SIDE D PLANE 2 PIN 31

SENSE WINDINGS TERMINATE ON SIDE D PINS 1, 2, 3 AND 4.

INHIBIT WINDINGS FOR ALL CORE PLANES, EXCEPT ROW BIT, TERMINATE ON SIDE D PINS 29, 30, 31 AND 32.

TOP

1	C	04.10.09.2	A	04.90.40.1
	D	04.10.09.1	B	04.40.03.1
2	C	04.15.01.1	A	04.15.01.1
	D	04.15.02.1	B	04.15.01.1
3	C	04.15.02.1	A	04.15.02.1
	D	04.15.03.1	B	04.15.02.1
4	C	04.83.06.1	A	04.15.03.1
	D	04.83.06.1	B	04.15.03.1
5	C	04.83.06.1	A	04.83.06.1
	D	04.83.06.1	B	04.83.06.1
6	C	04.83.06.1	A	04.40.03.1
	D	04.83.06.1	B	04.10.09.2
7	C	04.25.01.1	A	04.15.06.1
	D	04.25.01.1	B	04.25.01.1
8	C	04.25.01.1	A	04.25.01.1
	D	04.25.01.1	B	04.25.01.1
9	C	04.25.02.1	A	04.25.01.1
	D	04.25.02.1	B	04.25.02.1
10	C	04.25.03.1	A	04.25.02.1
	D	04.25.03.1	B	04.25.02.1
11	C	04.10.07.1	A	04.10.07.1
	D	04.10.07.1	B	04.10.07.1
12	C	04.10.08.1	A	04.10.07.1
	D	04.10.08.1	B	04.10.07.1
13	C	04.35.01.1	A	04.10.10.1
	D	04.10.04.1	B	04.10.09.1
14	C	04.25.03.1	A	04.10.11.1
	D	04.25.03.1	B	04.10.11.1
15	C	04.30.01.1	A	04.25.03.1
	D	04.10.08.2	B	04.25.03.1
16	C	04.10.04.1	A	04.83.06.1
	D		B	
17	C	04.40.02.1	A	04.10.12.1
	D	04.10.04.1	B	04.10.12.1
18	C	04.10.08.1	A	04.15.06.1
	D		B	04.25.03.1



19	C	04.15.04.1	A	04.15.05.1
	D	04.15.04.1	B	04.15.05.1
20	C	04.15.03.1	A	04.15.04.1
	D		B	04.15.04.1
21	C	04.15.01.1	A	04.15.01.1
	D	04.15.01.1	B	04.15.01.1
22	C	04.15.02.1	A	04.15.02.1
	D	04.15.02.1	B	04.15.02.1
23	C	04.35.14.1	A	04.35.14.1
	D	04.35.14.1	B	04.40.05.1
24	C	04.35.15.1	A	04.35.14.1
	D	04.35.15.1	B	04.35.15.1
25	C	04.35.16.1	A	04.35.15.1
	D	04.35.16.1	B	04.35.16.1
26	C	04.15.06.1	A	04.15.06.1
	D	04.15.06.1	B	04.35.16.1
27	C	04.04.04.1	A	04.15.06.1
	D	04.15.06.1	B	04.15.06.1
28	C	04.10.12.1	A	04.15.01.1
	D	04.10.06.1	B	04.10.08.2
29	C	04.15.03.1	A	04.15.03.1
	D	04.15.03.1	B	04.15.03.1
30	C	04.15.04.1	A	04.15.04.1
	D	04.15.04.1	B	04.15.04.1
31	C	04.10.09.1	A	04.15.05.1
	D	04.10.10.1	B	04.15.05.1
32	C	04.04.04.1	A	04.10.10.1
	D		B	04.10.10.1
33	C		A	
	D		B	04.35.16.1
34	C		A	
	D		B	
35	C		A	
	D		B	

BOTTOM

	A	B	C	D	E	F
	DT DEE				DPM AHT	DPM AHT
1	04.83.05.1 04.83.05.1 04.83.05.1 04.83.05.1				04.82.03.1 04.82.03.1 04.82.03.1	04.82.03.1 04.82.03.1 04.82.03.1
	DT DEE					DPM AHT
2	04.83.05.1 04.83.05.1 04.83.05.1 04.83.06.1	MAKE NO ASSIGNMENTS				04.82.03.1 04.82.03.1 04.82.03.1
	DT DEE					DPM AHT
3	04.83.06.1 04.83.06.1 04.83.06.1			MAKE NO ASSIGNMENTS		04.82.03.1 04.82.03.1 04.82.03.1
	THERM RE	AM NN				DPM AHT
4	04.90.40.1	04.30.02.1				04.82.03.1 04.82.03.1 04.82.03.1
	DT DEE	AM NN		SW TBD		DPM AHT
5	04.83.06.1 04.83.06.1 04.83.06.1	04.30.02.1		04.30.06.1		04.82.03.1 04.82.03.1 04.82.03.1
	DL DED	AM NN	BUFFER (NO SOCKETS INSTALLED)	SW TBD		DPM AHT
6	04.83.01.1 04.83.01.1 04.83.01.1 04.83.01.1	04.30.02.1		04.30.06.1		04.82.03.1 04.82.03.1 04.82.03.1
	DL DED	AM NN		SW TBD		DPM AHT
7	04.83.01.1 04.83.01.1 04.83.01.1	04.30.02.1		04.30.06.1		04.82.03.1 04.82.03.1 04.82.03.1
	DL DED	AM NN		SW TBD		DPM AHT
8	04.83.04.1 04.83.04.1 04.83.04.1 04.83.04.1	04.30.02.1		04.30.06.1		04.82.03.1 04.82.03.1 04.82.03.1
	DL DED	AM NN		SW TBD		DPM AHT
9	04.83.04.1 04.83.04.1 04.83.04.1 04.83.04.1	04.30.02.1		04.30.06.1		04.82.04.1 04.82.04.1 04.82.04.1
	2WD VE	AM NN		SW TBD		DPM AHT
10	04.83.06.1 04.30.02.1 04.83.06.1 04.83.06.1	04.30.02.1		04.30.07.1		04.82.04.1 04.82.04.1 04.82.04.1
		AM NN		SW TBD		DPM AHT
11		04.30.01.1		04.30.07.1		04.82.04.1 04.82.04.1 04.82.04.1
	3WD VF	AM NN		SW TBD		DPM AHT
	04.30.02.1 04.30.02.1 04.30.02.1	04.30.01.1		04.30.07.1		04.82.04.1 04.82.04.1 04.82.04.1
	2WD MX	AM NN		SW TBD	2W MX	DPM AHT
13	04.25.01.1 04.25.01.1 04.25.01.1 04.25.01.1	04.30.01.1		04.30.07.1	04.10.11.1 04.10.10.1 04.10.11.1 04.40.02.1	04.82.04.1 04.82.04.1 04.82.04.1

(BM 635564)

TAC

NOTE
X REFER TO LOGIC 04.04.03.6 FOR
CARD TYPE PART NUMBERS

(BM 635564)

	A	B	C	D	E	F
14	L TCZ	AM NN	DIODE YAR		3W CD	DPM AHT
	04.25.01.1 04.25.01.1	04.30.01.1	04.30.05.1	MAKE NO ASSIGNMENT	04.10.11.1 04.40.02.1 04.10.11.1	04.82.04.1 04.82.04.1 04.82.04.1
15	2W MX	AM NN	DIODE YAR	IS ACY	2W MX	DPM AHT
	04.25.01.1 04.25.01.1 04.25.01.1	04.30.01.1	04.30.05.1	04.30.06.1	04.10.10.1 04.40.03.1 04.10.10.1 04.40.02.1	04.82.04.1 04.82.04.1 04.82.04.1
16	L TCZ	AM NN	DIODE YAR		2W MX	DPM AHT
	04.25.01.1 04.25.01.1	04.30.01.1	04.30.05.1	MAKE NO ASSIGNMENT	04.15.06.1 04.15.06.1 04.15.06.1	04.82.04.1 04.82.04.1 04.82.04.1
17	2W MX	AM NN	DIODE YAR	IS ACY	DE CEYB	DPM AHT
	04.25.02.1 04.25.02.1 04.25.02.1 04.25.02.1	04.30.01.1	04.30.05.1	04.30.06.1	04.15.06.1 04.15.06.1 04.10.10.1	04.82.04.1 04.82.04.1 04.82.04.1
18	L TCZ	L TCZ	R FP	D WJ	2W VE	DPM AHT
	04.25.02.1 04.25.02.1	04.25.03.1 04.25.03.1	04.30.08.1	04.30.03.1 04.30.03.1	04.40.05.1 04.40.05.1 04.40.05.1	04.82.05.1 04.82.05.1 04.82.05.1
19	L TCZ	L TCZ	R FP	D WJ	2W MX	DPM AHT
	04.25.02.1 04.10.04.1	04.25.03.1 04.25.03.1	04.30.08.1	04.30.03.1 04.30.03.1	04.40.05.1 04.40.05.1 04.40.05.1	04.82.05.1 04.82.05.1 04.82.05.1
20	2W MX	L TCZ	R FP	D WJ	2W MX	DPM AHT
	04.25.02.1 04.35.04.1 04.25.02.1 04.40.02.1	04.25.03.1 04.25.03.1	04.30.08.1	04.30.03.1 04.30.03.1	04.40.05.1 04.40.05.1 04.40.05.1	04.82.05.1 04.82.05.1 04.82.05.1
21	2W MX	I VM	R AFB	D WJ	2W VE	DPM AHT
	04.40.03.1 04.40.03.1 04.40.03.1 04.40.03.1	04.30.01.1 04.10.12.1 04.30.02.1 04.10.12.1	04.30.08.1	04.30.03.1 04.30.03.1	04.82.01.1 04.82.01.1 04.82.01.1 04.40.05.1	04.82.05.1 04.82.05.1 04.82.05.1
22	2W MX	2W VE	2W MX	D WJ	I VM	DPM AHT
	04.40.03.1 04.40.03.1 04.40.03.1 04.40.03.1	04.30.02.1 04.30.02.1 04.30.02.1 04.25.03.1	04.35.04.1 04.35.04.1 04.35.04.1	04.30.03.1 04.30.03.1	04.82.01.1 04.82.01.1 04.82.01.1	04.82.05.1 04.82.05.1 04.82.05.1
23	THERM RE	2W VE	2W MX	D WJ	2W VE	DPM AHT
	04.90.40.1	04.30.02.1 04.30.02.1 04.30.02.1	04.35.04.1 04.35.04.1 04.35.04.1	04.30.03.1	04.82.01.1 04.82.01.1 04.82.01.1	04.82.05.1 04.82.05.1 04.82.05.1
24	2W MX	2W MX	3W CD	D WJ	I VM	DPM AHT
	04.40.03.1 04.40.03.1 04.40.03.1 04.40.03.1	04.35.04.1 04.35.04.1 04.35.04.1	04.35.04.1 04.35.04.1 04.35.04.1	04.30.04.1 04.30.04.1	04.82.01.1 04.82.01.1 04.82.01.1	04.82.05.1 04.82.05.1 04.82.05.1
25	2W MX	3W CD	2W MX	D WJ	2W VE	DPM AHT
	04.40.03.1 04.40.03.1 04.40.03.1 04.40.03.1	04.35.04.1 04.35.04.1 04.35.04.1	04.35.04.1 04.35.04.1 04.35.04.1	04.30.05.1 04.30.05.1	04.82.01.1 04.30.02.1 04.82.01.1	04.82.05.1 04.82.05.1 04.82.05.1
26	2W VE		3W CD	D WJ	I VM	DPM AHT
	04.40.03.1 04.40.03.1 04.40.03.1		04.35.04.1 04.35.04.1 04.35.04.1	04.30.05.1 04.30.05.1	04.82.01.1 04.82.01.1 04.25.03.1	04.82.05.1 04.82.05.1

NOTE
X REFER TO LOGIC 04.04.03.6 FOR
TYPE PART NUMBERS

615141 EC 802300
802300A
802455
802603A

	A	B	C	D	E	F
1	ID AFR	ID AFR	2WDX DAX	3WD VF	L TCZ	L TCZ
	04.15.01.1	04.35.14.1	04.10.10.1	04.10.10.1	04.15.01.1	04.15.03.1
	04.15.01.1	04.35.16.1	04.10.10.1	04.10.09.1	04.15.01.1	04.15.03.1
	04.15.01.1	04.35.11.1	04.10.11.1	04.10.10.1		
	04.15.02.1	04.35.13.1	04.35.01.1			
2	ID AFR	2WD VE	3WD VF		2WD VE	2WD VE
	04.15.02.1	04.35.01.1	04.10.10.1		04.15.01.1	04.15.03.1
	04.15.02.1	04.35.01.1	04.10.10.1		04.15.01.1	04.15.03.1
	04.15.03.1	04.35.01.1	04.10.11.1		04.15.01.1	04.15.04.1
	04.15.03.1	04.35.01.1			04.15.01.1	04.15.04.1
3	ID AFR	3WD VF	L DFA		3WD VF	3WD VF
	04.15.04.1	04.35.01.1	04.10.10.1		04.15.01.1	04.15.03.1
	04.15.04.1	04.35.01.1	04.10.10.1		04.15.01.1	04.15.03.1
	04.15.04.1	04.35.01.1			04.15.01.1	04.15.04.1
	04.15.05.1					
4	THERM RE	2WD VE	L DFA	2WD VE	L TCZ	L TCZ
	04.90.40.1	04.35.01.1	04.10.10.1	04.35.01.1	04.15.01.1	04.15.04.1
		04.35.01.1	04.10.10.1	04.15.06.1	04.15.01.1	04.15.04.1
		04.35.01.1		04.10.08.3		
		04.35.01.1		04.15.06.1		
5	ID AFR	3WD VF	3WD VF	2W MX	3WD VF	3WD VF
	04.25.01.1	04.35.01.1	04.10.11.1	04.10.10.1	04.15.01.1	04.15.04.1
	04.25.01.1	04.35.01.1	04.10.11.1	04.40.02.1	04.15.02.1	04.15.04.1
	04.25.01.1	04.35.02.1	04.10.11.1	04.10.11.1	04.15.02.1	04.15.04.1
	04.25.02.1			04.10.10.1		
6	ID AFR	2WDX DAX	3WD VF	3W CD	L TCZ	L TCZ
	04.25.02.1	04.35.01.1	04.35.11.1	04.40.02.1	04.15.02.1	04.15.04.1
	04.25.03.1	04.35.01.1	04.10.11.1	04.40.02.1	04.15.02.1	04.15.04.1
	04.25.03.1	04.35.01.1	04.10.08.1			
	04.25.03.1	04.35.02.1				
7	ID AFR	3WD VF	RYD PF	2W MX	2WD VE	2WD VE
	04.25.03.1	04.35.02.1	04.10.10.1	04.10.08.1	04.15.02.1	04.15.04.1
	04.10.10.1	04.35.01.1	04.10.10.1	04.10.09.1	04.15.02.1	04.15.04.1
	04.10.10.1	04.35.02.1		04.40.02.1	04.15.02.1	04.15.05.1
	04.40.03.1			04.10.08.2	04.15.02.1	04.15.05.1
8	3WD VF	2WD VE	3W CD	3WD VF	L TCZ	L TCZ
	04.10.09.1	04.35.01.1	04.10.08.1	04.35.02.1	04.15.02.1	04.15.05.1
	04.10.09.1	04.35.01.1	04.15.06.1	04.35.02.1	04.15.02.1	04.15.03.1
	04.10.09.1	04.35.01.1	04.10.08.2	04.35.02.1		
		04.35.01.1				
9	2WD VE	2WD VE		2W MX	3WD VF	3WD VF
	04.10.09.1	04.35.01.1		04.10.10.1	04.15.02.1	04.15.05.1
	04.10.09.1	04.35.02.1		04.10.10.1	04.15.02.1	04.15.05.1
	04.10.09.1	04.35.02.1		04.10.08.2	04.15.03.1	04.10.11.1
	04.10.09.2	04.35.02.1		04.10.10.1		
10	RDY PF	L VM	L TCZ		L TCZ	3WD VF
	04.15.06.1	04.10.09.2	04.10.08.1		04.15.05.1	04.30.01.1
	04.15.06.1	04.10.08.3	04.10.08.1		04.15.03.1	04.35.11.1
		04.10.08.3				04.15.03.1
		04.10.08.1				
11	2WD VE	2WD VE	2WD VE	L VM	2WD VE	
	04.10.04.1	04.35.02.1	04.10.08.1	04.10.07.1	04.15.03.1	
	04.10.09.2	04.35.02.1	04.10.08.1	04.10.12.1	04.15.03.1	
	04.10.09.1	04.10.09.1	04.10.08.1	04.10.07.1	04.15.05.1	
	04.10.09.1	04.10.07.1	04.10.08.1	04.10.07.1	04.10.08.3	
12	L TCZ	2WD VE			2WD VE	L TCZ
	04.10.09.1	04.10.05.1			04.15.01.1	04.35.11.1
	04.10.09.2	04.10.05.1			04.10.12.1	04.35.11.1
		04.35.02.1			04.15.03.1	
		04.10.07.1			04.15.05.1	
13	3WD VF	L TCZ	2WD VE	2W MX	2WD VE	2WD VE
	04.10.09.2	04.10.05.1	04.10.07.1	04.10.10.1	04.35.14.1	04.10.11.1
	04.10.09.2	04.10.05.1	04.10.07.1	04.10.11.1	04.35.14.1	04.35.11.1
	04.10.09.2		04.10.07.1	04.10.10.1	04.35.14.1	04.35.14.1
				04.10.10.1	04.35.14.1	04.35.14.1

NOTE
X REFER TO LOGIC 04.04.03.6 FOR CARD TYPE PART NUMBERS

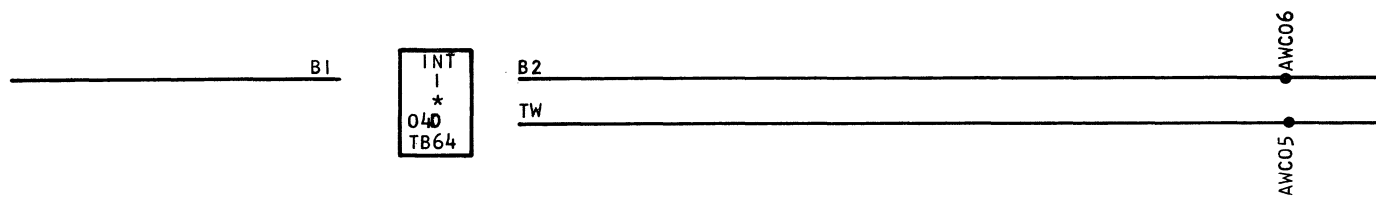
615142 EC 802300
802363
802592
802603A

	A	B	C	D	E	F
14	2WD VE	2WD VE	DEP DAR	2WD VE	L TCZ	I VM
	04.10.09.1	04.10.05.1	04.10.07.1	04.10.08.1	04.35.14.1	04.35.11.1
	04.10.09.2	04.10.05.1	04.10.07.1	04.10.08.2	04.35.14.1	04.35.14.1
	04.10.09.2	04.10.05.1	04.83-06.1 04.15.05.1	04.10.08.2		04.15.05.1 04.15.05.1
15	2WD VE	L TCZ	3WD VF	I MH	3WD VF	2WD VE
	04.10.09.2	04.10.05.1	04.10.07.1	04.10.10.1	04.35.14.1	04.35.11.1
	04.10.09.2	04.10.05.1	04.10.09.1	04.10.08.2	04.35.14.1	04.35.11.1
	04.10.09.2		04.10.07.1	04.10.08.1	04.35.14.1	04.35.11.1
16	I TCZ	2WD VE		L TCZ	L TCZ	3WD VF
	04.10.09.1	04.10.05.1		04.10.08.2	04.35.14.1	04.35.11.1
	04.10.09.2	04.10.05.1		04.10.08.2	04.35.14.1	04.35.11.1
		04.10.06.1				04.35.11.1
17	2WDX DAX	L TCZ	2WD VE	3WD VF	3WD VF	L TCZ
	04.10.09.1	04.10.06.1	04.10.07.1	04.10.08.2	04.35.14.1	04.35.11.1
	04.10.08.2	04.10.06.1	04.15.05.1	04.10.08.2	04.35.15.1	04.35.11.1
	04.10.09.2		04.10.07.1	04.10.12.1	04.35.15.1	
18	2W MX	2WD VE	2WD VE		2WD VE	L TCZ
	04.10.10.1	04.10.06.1	04.10.07.1		04.35.15.1	04.35.12.1
	04.10.10.1	04.10.06.1	04.10.07.1		04.35.15.1	04.35.12.1
	04.10.10.1	04.10.06.1	04.10.07.1		04.35.15.1	
19	L TCZ	L TCZ	I VM	2WDX DAX	L TCZ	2WD VE
	04.15.06.1	04.10.06.1	04.10.07.1	04.05.07.1	04.35.15.1	04.35.12.1
	04.15.06.1	04.10.06.1	04.10.07.1	04.05.07.1	04.35.15.1	04.35.12.1
			04.10.07.1	04.10.10.1		04.35.12.1
20	3WD VF	2WD VE	2WD VE	3WD VF	L TCZ	3WD VF
	04.15.06.1	04.10.04.1	04.40.03.1	04.10.12.1	04.35.15.1	04.35.12.1
	04.15.06.1	04.10.04.1	04.10.07.1	04.35.15.1	04.35.15.1	04.35.12.1
	04.15.06.1	04.10.06.1	04.40.03.1	04.10.08.3		04.35.12.1
21	2WD VE	OSC VG	DP DAT	L TCZ	3WD VF	L TCZ
	04.15.06.1	04.10.04.1	04.05.07.1	04.15.06.1	04.35.15.1	04.35.12.1
	04.10.08.2		04.05.07.1	04.15.06.1	04.35.16.1	04.35.12.1
	04.15.06.1				04.35.16.1	
22	L TCZ	TB VJ	2WD VE	L DFA	2WD VE	3WD VF
	04.15.06.1	04.10.04.1	04.35.13.1	04.15.06.1	04.35.16.1	04.35.12.1
	04.15.06.1		04.15.05.1	04.35.13.1	04.35.16.1	04.35.13.1
			04.15.06.1		04.35.16.1	04.35.13.1
23	THERM RE	3WD VF	3WD VF	I VM	L TCZ	2WD VE
	04.90.40.1	04.10.04.1	04.10.08.3	04.10.08.3	04.35.16.1	04.35.13.1
		04.10.04.1	04.10.08.3	04.10.08.3	04.35.16.1	04.35.13.1
		04.10.09.1	04.10.08.3	04.10.08.3		04.35.13.1
24	3WDX DAW	I VM	2WD VE	2WD VE	3WD VF	L TCZ
	04.15.06.1	04.10.04.1	04.10.08.3	04.10.03.1	04.35.16.1	04.35.13.1
	04.35.01.1	04.10.04.1	04.10.08.3	04.10.10.1	04.10.11.1	04.35.13.1
	04.15.06.1	04.10.04.1	04.10.08.3	04.10.03.1	04.35.16.1	
25		2WD VE	2W MX	L TCZ	L DFA	3WD VF
	MAKE NO ASSIGNMENT	04.10.04.1	04.04.05.1	04.10.03.1	04.35.16.1	04.35.13.1
		04.10.04.1	04.04.05.1	04.10.03.1	04.35.16.1	04.35.13.1
		04.10.04.1	04.10.09.1			04.35.13.1
26	DCM AHS	3W CD	3W CD	2WD VE	I VM	L TCZ
	04.15.06.1	04.10.08.2	04.04.05.1	04.10.03.1	04.10.03.1	04.35.13.1
	04.15.06.1	04.10.10.1	04.04.05.1	04.10.11.1	04.10.03.1	04.35.13.1
		04.10.09.1	04.15.06.1	04.10.03.1	04.15.05.1	

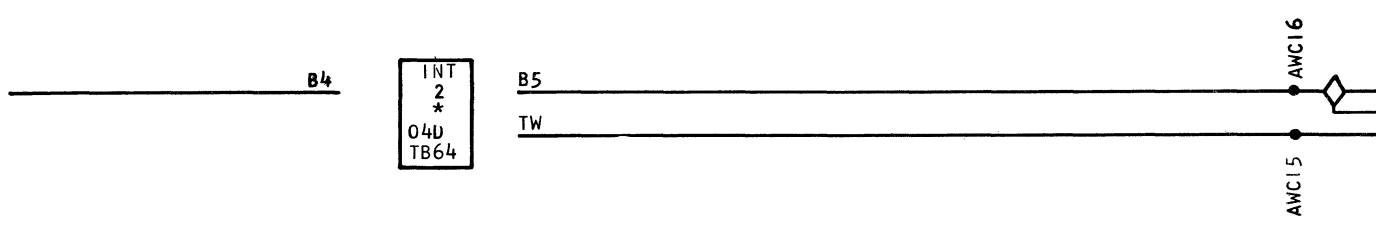
CARD PART NUMBERS

TYPE	PART NO
DAR	370082
DAW	370083
DAX	370084
ACY	370169
TBD	370171
DAT	370172
DFA	370224
YAR	370321
TEZ	370335
AHS	370336
AHT	370337
CD	371029
CEYB	371032
FP	371453
MH	371487
MX	371661
NN	371678
RE	371699
PF	371750
VJ	371867
VG	371868
VE	371869
VF	371870
VM	371871
WJ	371881
AFR	371943
AFB	371948
DED	371987
DEE	371988

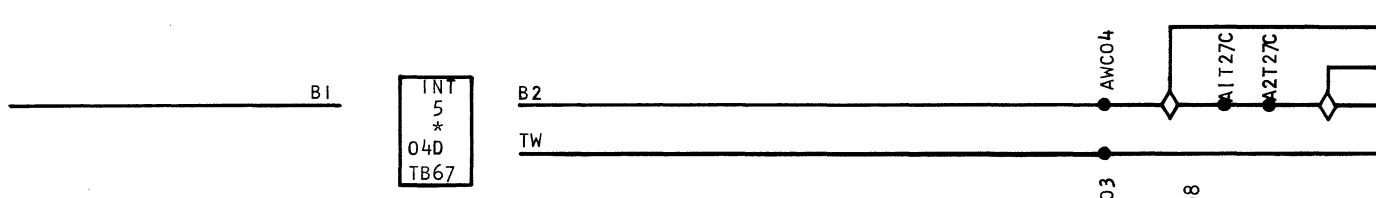
INT # 1
LOAD KEY SW
04.02.00.1



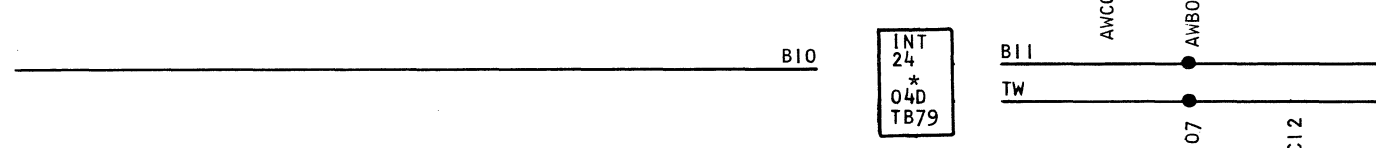
INT # 2
RDR NPRO
04.02.01.1



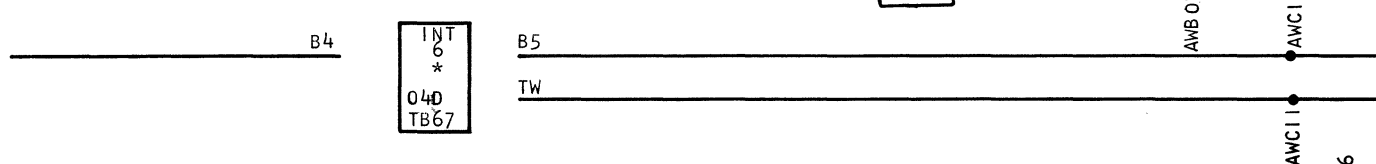
INT # 5
RDR RUN-IN
04.02.01.1



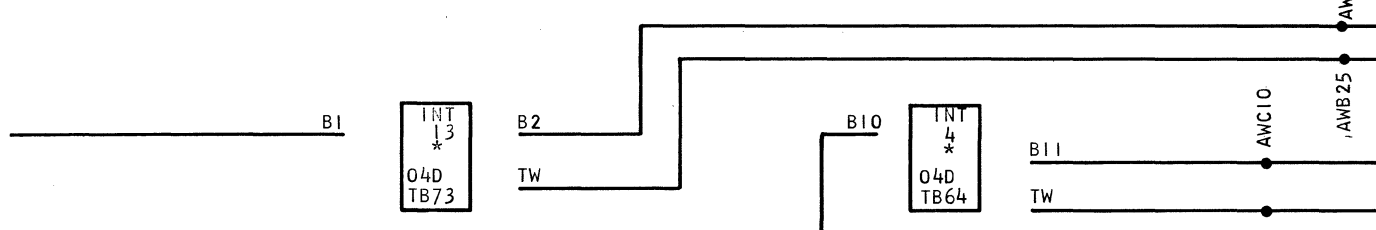
INT #24
RDR RDY NO STACKER
04.02.01.1



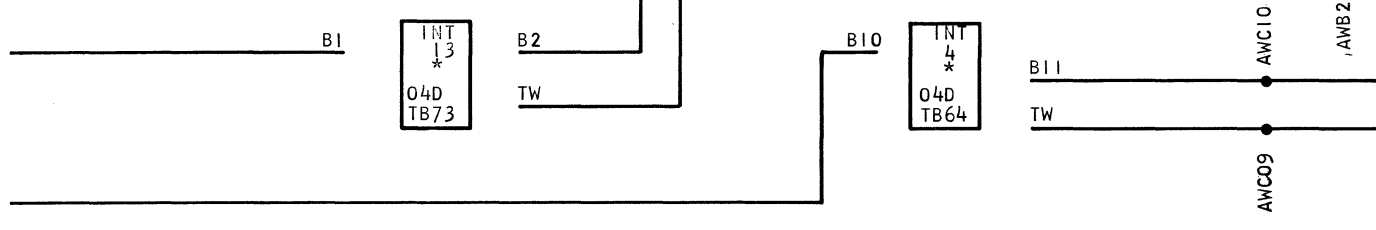
INT # 6
RDR RDY
04.02.01.1



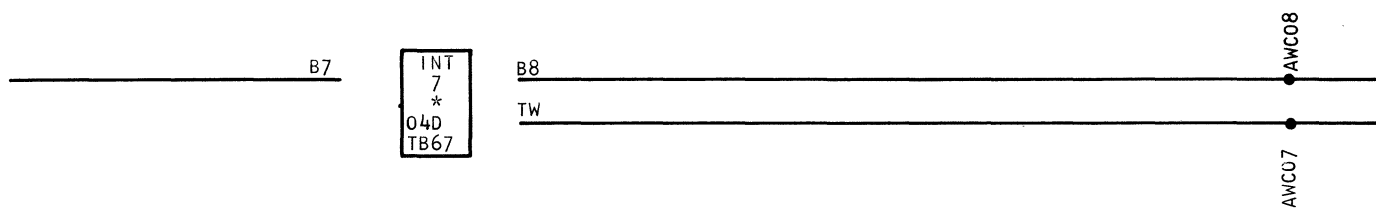
INT # 13
REQUEST RD SCAN CB
04.02.02.1



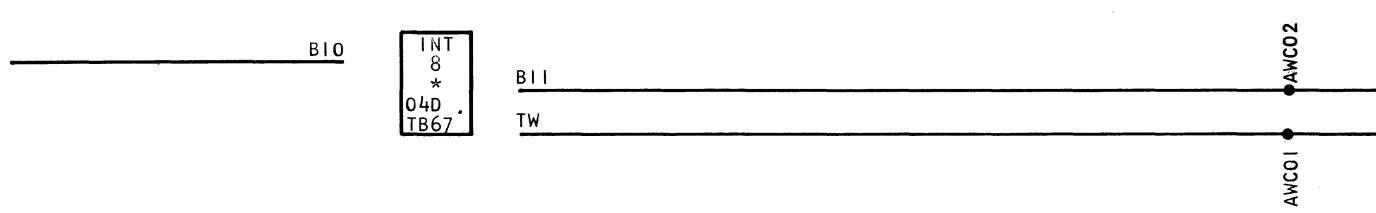
INT # 4
SET RD SCAN CB
04.02.02.1



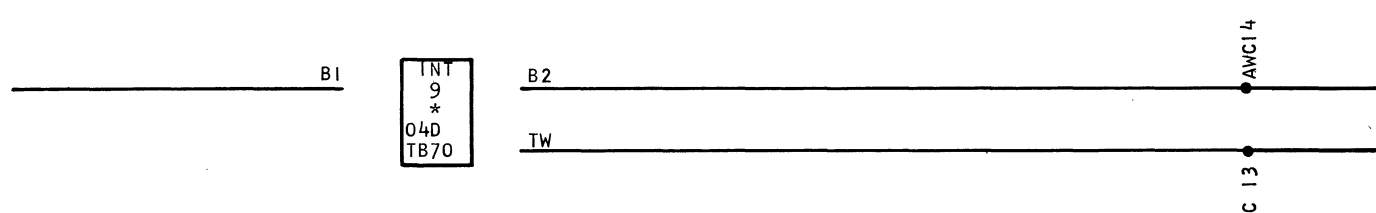
INT # 7
LAST CARD
04.02.01.1



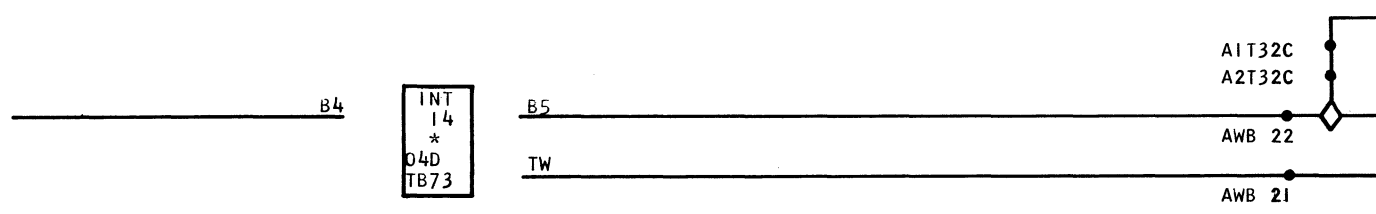
INT # 8
RD MOTOR START
04.02.00.1



FIRST CARD TO
INT # 9
04.02.01.1



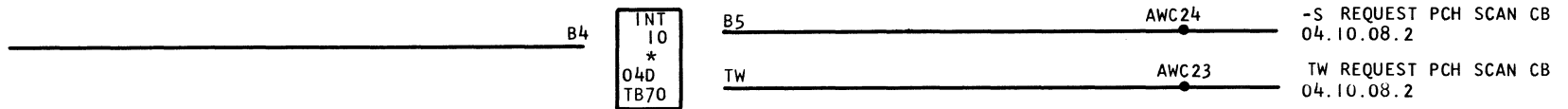
INT #14
POWER ON RESET
04.90.40.1



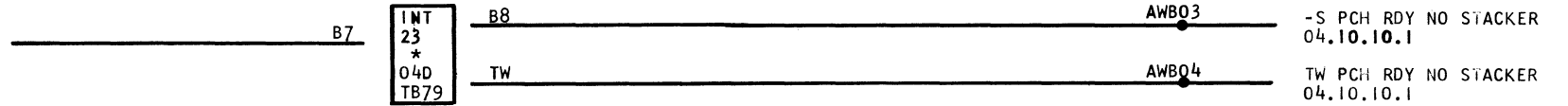
* 04 03.08.1

Integrators located
on 04.03.08.1

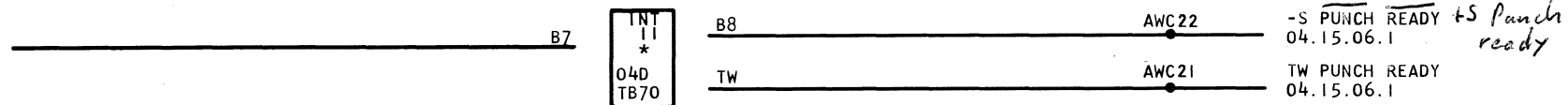
REQUEST PCH
SCAN CB
INT # 10
04.02.05.1



INT # 23
PCH RDY NO STACKER
04.02.04.1

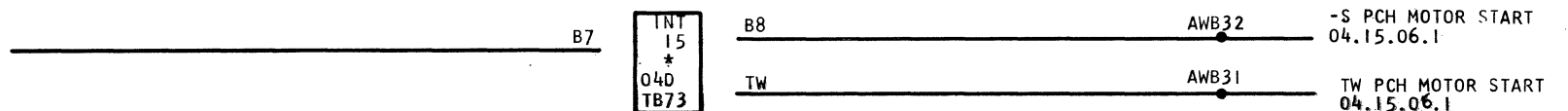


INT # 11
PUNCH RDY
04.02.04.1

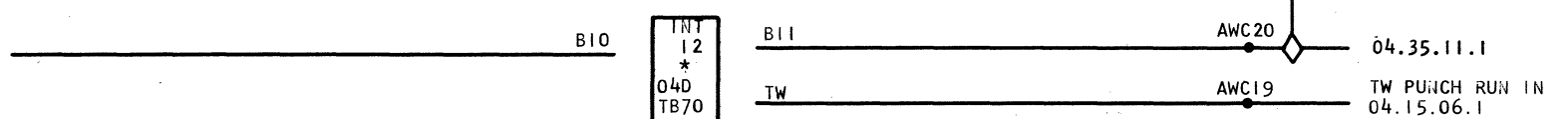


+S PUNCH ready

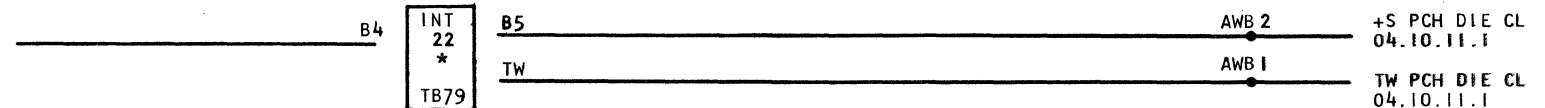
INT # 15
PCH MOTOR START
04.02.03.1



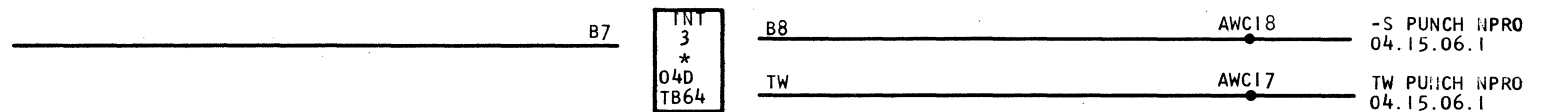
INT # 12
PCH RUN IN
04.02.04.1



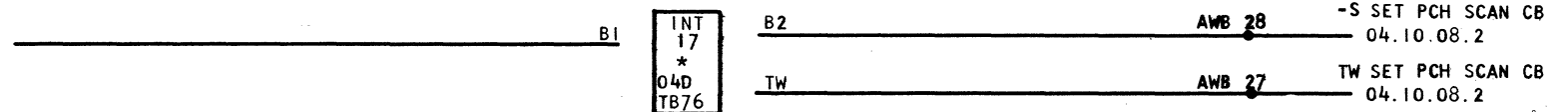
INT # 22
PCH DIE CL
04.02.03.1



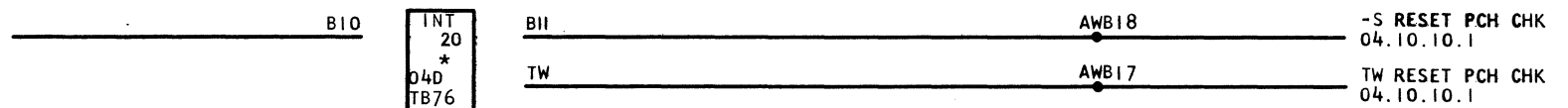
INT # 3
PCH NPRO
04.02.04.1



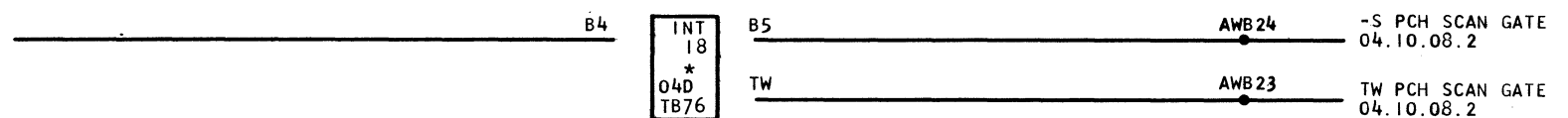
INT # 17
SET PCH SCAN CB
04.02.05.1



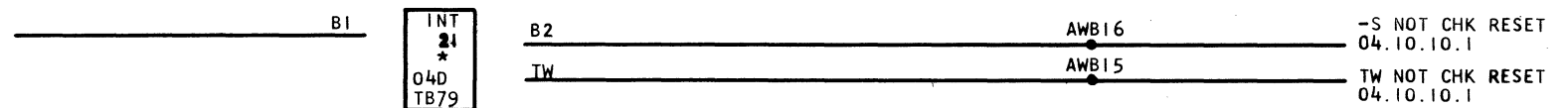
RESET PCH CHK
INT # 20
04.02.04.1



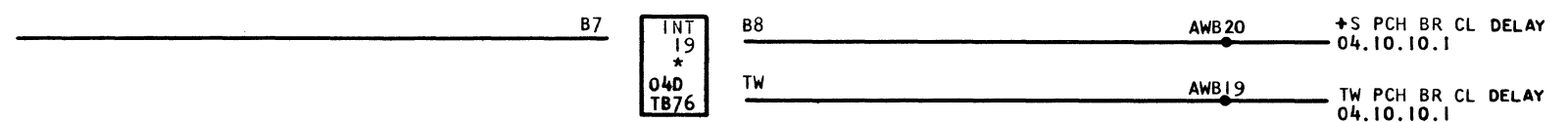
INT # 18
PCH SCAN GATE
04.02.05.1



NOT CHECK RESET
INT # 21
04.02.04.1



INT # 19
PCH BR CL DELAY
04.02.05.1



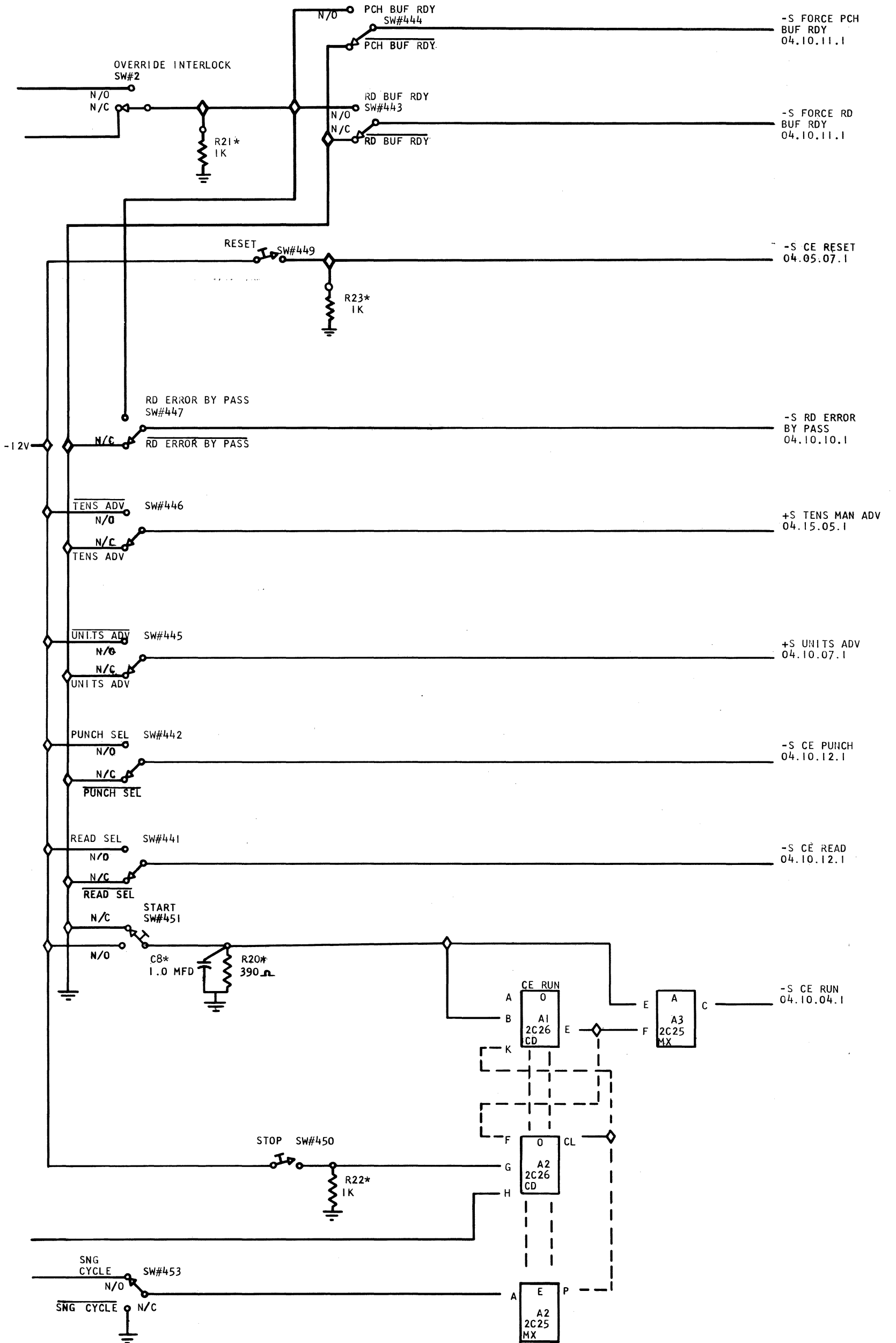
* 04.03.08.1

61545

EC 802300
802455
802592
802603A
802603G

-12V DC1-8
04.90.35.1

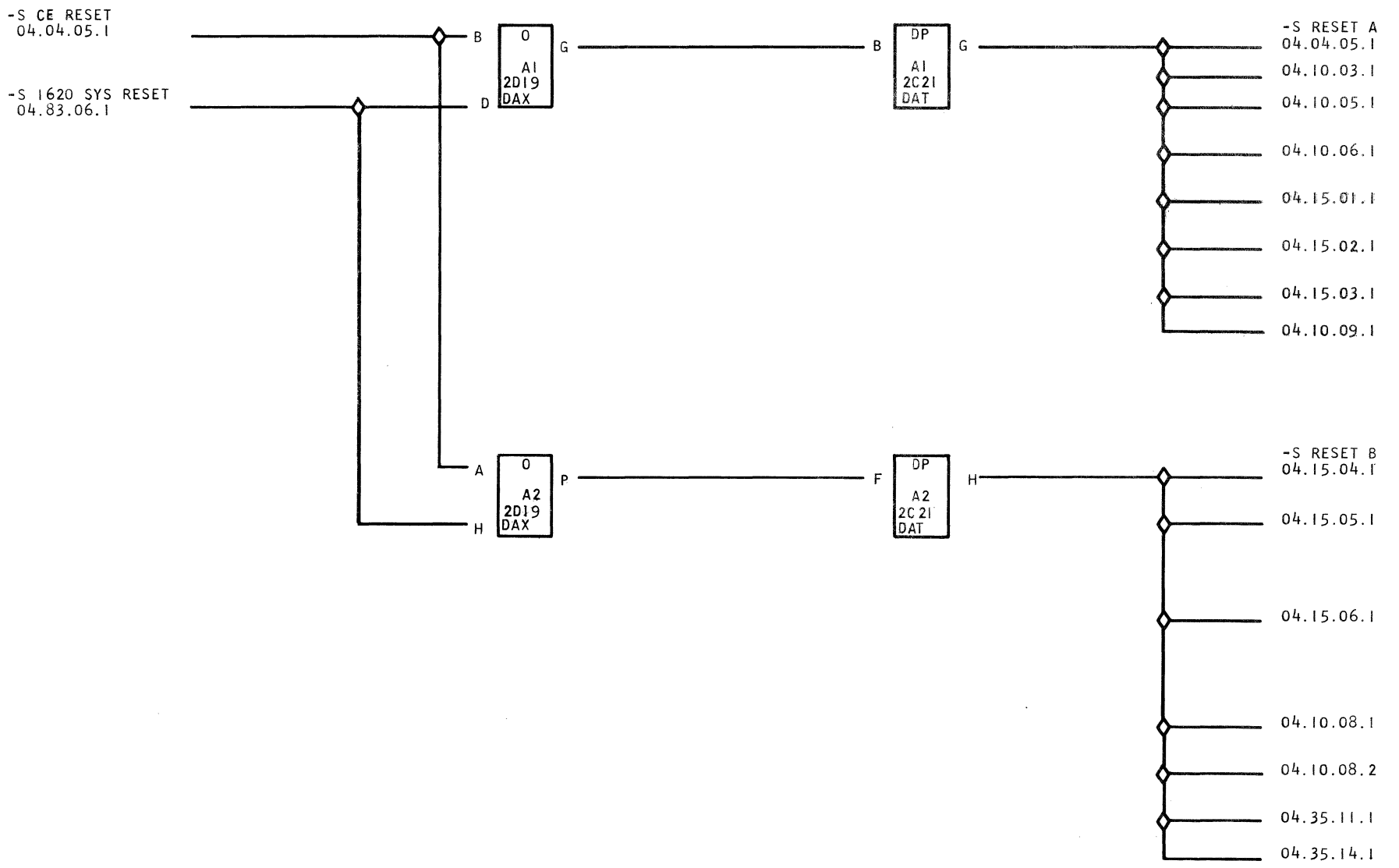
GND DC1-2
04.90.35.1

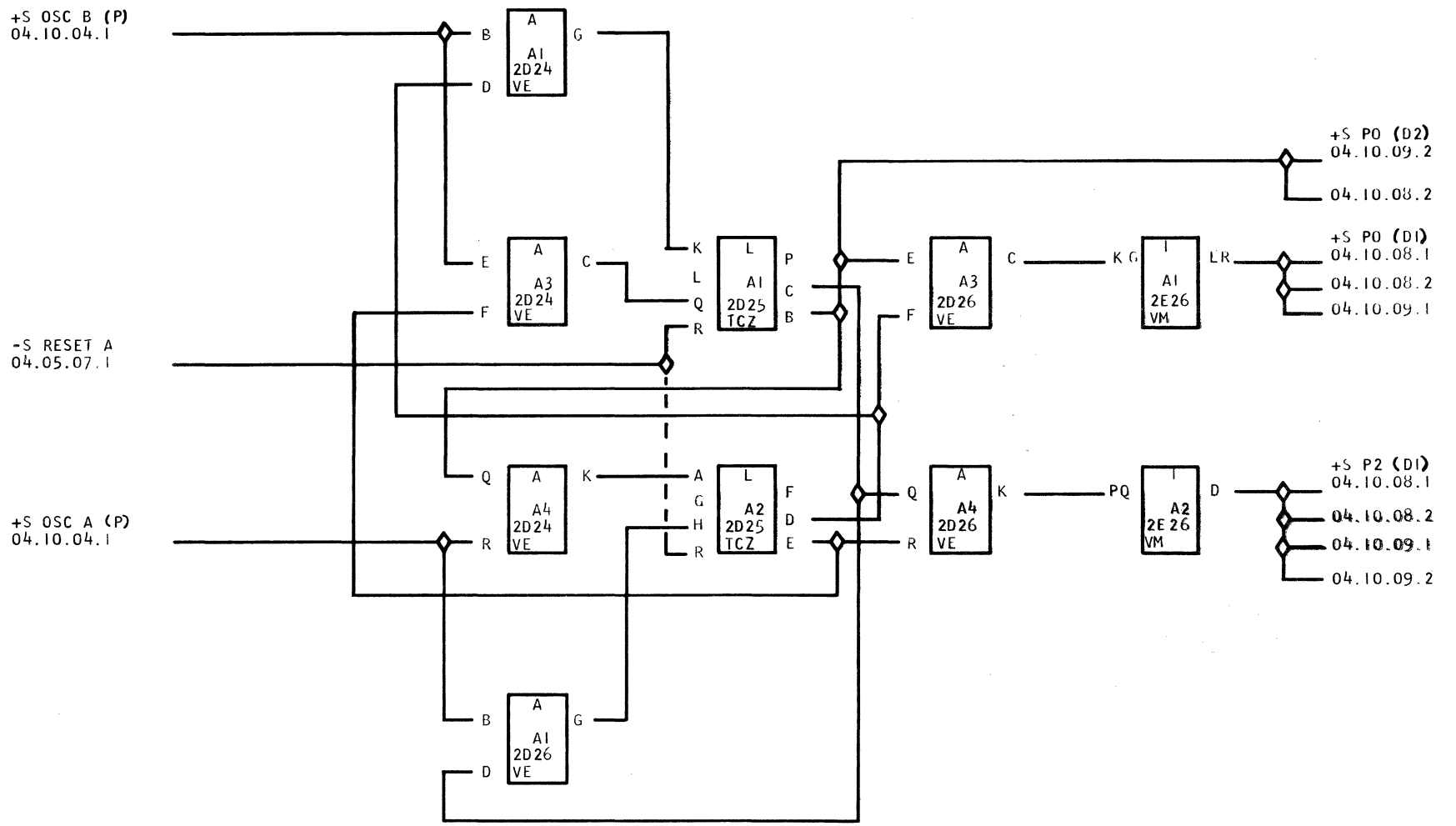


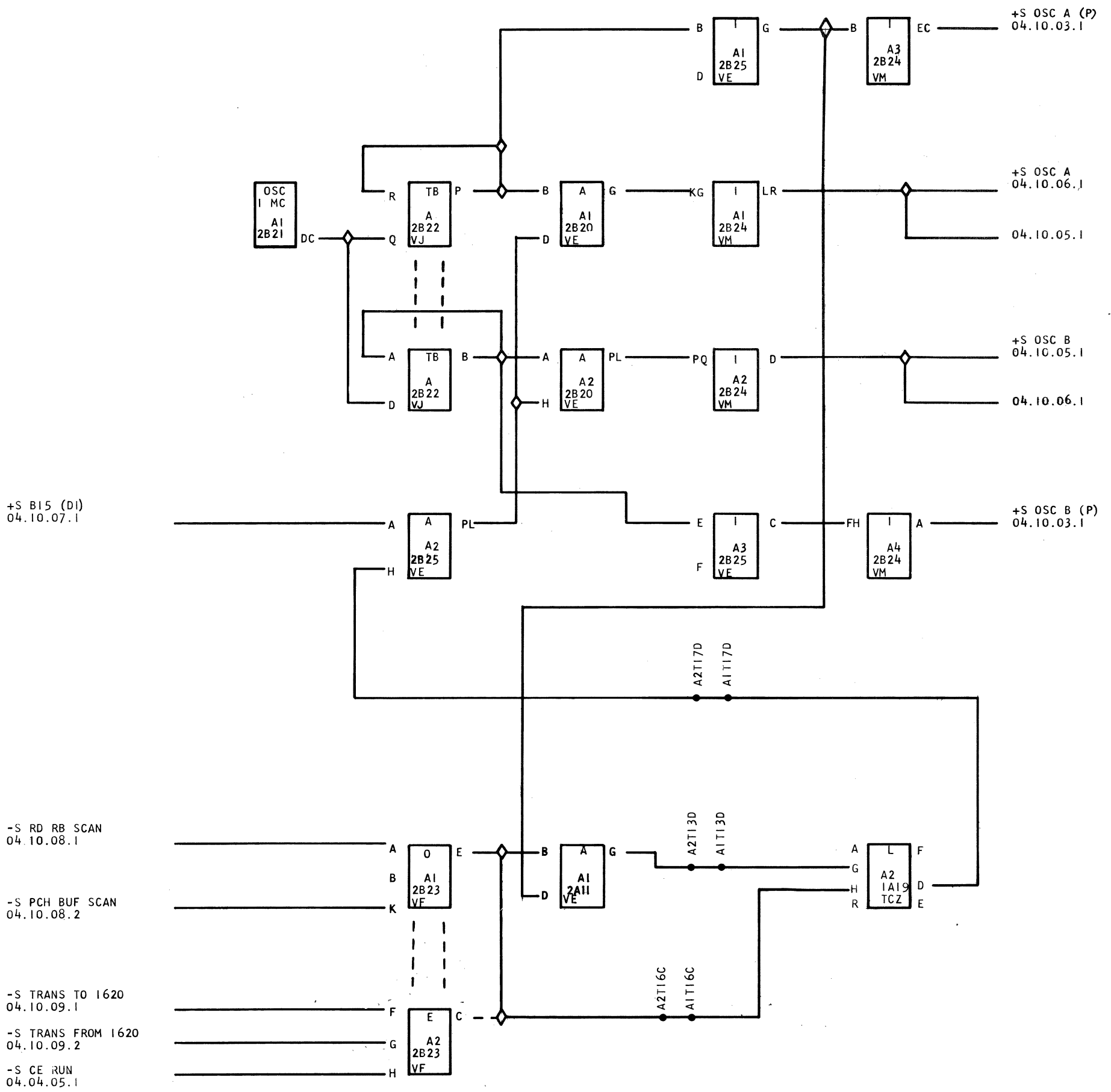
-S RESET A
04.05.07.1

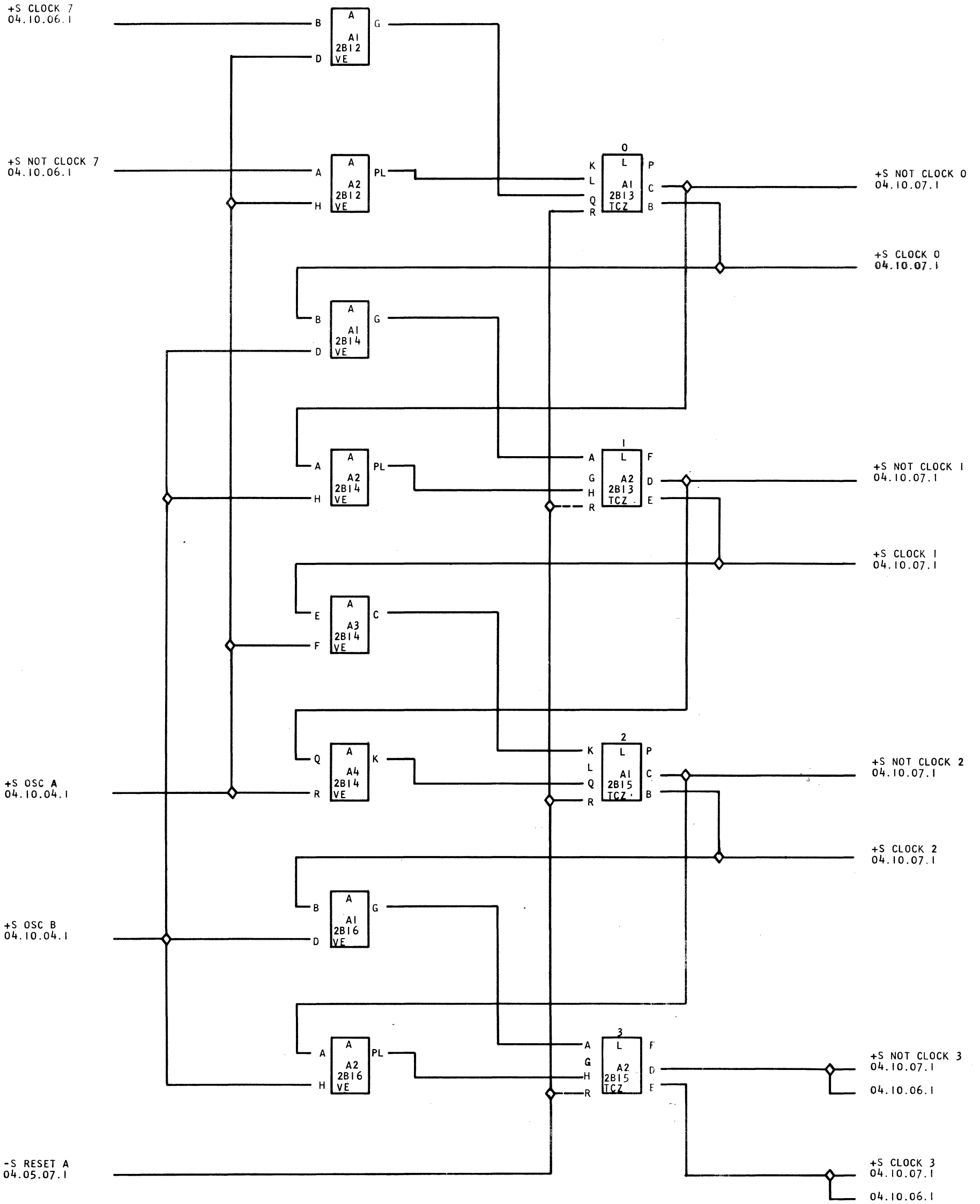
-S B11 D3
04.10.07.1

*04.03.08.1









+S CLOCK 3
04.10.05.1

+S NOT CLOCK 3
04.10.05.1

+S NOT CLOCK 4
04.10.07.1

+S CLOCK 4
04.10.07.1

+S NOT CLOCK 5
04.10.07.1

+S CLOCK 5
04.10.09.1
04.10.09.2

+S OSC A
04.10.04.1

+S NOT CLOCK 6
04.10.08.3
04.10.07.1

+S CLOCK 6
04.10.07.1
04.10.10.1

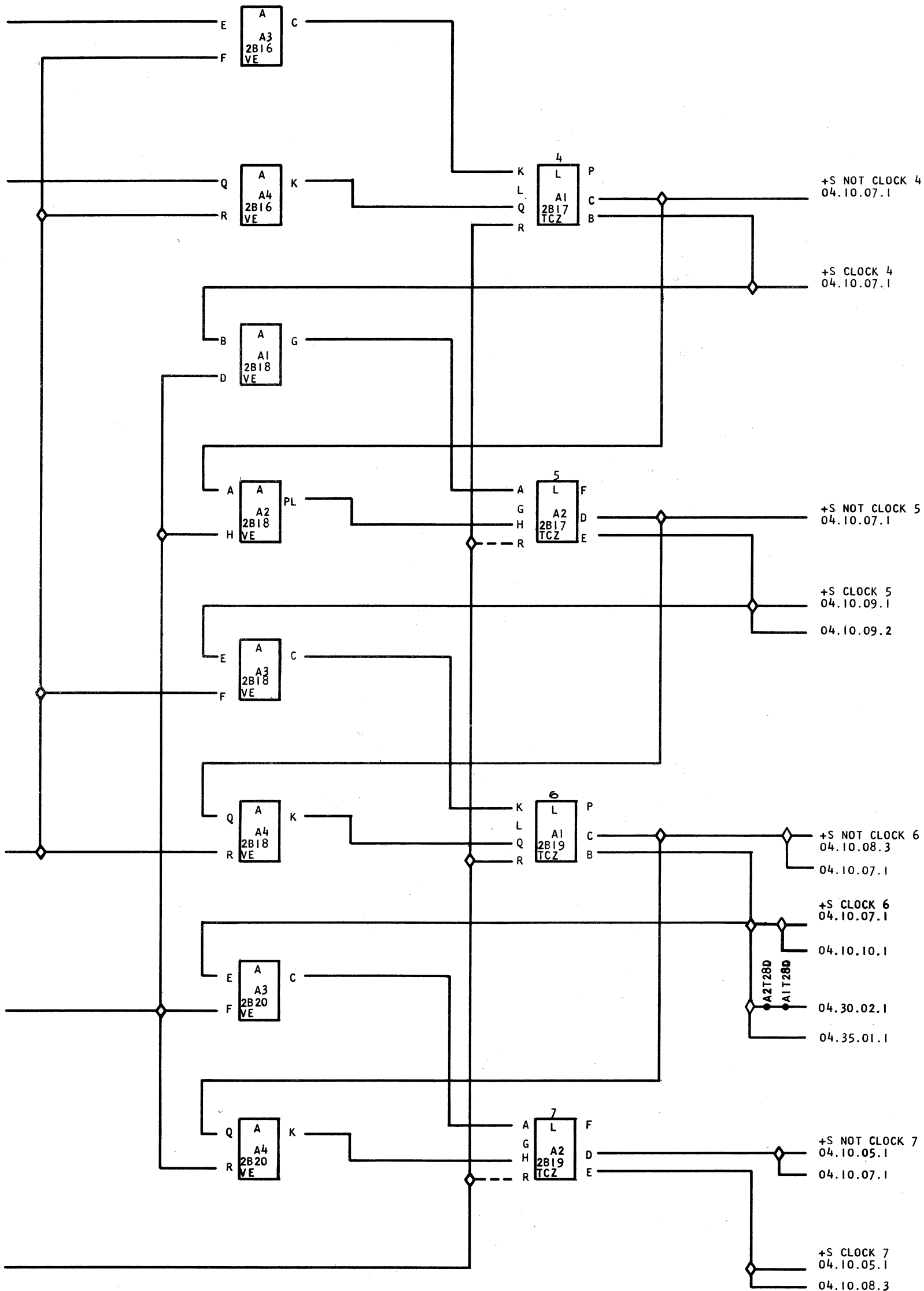
+S OSC B
04.10.04.1

04.30.02.1
04.35.01.1

-S RESET A
04.05.07.1

+S NOT CLOCK 7
04.10.05.1
04.10.07.1

+S CLOCK 7
04.10.05.1
04.10.08.3



+S CLOCK 0
04.10.05.1

+S NOT CLOCK 2
04.10.05.1

+S UNITS ADV
04.04.05.1

+S NOT CLOCK 1
04.10.05.1

+S CLOCK 4
04.10.06.1

+S NOT CLOCK 7
04.10.06.1

+S NOT CLOCK 0
04.10.05.1

+S CLOCK 3
04.10.05.1

+S NOT CLOCK 4
04.10.06.1

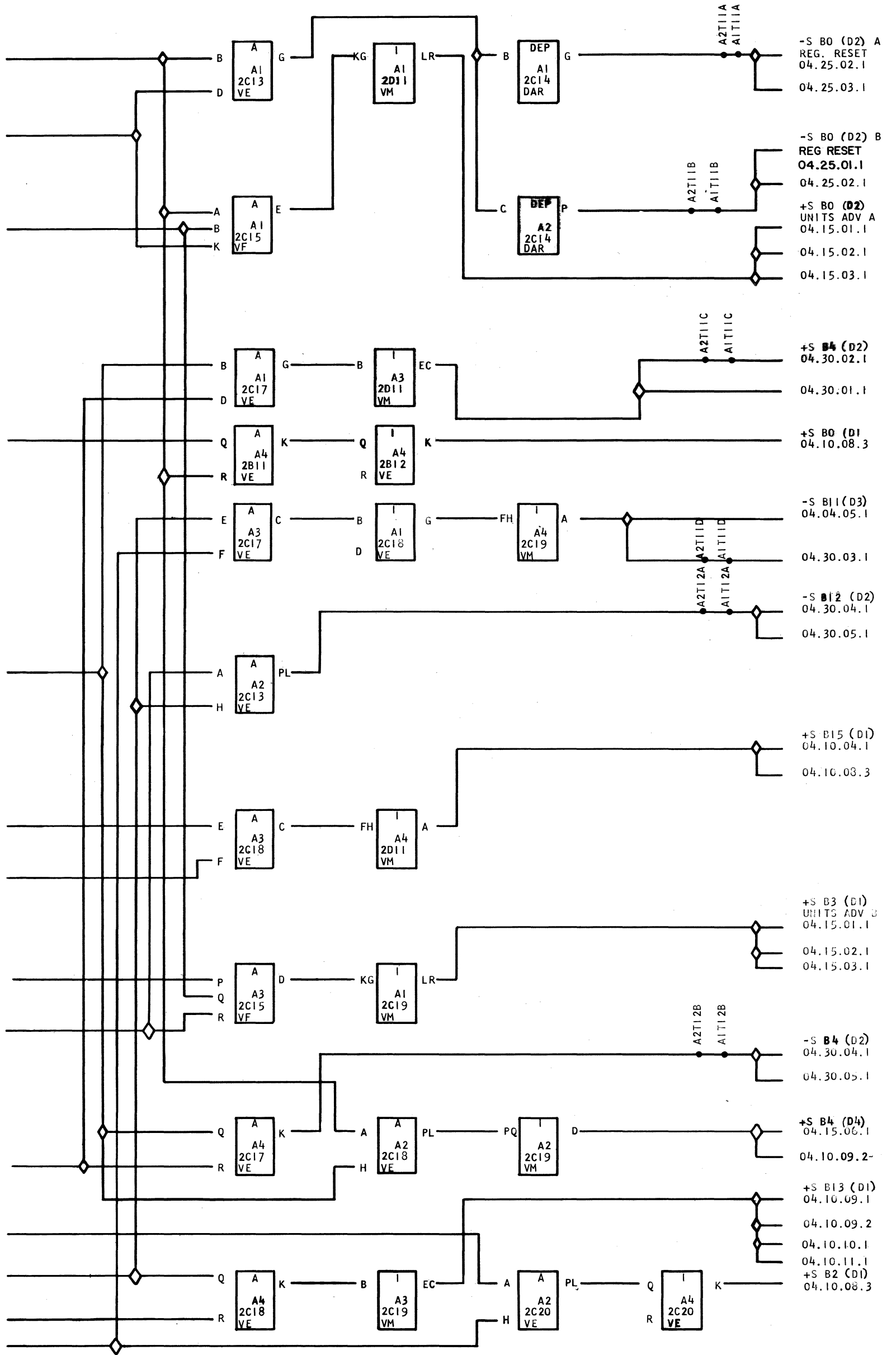
+S NOT CLOCK 6
04.10.06.1

+S CLOCK 2
04.10.05.1

+S CLOCK 6
04.10.06.1

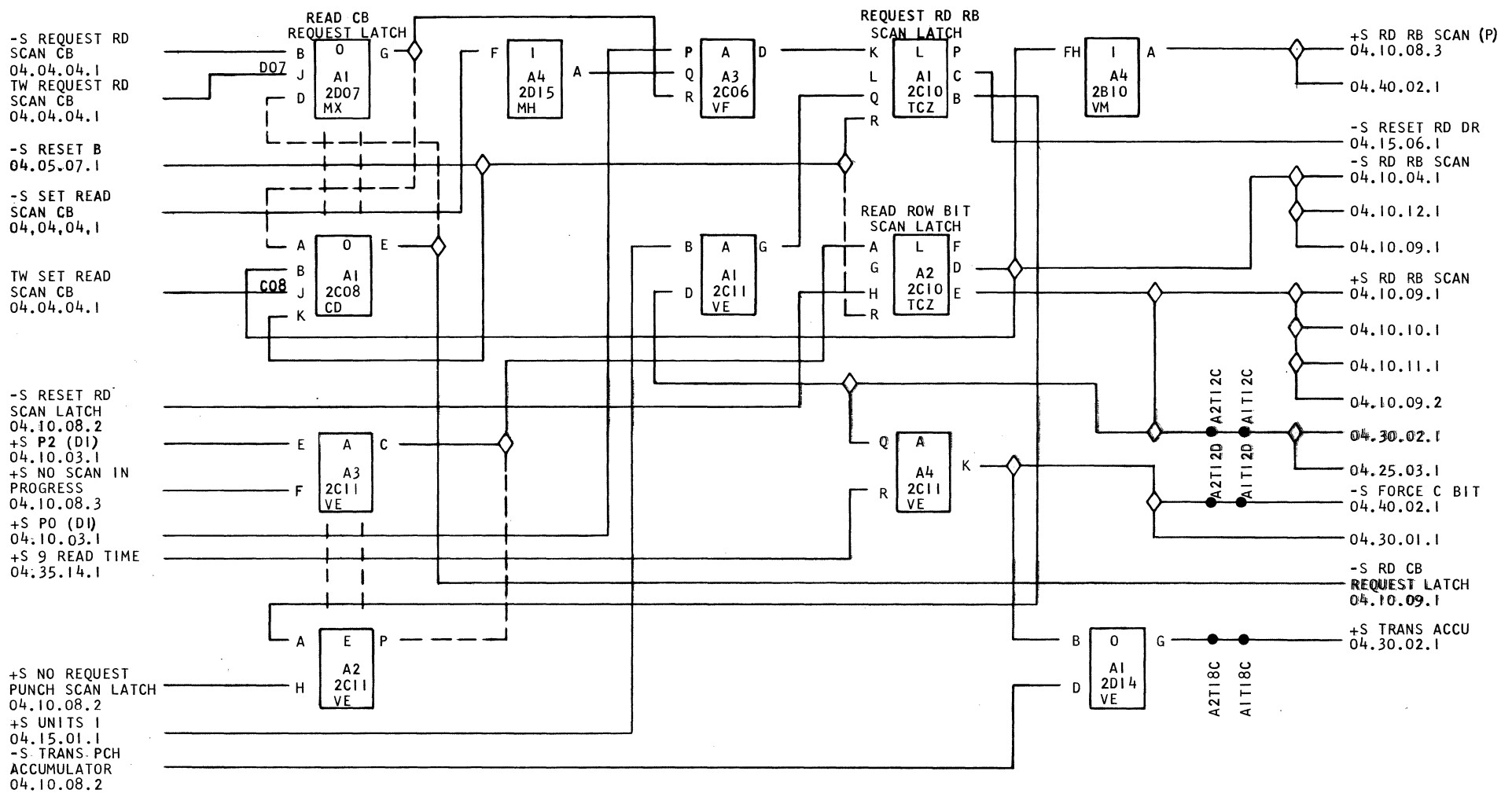
+S NOT CLOCK 5
04.10.06.1

+S NOT CLOCK 3
04.10.05.1



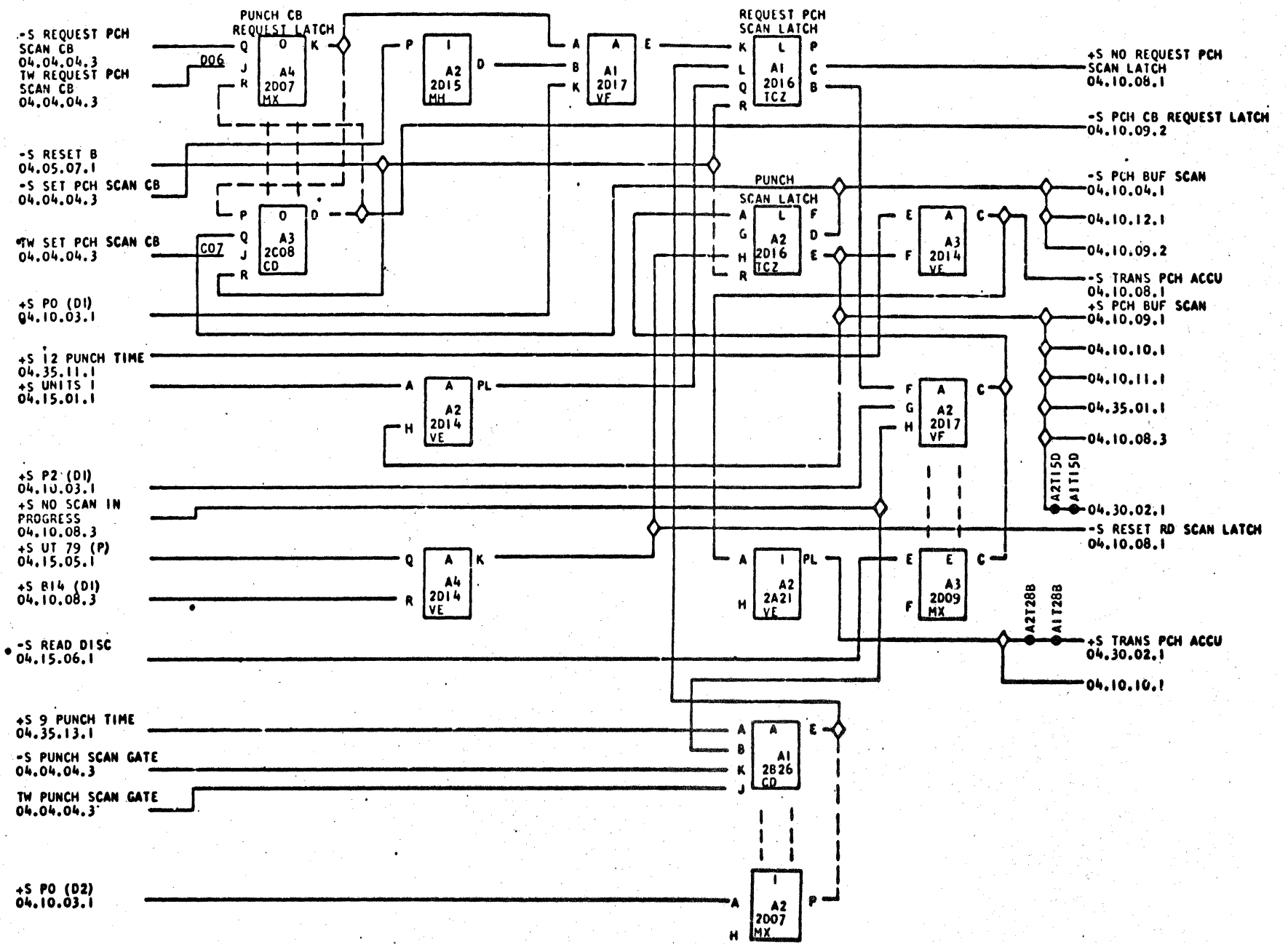
61512

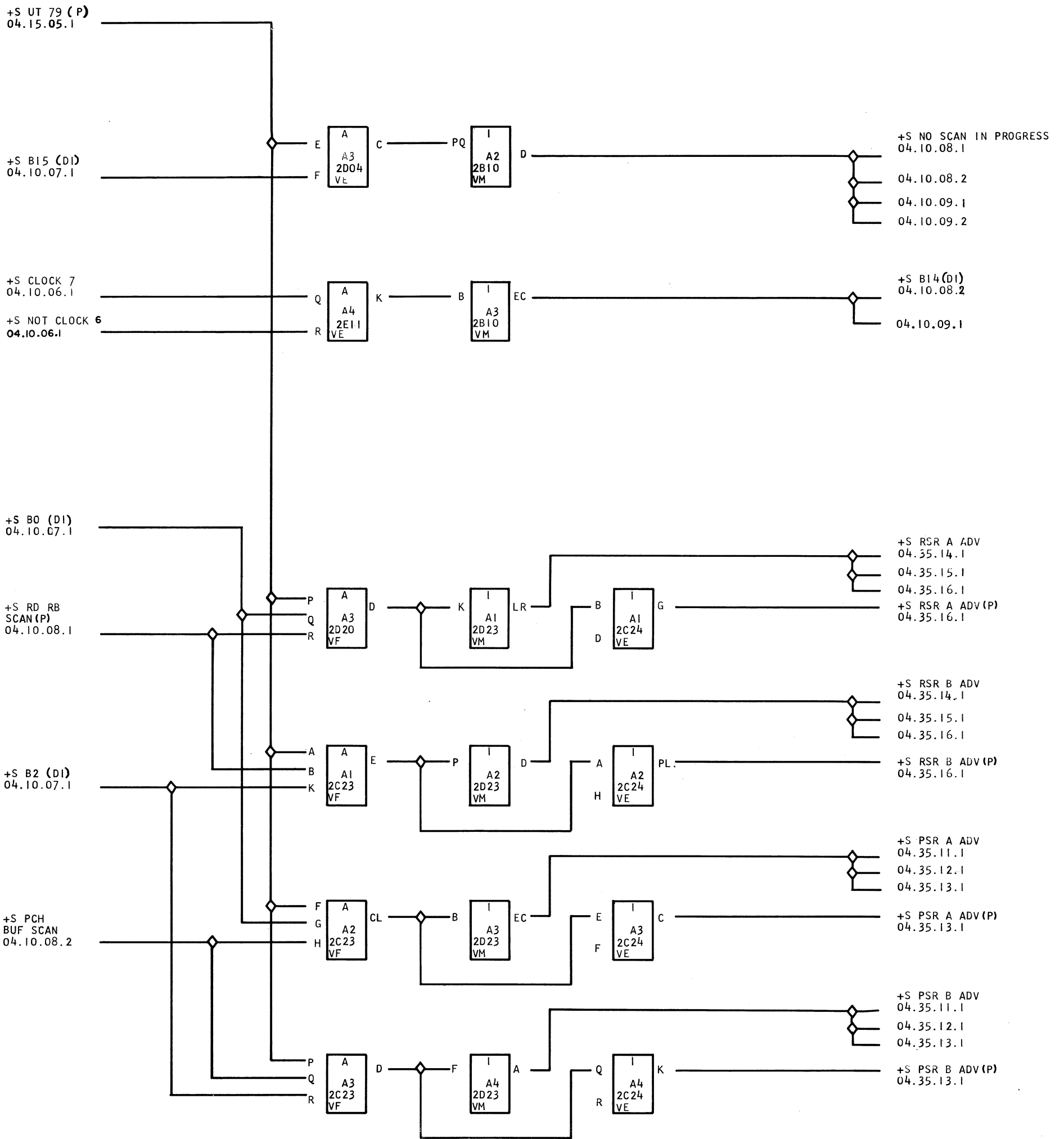
EC 802300
802363
802458A
802603A

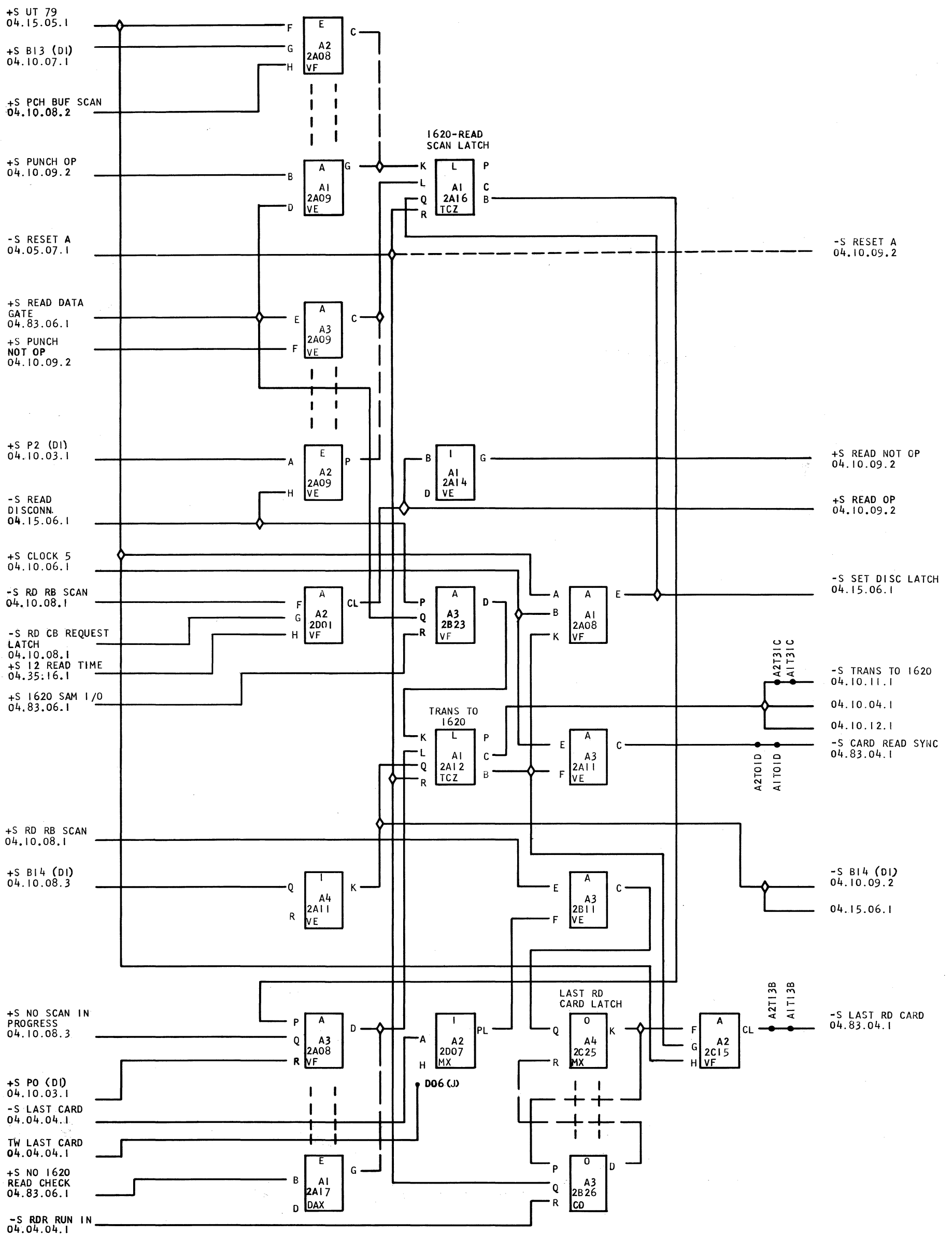


615153

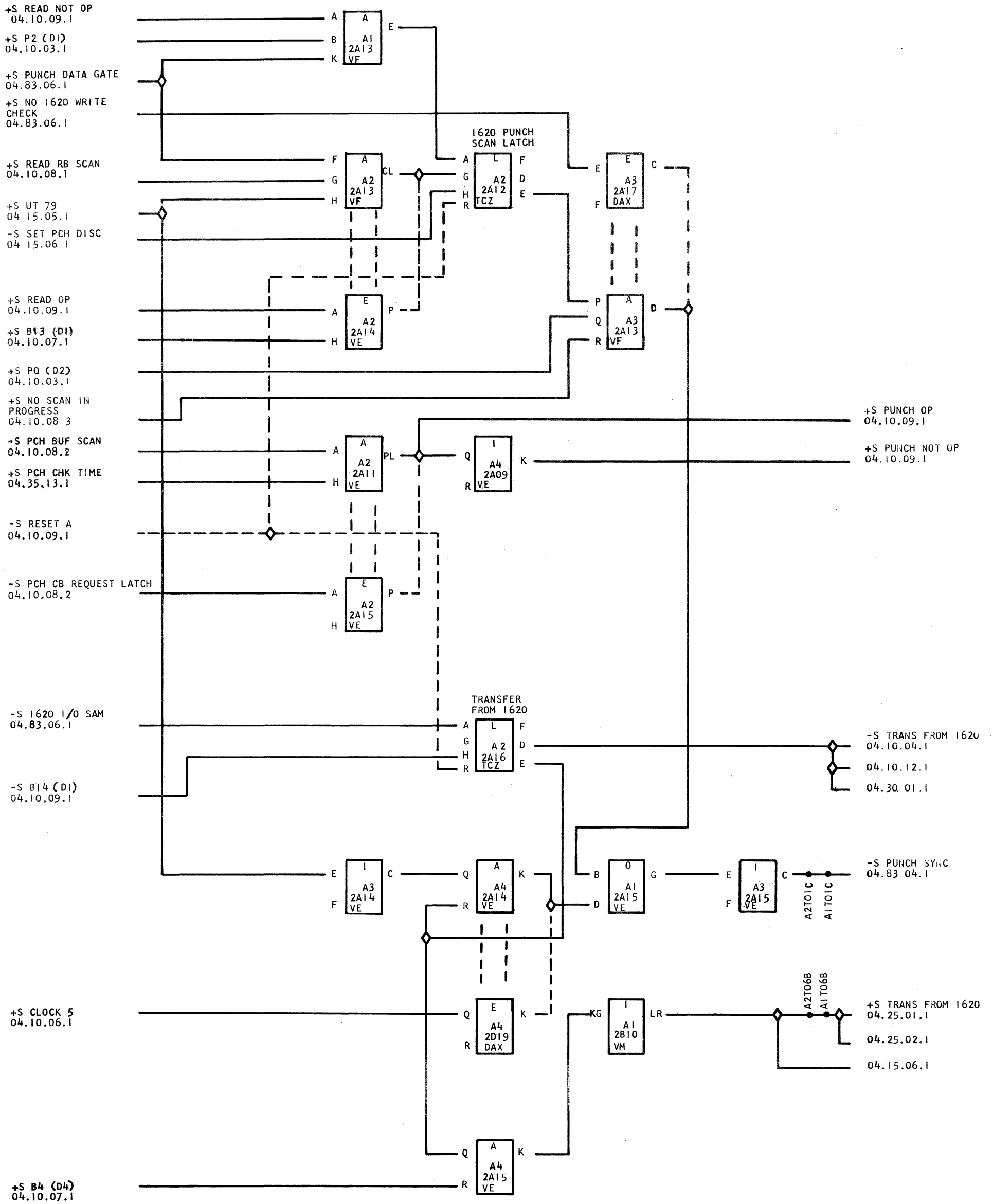
EC 802300
 802363
 802603A
 802603G

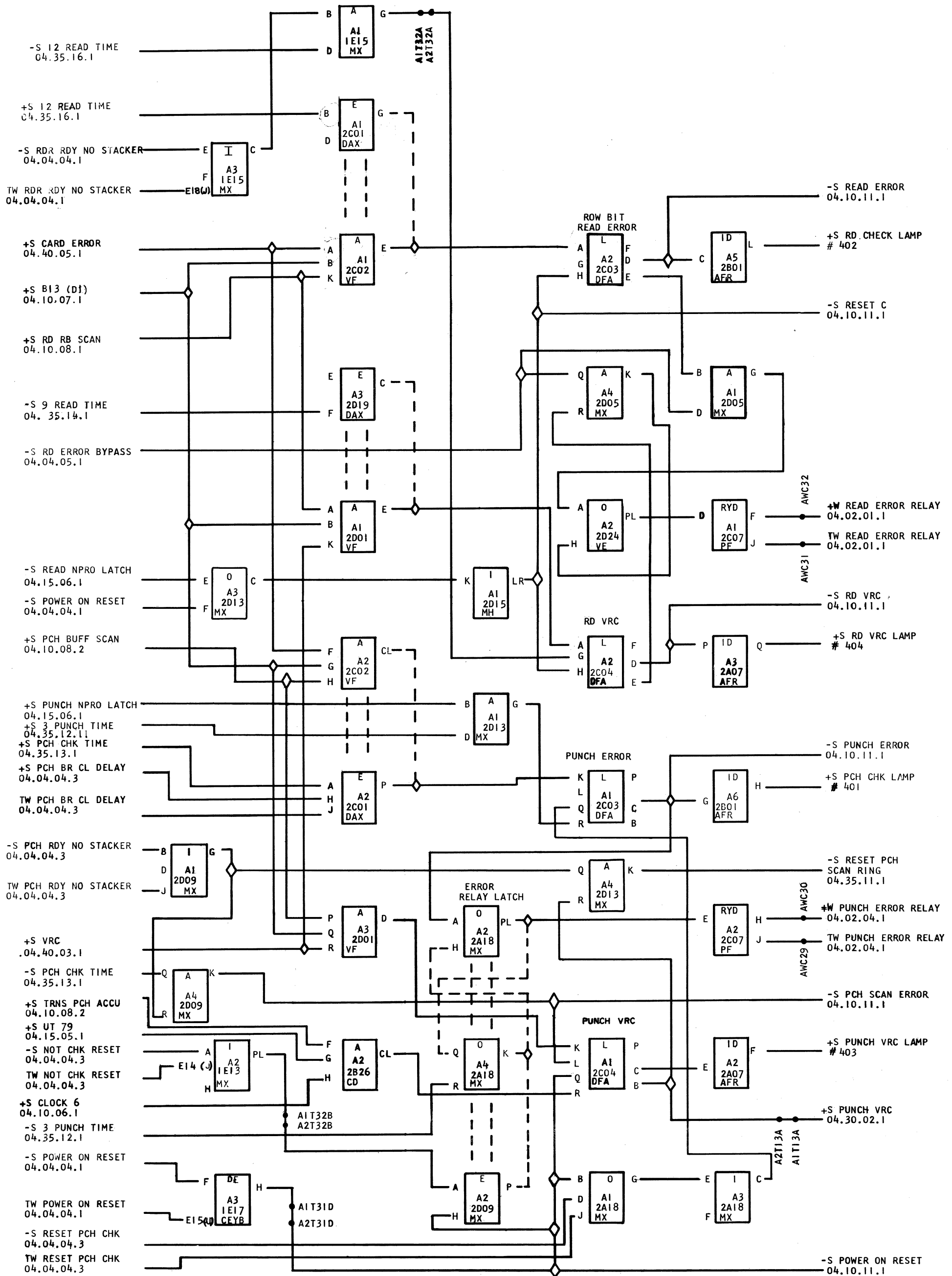






61516 EC 802300
 802363
 802603A





615158 EC 802300
 802363
 802455
 802592
 802603A

605829

DISCONTINUED

READY LATCHES

1622

04.10.11.1

+S 1620 MANUAL STATUS 04.83.06.1

-S LOAD KEY 04.04.04.1

TW LOAD KEY 04.04.04.1

-S TRANS TO 1620 04.10.09.1

TW FIRST RD CARD 04.04.04.1

-S FIRST RD CARD 04.04.04.1

+S 12 READ TIME 04.35.16.1

-S RD VRC 04.10.10.1

+S UT 79 04.15.05.1

-S READ ERROR 04.10.10.1

+S B13 (DI) 04.10.07.1

+S RD RB SCAN 04.10.08.1

-S FORCE RD BUF RDY 04.04.05.1

-S RESET RD BUFFER READY 04.15.06.1

-S RESET C 04.10.10.1

-S PUNCH ERROR 04.10.10.1

-S FORCE PCH BUR READY 04.04.05.1

+S PCH DIE CL 04.04.04.3

TW PCH DIE CL 04.04.04.3

+S PCH CHK TIME 04.35.13.1

+S PCH BUFF SCAN 04.10.08.2

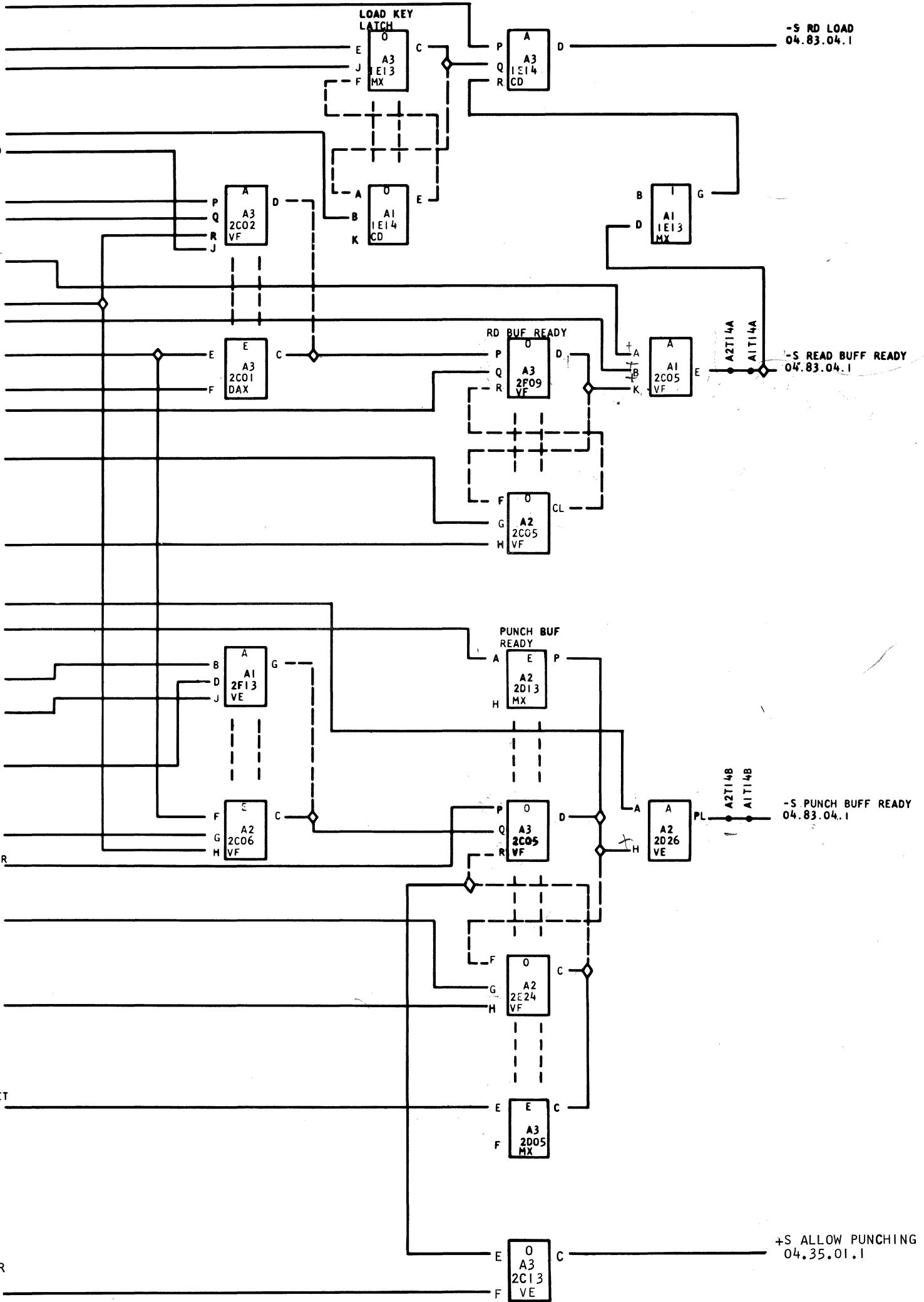
-S PCH SCAN ERROR 04.10.10.1

-S RESET PCH BUFFER RDY 04.15.06.1

-S PUNCH NPRO LATCH 04.15.06.1

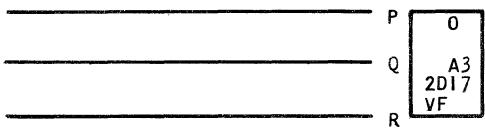
-S POWER ON RESET 04.10.10.1

-S PCH CLU DR LATCH SET 04.15.06.1



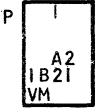
INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE X PRINT TO ENG. SPEC. NO. 894947	DEVELOPMENT NO.
NAME	PREVENT THE LOSS OF PUNCH DATA			12-7-62	802638F				
DESIGN	JBE	12/7/62	MODEL	1622					
DETAIL									
CHECK	JSS	12-7-62	DRAW						
APPRO	JSS	11-7-62	CHECK						

-S RD RB SCAN
04.10.08.1
-S TRANS TO 1620
04.10.09.1
-S CE READ
04.04.05.1

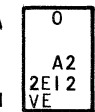


D

A2T28C
A1T28C



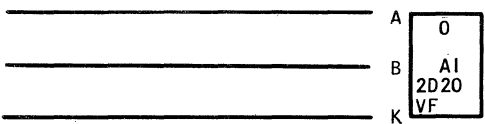
-S READ BUFFER
04.30.05.1



-S READ/PUNCH
BUFFER
04.30.04.1

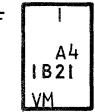
A2T17B
A1T17B

-S PCH BUF SCAN
04.10.08.2
-S TRANS FROM 1620
04.10.09.2
-S CE PUNCH
04.04.05.1

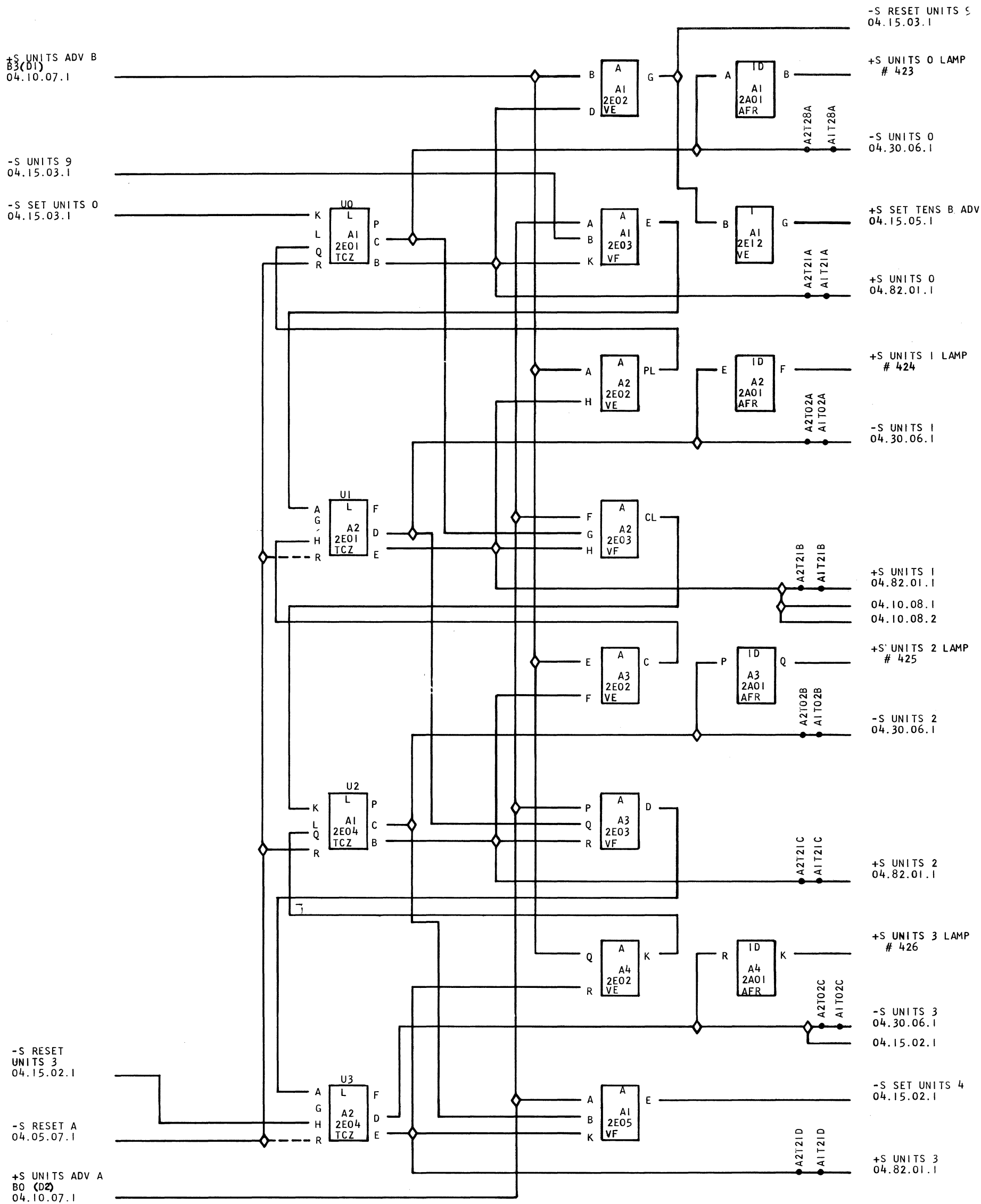


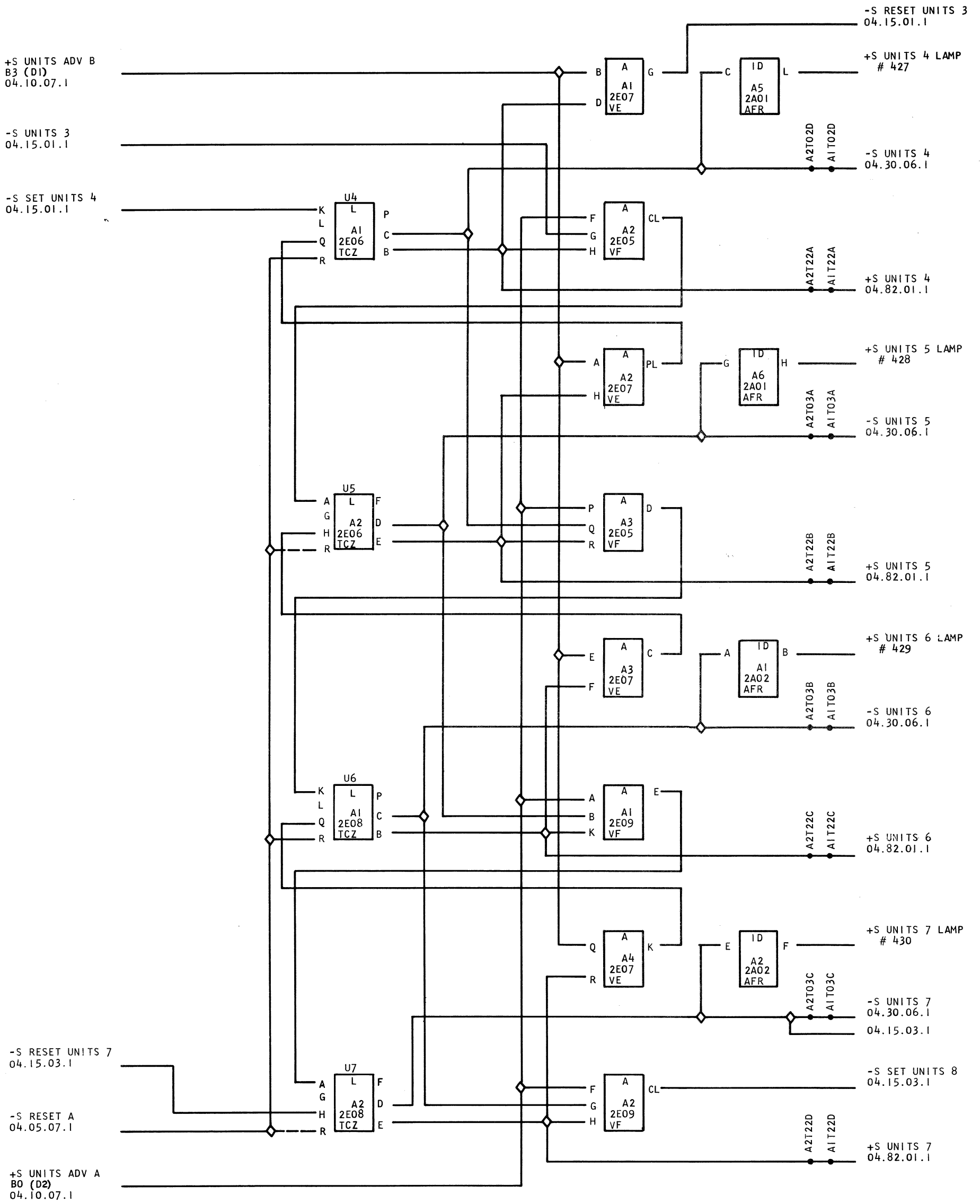
E

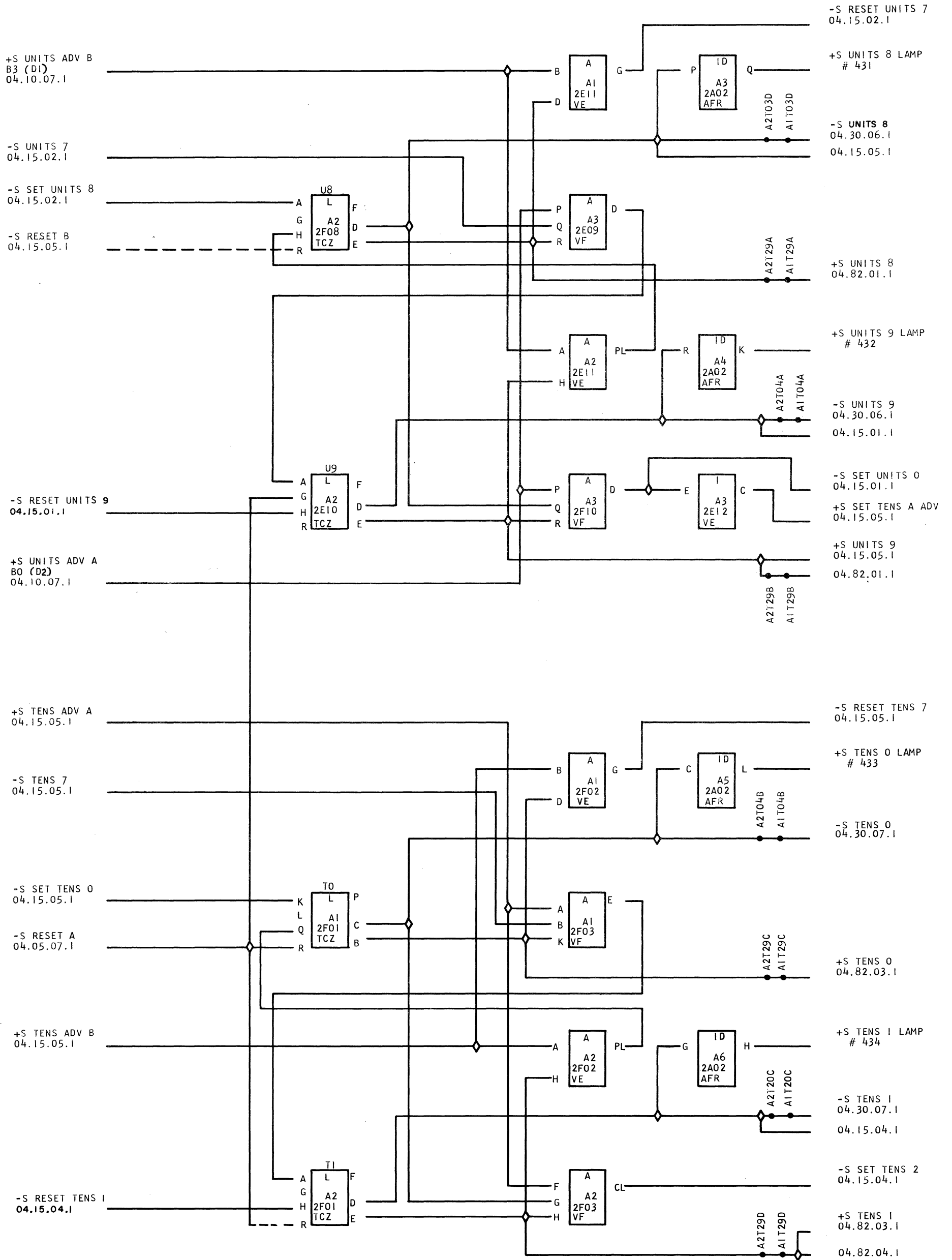
A2T17A
A1T17A



-S PUNCH BUFFER
04.30.05.1







+S TENS ADV B
04.15.05.1

-S TENS 1
04.15.03.1

-S SET TENS 2
04.15.03.1

-S RESET B
04.05.07.1

-S RESET TENS 1
04.15.03.1

+S TENS 2 LAMP
435

-S TENS 2
04.30.07.1

+S TENS 2
04.82.04.1

+S TENS 3 LAMP
436

-S TENS 3
04.30.07.1

+S TENS 3
04.82.04.1

04.82.05.1

+S TENS 4 LAMP
437

-S TENS 4
04.30.07.1

+S TENS 4
04.82.05.1

04.82.06.1

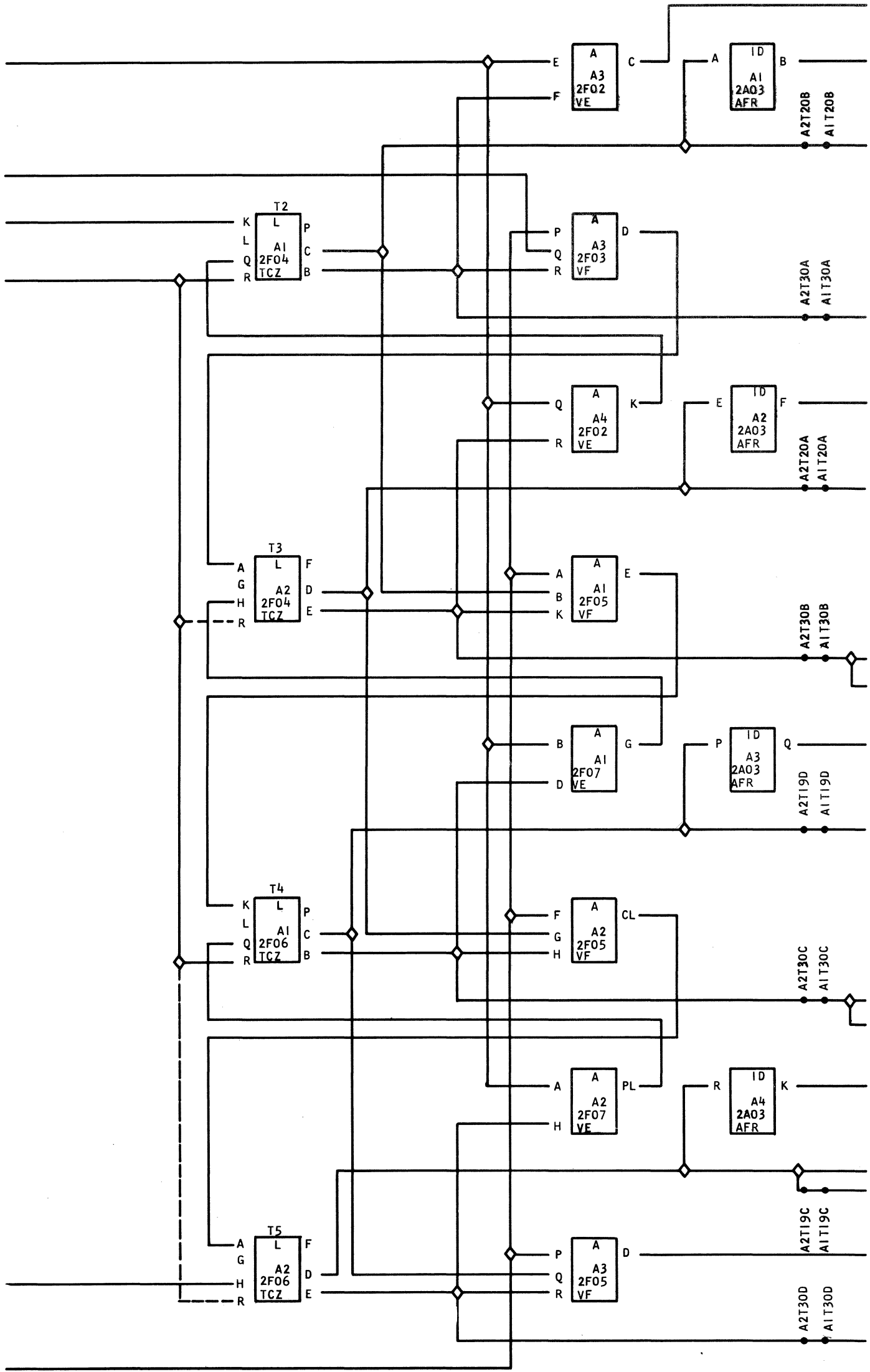
+S TENS 5 LAMP
438

-S TENS 5
04.15.05.1

04.30.07.1

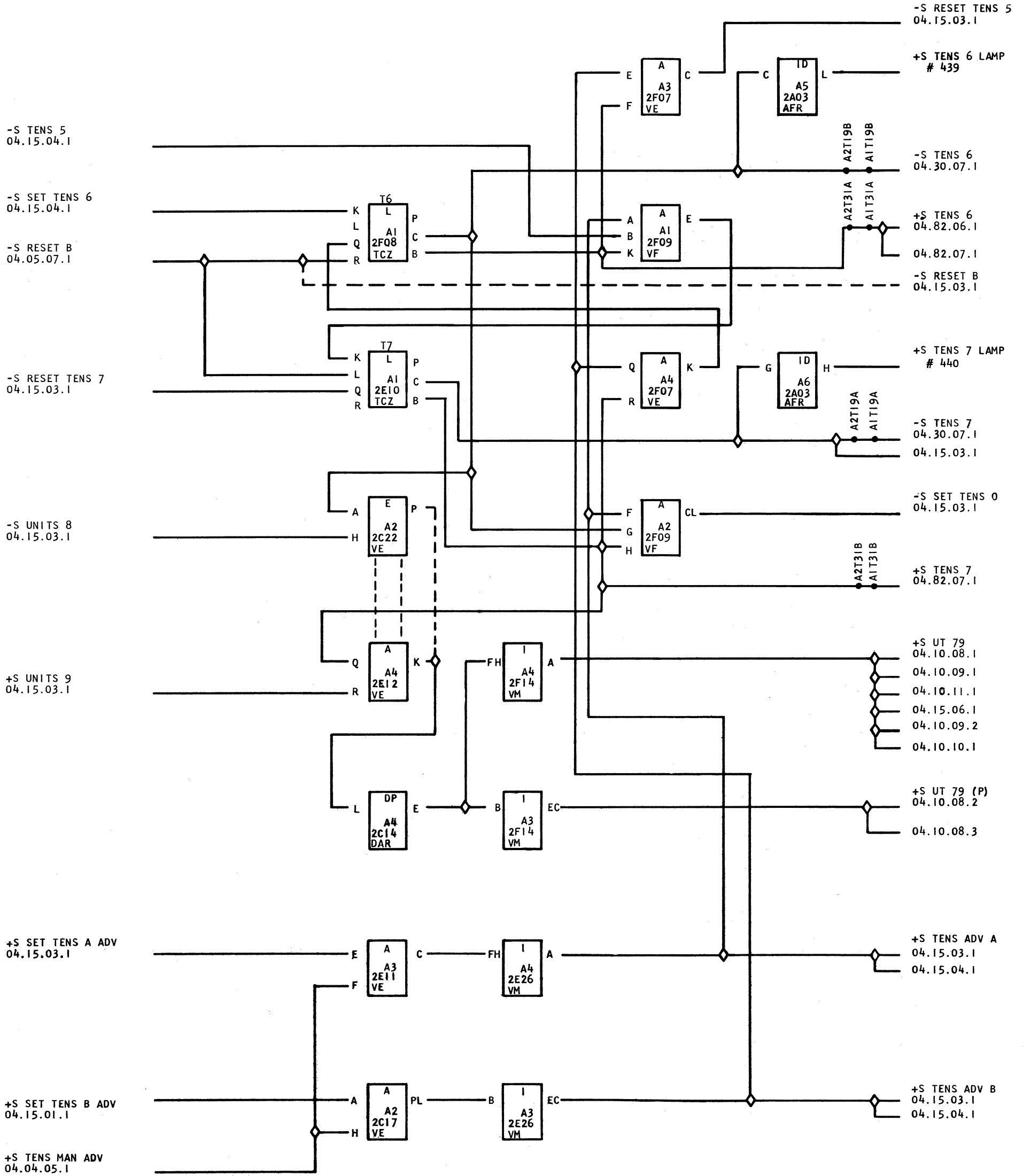
-S SET TENS 6
04.15.05.1

+S TENS 5
04.82.06.1



-S RESET TENS 5
04.15.05.1

+S TENS ADV A
04.15.05.1



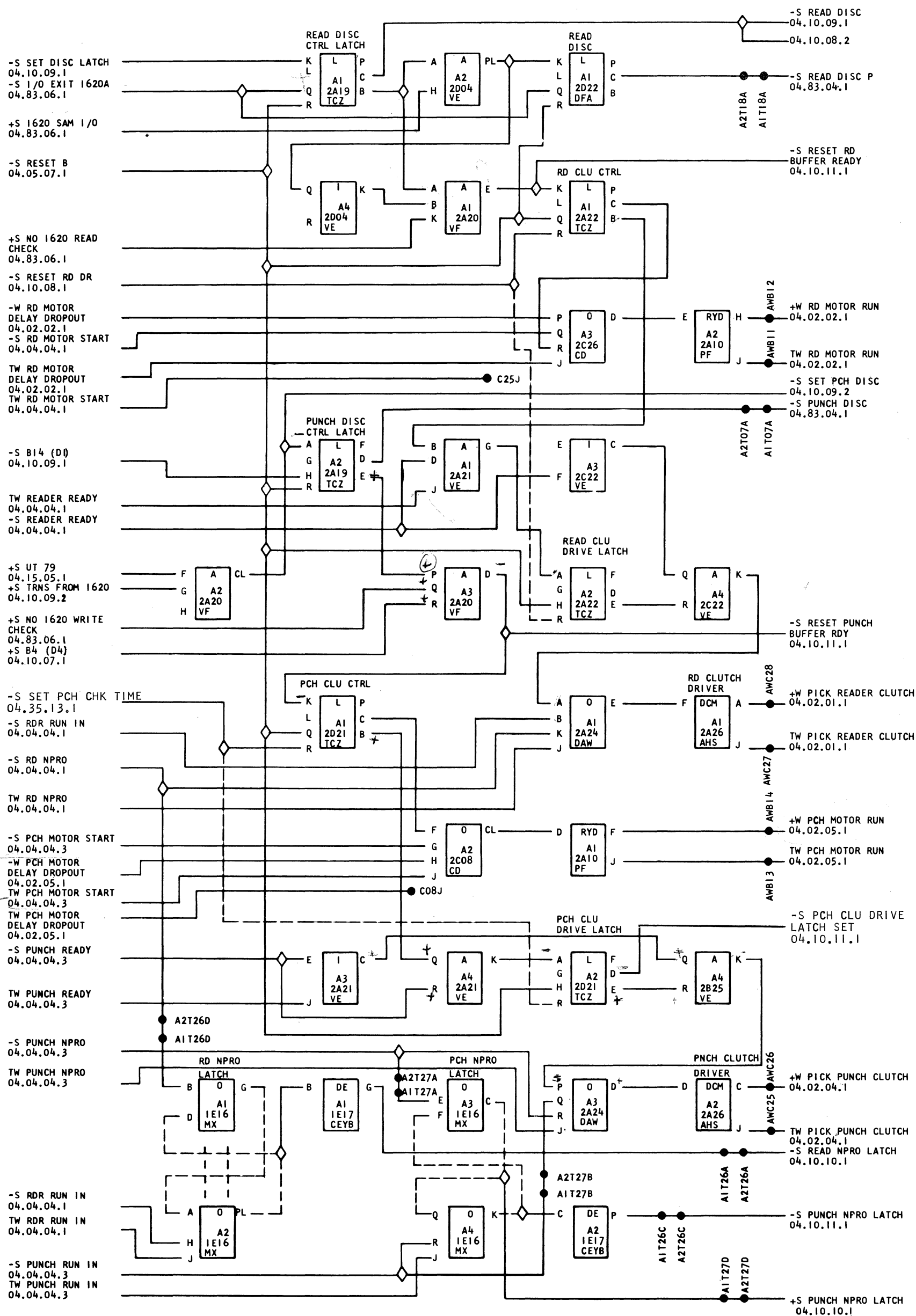
605830

DISCONTINUED

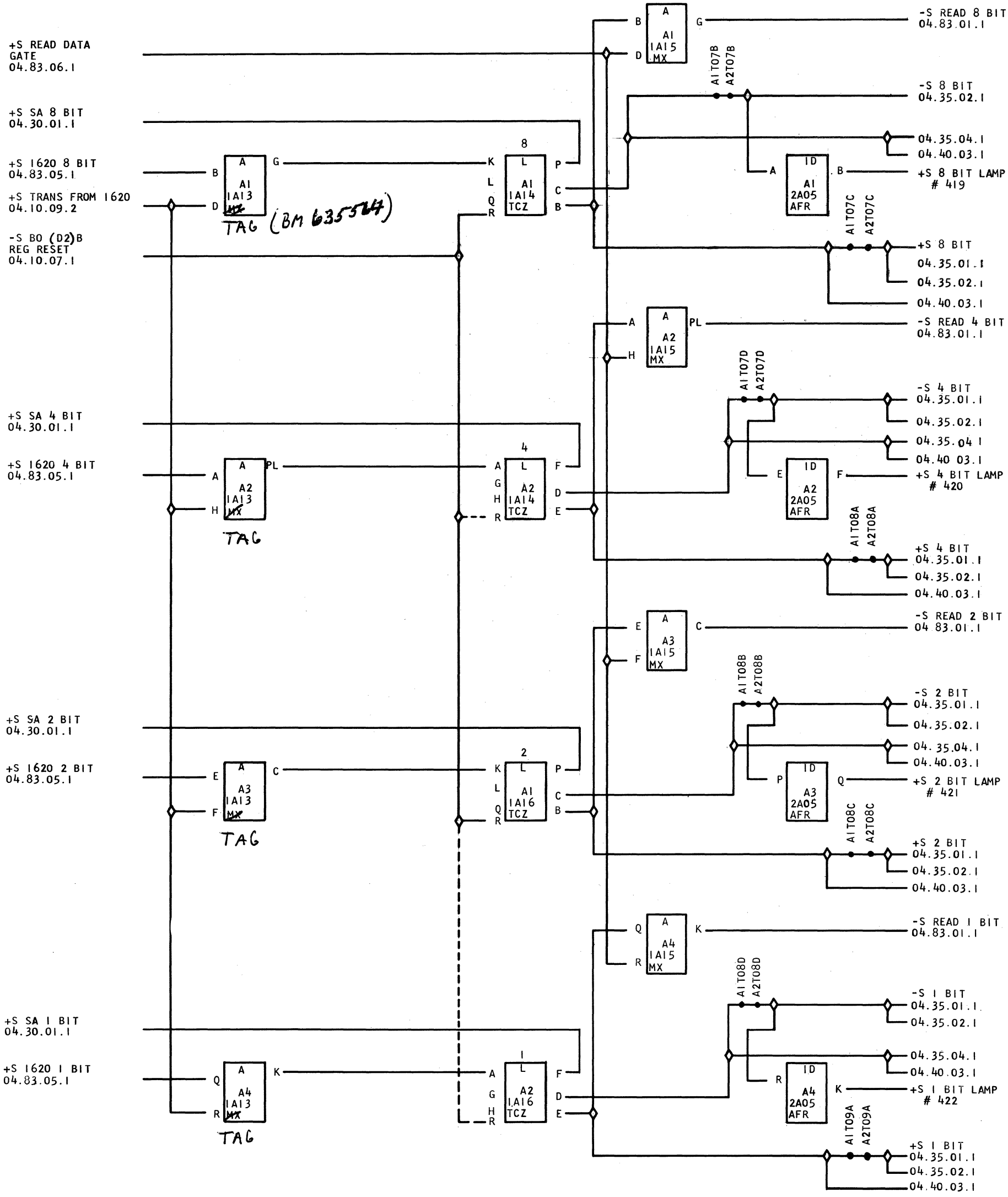
READ PUNCH DISCONNECT

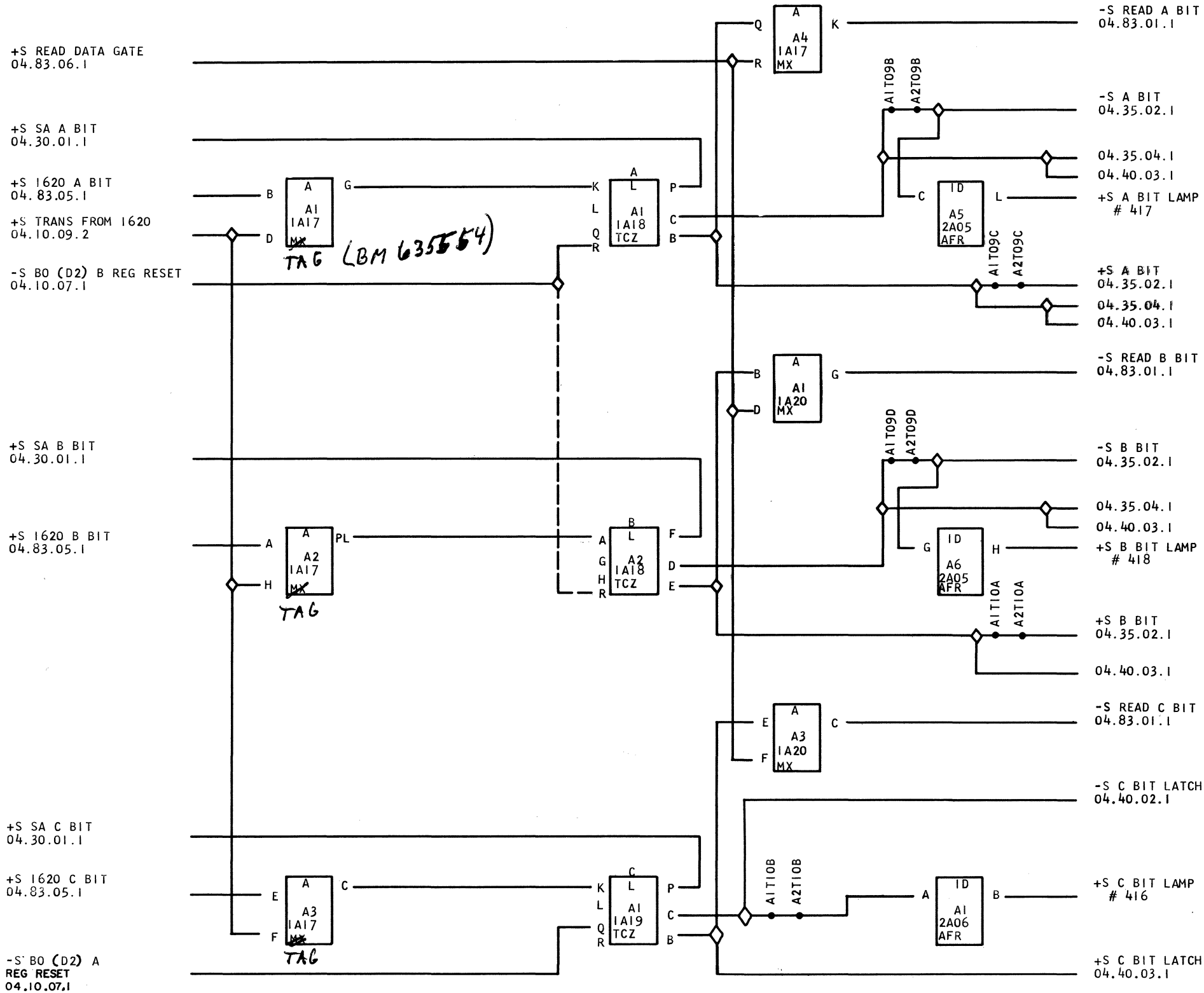
1622

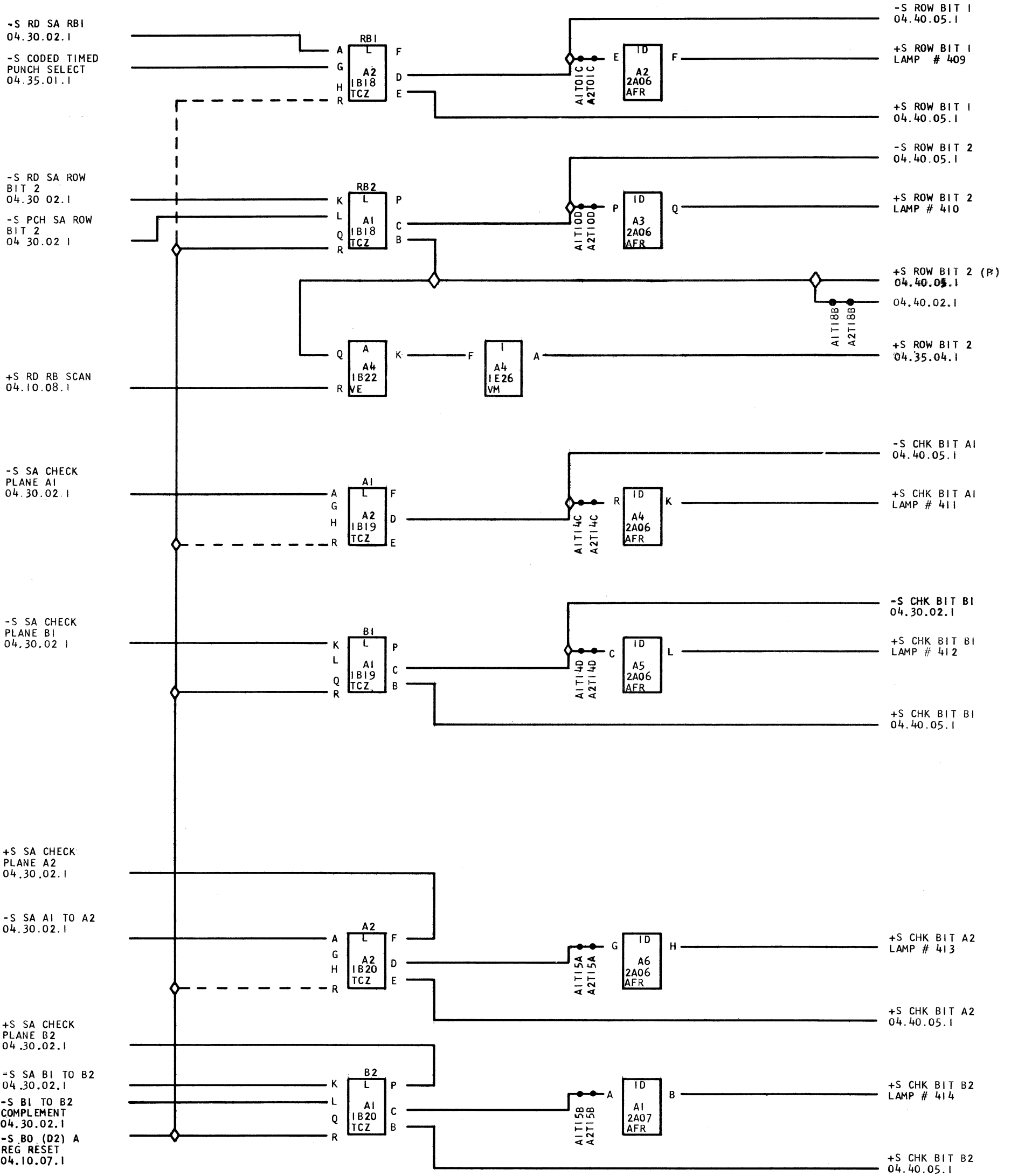
04.15.06.1

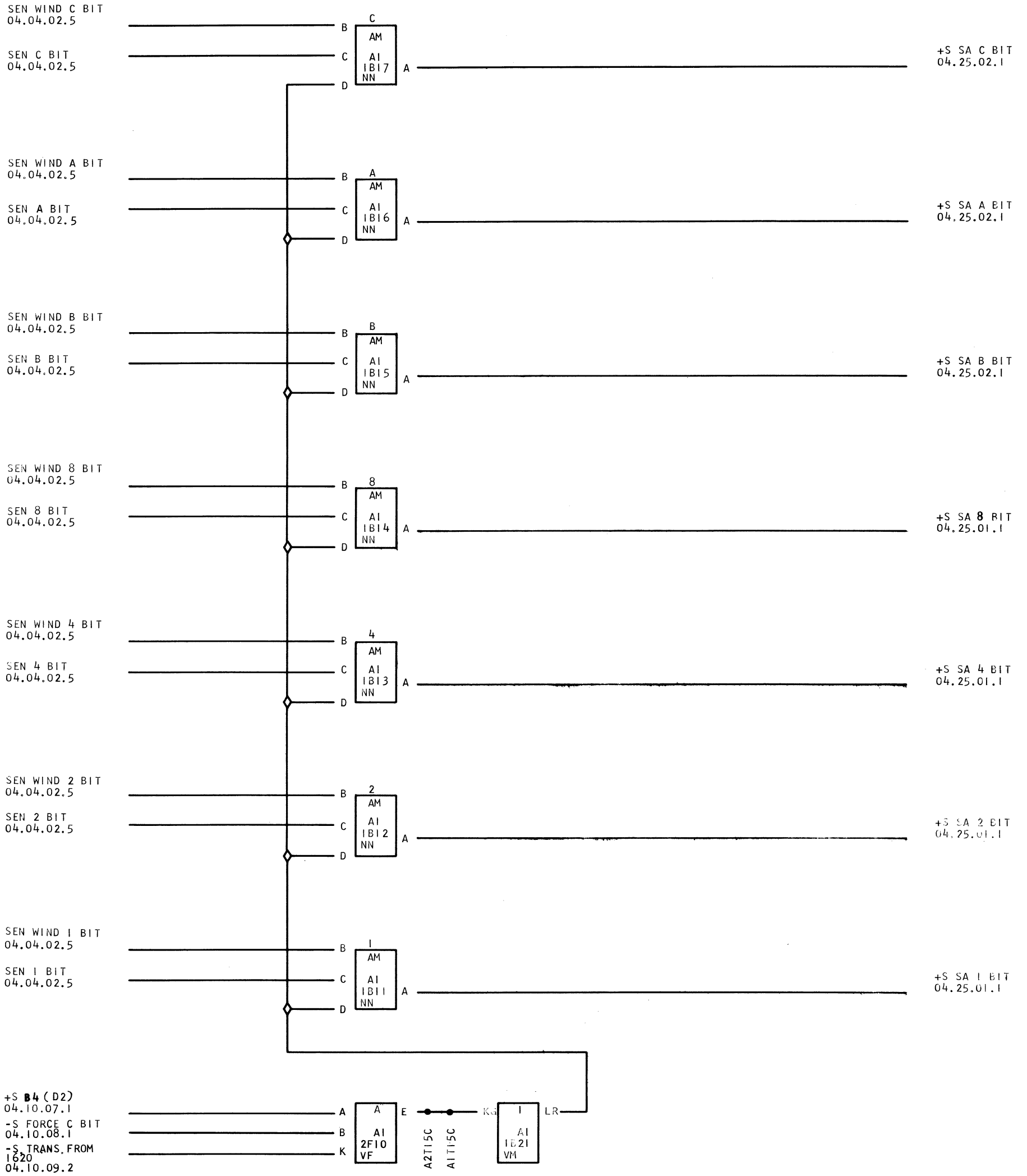


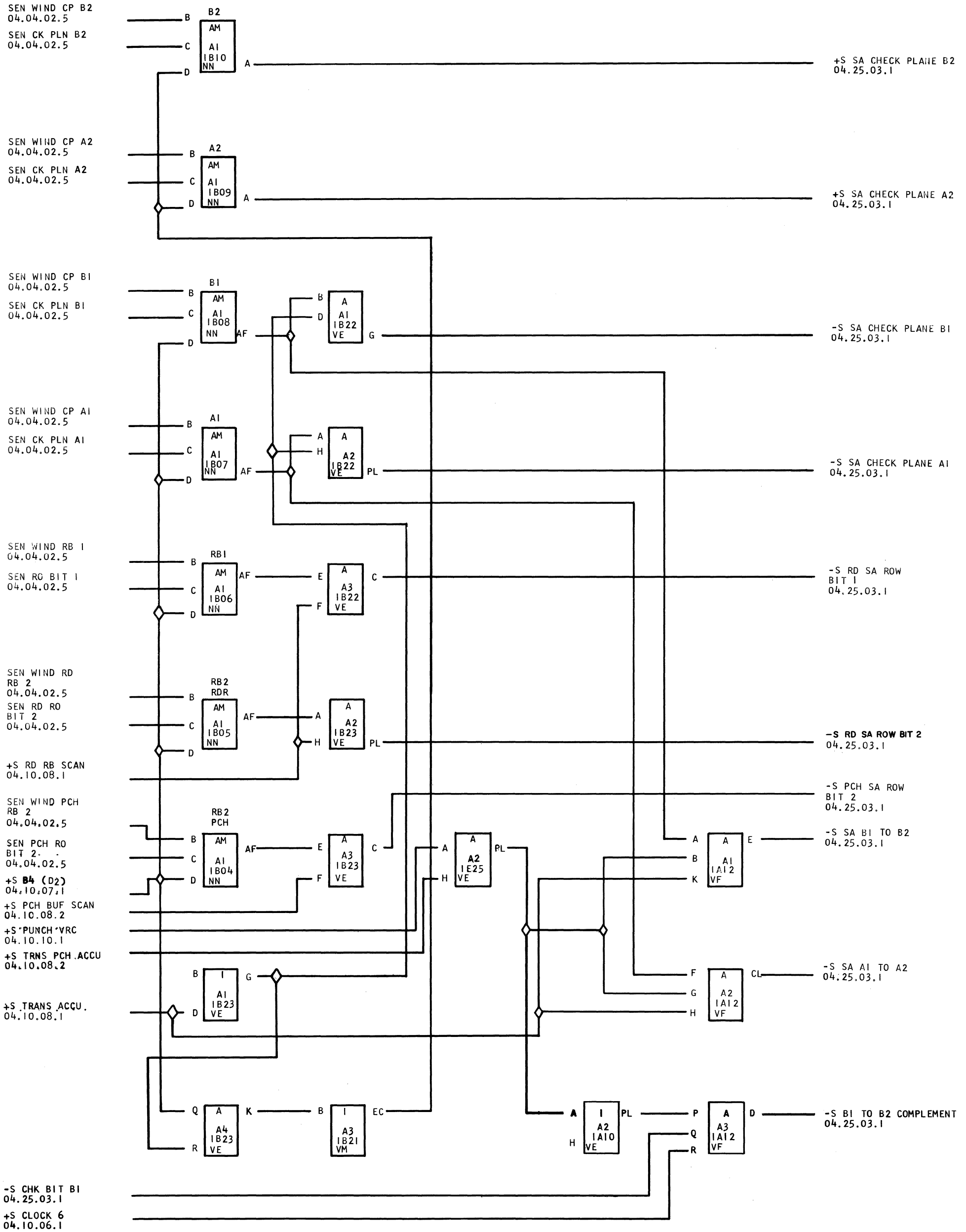
INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE X PRINT TO ENG. SPEC NO. 894947	DEVELOPMENT NO.
NAME	PREVENT THE LOSS OF PUNCH DATA			12-7-62	802638F				
DESIGN	JBE	12/7/62	MODEL	1622					
DETAIL									
CHECK	JBE	12-7-62	DRAW						
APPRO	JBE	12-7-62	CHECK						



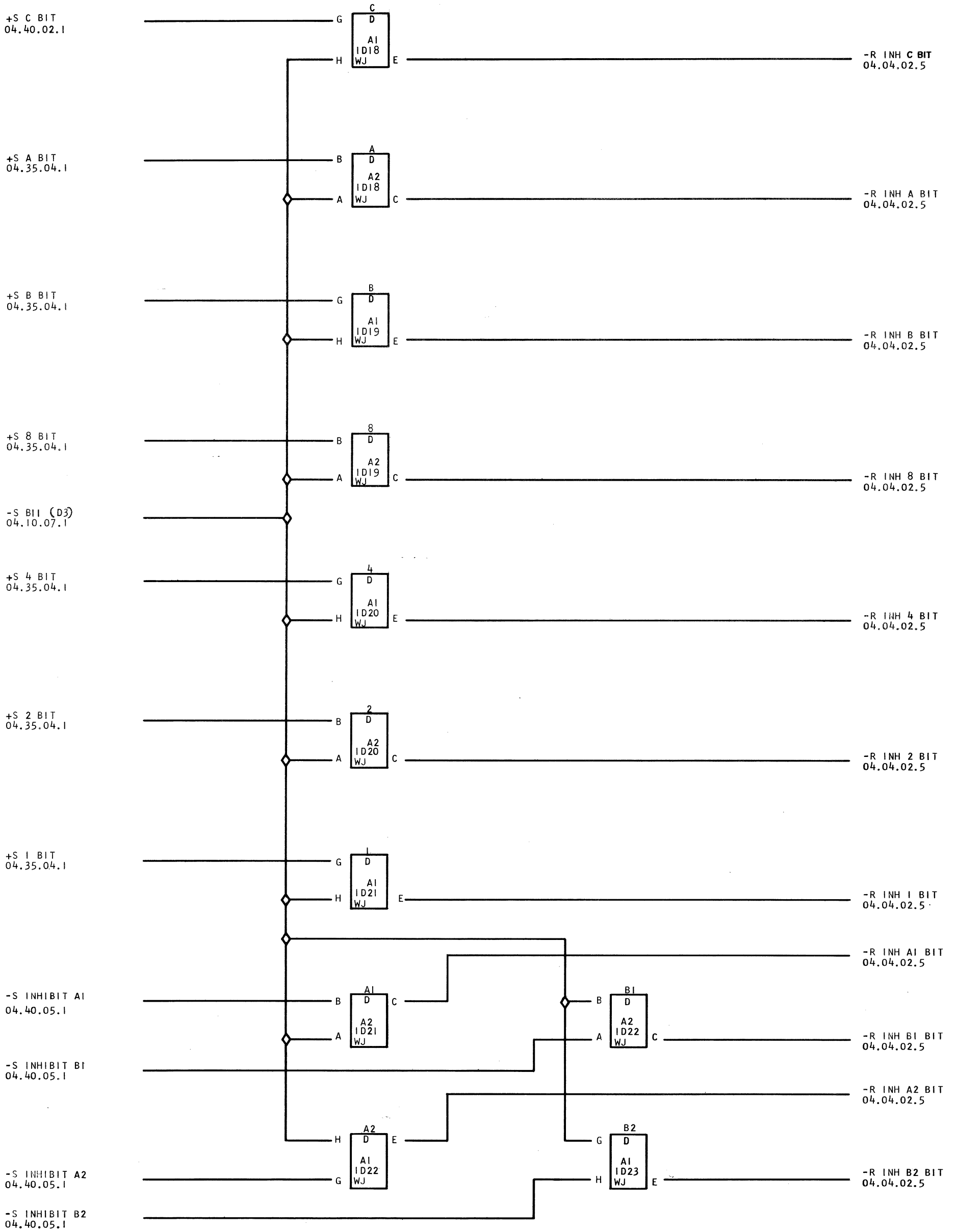


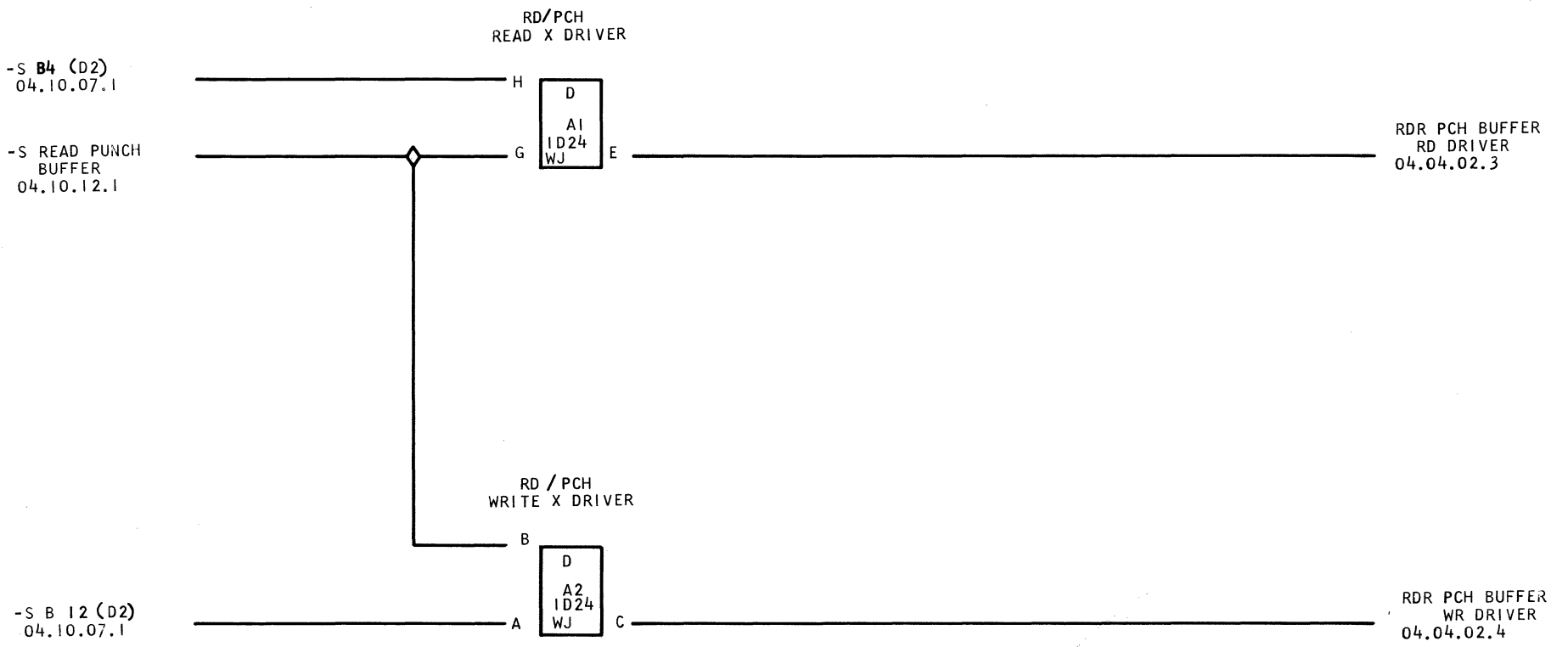






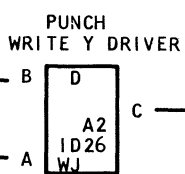
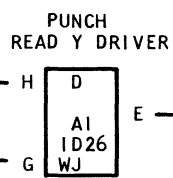
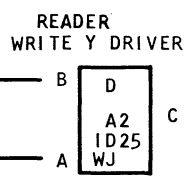
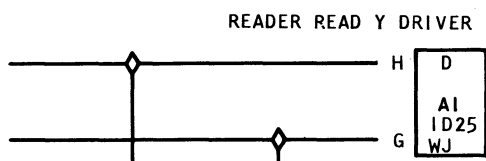
615171
EC 802300
802455
802592
802458A
802603A





-S B4 (D2)
04.10.07.1

-S READ BUFFER
04.10.12.1



-S PUNCH BUFFER
04.10.12.1

-S B12 (D2)
04.10.07.1

-R RD RDR TENS 0
04.04.02.3
-R RD RDR TENS 1
04.04.02.3
-R RD RDR TENS 2
04.04.02.3
-R RD RDR TENS 3
04.04.02.3
-R RD RDR TENS 4
04.04.02.3
-R RD RDR TENS 5
04.04.02.3
-R RD RDR TENS 6
04.04.02.3
-R RD RDR TENS 7
04.04.02.3

-R WR RDR TENS 0
04.04.02.4
-R WR RDR TENS 1
04.04.02.4
-R WR RDR TENS 2
04.04.02.4
-R WR RDR TENS 3
04.04.02.4
-R WR RDR TENS 4
04.04.02.4
-R WR RDR TENS 5
04.04.02.4
-R WR RDR TENS 6
04.04.02.4
-R WR RDR TENS 7
04.04.02.4

-R RD PCH TENS 0
04.04.02.3
-R RD PCH TENS 1
04.04.02.3
-R RD PCH TENS 2
04.04.02.3
-R RD PCH TENS 3
04.04.02.3
-R RD PCH TENS 4
04.04.02.3
-R RD PCH TENS 5
04.04.02.3
-R RD PCH TENS 6
04.04.02.3
-R RD PCH TENS 7
04.04.02.3

-R WR PCH TENS 0
04.04.02.4
-R WR PCH TENS 1
04.04.02.4
-R WR PCH TENS 2
04.04.02.4
-R WR PCH TENS 3
04.04.02.4
-R WR PCH TENS 4
04.04.02.4
-R WR PCH TENS 5
04.04.02.4
-R WR PCH TENS 6
04.04.02.4
-R WR PCH TENS 7
04.04.02.4

-S UNITS 0
04.15.01.1

-S UNITS 1
04.15.01.1

-S UNITS 2
04.15.01.1

-S UNITS 3
04.15.01.1

-S UNITS 4
04.15.02.1

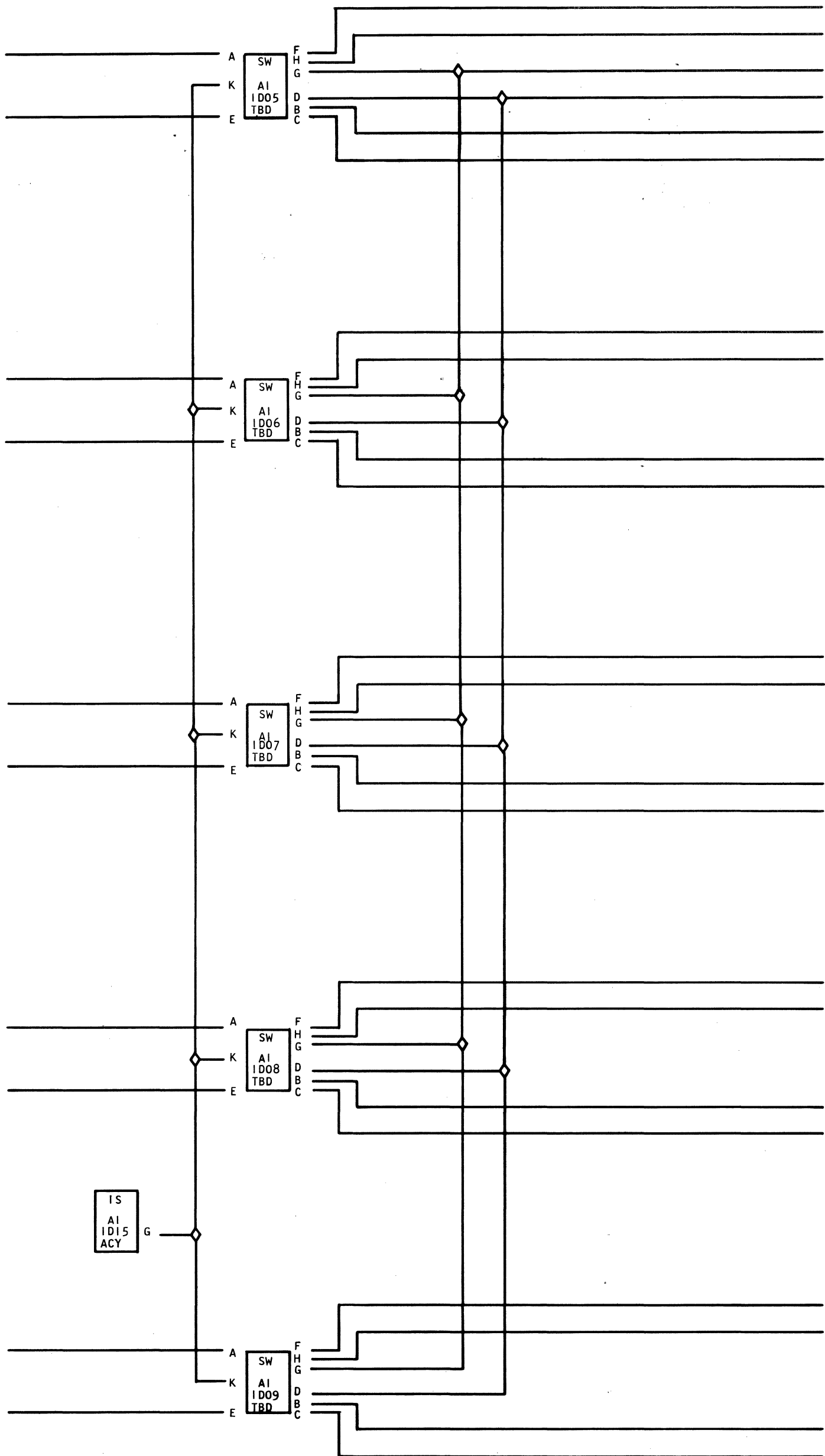
-S UNITS 5
04.15.02.1

-S UNITS 6
04.15.02.1

-S UNITS 7
04.15.02.1

-S UNITS 8
04.15.03.1

-S UNITS 9
04.15.03.1



-R R/P WR U 0
04.04.02.4
-R R/P RD U 0
04.04.02.3
-R UNITS WR RES.
04.30.08.1
-R UNITS RD RES
04.30.08.1
-R R/P WR U 1
04.04.02.4
-R R/P RD U 1
04.04.02.3

-R R/P WR U 2
04.04.02.4
-R R/P RD U 2
04.04.02.3

-R R/P WR U 3
04.04.02.4
-R R/P RD U 3
04.04.02.3

-R R/P WR U 4
04.04.02.4
-R R/P RD U 4
04.04.02.3

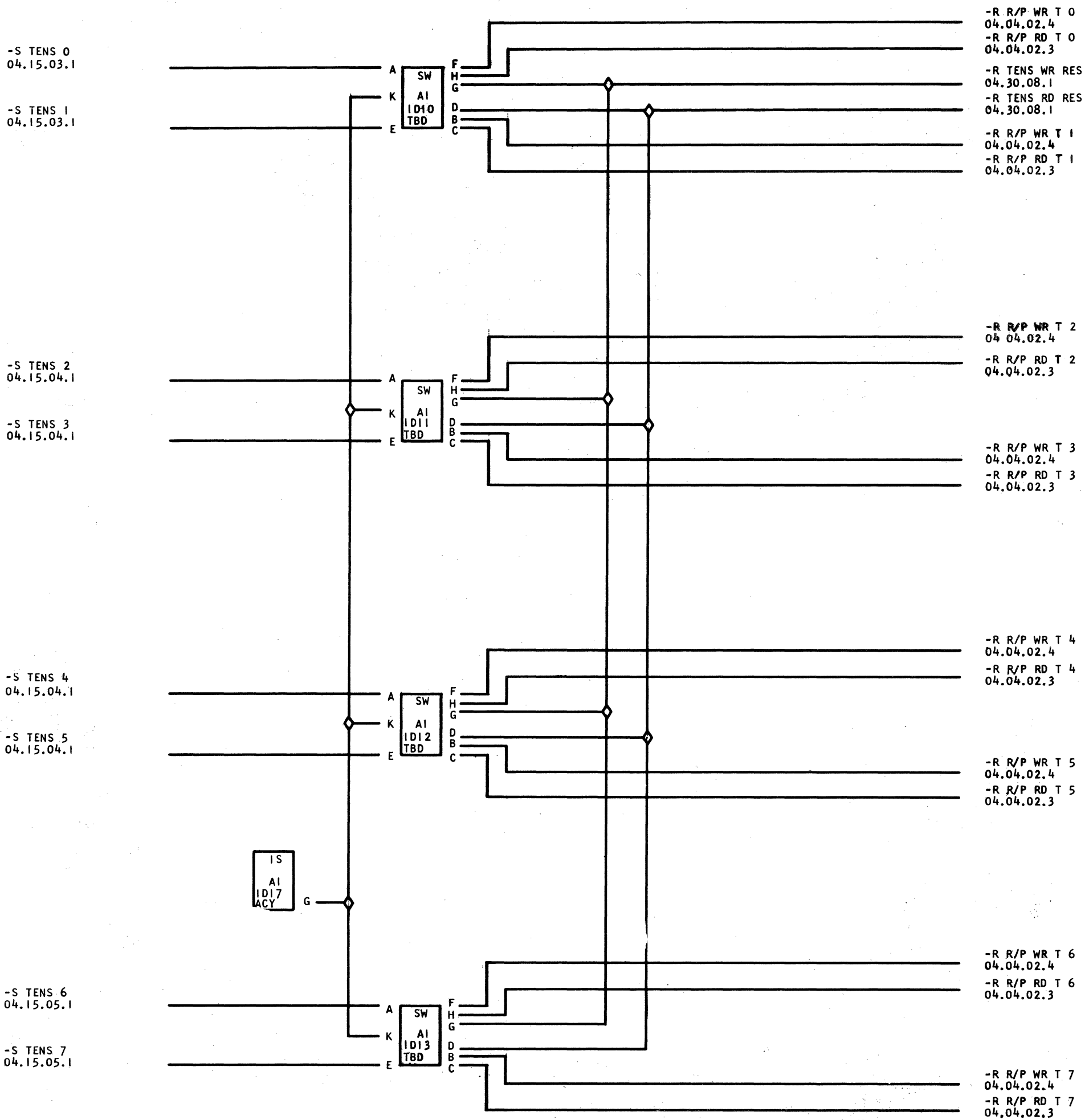
-R R/P WR U 5
04.04.02.4
-R R/P RD U 5
04.04.02.3

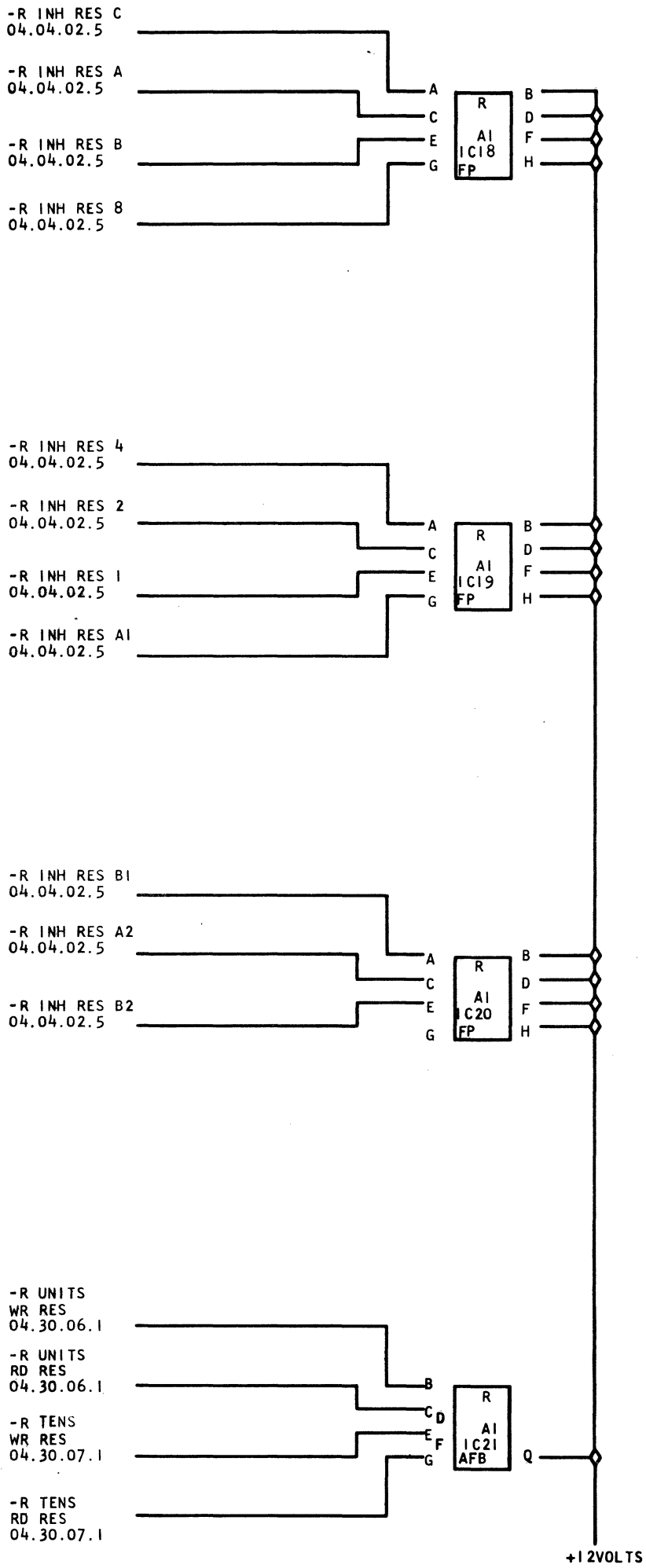
-R R/P WR U 6
04.04.02.4
-R R/P RD U 6
04.04.02.3

-R R/P WR U 7
04.04.02.4
-R R/P RD U 7
04.04.02.3

-R R/P WR U 8
04.04.02.4
-R R/P RD U 8
04.04.02.3

-R R/P WR U 9
04.04.02.4
-R R/P RD U 9
04.04.02.3





605831

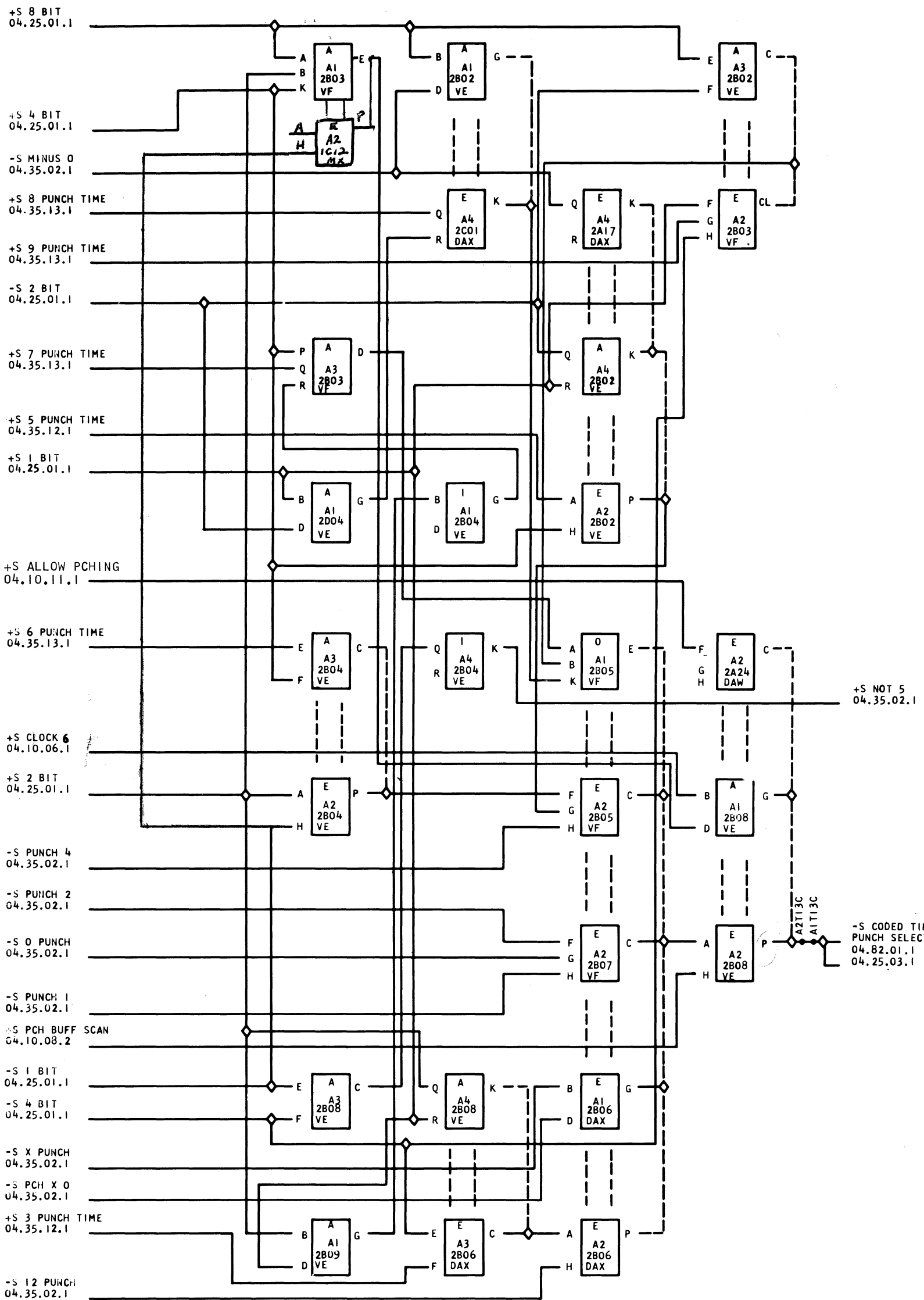
DISCONTINUED

BCD TO HOLLERITH CODING

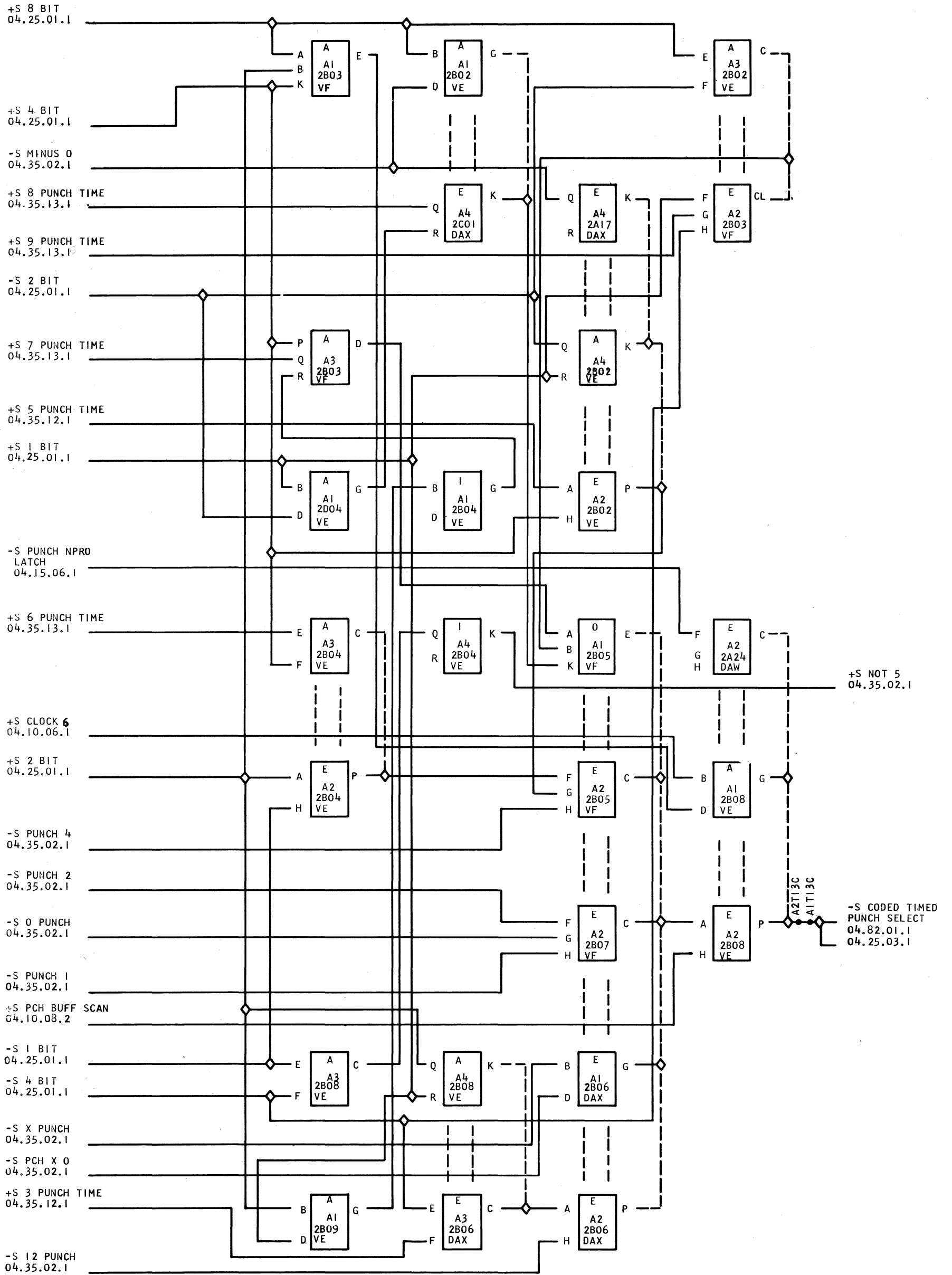
1622

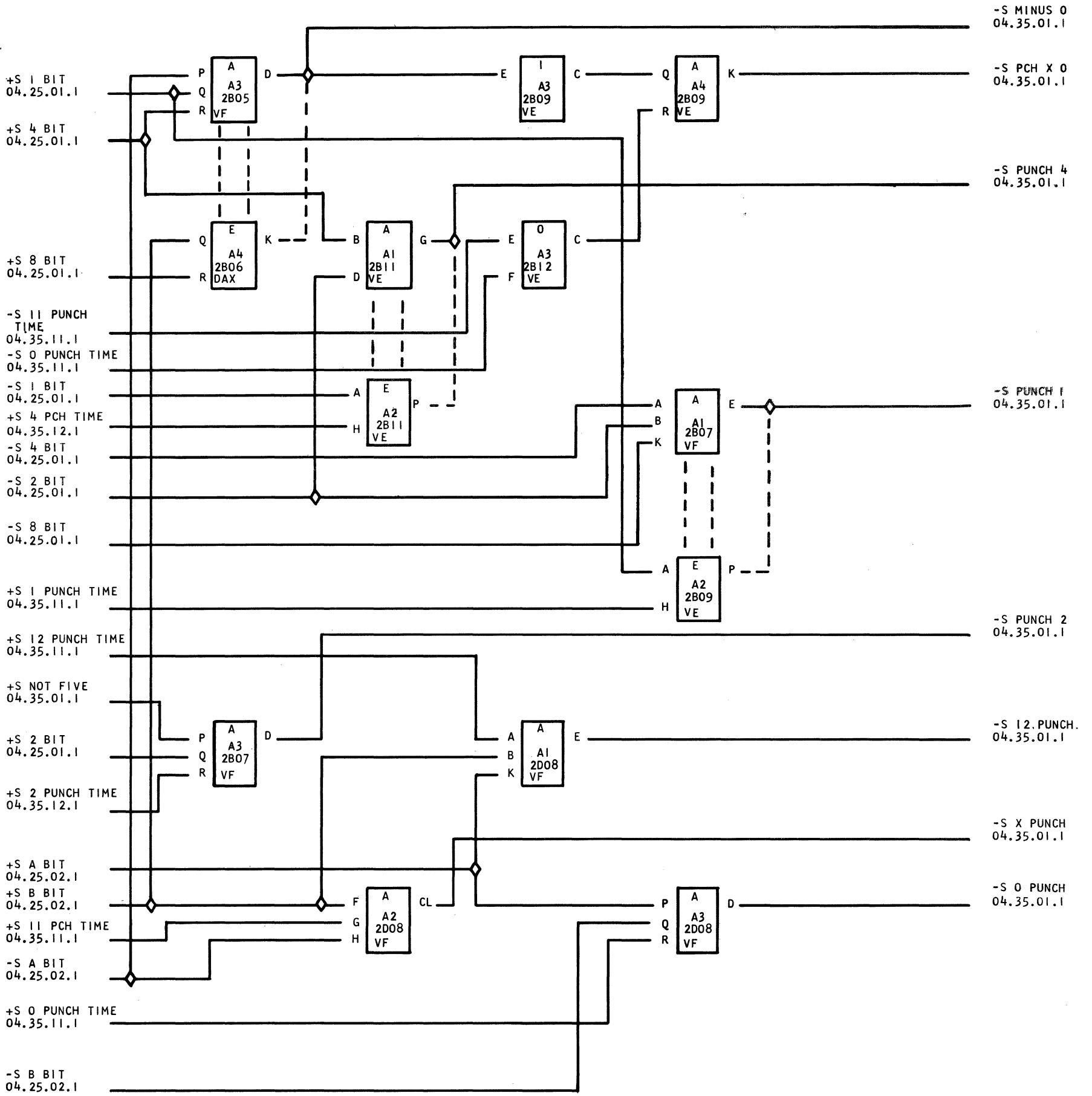
04.35.01.1

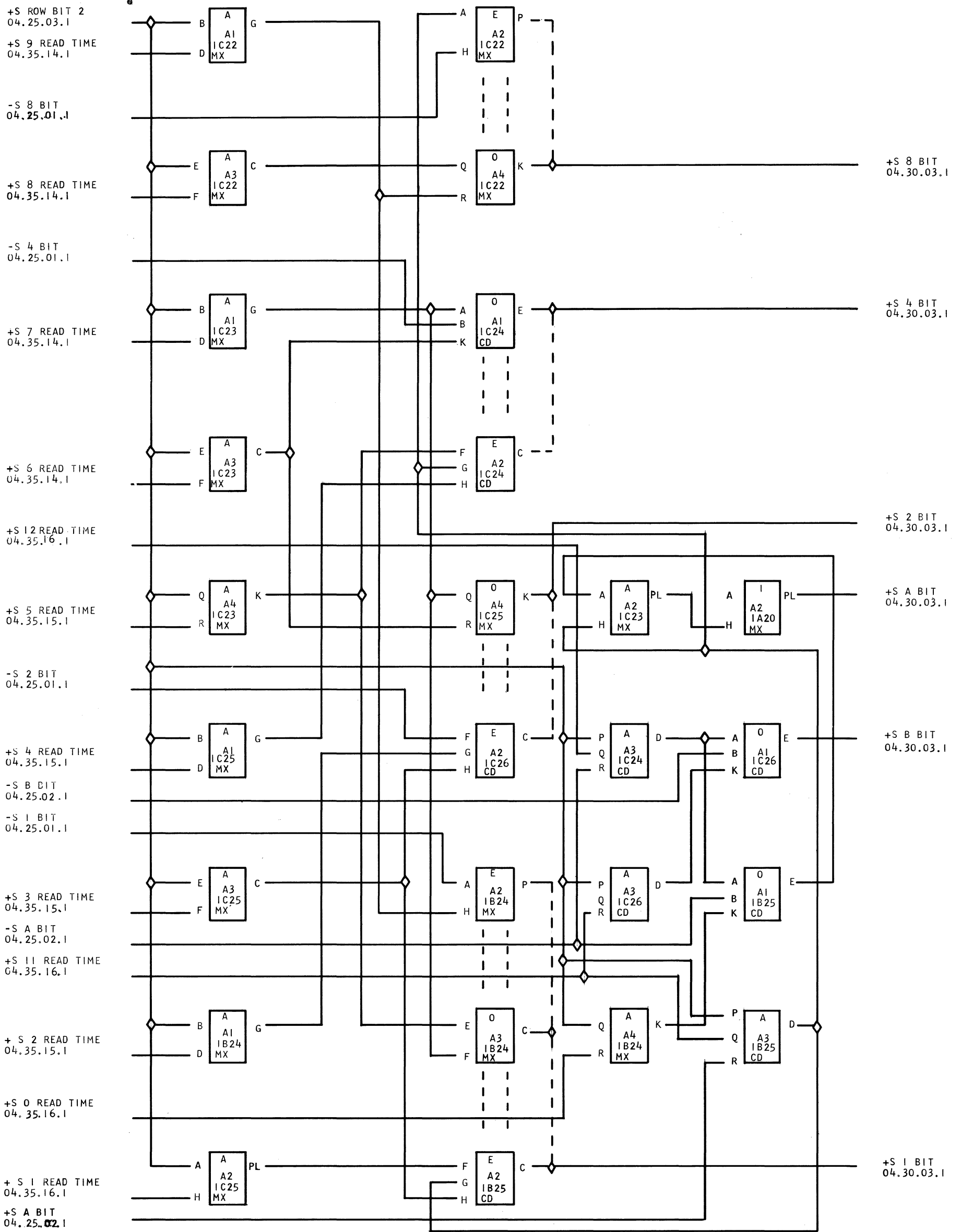
04.35.01.1

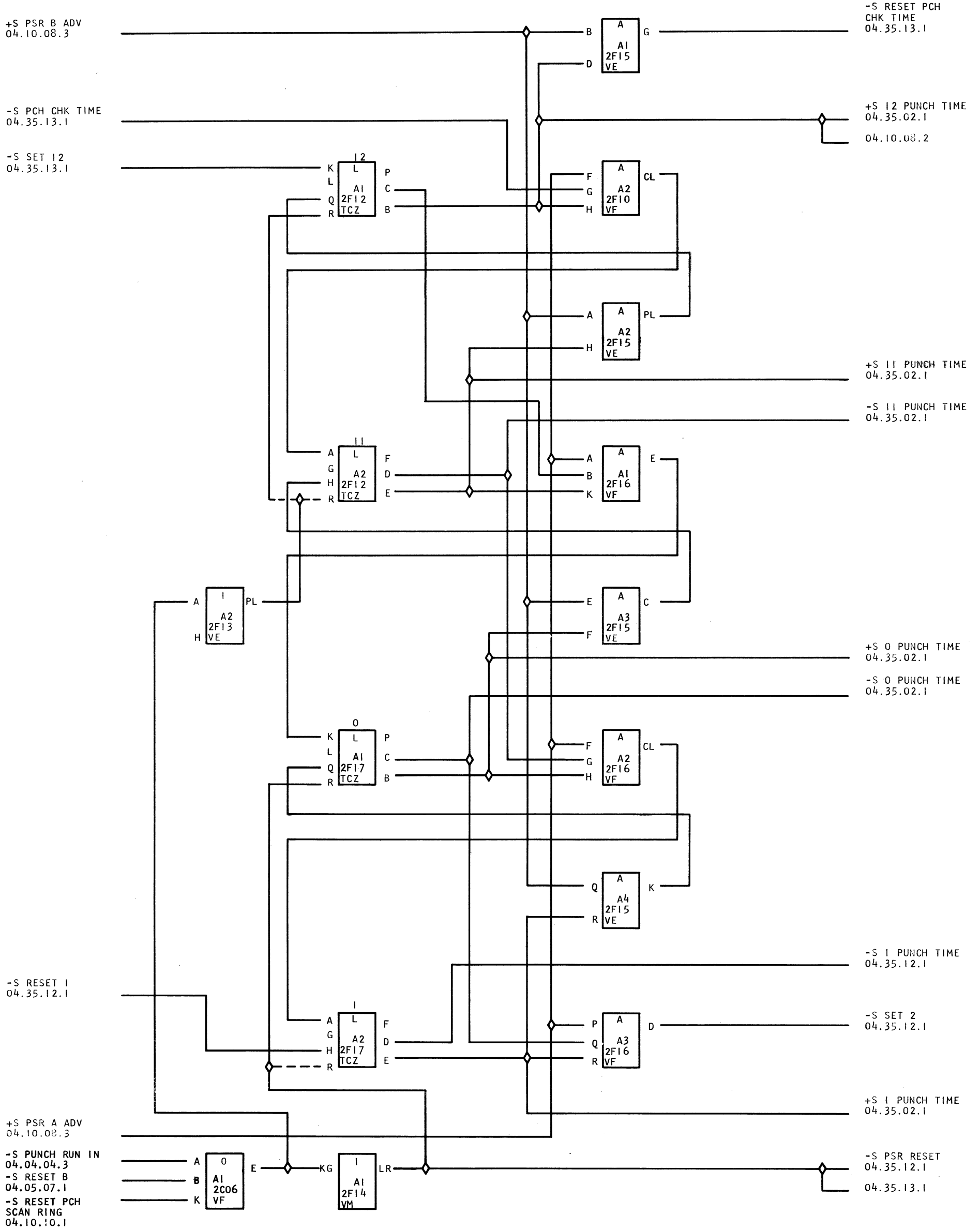


INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE	DEVELOPMENT NO.
NAME		PREVENT THE LOSS OF PUNCH DATA		12-7-62	802638F			X PRINT TO ENG. SPEC. NO. 894947	605831
DESIGN	ABE	12/7/62	MODEL	1622					
DETAIL									
CHECK	XEB	12-7-62	DRAW						
APPRO	XEB	12-7-62	CHECK						









+S PSR B ADV
04.10.08.3

-S 1 PUNCH TIME
04.35.11.1

-S SET 2
04.35.11.1

-S RESET 5
04.35.13.1

-S PSR RESET
04.35.11.1

+S PSR A ADV
04.10.08.3

-S RESET 1
04.35.11.1

+S 2 PUNCH TIME
04.35.02.1

+S 3 PUNCH TIME
04.35.01.1

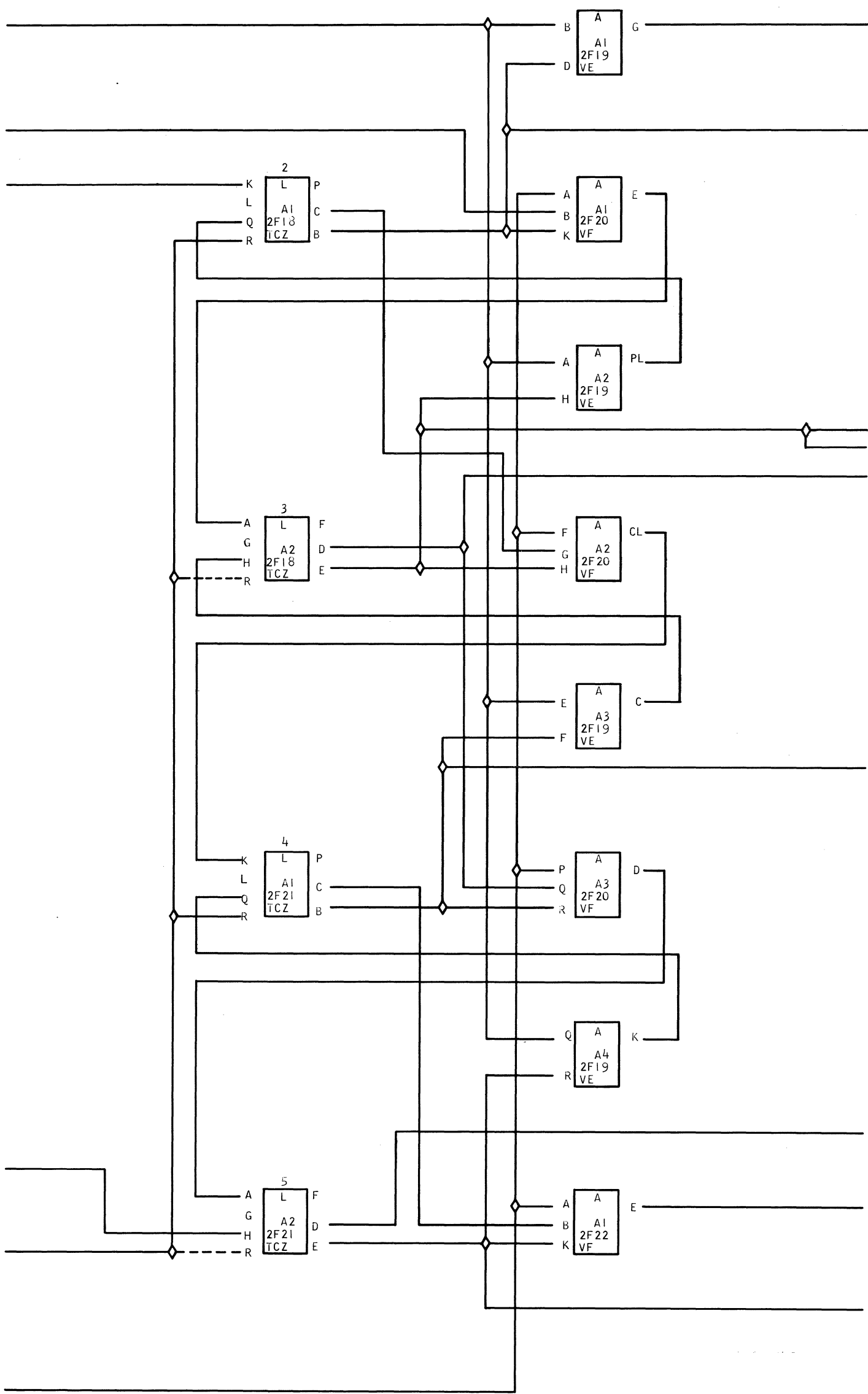
-S 3 PUNCH TIME
04.10.10.1

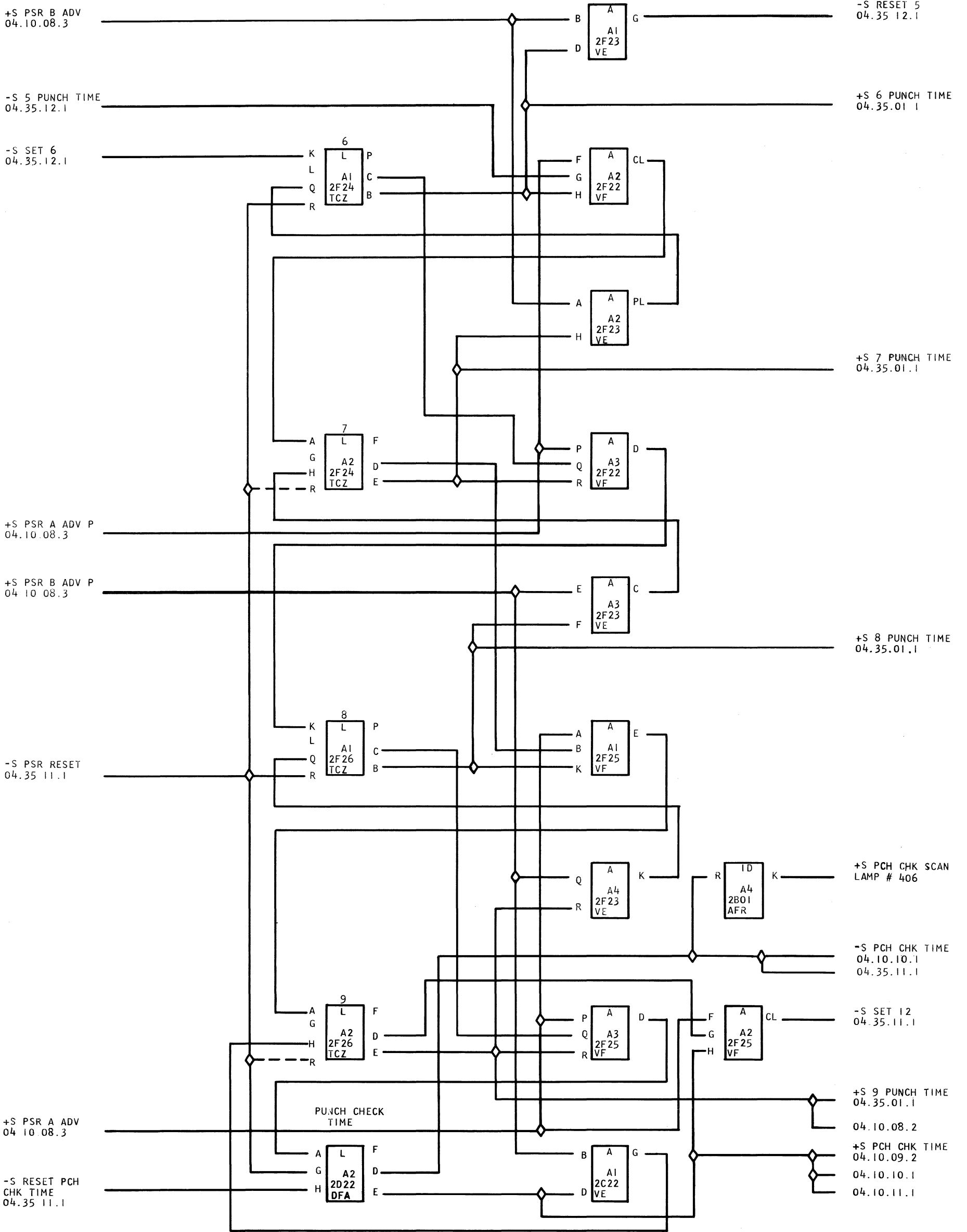
+S 4 PUNCH TIME
04.35.02.1

-S 5 PUNCH TIME
04.35.13.1

-S SET 6
04.35.13.1

+S 5 PUNCH TIME
04.35.01.1





+S RSR B ADV
04.10.08.3

-S 12 READ TIME
04.35.16.1

-S SET 9
04.35.16.1

-S RESET 6
04.35.15.1

+S RSR A ADV
04.10.08.3

-S READ NPRO
04.04.04.1

-S RESET B
04.05.07.1

-S RESET 12
04.35.16.1

+S 9 READ TIME
04.10.08.1

04.35.04.1

-S 9 READ TIME
04.10.10.1

+S 8 READ TIME
04.35.04.1

-S 8 READ TIME
04.40.02.1

+S 7 READ TIME
04.35.04.1

-S 7 READ TIME
04.40.02.1

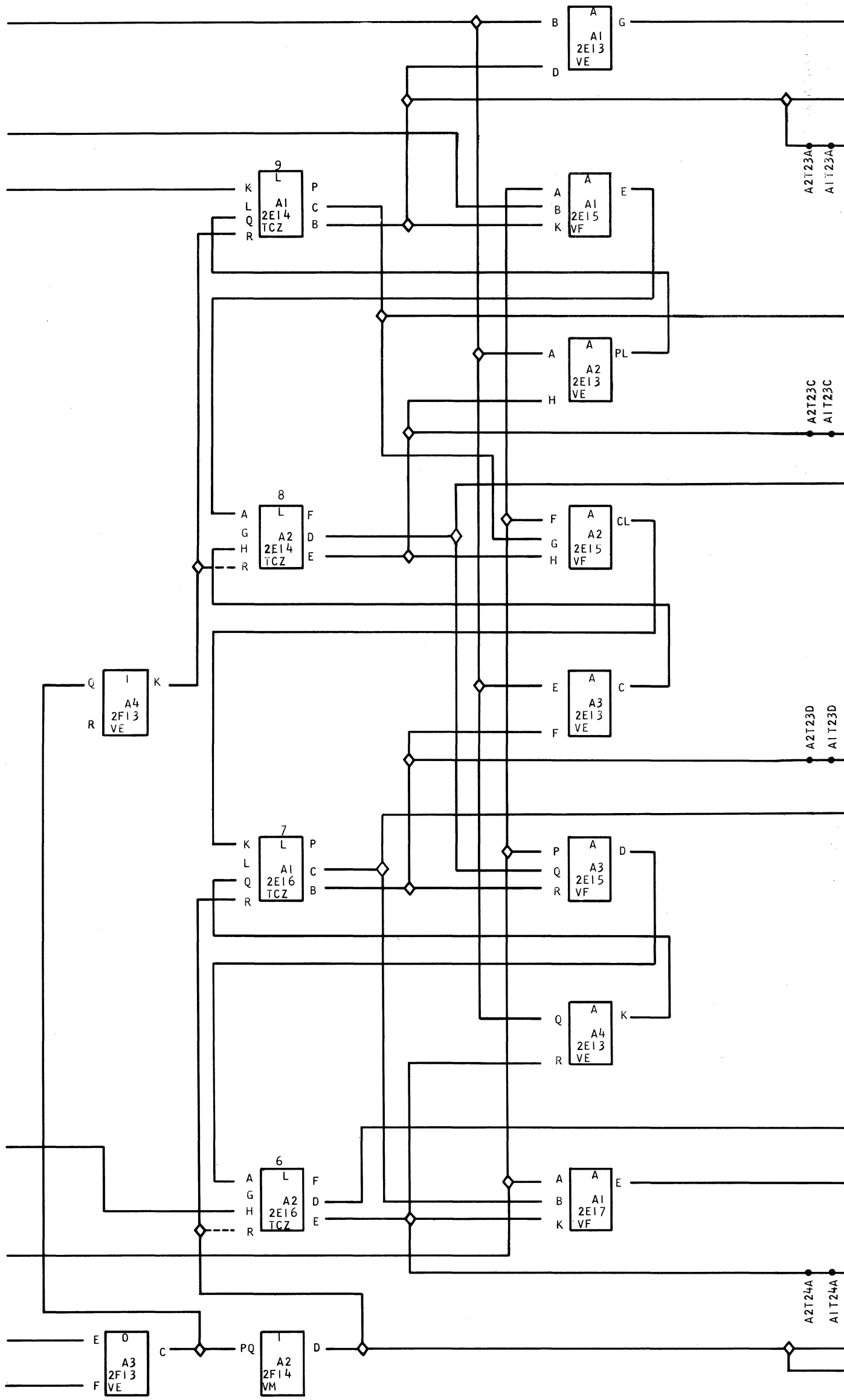
-S 6 READ TIME
04.35.15.1

-S SET 5
04.35.15.1

+S 6 READ TIME
04.35.04.1

-S RSR RESET
04.35.15.1

04.35.16.1



605832

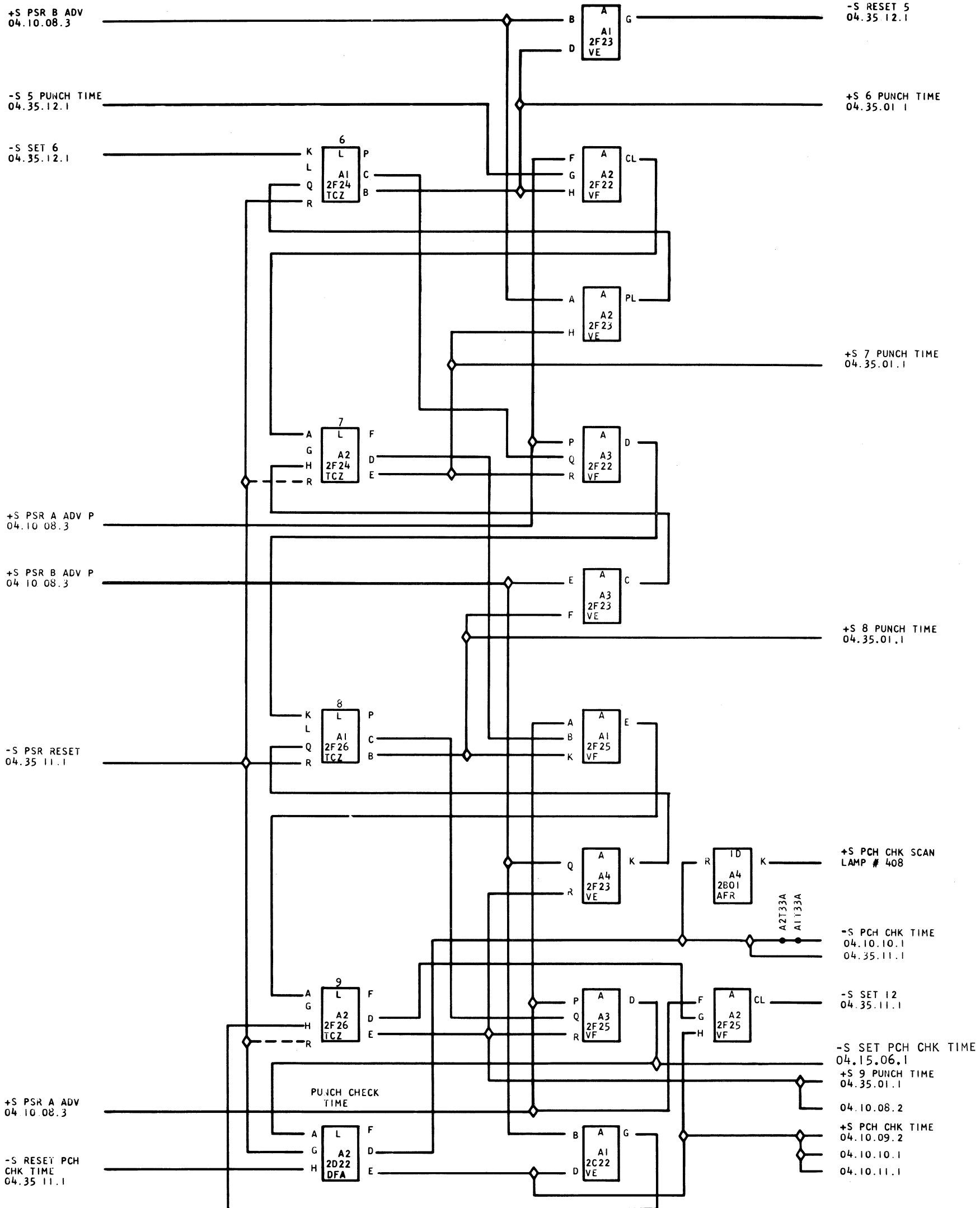
04.35.13.1

DISCONTINUED

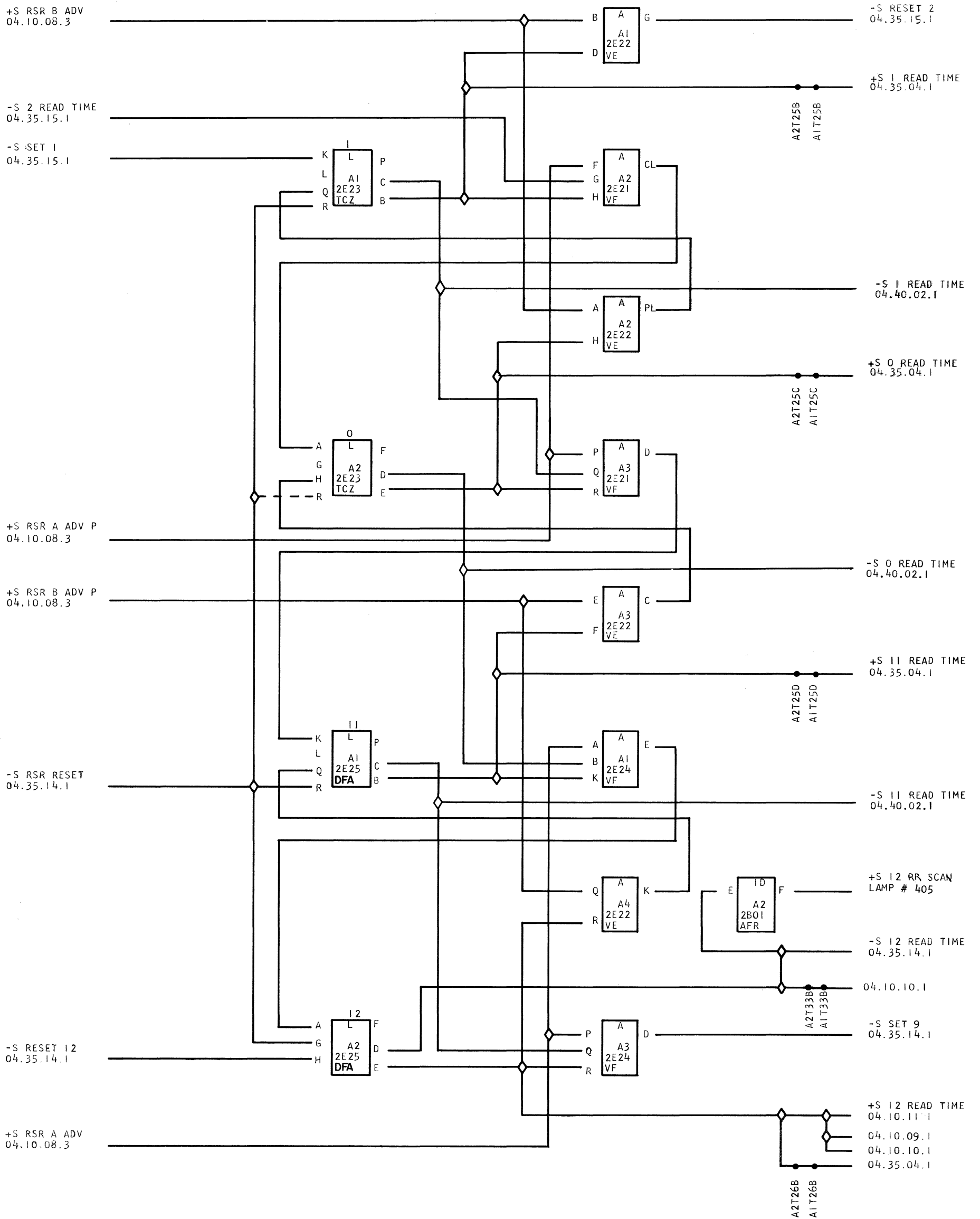
PUNCH SCAN RING
6-7-3-9

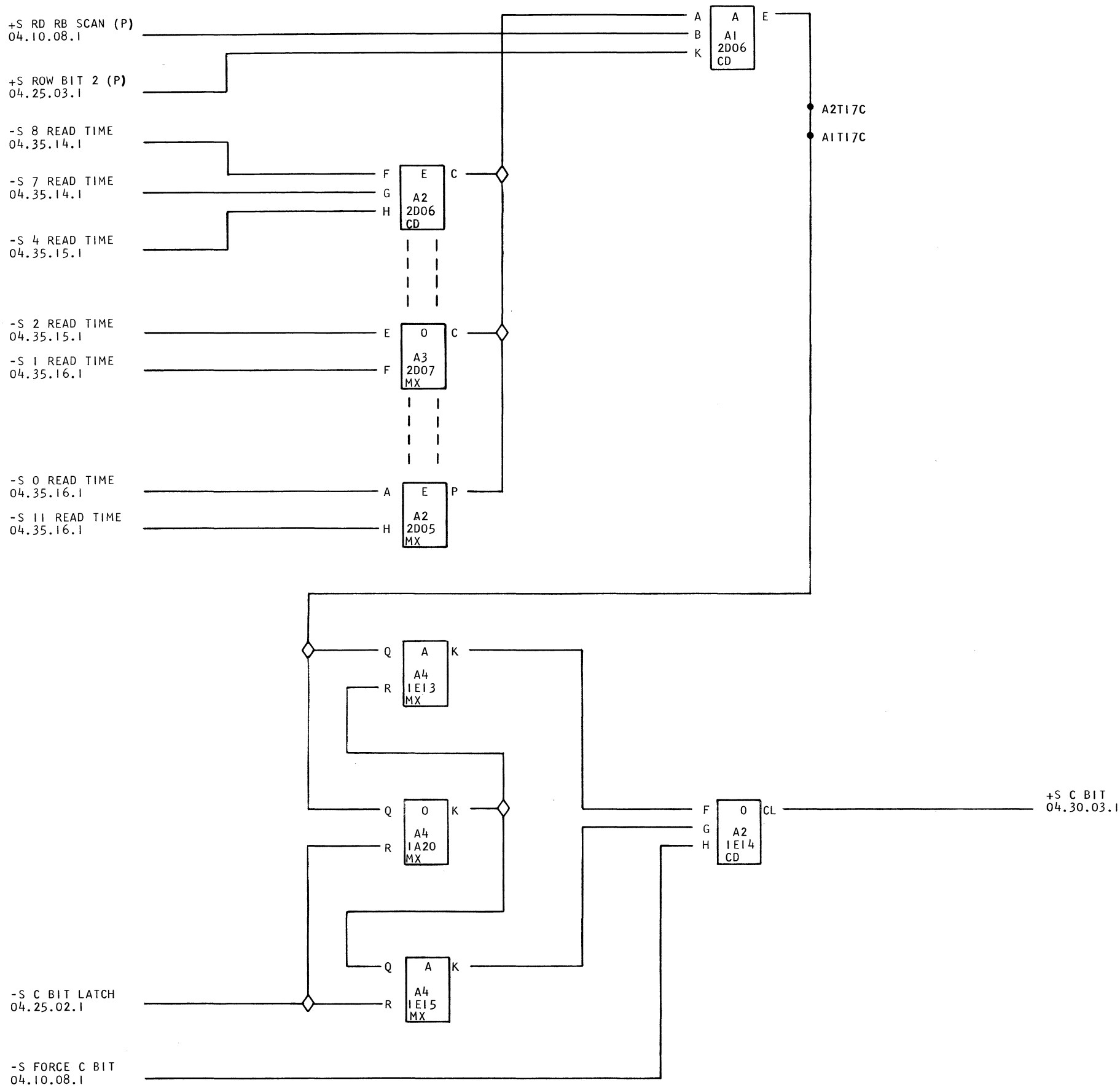
1622

04.35.13.1



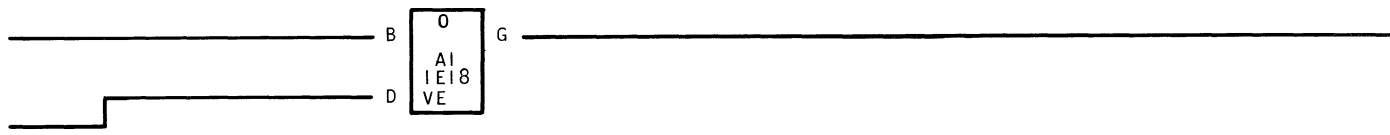
INTERNATIONAL BUSINESS MACHINES CORP.				DATE	CHANGE NO.	DATE	CHANGE NO.	NOTE X PRINT TO ENG. SPEC. NO. 894947	DEVELOPMENT NO.
NAME	PREVENT THE LOSS OF PUNCH DATA			12-7-62	802638F				
DESIGN	ABE	12/7/62	MODEL	1622					
DETAIL									
CHECK	XSG	12-7-62	DRAW						
APPRO	XSG	12-7-62	CHECK						





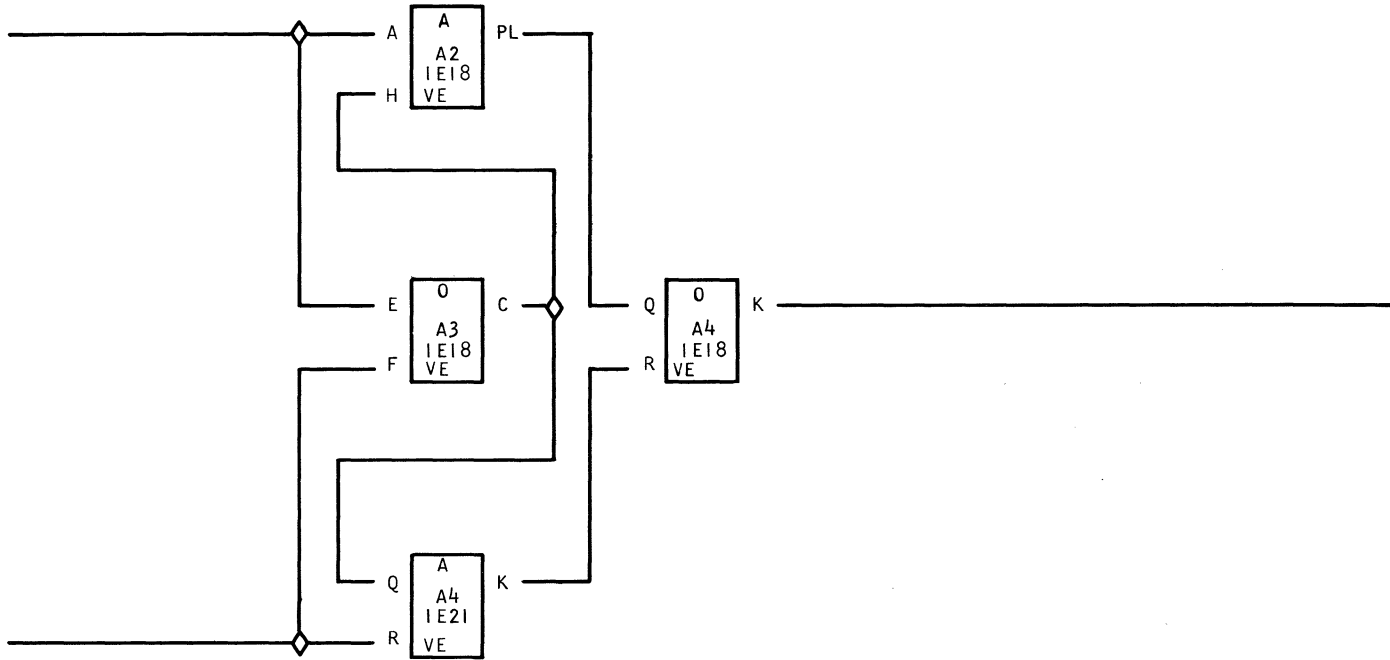
-S ROW BIT 1
04.25.03.1

-S CHK BIT A1
04.25.03.1



-S INHIBIT A1
04.30.03.1

+S ROW BIT 1
04.25.03.1

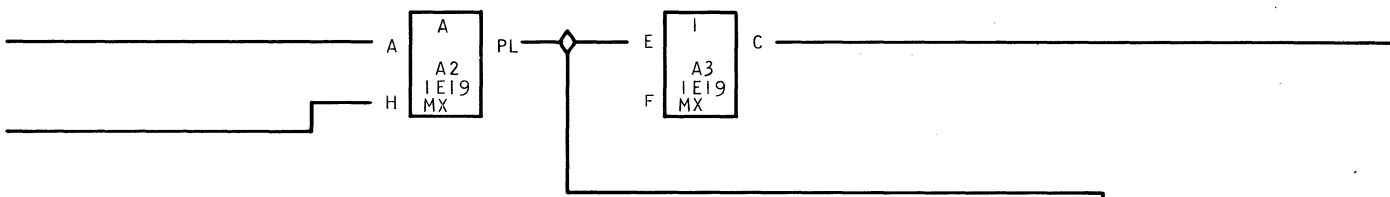


+S CHK BIT B1
04.25.03.1

-S INHIBIT B1
04.30.03.1

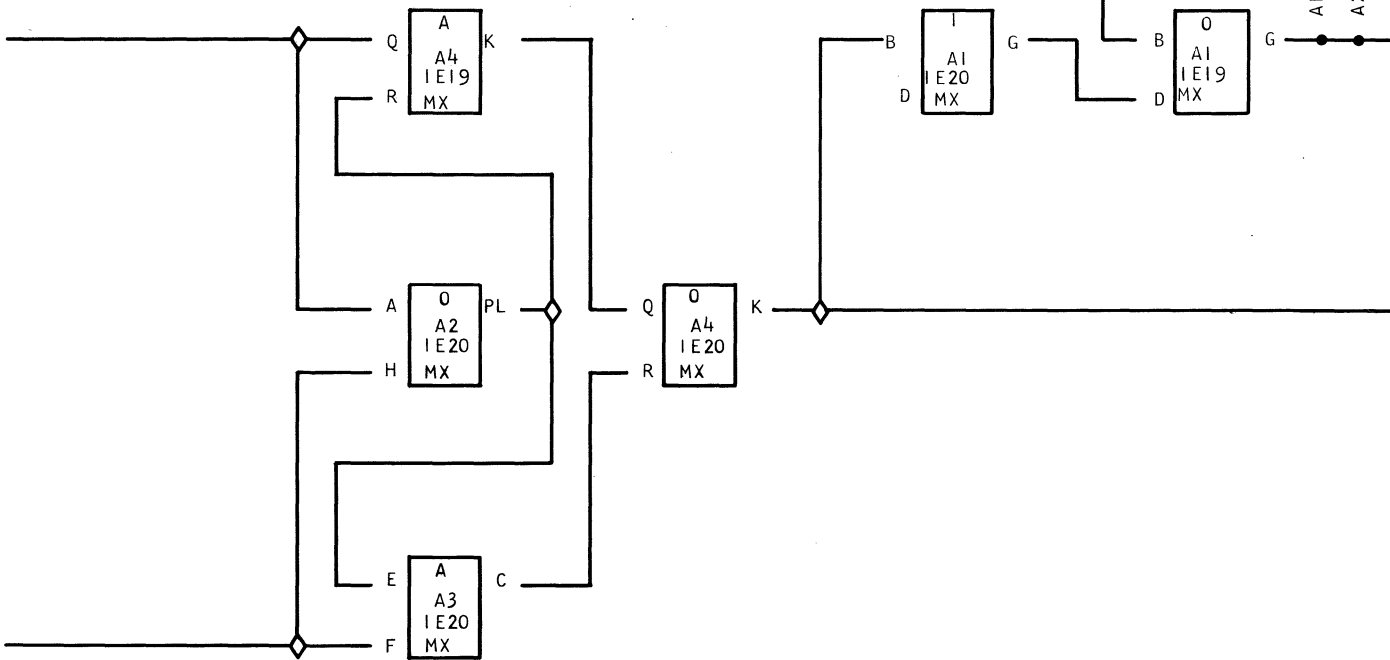
-S ROW BIT 2
04.25.03.1

+S CHK BIT A2
04.25.03.1



-S INHIBIT A2
04.30.03.1

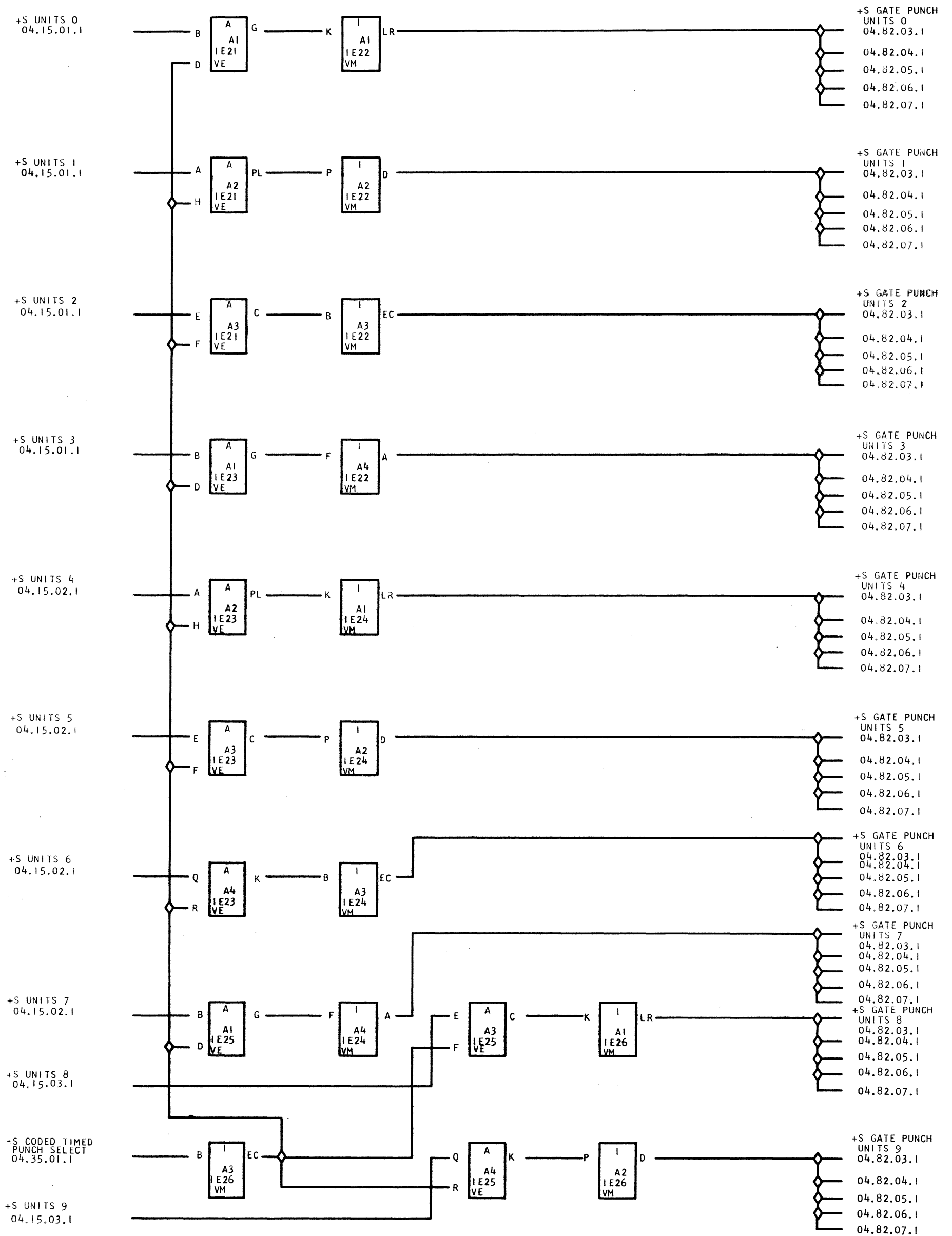
+S ROW BIT 2 (P)
04.25.03.1



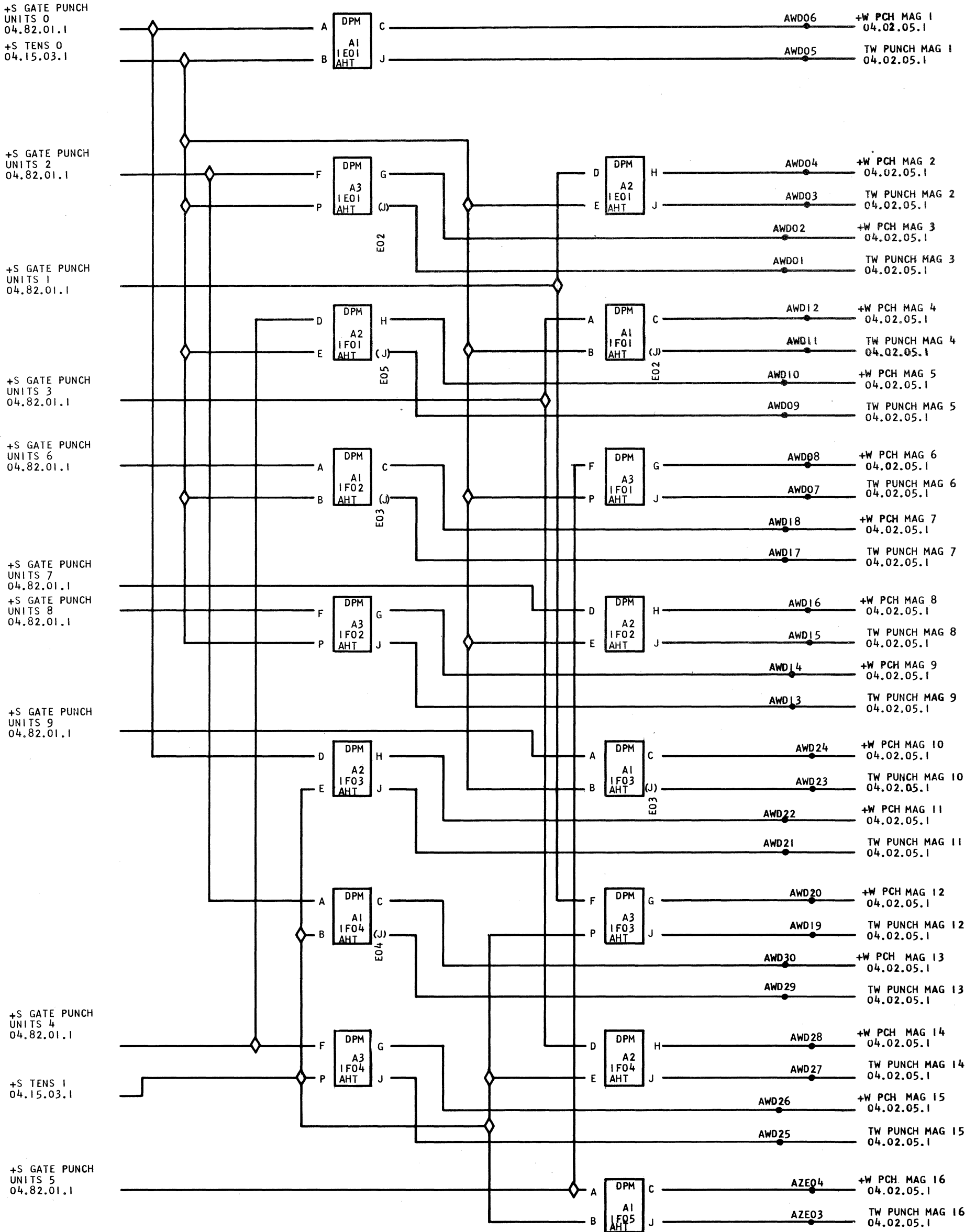
+S CARD ERROR
04.10.10.1

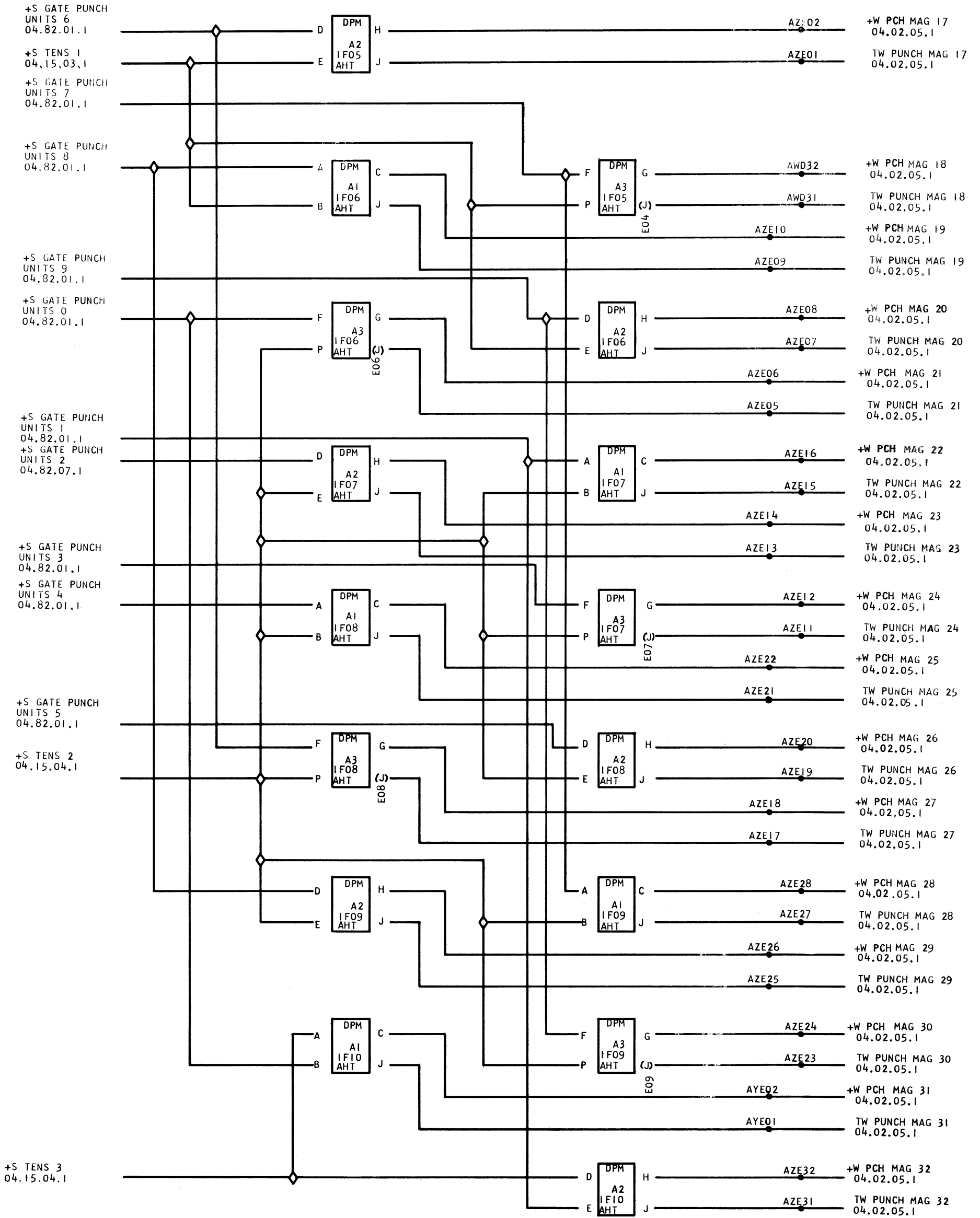
+S CHK BIT B2
04.25.03.1

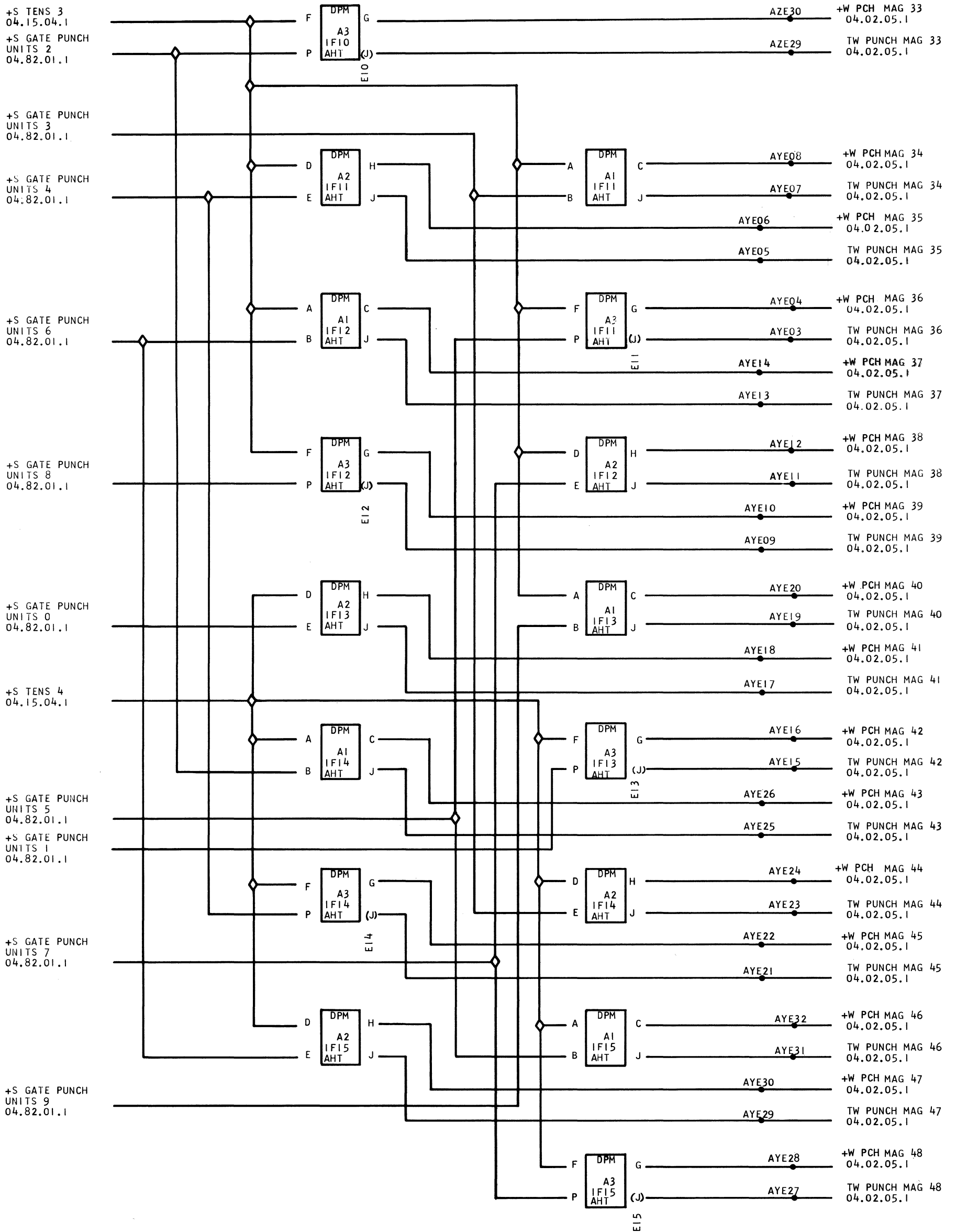
-S INHIBIT B2
04.30.03.1

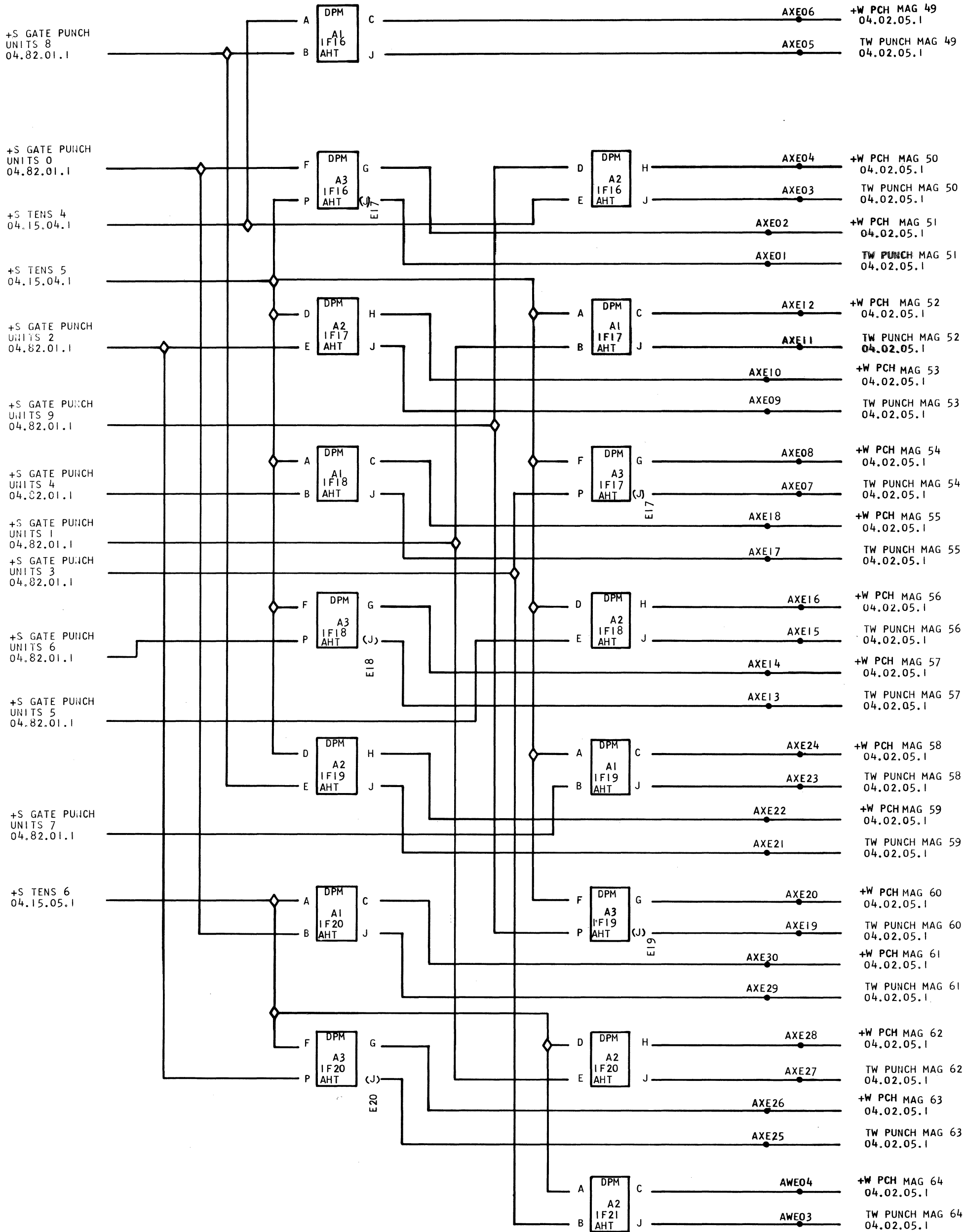


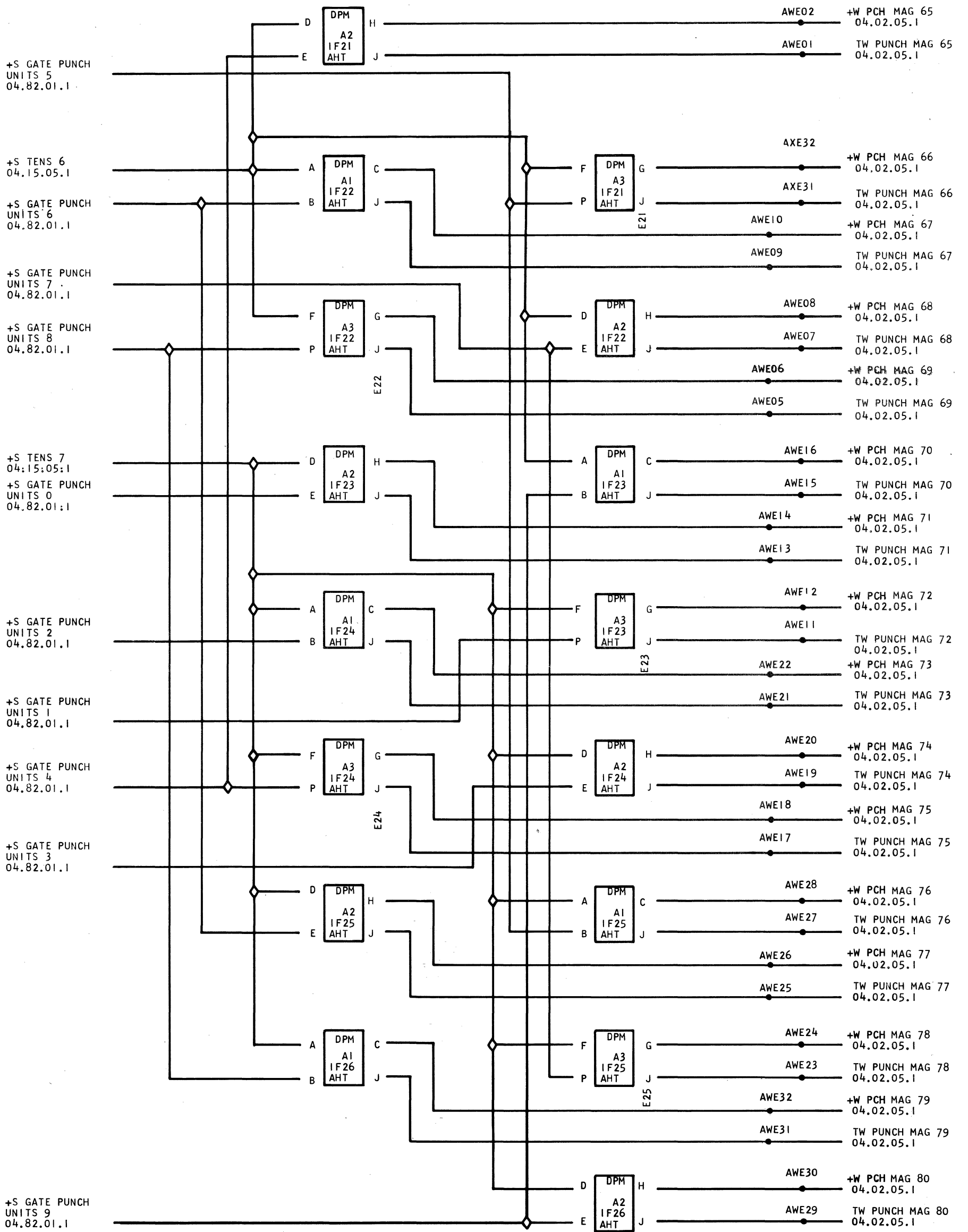
F01 5
F10 32

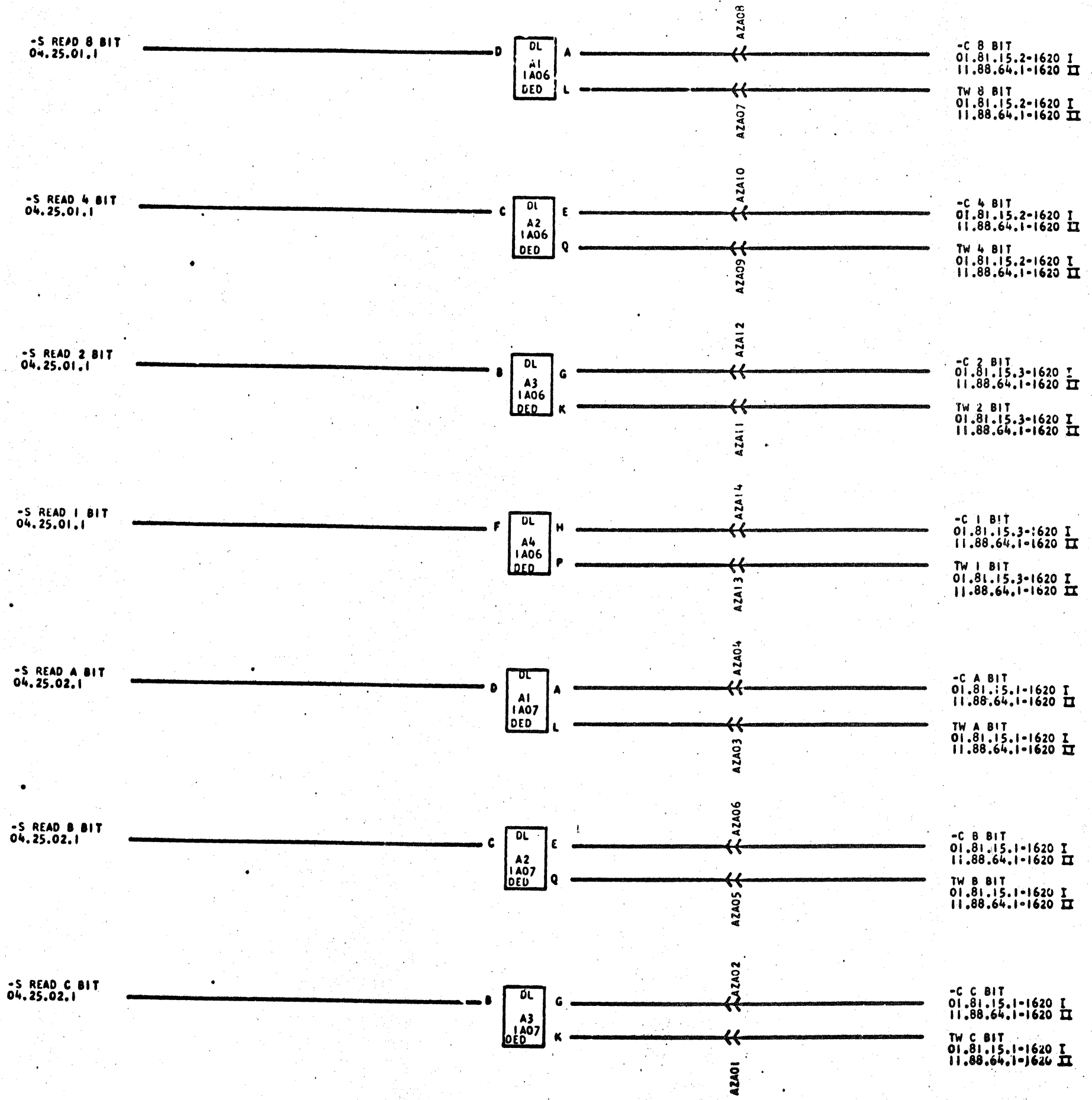


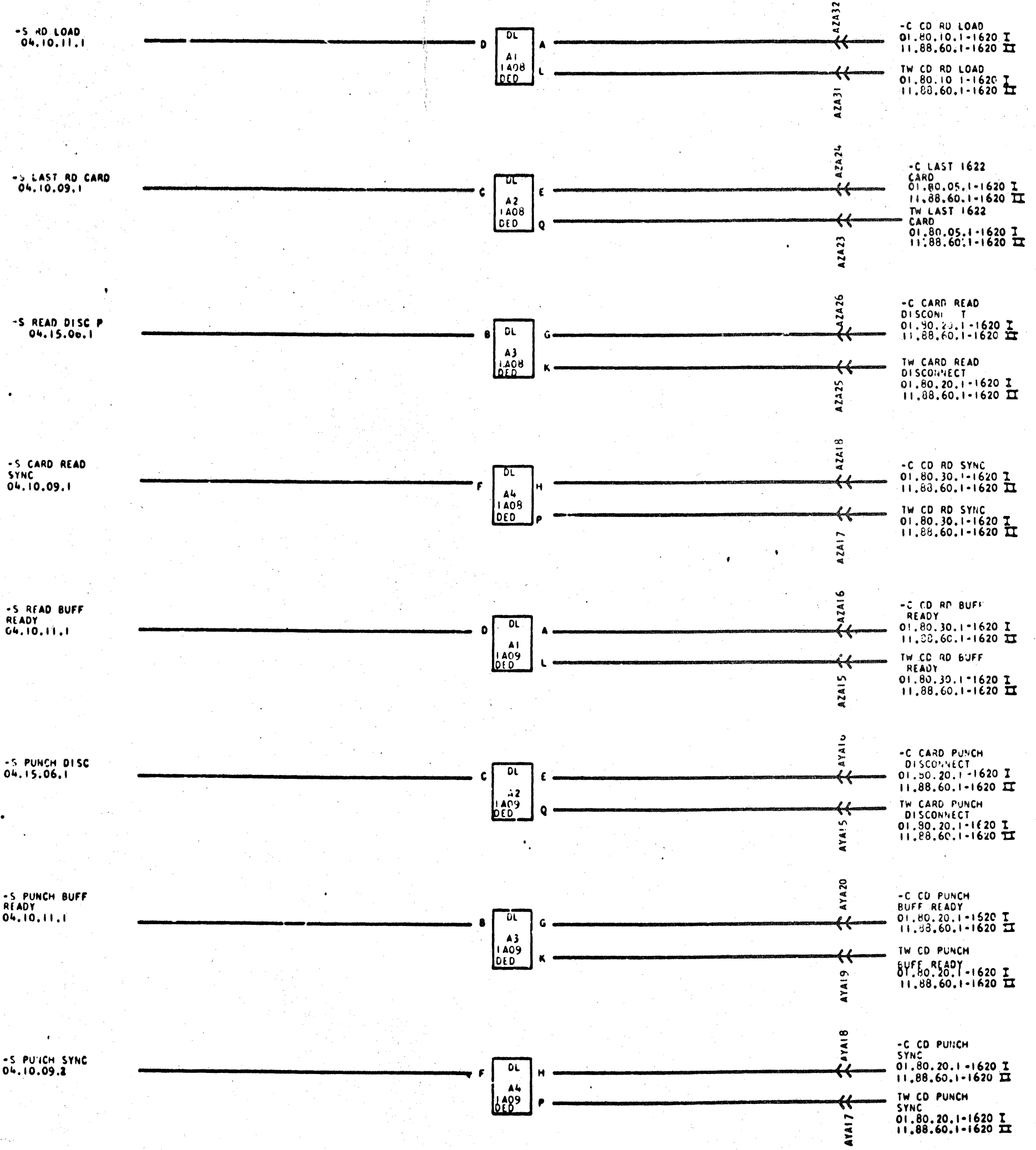


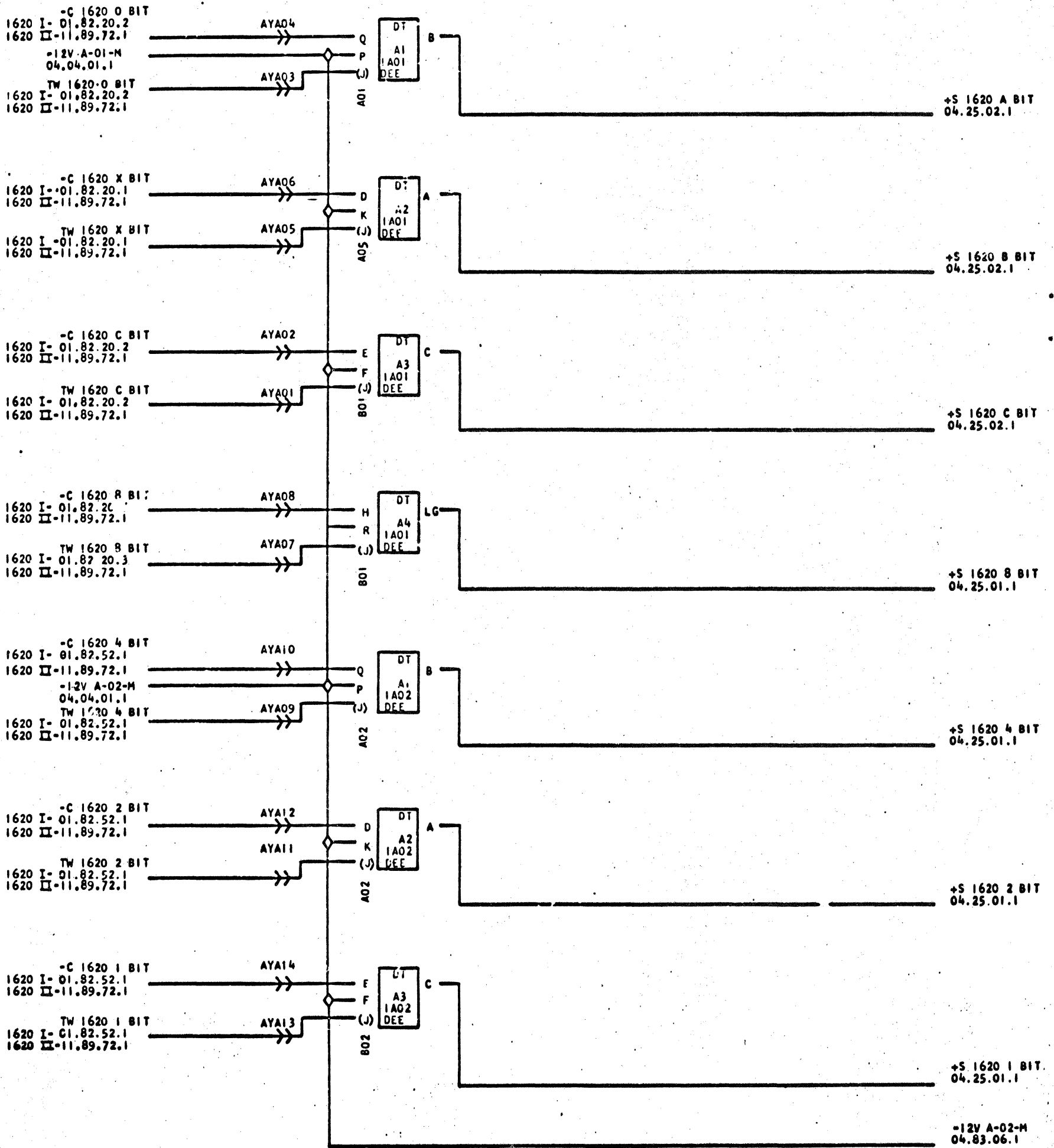


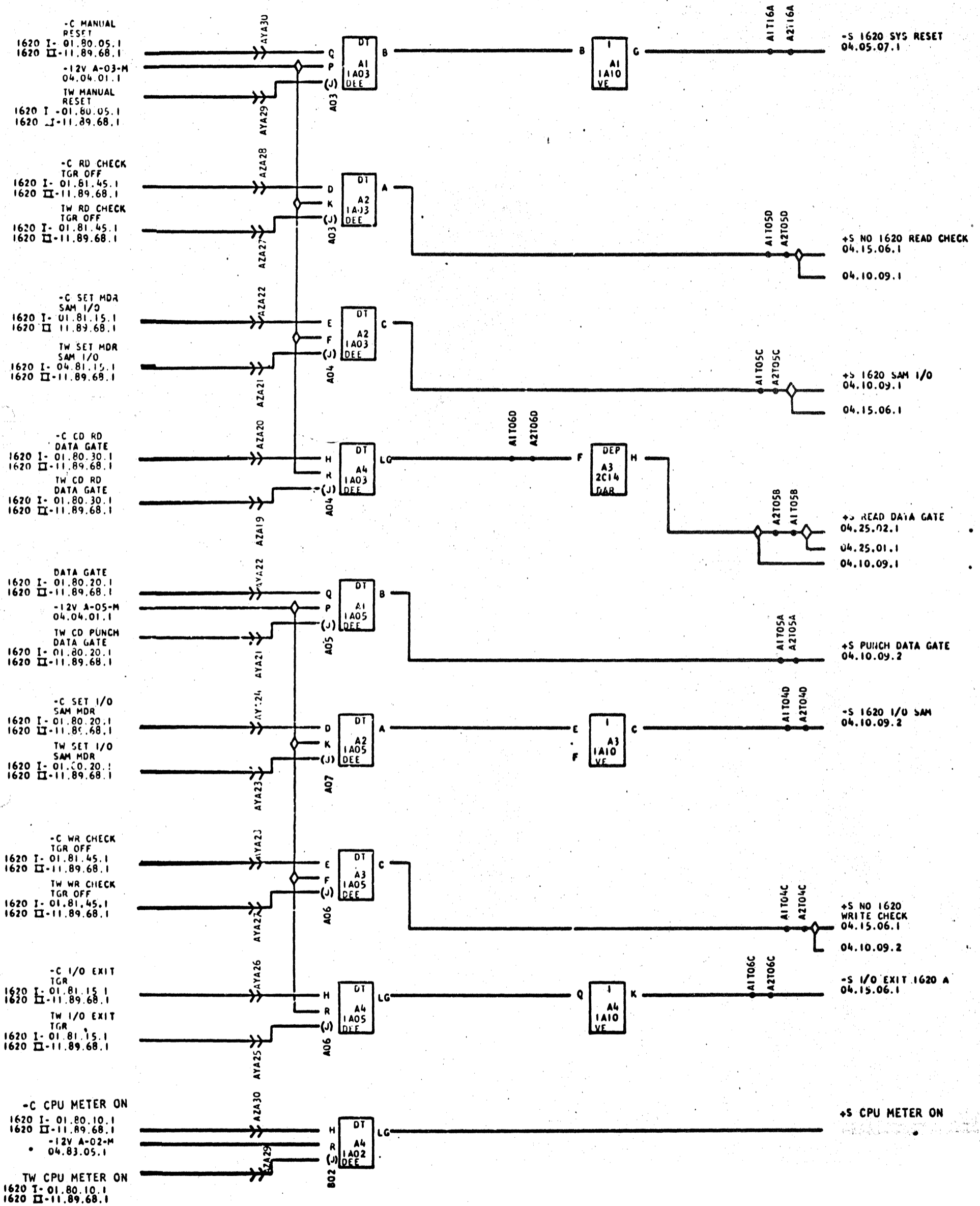


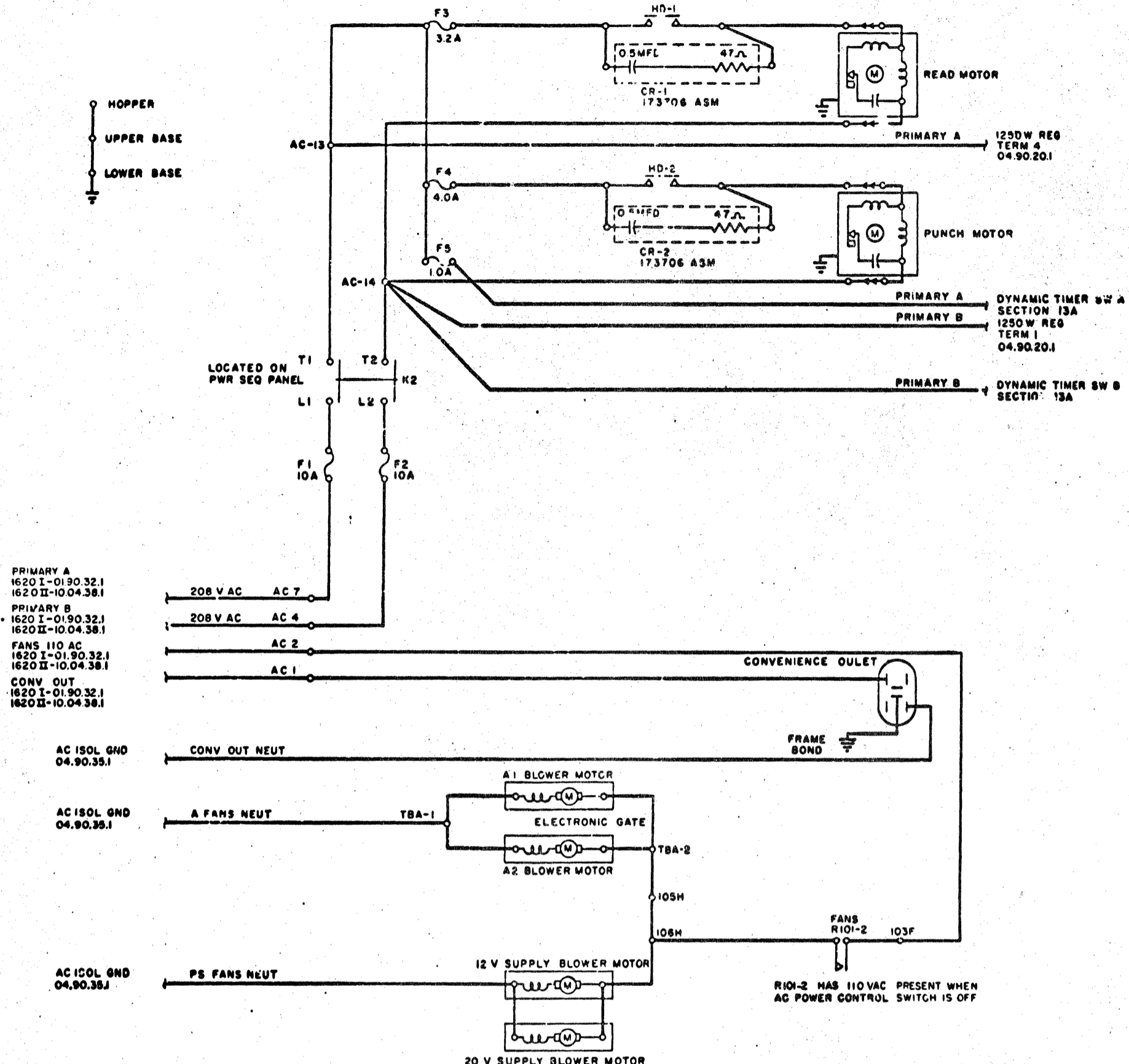












PRIMARY A
1620 I-01.90.32.1
1620 II-10.04.38.1

PRIMARY B
1620 I-01.90.32.1
1620 II-10.04.38.1

FANS 110 AC
1620 I-01.90.32.1
1620 II-10.04.38.1

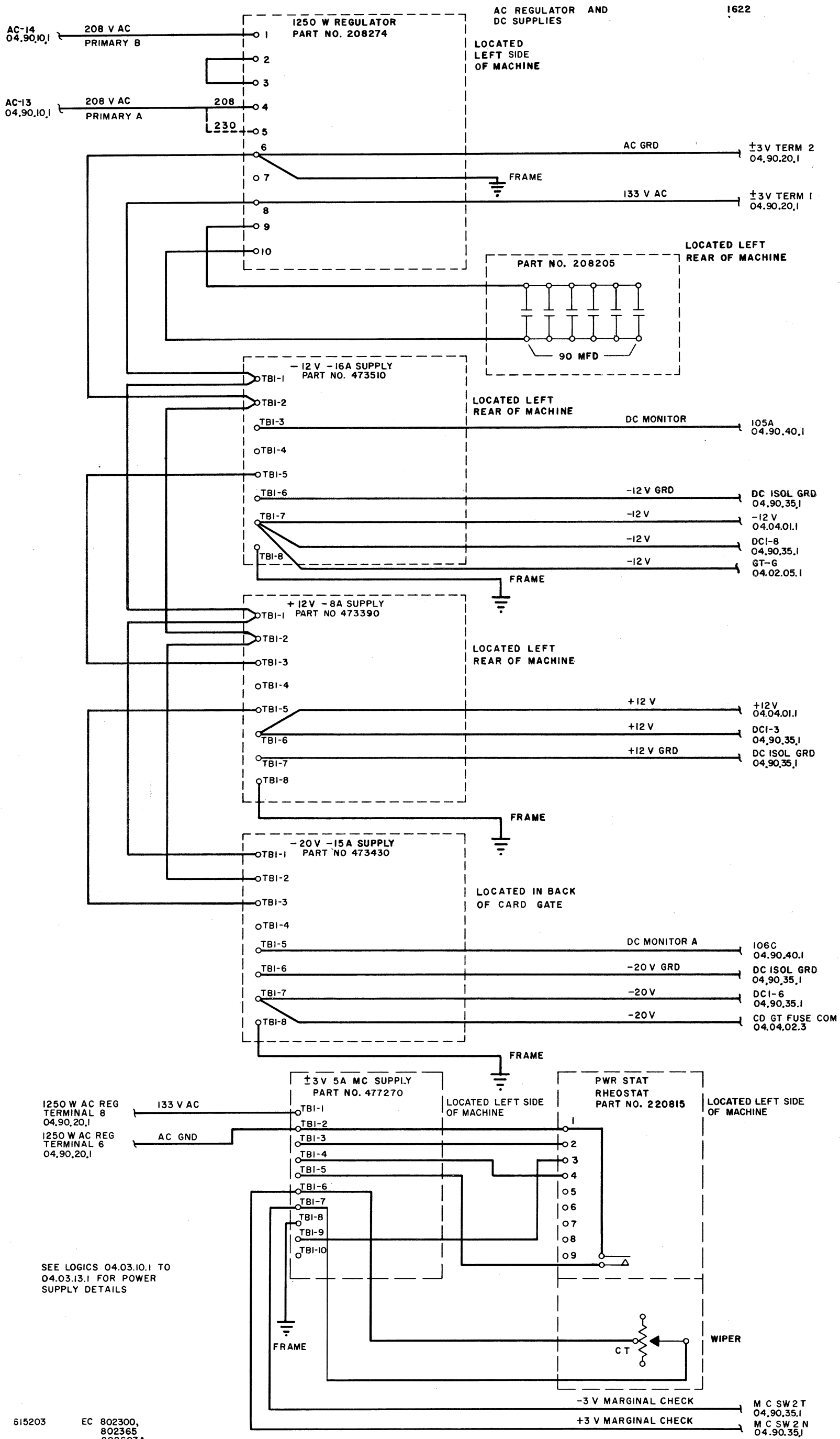
CONV OUT
1620 I-01.90.32.1
1620 II-10.04.38.1

FUSE CHART

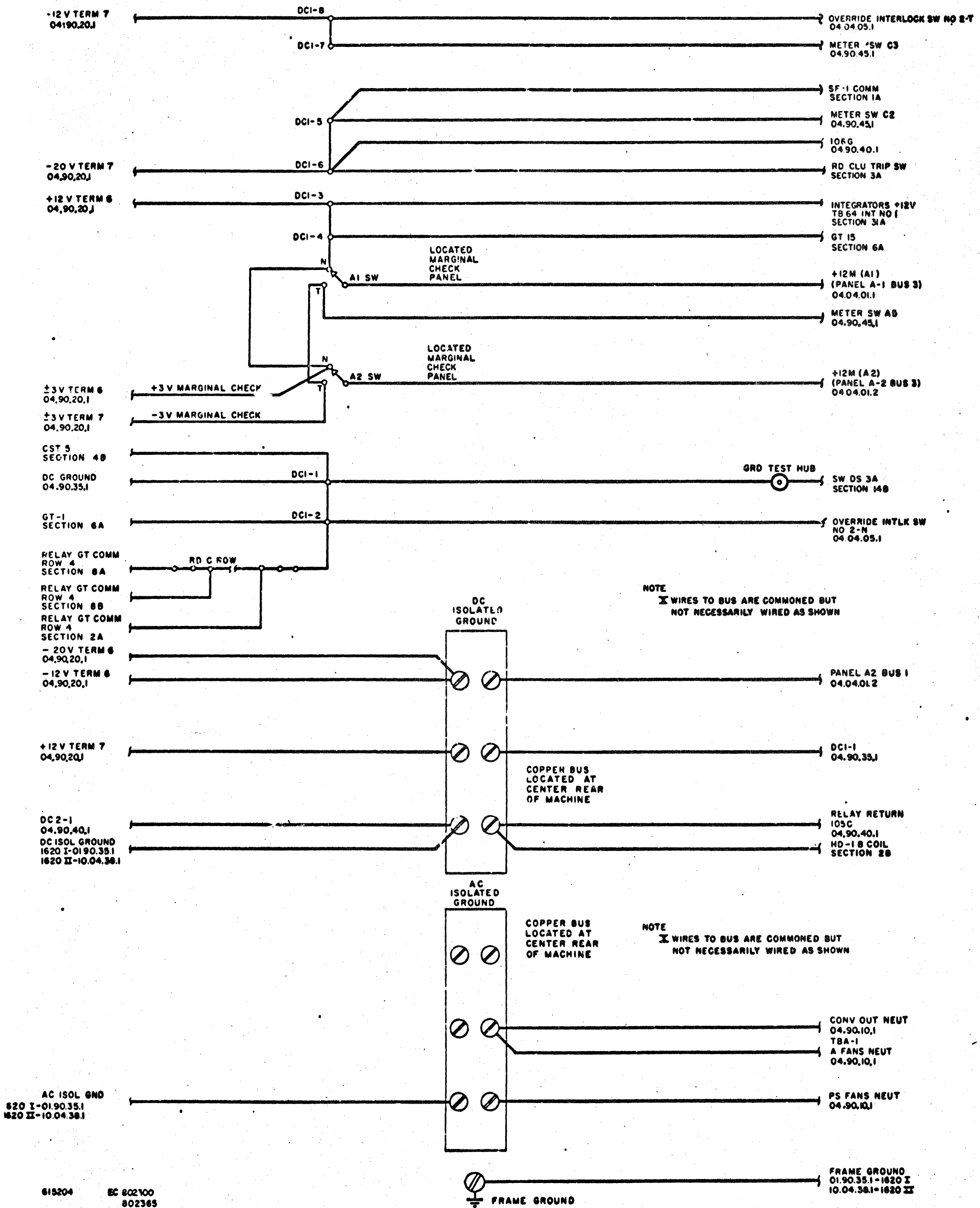
NO	TYPE	CIRCUIT	SECT/LOGIC
AC	F1	107659 PRIMARY A 10A	04.90.10.1
	F2	107669 PRIMARY B 10A	
	F3	107654 READ MOTOR 3.2A	
	F4	107665 PUNCH MOTOR 4.0A	
	F5	107799 DYNAMIC TIMER 1.0A	
	F6	107664 24V DC SUPPLY 3.2A	04.90.40.1
DC	SF1	104909 RL CAMS	1A
	SF2	104909 POWER READY	1A
	SF3	104909 PL CAMS	7A
	SF4	104909 PUNCH STOP	9A
	SF5	104909 PUNCH MAG DIODE COMM	12B
	SF6	104909 PUNCH START	9B
	F8	6325 -20V MEMORY CORES 1.0A	04.04.02.3
	F9		
	F10		
	F11		
	F12		
	F13		
	F14		

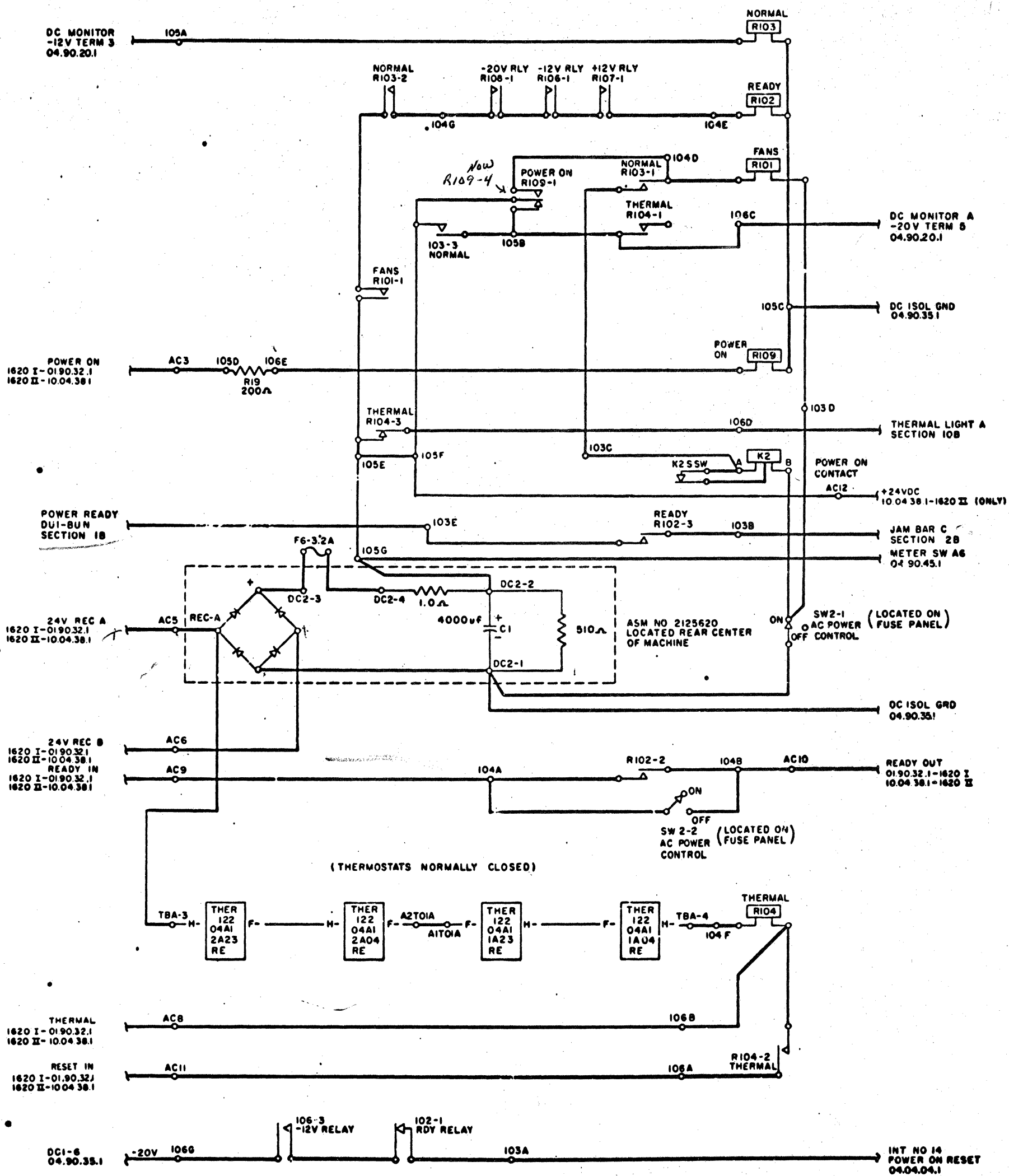
CONNECTORS

AC	LOCATION	DC	LOCATION
1	04.90.10.1	1	04.90.10.1
2	04.90.10.1	2	
3	04.90.40.1	3	
4	04.90.10.1	4	
5	04.90.40.1	5	
6	04.90.40.1	6	
7	04.90.10.1	7	
8	04.90.40.1	8	
9			
10			
11			
12			
13	04.90.10.1		
14	04.90.10.1		

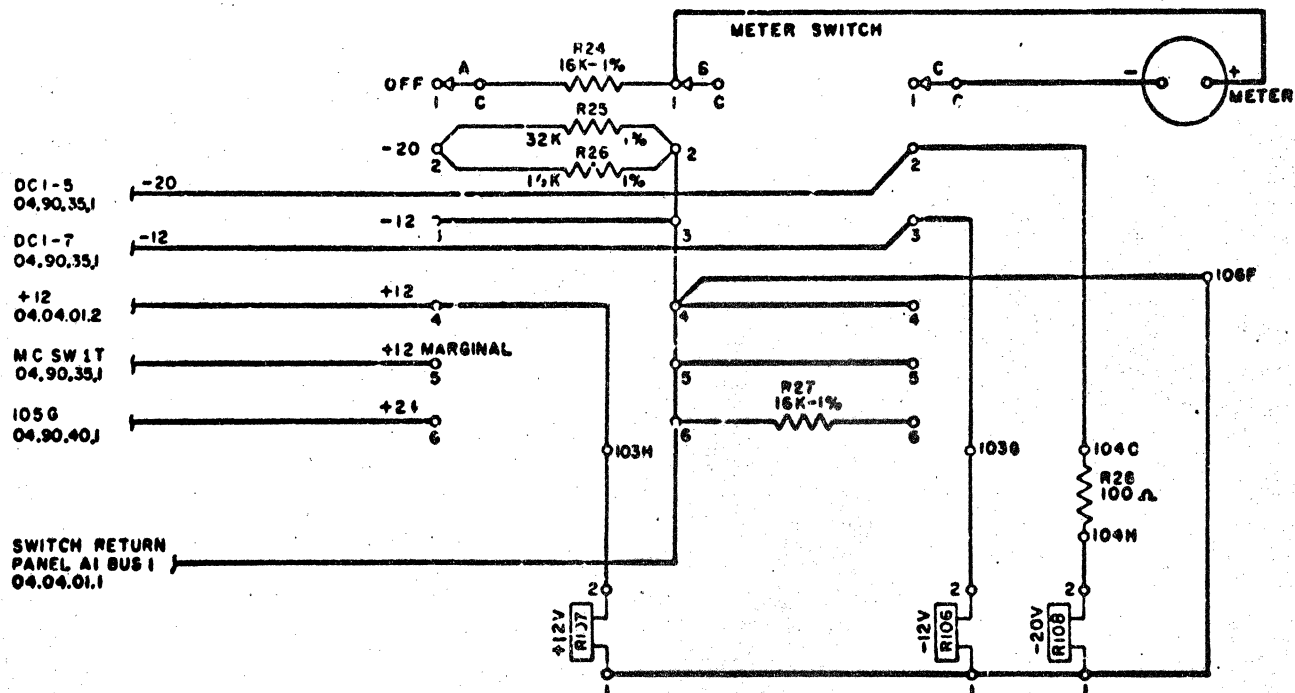


615203 EC 802300, 802365, 802603A

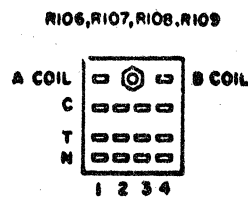
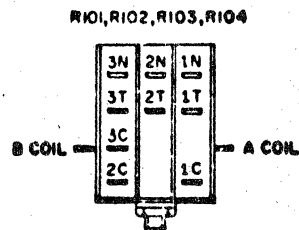
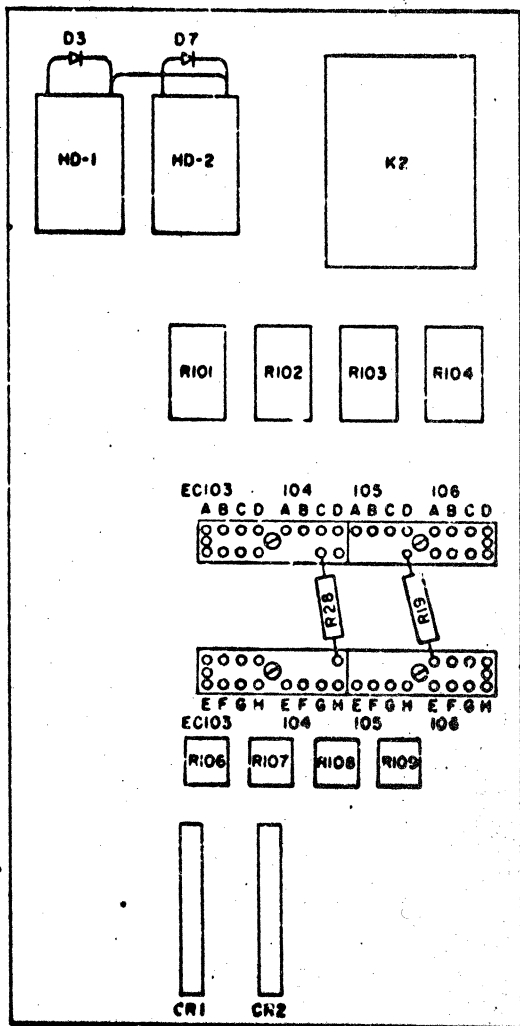




66206 EC 802300
 802300B
 802458A
 802603A



POWER SEQUENCE ASSEMBLY
(LOCATED BEHIND FUSE PANEL)



EDGE CONNECTOR LOCATIONS

	103	104	105	106
A	04.90.40.1	04.90.40.1	04.90.40.1	04.90.40.1
B	04.90.40.1	04.90.40.1	04.90.40.1	04.90.40.1
C	04.90.40.1	04.90.45.1	04.90.40.1	04.90.40.1
D	04.90.40.1	04.90.40.1	04.90.40.1	04.90.40.1
E	04.90.40.1	04.90.40.1	04.90.40.1	04.90.40.1
F	04.90.10.1	04.90.40.1	04.90.40.1	04.90.45.1
G	04.90.45.1	04.90.40.1	04.90.40.1	04.90.40.1
H	04.90.45.1	04.90.45.1	04.90.10.1	04.90.10.1