

AFTER ASSEMBLY THE COGAR PT.# & REVISION
LEVEL SHOULD BE CLEARLY MARKED HERE.

DESCRIPTION	LOCATION
RES. 1K	R1 R2, R3, R4, R5, R6, R12, R13, R14, R15, R16, R31, R32, R33, R34, R35, R36, R37, R39, R39, R40, R41, R42, R40, R44, R45, R40, R47, R40, R49, R50, R51, R52, R53, R54, R55, R50, R50, R57, R58, R59, R57, R7
REC. 10K	R9
RES. 200 OHM	R10, R11
RES. 1/4W 100 OHM	R16, R30
RES. 2K	R17
RES. 510 OHM	R22.
RES. 3K3	R26
RES. 150 OHM	R29
RES. 0K2	R21, R27
RES. 100 OHM 1/2W	R20, R23, R25
RES. 10K POT	
CAP. 560 P.F.	C3
CAP. 270 P.F.	C4, C1
CAP. 22 P.F.	C6
CAP. 100 P.F.	C8, C9
DIODE 1N914B	CR2, CR5
DIODE 5.1V ZENER	CR3, CR4
CAP. 68 MFD	C10, C11
CAP. 33 P.F.	C5, C7
RES. 5K1	R10, R24
RES. 100 OHM	R28
RES. 1K	R501., R502

S-1438	SEE E.C.D. DETAIL SHEET SEE REWORK INST.	JK	1-6-78	5
S-1416	SEE REWORK INST.	JK	2/14/79	4
S-1362	SEE REWORK INST. SEE E.C.D. DETAIL SHEET.	JS	2/24/78	3
S-1286	SEE REWORK INST.	JS	2/14/78	2
L.C.S. NO.	REMARKS	APPR.	DATE	NO.
S-1231	RELEASE (SEE REWORK)	JS	2/14/79	1

DATE
2/24/79

BA1
2/14/79

BA2
2/14/79

DATE
2/24/79

APPR.



COGAR
CORPORATION

INFORMATION
SYSTEMS GROUP
Scholar, New York 10020

FILE P.C. ASSY. (DISK)

PROCESSOR

DATE
2/24/79

BA1
2/14/79

BA2
2/14/79

DATE
2/24/79

APPR.



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Scholar, New York 10020

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SYSTEMS GROUP
Scholar, New York 10020

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SYSTEMS GROUP
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CORPORATION

INFORMATION
SYSTEMS GROUP
Scholar, New York 10020

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COGAR
CORPORATION

INFORMATION
SYSTEMS GROUP
Scholar, New York 10020

FILE P.C. ASSY. (DISK)

PROCESSOR

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COGAR
CORPORATION

INFORMATION
SYSTEMS GROUP
Scholar, New York 10020

FILE P.C. ASSY. (DISK)

PROCESSOR

DATE
2/24/79

BA1
2/14/79

BA2
2/14/79

DATE
2/24/79

APPR.

COGAR
CORPORATION

INFORMATION
SYSTEMS GROUP
Scholar, New York 10020

FILE P.C. ASSY. (DISK)

PROCESSOR

DATE
2/24/79

BA1
2/14/79

BA2
2/14/79

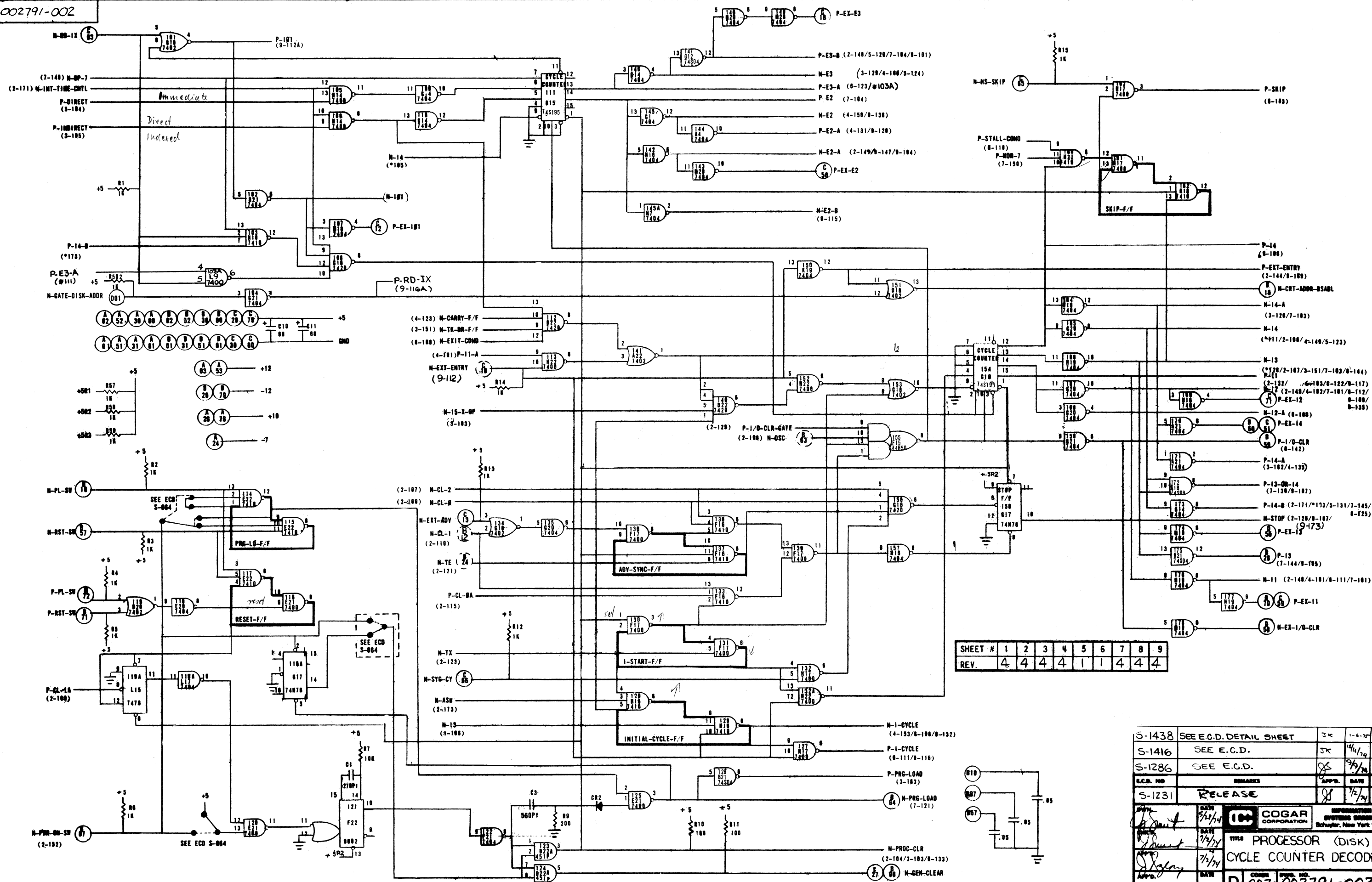
DATE
2/24/79

APPR.

COGAR
CORPORATION

FOR LOGIC SEE 007-002791-002

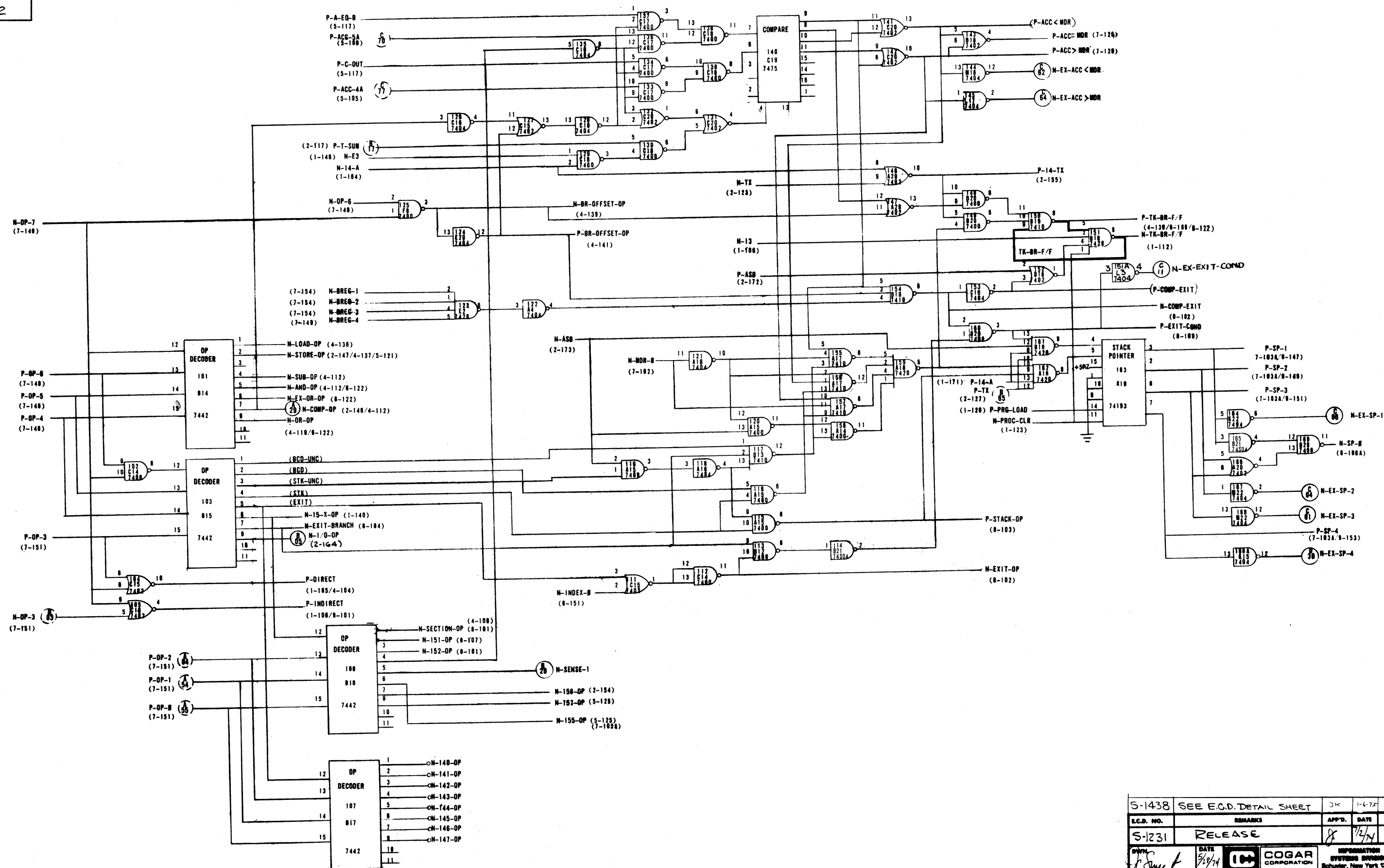
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SHEET #	1	2	3	4	5	6	7	8	9
REV.	4	4	4	4	1	1	4	4	4

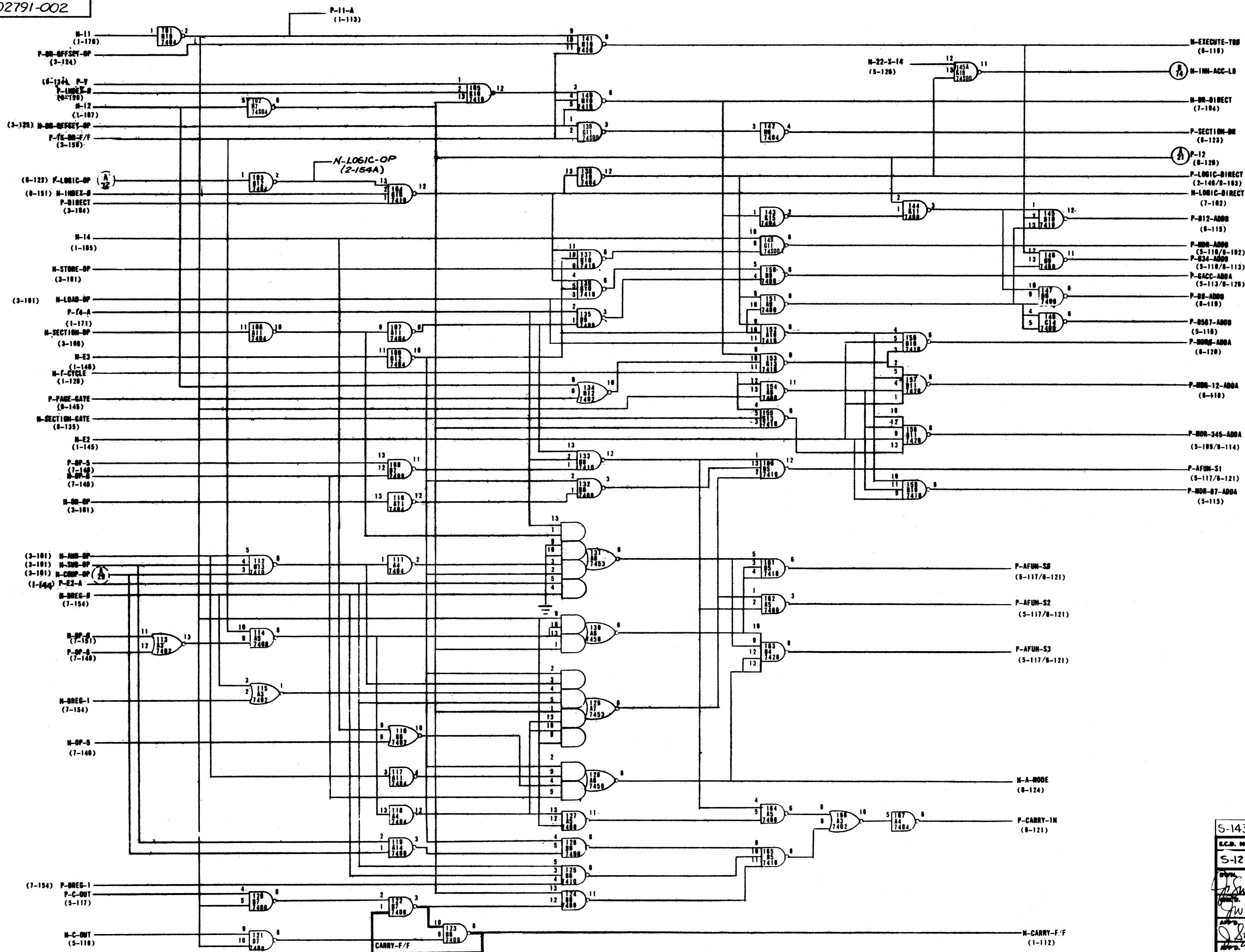
S-1438	SEE E.C.D. DETAIL SHEET	JK	1-6-74	4
S-1416	SEE E.C.D.	JK	1/11/74	3
S-1286	SEE E.C.D.	JK	9/1/74	2
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-1231	RELEASE	JK	7/2/74	1
DATE	7/2/74	COGAR CORPORATION	INFORMATION SYSTEMS GROUP	Schuyler, New York 10582
DATE	7/2/74	PROCESSOR (DISK)	CYCLE COUNTER DECODE	
DATE	7/2/74	D 007	002791-002	

002791-002



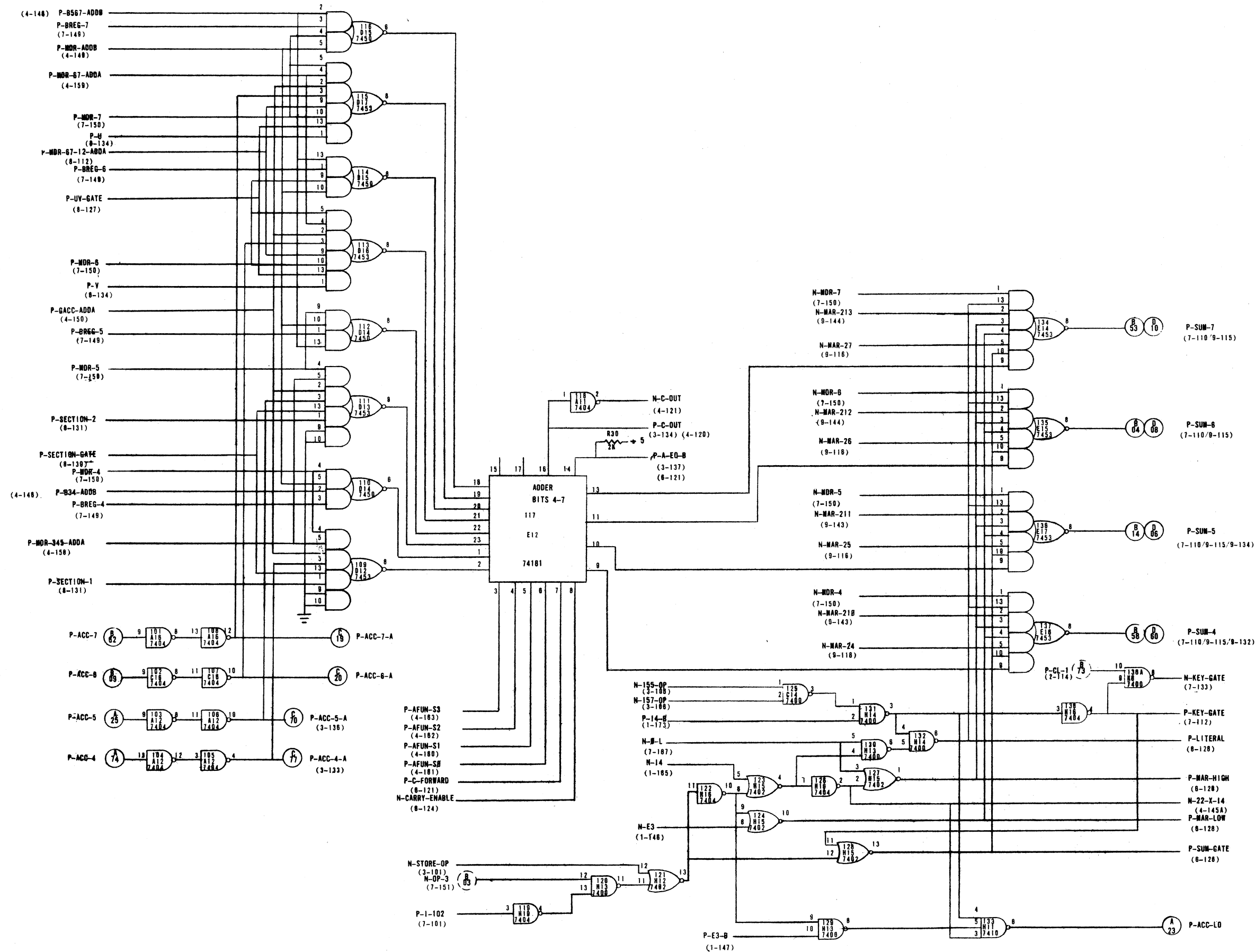
S-1438	SEE E.G.D. DETAIL SHEET	34	1-6-75	4	
S-1231	RELEASE	8	7/2/74	1	
DATE	7/2/74	DATE	7/2/74	DATE	7/2/74
COGAR CORPORATION		INFORMATION SYSTEMS DIVISION Schuylar, New York 13502			
TITLE		PROCESSOR (DISK)			
SUBTITLE		STACK POINTER & OP DECODE			
COMD	007	002791-002			

002791-002

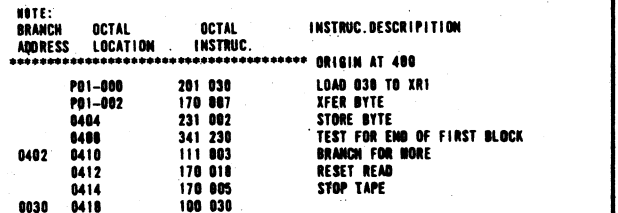


S-1438	SEE E.C.D. DETAIL SHEET	JIC	1-4-75	4
S-1231	RELEASE	APPROV.	DATE	REV.
COGAR CORPORATION		INFORMATION SYSTEMS DIVISION		
TITLE		PROCESSOR (DISK) ADDER CONTROLS		
COMM		D 007 002791-002		

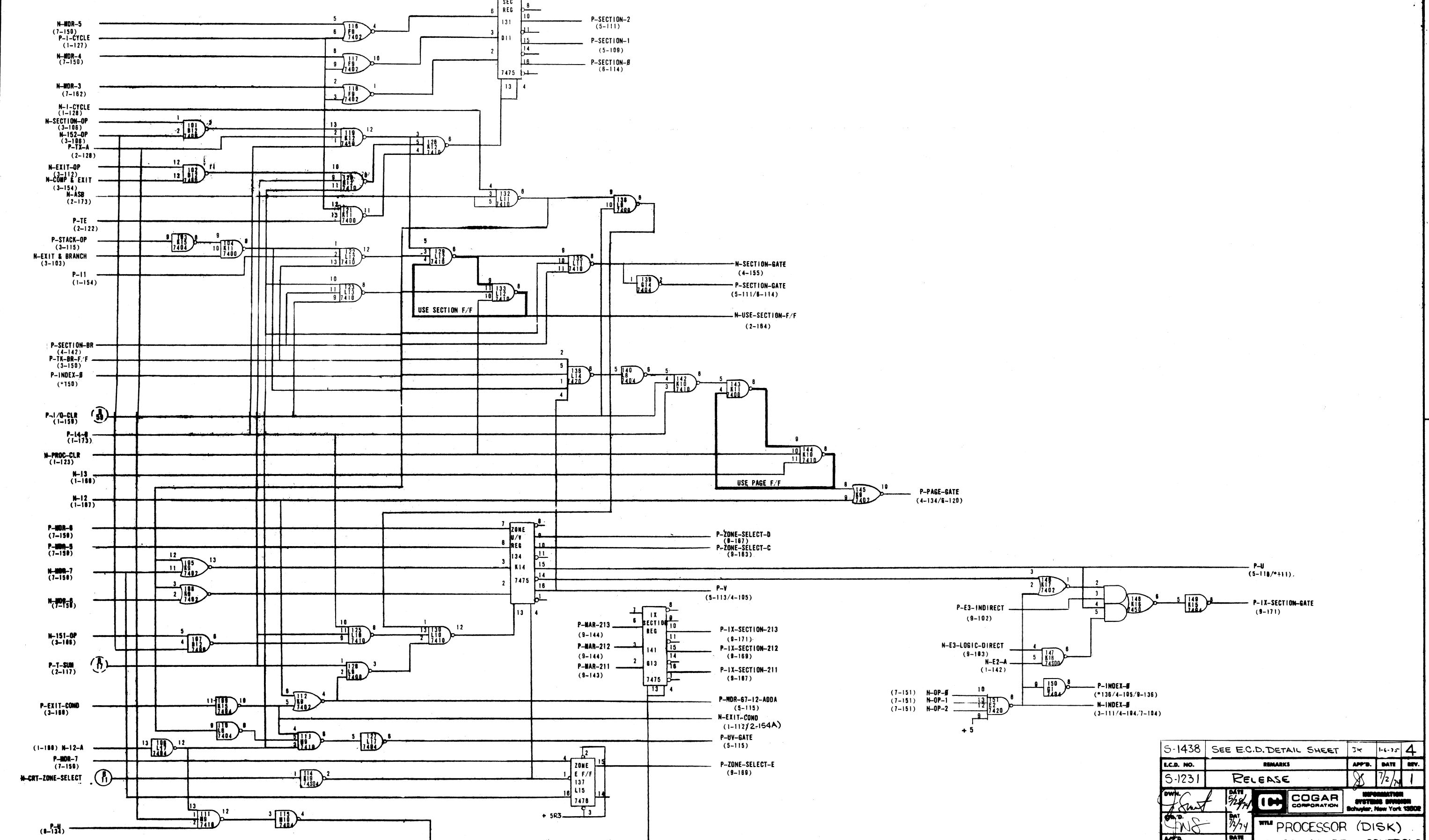
002791-002



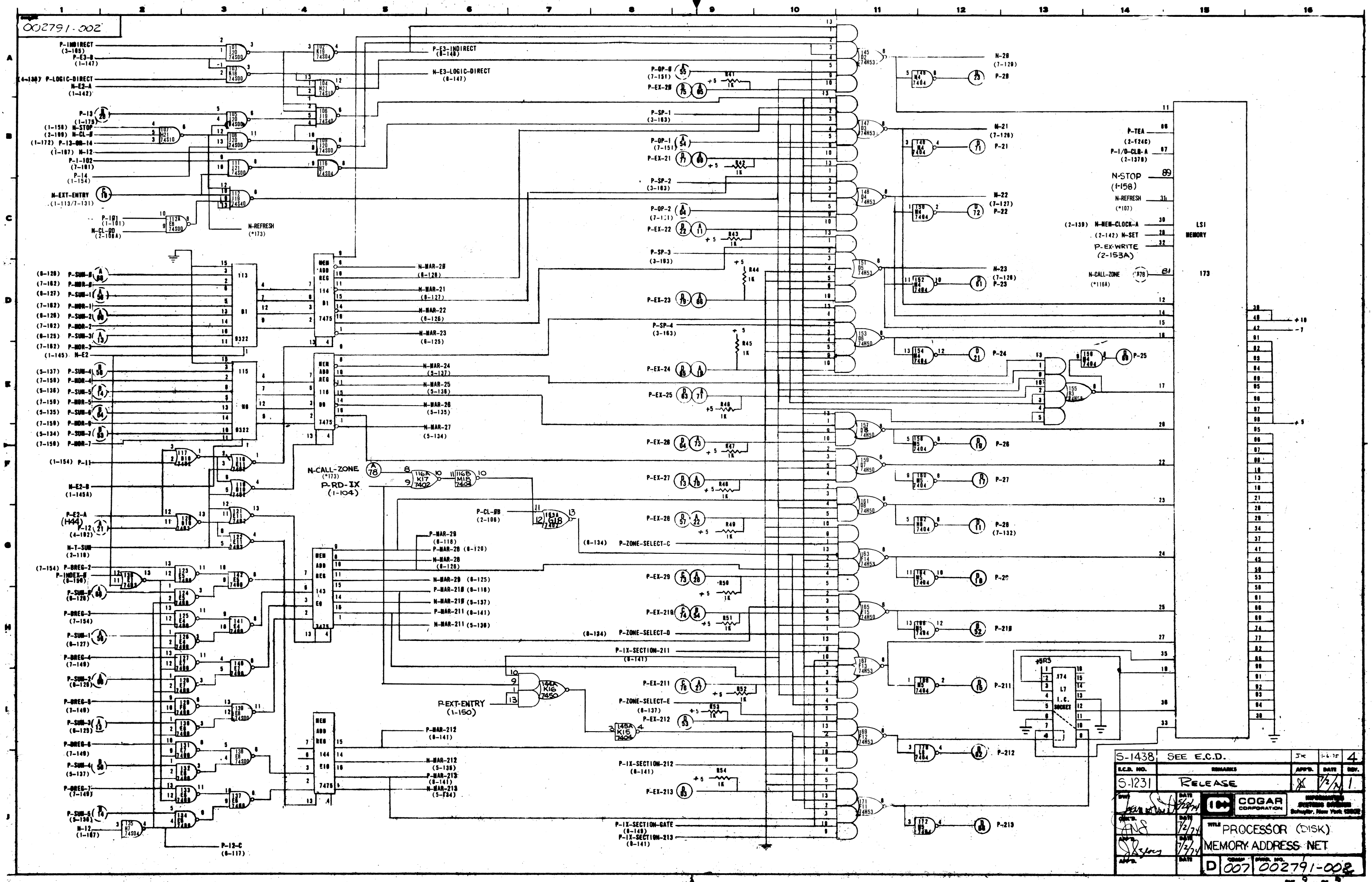
LCB. NO.	REMARKS	APP'D.	DATE	REV.
51231	RELEASE	JS	7/1/71	1
DWG. NO.	DATE	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuylar, New York 13502		
CHK'D.	DATE	TITLE PROCESSOR (DISK)		
APP'D.	DATE	ADDER BITS 4-7		
APP'D.	DATE	COMM	DWG. NO.	002791-002



5-1438	SEE E.C.D. DETAIL SHEET	JK	1-6-75	4
5-1286	SEE E.C.D. DETAIL SHEET	JS	9/9/74	2
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
5-1231	RELEASE	JS	7/2/74	1
DWR <i>[Signature]</i>	DATE 5/6/74	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Schuyler, New York 13802	
APP'D. <i>[Signature]</i>	DATE 7/2/74	TITLE PROCESSOR (DISK)		
APP'D. <i>[Signature]</i>	DATE 7/1/74	MEMORY & DATA REGISTERS		
APP'D.	DATE	COMM D 007	DWS. NO. 002791-002	



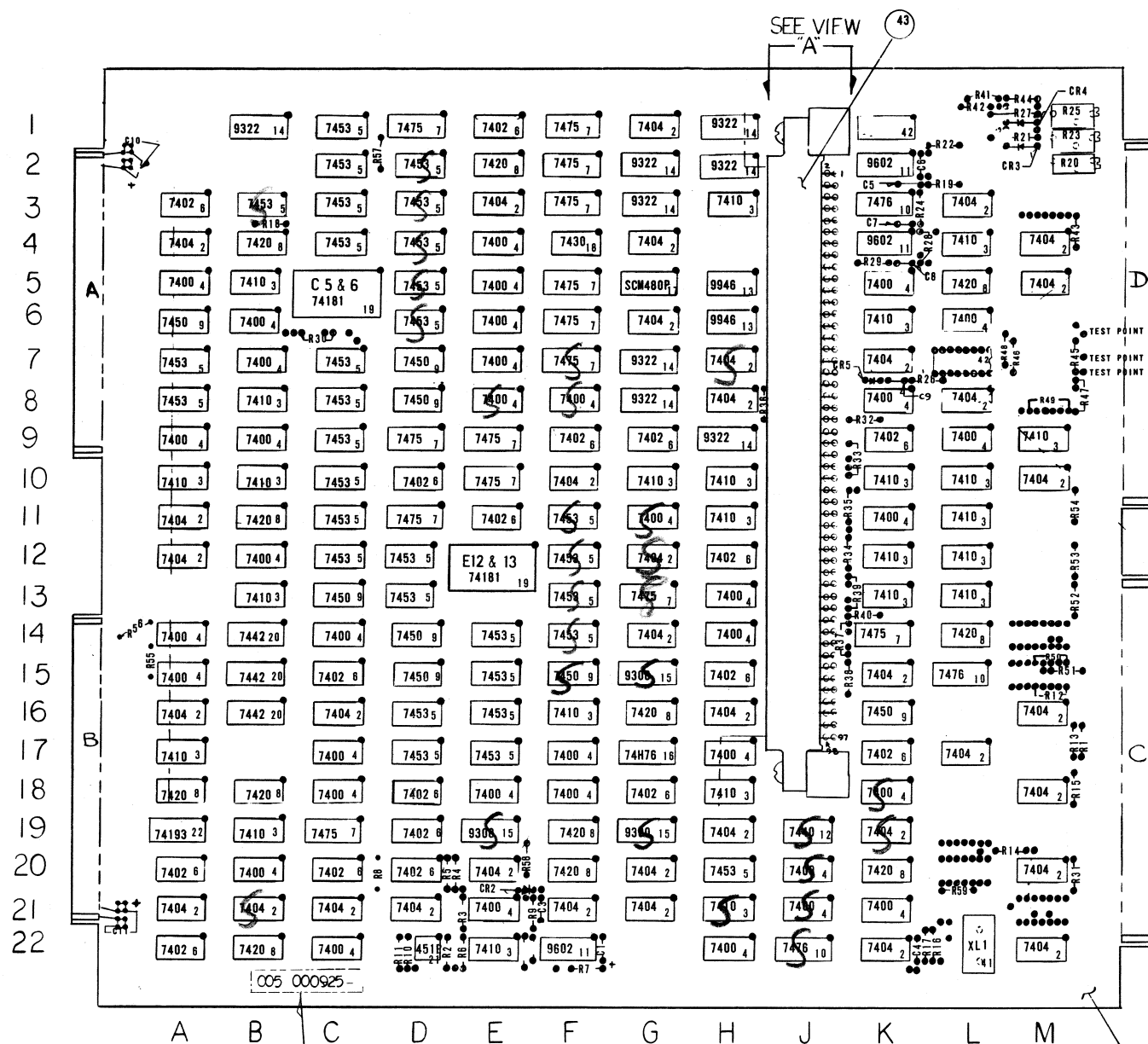
S-1438		SEE E.C.D. DETAIL SHEET		JK	1-6-75	4
E.C.D. NO.		REMARKS		APP'D.	DATE	REV.
S-1231		RELEASE		JS	7/2/74	1
OWN.	DATE	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Schuyler, New York 13802			
OWN.	DATE		TITLE			
APP'D.	DATE		PROCESSOR (DISK)			
APP'D.	DATE		MEMORY ADDRESS CONTROLS			
APP'D.	DATE	COGAR 007	SWS. NO. 002791-002			



000925-

VIEW "A"
TYP 2 PLACES

PROCESSOR



FIND NO.	DESCRIPTION	LOCATION
23	RES. 1K	R1, R2, R3, R4, R5, R6, R12, R13, R14, R15, R16, R18, R28, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R47, R55, R59, R57
24	RES. 10K	R7
25	RES. 200 OHM	R9
26	RES. 1/4W 100 OHM	R10, R11
27	RES. 2K	R16, R30
28	RES. 510 OHM	R17
29	RES. 3K3	R22,
30	RES. 150 OHM	R26
31	RES. 8K2	R29
32	RES. 100 OHM 1/2W	R21, R27
33	RES. 10K POT	R20, R23, R25
35	CAP. 560 P.F.	C3
36	CAP. 270 P.F.	C4, C1
37	CAP. 22 P.F.	C6,
38	CAP. 180 P.F.	C8, C9
39	DIODE 1N914B	CR2, CR5
40	DIODE 5.1V ZENER	CR3, CR4
44	CAP. 68 MFD	C10, C11
53	CAP. 33 P.F.	C5, C7
54	RES. 5K1	R19, R24

*PLACE BUSS WIRE AS SHOWN ON EACH TEST POINT.

S = speed change Rev 12-13

S = " " " " " "

Rev 4 and 5
Bare B1 →

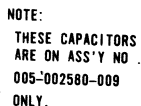
AFTER ASSEMBLY THE COGAR PT. # & REVISION LEVEL SHOULD BE CLEARLY MARKED HERE.

- NOTES: 1. FIND NUMBERS OF ALL IC'S ARE LOCATED ON THE IC'S AT THE RIGHT SIDE.
2. FOR OTHER FIND NUMBERS SEE LIST AT TOP RIGHT OF THIS PAGE.
3. PIN NO. 1 ON ALL IC'S ARE IN LINE WITH THE EXCEPTION OF B5, B6, C5, C6, D12, D13, E12, AND E13

COGAR NO.	DESCRIPTION
00 8	REV 88 BELOW
01 6	REV 92, 10 & 11, 12

SEE REWORK

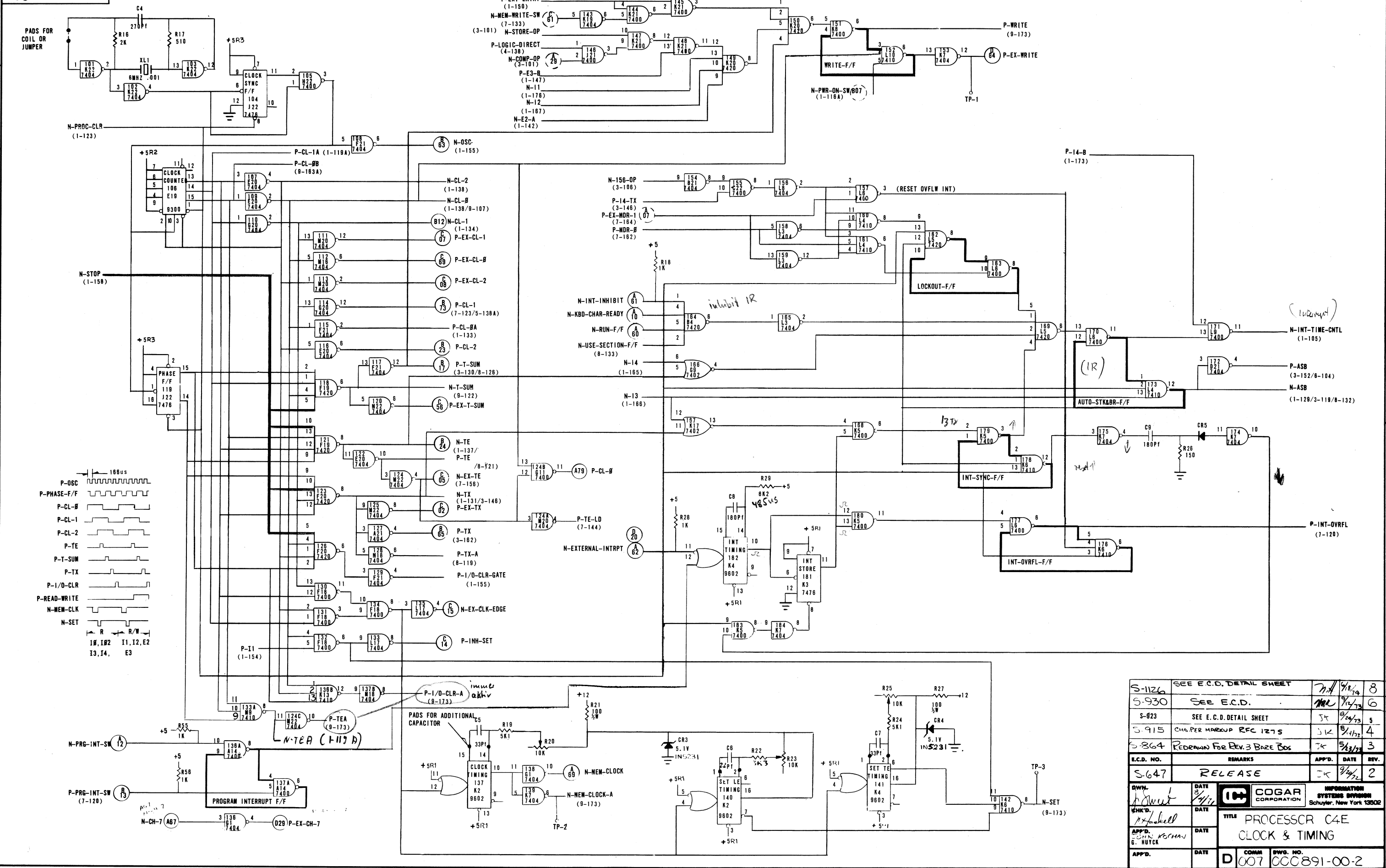
S-1438	REWORK FOR 415 memory chip	13
S-1362	REWORK TO ELIMINATE NOISE WHILE WRITING	12
S-1126	SEE REWORK INST. SEE E.C.D.	11
S-977	SEE E.C.D.	10
S-930	SEE REWORK INST.	9
S-923	UPDATE REV. ONLY SEE REWORK INST.	8
S-915	ADD TABS 032 THRU 095 FOR T.I. MEMORY SEE REWORK INST.	7
S-864	SEE REWORK INST. REDRAWN FOR REV. 3 BARE BDS.	6
S-791	SEE REWORK INST.	5
S-757	ZONE B3 FIND 10, 56, 43, 50	4
E.C.D. NO.	REMARKS	DATE
S-647	RELEASE UPDATE ASSY TO REV 2 BARE BDS	9/24/72
DATE	DATE	DATE
9/3/71	9/24/72	9/24/72
COGAR CORPORATION	COGAR CORPORATION	COGAR CORPORATION
SYSTEMS DIVISION	SYSTEMS DIVISION	SYSTEMS DIVISION
Schuyler, New York 13502	Schuyler, New York 13502	Schuyler, New York 13502
TITLE	P.C. ASSY. (C4-E)	PROCESSOR
APP'D.	DATE	DATE
JOHN KACHAU	9/22/72	9/22/72
APP'D.	DATE	DATE
D	COMM	DWG. NO.
005	000925-	



5	8	5-1362	CHANGED SHEETS 1,2,4,7,48 SEE E.C.D. DETAIL SHEETS	7/11/14	6/19/14	8
5-1048		ADDED CAPS (ZONE J-12) FOR REWORKED PROCESSOR. COS. 002580-009	REC	2/4/14		7
5-930		SEE E.C.D.		7/11/14	9/12/13	6
5-923		SEE E.C.D. DETAIL SHEET		TK	8/24/13	5
5-915		CHG. SHTS 217 SEE RFC 1275	- K		9/4/13	4
5-864		REDRAWN FOR REV. 3 BARE BDS.	TK		8/23/13	3
E.C.D. NO.		REMARKS		APP'D.	DATE	REV.
5-947		RELEASE		TK	3/2/12	2
DWN. J. Hunt	DATE 6/2/11	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Schuyler, New York 13506			
CHK'D. J. Hunt	DATE		TITLE PROCESSOR CYCLE COUNTER DECODE			
APP'D. JOHN KORMAN G. HUTCH	DATE	COMM	DWG. NO.			
APP'D.	DATE	D	007	000891-00-2		

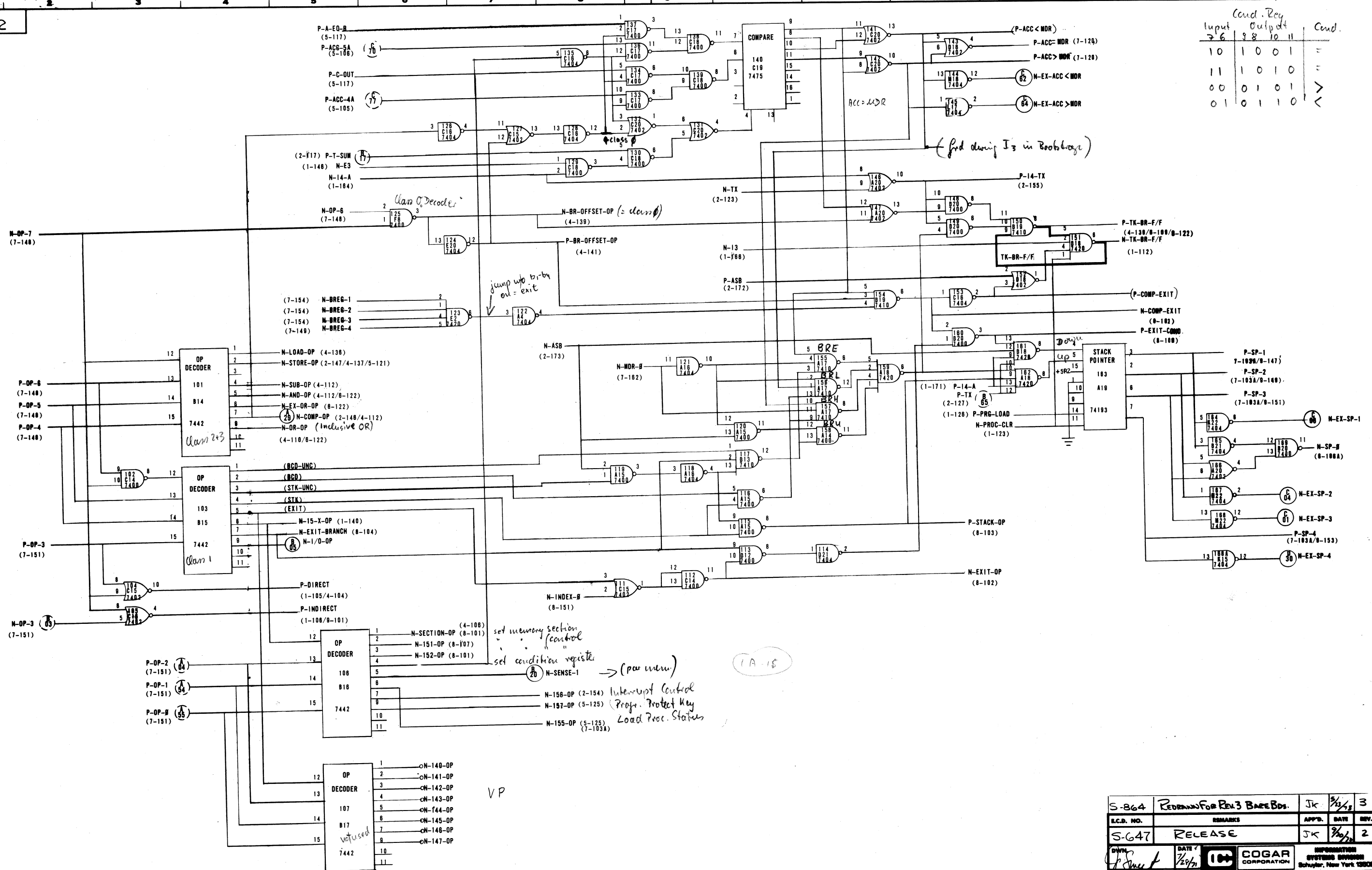
SNT 1 OF 9 SNT

000891002



S-1126	SEE E.C.D. DETAIL SHEET	7/11/74	8
S-930	SEE E.C.D.	7/11/74	6
S-823	SEE E.C.D. DETAIL SHEET	5/12/74	5
S-915	CHG. PER MARKUP RFC 1275	5/12/74	4
S-864	REDRAWN FOR REV. 3 BARE BOX	5/12/74	3
E.C.D. NO.	REMARKS	APP'D.	DATE
S-647	RELEASE	JK	7/11/74
DWN.	DATE	COGAR CORPORATION	INFORMATION
CHK'D.	DATE	SCHUYLER, NEW YORK 13502	SYSTEMS DIVISION
APP'D.	DATE	TITLE PROCESSOR C4E	
APP'D.	DATE	CLOCK & TIMING	
APP'D.	DATE	COMM	DWG. NO.
		D007	000891-00-2

000891002

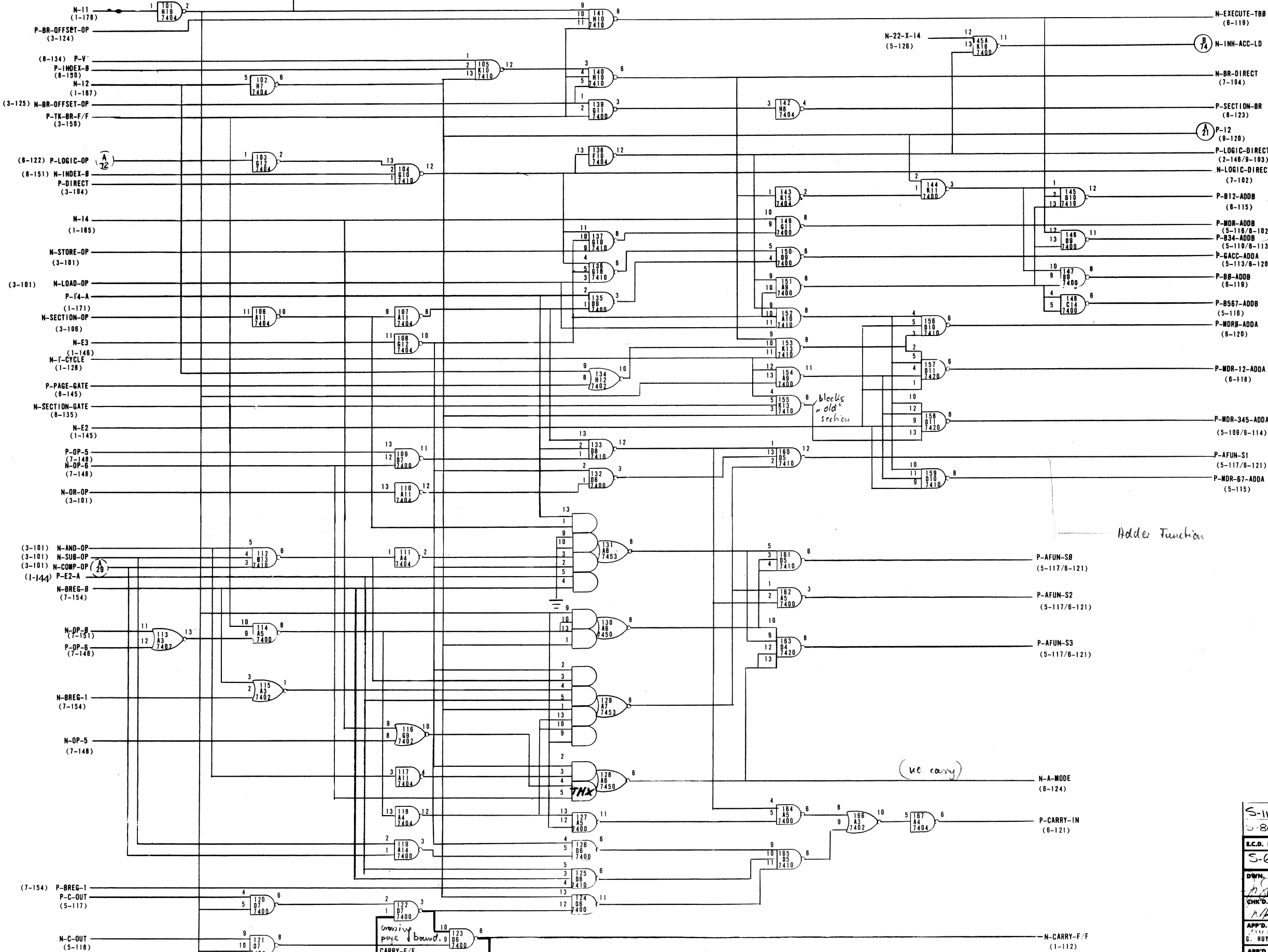


Cond. Reg.		Input		Output		Cond.	
7	6	9	8	10	11		
10	10	0	1			=	
11	10	1	0			=	
00	0	1	0	1		>	
01	0	1	1	0		<	

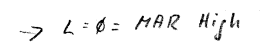
S-864	Redrawn For Rev 3 Base Bds.	Jk	2/2/71	3
S-647	RELEASE	Jk	2/2/71	2
DATE	2/2/71	DATE	2/2/71	
COGAR CORPORATION	INFORMATION SYSTEMS DIVISION			
Schuyler, New York 13802				
TITLE	PROCESSOR C4-E			
STACK POINTER & OP DECODE				
APP'D.	DATE	DATE	DATE	DATE
007	000891-00-2			

000891-00-2

P-11-A
(1-113)

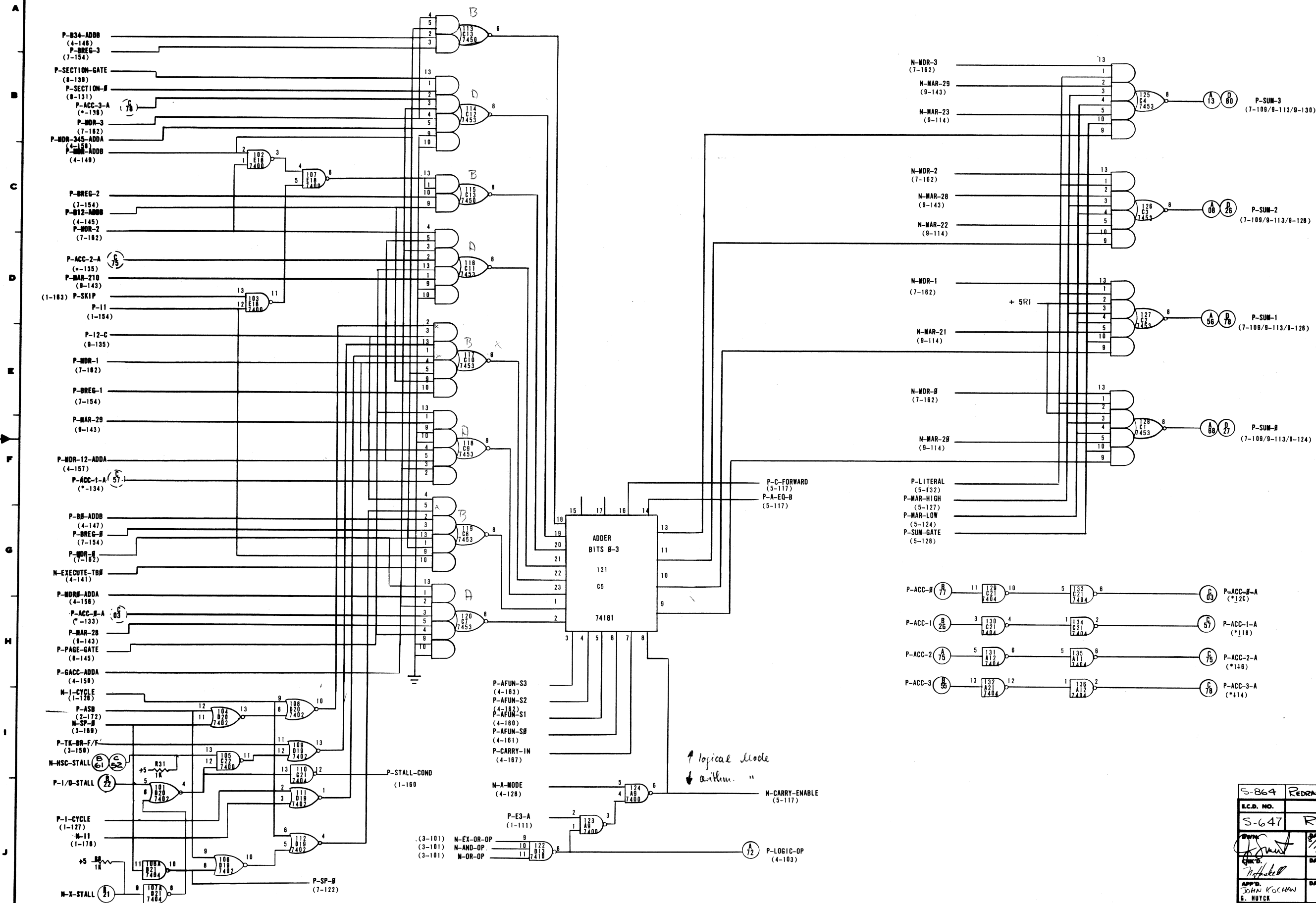


S-1126	REF ON SIGNAL P-E2-A WAS 1-111	7/14	8
U-864	REDRAWN FOR REV. 3 BASE BDS	JK	3
E.C.D. NO.	REMARKS	APP'D.	DATE
S-647	RELEASE	JK	2
DWN.	DATE	INFORMATION	
CHK'D	DATE	COGAR CORPORATION	
APP'D.	DATE	SYSTEMS DIVISION	
APP'D.	DATE	Schuyler, New York 13502	
TITLE		PROCESSOR C4E	
ADDER CONTROLS			
APP'D.	DATE	COMM	DWG. NO.
D			000891-00-2



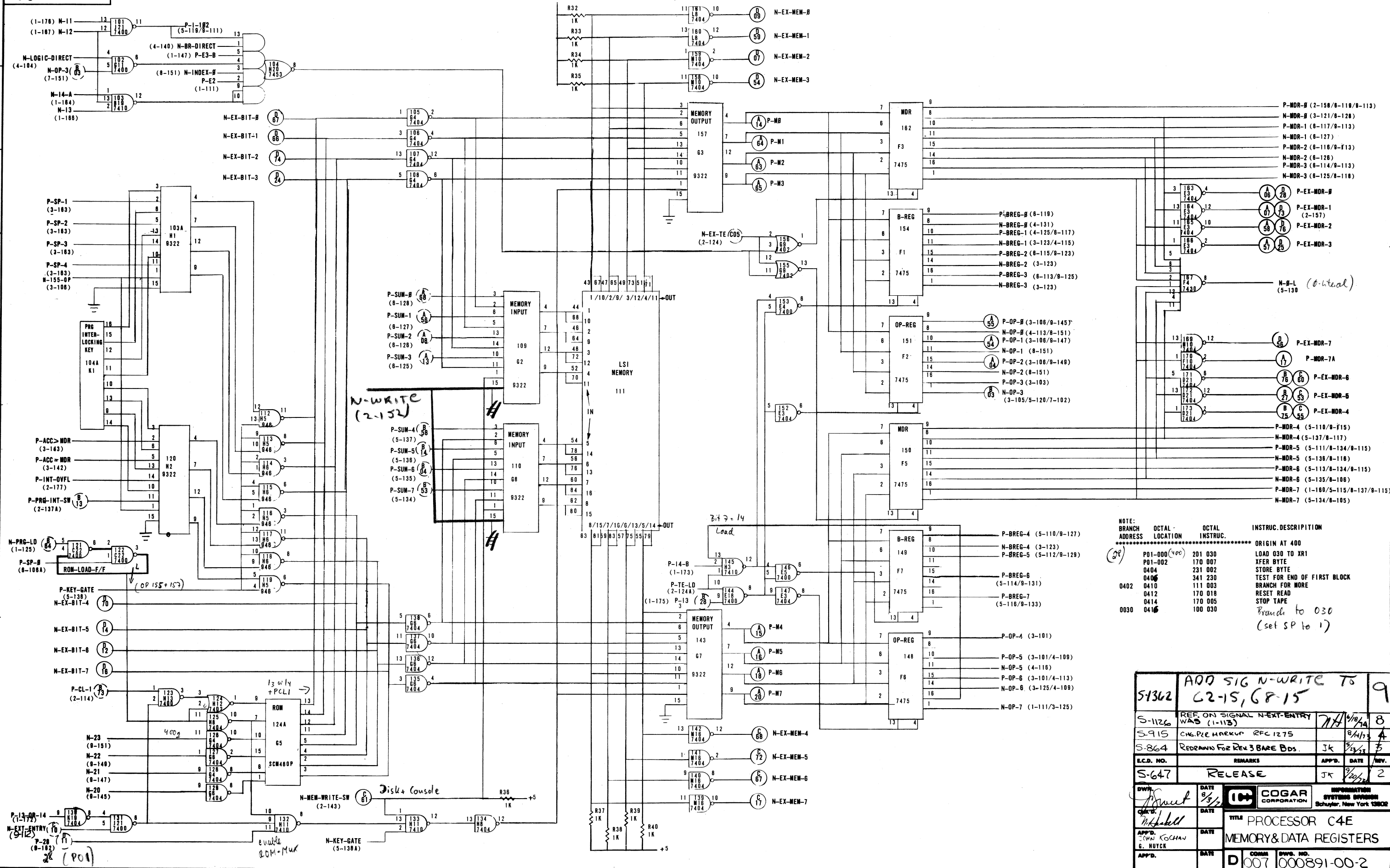
DATE 5 OF 9 PAGES

000891002



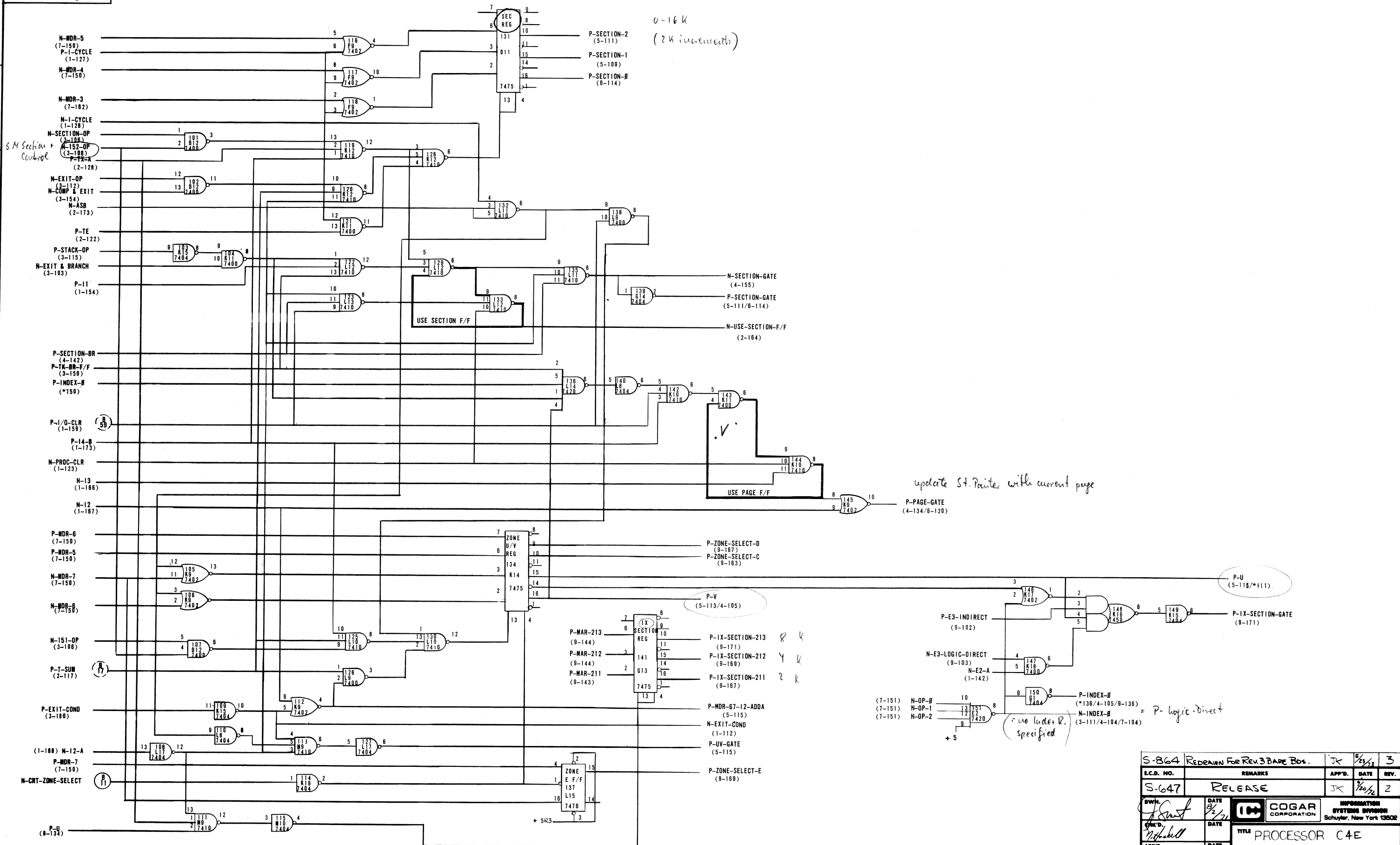
S-864	REDRAWN FOR REL 3 BASE BD.	JK	8/2/63	3
S.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-647	RELEASE	JK	8/2/63	2
OWN	DATE	COGAR CORPORATION	DATE	INFORMATION SYSTEMS DIVISION Schuyler, New York 13802
APP'D. JOHN KOCHAN	DATE	TITLE	PROCESSOR C4E	
S. NUTCH	DATE		ADDER BITS 0-3	
APP'D.	DATE	D 007	SWP. NO.	000891-00-2

000891002

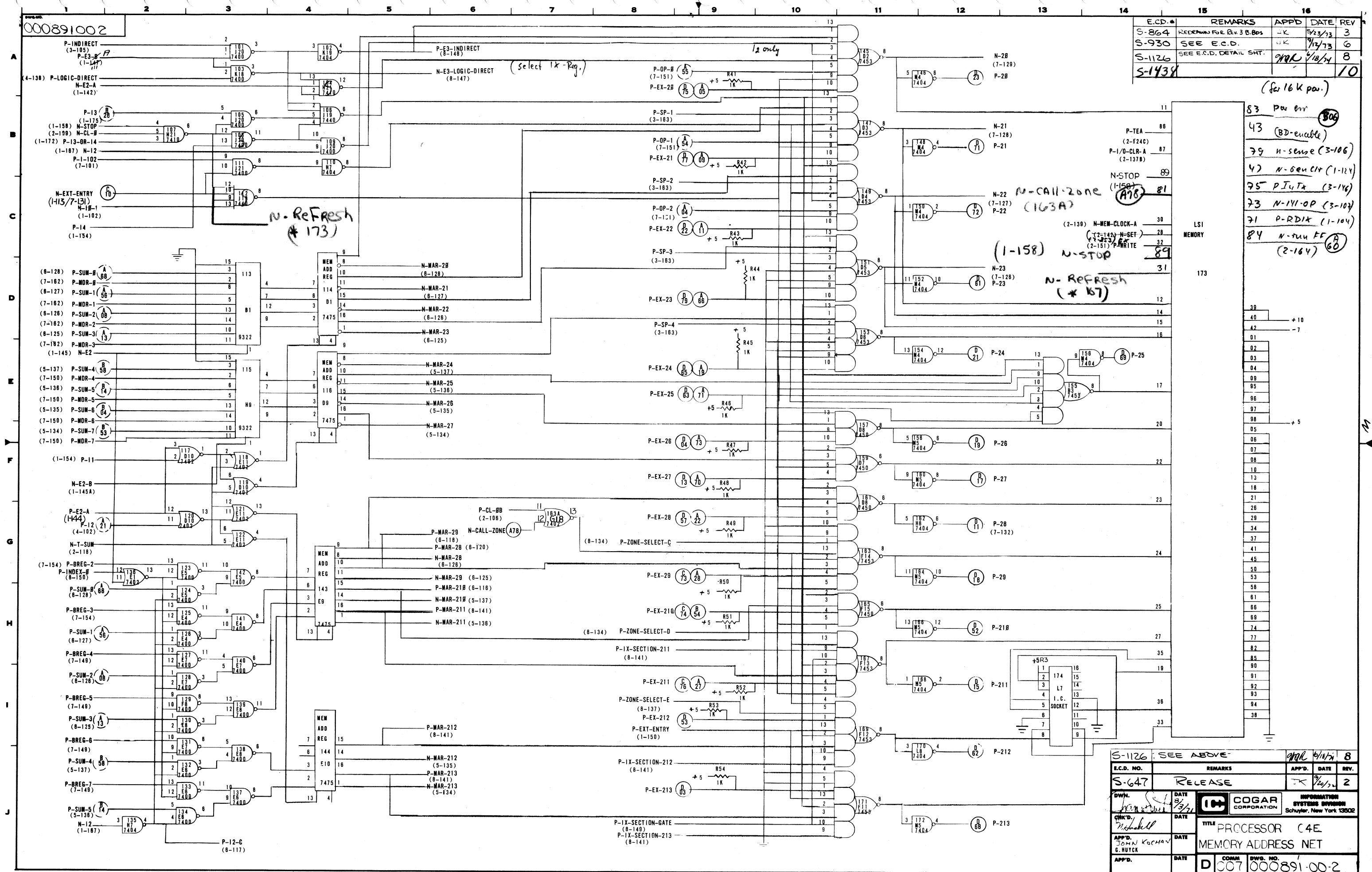


51362	ADD SIG N-WRITE TO C2-15, 68-15		9
S-1126	REF. ON SIGNAL N-EXT-ENTRY WAS (1-113)	7/11/74	8
S-915	CHG. PER HANDBOOK RFC 1275	8/1/75	1
S-864	REDRAWN FOR REV 3 BARE BDS.	JK	3
E.C. NO.	REMARKS	APP'D.	DATE
S-647	RELEASE	JK	2
DWN.	DATE	COGAR CORPORATION	
APP'D.	DATE	TITLE	
APP'D.	DATE	PROCESSOR C4E	
APP'D.	DATE	MEMORY & DATA REGISTERS	
APP'D.	DATE	COMD	DWG. NO.
		007	000891-00-2

000891-00-2

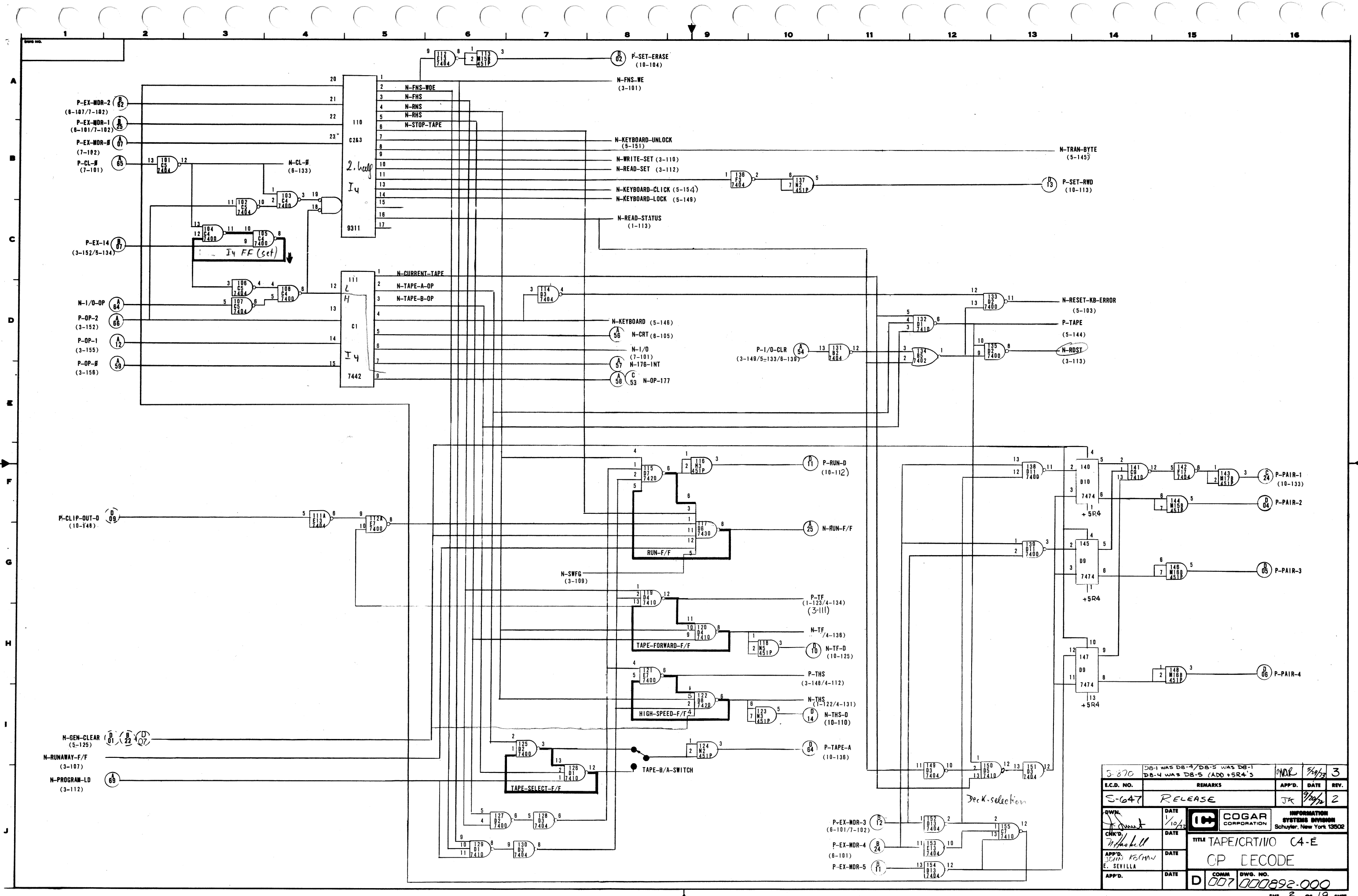


S-864	REDRAWN FOR REV. 3 BARE BO.	JK	5/2/71	3
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-647	RELEASE	JK	7/20/72	2
DWN.	DATE	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuylar, New York 13502		
CHK'D.	DATE			
APP'D.	DATE	PROCESSOR C4E		
JOHN KOCHAN	DATE	MEMORY ADDRESS CONTROLS		
APP'D.	DATE	D COMM BWS. NO. 000891-00-2		

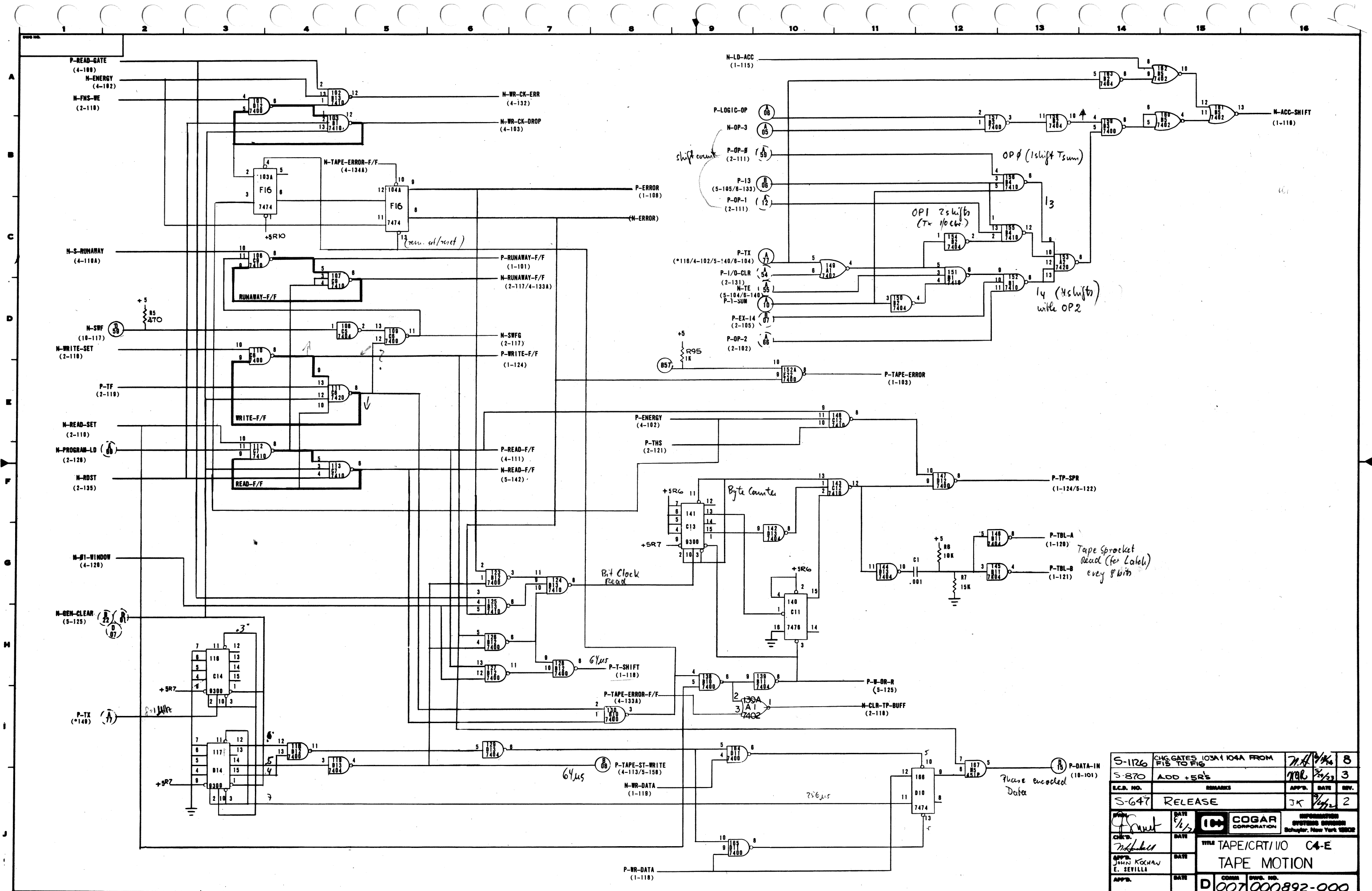


AFTER ASSEMBLY THE COGAR PT.# & REV. LEVEL
SHOULD BE CLEARLY MARKED HERE.

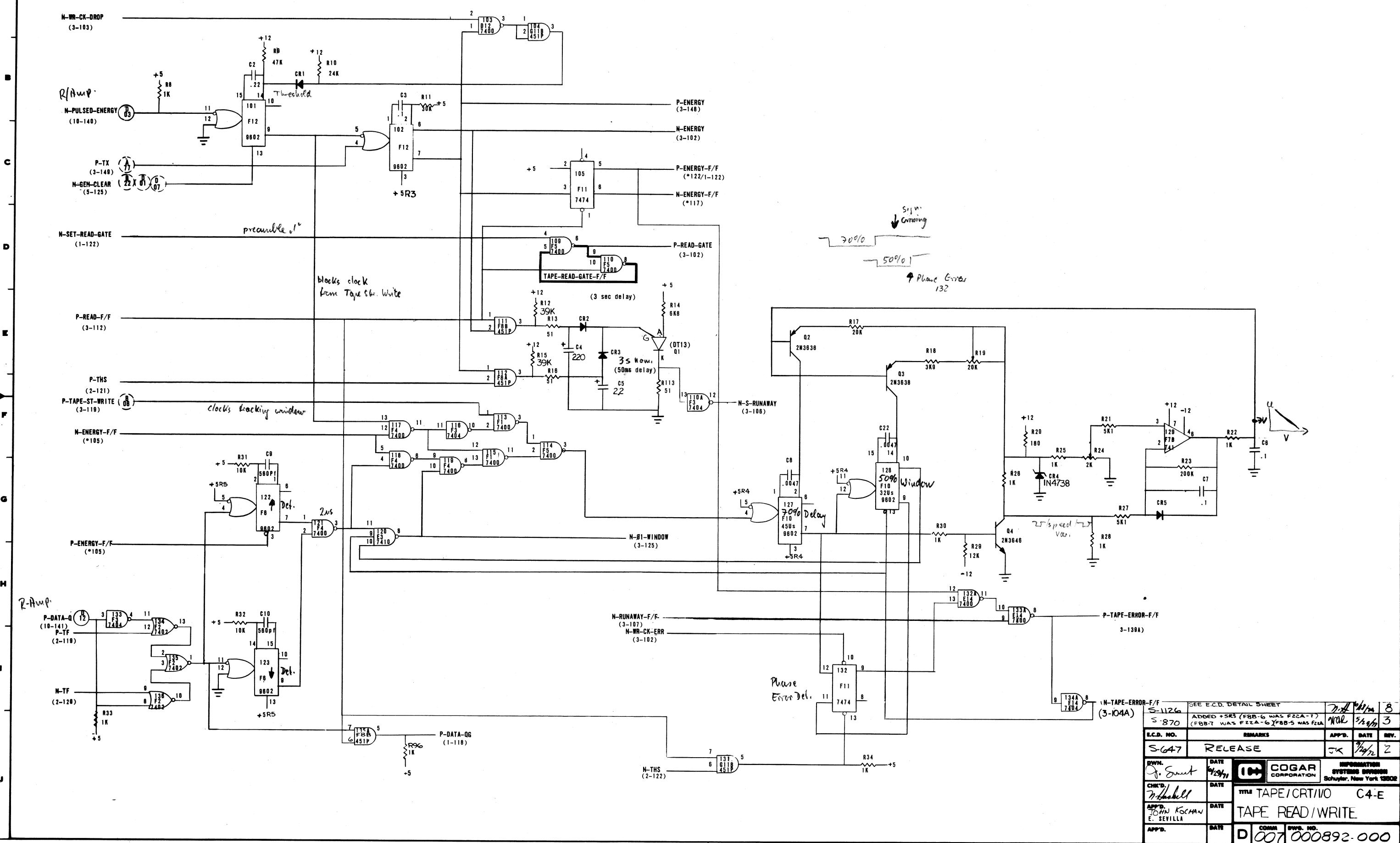




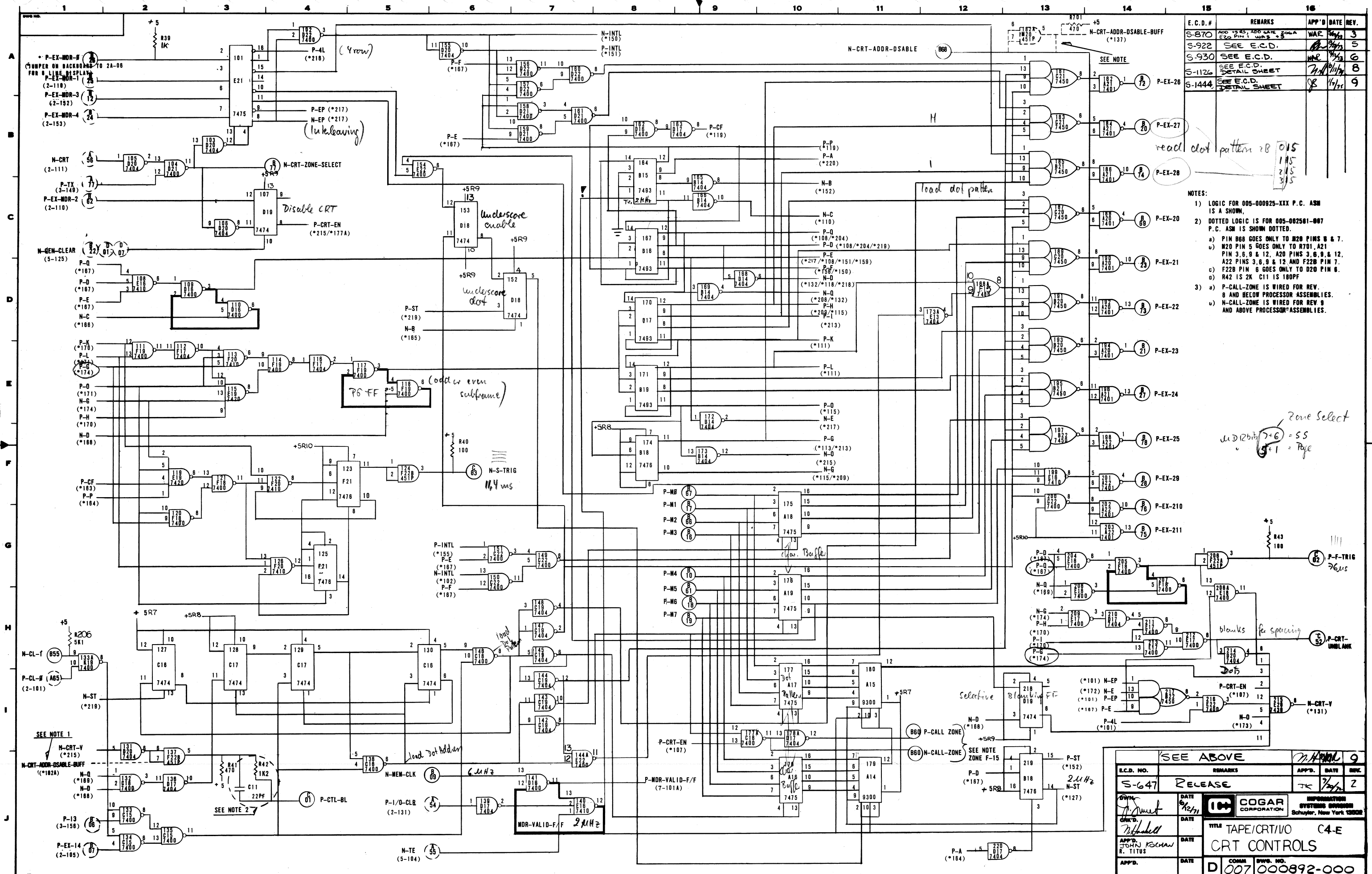
S-870		DB-1 WAS DB-4/DB-5 WAS DB-1 DB-4 WAS DB-5 (ADD +SR4'S)		MAR 5/4/73		3	
E.C.D. NO.		REMARKS		APP'D.		DATE	
S-647		RELEASE		JK		7/4/73	
OWN.		DATE		COGAR CORPORATION		INFORMATION	
CHK'D.		DATE		TITLE		SYSTEMS DIVISION	
APP'D.		DATE		TAPE/CRT/IO C4-E		Schuyler, New York 13502	
E. SEVILLA		DATE		CP DECODE			
APP'D.		DATE		D		COMM DWG. NO.	
		DATE		007		000892-000	



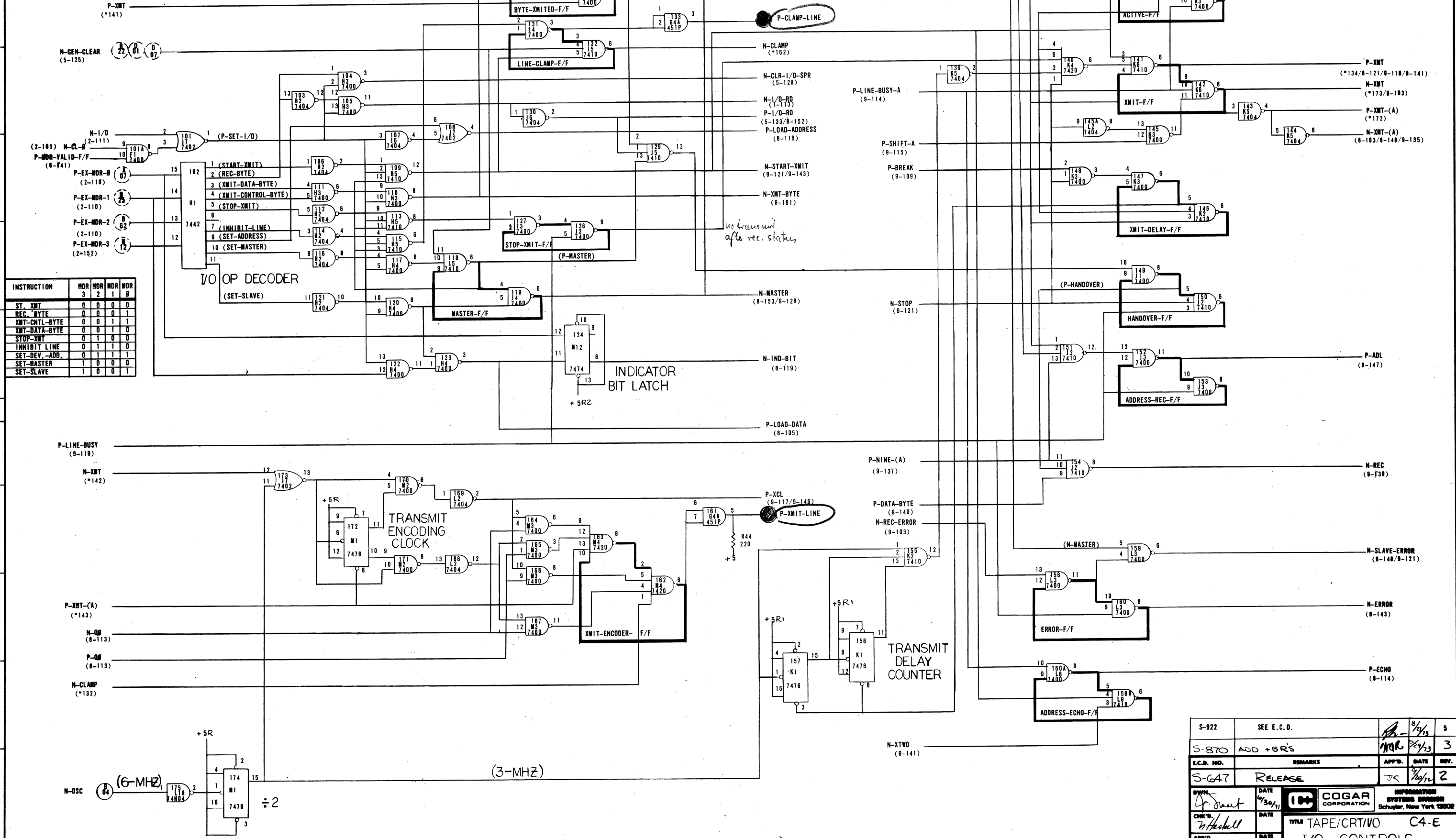
S-1126	CHG GATES 103A 104A FROM F15 TO F16	7/1/74	8
S-870	ADD +5R5	7/1/74	3
S-647	RELEASE	7/1/74	2
DATE	DATE	DATE	DATE
CHK'D	DATE	DATE	DATE
APP'D	DATE	DATE	DATE
COGAR CORPORATION	INFORMATION SYSTEMS GROUP, Schenectady, New York 12302		
TITLE TAPE/CRT I/O C4-E			
TAPE MOTION			
D 007000892-000			



S-1126		SEE E.C.D. DETAIL SHEET		DATE 1/1/71		REV. 3	
S-870		ADDED +SR5 (FBB-6 WAS F22A-7)		DATE 1/1/71		REV. 3	
S-647		RELEASE		DATE 1/1/71		REV. 2	
DWN. J. Smith		DATE 1/1/71		COGAR CORPORATION		INFORMATION SYSTEMS DIVISION Schuylar, New York 13502	
CHK'D. J. Smith		DATE 1/1/71		TITLE TAPE/CRT/VO		C4-E	
APP'D. JOHN KOCHAN		DATE 1/1/71		TAPE READ/WRITE			
APP'D. E. SEVILLA		DATE 1/1/71		D COMM		BWS. NO. 000892-000	

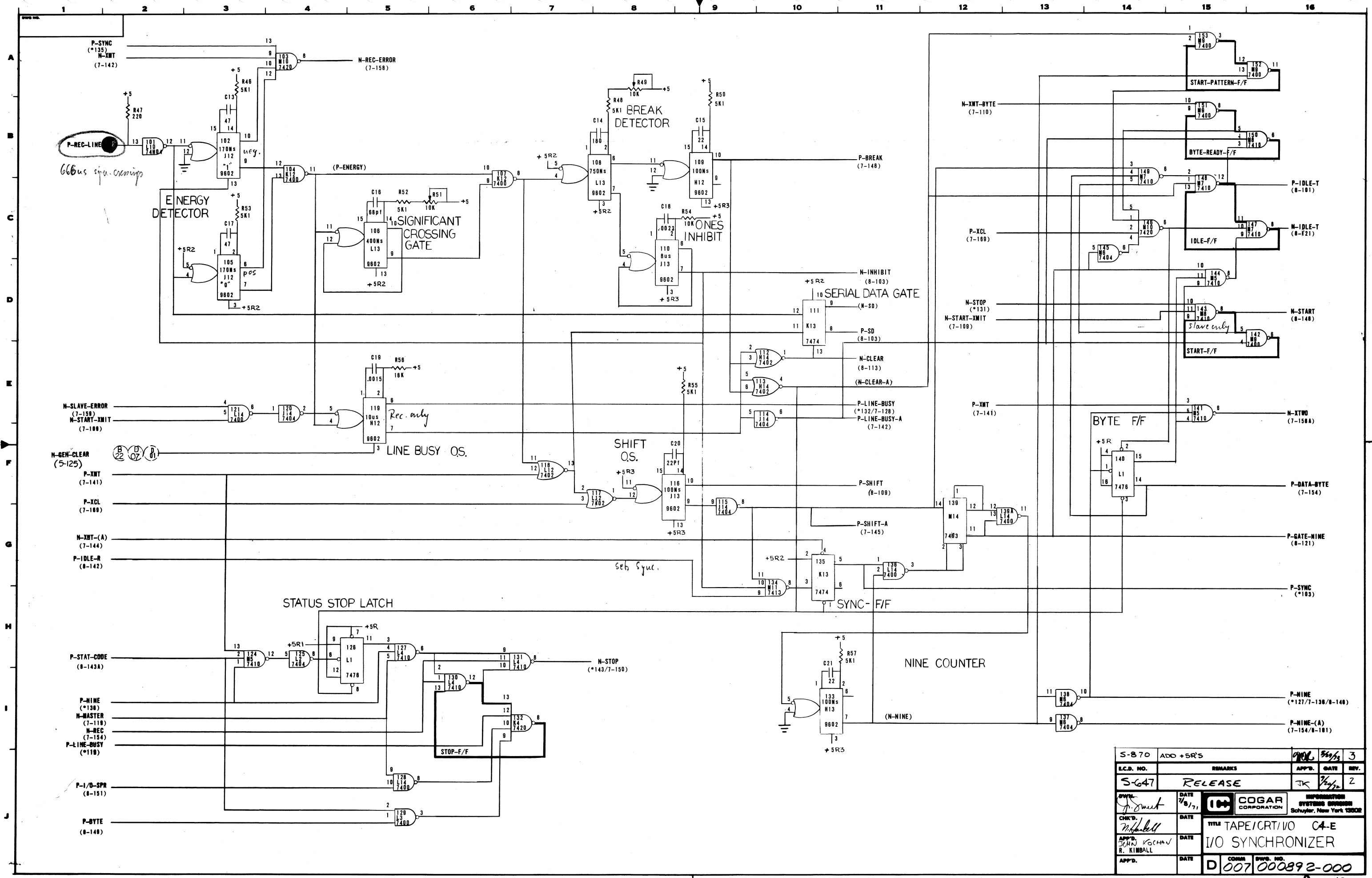


1-one 0-zero

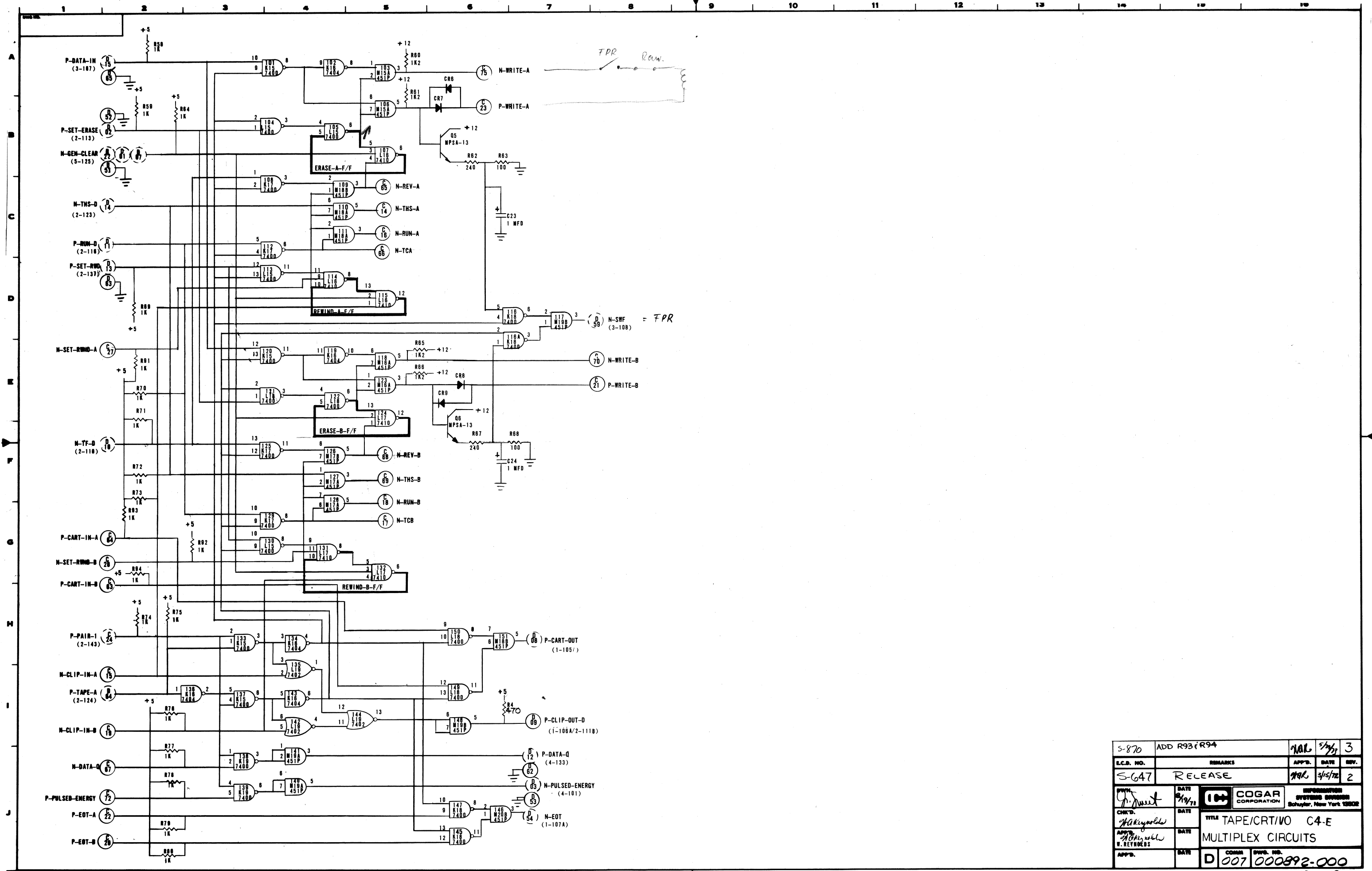


INSTRUCTION	MDR 3	MDR 2	MDR 1	MDR 0
ST. XMT	0	0	0	0
REC. BYTE	0	0	0	1
XMT-CTL-BYTE	0	0	1	1
XMT-DATA-BYTE	0	0	1	0
STOP-XMT	0	1	0	0
INHIBIT LINE	0	1	1	0
SET-DEV-ADD.	0	1	1	1
SET-MASTER	1	0	0	0
SET-SLAVE	1	0	0	1

S-922	SEE E.C.D.	8/13	5
S-870	ADD +5R's	8/13	3
E.C.D. NO.	REMARKS	APP'D.	DATE
S-647	RELEASE	JSC	8/13
DATE	8/30/71	COGAR CORPORATION	INFORMATION SYSTEMS DIVISION
CHK'D.	W. H. K.	TITLE	TAPE/CRT I/O C4-E
APP'D.	R. KIMBALL	DATE	I/O CONTROLS
APP'D.	DATE	COMM	007 000 892-000



S-870		ADD +5R'S		APR 1964	3
L.C.B. NO.		REMARKS		APR 1964	2
S-647		RELEASE		APR 1964	2
CHK'D.		DATE		COGAR CORPORATION	
APPR'D.		DATE		INFORMATION SYSTEMS DIVISION	
R. KIMBALL		DATE		Schuyler, New York 13002	
TITLE		TAPE/CRT/VO		C4-E	
I/O SYNCHRONIZER		DATE		D 007 000892-000	
APPR'D.		DATE		D 007 000892-000	



5-870	ADD R93/R94	WAL	5/3/71	3
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
5-647	RELEASE	WAL	5/15/71	2
CHK'D.	DATE	COGAR CORPORATION SYSTEMS DIVISION Schuylar, New York 12502		
APP'D.	DATE	TITLE TAPE/CRT/VO C4-E MULTIPLEX CIRCUITS		
APP'D.	DATE	COMD	SWR. NO.	
		007	000892-000	

DWG. NO.

002004 -

FOR REFERENCE ONLY (NOT A PARTS LIST)

F/N	DESCRIPTION	LOCATION
15	RES. 10K POT	R25, R27, R31, R36
16	RES. 5K1	R26, R28, R29, R30
17	RES. 10 OHM (SEE NOTE 4)	R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24 (R41 THRU R50) NOTE 4
18	CAP. 22 Pf	C2, C3, C80
19	CAP. 10 PF	C1
20	RES. 100 OHM	R33
21	RES. 200 OHM	R32, R37, R38, R39
22	DIODE 1N5231	CR1, CR3
23	DIODE 1N5343B	CR2
25	CAP. .1 MFD	C6 THRU C57 (SEE NOTE 3)
26	RES. 1K	R35

NOTES: 1) WHEN BUILDING THIS ASS'Y USE THE CHART BELOW FOR 2 THRU 8K MEMORY:

ROW	A	B	C	D	E	F	G	H	RES. 10 OHM F/N 17 NEEDED (SEE NOTE 4)
2K	*	*	*	*	*	*	*	*	R7, R8, R15, R16, R23, R24
3K	*	*	*	*	*	*	*	*	R6, R14, R22
4K	*	*	*	*	*	*	*	*	R5, R13, R21
5K	*	*	*	*	*	*	*	*	R4, R12, R20
6K	*	*	*	*	*	*	*	*	R3, R11, R19
7K	*	*	*	*	*	*	*	*	R2, R10, R18
8K	*	*	*	*	*	*	*	*	R1, R9, R17

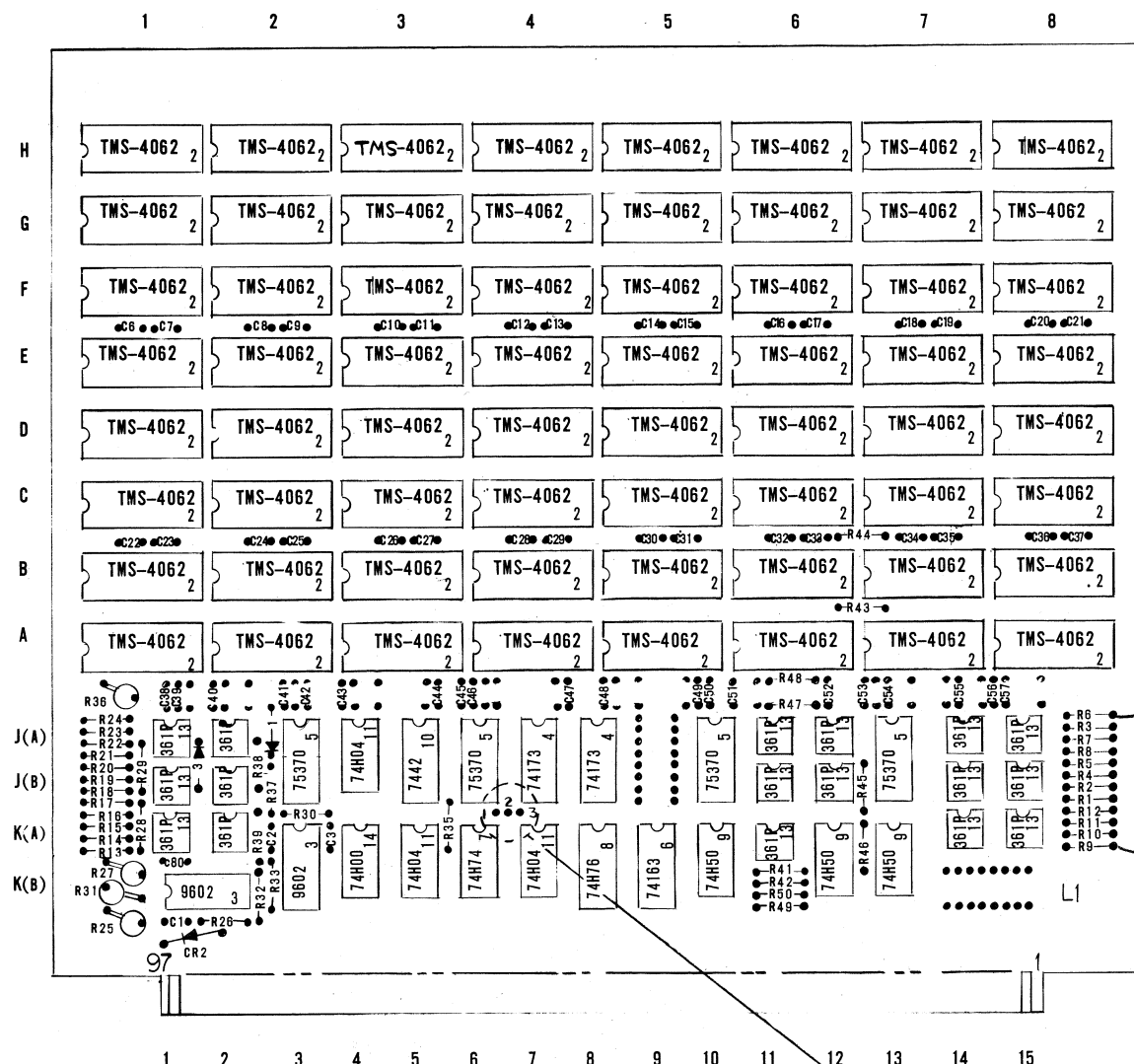
* INDICATES ROW OF MEMORY CHIPS NEEDED)

NOTE: 2) WHEN BUILDING 2K THRU 6K OF MEMORY THE FOLLOWING CHIPS TO BE OMITTED:

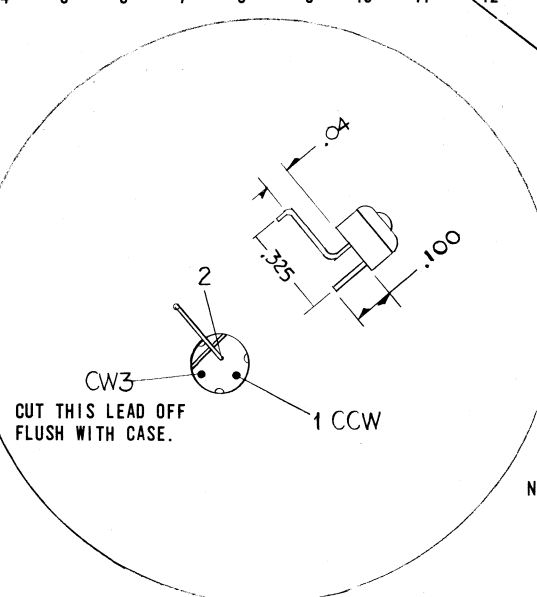
2K- J2A, J2B, J1B, K2A, K14A, J14B, J15A, J15B, K15A
3K & 4K- J1B, J2B, K14A, J14B, J15B, K15A
5K & 6K- J2B, J14B, K15A

NOTE: 3) WHEN BUILDING 2K THRU 4K OF MEMORY THE FOLLOWING CAPACITORS TO BE OMITTED:
C6 THRU C21

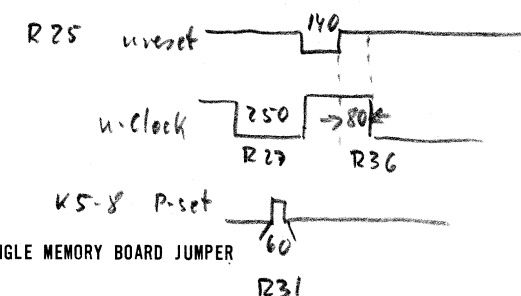
4) R41 THRU R50 ARE USED ON ALL MEMORY CONFIGURATIONS



COGAR #	DESCRIPTION
01-8	MEMORY-T.I. (4K)
02-6	MEMORY-T.I. (8K)
03-4	MEMORY-T.I. (2K)
04-2	MEMORY-T.I. (3K)
05-9	MEMORY-T.I. (5K)
06-7	MEMORY-T.I. (6K)
07-5	MEMORY-T.I. (7K)



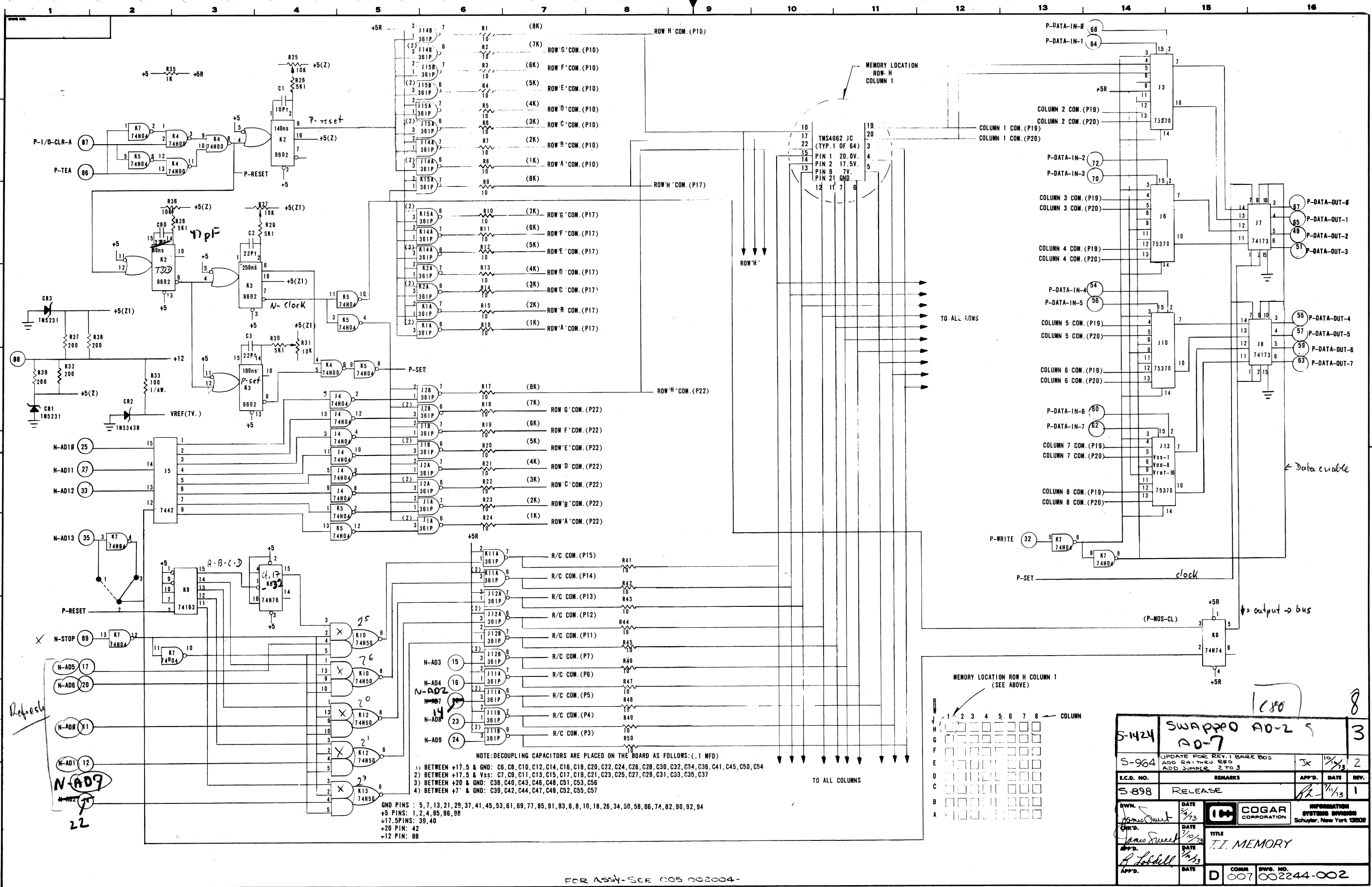
NOTE: F/N 15(10K POT) MUST BE FORMED TO THE ABOVE CONFIGURATION BY MANUFACTURING UNTIL REV.2 BARE BOARDS ARE AVAILABLE. ASSEMBLE AS SHOWN.



*WHEN USING A SINGLE MEMORY BOARD JUMPER 2 TO 3 AS SHOWN.

S-979	SEE REWORK INST.	JK	11/13	4
S-964	ADD R41 THRU R50 FOR REV. 1 BARE BDS. (ADD JUMPER 2 TO 3)	JK	10/13	3
S-919	ADDED VIEW FOR NEW 10K POTS.	AK	8/27/13	2
ECR. NO.	REMARKS	APP'D.	DATE	REV.
S-898	RELEASE - SEE REWORK INSTRUCTIONS.	AK	7/11/13	1
OWN.	DATE	DATE	DATE	DATE
CHK'D.	5/3/13	7/12/13	7/12/13	7/12/13
APP'D.	7/12/13	7/12/13	7/12/13	7/12/13
APP'D.	DATE	DATE	DATE	DATE
C	005	002004 -		

FOR LOGIC SEE 007-002244-002

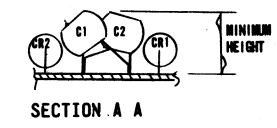


A B C D E F G H

040-000295-006 REV-A

CONNECTOR A
PIN NO. 1

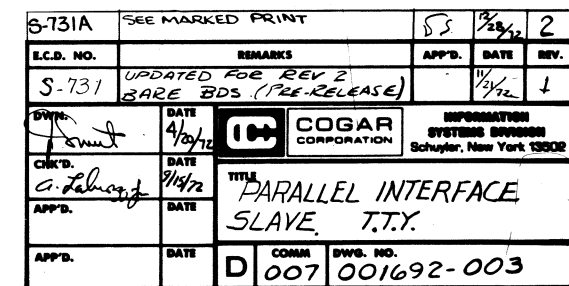
CONNECTOR B
PIN NO. 1



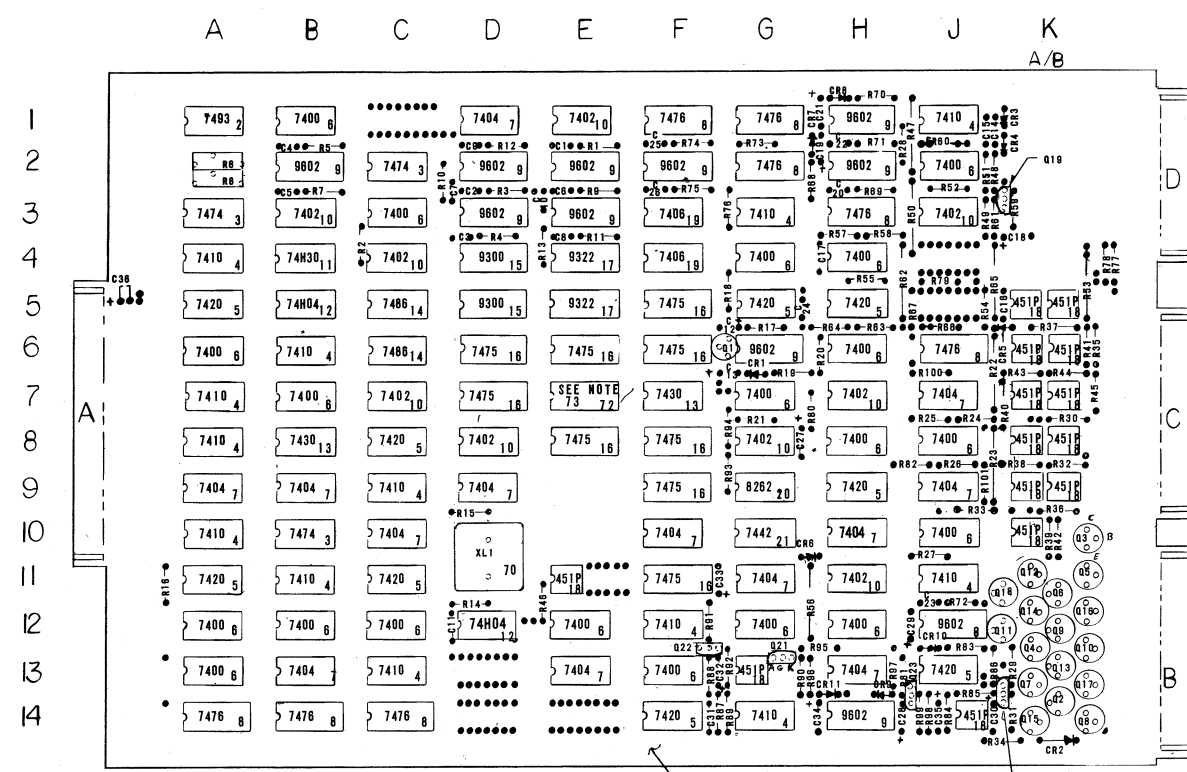
SECTION A A
C1 & C2 MUST BE MOUNTED IN A TILTED POSITION
SO THERE IS A MINIMUM HEIGHT FROM THE P.C.
BOARD TO THE TOP OF THE CAPACITORS.

- NOTES: 1. FIND NUMBERS FOR ALL I.C.'S ARE
SHOWN AT THE TOP LEFT OF EACH I.C.
2. R1, R2, AND R3 ARE FIND NO. 2
3. R4 AND R5 ARE FIND NO. 3
4. C1 AND C2 ARE FIND NO. 4
5. C3 IS FIND NO. 5
6. C4 AND C5 ARE FIND NO. 6
7. CR1, CR2, AND CR3 ARE FIND NO. 7
8. R6 IS FIND NO. 26
9. C6 IS FIND NO. 27
10. R7 IS FIND NO. 29

S-774	CHG. BY FROM TNDN TO TNDN	DRB	1/13	3
S-882	SEE REWORK INST. ADD NOTES 8 & 9, 10		2/272	2
S-560	RELEASE - SEE REWORK INST. REV A 18 REWORK MUST BE INCLUDED AS LONG AS RYA TAKE BD IS USED.			1
DATE	DATE	DATE	DATE	DATE
3/7/71	3/14/71	3/14/71	3/14/71	3/14/71
COGAR CORPORATION		INFORMATION SYSTEMS DIVISION Schuylar, New York 12002		
TITLE P.C. ASSY. COMMUNICATIONS				
D	005	0004-03-006		



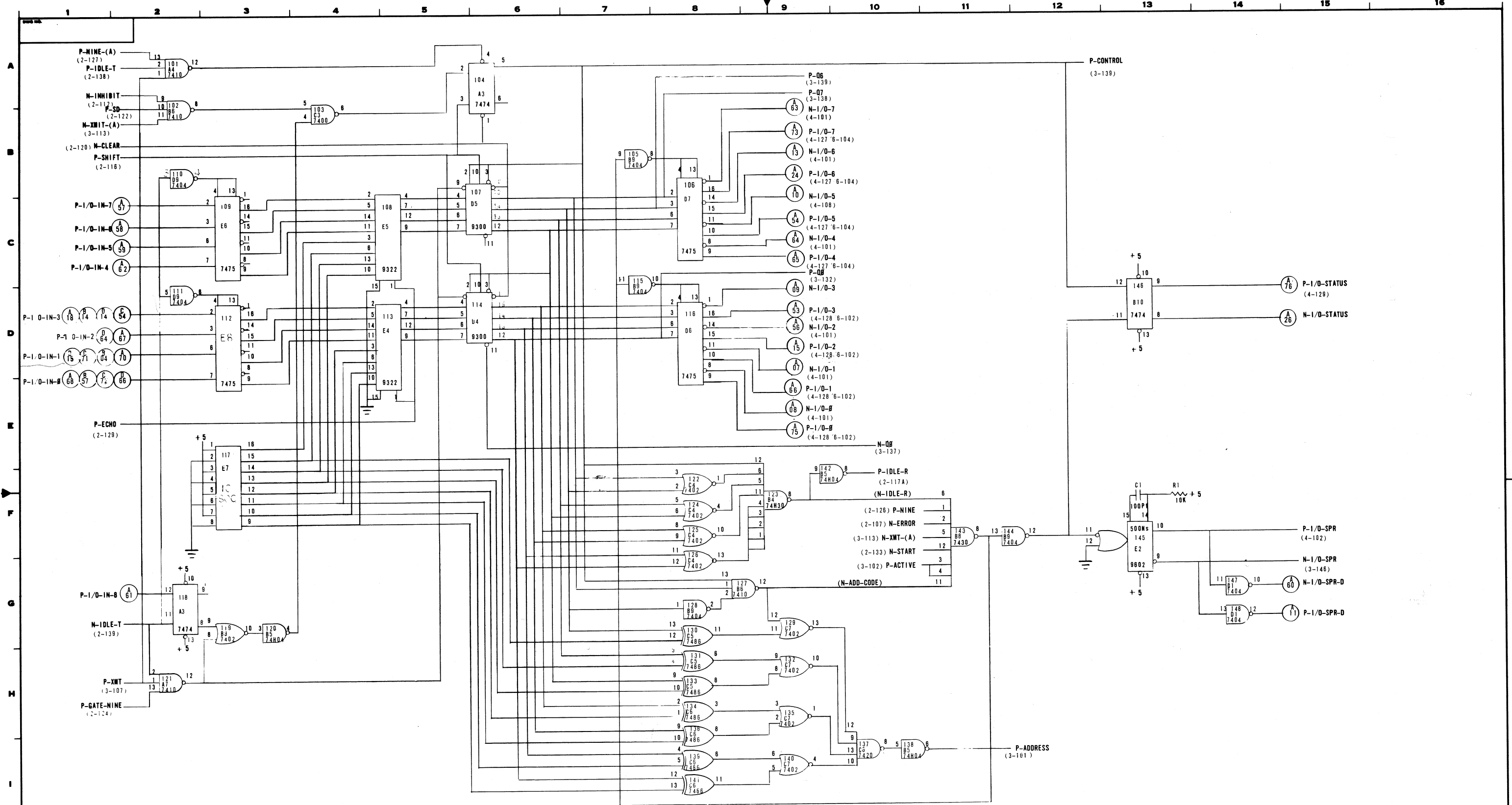
001405-000



NOTE 1: PIN #1 ON ALL IC'S ARE VERTICALLY IN LINE.
NOTE 2: ASSEMBLE ADDRESS PLUG (FIND NO 73) AS PER INSTRUCTIONS ON DWG. NO. 007-000753-111. USE FIND NO. 74 FOR JUMPERS ON THE ADDRESS PLUG. PLACE FIND NO. 73 INTO FIND NO. 72.
NOTE 3: THE ADDRESS PLUG IS STANDARD OCTAL 13, DECIMAL 11.

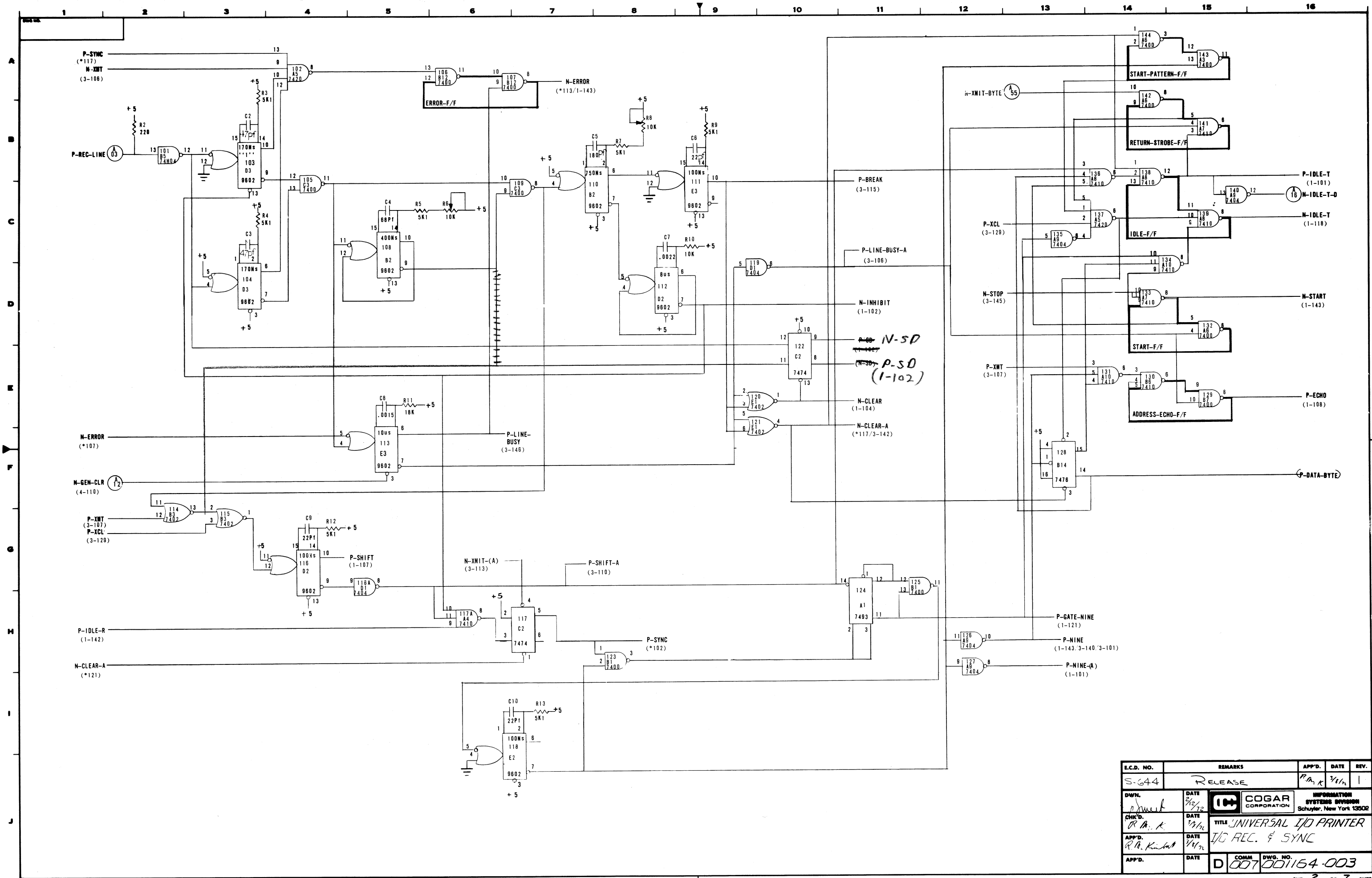
FIND NO.	DESCRIPTION	LOCATION
22	RES. 10K	R1, R10, R71, R72
23	RES. 220 OHM	R2, R16, R28, R46
24	RES. 5K1	R3, R4, R5, R7, R9, R12, R13, R20, R27, R80, R100
25	RES. 10K POT	R6, R8
26	RES. 18K	R11
27	RES. 2K	R14
28	RES. 510 OHM	R15
30	RES. 47K	R18
31	RES. 30K	R19, R69
32	RES. 1K	R21, R73, R82, R86, R80, R93, R94, R95, R97
33	RES. 1K 1 WATT	R22, R23, R47, R50, R53, R56, R62, R65,
34	RES. 470 OHM	R24, R48, R51, R54, R57, R63, R66, R76, R78, R79, R101,
35	RES. 330 OHM	R25, R26, R49, R52, R55, R58, R64, R67,
36	RES. 270 OHM	R29, R30, R31, R32, R33, R34, R36, R37, R38, R39, R41, R42, R43, R44, R45;
37	RES. 120 OHM 1/2 WATT	R35, R40.
38	RES. 510K	R59.
39	RES. 1K2	R60, R91
41	RES. 33K	R68, R70, R81, R83, R96
43	RES. 20K	R74, R75
44	RES. 330K	R84, R87
45	RES. 51 OHM	R85, R89, R98, R61, R92
46	RES. 620K	R88, R17
47	RES. 100K	R99
48	CAP. 100PF	C1, C23, C24
49	CAP. 47 PF	C2, C3
50	CAP. 68 PF	C4
51	CAP. 180 PF	C5, C25, C26
52	CAP. 22 PF	C6, C9, C10
53	CAP. .0022 MFD	C7
54	CAP. .0015 MFD	C8
55	CAP. 270 PF	C11, C20, C22
56	CAP. 18 MFD	C12, C27, C33
57	CAP. 10 MFD	C13
58	CAP. .001 MFD	C14, C15, C16, C17
59	CAP. .22 MFD	C18
60	CAP. 2.2 MFD	C19, C21
61	CAP. 6.8 MFD	C28, C29, C34
62	CAP. .047MFD	C30
63	CAP. .022 MFD	C31
64	CAP. 1 MFD	C32, C35
65	TRANS. 2N3646	Q1
66	TRANS. 2N3568	Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18
67	TRANS. 2N6027	Q19, Q20, Q21, Q22, Q23,
68	DIODE 1N914B	CR1, CR3, CR4, CR5, CR6, CR7, CR9, CR10, CR11, CR8
69	DIODE 1N4001	CR2
71	CAP. 68 MFD	C36

E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-644	RELEASE - SEE REWORK INST. ON E.C.D. S-644	R. M. K.	3/8/72	1
DWG.	DATE	INFORMATION SYSTEMS DIVISION Schuylar, New York 13502		
CHK'D	DATE			
APP'D.	DATE			
APP'D.	DATE			
TITLE		P.C. ASSY - UNIVERSAL I/O PRINTER		
DWG. NO.		005 001405-000		

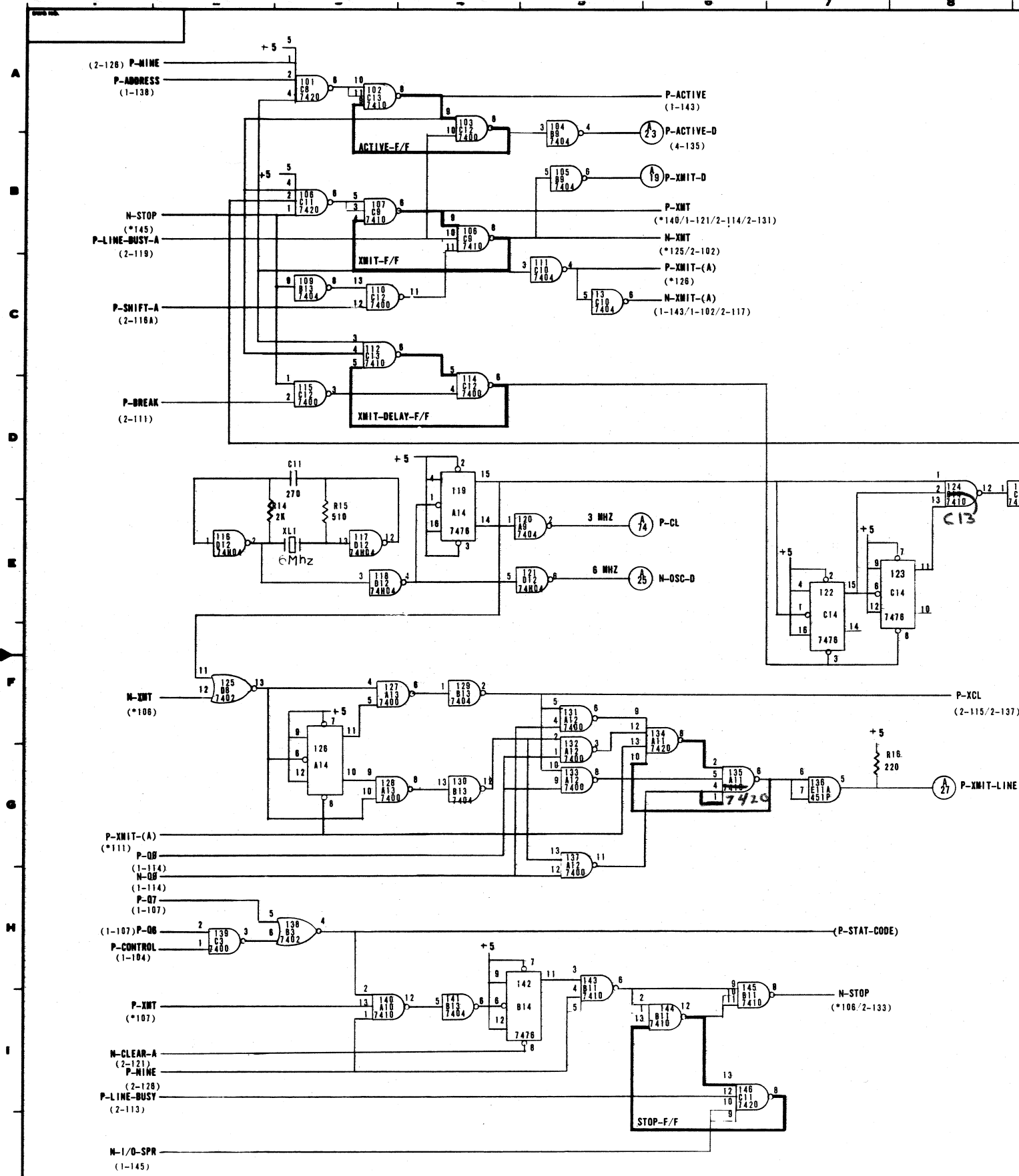


SHT	1	2	3	4	5	6	7
REV	1	1	1	1	1	1	1

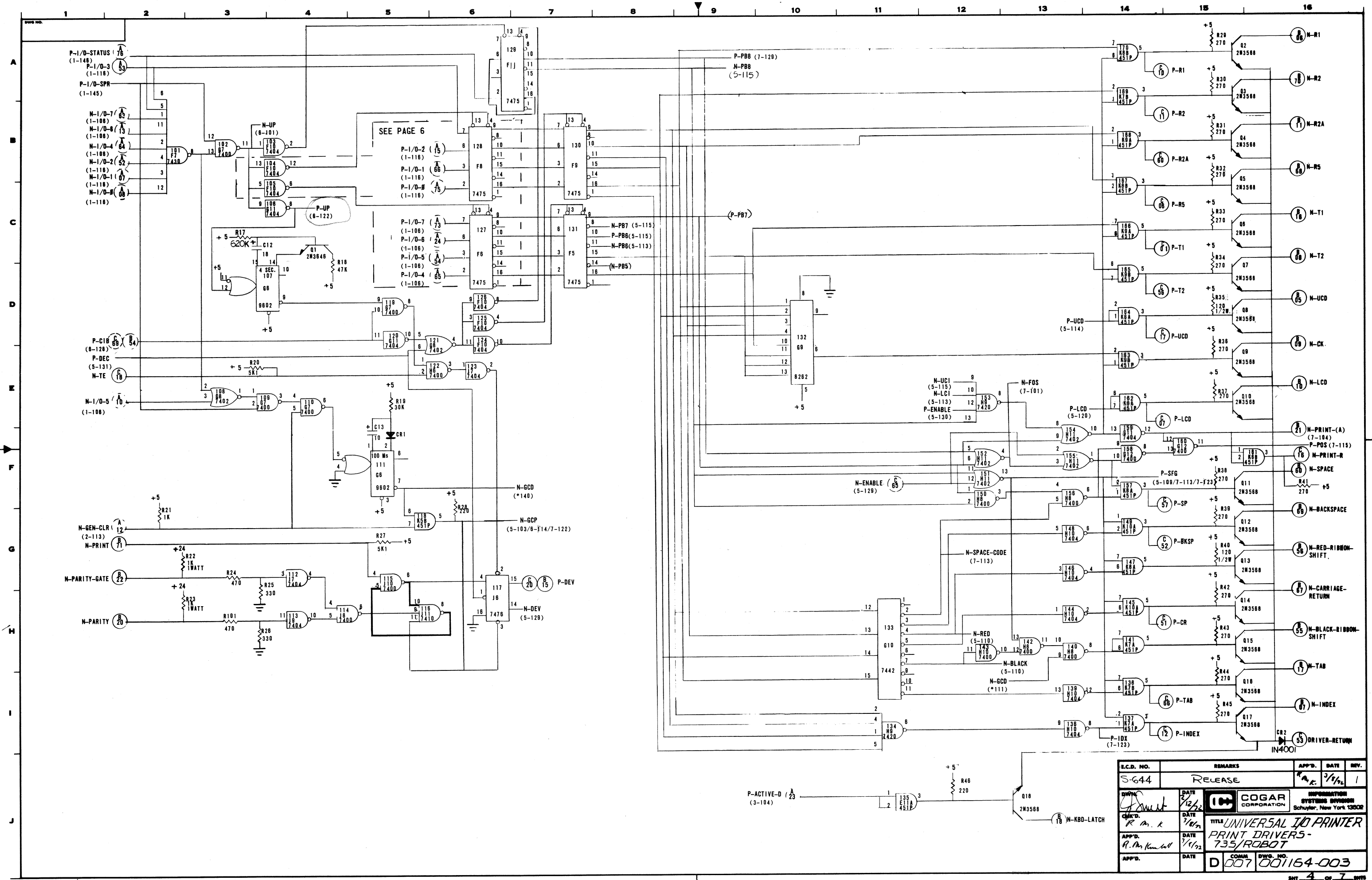
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
5-644	RELEASE	AK	2/1/71	1
DWN.	DATE	 COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuylar, New York 13502		
CHK'D.	DATE			
APP'D.	DATE			
APP'D.	DATE			
TITLE		UNIVERSAL I/O PRINTER		
SUBTITLE		I/O SHIRT REGISTER		
DWG. NO.		D-1164-003		



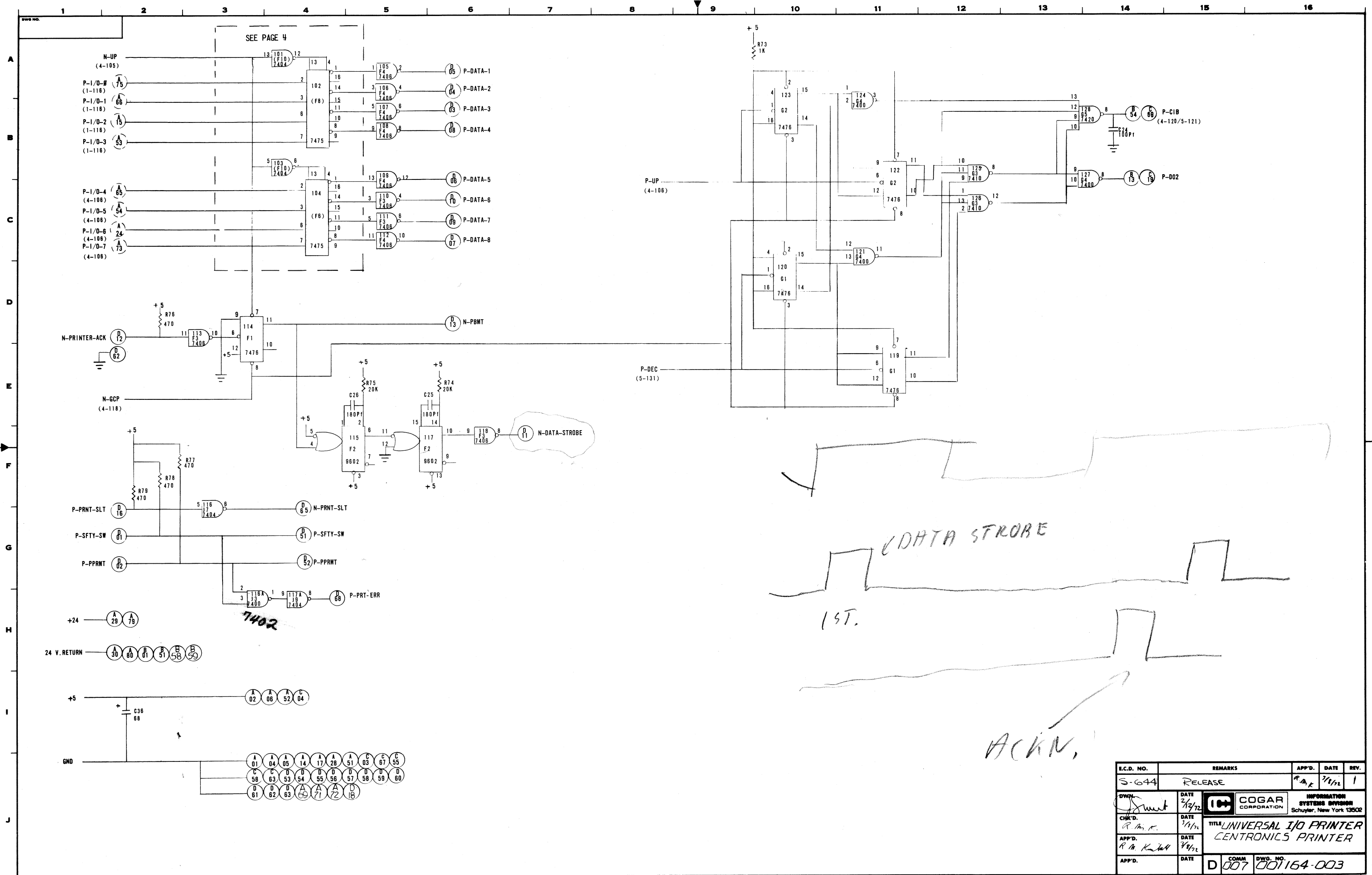
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-644	RELEASE	R. M. K.	3/1/72	1
DWN.	DATE 3/1/72	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuylar, New York 13502		
CHK'D.	DATE 3/1/72			
APP'D.	DATE 3/1/72	TITLE UNIVERSAL I/O PRINTER		
APP'D.	DATE 3/1/72	I/O REC. & SYNC		
APP'D.	DATE 3/1/72	D COMM DWG. NO. 007 001164-003		

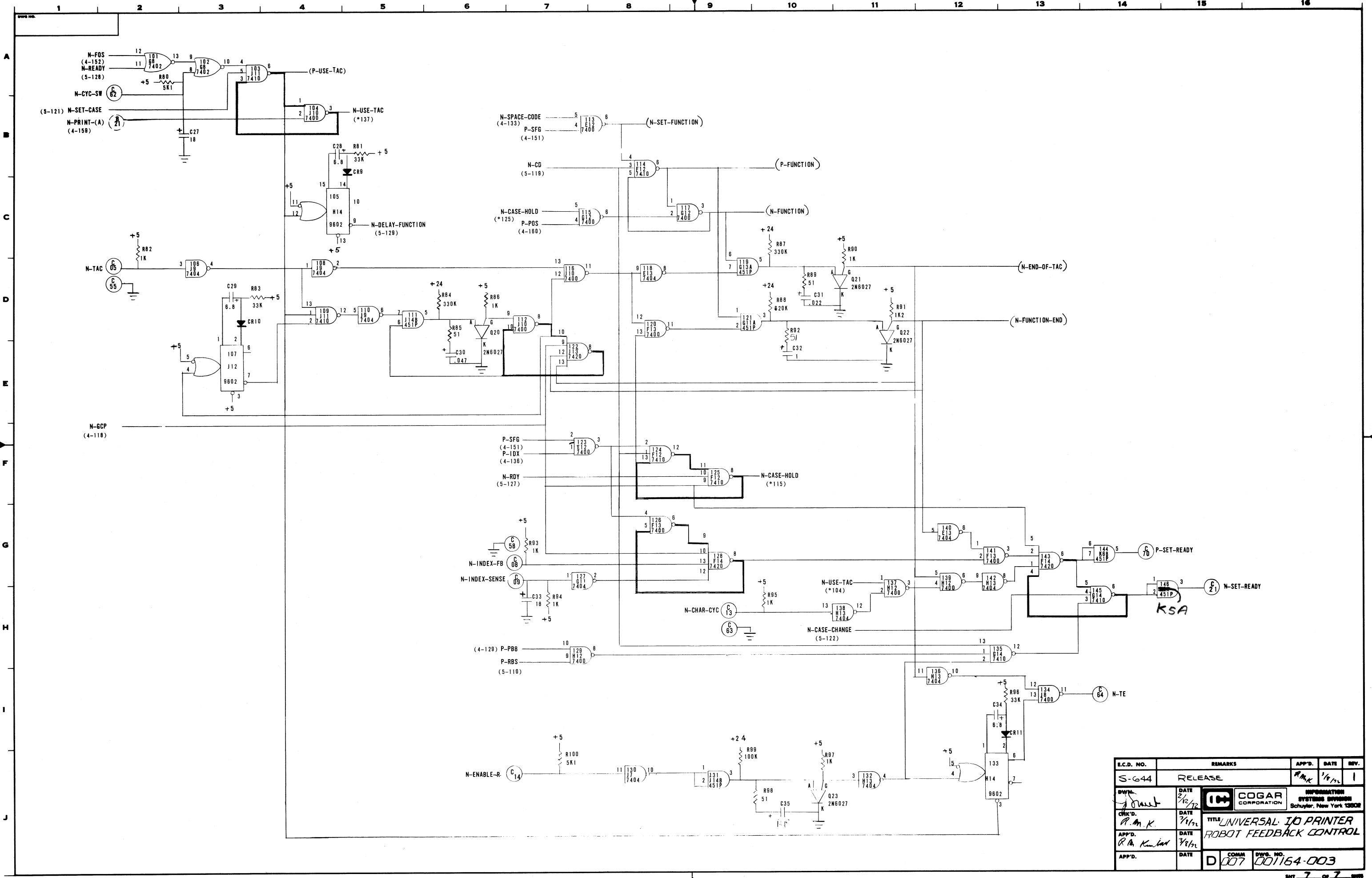


S.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-644	RELEASE	RAK	7/8/72	1
DWN.	DATE	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuyler, New York 13502		
CHK'D.	DATE			
APP'D.	DATE	TITLE UNIVERSAL I/O PRINTER I/O TRANSMITTER		
APP'D.	DATE			
APP'D.	DATE	COMM.	DWG. NO.	
		D	007 001164-003	

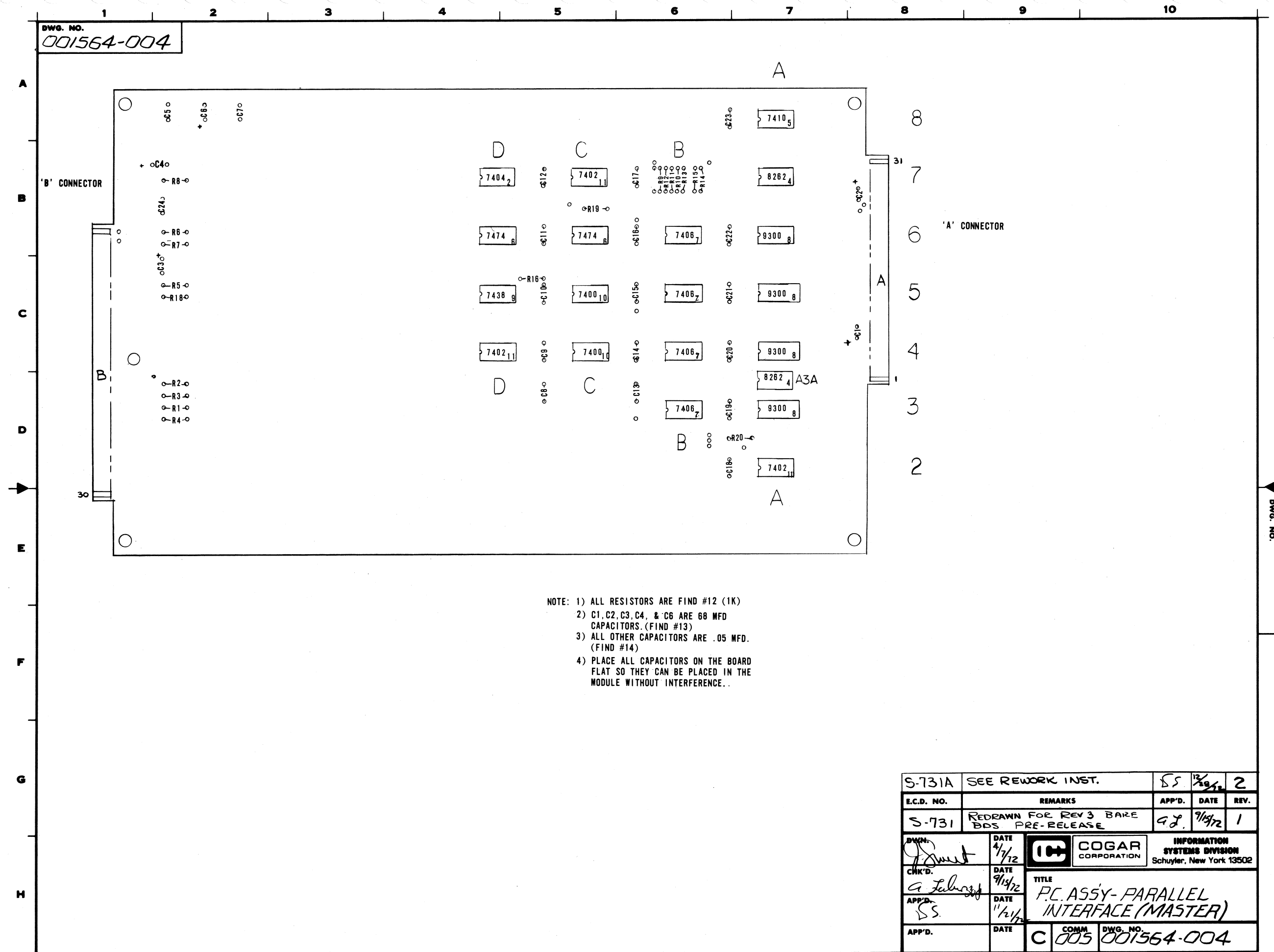


E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
5-644	RELEASE	<i>W. E.</i>	3/1/76	1
DIV.	DATE	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Schuyler, New York 13502	
<i>[Signature]</i> COM'D. <i>R. M. K.</i>	3/12/76		TITLE <i>UNIVERSAL ID PRINTER</i> <i>PRINT DRIVERS-</i> <i>735/ROBOT</i>	
APP'D.	DATE	 COGAR CORPORATION	COMM. NO. <i>001164-003</i>	
<i>R. M. Kennell</i>	3/1/76		D <i>007</i>	



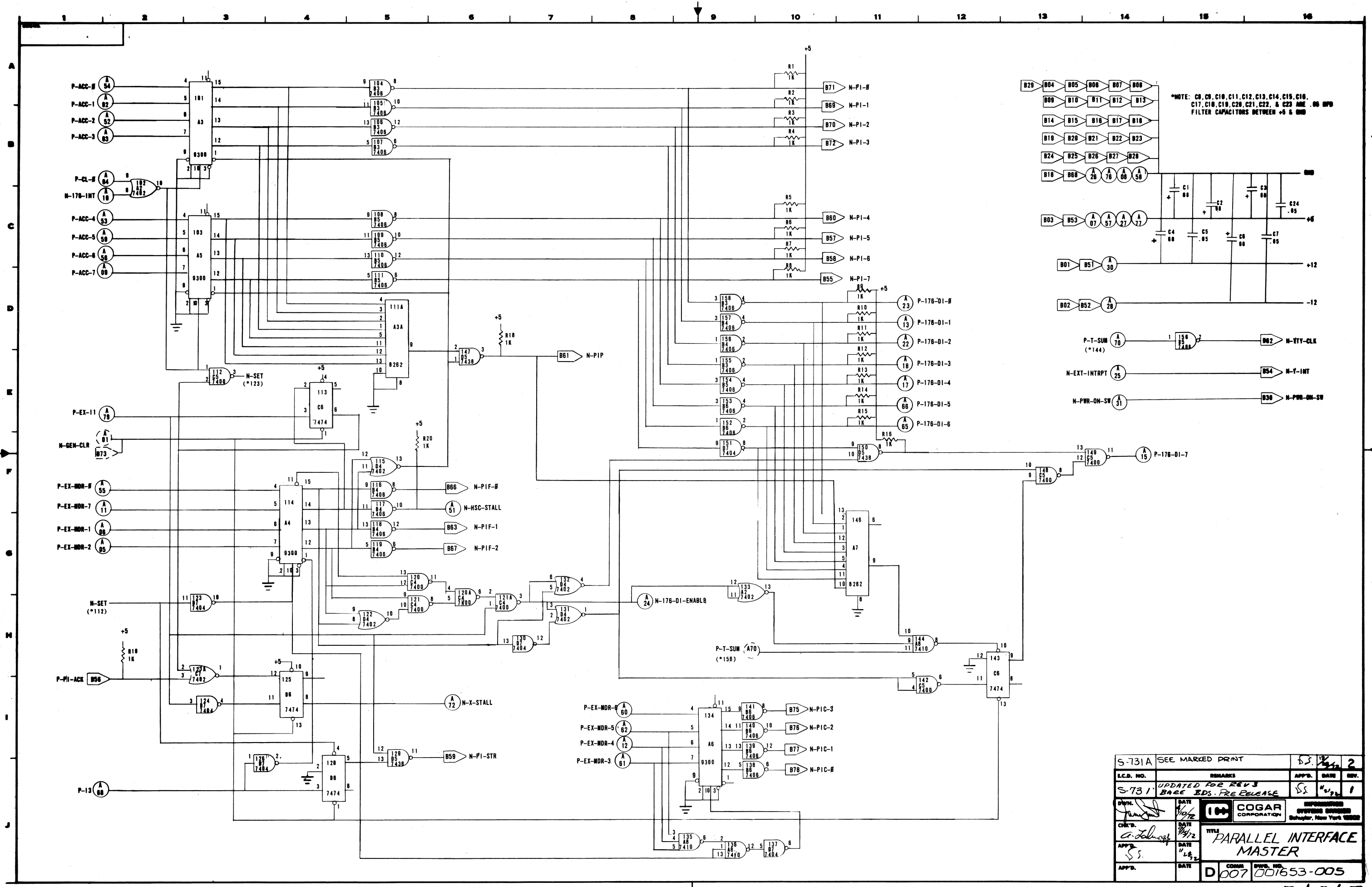


S.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-644	RELEASE	R.M.K.	1/1/72	1
DWN.	DATE	COGAR CORPORATION	DATE	INFORMATION
CHK'D.	DATE	Schuyler, New York 13502	DATE	
APP'D.	DATE	TITLE	DATE	
APP'D.	DATE	UNIVERSAL ID PRINTER	DATE	
		ROBOT FEEDBACK CONTROL		
		COMM	DWG. NO.	
		007	001164-003	



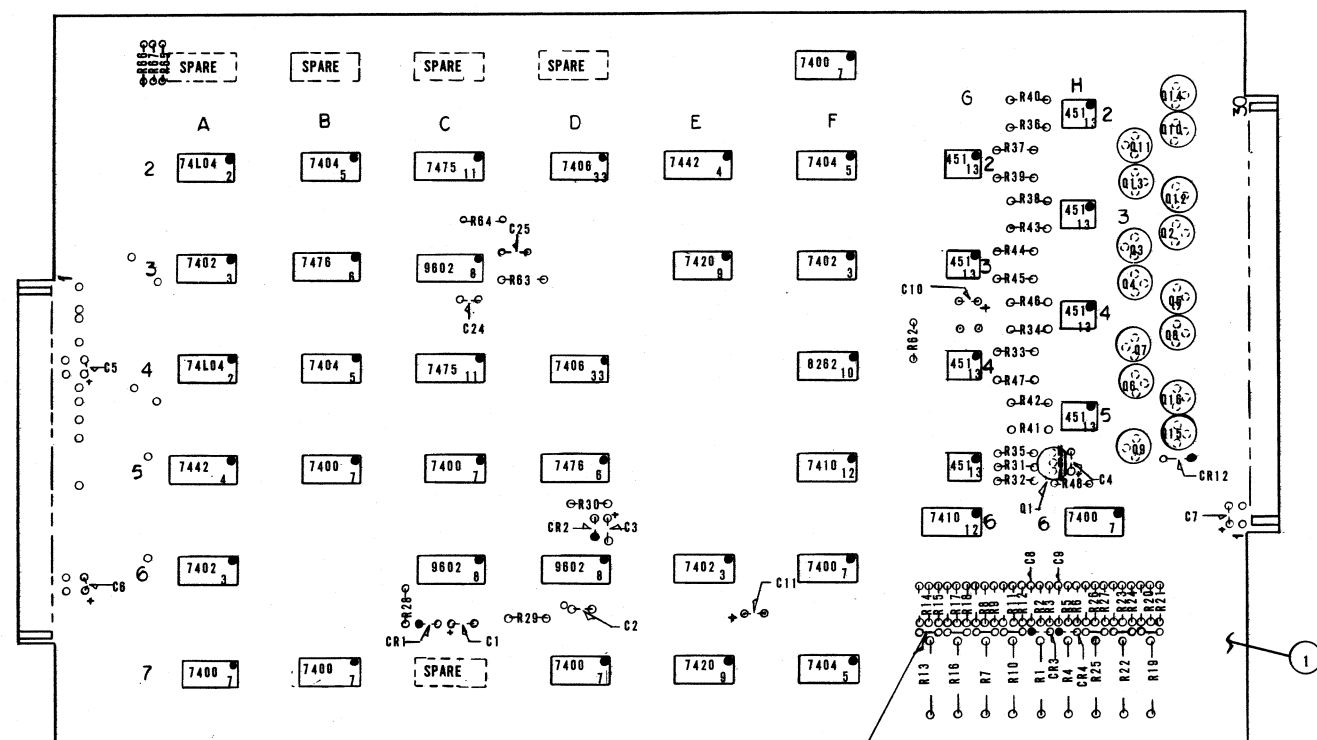
NOTE: 1) ALL RESISTORS ARE FIND #12 (1K)
2) C1, C2, C3, C4, & C6 ARE 68 MFD CAPACITORS. (FIND #13)
3) ALL OTHER CAPACITORS ARE .05 MFD. (FIND #14)
4) PLACE ALL CAPACITORS ON THE BOARD FLAT SO THEY CAN BE PLACED IN THE MODULE WITHOUT INTERFERENCE.

S-731A		SEE REWORK INST.		SS	12/12	2
E.C.D. NO.		REMARKS		APP'D.	DATE	REV.
S-731		REDRAWN FOR REV 3 BARE BDS. PRE-RELEASE		SS	7/15/72	1
BY: <i>J. Sweet</i>		DATE: 4/7/72		 COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuyler, New York 13502		
CHK'D: <i>A. Labrecque</i>		DATE: 7/14/72				
APP'D: <i>SS</i>		DATE: 11/21/72		TITLE: P.C. ASSY - PARALLEL INTERFACE (MASTER)		
APP'D.		DATE		COMM: C	DWG. NO. 005 001564-004	



S-731A		SEE MARKED PRINT		SS		2	
L.C.D. NO.		REMARKS		APP'D.		REV.	
S-731		UPDATED FOR REV 3 BASE SDS, PRE RELEASE		SS		1	
DWN.		DATE		COGAR CORPORATION		INFORMATION SYSTEMS GROUP Schenectady, New York 12302	
CHK'D.		DATE		TITLE		PARALLEL INTERFACE MASTER	
APP'D.		DATE		D		007 001653-005	

000956 003

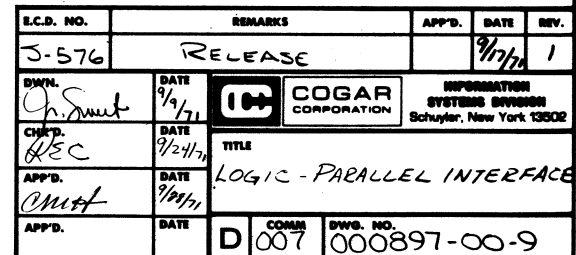


35 PLACE JUMPERS AS SHOWN (TYP. 7 PLACES)

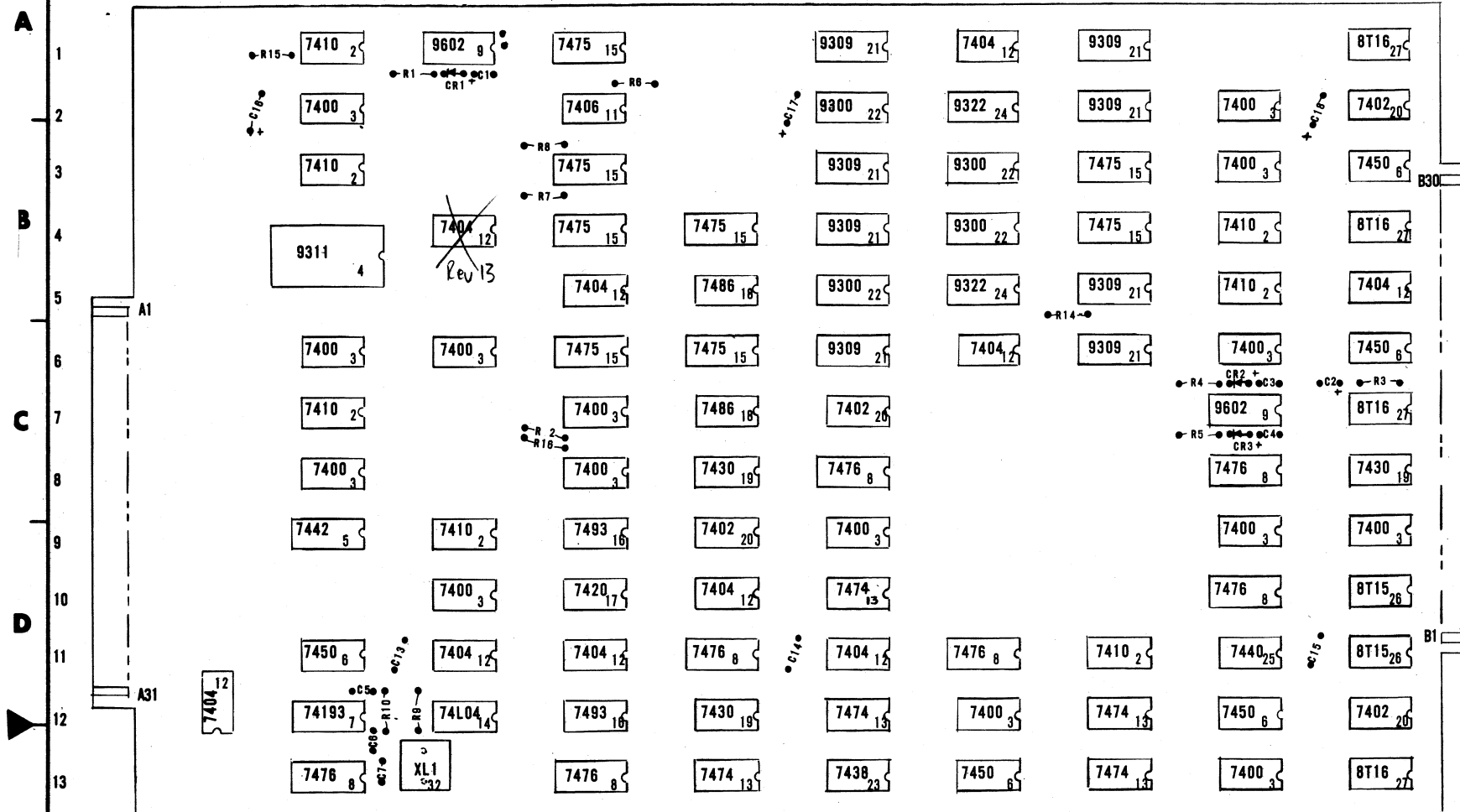
- NOTES:
- 1) FIND NUMBERS OF ALL IC'S ARE LOCATED ON THE IC'S AT THE RIGHT SIDE.
 - 2) FOR ALL OTHER FIND NUMBERS SEE THE LIST AT THE UPPER RIGHT OF THIS PAGE.
 - 3) PIN NO. 1 ON ALL IC'S IS SHOWN AS A DARK CIRCLE.
 - 4) ON DIODES INDICATES THE CATHODE
- END

FIND NO.	DESCRIPTION	LOCATION
14	RES. 1K 1 WATT	R1, R4, R7, R10, R13, R16, R19, R22, R25
15	RES. 470 OHM	R2, R5, R8, R11, R14, R17, R20, R23, R26, R29, R32, R35, R38, R41, R44, R47
16	RES. 330 OHM	R3, R6, R9, R12, R15, R18, R21, R24, R27
17	RES. 33K	R28, R30
18	RES. 10K	R29, R33
19	RES. 470K	R31
20	RES. 1K	R32
21	RES. 270 OHM	R33, R34, R35, R36, R37, R38, R39, R40, R42, R43, R44, R45, R46, R47
22	RES. 120 OHM	R41
23	CAP. 2.2 MFD	C1
24	CAP. 68 MFD	C4, C5, C6, C10, C11
25	CAP. 4.7 MFD	C3
26	CAP. 180 pF	C2, C24, C25
27	DIODE 1N914B	CR1, CR2, CR3, CR4
28	DIODE 1N4001	CR12
29	TRANS. DT13	Q1
30	TRANS. 2N3568	Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16
31	CAP. 33 MFD	C7
32	CAP. .001 MFD	C8, C9
34	RES. 20K	R64
36	RES. 51 OHM	R48

LC.S. NO.	REMARKS		APP'D.	DATE	REV.
5-576	RELEASE			9/2/71	1
APP'D.	DATE	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuylar, New York 13502	TITLE P.C. Assy- PARALLEL INTERFACE		
DATE	DATE				
APP'D.	DATE	D 005 000956 003			



DWG. NO.
001973-007



→ Modem

-FOR MACH. SEE 040-001974-005
-FOR LOGIC SEE 007-001970-003

NOT A PARTS LIST (FOR REFERENCE ONLY)

F/N	DESCRIPTION	LOCATION
28	RES. 30K	R1, R4, R5
29	RES. 51 OHM	R3
30	RES. 1K	R2, R6, R7, R8, R9, R10, R14, R16
31	DIODE 1N914B	CR1, CR2, CR3
34	CAP. 33 MFD	C1
35	CAP. 150 MFD	C2
36	CAP. 22 MFD	C3, C4
37	CAP. .003 MFD	C5
38	CAP. 100 PF	C6
40	CAP. .05 MFD	C13, C14, C15,
41	CAP. 68 MFD	C16, C17, C18
43	RES. 10K	R15
44	RES. 3K3	R17

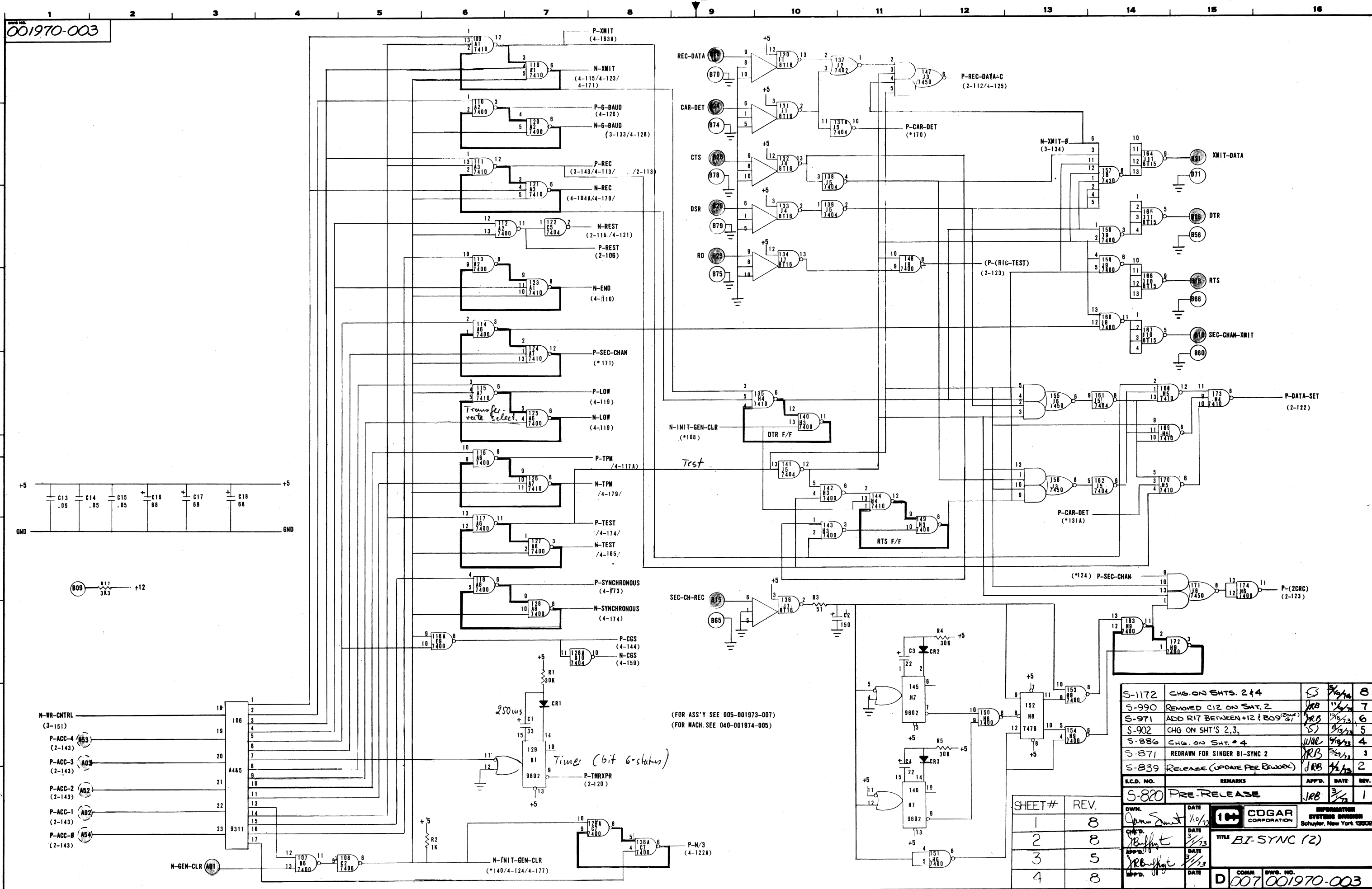
NOTE: C7 IS A MFG. TRIM

SEE
REWORK →

S-1172	SEE E.C.D. REWORK INSTRUCTIONS	SS	5/14/73	10
S-990	REMOVE C12 (CAP. 100 PF) (ZONE A3)	SS	5/14/73	9
S-971	ADDED RIT SEE REWORK INSTRUCTION	SS	5/14/73	8
S-902	DELETED I.C. 8262 IN POSITIONS B2 AND B5. DELETED I.C. 7474 IN POSITION B7. I.C. 7442 IN POSITION A10	SS	5/14/73	7
S-886	SEE REWORK INST.	WAK	6/13/73	6
S-871	REDRAWN FOR REV. 3 BARE BDS.	SS	5/29/73	5
S-839	UPDATE FOR REV. 2 BARE BDS. (SEE REWORK)	J.R.B.	4/2/73	4
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-820	PRE-RELEASE (SEE REWORK INST.)	J.R.B.	3/1/73	1
DWN	DATE	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Utica, New York 13582		
CHK'D.	DATE	TITLE P.C. ASSY- BI-SYNC (2)		
APP'D.	DATE			
APP'D.	DATE	COMM	DWG. NO. C 005 001973-007	

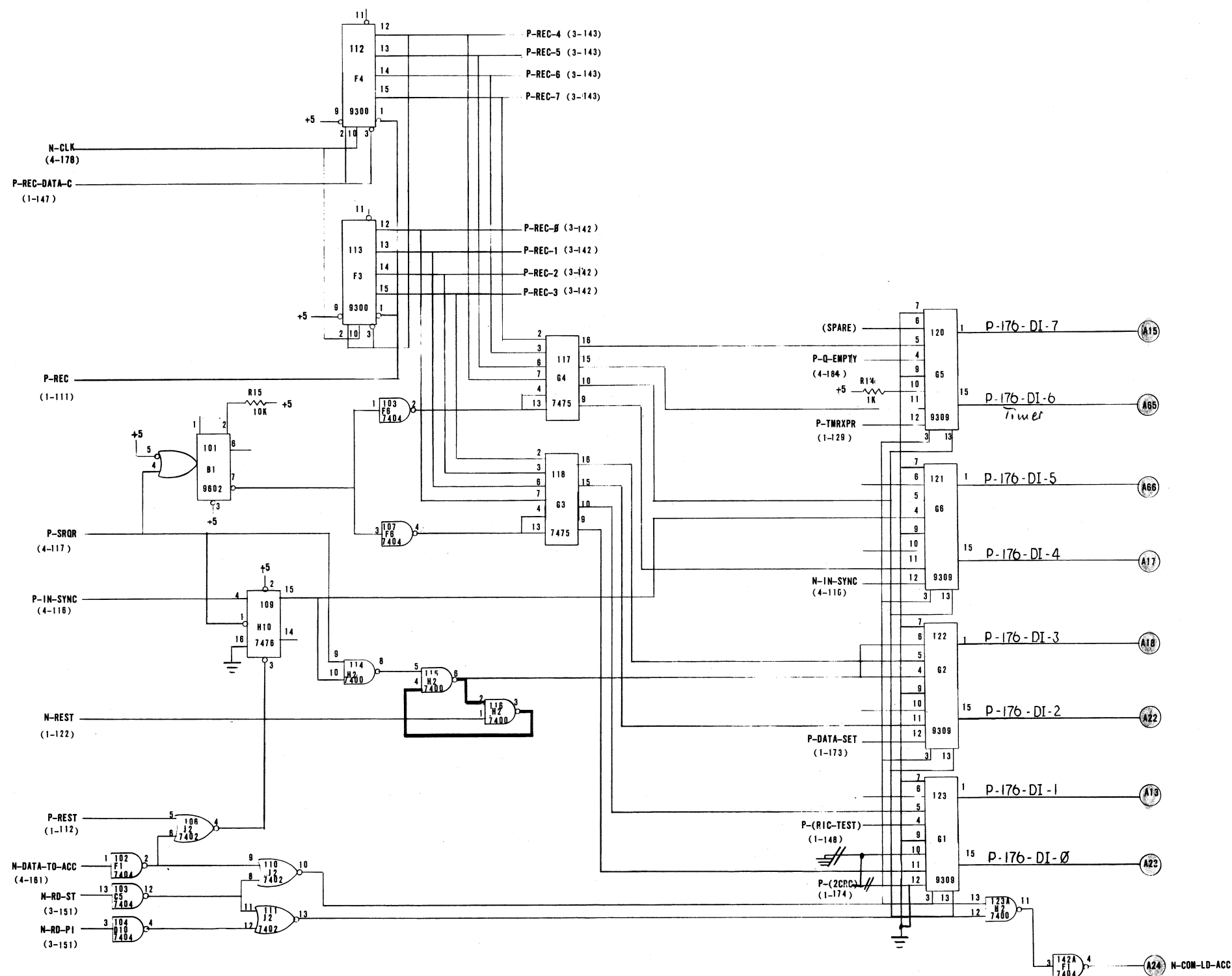
001970-003

A
B
C
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J

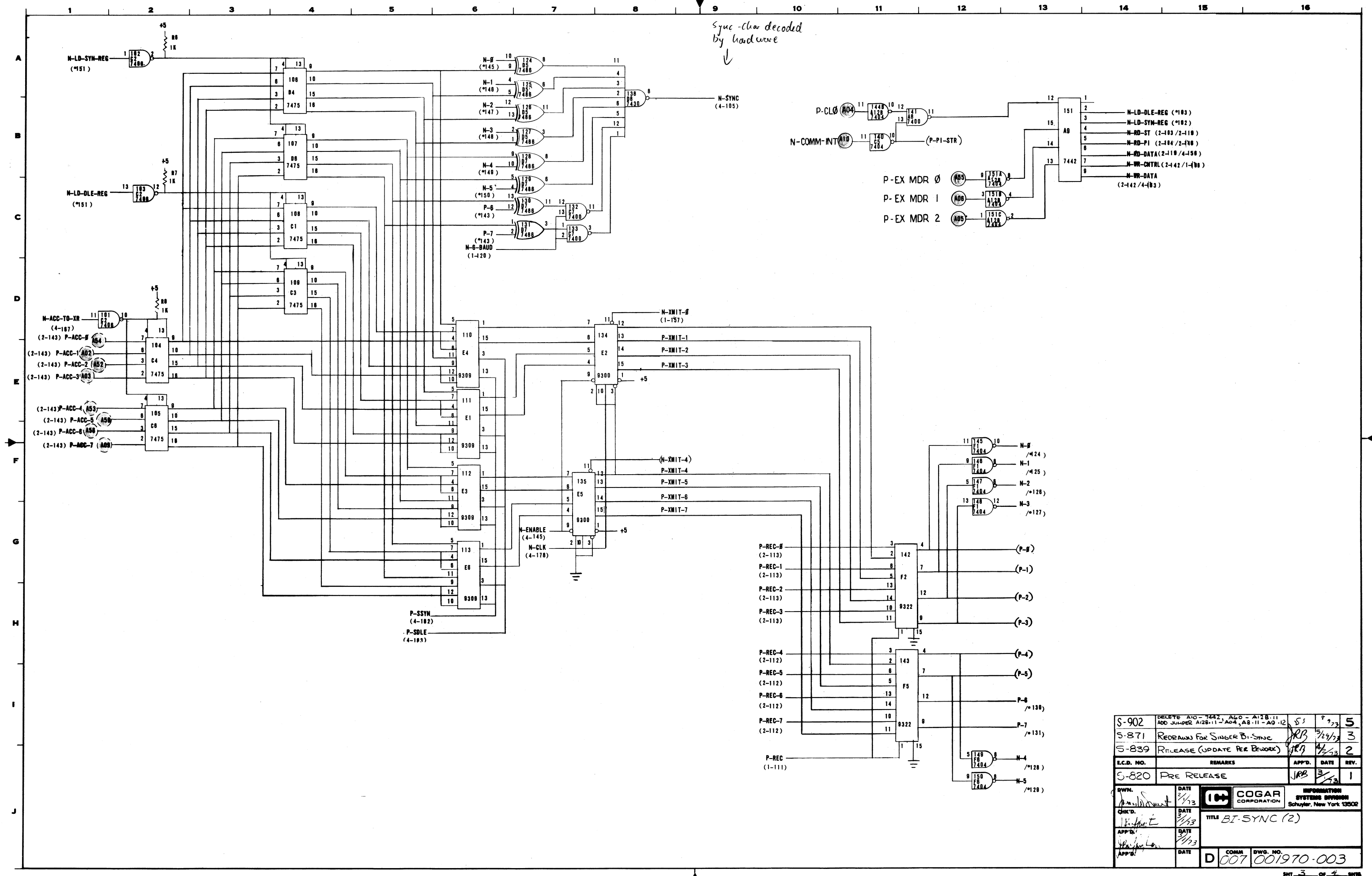


S-1172	CHG. ON SHTS. 2 & 4	S	10/14	8
S-990	REMOVED C12 ON SHT. 2	JRB	11/6/73	7
S-971	ADD R17 BETWEEN +12 & B09 (204)	JRB	11/13/73	6
S-902	CHG. ON SHT'S 2, 3,	S	11/13/73	5
S-886	CHG. ON SHT. # 4	JRB	11/13/73	4
S-871	REDRAW FOR SINGER BI-SYNC 2	JRB	11/13/73	3
S-839	RELEASE (UPDATE PER REWORK)	JRB	11/13/73	2
E.C.D. NO.		REMARKS	APP'D.	DATE
S-820		PRE-RELEASE	JRB	3/7/74
DWN.	DATE	COGAR CORPORATION		
CHG'D.	DATE	SYSTEMS DIVISION		
APP'D.	DATE	Schuyler, New York 13002		
APP'D.	DATE	TITLE BI-SYNC (2)		
SHEET#		REV.	COMM	
1		8	D 007	
2		8	001970-003	
3		5		
4		8		

001970-003

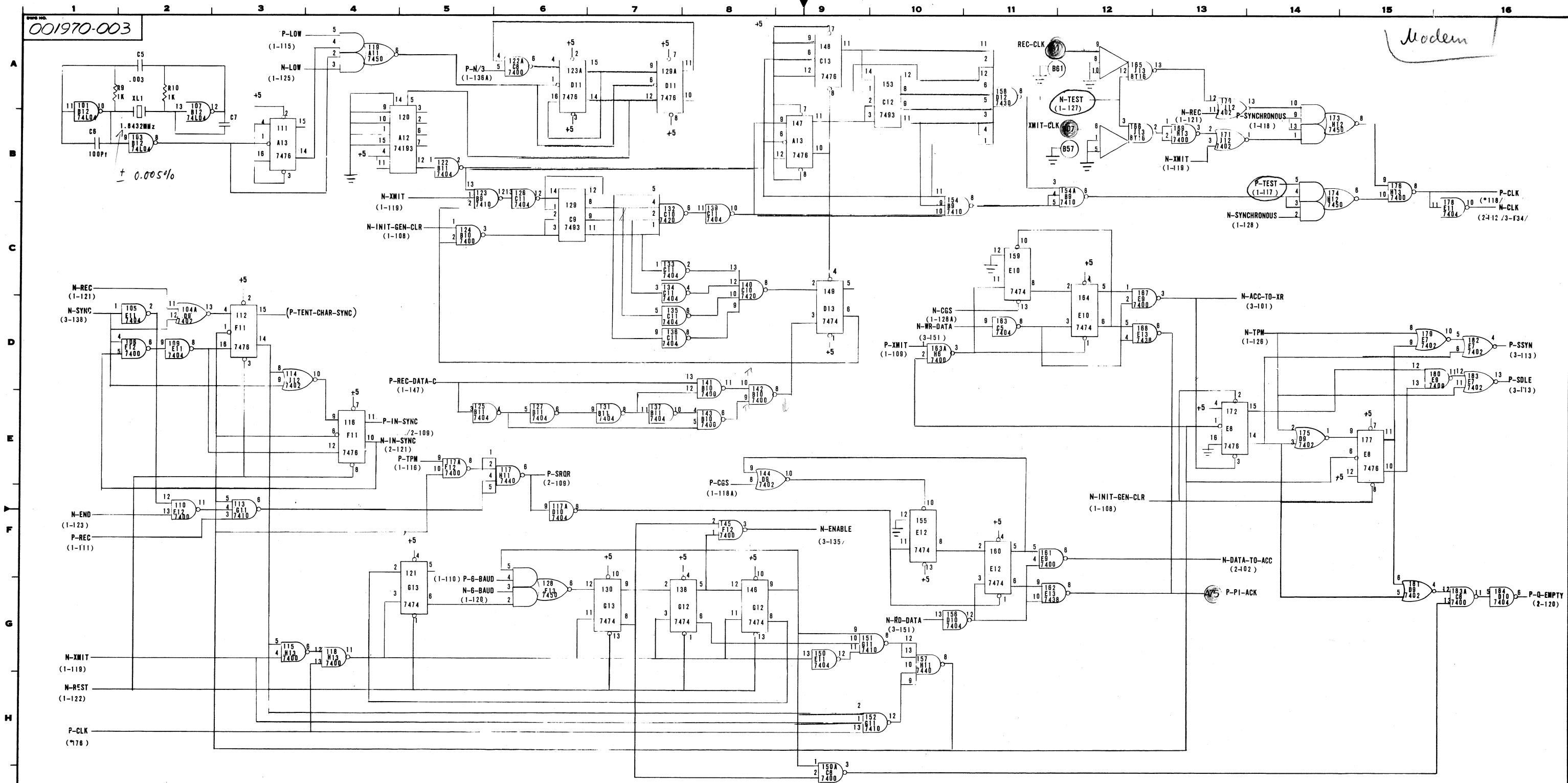


S-1172		(ZONE DE) DEF UNDER SIGNAL	SS	8/14/74	8
S-990		REMOVE C12 (100PF) FROM BETWEEN LEG 1 & 2 ON IC B1 (ZONE E2)	RB	11/13	7
S-902		DELETE 9262 I.C.'S IN ZONE C-10, C-12 AND I.C. 7474 IN ZONE B-14	SS	8/9/73	5
S-871		UPDATE FOR SINGER BI-SYNC 2	RB	8/13/73	3
S-839		RELEASE (UPDATE PER REWORK)	RB	4/2/73	2
E.C.D. NO.	REMARKS		APP'D.	DATE	REV.
S-820	PRE-RELEASE		RB	3/13	1
DWN.	DATE	COGAR CORPORATION SYSTEMS DIVISION Schuylar, New York 13502			
CHK'D.	DATE				
APP'D.	DATE				
APP'D.	DATE				
APP'D.	DATE				
TITLE		BI-SYNC (2)			
D		COMM	DWG. NO.	001970-003	



5-871	DELETE AIO - 7442, ALO - A128-11 ADD JUMPER A128-11 - A04, A8-11 - A9-12	JS	8/9/73	5
5-871	REDRAWN FOR SINGER BI-SYNC	JRB	5/29/73	3
5-839	RELEASE (UPDATE PER BENDICK)	JRB	4/2/73	2
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
5-820	PRE RELEASE	JRB	3/1/73	1
RWN.	DATE	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Schuyler, New York 13502	
CHK'D.	DATE		TITLE <i>BI-SYNC (2)</i>	
APP'D.	DATE			
APP'D.	DATE			
		D	COMM	DWG. NO.
		007		001970-003

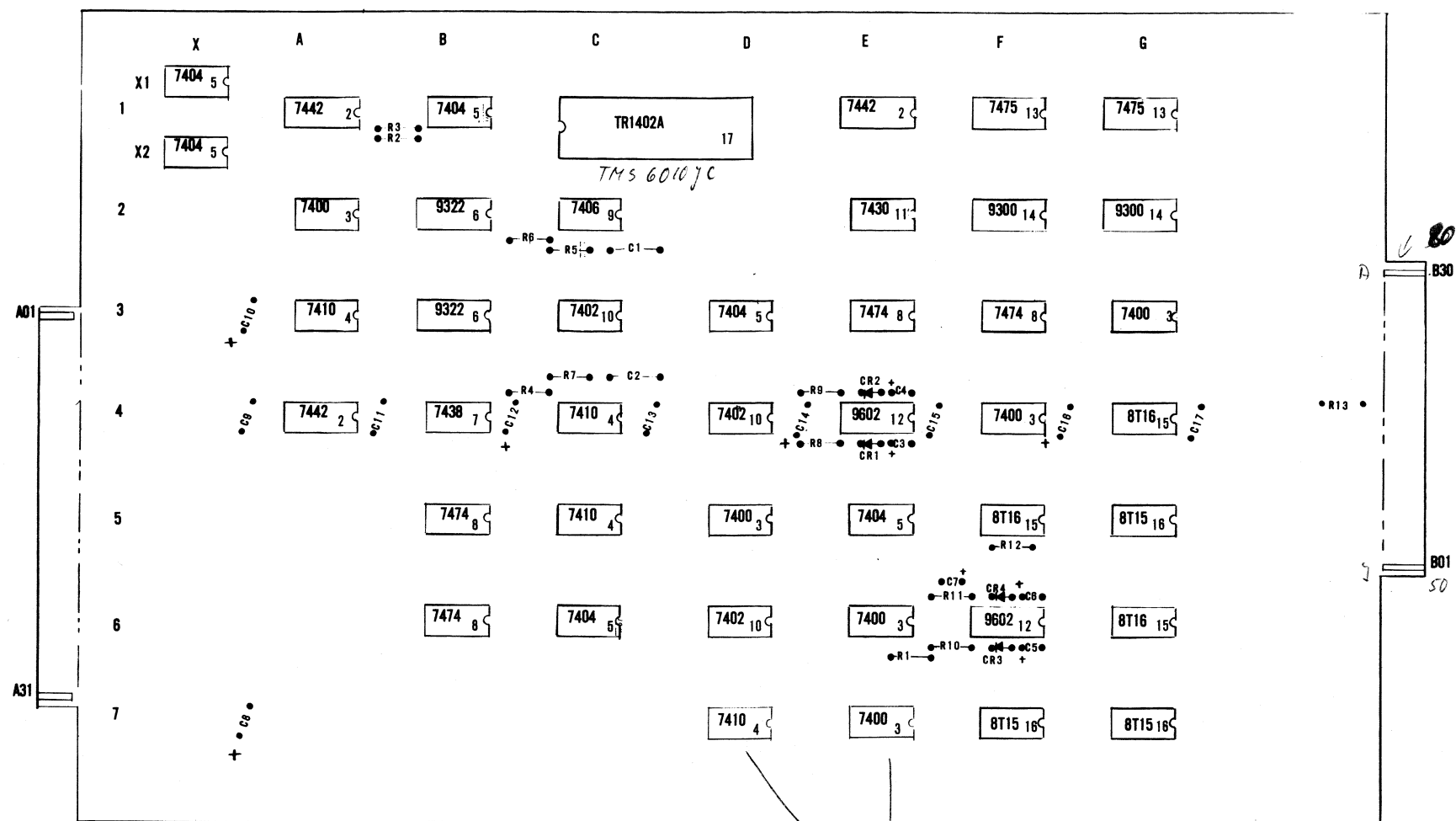
BWS NO. 001970-003



S-1172	ADDED GATES 150A, 183A, 184	SEE E.C.D. DETAIL SHEET	WS	9/14/73	8
S-886	P.P.I-ACK WAS PIN A25		WAL	9/14/73	4
S-871	REDRAWN FOR SINGER BI-SYNC 2.		JRB	5/29/73	3
S-839	RELEASE		JRB	4/2/73	2
E.C.D. NO.	REMARKS		APP'D.	DATE	REV.
S-820	PRERELEASE		JRB	8/13	1

OWN. J. Smith	DATE 2/1/73	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Schuyler, New York 13502
CHK'D. J. Buffington	DATE 3/1/73		
APP'D. J. Buffington	DATE		
APP'D.	DATE		
TITLE		BI-SYNC (2)	
D 0001		SWS. NO. 001970-003	

002272-003



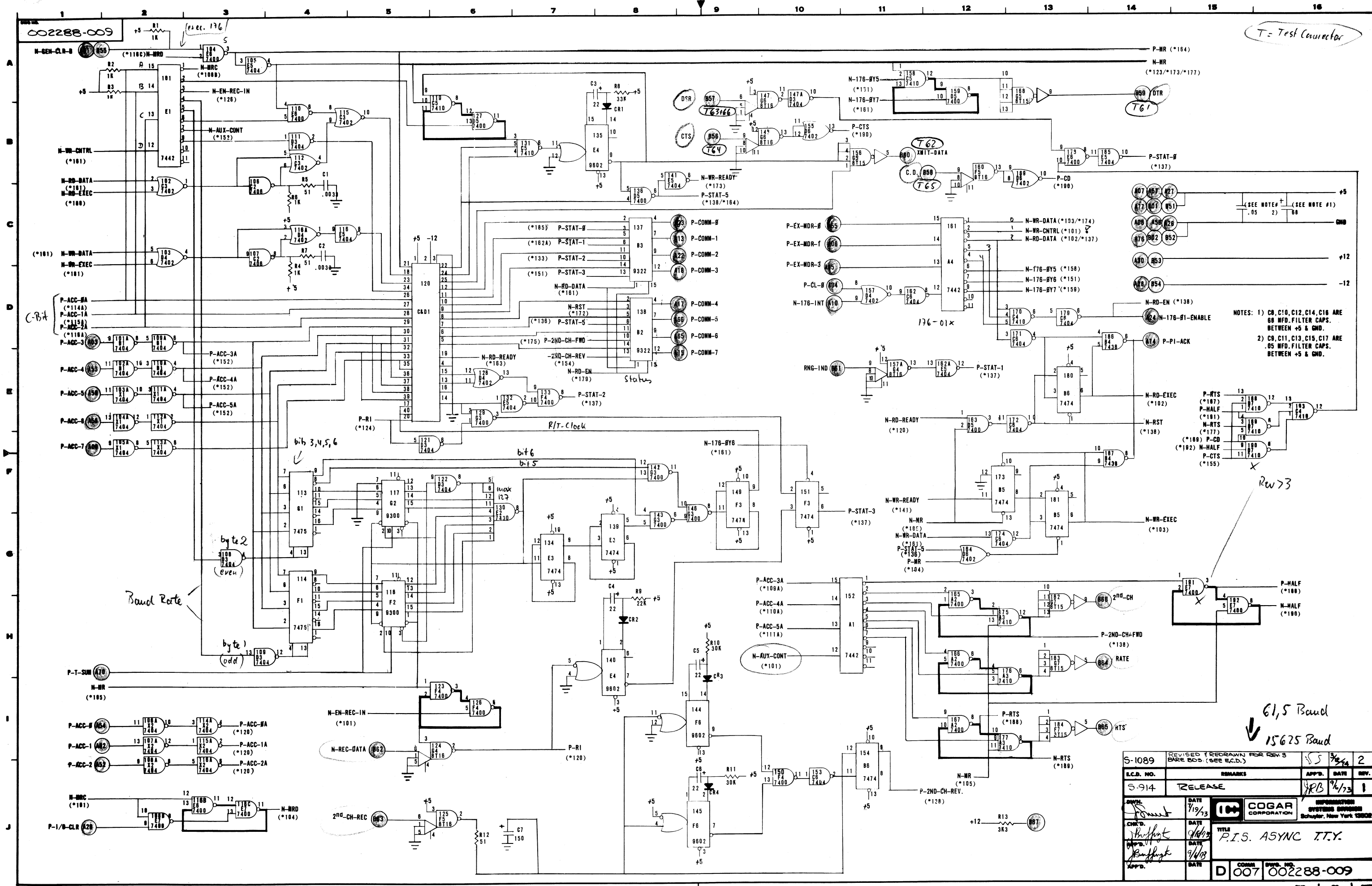
FOR REFERENCE ONLY (NOT A PARTS LIST)

F/N	DESCRIPTION	LOCATION
18	RES. 1K	R1, R2, R3, R4, R6
19	RES. 51 OHM	R5, R7, R12
20	RES. 33K	R8
21	RES. 22K	R9
22	RES. 30K	R10, R11
23	CAP. .0033 MFD	C1, C2
24	CAP. 22 MFD	C3, C4, C5, C6
25	CAP. 150 MFD	C7
26	DIODE 1N914B	CR1, CR2, CR3, CR4
27	CAP. .05 MFD	C9, C11, C13, C15, C17
28	CAP. 68 MFD	C8, C10, C12, C14, C16
29	RES. 3K3	R13

7 Rev 3

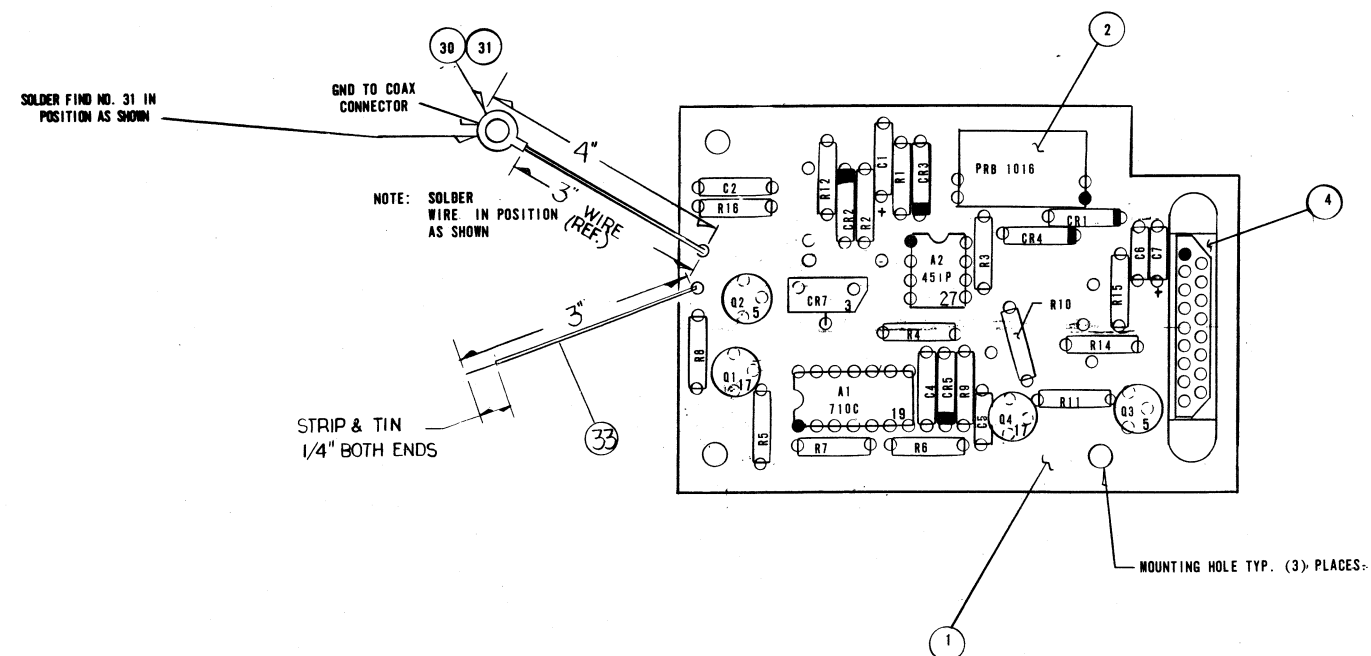
ARTWORK- 040-002271-005
NACH- 040-002273-001
LOGIC- 007-002288-009

S-1089	ADDED I.C.'S D7+E7 FOR REV. 3 ADDED R13 (SEE E.C.D.) BARE CD.		SS	3/12/74	2
E.C.D. NO.	REMARKS		APP'D.	DATE	REV.
S-914	RELEASE		RB	3/1/73	1
OWN. J. Smart		DATE 8/1/73	 COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuyler, New York 13502		
CHK'D. Buffett	DATE 9/18/73	TITLE P.C. ASSY- TTY (ASYNCR)			
APP'D. Buffett	DATE 9/6/73				
APP'D.	DATE	C COMM DWG. NO. 005 002272-003			



S-1089	REVISED (REDRAWN FOR REV. S) BASE BCS. (SEE E.C.D.)		SS	9/14	2
E.C.D. NO.	REMARKS		APP'D.	DATE	REV.
S-914	RELEASE		YRB	9/173	1
DATE 9/19/73	 COGAR CORPORATION		INFORMATION SYSTEMS DIVISION Schuyler, New York 13802		
CHK'D. Buffington	DATE 9/14/73		TITLE P.I.S. ASYNC T.T.Y.		
APP'D. Buffington	DATE 9/14/73				
APP'D.	DATE		COGAR	SWP. NO.	
			D 007	002288-009	

000412-00-7

FOR REFERENCE ONLY
NOT A PARTS LIST

FIND NO.	DESC.	LOCATION
6	RECTIFIER 1N5059	CR3, CR1
7	DIODE 1N5233B	CR2, CR5
8	DIODE 1N4735	CR4
9	CAP. 68MFD 15V	C1, C7
10	CAP. .05 MFD 16V	C2, C4, C5, C6
11	RES 220 OHM	R14, R15
12	RES 51K	R2
13	RES 15K	R1
14	RES 1K	R8, R9, R9, R11, R16
15	RES 150 OHM	R3
16	RES 200 OHM	R4
18	RES 5K1	R5, R10
28	RES 6K8	R7
29	RES 20 OHM	R12

FIND NO's FOR Q1, Q2, Q3, Q4, CR7, PRB106, A1, A2 AND THE CONNECTOR
ARE SHOWN ON THE PICTORIAL SECTION OF THIS DWG.

S-976	UPDATE DWG. REV. LEVEL TO S-1045	P/L REV. ON E.C.D. S-976	Ans	3/1/74	9
S-928	CHG. COAX CABLE DIM. FROM 2.5" ADD WIRE FOR P.I/O. SIGNAL		Re	3/1/73	8
S-717	REVISED FOR REV. 2 BARE BOARDS (SEE REDWOCK)		GR	1/1/72	6
S-564	REMOVE C3 AND ADDED R16 IN ZONE E-G		gm	3/1/71	5
S-496	REVISED & REDRAWN		SS	3/1/71	4
DATE	3/1/71	DATE	3/1/71	DATE	3/1/71
APP'D.	SS	APP'D.	SS	APP'D.	SS
COGAR CORPORATION		COGAR CORPORATION		COGAR CORPORATION	
TITLE	P.C. ASSY. SYSTEMS RESET	TITLE	P.C. ASSY. SYSTEMS RESET	TITLE	P.C. ASSY. SYSTEMS RESET
DWG. NO.	005	DWG. NO.	005	DWG. NO.	005

E ABOVE

DRAWN	RP	%19/73	4
E E30 FROM	RP	%23/73	3
	RP	%14/73	2
RKS	APP'D.	DATE	REV.
E	RP	%8/73	1

COGAR CORPORATION

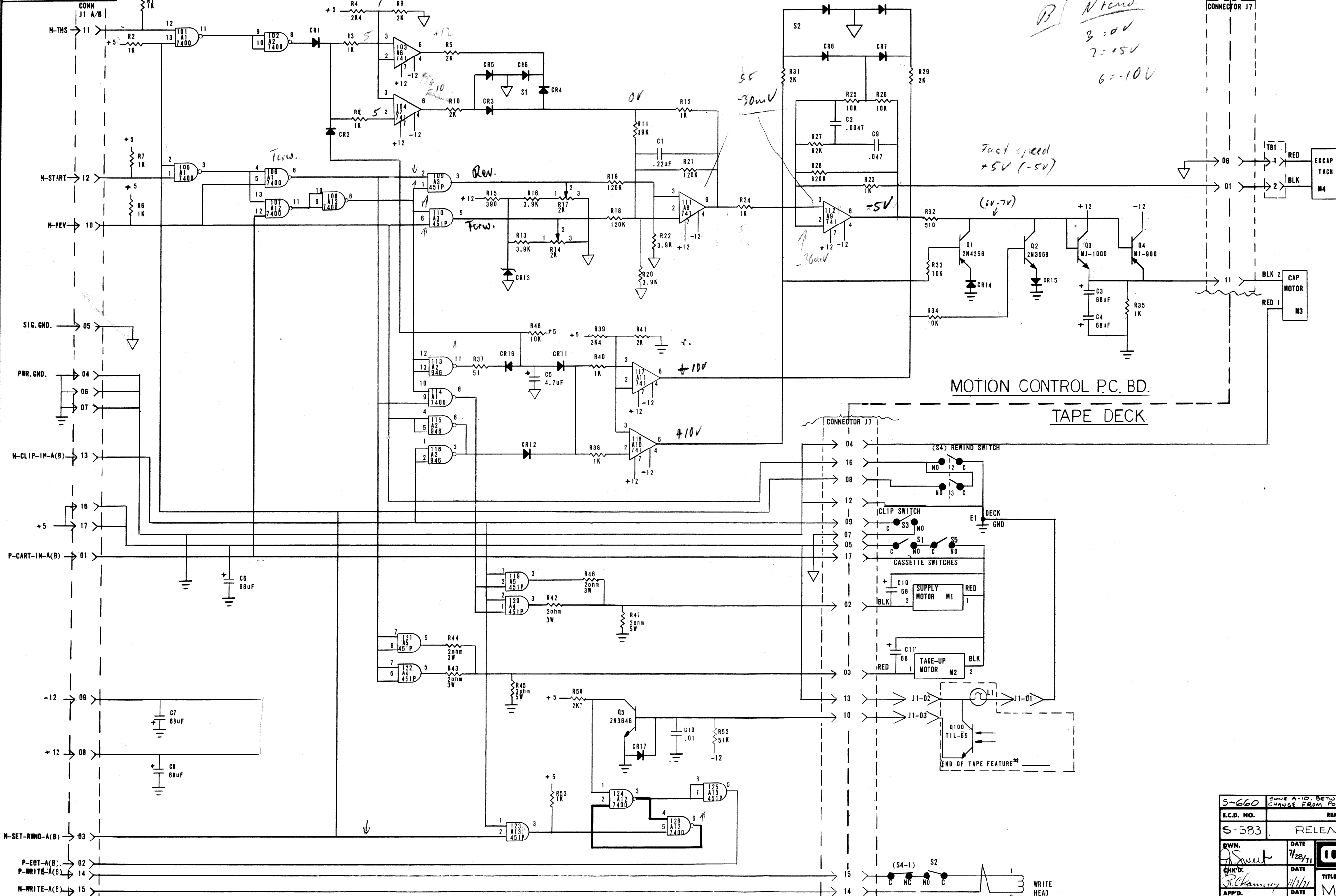
INFORMATION SYSTEMS DIVISION
Schuyler, New York 13802

POWER CONTROL
POWER 10 IPS

007001035-013

INT 1 OF 1 ENDS

000893-00-8



MOTION CONTROL P.C. BD.

TAPE DECK

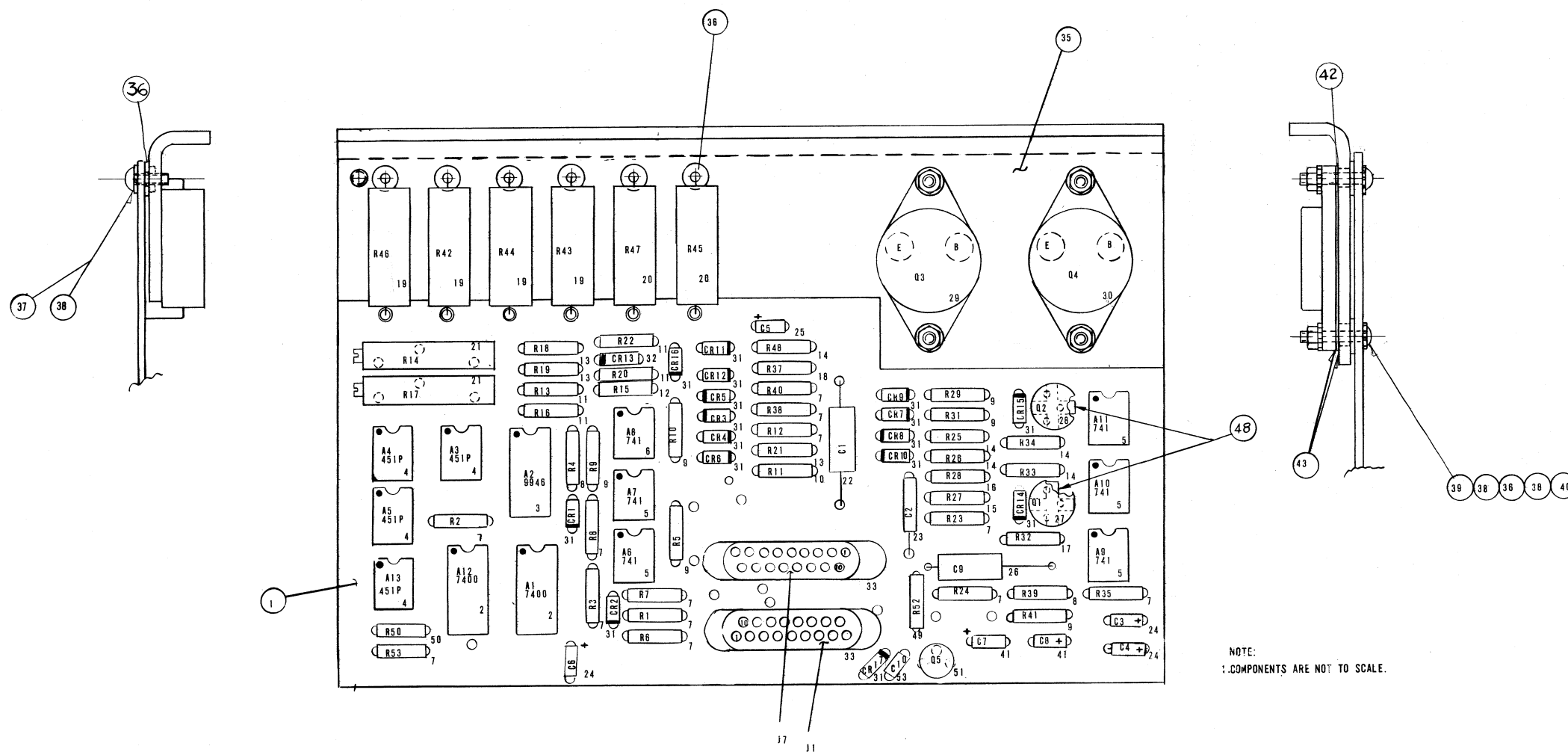
MOTION CONTROL P.C. BD.
TAPE DECK

S-660	EDGE A-10, BETWEEN CR10-CR9 CHANGE FROM POWER GND TO SIG. GND	APP'D.	DATE	REV.
S-583	RELEASE	APP'D.	DATE	REV.
DWN.	DATE	DATE	DATE	DATE
CHK'D.	DATE	DATE	DATE	DATE
APP'D.	DATE	DATE	DATE	DATE
W. REYNOLDS	DATE	DATE	DATE	DATE
APP'D.	DATE	DATE	DATE	DATE
D	COMM	DWG. NO.	007	000893008

000052-00-1

COMPONENT FIND NUMBERS
(FOR REFERENCE ONLY)

COMPONENT	FIND NO.	COMPONENT	FIND NO.
R1	7	C1	22
R2	7	C2	23
R3	7	C3	24
R4	8	C4	24
R5	9	C5	25
R6	7	C6	24
R7	7	C7	41
R8	7	C8	41
R9	9	C9	28
R10	9	CR1	31
R11	10	CR2	31
R12	7	CR3	31
R13	11	CR4	31
R14	21	CR5	31
R15	12	CR6	31
R16	11	CR7	31
R17	21	CR8	31
R18	13	CR9	31
R19	13	CR10	31
R20	11	CR11	31
R21	13	CR12	31
R22	11	CR13	32
R23	7	CR14	31
R24	7	CR15	31
R25	14	CR16	31
R26	14	CR17	31
R27	15	Q5	51
R28	16	C10	53
R29	9		
R31	9		
R32	17		
R33	14		
R34	14		
R35	7		
R37	18		
R38	7		
R39	8		
R40	7		
R41	9		
R42	19		
R43	19		
R44	19		
R45	20		
R46	19		
R47	20		
R48	14		
R50	50		
R52	49		
R53	7		



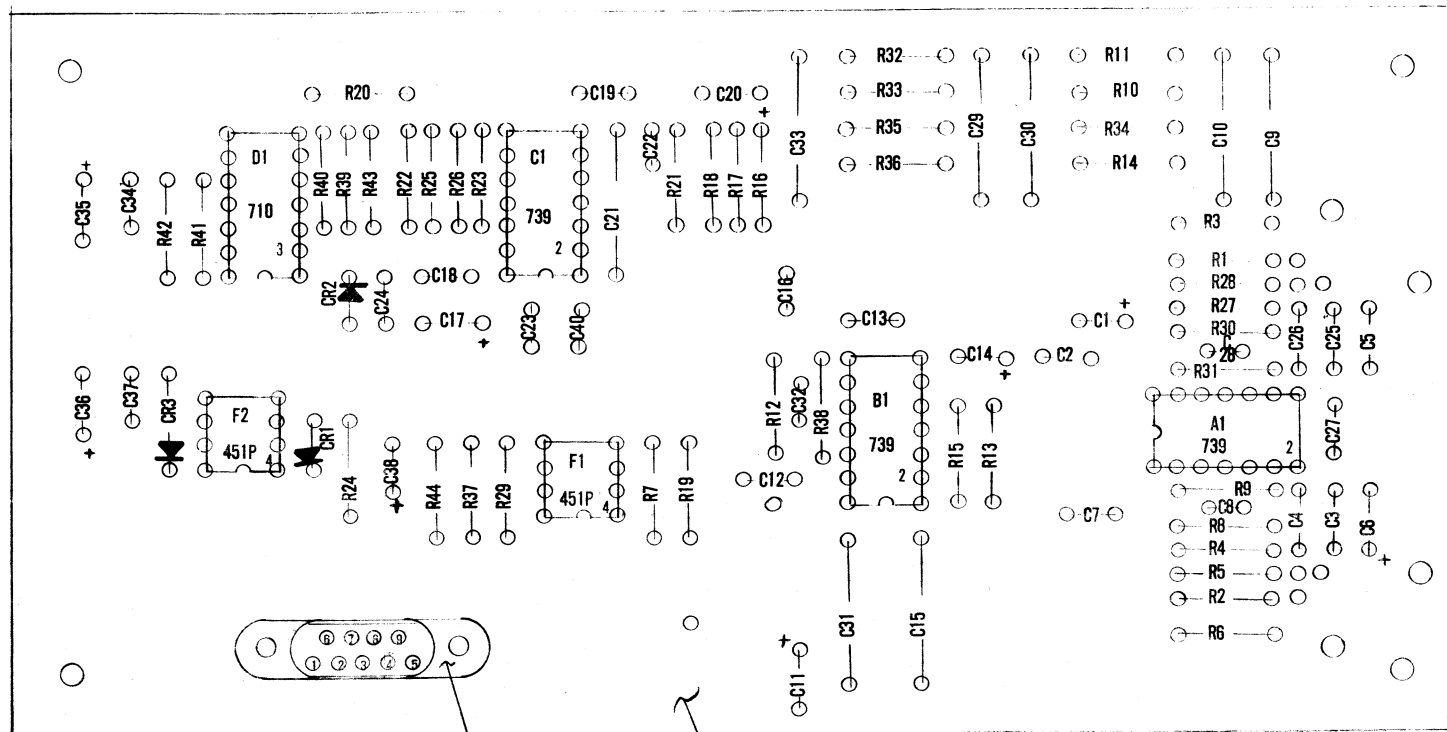
NOTE:
COMPONENTS ARE NOT TO SCALE.

FOR LOGIC SEE DWG. #000893-008

S-670	REVISED (REDESIGNED TO COMPLY WITH REV. 1 BARE BIDS ALL PREVIOUS REMARK OBSOLETE)	5/24/72	12	
S-660	SEE E.C.D. FOR REMARK	5/1/72	11	
S-620	ADDED SELECTED CHIP MOVED R20	1/4/71	10	
S-600	SEE E.C.D.	1/12/71	9	
S-595	SEE E.C.D.	1/14/71	8	
S-581	UPDATE REV. LEVEL ONLY	7/15/71	7	
S-571	CHG C18 C6 TO .22M	8-13-71	6	
S563	ADDED E.O.T	7-24-71	5	
E.C.D. NO.	REMARKS	APPD.	DATE	REV.
S-362	ADDED FIND NO. 48	S.S.	1/3/71	4

DWN. J. Sweet	DATE 5/24/70	 COGAR CORPORATION	INFORMATION SYSTEMS DIVISION Utica, New York 13502	
CHK'D. M. Lynde	DATE 5/1/70		TITLE P.C. CARD Assy - MOTION CONTROL	
APP'D. M. Lynde	DATE 11/4/70			
APP'D. S.S.	DATE 1/6/71			
COMM	DWG. NO.	005 000052-00-1		

DWG. NO.
000051-003



* MACHINING DWG. 040-000407-000
* LOGIC DWG. 007-000321-074

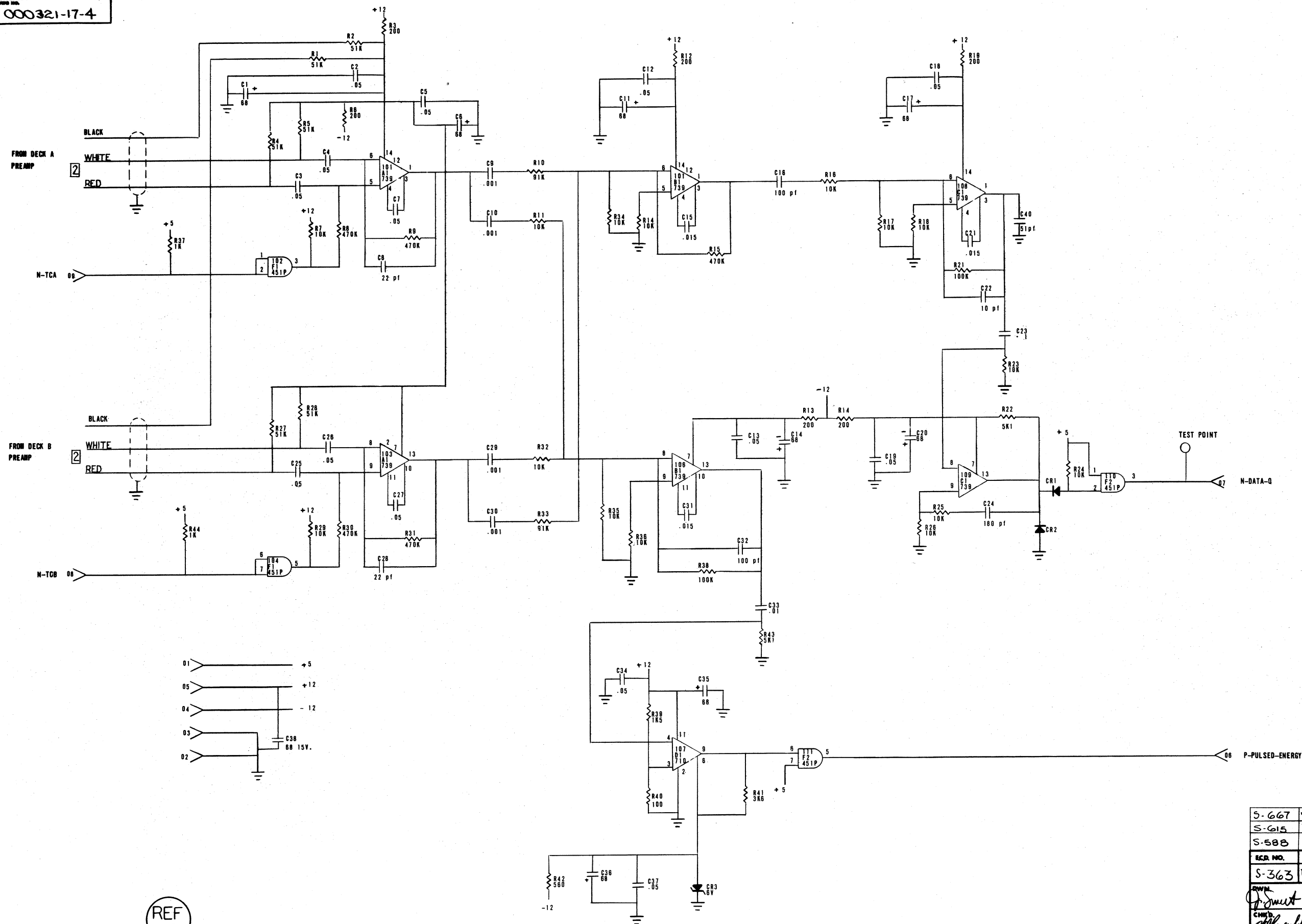
NOT A PARTS LIST (FOR REFERENCE ONLY)

FIND#	DESCRIPTION	LOCATION
5	RES. 51K	R1, R2, R4, R5, R27, R28
6	RES. 200 OHM	R3, R6, R12, R13, R19, R20
7	RES. 10K	R7, R11, R14, R16, R17, R18, R23, R24, R25, R26, R29, R32, R34, R35, R36
8	RES. 470K 1/4 W. 5%	R8, R9, R15, R30, R31
9	RES. 91K	R10, R33
10	RES. 1K	R37, R44
11	RES. 100K	R21, R38
12	RES. 5K1	R22, R43
13	RES. 1K5	R39
14	RES. 100 OHM	R40
15	RES. 3K6	R41
16	RES. 560 OHM	R42
17	CAP. 68 MFD	C1, C6, C11, C14, C17, C20, C36
18	CAP. .05 MFD	C2, C3, C4, C5, C7, C12, C13, C18, C19, C25, C26, C27, C34, C37
19	CAP. .015 MFD	C15, C21, C31
20	CAP. 22 Pf	C8, C28
21	CAP. .001 MFD	C9, C10, C29, C30
23	CAP. .01 MFD	C33
24	CAP. 100 Pf	C16, C32
25	CAP. 10 Pf	C22
26	CAP. 180 Pf	C24
27	DIODE 1N914B	CR1, CR2
28	DIODE 1N5233	CR3
29	CAP. 51 Pf	C40
35	CAP. 68 MFD	C38, C35
36	CAP. .1 MFD	C23

S-1045	ECD S976 PL Rev	4/11/72	17	
S-760	LAYOUT FOR REV. 1 BARE BDS. REVISED & REDRAWN FROM D TO C SIZE	RJP	12/18/72 15	
S-667	CHG. VALUE OF R40 FROM 51 OHM TO 100	J.C.	5/23/72 14	
S-615	CHG. C23 FROM F/N 25 TO F/N 36	W.R.	12/22/71 13	
S-612	REMOVE PREAMP CONNECTION SEE 001109	R.E.C.	12/10/71 12	
S-568	ADD C38 (SEE REWORK INSTRUCTIONS)	J.M.	10/4/71 11	
E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
S-549	ADDED CAP. DETAIL ZONE B5	J.M.	4/12/71	1
BWN.	DATE 7/25/72	 COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuyler, New York 13502		
CHK'D.	DATE 12/14/72			
APP'D.	DATE			
APP'D.	DATE			
TITLE P.C. ASSY - TAPE AMP.		COMM C	DWG. NO. 005 000051-003	

SHT. OF SHTS

000321-17-4



REF
17

5-667	ZONE I-B CHG. R40 FROM 510HZ TO 1002	<i>W</i>	<i>5/3</i>	6
5-615	CHG. C23 FROM .01 TO .1	<i>W</i>	<i>1/2/71</i>	5
5-588	ADDED C38, CHG. R40 FROM 100 OHM TO 510 OHM	<i>W</i>	<i>10/1/71</i>	4
SCR. NO.	REMARKS	APPR.	DATE	REV.
5-363	REMOVED C38, C39, C41	<i>W</i>	<i>1/24/71</i>	3

OWNER
J. Smith

CHG'D BY
Wileyville

APPR'D BY
Wileyville

APPROVED BY
J. Smith

DATE
10/4/70

DATE
11/4/70

DATE
11/7/70

DATE
11/11/71

COGAR CORPORATION

INFORMATION SYSTEMS DIVISION
Union, New York 10982

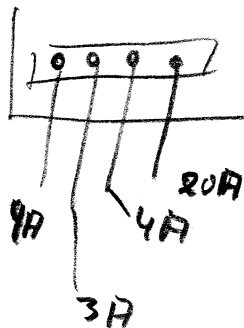
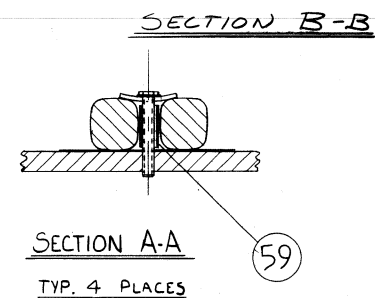
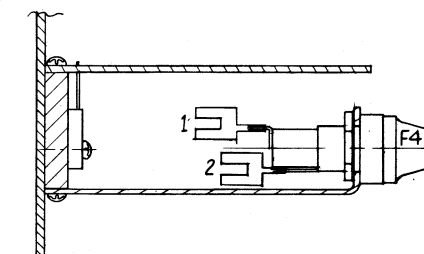
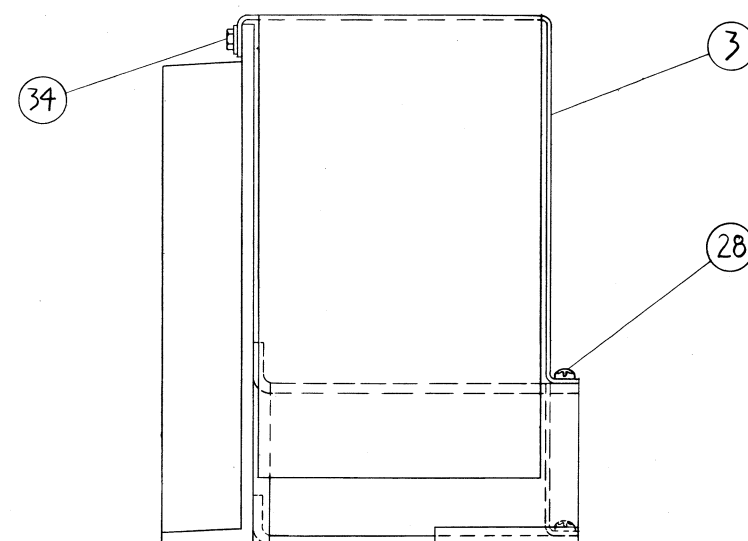
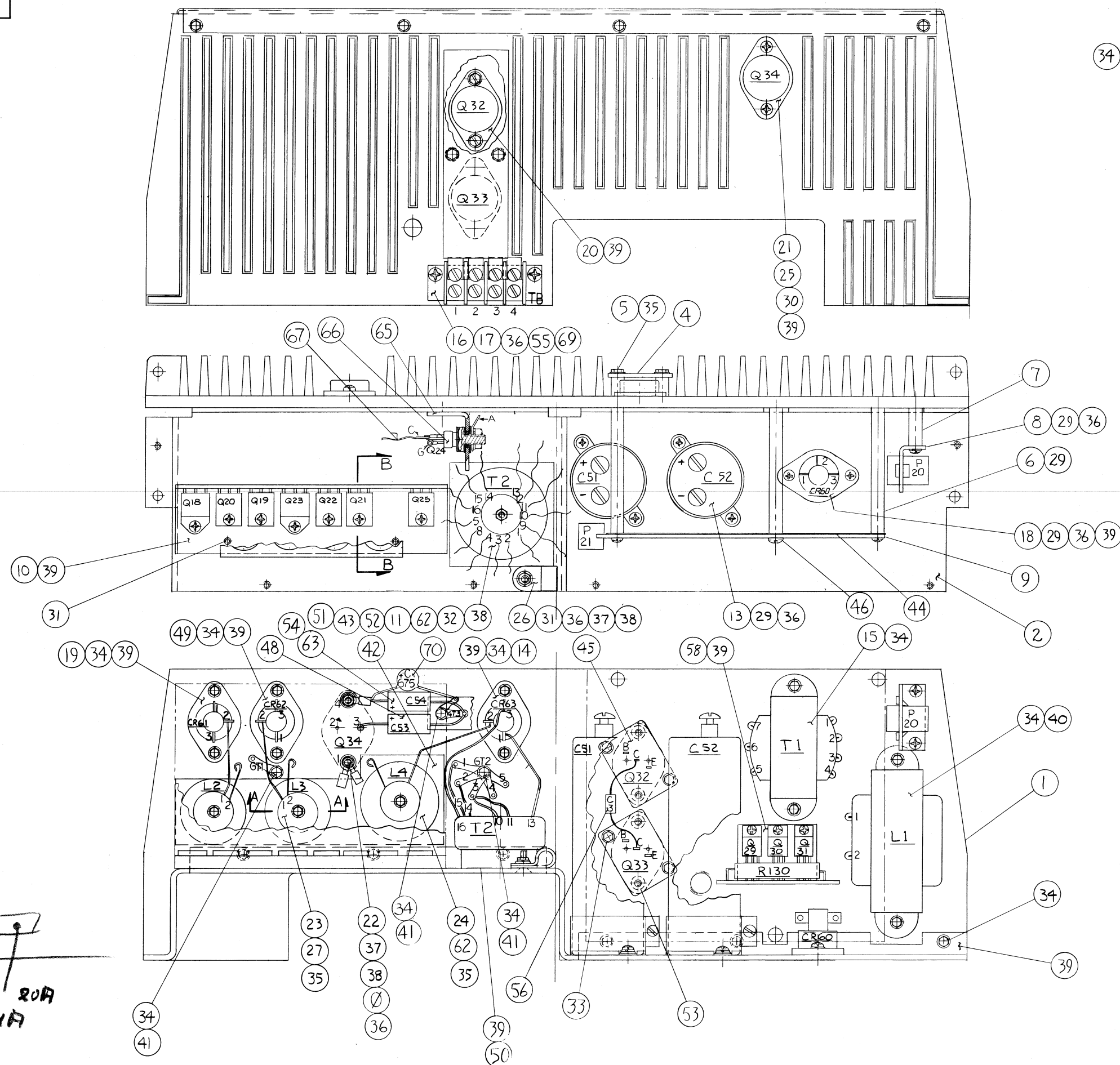
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COGN
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COGN NO.
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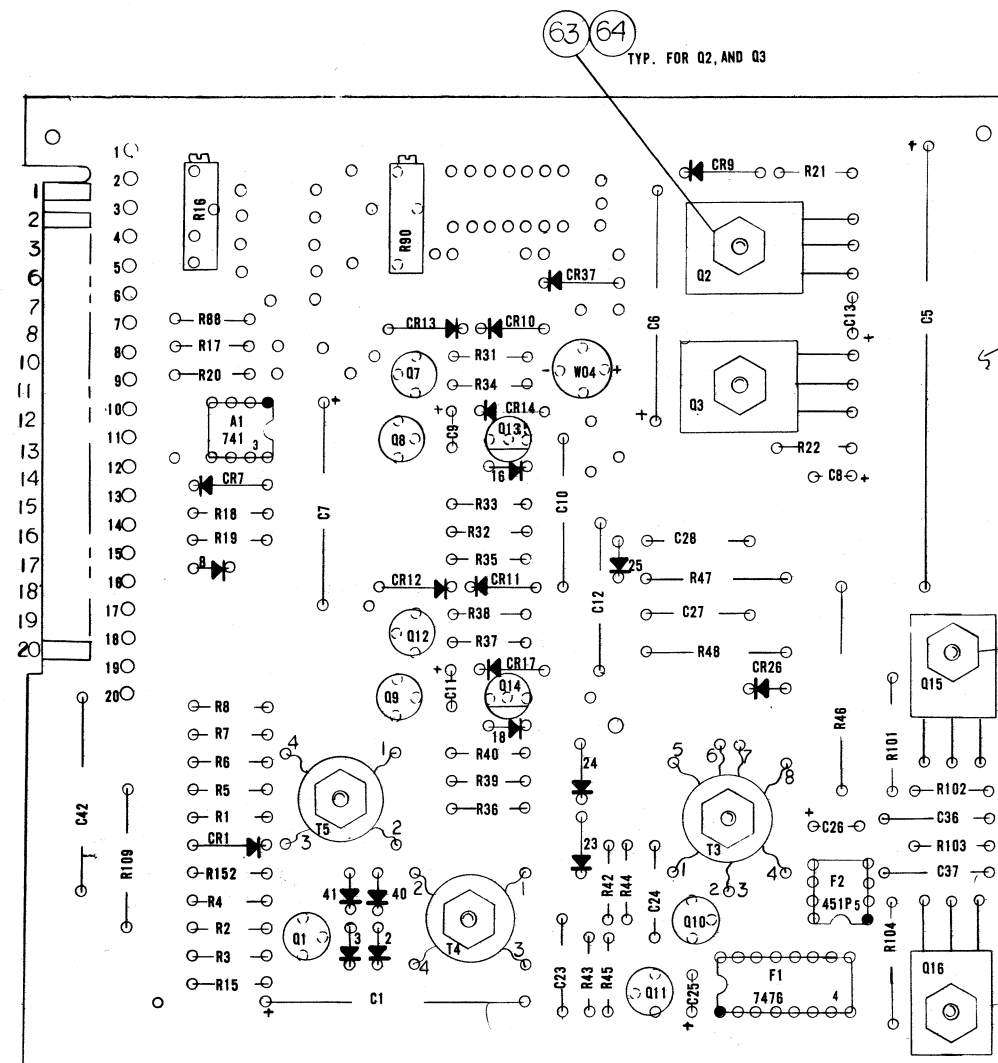
SERIAL NO.
000321-17-4

001062-009



E.C.D. NO.	REMARKS	APP'D.	DATE	REV.
5-628	RELEASE		1/18/72	1
DWN. Printer	DATE 1/12/71		INFORMATION SYSTEMS DIVISION Schuyler, New York 13502	
CHK'D. [Signature]	DATE 1/21/72		TITLE ASSEMBLY - POWER SUPPLY	
APP'D.	DATE	D	COMM	DWG. NO. 003 001062-009

001053-008

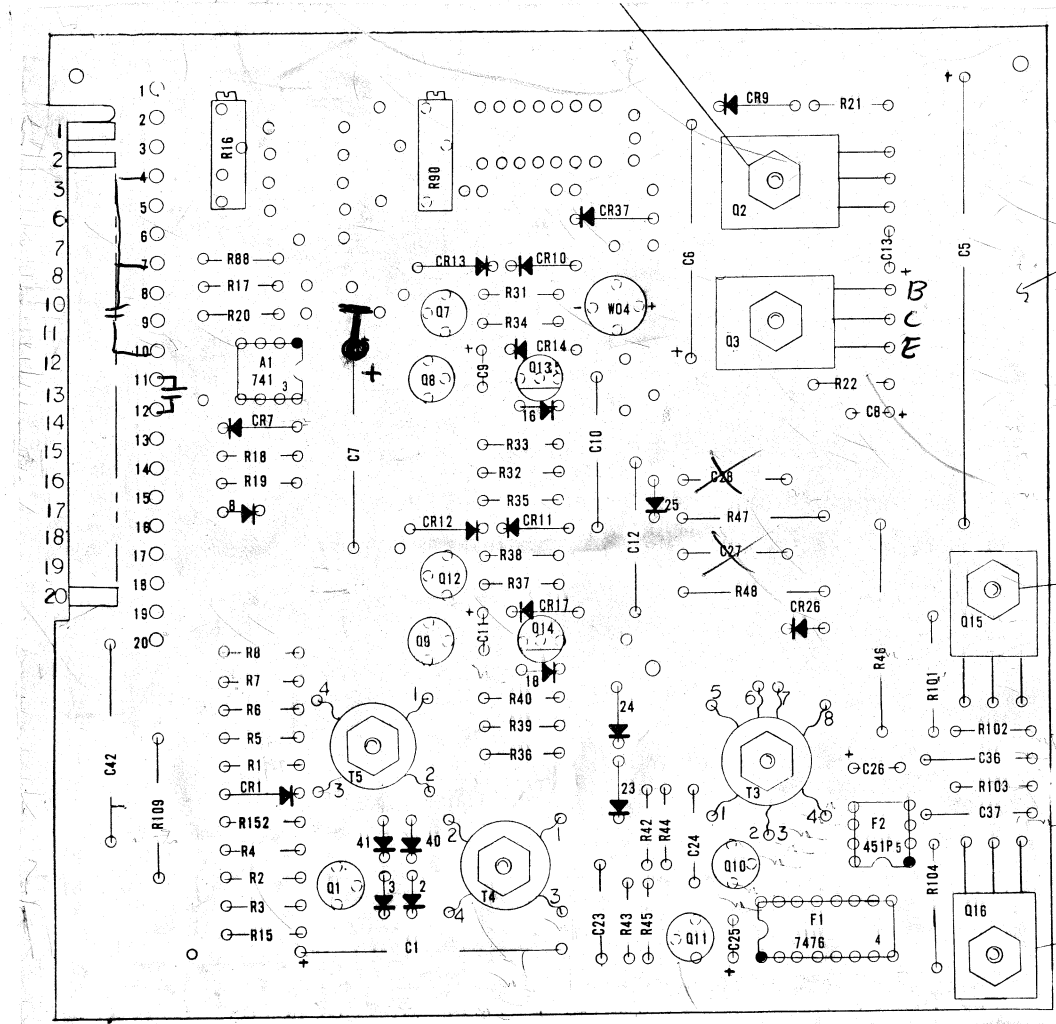
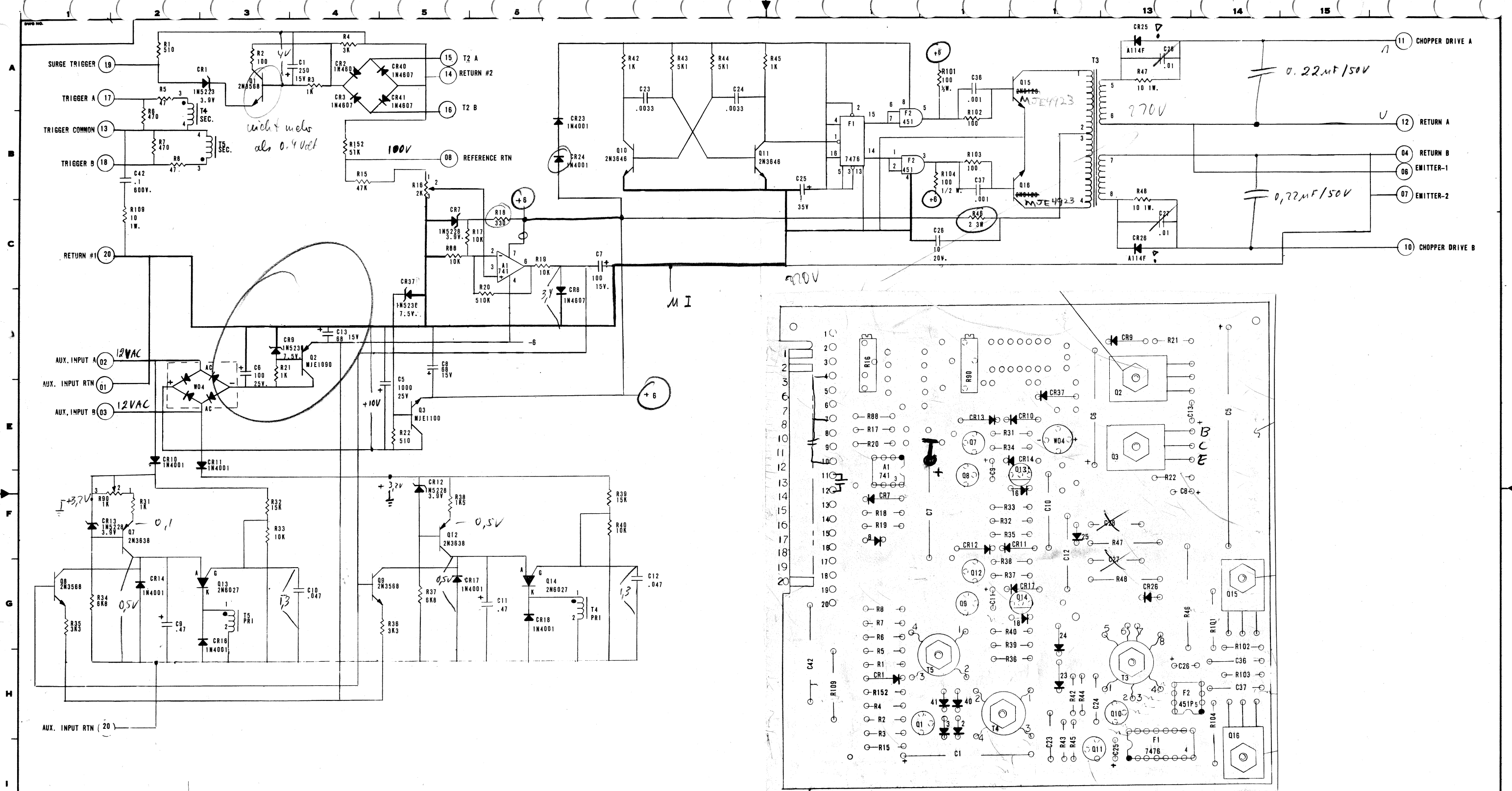


NOTES: 1) FIND NUMBERS FOR EACH IC ARE LOCATED ON THE IC IN THE LOWER RIGHT HAND SIDE.
2) ALL OTHER FIND NUMBERS ARE SHOWN ON THE LIST AT THE RIGHT.

FOR REFERENCE ONLY NOT A PARTS LIST		
FIND#	DESCRIPTION	LOCATION
6	TRANS. 2N3646	Q10, Q11
7	TRANS. 2N6027	Q13, Q14
8	TRANS. 2N3638	Q7, Q12
9	TRANS. MJE1100	Q3
10	TRANS. MJE1090	Q2
11	TRANS. 2N3568	Q1, Q8, Q9
12	DIODE A114F	CR25, CR26
13	RECTIFIER BRIDGE	W04
14	DIODE 1N4001	CR10, CR11, CR14, CR17, CR23, CR24, CR16, CR18
15	DIODE 1N4607	CR2, CR3, CR8, CR40, CR41
16	DIODE 1N5236	CR9, CR37
18	DIODE 1N5228	CR1, CR7, CR12, CR13
19	DIODE 1N4933	CR43, CR44
20	TORROID TRANSFORMER	T4, T5, T3
21	TORROID TRANSFORMER	T3
22	CAP. .001 MFD	C36, C37
23	CAP. .0033 MFD	C23, C24
24	CAP. 1 MFD 35V	C25
25	CAP. 10 MFD 20V	C28
26	CAP. .47 MFD	C9, C11
27	CAP. .047 MFD 80V	C10, C12
28	CAP. 1000 MFD 25V	C5
29	CAP. 100 MFD 25V	C6
30	CAP. 68 MFD 15V	C8, C13
31	CAP. 100 MFD 15V	C7
32	CAP. .01 MFD 80V	C27, C28
33	CAP. .1 MFD 800V	C42
34	CAP. 250 MFD 15V	C1
35	RES. 15K	R32, R39
36	RES. 1K5	R38
37	RES. 10 OHM 1 WATT	R47, R48, R109
38	RES. 2 OHM 3 WATT	R46
39	RES. 2K POT	R16
40	RES. 1K POT	R80
41		
42	RES. 510K	R20
43	RES. 10K	R17, R19, R33, R40, R88
44	RES. 47K	R15
45	RES. 330 OHM	R18
46	RES. 3K	R4, R14
47	RES. 5K1	R43, R44
49	RES. 47 OHM	R5, R8
50	RES. 470 OHM	R6, R7
51	RES. 510 OHM	R1, R22
52	RES. 3K3	R35, R36
53	RES. 6K8	R34, R37
54	RES. 1K	R21, R31, R42, R45, R3
55	RES. 100 OHM 1/2 WATT	R101, R104
56	RES. 100 OHM	R2, R102, R103
57	TRANS. MJE4923	Q15, Q16
66	RES. 51K	R152

CHANGE TO TYPE
MJE 4923

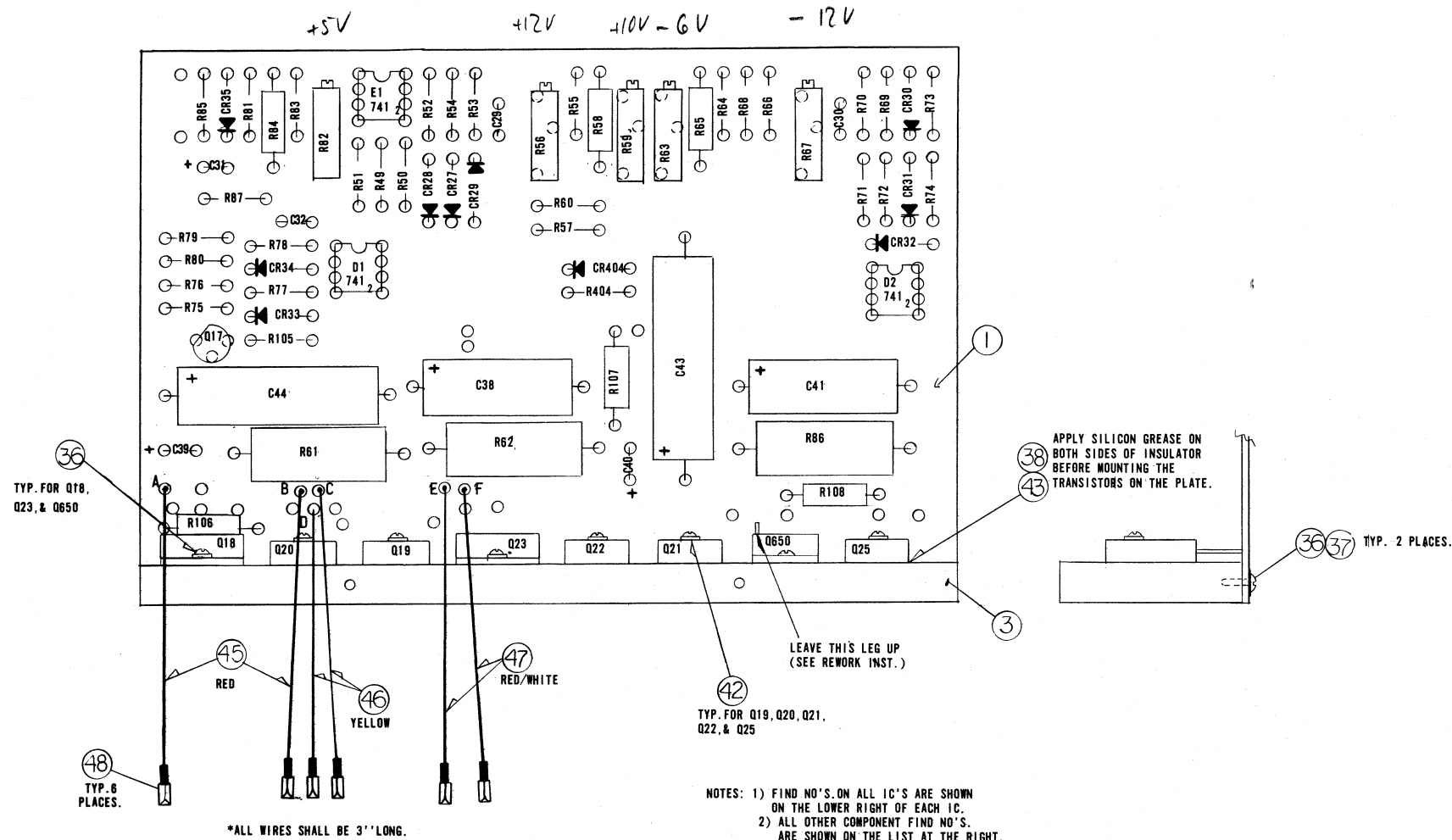
S-729	CHG. Q15, Q16 FROM 2N6123 TO MJE 4923	S.W.S.	1/4/72	4
S-703	Zone E-9 CHG From F/W 64765	S.W.S.	9/23/70	3
ECB. NO.	REMARKS	APP'D.	DATE	REV.
S-628	RELEASE	RT	3/14/72	1
DATE	DATE	COGAR CORPORATION SYSTEMS DIVISION Schenectady, New York 12302		
DATE	DATE	TITLE PC ASSY-POWER SUPPLY PRIMARY		
DATE	DATE	COMM D 005 001053-008		



CR 12-13 = 1,2V

S-720		CHG. ON SHIT #2		DATE 12/3/72	
S-628		RELEASE		DATE 3/16/72	
CHK'D.	DATE	DATE	DATE	DATE	DATE
APP'D.	DATE	DATE	DATE	DATE	DATE
TITLE POWER SUPPLY-PRIMARY		COMM D			
DWG. NO. 007		000896 001			

A
B
C
D
E
F
G
H
I
J



FIND NO.	DESCRIPTION	LOCATION
4	TRANS. MJE1100	Q19, Q20, Q25
5	TRANS. MJE1080	Q21, Q22
6	TRANS. 2N3568	Q17
7	TRANS. TIP 36	Q18
8	TRANS. TIP 35	Q23
10	DIODE 1N5241	CR36
11	DIODE 1N4735	CR28, CR31, CR33
12	DIODE 1N5231	CR35
13	DIODE 1N5240	CR27, CR32
14	CAP. 250 MFD 15V.	C43, C44
15	CAP. 100 MFD 25V.	C38, C41
16	CAP. .1 MFD 50V.	C29, C30, C32
17	CAP. 250 MFD 6V.	C31
18	RES. 1K POT	R56, R59, R63, R67, R82
19	RES. 330 OHM	R105
20	RES. 150 OHM	R50, R74
21	RES. 2K	R49, R73
22	RES. 470 OHM	R53, R70
23	RES. 510 OHM	R64
24	RES. 2 OHM 5 WATT	R61, R62
25	RES. 510 OHM 1/2 W.	R58, R65
26	RES. 2K4	R76
27	RES. 1K6	R77
28	RES. 6K8	R79
29	RES. 1K	R51, R54, R55, R57, R60, R66, R68, R69, R72, R75, R80, R81, R83
30	RES. 100 OHM 1/2 W.	R84
31	RES. 200 OHM	R85, R850
32	RES. 1 OHM 5 WATT	R86
33	RES. 100 OHM	R87, R404, R651
34	RES. 10 OHM 1/2 W.	R106, R107
35	RES. 1 OHM 1/2 W.	R108
39	RES. 82K	R52, R71, R78
40	DIODE 1N5228	CR29, CR30, CR34
41	CAP. 68 MFD 15V.	C39, C40
50	DIODE 1N4001	CR404
52	CAP. 47 MFD	C650
53	TRANS. S4016L	Q650

APPLY SILICON GREASE ON BOTH SIDES OF INSULATOR BEFORE MOUNTING THE TRANSISTORS ON THE PLATE.

36 37 TYP. 2 PLACES.

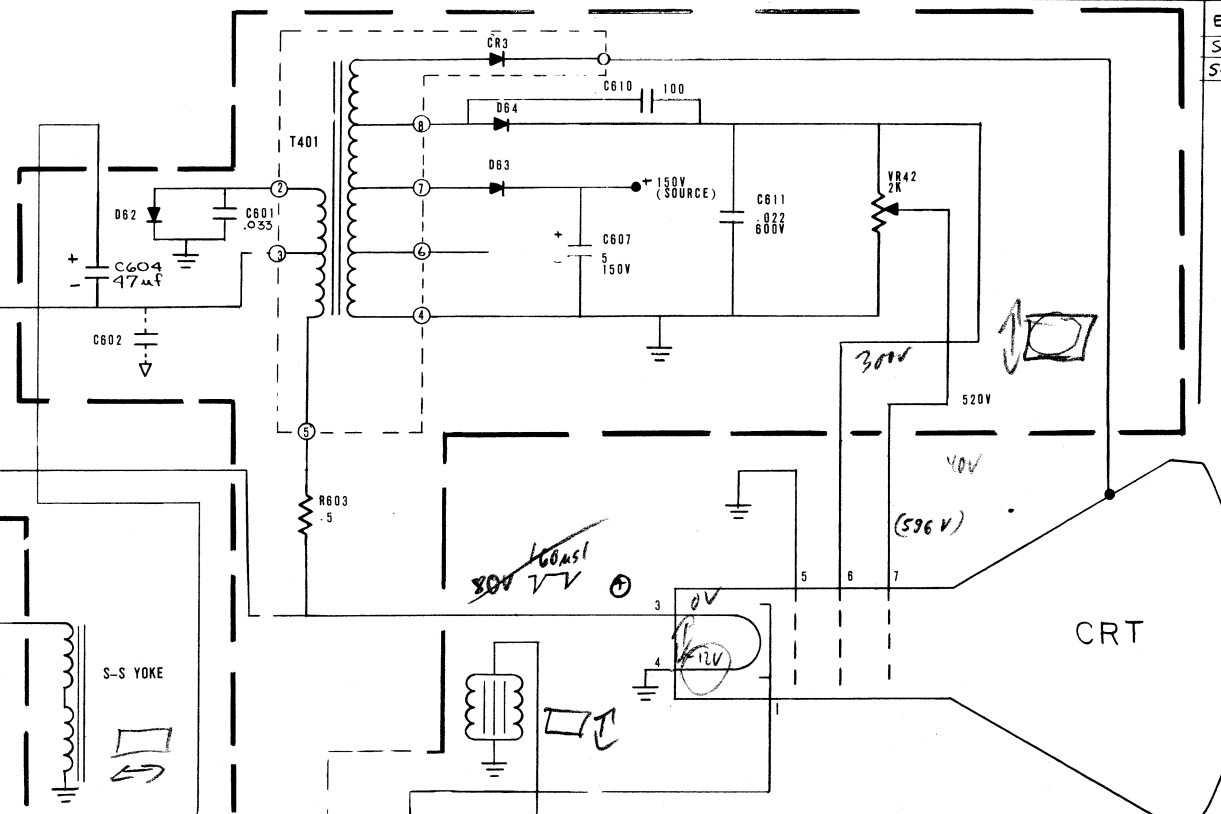
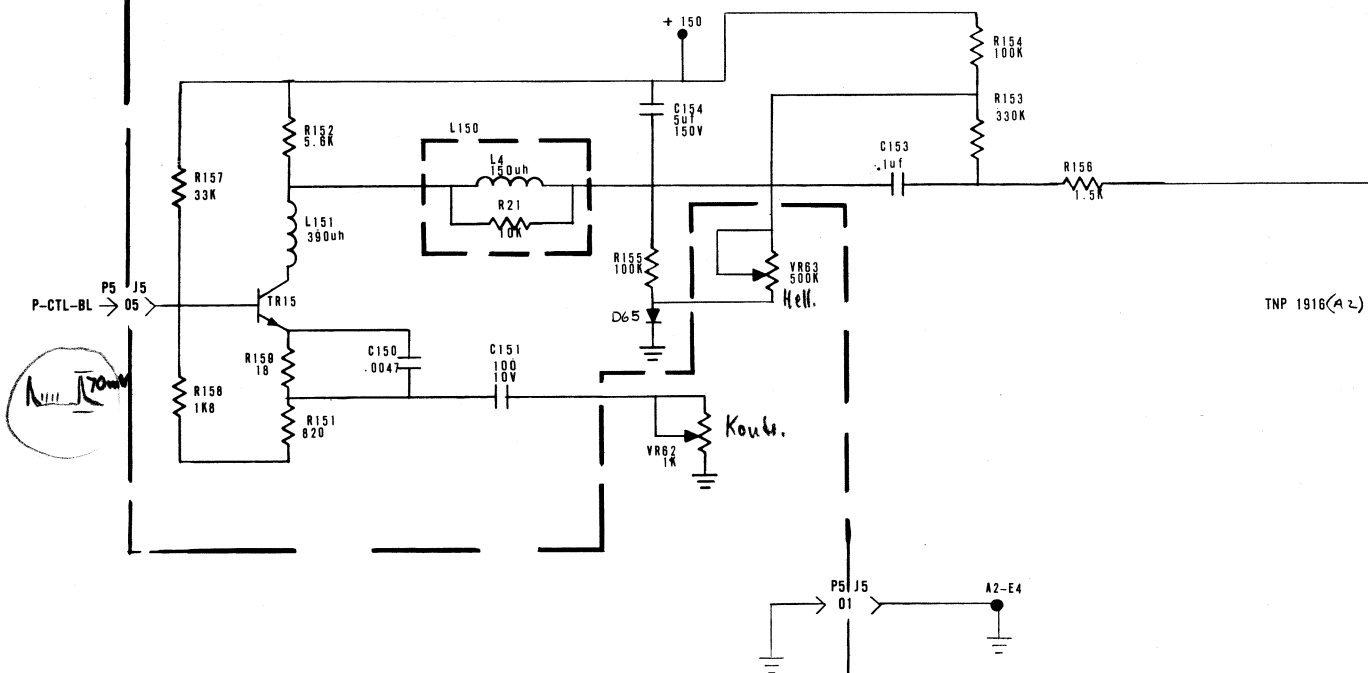
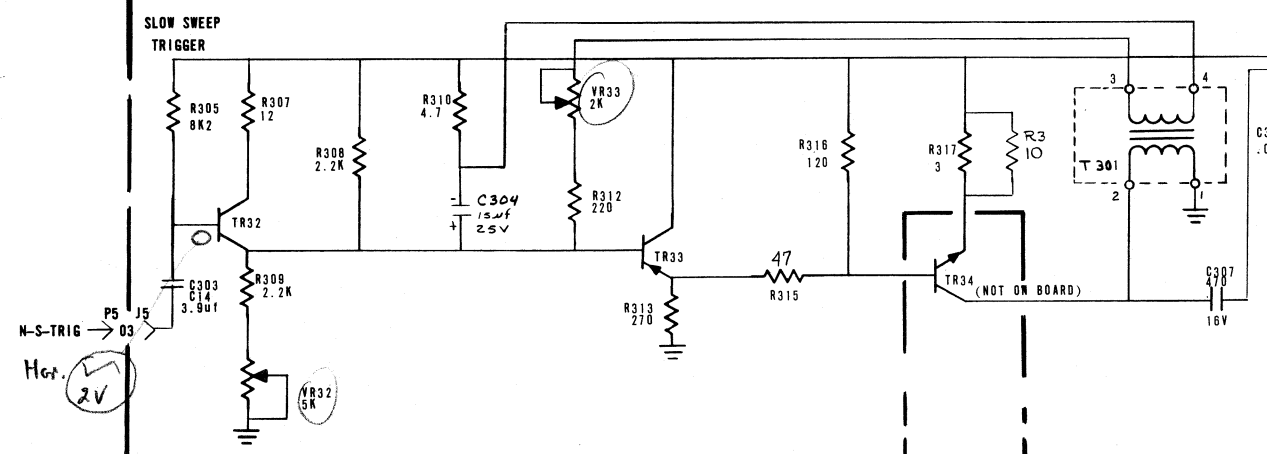
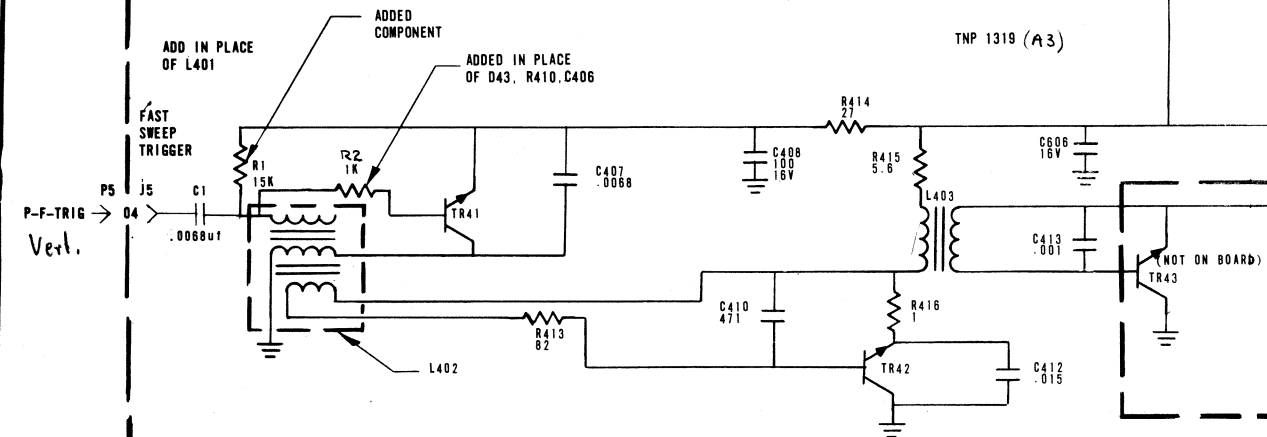
NOTES: 1) FIND NO'S. ON ALL IC'S ARE SHOWN ON THE LOWER RIGHT OF EACH IC.
2) ALL OTHER COMPONENT FIND NO'S. ARE SHOWN ON THE LIST AT THE RIGHT.

EC.D. NO.	REMARKS	APP'D.	DATE	REV.
S-628	RELEASE (SEE REWORK)	10	3/4/72	1
OWN.	DATE	DATE	COGAR CORPORATION INFORMATION SYSTEMS DIVISION Schuyler, New York 13502	
CHK'D.	DATE	DATE	TITLE	
APP'D.	DATE	DATE	P.C. ASS'Y POWER SUPPLY SECONDARY	
APP'D.	DATE	DATE	COMM	DWG. NO.
			D 005	001056-001

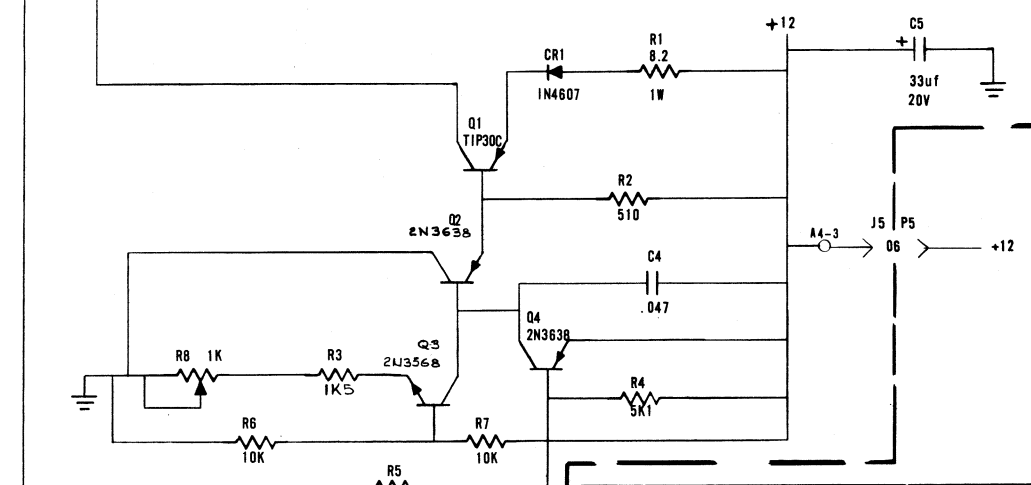
000895-003

-12V → J5
P5 J5

TNP 1319 (A3)

4-B LINE LINEARITY BOARD (040-000816-009)
ASS'Y - 005-000817-007 (A4)

NOTE: THIS BOARD IS GROUND TO CRT CHASSIS.

CRT DISPLAY SWEEP &
VIDEO CIRCUITRY

rel 1 / 1 blank

E.C.D	REMARKS	APP'D	DATE	REV
S-575	RELEASE	REC	9/8/71	1
S-582	CHG. VALUE OF R3 FROM 2K TO 1K5	REC	9/11/71	2

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