

ELECTRONIC ANALYTICAL CONTROL UNIT

SYSTEM DIAGRAMS TYPE 704 VOLUME 2

TABLE OF CONTENTS

INDEX NO	DESCRIPTION	PART NO	ENG CHG
1 SYSTEM DIAGRAMS			
3.01	INSTRUCTION REG PULSE GEN	503791	242719
3.02	INSTRUCTION REG S TGR	503792	242390
3.03	INSN REG 1-5 PRI OPER PART	503793	242390
3.04	INSTRUCTION REG 6-9	503794	242469B
3.05	SH 1 SHIFT CTR PULSE GEN	503795	242391
3.05	SH 2 SHIFT CTR PULSE GEN II	503796	242307
3.06	INSN REG 10-17 SHIFT CTR	503797	51600K
3.07	ZERO ADDRESS CONTROLS	503798	51600K
3.08	F. P. ENTRY TO SHIFT CTR 10-17	503799	242307
3.10	PRIMARY OPERATION DECODER	503800	242760
3.10.01	SH 1 PRIMARY OP DECODER	503801	242138
3.10.01	SH 2 PRIMARY OP DECODER	503802	242762
3.10.02	SUBTRACT CONTROL	503803	241563
3.10.04	HALT CONTROL	503804	51600K
3.10.06	TRAPPING CONTROL	503805	241701
3.11	SECONDARY OPN DECODER	503806	51600K
3.11.01	SENSE OPERATION DECODER	503807	241658
3.12	SENSE UNIT ADDRESS	503808	241861
3.20	ADVANCE INST COUNTER	503809	242264
3.20.02	RESET INST-CTR ADR SW-INST CTR	503810	241561
3.20.03	INSN CTR TRANSFER CTRL	503811	242941
3.21	INSTRUCTION COUNTER	503812	242941
3.40	ADDRESS SWITCH INPUT CTRLS	503813	242135
3.42	SH 1 ADDRESS REGISTER	503814	242466
3.42	SH 2 ADDRESS REGISTER	503815	242137
4.01	OP PNL ENTRY KEYS S ₁ 1-5	503816	241745
4.02	OP PNL ENTRY KEYS 6-35	503817	241745
4.03	ENTER MQ	503818	242256
4.04	SENSE KEYS AND LIGHTS	503819	241065
4.05.01	TURN OFF MASTER STOP TGR	503820	242470
4.05.02	TURN ON MASTER STOP TGR	503821	242571
4.05.03	TURN ON MASTER STOP TGR ON CHECK STOP	503822	242710
4.05.04	MASTER STOP TGR & OUTPUTS	503823	242580
4.06	OPR PNL AUTO & MANUAL CTRLS	503824	242343
4.07	MACH CY, SINGLE & MULT STEP	503825	242574
4.08	RESET CKTS #1	503826	242573
4.09	RESET CKTS #2	503827	242136
4.10	RESET RELAY POINTS	503828	241065
4.10.09	SWITCH READ	512823	241476
4.11	INSTRUCTION NEONS	503829	241745
4.12	INSTRUCTION CTR NEONS	503830	241820
4.13	INDICATOR LIGHTS	503831	242717
4.14	MQ REG NEON INVERTER CHART	503832	241065
4.15	STOR REG NEON INV CHART	503833	241065
4.16	ACC REG NEON INV CHART	503834	241065
4.17	ENTER INSTRUCTION TIMER	503835	242719
4.18	STORAGE DISPLAY TIMER	503836	242041
4.19	LOAD TIMER	503837	242466
4.20	MAIN FRAME RELAY CHART	503838	242947
4.21	DISPLAY EFFECTIVE ADR AND DISPLAY XRS A-B-C	503839	242947
4.22	OPR PNL MIXING CKTS	503840	242842
4.23	POWER SUPPLY CTRL OPRS PANEL	503841	241065
4.24	CONTINUOUS STORAGE RI/RO	503842	241658
4.25	TERMINAL BLOCK CHART OP PNL	503843	242711

2 PREVIOUS ENG CHGS

09/29/55 241842
10/25/55 241955

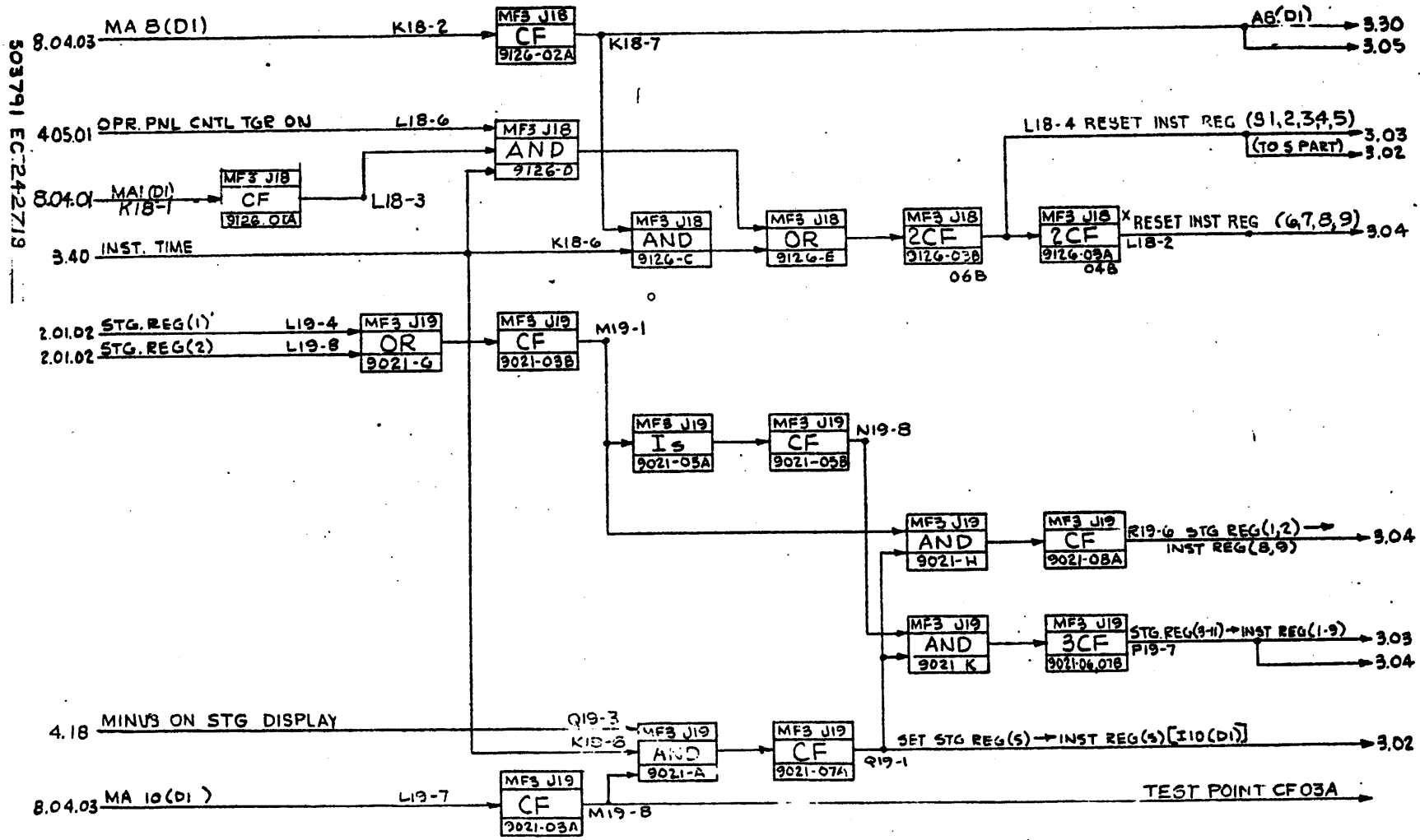
INDEX NO

DESCRIPTION

PART NO ENG CHG

01/16/56	242328
05/23/56	242877
08/02/56	243096

END



503791 EC242719

INSTRUCTION REGISTER PULSE GENERATOR

503792
 DATE 6-6-55
 CHANGES 51600K
 5-8-55 24176
 7-7-55 247676
 5-8-56 252350
 6-25-56 252940
 10-7-56 252742

STANDARD RELEASED FOR USE
 NONE 503627
 WASTE-319-NONE

503792

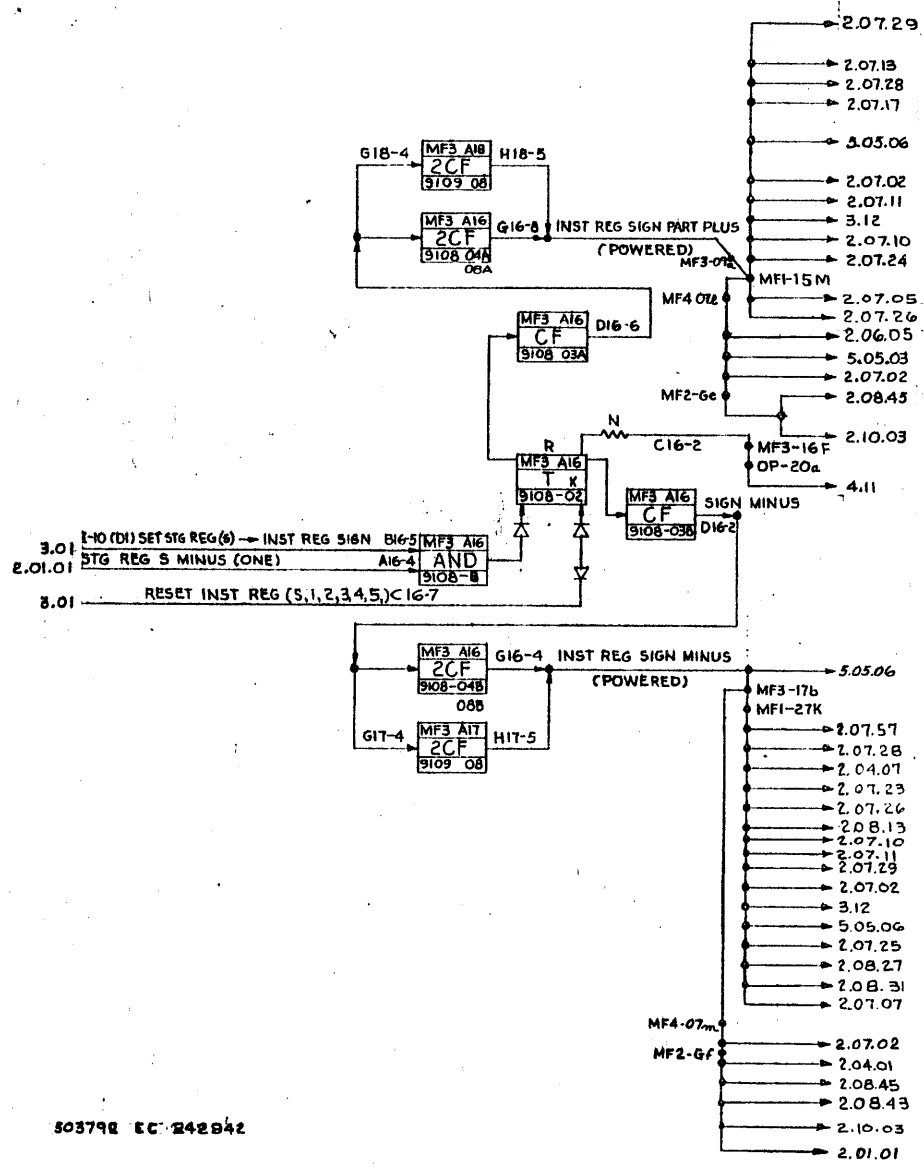
INSTRUCTION REG (S) TGR

3.02

NOTE

X PRINTING ENG SPEC
89329

REFER TO SFI

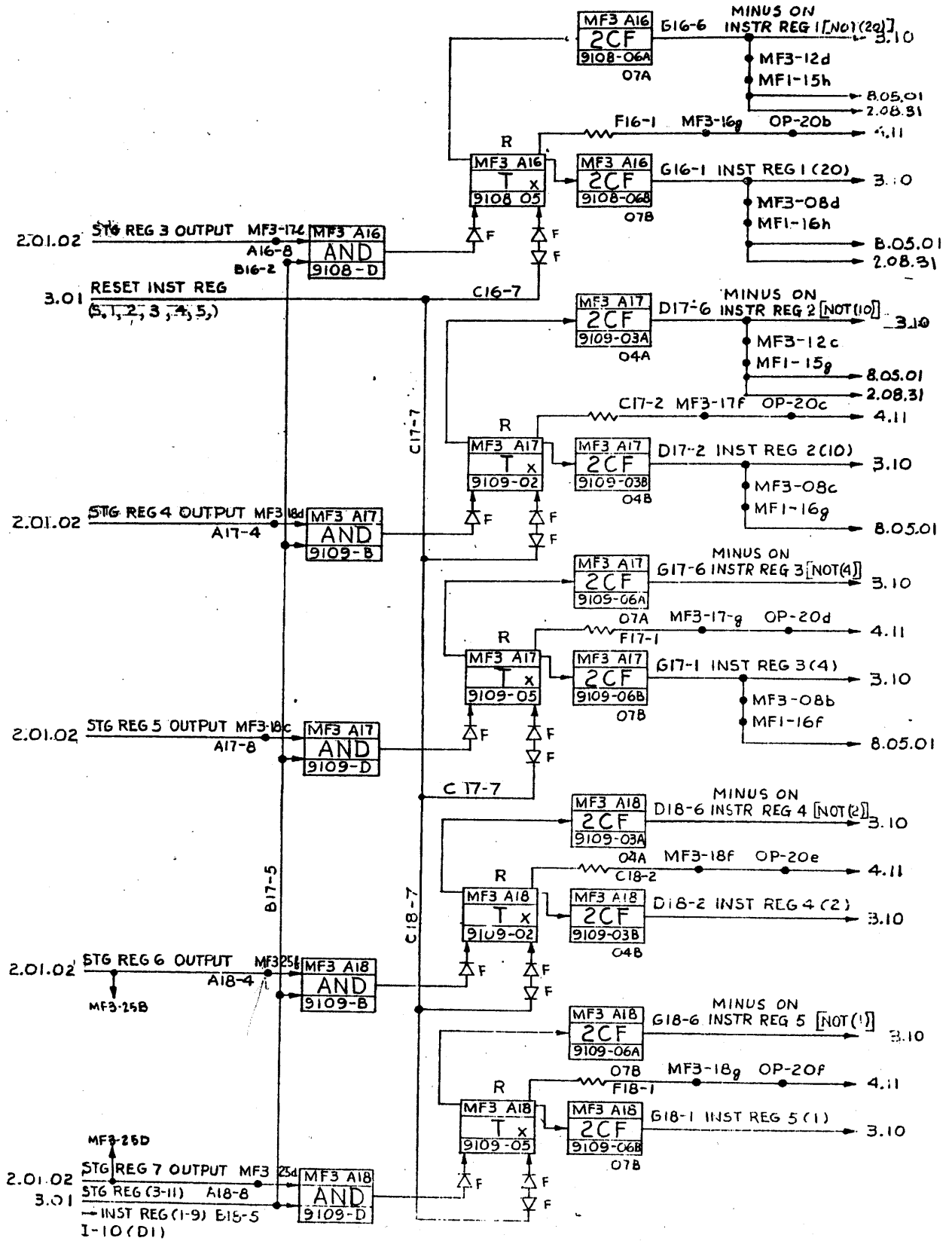


503792 EC 242842

INTERNATIONAL BUSINESS MACHINES CORP.	NOTE I	ALPHABET WITHIN
BACK ELECTRONIC ANALYTICAL	NOTE II	CONCATENATING WITHIN
CONTROL UNIT MODEL 504	NOTE III	PLAT WITHIN
SYSTEM DIAGRAM	NOTE IV	PARALLEL WITHIN
DRUM CAP 2054 SCALE NONE	NOTE V	STRAIGHT WITHIN
CHARGE UNIT 503627	NOTE VI	SQUARE WITHIN
DATE 6-6-55	NOTES	
CHANGES 51600K		
5-8-55 24176		
7-7-55 247676		
5-8-56 252350		
6-25-56 252940		
10-7-56 252742		

503792

INSTRUCTION REGISTER (1-5) (PRIMARY OPERATION PART)



WAS 70431ST

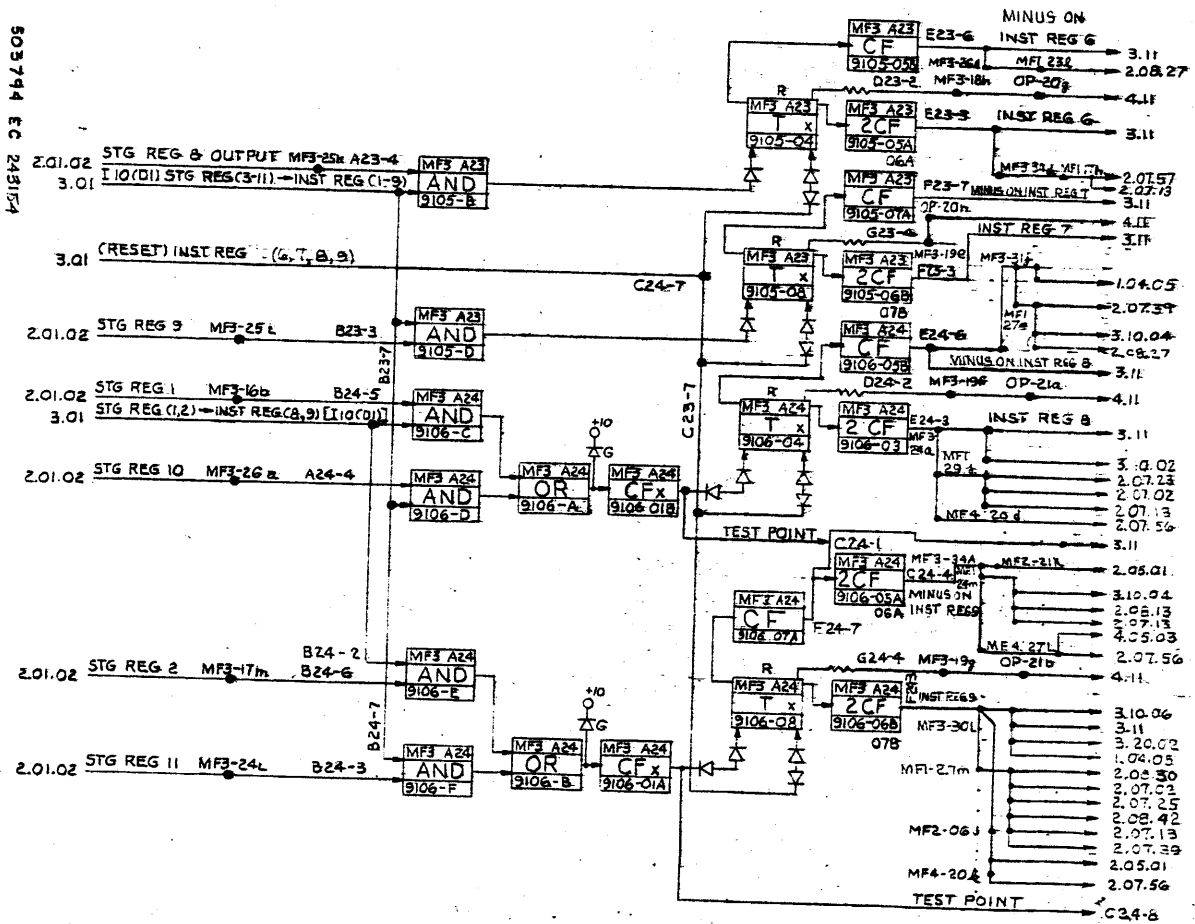
STANDARD CODE NONE RELEASED FOR ASSEMBLY 503794

QTY. 503794

DATE	CLASSIFIED BY
6-6-55	51600K
8-9-55	241478
9-1-55	247676
10-27-55	241510
2-21-56	242393
5-8-56	242468A
11-1-56	243154

MASTER

503794 EC 243154



INSTRUCTION REGISTER (6-9)

503794

NOTE: X PRINT TO ENG SPEC 895291.

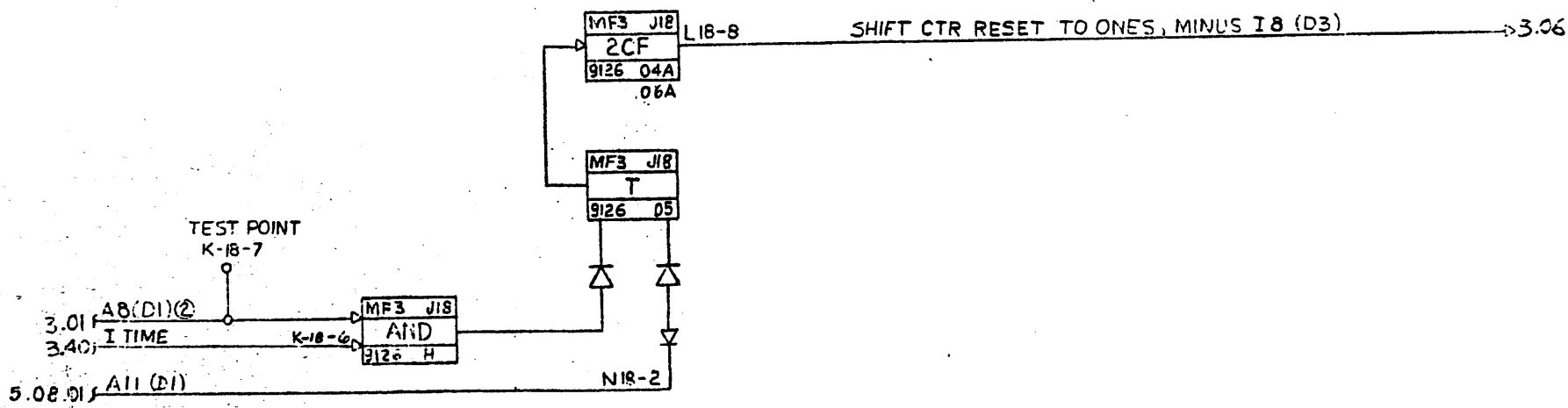
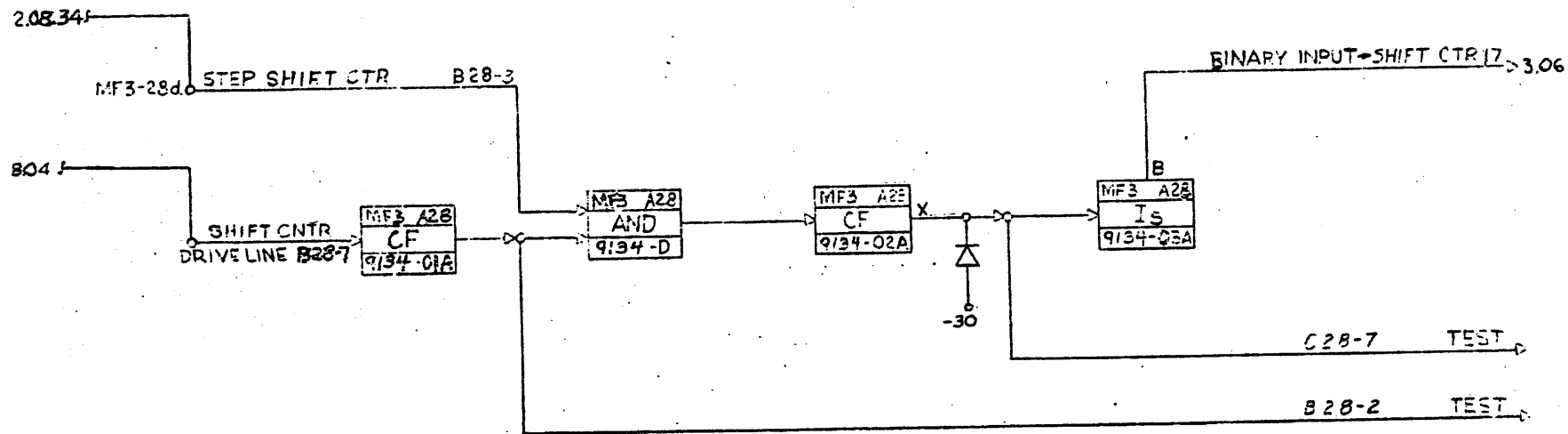
304

REFER TO S.F.I.

MATERIAL SPECIFICATIONS		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH		DECIMALS & 100		CONCENTRIC WITHIN	TOT. INCL. READING	MAC	ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 1704
HARDNESS		FRACTIONS & 100		PLAT WITHIN		NAME	SYSTEM DIAGRAM 3.04
SURFACE TREATMENT		ANGLES & 1'		PARALLEL WITHIN		DATE	JAP 17-20-54 SCALE NONE
		CONTOUR		STRAIGHT WITHIN		APP'D	JAP 17-20-54 SCALE NONE
		OUTSIDE		SQUARE WITHIN		CHECK	JAP 17-20-54 SCALE NONE
		INSIDE				APPROV	JAP 17-20-54 SCALE NONE

503794

508795 EC 242391



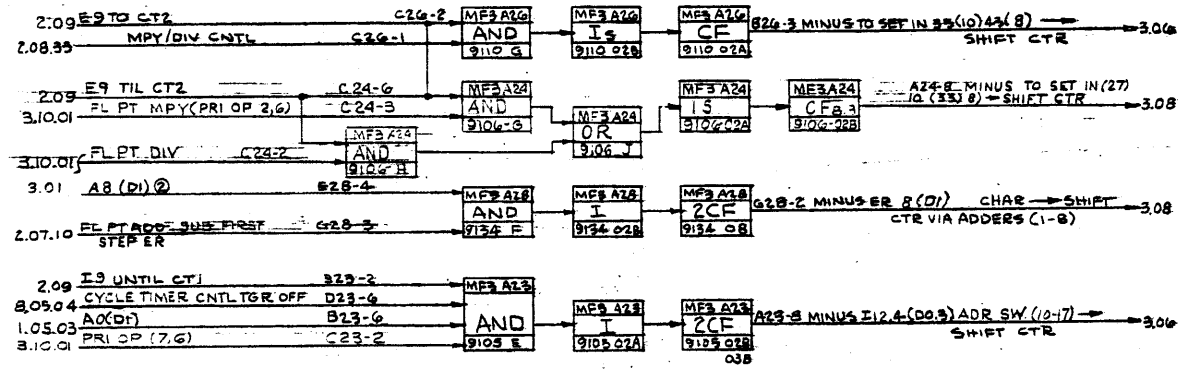
SHIFT COUNTER PULSE GENERATOR

3.05
SHEET 1 OF 2

DATE	CHANGE NO.
6-6-55	31800K
8-9-55	241477
10-11-55	241701
11-2-55	241849
12-6-55	242094
1-19-56	242307
11-1-56	243134

503796 EC 243154

SHIFT COUNTER PULSE GENERATOR II
3.05
SHEET 2 OF 2



503796

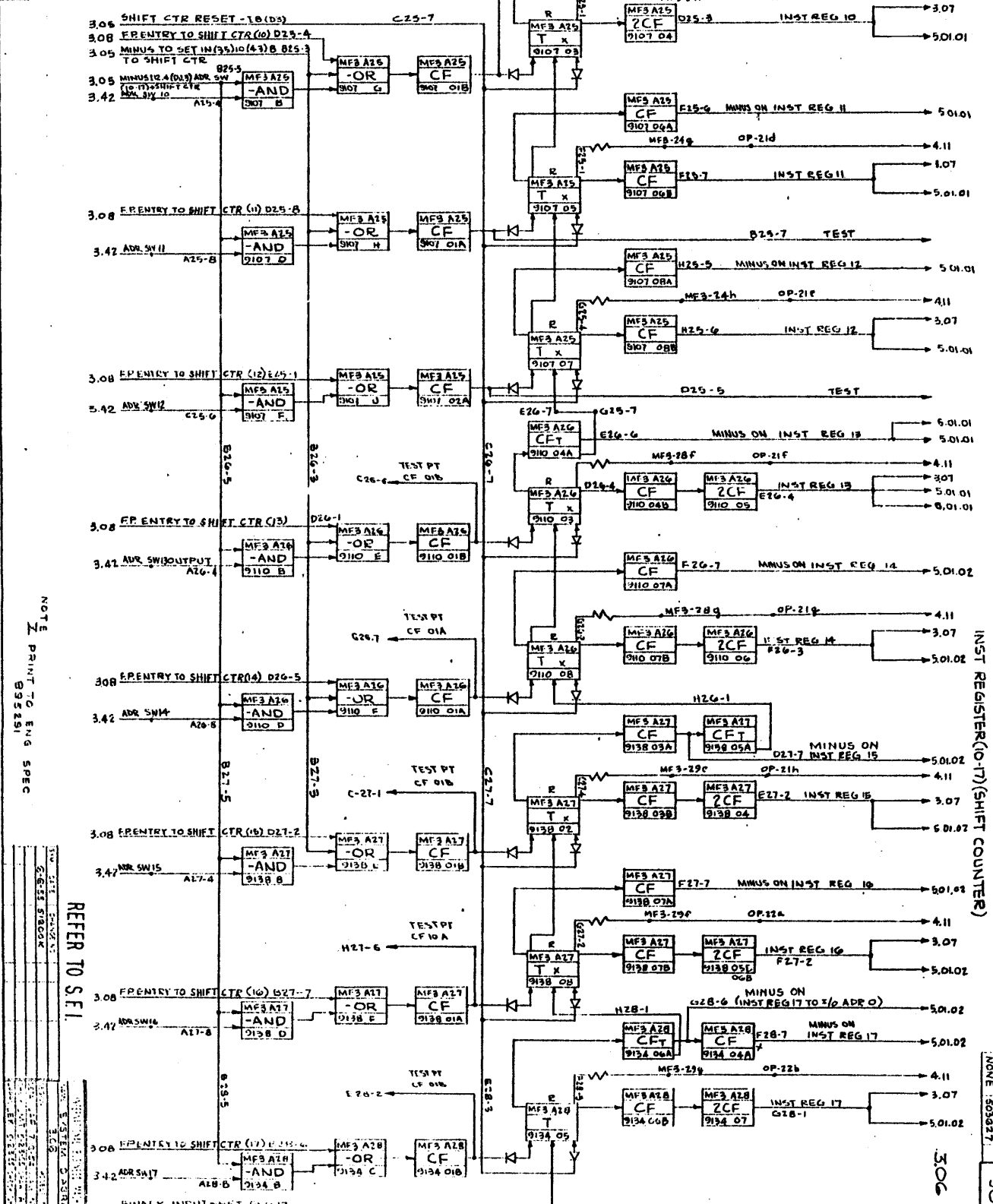
NOTE
 X PRINT TO ENG SPEC
 1895291

REFER TO S.F.I.

MATERIAL SPECIFICATION NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I
	DECIMALS & 100	CONCENTRIC WITHIN	NOTE II
CASE DEPTH	FRACTIONS & 1/64	FLAT WITHIN	NOTE III
HANDNESS	ANGLES & °	PARALLEL WITHIN	NOTE IV
SURFACE TREATMENT	CORNERS	STRAIGHT WITHIN	NOTE V
	MAY BE BROKEN	SQUARE WITHIN	NOTE VI

503796

503797



NOTE
PRINT TO ENG SPEC
938151

REFER TO SFI

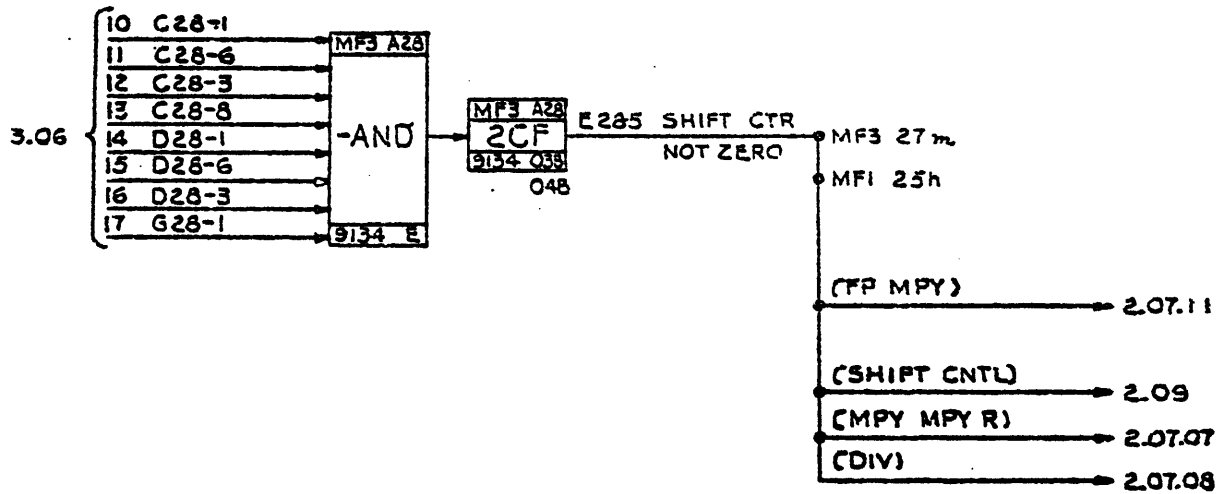
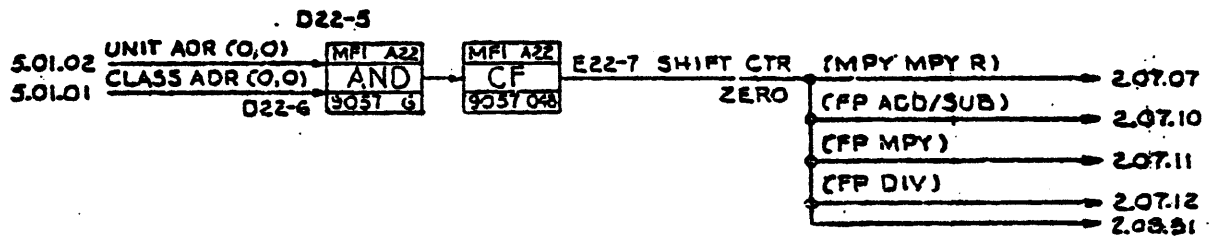
INST REGISTER(0-17)(SHIFT COUNTER)

503797

503797

306

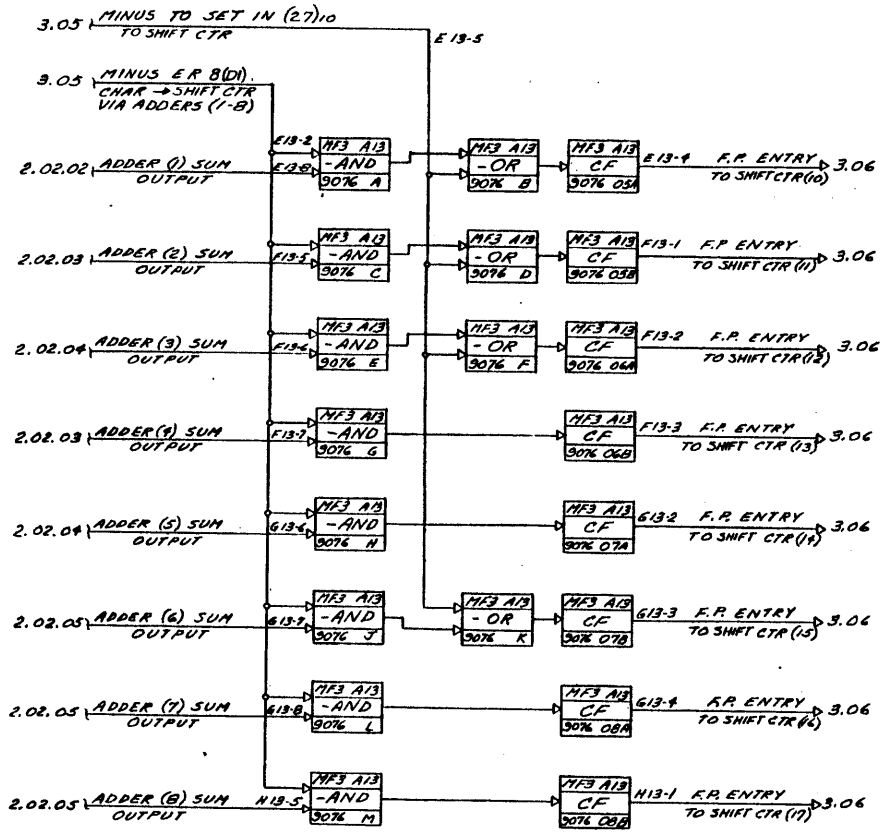
503797



DRAWING NO. 503799
 REV. 1
 DATE 10/15/55
 DESIGNED BY G/S/ST
 CHECKED BY G/S/ST
 APPROVED BY G/S/ST
 503799

MAS 709-3773

F.P. ENTRY TO SHIFT CTR (10-17) 3.08

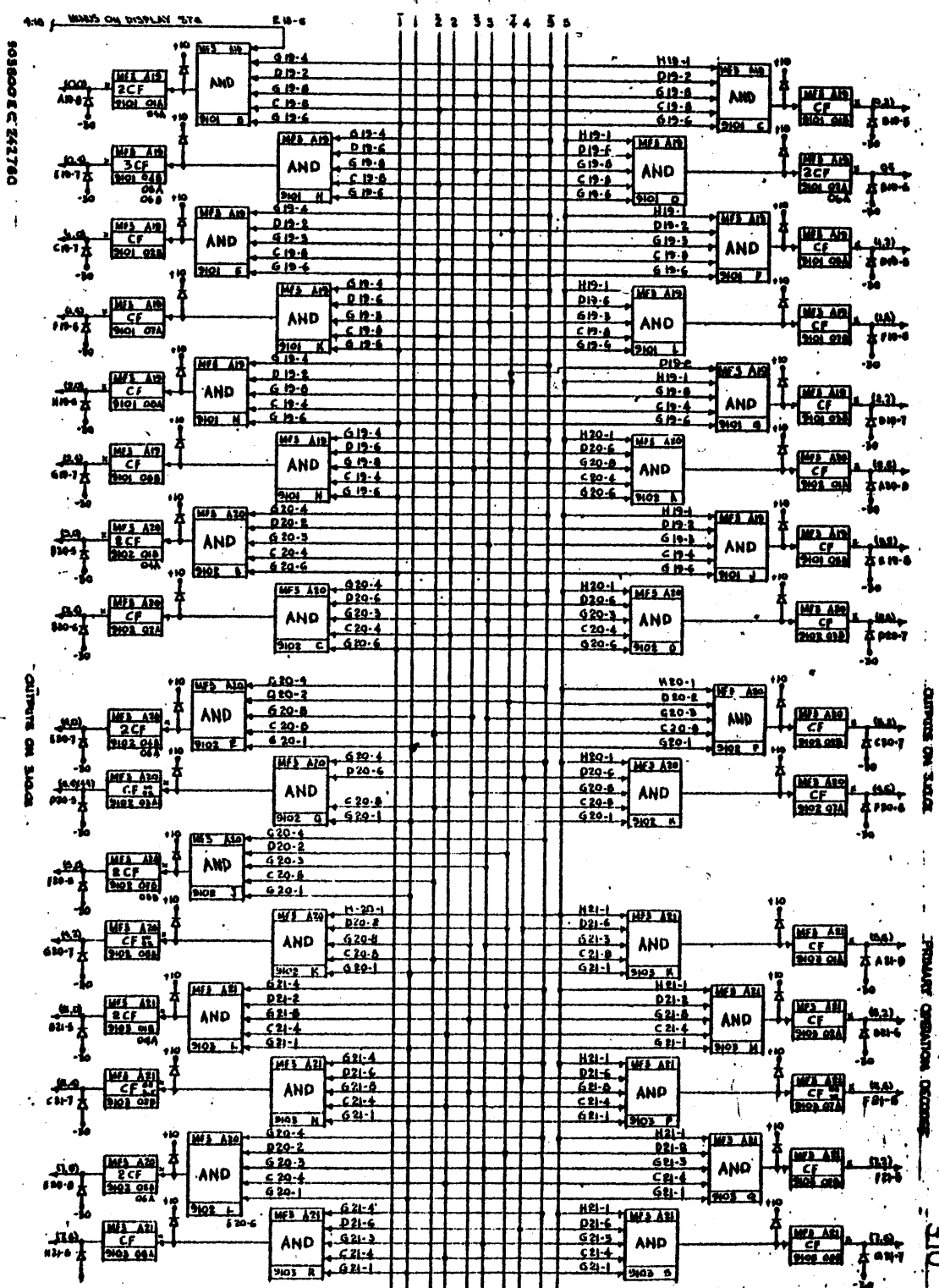


503799 EC 242307

NOTE PRINT TO ENG
 I SPEC. 895191
 REFER TO S.F.I.

INTERNATIONAL BUSINESS MACHINES CORP.	NOTE I	ALIGNMENT WITHIN
BUCK ELECTRONIC ANALYTICAL CONTROL UNIT	NOTE II	CONCENTRIC WITHIN
MODEL 704	NOTE III	PLAT WITHIN
SYSTEM DIAGRAM	NOTE IV	PARALLEL WITHIN
3.08	NOTE V	STRAIGHT WITHIN
	NOTE VI	SQUARE WITHIN
	NOTE VII	
	NOTE VIII	
	NOTE IX	
	NOTE X	
	NOTE XI	
	NOTE XII	
	NOTE XIII	
	NOTE XIV	
	NOTE XV	
	NOTE XVI	
	NOTE XVII	
	NOTE XVIII	
	NOTE XIX	
	NOTE XX	
	NOTE XXI	
	NOTE XXII	
	NOTE XXIII	
	NOTE XXIV	
	NOTE XXV	
	NOTE XXVI	
	NOTE XXVII	
	NOTE XXVIII	
	NOTE XXIX	
	NOTE XXX	

503799

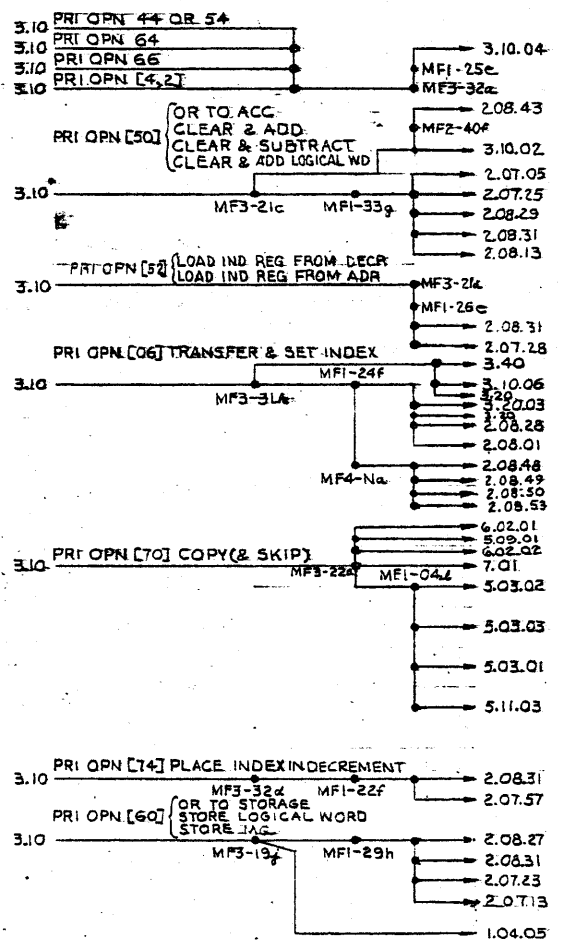
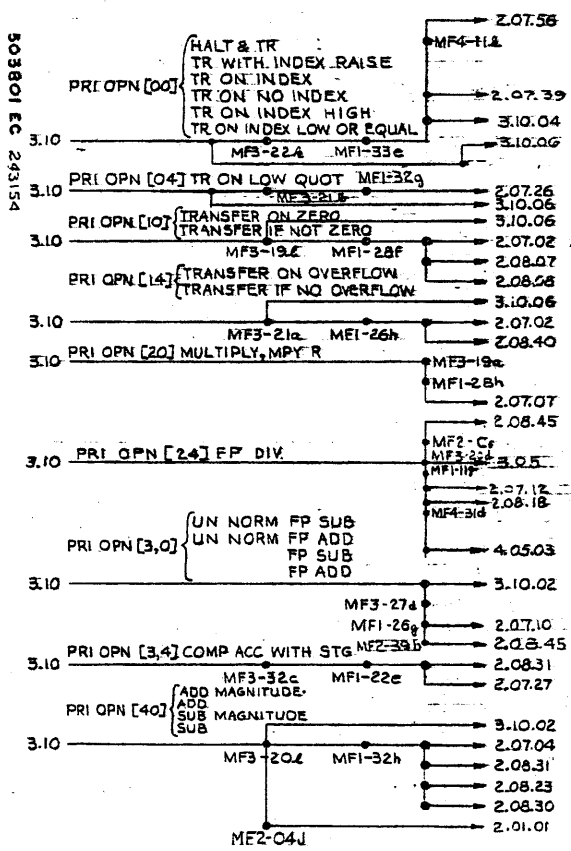


(NUMERICAL VALUE) (20)(20) (20)(20) (21)(4) (21)(2) (1) (1)
 (FROM WAF REG 3.03) 1 1 2 2 3 3 4 4 5 5

WAS 104-366

STANDARD CODE	RELEASED FOR ISSUES	QTY.	503801
NONE	503627		
SHEET 1 OF 2			
DATE	CHANGE NO.		
6-6-55	51600K		
8-9-55	241476		
10-11-55	241701		
10-22-55	241905		
12-5-55	242135		
2-28-56	242399		
5-9-56	242716		
11-1-56	243154		

MASTER



PRIMARY OP DECODER

503801

NOTE: X PRINT TO ENG SPEC. 895297

SHEET 1 OF 2 3.10.01

REFER TO S.F.I.

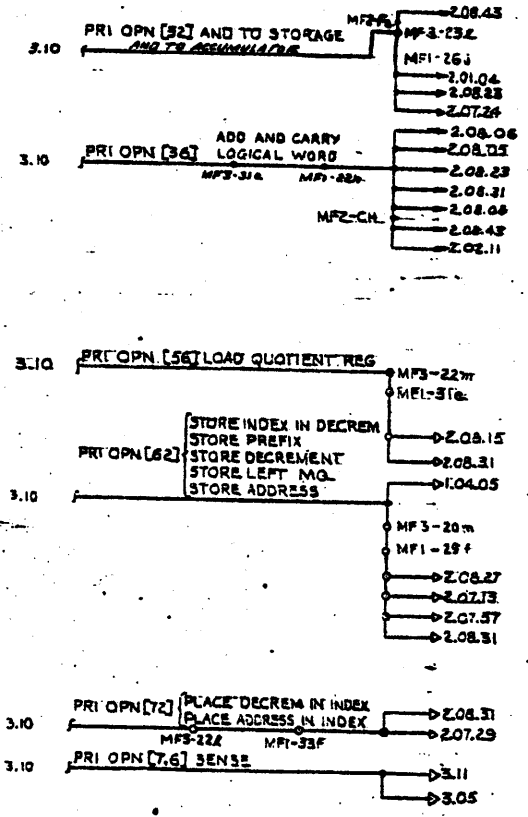
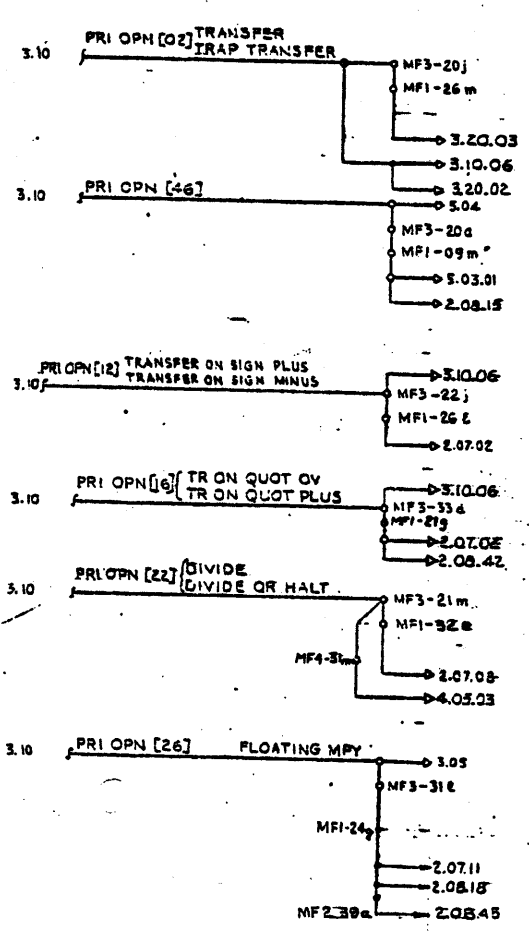
MATERIAL SPECIFICATION	NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
CASE DEPTH		DECIMALS & 000	CONCENTRIC WITHIN	NOTE II	MACH. ELECTRONIC ANALYTICAL
HARDNESS		FRACTIONS & 1/64	FLAT WITHIN	NOTE III	CONTROL UNIT MODEL 704
SURFACE TREATMENT		ANGLES & 2°	PARALLEL WITHIN	NOTE IV	NAME SYSTEM DIAGRAM
	SPEC. NO. TECH. RESEARCH APPR. DATE	CORNERS OUTSIDE	STRAIGHT WITHIN	NOTE V	3.10.01
		BROKEN INSIDE	SQUARE WITHIN	NOTE VI	DRAW. JAP-7-20-54 SCALE: NONE
					CHECK INT 5:00-05 TRAC A.M. 2-5-55
					APPRO. < 5:00-05 CHECK WAL 2:15-55

108209 503801

WAS 104-316 B

REVISION	DATE	BY	503802
ENGINE	3/10/61		
SHEET 2 OF 2			
DATE	CHANGED BY		
3-21-61	STB/OK		
3-21-61	STB/OK		
4-20-61	STB/OK		
5-23-61	STB/OK		

503802 EC 242742 B



PRIMARY OP DECODER

503802

NOTE
 X PRINT TO ENG
 SPEC. 295291

NOTE
 FOR CIRCUIT, SEE SUB CNL 3.10.02

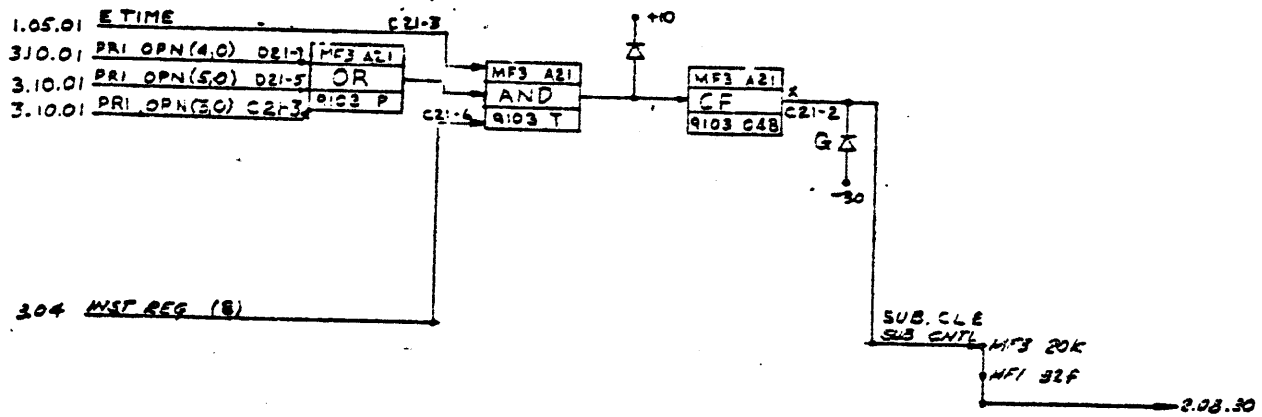
3.10.01
 SHEET 2 OF 2

REFER TO SFL

INTERNATIONAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		NOTE 1		INTERNATIONAL BUSINESS MACHINES CORP.	
DATE DESIGNED		DIMENSIONS & DIA		CONCENTRIC WITHIN		TIT. AIR. HEADLINE NOTE 2		DRAWN ELECTRONIC ANALYTICAL	
HARDNESS		FRACTIONS & 1/16		FLAT WITHIN		NOTE 3		CONTROL UN. 1 0000 704	
SURFACE TREATMENT		ANGLES & 0°		PARALLEL WITHIN		NOTE 4		NAME SYSTEM DIAGRAM	
SPEC. NO.		CORNERS & 0.015		STRAIGHT WITHIN		NOTE 5		DRAWN 3-10-61	
MATERIAL		CORNERS & 0.015		STRAIGHT WITHIN		NOTE 6		SCALE NONE	
FINISH		CORNERS & 0.015		STRAIGHT WITHIN		NOTE 7		CHECK UNIT 3-23-61	
FINISH		CORNERS & 0.015		STRAIGHT WITHIN		NOTE 8		CHECK UNIT 3-23-61	
FINISH		CORNERS & 0.015		STRAIGHT WITHIN		NOTE 9		CHECK UNIT 3-23-61	

503802

503803 EC 241563



SUBTRACT - CONTROL

3.10 02

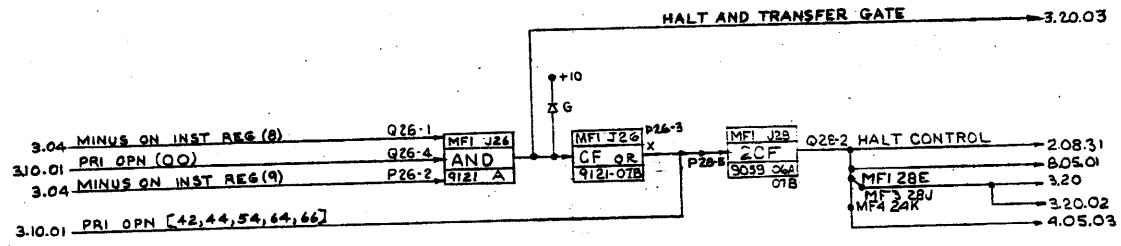
WAS 104-3170

STANDARD CODE	RELEASE P/W ISSUE	QTY.
NONE	503627	

503804

DATE	CHANGE NO.
6-6-55	51600K
11-1-56	243154

503804 EC 243154



HALT CONTROL

3.10.04

503804

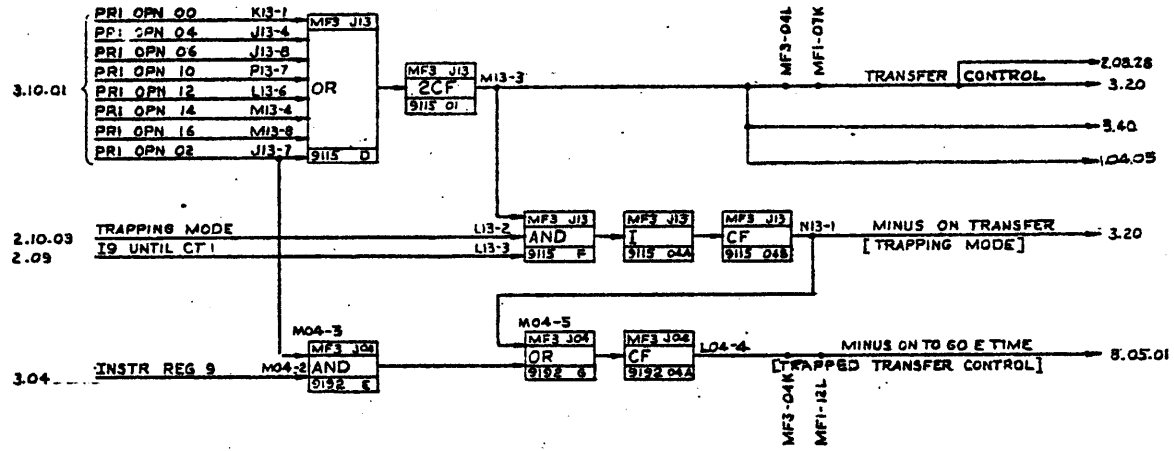
NOTE X PRINT TO ENG. SPEC. 895291

MATERIAL SPECIFICATION NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
	DECIMALS & ZEROS	CONCENTRIC WITHIN	TOT. IND. READING NOTE II	BACK ELECTRONIC ANALYTICAL
CASE DEPTH	FRACTIONS & 1/16"	FLAT WITHIN	NOTE III	CONTROL UNIT MOD. 704
HARDNESS	ANGLES & °	PARALLEL WITHIN	NOTE IV	NAME SYSTEM DIAGRAM 3.10.04
SURFACE TREATMENT	CORNERS RAY BR BROKEN INSIDE	STRAIGHT WITHIN	NOTE V	DRAW TAP 6-30.06 SCALE
	SPIC. NO. TRK. REMOVAL DATE	SQUARE WITHIN	NOTE VI	CHECK VMT 5-23-55 TRAC. PKM 11-6-55
				APPROV. 5-23-55 CHECK SHS 11-7-55

503804

WXS 12.4-3176
 STANDARD NONE
 RELEASED PER ALLEN
 ETC.
503805
 DATE 0-0-55 51600K
 5-24-55 241602
 10-11-55 241701
 3-31-56 24318 E

503805 EC243152



TRAPPING CONTROL

503805

NOTE
 X PRINT TO ENG
 SPEC. 895231

3.10.06

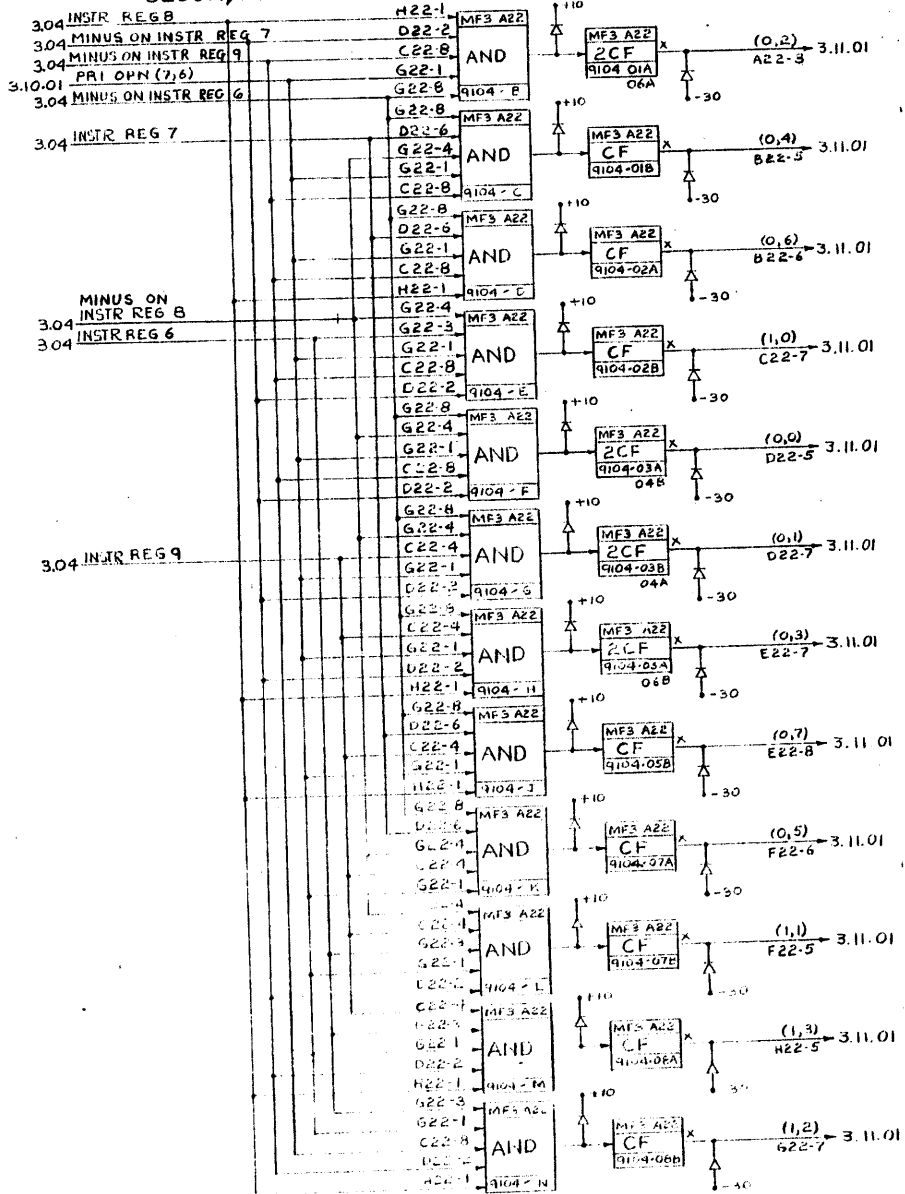
503805

INTERNATIONAL SPECIFICATION	IS 1	TOLERANCES UNLESS OTHERWISE SPECIFIED	ALLOCATION NOTATION	NOTE 1	INTERNATIONAL BUSINESS MACHINES CORP.
	IS 2			NOTE 2	
CASE FORM	IS 3	FRACTIONS 1/8 IN	FLAT TOP	NOTE 3	IBM ELECTRONIC ANALYTICAL
	IS 4			NOTE 4	
NAMES	IS 5	ANGLES 30°	PARALLEL WITH	NOTE 5	CENTRAL UNIT
	IS 6			NOTE 6	
SERIES IDENTIFICATION	IS 7	CONTOUR	SYMBOLS	NOTE 7	MARKING DIAGRAM
	IS 8			NOTE 8	
	IS 9			NOTE 9	
	IS 10			NOTE 10	
	IS 11			NOTE 11	
	IS 12			NOTE 12	

503806

SECONDARY OPERATION DECODER

3.11



503806 EC 51600K

NOTE: PRINT TO ENGS. SEC 595291

503806

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

503806 EC 51600K

NATIONAL SPECIFICATION NO.		TRANSMISSION SYMBOLS		ALPHABET WITHIN	
CASE ORIGIN	REVISIONS	CHARACTERS 1 TO 8	CHARACTERS 9 TO 10	CHARACTERS 11 TO 12	CHARACTERS 13 TO 14
MANUFACTURE					
MODIFICATION					
REVISIONS					
TECHNICAL					
APPROVAL					

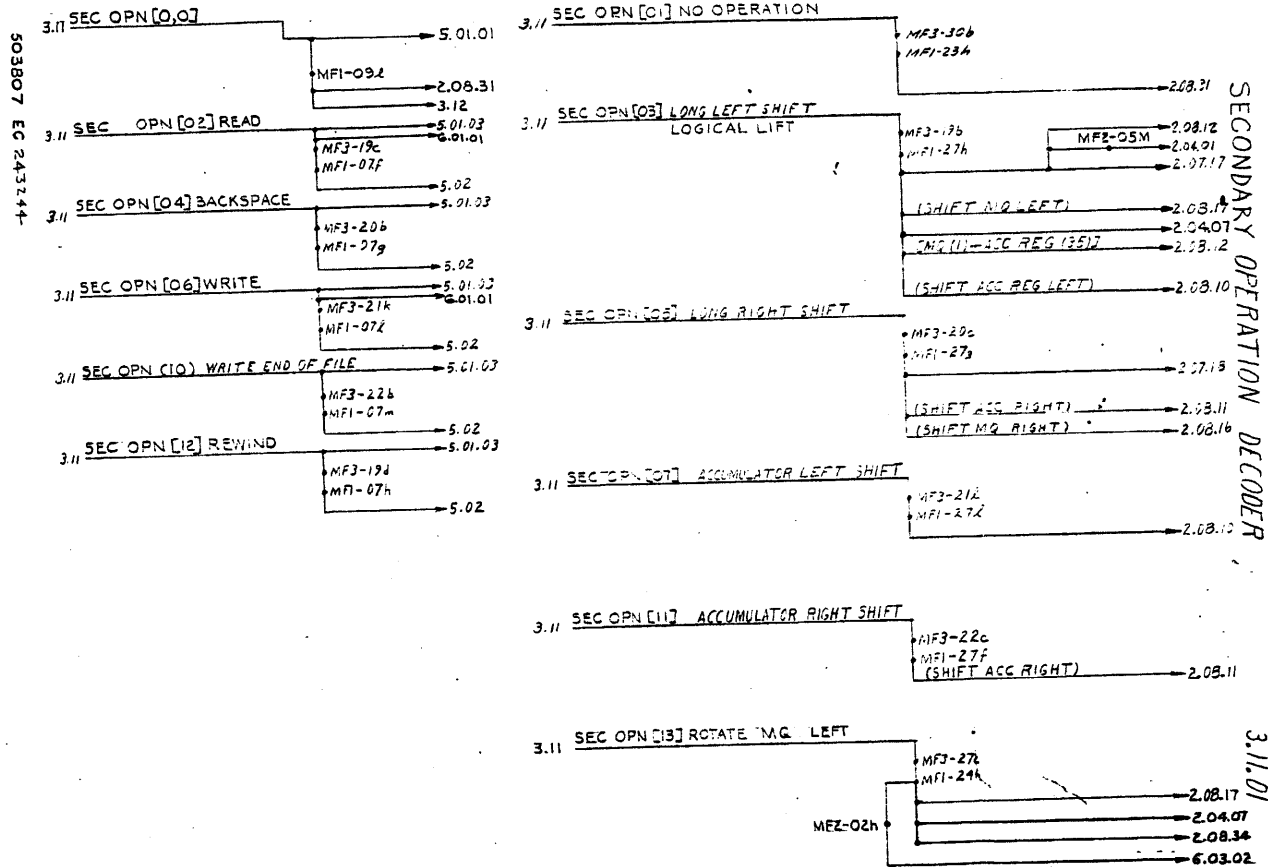
PAPER NO.		PAPER NO.		PAPER NO.	
CHARACTERS 1 TO 8	CHARACTERS 9 TO 10	CHARACTERS 11 TO 12	CHARACTERS 13 TO 14	CHARACTERS 15 TO 16	CHARACTERS 17 TO 18

INTERNATIONAL BUSINESS MACHINES CORP.	
DATE	DESCRIPTION
11-15-55	REVISION 1
12-15-55	REVISION 2
1-15-56	REVISION 3
2-15-56	REVISION 4
3-15-56	REVISION 5
4-15-56	REVISION 6
5-15-56	REVISION 7
6-15-56	REVISION 8
7-15-56	REVISION 9
8-15-56	REVISION 10
9-15-56	REVISION 11
10-15-56	REVISION 12
11-15-56	REVISION 13
12-15-56	REVISION 14
1-15-57	REVISION 15
2-15-57	REVISION 16
3-15-57	REVISION 17
4-15-57	REVISION 18
5-15-57	REVISION 19
6-15-57	REVISION 20
7-15-57	REVISION 21
8-15-57	REVISION 22
9-15-57	REVISION 23
10-15-57	REVISION 24
11-15-57	REVISION 25
12-15-57	REVISION 26
1-15-58	REVISION 27
2-15-58	REVISION 28
3-15-58	REVISION 29
4-15-58	REVISION 30
5-15-58	REVISION 31
6-15-58	REVISION 32
7-15-58	REVISION 33
8-15-58	REVISION 34
9-15-58	REVISION 35
10-15-58	REVISION 36
11-15-58	REVISION 37
12-15-58	REVISION 38
1-15-59	REVISION 39
2-15-59	REVISION 40
3-15-59	REVISION 41
4-15-59	REVISION 42
5-15-59	REVISION 43
6-15-59	REVISION 44
7-15-59	REVISION 45
8-15-59	REVISION 46
9-15-59	REVISION 47
10-15-59	REVISION 48
11-15-59	REVISION 49
12-15-59	REVISION 50

WAS 704-3109

STANDARDS CODE NONE
 RELEASED FOR ASSEMBLY QTY 503807

DATE CHANGE NO
 6-6-55 51000K
 3-9-55 241172
 3-1-55 241058
 4-25-55 241211



SECONDARY OPERATION DECODER

503807

NOTE
 X-PRINT TO ENG.
 SPEC 695291

REFER TO S.F.I.

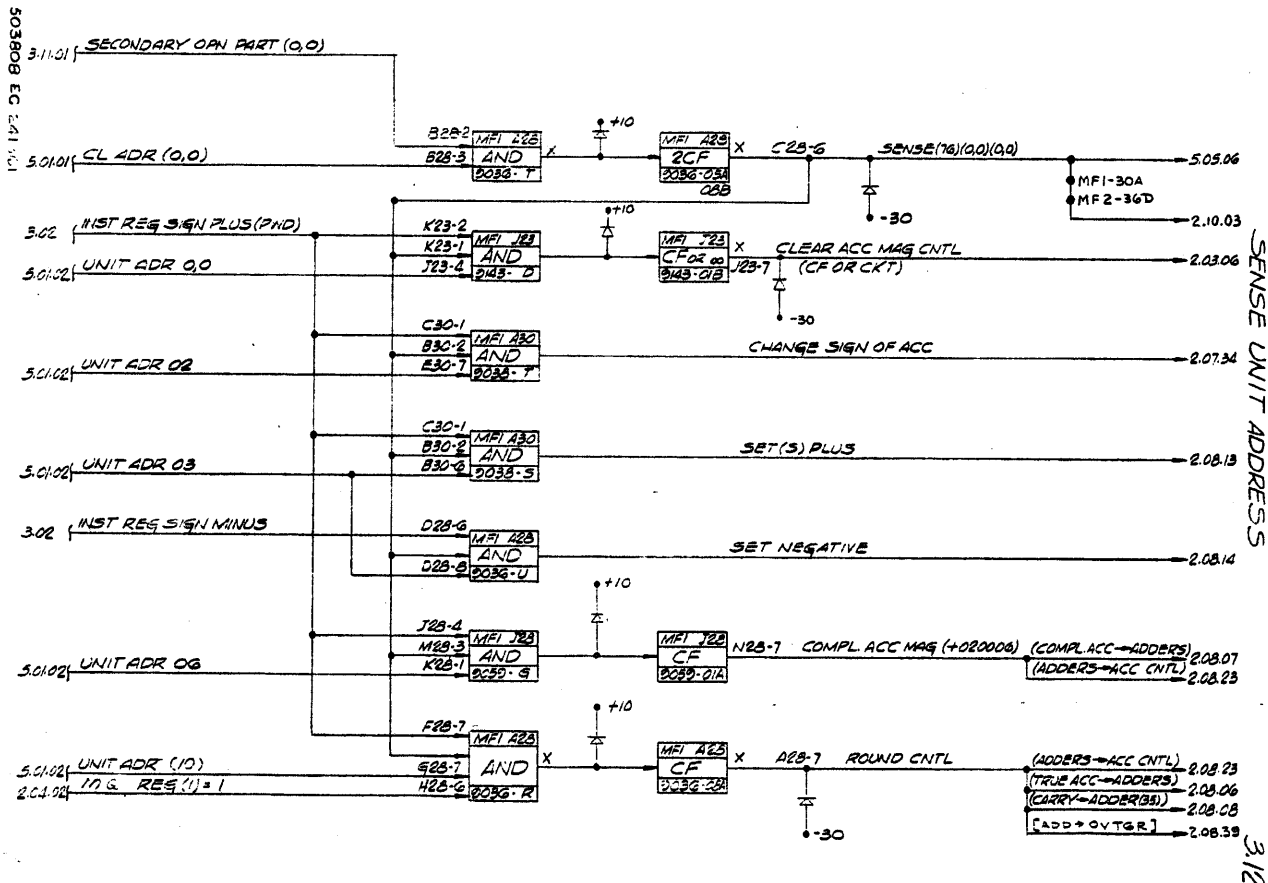
MATERIAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		NOTE I		INTERNATIONAL BUSINESS MACHINES CORP.	
		DECIMALS & 008		CONCENTRIC WITHIN		TUT. UNO. READING NOTE II		BACK ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 704	
CASE DEPTH		FRACTIONS & 1/64		FLAT WITHIN		NOTE III		NAME SYSTEM DIAGRAM	
HARDNESS		ANGLES & °		PARALLEL WITHIN		NOTE IV		3.11.01 SHEET 3 OF 3	
SURFACE TREATMENT		CORNERS MAY BE BROKEN		STRAIGHT WITHIN		NOTE V		DRAW. J.A.P. 7-20-54 SCALE	
		INSIDE		SQUARE WITHIN		NOTE VI		CHECK J.M.T. 12-19-52 TRAC 1/87 9-1-54	
								APPRO. I.E.K. 9-20-53 CHECK W.A.L. 9-1-54	

503807

WAS 704-3174

STANDARD CODE	RELEASED FOR ASSEMBLY	QTY.	503808
NONE	503827		

DATE	CHANGE NO.
6-8-55	51600K
8-9-55	2-1+72
10-13-55	241B61



503808

NOTE
 X PRINT TO ENG SPEC.
 B95291.

REFER TO S.F.I.

MATERIAL SPECIFICATION NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
	DECIMALS ± .005	CONCENTRIC WITHIN	TOT. IND. READING NOTE II	MACH. ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 704
CASE DEPTH:	FRACTIONS ± 1/64	PLAT WITHIN	NOTE III	NAME SYSTEM DIAGRAM
HARDNESS:	ANGLES ± 2'	PARALLEL WITHIN	NOTE IV	SCALE 3.12
SURFACE TREATMENT:	CORNERS OUTSIDE	STRAIGHT WITHIN	NOTE V	DRAW. GRMO-8-54 SCALE NONE
	RAYS BE BROKEN INSIDE	SQUARE WITHIN	NOTE VI	CHECK JMT 5-27-58 TRAC GSD/11-55
				INCHES

503808

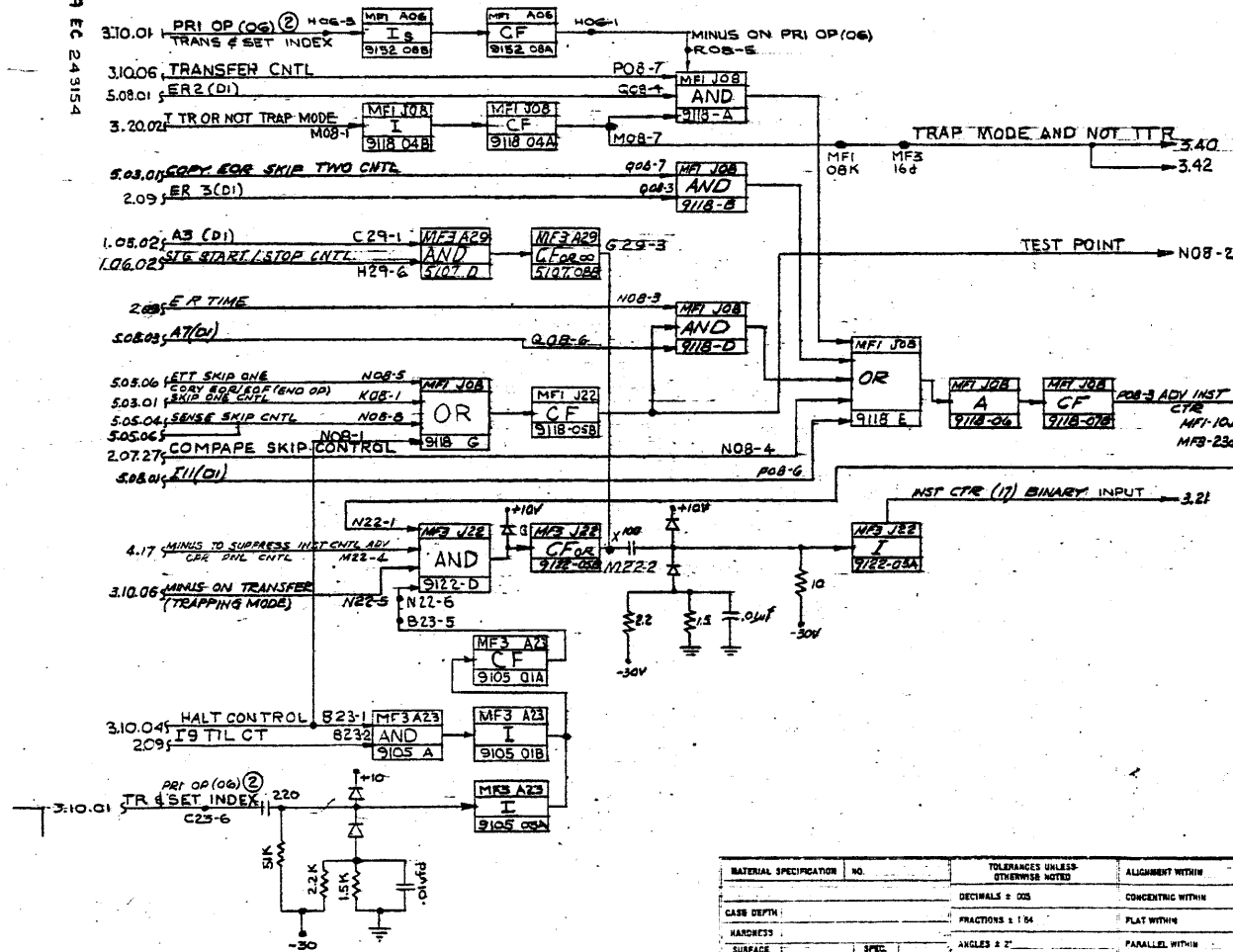
WAS 104-3153

STANDARD CODE	RELEASED FOR ASSEMBLY	QTY.
NONE	503627	1

503809

DATE	CHANGE NO.
6-6-55	51600K
6-27-55	241276
8-17-55	241861
9-14-55	241651
10-11-55	241701
10-27-55	241842
12-5-55	242138
1-19-56	242264
10-1-56	242762
11-1-56	243154

603809 EC 243154



ADVANCE INST COUNTER

503809

NOTE: PRINTED TO ENG. SPEC. 895291

520

REFER TO SFI.

MATERIAL SPECIFICATION	NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
CASH DEPTH:		DECIMALS ± .005	CONCENTRIC WITHIN	NOTE II	BACK ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 704
HARDNESS:		FRACTIONS ± 1/64	FLAT WITHIN	NOTE III	NAME SYSTEM DIAGRAM 3.20
SURFACE TREATMENT:		ANGLES ± 2°	PARALLEL WITHIN	NOTE IV	DRAW. JAP 17-20-54 SCALE
		CORNERS MAY BE BURRED	STRAIGHT WITHIN	NOTE V	CHECK JMT 5-22-55 TRAC JR 7-21-56
		INSIDE	SQUARE WITHIN	NOTE VI	APPROV. JIC 17-20-54 CHECK SMS 17-22-54

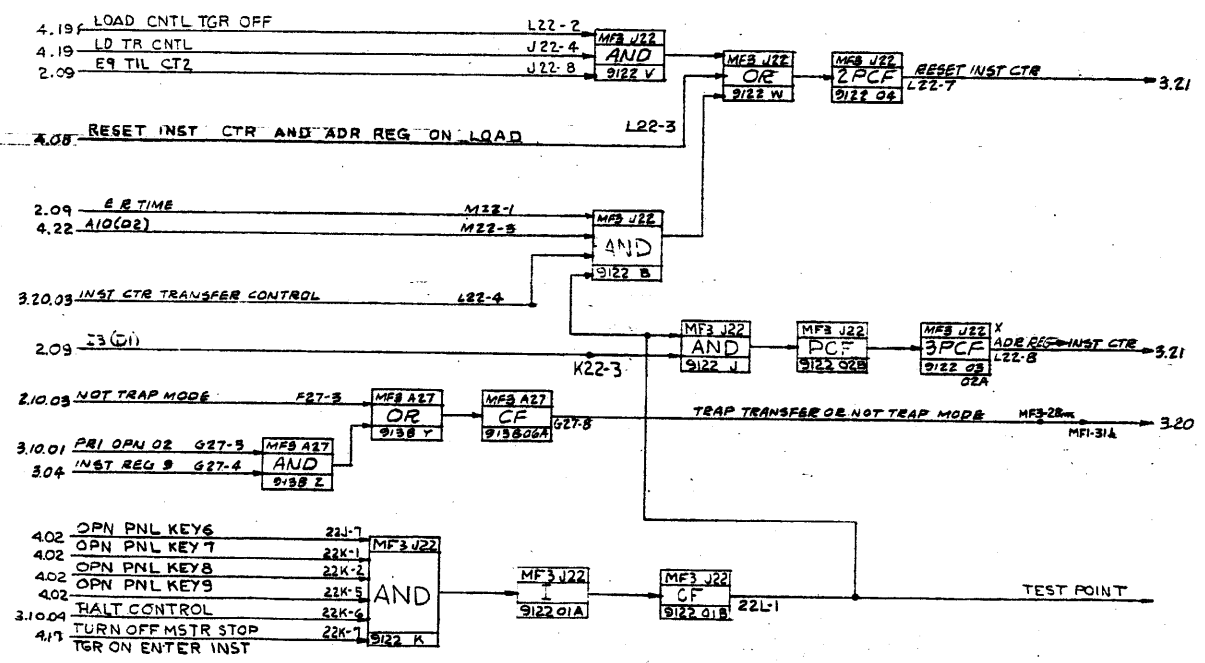
608209

WAS TO 4-3164

STANDARD CODE	RELEASED FOR ASSES	QTY.	503810
NONE	503627		
DATE	CHANGE NO.		
6-6-55	51600K		
7-2-55	241377		
8-16-55	241541		
1-1-56	241554		

503810 EC 241554

RESET INST CTR ADR SW-INST CTR



503810

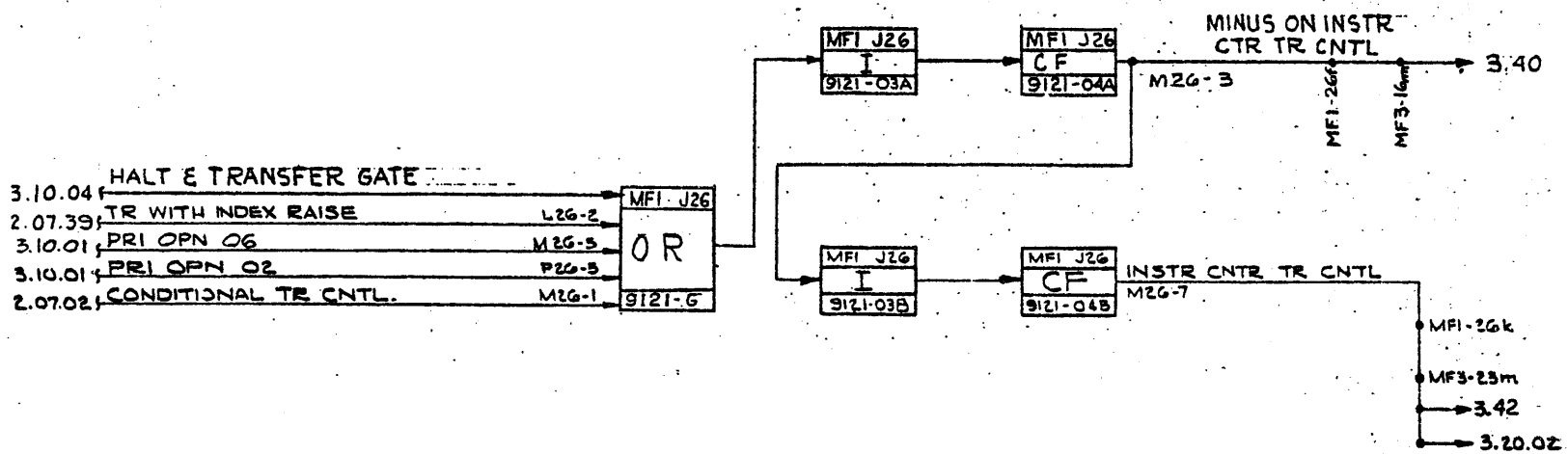
NOTE: X PRINT TO ENG SPEC B 95291

3.20.02

503810

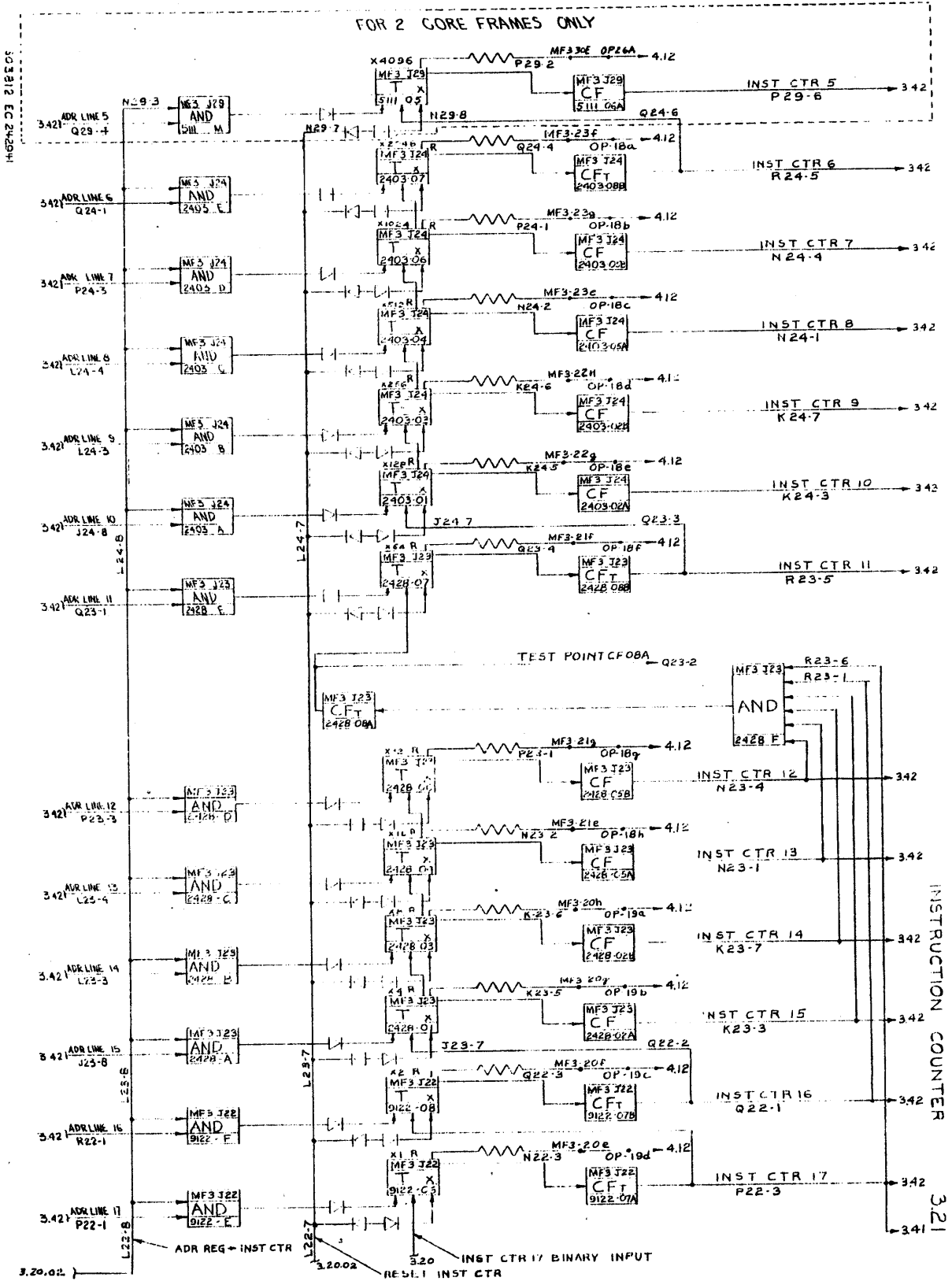
MATERIAL SPECIFICATION NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
CASE DEPTH	DECIMALS & 008	CONCENTRIC WITHIN	NOTE II	MARK: ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 704
HARDNESS	FRACTIONS & 1/64	FLAT WITHIN	NOTE III	NAME SYSTEM DIAGRAM
SURFACE TREATMENT	ANGLES & °	PARALLEL WITHIN	NOTE IV	3.20.02
	COPIERS MAY BE BROKEN	STRAIGHT WITHIN	NOTE V	DRAW: JAF 8-29-58 SCALE: NONE
		SQUARE WITHIN	NOTE VI	CHECK: JMT 5-2-58 TRAC: AH 2-1-58
				APPRO: CLK 5-2-58 CHECK: WAL 2-2-58

505811 EC 242841



INSTRUCTION COUNTER TRANSFER CONTROL

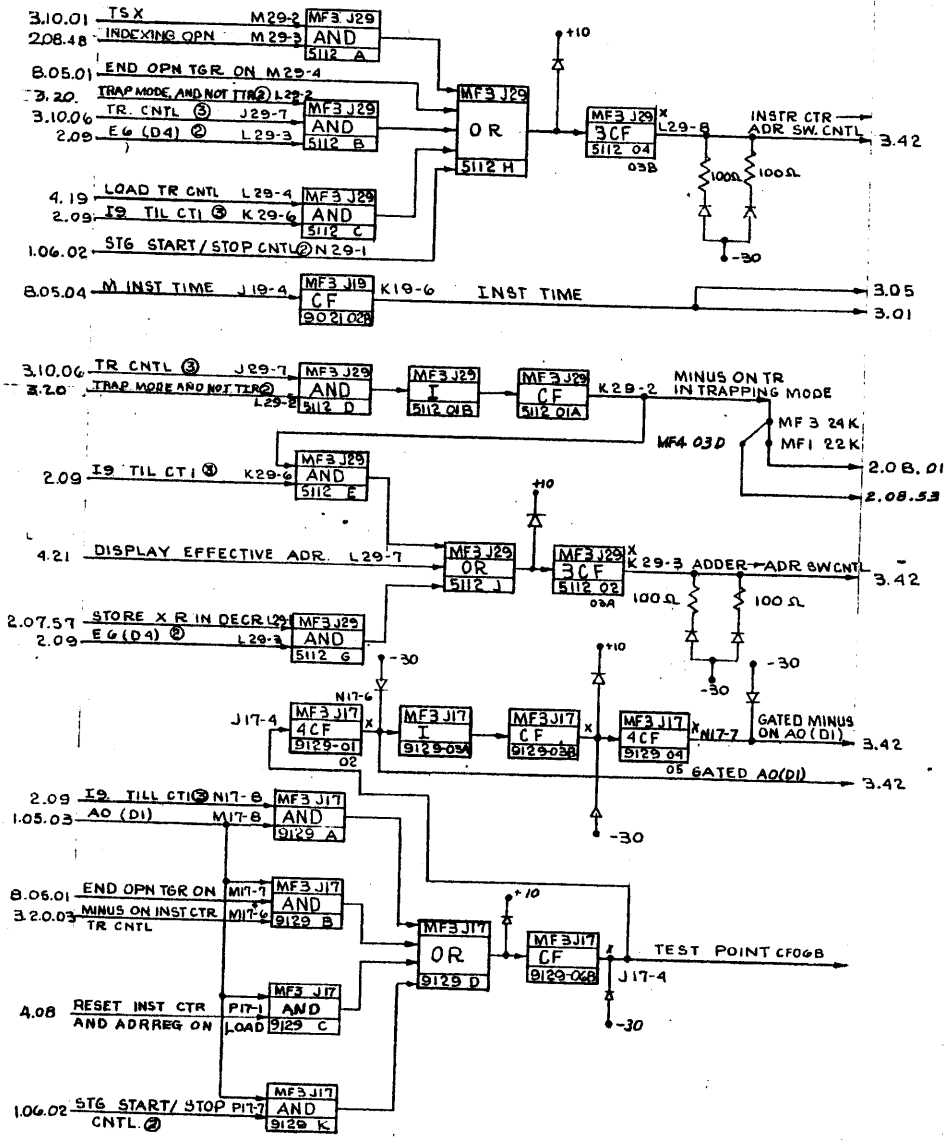
3.20.03



503813

ADDRESS SWITCH INPUT CONTROLS

3.40



503813 EC 242845

WAS 76-4-3167

REVISED 520427

503813

503813

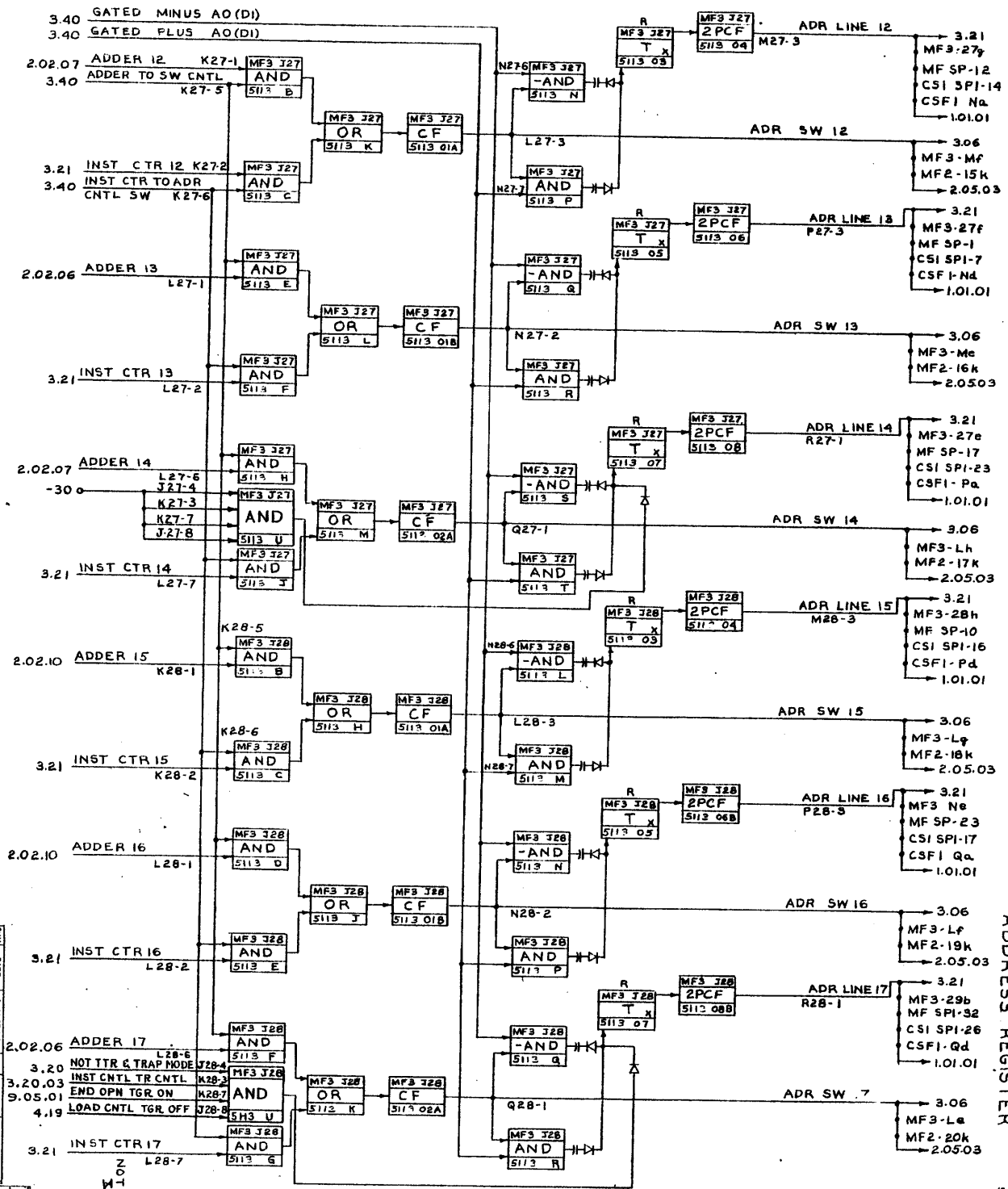
DATE	CHANGED BY	DATE	CHANGED BY	DATE	CHANGED BY
6-6-55	51800K	10-11-55	241701		
6-9-55	247326	12-5-55	241701		
6-17-55	241561	9-18-55	241701		
5-28-55	241783				

DATE	CHANGED BY	DATE	CHANGED BY
8-6-55	51800K	10-11-55	241701
6-9-55	247326	12-5-55	241701
6-17-55	241561	9-18-55	241701
5-28-55	241783		

DATE	CHANGED BY	DATE	CHANGED BY
8-23-55			
9-23-55			
5-23-55			
5-16-55			
5-16-55			
5-16-55			

INTERNATIONAL BUSINESS MACHINES CORP.
ELECTRONIC ANALYTICAL
CONTROL UNIT MODEL TO 4
SYSTEM DIAGRAM
3.40

503814



ADDRESS REGISTER

WAS 704-8108

SHEET 1 of 2

342

503814

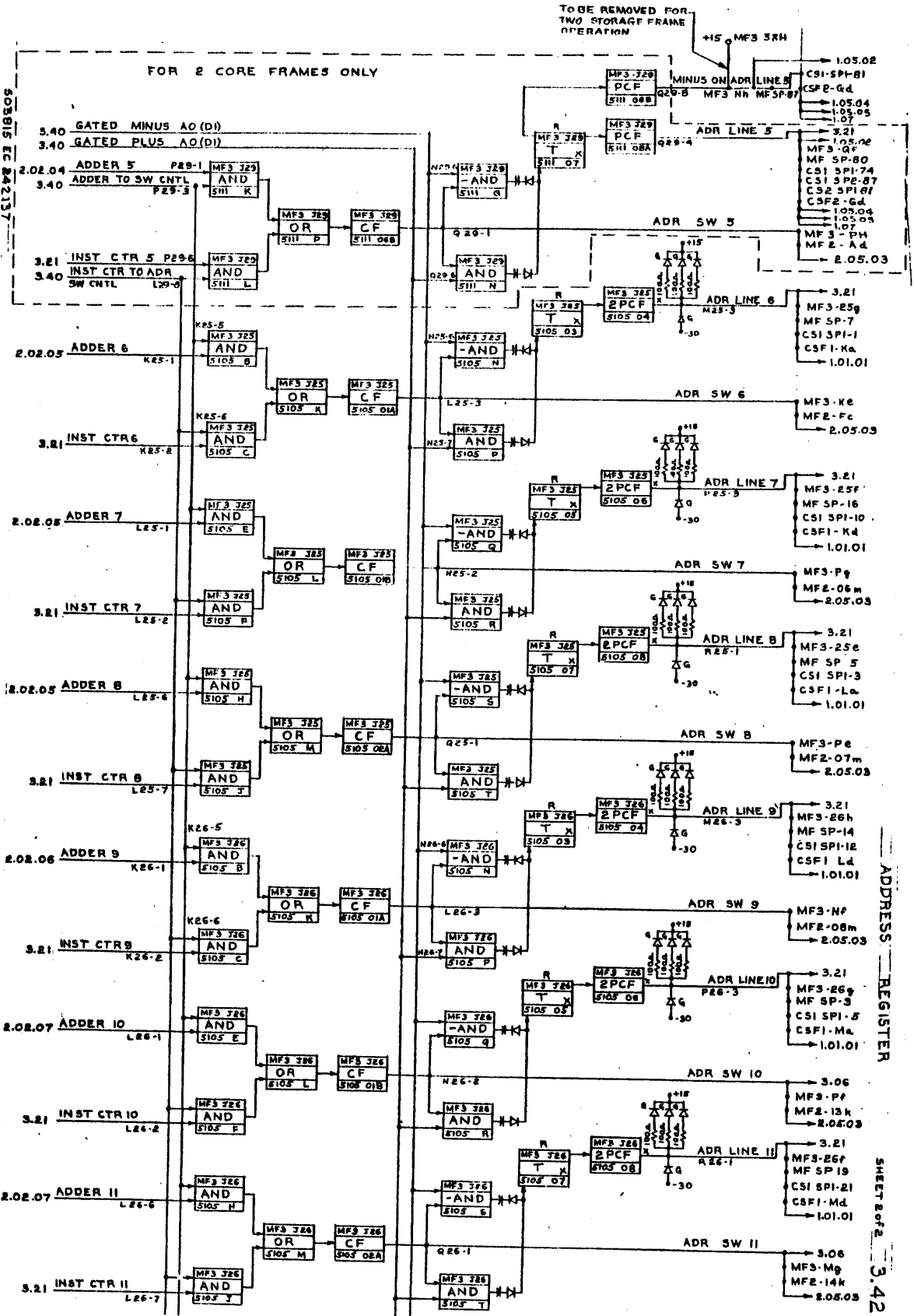
- 3.40 GATED MINUS AO(DI)
- 3.40 GATED PLUS AO(DI)
- 2.02.07 ADDER 12 K27-1 MF3 J27
- 3.40 ADDER TO SW CNTL AND 5113 B
- 3.21 INST CTR 12 K27-2 MF3 J27
- 3.40 INST CTR TOADR AND 5113 C
- 2.02.06 ADDER 13 L27-1 MF3 J27
- 3.21 INST CTR 13 L27-2 MF3 J27
- 2.02.07 ADDER 14 L27-5 J27-4 MF3 J27
- 30 K27-3 MF3 J27
- J27-8 MF3 J27
- 3.21 INST CTR 14 L27-7 MF3 J27
- 2.02.10 ADDER 15 K28-5 MF3 J28
- K28-1 MF3 J28
- 3.21 INST CTR 15 K28-2 MF3 J28
- 2.02.10 ADDER 16 L28-1 MF3 J28
- 3.21 INST CTR 16 L28-2 MF3 J28
- 2.02.06 ADDER 17 L28-6 MF3 J28
- 3.20 NOT ITR & TRAP MODE J28-4 MF3 J28
- 3.20.03 INST CNTL TR CNTL K28-3 MF3 J28
- 9.05.01 END OPN TGR ON M28-7 MF3 J28
- 4.19 LOAD CNTL TGR OFF J28-8 MF3 J28
- 3.21 INST CTR 17 L28-7 MF3 J28

NOTE
PRINT TO ENG SPEC.

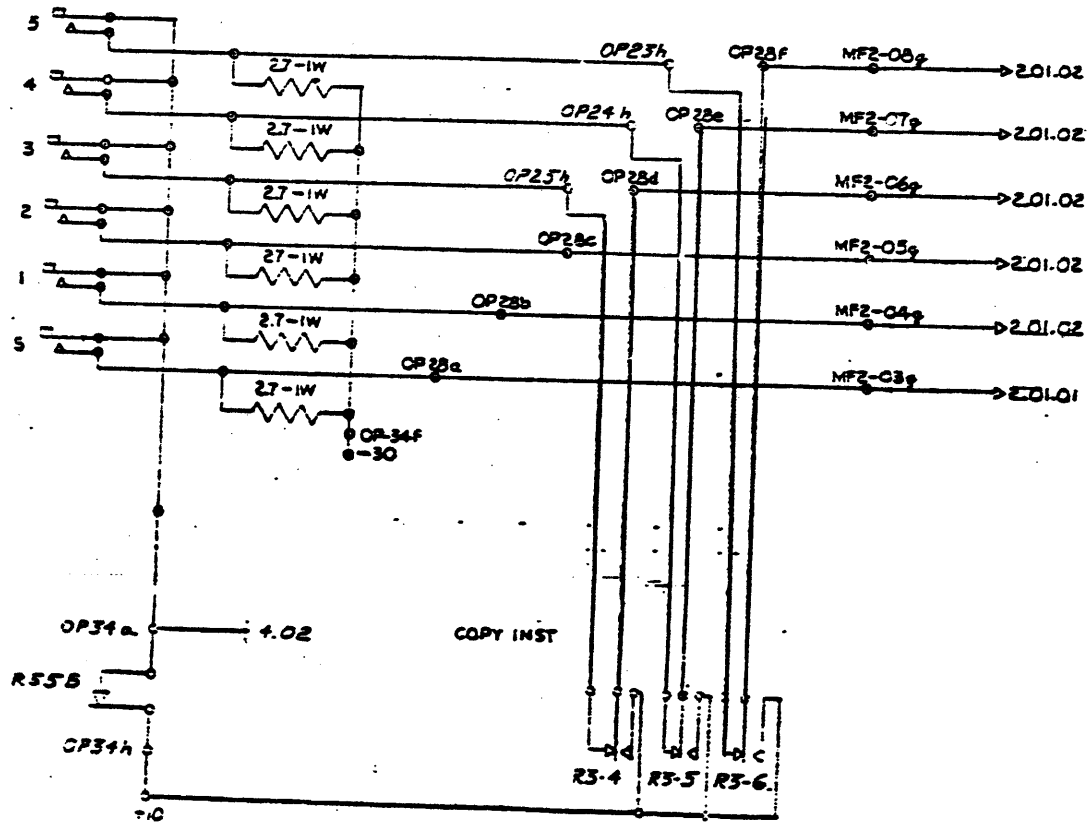
REV	DATE	CHANGE NO.	BY	CHKD
1	06-51	51900K		
2	07-28	51900C		
3	09-28	52144B		
4	08-28	52144C		

INTERNATIONAL BUSINESS MACHINES CORP.
NAME SYSTEM OF ADDRESS REGISTER

503814



503816EC 2/17/55



OP PNL ENTRY KEYS (5, 1 THRU 5)

4.01

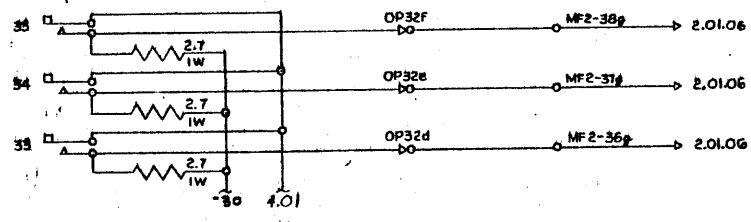
STANDARD RELEASE NONE
 DATE 503817
 CHG. NO. 503817
 DATE 10-25-55
 247745
 DATE 11-1-55
 243154

WAS 704-3216

503817

OP PNL ENTRY KEYS (6 THRU 35)

4.02



OPR PNL ENTRY KEY	OP PNL EDGE CONN	MAIN FRAME EDGE CONN	SYSTEMS DWG
32	32c	MF2-35g	2.01.06
31	32b	MF2-34g	2.01.06
30	32a	MF2-33g	2.01.06
29	31h	MF2-32g	2.01.06
28	31g	MF2-31g	2.01.06
27	31f	MF2-30g	2.01.06
26	31e	MF2-29g	2.01.06
25	31d	MF2-28g	2.01.06
24	31c	MF2-27g	2.01.06
23	31b	MF2-26g	2.01.06
22	31a	MF2-25g	2.01.06
21	30h	MF2-24g	2.01.06
20	30g	MF2-23g	2.01.03
19	30f	MF2-22g	2.01.03
18	30e	MF2-21g	2.01.03
17	30b	MF2-20g	2.01.02
16	30a	MF2-19g	2.01.02
15	29h	MF2-18g	2.01.02
14	29g	MF2-17g	2.01.02
13	29f	MF2-16g	2.01.02
12	29e	MF2-15g	2.01.02
11	29d	MF2-14g	2.01.02
10	29c	MF2-13g	2.01.02
9	29b	MF2-12g	2.01.02
8	29a	MF2-11g	2.01.02
7	28h	MF2-10g	2.01.02
6	28g	MF2-9g	2.01.02
(TO ENTERTSX)			
9	-	MF3-KG	3.20.02
8	-	MF3-KF	3.20.02
7	-	MF3-HH	3.20.02
6	-	MF3-HG	3.20.02

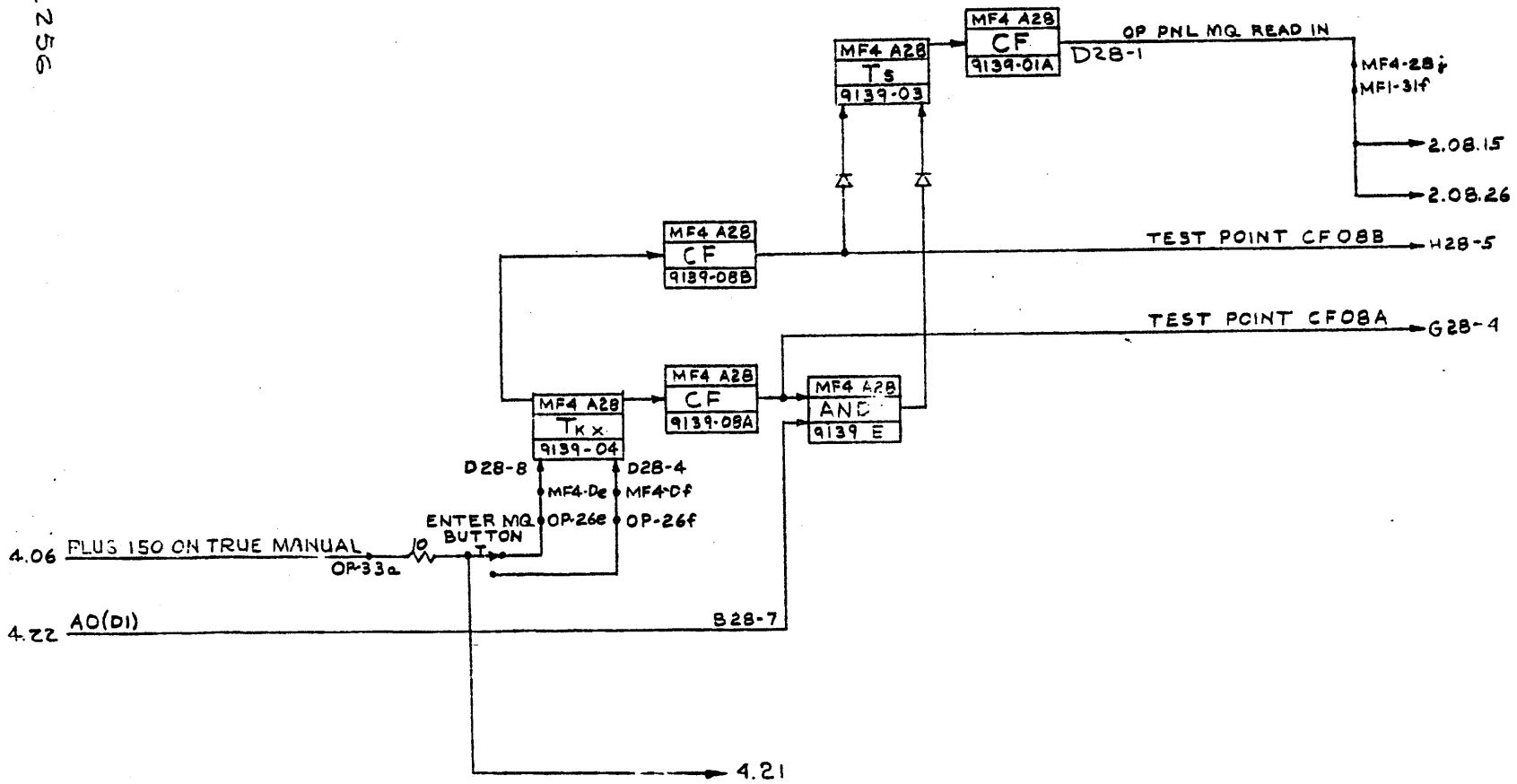
503817 E.C. 243154

NOTE
X PRINT TO ENG. SPEC.
84924

INTERNATIONAL BUSINESS MACHINES CORP.
 ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 704
 SYSTEM DIAGRAM
 DRAWING TITLE: TMS 1-4-55 SCALE: NONE
 DATE: 1-4-55
 DRAWN BY: J. J. ...
 CHECKED BY: ...
 APPROVED BY: ...
 PROJECT NO. 704-3216
 SHEET NO. 4.02
 TOTAL SHEETS 1-10-55

503817

503818 EC: 242256

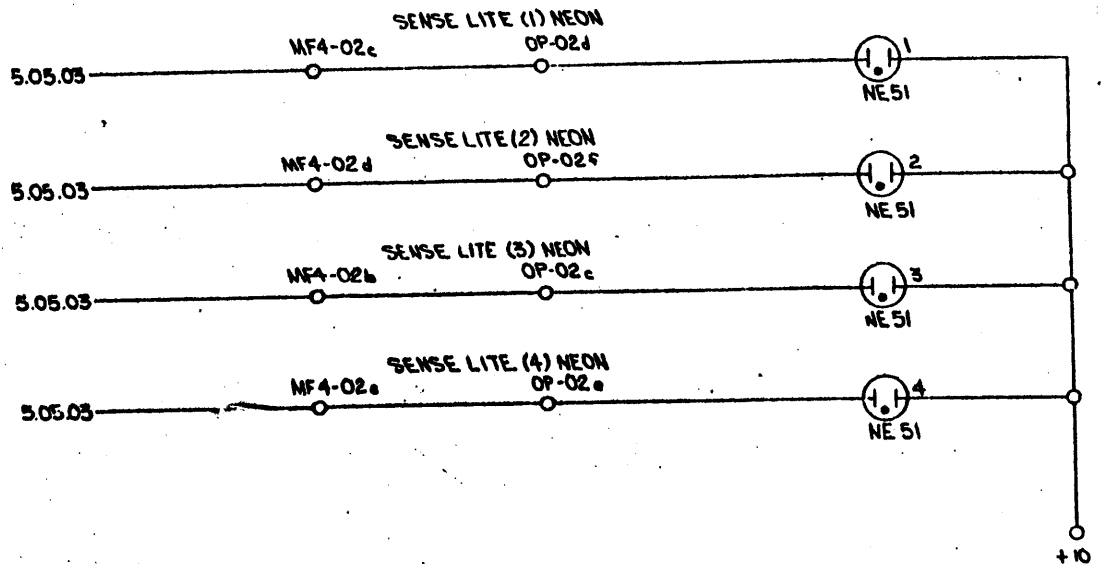
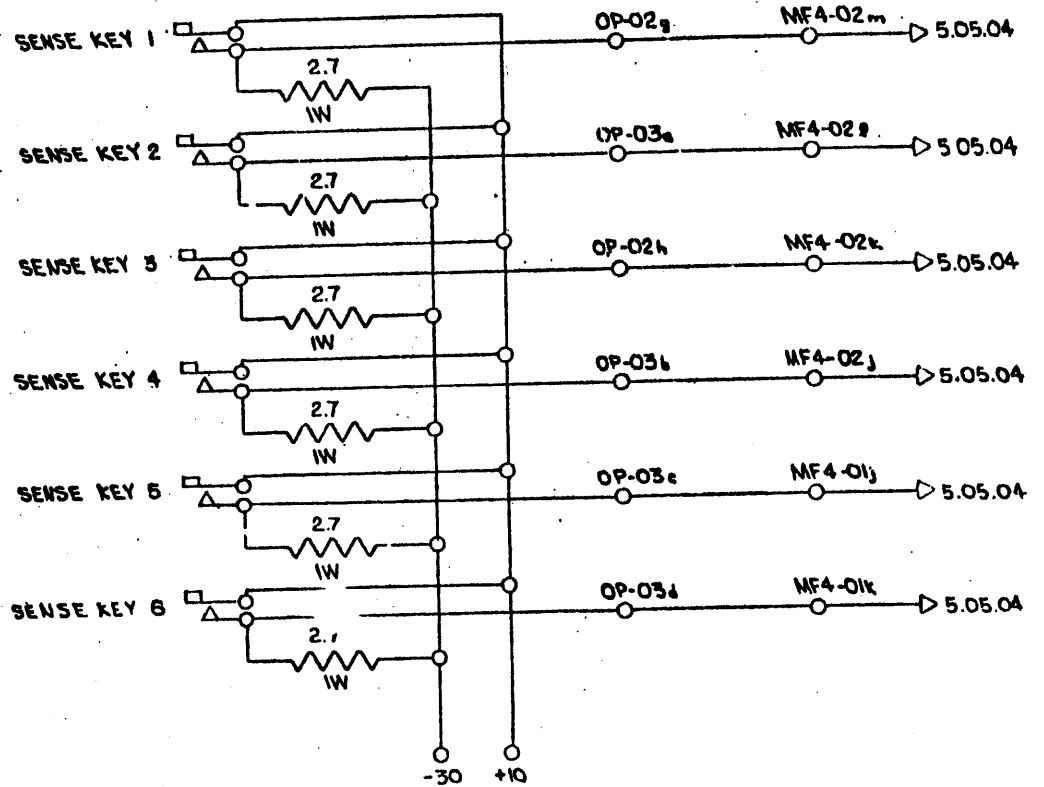


ENTER MG.

4.03

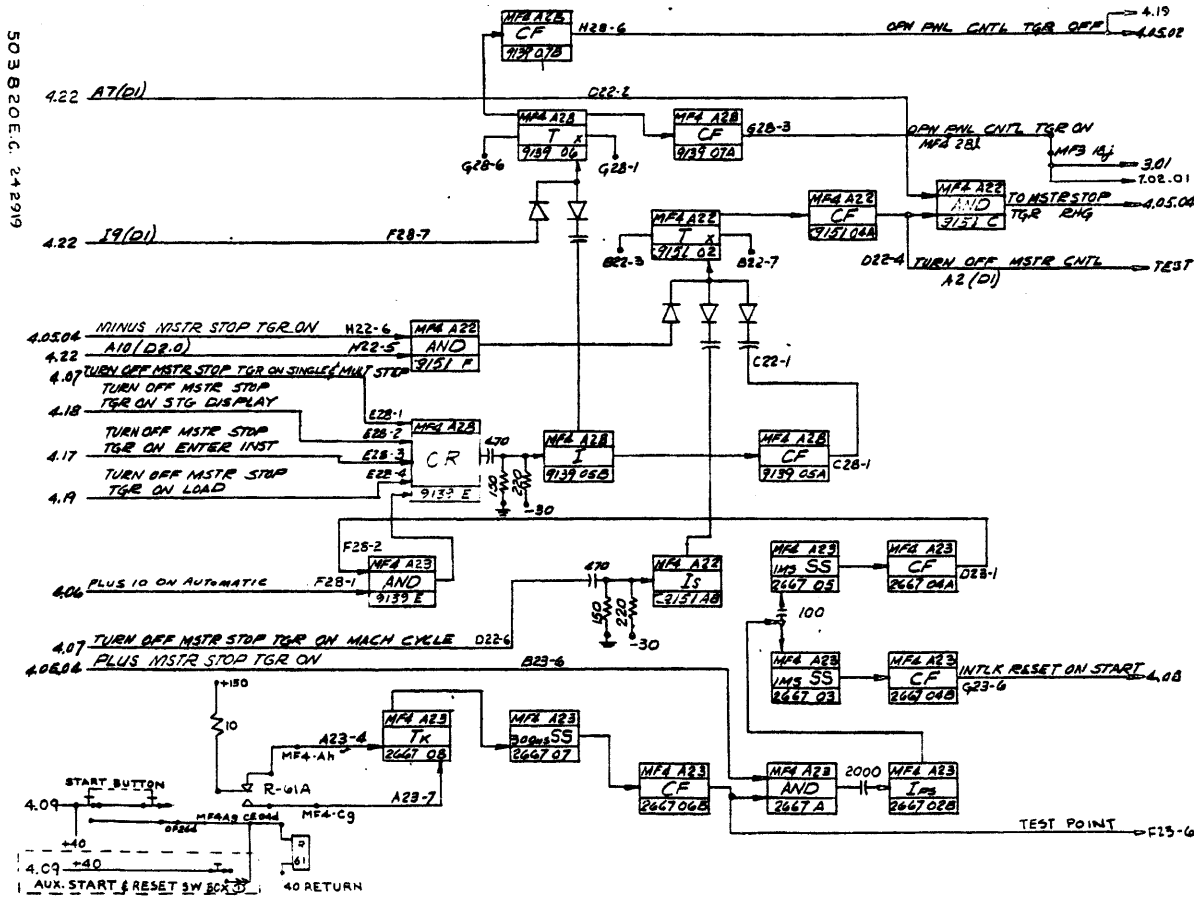
SENSE KEYS & LIGHTS

4.04



503 819 E.C. 21406 5

STANDARDS CODE	RELEASED FOR ASSES	QTY.	503820
NONE	503827		
SWS 784-3203			
DATE	CHANG. NO.		
8-9-55	241035		
9-15-55	241102		
3-23-56	242400		
2-28-56	242409		



503820 E.C. 242919

TURN OFF MSTR STOP TGR

4.05.01

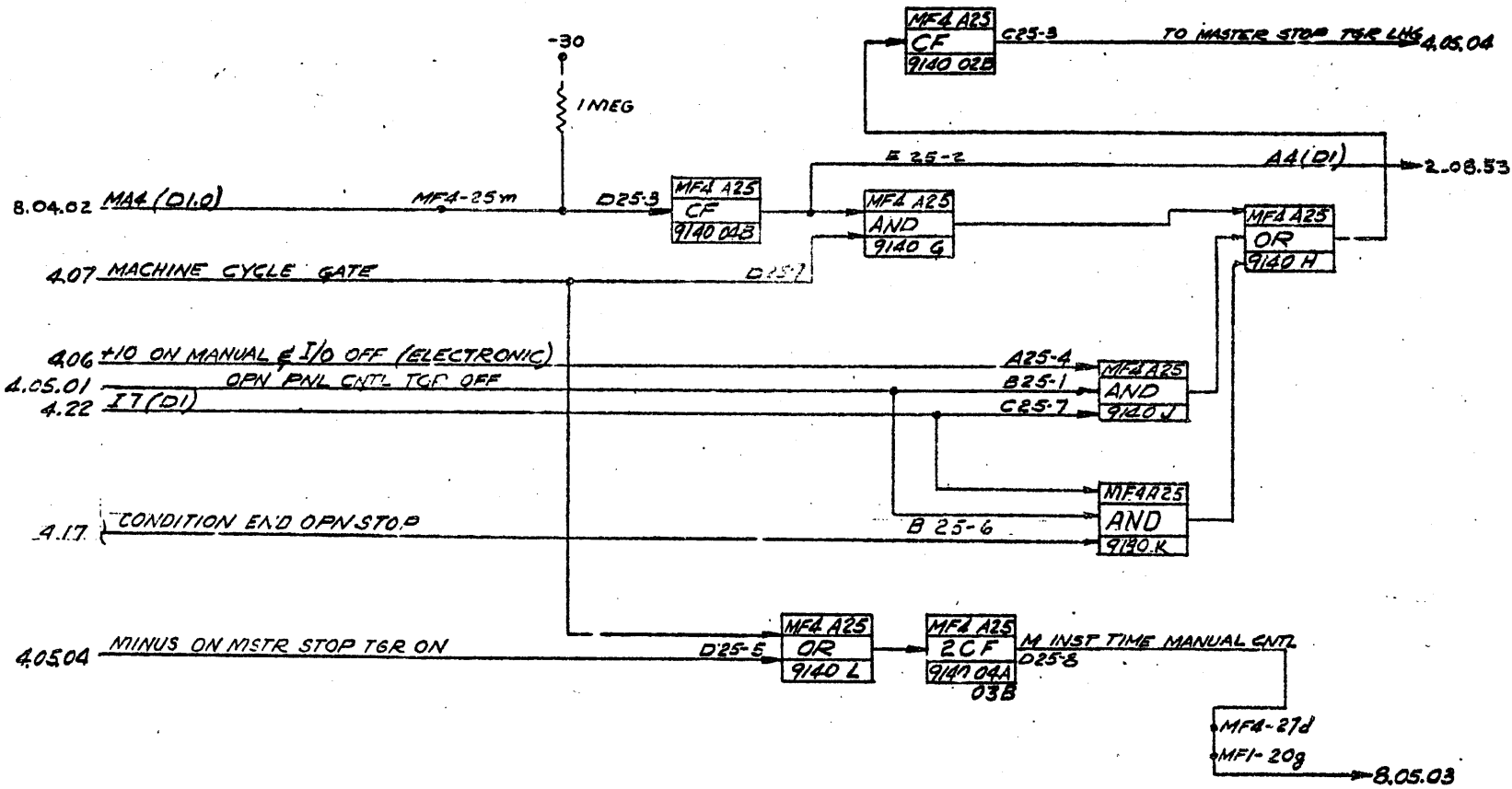
503820

NOTE:
X PRINT TO ENG SPEC 895291.

503820

INTERNATIONAL BUSINESS MACHINES CORP.	
ELECTRONIC ANALYTICAL	
CONTROL UNIT MODEL 704	
SYSTEM DIAGRAM	
4.05.01	
DATE: 1-15-56 SCALE:	
DRAWN BY: JMS	
CHECKED BY: R	
DATE: 8-17-55	
APPROVED BY: S-S-C	
CHECKED BY: SWS 8-19-55	

503821EC.242571

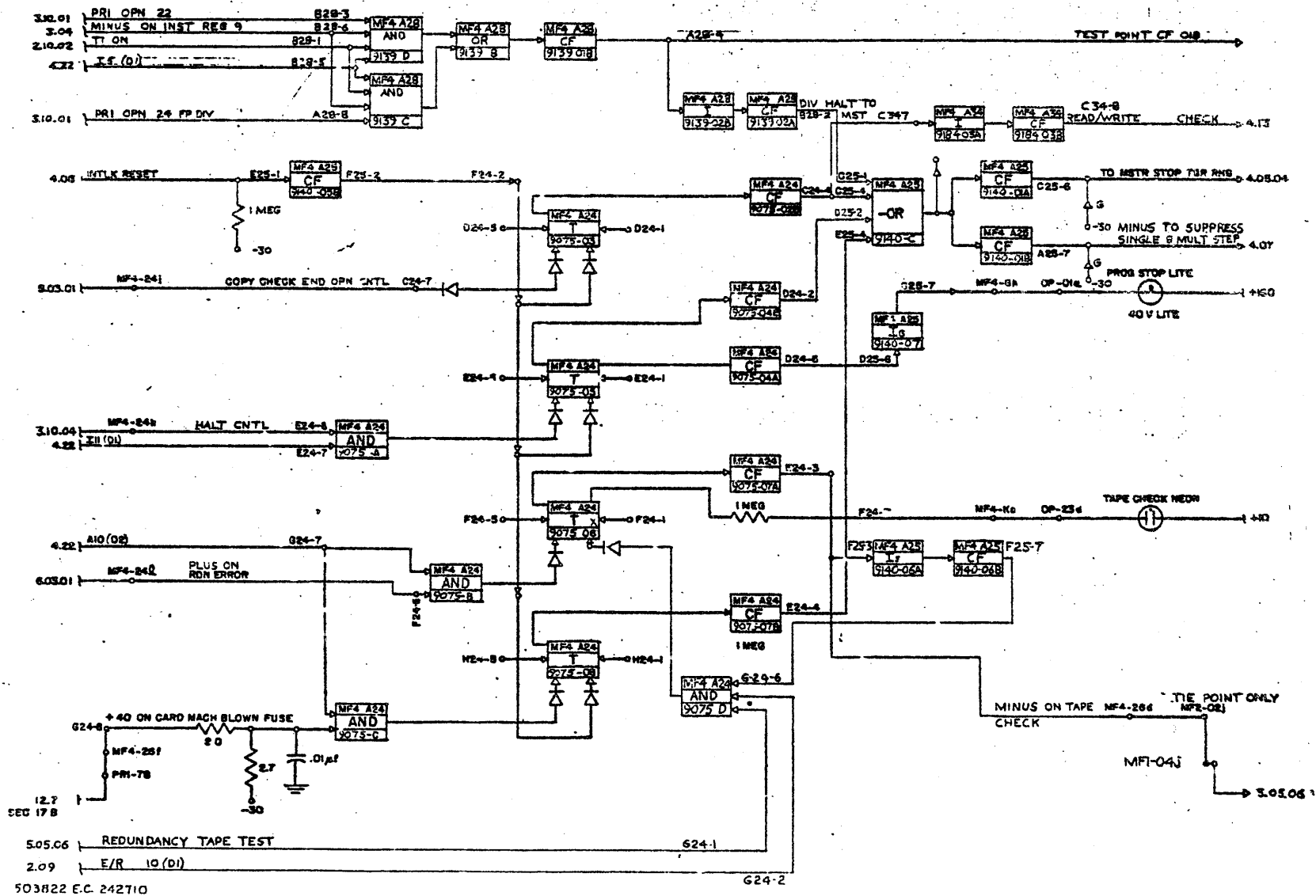


TURN ON MASTER STOP TGR

4.05.02

TURN ON MSTR STOP TGR ON CHECK STOP

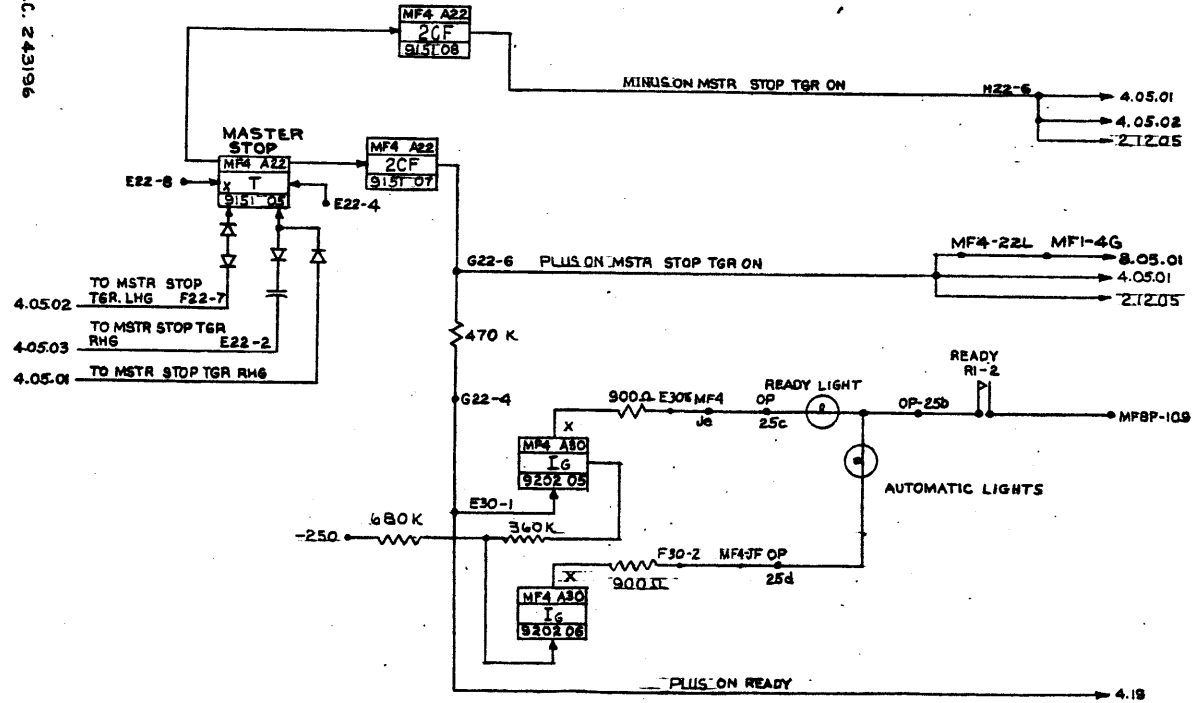
4.0503



WAS 704-3219

CODE	REVISED FOR ASSEMBLY	QTY.	503823
NONE	503027		
DATE	CHANGE NO.		
5-24-55	241065		
8-9-55	241478		
10-19-55	241902		
4-19-56	242580		
10-19-56	243196		

503823 E.C. 243196



MSTR STOP TGR & OUTPUTS

4.05.04

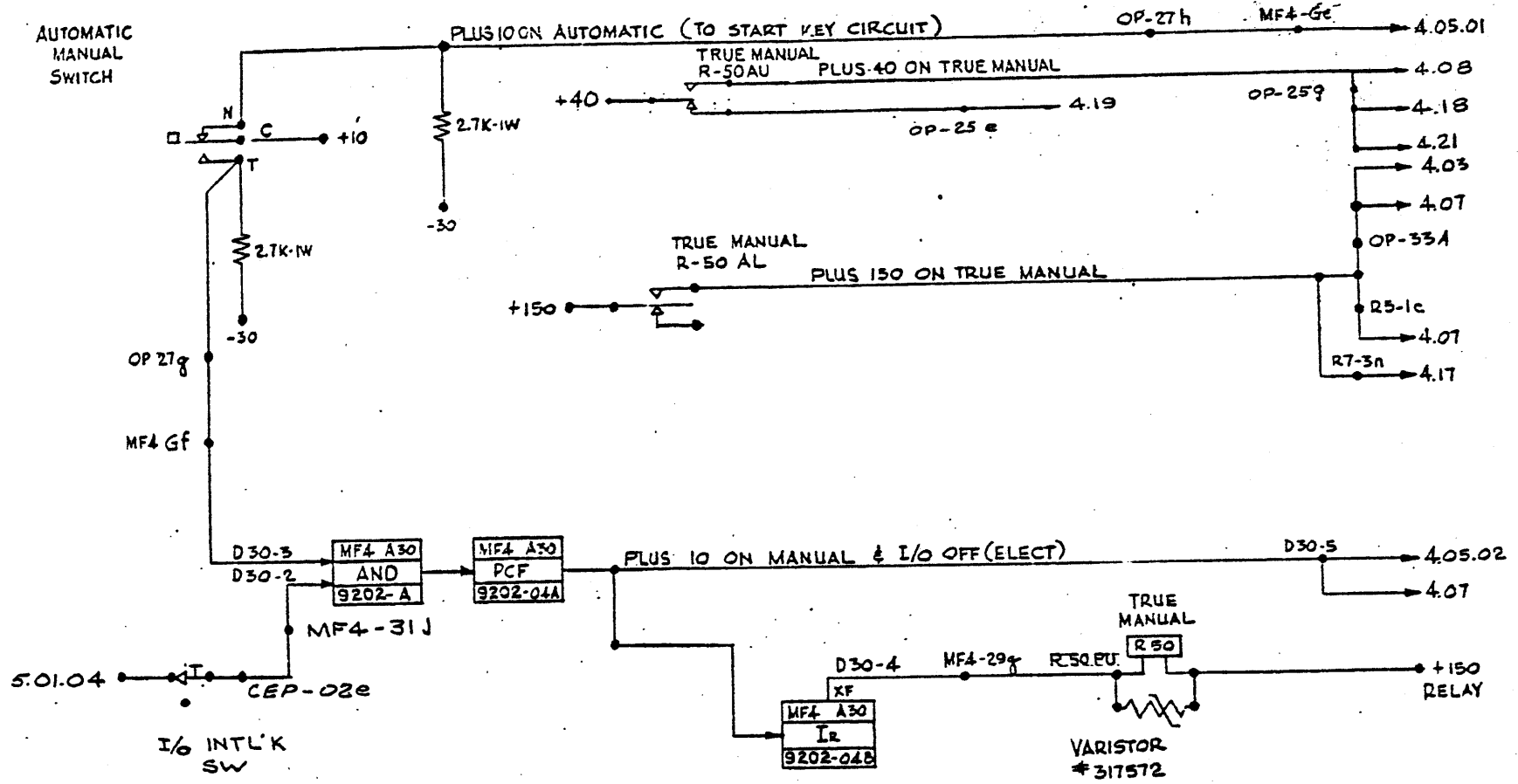
503823

NOTE
X PRINT TO ENG. SPEC.
895291

503823

MATERIAL SPECIFICATION		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		NOTE I		INTERNATIONAL BUSINESS MACHINES CORP.	
CAME DEPTH		DECIMALS ± .005		CONCENTRIC WITHIN		TOT. HGL. ALLOWANCE		BACK ELECTRONIC ANALYTICAL	
BARRICKS		FRACTIONS ± 1/16"		FLAT WITHIN		NOTE II		CONTROL UNIT MODEL 704	
SURFACE TREATMENT		ANGLES ± 2°		PARALLEL WITHIN		NOTE III		NAME SYSTEM DIAGRAM	
		CONCORD		STRAIGHT WITHIN		NOTE IV		4.05.04	
		OUTSIDE				NOTE V		DRAW TMS 2-18-55 SCALE:	
		INSIDE						CHECK TRAC DIM 2-22-55	
								DATE 2-22-55	

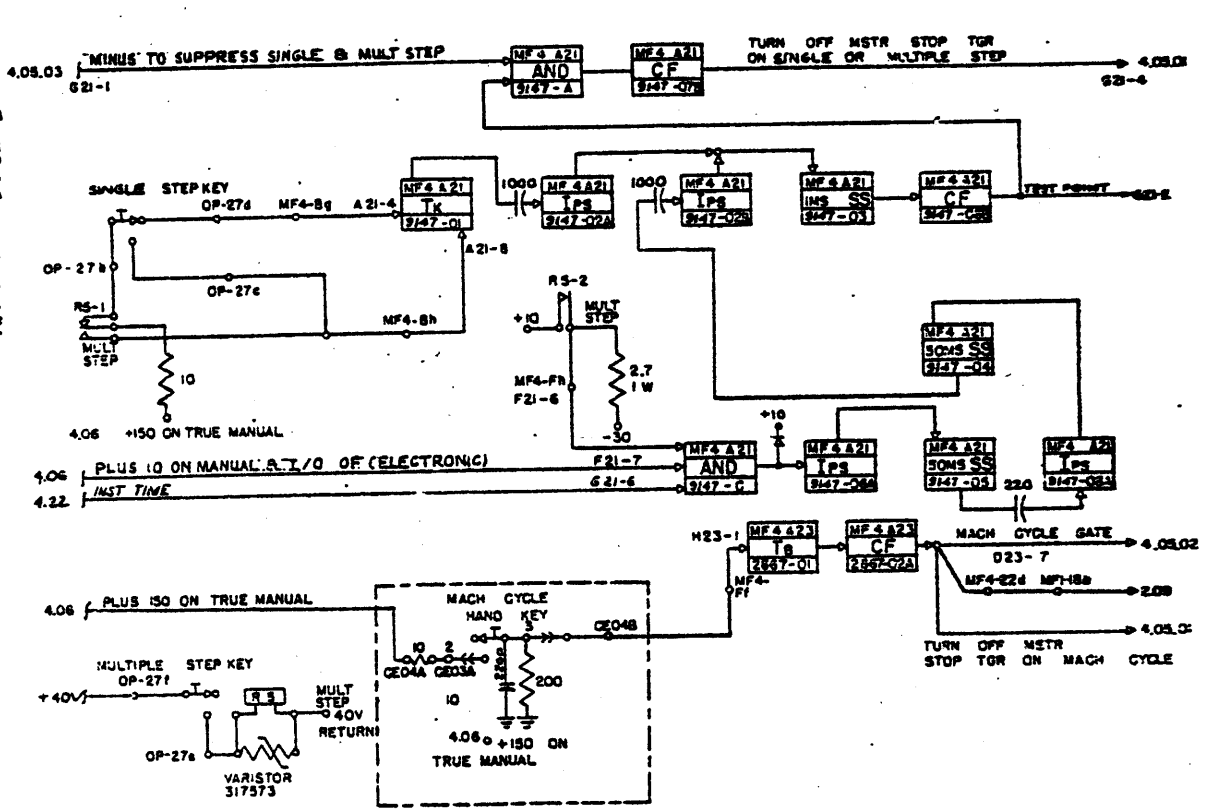
503 B 24 EC 242343



OPR PNL AUTOMATIC & MANUAL CONTROLS

4:06

503825 CG 642574



MACH CYCLE, SINGLE & MULT STEP

503825

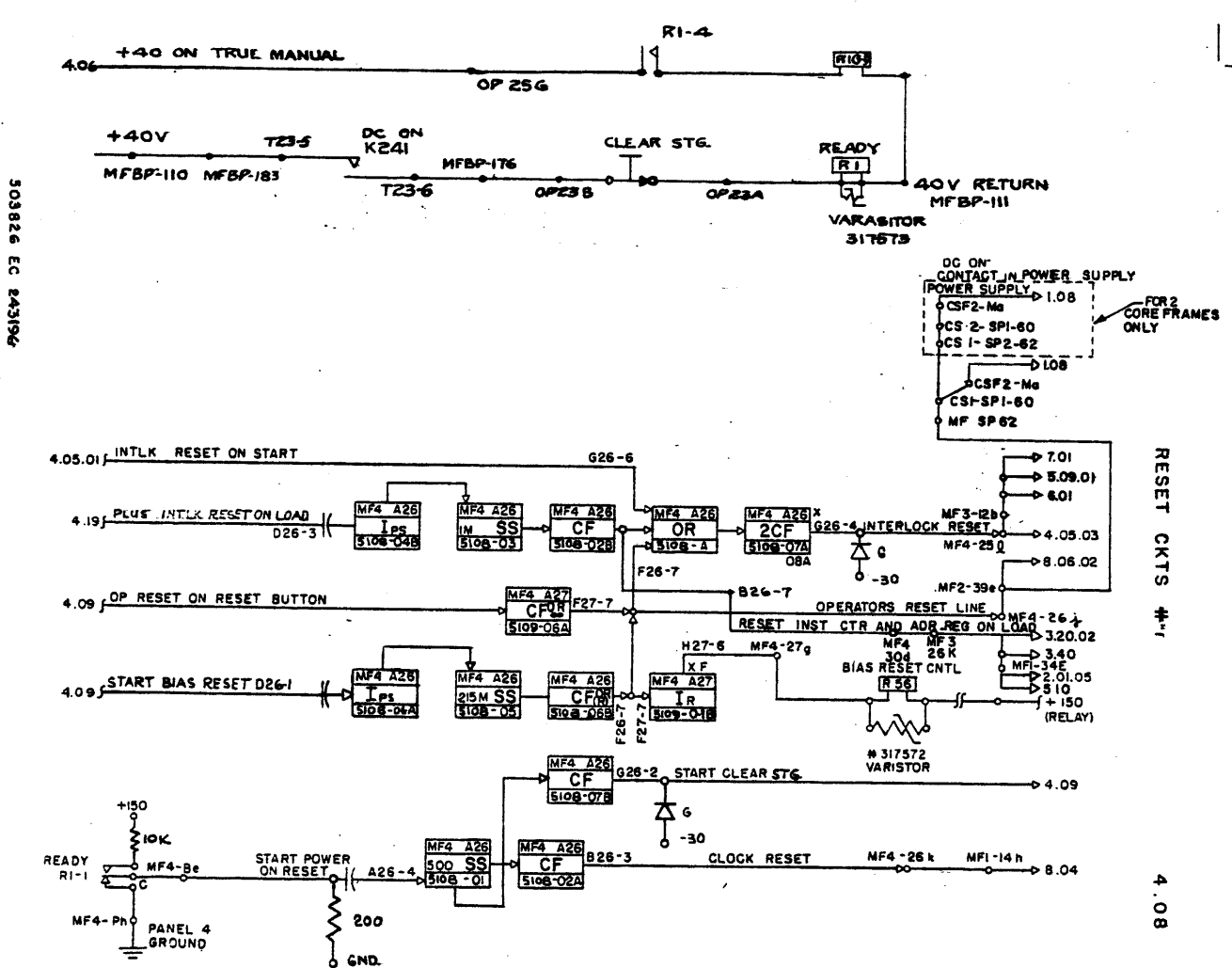
THIS COPY
REDUCED 42 %

NOTE:
X PRINT TO ENG SPEC 89324

INTERNAL SPECIFICATION NO	TOLERANCE UNITS	ALIGNMENT SYSTEM	NOTE	INTERNATIONAL BUSINESS MACHINES CORP
CASE DEPTH	SIGNALS	CENTRIC SYSTEM	100	ELECTRONIC ANALYTICAL
ADDRESS	RADIANS	FLAT SYSTEM	100	CONTROL UNIT
DEPTH	ANGLE	PARALLEL SYSTEM	100	SYSTEMS DIAGRAM
WIDTH	STRAIGHT SYSTEM		100	4.07
			100	JAP 17-16-54
			100	100 203 17-22-54
			100	LEK 3-0-55

503825

DATE	CHANGE NO
5-26-55	241065
8-16-55	241561
10-11-55	241701
11-2-55	241803
11-14-55	242041
12-13-55	242136
2-27-56	242464
3-23-56	242573
4-30-56	242573
10-16-56	243104



503826 EC 243196

RESET CKTS #1-1

503826

NOTE
X PRINT TO ENG. SPEC. 895291

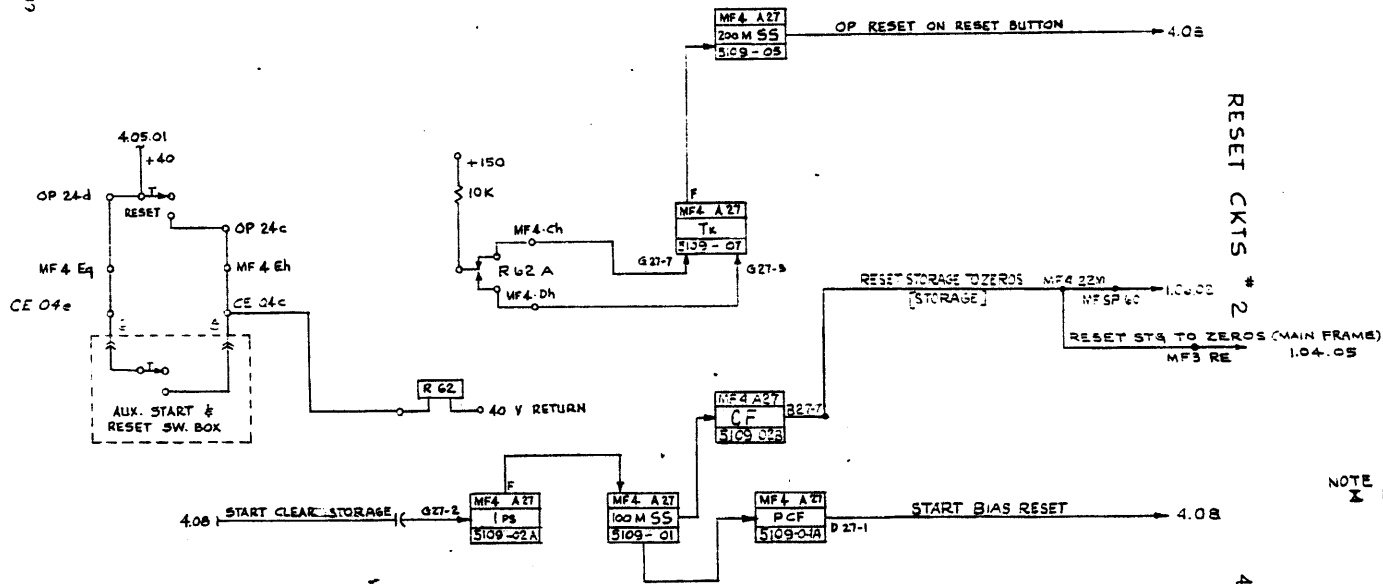
MATERIAL SPECIFICATION	NO.	TOLERANCE UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP
CASE DEPTH		DECIMALS	CONCENTRIC WITHIN	NOTE II	SACN ELECTRONIC ANALYTICAL
HARDNESS		FRACTIONS	FLAT WITHIN	NOTE III	CONTROL UNIT MODEL 704
SURFACE TREATMENT	SPEC NO.	ANGLES	PARALLEL WITHIN	NOTE IV	NAME SYSTEM DIAGRAM 4.08
	TECH RELATION	CORNERS	STRAIGHT WITHIN	NOTE V	DRAWN J. L. C. 6-17-54 SCALE N.O.P.
	APPROV. DATE	BROKEN	SQUARE WITHIN	NOTE VI	CHECKED E. S. 7-1-54
					APPROV. L. M. 8-8-55 CHECKED WAL 7-9-54

503826

WAS 704-3211

STANDARDS CODE	RELEASED PER ASSES	QTY	503827
NONE	503027		
DATE			CHANGE NO.
5-24-54			241005
6-9-55			241476
9-1-55			241658
10-6-55			241745
12-13-55			242136
8-28-56			242919

503827 E.C. 242919



RESET CKTS # 2

503827

NOTE
X PRINT TO ENG.
SPEC. 895291

* SS-01 WILL BE 150M FOR 2 CORE FRAME OPERATION

4.09

503827

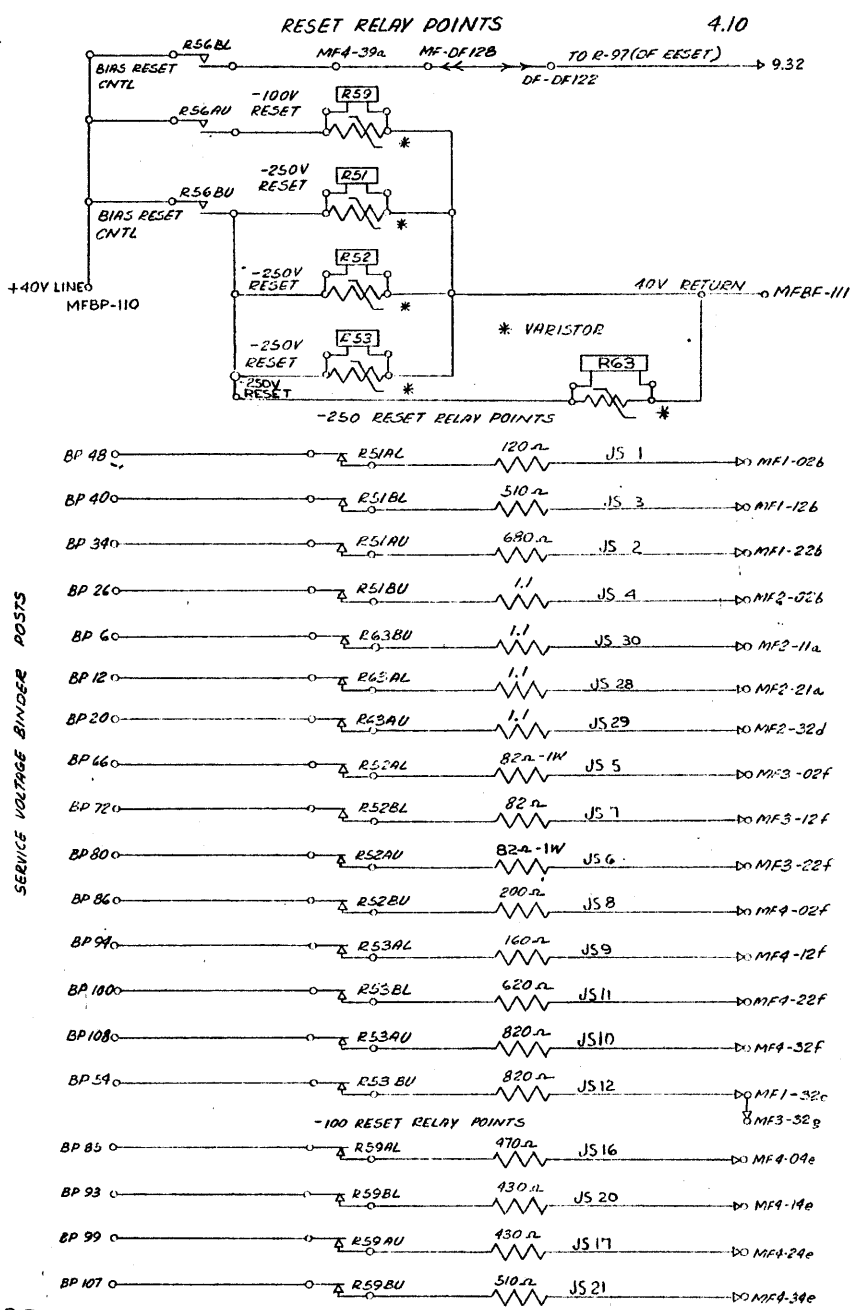
MATERIAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		NOTE I		INTERNATIONAL BUSINESS MACHINES CORP.	
		DECIMALS ± .005		CONCENTRIC WITHIN		TOT. RDG. NOTE II		RACK ELECTRONIC ANALYTICAL	
CASE DEPTH		FRACTIONS ± 1/64		FLAT WITHIN		NOTE III		MODEL 704	
HARDNESS		ANGLES ± °		PARALLEL WITHIN		NOTE IV		NAME SYSTEM: 242919 4.09	
SURFACE TREATMENT		CORNERS OUTSIDE		STRAIGHT WITHIN		NOTE V		DRAW L. B. 11-20-54 SCALE NONE	
SPEC. NO.		MAY BE BROKEN		SQUARE WITHIN IN		NOTE VI		TRAC. F.M. 12-2-54	
APPROV. DATE		BROKEN INSIDE		IN INCHES		NOTE VII		APPRO. L. B. 5-5-55 CHECK SHS 12-3-54	

503828
 DATE 503627
 52455 241095
 106639 24321
 112936 24321A

WAS 704-3218

503828

NONE PRINT TO ENG.
 SPEC. 895291

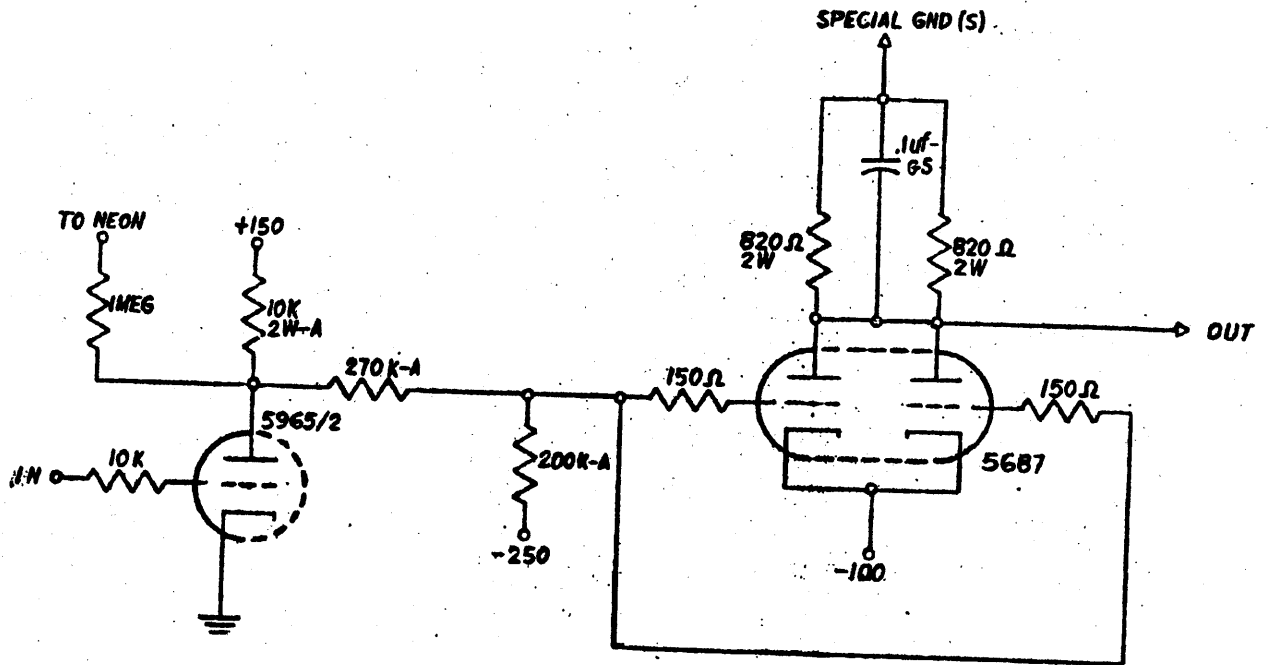
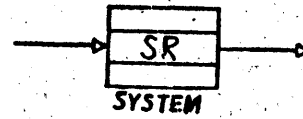
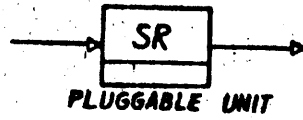


SERVICE VOLTAGE BINDER POSTS

503828 EC. 24321-A

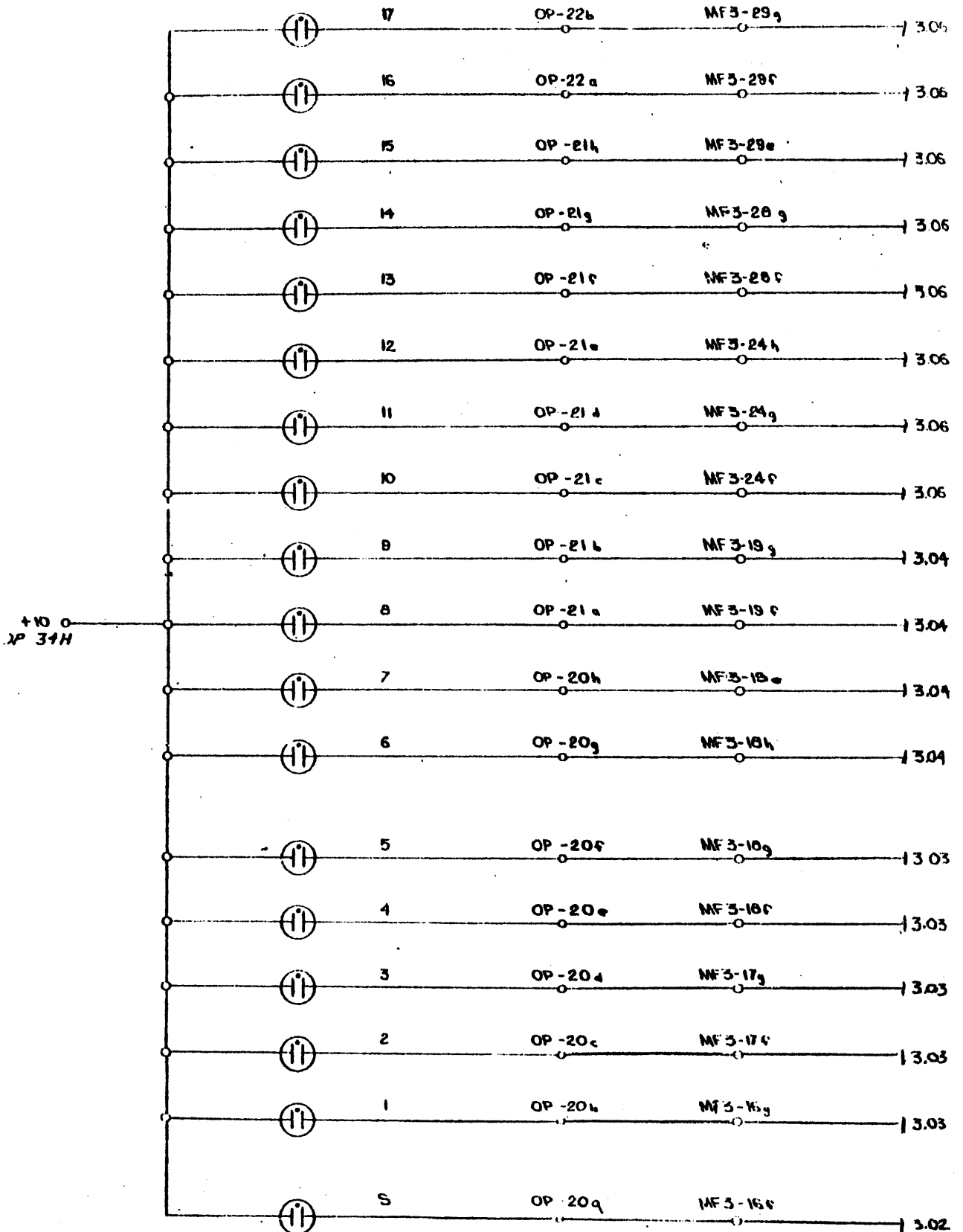
INTERNATIONAL BUSINESS MACHINES CORP.			
MACH. ELECTRONIC ANALYTICAL			
CONTROL UNIT MODEL 702			
MACHINE SYSTEM 2530 410			
SCALE 1:25			
DATE 11-20-52			
DRAWN BY J. J. JONES			
CHECKED BY J. J. JONES			
APPROVED BY J. J. JONES			
SPEC. 895291			
SHEET 1 OF 1			
DATE 11-20-52			
BY J. J. JONES			

503828



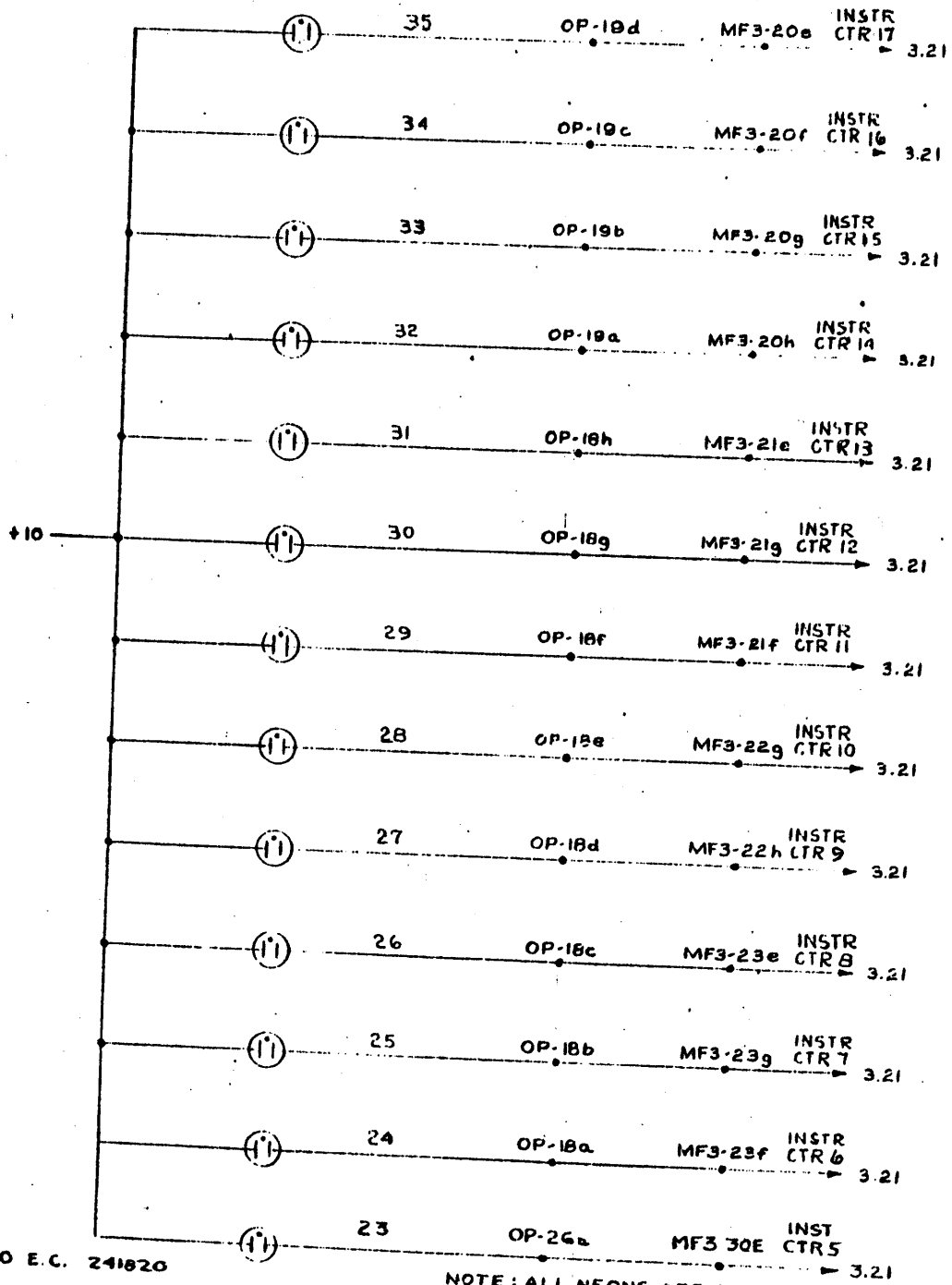
INSTRUCTION NEONS

4.11



ALL NEONS ARE NE-51

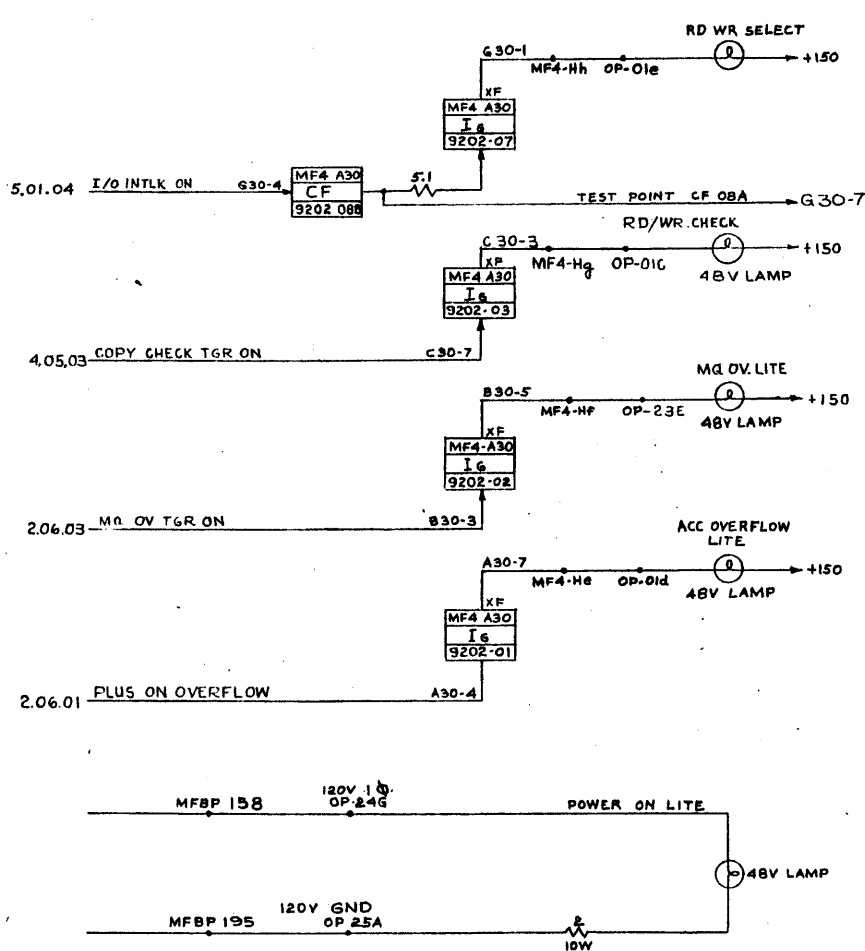
503829 EC-441745



503830 E.C. 241620

WAS 704-3220	REV.	503831
ISSUED	REVISED	DATE
NONE	503831	8-9-53
		8-9-53
		10-19-53
		9-10-56
		10-19-58

INDICATOR LIGHTS 4.13



NOTE
 I PRINT TO ENG. SPEC.
 898291

503831

WAS 704-3220

503831 E.C. 243196

INTERNATIONAL BUSINESS MACHINES CORP.
BACK ELECTRONIC ANALYTICAL CONTROL UNIT MODEL 704
NAME SYSTEM DIAGRAM
4.13
DATE 2-18-57
BY J.P.M.
CHKD J.P.M.
APPROV. J.P.M.
DATE 2-18-57
BY J.P.M.
CHKD J.P.M.
APPROV. J.P.M.
DATE 2-22-57
BY J.P.M.
CHKD J.P.M.
APPROV. J.P.M.
DATE 2-22-57

503831

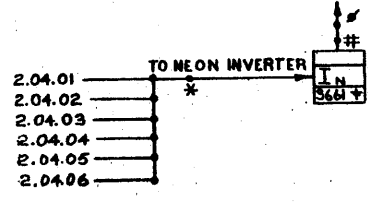
503832
 NONE
 503627
 NONE
 503832
 241065
 503627
 503627

503832

NOTE PRINT TO ENG.
 I SPEC. 895291

MULT. QUOTIENT REG. NEON INVERTER CHART 4.14

WAS 704-3215



REGISTER POSITION	EDGE CONN ON PANEL 2	INPUT CONN ON NIP	OUTPUT CONN ON NIP	TUBE LOCATION	OPERATOR'S PANEL EDGE CONN
QUOT. 3	03c	09c	10c	05C-a	0P 13g
1	04c	09k	10f	05C-b	13d
2	05c	09g	10p	05D-a	13e
3	06c	09h	10A	05D-b	13f
4	07c	11c	12a	06A-a	13g
5	08c	11k	12b	06A-b	13h
6	09c	11c	12c	06B-a	14a
7	10c	11d	12d	06B-b	14b
8	11c	11e	12e	06C-a	14c
9	12c	11f	12f	06C-b	14d
10	13c	11g	12g	06D-a	14e
11	14c	11h	12h	06D-b	14f
12	15c	13a	14a	07A-a	14g
13	16c	13b	14b	07A-b	14h
14	17c	13c	14c	07B-a	15a
15	18c	13d	14d	07B-b	15b
16	19c	13e	14e	07C-a	15c
17	20c	13f	14f	07C-b	15d
18	21c	13g	14g	07D-a	15e
19	22c	13h	14h	07D-b	15f
20	23c	15a	16a	08A-a	15g
21	24c	15b	16b	08A-b	15h
22	25c	15c	16c	08B-a	16a
23	26c	15d	16d	08B-b	16b
24	27c	15e	16e	08C-a	16c
25	28c	15f	16f	08C-b	16d
26	29c	15g	16g	08D-a	16e
27	30c	15h	16h	08D-b	16f
28	31c	17a	18a	09A-a	16g
29	32c	17b	18b	09A-b	16h
30	33c	17c	18c	09B-a	17a
31	34c	17d	18d	09B-b	17b
32	35c	17e	18e	09C-a	17c
33	36c	17f	18f	09C-b	17d
34	37c	17g	18g	09D-a	17e
35	38c	17h	18h	09D-b	17f

503832 E.C. 243053

INTERNATIONAL BUSINESS MACHINES CORP.
 DATE: 12 2 1971
 MODEL: 704-4
 NAME: SYSTEM DIAGRAM 4.14
 SHEET NO: 1
 SHEET TOTAL: 10/10/254
 SCALE: NONE
 TRAC: 100%
 DRAWN BY: JAC
 CHECKED BY: JAC
 APPROVED BY: JAC

503832

503833
 DATE 12-28-58
 243053
 973-36 243053

REVISIONS
 NONE
 10 10 21

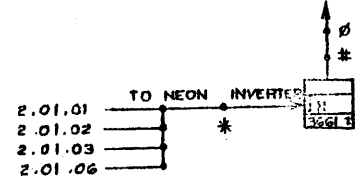
WAS 704-3214

503833

NOTE
 PRINT TO ENG
 SPEC 895231

STG. REG. NEON INVERTER CHART.

4.15



MEM REG S	EDGE CONN ON PANEL 2	INPUT CONN ON NIP #	OUTPUT CONN ON NIP #	TUBE LOCATION +	OPERATOR'S PANEL EDGE CONNECTOR #
1	03k	01a	02a	01A-a	0P 04a
1	04k	01f	02b	01A-b	04f
2	05k	01c	02c	01B-a	04c
3	06k	01d	02d	01B-b	04d
4	07k	01e	02e	01C-a	04e
5	08k	01f	02f	01C-b	04f
6	09k	01g	02g	01D-a	04g
7	10k	01h	02h	01D-b	04h
8	11k	03a	04a	02A-a	05a
9	12k	03b	04b	02A-b	05b
10	13k	03c	04c	02B-a	05c
11	14k	03d	04d	02B-b	05d
12	15k	03e	04e	02C-a	05e
13	16k	03f	04f	02C-b	05f
14	17k	03g	04g	02D-a	05g
15	18k	03A	04A	02D-b	05A
16	19k	05a	06a	03A-a	06a
17	20k	05b	06b	03A-b	06b
18	21k	05c	06c	03B-a	06c
19	22k	05d	06d	03B-b	06d
20	23k	05e	06e	03C-a	06e
21	24k	05f	06f	03C-b	06f
22	25k	05g	06g	03D-a	06g
23	26k	05h	06h	03D-b	06h
24	27k	07a	08a	04A-a	07a
25	28k	07b	08b	04A-b	07b
26	29k	07c	08c	04B-a	07c
27	30k	07d	08d	04B-b	07d
28	31k	07e	08e	04C-a	07e
29	32k	07f	08f	04C-b	07f
30	33k	07g	08g	04D-a	07g
31	34k	07A	08A	04D-b	07A
32	35k	09a	10a	05A-a	08a
33	36k	09b	10b	05A-b	08b
34	37k	09c	10c	05B-a	08c
35	38k	09d	10d	05B-b	08d
36					
37					

503833 E.C. 243053

INTERNATIONAL BUSINESS MACHINES CORP.
 1958
 1000 N. ZEEB RD.
 ARMONK, N.Y. 10503
 TELEPHONE 914-490-5000
 TELETYPE 914-490-5000
 CABLE 914-490-5000
 FAX 914-490-5000
 SERVICE BUREAU
 1000 N. ZEEB RD.
 ARMONK, N.Y. 10503
 TELEPHONE 914-490-5000
 TELETYPE 914-490-5000
 CABLE 914-490-5000

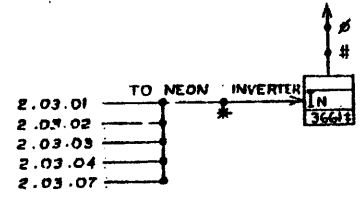
503834
 503834
 503834
 503834

WAS 704-3215

NOTE PRINT TO ENG
 SPEC. 893231

ACC REG. NEON INVERTER CHART

4.16



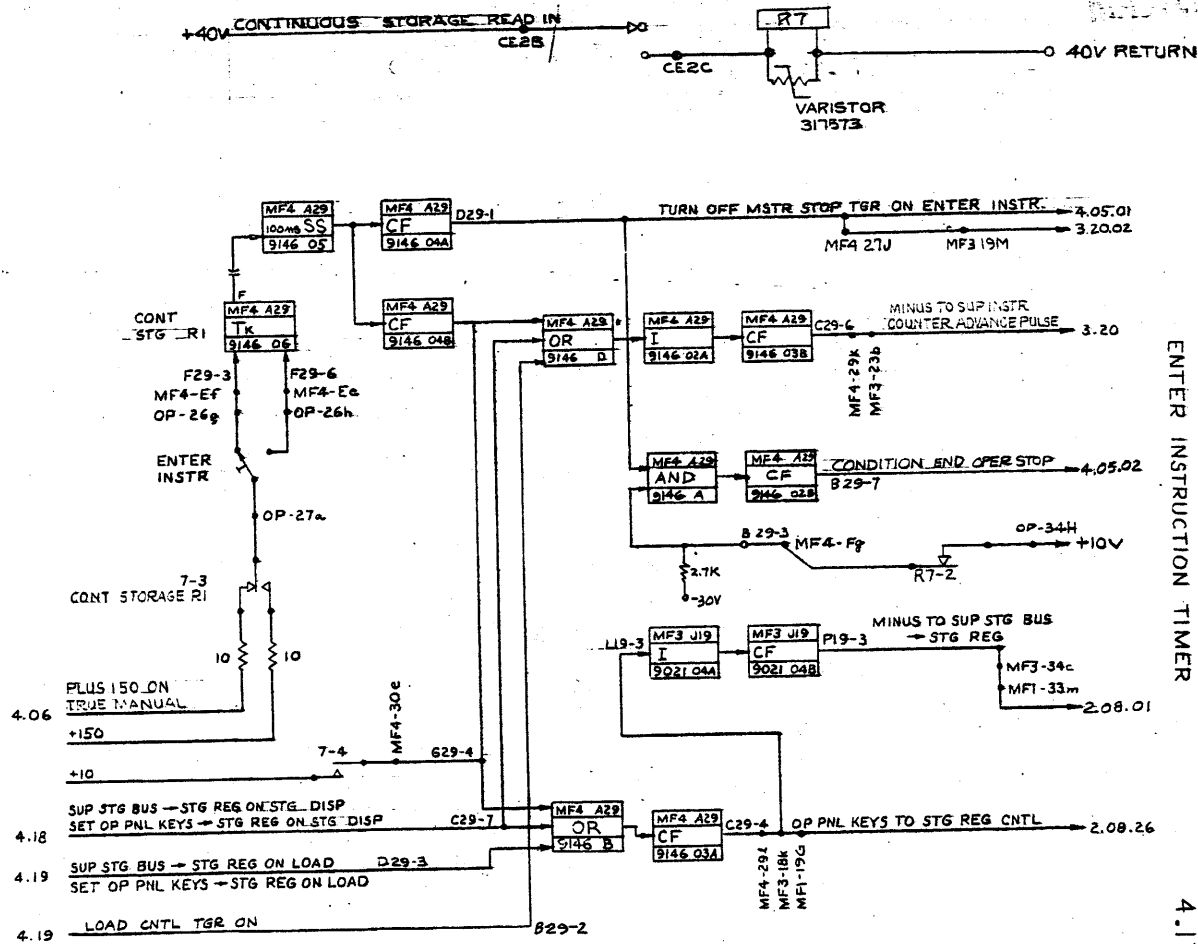
REGISTER POSITION	EDGE CONN ON PANEL 2	INPUT CONN ON NIP *	OUTPUT CONN: ON NIP H	TUBE LOCATION †	OPERATOR'S PANEL EDGE CONN
ACC		M _a	20 _a	1A-a	OP
		19 _b	20 _b	1A-b	OP
5	03 _a	19 _c	20 _c	10B-a	09 _a
1	04 _a	19 _d	20 _d	10B-b	09 _b
2	05 _a	19 _e	20 _e	10C-a	09 _c
3	06 _a	19 _f	20 _f	10C-b	09 _d
4	07 _a	19 _g	20 _g	10D-a	09 _e
5	08 _a	19 _h	20 _h	10D-b	09 _f
6	09 _a	21 _a	22 _a	11A-a	09 _g
7	10 _a	21 _b	22 _b	11A-b	09 _h
8	11 _a	21 _c	22 _c	11B-a	09 _i
9	12 _a	21 _d	22 _d	11B-b	09 _j
10	13 _a	21 _e	22 _e	11C-a	10 _a
11	14 _a	21 _f	22 _f	11C-b	10 _b
12	15 _a	21 _g	22 _g	11D-a	10 _c
13	16 _a	21 _h	22 _h	11D-b	10 _d
14	17 _a	23 _a	24 _a	12A-a	10 _e
15	18 _a	23 _b	24 _b	12A-b	10 _f
16	19 _a	23 _c	24 _c	12B-a	10 _g
17	20 _a	23 _d	24 _d	12B-b	10 _h
18	21 _a	23 _e	24 _e	12C-a	11 _a
19	22 _a	23 _f	24 _f	12C-b	11 _b
20	23 _a	23 _g	24 _g	12D-a	11 _c
21	24 _a	23 _h	24 _h	12D-b	11 _d
22	25 _a	25 _a	26 _a	13A-a	11 _e
23	26 _a	25 _b	26 _b	13A-b	11 _f
24	27 _a	25 _c	26 _c	13B-a	11 _g
25	28 _a	25 _d	26 _d	13B-b	11 _h
26	29 _a	25 _e	26 _e	13C-a	12 _a
27	30 _a	25 _f	26 _f	13C-b	12 _b
28	31 _a	25 _g	26 _g	13D-a	12 _c
29	32 _a	25 _h	26 _h	13D-b	12 _d
30	33 _a	2-a	29 _a	14A-a	12 _e
31	34 _a	27 _a	28 _a	14A-b	12 _f
32	35 _a	27 _b	28 _b	14B-a	12 _g
33	36 _a	27 _c	28 _c	14B-b	12 _h
34	37 _a	27 _d	28 _d	14C-a	13 _a
35	38 _a	27 _e	28 _e	14C-b	13 _b

503834 E C 24305 3

INTERNATIONAL BUSINESS MACHINES CORP.
 ELECTRONIC DEPARTMENT
 211 N. WABASH ST. CHICAGO, ILL. 60601
 TELEPHONE 312-724-4000
 TELETYPE 312-724-4000
 FAX 312-724-4000

WAS 704-3203

STANDARD CODE	ISSUED FOR ASSEMBLY	QTY	503835
NONE	503835		
DATE	CHANGE NO.		
5-24-55	241065		
7-12-55	241421		
10-12-55	241817		
12-2-55	242099		
6-4-56	242719		
10-15-56	243196		
11-1-56	243154		



ENTER INSTRUCTION TIMER

503835

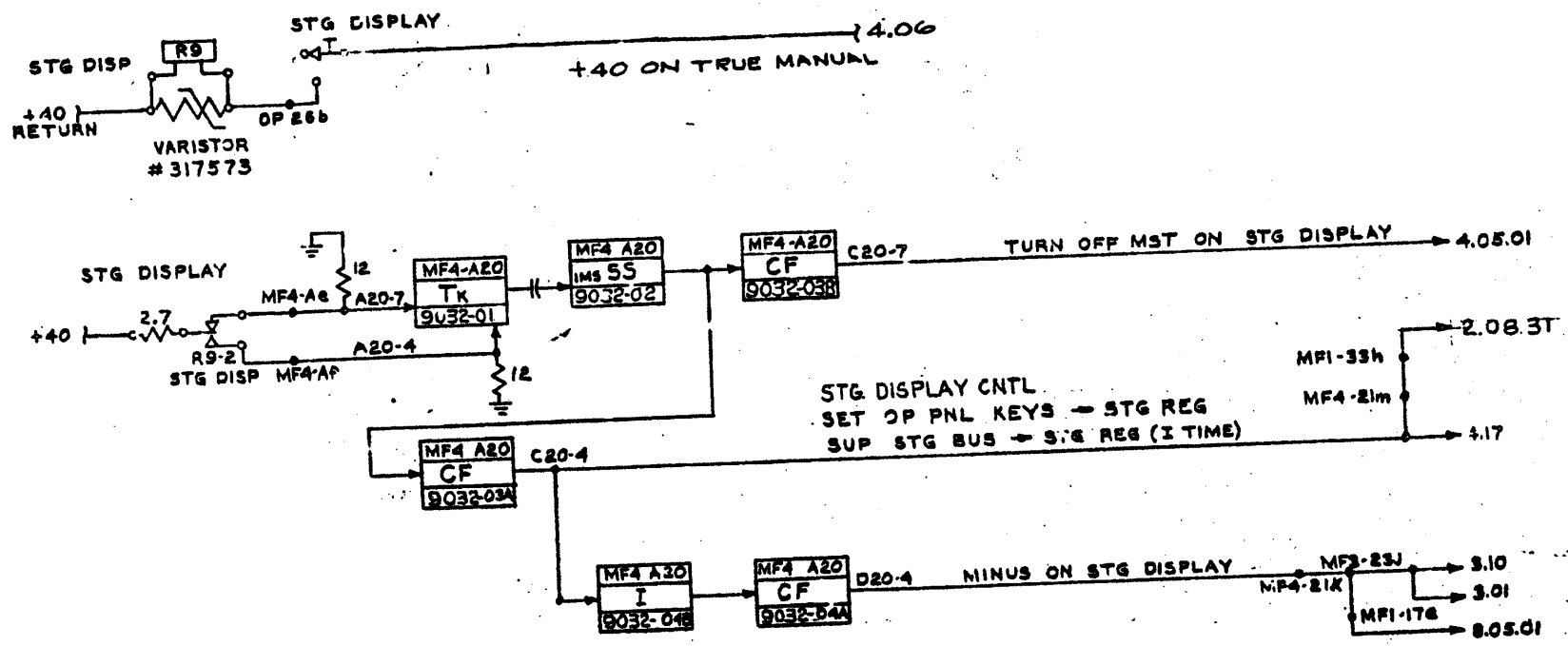
NOTE
X PRINT TO ENG
SPEC 895291

503835 E.C 243154

MATERIAL SPECIFICATION NO.	TOLERANCES UNLESS OTHERWISE NOTED	ALIGNMENT WITHIN	NOTE I	INTERNATIONAL BUSINESS MACHINES CORP.
CASE DEPTH	DIMENSIONAL ± .005	CONCENTRIC WITHIN	NOTE II	MACH. ELECTRONIC ANALYTICAL
HARDNESS	FRACTIONS ± .04	FLAT WITHIN	NOTE III	CNTL UNIT MODEL 704
SURFACE TREATMENT	ANGLES ± °	PARALLEL WITHIN	NOTE IV	VAR. SYSTEM DIAGRAM
	CORNERS	STRAIGHT WITHIN	NOTE V	4.17
	MAY BE BROKEN	SQUARE WITHIN	NOTE VI	DRAW. JAP 17-16-54 SCALE
				CHECK
				TRAC. SHS 11-6-55
				APPRO. L.P.K. 12-5-55 CHECK W.A.L. 1-6-55

503835

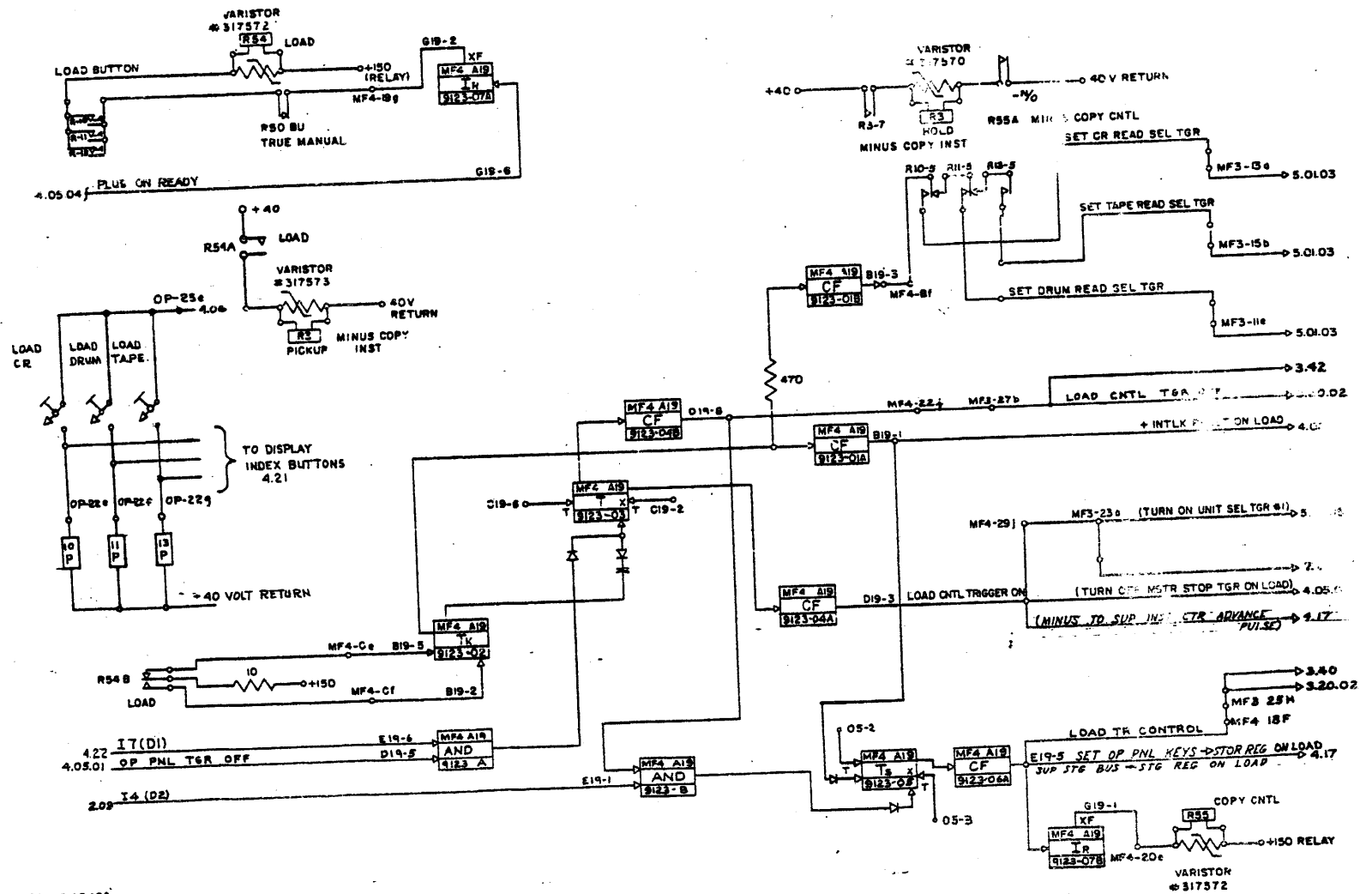
5015302E-242041



STORAGE DISPLAY TIMER

LOAD TIMER

4.19



503837ED.242466

WAS 704-3224

STANDARDS CODE	RELEASED FOR ASSEMBLY	QTY.
NONE	503838	

DATE	CHANGE NO.
5-24-55	241065
10-6-55	241745
10-27-55	24194E
11-14-55	242041
12-1-55	242058
6-7-56	242921
7-10-56	242947
10-15-56	243936

503838 E.C. 243936

RELAY NO	COILS				CONTACT POINTS				CONTACT POINTS				PART #			
	PU	PL	H		A	AU	AC	AL	B	BU	BC	BL				
50	4.06					4.06		4.06				4.19		4.21	TRUE MANUAL	282745
51	4.10					4.10		4.10				4.10		4.10	-250 VOLT RESET	281077
52	4.10					4.10		4.10				4.10		4.10	-250 VOLT RESET	281077
53	4.10					4.10		4.10				4.10		4.10	-250 VOLT RESET	281077
54	4.19				4.19				4.19						LOAD	111401
55	4.19				4.19				4.01						- COPY CNTL	111401
56	4.08					4.10						4.10		4.10	BIAS RESET CNTL	206672
58	4.10					4.10		4.10				4.10		4.10	-100 VOLT RESET	281077
61	4.05.01				4.05.01										START RELAY	111351
62	4.09				4.09										RESET RELAY	111351
63	4.10					4.10		4.10				4.10			-250 VOLT RESET	281077

MAIN FRAME RELAY CHART

503838

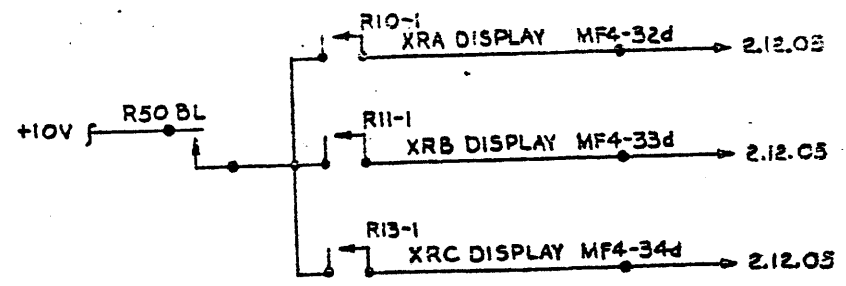
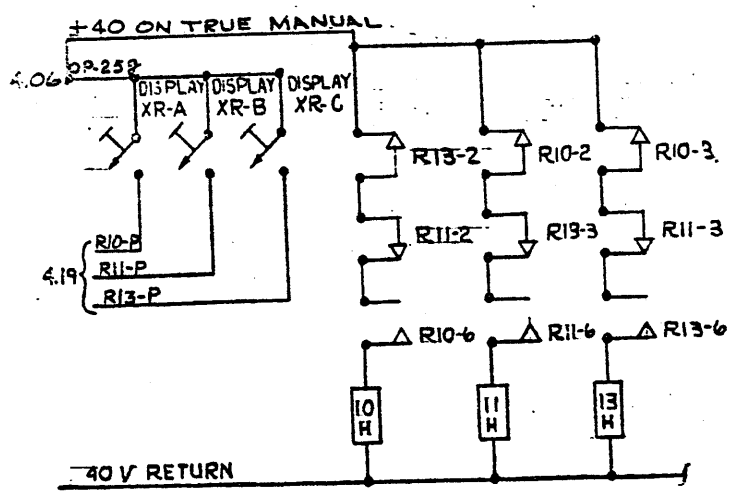
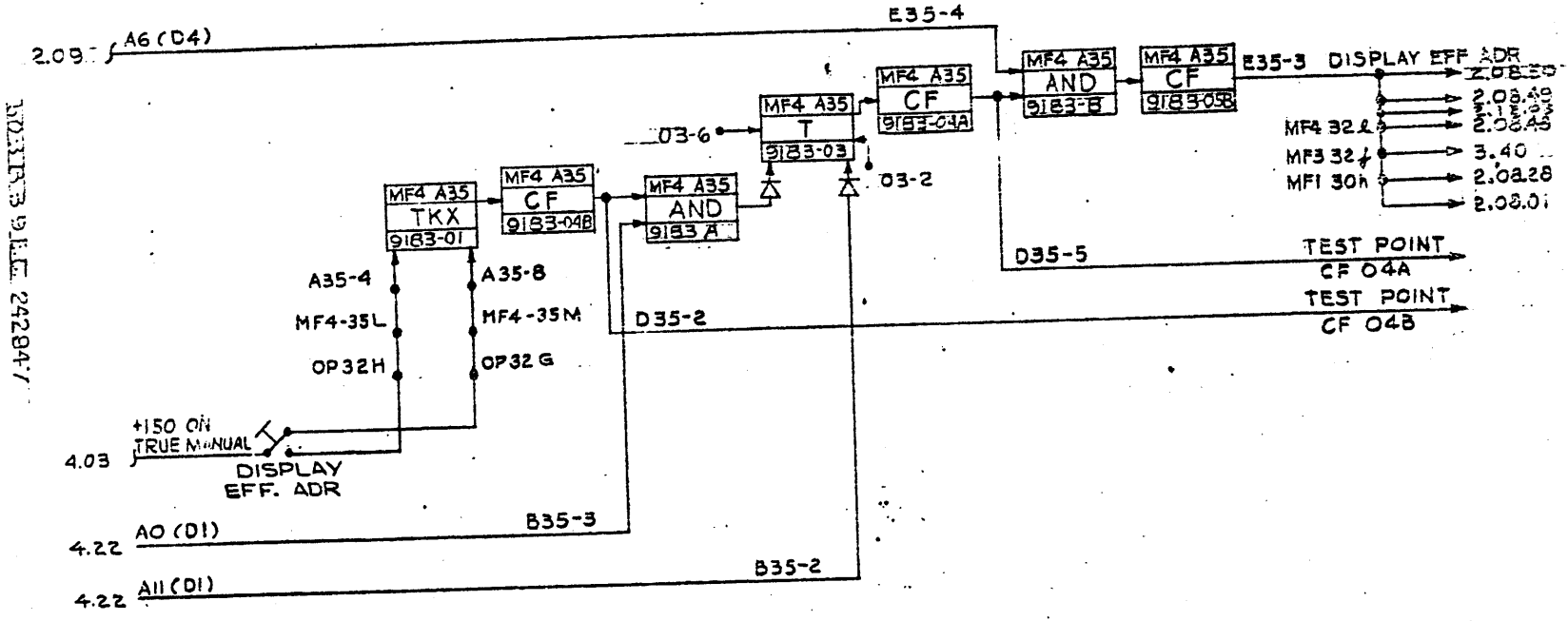
RELAY	NO	COILS			CONTACT POINTS												PART #	
		PU1	PU2	H	1	2	3	4	5	6	7	8	9	10	11	12		
READY	1	4.08		4.08	4.08	4.05.04	NU	4.08										196208
-COPY INST	3	4.19	NU	4.19	4.01	4.01	4.01	4.01	4.01	4.01	4.19	NU	NU	NU	NU	NU	NU	196187
MULTIPLE STEP	5	4.07			4.07	4.07	NU	NU										196206
CONT STG RI	7	4.24	NU		NU	4.17	4.17	4.17	NU	NU								196197
MEM DISPLAY	8	4.18			NU	4.18	NU	NU										196208
LOAD CR-DISPLAY	10	4.19		4.21	4.21	4.21	4.21	4.19	4.19	4.21								196197
LOAD DRUM-DISPLAY	11	4.19		4.21	4.21	4.21	4.21	4.19	4.19	4.21								196197
LOAD TAPE-DISPLAY	13	4.19		4.21	4.21	4.21	4.21	4.19	4.19	4.21								196187

420

NOTE
XPRINT TO ENG SPEC
B.9.52.91

8E8E09

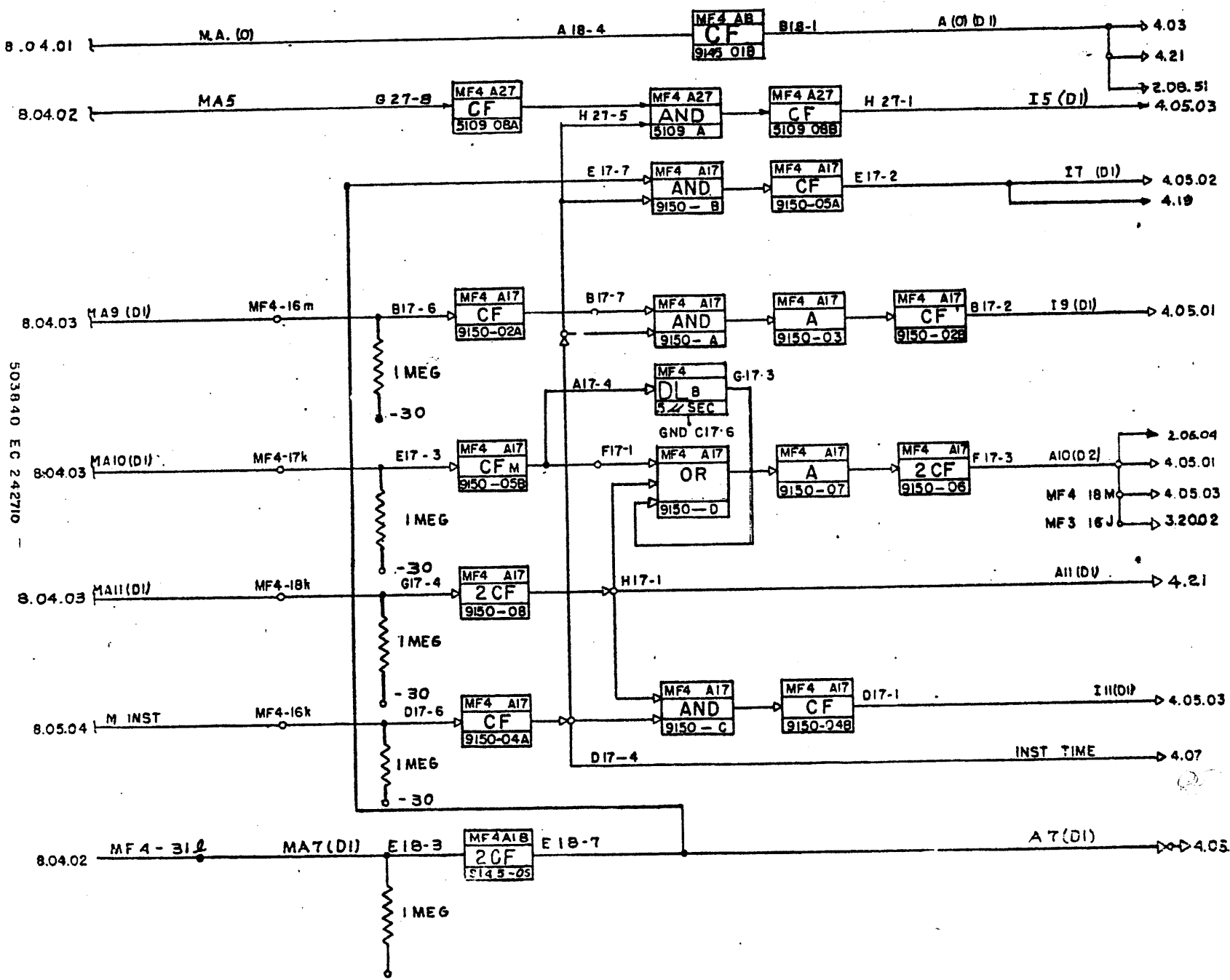
INTERNATIONAL SPECIFICATION NO.		TOLERANCES UNLESS OTHERWISE NOTED		ALIGNMENT WITHIN		NOTE I		INTERNATIONAL BUSINESS MACHINES CORP.	
CASE DEPTH		ORIGINALS & JOBS		CONCENTRIC WITHIN		TUT. IND. READING		BACK ELECTRONIC ANALYTICAL	
HARDNESS		FRACTIONS & 1/64		FLAT WITHIN		NOTE II		CONTROL UNIT MODEL 704	
SURFACE TREATMENT		ANGLES & °		PARALLEL WITHIN		NOTE III		NAME SYSTEM DIAGRAM	
SPEC. IN.		CORNERS		OUTSIDE		NOTE IV		420	
TECH. RESOURCES		MAY BE		STRAIGHT WITHIN		NOTE V		DRAWING 4-27-55 SCALE	
APPRO. DATE		SHOWN		INSIDE		NOTE VI		CHECKED	
								APPRO. DATE	



DISPLAY EFFECTIVE ADDRESS & DISPLAY XRS ADR

MIL-STD-883C 2429A-1

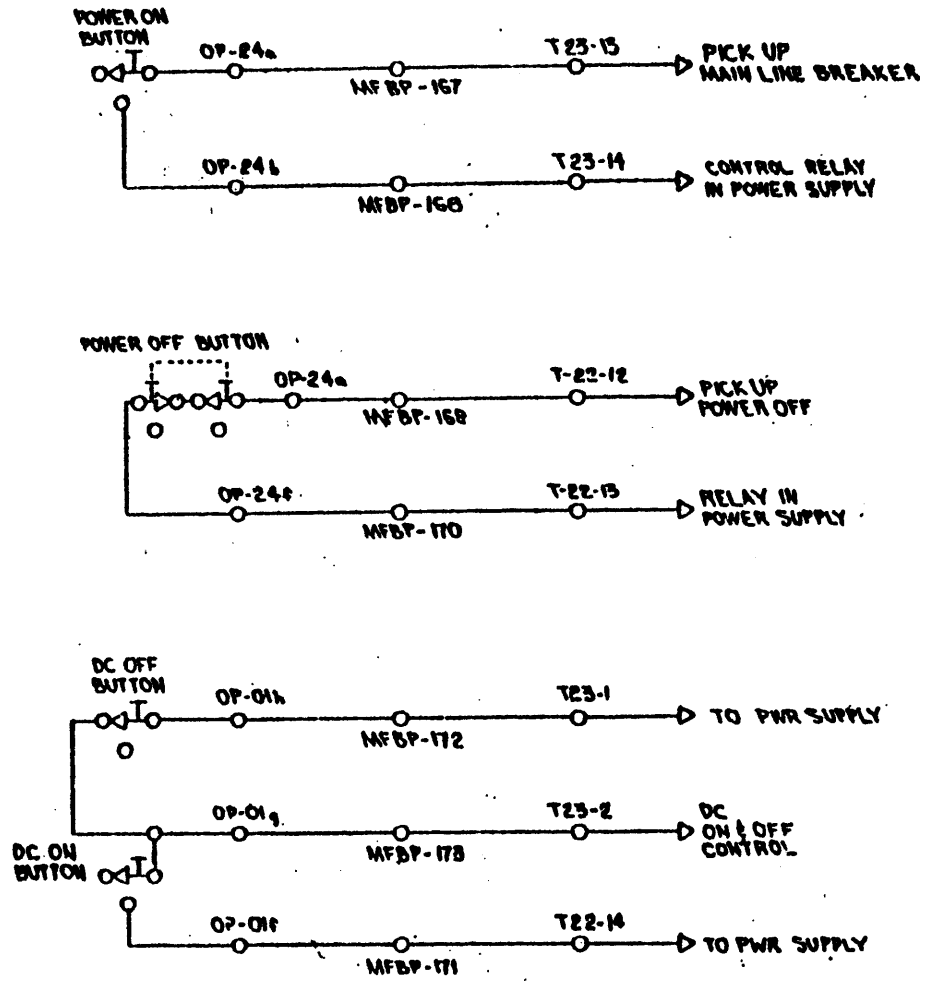
OP PNL MIXING CIRCUITS



503840 EC 242710

POWER SUPPLY CONTROLS (OPERATORS PANEL)

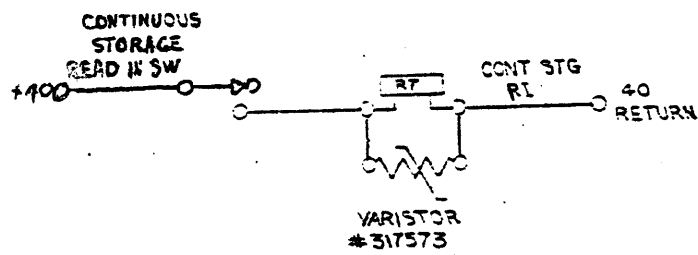
4.23



503 B 41 E.C.241065

CONTINUOUS STORAGE R1/R0

4.24



503 B 4 2 E C 241658

	a	b	c	d
01	PROGRAM MF4 - G4		RD/WRITTE MF4 - H1	ACC OFF FLO MF4 - 11 C H4
02			OP SENSE LITE 1 MF4 - 02 b	OP SENSE LITE 2 MF4 - 02 c
03	OP SENSE SW 4 MF4 - 02 J	OP SENSE SW 5 MF4 - 01 J	OP SENSE MF4 - 01 K	OP SENSE MF4 - 01 K
04	STORAGE REG NEON 5 NIP - 02 a	STORAGE REG NEON 1 NIP - 02 b	STORAGE REG NEON 2 NIP - 02 c	STORAGE REG NEON 3 NIP - 02 d
05	STORAGE REG NEON 6 NIP - 04 a	STORAGE REG NEON 9 NIP - 04 b	STORAGE REG NEON 10 NIP - 04 c	STORAGE REG NEON 11 NIP - 04 d
06	STORAGE REG NEON 04 NIP - 04 a	STORAGE REG NEON 06 NIP - 04 b	STORAGE REG NEON 08 NIP - 04 c	STORAGE REG NEON 07 NIP - 04 d
07	STORAGE REG NEON 2 NIP - 06 a	STORAGE REG NEON 3 NIP - 06 b	STORAGE REG NEON 04 NIP - 06 c	STORAGE REG NEON 05 NIP - 06 d
08	STORAGE REG NEON 02 NIP - 10 a	STORAGE REG NEON 03 NIP - 10 b	STORAGE REG NEON 04 NIP - 10 c	STORAGE REG NEON 05 NIP - 10 d
09	ACC NEON 2 NIP - 20 a	ACC NEON 5 NIP - 20 b	ACC NEON 4 NIP - 20 c	ACC NEON 8 NIP - 20 d
10	ACC NEON 10 NIP - 22 a	ACC NEON 11 NIP - 22 b	ACC NEON 12 NIP - 22 c	ACC NEON 15 NIP - 22 d
11	ACC NEON 18 NIP - 24 a	ACC NEON 19 NIP - 24 b	ACC NEON 20 NIP - 24 c	ACC NEON 21 NIP - 24 d
12	ACC NEON 26 NIP - 26 a	ACC NEON 27 NIP - 26 b	ACC NEON 28 NIP - 26 c	ACC NEON 29 NIP - 26 d
13	QUOTIENT NEON 04 NIP - 28 a	QUOTIENT NEON 05 NIP - 28 b	QUOTIENT NEON 06 NIP - 28 c	QUOTIENT NEON 07 NIP - 28 d
14	QUOTIENT NEON 6 NIP - 12 c	QUOTIENT NEON 7 NIP - 12 d	QUOTIENT NEON 8 NIP - 12 e	QUOTIENT NEON 9 NIP - 12 f
15	QUOTIENT NEON 14 NIP - 14 a	QUOTIENT NEON 15 NIP - 14 b	QUOTIENT NEON 16 NIP - 14 c	QUOTIENT NEON 17 NIP - 14 d
16	QUOTIENT NEON 22 NIP - 16 a	QUOTIENT NEON 23 NIP - 16 b	QUOTIENT NEON 24 NIP - 16 c	QUOTIENT NEON 25 NIP - 16 d
17	QUOTIENT NEON 30 NIP - 18 a	QUOTIENT NEON 31 NIP - 18 b	QUOTIENT NEON 32 NIP - 18 c	QUOTIENT NEON 33 NIP - 18 d
18	LNST CTR NEON 2 NIP 3 - 23 a	LNST CTR NEON 5 NIP 3 - 23 b	LNST CTR NEON 8 NIP 3 - 23 c	LNST CTR NEON 9 NIP 3 - 23 d

TERMINAL BLOCK CHART

	e	f	g	h
	RD/WRITTE MF4 - H1	DC ON SWITCH 111	DC OFF BUTTAN C MF 5P - 175	DC OFF BUTTAN C MF 5P - 172
	OP SENSE LITE 1	OP SENSE LITE 2	OP SENSE MF 4 - 02 m	OP SENSE MF 4 - 02 n
	DNV CHECK 2	2ND REG	4ND REG	1ND REG
	STORAGE REG NEON 02 c	STORAGE REG NEON 02 d	STORAGE REG NEON 03	STORAGE REG NEON 1
	STORAGE REG NEON 04 c	STORAGE REG NEON 04 d	STORAGE REG NEON 14	STORAGE REG NEON 15
	STORAGE REG NEON 20 c	STORAGE REG NEON 20 d	STORAGE REG NEON 21	STORAGE REG NEON 28
	STORAGE REG NEON 08	STORAGE REG NEON 09	STORAGE REG NEON 50	STORAGE REG NEON 51
	ACC NEON 5	ACC NEON 9	ACC NEON P	ACC NEON 1
	ACC NEON 6	ACC NEON 7	ACC NEON 9	ACC NEON 20 d
	ACC NEON 14	ACC NEON 15	ACC NEON 16	ACC NEON 17
	ACC NEON 28	ACC NEON 29	ACC NEON 24 c	ACC NEON 24 d
	ACC NEON 26	ACC NEON 28	ACC NEON 24	ACC NEON 25
	ACC NEON 20	ACC NEON 21	ACC NEON 22 c	ACC NEON 22 d
	QUOTIENT NEON 2	QUOTIENT NEON 3	QUOTIENT NEON 4	QUOTIENT NEON 5
	QUOTIENT NEON 10	QUOTIENT NEON 11	QUOTIENT NEON 12	QUOTIENT NEON 13
	QUOTIENT NEON 18	QUOTIENT NEON 19	QUOTIENT NEON 16	QUOTIENT NEON 21
	QUOTIENT NEON 24	QUOTIENT NEON 25	QUOTIENT NEON 26	QUOTIENT NEON 27
	QUOTIENT NEON 14	QUOTIENT NEON 15	QUOTIENT NEON 11	QUOTIENT NEON 23
	QUOTIENT NEON 24	QUOTIENT NEON 25	QUOTIENT NEON 26	QUOTIENT NEON 27
	LNST CTR NEON 10	LNST CTR NEON 11	LNST CTR NEON 12	LNST CTR NEON 13
	MF 3 - 22 a	MF 3 - 21 f	MF 3 - 21 g	MF 3 - 21 h

OPERATORS

	a	b	c	d
19	LNST CTR NEON 14 MF 5 - 20 a	LNST CTR NEON 15 MF 5 - 20 b	LNST CTR NEON 16 MF 5 - 20 c	LNST CTR NEON 17 MF 5 - 20 d
20	ADR REG NEON 5 MF 5 - 16 a	ADR REG NEON 6 MF 5 - 16 b	ADR REG NEON 7 MF 5 - 17 f	ADR REG NEON 8 MF 5 - 17 g
21	ADR REG NEON 8 MF 5 - 18 a	ADR REG NEON 9 MF 5 - 18 b	ADR REG NEON 10 MF 5 - 24 c	ADR REG NEON 11 MF 5 - 24 d
22	ADR REG NEON 16 MF 5 - 28 a	ADR REG NEON 17 MF 5 - 28 b		
23	POWER ON BUTTAN MF 5P 176			
24	READY LITE MF 5P - 167	READY LITE MF 5P - 168	READY LITE MF 4 A	READY LITE MF 4 A
25	POWER ON LANE RESISTOR MF 5P 195	READY R 1-2	START BUTTAN MF 4 A	AUTO LITE MF 4 A
26	LNST CTR NEON 5	DISPLAY STORAGE N.O.		
27	ENTER INST. R 7-5	FULL STEP KEY C R 5-1	FULL STEP KEY N.O. MF 4 B	FULL STEP KEY N.C. MF 4 B
28	OP ENTRY KEY 3 MF 2 - 08 J	OP ENTRY KEY 1 MF 2 - 04 J	OP ENTRY KEY 2 MF 2 - 08 J	OP ENTRY KEY 4 MF 2 - 08 J
29	OP ENTRY KEY 8 MF 2 - 11 J	OP ENTRY KEY 9 MF 2 - 12 J	OP ENTRY KEY 10 MF 2 - 14 J	OP ENTRY KEY 11 MF 2 - 14 J
30	OP ENTRY KEY 16 MF 2 - 19 J	OP ENTRY KEY 17 MF 2 - 20 J	LNST CTR NEON 4	LNST CTR NEON 5
31	OP ENTRY KEY 20 MF 2 - 26 J	OP ENTRY KEY 21 MF 2 - 28 J	OP ENTRY KEY 22 MF 2 - 28 J	OP ENTRY KEY 23 MF 2 - 28 J
32	OP ENTRY KEY 30 MF 2 - 34 J	OP ENTRY KEY 31 MF 2 - 34 J	OP ENTRY KEY 32 MF 2 - 34 J	OP ENTRY KEY 33 MF 2 - 34 J
33	TRUE MANUAL R 80 - AL	INDEX REG. NEON 12 MF 4 - 13 D	INDEX REG. NEON 15 MF 4 - 13 D	INDEX REG. NEON 16 MF 4 - 13 D
34	OP ENTRY KEY BUS R 55-B N/C		+150 ON SERVICE TBS - 104	+150 ON SERVICE TBS - 104

PANEL

	e	f	g	h
	INDEX NEON 8 MF 4 - 03 D	INDEX NEON 9 MF 4 - 03 D	INDEX NEON 10 MF 4 - 11 D	INDEX NEON 11 MF 4 - 12 D
	ADR REG NEON 4 MF 3 - 18	ADR REG NEON 5 MF 3 - 18	ADR REG NEON 6 MF 3 - 18	ADR REG NEON 7 MF 3 - 18
	ADR REG NEON 2 MF 3 - 24	ADR REG NEON 3 MF 3 - 24	ADR REC NEON 15 MF 3 - 24	ADR REC NEON 16 MF 3 - 24
	LOAD CARDS BUTTAN C R 10	LOAD/DRUM BUTTAN N.O. R 10	LOADS TAPE BUTTAN N.O. R 10	LOADS TAPE BUTTAN N.O. R 10
	QUOTIENT ON FLD MF 4 - MF		TRAP	OP ENTRY KEY 5 R 3-6 N/C
	NORMAL OFF MF 4 - 168	NORMAL OFF MF 5P - 170	POWER LITE MF 4 BP 15 B R 3-5 N/C	OP ENTRY KEY 4 R 3-5 N/C
	LOAD CARDS BUTTAN C R 10		DISPAL STORAGE C MF 3	OP ENTRY KEY 3 R 3-4 N/C
	ENTER N.O. BUTTAN N.C. MF 4	ENTER N.O. BUTTAN N.O. MF 4	ENTER INST. N.O. MF 4	ENTER INST. N.O. MF 4
	MULTIPLE STEP 140V	MULTIPLE STEP 140V	MANUAL SWITCH A MF 4	MANUAL SWITCH C MF 4
	OP ENTRY KEY 5 MF 2 - 01 J	OP ENTRY KEY 6 MF 2 - 08 J	OP ENTRY KEY 7 MF 2 - 08 J	OP ENTRY KEY 10 MF 2 - 10 J
	OP ENTRY KEY 12 MF 2 - 15 J	OP ENTRY KEY 13 MF 2 - 15 J	OP ENTRY KEY 14 MF 2 - 15 J	OP ENTRY KEY 15 MF 2 - 15 J
	OP ENTRY KEY 18 MF 2 - 21 J	OP ENTRY KEY 19 MF 2 - 21 J	OP ENTRY KEY 20 MF 2 - 21 J	OP ENTRY KEY 21 MF 2 - 21 J
	OP ENTRY KEY 28 MF 2 - 28 J	OP ENTRY KEY 29 MF 2 - 30 J	OP ENTRY KEY 30 MF 2 - 30 J	OP ENTRY KEY 31 MF 2 - 30 J
	INDEX REG NEON 15 MF 4 - 16 D	INDEX REG NEON 17 MF 4 - 17 D	INDEX REG NEON 18 MF 4 - 17 D	INDEX REG NEON 19 MF 4 - 17 D
	MULTI STEP R 30	MULTI STEP R 30	MULTI STEP R 30	DISPLAY EFF. ADDRESS

OPERATORS PANEL