

1401. INTERMEDIATE LEVEL DIAGRAMS
TAU 9 INDEX

FIGURE	NAME	PART NUMBER
180	REFERENCE SHEET	
181	WRITE CONTROLS 1	723750
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183	READ CONTROLS 1	723752
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185	BACK SPACE, ERASE, REWIND AND REWIND UNLOAD	723754
186	WR CLOCK AND DLY COUNTER OSC GATING	723755
187	DELAY COUNTER	723756
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197-1	7330 BACKSPACE OP	723770
		723771

DATE	CHANGE NO.	DATE	CHANGE NO.	INTERNATIONAL BUSINESS MACHINES CORP			
9-7-61	112216B	17.10.61	TA 37927 B	NAME	TAU 9 INDEX		
7-5-65	124688	18.OCT 65	TA 32501 F	DESIGN		TYPE	
				DETAIL		SCALE	
				CHECK		DRAW	VE R-2-61
				APPRO		CHECK	

723772

INPUTS FROM 729 TAPE DRIVE

89.02.20.0

729 TP DRV LOGIC
A7 + A4
I1 + I7

TU.07.00.0	01.03.1	8VPP READ BUS 1 BIT 729	19081
TU.07.00.0	01.03.1	8VPP READ BUS 2 BIT 729	19081
TU.07.00.0	01.03.1	8VPP READ BUS 4 BIT 729	19081
TU.07.00.0	01.03.1	8VPP READ BUS 8 BIT 729	19081
TU.07.00.0	01.03.1	8VPP READ BUS A BIT 729	19081
TU.07.00.0	01.03.1	8VPP READ BUS B BIT 729	19081
TU.07.00.0	01.03.1	8VPP READ BUS C BIT 729	19081
TU.08.10.1	01.02.1	SEL + RDY WR 729	189A4
TU.08.10.1	01.02.1	SEL + RDY RD 729	189A3
TU.08.10.1	01.02.1	SEL + REWIND 729	185A2
TU.08.10.1	01.02.1	SEL + TI ON 729	183A2
TU.08.10.1	01.02.2	HIGH DENSITY 729	189A1
TU.08.10.1	01.04.1	WRITE ECHO 729	191A1
TU.08.10.1	01.06.1	SEL + LP 729	185A4
TU.08.10.1	01.06.1	SEL + NOT LP 729	189C4
TU.08.10.1	01.05.1	SEL + TI OFF 729	189C4
TU.08.10.1	01.01.1	SEL AND READY MOD 2 729	189A3
TU.08.10.1	01.01.1	SEL AND READY MOD 4-729	189A2
TU.08.10.1	01.01.1	MOD 5 OR MOD 6	187A4

OUTPUTS TO 729 TAPE DRIVE

89.02.25.0

729 TP DRV LOGIC
I1 + I7
A2 + A4

19086	WRITE BUS 1 BIT 729	01.04.1	TU.08.00.1
19086	WRITE BUS 2 BIT 729	01.04.1	TU.08.00.1
19086	WRITE BUS 4 BIT 729	01.04.1	TU.08.00.1
19086	WRITE BUS 8 BIT 729	01.04.1	TU.08.00.1
19086	WRITE BUS A BIT 729	01.04.1	TU.08.00.1
19086	WRITE BUS B BIT 729	01.04.1	TU.08.00.1
19085	WRITE BUS C BIT 729	01.04.1	TU.08.00.1
18202	WRITE PULSE 729	01.04.1	TU.08.00.1
18206	WR CK CH 729	01.04.1	TU.08.00.1
181C5	SET WR STATUS 729	01.02.1	TU.08.00.1
183C6	SET READ STATUS 729	01.02.1	TU.08.00.1
185C5	BACKWARD 729	01.07.1	TU.08.00.1
189C6	GO 729	01.07.1	TU.08.00.1
185B2	REWIND 729	01.09.1	TU.08.00.1
185J2	REWIND UNLOAD 729	01.09.1	TU.08.00.1
189D3	TURN OFF TI 729	01.05.1	TU.08.00.1
183D2	TURN ON TI 729	01.05.1	TU.08.00.1

INPUTS FROM 7330 TAPE DRIVE

89.02.21.0

7330 TP DRV LOGIC

73.30.05.1	8VPP READ BUS 1 BIT 7330	19081
73.30.05.1	8VPP READ BUS 2 BIT 7330	19081
73.30.05.1	8VPP READ BUS 4 BIT 7330	19081
73.30.05.1	8VPP READ BUS 8 BIT 7330	19081
73.30.05.1	8VPP READ BUS A BIT 7330	19081
73.30.05.1	8VPP READ BUS B BIT 7330	19081
73.20.05.1	8VPP READ BUS C BIT 7330	19081
73.20.25.1	SEL + RDY WR 7330	189A4
73.20.25.1	SEL + RDY RD 7330	189A3
73.20.25.1	SEL + REWIND 7330	185A1
73.20.25.1	SEL + TI ON 7330	183A1
73.20.25.1	SEL + RDY HI 7330	189A2
73.20.05.1	ECHO PULSE 7330	191A1
73.20.25.1	SEL + LP 7330	185A4
73.20.25.1	SEL + RDY LO 7330	189A2
73.20.25.1	SEL RDY BWD 7330	185C3

OUTPUTS TO 7330 TAPE DRIVE

89.02.26.0

7330 TP DRV LOGIC

19086	WRITE BUS 1 BIT 7330	73.30.05.1
19086	WRITE BUS 2 BIT 7330	73.30.05.1
19086	WRITE BUS 4 BIT 7330	73.30.05.1
19086	WRITE BUS 8 BIT 7330	73.30.05.1
19086	WRITE BUS A BIT 7330	73.30.05.1
19086	WRITE BUS B BIT 7330	73.30.05.1
190C6	WRITE BUS C BIT 7330	73.30.05.1
182D2	WRITE PULSE 7330	73.30.05.1
182D5	WR TR REL 7330	73.30.05.1
181C5	SET WRITE STATUS 7330	73.20.25.1
183C6	SET READ STATUS 7330	73.20.25.1
185C5	BACKWARD 7330	73.20.25.1
189C6	GO 7330	73.20.25.1
185B2	REWIND 7330	73.20.25.1
185D2	REWIND UNLOAD 7330	73.20.25.1
189D3	TURN OFF TI 7330	73.20.25.1
183D2	TURN ON TI 7330	73.20.25.1

INPUTS TO TAU

89.02.30.0

1401 ILD

129D3	1 BIT WRITE DATA LINE	190A4
129D3	2 BIT WRITE DATA LINE	190A4
129D3	4 BIT WRITE DATA LINE	190A4
126D4	8 BIT WRITE DATA LINE	190A4
126D4	A BIT WRITE DATA LINE	190A4
126D4	B BIT WRITE DATA LINE	190A4
129D5	C BIT WRITE DATA LINE	190A4
130D2	WR CALL	181A5
130D2	WR TH CALL	181A6
129B3	DISC CALL	182A5
126C4	READ CALL	183A6
126B3	REWIND CALL	185A2
126B3	REWIND + UNLOAD CALL	185B2
126B2	BACKSPACE CALL	185A6
126B2	BACKSPACE CALL	192A1
129C3	TAU RESET	186A1
127C5	ODD REDUNDANCY CALL	183A3
129D4	TURN OFF TI	189C3
130B5	MAN WR DISC	181A4
130D4	MANUAL STOP ON ERROR	192B5
130D4	MANUAL STOP ON ERROR	192C2
	EARLY SAMPLE	192A3
	EARLY SAMPLE	191C4
	AMPLIFIER BIAS	190A1
	COMPARE CHECK CE	192B5
	REG A ONLY	191B6
	REG B ONLY	191B6
130C3	TURN ON GO	189B5
	NOT MANUAL OP	181A5
	SET TAU ERROR LATCH	192A2
126B2	ERASE CALL	185A5
	DENSITY SW 200 + 556	187A3
	DENSITY SW 200 + 556	187A4
	DENSITY SW 200 + 800	187A3
	DENSITY SW 556 + 800	187A3
	DENSITY SW 556 + 800	187A2

OUTPUTS FROM TAU

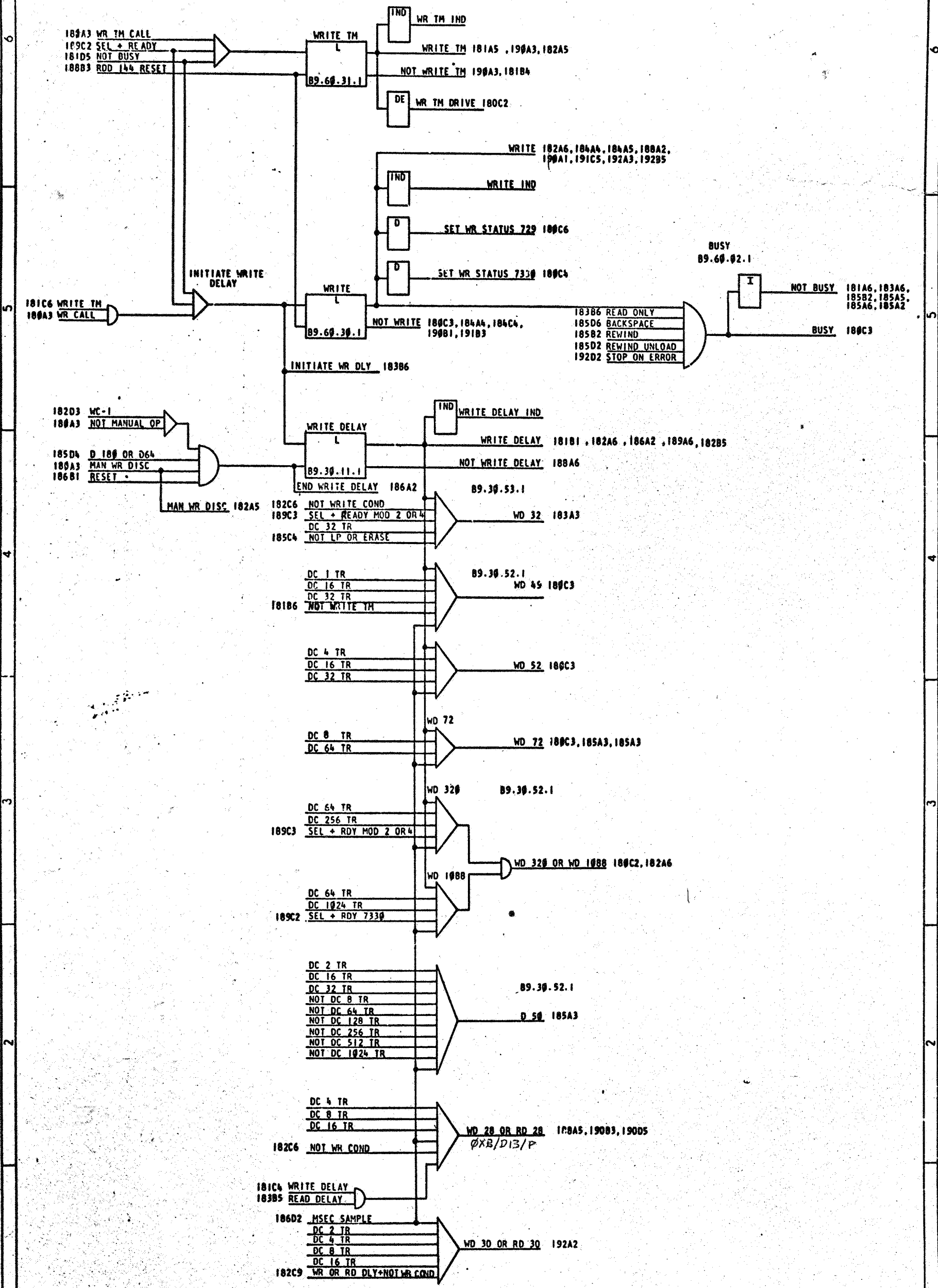
89.02.35.0

1401 ILD

190A6	R-W REG 1 BIT	127C3
190A6	R-W REG 2 BIT	127C3
190A6	R-W REG 4 BIT	127C3
190A6	R-W REG 8 BIT	127C4
190A6	R-W REG A BIT	127C4
190A6	R-W REG B BIT	127C4
190A6	R-W REG C BIT	127B5
183D4	END READ DELAY	128A2
182C6	WRITE COND	
181D5	BUSY	130A4
185B4	LOAD POINT	126B2
188D2	CHECK CHAR	130A3
183B1	SEL + TI ON	130A4
192C2	ERROR	129B3
188B3	FWD STOP DELAY	129A5
182D3	WC 2	126A2
182C2	WC 8 TR	130A2
184B4	WR RC-5 OR READ RC-7	126A1
181C4	WD 52	130A5
181C3	WD 72	130A5
181C3	WD 320 OR WD 1088	130A5
181C4	WD 49	128A2
189C2	SEL + READY MOD 4	128A2
189B2	SEL + RDY HI 7330	128B2
186B1	729 HIGH DENSITY 800 OR 556 BPI	128A2
184C2	RC 4 TR	128B2
181B6	WR TH DRIVE	126A2
185B1	TAU READY	

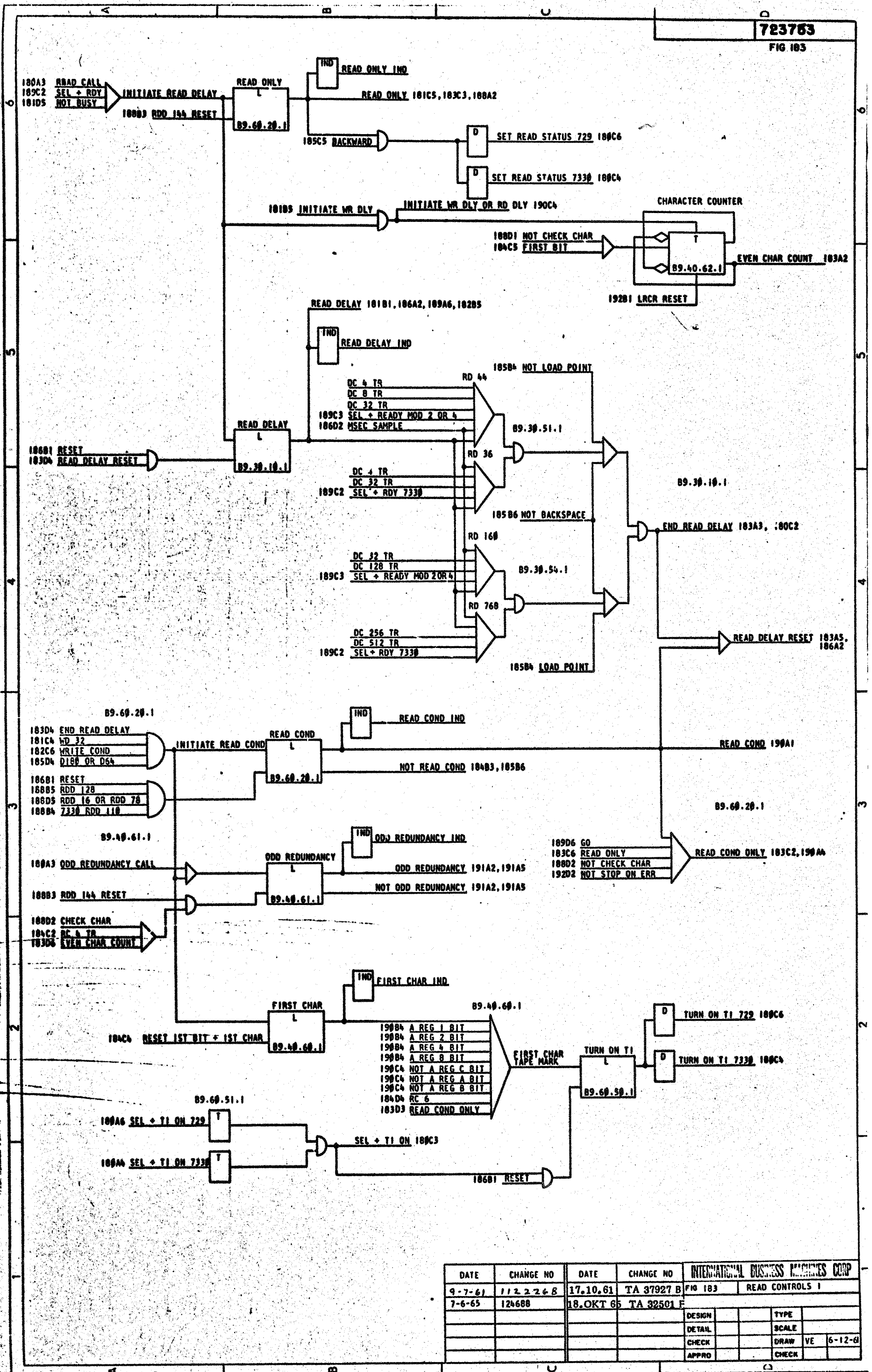
DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
17.10.61	124688	17.10.61	TA 37927 B	FIG 180 REFERENCE SHEET
7-6-65	124688	18.OKT65	TA 32501 F	
DESIGN		TYPE		
DETAIL		SCALE		
CHECK		DRAW		
APPRO		CHECK		

723750

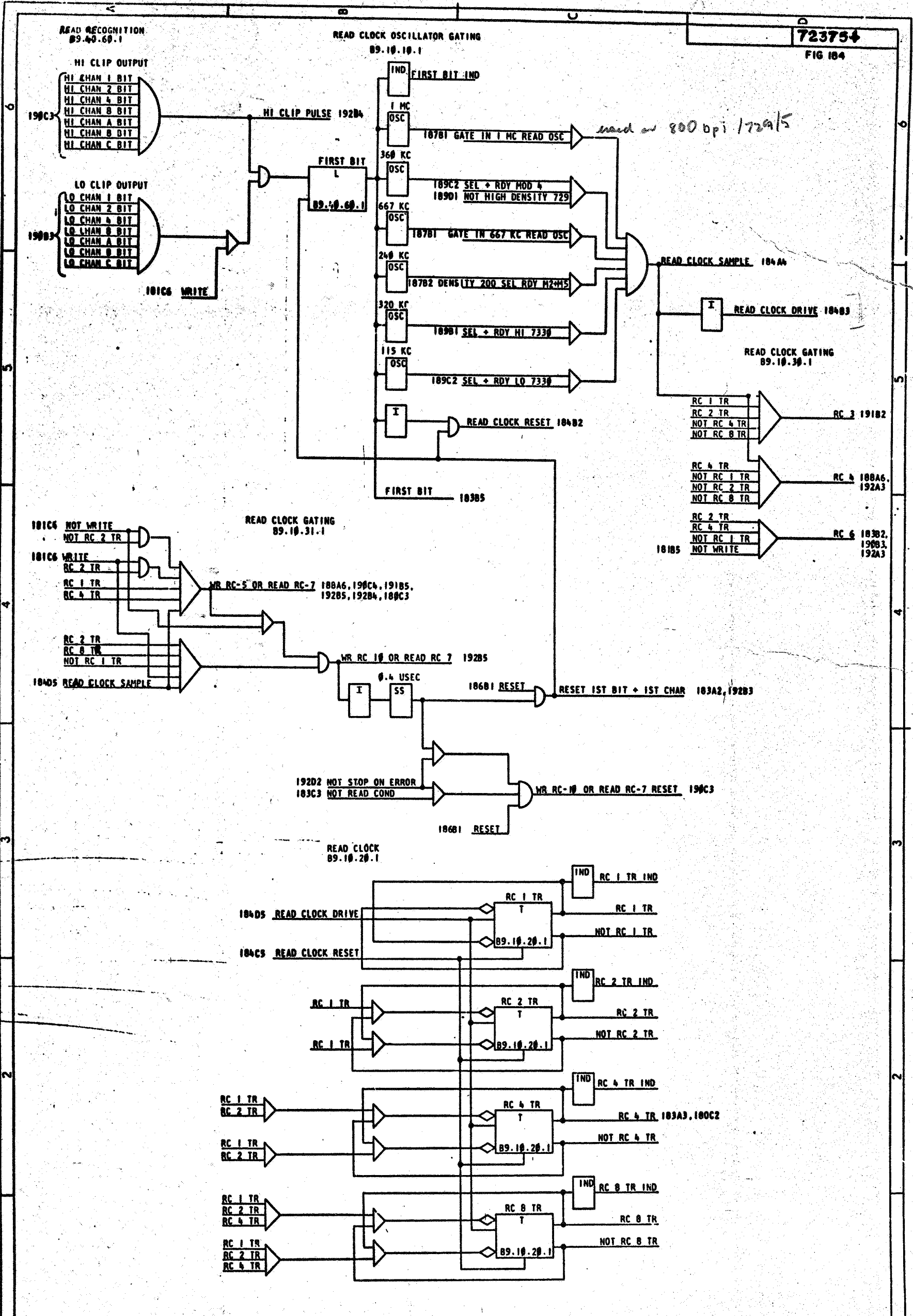


DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	1122268	17.10.61	TA 37927 B	FIG 101 WRITE CONTROLS I
7-6-65	124688	18.OKT 65	TA 32501 F	
				DESIGN
				DETAIL
				CHECK
				APPRO
				TYPE
				SCALE
				DRAW VE
				CHECK

10101



DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	112226B	17.10.61	TA 37927 B	FIG 183 READ CONTROLS I
7-6-65	124688	18.OKT 65	TA 32501 F	
				DESIGN
				DETAIL
				CHECK
				APPRO
				TYPE
				SCALE
				DRAW VE
				CHECK

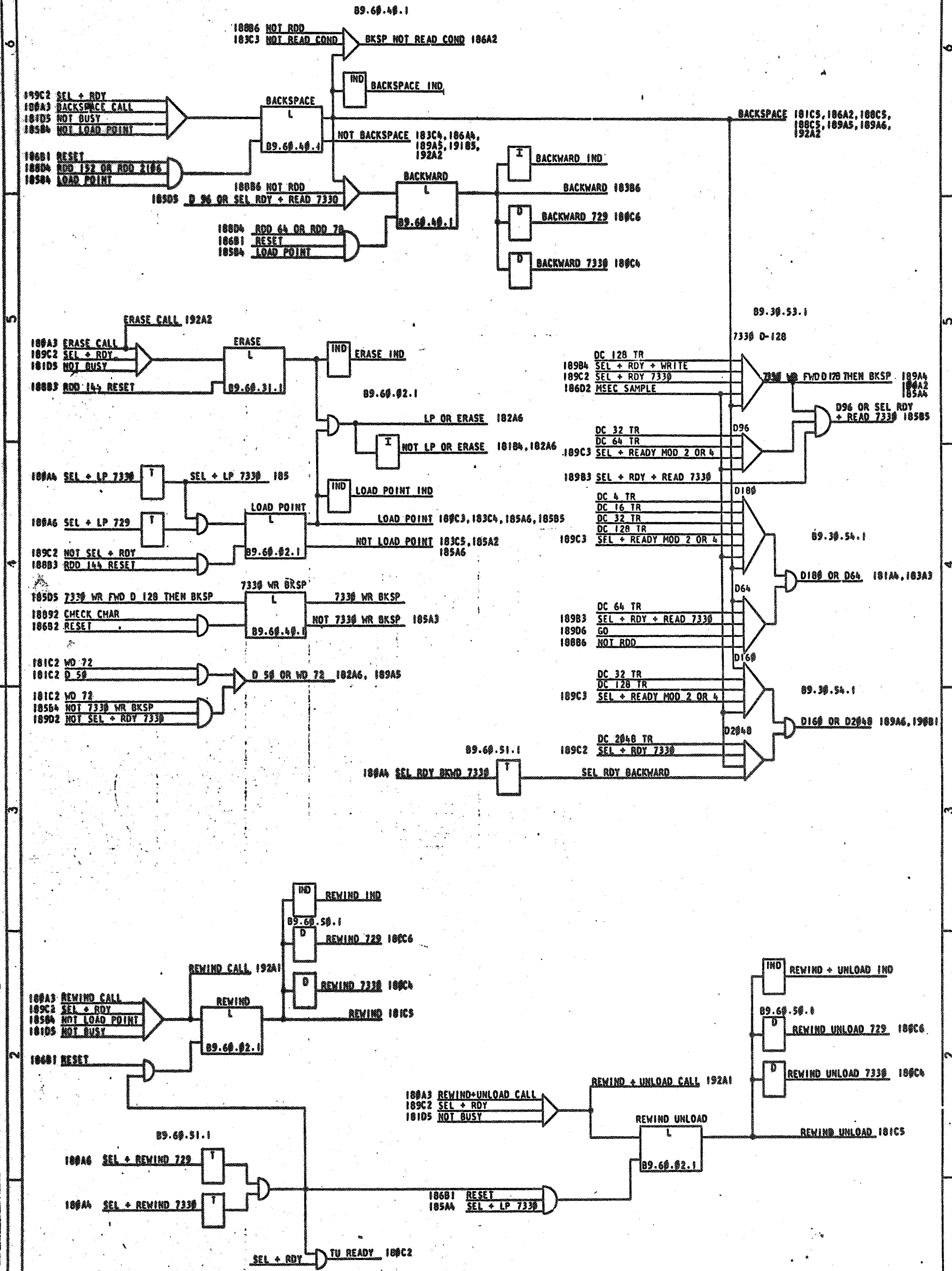


INTERNATIONAL BUSINESS MACHINES CORP					
DATE	CHANGE NO	DATE	CHANGE NO	READ CONTROLS 2	
9-7-61	112226 B	17.10.61	TA 37927 B	FIG 184	
7-6-65	124688	18.OKT 65	TA 32501 F		
			DESIGN		TYPE
			DETAIL		SCALE
			CHECK	DRAW VE	6-12-61
			APPRO	CHECK	

401071

723755

FIG. 185



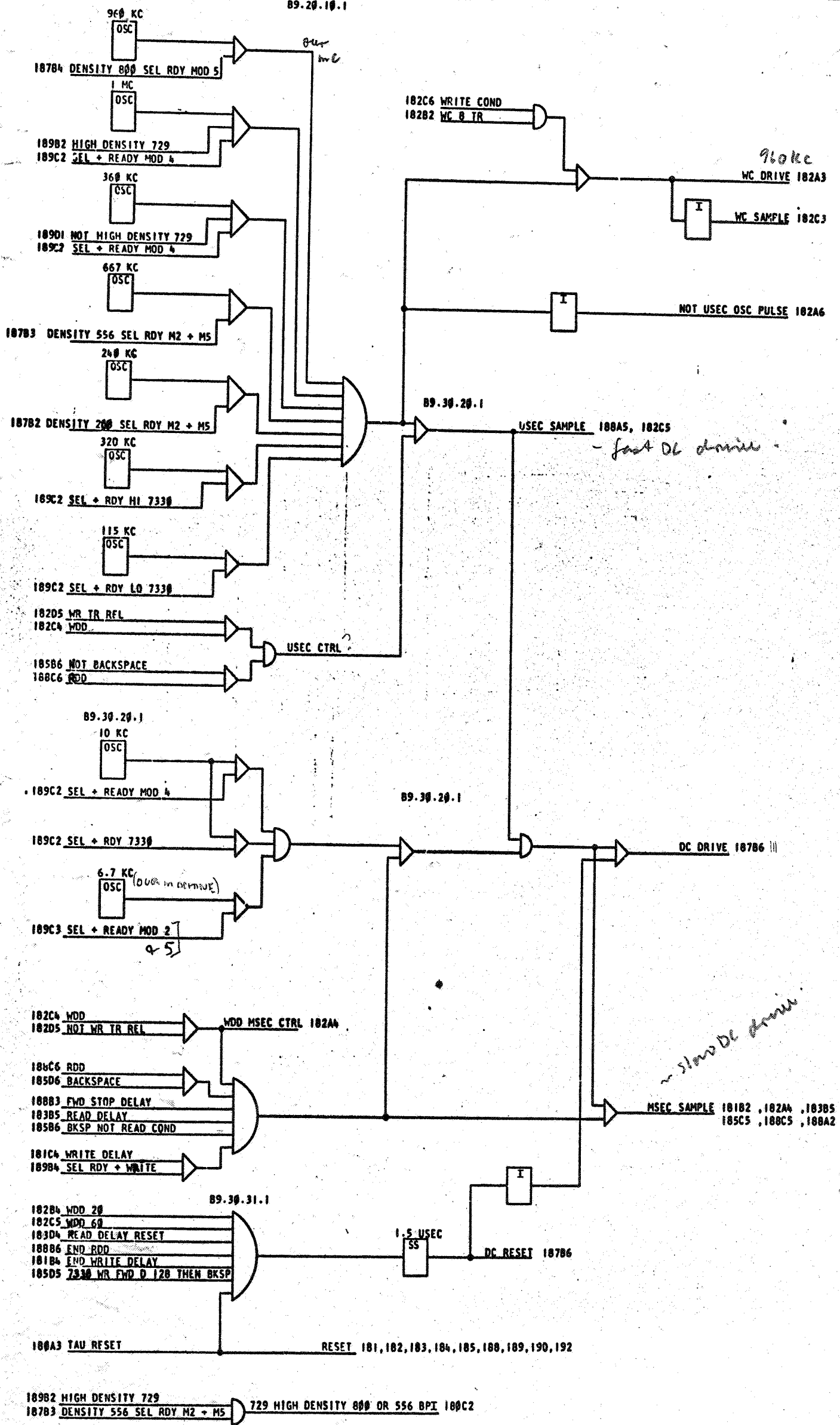
INTERNATIONAL BUSINESS MACHINES CORP					
DATE	CHANGE NO.	DATE	CHANGE NO.	FIG. 185	BACKSPACE ERASE
9-7-61	112216 B	17.10.61	TA 37927 B		
7-6-65	124688	18.OKT 65			REWIND AND REWIND UNLOAD
			TA 32501 F	DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW VE 6-14-61
				APPRO	CHECK

723755

WRITE CLOCK AND DELAY COUNTER OSCILLATOR GATING
89.20.10.1

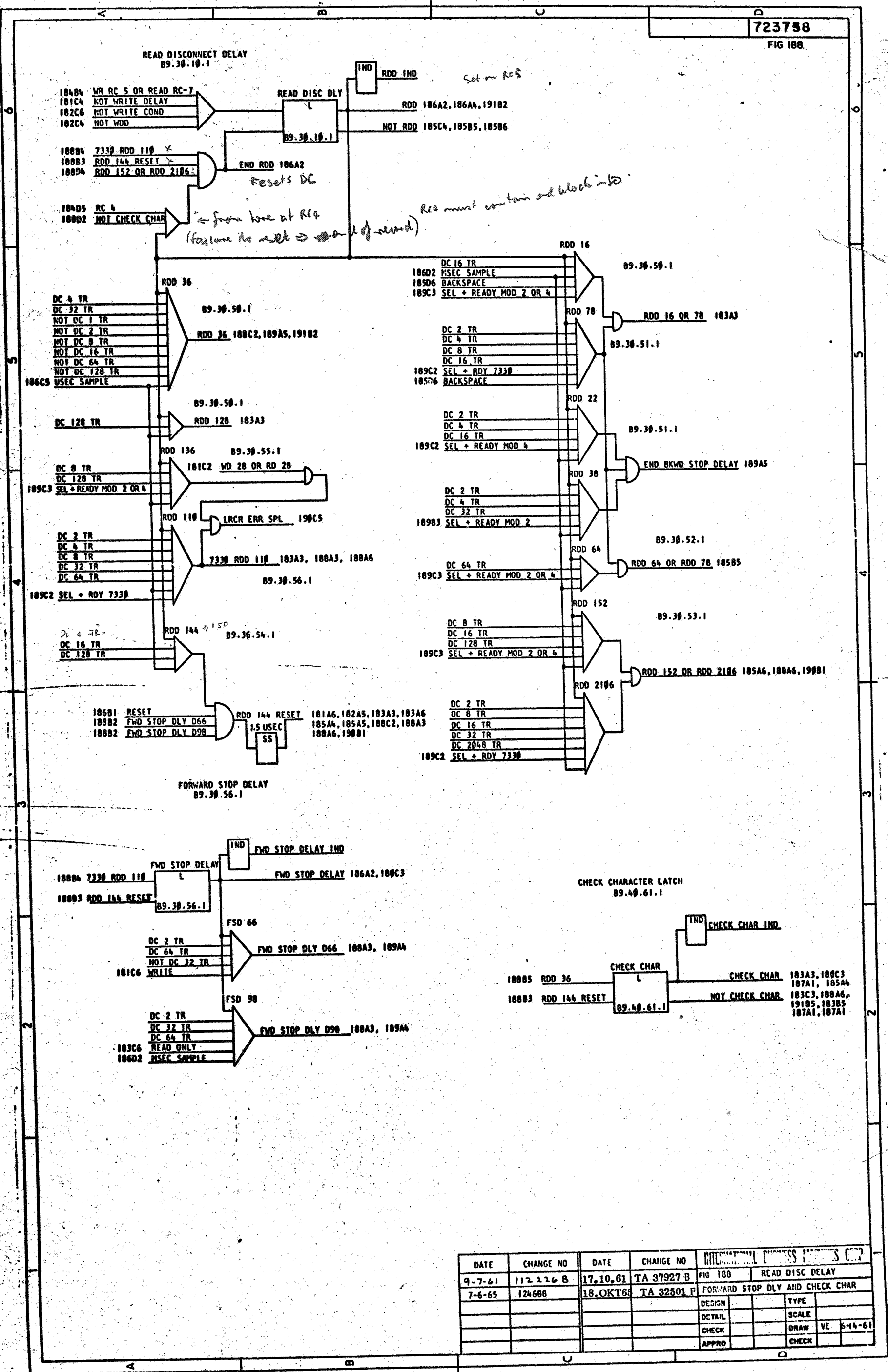
723756

FIG 186



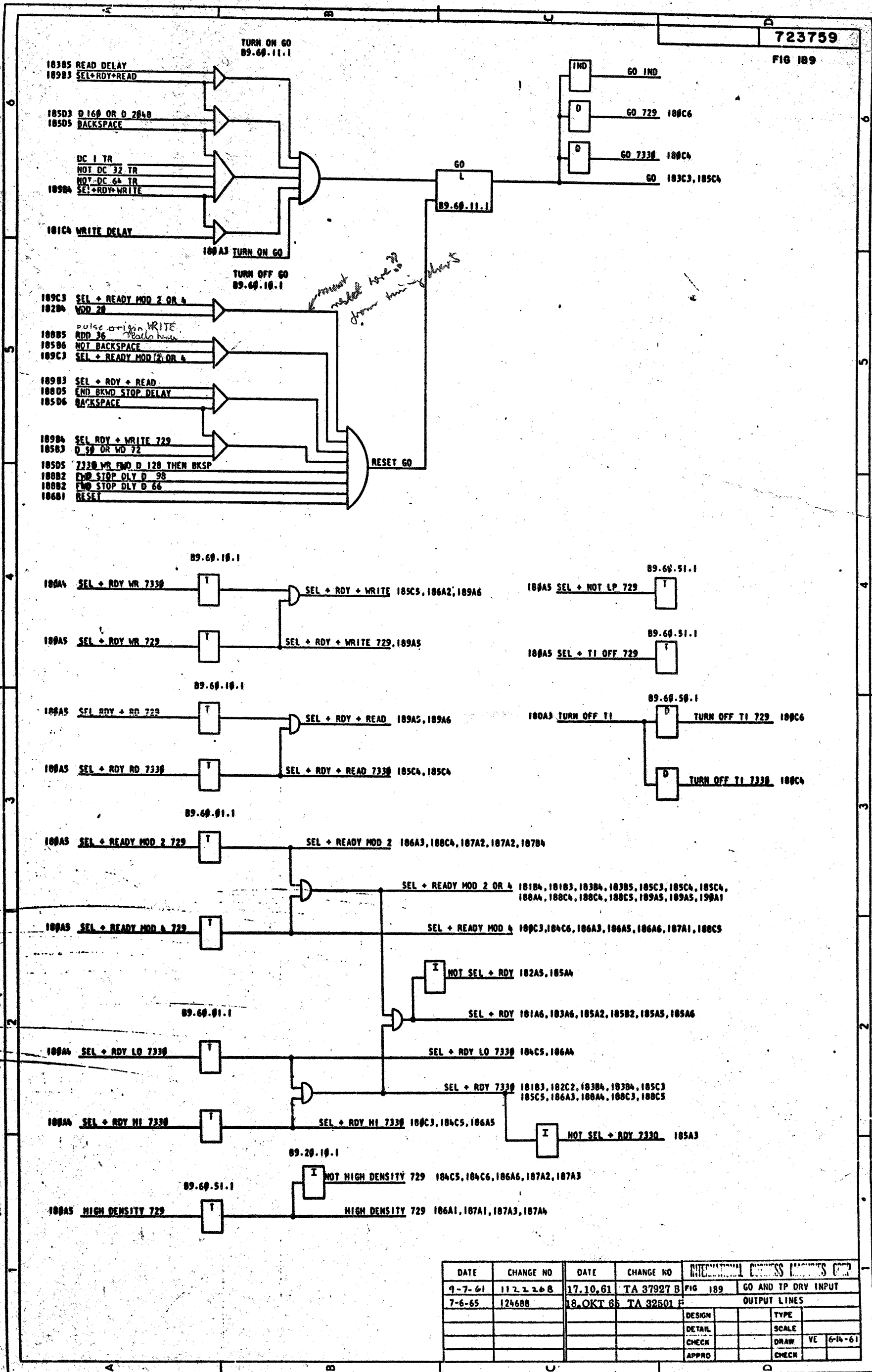
DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	112226B	17.10.61	TA 37927 B	FIG 186 WR CLOCK AND DLY
7-6-65	124688	18. OKT 65	TA 32501 F	COUNTER OSC GATING
				DESIGN
				DETAIL
				CHECK
				APPRO
				TYPE
				SCALE
				DRAW VE 6-5-61
				CHECK

723756

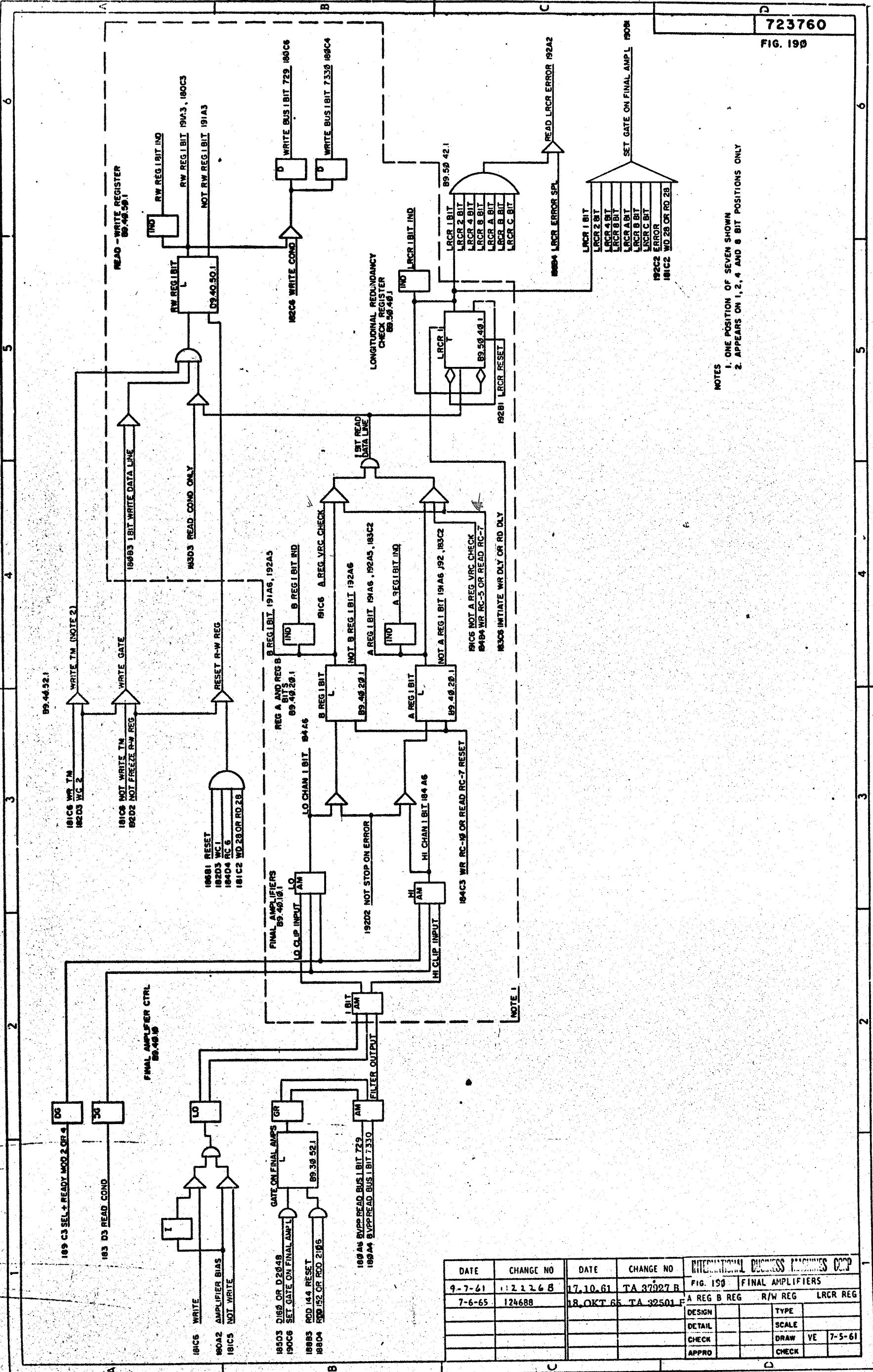


DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	112 226 B	17-10-61	TA 37927 B	FIG 188 READ DISC DELAY
7-6-65	124688	18-OCT-65	TA 32501 F	FORWARD STOP DLY AND CHECK CHAR
				DESIGN
				DETAIL
				CHECK
				APPRO
				TYPE
				SCALE
				DRAW VE 5-14-61
				CHECK

723758



DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	1122208	17.10.61	TA 37927 B	FIG 189 GO AND TP DRV INPUT
7-6-65	124688	18. OKT 65	TA 32501 F	OUTPUT LINES
				DESIGN
				DETAIL
				CHECK
				APPRO
				TYPE
				SCALE
				DRAW VE 6-14-61
				CHECK

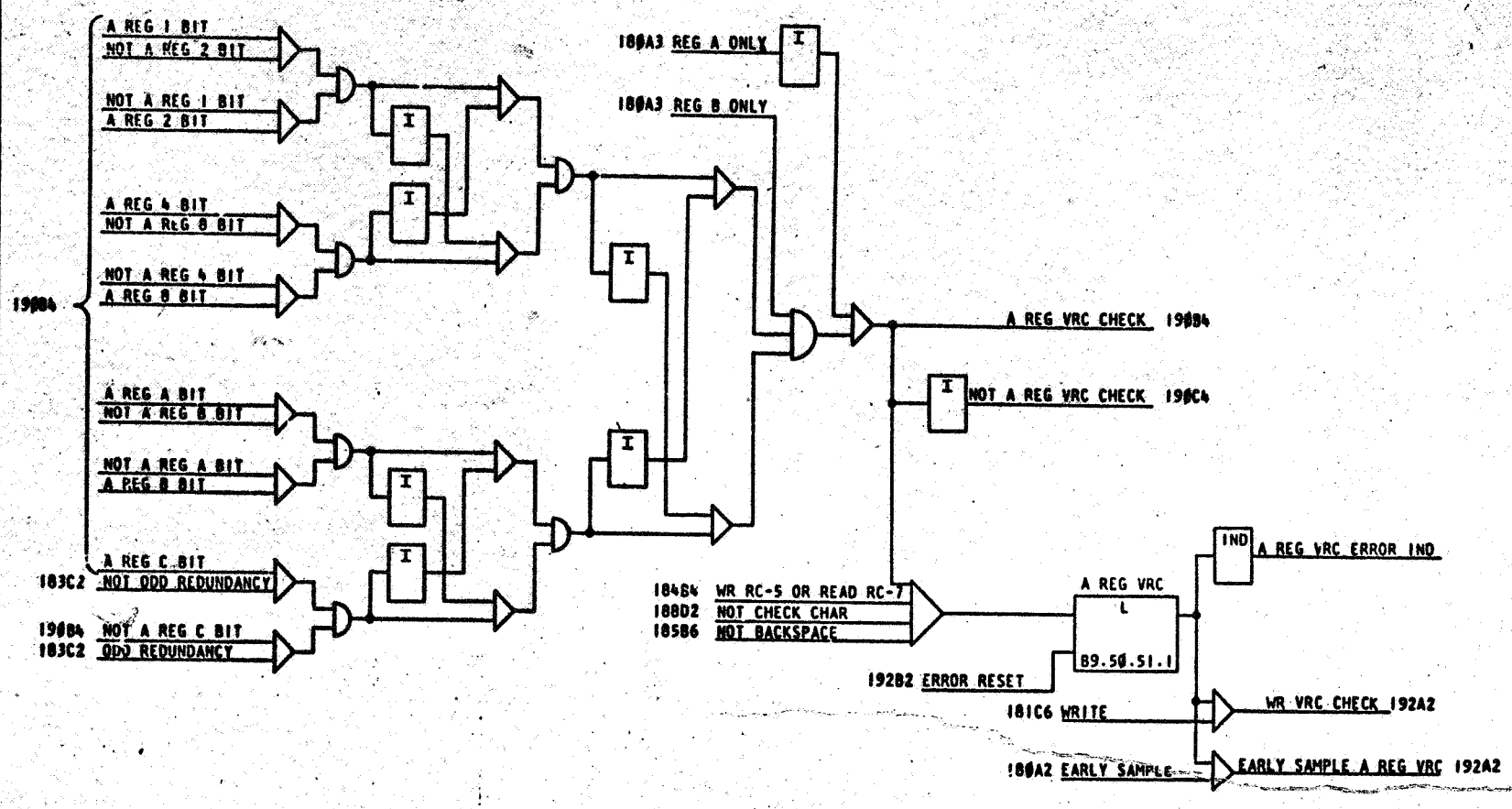


NOTES
1. ONE POSITION OF SEVEN SHOWN
2. APPEARS ON 1, 2, 4 AND 6 BIT POSITIONS ONLY

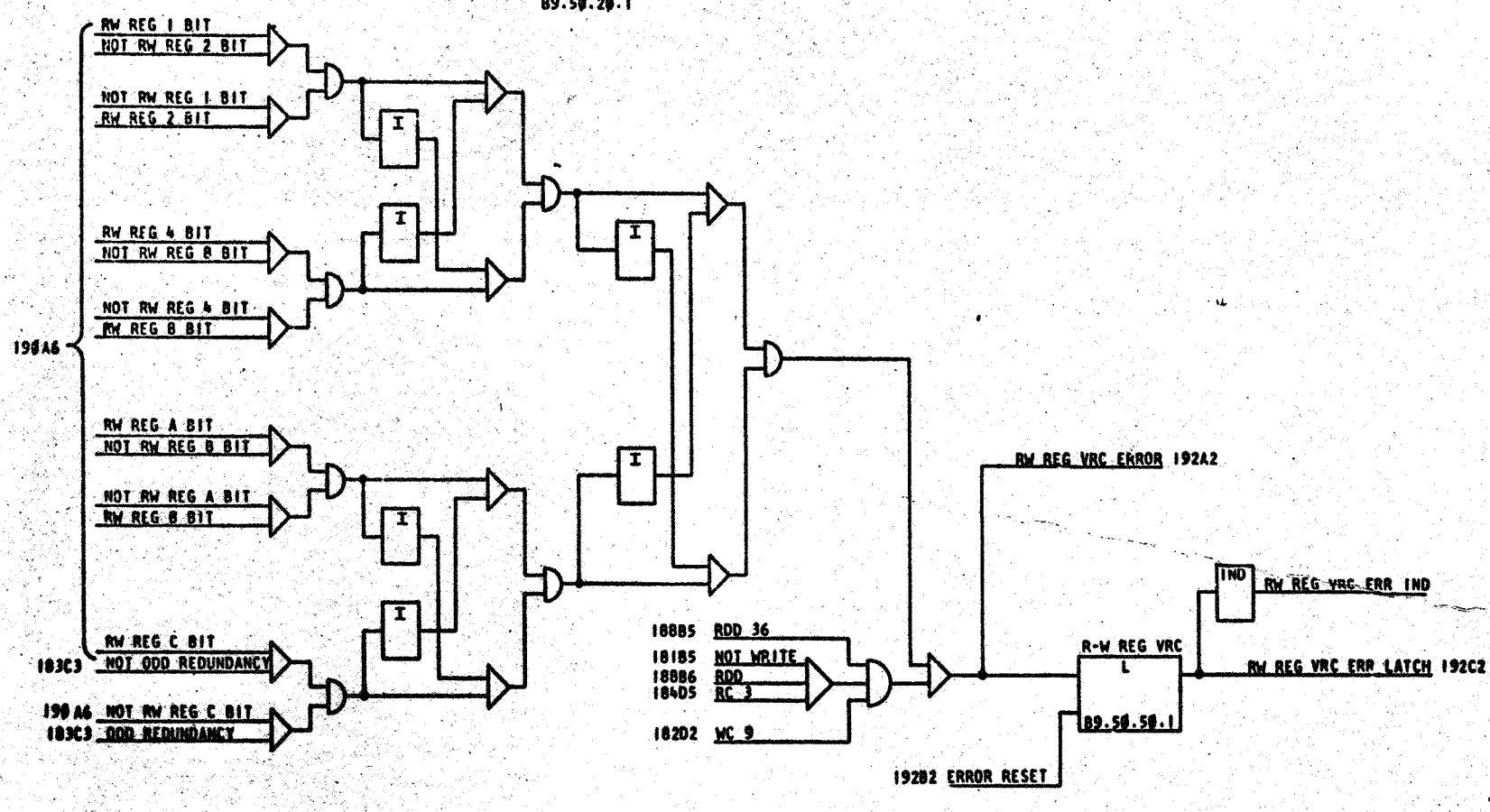
DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	112126B	17-10-61	TA 37927 B	FIG. 190 FINAL AMPLIFIERS
7-6-65	124688	18-OCT-65	TA 32501 F	A REG B REG R/W REG LRCR REG
				DESIGN
				DETAIL
				CHECK
				APPRO
				TYPE
				SCALE
				DRAW VE
				CHECK

723760

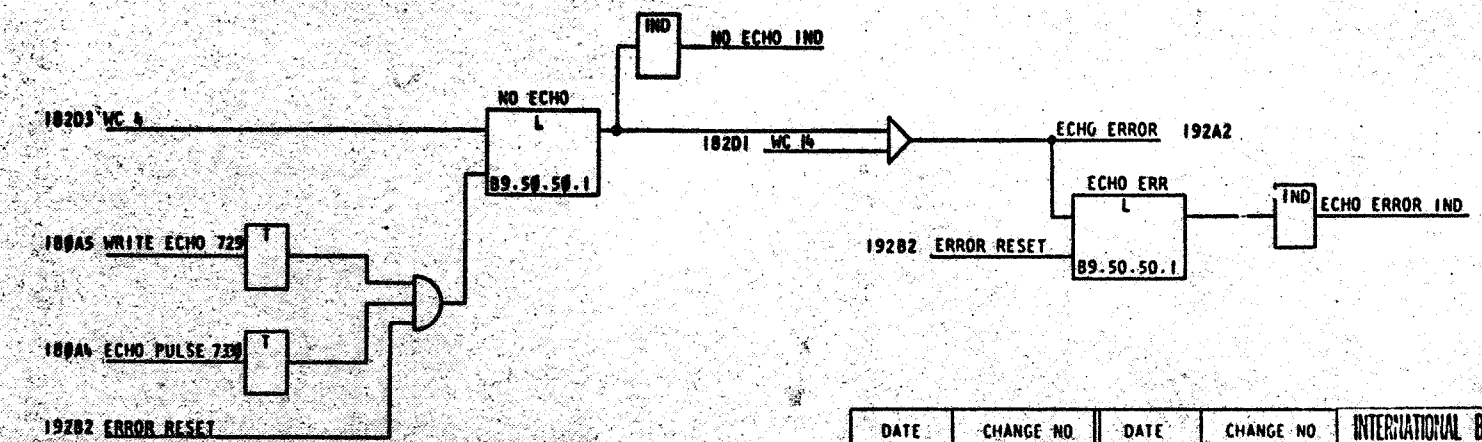
A REG VRC
B9.50.10.1



READ WRITE REG VRC
B9.50.20.1

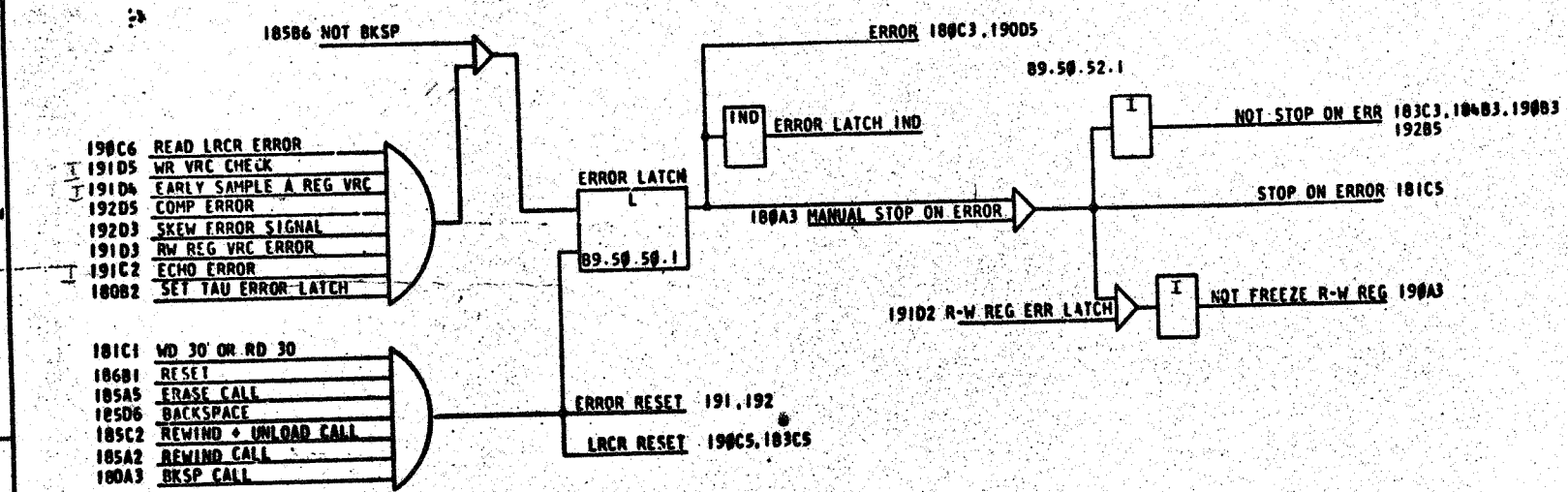
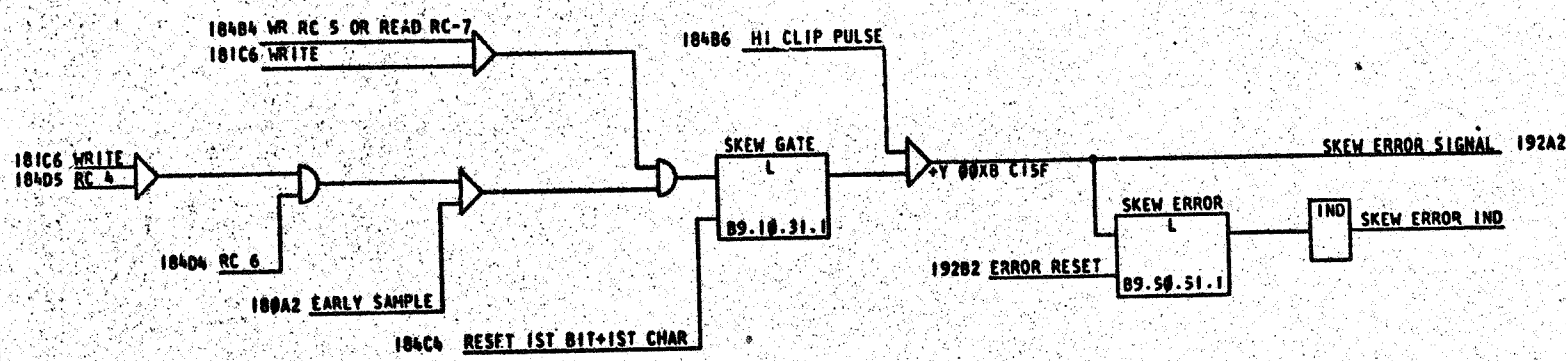
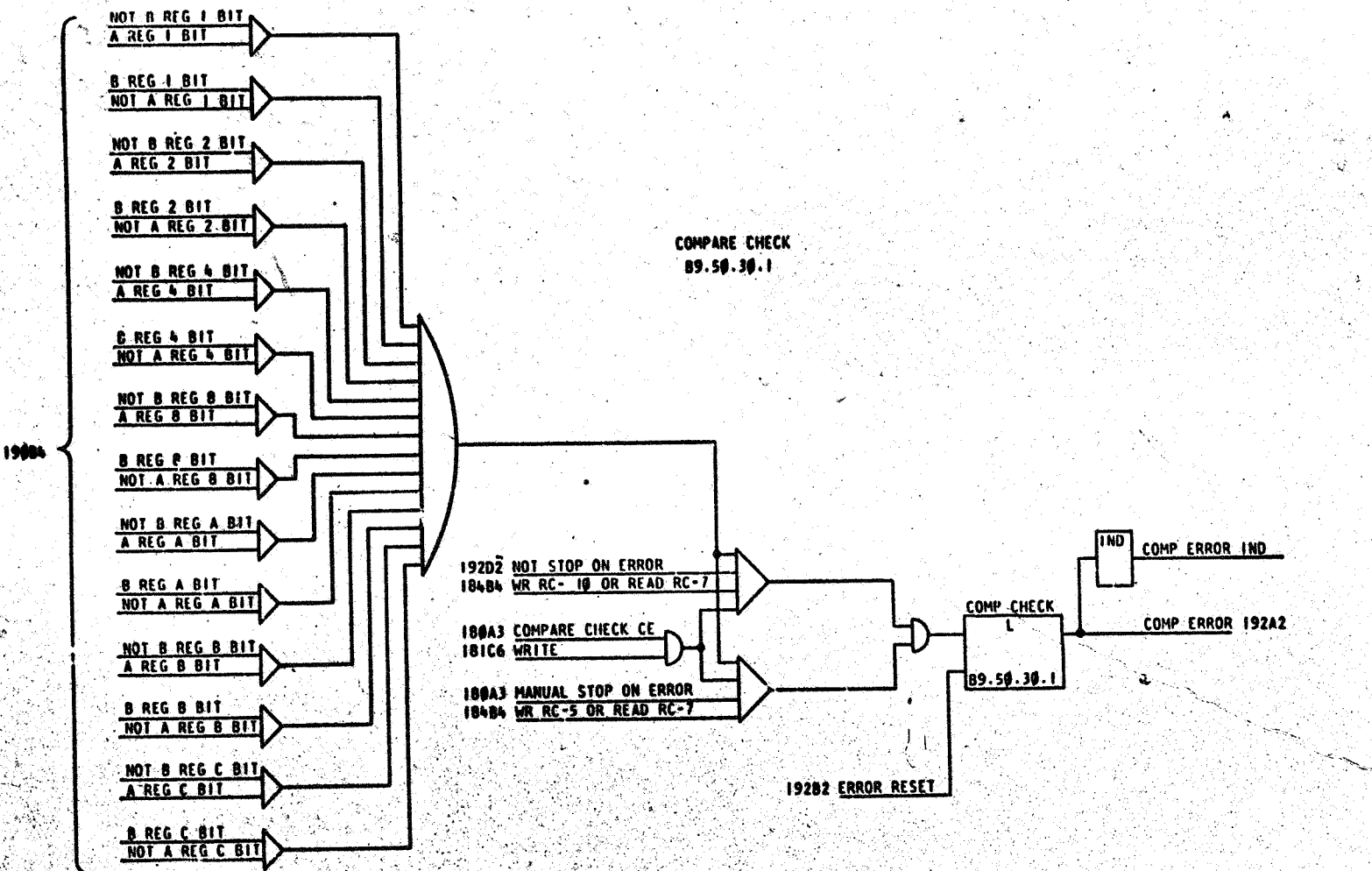


ECHO ERROR
B9.50.50.1



DATE		CHANGE NO.		INTERNATIONAL BUSINESS MACHINES CORP.	
9-7-61	112226B	17-10-61	TA 37927 B	FIG 191	ERROR CIRCUITS I
7-6-65	124688	18-OCT-65	TA 32501 F		
				DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW VE 6-3-61
				APPRO	CHECK

723751

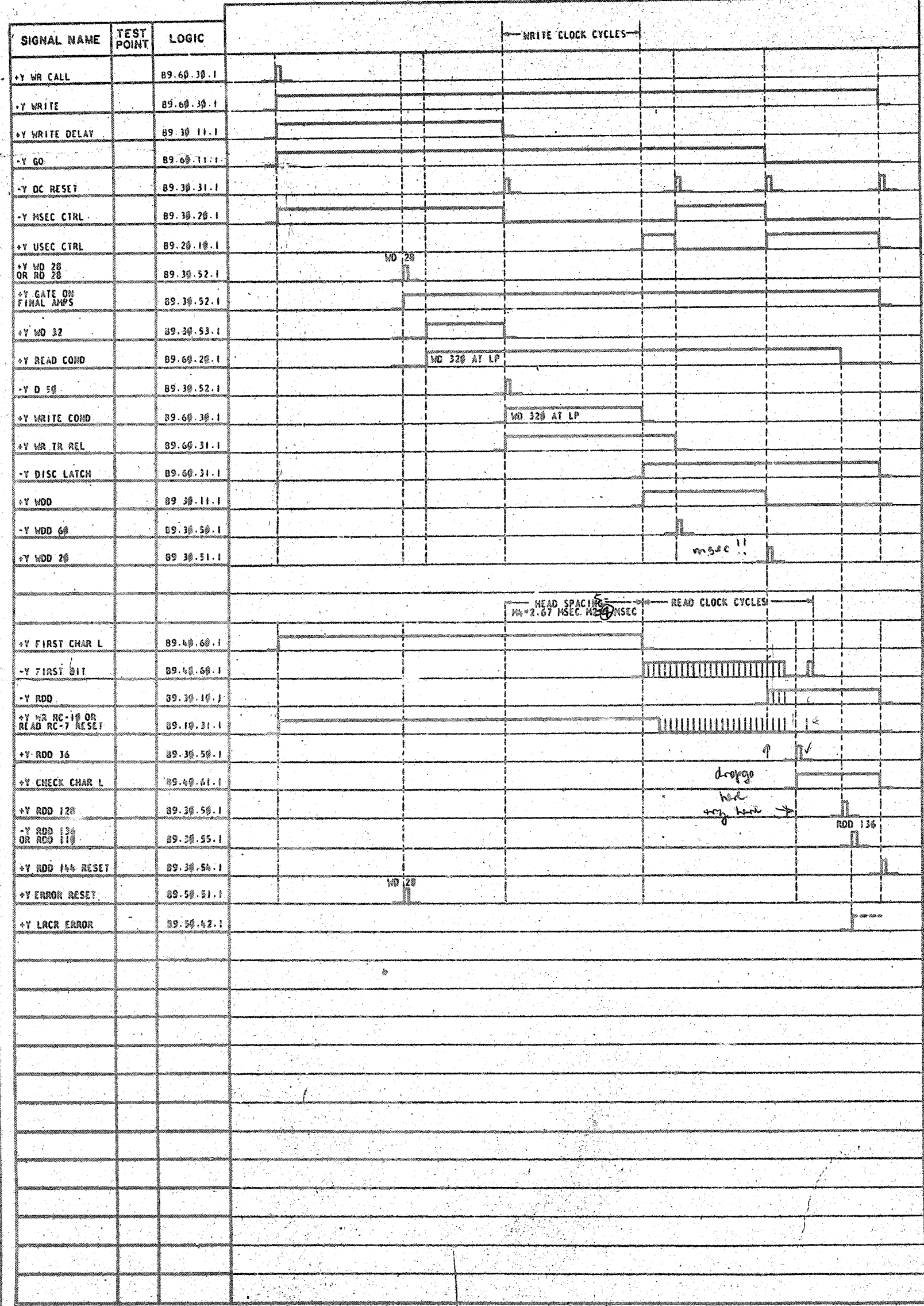


INTERNATIONAL BUSINESS MACHINES CORP					
DATE	CHANGE NO	DATE	CHANGE NO	FIG 192	ERROR CIRCUITS 2
4-1-61	112226-B	17.10.61	TA 37927 B		
7-6-65	124688	18.OKT65	TA 32501 E		
				DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW VI 6-3-61
				APPRO	CHECK

723762

723763

FIG 195



DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9/7/61	113,230 B	17.10.61	28	FIG 195 729
WRITE OPERATION				
DESIGN		TYPE		
DETAIL		SCALE		
CHECK		DRAWN	VE	6-27-61
APPRO		CHECK		

82

28

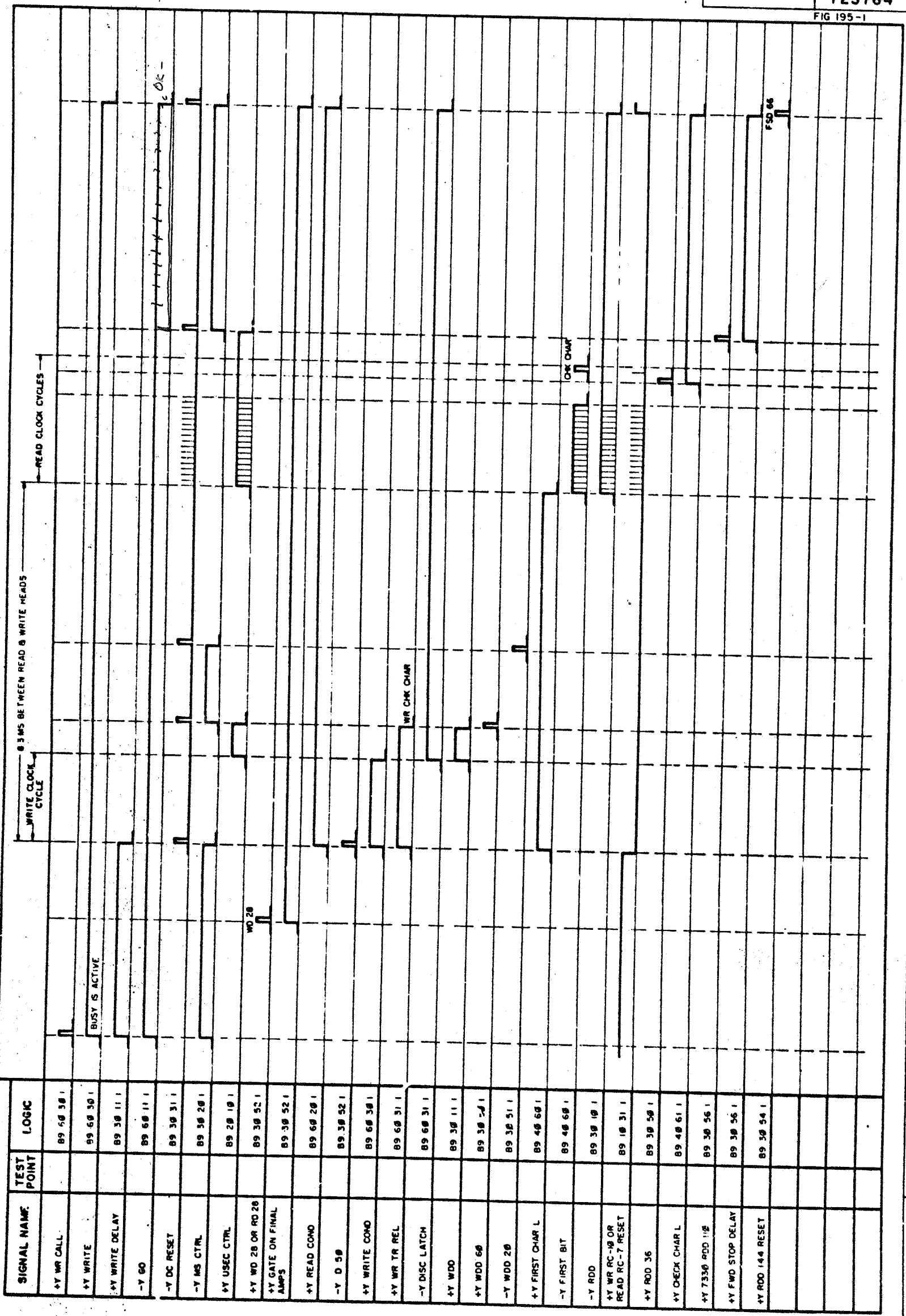
30 faults
 7.8ms
 1.8ms
 1/4
 of block

WD 20
 to WD 26

9/17/61 017618

7330 only

723764
FIG 195-1



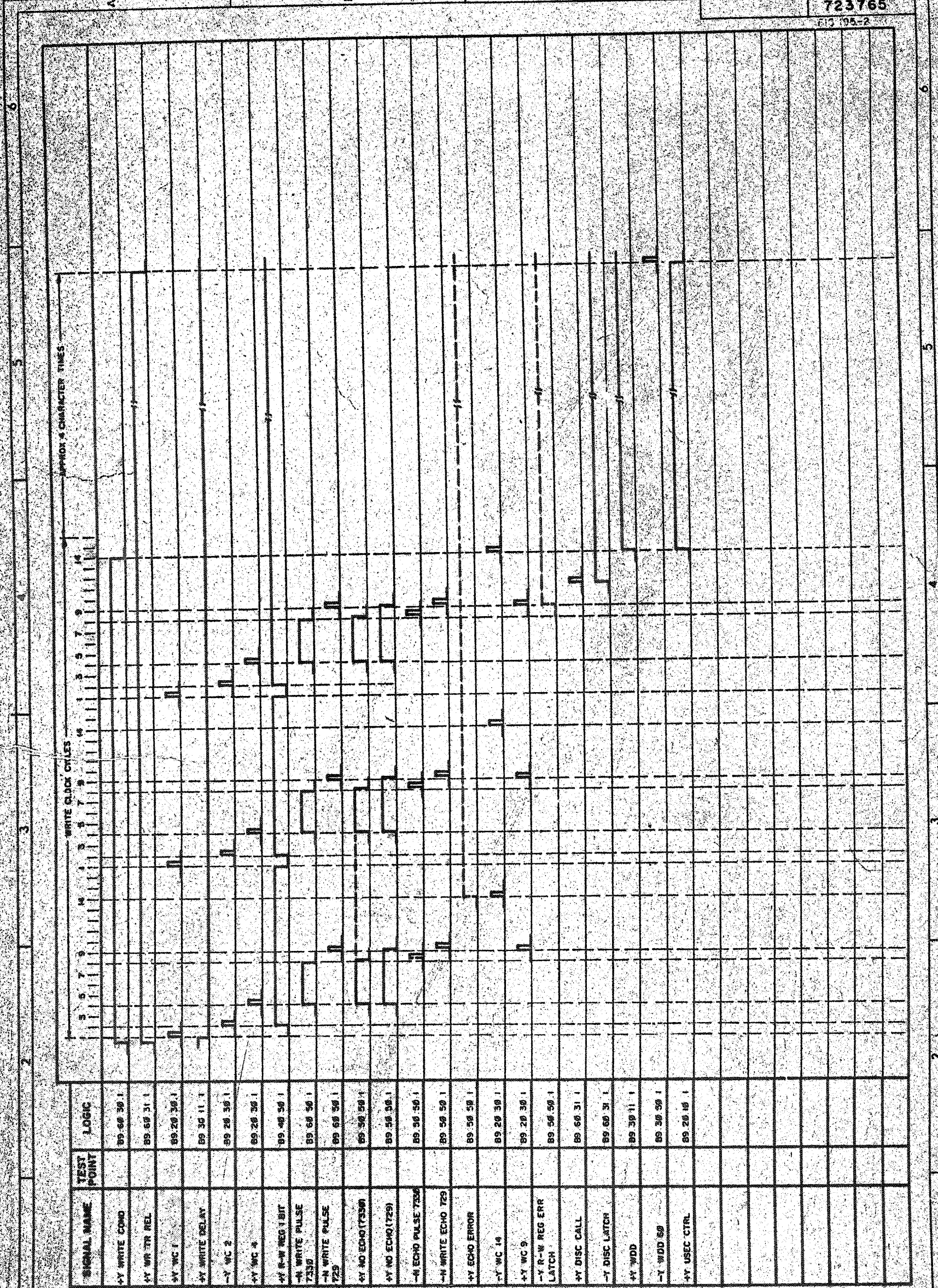
SIGNAL NAME	TEST POINT	LOGIC
+Y WR CALL		89 58 38 I
+Y WRITE		89 58 30 I
+Y WRITE DELAY		89 38 11 I
-Y GO		89 68 11 I
-Y DC RESET		89 38 31 I
-Y MS CTRL		89 38 28 I
+Y USEC CTRL		89 28 19 I
+Y WD 28 OR RD 28		89 38 52 I
+Y GATE ON FINAL AMPS		89 38 52 I
+Y READ COMO		89 68 28 I
-Y D 5B		89 38 52 I
+Y WRITE COMO		89 68 38 I
+Y WR TR REL		89 68 31 I
-Y DISC LATCH		89 68 31 I
+Y WDD		89 38 11 I
+Y WDD 6B		89 38 51 I
-Y WDD 2B		89 38 51 I
+Y FIRST CHAR L		89 48 68 I
-Y FIRST BIT		89 48 68 I
-Y RD		89 38 18 I
+Y WR RC-10 OR READ RC-7 RESET		89 18 31 I
+Y RD 36		89 38 58 I
+Y CHECK CHAR L		89 48 61 I
+Y 7330 RDD 11B		89 38 56 I
+Y FWD STOP DELAY		89 38 56 I
+Y RD 144 RESET		89 38 94 I

DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP	
9-7-67	112226B	TA 37927B	FIG 195-1	7330 WRITE OPERATION	
				DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW
				APPRO	CHECK

37927 B 723764

729

723765
FIG 195-2



SIGNAL NAME	TEST POINT	LOGIC
+Y WRITE COND		89 60 30 1
+Y WR TR REL		89 60 31 1
+Y WC 1		89 20 30 1
+Y WRITE DELAY		89 30 11 1
-Y WC 2		89 26 30 1
+Y WC 4		89 28 30 1
+Y R-W REG 1 BIT		89 40 30 1
-N WRITE PULSE 7330		89 60 50 1
-N WRITE PULSE 729		89 68 50 1
+Y NO ECHO (7330)		89 50 50 1
+Y NO ECHO (729)		89 58 50 1
-N ECHO PULSE 7330		89 30 50 1
-N WRITE ECHO 729		89 50 50 1
+Y ECHO ERROR		89 58 50 1
-Y WC 14		89 20 30 1
+Y WC 9		89 20 30 1
-Y R-W REG ERR LATCH		89 50 50 1
+Y DISC CALL		89 60 31 1
-Y DISC LATCH		89 60 31 1
+Y WDD		89 30 11 1
-Y WDD 60		89 30 50 1
+Y USEC CTRL		89 26 10 1

DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	113 + 26 8	17-10-61	TA 37927B	FIG 195-2 WRITE CLOCK CYCLES
				729 7330 WRITE OPERATION
				DESIGN
				TYPE
				SCALE
				CHECK
				DRAW
				APPR

30

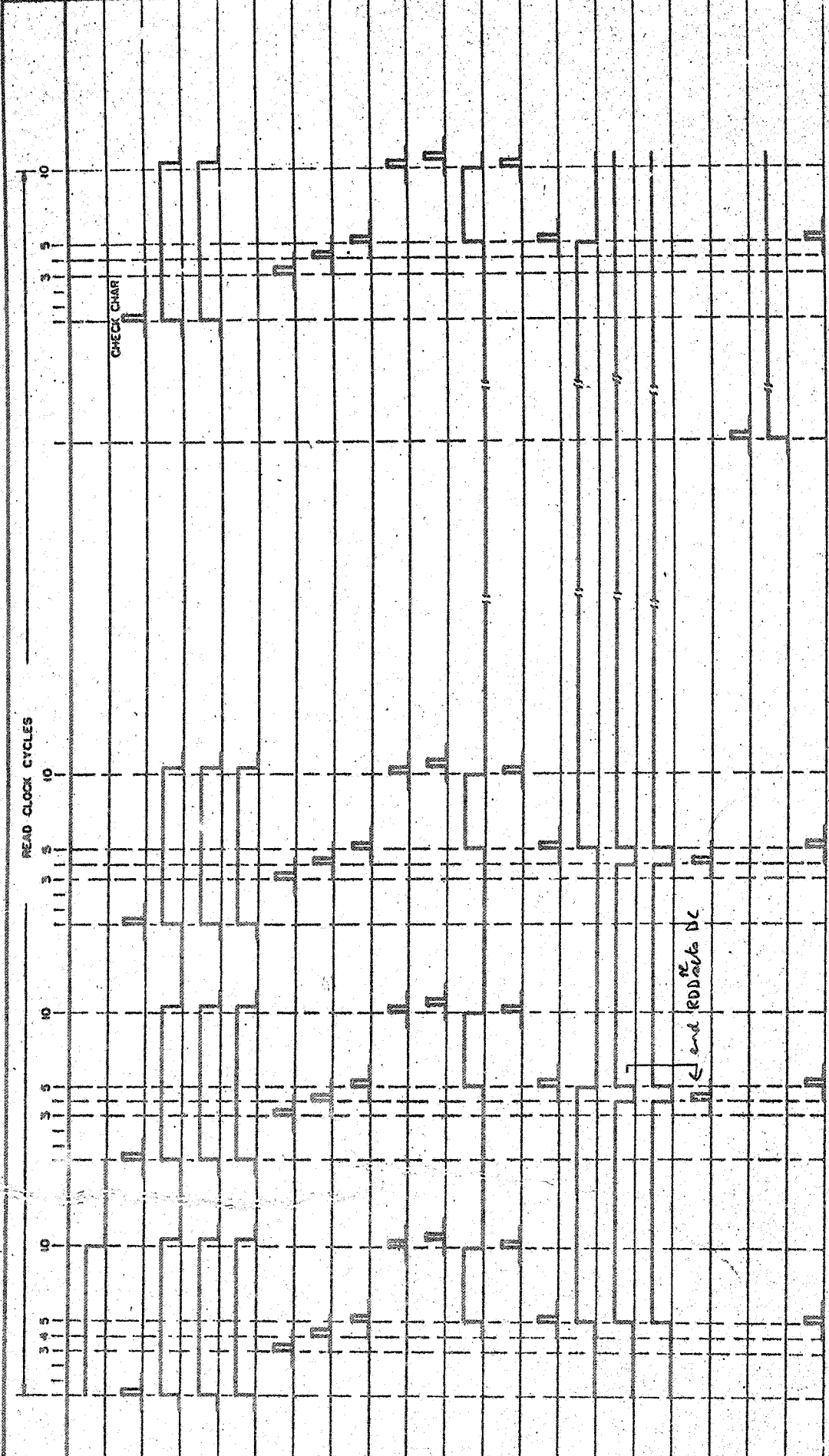
30

30

017510
001877

729

723766
FIG 195-3



check for this

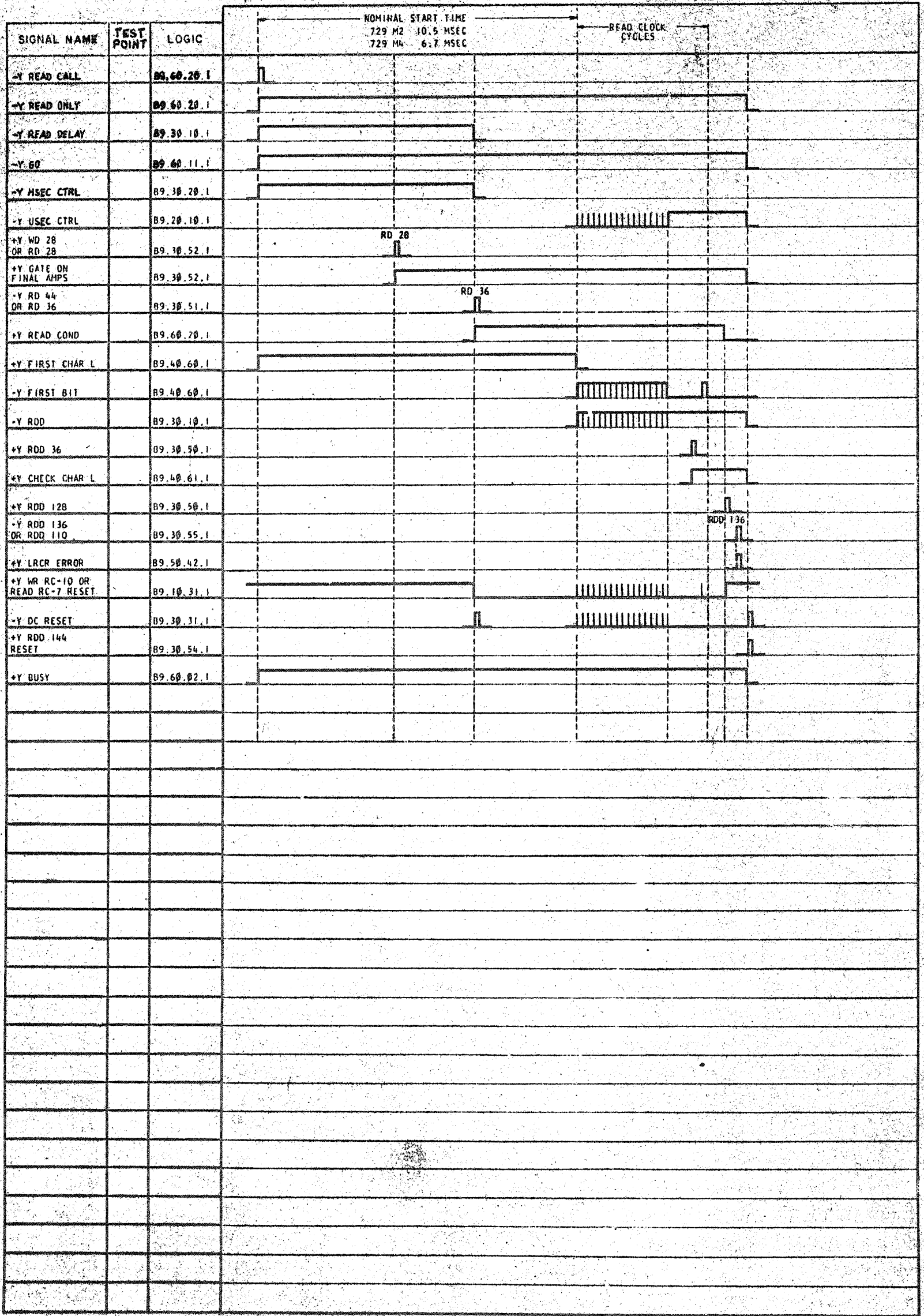
high clip pulse -> first bit -> arrives around clock -> RC4 etc.

SIGNAL NAME	TEST POINT	LOGIC
+Y FIRST CHAR L	B9 40 60 I	
-Y HI CLIP PULSE	B9 40 60 I	
-Y FIRST BIT	B9 40 60 I	
+Y A REG 1 BIT	B9 40 20 I	
+Y B REG 1 BIT	B9 40 20 I	
-Y RC 3	B9 10 30 I	
-Y RC 4	B9 10 30 I	
-Y WR RC-5 OR READ RC-7 CNT-2	B9 10 31 I	
-Y WR RC-10 OR READ RC-7	B9 10 31 I	
+Y WR RC-10 OR READ RC-7 RESET	B9 10 31 I	
+Y SKEW GATE	B9 10 31 I	
SAMPLE COMPARE ERROR	B9 50 30 I	
SAMPLE A REG WPC	B9 50 10 I	
+Y LPCR 1 BIT	B9 50 40 I	
-Y RDD	B9 30 10 I	
+Y USEC CTRL	B9 20 10 I	
-Y DC RESET	B9 30 31 I	
+Y RDD 36	B9 30 50 I	
+Y CHECK CHAR L	B9 40 61 I	
STOP ON ERR SW ON SPL COMPARE ERR	B9 50 30 I	

DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP
9-7-61	1123368	7-10-61	TA 37927B	FIG 195-3 READ CLOCK CYCLES
				729 7330 WRITE OPERATION
				DESIGN TYPE
				DETAIL SCALE
				CHECK DRAW
				APPRO CHECK

37927B 723766

31



DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP	
9-7-61	112268	17.10.61	TA 37927B	FIG 196	729 READ OPERATION
			32	DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW VE 7-12-61
				APPRO	CHECK

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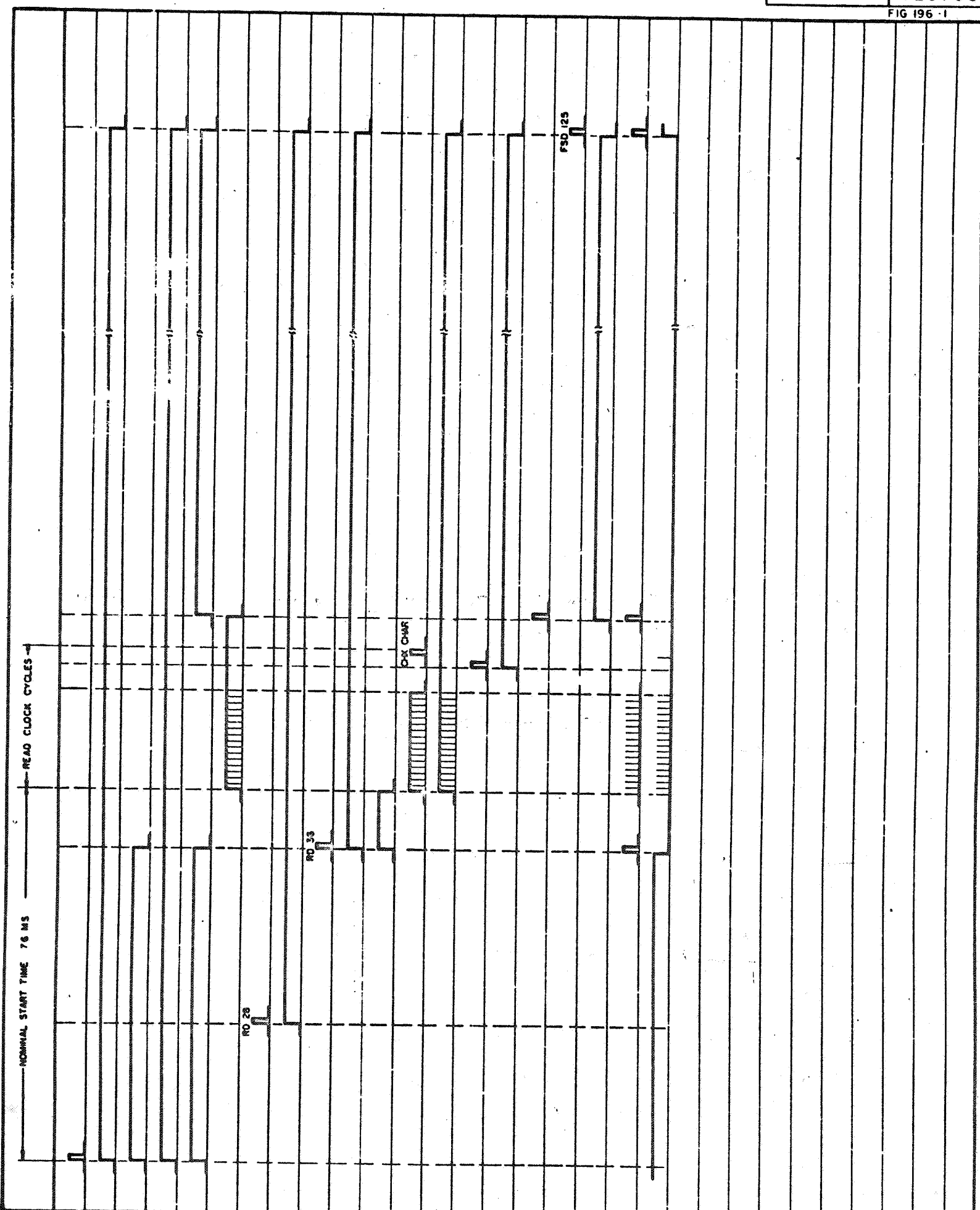
32

10/871 17615

723768

FIG 196-1

6 5 4 3 2

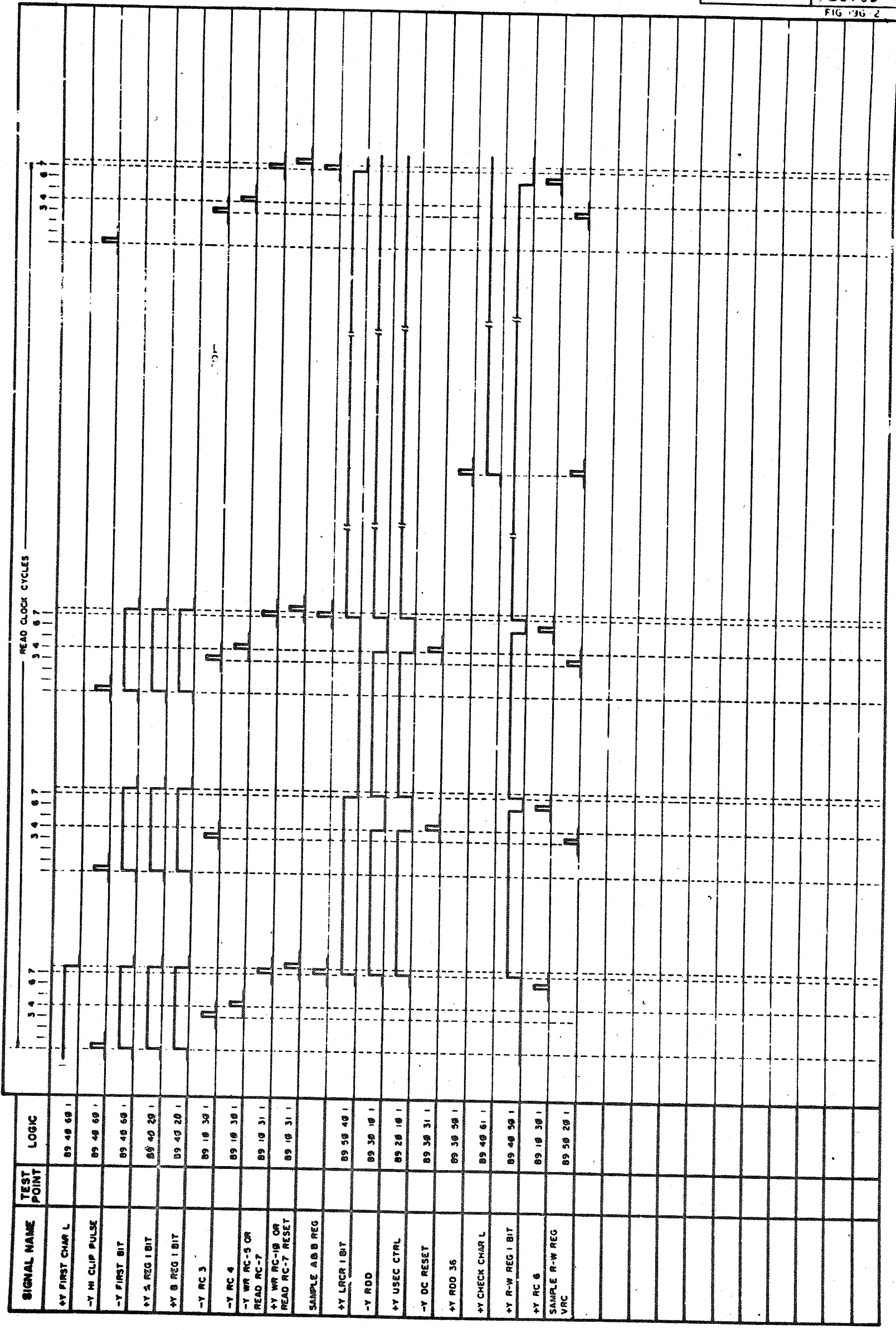


SIGNAL NAME	TEST POINT	LOGIC
-Y READ CALL		89 68 28 1
-Y READ ONLY		89 68 28 1
-Y READ DELAY		89 36 18 1
-Y 00		89 69 11 1
-Y MS CTRL		89 39 29 1
+Y USEC CTRL		89 29 18 1
+Y RD 28 OR RD 28		89 38 52 1
+Y GATE ON FINAL		89 38 52 1
-Y RD 44 OR RD 36		89 38 51 1
+Y READ COMB		89 68 28 1
+Y FIRST CHAR L		89 48 68 1
-Y FIRST SET		89 48 68 1
-Y RD		89 39 18 1
+Y RD 36		89 38 59 1
+Y CHECK CHAR L		89 48 61 1
+Y 7339 RD 18		89 38 50 1
+Y RD 14-6 RESET		89 38 54 1
+Y FWD STOP		89 38 56 1
-Y DC RESET		89 38 31 1
+Y WR RC-8 C3		89 18 31 1
READ RC-7 RESET		

DATE	CHANGE NO	DATE	CHANGE NO	DESCRIPTION
9-7-61	112226 B	17.10.61	TA 37927R	FIG 196-1 7339 READ OPERATION

DESCR	TYPE
DEVN	SCALE
CHEK	ORIG
APPR	CHEK

37927R
723 768



SIGNAL NAME	TEST POINT	LOGIC
+Y FIRST CHAR L		89 48 68 1
-Y M CLIP PULSE		89 48 68 1
-Y FIRST BIT		89 48 68 1
+Y A REG 1 BIT		89 48 28 1
+Y B REG 1 BIT		89 48 28 1
-Y RC 3		89 18 38 1
-Y RC 4		89 18 38 1
-Y WR RC-5 OR READ RC-7		89 18 31 1
+Y WR RC-10 OR READ RC-7 RESET		89 18 31 1
SAMPLE A,B,B REG		
+Y LR CR 1 BIT		89 58 48 1
-Y RDD		89 38 18 1
+Y USEC CTRL		89 28 18 1
-Y DC RESET		89 38 31 1
+Y RDD 36		89 38 58 1
+Y CHECK CHAR L		89 48 61 1
+Y R-W REG 1 BIT		89 48 58 1
+Y RC 6		89 18 38 1
SAMPLE R-W REG VRC		89 58 28 1

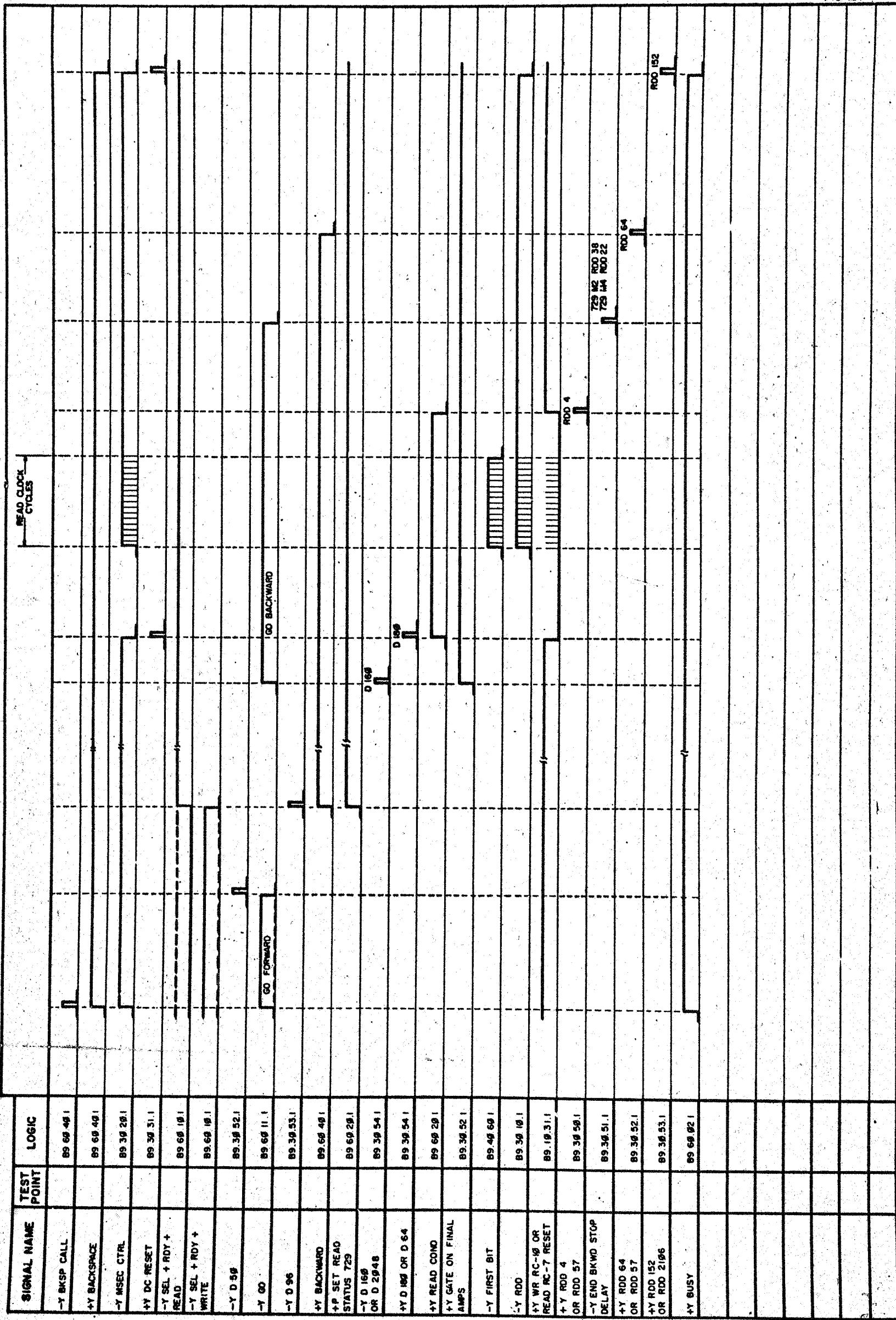
DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES
9-7-61	1122268	11-19-61	PA 379276	FIG 196-2 READ CLOCK CYCLES
				729 7338 READ OPERATION
				DESIGN
				TYPE
				SCALE
				DRAW VE 712 81
				CHECK
				APPRO
				CHECK

723,769

37487 B

723770

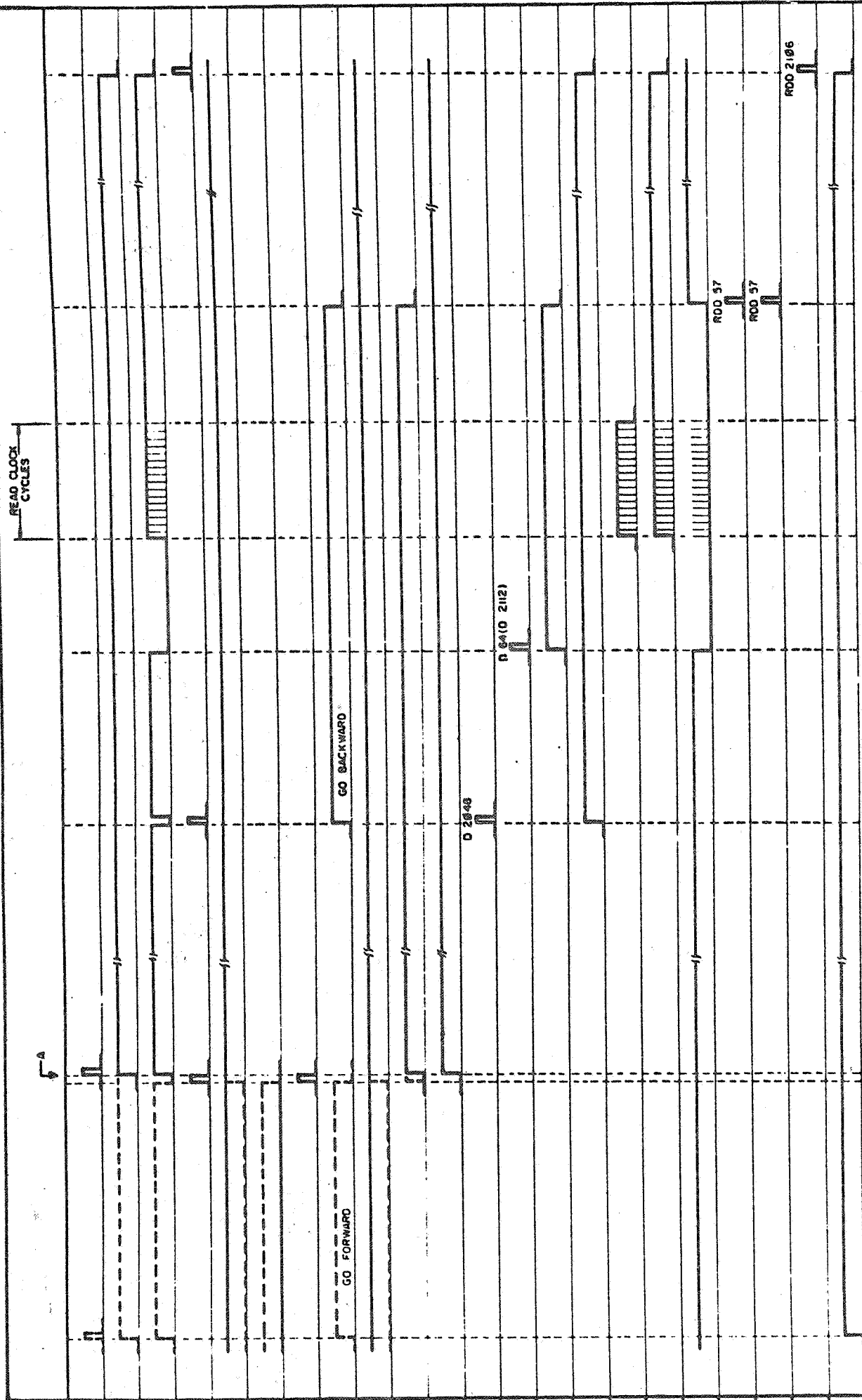
FIG 197



SIGNAL NAME	TEST POINT	LOGIC
-Y BKSP CALL		89 68 49 I
+Y BACKSPACE		89 68 49 I
-Y MSEC CTRL		89 38 28 I
+Y DC RESET		89 38 31 I
-Y SEL + RDY + READ		89 68 18 I
-Y SEL + RDY + WRITE		89 68 18 I
-Y D 99		89 38 52 I
-Y D 00		89 68 11 I
-Y D 96		89 38 53 I
+Y BACKWARD		89 68 48 I
+P SET READ STATUS 729		89 68 28 I
-Y D 166		89 38 54 I
-Y D 2948		89 38 54 I
+Y D 168 OR D 64		89 38 54 I
+Y READ COND		89 68 28 I
+Y GATE ON FINAL AMPS		89 38 52 I
-Y FIRST BIT		89 48 68 I
-Y RD0		89 38 18 I
+Y WR RC-16 OR READ RC-7 RESET		89 18 31 I
+Y RD0 4		89 38 58 I
+Y RD0 57		89 38 51 I
-Y END BKWD STOP DELAY		89 38 51 I
+Y RD0 64		89 38 52 I
+Y RD0 57		89 38 52 I
+Y RD0 152		89 38 53 I
+Y RD0 2196		89 38 53 I
+Y BUSY		89 68 82 I

DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP	
9-7-61	1122268	17.10.61	TA 37927B	FIG 197	729 BACKSPACE OP
				DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW VE 7-18-61
				APPRO	CHECK

723770



SIGNAL NAME	TEST POINT	LOGIC
-Y BKSP CALL		89 60 40 I
+Y BACKSPACE		89 60 40 I
-Y MSEC CTRL		89 30 20 I
+Y DC RESET		89 30 31 I
-Y SEL + RDY + READ		89 60 10 I
-Y SEL + RDY + WRITE		89 60 10 I
+Y 7336 WR BKSP D-128		89 30 53 I
-Y GO		89 60 11 I
-Y D 96		89 30 53 I
+Y BACKWARD		89 60 40 I
-N SET READ STATUS 7336		89 60 20 I
+Y D 160 OR D 2048		89 30 54 I
+Y D 180 OR D 64		89 30 54 I
+Y READ COND		89 60 20 I
+Y GATE ON FINAL AMPS		89 30 52 I
-Y FIRST BIT		89 40 60 I
-Y ROD		89 30 10 I
+Y WR RC-10 OR READ RC-7 RESET		89 10 31 I
+Y ROD 4 OR ROD 57		89 30 50 I
-Y END BKWD STOP DELAY		89 30 51 I
+Y ROD 152 OR ROD 2186		89 30 53 I
+Y BUSY		89 60 02 I

NOTE: IF THE TAPE DRIVE IS IN READ STATUS AT THE START OF THE BACKSPACE, THE OPERATION BEGINS AT SECTION A-A

DATE	CHANGE NO	DATE	CHANGE NO	INTERNATIONAL BUSINESS MACHINES CORP	
9-7-61	1122268	7.1.61	1A 117927N	FIG 197-1	7336 BACKSPACE OP
				DESIGN	TYPE
				DETAIL	SCALE
				CHECK	DRAW
				APPRO	CHECK

723 771