

APPENDIX

2

APPENDIX 2

DRAWINGS

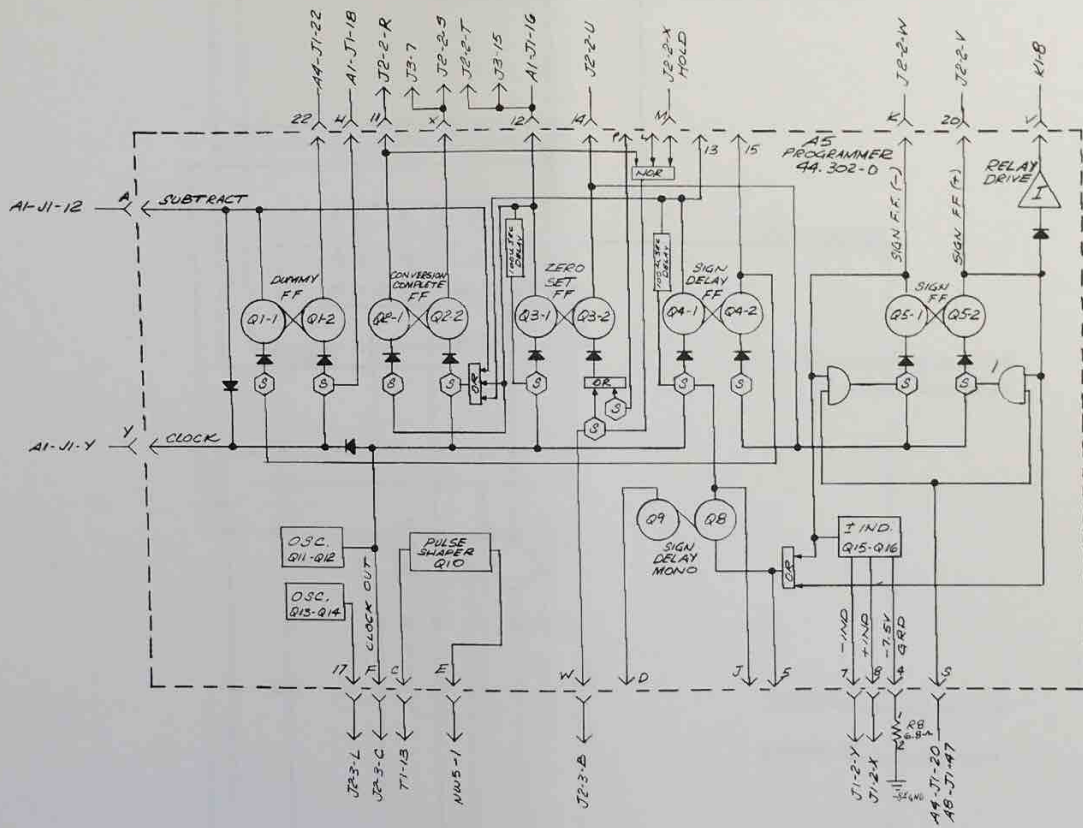
DIGITAL VOLTMETER, MODEL 26.268

This appendix contains necessary schematics and wiring diagrams of equipment described in this manual. To facilitate locating a particular sheet, an index is provided that lists the model number of each unit or component, the type of drawings, and the associated drawing number. The drawings are bound into the manual in the order listed under the index Drawing Number column.

EAI drawings are prepared in accordance with standard drafting practices for electro-mechanical and electronic equipment. All symbols are in accordance with current government standards.

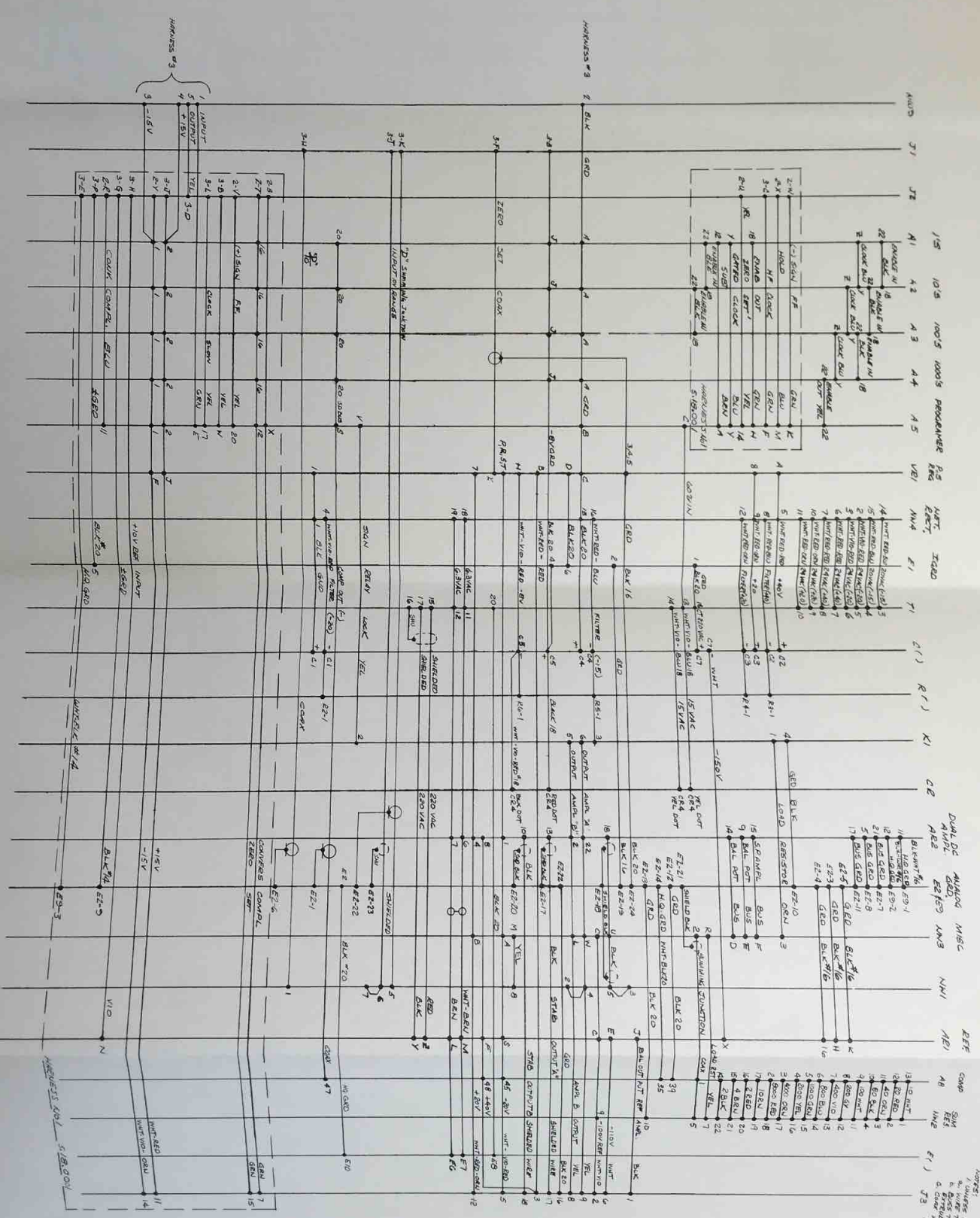
INDEX

<u>Unit or Component</u>	<u>Type of Drawing</u>	<u>Drawing Number</u>
26.268 Digital Voltmeter	Schematic	D026 268 0S (Sheets 1 through 4)
	Wiring	D026 268 0W (Sheets 1 through 5)
6.463-6 Dual DC Amplifier	Schematic	D006 463 0S
6.736-1 Reference Amplifier	Schematic	D006 736 0S
12.937-5 Miscellaneous Network	Schematic	C012 937 0S
12.1106 Rectifier Network	Schematic	B012 1106 0S
12.1654 Conversion Delay Network	Schematic	B00 012 1654 0S
26.116-1 Summing Resistor Network	Schematic	C026 116 0S
26.240 Comparator Amplifier	Schematic	B026 240 0S
26.242 Comparator and Diode Gate Network	Schematic	C026 242 0S
	Wiring	B026 242 0W
38.032 and 38.032-1 BCD Counter	Schematic	D038 032 0S
43.141 Power Supply Regulator	Schematic	D043 141 0S
44.302-1 Programmer	Schematic	D044 302 0S



UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN PF
 RESISTANCE IS IN OHMS
 TOLERANCE OF: 0.1% - 0.25% 1% - 0.5%
 0.5% - 0.25% 0.5% - 0.25% 1% - 0.5%
 * FULL OF MATERIAL SUPPLIED

ELECTRONIC ASSOCIATES, INC. LONG BRANCH, NEW JERSEY	
SHT. NO.	
SIZE	
REV. NO.	
PROJECT	19159 C026 sub 05
SHEET # OF SHEETS	

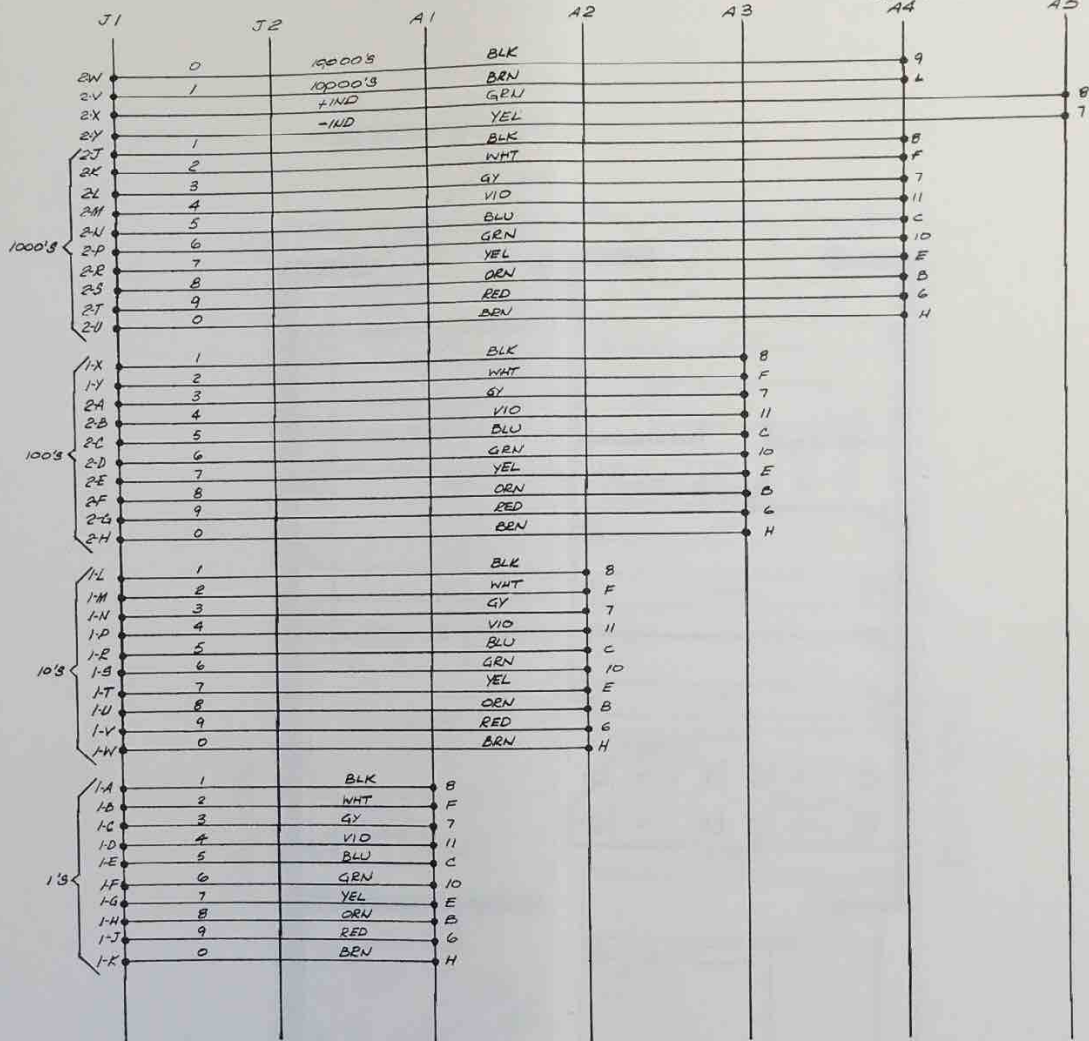


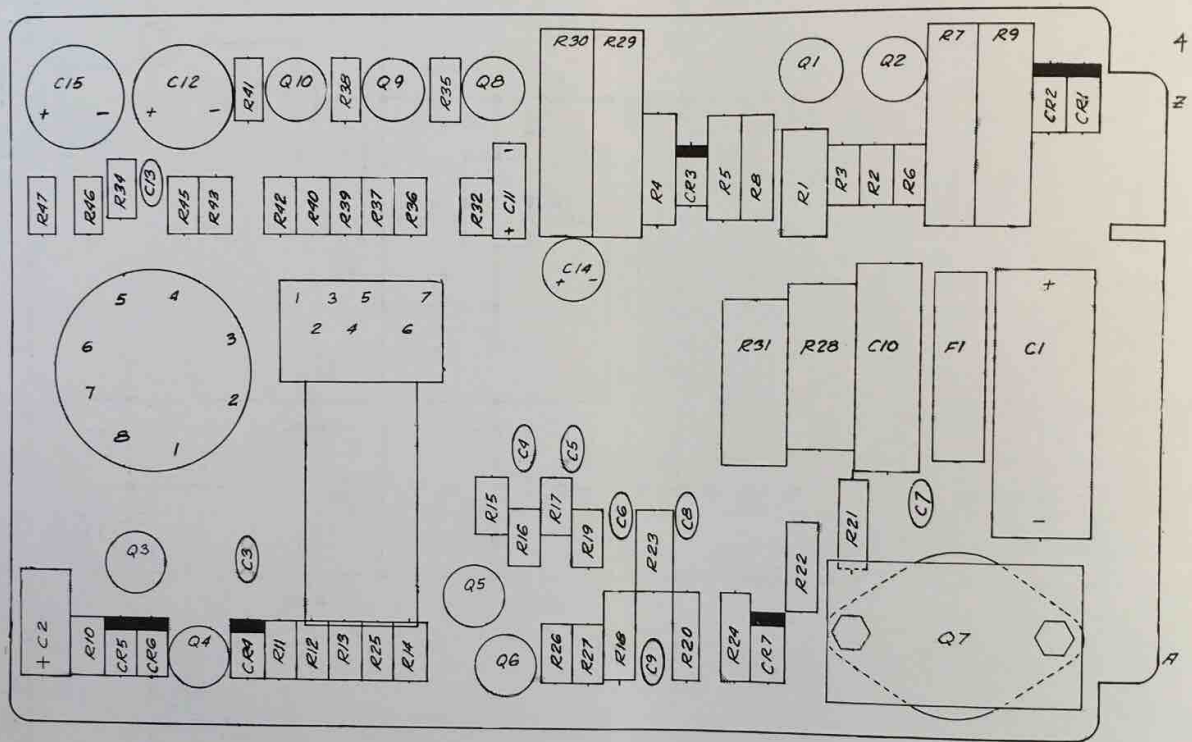
HARNESSES #3
 HARNESSES #1
 HARNESSES #2
 HARNESSES #4
 HARNESSES #5
 HARNESSES #6
 HARNESSES #7
 HARNESSES #8
 HARNESSES #9
 HARNESSES #10
 HARNESSES #11
 HARNESSES #12
 HARNESSES #13
 HARNESSES #14
 HARNESSES #15

REV. NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DATE																				
BY																				
CHKD																				
APP'D																				
DATE																				

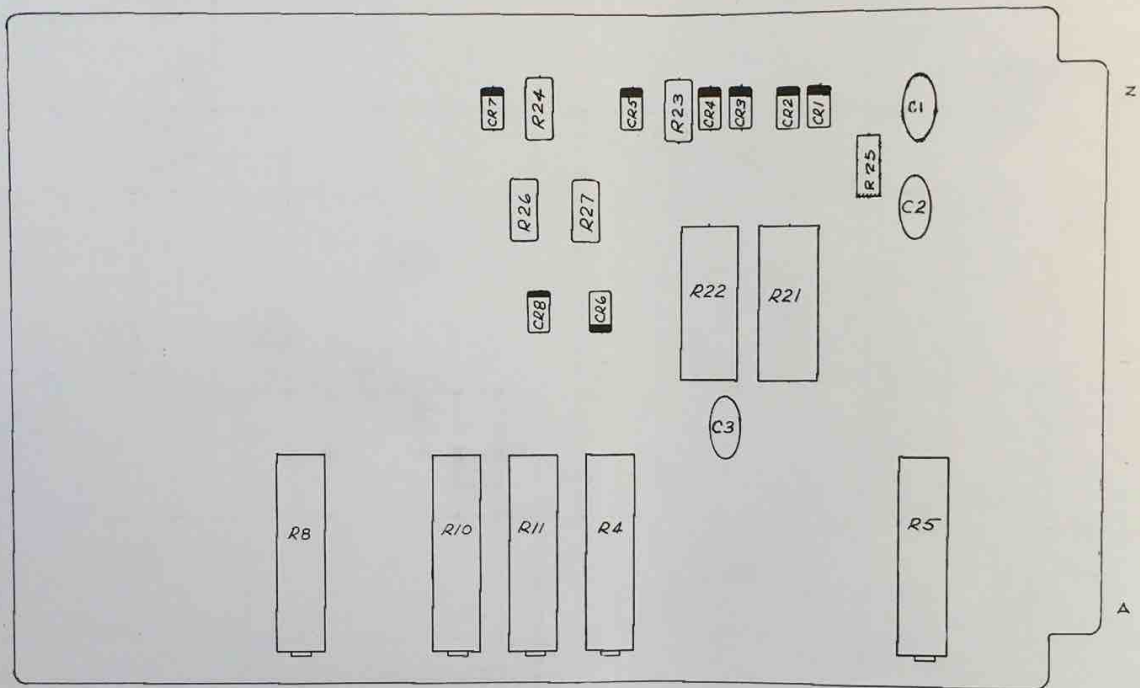
ELECTRONIC ASSOCIATES, INC.
 7214 V
 1000 DOWNE CUB DR
 WILSON, N.C. 27157

NOTE: UNLESS OTHERWISE SPECIFIED
ALL WIRES ARE IN WIRELESS NO. 5, 18, 002

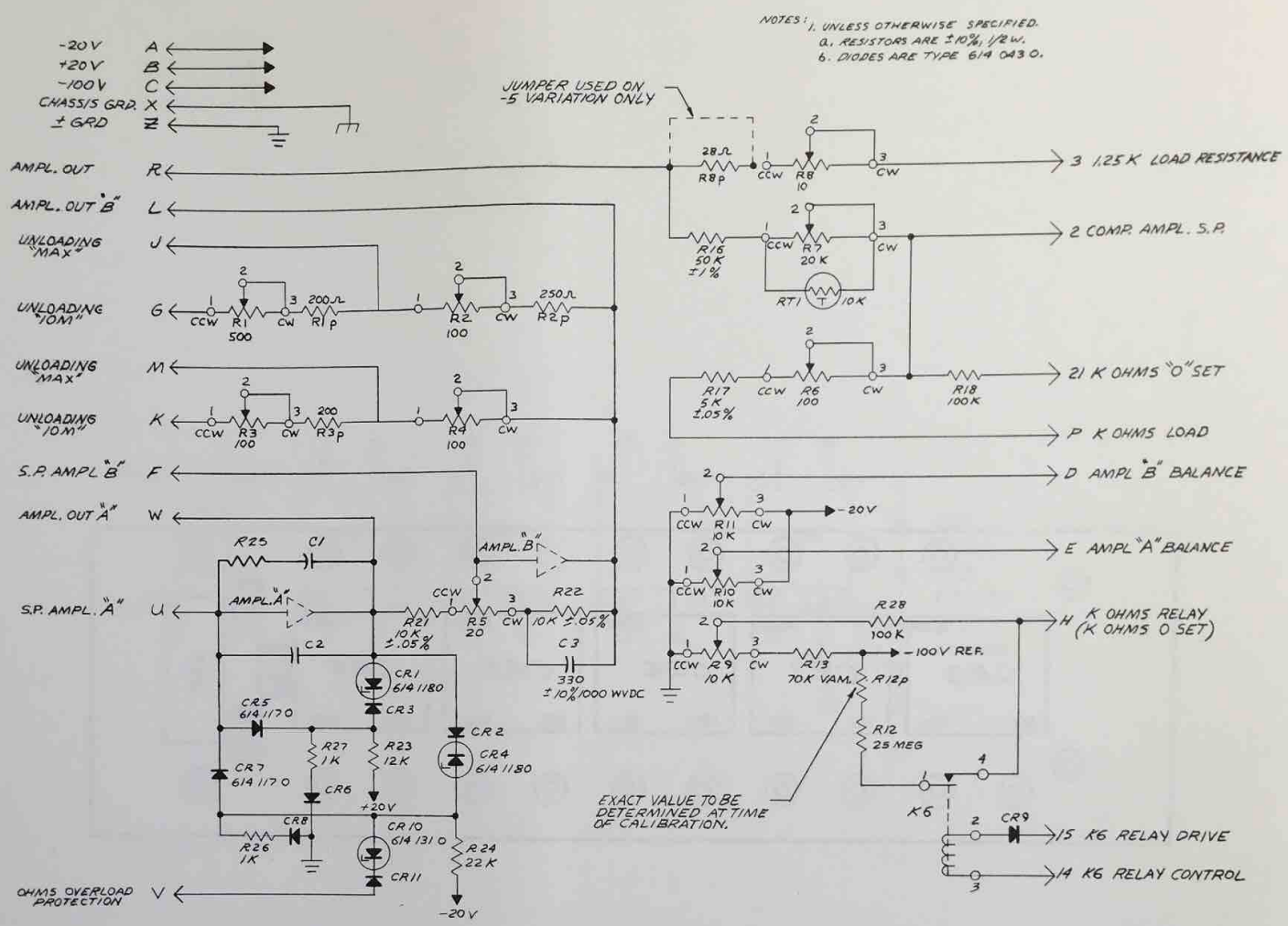




6.736-1 Reference Amplifier



12.937-5 Miscellaneous Network



UNIT NUMBER	SCHEMATIC NUMBER	PARTS LIST & NEXT ASSY.	DESCRIPTION	PARTS LIST USED ON:	PROJECT NUMBER
12.937-5	012 937 55	012 937 5P	OMIT RT1, CR9-11, K6, R1, 10, R22, 3, 32, 6, 7, 9, 12, 12A, 13, 14, 17, 18, 28 & REPLACE R8P W/ JUMPER.	A026 268 OP ERN 7770	
12.937-4	012 937 45	012 937 4P	OMIT C1, 2; R25 (SUPERSEDE)		ERN 7309
12.937-3	012 937 35	012 937 3P	OMIT R1, 12, 2, 25, 3, 32, 6, 7, 12, 12A, 13, 14, 17, 18, 28 & R25 (SUPERSEDE)	A026 261 OP	1723
12.937-2	012 937 25	012 937 2P	OMIT R1, 12, 2, 25, 3, 32, 6, 7, 12, 12A, 13, 14, 17, 18, 28 & R25 (SUPERSEDE)	A026 258 OP	19110
12.937-1	012 937 15	012 937 1P	OMIT R6, 9, 12, 12A, 13, 14, 17, 18, 25, 28 & R25 (SUPERSEDE)	A026 203 OP	1723
12.937	0012 937 05	4012 937 0P	OMIT C1, C2 & R25	A026 262 OP	1723

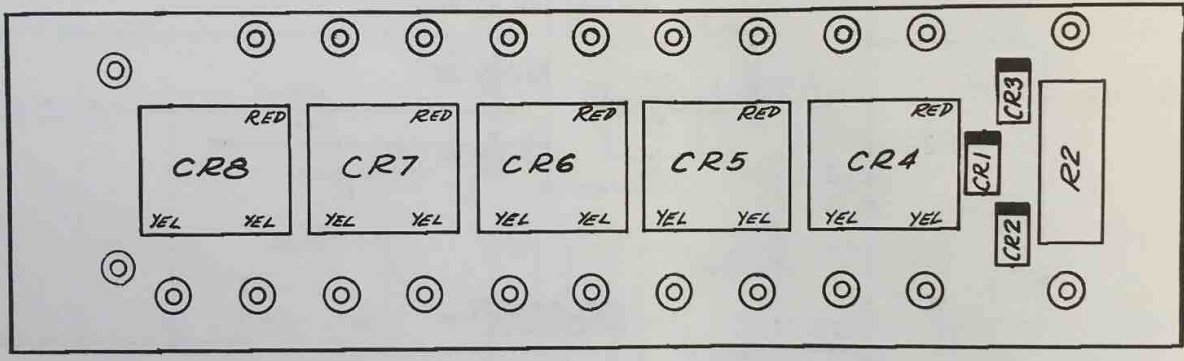
TABLE OF UNIT NUMBERS

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN UF
 RESISTANCE IS IN OHMS
 TOLERANCE OF: R = ±.05 X = ±.02
 .XXX = ±.015 .XXX = ±.005 L = ±.1"
 *TOL. OF MATERIAL SUPPLIED

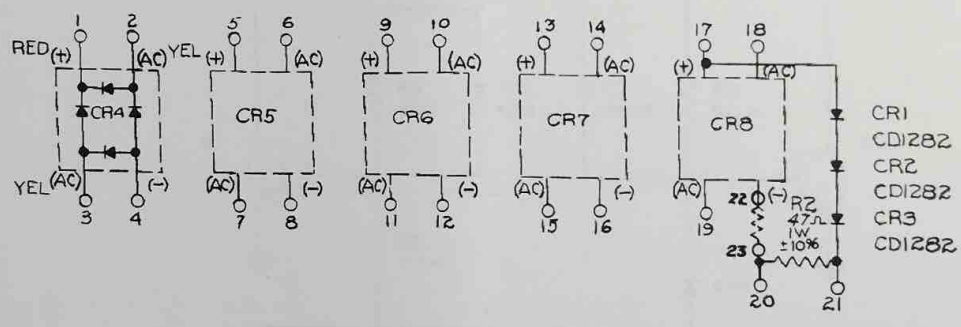
ELECTRONIC ASSOCIATES, INC.
 LONG BRANCH, NEW JERSEY

SCHEMATIC
 MISCELLANEOUS
 NETWORK

SHT. NO.	
SIZE	
REV. NO.	
PROJECT	7723 C012 937 05
SHEET	OF SHEETS



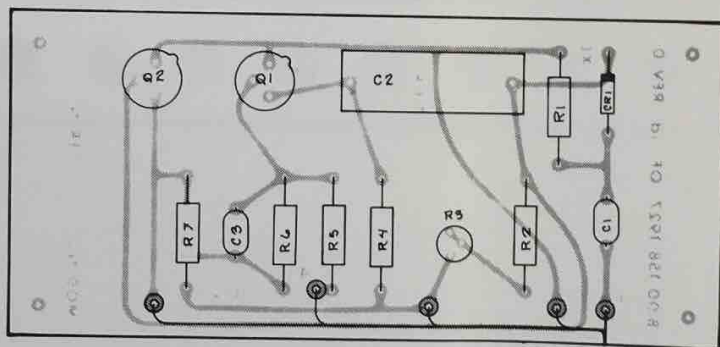
12.1106 Rectifier Network



UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN pF
 RESISTANCE IS IN OHMS
 TOLERANCE ON
 FRACTIONS DECIMALS ANGLES
 ± 1/64 ± .005 ±
 *TOL. OF MATERIAL SUPPLIED

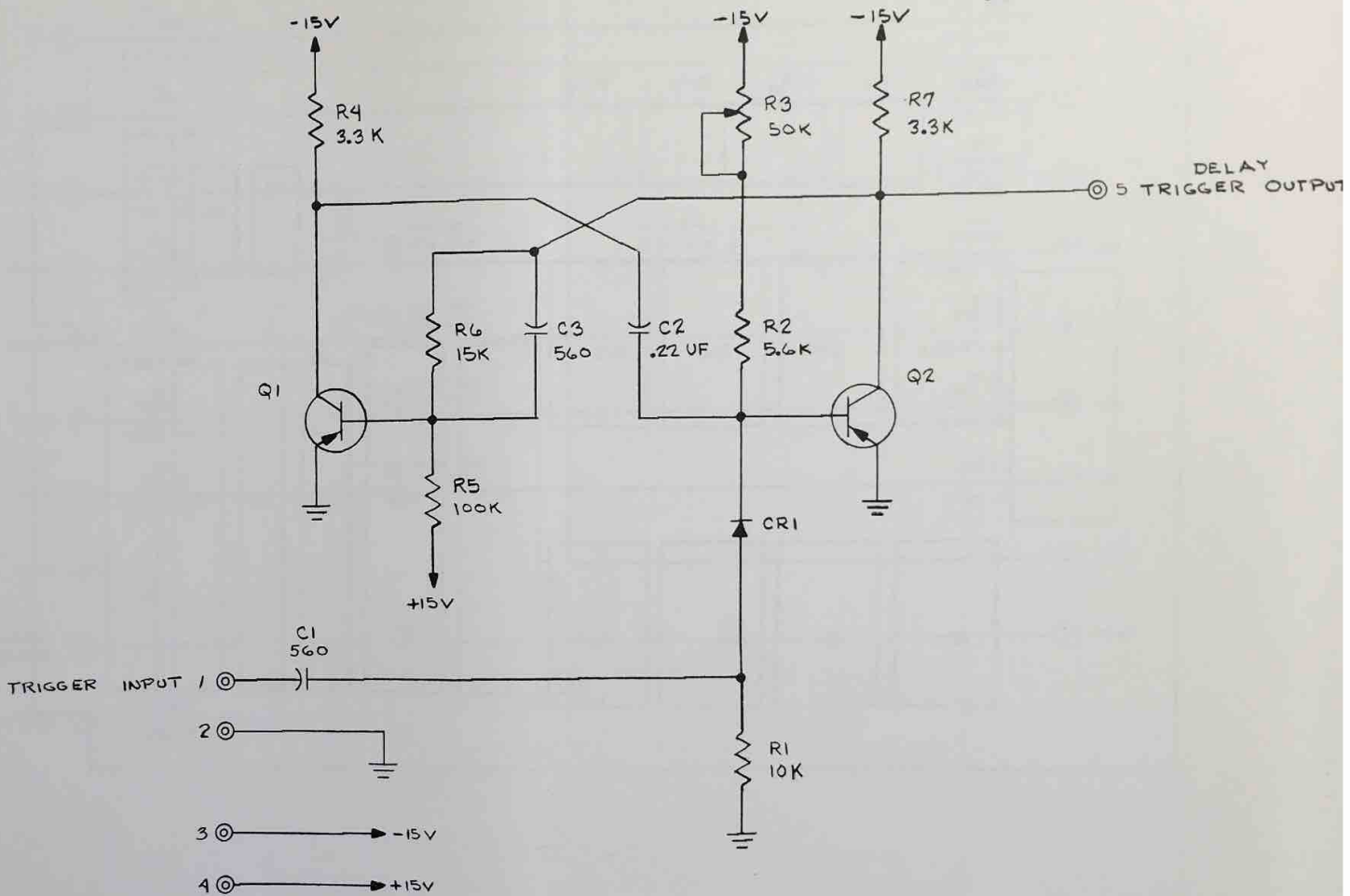
ELECTRONIC ASSOCIATES, INC.
 LONG BRANCH, NEW JERSEY
SCHEMATIC,
 RECTIFIER NWK, P.S.

SHT. NO.					
SIZE					
REV. NO.					
PROJECT	19110 B012 1106 05				
SHEET	OF	SHEETS			



12.1654 Conversion Delay Network

NOTES:
 1. UNLESS OTHERWISE SPECIFIED:
 A. ALL RESISTORS ARE $\pm 5\%$, V.L.W.
 B. ALL TRANSISTORS ARE 2N1305
 C. ALL DIODES ARE 614 00430.

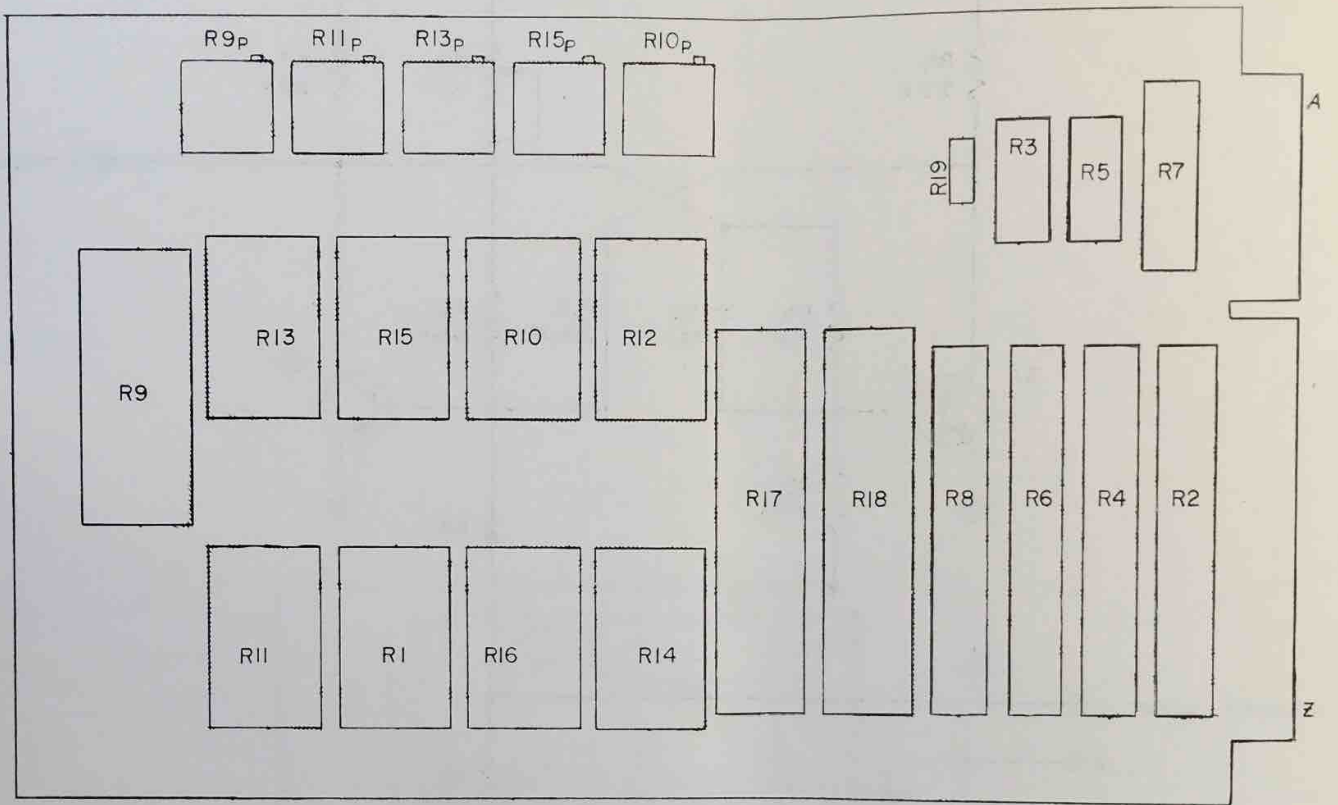


UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN pF
 RESISTANCE IS IN OHMS
 TOLERANCE OF: .X = $\pm .03$.XX = $\pm .02$
 .XXX = $\pm .015$.XXX = $\pm .008$ $\angle = \pm 1^\circ$
 *TOL. OF MATERIAL SUPPLIED

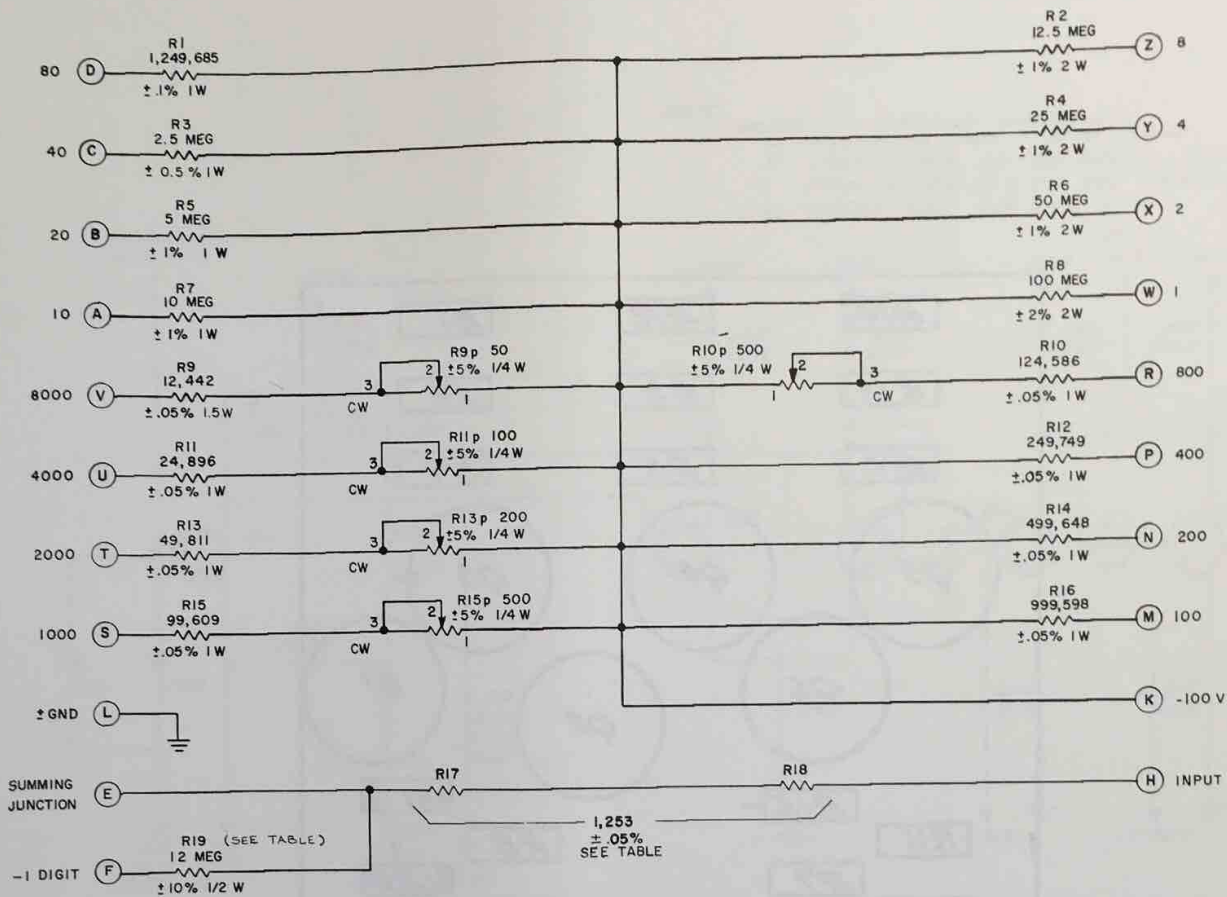
EAI
 ELECTRONIC ASSOCIATES, INC. West Long Branch, N.J.

**SCHEMATIC
 CONVERSION DELAY
 NETWORK**

SHT. NO.	
SIZE	
REV. NO.	
PROJECT	19159 B00 012 1654 05
SHEET / OF / SHEETS	



26.116-1 Summing Resistor Network



26.116.3	026 116 35	026 116 3P	AS SHOWN W/ R19 2.7 MEG ±5% 1/2 W	A 026 262 0P	ERN 834
26.116.2	026 116 25	026 116 2P	AS SHOWN 4/ R17, R18, R19	A 026 264 0P	ERN 6285
26.116.1	026 116 15	026 116 1P	AS SHOWN	A 026 246 0P	ERN 6633
26.116.0	026 116 05	A 026 116 0P	AS SHOWN		1877
UNIT NUMBER	SCHEMATIC NUMBER	PARTS LIST & NEXT ASSY.	DESCRIPTION	PARTS LIST USED ON:	PROJECT NUMBER

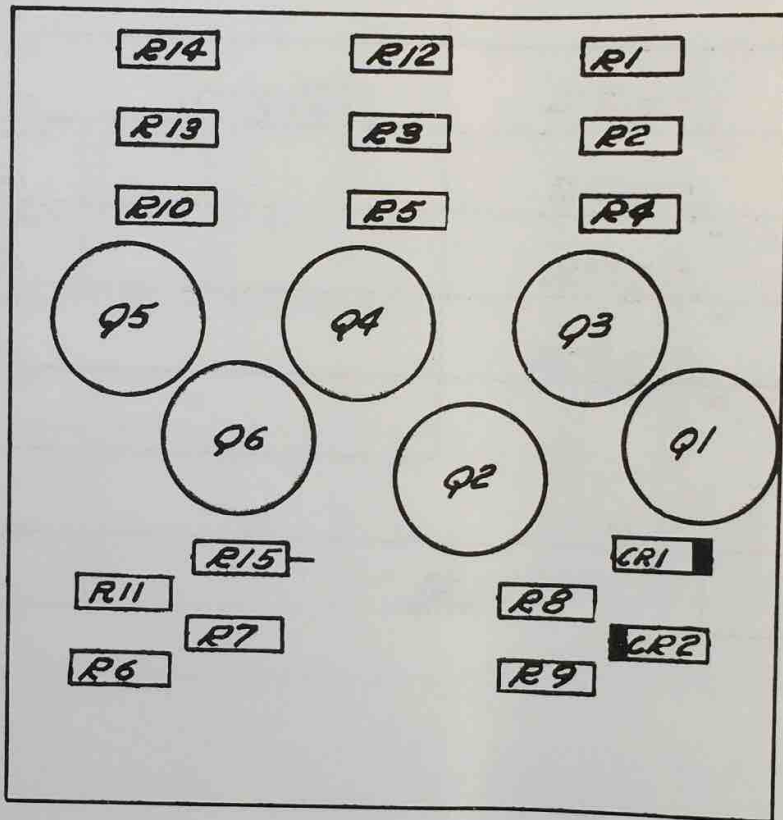
TABLE OF UNIT NUMBERS

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN MICRO
 RESISTANCE IS IN OHMS
 TOLERANCE ON
 FRACTIONS DECIMALS ANGLES
 1/8 1.000 1/2
 1/4 1.000 1/2
 3/8 1.000 1/2
 1/2 1.000 1/2
 3/4 1.000 1/2
 1 1.000 1/2
 1 1/4 1.000 1/2
 1 1/2 1.000 1/2
 2 1.000 1/2
 3 1.000 1/2
 4 1.000 1/2
 5 1.000 1/2
 6 1.000 1/2
 7 1.000 1/2
 8 1.000 1/2
 9 1.000 1/2

ELECTRONIC ASSOCIATES, INC.
 LONG BRANCH, NEW JERSEY

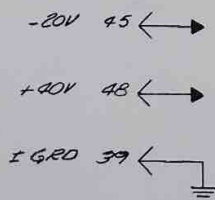
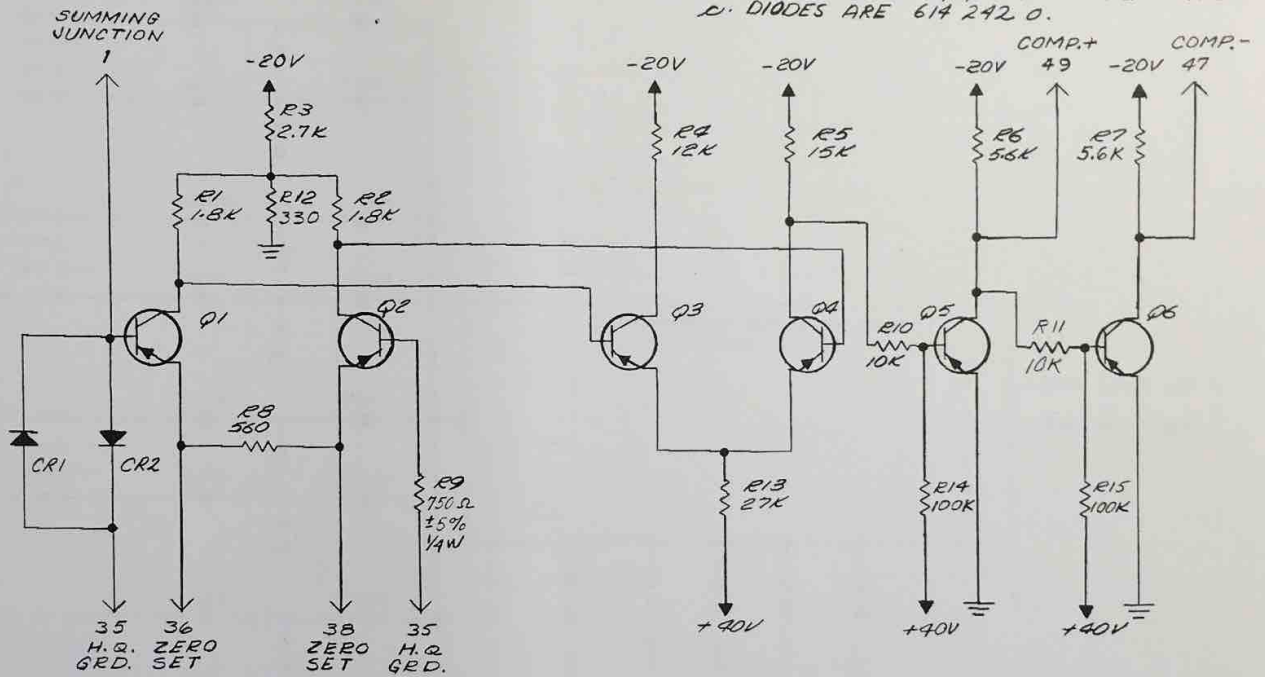
**SCHEMATIC
 SUMMING RESISTOR
 NETWORK**

SHT. NO.	
SIZE	
REV. NO.	
PROJECT	1877 C026 116 05
SHEET 1 OF 1 SHEETS	



4

NOTE:
 1. UNLESS OTHERWISE SPECIFIED:
 a. RESISTORS ARE $\pm 10\%$ 1/4W.
 b. TRANSISTORS Q3-Q6 ARE 2N1309 TYPE.
 TRANSISTORS Q1 & Q2 ARE 2N1132 TYPE.
 c. DIODES ARE 614 242 0.



UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN P.F.
 RESISTANCE IS IN OHMS

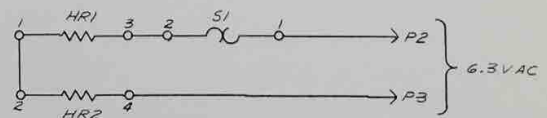
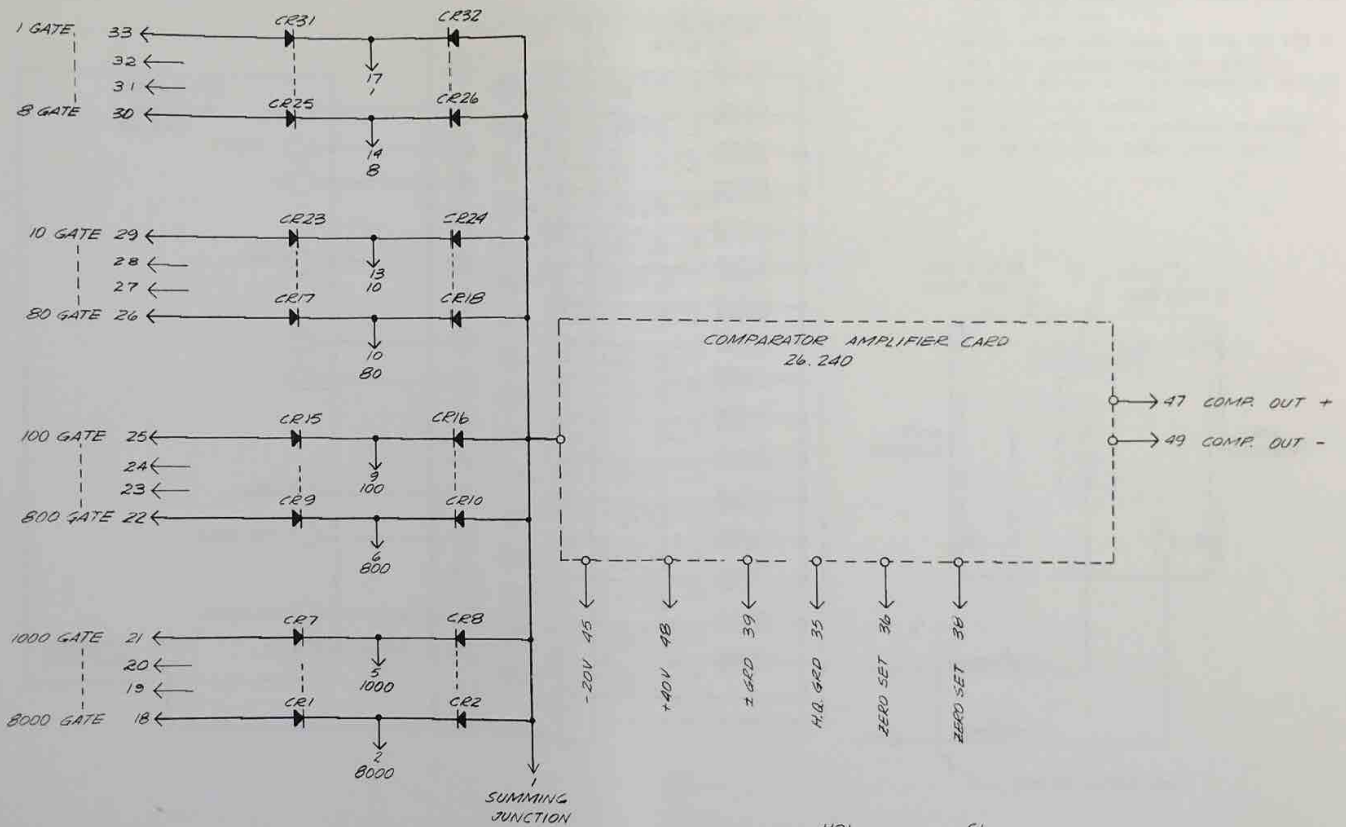
TOLERANCE ON		
FRACTIONS	DECIMALS	ANGLES
$\pm 1/64$	$\pm .005$	\pm

*TOL. OF MATERIAL SUPPLIED

ELECTRONIC ASSOCIATES, INC.
 LONG BRANCH, NEW JERSEY

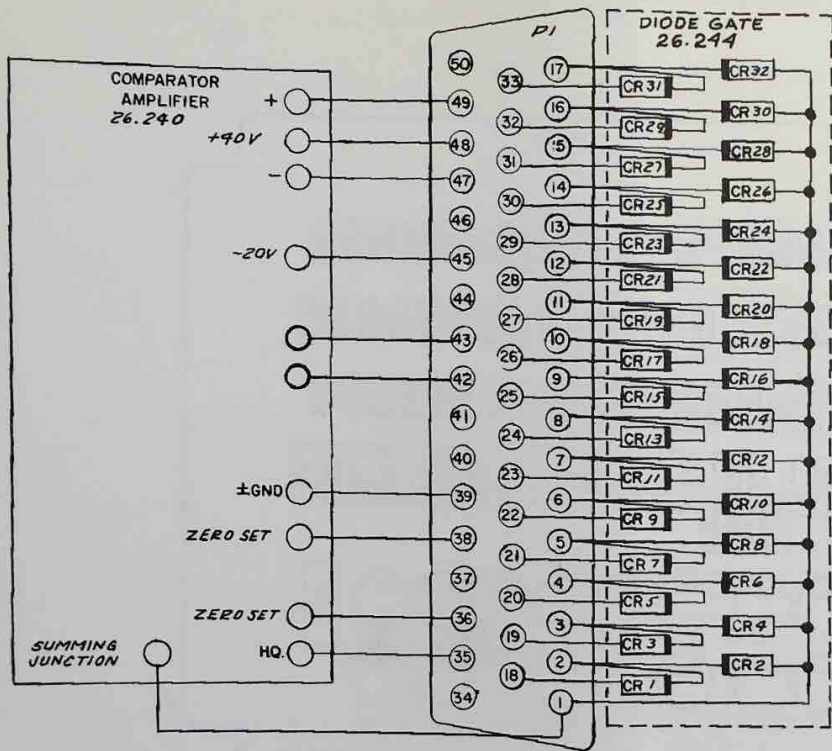
SCHMATIC
 COMPARATOR AMPL.

SHT. NO.	
REV. NO.	
PROJECT	1723 B 026 240 05
SHEET 1 OF 1 SHEETS	



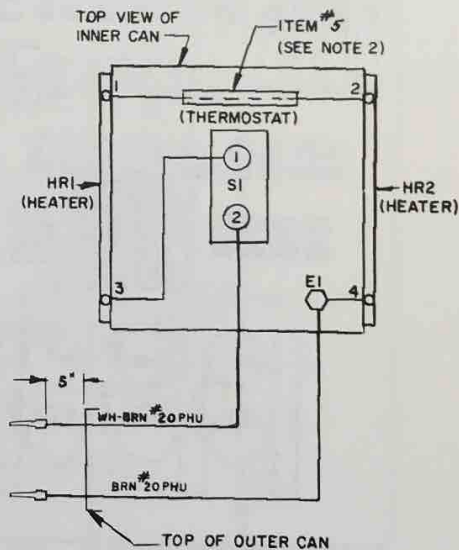
UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 CAPACITANCE IS IN P.F.
 RESISTANCE IS IN OHMS
 TOLERANCE ON
 FRACTIONS DECIMALS ANGLES
 ± 1/64 ± .005 ± 1°
 MFG. OF MATERIAL SUPPLIER

ELECTRONIC ASSOCIATES, INC. LONG BRANCH, NEW JERSEY	
SCHEMATIC COMPARATOR & DIODE GATE	
SHT. NO.	
SIZE	
REV. NO.	
PROJECT	C026 242 05
SHEET 1 OF 1 SHEETS	

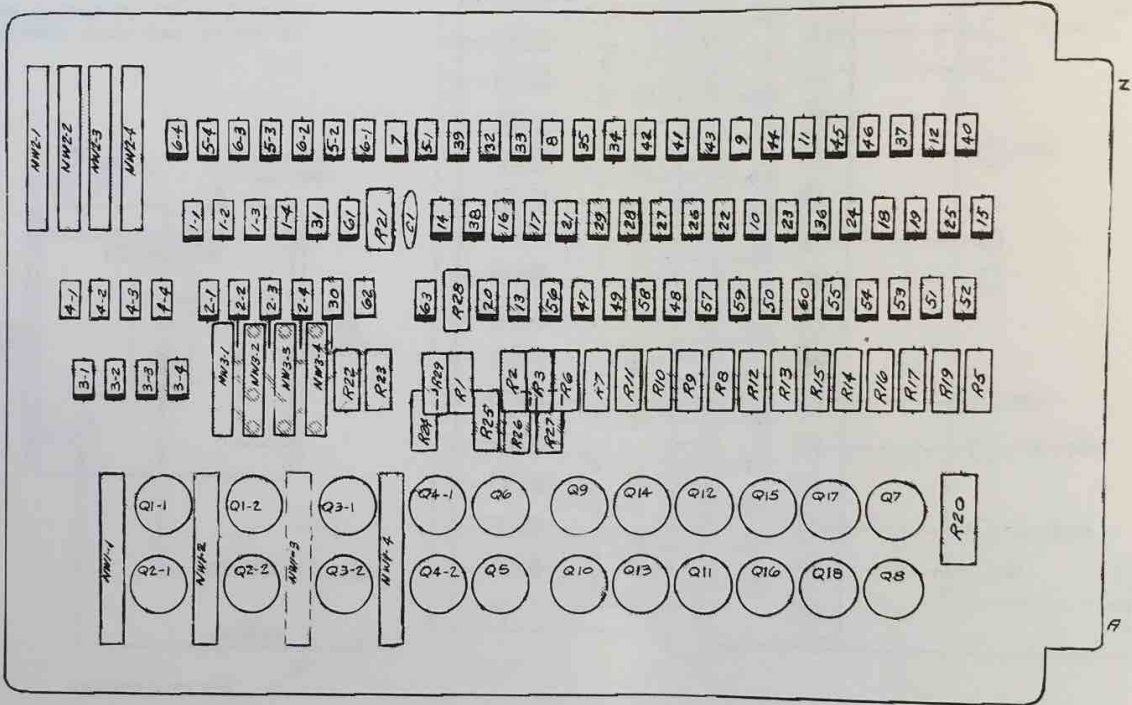


NOTE:

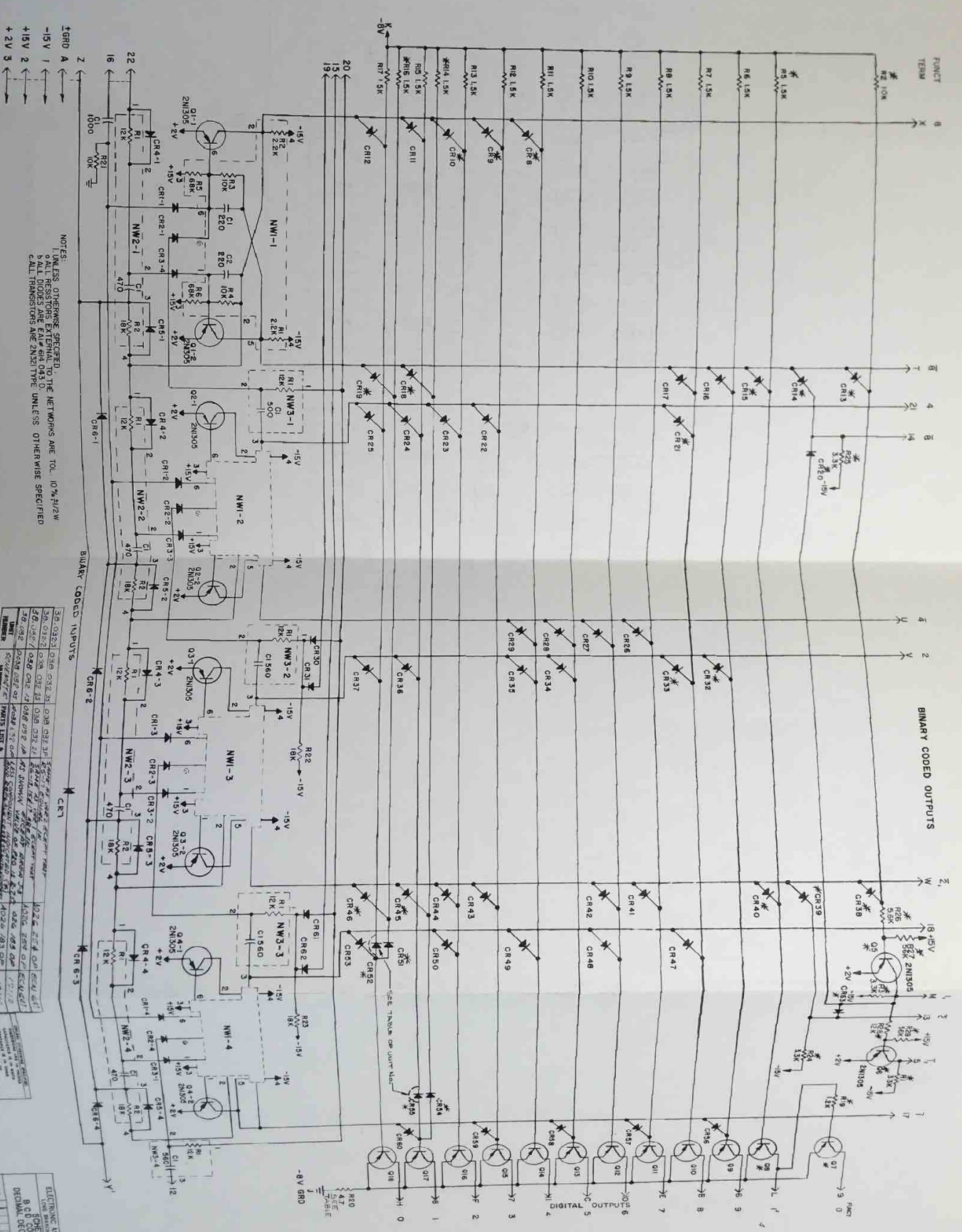
1. USE INSULATED TWO WAY CONNECTOR ITEM #5 TWIST WIRES TOGETHER & CRIMP WITH T&B TOOL WT-105M.
2. WIRES FROM POSITIONS 1,2,3,4 ON HRI & HR2 ARE EXISTING WIRES ON HEATER.
3. PI-42 & PI-43 ARE SOLDERED TO 26.240 P.C. CARD FOR SUPPORT.
4. PI-34 & PI-35 ARE COMMON BECAUSE OF THE P.C. CARD BEING JUMPERED.



ELECTRONIC ASSOCIATES, INC. LONG BRANCH, NEW JERSEY	
WIRING COMPARATOR & DIODE GATE	
SHT. NO.	
SIZE	
REV. NO.	
PROJECT	B026 242 0W
SHEET OF SHEETS	



38.032 and 38.032-1 BCD Counter and Decimal Decoding Matrix



NOTES:
 1. UNLESS OTHERWISE SPECIFIED,
 ALL RESISTORS ARE EXTERNAL TO THE NETWORKS ARE 10% 1/2W
 2. ALL DIODES ARE FAIRCHILD 1N4148
 3. ALL TRANSISTORS ARE 2N1005 UNLESS OTHERWISE SPECIFIED

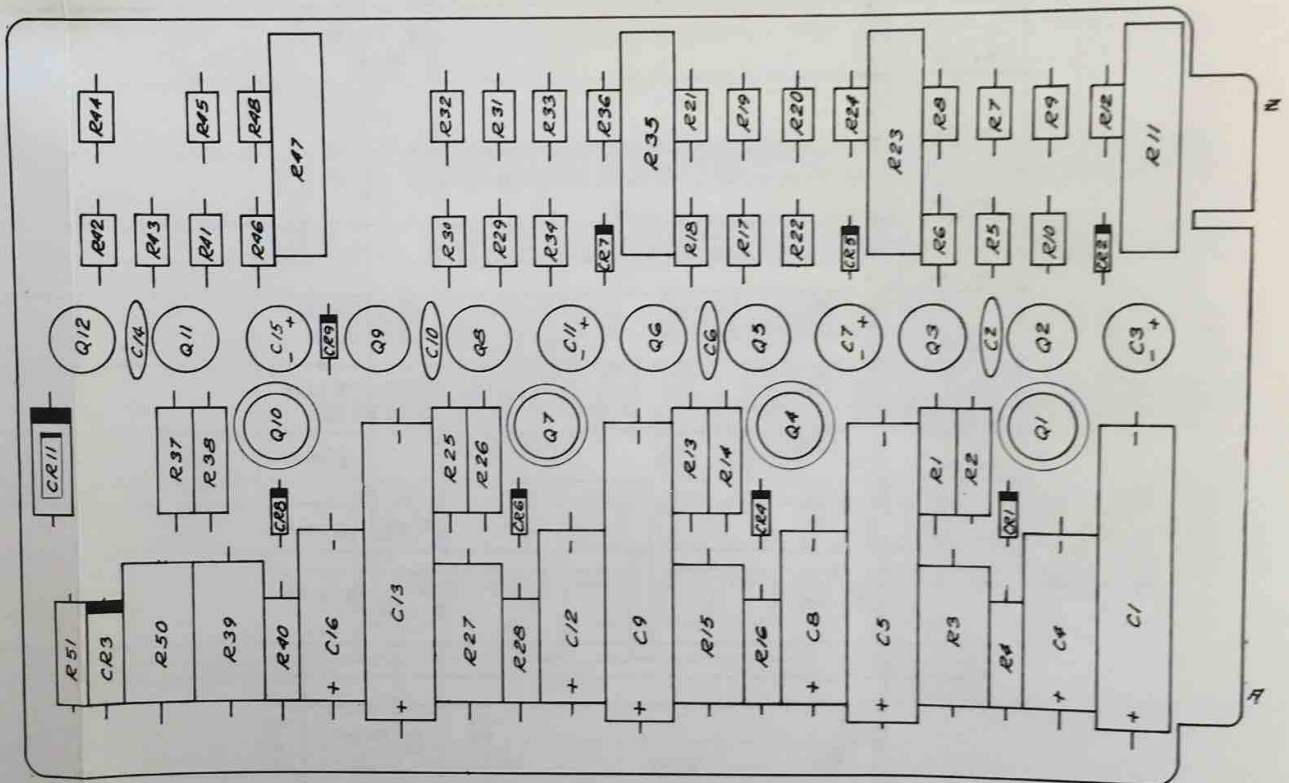
BINARY CODED INPUTS

NUMBER	DESCRIPTION	USED ON	NUMBER
3A, 3B, 3C, 3D	0000, 0001, 0010, 0011	CR1, CR2, CR3, CR4	1, 2, 3, 4
3E, 3F, 3G, 3H	0100, 0101, 0110, 0111	CR5, CR6, CR7, CR8	5, 6, 7, 8
3I, 3J, 3K, 3L	1000, 1001, 1010, 1011	CR9, CR10, CR11, CR12	9, 10, 11, 12
3M, 3N, 3O, 3P	1100, 1101, 1110, 1111	CR13, CR14, CR15, CR16	13, 14, 15, 16

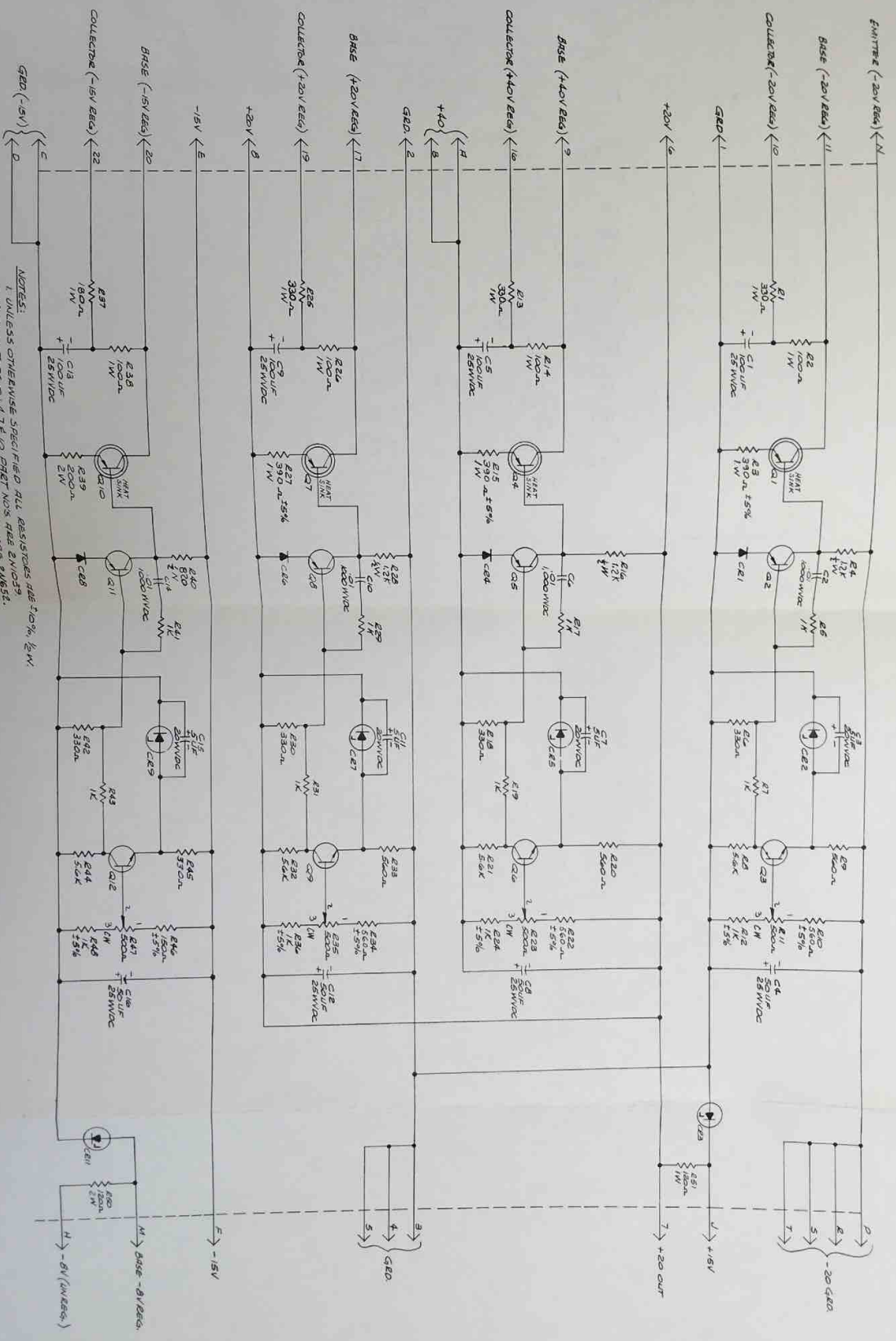
NUMBER	DESCRIPTION	USED ON	NUMBER
1A, 1B, 1C, 1D	0000, 0001, 0010, 0011	CR1, CR2, CR3, CR4	1, 2, 3, 4
1E, 1F, 1G, 1H	0100, 0101, 0110, 0111	CR5, CR6, CR7, CR8	5, 6, 7, 8
1I, 1J, 1K, 1L	1000, 1001, 1010, 1011	CR9, CR10, CR11, CR12	9, 10, 11, 12
1M, 1N, 1O, 1P	1100, 1101, 1110, 1111	CR13, CR14, CR15, CR16	13, 14, 15, 16

DATE	BY	DESCRIPTION
10/15/68	J. W. G.	DESIGN
10/22/68	J. W. G.	REVISION

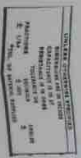
ELECTRONIC ASSOCIATES, INC.
 800 SOUTH MAIN STREET
 DEPT. 300
 WILMINGTON, DELAWARE 19801
 D038 031 05



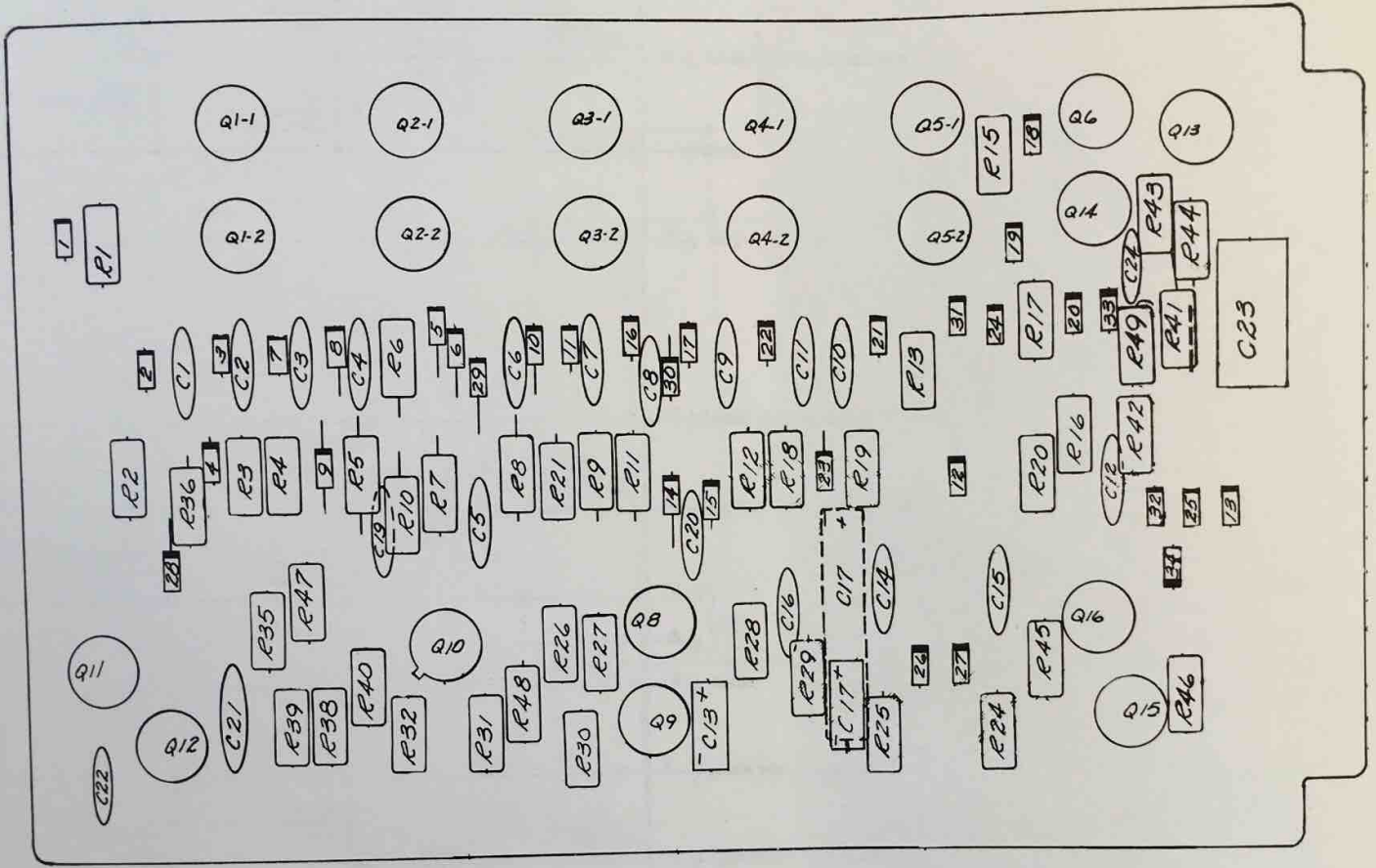
43.141 Power Supply Regulator



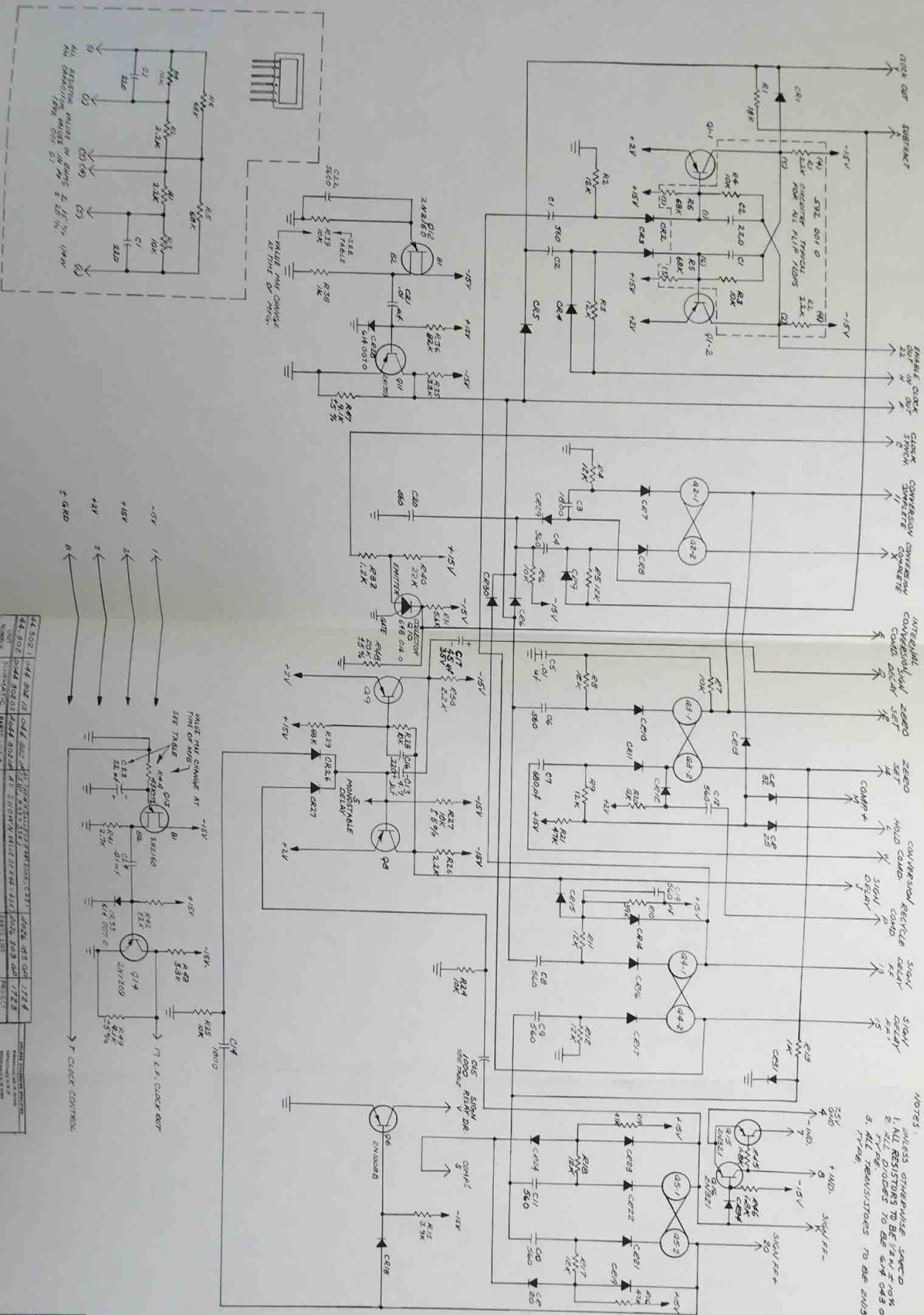
NOTES:
 1. VALUES OTHERWISE SPECIFIED ALL RESISTORS ARE 10%, 1/4W.
 2. TRANSISTORS Q1, 4, 7 & 10 PART NOS. ARE 2N439.
 3. TRANSISTORS Q2, 5, 8 & 11 PART NOS. ARE 2N437.
 4. TRANSISTORS Q3, 6, 9, & 12 PART NOS. ARE 2N437.
 5. ZENER DIODE CEN1 PART NO. IS 1N4750.
 6. ZENER DIODE CEN2 PART NO. IS 1N4750.
 7. ZENER DIODE CEN3 PART NO. IS 1N4750.
 8. ZENER DIODE CEN4 PART NO. IS 1N4750.
 9. ZENER DIODE CEN5 PART NO. IS 1N4750.



ELECTRONIC ASSOCIATES, INC.
 ST. LOUIS, MISSOURI
 ADVISE SUPPLY 48HRS
 PART NO. DOK4 J48 OS
 REV. NO. 1/73
 DATE 1/73



44.302 Programmer



NOTES:
 1. UNLESS OTHERWISE SPEC'D
 2. ALL RESISTORS TO BE 1/4W ± 1%
 3. ALL CAPACITORS TO BE 50V ± 5%
 4. ALL TRANSISTORS TO BE 2N3055

Q1-1	Q1-2	Q2-1	Q2-2
74C01	74C01	74C01	74C01
74C02	74C02	74C02	74C02
74C03	74C03	74C03	74C03
74C04	74C04	74C04	74C04
74C05	74C05	74C05	74C05
74C06	74C06	74C06	74C06
74C07	74C07	74C07	74C07
74C08	74C08	74C08	74C08
74C09	74C09	74C09	74C09
74C10	74C10	74C10	74C10
74C11	74C11	74C11	74C11
74C12	74C12	74C12	74C12
74C13	74C13	74C13	74C13
74C14	74C14	74C14	74C14
74C15	74C15	74C15	74C15
74C16	74C16	74C16	74C16
74C17	74C17	74C17	74C17
74C18	74C18	74C18	74C18
74C19	74C19	74C19	74C19
74C20	74C20	74C20	74C20
74C21	74C21	74C21	74C21
74C22	74C22	74C22	74C22
74C23	74C23	74C23	74C23
74C24	74C24	74C24	74C24
74C25	74C25	74C25	74C25
74C26	74C26	74C26	74C26
74C27	74C27	74C27	74C27
74C28	74C28	74C28	74C28
74C29	74C29	74C29	74C29
74C30	74C30	74C30	74C30
74C31	74C31	74C31	74C31
74C32	74C32	74C32	74C32
74C33	74C33	74C33	74C33
74C34	74C34	74C34	74C34
74C35	74C35	74C35	74C35
74C36	74C36	74C36	74C36
74C37	74C37	74C37	74C37
74C38	74C38	74C38	74C38
74C39	74C39	74C39	74C39
74C40	74C40	74C40	74C40