

IBM

**Customer Engineering
Instructional
System Diagrams**

1620

Data Processing System

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IBM Customer Engineering Instructional System Diagrams
1620 Data Processing System

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INTRODUCTION

This manual is intended for instructional purposes. It does not replace any field machine system diagrams. The diagrams enclosed within the machine should always be used for field analysis. These diagrams are intended for use with the Customer Engineering Manual of Instruction, 1620 Data Processing System, E Level.

The system diagrams in this manual are at F level and include Floating Point Arithmetic circuits.



Plus AND Inverter Function (All input legs must be conditioned to +S level to receive a -S output level.) The line name of each input leg specifies a +S level condition.



Minus OR Inverter Function (When one or more of the input legs is at -S level, the output is at +S level.) The line name of each input leg specifies a -S level condition.



A trigger or latch is turned ON.



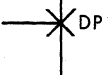
A trigger or latch is turned OFF.



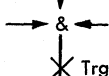
INVERTER (A -S level is inverted to a +S level, or a +S level is inverted to a -S level.)



INTEGRATOR (+48V is converted to +S level when the contact feeding the Integrator is closed. A -S level appears on the line when the contact is open.)



DRIVER, Relay Thyatron requires a +S on both inputs.



This symbol is used where two or three conditions (+S) are necessary to turn an AND Latch on or off. It represents an internal circuit within the latch rather than an external AND block.



SAMPLE PULSE GENERATOR (Provides a + output pulse for setting AC triggers. Requires a + pulse with a + gate to "fire".)



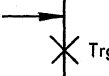
EXCLUSIVE OR (Like inputs produce a +S output. Unlike inputs produce a -S output.)



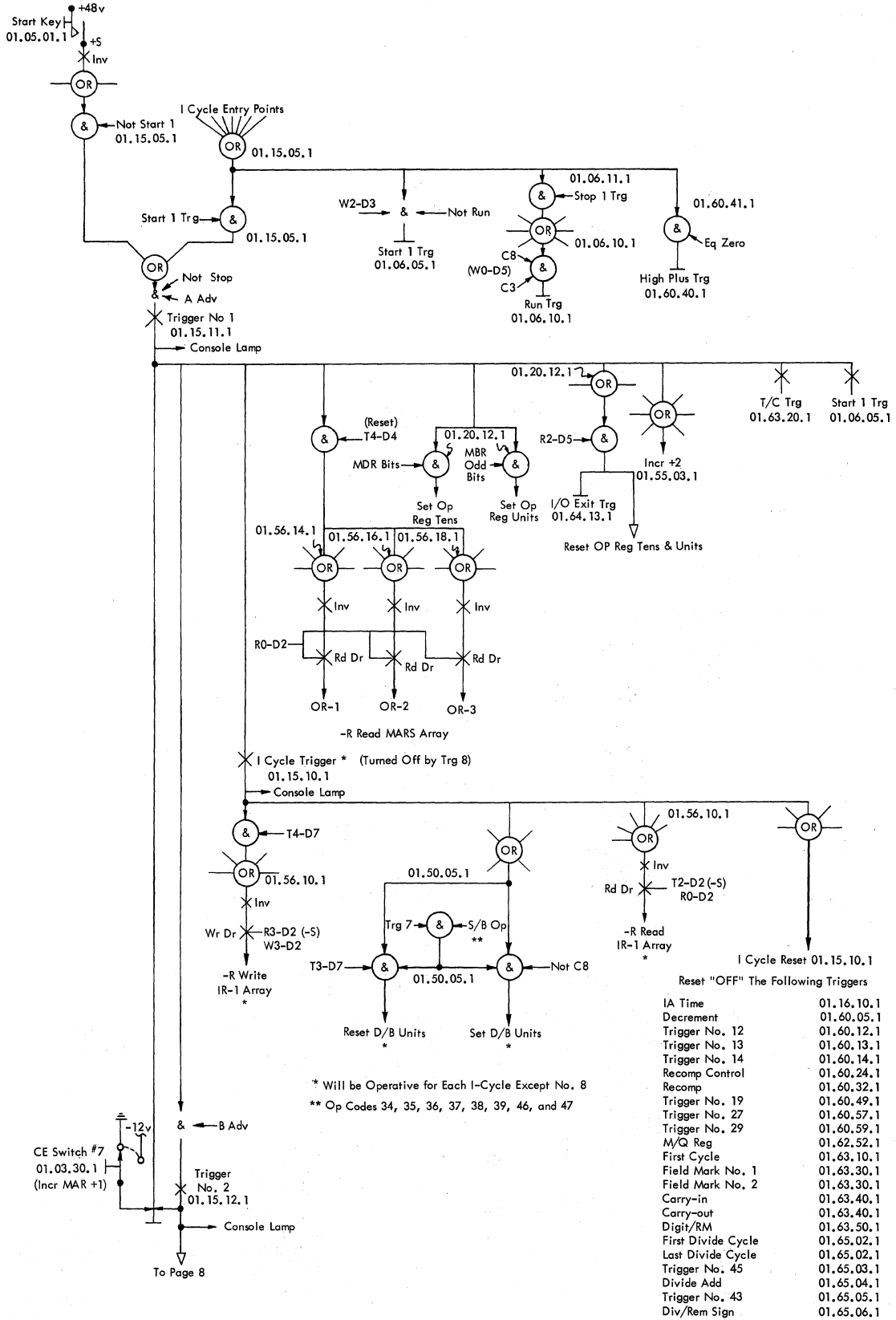
This symbol represents a non-inverting DOT AND emitter follower (AND circuit). Two +S inputs produce a +S output.

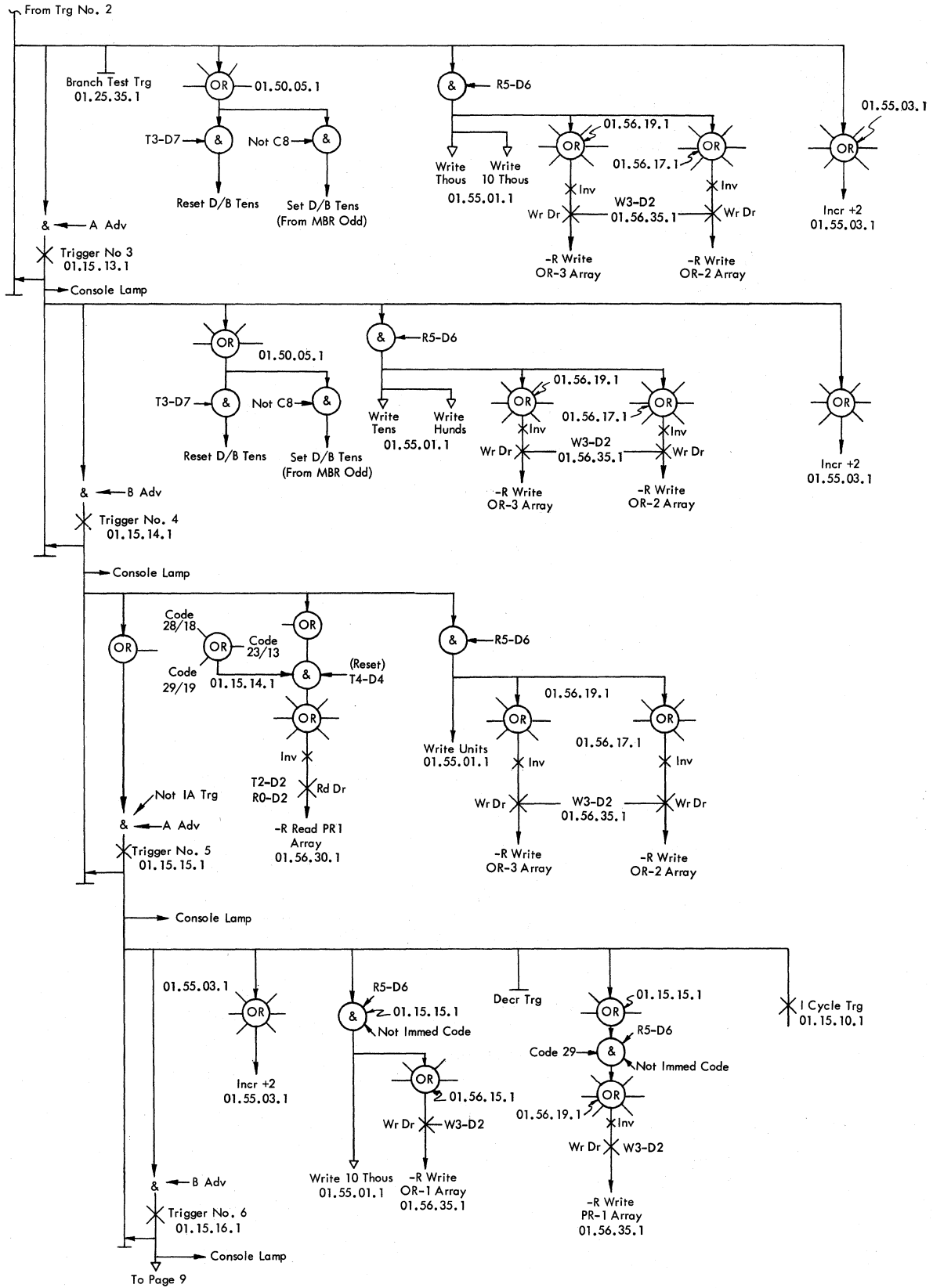


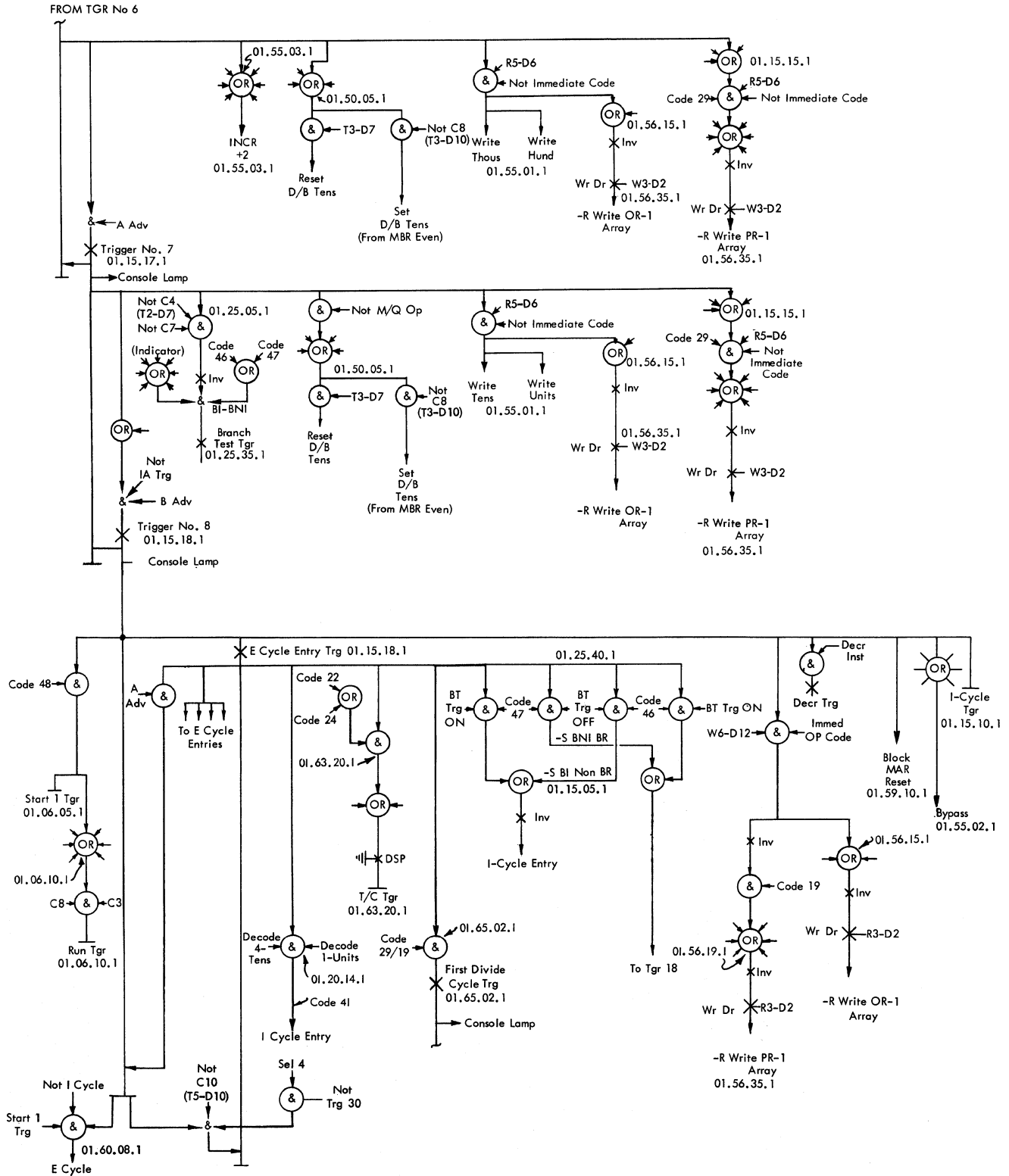
This symbol represents a non-inverting DOT OR emitter follower (OR circuit). One or Two -S inputs produce a -S output.

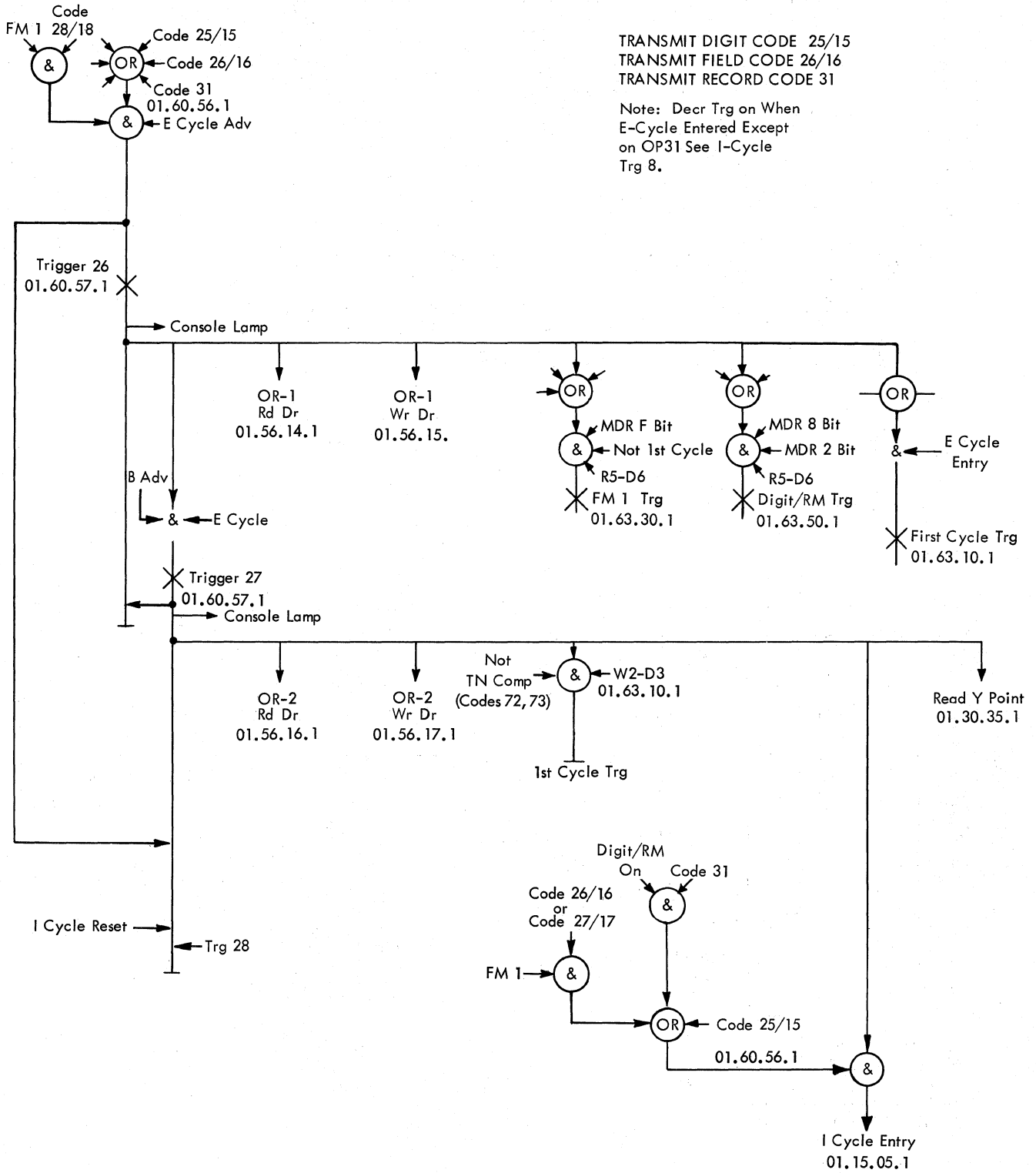


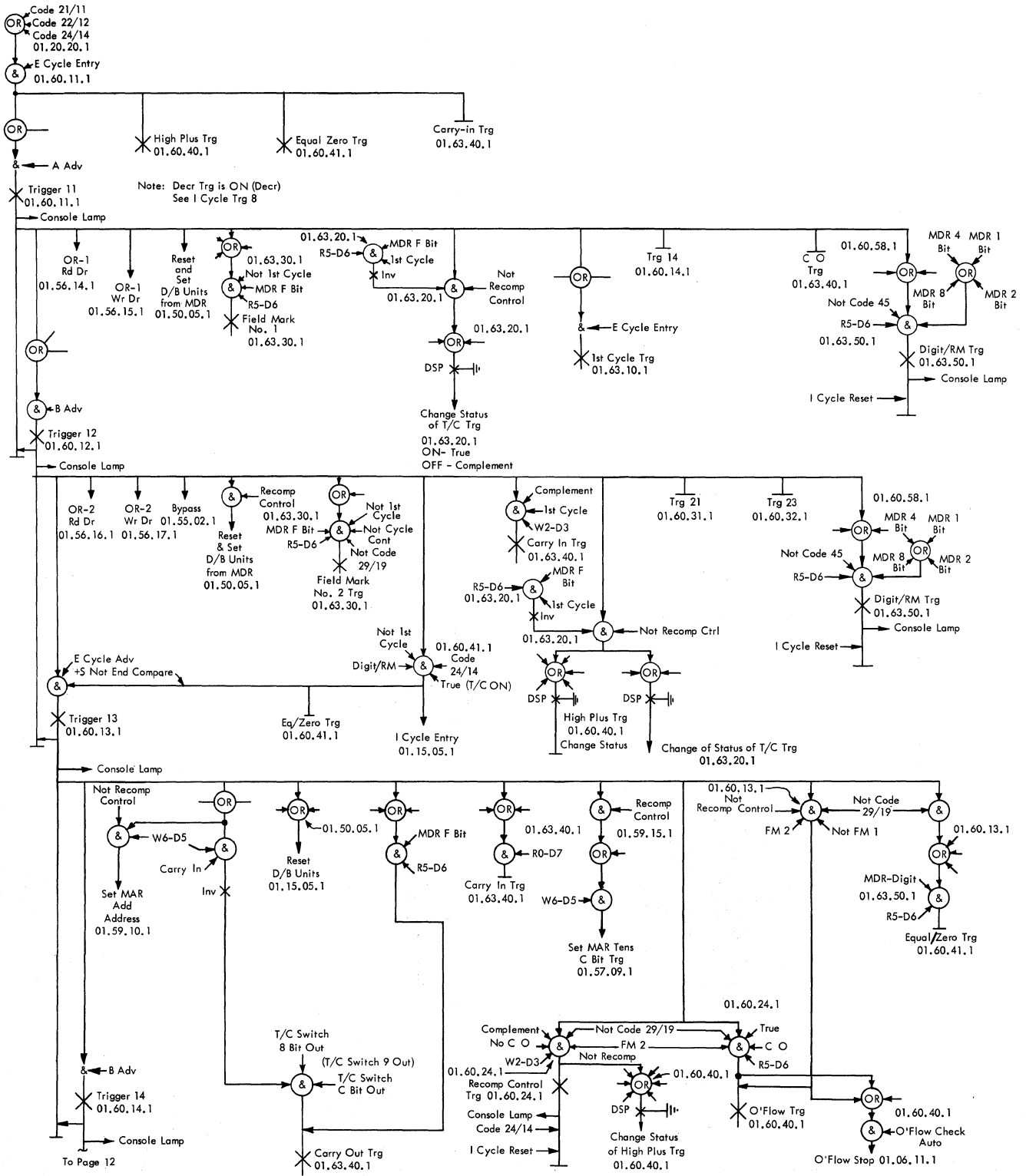
This symbol represents an OR turn on of a Latch. It indicates the associated circuits of a Latch, Extenders etc.





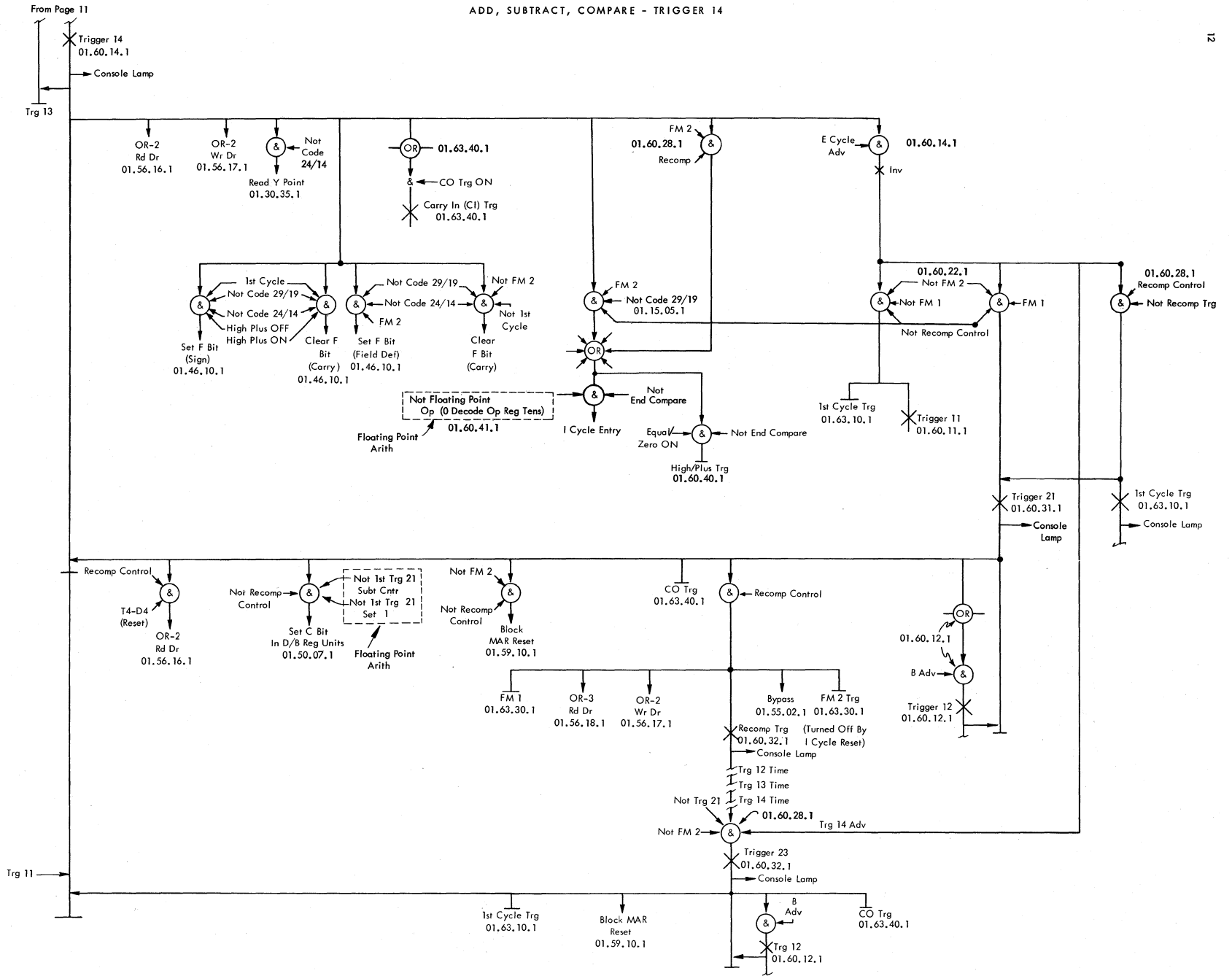




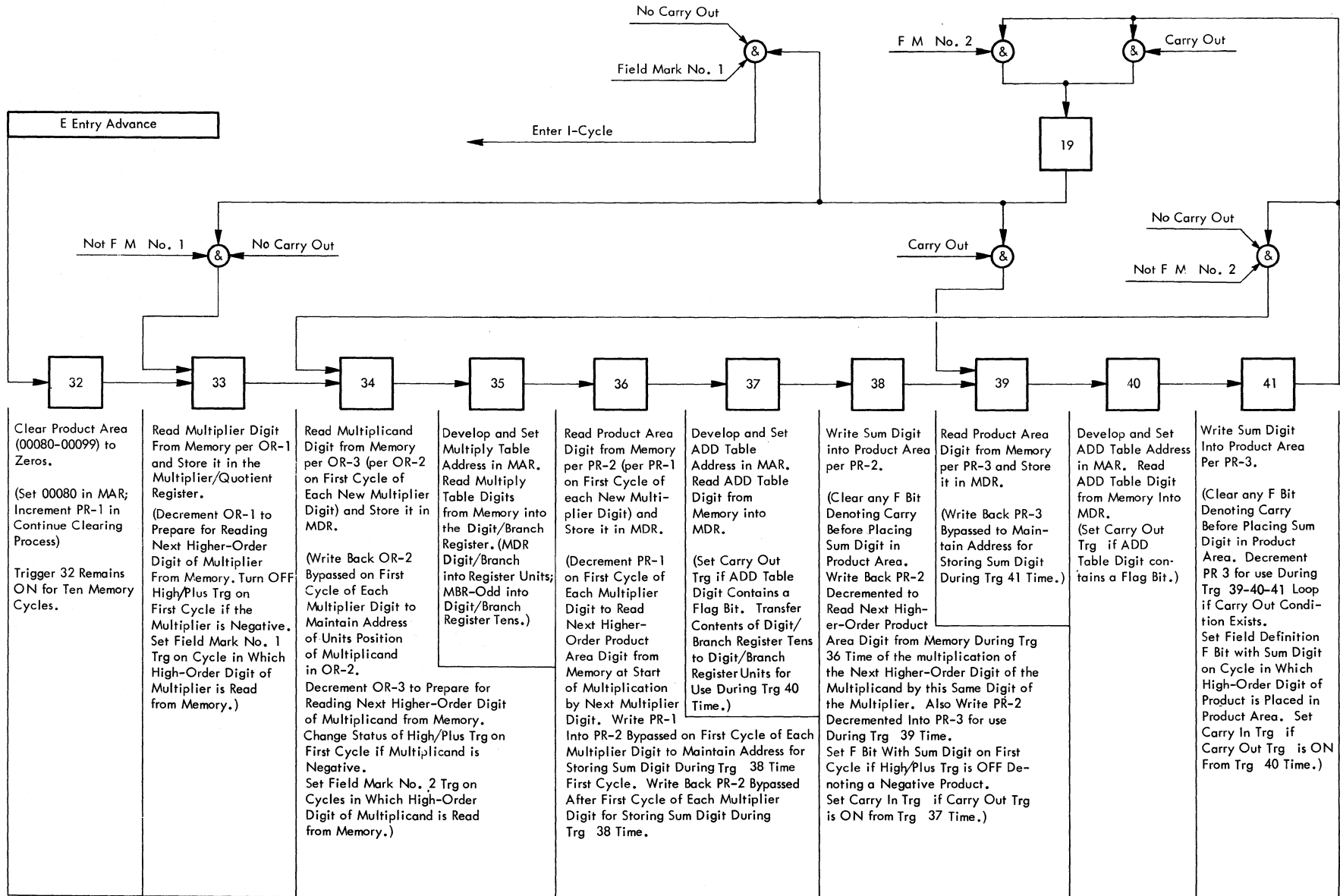


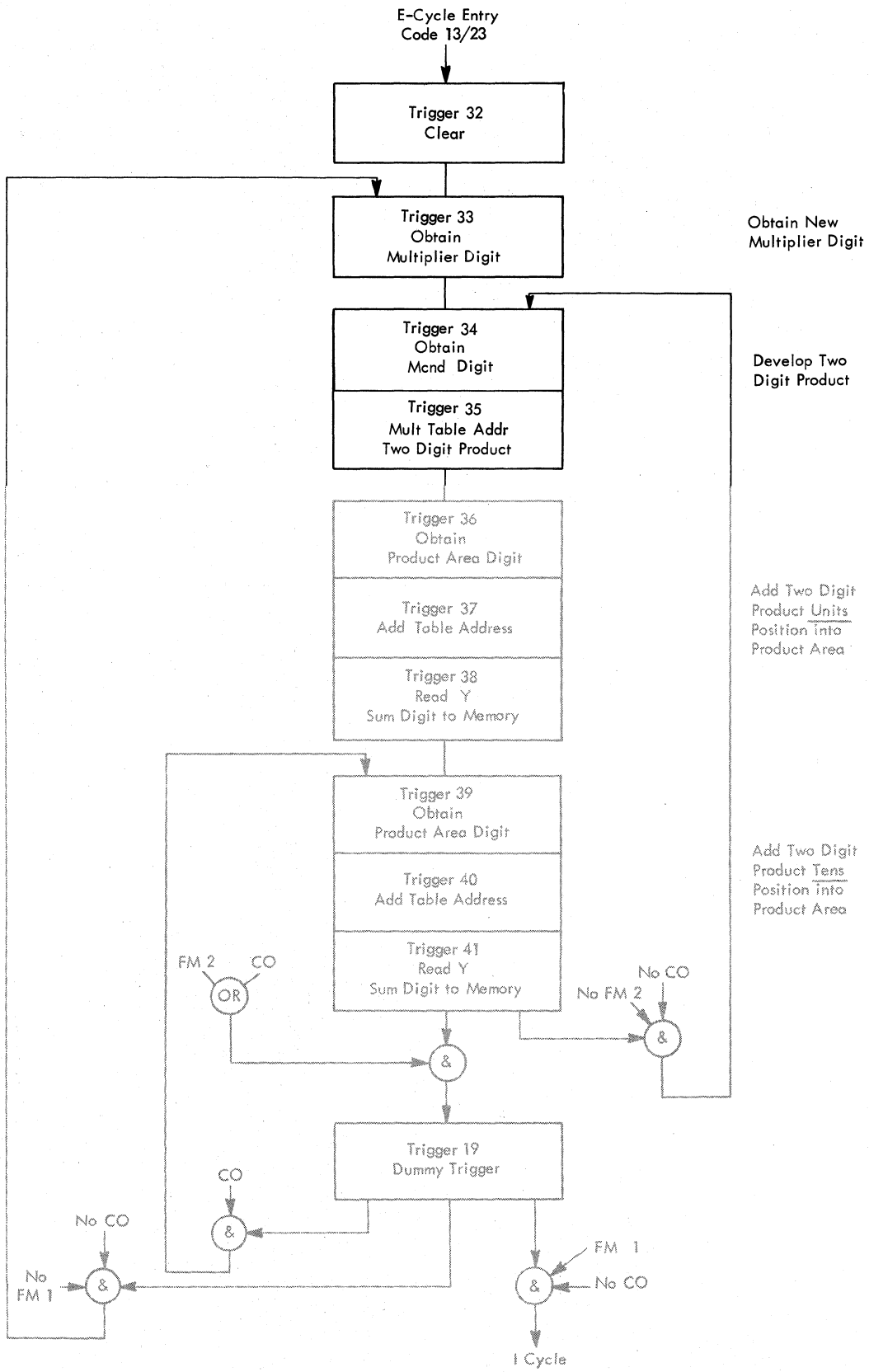
To Page 12

ADD, SUBTRACT, COMPARE - TRIGGER 14

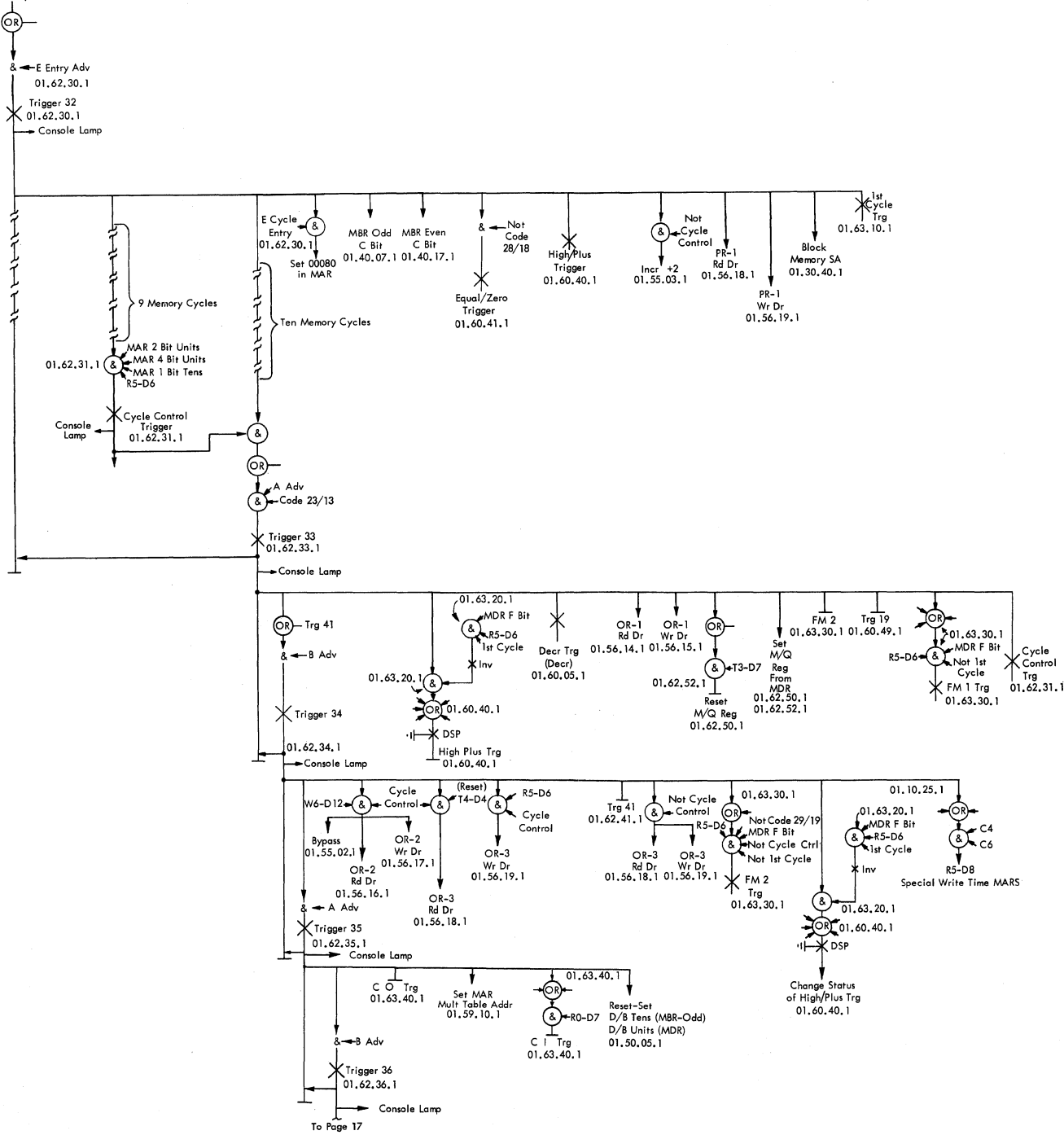


MULTIPLY FLOW DIAGRAM

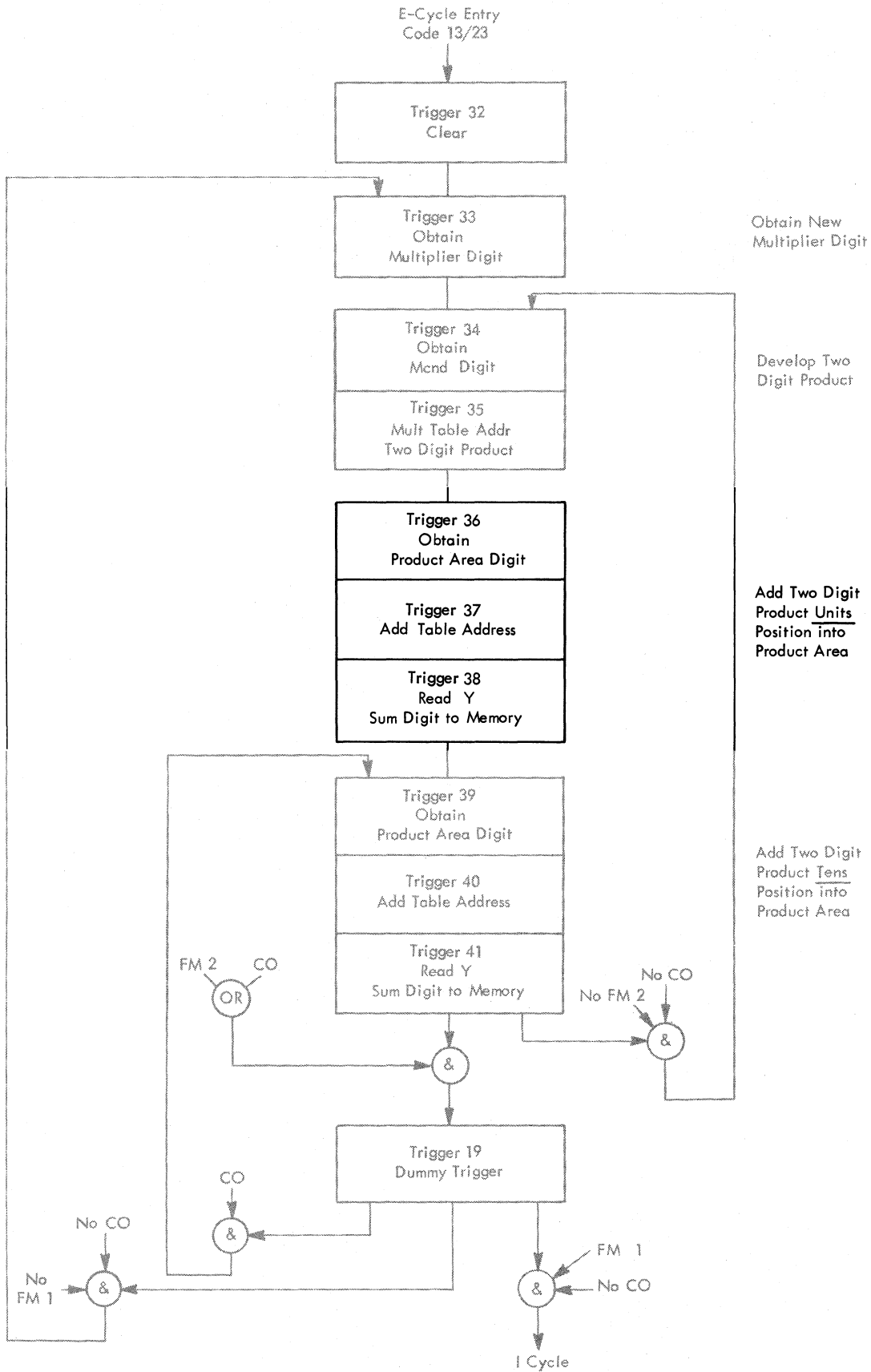




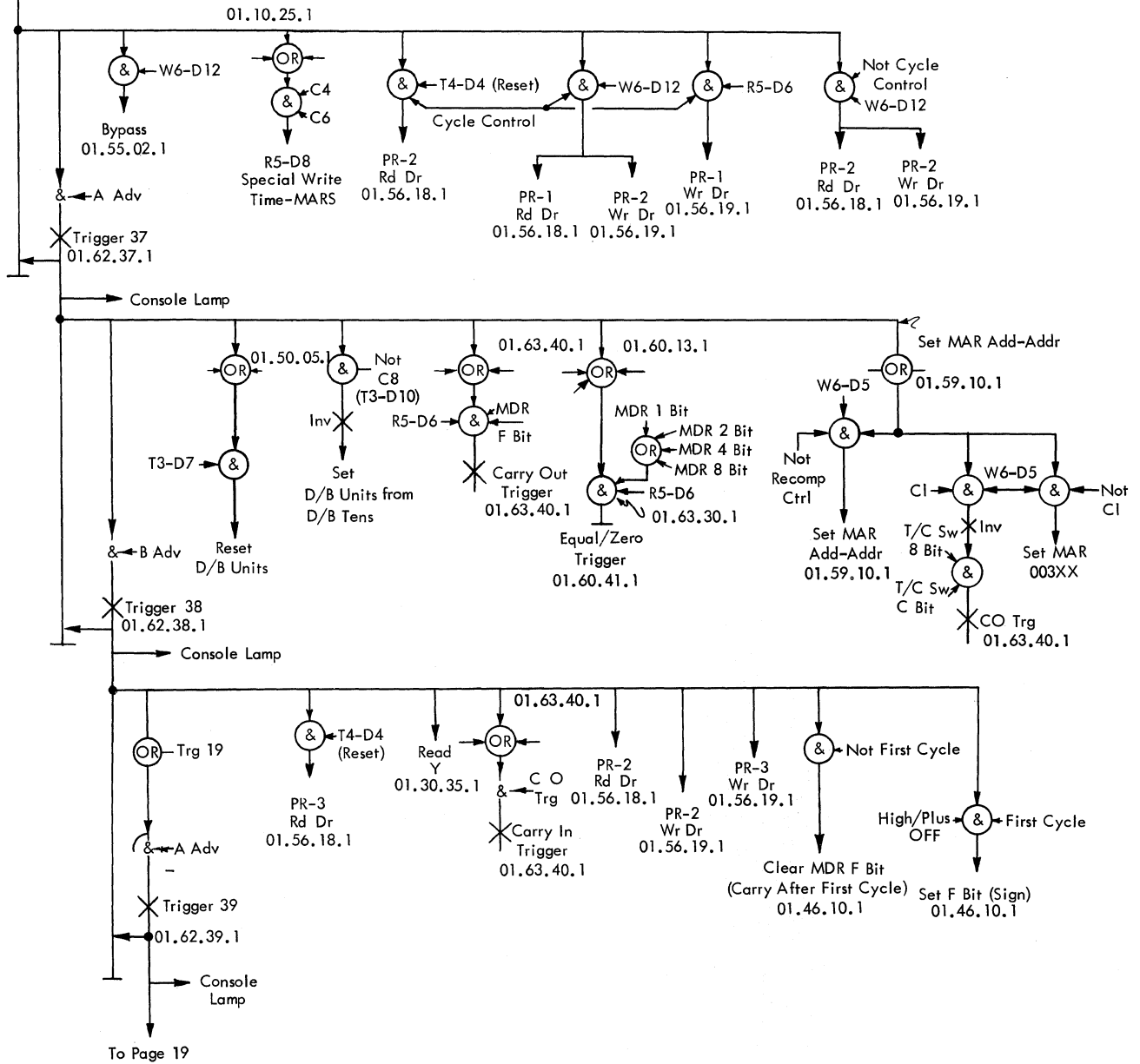
Code 23/13



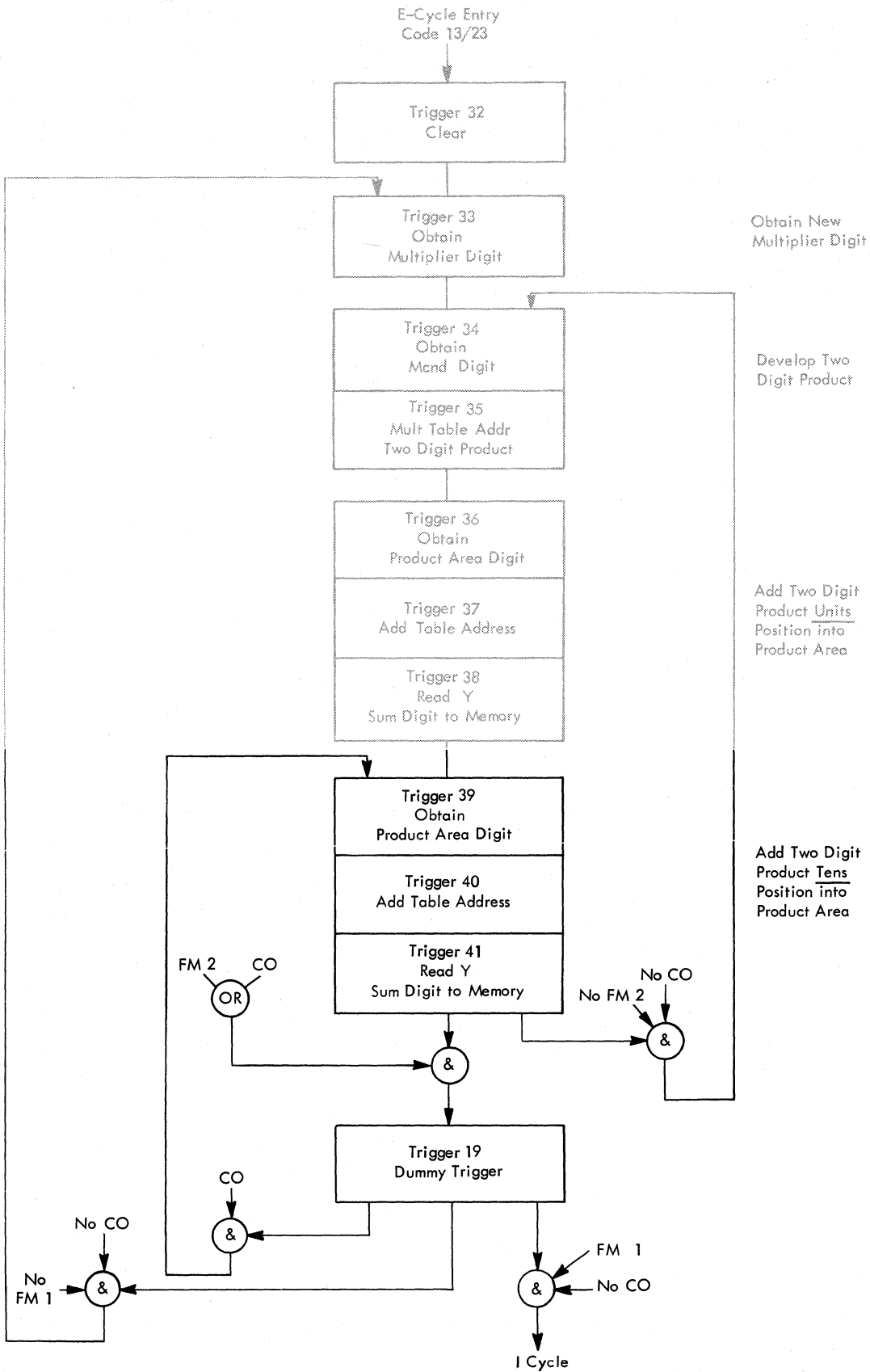
To Page 17



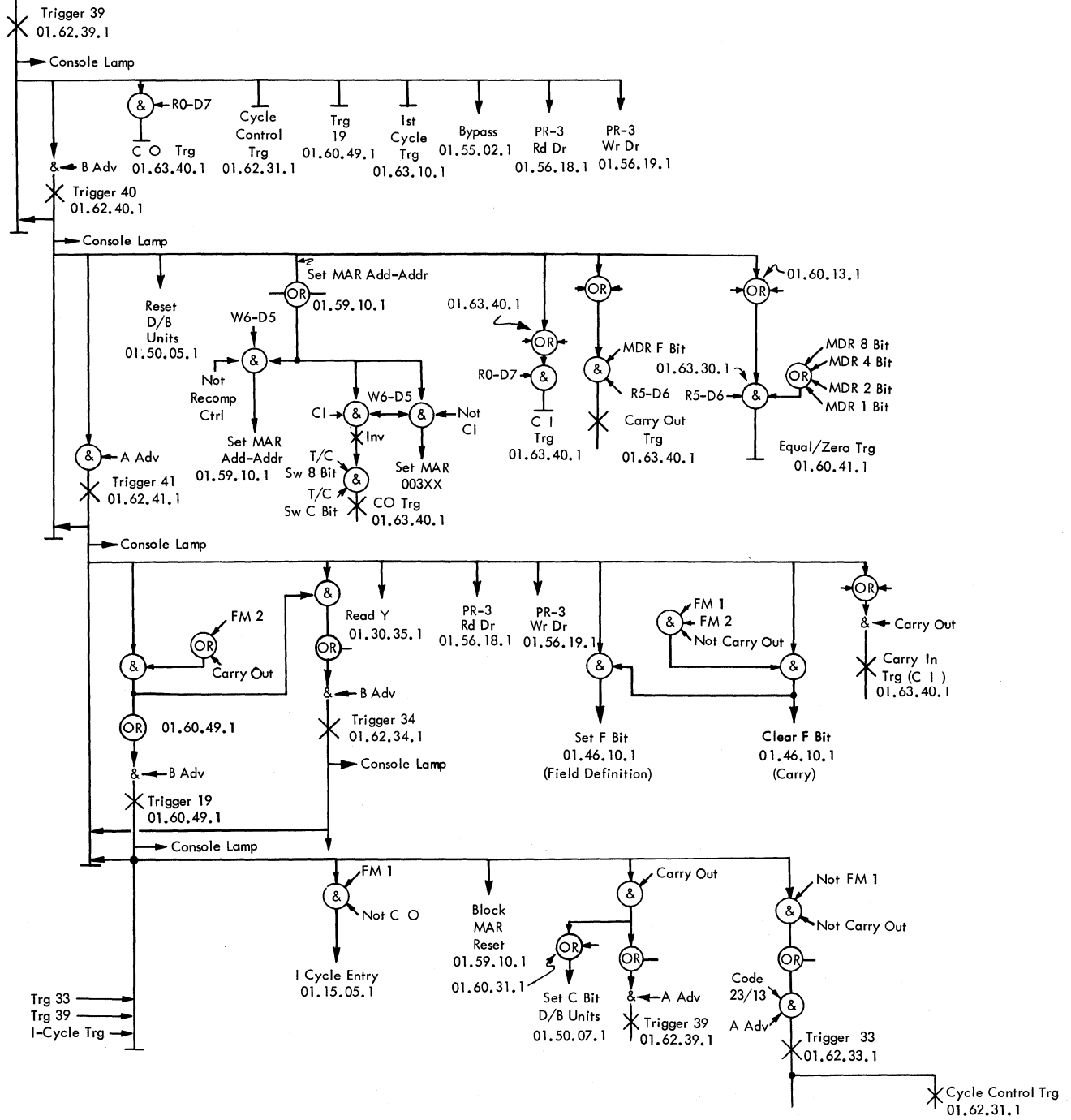
From Page 15

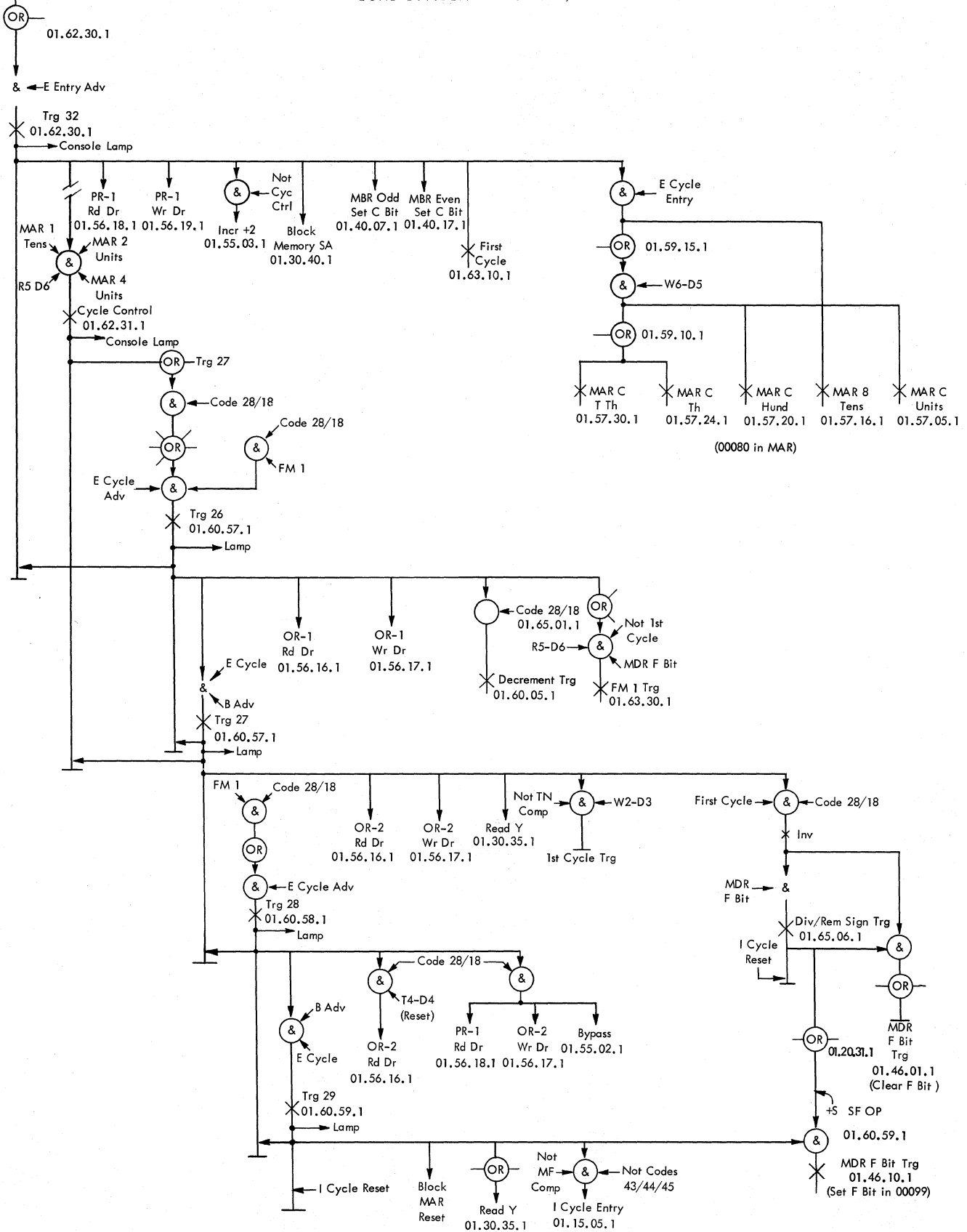


To Page 19

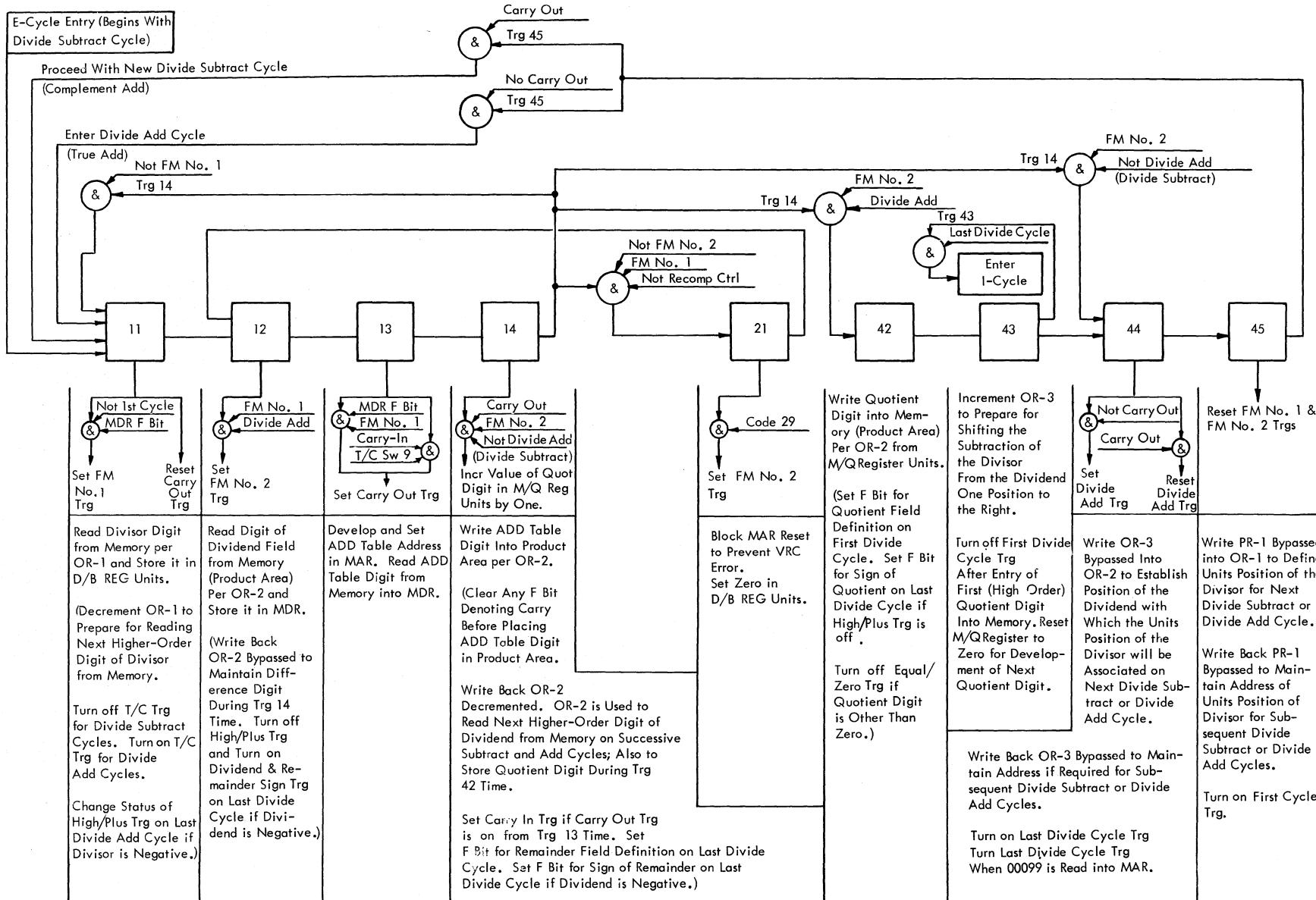


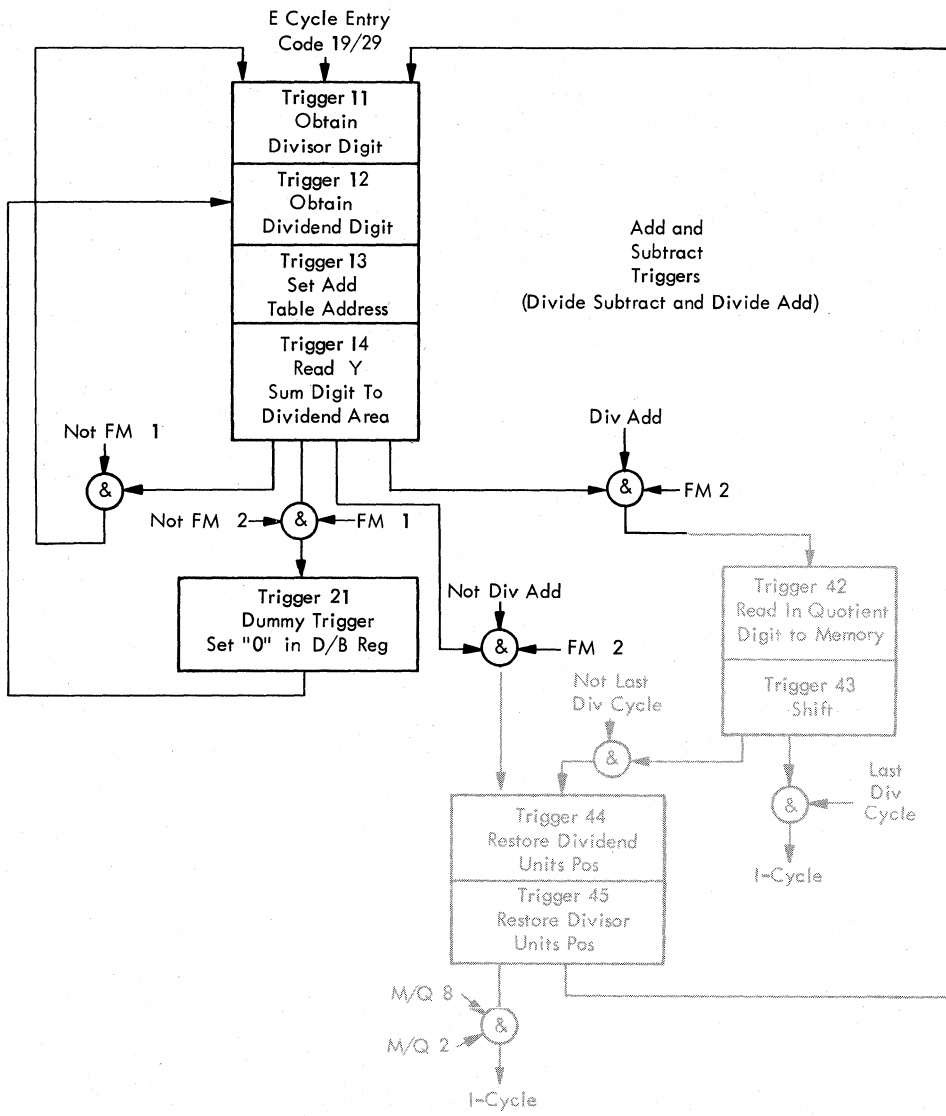
From Page 17

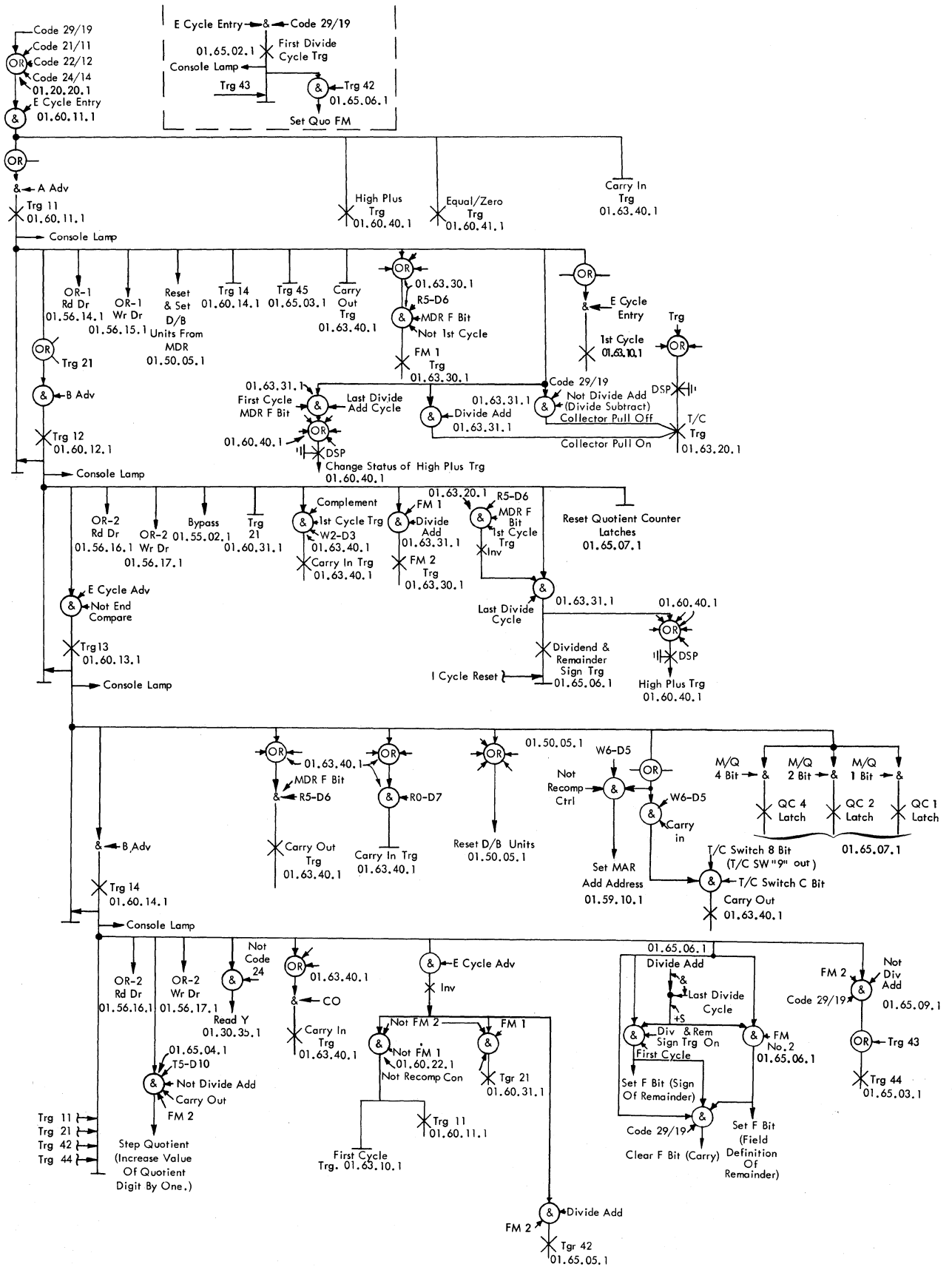


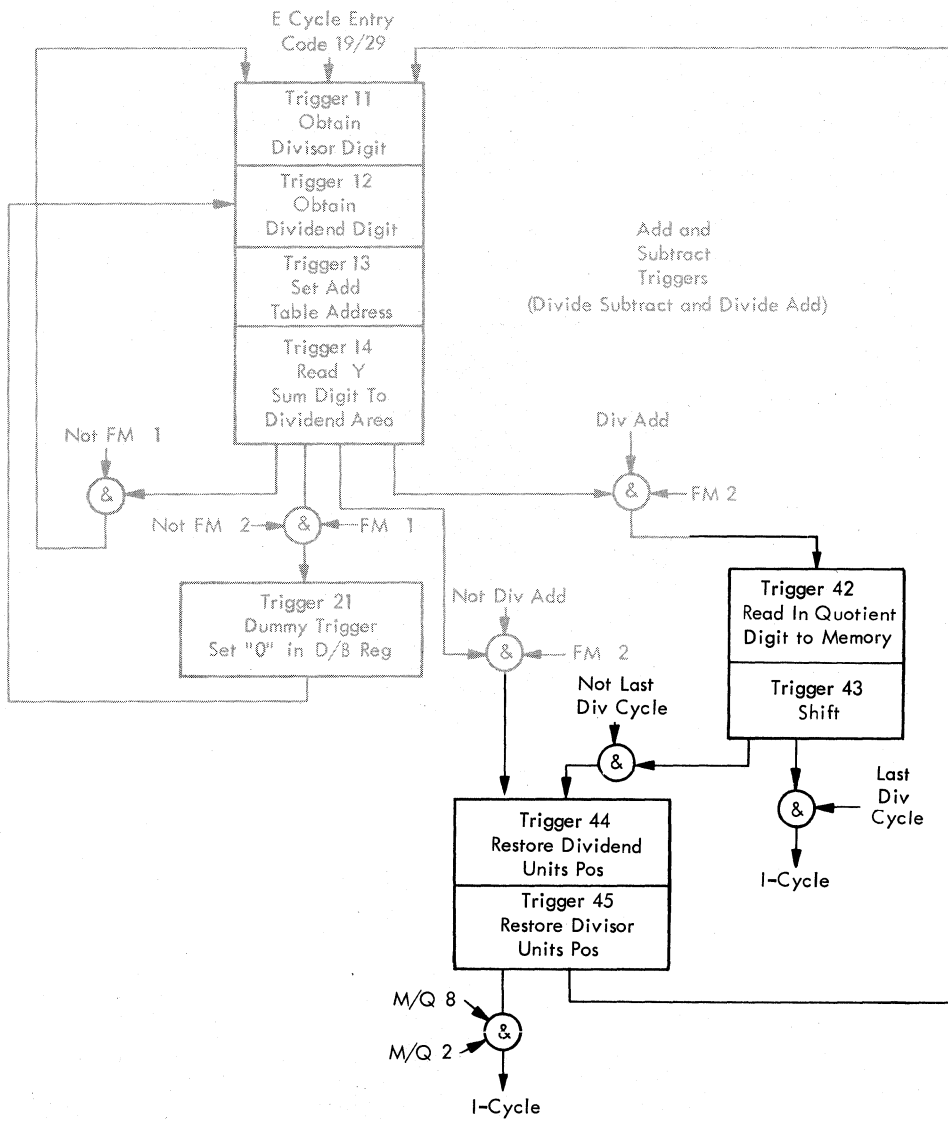


DIVIDE FLOW DIAGRAM

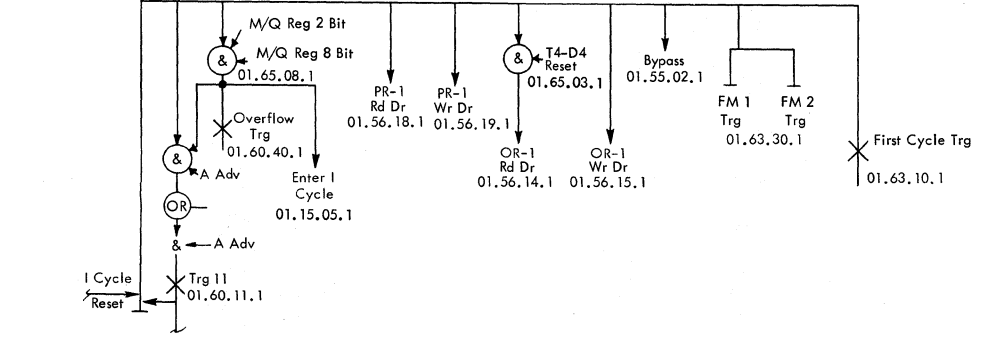
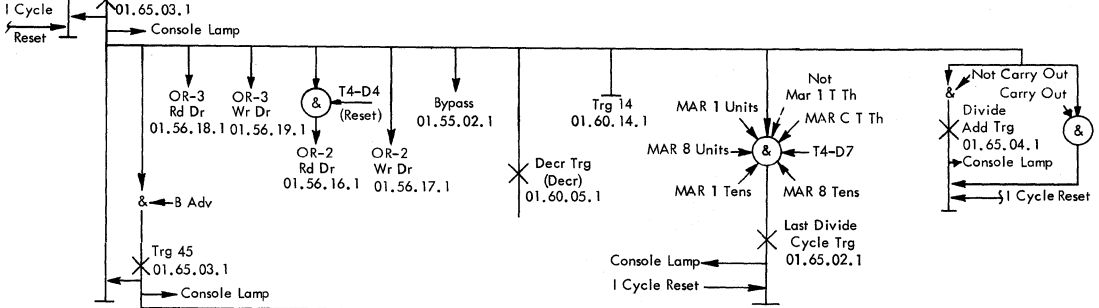
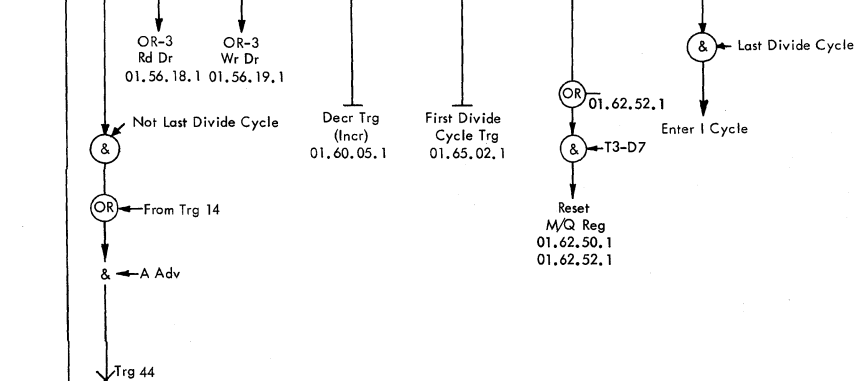
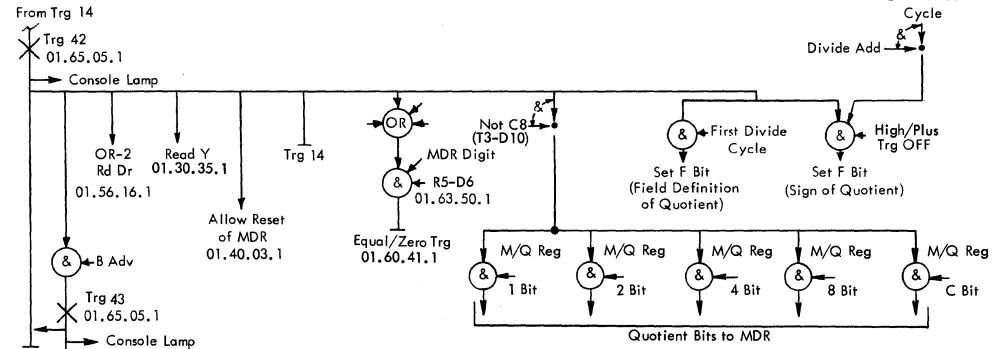
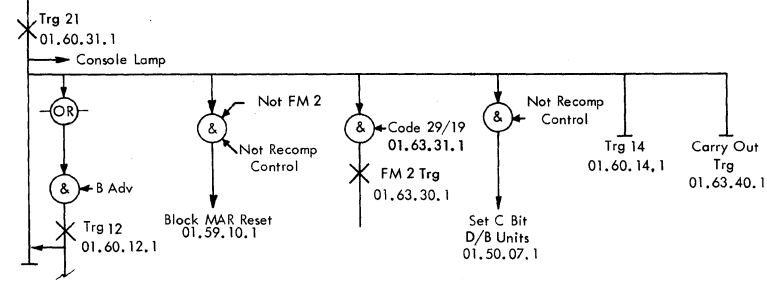


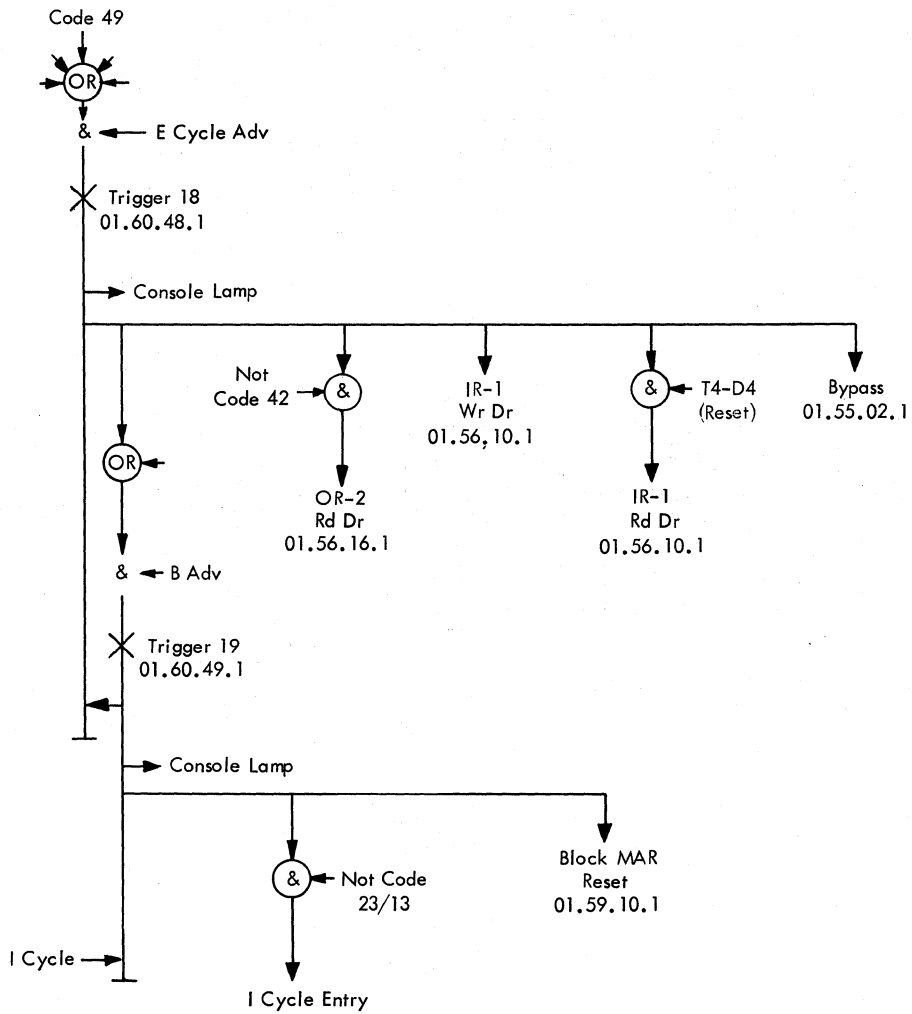


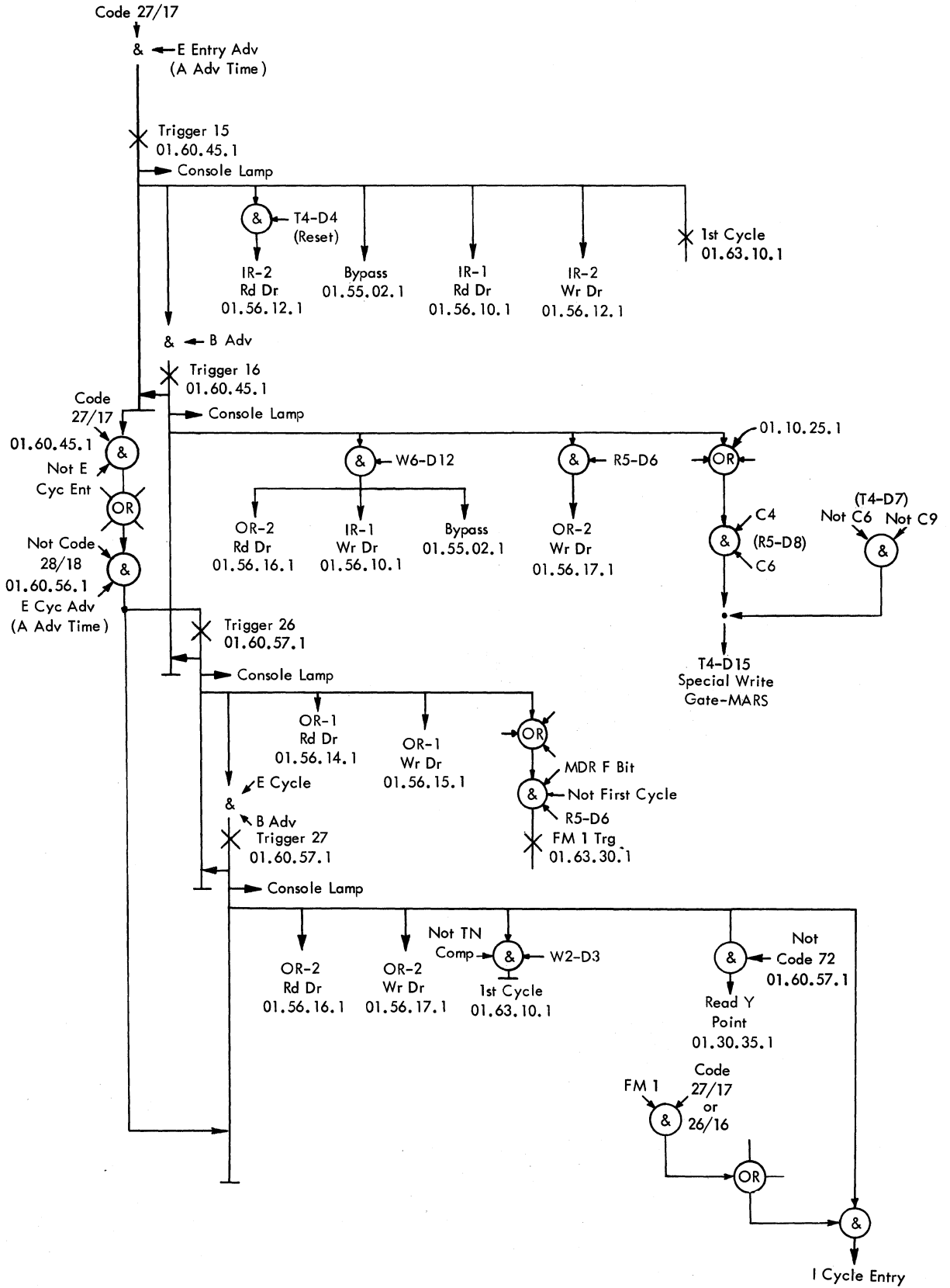


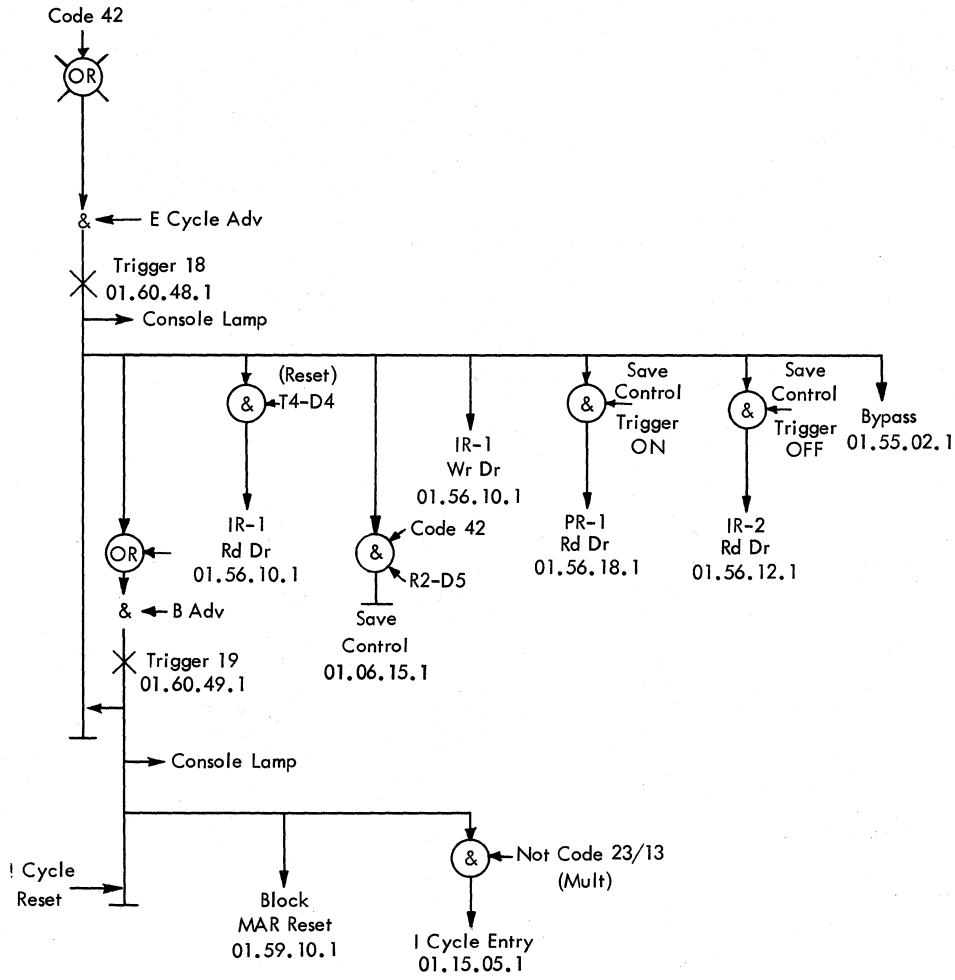


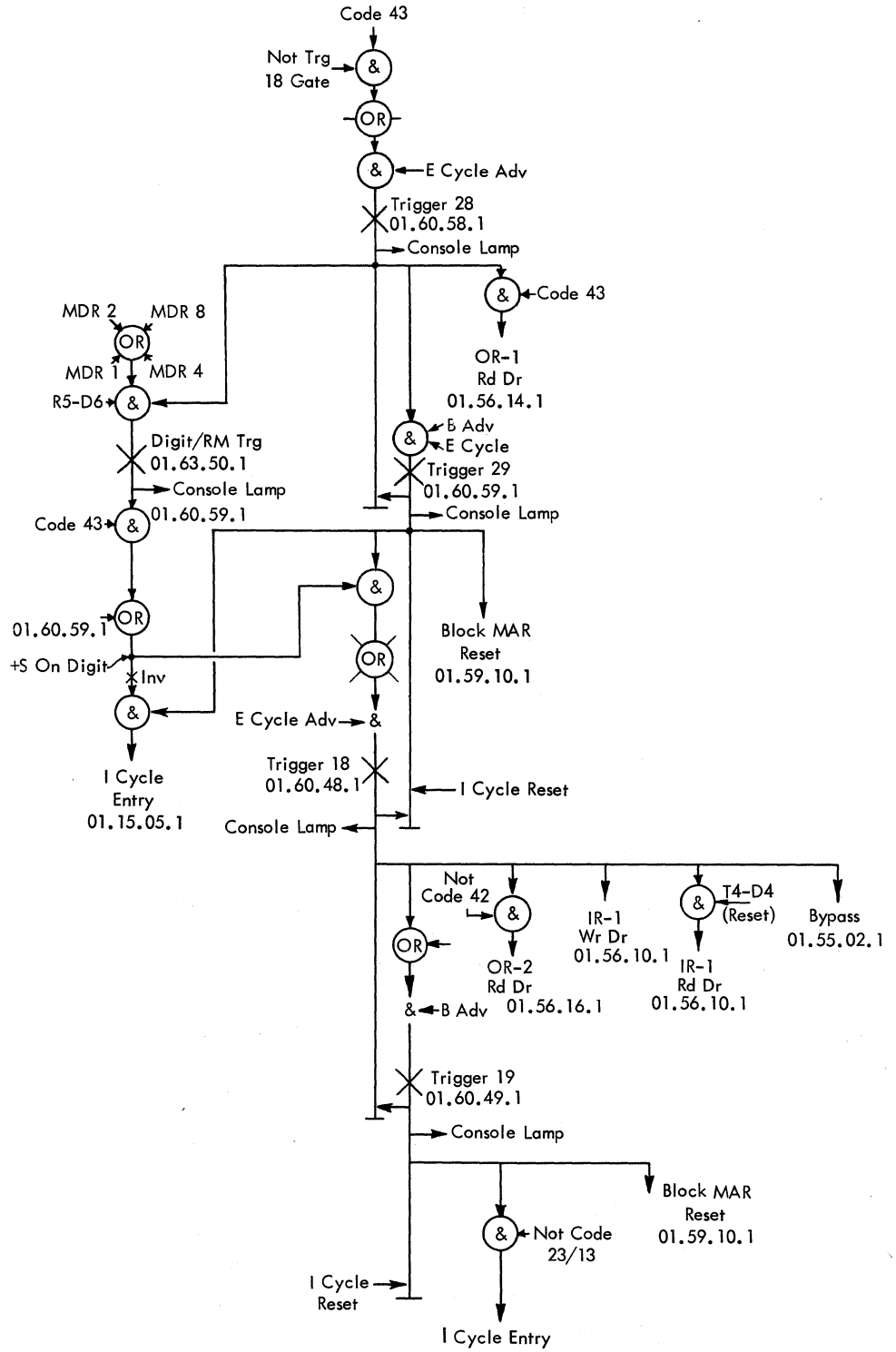
FROM Trg Page 23

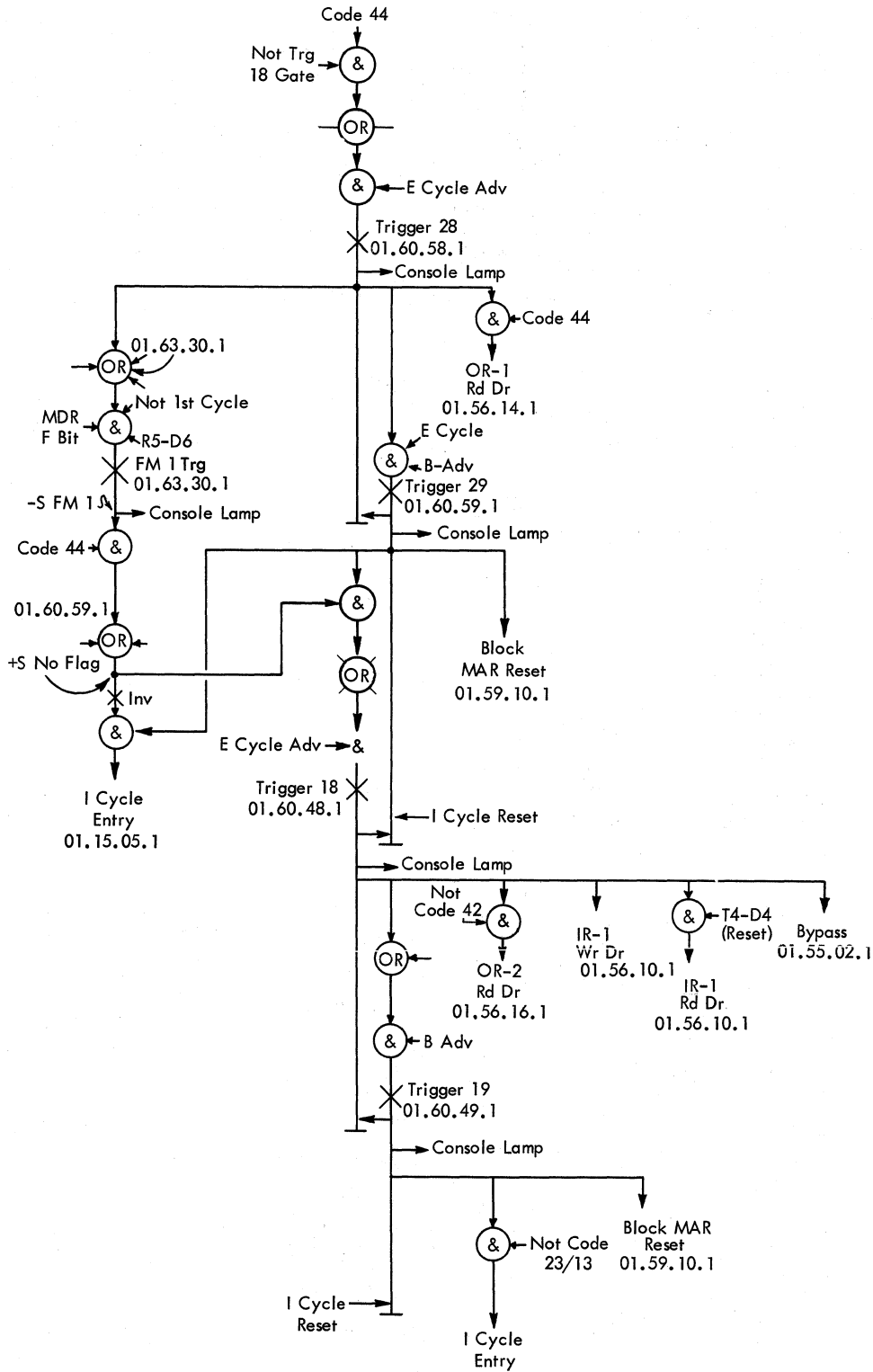


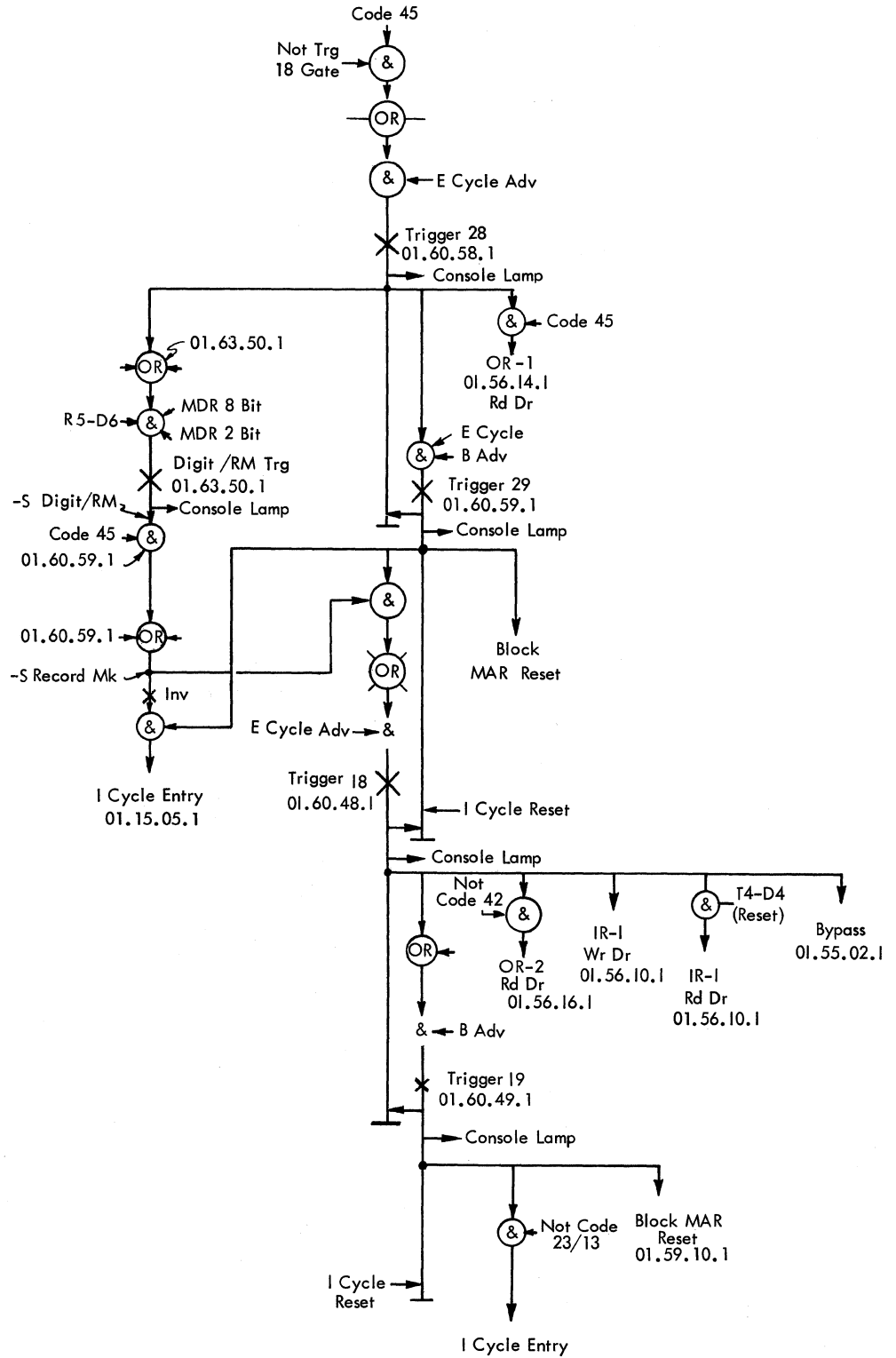




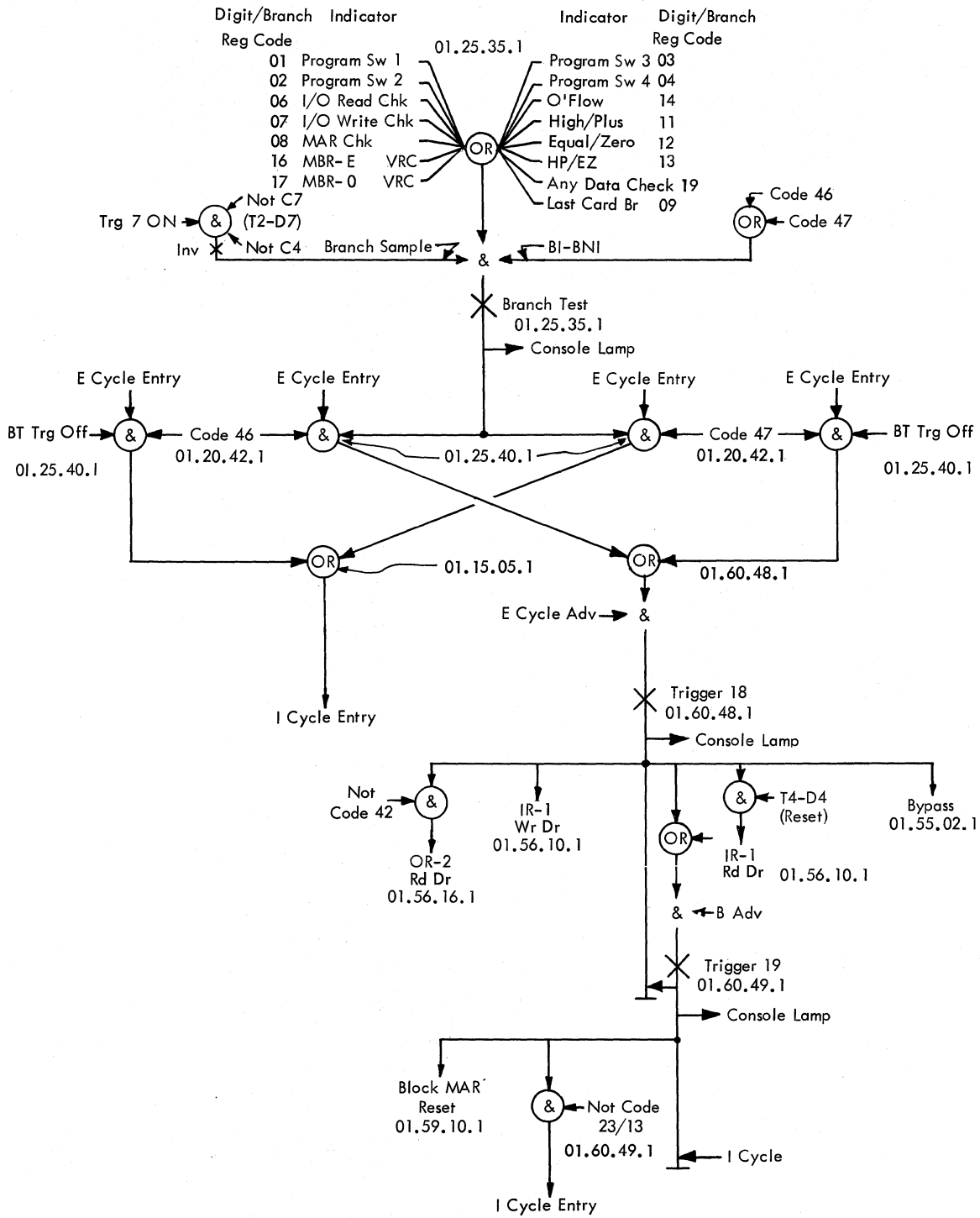


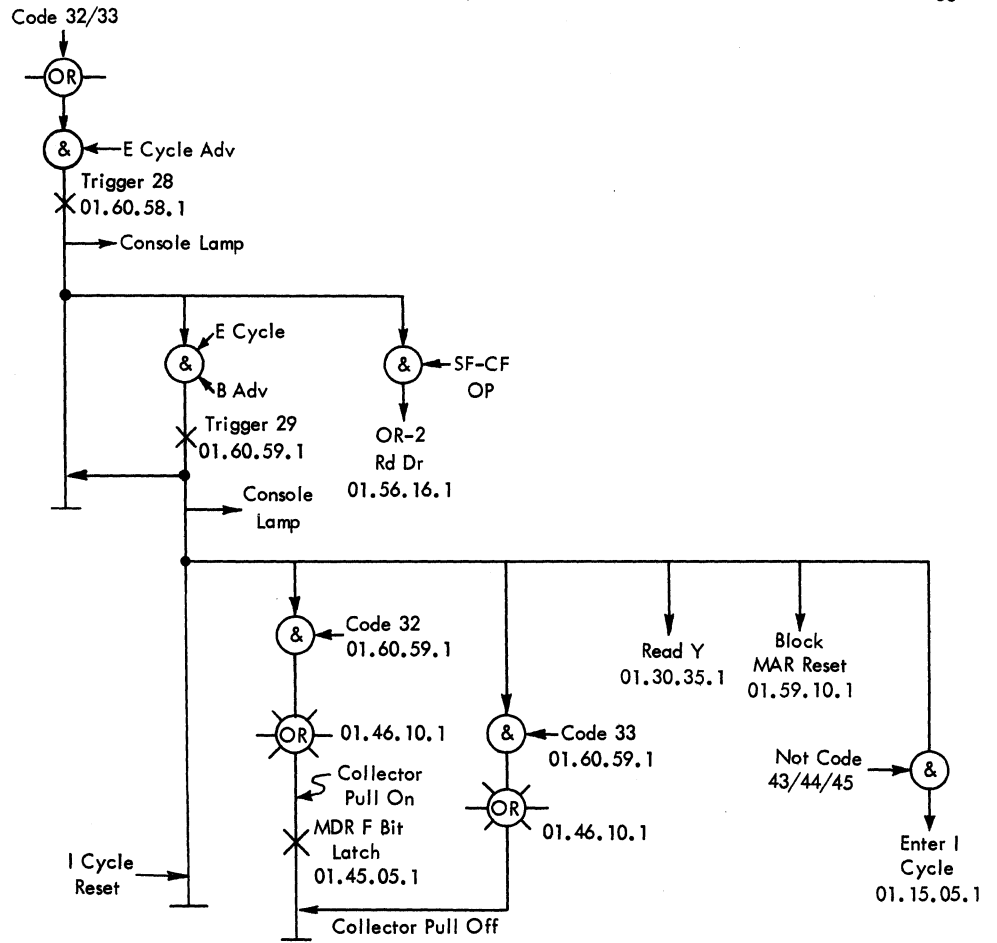


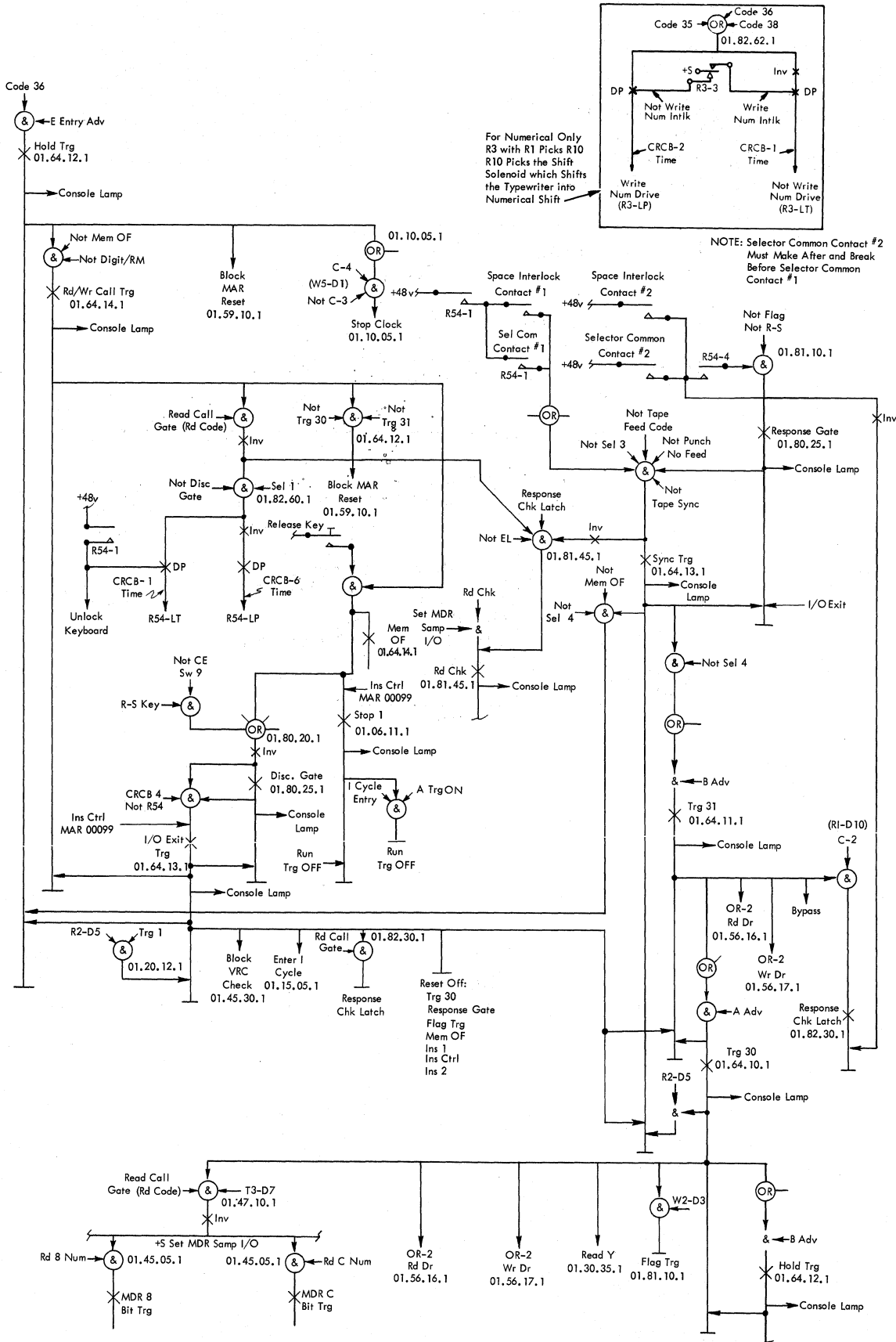




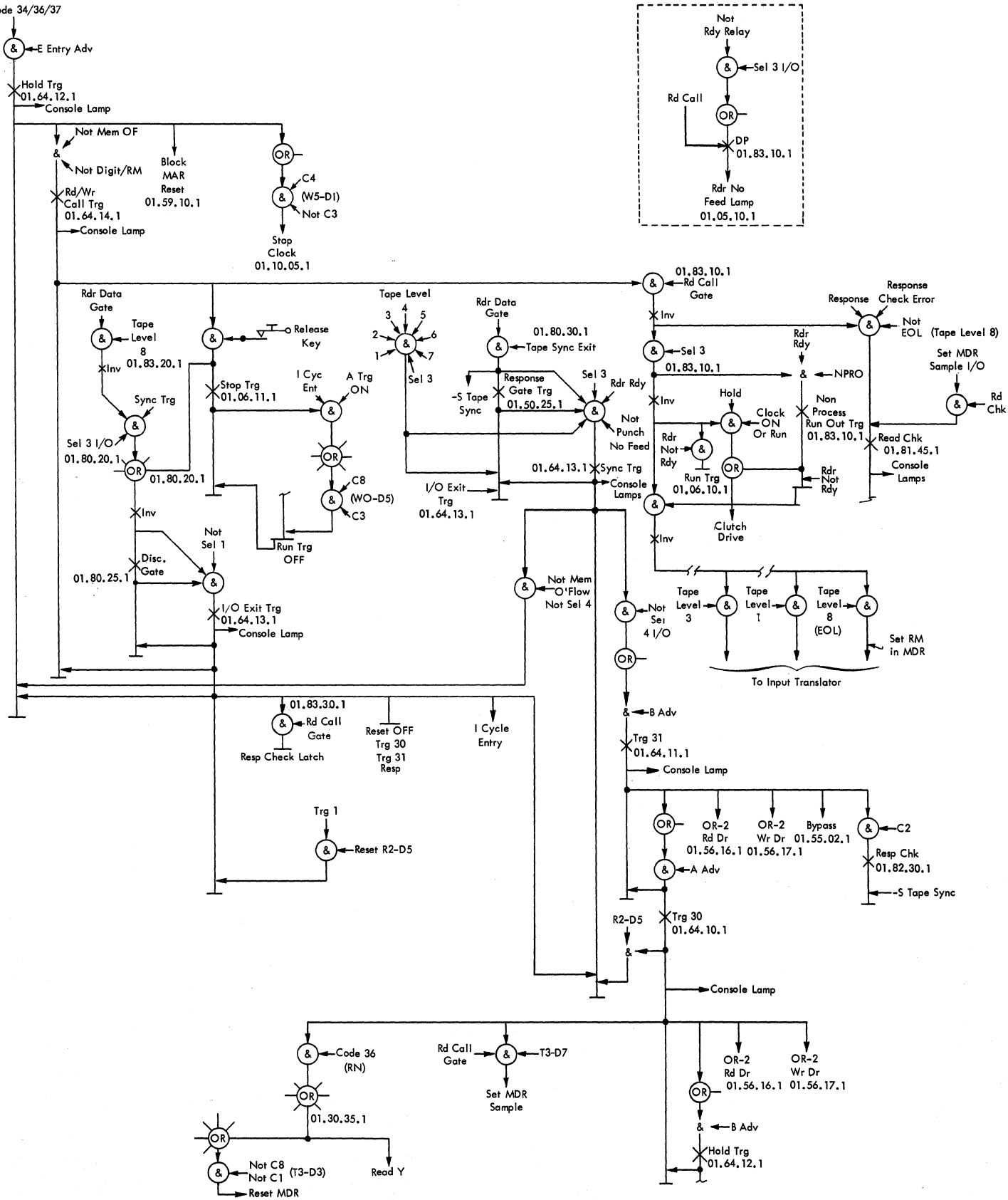
BRANCH INDICATOR, BRANCH NO INDICATOR



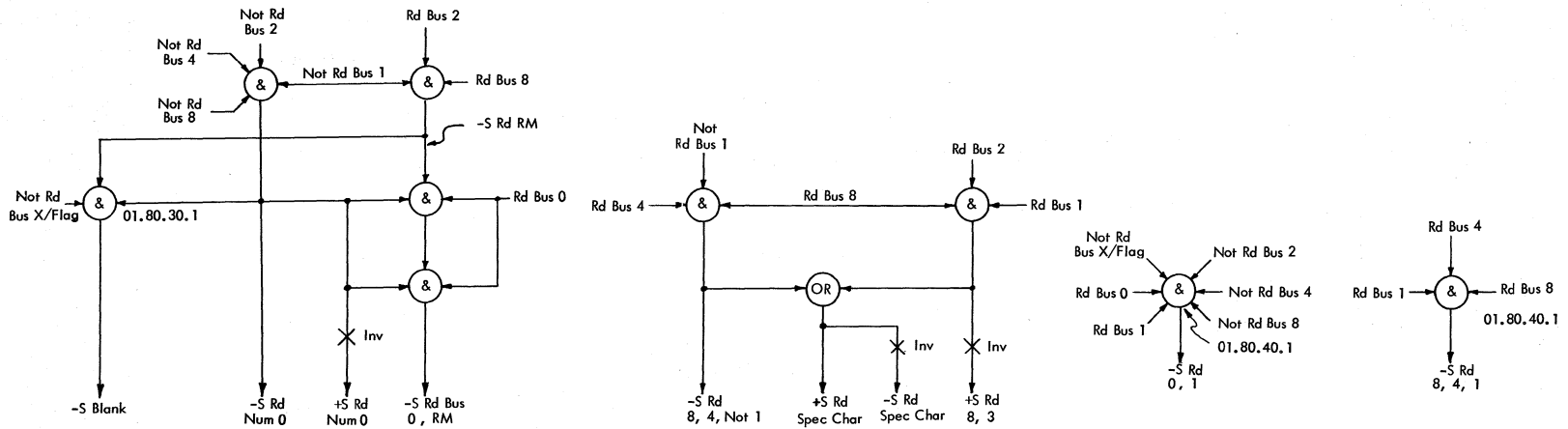
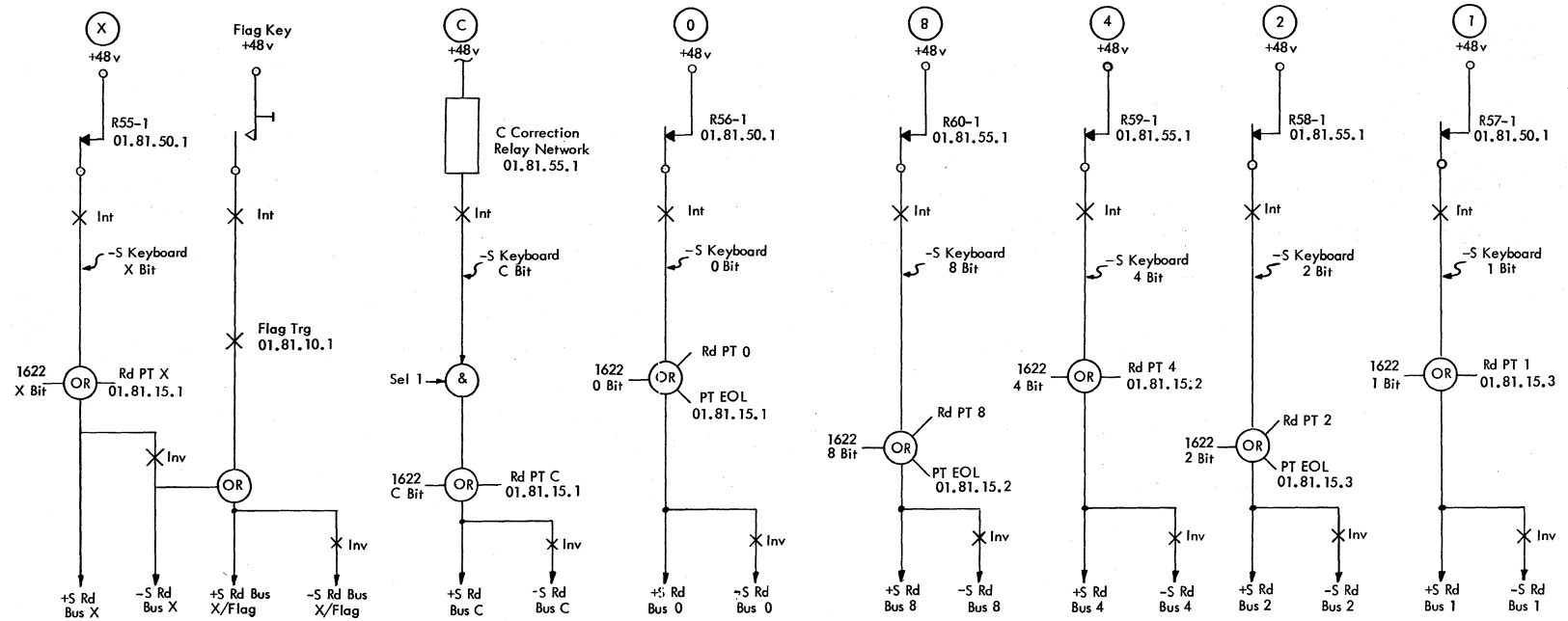




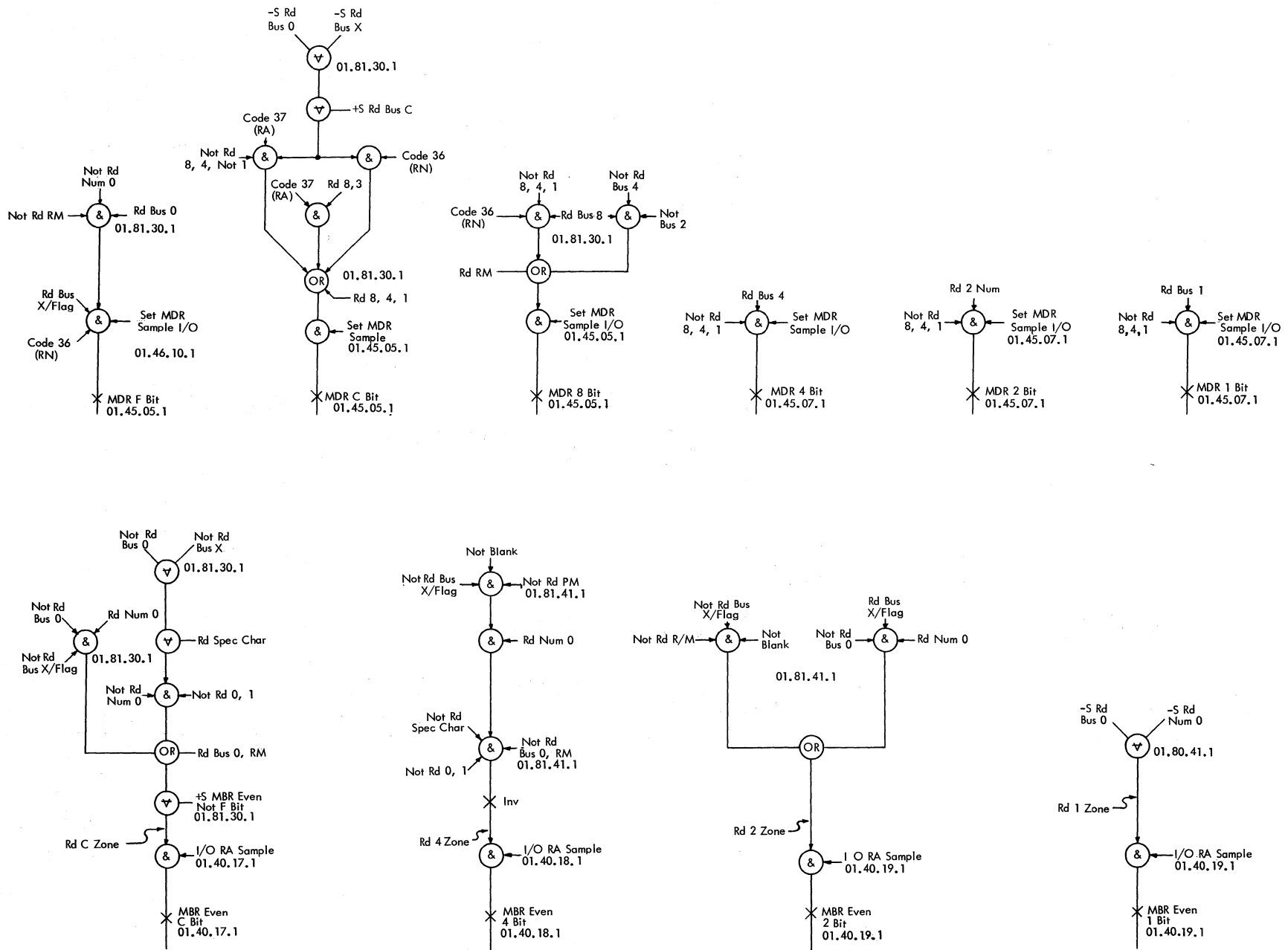
Code 34/36/37



INPUT TRANSLATOR

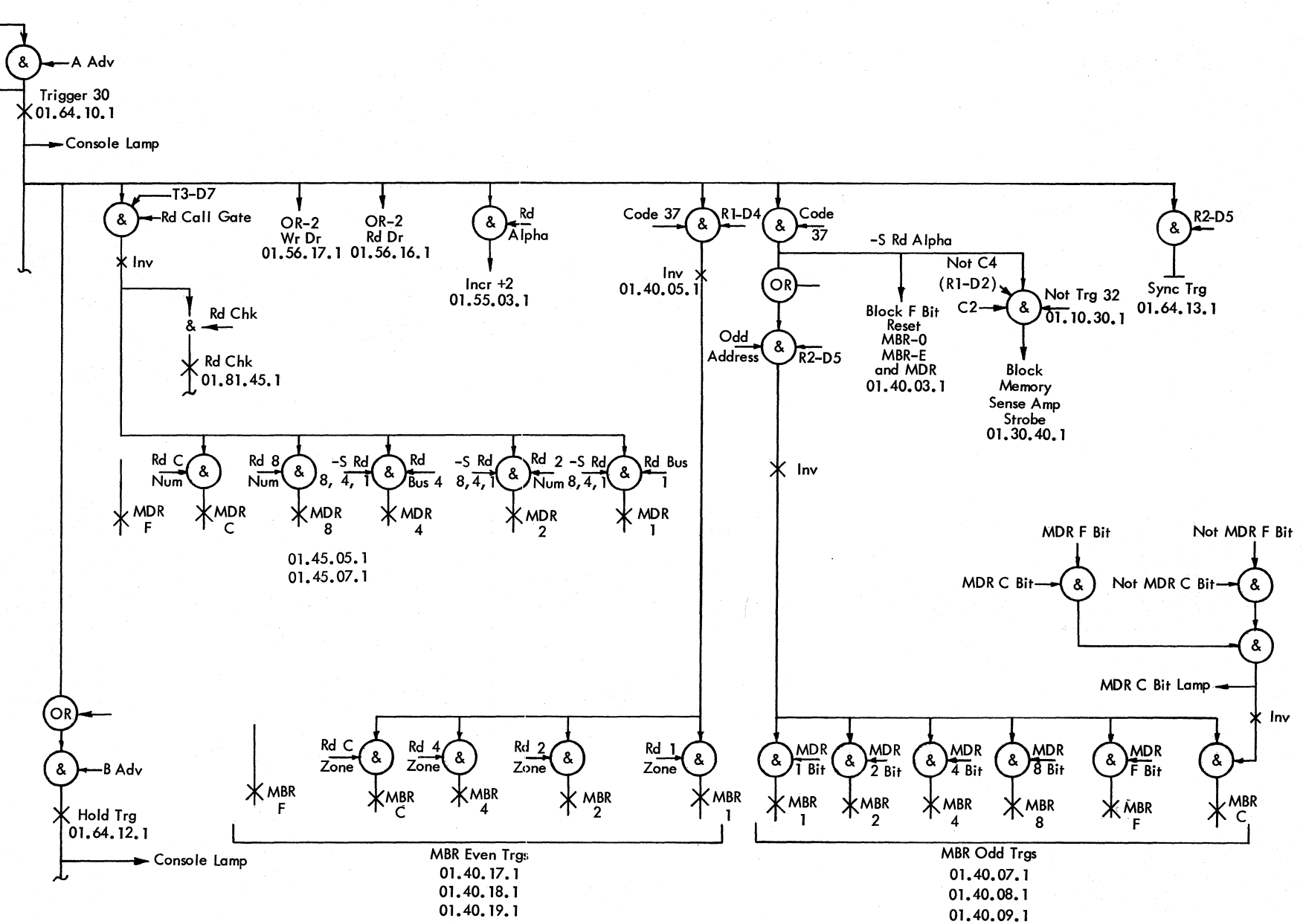


INPUT TRANSLATOR

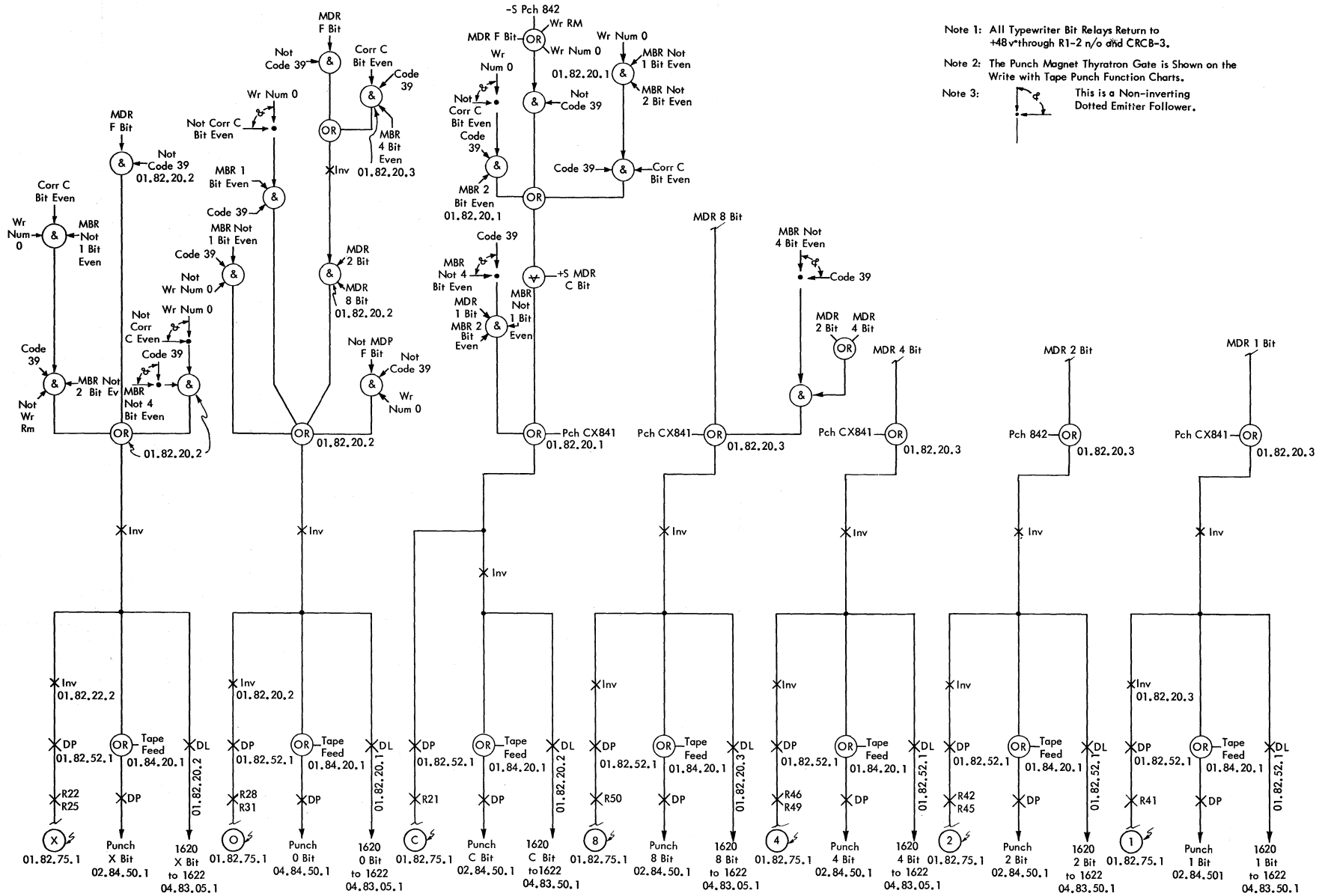



READ ALPHAMERICALLY - CODE 37 (37PPPPQ03QQ)

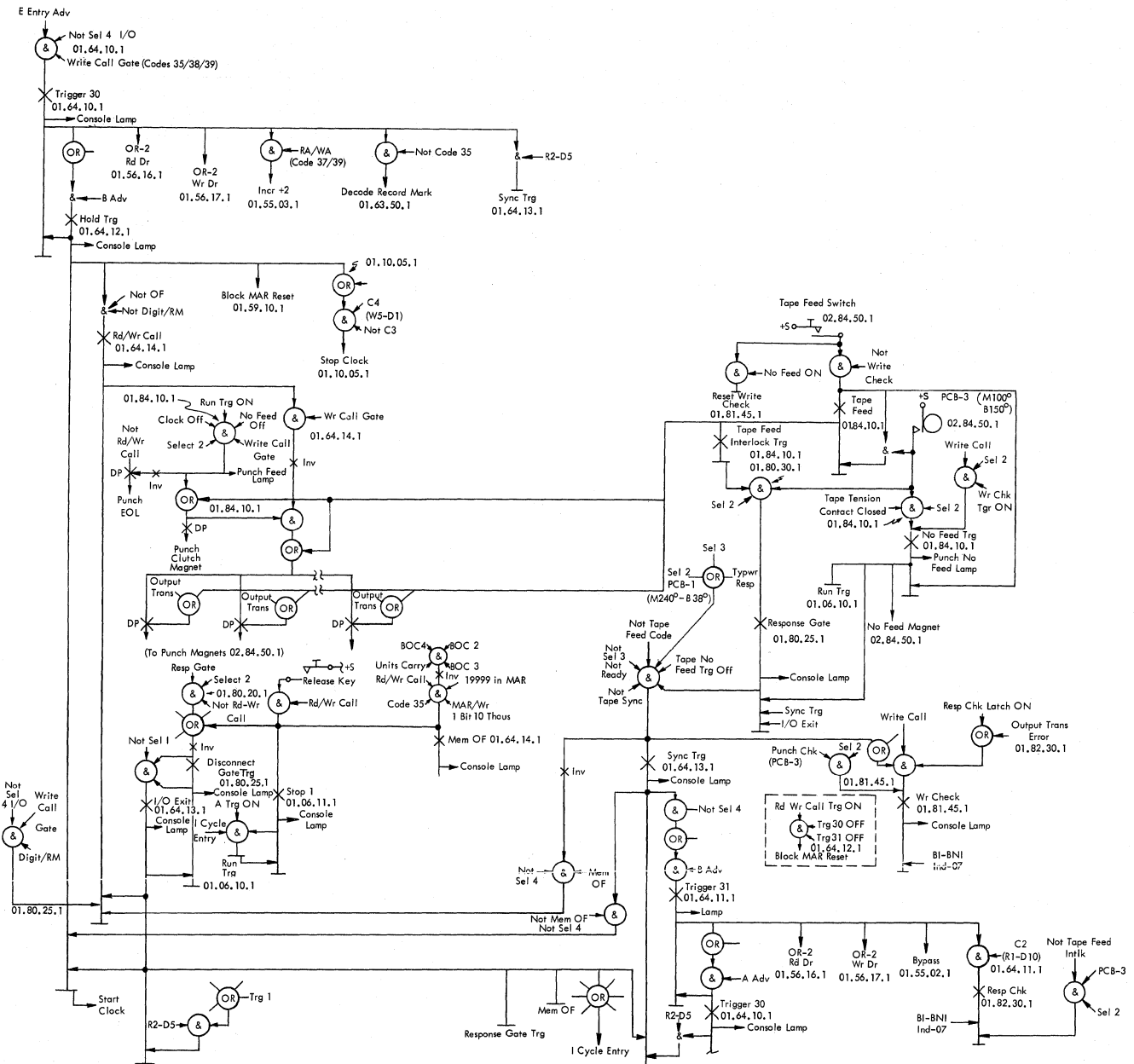
From Trg 31

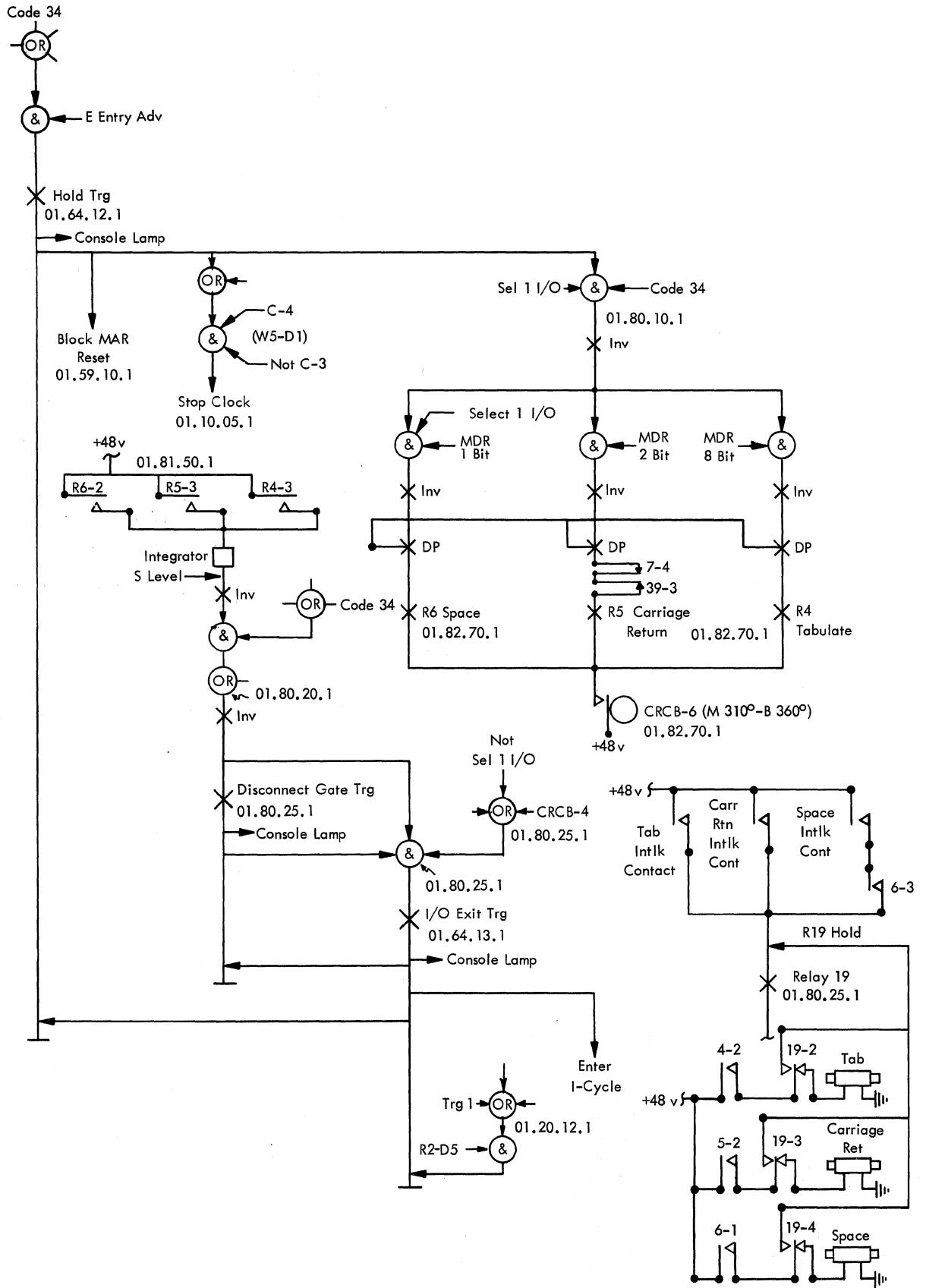


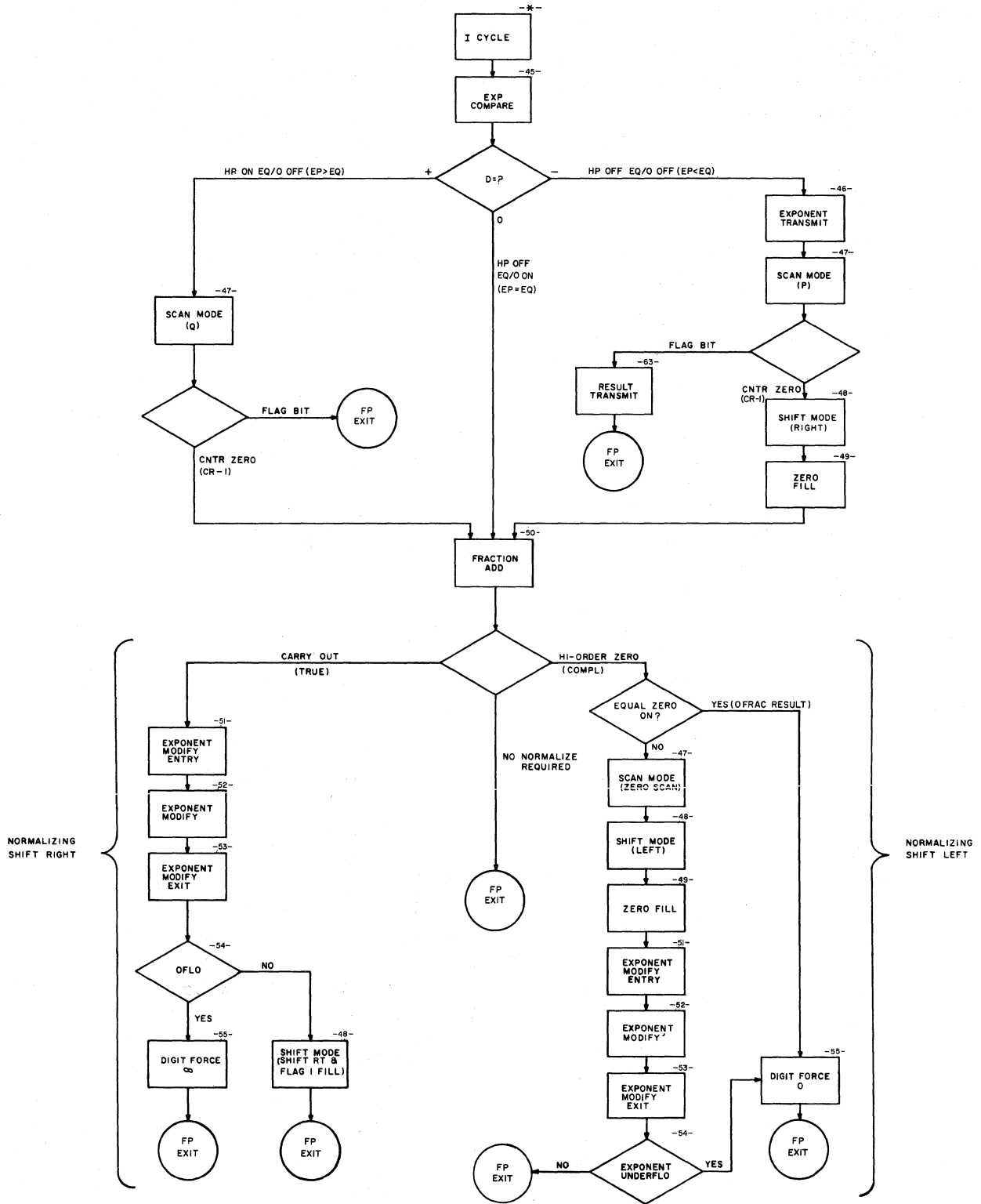
OUTPUT TRANSLATOR



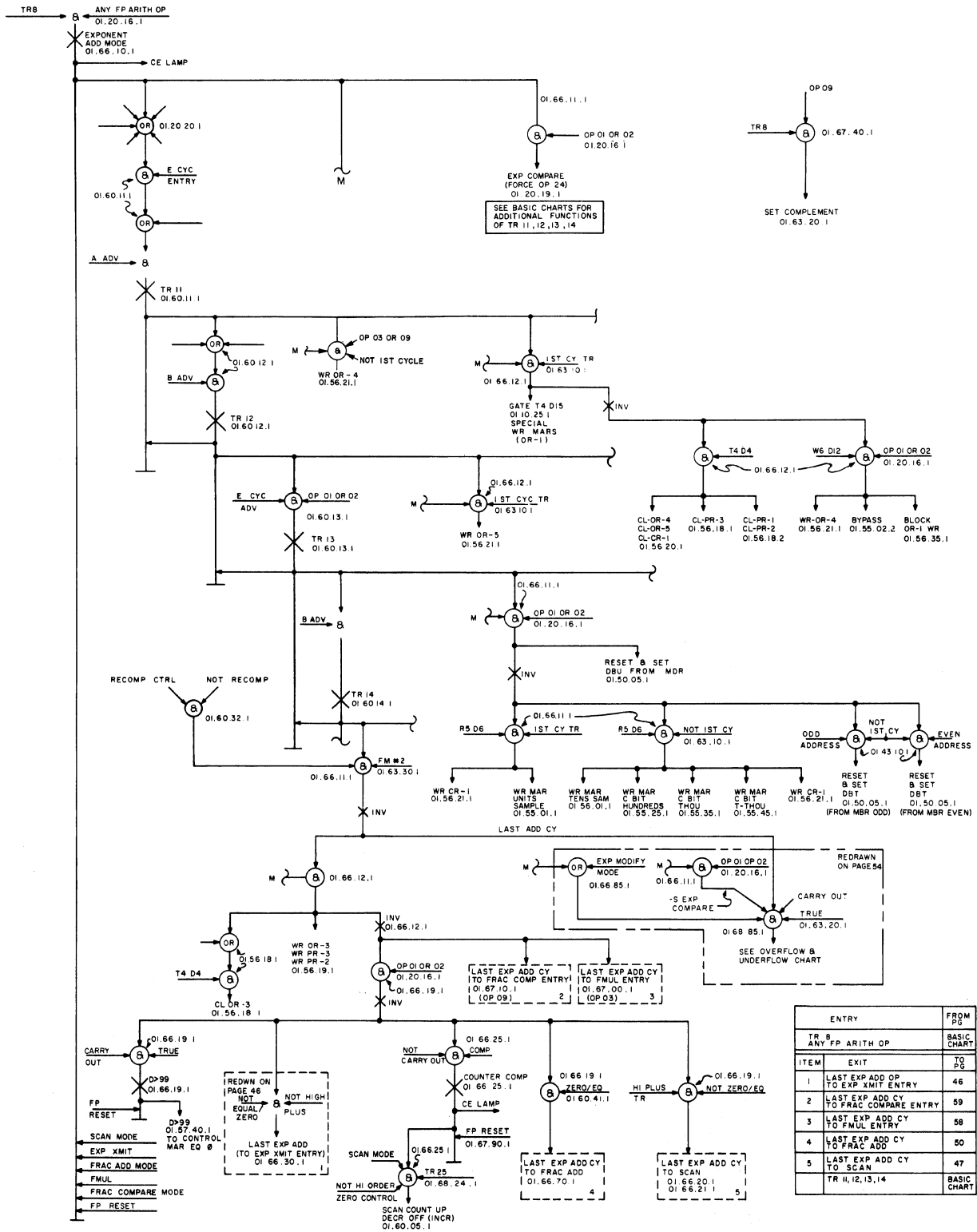
- Note 1: All Typewriter Bit Relays Return to +48V through R1-2 n/o and CRCB-3.
- Note 2: The Punch Magnet Thyratron Gate is Shown on the Write with Tape Punch Function Charts.
- Note 3:  This is a Non-inverting Dotted Emitter Follower.



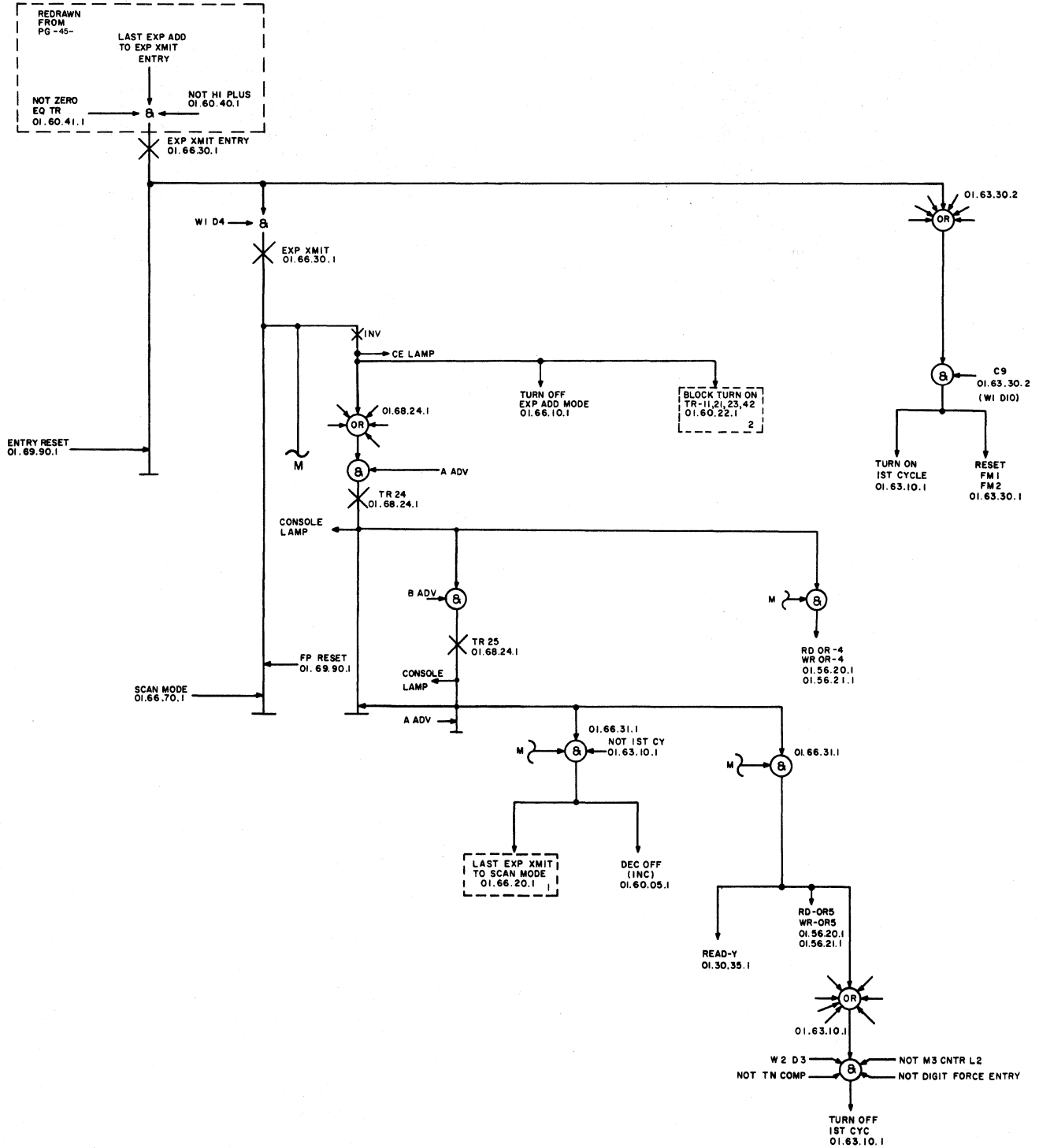




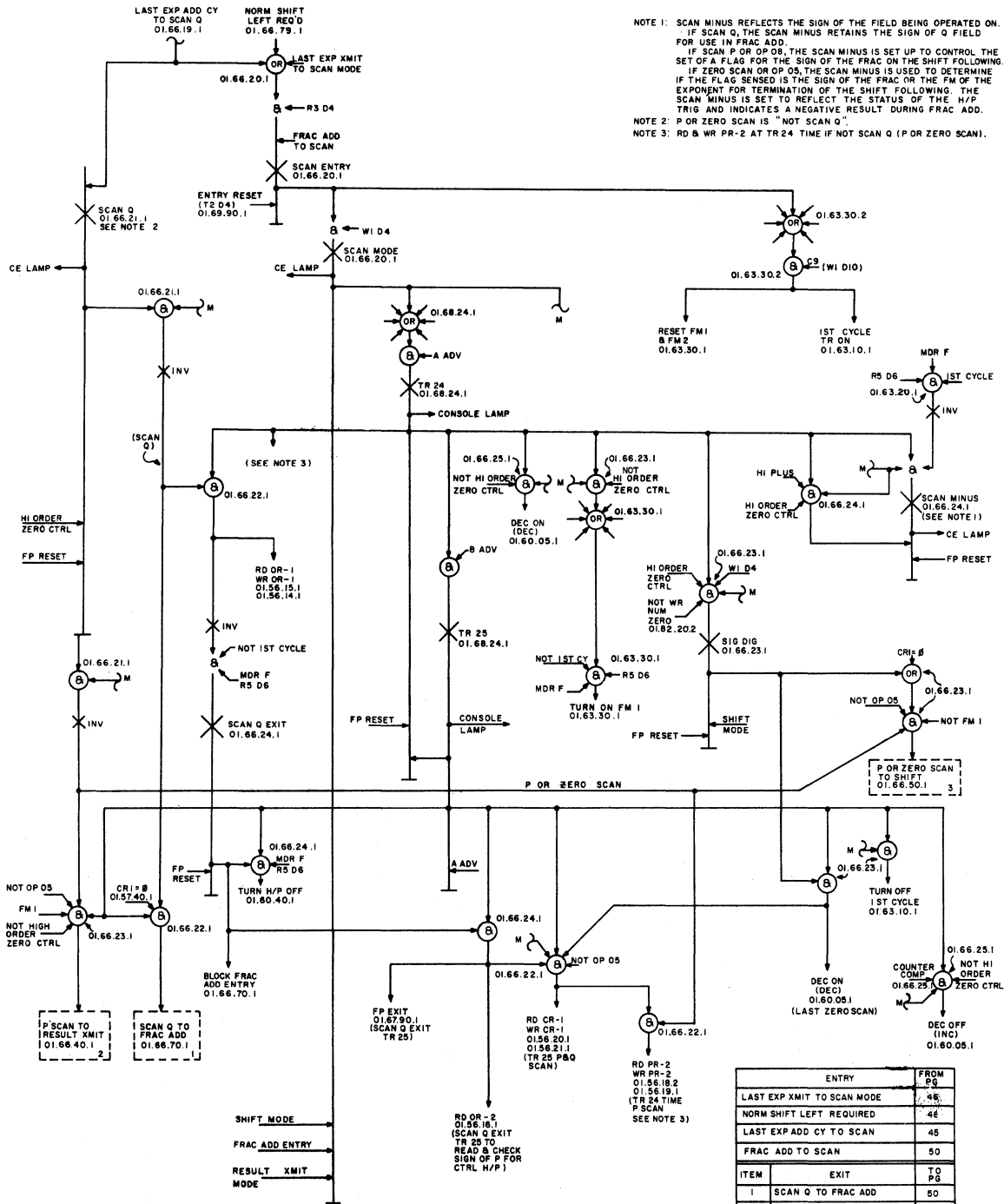
-*-SEE BASIC FUNCTION CHART

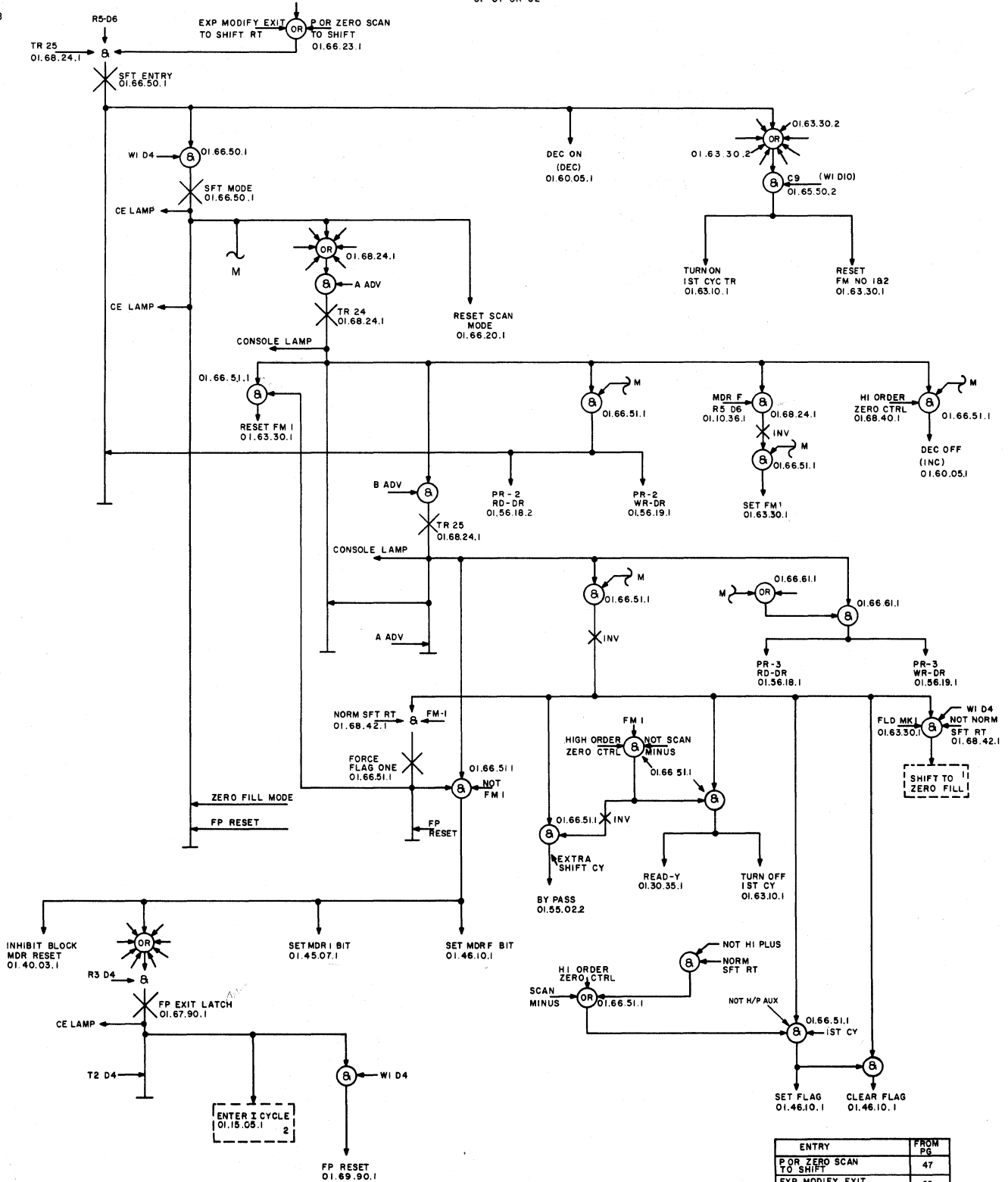


ENTRY	FROM PG
TR B ANY FP ARITH OP	BASIC CHART
ITEM EXIT	TO PG
1 LAST EXP ADD OP TO EXP XMIT ENTRY	46
2 LAST EXP ADD CY TO FRAC COMPARE ENTRY	59
3 LAST EXP ADD CY TO FMUL ENTRY	58
4 LAST EXP ADD CY TO FRAC ADD	50
5 LAST EXP ADD CY TO SCAN	47
TR H, I, 12, 13, 14	BASIC CHART

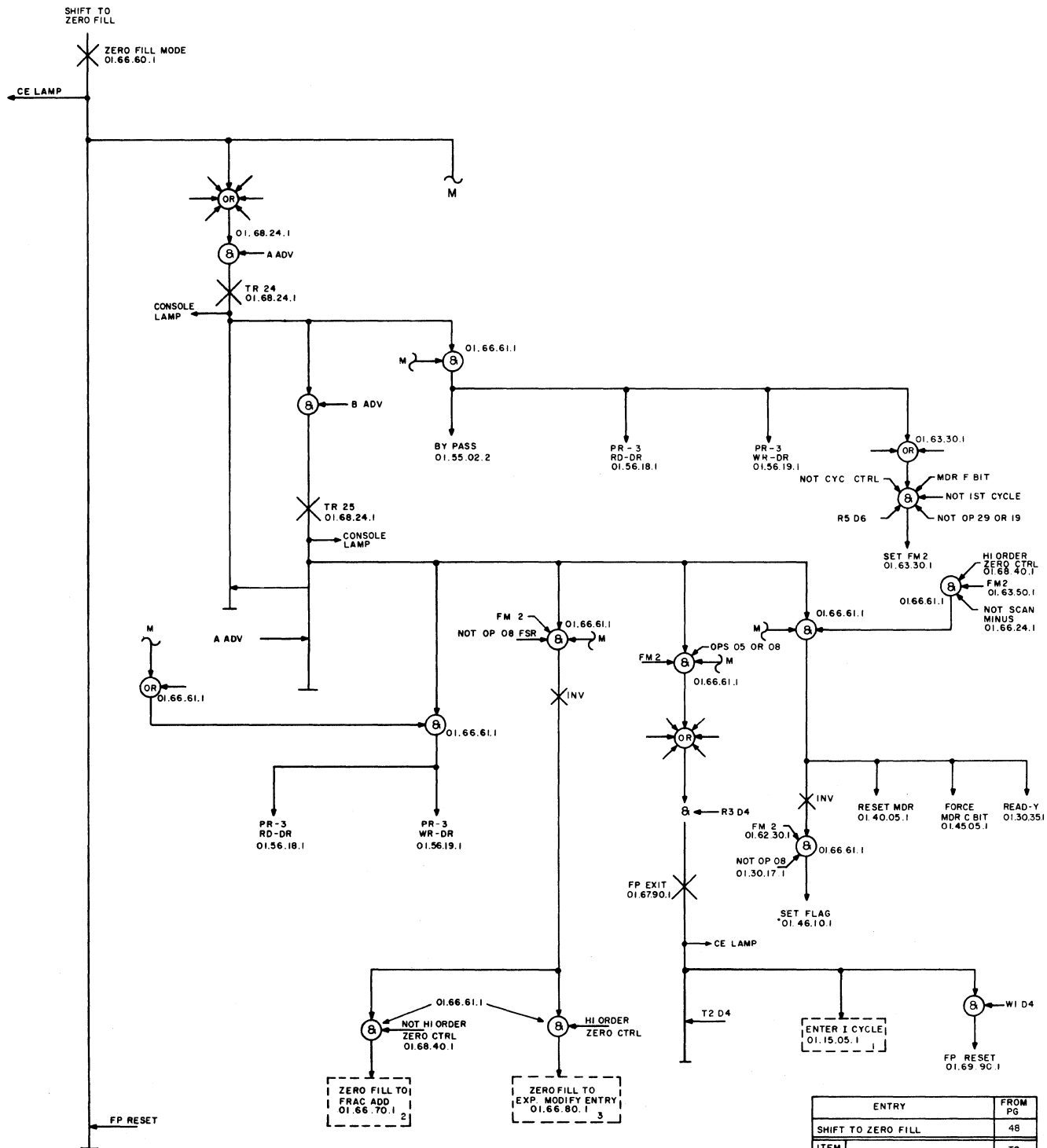


ENTRY		FROM PG
LAST EXP ADD TO EXP XMIT		45
ITEM	EXIT	TO PG
1	LAST EXP XMIT TO SCAN MODE	47
2	BLOCK TURN ON TR 11,21,23,42	BASIC CHART

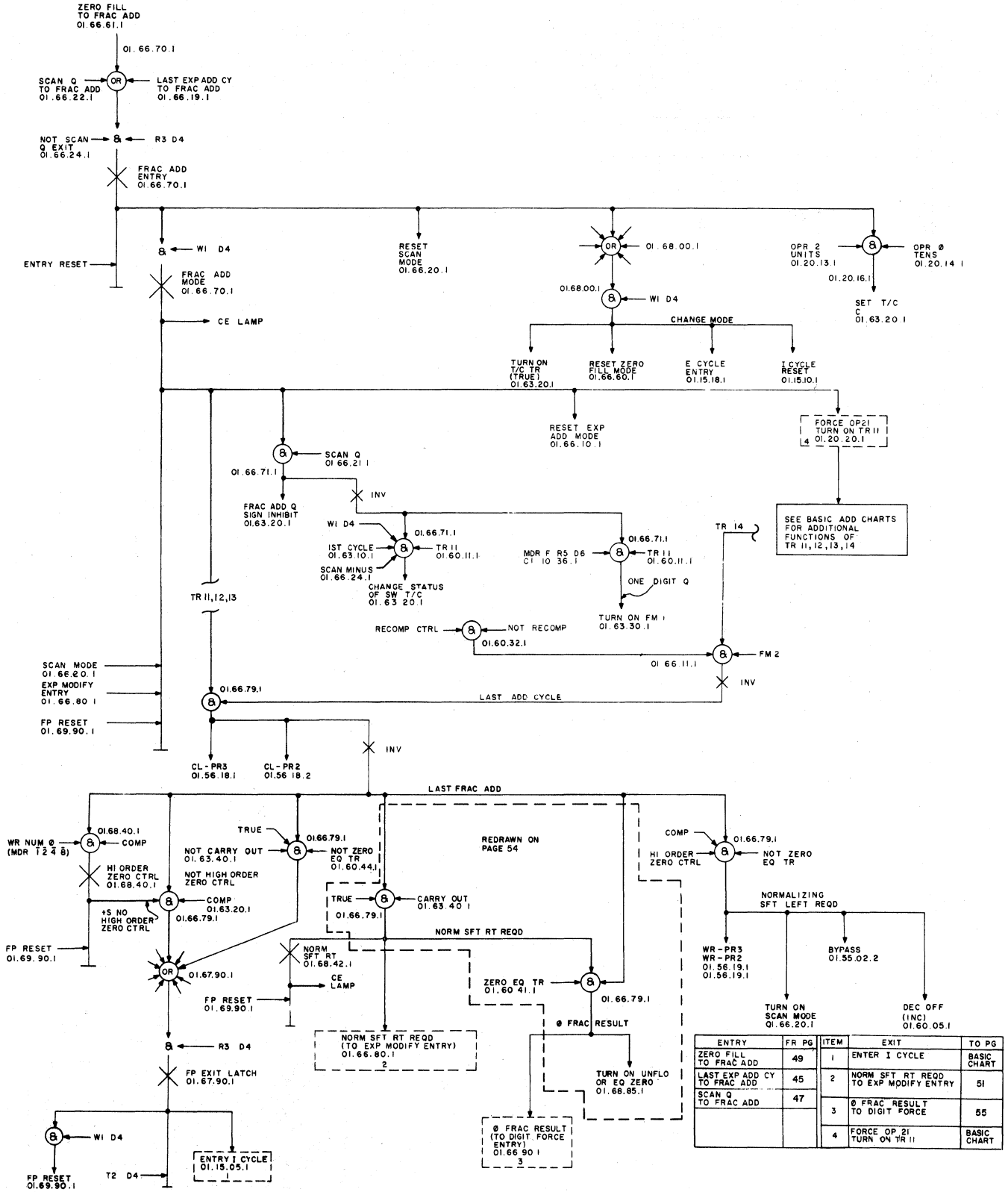


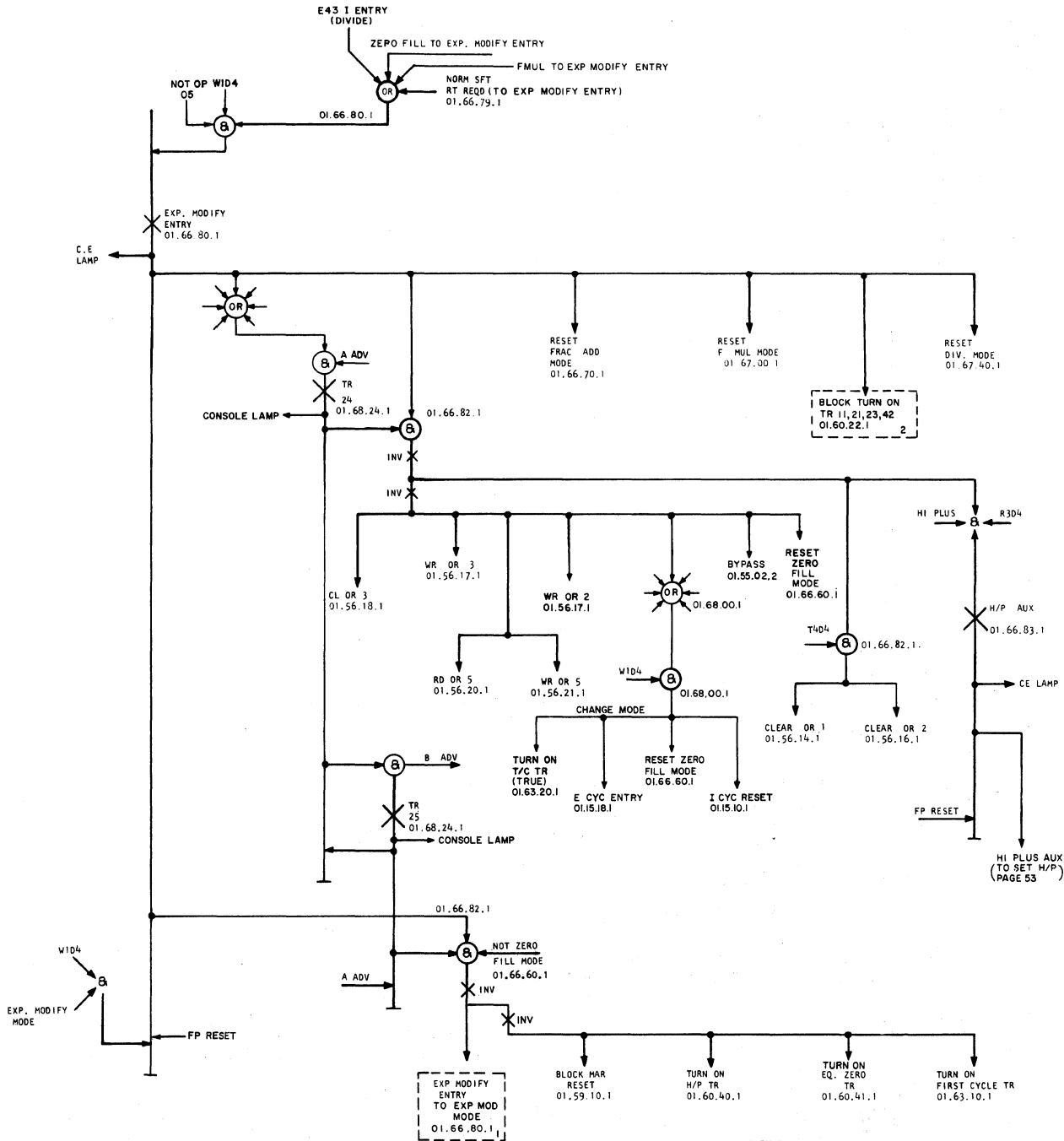


ENTRY	FROM Pg
P OR ZERO SCAN TO SHIFT	47
EXP MODIFY EXIT TO SFT RT	63
ITEM	TO Pg
1 SHIFT TO ZERO FILL	49
2 ENTER I CYCLE	BASIC CHART

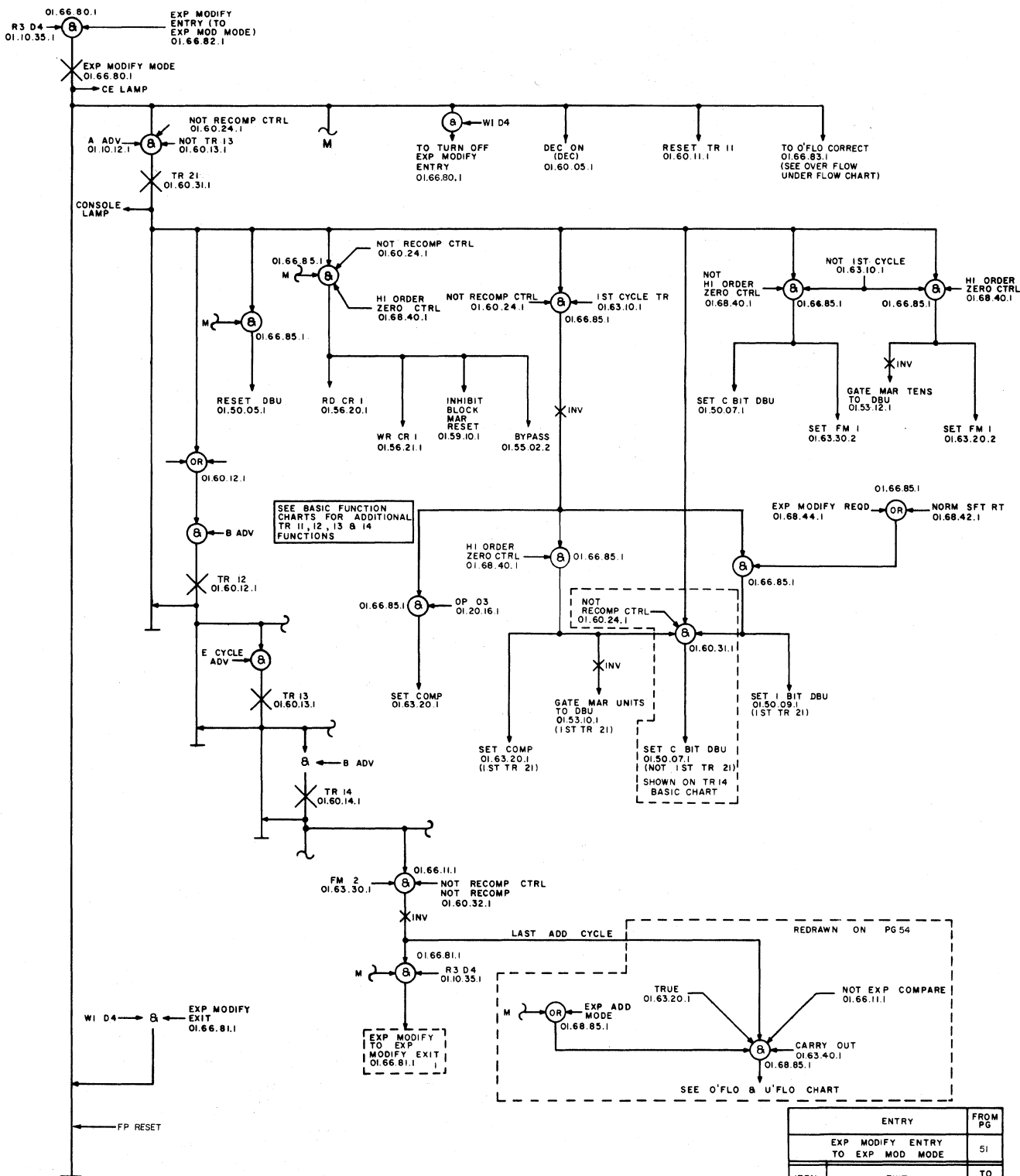


ENTRY		FROM PG
SHIFT TO ZERO FILL		48
ITEM NO.	EXIT	TO PG
1	ENTER I CYCLE	BASIC CHART
2	ZERO FILL TO FRAC ADD	50
3	ZERO FILL TO EXP MODIFY ENTRY	51

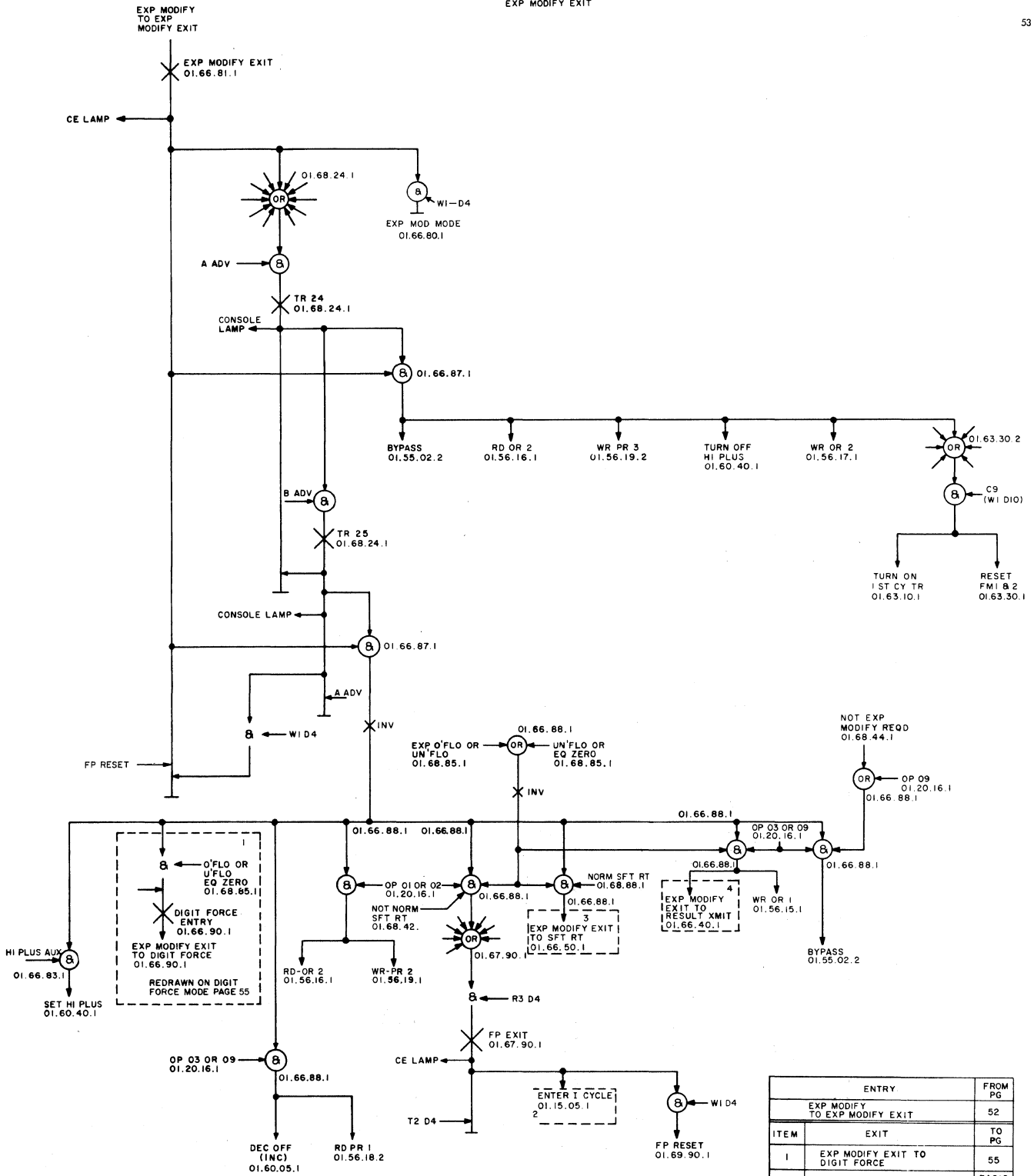




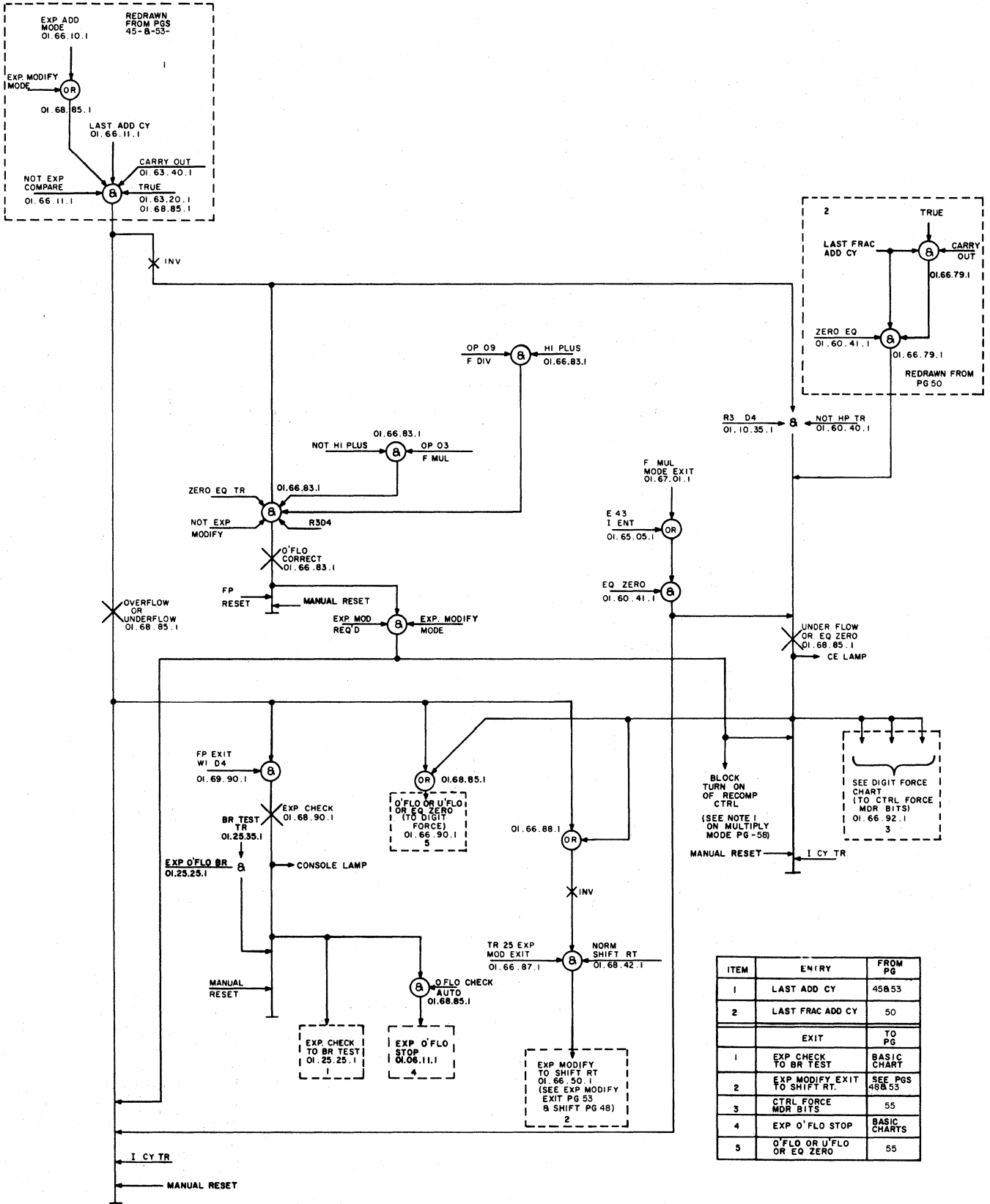
ENTRY	FROM PG	
E 43 I ENTRY (DIVIDE)	BASIC CHART	
ZERO FILL TO EXP MODIFY ENTRY	49	
NORM SFT RT REQ TO EXP MODIFY ENTRY	48	
F MUL TO TO EXP MODIFY ENTRY	58	
ITEM	EXIT	TO PG
1	EXP MODIFY ENTRY TO EXP MOD MODE	52
2	BLOCK TURN ON TR II, 21, 23, 42	BASIC CHART



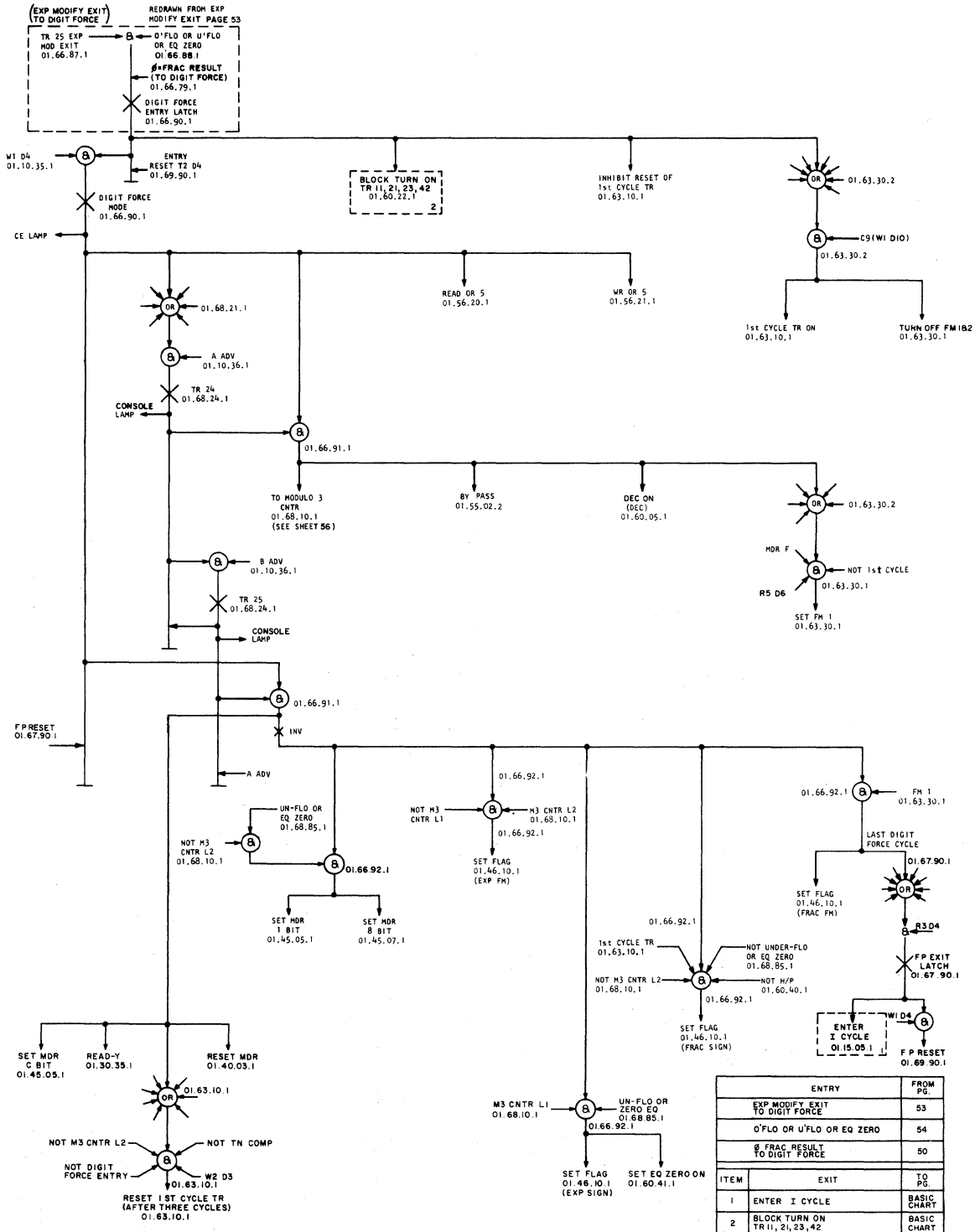
ITEM	ENTRY	FROM PG
	EXP MODIFY ENTRY TO EXP MOD MODE	51
	EXP MODIFY EXIT	TO PG
I	EXP MODIFY TO EXP MODIFY EXIT	53

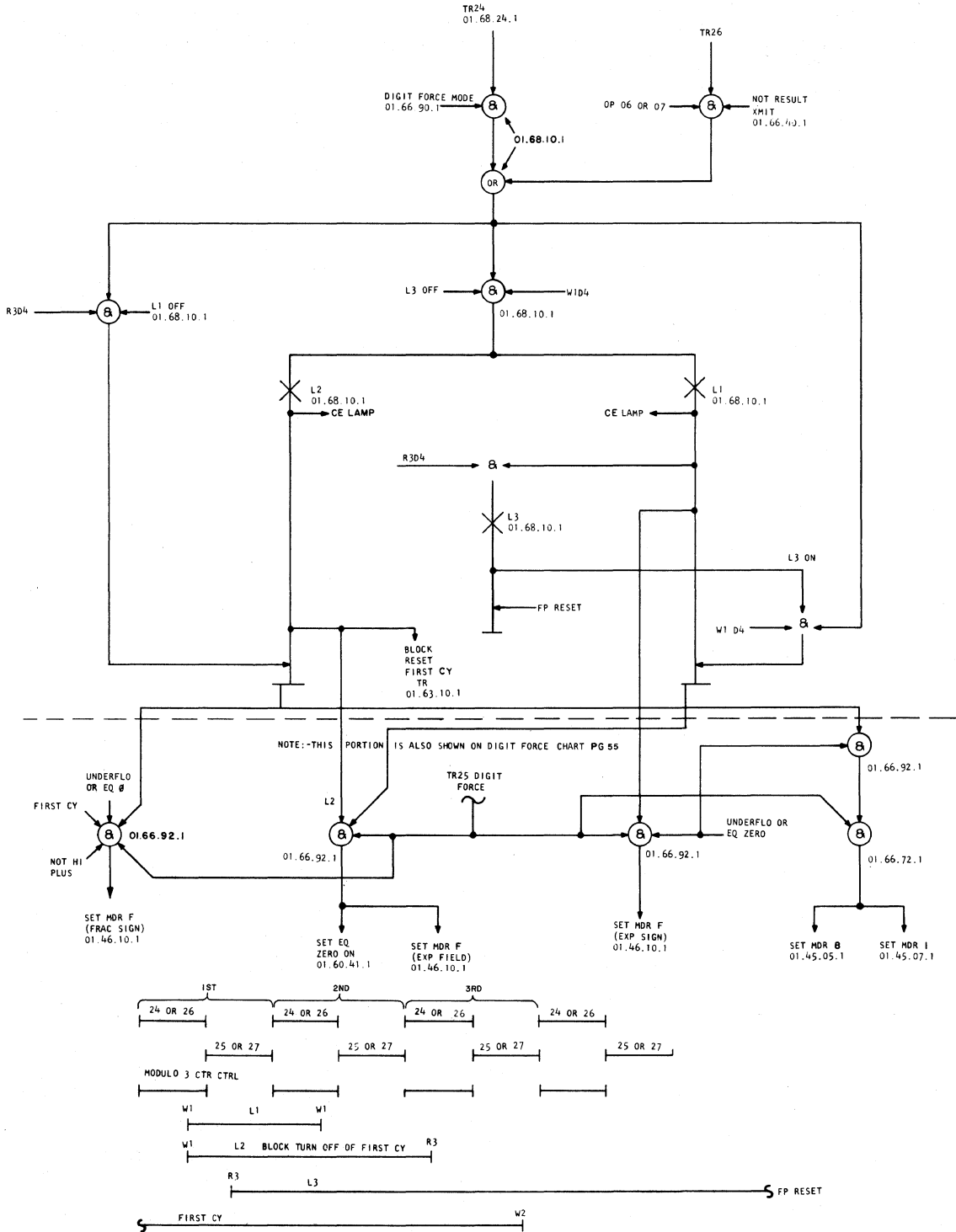


ENTRY		FROM PG
EXP MODIFY TO EXP MODIFY EXIT		52
ITEM	EXIT	TO PG
1	EXP MODIFY EXIT TO DIGIT FORCE	55
2	ENTER 1 CYCLE	BASIC CHART
3	EXP MODIFY EXIT TO SFT RT	48
4	EXP MODIFY EXIT TO RESULT XMIT	63
TR 21,12,13,14		BASIC CHART

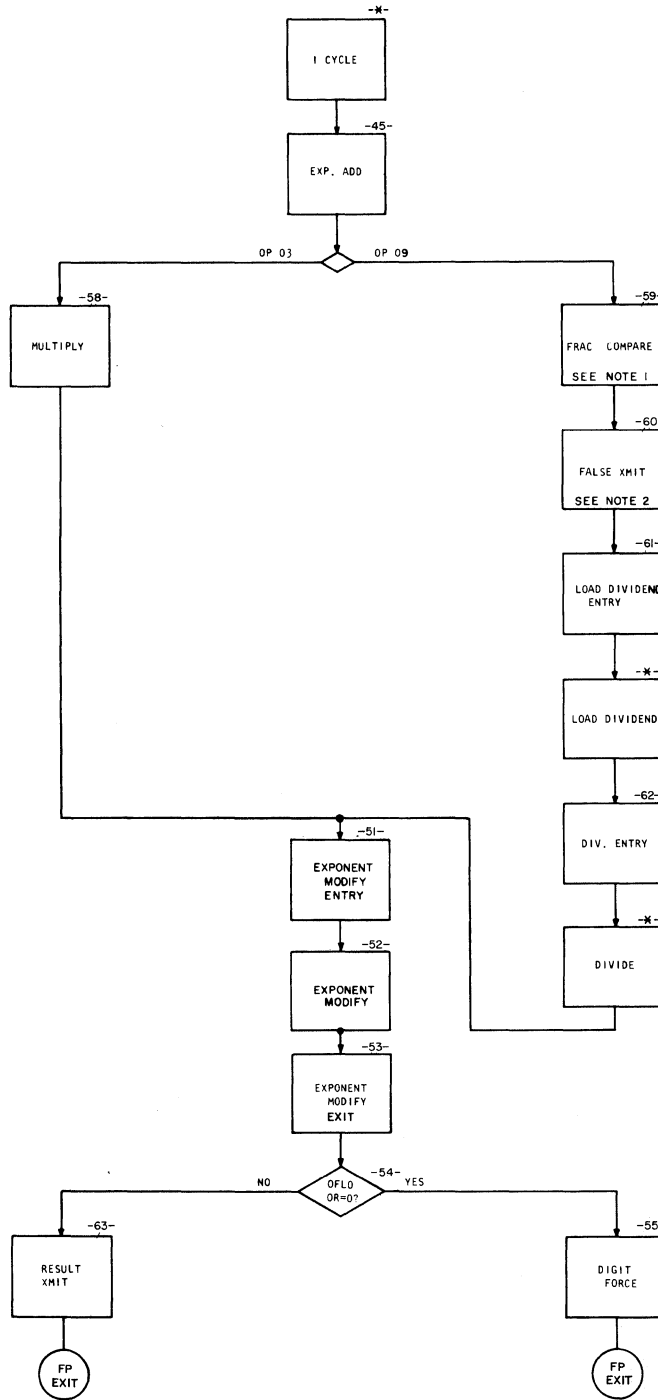


ITEM	ENTRY	FROM PG
1	LAST ADD CY	45&53
2	LAST FRAC ADD CY	50
	EXIT	TO PG
1	EXP CHECK TO BR TEST	BASIC CHART
2	EXP MODIFY EXIT TO SHIFT RT.	SEE PGS 4&5
3	CTRL FORCE MDR BITS	55
4	EXP O'FLO STOP	BASIC CHARTS
5	O'FLO OR U'FLO OR EQ ZERO	55





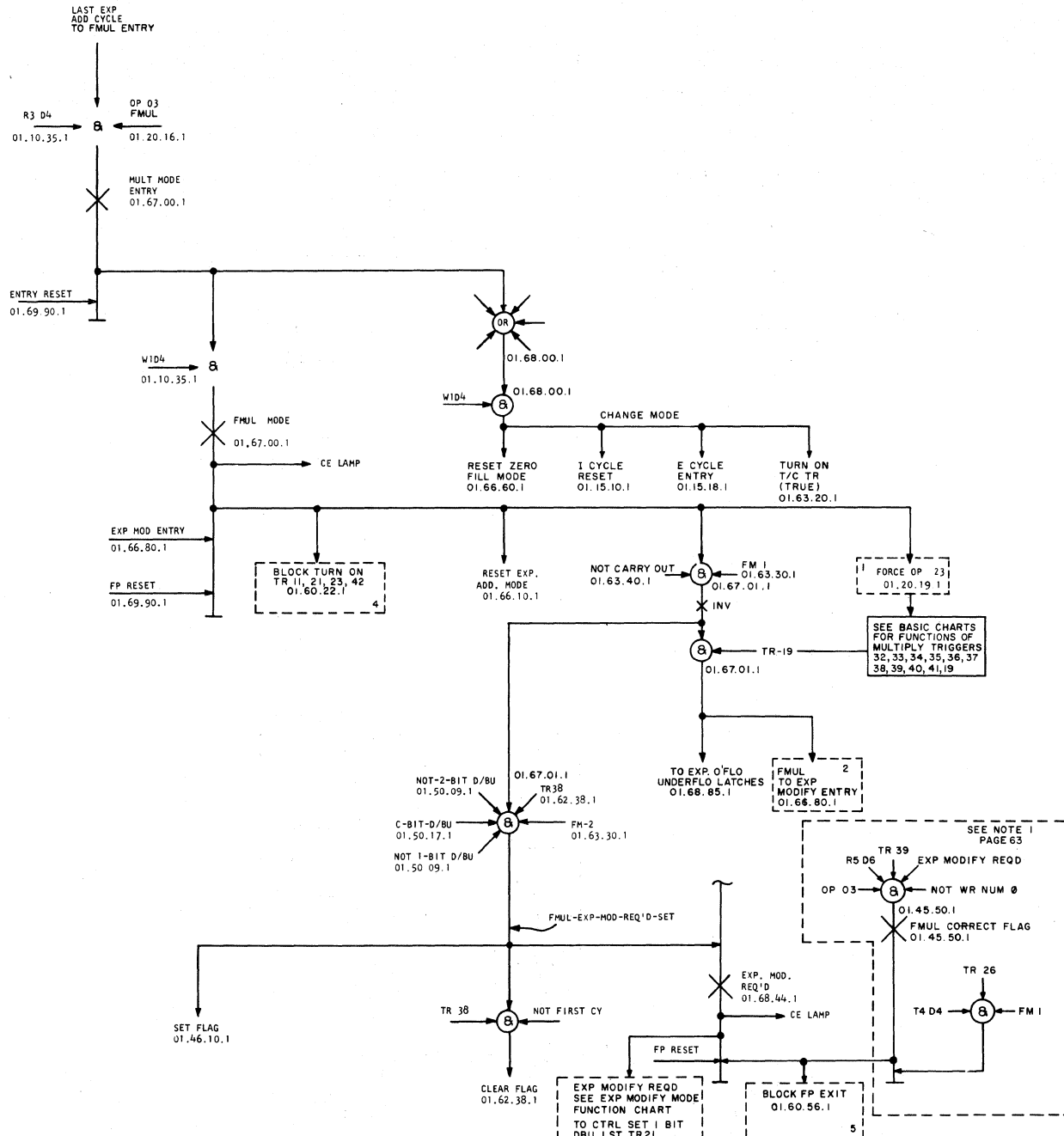
MULTIPLY & DIVIDE
FLOW CHART



- * - SEE BASIC FUNCTION CHARTS

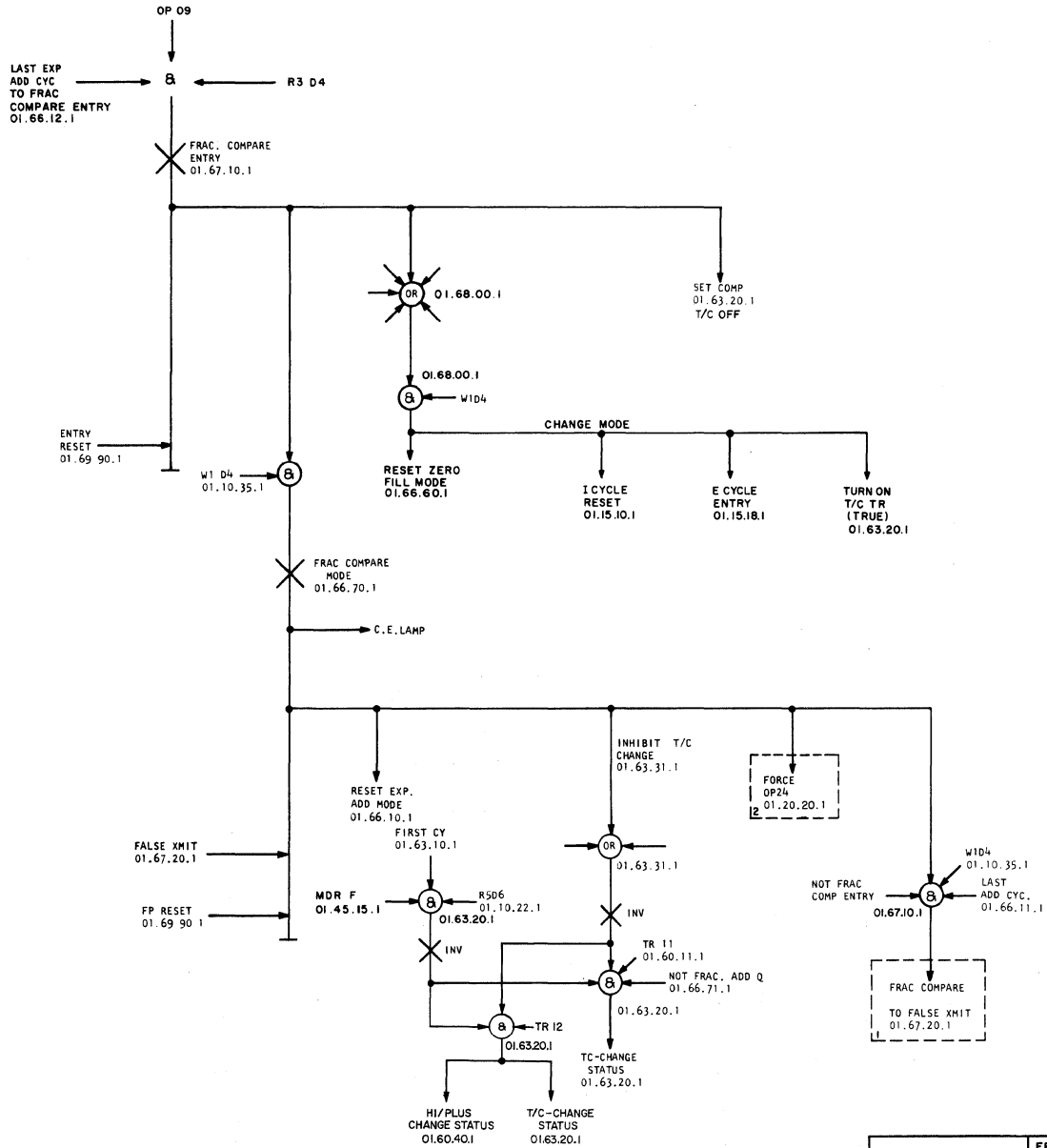
NOTE 1: FRACTION COMPARE DETERMINES THE ADDRESS FOR LOAD DIVIDEND
IF $P > Q$ (HP ON) 100-L
IF $P < Q$ 99-L

NOTE 2: FALSE XMIT SETS UP THE ADDRESS
100-L IN PR2

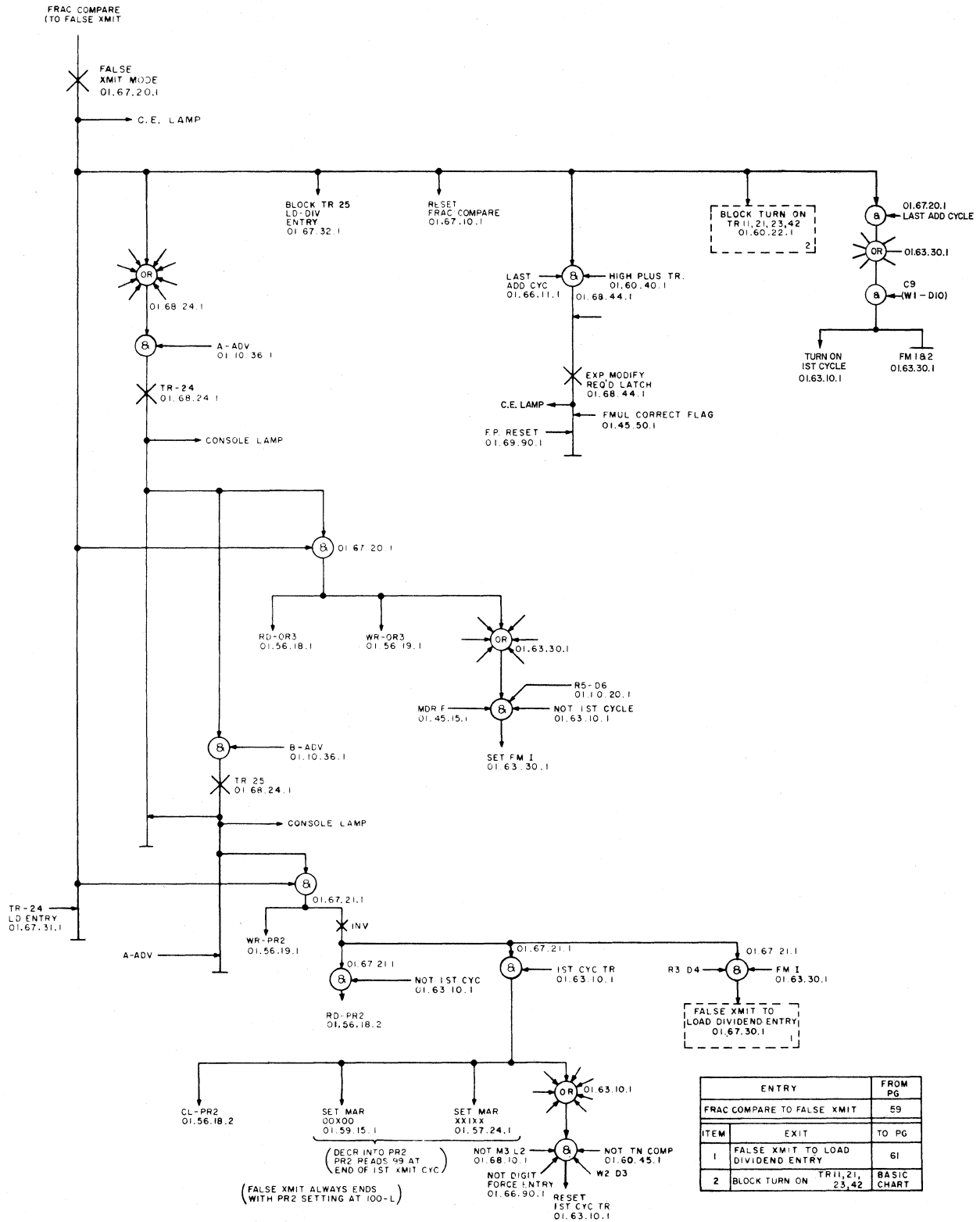


NOTE 1
 EXP MODIFY IS REQUIRED IF A HIGH ORDER ZERO EXISTS AFTER MULTIPLY. THE FM IS SET OVER THE HIGH ORDER SIG DIG (OXXXX) AND THE EXP MODIFY REQUIRED SUBTRACTS A ONE FROM THE EXPONENT IN THE CASE THAT THE EXPONENT SUM EQUALS 100, WITH A HIGH ORDER ZERO AFTER MULTIPLY THE FOLLOWING CONDITIONS ARE SET: OVERFLOW, OVERFLOW CORRECT, CR1=00000(>99 TR OFF), P FIELD OXXXX00. AFTER EXP MODIFY THE P FIELD WILL CONTAIN XXXX99 AND OVERFLOW WILL BE OFF. THIS IS ACCOMPLISHED BY OVERFLOW CORRECT RESETTING THE OVERFLOW LATCH, AND BLOCKING RECOMP CTRL. BY SUBTRACTING A ONE FROM 00(AND BLOCKING RECOMP). THE EXPONENT WILL BE 99.

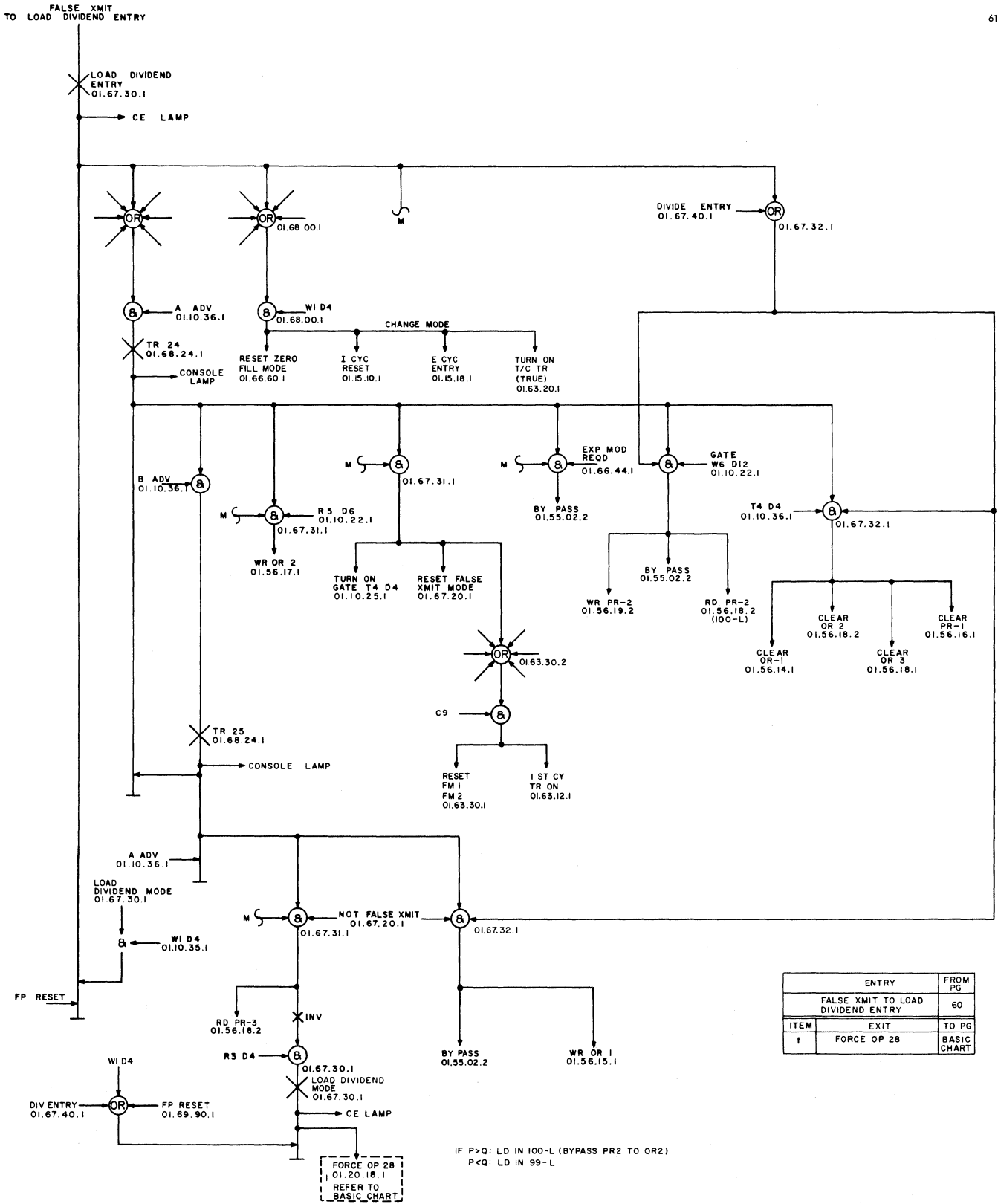
ENTRY		FROM PG
LAST EXP ADD CYCLE TO FMUL ENTRY		45
ITEM	EXIT	TO PG
1	FORCE OP 23	BASIC CHART
2	FMUL TO EXP MODIFY ENTRY	51
3	EXP MODIFY REQ'D	52
4	BLOCK TURN ON TR 1, 21, 23, 42	BASIC CHART
5	BLOCK FP EXIT SEE NOTE 1 PAGE 20	63



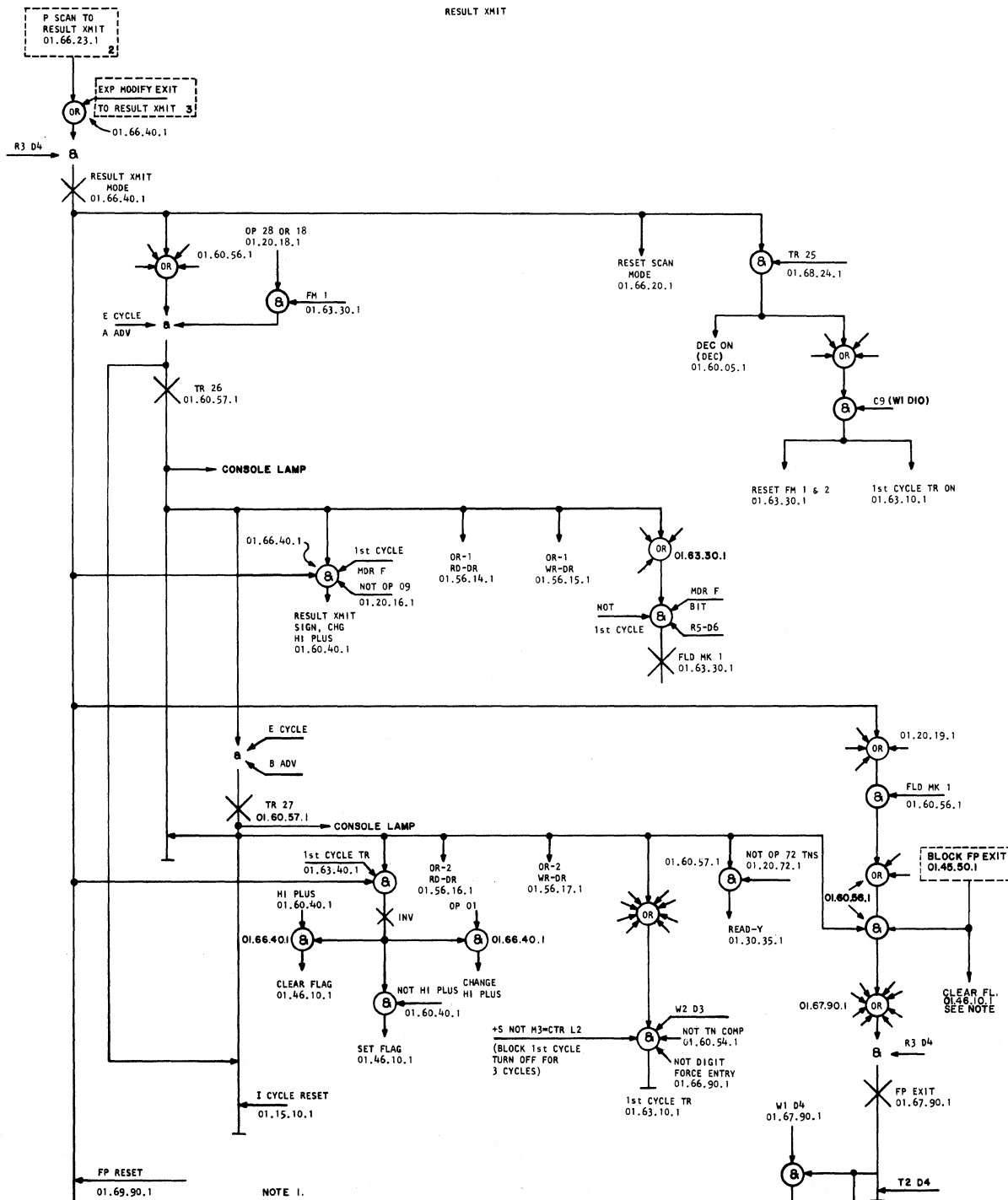
ENTRY		FROM PG
LAST EXP ADD CYC TO FRAC COMPARE ENTRY		45
ITEM	EXIT	TO PG
1	FRAC COMPARE TO FALSE XMIT	60
2	FORCE OP 24	BASIC CHART



ENTRY		FROM PG
FRAC COMPARE TO FALSE XMIT		59
ITEM	EXIT	TO PG
1	FALSE XMIT TO LOAD DIVIDEND ENTRY	61
2	BLOCK TURN ON TR 11, 21, 23, 42	BASIC CHART



ENTRY	FROM PG	
FALSE XMIT TO LOAD DIVIDEND ENTRY	60	
ITEM	EXIT	TO PG
1	FORCE OP 28	BASIC CHART

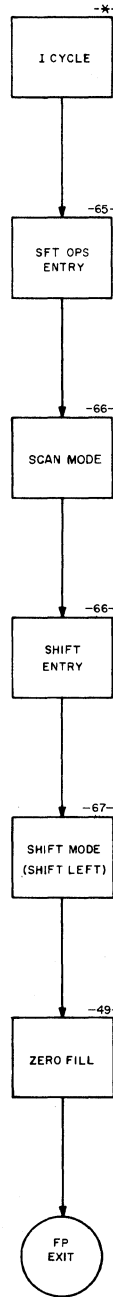


NOTE 1.

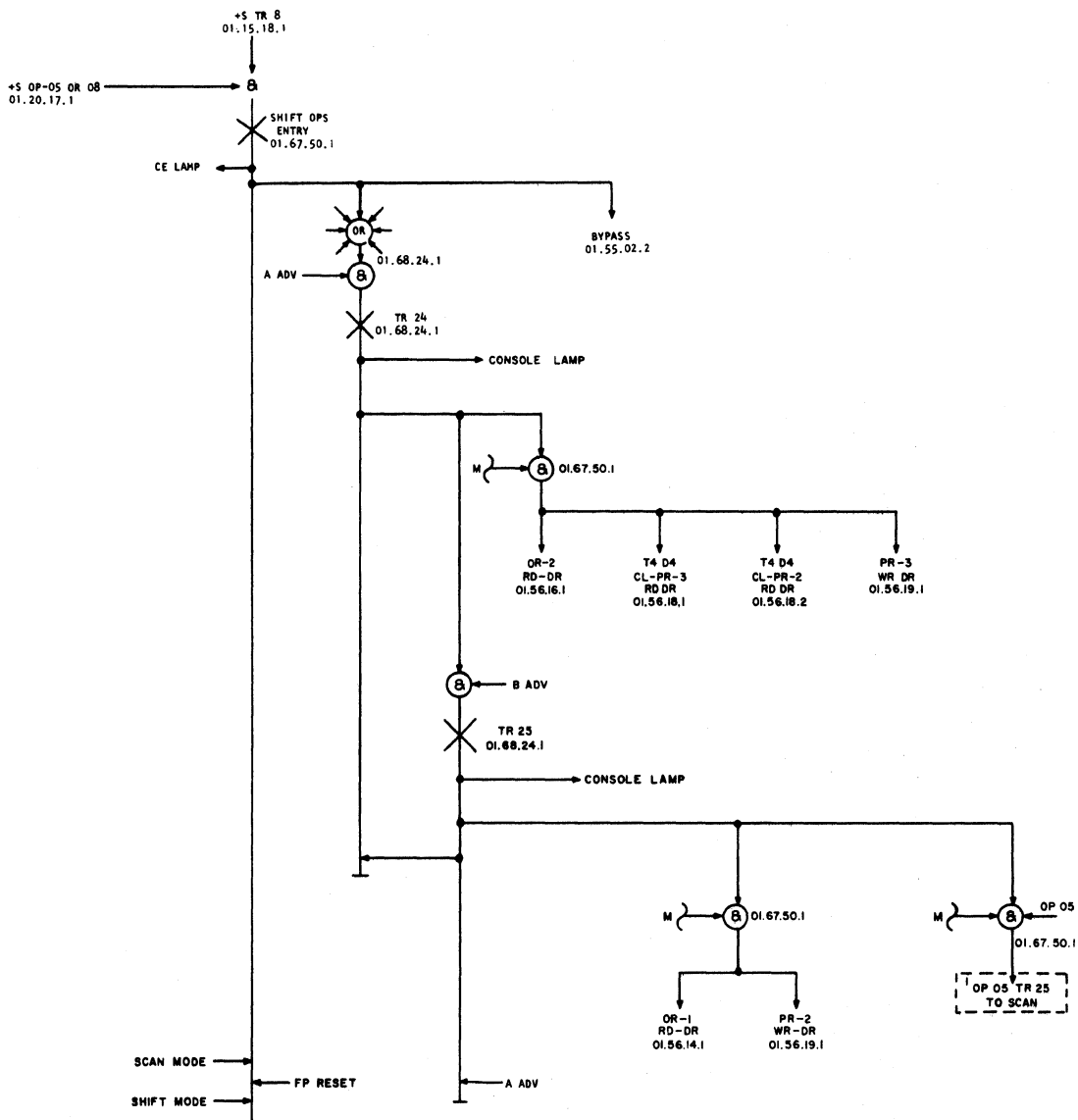
"FMUL CORRECT FLAG" CONDITION WILL EXIST WHEN MULTIPLYING 99901 BY 19901. THIS PROBLEM CAUSES AN 09 TO BE READ OUT OF THE MULT. TABLE ON THE LAST MULT. CYCLE AND SET IN DBU AND DBT TR 35, TR 37 RESETS DBU AND SETS DBU FROM DBT. THIS 0 IN DBU SATISFIES THE CONDITIONS FOR SETTING A FLAG OVER THE 99-(2L-1) POSITION AND SETS EXPONENT MODIFY REQUIRED. HOWEVER THE PREVIOUS TR 40 TIME A CARRY INTO THE 99-(2L) POSITION OCCURRED. DURING TR 41 A FLAG IS SET OVER 99-(2L) RESULTING IN THE TWO HIGH ORDER DIGITS BEING FLAGGED. IT IS NECESSARY TO DO THE FOLLOWING:

1. RESET "EXPONENT MODIFY REQUIRED" BEFORE ENTERING INTO EXPONENT MODIFY TO PREVENT CHANGING THE EXPONENT.
2. CLEAR THE FLAG FROM THE NEXT TO HIGH ORDER POSITION ON RESULT TRANSMIT AND BLOCK FP EXIT TO ALLOW THE HIGH ORDER DIGIT TO BE TRANSFERRED.
3. RESET FMUL CORRECT FLAG LATCH TO ALLOW THE NORMAL SET FLAG FOR FIELD DEFINITION AND FP EXIT.

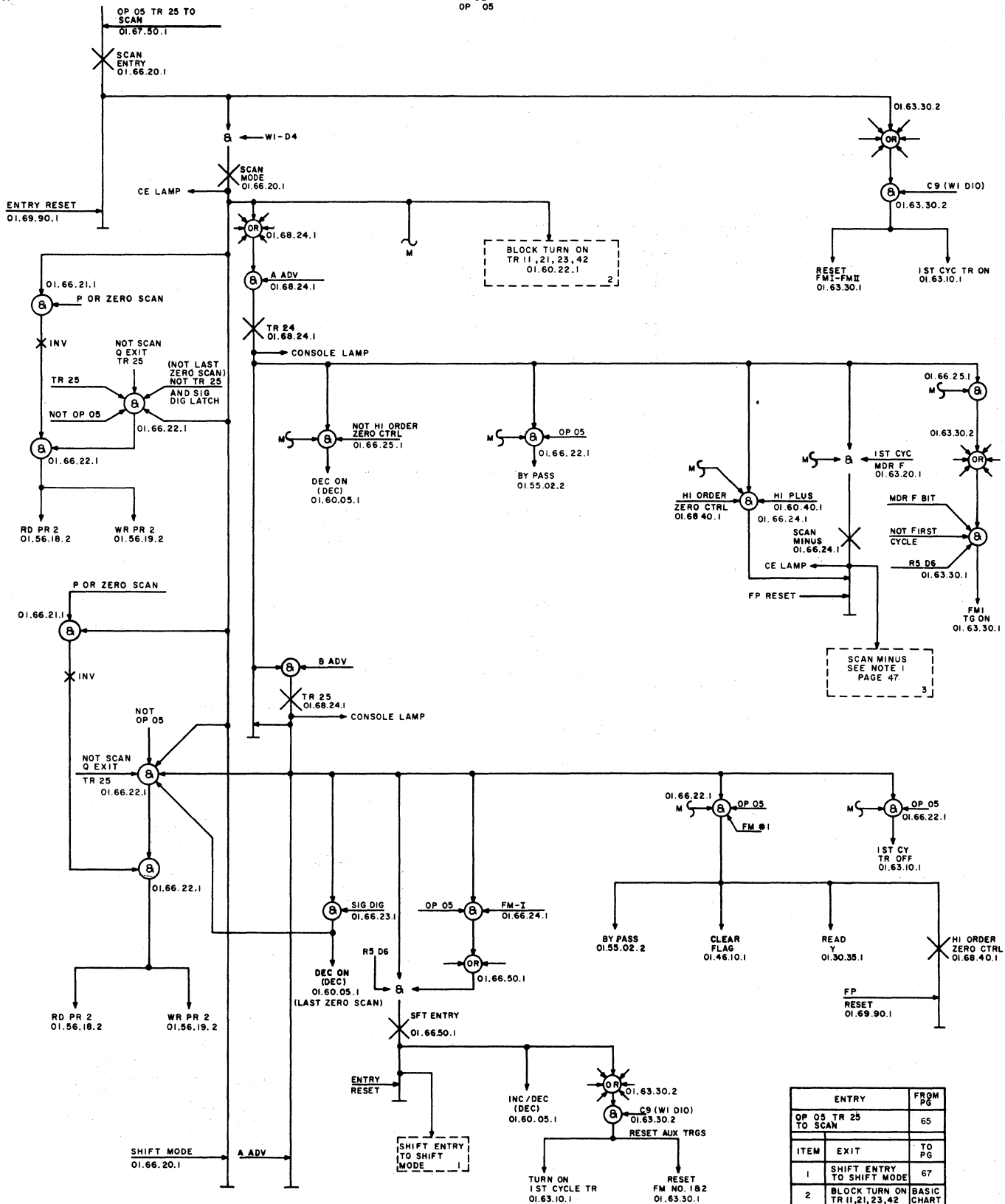
ITEM	ENTRY	FROM PAGE
1	BLOCK FP EXIT	58
2	P SCAN TO RESULT XMIT	47
3	EXP MODIFY EXIT TO RESULT XMIT	63
	EXIT TO PG	
1	ENTER I CYCLE	BASIC CHART



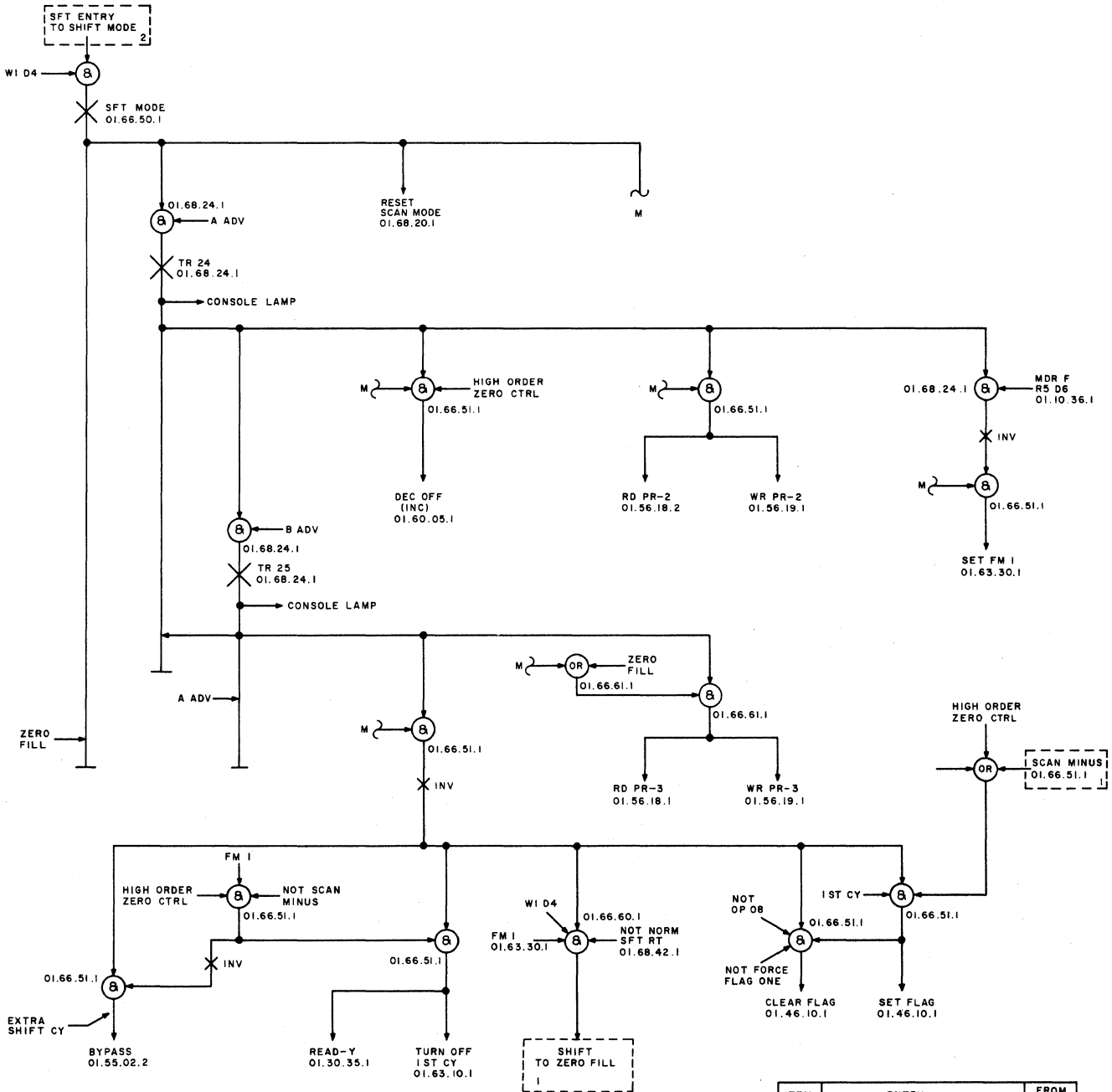
-*- SEE BASIC FUNCTION CHARTS



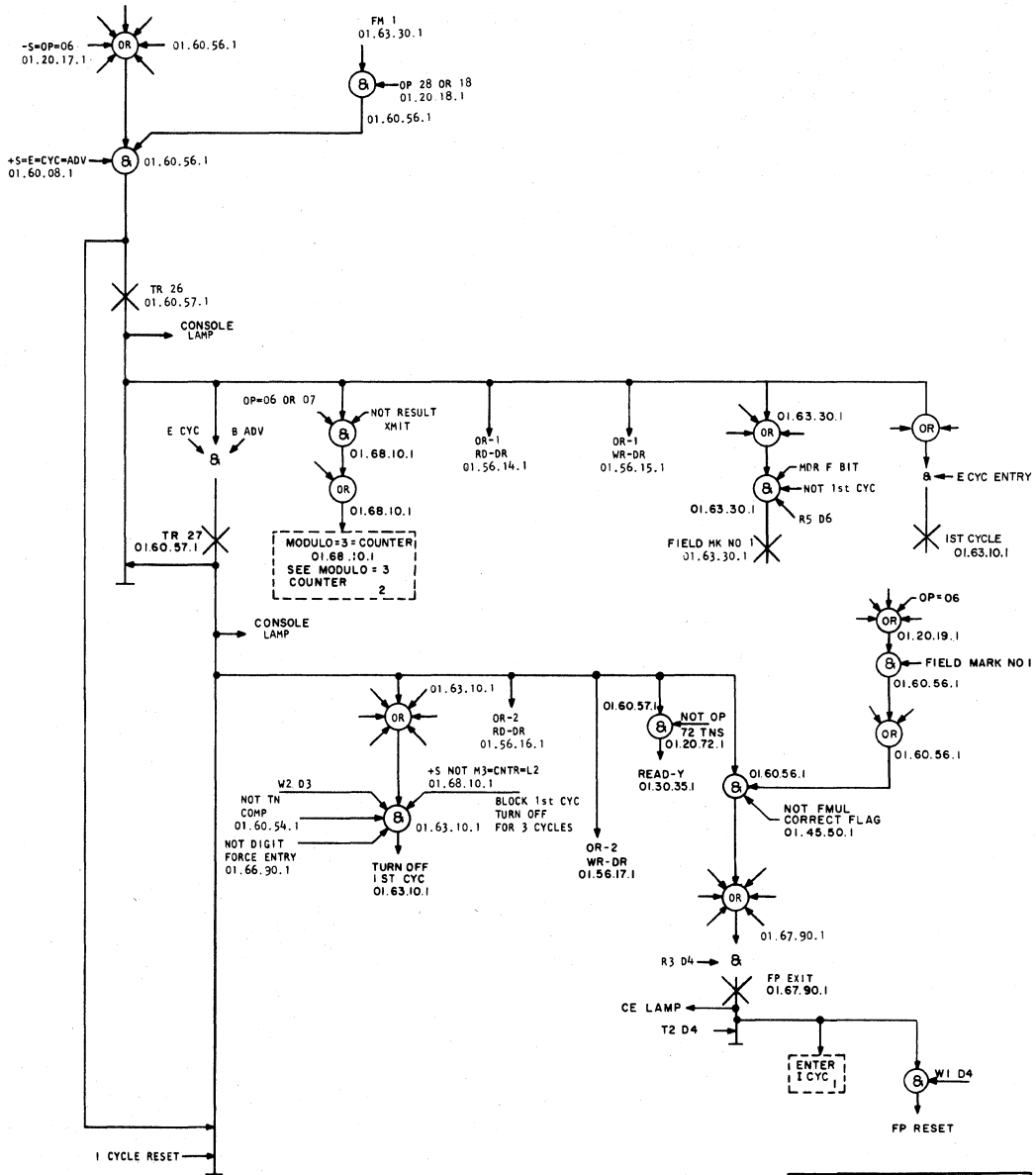
ENTRY		FROM
TR 8 OP 05 OR 08		PG. BASIC CHART
ITEM	EXIT	TO PG.
1	OP 05 TR 25 TO SCAN	66



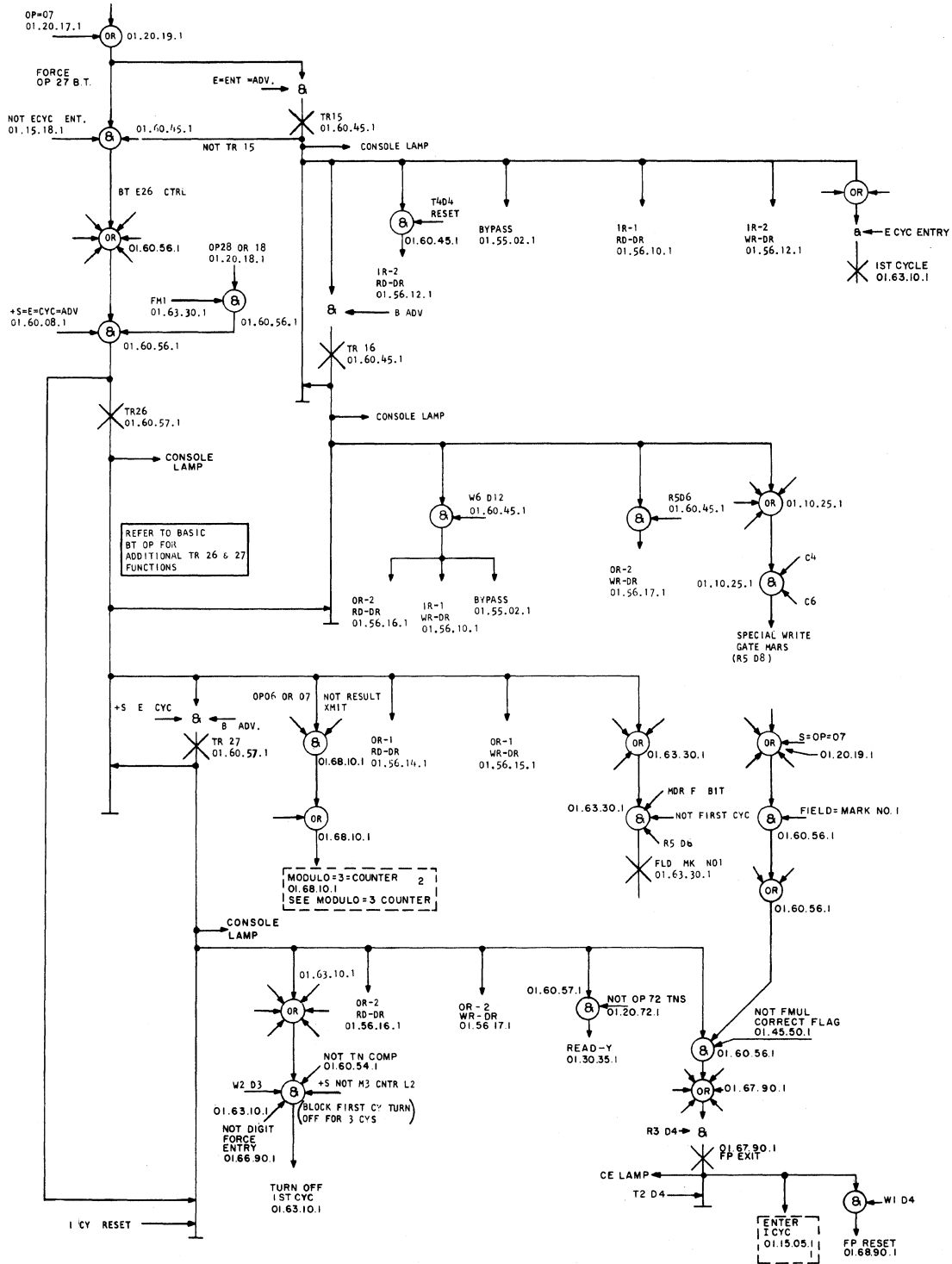
ENTRY	FROM PG	
OP 05 TR 25 TO SCAN	65	
ITEM	EXIT	TO PG
1	SHIFT ENTRY TO SHIFT MODE	67
2	BLOCK TURN ON TR 11, 21, 23, 42	BASIC CHART
3	SCAN MINUS	67



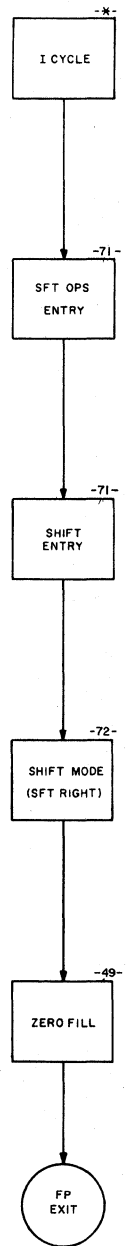
ITEM	ENTRY	FROM PG
1	SCAN MINUS	66
2	SHIFT ENTRY TO SHIFT MODE	66
ITEM	EXIT	TO PG
1	SHIFT TO ZERO FILL	49



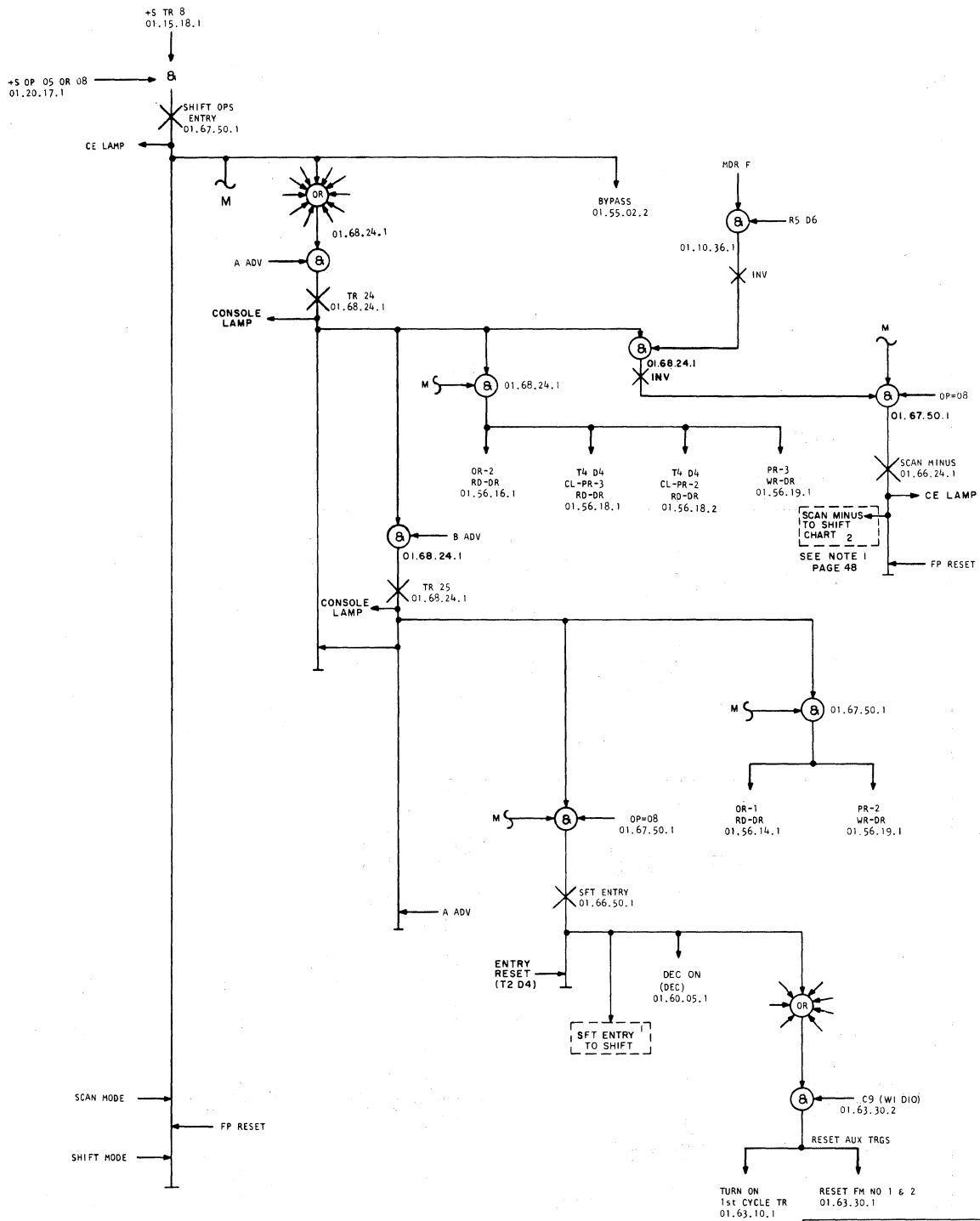
ENTRY		FROM
OP 06		
ITEM	EXIT	TO
1	ENTER I CYC	BASIC CHARTS
2	MODULO 3 COUNTER	56



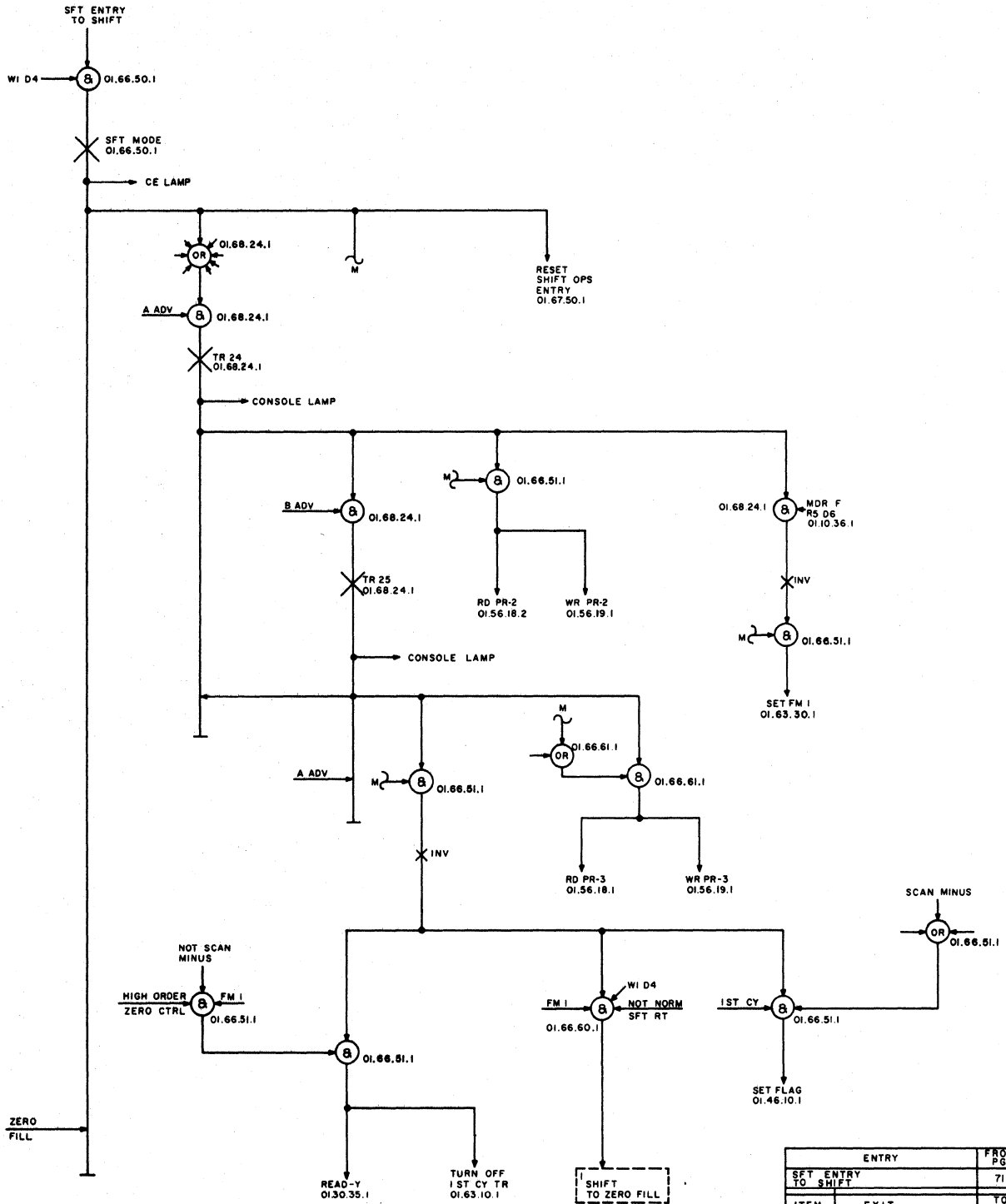
ENTRY		FROM PG
OP 07		BASIC CHART
ITEM	EXIT	TO PG
1	ENTER 1 CYC	BASIC CHARTS
2	MODULO 3 COUNTER	56



-*- SEE BASIC FUNCTION CHARTS



ENTRY		FROM PG
TR 8		BASIC CHART
ITEM	EXIT	TO PG
1	SFT ENTRY TO SHIFT	72
2	SCAN MINUS TO SHIFT CHART	72



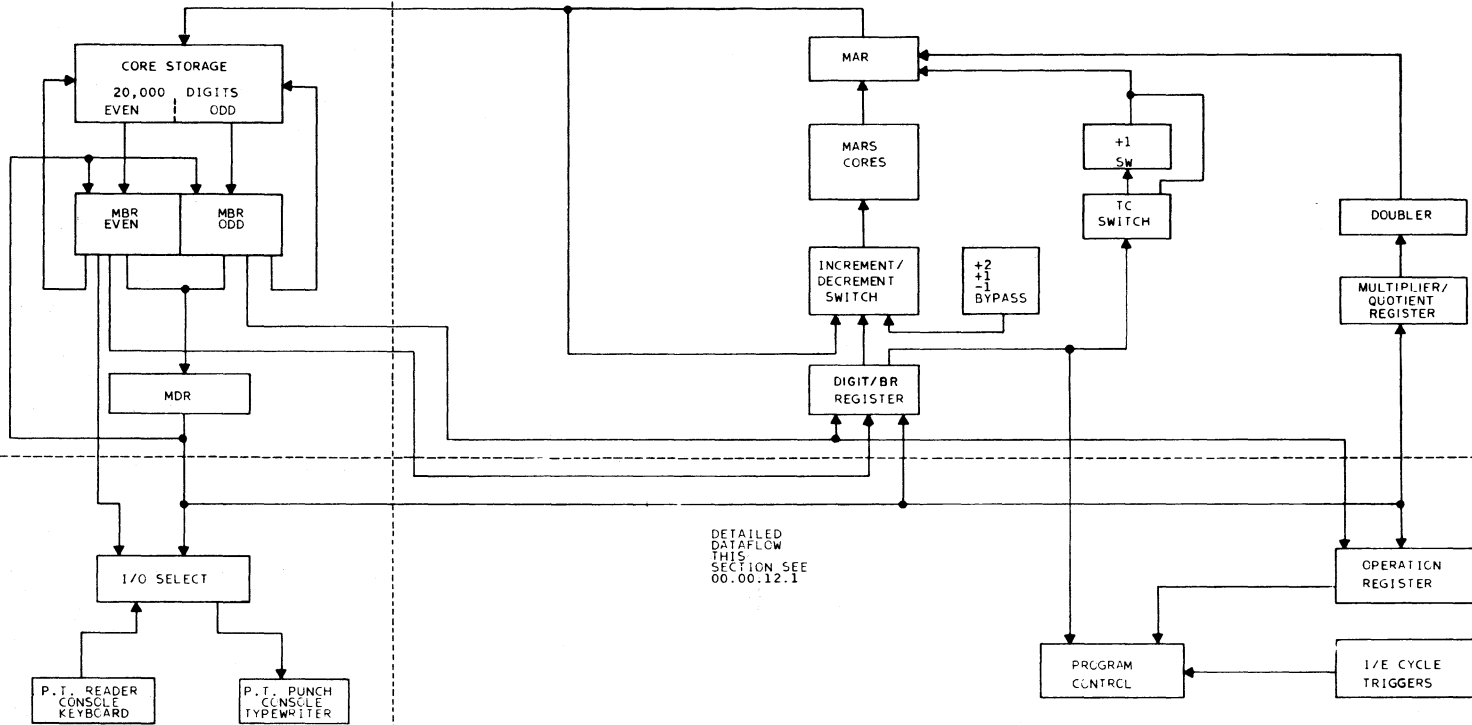
ENTRY		FROM PG
SET ENTRY TO SHIFT		71
ITEM	EXIT	TO PG
I	SHIFT TO ZERO FILL	49

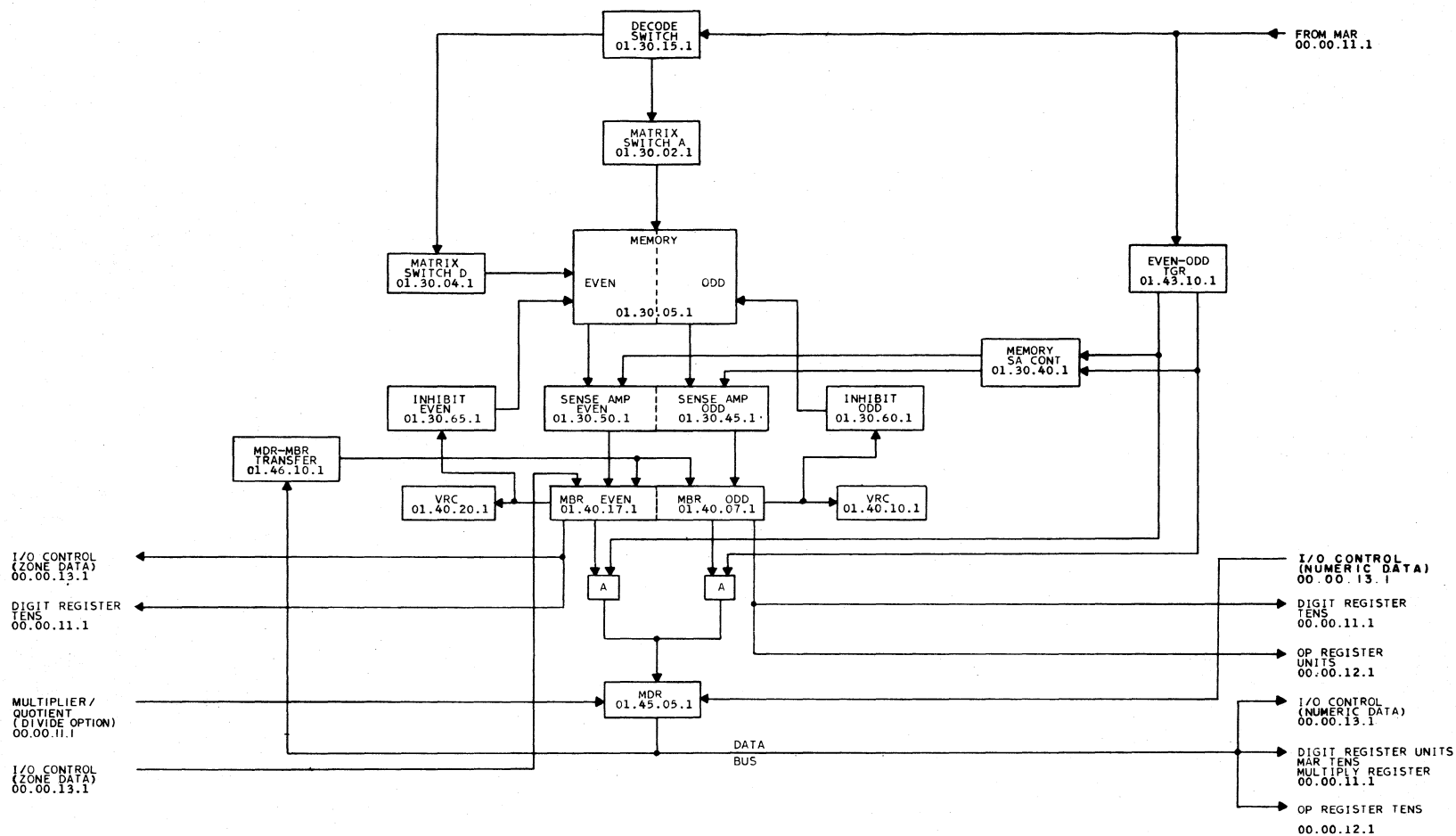
DETAILED DATAFLOW THIS SECTION SEE 00.00.10.1

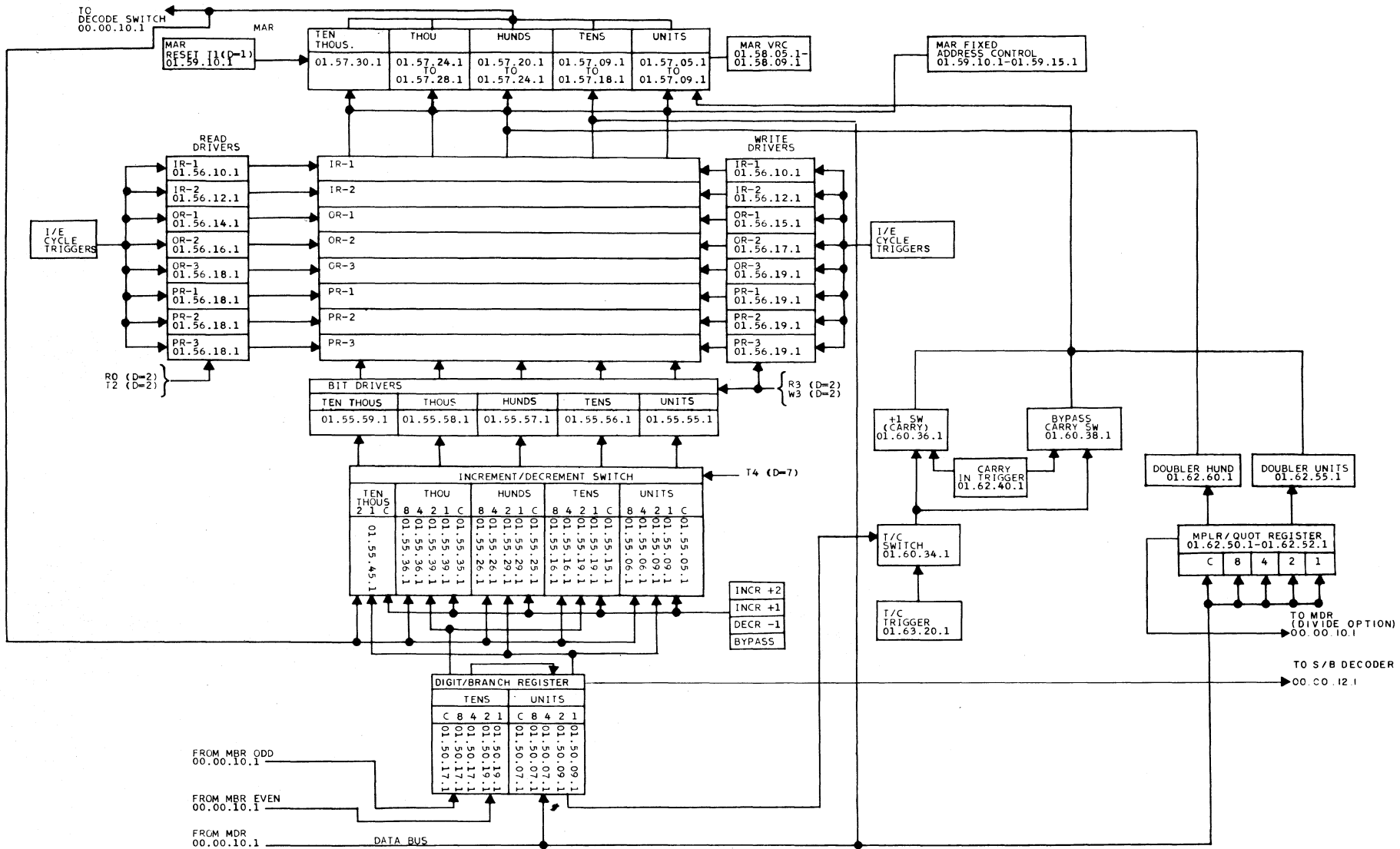
DETAILED DATAFLOW THIS SECTION SEE 00.00.11.1

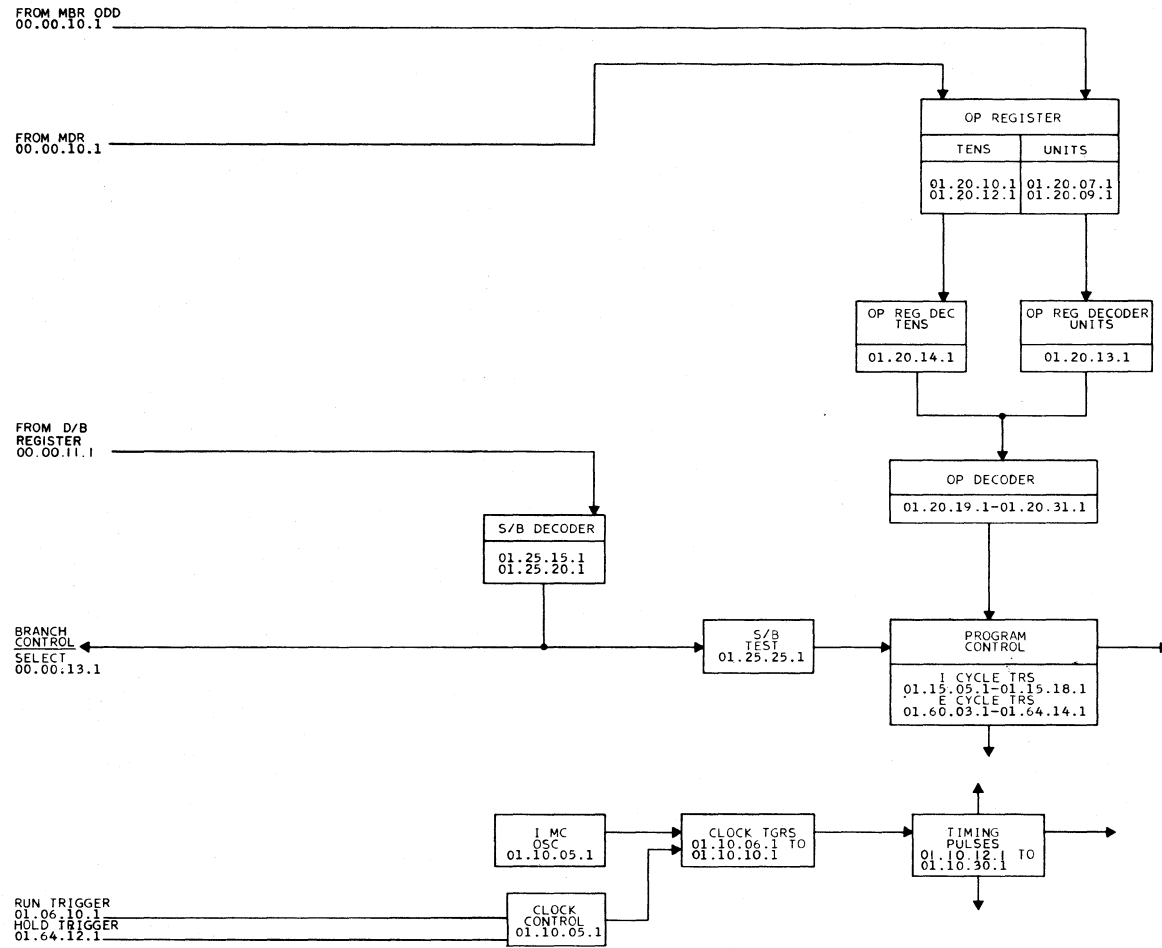
DETAILED DATAFLOW THIS SECTION SEE 00.00.13.1

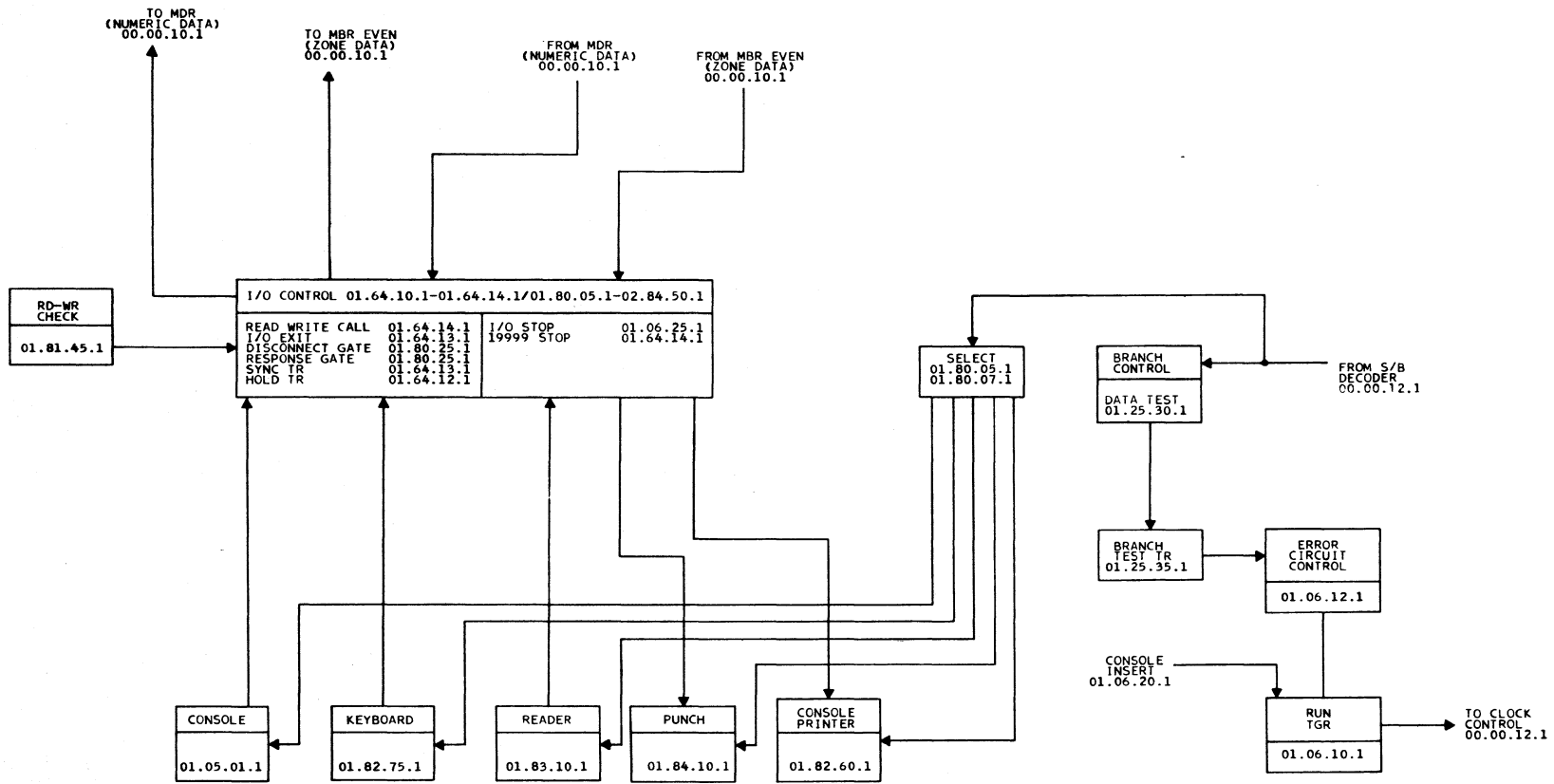
DETAILED DATAFLOW THIS SECTION SEE 00.00.12.1











SHOE CONNECTOR A

SC	LINE TITLE		
1	PUNCH=EL	01.84.20.1	02.84.50.1
2	" C=BIT	↑	↑
3	" X "	↑	↑
4	" 0 "	↑	↑
5	" 8 "	↑	↑
6	" 4 "	↑	↑
7	" 2 "	↑	↑
8	PUNCH=1=BIT	01.84.20.1	
9	PUNCH=FEED	01.84.10.1	
10	PUNCH=NO=FEED=P	01.84.10.1	02.84.50.1
11	+S=TAPE=LEVEL=1	02.83.50.1	01.83.20.1
12	" " " 2	↑	↑
13	" " " 3	↑	↑
14	" " " 4	↑	↑
15	" " " 5	↑	↑
16	" " " 6	↑	↑
17	" " " 7	↑	↑
18	+S=TAPE=LEVEL=8	↓	↓
19	+S=TAPE=SYNC=EXIT	02.83.50.1	01.80.30.1
20	+S=NON=PROCESS=RUN=OUT	01.83.10.1	02.83.60.1
21	+S=CLUTCH=DRIVE	01.83.10.1	02.83.60.1
22	+S=READER=RDY	02.83.60.1	01.83.10.1
23	+S=TAPE=TENSION	02.84.50.1	01.84.10.1
24	+S=P=3=RESPONSE	02.84.50.1	01.80.30.1
25	+S=PUNCH=CHECK	02.84.50.1	01.81.45.1
27	+S=TAPE=FEED	02.84.50.1	01.84.10.1
28	+S=PCB=1	02.84.50.1	01.80.25.1
29			
30			
31			
32			
33	+48V PLUS	02.70.10.1	01.90.32.1
34			
35			
36			
37			
38			
39			
40			

SHOE CONNECTOR B

SC			
1	TW=1620=C=BIT	01.82.20.2	04.83.05.1
2	-S=1620=C=BIT	↑	↑
3	TW=1620=O=BIT	↑	↑
4	-S=1620=O=BIT	01.82.20.2	
5	TW=1620=X=BIT	01.82.20.1	
6	-C=1620=X=BIT	01.82.20.1	
7	TW=1620=B=BIT	01.82.20.3	
8	-C=1620=B=BIT	01.82.20.3	
9	TW=1620=4=BIT	01.82.52.1	
10	-C=1620=4=BIT	↑	
11	TW=1620=2=BIT		
12	-C=1620=2=BIT	↓	
13	TW=1620=1=BIT		
14	-C=1620=1=BIT	01.82.52.1	04.83.05.1
15	TW=CD=PCH=DISCONNECT	04.83.04.1	01.80.20.1
16	-C=CD=PCH=DISCONNECT	↑	↑
17	TW=CD=PCH=SYNC	↑	↑
18	-C=CD=PCH=SYNC	↓	↓
19	TW=CD=PCH=BUFFER=READY	↓	↓
20	-C=CD=PCH=BUFFER=READY	04.83.04.1	01.80.20.1
21	TW=CD=PCH=DATA=GATE	01.80.20.1	04.83.06.1
22	-C=CD=PCH=DATA=GATE	↑	↑
23	TW=SET=1/0=SAM=MDR	↓	
24	-C=SET=1/0=SAM=MDR	01.80.20.1	
25	TW=1/0=EXIT=TR	01.81.15.1	
26	-C=1/0=EXIT=TR	01.81.15.1	
27	TW=WR=CHK=TR=OFF	01.81.45.1	
28	-C=WR=CHK=TR=OFF	01.81.45.1	
29	TW=MANUAL=RESET	01.80.05.1	
30	-C=MANUAL=RESET	01.80.05.1	04.83.06.1
31			
32			
33	32 POS AVAILABLE ONLY		
34			
35			
36			
37			
38			
39			
40			

THE FOLLOWING SMS CARDS ARE INTERCHANGEABLE ON THE 1620 SYSTEM.
ALL FIELD REPLACEMENT MUST BE WITH CARDS LISTED IN THE RIGHT-HAND COLUMN.

CARD CODE	P/N		CARD CODE	P/N
VE	371869		TAG	370366
VF	371870		TAH	370367
VG	371868		TAF	370365
VJ	371867		TAJ	370364
VL	371874		TAL	370370
VM	371871		TFC	370646
FL	371396		WF	371789
FM	371397		WG	371790
FQ	371454		ALY	370552

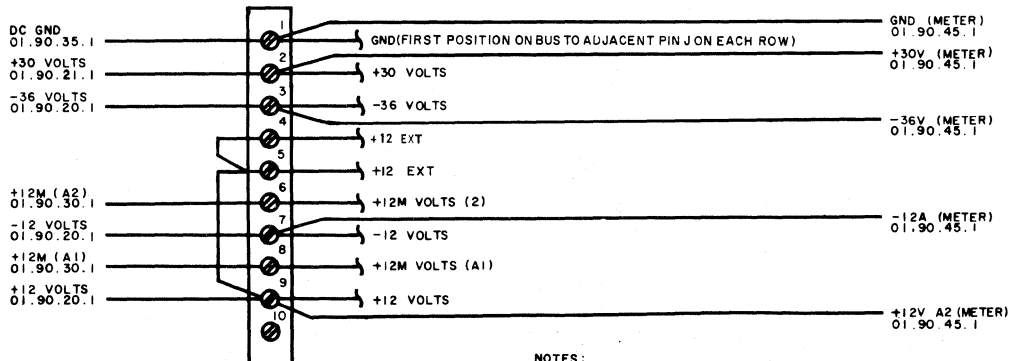
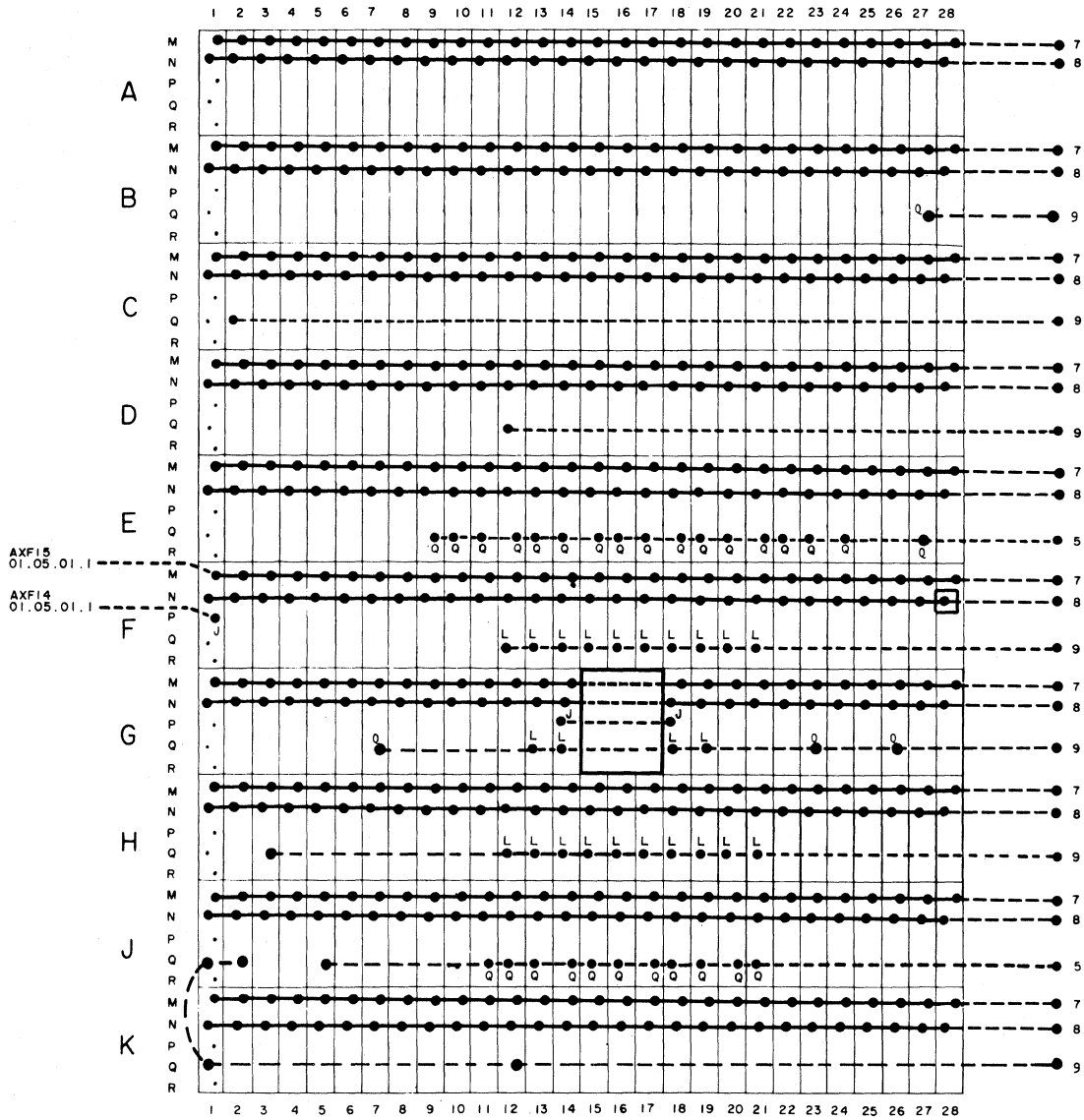
SEE NOTE I & II

NOTES:

- I. THE FM & WG SMS CARDS SHOULD NOT BE MIXED - THE 1620 MAY HAVE ALL FM OR ALL WG CARDS. FIELD REPLACEMENT SHOULD BE WITH THE CARD TYPE ORIGINALLY SUPPLIED WITH THE SYSTEM.
- II. THE WG IS FULLY INTERCHANGEABLE IN THE 1620 SYSTEM WITH THE DKA PN 370443.

	A	B	C	D	E	F	G	H	J	K
1	CD- FP 371029 03 01.55.21.1 01.56.21.1 01.56.21.1 01.57.40.1	TFC- FP 370646 04 01.55.02.1 01.56.05.1 01.56.21.1 01.57.40.1	AFR- FP 371943 06 01.55.02.1 01.56.10.1 01.56.21.1 01.57.40.1	MX- FP 371661 04 01.55.02.1 01.56.10.1 01.56.21.1 01.57.40.1	TFC- FP 370646 04 01.55.02.1 01.56.10.1 01.56.21.1 01.57.40.1	AHK- FP 370322 04 01.55.02.1 01.56.10.1 01.56.21.1 01.57.40.1	AFR- FP 371943 06 01.55.02.1 01.56.10.1 01.56.21.1 01.57.40.1		WJ- FP 371881 02 01.56.36.1 01.56.36.1	WJ- FP 371881 02 01.56.36.1 01.56.36.1
2	MAX- IF 370004 04 01.55.05.1	CAB- FP 371931 03 01.55.05.1 01.56.05.1	CEYB- FP 371032 04 01.55.05.1 01.56.05.1	AHK- FP 370322 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	TFC- FP 370646 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	AHK- FP 370322 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	AHK- FP 370322 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	CAB- FP 371931 03 01.55.05.1 01.56.05.1	WJ- FP 371881 02 01.56.36.1 01.56.36.1	TAG- FP 370366 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1
3	MX- 371661 04 01.55.05.1 01.55.05.1 01.55.05.1	AHK- IF 371322 04 01.55.05.1	AHK- IF 370322 04 01.55.05.1 01.56.05.1	RE- 122 371699 01 01.55.05.1	TFC- FP 370646 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	TAG- FP 370366 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	DAW- FP 370083 03 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	CEYB- FP 371032 04 01.55.05.1 01.56.05.1	CAB- FP 371931 03 01.55.05.1 01.56.05.1	TAG- FP 370366 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1
4	CD- FP 371029 03 01.55.05.1 01.55.05.1 01.55.05.1	AHK- FP 370322 04 01.55.05.1 01.56.05.1 01.56.21.1 01.57.40.1	CD- FP 371029 03 01.55.05.1 01.56.05.1	MX- FP 371661 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	MX- FP 371661 04 01.55.05.1 01.56.22.1 01.56.23.1	AFR- FP 371943 06 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	CD- FP 371029 03 01.55.05.1 01.56.05.1 01.56.21.1 01.57.40.1	AFR- FP 371943 06 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	CAB- FP 371931 03 01.55.05.1 01.56.05.1	AHK- DV 370322 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1
5	CD- FP 371029 03 01.55.05.1 01.55.05.1 01.55.05.1	TAG- FP 370366 04 01.55.05.1 01.56.05.1	CD- FP 371029 03 01.55.05.1 01.56.05.1	CD- FP 371029 03 01.55.05.1 01.56.05.1	TAG- FP 370366 04 01.55.05.1 01.56.05.1 01.56.21.1 01.57.40.1	CAB- FP 371931 03 01.55.05.1 01.56.05.1	AHK- FP 370322 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	CD- FP 371029 03 01.55.05.1 01.56.05.1 01.56.21.1 01.57.40.1	YJA- FP 370366 04 01.55.05.1 01.56.10.1 01.56.21.1 01.57.40.1	CD- FP 371029 03 01.55.05.1 01.56.05.1 01.56.21.1 01.57.40.1
6	MX- 371661 04 01.55.09.1 01.55.09.1 01.55.16.1	CD- FP 371029 03 01.55.09.1 01.56.09.1 01.56.21.1	CD- FP 371029 03 01.55.09.1 01.56.09.1	MX- FP 371661 04 01.55.09.1 01.56.09.1 01.56.21.1	TAG- FP 370366 04 01.55.09.1 01.56.09.1 01.56.21.1	AHK- FP 370322 04 01.55.09.1 01.56.10.1 01.56.21.1 01.57.40.1	AHK- FP 370322 04 01.55.09.1 01.56.10.1 01.56.21.1 01.57.40.1	MX- FP 371661 04 01.55.09.1 01.56.09.1 01.56.21.1	MX- FP 371661 04 01.55.09.1 01.56.09.1 01.56.21.1	CD- FP 371029 03 01.55.09.1 01.56.09.1 01.56.21.1
7	MX- 371661 04 01.55.09.1 01.55.09.1 01.55.09.1	CD- FP 371029 03 01.55.09.1 01.56.09.1	MX- FP 371661 04 01.55.15.1 01.56.15.1	CAB- FP 371931 03 01.55.05.1 01.56.05.1 01.56.21.1	TAG- FP 370366 04 01.55.09.1 01.56.09.1 01.56.21.1	AHU- FP 370386 03 01.55.05.1 01.56.05.1 01.56.21.1	CEYB- FP 371032 04 01.55.05.1 01.56.05.1	AHU- FP 370386 03 01.55.05.1 01.56.05.1	TAG- FP 370366 04 01.55.18.1 01.56.18.1 01.56.21.1	AHK- FP 370322 04 01.55.09.1 01.56.09.1 01.56.21.1
8	CD- FP 371029 03 01.55.19.1 01.55.19.1 01.55.19.1	TAG- FP 370366 04 01.55.19.1 01.56.02.1	CD- FP 371029 03 01.55.19.1 01.56.19.1	CD- FP 371029 03 01.55.15.1 01.56.15.1	CAB- FP 371931 03 01.55.16.1 01.56.16.1 01.56.21.1	TFC- FP 370646 04 01.55.16.1 01.56.16.1 01.56.21.1	DEF- FP 370204 02 01.55.15.1 01.56.09.1	AHU- FP 370386 03 01.55.15.1 01.56.09.1	TAG- FP 370366 04 01.55.30.1 01.56.30.1 01.56.33.1	MX- FP 371661 04 01.55.19.1 01.56.23.1 01.56.23.1
9	AHK- FP 370322 04 01.55.09.1 01.55.09.1 01.55.09.1	TAG- FP 370366 04 01.55.15.1 01.56.15.1	TAG- FP 370366 04 01.55.15.1 01.56.15.1	AHK- FP 370322 04 01.55.06.1 01.56.06.1 01.56.16.1	WJ- FP 371881 02 01.55.55.1 01.56.55.1	TFC- FP 370646 04 01.55.07.1 01.56.07.1 01.56.07.1	TFC- FP 370646 04 01.55.10.1 01.56.10.1 01.56.15.1	TCZ- FP 370335 02 01.55.09.1 01.56.09.1	TAG- FP 370366 04 01.55.30.1 01.56.30.1 01.56.33.1	CD- FP 371029 03 01.55.31.1 01.56.31.1 01.56.31.1
10	CD- FP 371029 03 01.55.16.1 01.55.16.1 01.55.16.1	MX- FP 371661 04 01.55.19.1 01.56.19.1 01.56.19.1	CD- FP 371029 03 01.55.16.1 01.56.16.1	TFC- FP 370646 04 01.55.05.1 01.56.05.1 01.56.25.1	YJA- FP 370788 03 01.55.36.1 01.56.36.1	TCZ- FP 370335 02 01.55.18.1 01.56.18.1	TAG- FP 370366 04 01.55.16.1 01.56.16.1 01.56.18.1	TCZ- FP 370335 02 01.55.17.1 01.56.17.1	TFC- FP 370646 04 01.55.30.1 01.56.30.1 01.56.33.1	TAG- FP 370366 04 01.55.31.1 01.56.31.1 01.56.31.1
11	CD- FP 371029 03 01.55.16.1 01.55.16.1 01.55.16.1	CD- FP 371029 03 01.55.16.1 01.56.16.1	CD- FP 371029 03 01.55.16.1 01.56.16.1	CAB- FP 371931 03 01.55.26.1 01.56.26.1 01.56.26.1	WJ- FP 371881 02 01.55.56.1 01.56.56.1	TCZ- FP 370335 02 01.55.16.1 01.56.16.1	TAG- FP 370366 04 01.55.18.1 01.56.18.1 01.56.15.1	TCZ- FP 370335 02 01.55.05.1 01.56.05.1	WJ- FP 371881 02 01.56.30.1 01.56.30.1	MX- FP 371661 04 01.55.50.1 01.56.50.1 01.57.40.1
12	MX- 371661 04 01.55.16.1 01.55.16.1 01.55.16.1	CD- FP 371029 03 01.55.19.1 01.56.19.1	CD- FP 371029 03 01.55.19.1 01.56.19.1	CEYB- FP 371032 04 01.55.15.1 01.56.15.1 01.56.25.1	WJ- FP 371881 02 01.55.55.1 01.56.55.1	NN- FP 371678 01 01.57.01.1	TCZ- FP 370335 02 01.57.30.1 01.57.30.1	NN- FP 371678 01 01.57.01.1	YJA- FP 370788 03 01.56.30.1 01.56.30.1 01.56.30.1	CEYB- FP 371032 04 01.55.50.1 01.56.50.1 01.56.44.1
13	AHK- FP 370322 04 01.55.19.1 01.55.19.1 01.55.19.1	CD- FP 371029 03 01.55.19.1 01.56.19.1	MX- FP 371661 04 01.55.25.1 01.56.25.1	CD- FP 371029 03 01.55.25.1 01.56.25.1	WJ- FP 371881 02 01.55.56.1 01.56.56.1	NN- FP 371678 01 01.57.01.1	NN- FP 371678 01 01.57.03.1	NN- FP 371678 01 01.57.01.1	WJ- FP 371881 02 01.56.30.1 01.56.30.1	CD- FP 371029 03 01.55.50.1 01.56.50.1 01.56.50.1
14	CD- FP 371029 03 01.55.26.1 01.55.26.1 01.55.26.1	CD- FP 371029 03 01.55.26.1 01.56.26.1	CD- FP 371029 03 01.55.25.1 01.56.25.1	CD- FP 371029 03 01.55.29.1 01.56.29.1	WJ- FP 371881 02 01.55.59.1 01.56.59.1	NN- FP 371678 01 01.57.01.1	NN- FP 371678 01 01.57.03.1	NN- FP 371678 01 01.57.01.1	WJ- FP 371881 02 01.56.30.1 01.56.30.1	CD- FP 371029 03 01.55.19.1 01.56.22.1 01.56.22.1

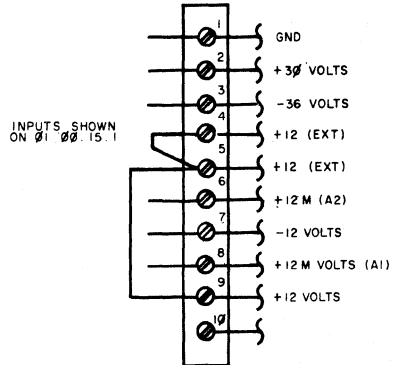
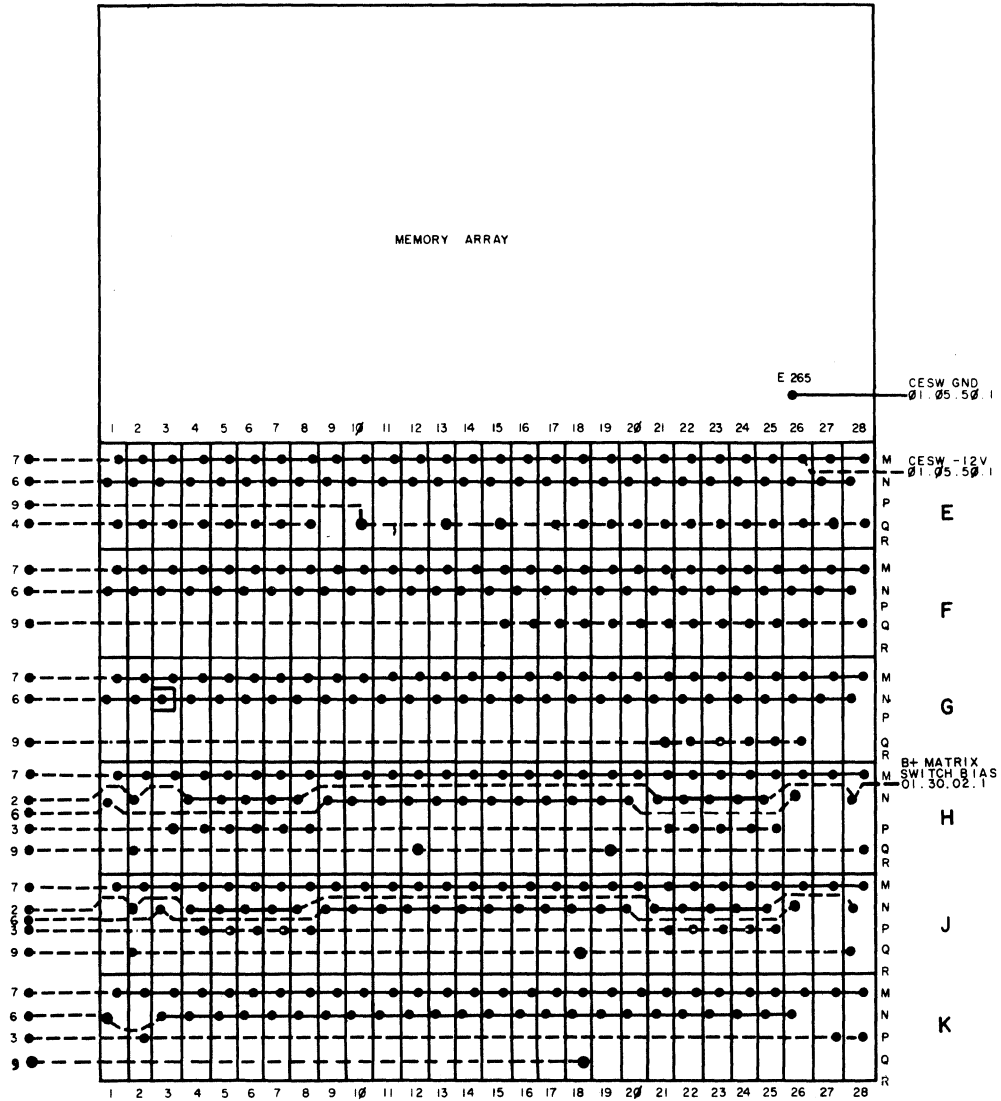
WIRING SIDE



NOTES:

- X PIN J IS GROUND ON ALL SOCKETS.
- INDICATES VOLTAGE CHAIN.
- - - INDICATES JUMPER WIRE.
- XIII INDICATES A 10MFD CAPACITOR TO "J" PIN

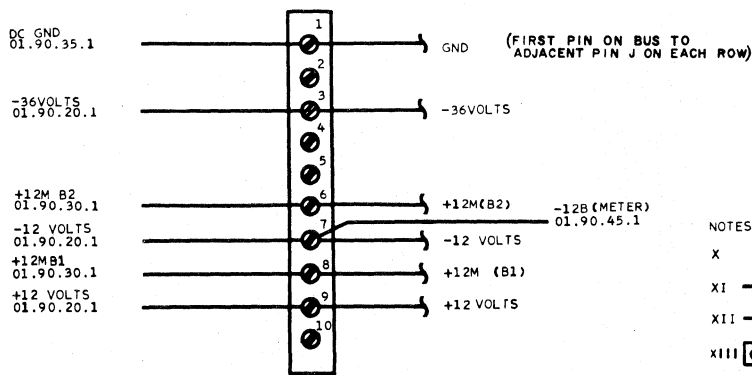
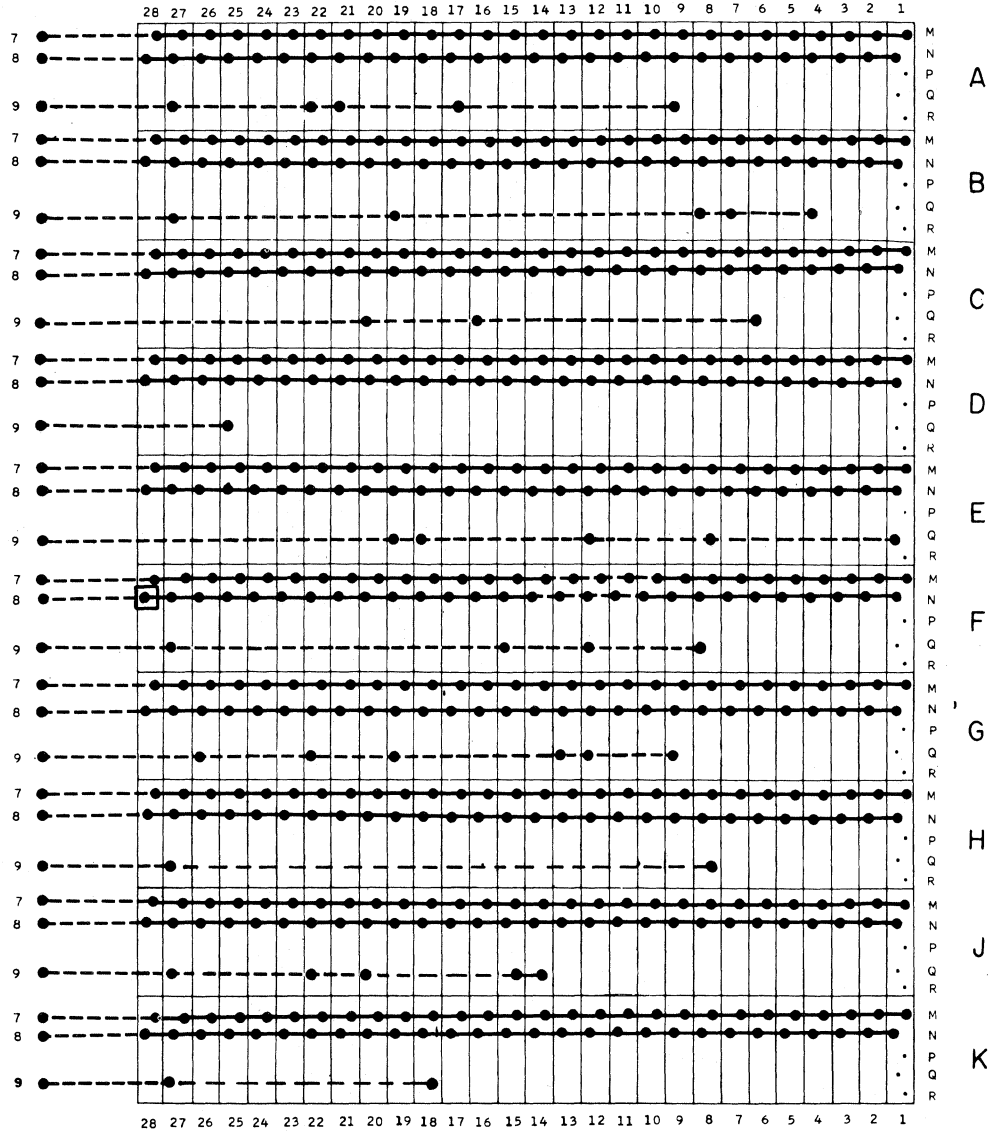
WIRING SIDE




(FIRST POSITION ON BUS TO
ADJACENT PIN J ON EACH ROW)

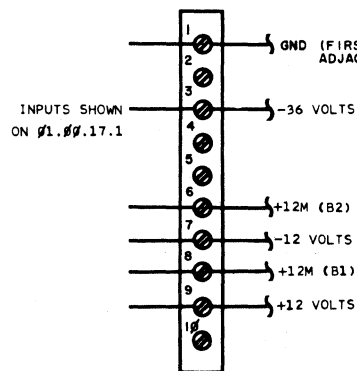
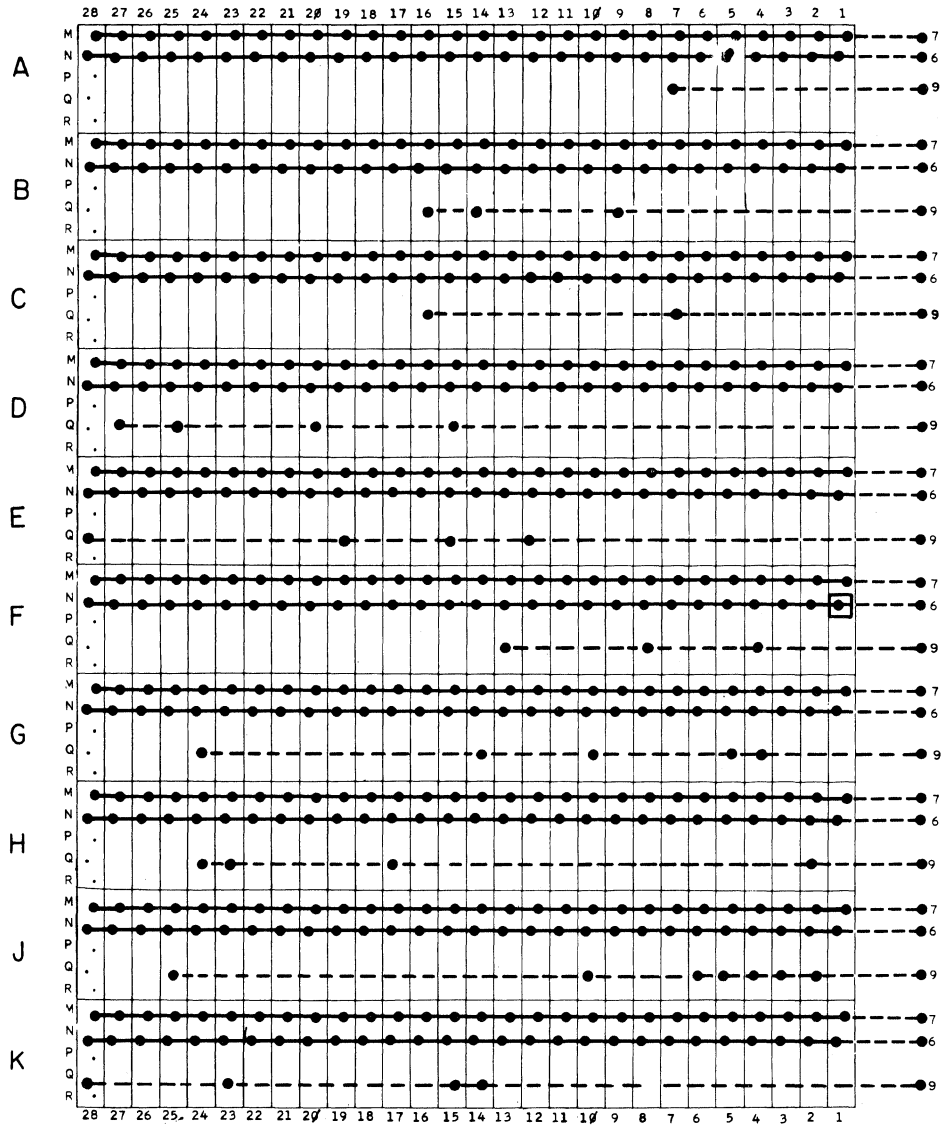
- NOTES:
- I** PIN J IS GROUND ON ALL SOCKETS.
 - II** ——— INDICATES VOLTAGE CHAIN
 - III** - - - - - INDICATES JUMPER WIRE.
 - IV** INDICATES A 10MFD CAPACITOR TO "J" PIN

WIRING SIDE



- NOTES;
- X PIN 'J' IS GROUND ON ALL SOCKETS.
 - XI ——— INDICATES VOLTAGE CHAIN.
 - XII - - - - INDICATES JUMPER WIRE.
 - XIII  INDICATES A 10MFD CAPACITOR TO "J" PIN

WIRING SIDE



NOTES:

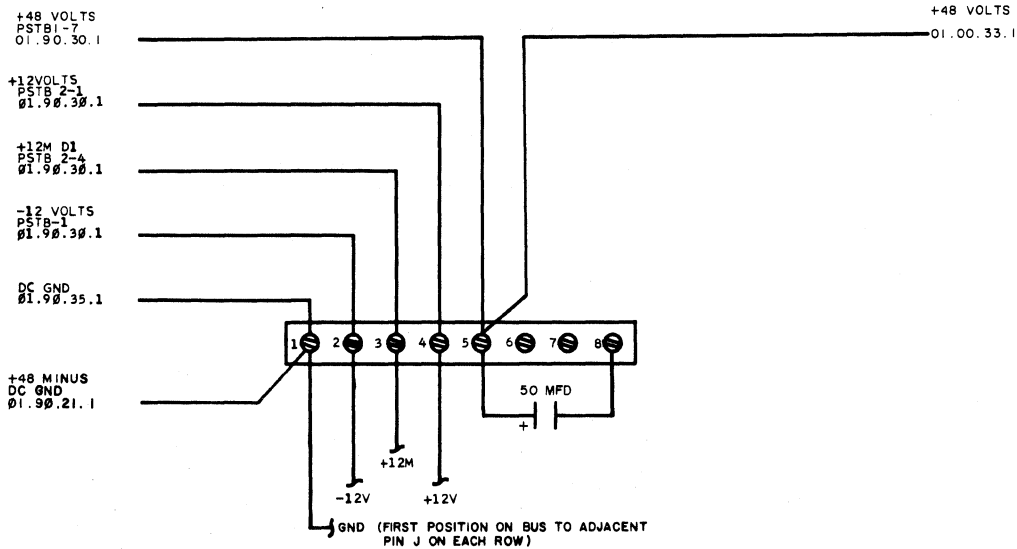
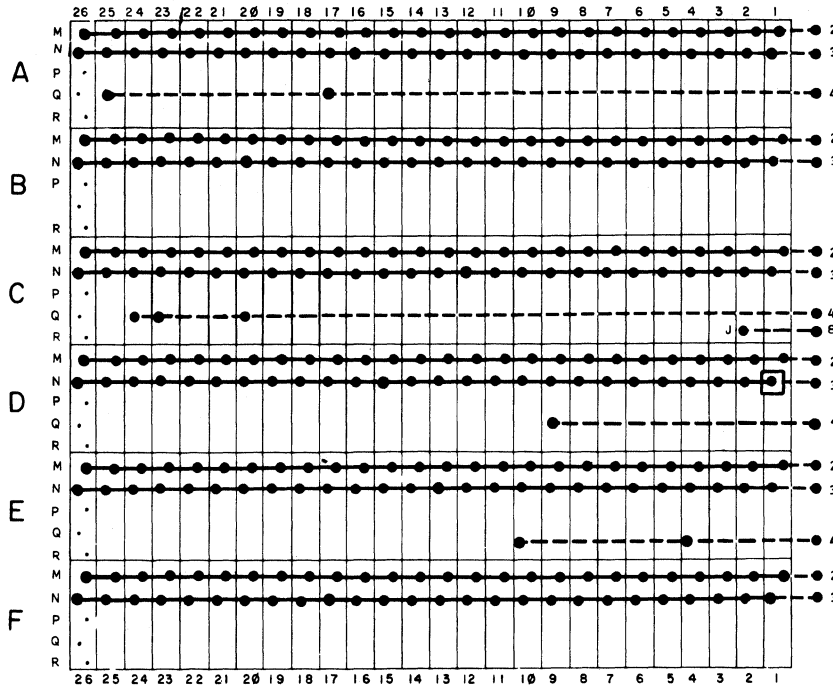
X PIN J IS GROUND ON ALL SOCKETS

XI ——— INDICATES VOLTAGE CHAIN

XII - - - - - INDICATES JUMPER WIRE

XIII ■ INDICATES A 10 MFD CAPACITOR TO "J" PIN.

WIRING SIDE



- NOTES:
- X I PIN J IS GROUND ON ALL SOCKETS.
 - X I ——— INDICATES VOLTAGE CHAIN.
 - X II - - - - - INDICATES JUMPER WIRE
 - X III INDICATES A 10HFD CAPACITOR TO "J" PIN

GATE A T CONNECTORS

01A1(2)ZXXX

	A	B	C	D
1				
2				
3				
4				
5				
6			01.45.16.1	
7	01.45.17.1		01.45.16.1	
8	01.57.18.1	01.57.18.1	01.57.16.1	
9	01.45.17.1			
10	01.57.18.1	01.55.15.1	01.55.15.1	01.57.07.1
11	01.57.05.1	01.57.07.1	01.57.05.1	01.57.07.1
12	01.57.16.1	01.57.30.1	01.57.30.1	01.57.07.1
13	01.57.24.1			01.57.22.1
14		01.57.30.1		01.57.22.1

01A1(2)ZXXX

	A	B	C	D
15	01.57.24.1	01.57.16.1		01.57.22.1
16	01.57.18.1	01.57.16.1		01.57.22.1
17	01.57.32.1			01.57.32.1
18	01.57.30.1			
19				
20				
21	01.57.26.1	01.57.26.1		
22	01.57.26.1	01.57.26.1	01.57.20.1	01.57.20.1
23	01.57.28.1	01.57.28.1	01.57.28.1	01.57.28.1
24	01.10.05.1			
25				01.90.42.1
26				
27				
28				

MEMORY EDGE CONNECTORS

01A2(4)LXXX

	A	B	C	D
1	01.30.10.1	01.30.10.1	01.30.26.1	01.30.26.1
2	01.30.26.1	01.30.26.1	01.30.26.1	01.30.26.1
3	01.30.26.1	01.30.26.1	01.30.26.1	01.30.26.1
4	01.30.31.1	01.30.31.1	01.30.31.1	01.30.31.1
5	01.30.31.1	01.30.31.1	01.30.31.1	01.30.31.1
6	01.30.31.1	01.30.31.1		01.30.10.1
7	01.30.80.1			01.30.80.1
8	01.30.80.1			01.30.80.1
9	01.30.80.1			01.30.80.1
10	01.30.80.1			01.30.80.1
11	01.30.80.1			01.30.80.1
12	01.30.80.1			01.30.80.1
13	01.30.80.1			01.30.80.1
14	01.30.80.1			01.30.80.1
15	01.30.80.1			01.30.80.1
16	01.38.80.1			01.30.80.1
17	01.30.80.1			01.30.80.1
18	01.30.80.1			01.30.80.1

01A2(4)RXXX

	A	B	C	D
1	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
2	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
3	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
4	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
5	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
6	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
7	01.30.10.1	01.30.10.1	01.30.21.1	01.30.21.1
8	01.30.21.1	01.30.21.1	01.30.21.1	01.30.21.1
9	01.30.21.1	01.30.21.1	01.30.21.1	01.30.21.1
10	01.30.16.1	01.30.16.1	01.30.16.1	01.30.16.1
11	01.30.16.1	01.30.16.1	01.30.16.1	01.30.16.1
12	01.30.16.1	01.30.16.1		
13	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
14	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
15	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
16	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
17	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1
18	01.30.45.1	01.30.45.1	01.30.50.1	01.30.50.1

GATE B T CONNECTORS

01B1(2)YXXX UPPER

	A	B	C	D		A	B	C	D	
1		01.10.25.1				01.06.30.1	01.40.08.1			1
2	01.15.10.1	01.25.25.1	01.25.40.1			01.60.54.1	01.40.08.1	01.40.09.1		2
3	01.25.05.1	01.15.10.1	01.25.40.1			01.45.15.1	01.40.09.1			3
4	01.10.25.1	01.60.08.1	01.60.54.1	01.60.54.1		01.16.12.1	01.45.16.1			4
5	01.15.14.1	01.43.10.1	01.06.03.1			01.20.20.1	01.64.13.1	01.15.18.1		5
6	01.16.05.1	01.10.15.1	01.43.10.1	01.63.20.1		01.60.54.1	01.57.07.1	01.64.10.1	01.20.42.1	6
7	01.15.15.1	01.10.22.1	01.25.40.1	01.10.22.1		01.20.31.1	01.20.20.1	01.62.31.1	01.60.36.1	7
8	01.59.10.1	01.10.15.1	01.25.40.1	01.10.25.1		01.20.35.1	01.20.35.1	01.60.57.1	01.20.42.1	8
9	01.15.16.1	01.10.25.1	01.10.26.1	01.10.09.1		01.45.17.1	01.60.54.1	01.64.13.1	01.20.42.1	9
10	01.15.17.1	01.10.12.1	01.10.26.1			01.45.17.1	01.20.20.1	01.60.40.1	01.20.20.1	10
11	01.15.14.1	01.10.12.1	01.15.18.1	01.10.08.1		01.60.41.1	01.45.15.1	01.20.20.1	01.20.20.1	11
12	01.15.14.1	01.10.12.1	01.15.18.1	01.15.05.1		01.47.10.1	01.63.50.1	01.20.19.1	01.20.20.1	12
13	01.15.14.1	01.10.12.1	01.15.18.1	01.10.09.1		01.60.41.1	01.60.08.1	01.20.12.1	01.57.07.1	13
14	01.15.13.1	01.10.22.1	01.15.18.1	01.16.10.1		01.63.50.1	01.65.06.1	01.20.18.1	01.57.18.1	14
15	01.10.15.1	01.50.05.1	01.15.18.1	01.06.30.1		01.60.40.1	01.65.06.1	01.20.18.1	01.64.11.1	15
16	01.15.10.1	01.50.05.1	01.15.18.1	01.06.15.1		01.06.01.1	01.65.06.1	01.20.18.1	01.60.11.1	16
17	01.16.20.1	01.50.05.1	01.15.18.1	01.60.50.1		01.46.10.1	01.46.10.1	01.20.18.1	01.40.50.1	17
18	01.16.20.1	01.50.05.1	01.06.20.1	01.15.10.1		01.60.14.1	01.65.06.1	01.20.18.1	01.64.12.1	18
19	01.06.15.1	01.50.05.1	01.06.20.1	01.15.12.1		01.60.40.1	01.65.06.1	01.20.14.1	01.59.10.1	19
20	01.15.15.1	01.50.05.1	01.06.20.1	01.15.17.1		01.65.03.1	01.65.03.1	01.20.14.1	01.59.10.1	20
21	01.15.15.1	01.16.10.1	01.06.20.1	01.15.11.1		01.65.03.1	01.65.03.1	01.64.12.1	01.59.10.1	21
22	01.15.05.1	01.16.13.1	01.06.20.1	01.65.01.1		01.65.04.1	01.65.04.1	01.65.03.1	01.60.12.1	22
23	01.15.15.1	01.16.13.1	01.06.15.1	01.63.20.1		01.65.05.1	01.65.05.1	01.62.30.1	01.60.13.1	23
24	01.55.02.1	01.16.13.1	01.90.42.1	01.60.58.1		01.65.05.1	01.65.06.1	01.60.49.1	01.60.40.1	24
25	01.65.08.1	01.16.13.1	01.06.15.1	01.15.11.1		01.65.06.1	01.65.06.1	01.60.14.1	01.62.33.1	25
26	01.64.10.1	01.16.13.1	01.15.17.1	01.63.31.1		01.62.33.1	01.15.05.1	01.60.31.1	01.20.42.1	26
27	01.60.08.1		01.06.15.1	01.15.12.1		01.65.02.1	01.63.50.1	01.60.13.1	01.63.40.1	27
28	01.30.35.1	01.15.11.1	01.15.16.1	01.15.13.1		01.63.30.1	01.63.50.1	01.63.10.1	01.63.40.1	28

01B1(2)ZXXX LOWER

W CONNECTORS

	AW-B	AW-C	AW-D	AW-E	AW-F	AW-G	AW-H	AW-J	AW-K	AW-L	
1	01.10.30.1	01.67.21.1	01.10.30.1	01.10.25.1	01.62.30.1		01.57.09.1	01.20.35.1	01.45.05.1	01.67.21.1	1
2	01.10.30.1	01.10.10.1	01.10.30.1	01.15.18.1	01.56.12.1	01.40.08.1	01.57.09.1	01.30.35.1	01.45.07.1	01.67.21.1	2
3	01.10.30.1	01.10.22.1	01.66.51.1	01.15.18.1	01.56.12.1	01.40.07.1	01.57.09.1	01.30.35.1	01.46.10.1	01.67.21.1	3
4	01.10.15.1	01.10.22.1	01.66.51.1	01.30.35.1	01.56.18.1		01.45.30.1	01.10.05.1	01.57.05.1	01.67.21.1	4
5	01.10.30.1	01.15.10.1	01.10.15.1	01.40.03.1	01.56.18.1	01.40.08.1	01.66.51.1	01.40.03.1	01.57.09.1	01.66.61.1	5
6	01.10.30.1	01.50.09.1	01.57.07.1	01.45.05.1	01.56.18.1	01.40.07.1	01.66.51.1	01.40.03.1	01.59.15.1	01.66.10.1	6
7	01.10.30.1	01.60.14.1	01.10.30.1	01.57.16.1	01.56.18.1	01.40.07.1	01.45.17.1	01.43.10.1	01.60.40.1	01.66.11.1	7
8	01.47.10.1	01.62.30.1	01.10.26.1	01.57.18.1	01.57.05.1		01.45.17.1	01.43.10.1	01.60.40.1	01.66.11.1	8
9	01.30.35.1	01.63.40.1	01.56.19.1	01.60.22.1	01.57.05.1	01.40.09.1	01.66.51.1	01.64.10.1	01.60.40.1	01.66.11.1	9
10	01.60.05.1	01.65.06.1	01.56.19.1	01.60.49.1	01.06.03.1	01.40.09.1	01.66.60.1	01.45.50.1	01.60.40.1	01.68.00.1	10
11	01.55.02.1	01.66.61.1	01.56.19.1	01.60.56.1	01.57.07.1	01.40.07.1	01.56.14.1	01.45.15.1	01.60.41.1	01.66.88.1	11
12	01.55.03.1	01.66.61.1	01.56.19.1	01.60.57.1	01.57.07.1	01.40.17.1	01.56.15.1	01.45.16.1	01.60.41.1	01.66.40.1	12
13	01.16.20.1	01.56.18.2	01.55.03.1	01.60.59.1	01.57.07.1	01.40.18.1	01.60.11.1	01.45.16.1	01.60.41.1	01.66.10.1	13
14	01.16.05.1	01.68.00.1	01.50.17.1	01.60.59.1	01.10.30.1	01.40.18.1	01.56.17.1		01.63.10.1	01.66.12.1	14
15		01.20.16.1	01.50.17.1	01.63.10.1	01.58.09.1	01.40.19.1	01.62.55.1	01.45.16.1	01.63.10.1	01.66.22.1	15
16	01.16.21.1	01.20.16.1	01.50.17.1	01.63.20.1	01.55.15.1		01.62.55.1	01.45.16.1	01.63.10.1	01.66.24.1	16
17	01.10.25.1	01.20.16.1	01.57.05.1	01.63.20.1	01.55.45.1	01.40.19.1	01.62.55.1	01.45.17.1	01.63.10.1	01.66.51.1	17
18	01.10.25.1	01.66.88.1	01.50.07.1	01.63.20.1	01.59.15.1	01.40.17.1	01.62.55.1	01.45.17.1	01.63.30.2	01.66.51.1	18
19		01.66.88.1	01.50.07.1	01.63.20.1	01.59.15.1	01.57.18.1	01.62.55.1	01.59.10.1	01.63.30.1	01.66.80.1	19
20	01.10.25.1	01.66.88.1	01.50.07.1	01.63.30.1	01.60.36.1		01.62.55.1	01.59.10.1	01.63.30.1	01.65.05.1	20
21	01.16.05.1	01.66.40.1	01.50.09.1	01.63.31.1	01.60.38.1	01.62.60.1	01.57.05.1	01.59.10.1	01.63.40.1	01.66.81.1	21
22	01.16.05.1	01.66.40.1	01.50.09.1	01.10.35.1	01.60.38.1	01.60.38.1	01.62.60.1	01.59.10.1	01.65.06.1	01.66.82.1	22
23	01.16.05.1	01.20.17.1	01.50.19.1	01.10.35.1	01.60.38.1		01.57.16.1	01.59.10.1	01.67.32.1	01.66.82.1	23
24	01.16.05.1	01.20.17.1	01.50.19.1	01.63.30.2	01.60.05.1	01.40.17.1	01.62.30.1	01.59.10.1	01.67.32.1	01.66.83.1	24
25	01.16.05.1	01.66.12.1	01.55.01.1	01.66.88.1	01.57.30.1	01.56.10.1	01.10.36.1	01.45.15.1	01.67.32.1	01.66.83.1	25
26	01.16.05.1	01.66.12.1	01.55.01.1	01.66.88.1	01.56.10.1	01.40.17.1	01.10.36.1	01.06.30.1	01.67.32.1	01.66.90.1	26
27	01.58.09.1	01.66.12.1	01.55.01.1	01.66.82.1	01.57.30.1		01.20.17.1	01.10.12.1	01.67.32.1	01.66.90.1	27
28	01.66.85.1	01.66.19.1	01.55.01.1	01.10.36.1	01.57.30.1		01.20.17.1	01.55.02.1	01.67.32.1	01.66.91.1	28
29		01.66.22.1	01.55.01.1	01.10.36.1	01.66.24.1		01.66.12.1		01.10.35.1	01.66.91.1	29
30	01.66.87.1		01.66.70.1	01.20.17.1	01.66.24.1		01.66.12.1		01.66.85.1	01.66.92.1	30
31	01.66.87.1	01.66.24.1		01.66.71.1	01.66.50.1		01.66.19.1	01.64.10.1	01.63.30.2	01.66.92.1	31
32	01.10.30.1	01.66.51.1		01.66.23.1	01.66.81.1		01.66.19.1		01.20.17.1	01.66.92.1	32
	BWB	BW-C	BWD	BW-E	BWF	BWG	BWH	BWJ	BWK	BWL	

X CONNECTORS

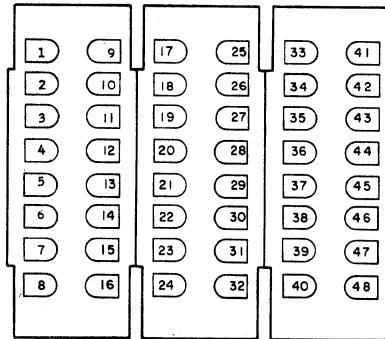
	AX-B	AX-C	AX-D	AX-E	AX-F	AX-G	AX-H	AX-J	AX-K	AX-L	
1	01.66.10.1	01.82.20.2			01.40.07.1	01.41.04.1	01.41.03.1	01.41.07.1	01.67.00.1	01.66.85.1	1
2	01.66.20.1			01.05.50.1	01.40.07.1	01.41.04.1	01.41.03.1	01.41.07.1	01.67.00.1	01.56.16.1	2
3	01.66.30.1			01.55.02.1	01.40.08.1	01.41.04.1		01.41.07.1	01.67.01.1	01.50.09.1	3
4	01.66.50.1			01.55.03.1	01.40.08.1	01.41.04.1		01.41.07.1	01.67.01.1	01.56.18.2	4
5	01.66.60.1	01.81.30.1	01.41.04.1	01.55.15.1	01.40.09.1	01.41.06.1	01.41.05.1	01.41.07.1	01.67.30.1	01.66.71.1	5
6	01.66.40.1		01.41.04.1	01.57.05.1	01.40.09.1	01.41.06.1	01.41.05.1	01.41.07.1	01.67.40.1	01.46.10.1	6
7	01.66.70.1		01.41.04.1	01.57.05.1	01.40.17.1	01.41.06.1	01.41.05.1	01.41.07.1	01.67.40.1	01.63.30.1	7
8	01.66.80.1		01.41.04.1	01.57.07.1	01.40.17.1	01.41.06.1	01.41.05.1	01.41.07.1	01.67.90.1	01.66.81.1	8
9	01.66.80.1		01.41.04.1	01.57.07.1	01.40.18.1	01.41.06.1	01.41.15.1	01.41.07.1	01.67.90.1	01.66.40.1	9
10	01.66.81.1		01.41.04.1	01.57.09.1	01.40.18.1	01.41.06.1	01.41.15.1	01.41.07.1	01.68.10.1	01.66.80.1	10
11	01.67.00.1		01.41.04.1	01.57.09.1	01.40.19.1	01.41.06.1	01.41.15.1	01.41.07.1	01.68.10.1	01.10.25.1	11
12	01.67.10.1		01.41.04.1	01.57.16.1	01.40.19.1	01.41.06.1	01.41.15.1	01.41.07.1	01.68.10.1	01.66.70.1	12
13	01.67.20.1		01.41.04.1	01.57.16.1		01.41.06.1	01.41.15.1	01.41.17.1	01.68.10.1	01.63.30.1	13
14	01.67.30.1		01.41.04.1	01.57.18.1	01.05.01.1	01.41.06.1	01.41.15.1	01.41.17.1	01.68.24.1	01.66.85.1	14
15	01.67.30.1		01.41.04.1	01.57.18.1	01.05.01.1	01.41.06.1	01.41.15.1	01.41.17.1	01.68.24.1	01.60.05.1	15
16	01.67.40.1		01.41.04.1	01.57.20.1		01.41.06.1	01.41.15.1	01.41.17.1	01.68.24.1	01.66.24.1	16
17	01.67.40.1	01.40.17.1	01.41.04.1	01.57.20.1		01.41.03.1	01.41.15.1	01.41.17.1	01.68.24.1	01.68.44.1	17
18	01.66.90.1		01.41.04.1	01.57.22.1	01.67.90.1	01.41.03.1	01.41.15.1	01.41.17.1	01.68.40.1	01.57.07.1	18
19	01.67.50.1		01.41.04.1	01.57.22.1	01.68.90.1	01.41.03.1	01.41.15.1	01.41.17.1	01.68.40.1	01.05.50.1	19
20	01.68.40.1	01.40.18.1	01.41.04.1	01.57.24.1	01.68.85.1	01.41.03.1	01.41.15.1	01.41.17.1	01.68.42.1		20
21	01.68.42.1	01.40.18.1	01.41.04.1	01.57.24.1	01.68.24.1	01.41.03.1	01.41.16.1	01.41.17.1	01.68.42.1		21
22	01.68.44.1	01.40.19.1	01.41.04.1	01.57.26.1	01.68.24.1	01.41.03.1	01.41.16.1	01.41.17.1	01.68.44.1		22
23	01.66.25.1	01.40.19.1	01.41.04.1	01.57.26.1	01.06.30.1	01.41.03.1	01.41.16.1	01.41.17.1	01.68.85.1		23
24	01.66.21.1	01.40.19.1	01.41.04.1	01.57.28.1	01.05.01.1	01.41.03.1	01.41.16.1	01.41.17.1	01.68.85.1		24
25	01.66.23.1	01.40.19.1	01.41.04.1	01.57.28.1	01.05.02.1	01.41.03.1	01.41.16.1	01.41.01.1	01.66.80.1		25
26	01.66.24.1	01.81.41.1	01.41.04.1	01.57.30.1	01.05.01.1	01.41.03.1	01.41.16.1	01.41.01.1	01.68.85.1		26
27	01.68.10.1	01.81.41.1	01.41.04.1	01.57.30.1	01.05.02.1	01.41.03.1	01.41.16.1	01.41.01.1	01.68.90.1		27
28	01.68.10.1	01.81.41.1	01.41.04.1	01.57.30.1	01.05.01.1	01.41.03.1	01.41.16.1	01.41.01.1	01.69.90.1		28
29	01.66.83.1		01.41.04.1	01.57.32.1	01.05.01.1	01.41.03.1		01.41.01.1	01.69.90.1		29
30	01.66.24.1		01.41.04.1	01.60.05.1	01.05.50.1	01.41.03.1		01.41.01.1	01.67.10.1		30
31	01.00.15.1		01.41.04.1	01.60.05.1	01.60.30.1	01.41.03.1		01.41.01.1	01.66.85.1		31
32	01.90.35.1		01.41.04.1	01.58.09.1	01.60.30.1	01.41.03.1		01.41.01.1	01.68.85.1		32
	CE-BOX	DXE	1623	LAMPS	LAMPS/CONS	1623	1623	1623	BX-K	BX-L	

TYPEWRITER CONNECTORS

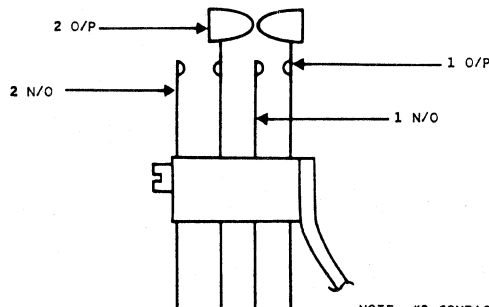
		CXA		
1	01.82.80.1	25	01.82.84.1	
2	01.82.86.1	26	01.82.84.1	
3	01.82.80.1	27	01.82.86.1	
4	01.82.84.1	28	01.82.82.1	
5	01.82.80.1	29	01.82.86.1	
6	01.82.82.1	30	01.82.82.1	
7	01.82.86.1	31	01.82.80.1	
8	01.82.84.1	32	01.82.82.1	
9	01.82.80.1	33	01.82.82.1	
10	01.82.86.1	34	01.82.80.1	
11	01.82.84.1	35	01.82.80.1	
12	01.82.82.1	36	01.82.80.1	
13	01.82.86.1	37	01.82.86.1	
14	01.82.86.1	38	01.82.82.1	
15	01.82.80.1	39	01.82.80.1	
16	01.82.80.1	40	01.82.82.1	
17	01.82.80.1	41	01.82.86.1	
18	01.82.86.1	42	01.82.84.1	
19	01.82.80.1	43	01.82.82.1	
20	01.82.82.1	44	01.82.82.1	
21	01.82.80.1	45	01.82.70.1	
22	01.82.86.1	46	01.82.70.1	
23	01.82.82.1	47	01.82.70.1	
24	01.82.80.1	48	01.82.72.1	

		CXB		
1	01.81.60.1	25	01.81.64.1	
2	↑	26	↑	
3		27		
4	↓	28	↓	
5		29		
6	01.81.60.1	30	01.81.64.1	
7		31	01.81.64.1	
8		32	01.81.60.1	
9	01.81.62.1	33		
10	01.81.62.1	34	01.81.64.1	
11	↑	35	01.81.60.1	
12		36	01.00.33.1	
13		37	01.81.50.1	
14		38	01.81.50.1	
15		39	01.82.70.1	
16		40	01.82.70.1	
17		41	01.82.70.1	
18		42	01.82.72.1	
19		43	01.81.60.1	
20		44	01.90.35.1	
21	↓	45		
22	01.81.62.1	46	01.90.32.1	
23	01.81.64.1	47		
24	01.81.64.1	48	01.90.32.1	

WIRING SIDE CXA & CXB (FEMALE)



TYPEWRITER SELECTOR COMMON CONTACTS



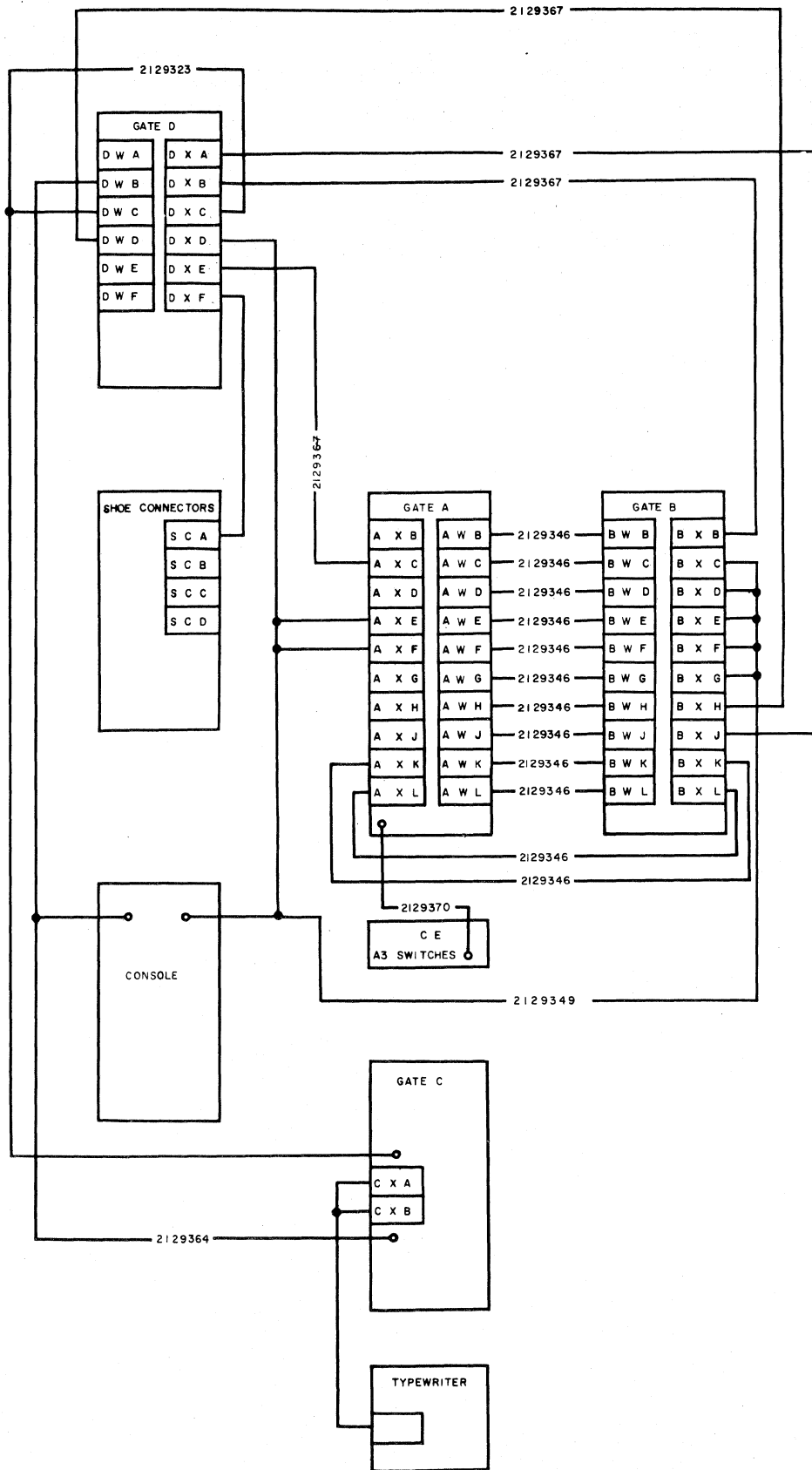
NOTE: #2 CONTACTS MUST MAKE AFTER AND BREAK BEFORE #1 CONTACTS.

W CONNECTORS

	DW-A	DW-B	DW-C	DW-D	DW-E	DW-F		
1		01.06.15.1	01.64.13.1		01.82.20.2	01.81.15.1		1
2		01.06.15.1	01.64.13.1		01.82.20.2	01.81.15.1		2
3		01.06.20.1			01.82.20.2	01.81.15.1		3
4			01.80.25.1		01.82.20.2	01.81.15.1		4
5		01.06.05.1	01.80.25.1		01.82.20.1	01.81.15.1		5
6		01.06.05.1	01.82.60.1		01.82.20.1	01.81.15.1		6
7		01.06.10.1			01.82.20.3	01.81.15.2		7
8		01.06.10.1			01.82.20.3	01.81.15.2		8
9		01.06.12.1			01.82.52.1	01.81.15.2		9
10		01.06.12.1			01.82.52.1	01.81.15.2		10
11		01.84.10.1			01.82.52.1	01.81.15.3		11
12		01.84.10.1			01.82.52.1	01.81.15.3		12
13		01.83.10.1		SEE BXH	01.82.52.1	01.81.15.3		13
14		01.83.10.1			01.82.52.1	01.81.15.3		14
15					01.80.20.1	01.80.30.1		15
16					01.80.20.1	01.80.30.1		16
17					01.80.20.1	01.80.30.1		17
18					01.80.20.1	01.80.30.1		18
19					01.80.20.1	01.80.30.1		19
20					01.80.20.1	01.80.30.1		20
21					01.80.20.1	01.81.15.1		21
22					01.80.20.1	01.81.15.1		22
23					01.80.20.1	01.80.05.1		23
24					01.80.20.1	01.80.05.1		24
25					01.81.15.1	01.80.20.1		25
26					01.81.15.1	01.80.20.1		26
27					01.81.45.1	01.81.45.1		27
28					01.81.45.1	01.81.45.1		28
29				01.80.05.1	01.80.10.1		29	
30				01.80.05.1	01.80.10.1		30	
31					01.80.10.1		31	
32					01.80.10.1		32	
	CONS		GATE C	BX-H	1622	1622		

X CONNECTORS

	DX-A	DX-B	DX-C	DX-D	DX-E	DX-F			
1			01.82.60.1			01.84.20.1		1	
2			01.81.10.1			01.84.20.1		2	
3			01.82.60.1			01.84.20.1		3	
4			01.82.30.1	01.81.30.1		01.84.20.1		4	
5			01.82.62.1	01.80.05.1		01.84.20.1		5	
6			01.82.62.1			01.84.20.1		6	
7			01.82.62.1	01.06.05.1		01.84.20.1		7	
8			01.81.15.1	01.80.20.1		01.84.20.1		8	
9			01.81.15.1	01.81.45.1		01.84.10.1		9	
10			01.81.15.3	01.81.45.1		01.84.10.1		10	
11			01.81.15.3	01.80.05.1		01.83.20.1		11	
12			01.81.15.2	01.81.45.1		01.83.20.1		12	
13			01.81.15.2	01.81.30.1		01.83.20.1		13	
14			01.81.15.1			01.83.20.1		14	
15			01.81.45.1	01.81.30.1		01.83.20.1		15	
16			01.81.10.1	01.80.25.1		01.83.20.1		16	
17	SEE BXJ	SEE BXB	01.82.62.1	01.80.25.1		01.83.20.1		17	
18			01.82.62.1	01.84.10.1		01.83.20.1		18	
19			01.82.60.1	01.81.10.1		01.80.30.1		19	
20			01.82.60.1	01.83.10.1		01.83.10.1		20	
21			01.82.60.1			01.83.10.1		21	
22			01.82.62.1	01.81.45.1		01.83.10.1		22	
23			01.82.60.1			01.84.10.1		23	
24			01.82.62.1			01.80.30.1		24	
25			01.82.60.1			01.81.45.1		25	
26			01.82.52.1					26	
27			01.82.52.1				01.84.10.1		27
28			01.82.52.1				01.80.25.1		28
29			01.82.52.1						29
30			01.82.52.1						30
31			01.82.52.1						31
32			01.82.52.1						32
T0	BX-J	BX-B	GATE C	BX-D / CONS	AX-C	SC-A (1621)			



WIRE CONTACT RELAY CHART

RELAY NO.	NAME	P/N	COILS		POINTS						
			PICK	H/T	1/7	2/8	3/9	4/10	5/11	6/12	
1	WRITE STATUS	T	01.82.70.1	01.82.70.1	01.82.72.1	01.82.75.1	01.82.80.1	01.81.50.1			
2											
3	WRITE NUM.	T	01.82.70.1	01.82.70.1	01.82.70.1	01.82.72.1	01.81.50.1	01.82.72.1			
4	CONTROL TAB	C	01.82.70.1	01.82.70.1	01.82.70.1	01.82.70.1	01.81.50.1				
5	CONTROL CARR. RET.	C	01.82.70.1	01.82.70.1	01.82.70.1	01.82.70.1	01.81.50.1	01.82.72.1			
6	CONTROL SPACE	B	01.82.70.1	01.82.70.1	01.82.82.1	01.81.50.1	01.82.70.1	01.82.70.1			
7	FLAG INTL'K	T	01.82.72.1	01.82.75.1	01.82.75.1	01.82.80.1	01.81.50.1	01.82.70.1			
8	FLAG 1	B	01.82.75.1	01.82.75.1		01.82.75.1	01.82.75.1	01.82.82.1			
9	FLAG 2	A	01.82.75.1			01.81.55.1					
10	SHIFT	T	01.82.72.1	01.82.72.1	01.82.70.1						
11	SHIFT DELAY	B	01.82.72.1	01.82.72.1		01.82.80.1					
12	MAN SHIFT	W	01.82.72.1	01.82.72.1	01.81.60.1	01.81.60.1	01.81.62.1	01.81.62.1	01.81.62.1	01.81.62.1	01.81.62.1
					01.81.62.1	01.81.62.1	01.81.60.1	01.81.64.1	01.81.64.1	01.81.64.1	01.81.64.1
15	MAN SHIFT	B	01.82.72.1	01.82.72.1	01.82.72.1	01.82.70.1	01.81.60.1	01.81.64.1			
16	MAN SHIFT DELAY	B	01.82.72.1	01.82.72.1	01.82.72.1	01.82.72.1	01.82.72.1				
17	R C UNITS										
18	R C UNITS										
19		B	01.82.70.1	01.82.70.1	01.82.70.1	01.82.70.1	01.82.70.1	01.82.82.1			
20	WR TEST	T	01.82.72.1	01.82.72.1	01.82.80.1	01.82.72.1	01.82.72.1	01.82.75.1			
21	C BIT SET UP	A	01.82.75.1		01.82.84.1	01.81.55.1	01.81.55.1				
22	X BIT SET UP	F	01.82.75.1			01.82.80.1	01.82.82.1	01.82.82.1	01.82.82.1	01.82.82.1	01.82.82.1
					01.82.82.1	01.82.82.1	01.82.82.1	01.82.82.1	01.82.82.1	01.82.84.1	01.82.84.1
25	X BIT SET UP	F	01.82.75.1		01.82.84.1	01.82.84.1	01.82.84.1				
							01.81.55.1	01.82.72.1	01.82.72.1	01.82.72.1	01.82.72.1
28	O BIT SET UP	F	01.82.75.1			01.82.80.1	01.82.86.1	01.82.82.1	01.82.82.1	01.82.82.1	01.82.82.1
					01.82.82.1	01.82.84.1		01.82.84.1	01.81.55.1	01.81.55.1	01.81.55.1
31	O BIT SET UP	A	01.82.75.1		01.82.72.1						
38	PARITY CHECK	B	01.81.55.1	01.81.55.1	01.81.55.1	01.82.72.1		01.82.80.1			
39	ERROR 1	T	01.81.55.1	01.82.72.1	01.82.72.1	01.82.75.1	01.82.70.1				
40	ERROR 2	T	01.82.72.1	01.82.72.1	01.82.72.1	01.81.55.1					
41	1 BIT SET UP	A	01.82.75.1		01.82.72.1	01.82.80.1	01.81.55.1	01.81.55.1			
42	2 BIT SET UP	F	01.82.75.1		01.82.72.1	01.82.80.1	01.82.80.1	01.82.80.1	01.82.80.1	01.82.80.1	01.82.80.1
					01.82.80.1	01.82.86.1	01.82.86.1	01.82.86.1	01.82.86.1	01.82.86.1	01.82.86.1
44											
45	2 BIT SET UP	A	01.82.75.1		01.82.86.1	01.82.82.1	01.81.55.1	01.81.55.1			
46	4 BIT SET UP	F	01.82.75.1		01.82.72.1	01.82.80.1	01.82.80.1	01.82.80.1	01.82.80.1	01.82.80.1	01.82.86.1
					01.82.86.1	01.82.86.1	01.82.86.1	01.82.82.1	01.82.84.1		
49	4 BIT SET UP	A	01.82.75.1		01.81.55.1	01.81.55.1					

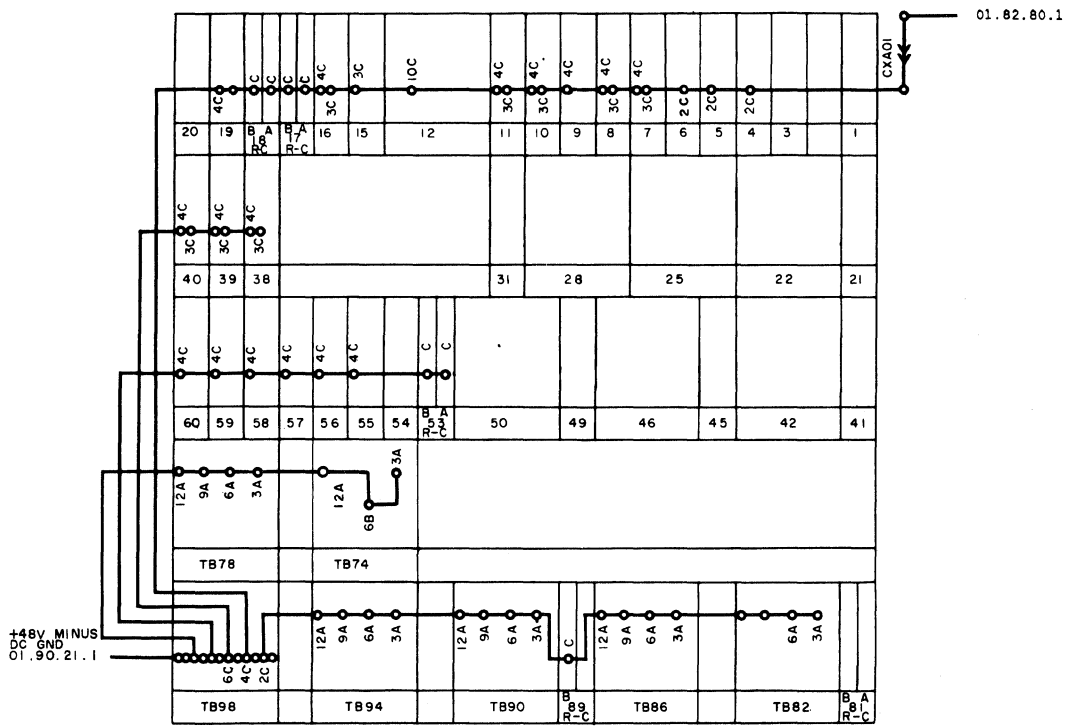
			B	4	196207			
T	4LP	186685	C	4	196208			
			W	12	255735			
F	12	196186						
A	4	196206						

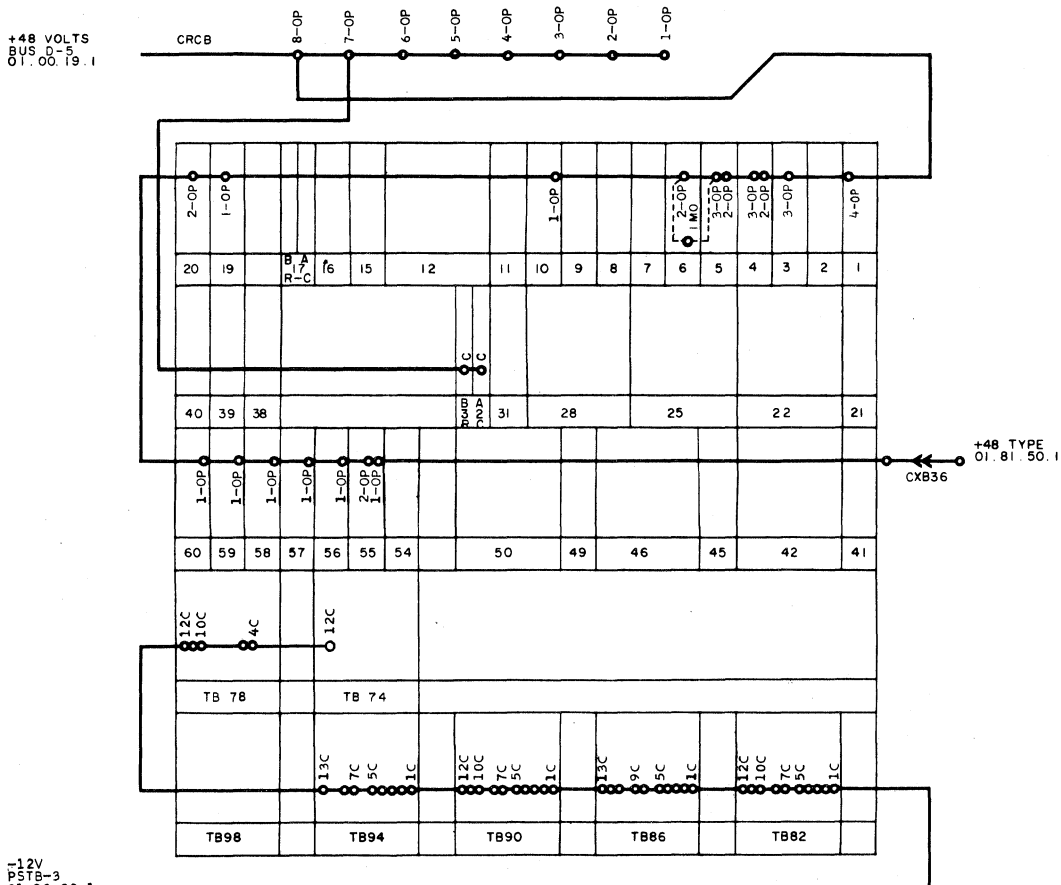
WIRE CONTACT RELAY CHART

RELAY NO.	NAME	P/N	COILS		POINTS						
			PICK	H/T	1/7	2/8	3/9	4/10	5/11	6/12	
50	8 BIT SET UP	F	01.82.75.1		01.82.72.1	01.82.80.1	01.82.80.1	01.82.86.1	01.82.86.1	01.82.82.1	
					01.82.82.1	01.82.84.1	01.82.84.1	01.81.55.1	01.81.55.1		
53	RC UNIT										
54	STORE	T	01.82.70.1	01.82.70.1	01.81.60.1	01.82.72.1	01.82.72.1	01.81.50.1			
55	X BIT TRANSMIT	A	01.81.60.1		01.81.50.1	01.81.55.1					
56	O BIT TRANSMIT	A	01.81.60.1		01.81.50.1	01.81.55.1	01.81.55.1				
57	I BIT TRANSMIT	A	01.81.62.1		01.81.50.1		01.81.55.1				
58	2 BIT TRANSMIT	A	01.81.62.1		01.81.55.1	01.81.55.1	01.81.55.1				
59	4 BIT TRANSMIT	A	01.81.62.1		01.81.55.1	01.81.55.1	01.81.55.1	01.81.55.1			
60	8 BIT TRANSMIT	A	01.81.64.1		01.81.55.1	01.81.55.1	01.81.55.1				

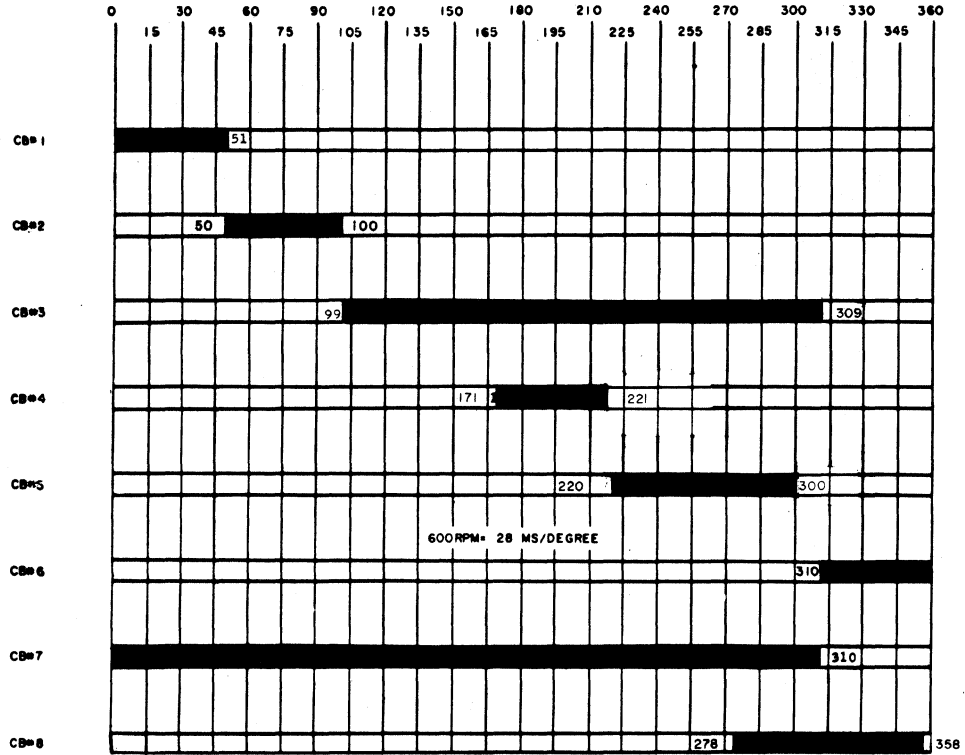
T	4LP	186685	B	4	196207			
X		2100859	C	4	196208			
			Y		2103288			
			W	12	255735			
F	12	196186	CG		360670			
A	4	196206	P		344600			

WIRING SIDE





NOTES:
 X ∞ INDICATES POINTS ARE CONNECTED BY A WIRE.
 XI ALL POINTS ARE OPERATING POINTS (O/P).

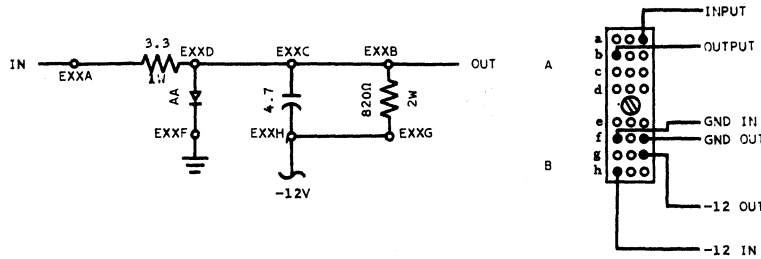
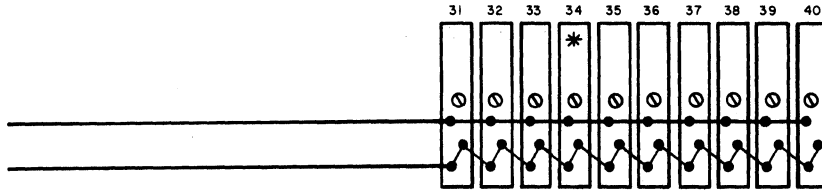


CAM CHART

CB#	LOCATION	MAKE	TOL	BREAK	TOL	CAM FUNCTION	PART NO
1	01.82.70.1	0	±5	51	+4 -0	LATCH TRIP FLAG & SHIFT INTLK.	227694
2	01.82.70.1	50	+0 -5	100	+4 -0	LATCH TRIP TYPE DELAY 1 & 2	227694
3	01.82.75.1	99	+0 -5	309	±5	PRINT DECODE SETUP	309629
4	01.82.72.1	171	±5	221	+4 -0	PICK DELAY RELAYS	227694
5	01.82.80.1	220	+0 -5	300	±5	TYPE CB & HOLD DECODE RELAYS	309629
6	01.82.70.1	310	±5	360	±5	FUNCTION RELAY PICK FLAG & SHIFT INTLK. HOLD	227694
7	01.05.10.1	0	+3 -0	310	±5	THYRATRON HOLD	310255
8	01.05.10.1	278	±5	358	+0 -3	THYRATRON HOLD	309629

NOTE: CB-2 MUST MAKE BEFORE CB-1 BREAKS
 CB-3 MUST MAKE BEFORE CB-2 BREAKS
 CB-5 MUST MAKE BEFORE CB-4 BREAKS
 THE ANGLE BETWEEN CB-8 BREAK AND CB-7
 MAKE MUST NOT BE LESS THAN 2° OR GREATER
 THAN 5°

D. C. GND
01 90 35.1
-12 VOLTS
PSTB-3
01 90 30.1

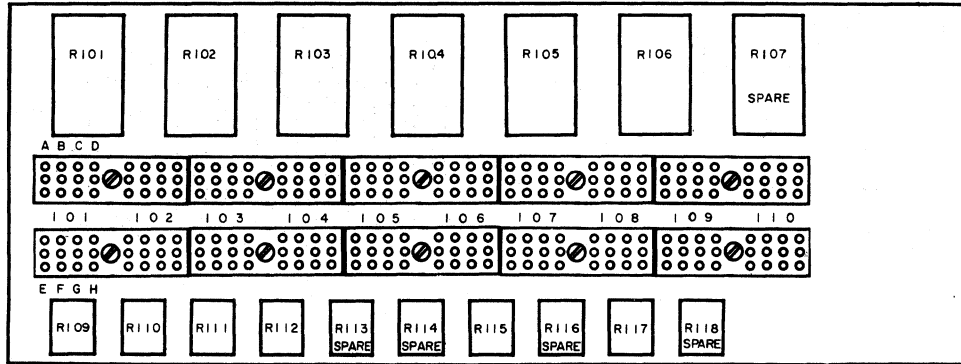


C. E. SWITCHES & LAMP		
1	01.05.50.1	CLOCK ON
2		
3	01.05.50.1	CFB - T
4	01.05.50.1	CFB - C
5	01.05.50.1	421 - T
6	01.05.50.1	421 - C
7	01.05.50.1	INC MAR
8	01.05.50.1	BYPASS INC
9	01.05.50.1	MAR STOP BYPASS
10	01.05.50.1	REPEAT CYC

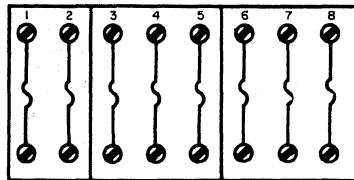
E-	PAGE
31	01.05.01.1
32	01.05.02.1
33	01.05.01.1
34	01.05.01.1
35	01.05.01.1
36	01.05.02.1
37	01.05.01.1
38	01.05.01.1
39	01.05.01.1
40	01.05.01.1

C. E. REMOTE SWITCHES		
SWITCH	CONN	PAGE
INSTANT STOP	JP-8	01.05.01.1
START	JP-4	01.05.01.1
RELEASE	JP-6	01.05.01.1
INSERT	JP-3	01.05.01.1
RESET	JP-5	01.05.02.1
COMMON	JP-7	01.05.02.1

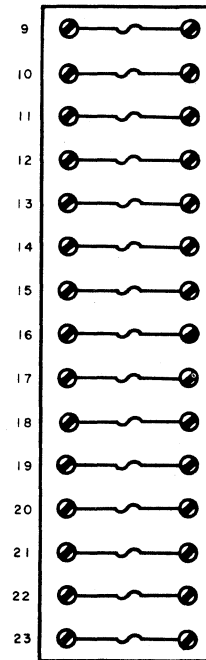
* REMOVE 4.7 MFD CAPACITOR BETWEEN C AND H PINS
ON INTEGRATOR NO. 34



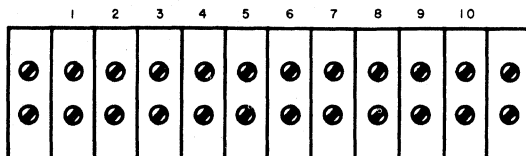
FUSES



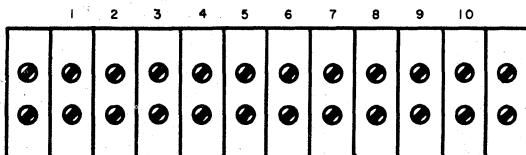
FUSES



PSTB 1



PSTB 2



FUSE CHART

NO	TYPE	CIRCUIT	PAGE
1	FNM 6 1/4	T-2 PRIMARY	01.90.10.1
2	FNM 6 1/4	T-2 PRIMARY	01.90.10.1
3			
4	FNM 8	CONV. OUTLET	01.90.10.1
5	FNM 10	1623 PRIMARY	01.90.32.1
6	FNM 10	1623 PRIMARY	01.90.32.1
7	FNM 10	1621 A.C. PWR.	01.90.32.1
8	FNM 10	1621 A.C. PWR.	01.90.32.1
9	MDL 2	T-2 20 VOLT SEC.	01.90.10.1
10	AGC 1.5	MEMORY HEATER	01.90.10.1
11	MDX 3	FANS	01.90.10.1
12			
13	MDL 2	24V RE	01.90.32.1
14	MDL 2	1622 FANS	01.90.32.1
15	MDL 1/4	T-1 PRIMARY	01.90.10.1
16	MDL 1/4	T-1 PRIMARY	01.90.10.1
17	MDL .5	TYPEWRITER MOTOR	01.90.32.1
18	MDL .5	C.B. MOTOR	01.90.32.1
19		SPARE	01.90.32.1
20		SPARE	01.90.32.1
21	MDL .5	TYPEWRITER MOTOR	01.90.32.1
22	MDL .5	C.B. MOTOR	01.90.32.1
23		SPARE	01.90.32.1

RELAY CHART

NO	TYPE	NAME	COIL	1	2	3
101	KAI4D-24DC	FANS	01.90.40.1	01.90.10.1	01.90.10.1	01.90.10.1
102	KAI4D-24DC	MEMORY HEATER	01.90.40.1		01.90.40.1	01.90.10.1
103	KAI4D-24DC	MEMORY VOLTAGE	01.90.40.1	01.90.45.1	01.90.21.1	01.90.21.1
104	KAI4AY-24AC	THERMAL	01.90.42.1	01.90.40.1	01.90.40.1	01.90.10.1
105	KAI4D-24DC	NORMAL	01.90.40.1	01.90.40.1	01.90.40.1	
106	KAI4D-24DC	READY	01.90.40.1	01.90.40.1		01.90.40.1
107						
108						
109	KMI1D-24V	-36V U.V. SENSING	01.90.45.1		01.90.40.1	
110	KMI1D-12V	-12A U.V. SENSING	01.90.45.1		01.90.40.1	
111	KMI1D-12V	-12B U.V. SENSING	01.90.45.1		01.90.40.1	
112	KMI1D-12V	+12V U.V. SENSING	01.90.45.1		01.90.40.1	
113						
114						
115	KMI1D-24V	+30MEM. U.V. SENSING	01.90.45.1	01.90.45.1	01.90.40.1	
116		SPARE				
117	KMI1D-6V	+30MEM. TRACE SENSING	01.90.45.1	01.90.40.1	01.90.45.1	
118		SPARE				
119						
120						
121						
122						
123						
124						
125						
126						
127						
128						

EDGE CONNECTOR CHART

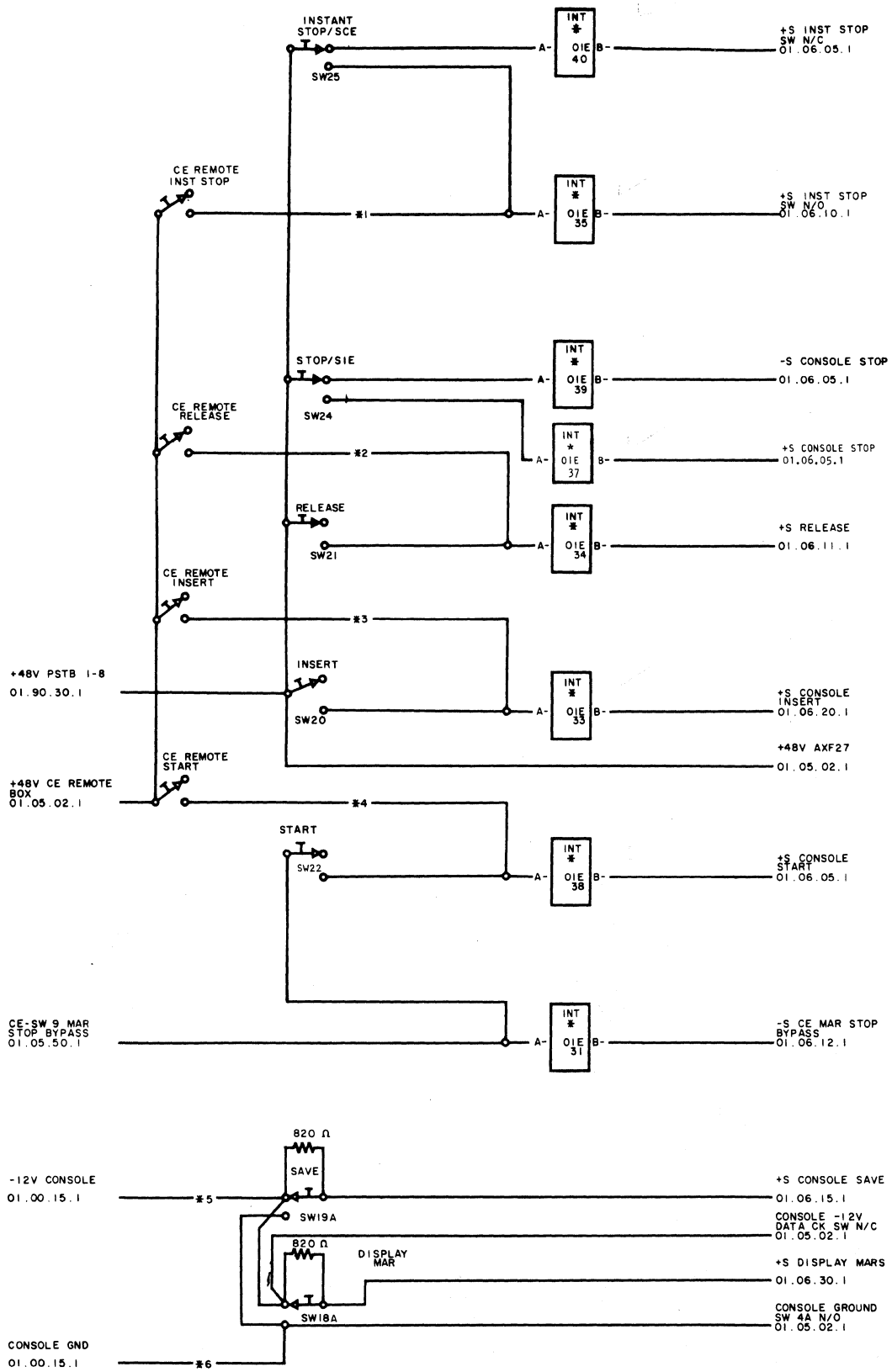
NO.	a	b	c	d	e	f	g	h
101	01.90.10.1	01.90.10.1	01.90.10.1	01.90.10.1	01.90.40.1	01.90.10.1	01.90.40.1	01.90.40.1
102		01.90.45.1					01.90.21.1	01.90.45.1
103	01.90.40.1	01.90.45.1	01.90.10.1	01.90.45.1		01.90.45.1		01.90.45.1
104	01.90.45.1	01.90.10.1	01.90.40.1	01.90.40.1	01.90.45.1	01.90.40.1	01.90.40.1	
105	01.90.40.1	01.90.40.1	01.90.45.1	01.90.40.1	01.90.40.1	01.90.40.1	01.90.45.1	01.90.40.1
106		01.90.40.1	01.90.40.1			01.90.40.1		
107	01.90.40.1	01.90.21.1	01.90.45.1	01.90.45.1	01.90.40.1	01.90.40.1	01.90.45.1	
108	01.90.45.1	01.90.21.1		01.90.40.1	01.90.45.1			01.90.40.1
109	01.90.40.1	01.90.40.1						
110	01.90.45.1				01.90.40.1			
111								
112								
301	01.90.32.1	01.90.32.1	01.90.32.1	01.90.32.1				
302	01.90.32.1	01.90.32.1	01.90.32.1	01.90.32.1				

CONSOLE SWITCHES

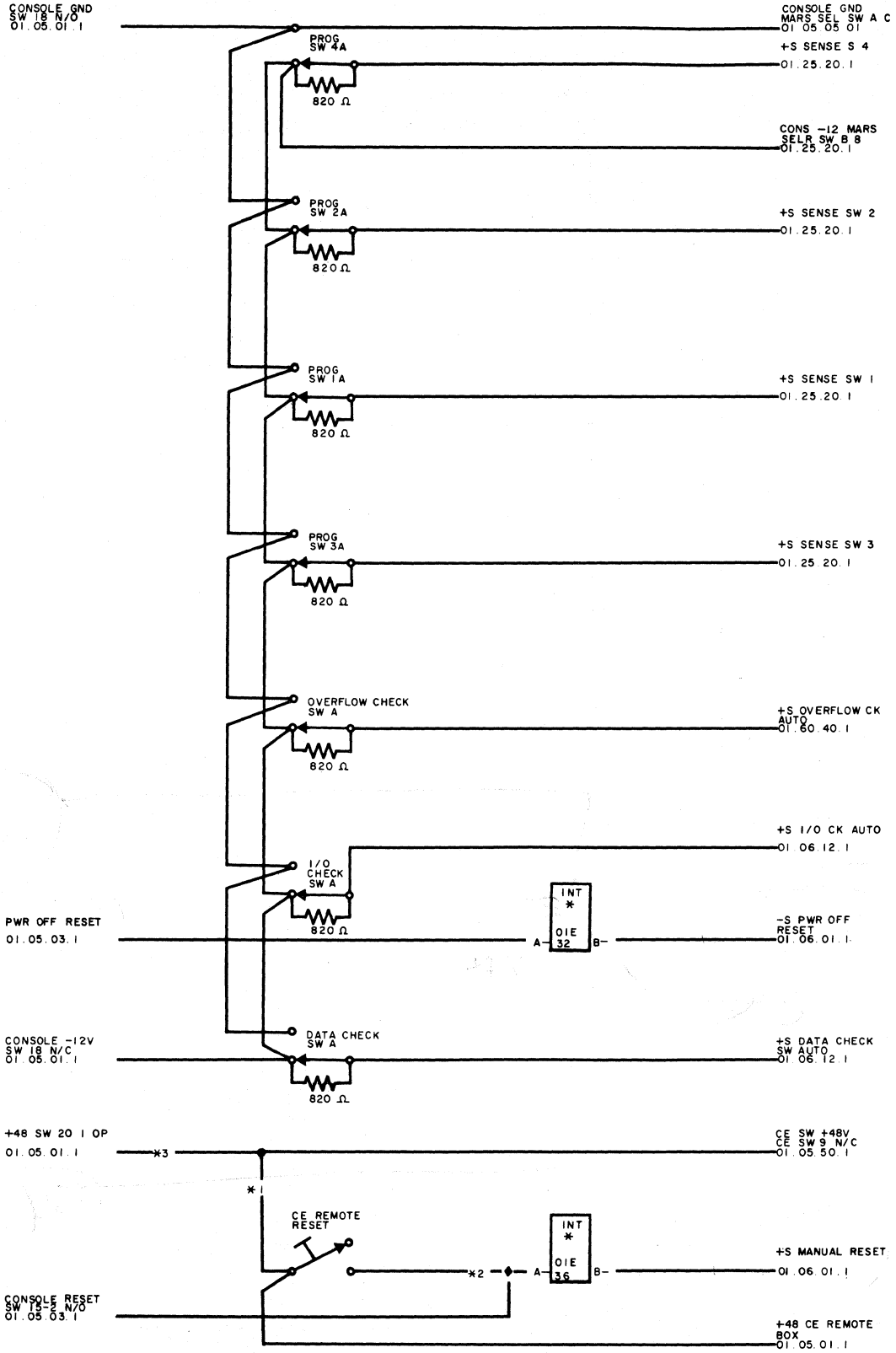
DESCRIPTION	PAGE
EMERGENCY OFF	01.05.03.1
DISPLAY MAR	01.05.01.1
INSERT	01.05.01.1
INSTANT STOP - SCE	01.05.01.1
I/O CHECK	01.05.02.1
MAR DISPLAY SELECTOR	01.05.05.1
OVERFLOW CHECK	01.05.02.1
PARITY CHECK	01.05.02.1
POWER ON OFF	01.05.03.1
PROGRAM #1	01.05.02.1
PROGRAM #2	01.05.02.1
PROGRAM #3	01.05.02.1
PROGRAM #4	01.05.02.1
RELEASE	01.05.01.1
RESET	01.05.03.1
SAVE	01.05.01.1
START	01.05.01.1
STOP - SIE	01.05.01.1

CONSOLE CONTROL LAMPS

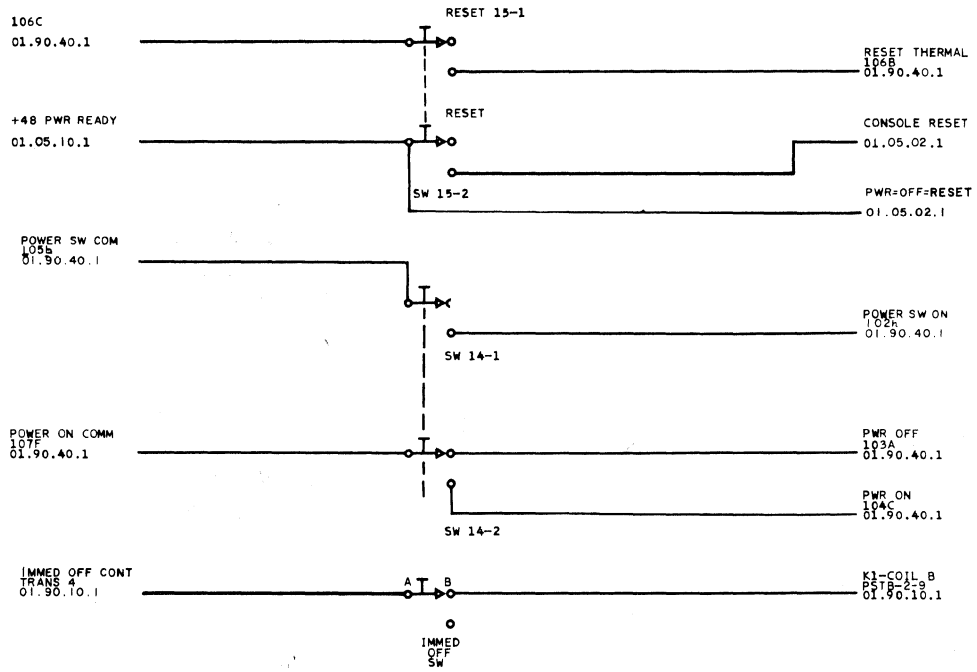
NO.	DESCRIPTION	PAGE
1	POWER ON	01.05.03.1
2	POWER READY	01.90.40.1
3	THERMAL	01.90.10.1
4	PUNCH NO FEED	01.84.10.1
5	READER NO FEED	01.83.10.1
6	SAVE	01.06.15.1
7	INSERT	01.06.20.1
8		
9	AUTOMATIC	01.06.05.1
10	MANUAL	01.06.10.1
11		
12	CHECK STOP	01.06.12.1



*1---01A3JP-8 01AXF28 *2---01A3JP6 01AXF26 *3---01A3JP3 01AXF29 *4---01A3JP4 01AXF24
 *5---01A1FO1M 01AXF15 *6---01A1FO1J 01AXF14
 RESISTORS 1/2 WATT

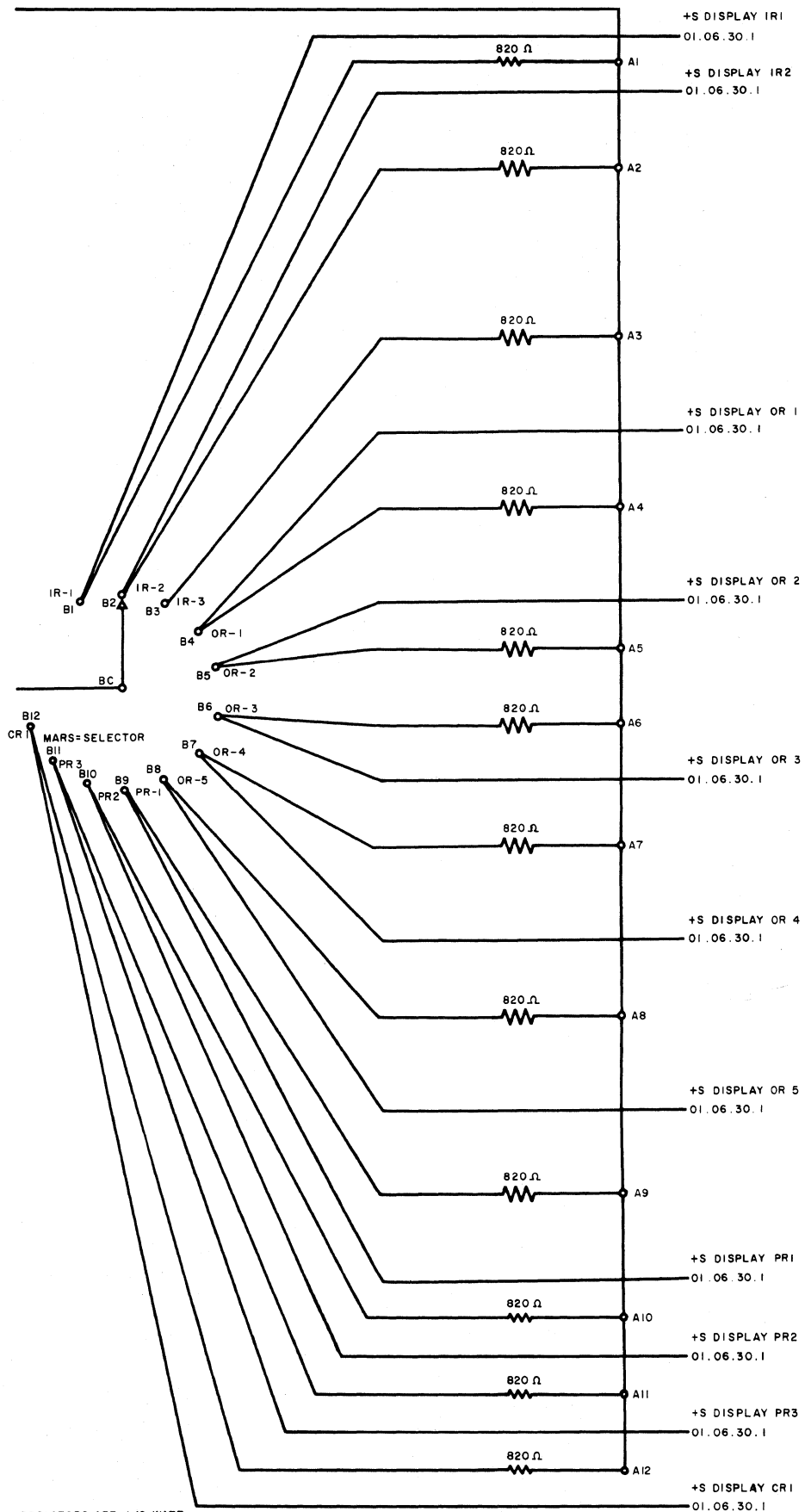


*1---01A3JP7 *2---01A3JP5---01AXF25 *3---01AXF27
 INTEGRATORS---REFERENCE 01.00.40.1
 RESISTORS ARE 1/2 WATT

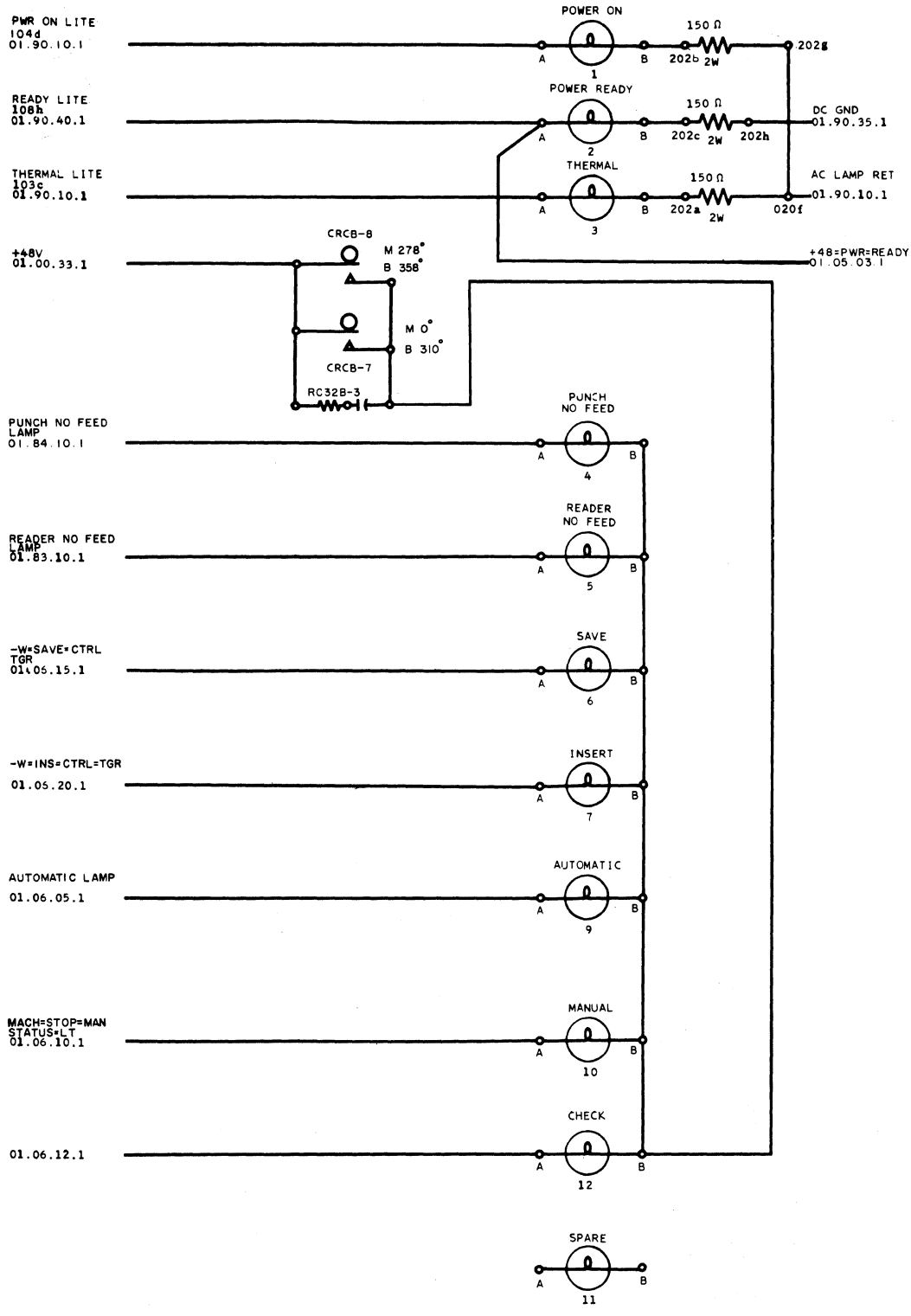


CONSOLE -12V
SW 4A-N/C
01.05.02.1

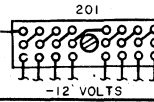
CONSOLE GND
SW 4A-N/C
01.05.02.1



RESISTORS ARE 1/2 WATT



CONSOLE DISPLAY LAMPS

-12 VOLTS
PSTB-3
01.90.30.1LAMP
PAGE

-12 VOLTS

NO.	DESCRIPTION	CONNECTOR	PAGE
1	I TR. NO. 1	BXE-10	01.15.11.1
2	I TR. NO. 6	BXE-15	01.15.16.1
3	E TR. NO. 11	BXC-06	01.60.11.1
4	E TR. NO. 16	BXG-13	01.60.45.1
5	E TR. NO. 21	BXC-11	01.60.31.1
6	E TR. NO. 26	BXC-17	01.60.57.1
7	E TR. NO. 31	BXF-18	01.64.11.1
8	E TR. NO. 36	BXG*22	01.62.36.1
9	E TR. NO. 41	BXG-27	01.62.41.1
10	E TR. NO. 46	BXC-02	01.16.20.1
11			
12	RUN	BXE-02	01.06.10.1
13	DIV. FIRST CYCLE	BXF-24	01.65.02.1
14	RECOMP	BXC-12	01.60.32.1
15	RECOMP. CTRL TR	BXC-10	01.60.24.1
16	DIV. SIGN	BXF-31	01.65.06.1
17	FIRST CYCLE	BXF-32	01.63.10.1
18	A. ADV	BXE-08	01.10.12.1
19	ODD-ADDRESS	BXE-21	01.43.10.1
20	MEM O'FLOW	BXF-23	01.64.14.1
21	DISCONNECT GATE	DXD-16	01.80.25.1
22			
23	OP REG TENS C BIT	BXG-07	01.20.10.1
24			
25	OP REG TENS 4 BIT	BXG-09	01.20.10.1
26	OP REG TENS 2 BIT	BXG-10	01.20.12.1
27	OP REG TENS 1 BIT	BXG-11	01.20.12.1
28	MBR EV C BIT	AXF-07	01.40.17.1
29	MBR EV F BIT	AXF-08	01.40.17.1
30	MBR EV 8 BIT	AXF-09	01.40.18.1
31	MBR EV 4 BIT	AXF-10	01.40.18.1
32	MBR EV 2 BIT	AXF-11	01.40.19.1
33	MBR EV 1 BIT	AXF-12	01.40.19.1
34	MAR C BIT TEN THOU	AXE-26	01.57.30.1
35			
36	MAR 4 BIT TEN THOU	AXE-29	01.57.32.1
37	MAR 2 BIT TEN THOU	AXE-27	01.57.30.1
38	MAR 1 BIT TEN THOU	AXE-28	01.57.30.1
39	I TR. NO. 2	BXE-11	01.15.12.1
40	I TR. NO. 7	BXE-16	01.15.17.1
41	E TR. NO. 12	BXC-07	01.60.12.1
42			
43			
44	E TR. NO. 27	BXC-18	01.60.57.1
45	E TR. NO. 32	BXG-17	01.62.30.1
46	E TR. NO. 37	BXG-23	01.62.37.1
47	E TR. NO. 42	BXF-30	01.65.05.1
48	E TR. NO. 47	BXC-03	01.16.20.1
49			
50	START CONTROL	BXE-01	01.06.05.1
51	DIV ADD	BXF-28	01.65.04.1
52	CARRY IN	BXG-30	01.63.40.1
53	T/C TR. NO. 1	BXG-32	01.63.20.1
54	UNDERFLOW/EQ. ZERO	AXF 20	01.68.85.1
55	FIELD MK. NO. 1	BXG-28	01.63.30.1
56	DECREMENT	AXE-30	01.60.05.1
57	I CYCLE TR.	BXE-09	01.15.10.1
58	STOP	BXE-04	01.06.11.1
59	RESPONSE GATE	DXD-17	01.80.25.1
60	PUNCH FEED	DXD-18	01.84.10.1
61	OP REG UNITS C BIT	BXG-02	01.20.07.1
62	OP REG UNITS 8 BIT	BXG-03	01.20.07.1
63	OP REG UNITS 4 BIT	BXG-04	01.20.07.1
64	OP REG UNITS 2 BIT	BXG-05	01.20.09.1
65	OP REG UNITS 1 BIT	BXG-06	01.20.09.1
66	MBR ODD C BIT	AXF-01	01.40.07.1
67	MBR ODD F BIT	AXF-02	01.40.07.1
68	MBR ODD 8 BIT	AXF-03	01.40.08.1

CONSOLE DISPLAY LAMPS

LAMP
PAGE-12 VOLTS
01.05.15.1

NO.	DESCRIPTION	CONNECTOR	PAGE
69	MBR ODD 4 BIT	AXF-04	01.40.08.1
70	MBR ODD 2 BIT	AXF-05	01.40.09.1
71	MBR ODD 1 BIT	AXF-06	01.40.09.1
72	MAR C BIT THOU	AXE-21	01.57.24.1
73	MAR 8 BIT THOU	AXE-22	01.57.26.1
74	MAR 4 BIT THOU	AXE-23	01.57.26.1
75	MAR 2 BIT THOU	AXE-24	01.57.28.1
76	MAR 1 BIT THOU	AXE-25	01.57.28.1
77	I TR. NO. 3	BXE-12	01.15.13.1
78	I TR. NO. 8	BXE-17	01.15.18.1
79	E TR. NO. 13	BXC-08	01.60.13.1
80	E TR. NO. 18	BXG-14	01.60.48.1
81	E TR. NO. 23	BXC-13	01.60.32.1
82	E TR. NO. 28	BXE-31	01.60.58.1
83	E TR. NO. 33	BXG-19	01.62.33.1
84	E TR. NO. 38	BXG-24	01.62.38.1
85	E TR. NO. 43	BXF-29	01.65.05.1
86	E TR. NO. 48	BXC-04	01.16.21.1
87			
88	INSERT 2	BXE-05	01.06.20.1
89	DIV. LAST CYCLE	BXF-25	01.65.02.1
90	CARRY OUT	BXG-31	01.63.40.1
91	IA	BXC-01	01.16.10.1
92	FP EXIT	AXF-18	01.67.90.1
93	FIELD MK NO. 2	BXG-29	01.63.30.1
94	INCREMENT	AXE-31	01.60.05.1
95	E TIME	BXE-28	01.60.08.1
96			
97	RD WR CALL	BXF-22	01.64.14.1
98	I/O FLAG	DXD-19	01.81.10.1
99	M/Q C BIT	BXF-13	01.62.50.1
100	M/Q 8 BIT	BXF-14	01.62.50.1
101	M/Q 4 BIT	BXF-15	01.62.50.1
102	M/Q 2 BIT	BXF-16	01.62.52.1
103	M/Q 1 BIT	BXF-17	01.62.52.1
104	MDR C BIT	BXF-02	01.45.50.1
105	MDR F BIT	BXF-03	01.45.15.1
106	MDR B BIT	BXF-04	01.45.16.1
107	MDR 4 BIT	BXF-05	01.45.16.1
108	MDR 2 BIT	BXF-06	01.45.17.1
109	MDR 1 BIT	BXF-07	01.45.17.1
110	MAR C BIT HUND	AXE-16	01.57.20.1
111	MAR 8 BIT HUND	AXE-17	01.57.20.1
112	MAR 4 BIT HUND	AXE-18	01.57.22.1
113	MAR 2 BIT HUND	AXE-19	01.57.22.1
114	MAR 1 BIT HUND	AXE-20	01.57.24.1
115	I TR. NO. 4	BXE-13	01.15.14.1
116	TEST LAMP NO.1	AXE-02	01.05.50.1
117	E TR. NO. 14	BXC-09	01.60.14.1
118	E TR. NO. 19	BXG-15	01.60.49.1
119	TR 24	AXF-21	01.63.24.1
120	E TR. NO. 29	BXE-32	01.60.59.1
121	E TR. NO. 34	BXG-20	01.62.34.1
122	E TR. NO. 39	BXG-25	01.62.39.1
123	E TR. NO. 44	BXF-26	01.65.03.1
124	E TR. NO. 49	BXC-05	01.16.22.1
125			
126	DISP ADR 3	BXE-06	01.06.30.1
127			
128	CYCLE CONTROL	BXG-18	01.62.31.1
129			
130			
131	RECORD MARK	BXE-29	01.63.50.1
132	INCR PLUS 2	AXE-04	01.55.03.1
133	HIGH PLUS	BXC-15	01.60.40.1
134	LAST CARD	BXF-01	01.25.30.1
135	I/O EXIT	BXF-20	01.64.13.1
136	I/O SYNC	BXF-21	01.64.13.1

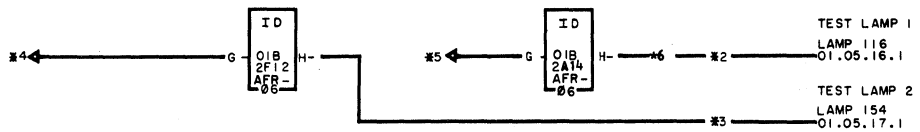
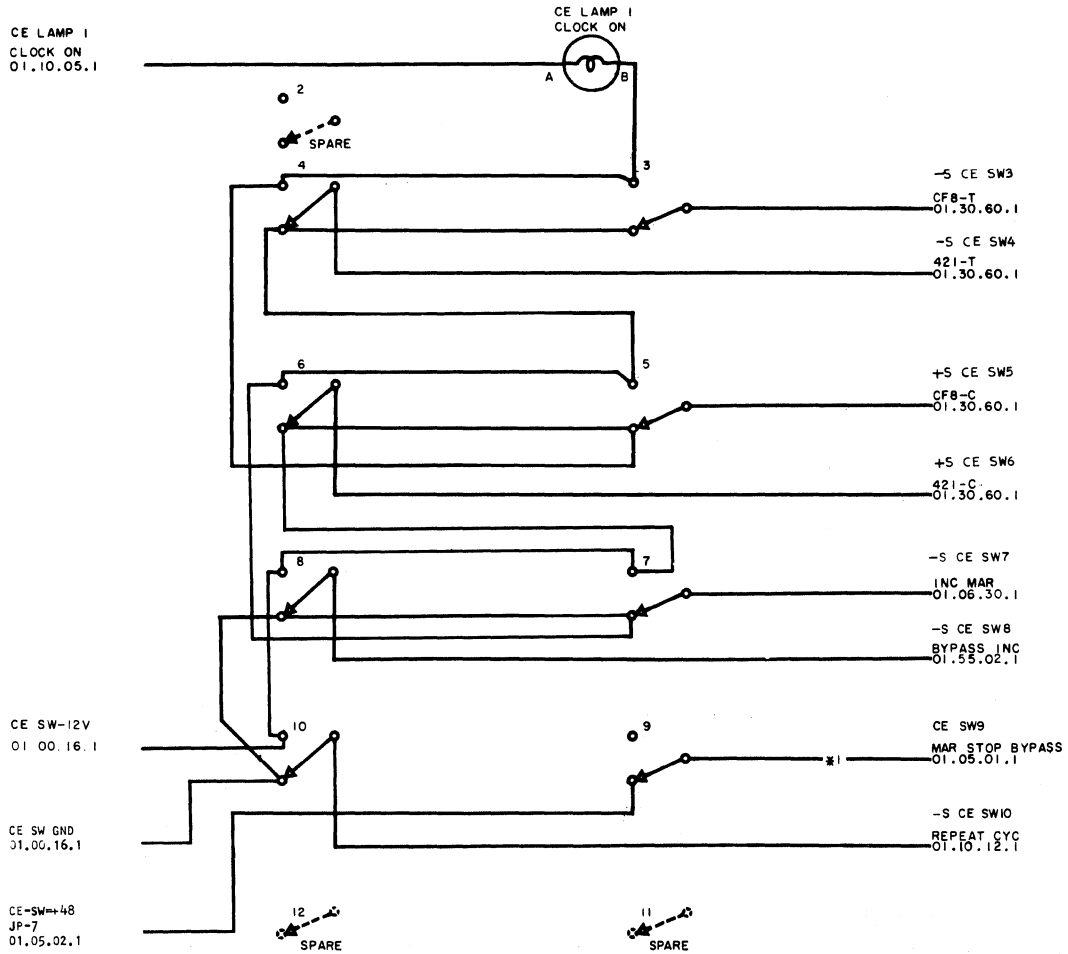
CONSOLE DISPLAY LAMPS

LAMP
PAGE

0

NO.
-12 VOLTS
01.05.15.1

NO	DESCRIPTION	CONNECTOR	PAGE
137	D/B TENS C BIT	BXE-23	01.50.17.1
138	D/B TENS 8 BIT	BXE-24	01.50.17.1
139	D/B TENS 4 BIT	BXE-25	01.50.17.1
140	D/B TENS 2 BIT	BXE-26	01.50.19.1
141	D/B TENS 1 BIT	BXE-27	01.50.19.1
142			
143			
144			
145			
146			
147			
148	MAR C BIT TENS	AXE-11	01.57.09.1
149	MAR 8 BIT TENS	AXE-12	01.57.16.1
150	MAR 4 BIT TENS	AXE-13	01.57.16.1
151	MAR 2 BIT TENS	AXE-14	01.57.18.1
152	MARS 1 BIT TENS	AXE-15	01.57.18.1
153	I TR. NO.5	BXE-14	01.15.15.1
154	TEST LAMP NO.2	BXG-01	01.05.30.1
155	E TR. NO.15	BXG-12	01.60.45.1
156			
157	TR 25	AXF-22	01.68.24.1
158	E TR. NO.30	BXE-30	01.64.10.1
159	E TR. NO.35	BXG-21	01.62.35.1
160	E TR. NO.40	BXG-26	01.62.40.1
161	E TR. NO.45	BXF-27	01.65.03.1
162			
163			
164	SAVE 2	BXE-04	01.06.15.1
165			
166	50-99	AXE-05	01.55.15.1
167			
168			
169	BRANCH TRIG	BXE-18	01.25.35.1
170	INC BIPASS	AXE-03	01.55.02.1
171	EQUAL ZERO	BXC-16	01.60.41.1
172			
173	I/O HOLD	BXF-19	01.64.12.1
174	READER FEED	DXD-20	01.83.10.1
175	D/B UNITS C BIT	BXF-08	01.50.07.1
176	D/B UNITS 8 BIT	BXF-09	01.50.07.1
177	D/B UNITS 4 BIT	BXF-10	01.50.07.1
178	D/B UNITS 2 BIT	BXF-11	01.50.09.1
179	D/B UNITS 1 BIT	BXF-12	01.50.09.1
180			
181			
182			
183			
184			
185			
186	MAR C BIT UNITS	AXE-06	01.57.06.1
187	MAR 8 BIT UNITS	AXE-07	01.57.06.1
188	MAR 4 BIT UNITS	AXE-08	01.57.07.1
189	MAR 2 BIT UNITS	AXE-09	01.57.07.1
190	MAR 1 BIT UNITS	AXE-10	01.57.09.1
191			
192			
193	MAR CHECK	AXE-32	01.58.09.1
194			
195			
196			
197			
198	MBR EVEN CHECK	BXE-20	01.40.20.1
199	READ CHECK	DXD-14	01.81.45.1
200	EXP. CK. (0*FLO)	AXF-19	01.68.90.1
201			
202			
203	MBR ODD CHECK	BXE-19	01.40.10.1
204	WRITE CHECK	DXD-22	01.81.45.1
205	ARITH CHECK	BXC-14	01.60.40.1



SWITCH		NORMAL OPN	ALL COMP	FORCE CF8	FORCE 124	FORCE ALL ZEROS	FORCE ALL ONES
CF8-T	SW3	N	T	N	T	T	N
421-T	SW4	N	T	T	N	T	N
CF8-C	SW5	N	T	T	N	N	T
421-C	SW6	N	T	N	T	N	T

*1 AXF 30

*2 AXE 02

*3 BXG 01

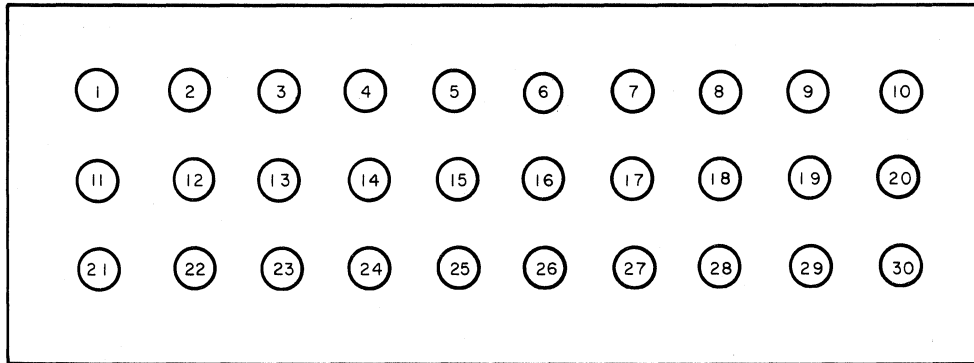
*4, *5 THESE POINTS CAN BE

JUMPERED TO MONITOR LOGIC. ENERGIZED BY -S LEVEL.

*6 BXL 13--- AXL 19

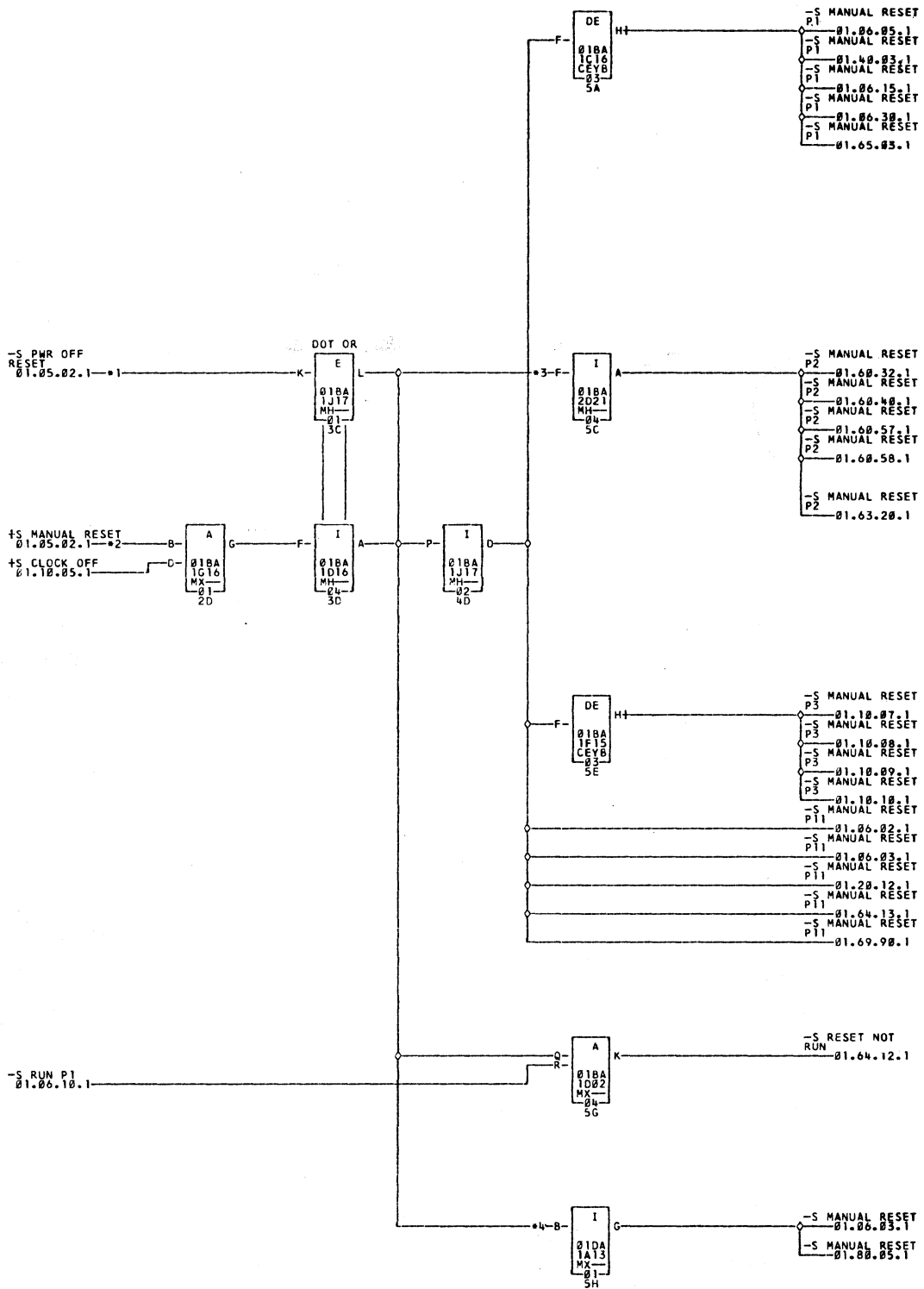
NOTE: WHEN CE SW9 IS IN BYPASS POSITION,
CE REMOTE START KEY MUST BE USED

CE BOX DISPLAY LAMPS



FRONT VIEW

NO.	DESCRIPTION	CONNECTOR	PAGE
CE 1	EXPONENT ADD	AXB-1	01.66.10.1
CE 2	SCAN	AXB-2	01.66.20.1
CE 3	EXPONENT TRANSMIT	AXB-3	01.66.30.1
CE 4	SHIFT	AXB-4	01.66.50.1
CE 5	ZERO FILL	AXB-5	01.66.60.1
CE 6	RESULT TRANSMIT	AXB-6	01.66.40.1
CE 7	FRACTIONAL ADD	AXB-7	01.66.70.1
CE 8	EXPONENT MODIFY ENTRY	AXB-8	01.66.80.1
CE 9	EXPONENT MODIFY MODE	AXB-9	01.66.80.1
CE 10	EXPONENT MODIFY EXIT	AXB-10	01.66.81.1
CE 11	MULTIPLY	AXB-11	01.67.00.1
CE 12	FRAC COMPARE	AXB-12	01.67.10.1
CE 13	FALSE XMIT	AXB-13	01.67.20.1
CE 14	LD ENTRY	AXB-14	01.67.30.1
CE 15	LOAD DIVIDEND	AXB-15	01.67.30.1
CE 16	DIV ENTRY	AXB-16	01.67.40.1
CE 17	DIV MODE	AXB-17	01.67.40.1
CE 18	DIGIT FORCE	AXB-18	01.67.90.1
CE 19	SHIFT OPS ENTRY	AXB-19	01.67.50.1
CE 20	HI ORDER ZERO CNTRL	AXB-20	01.68.40.1
CE 21	NORMAL SHIFT RIGHT	AXB-21	01.68.42.1
CE 22	EXPONENT MODIFY REQUIRED	AXB-22	01.68.44.1
CE 23	COUNTER COMPLEMENT	AXB-23	01.66.25.1
CE 24	SCAN Q	AXB-24	01.66.21.1
CE 25	SIGN DIGIT	AXB-25	01.66.23.1
CE 26	SCAN MINUS	AXB-26	01.66.24.1
CE 27	MODULE 3 CONTROL L1	AXB-27	01.68.10.1
CE 28	MODULE 3 CONTROL L2	AXB-28	01.68.10.1
CE 29	HI PLUS AUXILIARY	AXB-29	01.66.83.1
CE 30	SCAN Q EXIT	AXB-30	01.66.24.1
CE 31	-12 VOLTS	AXB-31	01.00.15.1
CE 32	GROUND	AXB-32	01.90.35.1



*1—01BXD32
 *4—01BXH15

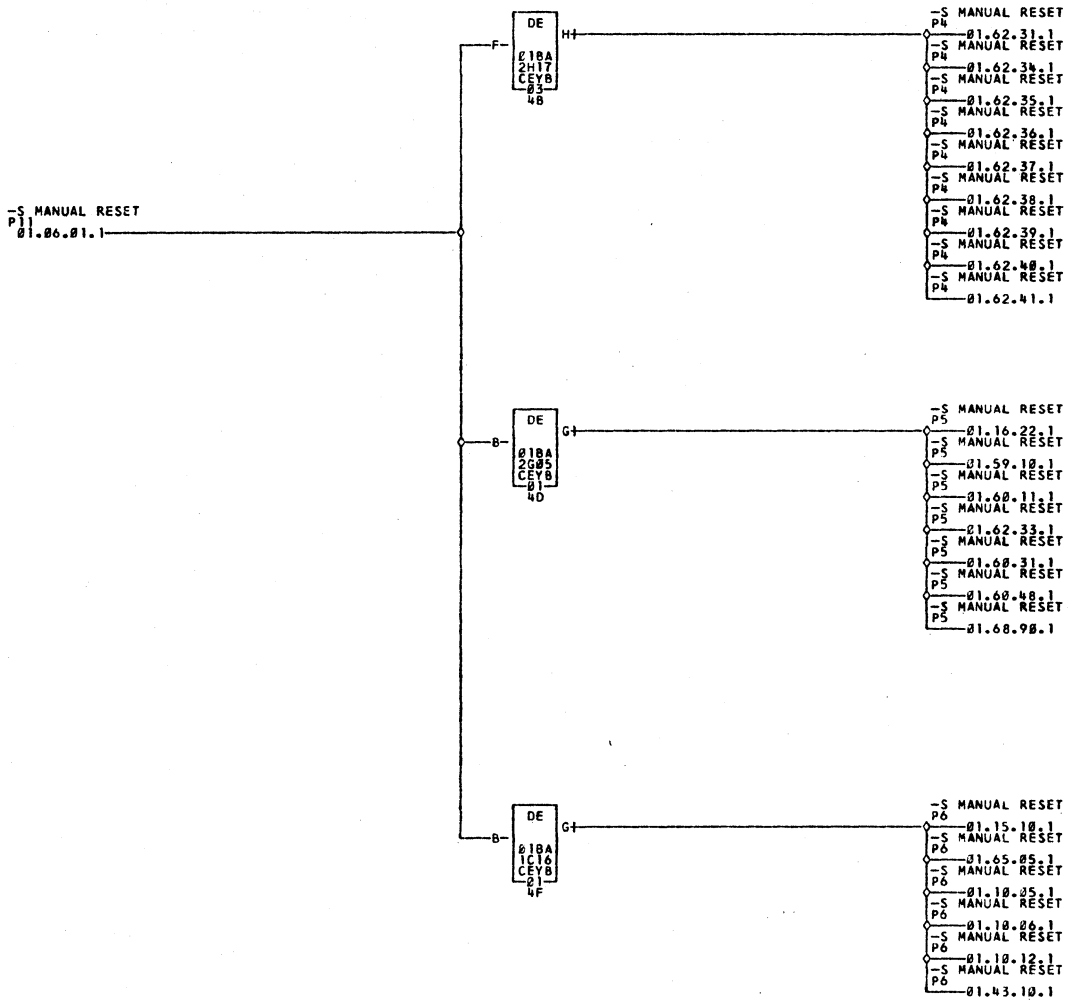
—E328
 —01DWD15

*2—01BXD31

—E368

*3—01B1216A

—01B2216A



-S MANUAL RESET
P1 01.06.01.1



- S MANUAL RESET P7 01.15.10.1
- S MANUAL RESET P7 01.15.11.1
- S MANUAL RESET P7 01.15.12.1
- S MANUAL RESET P7 01.15.13.1
- S MANUAL RESET P7 01.15.14.1
- S MANUAL RESET P7 01.15.15.1
- S MANUAL RESET P7 01.15.16.1
- S MANUAL RESET P7 01.15.17.1
- S MANUAL RESET P7 01.15.18.1



- S MANUAL RESET PR 01.08.41.1
- S MANUAL RESET PR 01.16.10.1
- S MANUAL RESET PR 01.16.20.1
- S MANUAL RESET PR 01.16.21.1
- S MANUAL RESET PR 01.62.30.1
- S MANUAL RESET PR 01.68.40.1
- S MANUAL RESET PR 01.68.45.1

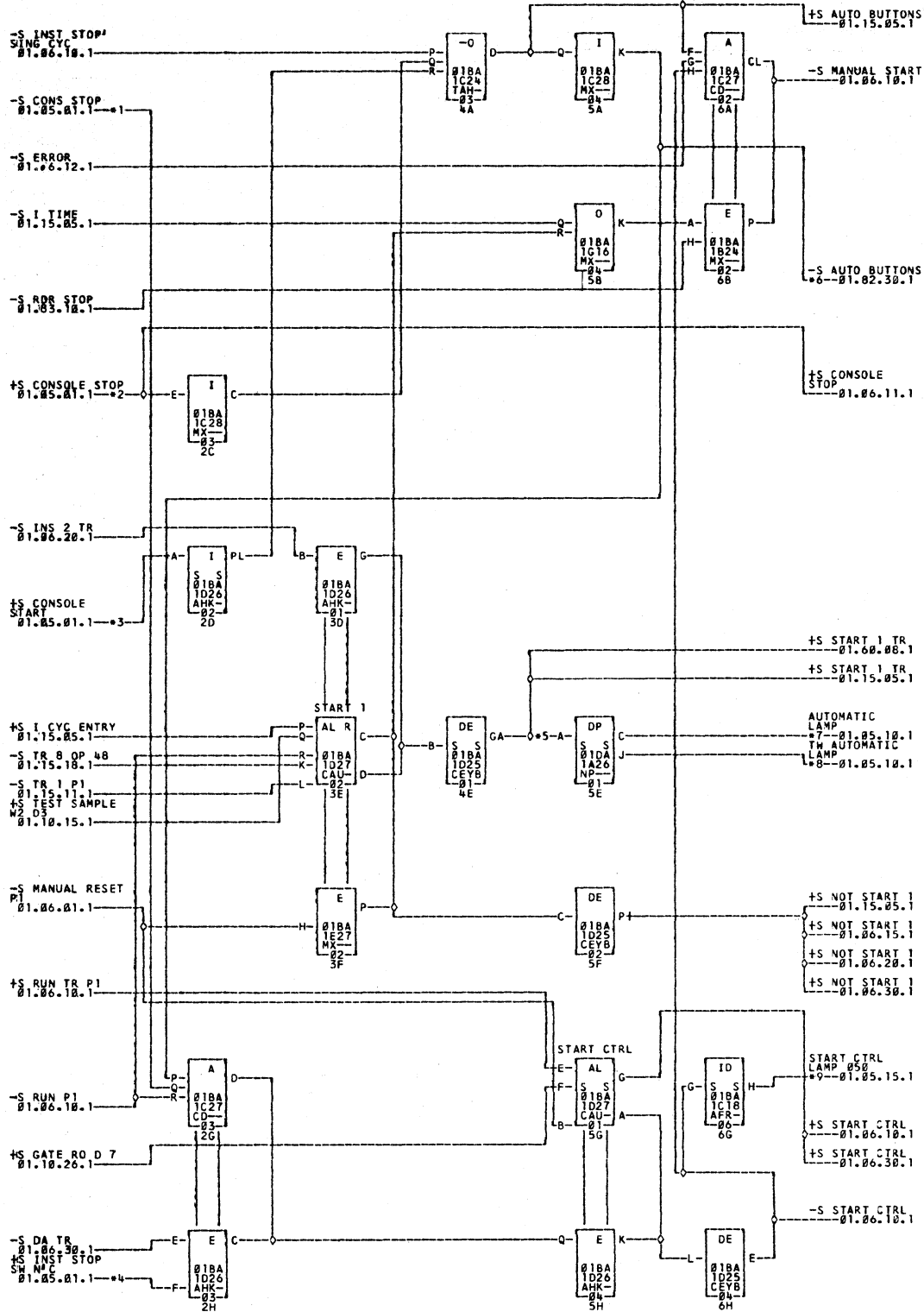


- S MANUAL RESET P9 01.25.35.1
- S MANUAL RESET P9 01.40.03.1
- S MANUAL RESET P9 01.40.10.1
- S MANUAL RESET P9 01.40.20.1
- S MANUAL RESET P9 01.58.09.1
- S MANUAL RESET P9 01.25.30.1
- S MANUAL RESET P9 01.06.20.1
- S MANUAL RESET P9 01.66.03.1
- S MANUAL RESET P9 01.68.05.1

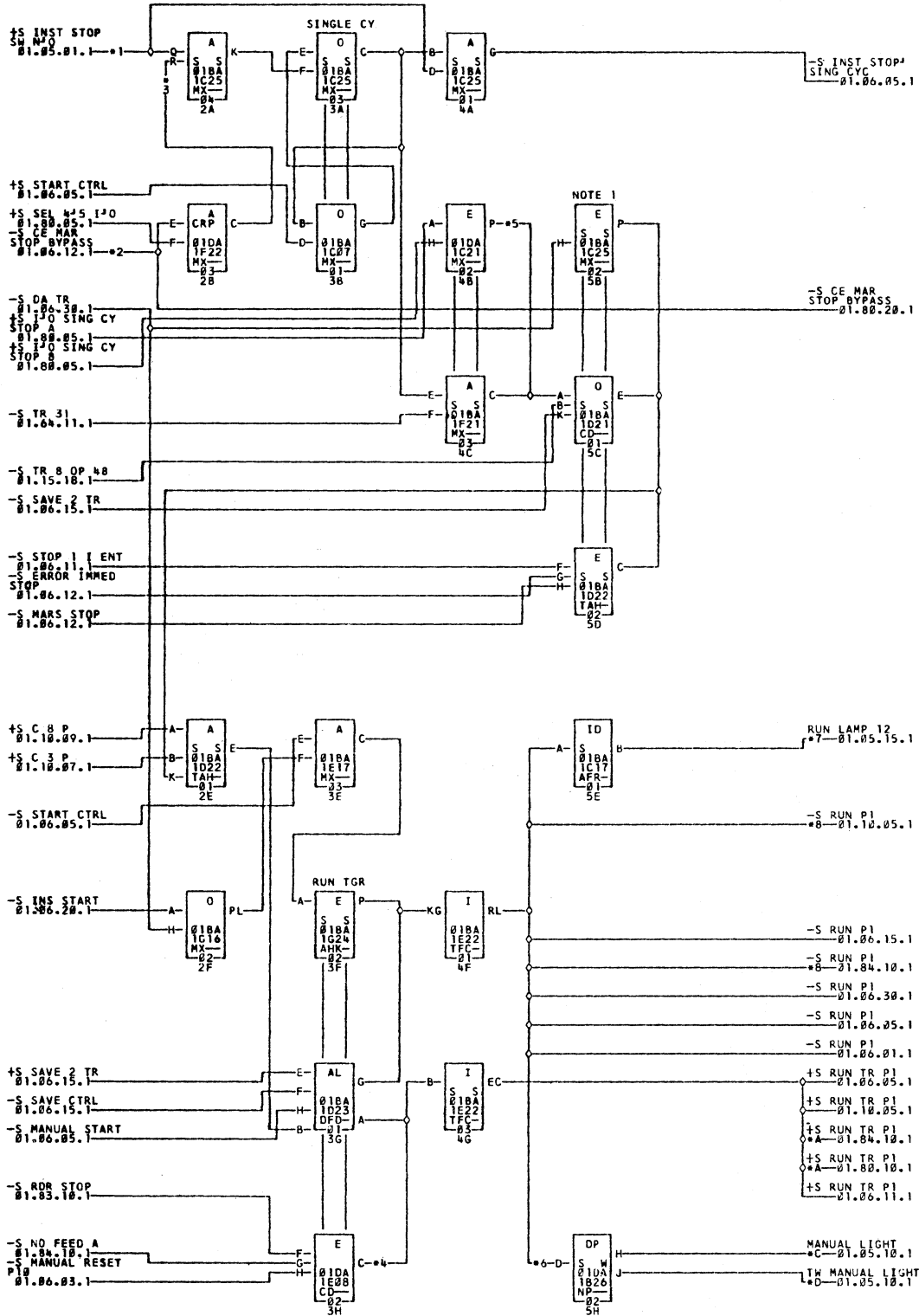
-S MANUAL RESET
P1 01.06.01.1



- S MANUAL RESET P10 01.01.45.1
- S MANUAL RESET P10 01.04.10.1
- S MANUAL RESET P10 01.02.30.1
- S MANUAL RESET P10 01.06.10.1



- *1--01BXD16
- *2--01BXD07
- *3--01BXD17
- *4--01BXD18
- *5--01BXB27
- *6--01BXH08
- *7--01DW005
- *8--01DW006
- *9--01BXE01
- E378
- E378
- E388
- E388



*1-018XD20
 *4-010W004
 *7-018XB2
 *D-010W006

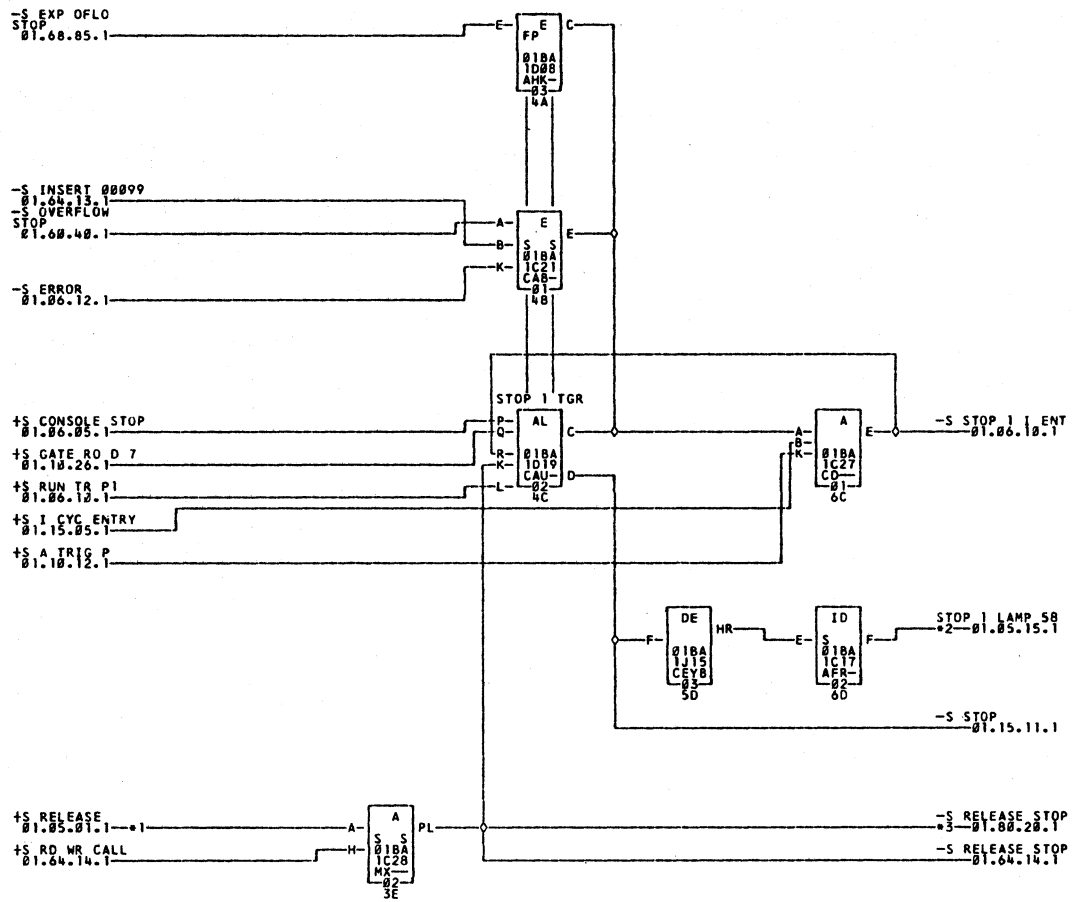
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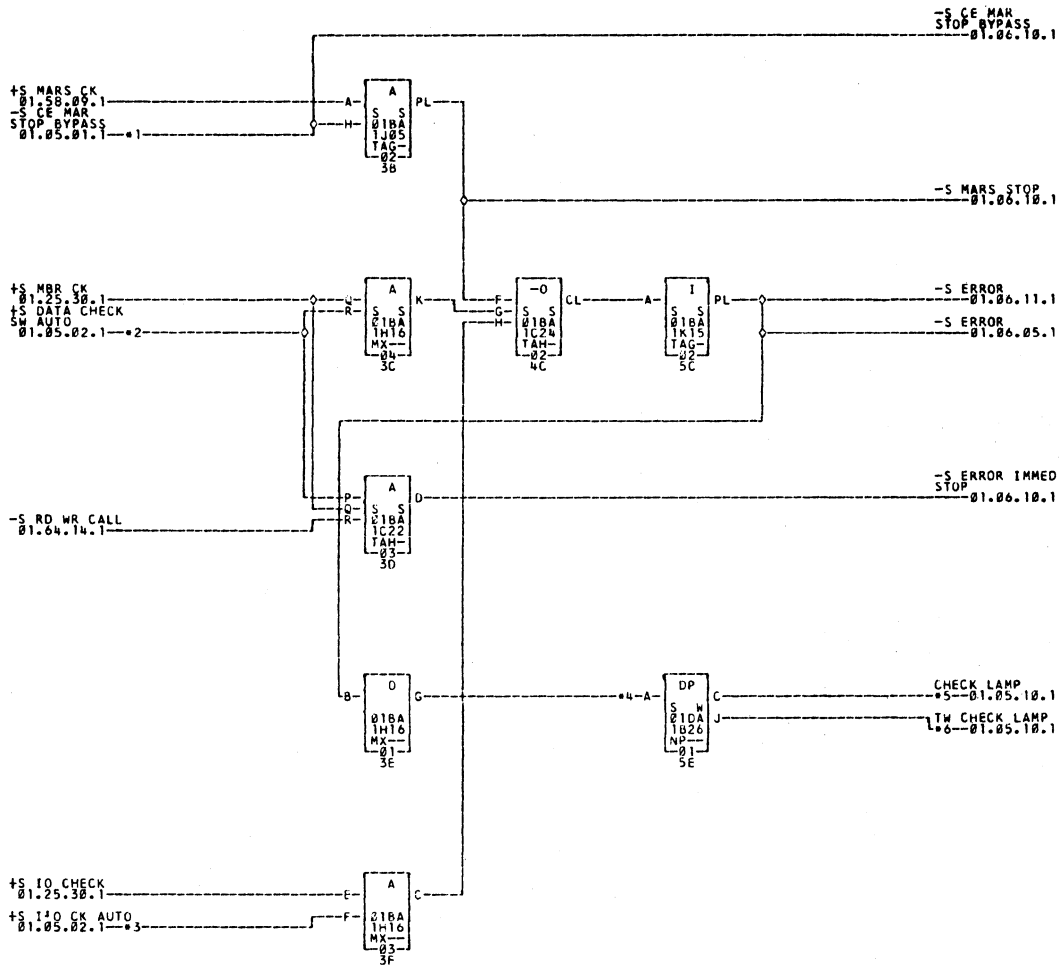
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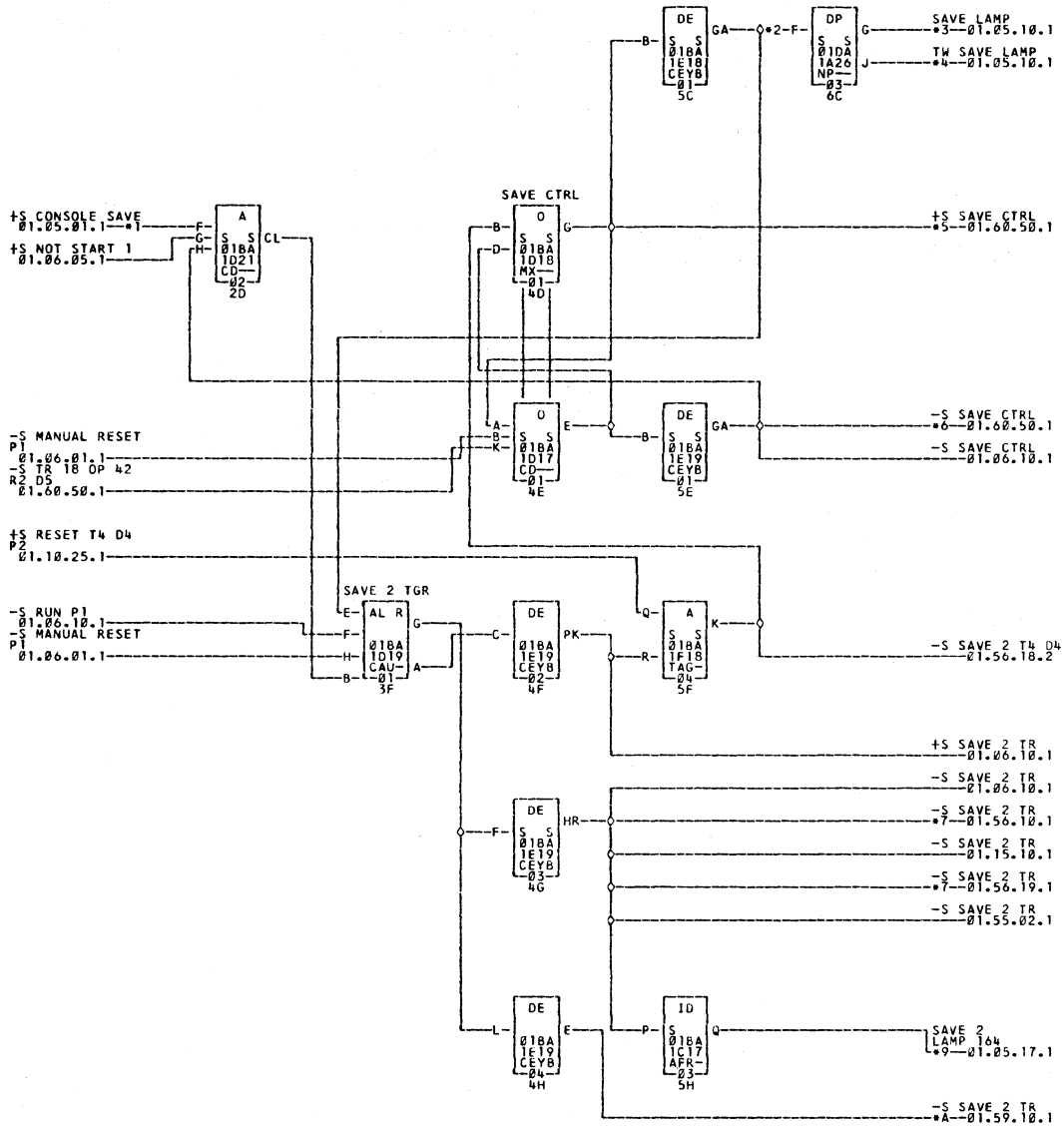
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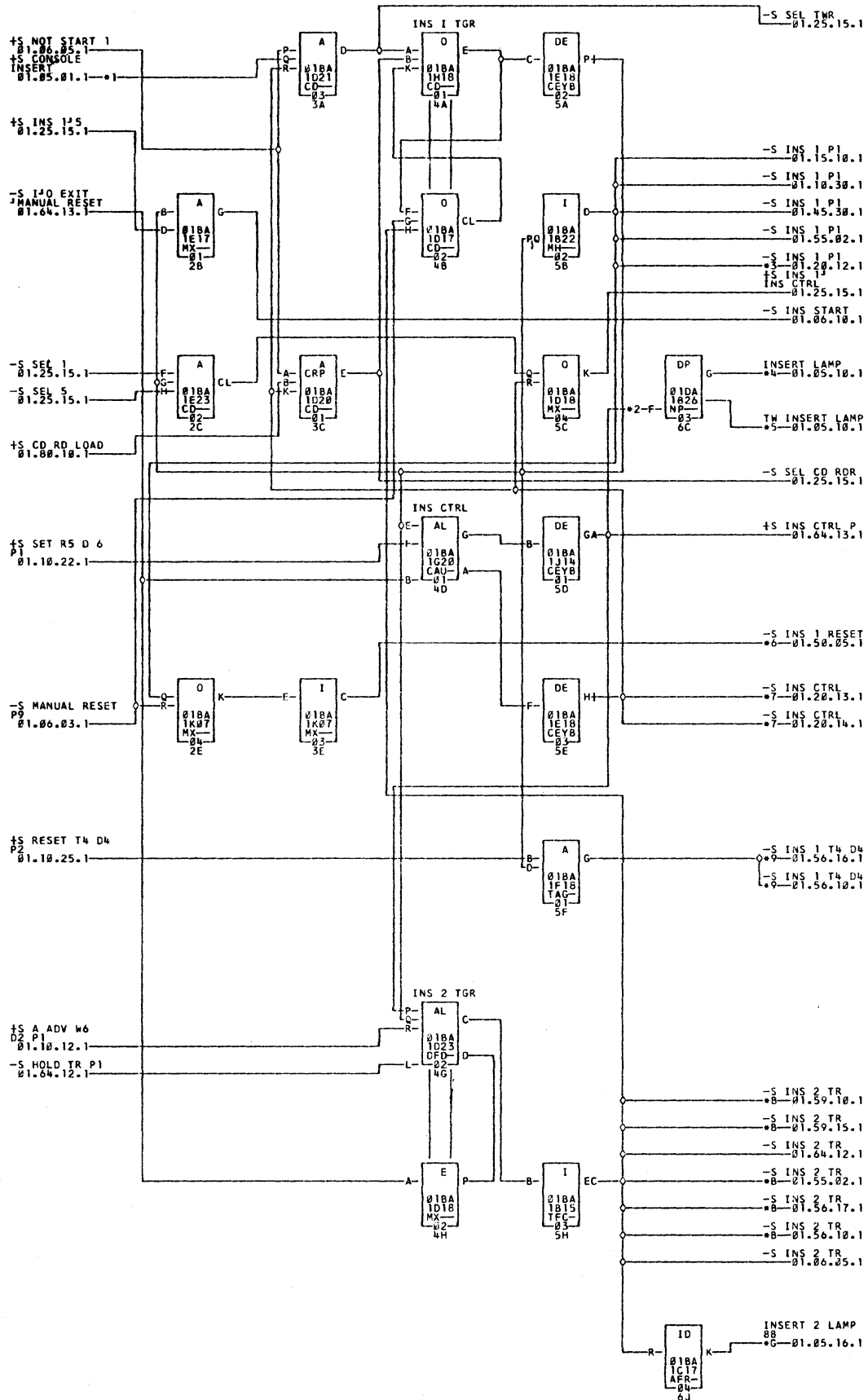
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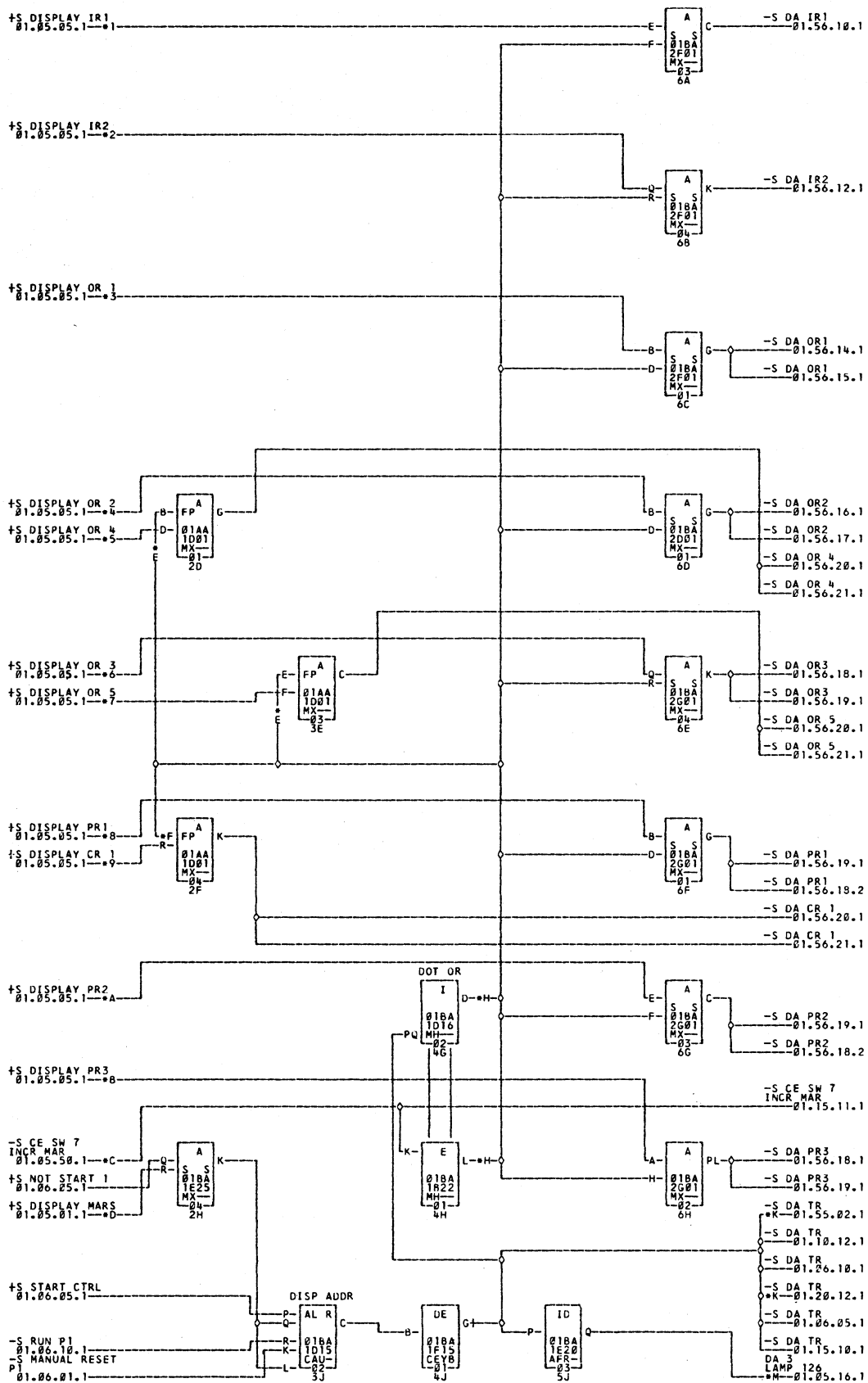
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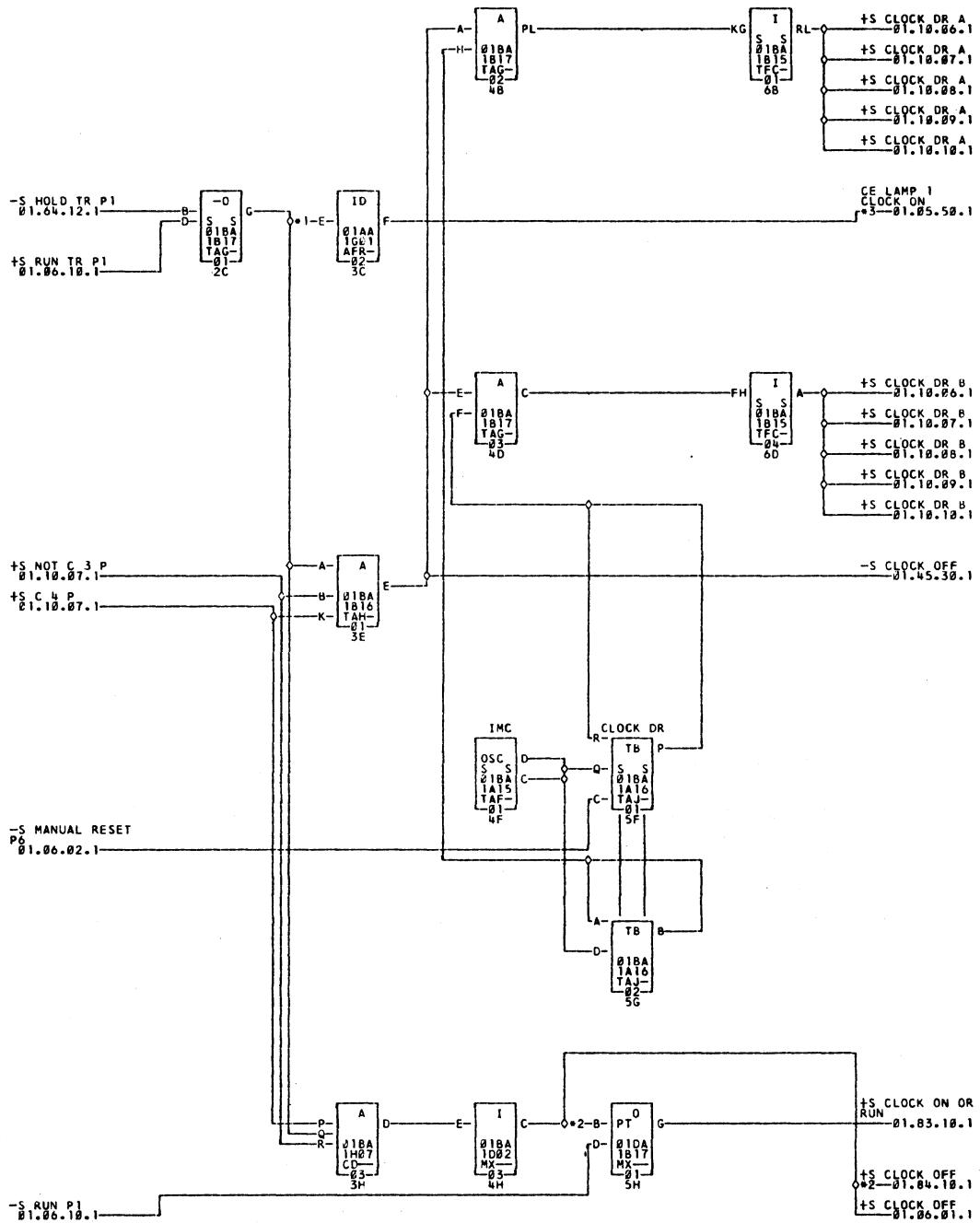
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| *9--01BX004 | *A--01BY16D | --- | --- | --- | --- |



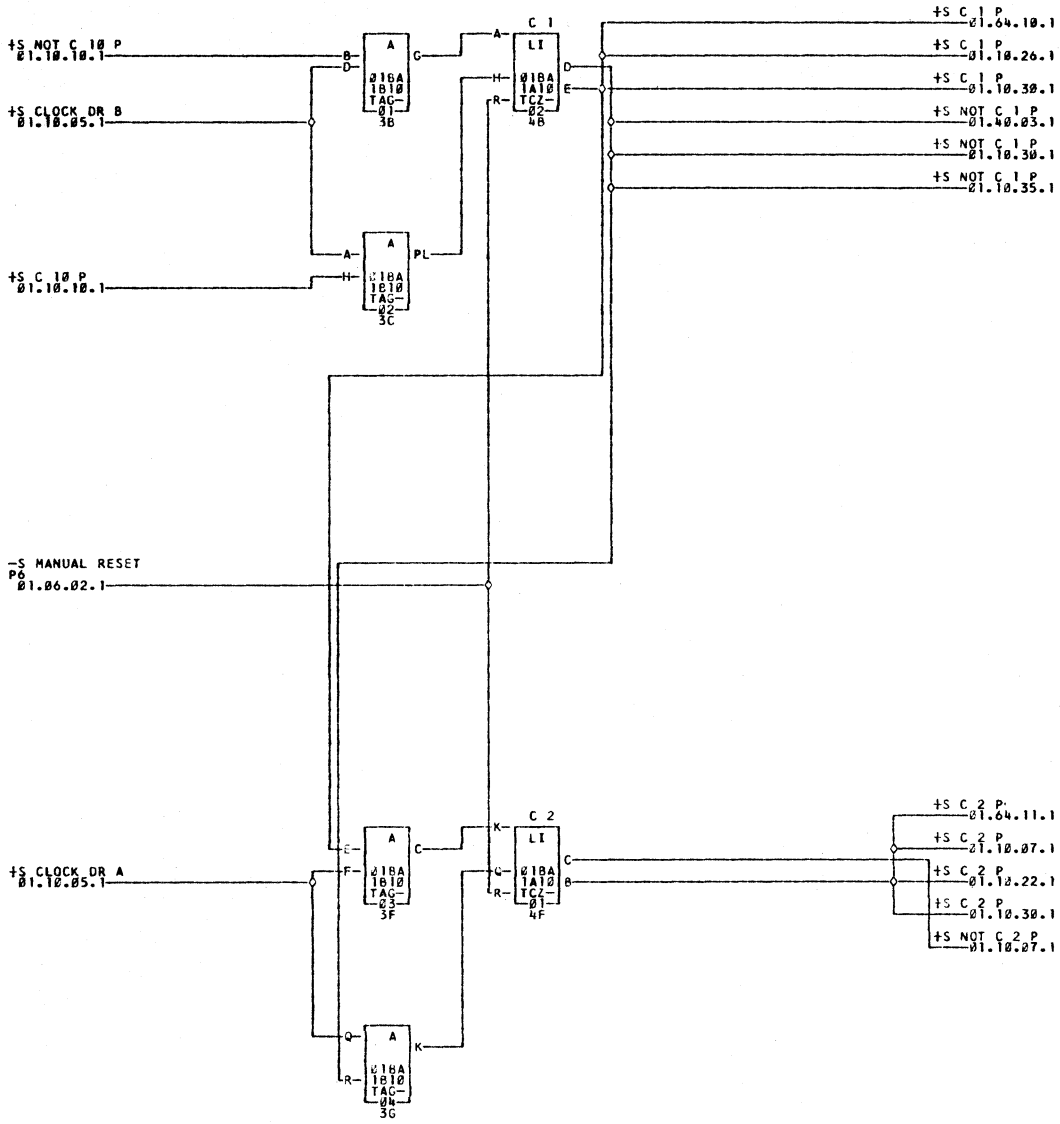
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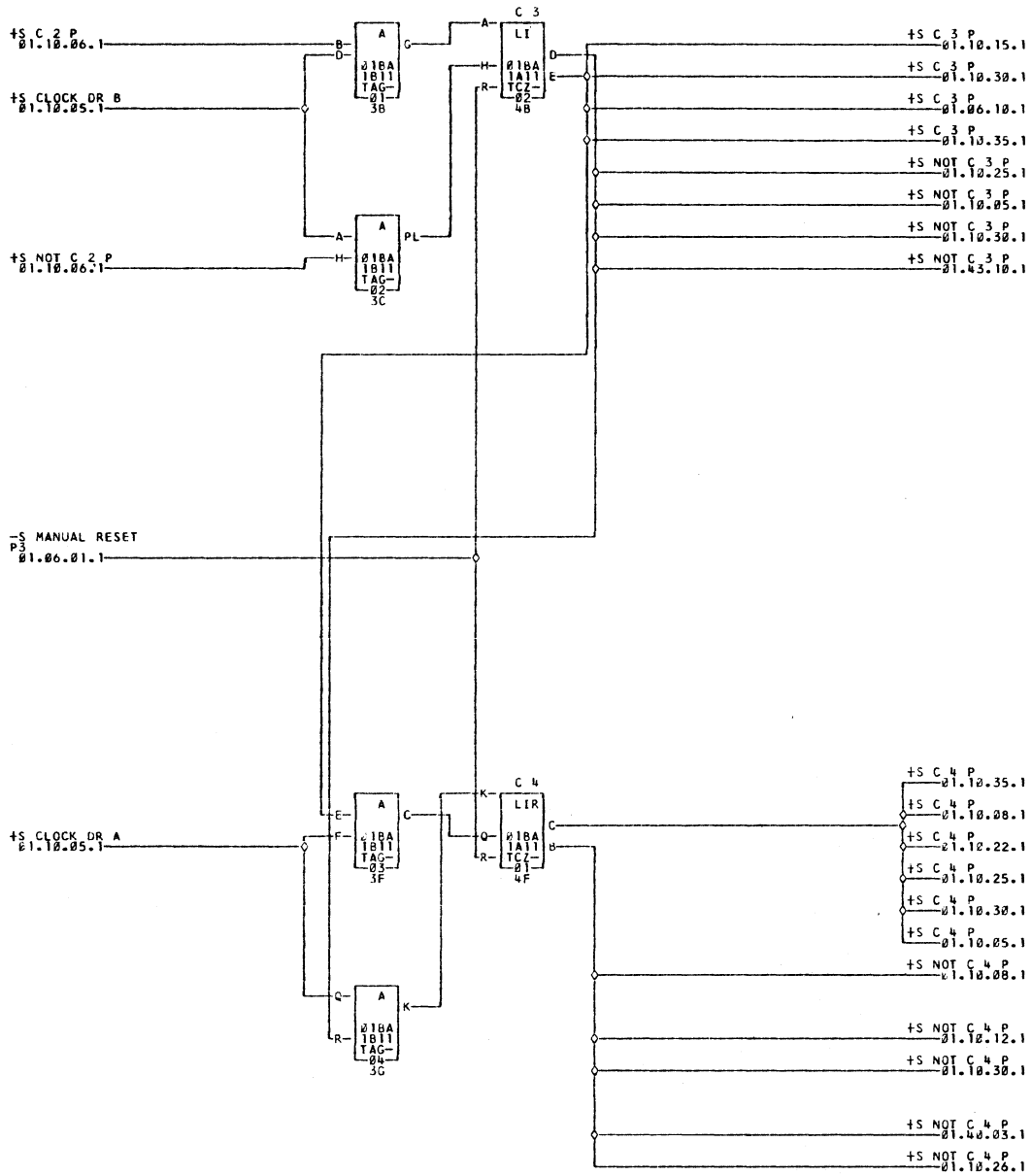


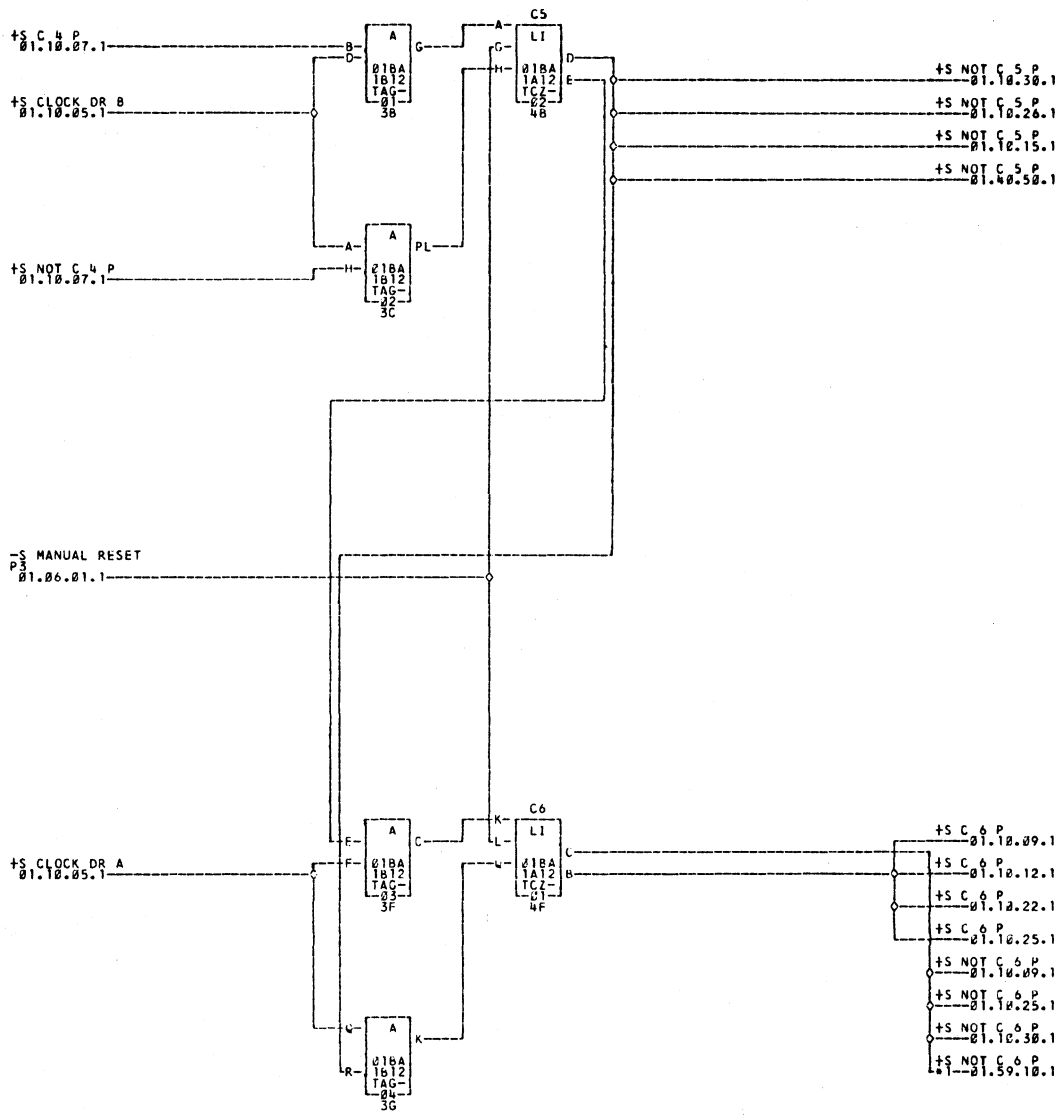
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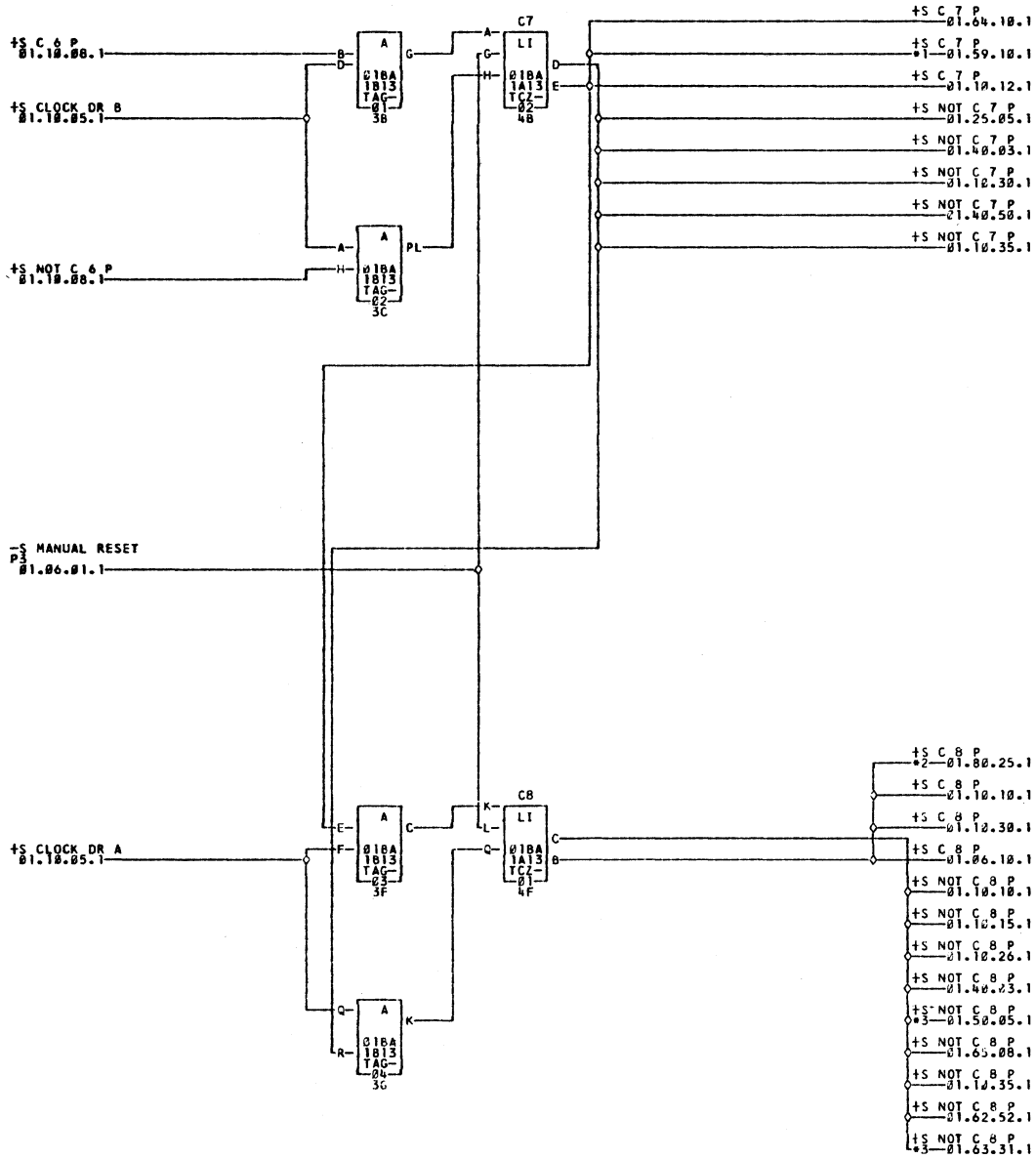


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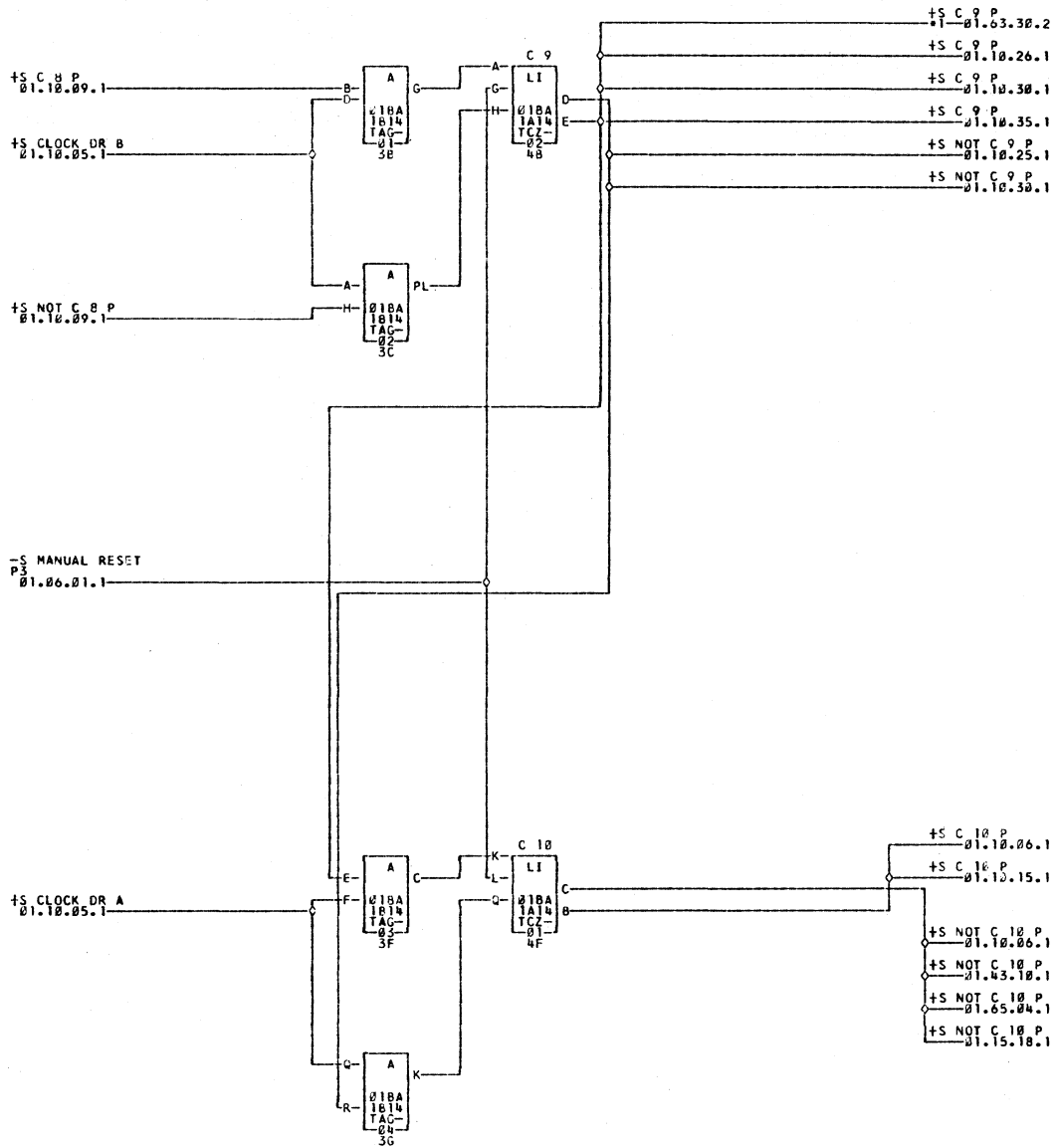




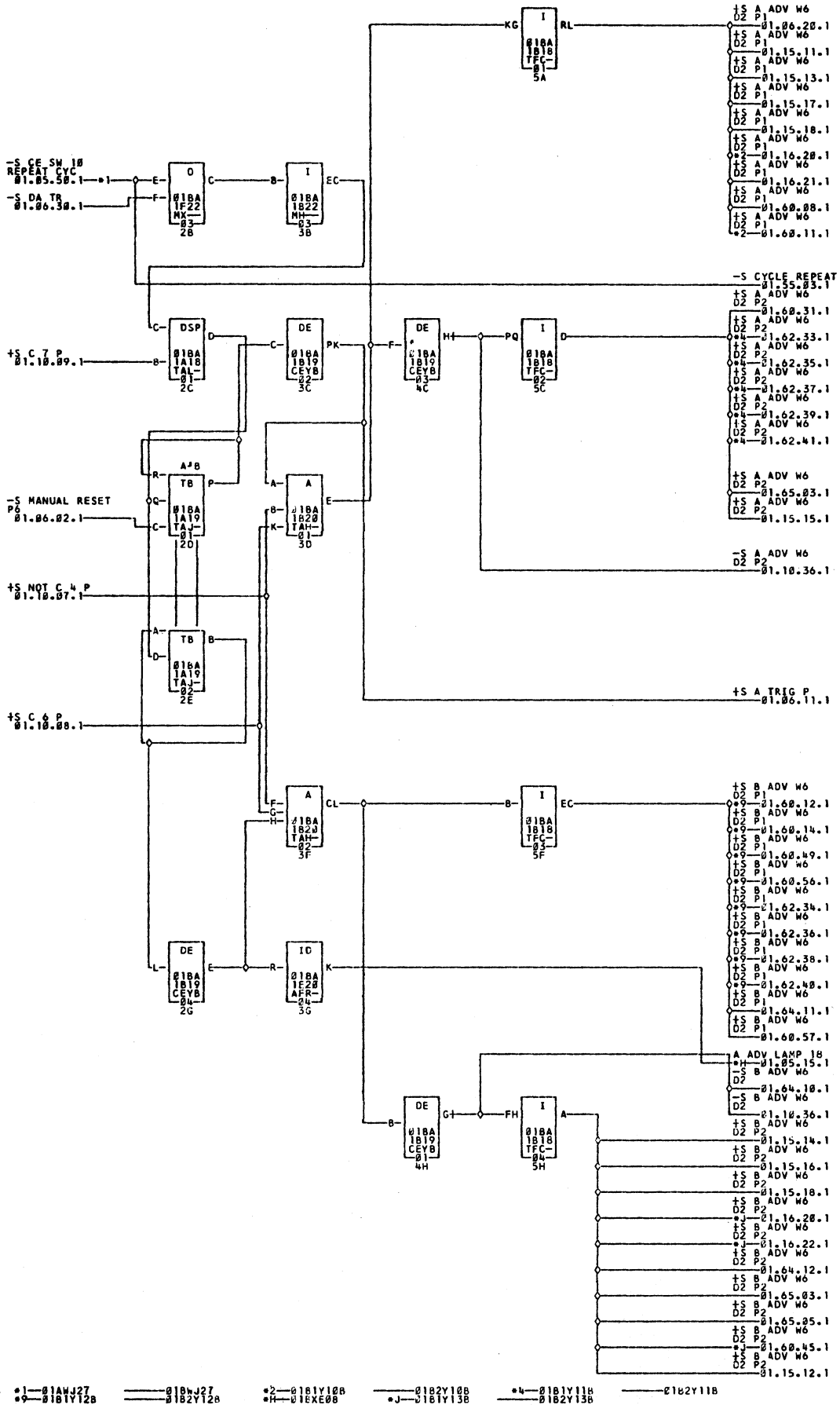




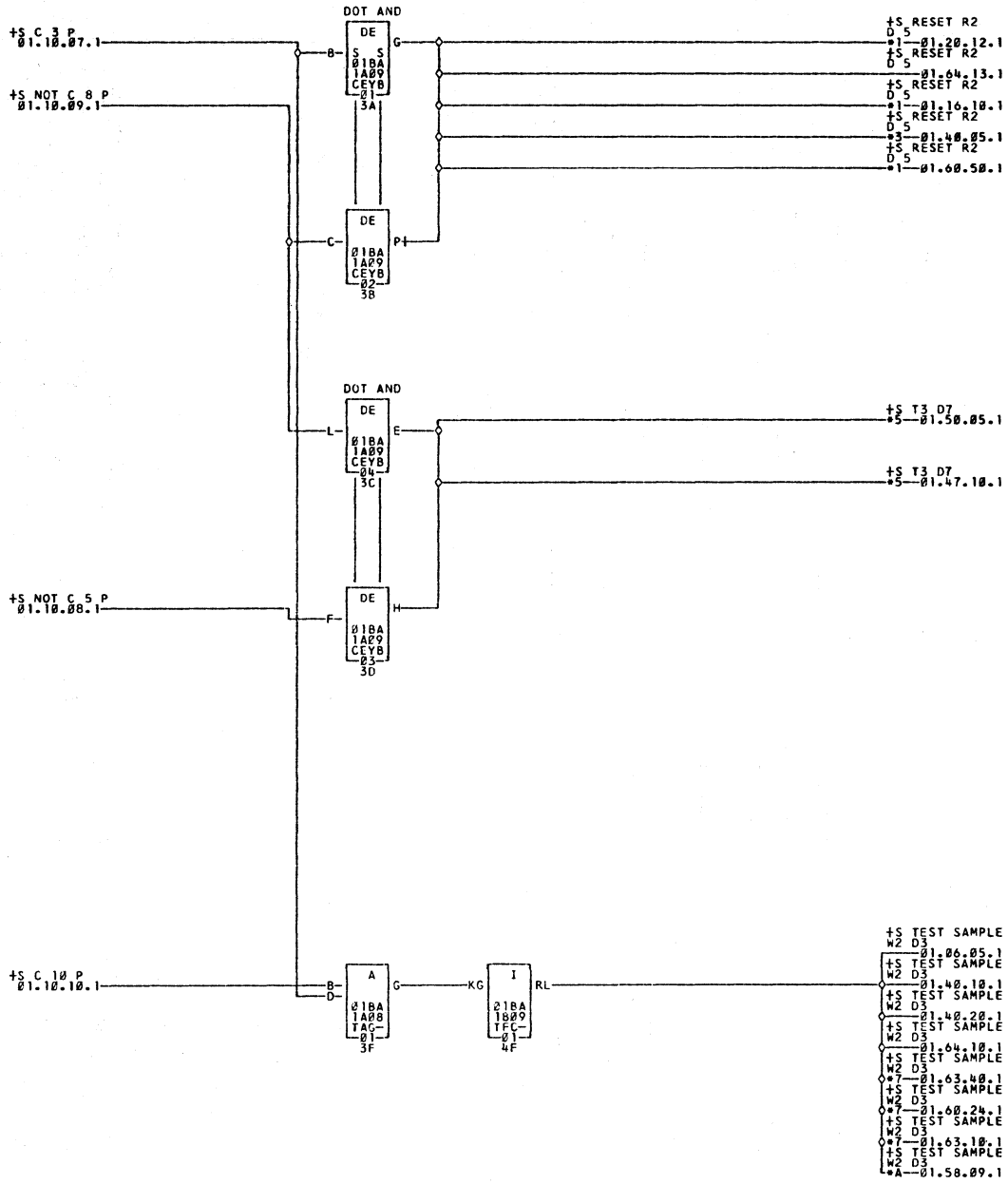
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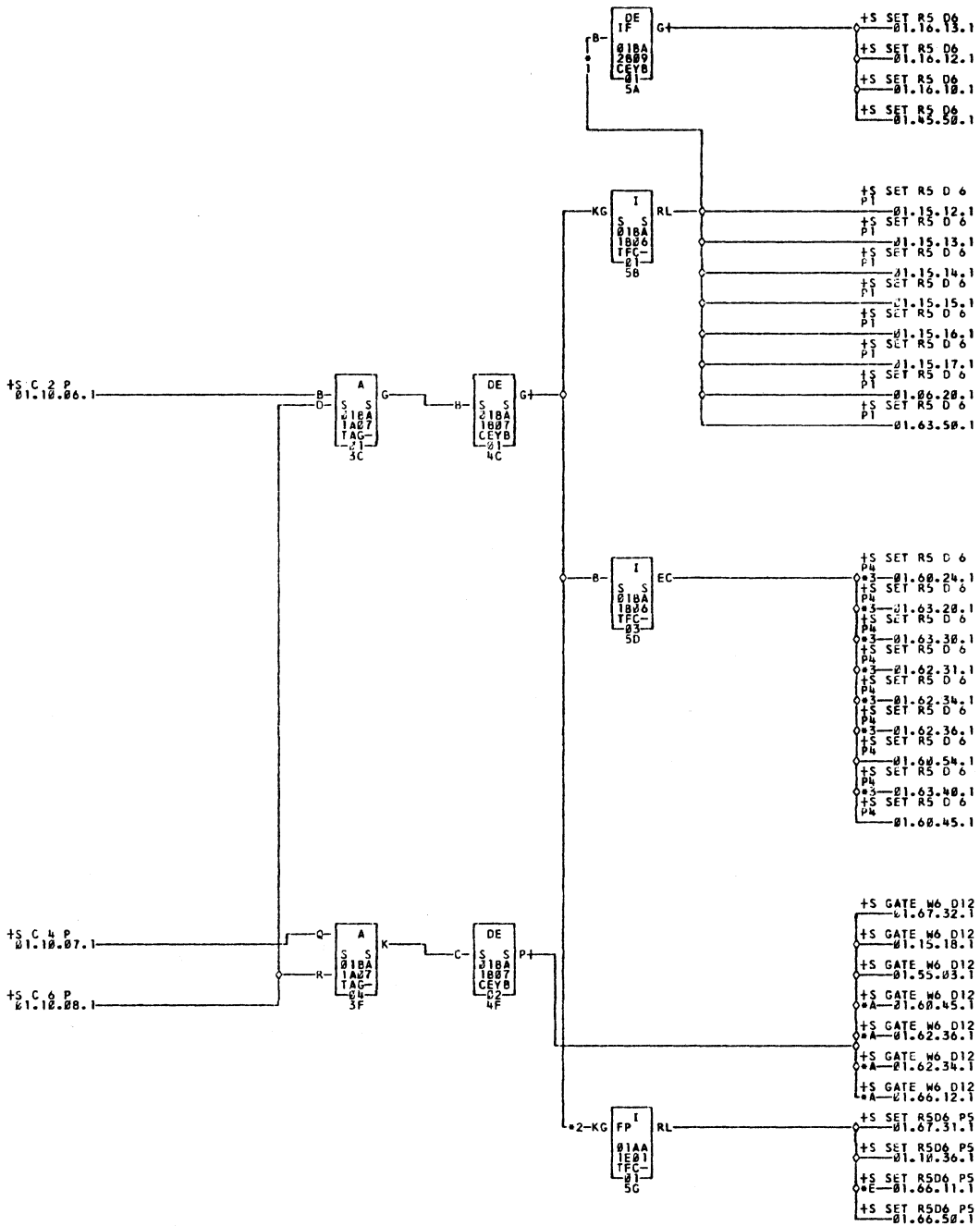
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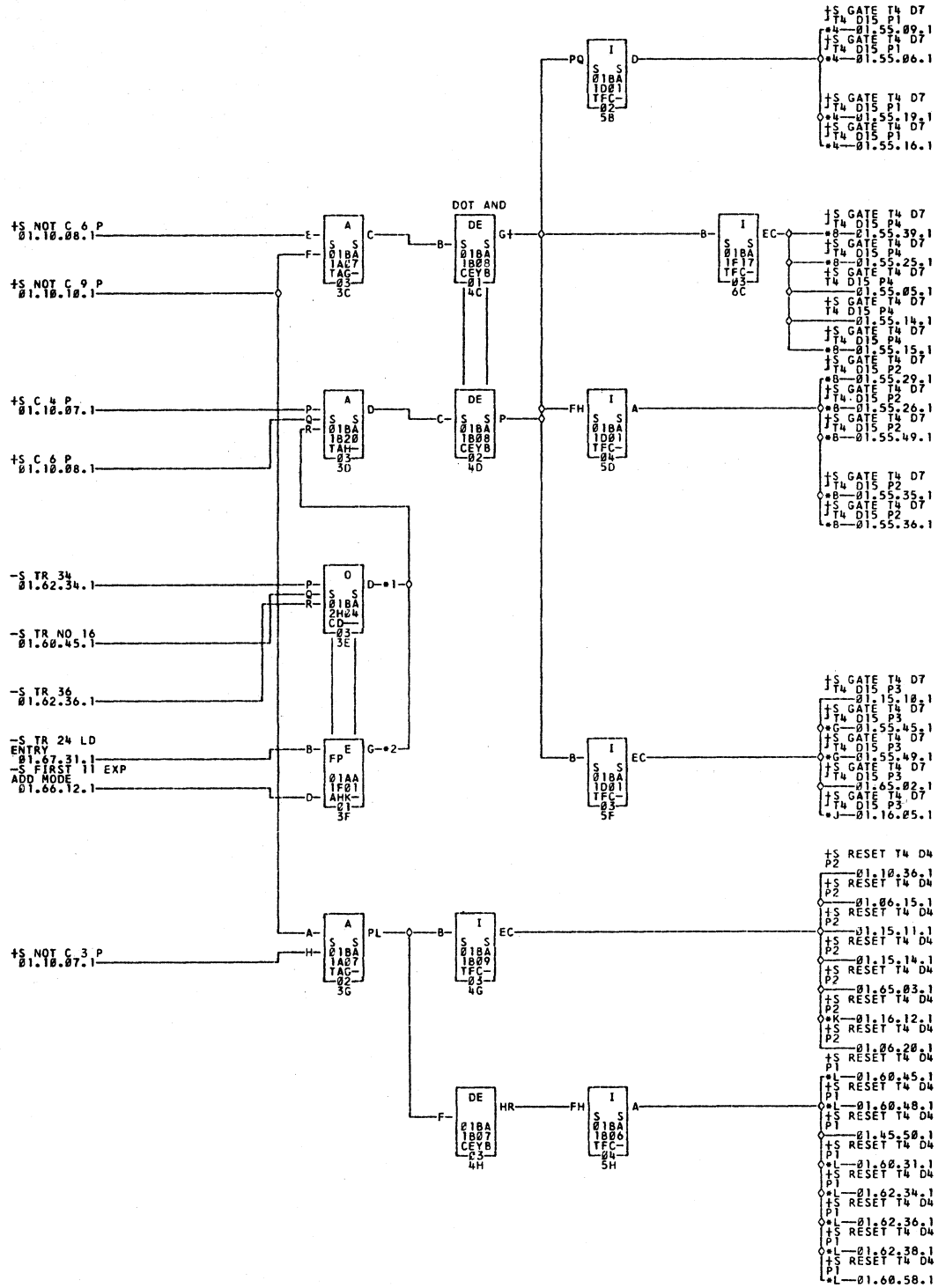
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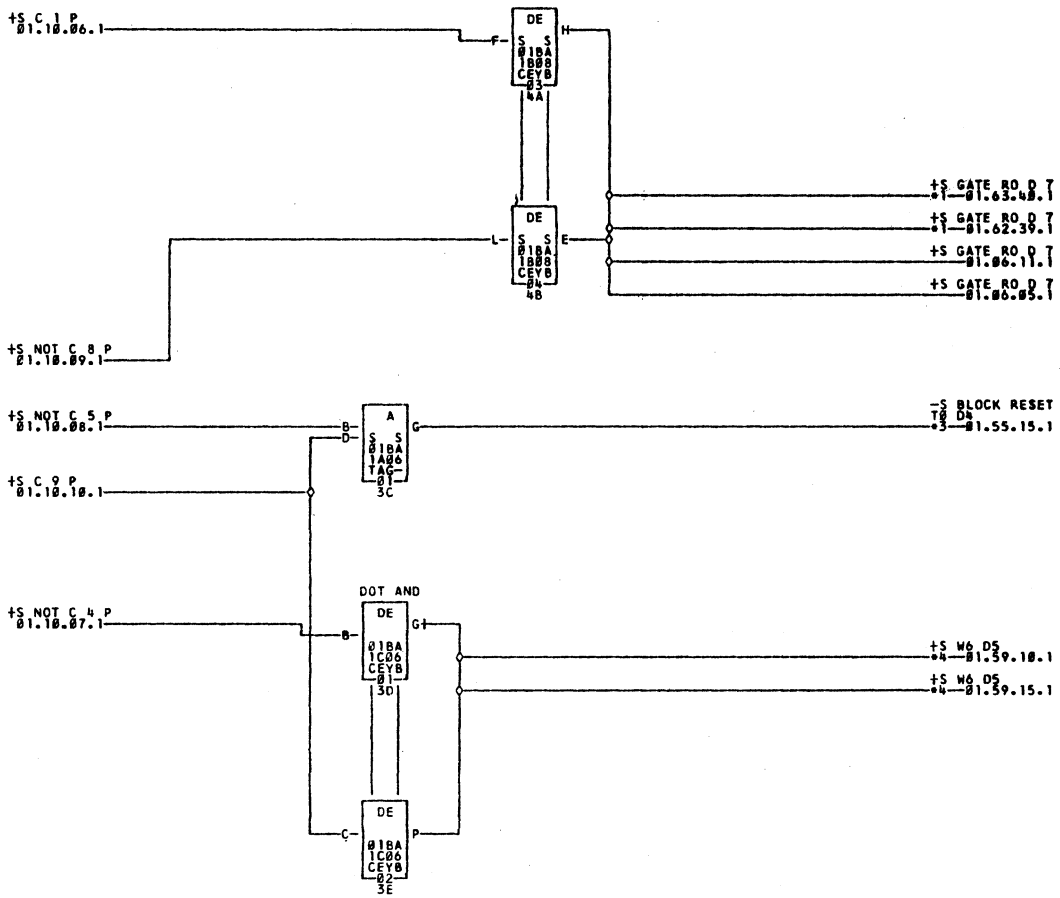
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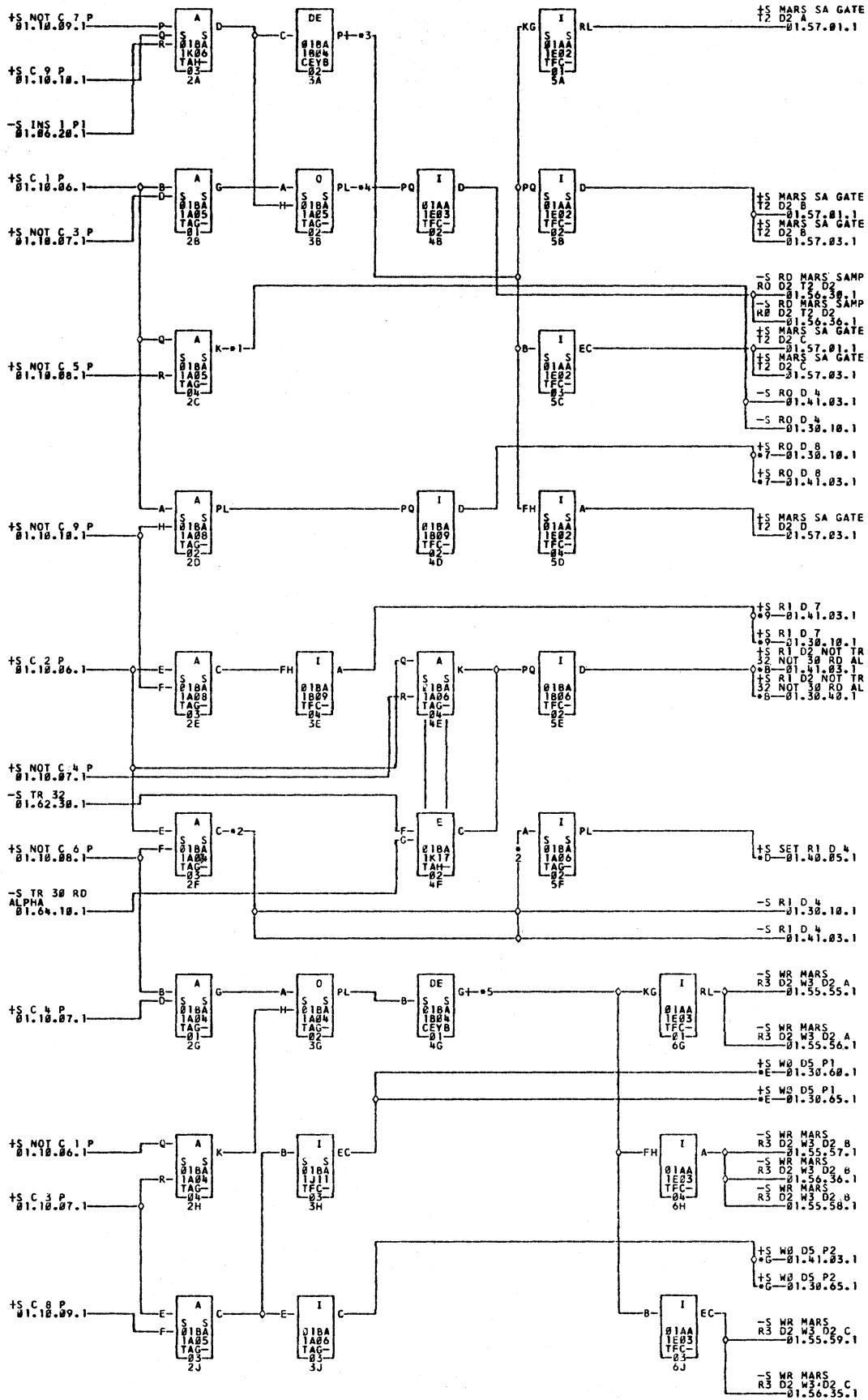
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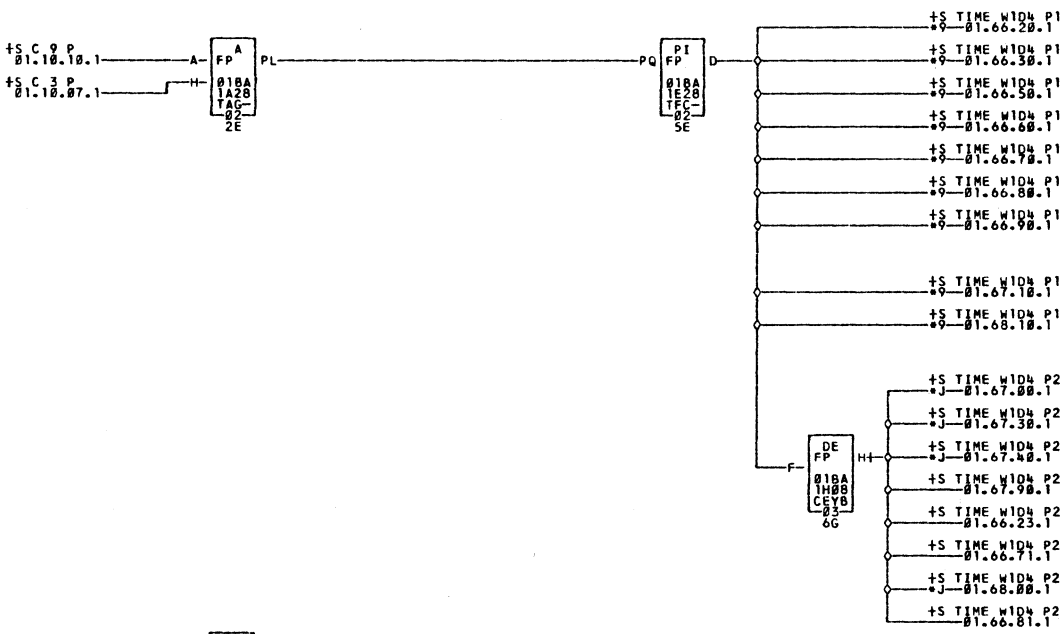
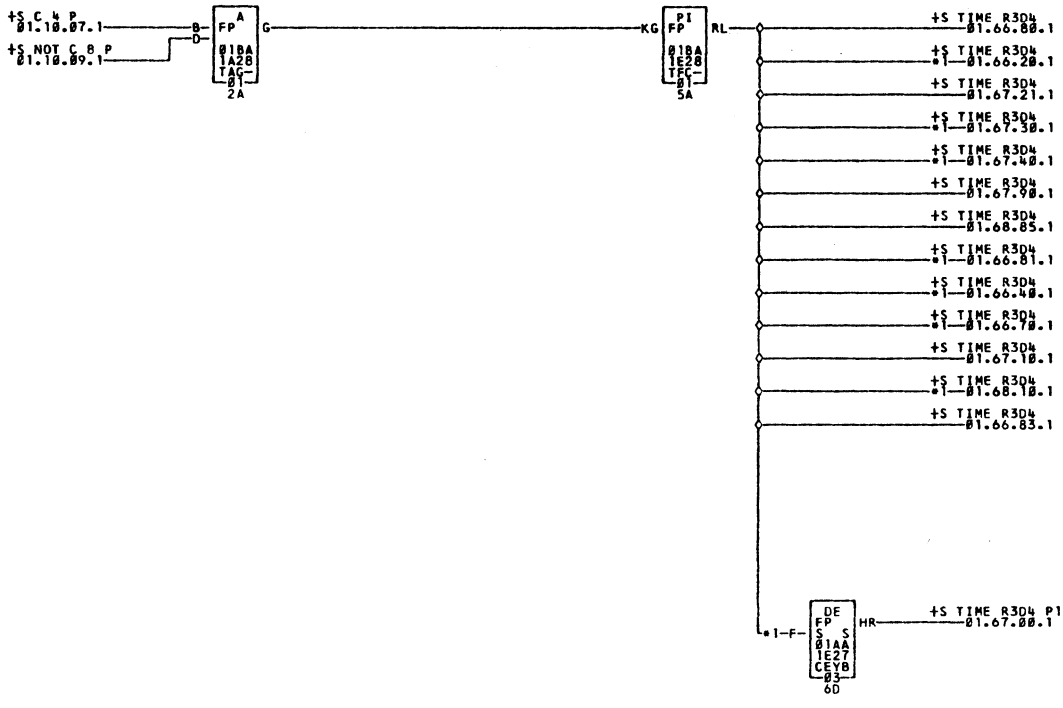


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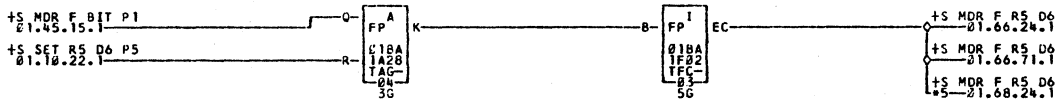
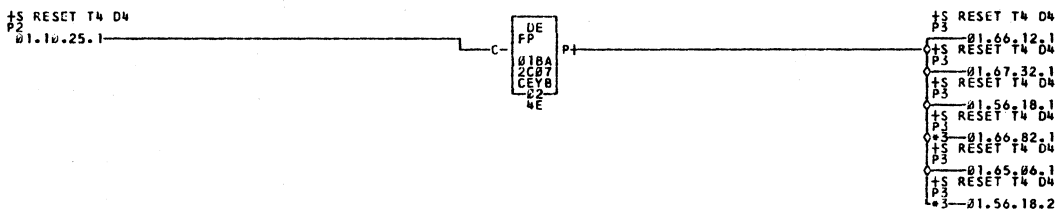
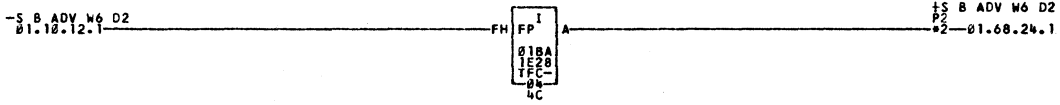
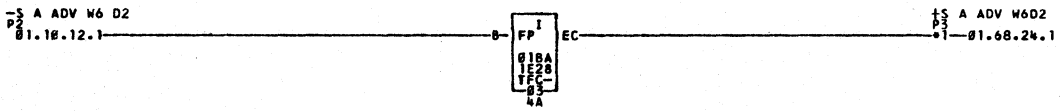


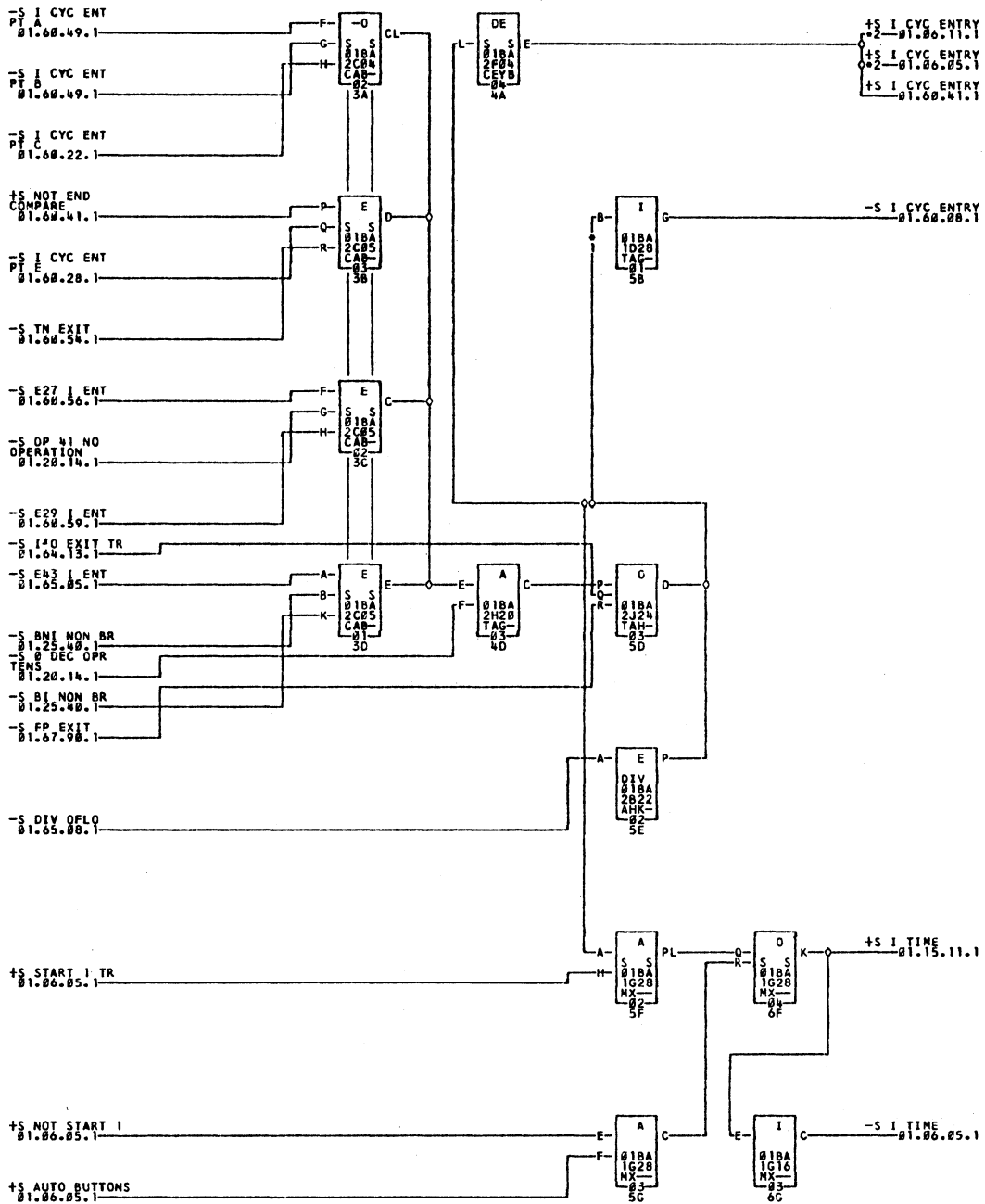


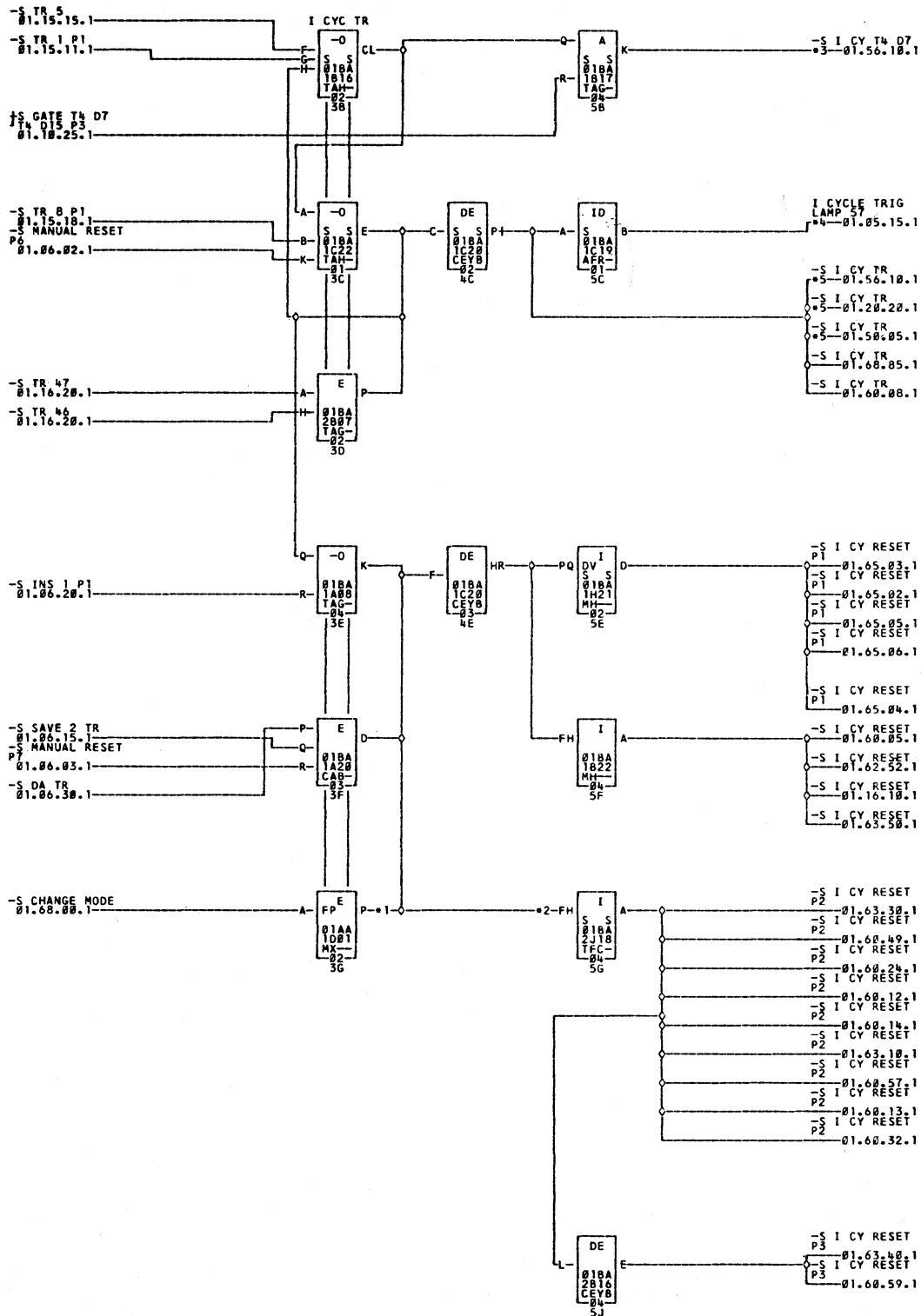
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- 9-01BW004 •9A-01AWB04 •6-01BW007 •6A-01AWD07 •7-01BW007 •7A-01AWB07
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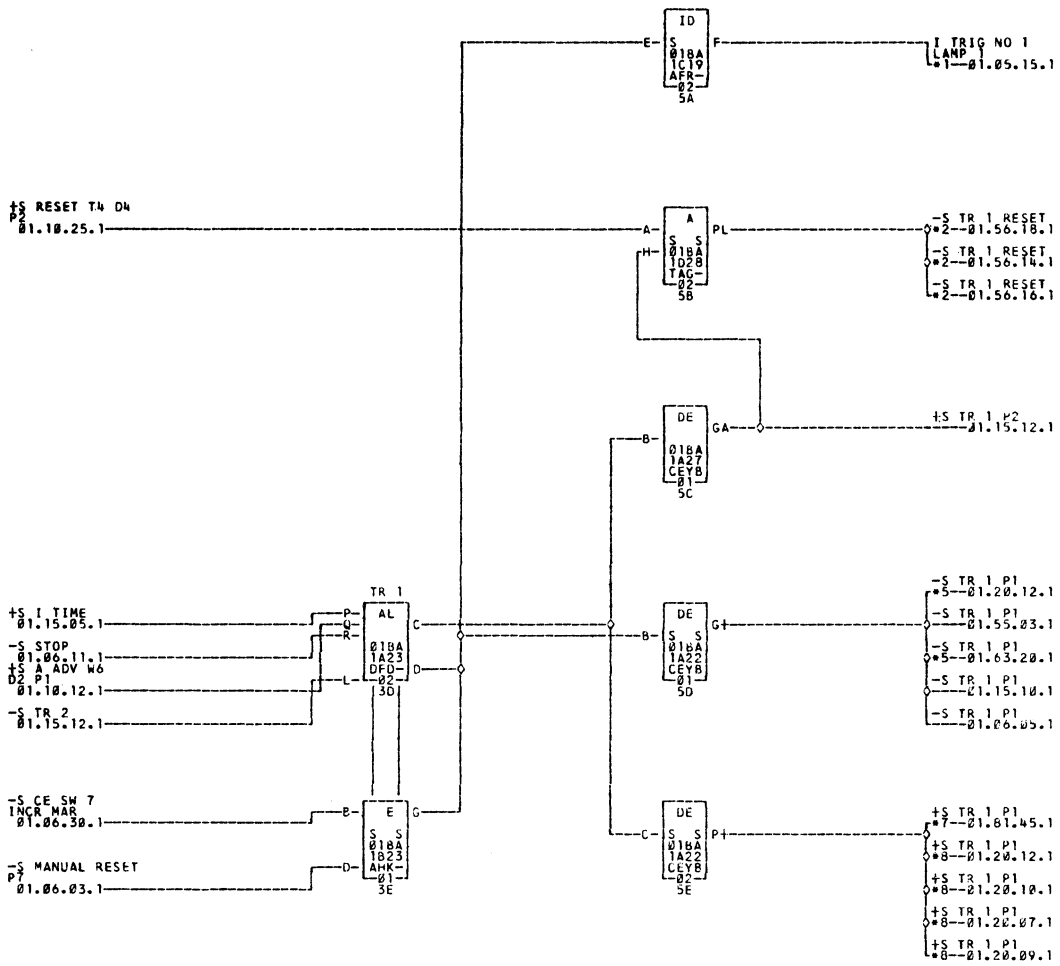
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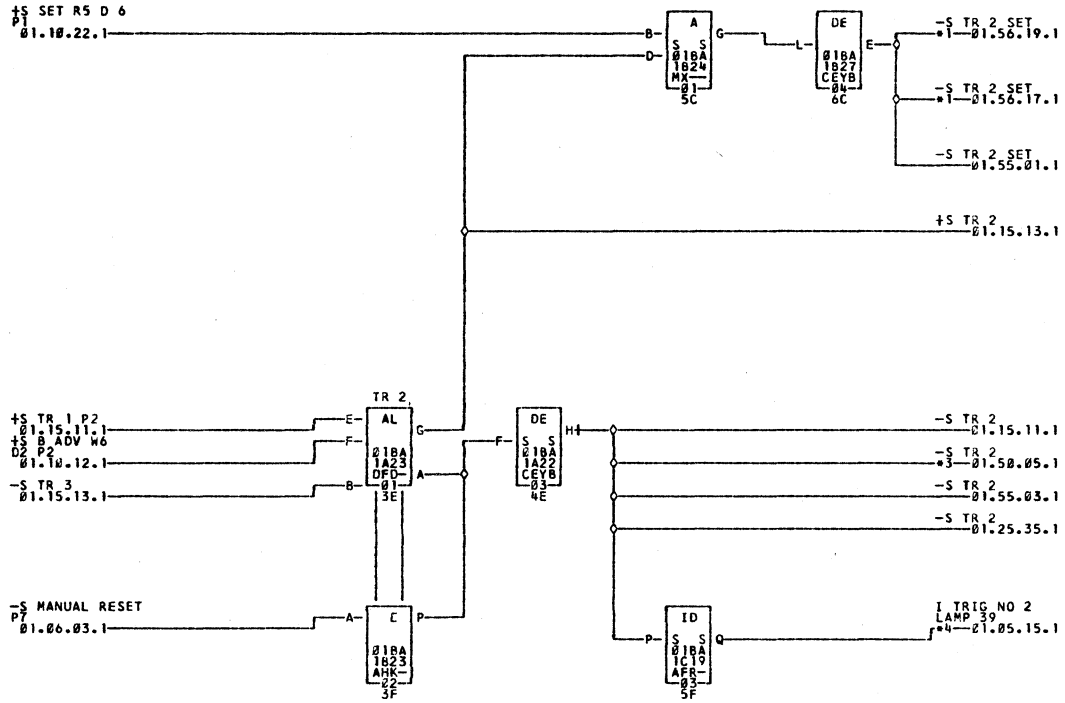
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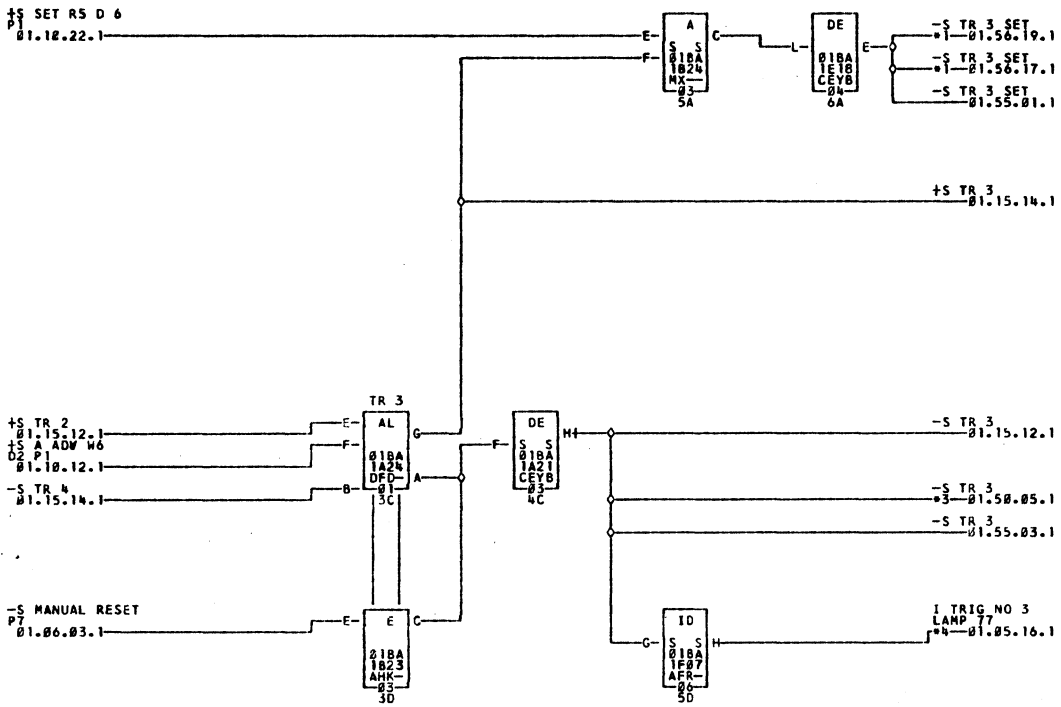
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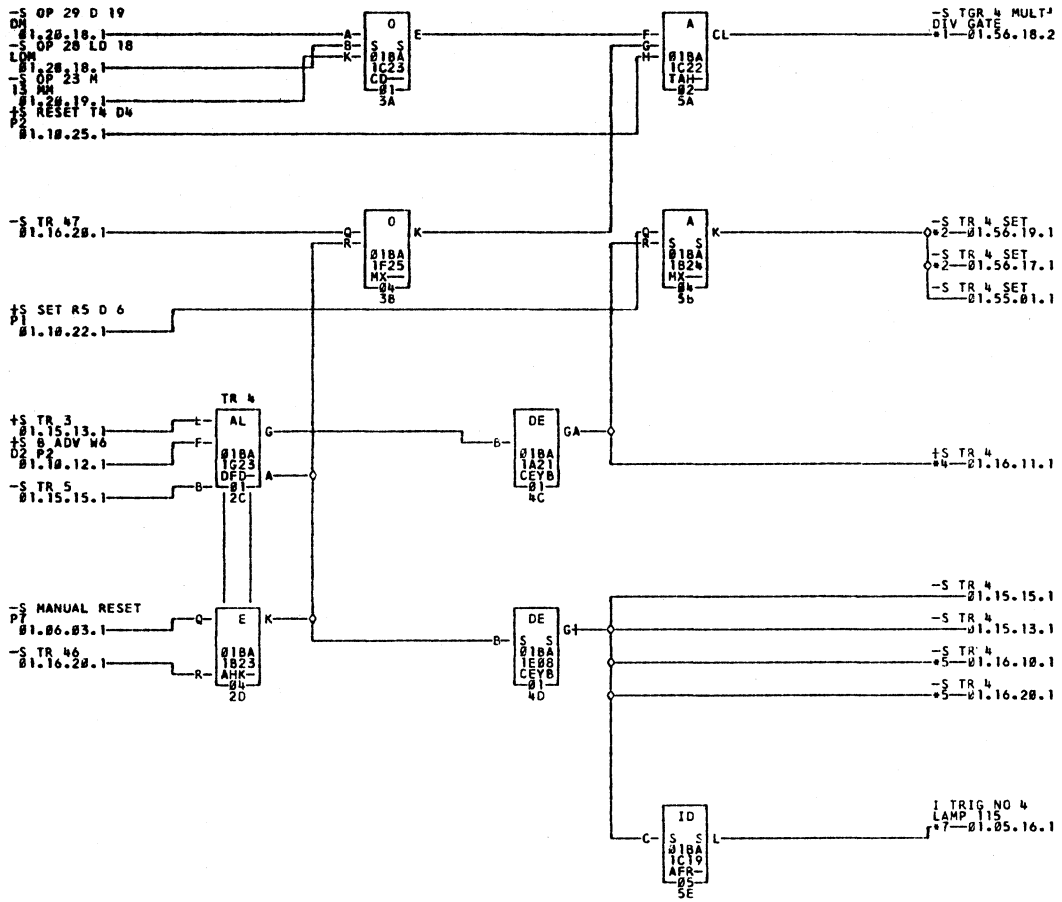
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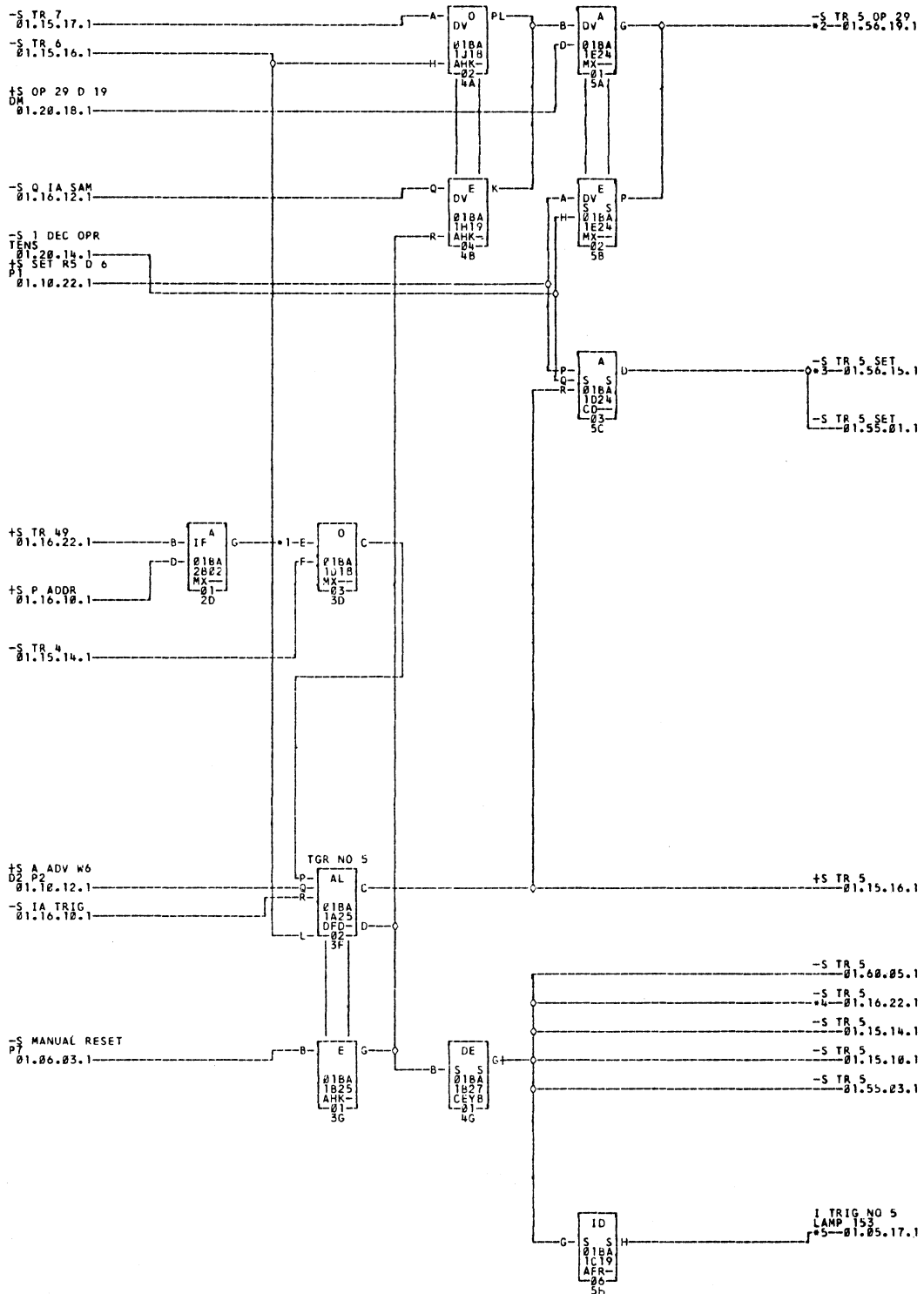
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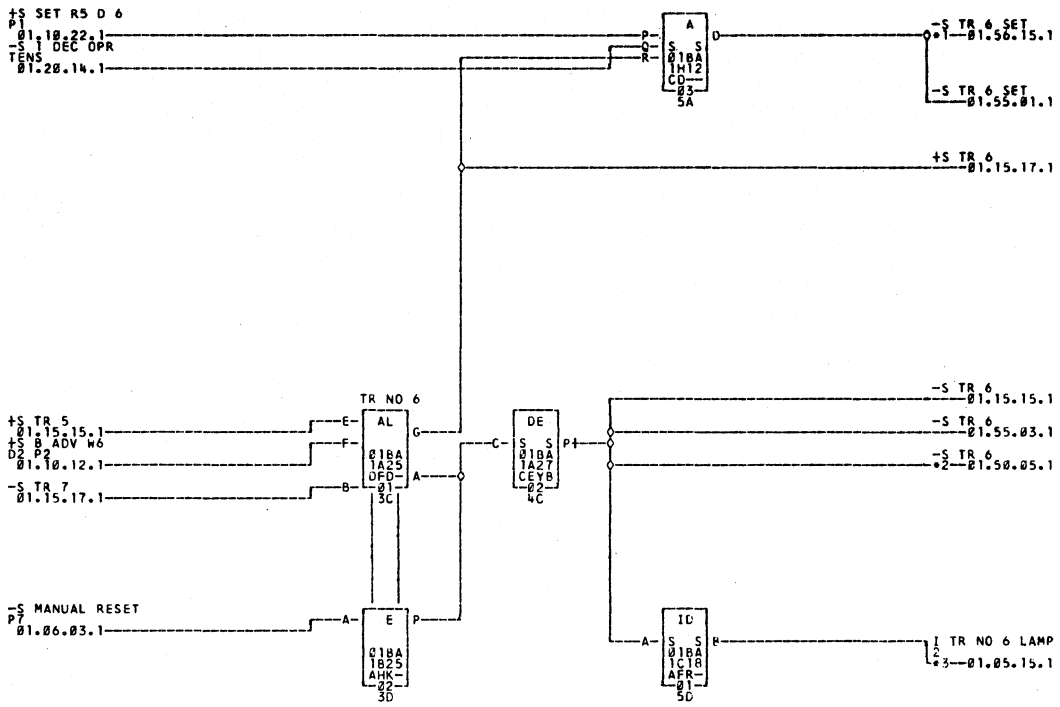
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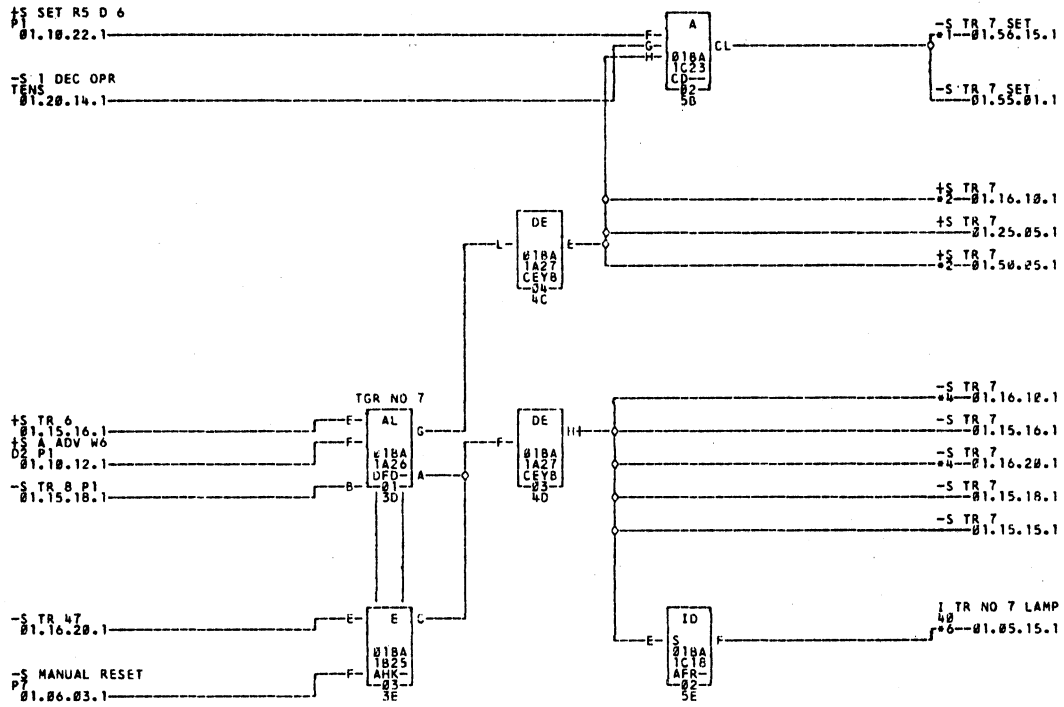
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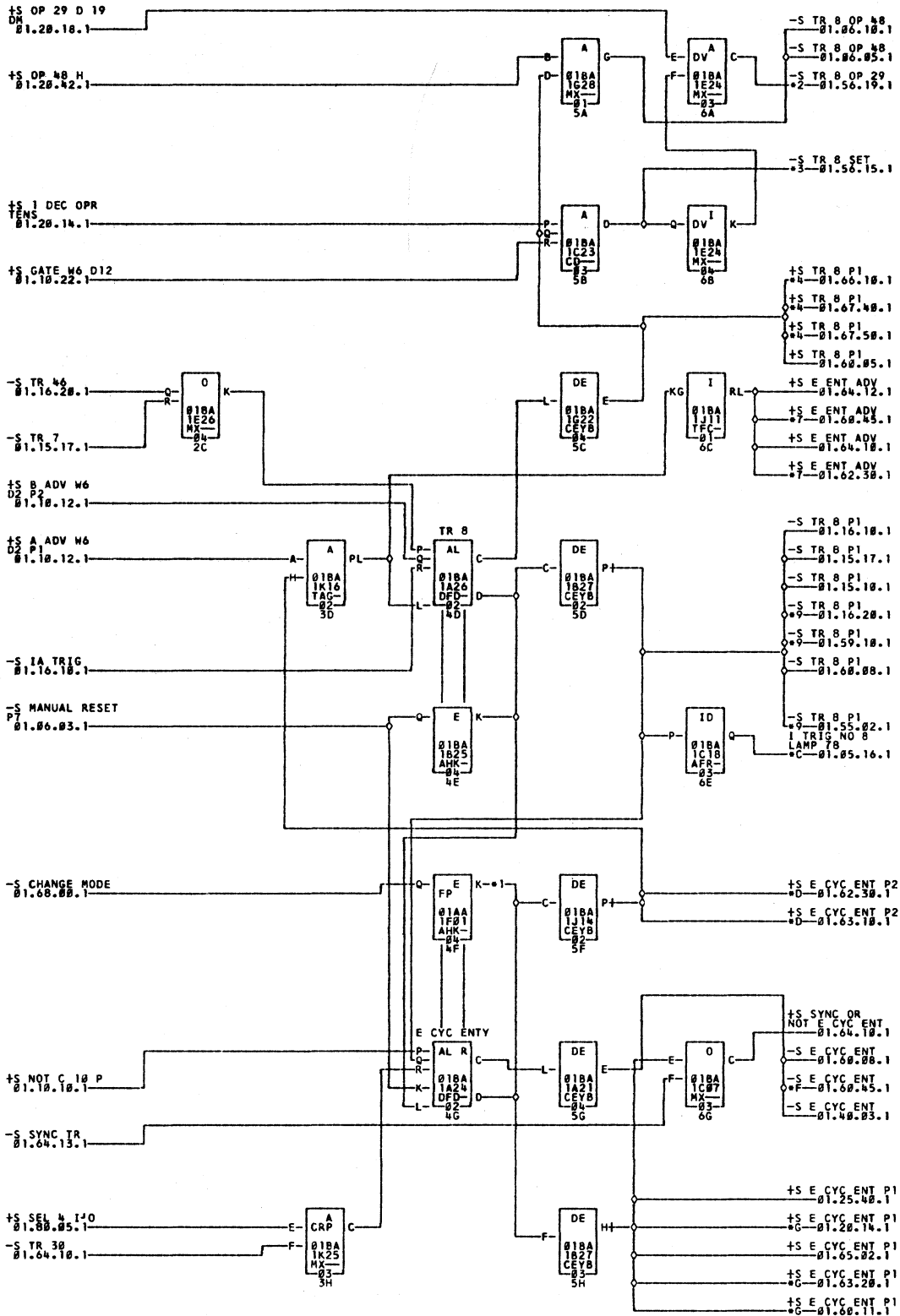
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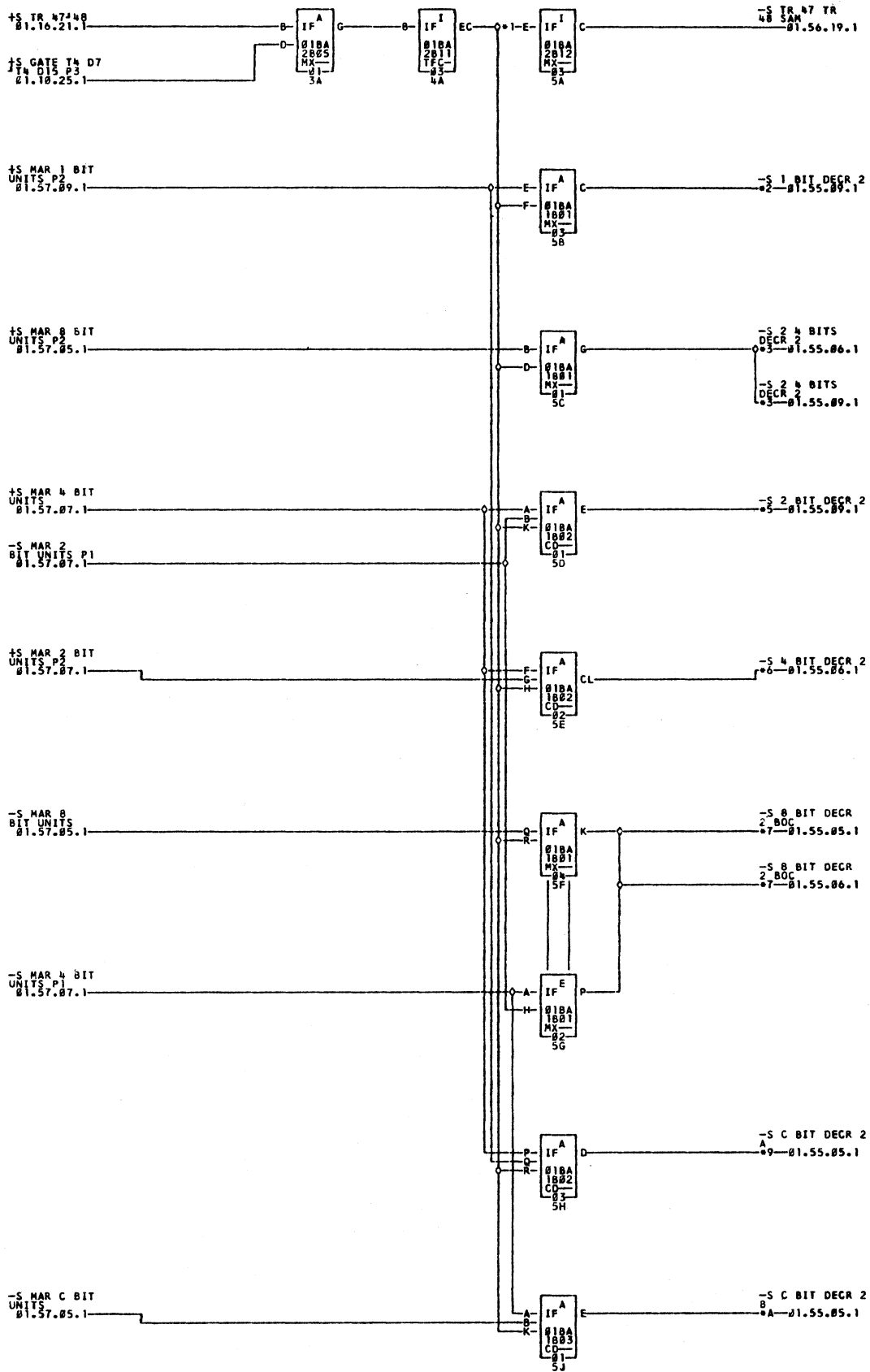
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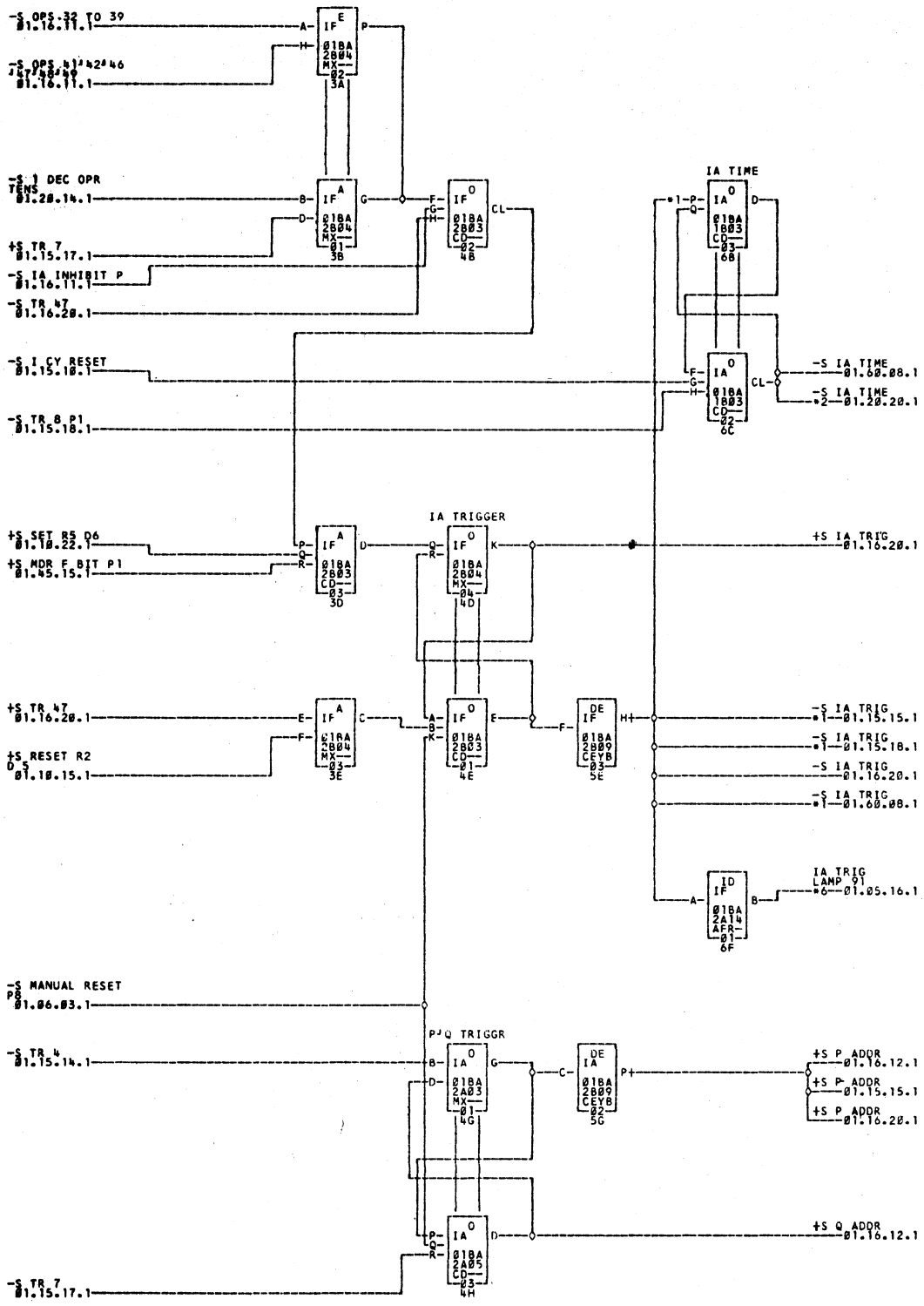
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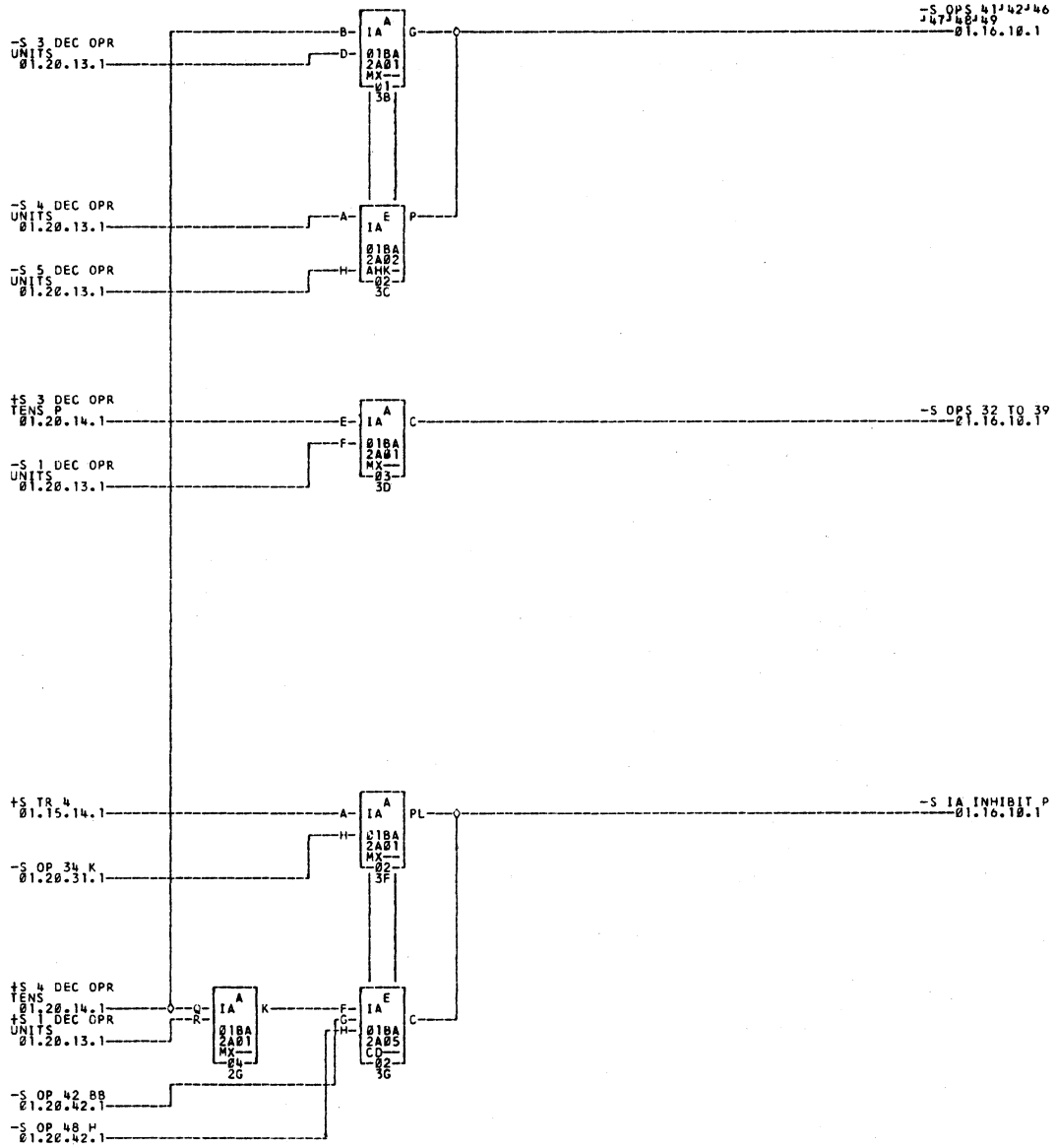
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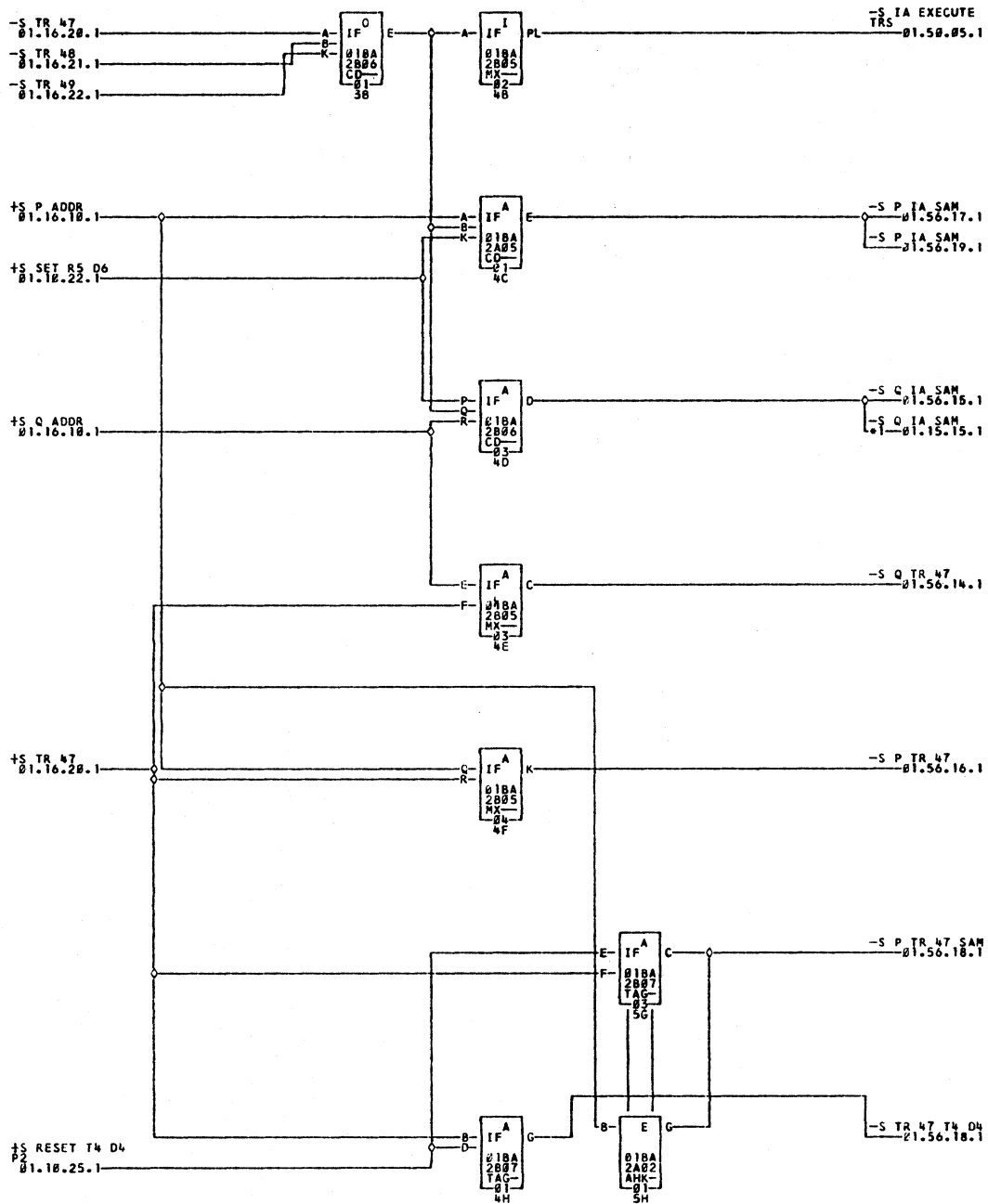


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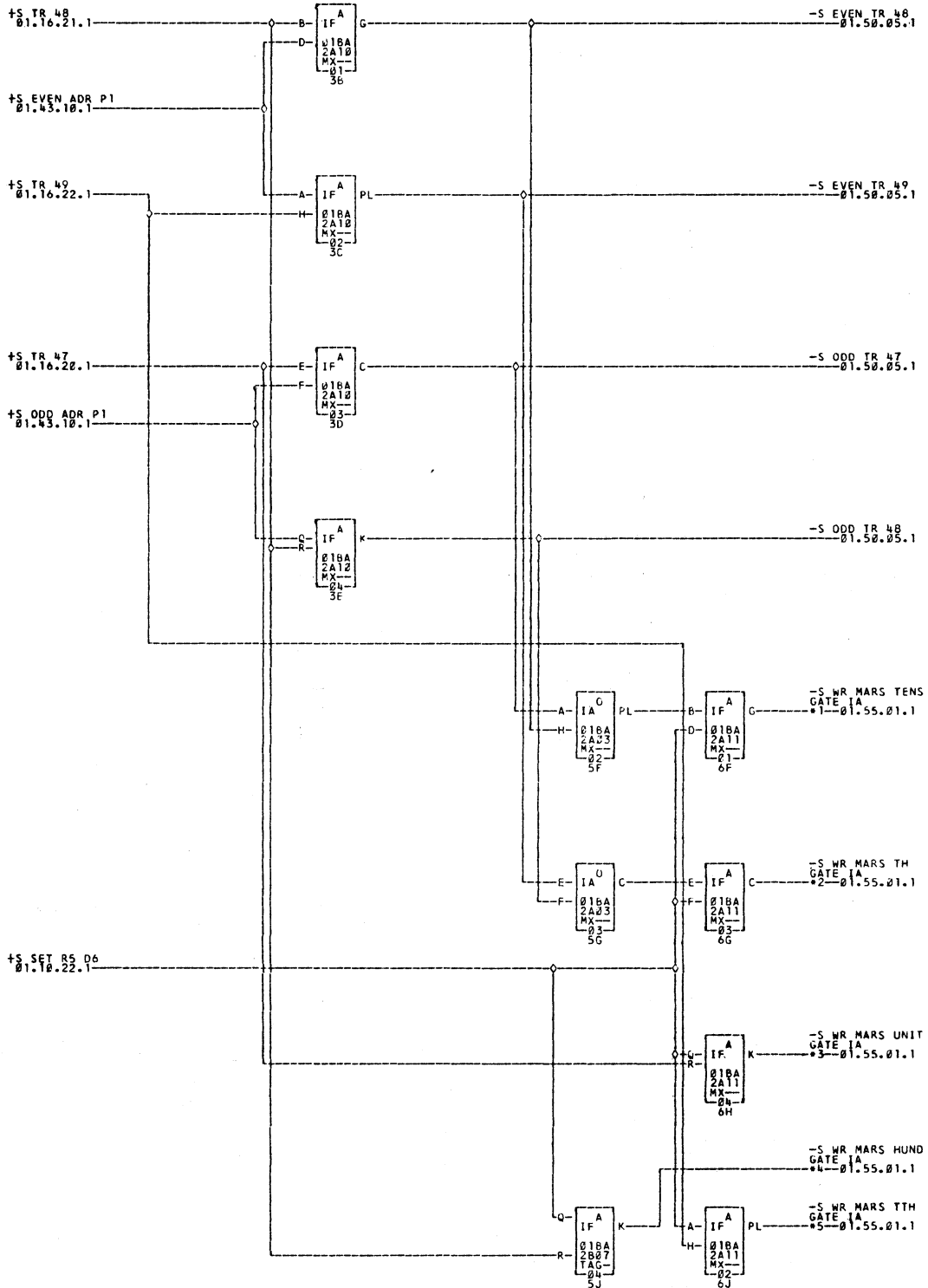


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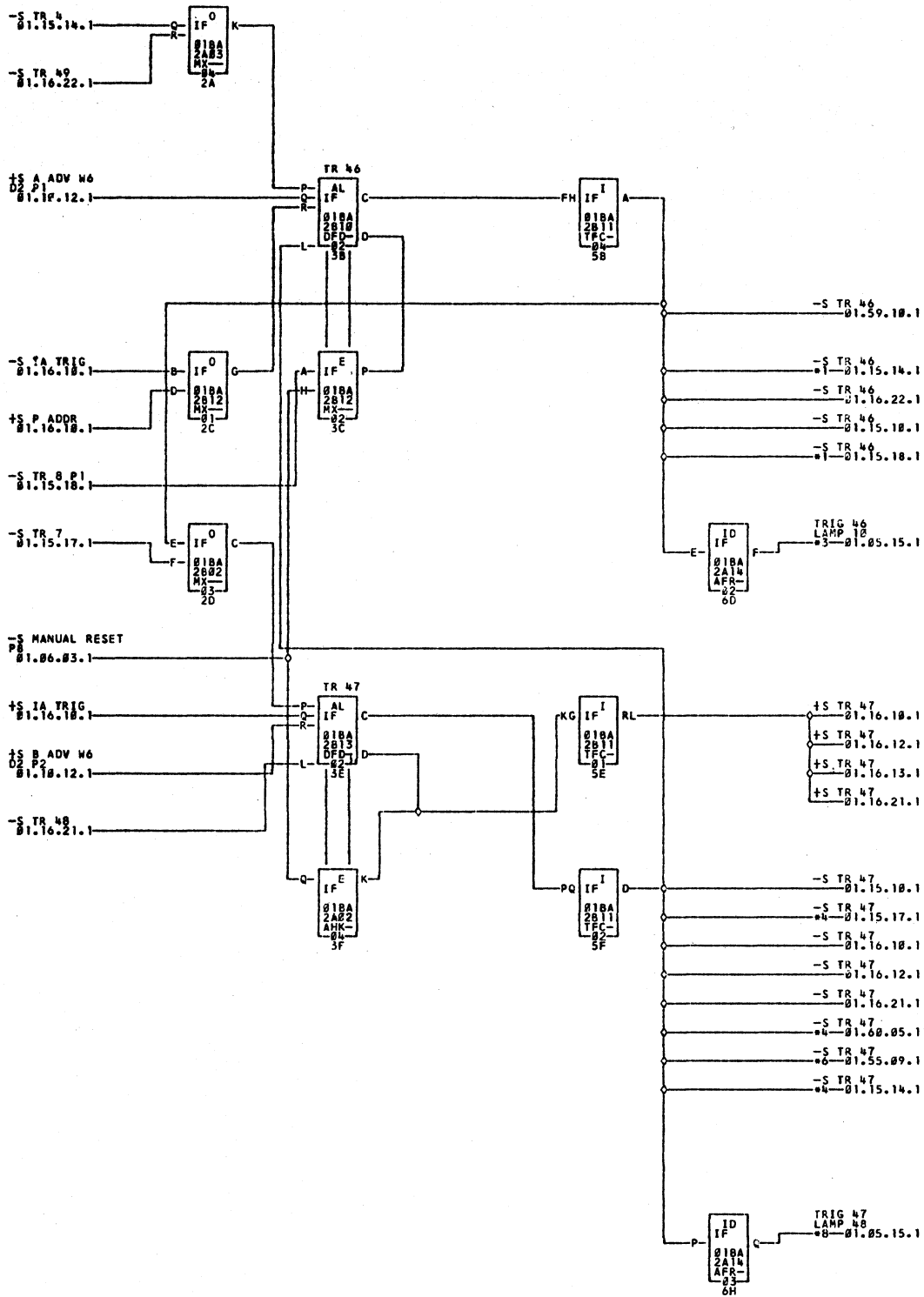
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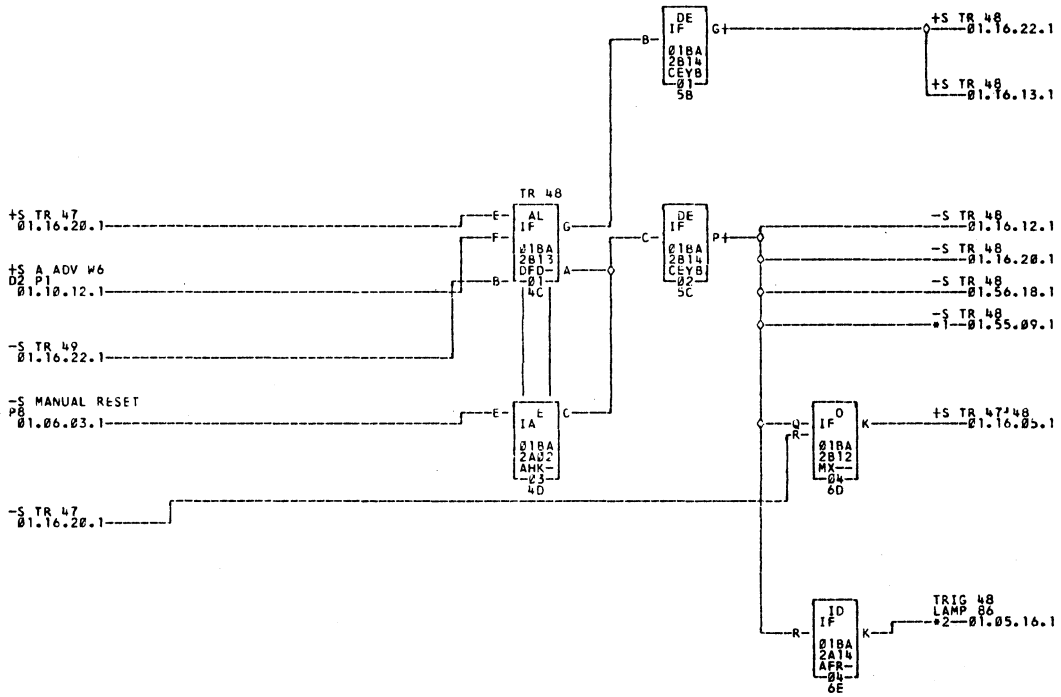
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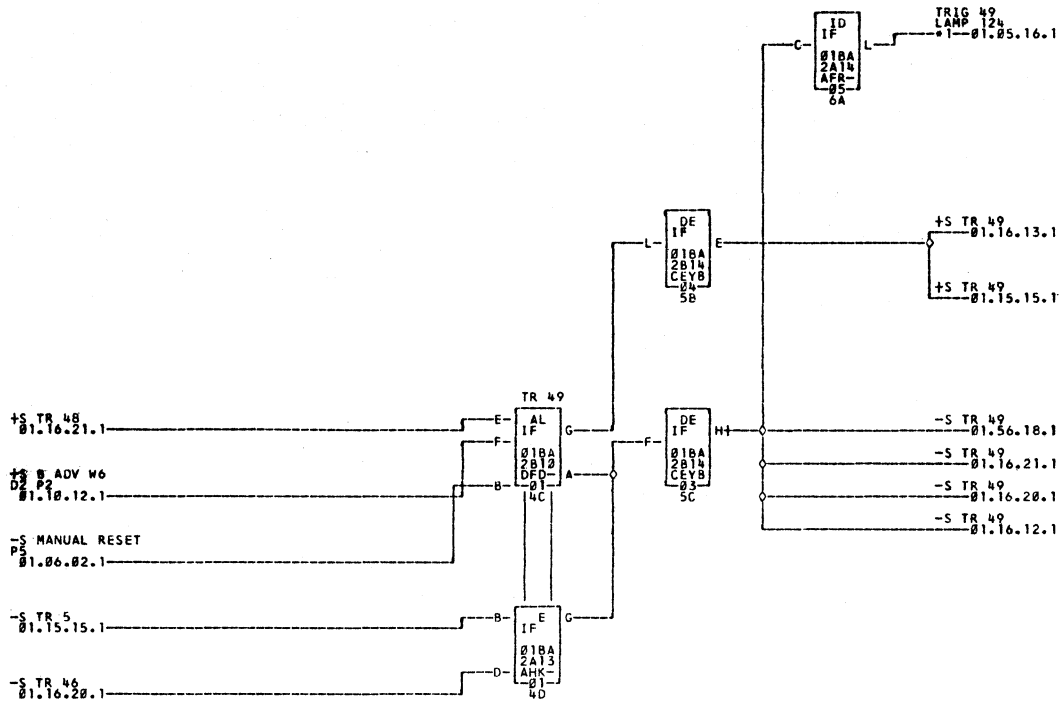
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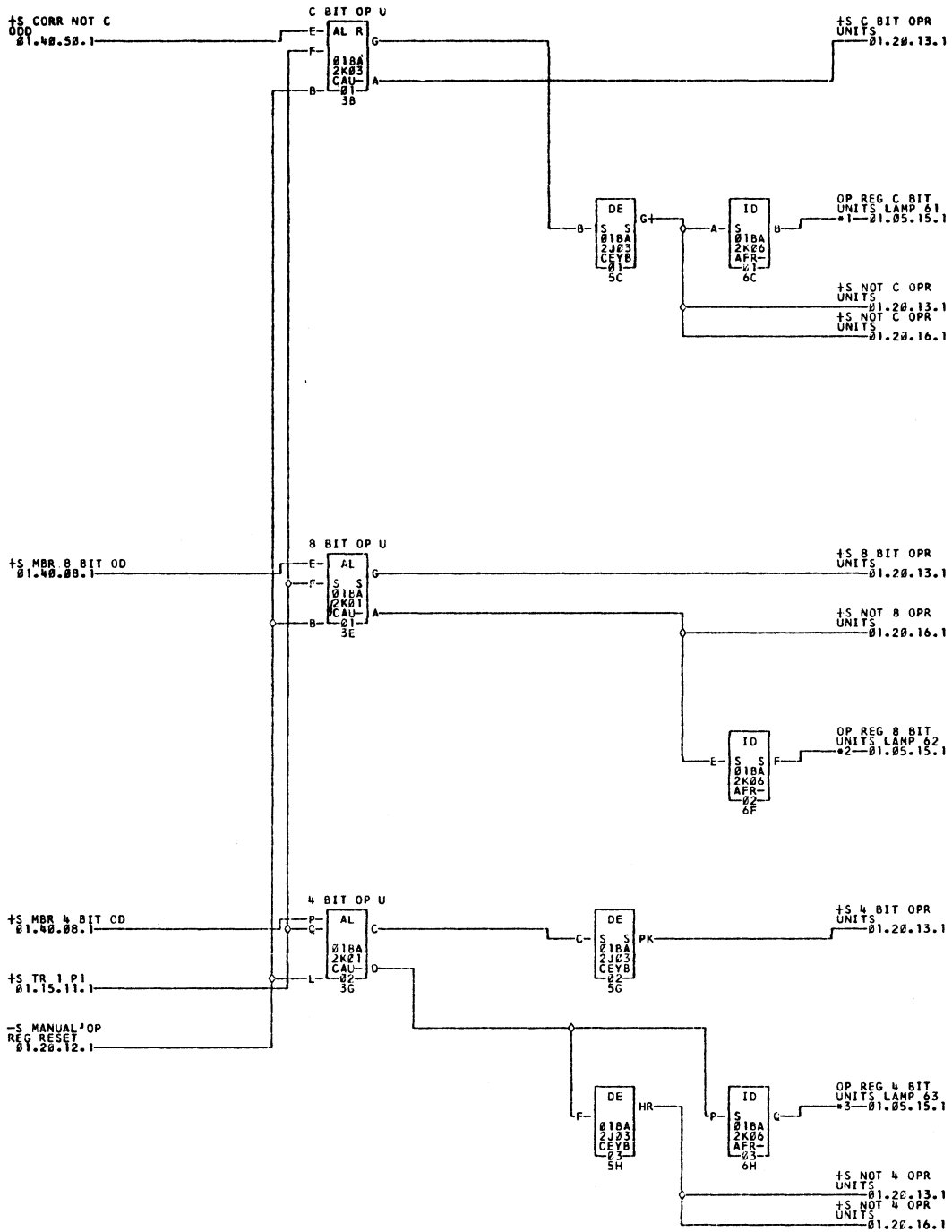


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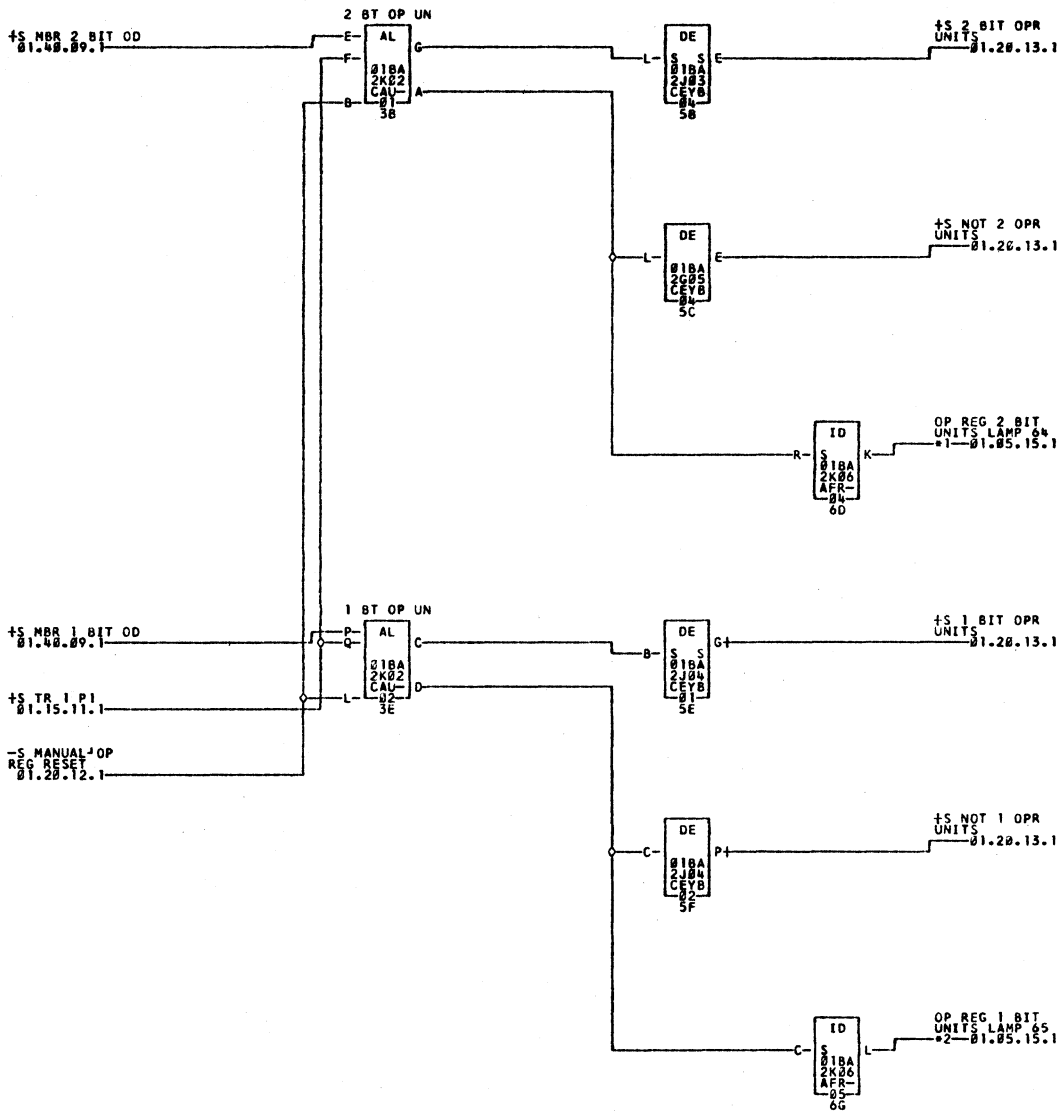




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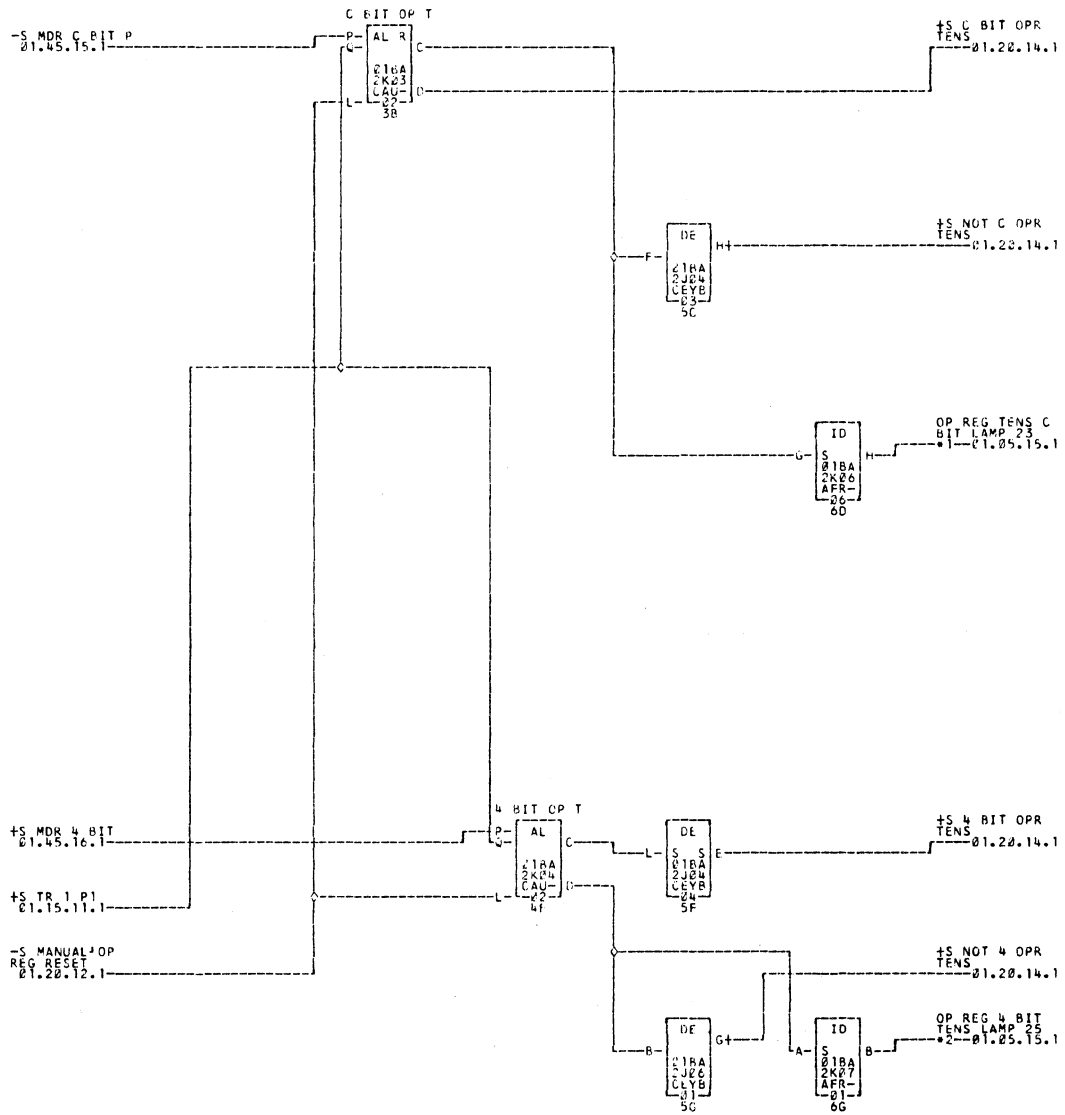
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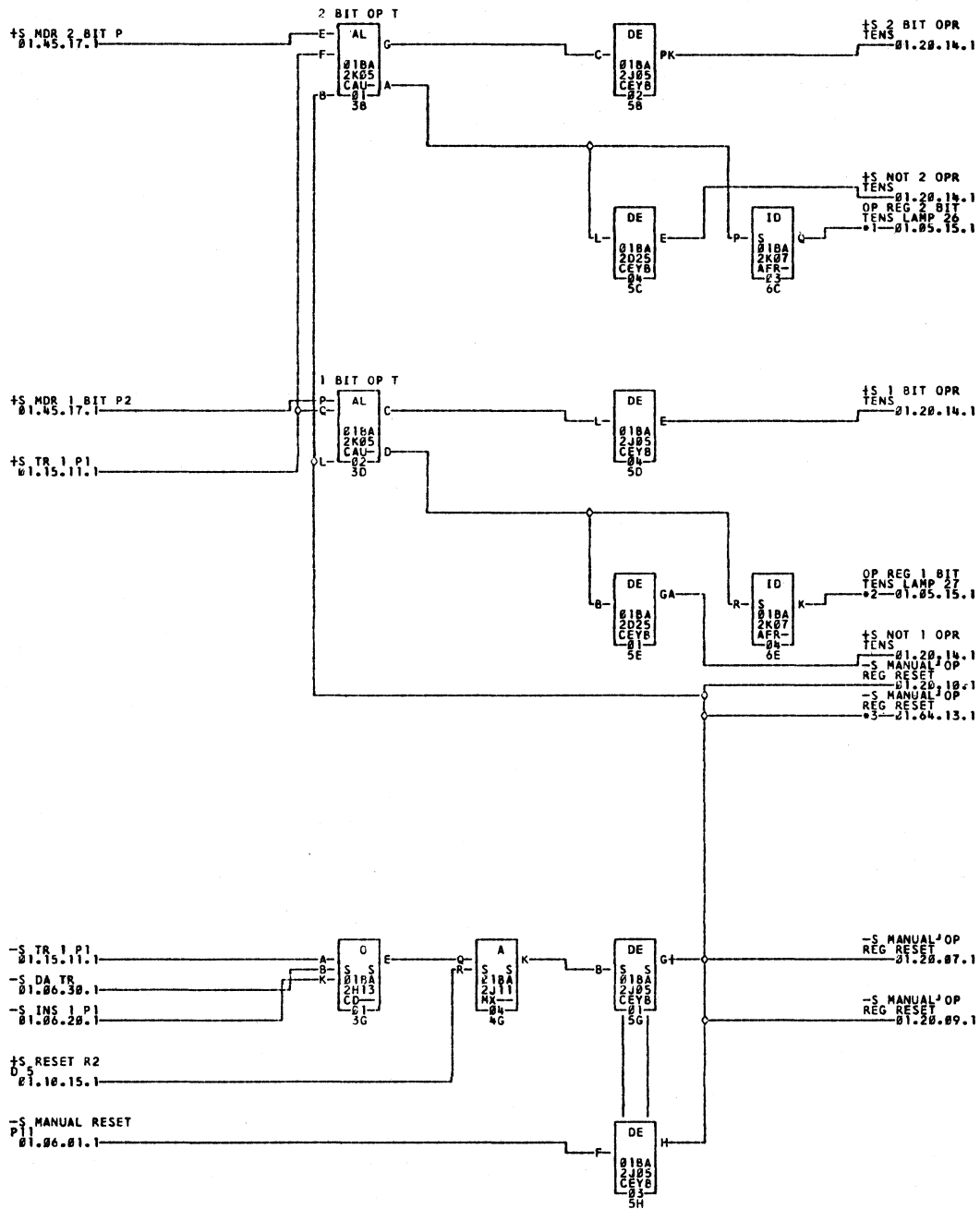
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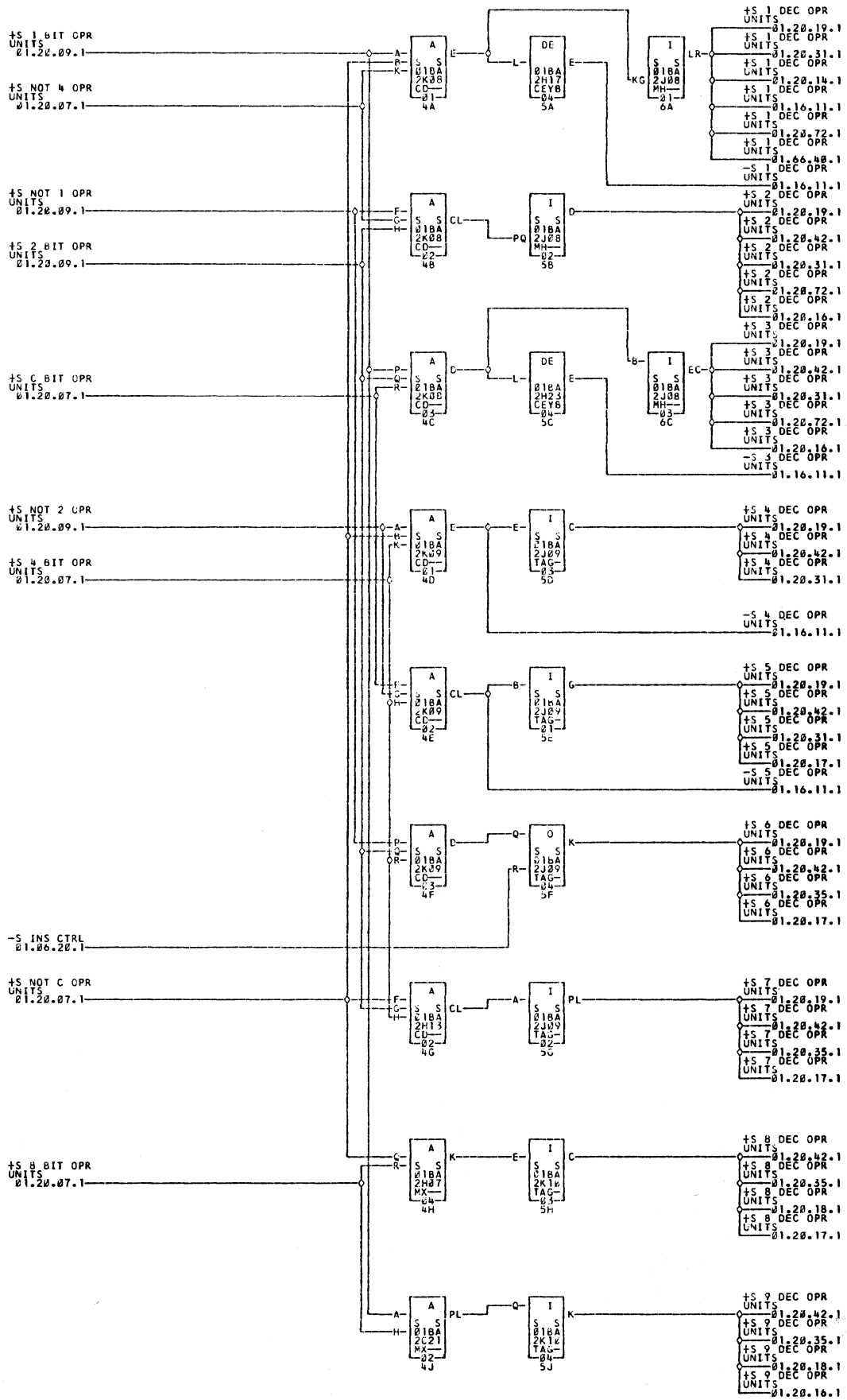


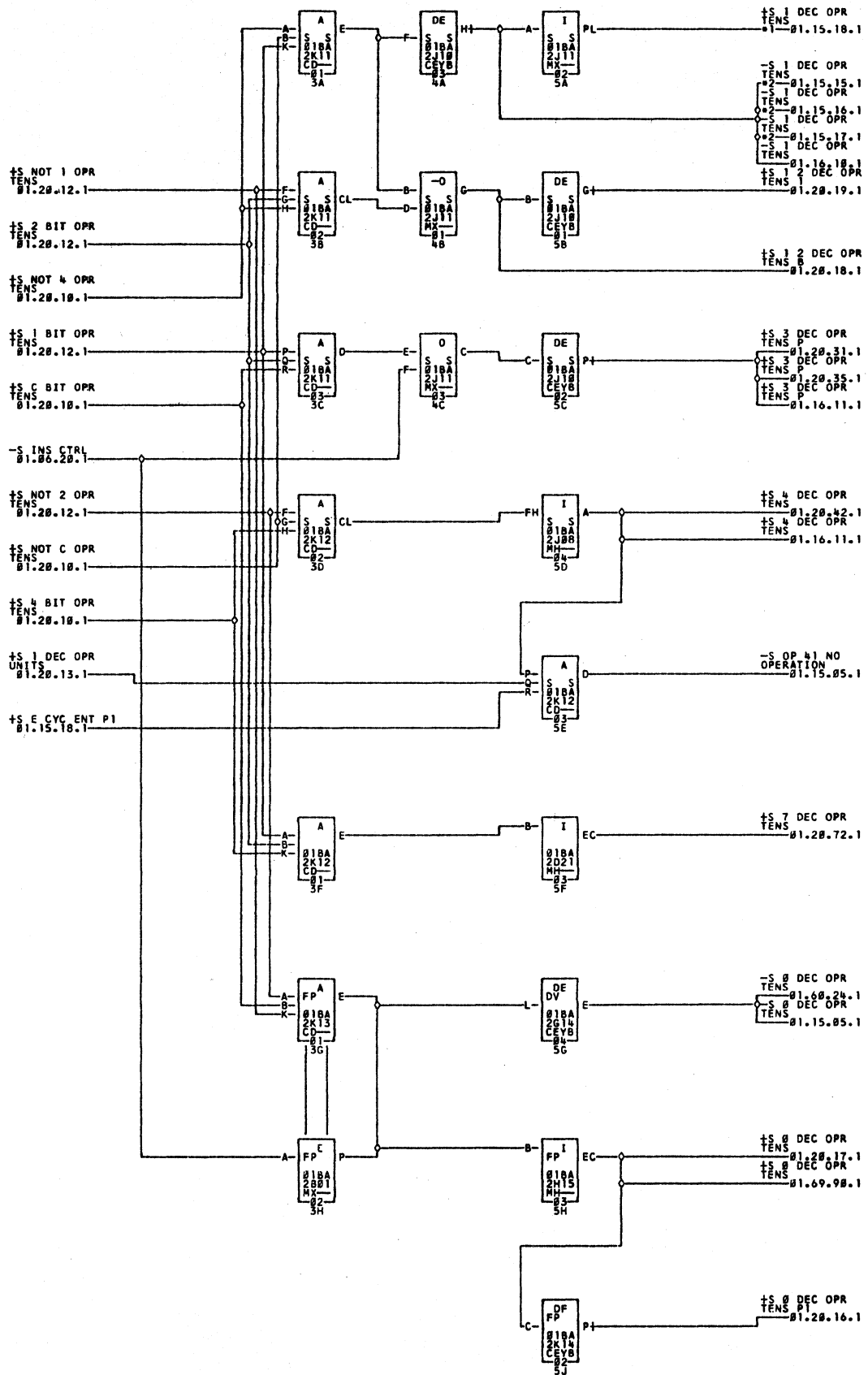
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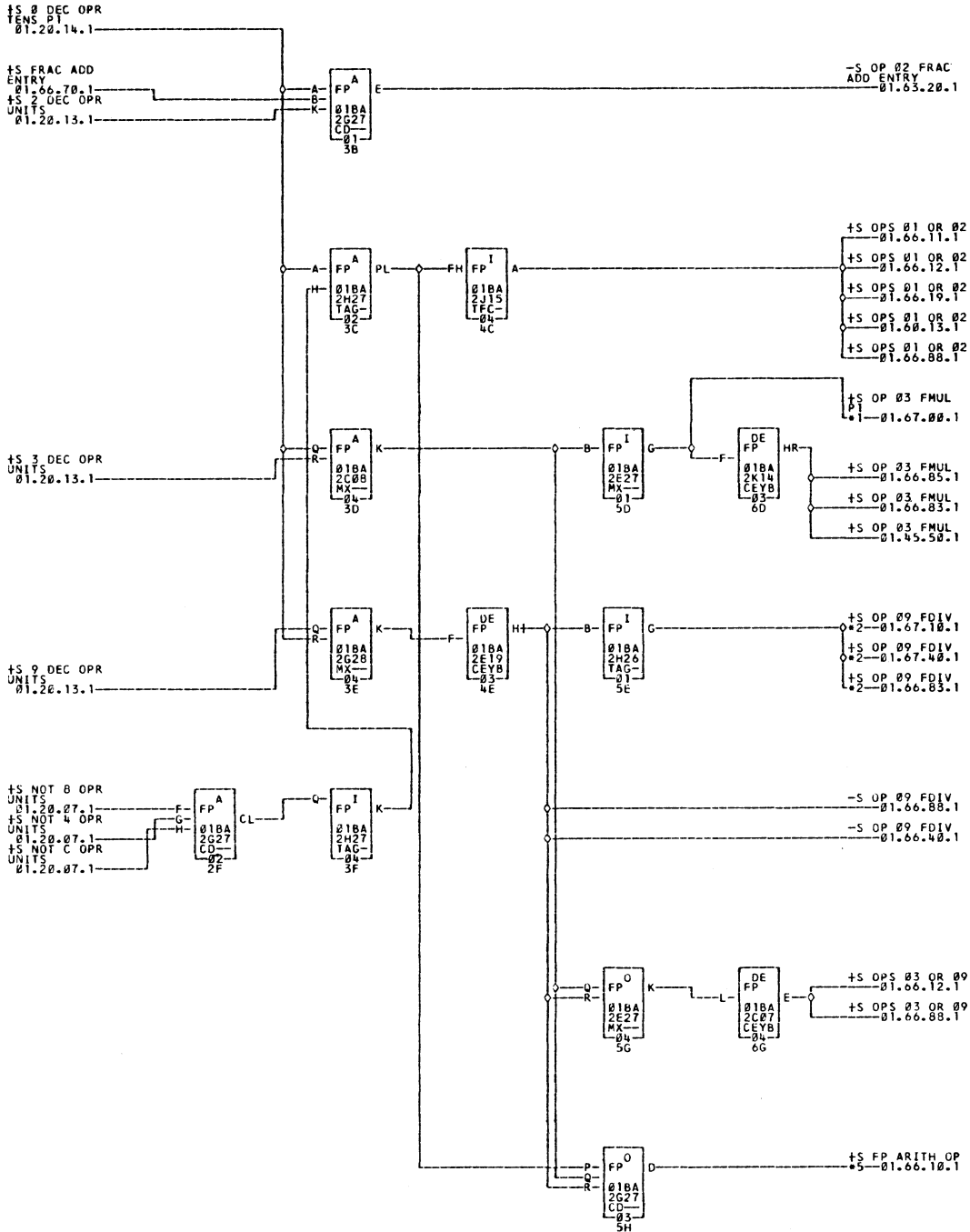
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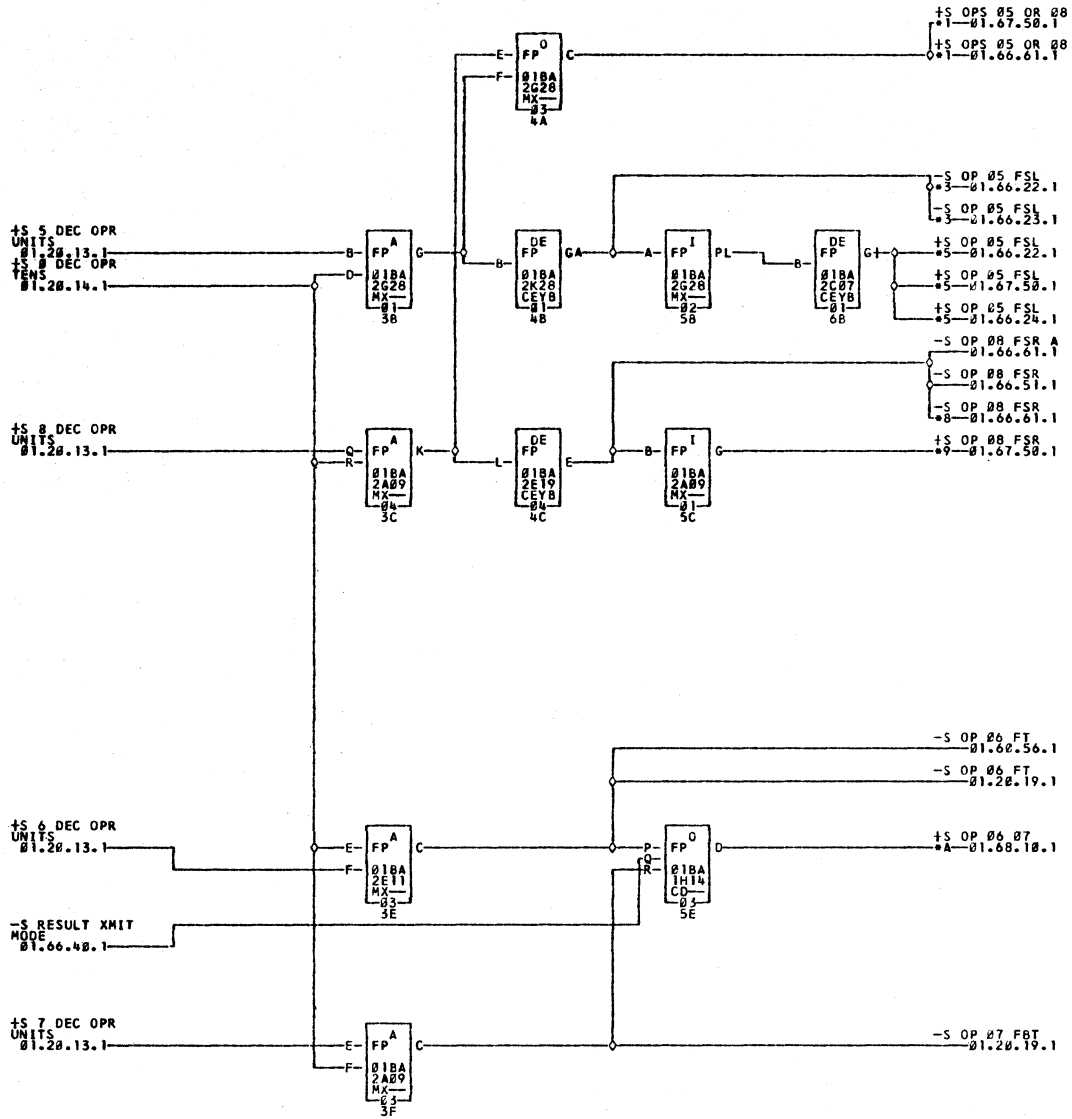
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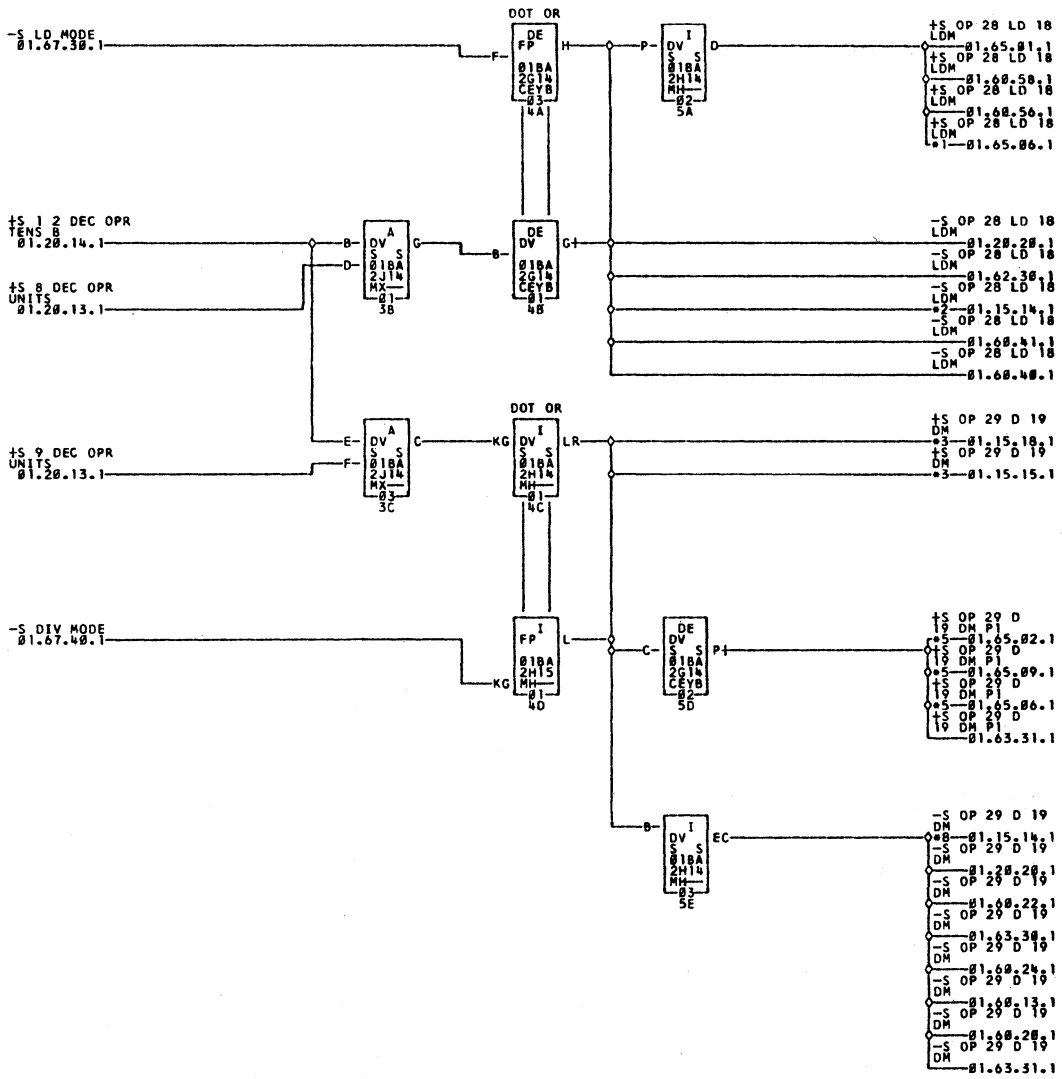
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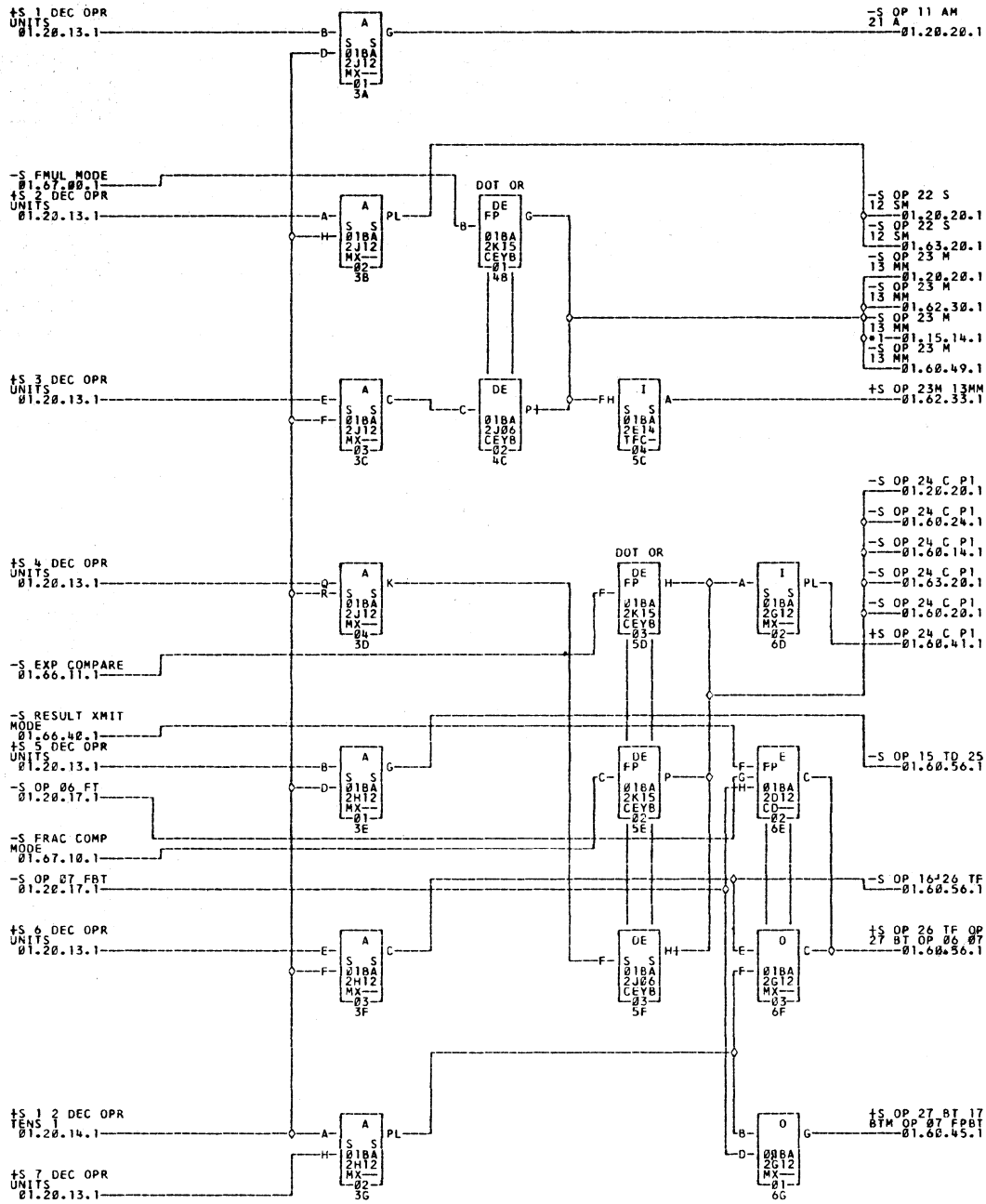
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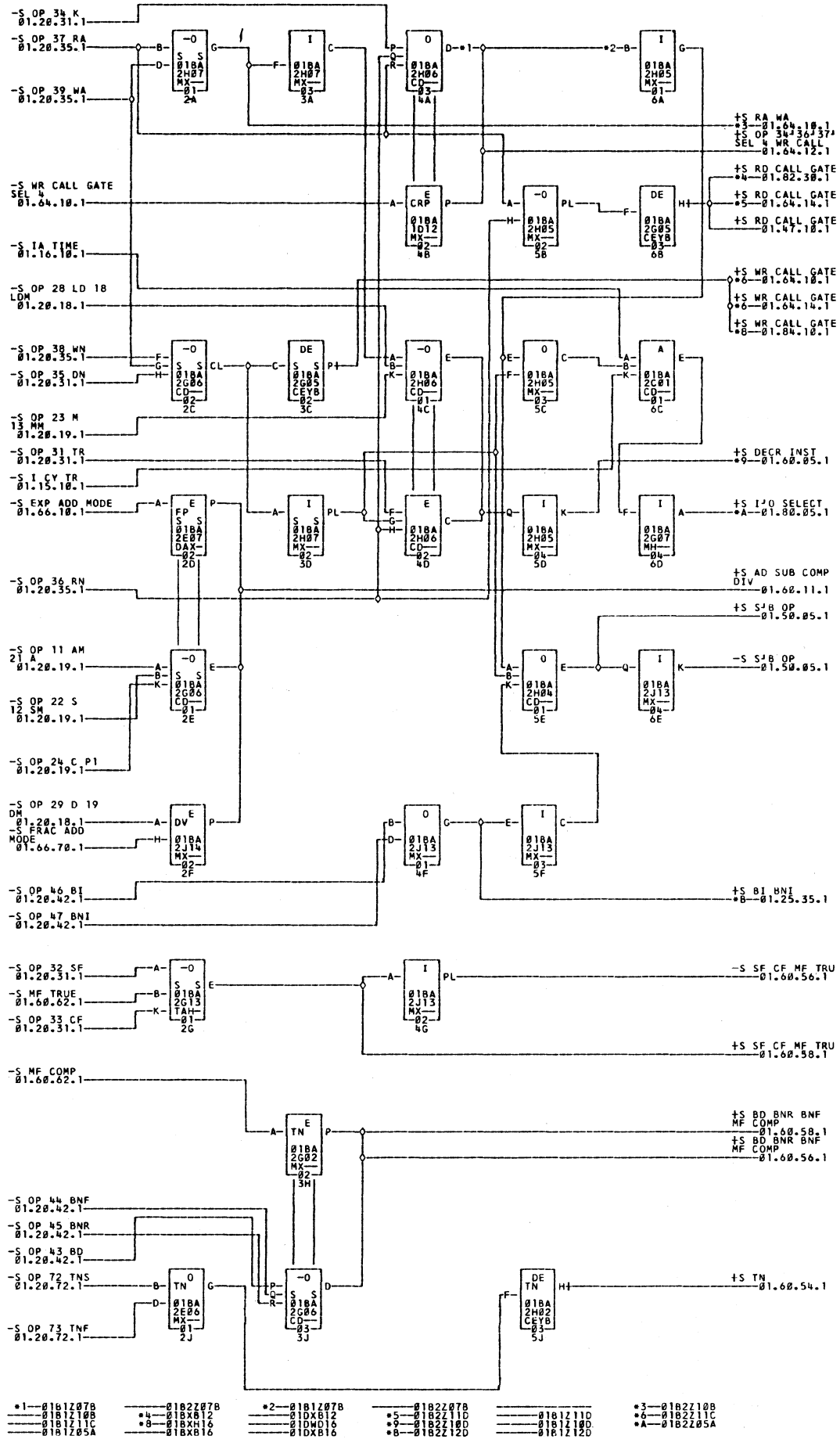
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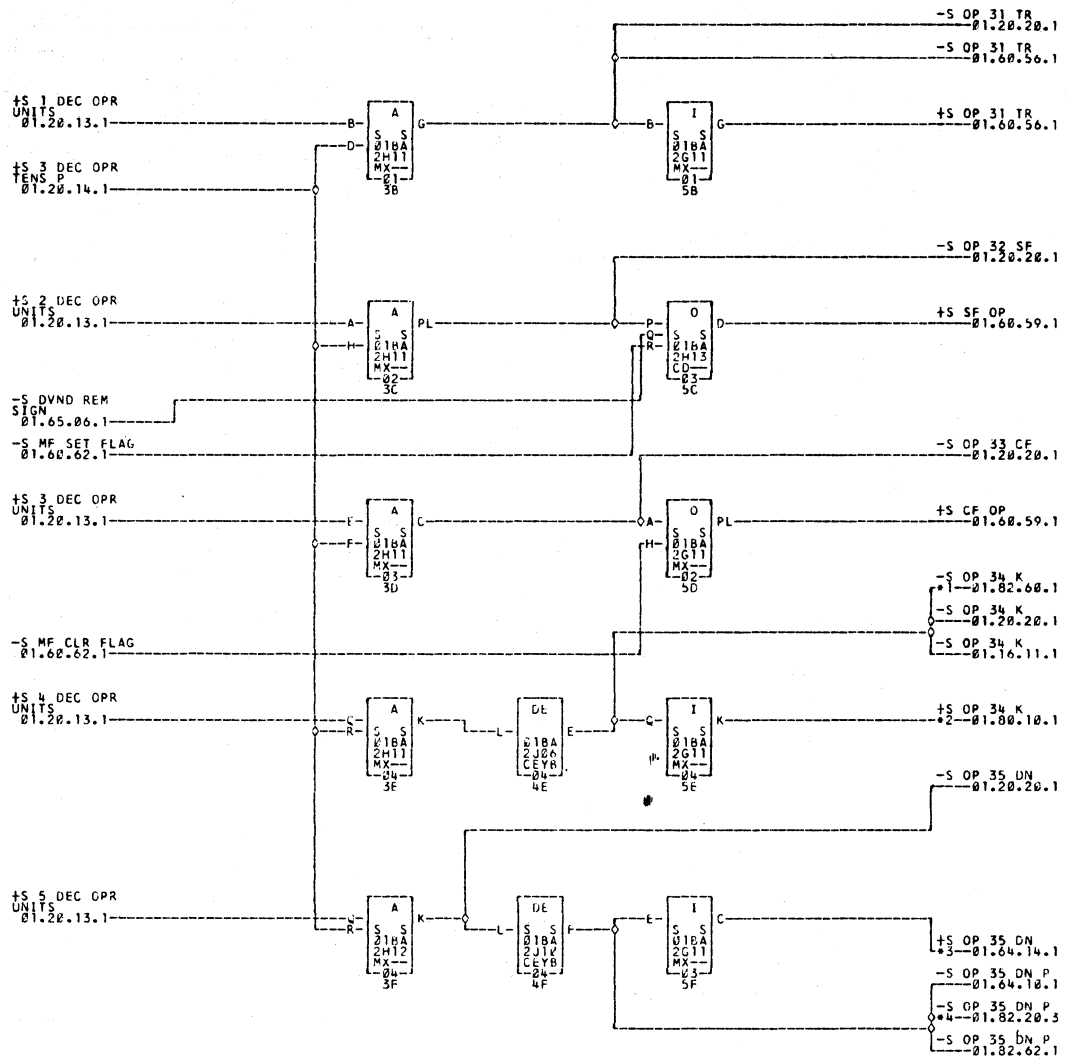
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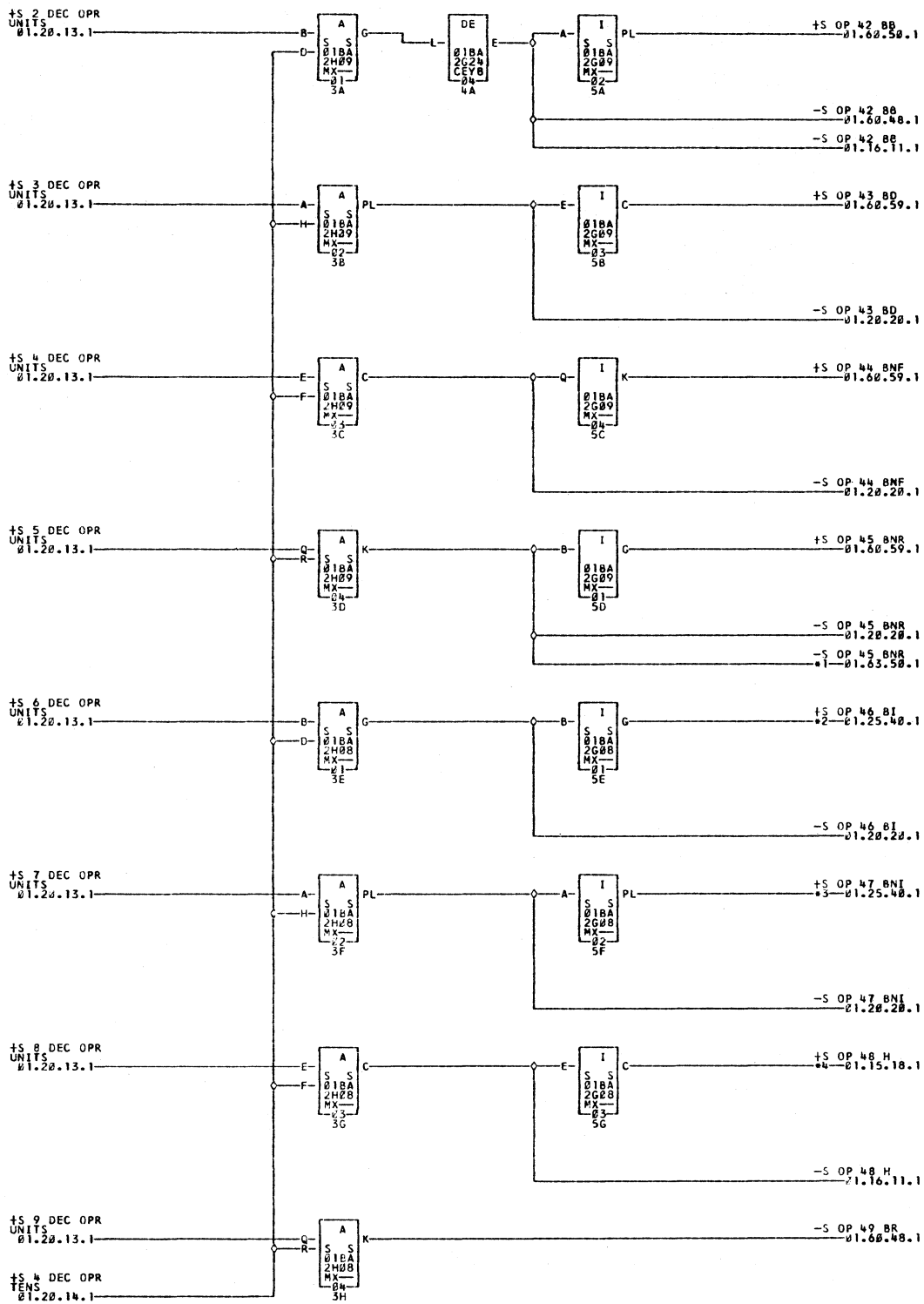
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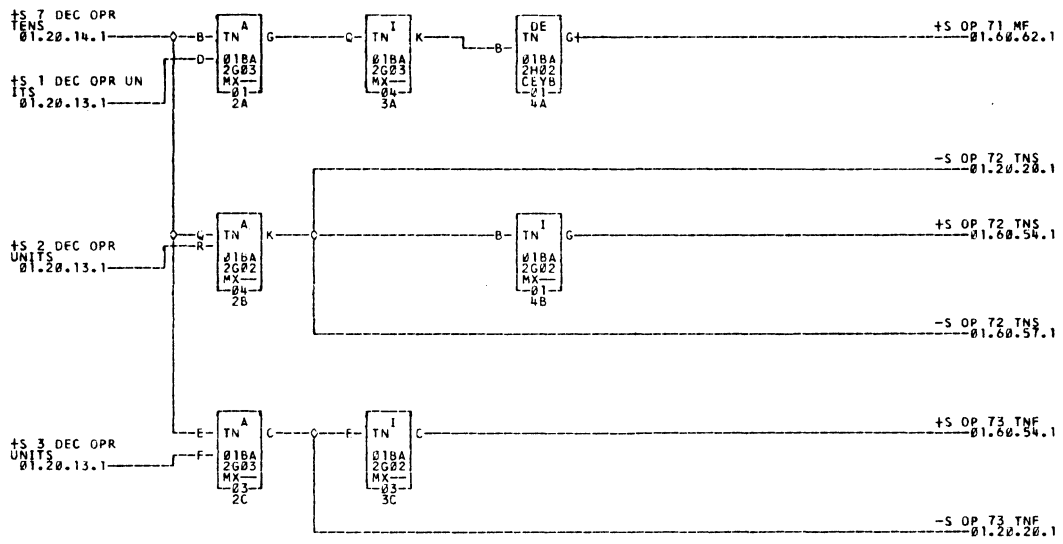
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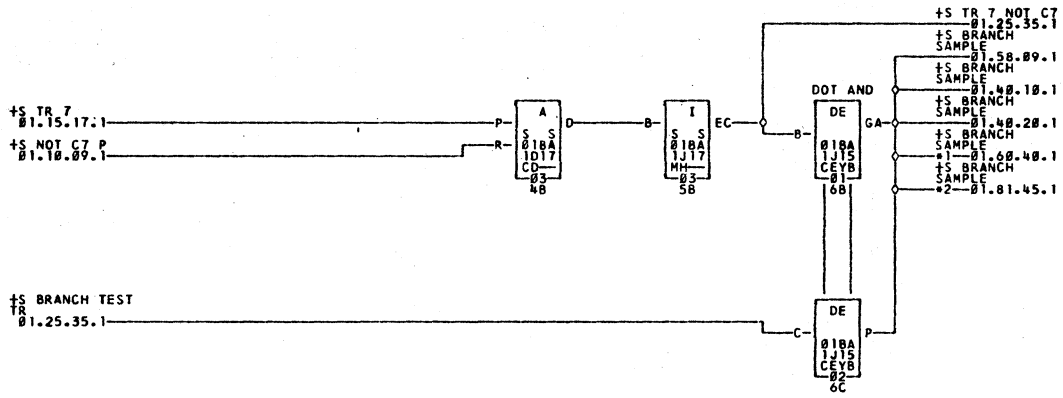
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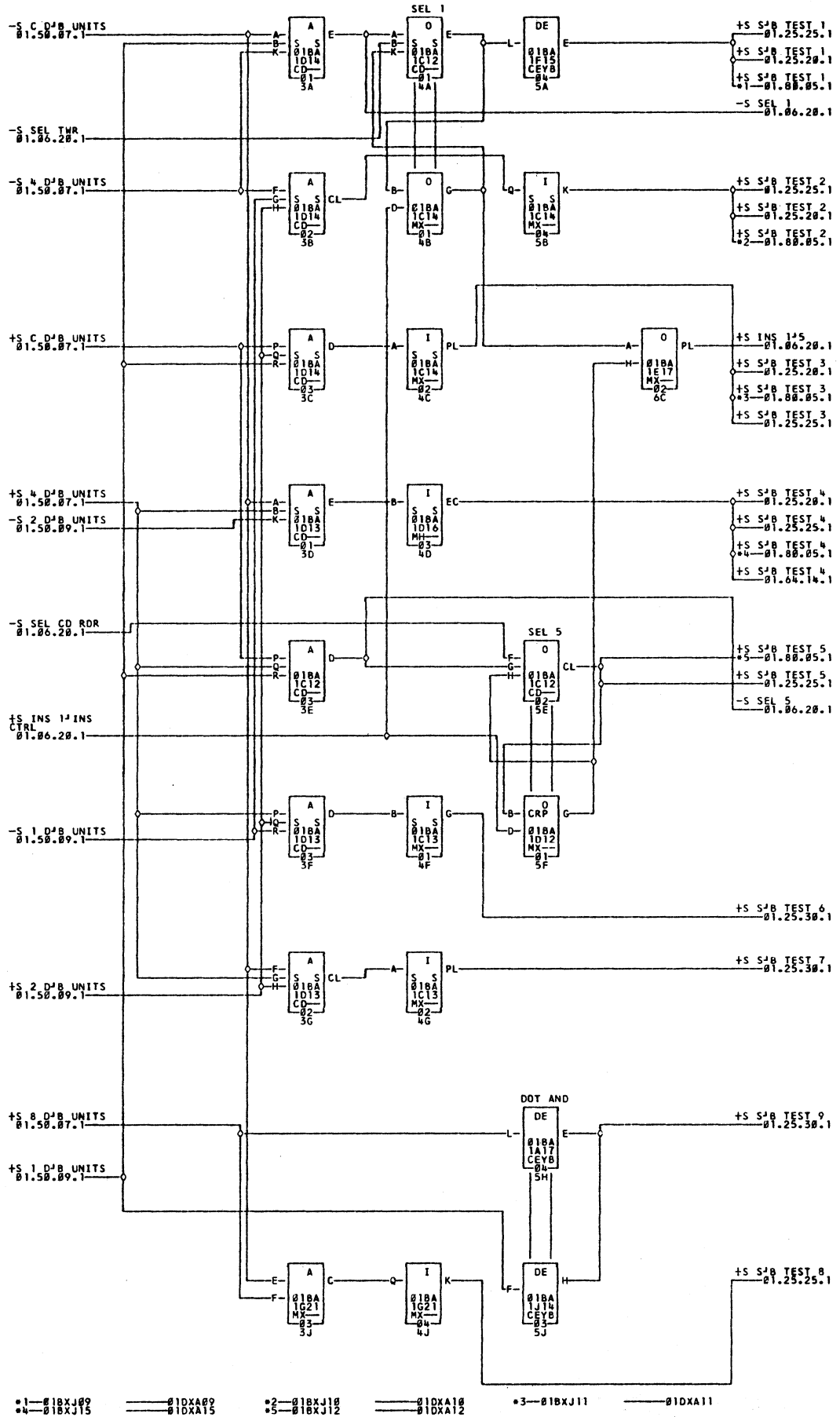
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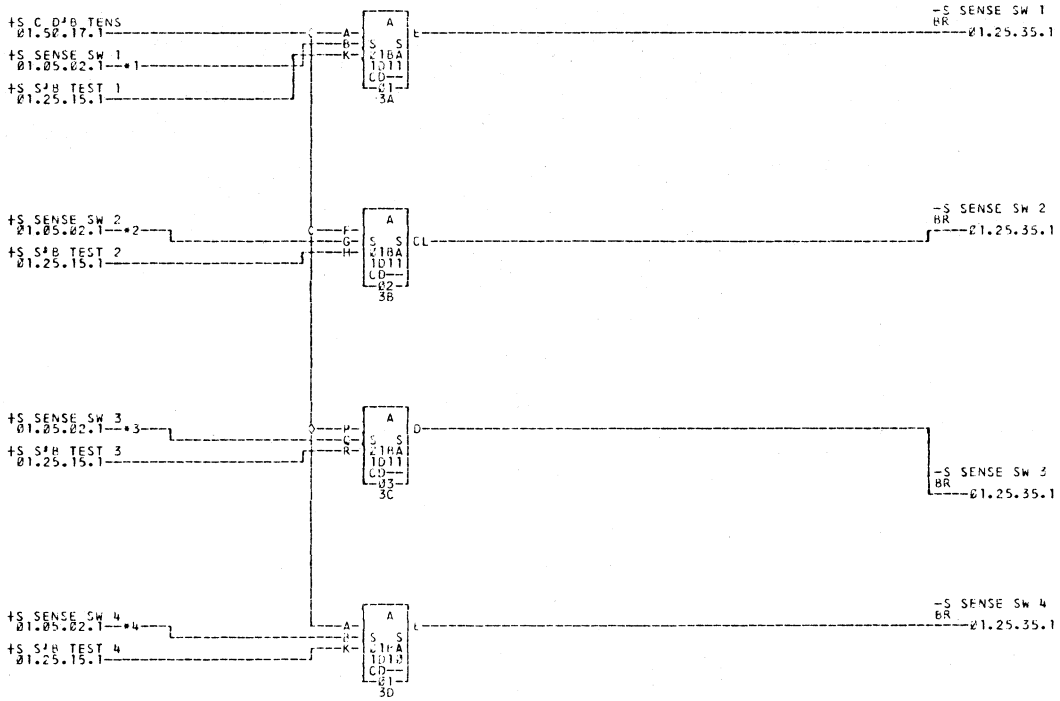
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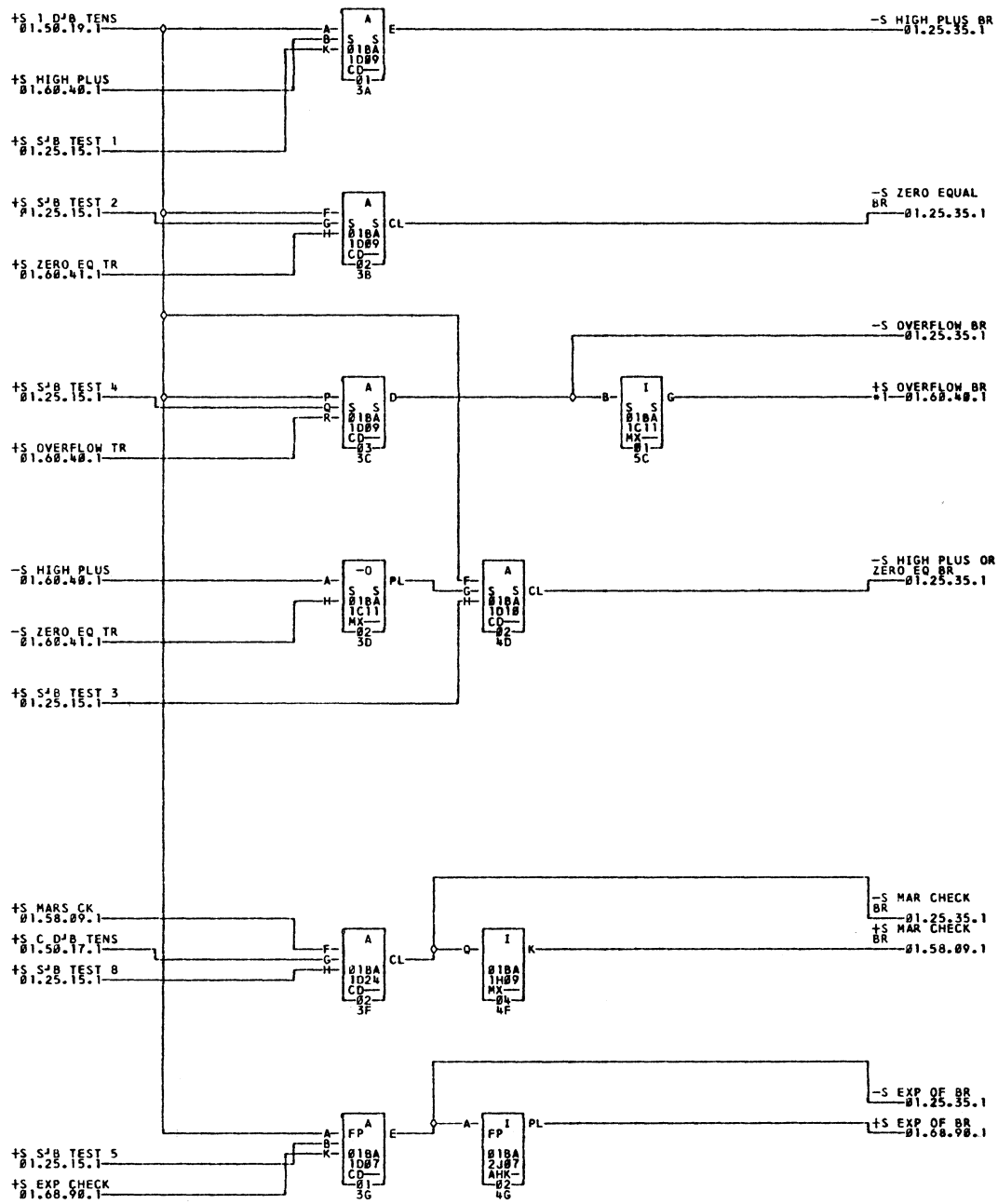
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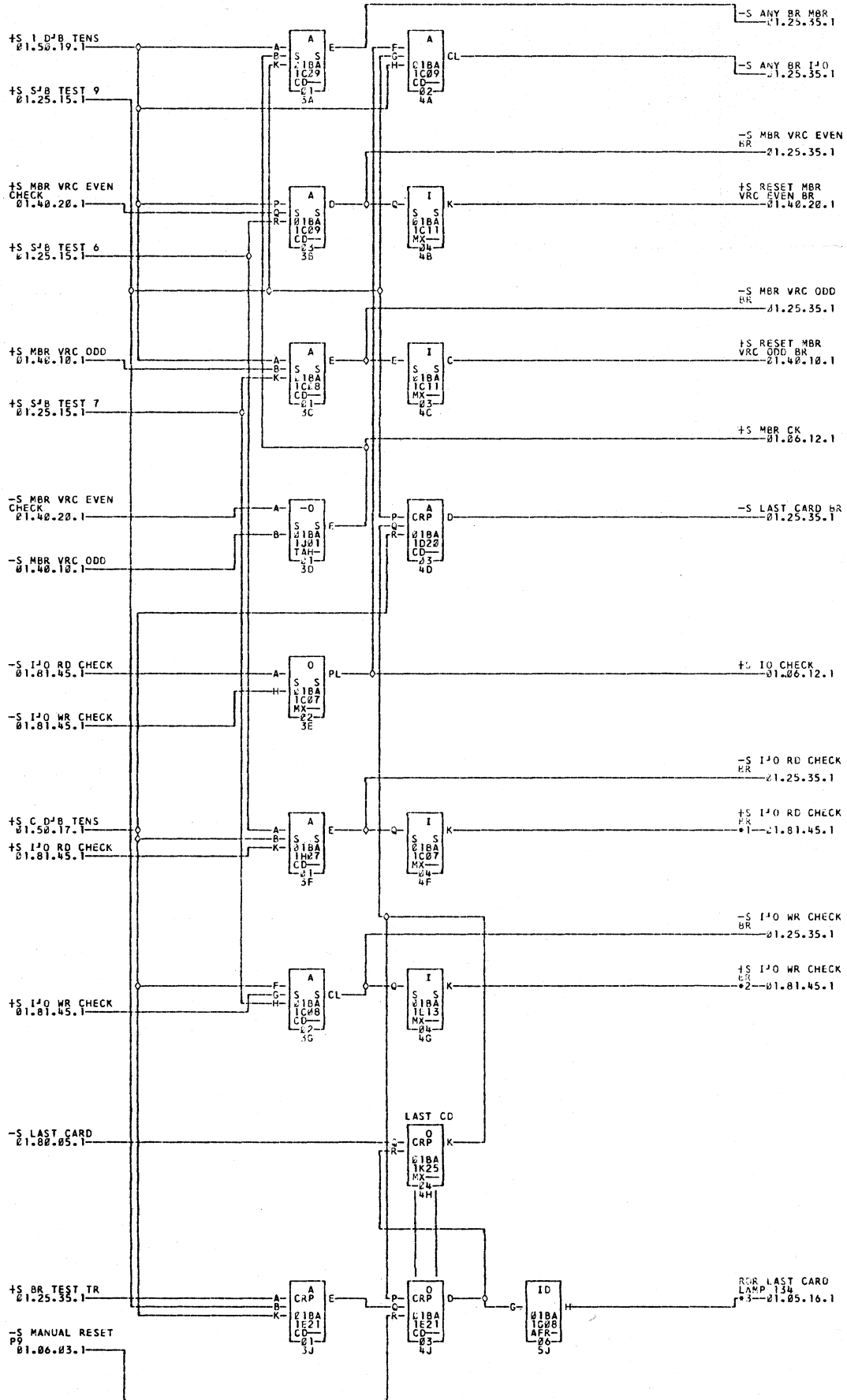
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*2--01BX026
PR SW4A

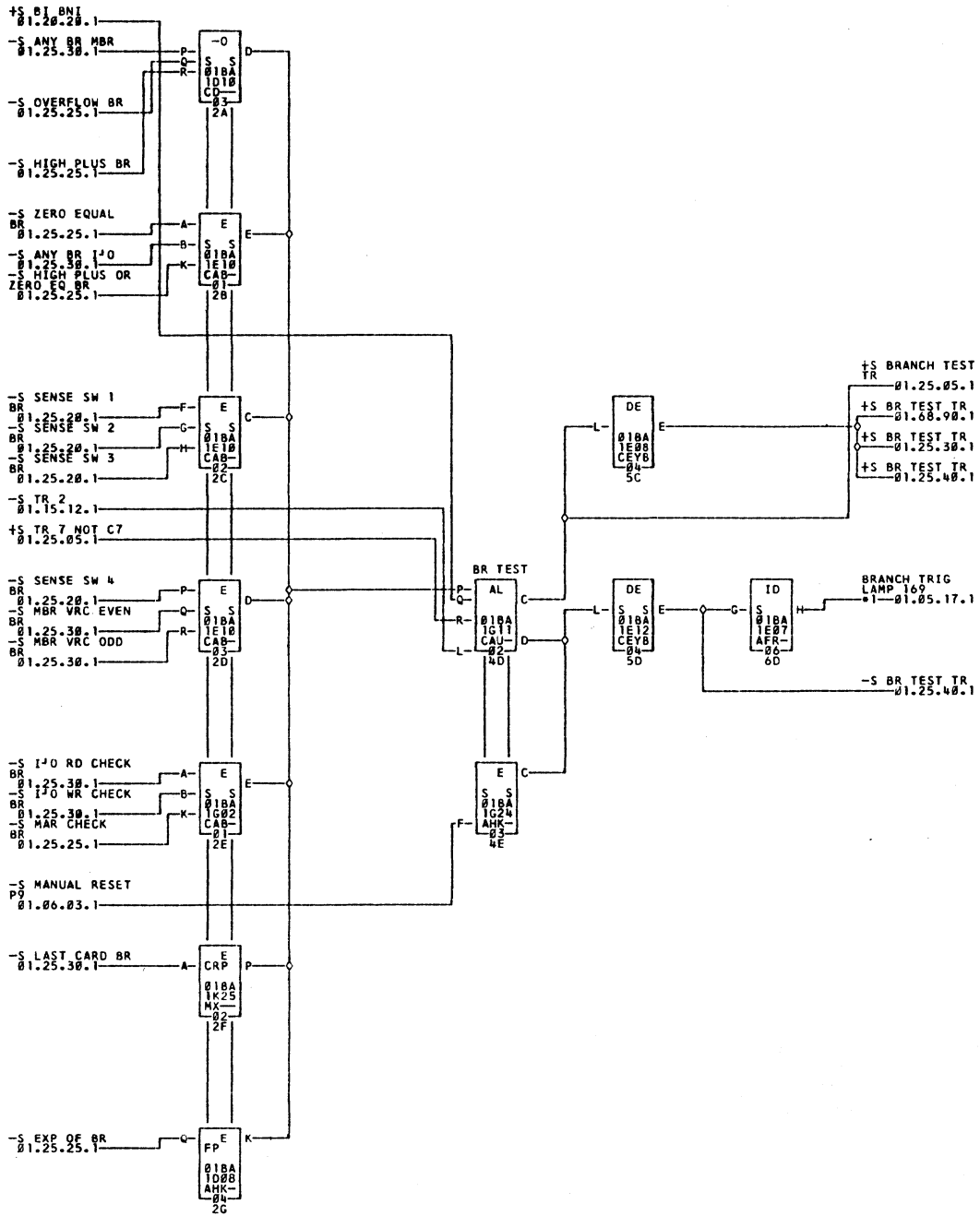
-----PR SW2AC
-----C

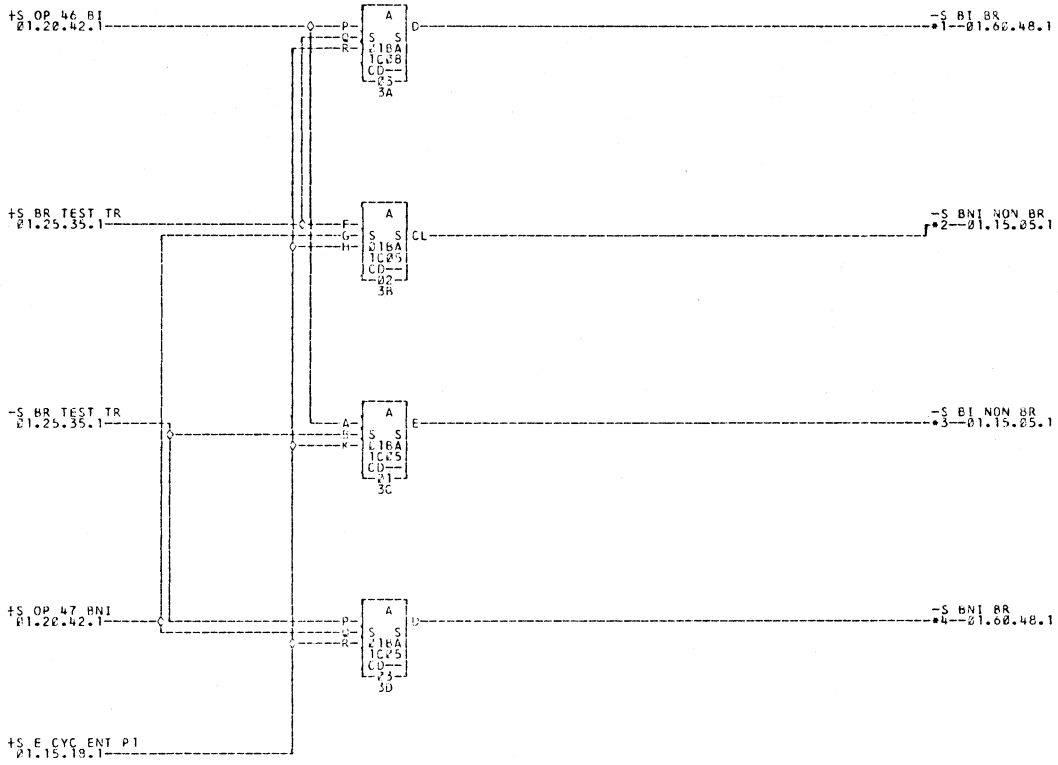
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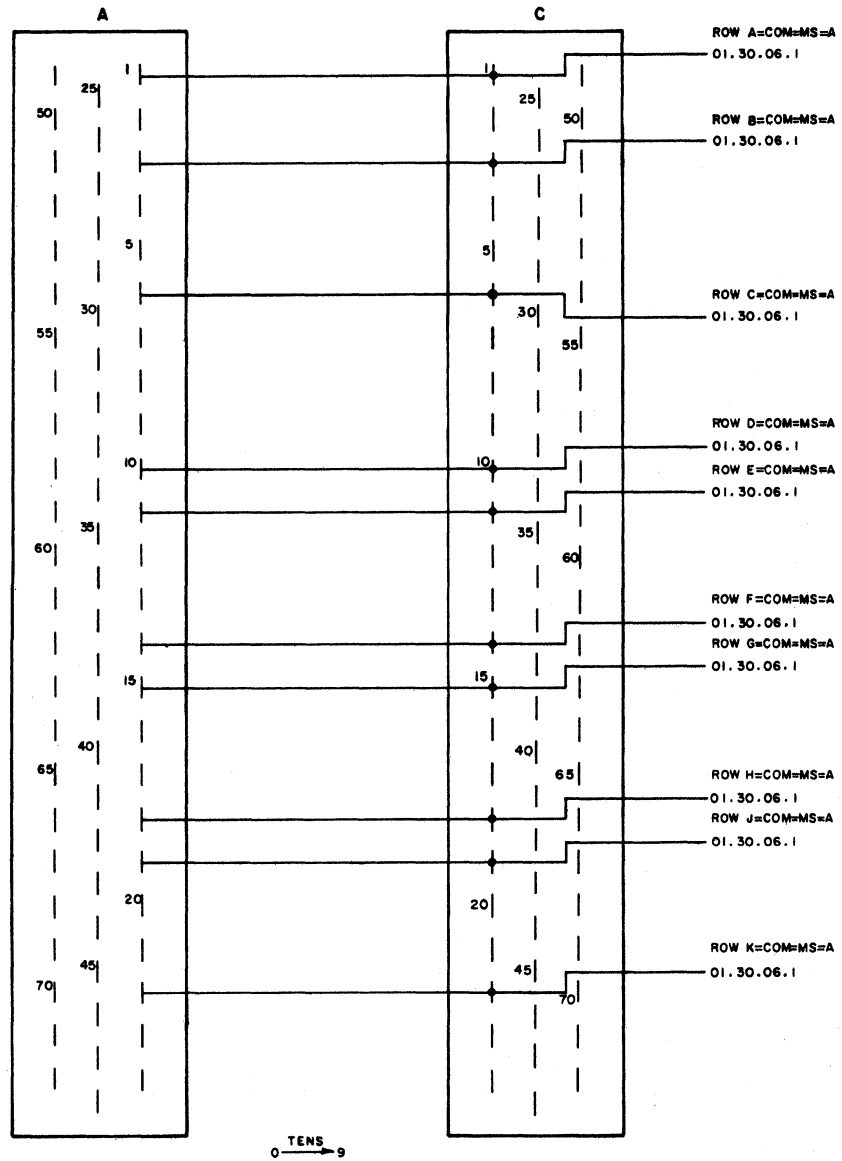


*1-01BXJ19 010XA19 *2-01BXJ18 010XA18 *3-01BXF01 LAMP 134

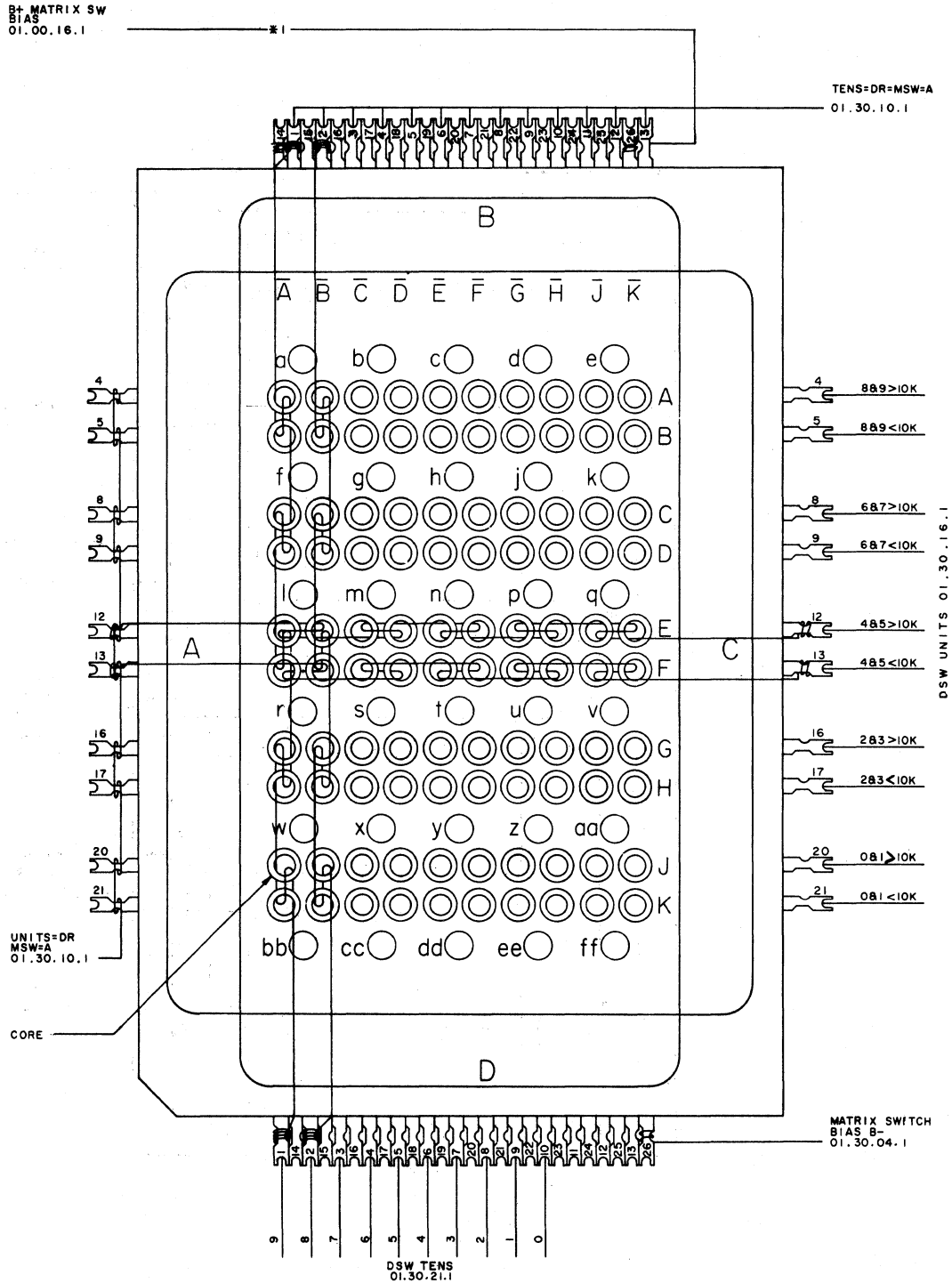


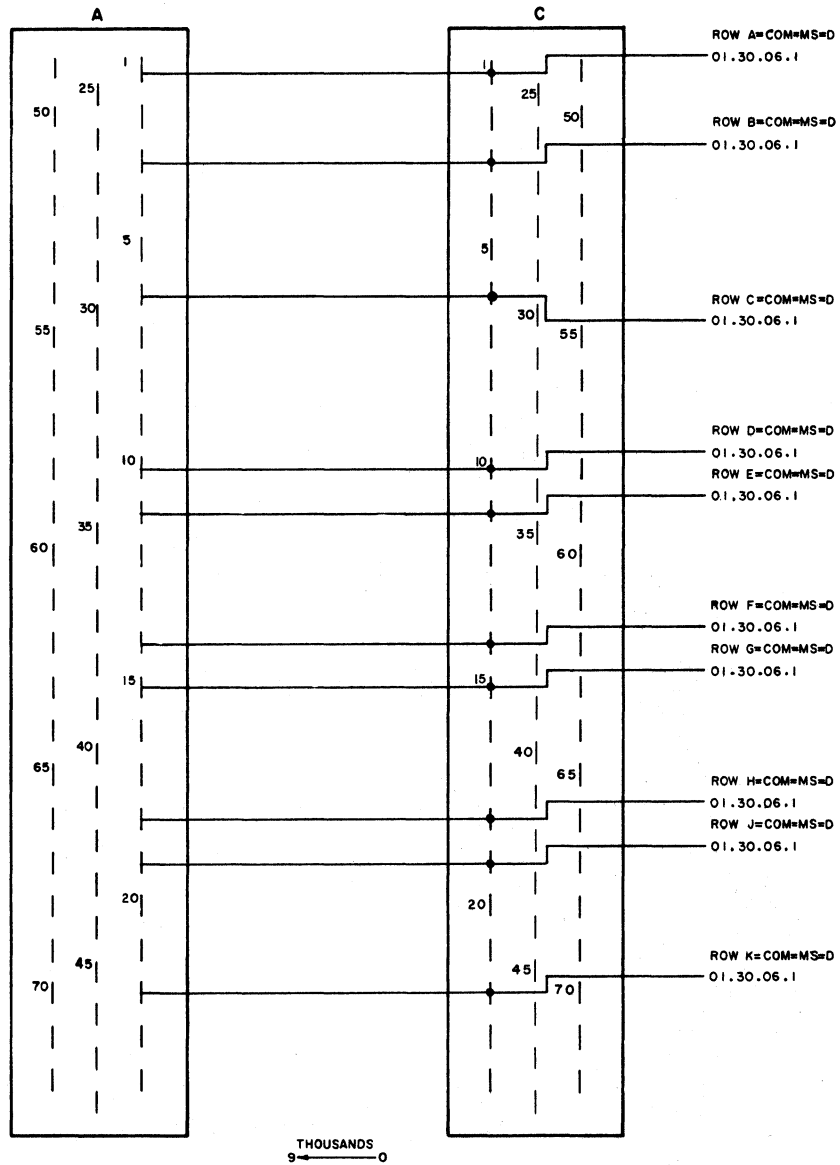


•1---L1B1Y27C -----L1B2Y07C •2---L1B1Y22C -----L1B2Y22C •3---L1B1Y03C -----L1B2Y03C
 •4---L1B1Y29C -----L1B2Y29C

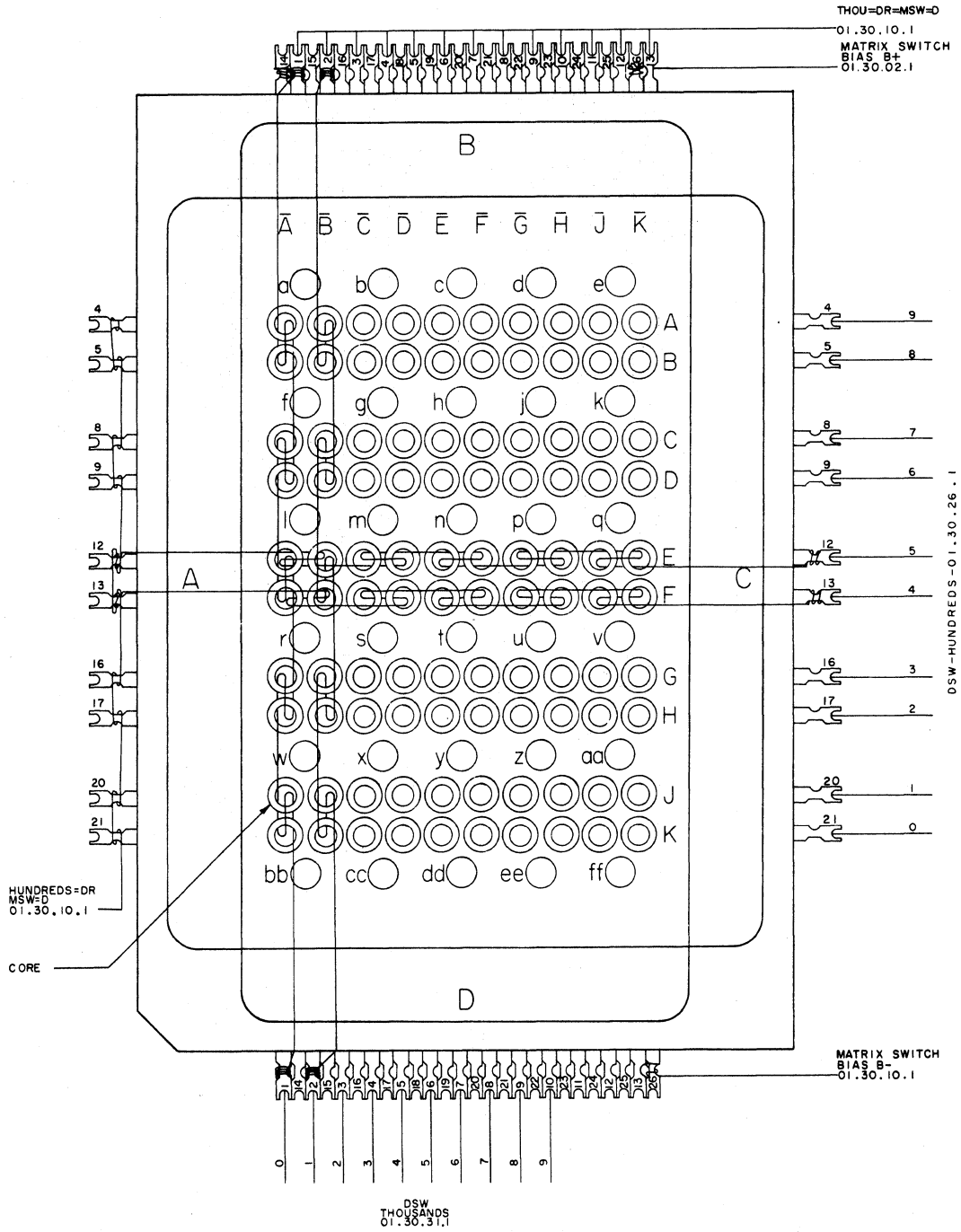


NOTE
SEE PAGE 01.30.05.1 FOR MATRIX SWITCH
TO ARRAY CONNECTIONS





NOTE
SEE PAGE 01.30.05.2 FOR MATRIX SWITCH
TO ARRAY CONNECTIONS



MATRIX SWITCH A OUTPUTS

MEMORY ADDRESS	MATRIX SWA OUTPUTS (01.30.01.1)	ARRAY-SIDE A PLANE#	A PIN	MEMORY ADDRESS	MATRIX SWA OUTPUTS (01.30.01.1)	ARRAY-SIDE A PLANE#	A PIN
0XX00	A-72	12	18	0XX50	C-72	12	72
1XX00	A-71	1	19	1XX50	C-69	1	73
0XX02	A-68	12	20	0XX52	C-67	12	74
1XX02	A-66	1	21	1XX52	C-64	1	75
0XX04	A-63	12	22	0XX54	C-62	12	76
1XX04	A-61	1	23	1XX54	C-59	1	77
0XX06	A-58	12	24	0XX56	C-57	12	78
1XX06	A-56	1	25	1XX56	C-54	1	79
0XX08	A-53	12	26	0XX58	C-52	12	80
1XX08	A-51	1	27	1XX58	C-49	1	81
0XX10	A-48	12	28	0XX60	C-47	12	82
1XX10	A-70	1	29	1XX60	C-70	1	83
0XX12	A-67	12	30	0XX62	C-68	12	84
1XX12	A-65	1	31	1XX62	C-65	1	85
0XX14	A-62	12	32	0XX64	C-63	12	86
1XX14	A-60	1	33	1XX64	C-60	1	87
0XX16	A-57	12	34	0XX66	C-58	12	88
1XX16	A-55	1	35	1XX66	C-55	1	89
0XX18	A-52	12	36	0XX68	C-53	12	90
1XX18	A-50	1	37	1XX68	C-50	1	91
0XX20	A-47	12	38	0XX70	C-48	12	92
1XX20	A-69	1	39	1XX70	C-71	1	93
0XX22	A-44	12	40	0XX72	C-42	12	94
1XX22	A-64	1	41	1XX72	C-66	1	95
0XX24	A-39	12	42	0XX74	C-37	12	96
1XX24	A-59	1	43	1XX74	C-61	1	97
0XX26	A-34	12	44	0XX76	C-32	12	98
1XX26	A-54	1	45	1XX76	C-56	1	99
0XX28	A-29	12	46	0XX78	C-27	12	100
1XX28	A-49	1	47	1XX78	C-51	1	101
0XX30	A-24	12	48	0XX80	C-23	12	102
1XX30	A-46	1	49	1XX80	C-46	1	103
0XX32	A-43	12	50	0XX82	C-43	12	104
1XX32	A-41	1	51	1XX82	C-40	1	105
0XX34	A-38	12	52	0XX84	C-38	12	106
1XX34	A-36	1	53	1XX84	C-35	1	107
0XX36	A-33	12	54	0XX86	C-33	12	108
1XX36	A-31	1	55	1XX86	C-30	1	109
0XX38	A-28	12	56	0XX88	C-28	12	110
1XX38	A-26	1	57	1XX88	C-25	1	111
0XX40	A-23	12	58	0XX90	C-24	12	112
1XX40	A-45	1	59	1XX90	C-47	1	113
0XX42	A-42	12	60	0XX92	C-44	12	114
1XX42	A-40	1	61	1XX92	C-41	1	115
0XX44	A-37	12	62	0XX94	C-39	12	116
1XX44	A-35	1	63	1XX94	C-36	1	117
0XX46	A-32	12	64	0XX96	C-34	12	118
1XX46	A-30	1	65	1XX96	C-31	1	119
0XX48	A-27	12	66	0XX98	C-29	12	120
1XX48	A-25	1	67	1XX98	C-26	1	121

MEMORY RETURN LINE

L LINE (01.30.06.1)	ARRAY-SIDE A PLANE#	A PIN
A1	12	21
A2	12	31
A3	12	41
A4	12	51
A5	12	61
A6	12	75
A7	12	85
A8	12	95
A9	12	106
A10	12	115

MATRIX SWITCH D OUTPUTS

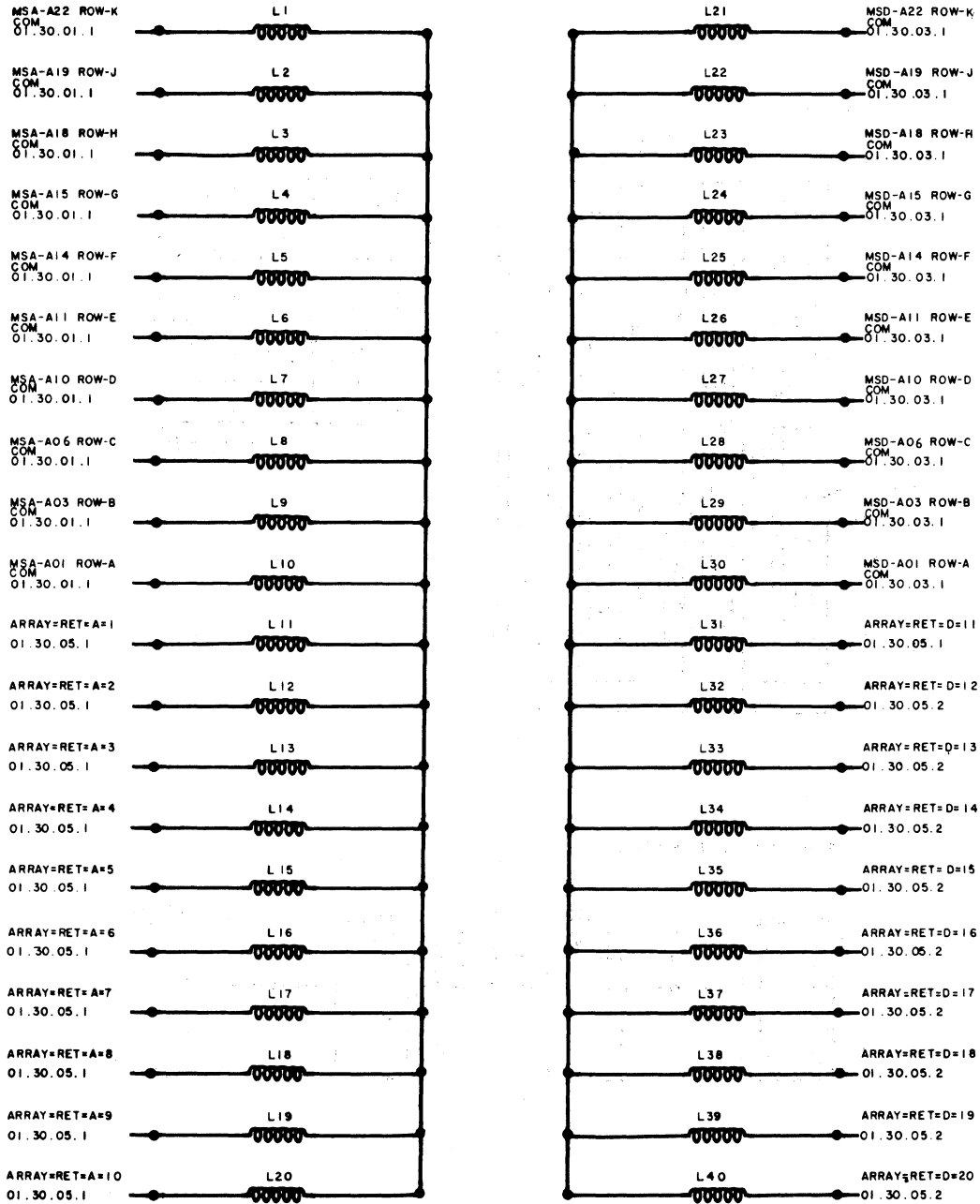
MEMORY ADDRESS	MATRIX SW D OUTPUTS (01.30.03.1)	ARRAY-SIDE D PLANE # PIN
X00XX	C-24	1 18
X01XX	C-47	12 19
X02XX	C-44	1 20
X03XX	C-41	12 21
X04XX	C-39	1 22
X05XX	C-36	12 23
X06XX	C-34	1 24
X07XX	C-31	12 25
X08XX	C-29	1 26
X09XX	C-26	12 27
X10XX	C-23	1 28
X11XX	C-46	12 29
X12XX	C-43	1 30
X13XX	C-40	12 31
X14XX	C-38	1 32
X15XX	C-35	12 33
X16XX	C-33	1 34
X17XX	C-30	12 35
X18XX	C-28	1 36
X19XX	C-25	12 37
X20XX	C-48	1 38
X21XX	C-71	12 39
X22XX	C-42	1 40
X23XX	C-66	12 41
X24XX	C-37	1 42
X25XX	C-61	12 43
X26XX	C-32	1 44
X27XX	C-56	12 45
X28XX	C-27	1 46
X29XX	C-51	12 47
X30XX	C-47	1 48
X31XX	C-70	12 49
X32XX	C-68	1 50
X33XX	C-65	12 51
X34XX	C-63	1 52
X35XX	C-60	12 53
X36XX	C-58	1 54
X37XX	C-55	12 55
X38XX	C-53	1 56
X39XX	C-50	12 57
X40XX	C-72	1 58
X41XX	C-69	12 59
X42XX	C-67	1 60
X43XX	C-64	12 61
X44XX	C-62	1 62
X45XX	C-59	12 63
X46XX	C-57	1 64
X47XX	C-54	12 65
X48XX	C-52	1 66
X49XX	C-49	12 67

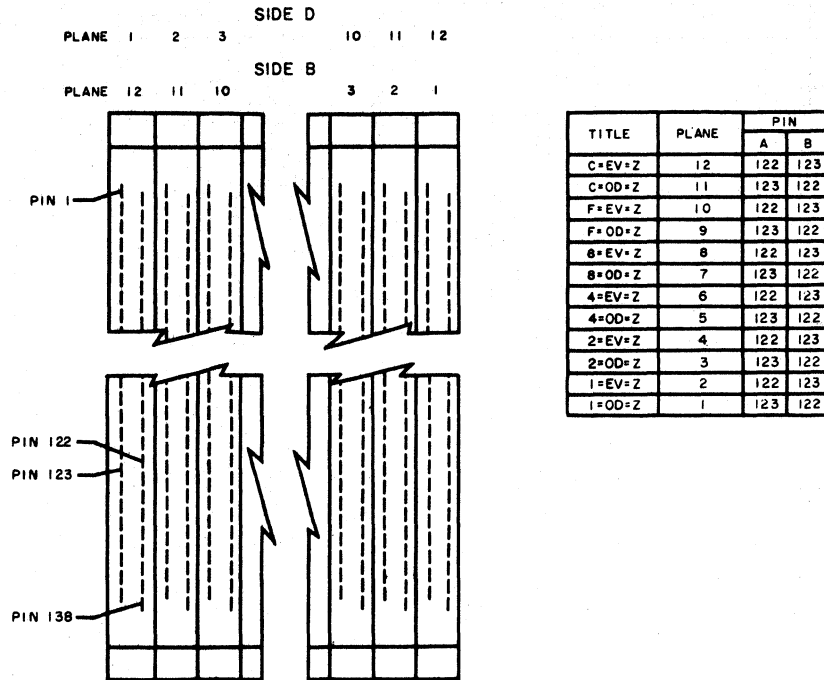
MEMORY ADDRESS	MATRIX SW D OUTPUTS (01.30.03.1)	ARRAY-SIDE D PLANE # PIN
X50XX	A-23	1 72
X51XX	A-45	12 73
X52XX	A-42	1 74
X53XX	A-40	12 75
X54XX	A-37	1 76
X55XX	A-35	12 77
X56XX	A-32	1 78
X57XX	A-30	12 79
X58XX	A-27	1 80
X59XX	A-25	12 81
X60XX	A-24	1 82
X61XX	A-46	12 83
X62XX	A-43	1 84
X63XX	A-41	12 85
X64XX	A-38	1 86
X65XX	A-36	12 87
X66XX	A-33	1 88
X67XX	A-31	12 89
X68XX	A-28	1 90
X69XX	A-26	12 91
X70XX	A-47	1 92
X71XX	A-69	12 93
X72XX	A-44	1 94
X73XX	A-64	12 95
X74XX	A-39	1 96
X75XX	A-59	12 97
X76XX	A-34	1 98
X77XX	A-54	12 99
X78XX	A-29	1 100
X79XX	A-49	12 101
X80XX	A-48	1 102
X81XX	A-70	12 103
X82XX	A-67	1 104
X83XX	A-65	12 105
X84XX	A-62	1 106
X85XX	A-60	12 107
X86XX	A-57	1 108
X87XX	A-55	12 109
X88XX	A-52	1 110
X89XX	A-50	12 111
X90XX	A-72	1 112
X91XX	A-71	12 113
X92XX	A-68	1 114
X93XX	A-66	12 115
X94XX	A-63	1 116
X95XX	A-61	12 117
X96XX	A-58	1 118
X97XX	A-56	12 119
X98XX	A-53	1 120
X99XX	A-51	12 121

MEMORY RETURN LINES

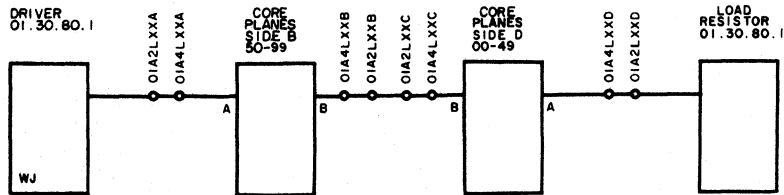
LINE (01.30.06.1)	ARRAY-SIDE D PLANE # PIN
D11	12 20
D12	12 30
D13	12 40
D14	12 50
D15	12 60
D16	12 74
D17	12 84
D18	12 94
D19	12 104
D20	12 114

* PLANE 12 15 PIN (WIRING) SIDE

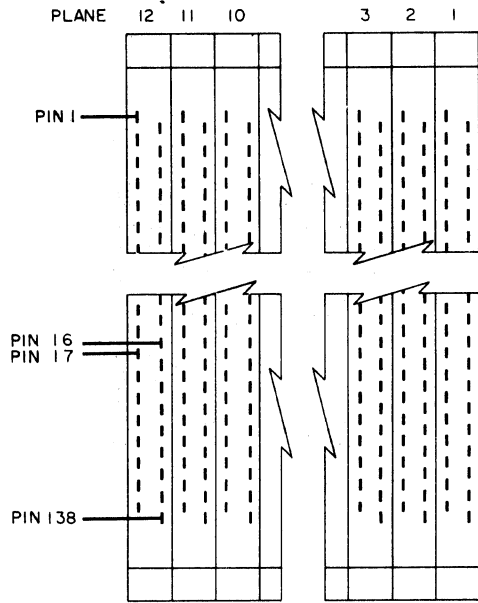




TYPICAL INHIBIT WINDING:

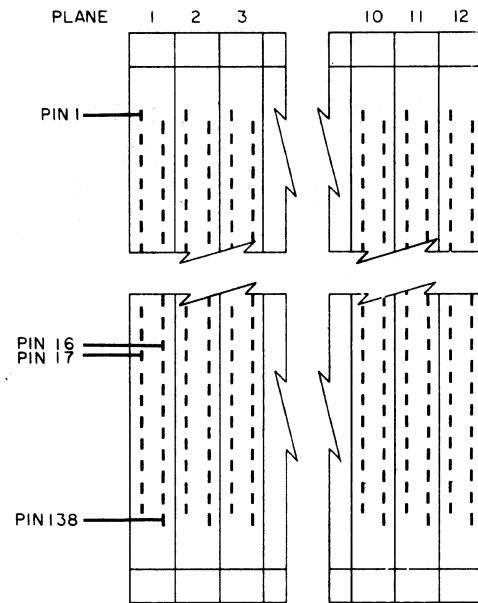


SIDE B

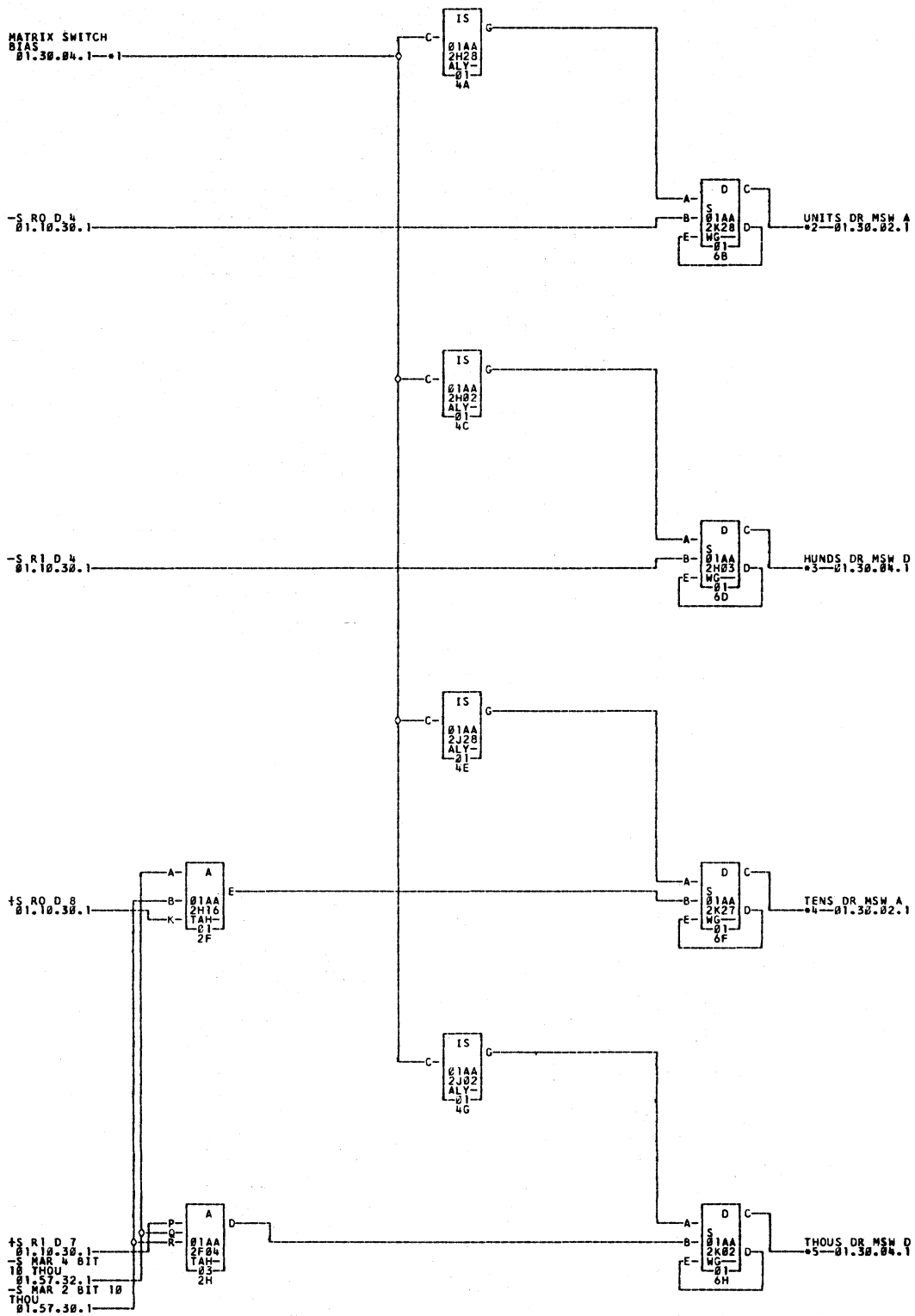


PLANE	PIN	NAME	LOGIC
12	16	SEN=WIND=C=EV>50	01.30.50.1
12	17	SEN=C=EV>50	01.30.50.1
11	16	SEN=WIND=C=00>50	01.30.45.1
11	17	SEN=C=00>50	01.30.45.1
10	16	SEN=WIND=F=EV>50	01.30.50.1
10	17	SEN=F=EV>50	01.30.50.1
9	16	SEN=WIND=F=00>50	01.30.45.1
9	17	SEN=F=00>50	01.30.45.1
8	16	SEN=WIND=8=EV>50	01.30.50.1
8	17	SEN=8=EV>50	01.30.50.1
7	16	SEN=WIND=8=00>50	01.30.45.1
7	17	SEN=8=00>50	01.30.45.1
6	16	SEN=WIND=4=EV>50	01.30.50.1
6	17	SEN=4=EV>50	01.30.50.1
5	16	SEN=WIND=4=00>50	01.30.45.1
5	17	SEN=4=00>50	01.30.45.1
4	16	SEN=WIND=2=EV>50	01.30.50.1
4	17	SEN=2=EV>50	01.30.50.1
3	16	SEN=WIND=2=00>50	01.30.45.1
3	17	SEN=2=00>50	01.30.45.1
2	16	SEN=WIND=1=EV>50	01.30.50.1
2	17	SEN=1=00>50	01.30.50.1
1	16	SEN=WIND=1=00>50	01.30.45.1
1	17	SEN=1=00>50	01.30.45.1

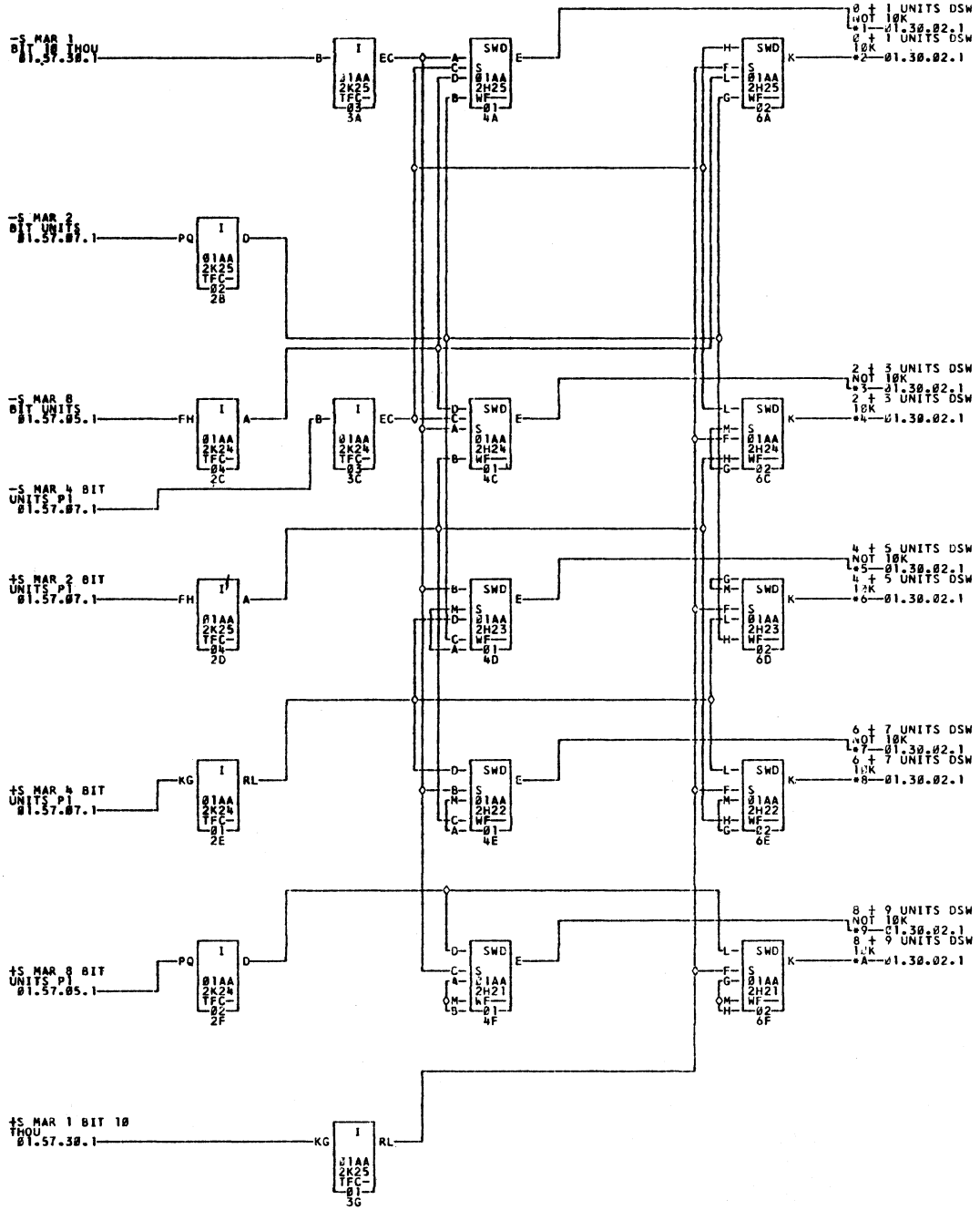
SIDE D



PLANE	PIN	NAME	LOGIC
12	16	SEN=WIND=C=EV<50	01.30.50.1
12	17	SEN=C=EV<50	01.30.50.1
11	16	SEN=WIND=C=00<50	01.30.45.1
11	17	SEN=C=00<50	01.30.45.1
10	16	SEN=WIND=F=EV<50	01.30.50.1
10	17	SEN=F=EV<50	01.30.50.1
9	16	SEN=WIND=F=00<50	01.30.45.1
9	17	SEN=F=00<50	01.30.45.1
8	16	SEN=WIND=8=EV<50	01.30.50.1
8	17	SEN=8=EV<50	01.30.50.1
7	16	SEN=WIND=8=00<50	01.30.45.1
7	17	SEN=8=00<50	01.30.45.1
6	16	SEN=WIND=4=EV<50	01.30.50.1
6	17	SEN=4=EV<50	01.30.50.1
5	16	SEN=WIND=4=00<50	01.30.45.1
5	17	SEN=4=00<50	01.30.45.1
4	16	SEN=WIND=2=EV<50	01.30.50.1
4	17	SEN=2=EV<50	01.30.50.1
3	16	SEN=WIND=2=00<50	01.30.45.1
3	17	SEN=2=00<50	01.30.45.1
2	16	SEN=WIND=1=EV<50	01.30.50.1
2	17	SEN=1=EV<50	01.30.50.1
1	16	SEN=WIND=1=00<50	01.30.45.1
1	17	SEN=1=00<50	01.30.45.1



*1-01A2L06D 01A4L06D *2-01A2R07A 01A4R07A *3-01A2L01A 01A4L01A
 *4-01A2R07B 01A4R07B *5-01A2L01B 01A4L01B



- *1-01A2R12B
- *4-01A2R11C
- *7-01A2R16D
- *A-01A2R18A

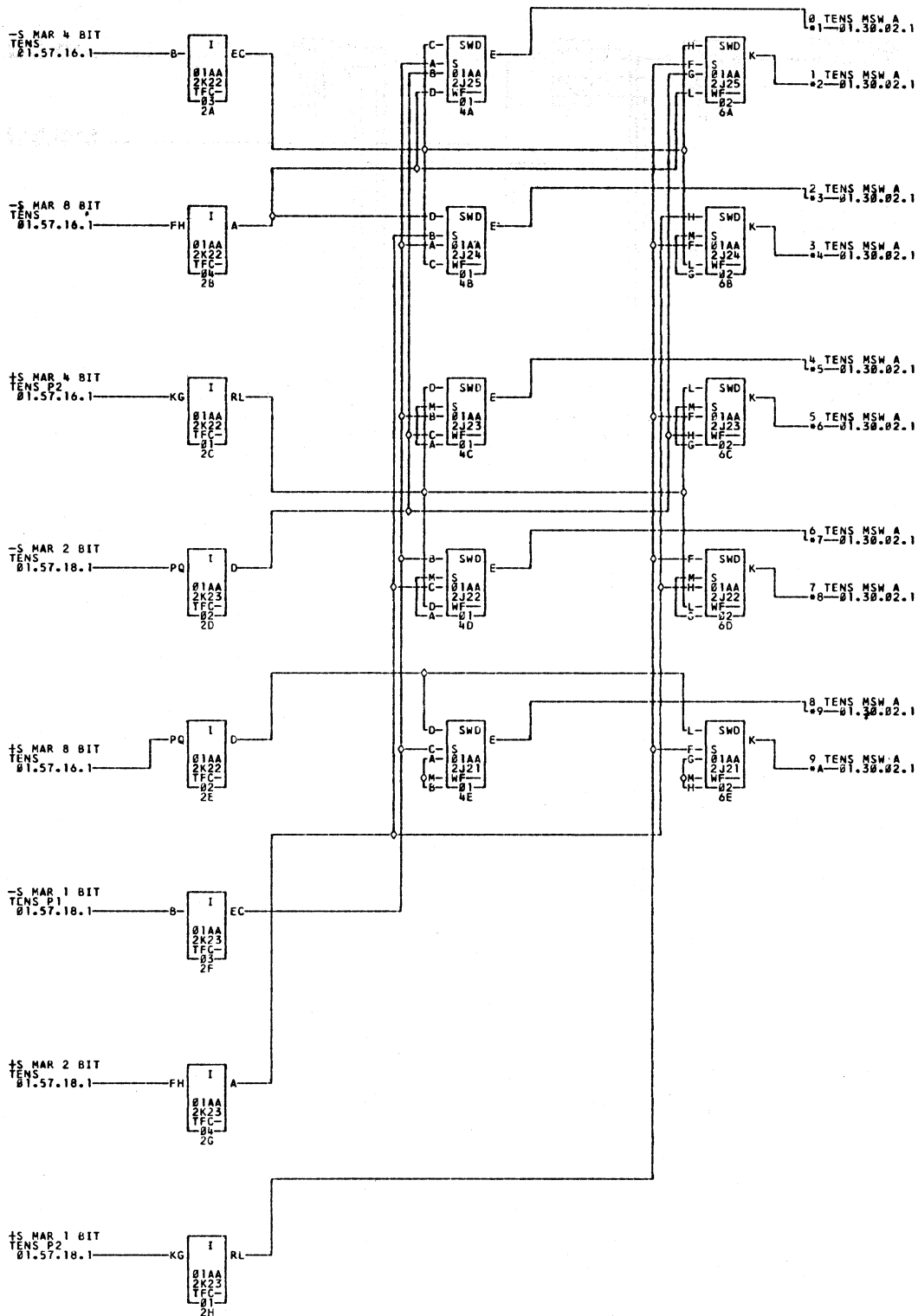
- 01ARR12B
- 01ARR11C
- 01ARR16D
- 01ARR18A

- *2-01A2R12A
- *5-01A2R11B
- *6-01A2R17C

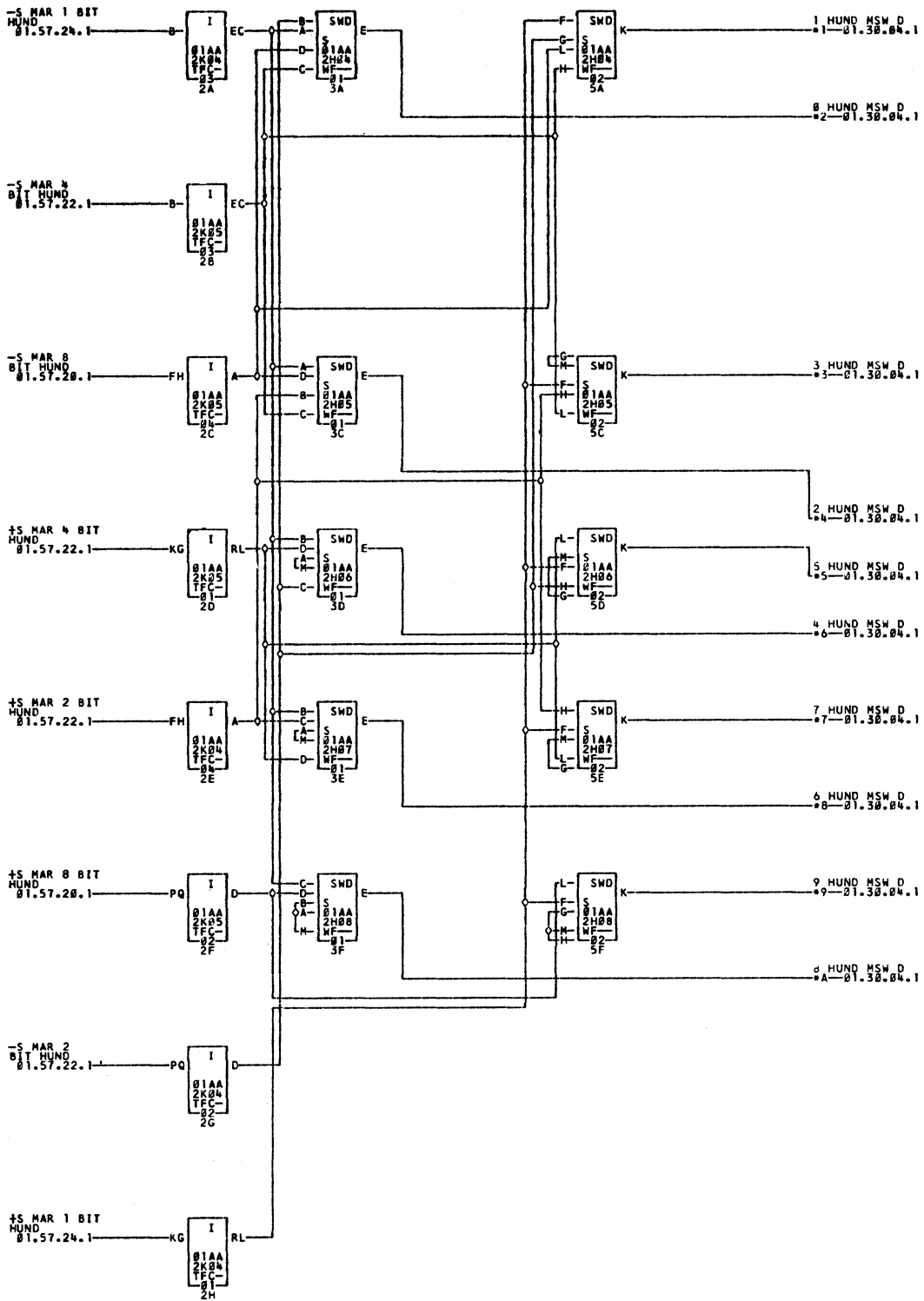
- 01ARR12A
- 01ARR11B
- 01ARR17C

- *3-01A2R11D
- *8-01A2R11A
- *9-01A2R16E

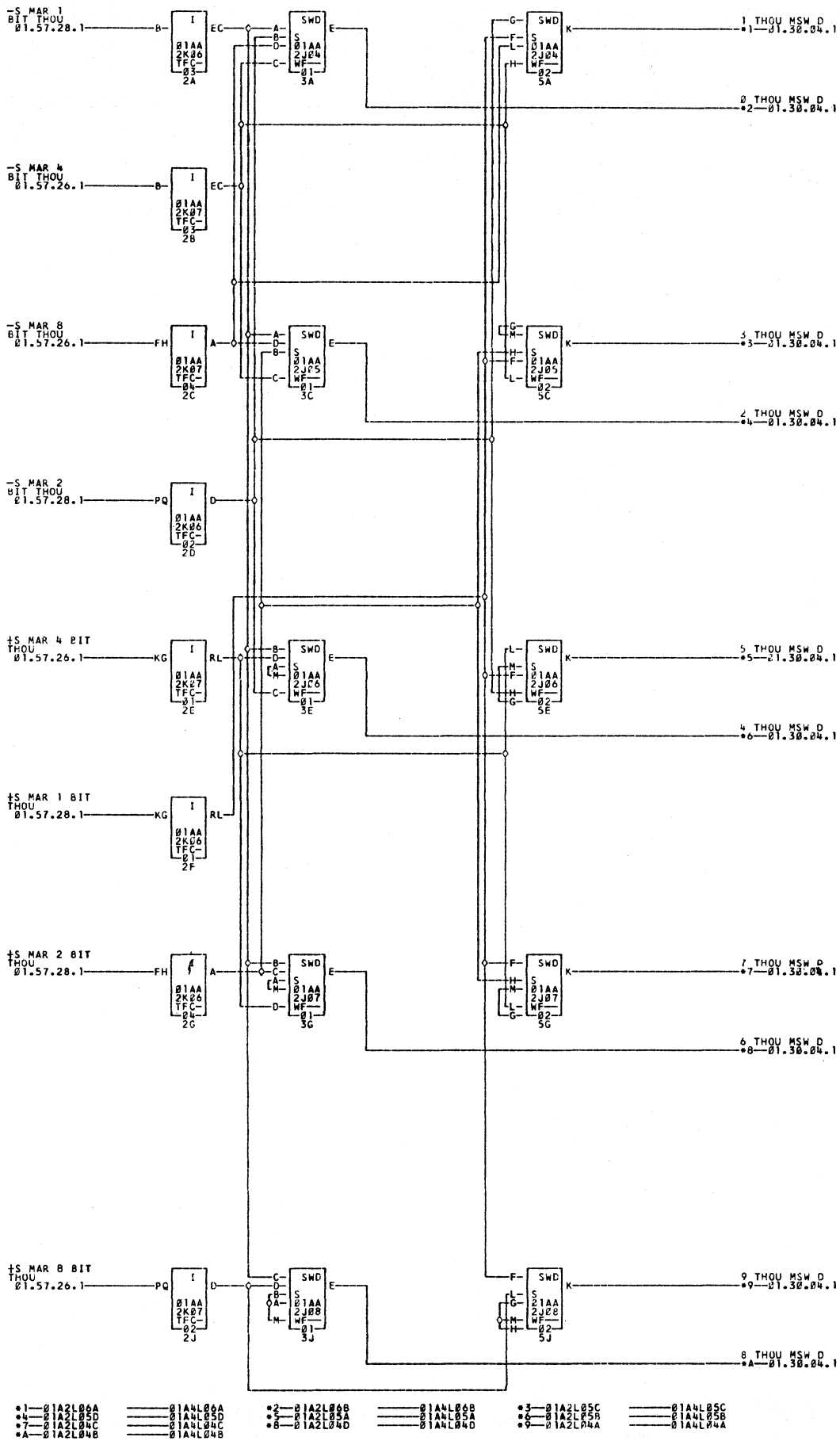
- 01ARR11D
- 01ARR11A
- 01ARR16E



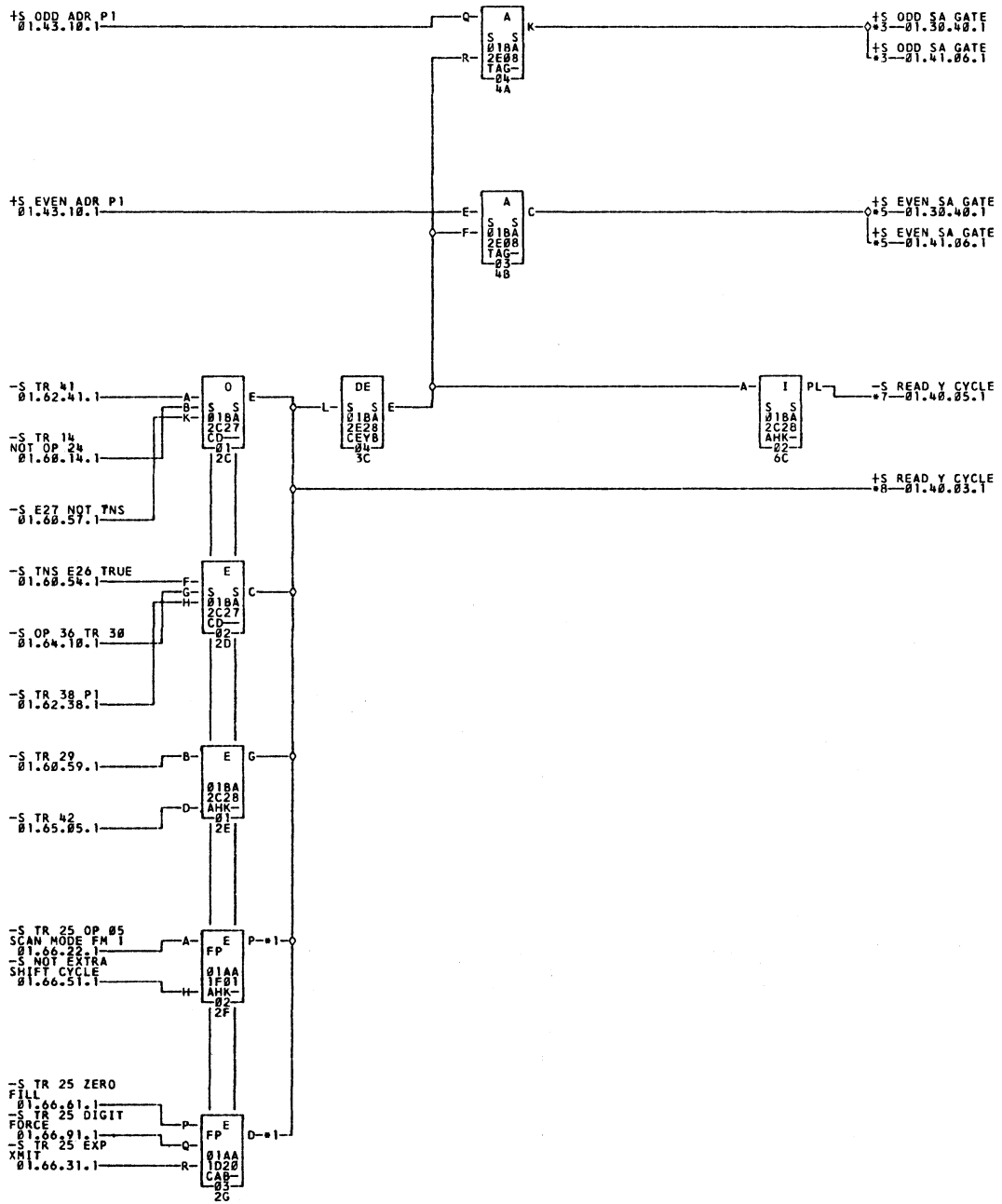
- | | | | | | |
|-------------|----------------|-------------|----------------|-------------|----------------|
| *1-01A2R09D | ===== 01A4R09D | *2-01A2R09C | ===== 01A4R09C | *3-01A2R09B | ===== 01A4R09B |
| *4-01A2R09A | ===== 01A4R09A | *5-01A2R08D | ===== 01A4R08D | *6-01A2R08C | ===== 01A4R08C |
| *7-01A2R08B | ===== 01A4R08B | *8-01A2R08A | ===== 01A4R08A | *9-01A2R07D | ===== 01A4R07D |
| *A-01A2R07C | ===== 01A4R07C | | | | |



- | | | | | | |
|-------------|---------------|-------------|---------------|-------------|---------------|
| *1-01A2L03C | =====01A4L03C | *2-01A2L03D | =====01A4L03D | *3-01A2L03A | =====01A4L03A |
| *4-01A2L03B | =====01A4L03B | *5-01A2L02C | =====01A4L02C | *6-01A2L02D | =====01A4L02D |
| *7-01A2L02A | =====01A4L02A | *8-01A2L02B | =====01A4L02B | *9-01A2L01C | =====01A4L01C |
| *A-01A2L01D | =====01A4L01D | | | | |



- 1-01A2L06A ———— 01A4L06A •2-01A2L06B ———— 01A4L06B •3-01A2L05C ———— 01A4L05C
- 4-01A2L05D ———— 01A4L05D •5-01A2L05A ———— 01A4L05A •6-01A2L05B ———— 01A4L05B
- 7-01A2L04C ———— 01A4L04C •8-01A2L04D ———— 01A4L04D •9-01A2L04A ———— 01A4L04A
- A-01A2L04B



*1-01AW04
*7-01BW009

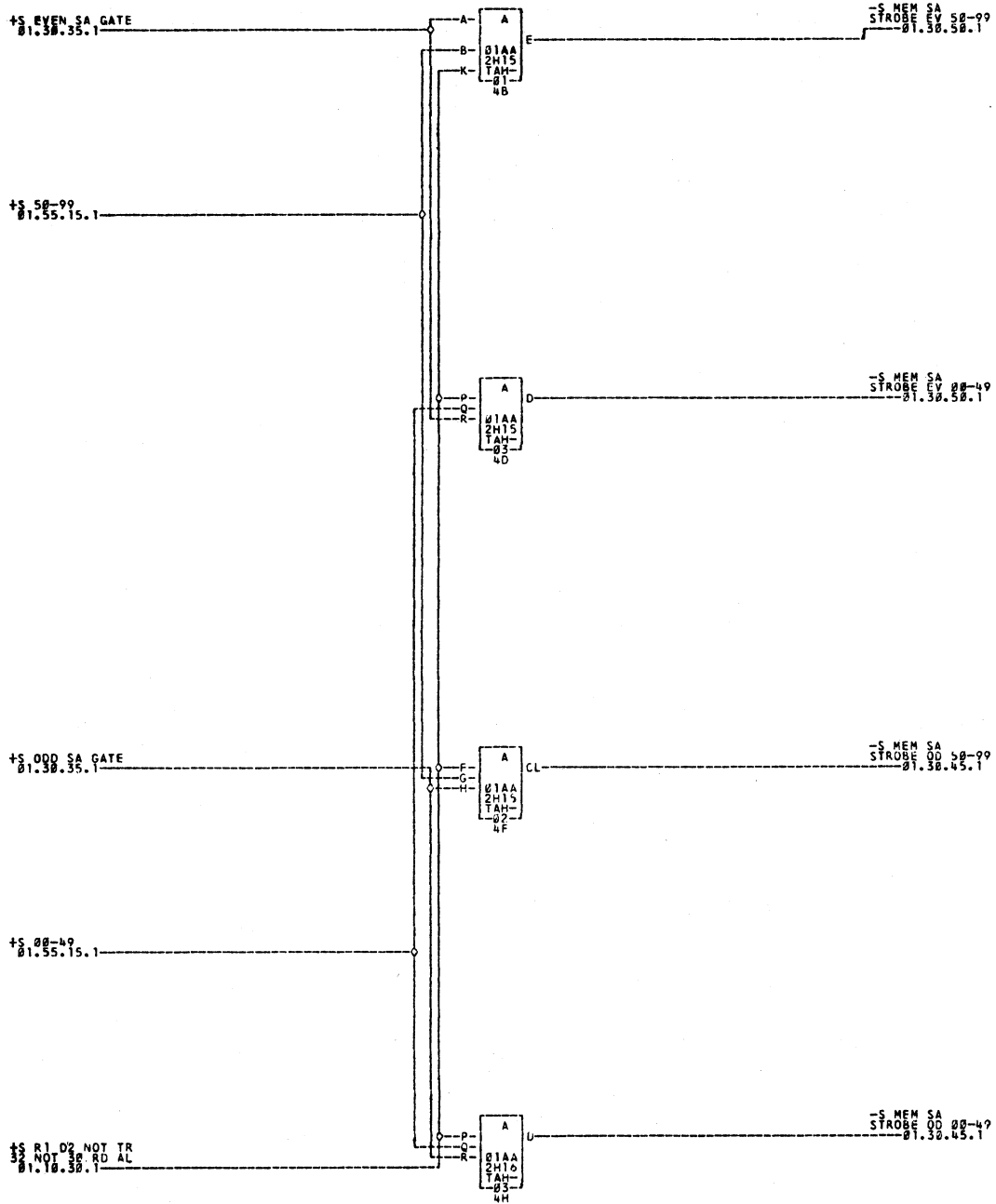
01BME04
01AW009

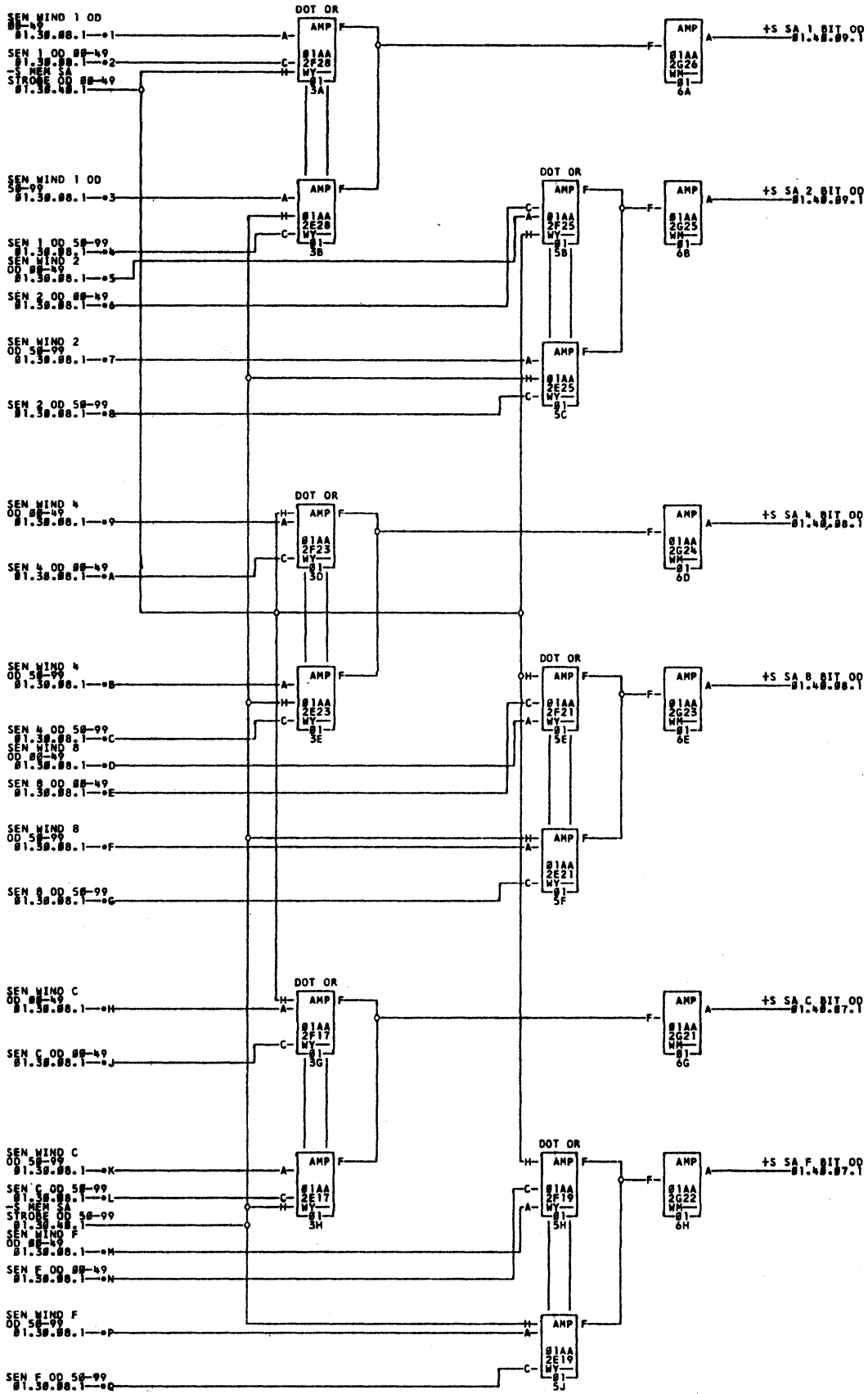
*3-01BWJ02
*8-01B2Y28A

01AWJ02
01B1Y28A

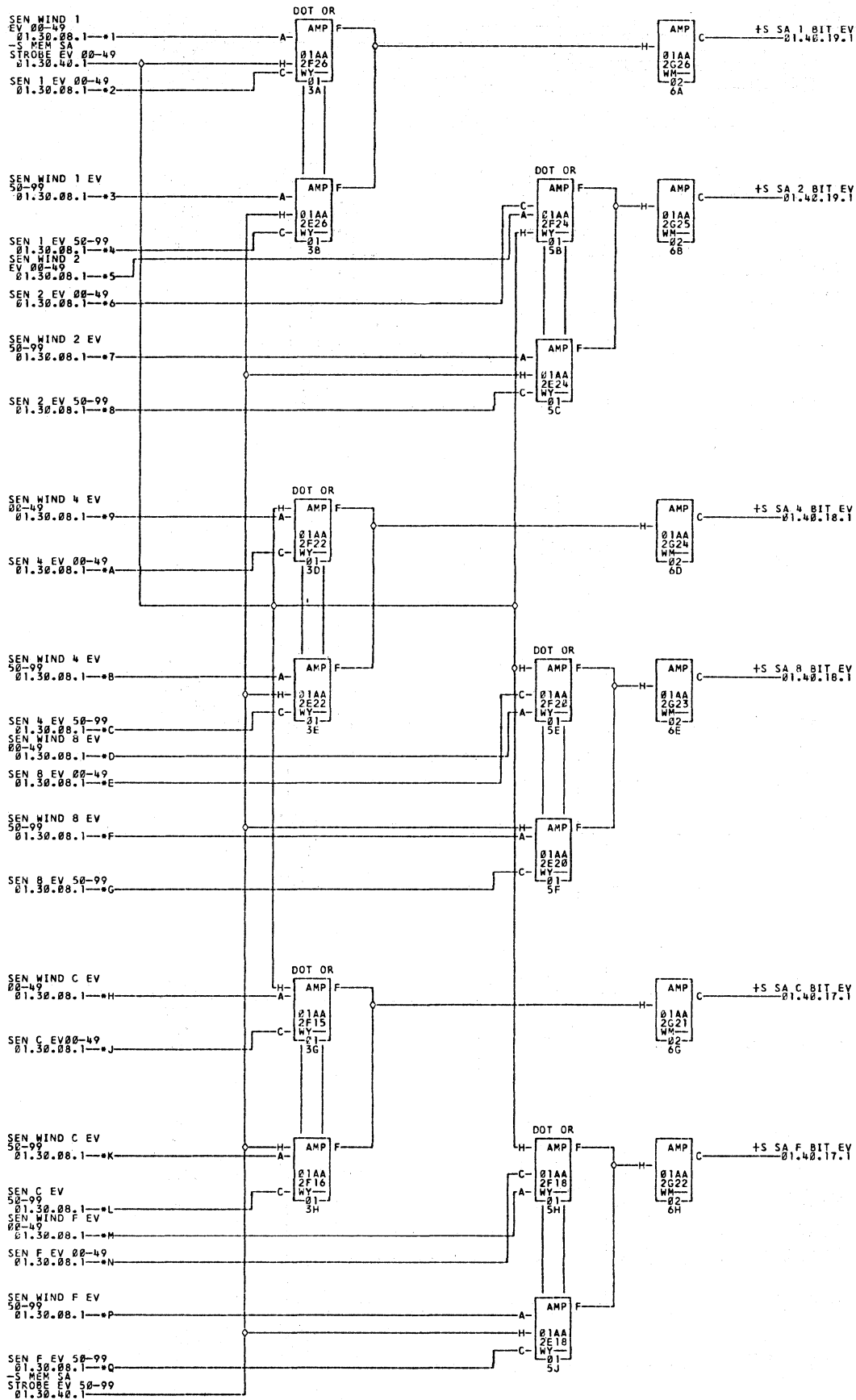
*5-01BWJ03

01AWJ03

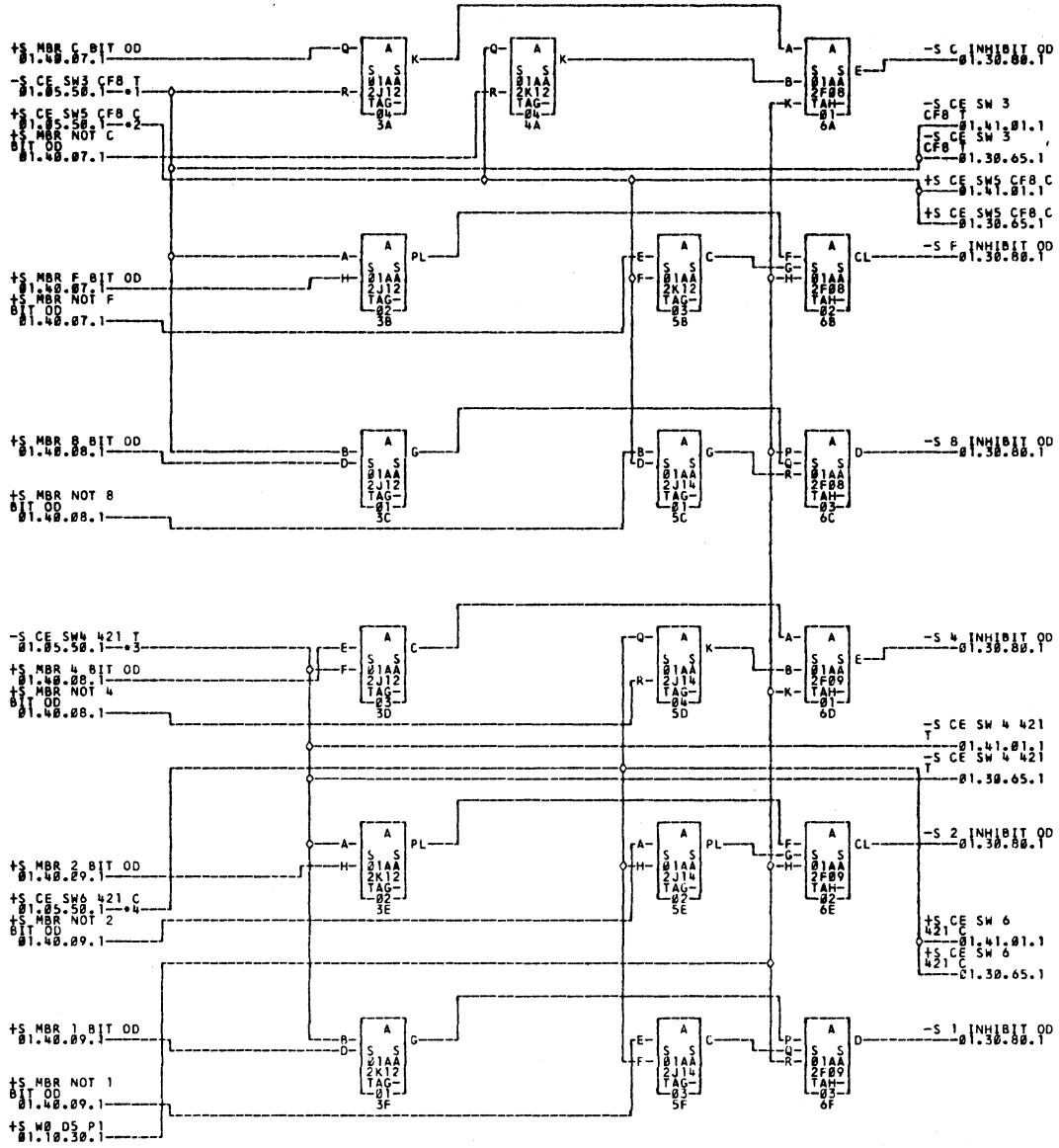


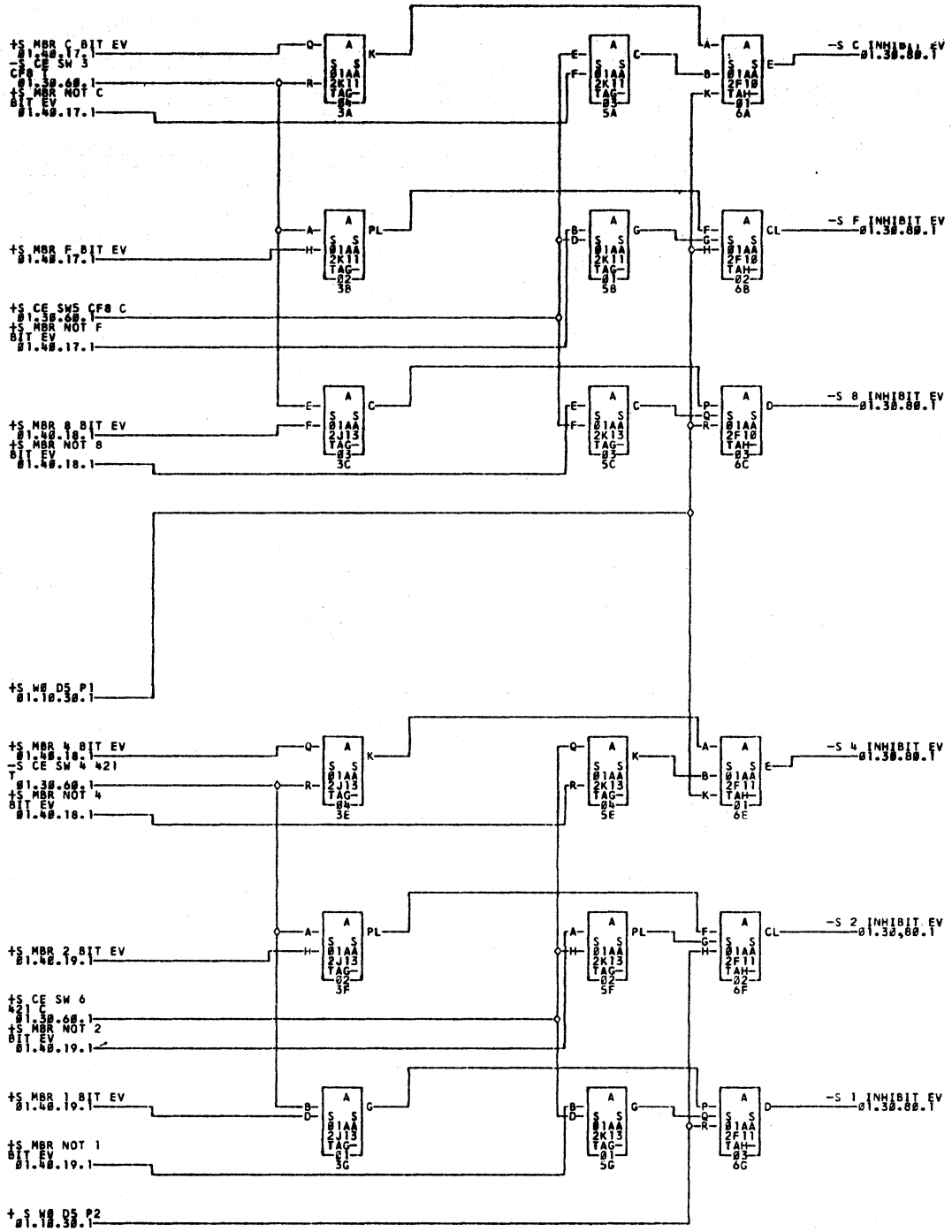


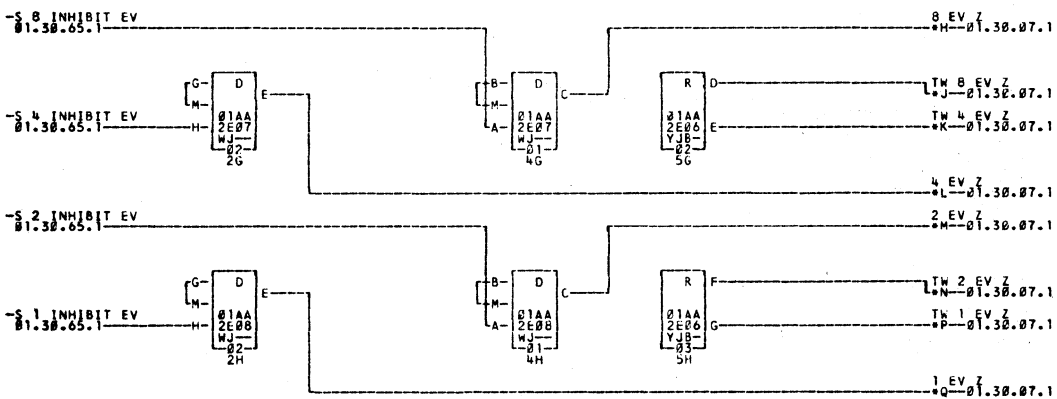
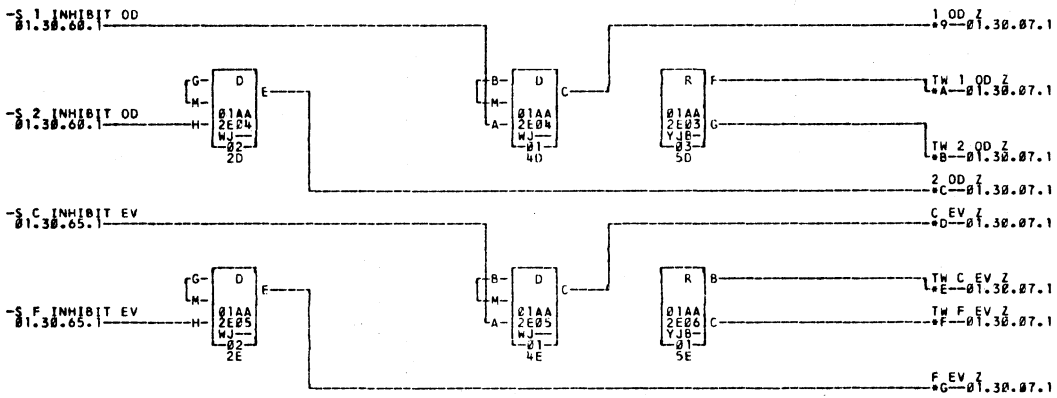
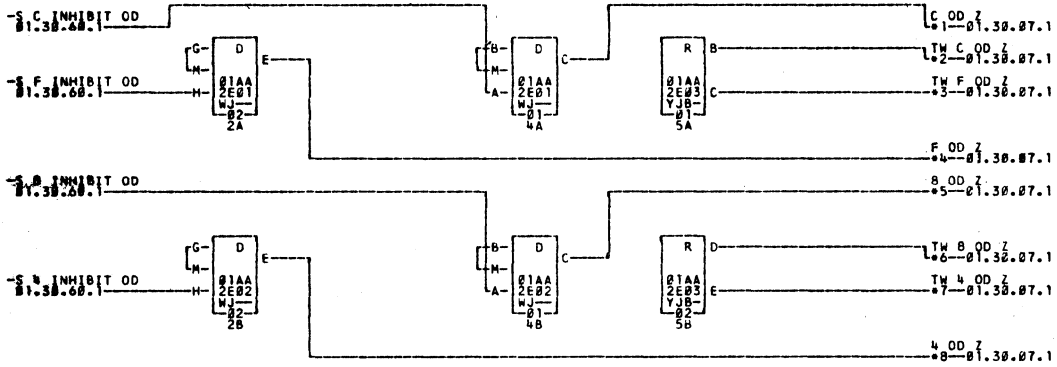
•1- 81A2R18	===== 81A2R13A	•2- 81A2R18A	===== 81A2R13A	•3- 81A2R19	===== 81A2R13B
•4- 81A2R13A	===== 81A2R13B	•5- 81A2R19A	===== 81A2R13B	•4- 81A2R19A	===== 81A2R13C
•7- 81A2R13B	===== 81A2R13C	•6- 81A2R19B	===== 81A2R13C	•5- 81A2R19B	===== 81A2R13D
•8- 81A2R13C	===== 81A2R13D	•7- 81A2R19C	===== 81A2R13D	•6- 81A2R19C	===== 81A2R13E
•9- 81A2R13D	===== 81A2R13E	•8- 81A2R19D	===== 81A2R13E	•7- 81A2R19D	===== 81A2R13F
•6- 81A2R13E	===== 81A2R13F	•9- 81A2R19E	===== 81A2R13F	•8- 81A2R19E	===== 81A2R13G
•5- 81A2R13F	===== 81A2R13G	•0- 81A2R19F	===== 81A2R13G	•9- 81A2R19F	===== 81A2R13H
•0- 81A2R13G	===== 81A2R13H	•1- 81A2R19G	===== 81A2R13H	•0- 81A2R19G	===== 81A2R13I
•K- 81A2R13H	===== 81A2R13I	•2- 81A2R19H	===== 81A2R13I	•1- 81A2R19H	===== 81A2R13J
•N- 81A2R13I	===== 81A2R13J	•3- 81A2R19I	===== 81A2R13J	•2- 81A2R19I	===== 81A2R13K
		•4- 81A2R19J	===== 81A2R13K	•3- 81A2R19J	===== 81A2R13L
		•5- 81A2R19K	===== 81A2R13L	•4- 81A2R19K	===== 81A2R13M
		•6- 81A2R19L	===== 81A2R13M	•5- 81A2R19L	===== 81A2R13N
		•7- 81A2R19M	===== 81A2R13N	•6- 81A2R19M	===== 81A2R13O
		•8- 81A2R19N	===== 81A2R13O	•7- 81A2R19N	===== 81A2R13P
		•9- 81A2R19O	===== 81A2R13P	•8- 81A2R19O	===== 81A2R13Q
		•0- 81A2R19P	===== 81A2R13Q	•9- 81A2R19P	===== 81A2R13R
		•1- 81A2R19Q	===== 81A2R13R	•0- 81A2R19Q	===== 81A2R13S
		•2- 81A2R19R	===== 81A2R13S	•1- 81A2R19R	===== 81A2R13T
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		•4- 81A2R19T	===== 81A2R13U	•3- 81A2R19T	===== 81A2R13V
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		•6- 81A2R19V	===== 81A2R13W	•5- 81A2R19V	===== 81A2R13X
		•7- 81A2R19W	===== 81A2R13X	•6- 81A2R19W	===== 81A2R13Y
		•8- 81A2R19X	===== 81A2R13Y	•7- 81A2R19X	===== 81A2R13Z
		•9- 81A2R19Y	===== 81A2R13Z	•8- 81A2R19Y	===== 81A2R13A
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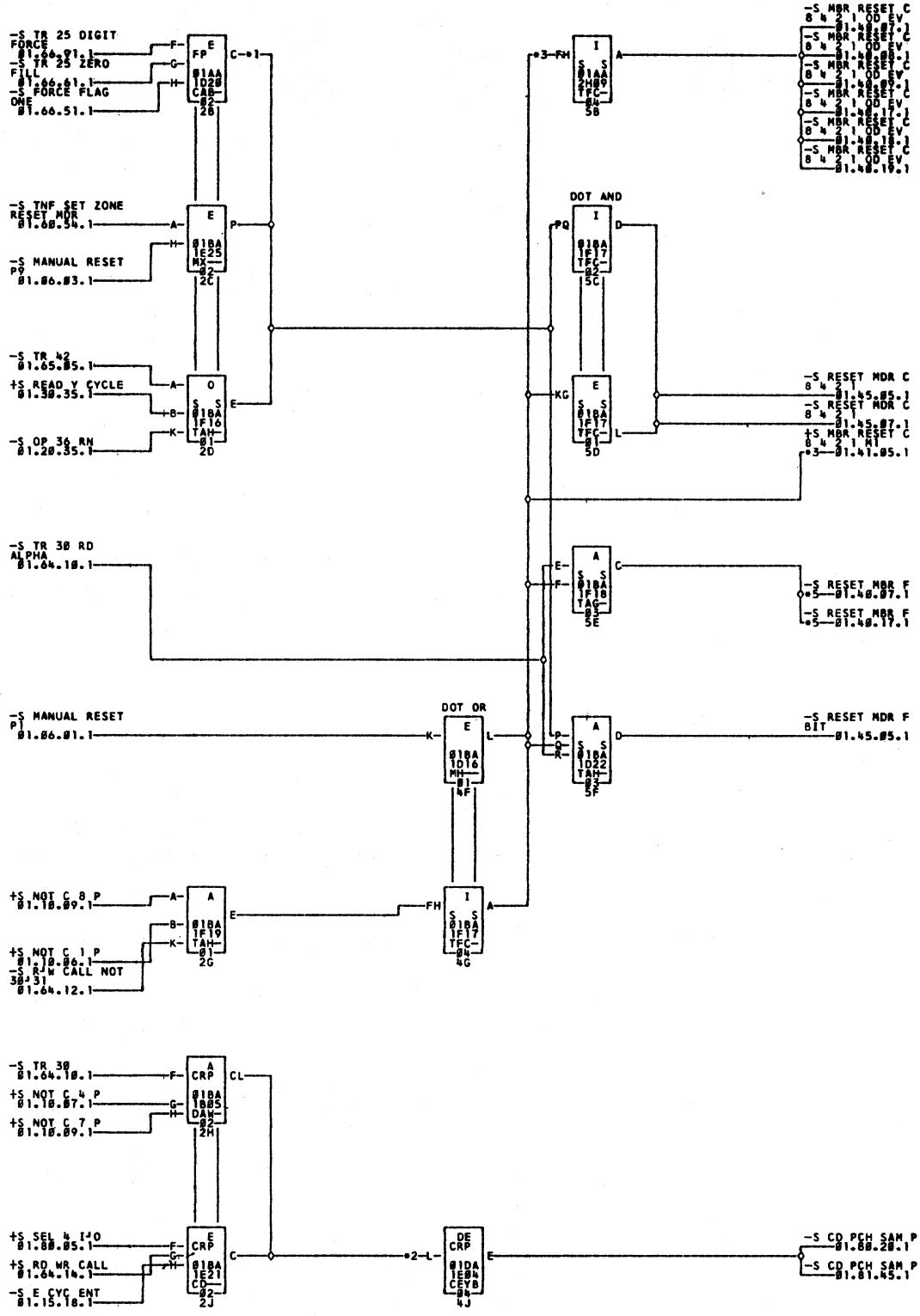
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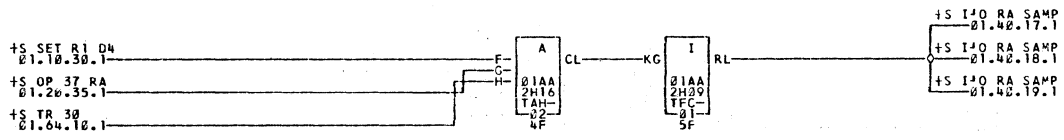
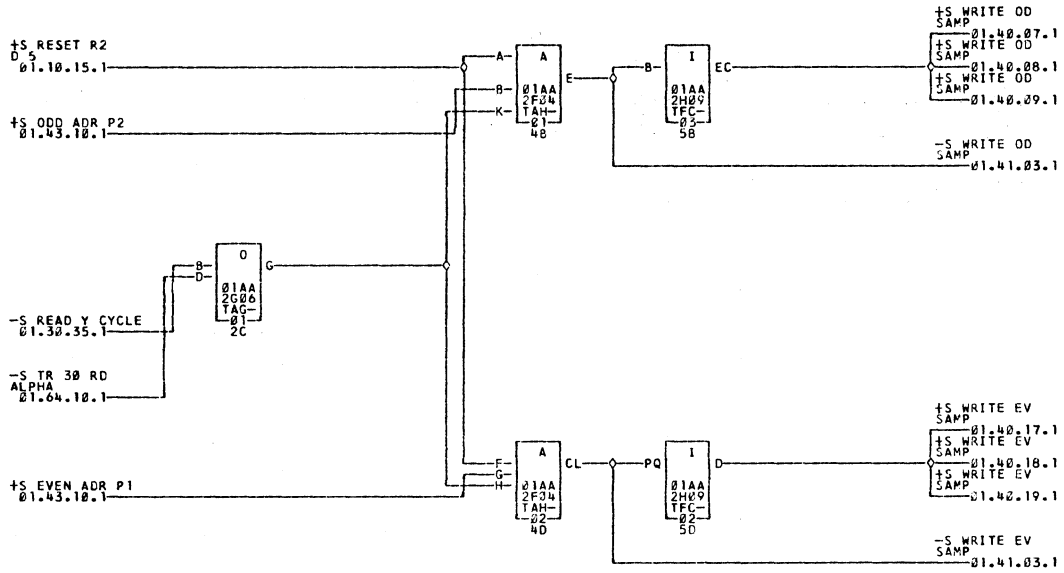


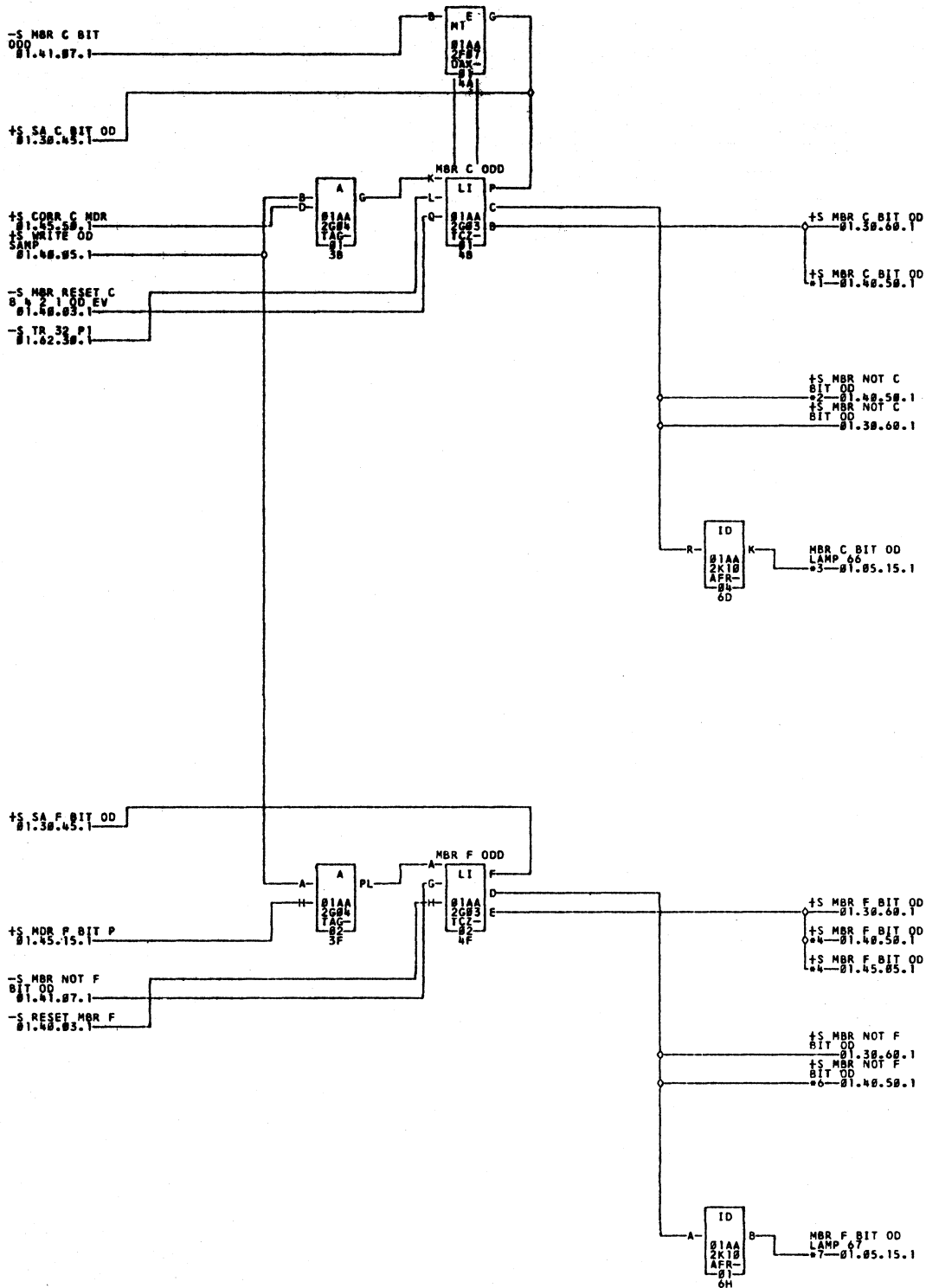


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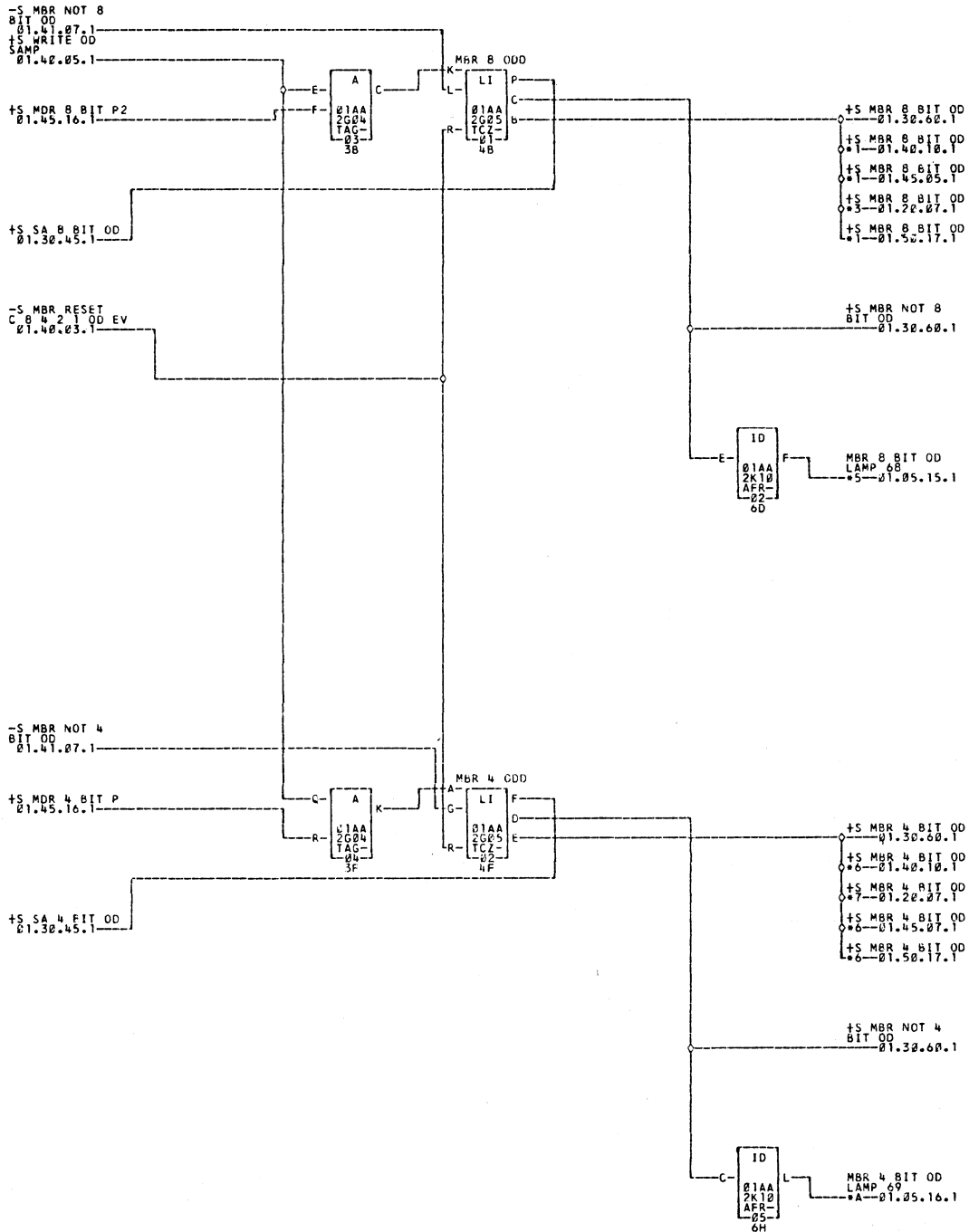
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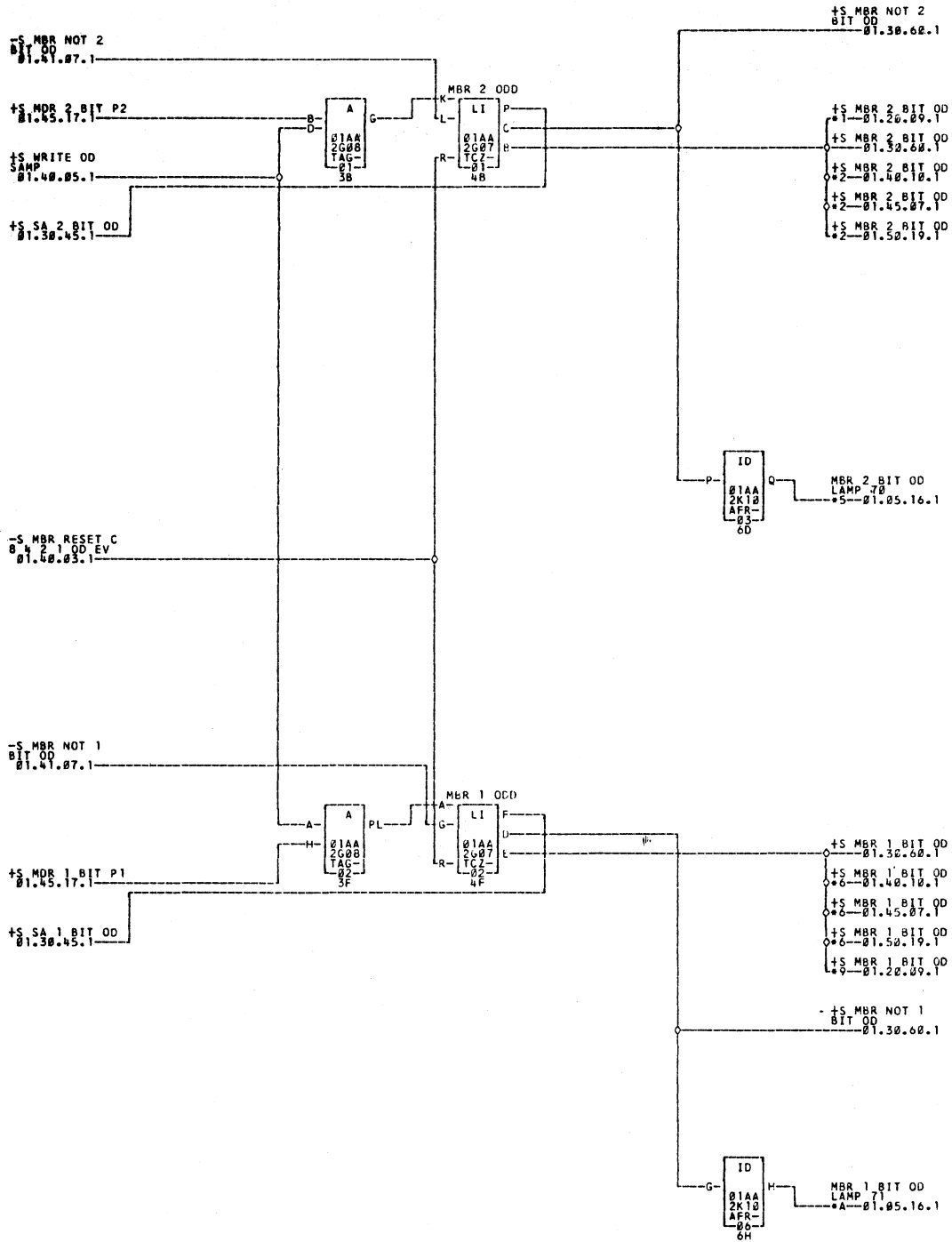
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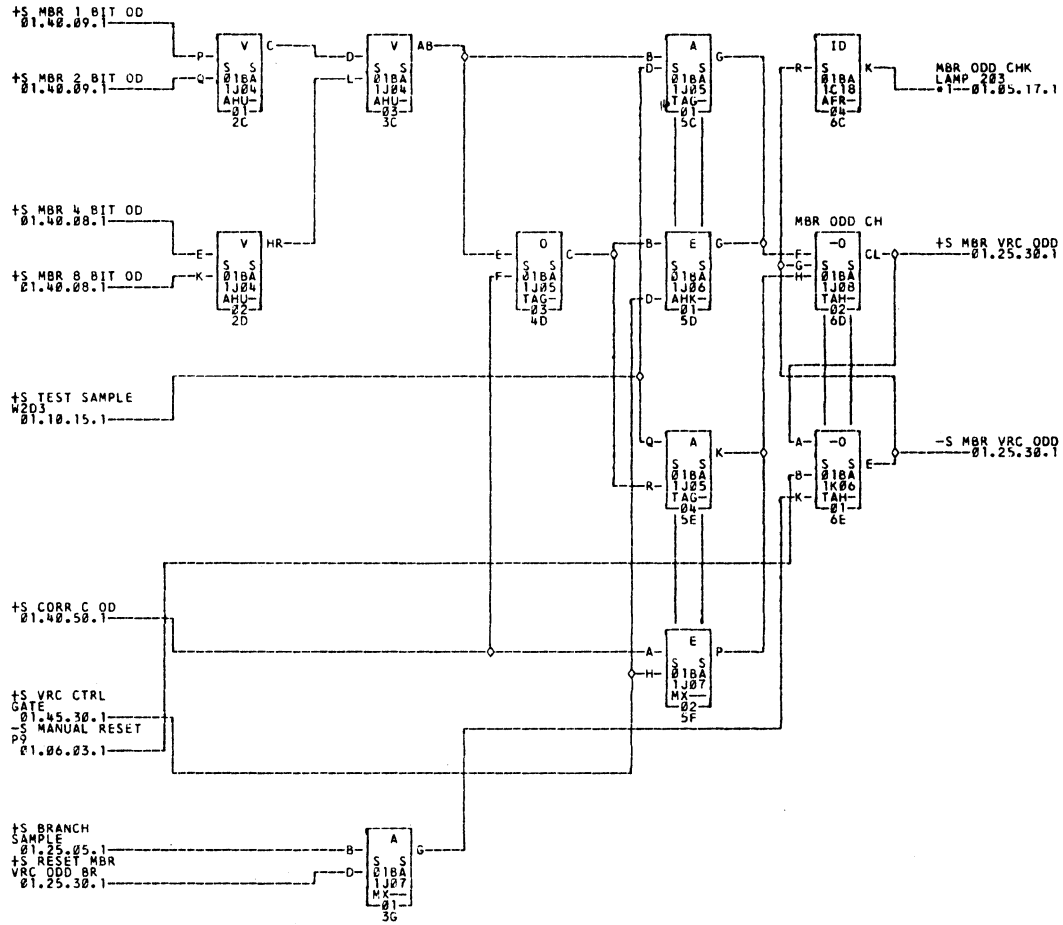
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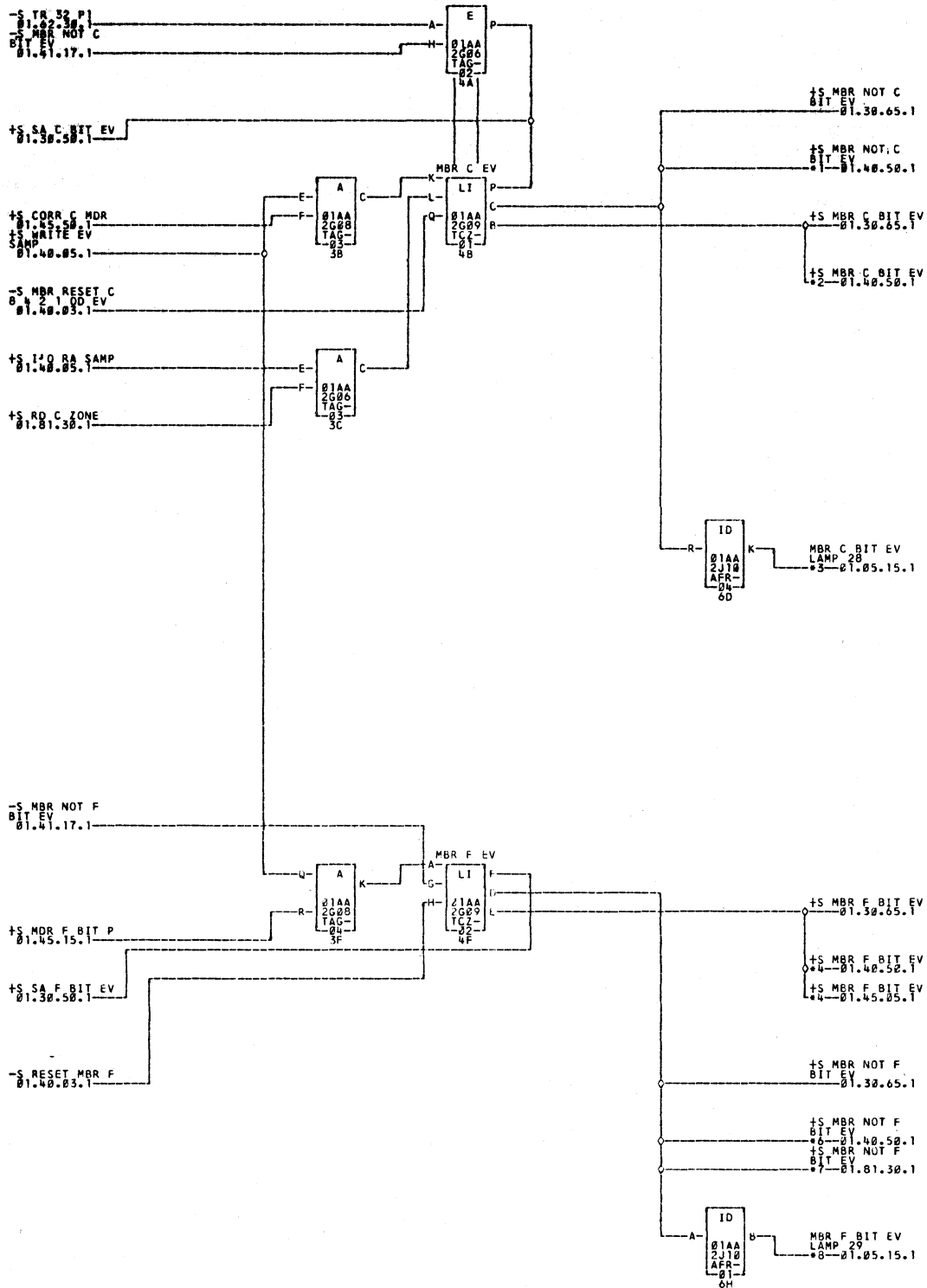
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*1--01AWG12
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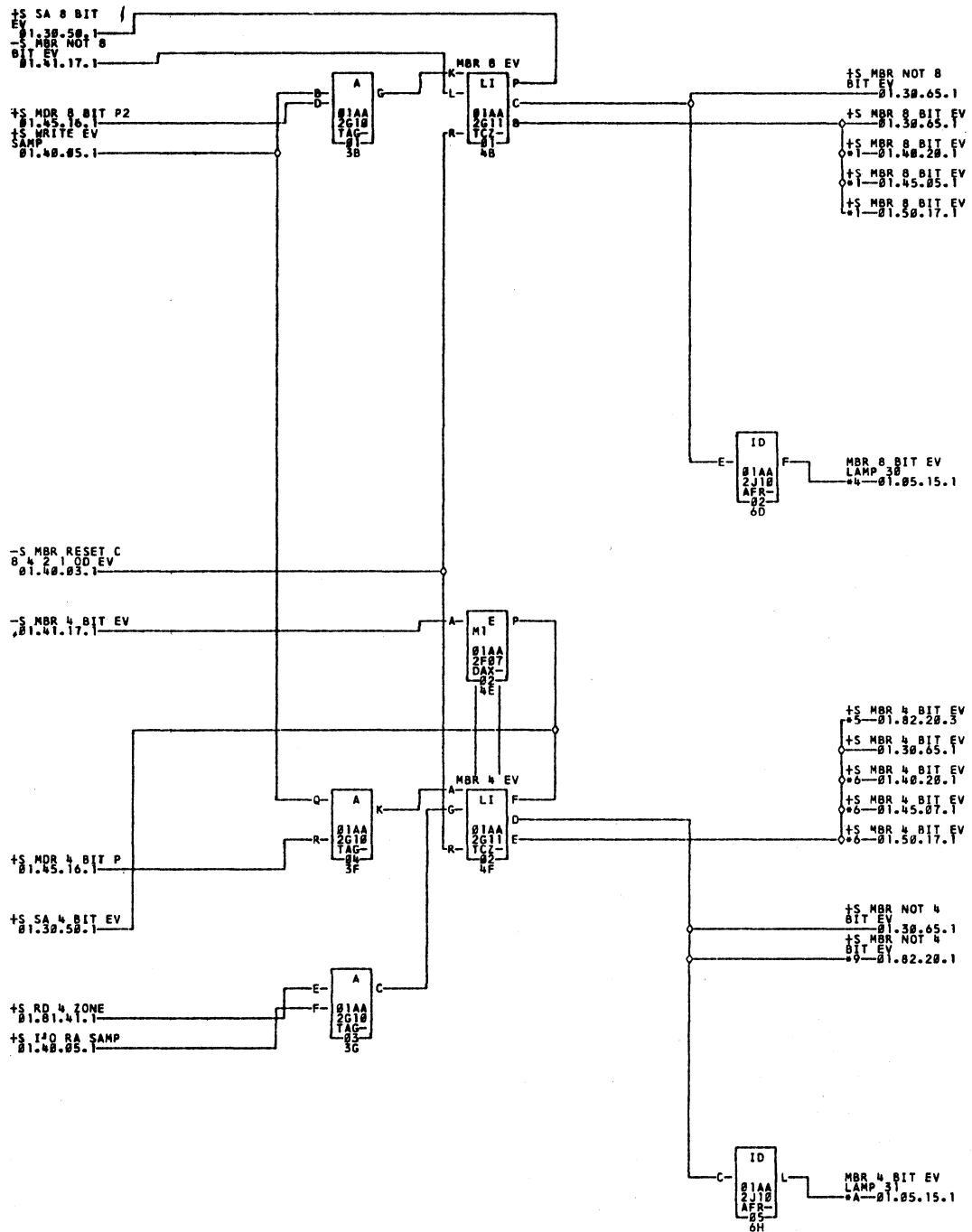
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-----01BWC19
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-----01DX017

*4--01AWG24
*8--01AXFB8



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—01AWG14

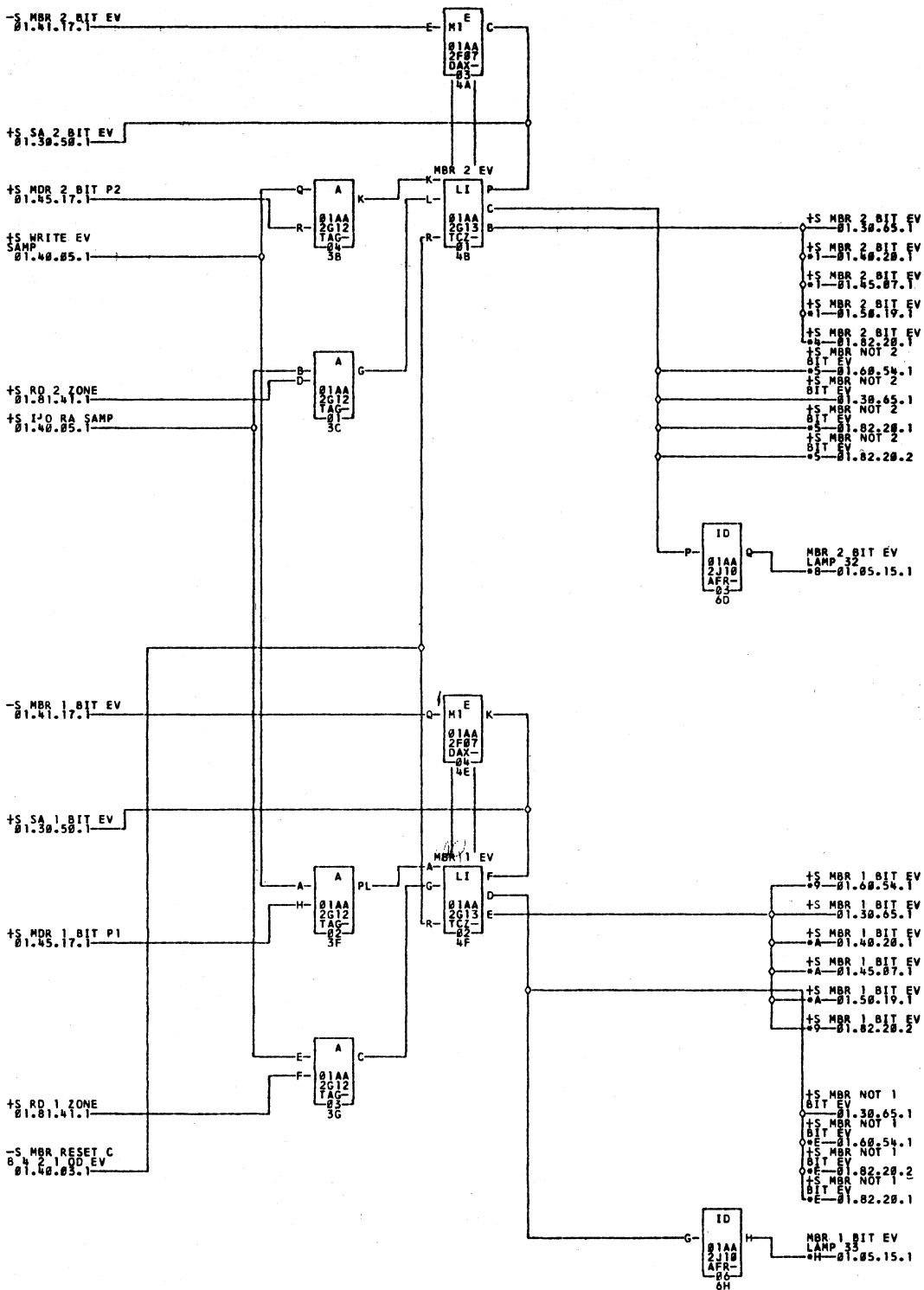
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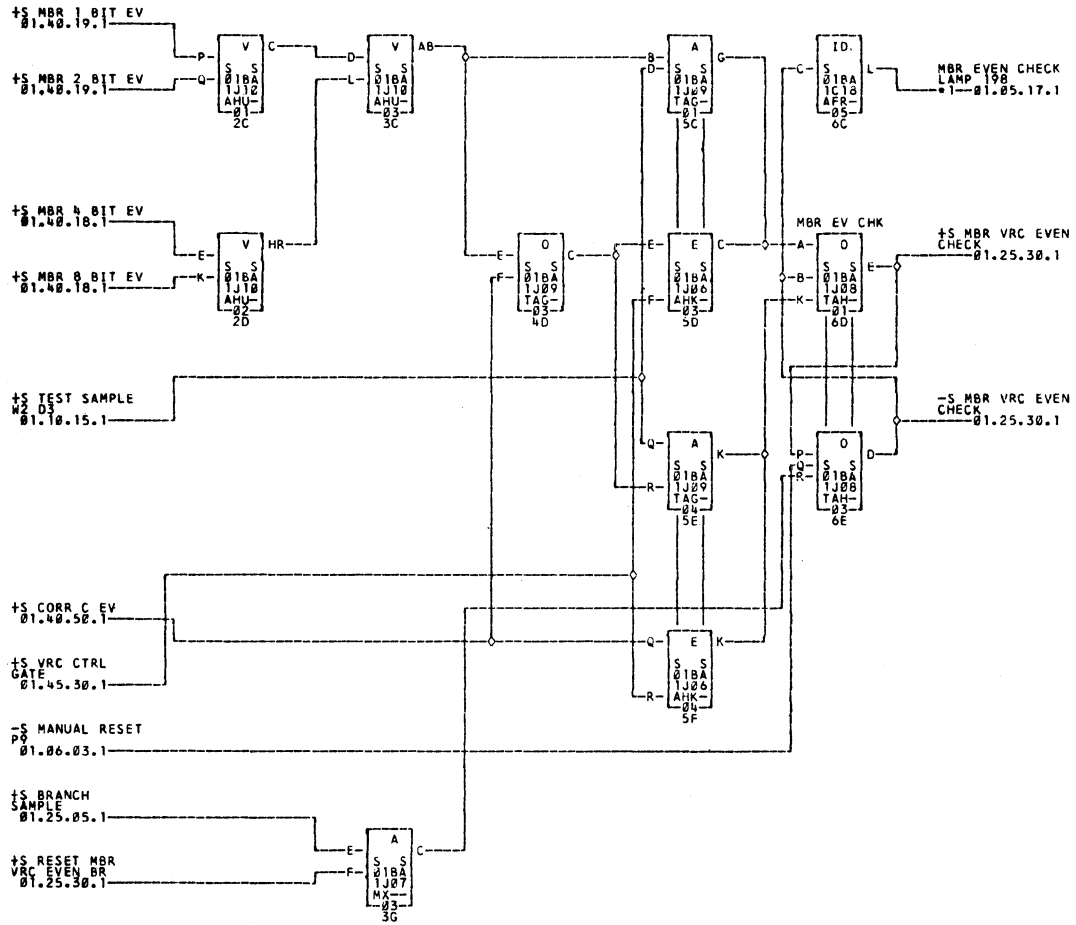
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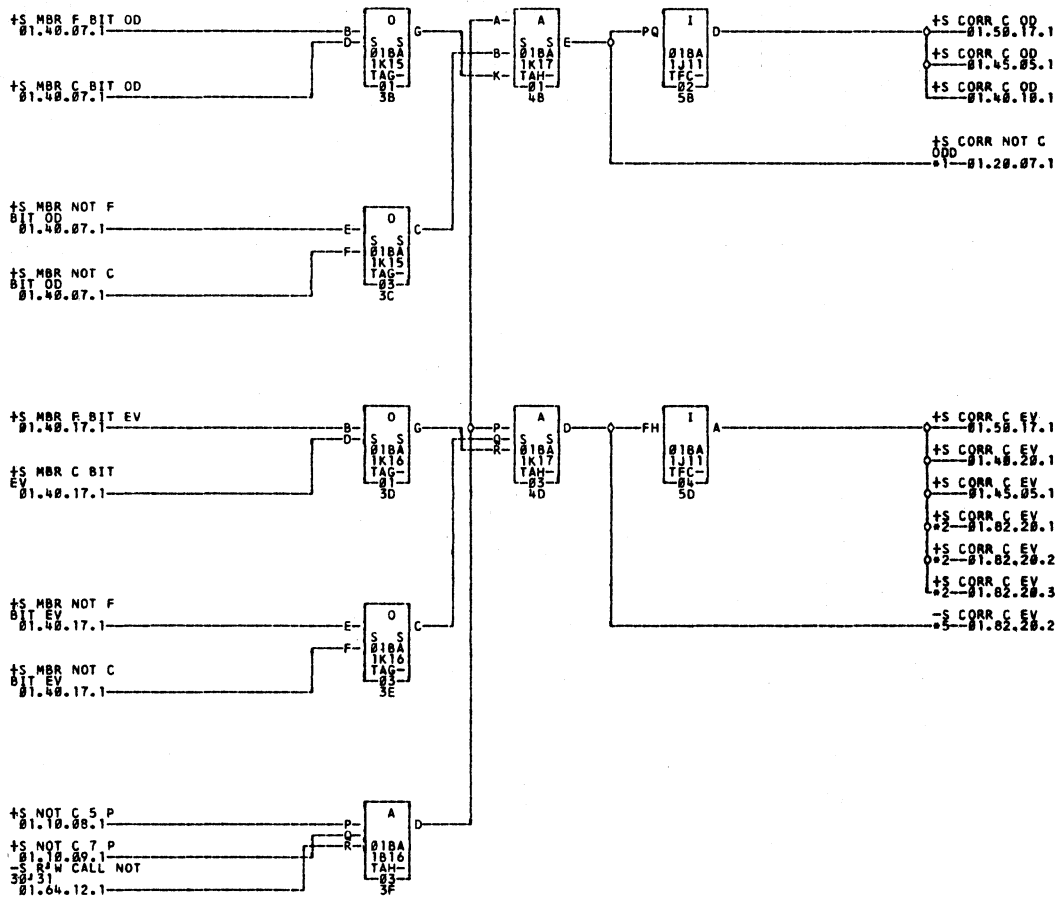
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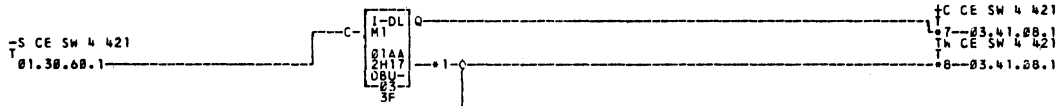
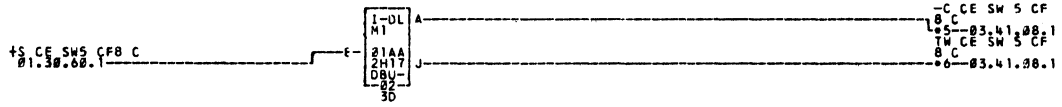
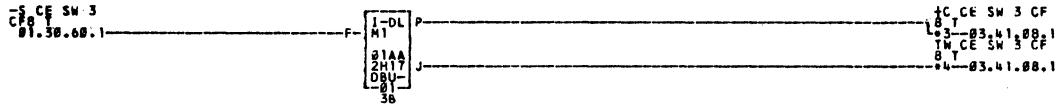
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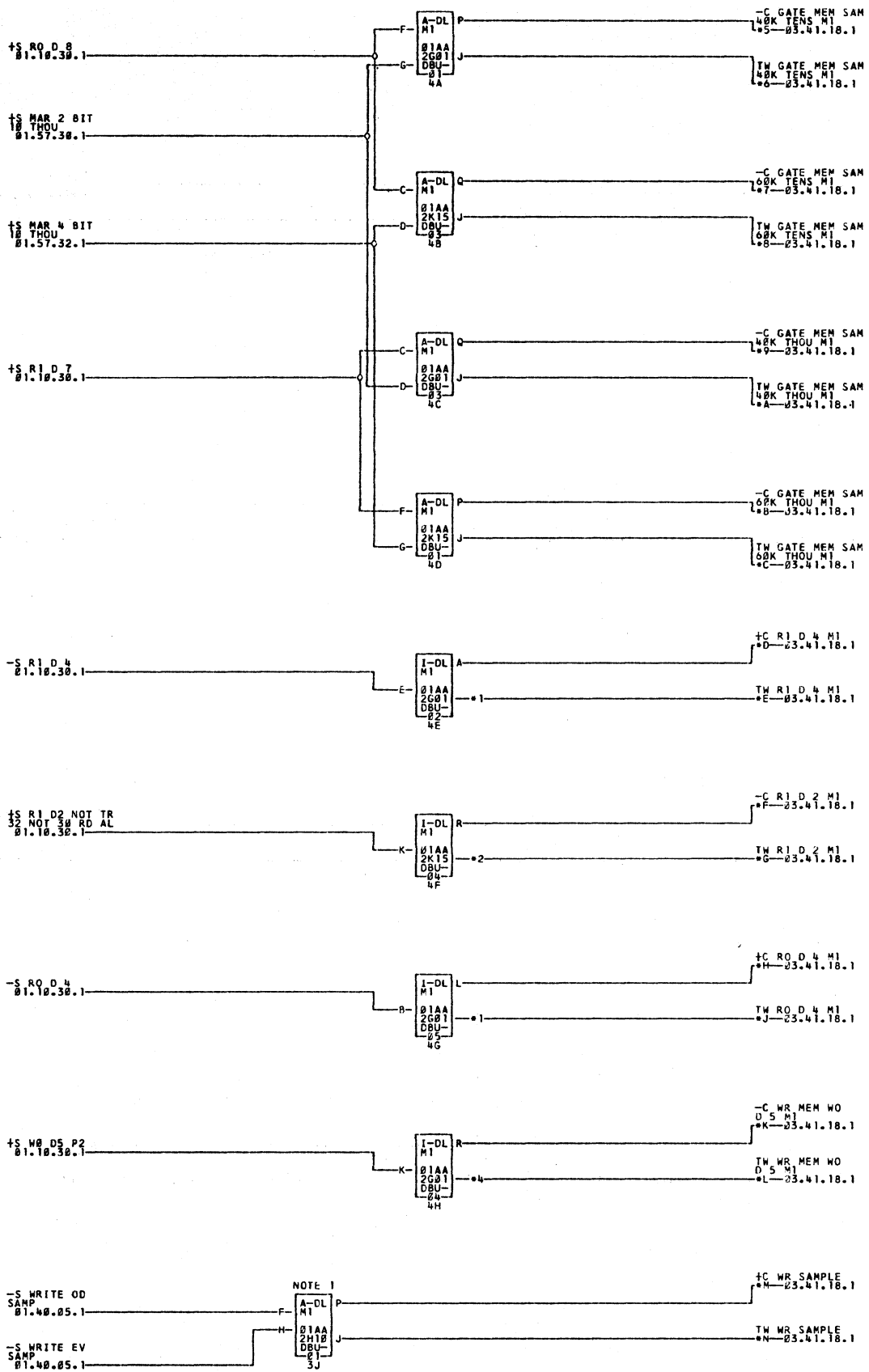
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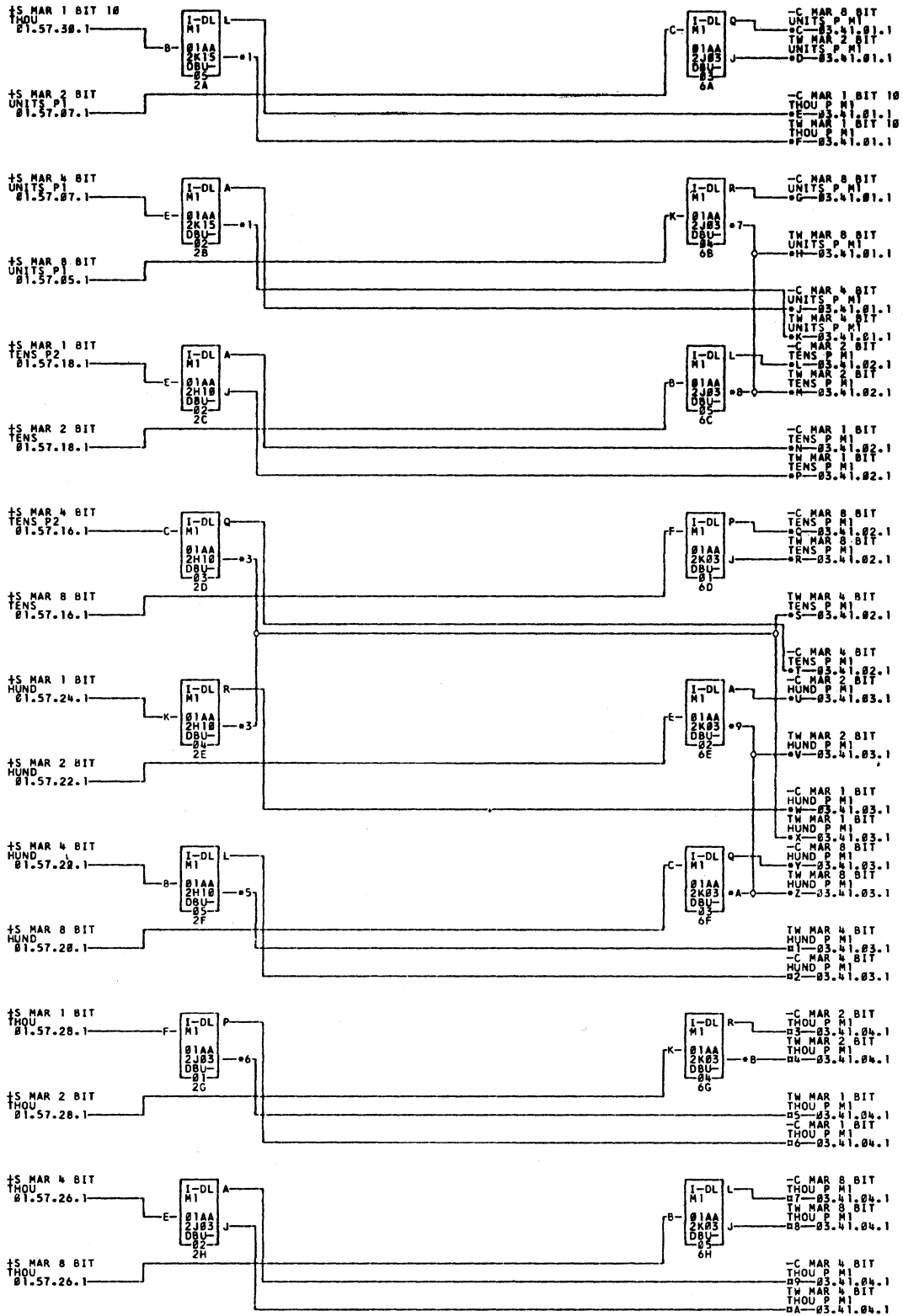
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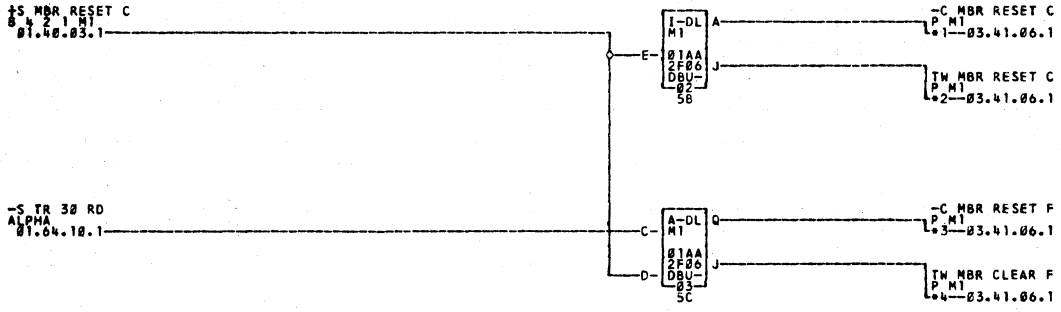
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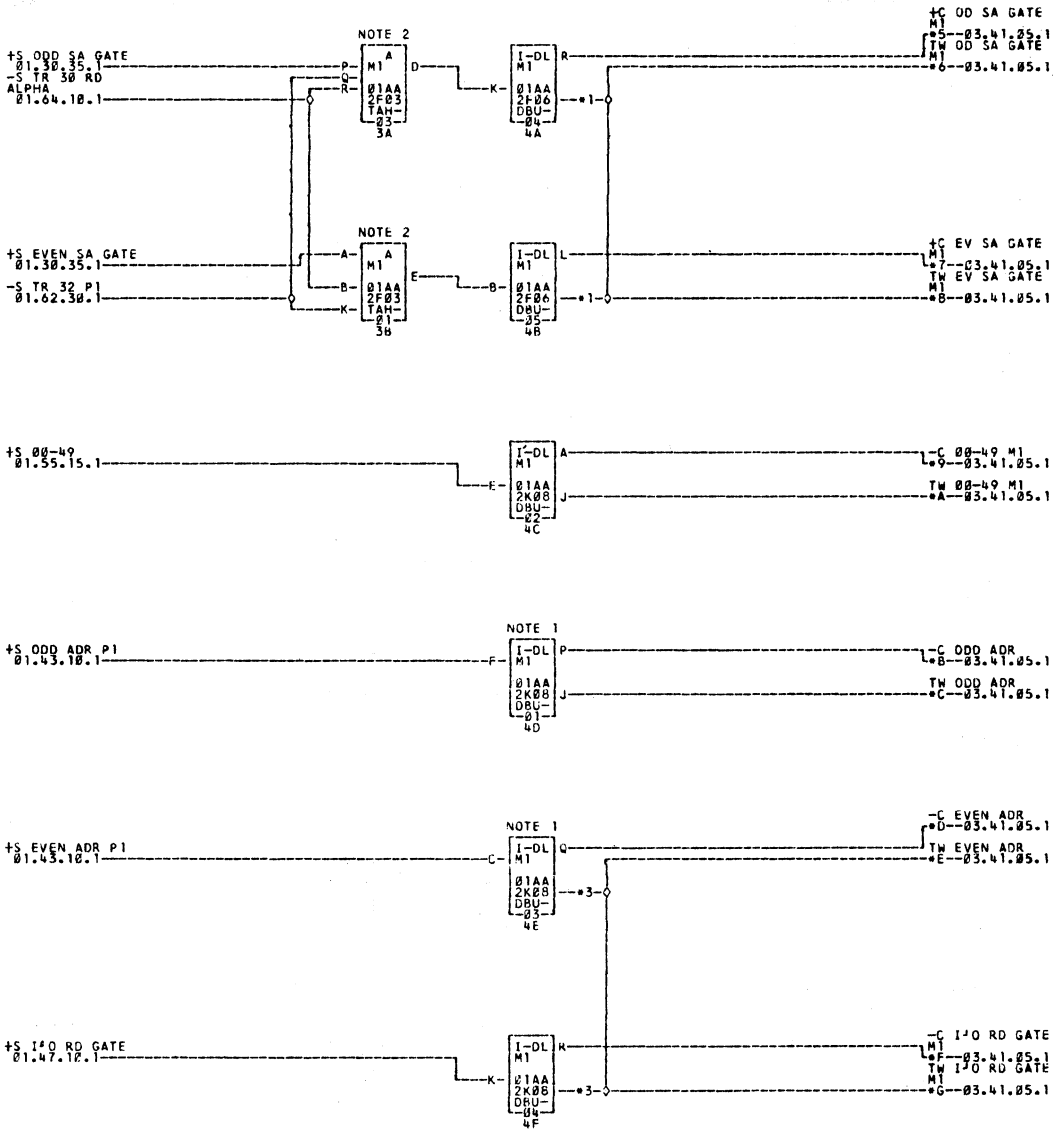


- NOTE 1
- | | | | | | |
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| *E-01AXG25 | *F-01AXG28 | *G-01AXG27 | *H-01AXG30 | *J-01AXG29 | *K-01AXG32 |
| *L-01AXG31 | *M-01AXH02 | *N-01AXH01 | | | |

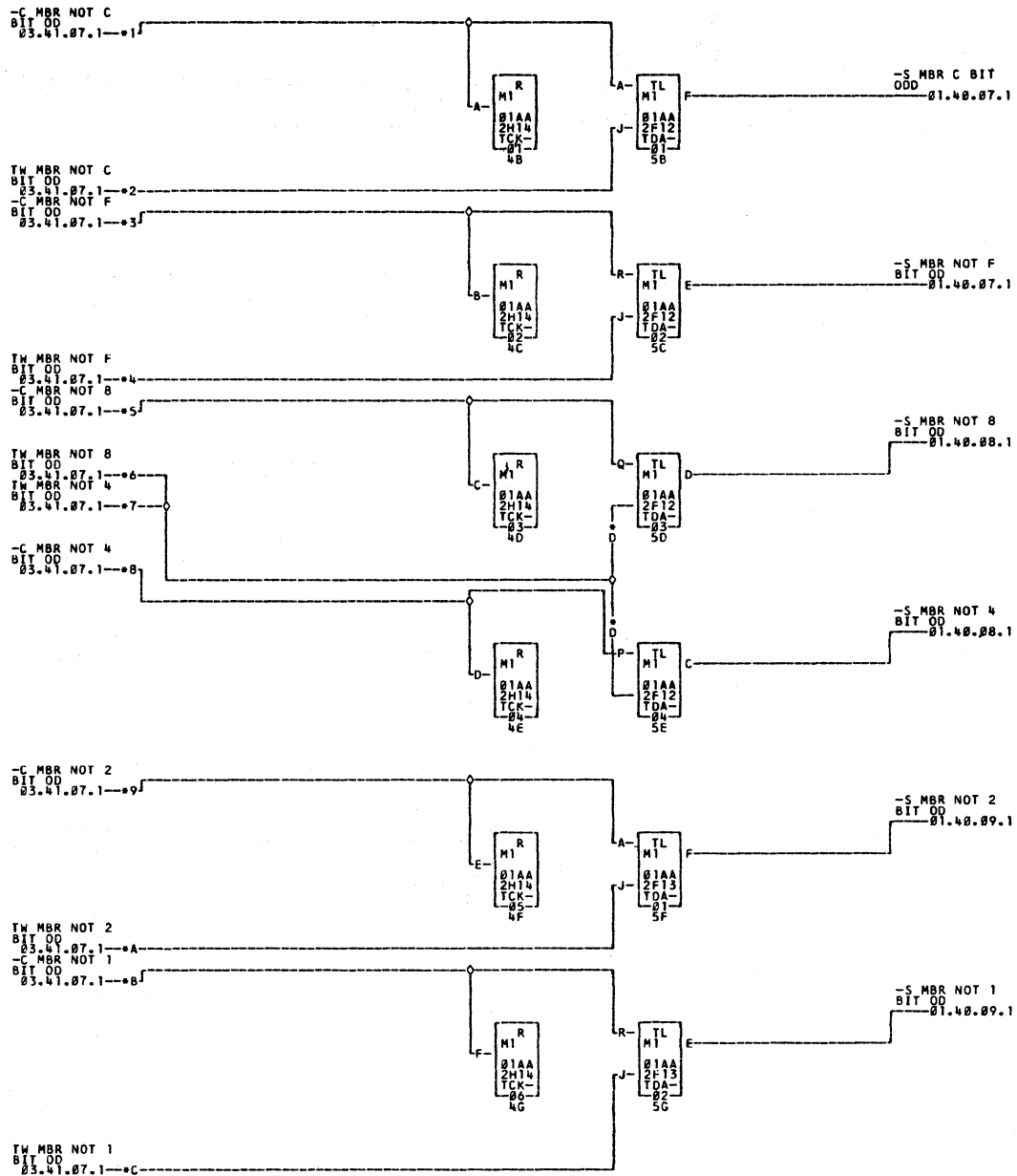


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- *9-01A2K04J *A-01A2K04J *B-01A2K02J *C-01AXD08 *D-01AXD07 *E-01AXD06
- *F-01AXD05 *G-01AXD12 *H-01AXD11 *J-01AXD10 *K-01AXD09 *L-01AXD16
- *M-01AXD15 *N-01AXD14 *P-01AXD13 *Q-01AXD22 *R-01AXD19 *S-01AXD17
- *T-01AXD18 *U-01AXD24 *V-01AXD23 *W-01AXD22 *X-01AXD21 *Y-01AXD28
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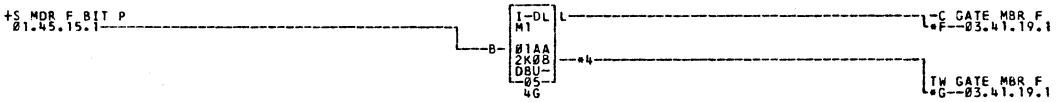
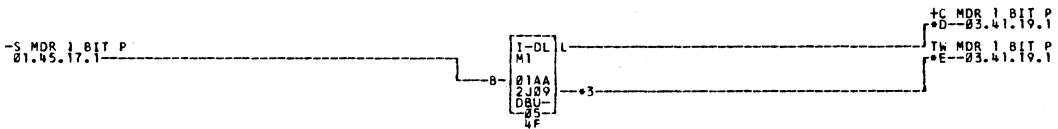
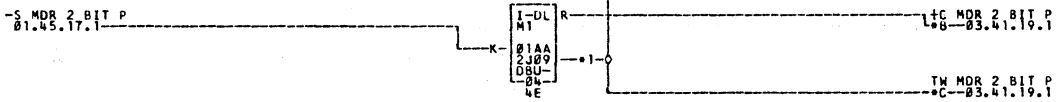
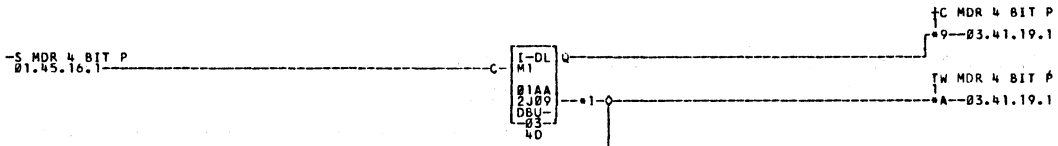
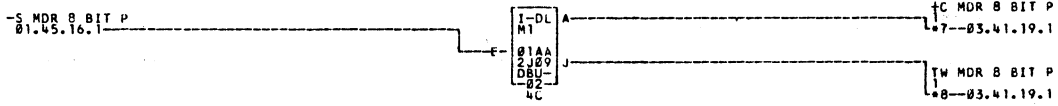
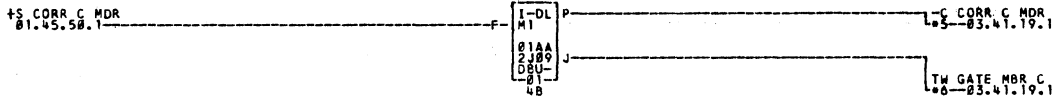




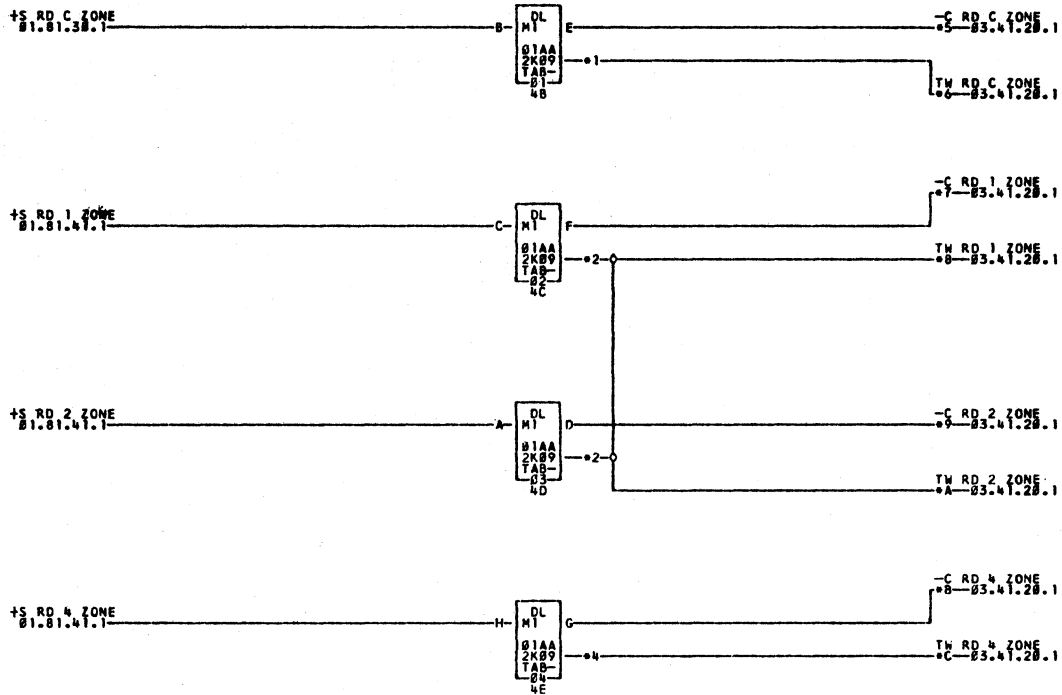
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- *3--01A2K09J
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- *7--01AXG08
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- *0--01AXG10
- *1--01AXG09
- *8--01AXG12
- *C--01AXG11
- *D--01AXG14
- *E--01AXG13
- *2--01AXG16
- *C--01AXG15



- 1--01AXJ02
- 2--01AXJ01
- 3--01AXJ04
- 4--01AXJ03
- 5--01AXJ06
- 6--01AXJ05
- 7--01AXJ07
- 8--01AXJ08
- 9--01AXJ10
- A--01AXJ09
- B--01AXJ12
- C--01AXJ11
- D--01A2G12J



- *1--01A2J10J *3--01A2J08J *4--01A2K10J *5--01AXH10 *6--01AXH09 *7--01AXH12
- *8--01AXH11 *9--01AXH14 *A--01AXH13 *B--01AXH16 *C--01AXH15 *D--01AXH18
- *E--01AXH17 *F--01AXH28 *G--01AXH19



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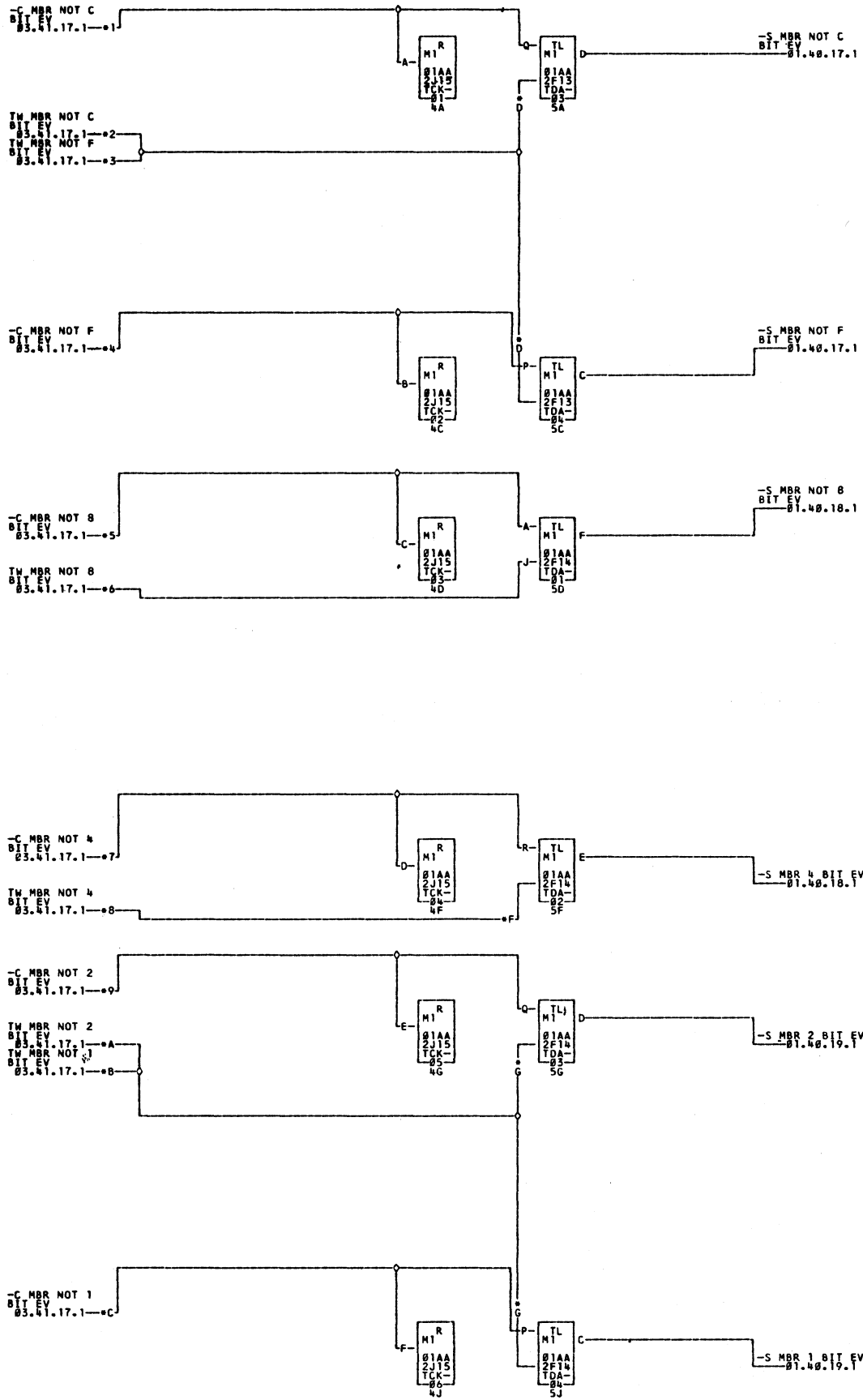
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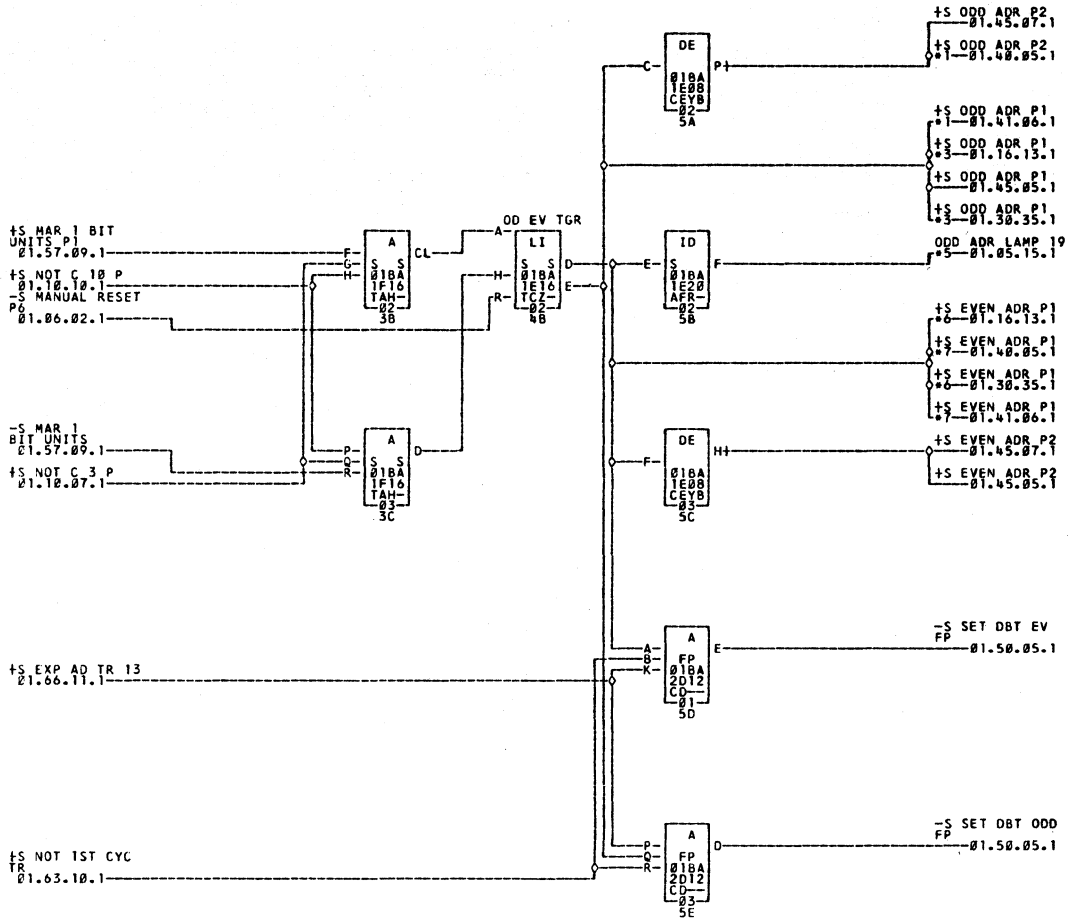
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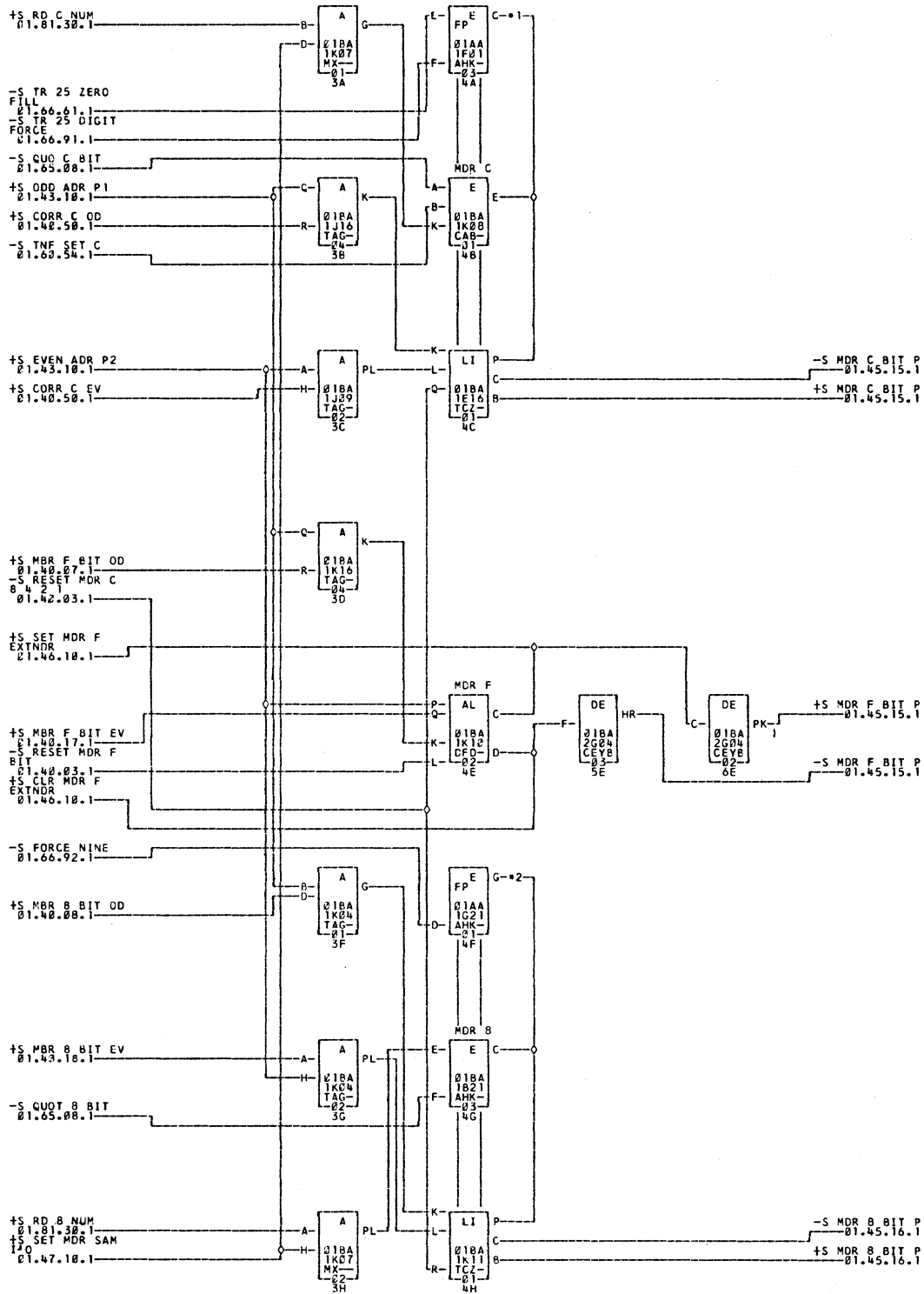
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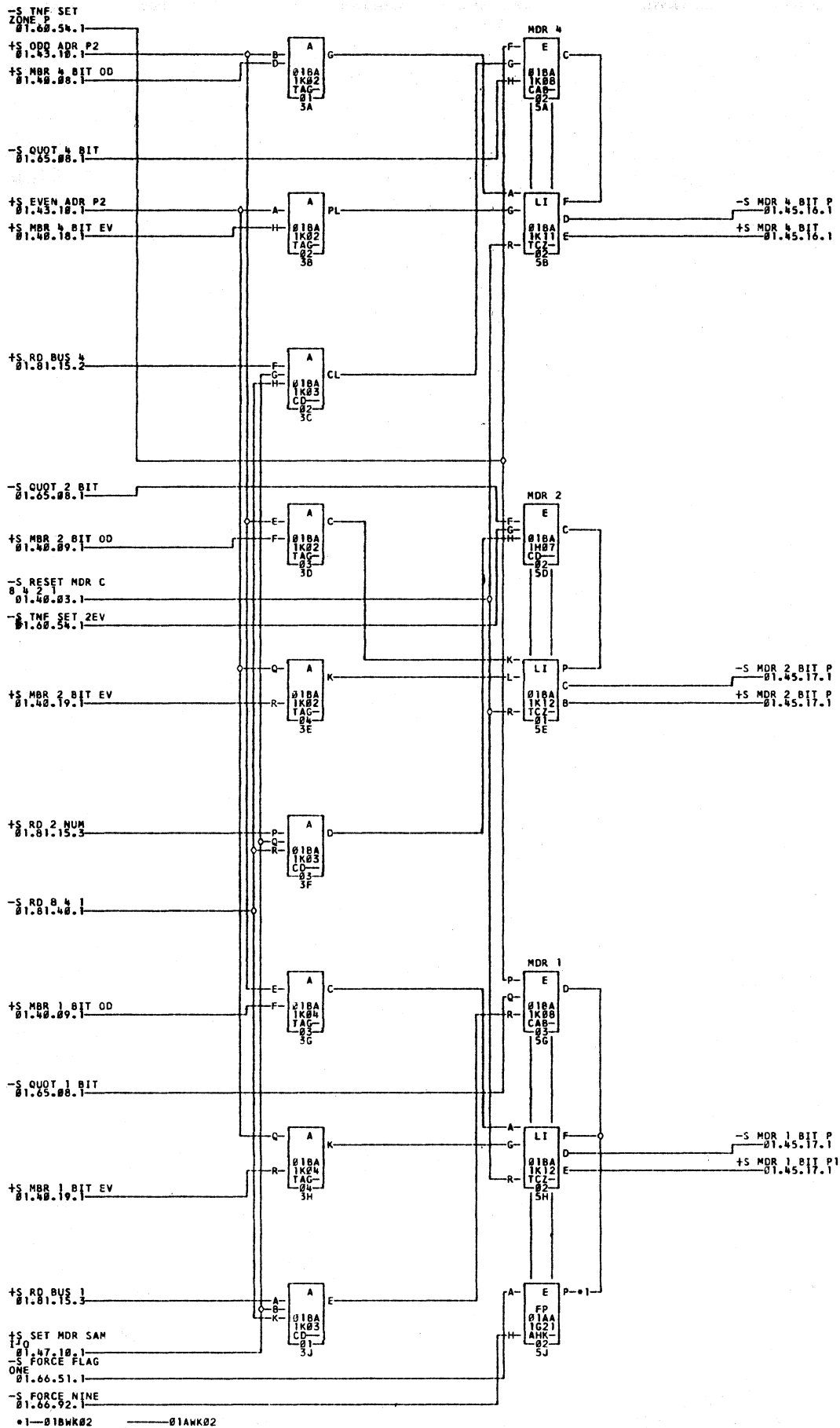
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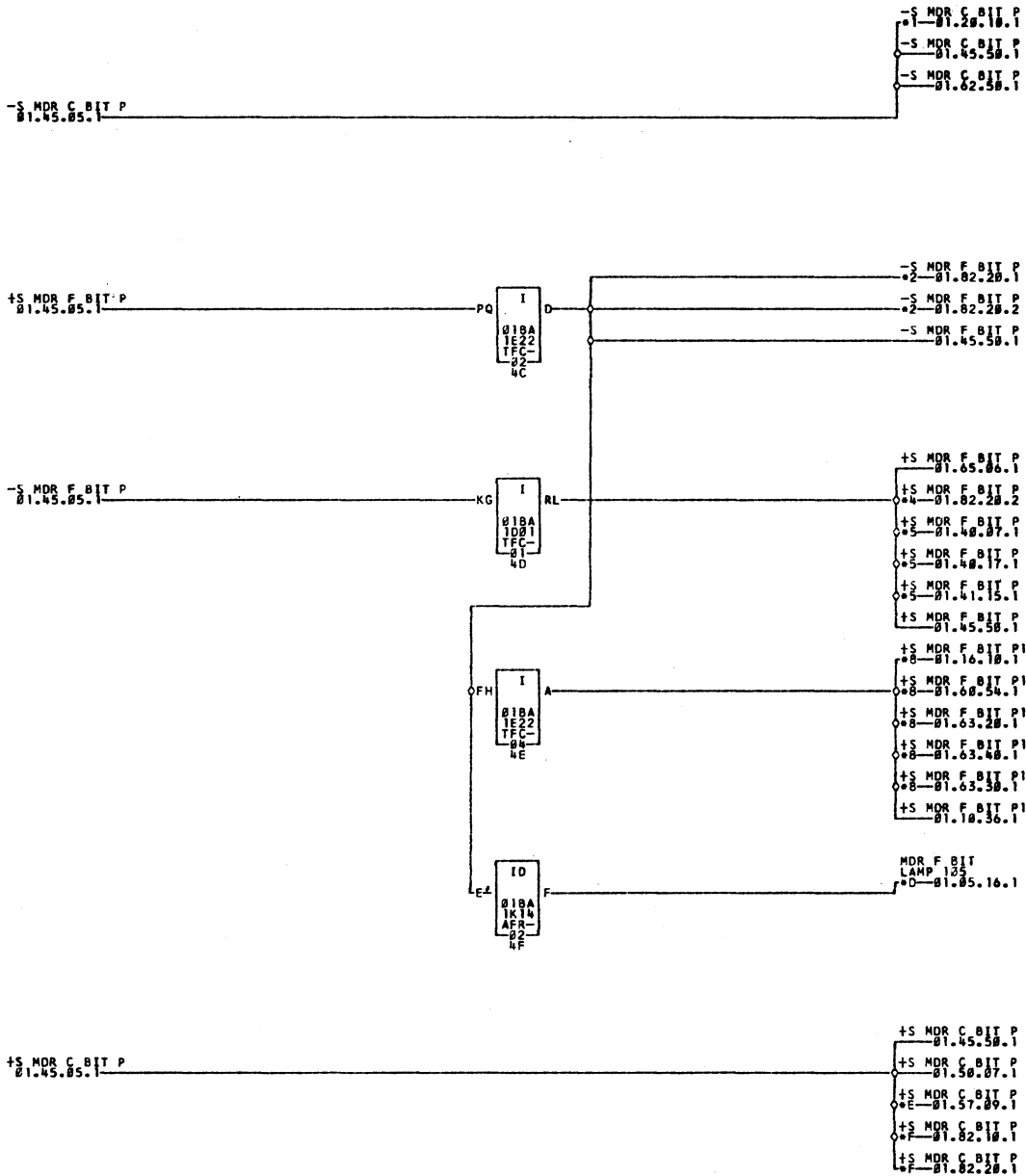
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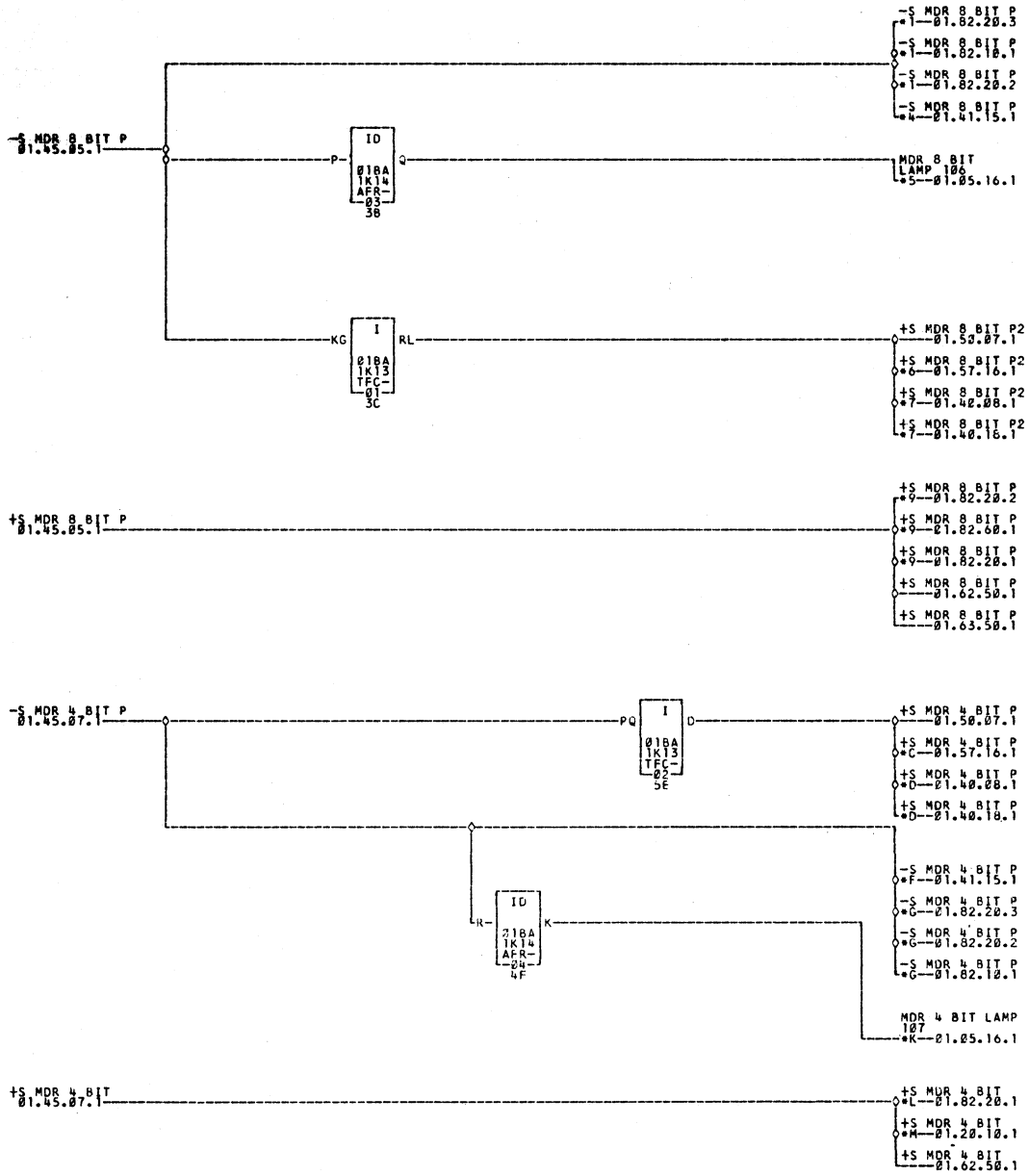


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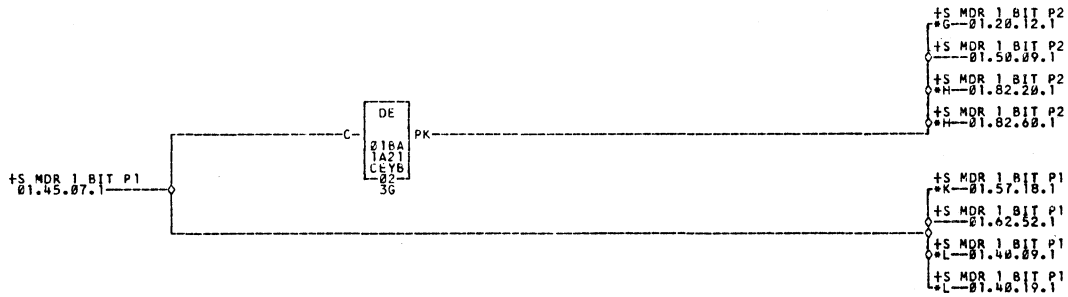
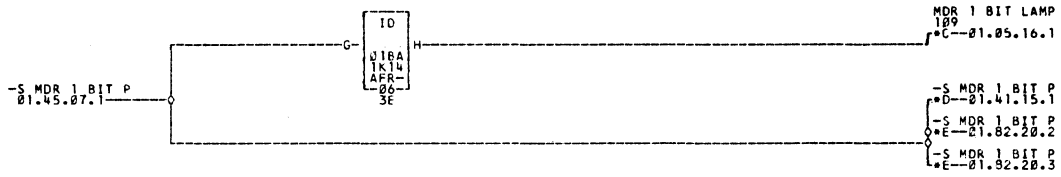
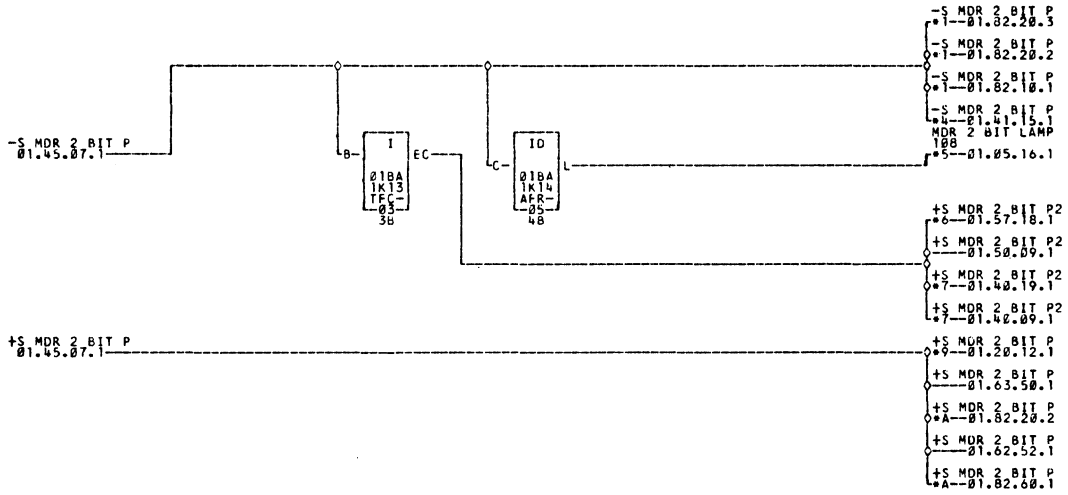




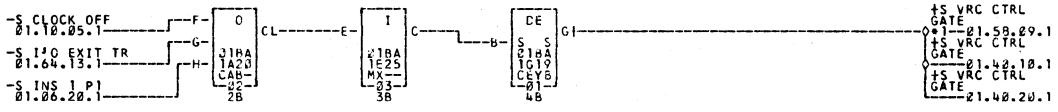
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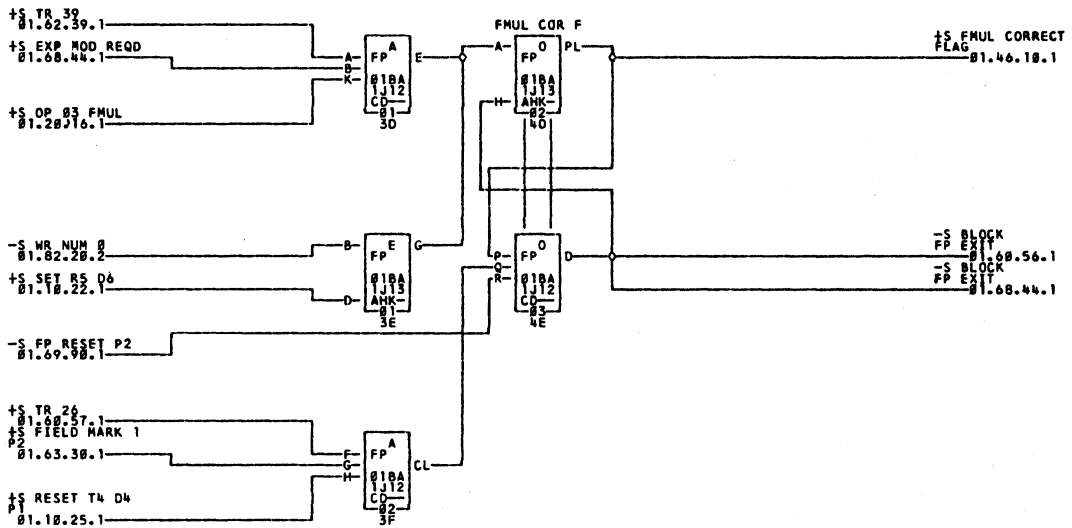
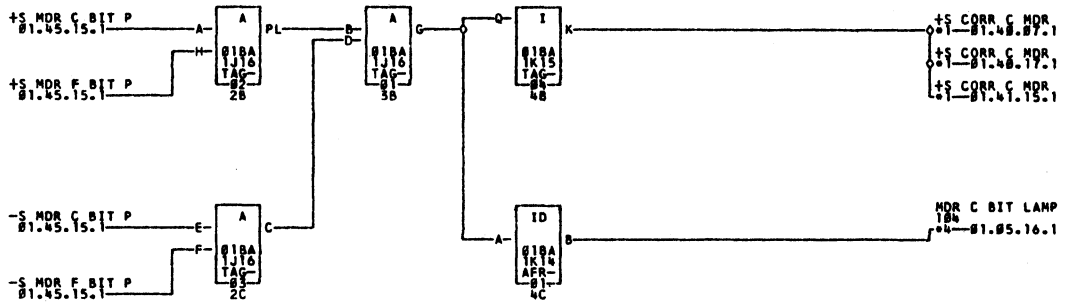


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- 01DXA01
- 01A1206C
- *C---018WJ13
- 01DXA04
- *4---018WJ15
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- 01A1204B
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- *7---018WJ12
- 01A1207C
- *G---018XJ05
- 0182204B
- *5---018XF04
- 01AWJ12
- 01AZZ07C
- 01DXA05
- *6---018WJ12
- *9---018XJ02
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- *K---018XF05



- *1---018XJ20 -----01DXA20 *4---018WJ17 -----01AWJ17 *5---018XF06 *6---018WH07
- 01AWH07 -----01A1209A -----01A2Z09A -----01AWH07 -----01AWH07 -----0181209A
- 0182Z09A *A---018XJ21 -----01DXA21 *C---018XF07 *D---018WJ19 -----01AWJ16
- *E---018XJ22 -----01DXA22 *G---0181Z10A -----01A2Z10A *H---018XJ23 -----01DXA23
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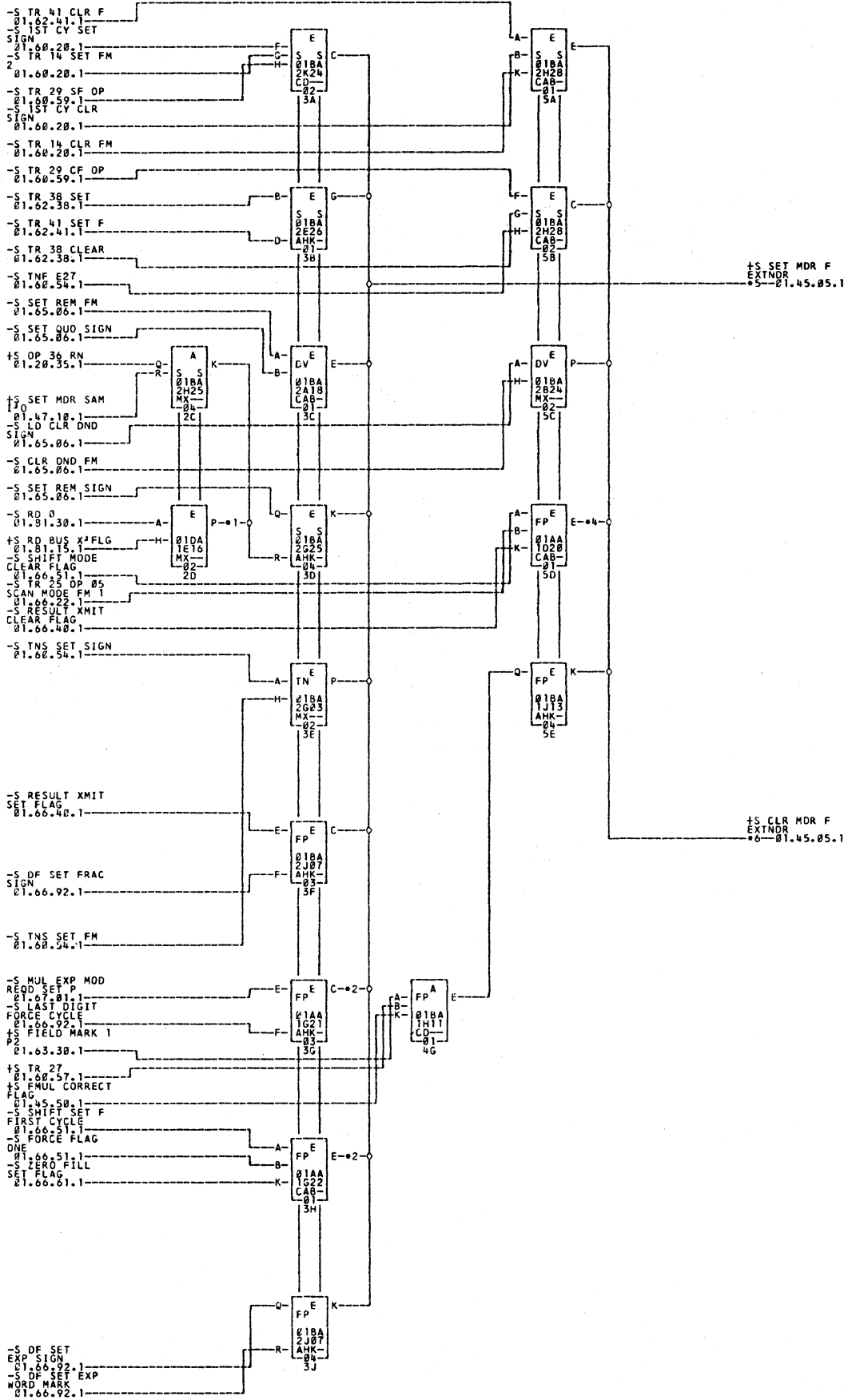




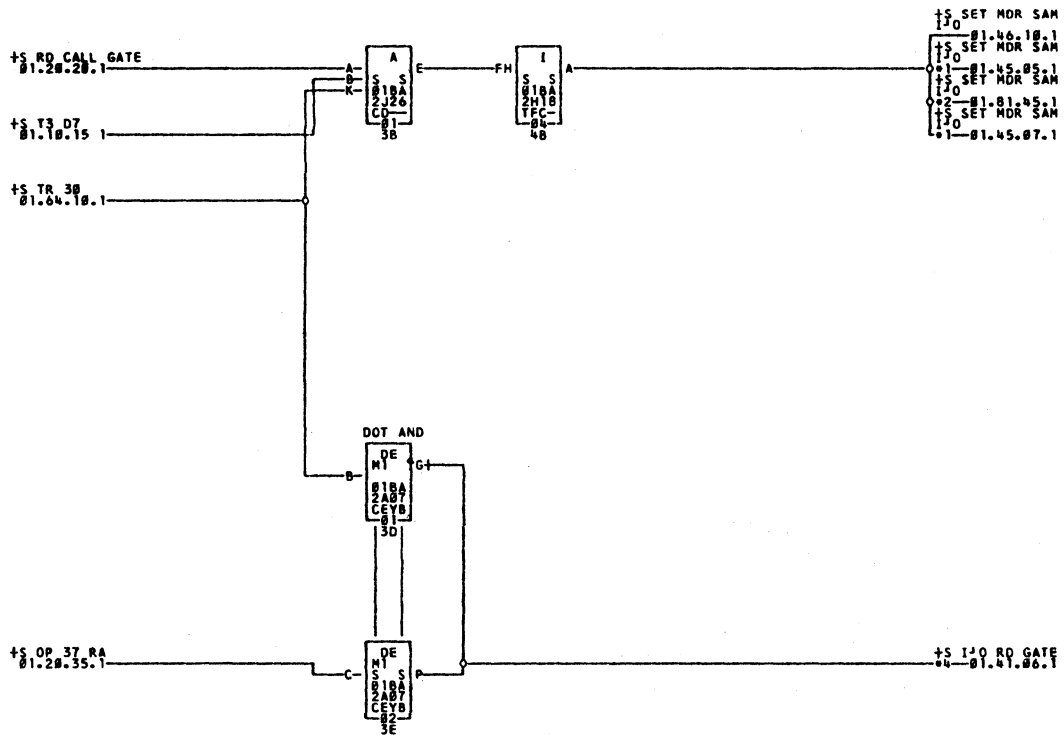
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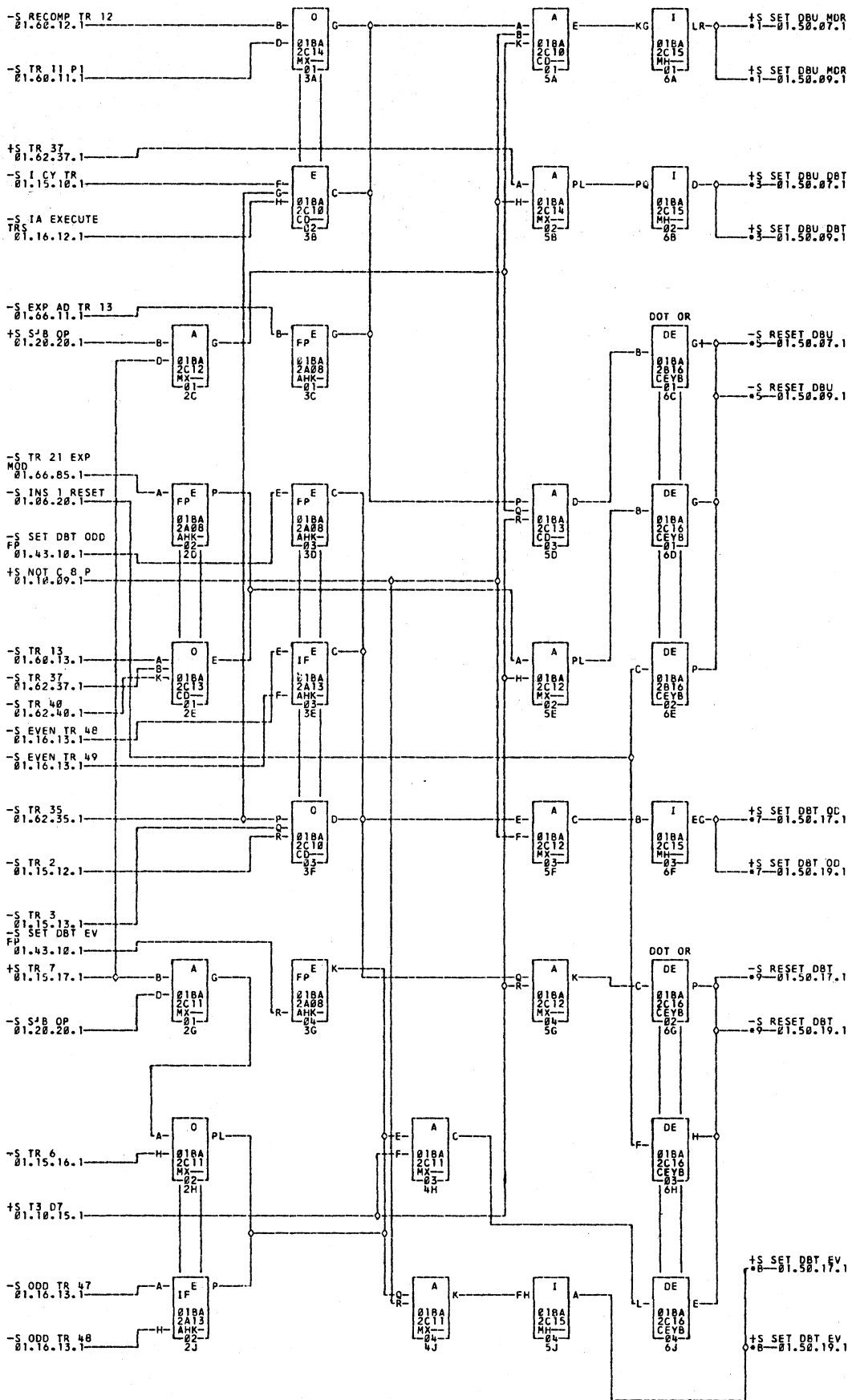
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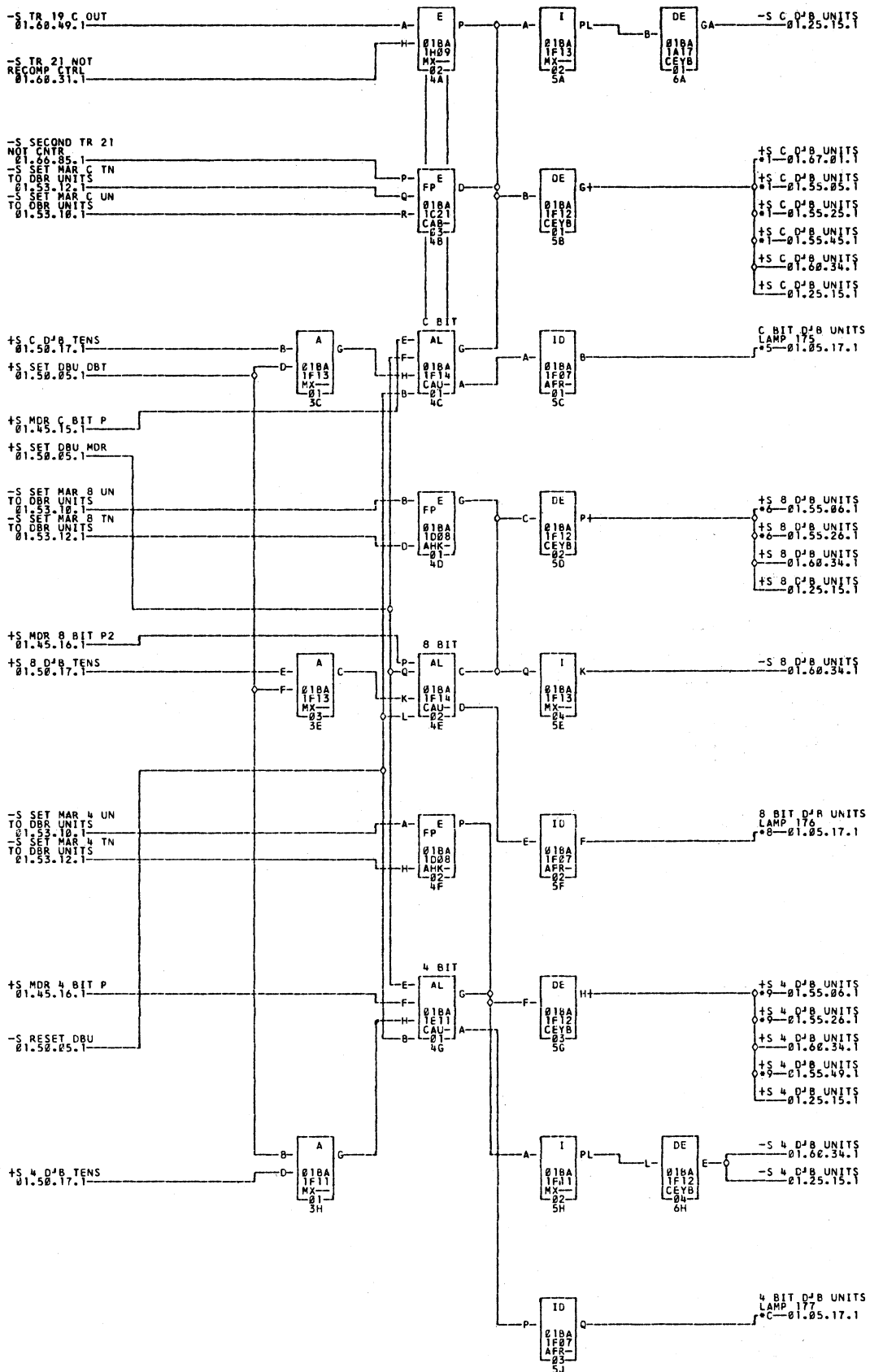
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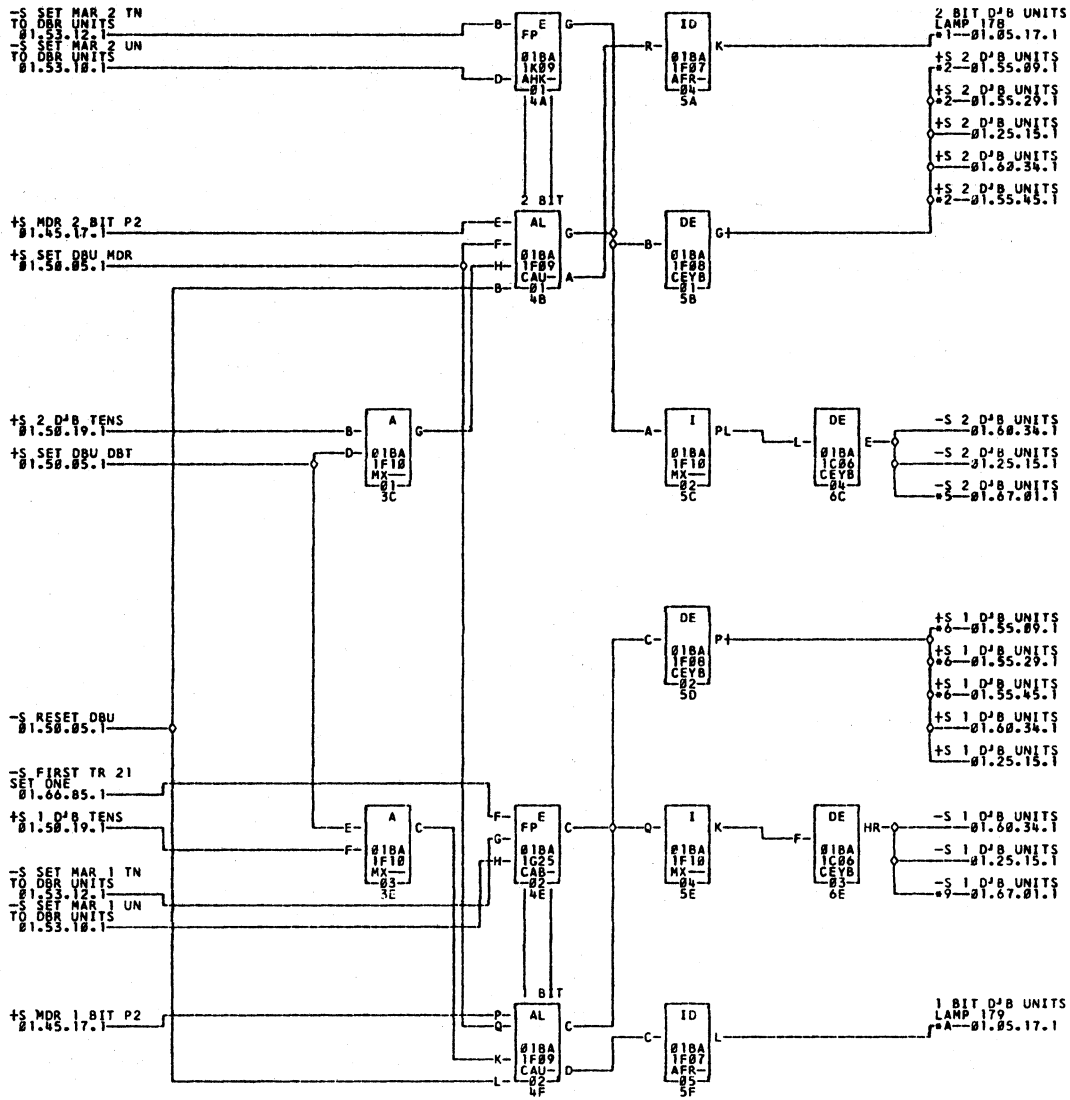
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 *7-01B2Y18B *8-01B1Y18B *9-01B2Y19B *10-01B1Y19B *11-01B2Y20B *12-01B1Y20B



*1--018WD18 *5--018XF08 *6--018WD19 *8--018XF09
 *9--018WD20 *C--018XF10



•1—01BXF11
—01AWD22

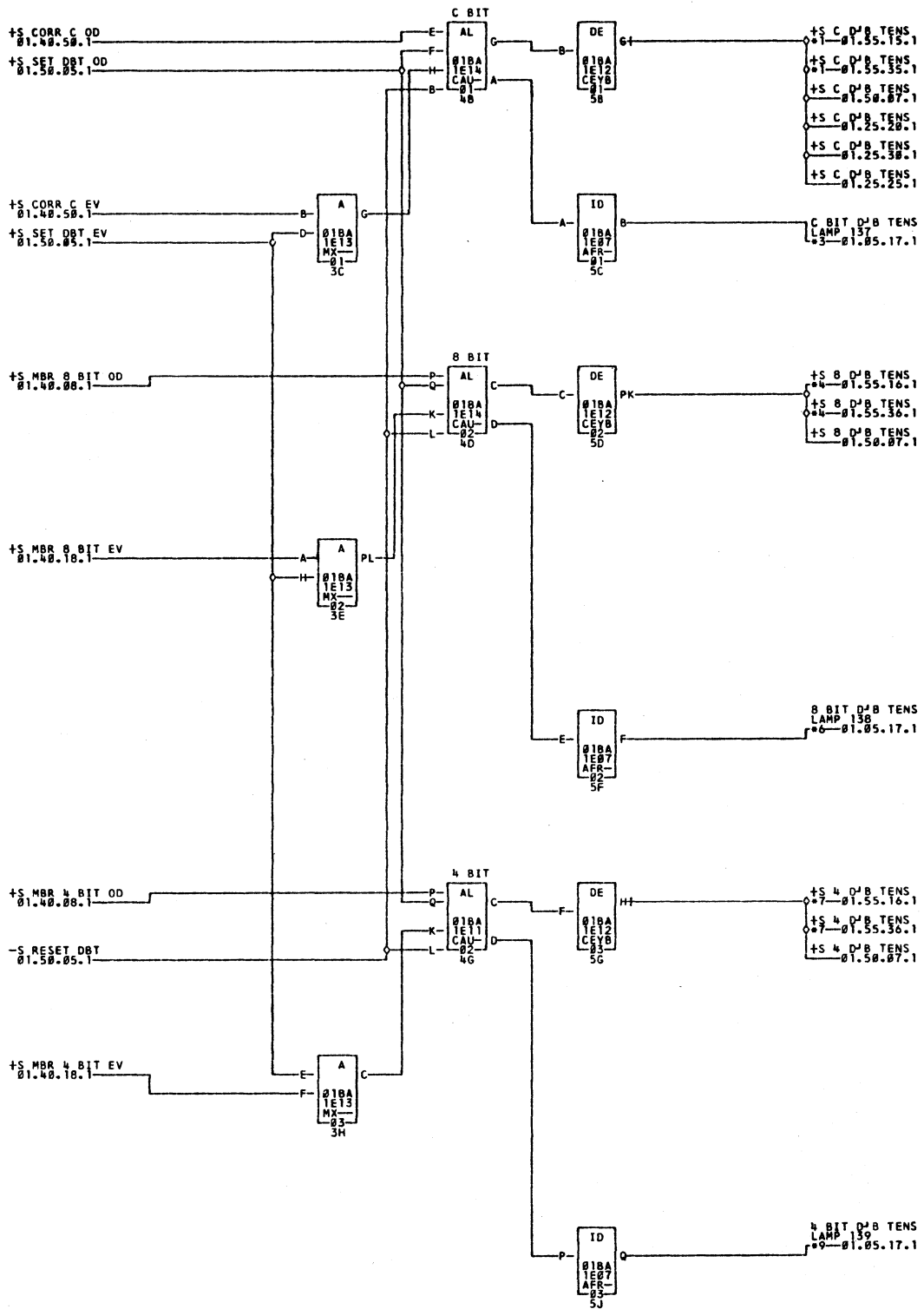
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•9—01AWC06

—01AWD21
—01BWC06

•5—01BXL03
•A—01BXF12

—01AXL03

•6—01BWD22



•1—018WD14
•7—018WD16

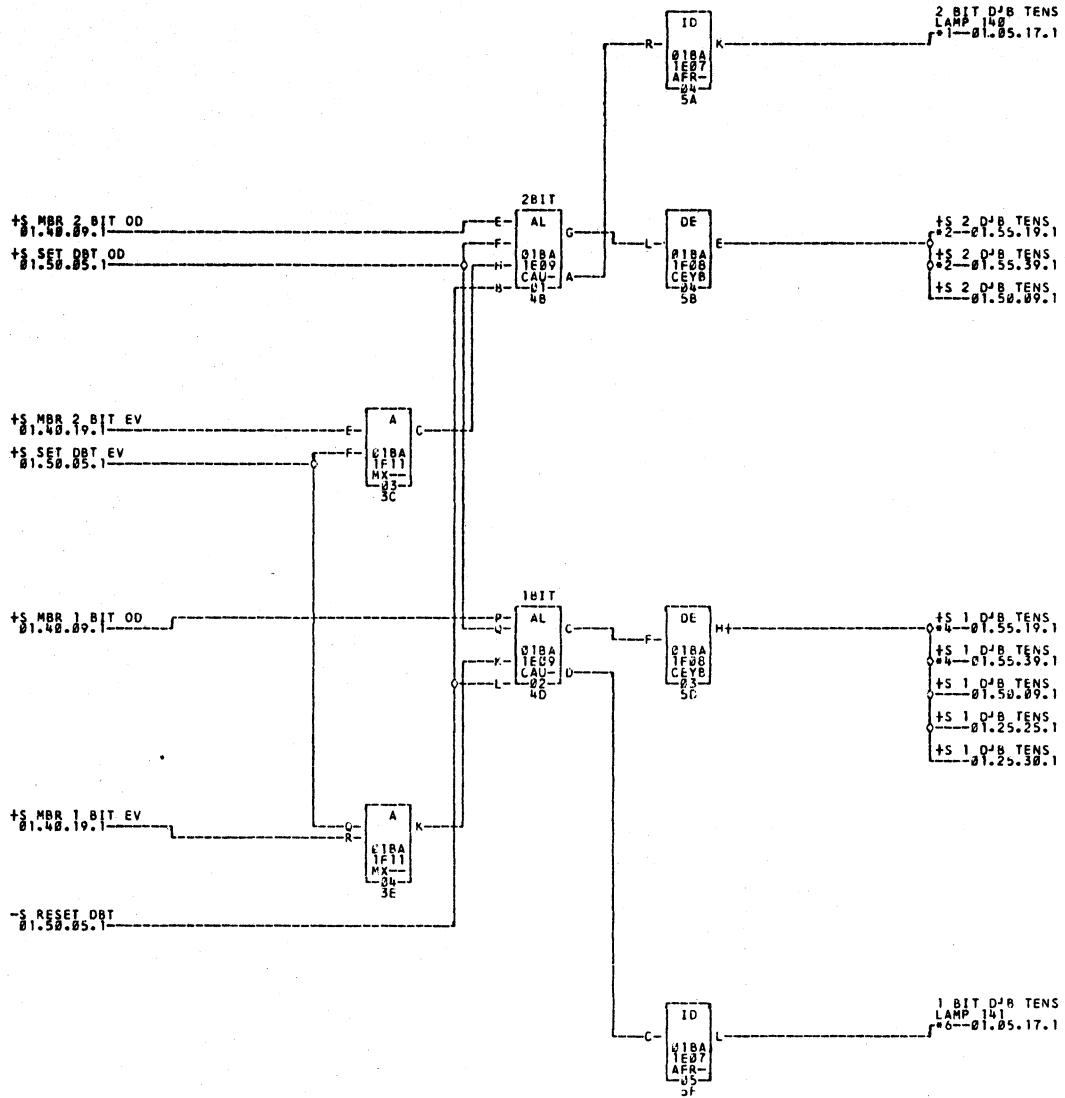
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====01AND16

•3—018XE23
•0—018XE25

•4—018ND15

——01AND15

•6—018XE24



*1--018XE26

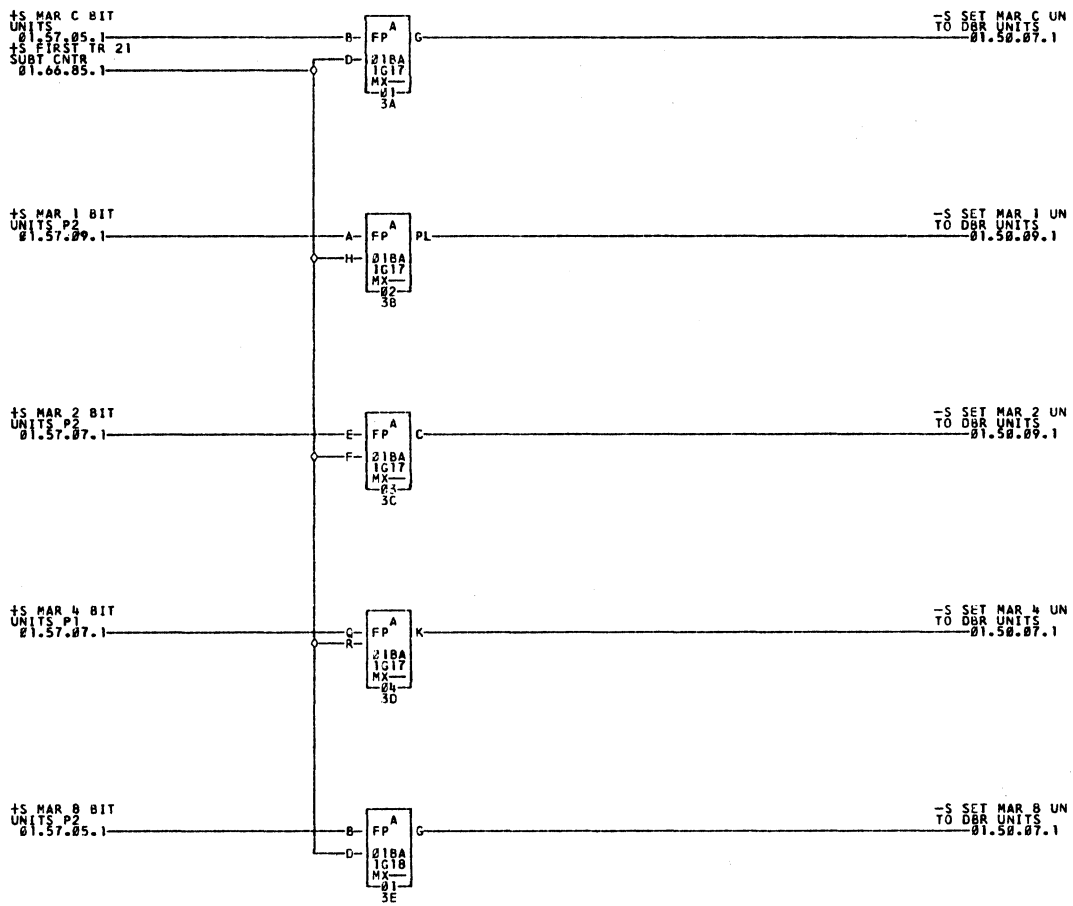
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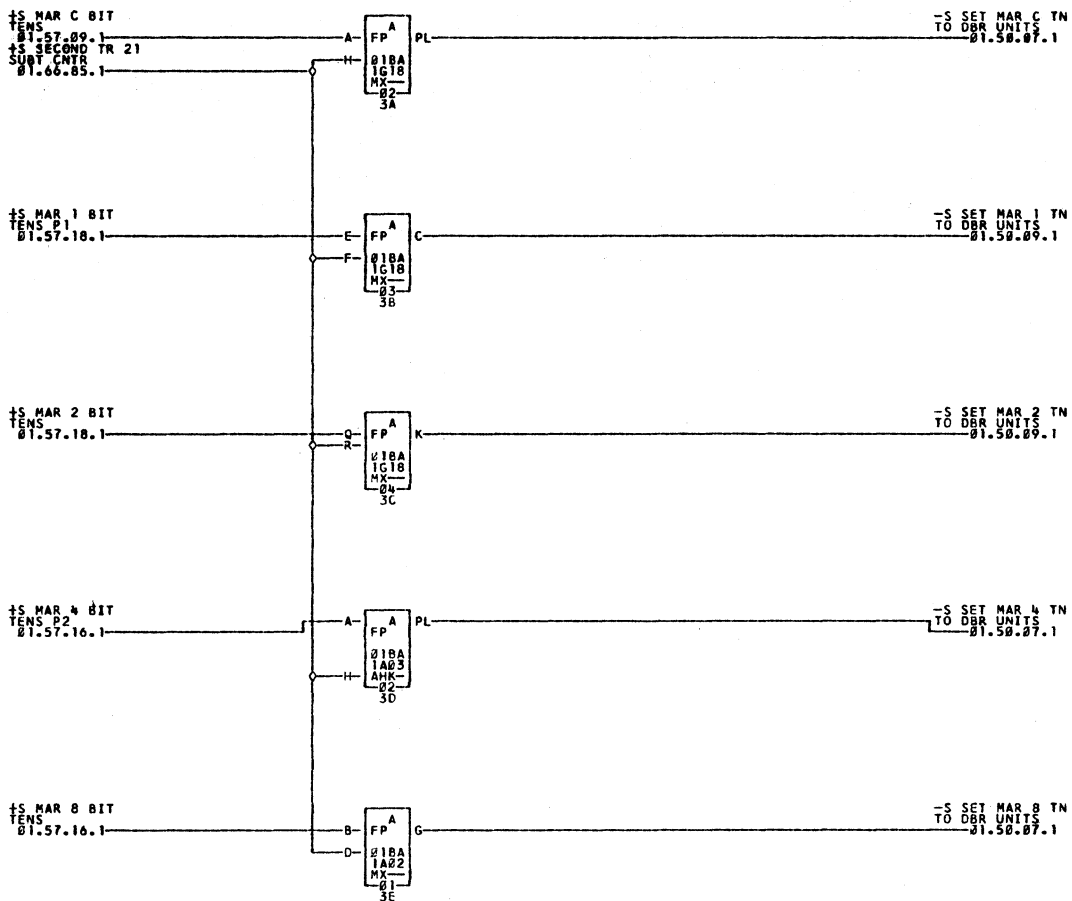
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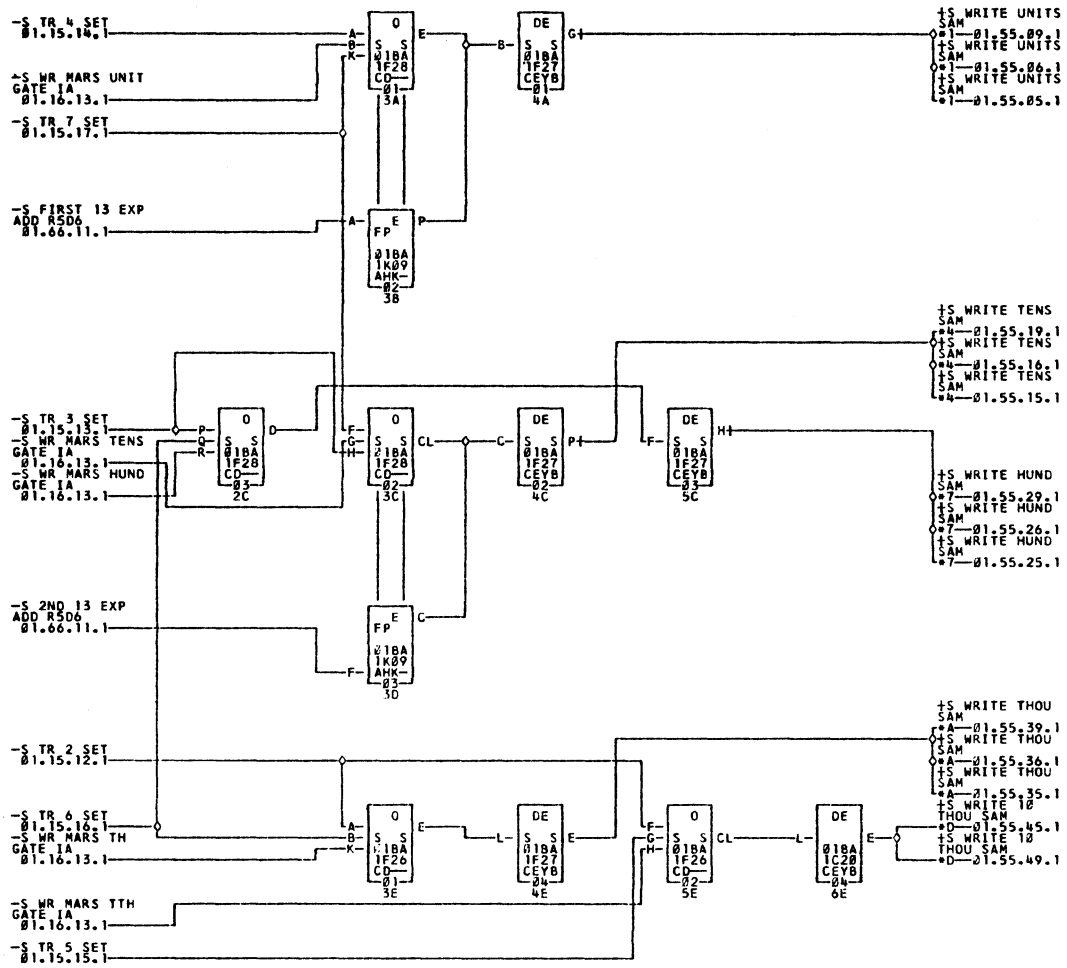
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*6--018XE27







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•A—01BWD28

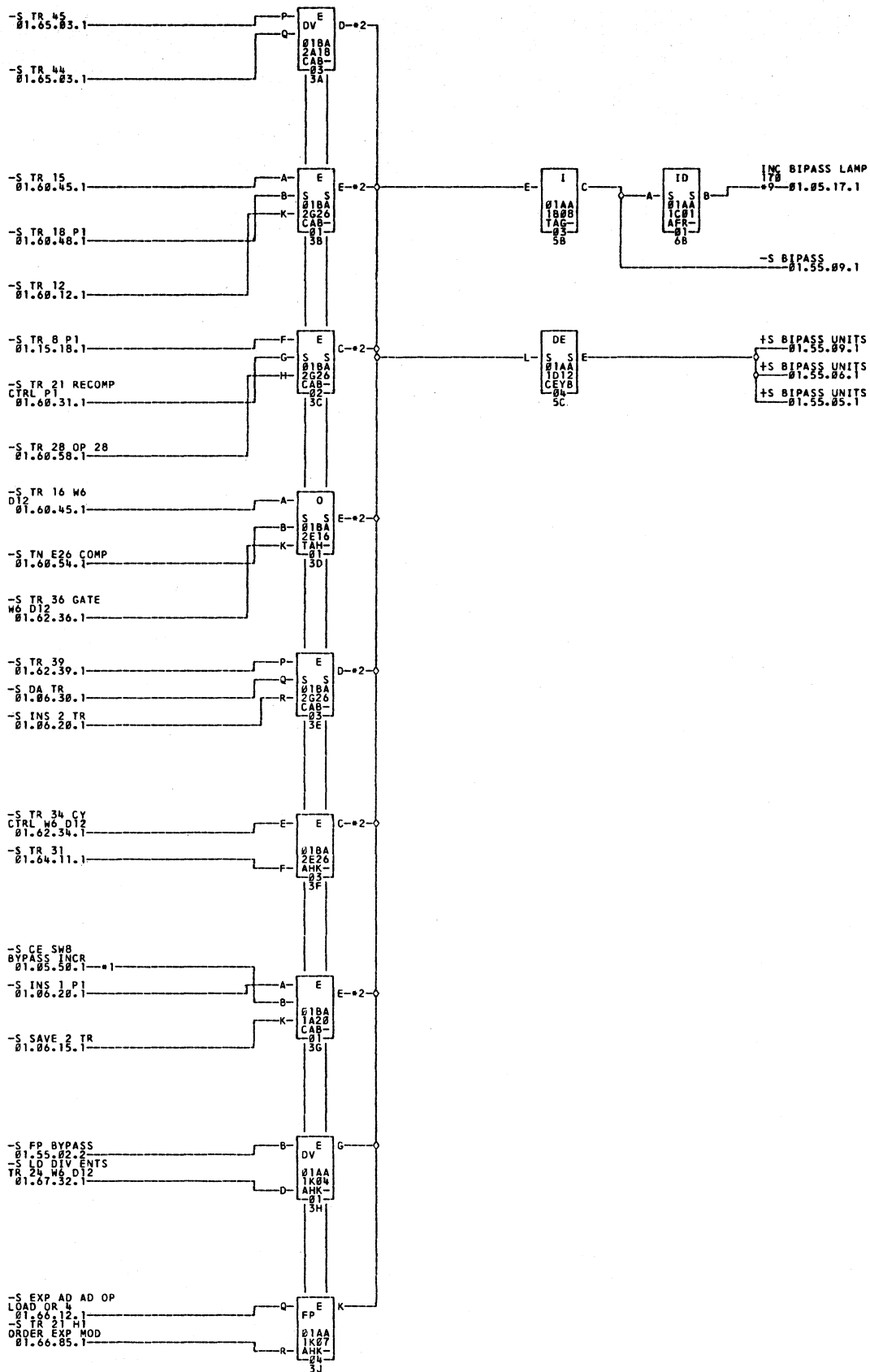
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•4—01BWD26
•D—01BWD29

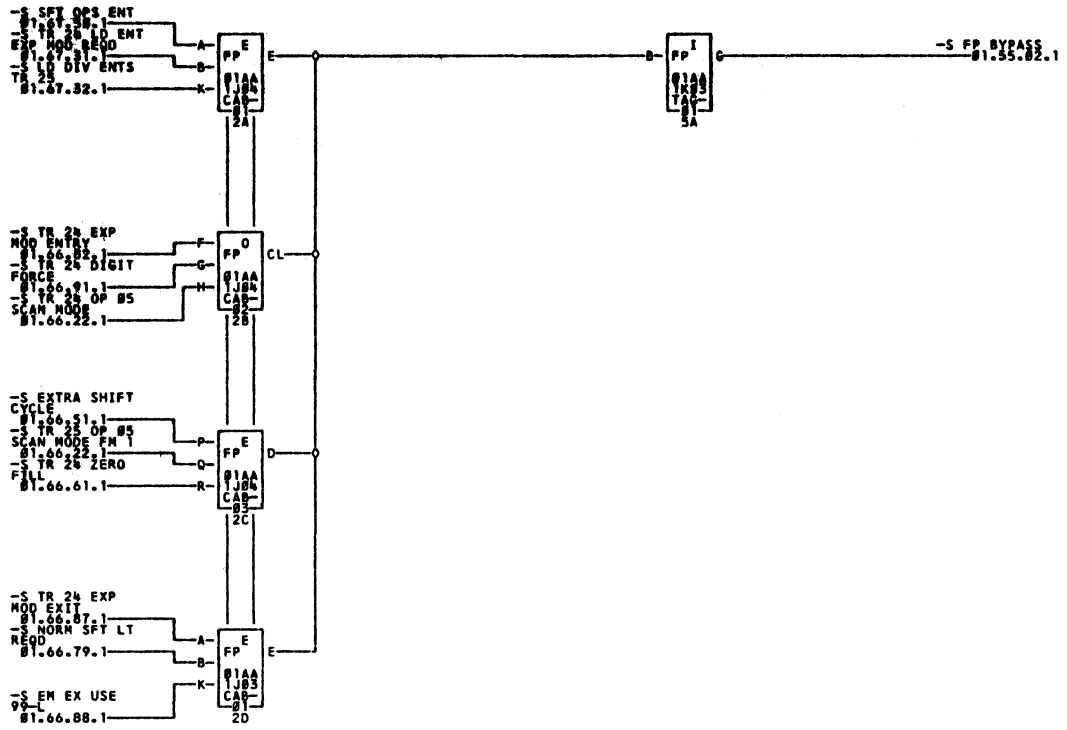
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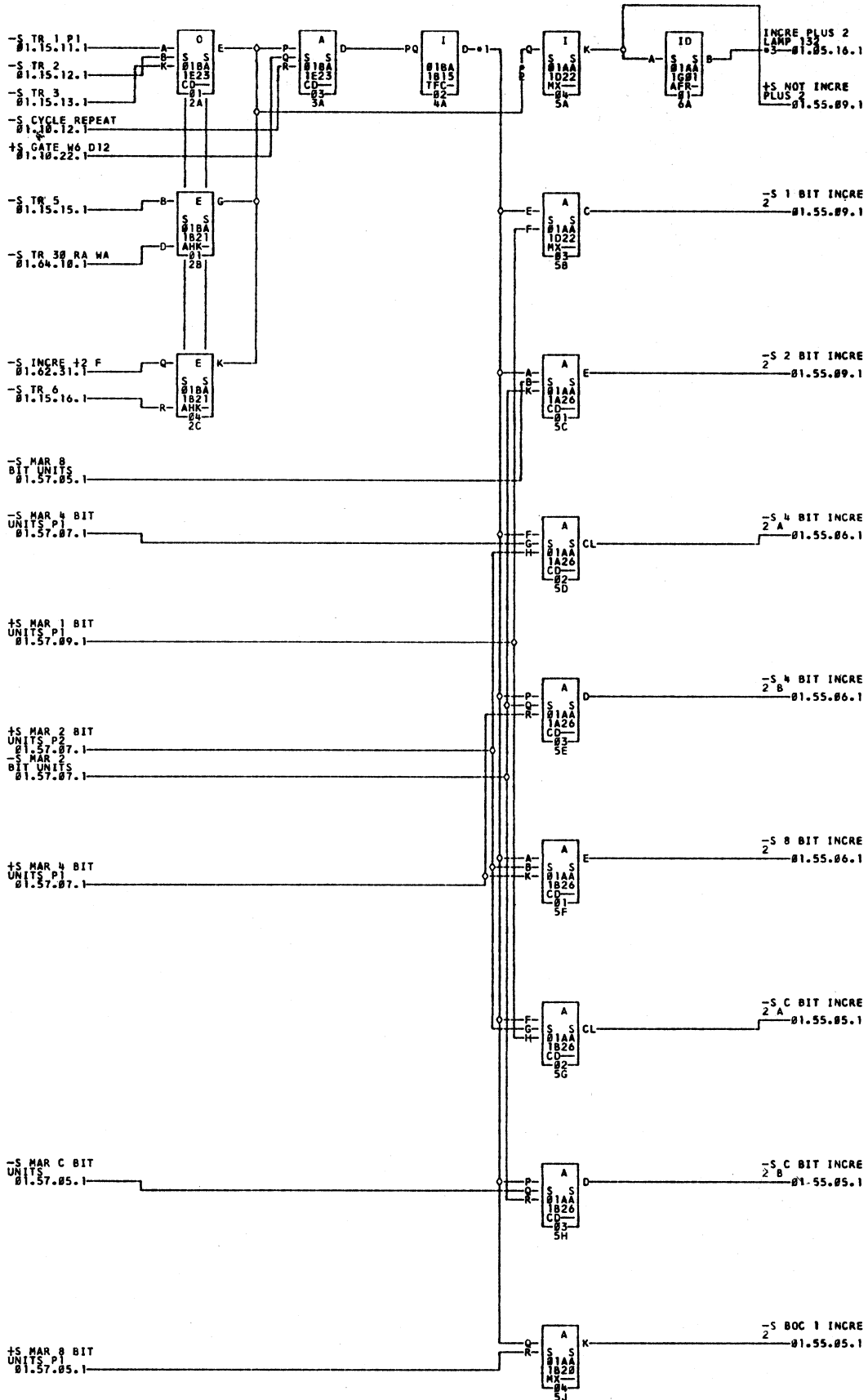
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—01AWD27

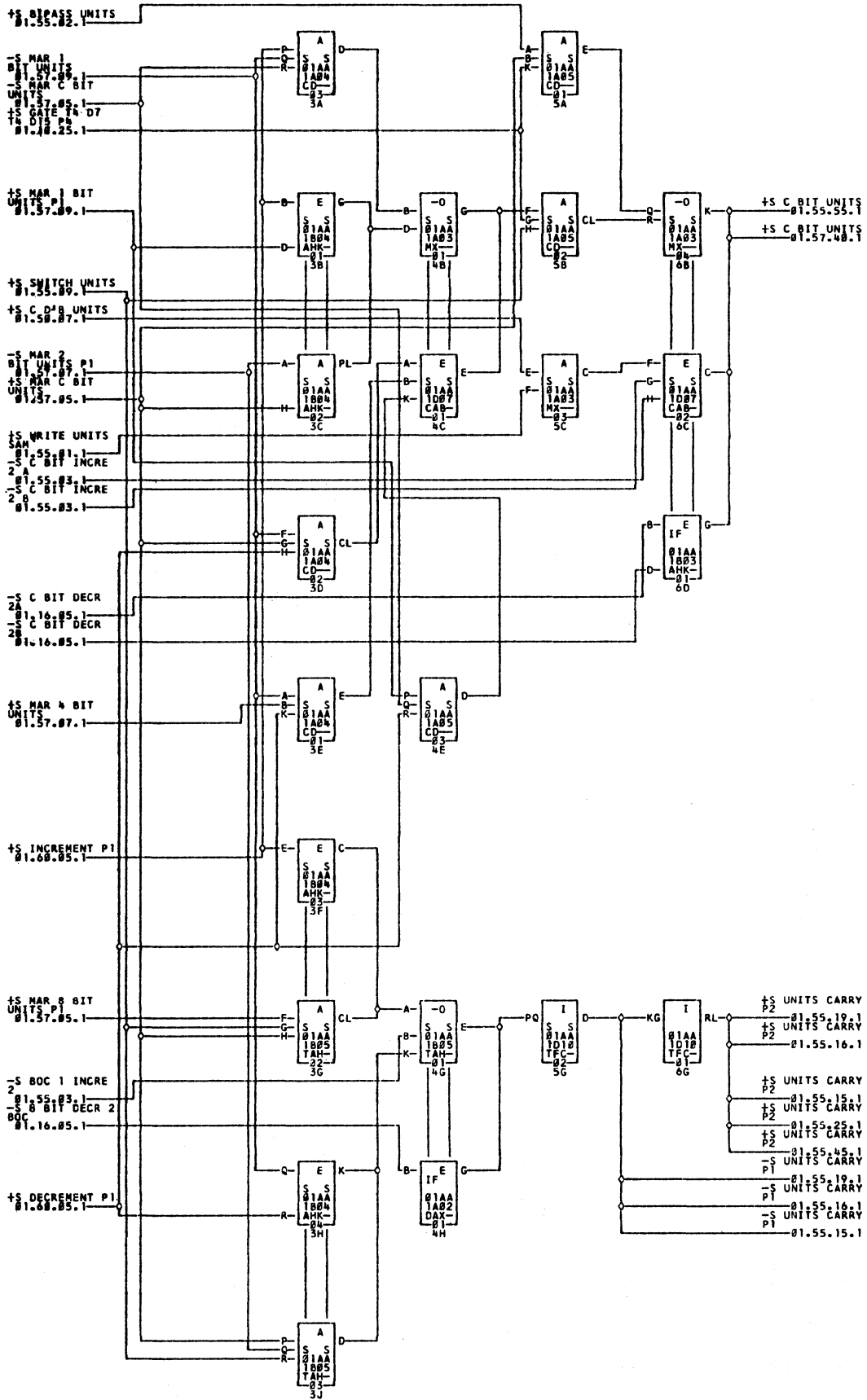


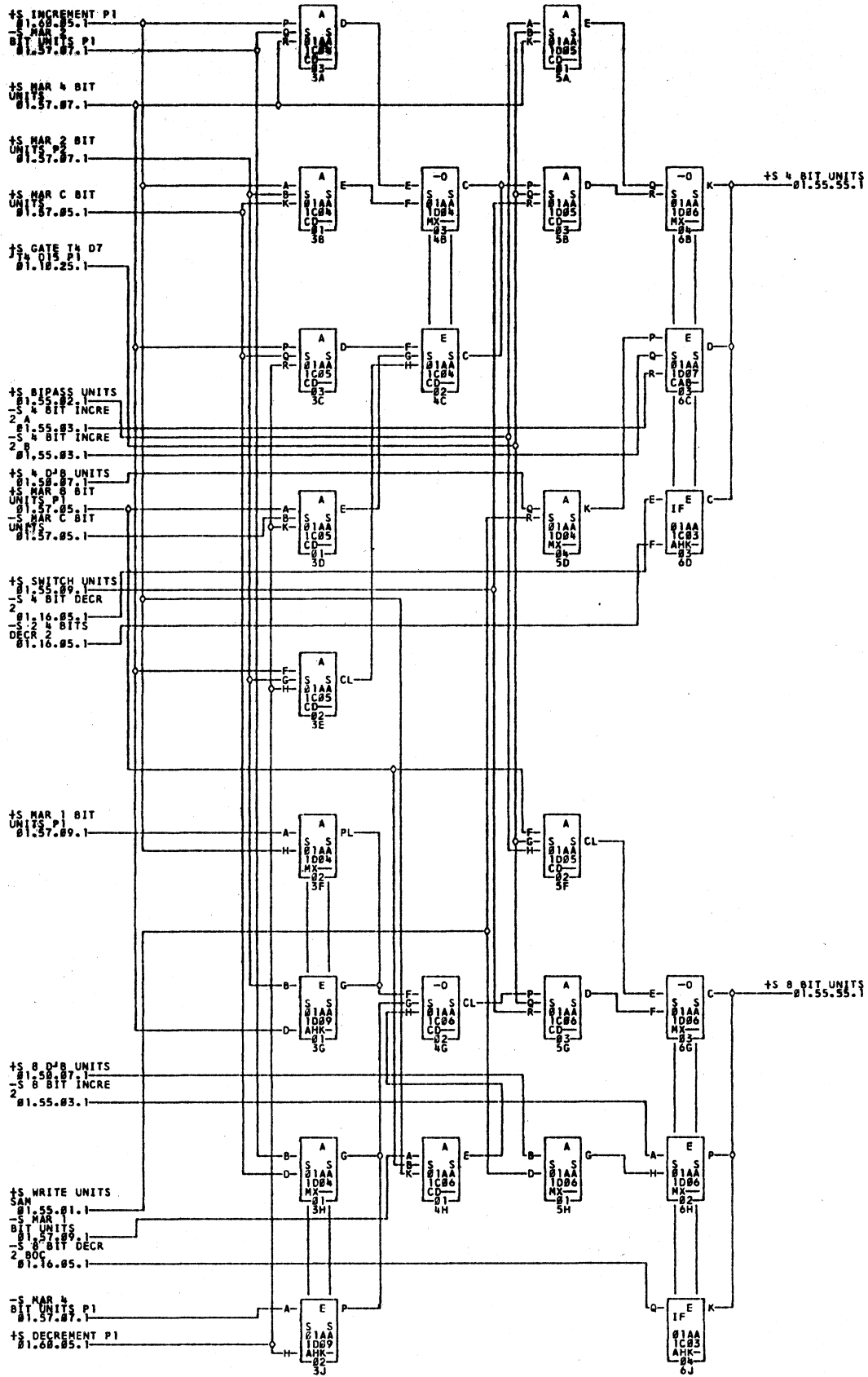
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 ---01AWJ28 ---01BWJ28

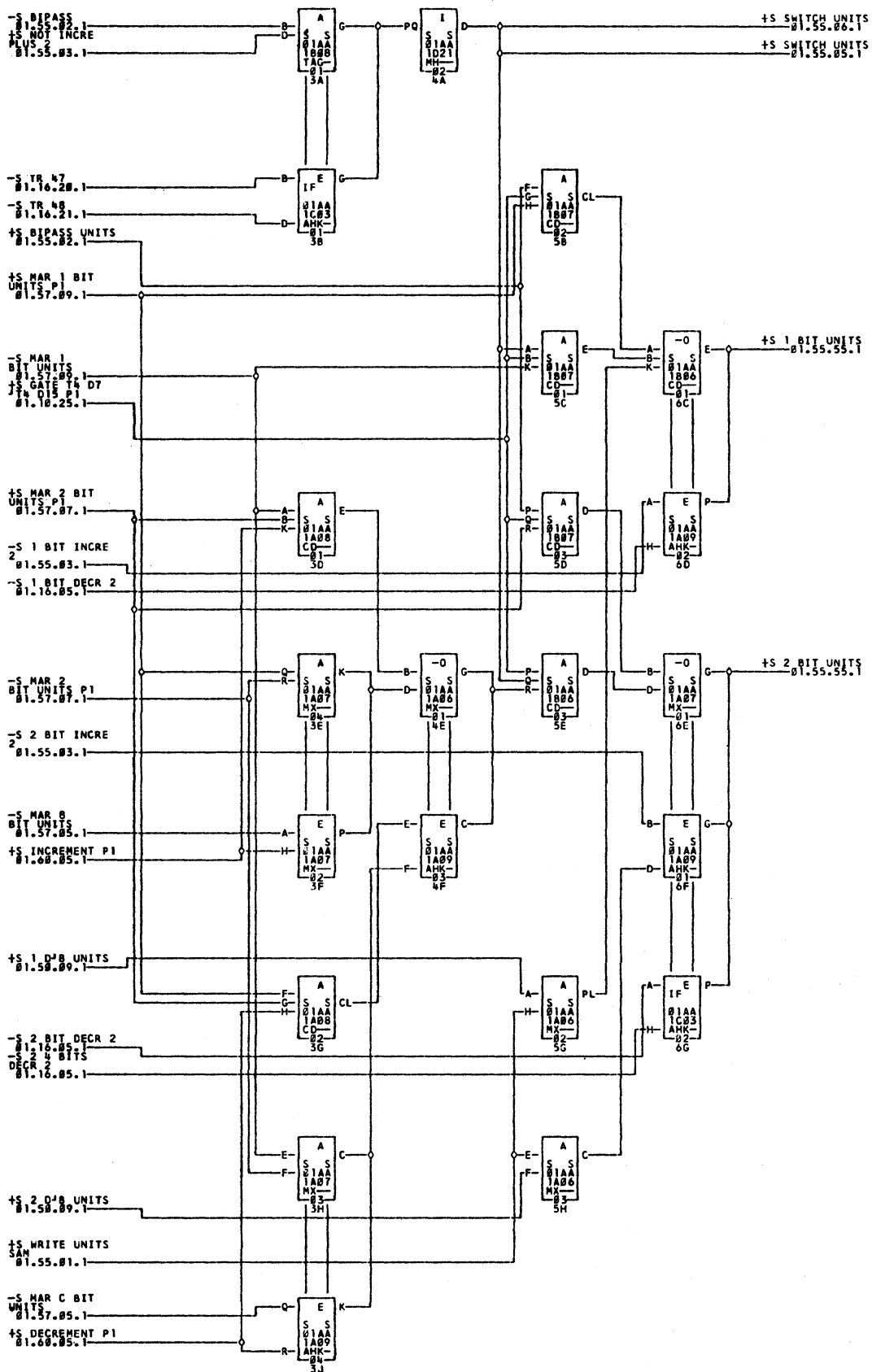


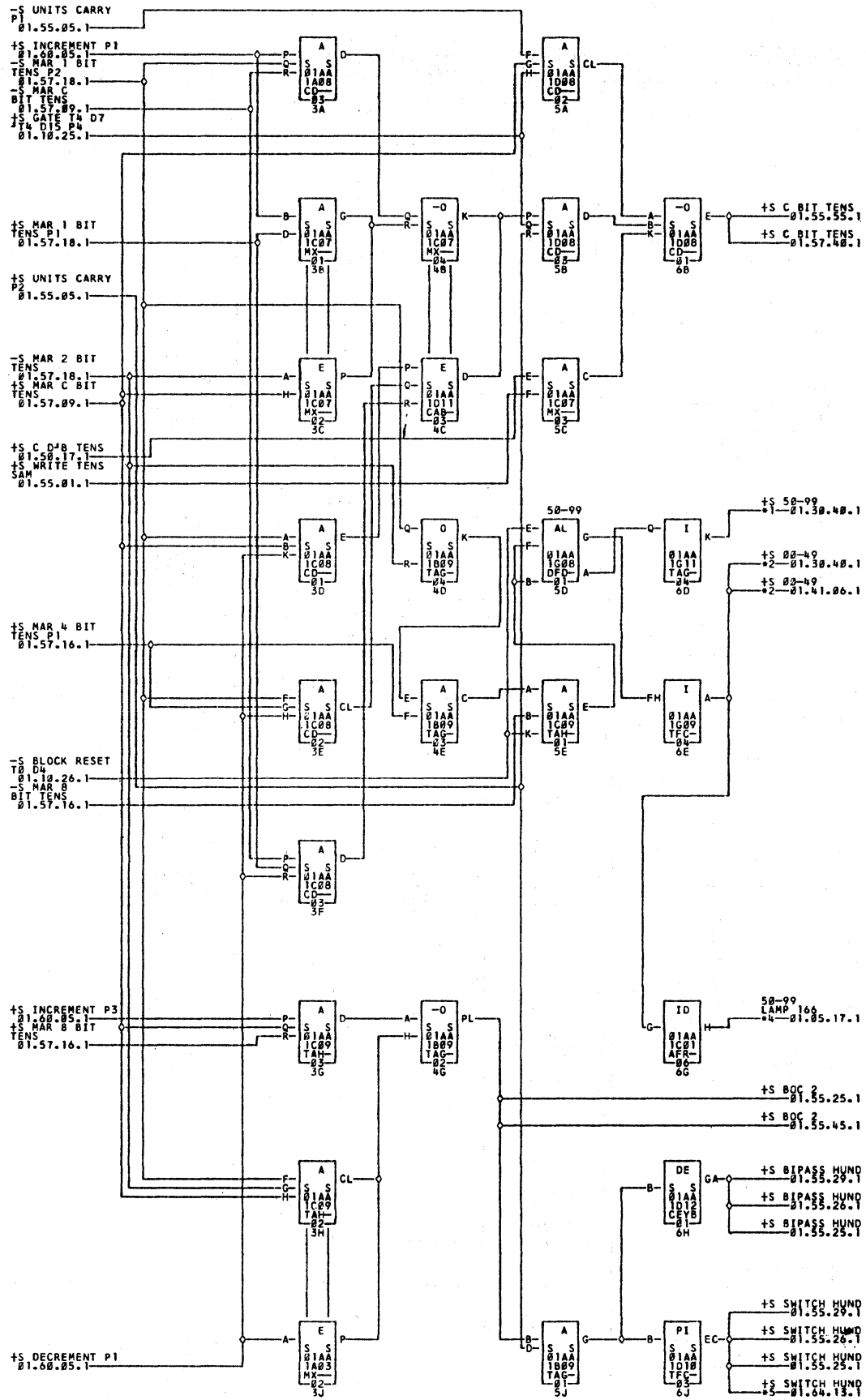


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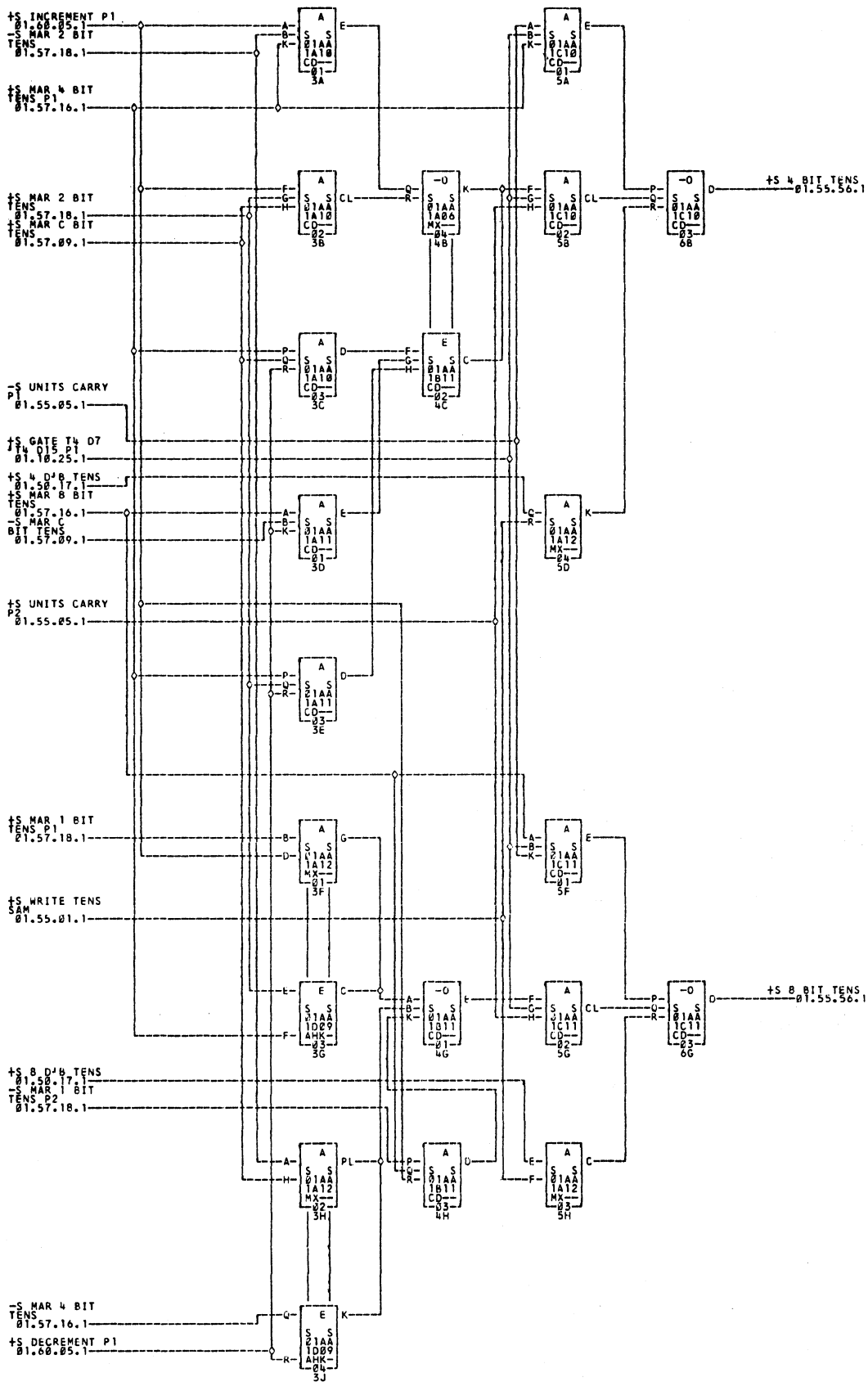


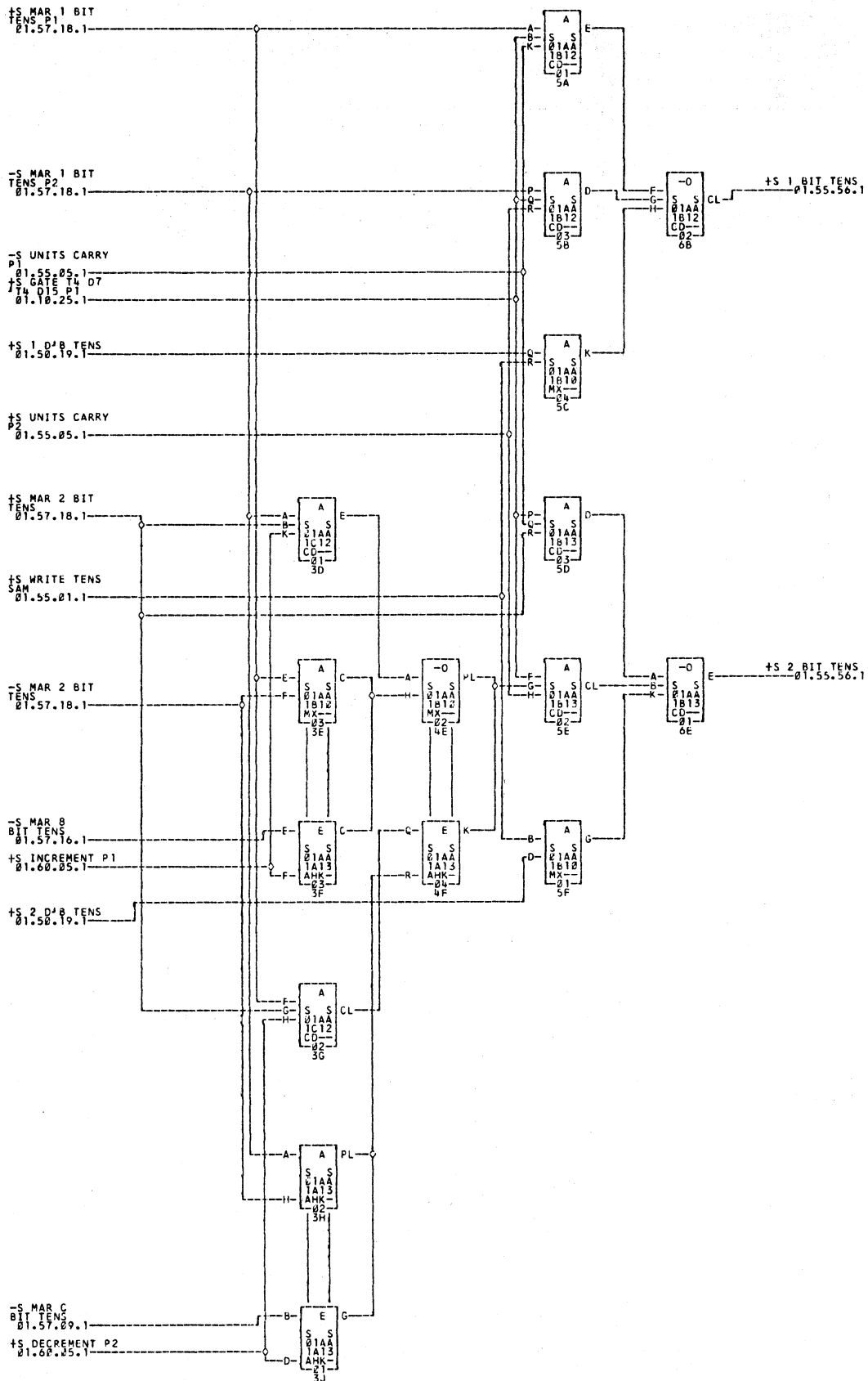


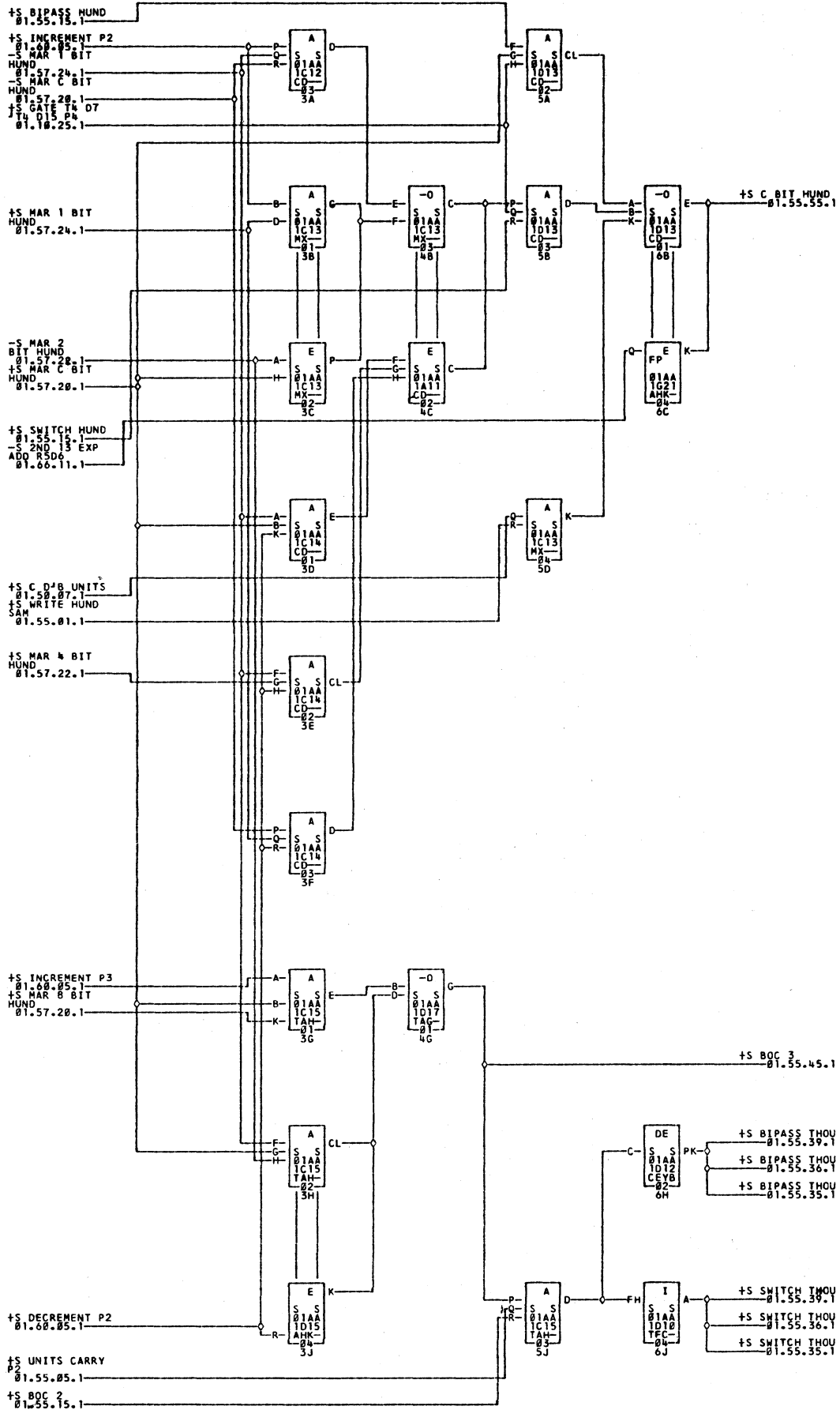


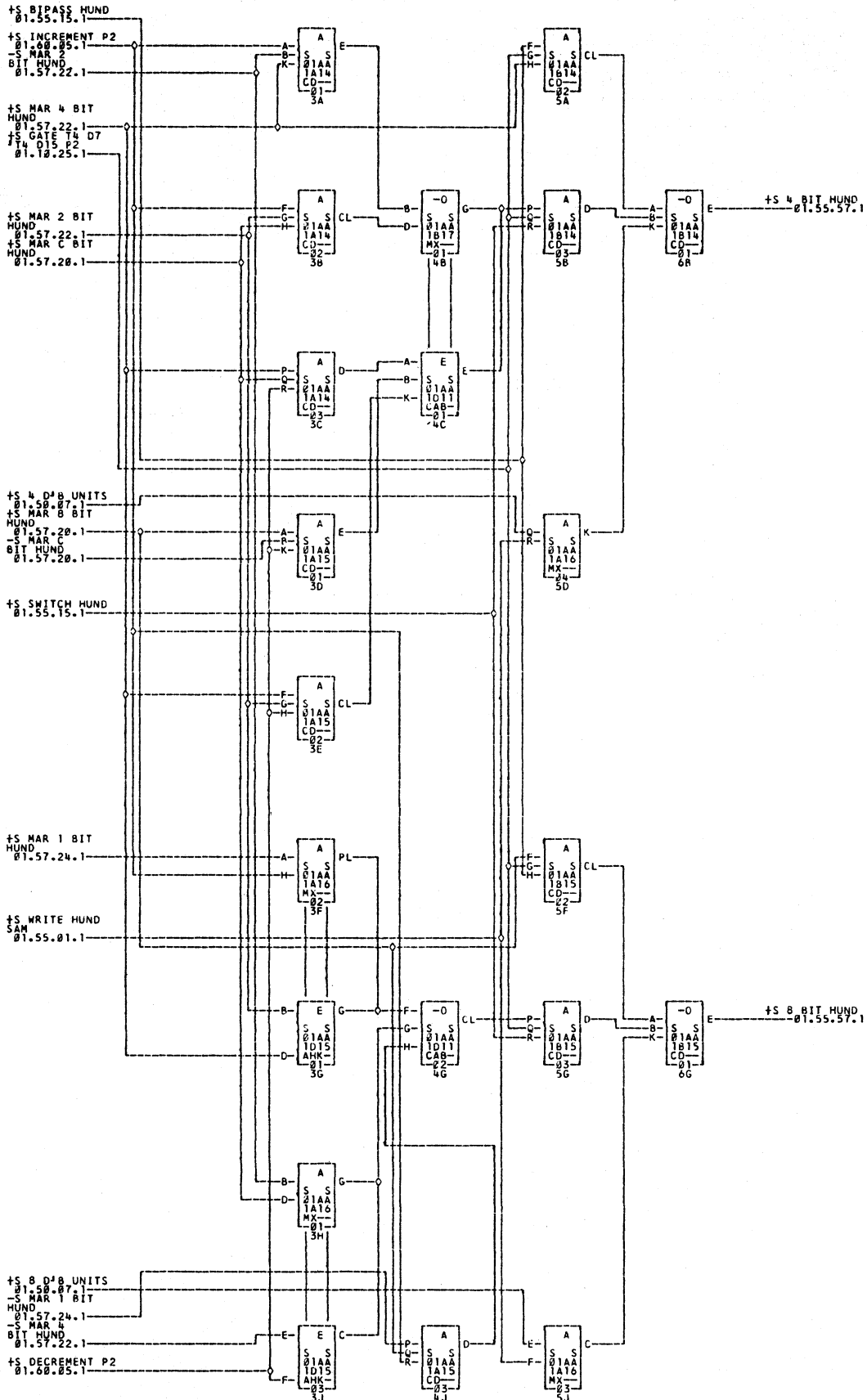


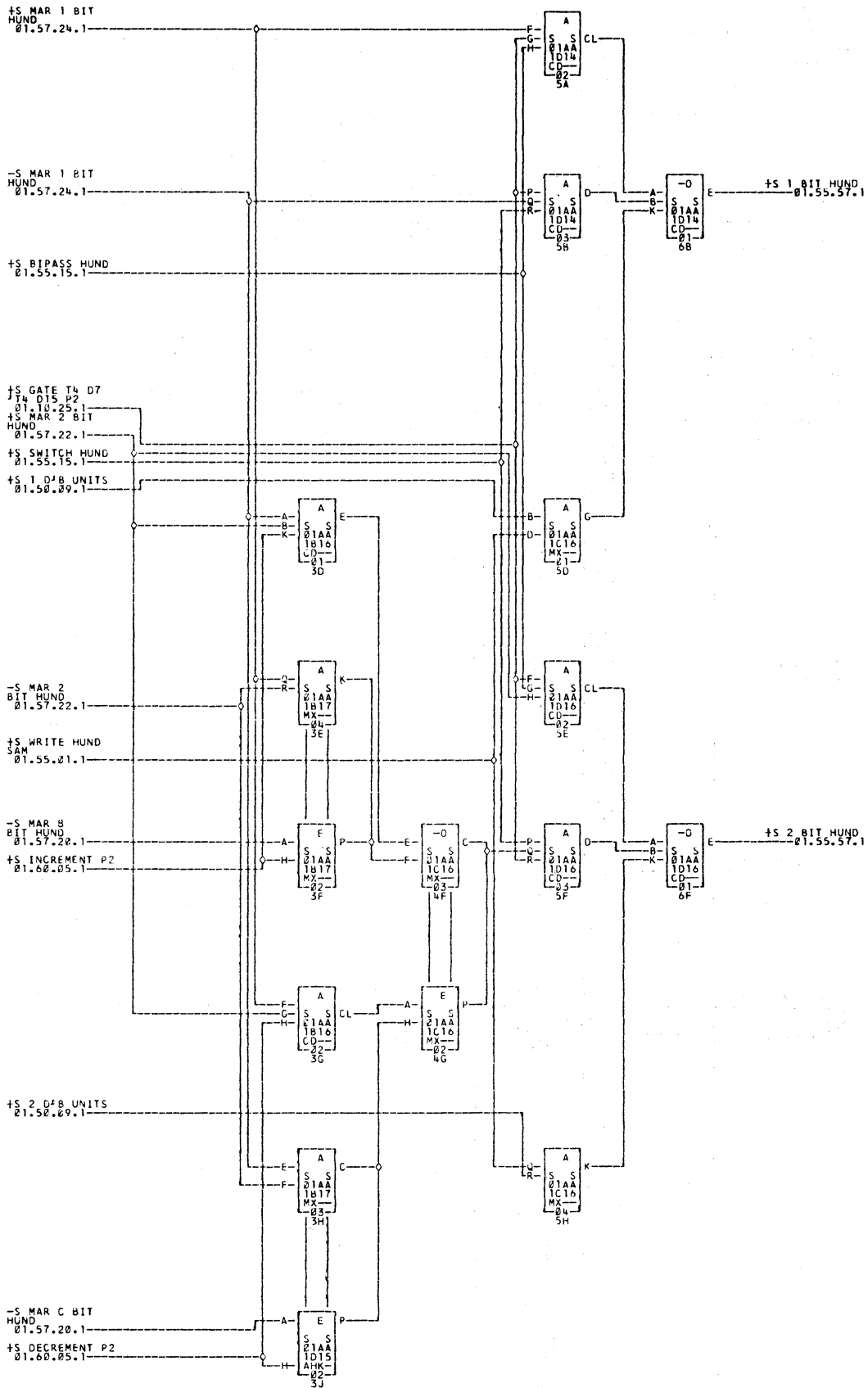
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 —01B18F16

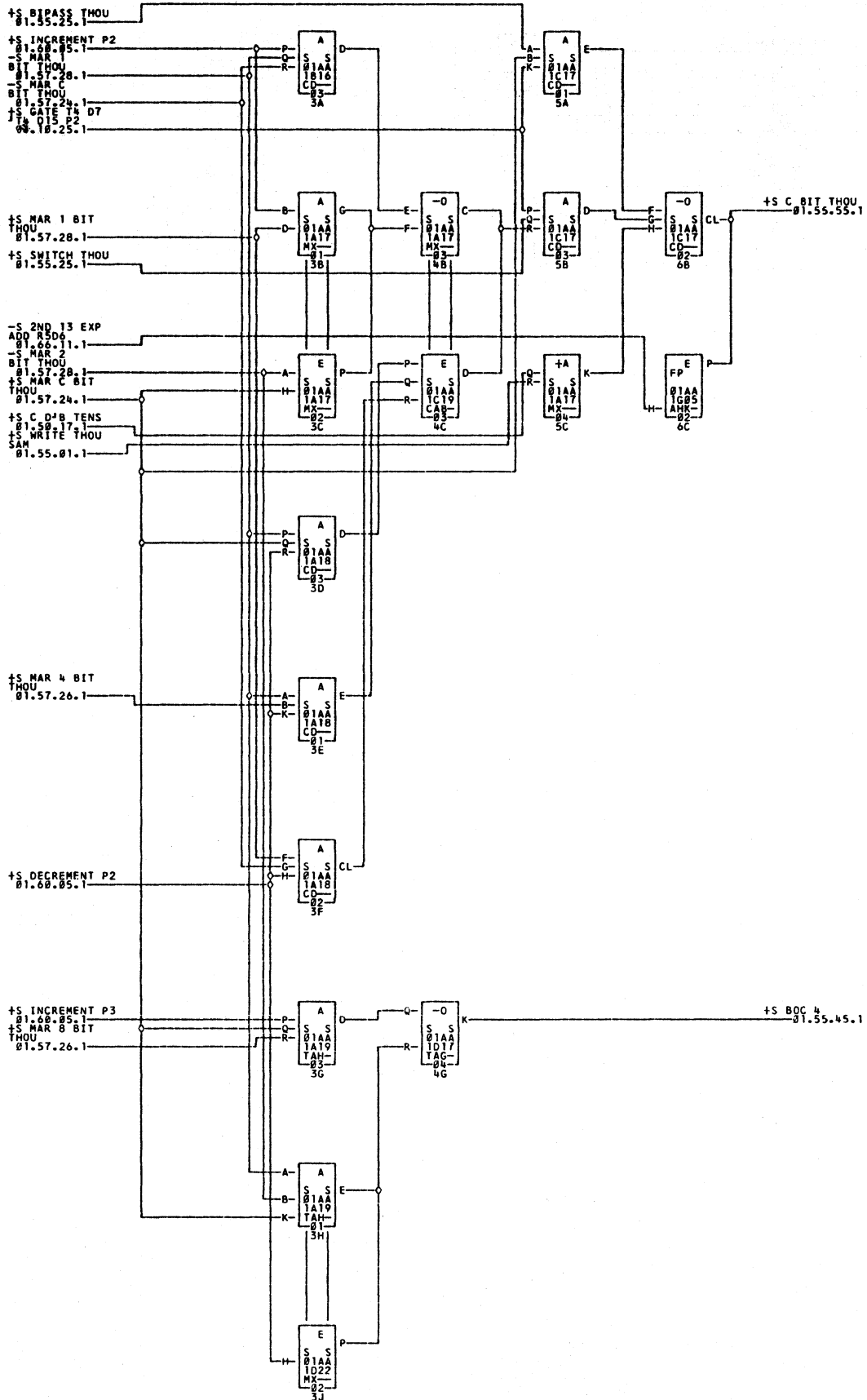


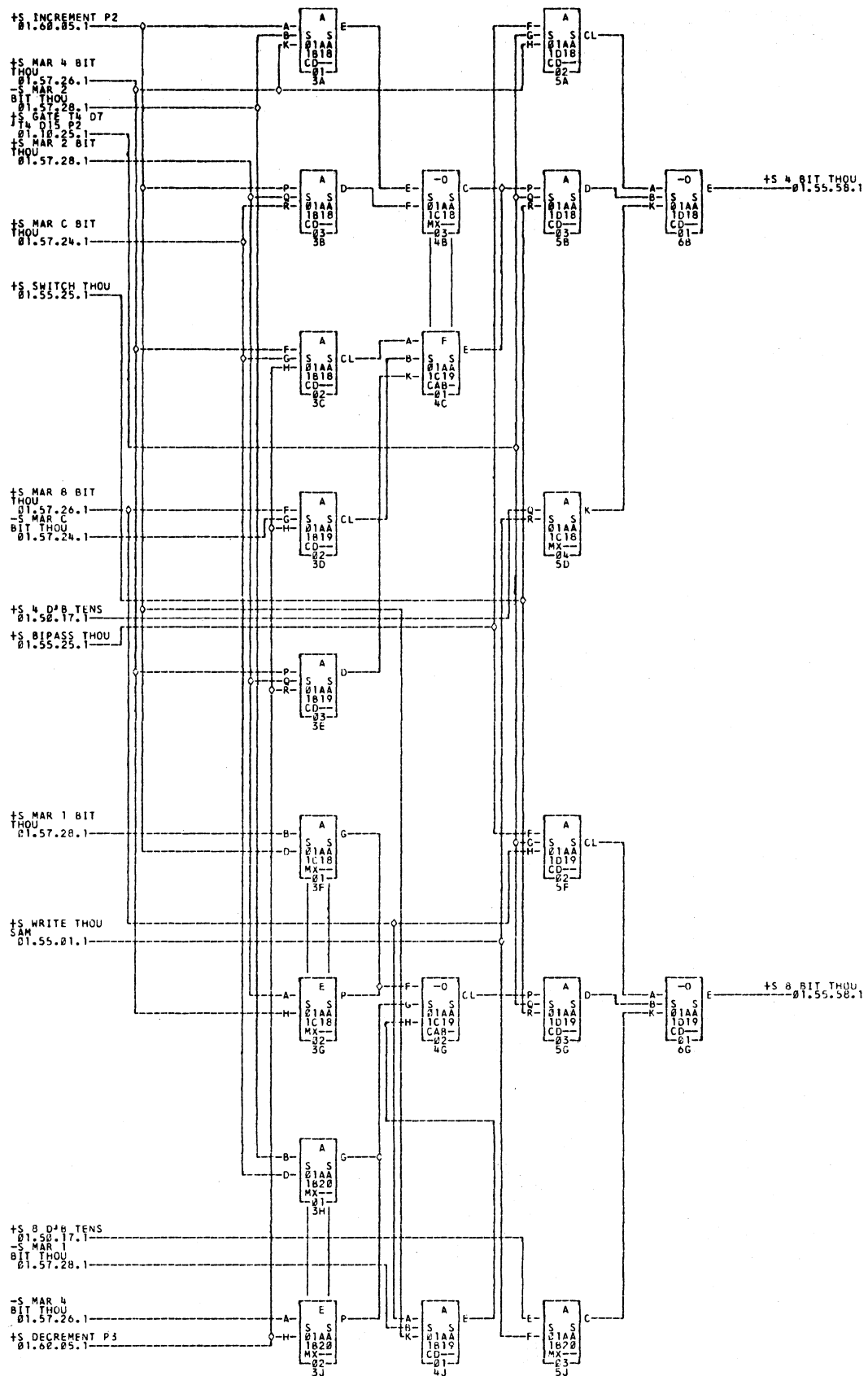


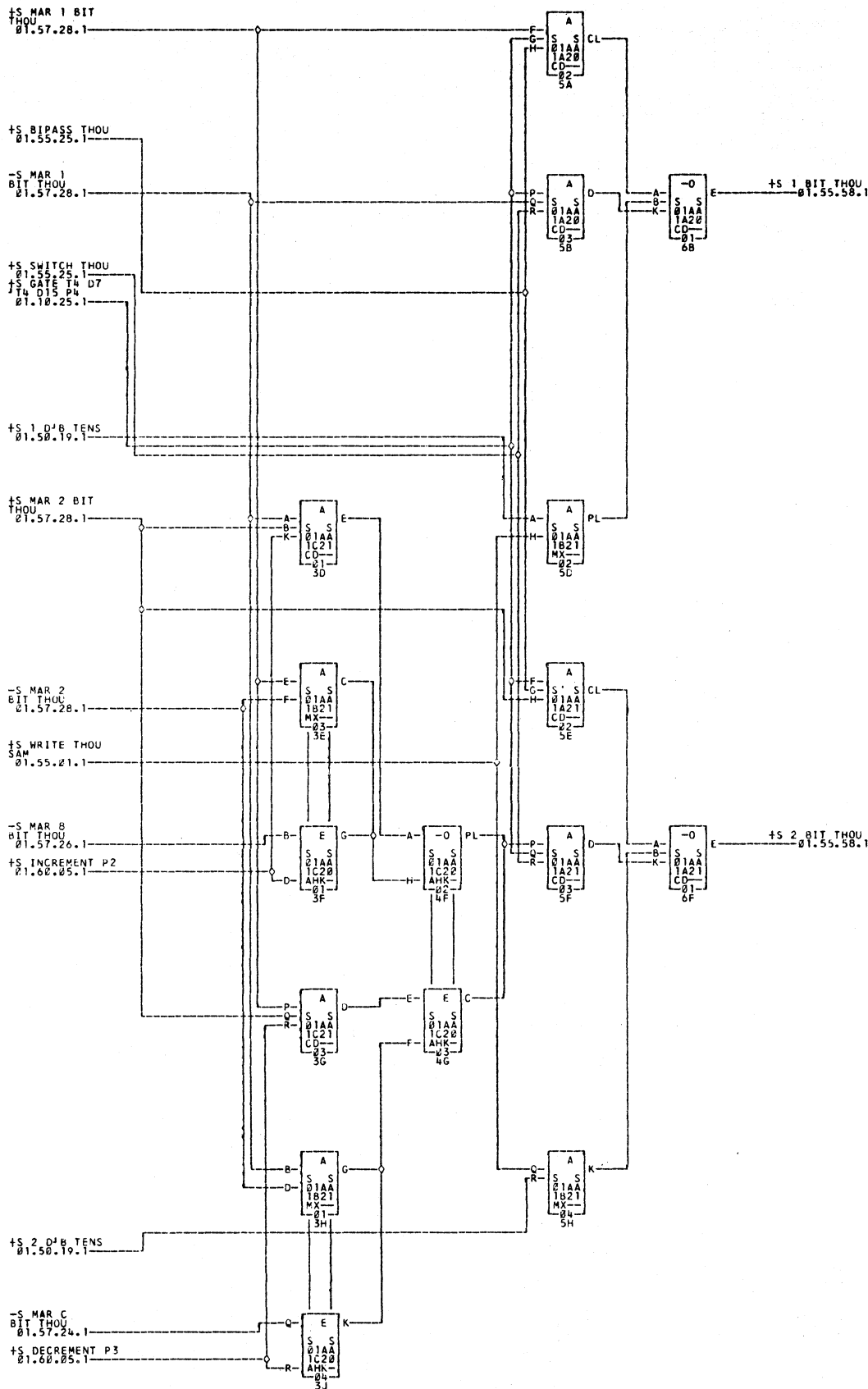


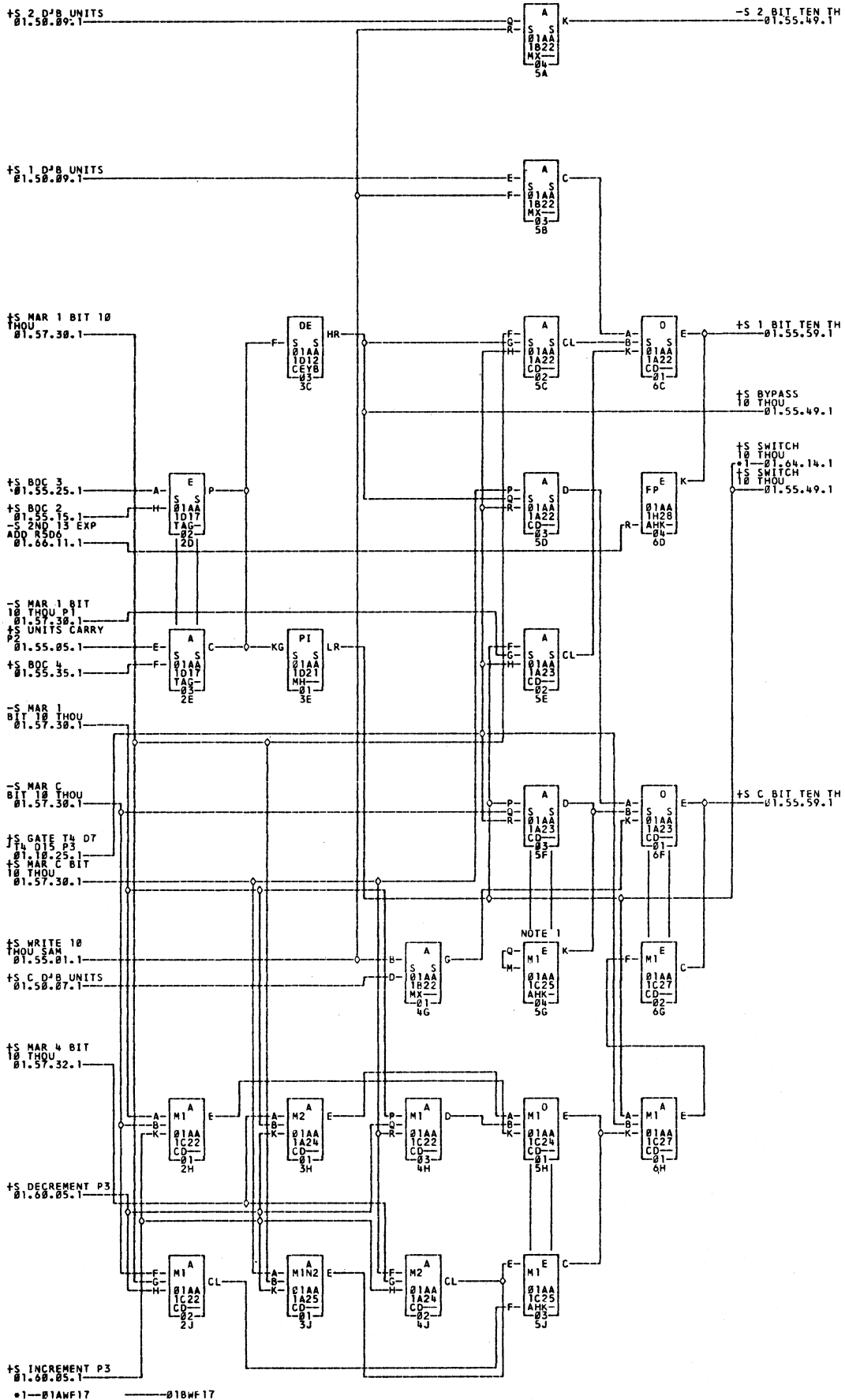


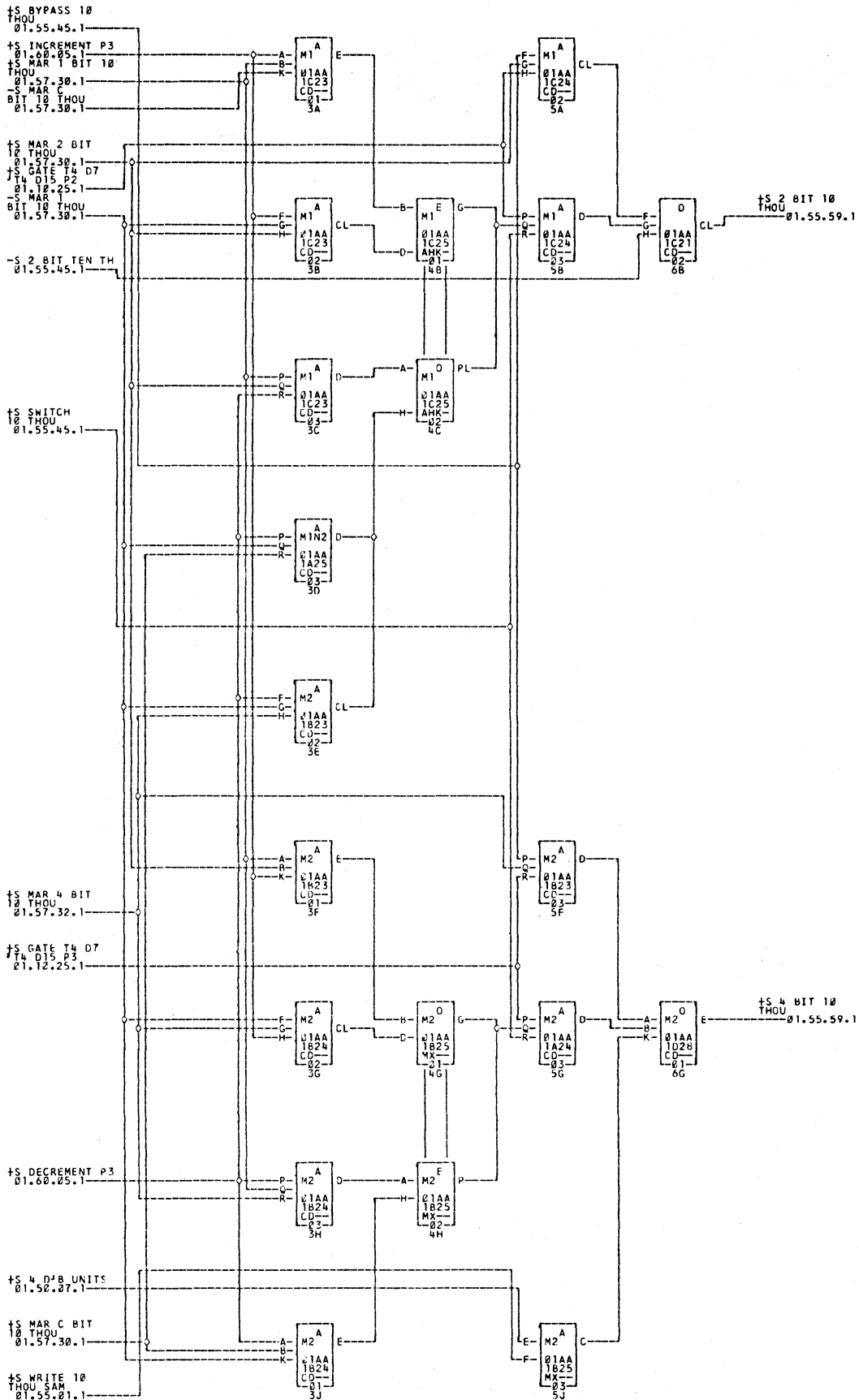


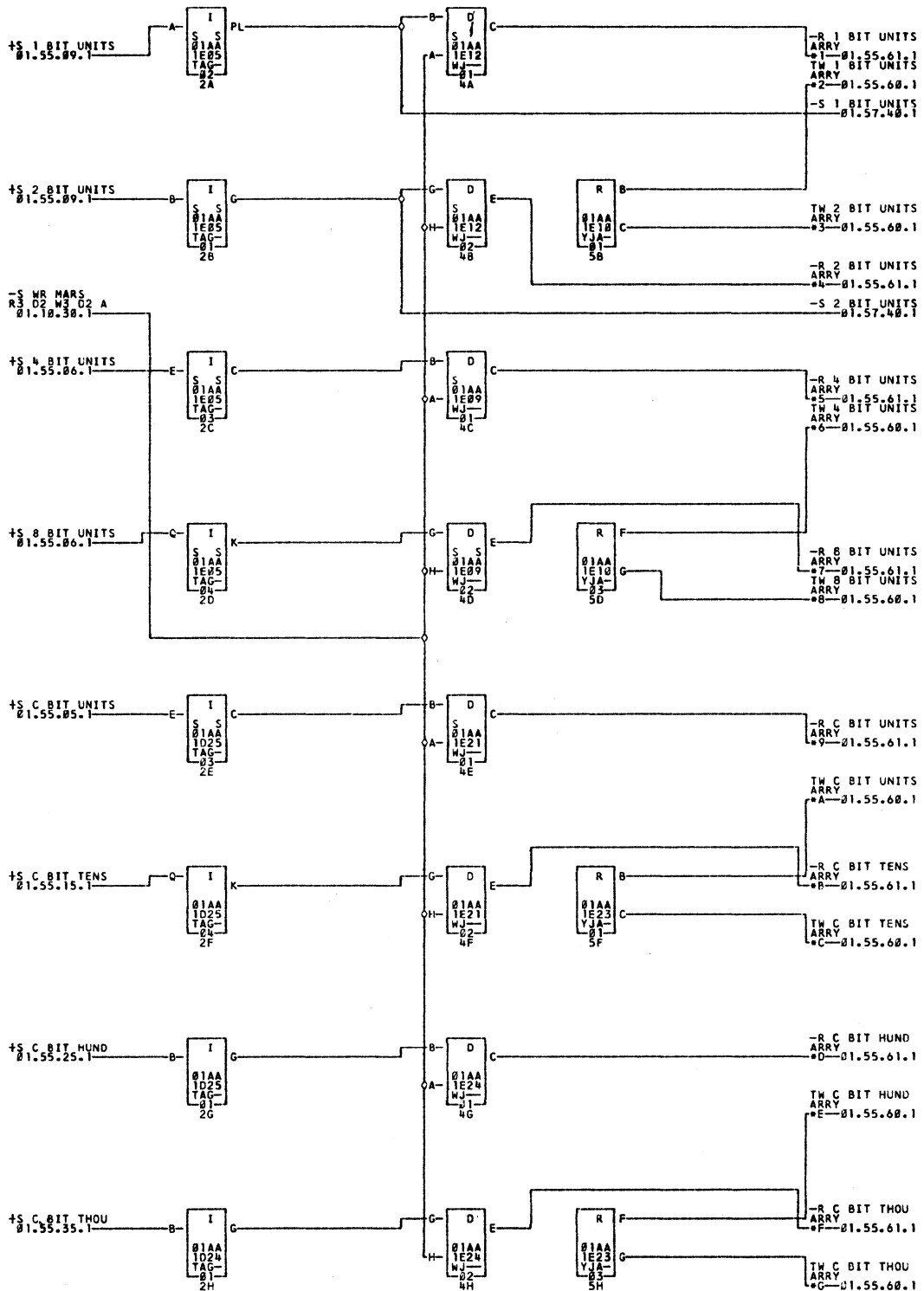




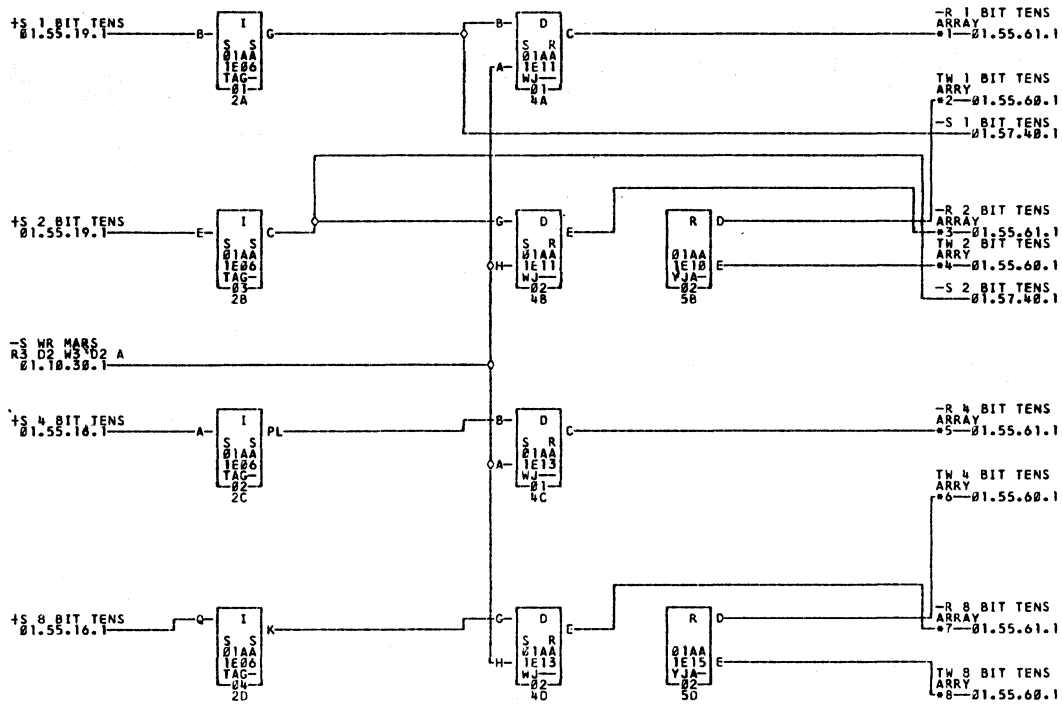








- *1—MARS C01 *2—MARS A01 *3—MARS A03 *4—MARS C03 *5—MARS C05 *6—MARS A05
- *7—MARS C07 *8—MARS A07 *9—MARS C09 *A—MARS A09 *B—MARS C19 *C—MARS A19
- *D—MARS C29 *E—MARS A29 *F—MARS C39 *G—MARS A39



*1--MARS C11
*7--MARS C17

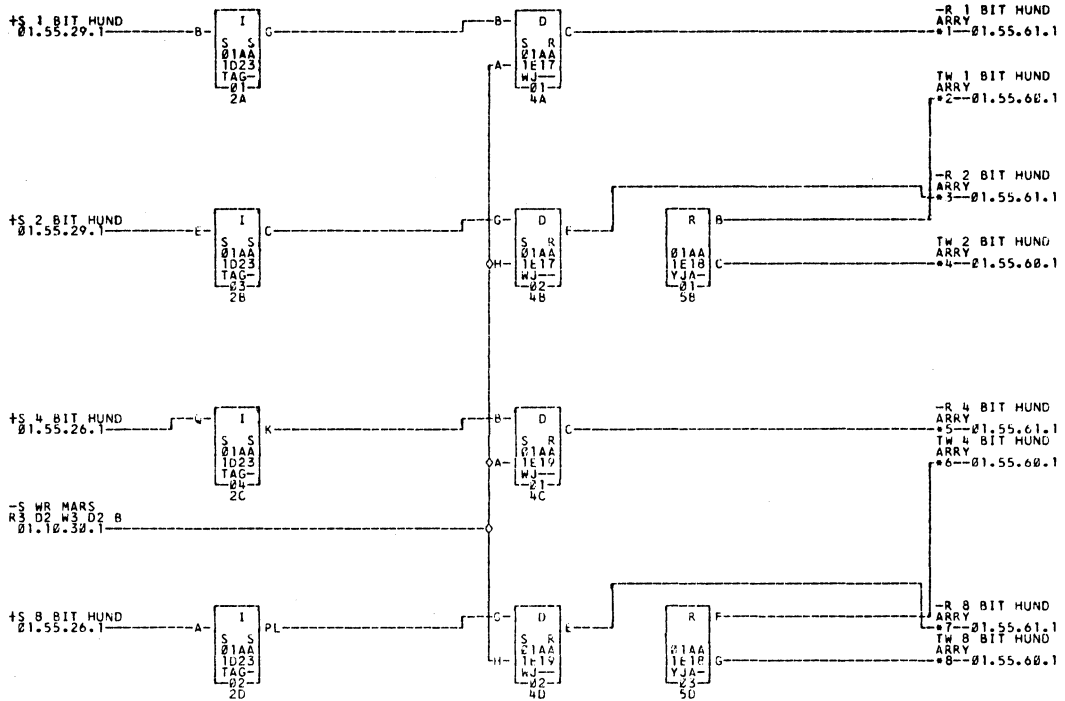
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*8--MARS A17

*3--MARS C13

*4--MARS A13

*5--MARS C15

*6--MARS A15



*1--MARS C21
*7--MARS C27

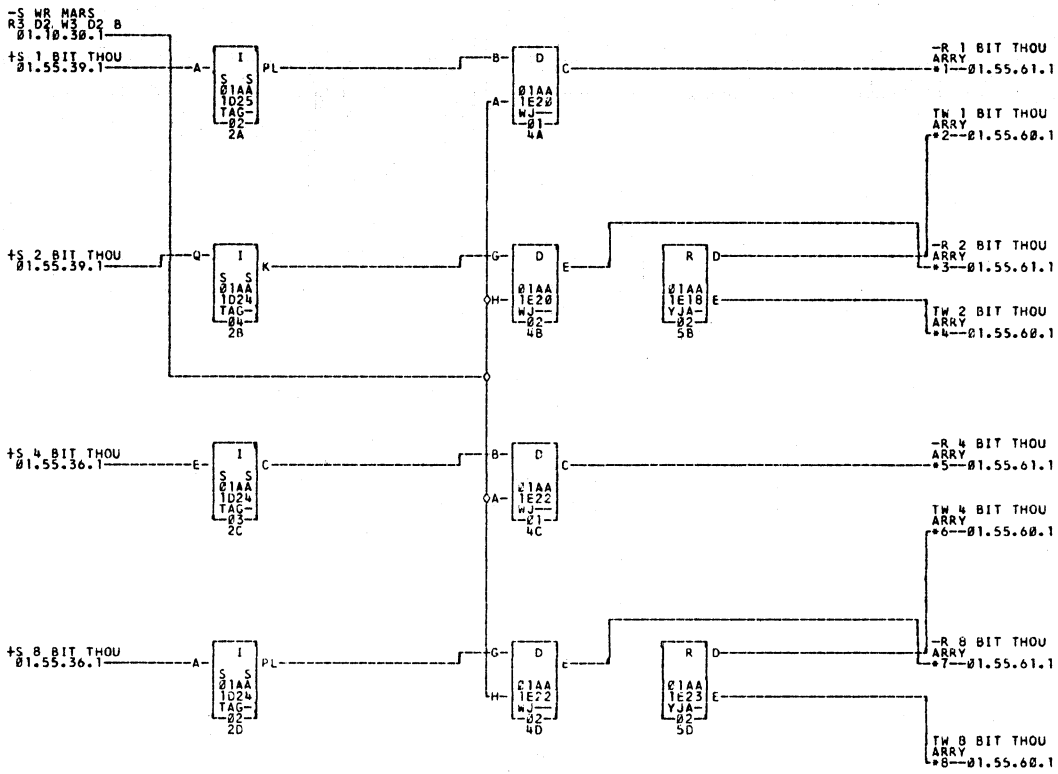
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*5--MARS C25

*6--MARS A25



*1--MARS C31
*7--MARS C37

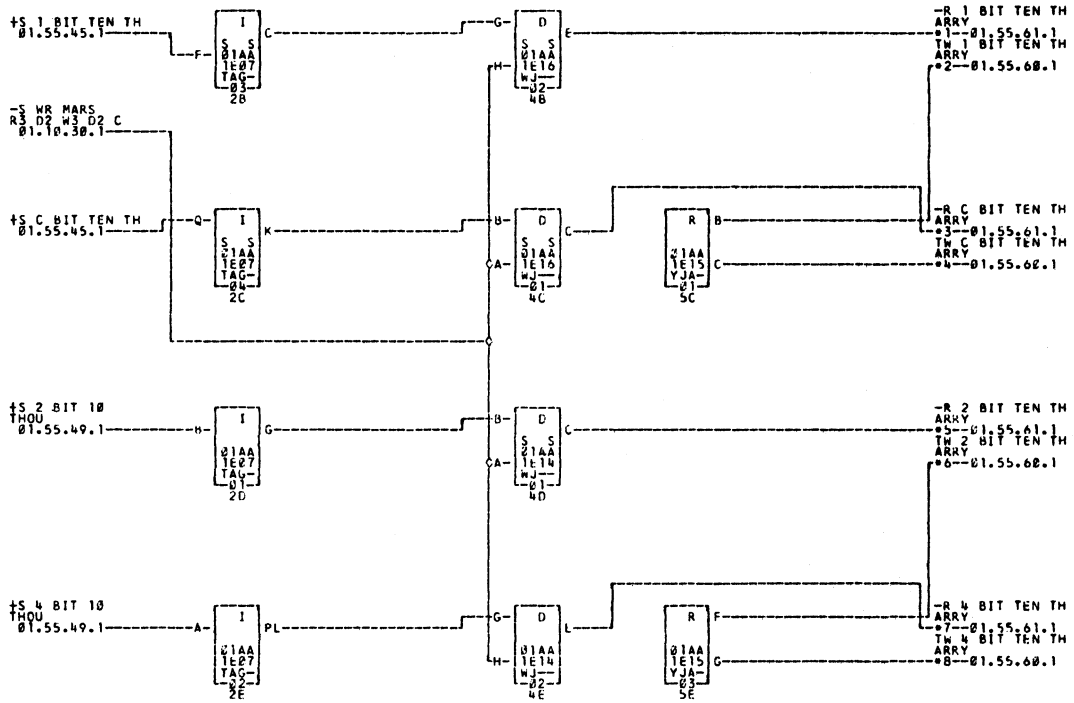
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*3--MARS C33

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*5--MARS C35

*6--MARS A35



*1--MARS C41
*7--MARS C47

*2--MARS A41
*8--MARS A47

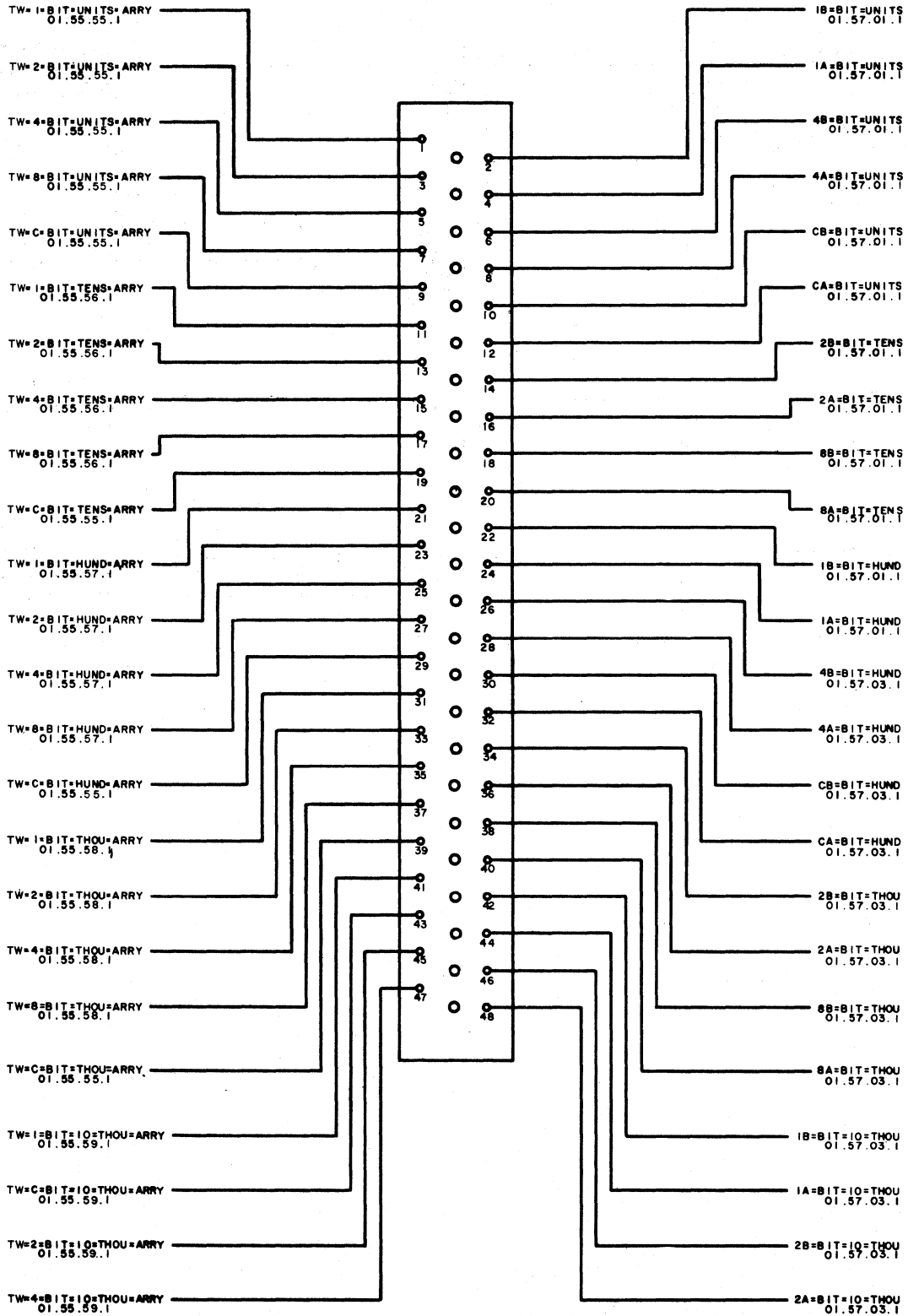
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*4--MARS A43

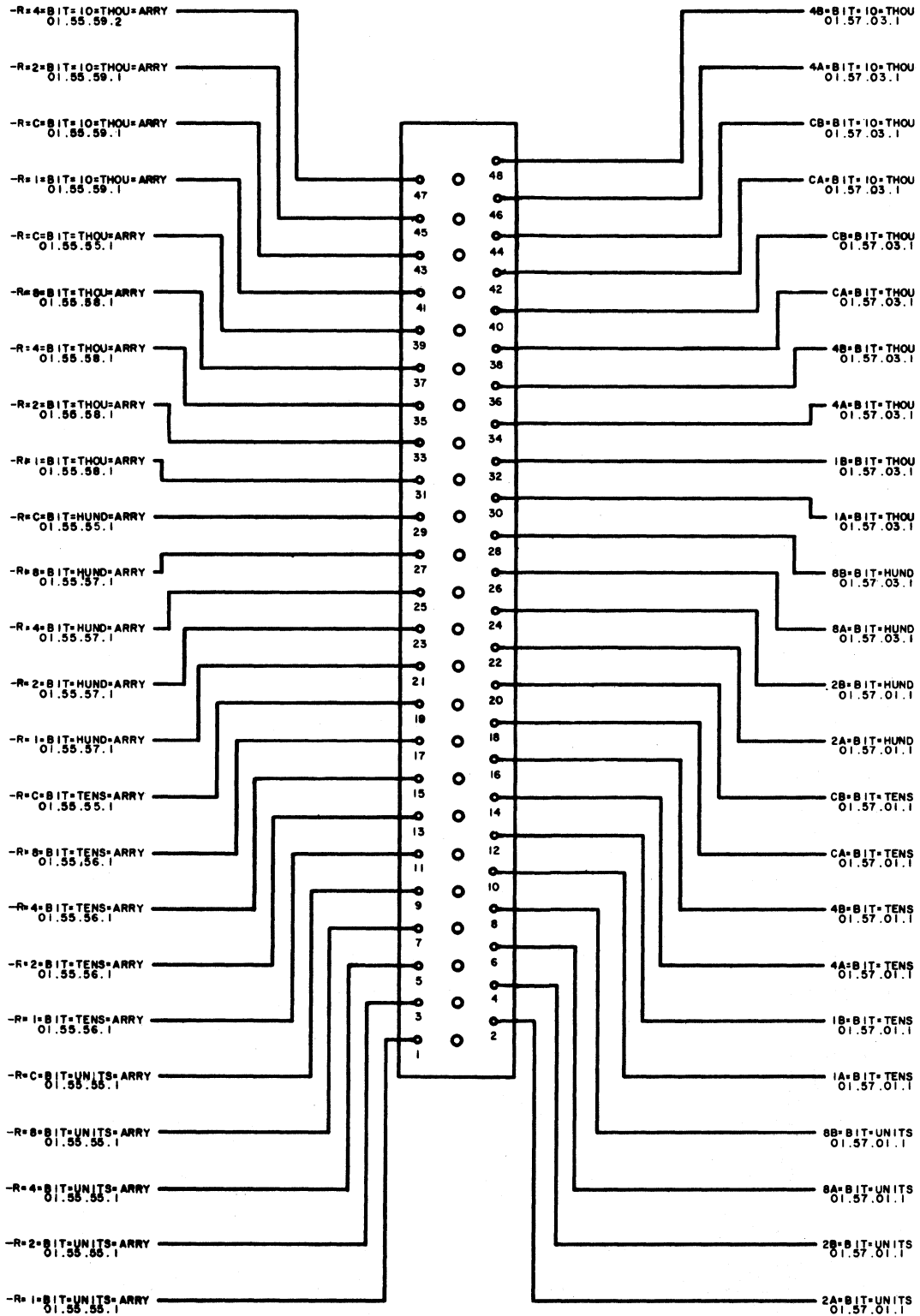
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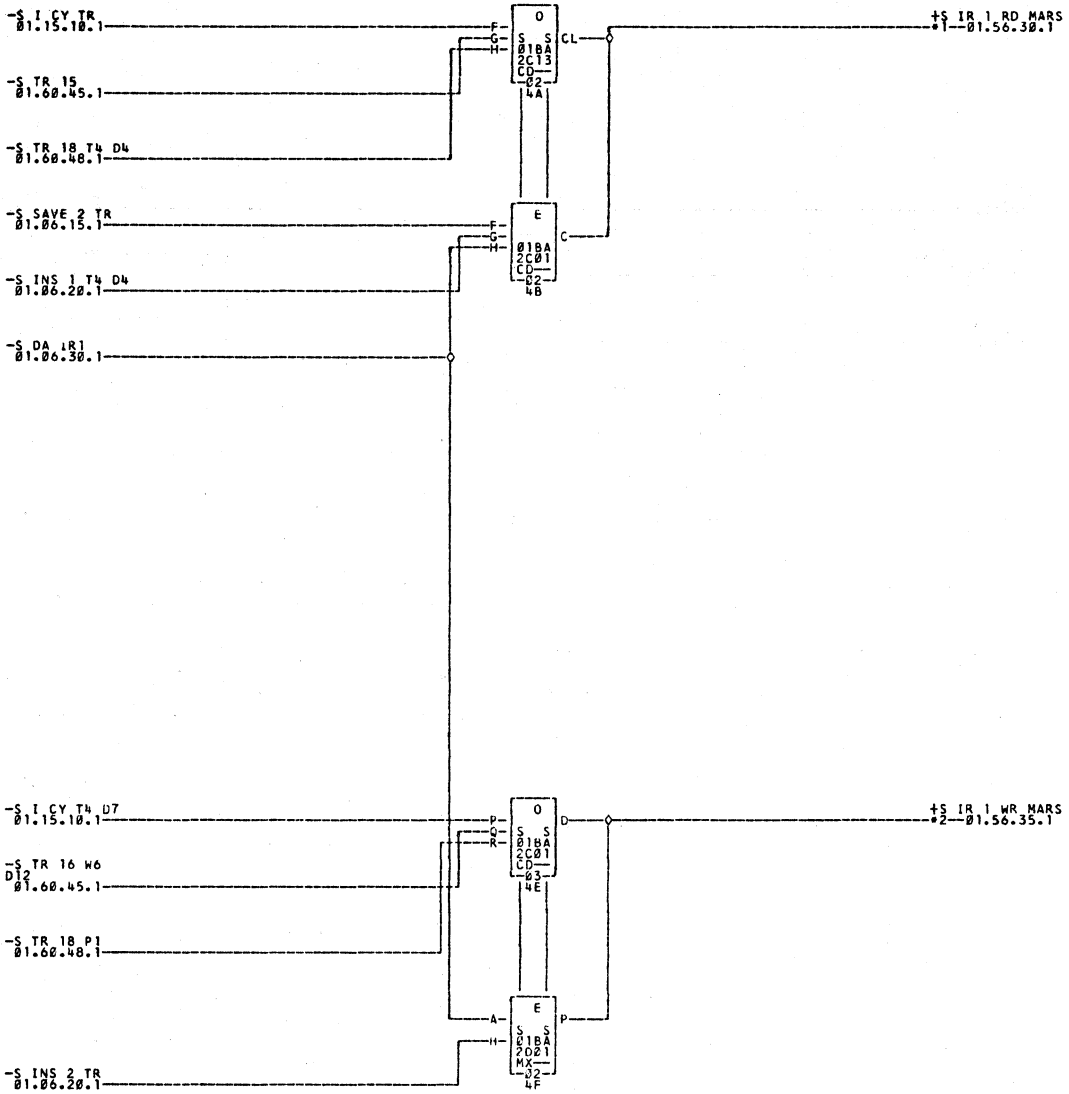
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SIDE-A



SIDE C



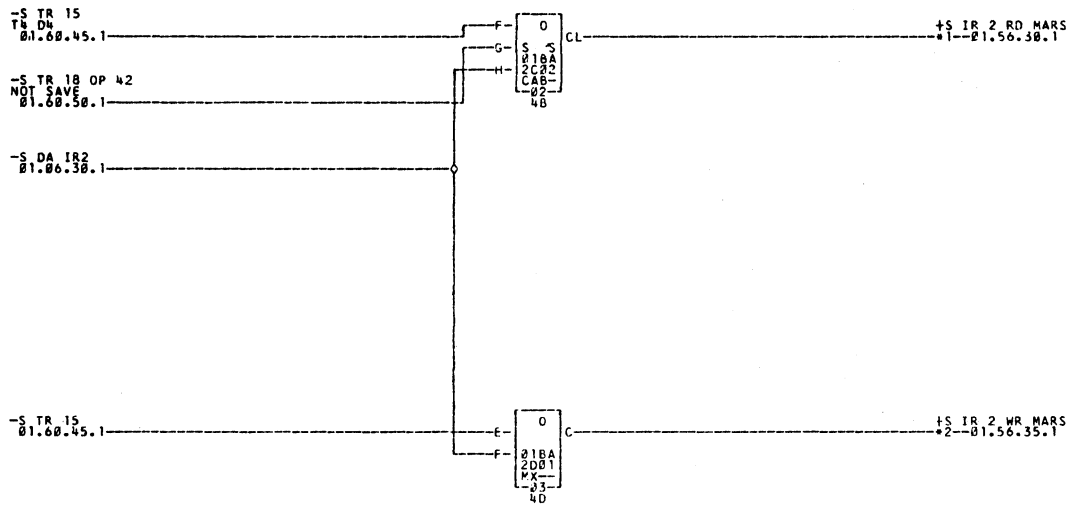


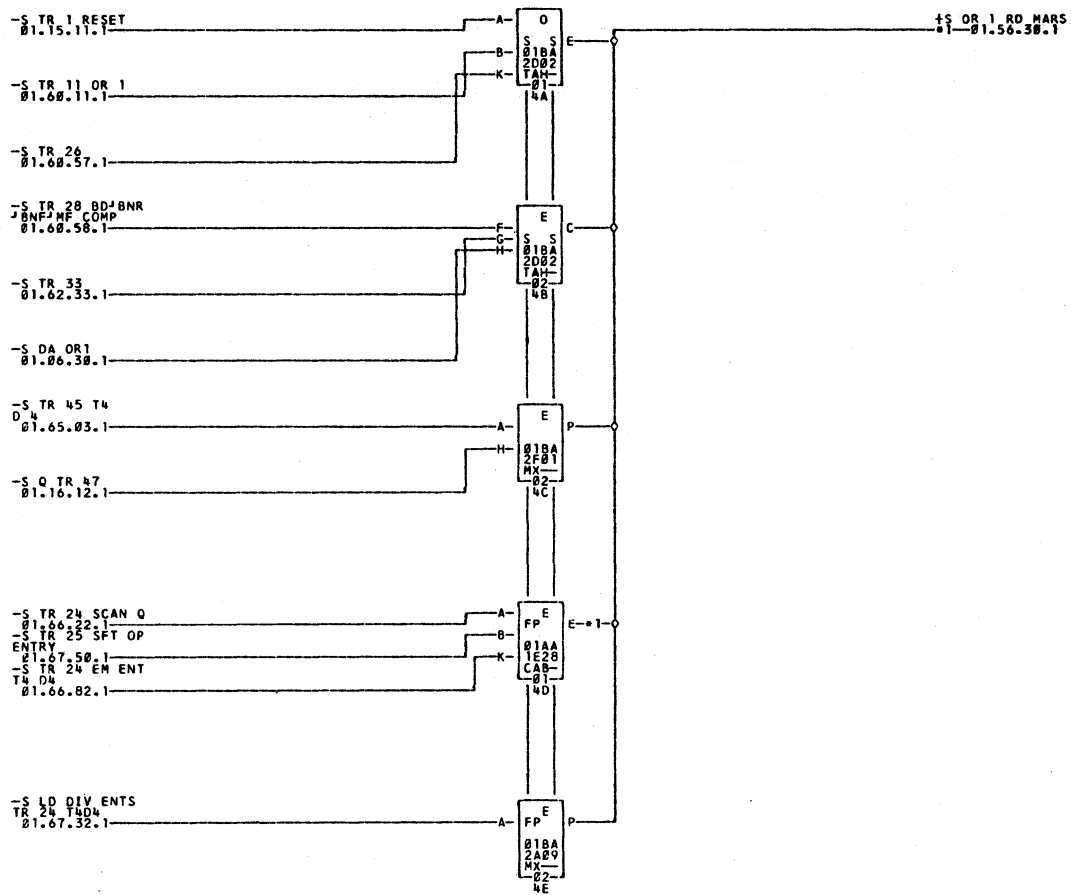
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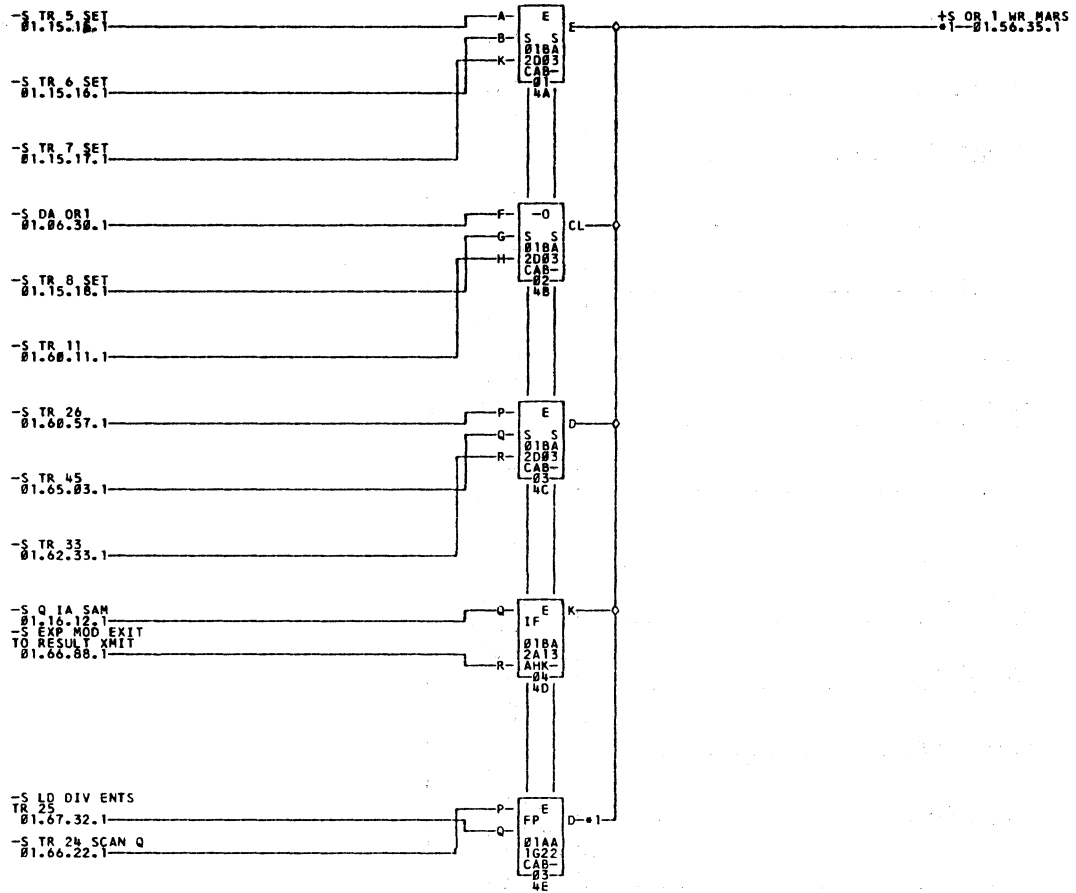
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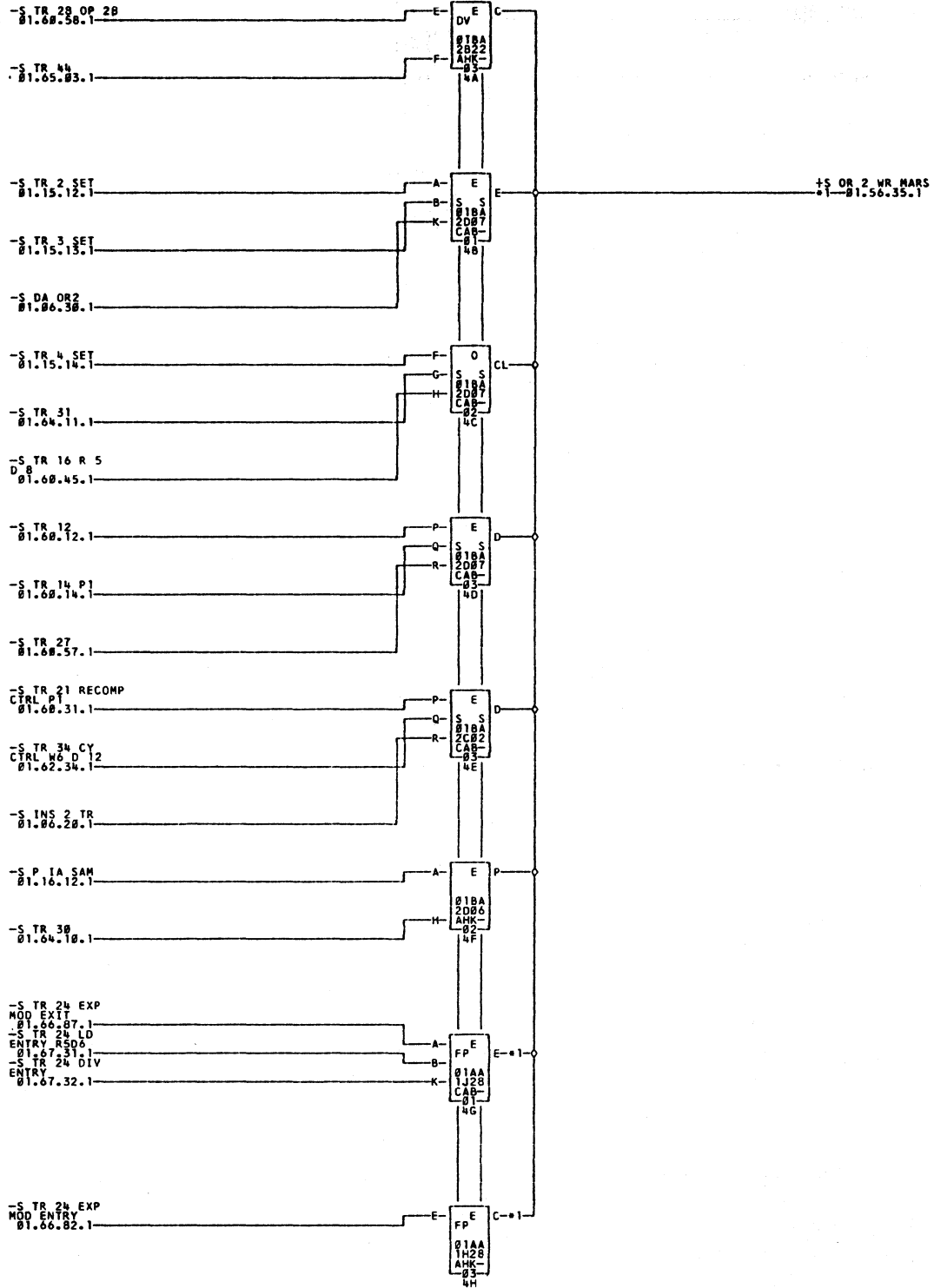
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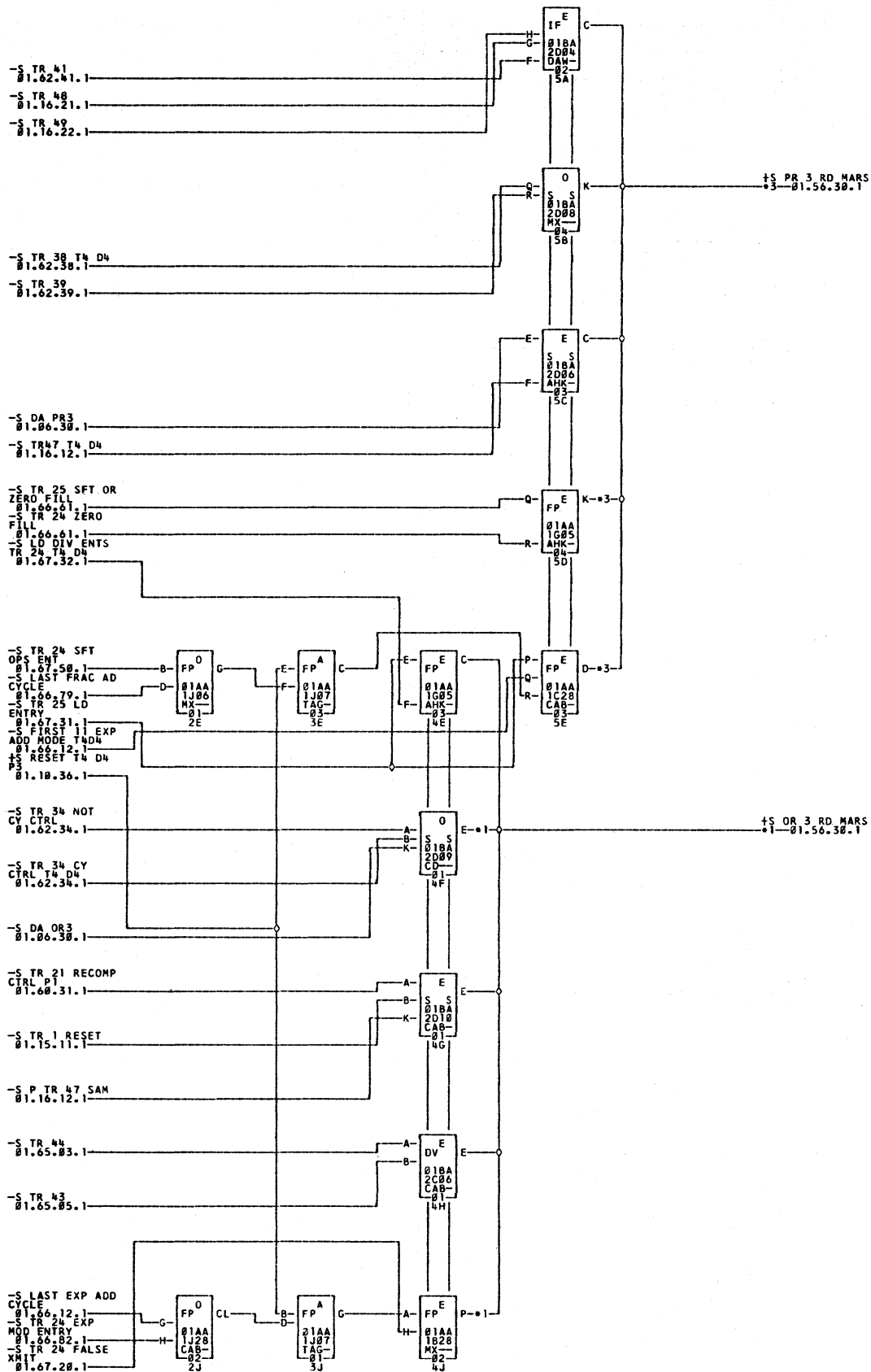
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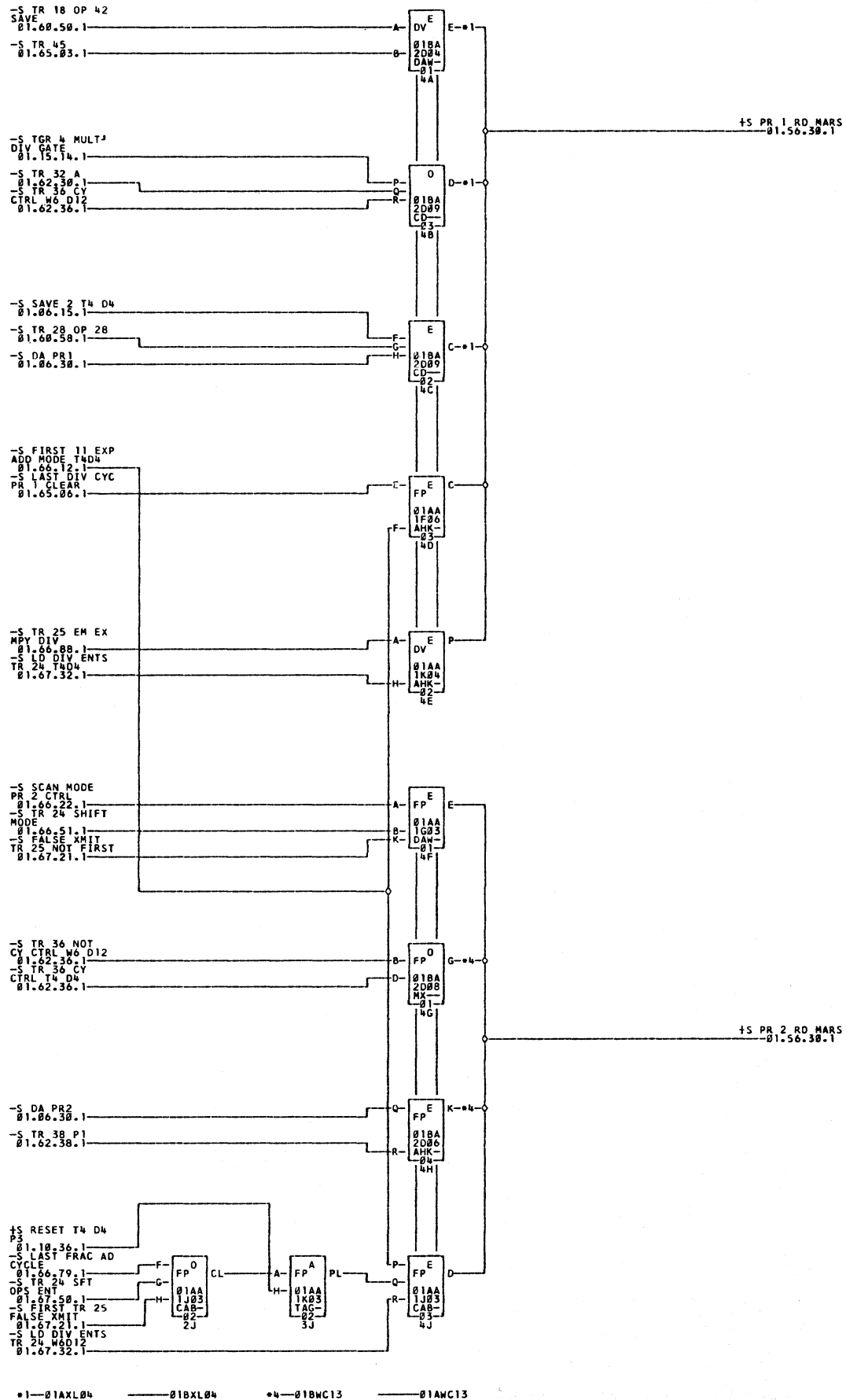


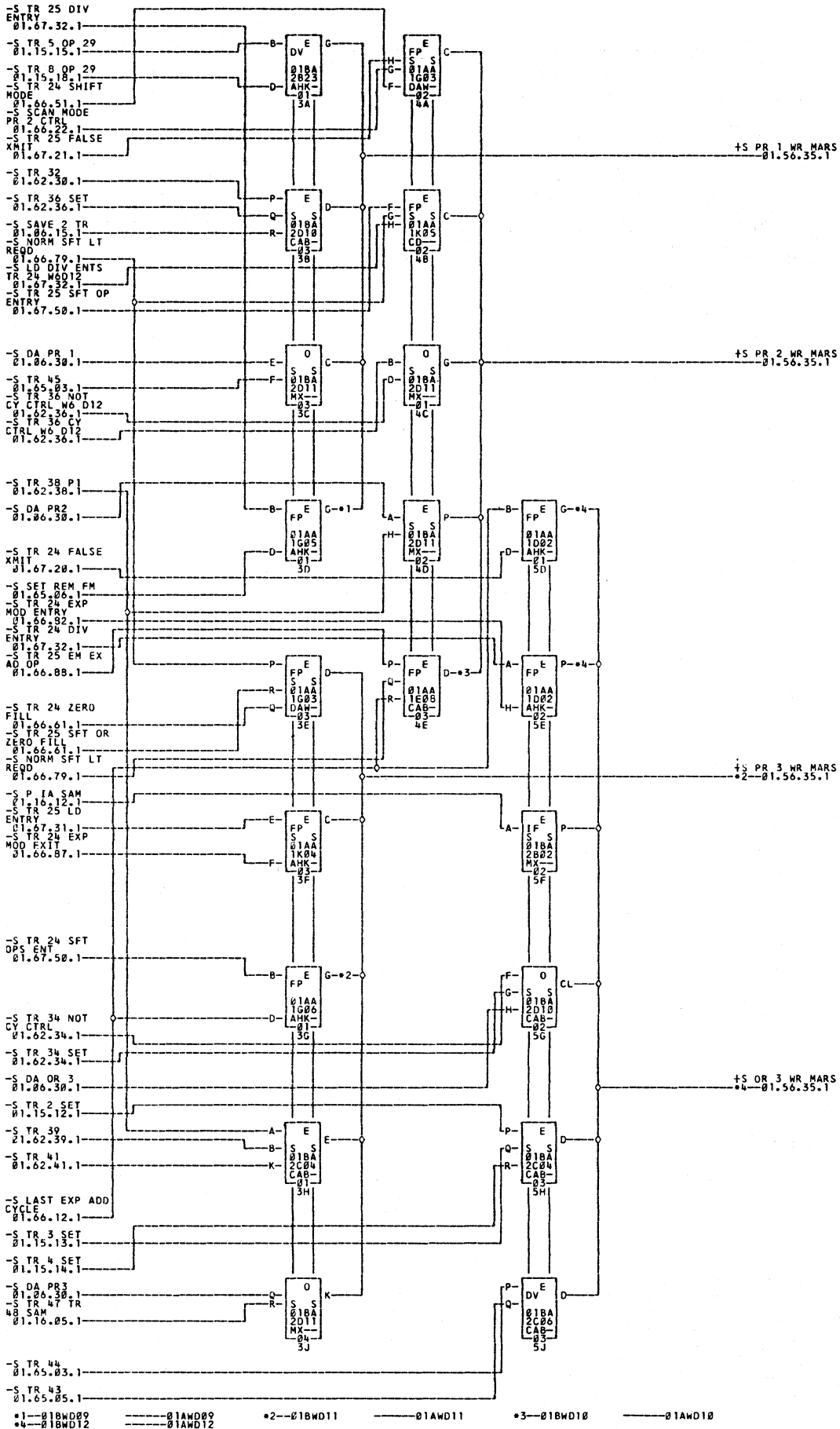




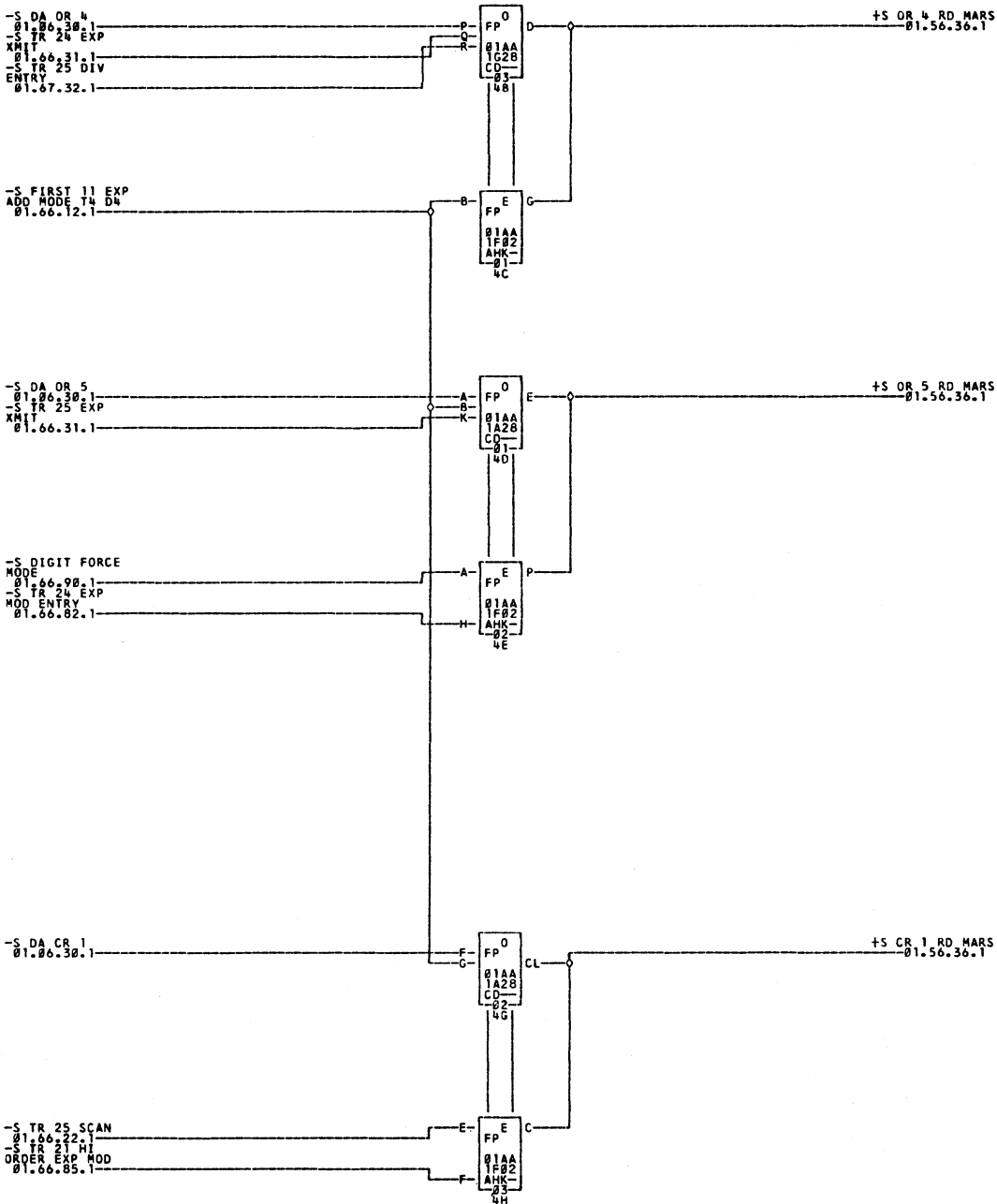


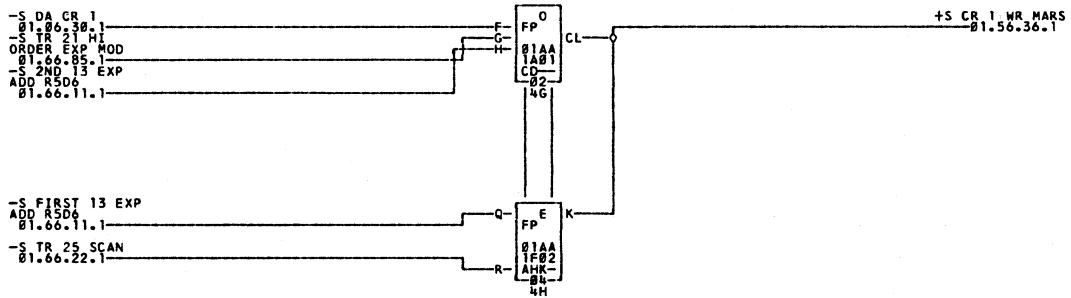
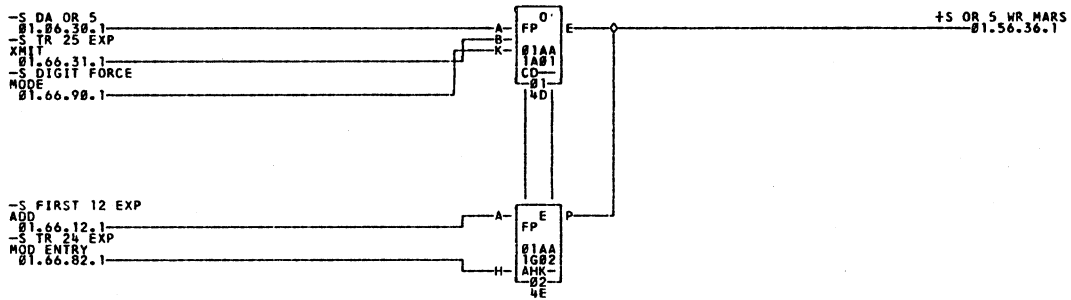
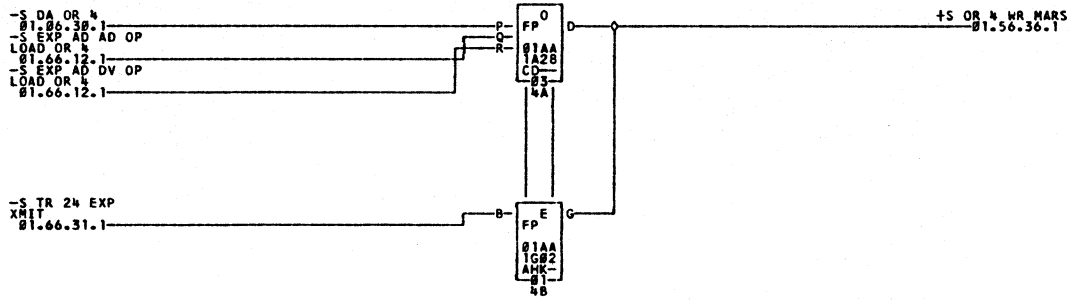
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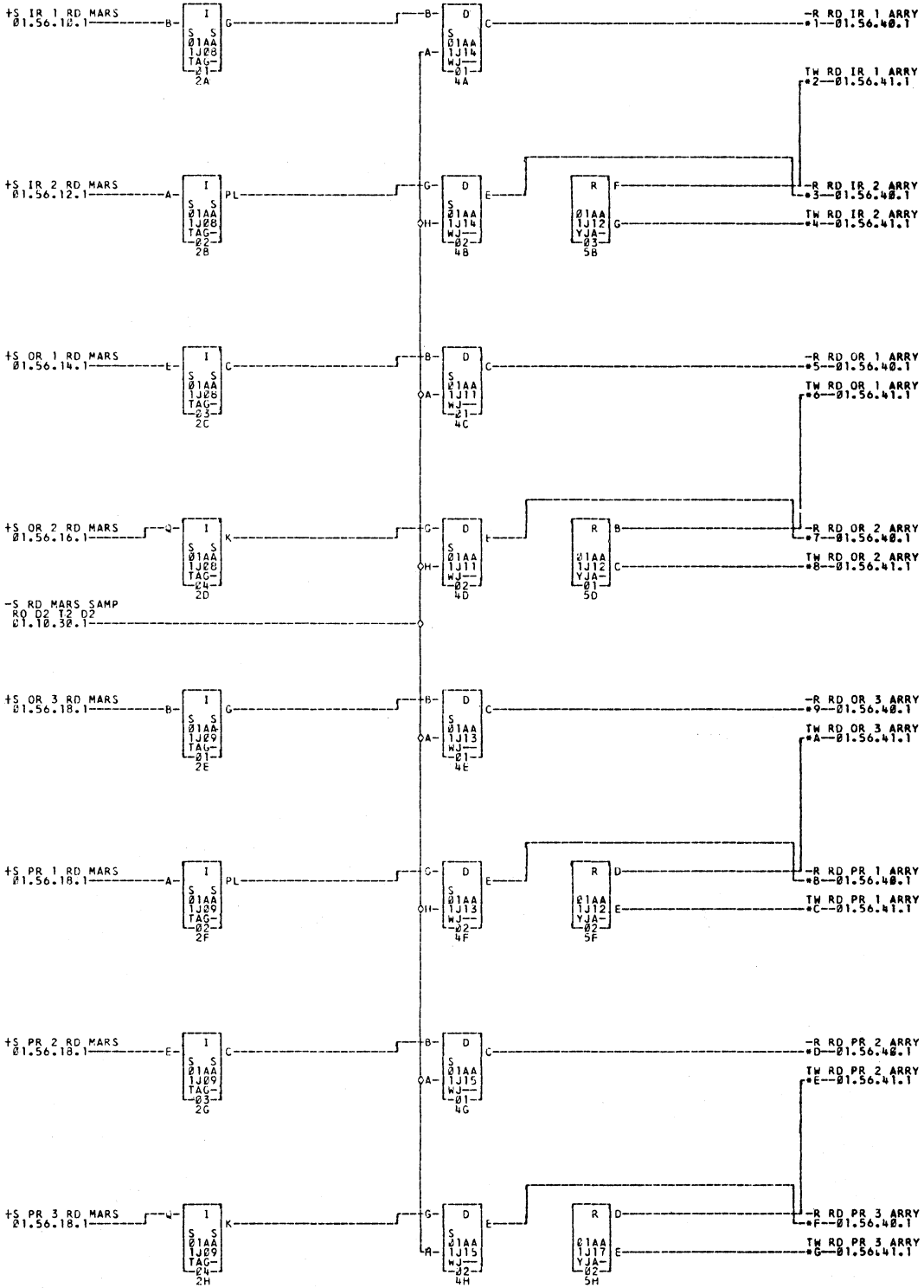




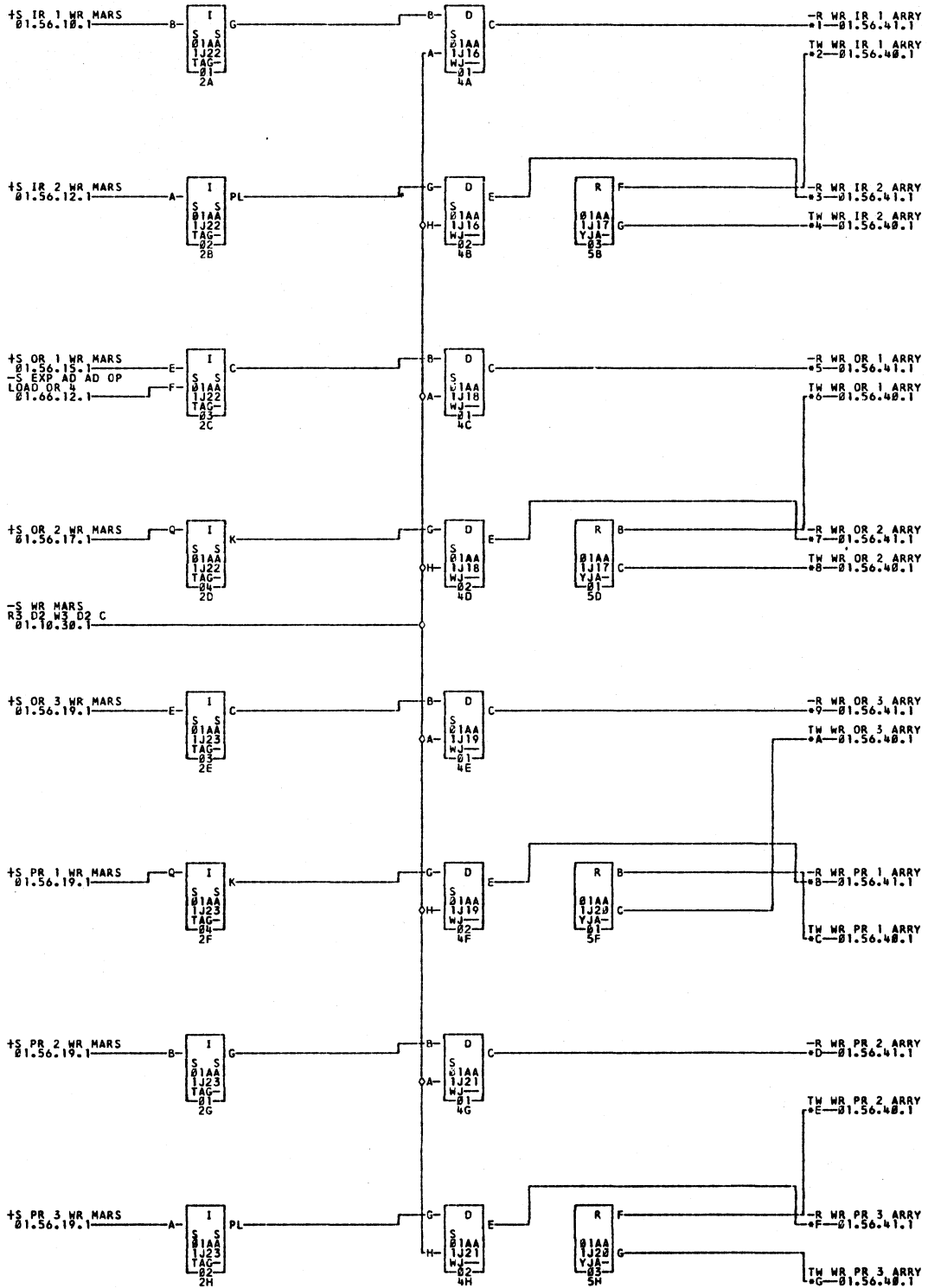
1-01AWD09 2-01AWD11 3-01AWD10 4-01AWD12 5-01AWD10







- *1--MARS D01 *2--MARS B01 *3--MARS D03 *4--MARS B03 *5--MARS D05 *6--MARS B05
- *7--MARS D07 *8--MARS B07 *9--MARS D09 *A--MARS B09 *B--MARS D11 *C--MARS B11
- *D--MARS D13 *E--MARS B13 *F--MARS D15 *G--MARS B15



*1-MARS B02
 *7-MARS B08
 *D-MARS B14

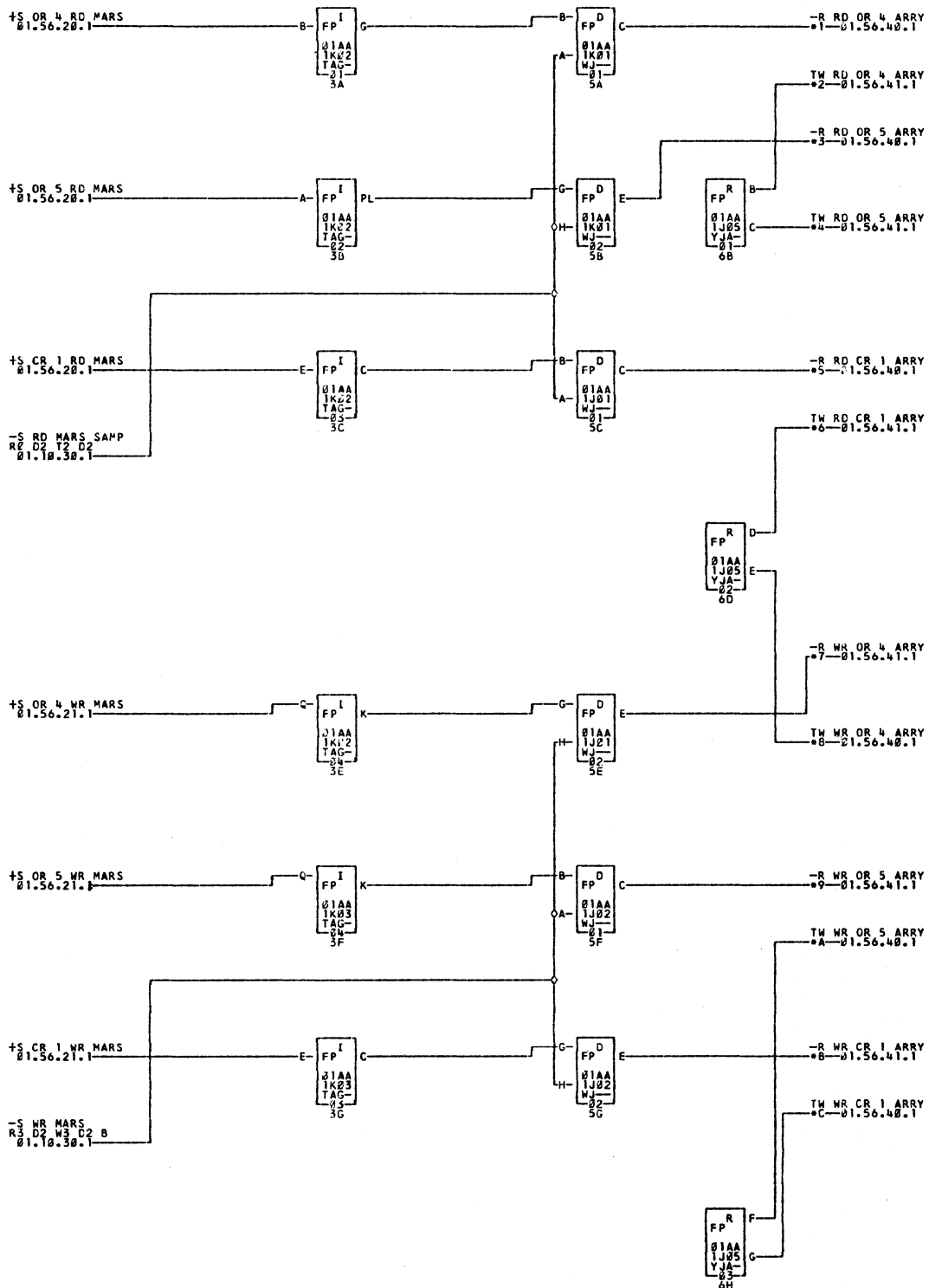
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 *8-MARS D08
 *E-MARS D14

*3-MARS B04
 *9-MARS B10
 *F-MARS B16

*4-MARS D04
 *A-MARS D10
 *G-MARS D16

*5-MARS B06
 *B-MARS B12

*6-MARS D06
 *C-MARS D12



*1—MARS D17
*7—MARS B18

*2—MARS B17
*8—MARS D18

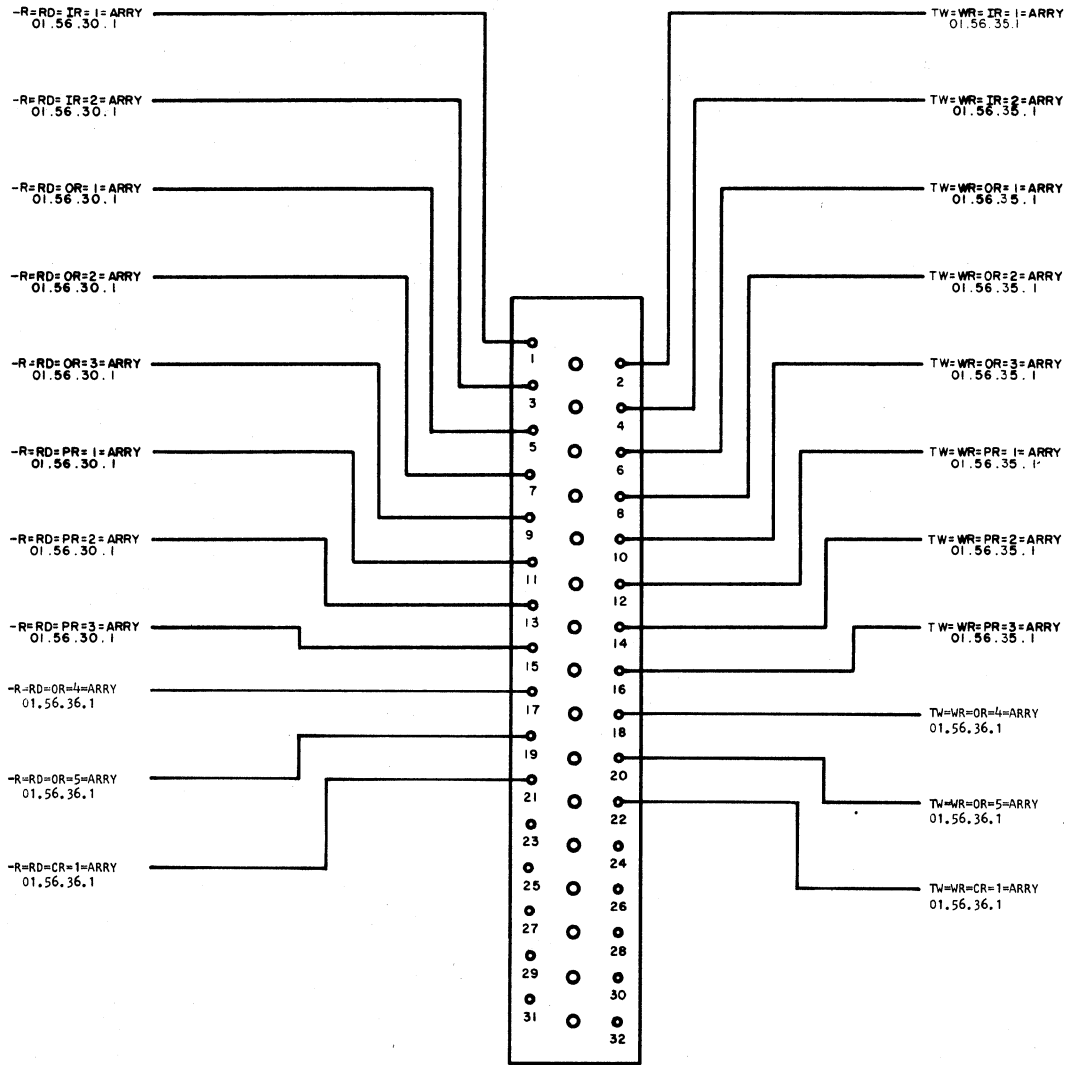
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*9—MARS B20

*4—MARS B19
*A—MARS D20

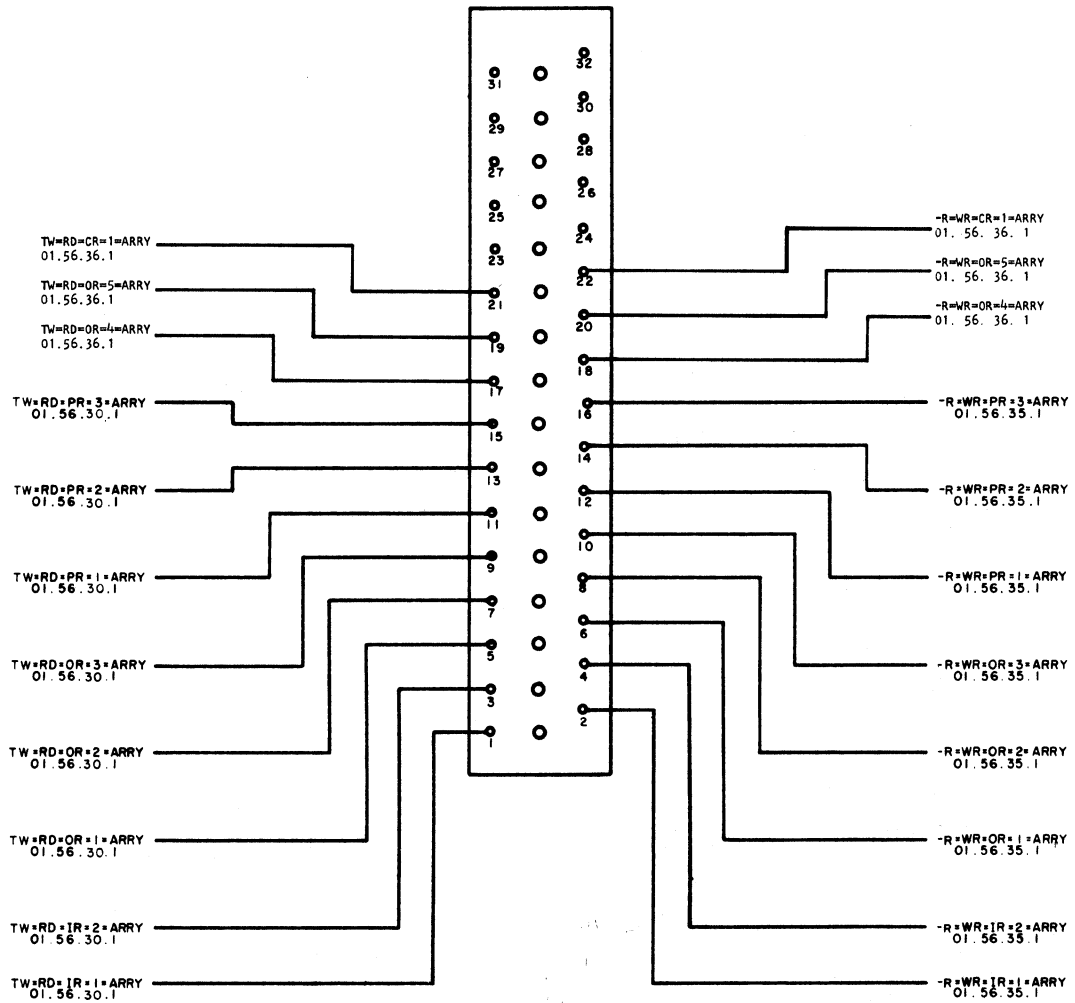
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*B—MARS B22

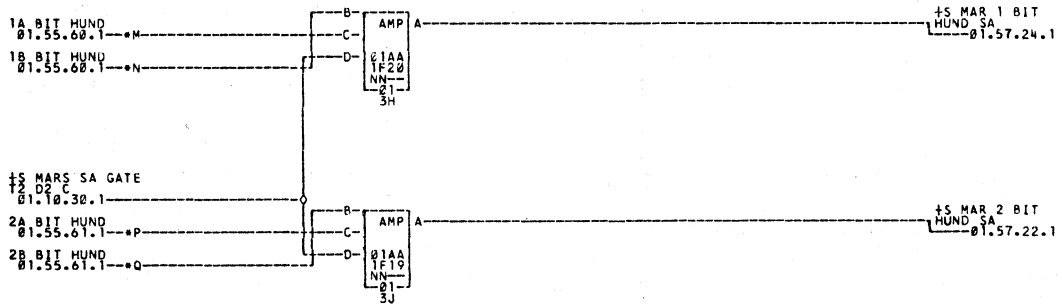
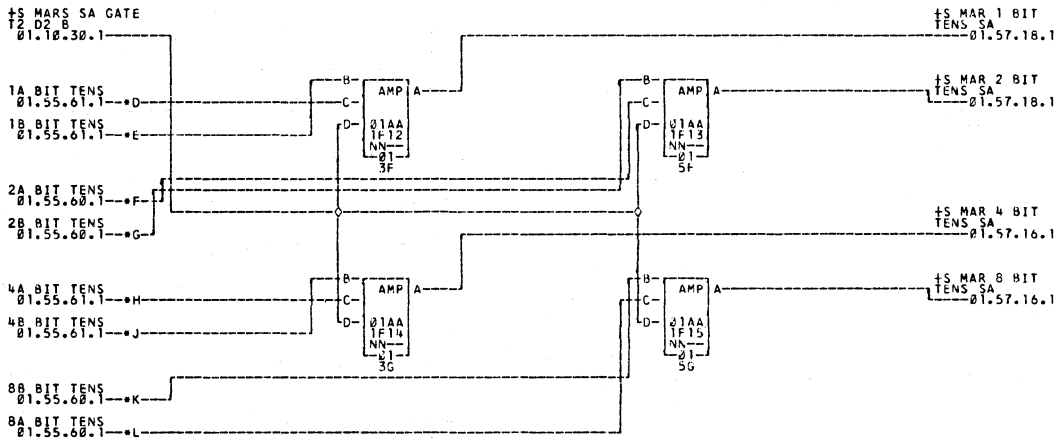
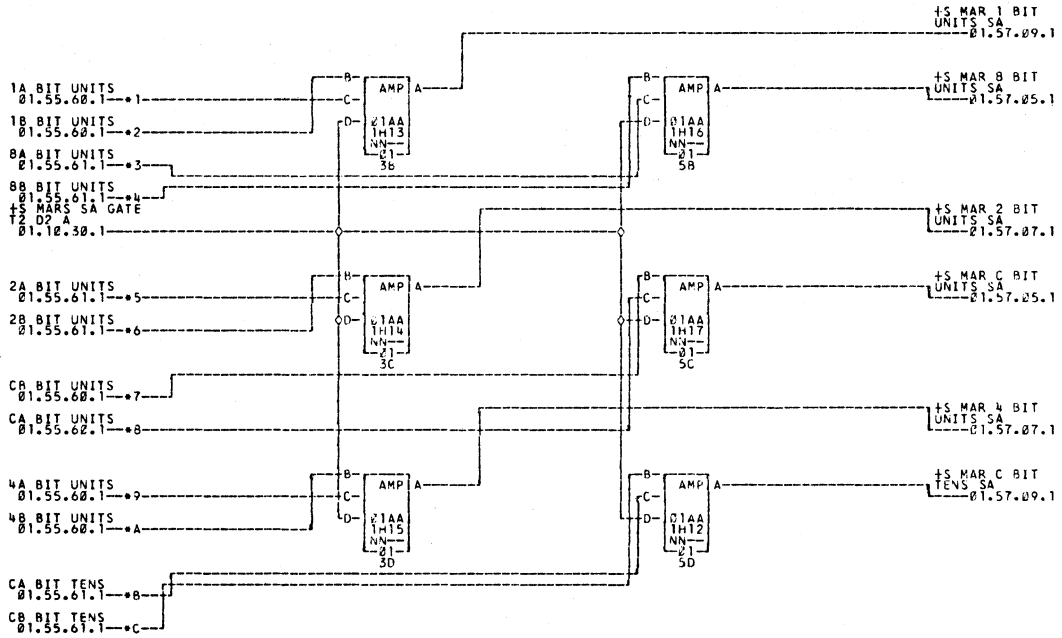
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*C—MARS D22

SIDE D

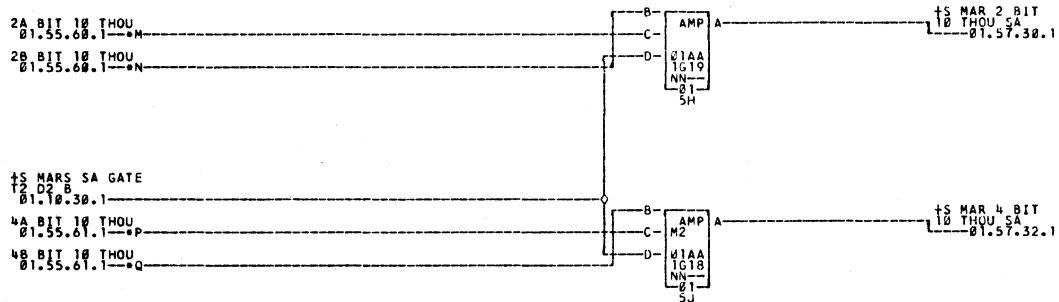
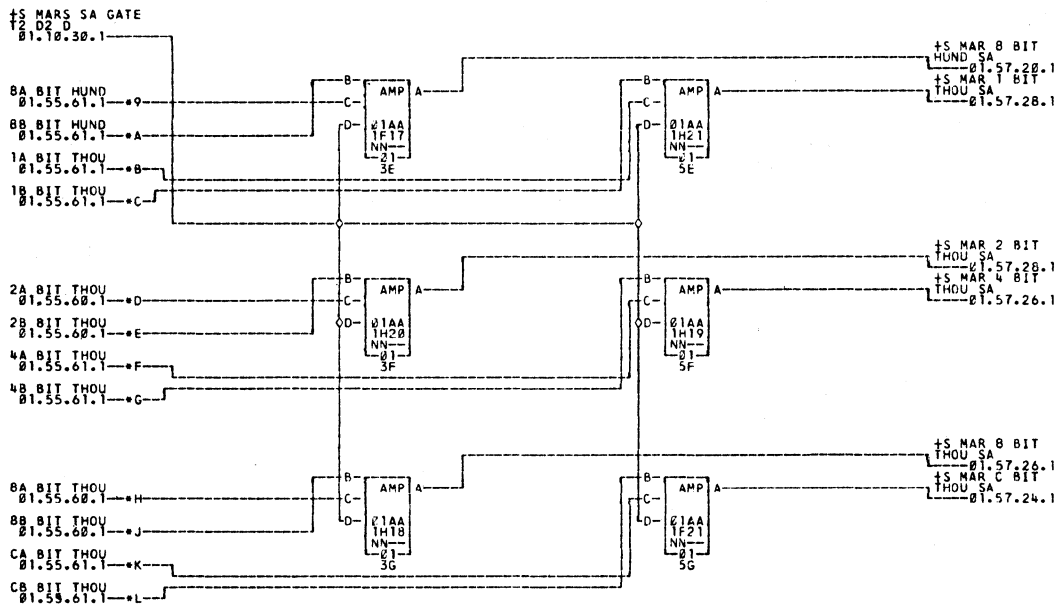
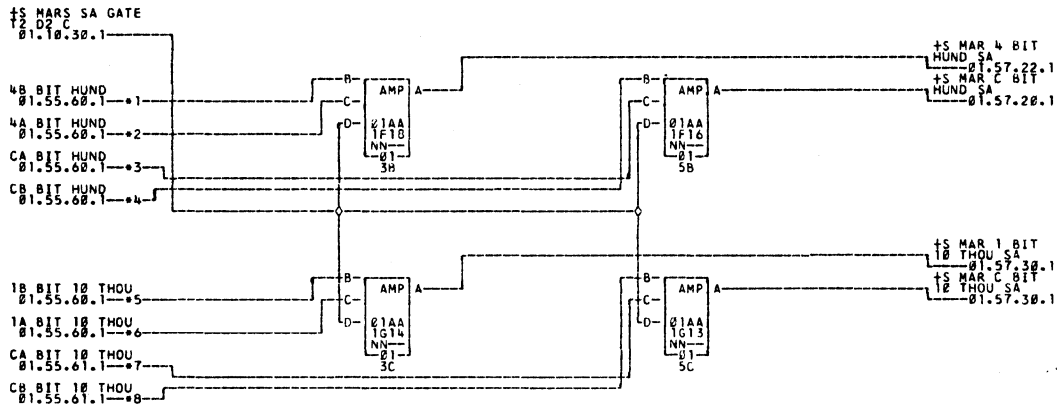


SIDE B

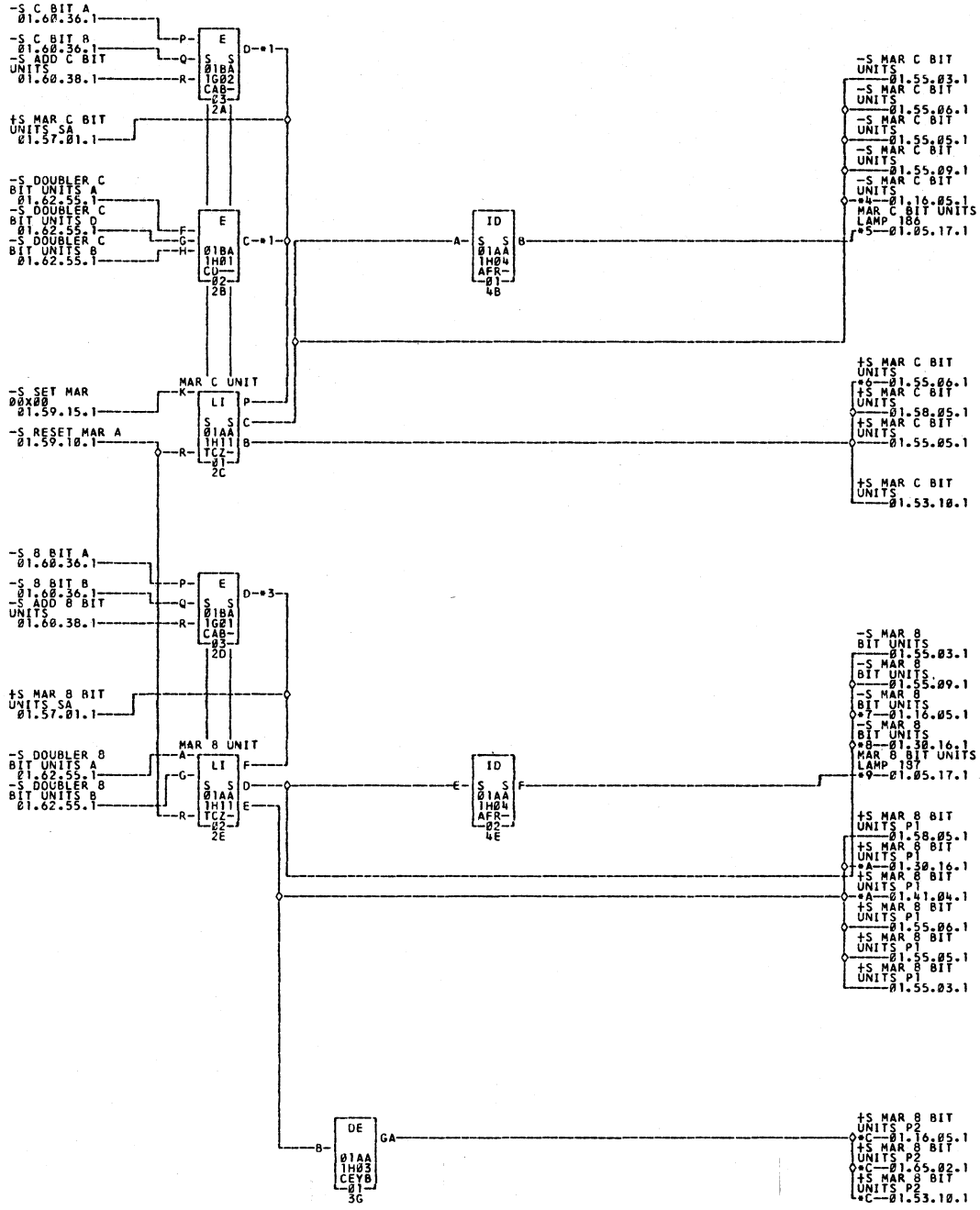




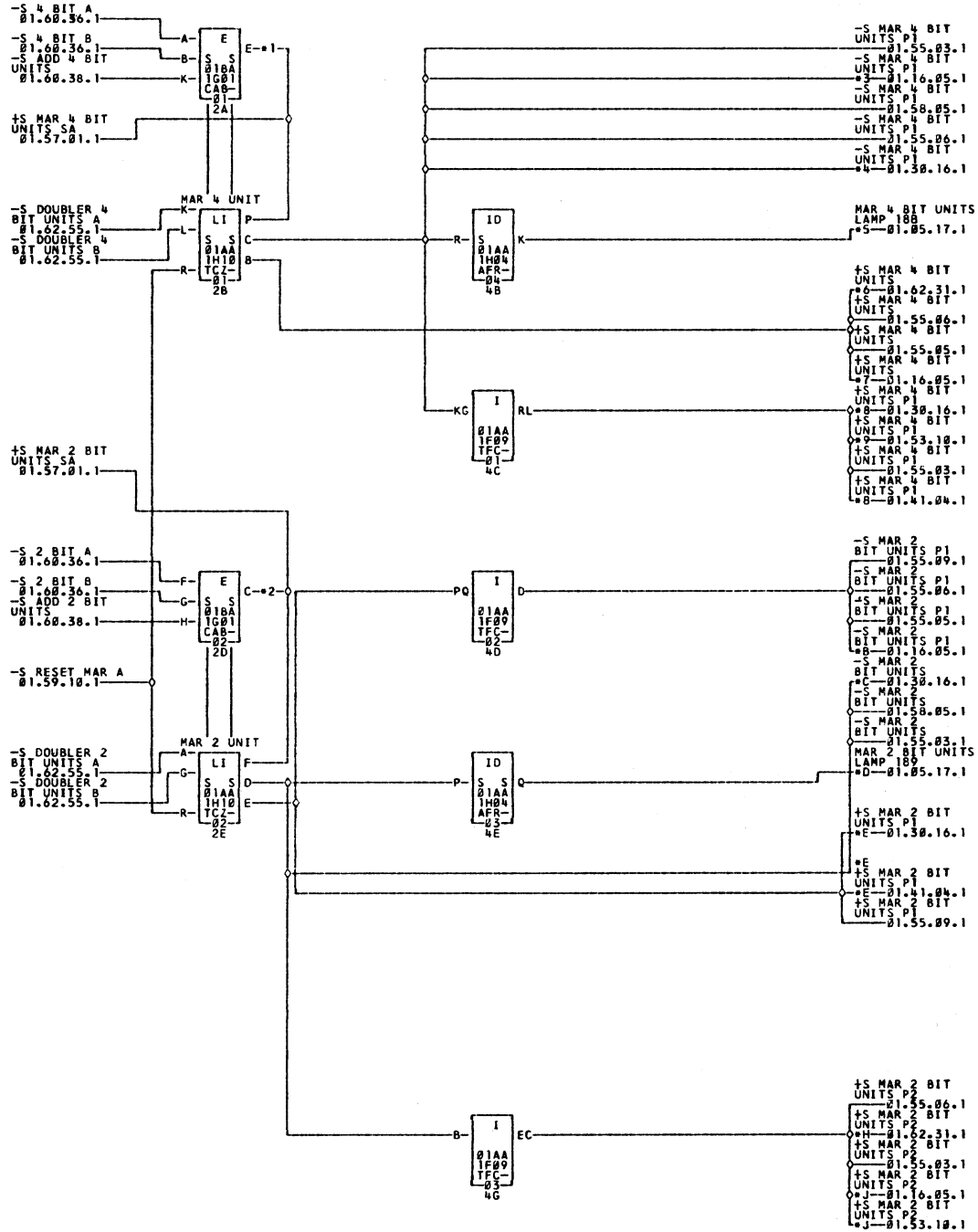
- *1--MARS A04 *2--MARS A02 *3--MARS C06 *4--MARS C08 *5--MARS C02 *6--MARS C04
- *7--MARS A10 *8--MARS A12 *9--MARS A28 *A--MARS A06 *B--MARS C18 *C--MARS C20
- *D--MARS C10 *E--MARS C12 *F--MARS A16 *G--MARS A14 *H--MARS C14 *J--MARS C16
- *K--MARS A18 *L--MARS A20 *M--MARS A24 *N--MARS A22 *P--MARS C22 *Q--MARS C24



- *1--MARS A26 *2--MARS A28 *3--MARS A32 *4--MARS A36 *5--MARS A40 *6--MARS A44
- *7--MARS C32 *8--MARS C34 *9--MARS C38 *A--MARS C28 *B--MARS C30 *C--MARS C37
- *D--MARS A36 *E--MARS A34 *F--MARS C34 *G--MARS C36 *H--MARS A42 *I--MARS A38
- *K--MARS C38 *L--MARS C40 *M--MARS A48 *N--MARS A46 *P--MARS C46 *Q--MARS C48



- *1--018WH21
- *2--01AXE06
- *3--01BWK22
- *4--01ANG22
- *5--01AWF08
- *6--01BWF08
- *7--01AWF09
- *8--01A1Z11C
- *9--01AXE07
- *A--01A1Z11A
- *B--01A2Z11C
- *C--01AWD17



- 1-01BWF23
- 4-01AZ11B
- 01BZ206B
- 01B118
- E-01AZ12D
- J-01AWF13

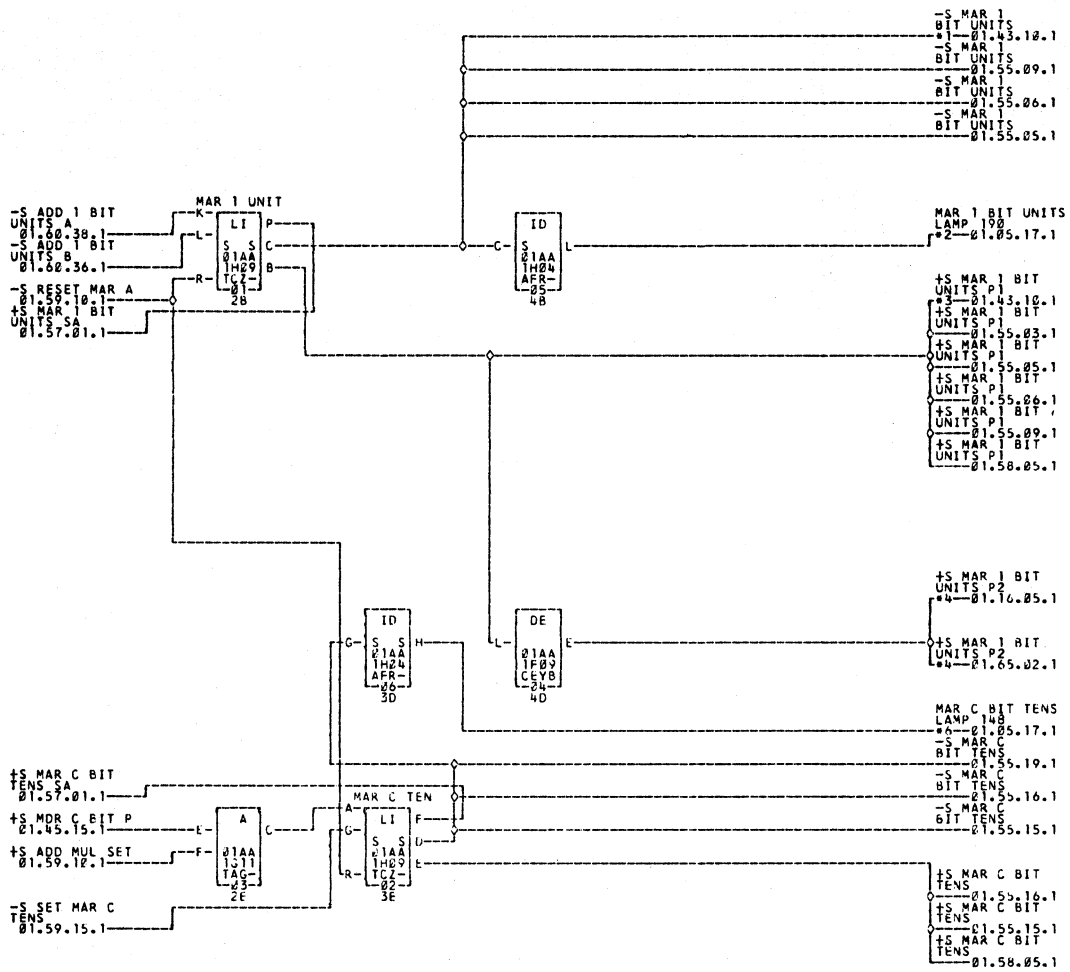
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- 01AZ21B
- 7-01AWF11
- 0-01AWF12
- 01AZ22D
- 01BWF13

- 2-01BWF22
- 5-01AXE00
- 01BWF11
- 01BWF12
- H-01AWF13

- 01AWF22
- 0-01AWF11
- 01AZ21D
- C-01AZ21D
- 01BWF13

- 3-01AWD06
- 01BWF11
- 01AZ21D
- 01BZ13D

- 01BWD06
- 01B1Z06B
- 0-01AXI18
- D-01BZ213D



*1--01AWH01
-----01BWH03

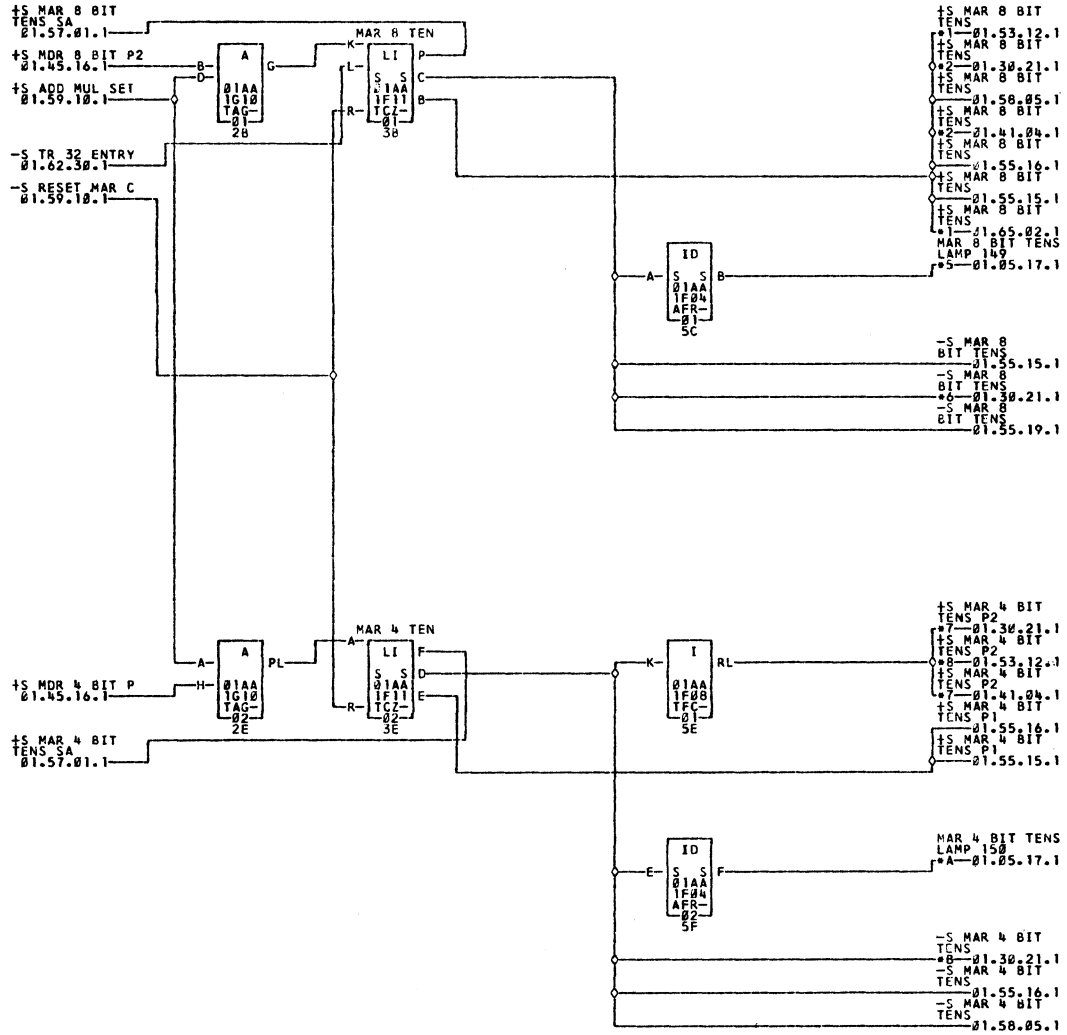
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*2--01AXE10

*3--01AWH02

-----01BWH02

*4--01AWH03



*1-01AHH23
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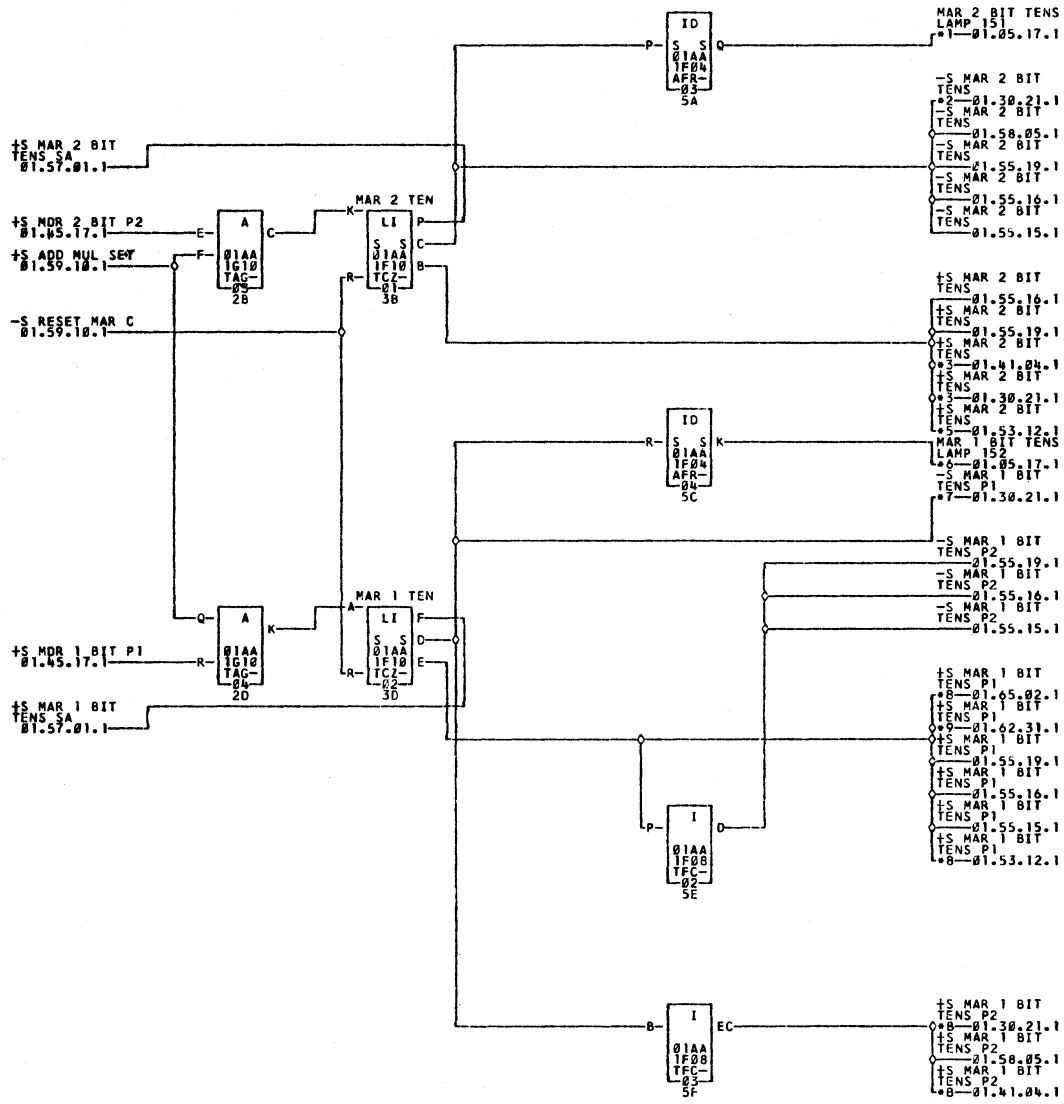
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 *6-01A2Z166

*7-01A1Z12A
 *8-01A2Z08C

*9-01A2Z12A
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*11-01AXE12
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*13-01A1Z15B
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*1-01A1E14
 *2-01A1E15
 *3-01B1Z14D

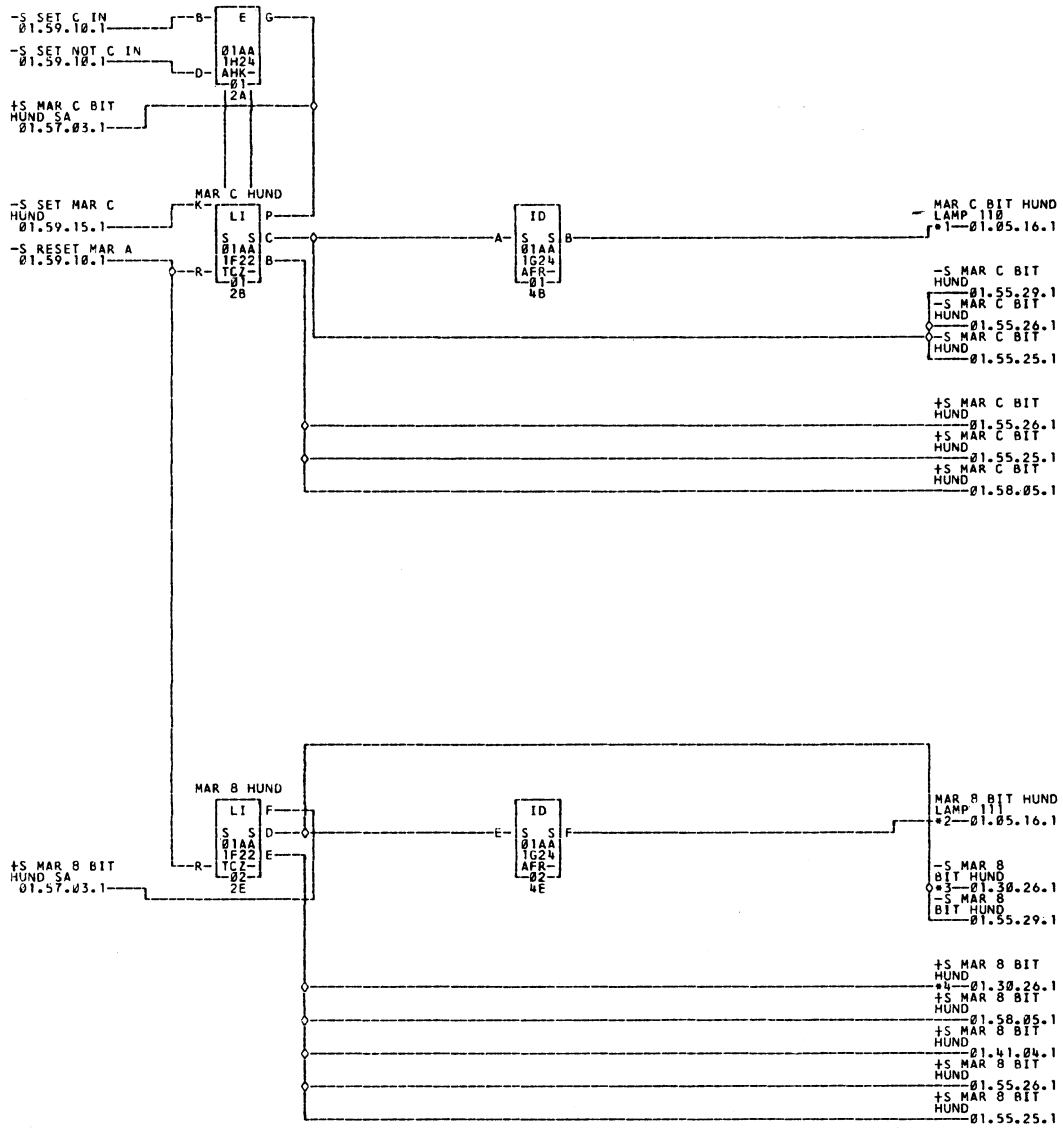
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 *8-01A1Z08B
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*10-01A1Z10A
 *11-01A2Z08A
 *12-01A2Z08B

*13-01A2Z10A
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*15-01A1E08
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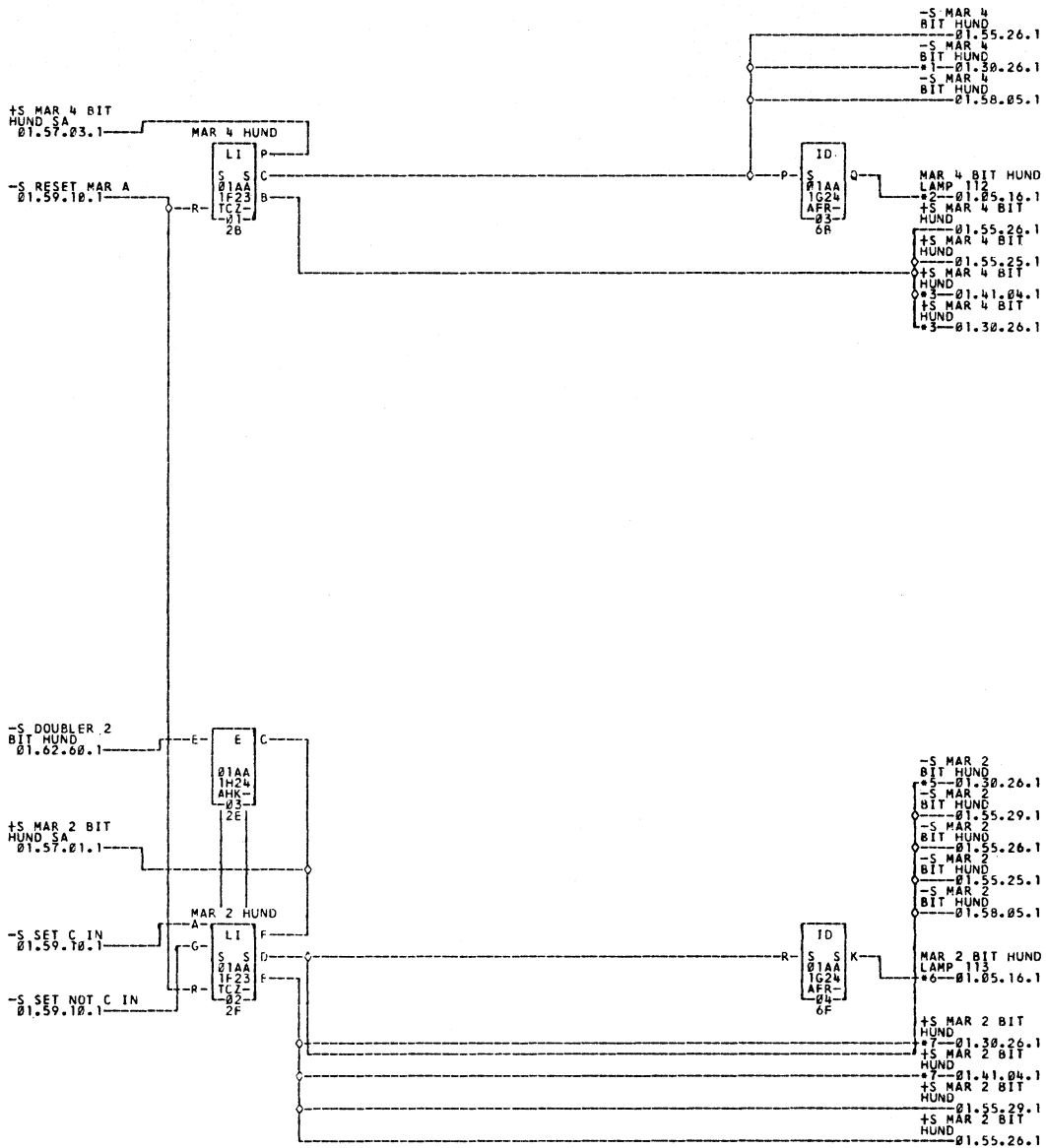
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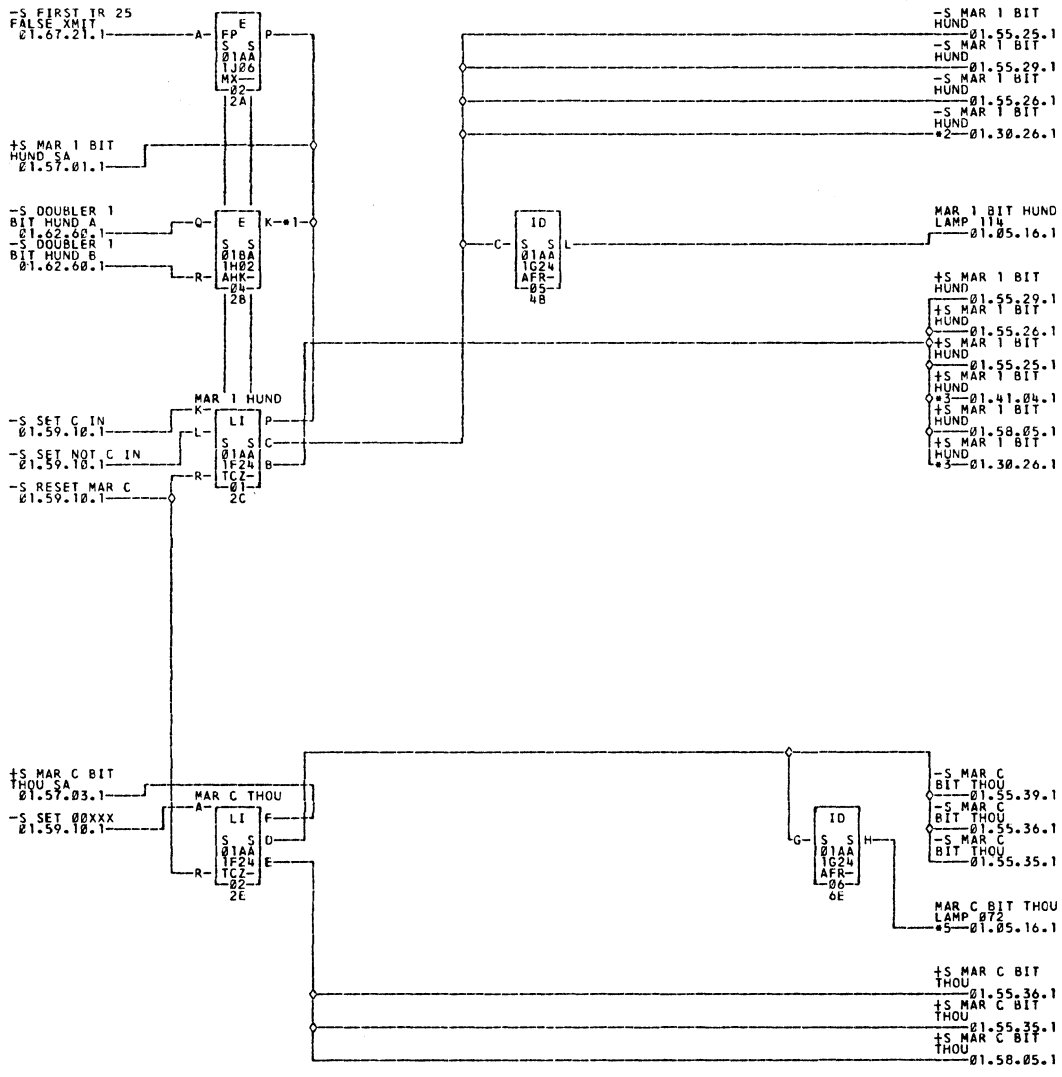
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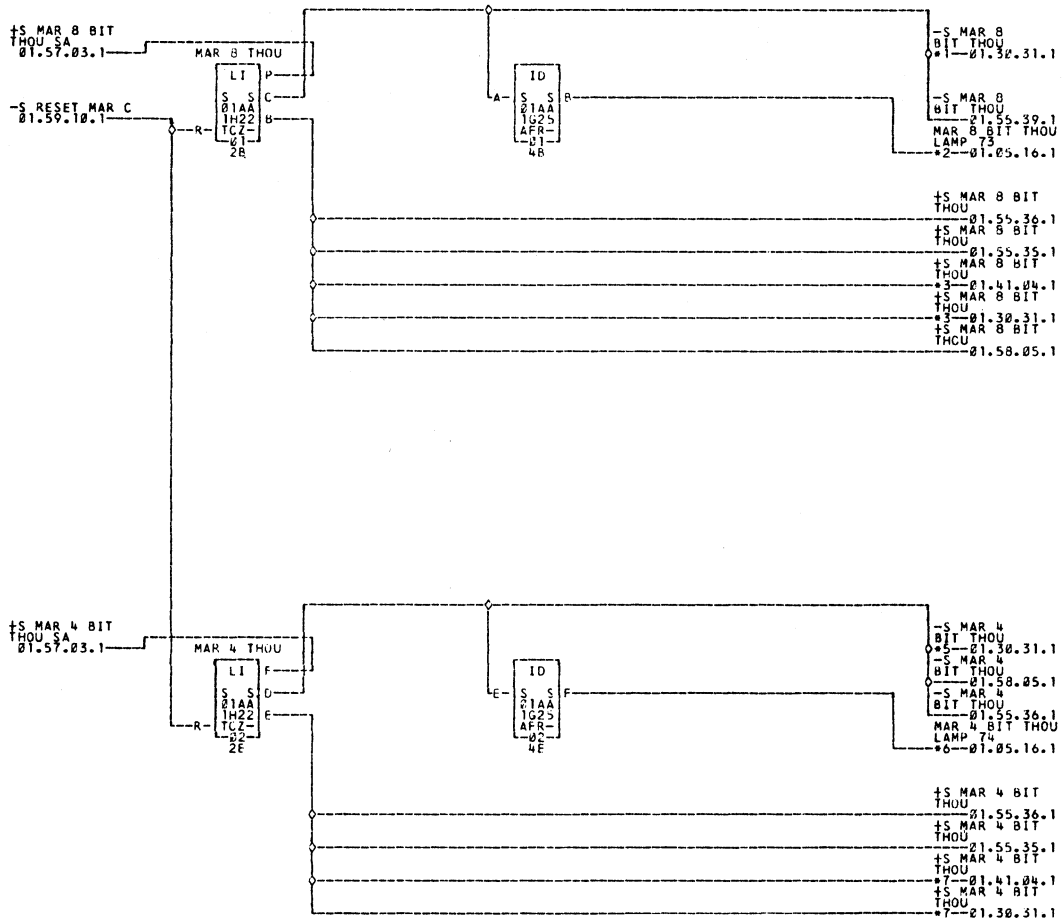
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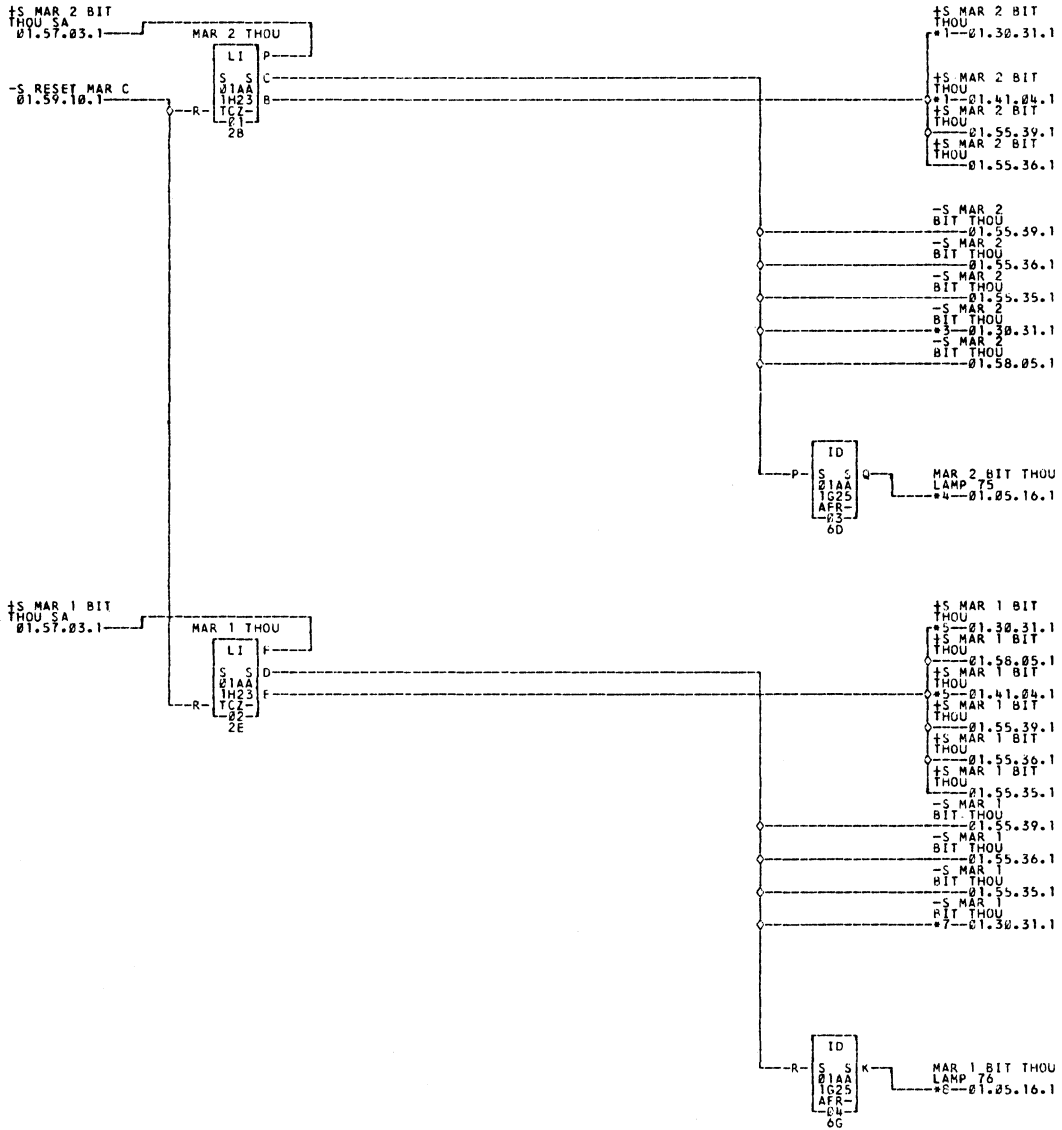
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*1-01BNG21 -01ANG21 *2-01A1215A -01A2215A *3-01A1213A -01A2213A
 *5-01AXE21





*1-01A1223A
01A2223B

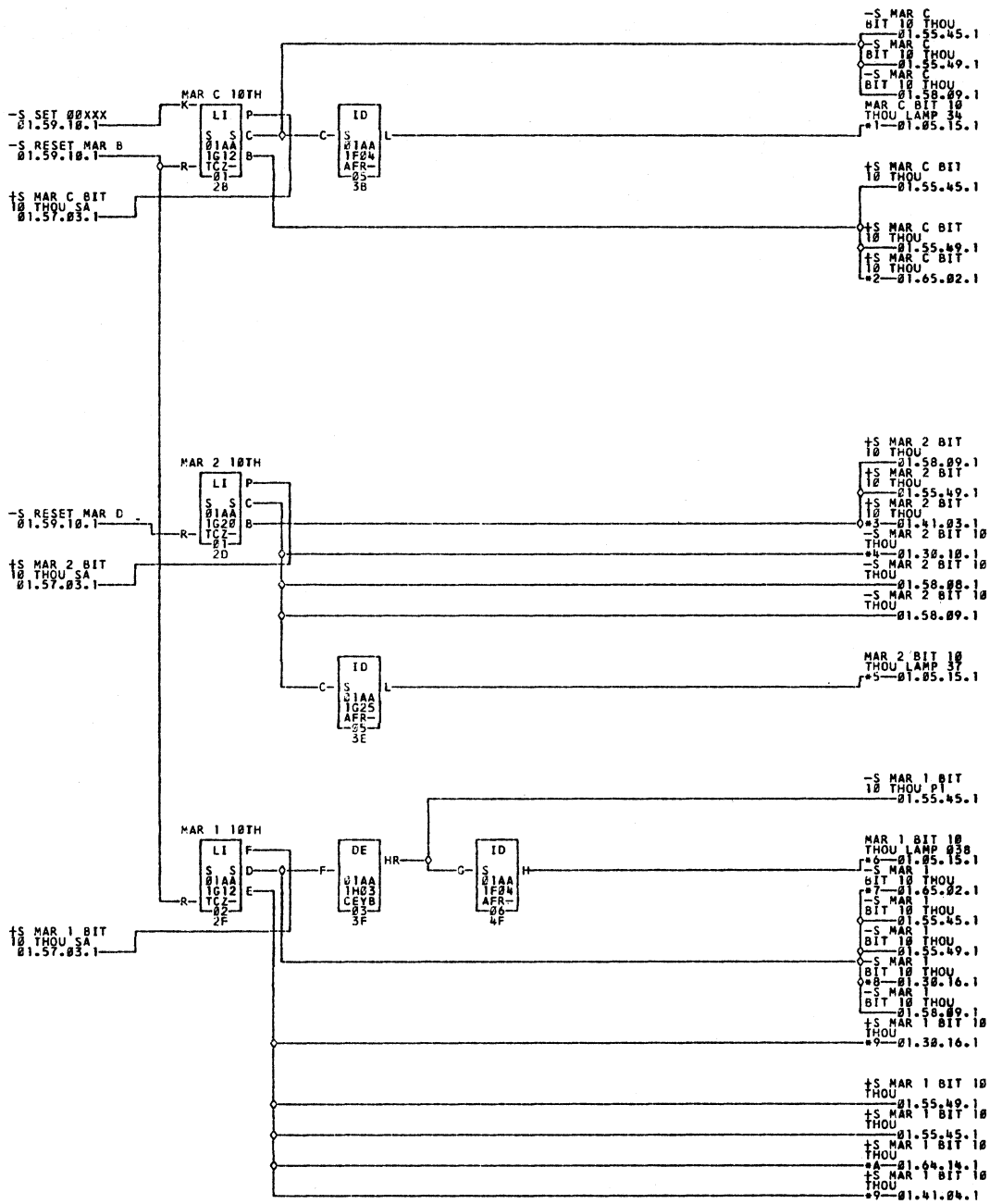
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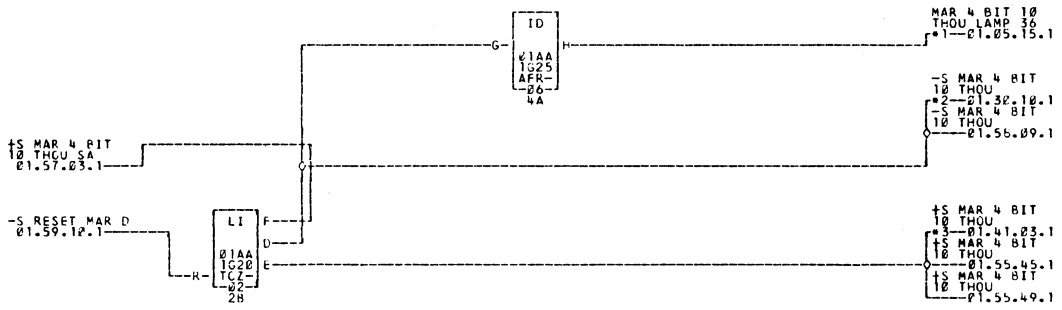
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*5-01A1223B



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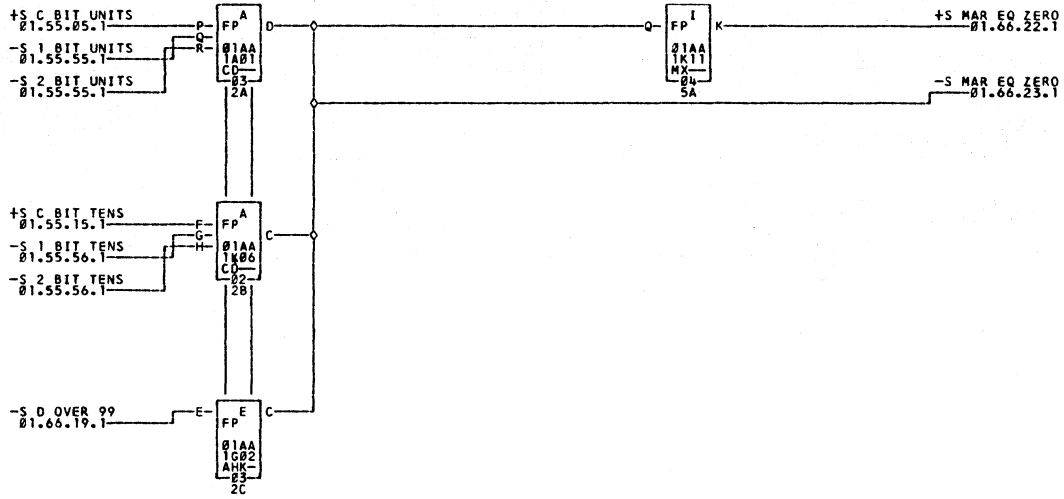
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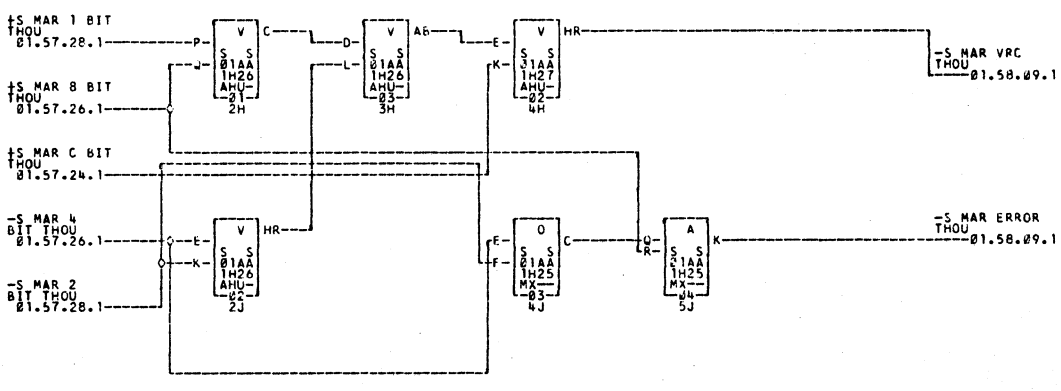
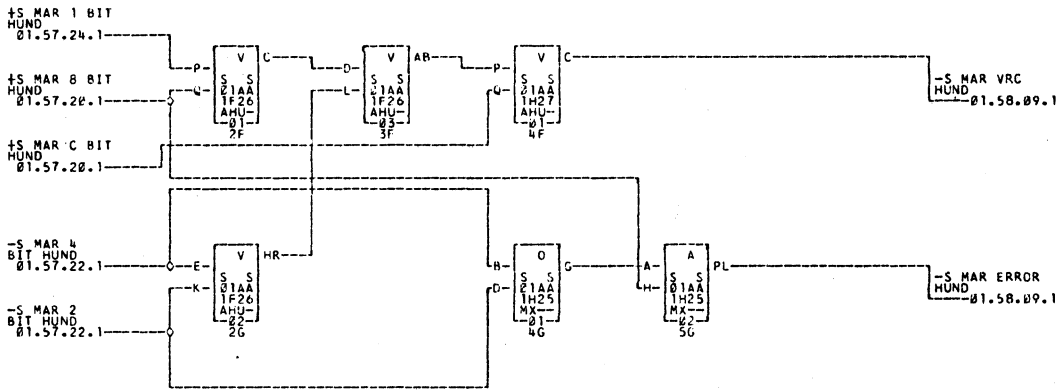
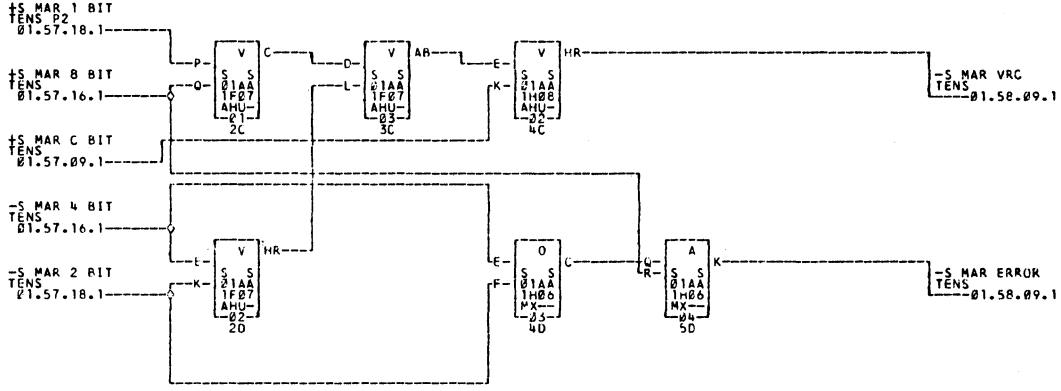
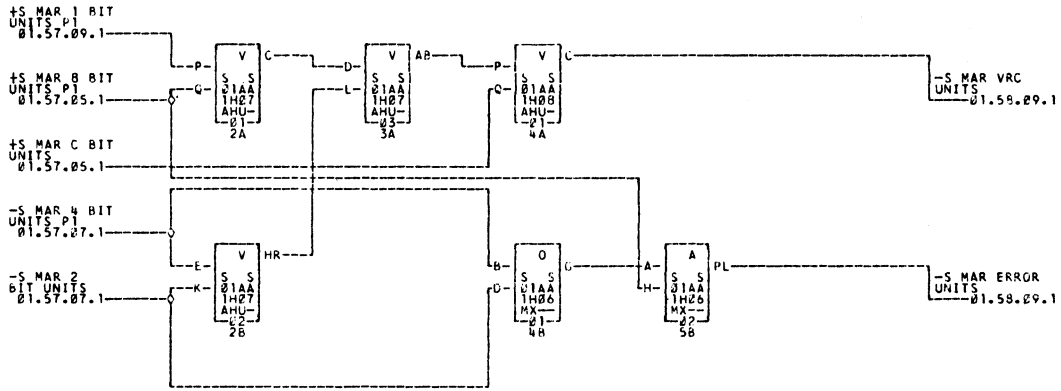
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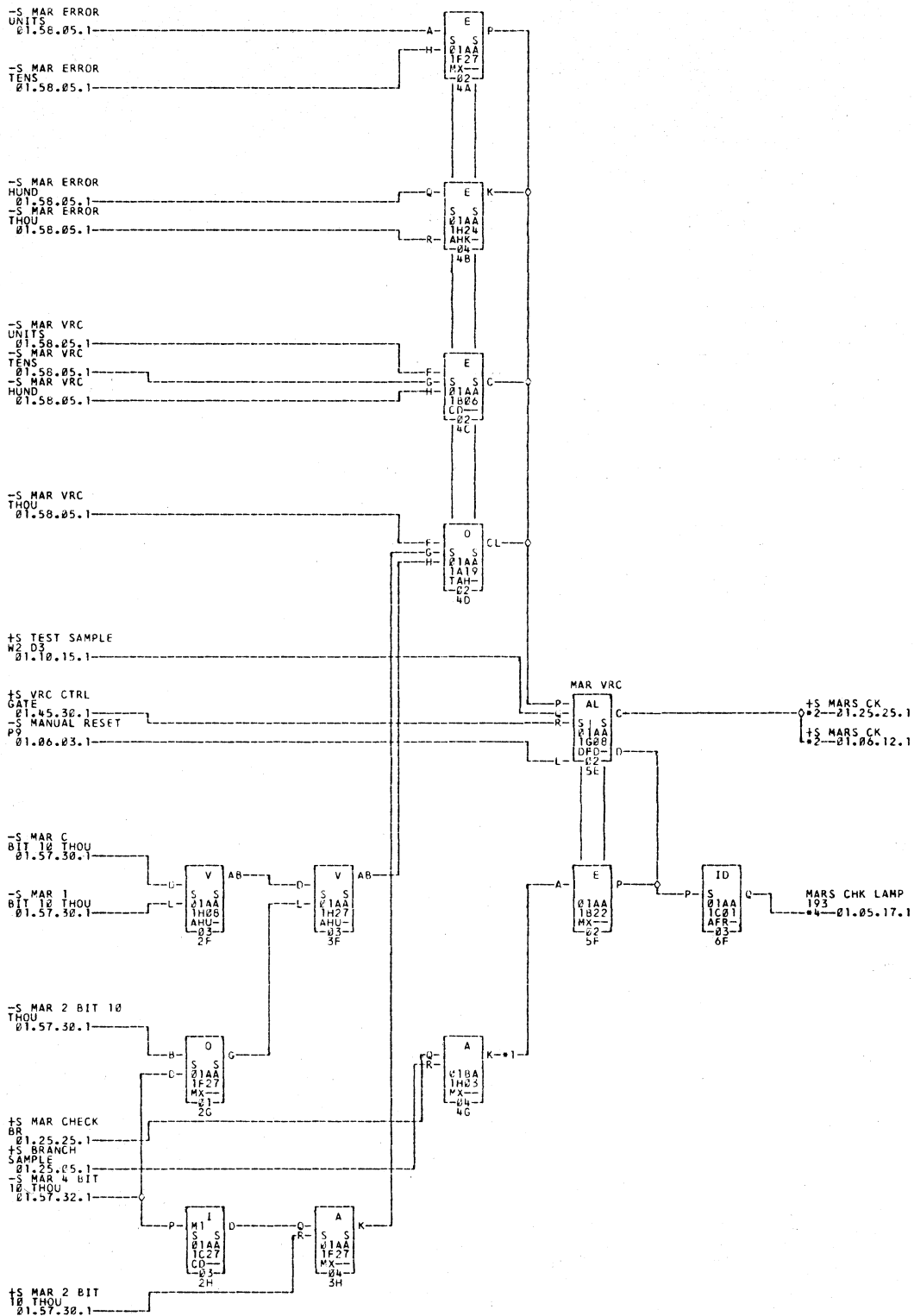
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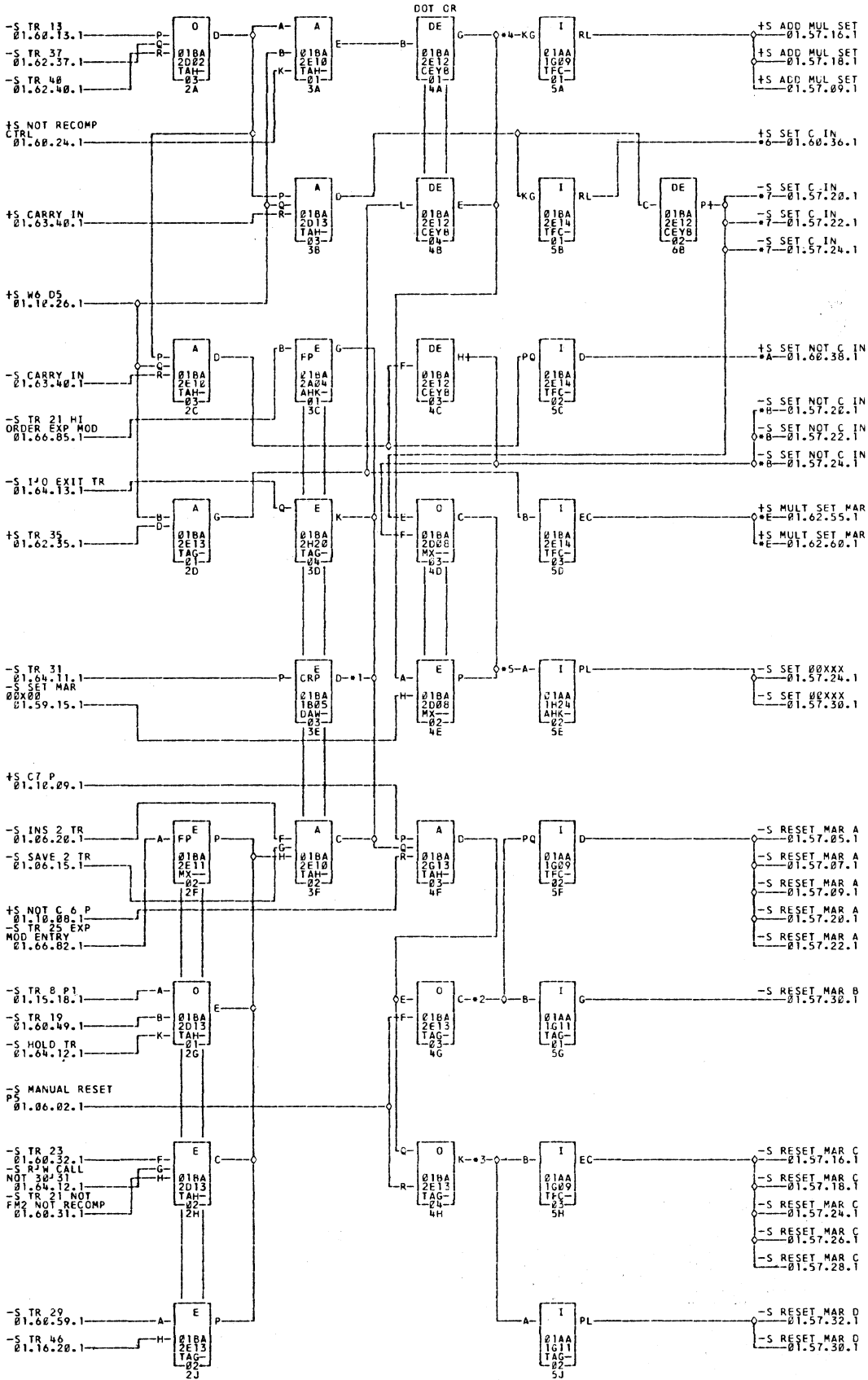
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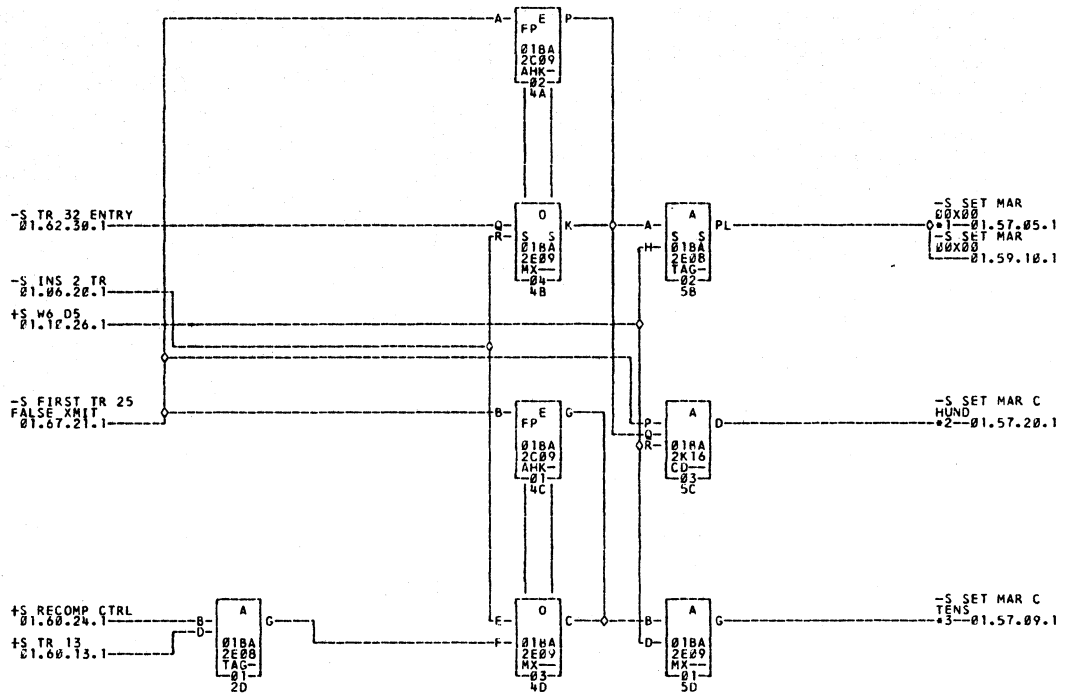




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- *4--01B1WJ19 01A1WJ20 *5--01B1WJ23 01B1Z20 *6--01B2Z19D 01B1Z19D
- *7--01B1WJ23 01A1WJ23 *A--01B2Z20D 01B1Z20D *B--01B1WJ24 01A1WJ24
- *E--01B2Z21D



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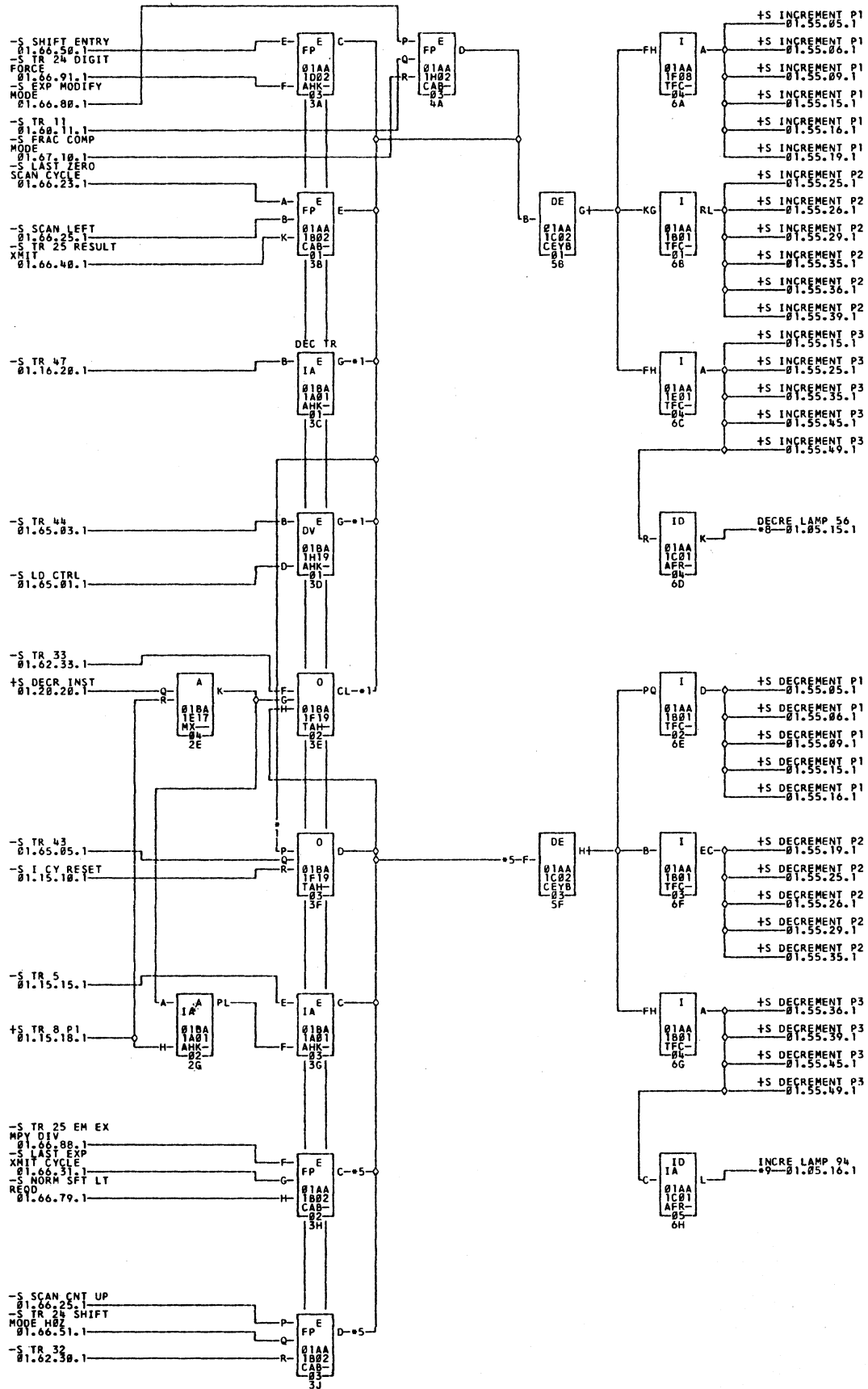
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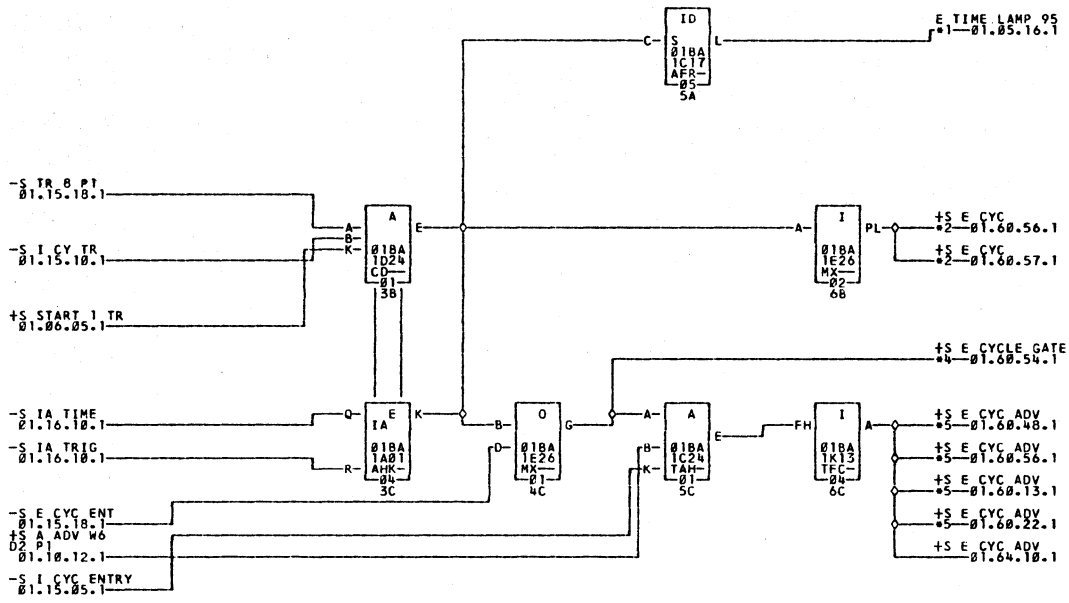
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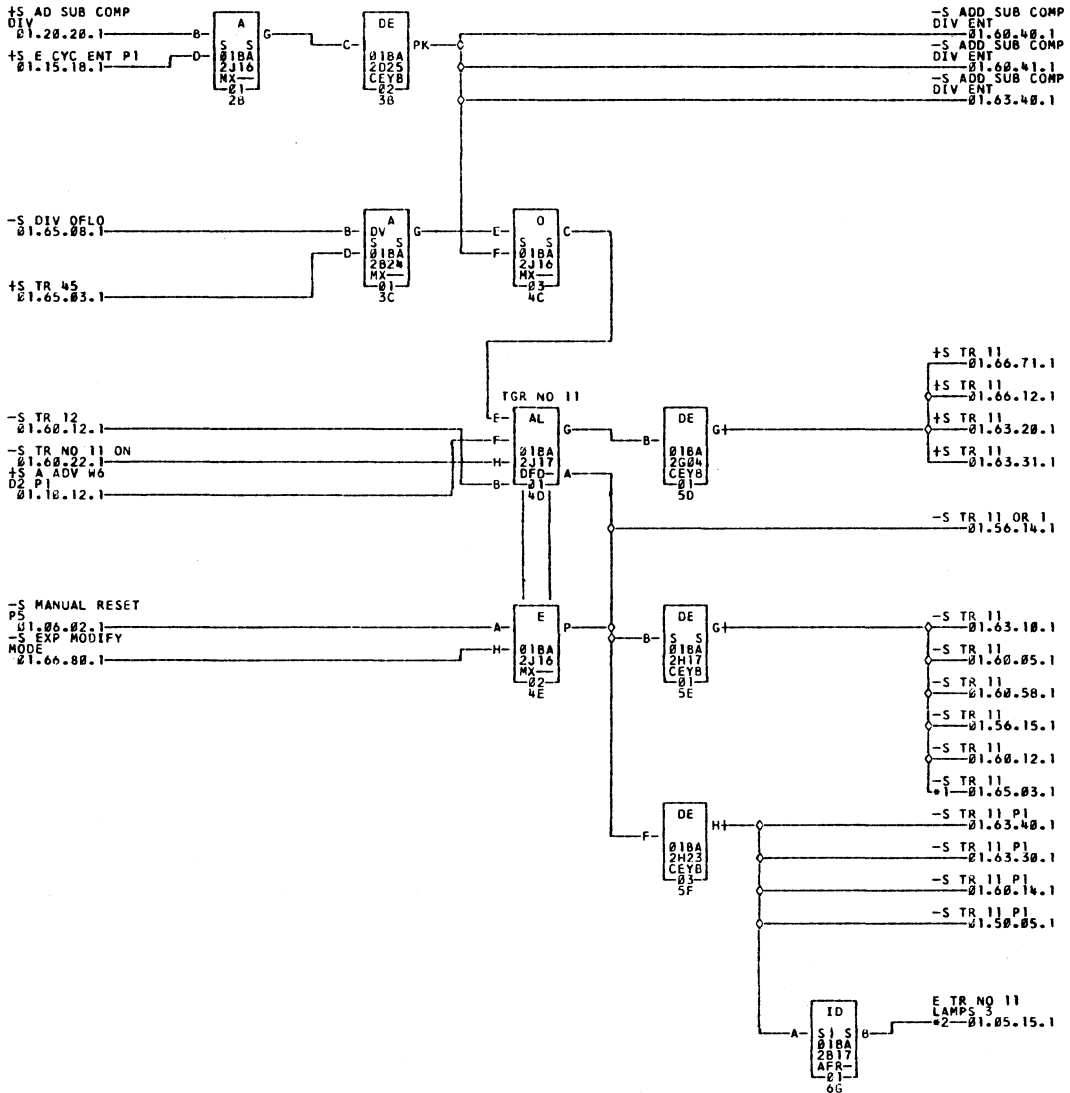
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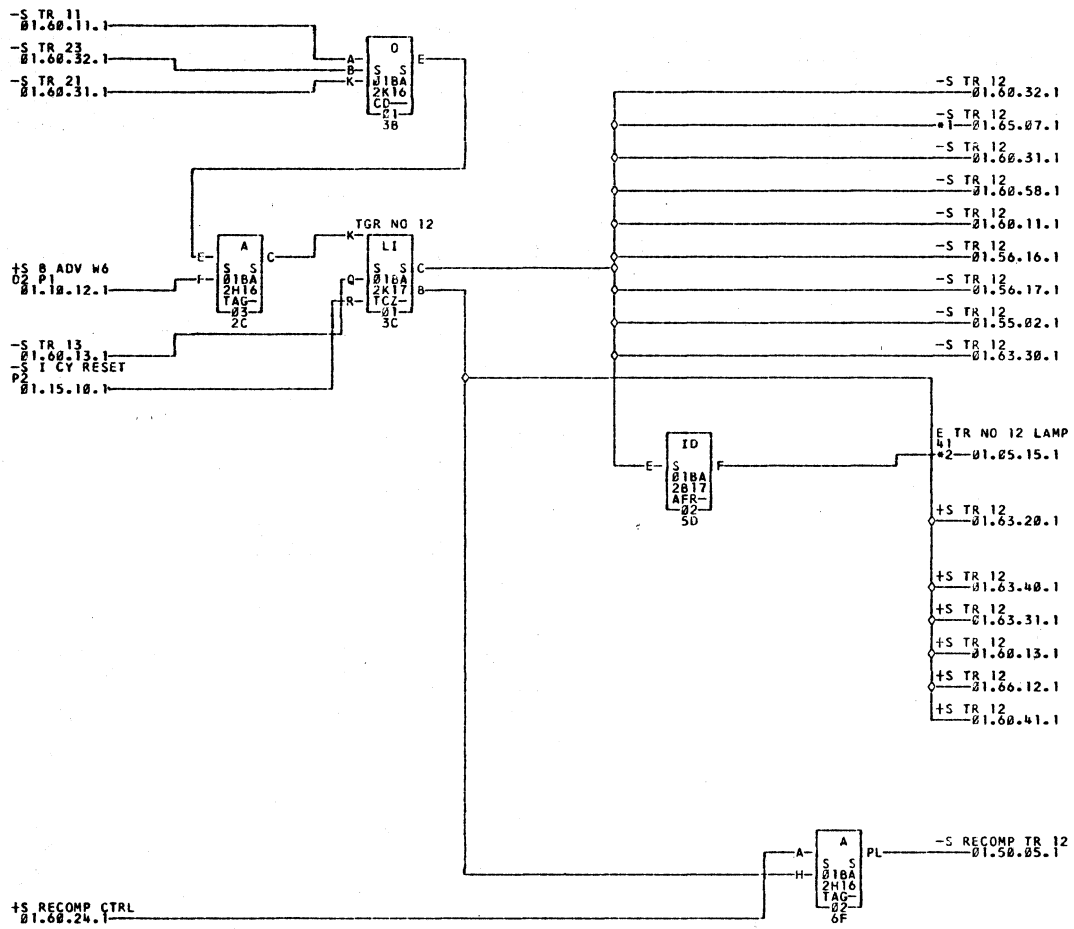
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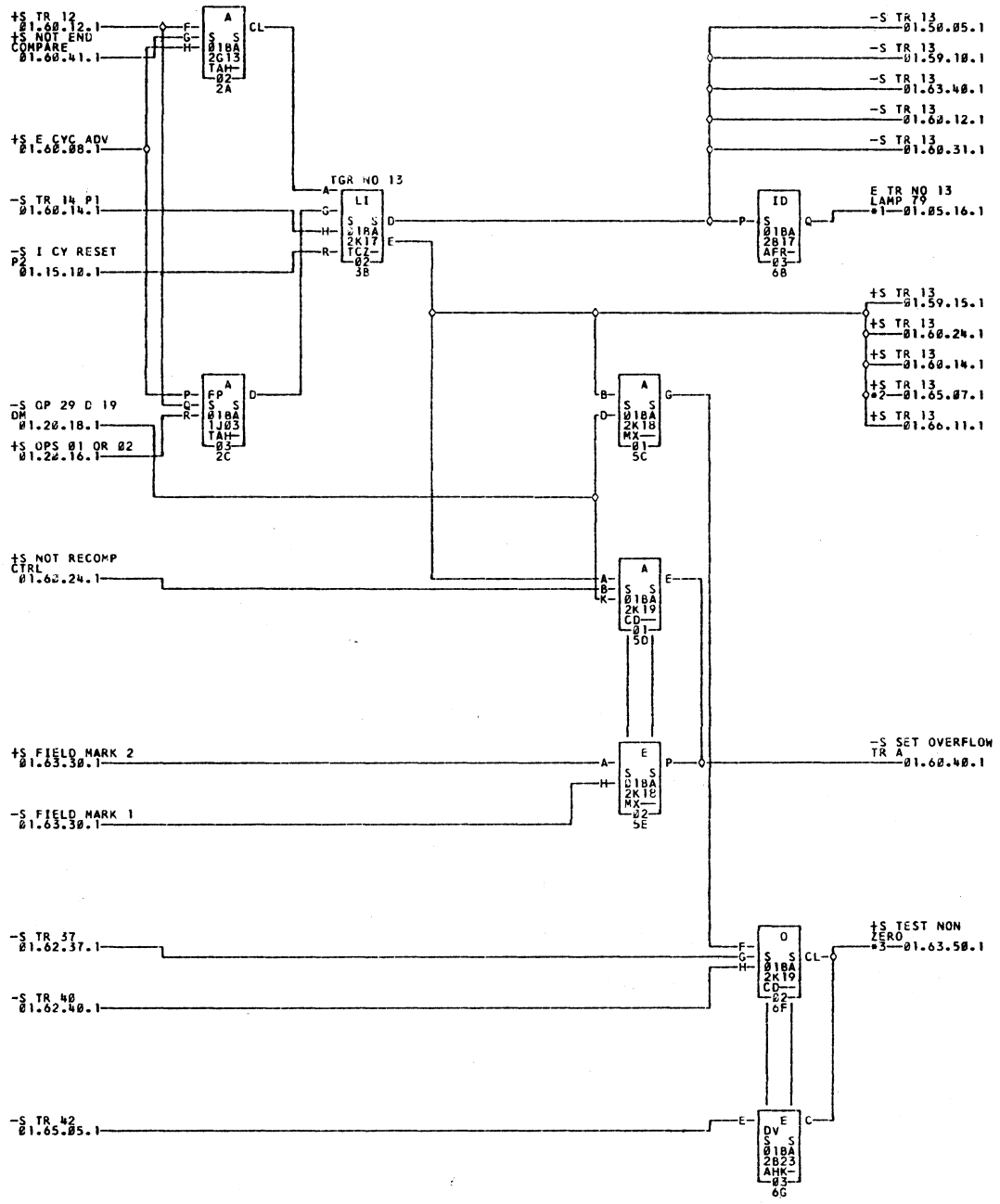
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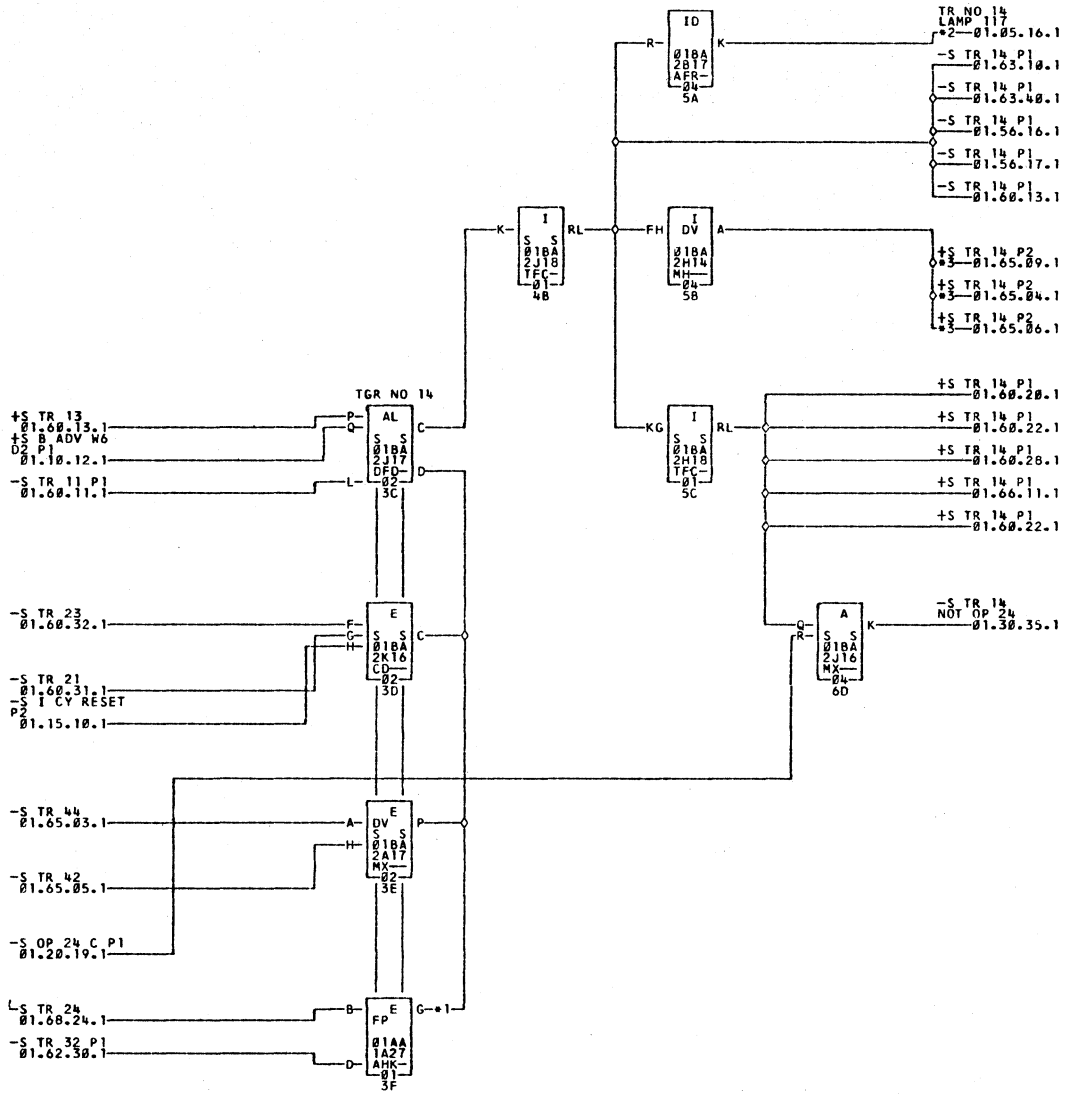
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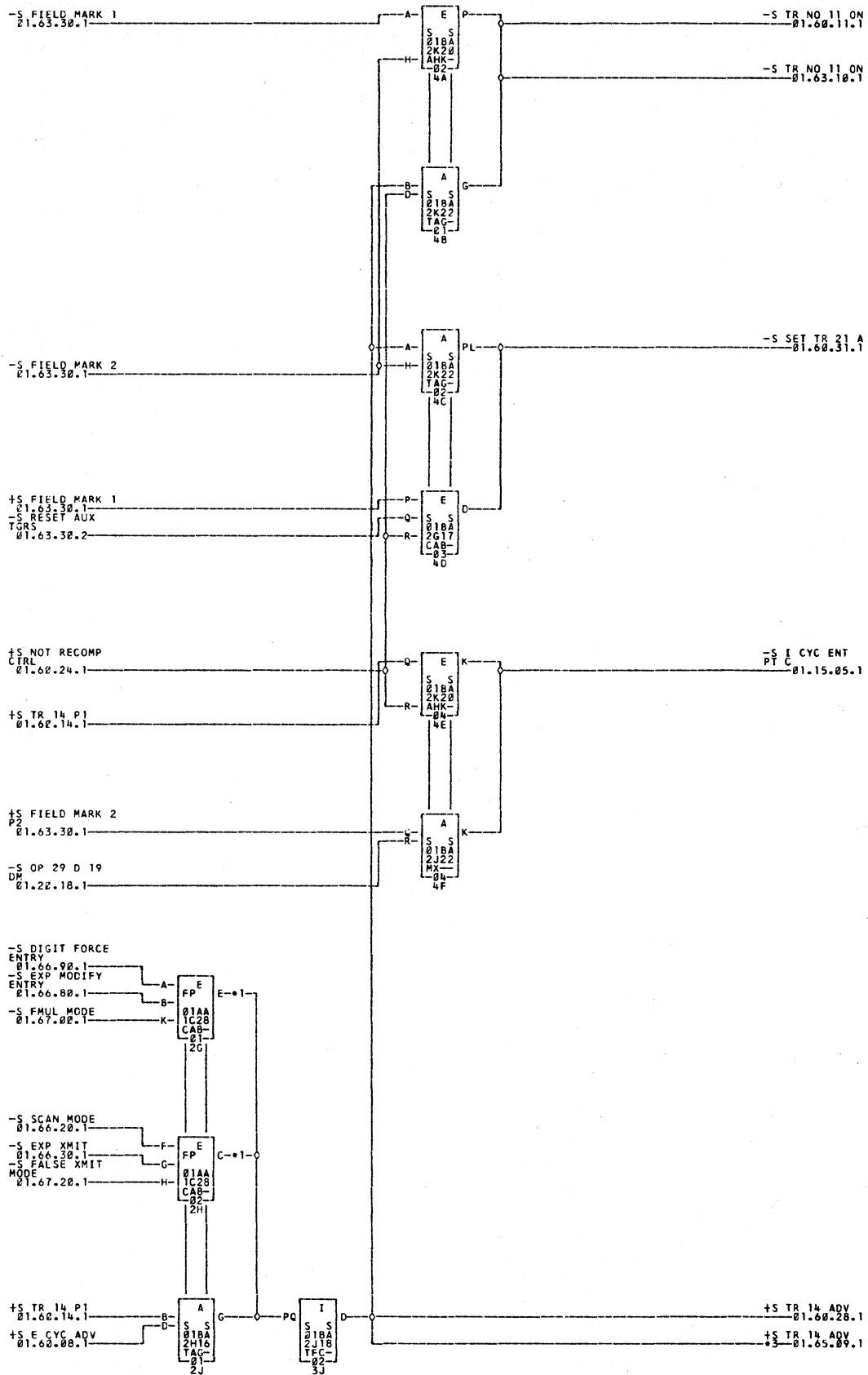


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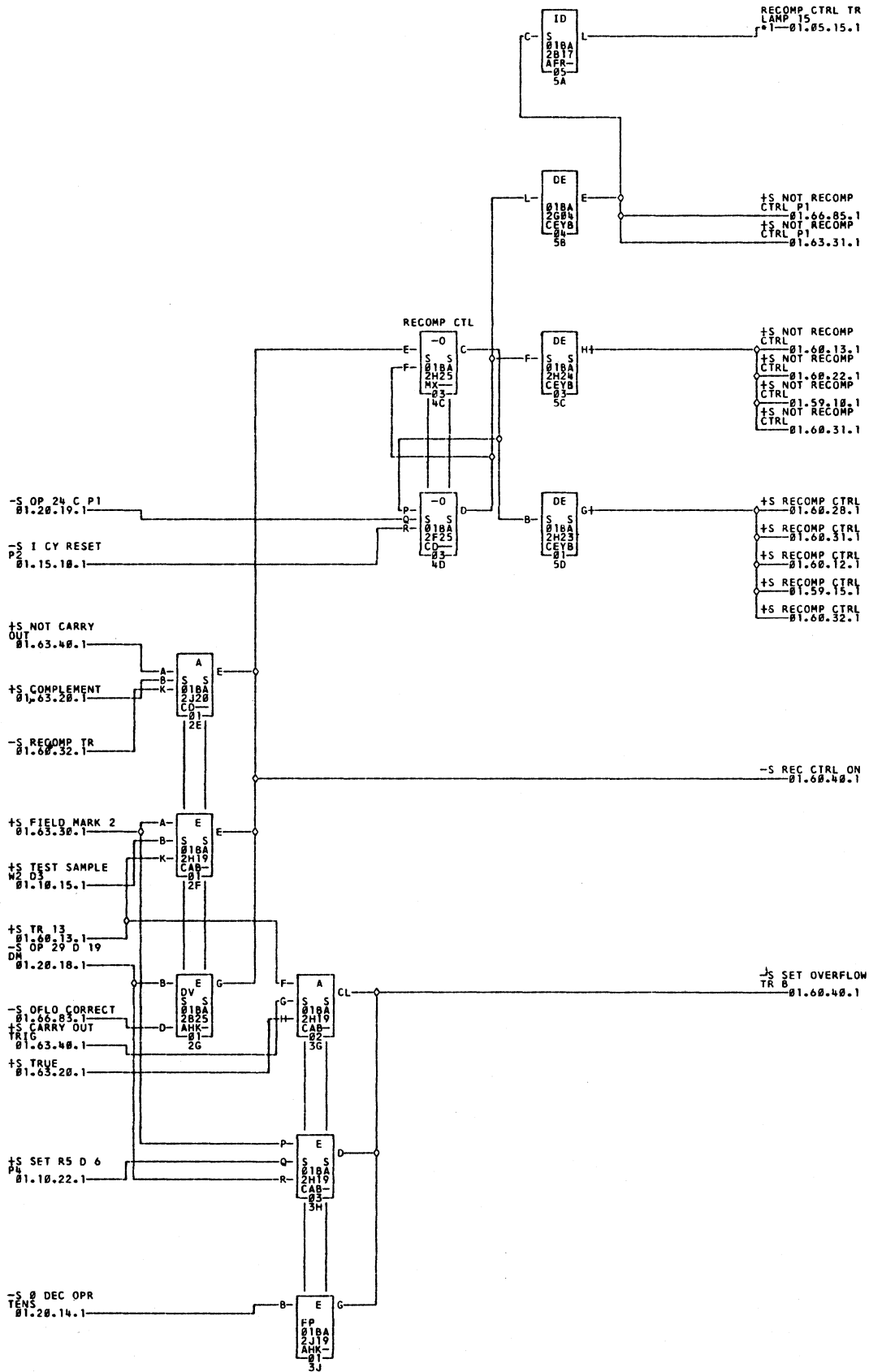


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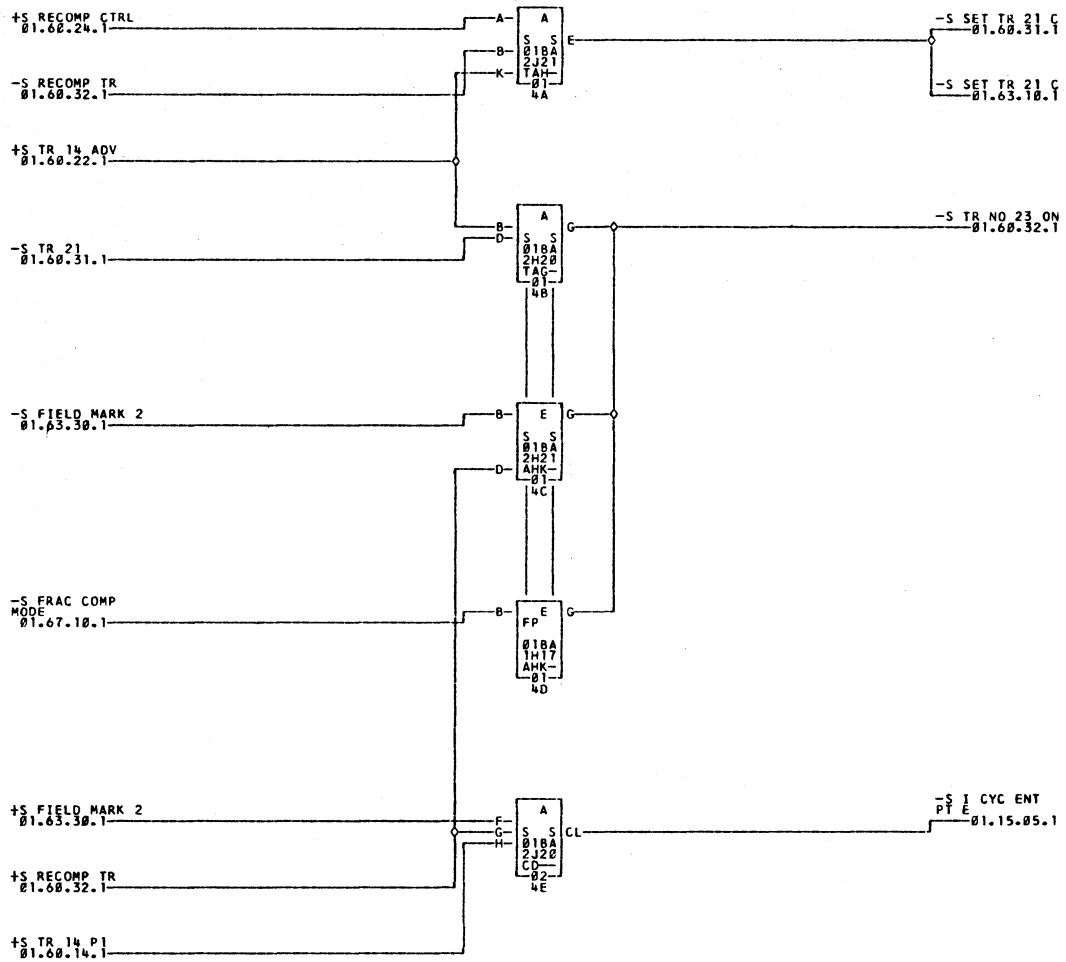
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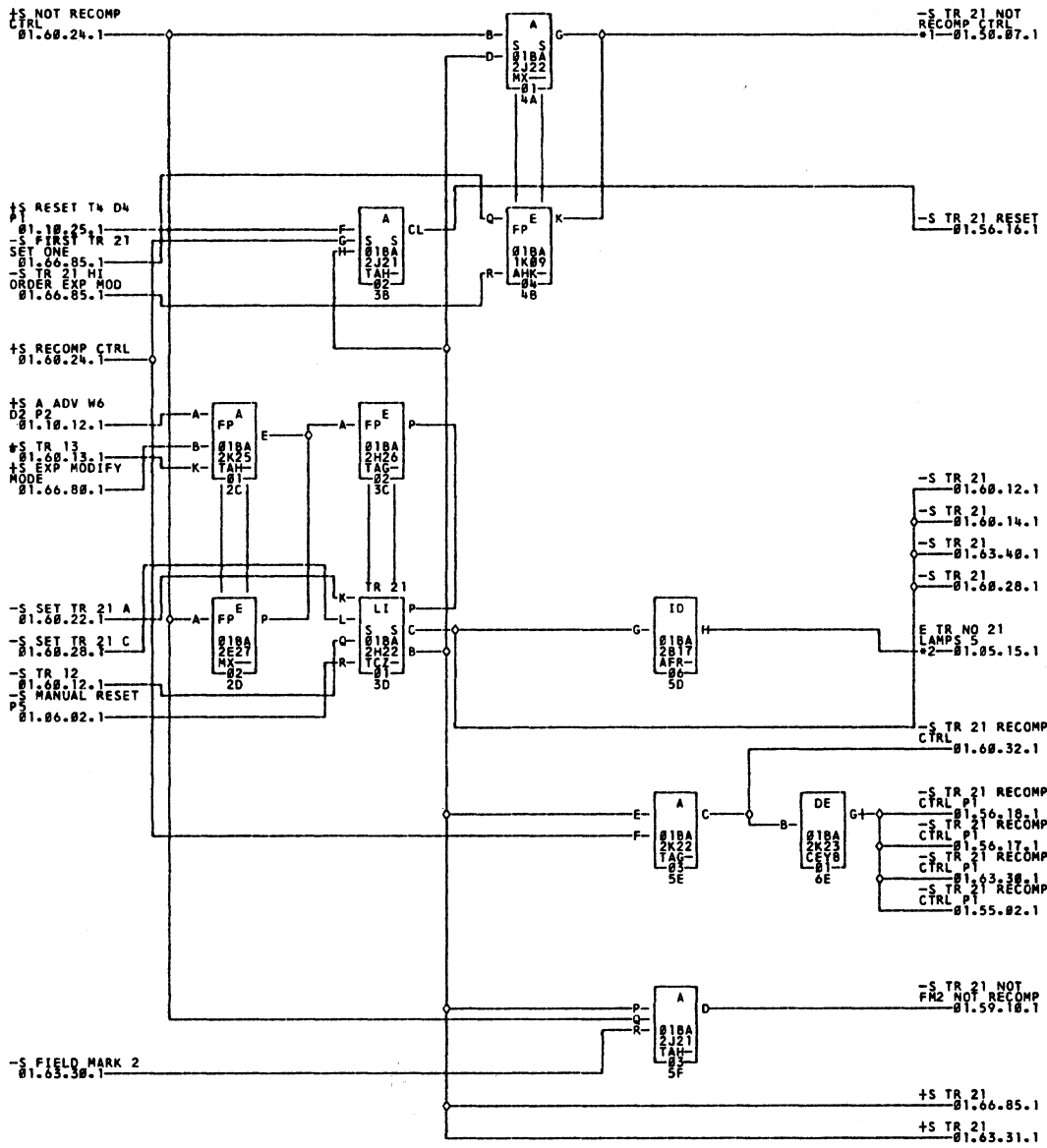
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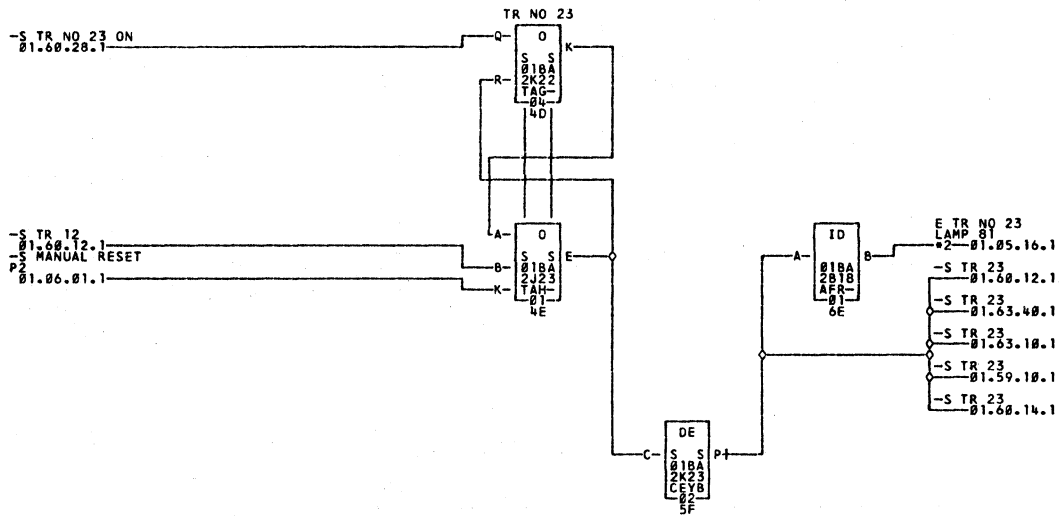
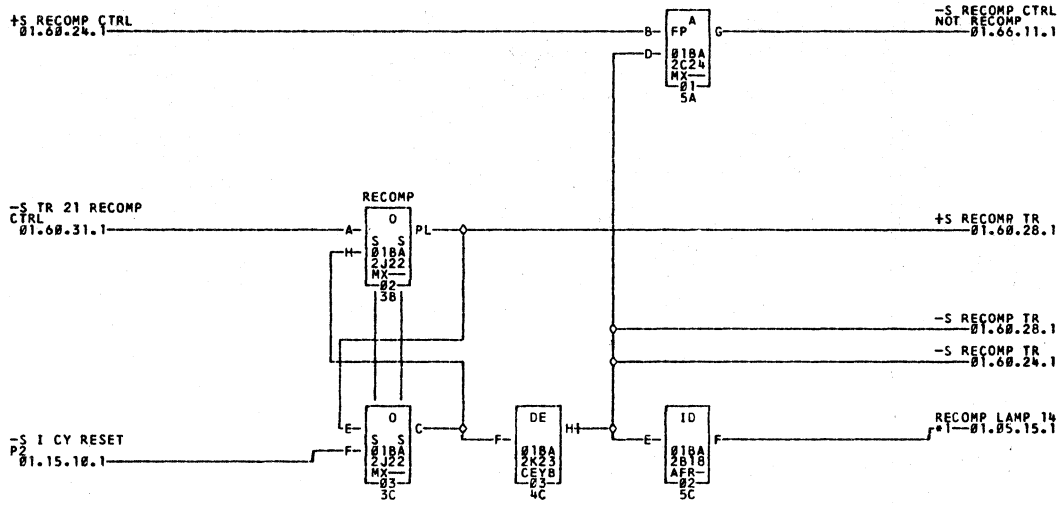


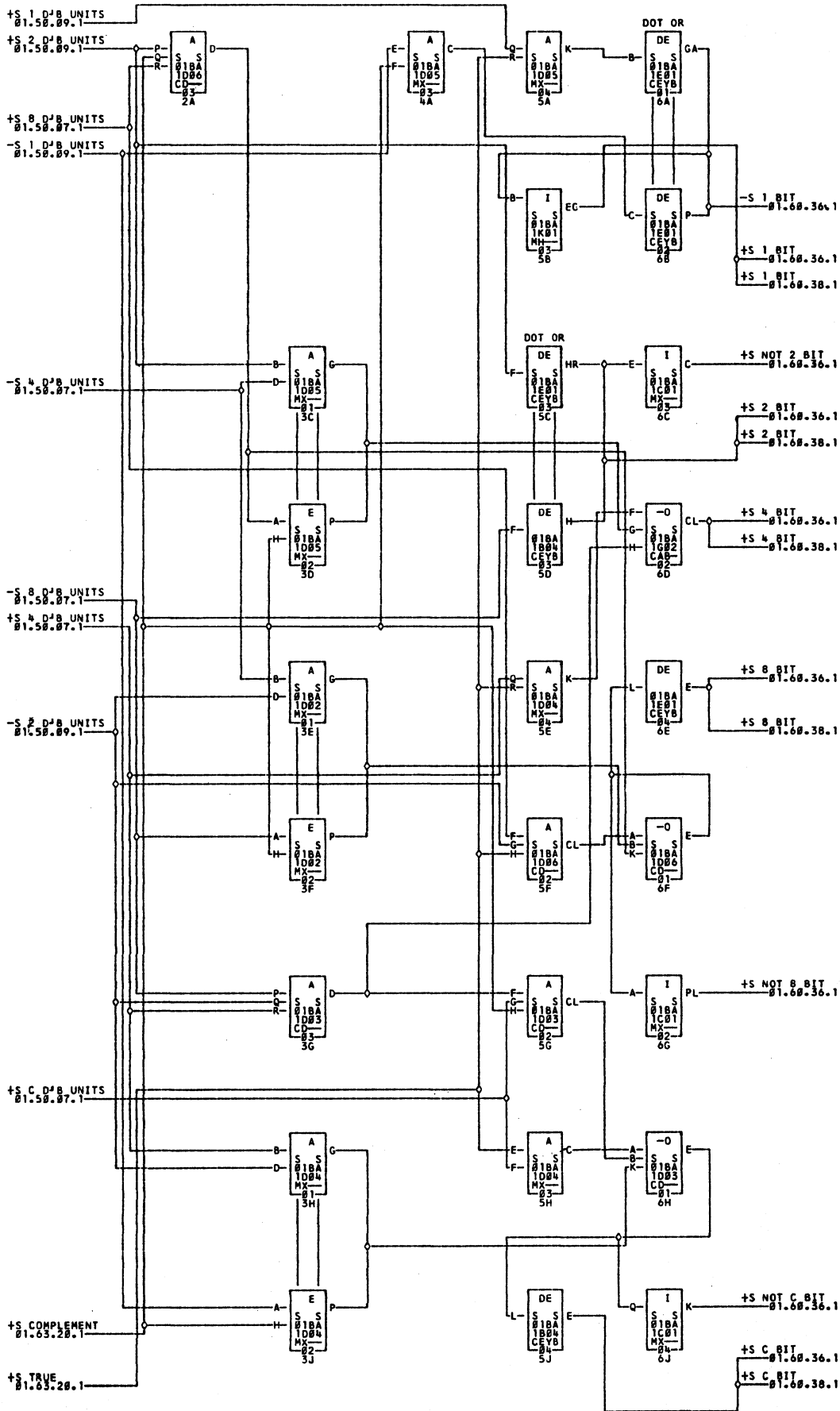
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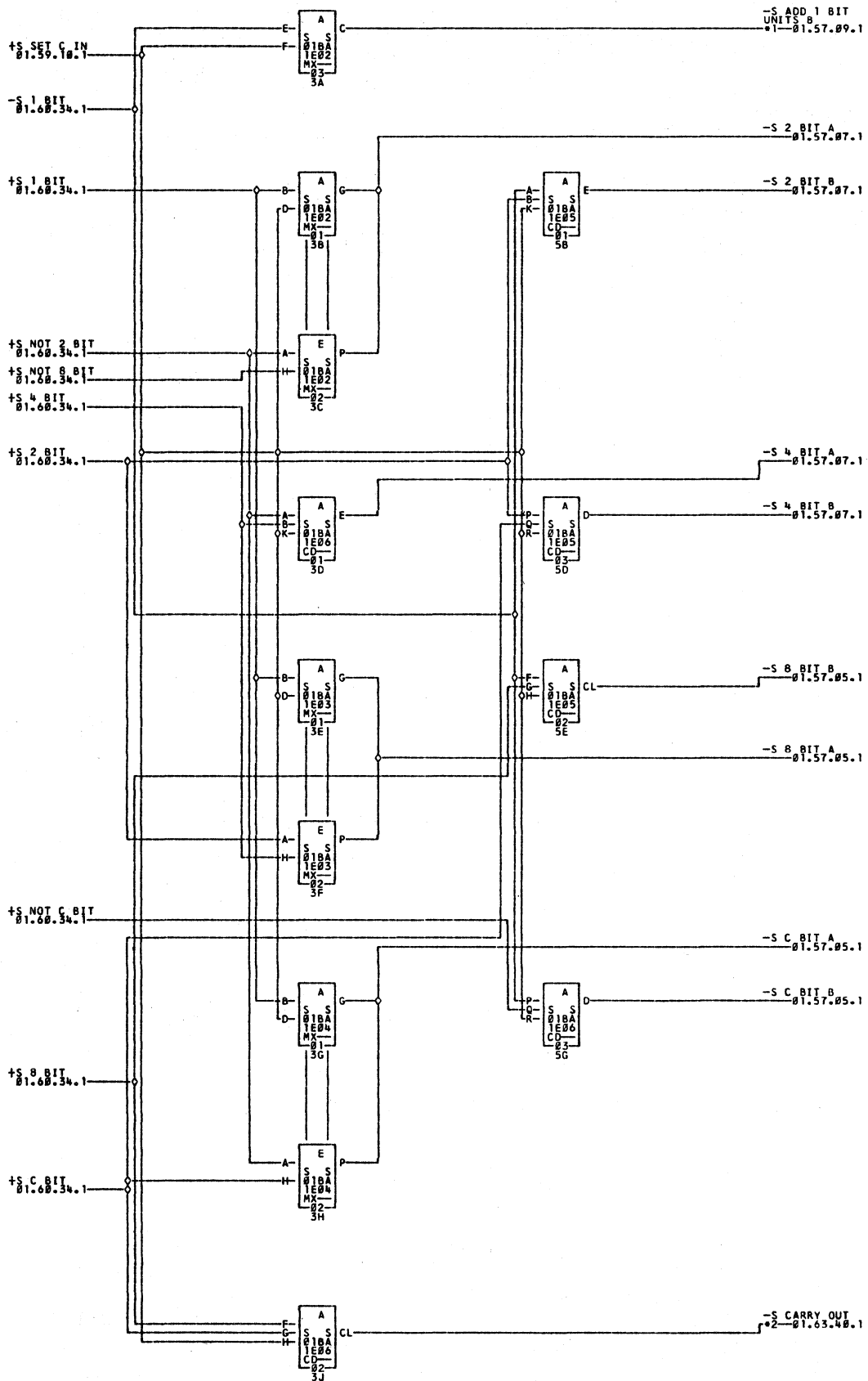




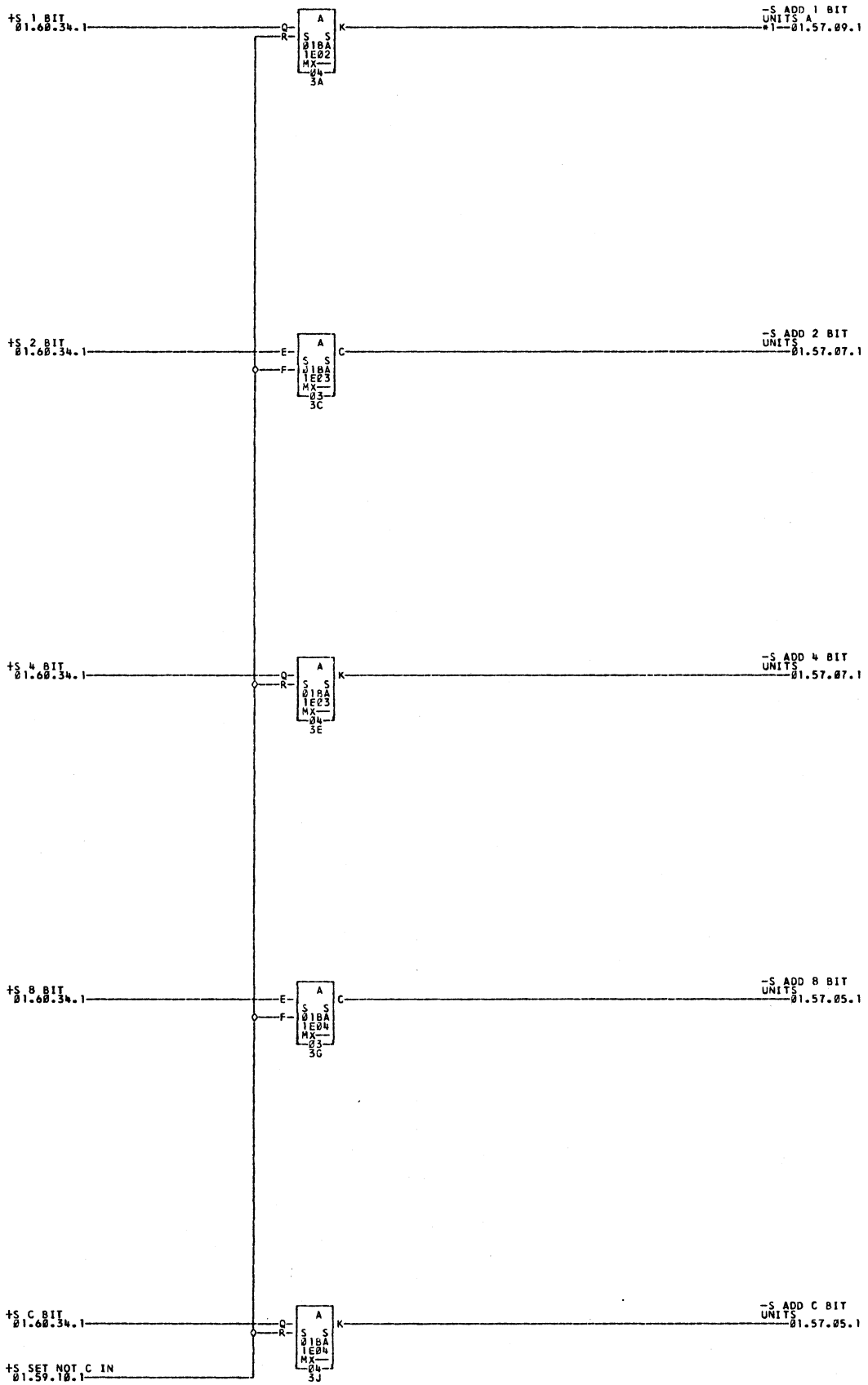
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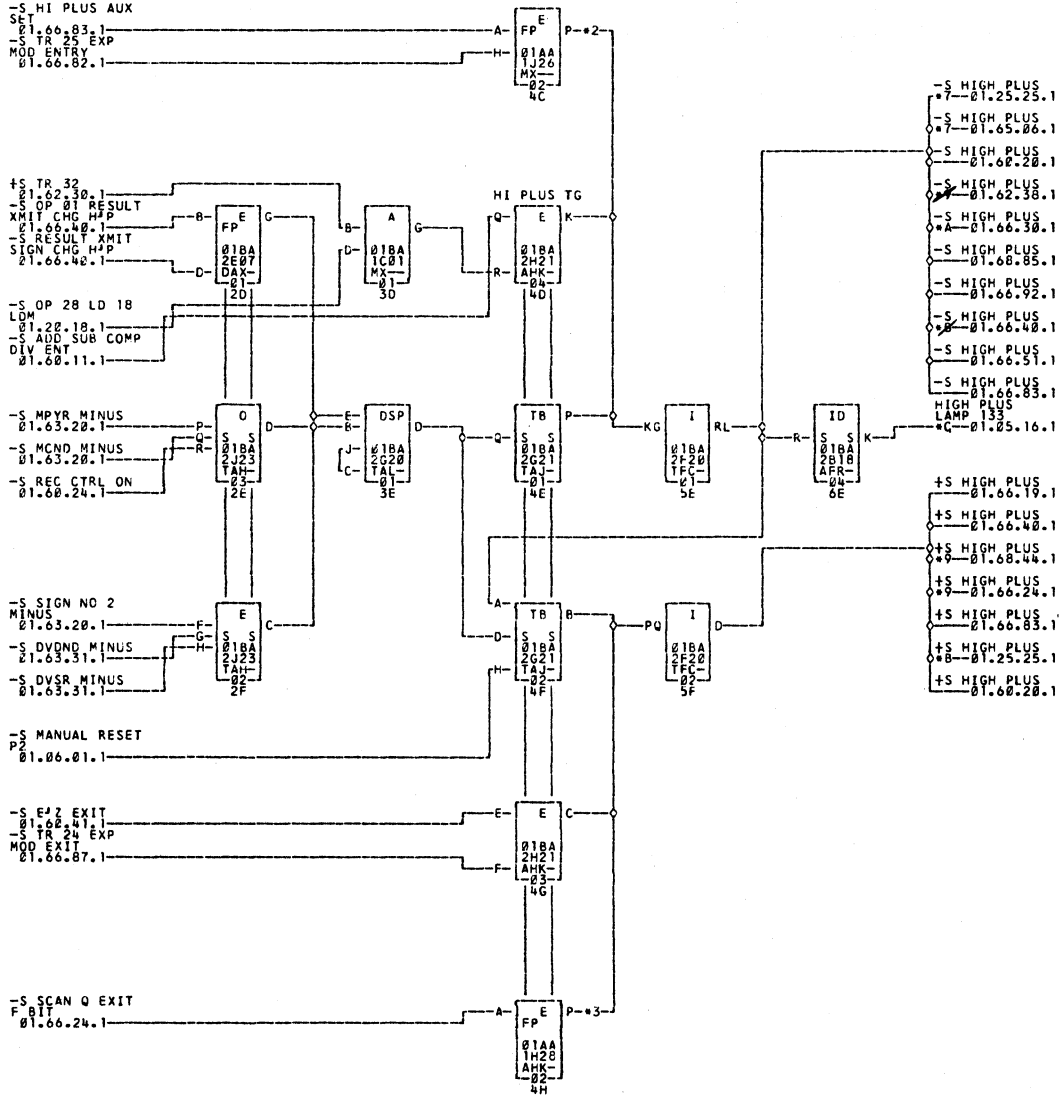
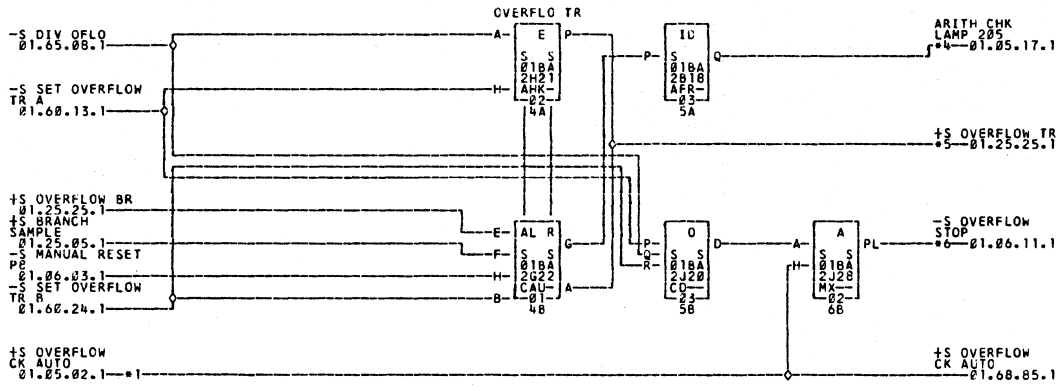




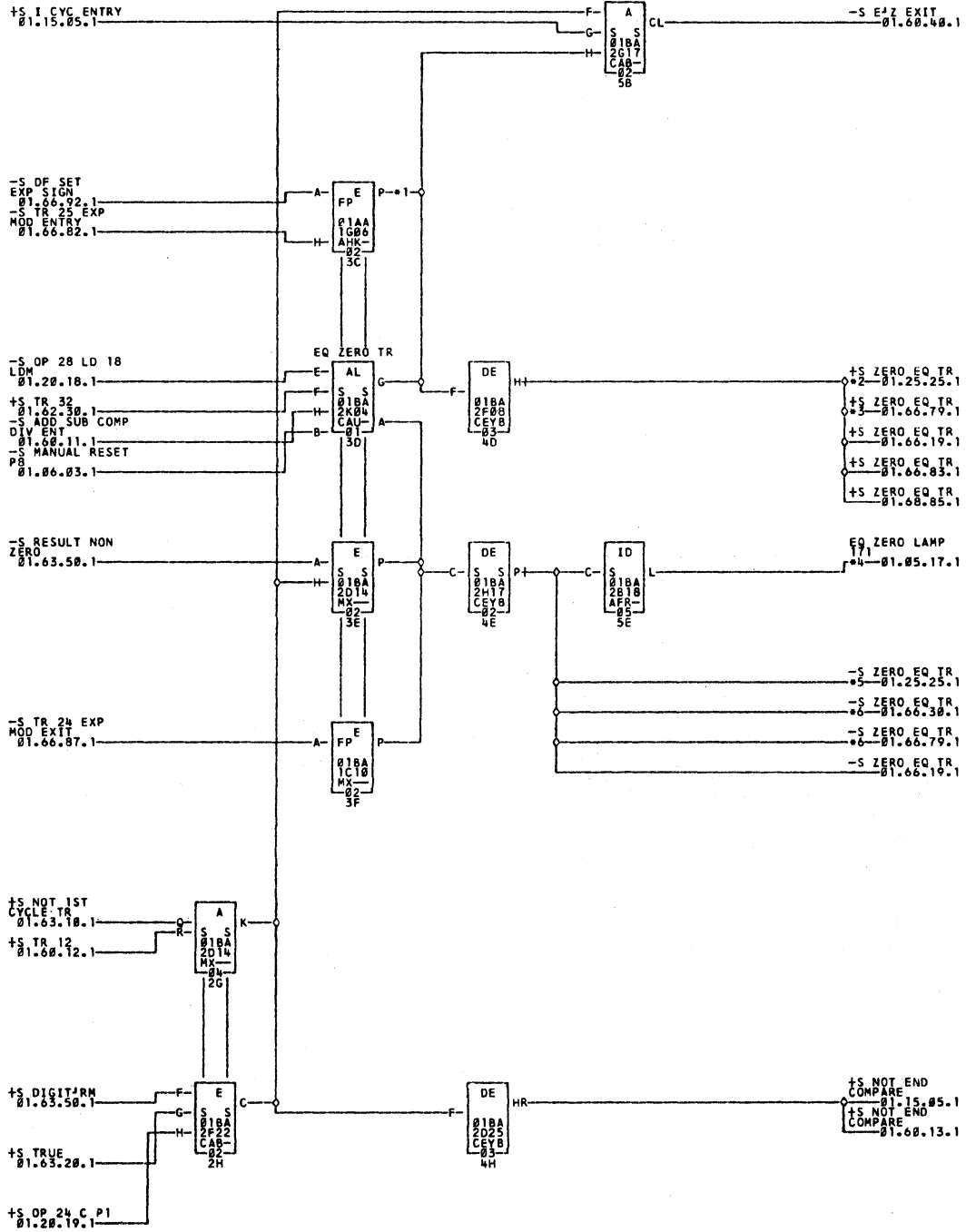
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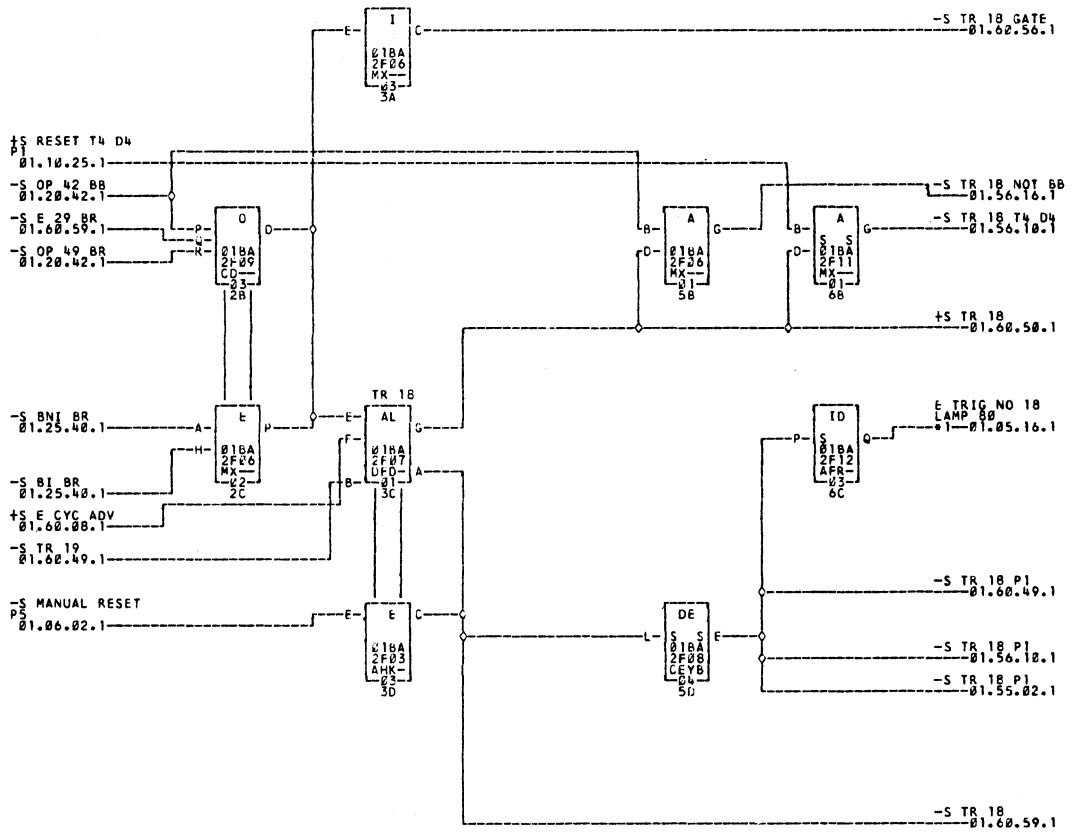
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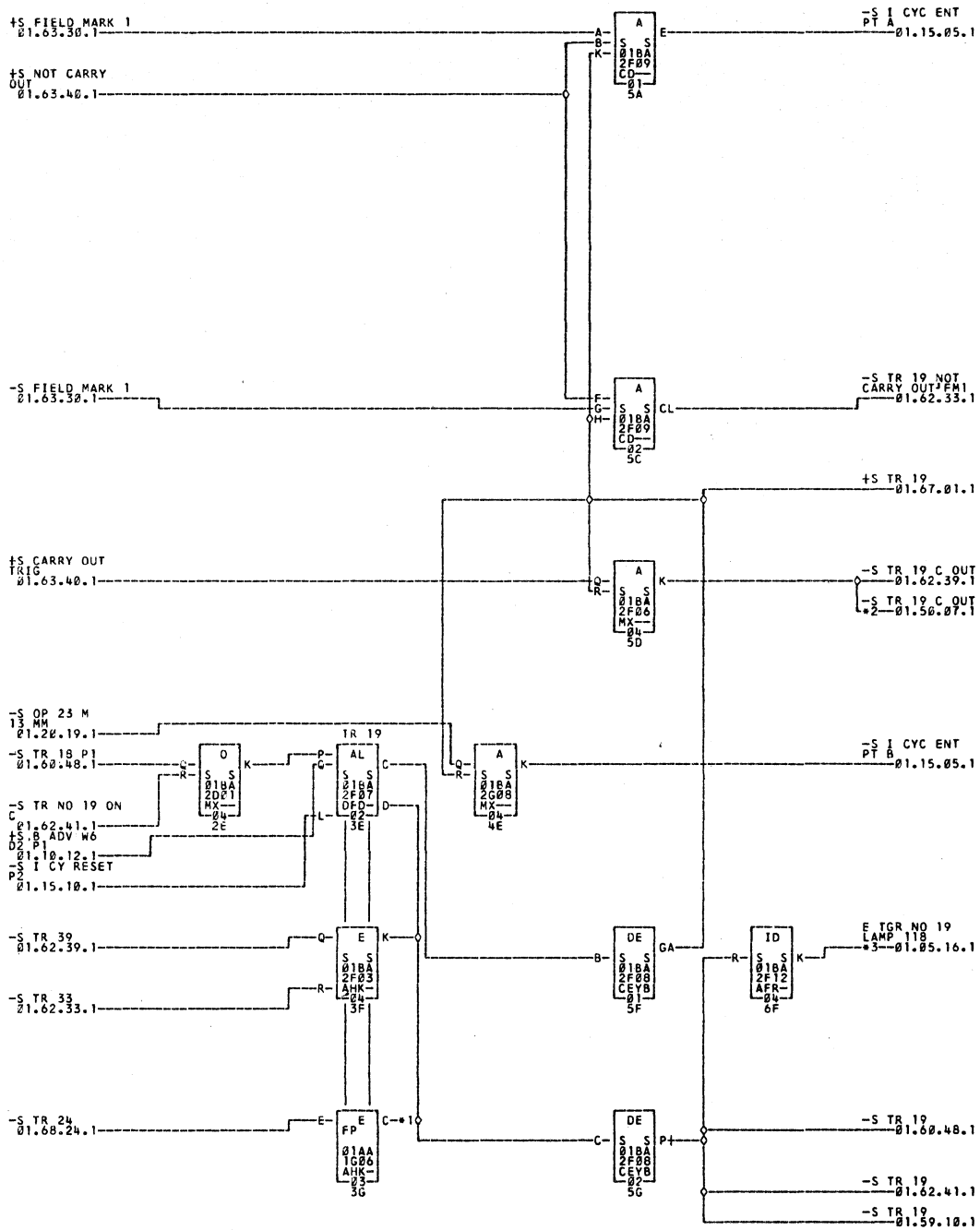


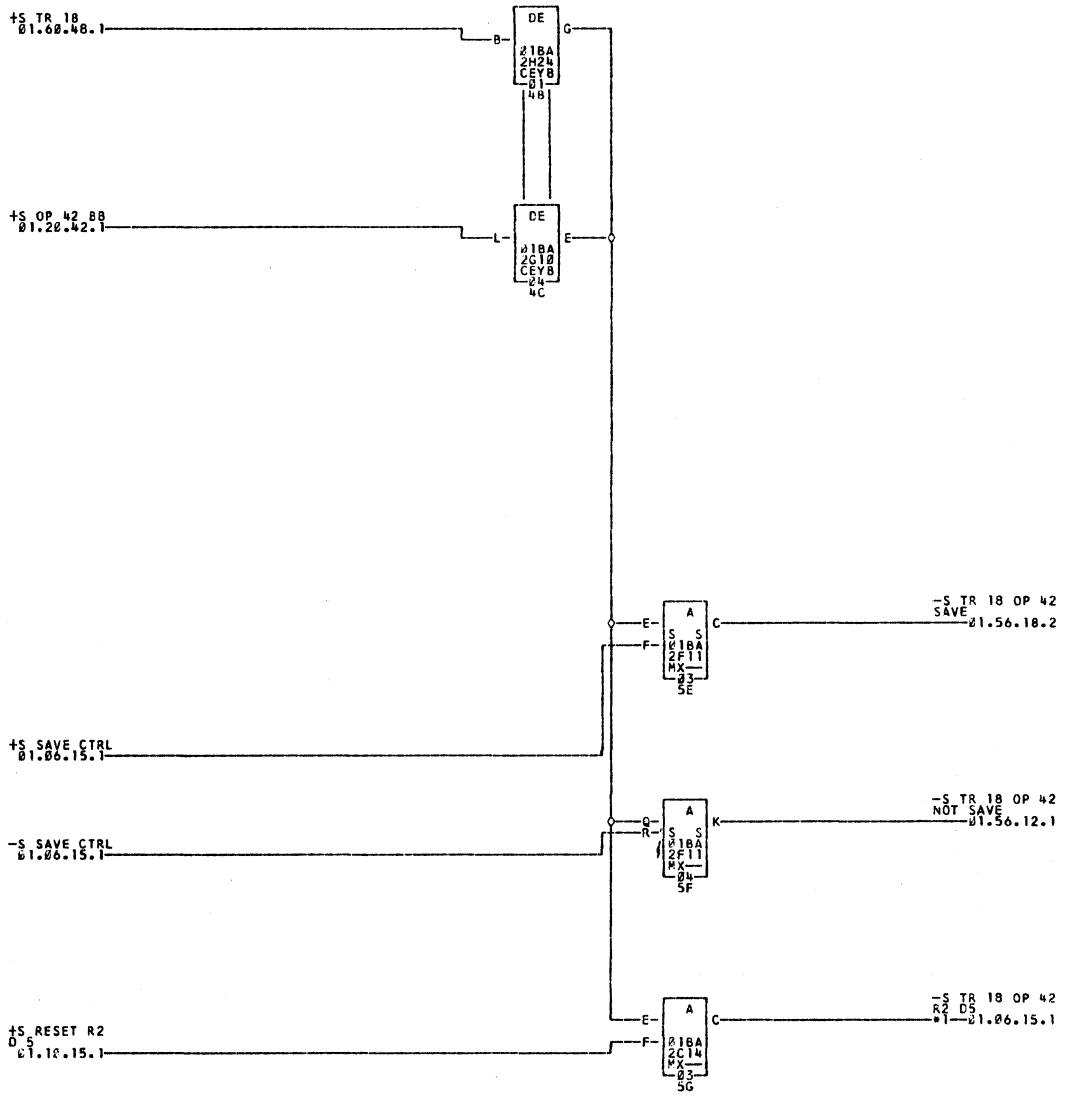
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- *5-018Z215A -0181215A *6-018Z224D -0181224D *7-018Z219A -0181219A
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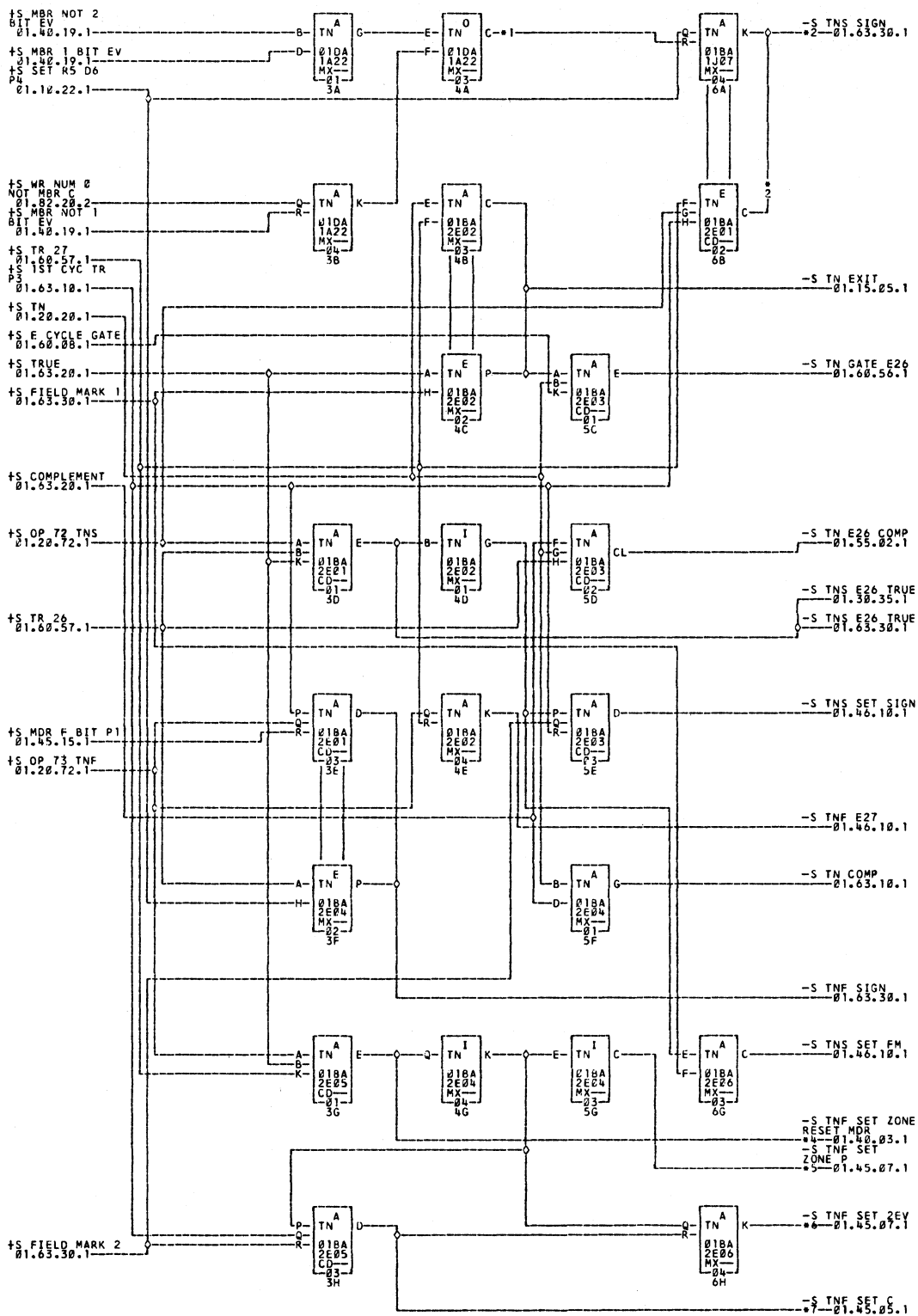


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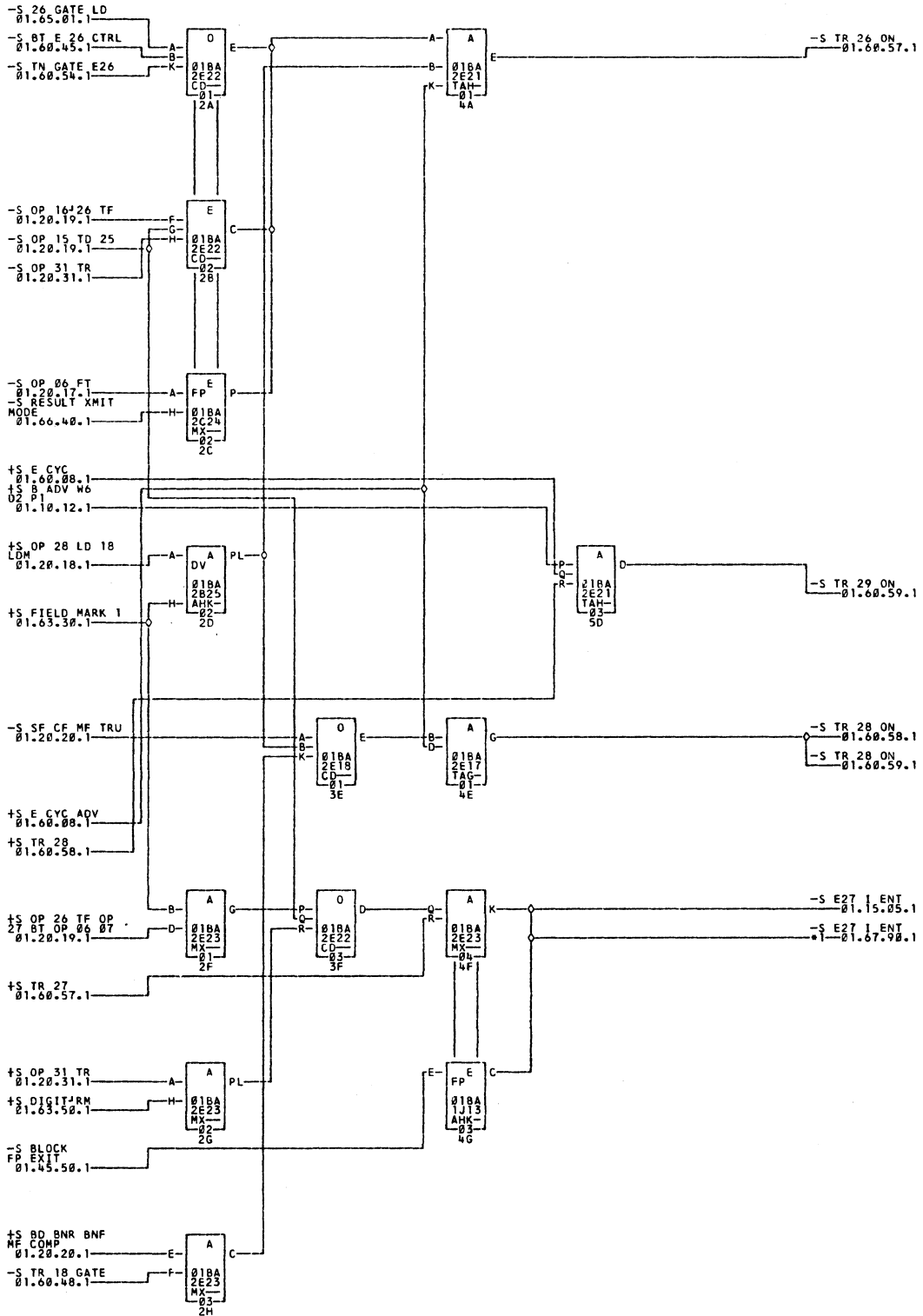




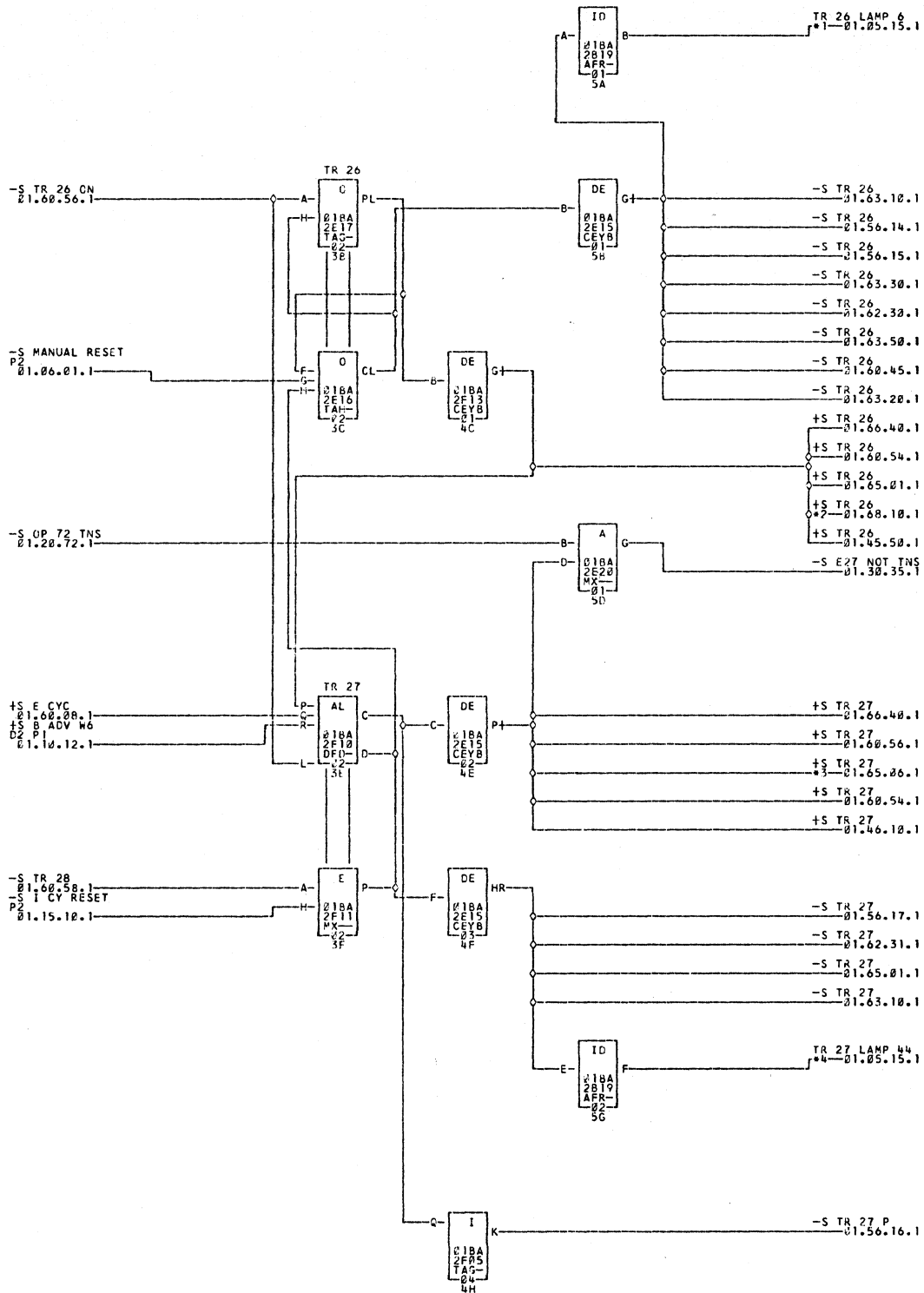




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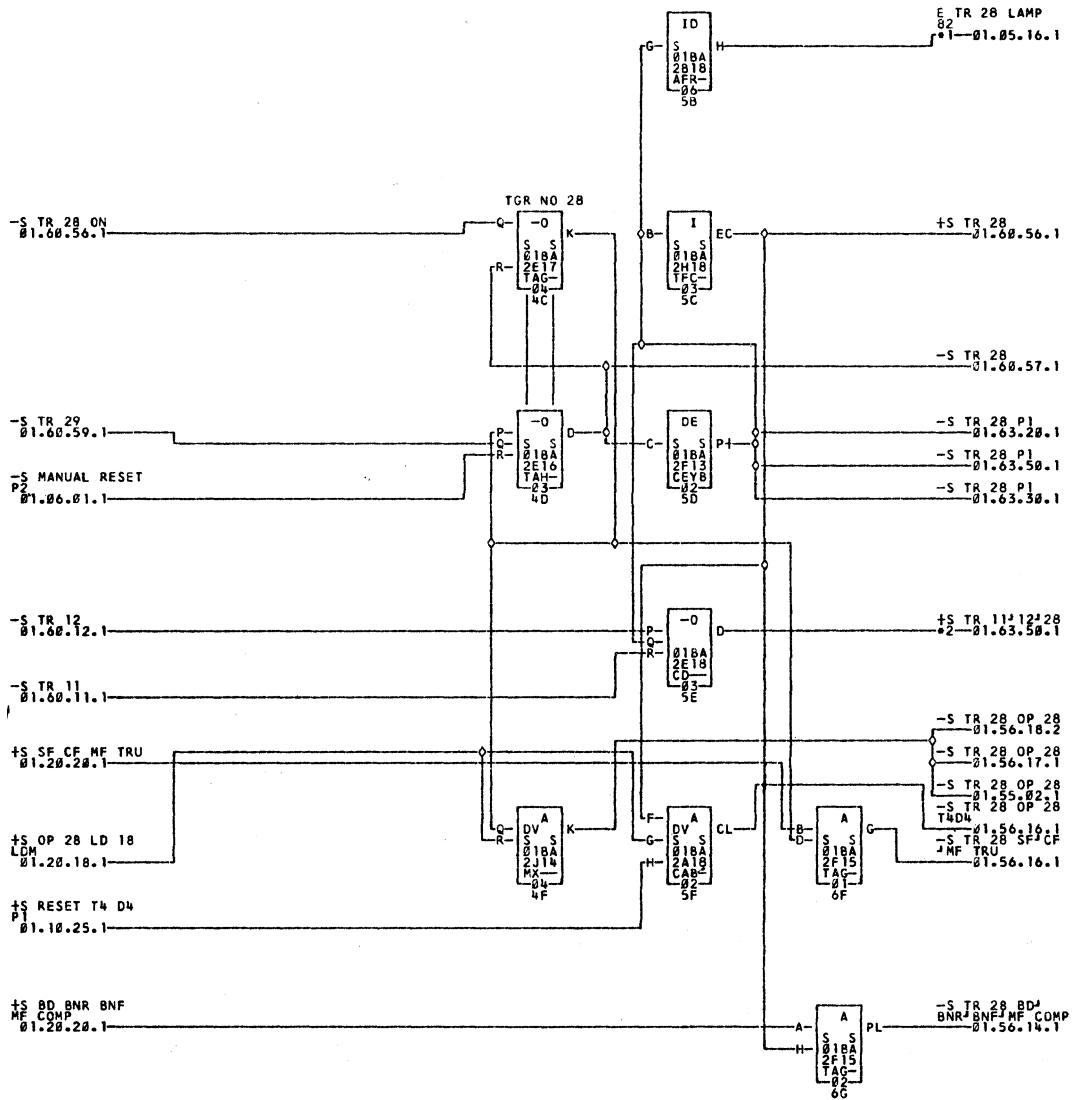
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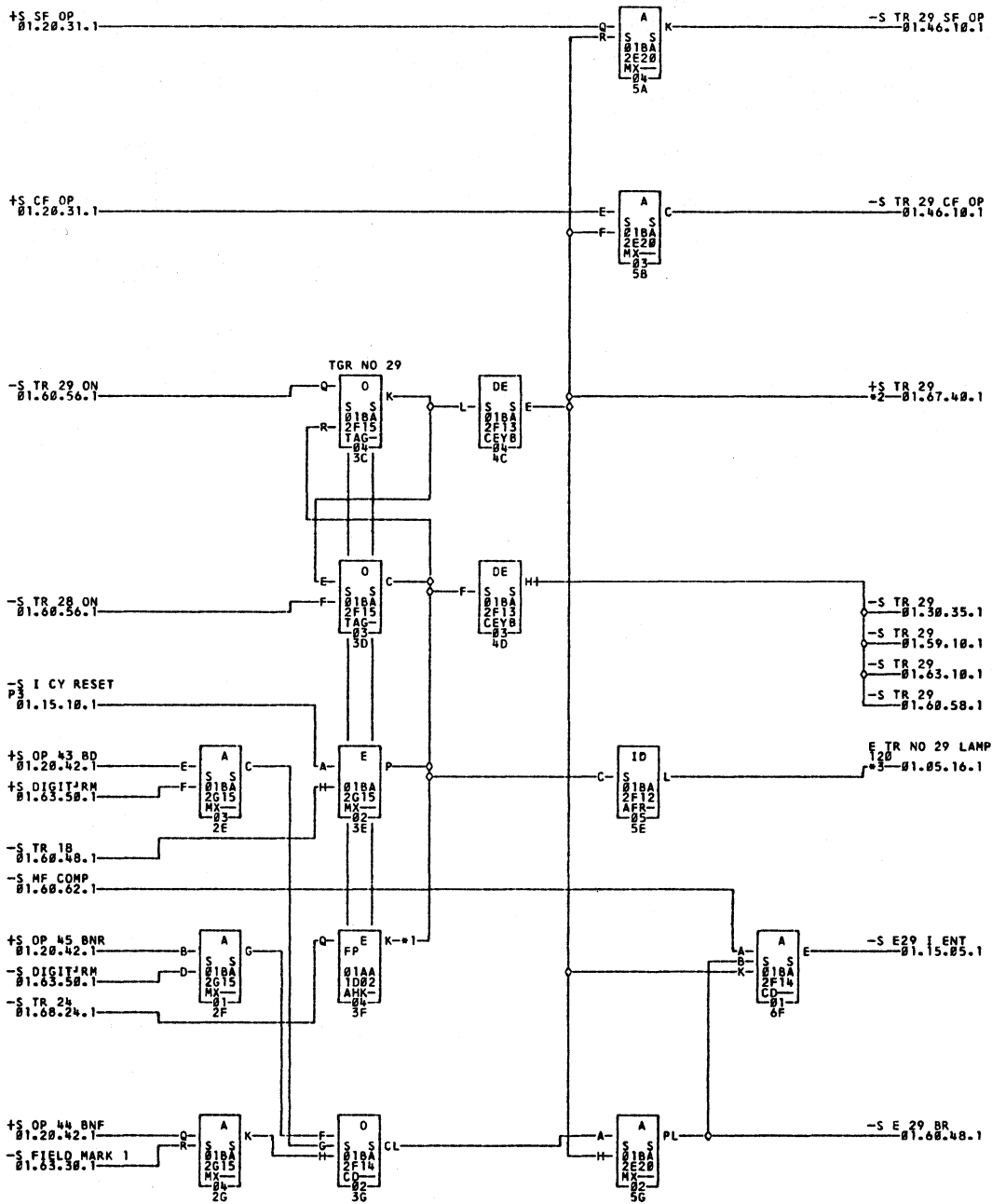
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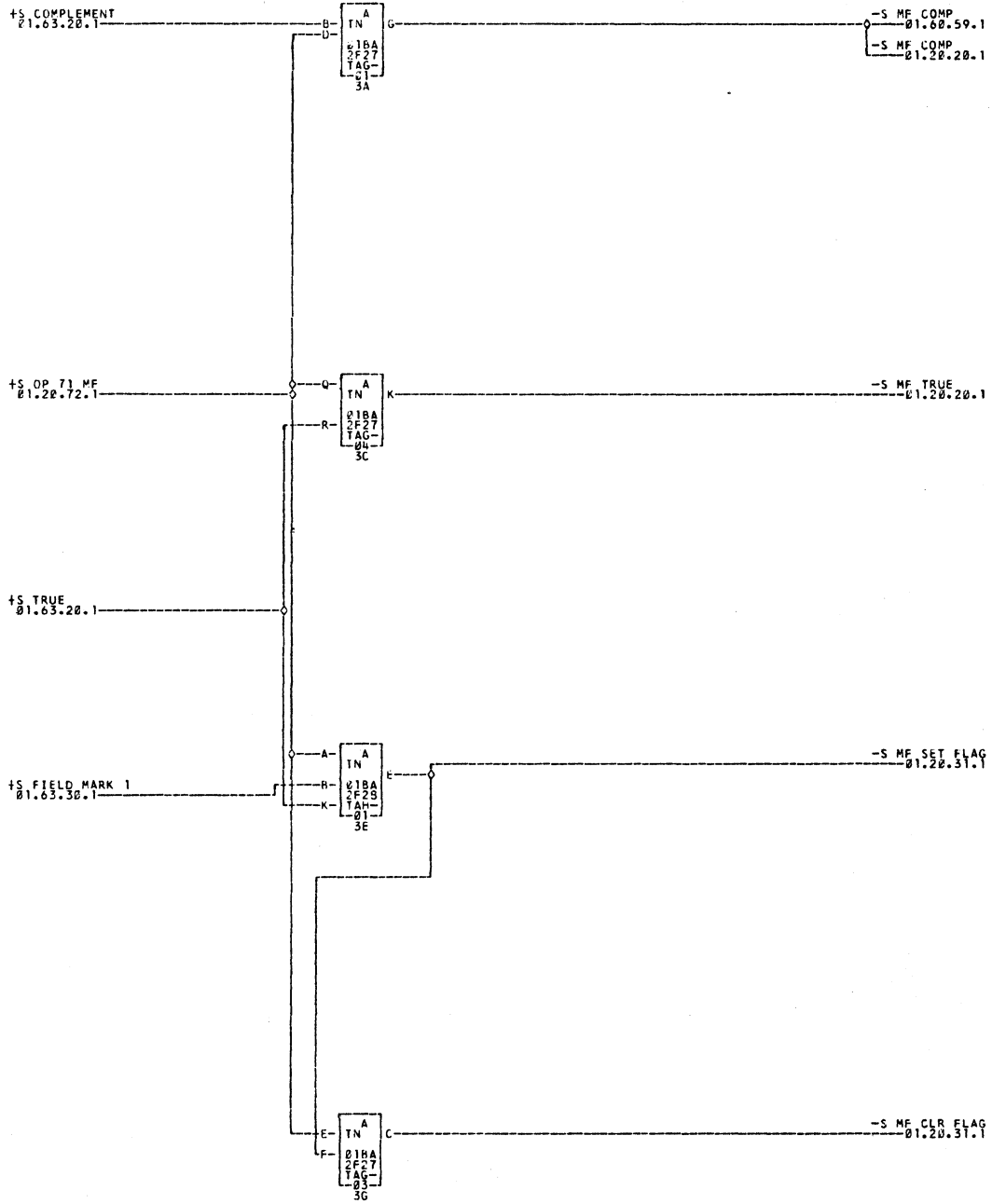
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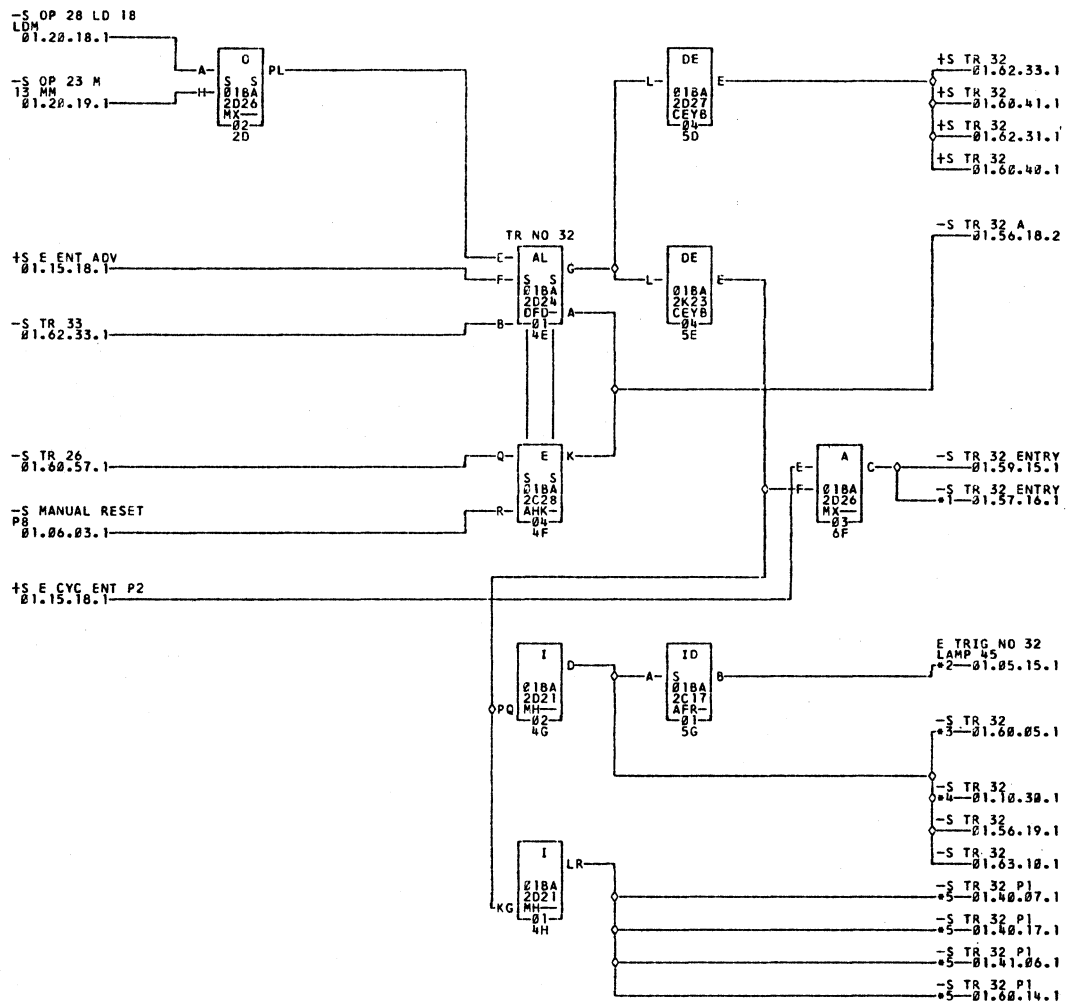
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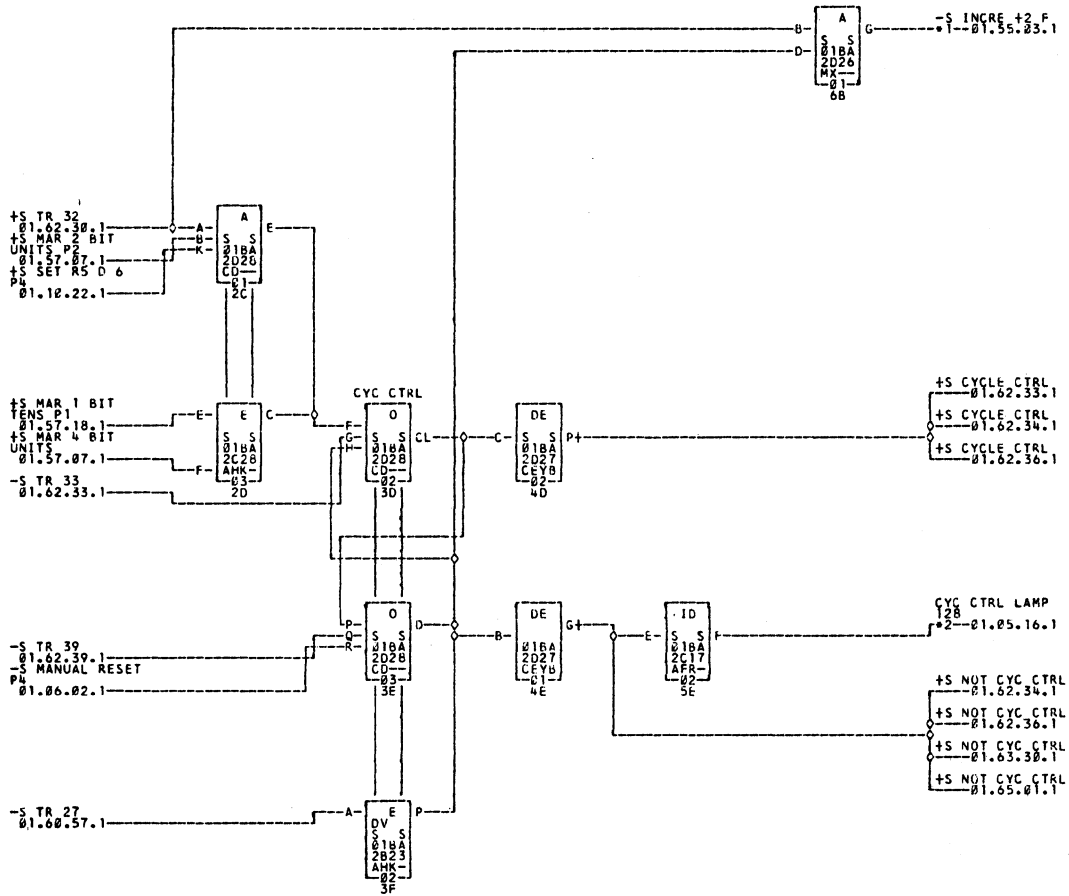
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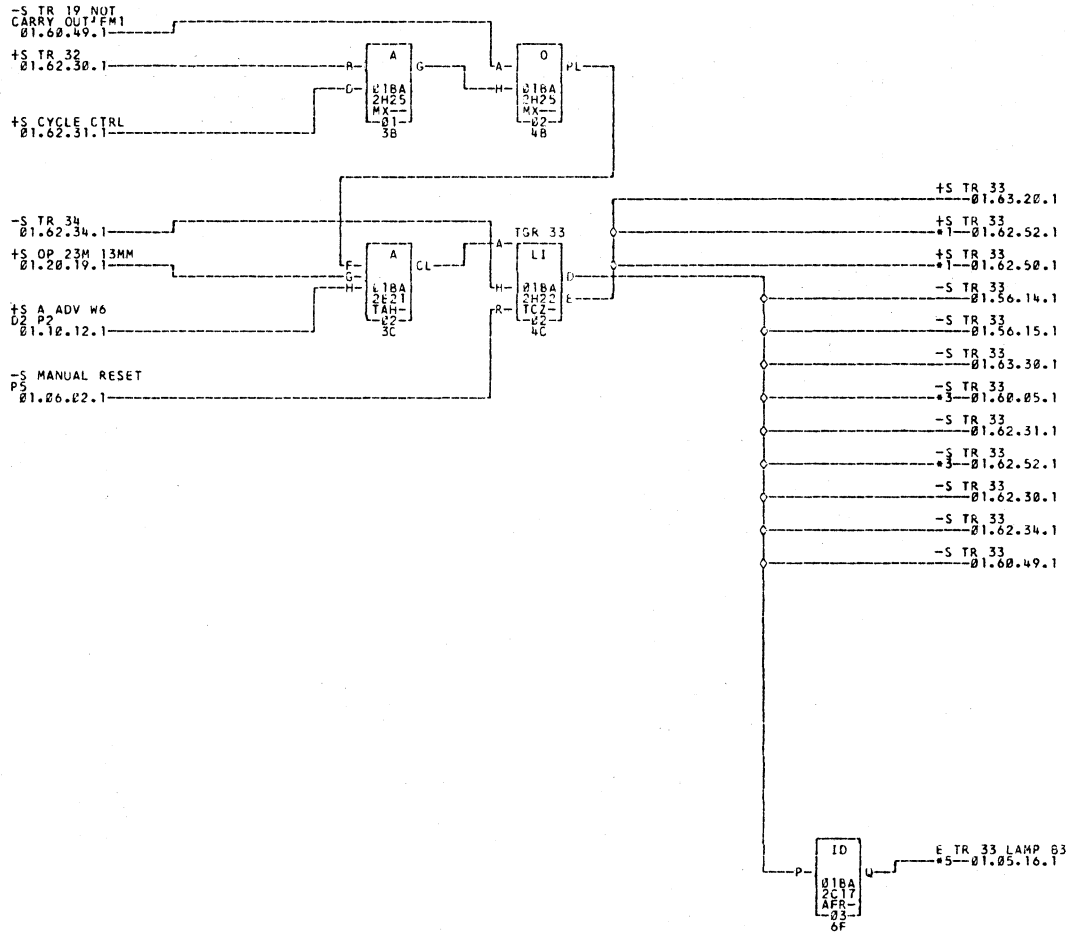
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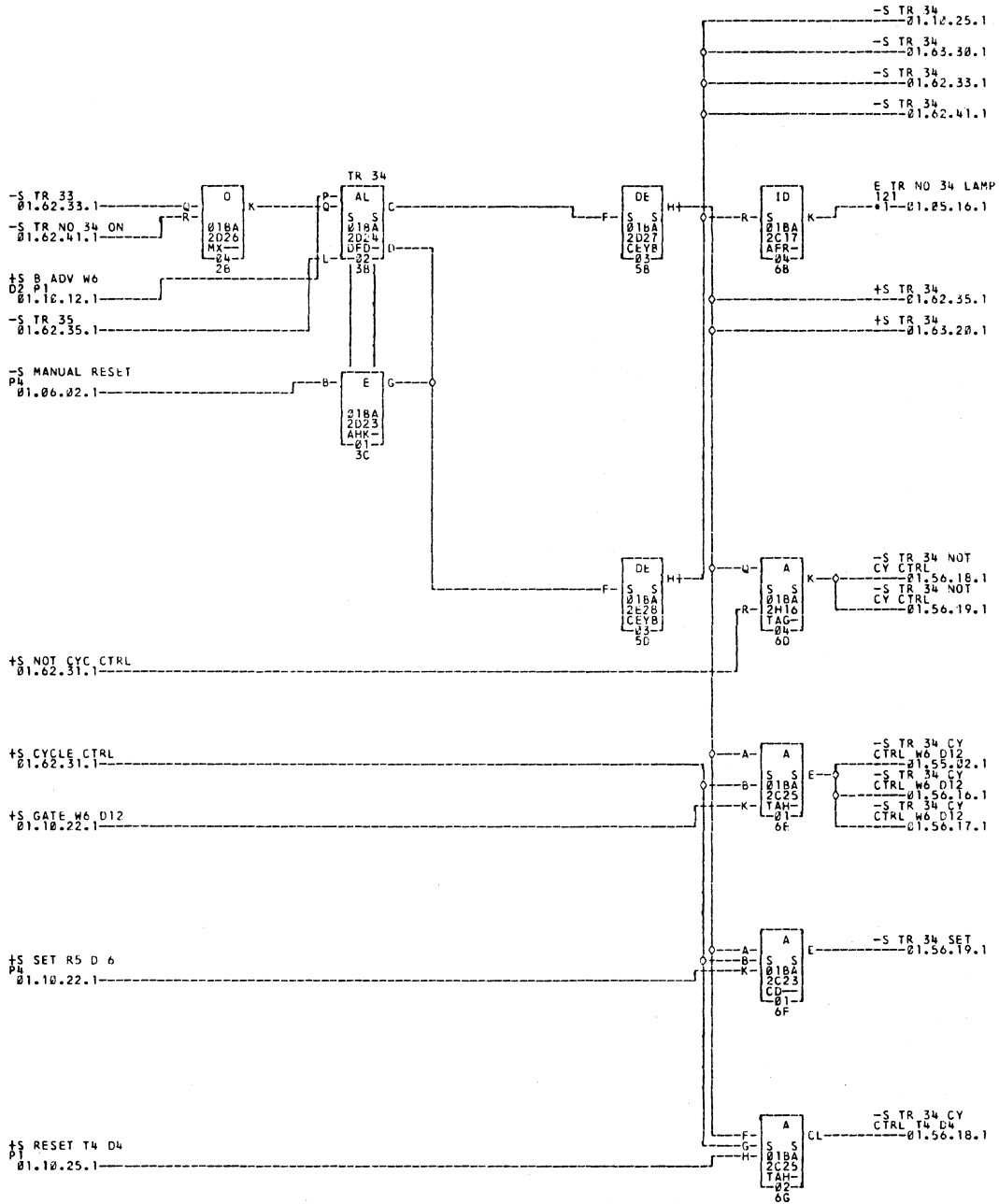
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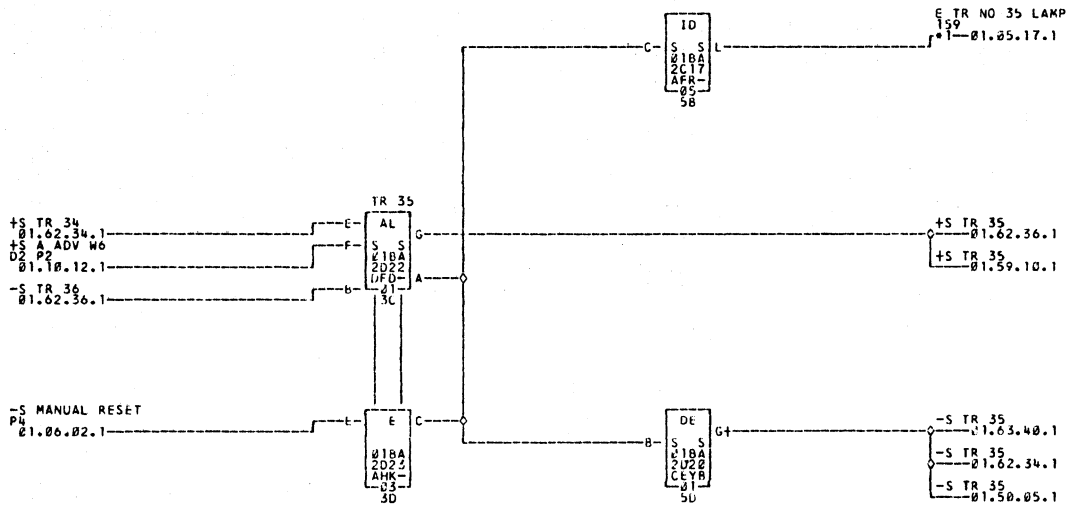
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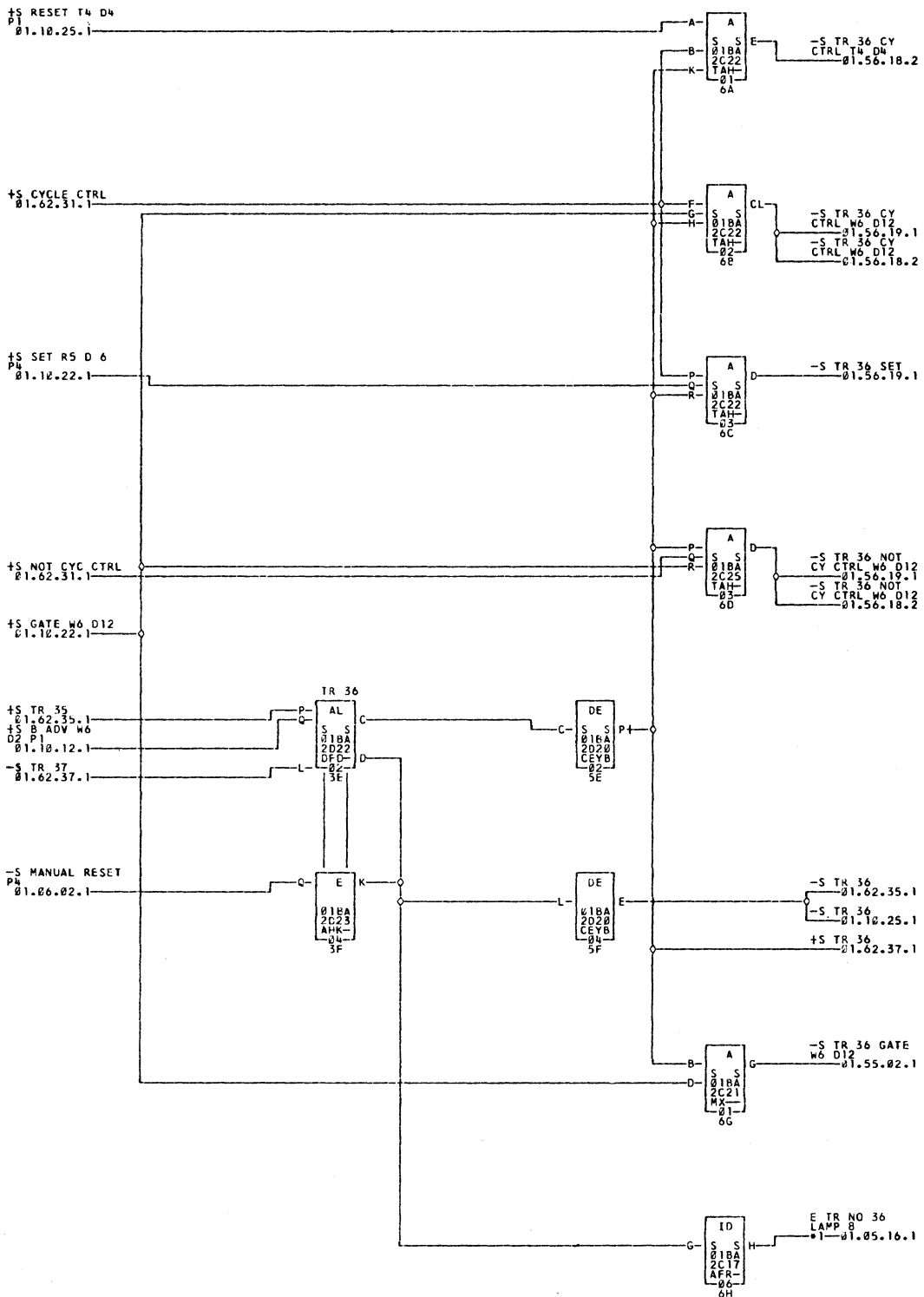
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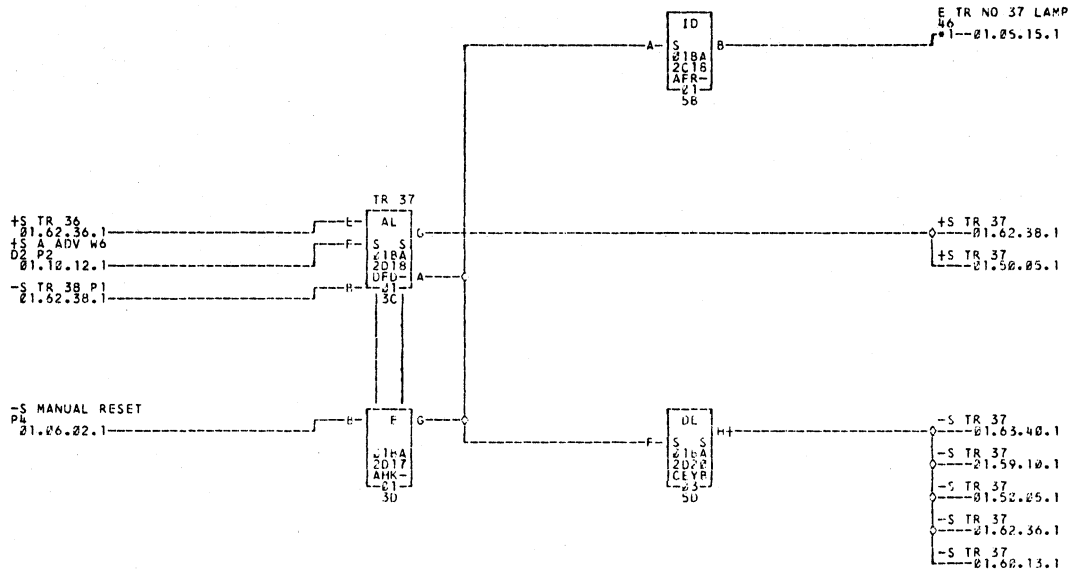
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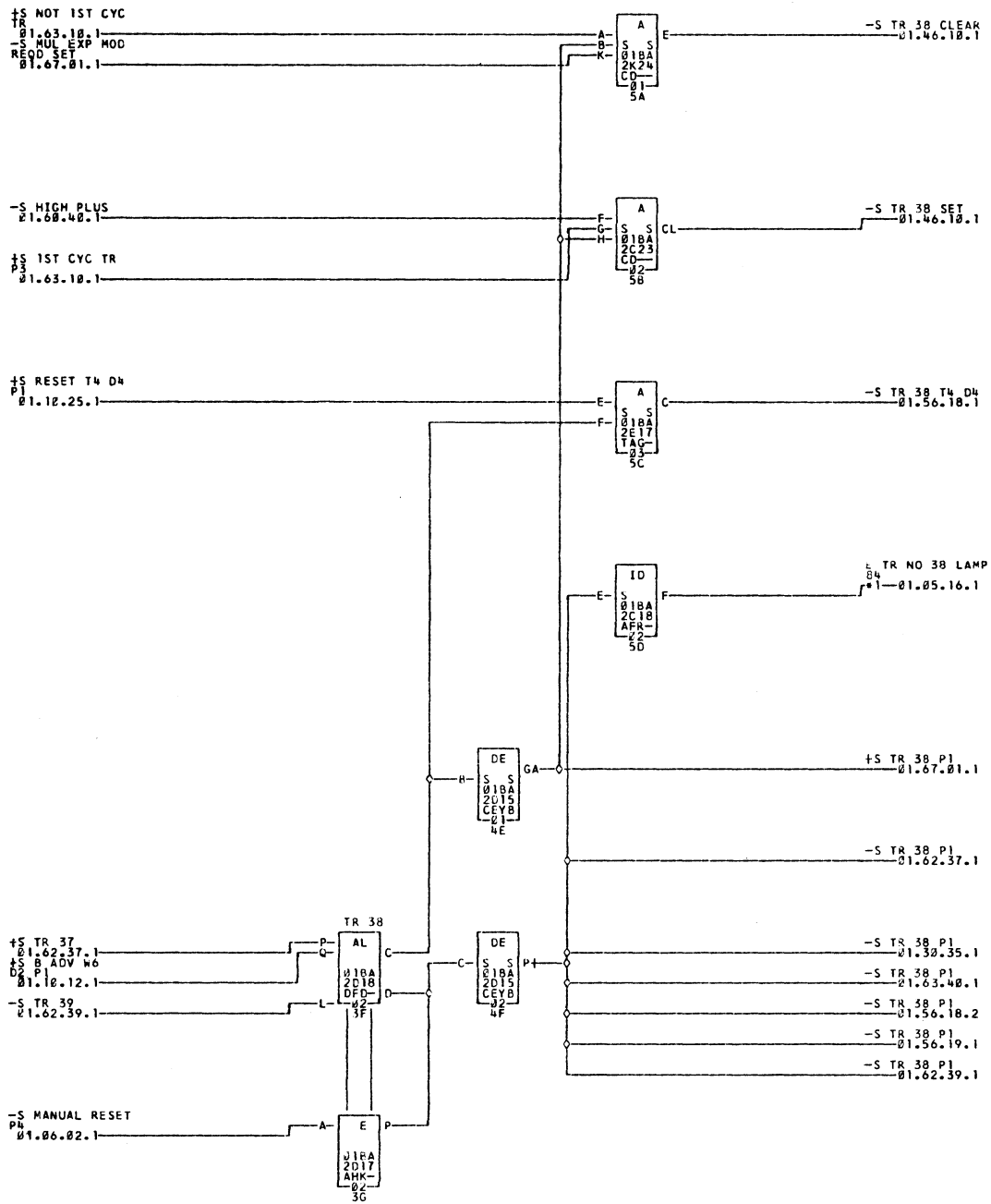


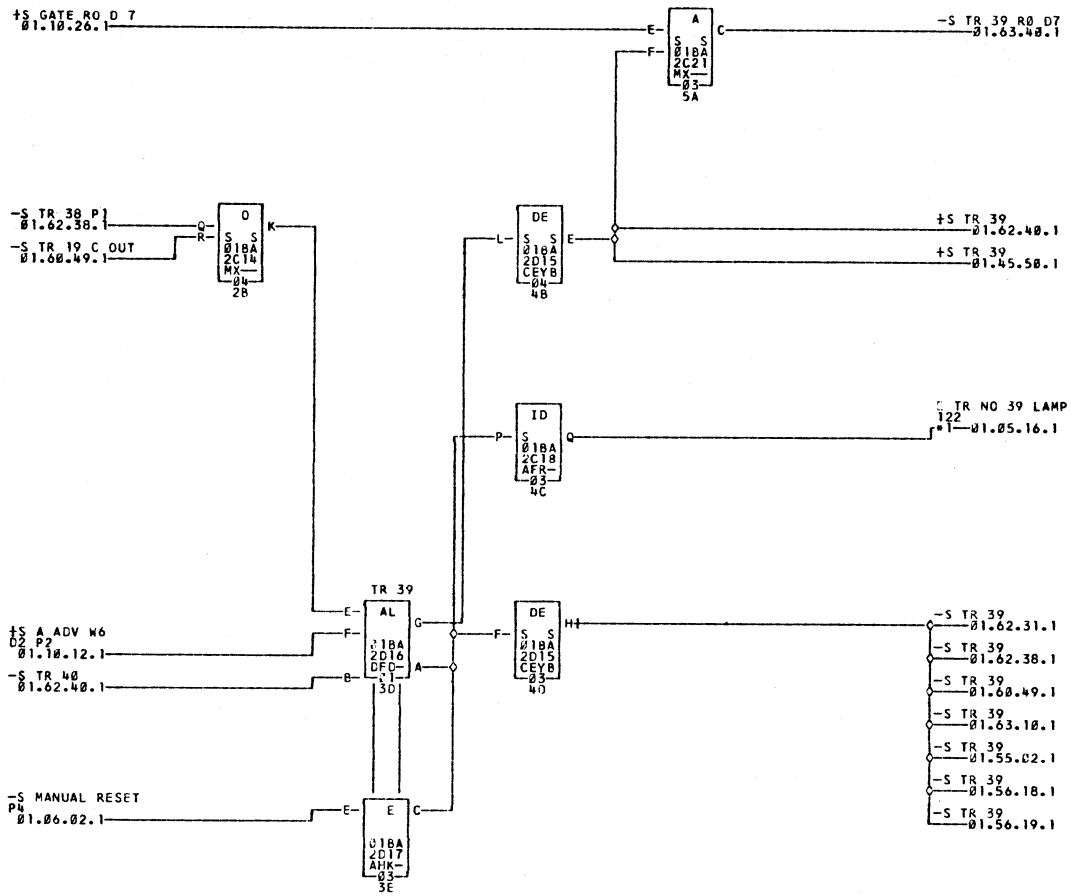
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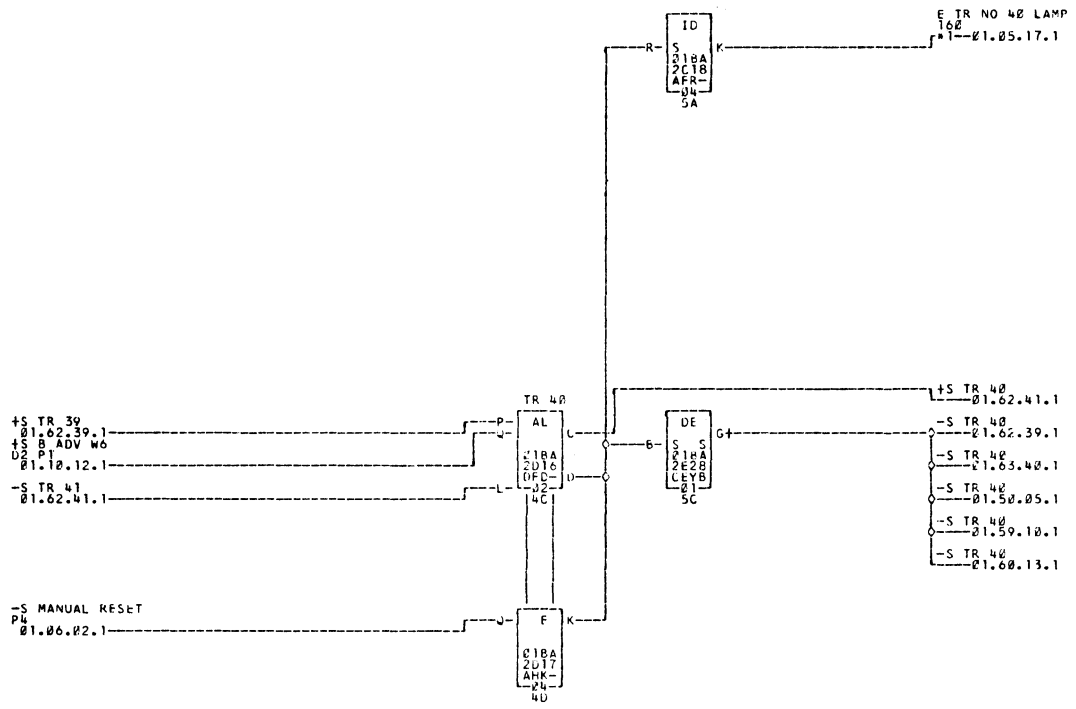


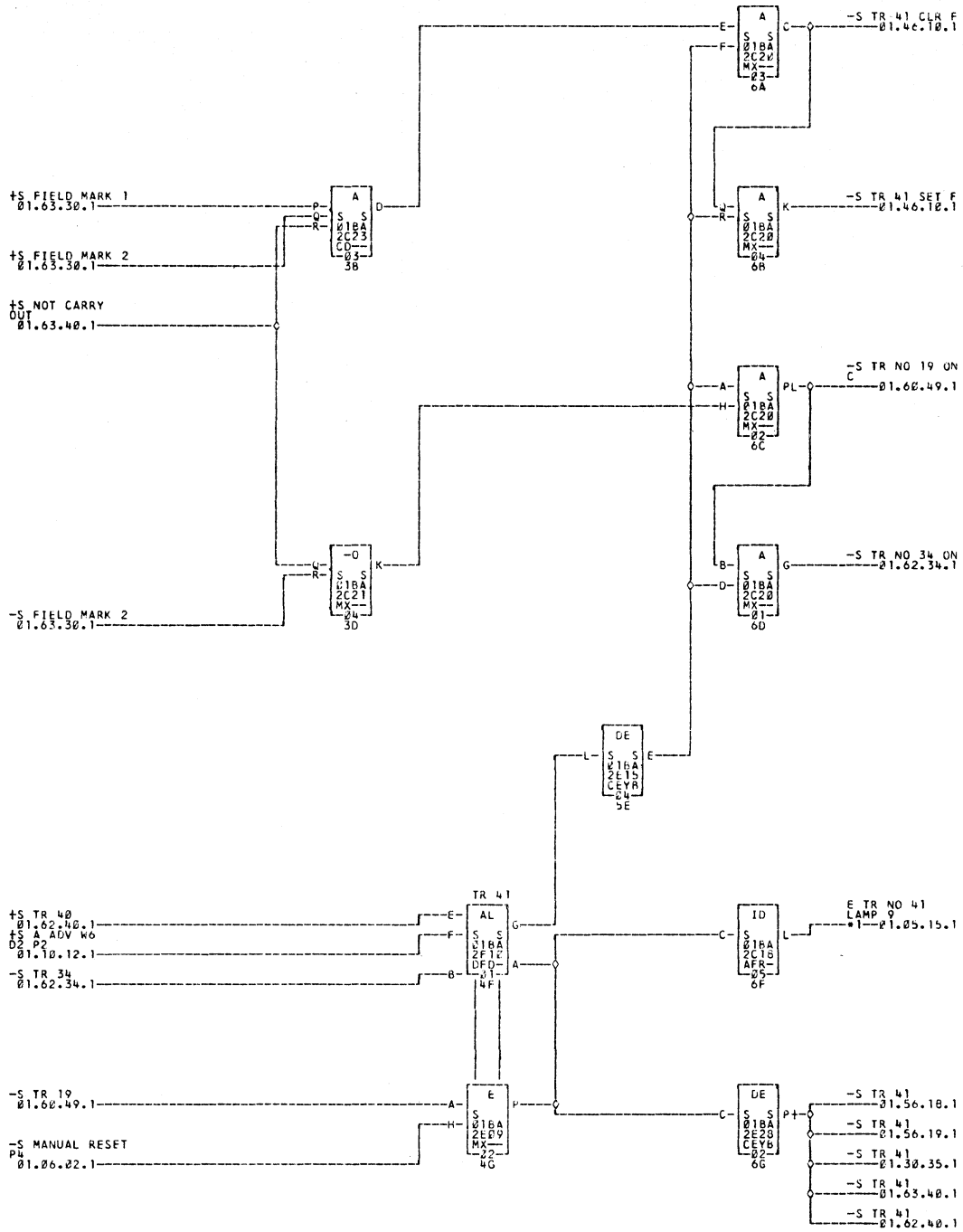


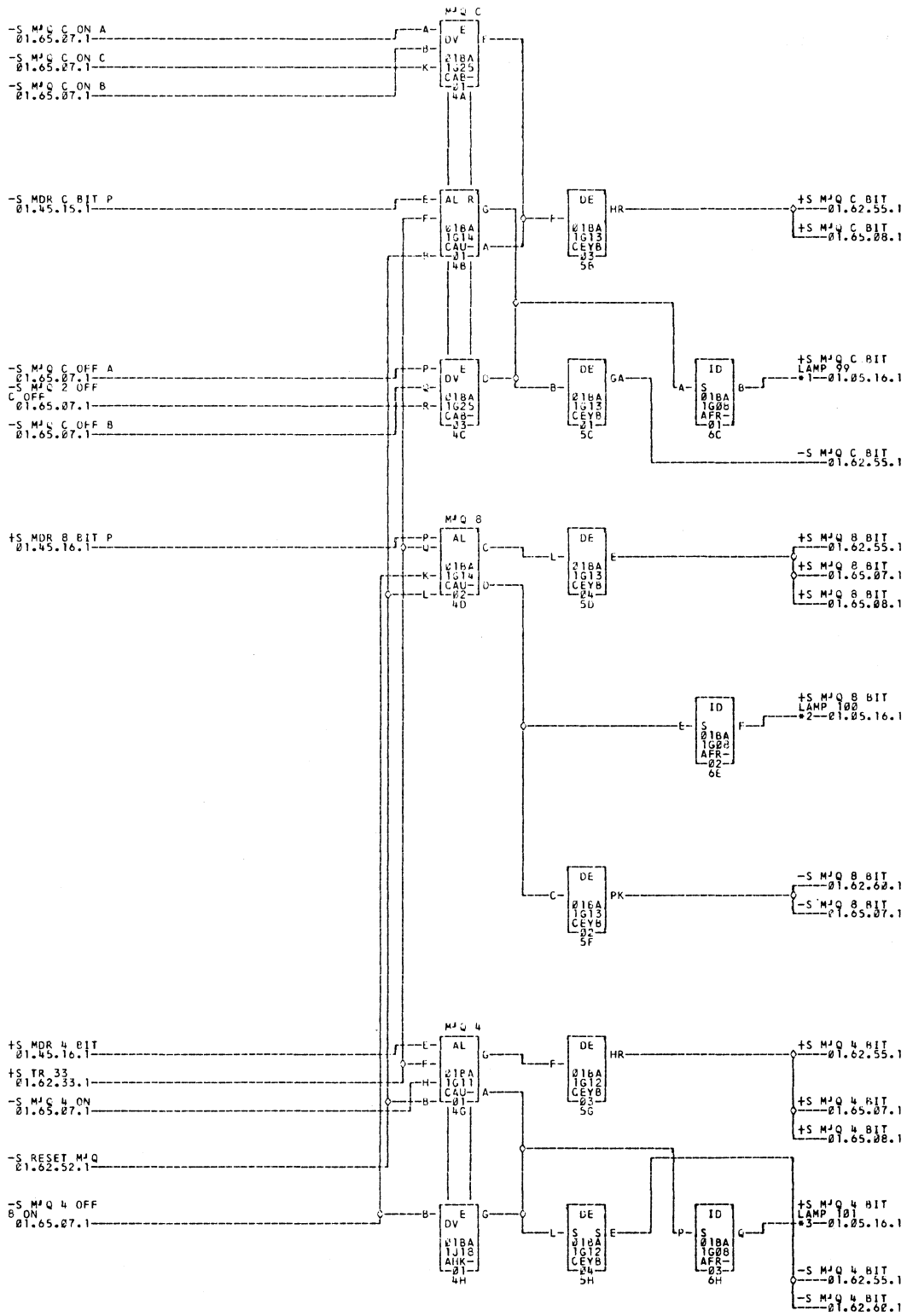








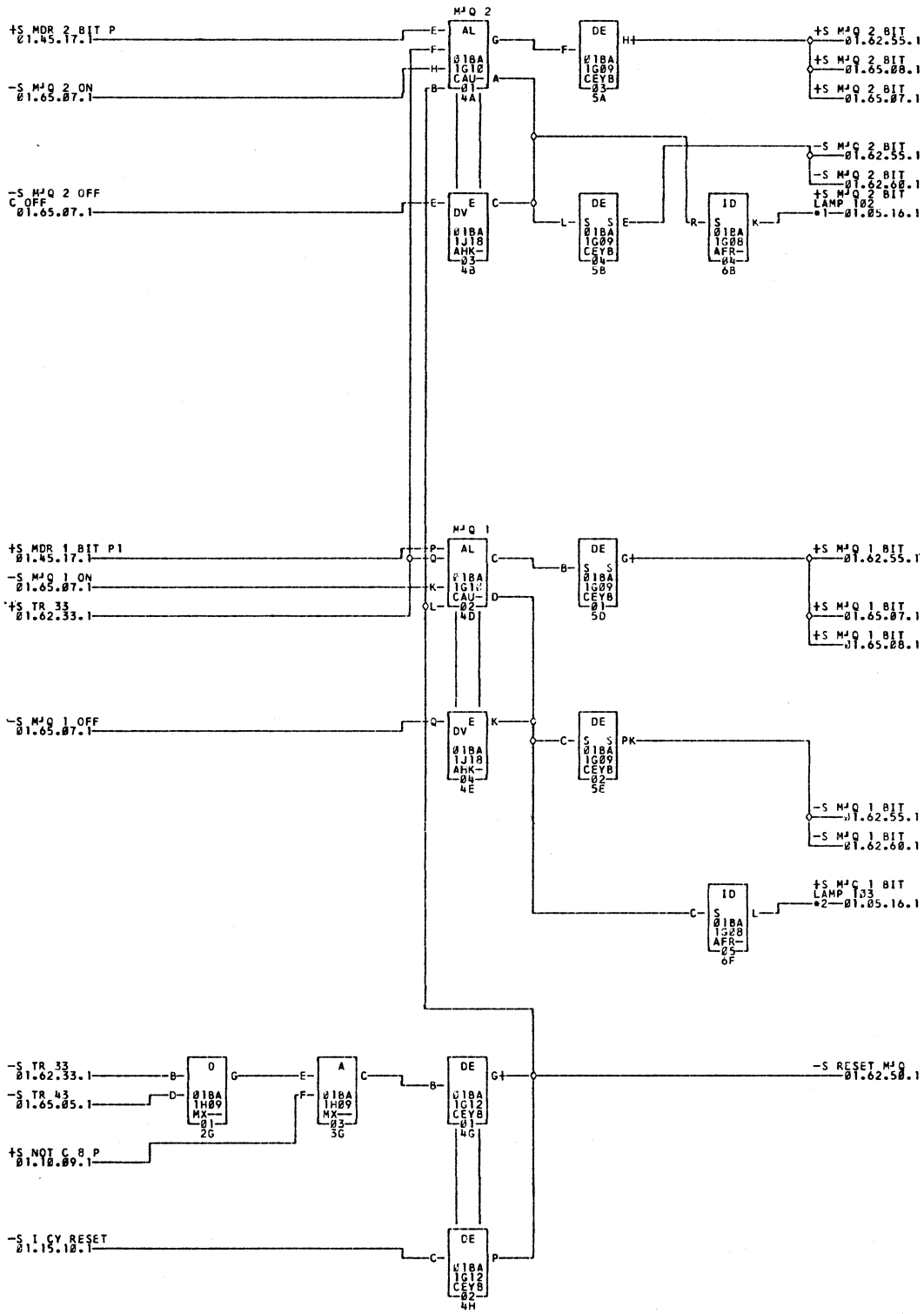




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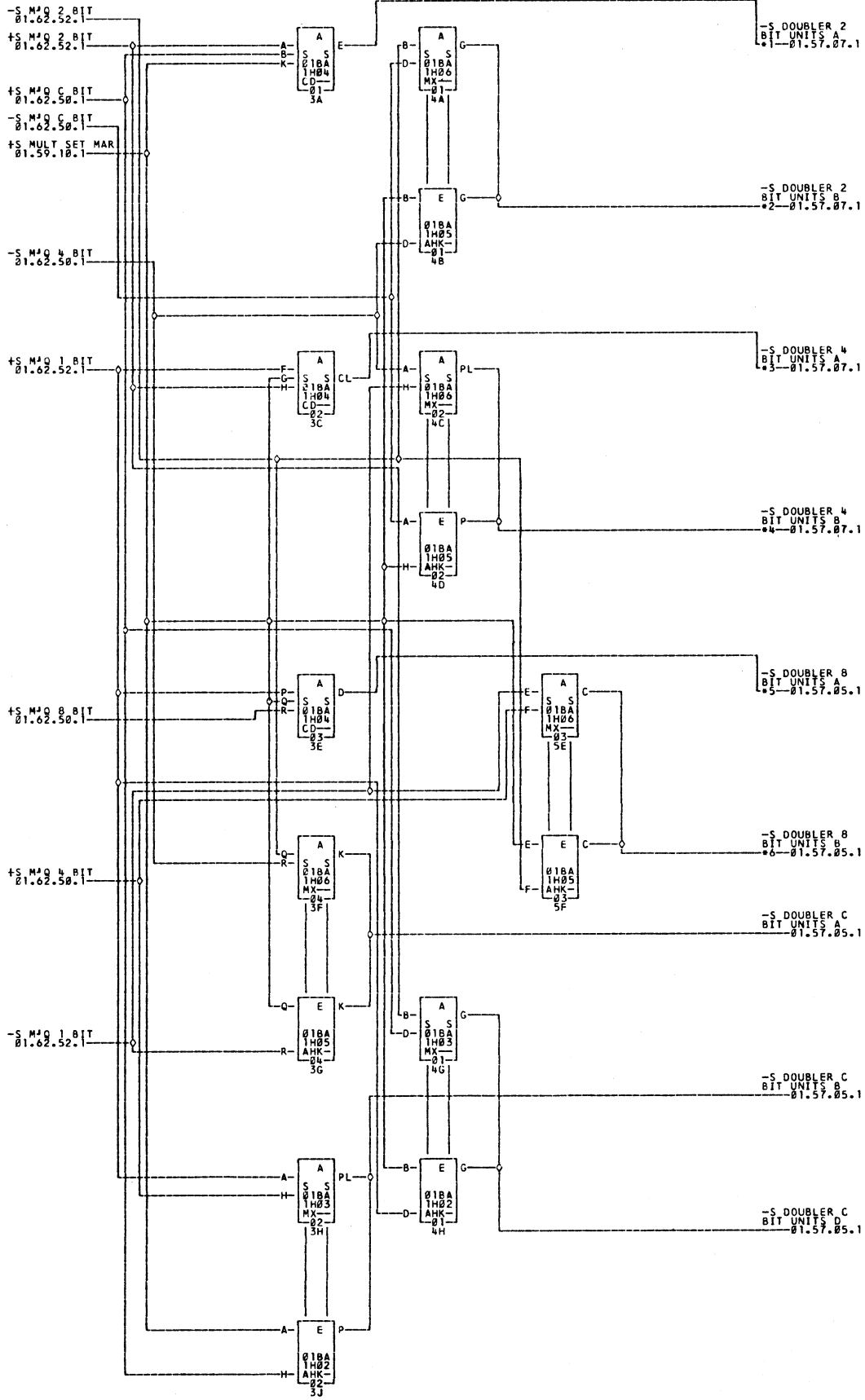
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*3--018XF15



*1-01BXF16

*2-01BXF17



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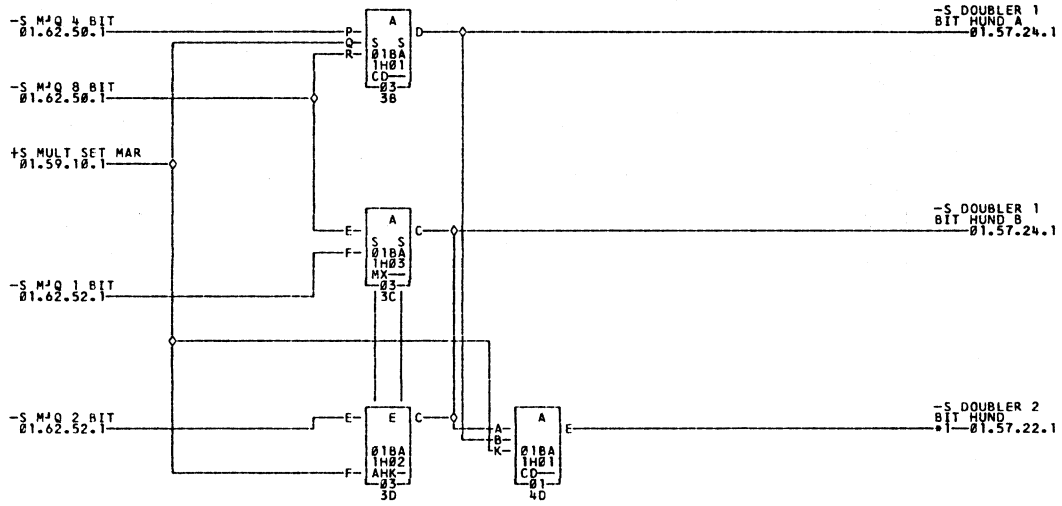
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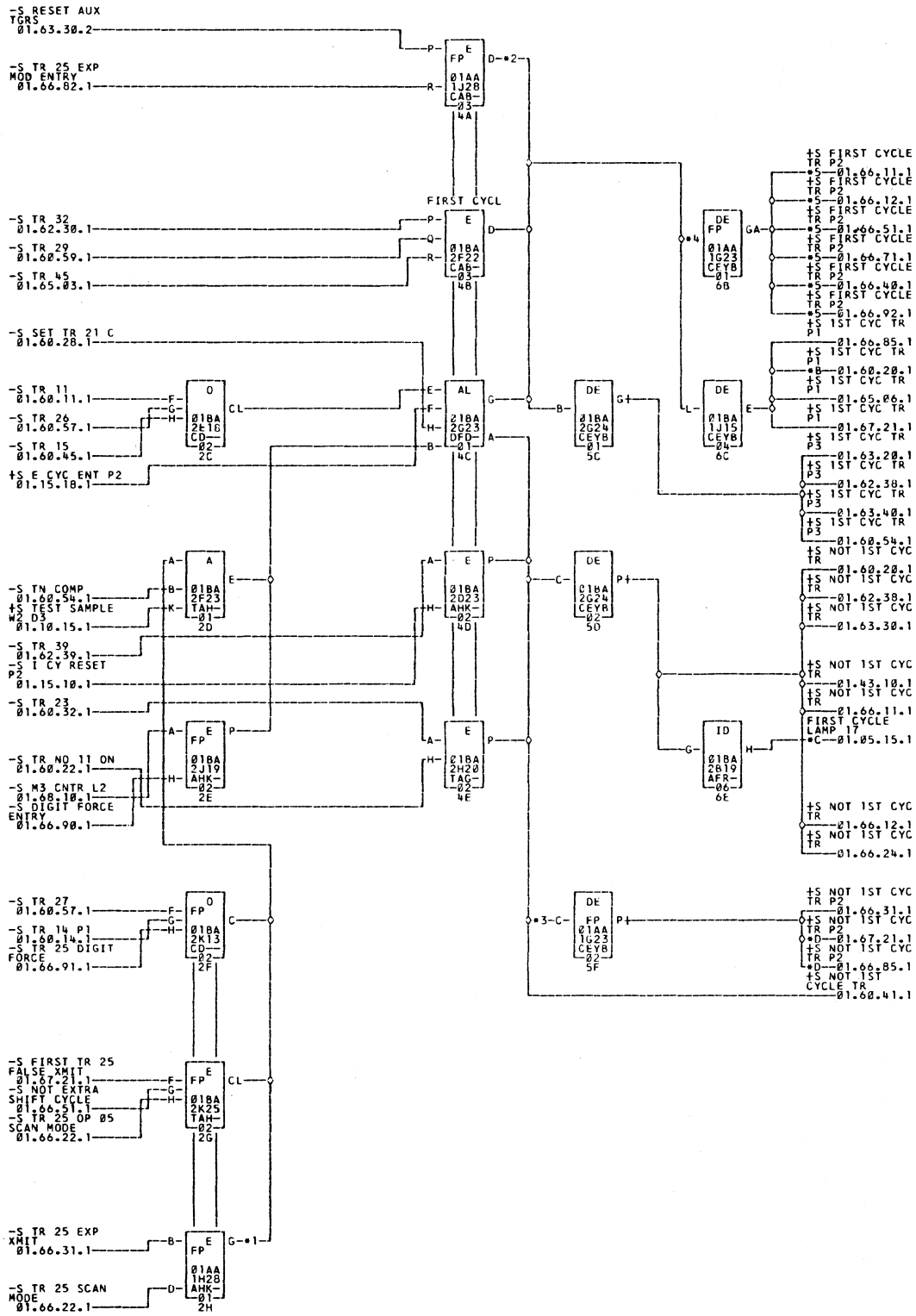
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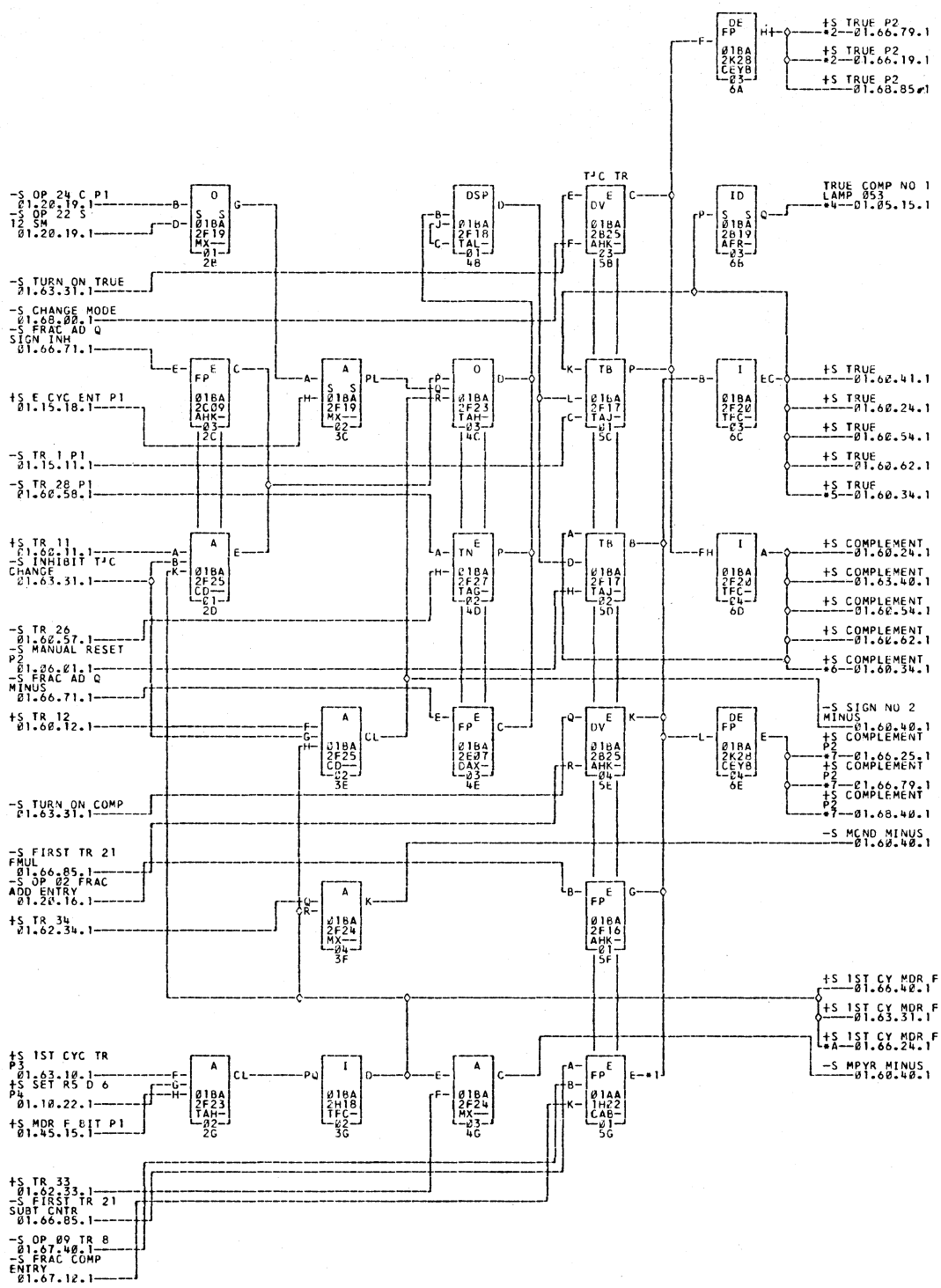
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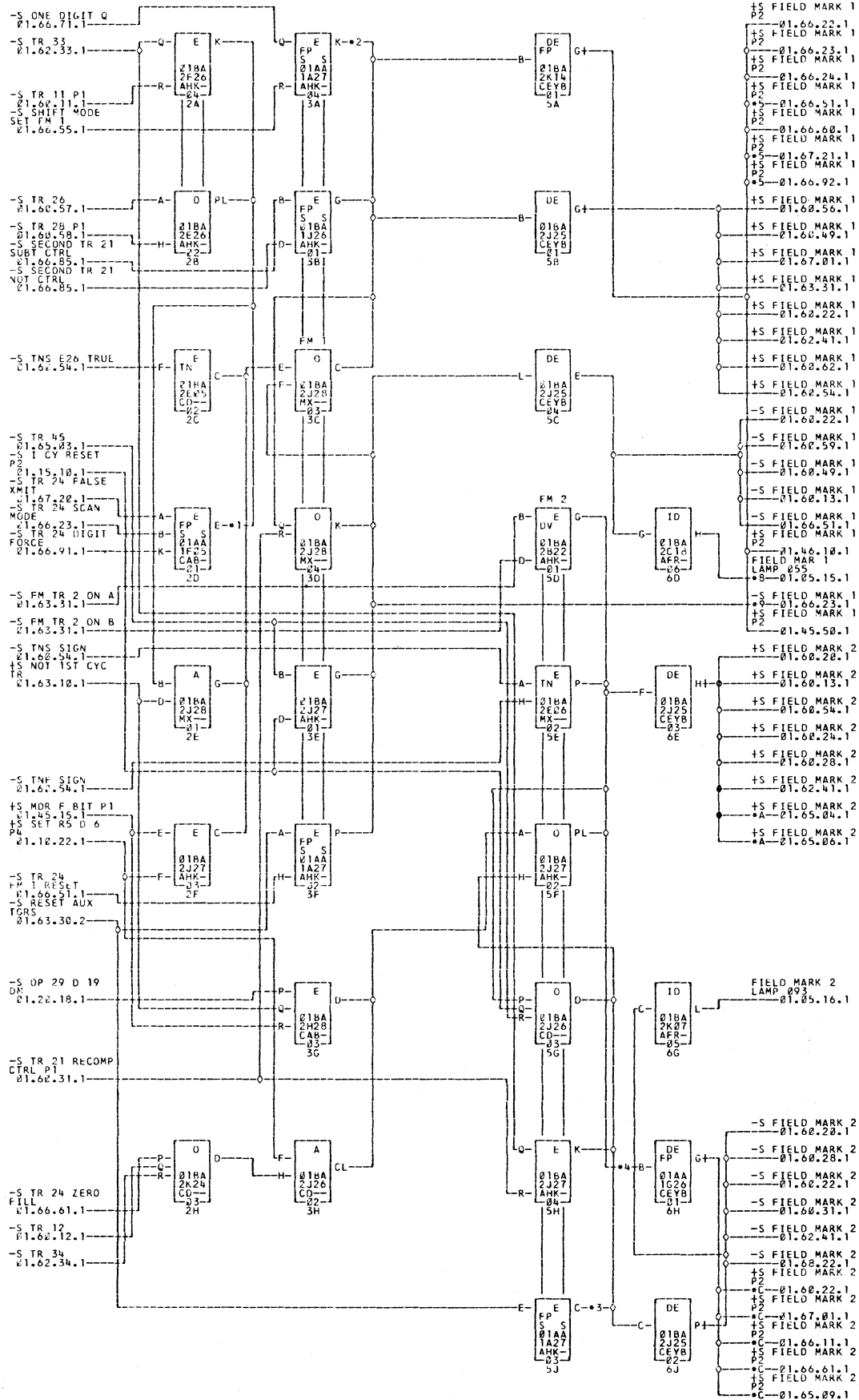




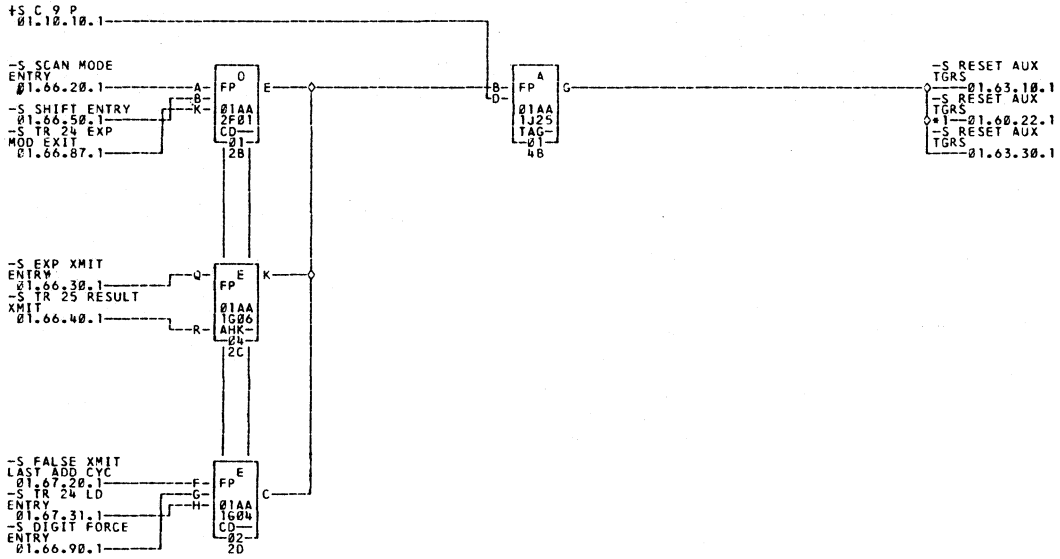
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- *C--01BFX32 *D--01AWK16

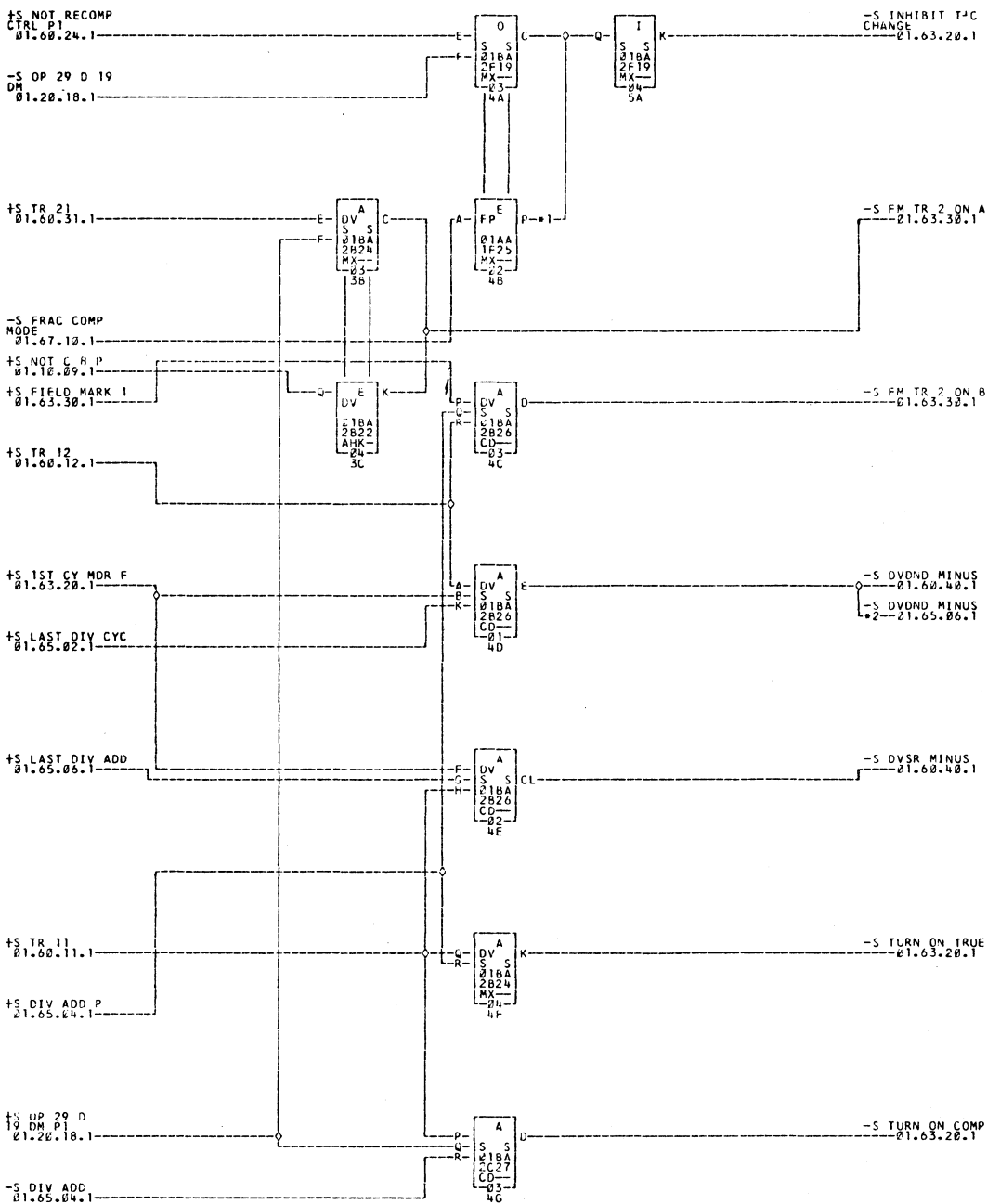


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- *1-01AWE24 ---01BWE24 *2-01AWK18 ---01BWK18 *3-01AWK20 ---01BWK20
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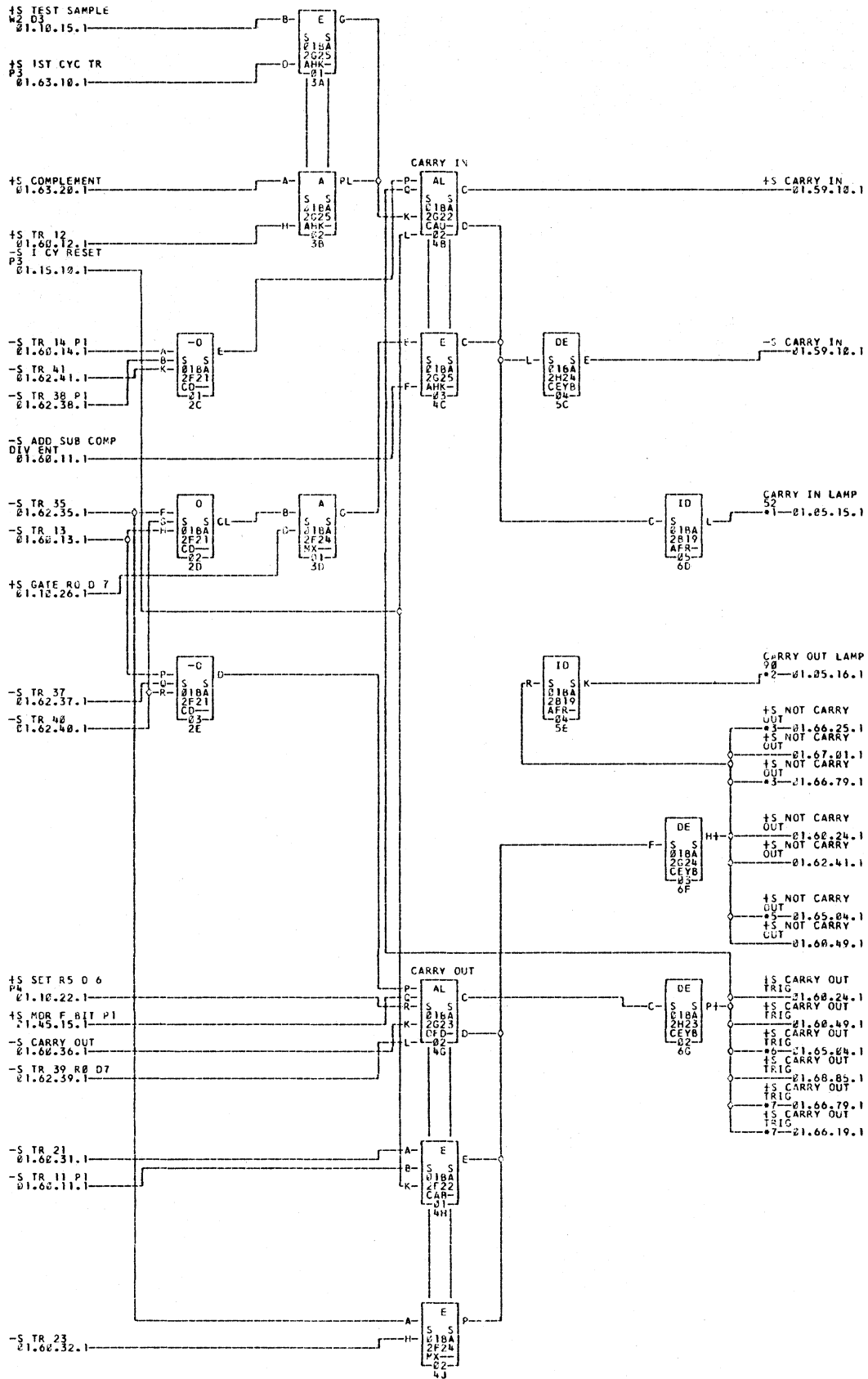


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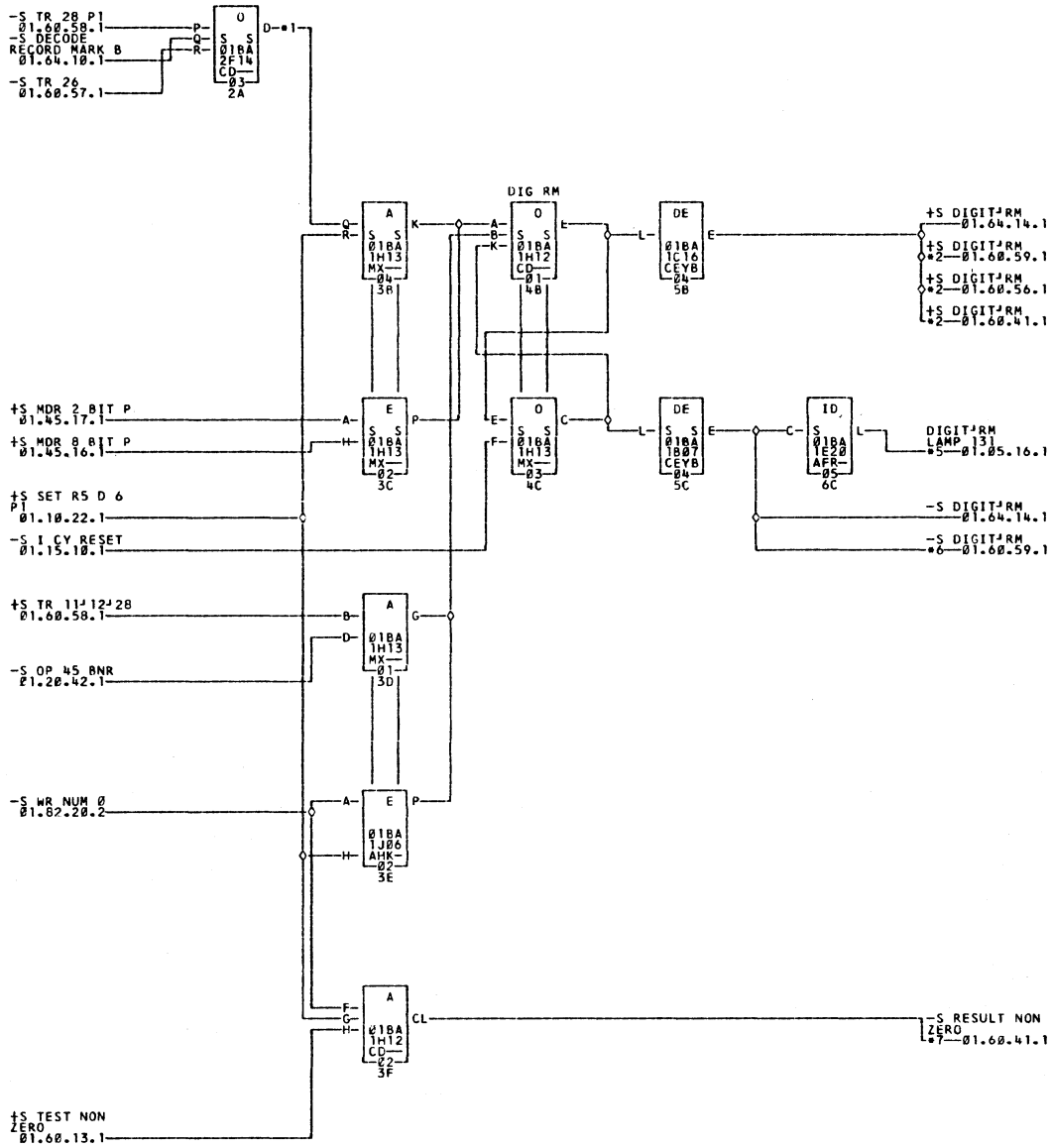
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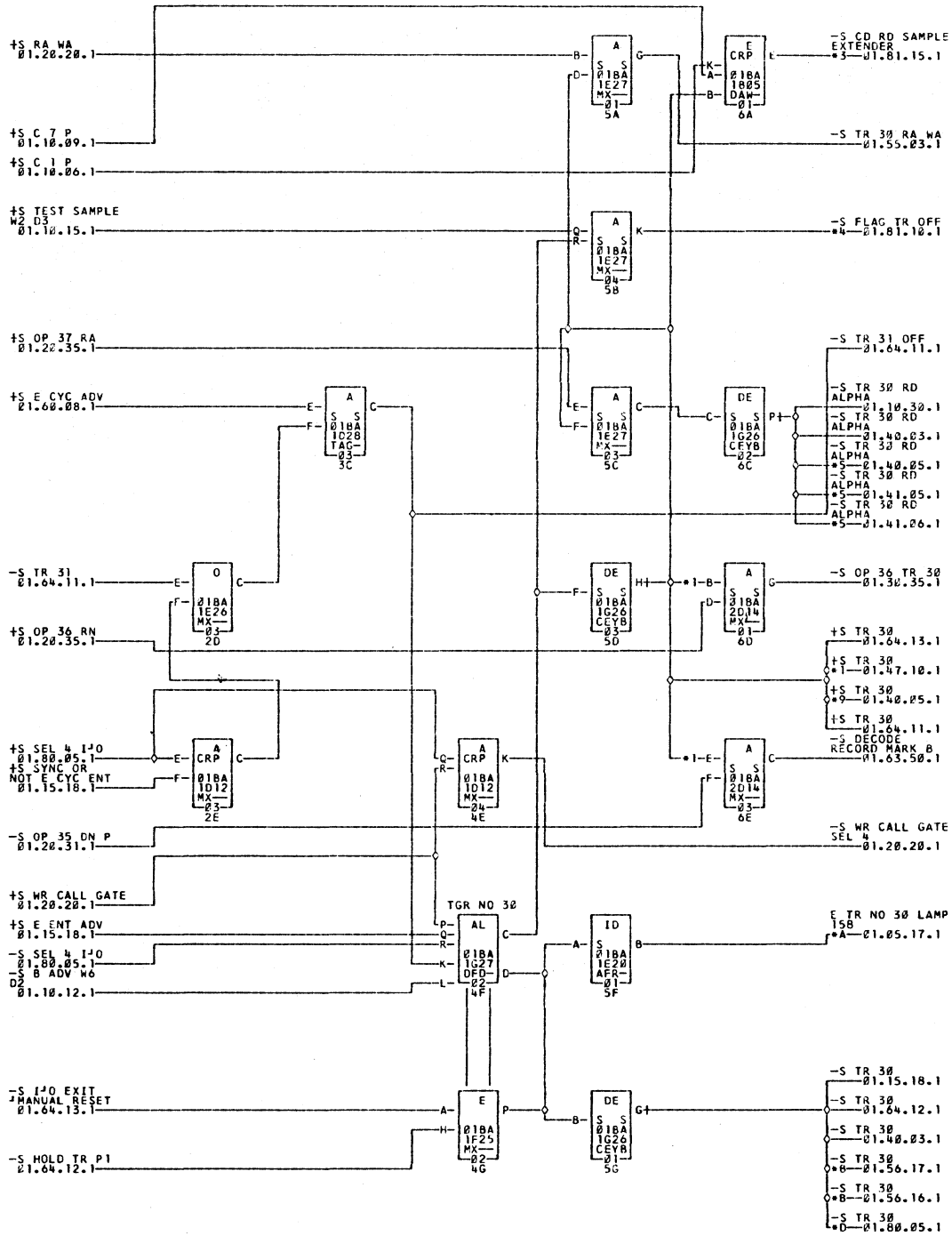
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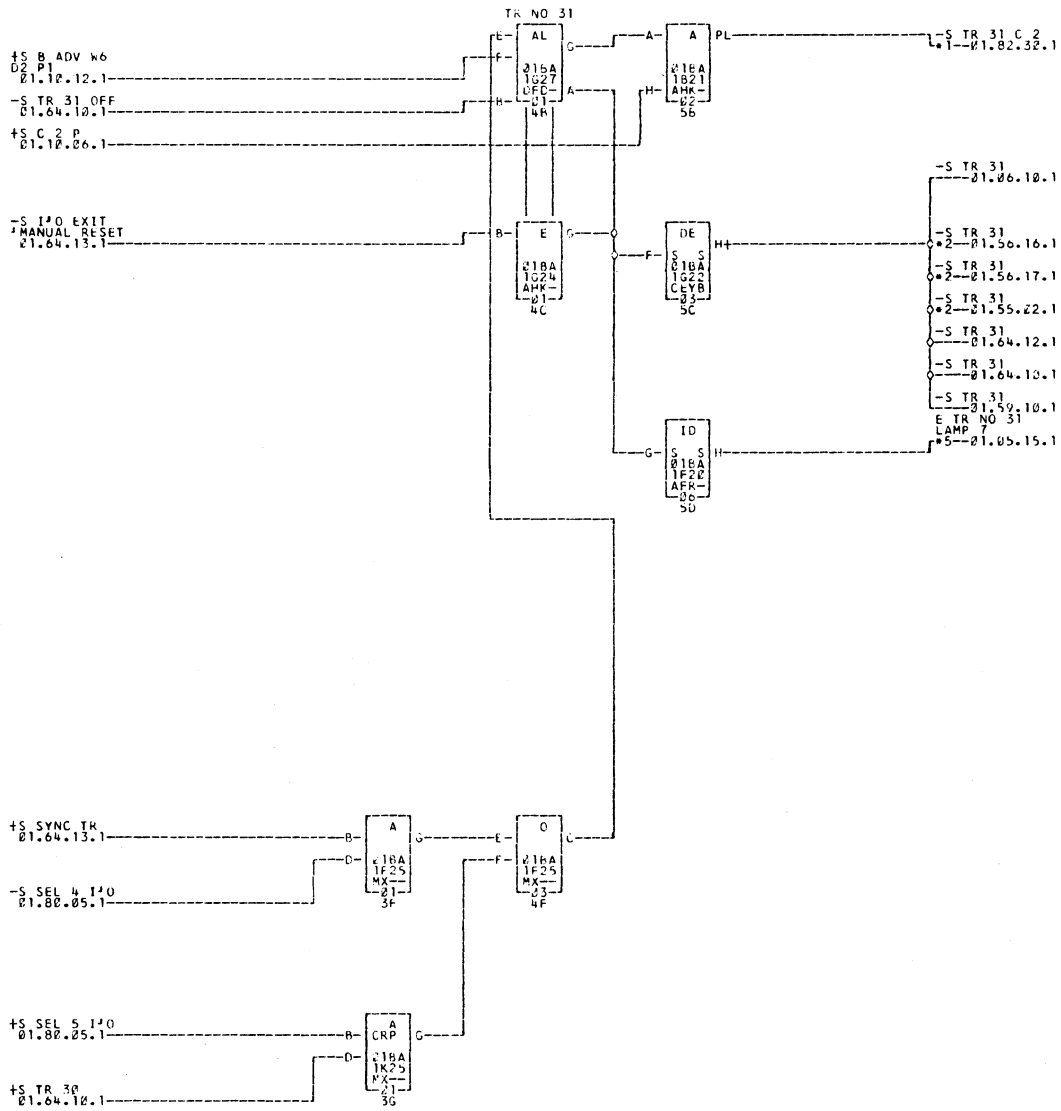
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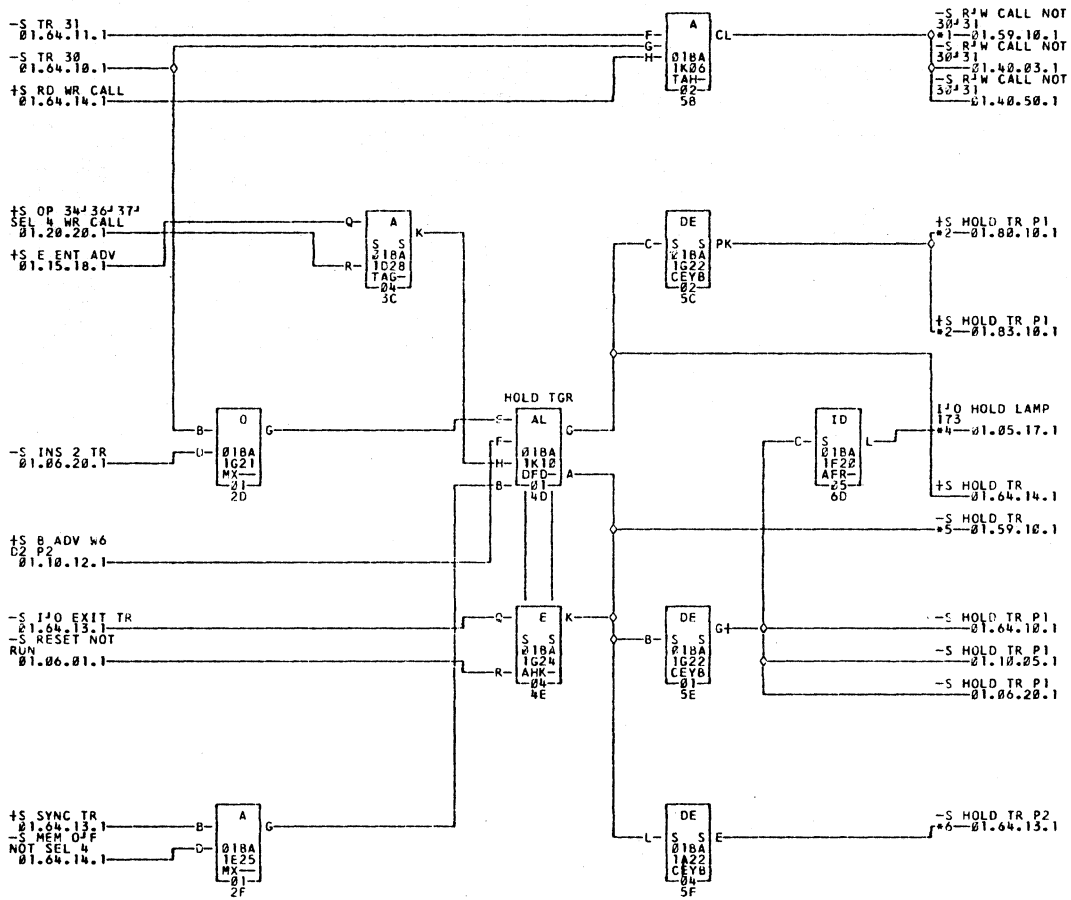
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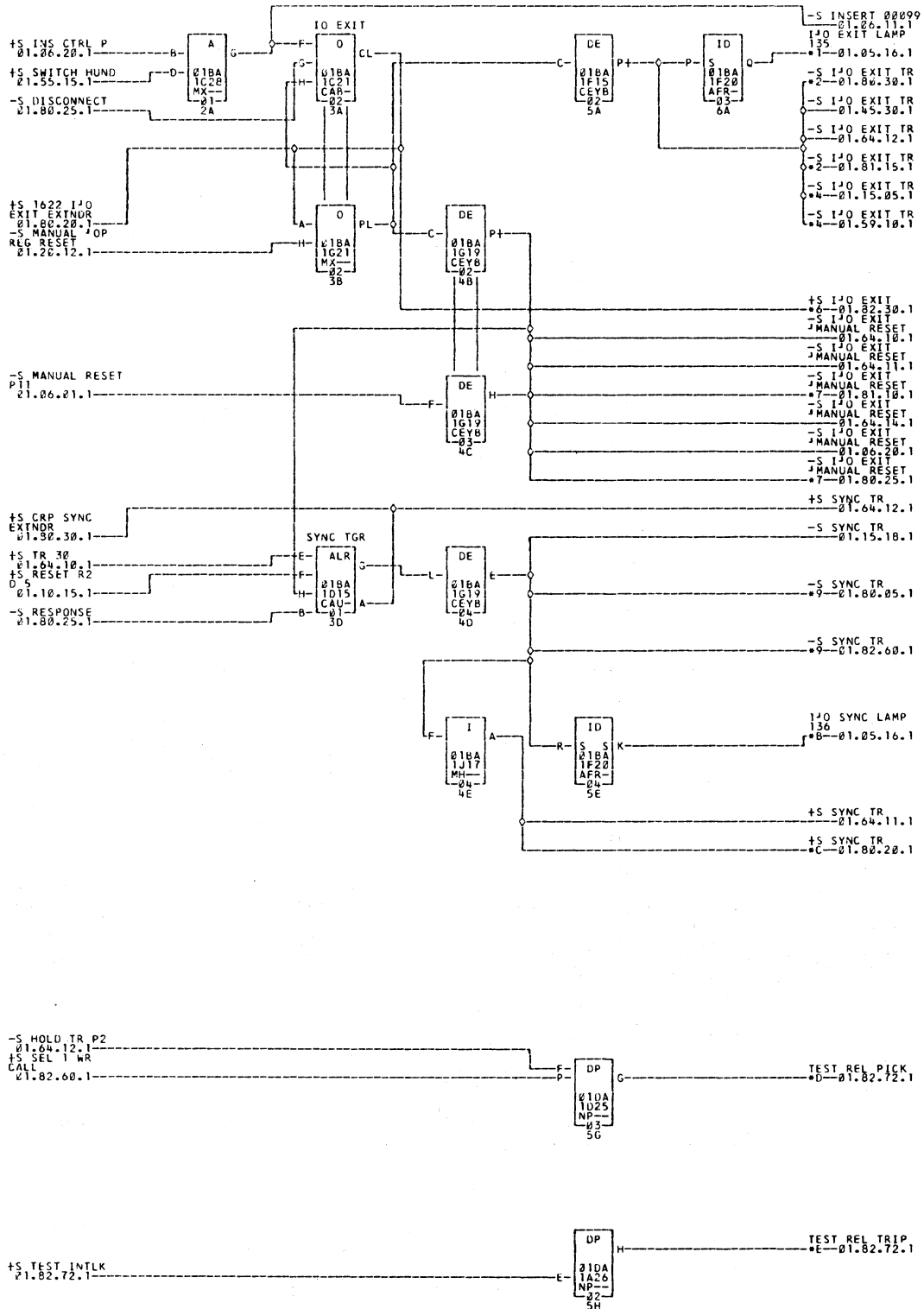
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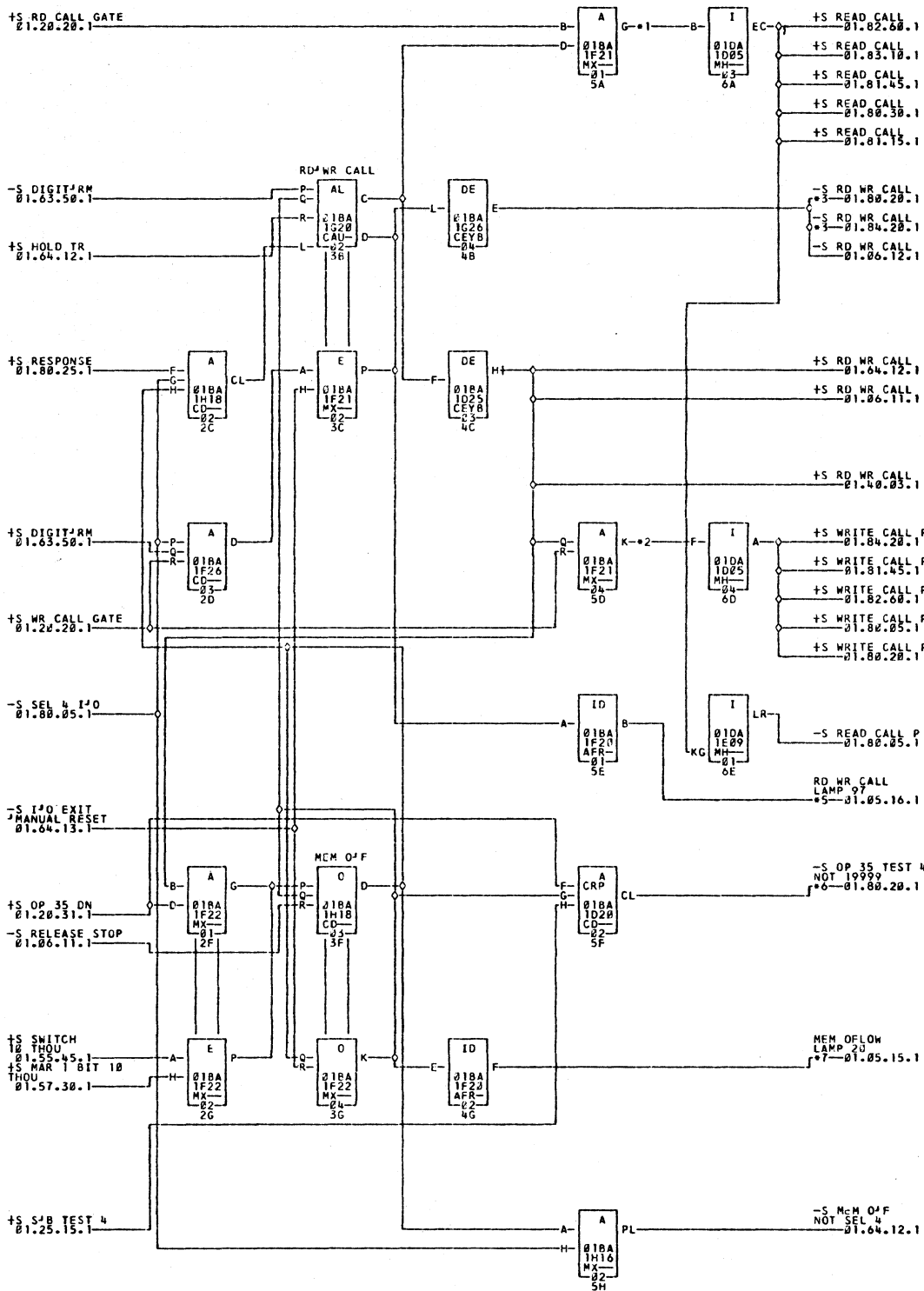
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- *4--01DXB02
- *5--01DXB02
- *6--01DXB21
- *7--01DXB21
- *8--01DXB21
- *9--01DXB21
- *0--01DXB21



*1-018XB04
*5-018XF22

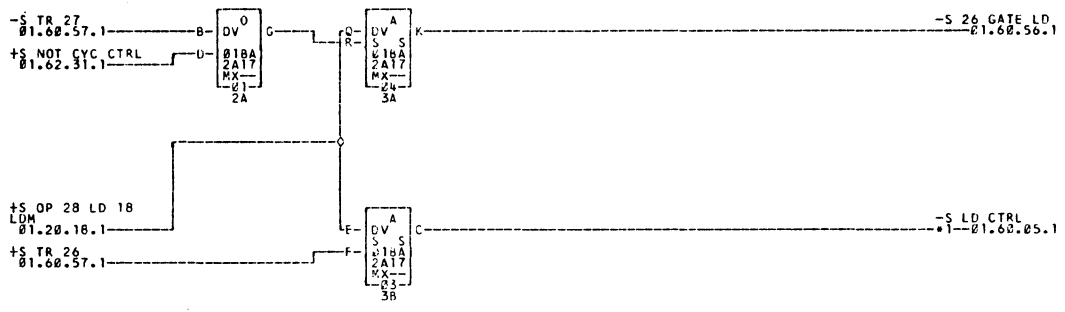
— 01DXB04
*6-018XB22

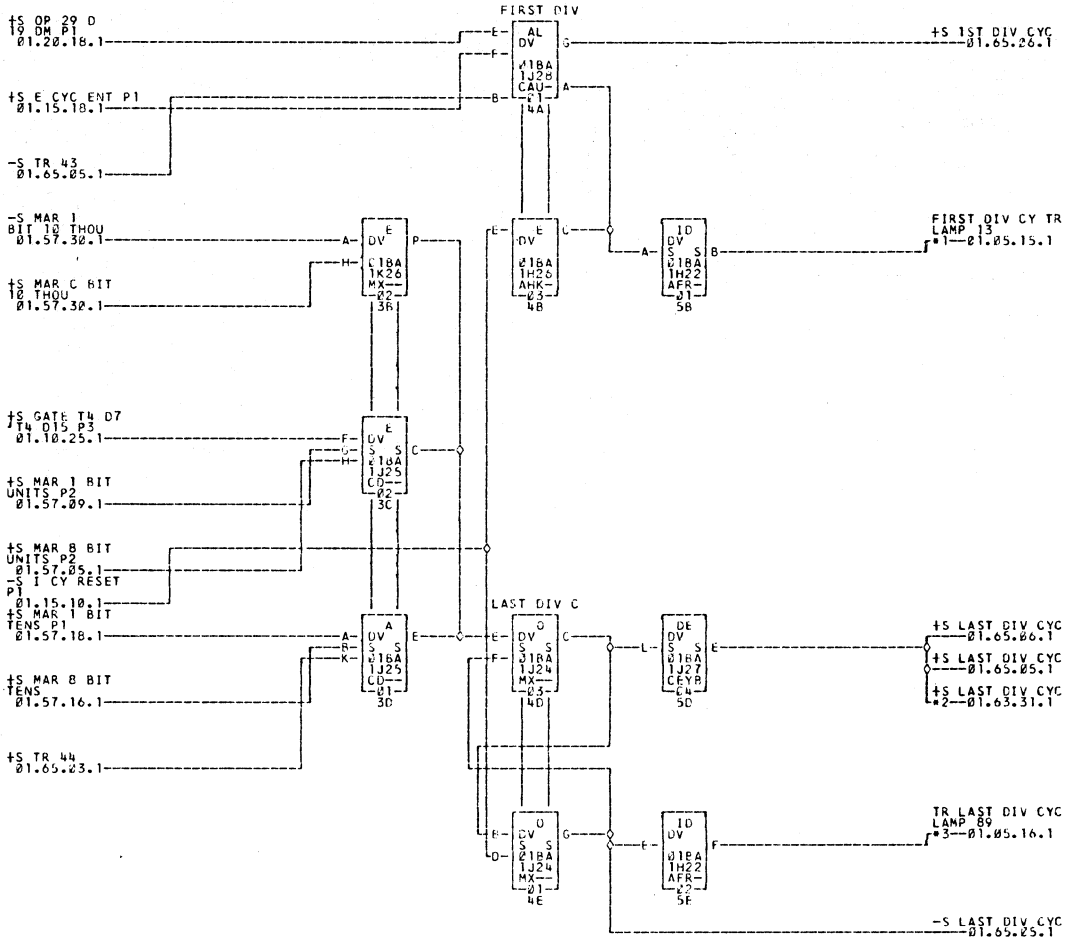
*2-018XB06
— 01DXB22

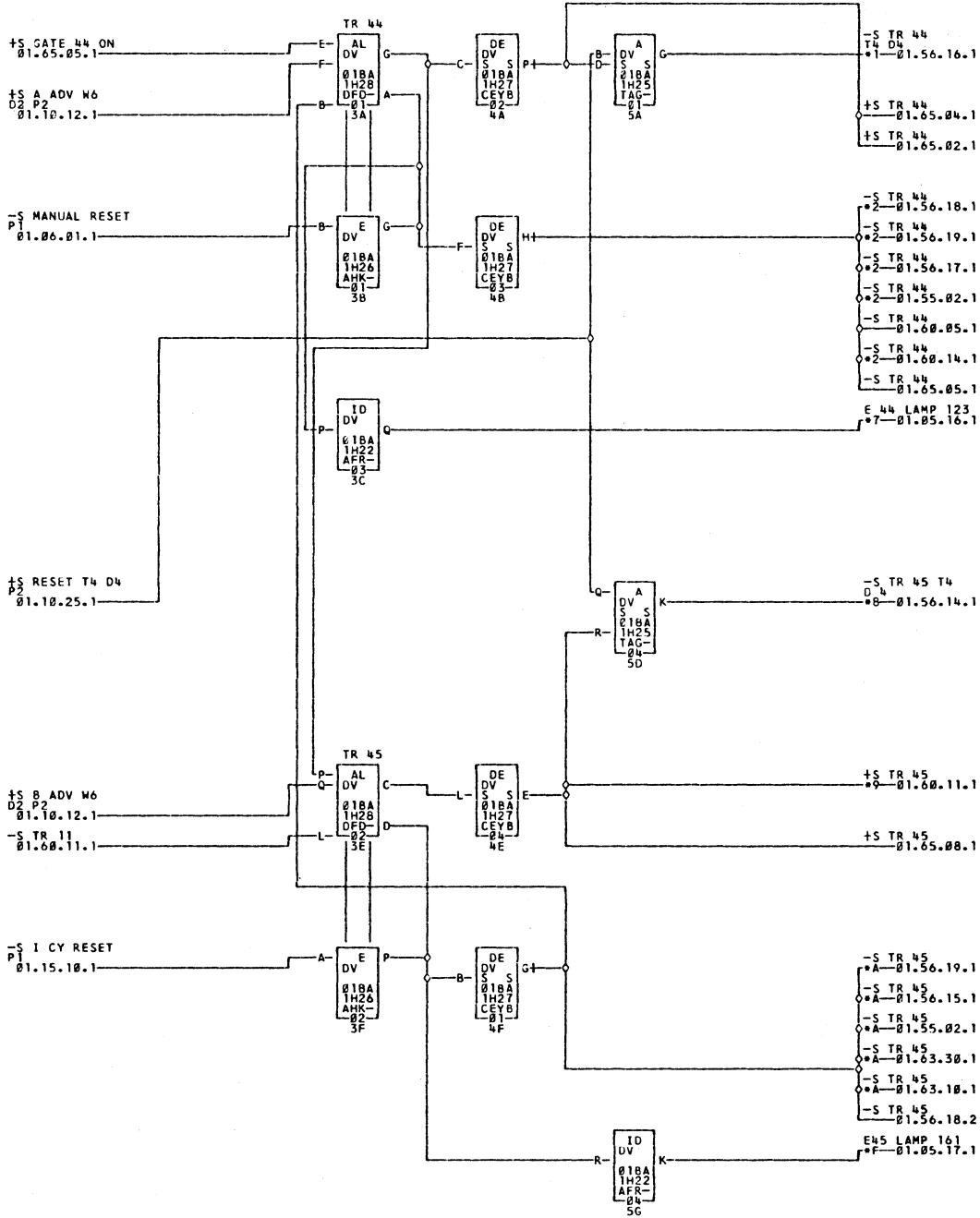
— 01DXB06
*7-018XF23

*3-018XB15

— 01DXB15







*1—0181220A
0182222C

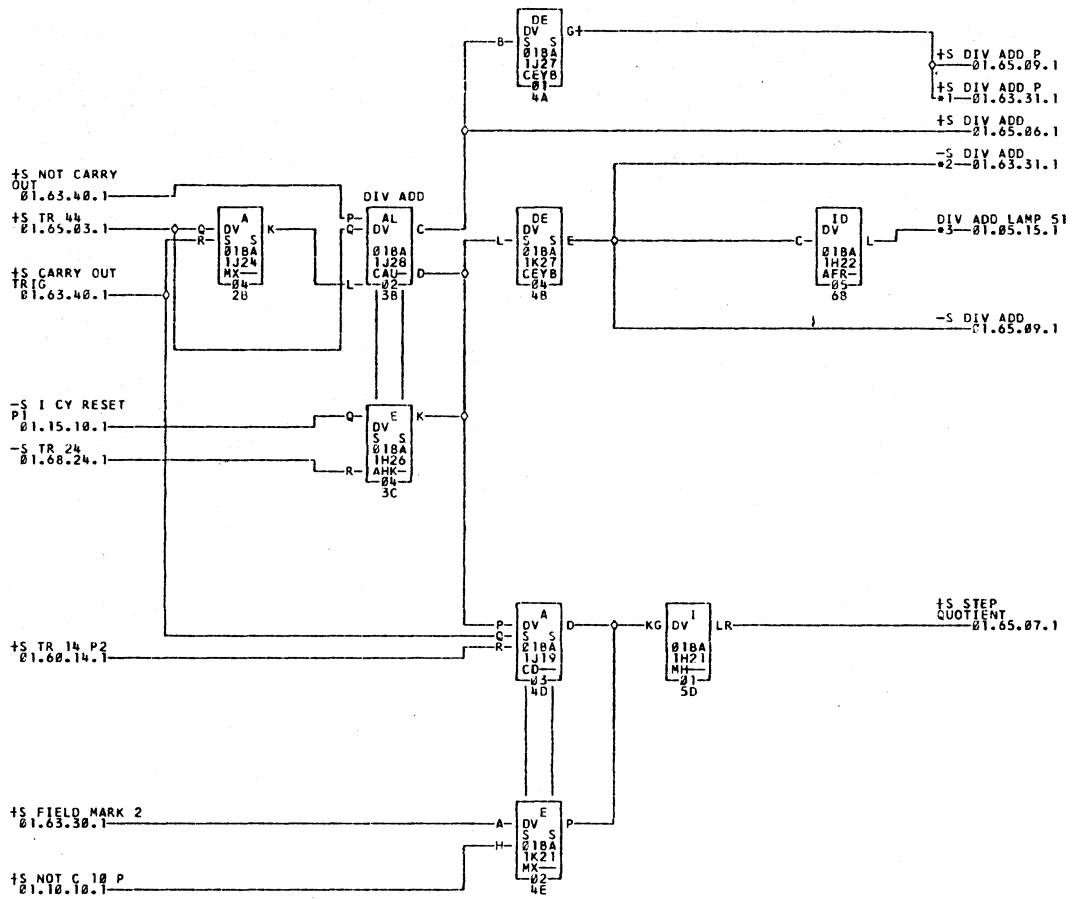
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*9—0181221A

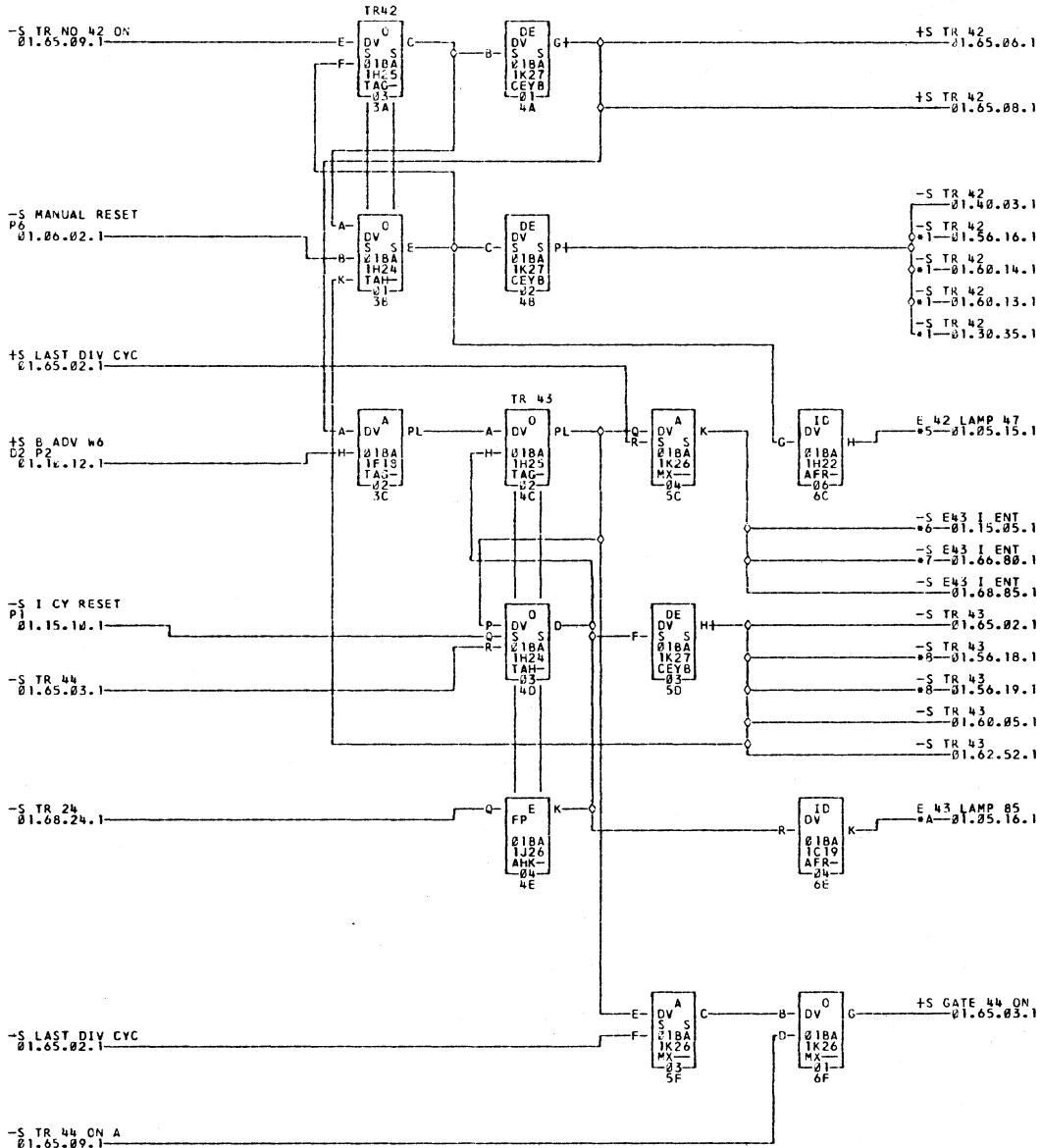
*2—0181220B
0182221A

0182220B
*A—0181221B

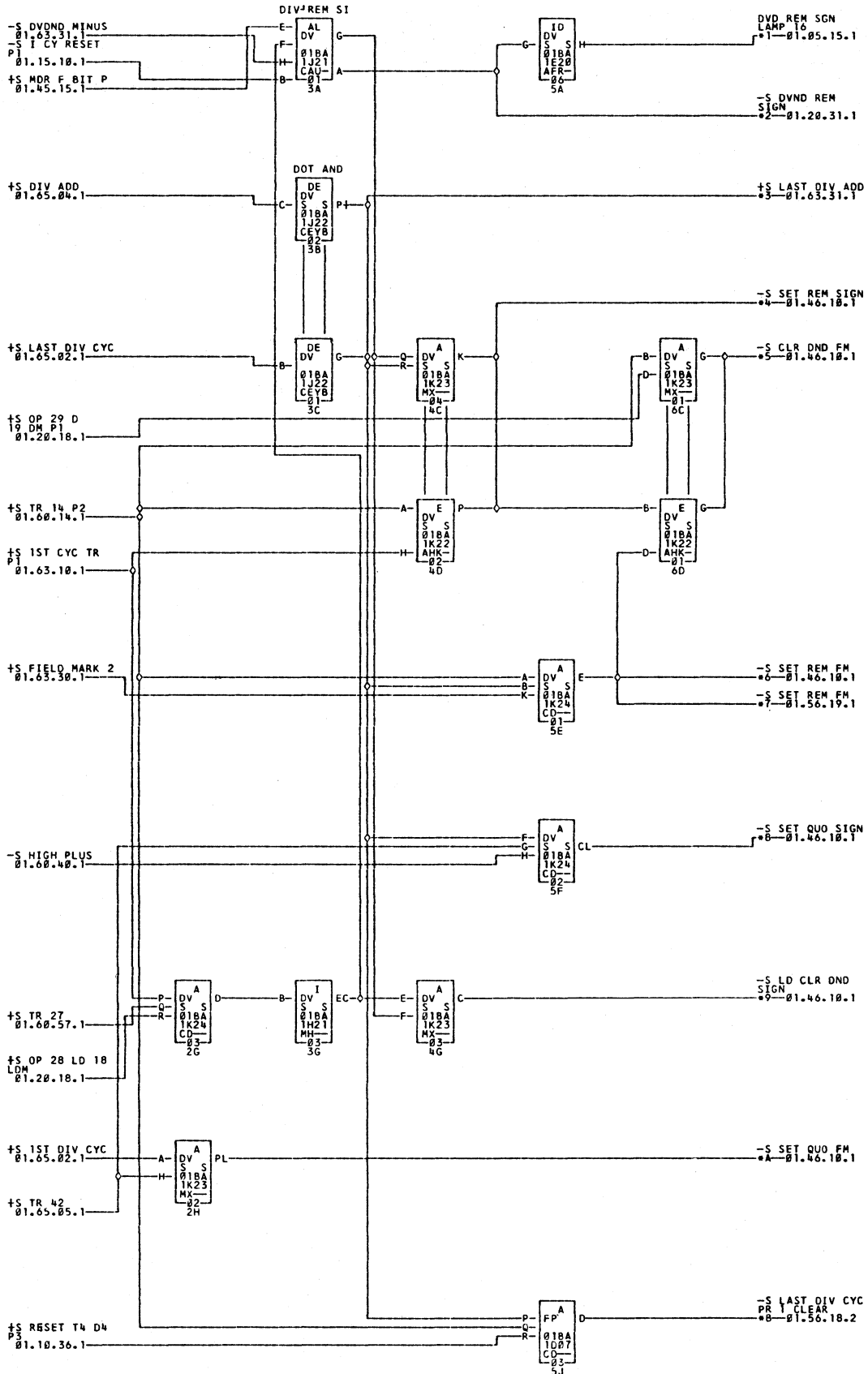
*7—018XF26
0182221B

*Ø—0181222C
*P—018XF27





*1-0181223A 0182123A *5-018XF30 *6-0181224A 0182224A *7-018W120
 01AWL20 *8-0181223B 0182223B *A-018XF29



*1--018XF31
 0182225B
 01AKK22
 0182718B

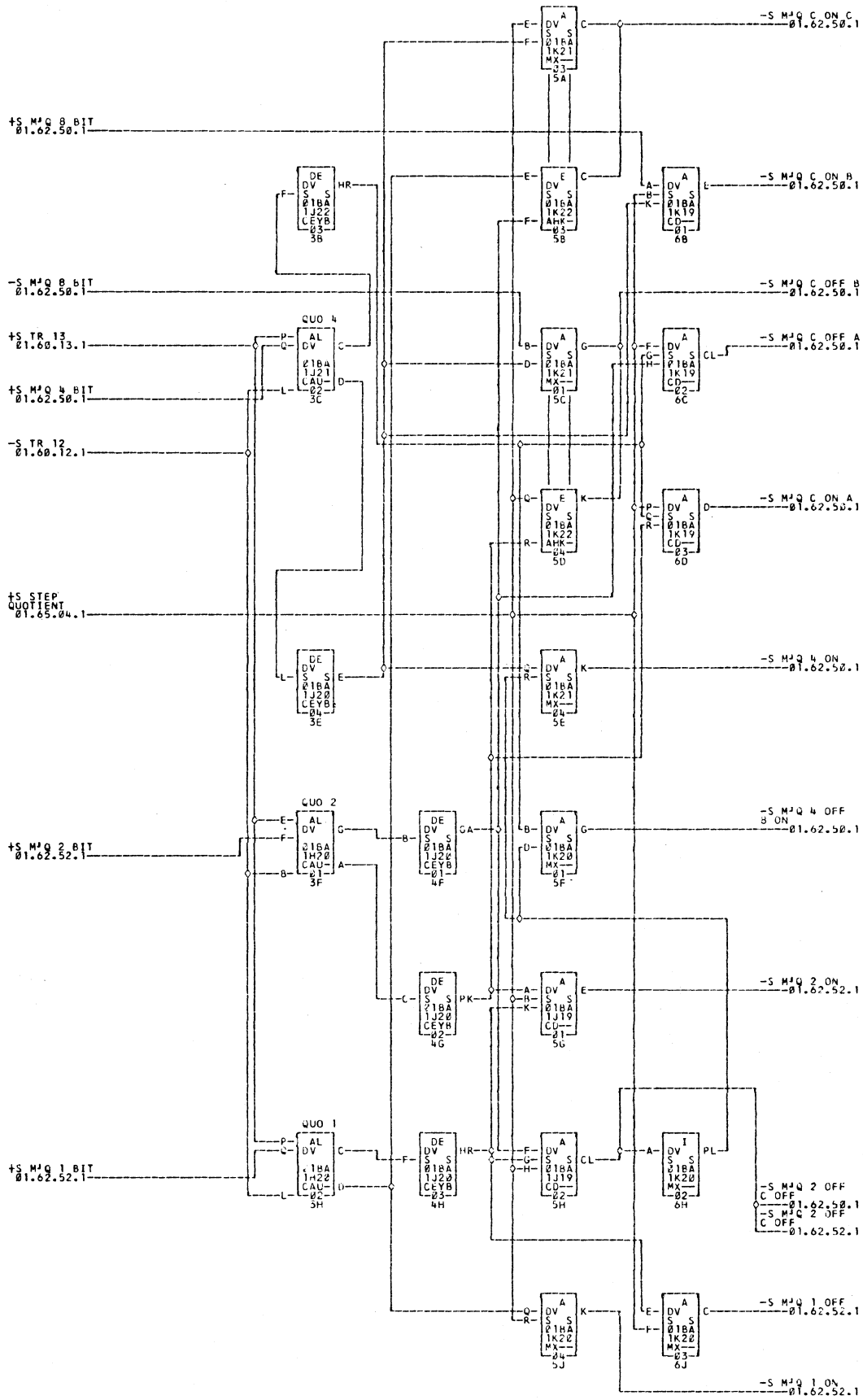
*2--0181Z146
 *5--0181Z198
 *8--0181Z168
 *8--01AKC18

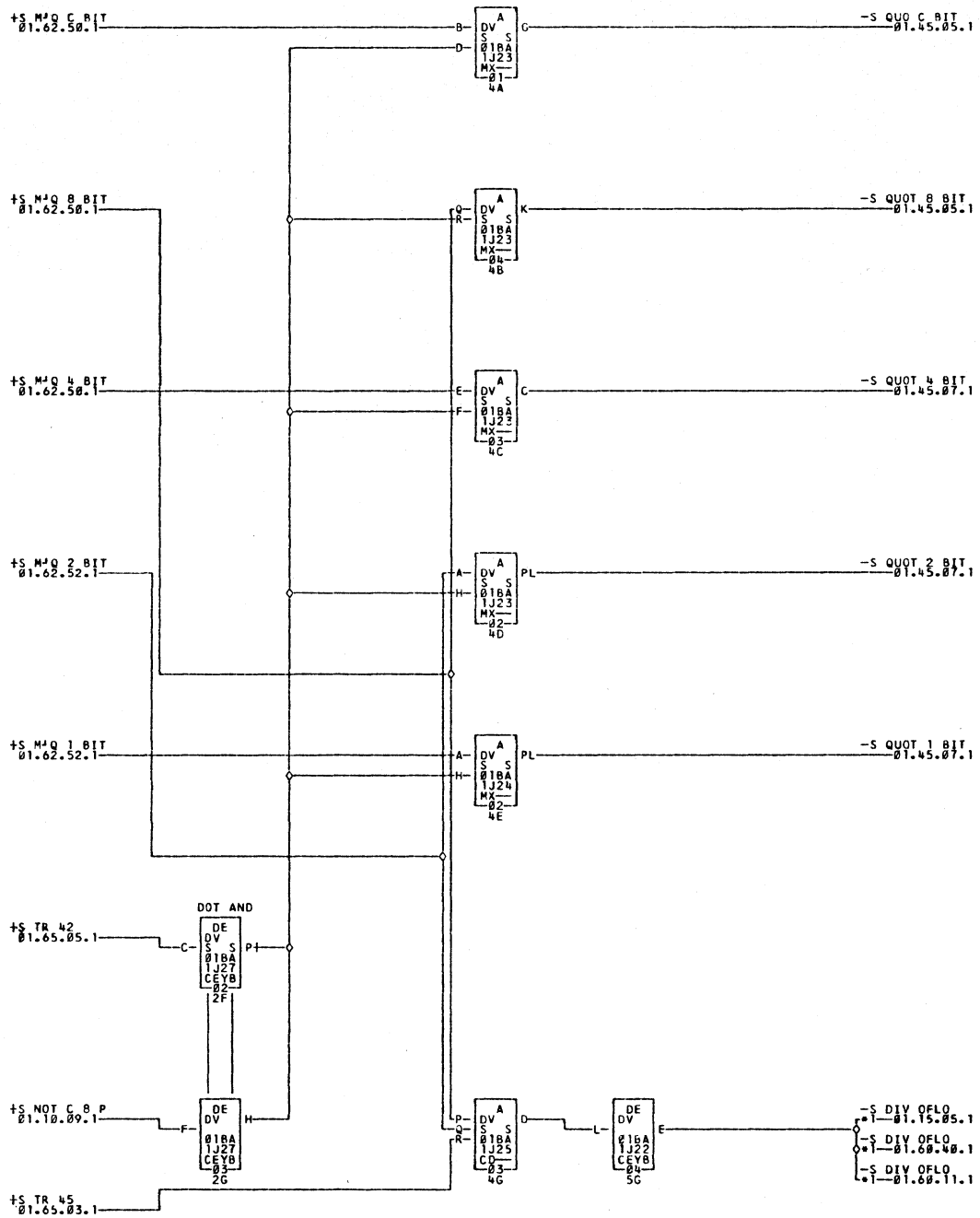
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 0182Z198
 0182Z168
 018WC18

*3--0181Z25A
 *6--0181Z158
 *9--0181Z246

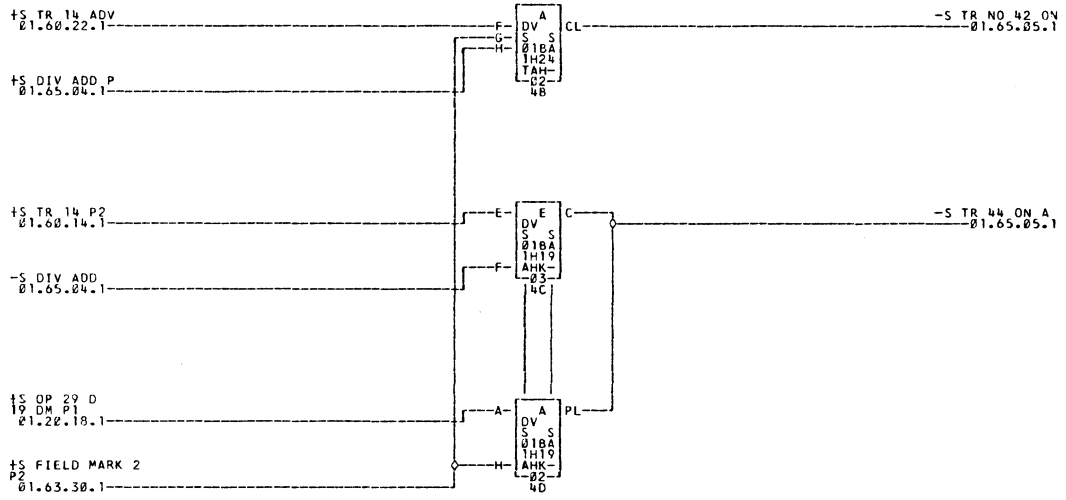
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 0182Z158
 0182Z246

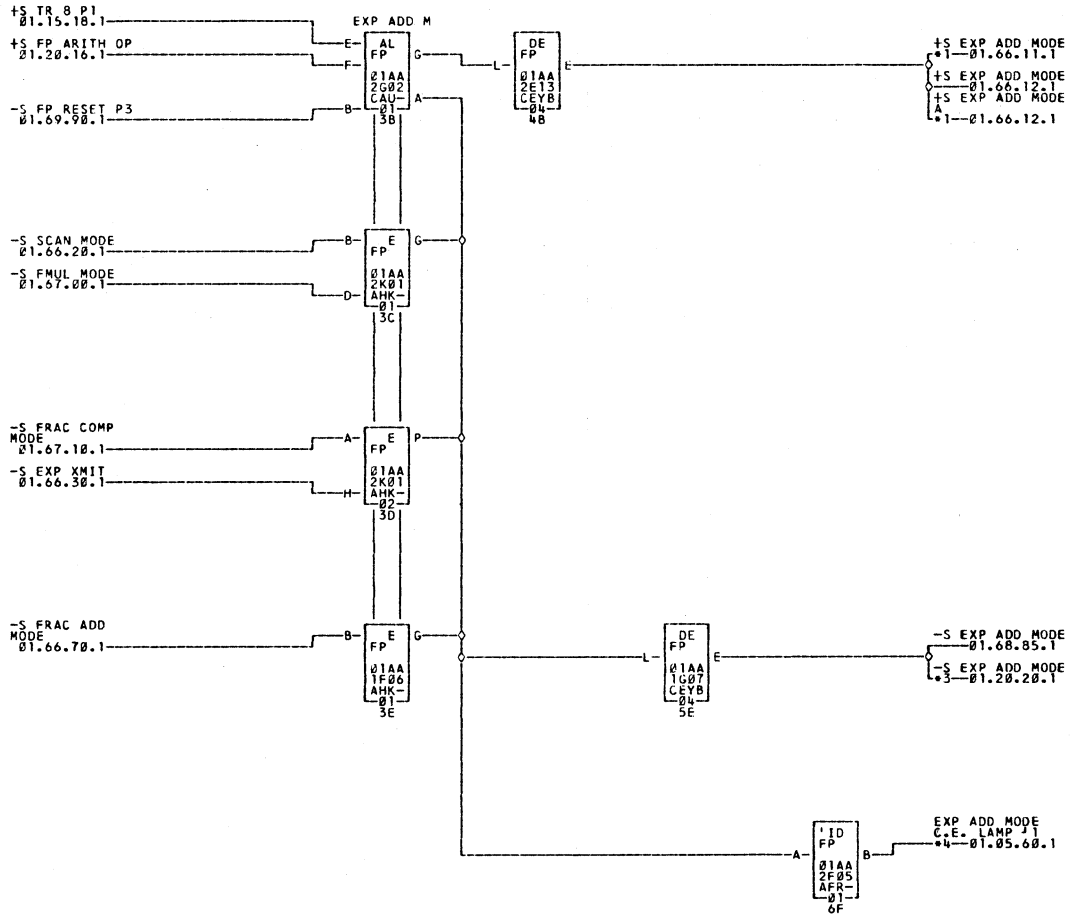
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 *7--018WK22
 *A--0181Z188





*1--01B1Y25A ——— 01B2Y25A





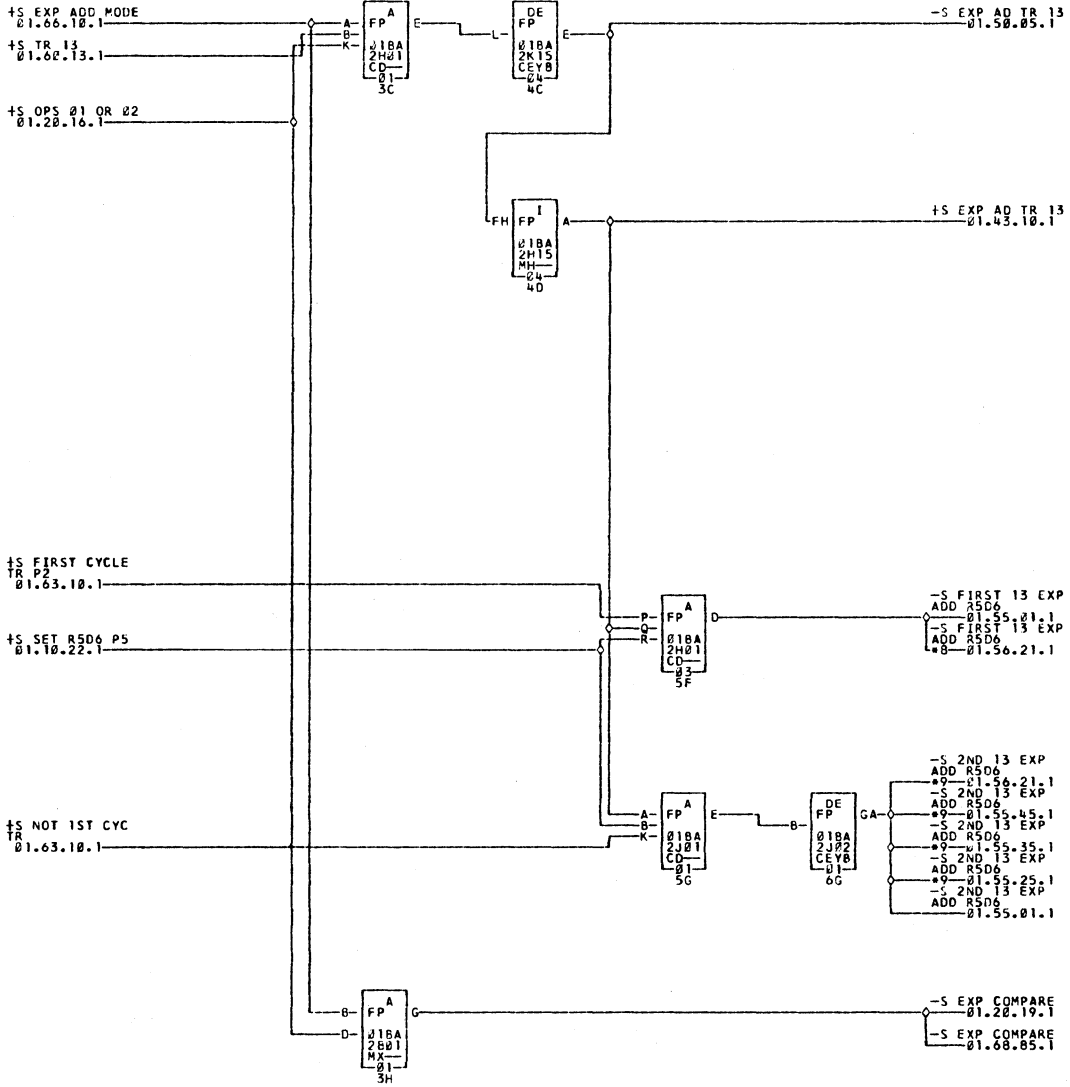
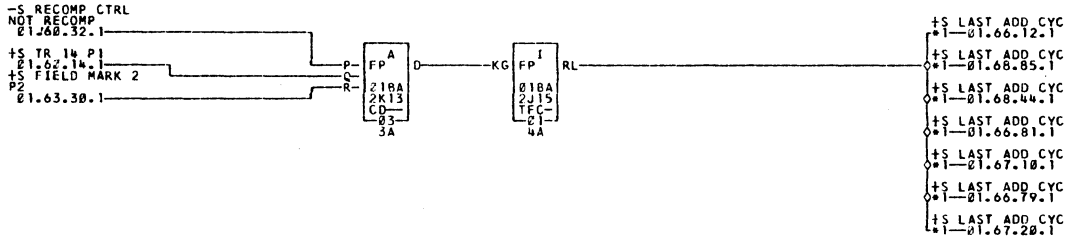
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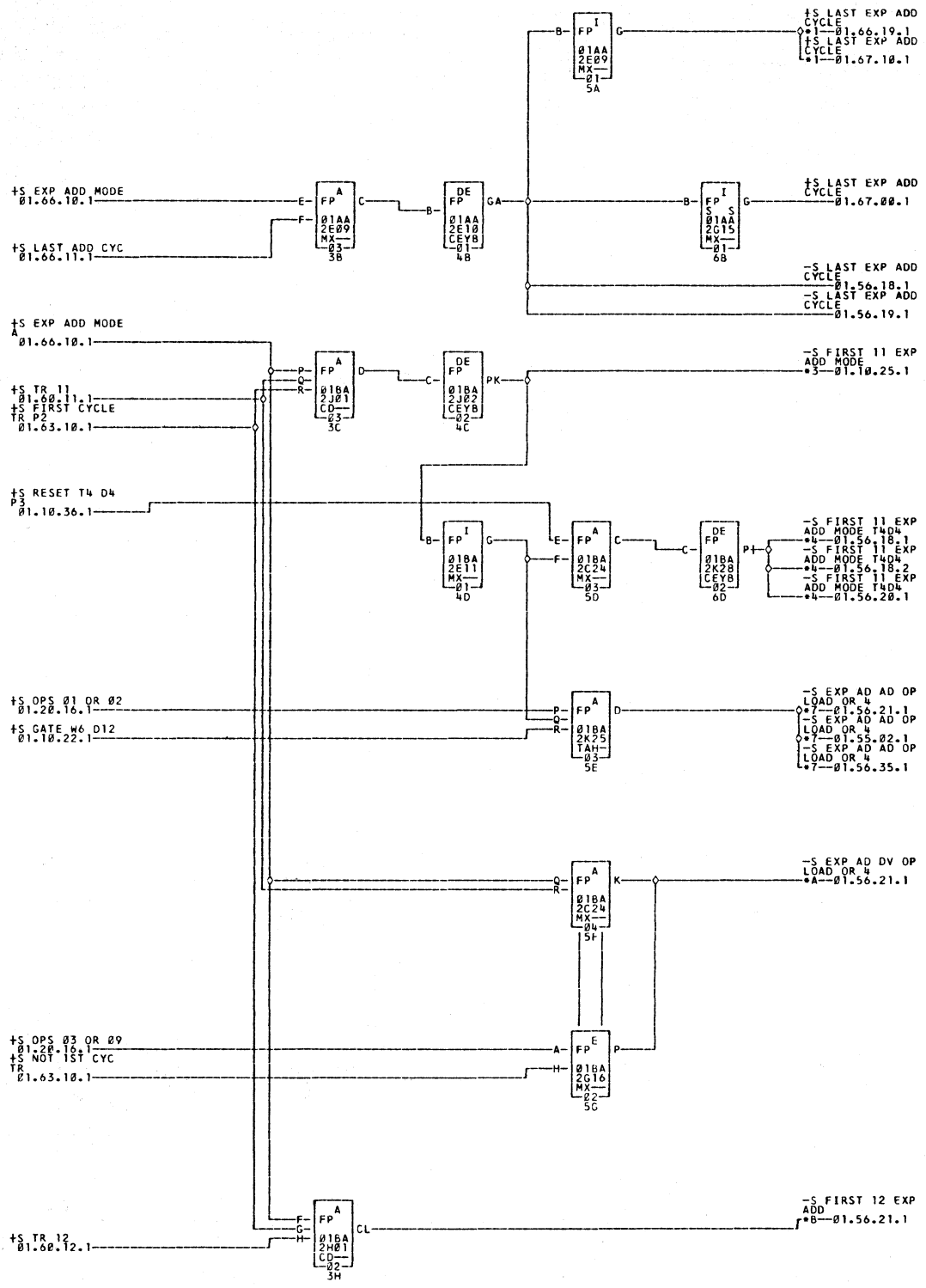
—01BWL06

*3--01ANL13

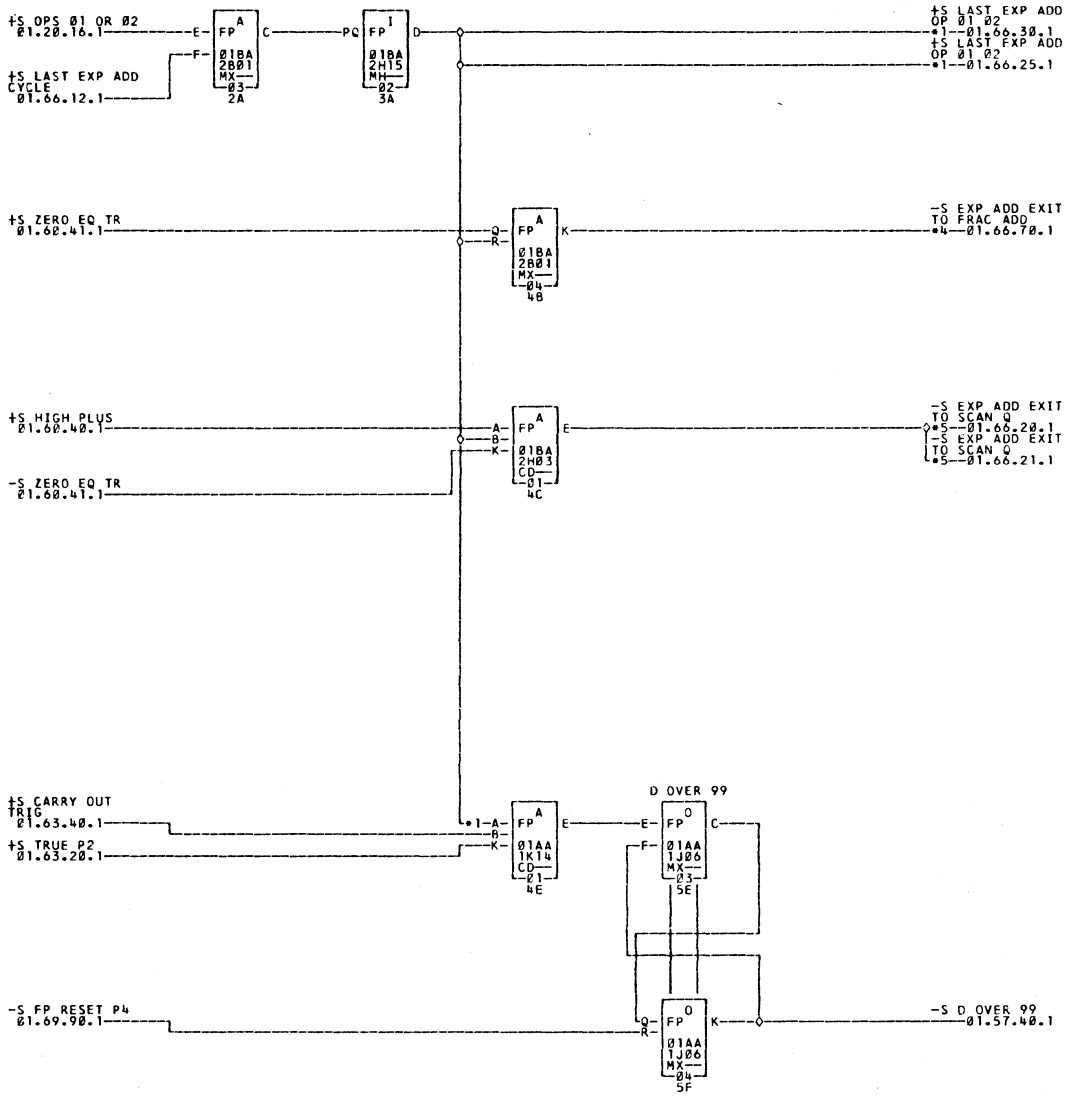
—01BWL13

*4--01AXB01





*1--01AWC26 ---01BWC26 *3--01AWH29 ---01BWH29 *4--01AWC25 ---01BWC25
 *7--01BWL14 ---01AWL14 *A--01BWC27 ---01AWC27 *B--01BWH30 ---01AWH30



*1--01BWH32

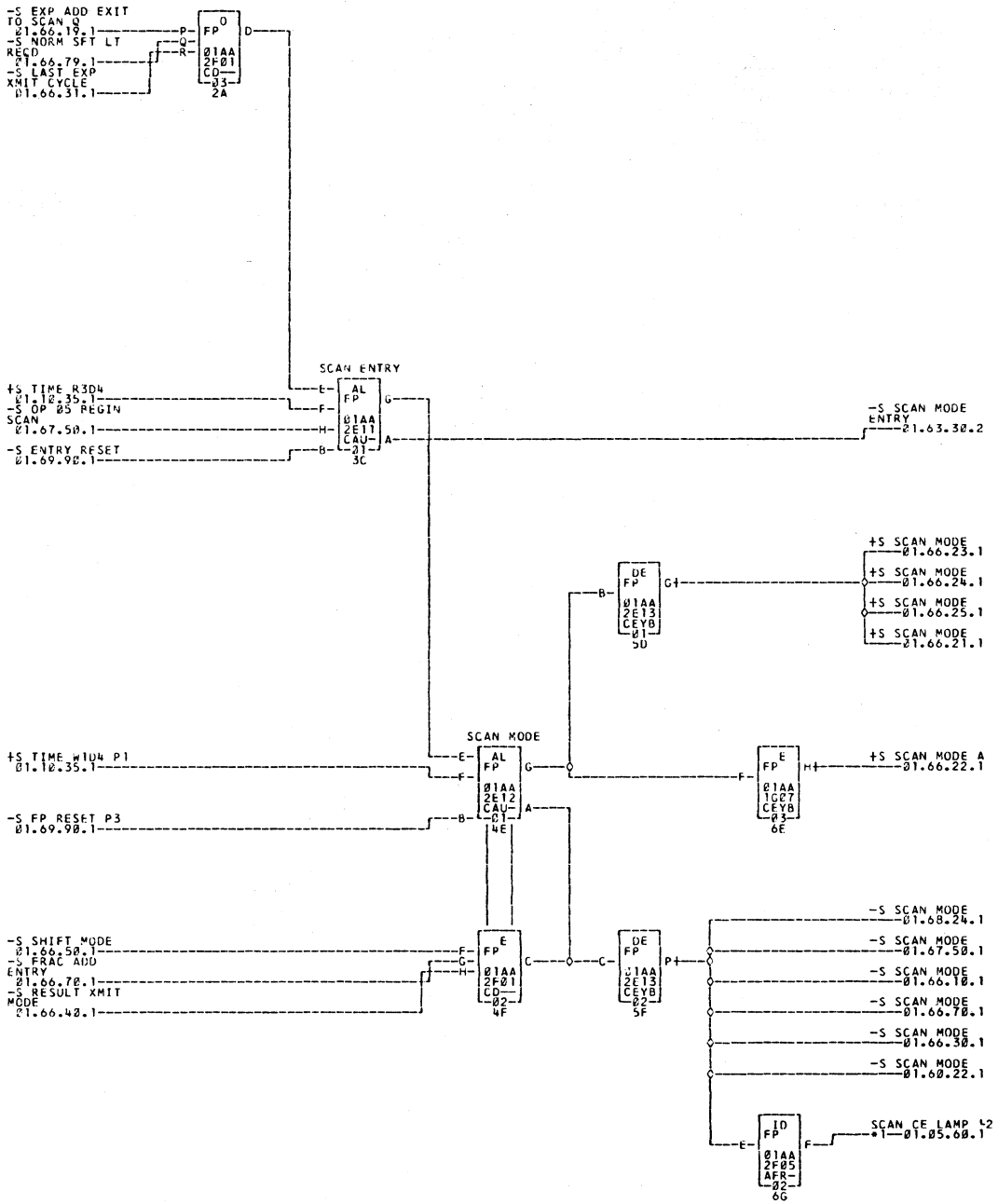
—01AWH32

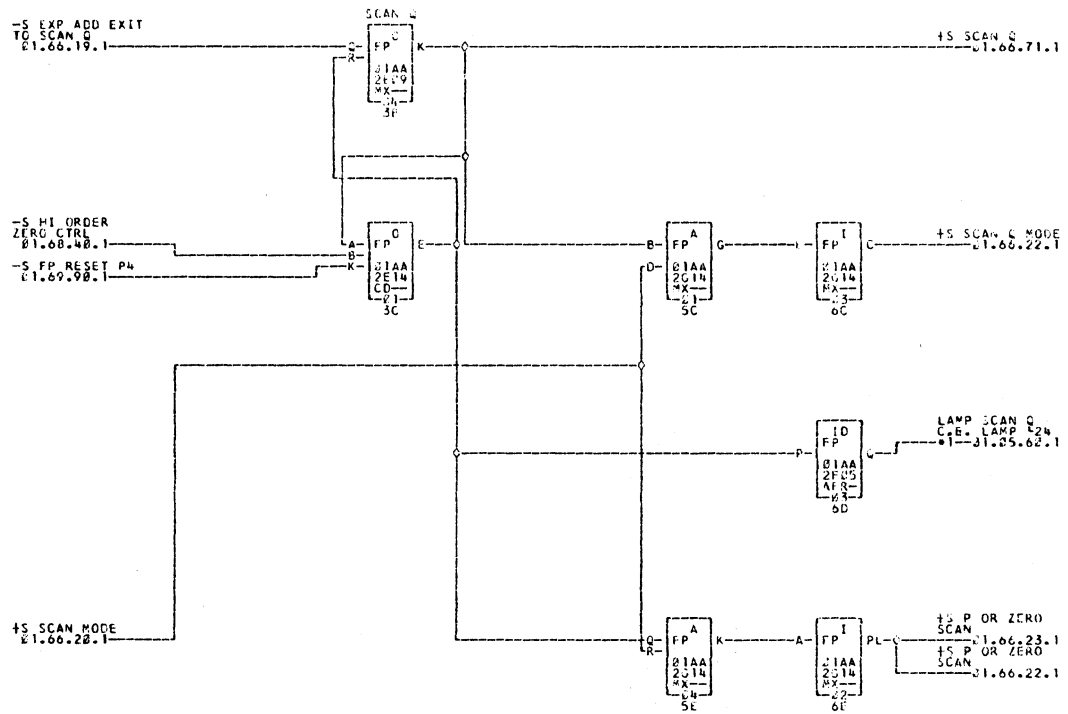
*4--01BWC20

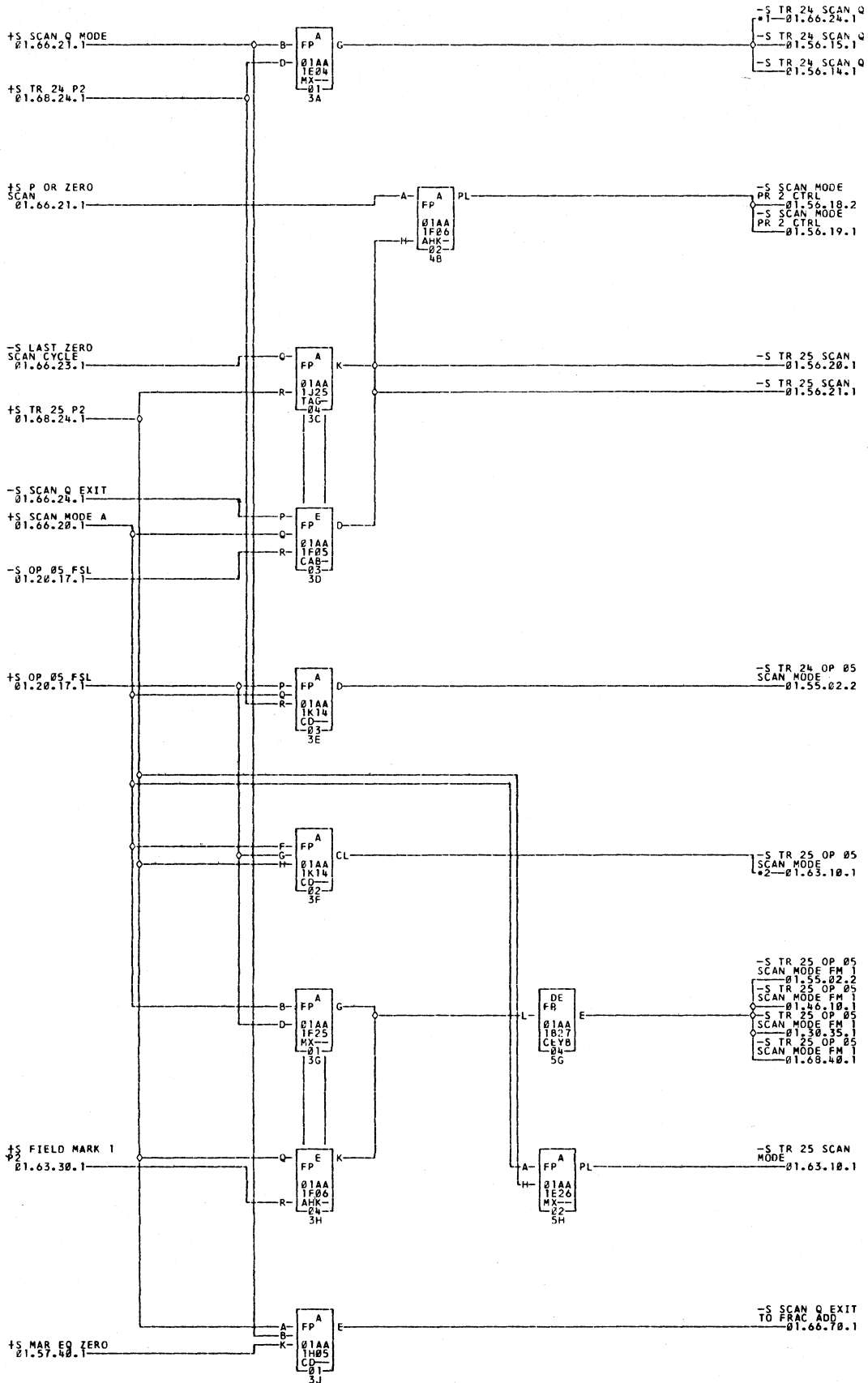
—01AWC20

*5--01BWH31

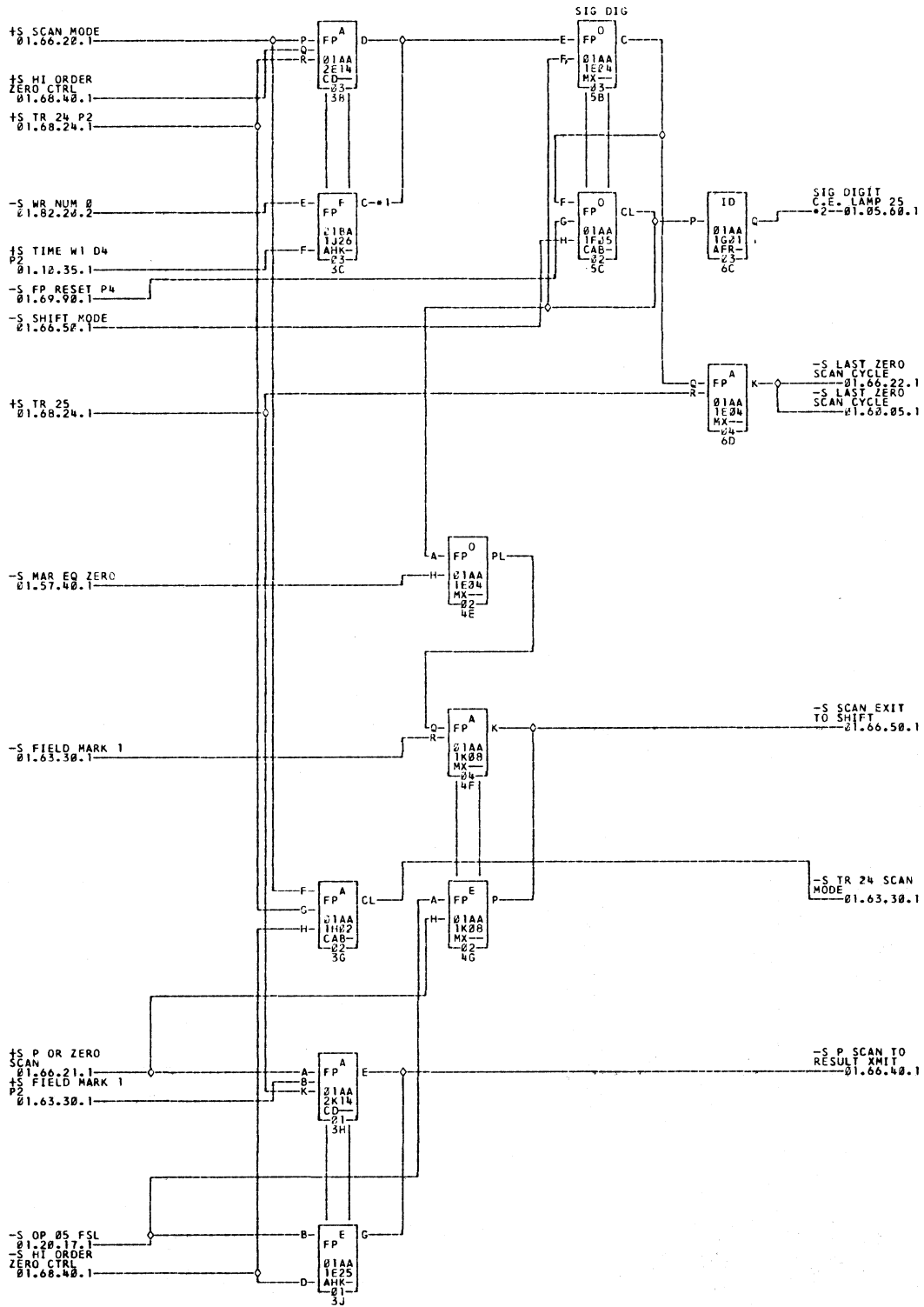
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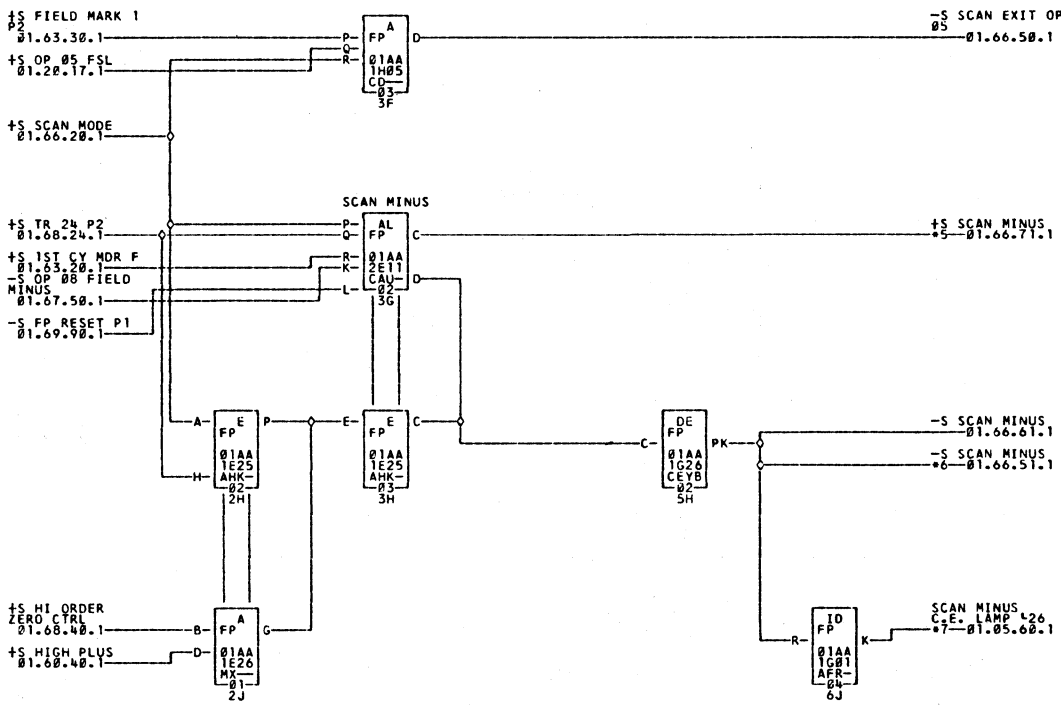
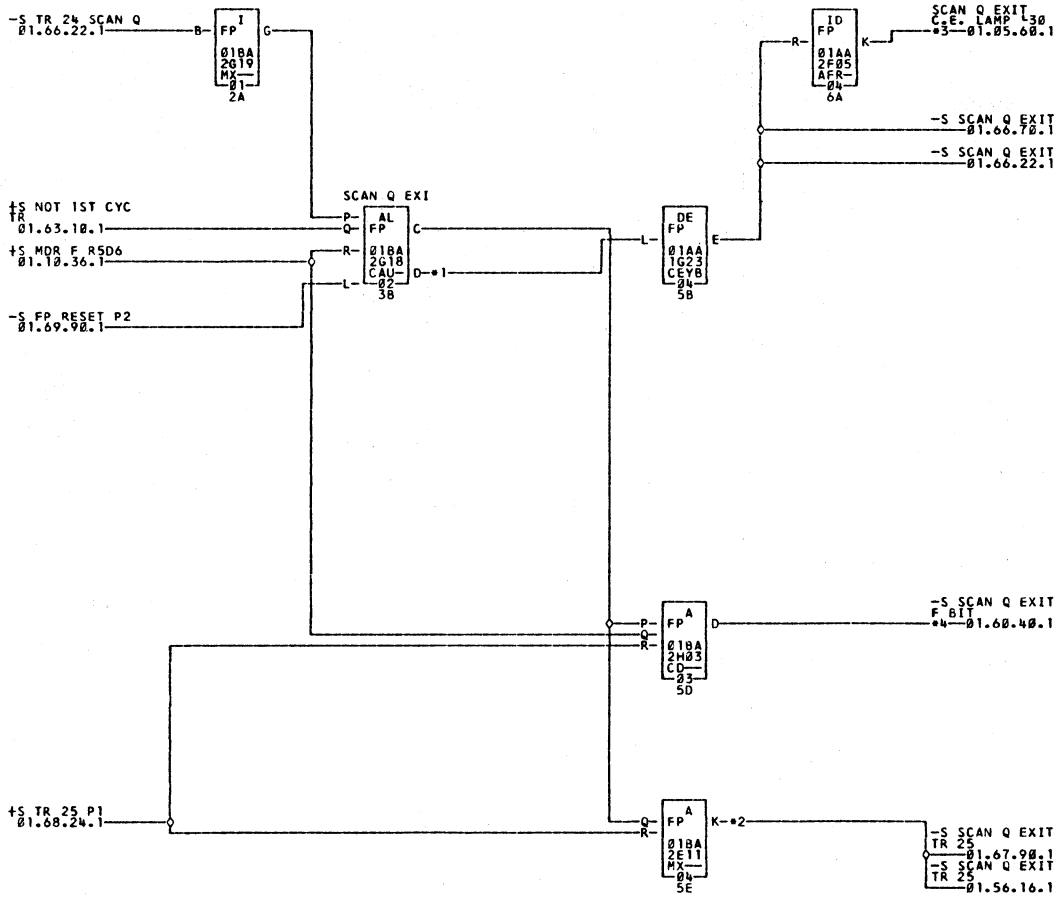
•1—01AHC29 — 01BWC29 •2—01AWL15 — 01BWL15



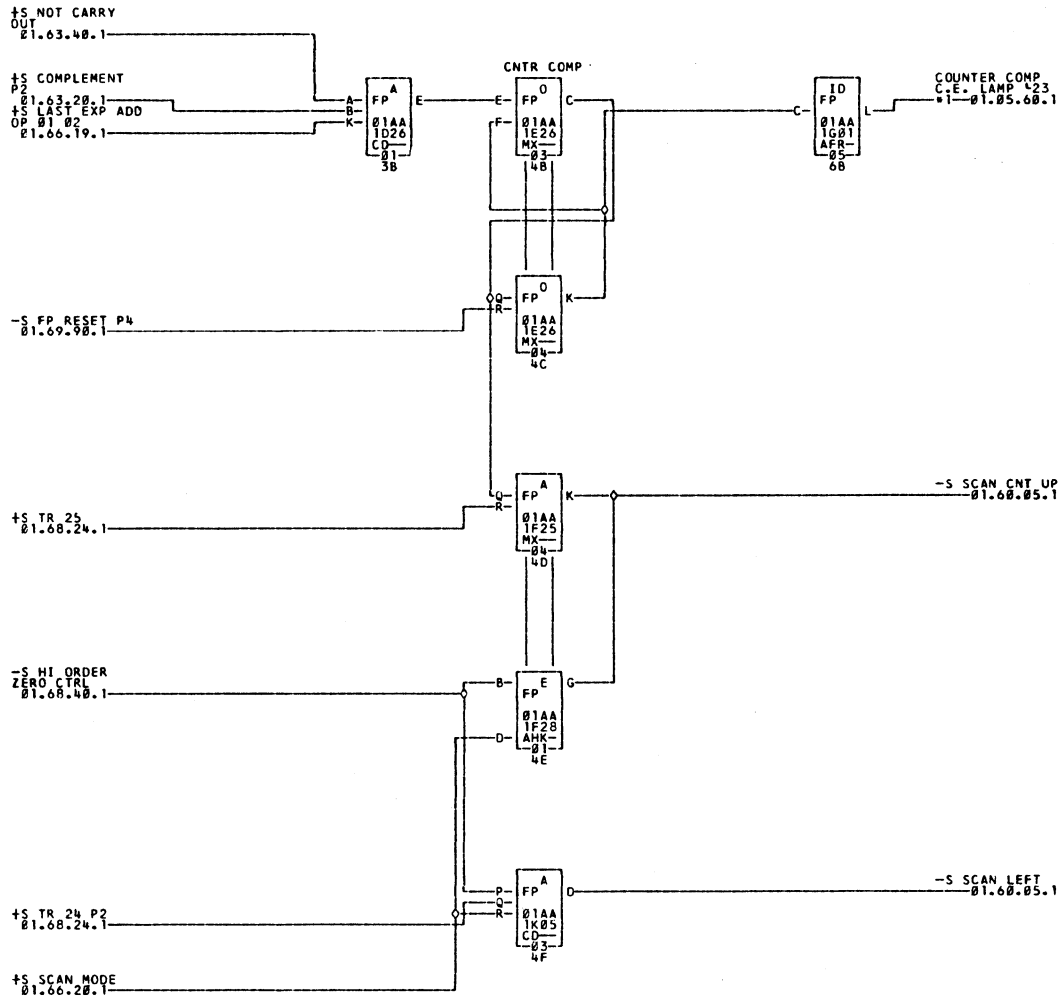
*1—01AW32

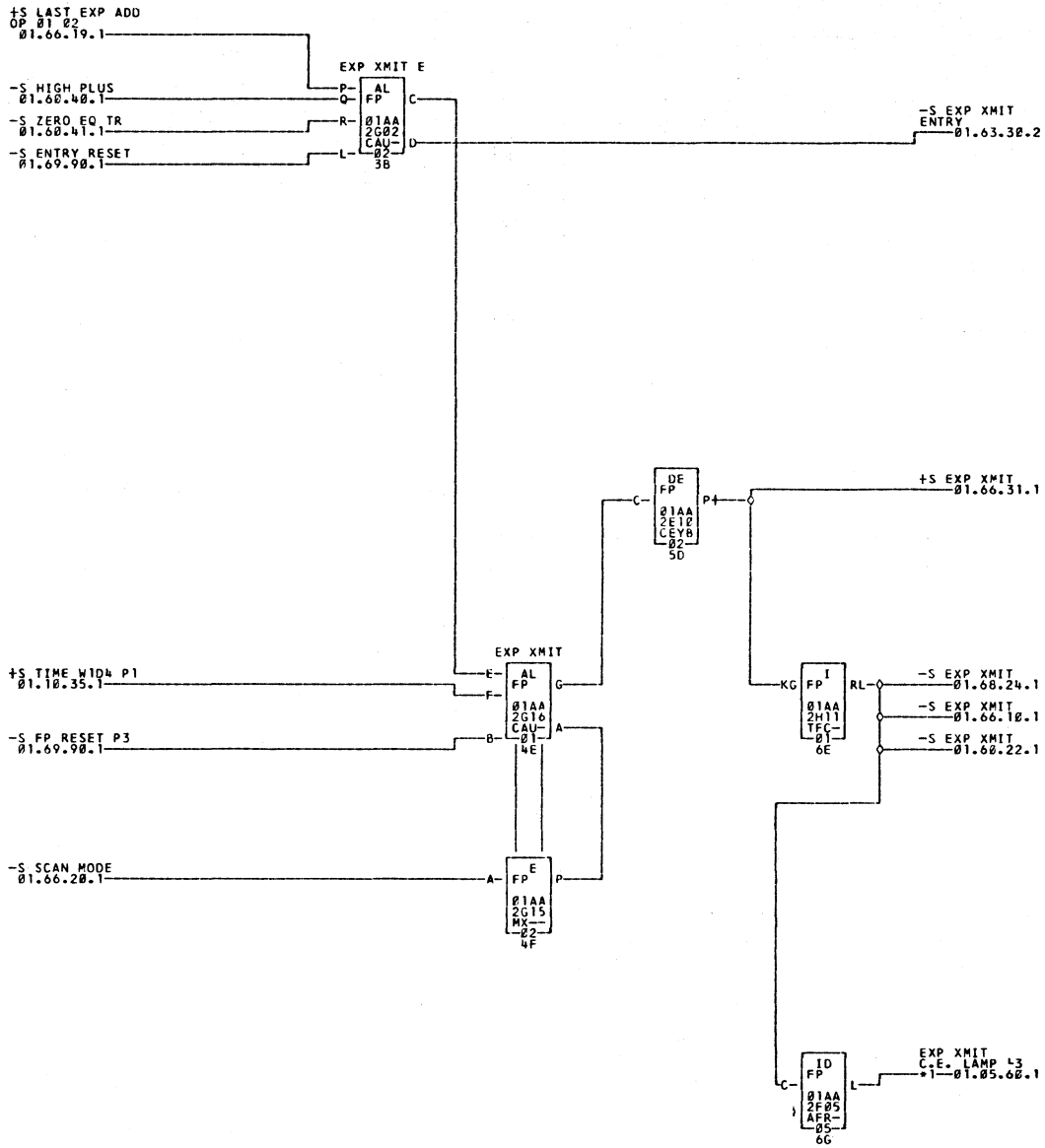
—018WE32

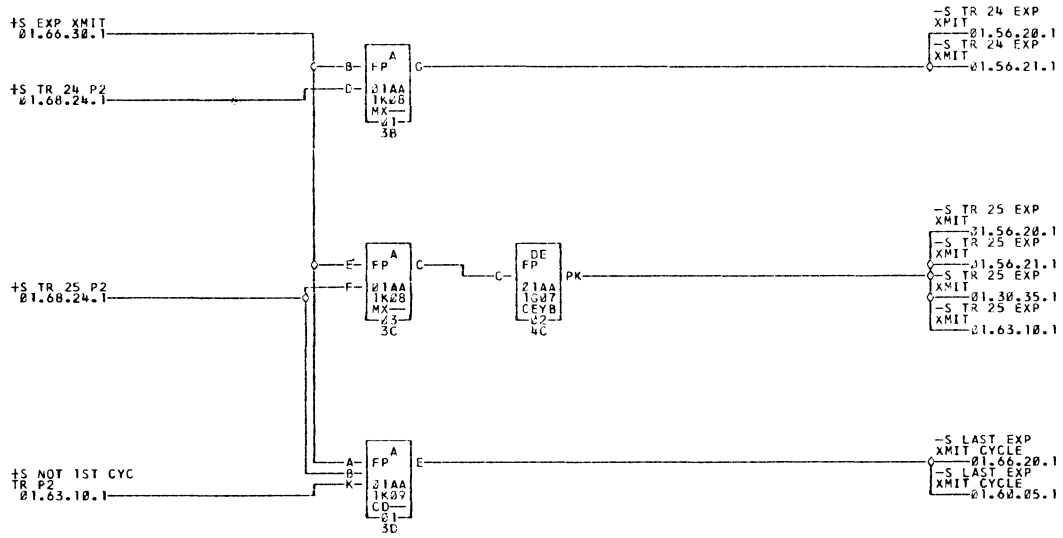
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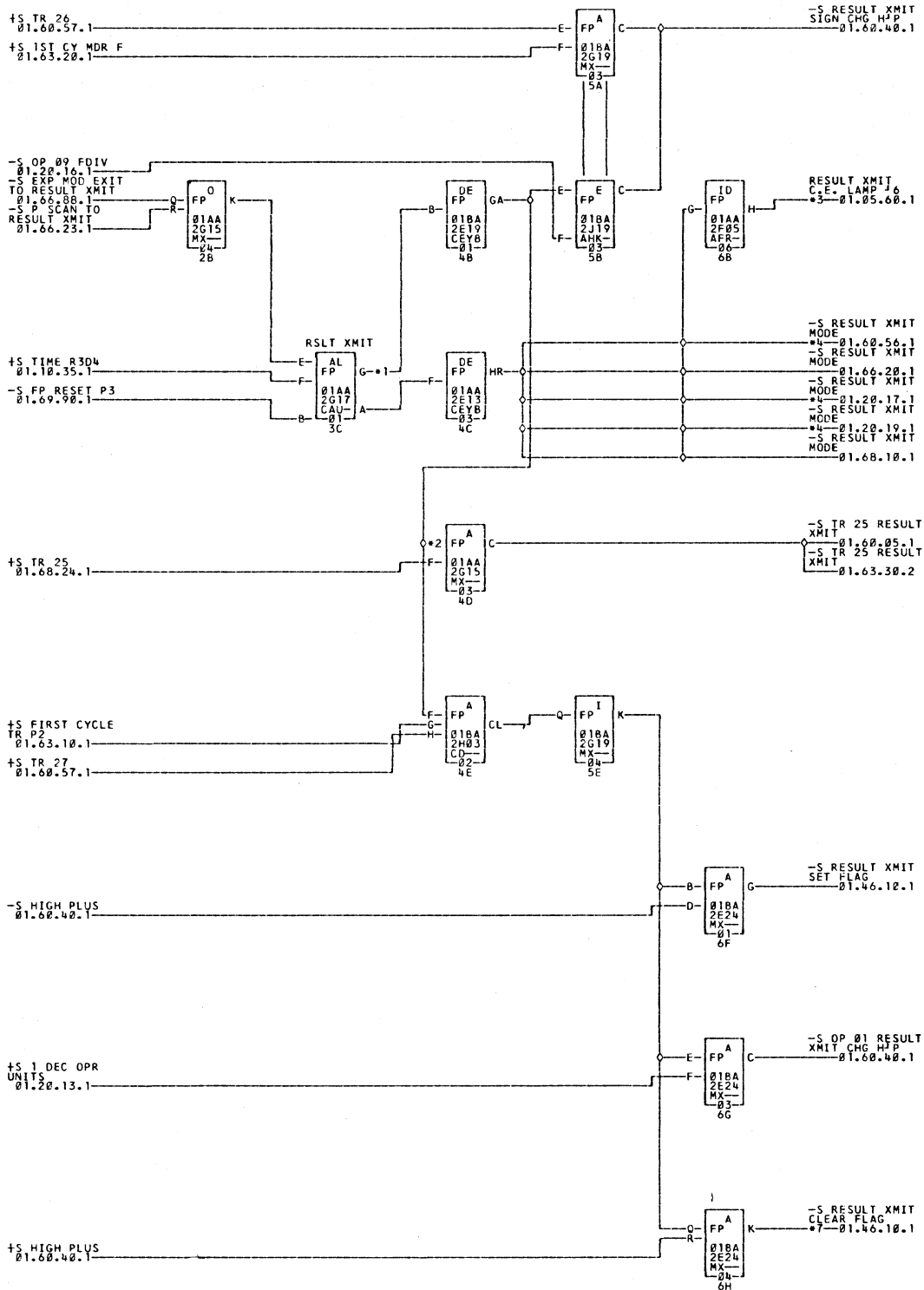


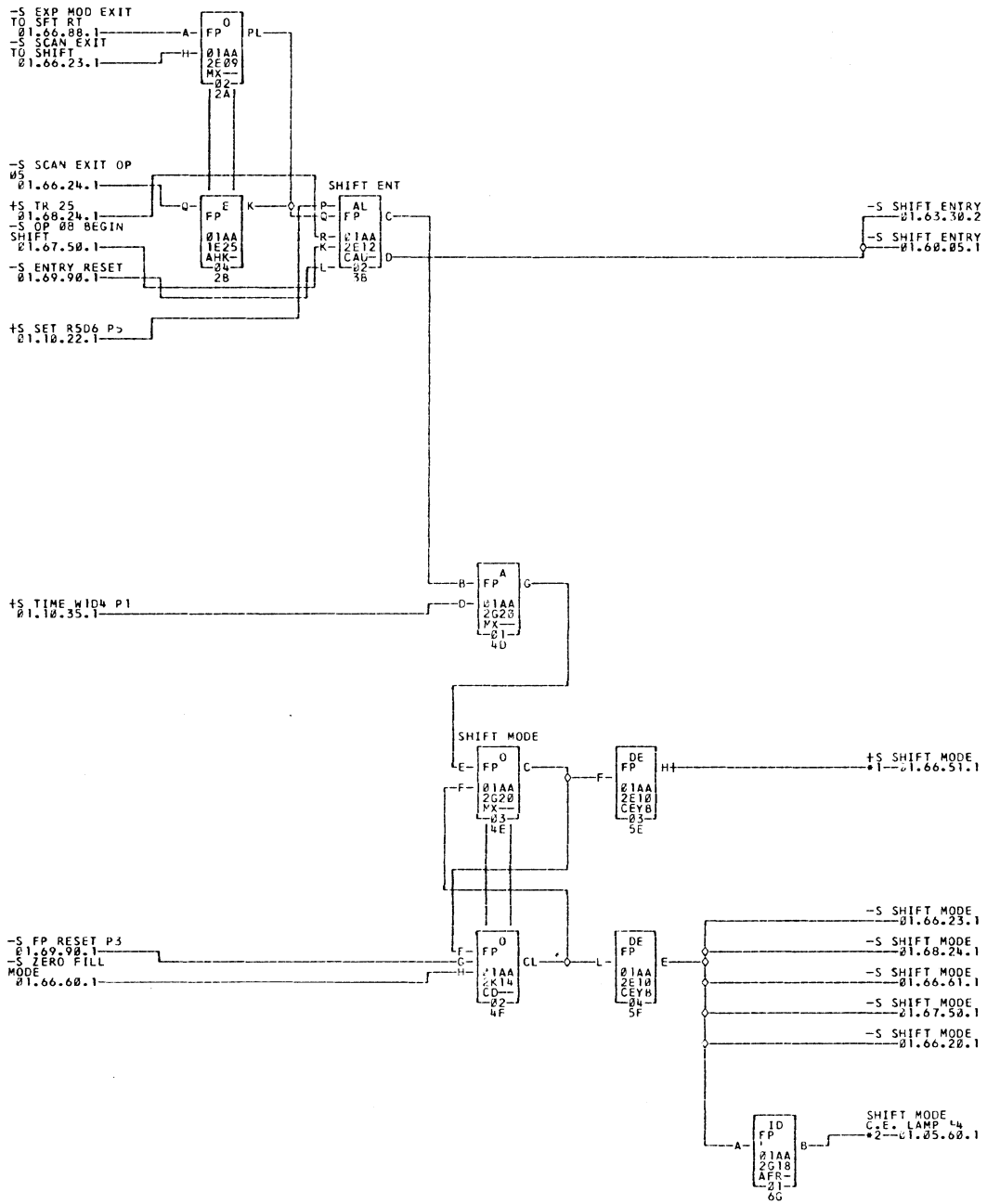
- 1-01BWF30 •5-01AWF31 •2-01AXL16 •6-01BXL16 •3-01AXB30 •4-01BWF29
- 01AWF29 •01AWC31 •01BWC31 •01AWL16 •01BWL16 •01AXB26







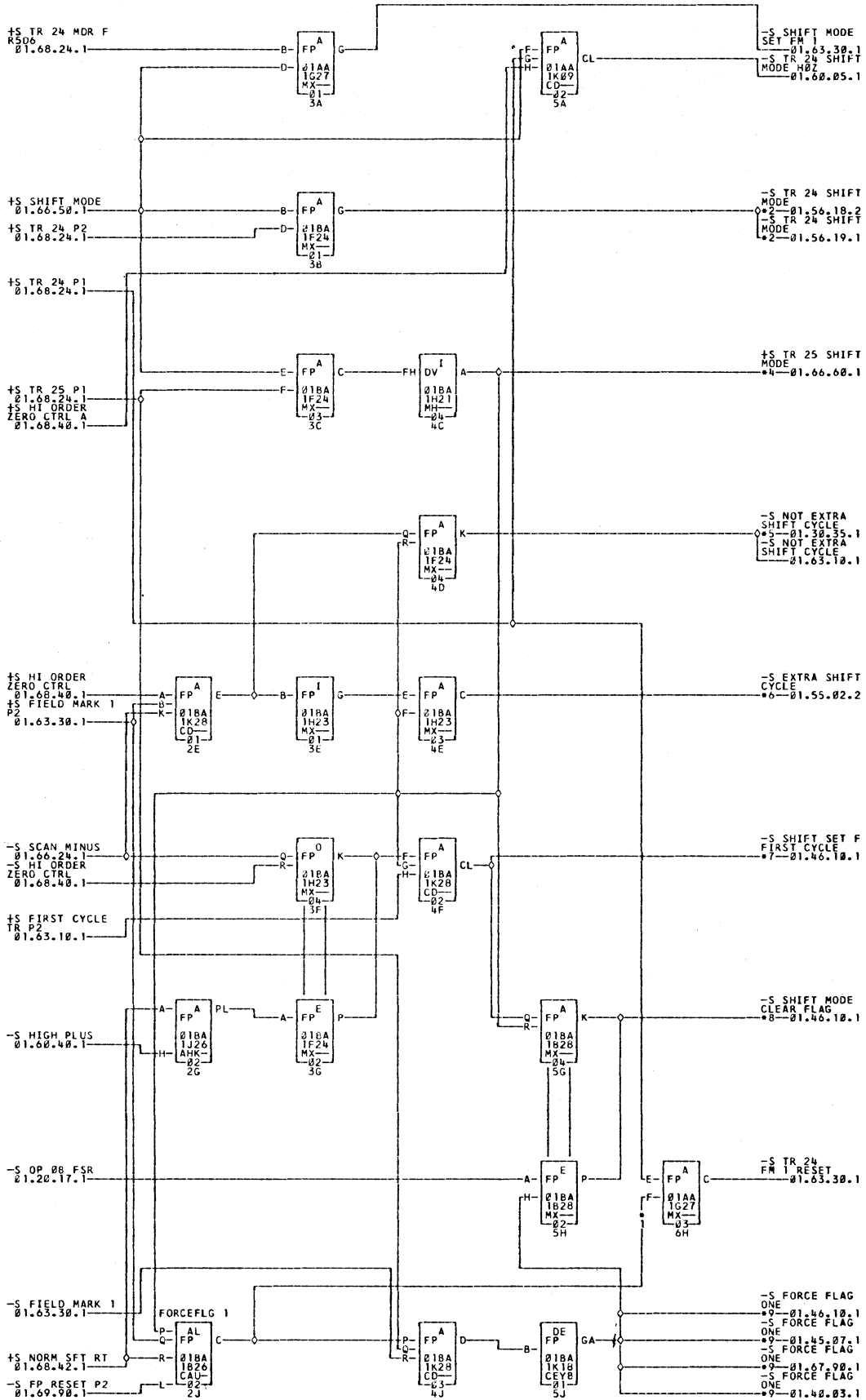




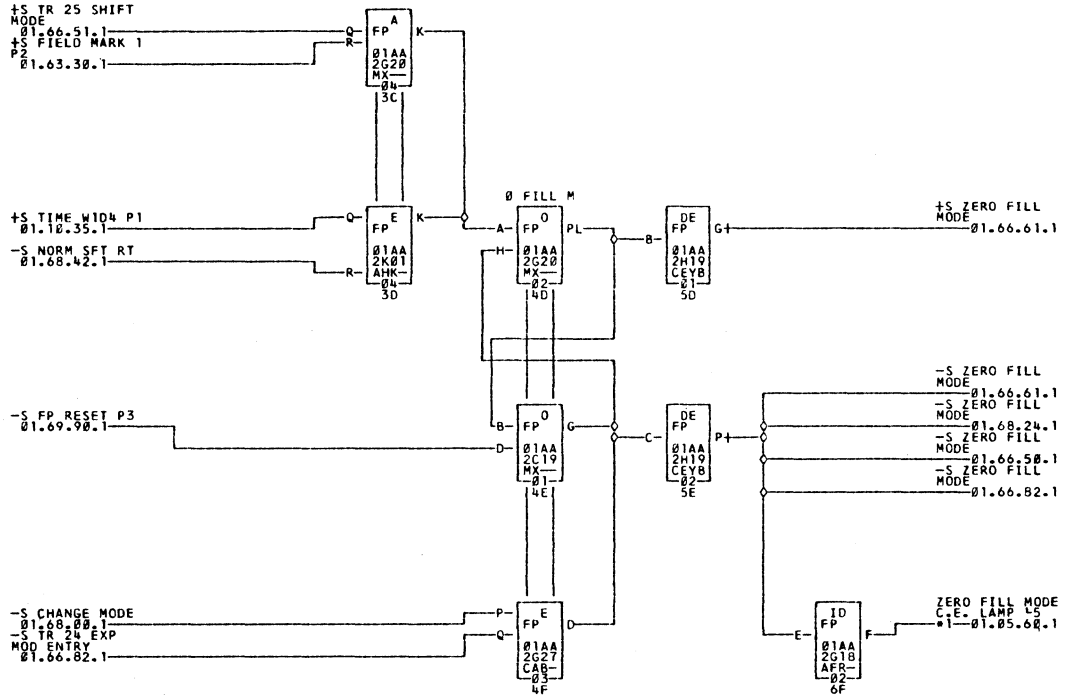
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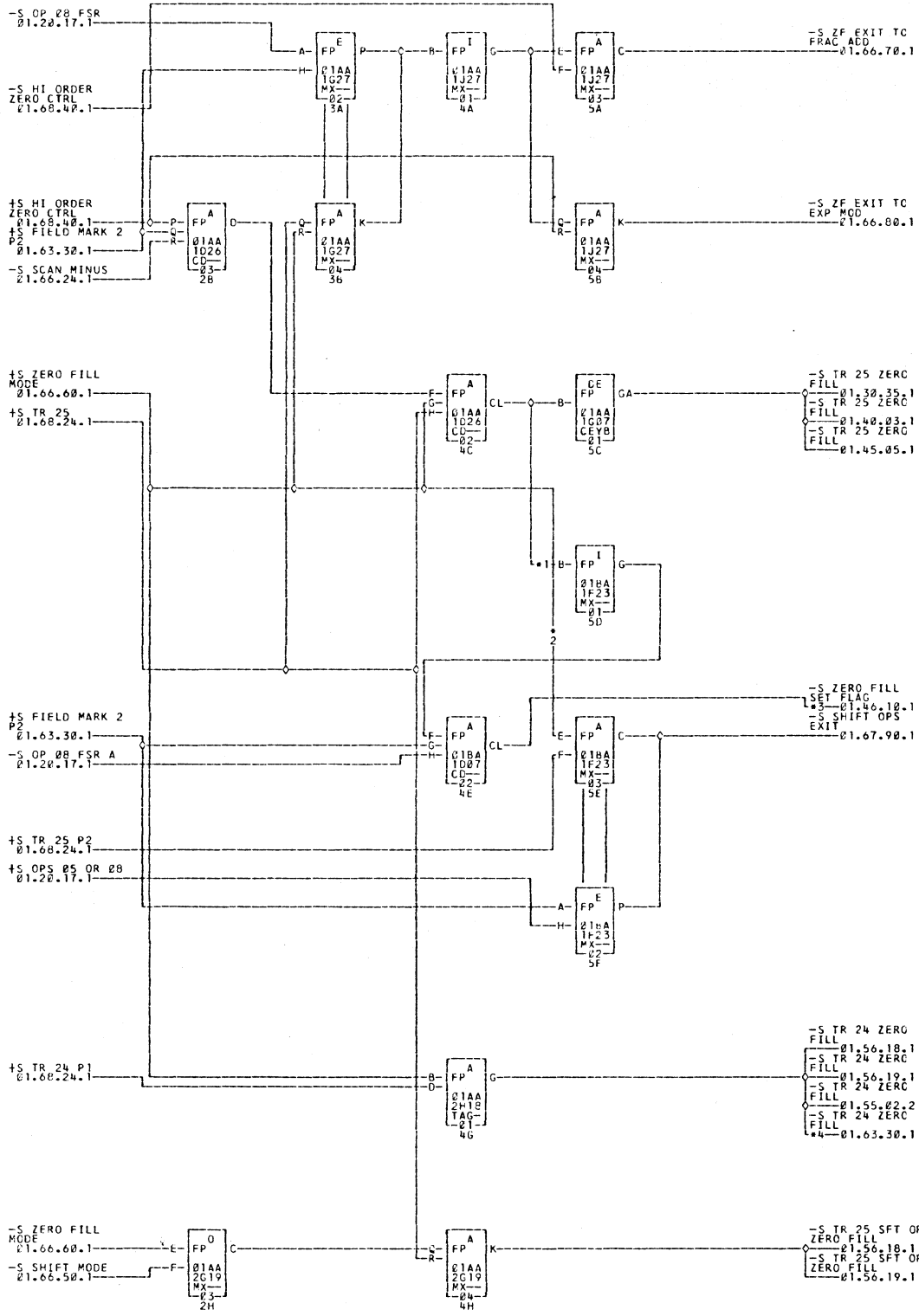
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*2--01AX04

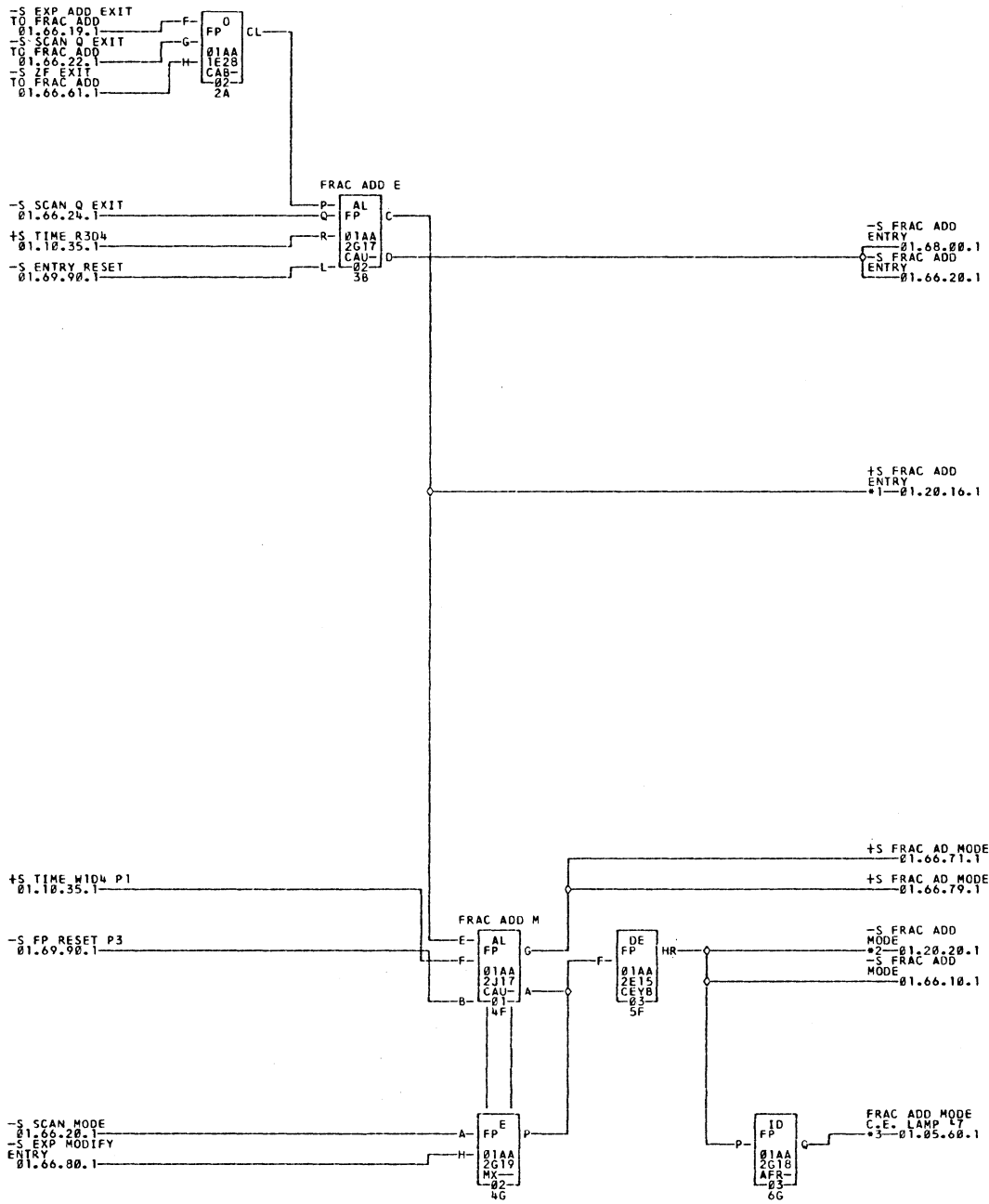


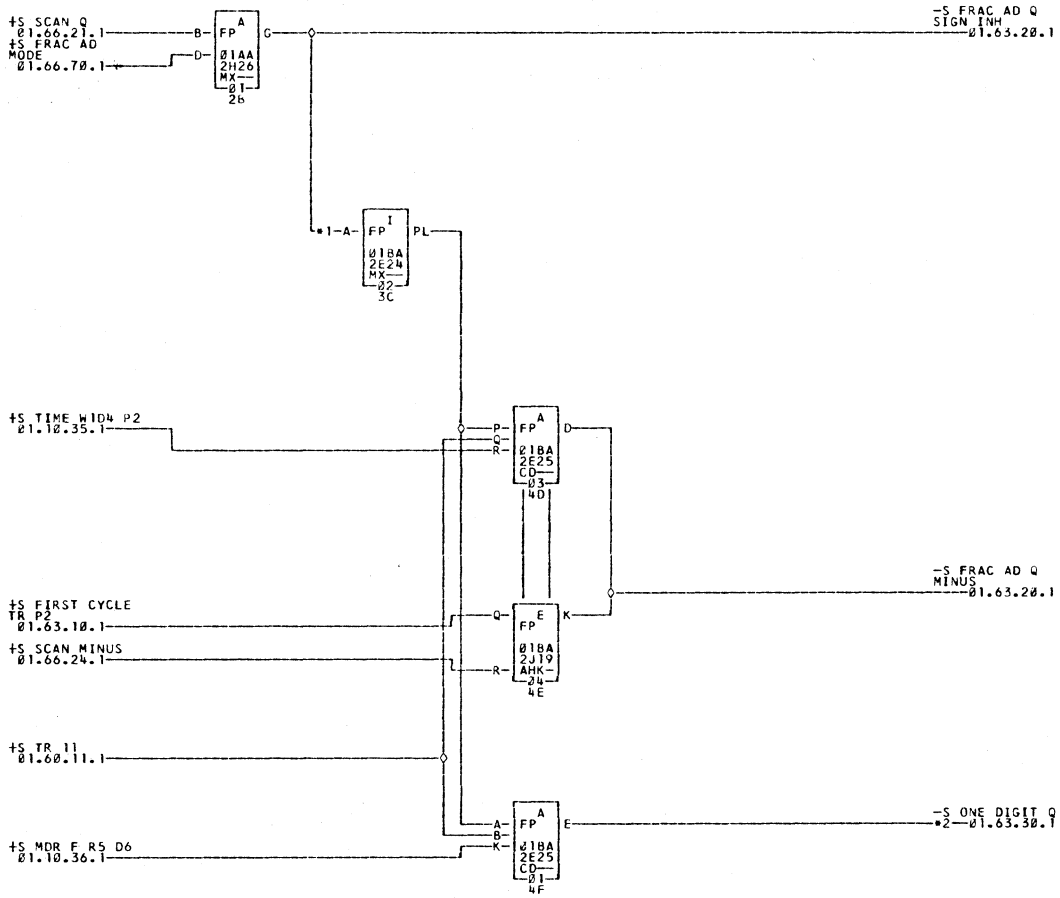
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|------------|------------|------------|------------|------------|------------|
| *1--01BH09 | ====01AH09 | *2--01AW04 | ====01BW04 | *4--01AH05 | ====01BH05 |
| *5--01BW03 | ====01AW03 | *6--01WL18 | ====01AW18 | *7--01AW17 | ====01BL17 |
| *8--01AW32 | ====01BC32 | *9--01BH06 | ====01AH06 | | |

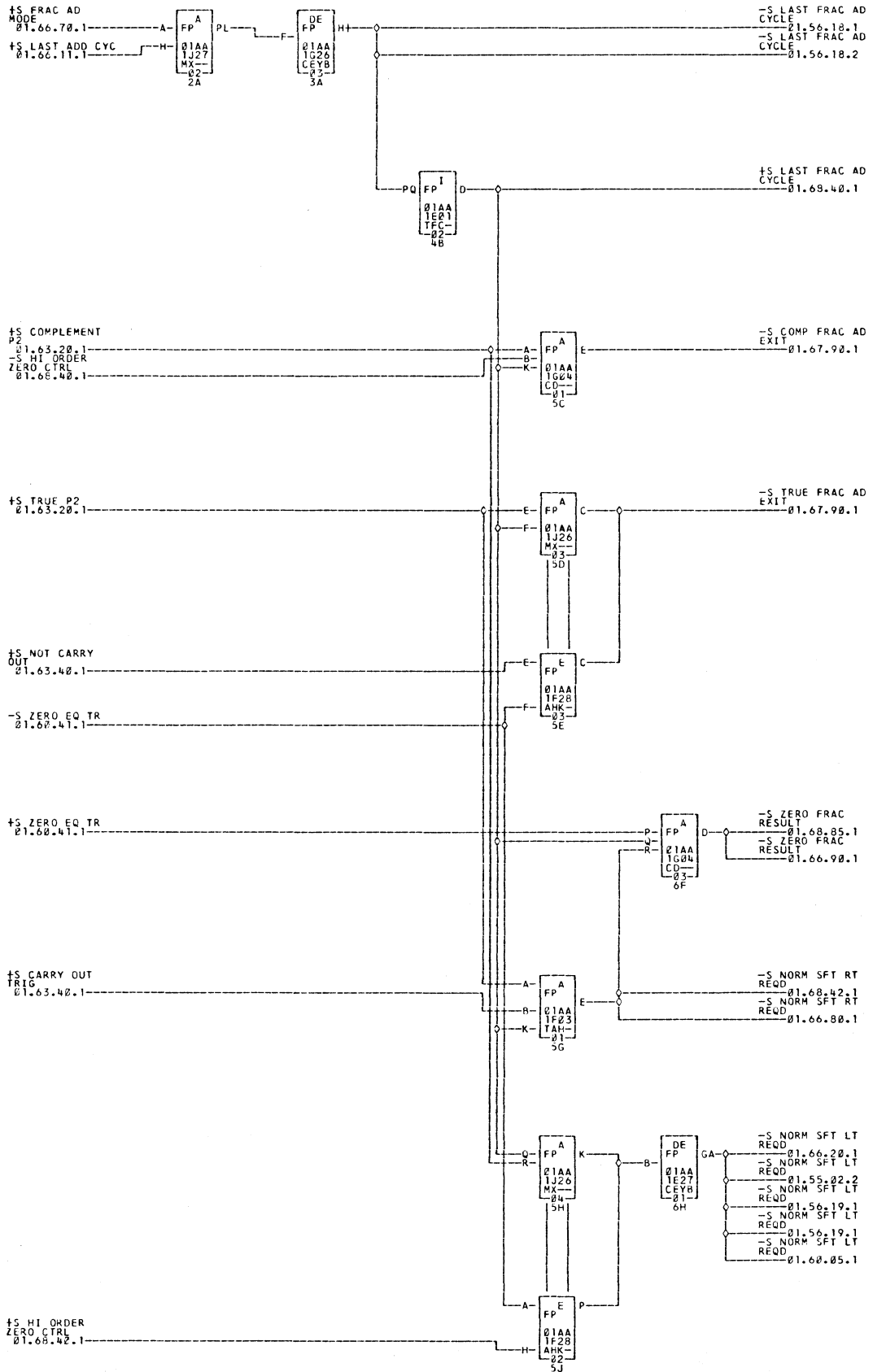


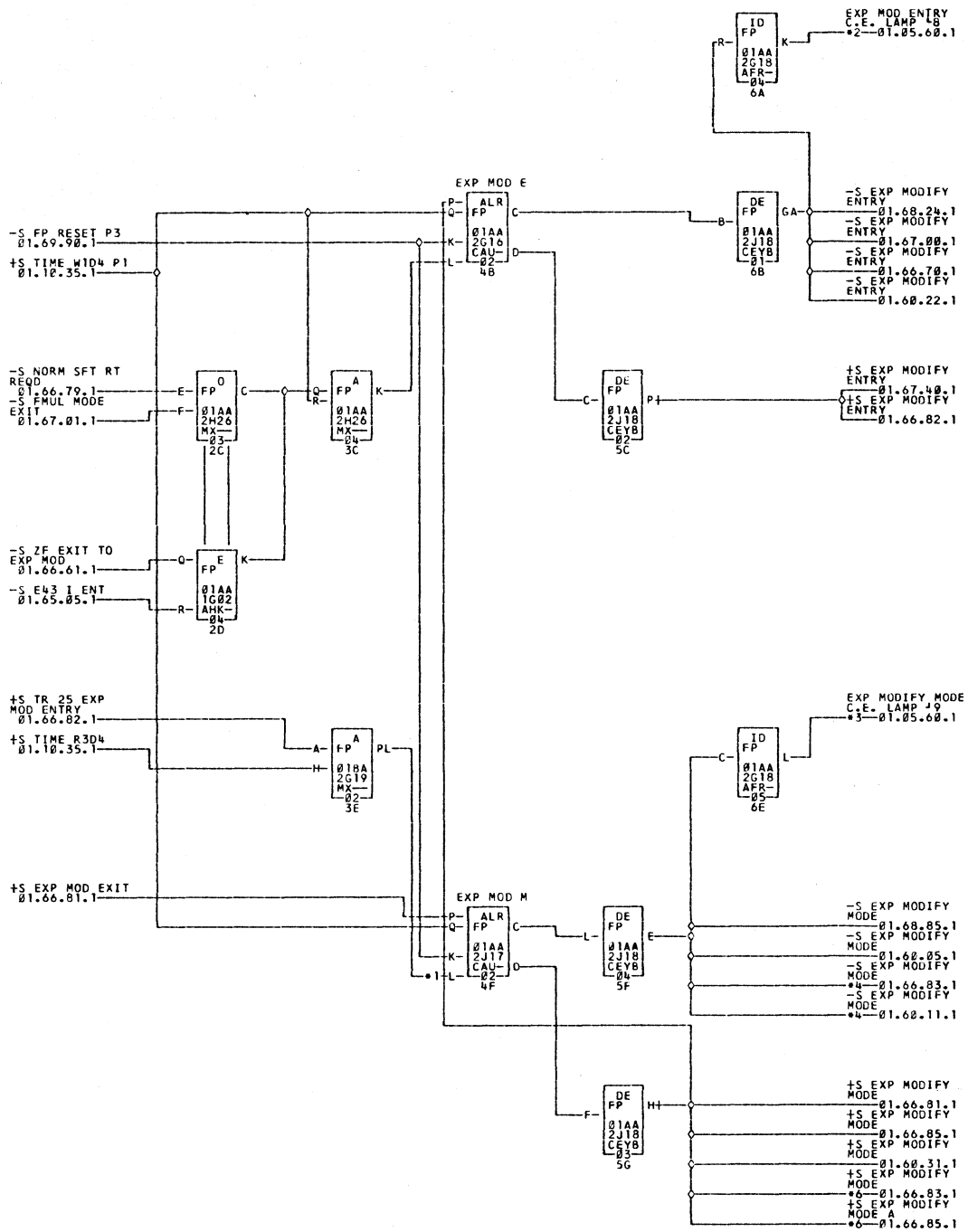


*1--01BWC11 01ANC11 *2--01AWH10 01BWH10 *3--01ANC12 01BWC12
 *4--01AWL05 01BWL05









*1—01AXL10
 *6—01ANL19

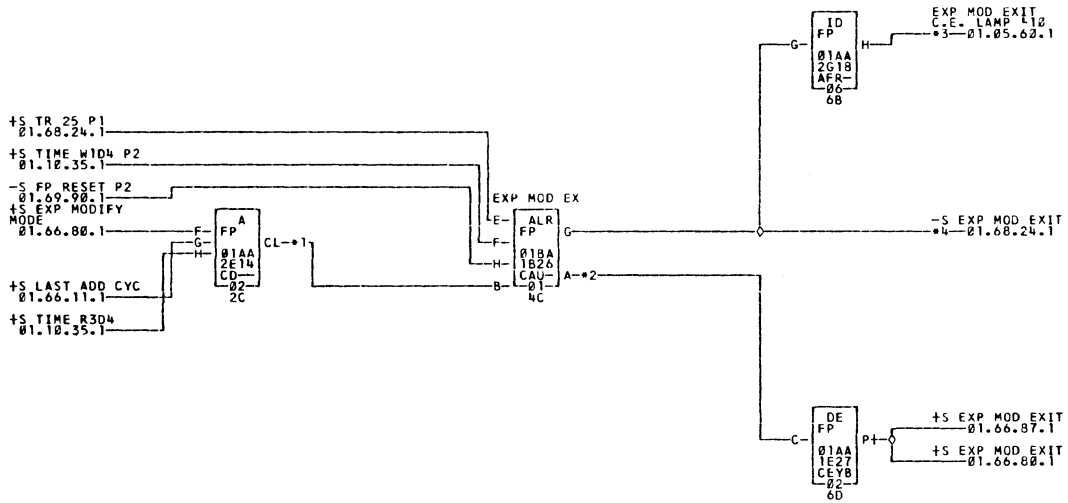
====01BXL10
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*2—01AXB08

*3—01AXB09

*4—01AXK25

———01BXX25



*1-01AWF32
01AWL21

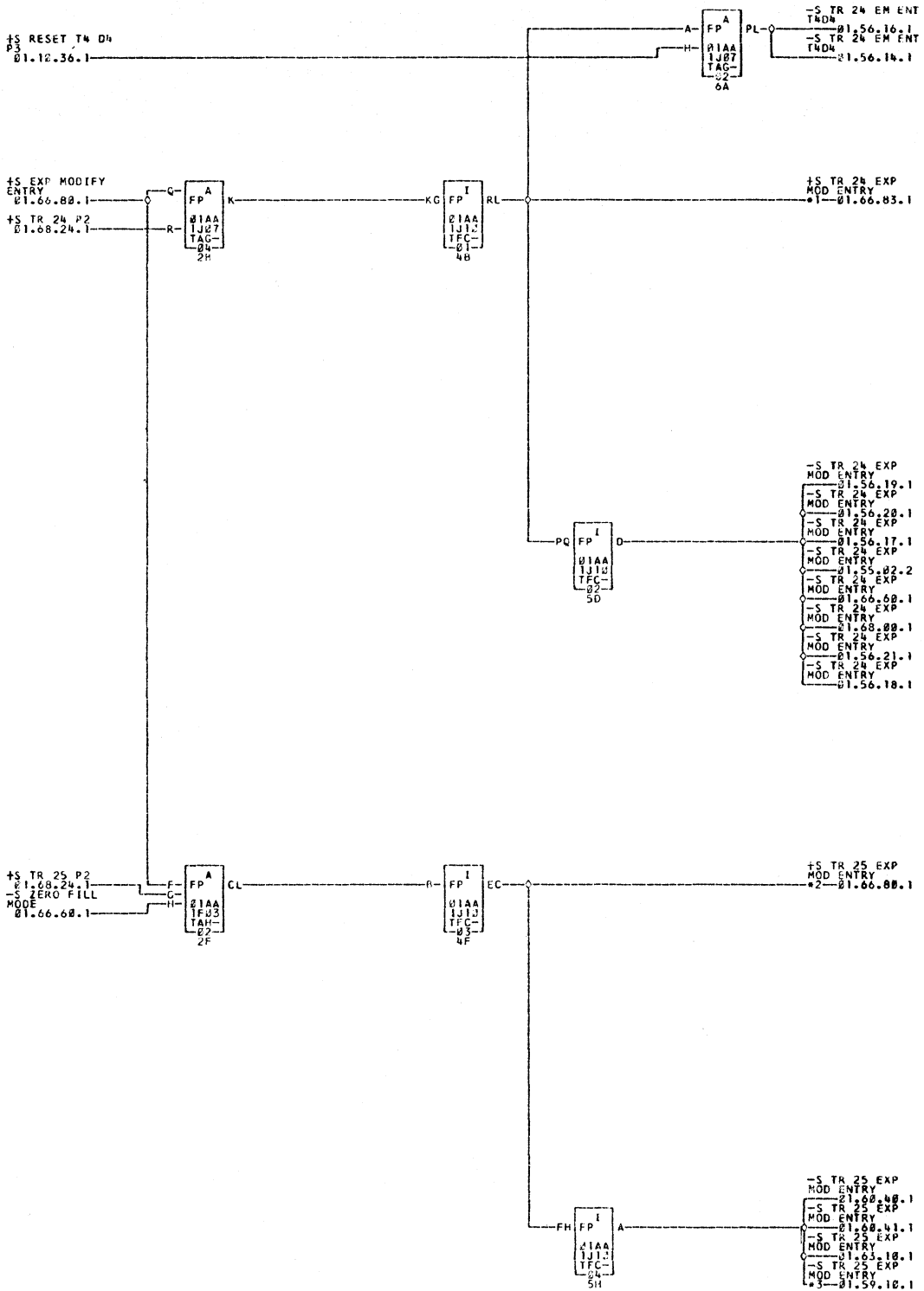
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01BXL08

*3-01AX610

*4-01BWL21



*1-01AWL22

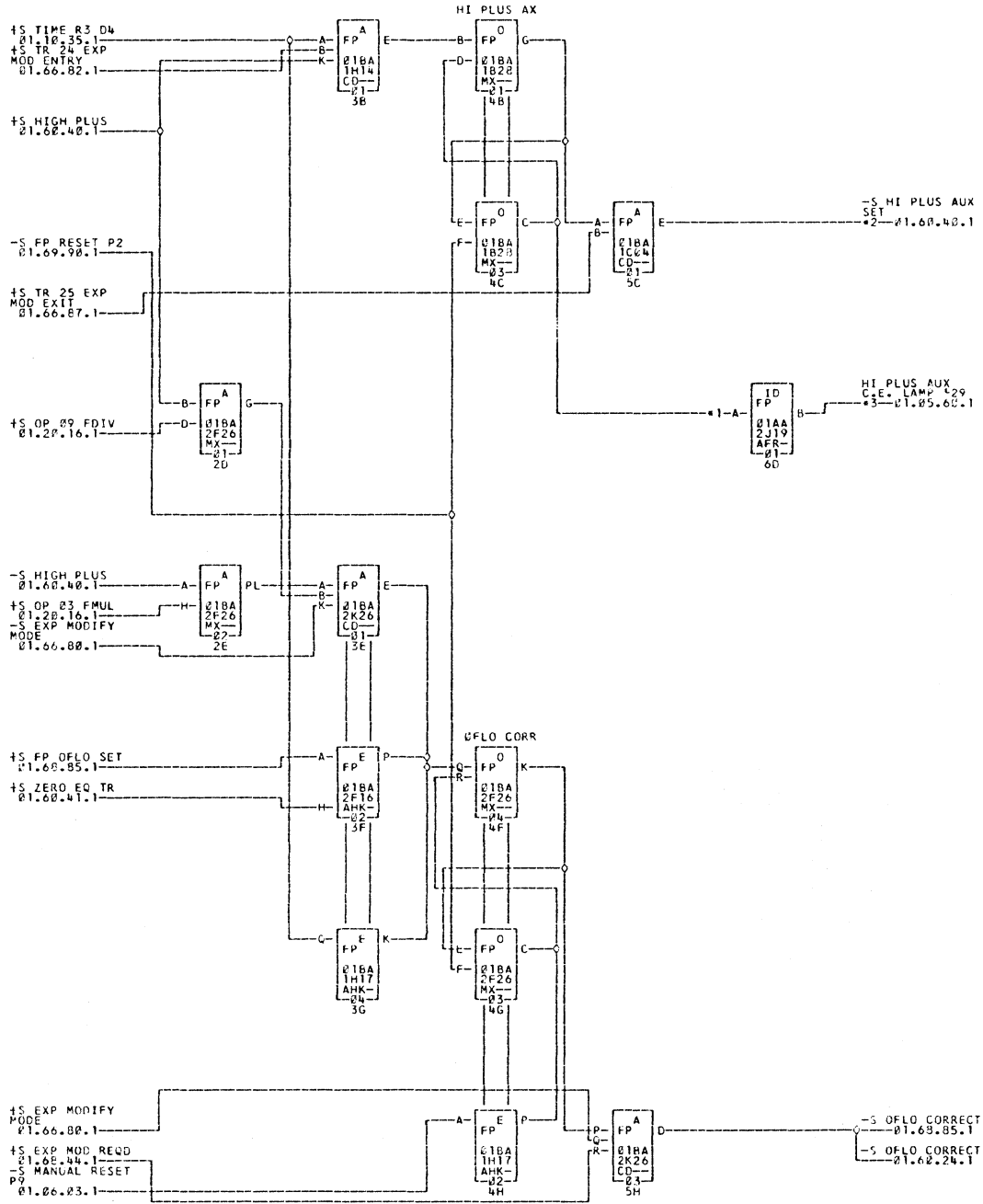
01BWL22

*2-01AWL27

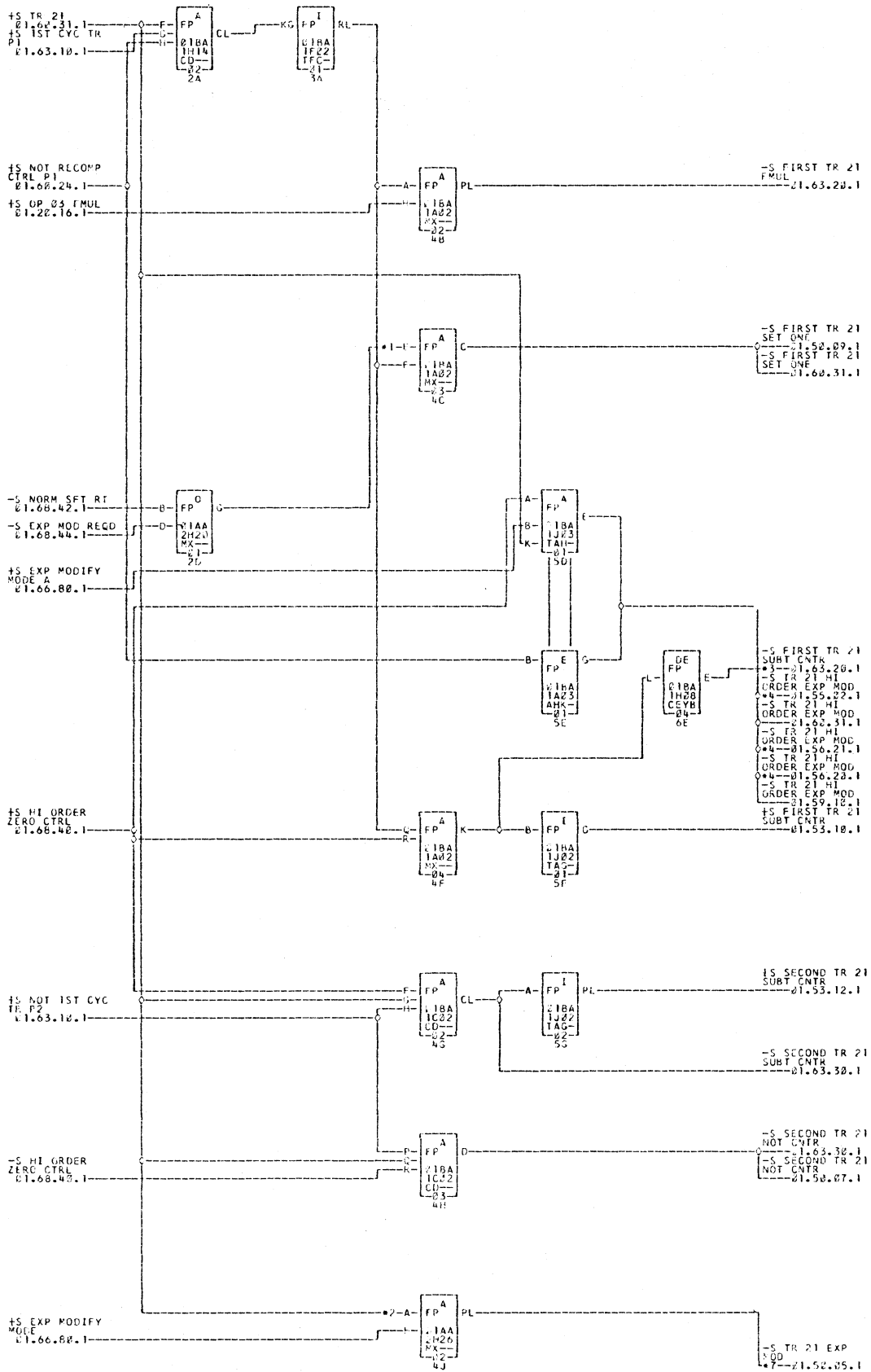
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*3-01AWL23

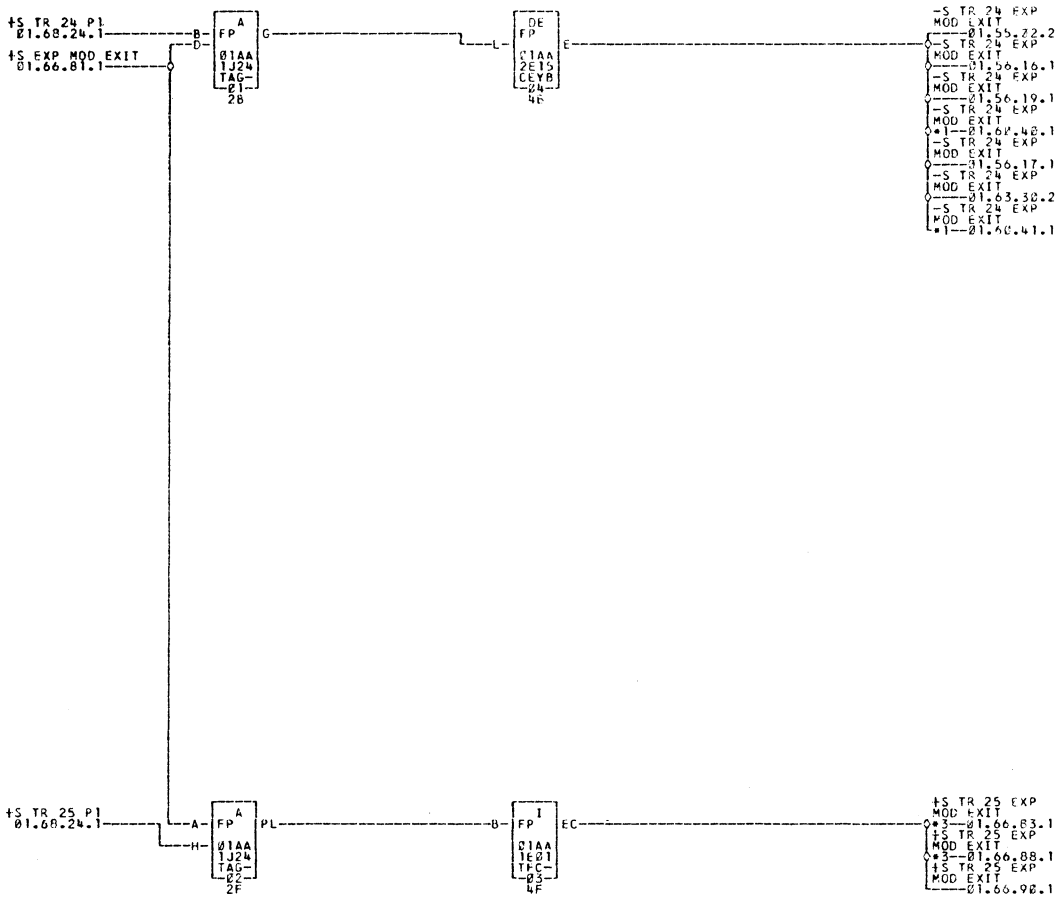
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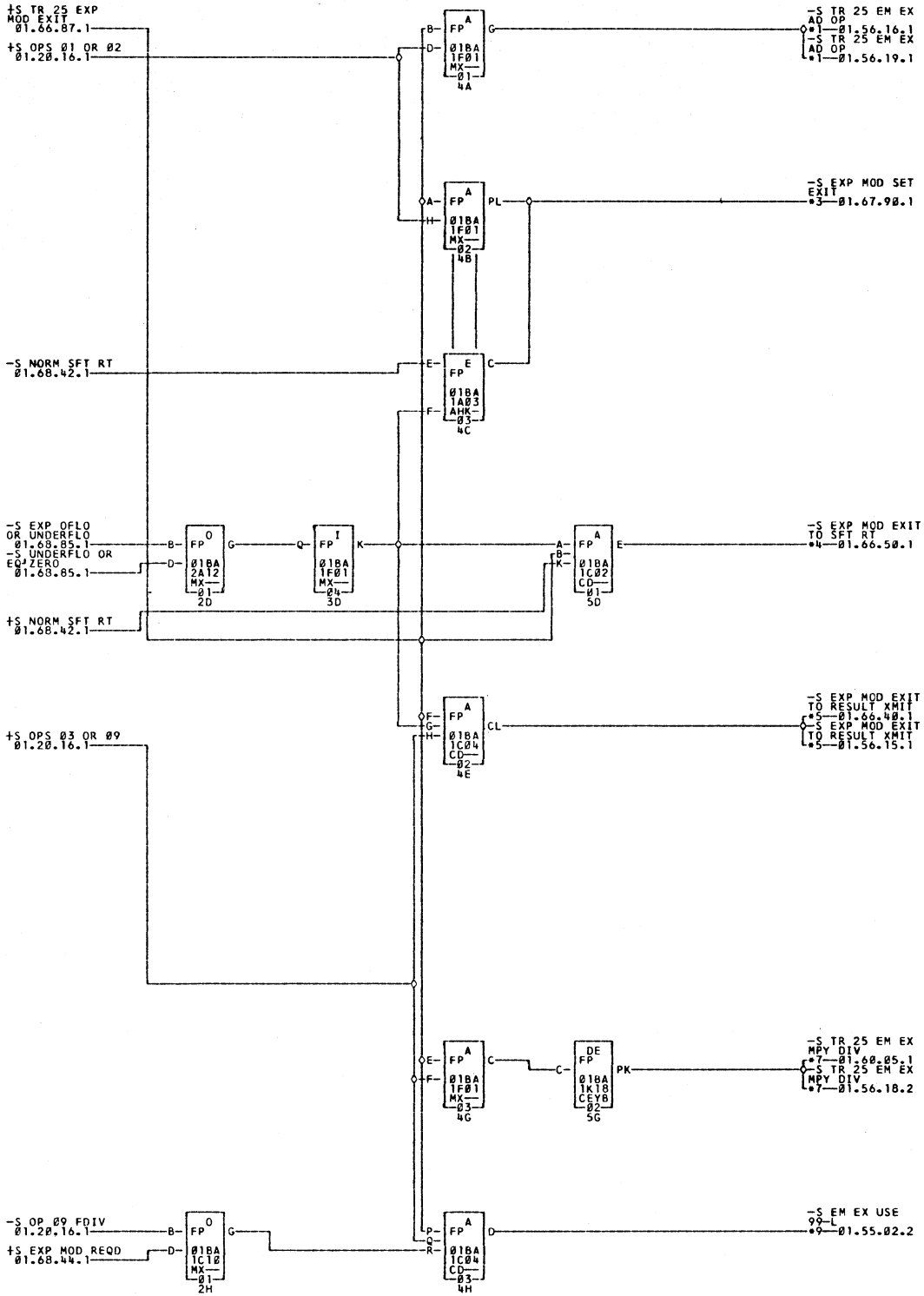


*1--21BW24 ———— 21AW24 *2--21BW25 ———— 21AW25 *3--21AX29



1-AND 01AK31 4-OR 01AKL21 2-NOT 01AKK3E 7-AND 01AKPL14 3-OR 01AKW26 6-NOT 01AKW28
 4-OR 01AKL21 7-AND 01AKPL14 3-OR 01AKW26 6-NOT 01AKW28





*1--018WE26

01AWE26

*3--018WE25

01AWE25

*4--018WC19

01AWC19

*5--018WC18

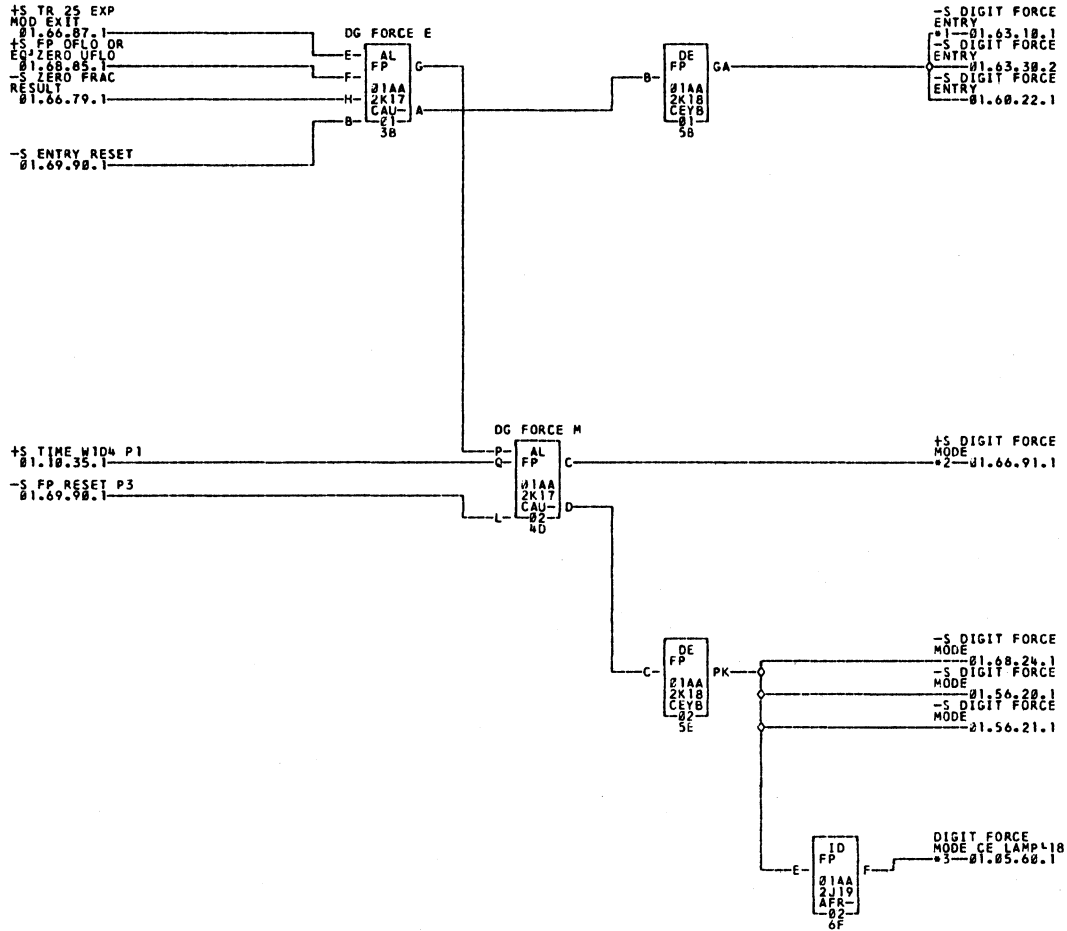
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*7--018WL11

01AWL11

*6--018WC20

01AWC20



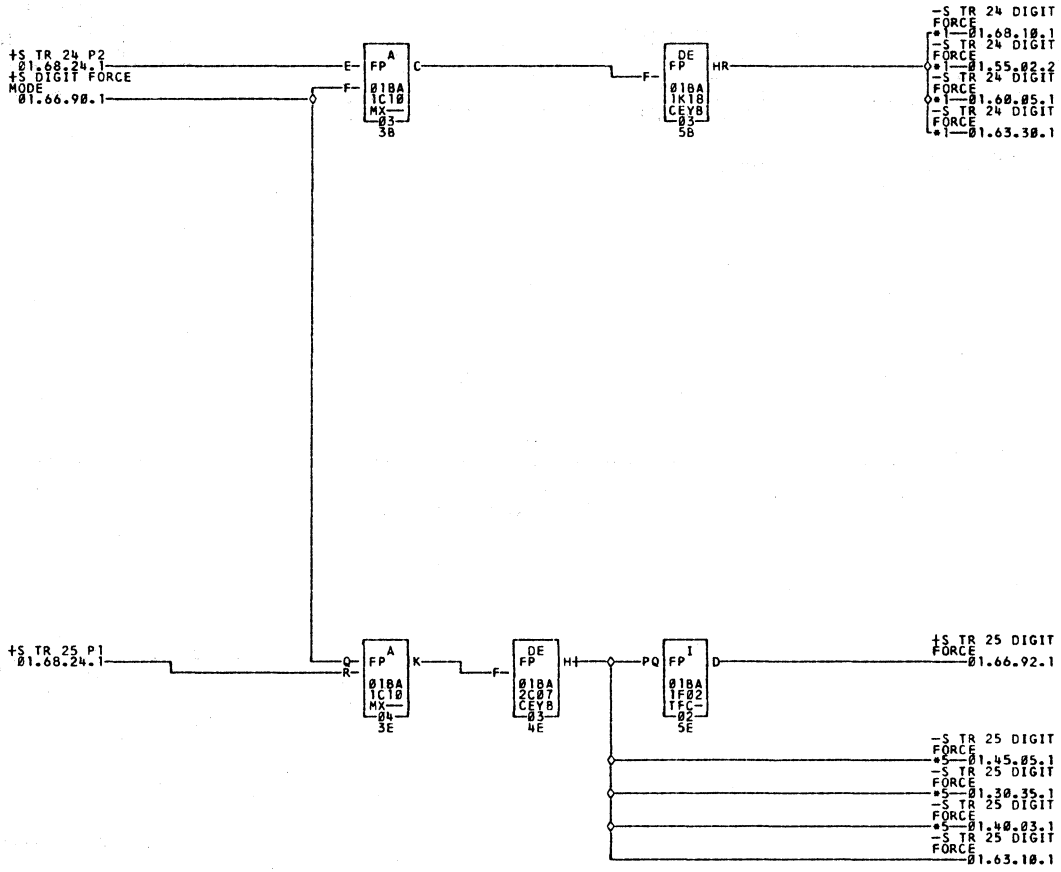
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018WL27

*2-01AWL26

018WL26

*3-01AX818

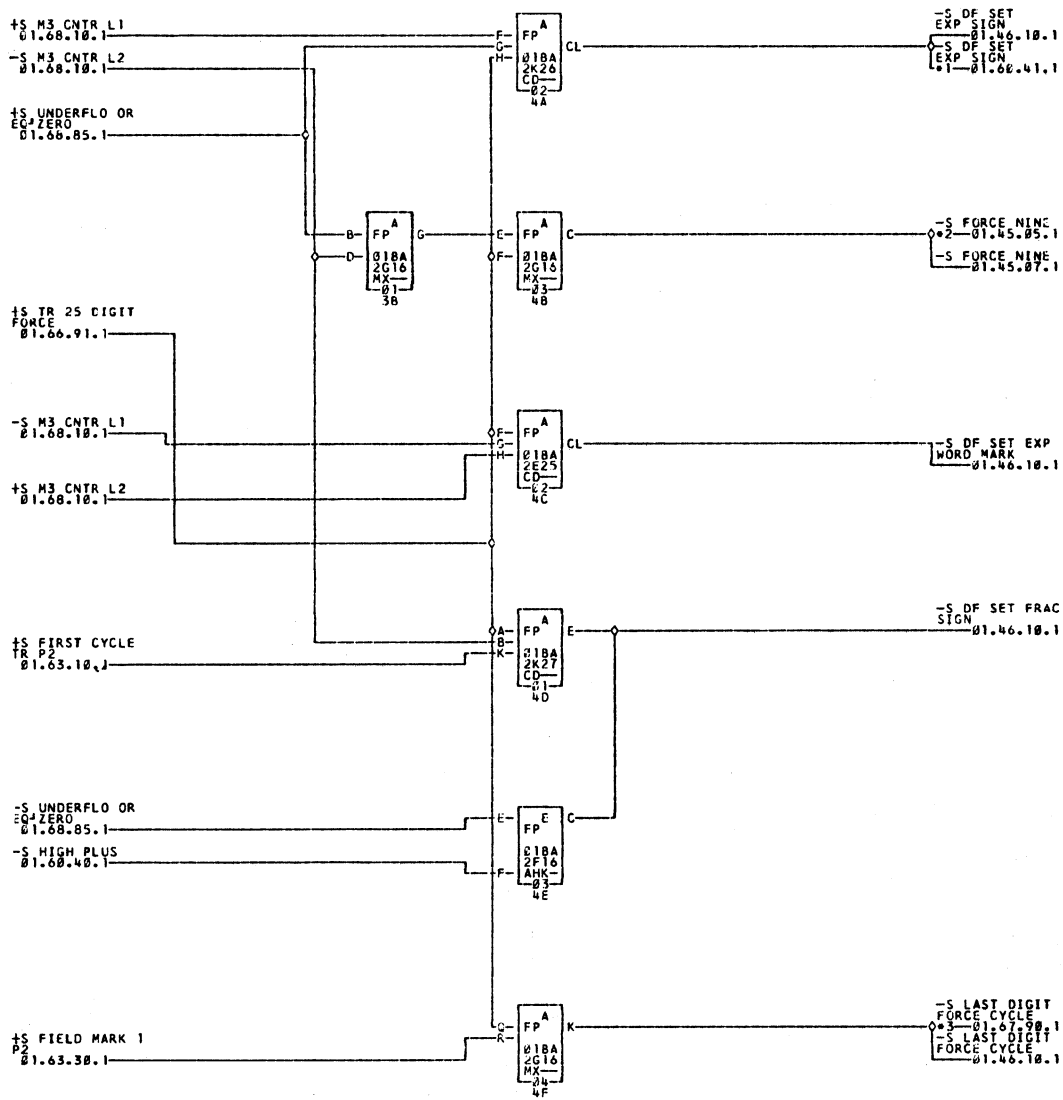


*1—01BWL28

—01AWL28

*5—01BWL29

—01AWL29



*1-018WL32

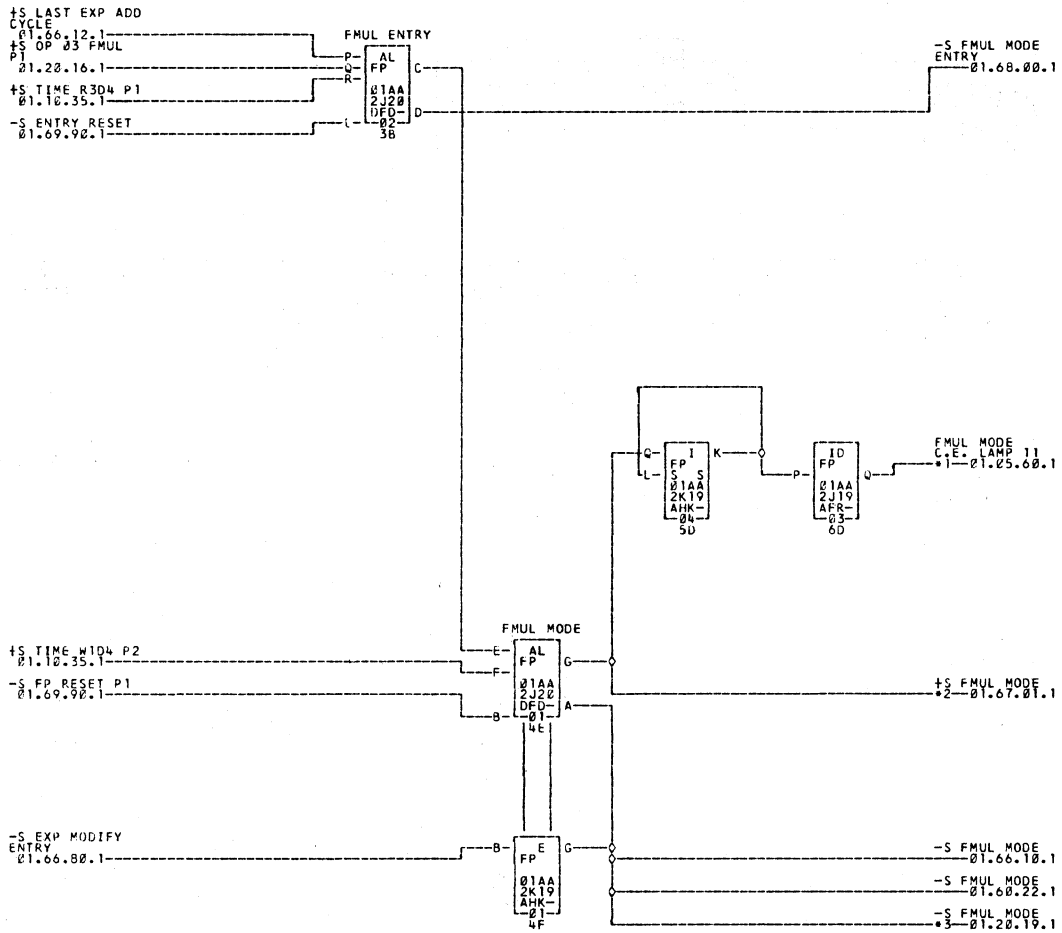
01AWL32

*2-018WL31

01AWL31

*3-018WL30

01AWL30



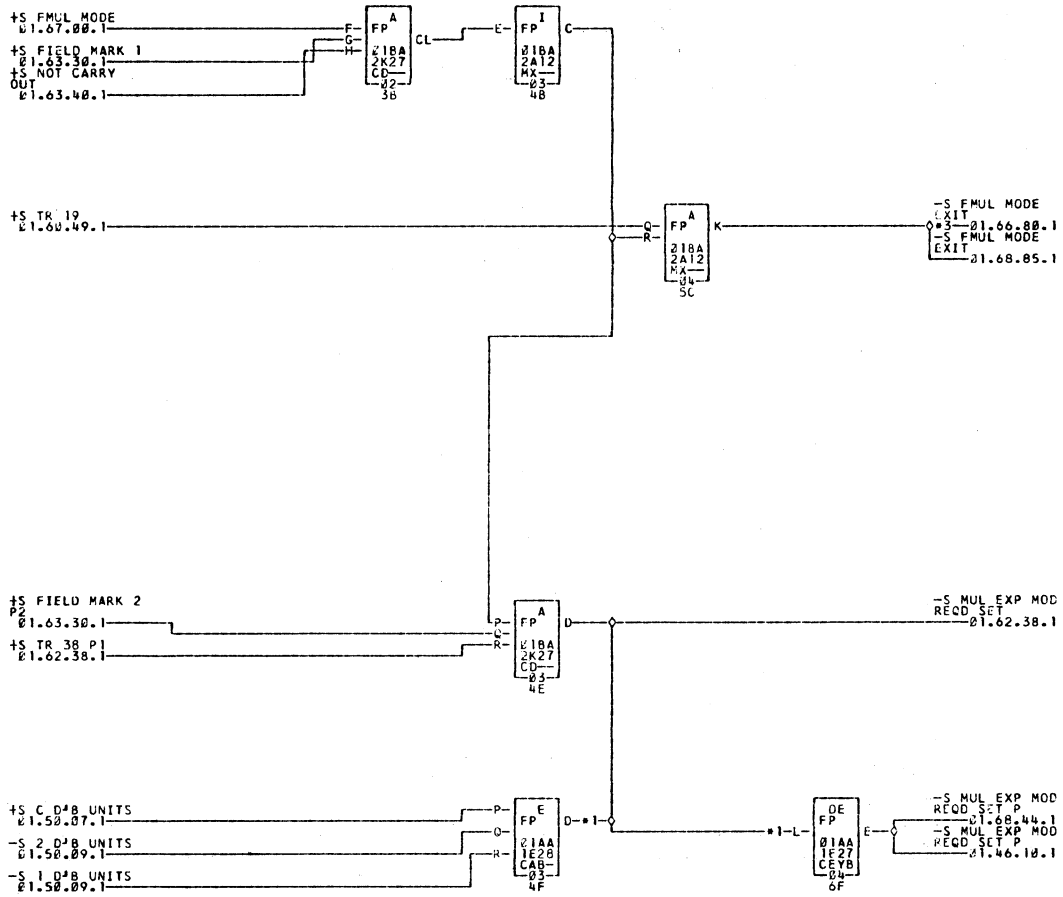
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*2--01AXK01

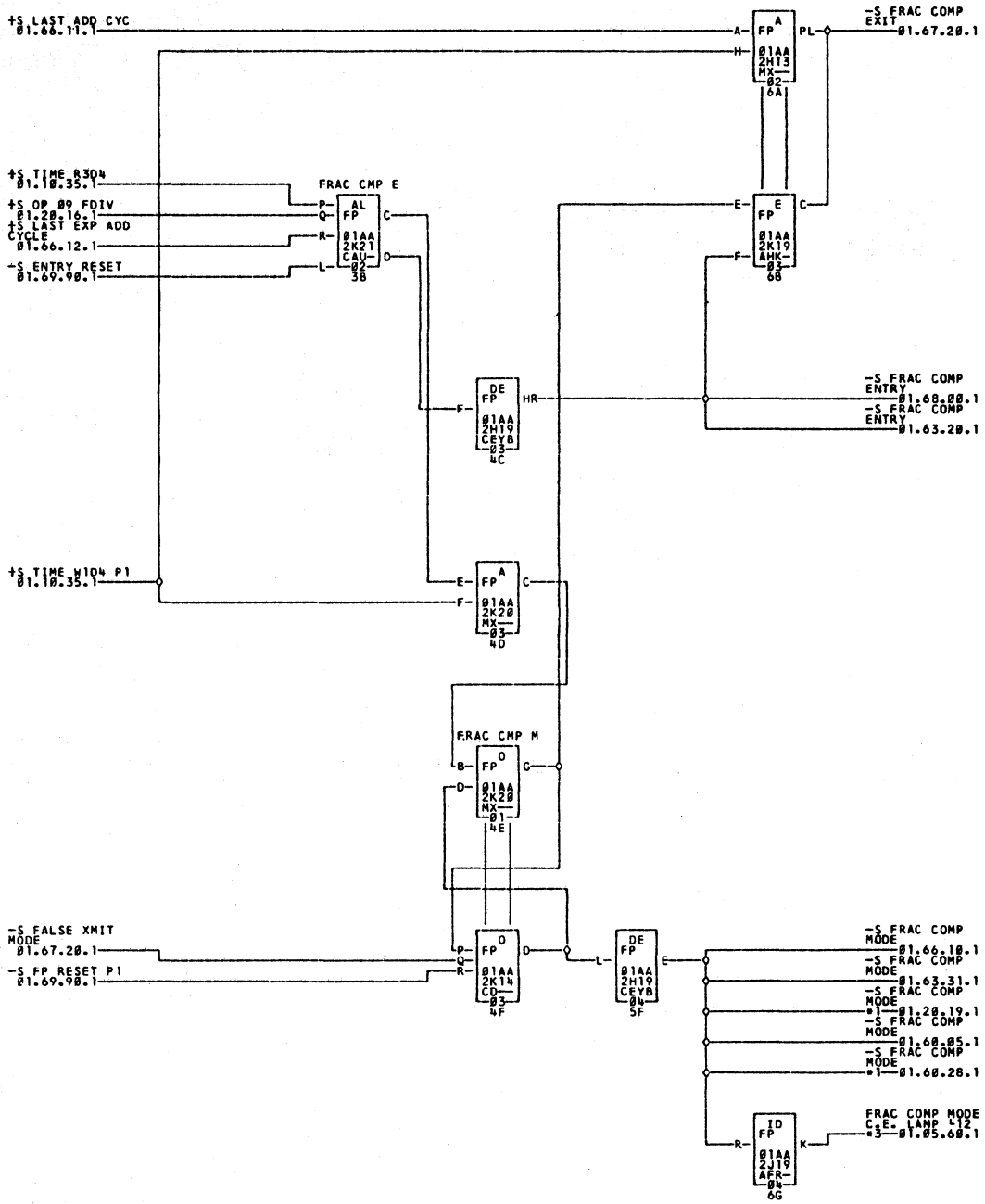
----01BXX01

*3--01AXK02

----01BXX02



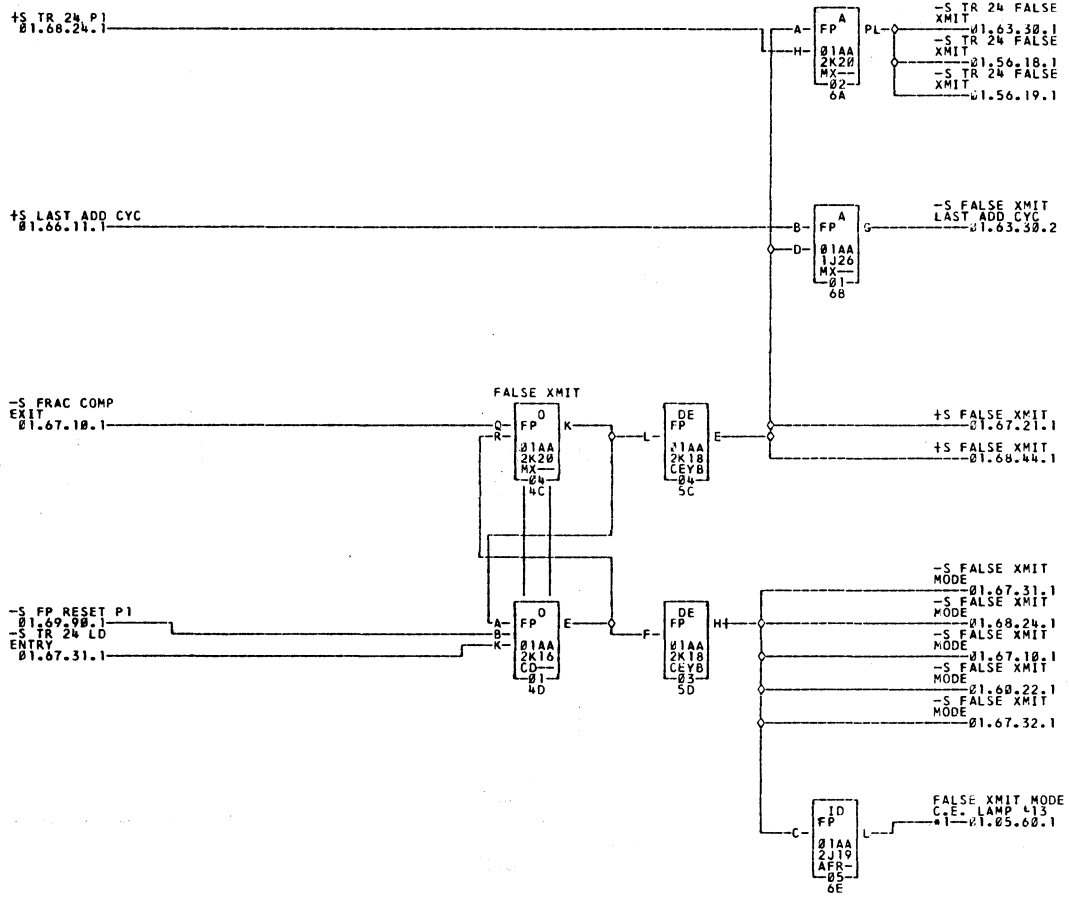
*1—010XK03 ———— 01AXK03 *3—010XK04 ———— 01AXK04

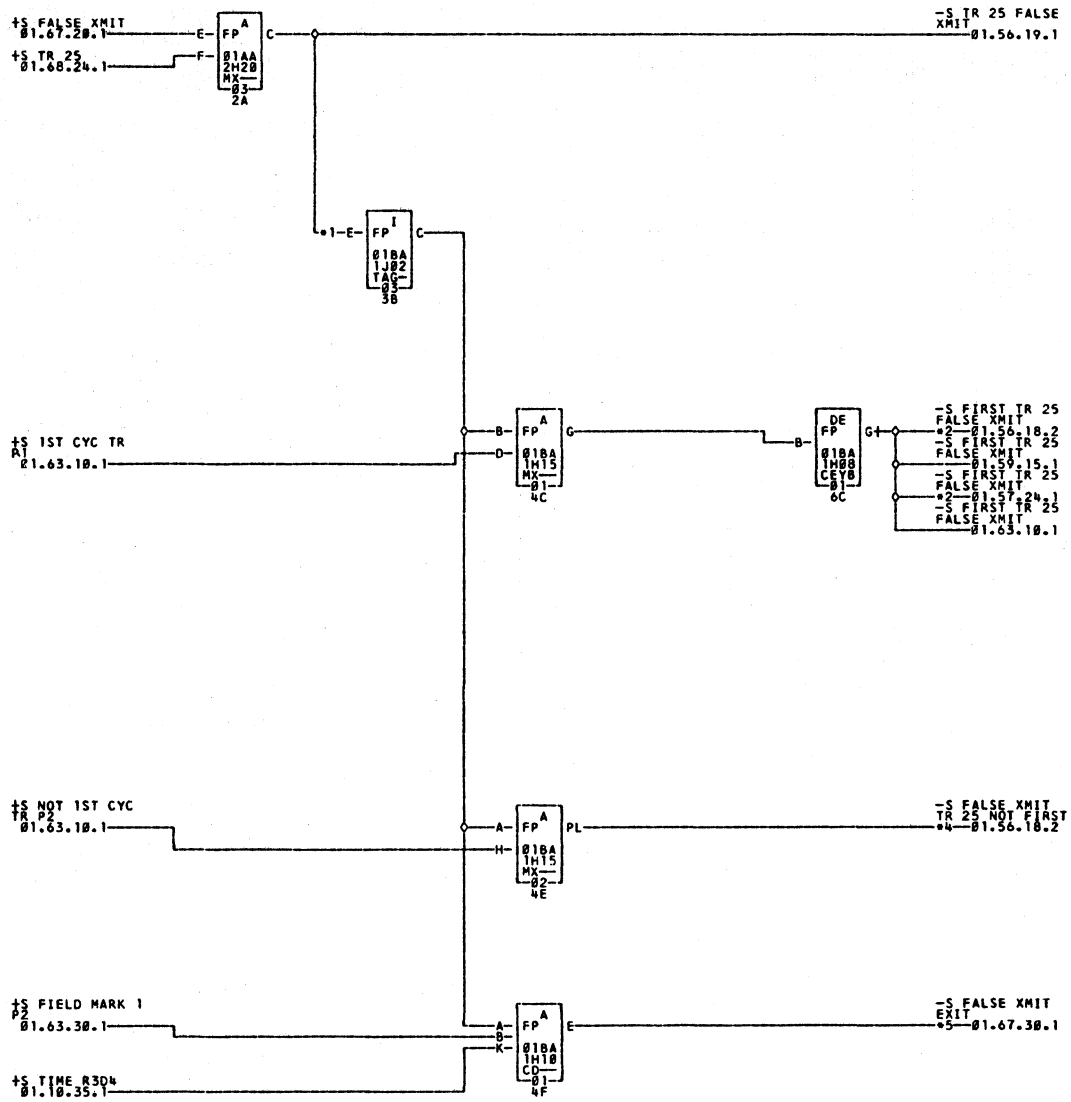


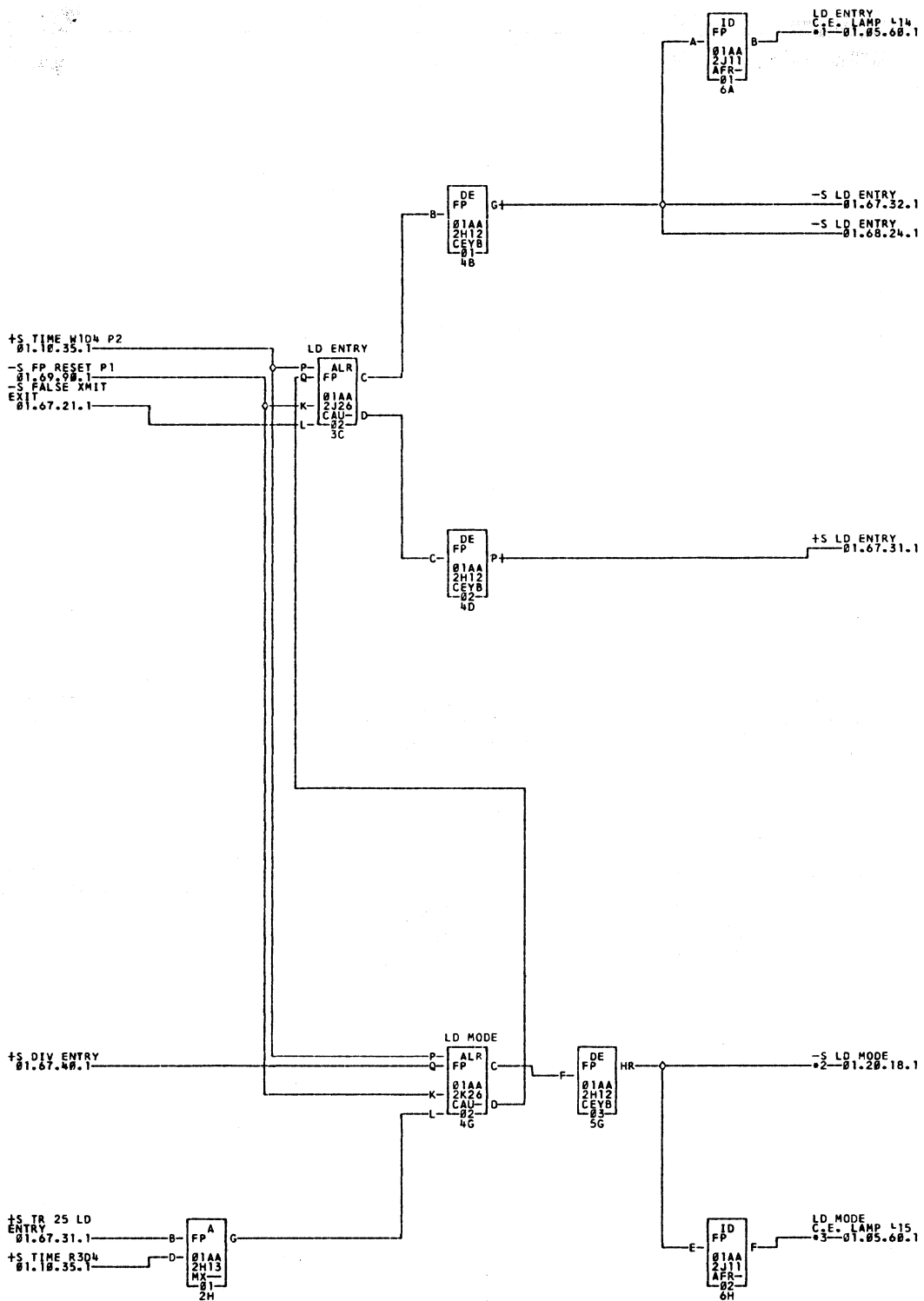
*1-01AXK30

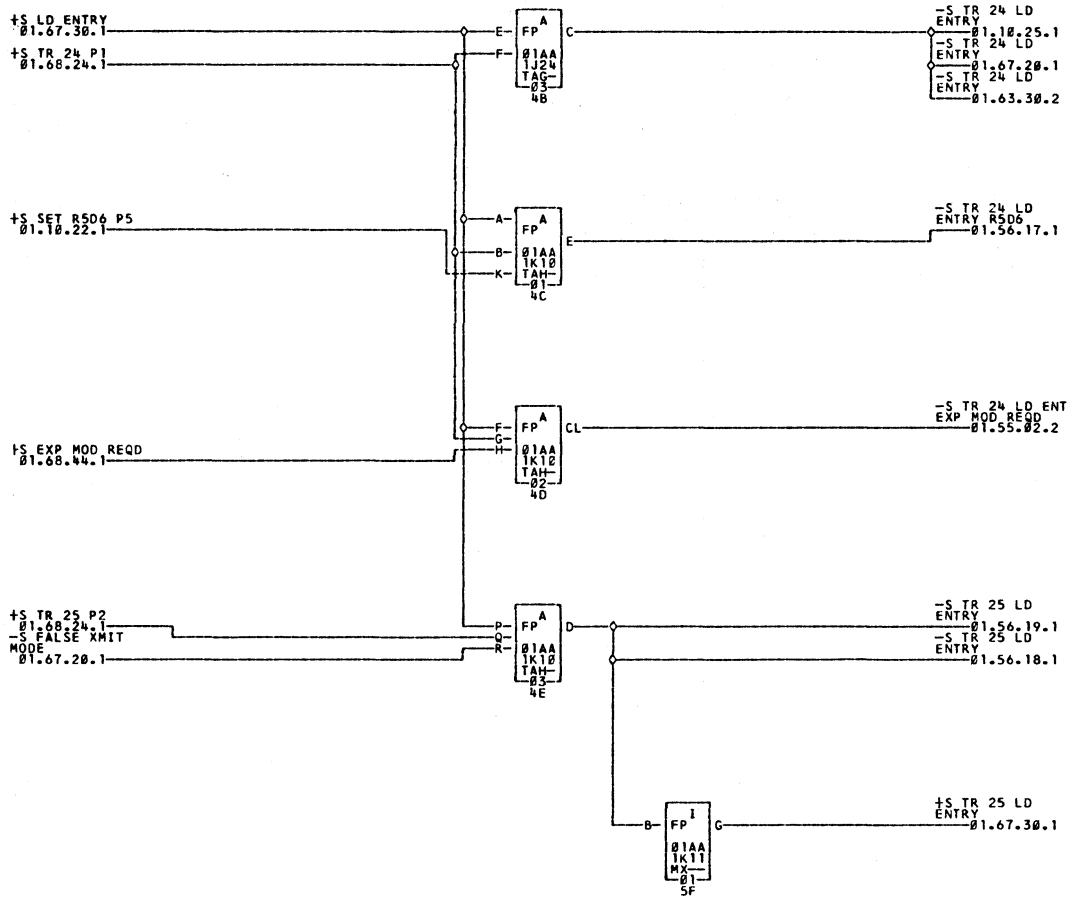
—01BXX30

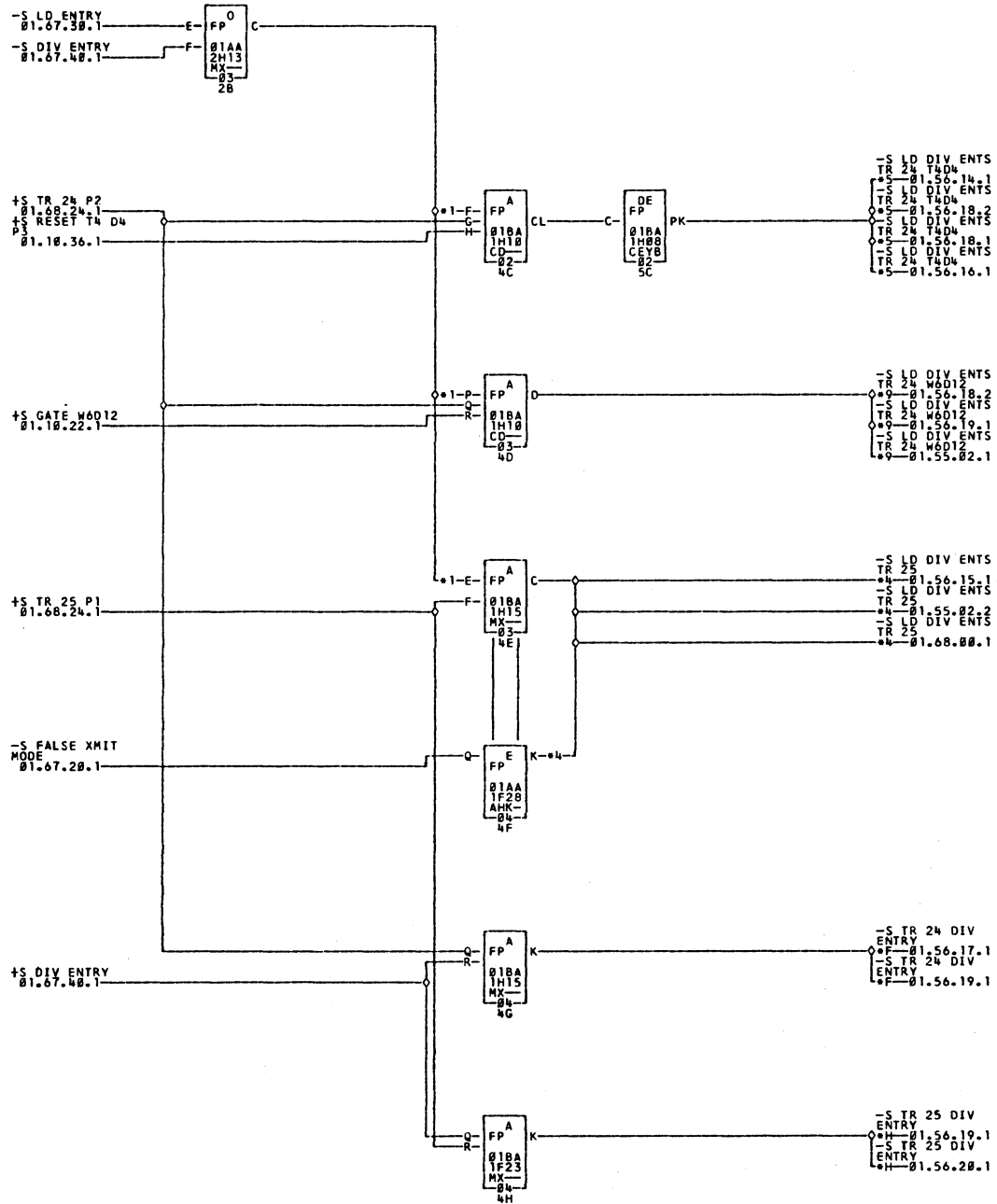
*3-01AXB12



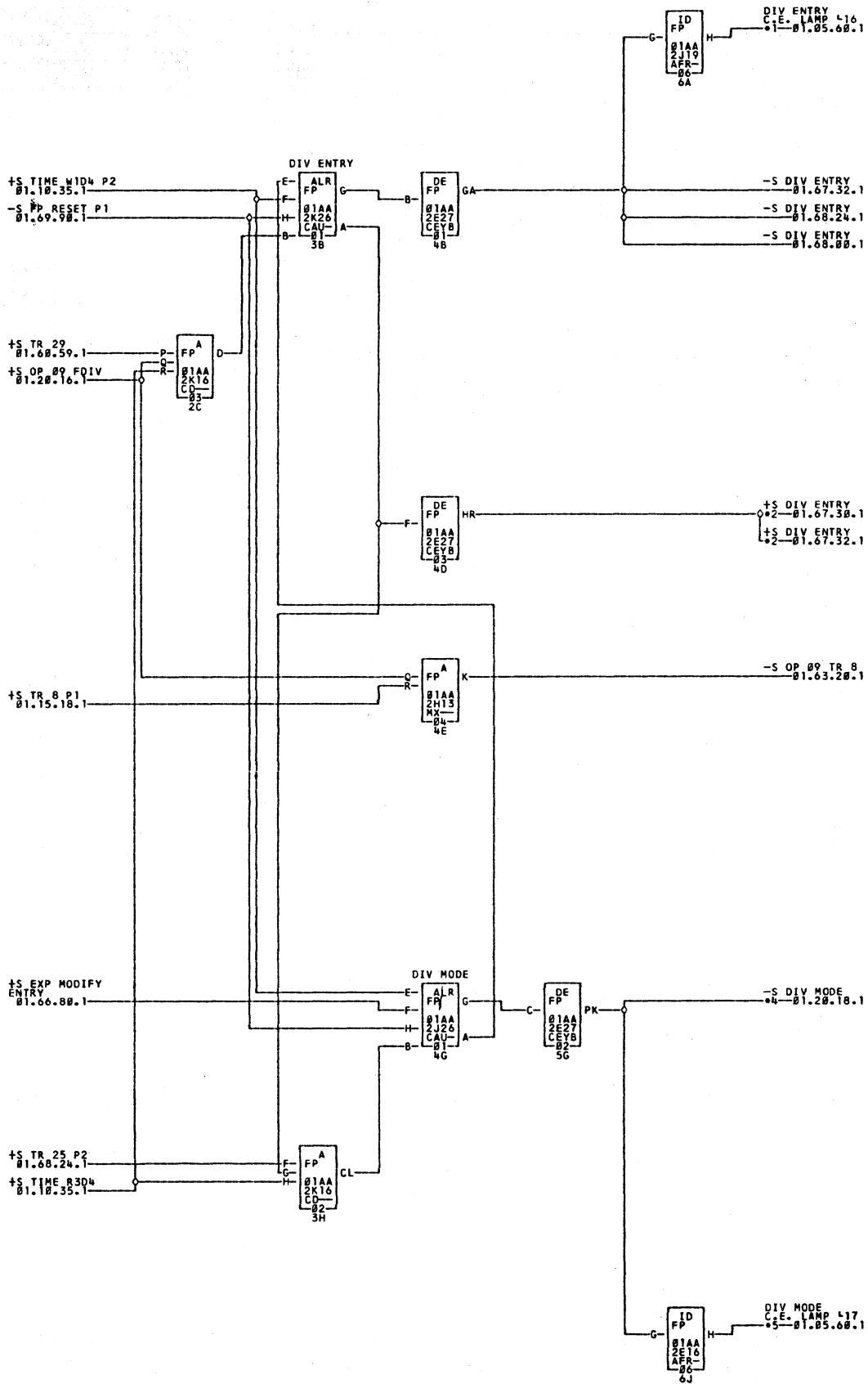








*1-01AWK23 01BKW23 *4-01BKW24 01AWK24 *5-01BKW27 01AWK27
 *0-01BKW25 01BKW25 *F-01BKW26 01AWK26 *H-01BKW28 01AWK28



•1—01AXB16

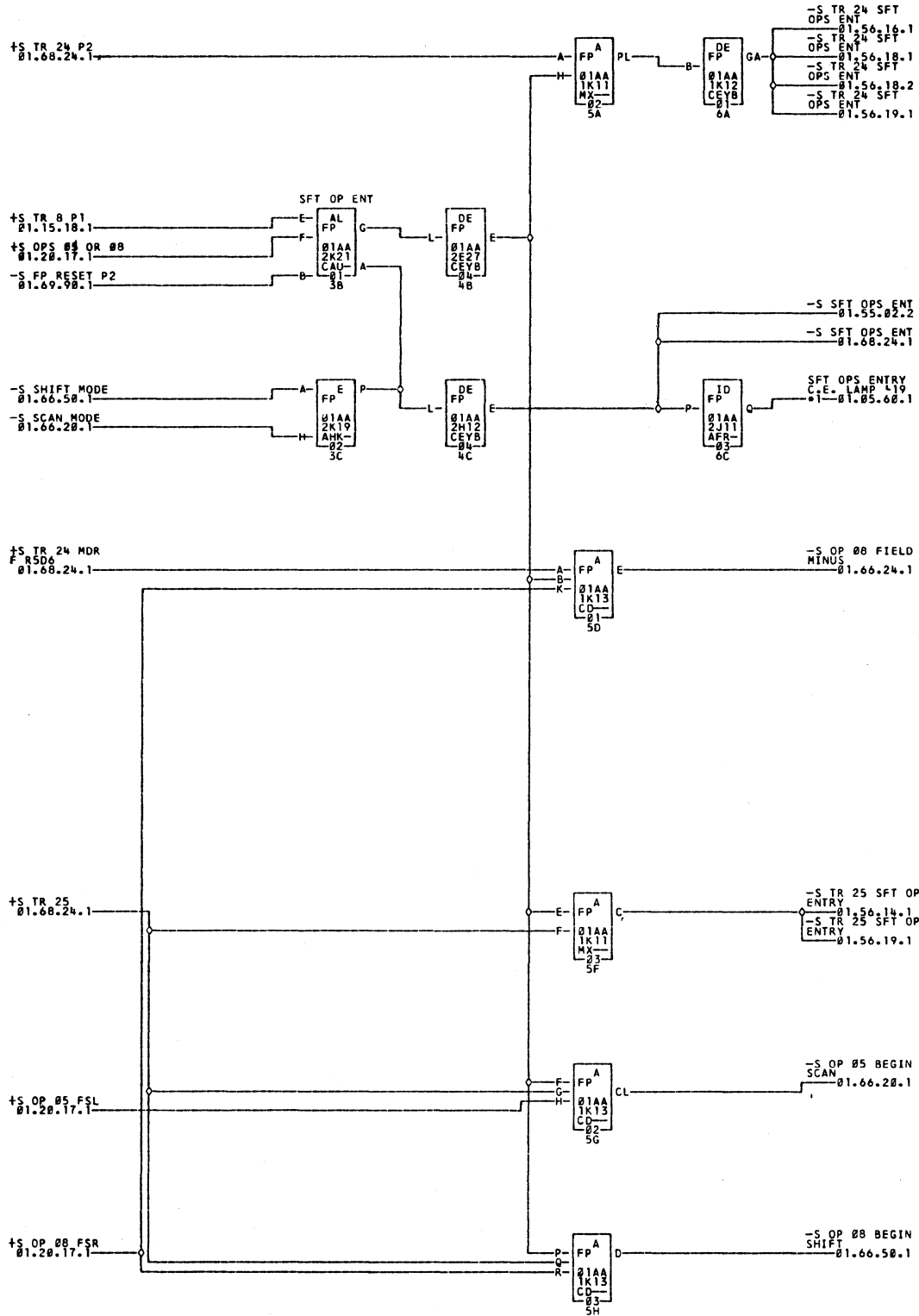
•2—01AXB6

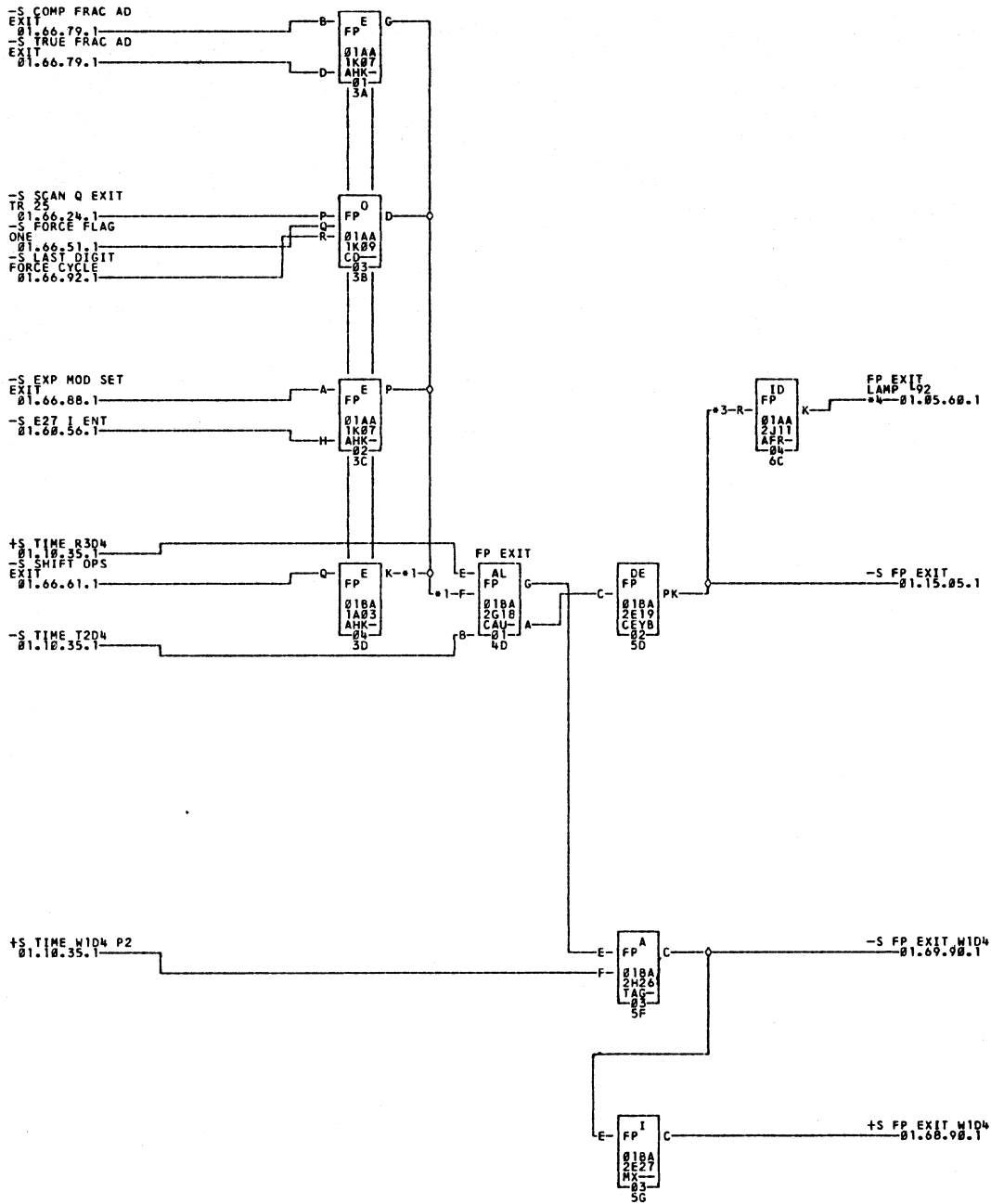
—018XB6

•4—01AXB7

—018XB7

•5—01AXB17





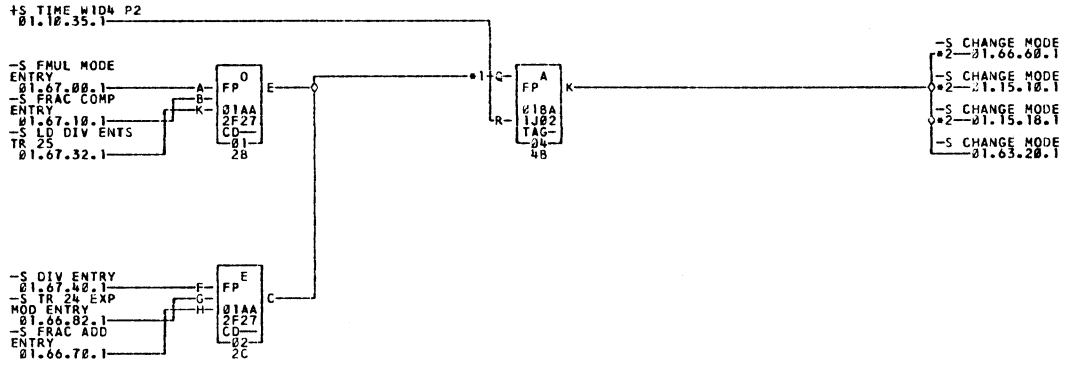
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—01BXK08

*3-01AXK09

—01BXK09

*4-01AXF18

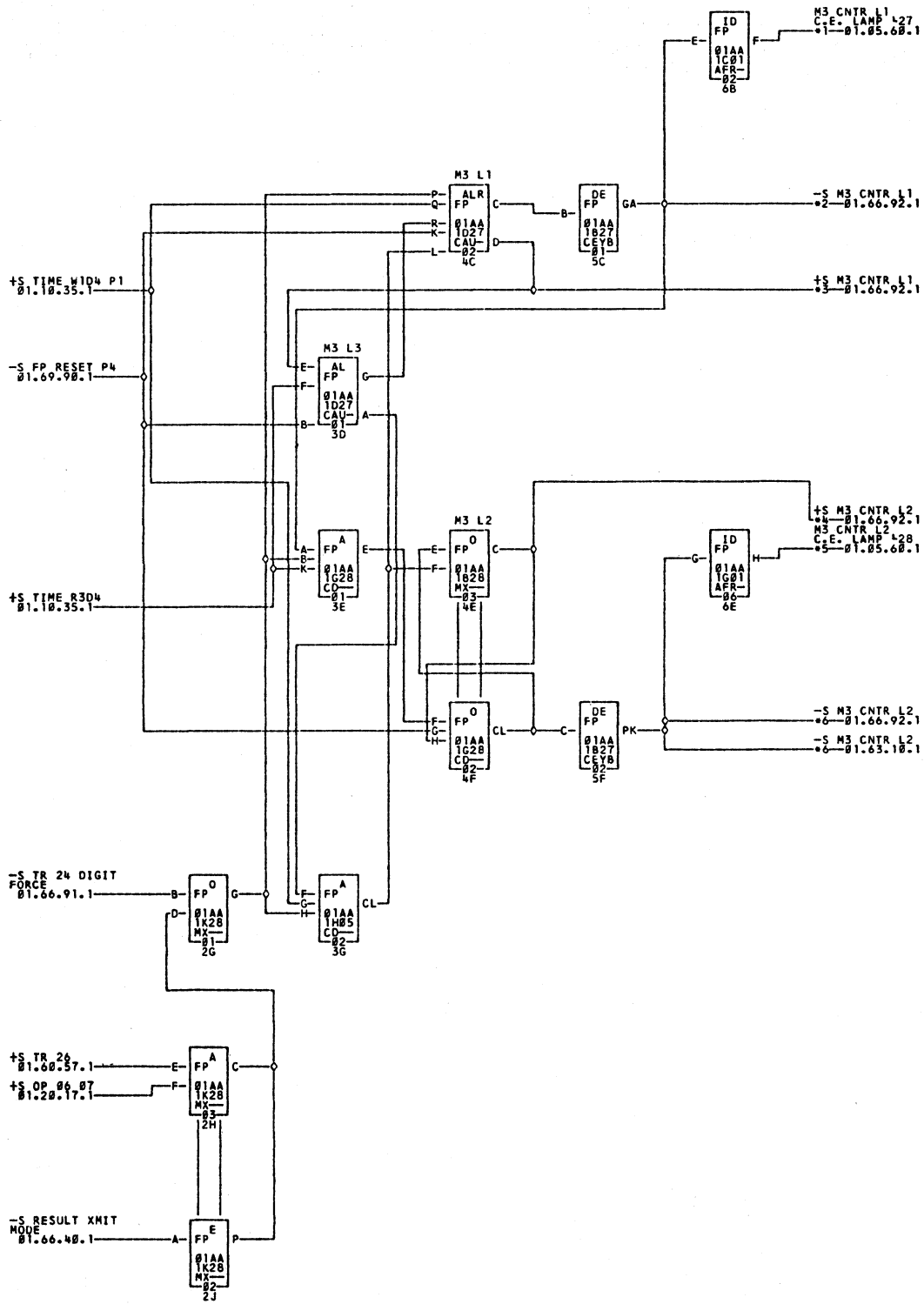


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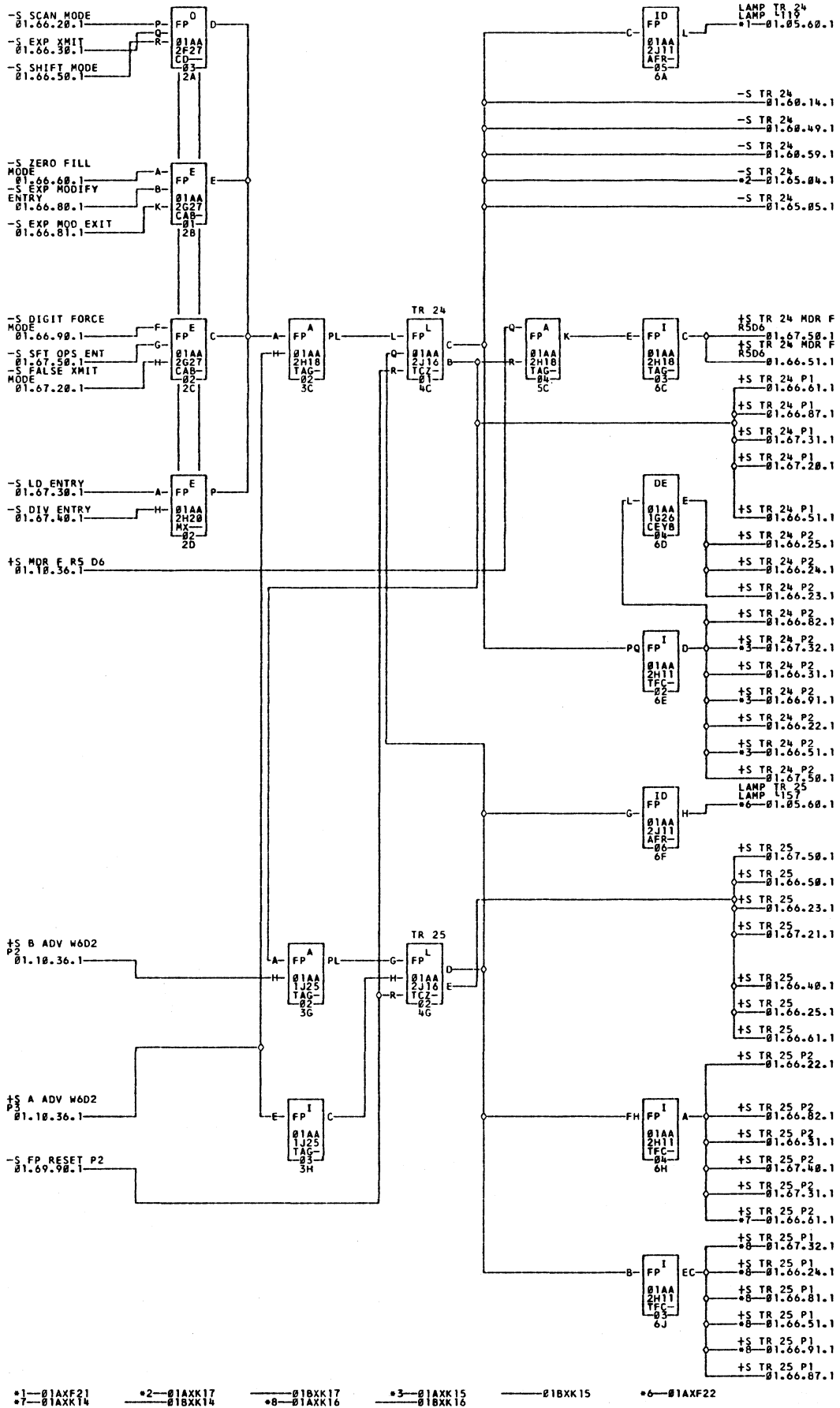
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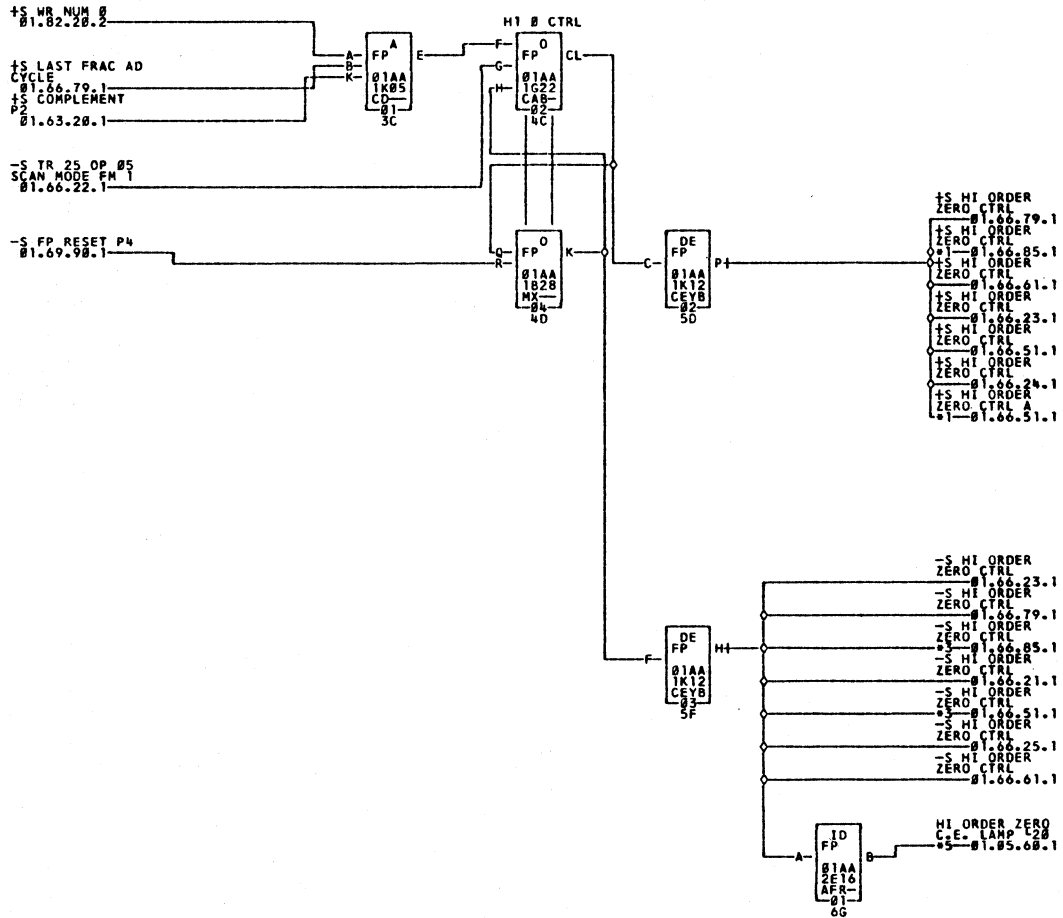
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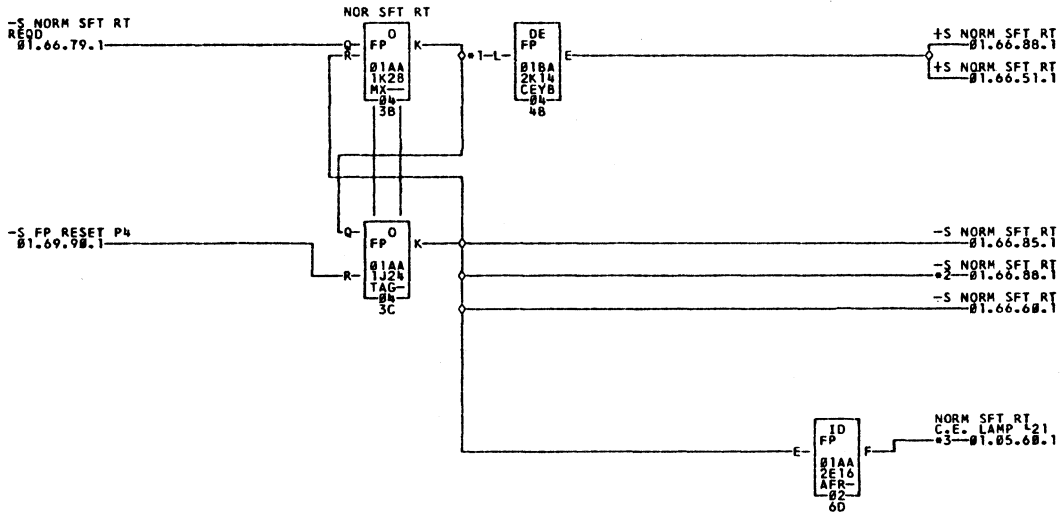
—01AWL10

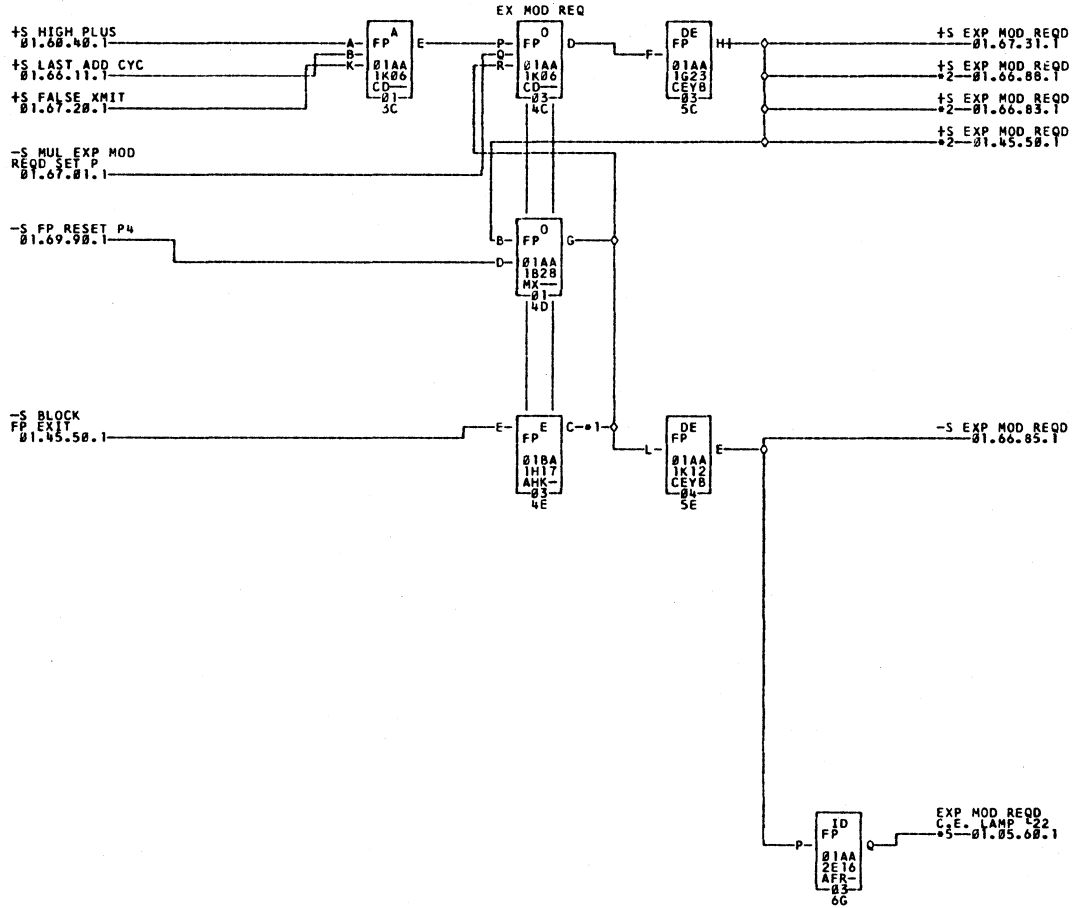


*1—01AXB27 *2—01AXK12 *3—01AXK11 *4—01AXK10
 *5—01AXB26 *6—01AXK13 *7—01BXX11









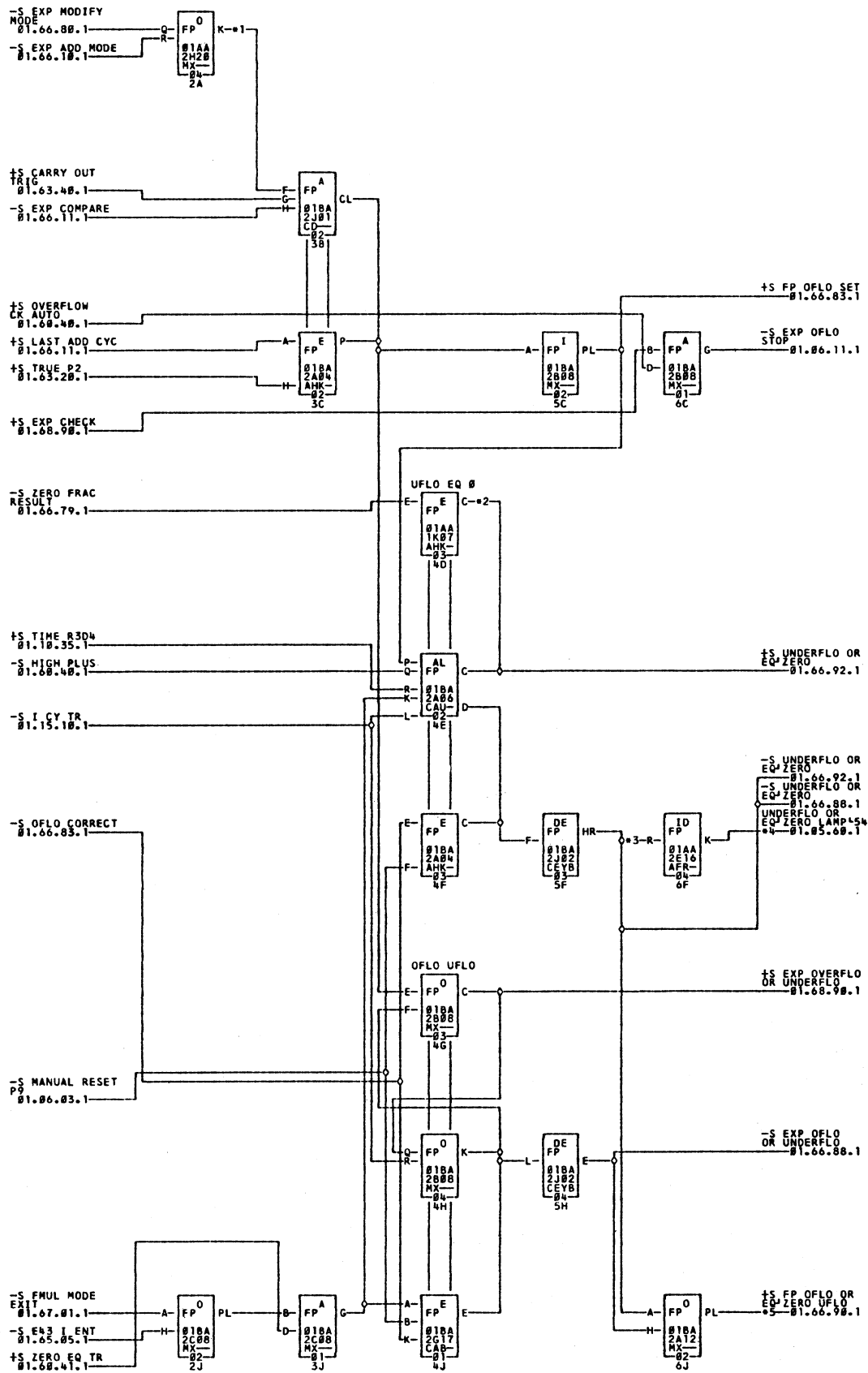
•1—01AXL17

—01AXL17

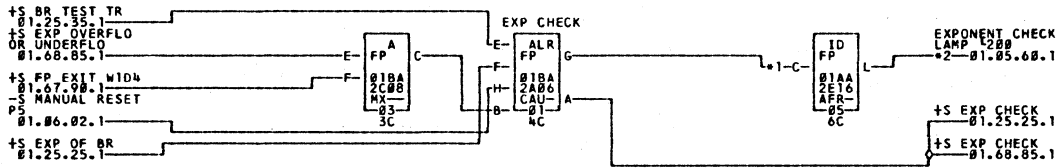
•2—01AXK22

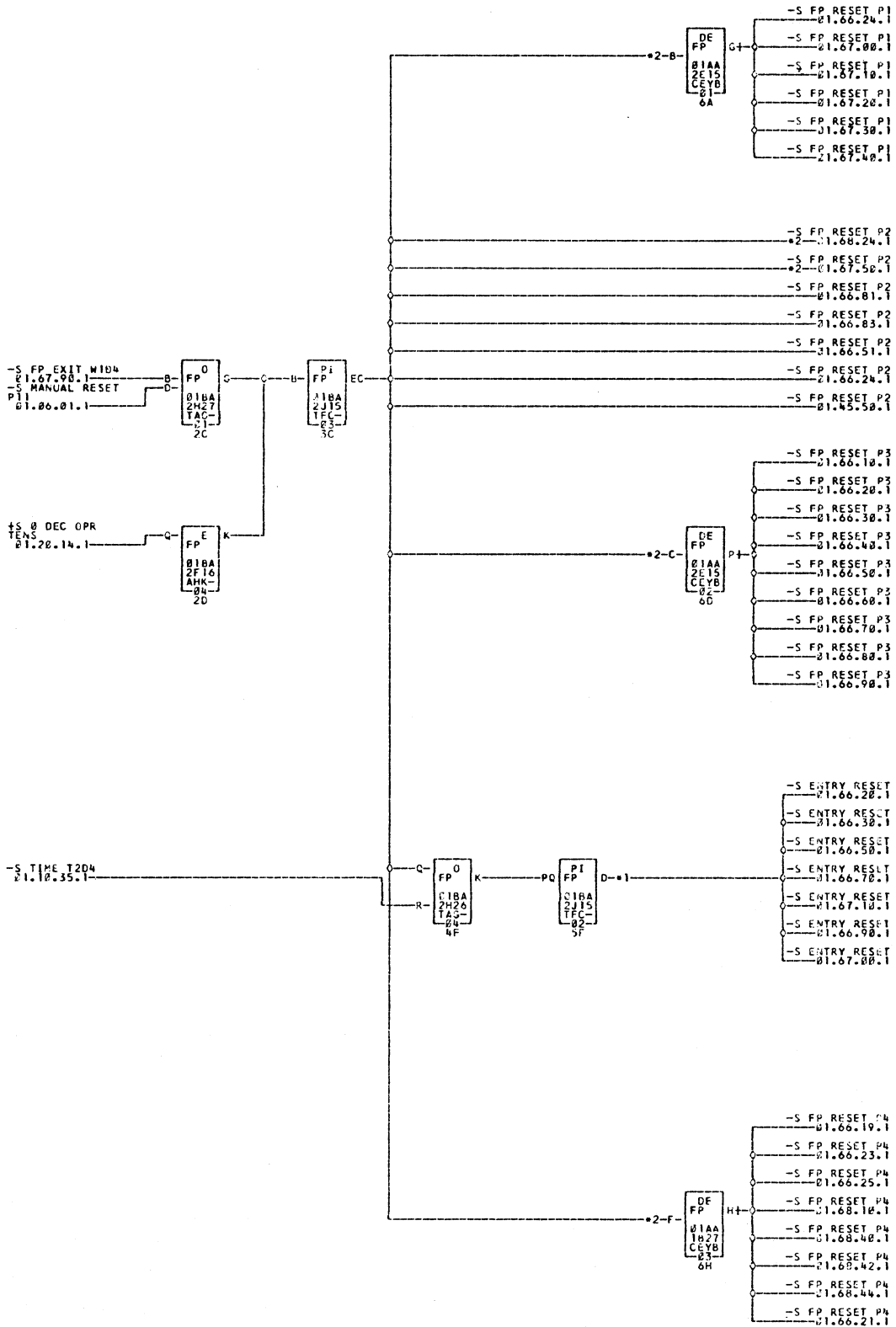
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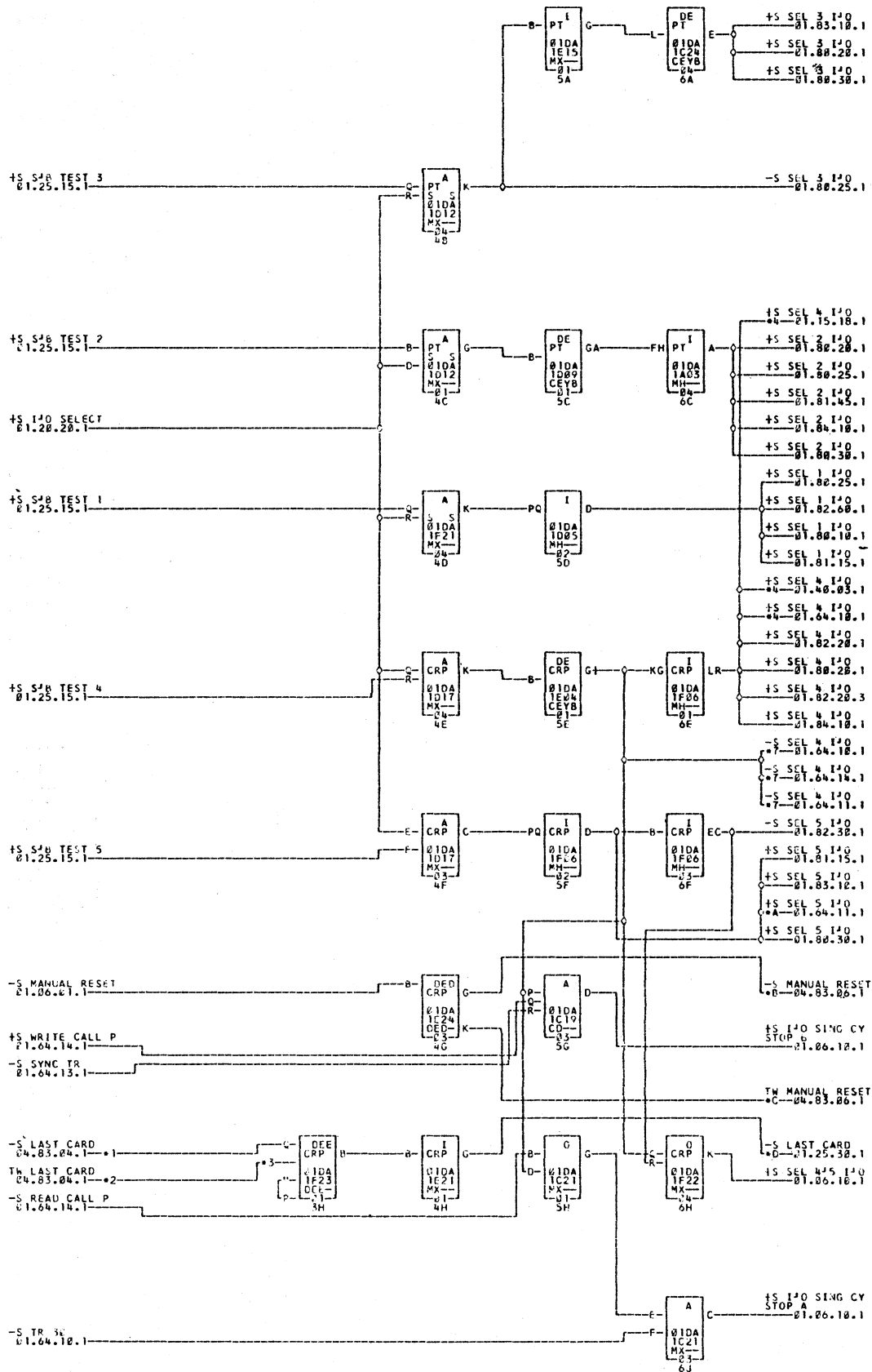
•5—01AXB22



•1—01AXK23 —01BXX23 •2—01AXK24 —01BXX24 •3—01BXX26 —01AXK26
 •4—01AXP20 •5—01BXX32







*1--01DWF24
 ---01BXH13
 ---01BJ24

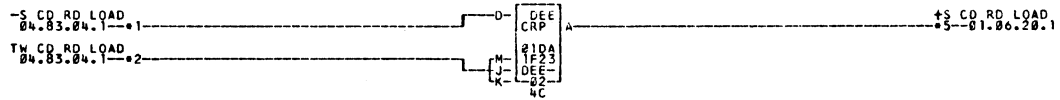
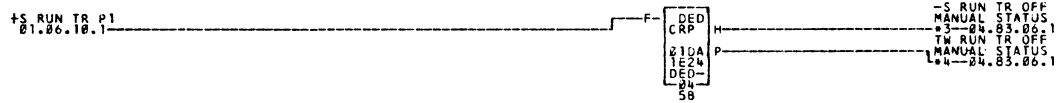
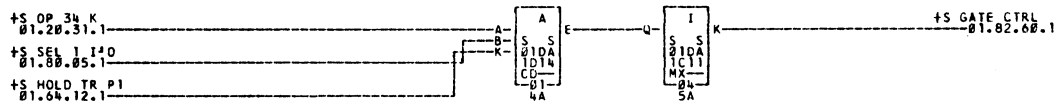
*2--01DWF23
 *A--01DX005

*3--01D1E23J
 ---01BXC05

*4--01DXD11
 *8--01DWE30

---01BXD11
 *C--01DWE29

*7--01DWD13
 *D--01DXA24



*1--01DWF32

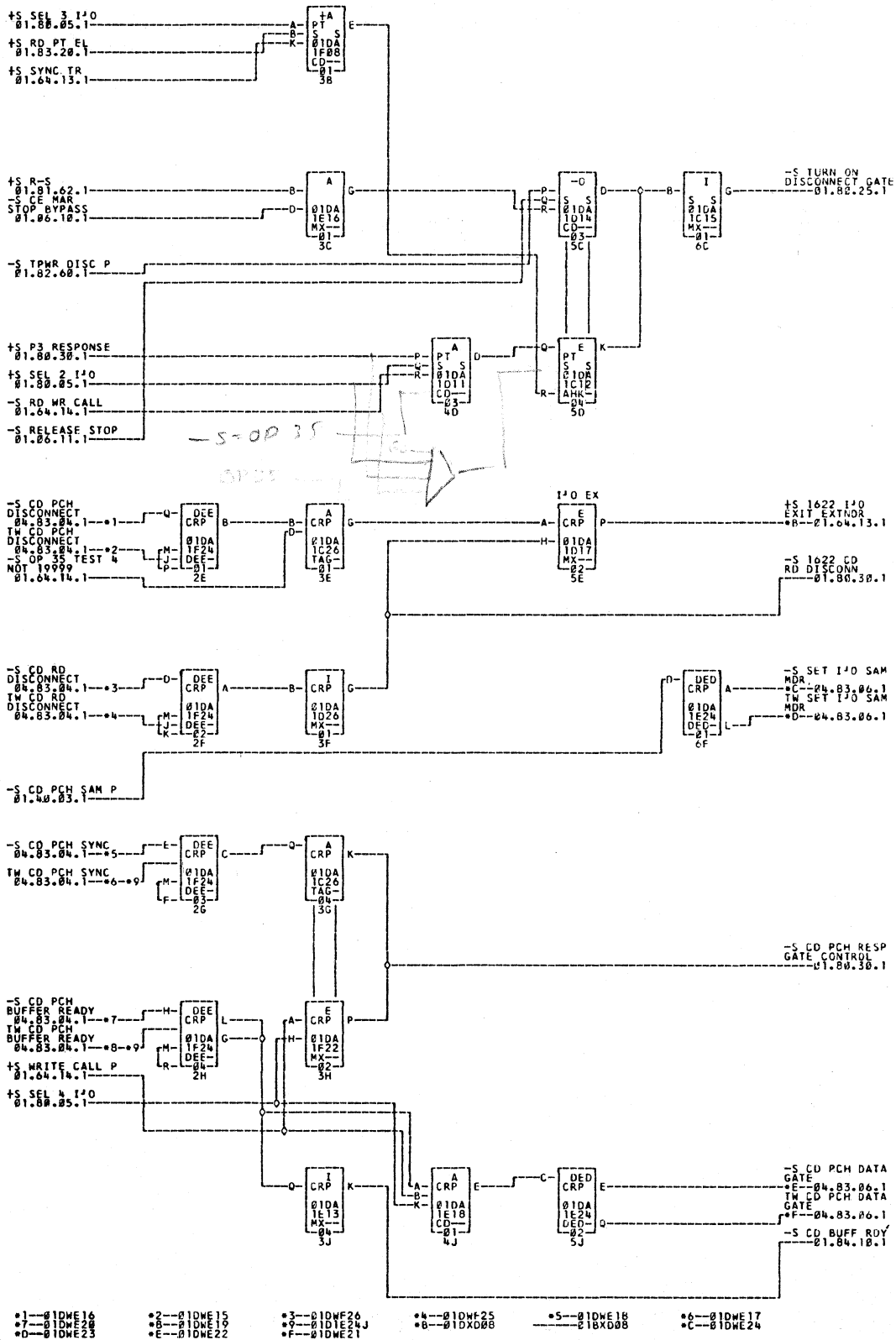
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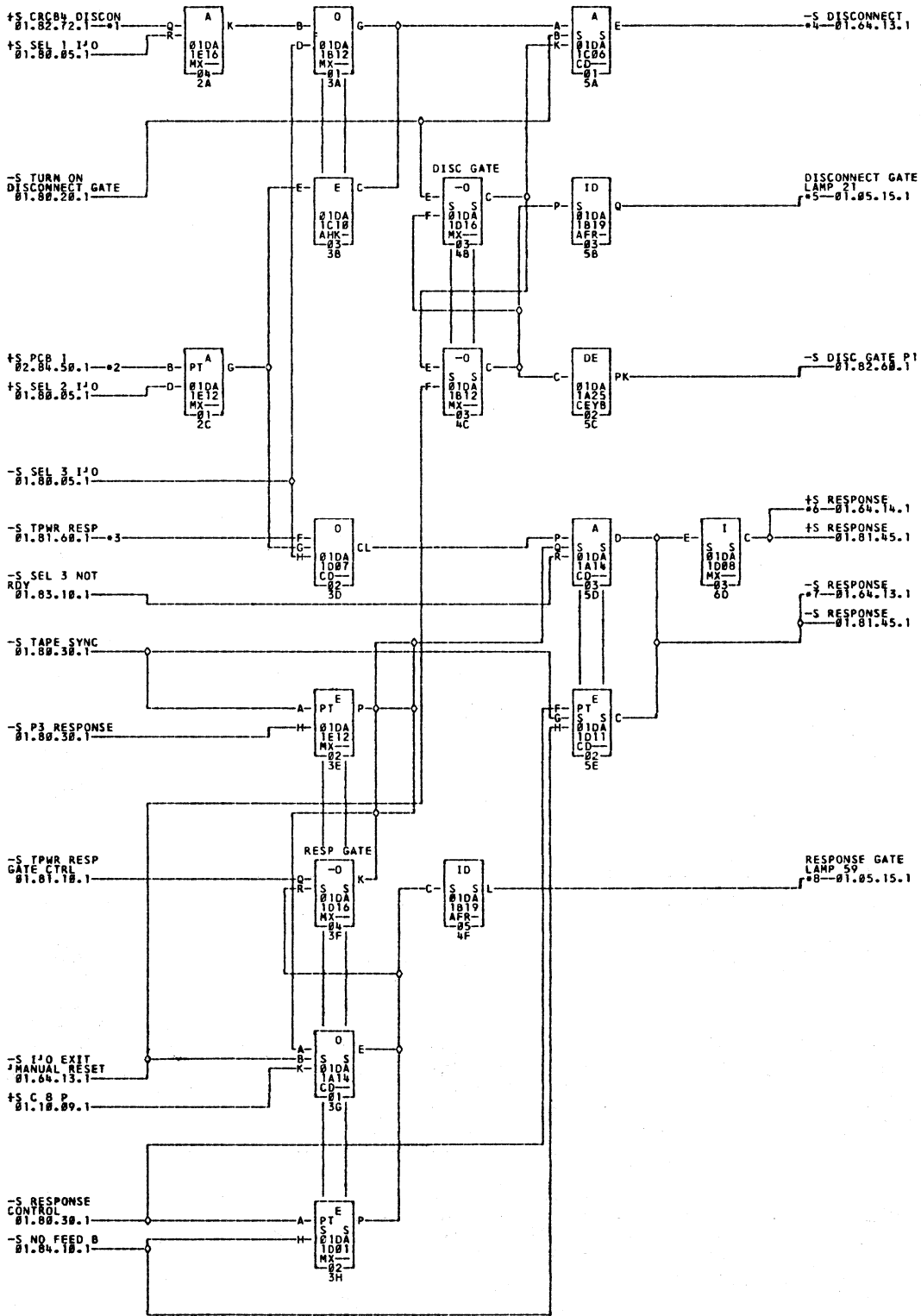
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*4--01DWF29

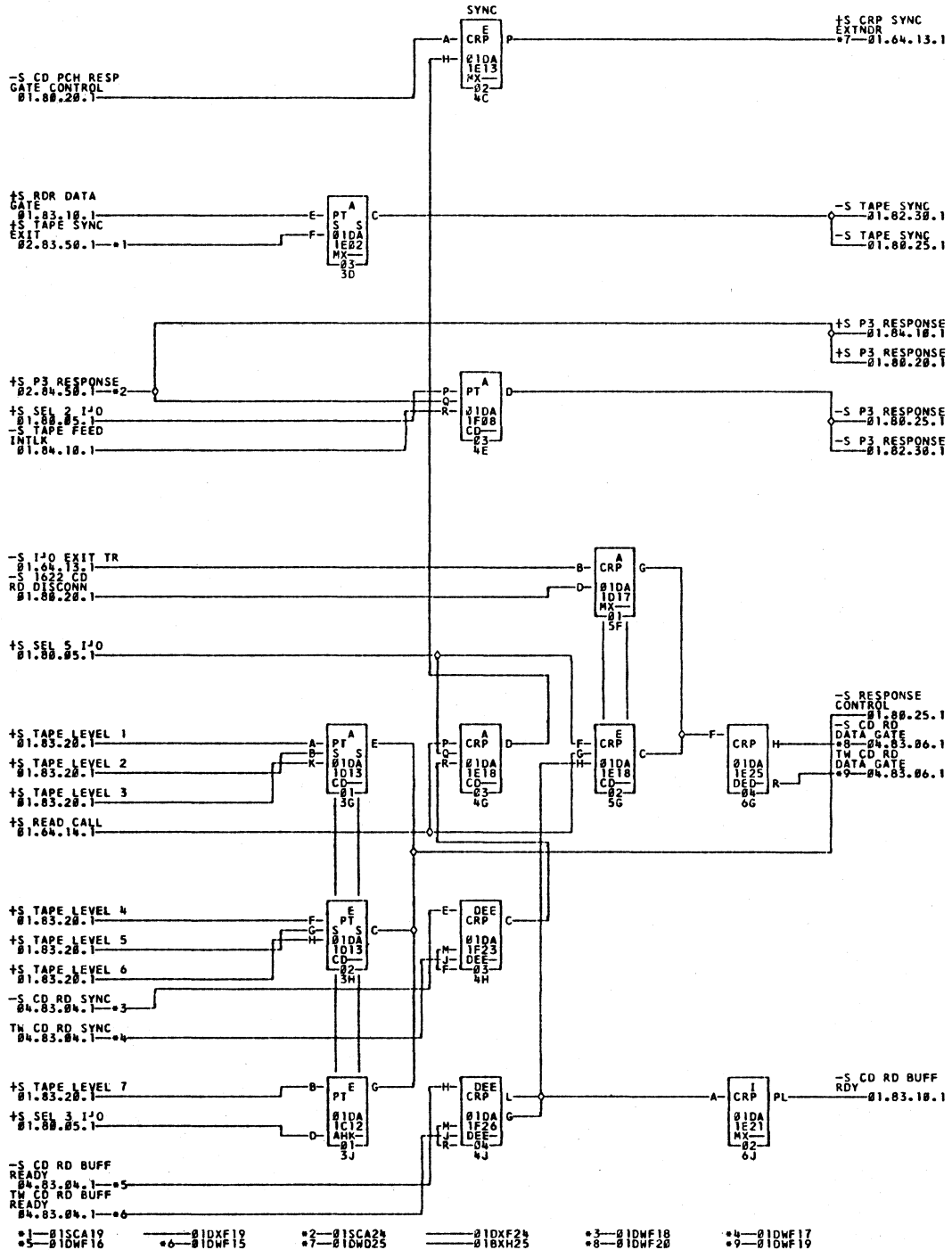
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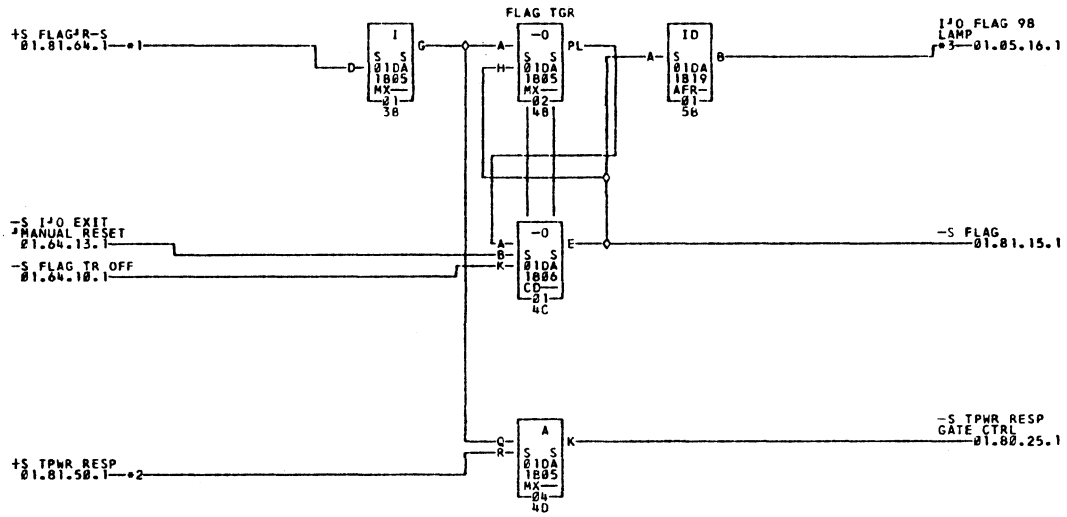
---01BXH13





*1--01DXC06 *2--01SCA28 ---01DXF28 *3--01DWC05 *4--01DXB20 ---01DXB20
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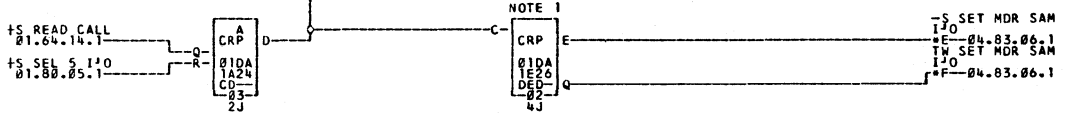
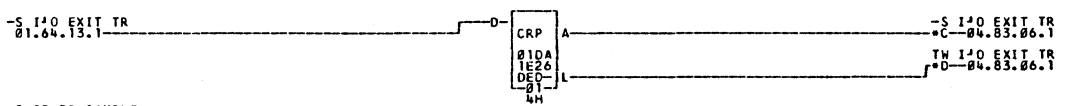
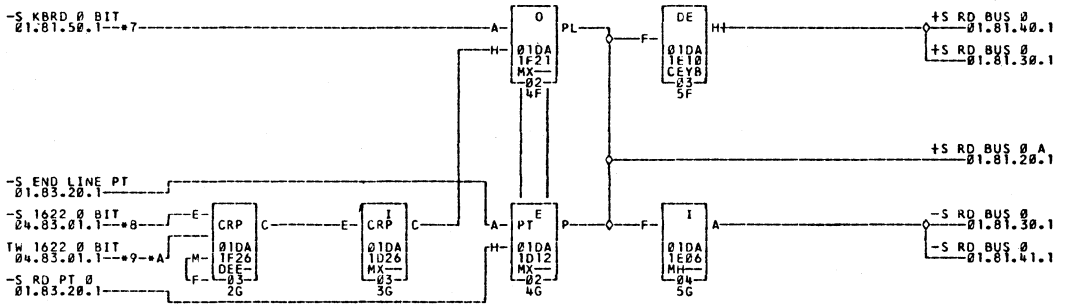
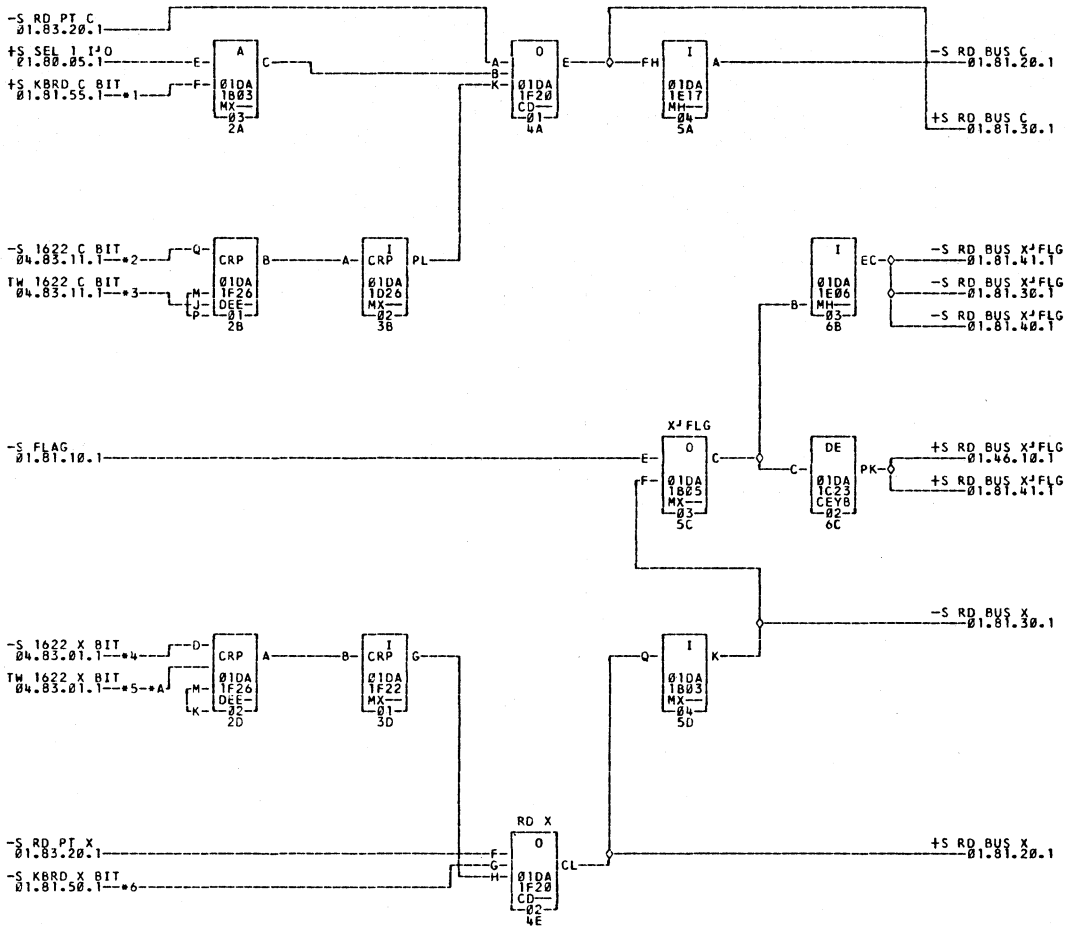




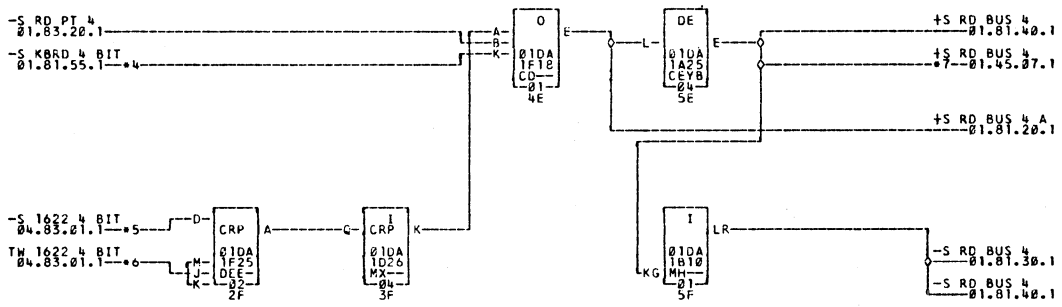
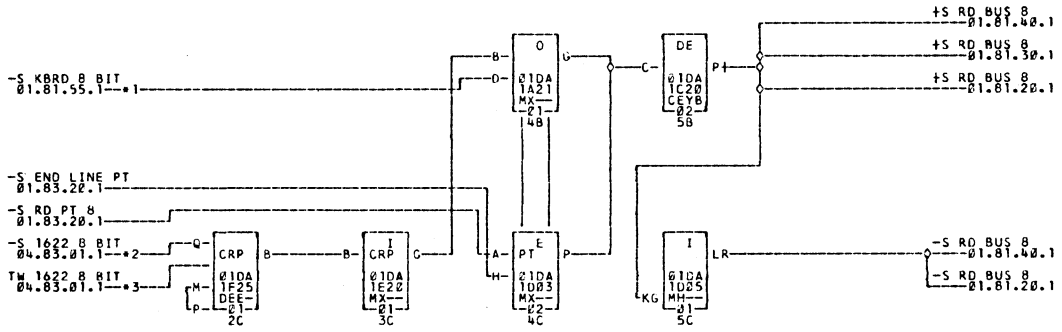
•1—01DXC16

•2—01DXC02

•3—01DXD19



- *1--01DXC14
- *2--01DWF02
- *3--01DWF01
- *4--01DWF06
- *5--01DWF05
- *6--01DXC09
- *7--01DXC09
- *8--01DWF04
- *9--01DWF03
- *A--01D1E26J
- *C--01DWE26
- *D--01DWE25
- *E--01DWF22
- *F--01DWF21



*1--01DXC13
 *6--01DWF09

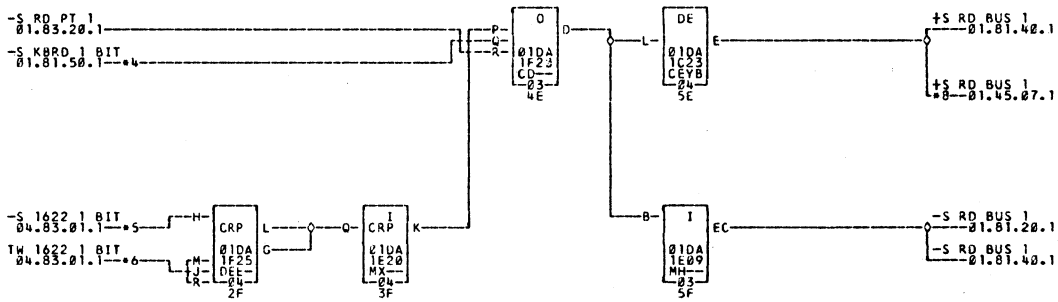
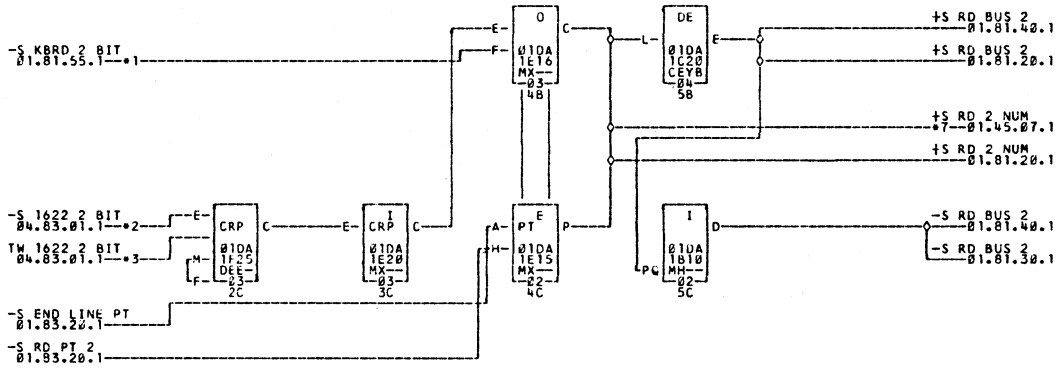
*2--01DWF08
 *7--01DXA29

*3--01DWF07
 *8--01BXJ29

-----01D1E25J

*4--01DXC12

*5--01DWF10



*1--01DXC11
*6--01DWF13

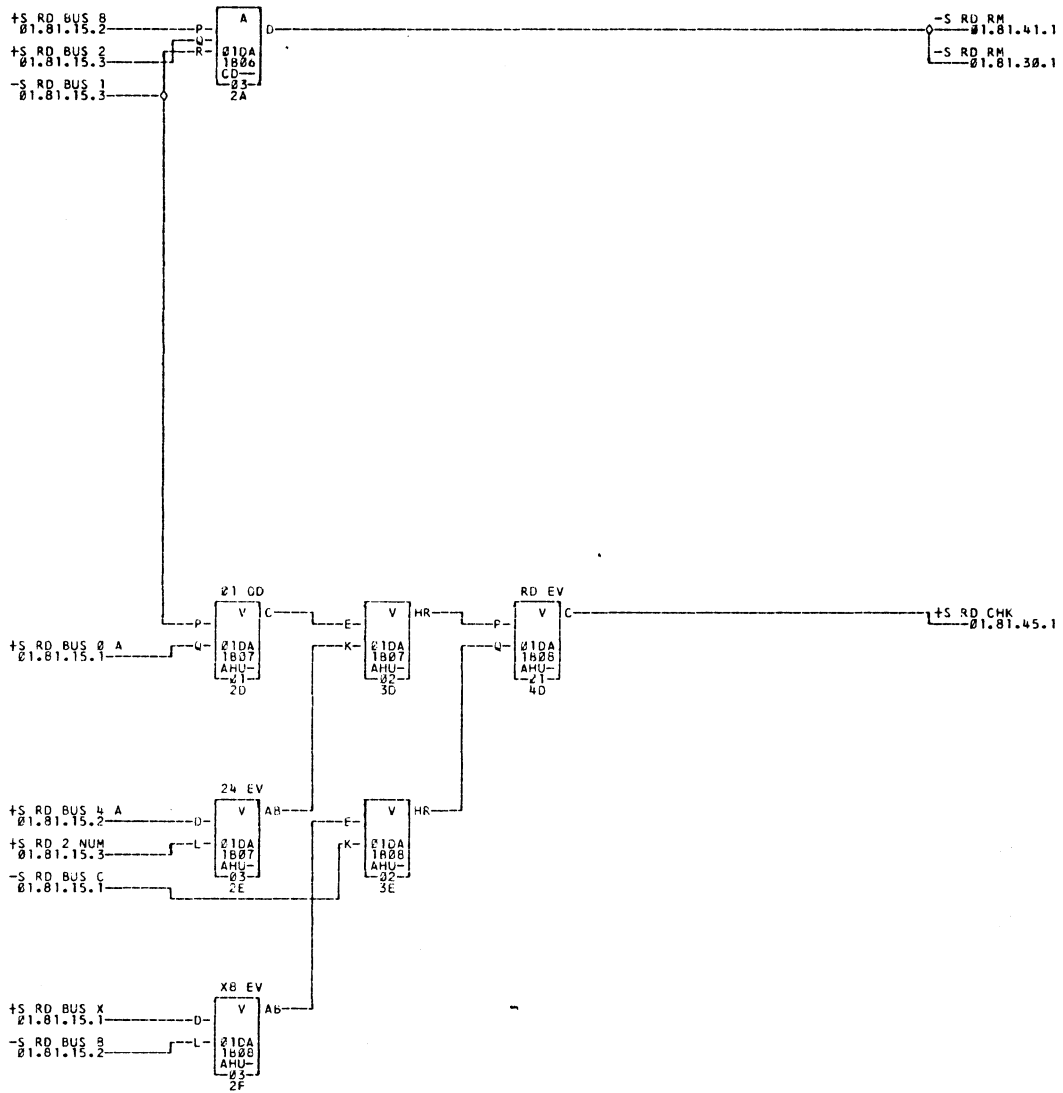
*2--01DWF12
*7--01DX624

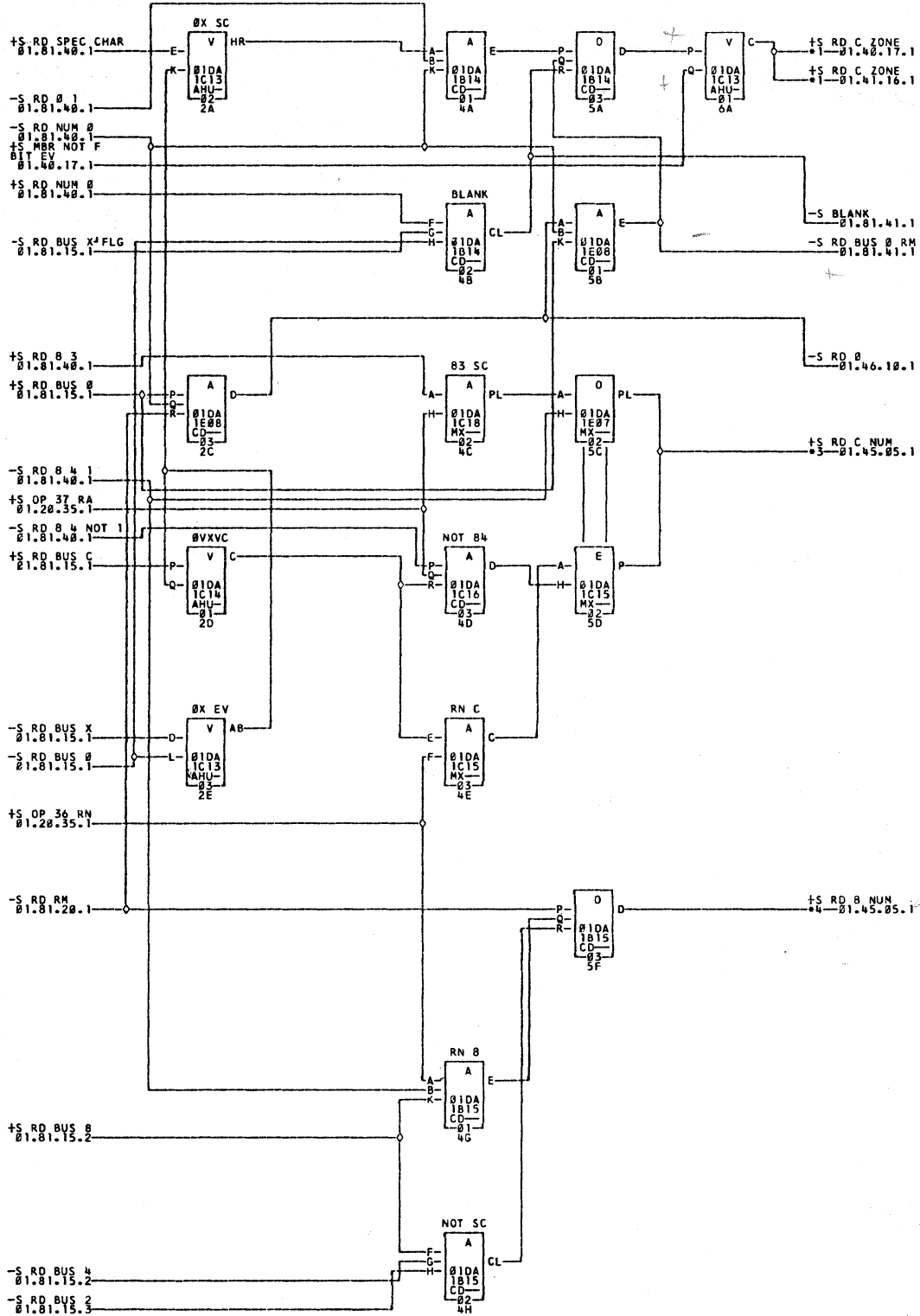
*3--01DWF11
*8--01BX624

*4--01D1E25J
*8--01DXA30

*4--01DXC10
*8--01BXJ30

*5--01DWF14





*1-01DXE05

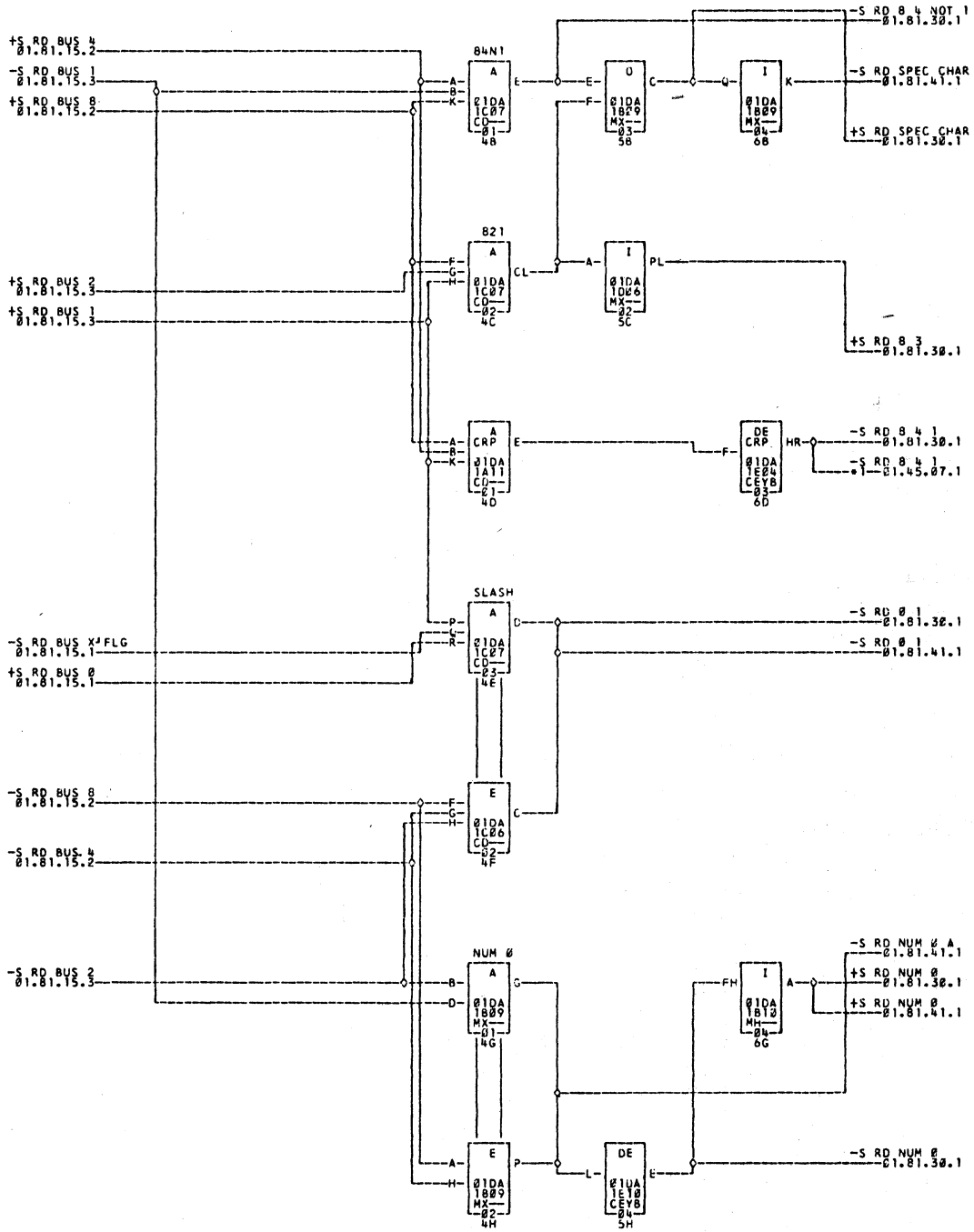
01AXC05

*3-01DXD04

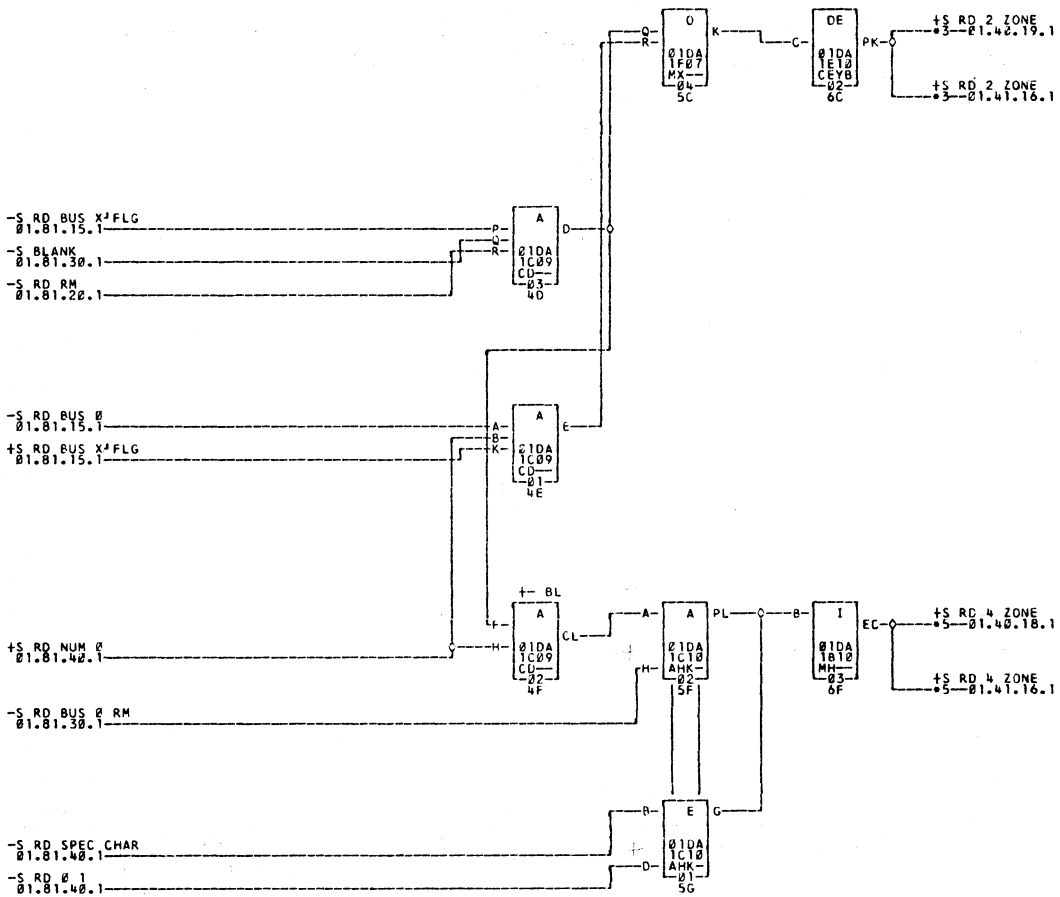
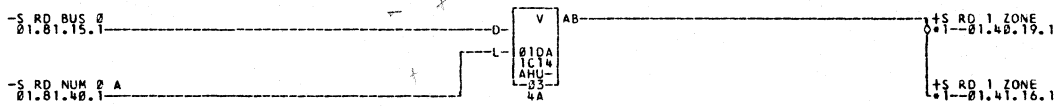
01BXD04

*4-01DXD13

01BXD13



*1-01DXA31 -01RXJ31



•1—01DXE28

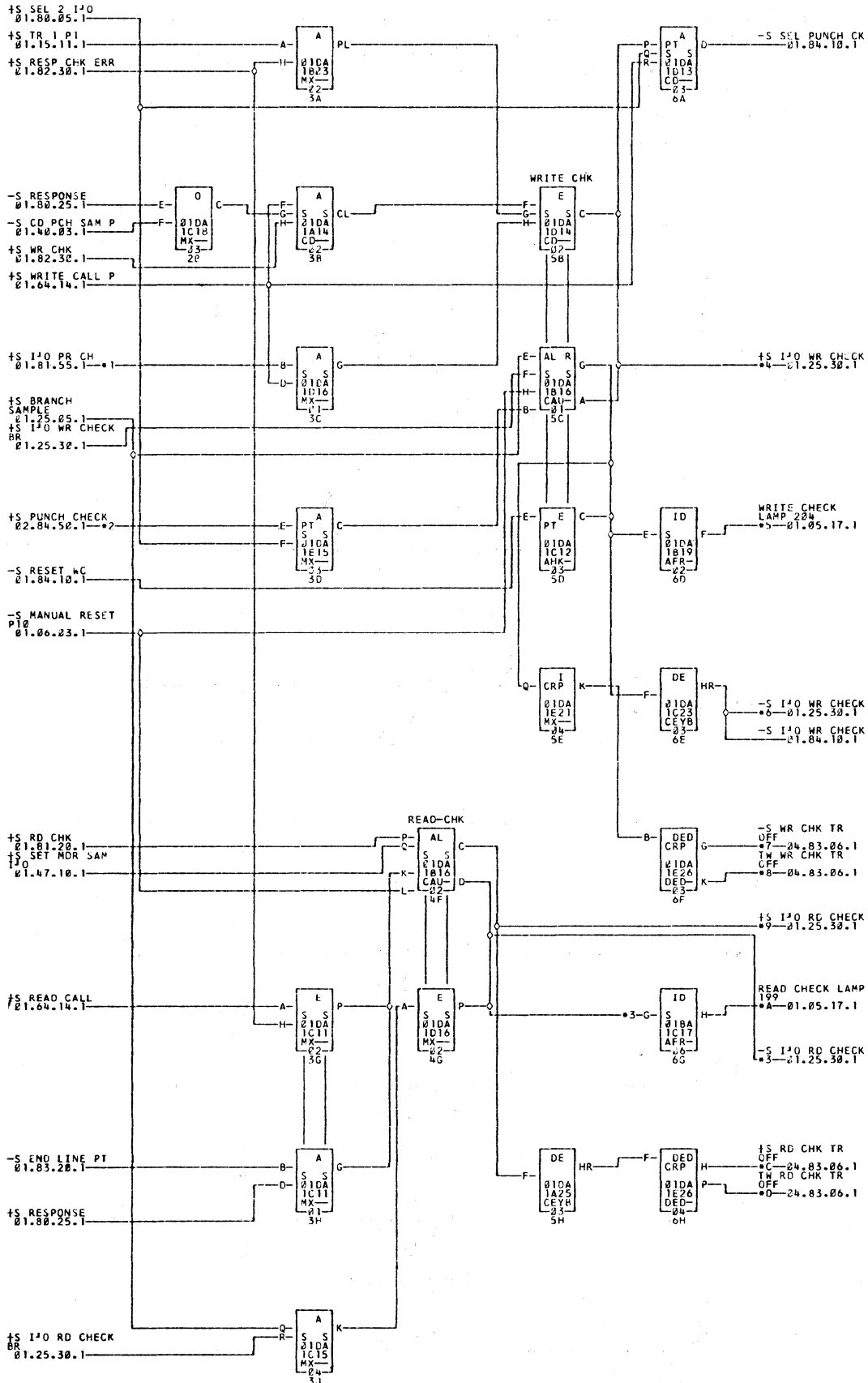
—01AXC28

•3—01DXE27

—01AXC27

•5—01DXE26

—01AXC26



•1—010XC15
•2—018XD09
•3—010W024

•4—01SCA25
•5—010XD22
•6—018XH24

•7—010XF25
•8—010XD18
•9—010XC14

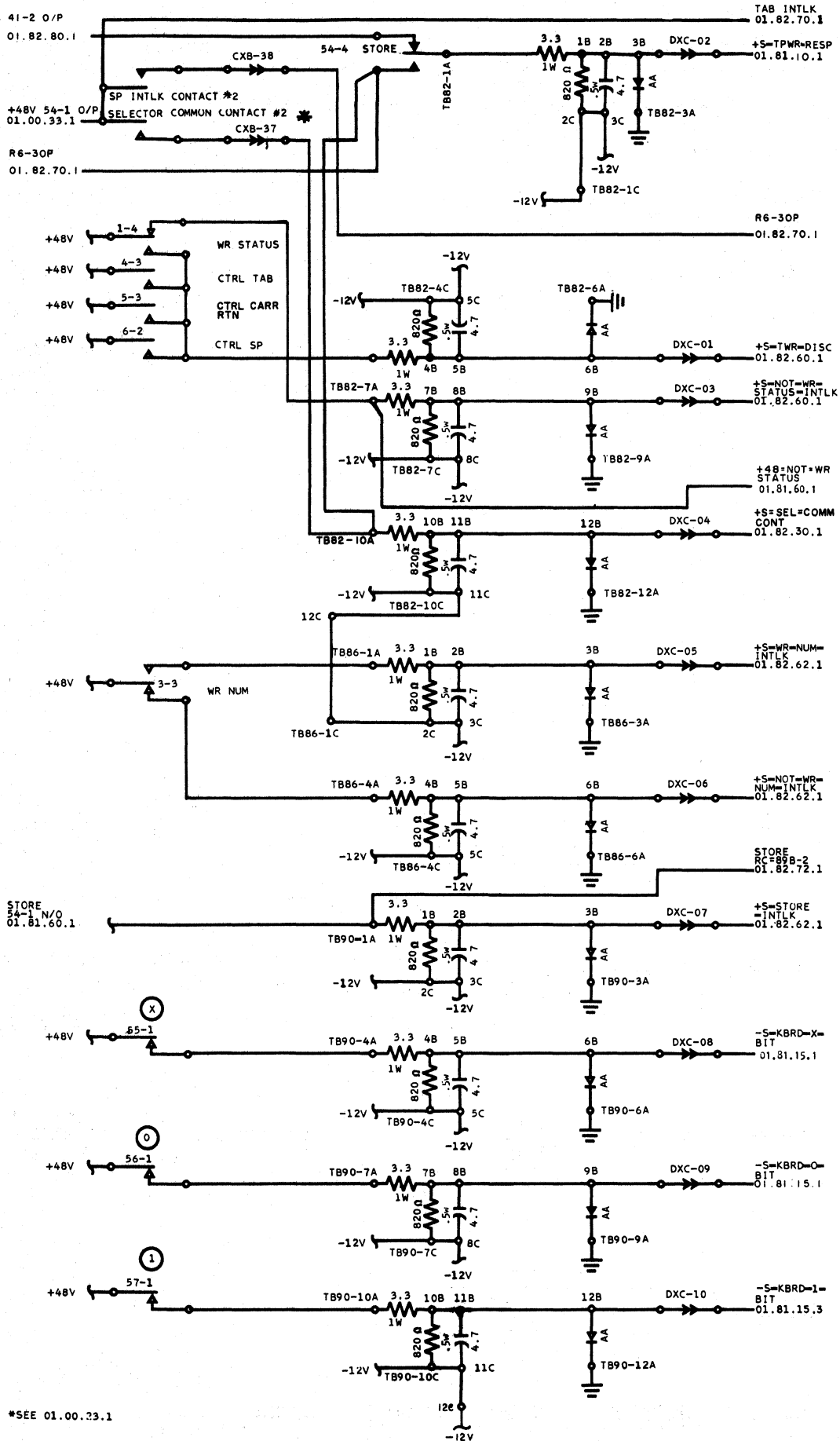
•10—010XD12
•11—018XD16
•12—010WF28

•13—018XD12
•14—010WE29
•15—010WF27

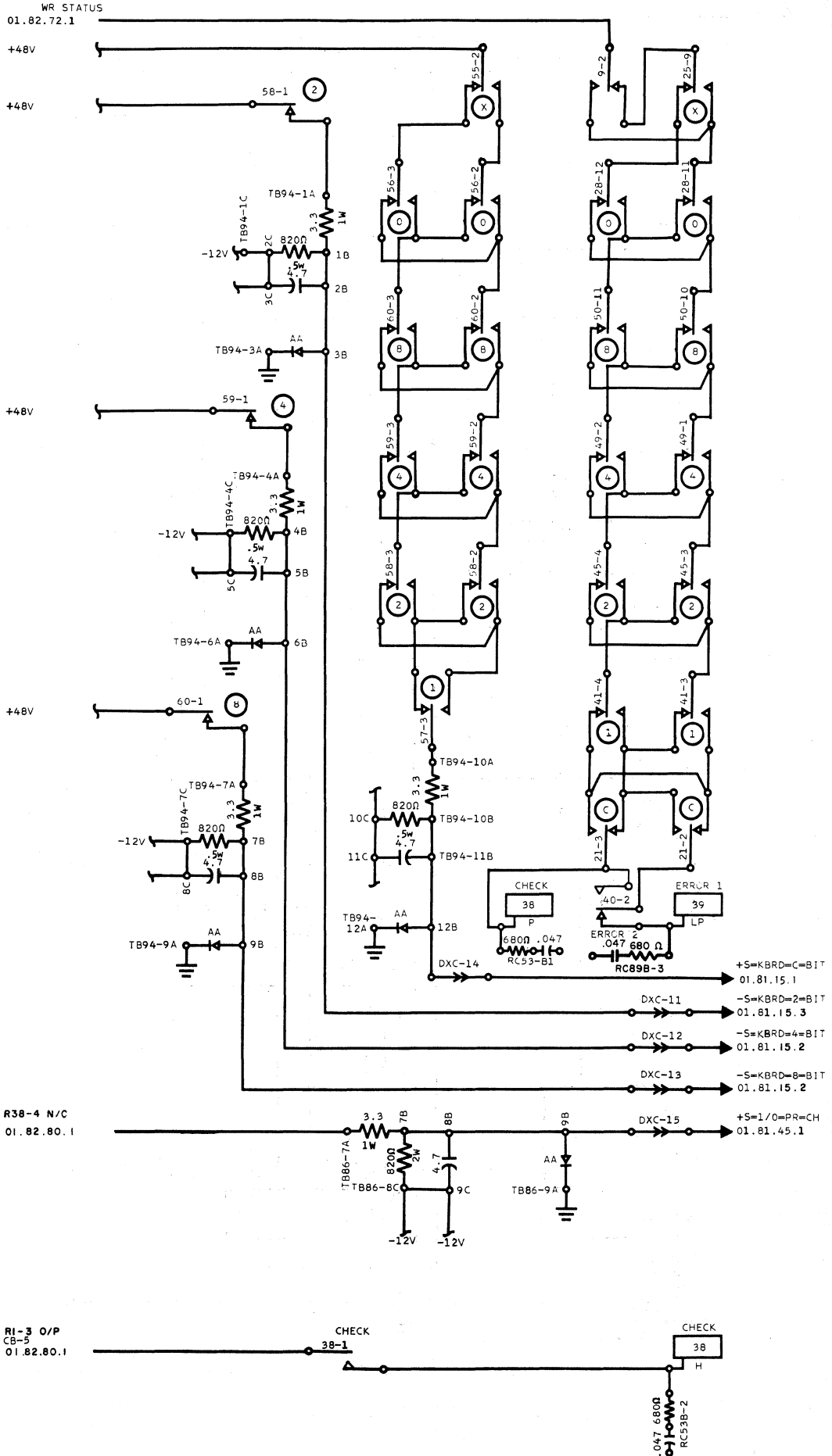
•16—010XD09
•17—010WE27

TYPEWRITER OUTPUT SIGNALS

01.81.50.1



*SEE 01.00.23.1



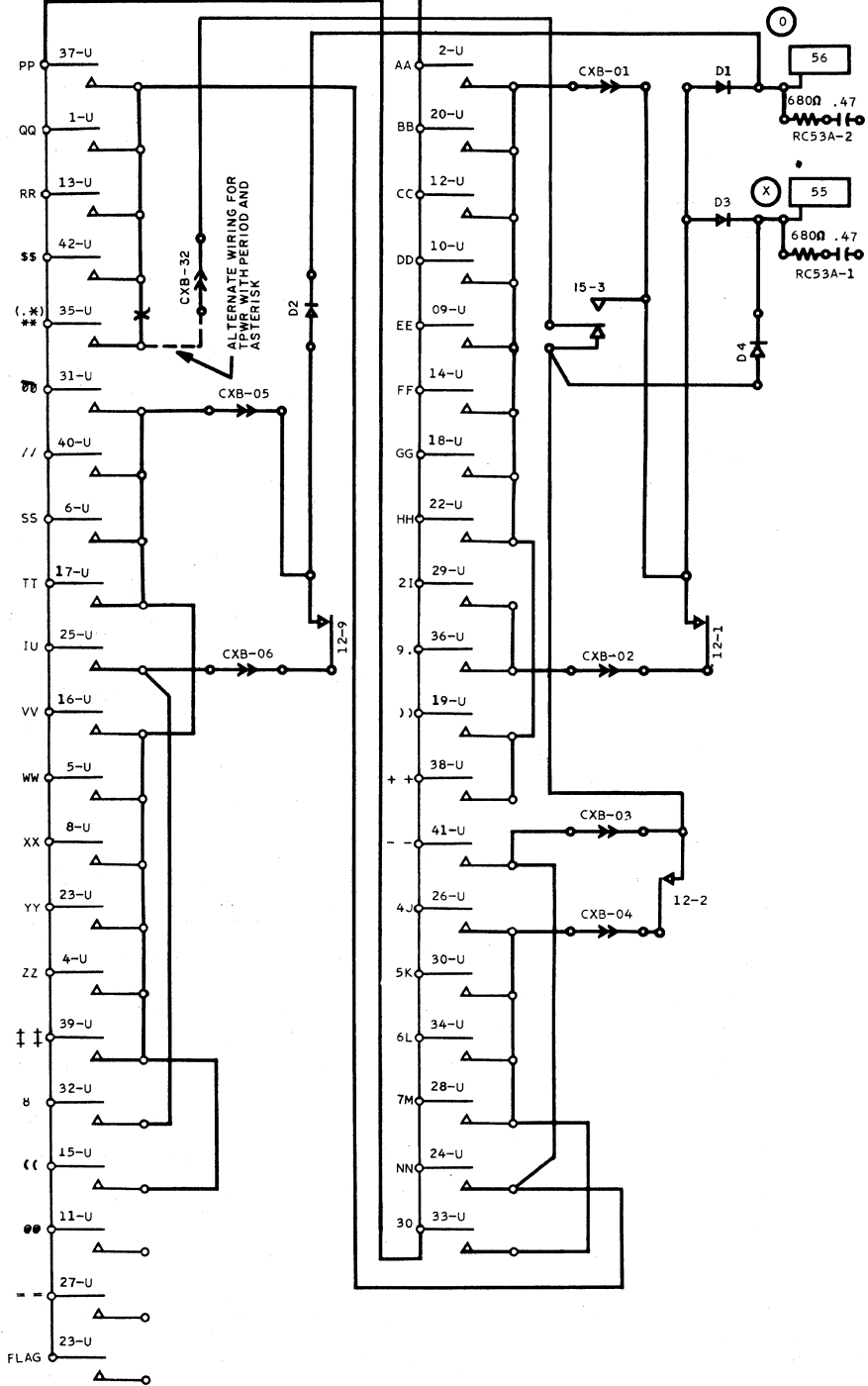
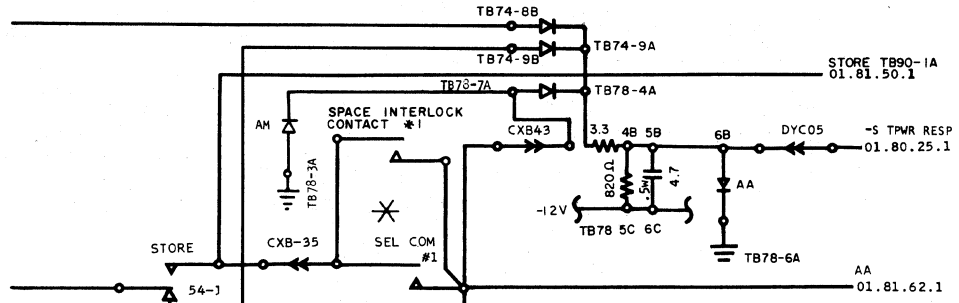
TYPEWRITER CAM CONTACTS
AND CODING

1620

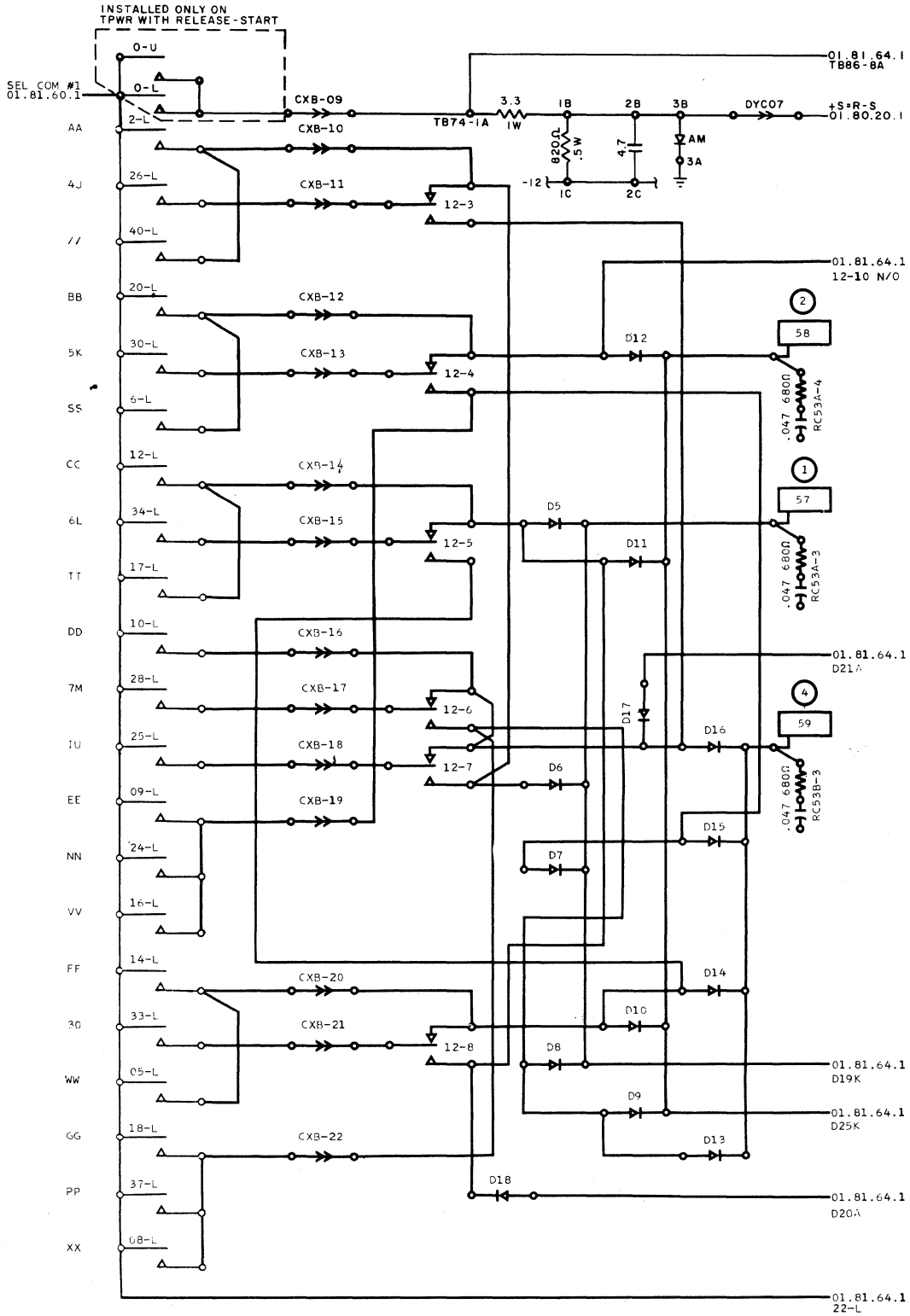
01.81.60.1

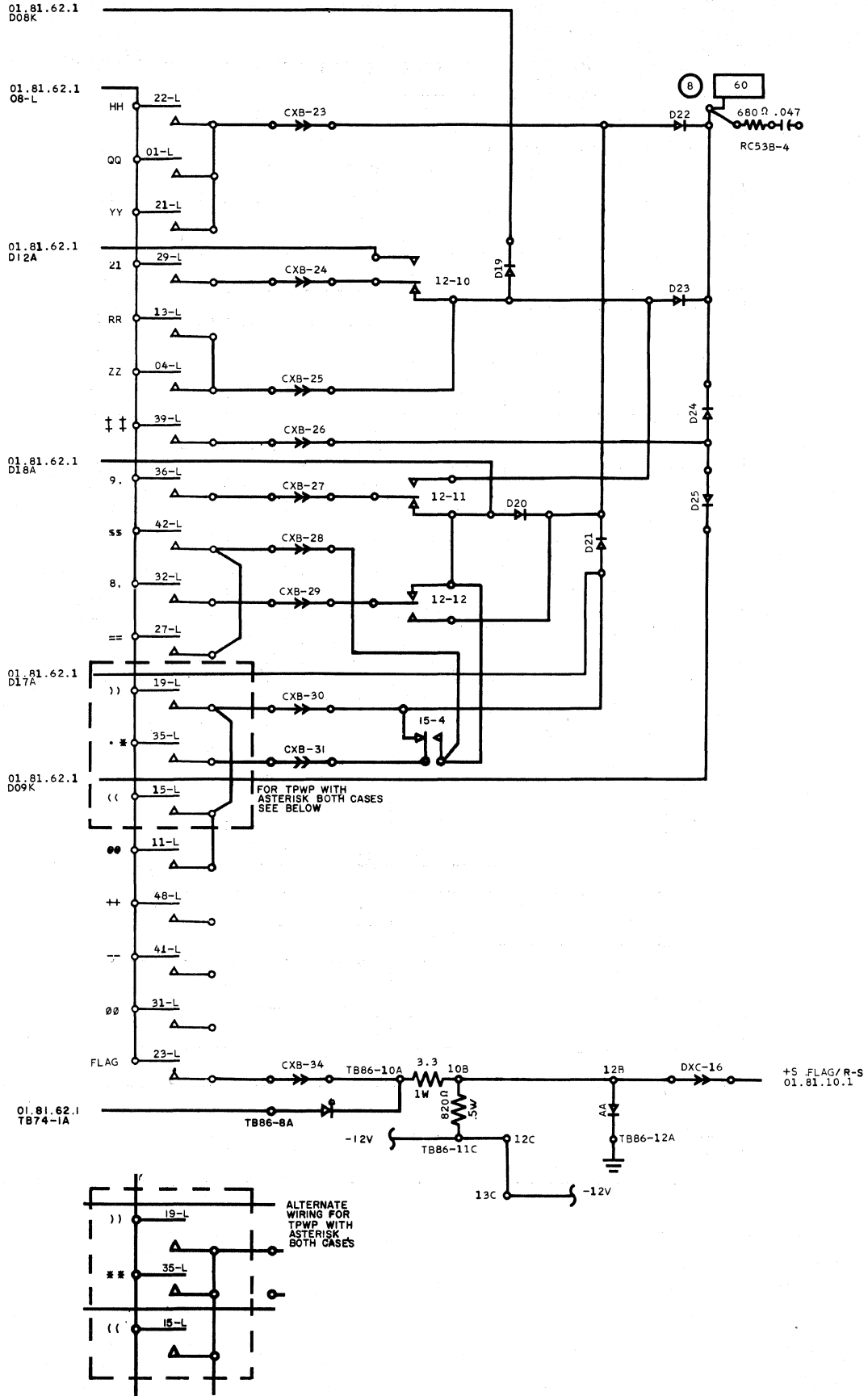
+48=CRCB=3
WR=STATUS
01.82.75.1

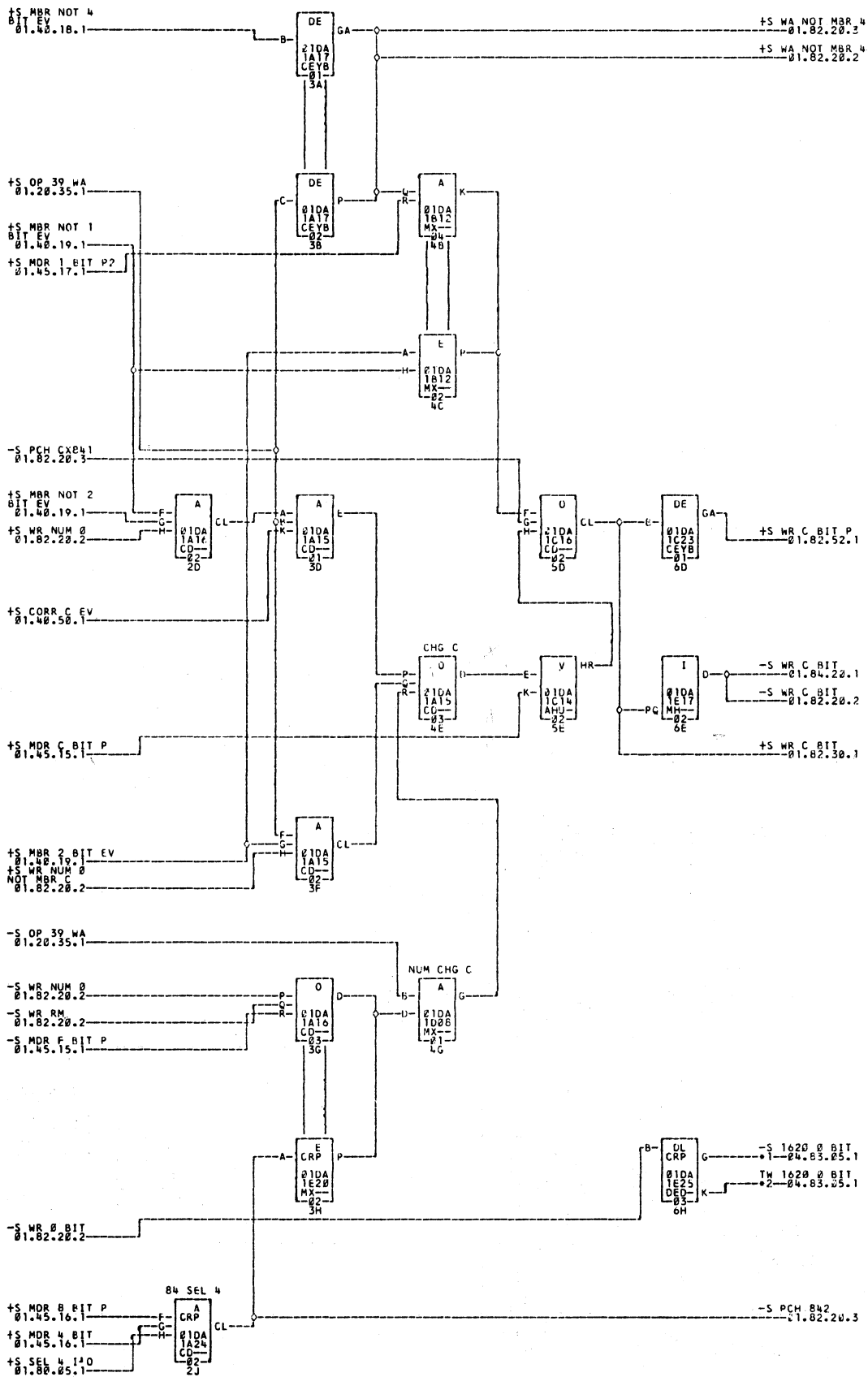
+48=NOT=WR
STATUS
01.81.50.1



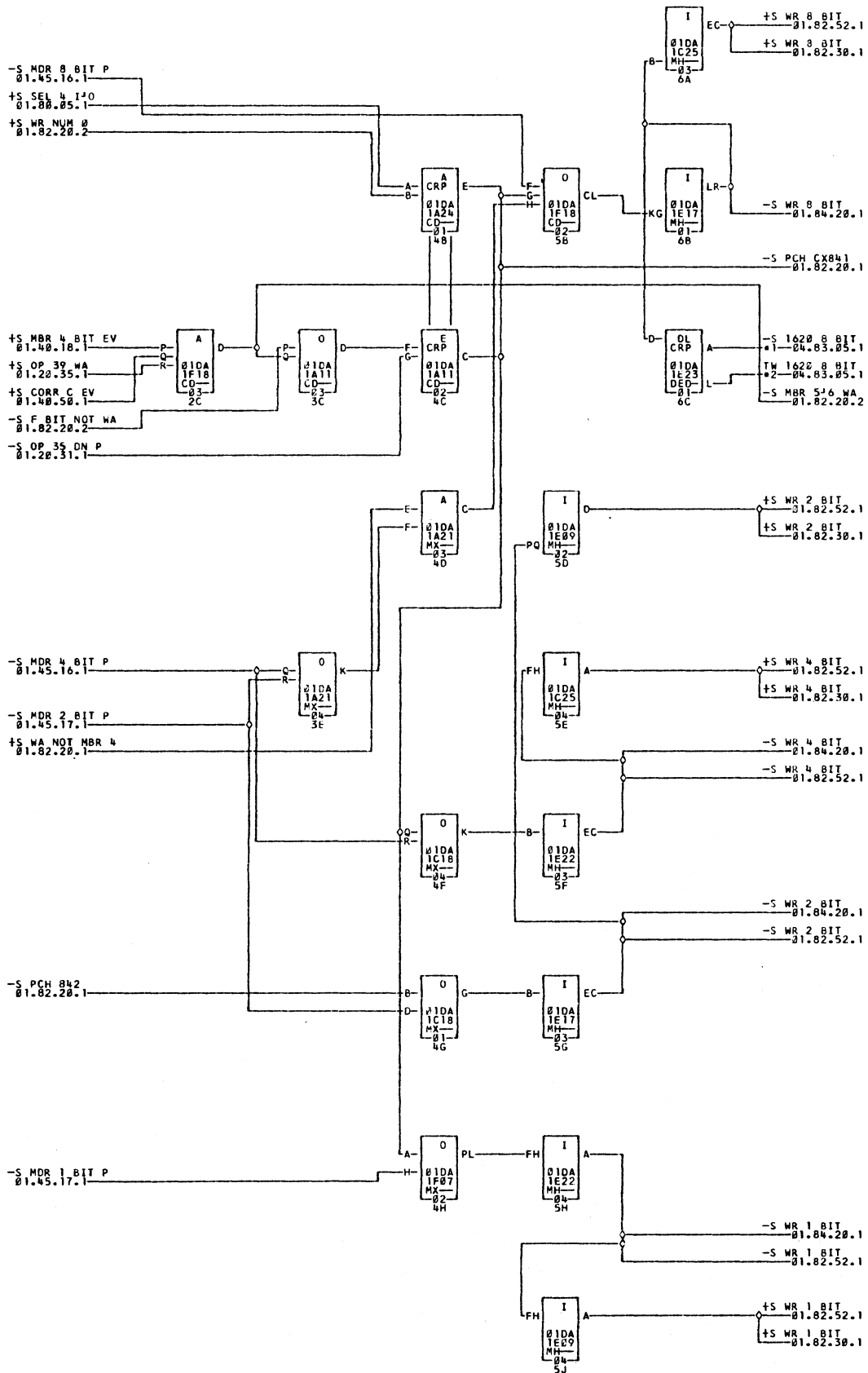
* SEE 01.00.23.1





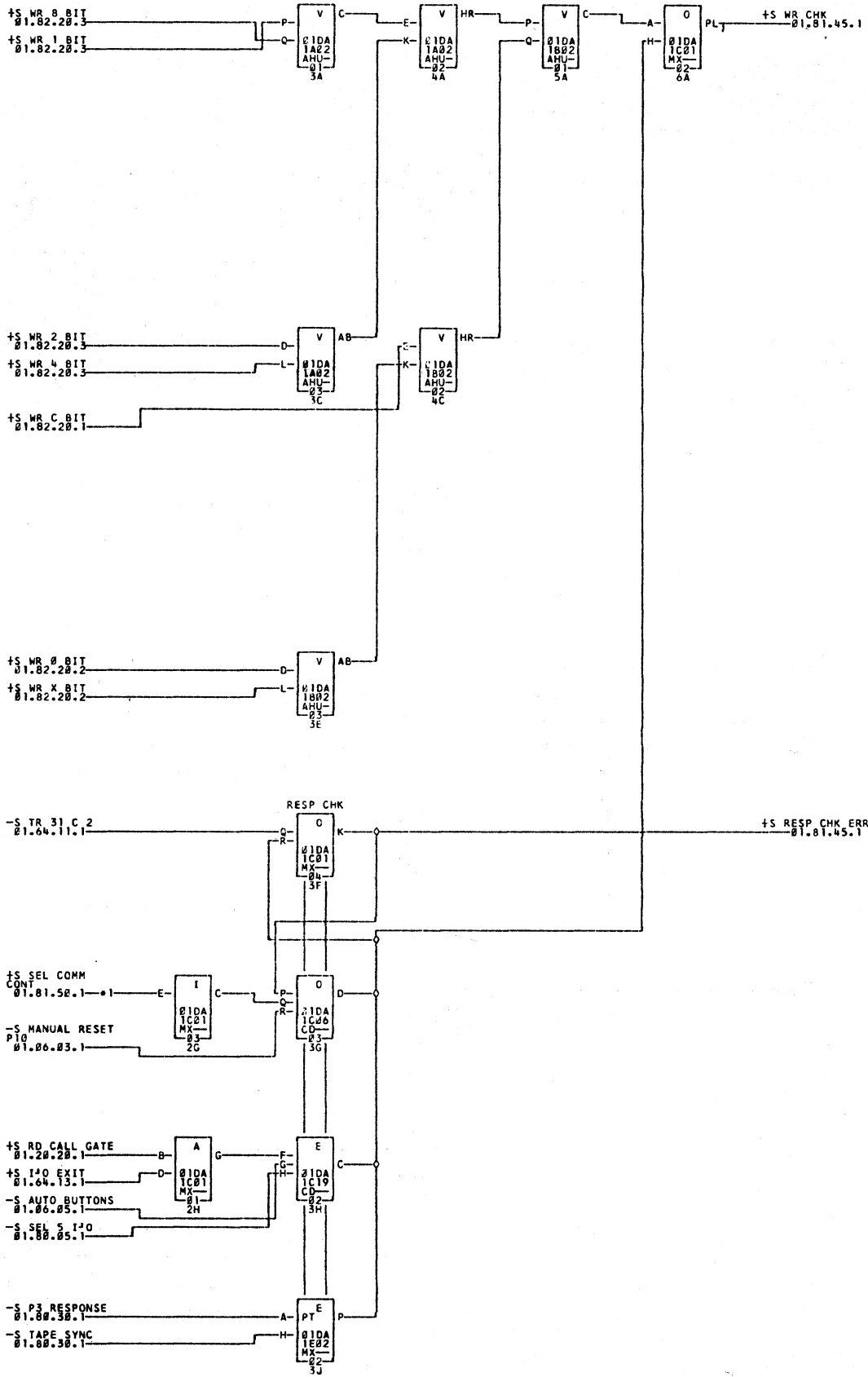


*1--01DNE04 *2--01DNE03

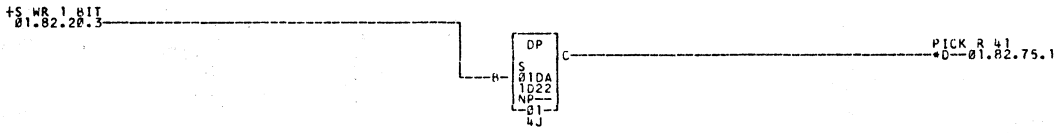
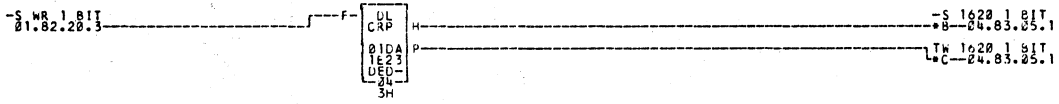
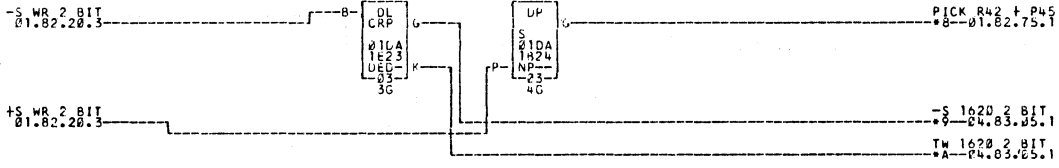
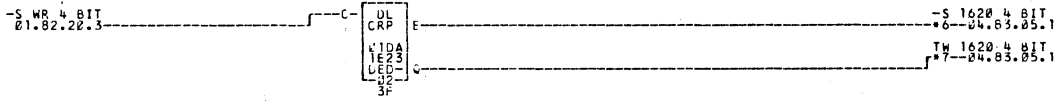
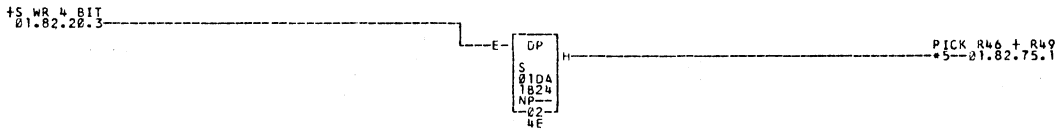
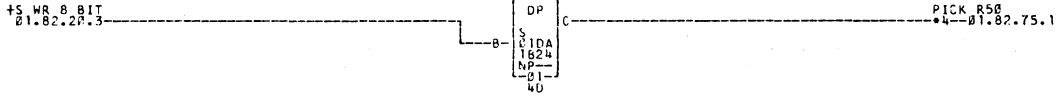
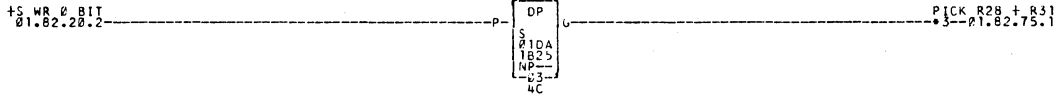
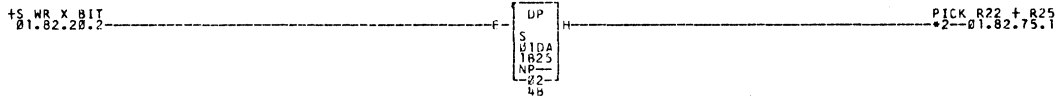
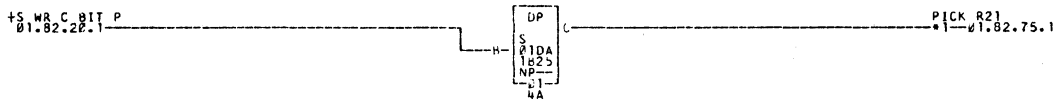


•1—01DWE08

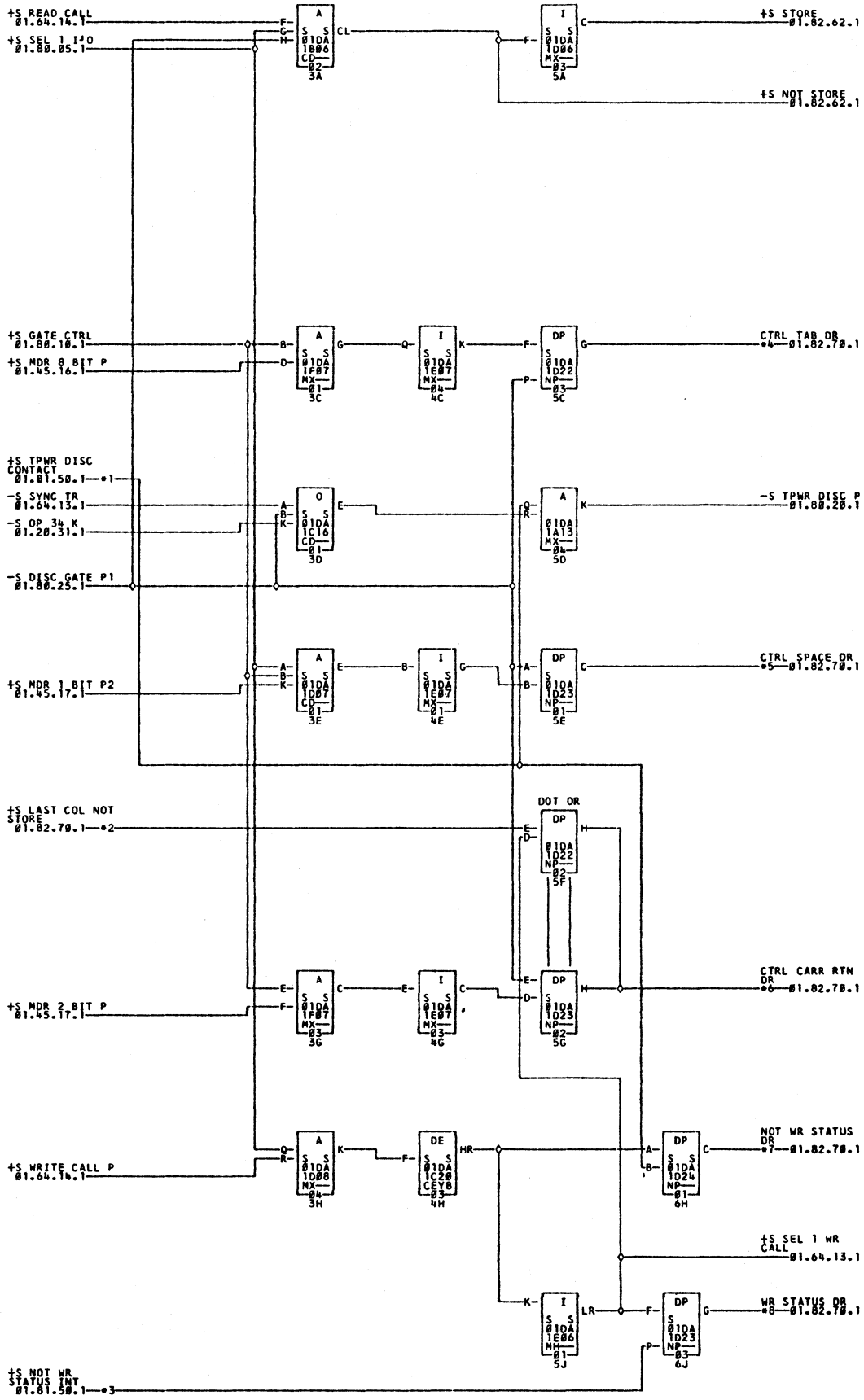
•2—01DWE07



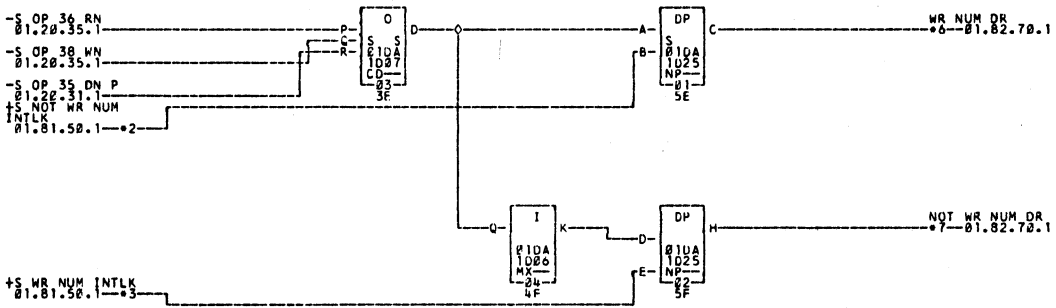
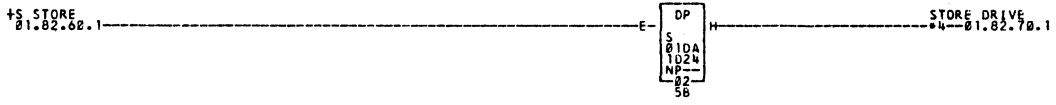
•1—01DXC04



- *1--01DXC32
- *2--01DXC27
- *3--01DXC26
- *4--01DXC31
- *5--01DXC30
- *6--01DWE18
- *7--01DWE09
- *8--01DXC29
- *9--01DWE12
- *A--01DWE11
- *B--01DWE14
- *C--01DWE13
- *D--01DXC28



- 1--#1DXC01
- 2--#1DNC06
- 3--#1DXC03
- 4--#1DXC21
- 5--#1DXC25
- 6--#1DXC23
- 7--#1DXC20
- 8--#1DXC19



*1--01DXC07
*7--01DXC24

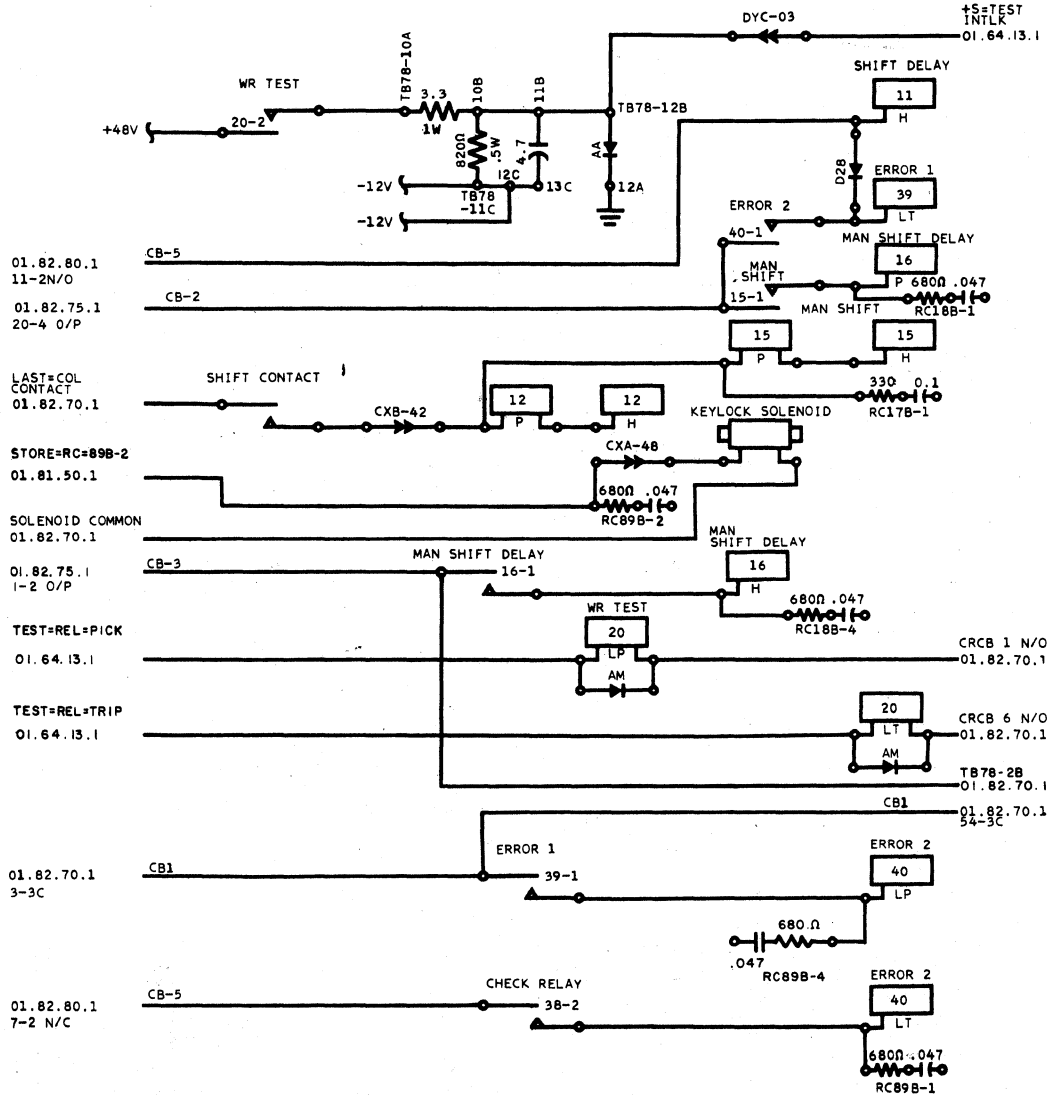
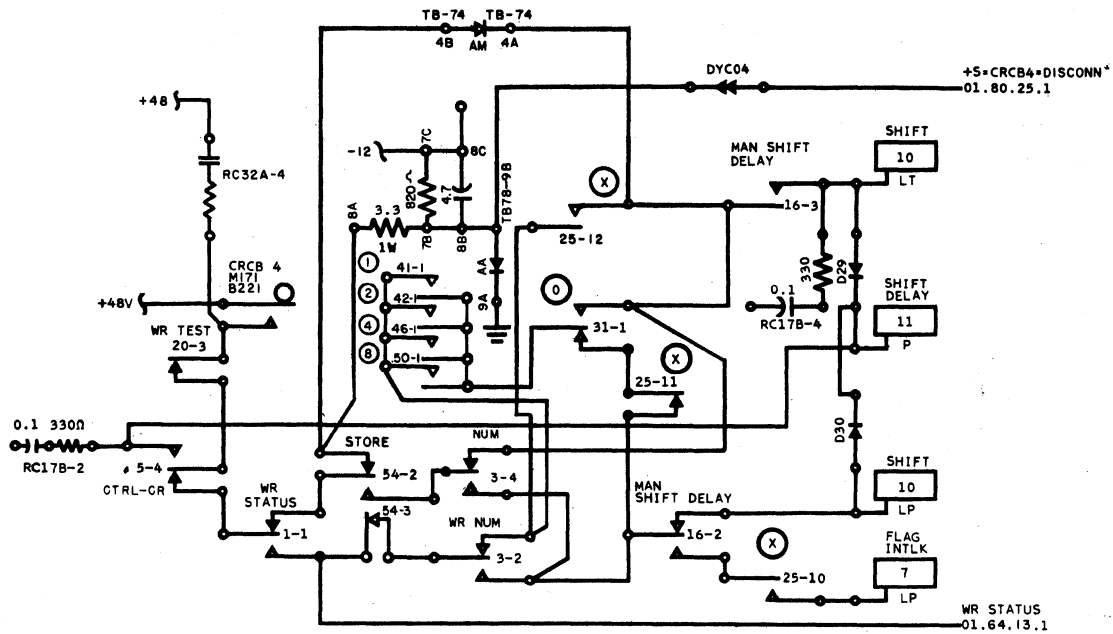
*2--01DXC06

*3--01DXC05

*4--01DXC17

*5--01DXC18

*6--01DXC22



01.82.80.1
11-2N/O
01.82.75.1
20-4 O/P

LAST=COL
CONTACT
01.82.70.1

STORE=RC=89B-2
01.81.50.1

SOLENOID COMMON
01.82.70.1

01.82.75.1
1-2 O/P

TEST=REL=PICK
01.64.13.1

TEST=REL=TRIP
01.64.13.1

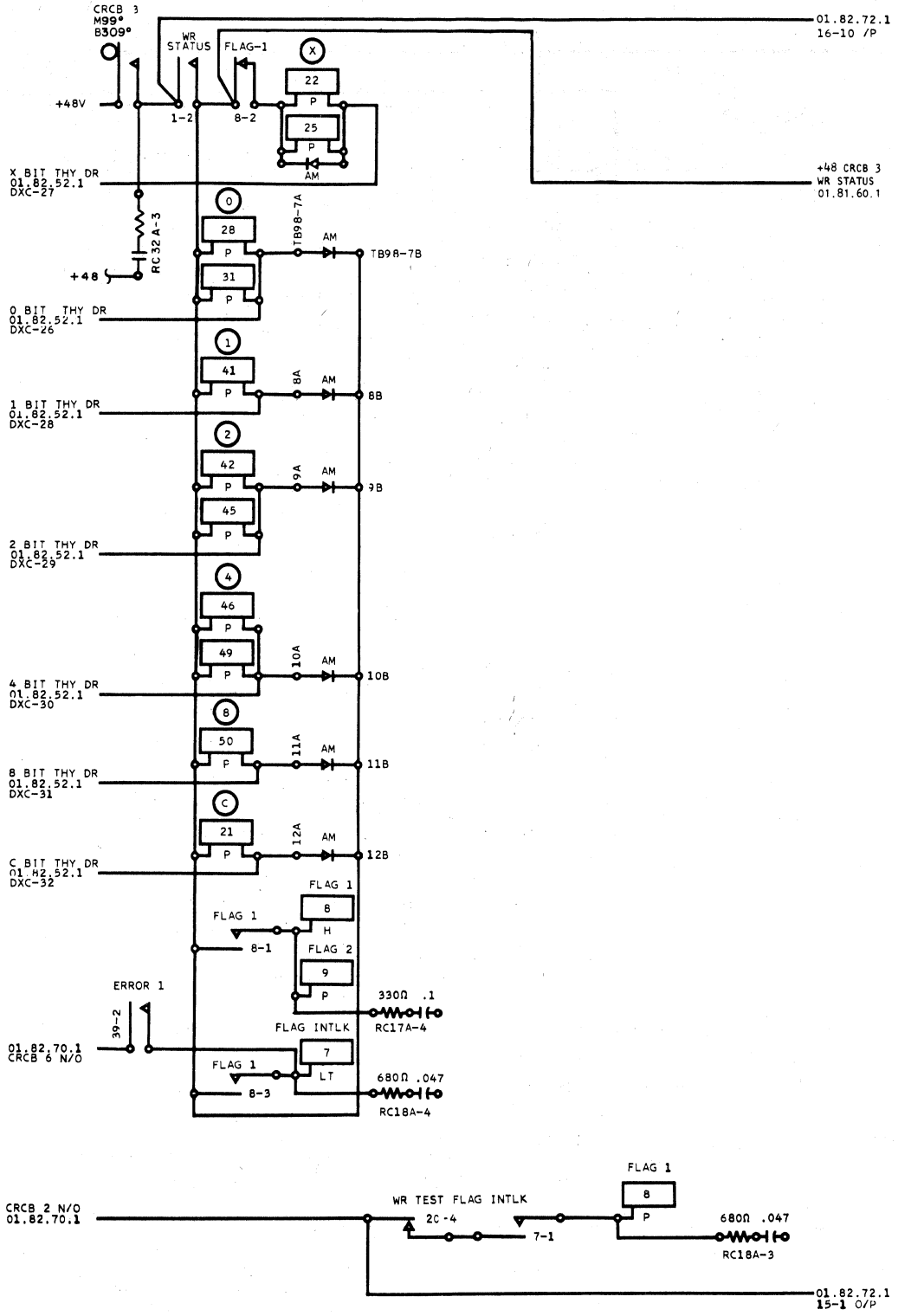
01.82.70.1
3-3C

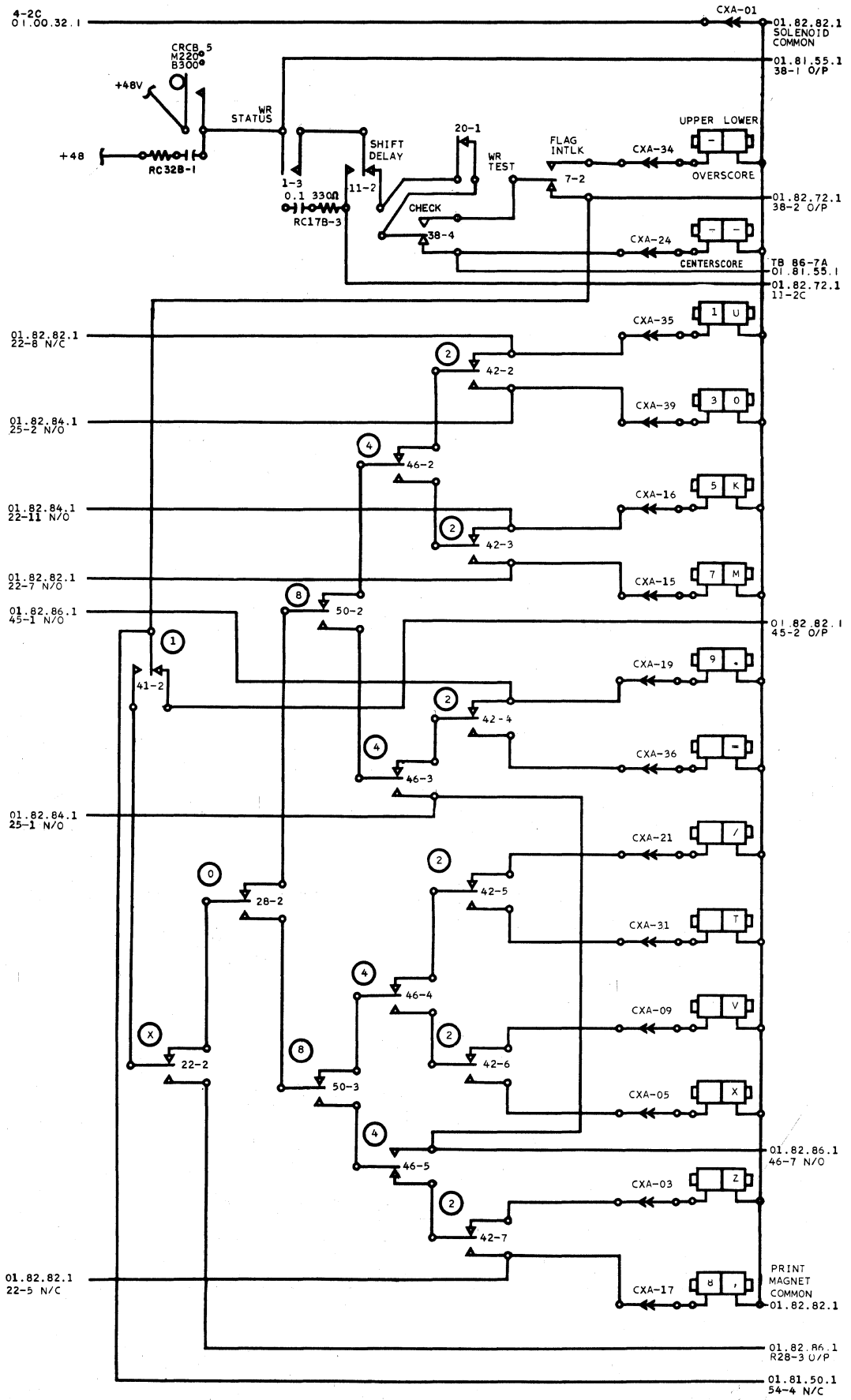
01.82.80.1
7-2 N/C

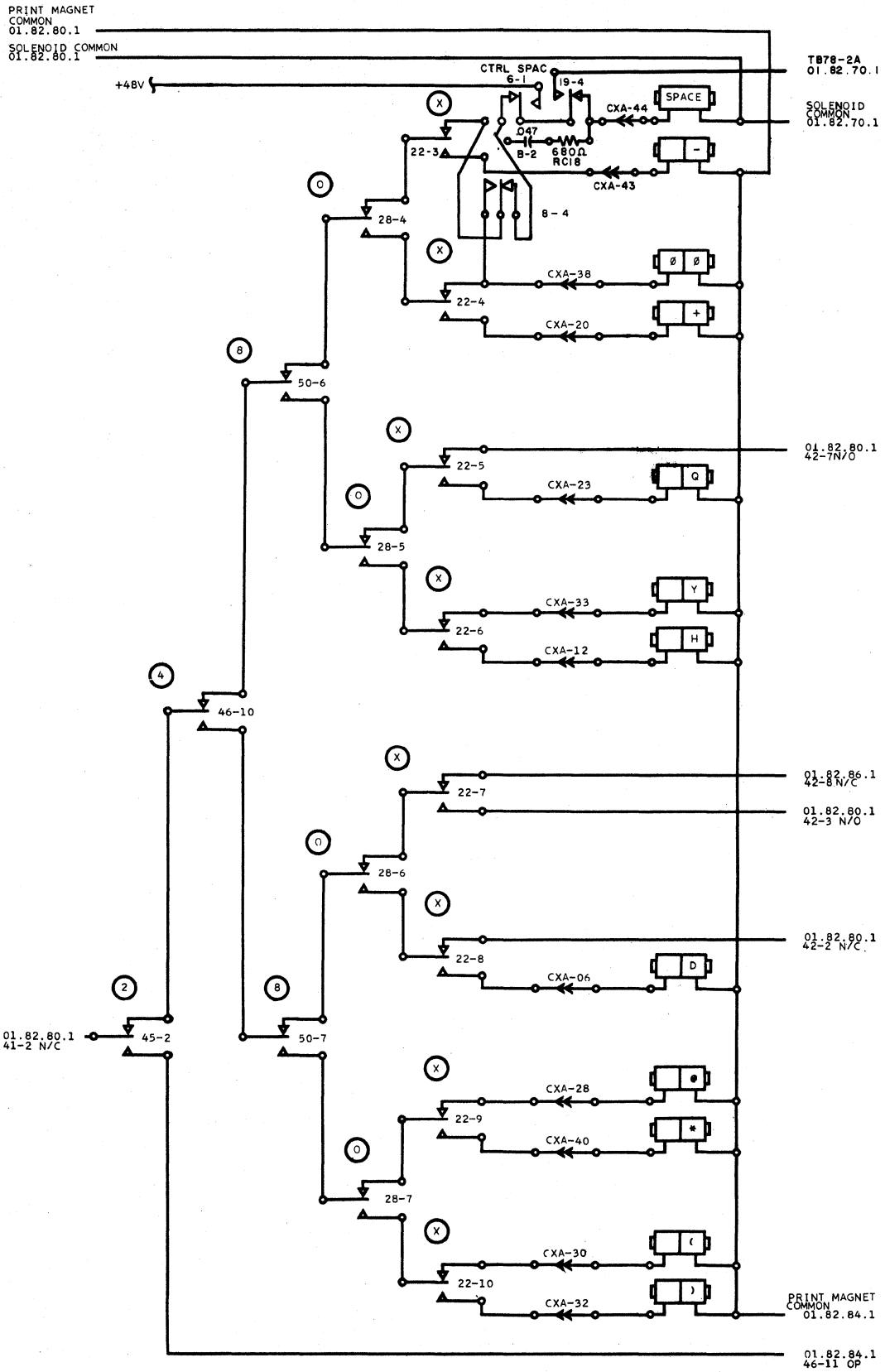
CRCB 1 N/O
01.82.70.1

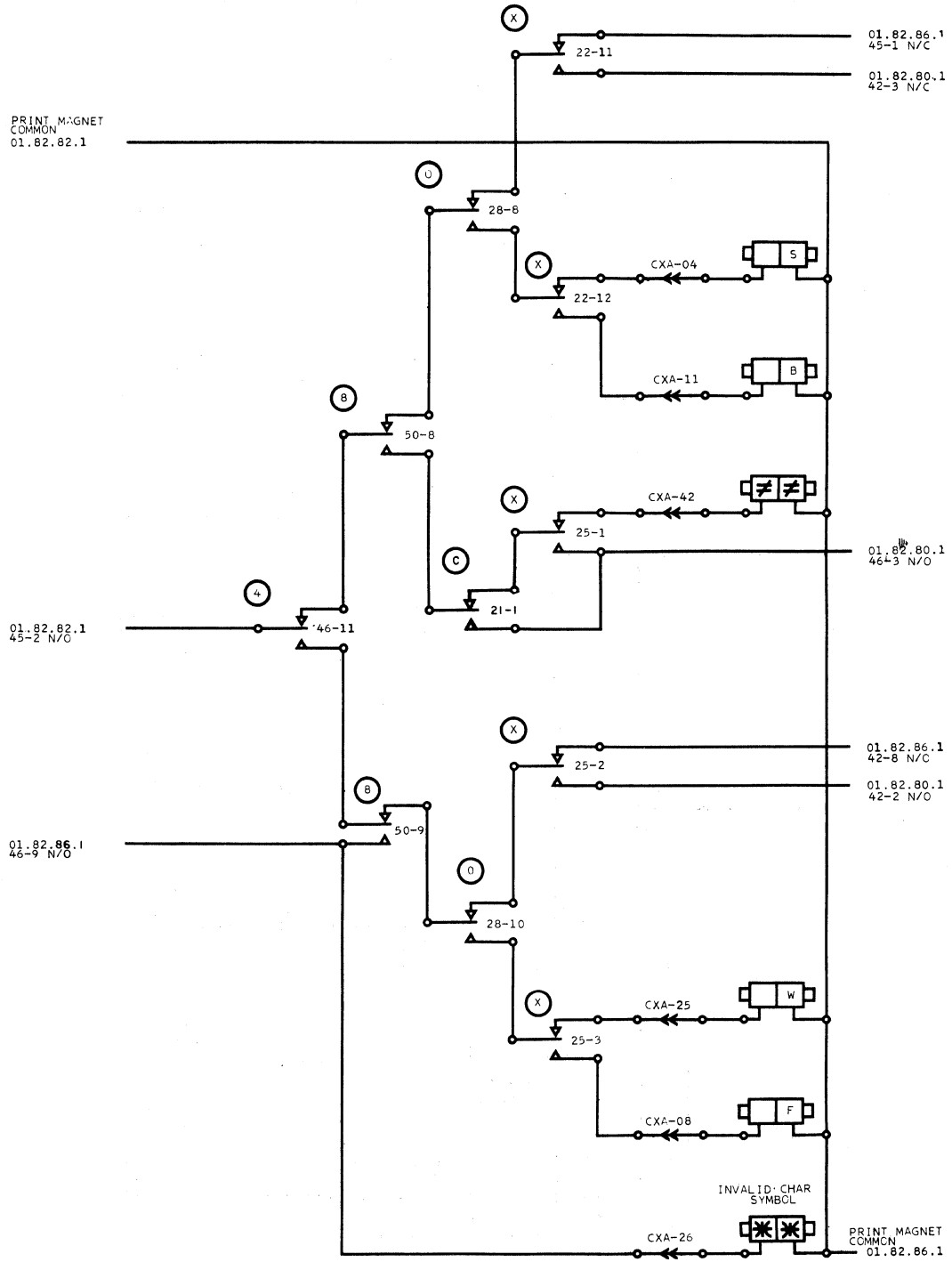
CRCB 6 N/O
01.82.70.1

01.82.70.1
34-3C









PRINT MAGNET
COMMON
01.82.84.1

PRINT

01.82.82.1
22-7 N/C

01.82.84.1
25-2 N/C

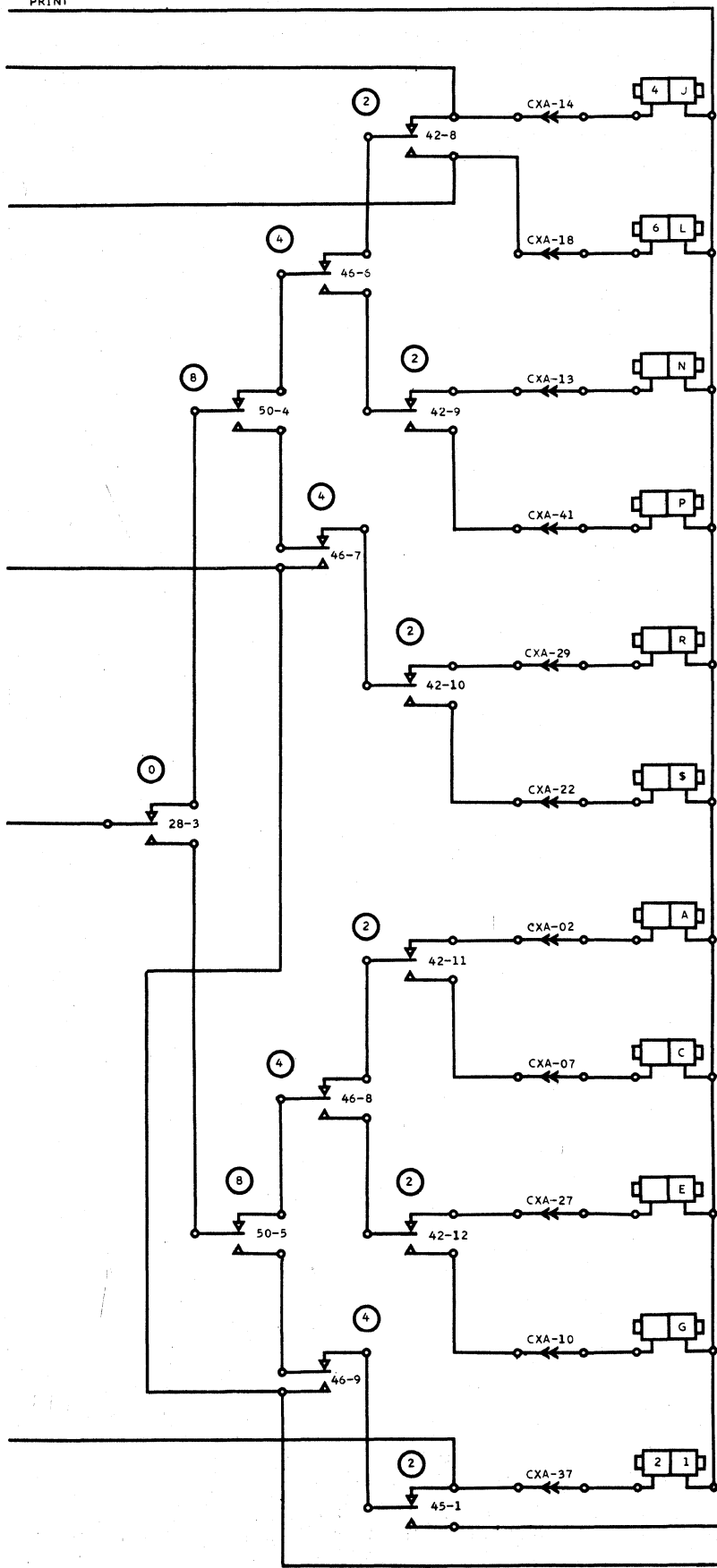
01.82.80.1
46-5 N/C

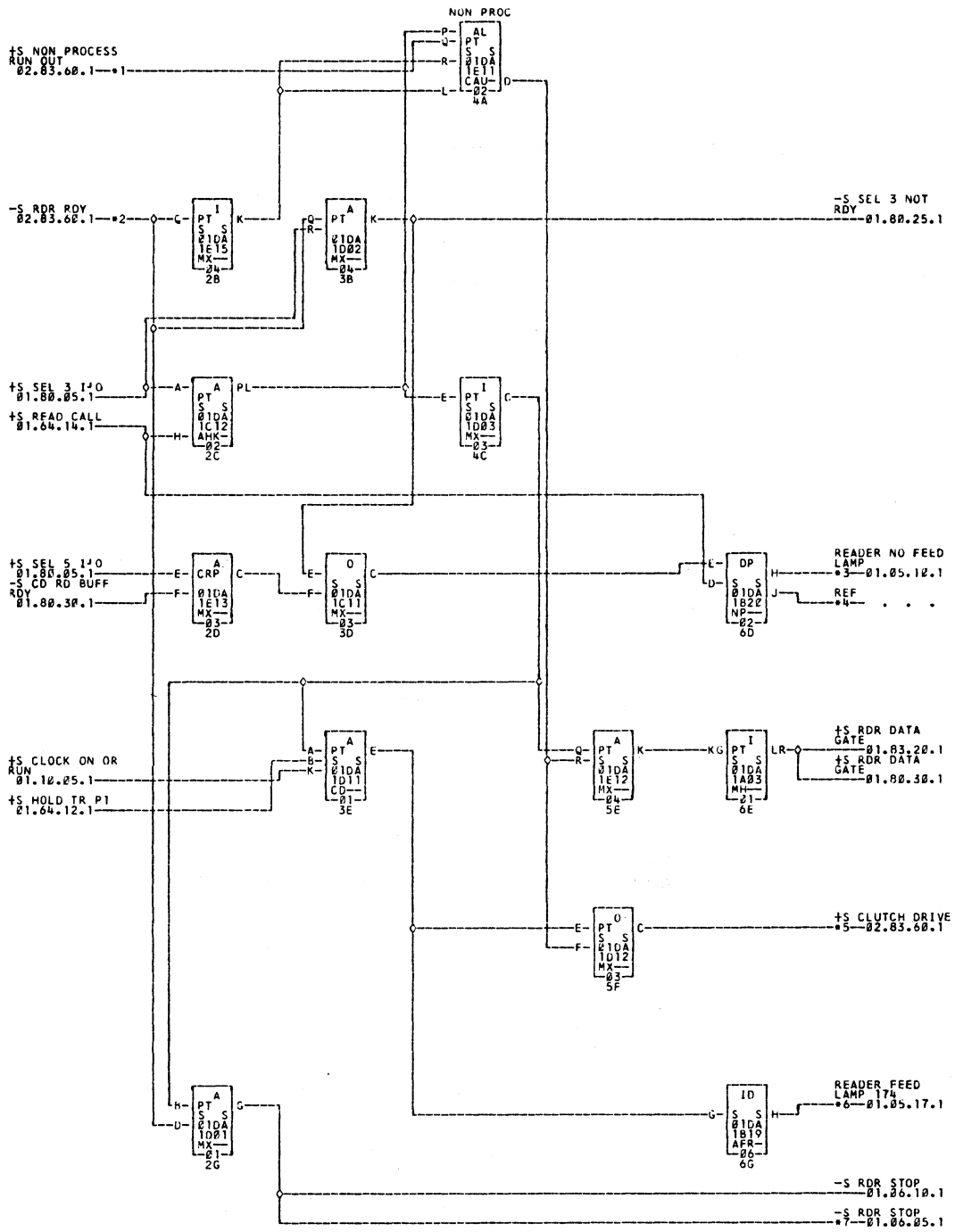
01.82.80.1
22-2 N/O

01.82.84.1
22-11 N/C

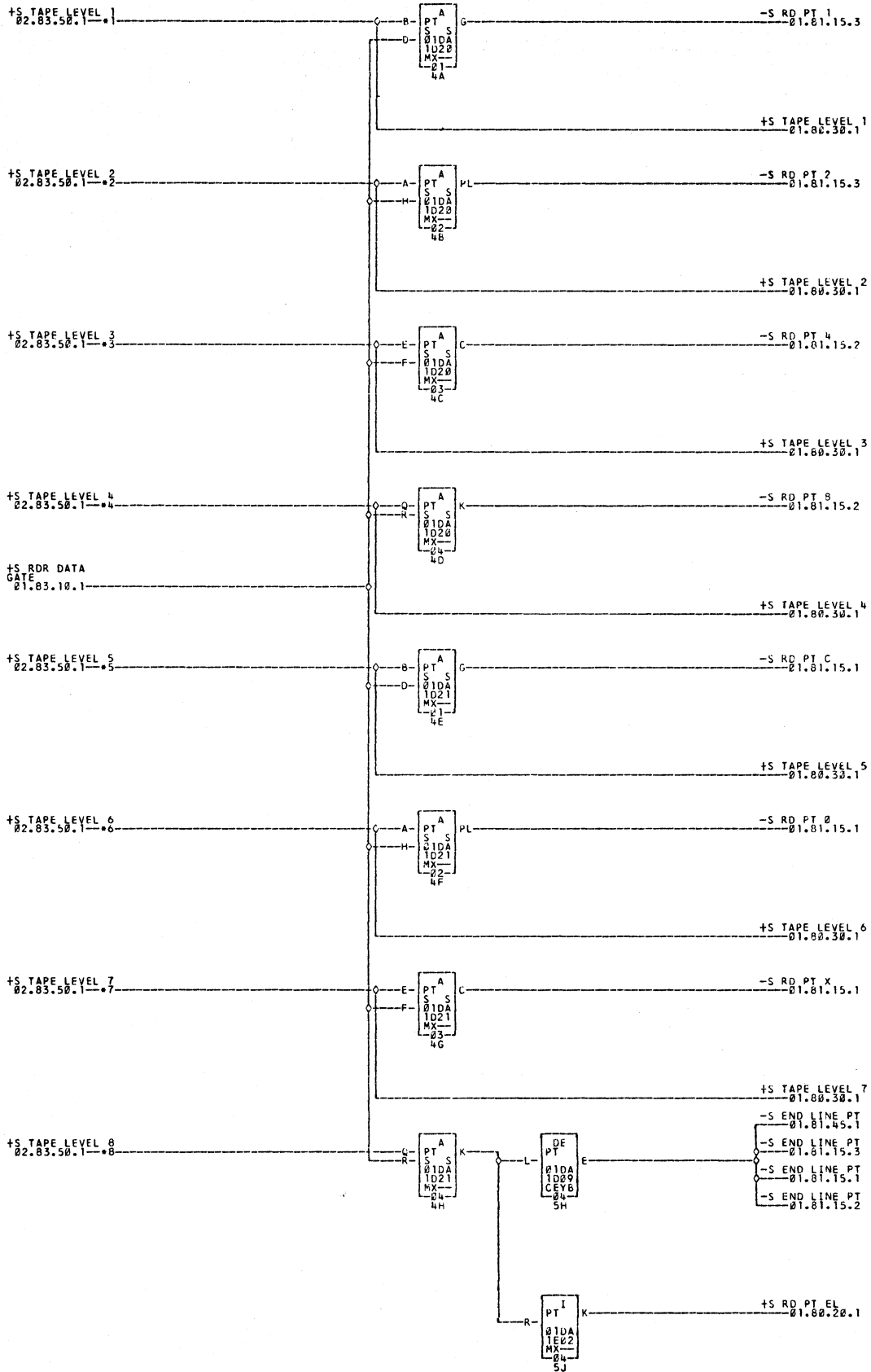
01.82.80.1
42-4 N/C

01.82.84.1
50-9 N/O

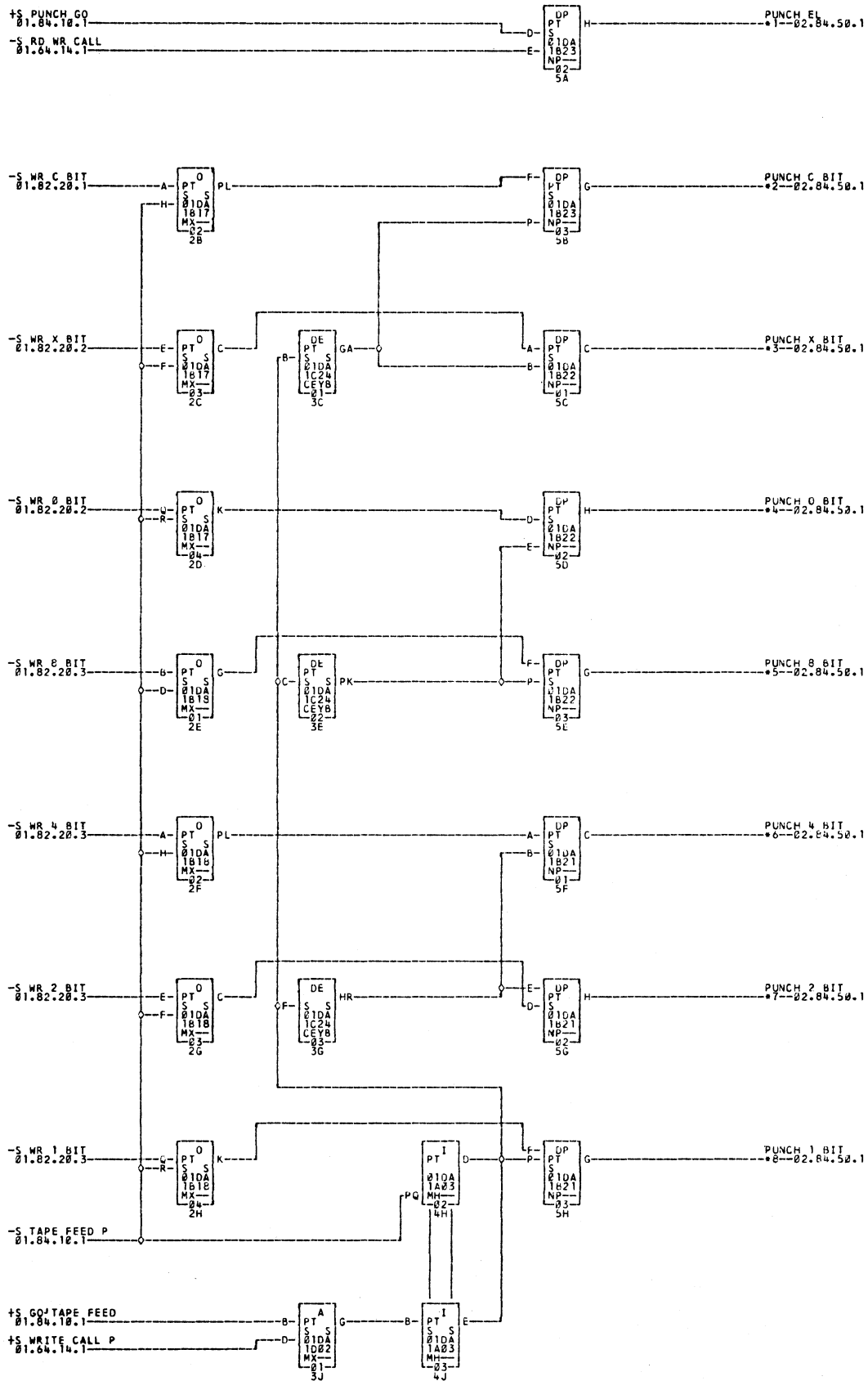




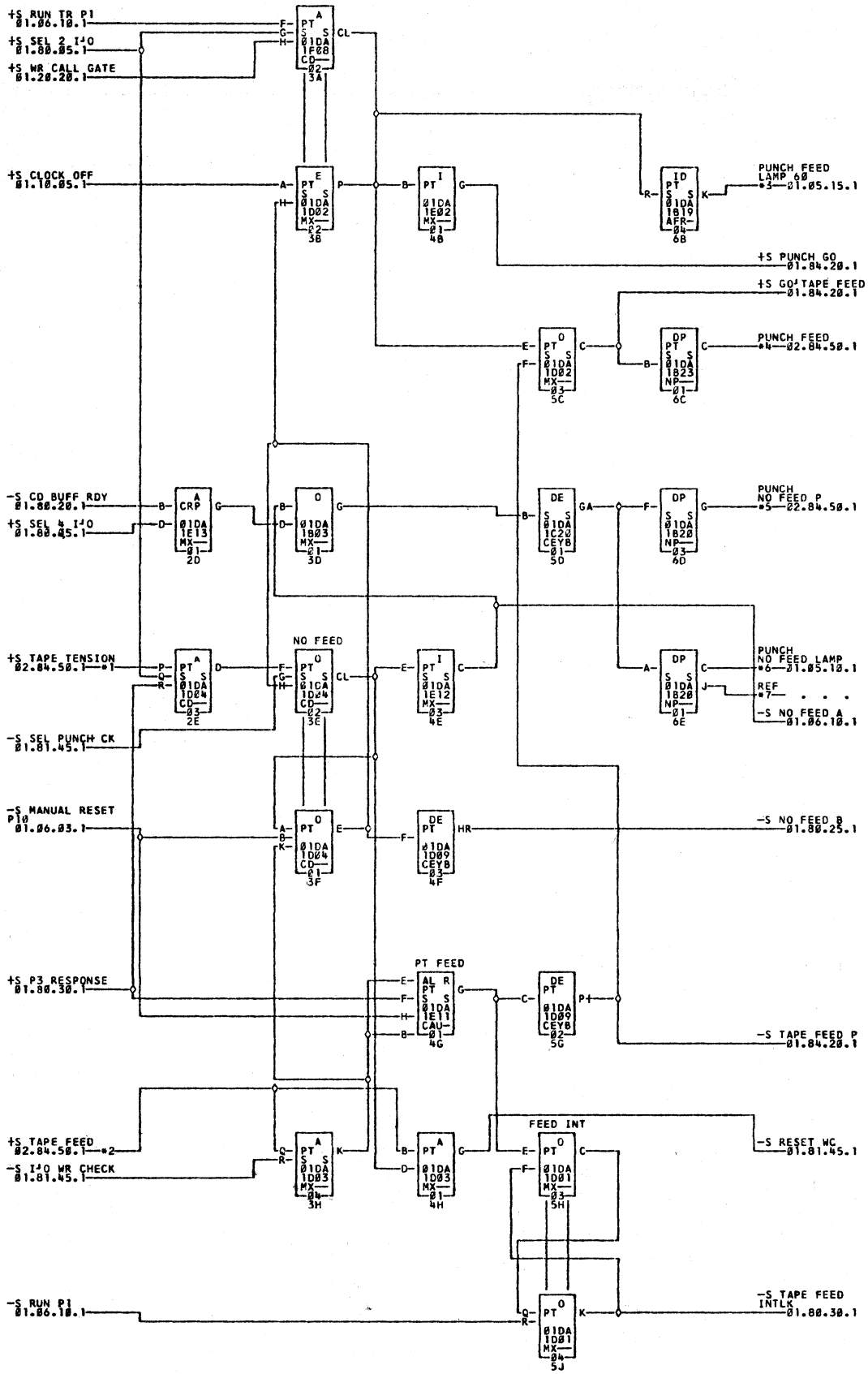
*1-01SCA20 01DXF20 *2-01SCA22 01DXF22 *3-01DWB13 01DXH01
 *4-01DXF21 01SCA21 *6-01DX020 *7-01DW001 *5-01DWB14



- *1--01SCA11 ---01DXF11 *2--01SCA12 ---01DXF12 *3--01SCA13 ---01DXF13
- *4--01SCA14 ---01DXF14 *5--01SCA15 ---01DXF15 *6--01SCA16 ---01DXF16
- *7--01SCA17 ---01DXF17 *8--01SCA18 ---01DXF18



- *1--01DXF01 01SCA01 *2--01DXF02 01SCA02 *3--01DXF03 01SCA03
- *4--01DXF04 01SCA04 *5--01DXF05 01SCA05 *6--01DXF06 01SCA06
- *7--01DXF07 01SCA07 *8--01DXF08 01SCA08



*1—01SCA23
 —01SCA09

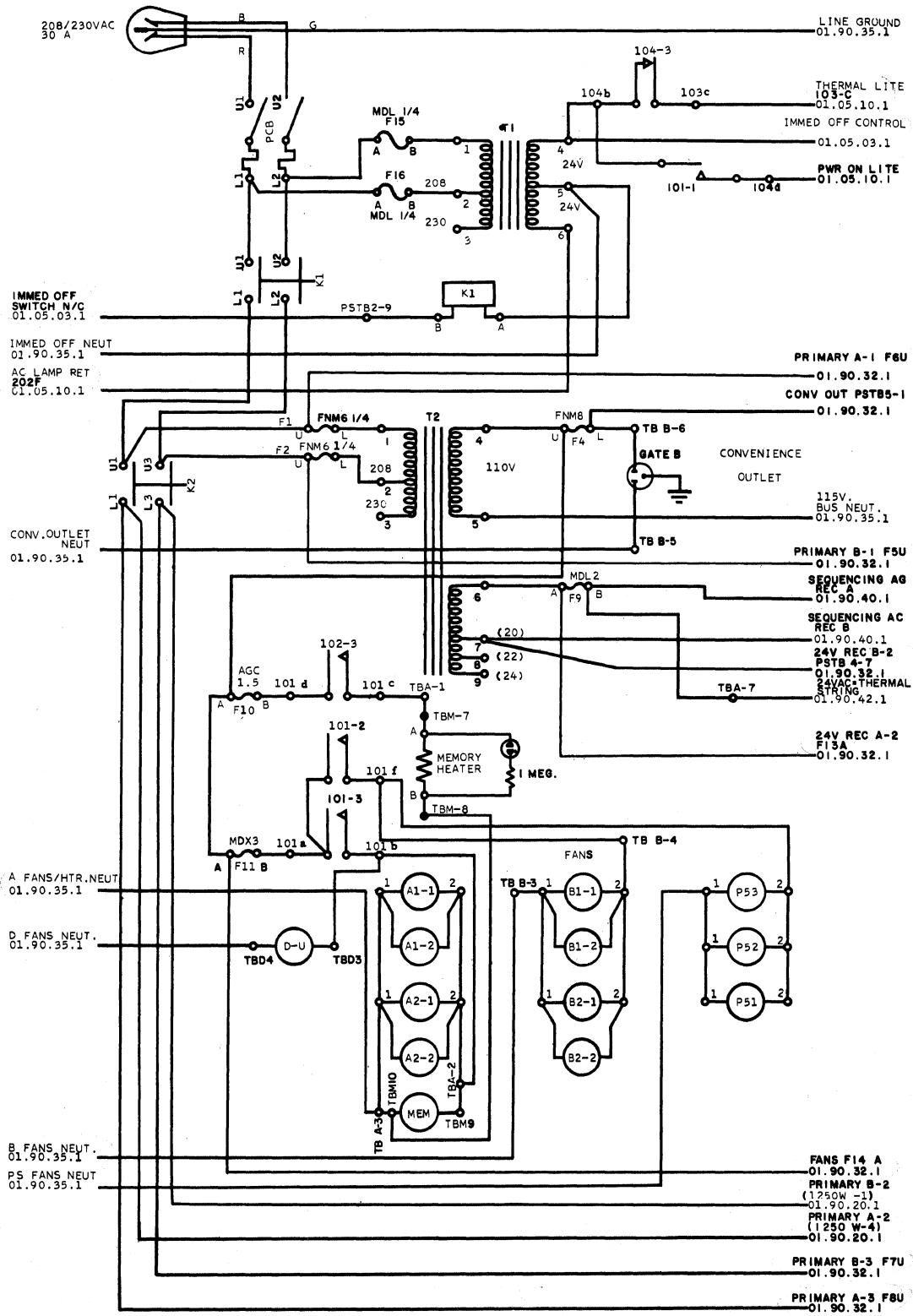
—01DXF23
 *5—01DXF10

*2—01SCA27
 —01SCA10

—01DXF27
 *6—01DW811

*3—01DXD10
 *7—01DW812

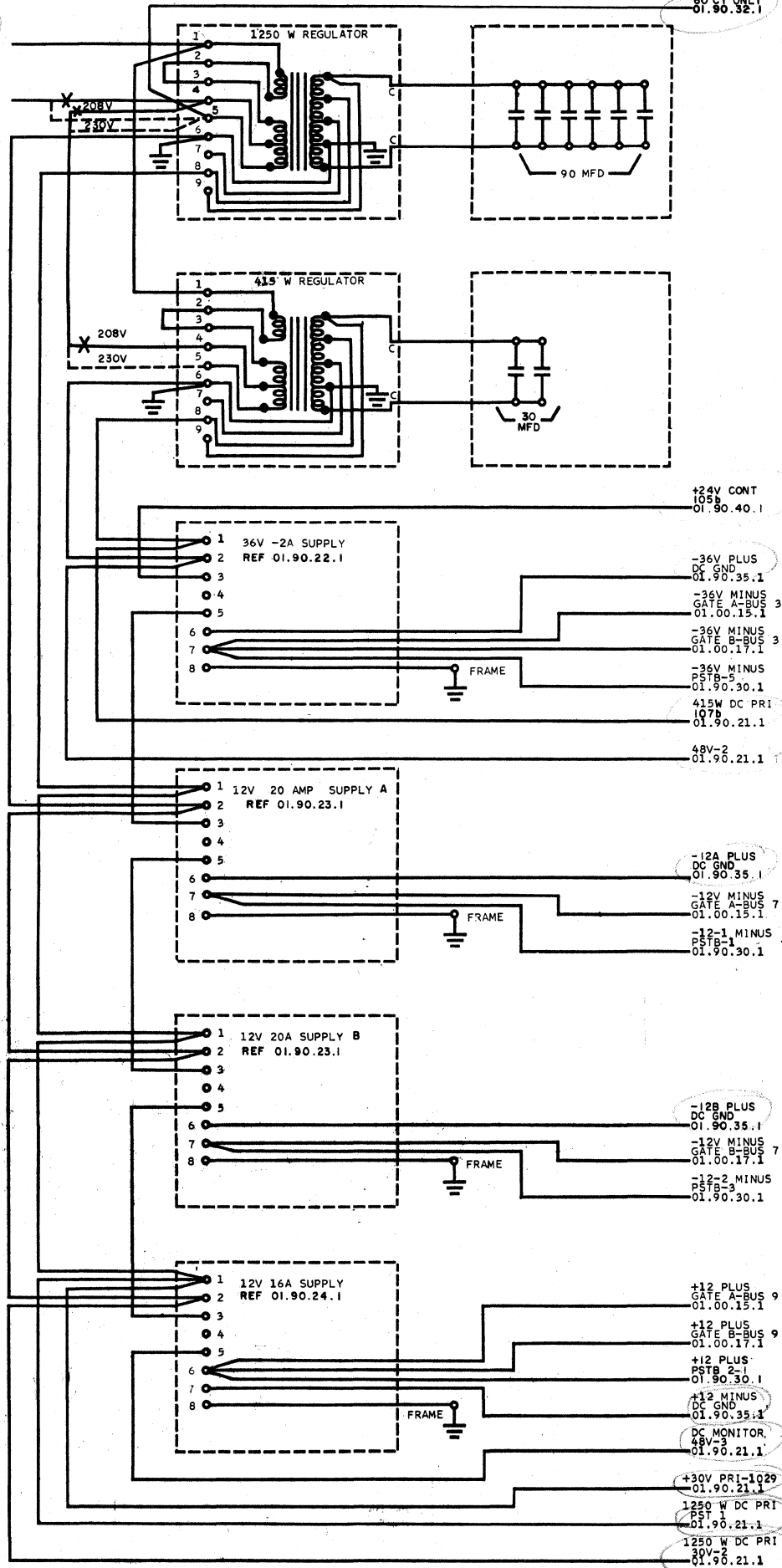
*4—01DXF09

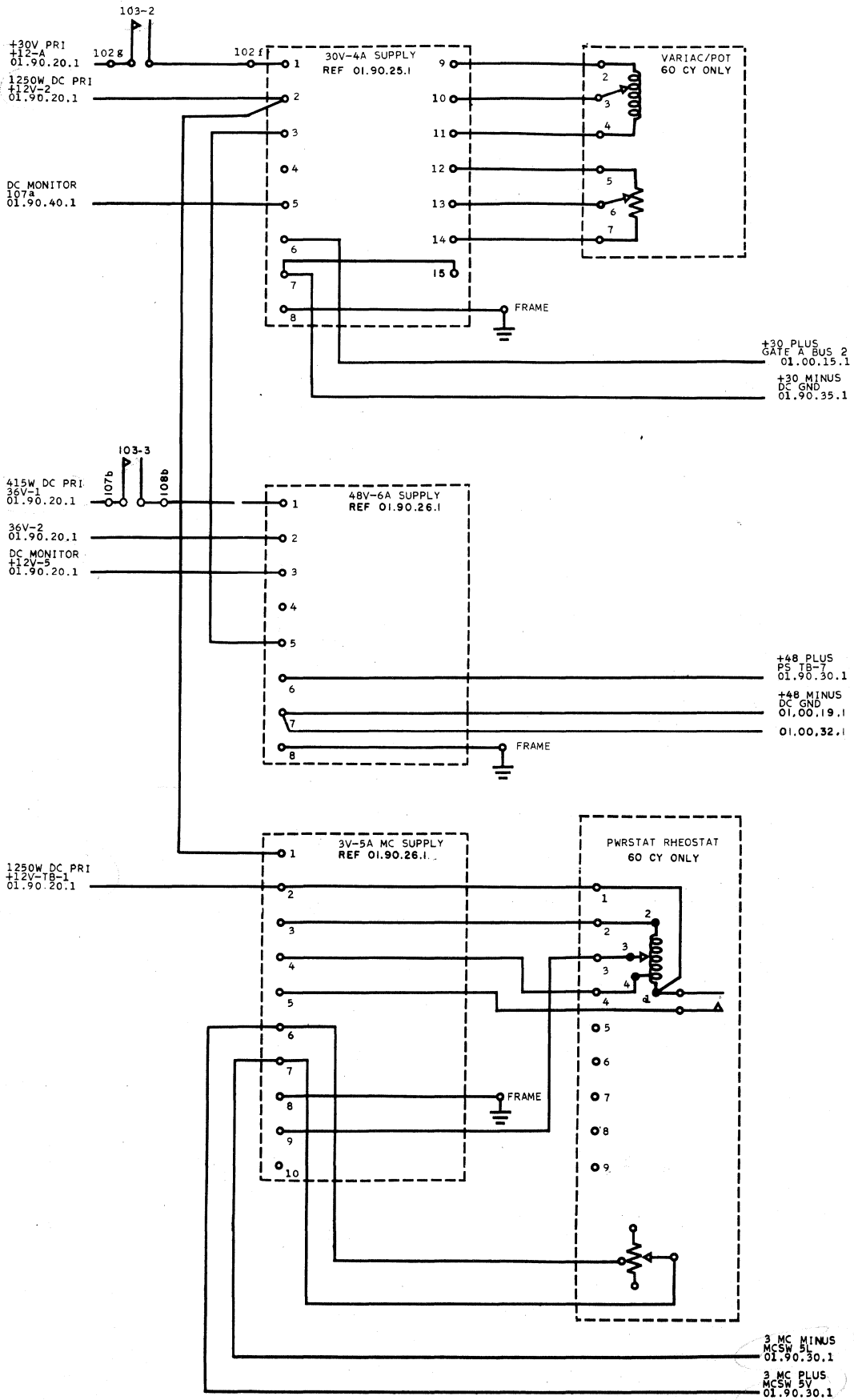


PRIMARY B-2
(K2-L3)
01.90.10.1

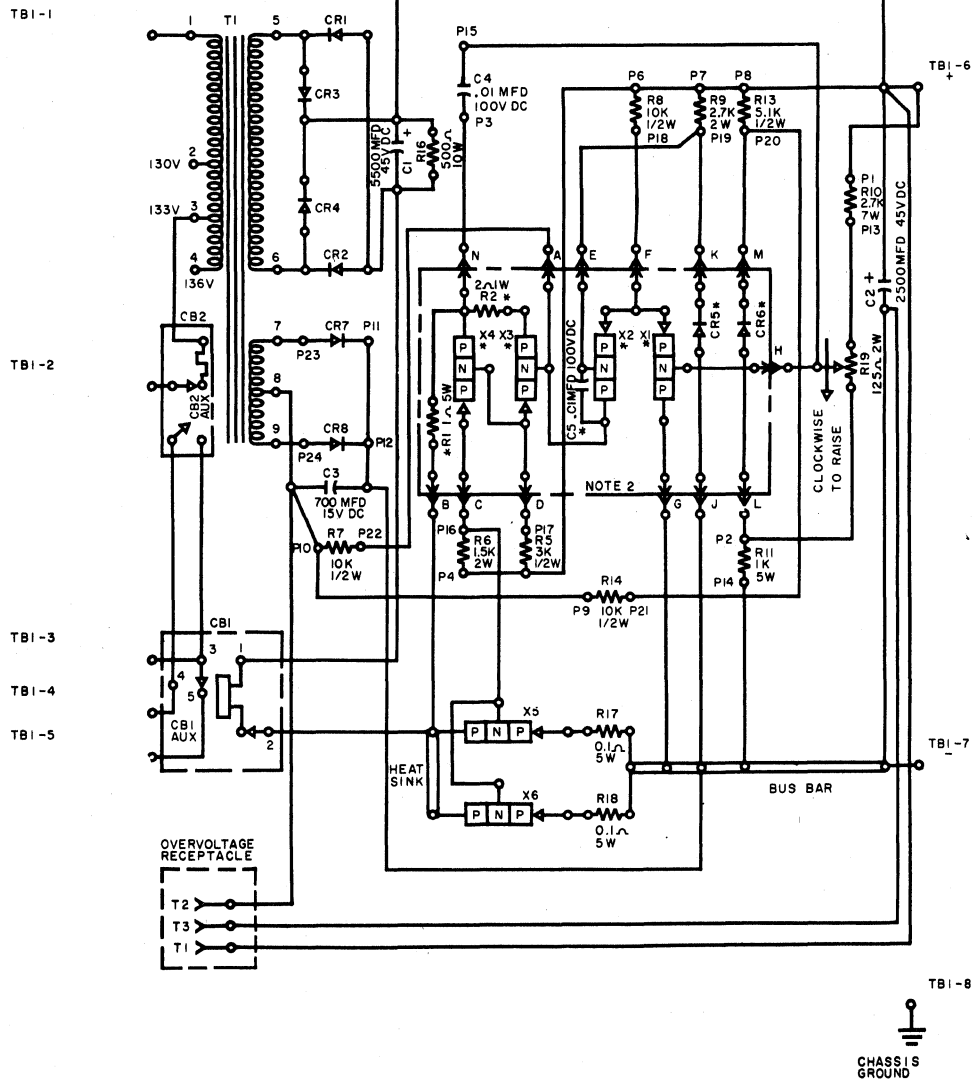
PRIMARY A-2
(K2-L1)
01.90.10.1

FUSE 21A
60 CY ONLY
01.90.32.1





± 36 V DC AT 2 AMP
REF-PWR SUP 207276



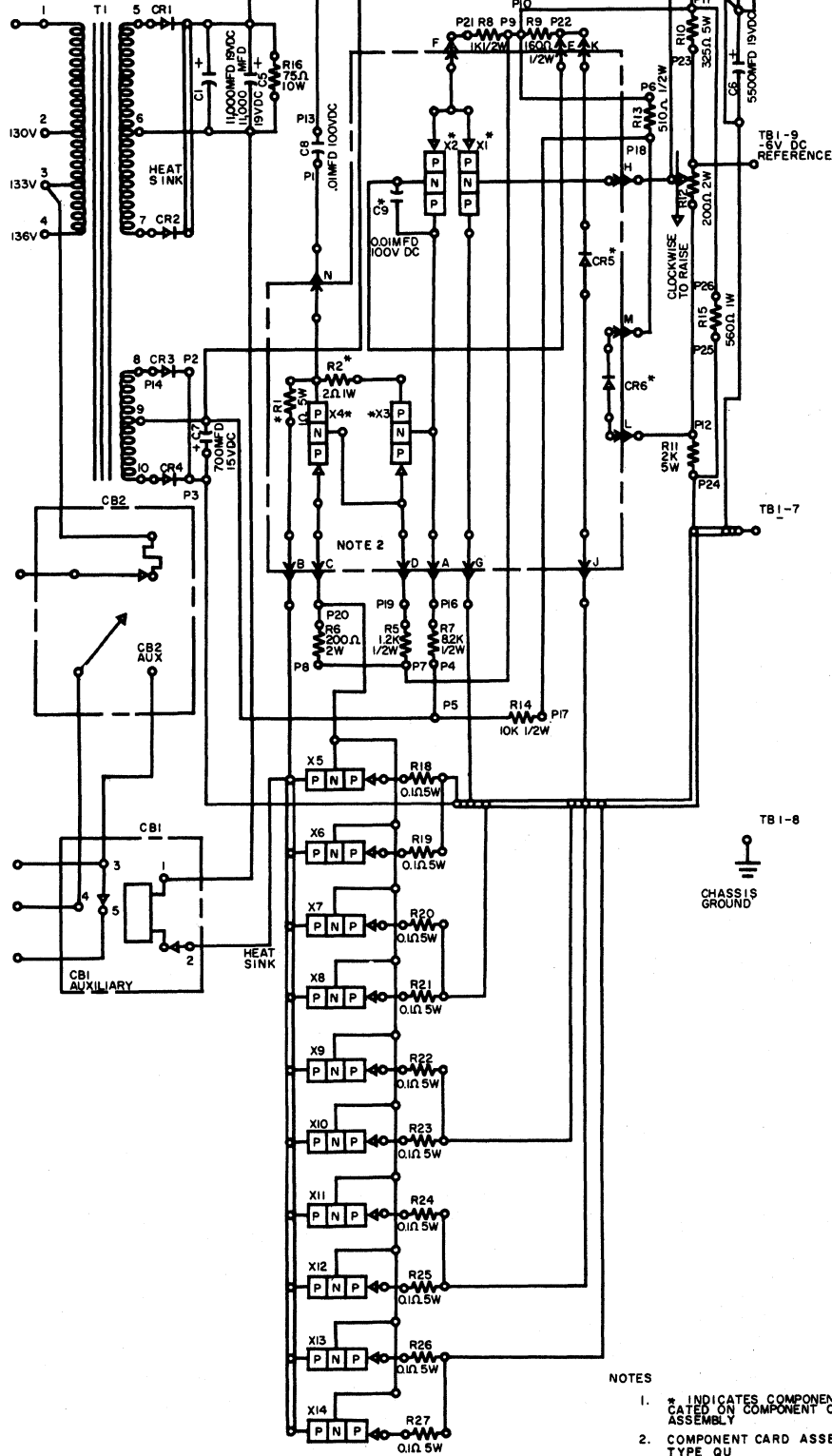
NOTES

1. * INDICATES COMPONENTS LOCATED ON COMPONENT CARD ASSEMBLY
2. COMPONENT CARD ASSEMBLY TYPE QU

± 12V DC AT 20AMP
REF-PWR SUP 208258

OVERVOLTAGE
RECEPTACLE
T2 T1 T3

TB1-1



TB1-2

TB1-3

TB1-4

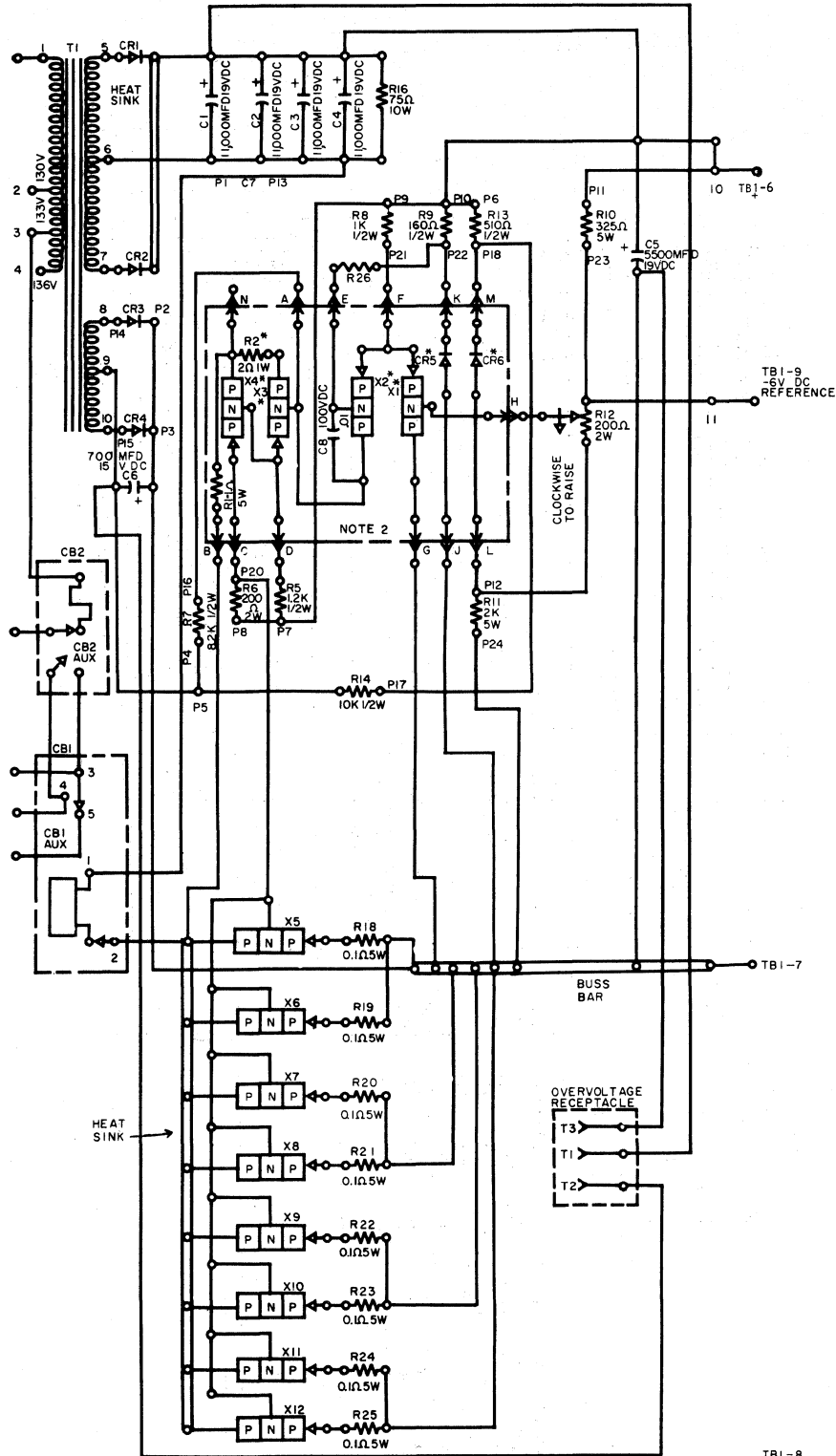
TB1-5

TB1-6
TB1-7
TB1-8
CHASSIS GROUND

NOTES

1. * INDICATES COMPONENTS LOCATED ON COMPONENT CARD ASSEMBLY
2. COMPONENT CARD ASSEMBLY TYPE QU

TB1-1



TB1-2

TB1-3

TB1-4

TB1-5

HEAT SINK

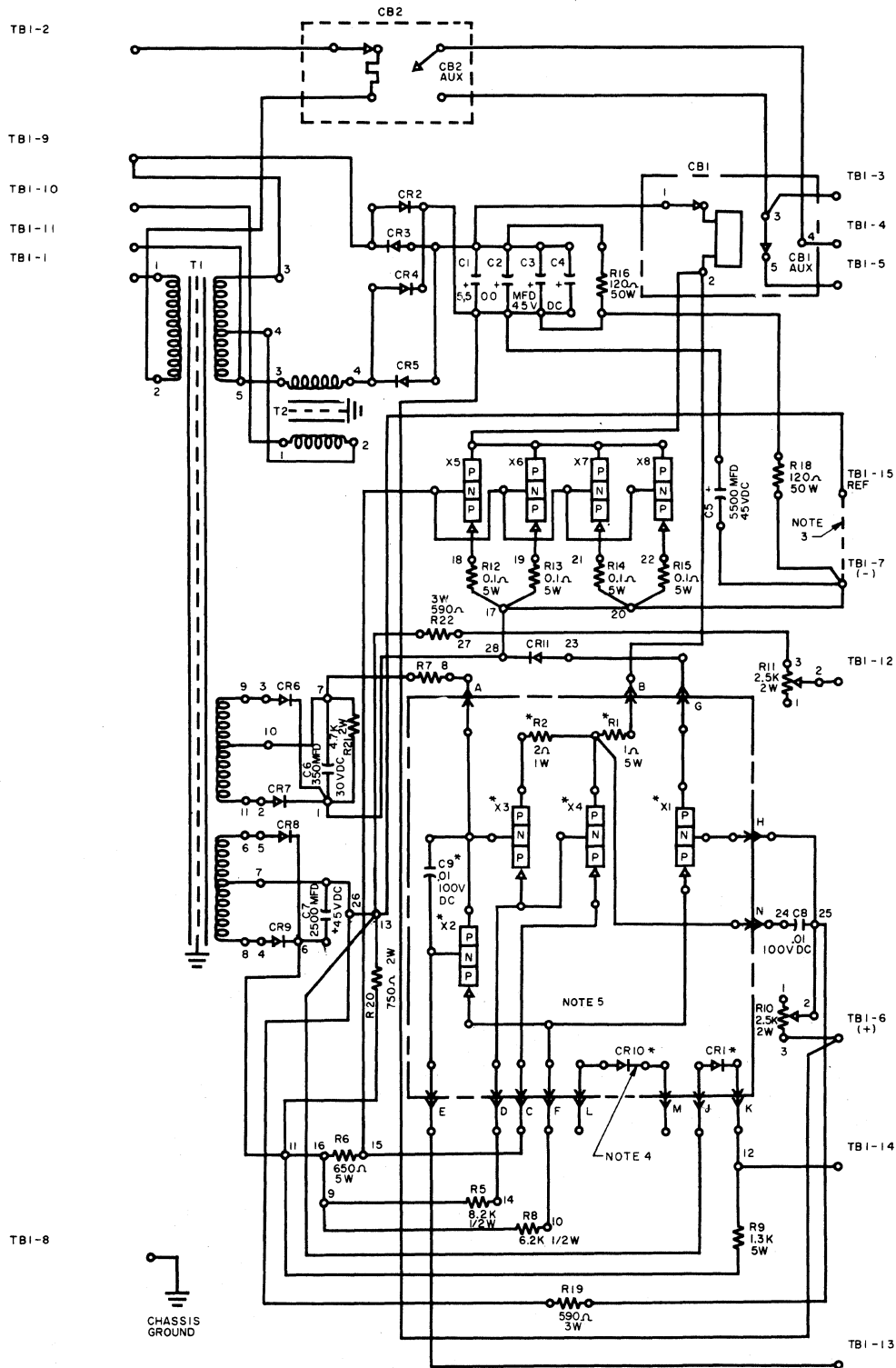
OVERVOLTAGE RECEPTACLE
 T3
 T1
 T2

TB1-8



- NOTES
 1. * INDICATES COMPONENTS LOCATED ON COMPONENT CARD ASSEMBLY
 2. COMPONENT CARD ASSEMBLY TYPE QU

+30V DC AT 4 AMP
REF-PWR SUP 207246

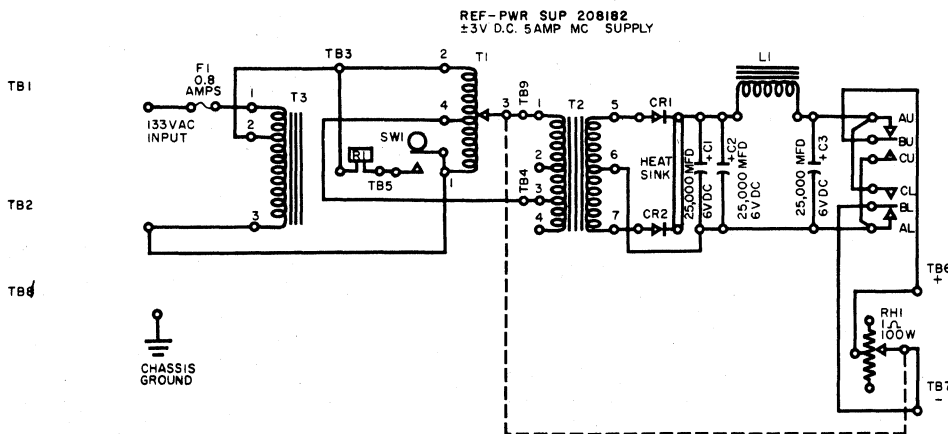
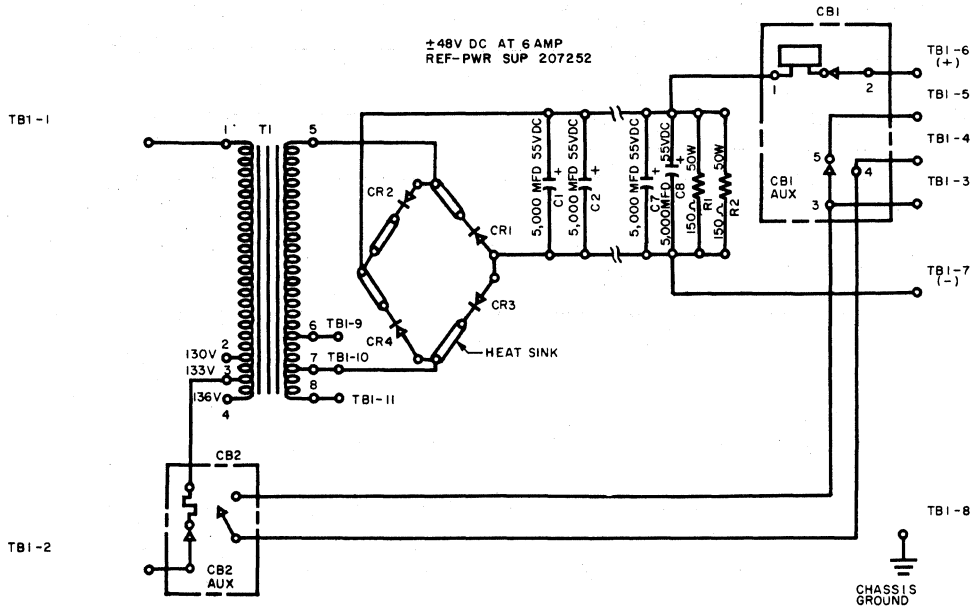


WIRING LIST, VOLTAGE ADJUSTMENT TO POWER SUPPLY

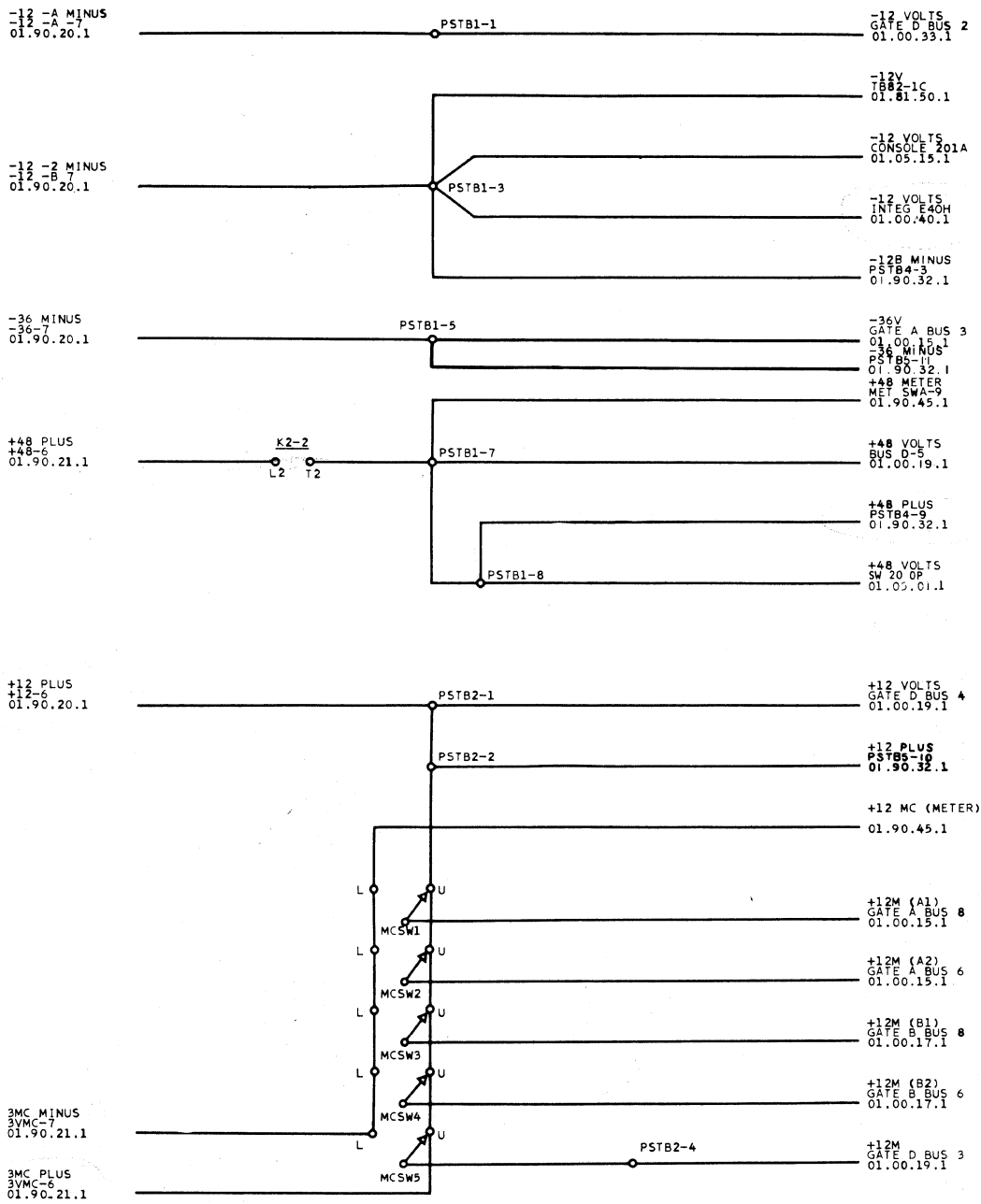
- TB1-9 TO 1 ON T3
- TB1-10 TO 3 ON T3
- TB1-11 TO 4 ON T3
- TB1-12 TO 3 ON R17
- TB1-13 TO 2 ON R17
- TB1-14 TO 1 ON R17

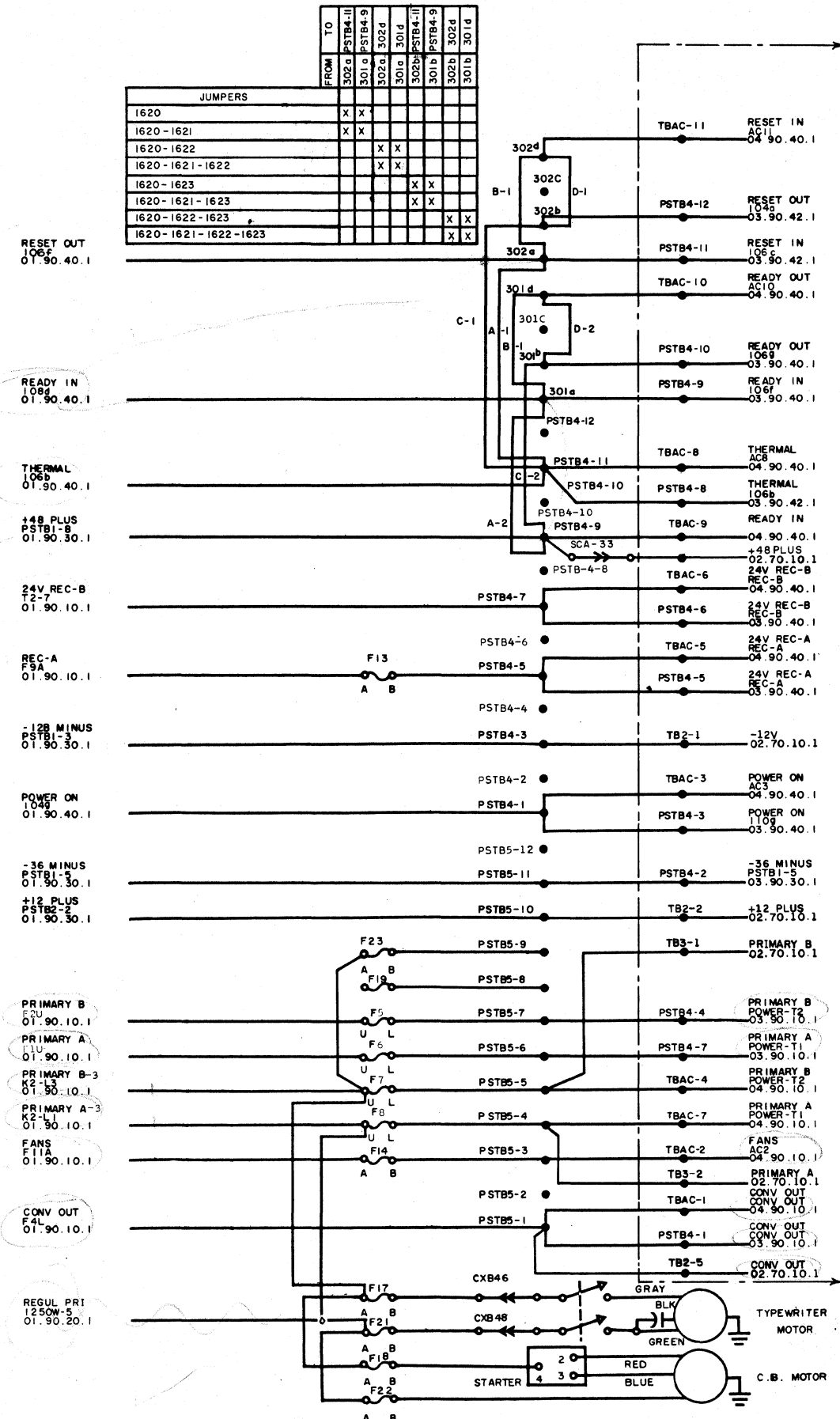
NOTES

1. * INDICATES COMPONENTS LOCATED ON COMPONENT CARD ASSEMBLY.
2. ** INDICATES COMPONENTS LOCATED ON VOLTAGE ADJUSTMENT ASSEMBLY.
3. JUMPER ONLY FOR ZERO VOLT REFERENCE.
4. NOT USED ON THIS SUPPLY
5. COMPONENT CARD ASSEMBLY TYP QU.



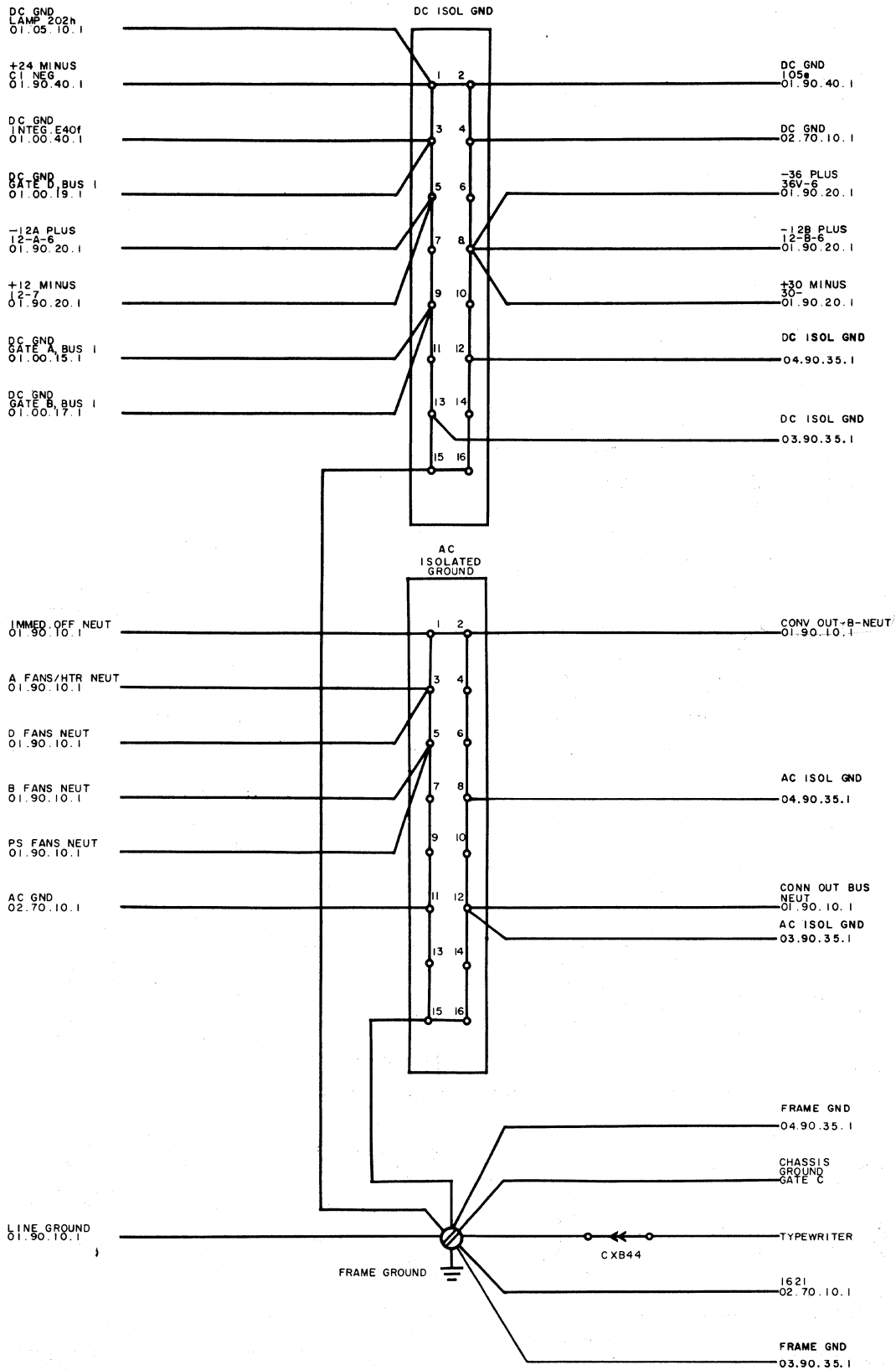
- NOTES**
- X T1 AND RHI GANGED.
 - XI T1, RHI, SW1 AND ASSOCIATED WIRING ARE LOCATED REMOTELY TO SUPPLY IN ASSEMBLY NO 220815.
 - XII SW1 ACTUATING CAM ON SHAFT OF T1.

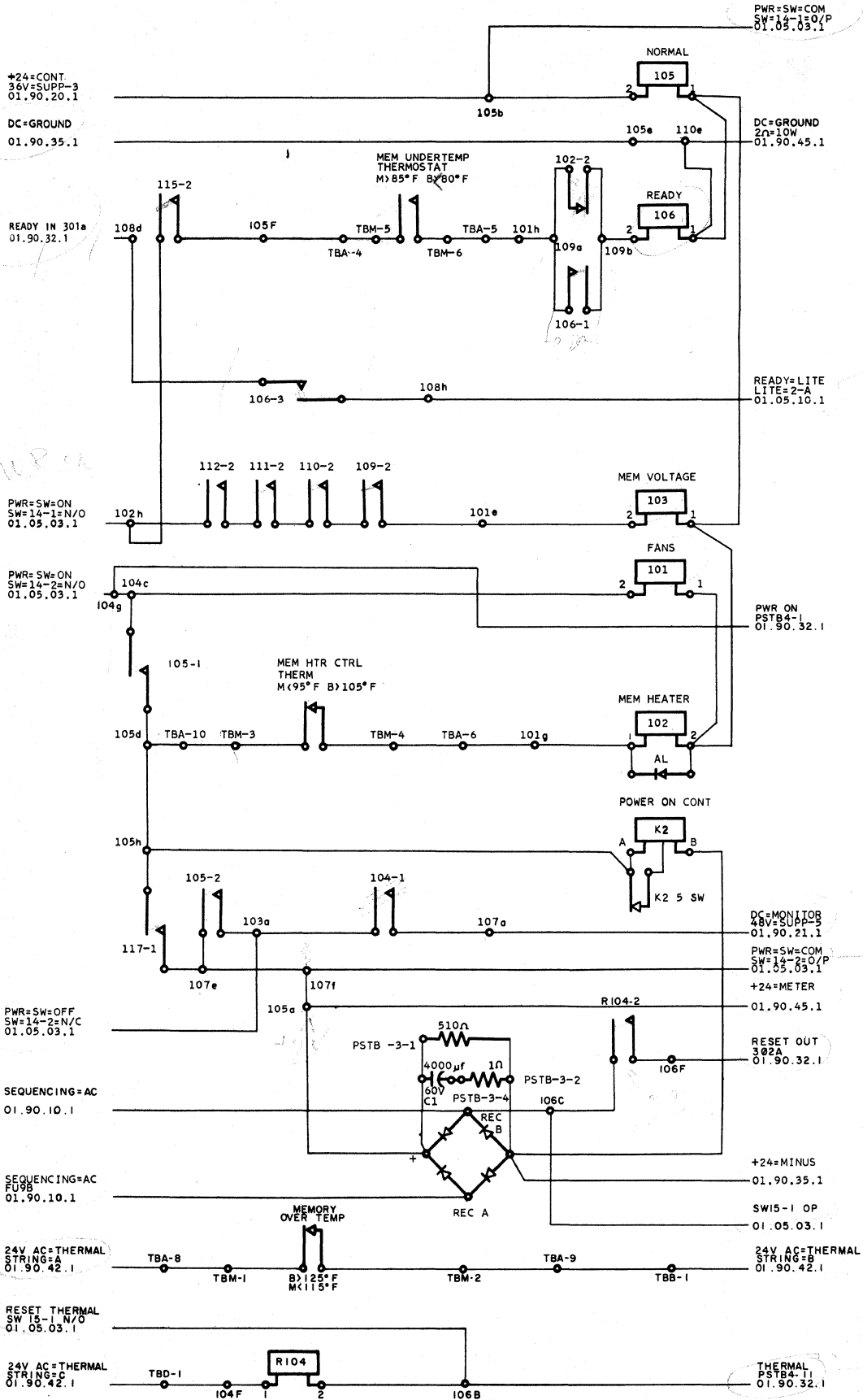




SEE NOTE

NOTE:
THESE TERMINALS WILL BE FOUND ON THE OPTIONAL FEATURE MACHINE AND WILL BE DUPLICATED ON OPTIONAL FEATURE SYSTEM DIAGRAM PAGES.





+24=CONT
36V=SUPP-3
01.90.20.1

DC=GROUND
01.90.35.1

READY IN 301a
01.90.32.1

PWR=SW=ON
SW=14-1=N/O
01.05.03.1

PWR=SW=ON
SW=14-2=N/O
01.05.03.1

PWR=SW=OFF
SW=14-2=N/C
01.05.03.1

SEQUENCING=AC
01.90.10.1

SEQUENCING=AC
FUSE
01.90.10.1

24V AC=THERMAL
STRING=A
01.90.42.1

RESET THERMAL
SW 15-1 N/O
01.05.03.1

24V AC=THERMAL
STRING=C
01.90.42.1

PWR=SW=COM
SW=14-1=O/P
01.05.03.1

DC=GROUND
27=10W
01.90.45.1

READY=LITE
LITE=2-A
01.05.10.1

PWR ON
PSTB4-1
01.90.32.1

DC=MONITOR
48V=SUPP-5
01.90.21.1

PWR=SW=COM
SW=14-2=O/P
01.05.03.1

+24=METER
01.90.45.1

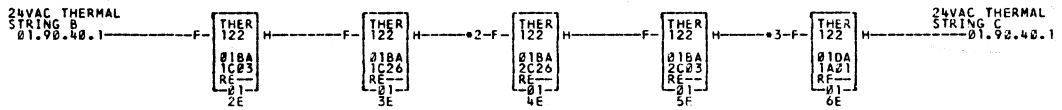
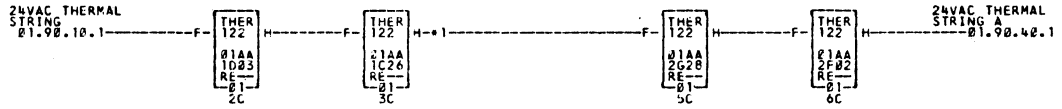
RESET OUT
302A
01.90.32.1

+24=MINUS
01.90.35.1

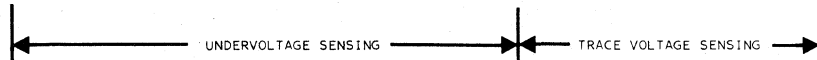
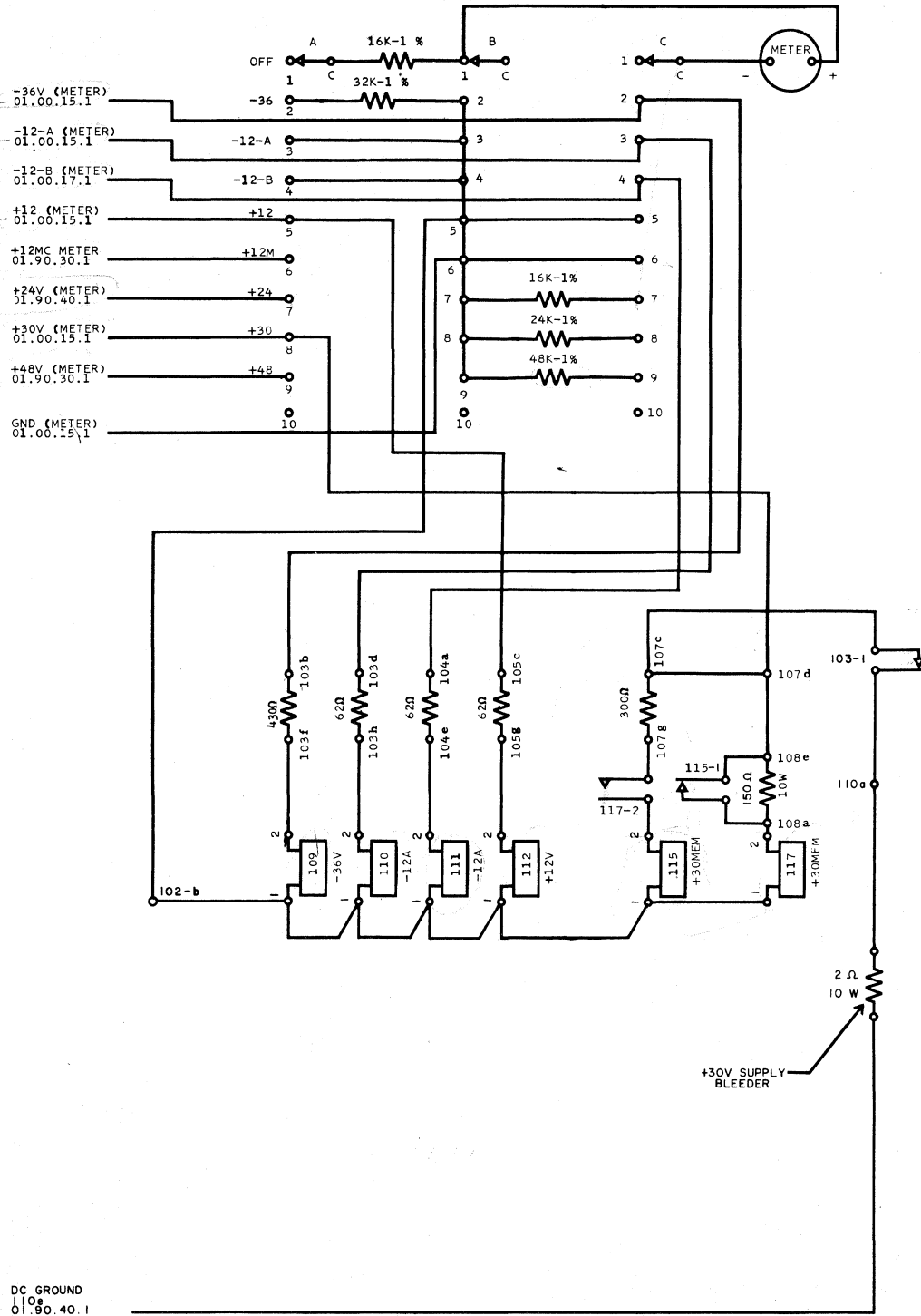
SW15-1 OP
01.05.03.1

24V AC=THERMAL
STRING=B
01.90.42.1

THERMAL
PSTB4-1
01.90.32.1

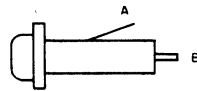


1-01A12250 -01A22250 *2-01B1Y24C -01B2Y24C *3-01T8B-2 -01T8D-2



FUSE REF CHART

FUSE#	SHOWN ON	TYPE	RATING	CIRCUIT
1	02.70.10.1	FNM	2	230 AC
2	02.70.10.1	FNM	2	230 AC
3				
4	02.70.10.1	MIC	3	-48 DC
5	02.70.10.1	FNM	2	230 AC
6	02.70.10.1	FNM	2	230 AC



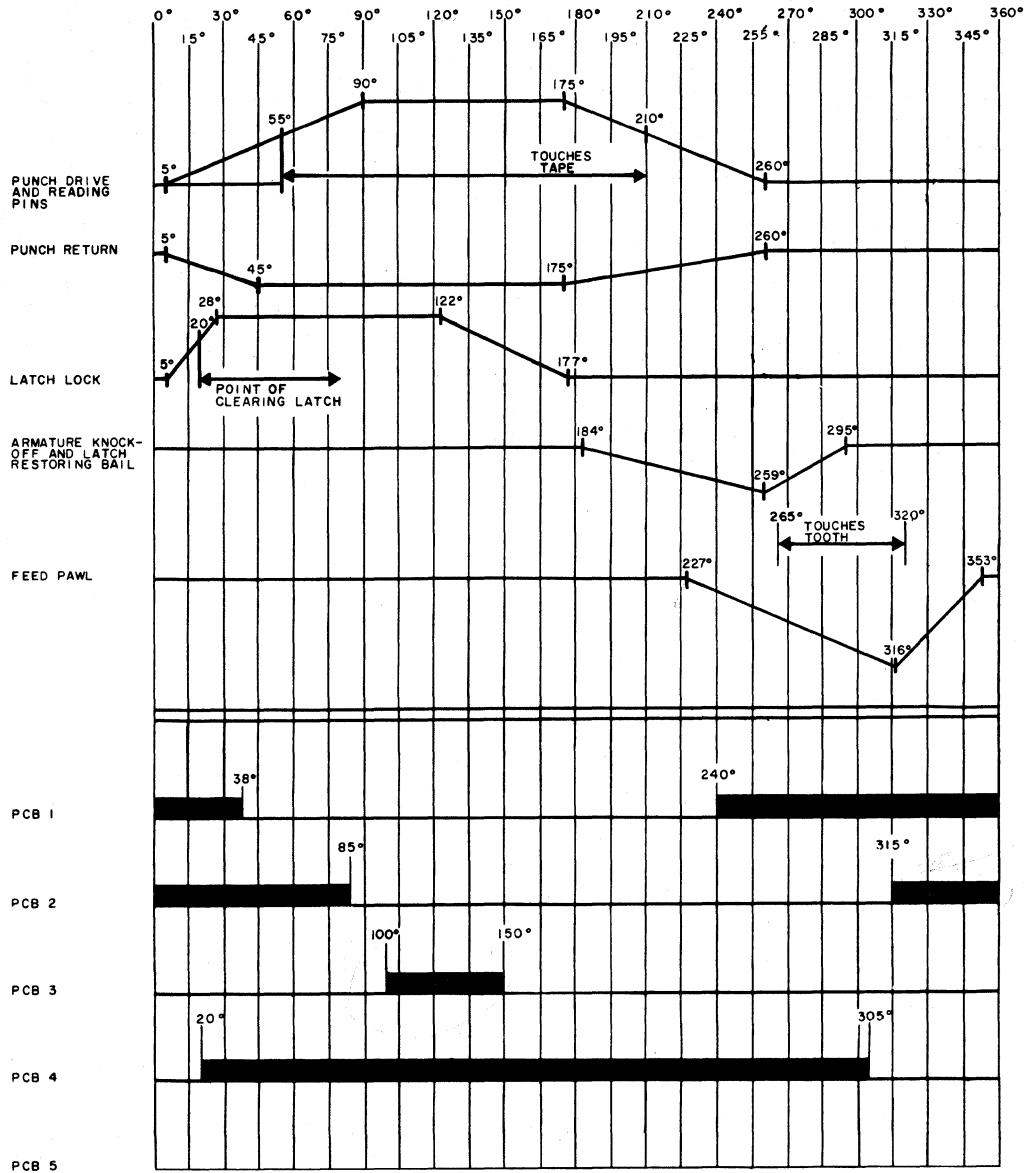
FUSE HOLDER

PUNCH CONN RESERVATION CHART

T	SHOWN ON	T	SHOWN ON	T	SHOWN ON	T	SHOWN ON
1	02.84.50.1	11	02.84.50.1	21	02.84.50.1	31	
2	02.70.10.1	12	02.84.50.1	22		32	
3	02.84.50.1	13	02.84.50.1	23	02.84.50.1	33	
4	02.70.10.1	14		24	02.84.50.1	34	
5	02.70.10.1	15	02.84.50.1	25	02.84.50.1	35	
6	02.84.50.1	16	02.84.50.1	26		36	
7	02.84.50.1	17	02.84.50.1	27		37	
8	02.84.50.1	18	02.84.50.1	28	02.84.50.1	38	
9	02.84.50.1	19	02.84.50.1	29		39	
10	02.84.50.1	20	02.84.50.1	30			

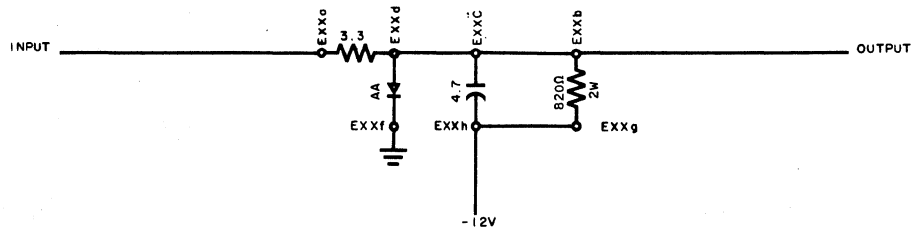
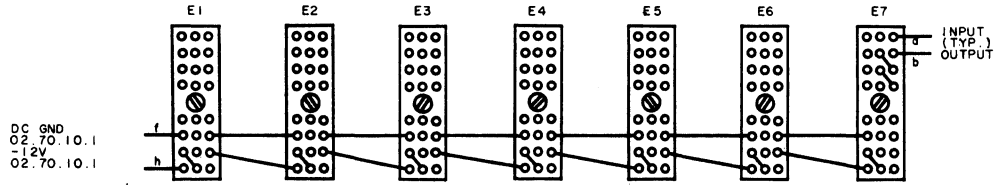
SWITCH LOCATION CHART

SW#	SHOWN ON	FUNCTION
1	02.83.70.1	CENTER ROLL FEED LIMIT SW
2	02.83.70.1	CENTER ROLL FEED LIMIT SW
3	02.83.70.1	SUPPLY REEL UPPER LIMIT SW
4	02.83.70.1	SUPPLY REEL UPPER MOTOR CONTROL
5	02.83.70.1	SUPPLY REEL LOWER MOTOR CONTROL
6	02.83.70.1	SUPPLY REEL LOWER LIMIT SW
7	02.83.70.1	TAPE RUNOUT LIMIT SW
8	02.83.70.1	TAPE BREAK LIMIT SW
9	02.83.70.1	TAPE LOAD LIMIT SW
10	02.83.70.1	REEL POWER LIMIT SW
11		
12		
13	02.83.70.1	TAKE UP REEL UPPER LIMIT SW
14	02.83.70.1	TAKE UP REEL UPPER MOTOR CONTROL
15	02.83.70.1	TAKE UP REEL LOWER MOTOR CONTROL
16	02.83.70.1	TAKE UP REEL LOWER LIMIT SW
17	02.83.70.1	REEL-STRIP MODE SW
18	02.83.60.1	NON-PROCESS RUNOUT KEY
19	02.70.10.1	MAIN LINE

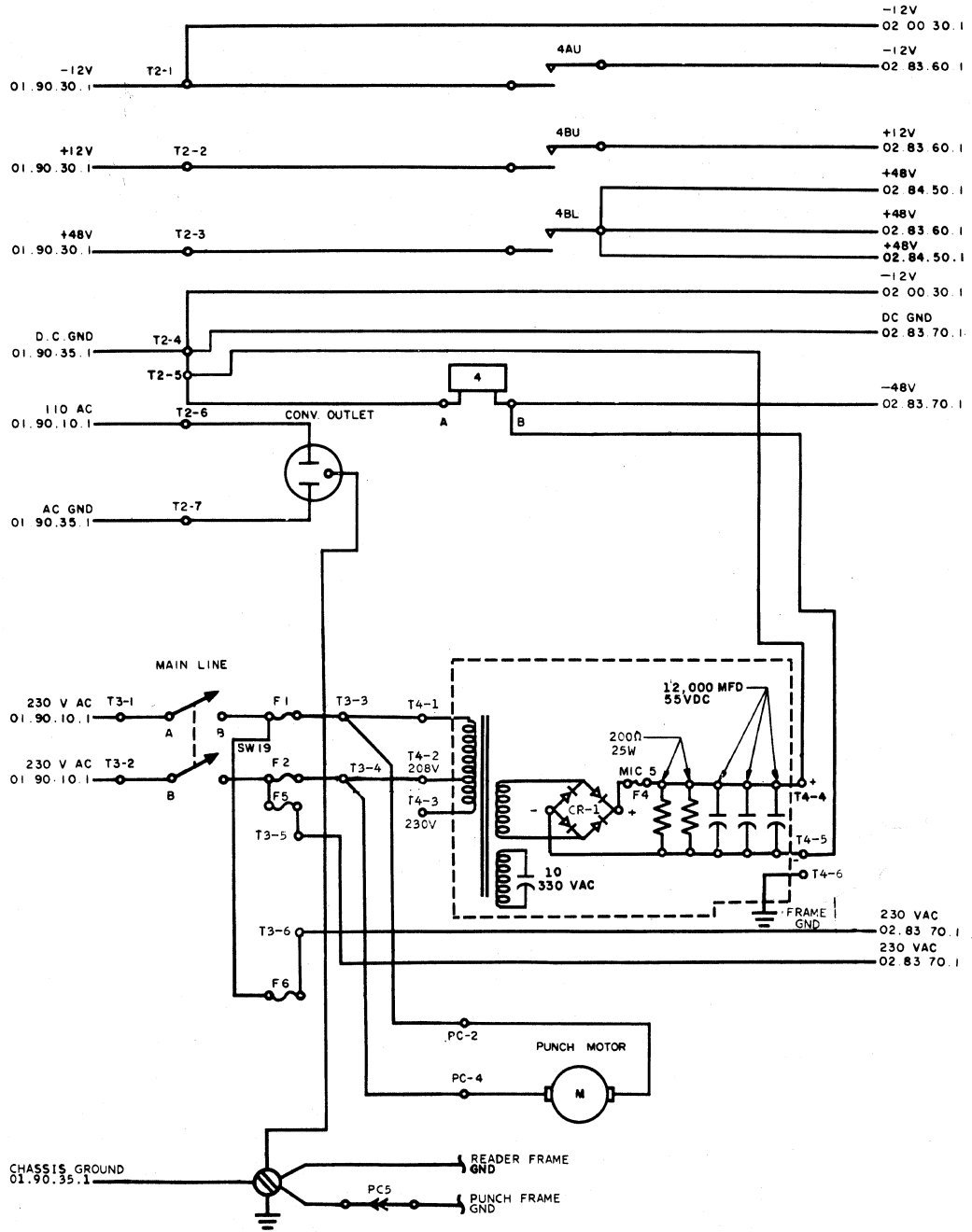


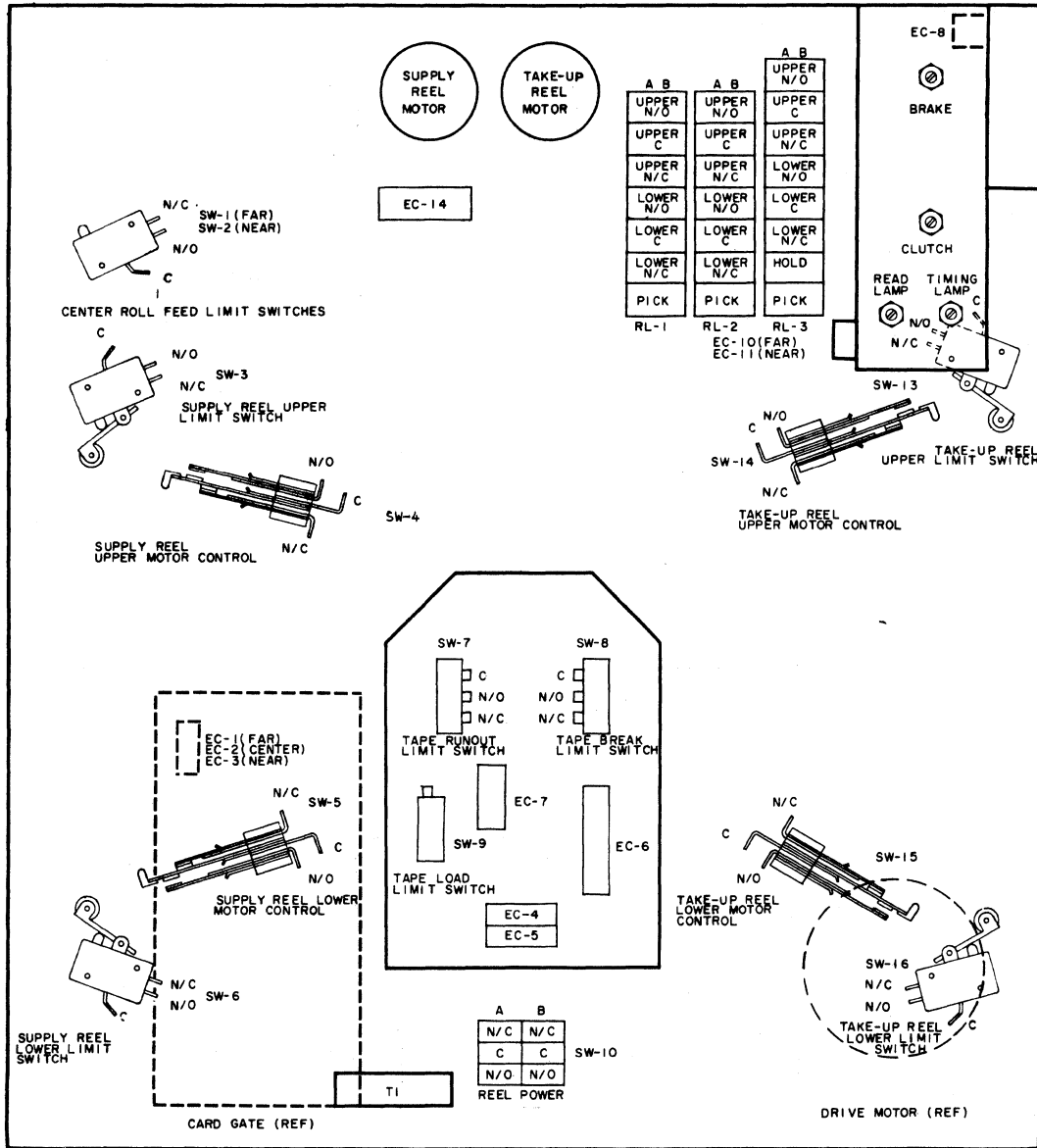
900 RPM .18 M/S DEGREE

CB #	LOCATION	MAKE	TOL	BREAK	TOL	CAM FUNCTION	PART NO.
1	02.84.50.1	240°	±2°	38°	±2°	+S GATE INTERPOSERS	313414
2	02.84.50.1	315°	±2°	85°	±2°	PUNCH CLUTCH & PUNCH MAGNETS	326429
3	02.84.50.1	100°	±2°	150°	±2°	+S PUNCH CHECK - +S P3 RESPONSE	227694
4	02.84.50.1	20°	±2°	305°	±2°	NO FEED MAGNET	309631

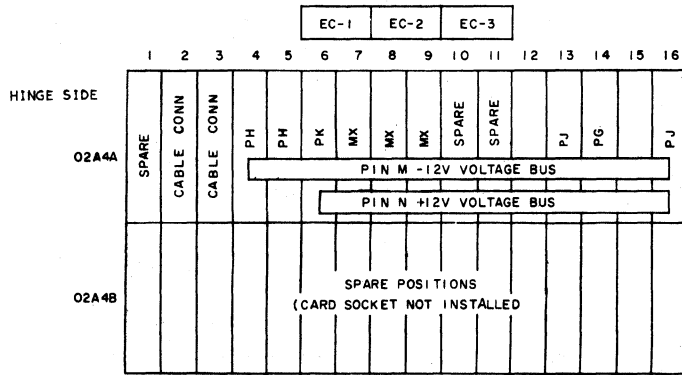


E	SHOWN ON
01	02.84.50.1
02	02.84.50.1
03	02.84.50.1
04	02.84.50.1
05	02.84.50.1
06	02.83.60.1
07	02.84.50.1

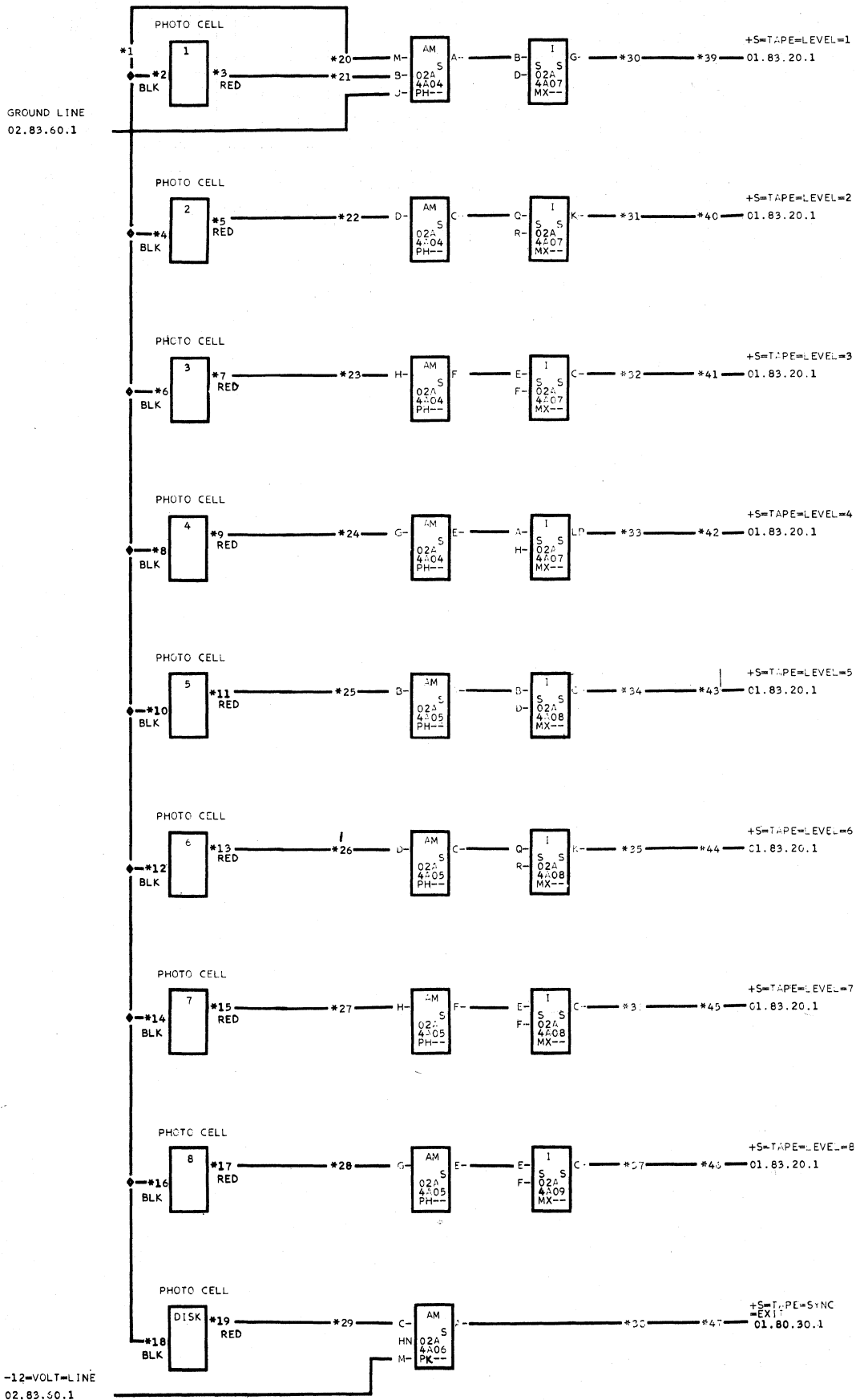




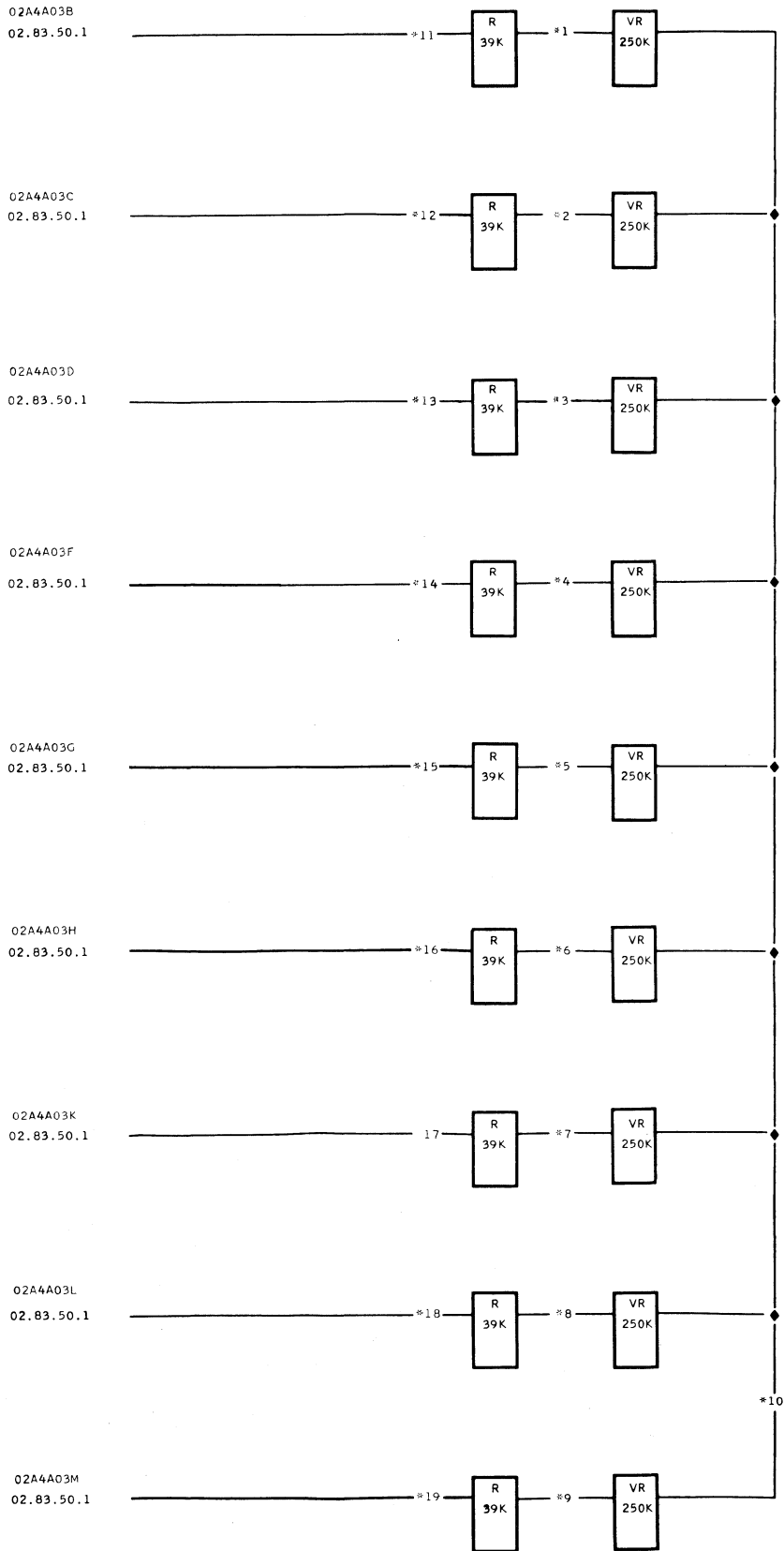
SWITCH, EDGE CONNECTOR, AND TERMINAL BLOCK LOCATION CHART
(VIEWED FROM THE BACK OF THE READER)



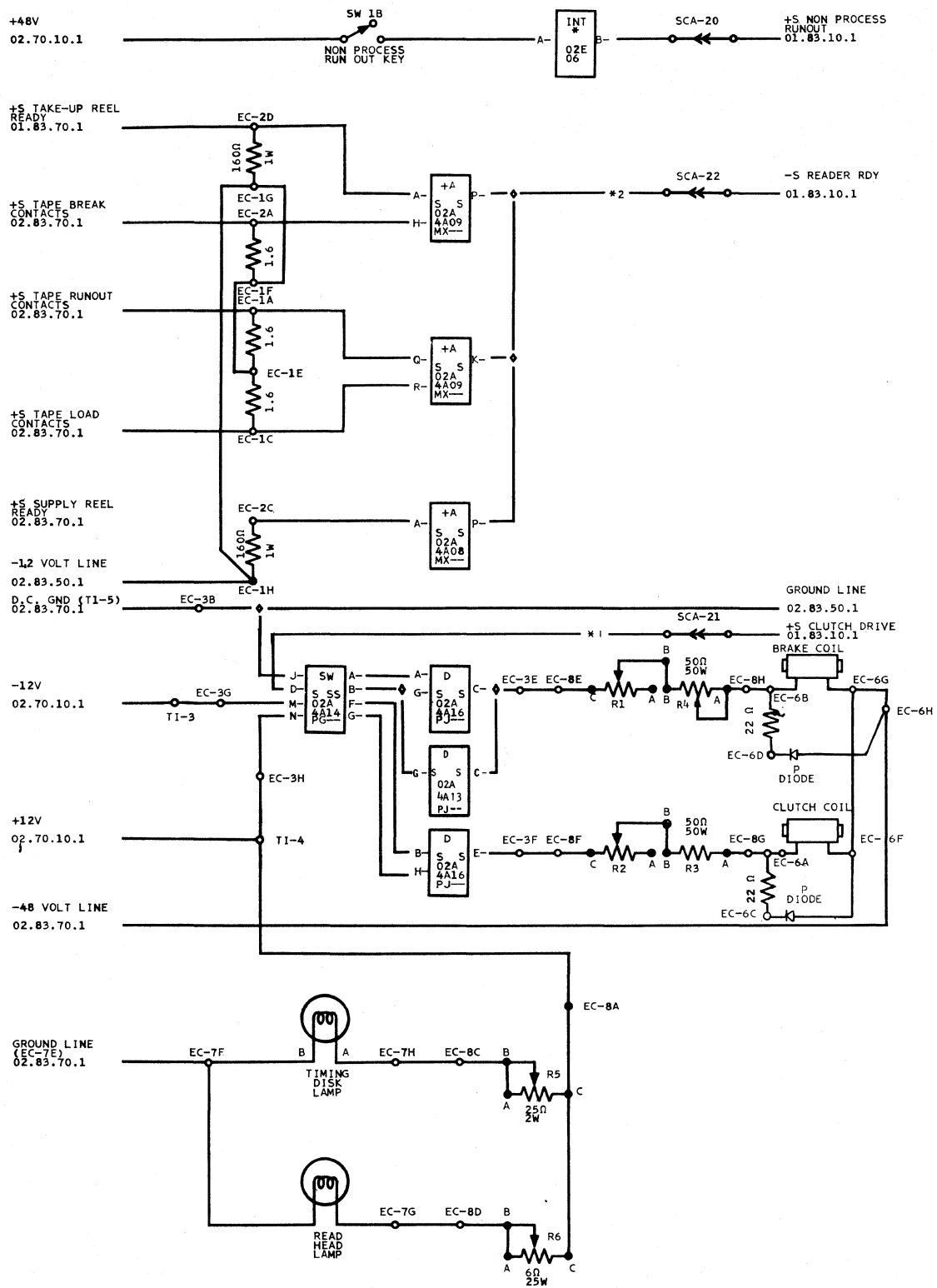
READER GATE - CARD LAYOUT
(VIEWED FROM WIRING SIDE)



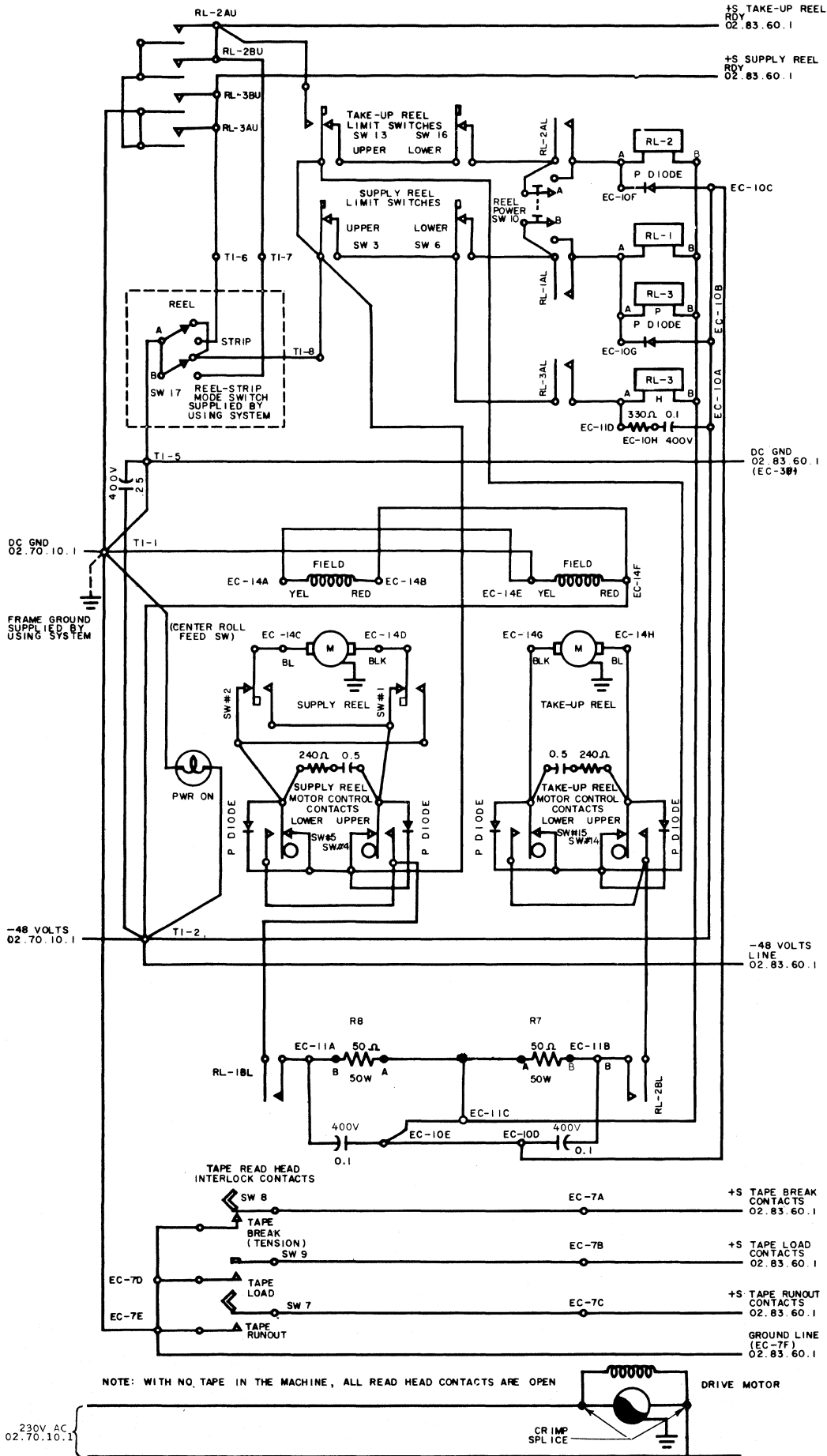
*1---02EC5H *2---02EC5C *3---02EC4A *4---02EC5D *5---02EC4B *6---02EC5D *7---02EC4C *8---02EC5E
 *9---02EC4D *10---02EC5E *11---02EC4E *12---02EC5F *13---02EC4F *14---02EC5F *15---02EC4G *16---02EC53
 *17---02EC4H *18---02EC5C *19---02EC5C *20---02A403P *21---02A403K *22---02A403C *23---02A403D *24---02A403F
 *25---02A403G *26---02A403H *27---02A403K *28---02A403L *29---02A403M *30---02A403N *31---02A402C
 *32---02A402U *33---02A402F *34---02A402G *35---02A402H *36---02A402I *37---02A402J *38---02A402M
 *39---02SC-11 *40---02SC-12 *41---02SC-13 *42---02SC-14 *43---02SCA-15 *44---02SC-1
 *45---02SCA-17 *46---02SCA-18 *47---02SC-19

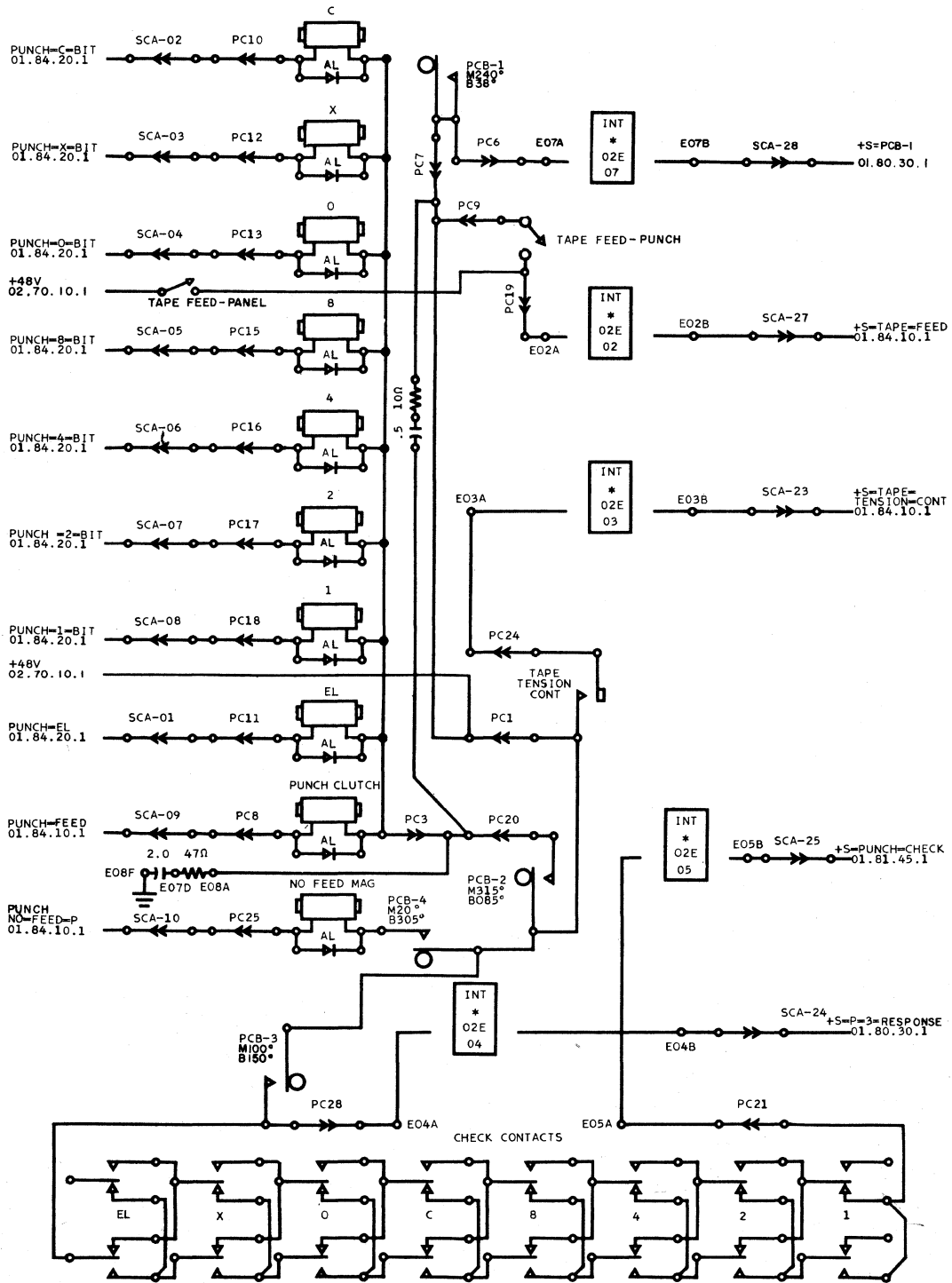


*1---02EC18A *2---02EC18C *3---02EC18E *4---02EC18G *5---02EC19A *6---02EC19C *7---02EC19E *8---02EC19G
*9---02EC20A *10---02EC03H *11---02EC18B *12---02EC18D *13---02EC18F *14---02EC18G *15---02EC19B *16---02EC19D
*17---02EC19F *18---02EC19G *19---02EC20B



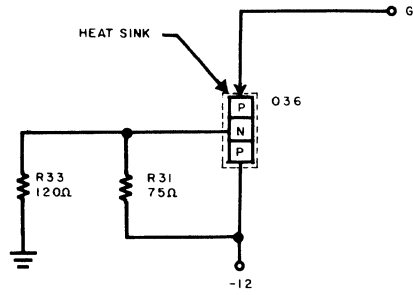
*1—02A4A02P *2—02A4A02Q





ALLOY-CURRENT SOURCE

ACY



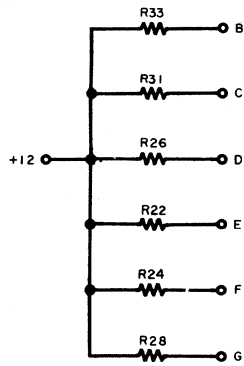
370169 REF

MAX CURRENT 600 ma



ALLOY-RESISTOR CARD, 3 WATT

AFB
YJA*
YJB**



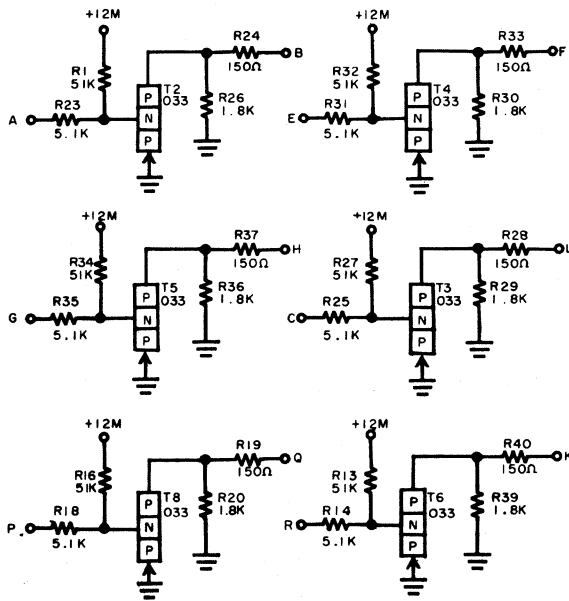
371948 REF
*370788 REF
**370789 REF



RESISTORS ARE 34.3Ω ± 1/2% TOL.
* RESISTORS ARE 40.2Ω ± 1.0% TOL.
** RESISTORS ARE 17.2Ω ± 1.0% TOL.

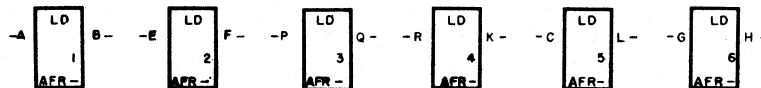
CTRL LIGHT DRIVER N TYPE

AFR



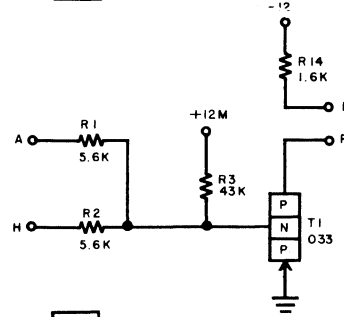
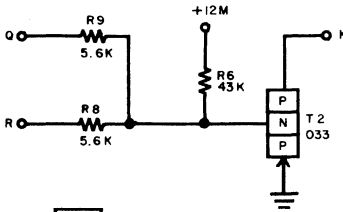
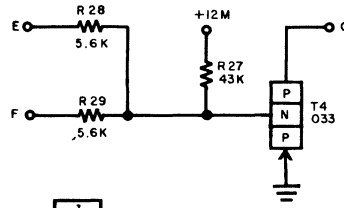
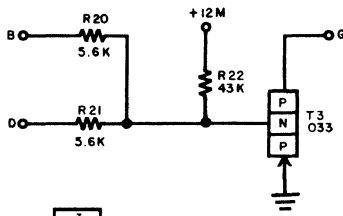
INPUT UP LEVEL 0.0V TO -0.5V
DOWN LEVEL -5.56V TO -12.48V
OUTPUT MAX CURRENT 15.0 ma

371943 REF



CTRL-INVERTER "N" 2 WAY EXTENDER

AHK-



INPUT AND OUTPUT
 UP LEVEL 0V TO -0.2V
 DOWN LEVEL -5.86V TO -12.48V

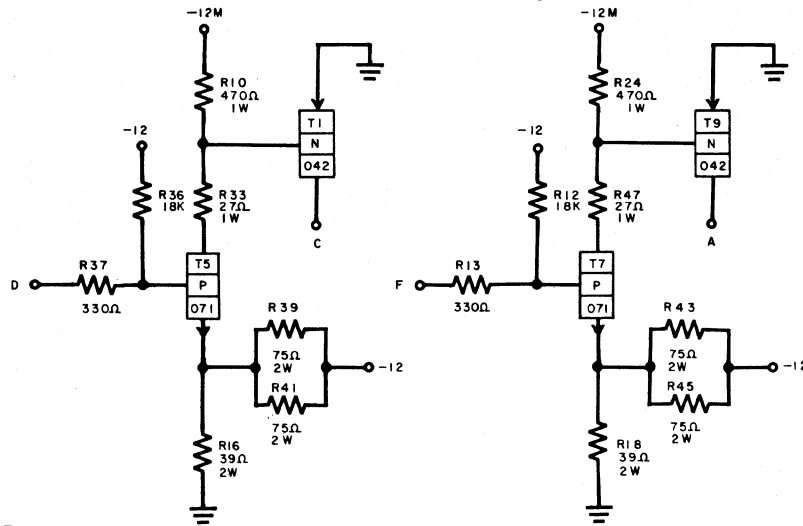
370322 REF

ALLOY CLUTCH MAGNET DRIVER

1620

C.00.07.1

AHS



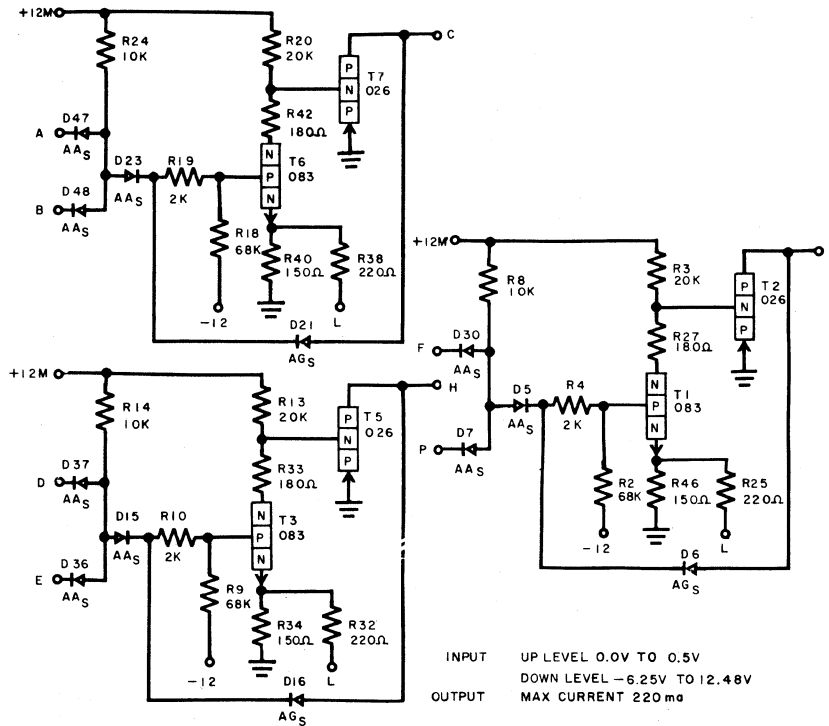
370336 REF

INPUT UP LEVEL -0.1V TO -0.5V
DOWN LEVEL -6.35V TO -12.48V
OUTPUT MAX CURRENT 1.35 AMP.



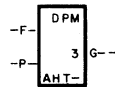
ALLOY PUNCH MAGNET DRIVER

AHT

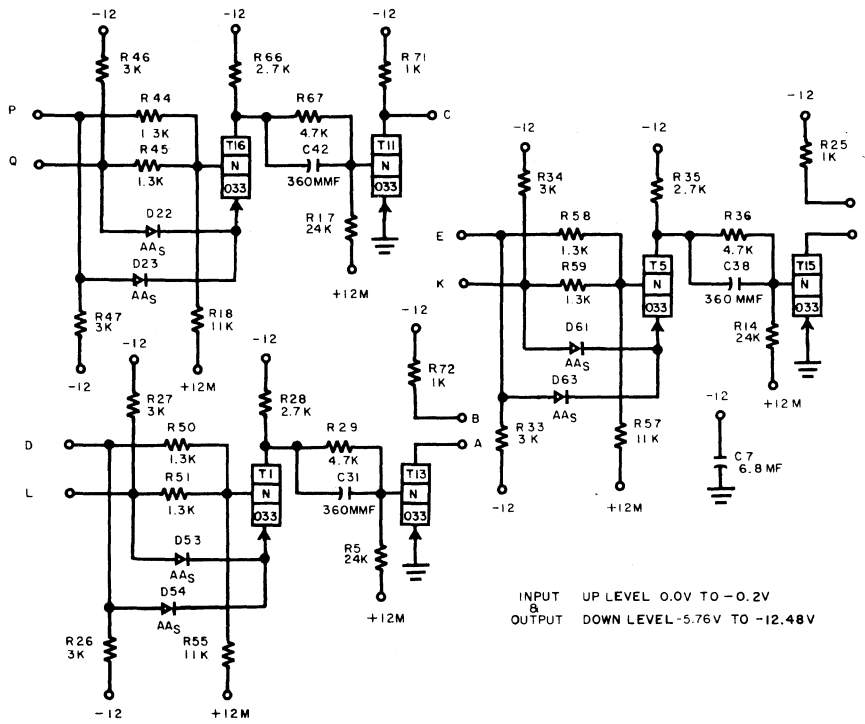


INPUT UP LEVEL 0.0V TO 0.5V
DOWN LEVEL -6.25V TO 12.48V
OUTPUT MAX CURRENT 220 mA

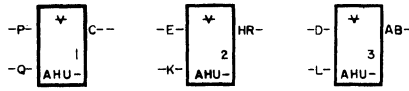
370337 REF



AHU

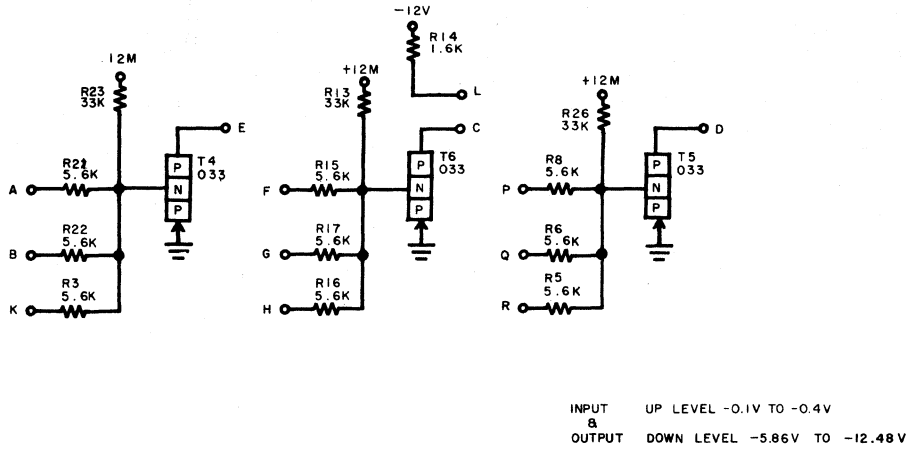


370386 REF

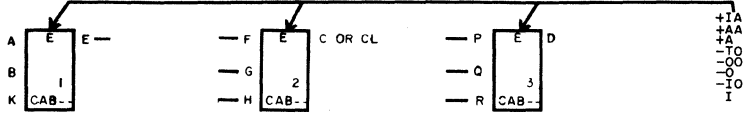


CTRL-INVERTERS "N" TYPE UNLOADED COLLECTORS

CAB

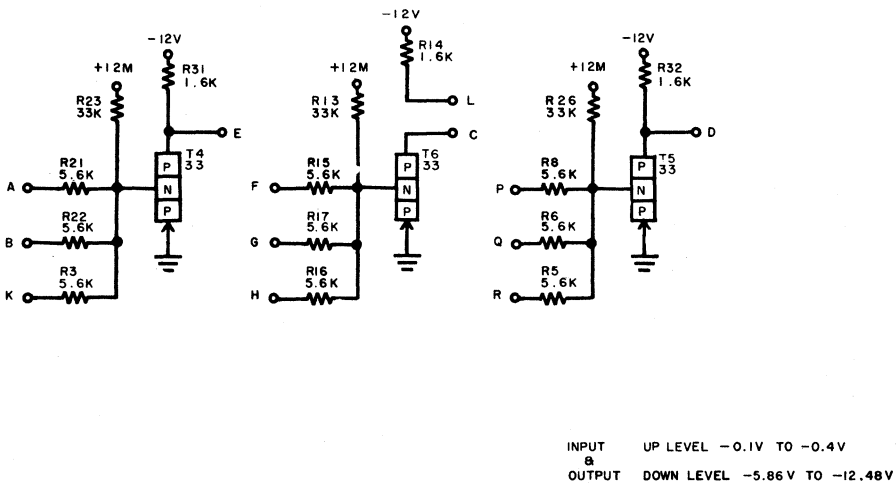


371931 REF

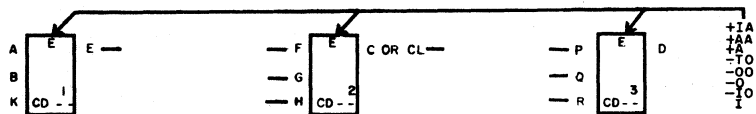


CTRL-INVERTERS "N" TYPE

CD

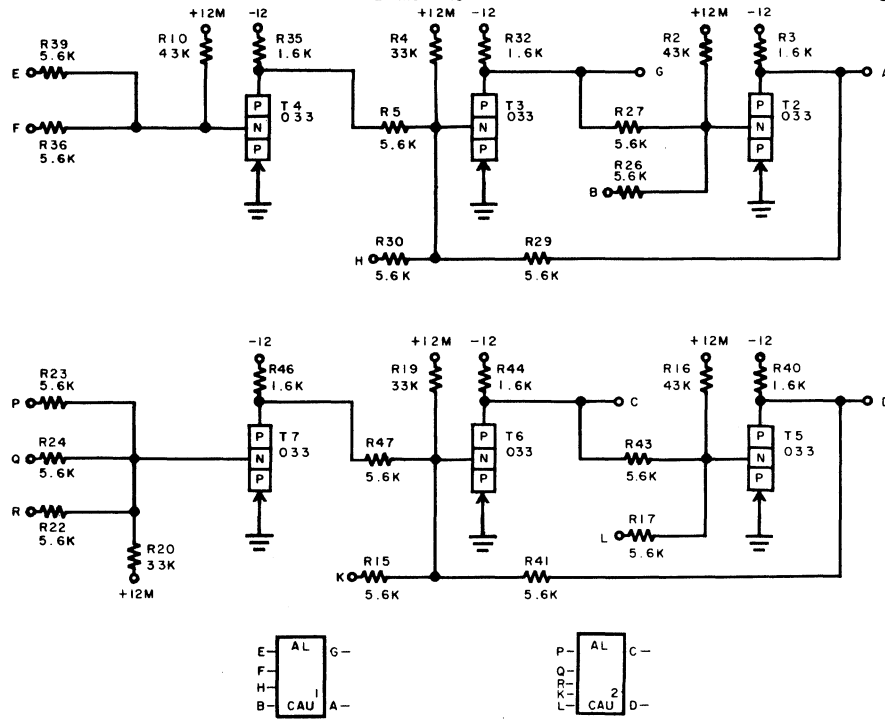


371029 REF



CTRL MUP-15

CAU-

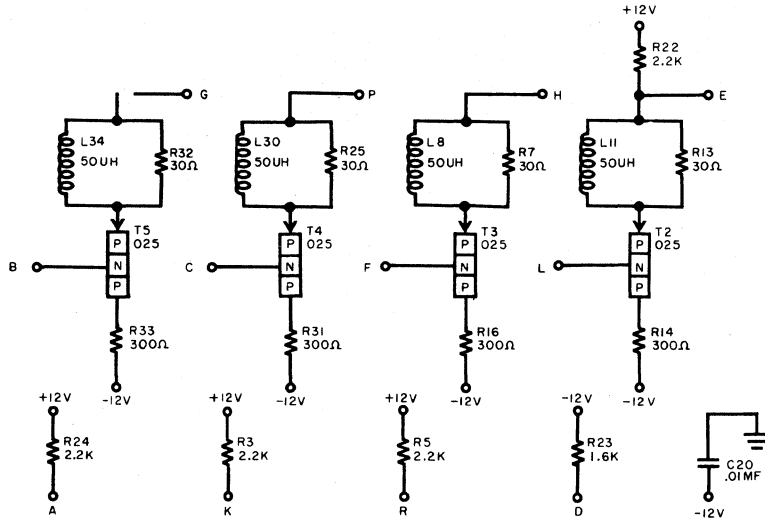


370353 REF

INPUT AND OUTPUT
 UP LEVEL -0.1V TO -0.4V
 DOWN LEVEL -5.86V TO -12.48V

CTRL-EMITTER FOLLOWER PNP

CE



VOLTAGE LEVEL

IN	OUT
0.0V TO -0.2V	+ 0.02
-6.06V TO -10.55V	- 8.0

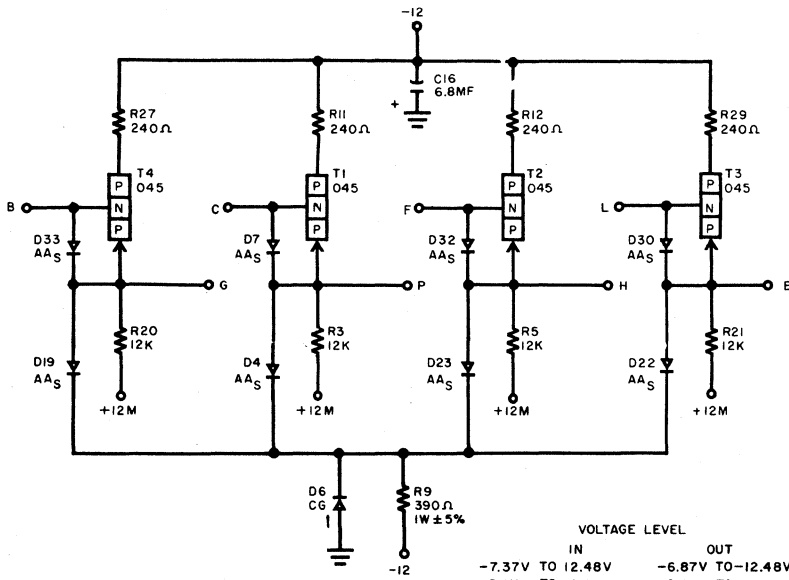
371032 REF

NOTE: Q PIN TIE TO -12V



SDTRL-DRIVER, LOW POWER-IO BASE NON-INVERTING

DAR



VOLTAGE LEVEL

IN	OUT
-7.37V TO 12.48V	-6.87V TO -12.48V
-0.1V TO 0.6V	-0.1V TO -0.5V

370062 REF

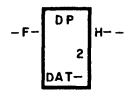
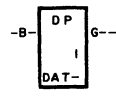
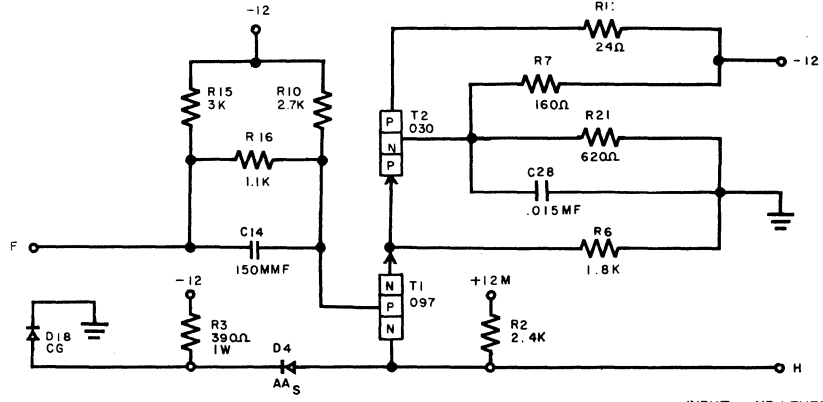
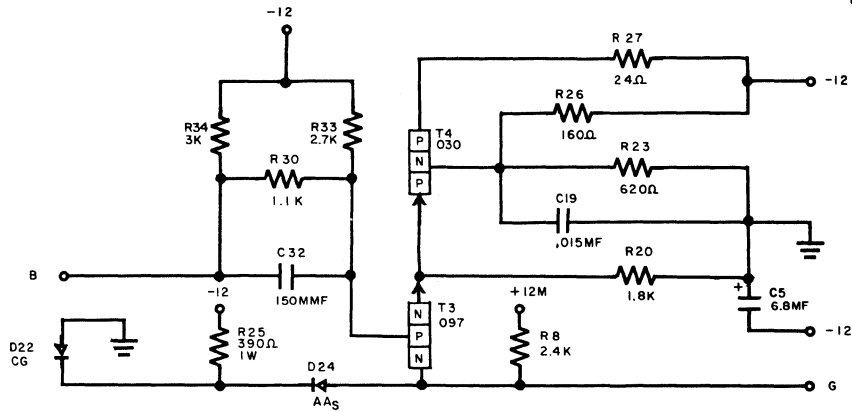


SDTRL-INVERTING,HEAVY POWER
DRIVER

1620

C.00.17.1

DAT



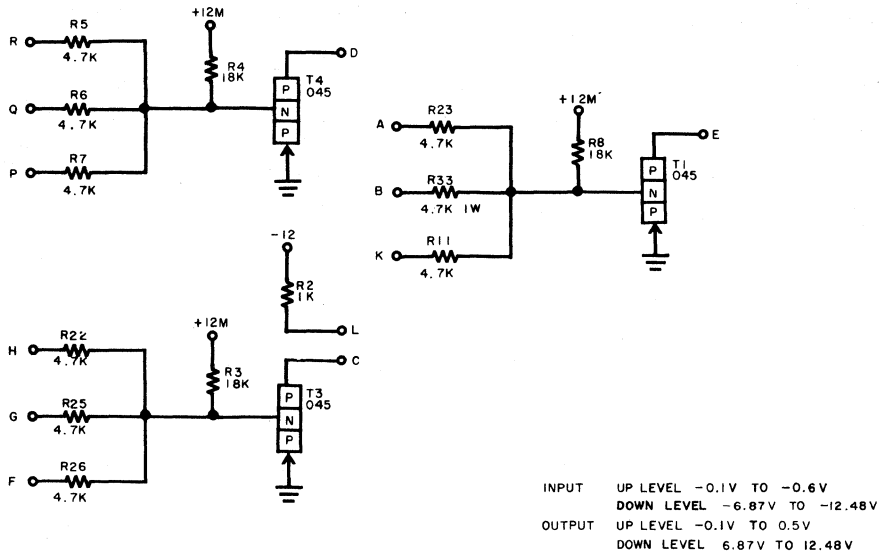
INPUT UP LEVEL - 0.4V TO -0.6V
DOWN LEVEL - 7.73V TO -12.48V

OUTPUT UP LEVEL - 0.4V TO -0.6V
DOWN LEVEL - 7.3V TO -9.7V

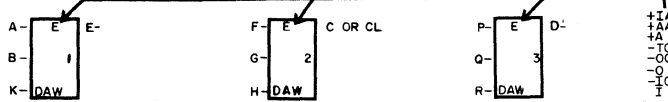
370172 REF

SDTRL-INVERTER, 3 WAY, UNLOADED COLLECTORS

DAW

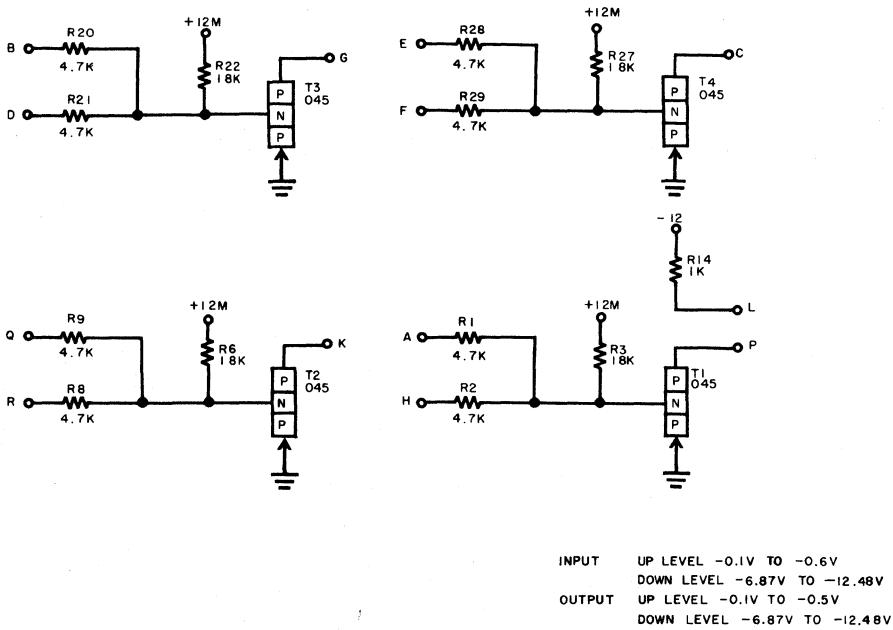


370083 REF



SDTRL-INVERTER, 2 WAY, UNLOADED COLLECTORS

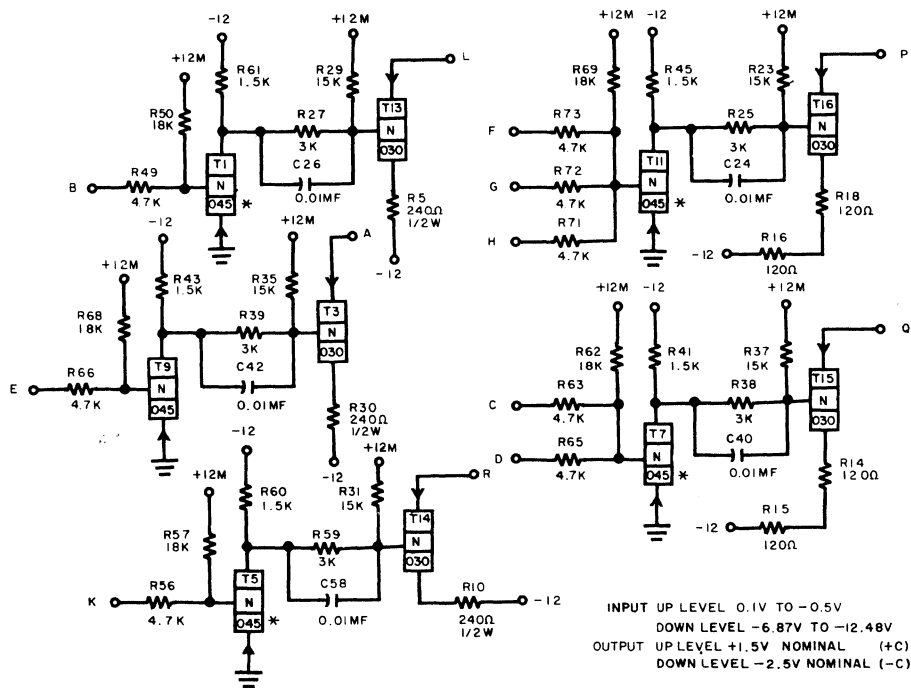
DAX



370084 REF

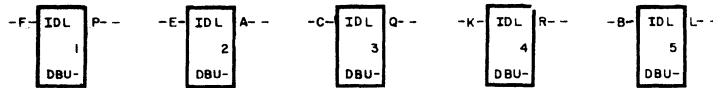


DBU

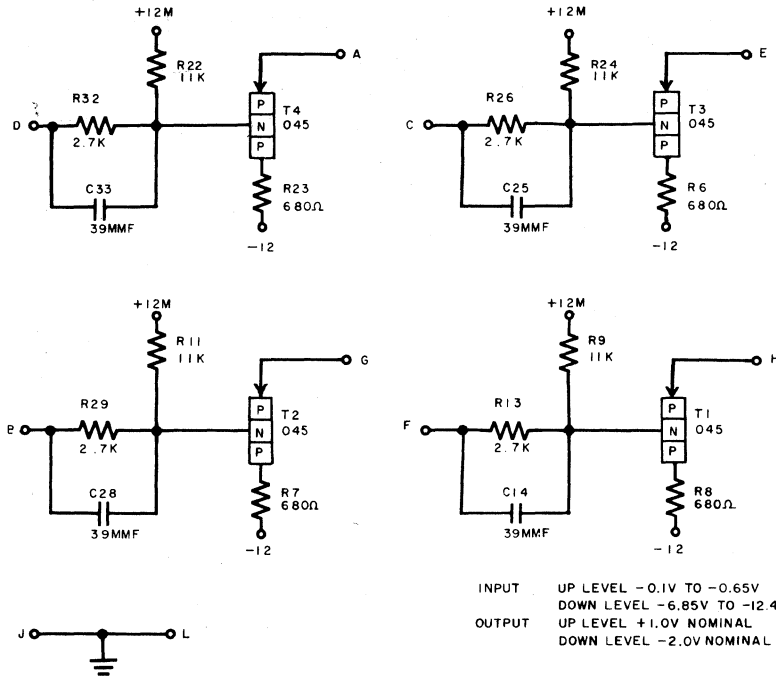


370384 REF

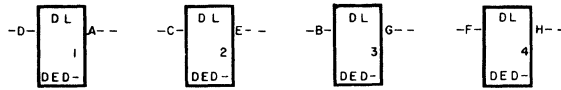
* IO1



DED

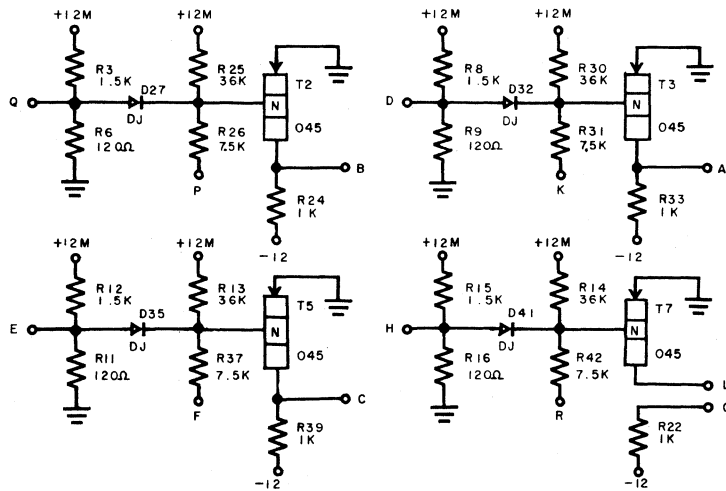


371987 REF

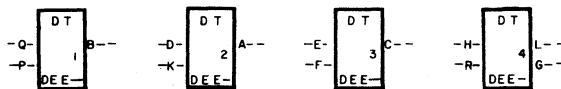


SDTRL STANDARD CABLE TERMINATOR GATED

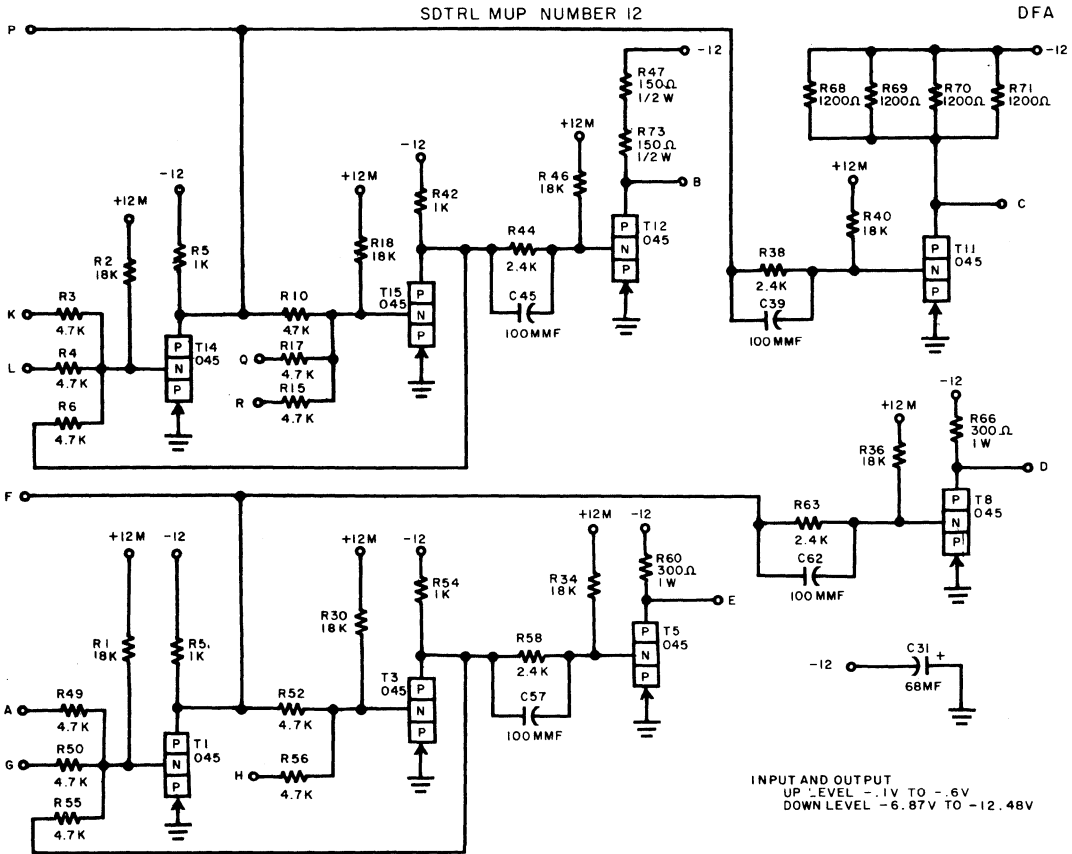
DEE



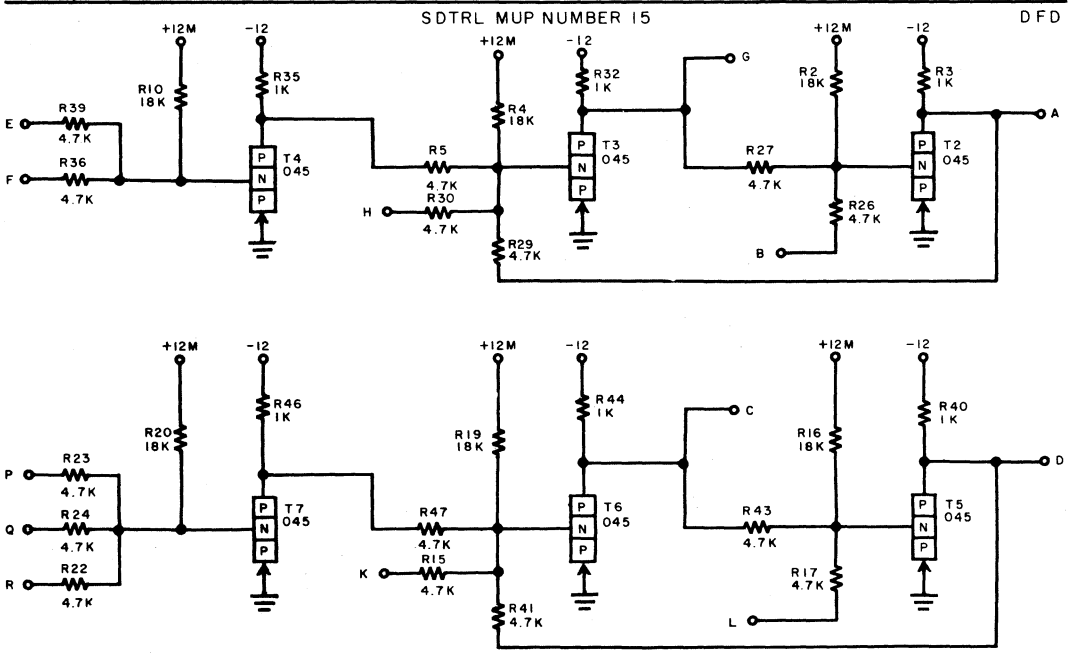
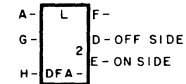
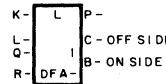
371988 REF



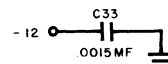
INPUT UP LEVEL +1.0V NOMINAL
DOWN LEVEL -2.0V NOMINAL
OUTPUT UP LEVEL -0.1V TO -6.5V
DOWN LEVEL -6.85V TO -12.48V



370224 REF

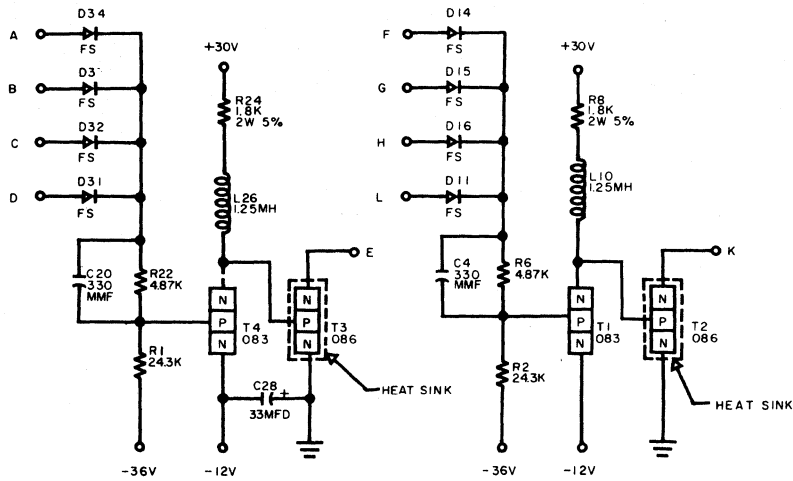


370204 REF



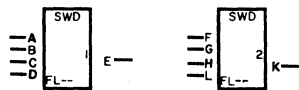
ALLOY-SWITCH, DECODER

FL
WF*



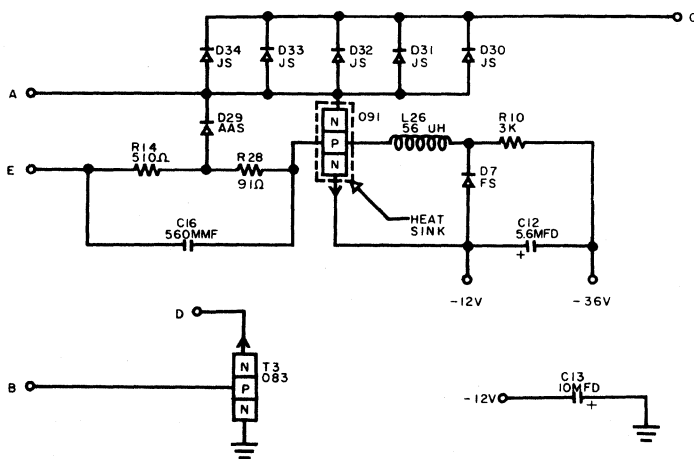
INPUT UP LEVEL 0.0V TO-0.5V
DOWN LEVEL -10.2V TO -13.8V
OUTPUT NOMINAL 270 ma
* INCHANGEABLE WITH FL

371396 REF
*371789 REF



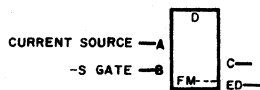
ALLOY-DRIVER, CURRENT

FM
WG*



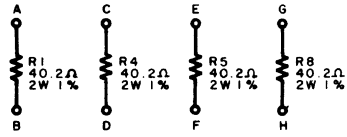
INPUT A PIN NOMINAL 270 ma
E PIN UP LEVEL 0.1V TO-0.5V
DOWN LEVEL -6.87V TO -12.48V
* INTERCHANGEABLE WITH FM

371397 REF
*371790 REF

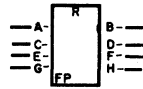


ALLOY-LOAD RESISTOR

FP

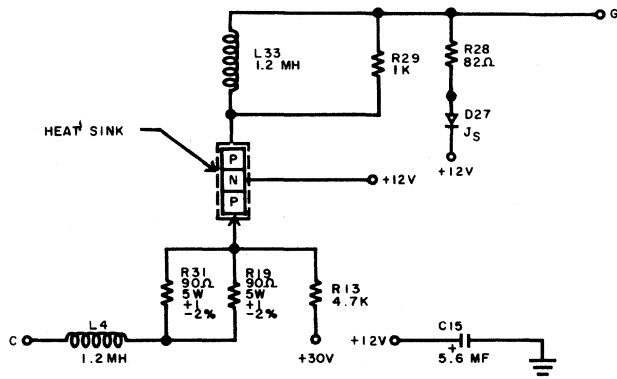


371453 REF



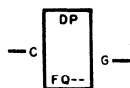
ALLOY-CURRENT SOURCE

FQ
ALY *



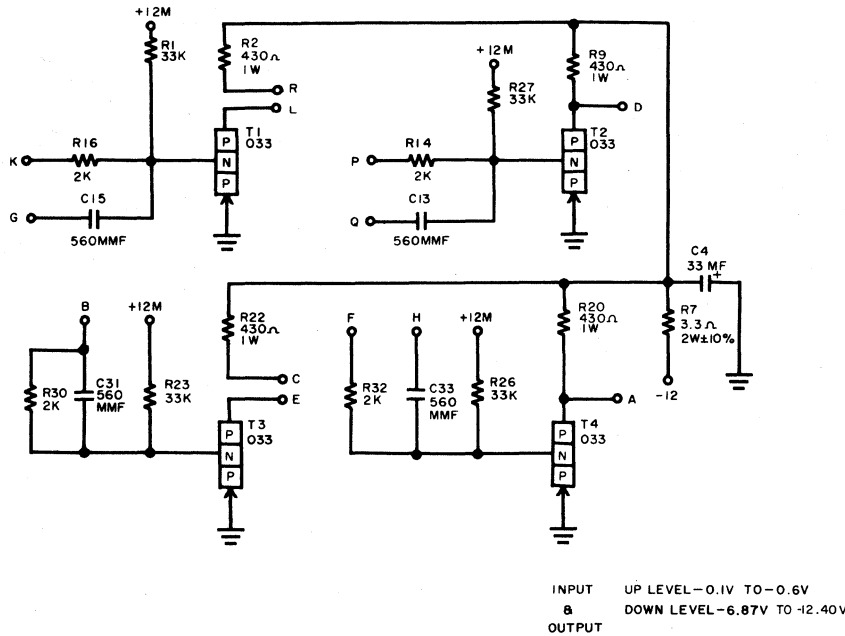
INPUT +30V NOMINAL 1 AMP
OUTPUT NOMINAL 270 ma

371454 REF
*370552 REF

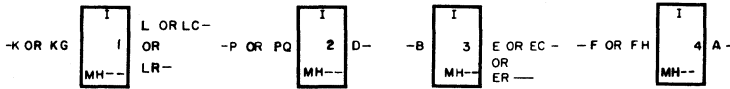


CTRL - INVERTER, POWER - PNP

MH

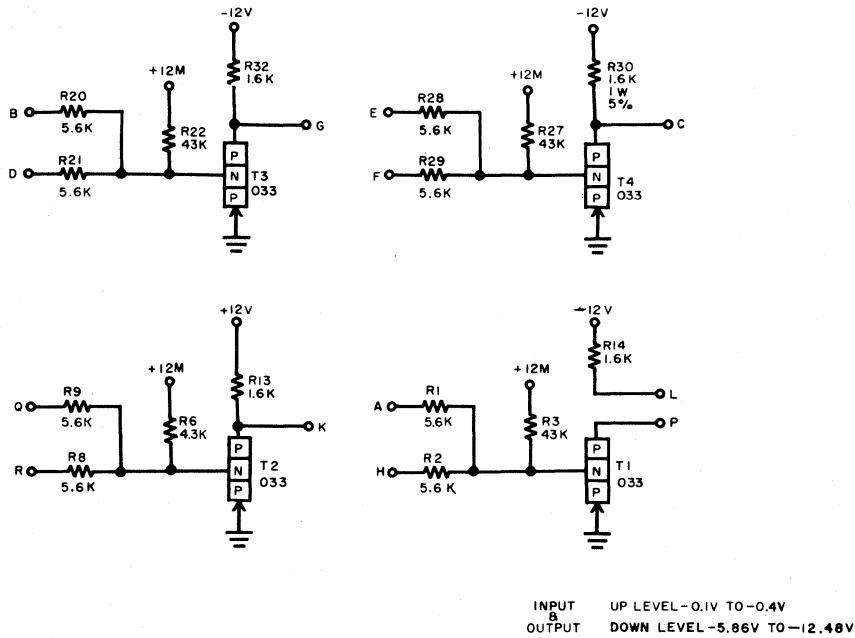


371487 REF

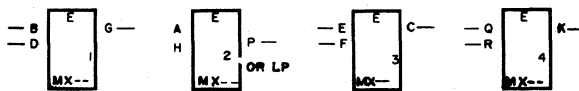


CTRL - INVERTER "N" 2 WAY

MX

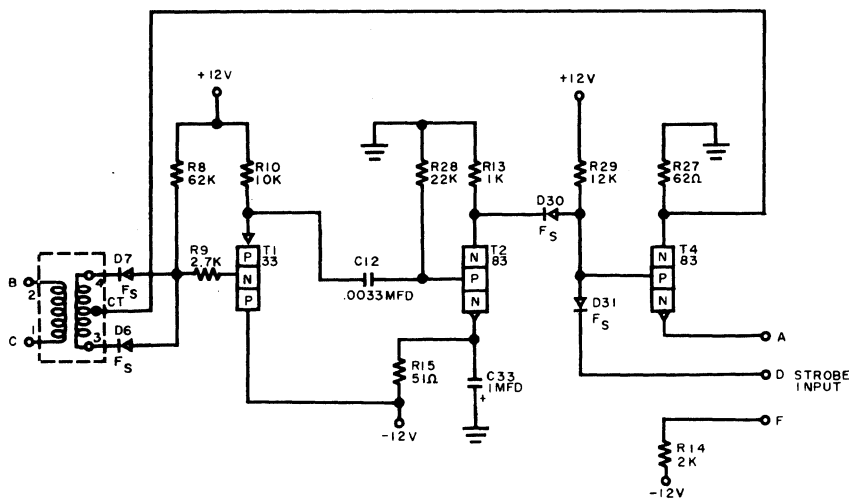


371661 REF



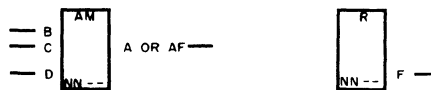
CTDL - SENSE AMPLIFIER, BUFFER

NN



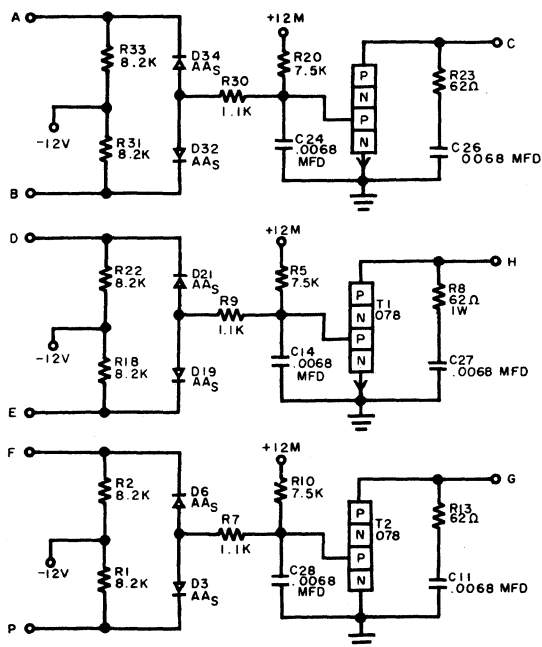
371678 REF

OUTPUT UP LEVEL - 0.1V TO -0.4V
DOWN LEVEL - 6.87V TO -12.48V
INPUT NOMINAL VOLTAGE
100 MV PULSE



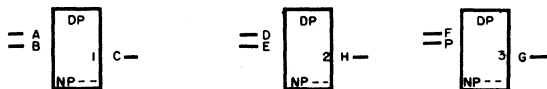
CTRL-DRIVER, RELAY THYRATRON V.M.

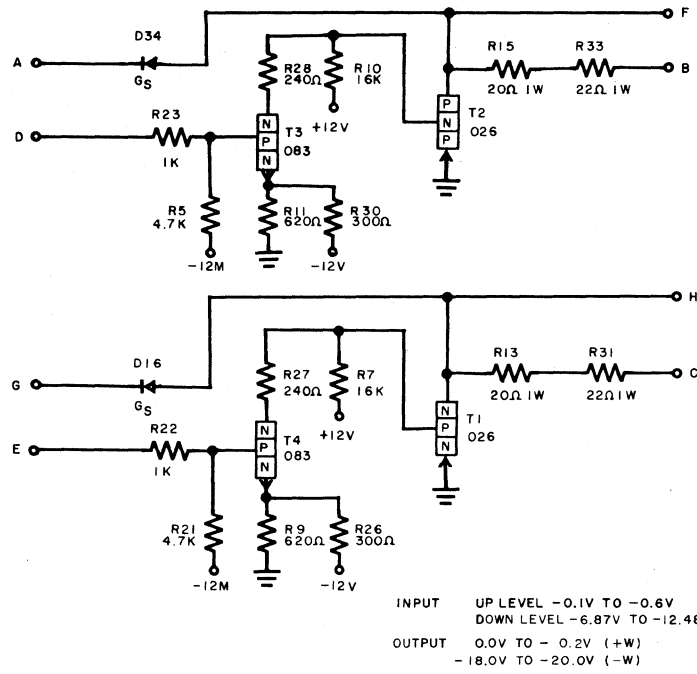
NP



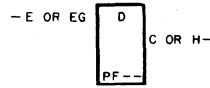
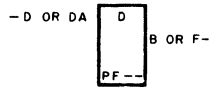
371684 REF

INPUT UP LEVEL - 0.0V TO -0.3V
DOWN LEVEL - 5.96V TO -13.2V
OUTPUT PIN C, H & F 0.0V TO -0.6V



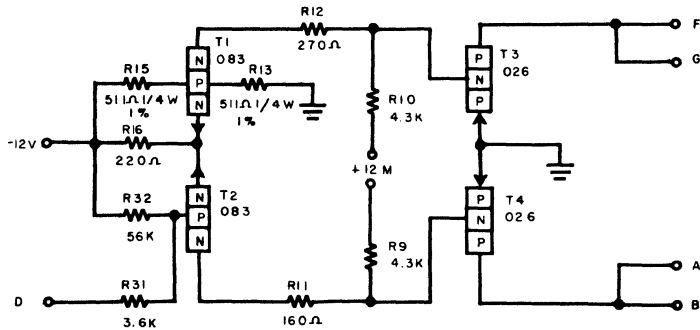


371750 REF



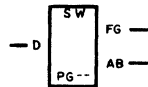
CONTROL-SELECTOR, BRAKE OR CLUTCH

PG

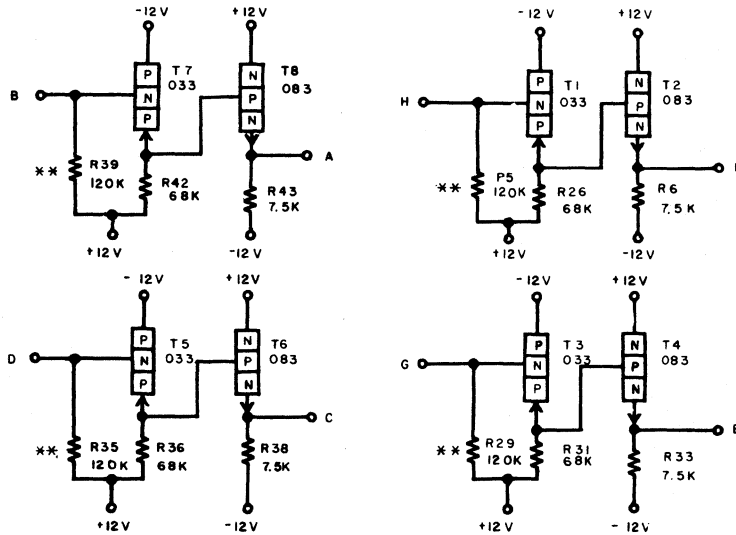


OUTPUT VARIES FROM -0.1V TO -12V
 INPUT UP LEVEL -0.1V TO -0.4V
 DOWN LEVEL -6.87V TO -12.48V

371777 REF



CTRL-EMITTER FOLLOWERS, LOW CURRENT



PH
 * CBW

INPUT -8V TO -9V
 OUTPUT UP LEVEL -0.1V TO -0.4V
 DOWN LEVEL -6.87V TO -12.48V

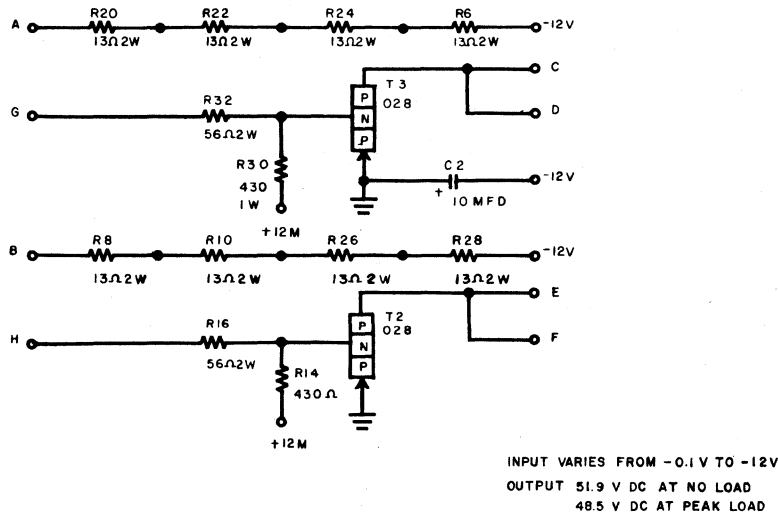
371778 REF
 * 2115030 REF

* WHEN PHOTODIODES HAVE ADJUSTING POTENTIOMETERS USE PIN 2115030
 * THESE RESISTORS ARE REMOVED TO CONVERT PH CARDS TO CBW



CONTROL- DRIVERS, BRAKE AND CLUTCH

PJ

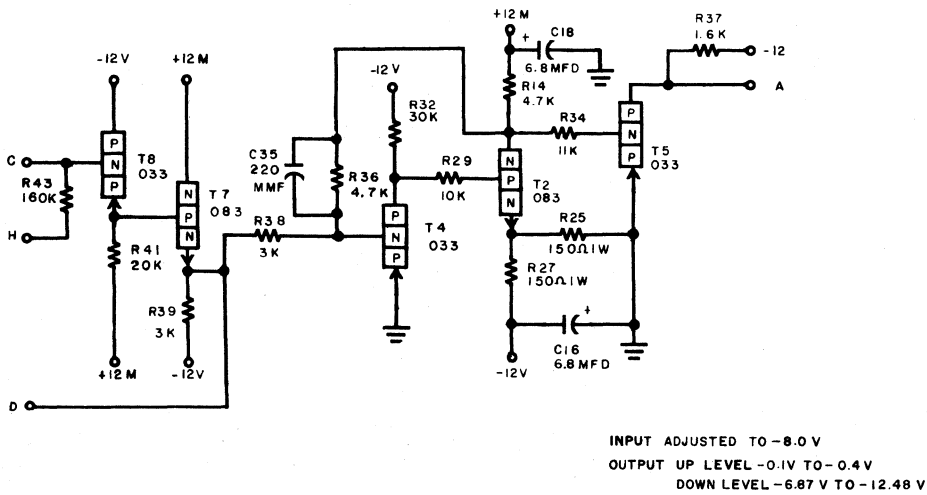


371779 REF

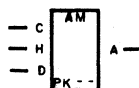


CONTROL- LOCK CIRCUIT- PHOTOSENSE

PK

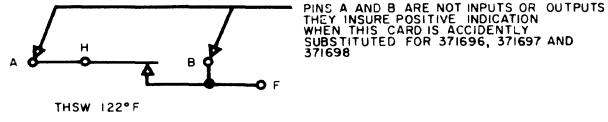


371780 REF

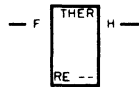


ALLOY-THERMOSWITCH N/C 122°F

RE

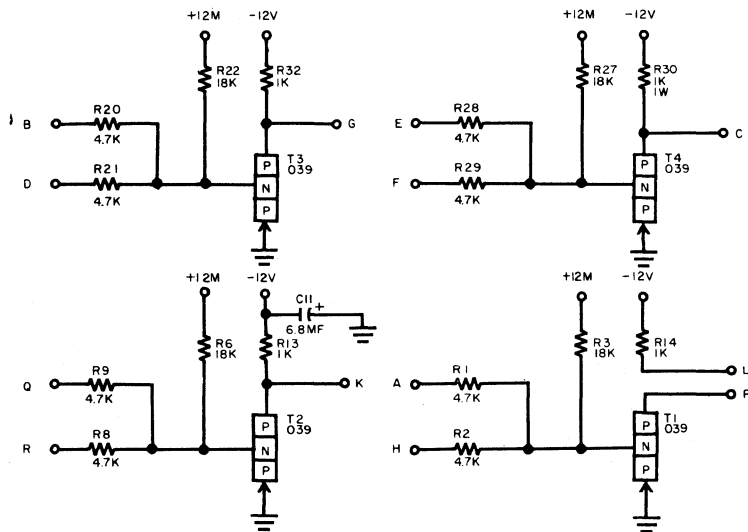


371699 REF



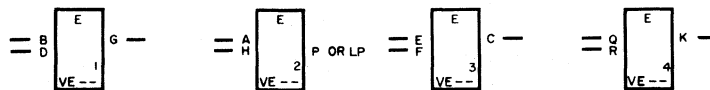
SDTRL-2WAY INVERTER

VE
TAG *



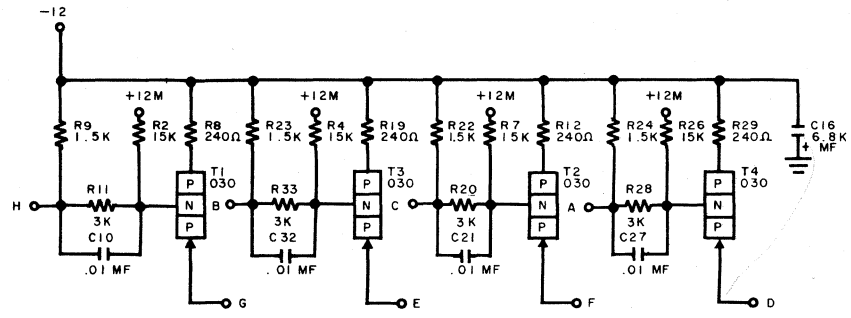
371869 REF
* 370366 REF

INPUT UP LEVEL - 0.1V TO 0.6V
a
OUTPUT DOWN LEVEL - 6.87V TO 12.48V
* INTERCHANGEABLE WITH VE

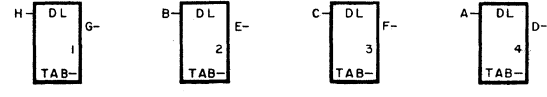


SDTRL 93Ω COAX LINE DRIVER-DISPERSED LOADS

TAB-



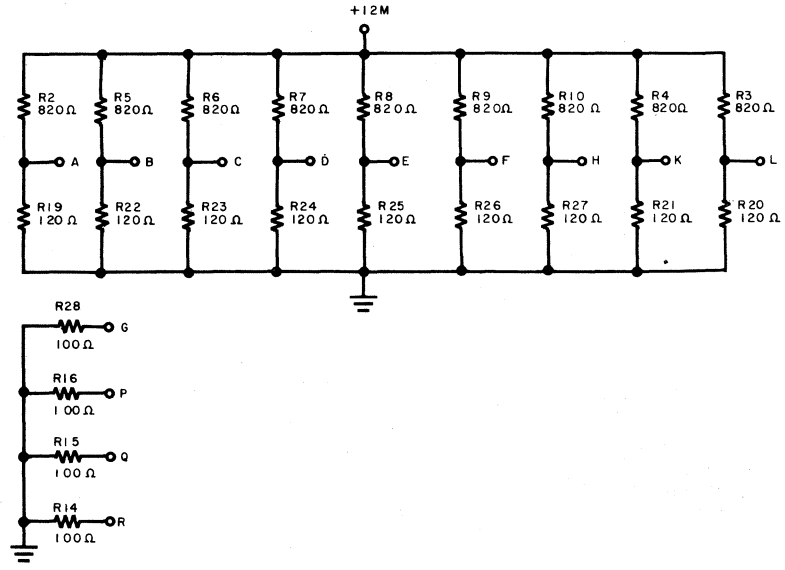
370066 REF



INPUT UP LEVEL -0.1V TO -0.4V
 DOWN LEVEL -6.87V TO -12.48V
 OUTPUT NOMINAL -2.0V

SDTRL-END OF LINE TERMINATORS

TCK-

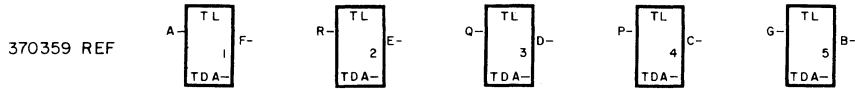
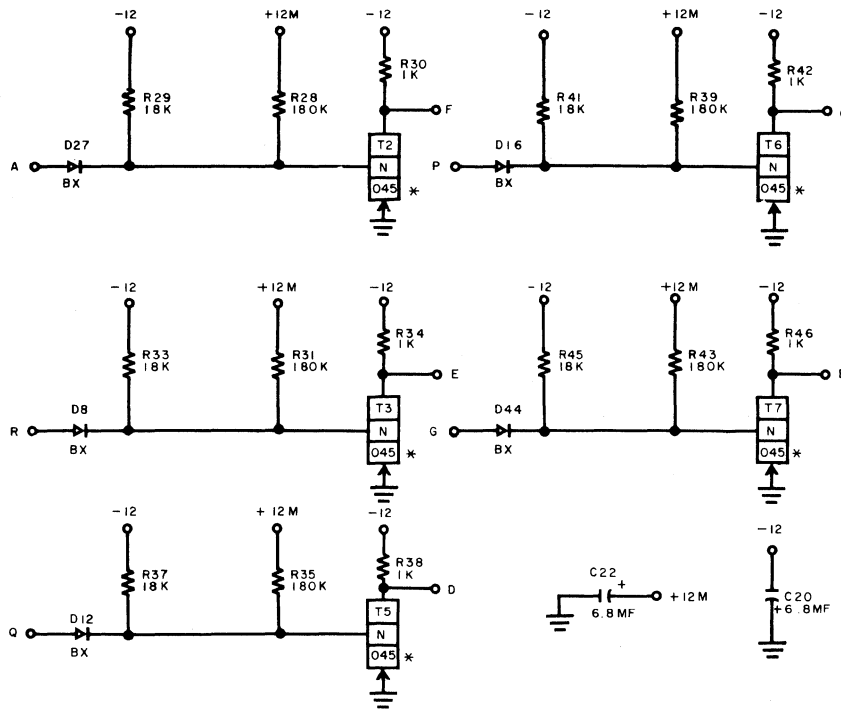


370334 REF

NOTE: ALL RESISTORS ARE 1/2 WATT AND ±5%

SDTRL-DISTRIBUTED LINE TERMINATOR

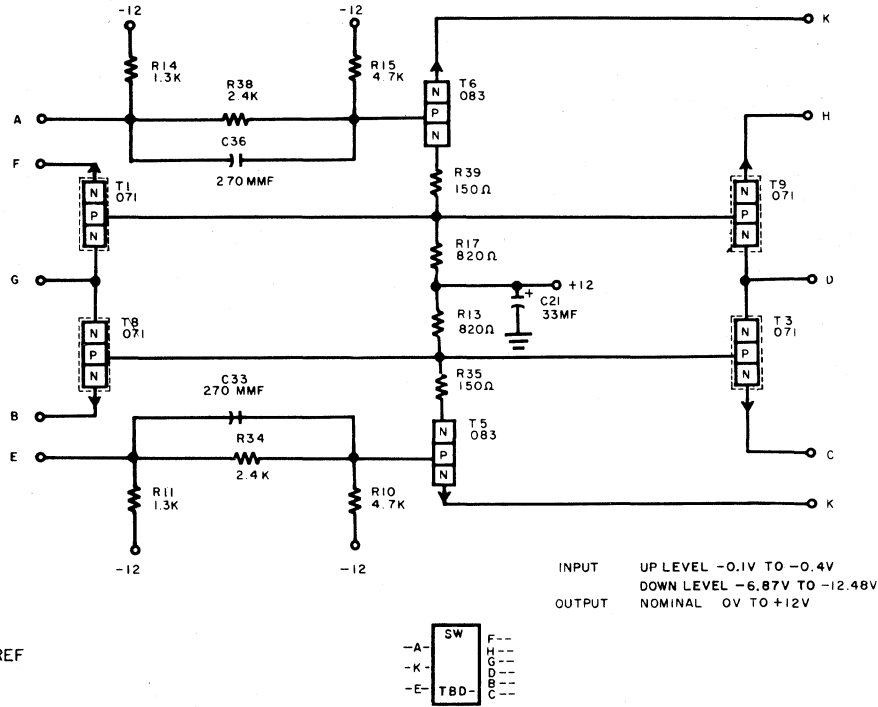
TDA-



INPUT NOMINAL -2.0V
 OUTPUT UP LEVEL -0.1V TO -0.4V
 DOWN LEVEL -6.87V TO -12.48V *101

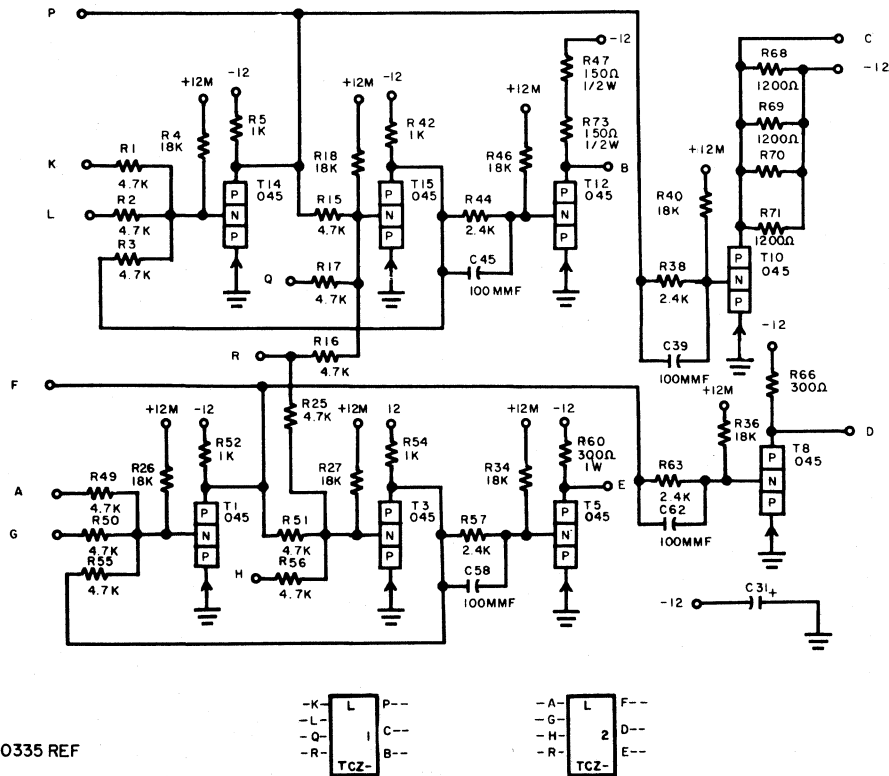
SDTRL-ALLOY SWITCH

TBD



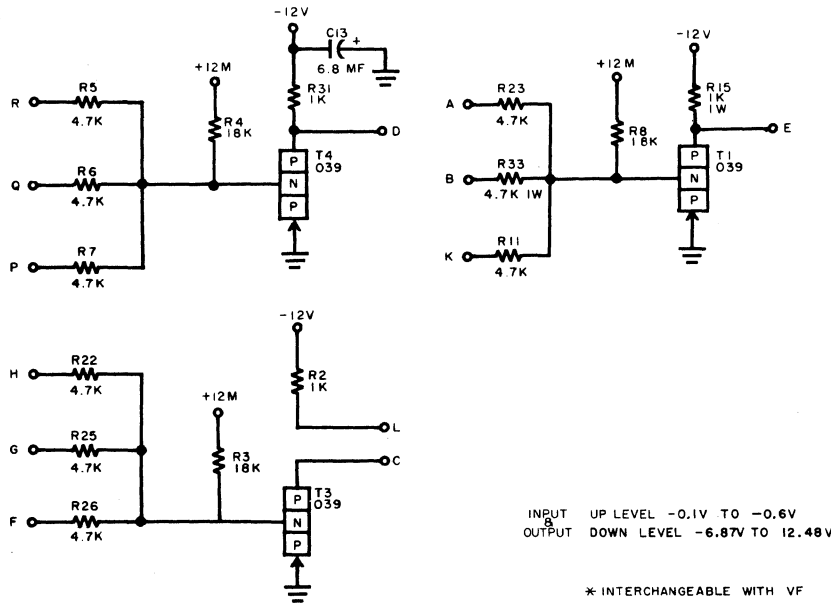
SDTRL-MODIFIED MUP NUMBER 12

TCZ

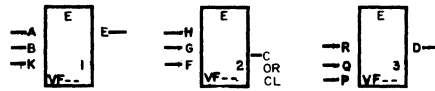


SDTRL-3 WAY INVERTER

VF
TAH*

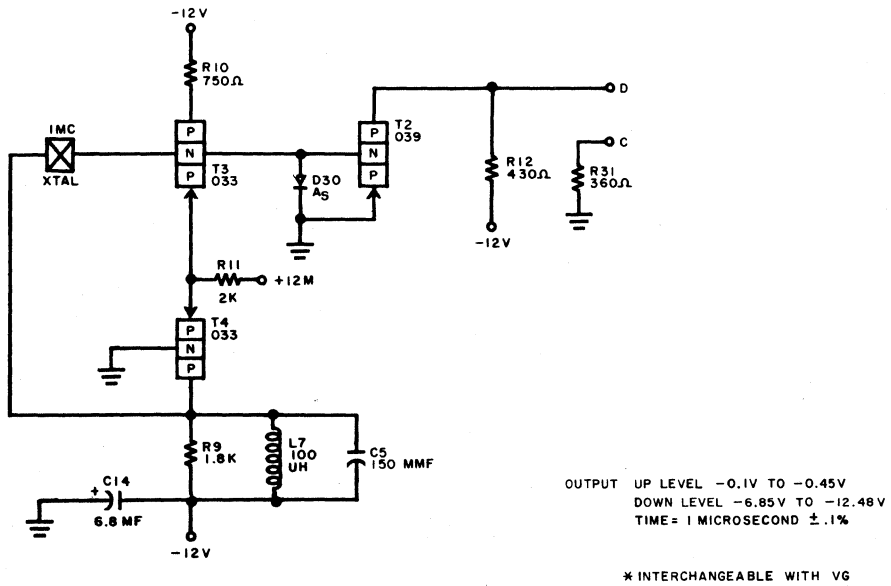


371870 REF
* 370367 REF

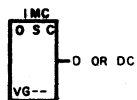


SDTRL - OSCILLATOR, ONE MC

VG
TAF*

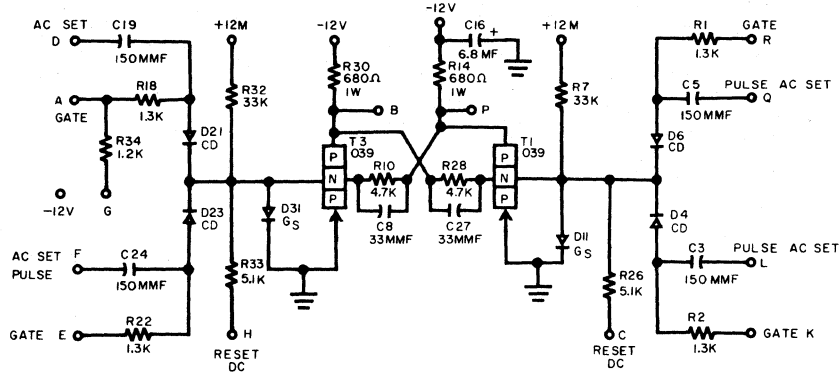


371868 REF
* 370365 REF



SDTRL - TRIGGER, BINARY

VJ
TAJ*

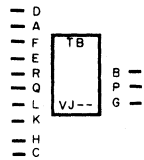


INPUT AC SET POSITIVE SHIFT 4.5V TO 6.0V
DC GATE UP LEVEL 0.0V TO -0.6V
DOWN LEVEL -6.87V TO -12.48V

OUTPUT UP LEVEL -0.1V TO -0.6V
DOWN LEVEL MIN -9.96V

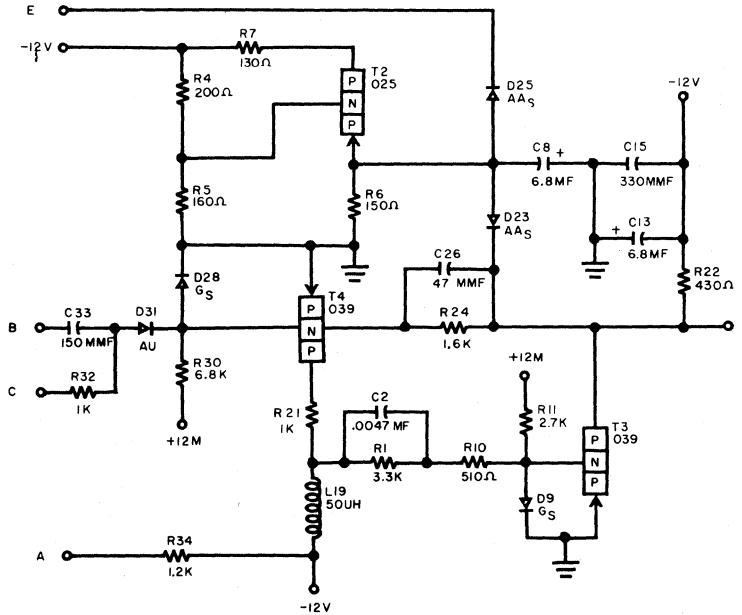
* INTERCHANGEABLE WITH VJ IF FBM # 2115244 IS INSTALLED.

371867 REF
*370364 REF



SDTRL - GENERATOR, SAMPLE PULSE

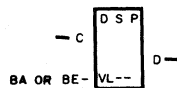
VL
TAL*



INPUT AC SET POSITIVE SHIFT 4.5V TO 6.24V
GATE UP LEVEL 0.0V TO -0.6V
DOWN LEVEL -6.87V TO -12.48V

OUTPUT UP LEVEL 0.0V TO -0.5V
DOWN LEVEL -4.5V TO -6.24V

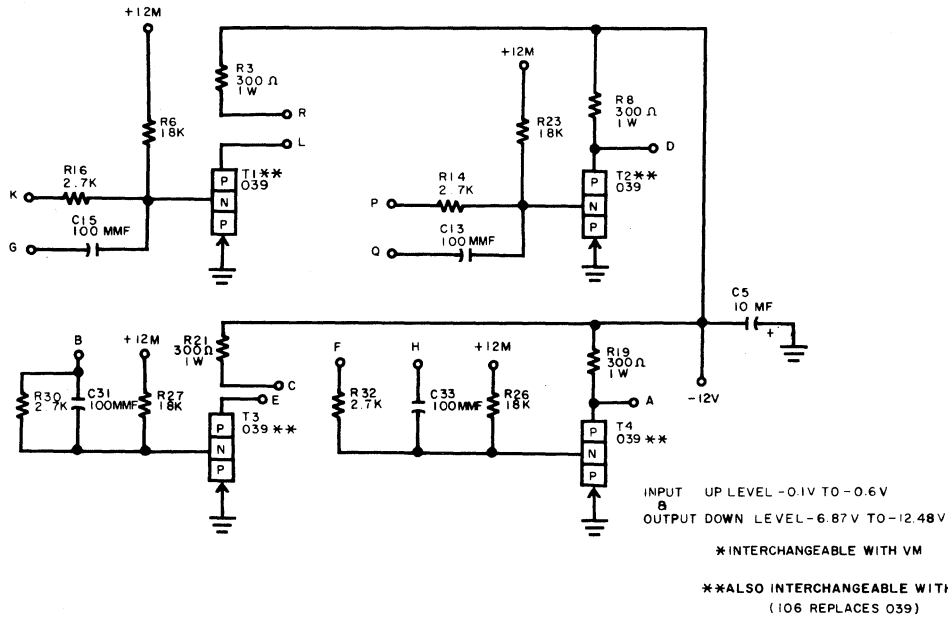
371874 REF
*370370 REF



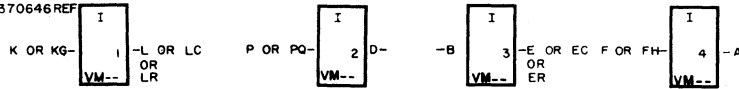
* INTERCHANGEABLE WITH VL

SDTRL - INVERTER, POWER - PNP

VM
TAK*
TFC**

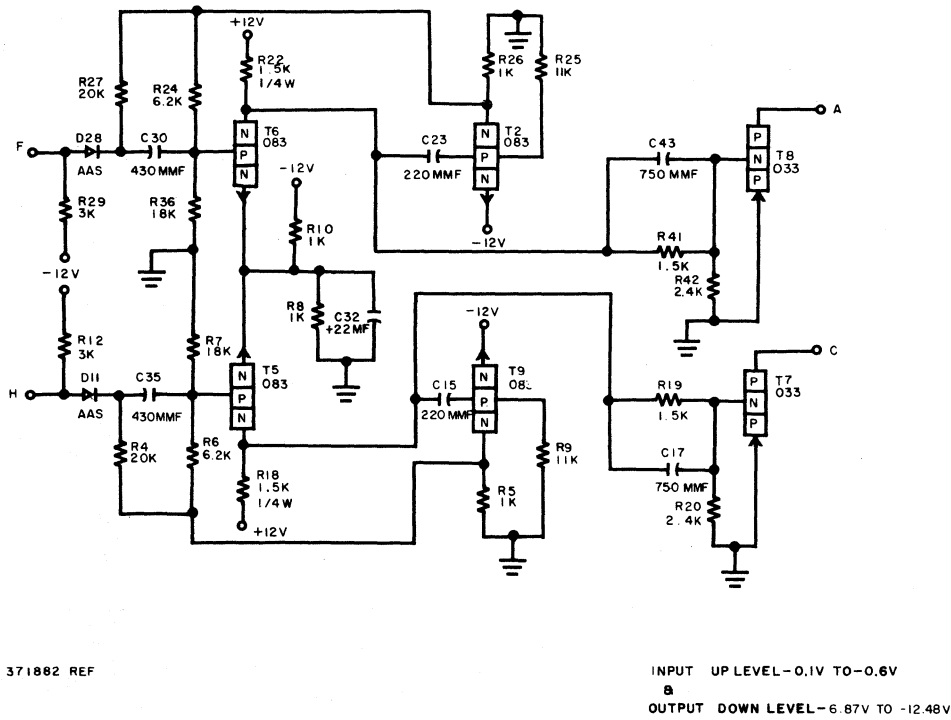


371871 REF
 *370368 REF
 **370646 REF

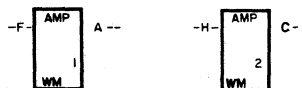


ALLOY-SENSE AMPLIFIERS, SINGLE SHOT

WM

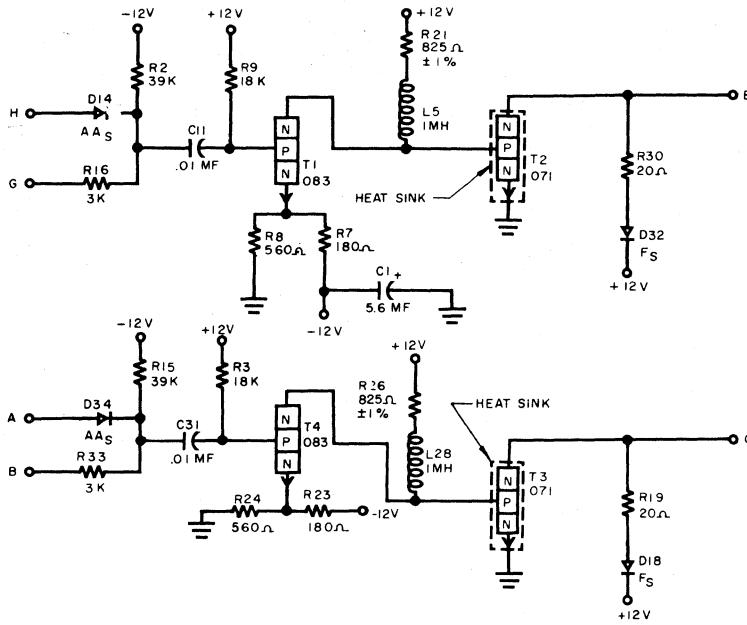


371882 REF



ALLOY-DRIVER, 12 V

W J



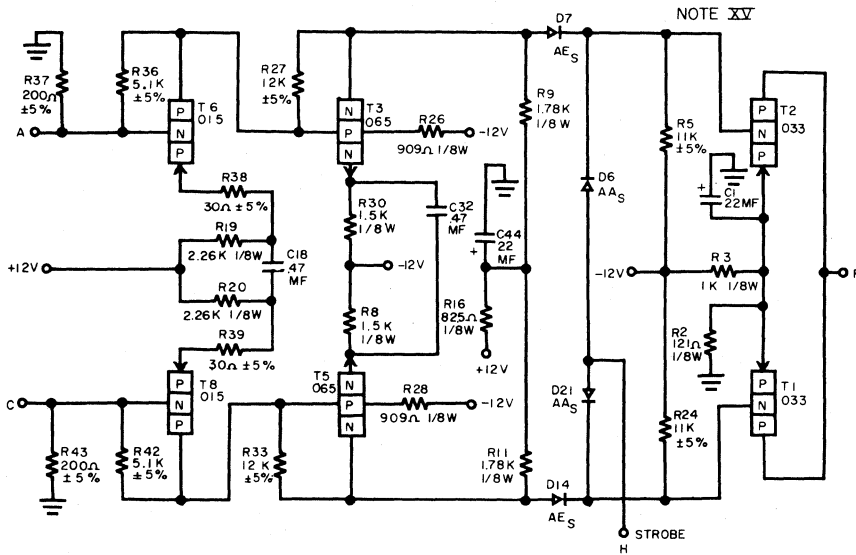
371881 REF



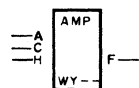
INPUT UP LEVEL 0.0V TO -0.5V
 DOWN LEVEL -9.0V TO -12.48V
 OUTPUT ± 12V NOMINAL (± R LEVEL)
 230 ma TO 300 ma

ALLOY-AMPLIFIER, PRE SENSE NO. 2

W Y



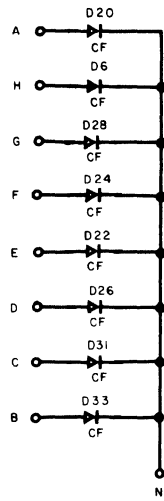
371900 REF



INPUT PIN A B C ± 40 MV NOMINAL
 PIN H OUTPUT
 UP LEVEL -0.1V TO -0.6V
 DOWN LEVEL -6.87 V TO -12.48V

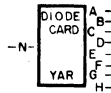
CF DIODE CARD

YAR



370321 REF

RATED CURRENT 100 ma
OUTPUT ±12V NOMINAL (± R LEVEL)





International Business Machines Corporation
Data Processing Division
112 East Post Road, White Plains, New York