

ELECTRONIC ANALYTICAL CONTROL UNIT

TYPE 704 - VOLUME 1

TABLE OF CONTENTS

INDEX NO	DESCRIPTION	PART NO	ENG CHG
1 SYSTEMS DIAGRAMS			
2.01.01	STG. REG COL S	503671	241602
2.01.02	STG. REG COLS 1-17	503672	241616
2.01.03	STG REG COLS 18-20	503673	241399A
2.01.04	STG REG COL S HOLD CKT	503674	241783
2.01.05	STG REG COL 1-35 HOLD CKTS	503675	241701
2.01.06	STG REG COLS 21-35	503676	241399A
2.02.01	ADDER & T/C CTRLS COLS Q & P	503677	242259
2.02.02	ADDER & T/C CTRLS COL 1	503678	241863
2.02.03	ADDER & T/C CTRLS COLS 2 & 4	503679	241863
2.02.04	ADDER & T/C CTRLS COLS 3 & 5	503680	241943
2.02.05	ADDER & T/C CTRLS COLS 6, 7, 8	503681	241863
2.02.06	ADDER & T/C CONTROLS COLS 9, 13, 17	503682	241870
2.02.07	ADDER & T/C CTRLS COLS 10, 11, 12, 14	503683	241399A
2.02.08	ADDER & T/C CTRLS COLS 18, 19, 20, 22, 23, 24, 26, 27, 28, 30, 31, 32, 34, 35	503684	242340
2.02.09	ADDER & T/C CTRLS COLS 21, 25, 29, 33	503685	241399A
2.02.10	ADDER & T/C CTRLS COLS 15, 16	503686	241399A
2.03.01	ACCUM REGISTER S	503687	241399A
2.03.02	ACCUM REG COLS P, 1-8	503688	242303
2.03.03	ACCUM REG COLS 9-34	503689	241703
2.03.04	ACCUM REG COL 35	503690	241655
2.03.05	ACCUM REG COL S HOLD CKTS	503691	241399A
2.03.06	ACCUM REG COL P, Q, 1-35 HOLD CKTS	503692	241701
2.03.07	ACCUM REG COL Q	503693	242762
2.04.01	MQ REGISTER COL S	503694	242715
2.04.02	MQ REGISTER COL 1	503695	242263
2.04.03	MQ REGISTER COLS 2-5	503696	242169
2.04.04	MQ REGISTER COLS 6-8	503697	241863
2.04.05	MQ REGISTER COLS 9-34	503698	241399A
2.04.06	MQ REGISTER COL 35	503699	242263
2.04.07	MQ REG COLS S, 1-35 HCLD CKTS.	503700	242098
2.05.01	STOR BUS SWITCHING COL S	503701	241700
2.05.02	STOR BUS SWITCHING COLS 1, 2, 18-20	503702	242259
2.05.03	STOR BUS SWITCHING COLS 3-17, 21-35	503703	242259
2.06.01	CARRY & OVERFLOW TGRS CC, G	503704	242646
2.06.02	CARRY & OVERFLOW TGRS COL 9	503705	242469B
2.06.03	MQ REG. OVERFLOW TGR.	503706	241399A
2.06.04	ADDER & CARRY TGR.	503707	242469B
2.06.05	DIVIDE CHECK TGR.	503708	241905
2.07.02	CONDITIONAL TRANSFER EXEC CTRLS	503709	241399A
2.07.02	CARD TRANSFER CTRL TR ON LOW MQ	503710	241860
2.07.04	ADD/SUB EXE CTRL	503711	241399A
2.07.05	CLEAR & ADD/UB EX CTRL	503712	241783
2.07.07	MPY/MPY R EX CTRL	503713	241399A
2.07.08	DIVIDE EXEC CT'S	503714	242264
2.07.10	F. P. ADD/SUB EXEC CTRLS	503715	242005
2.07.10	F. P. ADD/SUB EXEC CTRLS	503716	241860
2.07.11	F. P. MPY EXEC CTRLS	503717	242312
2.07.12	F. P. DIVIDE EX CTRLS	503718	242005
2.07.12	F. P. DIVIDE EXEC CTRLS	503719	242764A
2.07.13	STORE EXEC CNTLS	503720	242098
2.07.17	LONG LEFT, LOGICAL LEFT EXEC CTRL	503721	241399A
2.07.18	LONG RIGHT EXEC CTRLS	503722	241399A
2.07.23	OR TO STORAGE EXEC CTRL	503723	241399A
2.07.24	AND TO ACC, AND TO STG EXEC CTRL	503724	242393
2.07.25	OR TO ACC EXEC CTRL	503725	241399A
2.07.26	TRAN ON LOW QUOT EXEC CTRL COMPARE ACC WITH STOR EXEC CTRL	503726	242050
2.07.27	COMPARE STG. & ACC	503726	242050

ELECTRONIC ANALYTICAL CONTROL UNIT

TYPE 704 - VOLUME 1

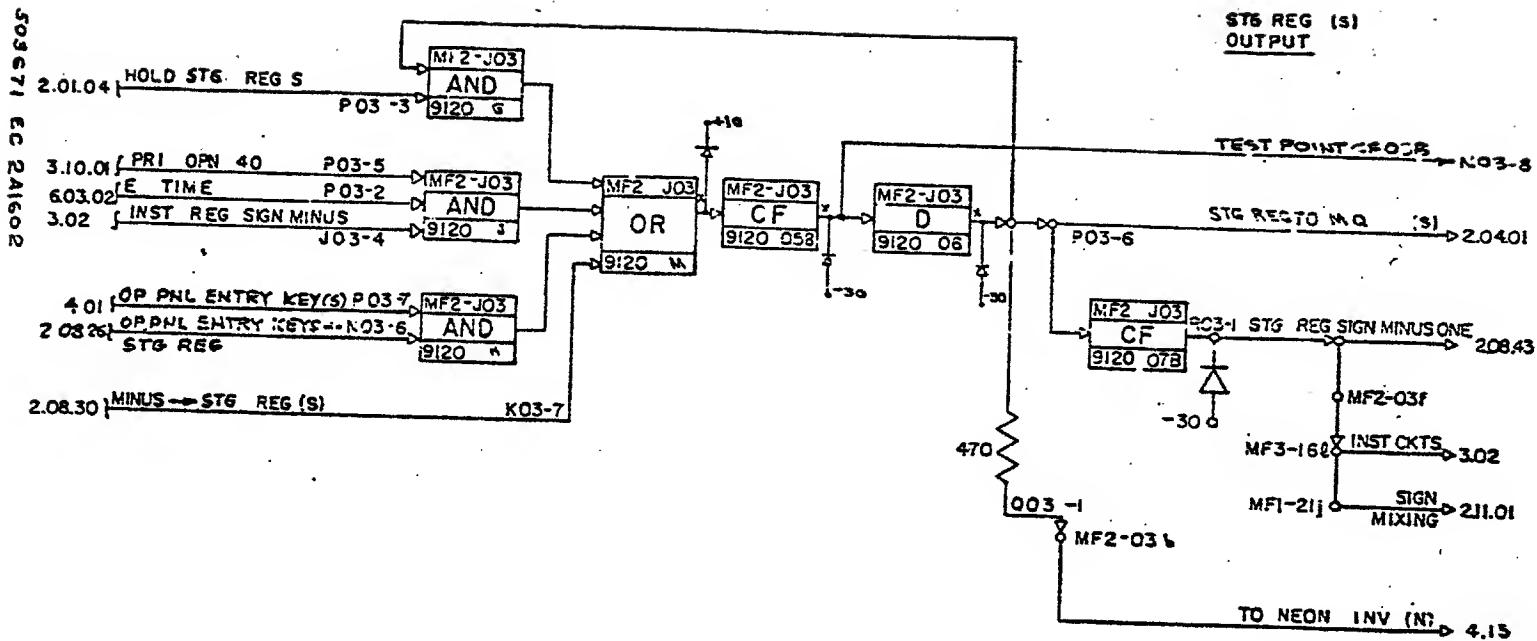
TABLE OF CONTENTS

INDEX NO	DESCRIPTION	PART NO	ENG CHG
1 SYSTEMS DIAGRAMS			
2.01.01	STG. REG COL S	503671	241602
2.01.02	STG. REG COLS 1-17	503672	241616
2.01.03	STG REG COLS 18-20	503673	241399A
2.01.04	STG REG COL S HOLD CKT	503674	241783
2.01.05	STG REG COL 1-35 HOLD CKTS	503675	241701
2.01.06	STG REG COLS 21-35	503676	241399A
2.02.01	ADDER & T/C CTRL S COLS Q & P	503677	242259
2.02.02	ADDER & T/C CTRL S COL 1	503678	241863
2.02.03	ADDER & T/C CTRL S COLS 2 & 4	503679	241863
2.02.04	ADDER & T/C CTRL S COLS 3 & 5	503680	241943
2.02.05	ADDER & T/C CTRL S COLS 6, 7, 8	503681	241863
2.02.06	ADDER & T/C CONTROLS COLS 9, 13, 17	503682	241870
2.02.07	ADDER & T/C CTRL S COLS 10, 11, 12, 14	503683	241399A
2.02.08	ADDER & T/C CTRL S COLS 18, 19, 20, 22, 23, 24, 26, 27, 28, 30, 31, 32, 34, 35	503684	242340
2.02.09	ADDER & T/C CTRL S COLS 21, 25, 29, 33	503685	241399A
2.02.10	ADDER & T/C CTRL S COLS 15, 16	503686	241399A
2.03.01	ACCUM REGISTER S	503687	241399A
2.03.02	ACCUM REG COLS P, 1-8	503688	242303
2.03.03	ACCUM REG COLS 9-34	503689	241703
2.03.04	ACCUM REG COL 35	503690	241655
2.03.05	ACCUM REG COL S HOLD CKTS	503691	241399A
2.03.06	ACCUM REG COL P, Q, 1-35 HOLD CKTS	503692	241701
2.03.07	ACCUM REG COL Q	503693	242762
2.04.01	MQ REGISTER COL S	503694	242715
2.04.02	MQ REGISTER COL 1	503695	242263
2.04.03	MQ REGISTER COLS 2-5	503696	242169
2.04.04	MQ REGISTER COLS 6-8	503697	241863
2.04.05	MQ REGISTER COLS 9-34	503698	241399A
2.04.06	MQ REGISTER COL 35	503699	242263
2.04.07	MQ REG COLS S, 1-35 HLD CKTS.	503700	242098
2.05.01	STOR BUS SWITCHING COL S	503701	241700
2.05.02	STOR BUS SWITCHING COLS 1, 2, 18-20	503702	242259
2.05.03	STOR BUS SWITCHING COLS 3-17, 21-35	503703	242259
2.06.01	CARRY & OVERFLOW TGRS COL G	503704	242646
2.06.02	CARRY & OVERFLOW TGRS COL 9	503705	242469B
2.06.03	MQ REG. OVERFLOW TGR.	503706	241399A
2.06.04	ADDER & CARRY TGR.	503707	242469B
2.06.05	DIVIDE CHECK TGR.	503708	241905
2.07.02	CONDITIONAL TRANSFER EXEC CTRL	503709	241399A
2.07.02	CARD TRANSFER CTRL TR ON LOW MQ	503710	241860
2.07.04	ADD/SUB EXEC CTRL	503711	241399A
2.07.05	CLEAR & ADD/ SUB EX CTRL	503712	241783
2.07.07	MPY/MPY R EX CTRL	503713	241399A
2.07.08	DIVIDE EXEC CT'S	503714	242264
2.07.10	F. P. ADD/SUB EXEC CTRL	503715	242005
2.07.10	F. P. ADD/SUB EXEC CTRL	503716	241860
2.07.11	F. P. MPY EXEC CTRL	503717	242312
2.07.12	F. P. DIVIDE EX CTRL	503718	242005
2.07.12	F. P. DIVIDE EX CTRL	503719	242764A
2.07.13	STORE EXEC CTL	503720	242098
2.07.17	LONG LEFT, LOGICAL LEFT EXEC CTRL	503721	241399A
2.07.18	LONG RIGHT EXEC CTRL	503722	241399A
2.07.23	OR TO STORAGE EXEC CTRL	503723	241399A
2.07.24	AND TO ACC, AND TO STG EXEC CTRL	503724	242393
2.07.25	OR TO ACC EXEC CTRL	503725	241399A
2.07.26	TRAN ON LOW QUOT EXEC CTRL COMPARE ACC WITH STOR EXEC CTRL	503726	242050
2.07.27	COMPARE STG. & ACC	503727	242645

INDEX NO	DESCRIPTION	PART NO	ENG CHG
2.07.28	LOAD INDEX CONTROL	503728	241399A
2.07.29	PLACE ADR IN INDEX, PLACE DECR IN INDEX	503729	241815
2.07.34	CHANGE ACC SIGN EXEC CTRL	503730	241399A
2.07.39	TRANSFER WITH INDEX RAISE EX CTRL	503731	241816
2.07.56	INDEXING EXEC CTRL	503732	241815
2.07.57	INDEXING EXEC CTRL	503733	241602
2.08.01	STG BUS TO STG REG.	503734	241701
2.08.05	STG REG 1-8 TO ADDER &	503735	242138
	STG REG 9-35 TO ADDER	503735	242138
2.08.06	TR ACC Q, P, 1-8 TO ADD & TR ACC 9-35 TO ADD	503736	242469B
2.08.07	CMPRL ACC TO ADDER	503737	242939
2.08.08	CARRY TO ADDER 35	503738	241701
2.08.09	ADDER Q, P, 1-8 TO ACC ADDER 9-35 TO ACC	503739	242764A
2.08.10	SHIFT ACC LEFT	503740	241399A
2.08.11	SHIFT ACC REG RIGHT	503741	241399A
2.08.12	MQ S, 1 OR 9 TO ACC 35,	503742	241399A
	1 TO ACC 35	503742	241399A
2.08.13	PLUS TO ACC REG S	503743	241787
2.08.14	MINUS TO ACC REG S	503744	241816
2.08.15	STG REG S-35 TO MQ REG	503745	241399A
2.08.16	SHIFT MQ RIGHT	503746	242263
2.08.17	SHIFT MQ LEFT	503747	241787
2.08.18	CLEAR MQ REG	503748	242848
2.08.19	RING SHIFT MQ	503749	241399A
2.08.20	ONE TO MQ 35	503750	241399A
2.08.21	I/O BUS S-35 TO MQ REG	503751	241949
2.08.22	I/O BUS 6-35 TO MQ REG	503752	241811
2.08.23	ADDER TO ACC CONTROL	503753	242947
2.08.24	MINUS TO MQ S	503754	241399A
2.08.25	ACC S, 1-35 TO STG BUS S, 1-35	503755	241399A
2.08.26	OP PNL KEYS TO STG REG	503756	241783
2.08.27	MQ REG S, 1-35 TO STG BUS	503757	241399A
	S, 1-35 MQ REG STORE CTRL	503757	241399A
2.08.28	ADR SWITCH TO STORAGE BUS 3-17 21-35	503758	241399A
2.08.29	CLEAR & ADD/AND CTRL	503759	241399A
2.08.30	MINUS TO STG. REGS	503760	241907
2.08.31	END OPERATION	503761	241563
2.08.31	END OPERATION	503762	241399A
2.08.33	35 TO SHIFT COUNTER	503763	241399A
2.08.34	STEP SHIFT COUNTER	503764	241399A
2.08.39	ADDER 1 CARRY OR ACC 1 OR P TO OV TGR	503765	242005
2.08.40	RESET OV TGR	503766	241651
2.08.41	SET MQ OVERFLOW TGR	503767	241399A
2.08.42	RESET MQ OVERFLOW TGR	503768	241399A
2.08.43	ONES TO ADDERS Q, P, 1, 2, 3, 4, 5, 6, 7, 8	503769	242396
2.08.44	CARRY TO ADDER 8	503770	242465
2.08.45	FLOATING POINT SHIFT CTRL	503771	242005
2.08.46	ADDERS 1-8 TO MQ 1-8	503772	241478
2.08.47	STEP FLOATING POINT TALLY COUNTER	503773	242758
2.08.48	INDEXING OPERATION & SR	503774	242641
	24-35 TO ADDERS 6-17	503774	242465
2.08.49	INDEX REGISTER TO ADDER	503775	242641
2.08.50	CARRY 1 TO ADDER 17, XR	503776	242009
	ENTRY CTRL CARRY 1 TO ADDER 16	503776	242009
2.08.51	INDEXING CONTROLS	503777	242092
2.08.53	ADDER TO INDEX REG	503778	241942
2.09	PULSE & GATE GENERATOR	503779	242764A
2.09	PULSE & GATE GENERATOR	503780	242469B
2.09	PULSE & GATE GENERATOR	503781	242939
2.10.01	FLOATING POINT TALLY COUNTER	503782	242469B
2.10.02	EXEC CTRL TGR. T-I	503783	242660
2.10.03	TRAPPING CONTROL	503784	241561
2.11.01	SIGN MIXING	503785	241860
2.12.01	INDEX REGISTER	503786	241701
2.12.02	X. R. N HOLD LINES ADDER TO X. R. N	503787	241906
2.12.03	ADDER TO INDEX REG N GATING LINE	503788	241399A
2.12.04	INDEX REGISTER MIXING	503789	241701
2.12.05	INDEX REG TO ADDERS GATING LINE	503790	241815

STG REG COL 8

2.01.01



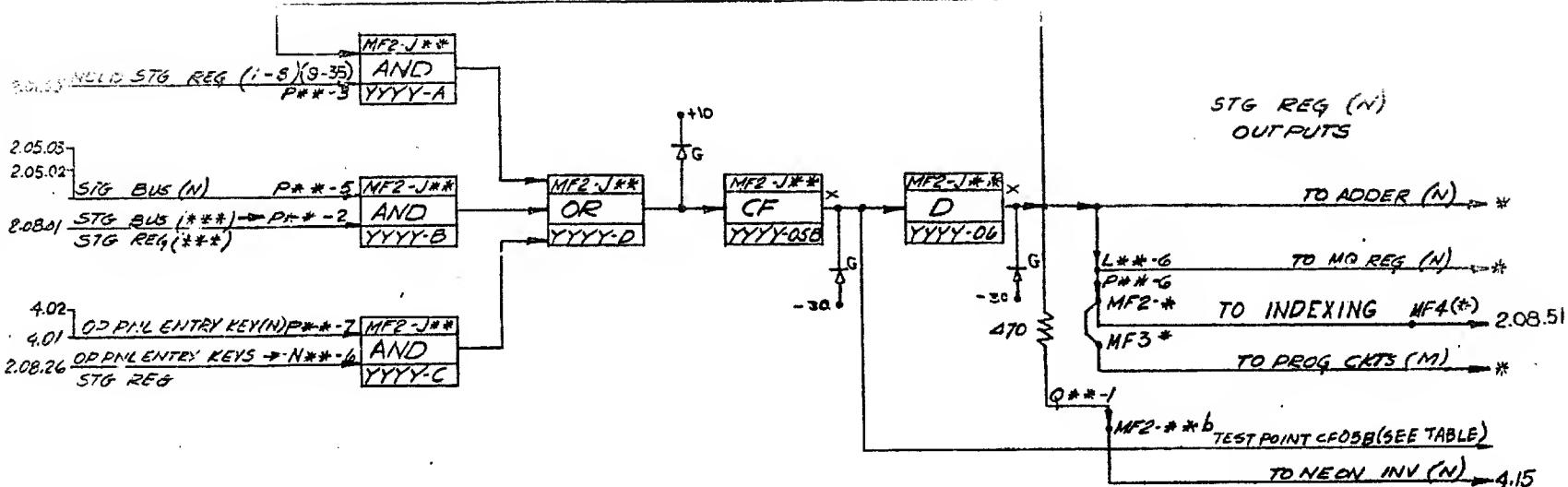
STG REG CIRCUITS (1-17)

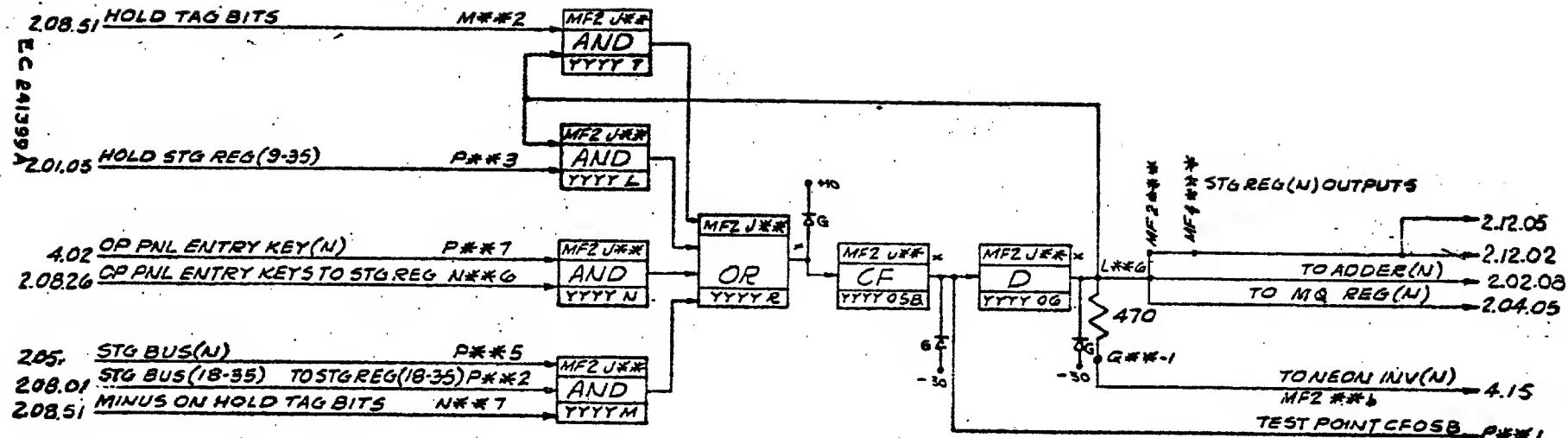
2.01.02

TEST POINT CF05B (SEE TABLE)

* SEE TABLE

STG. BUS#*	TEST POINT	ARITHM. NO.	PLUGGABLE UNIT LOCATION	PLUGGABLE UNIT ON TEST BOARD	STG. REG (N) OUTPUTS	TO ADDER (N)	* MF2 EDGE CONNECTOR	* MF4 EDGE CONNECTORS
1-8	P04-1	1	04	9065	202.02 204.02	16-6	3.04	04 f 14 M
1-8	P05-1	2	05	9066	202.03 204.03	17-M	3.04	05 f 15 K
1-8	P06-1	3	06	9067	202.04 204.03	17-S	3.03	06 f
1-8	P07-1	4	07	9066	202.03 204.03	18-d	3.03	07 f
1-8	P08-1	5	08	9067	202.04 204.03	18-C	3.03	08 f
1-8	P09-1	6	09	9066	202.05 204.04	25-B	3.03	09 K
1-8	P10-1	7	10	9067	202.05 204.04	25-D	3.03	10 K
1-8	P11-1	8	11	9066	202.05 204.04	25-K	3.04	11 K 15 M
S,9-17	N12-8	9	12	7611	202.06 204.05	25-L	3.04	12 K 04 D
S,9-17	P13-1	10	13	7610	202.07 204.05	26-A	3.04	21 M
S,9-17	N14-8	11	14	7611	202.07 204.05	24-L	3.04	22 M
S,9-17	P15-1	12	15	7610	202.07 204.05			
S,9-17	N16-8	13	16	7611	202.06 204.05			
S,9-17	P17-1	14	17	7610	202.07 204.05			
S,9-17	N18-8	15	18	7611	202.10 204.05			
S,9-17	P19-1	16	19	7610	202.10 204.05			
S,9-17	N20-8	17	20	7611	202.06 204.05			



503673
EC 24399A

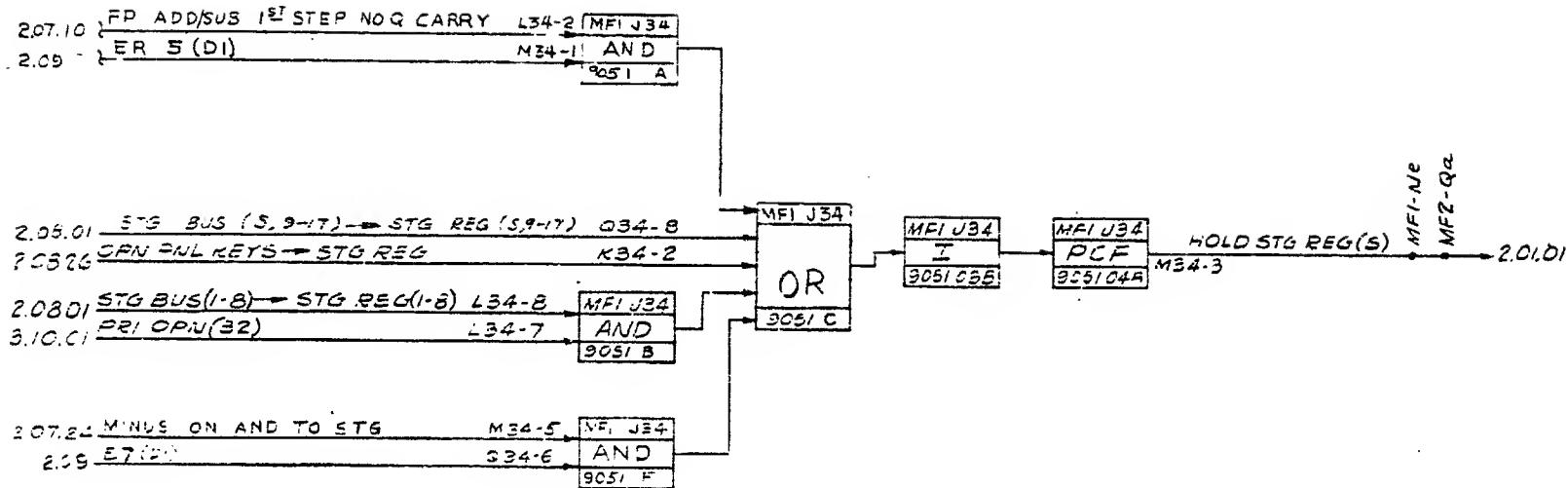
* SEE TABLE

ADDRESS LINE	PART NO.	PLUGGABLE UNIT	LOCATION	EDGE CONNECTOR	MF2	MF4
18	9180	21	24 F	25 M		
19	9179	22	25 F	27 M		
20	9180	23	26 F	28 M		

STG REG COL(S) HOLD CKT

201.04

503674 EC 241783

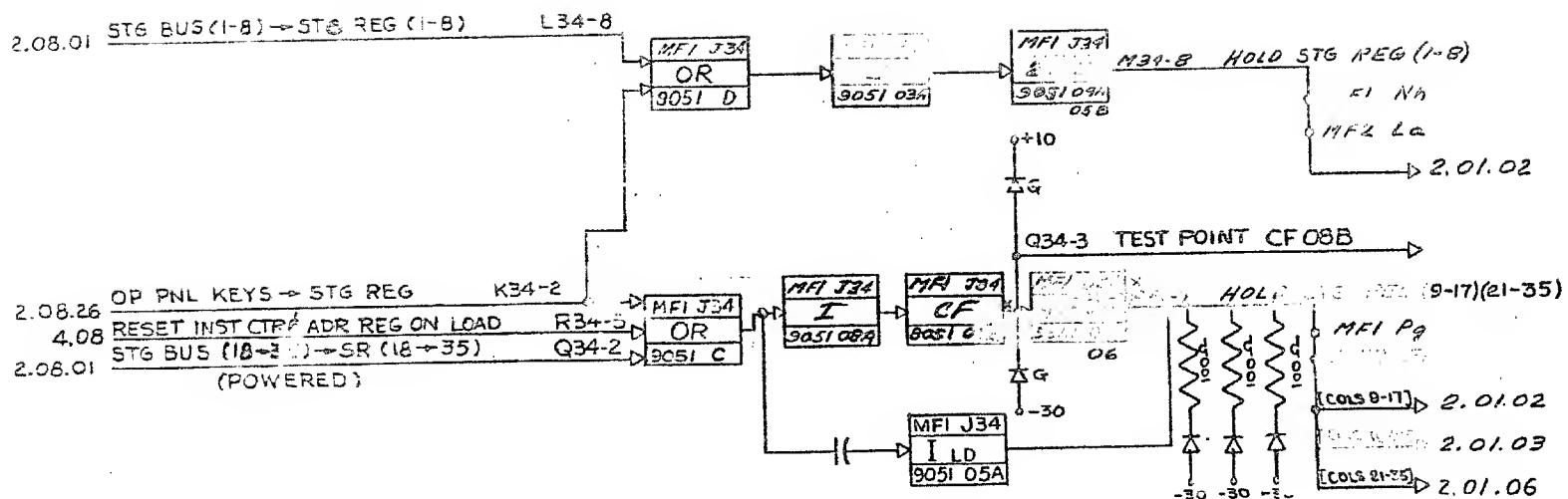


SIG REG COLS

(9-35) HOLD. CKTS

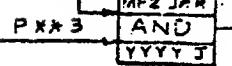
2.0105

二〇一六年三月三十日



50350792
EC 241399A

201.05 HOLD STG REG(9-35)



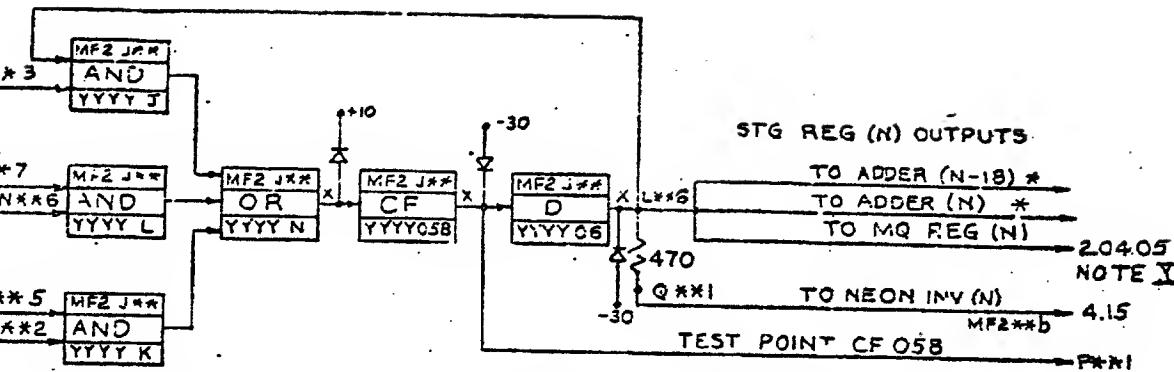
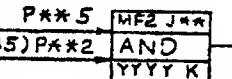
4.02 OP PNL ENTRY KEY (N) P**7

2.08.26 CP PNL ENTRY KEYS TO STG REG N**6



2.05.03 STG BUS (N)

2.08.01 STG BUS (18-35) TO STG REG(18-35) P**2



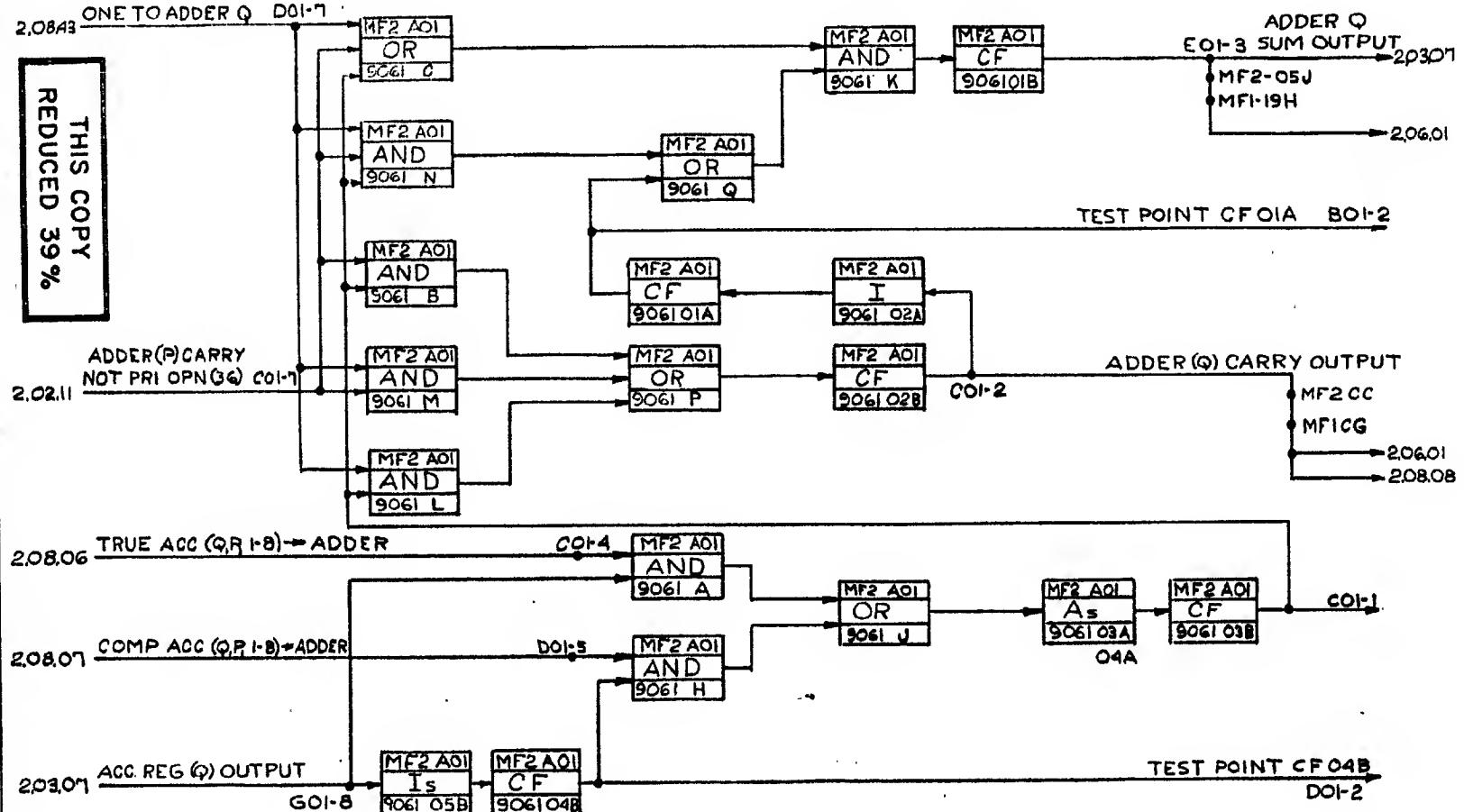
ARITH COL NO. (N)	PLUGGABLE UNIT PART NO (Y***Y)	PLUGGABLE UNIT LOCATION (***)	STG REG (N) OUTPUT	STG REG (N) OUTPUT
			TO ADDER (N) LOGICAL DIAGRAM NO.	TO ADDER (N-18) LOGICAL DIAGRAM NO.
21	9182	24	2.02.09	
22	9181	25	2.02.08	
23	9182	26	2.02.08	
24	9181	27	2.02.08	2.02.05
25	9182	28	2.02.09	2.02.05
26	9181	29	2.02.08	2.02.05
27	9182	30	2.02.08	2.02.06
28	9181	31	2.02.08	2.02.07
29	9182	32	2.02.09	2.02.07
30	9181	33	2.02.08	2.02.07
31	9182	34	2.02.08	2.02.06
32	9181	35	2.02.08	2.02.07
33	9182	36	2.02.09	2.02.10
34	9181	37	2.02.08	2.02.10
35	9060	38	2.02.08	2.02.06

S.T.G REG COLS (21-35)

2.01.06

ADDER & T/C CONTROL COL Q

2.02.01



INTERNATIONAL BUSINESS MACHINES CORP.	DRAW		DATE	CHANGE NO.	DATE	CHANGE NO.
INCH. ELECTRONIC ANALYTICAL	CHECK					
CONTROL UNIT MODEL 704	APPRO	PCT	9-18-56	9-15-55	241651	
SYSTEM DIAGRAM	REDRAW	DCC	9-14-56	10-12-55	241860	
	CHECK	JAF	9-18-56	1-23-56	242259	

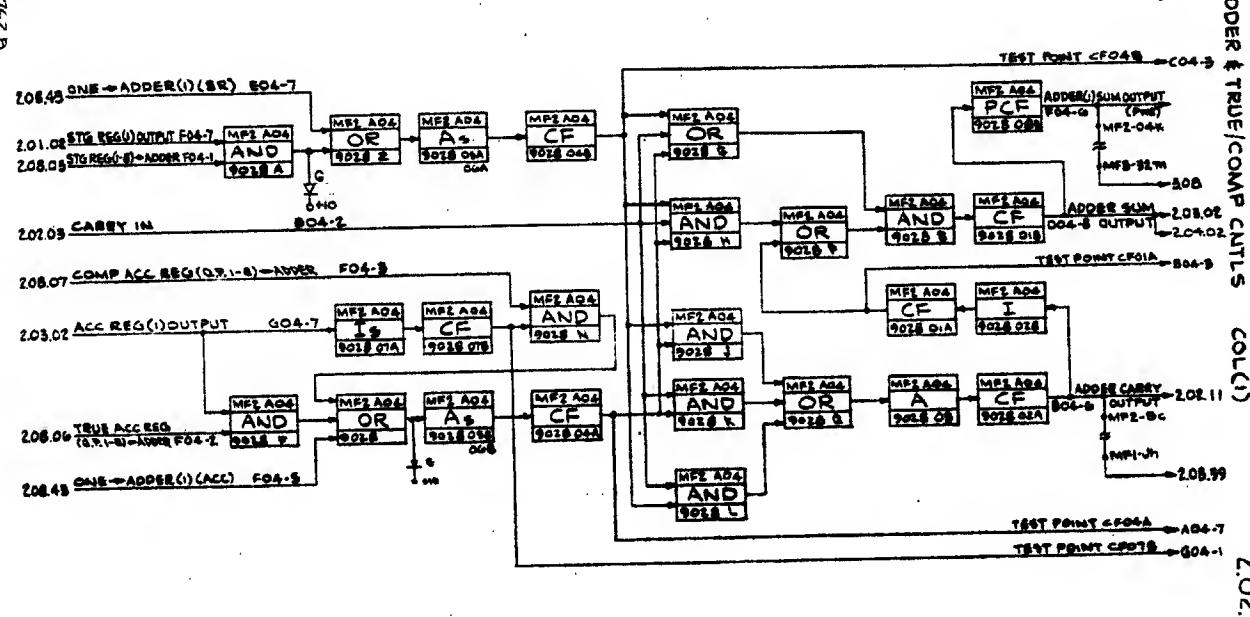
NOTE X PRINT TO END.
SPEC. NO. 895291

QTY.	RELEASED FOR ASSEM.	STANDARDS CODE
		NONE

503677

WAS 704-3056

STANDARDS CODE	RELEASED FOR ASSEMBL	QTY.
NONE	503626	503678

DATE CHANGE NO
7-11-55 24739A
10-13-55 241863
10-25-55 242163503678
EC 242762 D

ADDER & TRUE/COMP CNTLS

2.02.02

503678

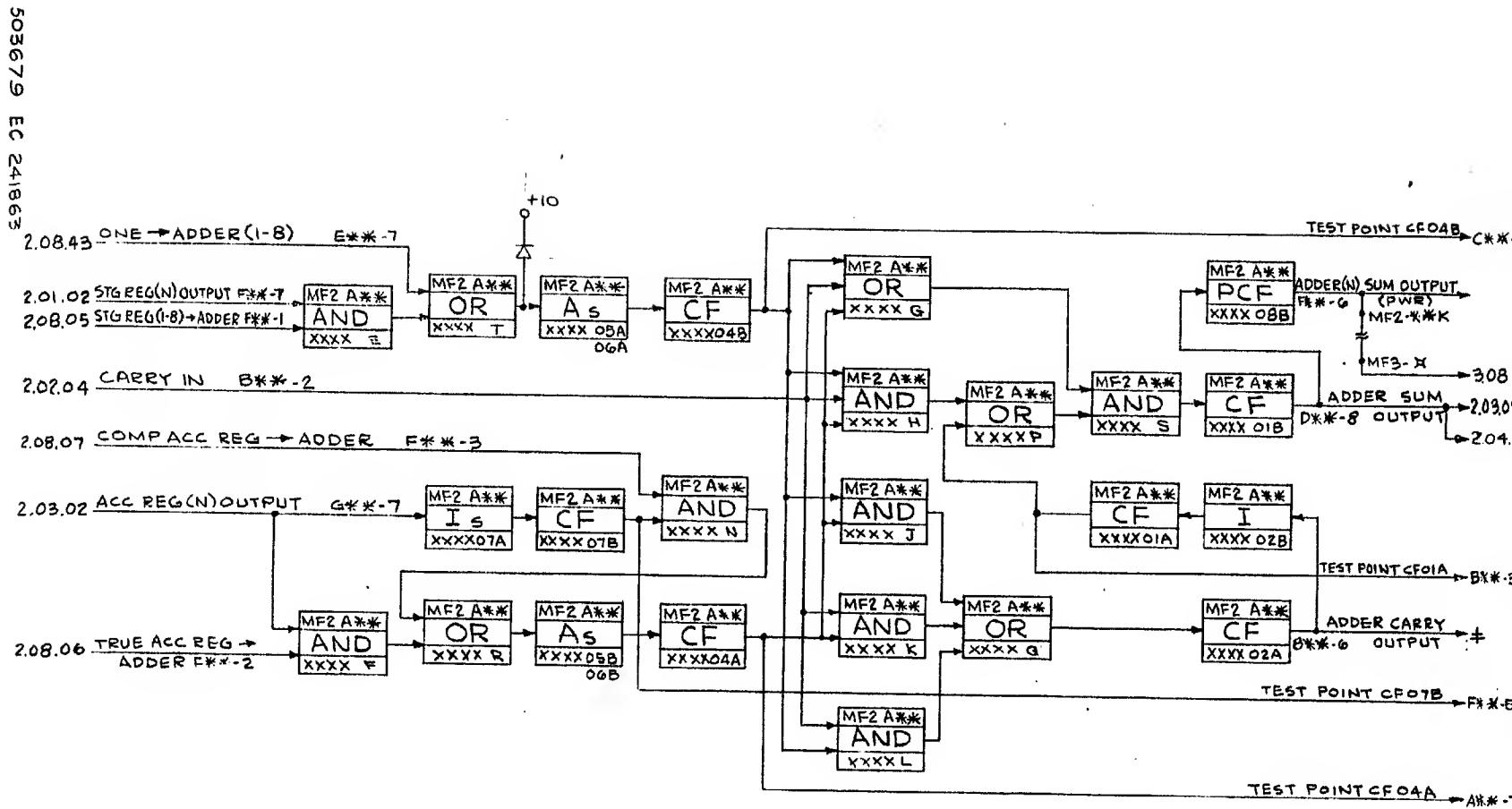
NOTE:
EXTRACT TO ECO SPEC.
616821

MATERIAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALLOWABLE DEFECTS		NOTE I		INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH		DECIMALS ± .005		CONCENTRICITY DEFECTS		NOT RELEASING NOTE II		NAME: ELECTRONIC ANALYTICAL	
HEIGHT		FRACTION ± 1/64		PLATE DEFECTS		RELEASING NOTE III		CONTROL UNIT NO.: 704	
DEPTH		INCHES ± .01"		PARALLEL DEFECTS		NOTE IV		SYSTEM DIAGRAM	
THICKNESS		COMERS OUTSIDE		STRAIGHT DEFECTS		NOTE V		2.02.02	
WEIGHT		CUTTER DEFECTS		SQUARE DEFECTS		NOTE VI		NAME: ELC G-274-4 RELEASE NONE	
TIME		RAY RE		SHANK JAW T 6-13-55 TIME: PM 11-18-55		NOTE VII		NAME: LKJ L-2-55 RELEASE LSIS 11-16-55	
DATE		SHANK		SHANK		NOTE VIII		APPROV.	
SIGNATURE		SHANK		SHANK		SHANK		APPROV.	

503678

ADDER & TRUE/COMP CNTLS COLUMNS 2 & 4

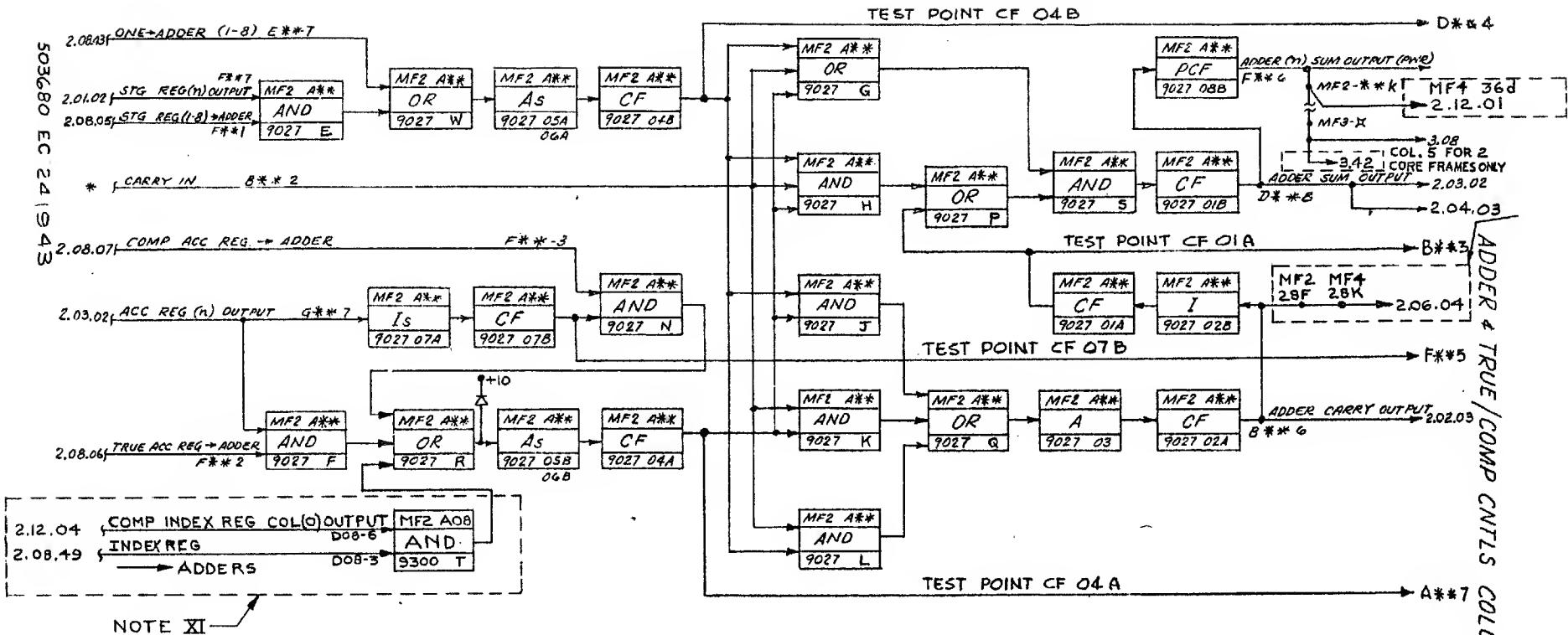
2.02.03



ARITH. COLUMN NO. (N)	2	4
PLUGGABLE UNIT LOCATION (**)	05	07
ADDER CARRY OUTPUT LOG. DIAGRAM NO. (#)	2.02.02	2.02.04
ADDER(n) POWER OUTPUT MF3 EDGE CONN. (X)	32L	33L
PV NUMBER XXXX	9026	9177

ADDER & TRUE/COMP CNTLS COLUMNS 3&5

2.02.04



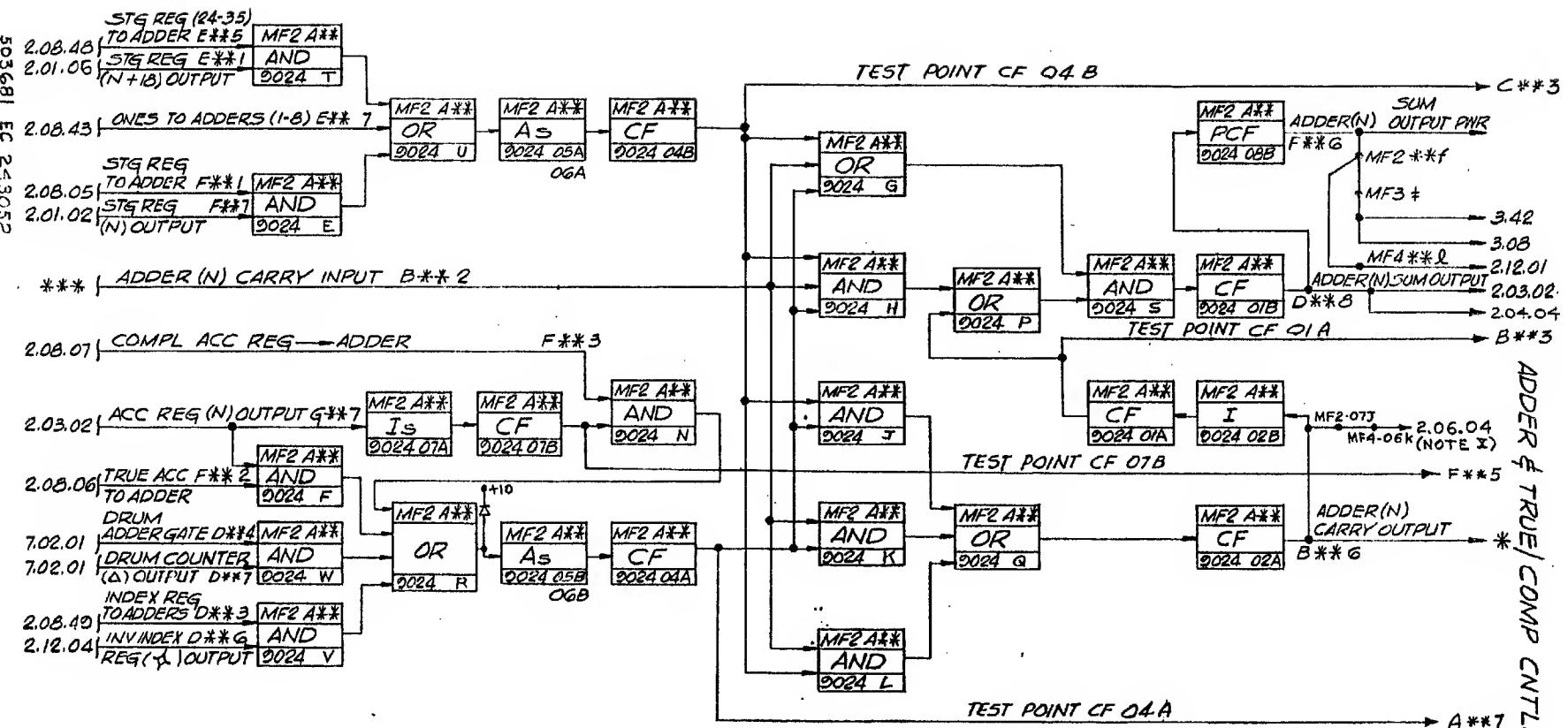
ARITH COL NO (n)	PLUGGABLE UNIT LOCATION (#*)	ADDER (n) SUM OUTPUT (Pn)	MF3 EDGE CONNECTOR (f)
3	06	32k	2.02.03
5	08	33k	2.02.04

ADDER & TRUE/COMP CNTLS. COLS 6,7,8

2.02.05

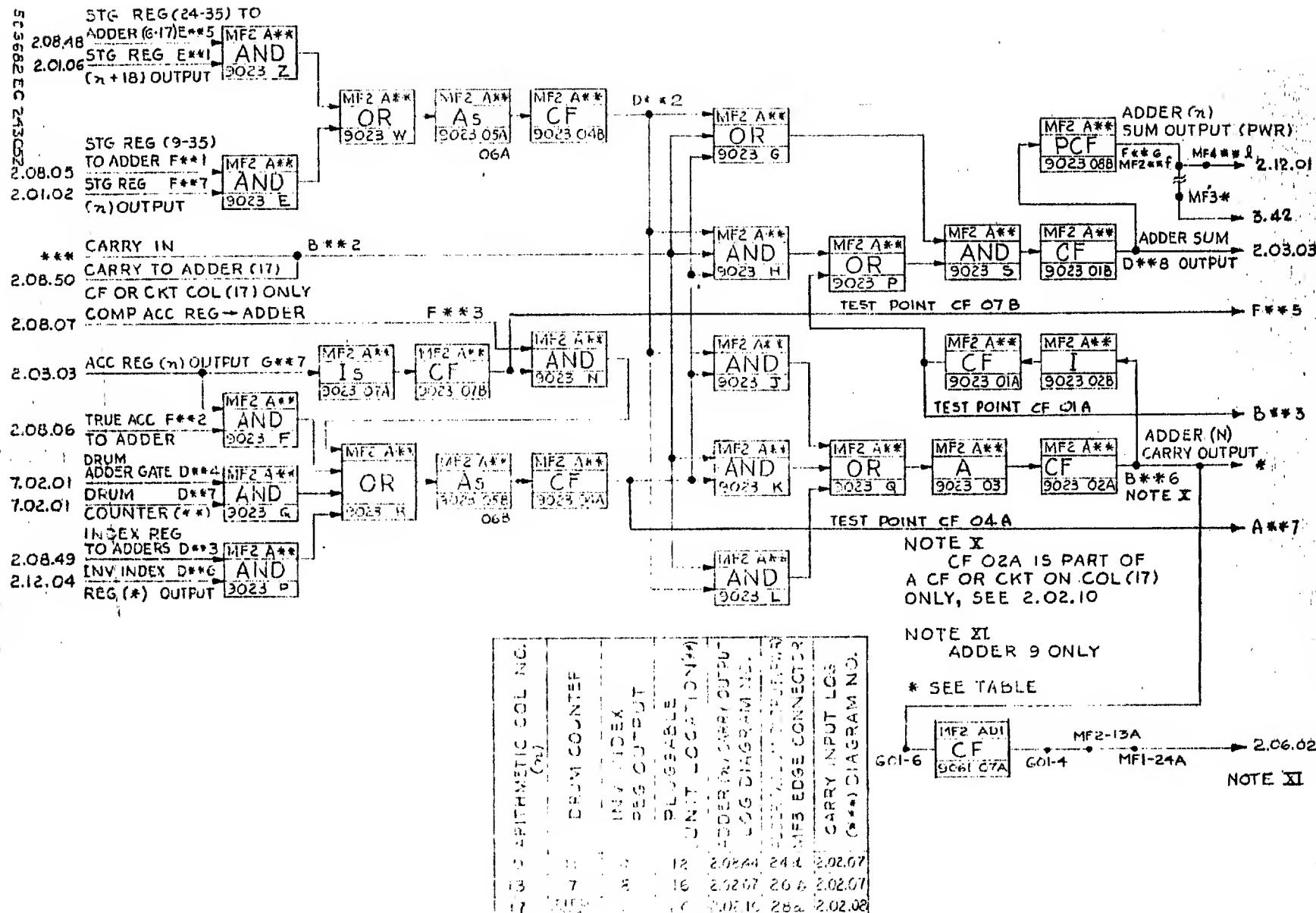
NOTE
X ADDER 6 ONLY

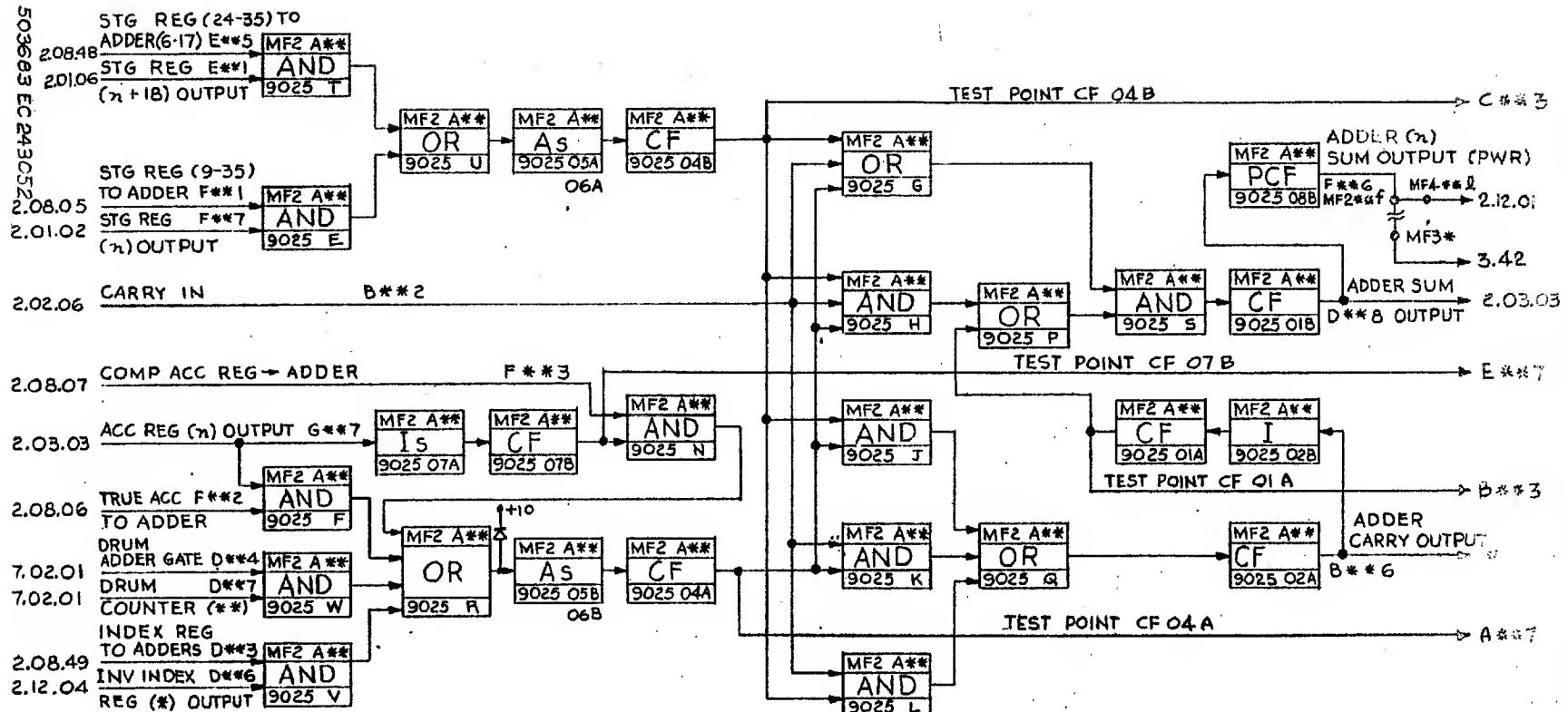
ARITH COLUMN NO	DRUM STR OUTPUT (Δ)	INDEX REG (Δ) OUTPUT	PLUGGABLE UNIT LOCATION (***)	ADDER CARRY OUTPUT LOG DIA NO (***)	ON NY LOG DIAGRAM LOG DIA NO (***)
6	3	1	9	202.01 24 _a	2.02.05
7	2	2	10	202.05 24 _m	2.02.05
8	1	3	11	202.05 24 _C	2.02.44



ADDER & TRUE/COMP CNTLS COLS 9, 13, 17

90202

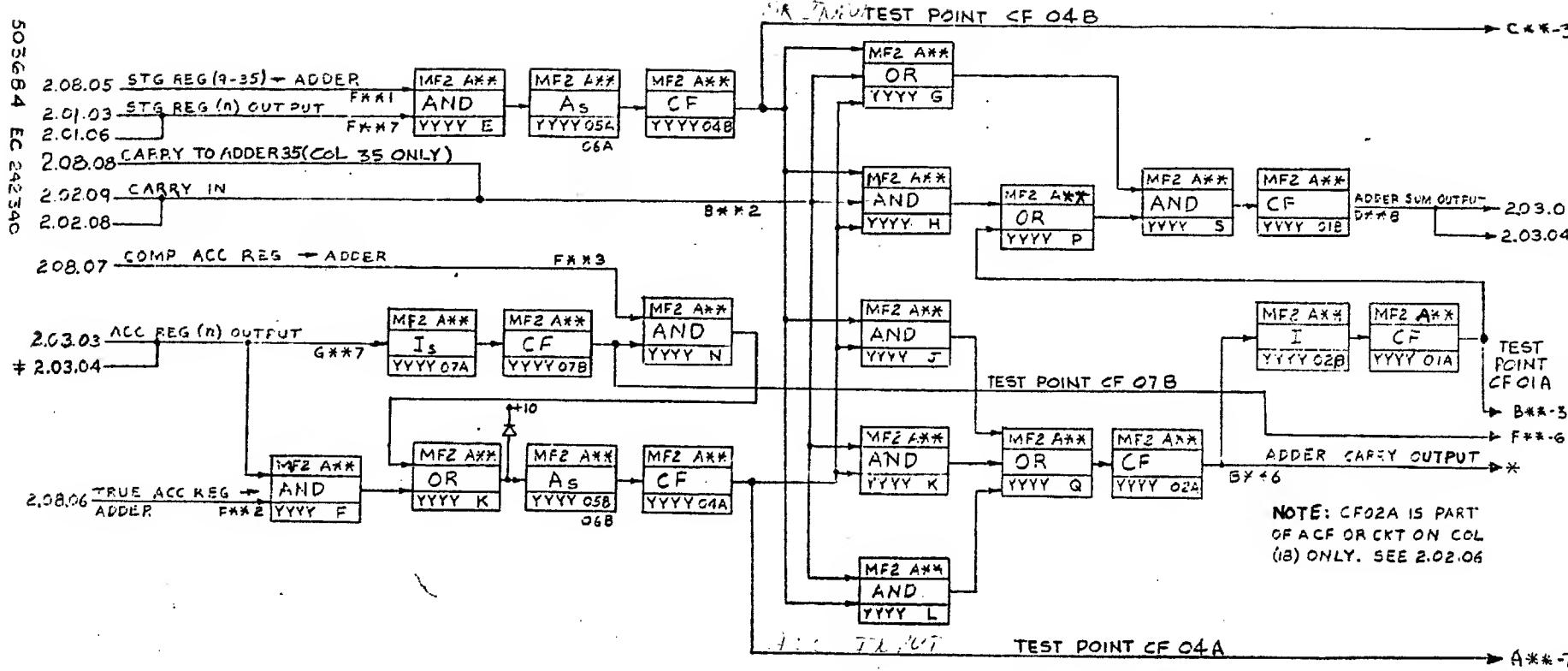




SEE TABLE

ARITHMETIC CQ1 NO. (n)	DRUM COUNTER	INV INDEX (*) REG OUTPUT	PLUGGABLE UNIT LOCATION(s)	ADDER (n) CARRY OUTPUT LOG DIAGRAM NO.	ADDER (n) SUM OUTPUT(PWR) LOG DIAGRAM NO.	CARRY INPUT LOG DIAGRAM NO.
10	10	5	13	2.02.06	2.5c	2.02.07
11	9	6	14	2.02.07	2.5a	2.02.07
12	8	7	15	2.02.07	2.5f	2.02.06
14	6	9	17	2.02.06	2.5m	2.02.10

ADDER & TRUE/COMP CNTL COLS. 18,19,20,22,23,24,26,27,28,30,31,32,34,35 2.02.08

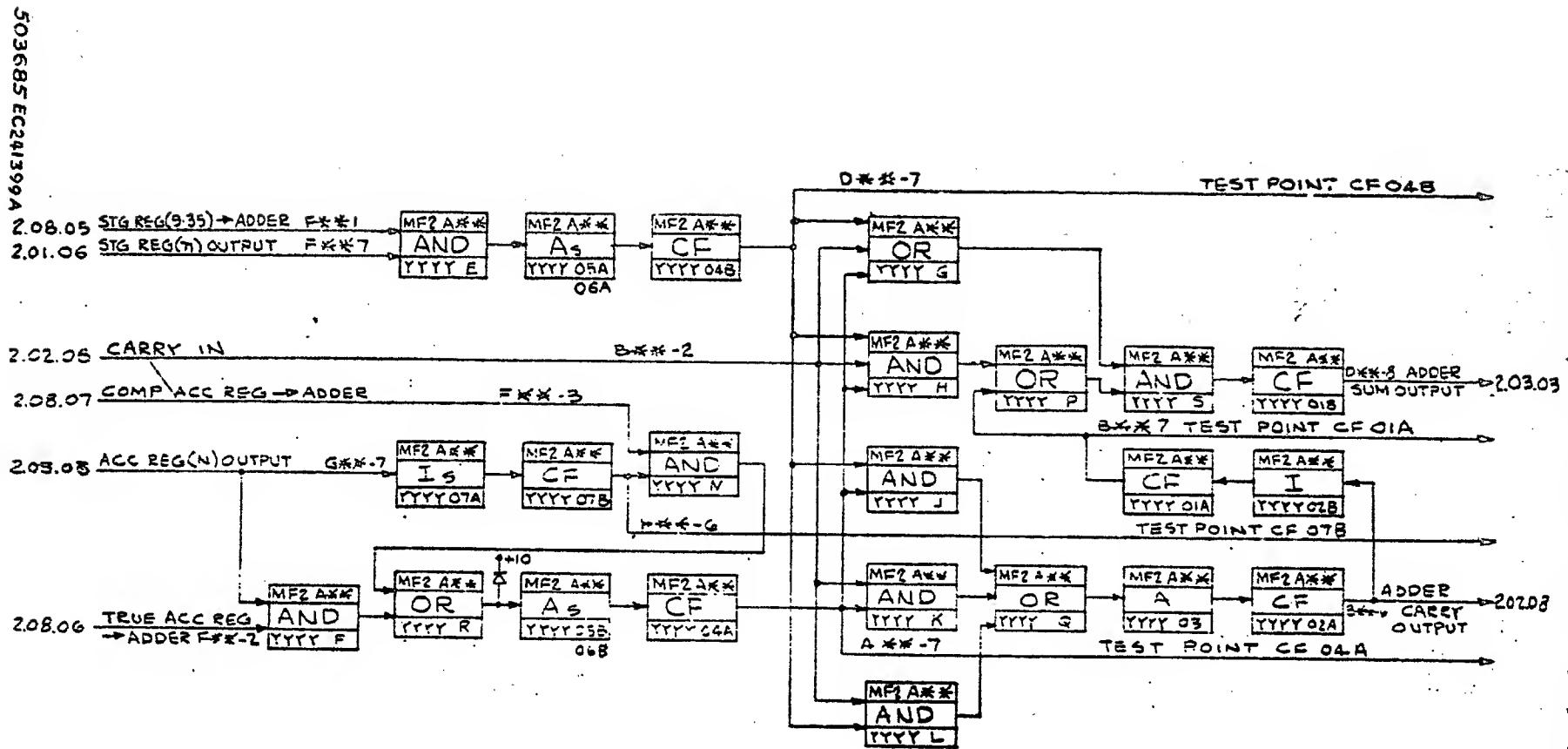


* SEE TABLE
* FOR COL 35 ONLY

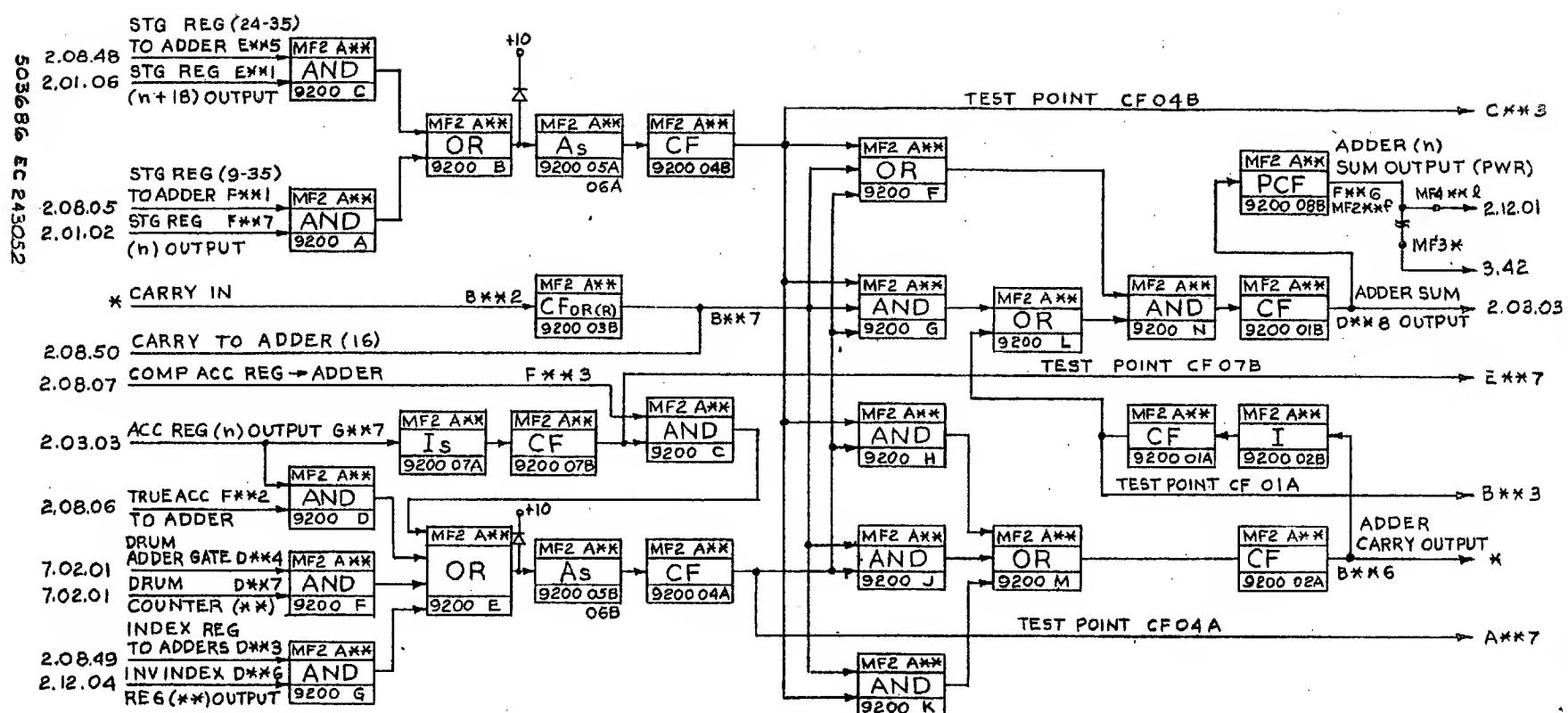
ARITH. COLUMN NUMBER	18	19	20	22	23	24	26	27	28	30	31	32	34	35
PLUGGABLE UNIT LOCATION (***)	21	22	23	25	26	27	29	30	31	33	34	35	37	38
PLUGGABLE UNIT PART NO (YYYY)	9176	9176	9176	9170	9170	9170	9170	9170	9170	9170	9170	9170	9170	9170
ADDER CARRY OUTPUT(X) LOG. DIAGRAM NUMBER	2.02.06	2.02.08	2.02.08	2.02.09	2.02.08	2.02.08	2.02.09	2.02.08	2.02.08	2.02.09	2.02.08	2.02.08	2.02.09	2.02.08

ADDER & TRUE/COMP CNTLS - COLS 21,25,29,33

2.02.09



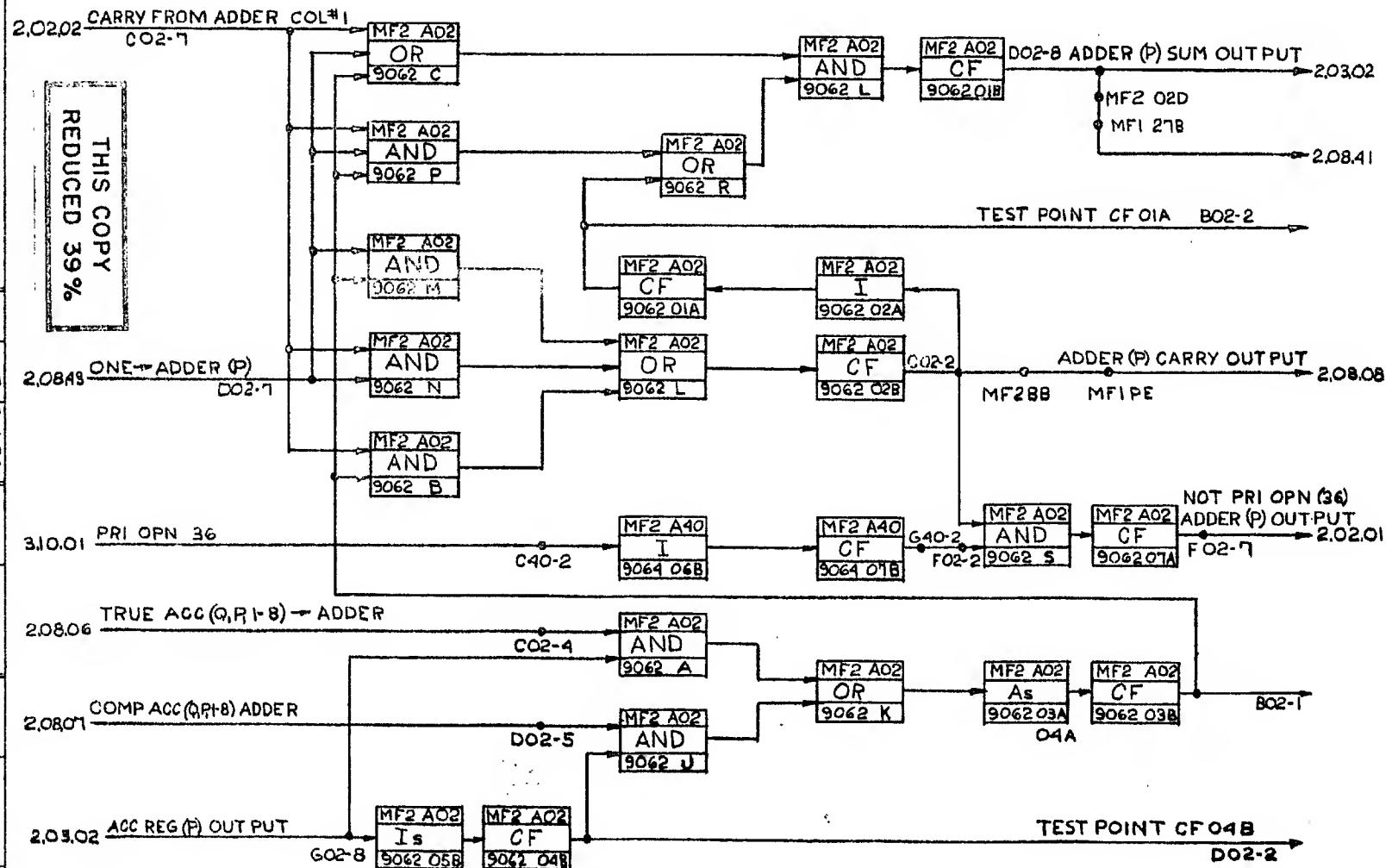
ARITH COLUMN NUMBER(N)	21	25	29	33
PLUGGABLE UNIT LOCATION(***)	24	28	32	36
PLUGGABLE UNIT PART NO (YYY)	9171	9171	9171	9171



* SEE TABLE

ARITHMETIC COL NO. (*)	DRUM COUNTER	INV INDEX REG OUTPUT	PLUGGABLE UNIT LOCATION(**)	ADDER (n) CARRY OUTPUT LOG DIAGRAM NO.	ADDER (n) SUM OUTPUT(PWR) LOG DIAGRAM NO.	CARRY INPUT LOG DIAGRAM NO.
16	4	11	19	202.10	27Q	202.06
15	5	10	18	202.07	27K	202.10

ADDER & I/C CONTROL COL P 2.0211



INTERNATIONAL BUSINESS MACHINES CORP.	DRAW	JAF	6-1-56	DATE	CHANGE NO.
MACH. ELECTRONIC ANALYTICAL	CHECK	T.F.D	9-17-56	7-25-56	2427628
CONTROL UNIT MODEL 704	APPRO	RET	9-8-56		
SYSTEM DIAGRAM	REDRAW	DCC	9-14-56		
	CHECK	R.G.F	9-17-56		

NOTE X PRINT TO ENG.
SPEC. NO. 895291

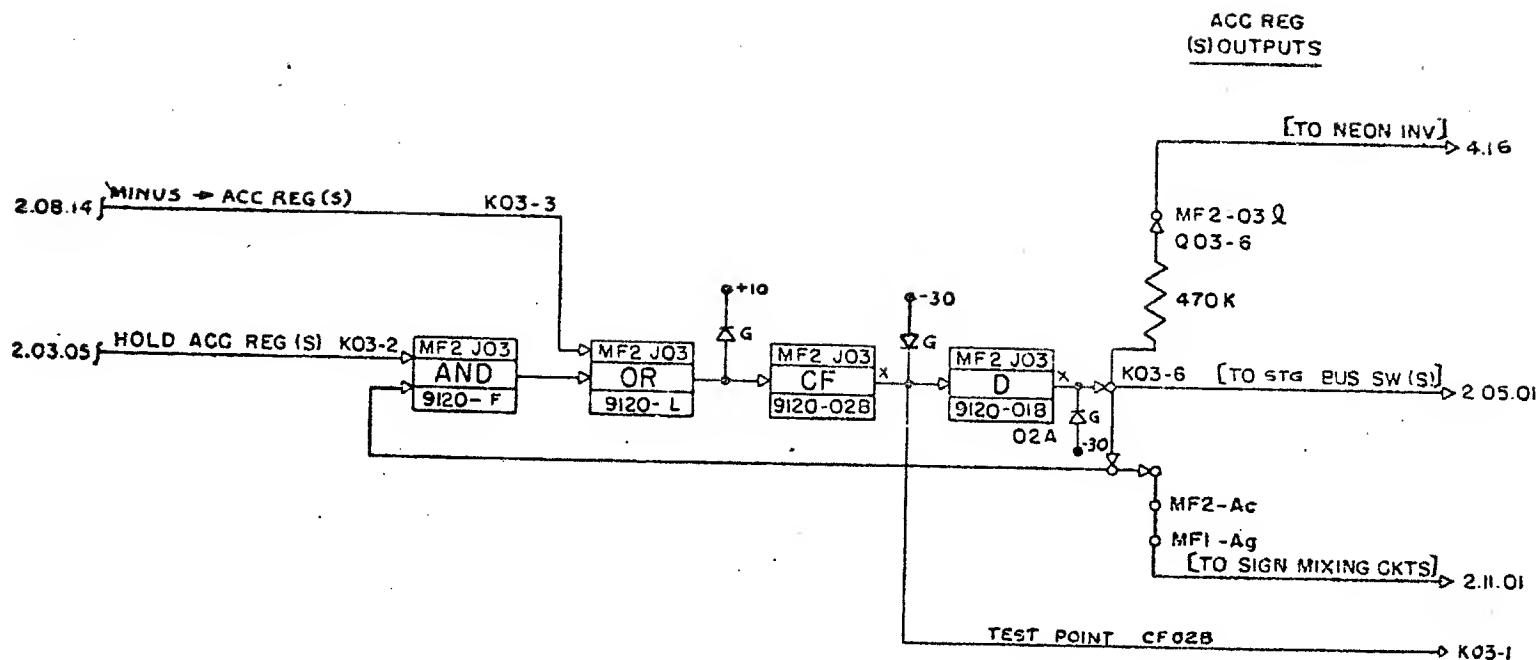
G. B. 90.. NO. H-570W 1969

QTY.	RELEASED FOR ASSEM.	STANDARDS CODE
		NONE

512929

ACCUMULATOR REGISTER (S)

2.03.01



503€87EC 24/399A

ACC REG COL(n) OUTPUT

NOTES:	
1. LOGICAL DIAGRAM NO.	N-(P-1)T 2.05.02
	N-8 2.05.02
2. LOGICAL DIAGRAM NO.	N-P 2.05.07
	N-(1-S) 2.05.02
	N-(S) 2.05.03
3. LOGICAL DIAGRAM NO.	N-(P-1)T 2.03.02
	N-8 2.0845
4 LOGICAL DIAGRAM NO	N-P 2.05.01
	N-1,2 2.05.02
	N-3,8 2.05.03

ARITHMETIC COLUMN NO (N)	P	1	2	3	4	5.	6	7	8
PLUGGABLE UNIT LOCATION (XX)	02	04	05	06	07	08	09	10	11
PLUGGABLE UNIT PART NO.(YYYY)	9062	9065	9066	9067	9066	9067	9066	9067	9066
ADDER & T/CNTL LOG DIAGRAM NO(X)	2.02.11	2.02.02	2.02.03	2.02.04	2.02.03	2.02.04	2.02.05	2.02.05	2.02.05
CATHODE FOLLOWER OEB TEST POINTS <small>(OEB1) (OEB2)</small>	G02-6	M04-7	M05-G	M06-G	M07-6	M08-G	M09-G	M10-G	M11-G

NOTE:
I PRINT TO ENQ. SPEC.
533291

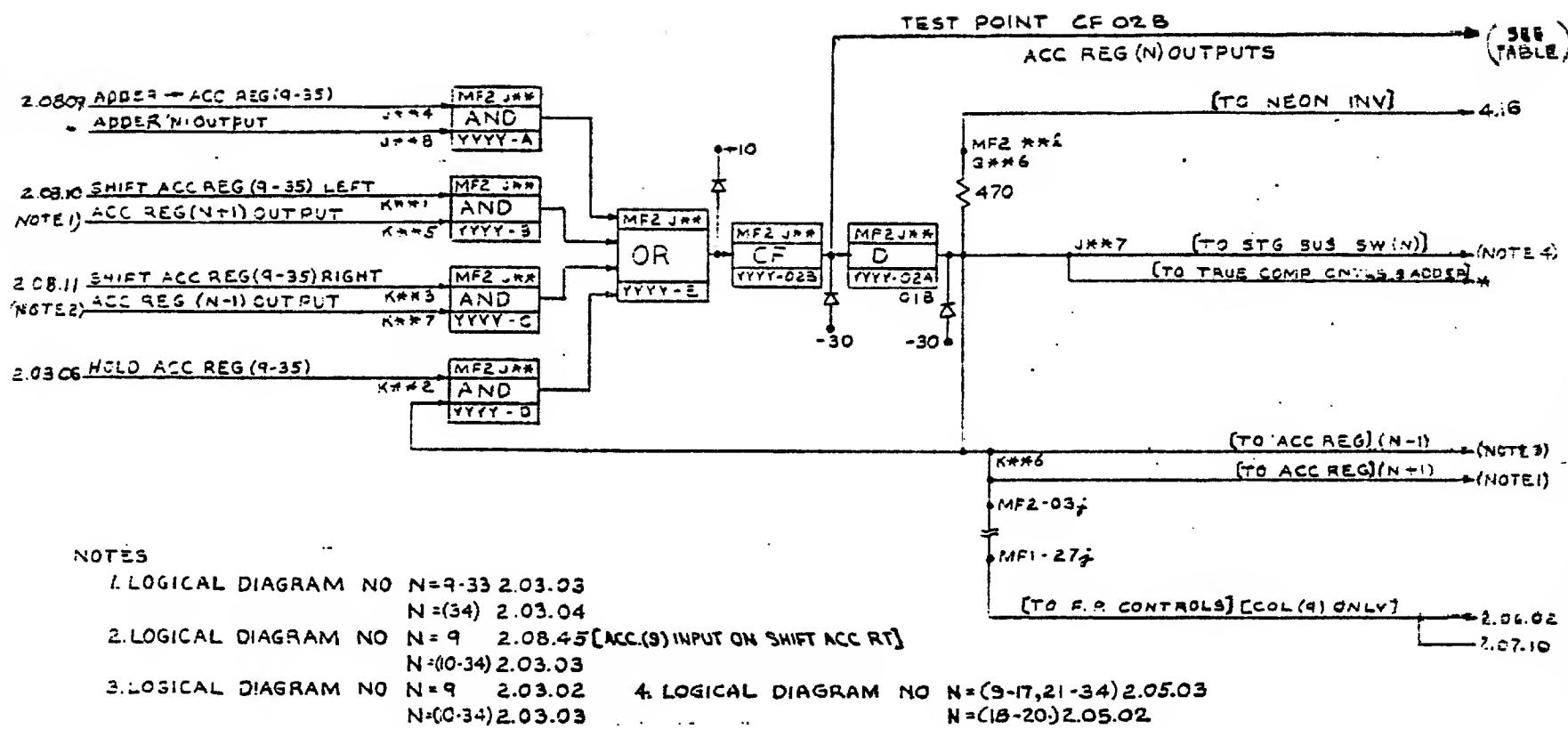
2.03.02

MATERIAL SPECIFICATIONS		NO.	TOLERANCES UNLESS STATED IN DRAWING	ALLOWANCE WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
			DECIMALS $\pm .005$	CONCENTRIC WITHIN	NOTE II	NAME : ELECTRONIC ANALYTICAL
CASE DEPTH			FRACTIONS $\pm 1/64$	FLAT WITHIN	NOTE III	CONTROL UNIT MODEL 704
HARDNESS			ANGLES $\pm 1^\circ$	PARALLEL WITHIN	NOTE IV	NAME : SYSTEM DIAGRAM
SURFACE TREATMENT	SPC NO.		DEGREES ROTATION	STRaight WITHIN	NOTE V	DRAW. CLC-2584 SCALE NONE
			RAY BE DRIVEN	INVERSE WITHIN	NOTE VI	CHECK JMT-62-457 TRAC DRK/H-1/4
			ANGLE	INVERSE WITHIN	NOTE VII	APRIL 1967 62-257 CHECK 61-17 55

889309

503659 EC 241703

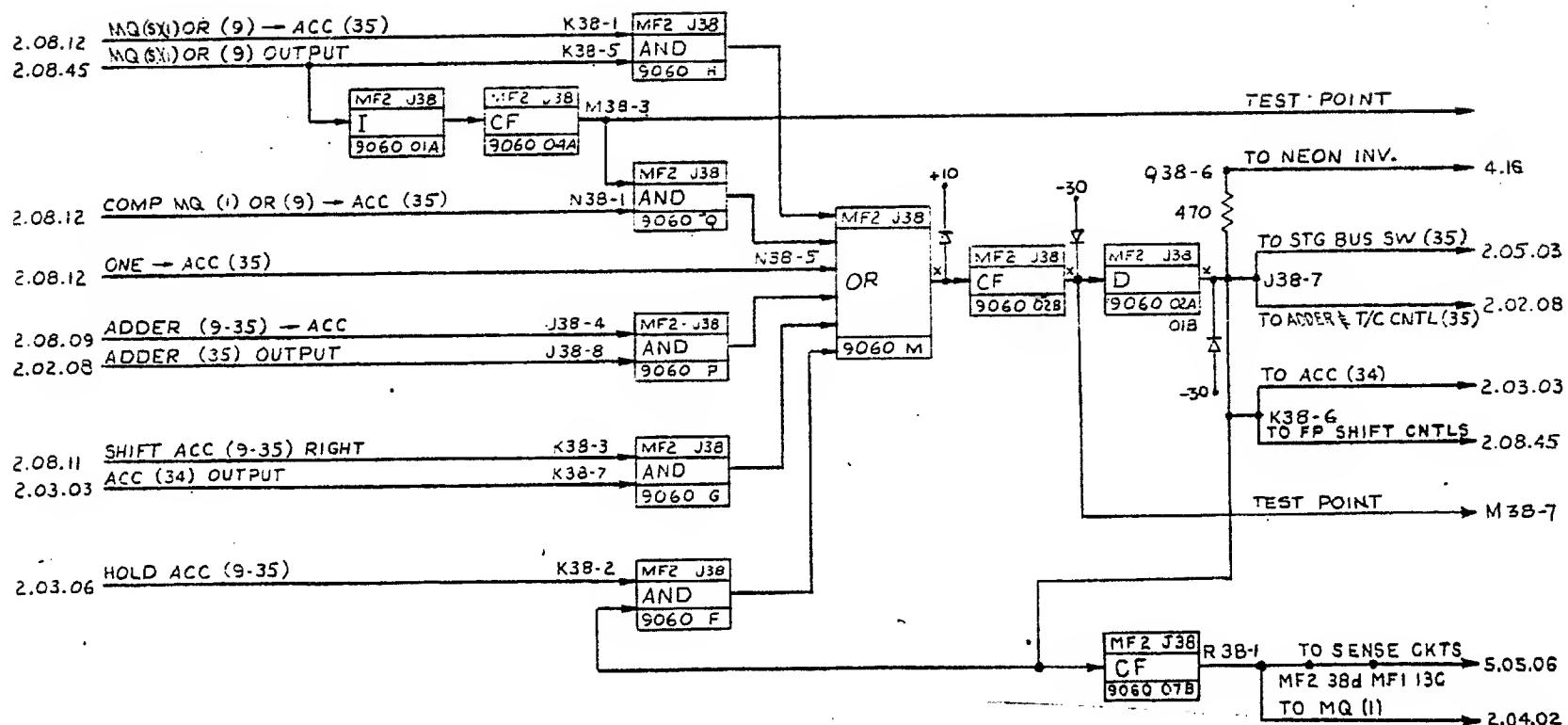
503699 EC 241703



ACC REG COLUMNS (q-34)

TEST POINT CF 02B	M12-G	M13-G	M14-G	M15-G	M16-G	M17-G	M18-G	M19-G	M20-G	M21-T	M22-G	M23-T	M24-G	M25-T
ARITHMETIC COLUMN NO (N)	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PLUGGABLE UNIT LOCATION (**)	12	13	14	15	16	17	18	19	20	21	22	23	24	25
PLUGGABLE UNIT PART NO(YYYY)	7611	7610	7611	7610	7611	7610	7611	7610	7611	9180	9179	9180	9182	9181
TG ADDER E T/C CNTLS LCS DIA.NG.(*)	202.06	202.07	202.07	202.07	202.06	202.07	202.10	202.10	202.06	202.08	202.08	202.08	202.09	202.CE
ARITHMETIC COLUMN NO (N)	23	24	25	26	27	28	29	30	31	32	33	34		
PLUGGABLE UNIT LOCATION (**)	26	27	28	29	30	31	32	33	34	35	36	37		
PLUGGABLE UNIT PART NO(YYYY)	9182	9181	9182	9181	9182	9181	9182	9181	9182	9181	9182	9181		
TG ADDER E TG CNTLS LOG.DIA. NO.(*)	202.08	202.08	202.09	202.08	202.08	202.08	202.09	202.08	202.08	202.08	202.08	202.09	202.08	
TEST POINT CF 02B	M26-G	M27-T	M28-G	M29-T	M30-G	M31-T	M32-G	M33-T	M34-G	M35-T	M36-G	M37-T		

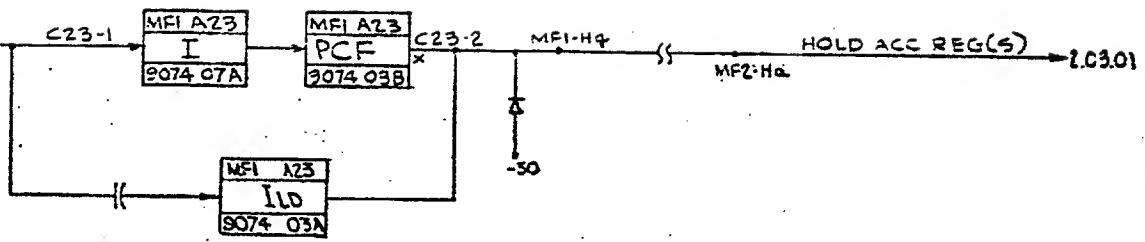
2403



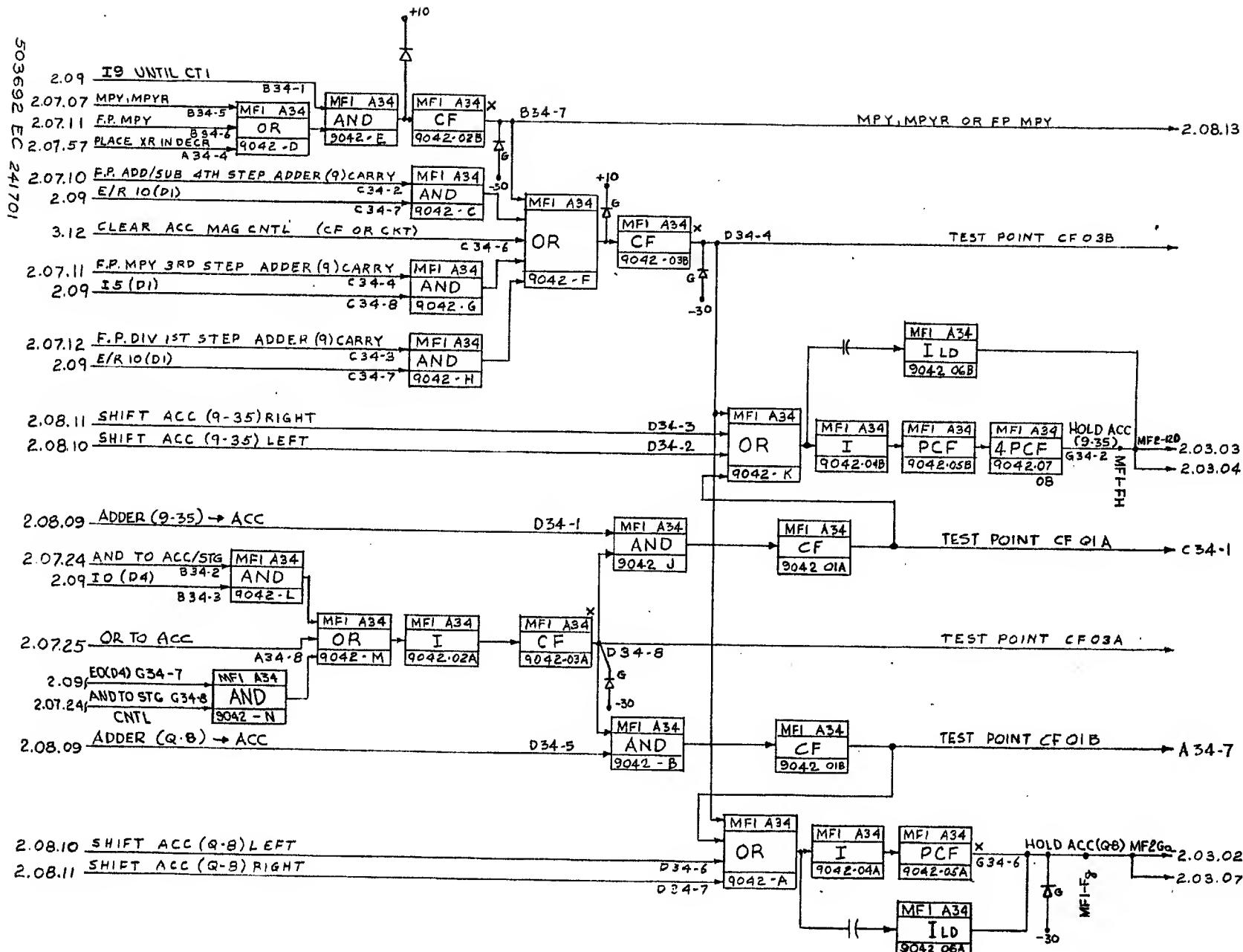
ACC REG. CIRCUITS HOLD

2.03.05

2.08.13 PLUS TO ACC REG(S)



503691 EC241390 A



WAS 704-3064
NONE 503626
7-1-55 242762
6-1-56 242762
2-25-56 242762

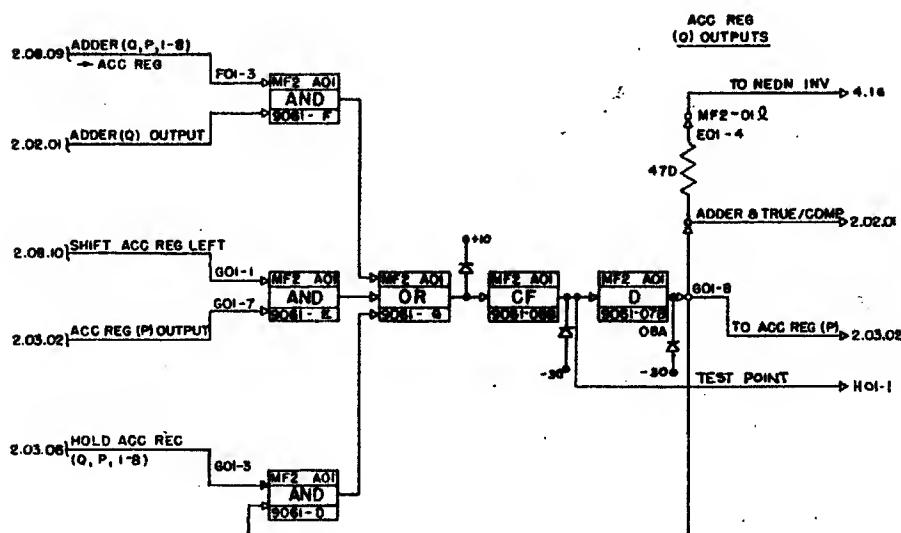
503693

503693

NOTE PRINT TO ENG. & SPEC.
635291

ACC REG COLUMN (Q)

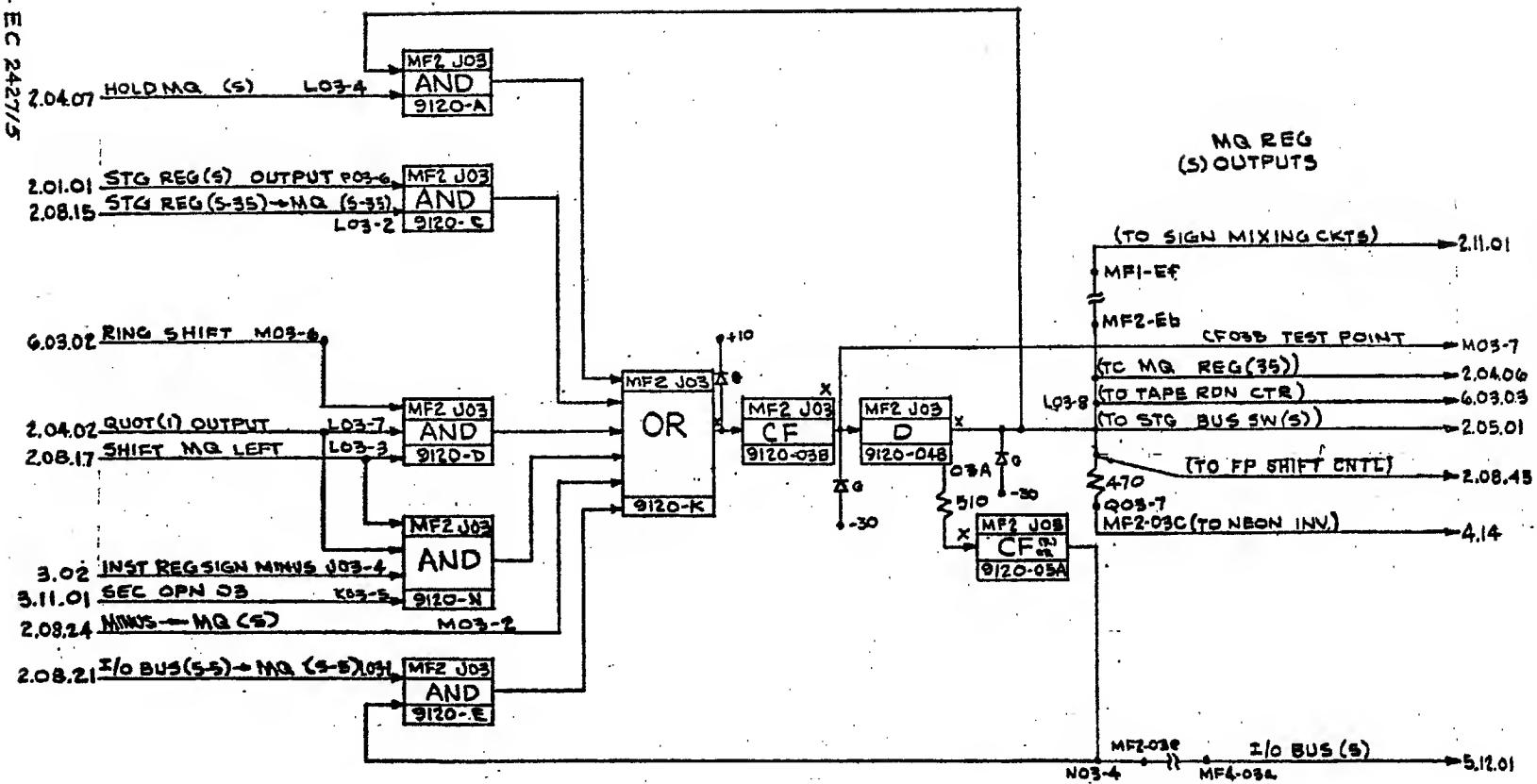
2.03.07



PARTIAL SPECIFICATION		TRANSISTOR TYPES	ALUMINUM WIRE	NOTES	
LINE INPUTS	MF2-A01	TRANSISTORS: C-104	CONNECTING WIRE	TYPE NO. 611	PACK: ELECTRONIC ANALYTICAL
NUMBER OF	MF2-A01	TRANSISTORS: 2-104	FLAT WIRE	704	CONTROL UNIT
CHARACTERS	MF2-A01	TRANSISTORS: 2-104	PARALLEL WIRE	WIRE TO	SYSTEM DATA STREAM
SPACES	MF2-A01	TRANSISTORS: 2-104	STRAIGHT WIRE	WIRE Y	CALL: NONE
CHARACTERS	MF2-A01	TRANSISTORS: 2-104	WRAP AROUND	WIRE X	CALL: JET 635291 TIME: EJS 8-10-54
SPACES	MF2-A01	TRANSISTORS: 2-104	END	WIRE Z	CHARACTER: V1 APPROX. 10%

503693 EC. 242762-B

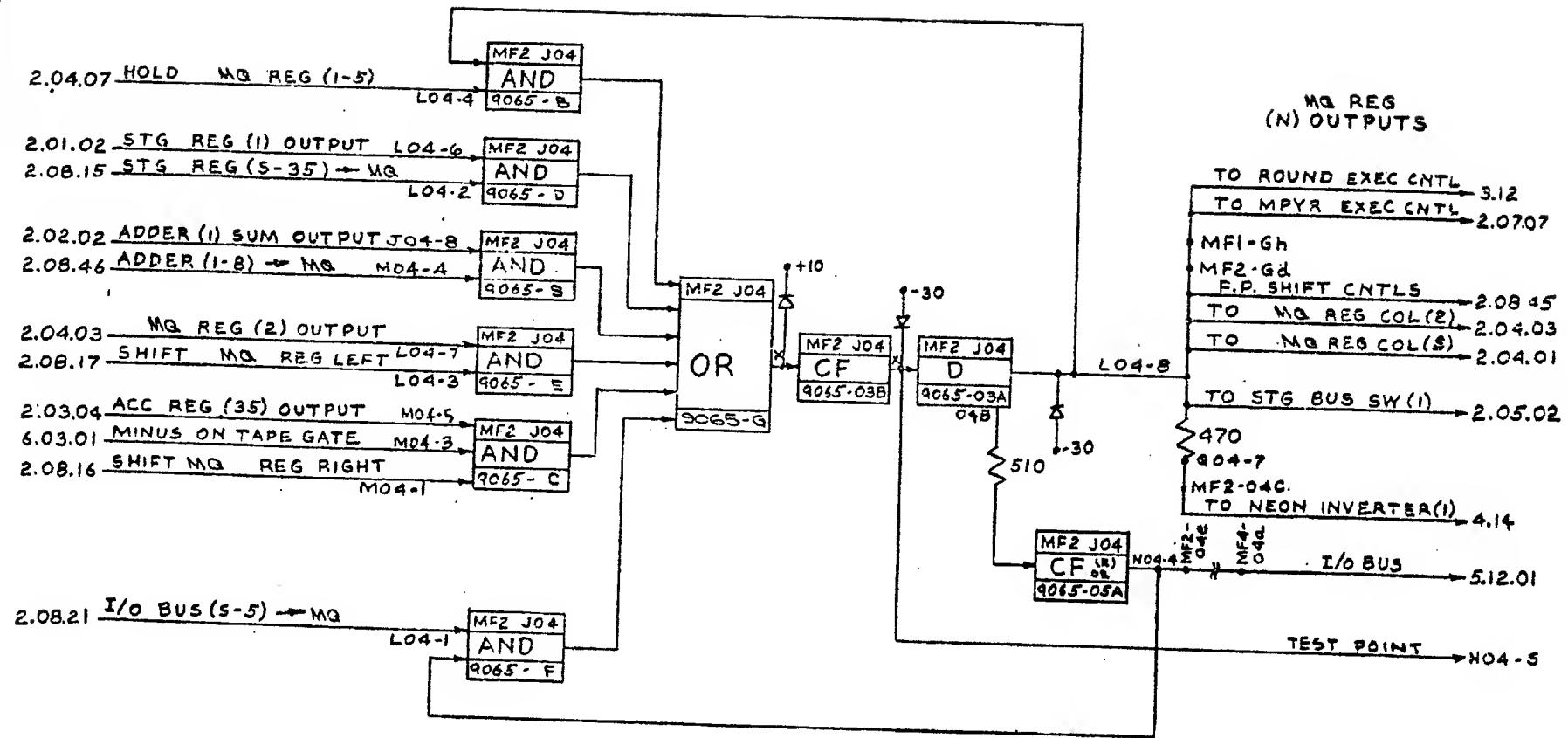
503693



MQ REG COLUMN(S)

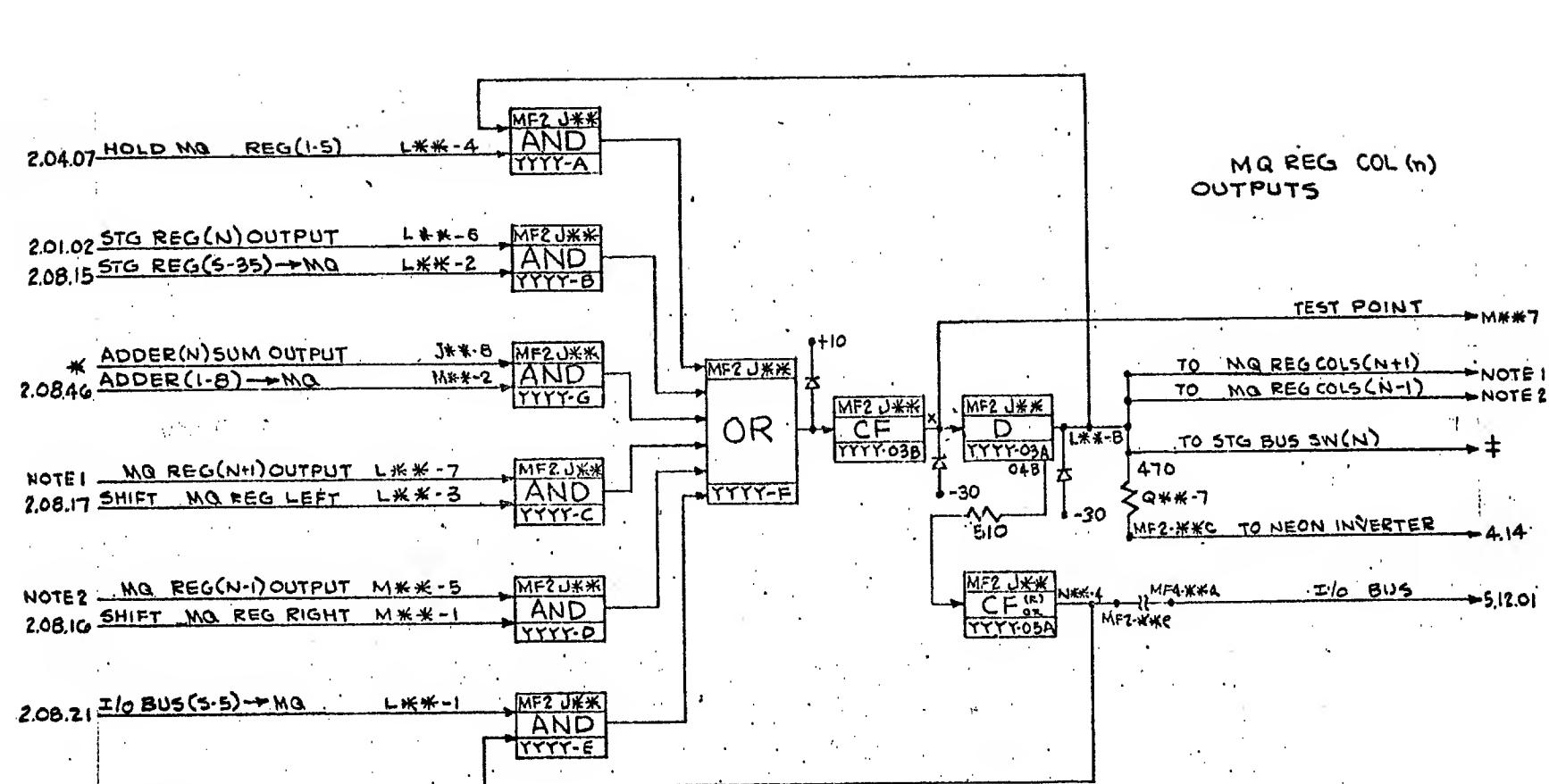
2.04.01

503695 EC 242263

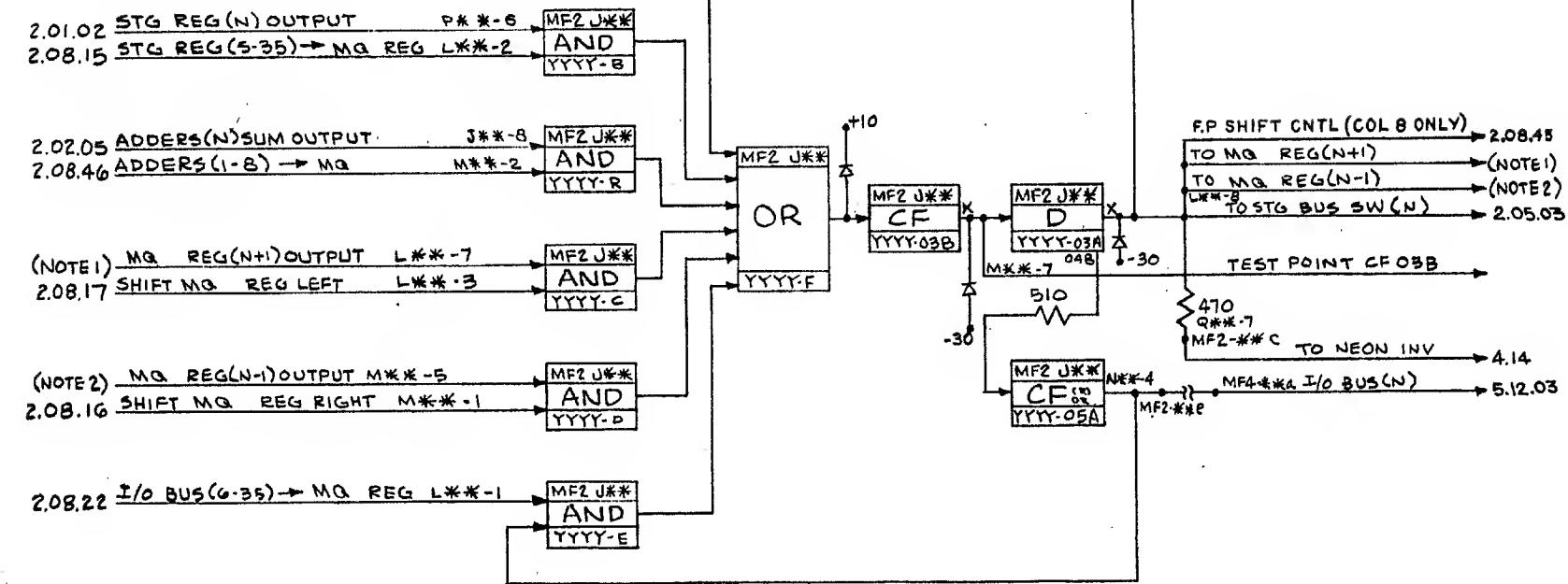


MQ REGISTER COLUMNS (2-5)

2.04.03

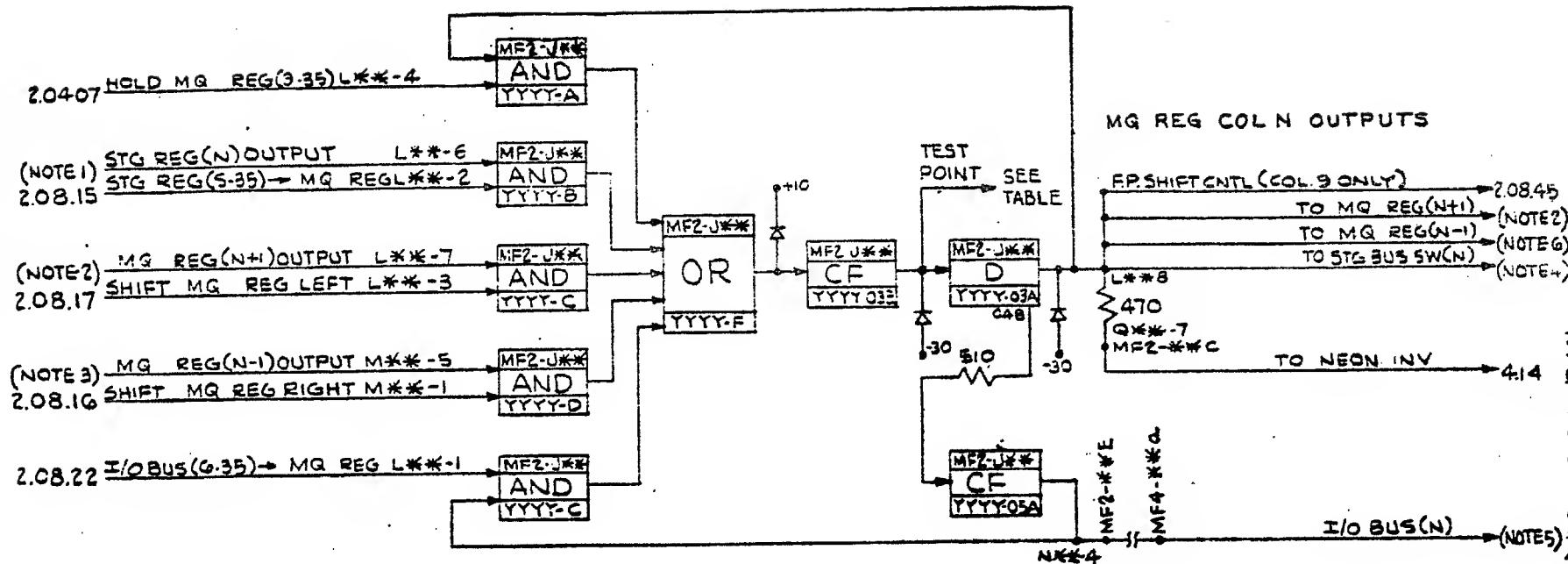


ARITH. COLUMN NUMBERS (N)	2	3	4	5
PLUGGABLE UNIT LOC. (***)	05	06	07	08
PLUGGABLE UNIT PART NO. (YYYY)	9066	9067	9066	9067
ADDER(N) SUM OUTPUT (LOG. DIAGRAM NO. *)	2.02.03	2.02.04	2.02.03	2.02.04
OUTPUT TO STG. BUS SW (n)	20502	20503	20503	20503



2.04.04

503698 EC 24/1599 A



MQ REG COL (9-34)

2.04.05

NOTES:

1. LOGICAL DIAGRAM NO, N=(9-17) 2.01.02
 N=(18-20), 2.01.03

N=(21-34), 2.01.06

2. LOGICAL DIAGRAM NO, N=(9-33), 2.04.05
 N = 34 204.063. LOGICAL DIAGRAM NO, N = 9 208.45 [MQ(9) INPUT ON SHIFT MQ RT]
 N=(10-34) 2.04.054. LOGICAL DIAGRAM NO, N=(9-17,21-34) 2.05.03
 N =(18-20) 2.05.02

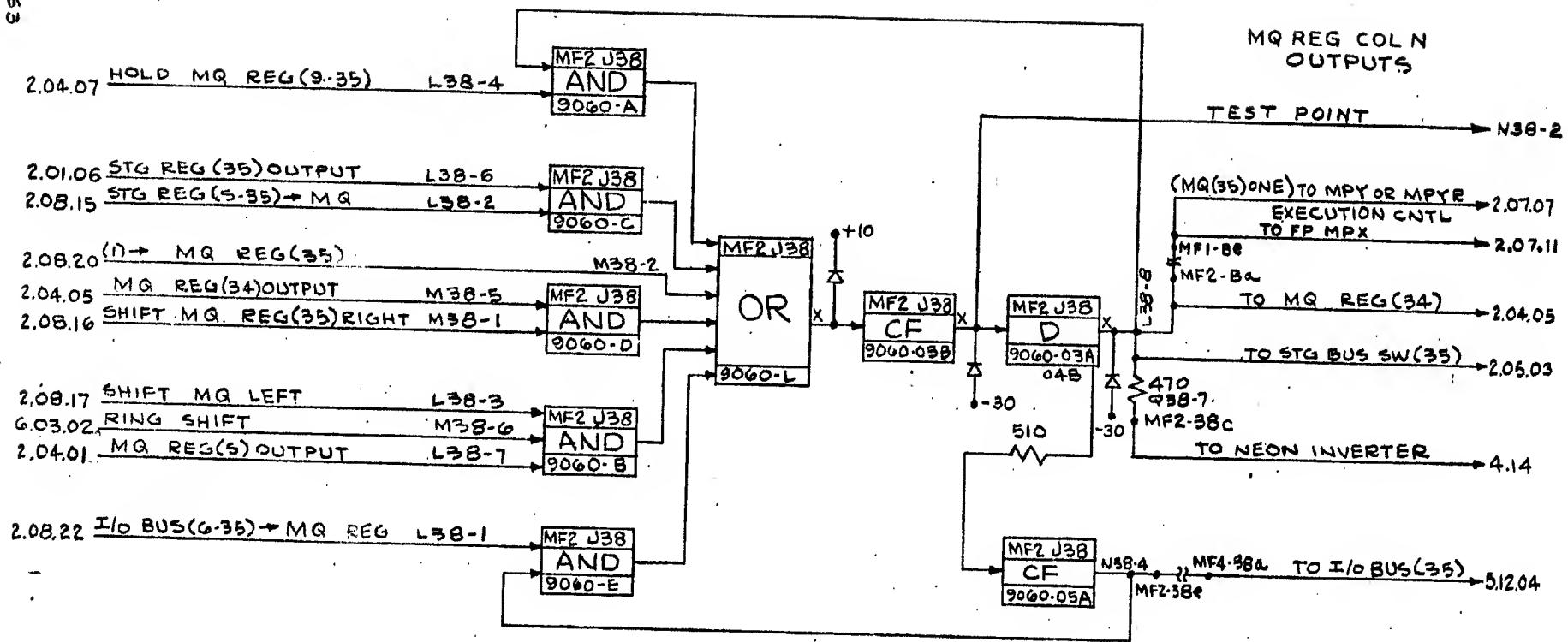
5. LOGICAL DIAGRAM NO, N=(9-29) 5.12.03

N=(30-34) 5.12.04

6. LOGICAL DIAGRAM NO, N=9 2.04.04
 N=(10-34) 2.04.05

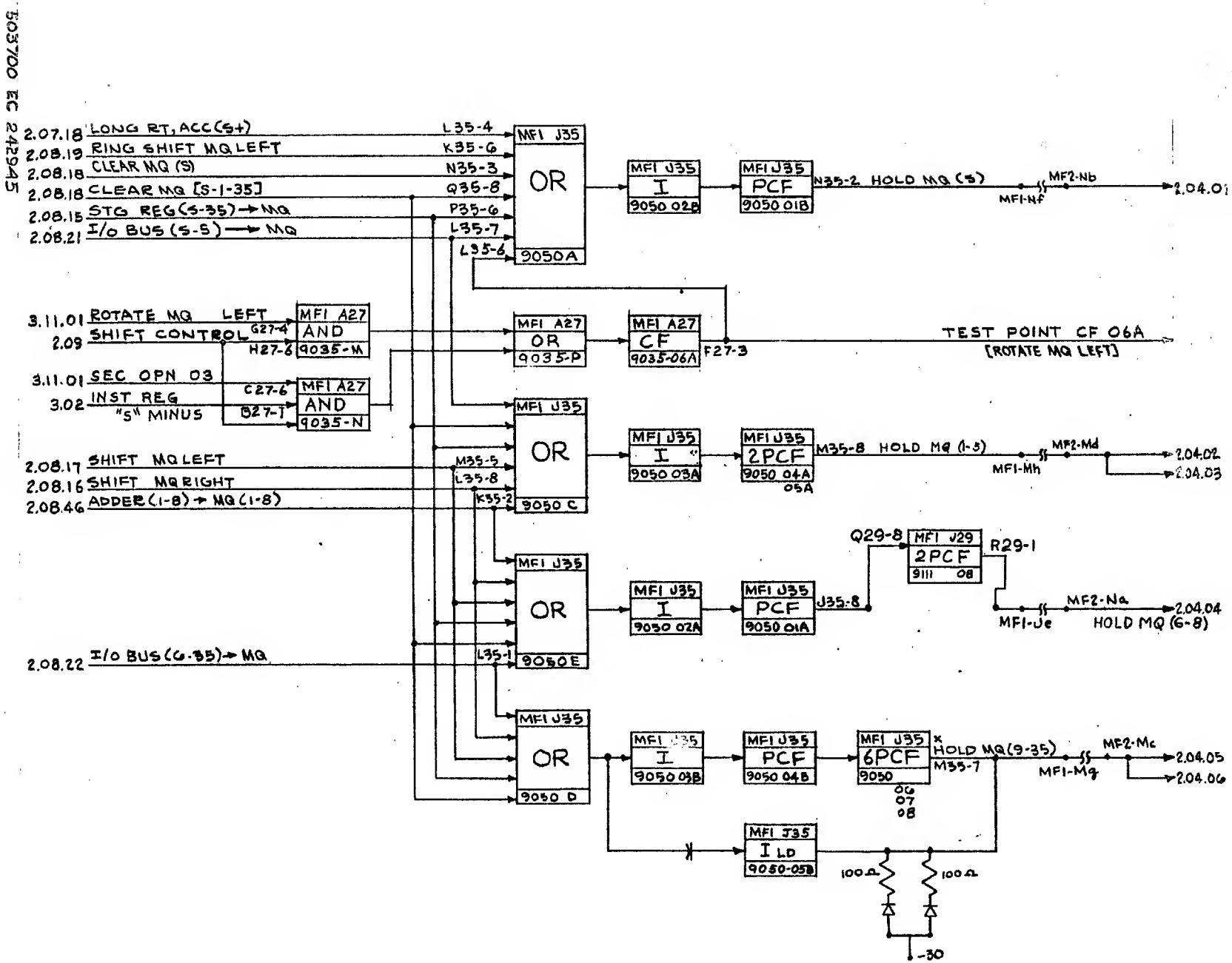
ARITHMETIC COL NO.(N)	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
PLUGGABLE UNIT LOCATION ***	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
PLUGGABLE UNIT PART NO. YYY	7G11	7G1C	7G11	7G10	7G11	7G1C	7G11	7G10	7G11	9180	9179	9160	9122	9181	9162	9181	9182	9121	9182	9181	9132	9151	9182	9181	9122	9151
TEST POINT CF 03B	M12-7	M13-7	M14-7	M15-7	M16-7	M17-7	M18-7	M19-7	M20-7	M21-6	M22-3	M23-6	M24-3	M25-6	M26-3	M27-6	M28-3	M29-6	M30-3	M31-6	M32-3	M33-6	M34-3	M35-6	M36-3	M37-6

503699 EC 242263



MQ REGISTER COLS.(5,1-35) HOLD CIRCUITS

2.04.07



STANDARDS CODE: RELEASED FOR AGREE DATE: 7-17-55 241399-A
NONE 503626 CHARGE NO: 8-17-55 241581
9-14-55 241700
9-17-55 2423160

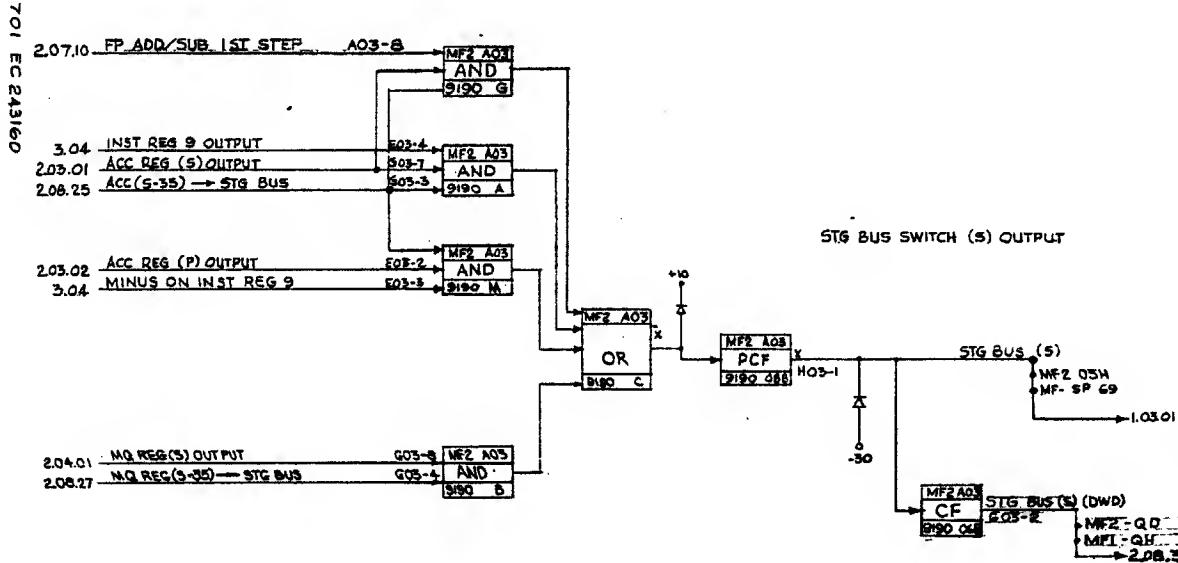
STORAGE BUS SWITCHING COLUMN 5

2.05.01

503701

503701

NOTE:
X PRINT TO ENG SPEC.
G95281

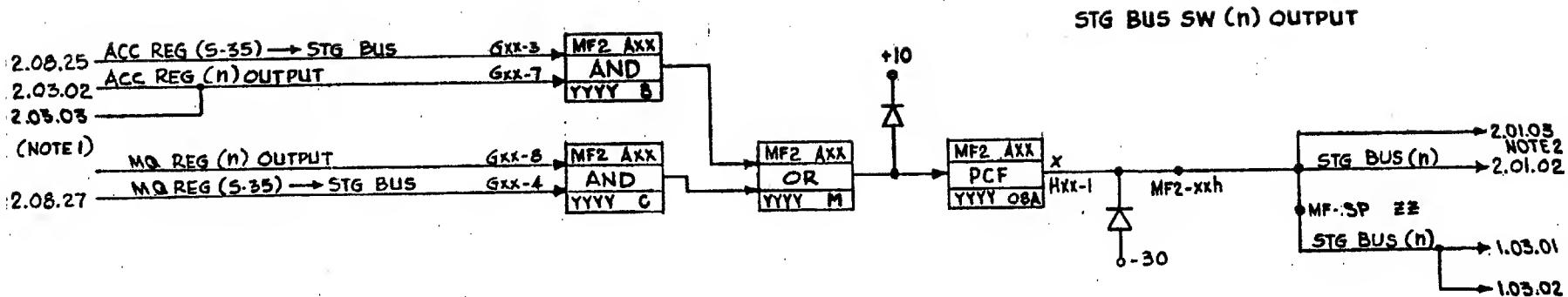


MATERIAL SPECIFICATION NO.		TELEGRAPHED WIRELESS TRANSMISSION WIRE		ALUMINUM WIRE		NOTE 1		INTERNATIONAL BUSINESS MACHINES CORP.	
SHEATH		DECODED WIRE		TIT. 1000 DECODED NOTE 1		BAOL		ELECTRONIC ANALYTICAL	
SHEATH		DECODED WIRE		DECODED NOTE 1		CONTROL UNIT		NONE	
MANUFACTURER		PLAT WIRE		NOTE 11		NAME		SYSTEM DIAGRAM	
SURFACE TREATMENT		ANGLES & T		PARALLEL WIRE		NOTE 14		2.05.01	
SPEC. NO.		TYPE		NOTES		SWR		KAD 1-13-54 SCALE	
TEST READING		TEST DATE		NOTE V		NONE		NONE	
TEST DATE		TESTER		NOTE VI		CHINE JMT 6-3-65 TIME		FM 1-13-55	
TESTER		TESTER		NOTE VII		APPL 14/C 6-6-57 CHECK SH 8.1-14-57		SH 8.1-14-57	
TESTER		TESTER		NOTE VIII		APPL 14/C 6-6-57 CHECK SH 8.1-14-57		SH 8.1-14-57	
TESTER		TESTER		NOTE IX		APPL 14/C 6-6-57 CHECK SH 8.1-14-57		SH 8.1-14-57	

503701

STORAGE BUS SWITCHING COLUMNS (1,2,8,9,20)

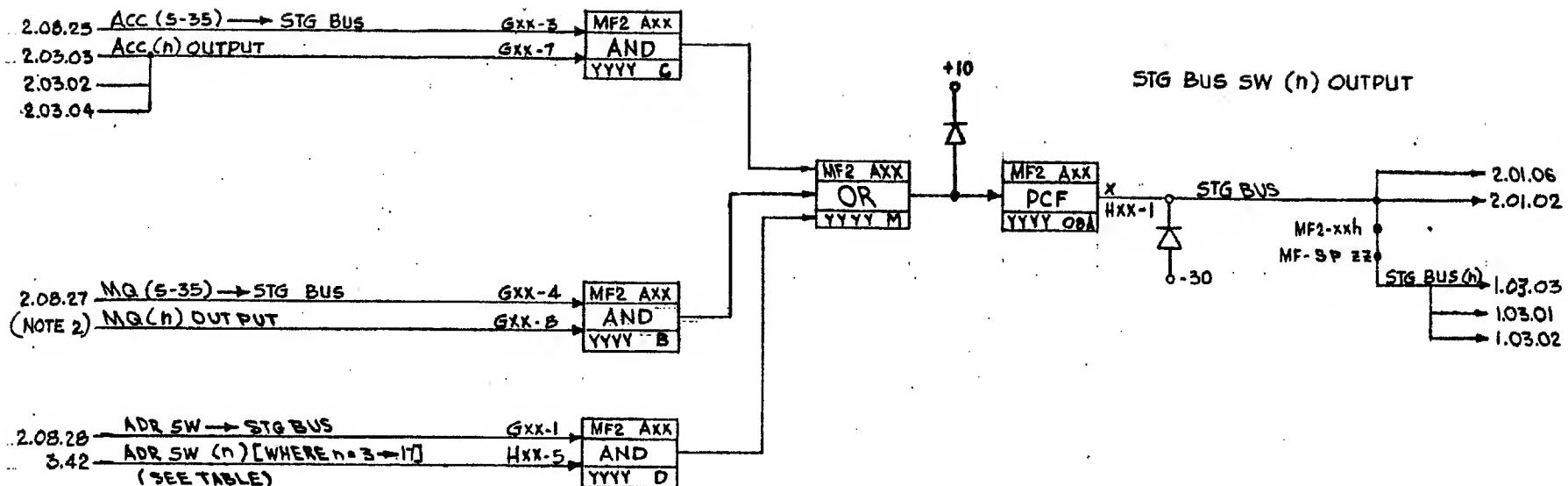
2.05.D2



ARITH COL NO (n)	PLUGGABLE UNIT	LOCATION (xx)	PART NO (YYYY)	CONNECTOR MF-SP (ZZ)
1	04	9028	85	
2	05	9026	101	
18	21	9176	76	
19	22	9176	92	
20	23	9176	108	

NOTE 1: COL (1) SYSTEMS DWG 2.04.02
COL (2) SYSTEMS DWG 2.04.03
COL (18-20) SYSTEMS DWG 2.04.05

NOTE 2: FOR 18, 19 & 20 ONLY



ARITH COL NO (n)	PLUGGABLE UNIT LOCATION (xx)	PLUGGABLE UNIT PART NO (YYYY)	CONNECTOR MF-SP 1 (ZZ)	ADR SW (N)	ARITH COL NO (n)	PLUGGABLE UNIT LOCATION (xx)	PLUGGABLE UNIT PART NO (YYYY)	CONNECTOR MF- SP (ZZ)	ADR SW (N)
3	06	9027	117	NOTE 3	21	24	9171	124	NOTE 3
4	07	9177	133	NOTE 3	22	25	9170	140	NOTE 3
5	08	9027	149	NOTE 1	23	26	9170	128	NOTE 1
6	09	9024	78	6	24	27	9170	65	6
7	10	9024	94	7	25	28	9171	81	7
8	11	9024	110	8	26	29	9170	97	8
9	12	9023	126	9	27	30	9170	113	9
10	13	9025	142	10	28	31	9170	129	10
11	14	9025	119	11	29	32	9171	144	11
12	15	9025	67	12	30	33	9170	74	12
13	16	9023	83	13	31	34	9170	90	13
14	17	9025	99	14	32	35	9170	106	14
15	18	9200	115	15	33	36	9171	122	15
16	19	9200	131	16	34	37	9170	138	16
17	20	9023	147	17	35	38	9170	135	17

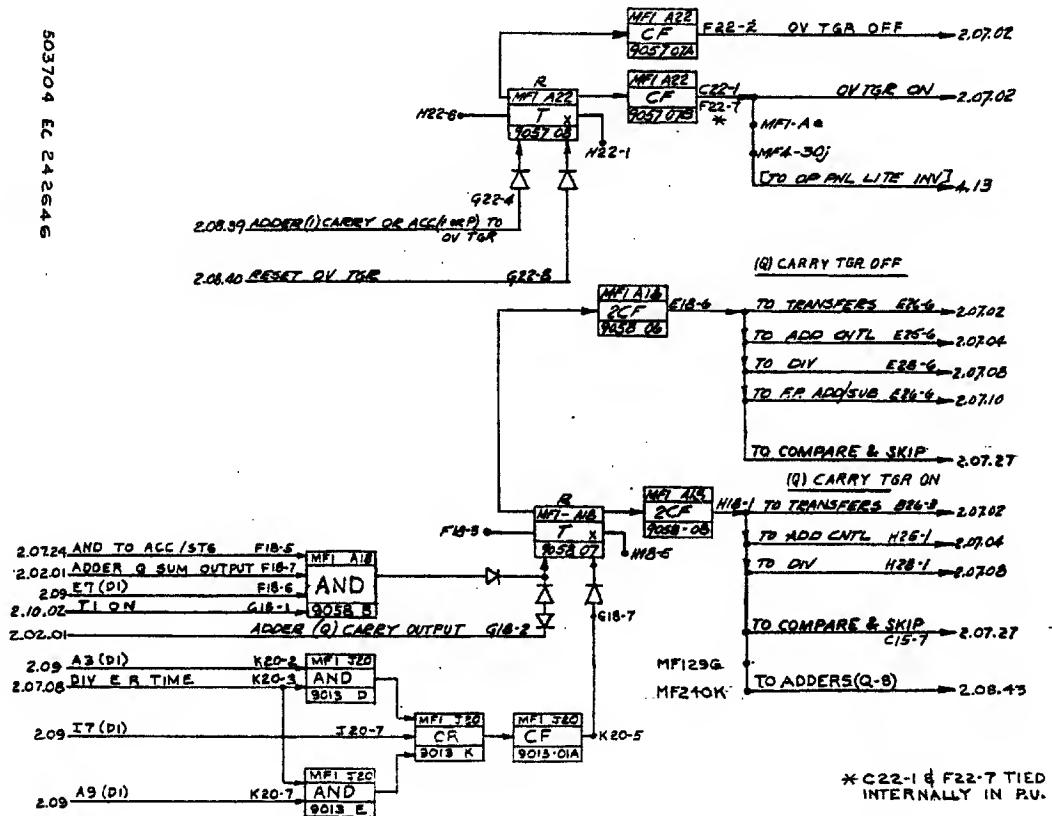
NOTE 1 : ARITH COL 5 IS WIRED TO ADR SW5
 FOR 2 CORE FRAME OPN (-30 REMOVED)

NOTE 2 : COL (3-5) SYSTEM DWG. 2.04.03
 COL (6-8) SYSTEM DWG. 2.04.04
 COL (9-17) SYSTEM DWG. 2.04.05
 COL (21-34) SYSTEM DWG. 2.04.05
 COL (35) SYSTEM DWG. 2.04.06

NOTE 3 : HXX5 CONNECTED TO -30 FOR COL (3-5) & (21-23)

STANDARDS CODE	RELEASED FOR ASSESS.	CTY.	503704
NONE		503626	
	WAS 704-3079		
			DATE CHANGE NO.
			7-15-55 24155A
			10-11-55 241701
			10-26-55 241805
			4-27-56 242462
			9-25-56 242762

503704 E4 242646



COL (a) CARRY AND OVERFLOW TIGERS

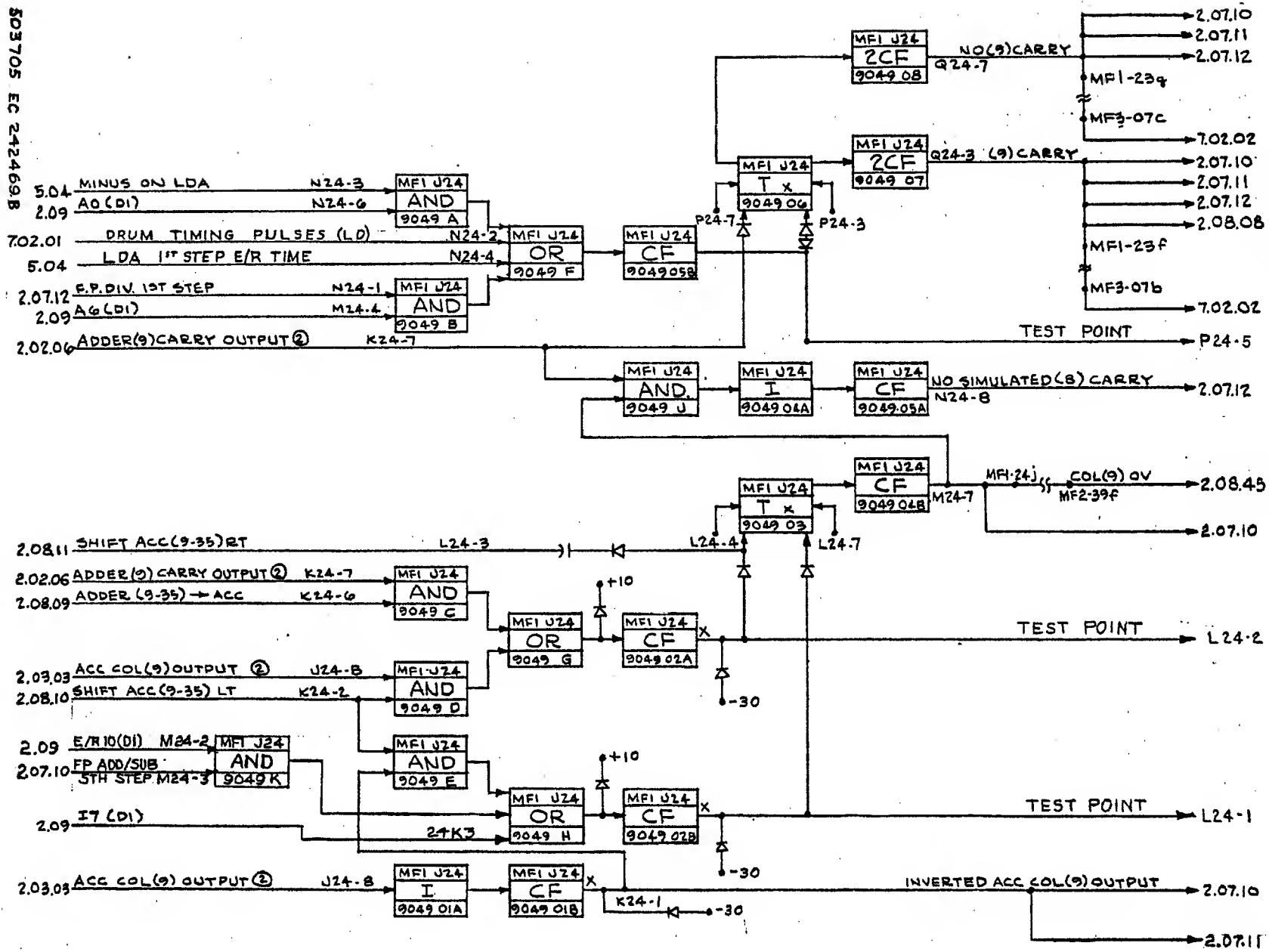
2.06.01

NOTE
I PRINT TO ENG. SPEC.
895291

NATIONAL SPECIFICATION		NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH			FRACTIONAL ± .005	CENTRICITY WITHIN	NOTE II TOT. IND. BELLOW	NAME	ELECTRONIC ANALYTICAL
HARDNESS			FRACTIONAL ± 1/16	FLAT WITHIN ²	NOTE III	CONTROL UNIT	DOOR 704
SURFACE TREATMENT	TYPE	DATE	ANGLES ± 1°	PARALLEL WITHIN	NOTE IV	SYSTEM DIAGRAM	2-04-01
			CORNERS OUTSIDE MAY BE SHRUNK	STRAIGHTNESS IN HORIZONTAL PLANE	NOTE V	SCALE	CLC 7-15-SH SCALE
			IN HORIZONTAL PLANE	SQUARE WITHIN	NOTE VI	TRAC	CLC 7-15-SH TRAC

THE HISTORY OF THE BAPTIST CHURCH IN AMERICA

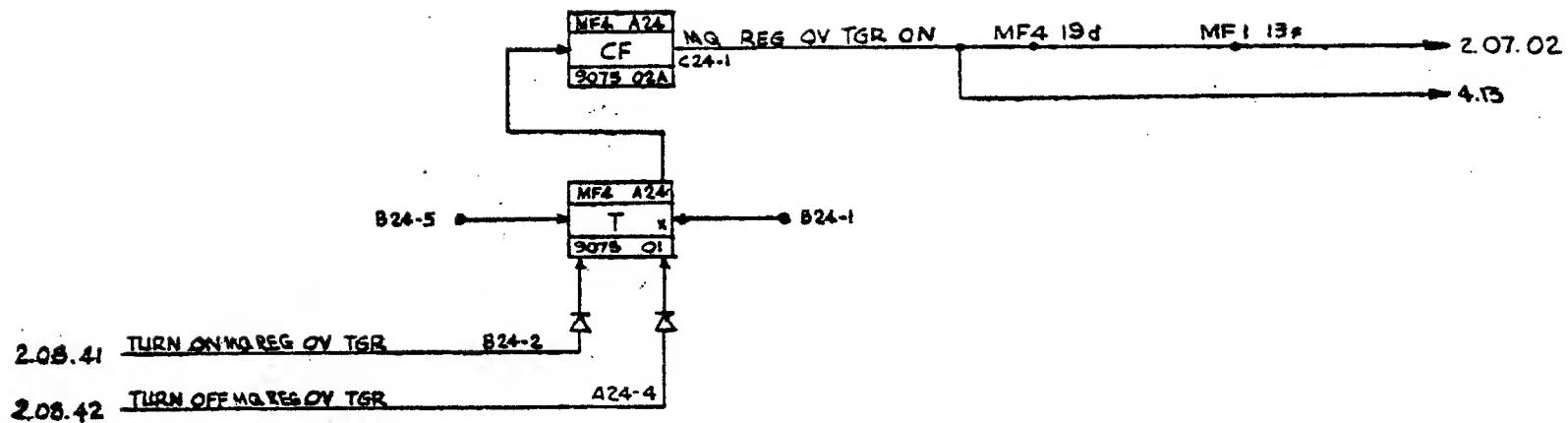
2.06.02



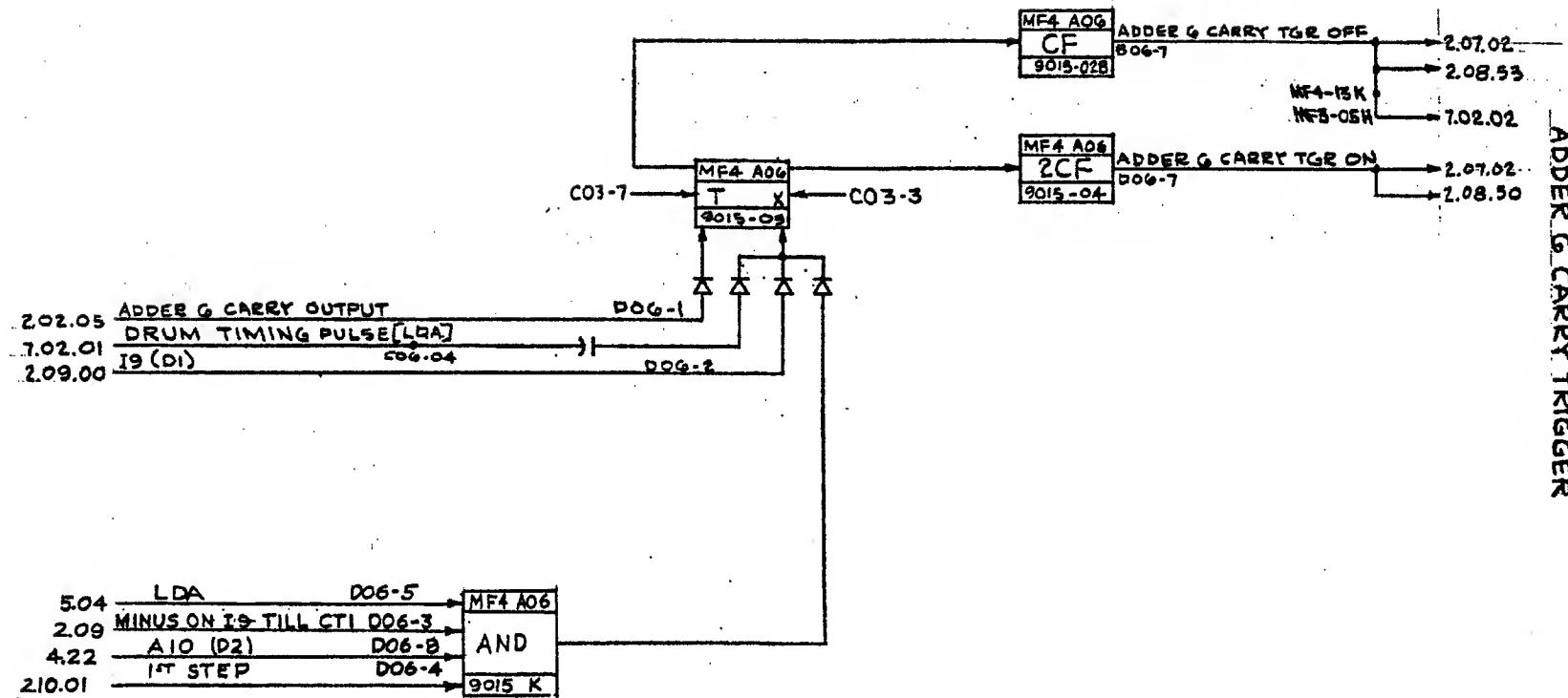
MQ REG OVERFLOW TRIGGER

2.06.03

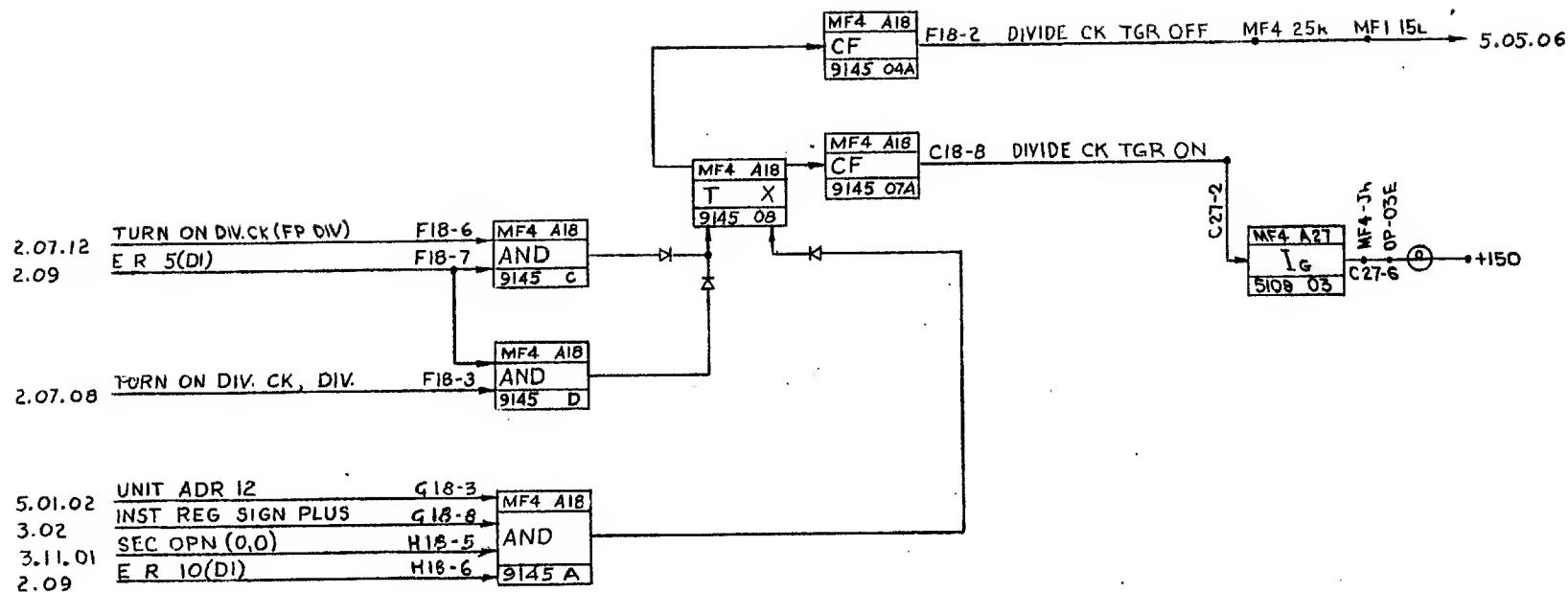
503706 EC 241399A



503707 EC 242469B



503708 EC 24/3/r



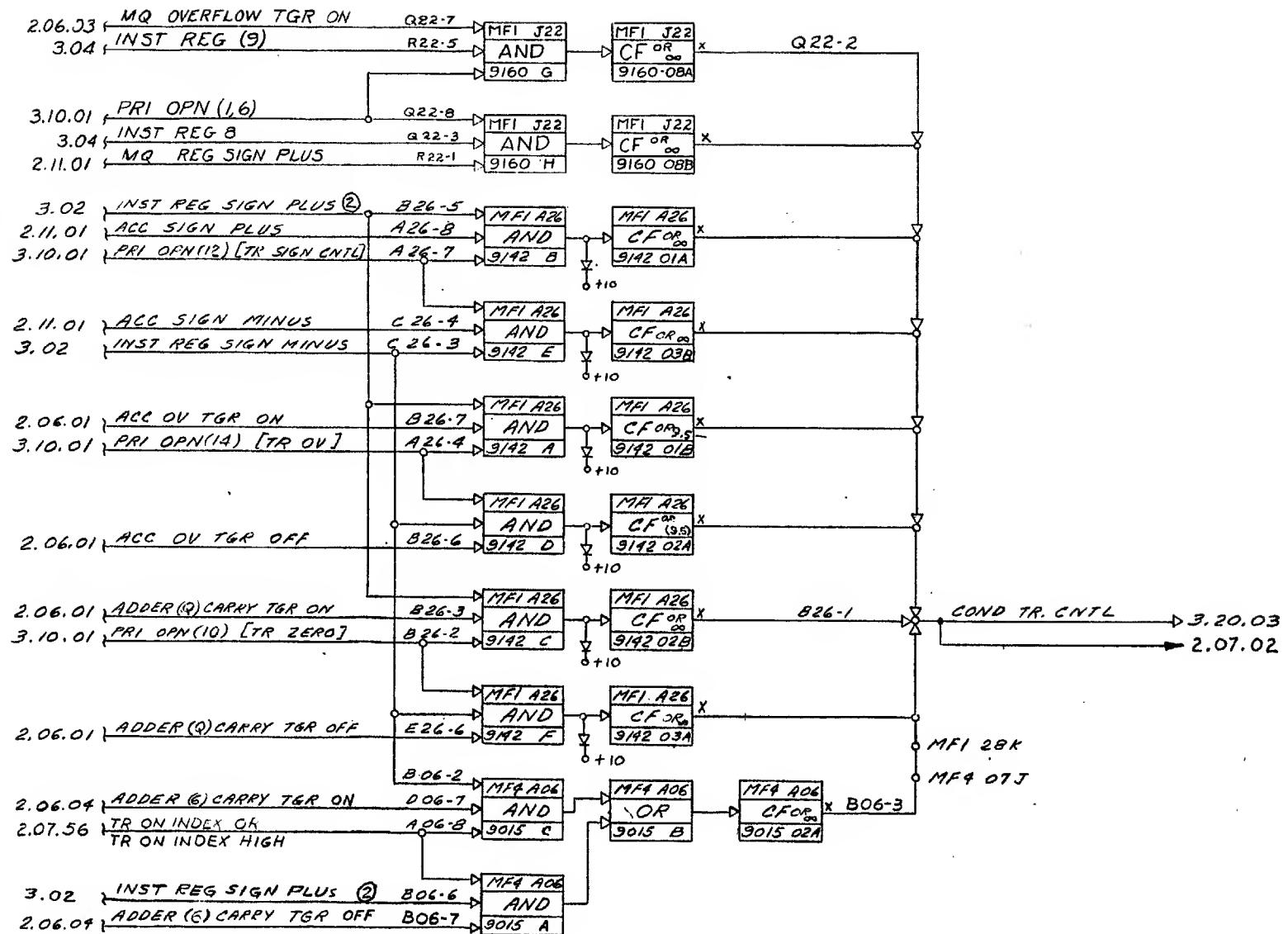
2.06.05

DIVIDE CHECK TGR.

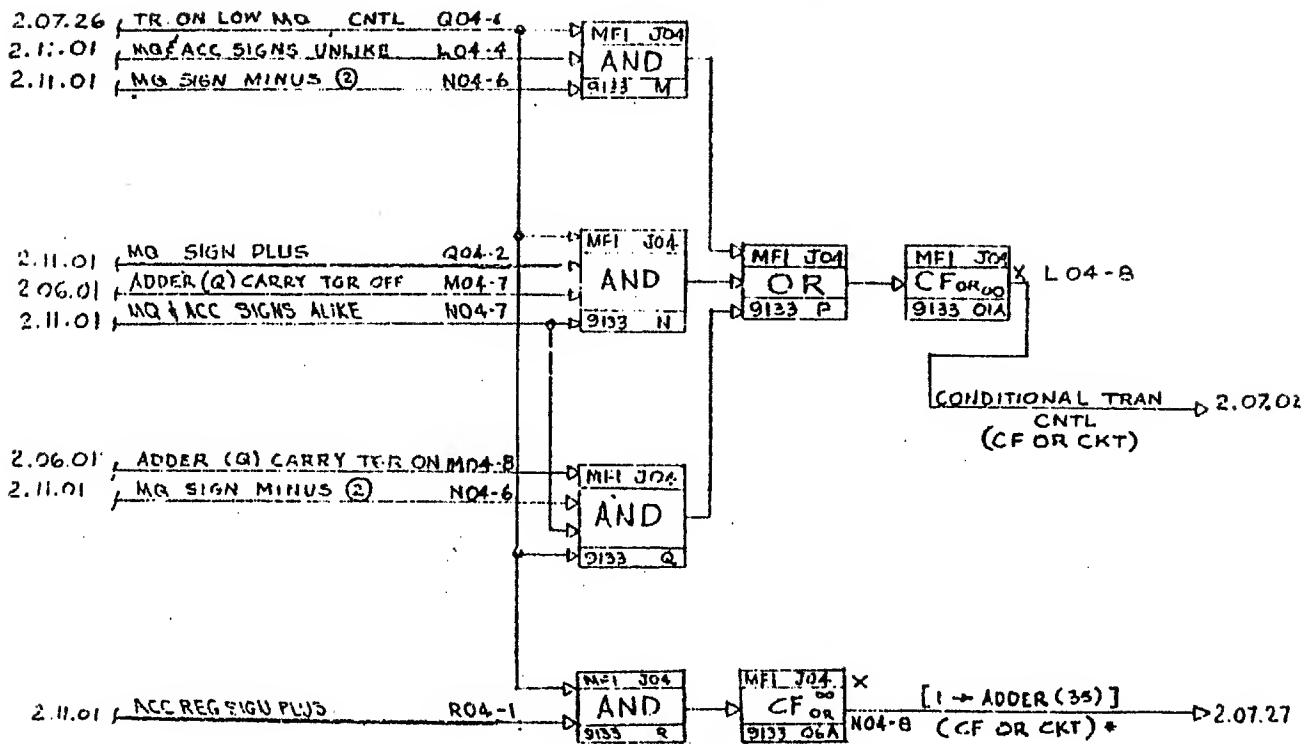
COND TR EXEC CNTL

2.07.02

SHEET 1 OF 2



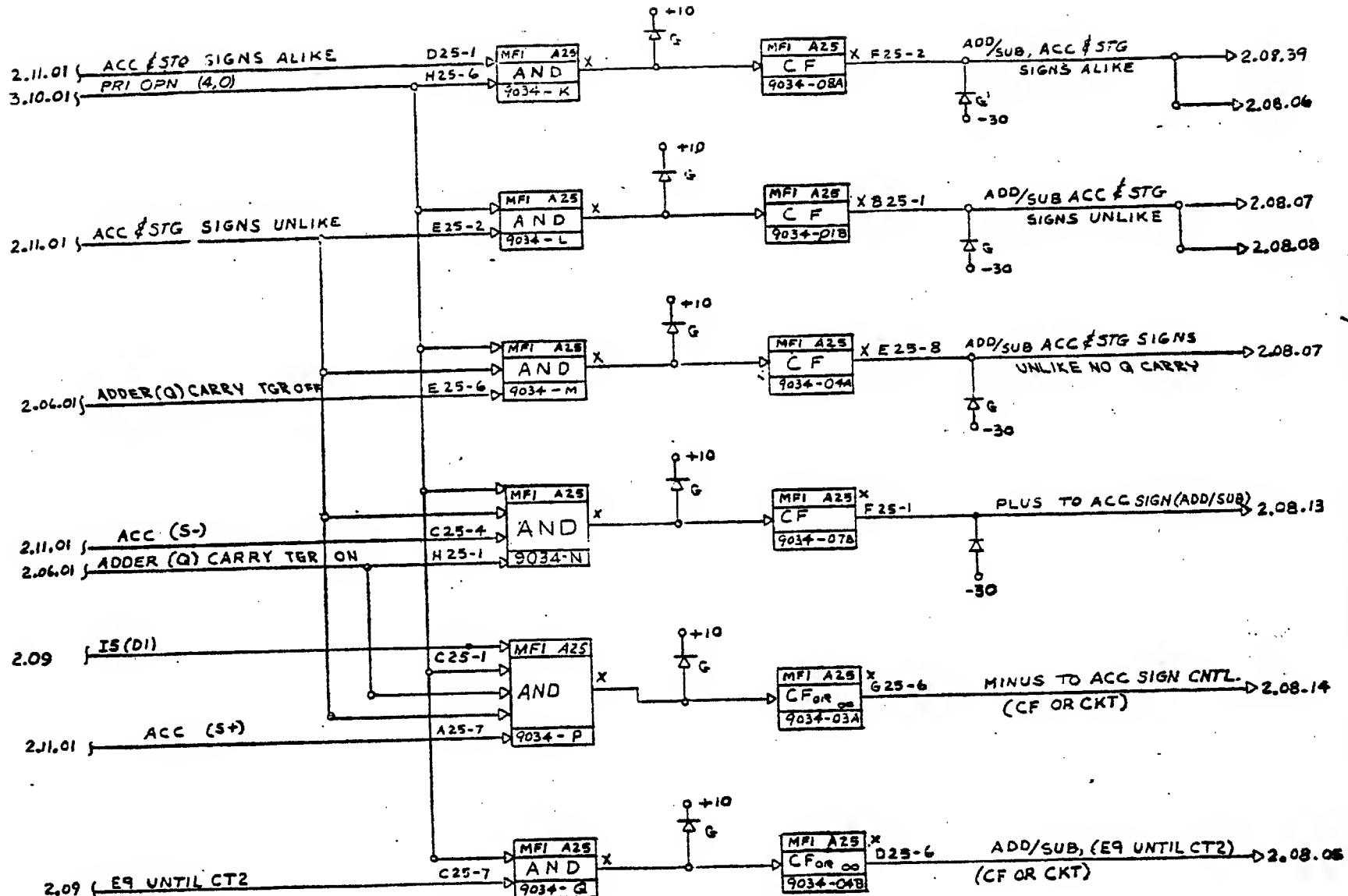
CONDITIONAL TRANSFER CNTL 2.07.02
 (CTR ON LOW MQ) SHEET 2 OF 2



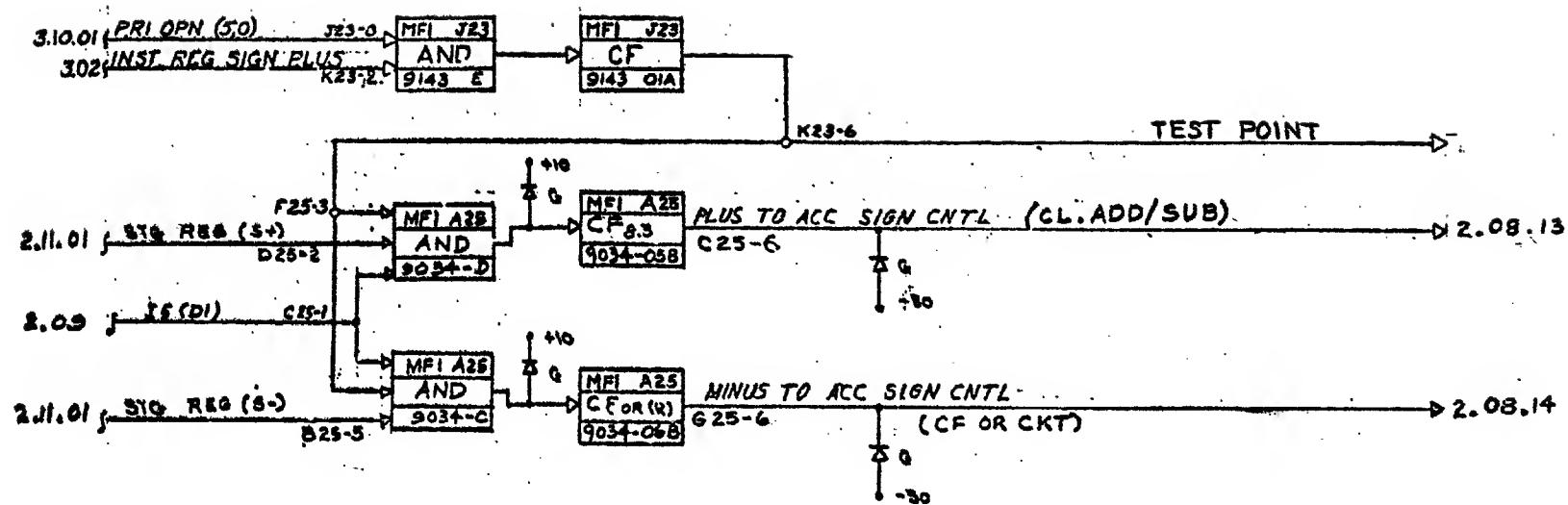
* OTHER HALF IN
 9166 - CF 04-B

ADD/SUB EXECUTION CONTROL 2.07.04

503511 EC 241399A

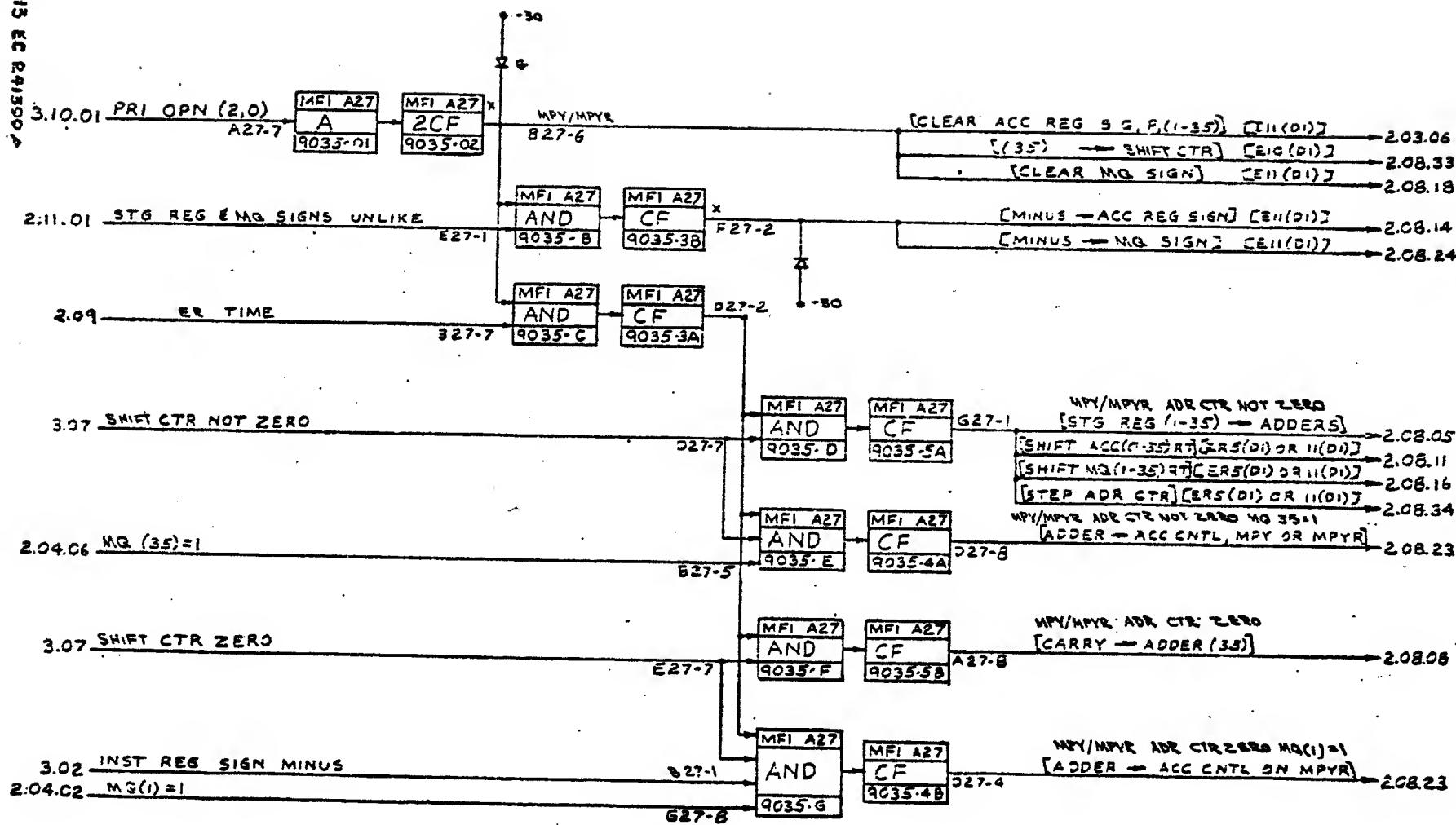


505712 EC 24783



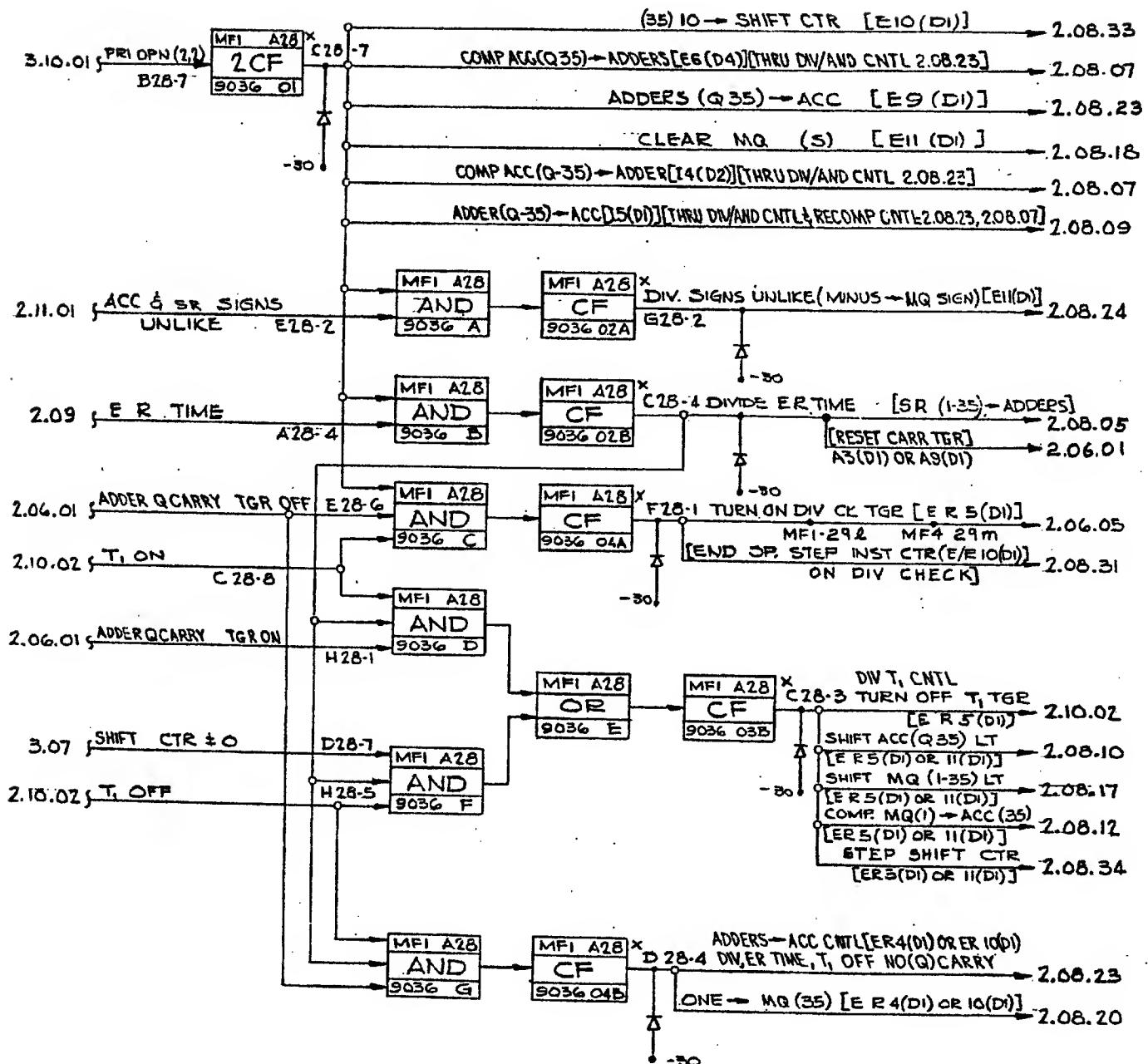
CLEAR & ADD/SUB EX. CNTL

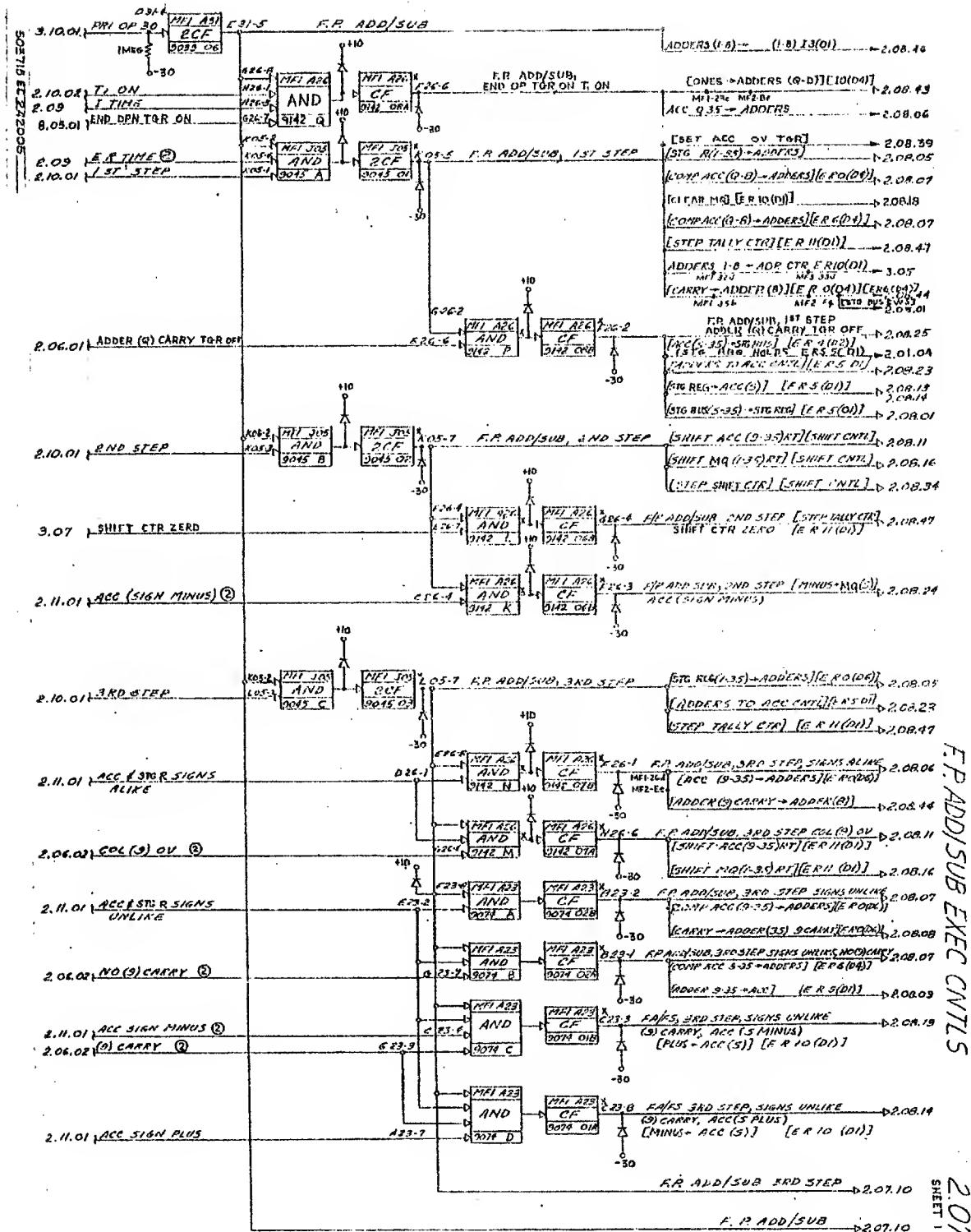
2.07.05

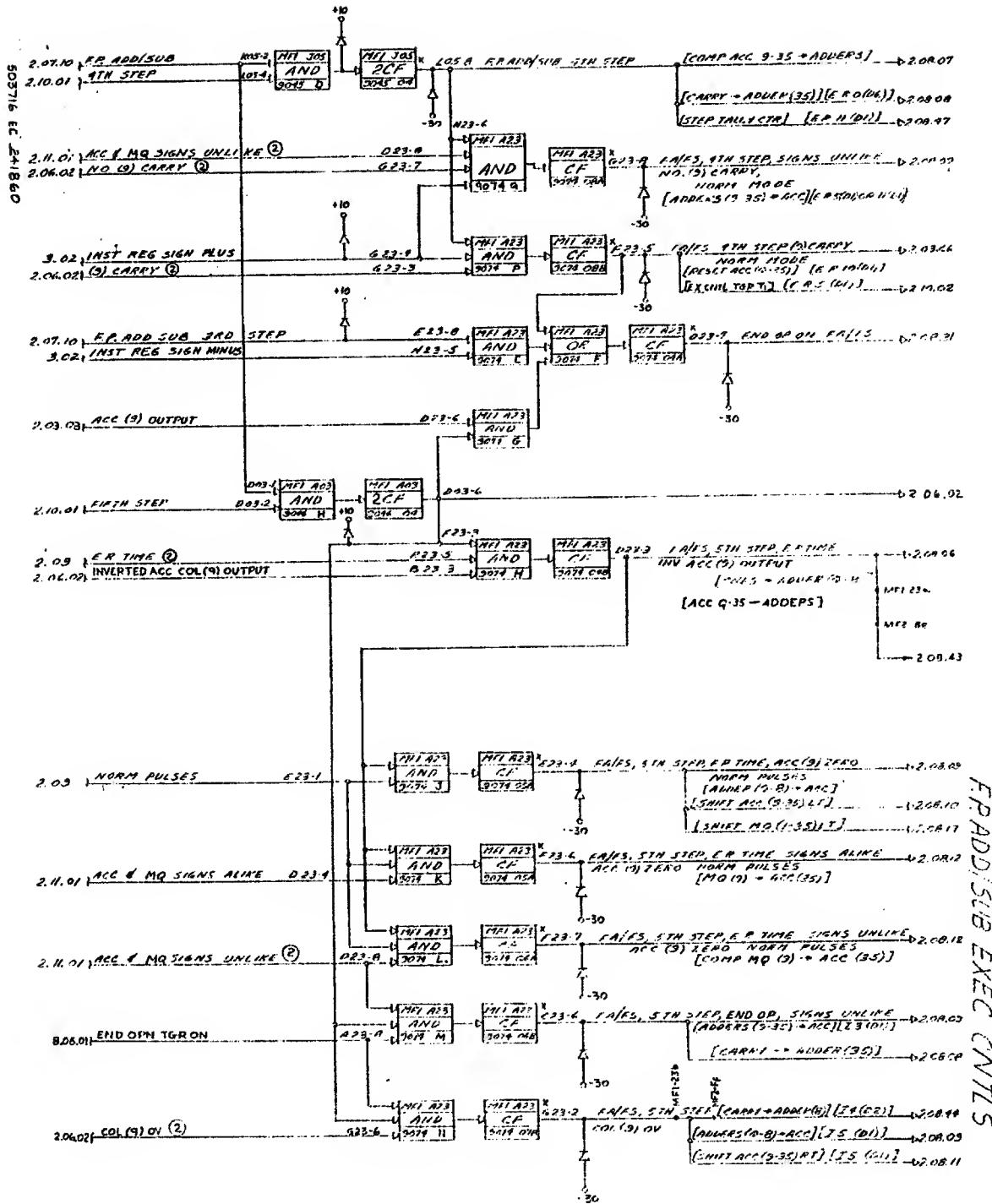


DIVIDE EXEC CNTLS

2.07.08



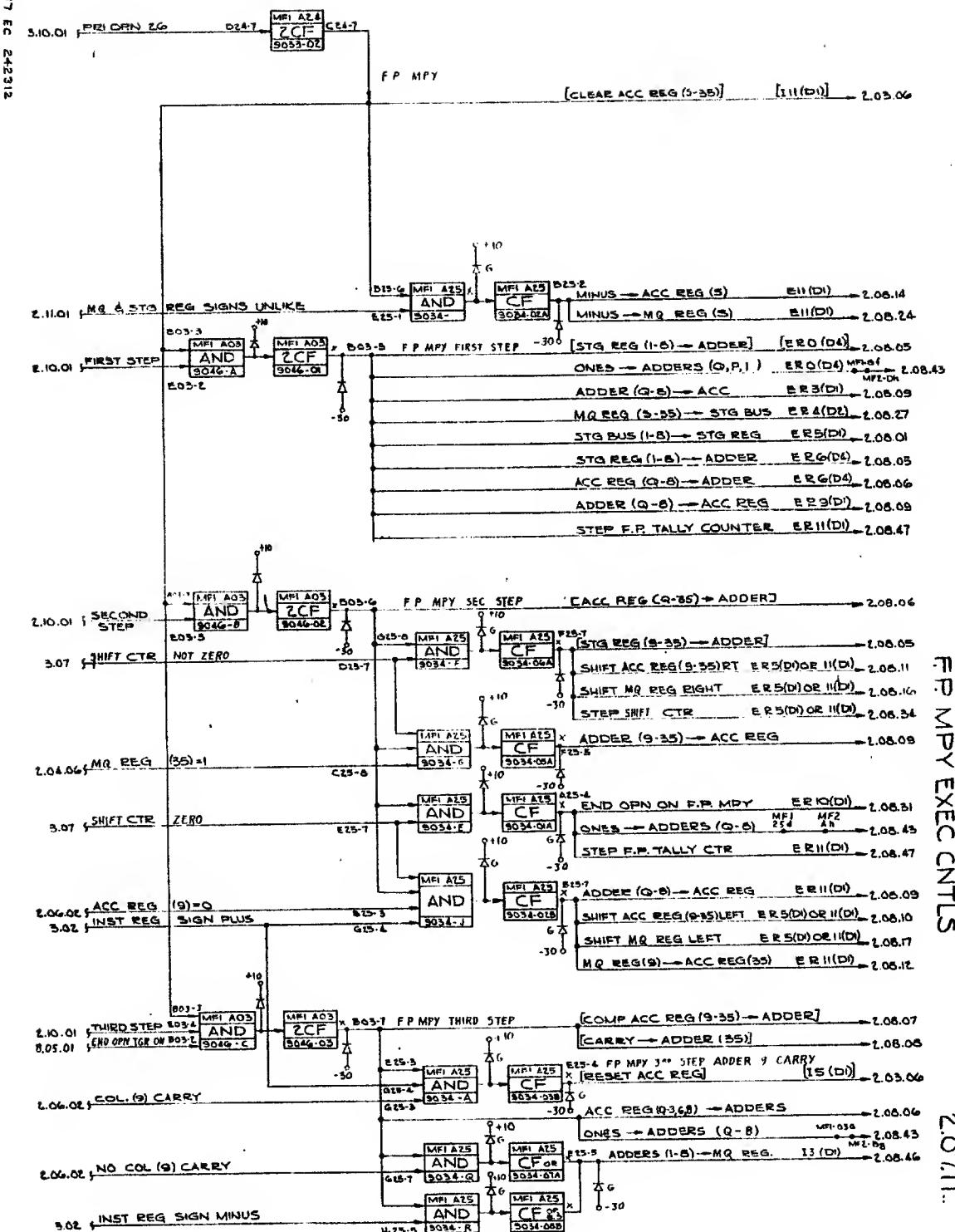




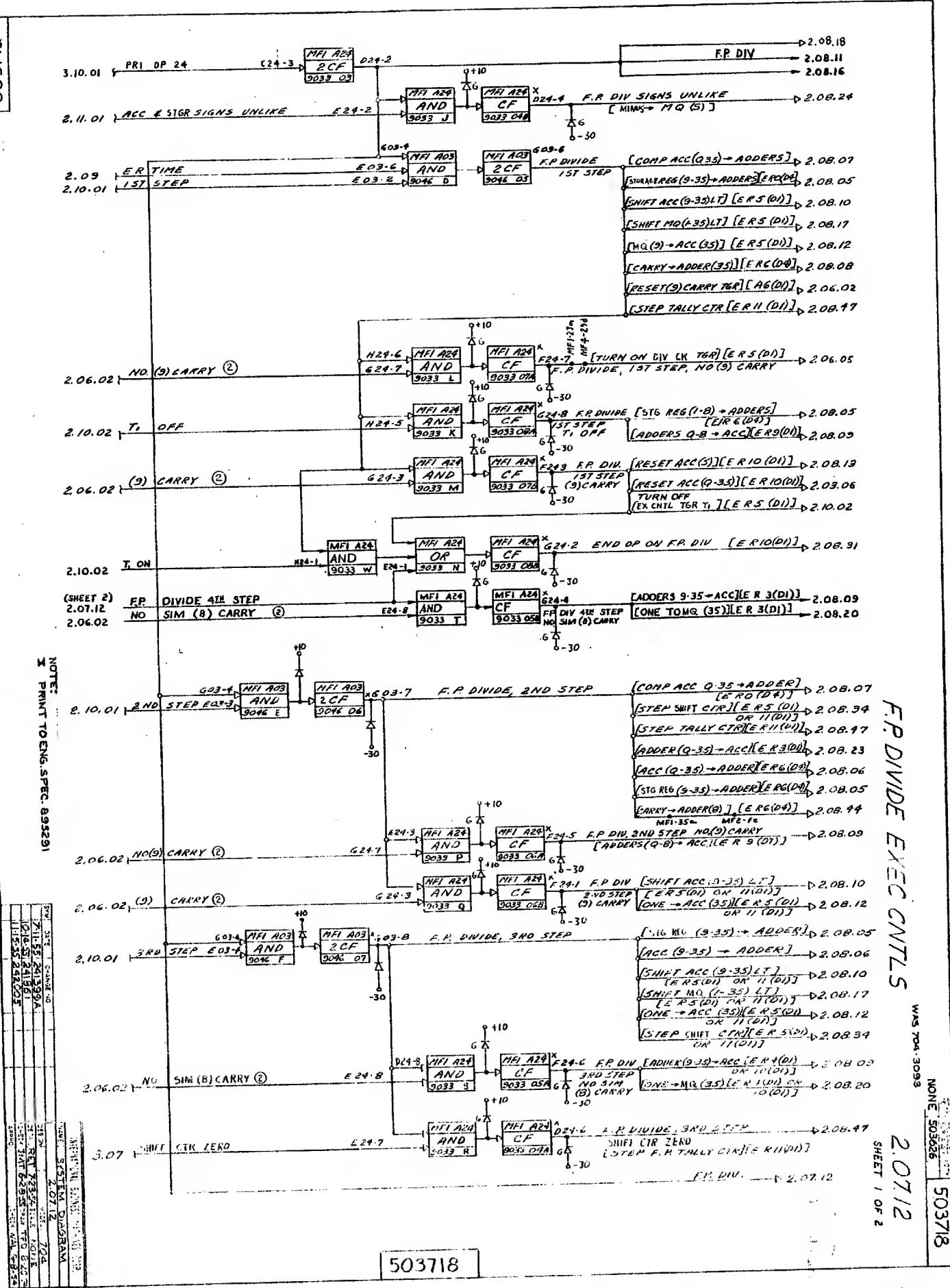
F.P. ADD. SUB EXEC CNL 5

01/10/2022

50371 EC 242312



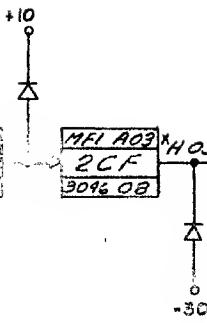
503718



503719 EC 242764-A

SHEET 1

2.07.12 F.P DIV G03-4
2.10.01 7TH STEP
F03-1 MFI A03



F.P DIV 4TH STEP

- 2.07.12 (SHEET 1)
- [STG REG (9-35) → ADDER] [E/R 0 (D8)] → 2.08.05
 - [ACC 9-35 → ADDER] [E/R 0 (D4)] → 2.08.06
 - [COMP ACC (9-35) → ADDER] [E/R 6 (D4)] → 2.08.07
 - [ADDER (Q-8) → [A10(D1)] [E/R 6 (D1)] → 2.08.09
 - ACC (Q-8) → ADDER → 2.08.06
 - STEP F.P TALLY COUNTER → 2.08.47
 - [ADDER (I-B) → MQ] [E/R 3 (01)] → 2.08.46
 - ADDER (9-35) → ACC [E/R 9 (0)] → 2.08.09
 - [I TO ADDER (I)] [E/R 0 (D4)] → 2.08.43

MFI-35g
MF2-Bh

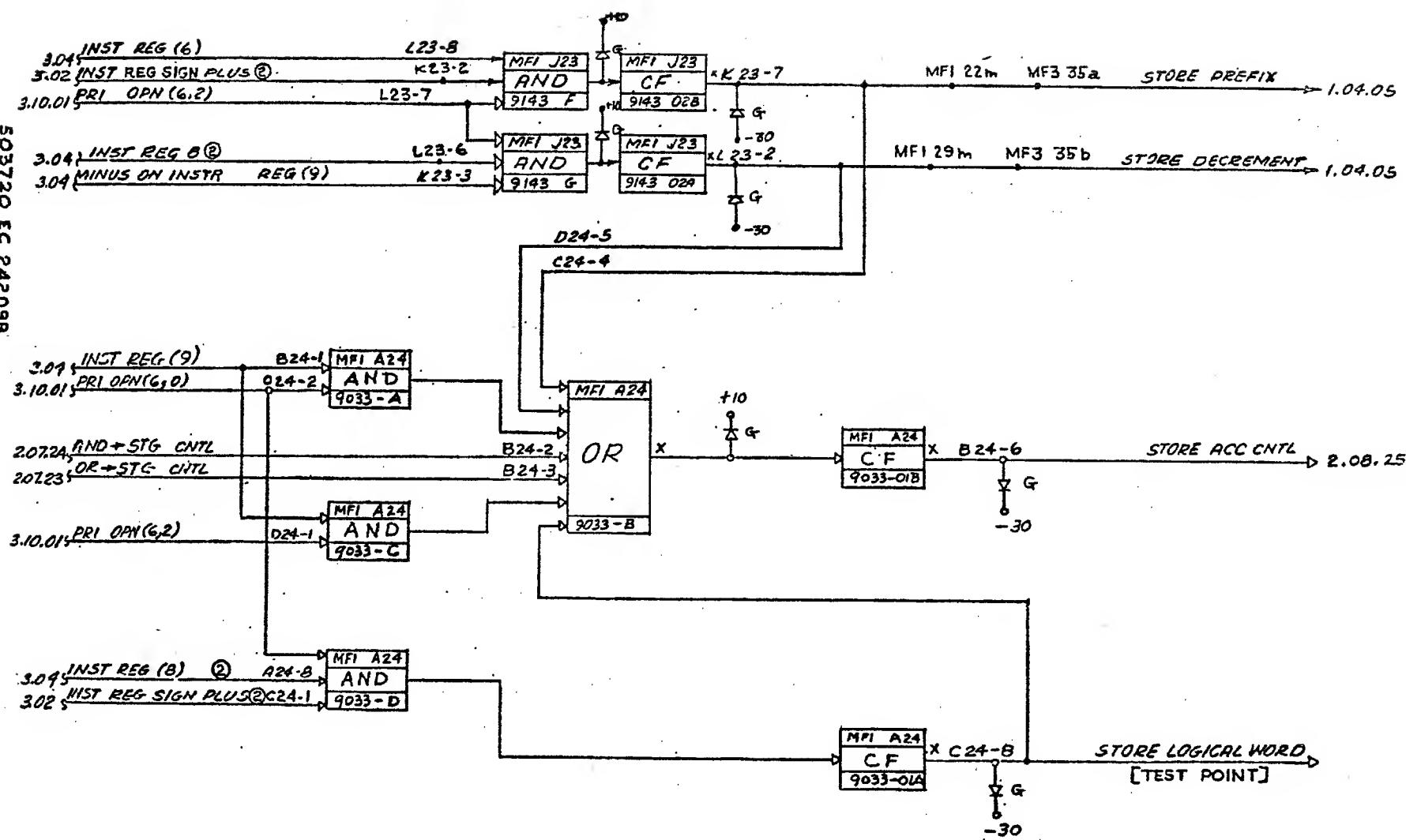
F.P DIV EXEC. CNTL

2.07.12
SHEET 2 OF 2

STORE EXECUTION CNTL

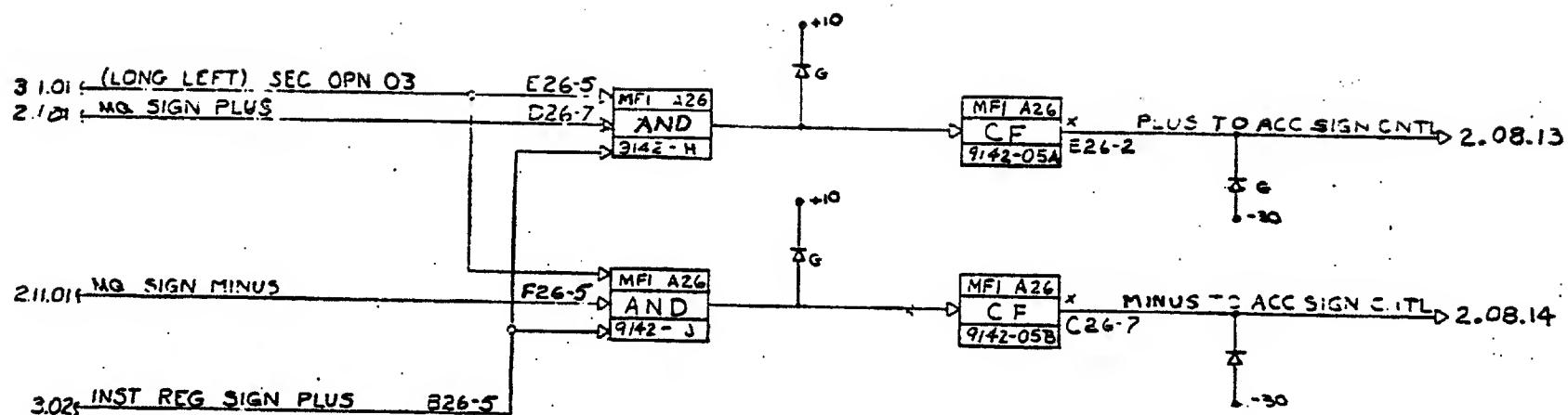
2.07.1

503720 EC 242098



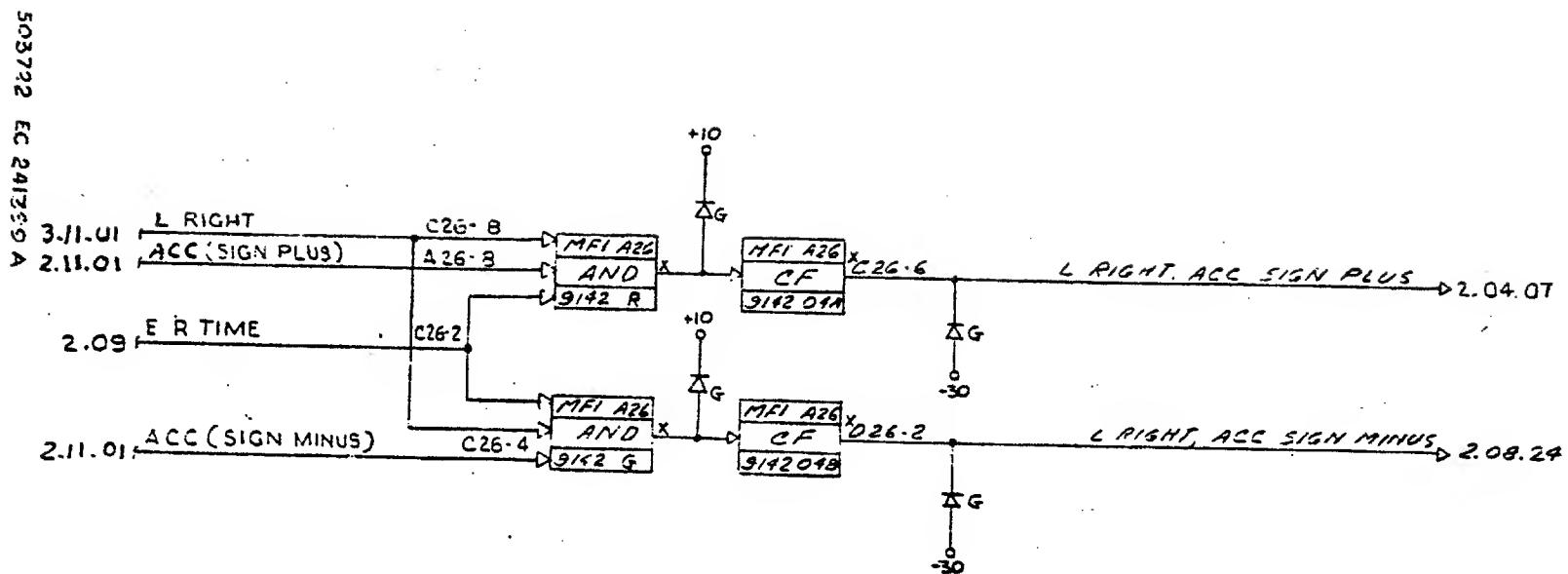
LONG LEFT, LOGICAL LEFT EX CNTL 2.07.17

503721 EC 241399A



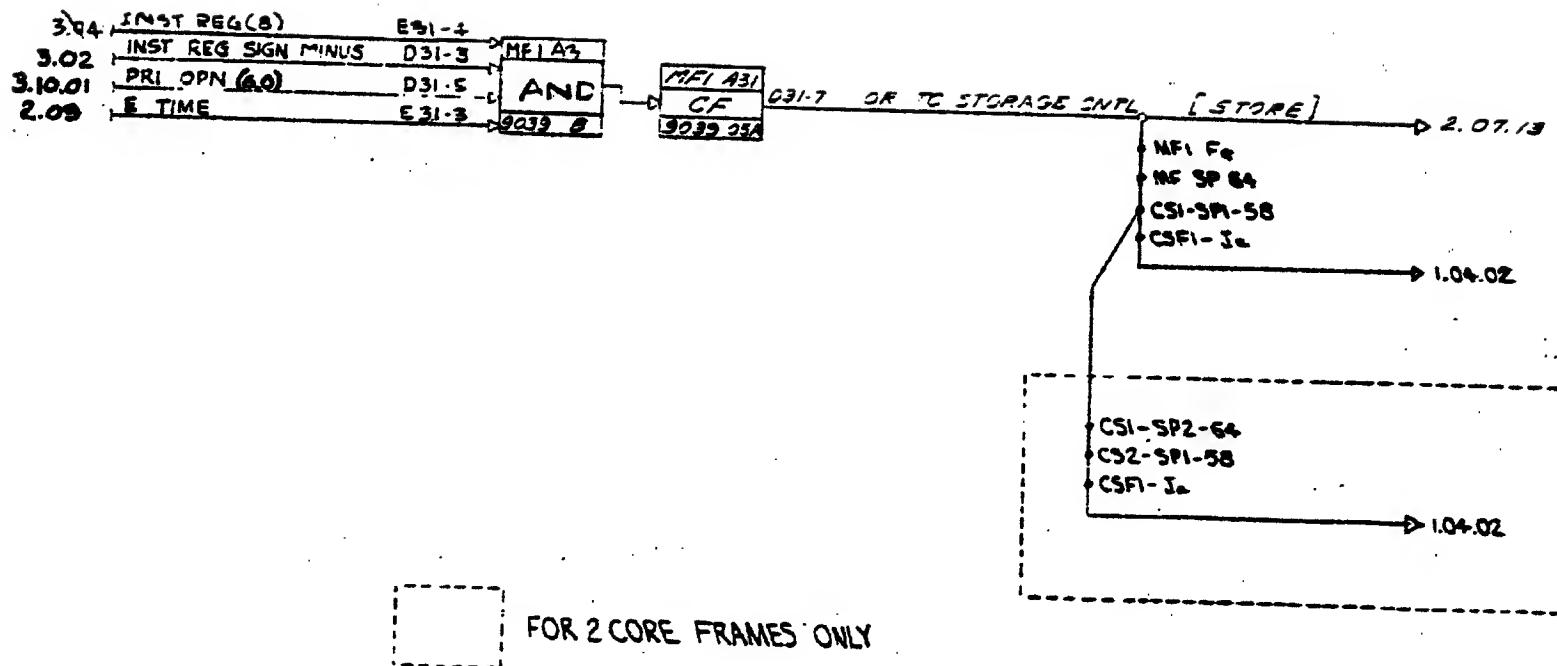
LONG RIGHT EX CNTRL

2.07.18

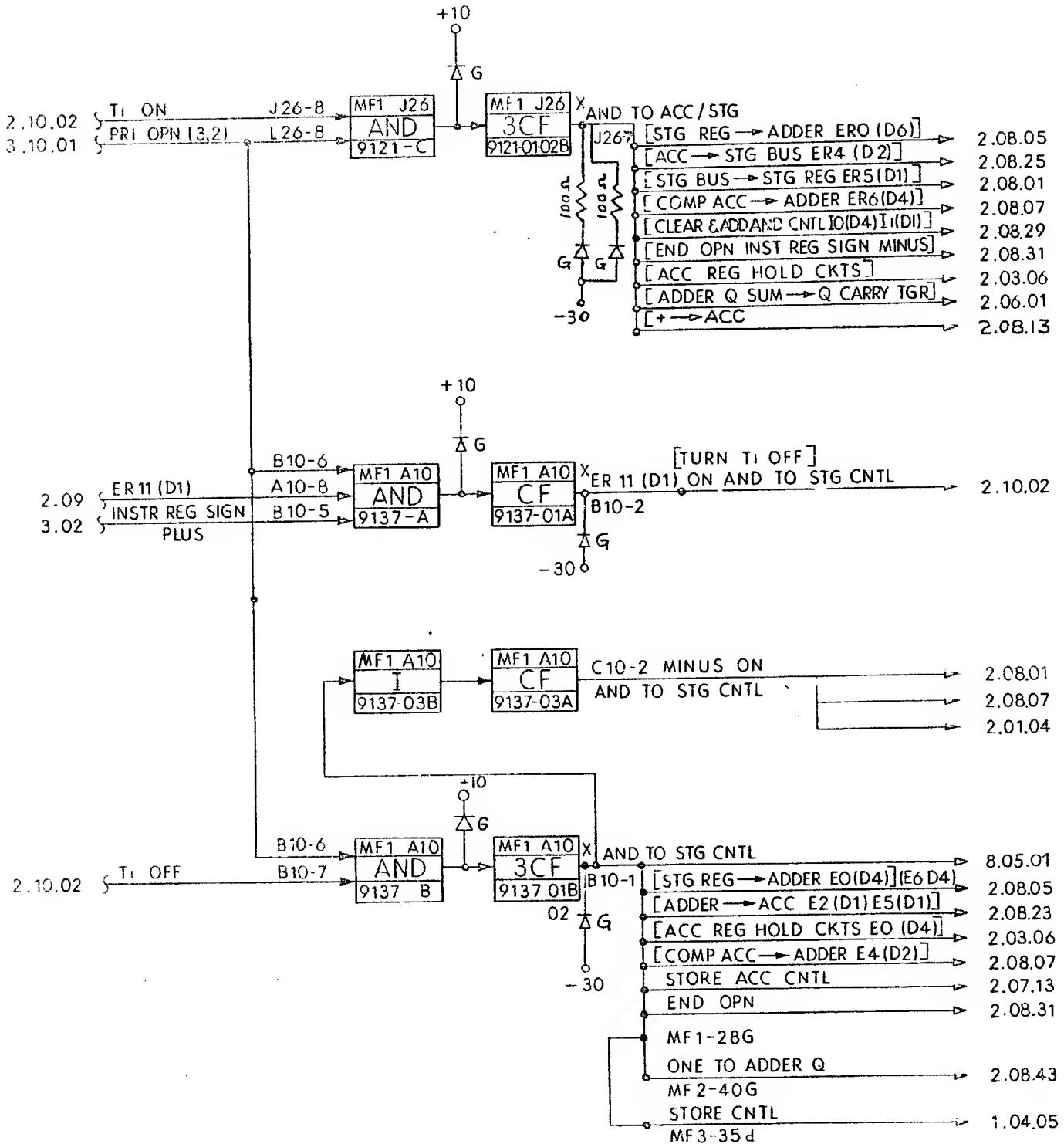


OR TO STORAGE EXEC CNTL

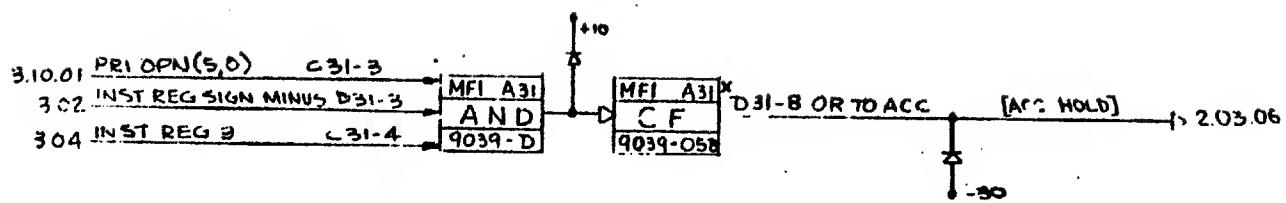
2.07.23



503723 EC 241399A



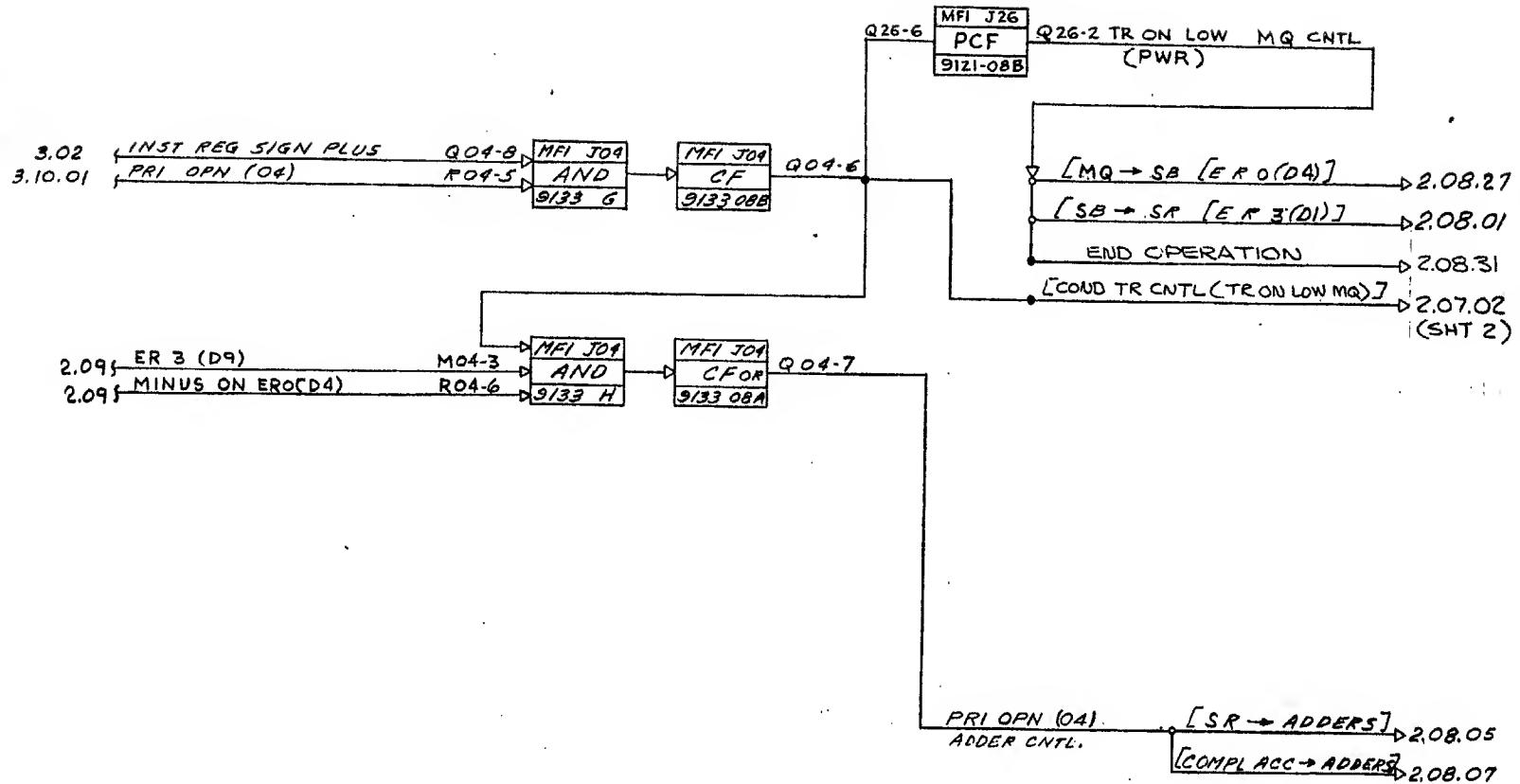
OR TO ACC EXEC CNTL 2.07.25



PART #6503725
EC 284399A

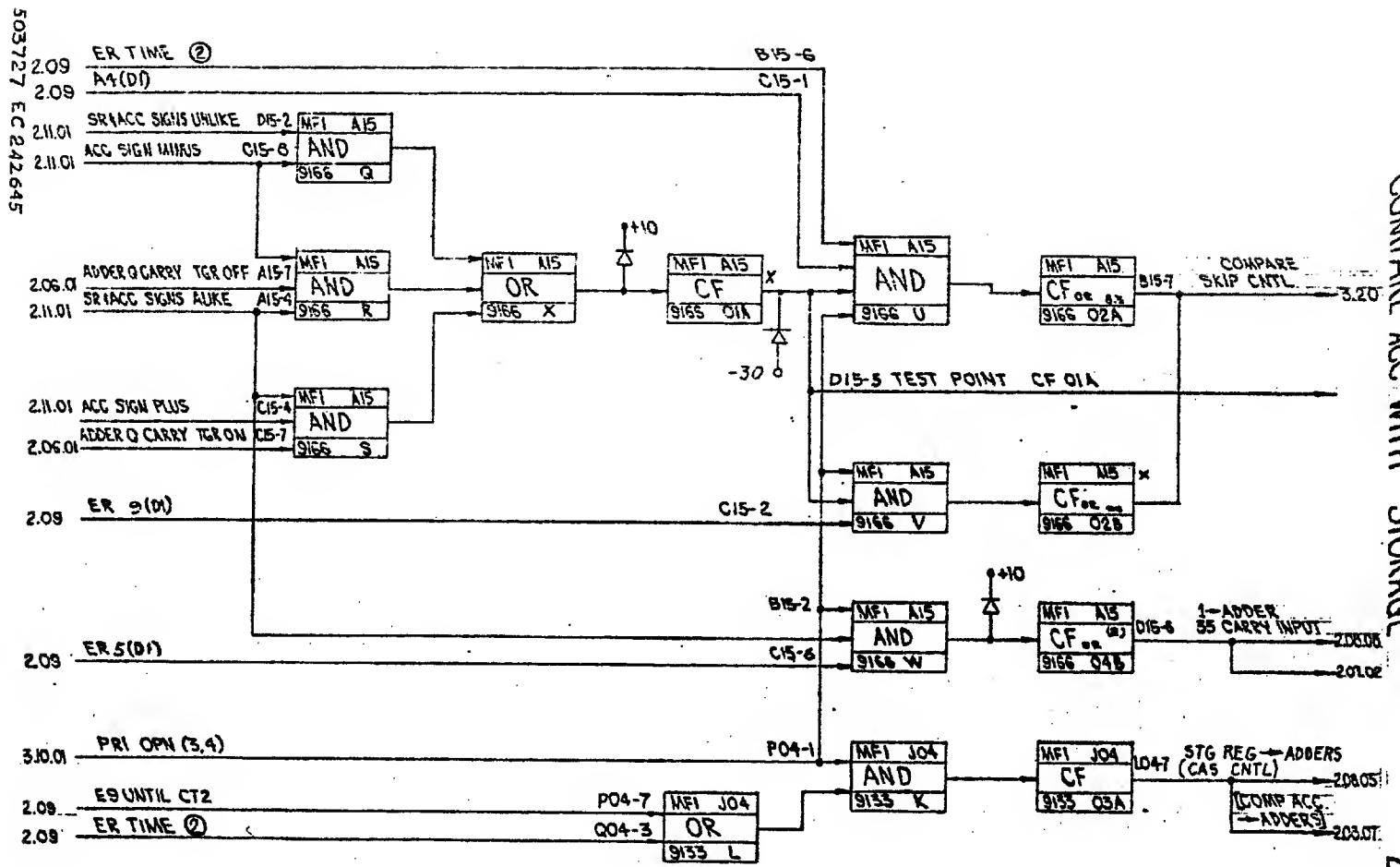
TRANSFER ON LOW QUOTIENT EX CNTL
COMPARE (ACC WITH STORAGE) EX. CNTL

2.07.26



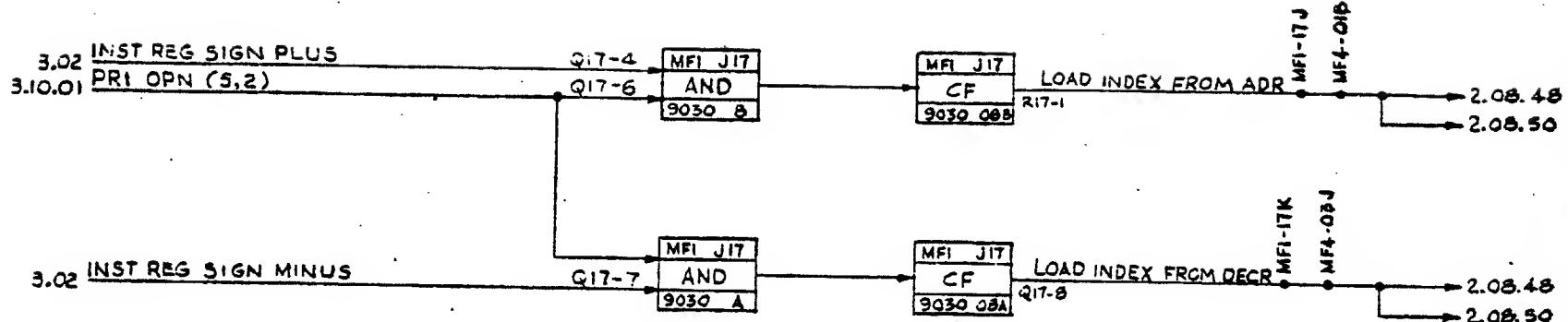
COMPARE ACC WITH STORAGE

2.07.27



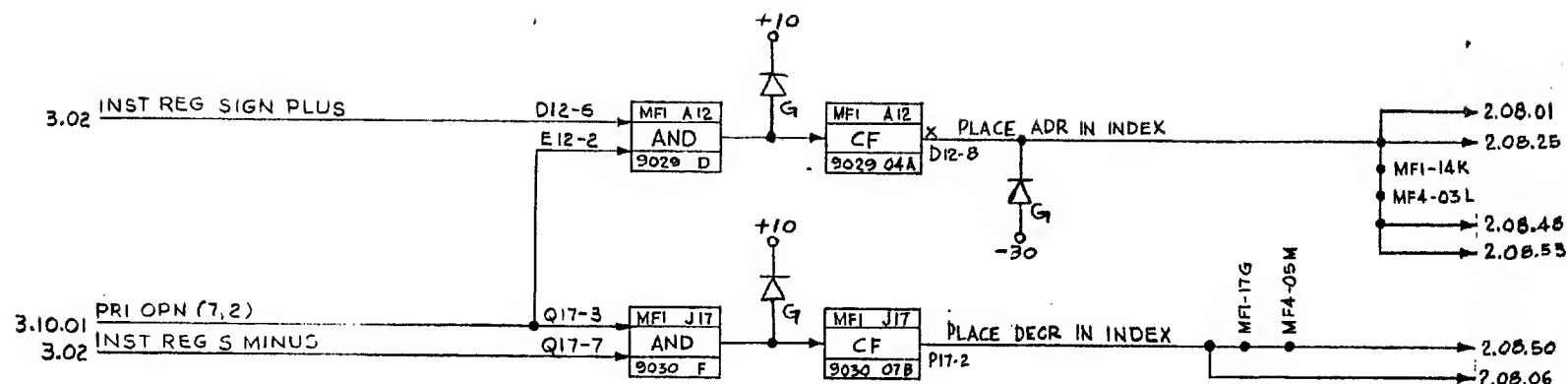
LOAD XR CONTROL

2.07.28



PLACE ADR IN INDEX, PLACE DECR IN INDEX

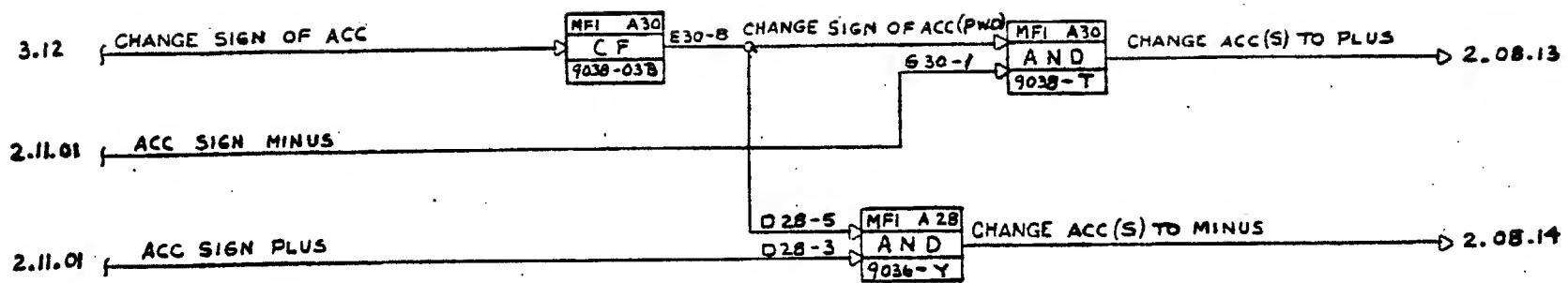
2.07.29



503729-EC24/1815

CHANGE ACC SIGN EXEC CNTL 2.07.34

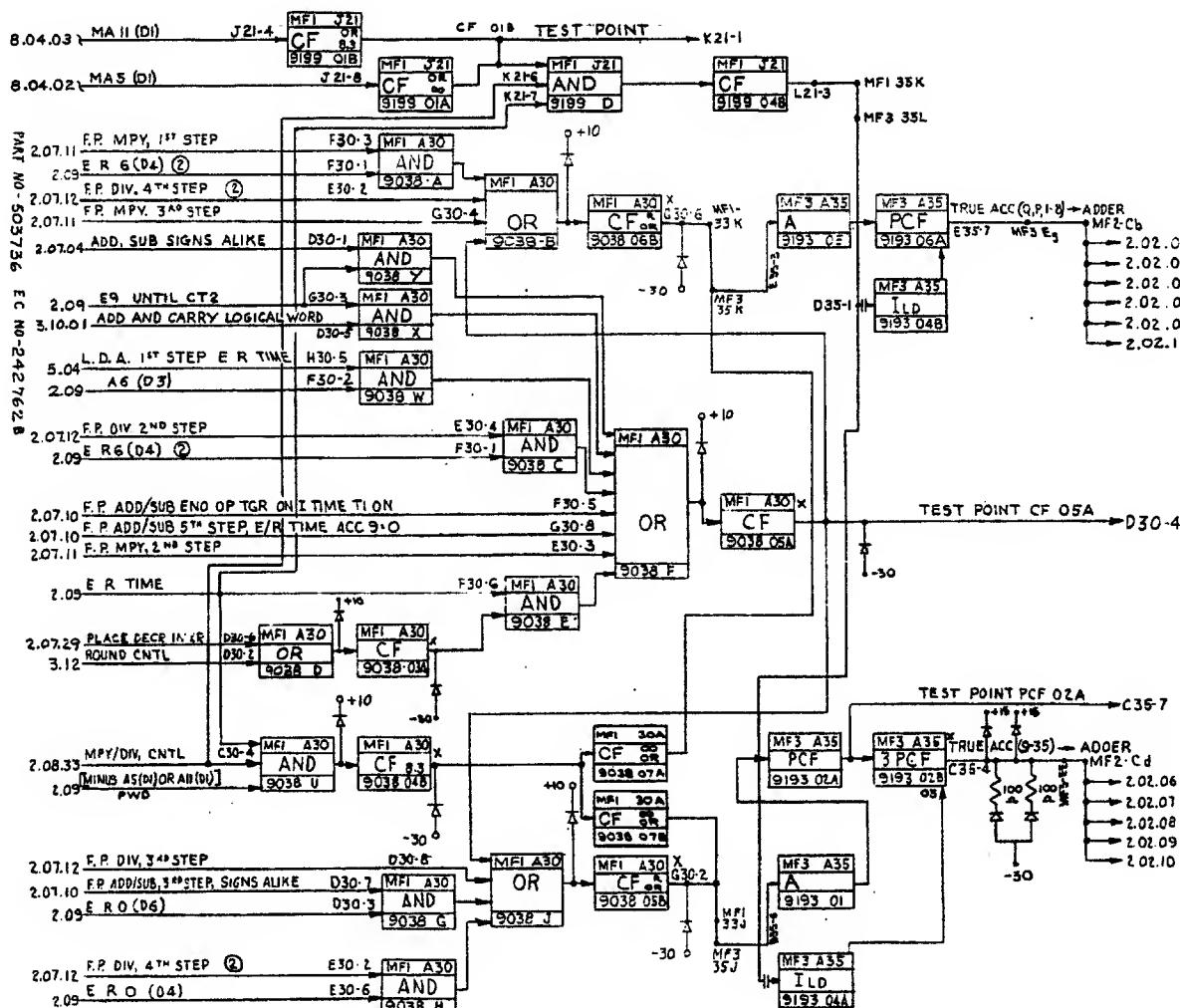
503730 EC 241399A



503736

STANDARD CODE	RELEASED FOR ASSEMBLY	REV.
NONE		503736
DATE		CHANGE NO.
7-11-55 24/399A		9-15-55 24100
9-15-55 24100		12-8-56 242138
12-8-56 242138		12-25-55 242137
12-25-55 242137		12-8-56 2424698
12-8-56 2424698		12-25-55 2427626

WKS 704 - 3124



503736

MATERIAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT NOTING		NOTE 1 INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH		INCHES ± .005		CONCENTRIC WITHIN		NOTE 2 READING NOTE 2	
HARNESS		FRACTION ± 1/16		FLAT WITHIN		BACK ELECTRONIC ANALYTICAL	
SURFACE TREATMENT		SPOT	APPRO	ANGLES ± 2°	PARALLEL WITHIN	CONTROL UNIT MODEL 704	
TEST SEARCH DATE				CORNERS OUTSIDE	STRAIGHT WITHIN	NOTE 3 SYSTEM DIAGRAM	
APPRO				CORNERS MAY BE INSIDE	SQUARE WITHIN	NOTE 4 2.08.06	
SEARCH DATE				INCHES	INCHES	DRAW. CLC S-7-54 SCALE: NONE	
						NOTE 5 CHECK JNT S-2-155 TRAC G.P. 3-15-55	
						APPRO 4&K 4-21-56 CHECK W/CL 3-25-55	

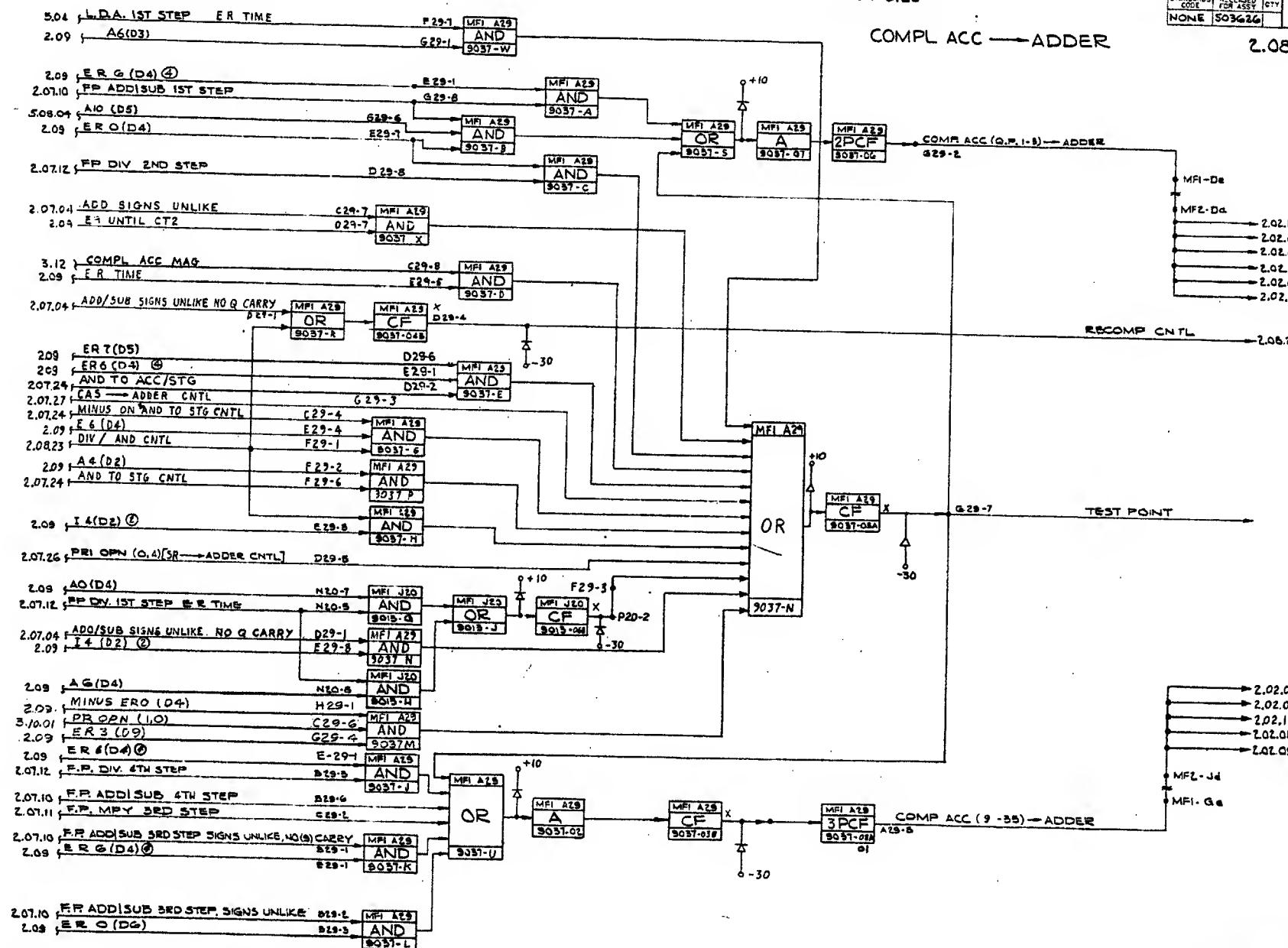
WAS 104-3125

STANDARDS CODE	RELEASED QTY
NONE	503626

503737

COMPL ACC — ADDER

2.08.07



503737 EC 242939

NOTE X:
PRINT TO ENG.SPEC.895291

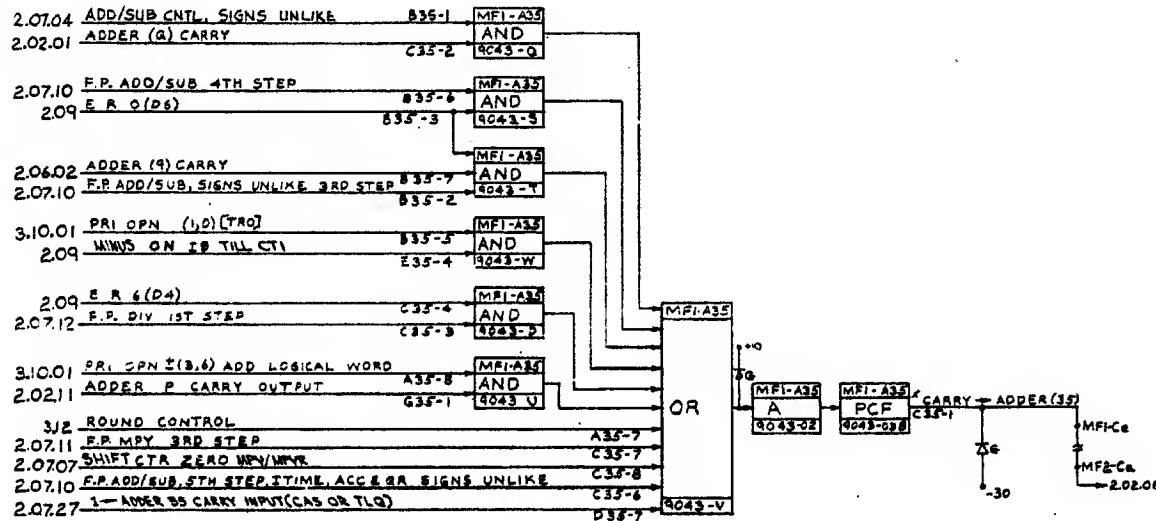
INTERNATIONAL BUSINESS MACHINES CORP. NAME SYSTEM DIAGRAM 2.08.07					
SYN	DATE	CHANGE NO			
SEE INDEX CARD					
5-B-52 242621-8					
DETAL					
G-21-62 242784					
CHECK					
DRAW CLC 89-54					
APPRO					
CHECK LM 82-54					

WAV 704-3126

STANDARD CODE	RELEASED FOR ASSEMBLY	QTY.
NOTE: 503626		
DATE	CHARGE NO.	
7-11-55	2-13551	
10-11-55	241701	
9-25-56	242762-2	

503738

503738 EC 242762B



CARRY → ADDER (35)

503753

NOTE:
PRINT TO ENG. SPEC.
695281

2.08.08

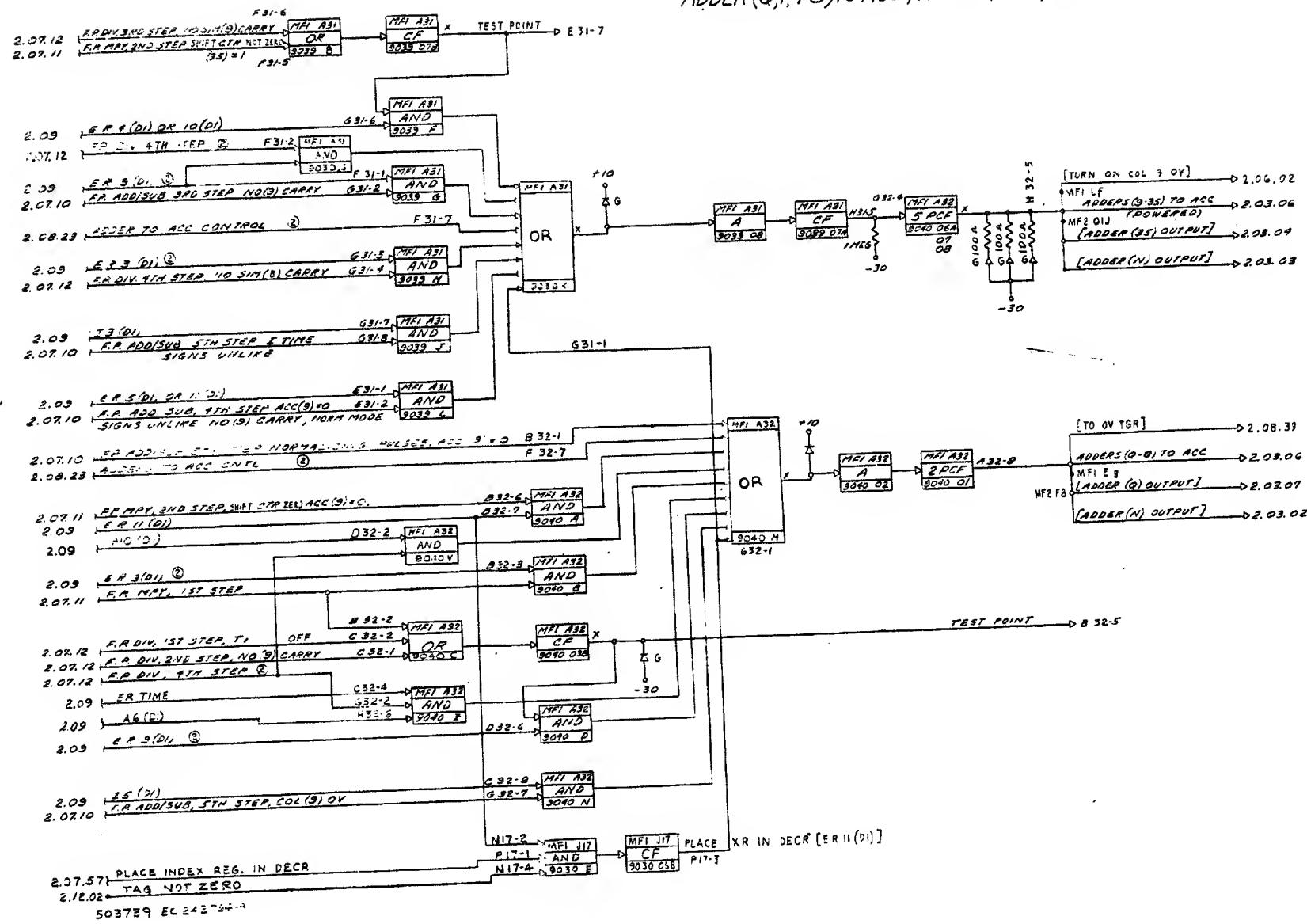
MATERIAL SPECIFICATION		NR.	TOLERANCES UNLESS OTHERWISE NOTED	ALLOWABLE WITHIN	NOTE 1	INTERNATIONAL BUSINESS MACHINES CORP.
BRASS			IMPERIALS ± .005	CONCENTRIC WITHIN	TOT. INC. READING NOTE 2	BLACK ELECTRONIC ANALYTICAL
CAGE DEPTH			FRACTION ± 1/16	FLAT WITHIN	NOTE 3	CONTROL UNIT MODEL 704
BARRELS			ANGLES ± 2°	PARALLEL WITHIN	NOTE 4	NAME SYSTEM DIAGRAM
SURFACE TREATMENT	SPK. NR.		COMERS OUTSIDE	STRAIGHT WITHIN	NOTE 5	2.08.08
	TEST. RESEARCH		MAY BE INSIDE	SQUARE WITHIN	NOTE 6	DRAW. CLC 15-11-59 SCALE
	APPRO.				NOTE 7	CHECK JNT G-9-55 TRAC DKM11-5-55
	DATE				NOTE 8	APPR. NO K G-9-55 CHECK SHS 1-7-55

503738

PRINTED BY IBM

ADDER(Q,P1-8) TO ACC; ADDER(9-35) TO ACC

2.08.09



503740 E2C 241339 A

2.09 ER 5(D) OR 11(D) ②
 2.07.08 DIV T₁ CNTL ②

3.11.01 SEC OPN 03
 3.11.01 ACC LEFT

2.09 SHIFT CONTROL

2.07.08 DIV T₁ CNTL ②

2.07.12 F.P. DIV 2ND STEP (9) CARRY

2.07.12 F.P. DIV 3RD STEP

2.07.11 F.P. MPY 2ND STEP ADR CTR = 0

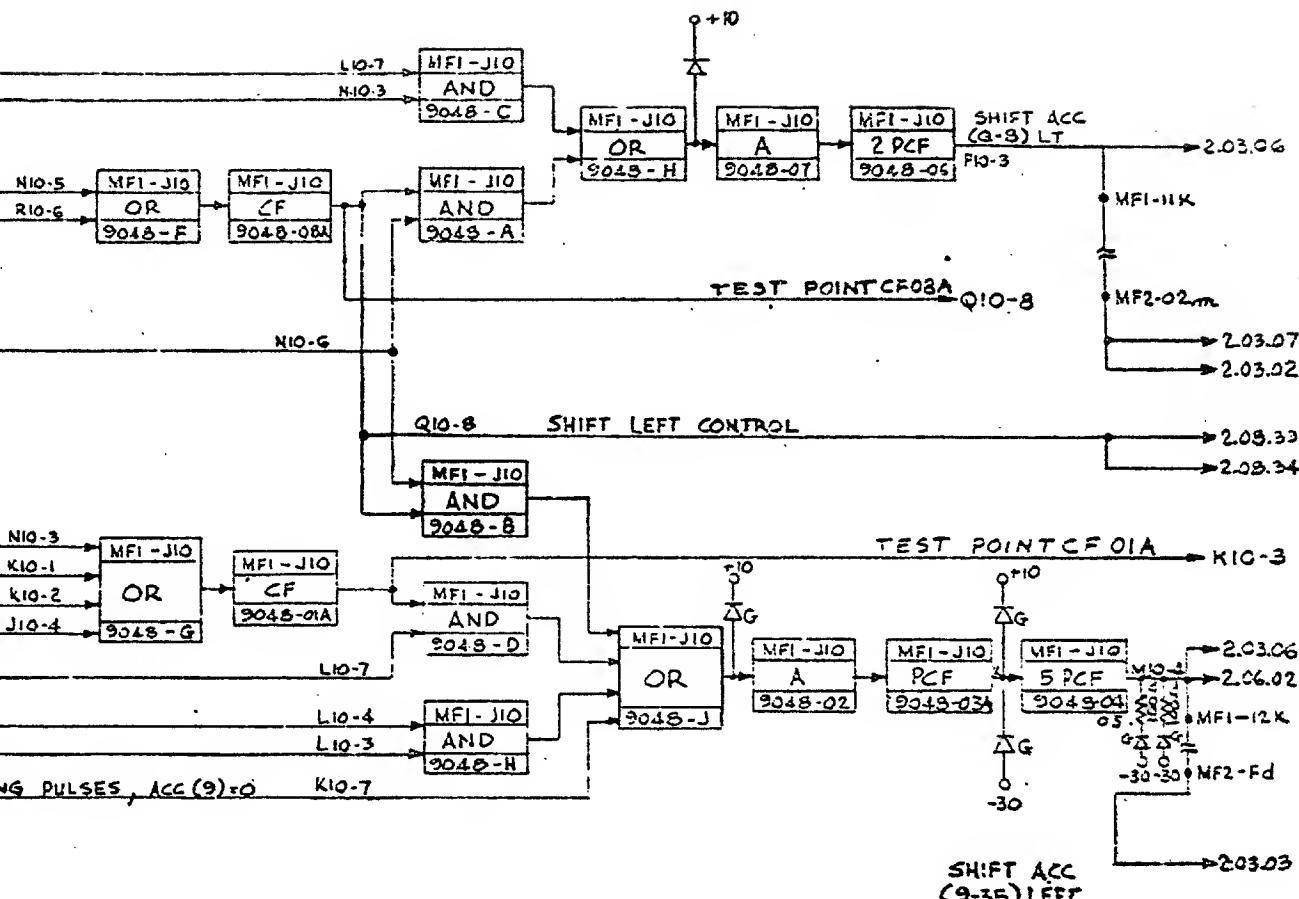
ACC(9)=0 NORMALIZING MODE

2.09 ER 5(D) OR 11(D) ②

2.07.12 F.P. DIV 1ST STEP

2.09 ER 5(D)

2.07.10 F.P. ADD/SUB, 5TH STEP, NORMALIZING PULSES, ACC(9)=0

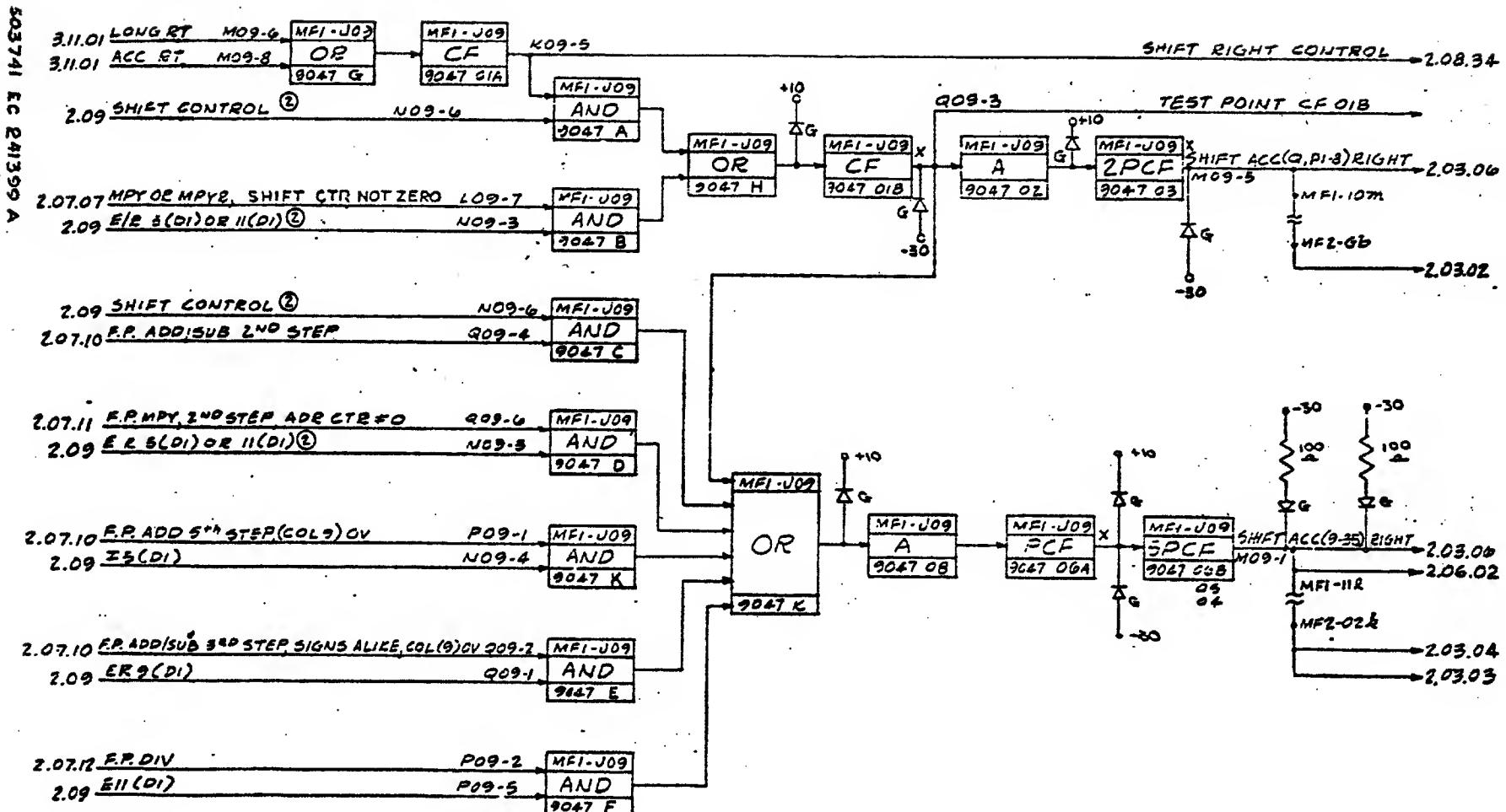


SHIFT ACC LEFT

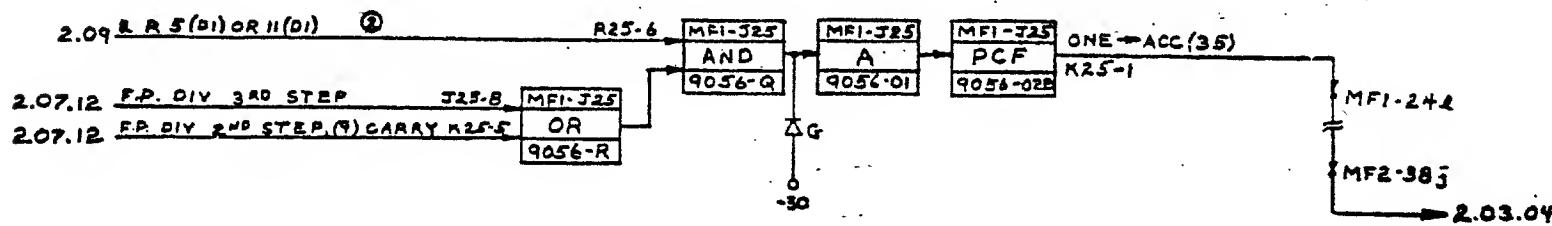
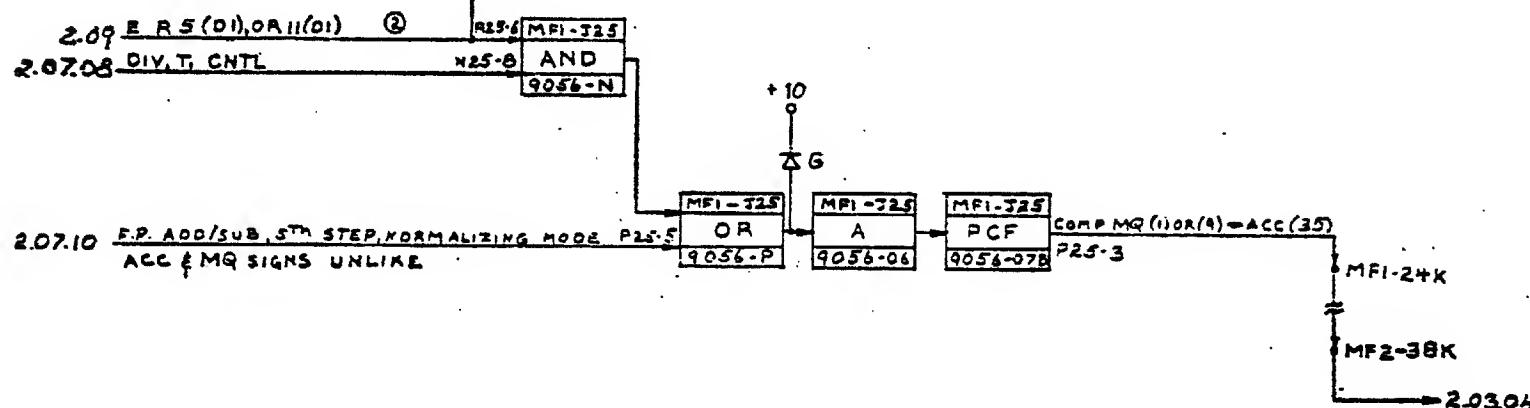
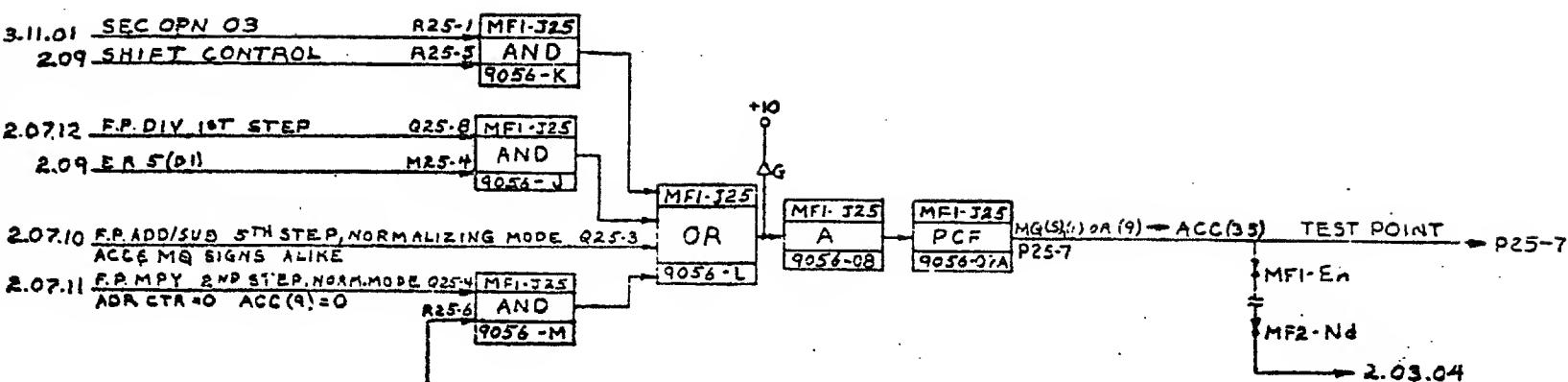
2.08.10

SHIFT ACC REG RIGHT

2.08.11

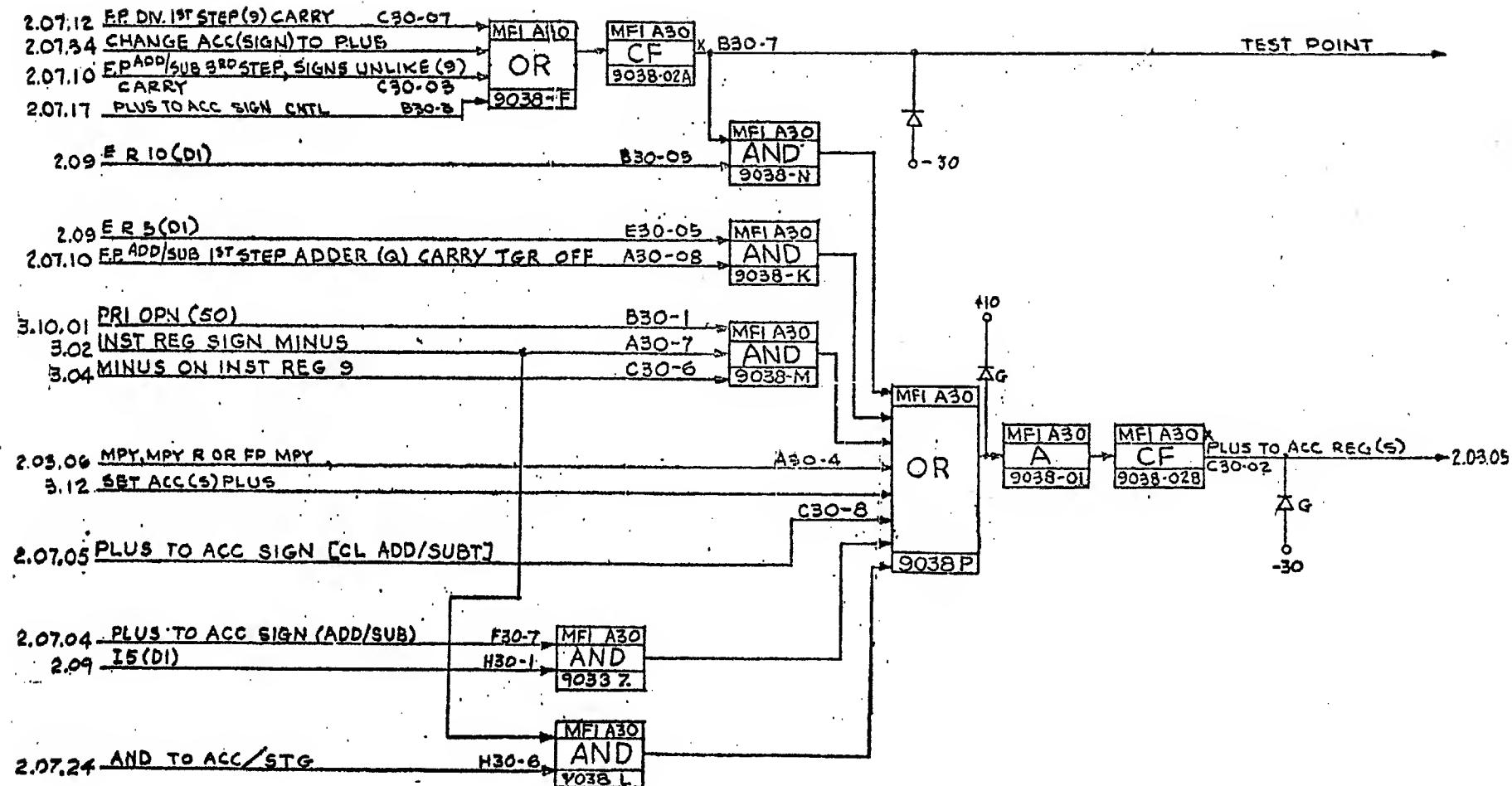


503742 EC 24/390A



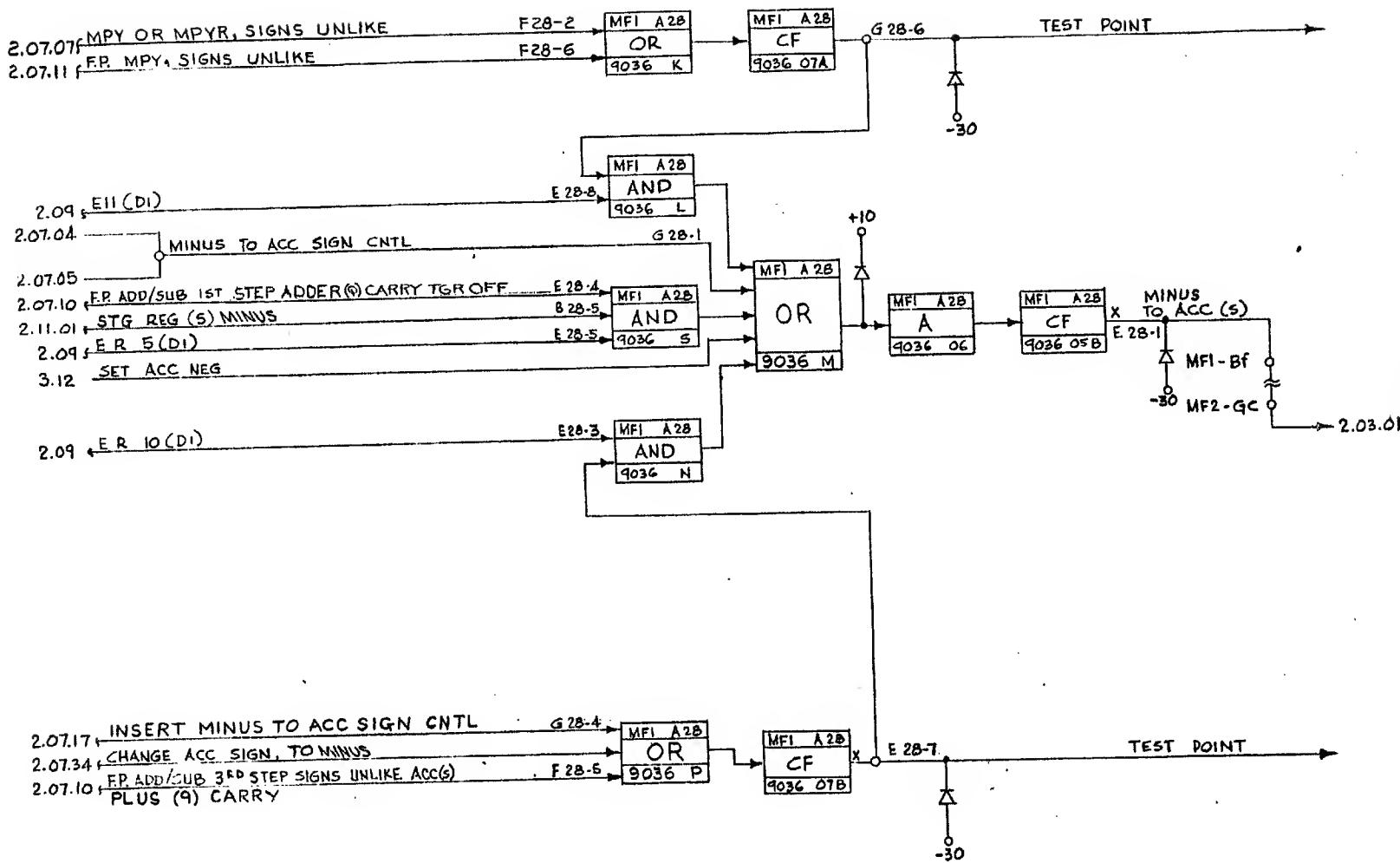
MQ (S), (I) OR (9) TO ACC (35), I TO Accc (35)

2.08.12

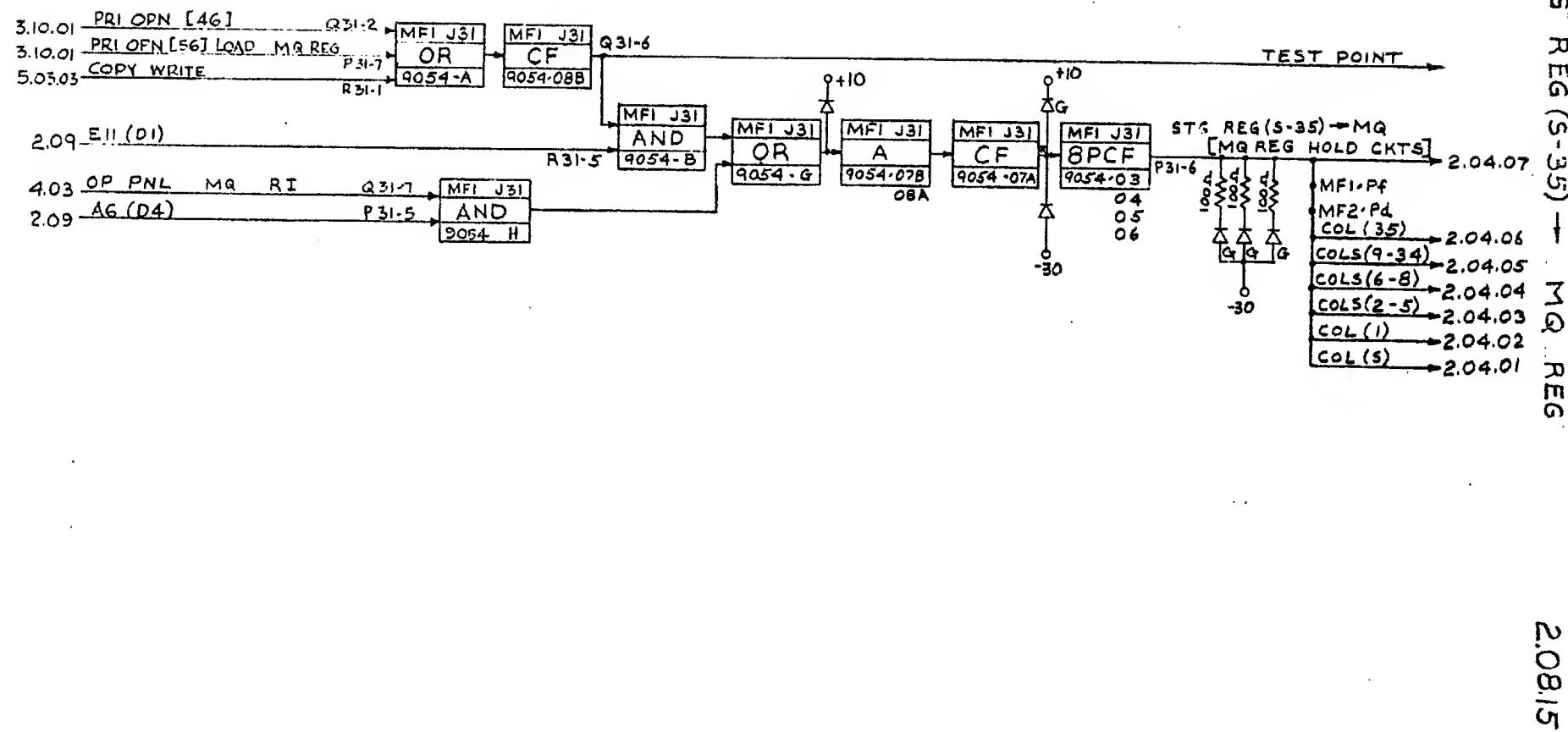


MINUS TO ACC REG (S)

208.14



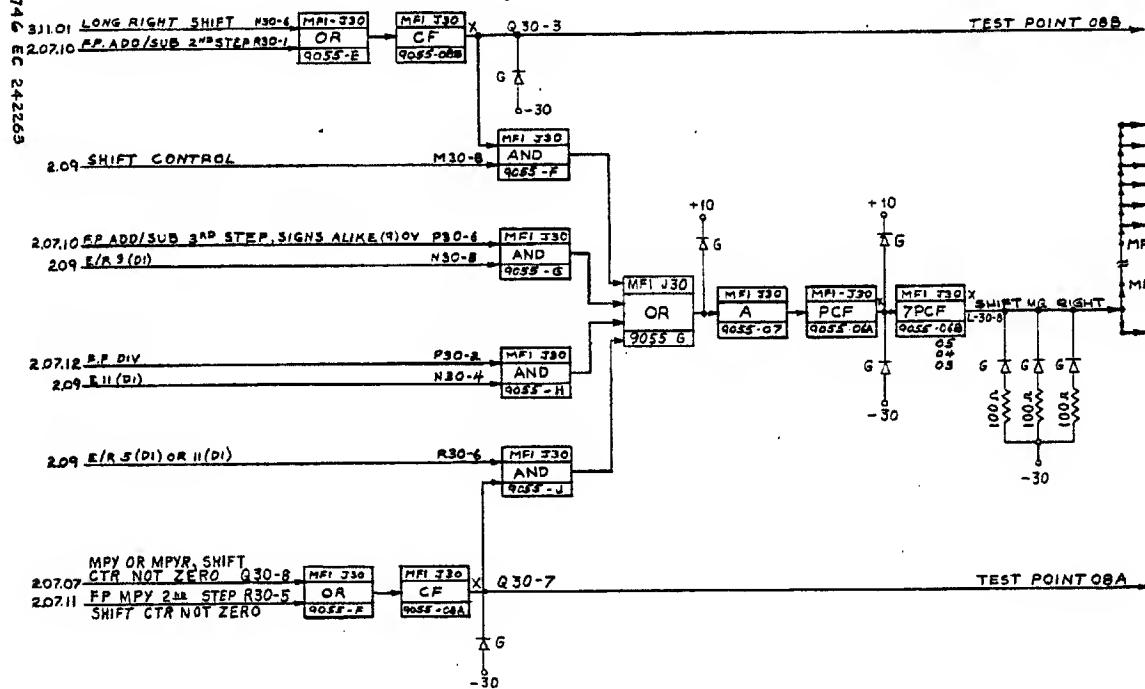
503745 EC 241395A



WAS 704-3134

STANDARDS CODE	RELEASED FOR ASSESS	BY
NONE	503626	503746
		DATE : CHANGE NO
		7-11-55 24 399A
		1-17-56 242263

503746 EC 242263



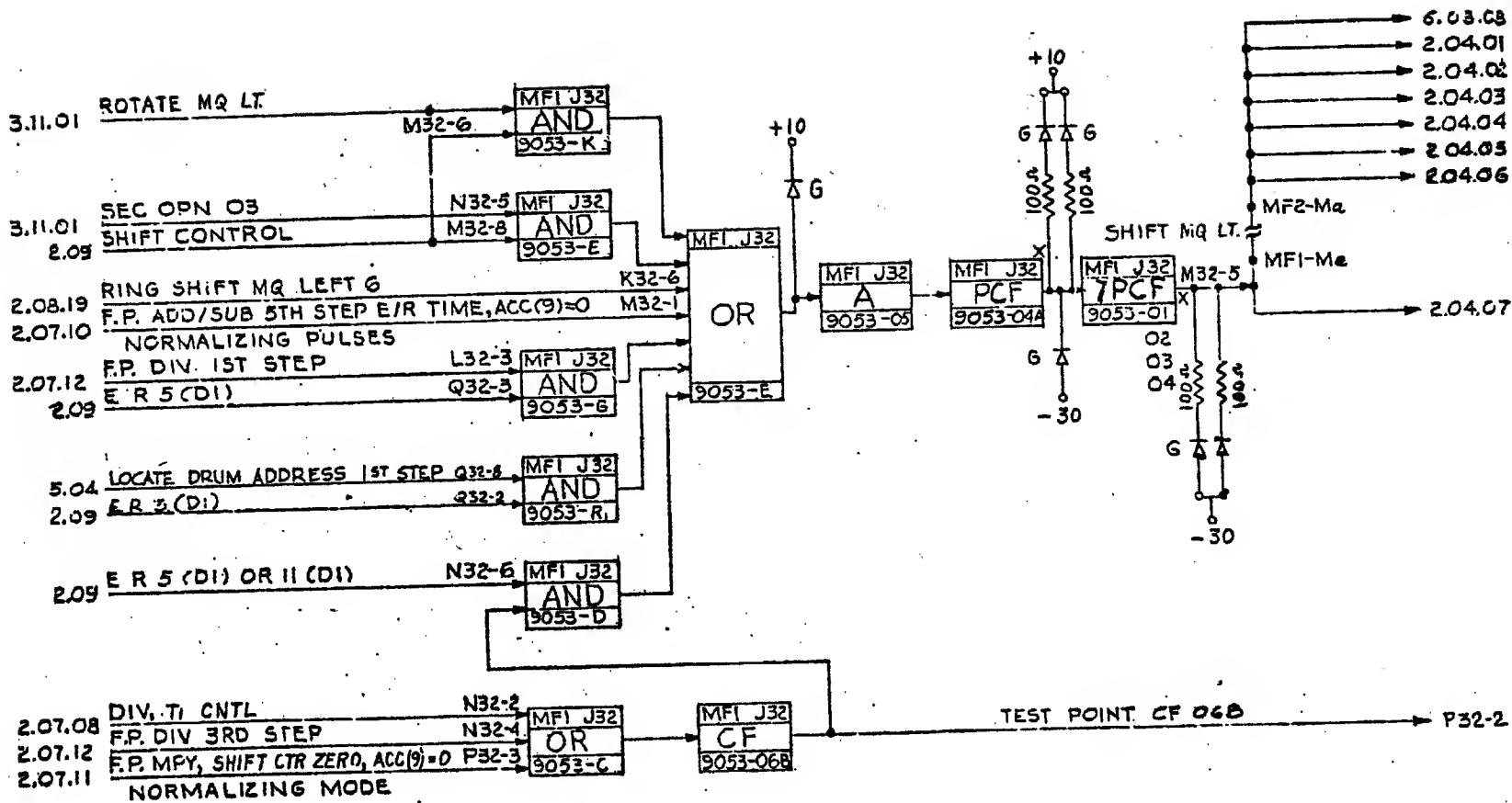
NOTE:
 PRINT TO ENG SPEC 89529L

2.08.16

REFER TO S.F.I.

MATERIAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		NOTE 1		INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH		DECIMALS ± .005		CONCENTRIC WITHIN		TOP TWO READING NOTE 2		BLACK ELECTRONIC ANALYTICAL	
HARDNESS		FRACTIONS ± 1/16		FLAT WITHIN		READING NOTE 3		CONTROL UNIT MODEL 204	
SURFACE TREATMENT		ANGLES ± 2°		PARALLEL WITHIN		NOTE IV		NAME SYSTEM DIAGRAM	
SPEC		CORNERS INSIDE		STRAIGHT WITHIN		NOTE V		DRAW CLC 5-13-34 CAL. NONE	
TECH. RESEARCH APPROVED DATE		WAY BE BROKEN		INSIDE		SQUARE WITHIN		CHECK JNT 6-23-34 DKN 7-20-67	
								APPRO 7-26 1-1-3 CHECK 7-22-67	

503747 EC 241787



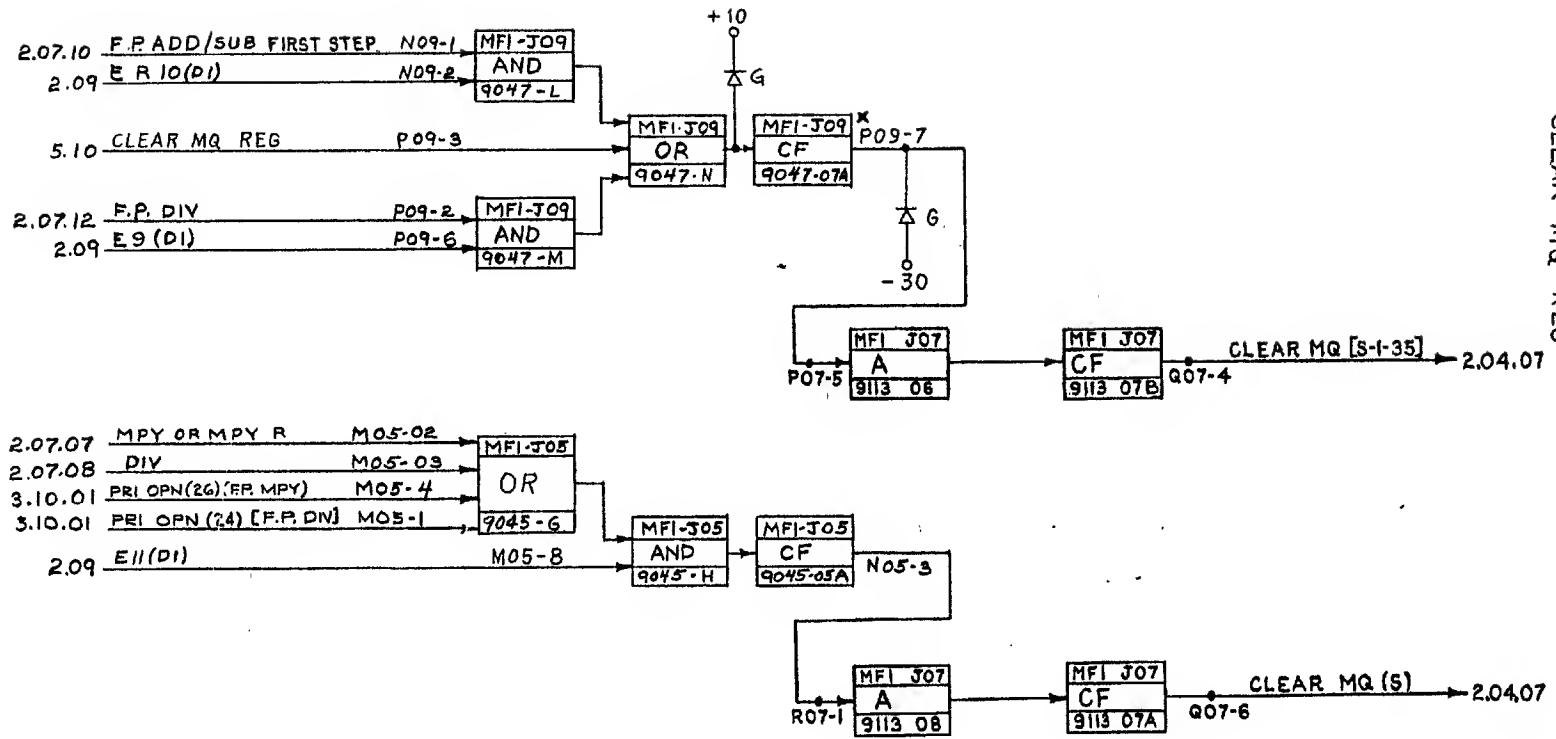
SHIFT MQ LEFT

2.08.17

CLEAR MQ REG

2.08.18

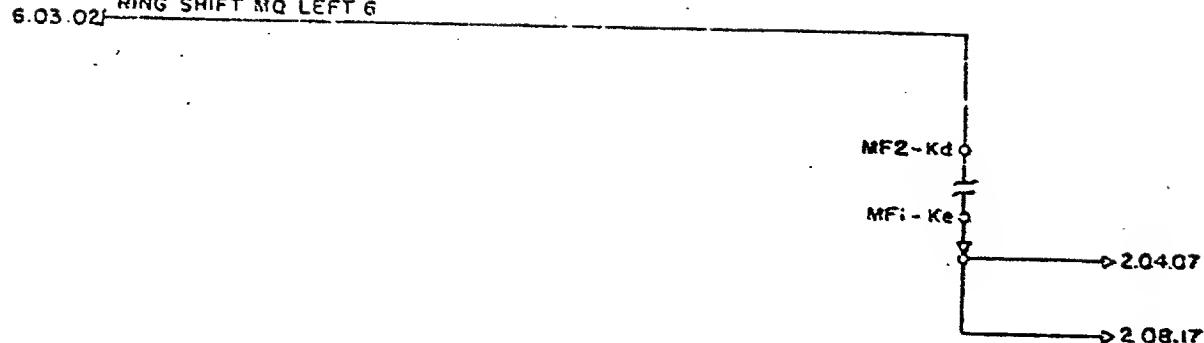
503748 EC_242940



RING SHIFT Ma

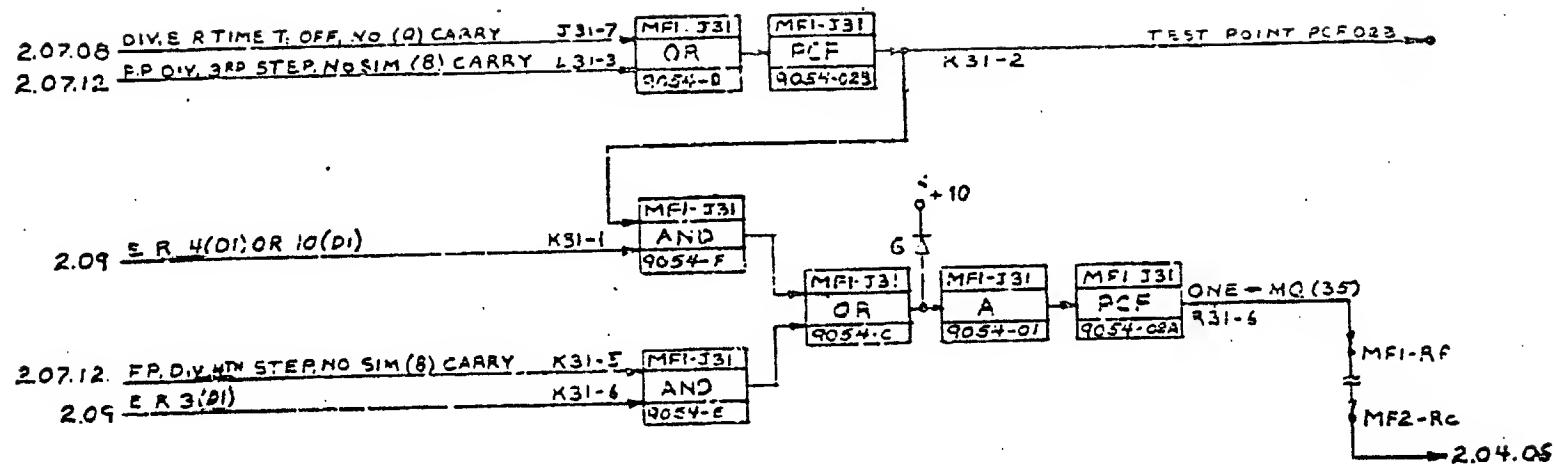
2.08.19

6.03.02 RING SHIFT MQ LEFT 6



PART NO.- 503749
E.C. NO.- 24139A

503750 EC 2413991



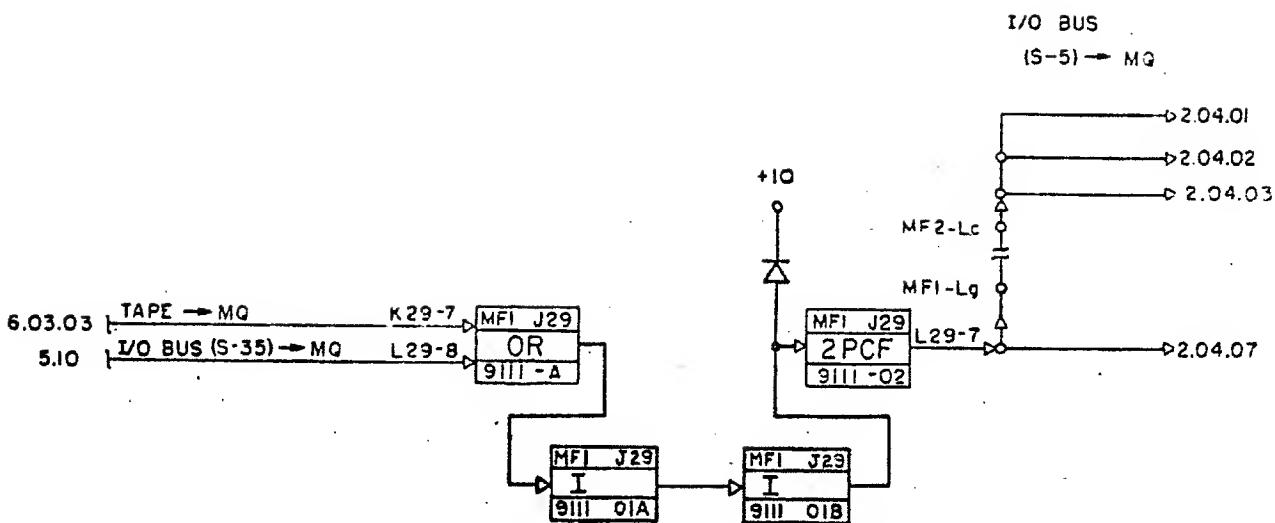
ONE → MA (35)

2.08.20

I/O BUS (S-5) → MQ REG

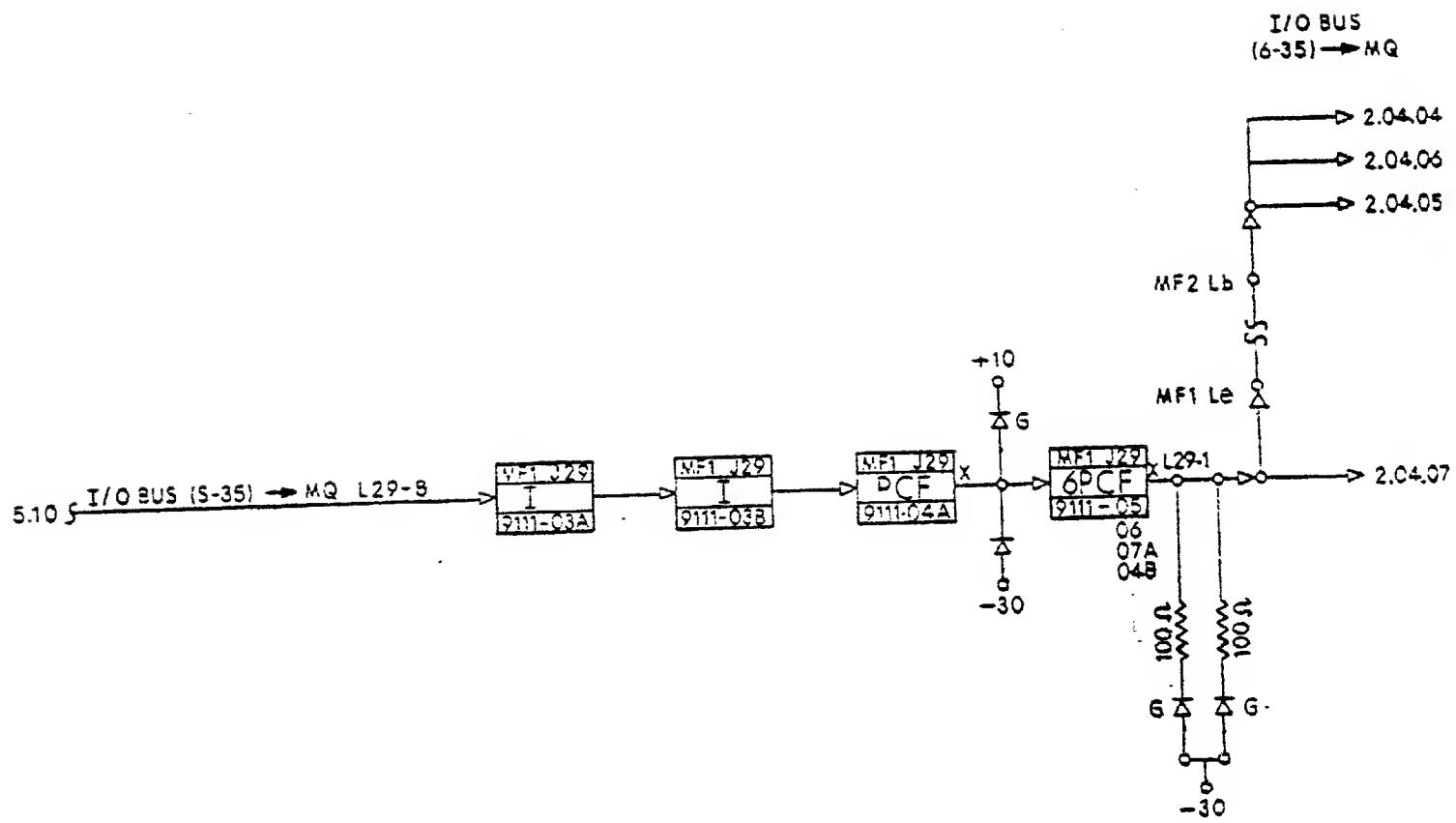
2.06.21

PART NO 503751
E C NO 241949



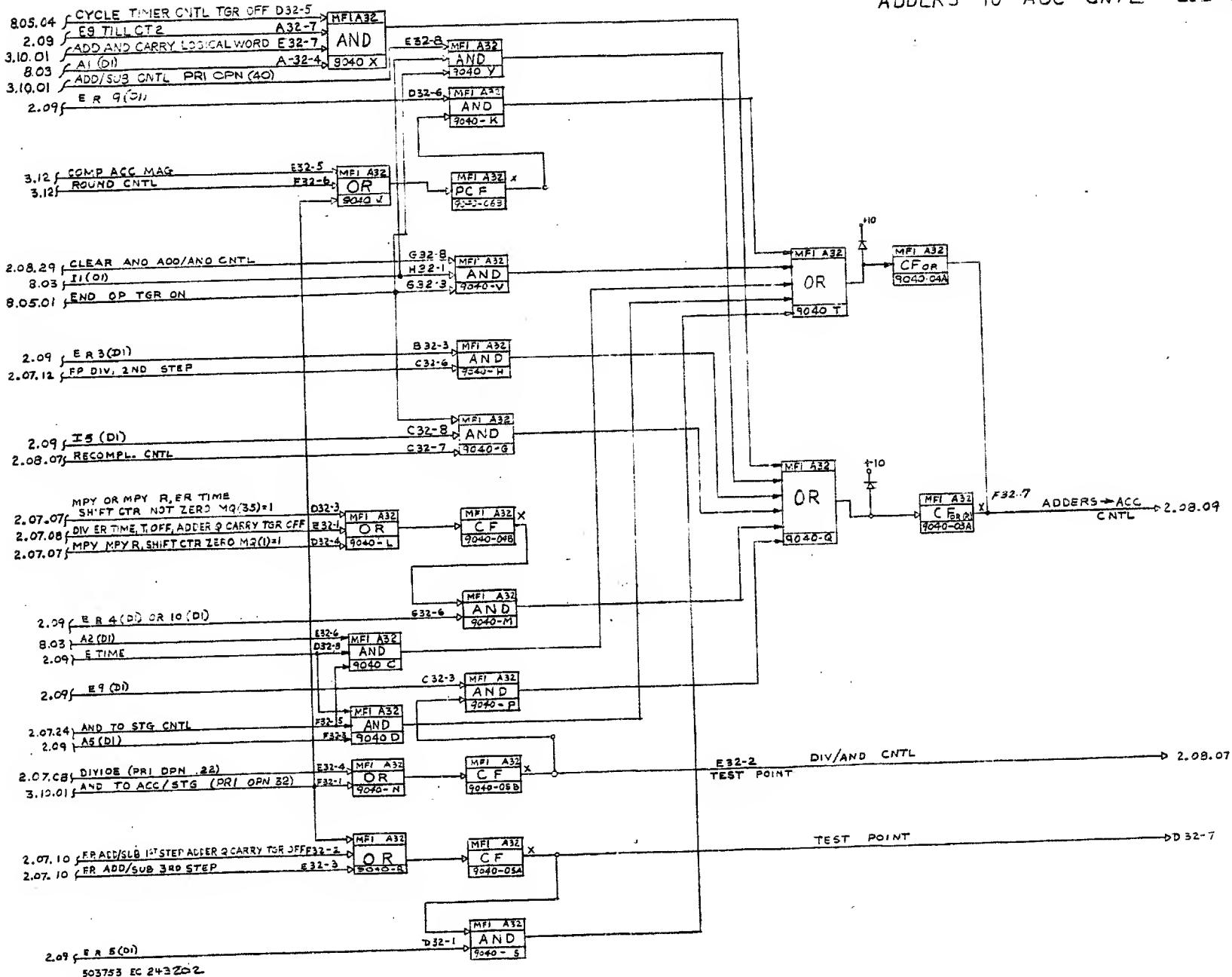
2.08.22

I/O BUS (6-35) → M.Q. REG



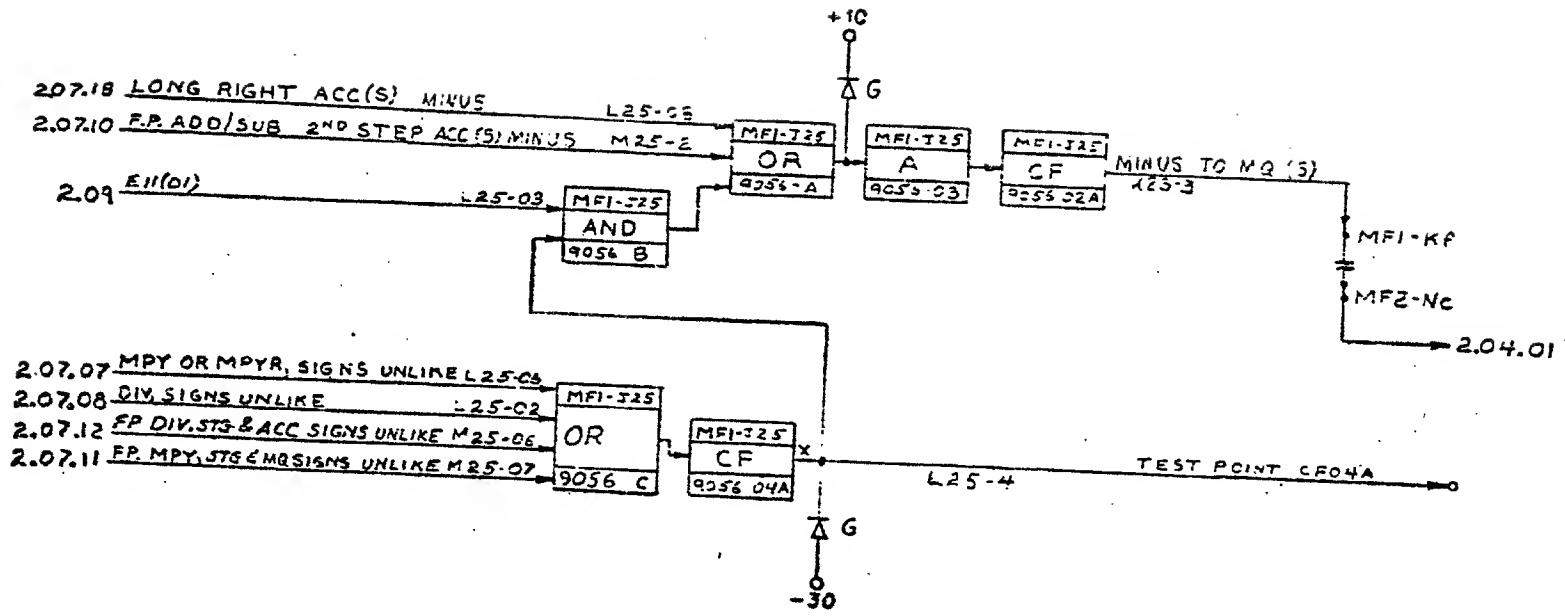
503762 EC 24mH

ADDERS TO ACC CNTL 2.08.23



MINUS TO MQ (5)

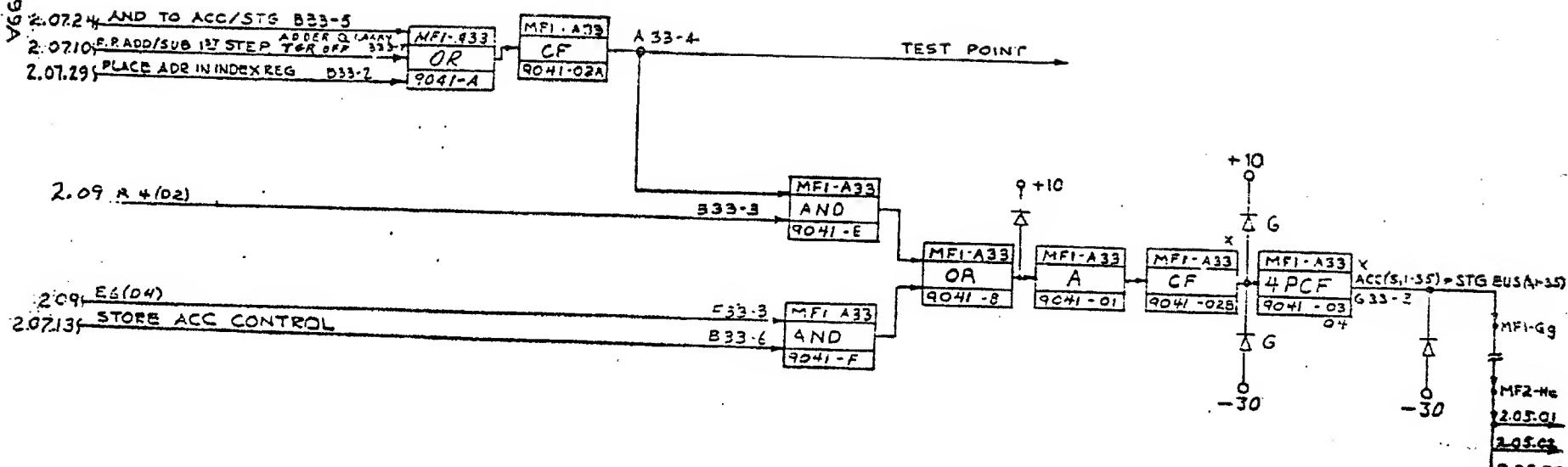
2.08.24



ACC(S,1-35) → STG BUSS(S,1-35)

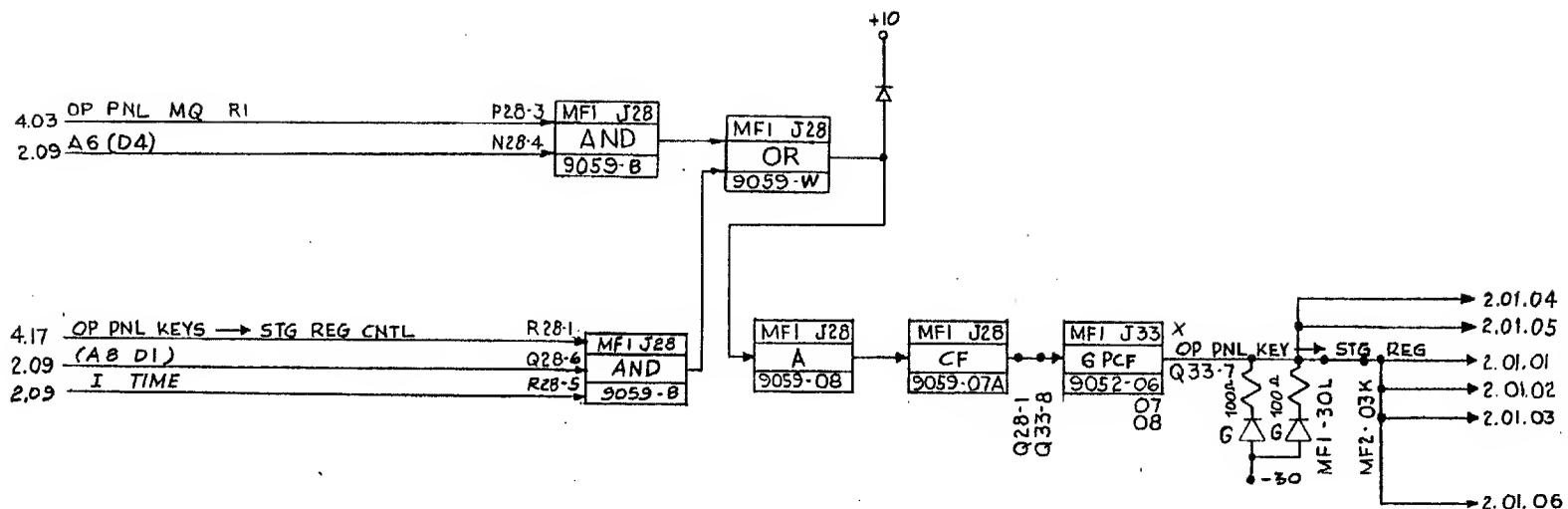
2.08.25

503755 EC 241399A



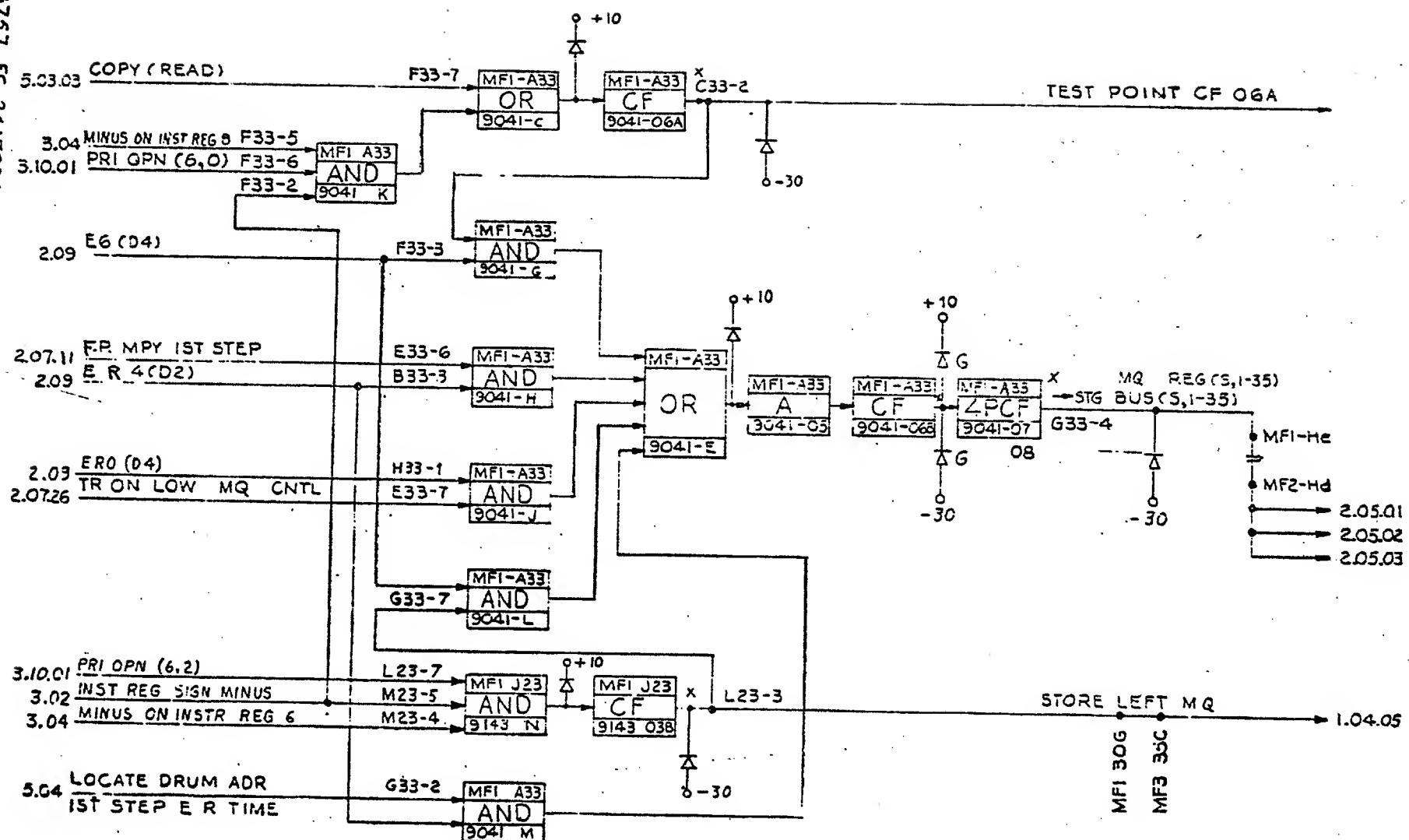
OPN PNL KEYS → STG REG

2.08.26



503756 EC 241783

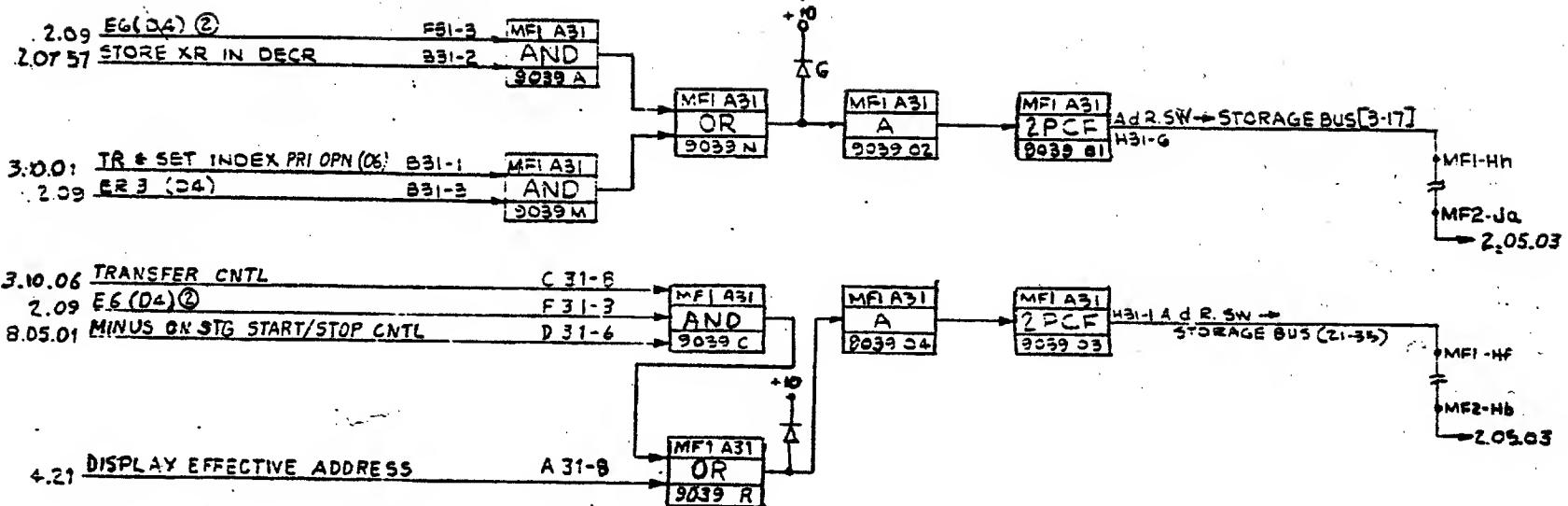
303/3 / EC 241399A



A/D SWITCHES TO STORAGE BUS(3-17)(21-35)

2.0878

503758 EC.2.4.159A



CLEAR AND ADD/AND CNTL

2.08.29

2.08.05
[STG. REG (1-35) → ADDERS]

3.10.01 PRI OPN (50)
2.07.24 AND → ACC / STG

F35-2 MFI A35
F35-6 OR
9043-07

+10

E35-3 MFI A35
C F
9043-06B

2.08.23

X CLEAR AND ADD/AND CNTL [I(I(DI))]

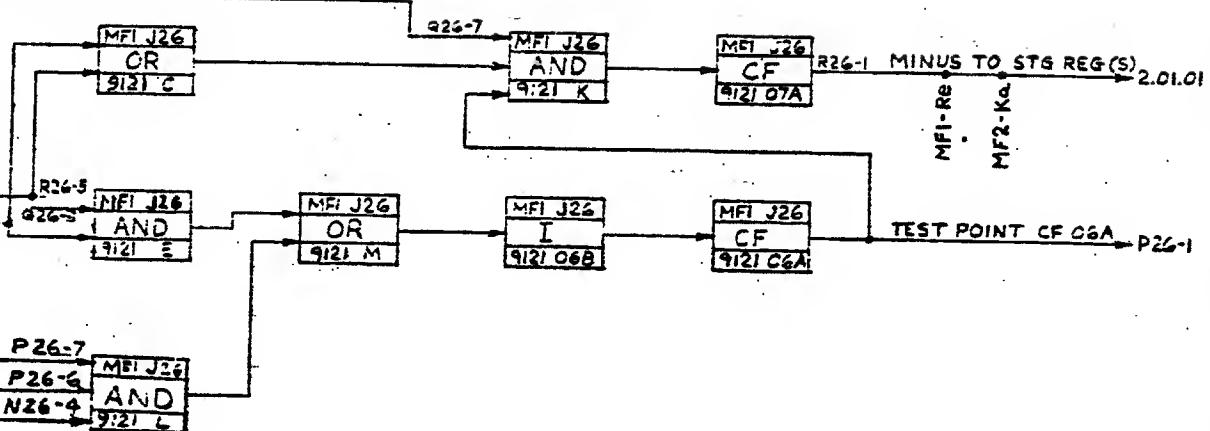
503759 EG 241399A

MINUS TO STG REG'S.

2108.3C

505760 EC 241507

2.08.01 STG BUS (S, 9-17) → STG REG (S, 9-17)



3.10.02 SUB CNTL

2.05.01 STG BUS (S) MINUS

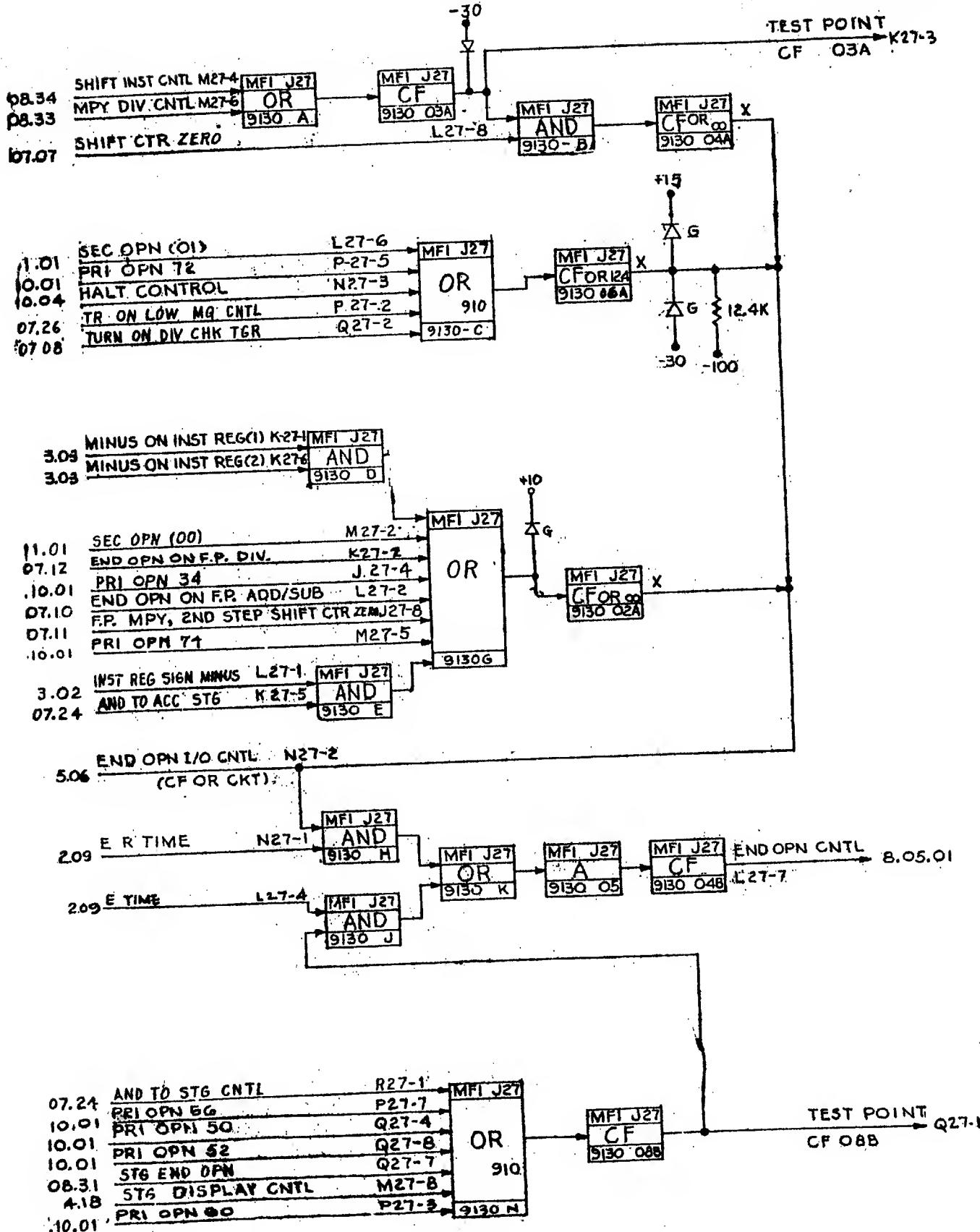
3.10.01 PRI OPN (40)

3.04 INST REG 9

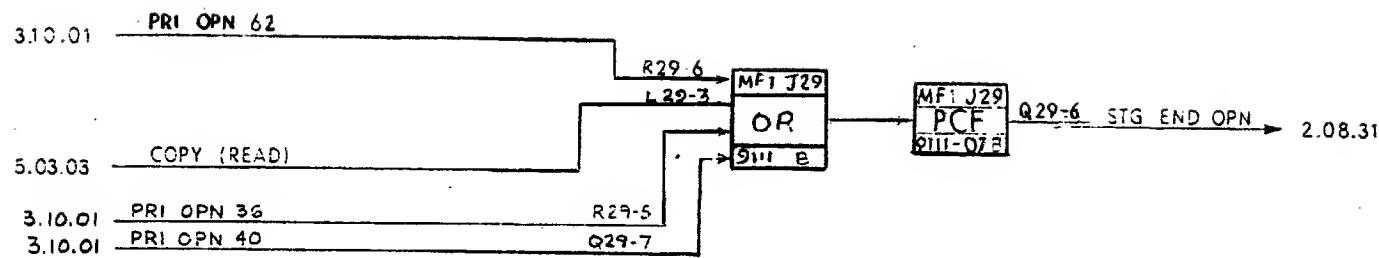
2.09 E TIME

END OPERATION

2.08.5
SHEET 1 OF 1



503762 EC 241602

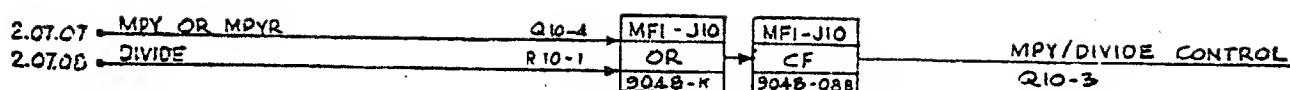
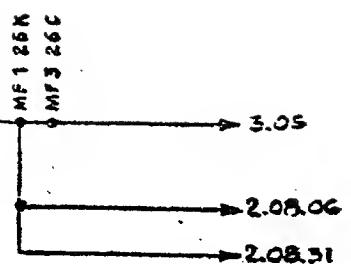


END OPERATION

2.08.31
SHEET 2 OF 2

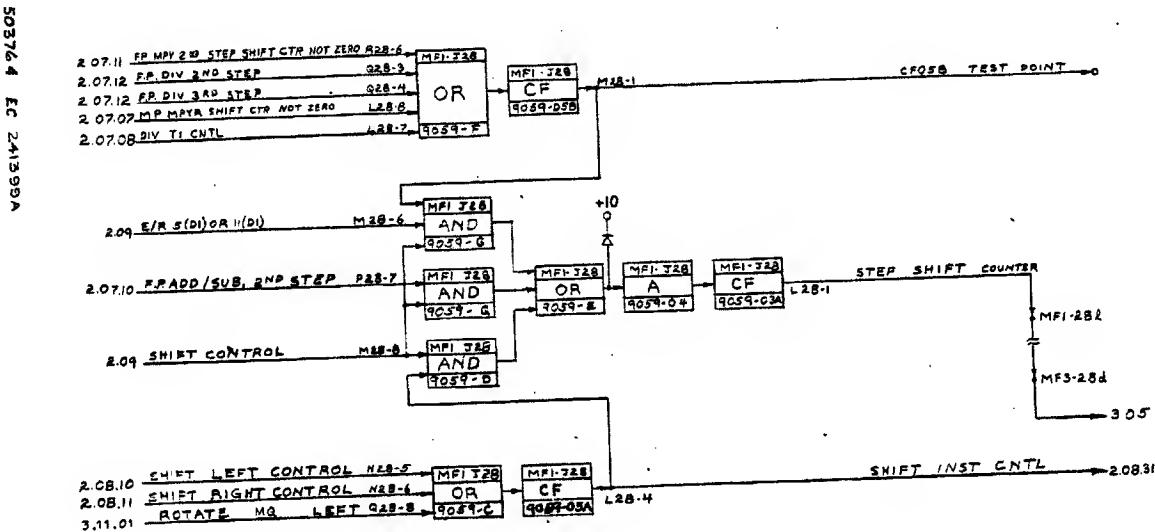
35 -> SHIFT CTR

2.08.33



503763 EC 241399A

STANDARDS
CODE: NONE
RELEASED
PER ASSN: 503764
QTY: 1
DATE: 7-15-66
CHANGE NO: 24-5054



2.08.34

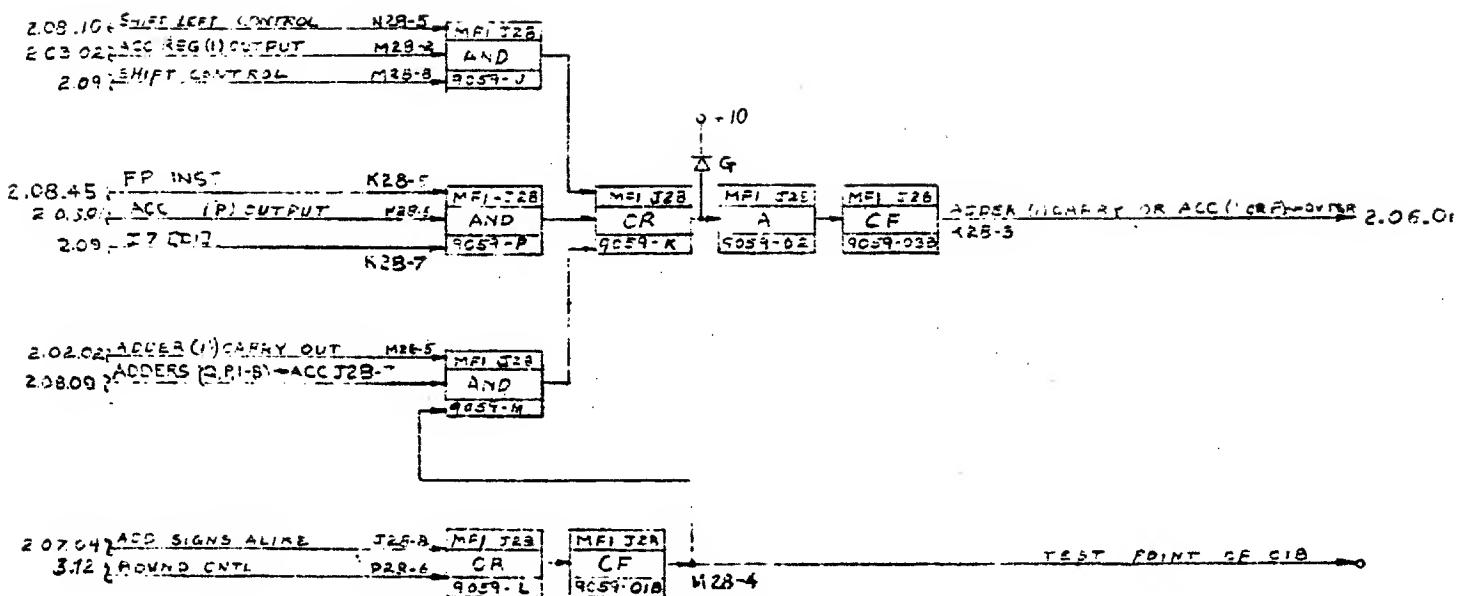
REFER TO S.F.I.

MATERIAL SPECIFICATION NO	TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN	NOTE 1: INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH	DECIMALS ± .005	FRACTIONAL ± 1/64	CONCENTRIC WITHIN	TOT. IND. NOTE II	NAME: ELECTRONIC ANALYTICAL
HARDNESS		ANGLES ± 2°	FLAT WITHIN	READING NOTE II	CONTROL UNIT MODEL 704
FINISH	SPK NO		PARALLEL WITHIN	NOTE III	NAME SYSTEM 704/704A
TREATMENT	TECH. RESEARCH APPROVED DATE	CORNERS OUTSIDE MAY BE BROKEN INSIDE.	STRAIGHT WITHIN	NOTE IV	2.08.34
		SQUARE WITHIN	IN INCHES	NOTE V	DRAW: C/C 5'-18'-59" SCALE: NONE
			MM	NOTE VI	CHECK JMT 6-12-59 MAC 2A4 7-16-66
			MM	APPROV. JC/C CHECK SHS 7-21-54	

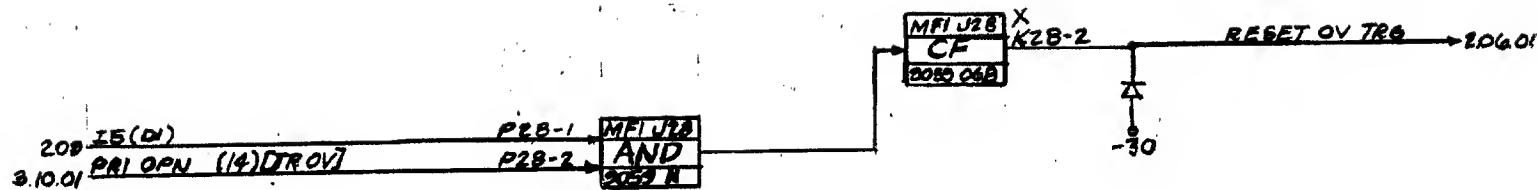
503764

ADDER (1) CARRY OR ACC (13E.P) -> OUT GR

2.08.39



503766 EC 241651



RESET OV TRG

20840

WAS 704-3429

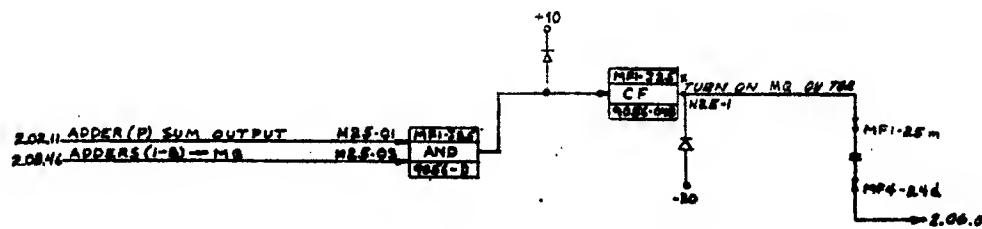
STANDARD CODE	RELEASED FOR ASSEMBLY	etc.
NONE	503767	503767
DATE	CHANGE NO.	
7-11-55	241359A	
9-25-54	242762B	

503767 EC 242762B

SET MQ OV TGR

2.08.41

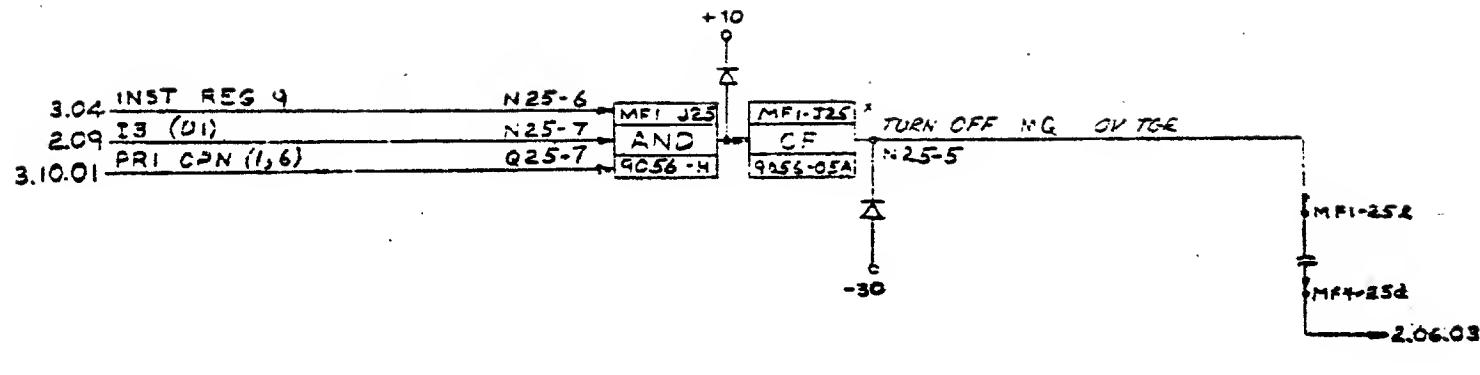
503767

NOTE
PRINT TO ENG.
SPEC. 895231

503767

MATERIAL SPECIFICATION		RE.	TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT NOTING	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH			DEGREES ± .005	CONCENTRICITY NOTING	NOT. OR RELATIONSHIP	NOTE II	NAME	ELECTRONIC ANALYTICAL
SHIMMING			FRACTION ± 1/16	FLATNESS	NOT. II	NOTE III	NAME	704
SURFACE TREATMENT			ANGLE ± 1°	PARALLELISM	NOTE IV	NAME	SYSTEM DIAGRAM	2.08.41
			COMBINE	STRAIGHTNESS	NOTE V	NAME	CLC 50857 NAME	NONE
			DIVIDE	ROUNDNESS	NOTE VI	NAME	SHIM. UNIT	SHIM. UNIT
			MERGE	SHAPE	NOTE VII	NAME	SHIM. UNIT	SHIM. UNIT
			DISJOINT	POSITION	NOTE VIII	NAME	APPL. ANTC	6-14-54
			DISJOINT	SHAPE	NOTE IX	NAME	SHIM. SWS	9-22-54

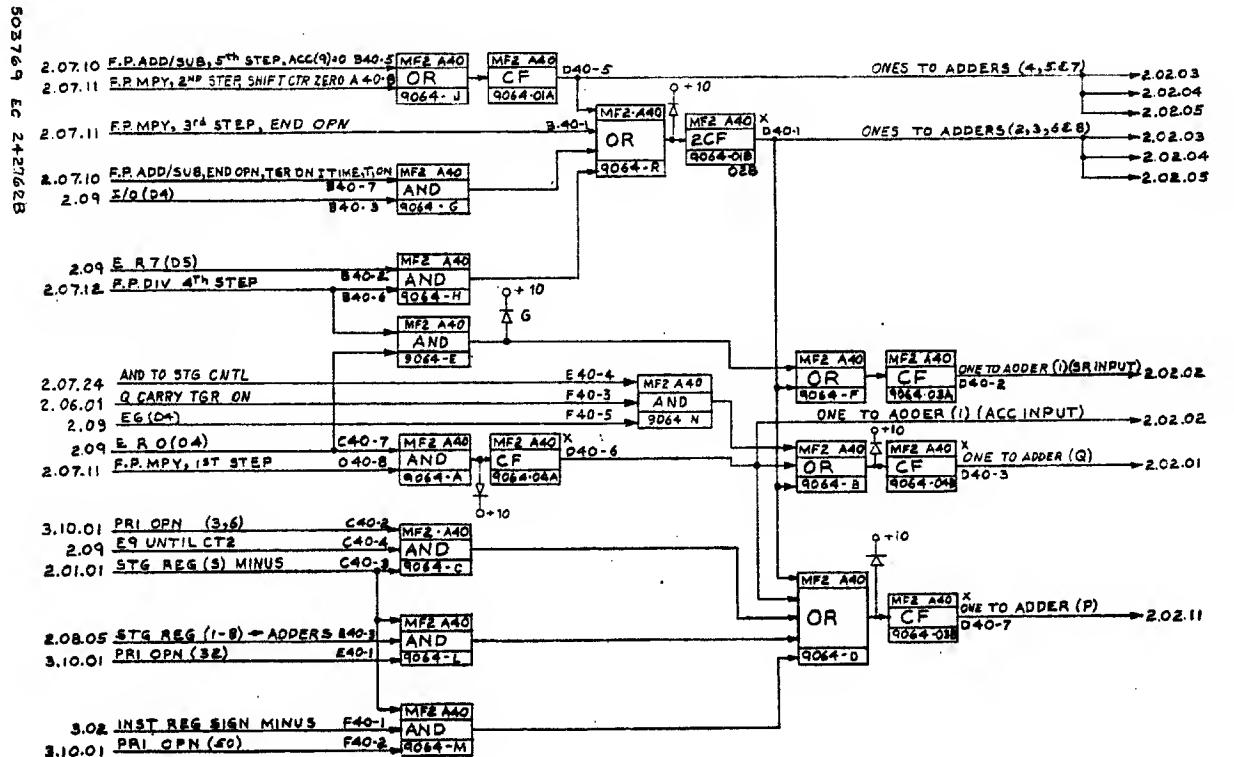
503768 EC-241309A



2.08.42

RESET MQ OV TGE

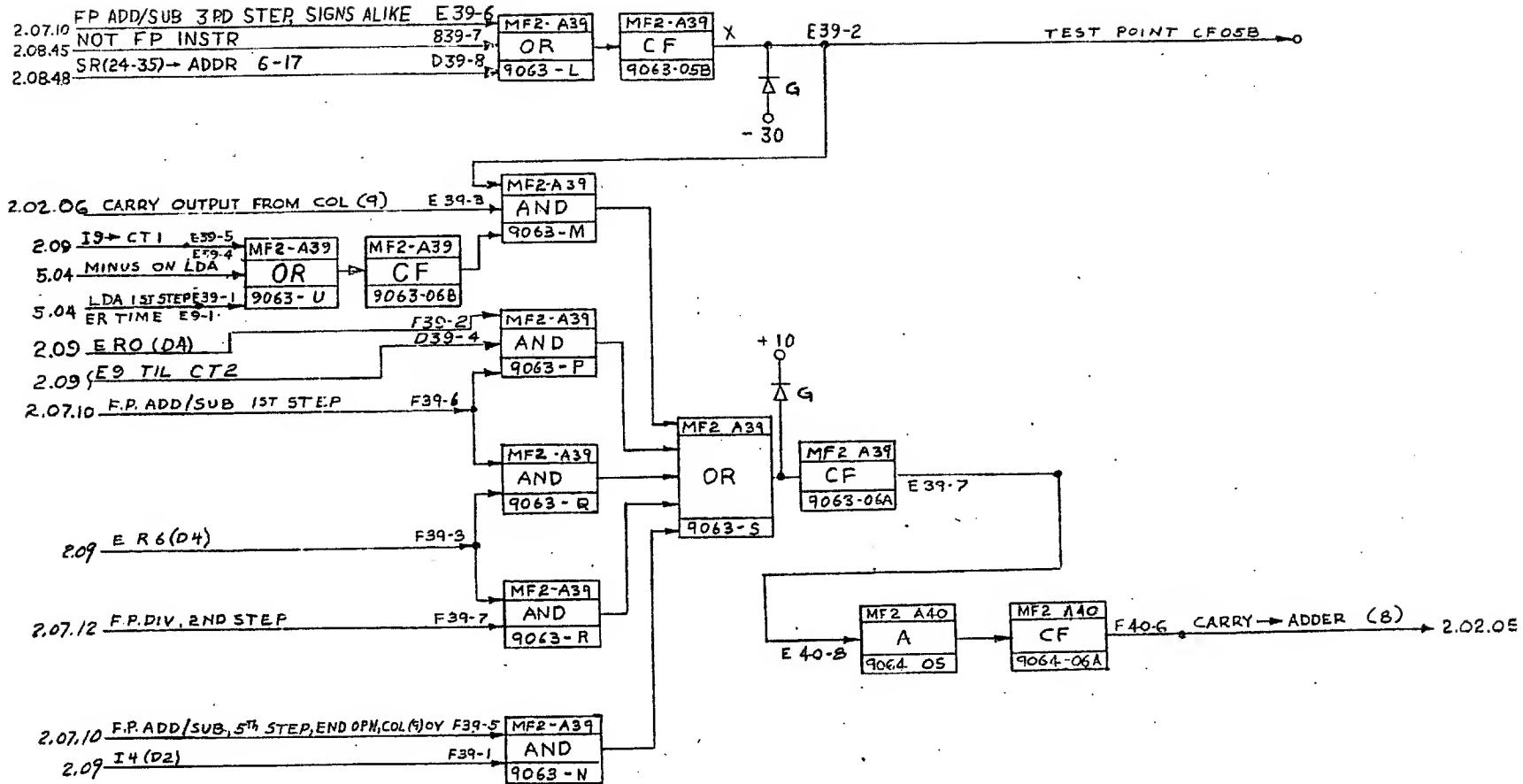
STANDARDS CODE: RELEASED FOR ASSEMBLY BY: 503769
 WAS 704-3431 NONE 503626 DATE: CHAMBER NO:
 7-11-55 241398A
 9-14-55 241651
 3-21-56 242396
 9-25-56 242722B

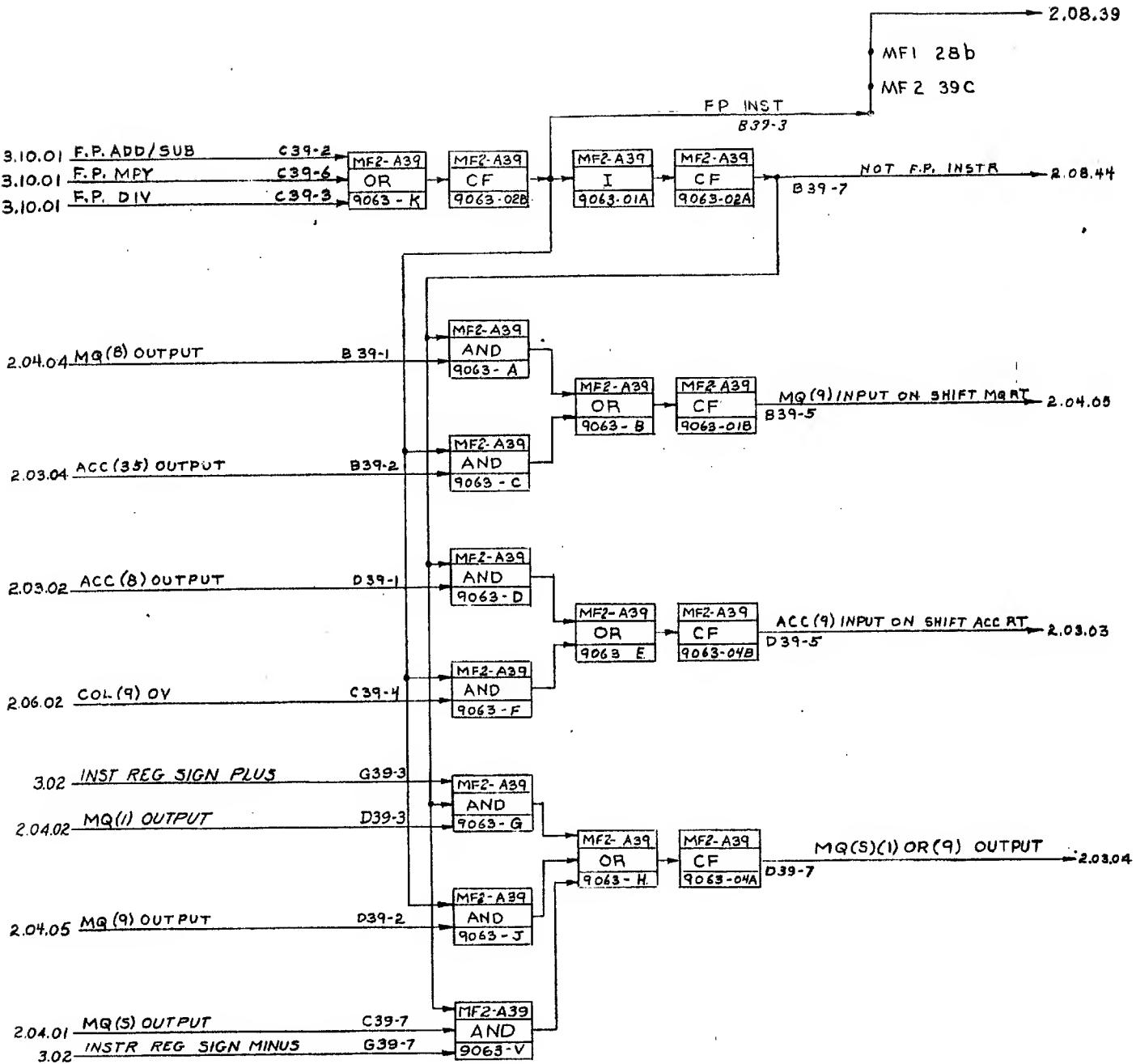


MATERIAL SPECIFICATION NO.	THICKNESS UNLESS OTHERWISE NOTED	ALLOWABLE WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
DECIMALS & 200	CONCENTRIC WIRES	WT. IN. WEIGHT	NOTE II	NAME: ELECTRONIC ANALYTICAL
FRACTION & 1/8	FLAT WIRES	NOTE III	NAME: CONTROL UNIT MODEL: 704	
HARNESS	ANGLE & 2°	NOTE IV	NAME: SYSTEM DIAGRAM	
SURFACE TREATMENT	SPEC.	PARALLEL WIRES	2.08.43	NAME: 51804 SCALE: NONE
TEST RESEARCH	DATE	CORNER OUTSIDE STRAIGHT WIRES	NOTE V	NAME: 600 CHECK: JAT 6-2-55 TRAC DKA13-5-53
ANALYST	DATE	END INSIDE	NOTE VI	APPROV: LCN 6-2-55 CHECK: WBL 3-15-53

503769

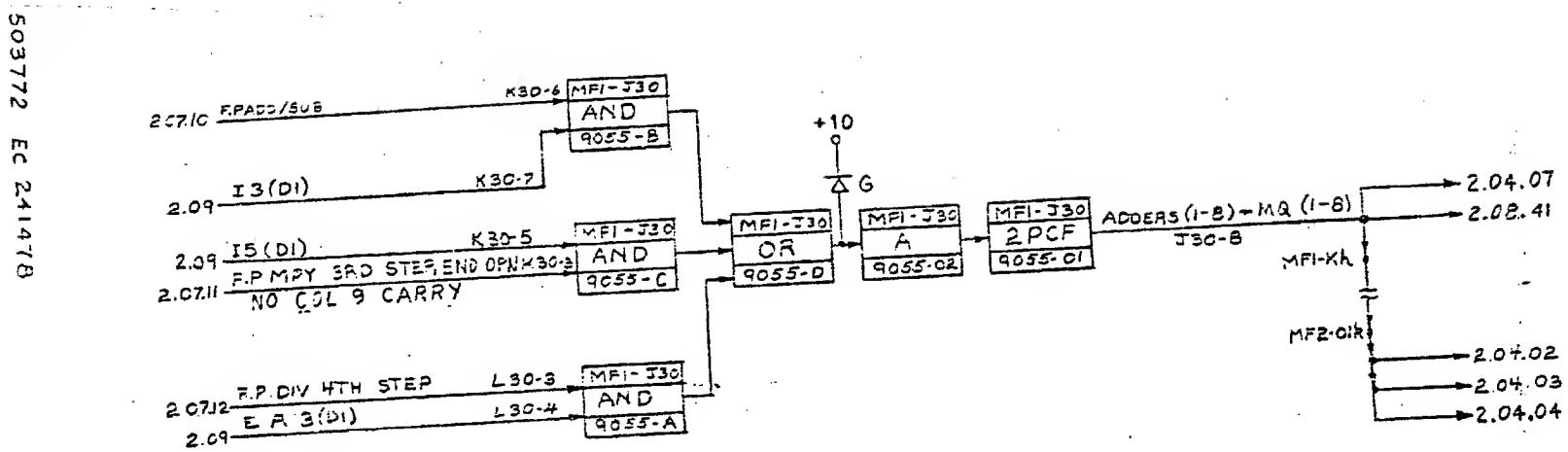
503770 EC 242465





ADDERS (I-8) \rightarrow MQ(I-8)

2.04.01

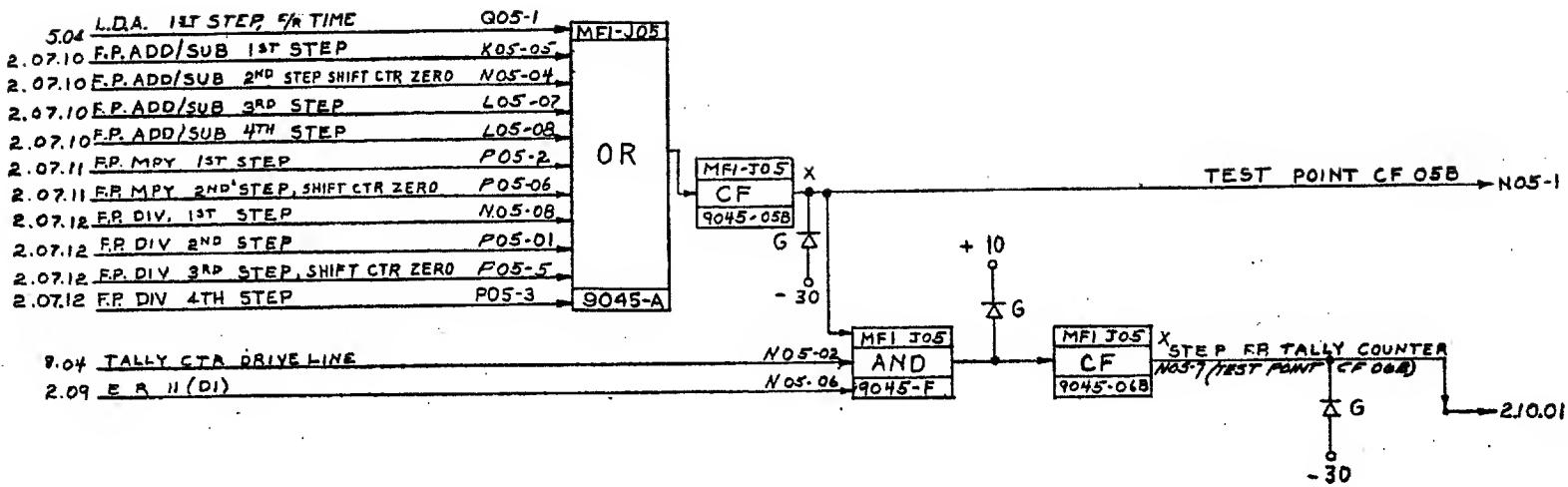


503772 EC 241478

STEP FLOATING POINT TALLY COUNTER

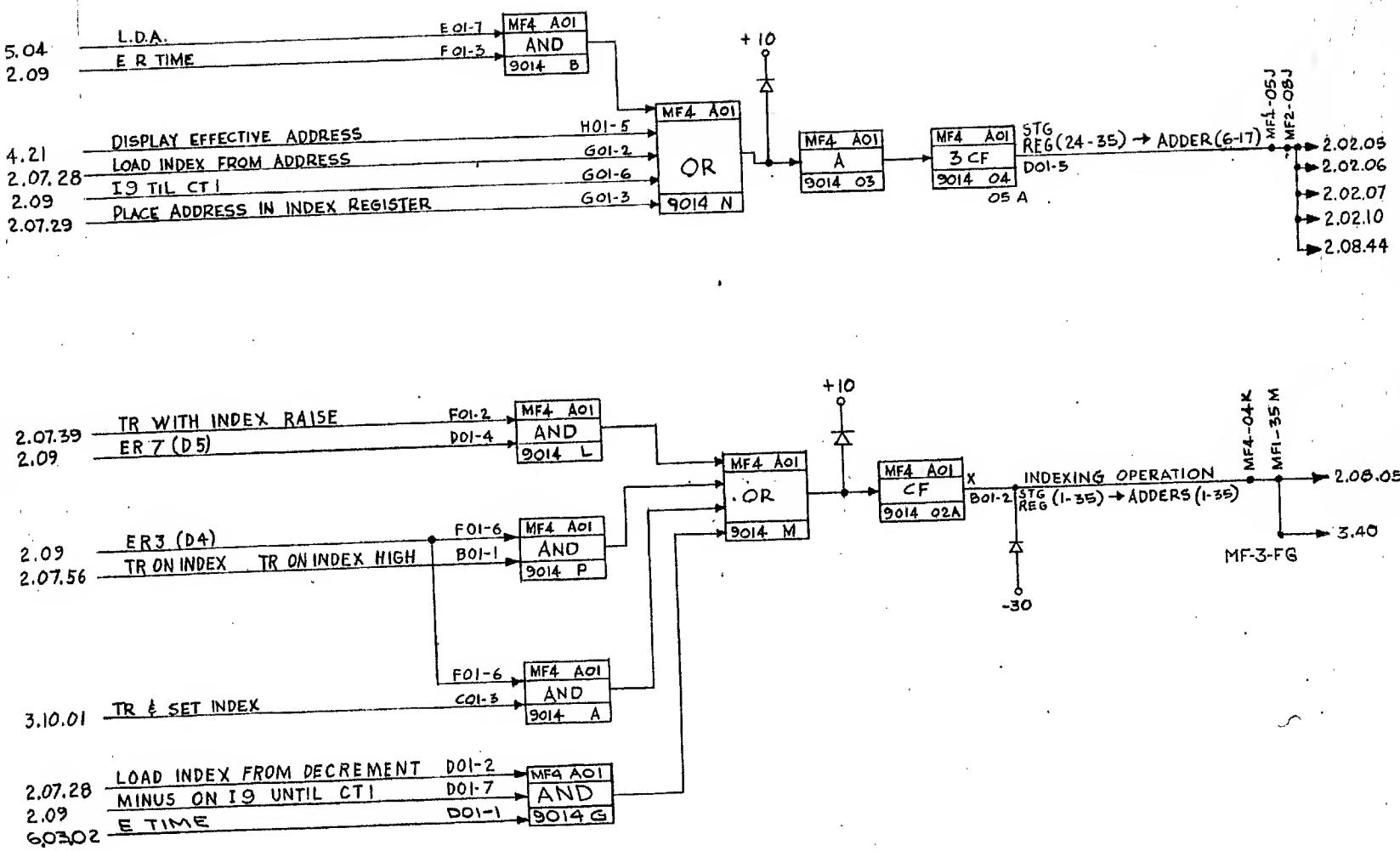
2.08.47

503773 EC 242758



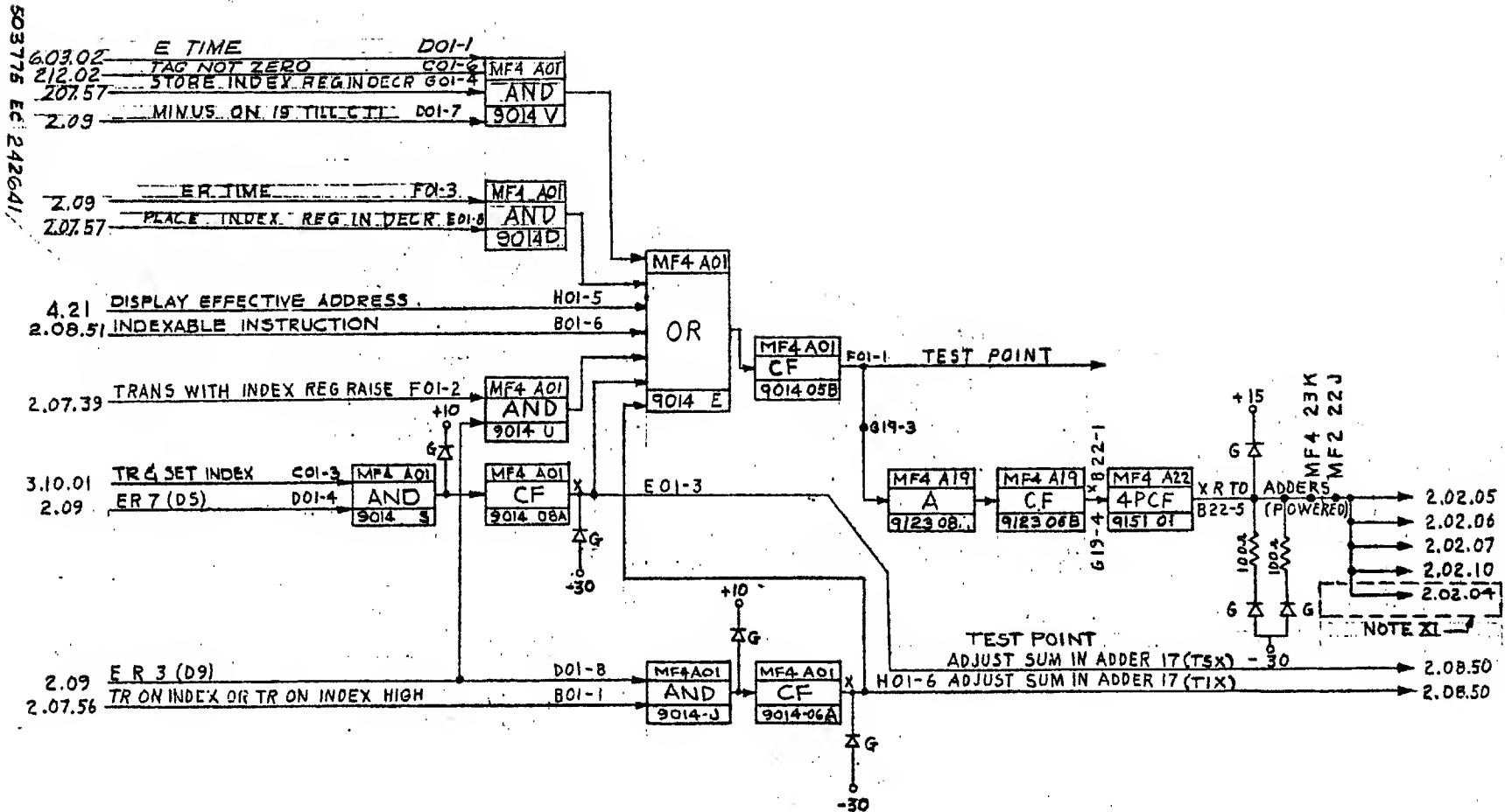
INDEXING OPERATION & STG REG 24-35 → ADDERS (6-17)

2.08.48



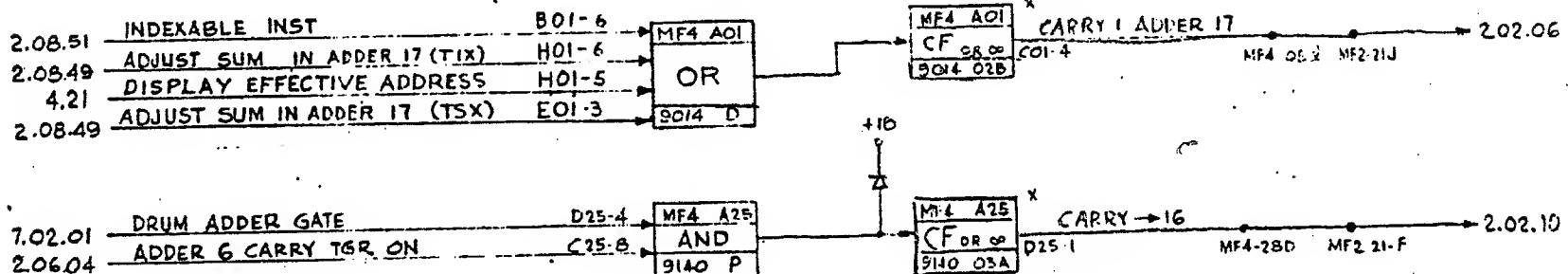
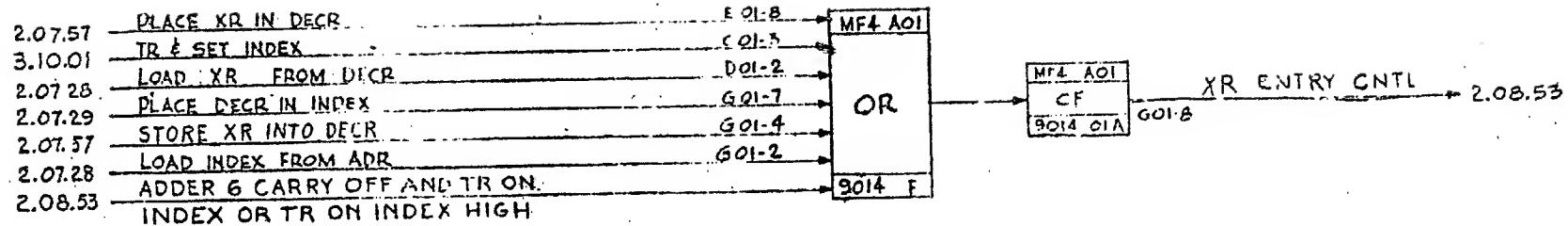
INDEX REGISTER → ADDER

2.08.49



XR ENTRY CNTL CARRY 1 → ADDER 16 . CARRY 1 → ADDER 17

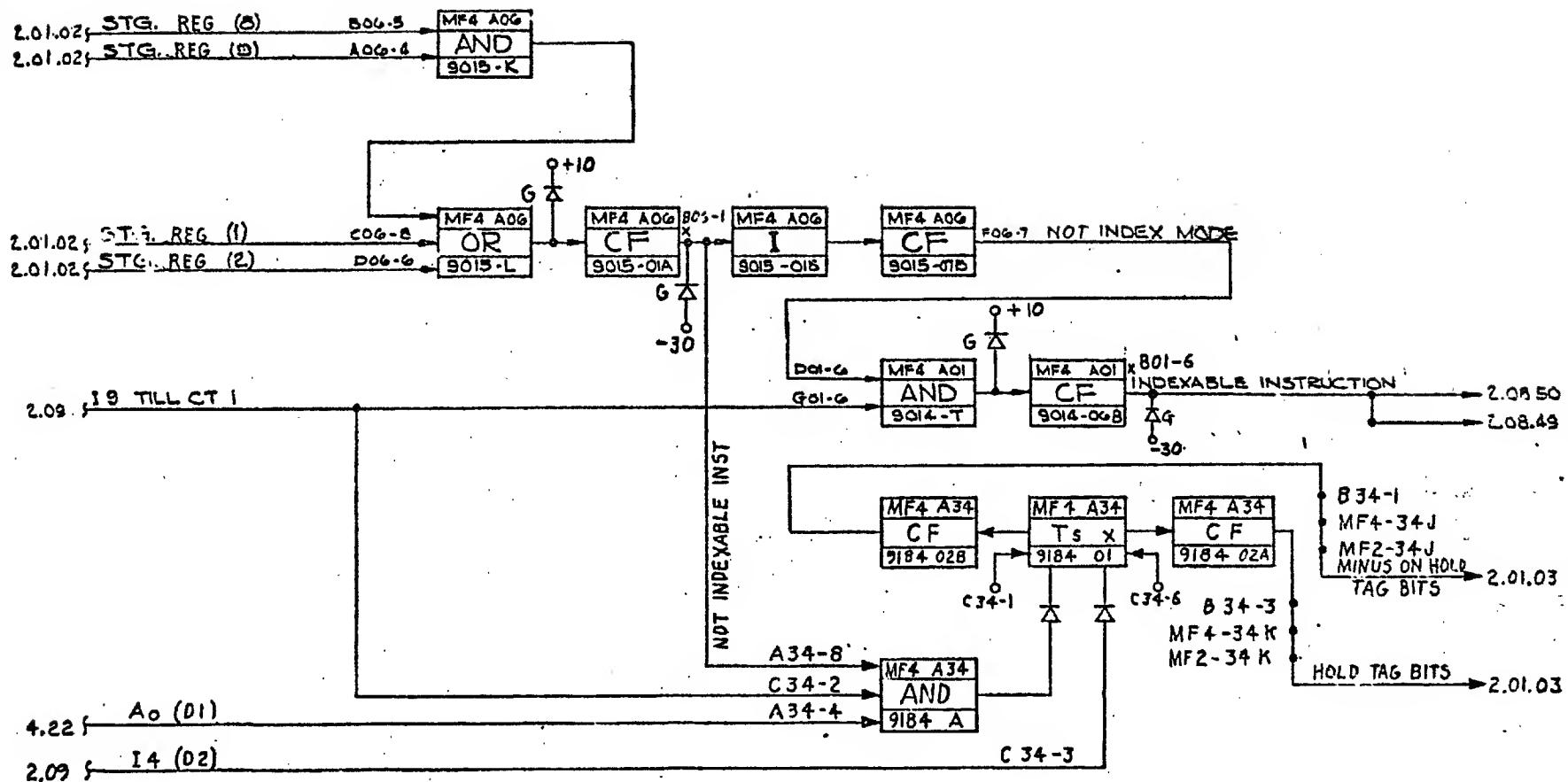
2.08.50



INDEXING CONTROLS

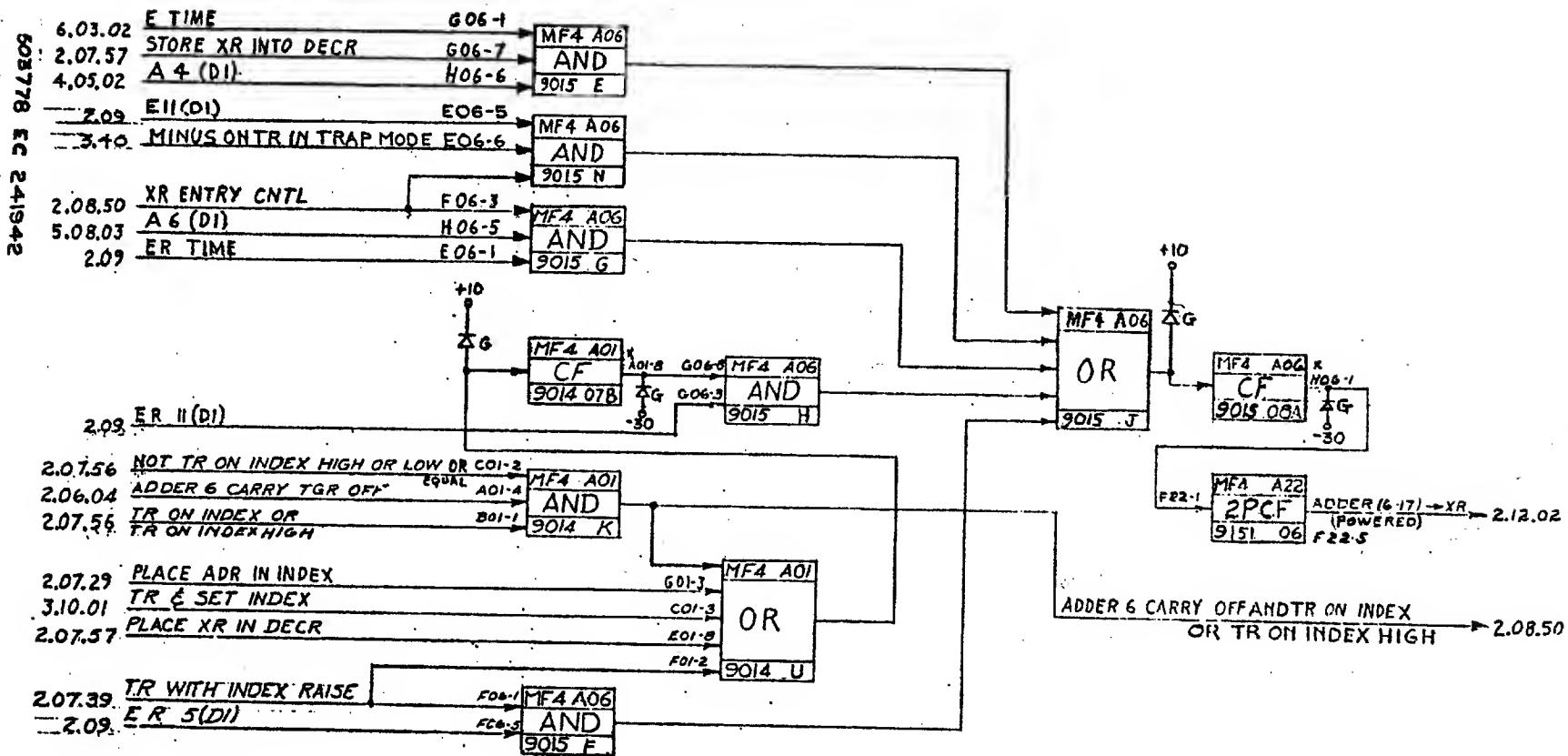
2.08.51

503777 EC 242092



ADDER → INDEX REG

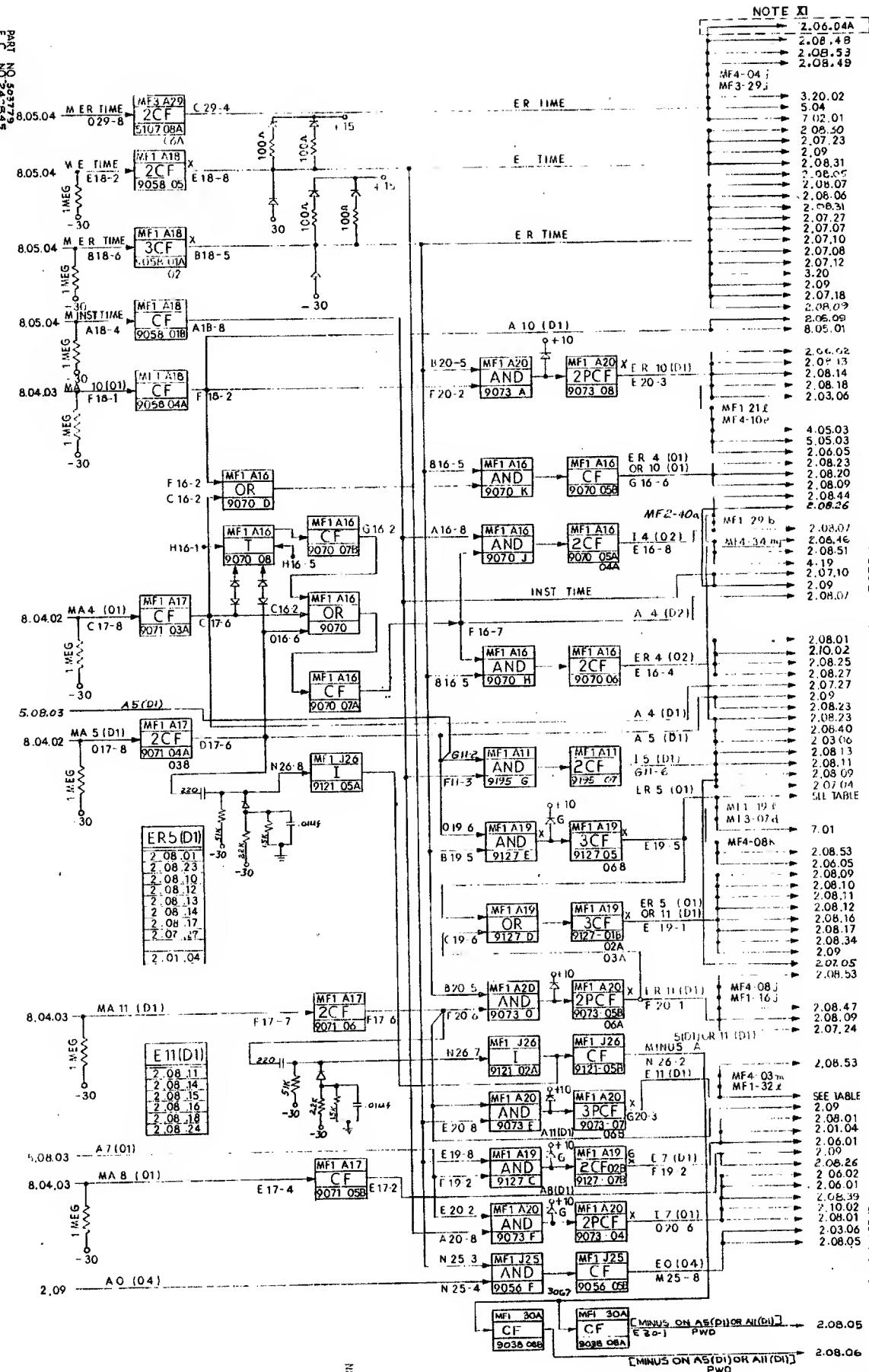
2.08.53



PULSE AND GATE GENERATOR

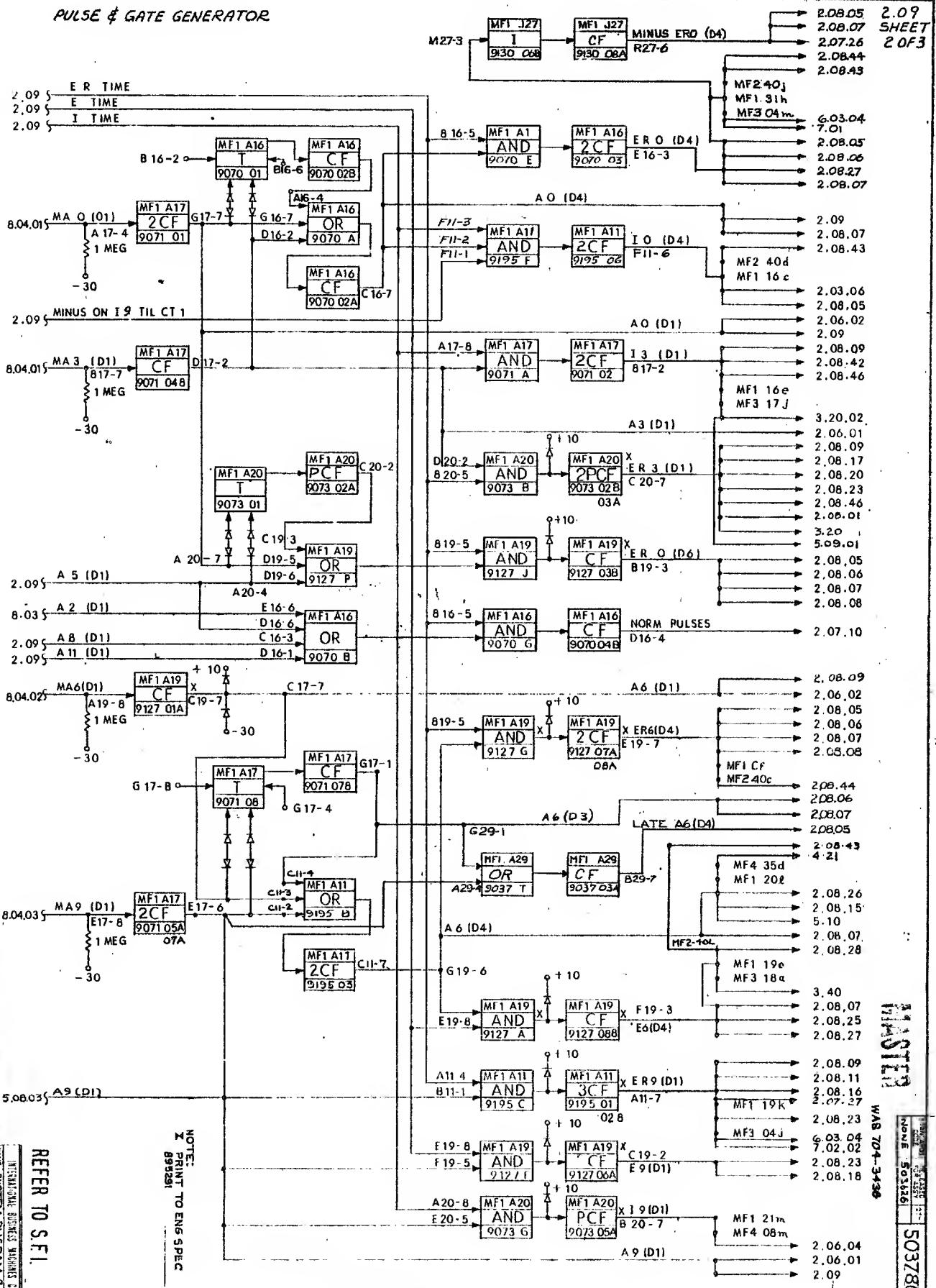
SHEET - 1 OF 3

2.09



PULSE & GATE GENERATOR

503780



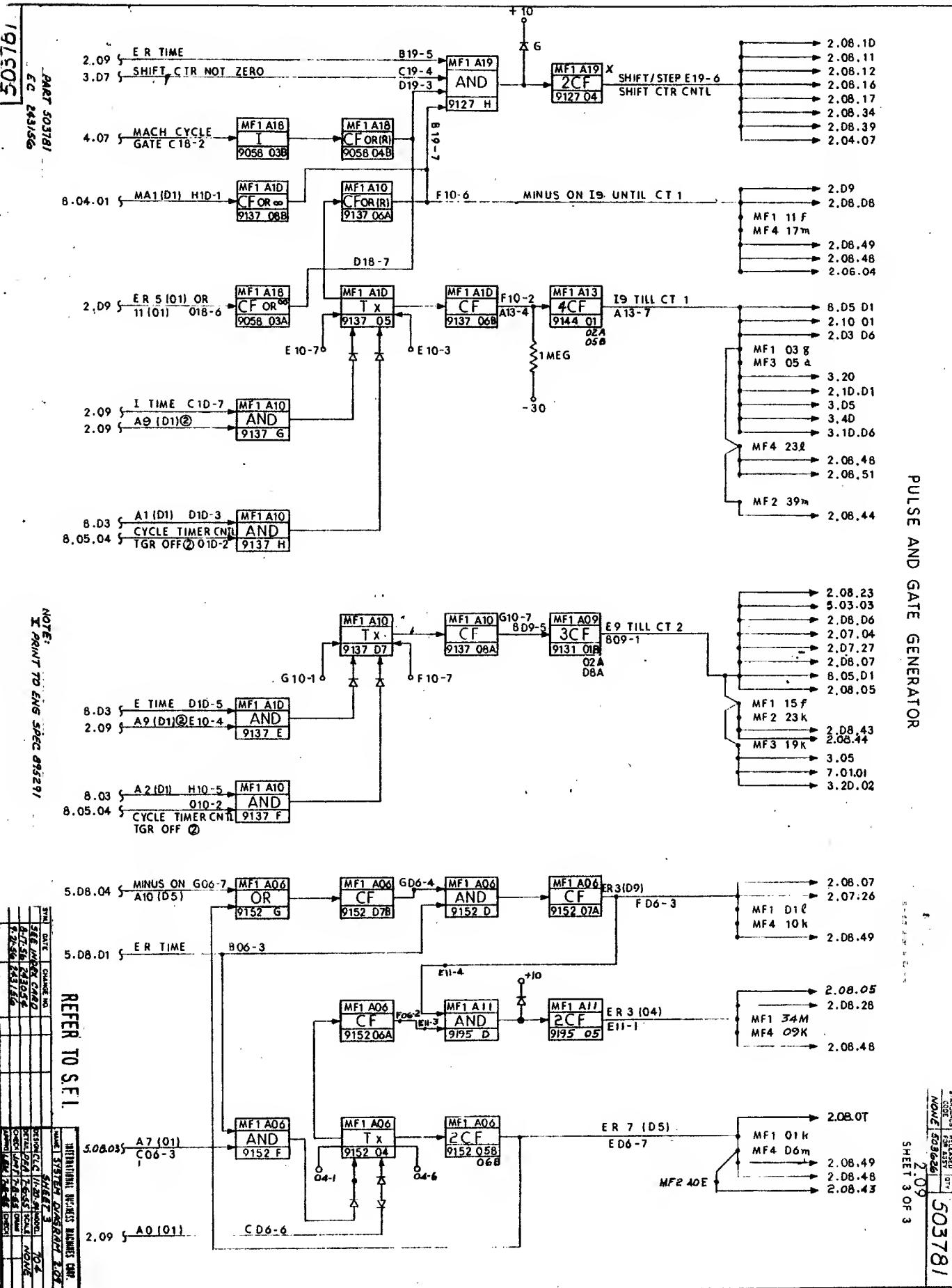
REFER TO S.E.I.

~~NOTE:~~
PRINT TO ENG SPEC
895291

SEARCH DATE	SEARCH NO	SEARCH CIRC.	SEARCH INDEX	SEARCH CARD	SEARCH INDEX	SEARCH CARD
SEE INDEX CARD	00-3212212	SEARCHED	SEARCHED	SEARCHED	SEARCHED	SEARCHED
3-23-62	222390	SEARCHED	SEARCHED	SEARCHED	SEARCHED	SEARCHED
3-8-62	224698	SEARCHED	SEARCHED	SEARCHED	SEARCHED	SEARCHED
3-31-62	224697	SEARCHED	SEARCHED	SEARCHED	SEARCHED	SEARCHED

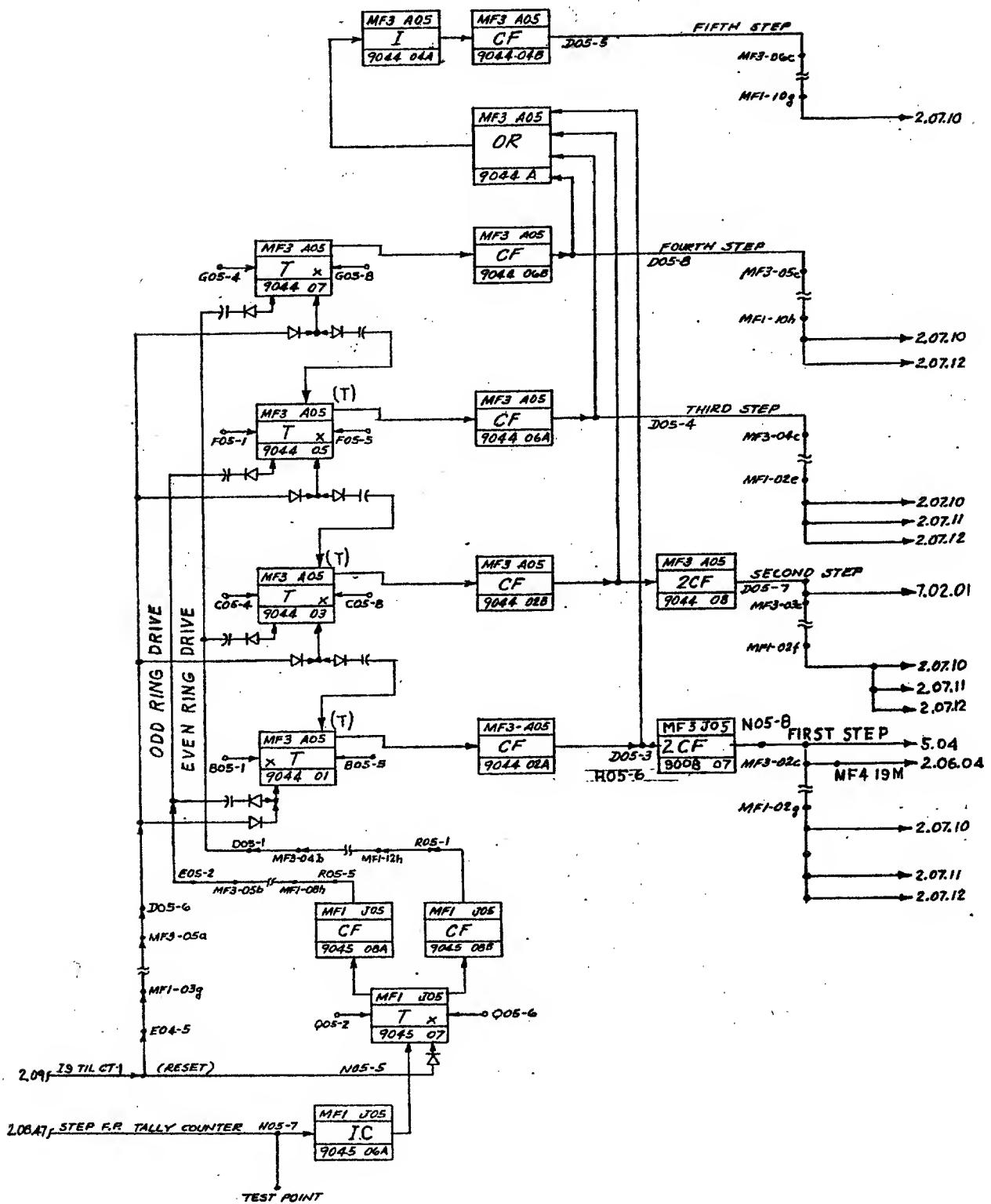
PULSE AND GATE GENERATOR

503781
200
SHEET 3 OF 3



FLOATING POINT TALLY COUNTER

2.10.01

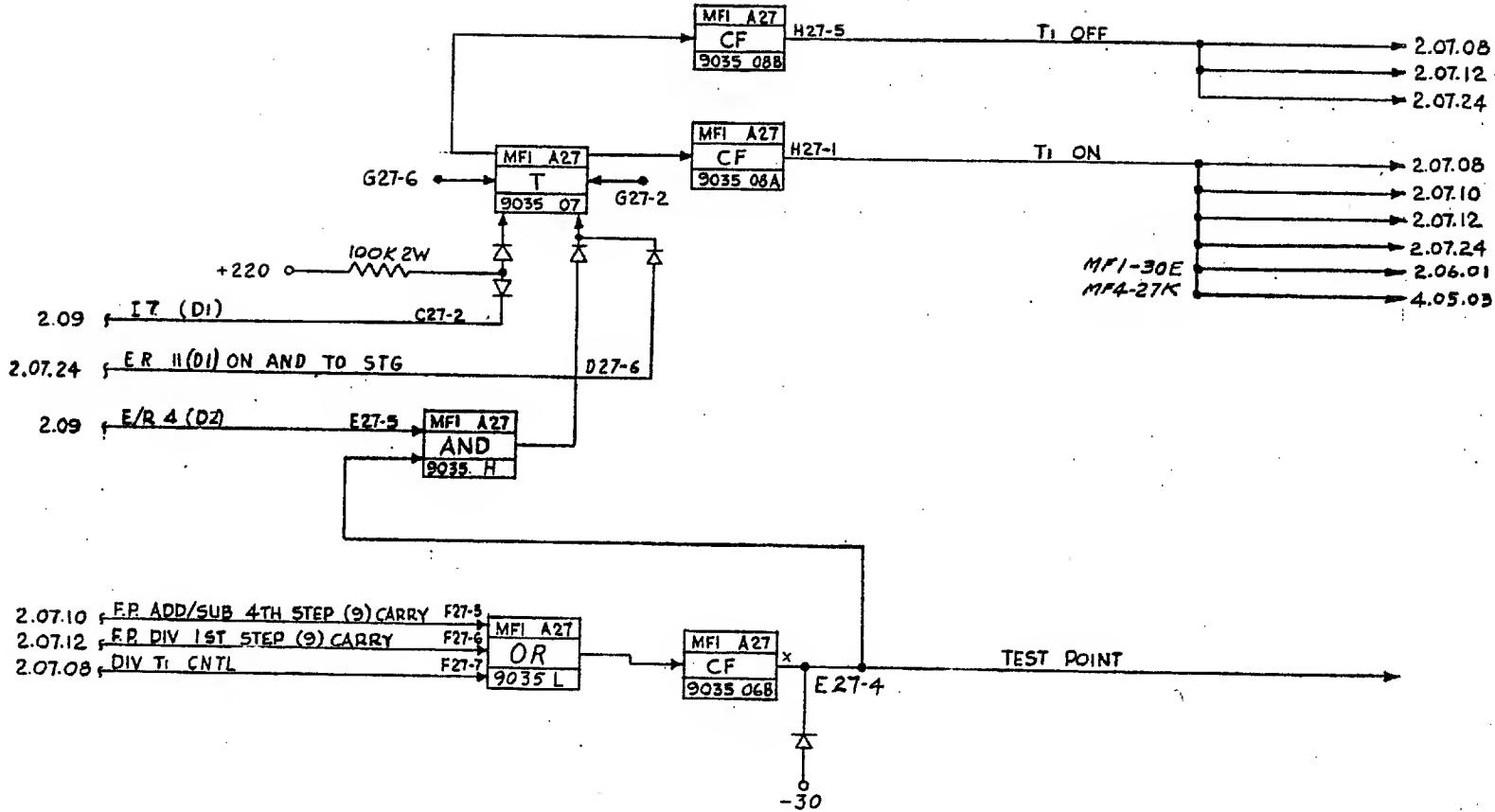


503782 EC 242469 B

EXEC CNTL TGR (T₁)

2.10.02

503783 EC 242468



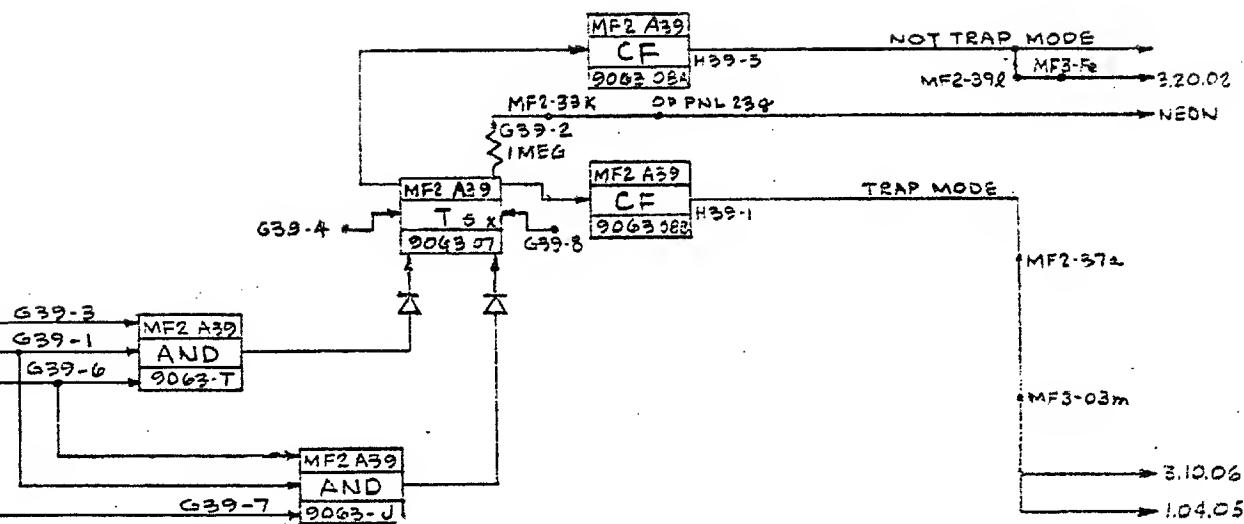
TRAPPING CONTROL

2.10.03

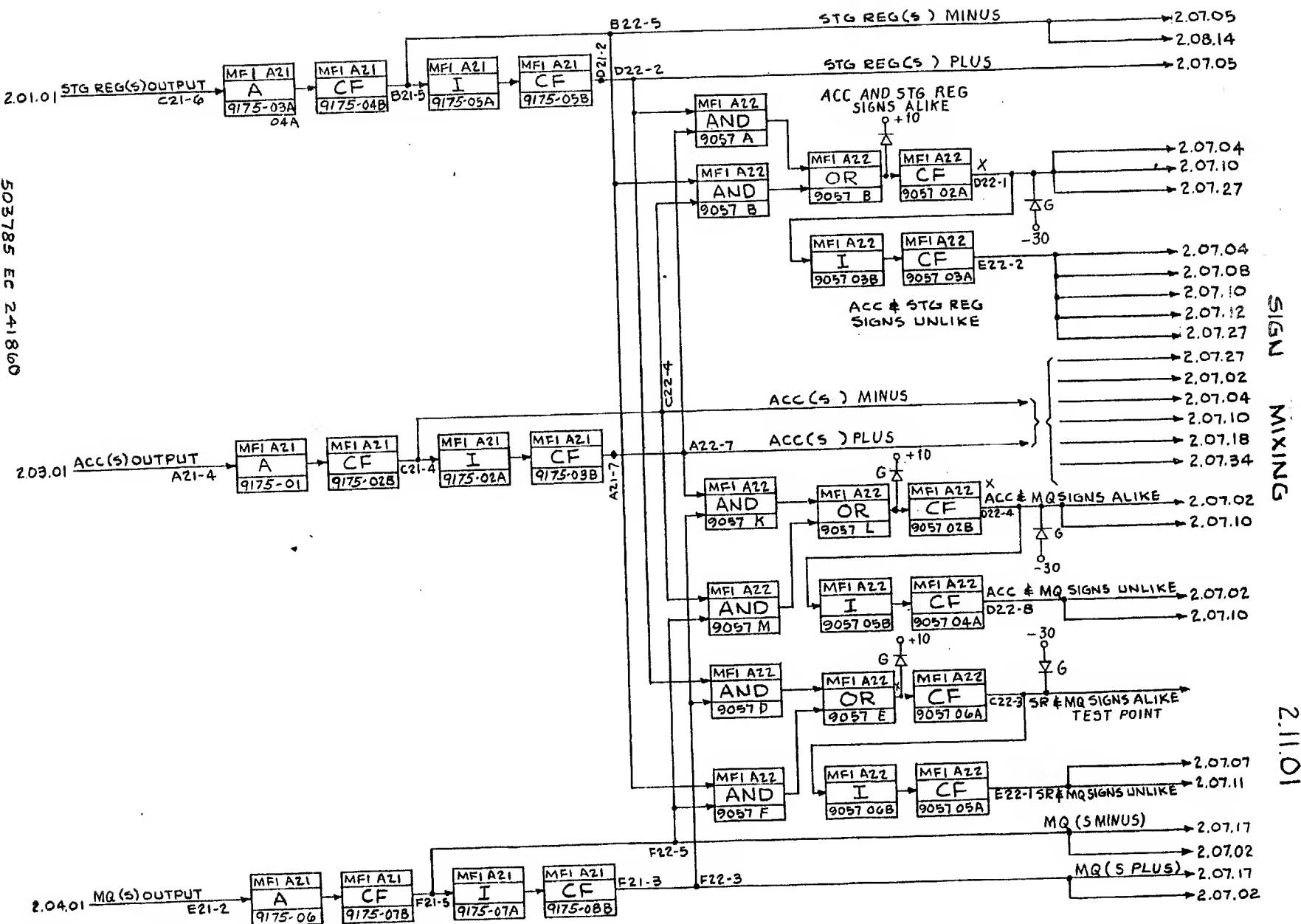
3.02 INST REG S PLUS
3.12 SENSE (76)(00)(00)

5.01.02 UNIT ADR 07

3.02 INST REG S MINUS



503785 EC 241860



2.11.01

INDEX REGISTER

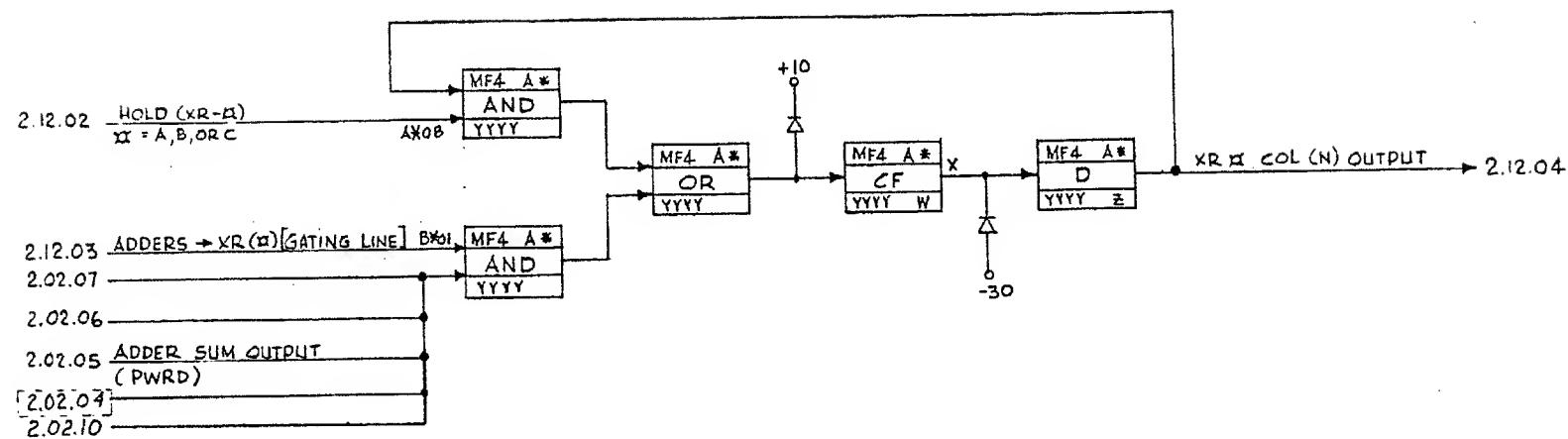
2.12.01

X.R. (B)	COL (N)	P.U. LOC (*)	P.U. PART NO.	ADDER SUM OUTPUT (PWRD)	COL (N) OUTPUT
C 6 10 9018	C07-04	A07-07	B 6 10 9019	C10-04	A10-07
C 7 11 9018	C08-04	A08-07	B 7 11 9019	C11-04	A11-07
C 8 13 9018	C09-04	A09-07	B 8 13 9019	C13-04	A13-07
C 9 07 9018	A07-04	C07-07	B 9 10 9019	A10-04	C10-07
C 10 08 9019	A08-04	C08-07	B 10 11 9018	A11-04	C11-07
C 11 09 9018	A09-04	C09-07	B 11 13 9019	A13-04	C13-07
C 12 07 9018	E07-04	D07-07	B 12 10 9019	E10-04	D10-07
C 13 08 9019	E08-04	D08-07	B 13 11 9018	E11-04	D11-07
C 14 09 9018	E09-04	D09-07	B 14 13 9019	E13-04	D13-07
C 15 07 9018	D07-04	E07-07	B 15 10 9019	D10-04	E10-07
C 16 08 9019	D08-04	E08-07	B 16 11 9018	D11-04	E11-07
C 17 09 9018	D09-04	E09-07	B 17 13 9019	D13-04	E13-07
C 15 36 9194	A36-04	C36-07	B 15 36 9194	A36-04	D36-07

FOR 2 CORE FRAMES ONLY

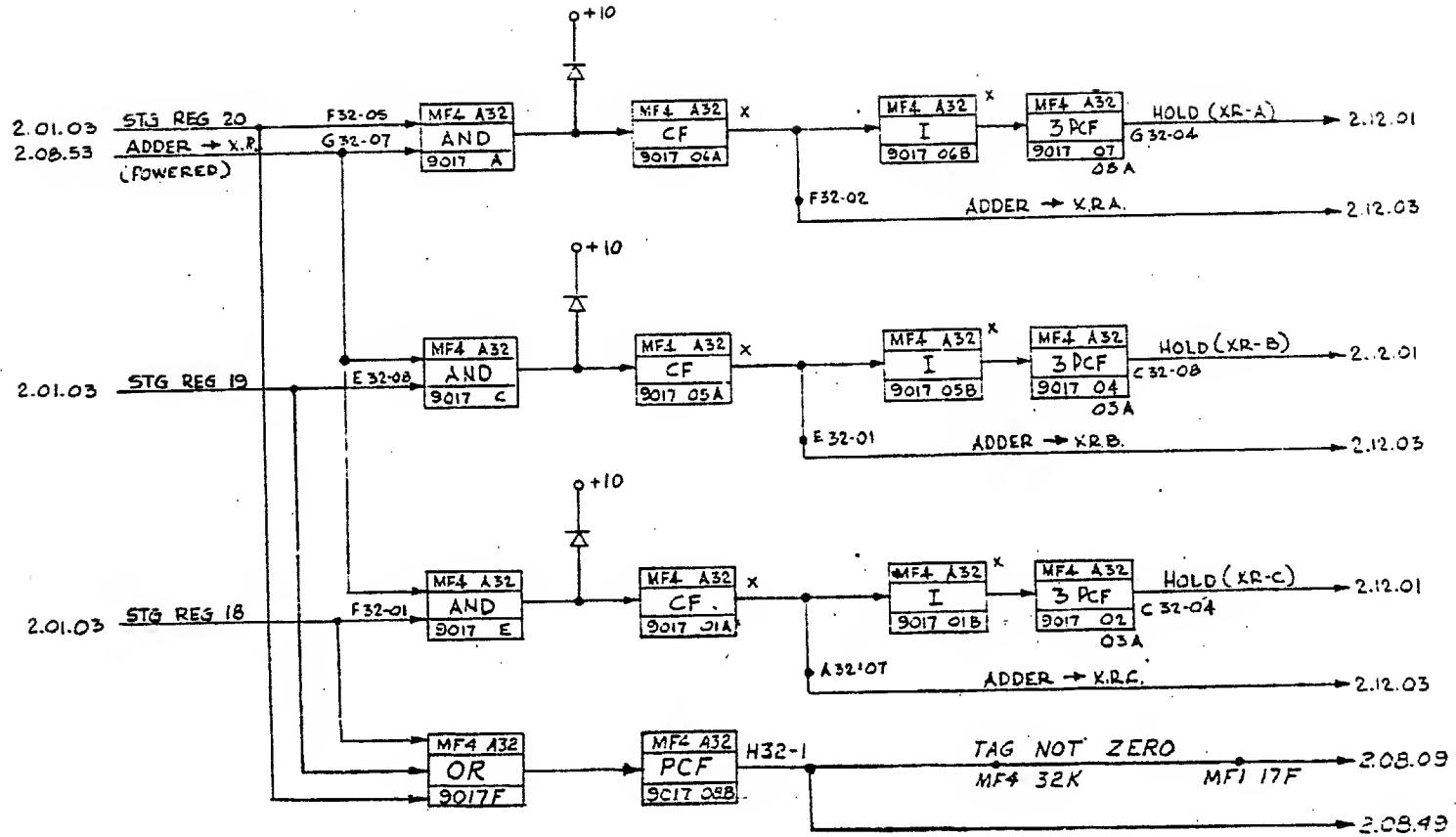
503786 EC 24/701

X.R.	HOLD X.R.	ADDERS → X.R.	GATING LINE	COL (N)	D (Z)
A	A36-8	B36-1	502A-03		
B	E36-3	F36-2	505B-04		
C	F36-7	E36-6	505A-06		



X.R.(N) HOLD LINES ADDER → X.R.(N)

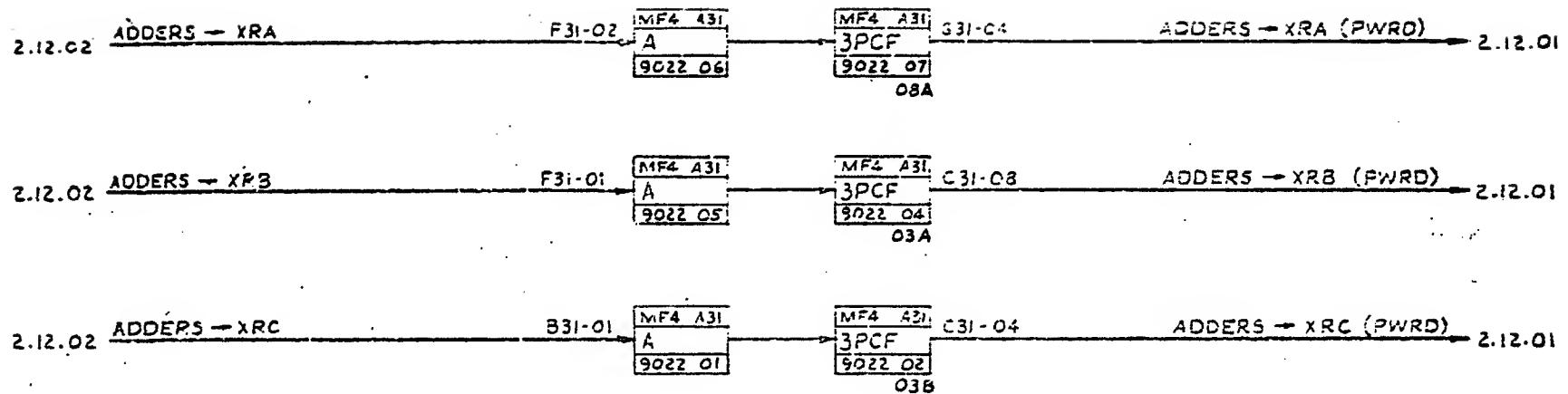
2.12.02



ADDERS → XR (N) GATING LINE

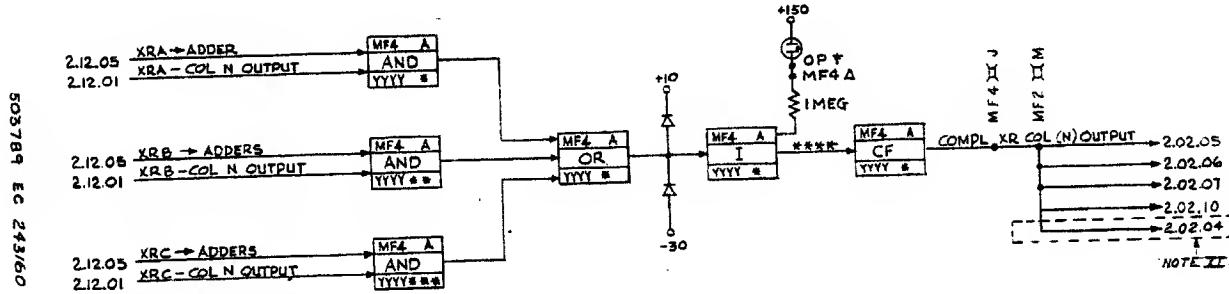
2.12.03

503788 EC 241399A



WAS 704-3447

STANDARDS
CODE : 503626
RELEASED FOR PUBLIC USE
NONE : 503789
DATE : 10/11/55
ORIG. NO. : 241593A
7-11-55 241593A
10/11/55 241701
9-17-56 263160



OP. NO. / PIN NO.	X OUT	EDGE CIRCUIT	MF4 NEON	COL (N)	XRA ADDERS PIN NO.	XR B ADDERS PIN NO.	XR C ADDERS PIN NO.	XR A COL (N) OUTPUT PIN NO.	XR B COL (N) OUTPUT PIN NO.	XR C COL (N) OUTPUT PIN NO.	AND CKT *		AND CKT **		AND CKT ***		OR CKT *		I		CF		COMPL. XRA COL (N) OUTPUT		EDGE CONN. MF4 AND 2 ARITHMETIC CKT				
											P.U. Loc	YYY*	P.U. Loc	YYY*	P.U. Loc	YYY*	P.U. Loc	YYY*											
17G	B12-03	07D	I	A12-07	C12-03	A12-04	C12-07	A12-08	C12-04	12	9020	A	12	9020	B	12	9020	C	12	9020	D	12	9020	QA	12	9020	Q1B	B12-01	9 6
17H	B12-07	08D	2	A12-07	C12-08	A12-04	D12-01	A12-08	D12-05	12	9020	E	12	9020	F	12	9020	G	12	9020	H	12	9020	QA	12	9020	Q1B	B12-05	10 7
17E	C12-06	09D	3	A12-07	D12-02	A12-04	D12-06	A12-08	D12-03	12	9020	J	12	9020	K	12	9020	L	12	9020	M	12	9020	QA	12	9020	Q1B	B12-02	11 8
17F	C12-01	10D	4	A12-07	D12-07	A12-04	D12-04	A12-08	D12-08	12	9020	N	12	9020	P	12	9020	Q	12	9020	R	12	9020	QA	12	9020	Q1B	B12-06	12 9
19G	F12-03	11D	5	A12-07	E12-01	A12-04	E12-05	A12-08	E12-03	12	9020	T	12	9020	U	12	9020	V	12	9020	W	12	9020	QA	12	9020	Q1B	B12-03	13 10
17H	F12-07	12D	6	A12-07	E12-06	A12-04	E12-03	A12-08	E12-07	12	9020	X	12	9020	Y	12	9020	Z	12	9020	AA	12	9020	QA	12	9020	Q1B	B12-07	14 11
33B	G12-D1	13D	7	A12-07	E12-04	A12-04	E12-08	A12-08	F12-01	12	9020	AA	12	9020	AB	12	9020	AC	12	9020	QA	12	9020	Q1B	B12-04	15 12			
33C	H12-05	14D	8	A12-07	F12-05	A12-04	F12-02	A12-08	F12-06	12	9020	AD	12	9020	AE	12	9020	AF	12	9020	AG	12	9020	QA	12	9020	Q1B	B12-08	16 13
33D	H08-04	15D	9	F08-05	E08-08	F08-02	F08-01	G08-07	G08-05	08	9019	N	08	9019	P	08	9019	Q	08	9019	R	08	9019	QA	08	9019	Q1B	B08-04	17 14
33E	H10-06	16D	10	F10-05	E10-06	F10-02	F10-01	G10-07	G10-05	10	9019	N	10	9019	P	10	9019	Q	10	9019	R	10	9019	QA	10	9019	Q1B	B10-06	18 15
33F	H13-06	17D	11	F13-05	E13-06	F13-02	F13-01	G13-07	G13-03	13	9019	N	13	9019	P	13	9019	Q	13	9019	R	13	9019	QA	13	9019	Q1B	B13-06	19 16
33G	H15-06	18D	12	F15-05	E15-06	F15-02	F15-01	G15-07	G15-03	15	9019	N	15	9019	P	15	9019	Q	15	9019	R	15	9019	QA	15	9019	Q1B	B15-06	20 17
34A	A36-7	35N	0	B36-07	C36-06	D36-07	B36-03	E36-07	36	9194	A	36	9194	B	36	9194	C	36	9194	D	36	9194	QA	36	9194	Q1B	B36-2	36 5	

NOTE XI - COL 0 FOR 2 CORE FRAME ONLY

INDEX REGISTER MIXING

503789

NOTE:
PRINT TO ENG SPEC 995271

2.12.04

MATERIAL SPECIFICATIONS		TOLERANCES UNLESS STATED OTHERWISE		ALIGNMENT WIRE		NOTE I		INTERNATIONAL BUSINESS MACHINES CORP.	
CAGE DEPTH		DIMENSIONS ± .005		CONCENTRICITY WIRE		TOT. HGT. DIM. 1		BLACK ELECTRONIC ANALYTICAL	
DIMENSIONS		FRACTIONAL ± 1/64		FLAT WIRE		DIM. 2		CONTROL UNIT MODEL 704	
SURFACE TREATMENT		ANGLE ± 1°		PARALLEL WIRE		DIM. 3		NAME SYSTEM DIAGRAM	
TEST REARSHED DATE		SPEC. REARSHED DATE		STRAIGHT WIRE		DIM. IV		2.12.04	
SAY ME NUMBER	OUTSIDE	INSIDE	REARSHED	WIRE	REARSHED	WIRE	WIRE V	DRAW. LEK 6-23 54 SCALE: NONE	
								CHK. JMT: G-3.8 FT THIN FM 1-27-55	

503789

503790 EC 241515

