Equipment Diagrams

CONTROL DATA 8092
TELEPROGRAMMER

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CONTROL DATA 8092
TELEPROGRAMMER

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RECORD OF REVISIONS

REVISION NUMBER	NOTES
368 109 01 (Rev A)	(4-15-65) Includes ECO's 1163, 1198, 1268, 1334, 1354, 1402, 1403, 1411, 1431, 1470, 1505, and 1585.
368 109 00b (Rev B)	(8-18-66) Includes ECO numbers 2041 and 2085 (Reprinting with revision).
Revision C	(3-10-67) Includes ECO's DP2329 and DP2383.
Revision D	(8-29-67) Includes ECO's DP2055, 2249, 2279, 2500, 2590, 2356, 2329, 2328, 2370, 2365, 2512, 2450, and 2383 (Reprinting with revision).
Revision E	(11-8-67) Incorporated FCO's DP 2329, 2450
Revision F	(1-25-68) Revised to incorporate FCO DP2870. Pages revised: Pages 2, 5, 18.
Revision G	(4-23-68) Reprint with revision. Includes ECO DP2886. Addition of list of terms.
Revision H	(8-15-68) Revised to incorporate FCO DP03130. Page revised: Page 2 of 36042600.
Revision J	(1-30-69) Revised to incorporate ECO DP03333 and to add a schematic for the display panel. New product designations: 8092-A22/-B23/-D08/-E03. Revised Table of Contents, Pages vii, 16, and added pages 28, 29, 30 and 31.

Publication Number
368 109 00

TABLE OF CONTENTS

8092 TERM LIST

Logic Symbol	Function	Page
A000, A010, A070	A Register	8
A100, A110, A170	A' Register	7
C000- C007	Clocks	13
E000, E010-,E070	Stage Enable (SE) F/F's	6
E001, E011-,E071	No Stage Enable (SE) F/F's	6
E200, E201, E202	Group Enable (GI) A' Register	7
E300, E301, E302	Group Borrow Generators (GBG) A' Register	7
E400, E401, E402	Group Borrow Input (GBI) A' Register	7
E500, E501-, E507	Stage Probe Input (SPI) A' Register	7
F002	XXX XX0	4
003	XXX XX1	4
012	XXX X0X	4
013	XXX X1X	4
014	XXX X0X	4
015	XXX X1X	4
022	XXX 0XX	4
023	XXX 1XX	4
025	XXX 1XX	4
031	XX0 XXX	4
041	X0X XXX	4
042	X0X XXX	4
050	1XX XXX	4
052	0XX XXX	4
053	1XX XXX	4
054	XXX 100	4
056	XXX 000	4
057	XXX X11	4
059	XXX 1XX, $\overline{\text{XXX 111}}$	4
060	XXX X10	4
061	XXX 001	4
062	XXX 010	4
063	XXX 011	4
064	XXX 100	4
065	XXX 110	4
066	XXX 111	4
067	XXX X01	4
068	XXX X00	4
069	XXX X10	4
070	XXX 00X	4
071	XXX 001	4
072	XXX 010	4
073	XXX 011	4
074	XXX 100	4
075	XXX 110	4
076	XXX 111	4
077	XXX X01	4
078	XXX 00X	4
079	XXX 1X1	4
080	000 XXX	4

Logic Symbol	Function	Page
F081	001 XXX	4
082	01X XXX	4
083	01X XXX	4
084	100 XXX	4
085	101 XXX	4
086	110 XXX	4
087	111 XXX	4
088	000 XXX	4
089	000 XXX	4
090	001 XXX	4
091	100 XXX	4
092	101 XXX	4
093	101 XXX	4
094	110 XXX	4
095	110 XXX	4
096	111 XXX	4
097	111 XXX	4
098	111 XXX	4
099	111 XXX	4
101	X1X XXX XX	4
112	000 XXX	4
114	111 XXX	4
115	111 1XX, $\overline{\text{111 111}}$	4
120	111 01X	4
121	111 01X	4
122	111 01X	4
123	111 01X	4
124	111 101	4
125	111 101	4
127	111 01X	4
130	000 101	4
131	XXX 1X1	4
132	0X1 XXX	4
133	0X1 XXX	4
134	011 XXX	4
F200	$\overline{G \rightarrow [(\text{Ent.} + \text{Swp.})\ (\text{SSI})]\ [(4X + SX.C')}$	5
F206	$\overline{(\text{SSI})\ (\text{OBA}) + C\ [(\text{Ent.} + \text{Swp.})\ (\text{SSI})]}$ $\overline{(4X + 5X.C' + 76) + 72.C'B\ [(\text{Ent.} + \text{Swp.})}$ $\overline{(\text{SSI})]\ A\ (\text{Ent})(\text{Swp.})\ (\text{SSI}) + D[(\text{Ent.} + \text{Swp.})}$ $\overline{(\text{SSI})] + (\text{Swp.})}$	5
F208	$\overline{(\text{Buff BSY})\ (04 + 05 + 70 + 71) + 6X\ (\text{Jump SAT})}$	5
F209	$\overline{\text{F208}}$	5
F211	$\overline{6X\ (\overline{\text{Jump SAT}}) + (\overline{\text{Buff BSY}})\ (04 + 05 + 70 + 71)}$	5
F213	$\overline{17 + 23 + 24 + 27 + 33 + 37 + 44 + 45 + 46 +}$ $\overline{47 + 52 + 56}$	5
F214	$31 + 35 + 41 + 45 + 51 + 55 + 72.\overline{C'} + 73.\overline{C'}$	5

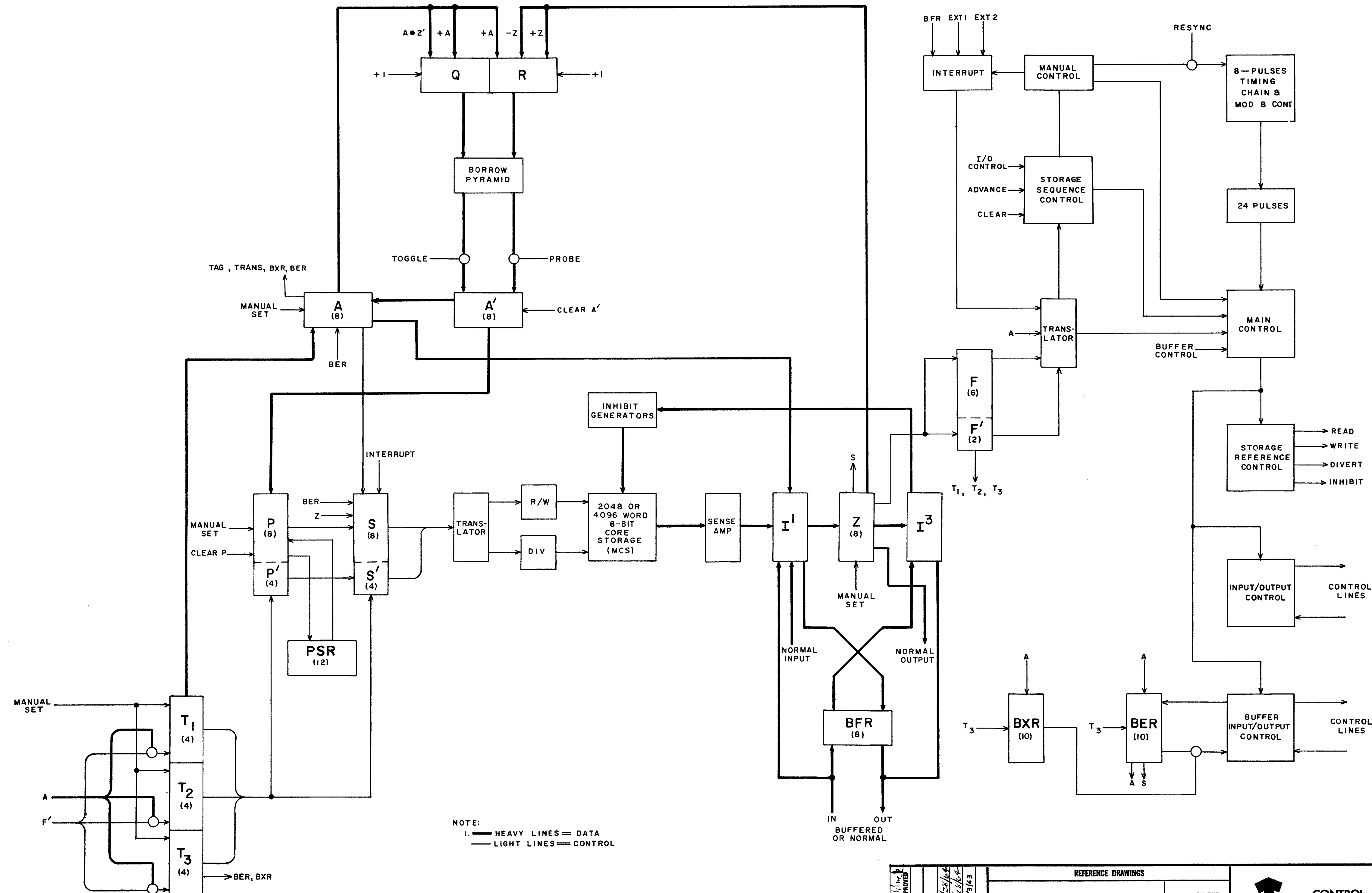
Logical Symbol	Function	Page
F216	$\overline{(\text{Ent.} + \text{Swp.})\ (\text{SSI})}\ \overline{B\ (11 + 15 + 41 + 45 + 51 + 55 + 72.C' + 73.C')} + C\ (\text{load} + 00 + 04 + 05 + 10 + 14 + 20 + 24 + 30 + \overline{34 + 6X + 70 + 71 + 72 + 73 + 74 + 75}) + A\ \overline{(\text{Ent.})\ (\text{Swp.})\ (\text{SSI})} + D\ (\text{Ent.} + \text{Swp.})\ (\text{SSI}) + (\text{Ent.} + \text{Swp.})$	5
F222	$\overline{(\text{Ent.} + \text{Swp.})\ (\text{SSI})}\ (B\ (11 + 15 + 41 + 45 + 51 + 55 + 72.C' + 73.C') + C\ (\text{Load} + 00 + 04 + 05 + 10 + 14 + 20 + 24 + 30 + \overline{34 + 6X + 70 + 71 + 72.C' + 73.C' + 74 + 75}) + A\ \overline{(\text{Ent.})\ (\text{Swp.})\ (\text{SSI})} + D\ \overline{(\text{Ent.} + \text{Swp.})\ (\text{SSI})} + (\text{Ent.} + \text{Swp.})$	5
F226	$12 + 16 + 22 + 26 + 32 + 36 + 42 + 46$	
F229	$11 + 12 + 13 + 15 + 16 + 17 + 22 + 23 + 26 + 27 + 31 + 32 + 33 + 35 + 36 + 5X.C' + 4X$	5
F232	$04 + 05 + 20 + 21 + 22 + 23 + 30 + \overline{31} + \overline{32} + 33 + 5X + 70 + 72 + 74 + 75 + \overline{1X} + \overline{4X} + \overline{6X}$	5
F233	$\overline{72 + 73 + 75}$	5
F235	01	5
F236	$5X + 72 + 73 + 75$	5
F239	$\overline{5X.C' + 75.C' + (72 + 73)\ (A'\ \ 0)\ (\text{I/O Seq.})}$	5
F242	$(\text{Load}) + 6X\ (\text{Jump SAT}) + 40 + 44 + 77 + (\text{Buff BSY})\ (04 + 05 + 70 + 71)$	5
F243	$C' + 55 + 75$	5
F248	$A/0$	5
F251	Jump SAT	5
F252	$\overline{\text{Jump SAT}}$	5
F256	$20 + 21 + \overline{22 + 23 + 30 + 31} + 32 + 33 + (72 + 73)\ C\ \overline{(\text{Ent.} + \text{Swp.})\ (\text{SSI})}$	5
F261		5
F271	13	5
F300	$\overline{\text{Adv. } P_1 \text{ by } 1}$	5
F301	$\overline{P_2 - P_1}$	5
F302	$\overline{P \rightarrow S,\ P' \text{---} S'}$	5
F303	$\overline{5.C'}$	12
F304	$\overline{Z \rightarrow S}$	5
F305	$\overline{\text{Tag} \rightarrow S'}$	5
F306	$\overline{A \rightarrow S}$	5
F307	$\overline{\text{MCS} \rightarrow Z}$	5
F308	$\overline{\text{INP} \rightarrow Z:\ \overline{(\text{Ent.} + \text{Swp.})}\ (\overline{\text{SSI}}\ \overline{B.72.C' + C(\text{load})})}$	5
F310	$\overline{\text{Clear F/F'}}$	

Logic Symbol	Function	Page
F311	$\overline{Z \rightarrow F/F'}$	5
F313	$\overline{Z \rightarrow Ou}$	5
F315	$\overline{+Z \rightarrow R}$	5
F316	$\overline{-Z \rightarrow R}$	5
F317	$\overline{+1 \rightarrow R}$	5
F318	$\overline{A \rightarrow R}$	5
F319	$\overline{A \rightarrow Q}$	5
F320	$\overline{A.2' \rightarrow Q}$	5
F321	$\overline{+1 \rightarrow Q}$	5
F322	$\overline{\text{Block Probe A'}}$	5
F323	$\overline{A' \rightarrow A}$	5
F324	$\overline{A \rightarrow \text{Tag Reg}}$	5
F325	$\overline{\text{Tag Reg} \rightarrow A}$	5
F326	$\overline{A \rightarrow \text{BER}.\ I_3 \rightarrow \text{BER}}$	5
F327	$\overline{A \rightarrow \text{BXR},\ I_3 \rightarrow \text{BXR}}$	5
F328	$\overline{\text{BER} \rightarrow A}$	5
F329	$\overline{A' \rightarrow P,\ \text{Tag} \rightarrow P'}$	5
F331	$\overline{\text{INP} \rightarrow Z:\ \overline{76} + \overline{C} + (\text{Ent} + \text{Swp}) + (\text{SSI})}$	5
F332	$01 + \overline{D} + (\text{Ent.} + \text{Swp}) + (\text{SSI})$	7
F580	$70 + 71$	18
F502	$\overline{\text{Load} + (\overline{\text{Clear F/F'}}) + (\text{Ent} + \text{Swp})}\ \ (70 + 71)$	18
F503	$\overline{(\overline{\text{Load}})\ (\text{Clear F/F'})\ (\text{Ent} + \text{Swp})}\ \ (70 + 71)$	18
G000 - G207	Read Write Drivers	13
H000 - H007	Plain Timing Delay's	3
H201 - H231	SSC Timing Delay's	2
I001 - I005	Z Register	9
I006	Enables -- S	12
I011 - I015	Z Register	9
I016	S Register	12
I021 - I025	Z Register	9
I026	S Register	12
I031 - I034	Z Register	9
I036	S Register	12
I041 - I045	Z Register	9
I046	S Register	12
I051 - I055	Z Register	9
I056	S Register	12
I061 - I065	Z Register	9
I066	S Register	12
I071 - I075	Z Register	9

Logic Symbol	Function	Page
I076	S Register	12
I200 - I219	A Register	8
I300 - I369	Tag Register 1, 2, 3	15
I400 - I401	A' Register	7
I402	A' ≠ 0	7
I403	A' = 0	7
I404 - I414	0 Register	8
I500 - I538	BFR, BER, BXR	19
I519	BER = BXR	
I550	A $(\overline{\text{Ent}})$ $(\overline{\text{Swp}})$ $(\overline{\text{SSI}})$ + B $(\overline{\text{Ent + Swp}})$ (SSI) + (74 + 75 + 76) $\overline{[(\text{D } (\overline{\text{Ent + Swp}}) (\overline{\text{SSI}})]}$ (Load + $\overline{[(\overline{\text{Ent. + Swp}}) (13) (00 + 01 + 02 + 03 + 06 + 07 + 77) (011 \overline{5X (\text{Jump SAT}) + (04 + 05 + 70 + 71) (\text{Buff BSY})}]}$ + C $(\overline{\text{Ent + Swp}})$ $(\overline{\text{SSI}})$ (55 + 75)	18
I551	$(\overline{\text{IBA}}) + (\overline{\text{OBA}})$	18
I554	(Buffer Cycle)	18
I560	BFR → Buff Output Cable (B. O. C)	18
I561	Z → B.O.C.	18
I562	Z → B.O.C.	18
I570	(Buff RDY) + (IBA) + $(\overline{\text{input RDY}})$	18
I571	INP → BFR	18
I573	(Buffer Cycle) + (OBA) + $(\overline{\text{Time 22}})$	18
I574	MCS → BFR	18
I577	Buff INP Cable → Z	18
I580	Clear Buffer Controls	18
I582	Clear Buffer	18
I588	(Buffer Busy)	18
I590	(SSI)	18
I593	(Buff Cycle)	18
I852	(Int. 10, 20, 30, 40)	17
I853	Block P → S	17
I857	(Block P → S) (I/O Seq) $(\overline{\text{Ent + Swp}})$ $(\overline{\text{Load}})$ $(\overline{13})$	17
I859	(Master Clear) (Time 26) (D $(\overline{\text{Ent + Swp}})$ (SSI)	17
I860	Clear P, P'	17
I861	Interrupt Address → S	17
I862	$(\overline{\text{Int. 10, 20, 30, 40}})$	17
I863	Interrupt Address Enable → S	17 & 12
I872	Interrupt Address → PSR	17
J000 - J031	Main Control Timing	2
J100 - J103	Main Control Timing	3
J103	Recirc	

Logic Symbol	Function	Page
J104 - J107	Main Timing	3
J109 - J111	I/O Control	16
J107	Timing Error Stop	2
J200	A + (Ent) + (Swp) + (SSI)	2
J211 - J212	B $\overline{[(\text{Ent. + Swp.}) (\text{SSI})]}$	2
J221 - J222 - J223	C $\overline{[(\text{Ent. + Swp.}) (\text{SSI})]}$	2
J224 - J225 - J226	C'	2
J227 - J228	$\overline{\text{C}}$'	2
J231 - J232 - J233	D $(\overline{\text{Ent. + Swp.}})$ $(\overline{\text{SSI}})$	2
J235		2
J243		2
J400 - J440	I/O Control	16
J441	(I/O Seq. Set)	16
J446	(Load) + B $\overline{[(\overline{\text{Ent. + Swp}}) (\text{SSI})]}$	16
J560	$(\overline{\text{Main Timing Fault}})$	2
J562 - J565	Storage	13
J900	$\overline{(\text{Master Clear})}$	3
J901 - J902 - J903		
J904	(Master Clear)	3
J907	$\overline{(\text{Master Clear}) (\overline{\text{Clear Z}})}$	3
J908	$\overline{(\text{Master Clear}) (\text{Clear P})}$	3
J909 - J910	Clear P'	3 & 10
J912	$\overline{\text{Load}}$	3
J913	Load	3
J914	$\overline{\text{Enter}}$	3
J917 - J921	$(\overline{\text{Enter + Sweep}})$	3
J923	$\overline{\text{Load}}$	3
J930	(Master Clear)	3
K000 - K002	Timing Chain Excursion Counters	2
K010 - K013		
K100	Divert	13
K110	Read	13
K120	Write	13
K130	Inhibit	13
K140	Timing Fault	2
K200	A Cycle	2
K210	B Cycle	2
K220	C Cycle	2
K222 - K224	C' Cycle	2
K230	D Cycle	2
K240	Block $P_2 = P_1$	3
K320	Wait Output	16
K322	Function Ready	16
K420	Wait Input	16

Logic Symbol	Function	Page
K440	I/O Seq.	16
K522	Sample	16
K524	Enable	16
K800 - K802 - K810 K812	Resync. Counter	2
K850	Manual Interrupt	16
K852	Manual Interrupt	16
K854	Manual Interrupt 10	16
K856	Buffer Interrupt	16
K858	Buffer Interrupt 20	16
K860	External Interrupt 30	16
K862	External Interrupt 40	16
K864	Interrupt Lockout	16
K900	Run	3
K902	Step	3
K904	Neutral	3
L000 - L010 - L110	0 Register Inputs	8
L321	Information Ready	16
L322	Function Ready	16
L323	Master Clear	16
L330	I/O Sequence	16
L331	Load Mode	16
L421	Input Request	16
L500 - L510 - L610 L512	BFR Outputs Information Ready	19 18
L513	Input Request	18
L514	Function Ready	18
L515	Master Clear	18
M000 - M010 - M070	Z Register Inputs	9
M330	Output Resume	16
M420	Input Ready	16
M424	Input Disconnect	16
M500 - M510 - M570	BFR Inputs	19
M512	Output Resume	18
M513	Input Ready	18
M514	Input Disconnect	18
M850	Manual Interrupt Input	17
M851 - M852	External Interrupt Input	17
M900	Run	3
M901	Step	3
M902	Neutral	3
M903	Load	3
M904	Master Clear	3
M905	Clear A	3
M906	Clear Z	3
M907	Clear P	3
M908	Enter	3
M909	Sweep	3
N000 - N005	Timing Control	2
N210	Clear A' : $\overline{N212}$	7
N212	$\overline{[(A \rightarrow Tag) + D + (Ent. + Swp.) + (SSI)]}$ (Time 01)	7
N230	Toggle A': $\overline{N232}$	7
N232	$\overline{[(A \rightarrow Tag) + \overline{D} + (Ent. + Swp) + (SSI)]}$ (Time 23)	7
N800 - N801	Clocks	2
0000 - 0010 - 0050	0 Register	6
P000 - P010 - P070	P_1 Register	10
P002 - P012 - P072	P_2 Register	10
P100 - P110 - P120 P130	P_1 Register	10
P102 - P112 - P122 P132	P_2 Register	10
P200 - P314	PSR - Register	11
Q000 - Q010 - Q070	Q Inverters	6
R000 - R010 - R070	R Inverters	6
S000 - S010 - S050	Divert F/F's, S Register	13/12
S060 - S070 S100 - S110 - S120 S130	R/W Driver F/F's, S Register R/W Drive F/F's, S'Register	13/12 13/12
T000 - T507	Storage Translators	13
U000 - U010 - U070	Stage Borrow F/F's (SB)	6
V000 - V046	Timing	3
V201 - V231	Storage Sequence Control	2
V521	I/O Start of Timing	16
V901 - V903	Resync Timing	2
W000 - W005	Adv. P_1 by 1	10
W020 - W023	Clear S and S'	12
W024	Adv. BER: $\overline{(Buff\ Cycle)}$ (time 13)	19
W028	$\overline{ADV.\ BER}$	19
W058	IO-6 $\rightarrow$ S	12
W070 - W073	$P_1 \rightarrow P_1$ $P_1 \rightarrow P_2$, $P_1 \rightarrow P_2$	10
W100	Clear Z	9
W102	Strobe	9
W110	Enable Z $\rightarrow$ S	12/17
W122 - W124	Input $\rightarrow$ Z	9
W130 - W160	Clear F, Z $\rightarrow$ F	4



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A	1585	3-15-65		KH	JJU	

REVISIONS

APPROVED	W.B. MOE	3/28/64
CHECKED	W.B. MOE	3/28/64
DRAWN	H.H. Nelson	12/9/63
DESIGNED		

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE BLOCK DIAGRAM, TELEPROGRAMMER— MODEL 8092

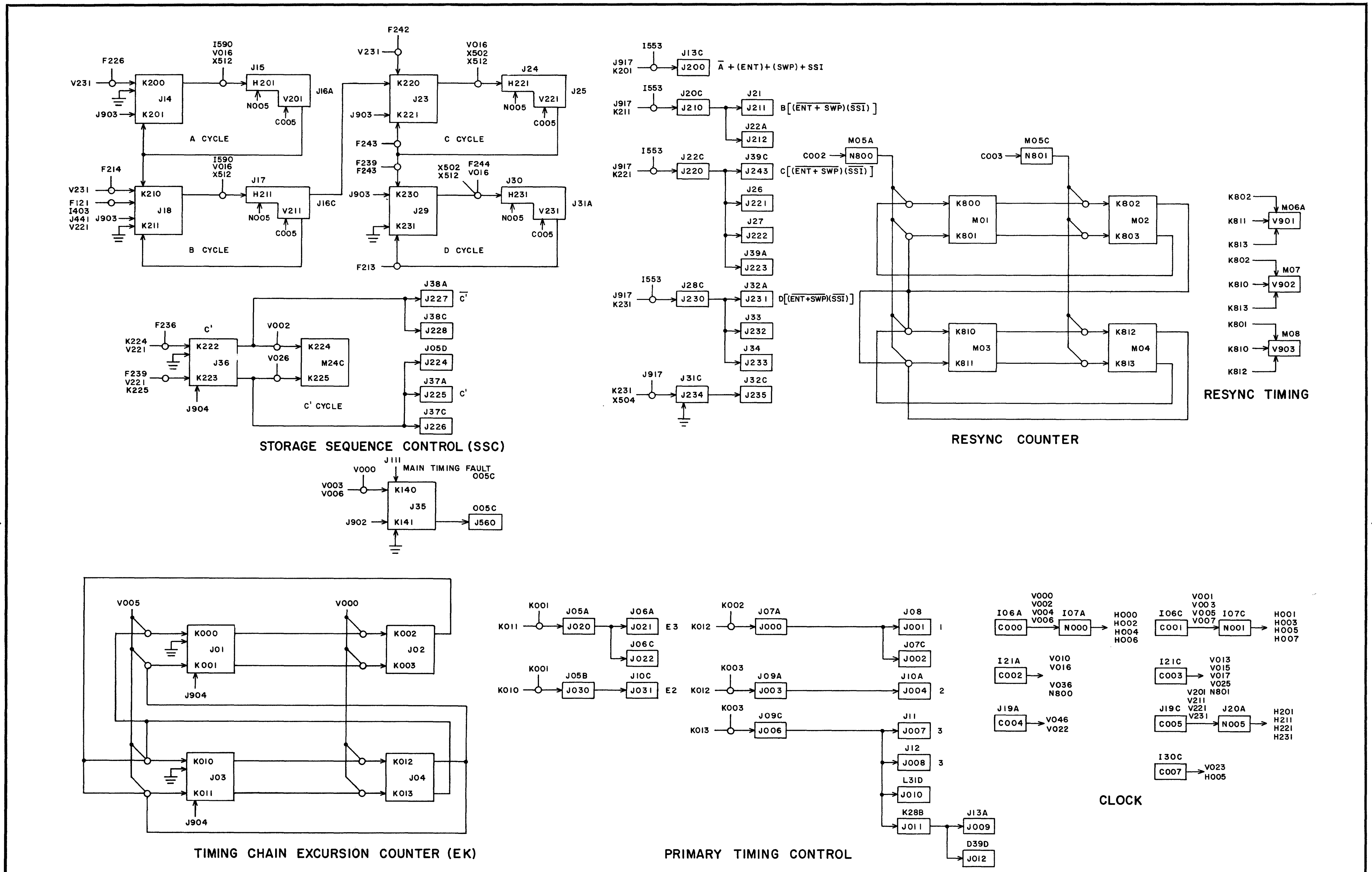
CONTROL DATA CORPORATION

I D P DIVISION

PROJECT OR PRODUCT

DRAWING NUMBER 364038 REV A

PAGE 1



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D	3/30	7-21	JAT.	R.H.	R.H.
C	2870	1-5 68	W.R.	C.L.	R.K.L.
B	2329	2-24 67	W.B.		
A	1585	8-15 65	KH		

REVISIONS

APPROVED • [signature] 2/28/64
CHECKED • J.H. NIPP 2/24/64
DRAWN • N.K. BECK 2/21/64
DESIGNED •

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

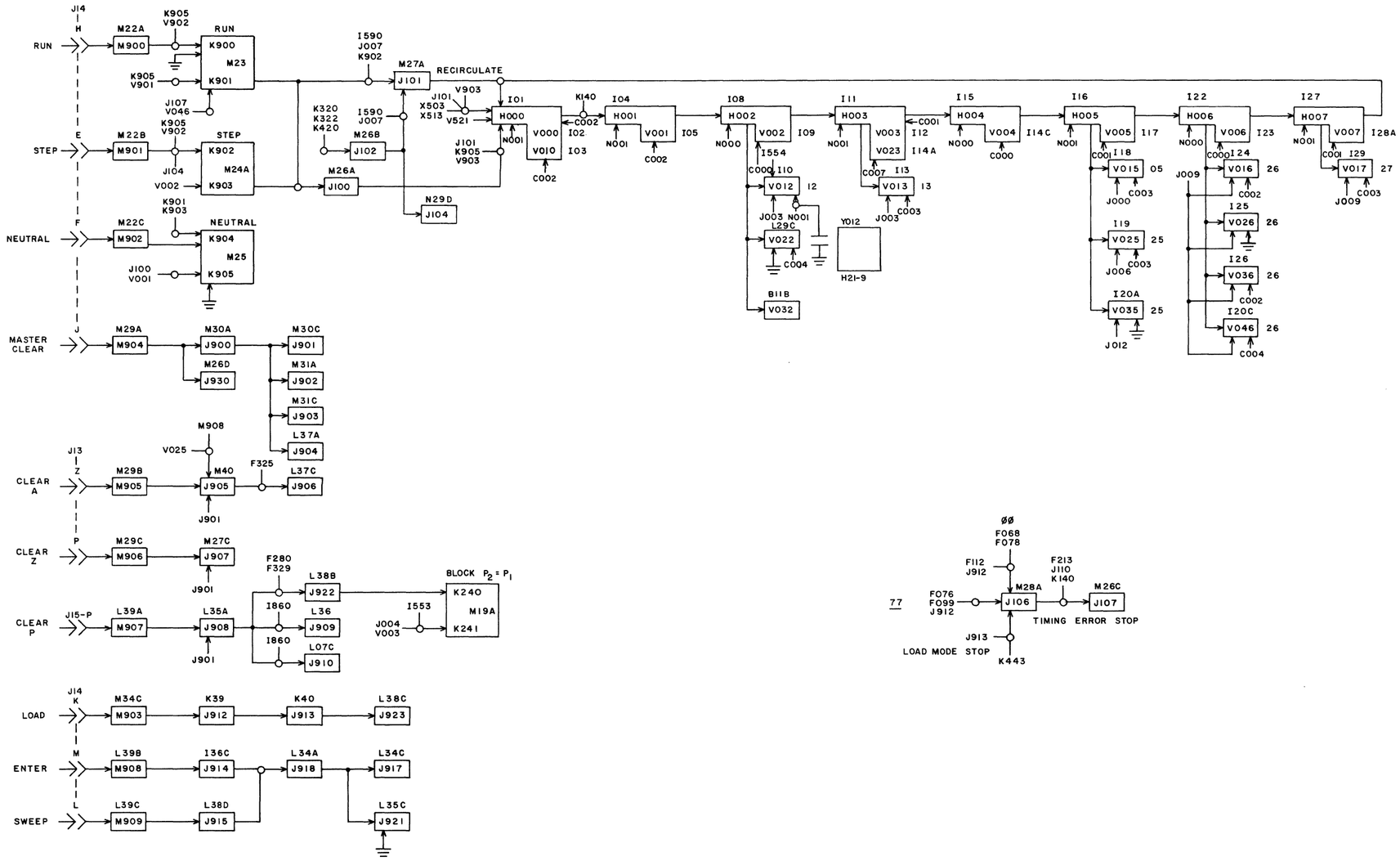
TITLE LOGIC DIAGRAM, MAIN CONTROL

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT 8092 TELEPROGRAMMER

DRAWING NUMBER 36042600 REV D

SHT PAGE 2



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C	ECN 12041	KH	JHN	WBM	5/14/65
B	ECN 11585	KH	JHN	WBM	3/15/65
A	ECN 11194-391	WHB	JHN	WBM	2/24/64

APPROVED	W.B. Moe	2/24/64
CHECKED	J.H. NIPP	
DRAWN	N.K. BECK	
DESIGNED	-	

REVISIONS -

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

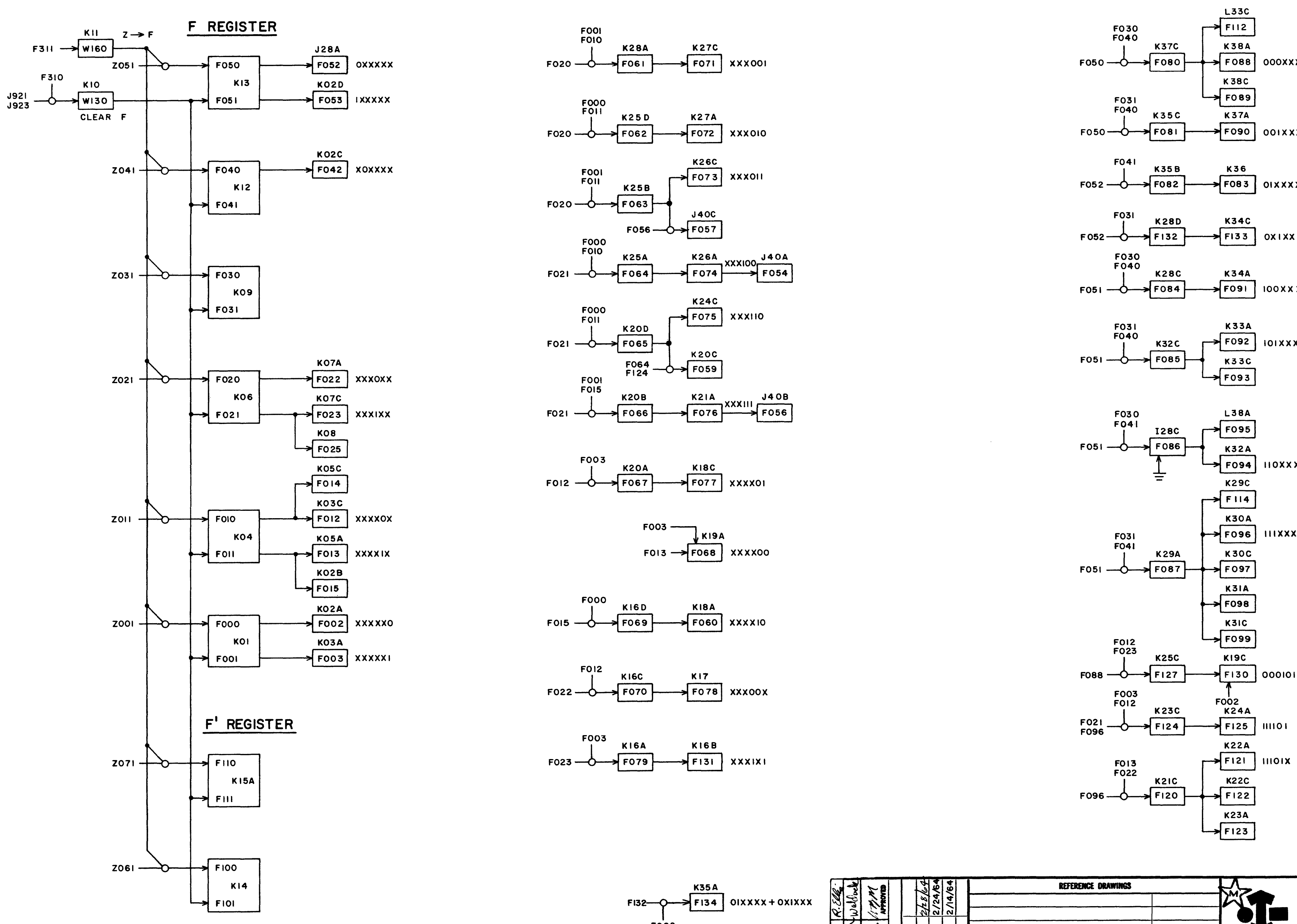
TITLE: LOGIC DIAGRAM, MAIN TIMING

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 364156 REV: C

SHT PAGE 3



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C	2041	3-4	RW		
B	1585	3-15-65	KH		
A	M31		JK		

REVISIONS

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DRAWN N.K. BECK 2/14/64
DESIGNED

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

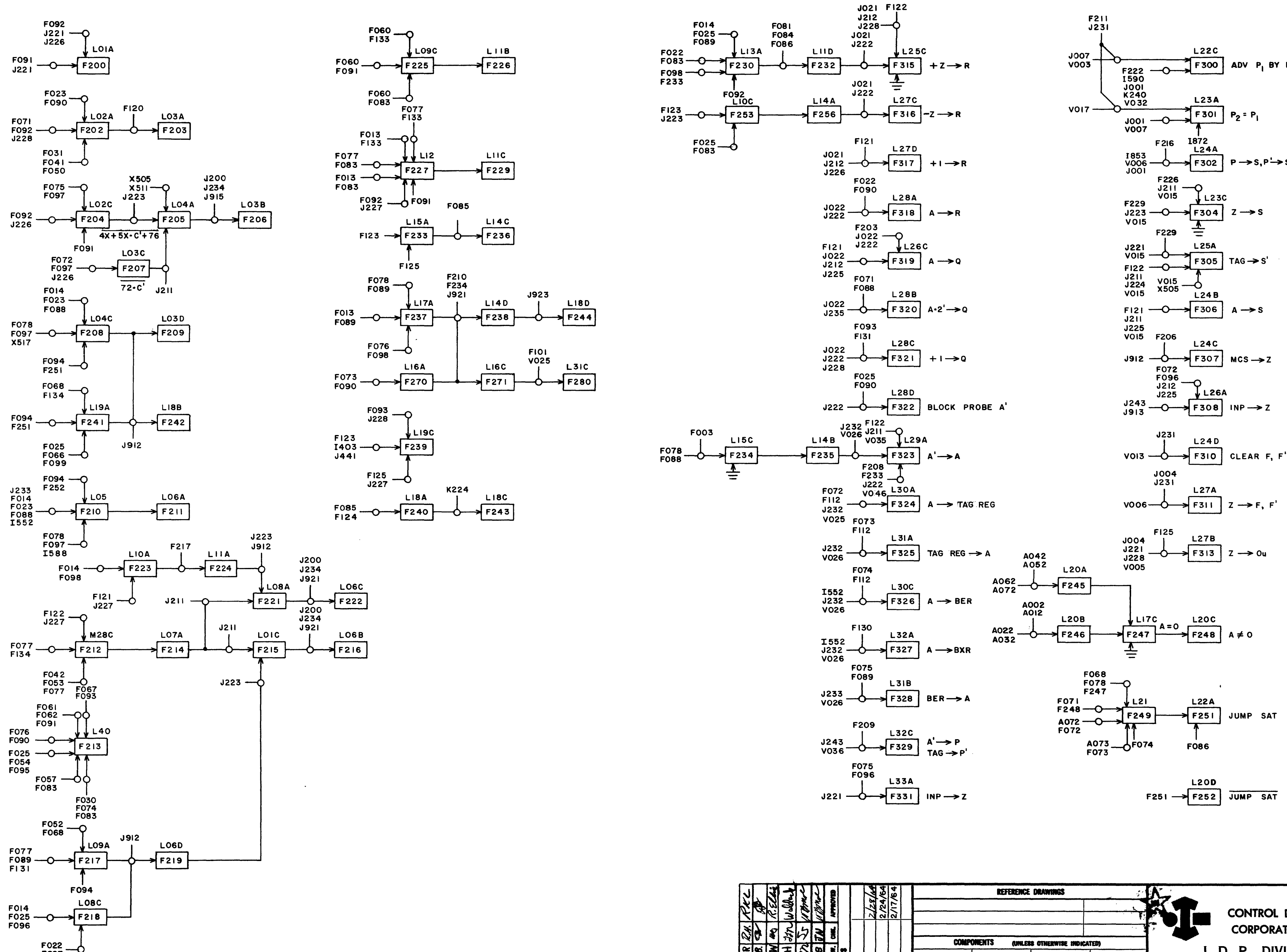
TITLE
LOGIC DIAGRAM,
REGISTERS, F & F' & TRANSLATORS

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 360449
REV C

SHT
PAGE 4



REV					
F	2870				
E	2329				
D	2041	3-24	RW		
C	1585	3-15-65	KH		
B	1411				
A	1534				

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

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CHECKED J. H. NIPP 2/24/64
DRAWN N. K. BECK 2/17/64

TITLE

LOGIC DIAGRAM, FUNCTION TRANSLATORS

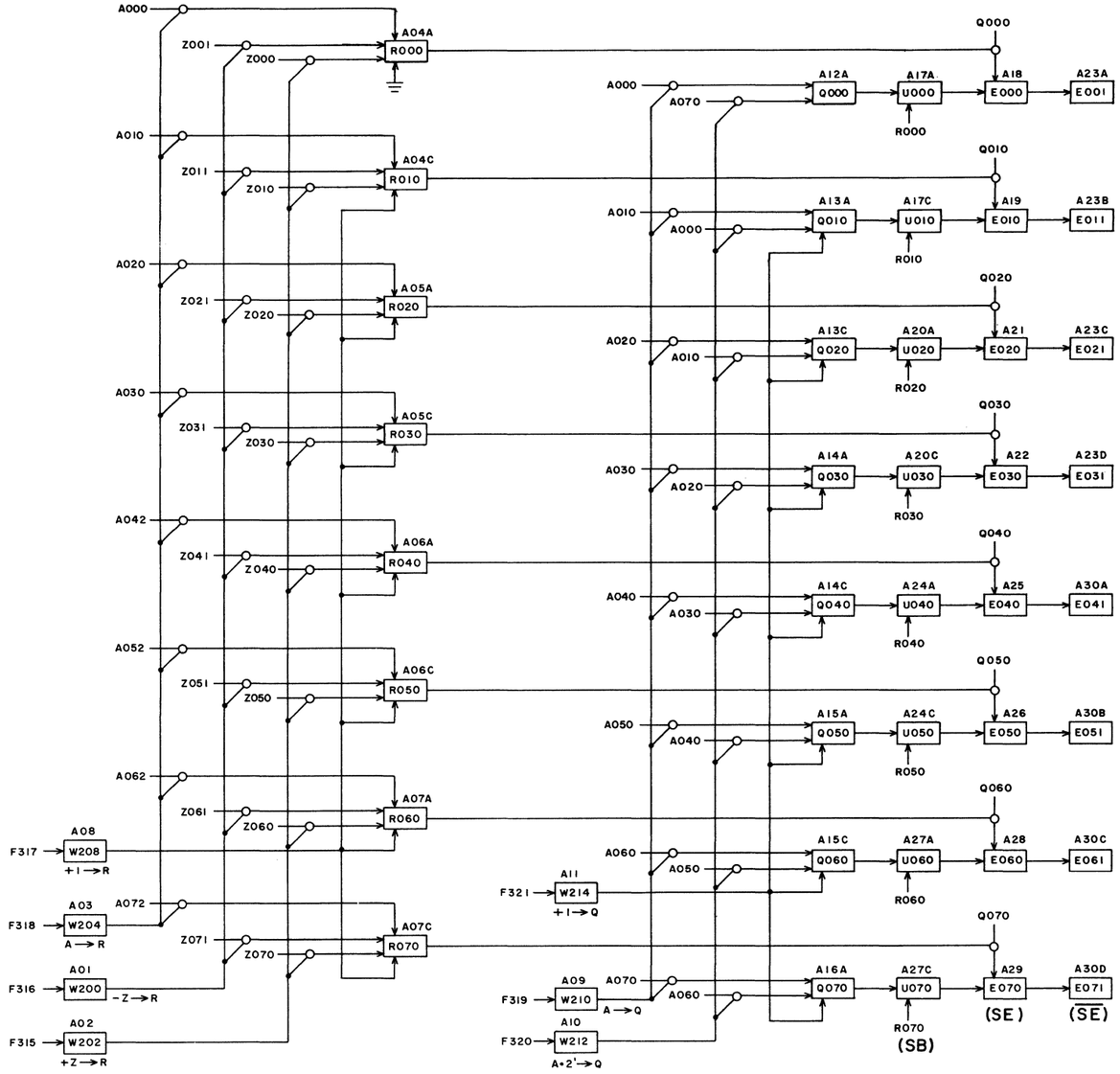
CONTROL DATA CORPORATION

I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 36042700 REV F

SHT | PAGE 5



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REVISIONS						
-						
APPROVED	-	W.B. Hoe			2/24/64	
CHECKED	-	J.H. NIPP			2/24/64	
DRAWN	-	N.K. BECK			2/18/64	
DESIGNED	-					

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE

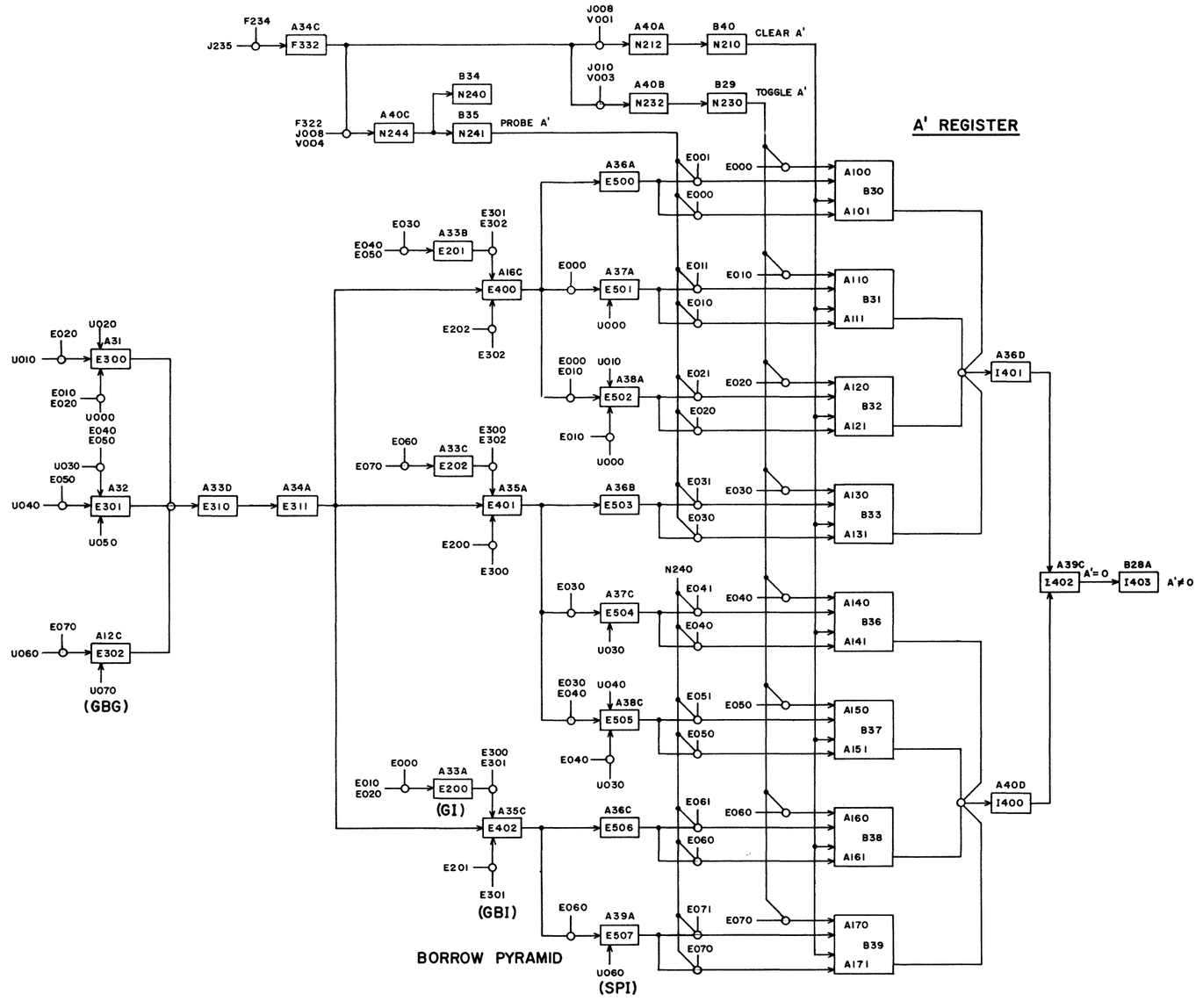
LOGIC DIAGRAM,
R AND Q INVERTERS

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 360428 REV

SHT PAGE 6



REV.	AUTH.	DATE	REG.	DRW.	CHK.	APPROVED
REVISIONS						
-						
		2/28/64				
APPROVED	W.C. Hoge	2/24/64				
CHECKED	J.H. NIPP					
DRAWN	N.K. BECK	2/19/64				
DESIGNED	-					

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

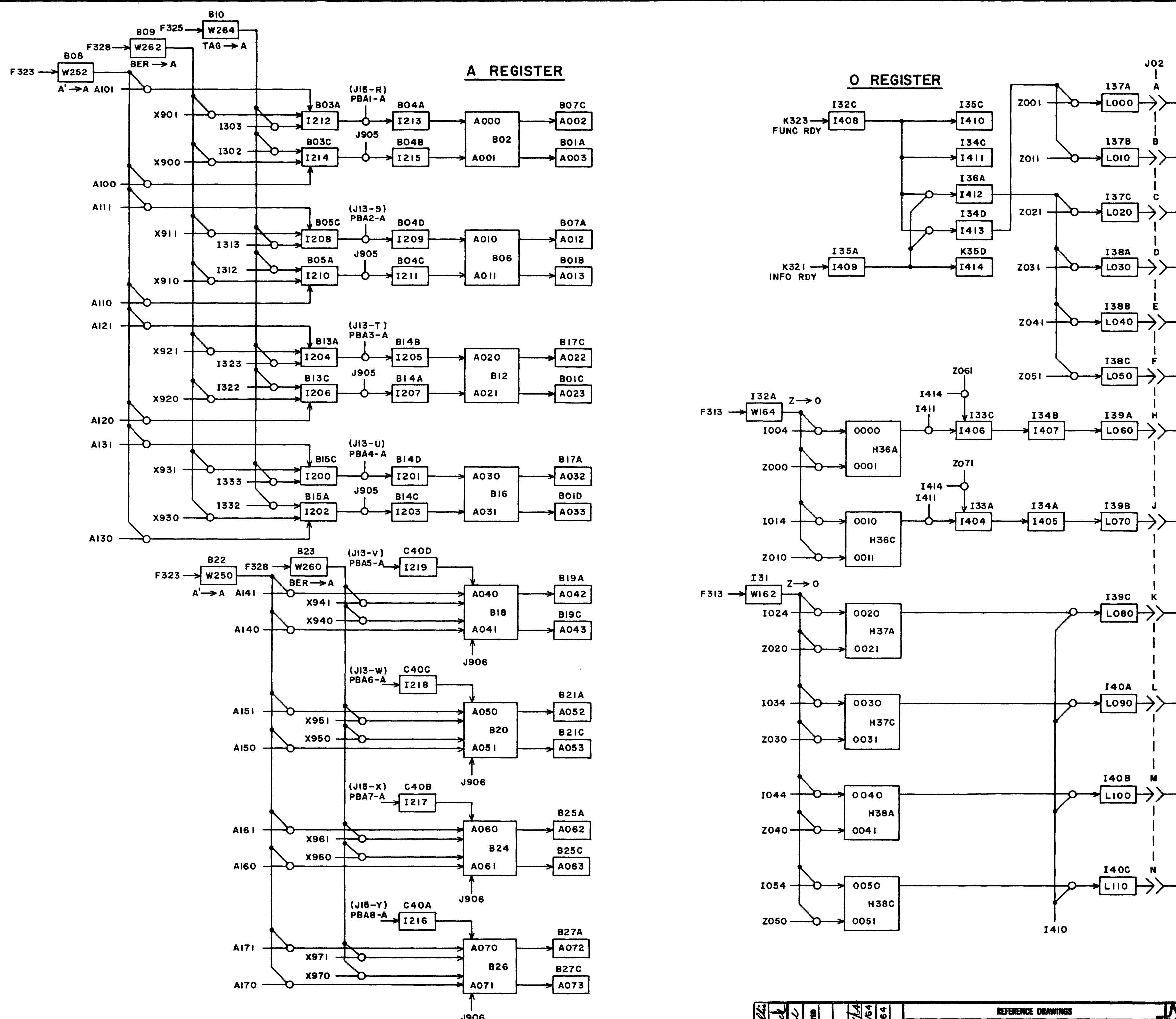
TITLE: LOGIC DIAGRAM, REGISTER - A'

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 364157 REV:

SHT: PAGE: 7



REV.	AUTH.	DATE	REL.	DRN.	CHK.	APPROVED
C	2041	3-1		RW		R. Ellis
B	1585	3-15-65		KH		
A	1354					

REVISIONS

DESIGNED: N.K. BECK
DRAWN: N.K. BECK 2/6/64
CHECKED: J.H. NIPP 2/24/64
APPROVED: W.B. MOE 2/28/64

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

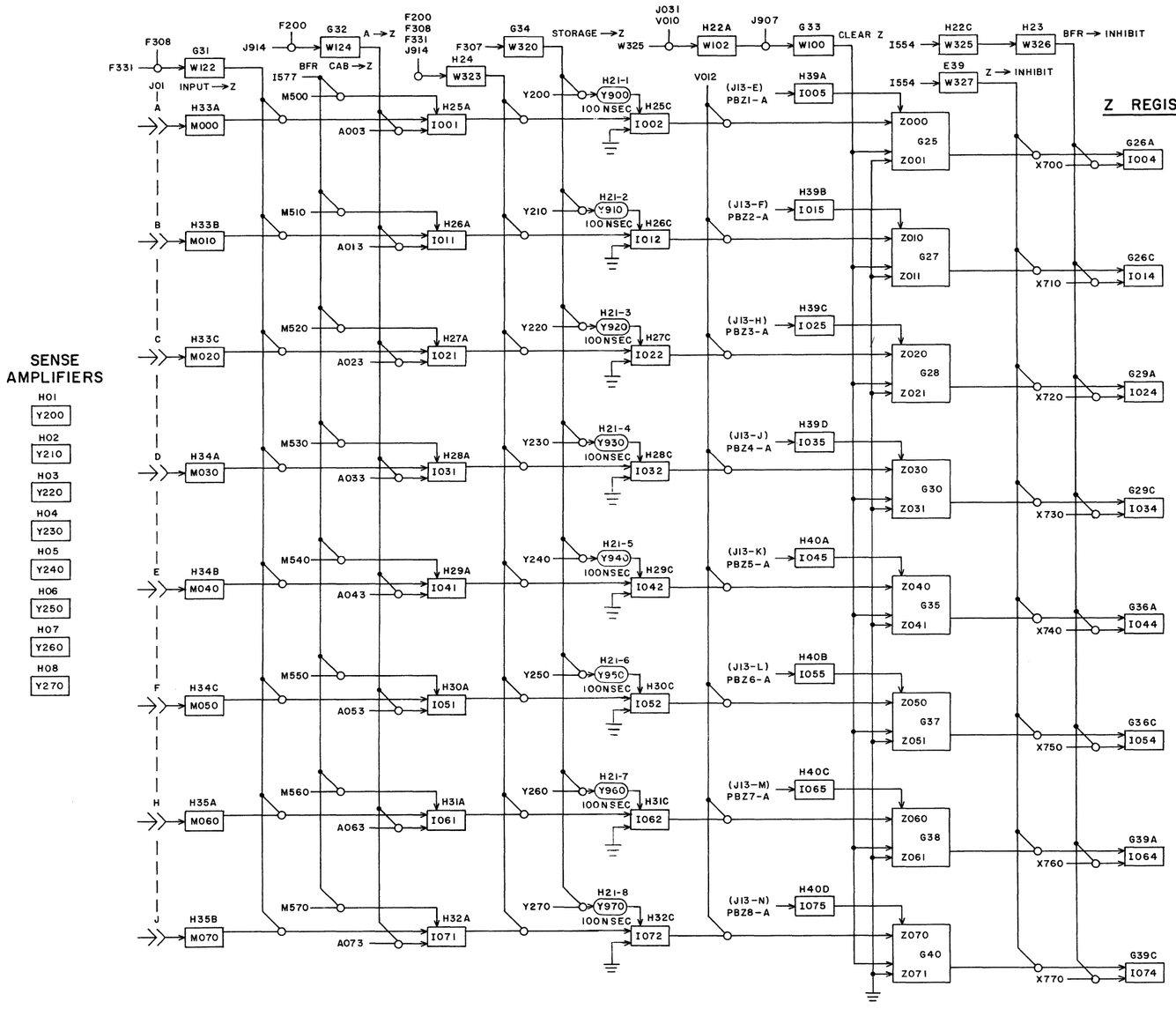
TITLE: LOGIC DIAGRAM REGISTERS – A AND O

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 360429 REV C

SHT PAGE 8



REV.	AUTH.	DATE	REVISIONS	DRW.	CHK.	APPROVED
B	1585	2-13-64		KH		
A	1402	12-23-63			SS	

APPROVED		2/24/64
CHECKED	J. H. NIPP	2/24/64
DRAWN	N. K. BECK	2/7/64
DESIGNED		

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

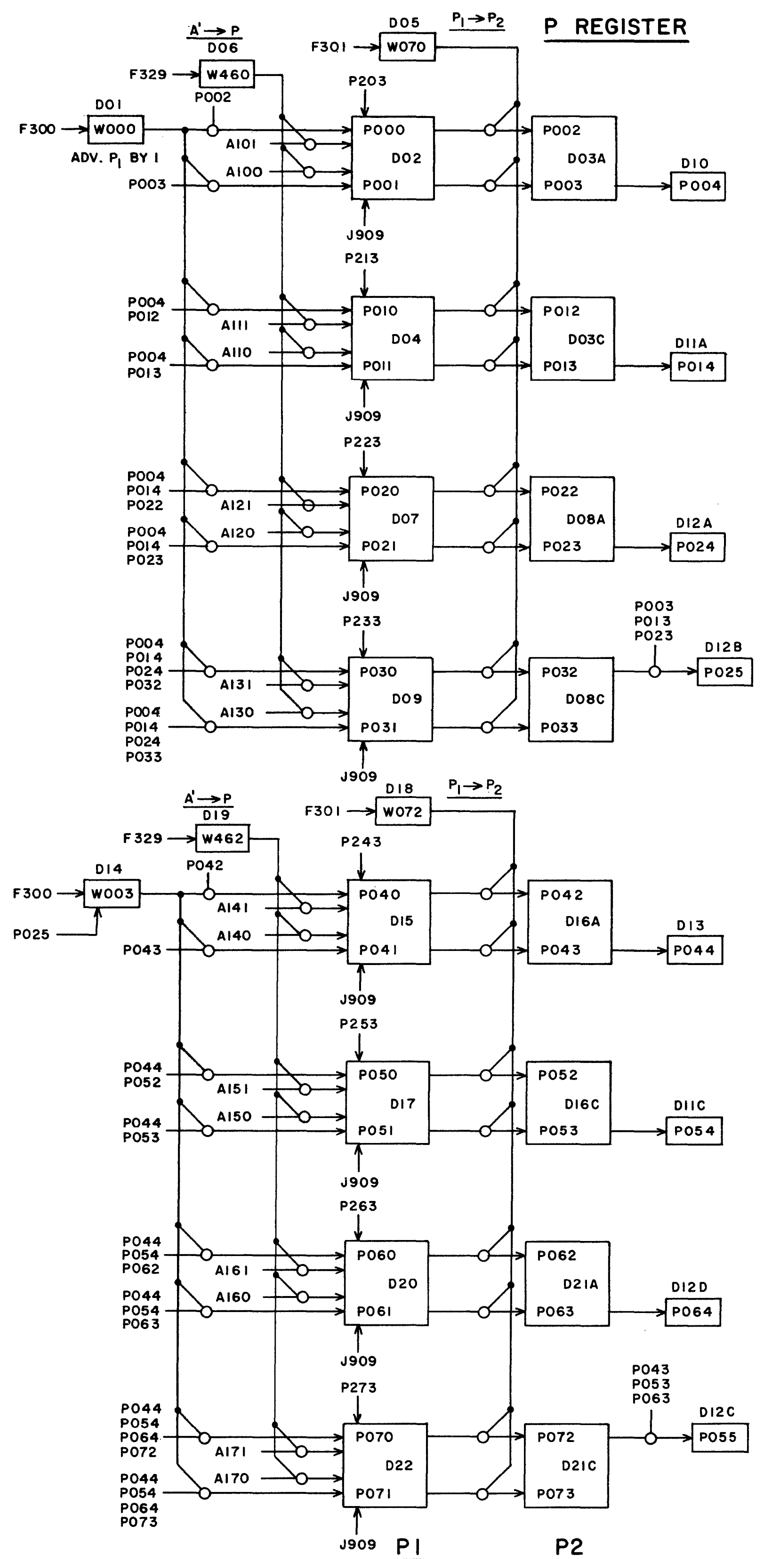
TITLE
LOGIC DIAGRAM
REGISTER-Z

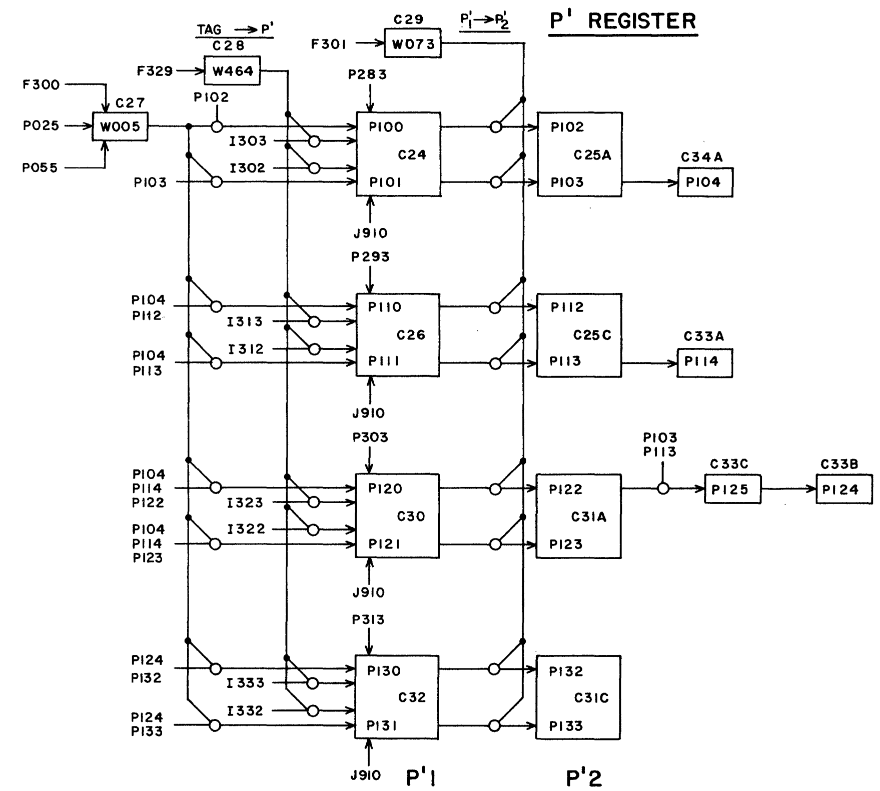
CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 364158 REV B

SHT PAGE 9





REV.	AUTH.	DATE	REG.	DRW.	CHK.	APPROVED
A	1585	3-15-65		KH		Wolslack

REVISIONS

APPROVED · W.B.Moe · 2/28/64
CHECKED · J.H. NIPP · 2/24/64
DRAWN · N.K. BECK · 2/4/64
DESIGNED

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE
LOGIC DIAGRAM
REGISTERS – P AND P'

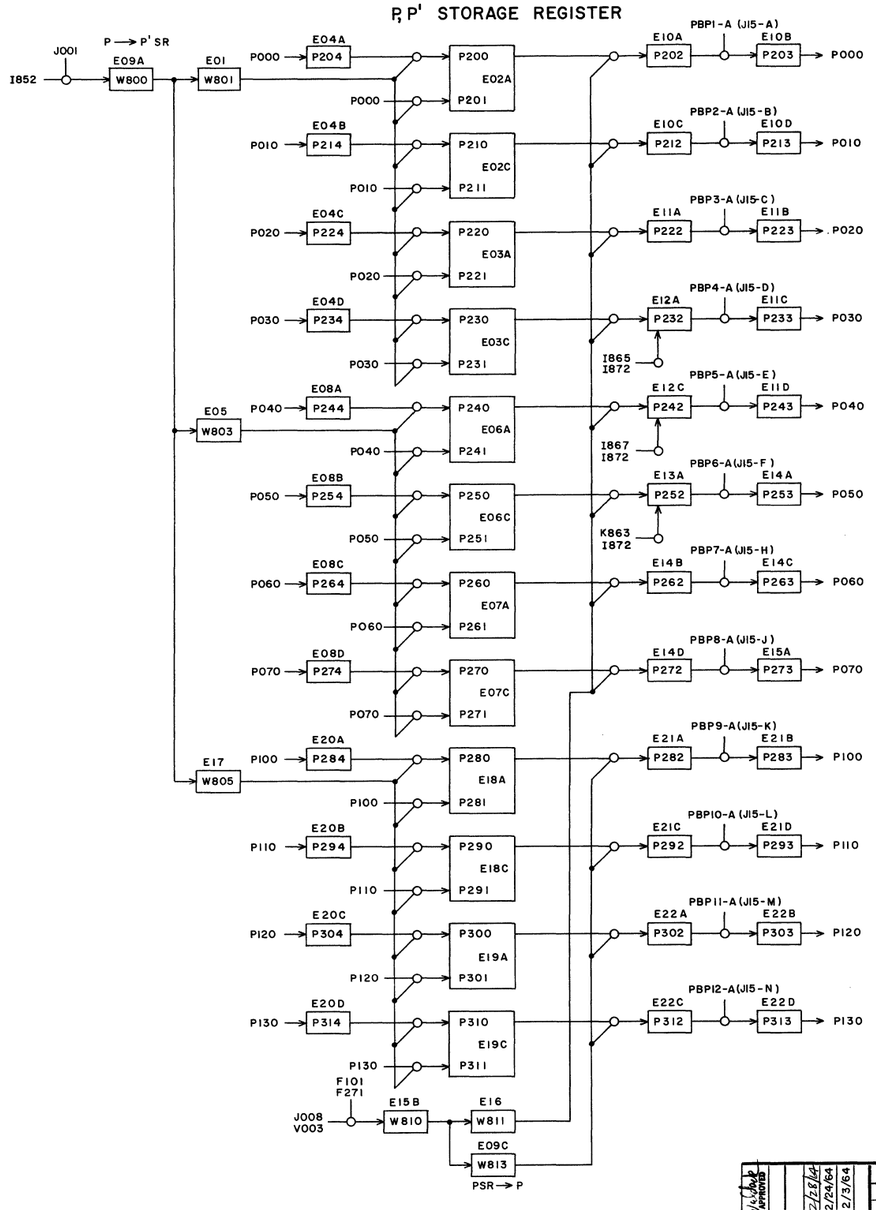
CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 360430 REV A

SHT
PAGE 10

P, P' STORAGE REGISTER



REV.	REL. INITIAL	DATE	REVISIONS	APPROVED	CHK.
A	KH	2-15-64	-	2/28/64	

APPROVED : W. B. Mac
CHECKED : J. H. NIPP 2/24/64
DRAWN : N. K. BECK 2/13/64
DESIGNED :

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

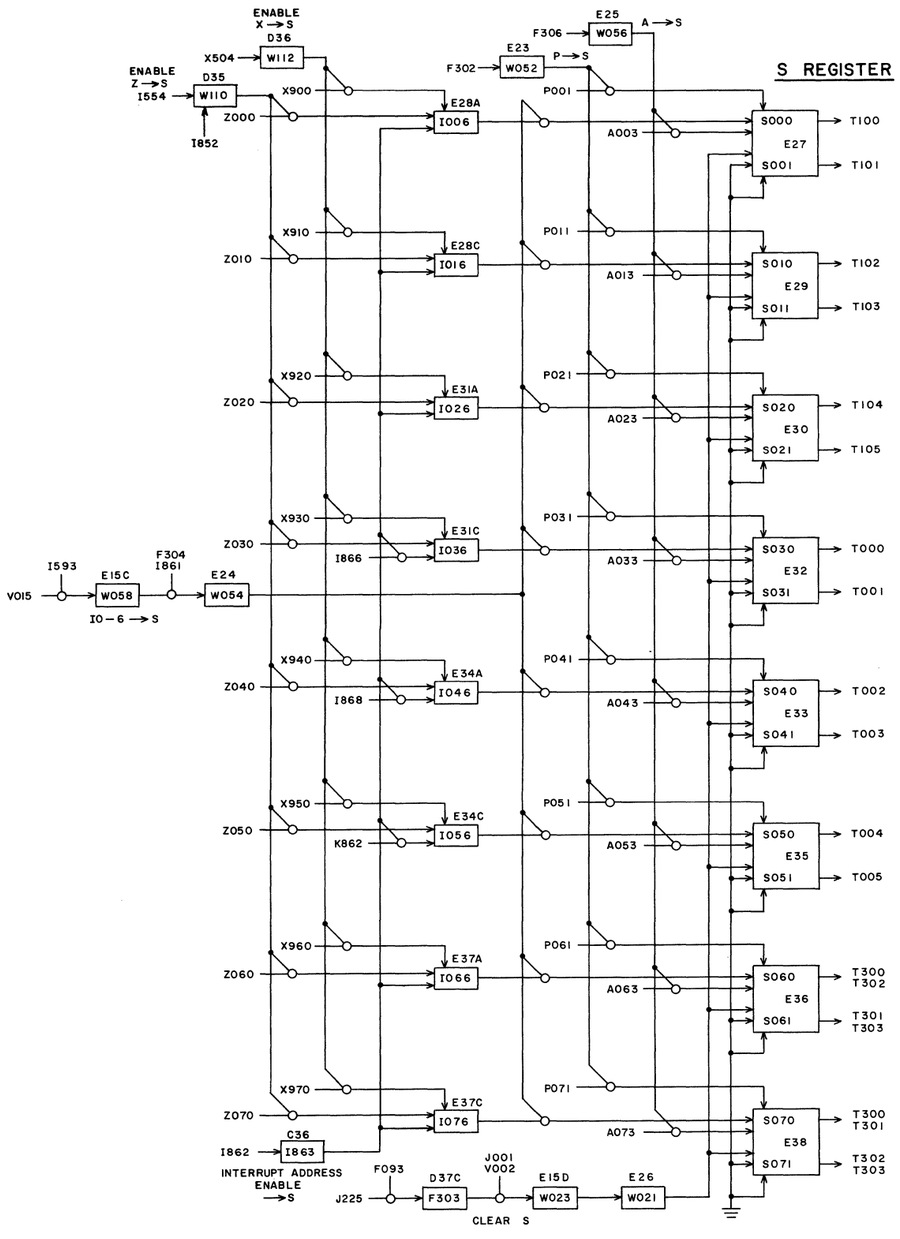
TITLE: LOGIC DIAGRAM REGISTER – PSR

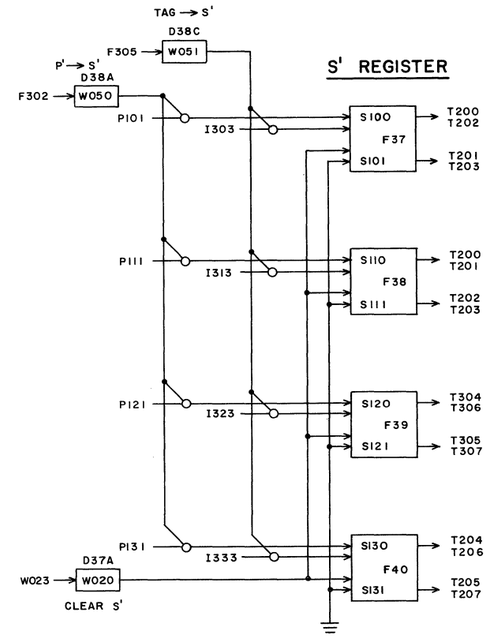
CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 364159 REV: A

SHT PAGE: 11





REV.	AUTH.	DATE	REVISIONS	DRWN.	CHK.	APPROVED
A	15851	3-5-64	-	KH		

APPROVED = W.E. Hoffmeister 2/24/64
CHECKED = J.H. NIPP 2/5/64
DRAWN = N.K. BECK
DESIGNED =

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

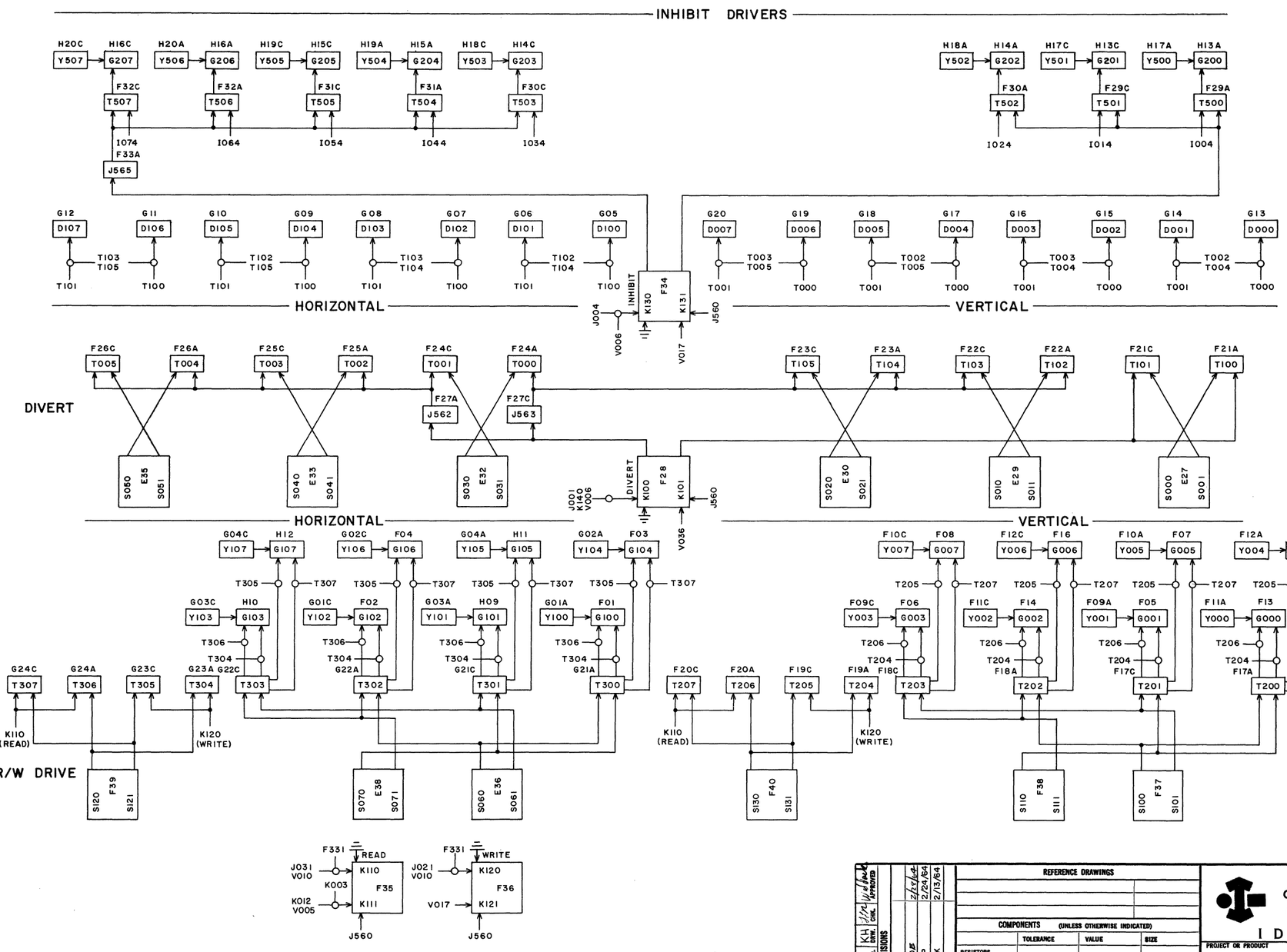
TITLE
LOGIC DIAGRAM
REGISTERS – S AND S'

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 364160 REV A

SHT PAGE 12



REV.	AUTH.	DATE	REVISIONS	APPROVED	CHK.	DRW.
A	1585	3-15-64	REG.	-		KH

APPROVED : H.B. Mos 2/24/64
CHECKED : J.H. NIPP 2/13/64
DRAWN : N.K. BECK
DESIGNED :

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

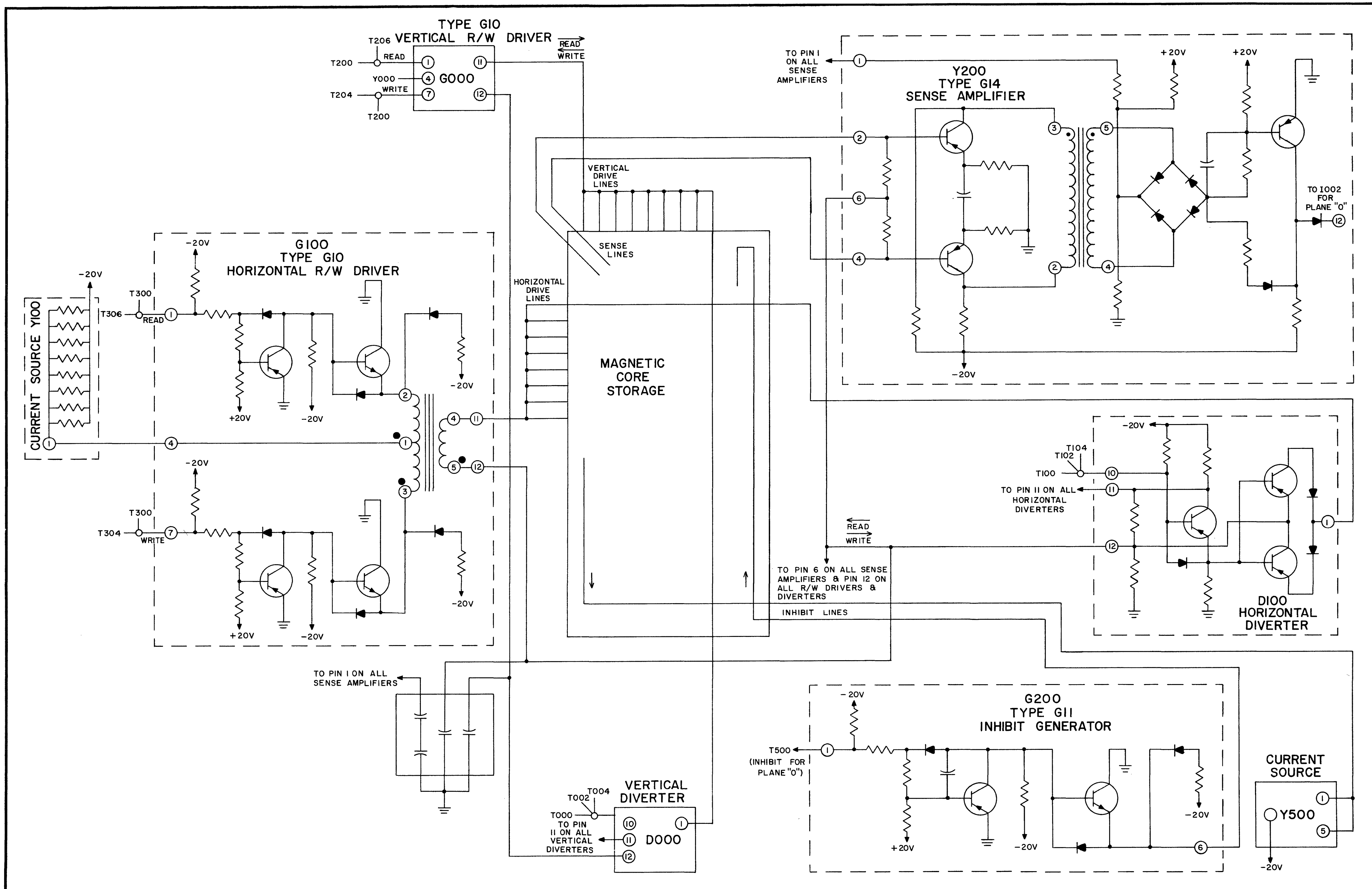
TITLE
LOGIC DIAGRAM
STORAGE TRANSLATORS

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 360431 REV A

SHT PAGE 13



REV.	A
AUTH.	1585
DATE	3-15-65
REQ.	
DRW.	KH
CHK.	
APPROVED	

REVISIONS

APPROVED - W.B. MOE 2/24/64
CHECKED - J.H. NIPP 2/24/64
DRAWN - N.K. BECK 1/27/64
DESIGNED -

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

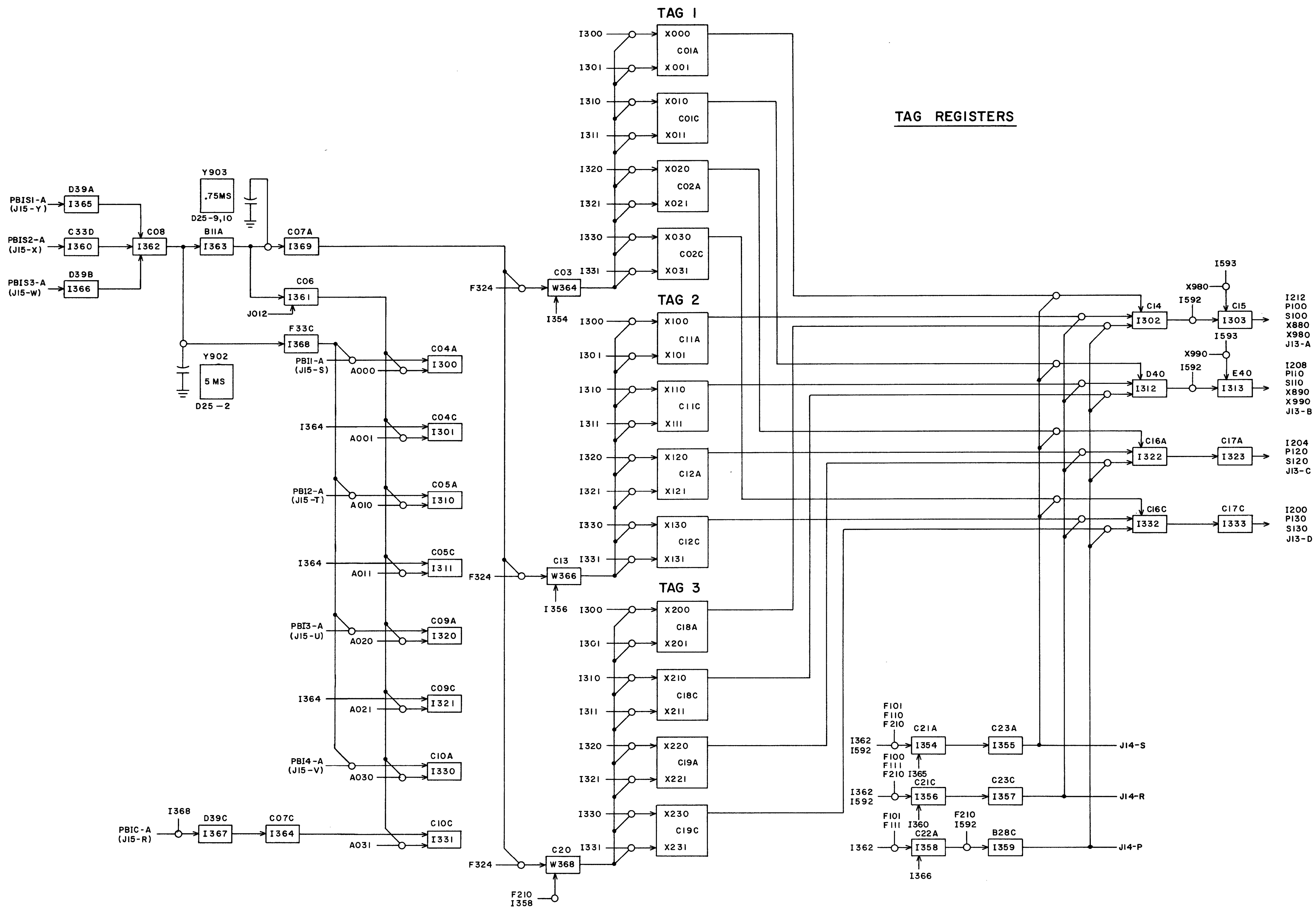
TITLE: SCHEMATIC DIAGRAM, TYPICAL STORAGE CIRCUITS

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 360442 REV: A

SHT



REV.	AUTH.	DATE	REQ.	DRW.	CHK.	APPROVED
A	1585	3-15		KH		

REVISIONS

APPROVED	W.B.	2/21/64
CHECKED	J.H. NIPP	2/24/64
DRAWN		
DESIGNED	N.K. BECK	2/10/64

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE
LOGIC DIAGRAM,
REGISTER-TAG 1,2,& 3

CONTROL DATA CORPORATION
I D P DIVISION

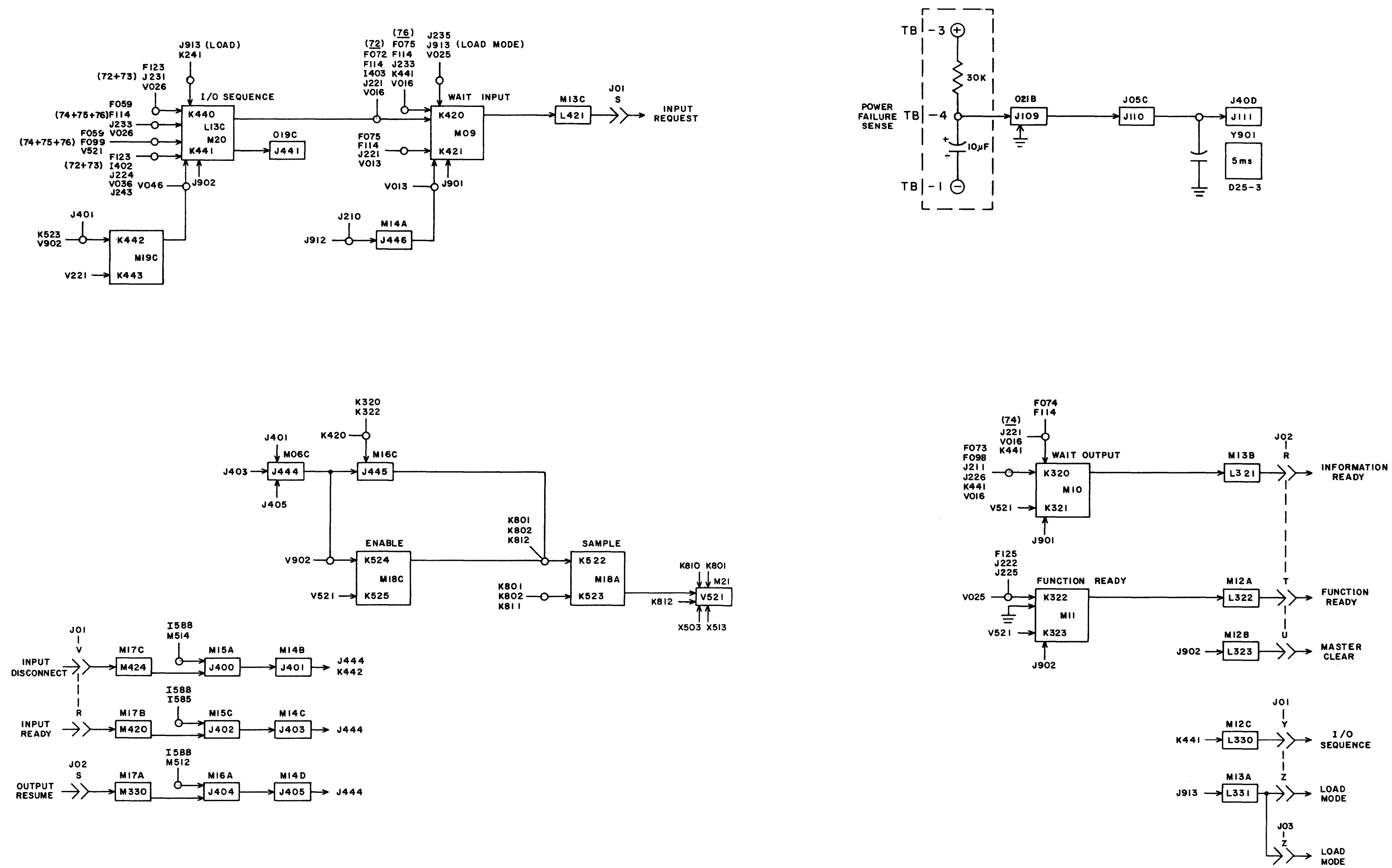
PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER
360433

REV
A

SHT

PAGE
15



REV.	AUTH.	DATE	REQ.	DRW.	CHK.	APPROVED
D	2041	3/24		RW		
C	1585	6/5		KH		
B	1411	7/2/64				
A	1354	7/2/64				

REVISIONS

APPROVED W.B.Moe 2/28/64
CHECKED J. H. NIPP 2/24/64
DRAWN N. K. BECK 2/21/64
DESIGNED

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

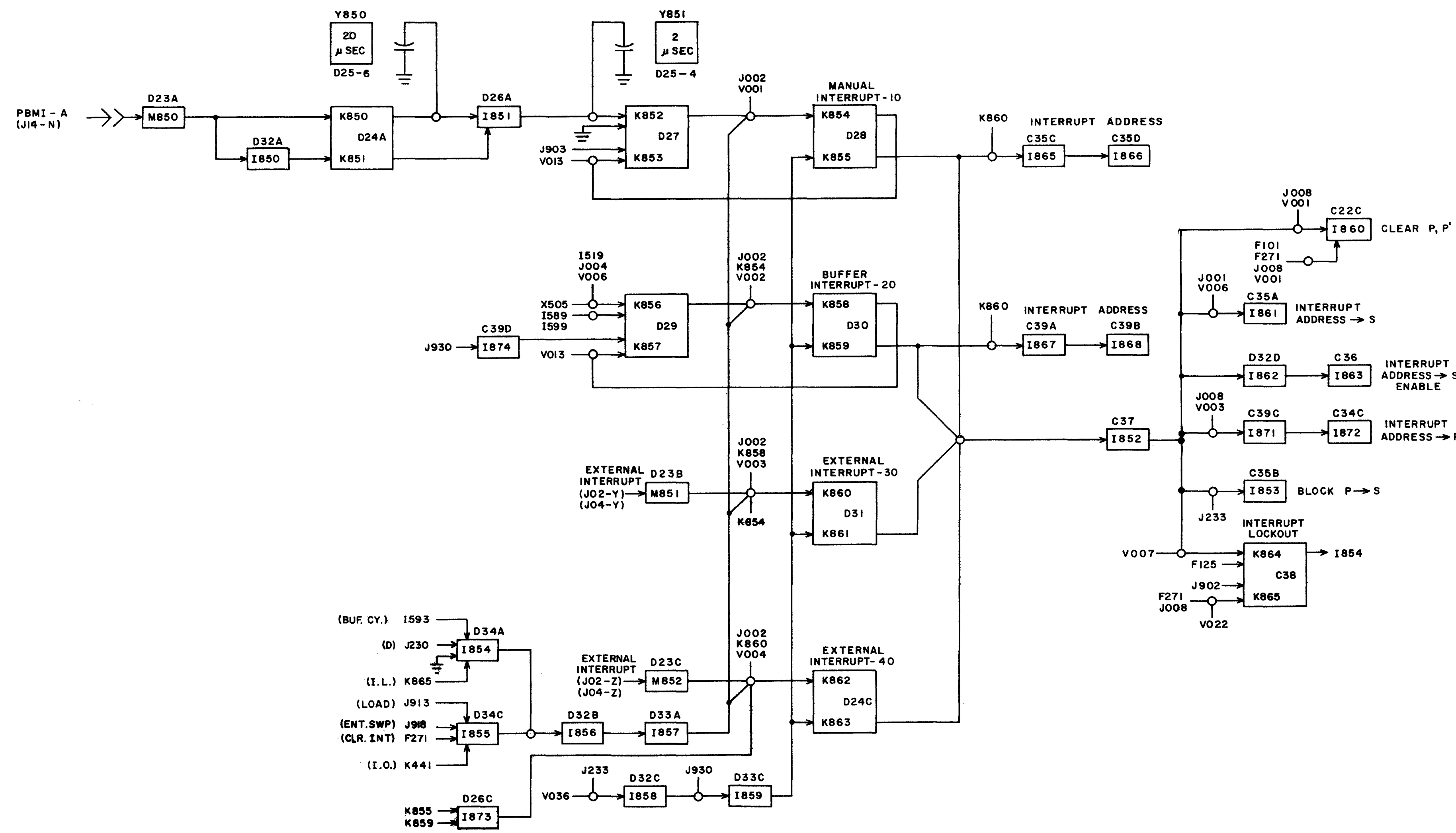
TITLE LOGIC DIAGRAM, INPUT/OUTPUT CONTROL

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT 8092 TELEPROGRAMMER

DRAWING NUMBER 360425 REV E

SHT 2 OF 2 PAGE 16



REV.	AUTH.	DATE	DWN.	CHK.	APPROVED
E	2383	3-4-67	JB		
D	2085	3-2-66	WW		
C	1585	3-15-65	KH		
B	1354	7-7-64			
A	1384	7-3-64			

REVISIONS

APPROVED W.B. Mac 7/28/64
CHECKED J. H. NIPP 2/24/64
DRAWN N. K. BECK 1/31/64
DESIGNED

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE LOGIC DIAGRAM INTERRUPT

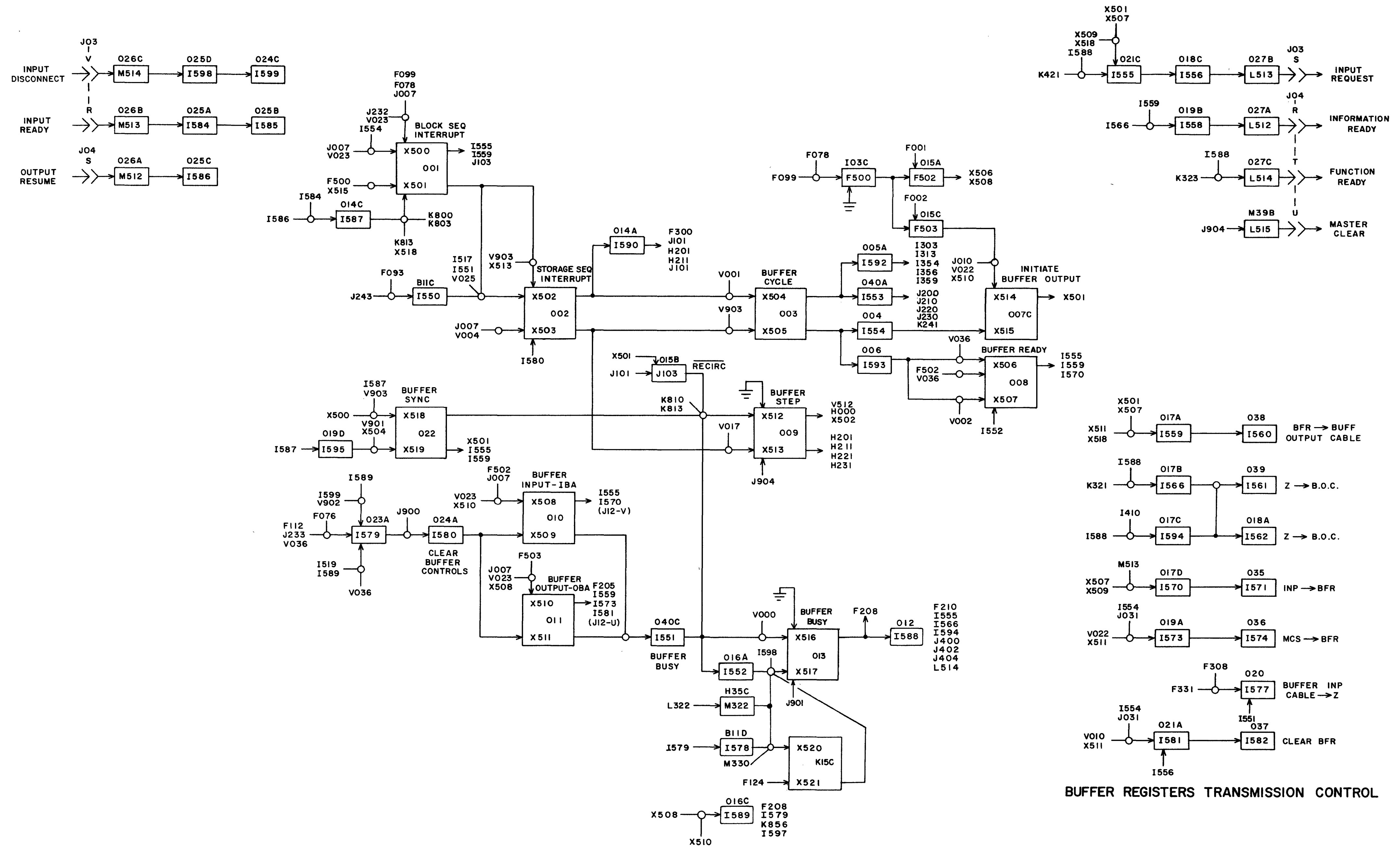
CONTROL DATA CORPORATION

I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

DRAWING NUMBER: 360434 — REV: E

SHT — PAGE 17



BUFFER REGISTERS TRANSMISSION CONTROL

REV					APPROVED
H	2876				
G	2041				
F	1585				
E	1505				
D	1470				
C	1431				
B	1411				
A	1394				

APPROVED - W.B. MOE
CHECKED - J.H. NIPP
DRAWN - N.K. BECK

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED): TOLERANCE, VALUE, SIZE; RESISTORS; CAPACITORS

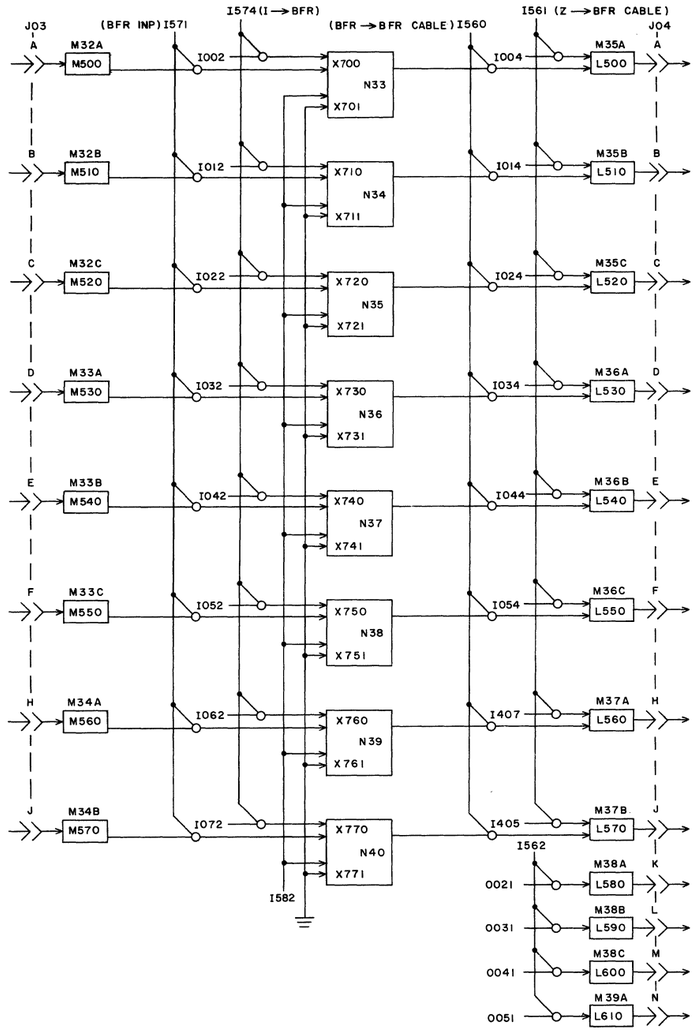
CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

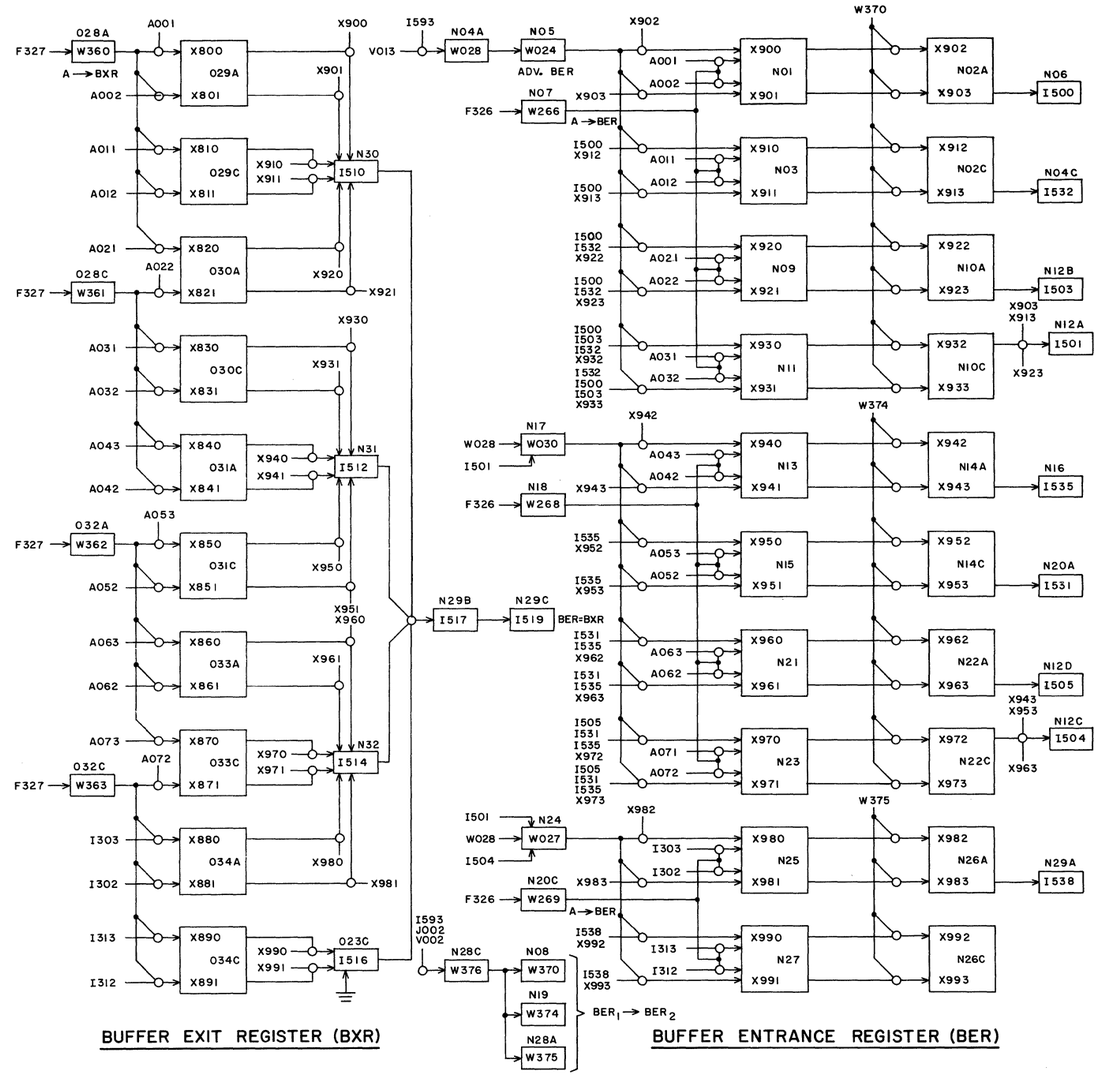
TITLE: LOGIC DIAGRAM BUFFER CONTROLS

DRAWING NUMBER: 36044700 REV H

SHT PAGE 18



BUFFER DATA REGISTER (BFR)



BUFFER EXIT REGISTER (BXR)

BUFFER ENTRANCE REGISTER (BER)

REV.	AUTH.	DATE	REVISIONS	DRW.	CHK.	APPROVED
A	1585	3-15	-	KH		

APPROVED	-	W.B. Moore 2/24/64
CHECKED	J.H. NIPP	2/24/64
DRAWN	N.K. BECK	1/30/64
DESIGNED	-	

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE

LOGIC DIAGRAM
REGISTERS - BFR, BXR, BER

CONTROL DATA CORPORATION
I D P DIVISION

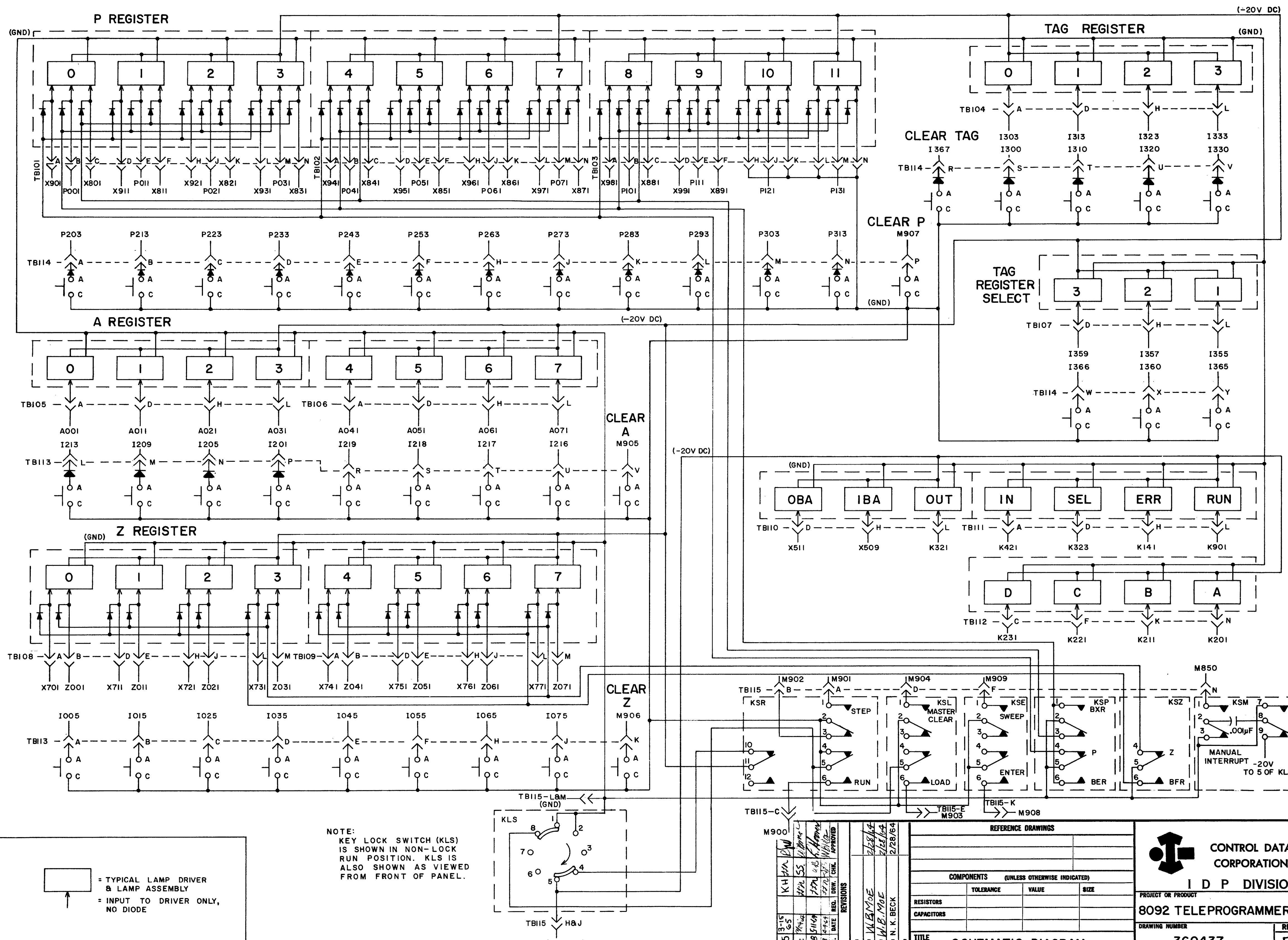
PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER
360432

REV
A

SHT

PAGE
19



REV.	AUTH.	DATE	REQ.	DRW.	CHK.	APPROVED
D	1585	3-15-65		KH		
C	1402			HN	SS	
B	1268	5/14/64				
A	1163	4/4/64				

REVISIONS

APPROVED	W.B. MOE	2/28/64
CHECKED	W.B. MOE	2/28/64
DRAWN	N.K. BECK	2/28/64
DESIGNED		

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

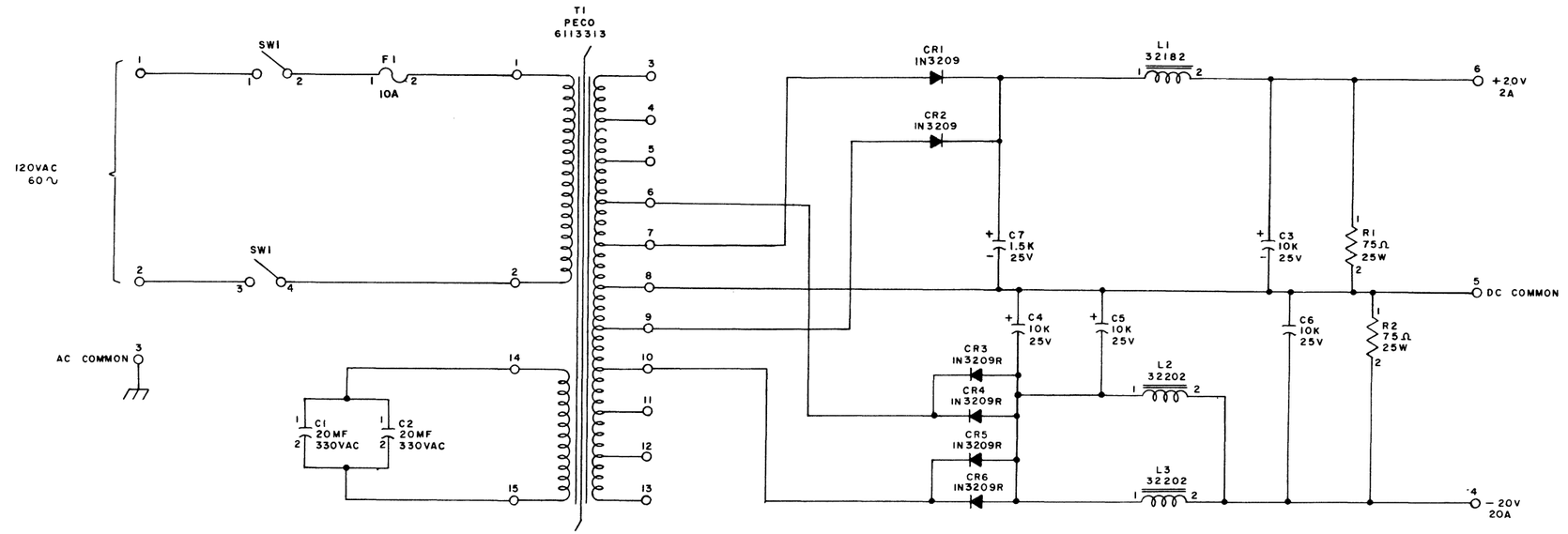
CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT: 8092 TELEPROGRAMMER

TITLE: SCHEMATIC DIAGRAM, CONTROL CONSOLE

DRAWING NUMBER: 360437 REV: D

SHT | PAGE 20



REV.	AUTH.	DATE	RES.	DRW.	CHK.	APPROVED

REVISIONS

APPROVED
CHECKED
DRAWN 12/30/63
DESIGNED

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

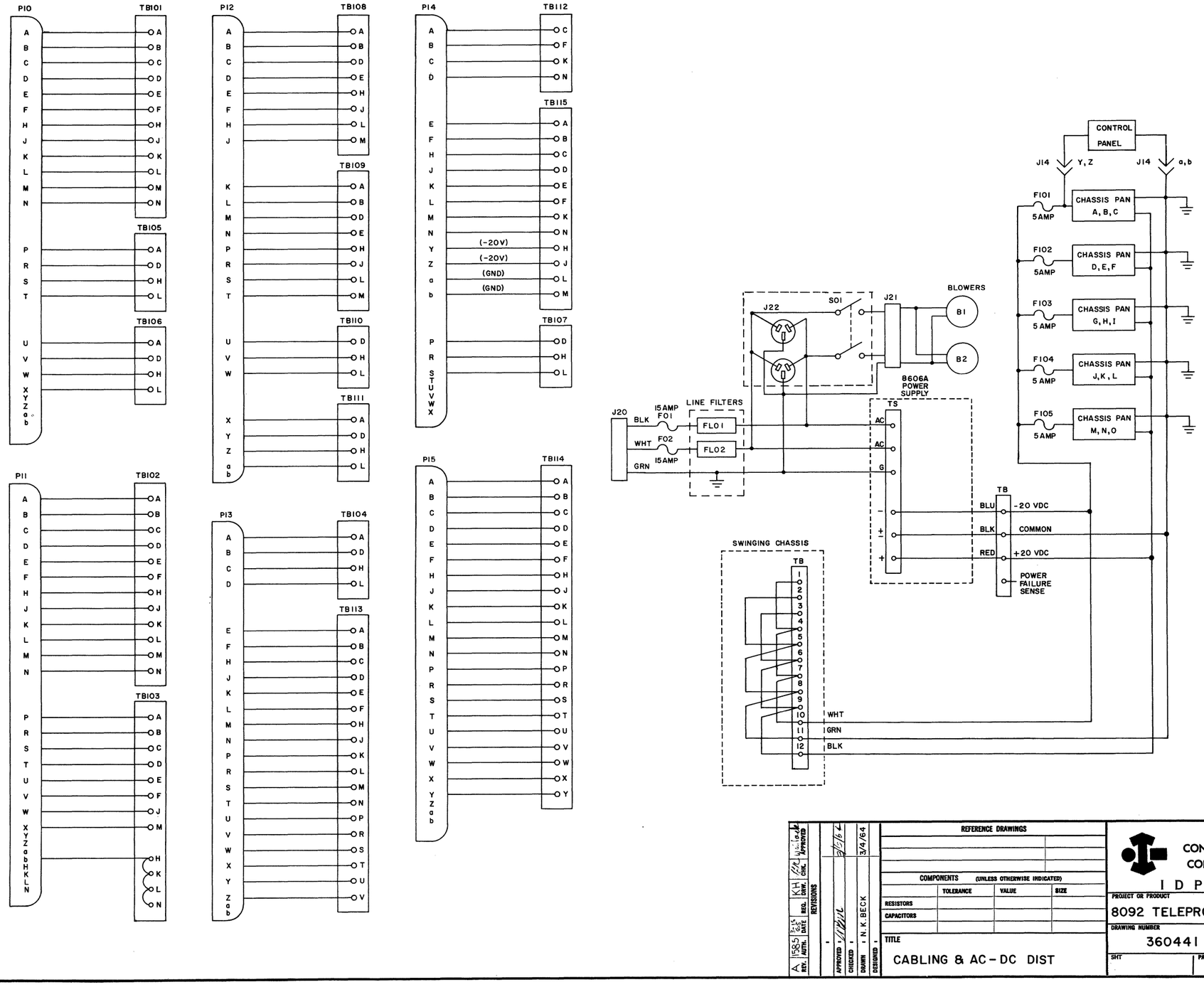
TITLE
SCHEMATIC, POWER SUPPLY—
MODEL 8606-A

CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT

DRAWING NUMBER 364071 REV

PAGE 21



REV.	AUTH.	DATE	REVISIONS	DRWN.	APPROVED
A	1565	2-25-65	REL.	KH	

APPROVED
CHECKED
DRAWN N. K. BECK 3/4/64
DESIGNED

REFERENCE DRAWINGS

COMPONENTS (UNLESS OTHERWISE INDICATED)

	TOLERANCE	VALUE	SIZE
RESISTORS			
CAPACITORS			

TITLE
CABLING & AC-DC DIST

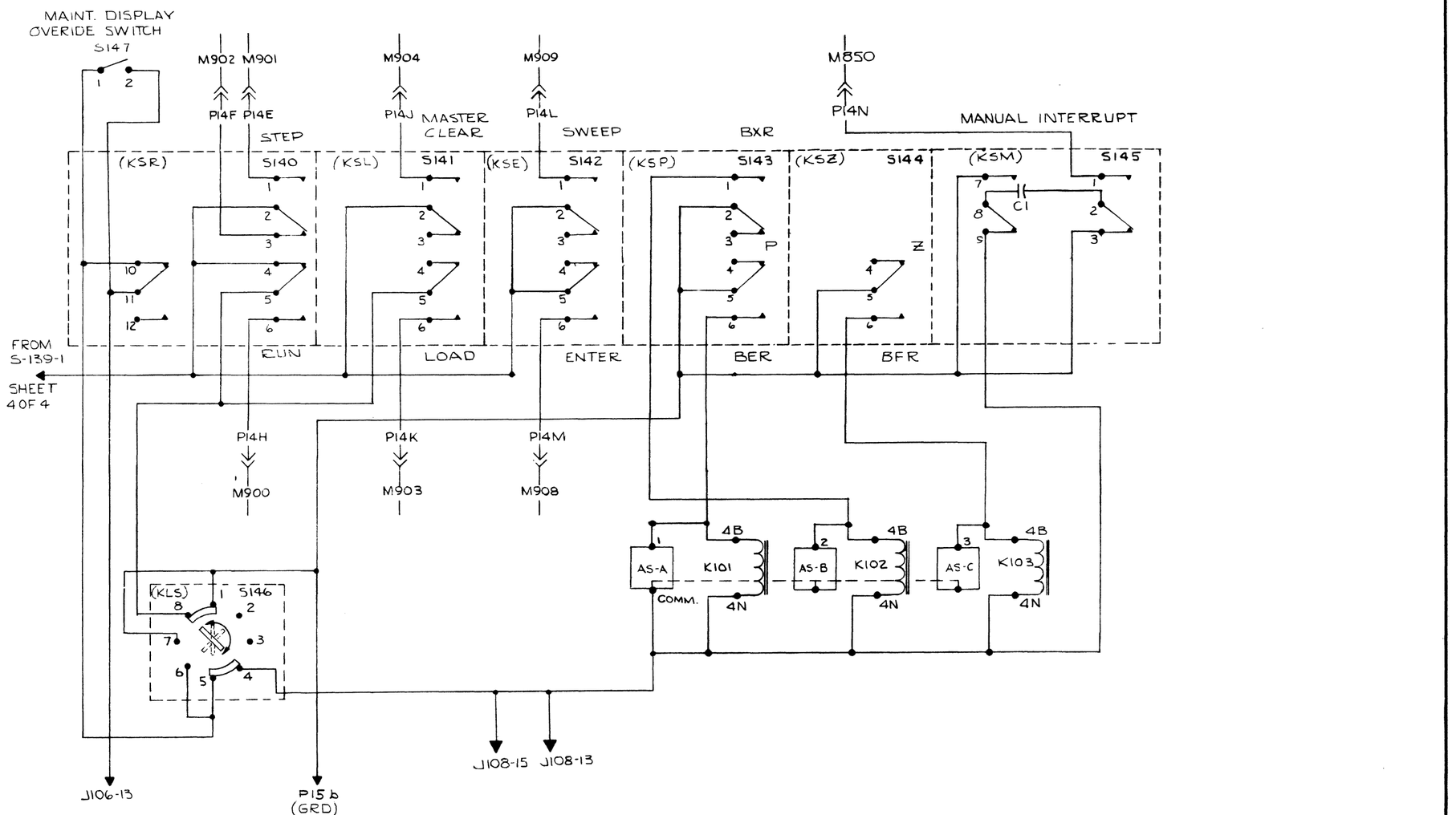
CONTROL DATA CORPORATION
I D P DIVISION

PROJECT OR PRODUCT
8092 TELEPROGRAMMER

DRAWING NUMBER 360441 REV A

SHT PAGE 22

REVISIONS							
REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APP'D.
A	—	—	RELEASED	—	11-30-68	—	[illegible]
B	80234		REVISED PER ECO	RAH	4-5-69	[illegible]	FES



2. DOTTED LINES SHOW CONNECTIONS WITHIN A CONNECTOR OR COMPONENT.
1. KEY LOCK SWITCH KLS IS SHOWN IN NON-LOCK RUN POSITION. KLS IS ALSO SHOWN AS VIEWED FROM FRONT OF PANEL.

NOTES:

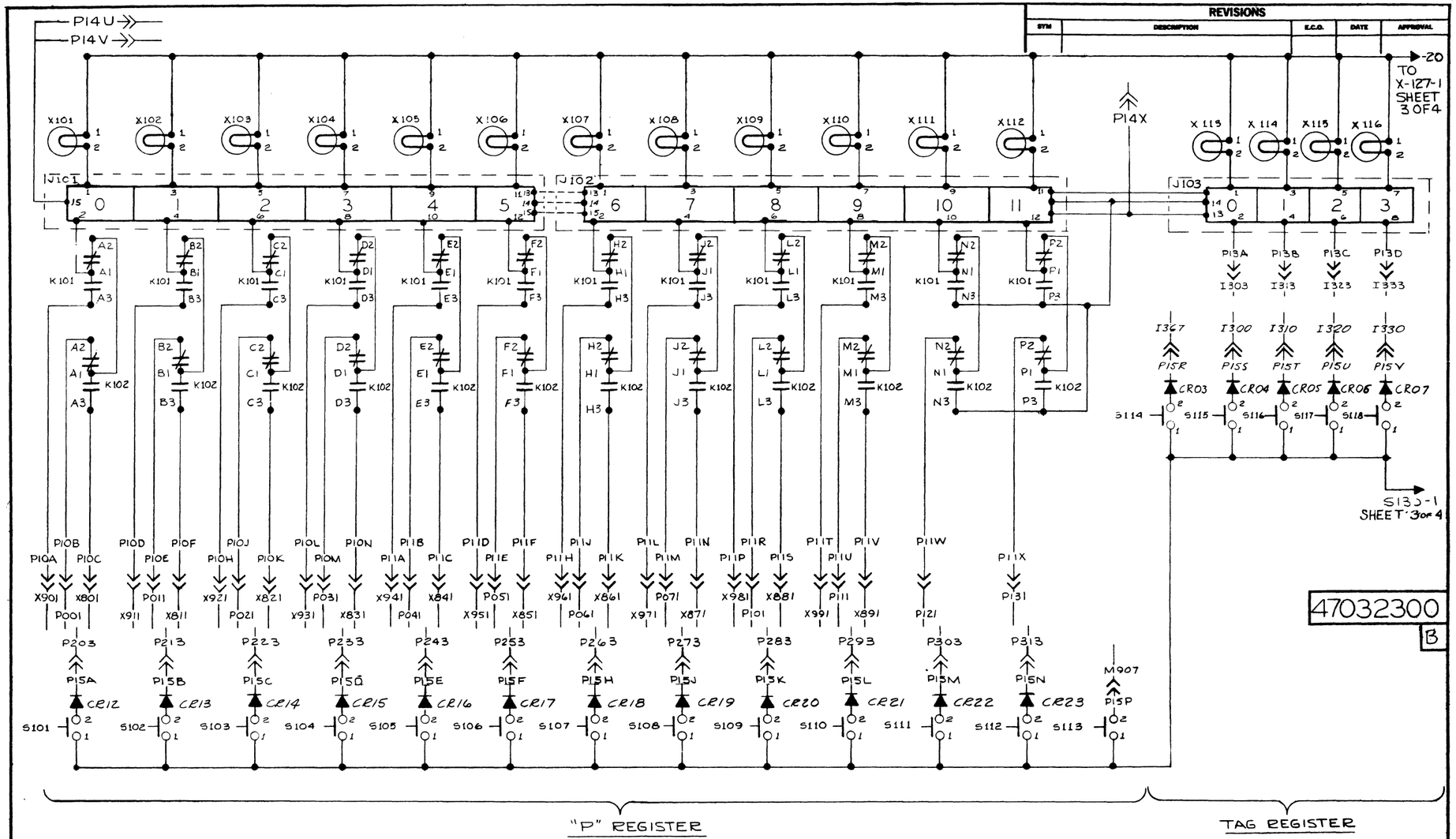
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON FRACTIONS: ± ____ DECIMALS: ± ____ ANGLES: ± ____
DO NOT SCALE DRAWING
MATERIAL
FINISH

CONTROL DATA
CEDAR ENGINEERING DIVISION
DIGITAL ENGINEERING DEPARTMENT
MINNEAPOLIS, MINNESOTA

PRODUCT	8092 DISPLAY	
DRAWN	R. Alexander	11-13-68
CHECKED	V. Hilgar	11-13-68
ENGINEER	F. Wenzel	11-13-68
APPROVED		

TITLE
SCHEMATIC DIAGRAM
8092 DISPLAY

SIZE C | DRAWING NO. 47032300 | REV B
SCALE | Page 23 | SHEET 1 OF 4



47032300
B

ITEM	REQ'D.	PART NO.	DESCRIPTION	MATL.	MATL. SPEC.	NEXT ASSY.	USED ON	FINAL ASSY.	NEXT ASSY.
LIST OF MATERIAL						APPLICATION		QTY. REQ'D	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES AND TOLERANCES ARE:
FRACTIONS: ±1/64 DECIMALS: (0.00)±0.05 (0.000)±0.005 ANGLES: ±1°
BREAK ALL EDGES AND REMOVE CORNERS .010 MAX.
DIMENSIONS APPLY AFTER PLATING OR HEAT TREAT.
BURRS: NO LOOSE BURRS PERMITTED. TIGHT BURRS PERMITTED IF THEY CANNOT BE REMOVED BY NORMAL HANDLING OR TUMBLING.
SURFACE FINISH:
√ ALL INSIDE SURFACES
√ ALL OUTSIDE SURFACES

	BY	DATE
DRAWN		
CHECKED		
ENG.		
PROD.		

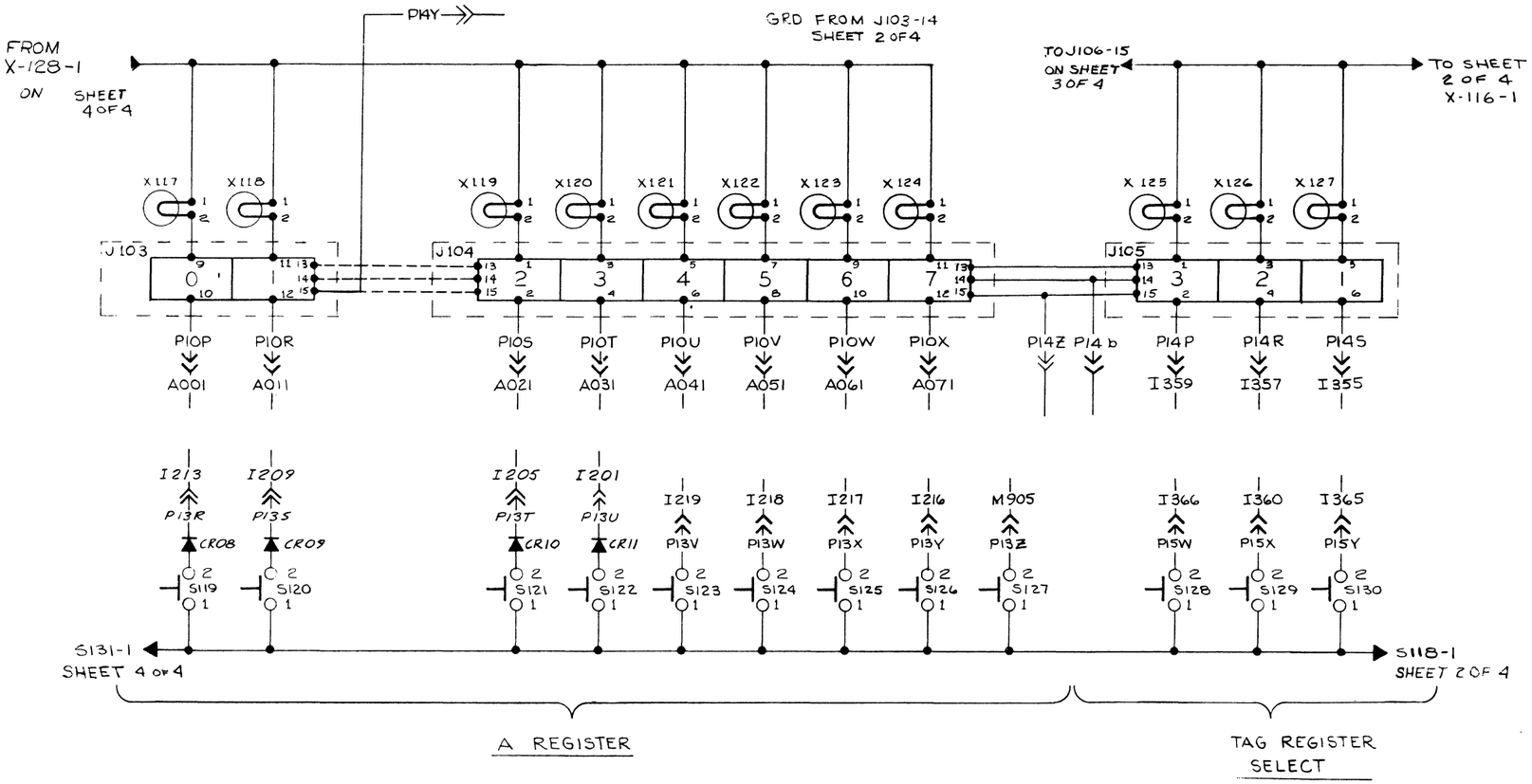
FINISH:

NAME
SCHEMATIC DIAGRAM
8092 DISPLAY

CONTROL DATA CORP
CEDAR ENGINEERING DIVISION
8000 WEST 78TH ST.
MINNEAPOLIS 10 MINNESOTA

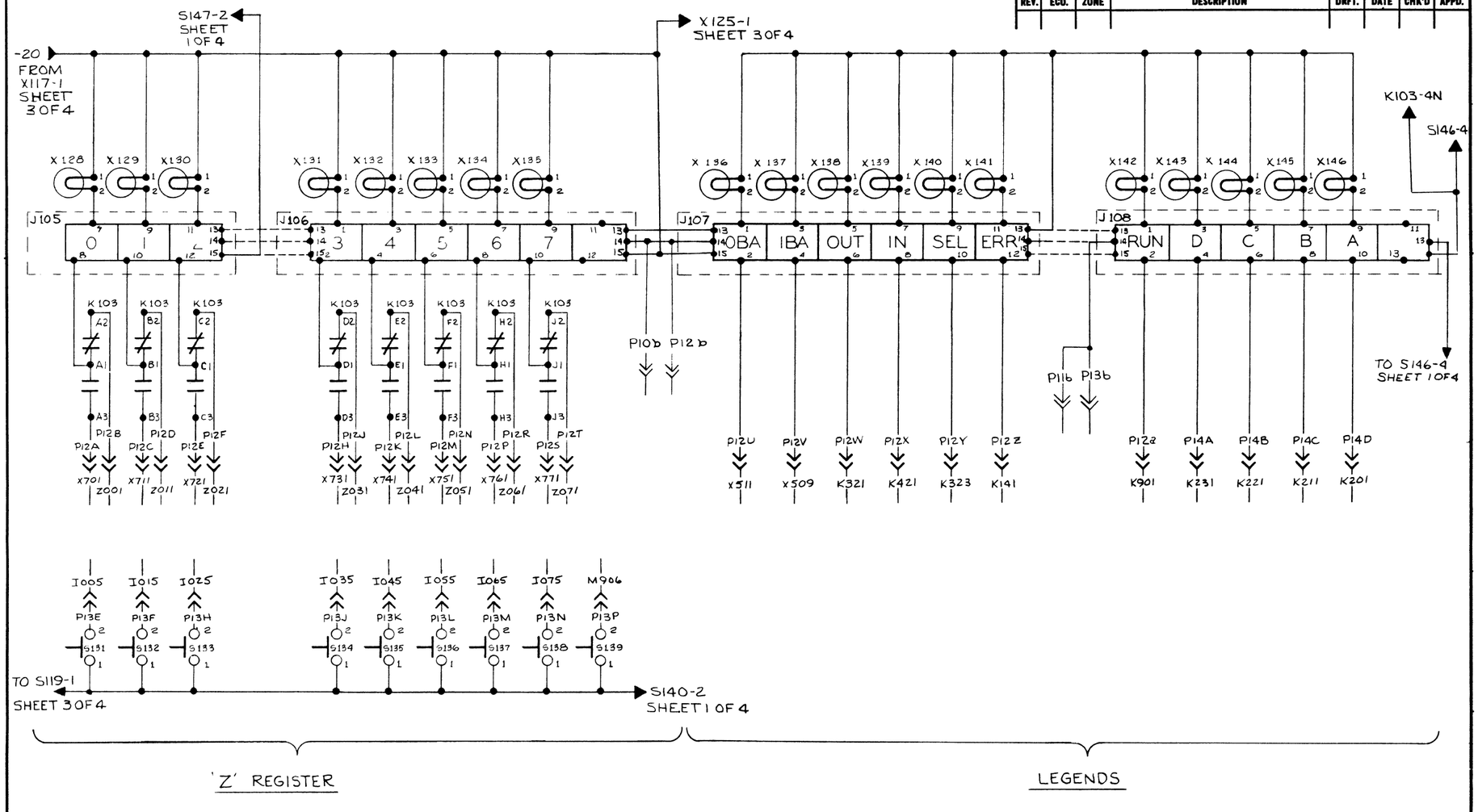
SIZE B
DWG. NO. 47032300
SCALE
WT.
SHEET 2 OF 4

REVISIONS						
REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APPD.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS: ± DECIMALS: ± ANGLES: ±	CONTROL DATA CORPORATION	TITLE	SCHEMATIC DIAGRAM 8092 DISPLAY
DO NOT SCALE DRAWING	CEDAR ENGINEERING DIVISION DIGITAL ENGINEERING DEPARTMENT MINNEAPOLIS, MINNESOTA		
MATERIAL	PRODUCT 8092 DISPLAY		
FINISH	DRAWN	SIZE C	DRAWING NO. 47032300 REV B
	CHECKED		
	ENGINEER	SCALE	
	APPROVED		

REVISIONS							
REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APPD.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON FRACTIONS: ± DECIMALS: ± ANGLES: ±
DO NOT SCALE DRAWING
MATERIAL
FINISH

CONTROL DATA CORPORATION
CEDAR ENGINEERING DIVISION
DIGITAL ENGINEERING DEPARTMENT
MINNEAPOLIS, MINNESOTA

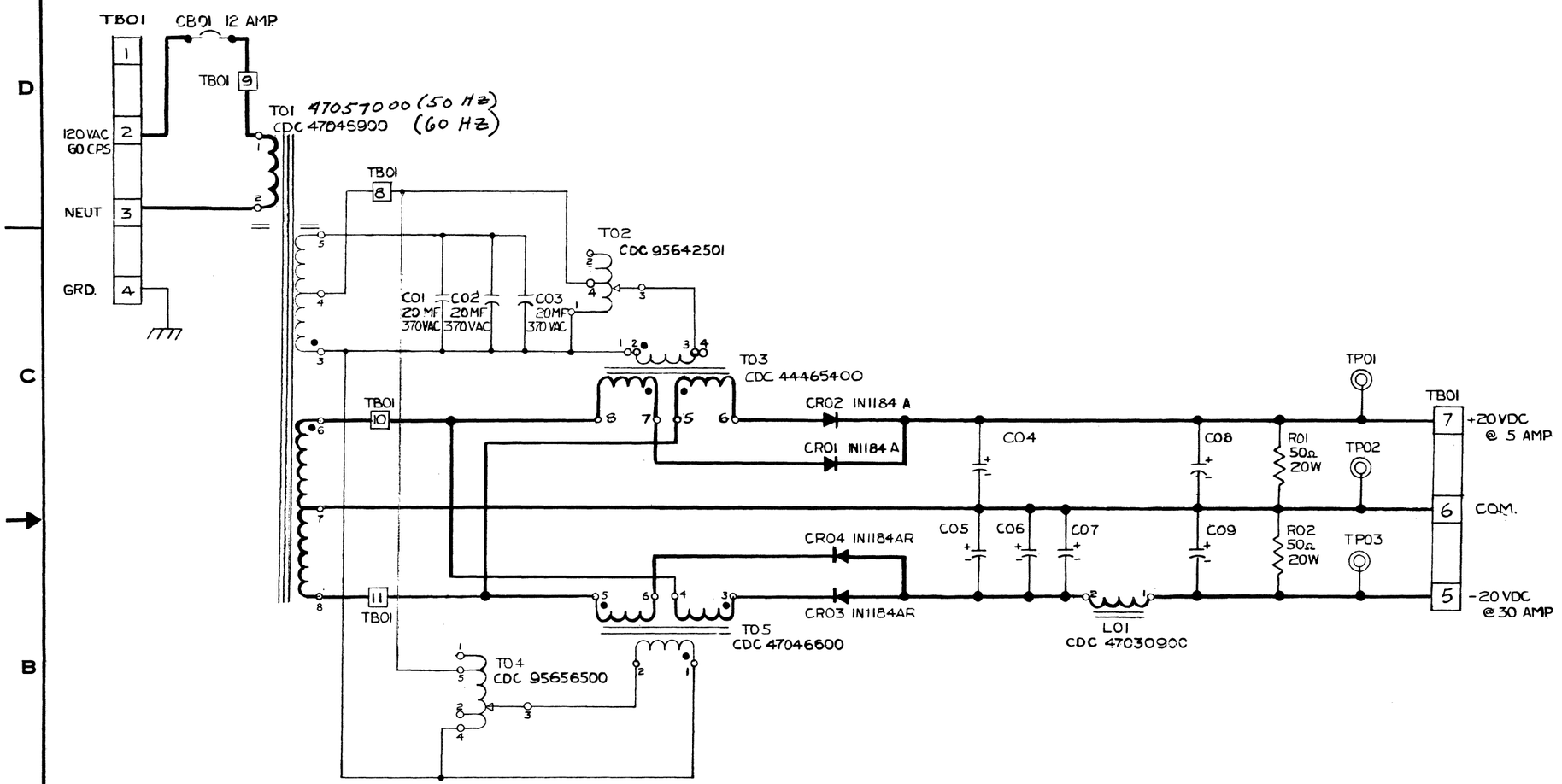
PRODUCT	8092 DISPLAY
DRAWN	
CHECKED	
ENGINEER	
APPROVED	

TITLE: SCHEMATIC DIAGRAM, 8092 DISPLAY

SIZE: C | DRAWING NO.: 47032300 | REV: B

SCALE | Page 26 | SHEET 4 OF 4

REVISIONS							
REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APPD.
A			RELEASED		3-22-66		

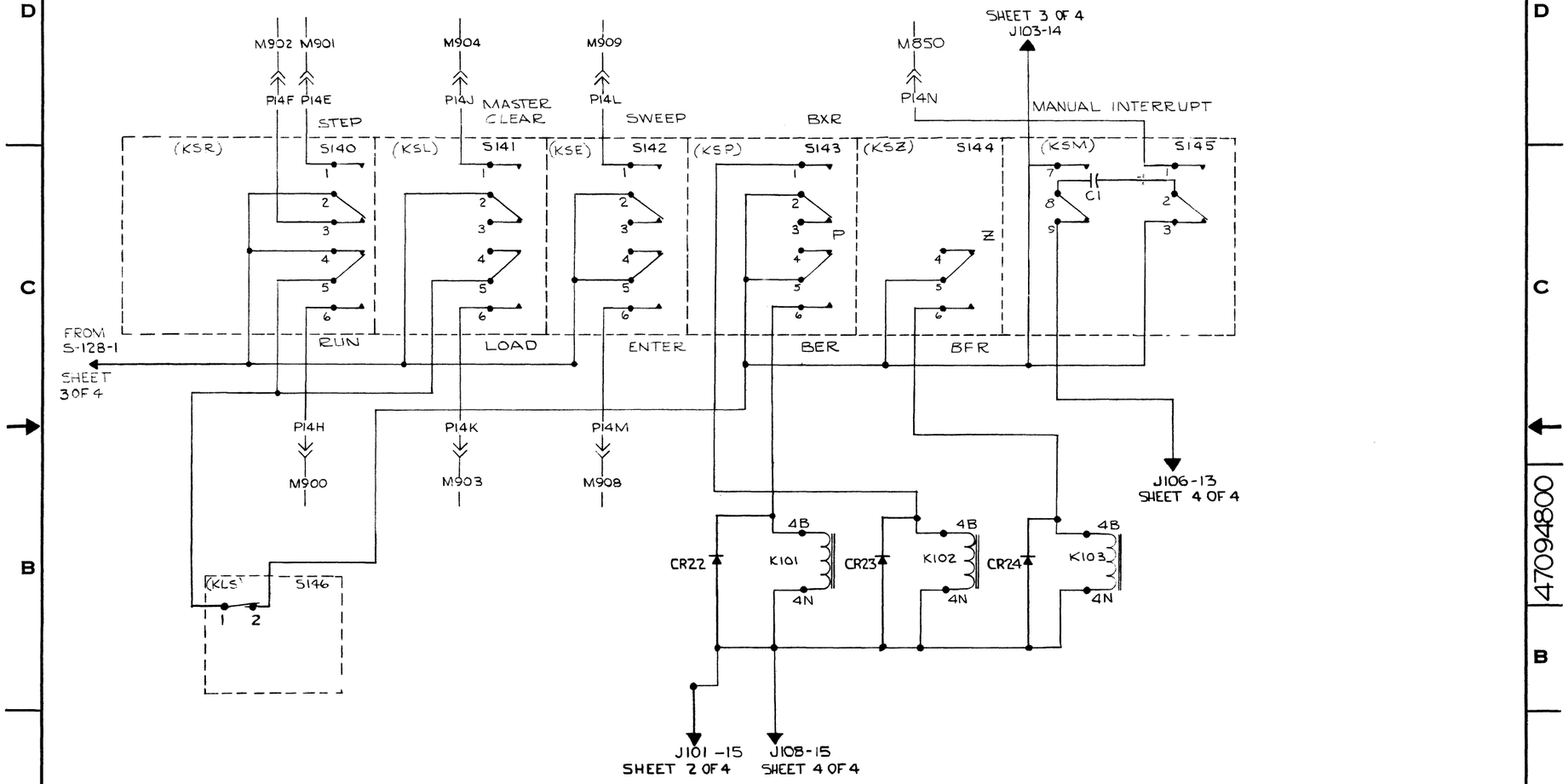


NOTE: C04 THROUGH C09 ARE 55,000 MFD @ 25 VDC.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS: DECIMALS: ANGLES: ± ± ±	CONTROL DATA	TITLE SCHEMATIC, POWER SUPPLY FERRORESONANT, 60 CPS & 50 CPS
DO NOT SCALE DRAWING	CEDAR ENGINEERING DIVISION DIGITAL ENGINEERING DEPARTMENT MINNEAPOLIS, MINNESOTA	
MATERIAL	PRODUCT TELEPROGRAMMER	
FINISH	DRAWN D. SCOFIELD 12-3-65	SIZE C — DRAWING NO. 47046500 — REV A
	CHECKED 12-3-65	
	ENGINEER 12/3/65	SCALE — Page 27 — SHEET 1 OF 1
	APPROVED 12/6/65	

47046500

SHEET REV STATUS				REVISIONS							
4	3	2	1	REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APPD.
A	A	A	A	A			RELEASED		6-14-67		6-15-67
A	A	A	B	B	80833	B-2	ADDED DIODES, DEL. ARC SUP	DS	7-20-67		7-21-67



2. DOTTED LINES SHOW CONNECTIONS WITHIN A CONNECTOR OR COMPONENT.
1. KEY LOCK SWITCH KLS IS SHOWN IN NON-LOCK RUN POSITION.

NOTES:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS: DECIMALS: ANGLES:
± ___ ± ___ ± ___
DO NOT SCALE DRAWING
MATERIAL
FINISH

CONTROL DATA CORPORATION
CEDAR ENGINEERING DIVISION
DIGITAL ENGINEERING DEPARTMENT
MINNEAPOLIS, MINNESOTA

PRODUCT	8092 DISPLAY	
DRAWN	G. Taft	3-28-67
CHECKED		4-6-67
ENGINEER		4-6-67
APPROVED		4-6-67

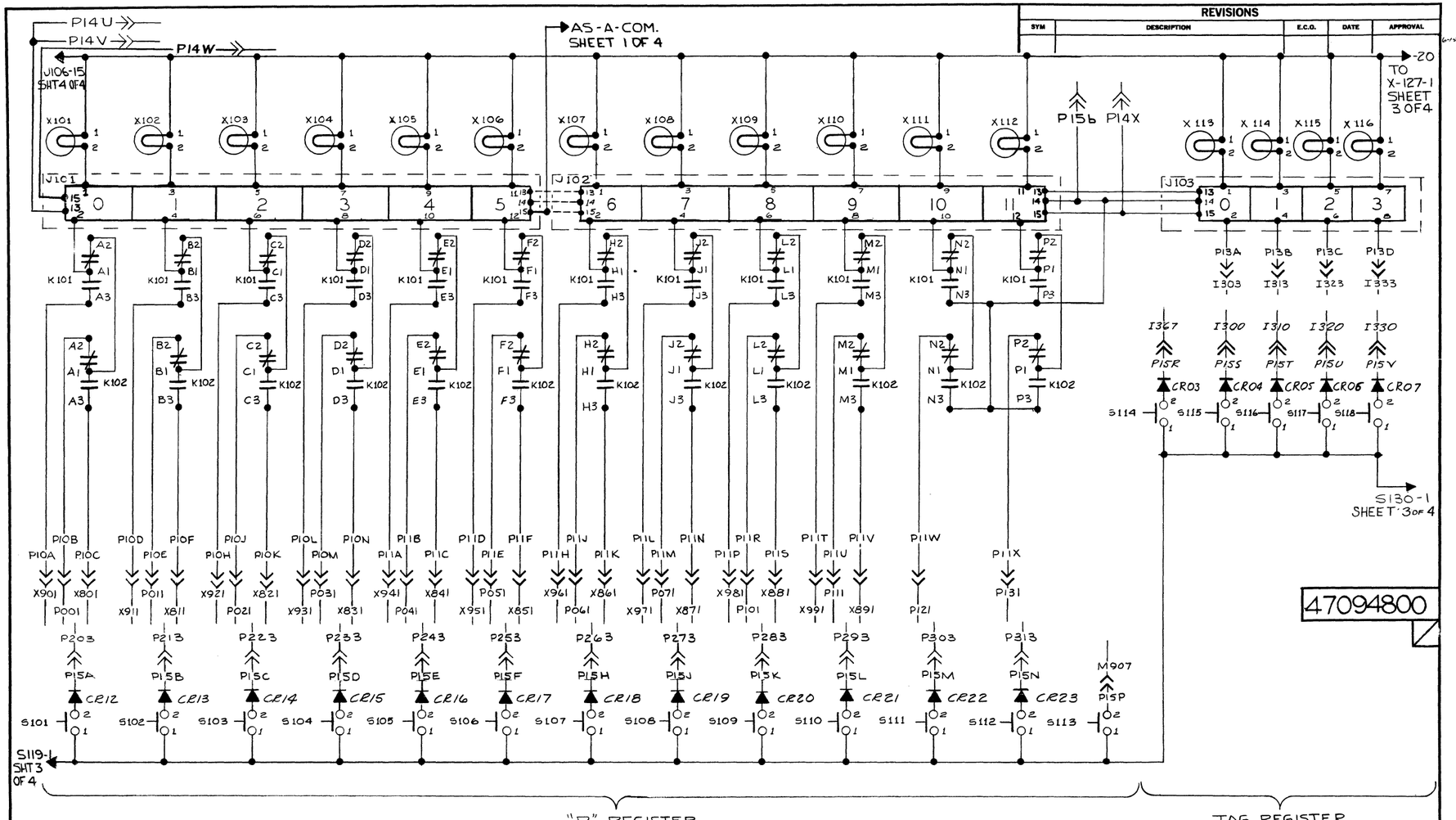
TITLE
SCHEMATIC DIAGRAM
8092 DISPLAY

SIZE	DRAWING NO.	REV
C	47094800	B

SCALE
SHEET 1 OF 4

47094800

REVISIONS				
SYM	DESCRIPTION	E.C.O.	DATE	APPROVAL



47094800

ITEM	REQD.	PART NO.	DESCRIPTION	MATL.	MATL. SPEC.	NEXT ASSY.	USED ON	FINAL ASSY.	NEXT ASSY.
LIST OF MATERIAL						APPLICATION		QTY. REQD.	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES AND TOLERANCES ARE:
FRACTIONS: ±1/64 DECIMALS: (0.00)±0.01 (0.000)±0.005 ANGLES: ±1°
BREAK ALL EDGES AND SHARP CORNERS .010 MAX.
DIMENSIONS APPLY AFTER PLATING OR HEAT TREAT.
BURRS: NO LOOSE BURRS PERMITTED. TIGHT BURRS PERMITTED IF THEY CANNOT BE DETECTED BY NORMAL VISION OR TOUCH.
SURFACE FINISH: √ ALL INSIDE SURFACES √ ALL OUTSIDE SURFACES

	BY	DATE
DRAWN		
CHECKED		
ENG.		
PROD.		

FINISH:

NAME: SCHEMATIC DIAGRAM 8092 DISPLAY

SCALE | WT.

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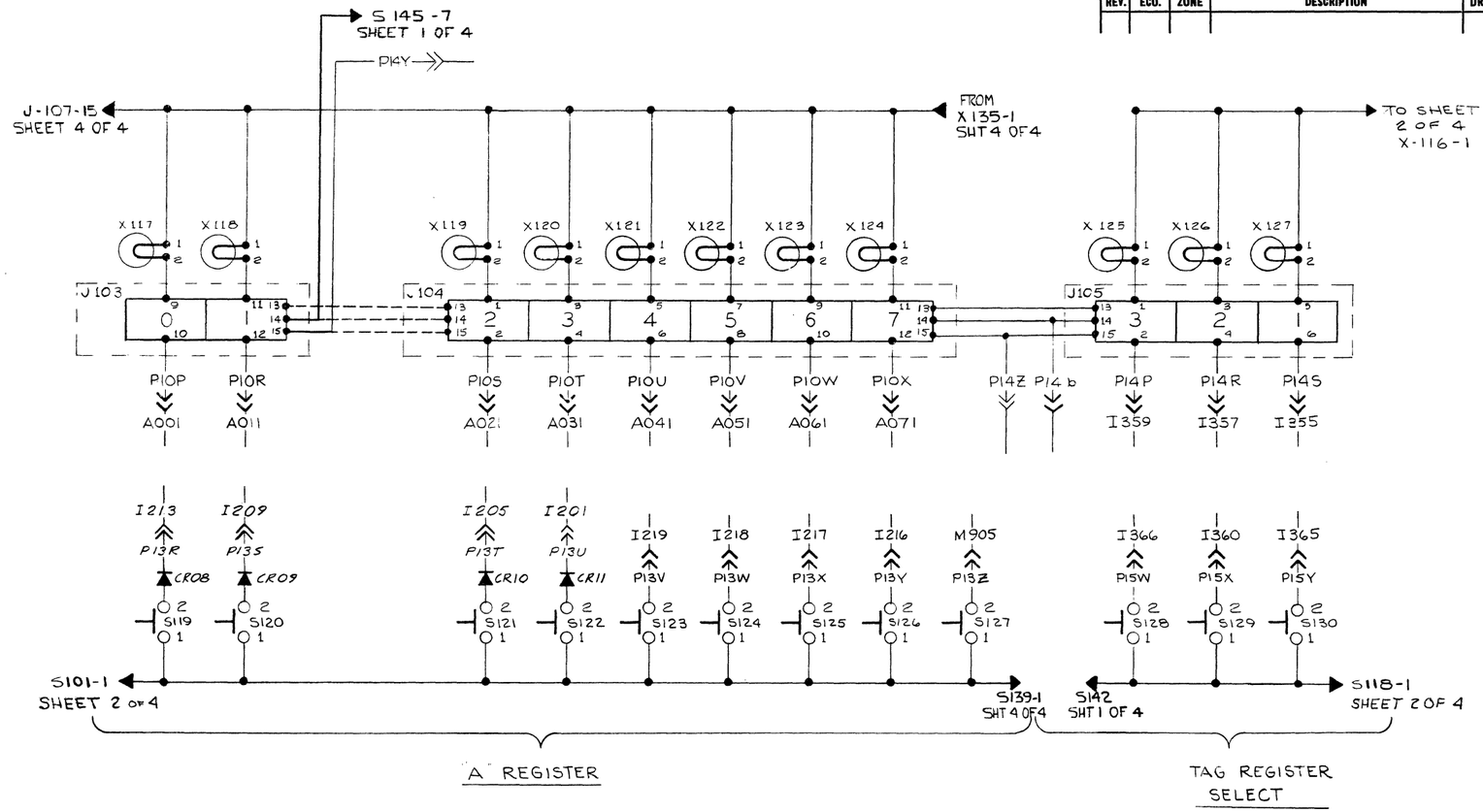
CEDAR ENGINEERING DIVISION
5806 WEST 36TH ST.
MINNEAPOLIS 16, MINNESOTA

DWG. NO. 47094800

SHEET 2 OF 4

REVISIONS							
REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APPD.



0													
	1	2	3	4	5	6	7			3	2	1	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS: ± DECIMALS: ± ANGLES: ±
DO NOT SCALE DRAWING
MATERIAL
FINISH

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MINNEAPOLIS, MINNESOTA

PRODUCT	8092 DISPLAY
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ENGINEER	
APPROVED	

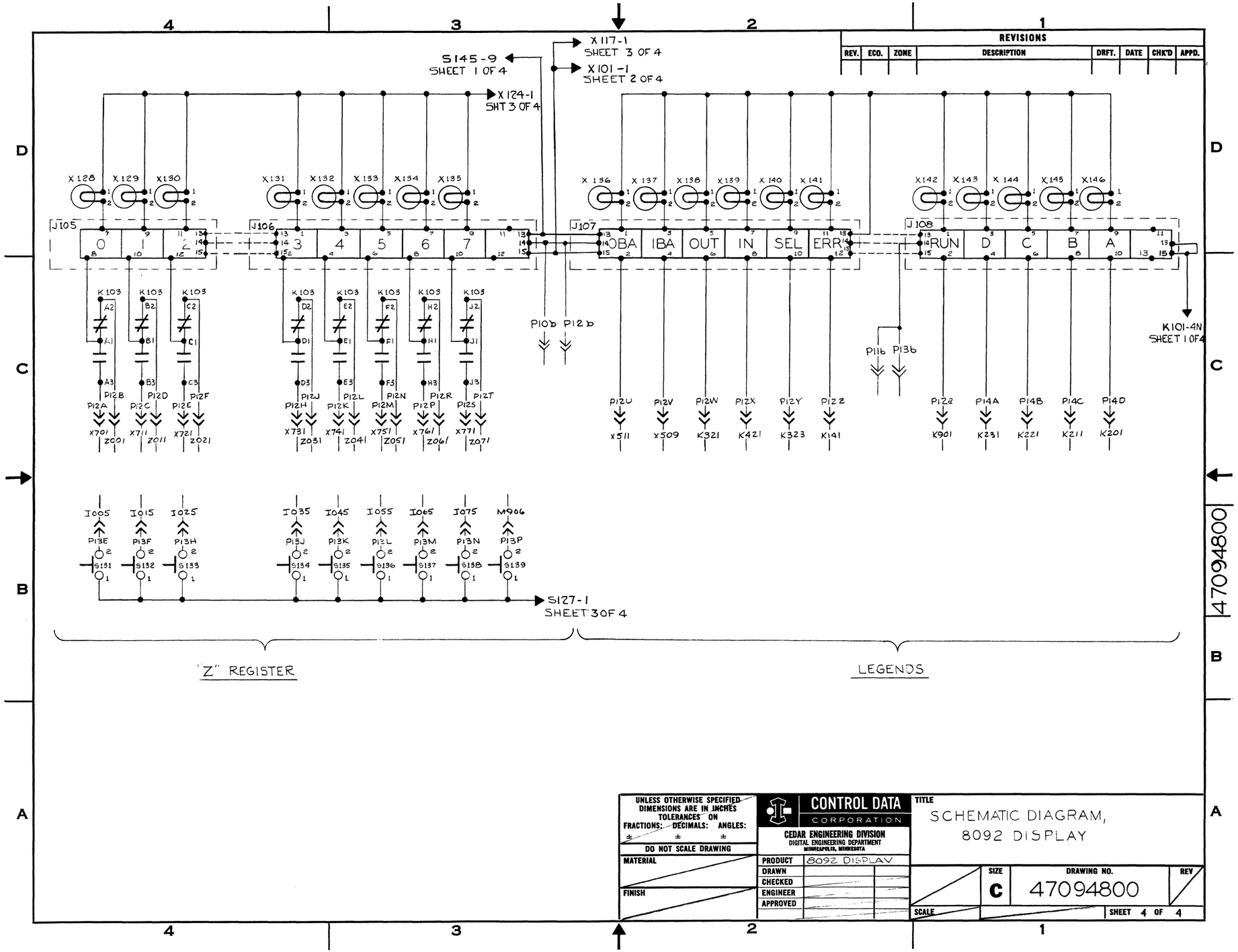
TITLE
SCHEMATIC DIAGRAM
8092 DISPLAY

SIZE	DRAWING NO.	REV
C	47094800	

SCALE
SHEET 3 OF 4

47094800

REVISIONS						
REV.	ECO.	ZONE	DESCRIPTION	DRFT.	DATE	CHK'D	APPD.



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS: ± DECIMALS: ± ANGLES: ±	CONTROL DATA CORPORATION
DO NOT SCALE DRAWING	CEDAR ENGINEERING DIVISION, DIGITAL ENGINEERING DEPARTMENT, MINNEAPOLIS, MINNESOTA
MATERIAL	PRODUCT 8092 DISPLAY
FINISH	DRAWN / CHECKED / ENGINEER / APPROVED

TITLE: SCHEMATIC DIAGRAM, 8092 DISPLAY

SIZE C | DRAWING NO. 47094800 | REV

SCALE | SHEET 4 OF 4

47094800

COMMENT SHEET

MANUAL TITLE 8090 TELEPROGRAMMER Equipment Diagrams

PUBLICATION NO. 36810900 REVISION

FROM: NAME:

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