

⚠ USE CAUTION AND READ WARNING!

- 7. MAXIMUM COMPONENT HEIGHT = 0.29 IN.
- 6. AFTER SOLDERING, NO COMPONENT LEAD SHALL EXTEND BEYOND 0.03 IN.

⚠ IDENTIFY WITH LATEST REVISION.

- 1. ALL DIMENSIONS ARE IN INCHES.
- 2. DIM. VALUES ARE SPECIFIED IN MICROINCHES.
- 3. CAPACITOR VALUES ARE SPECIFIED IN PICOFARADS WHEN REPRESENTED BY WHOLE NUMBERS, AND BY MICROFARADS WHEN REPRESENTED BY DECIMALS.
- 4. RESISTOR VALUES ARE SPECIFIED IN OHMS AND ARE 1/4W, 3.3%.

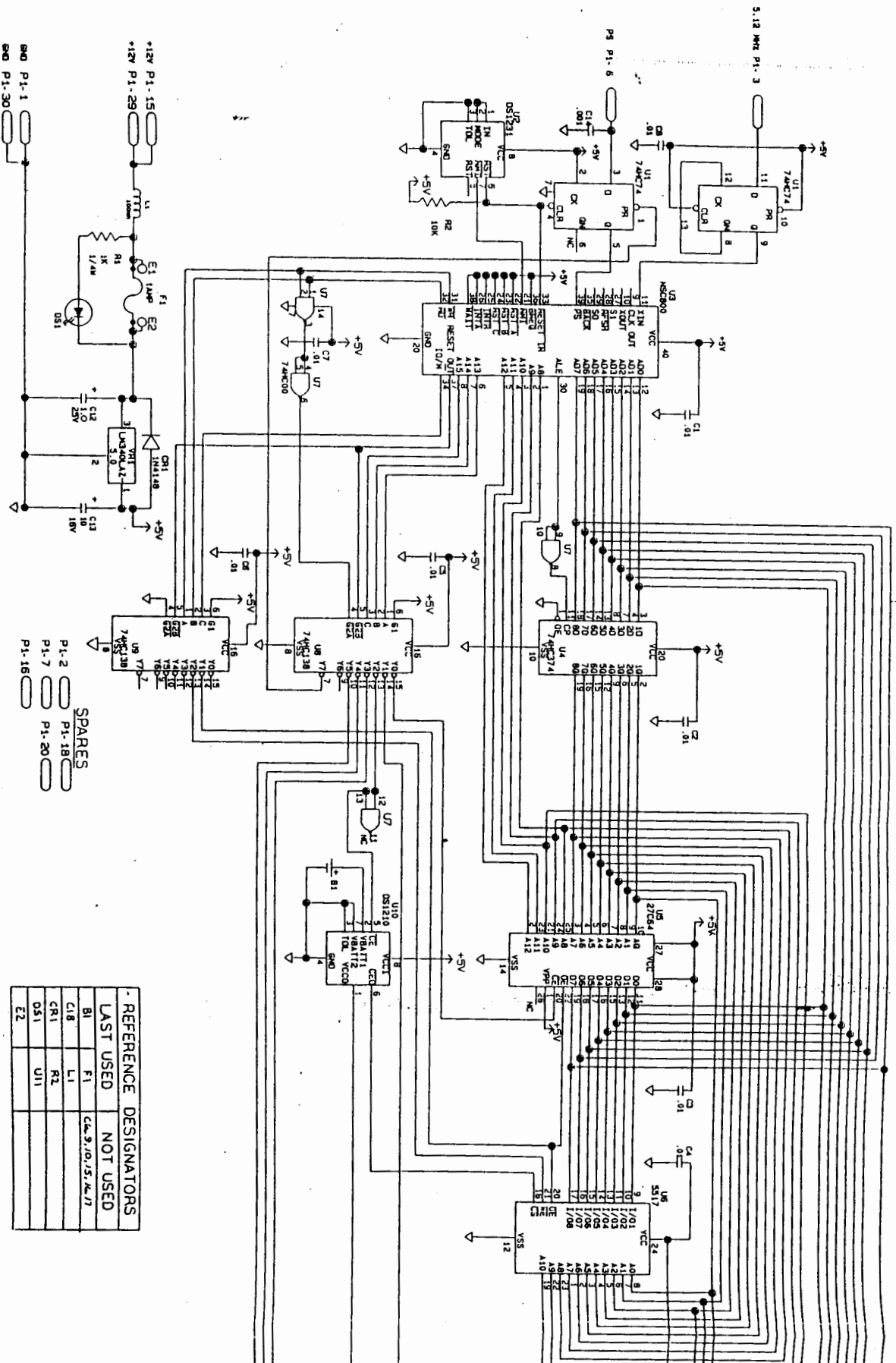
NOTE: UNLESS OTHERWISE SPECIFIED

 WFL
 THE LITHIUM
 FLAMMABLE OR
 SHORT BATT
 EXPOSE TO EX
 IMMERSE IN WATER
 MAKE

7	DRIVING	SIZE	QTY	REC'D	DATE	BY
6	ASSEMBLY	0				
5	SCHEMATIC	0				
4	SCHEMATIC	0				
3	SCHEMATIC	0				
2	SCHEMATIC	0				
1	ASSEMBLY	0				
0	ASSEMBLY	0				
7	DRIVING	SIZE	QTY	REC'D	DATE	BY

UNLESS OTHERWISE SPECIFIED	CONTROLS
DIMENSIONS ARE IN INCHES	
TOLERANCES	
LINEAR	±0.01
ANGULAR	±0.5°
DRILL	±0.005
ETCH	±0.005
PLATING	
FINISH	
ALL MACHINED SURFACES	

8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8

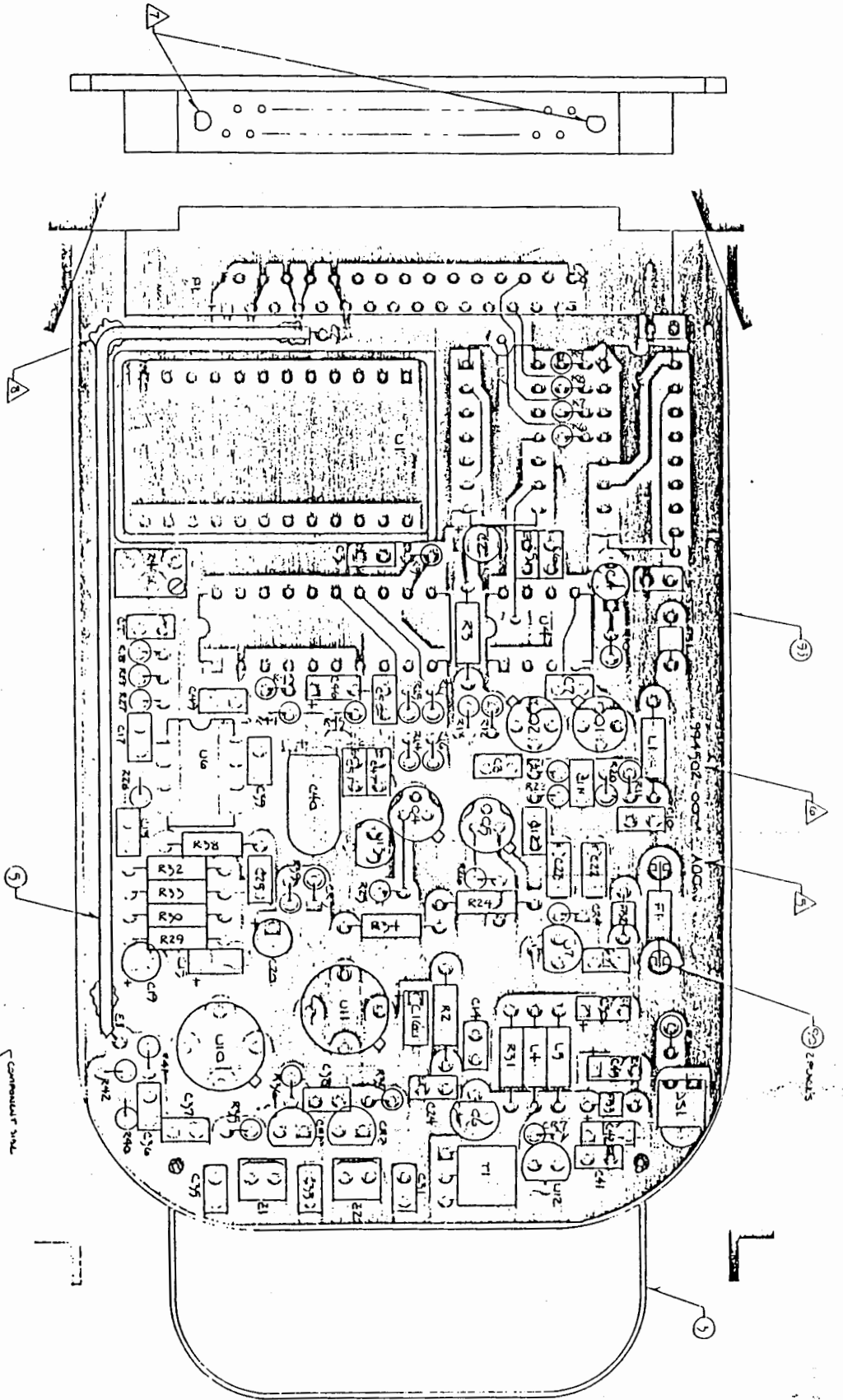


- SPARES
- P1-2
 - P1-7
 - P1-16
 - P1-15
 - P1-29
 - P1-30

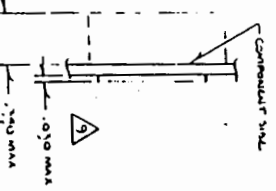
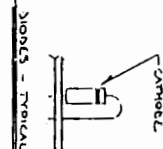
- REFERENCE DESIGNATORS	
LAST USED	NOT USED
B1	F1
C18	L1
C81	R2
DS1	U11
E2	

NOTE: UNLESS OTHERWISE SPECIFIED

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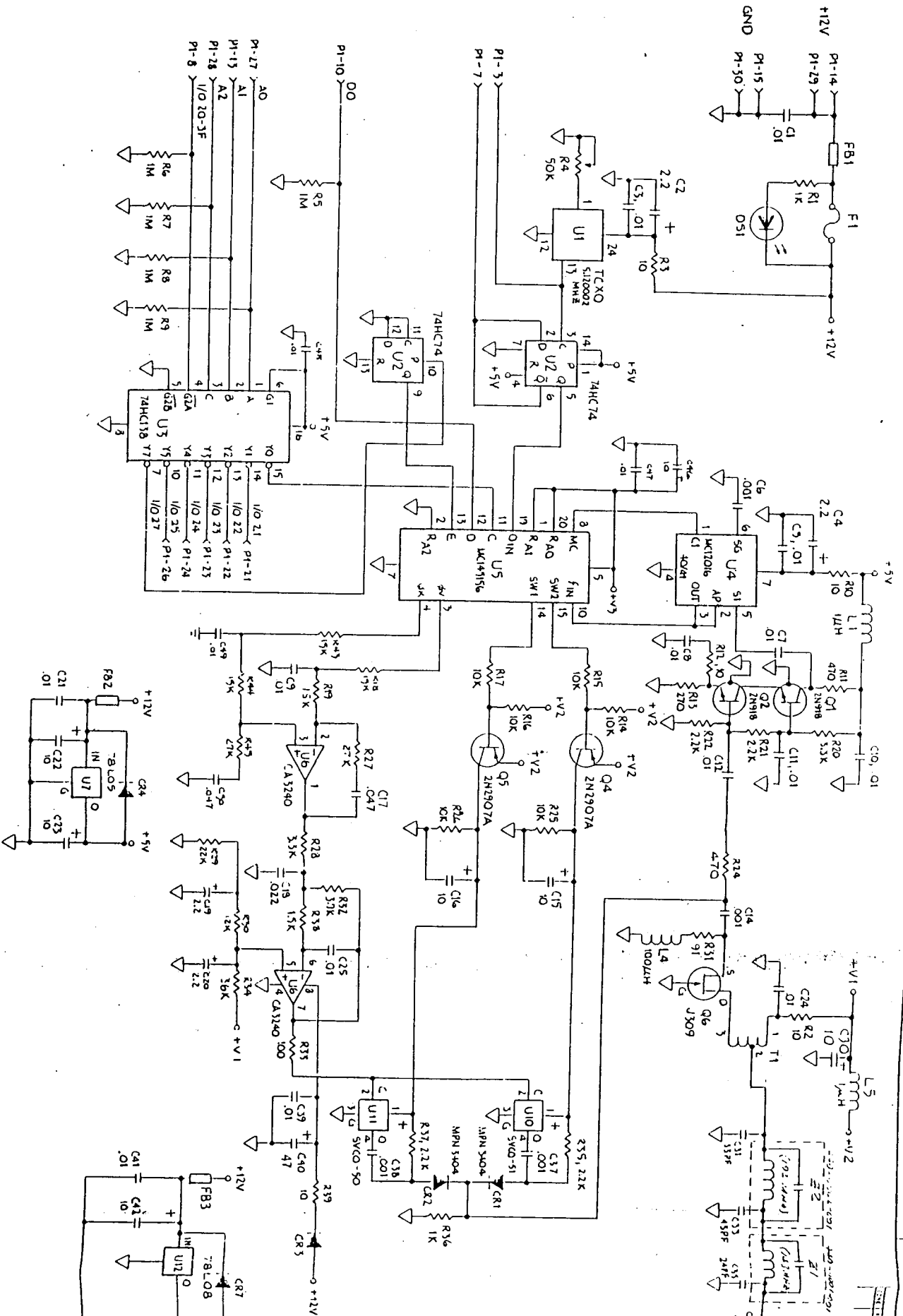
- 1. RESISTOR VALUES ARE SPECIFIED IN OHMS AND ARE 1/4W, 1%.
- 2. CAPACITOR VALUES ARE SPECIFIED IN MICROFARADS.
- 3. CON. VALUES ARE IN MICROFARADS.
- 4. ALL DIMENSIONS ARE IN INCHES.
- 5. IDENTIFY WITH LATEST REVISION USING 10 PT. MARK UNLESS OTHERWISE SPECIFIED.
- 6. IDENTIFY WITH STOCK NUMBER USING 10 PT. MARK UNLESS OTHERWISE SPECIFIED.
- 7. DIMENSIONS TO POSITION HOLE AS SHOWN.
- 8. DIMENSIONS TO POSITION HOLE AS SHOWN.



REV.	DATE	DESCRIPTION	BY	CHKD.
1		ISSUE FOR DRAWING		
2		ISSUE FOR DRAWING		
3		ISSUE FOR DRAWING		
4		ISSUE FOR DRAWING		
5		ISSUE FOR DRAWING		
6		ISSUE FOR DRAWING		
7		ISSUE FOR DRAWING		
8		ISSUE FOR DRAWING		
9		ISSUE FOR DRAWING		
10		ISSUE FOR DRAWING		

UNLESS OTHERWISE SPECIFIED	CONTRACT NO.
LENGTH	
WIDTH	
THICKNESS	
FINISH	
ALL MACHINED SURFACES	
FINISH	
UNLESS OTHERWISE SPECIFIED	
CONTRACT NO.	
LENGTH	
WIDTH	
THICKNESS	
FINISH	
ALL MACHINED SURFACES	
FINISH	

8 7 6 5 4 3



1. DIODES, CR3 THRU CR8, ARE IN 414B.

2. CAPACITOR VALUES ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

3. RESISTORS ARE 1/8W, 5%, VALUES IN OHMS, UNLESS OTHERWISE SPECIFIED.

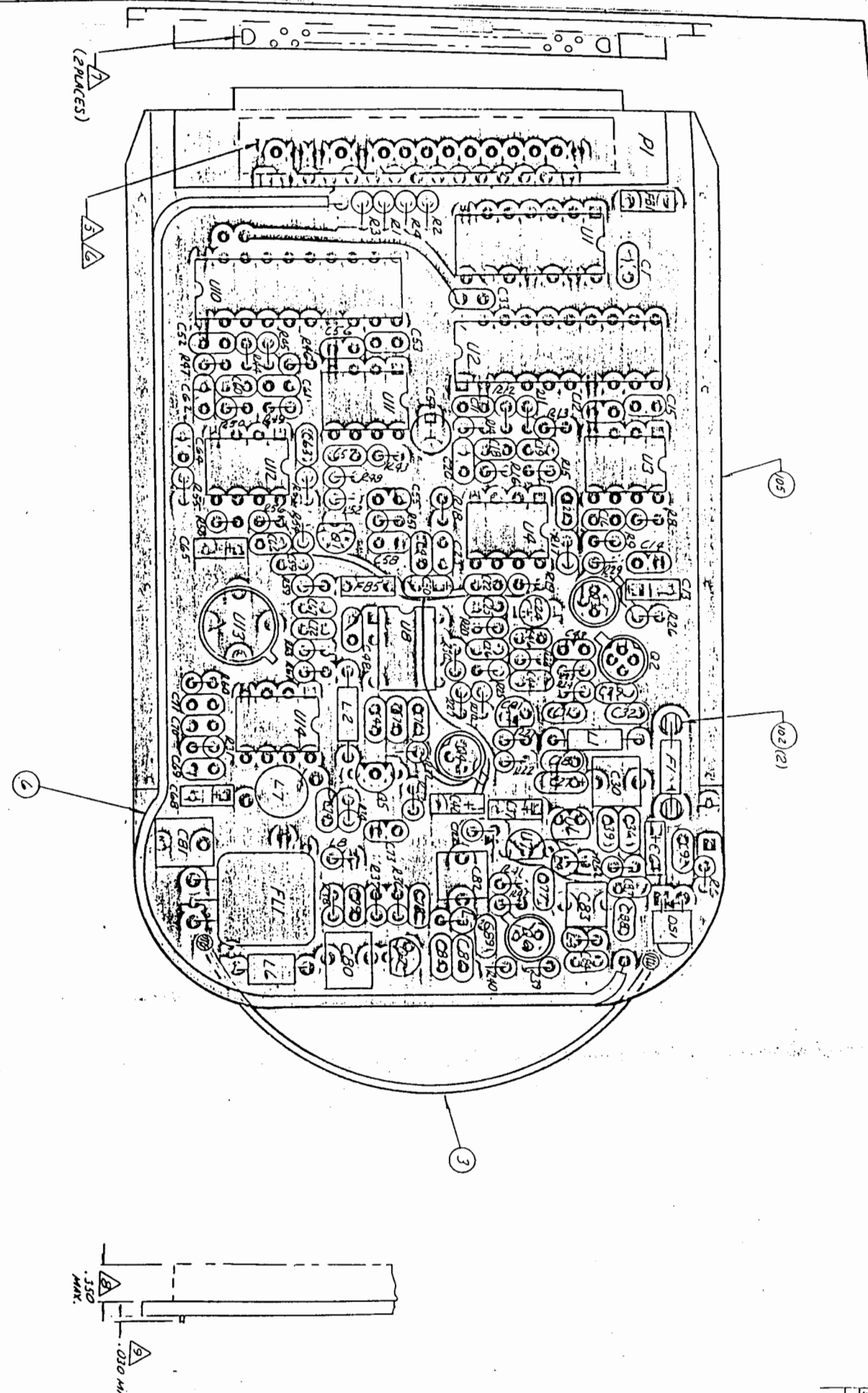
NOTE: UNLESS OTHERWISE SPECIFIED

C	R	Q	L	D	S	T	F	B	F	P	E	Z
5	1	4	7	3	1	3	1	1	2	2		

REFERENCE DESIGNATIONS NOT USED: C13, Q3, U9, U8, CR5, CR6, CR8, C26, C27, C28, C29, C43, C44, R23, C32, C34, L2, L3

QTY	DESCRIPTION	QTY	DESCRIPTION
1	78L05	1	78L05
1	74HC138	1	74HC138
2	74HC74	2	74HC74
1	74HC153	1	74HC153
1	74HC154	1	74HC154
1	74HC14	1	74HC14
1	MC	1	MC
1	U1	1	U1
1	U2	1	U2
1	U3	1	U3
1	U4	1	U4
1	U5	1	U5
1	U7	1	U7
1	U8	1	U8
1	U9	1	U9
1	CR1	1	CR1
1	CR2	1	CR2
1	CR3	1	CR3
1	CR4	1	CR4
1	CR5	1	CR5
1	CR6	1	CR6
1	CR7	1	CR7
1	CR8	1	CR8
1	L1	1	L1
1	L2	1	L2
1	L3	1	L3
1	L4	1	L4
1	L5	1	L5

FOR PARTS LIST SEE DRAWING SHEET 101



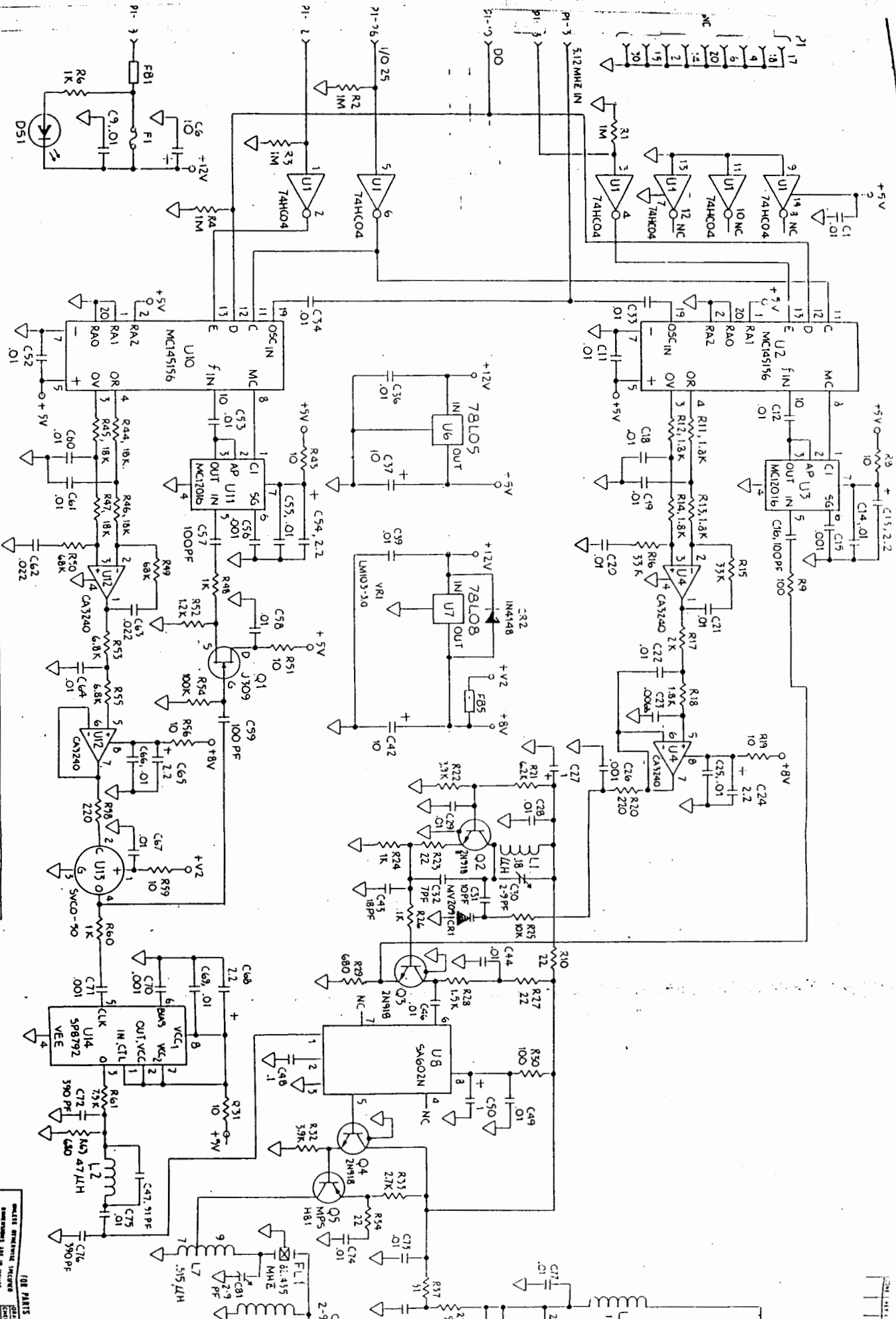
- △ ALL LEAD EXTENTIONS ON CIRCUIT SIDE OF BOARD TO BE .030 MAX. AS SHOWN.
- △ COMPONENTS NOT TO EXTEND BEYOND MAX. HEIGHT AS INDICATED.
- △ KEYING PINS TO BE ORIENTED AS INDICATED.
- △ IDENTIFY WITH STOCK NUMBER USING (10 PT.) KROY TYPE TAGS.
- △ IDENTIFY WITH LATEST REVISION USING (10 PT.) KROY TYPE TAGS.
- △ ALL DIMENSIONS AND TOLERANCES IN MICROINCHES.
- △ DIM. VALUES ARE SPECIFIED IN MICROINCHES.
- △ CAPACITOR VALUES ARE SPECIFIED IN MICROFARADS.

NOTE: UNLESS OTHERWISE SPECIFIED

NO.	DESCRIPTION	QTY	RECD	DATE
1	SCHEMATIC DRAWING	0		
2	ASSEMBLY DRAWING	0		
3	QTY RECD			
4	DATE			
5	BY			
6	CHKD			
7	ASSEMBLY			

UNLESS OTHERWISE SPECIFIED	CONTRACT NUMBER
DIMENSIONS ARE IN INCHES	
TOLERANCES	
LINEAR	
ANGULAR	
HOLE DIA.	
HOLE POS.	
HOLE RND	
HOLE DRILL	
HOLE REAM	
HOLE TAP	
HOLE FILE	
HOLE HONED	
HOLE POLISHED	
HOLE BRUSHED	
HOLE ELECTROPLATED	
HOLE ANNEALED	
HOLE OTHER	
ALL MACHINED SURFACES	
FINISH	
DESIGN ACTIVITY	
DESIGNER	
CHECKER	
DATE	

3



RESISTOR VALUES ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

RESISTOR VALUES ARE IN OHMS, UNLESS OTHERWISE SPECIFIED.

C	R	K	R	V	R	U	Q	F	B	F	D	S	L	F	L	E	P
09	03	2	14	7	5	1	1	8	1	2	1						

REFERENCE DESIGNATORS NOT USED:

- C2 THRU 5, C7, C9, C10, C17, C33, C38, C45, C51, C60, C61
- R5, R7, R35, R57
- F02, F03, F04
- U5, U9

100 PARTS LIST

QTY	REF ID	DESCRIPTION	MANUFACTURER
		RESISTORS	
		CAPACITORS	
		DIODES	
		TRANSISTORS	
		VACUUM TUBES	
		IC'S	
		CONNECTORS	
		OTHER	

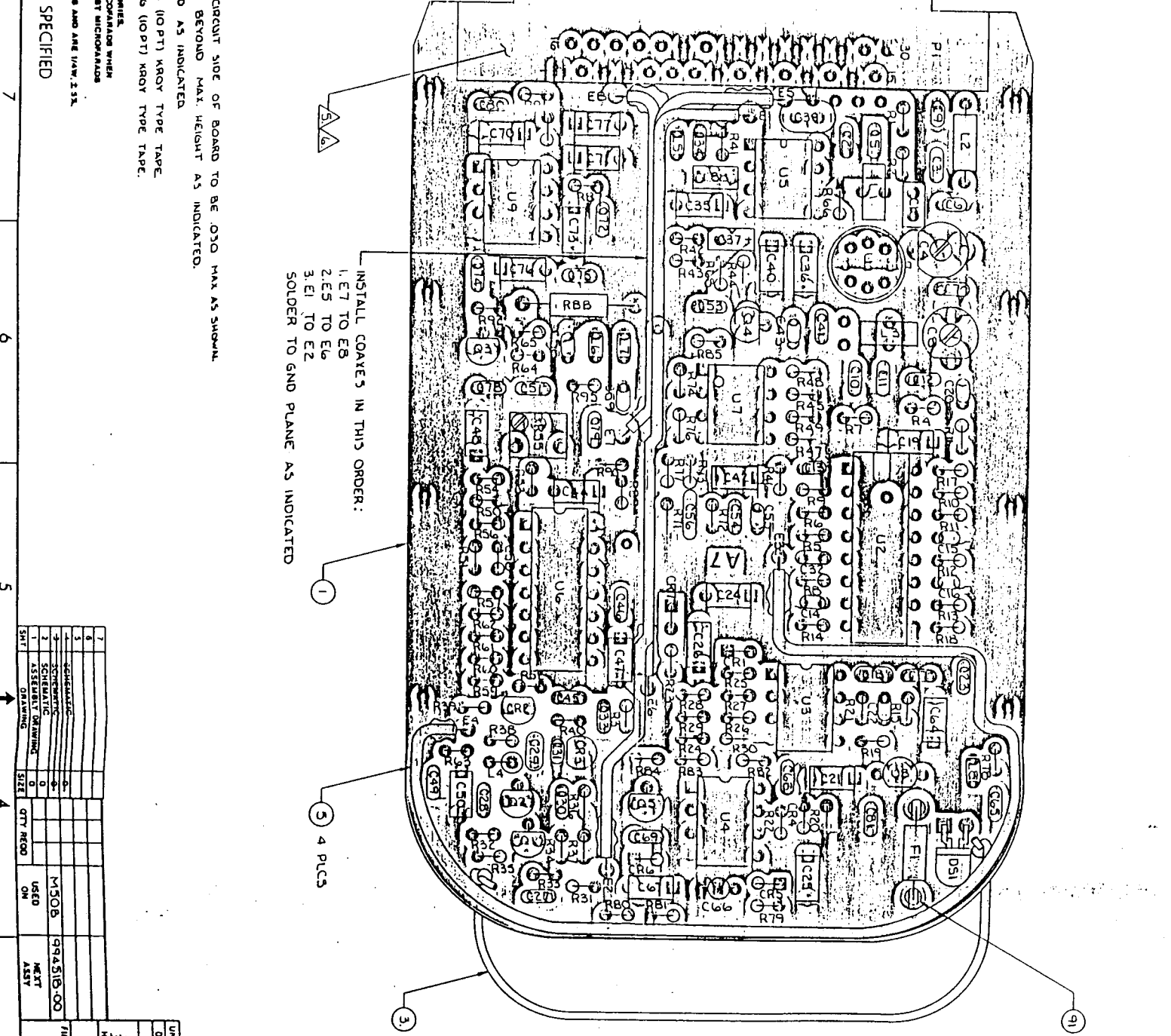
- △ ALL LEAD EXTENSIONS ON CIRCUIT SIDE OF BOARD TO BE .030 MAX AS SHOWN.
- △ COMPONENTS NOT TO EXTEND BEYOND MAX. HEIGHT AS INDICATED.
- △ EYEING PINS TO BE ORIENTED AS INDICATED.
- △ IDENTIFY WITH STOCK NUMBER USING (10PT) KROY TYPE TAPE.
- △ OR, VALUES ARE SPECIFIED IN MICROGRAMS.
- △ ACTION VALUES ARE SPECIFIED IN PROGRAMS WHEN REPRESENTED BY WHOLE NUMBERS AND BY MICROGRAMS WHEN REPRESENTED BY DECIMALS.
- △ RESISTOR VALUES ARE SPECIFIED IN OHMS AND ARE (1/4W, 2.5%).

NOTE: UNLESS OTHERWISE SPECIFIED

8 7 6 5 4 3

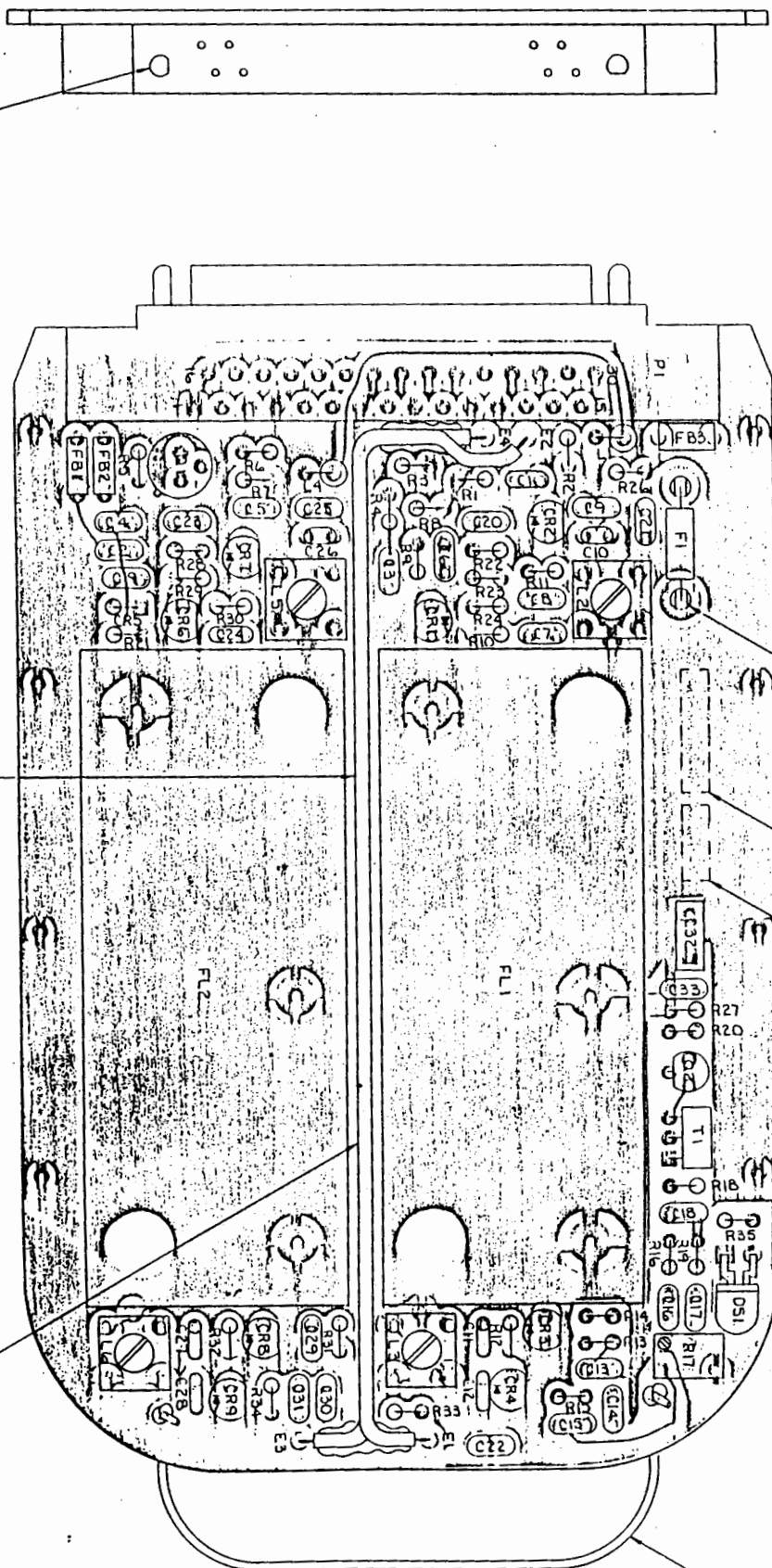
INSTALL COAKES IN THIS ORDER:
 1. E7 TO E8
 2. E5 TO E6
 3. E1 TO E2
 SOLDER TO GND PLANE AS INDICATED

7 2 PLCS
 91 2 PLCS
 5 4 PLCS



1	SCHEMATIC	SIZE	QTY	RECD	M506	994518-00	USED	NEXT
2	SCHEMATIC	0					ON	ASTV
3	ASSEMBLY DRAWING	0						
4	ASSEMBLY DRAWING	0						
5	SCHEMATIC	0						
6	SCHEMATIC	0						
7	SCHEMATIC	0						

UNLESS OTHERWISE SPECIFIED		CONTRACT NUMBER
DIMENSIONS ARE IN INCHES		
TOLERANCES		
LINEAR	ANGULAR	
XX ± .01	XX ± .01	
XXX ± .005	XXX ± .005	
XXXX ± .002	XXXX ± .002	
ALL MACHINED SURFACES		FINISH
✓		
DESIGN ACTIVITY BY		
DESIGN APPROVED		



2 PLCS

59 2 PLCS

INSTALL COAXES IN THIS ORDER:
 1. E3 TO E4
 2. E1 TO E2
 SOLDER TO GND PLANE AS INDICATED.

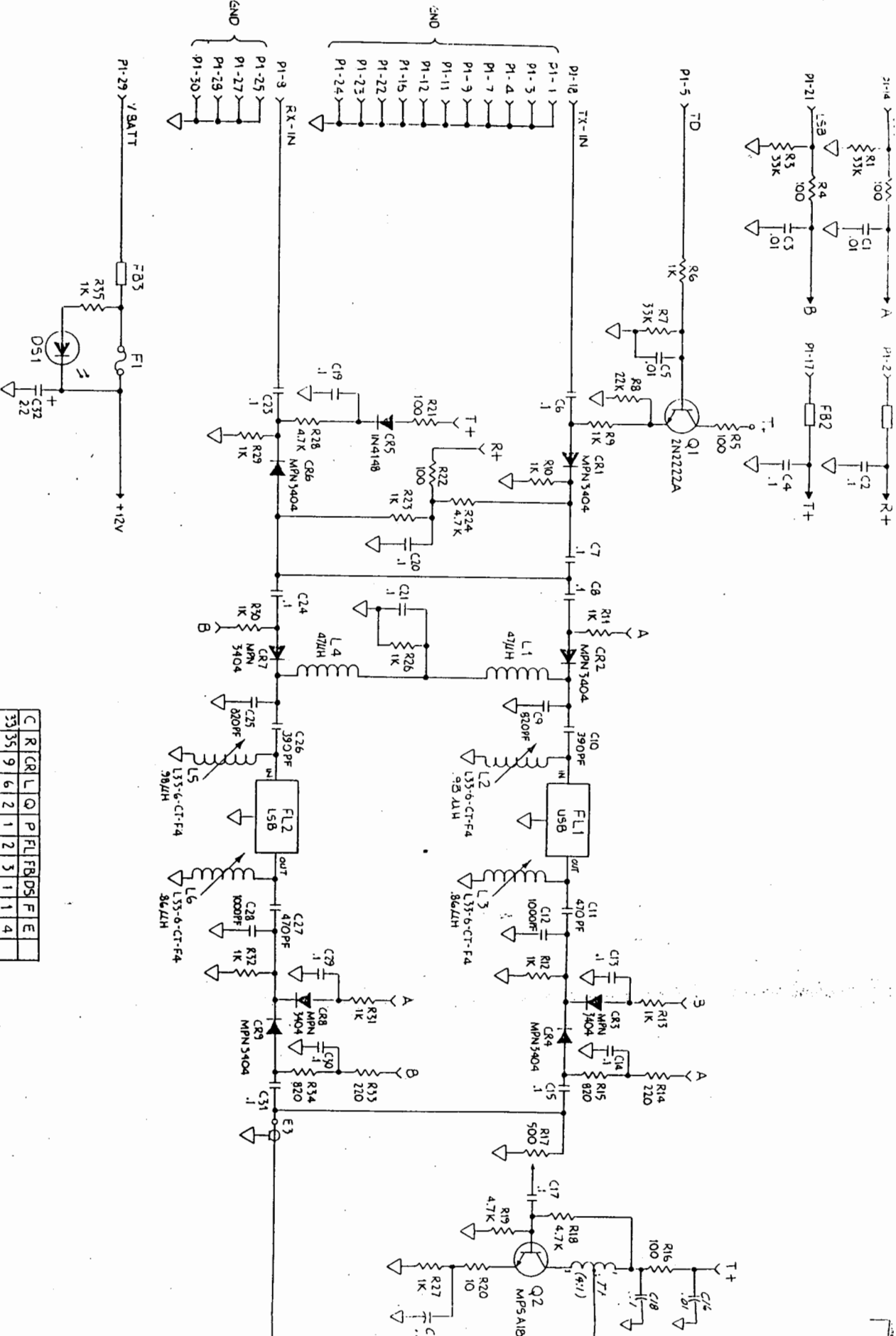
- ALL LEAD EXTENSIONS ON CIRCUIT SIDE OF BOARD TO BE 0.90 MAX AS SHOWN.
- COMPONENT NOT TO EXTEND BEYOND MAX. HEIGHT AS INDICATED.
- ALL PINS TO BE ORIENTED AS INDICATED.
- IDENTIFY WITH PART NUMBER, RUBBER STAMP.
- IDENTIFY WITH LATEST REVISION, RUBBER STAMP.
- GROUPS ARE INDICATED BY:
- C. VALUES ARE SPECIFIED IN MICROHMS.
- F. VALUES ARE SPECIFIED IN MICROHMS.
- ACTION VALUES ARE SPECIFIED IN MICROHMS WHEN REPRESENTED BY WHOLE NUMBERS, AND BY MICROHMS WHEN REPRESENTED BY DECIMALS.
- RESISTOR VALUES ARE SPECIFIED IN OHMS AND ARE 1/4W, 2.5%.

UNLESS OTHERWISE SPECIFIED

7	TEST						
6	INSPECTION						
5	ASSEMBLY						
4	SCHEMATIC						
3	ASSEMBLY DRAWING						
2	DESIGN						
1	DRAWING						

UNLESS OTHERWISE SPECIFIED CONTRACT NUMBER	
DIMENSIONS ARE IN INCHES	
TOLERANCES	
LINEAR	±0.005
ANGULAR	±0.1°
XXX = 0.005	
XXX = 0.010	
ALL UNFINISHED SURFACES	
DESIGN	

8 7 6 5 4 3



C. ACTOR VALUES ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.

R. RESISTORS ARE 1/8 W, 5%, VALUES IN OHMS, UNLESS OTHERWISE SPECIFIED.

ALL VALUES OTHERWISE SPECIFIED

C	R	CR	L	Q	P	FL	FR	DS	F	E
33	35	9	6	2	1	2	3	1	1	4

REFERENCE DESIGNATIONS NOT USED:

R25

ITEM	DESCRIPTION	QTY	UNIT	REMARKS
1	500 OHM 1/8 W	1	RES	
2	100 OHM 1/8 W	1	RES	
3	4.7K OHM 1/8 W	1	RES	
4	10 OHM 1/8 W	1	RES	
5	1K OHM 1/8 W	1	RES	
6	100 OHM 1/8 W	1	RES	
7	100 OHM 1/8 W	1	RES	
8	100 OHM 1/8 W	1	RES	
9	100 OHM 1/8 W	1	RES	
10	100 OHM 1/8 W	1	RES	
11	100 OHM 1/8 W	1	RES	
12	100 OHM 1/8 W	1	RES	
13	100 OHM 1/8 W	1	RES	
14	100 OHM 1/8 W	1	RES	
15	100 OHM 1/8 W	1	RES	
16	100 OHM 1/8 W	1	RES	
17	100 OHM 1/8 W	1	RES	
18	100 OHM 1/8 W	1	RES	
19	100 OHM 1/8 W	1	RES	
20	100 OHM 1/8 W	1	RES	
21	100 OHM 1/8 W	1	RES	
22	100 OHM 1/8 W	1	RES	
23	100 OHM 1/8 W	1	RES	
24	100 OHM 1/8 W	1	RES	
25	100 OHM 1/8 W	1	RES	
26	100 OHM 1/8 W	1	RES	
27	100 OHM 1/8 W	1	RES	
28	100 OHM 1/8 W	1	RES	
29	100 OHM 1/8 W	1	RES	
30	100 OHM 1/8 W	1	RES	
31	100 OHM 1/8 W	1	RES	
32	100 OHM 1/8 W	1	RES	
33	100 OHM 1/8 W	1	RES	
34	100 OHM 1/8 W	1	RES	
35	100 OHM 1/8 W	1	RES	
36	100 OHM 1/8 W	1	RES	
37	100 OHM 1/8 W	1	RES	
38	100 OHM 1/8 W	1	RES	
39	100 OHM 1/8 W	1	RES	
40	100 OHM 1/8 W	1	RES	
41	100 OHM 1/8 W	1	RES	
42	100 OHM 1/8 W	1	RES	
43	100 OHM 1/8 W	1	RES	
44	100 OHM 1/8 W	1	RES	
45	100 OHM 1/8 W	1	RES	
46	100 OHM 1/8 W	1	RES	
47	100 OHM 1/8 W	1	RES	
48	100 OHM 1/8 W	1	RES	
49	100 OHM 1/8 W	1	RES	
50	100 OHM 1/8 W	1	RES	
51	100 OHM 1/8 W	1	RES	
52	100 OHM 1/8 W	1	RES	
53	100 OHM 1/8 W	1	RES	
54	100 OHM 1/8 W	1	RES	
55	100 OHM 1/8 W	1	RES	
56	100 OHM 1/8 W	1	RES	
57	100 OHM 1/8 W	1	RES	
58	100 OHM 1/8 W	1	RES	
59	100 OHM 1/8 W	1	RES	
60	100 OHM 1/8 W	1	RES	
61	100 OHM 1/8 W	1	RES	
62	100 OHM 1/8 W	1	RES	
63	100 OHM 1/8 W	1	RES	
64	100 OHM 1/8 W	1	RES	
65	100 OHM 1/8 W	1	RES	
66	100 OHM 1/8 W	1	RES	
67	100 OHM 1/8 W	1	RES	
68	100 OHM 1/8 W	1	RES	
69	100 OHM 1/8 W	1	RES	
70	100 OHM 1/8 W	1	RES	
71	100 OHM 1/8 W	1	RES	
72	100 OHM 1/8 W	1	RES	
73	100 OHM 1/8 W	1	RES	
74	100 OHM 1/8 W	1	RES	
75	100 OHM 1/8 W	1	RES	
76	100 OHM 1/8 W	1	RES	
77	100 OHM 1/8 W	1	RES	
78	100 OHM 1/8 W	1	RES	
79	100 OHM 1/8 W	1	RES	
80	100 OHM 1/8 W	1	RES	
81	100 OHM 1/8 W	1	RES	
82	100 OHM 1/8 W	1	RES	
83	100 OHM 1/8 W	1	RES	
84	100 OHM 1/8 W	1	RES	
85	100 OHM 1/8 W	1	RES	
86	100 OHM 1/8 W	1	RES	
87	100 OHM 1/8 W	1	RES	
88	100 OHM 1/8 W	1	RES	
89	100 OHM 1/8 W	1	RES	
90	100 OHM 1/8 W	1	RES	
91	100 OHM 1/8 W	1	RES	
92	100 OHM 1/8 W	1	RES	
93	100 OHM 1/8 W	1	RES	
94	100 OHM 1/8 W	1	RES	
95	100 OHM 1/8 W	1	RES	
96	100 OHM 1/8 W	1	RES	
97	100 OHM 1/8 W	1	RES	
98	100 OHM 1/8 W	1	RES	
99	100 OHM 1/8 W	1	RES	
100	100 OHM 1/8 W	1	RES	

8 7 6 5 4 3

8

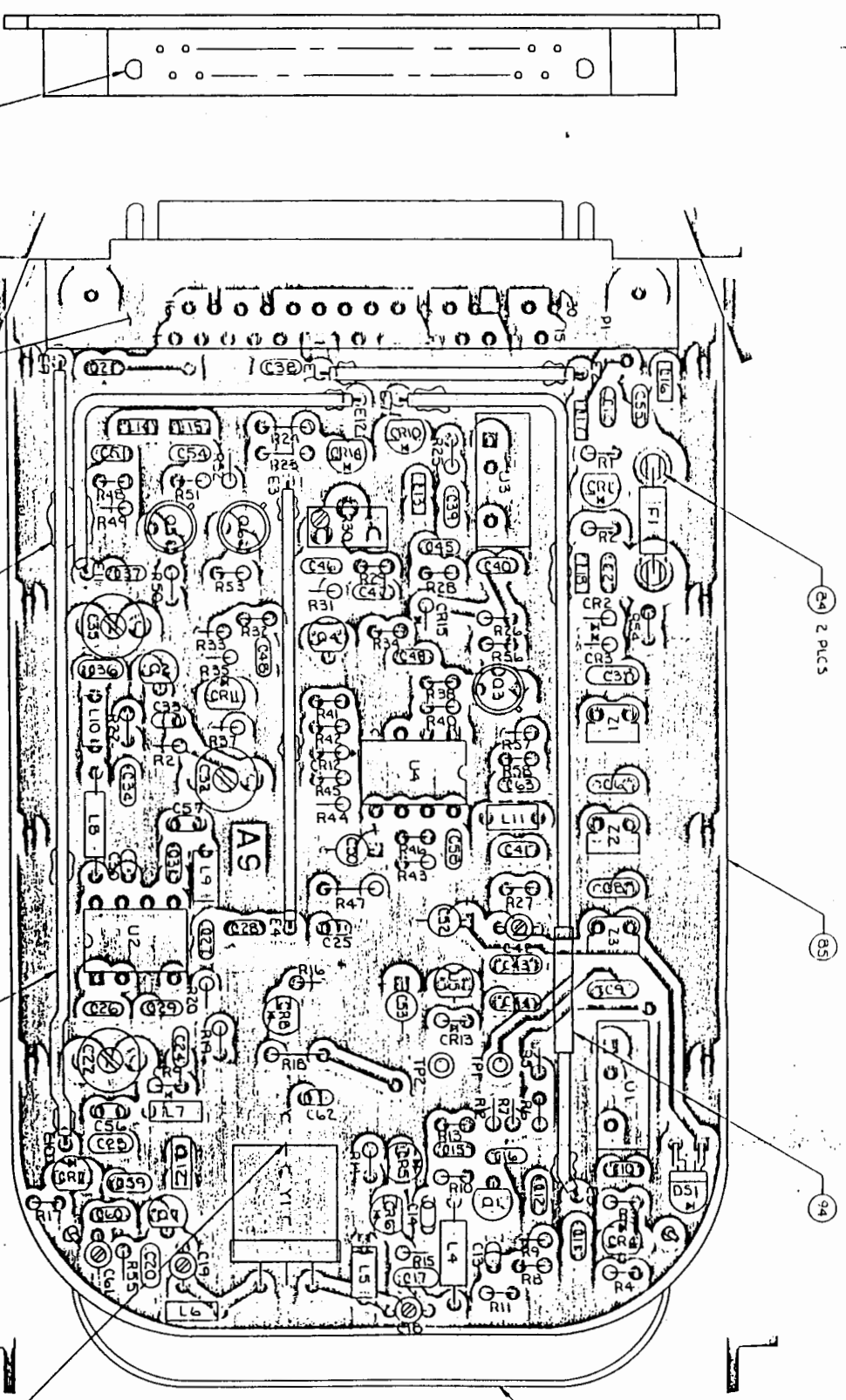
7

6

5

4

3

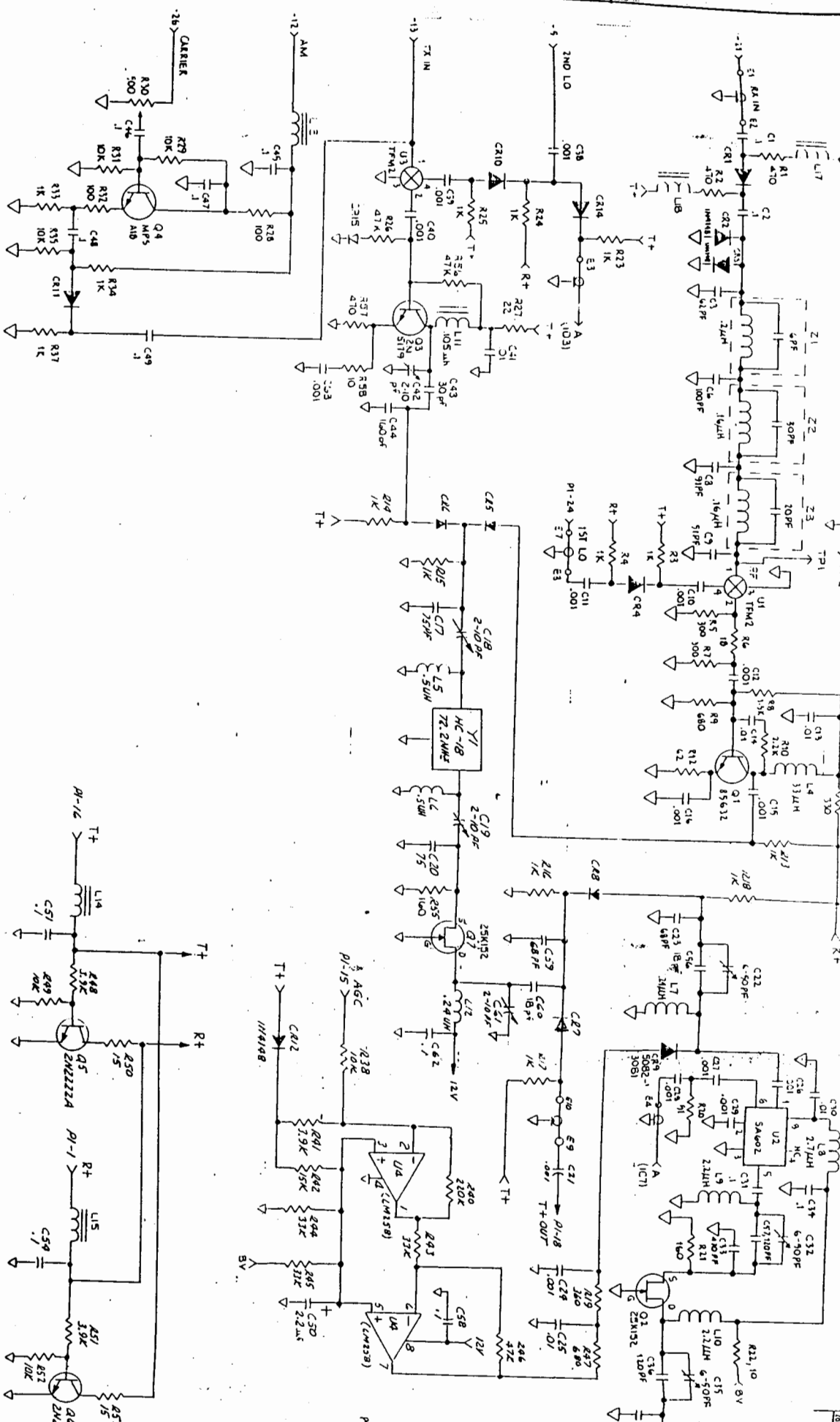


- 1. LEAD EXTENSIONS ON CIRCUIT SIDE OF BOARD TO BE .030 MAX. AS SHOWN.
- 2. COMPONENTS NOT TO EXCEED BEYOND MAX. HEIGHT AS INDICATED.
- 3. KEYING PINS TO BE ORIENTED AS INDICATED.
- 4. IDENTIFY WITH STOCK NUMBER, USING (NO PT.) KR Y TYPE TAP.
- 5. IDENTIFY WITH LATEST REVISION, USING (NO PT.) K CY TYPE TAP.
- 6. DIMENSIONS ARE UNLESS OTHERWISE SPECIFIED.
- 7. ON VALUES ARE SPECIFIED IN MICROINCHES.
- 8. CAPACITOR VALUES ARE SPECIFIED IN MICROFARADS WHEN REPRESENTED BY WHOLE NUMBERS, AND BY MICROFARADS WHEN REPRESENTED BY DECIMALS.
- 9. RESISTOR VALUES ARE SPECIFIED IN OHMS AND ARE 1/4W. 2.5%.

NOTE: UNLESS OTHERWISE SPECIFIED

7	SCHEMATIC					
6	SCHEMATIC					
5	SCHEMATIC					
4	SCHEMATIC					
3	SCHEMATIC					
2	SCHEMATIC					
1	ASSEMBLY DRAWING					
0	SIZE					
0	QTY REQD					
0	USED ON					
0	NEXT ASSY					

UNLESS OTHERWISE SPECIFIED	CONTRACT NUMBER
DIMENSIONS ARE IN INCHES	
TOLERANCES	
LINEAR	
ANGULAR	
HOLE DIA	
HOLE PER	
ALL MACHINED SURFACES	
FINISH	
DESIGN ACTIVITY	



100ES ARE M/FN 3404.

1. CAPACITOR VALUES ARE IN MICROFARADS.

2. RESISTOR VALUES ARE IN OHMS.

NOTE: UNLESS OTHERWISE SPECIFIED

26P DESIGNATORS USED

C	R	CR	U	Q	F	L	D	S	P	Y	E
63	±3	15	5	7	1	18	1	1	1	1	12

26P DESIGNATORS NOT USED

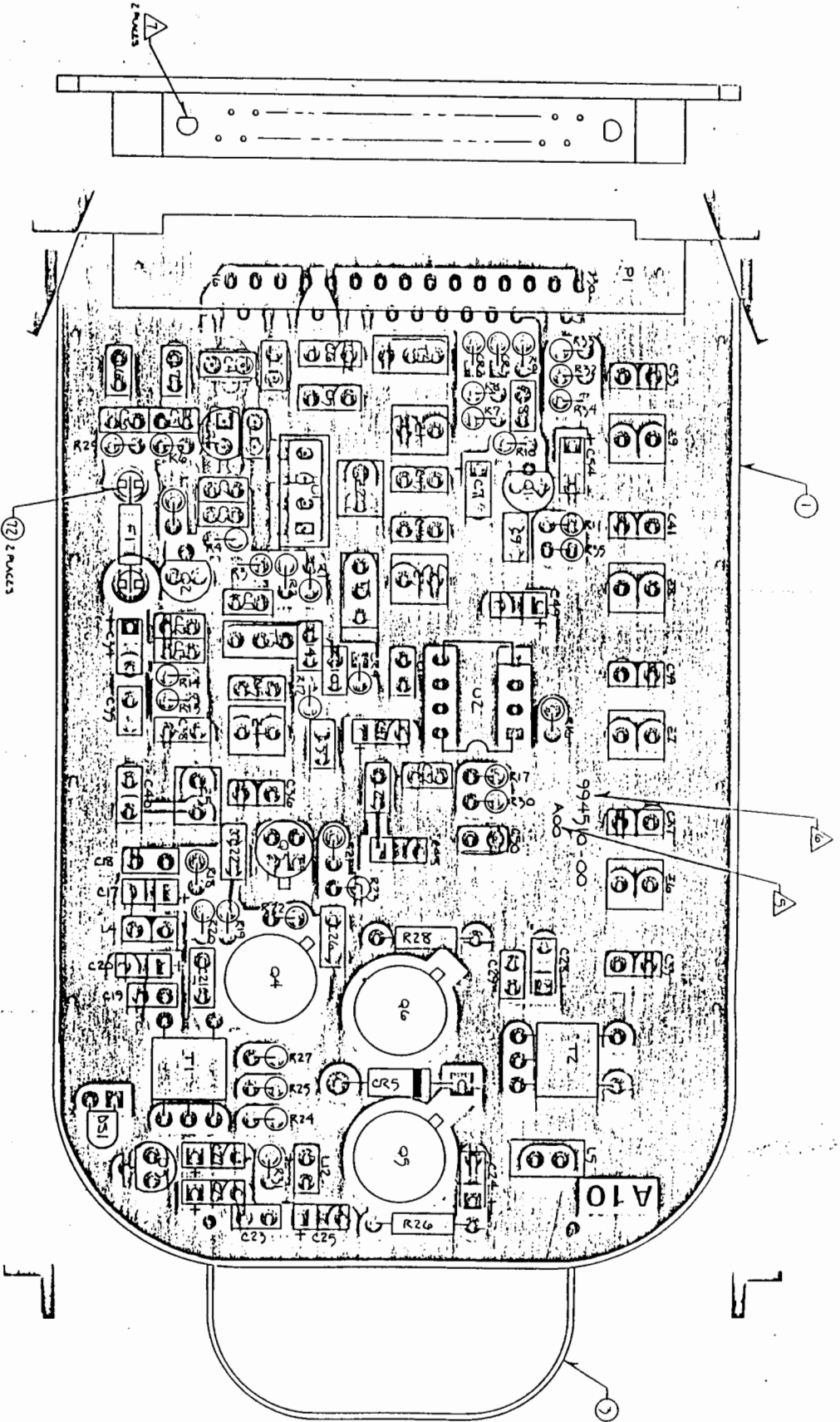
C-4, 5, 7
R-1, 2, 3

26P PARTS

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26
6X4	6AV6	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4	6X4

- 1. IDENTIFY WITH STOCK NUMBER, UNLESS OTHERWISE SPECIFIED.
- 2. IDENTIFY WITH LATEST REVISION, UNLESS OTHERWISE SPECIFIED.
- 3. ALL DIMENSIONS ARE IN INCHES.
- 4. ALL DIMENSIONS ARE SPECIFIED IN MICROINCHES, UNLESS OTHERWISE SPECIFIED.
- 5. ALL DIMENSIONS ARE SPECIFIED IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
- 6. ALL DIMENSIONS ARE SPECIFIED IN CENTIMETERS, UNLESS OTHERWISE SPECIFIED.
- 7. ALL DIMENSIONS ARE SPECIFIED IN METERS, UNLESS OTHERWISE SPECIFIED.
- 8. ALL DIMENSIONS ARE SPECIFIED IN KILOMETERS, UNLESS OTHERWISE SPECIFIED.

NOTE: UNLESS OTHERWISE SPECIFIED



SHEET	DATE	BY	CHKD	APP'D	REVISION	QTY REQD	USED	OH	WHOS B.	994518-00	NEXT ASSY
1											
2											
3											
4											
5											
6											
7											
8											

UNLESS OTHERWISE SPECIFIED (CONTRACT NUMBER)	
LINEAR	ANGULAR
XX ± .01	M ± .01
XX ± .02	M ± .02
XX ± .05	M ± .05
XX ± .10	M ± .10
XX ± .15	M ± .15
XX ± .20	M ± .20
XX ± .25	M ± .25
XX ± .30	M ± .30
XX ± .35	M ± .35
XX ± .40	M ± .40
XX ± .45	M ± .45
XX ± .50	M ± .50
XX ± .55	M ± .55
XX ± .60	M ± .60
XX ± .65	M ± .65
XX ± .70	M ± .70
XX ± .75	M ± .75
XX ± .80	M ± .80
XX ± .85	M ± .85
XX ± .90	M ± .90
XX ± .95	M ± .95
XX ± 1.00	M ± 1.00

IQTE UNLESS OTHERWISE SPECIFIED

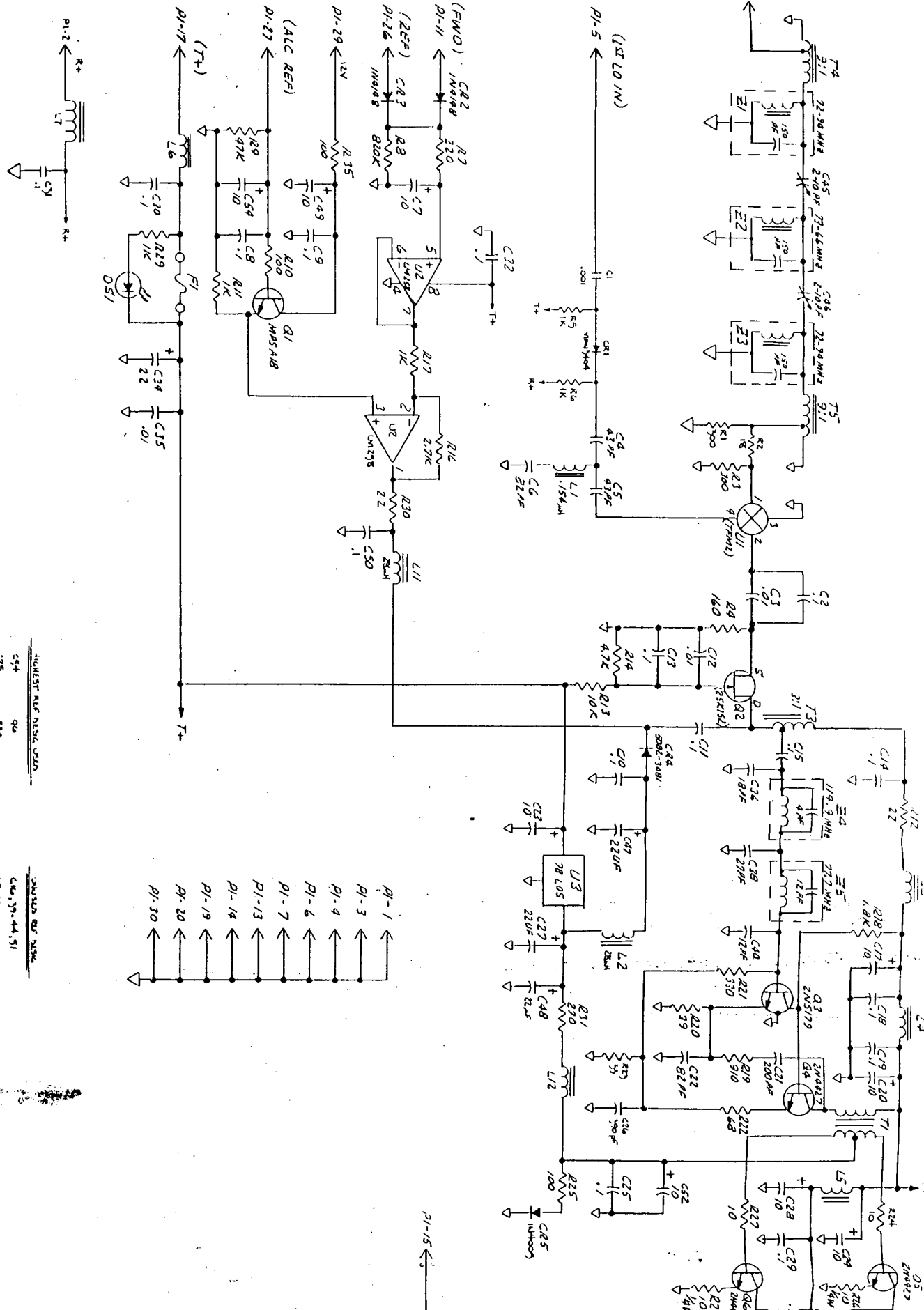
8 7 6 5 4 3

RESISTOR VALUE CHANGES

54	90
29	93
35	73
1	33
12	29
21	

INDUCTOR VALUE CHANGES

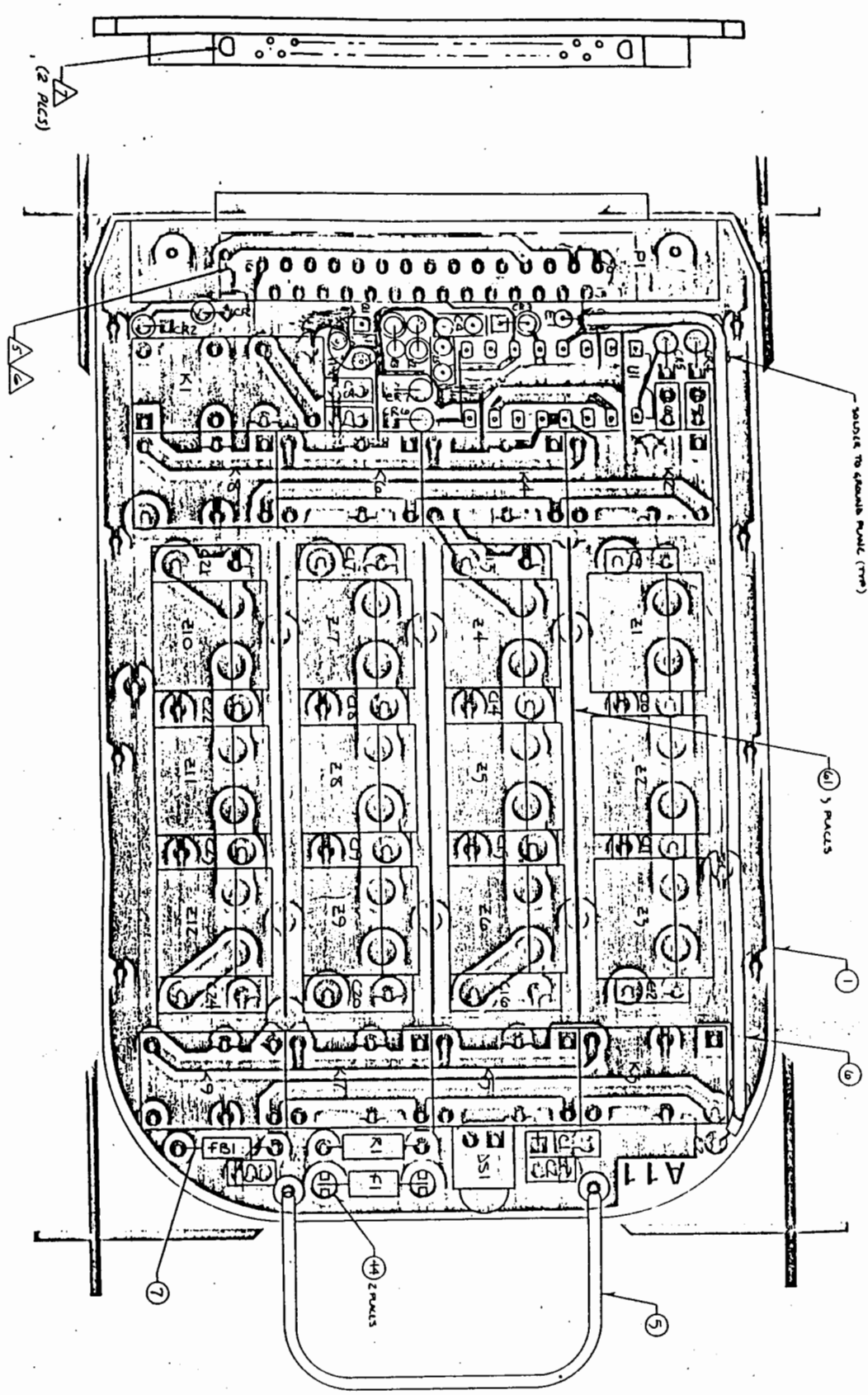
54	90
29	93
35	73
1	33
12	29
21	



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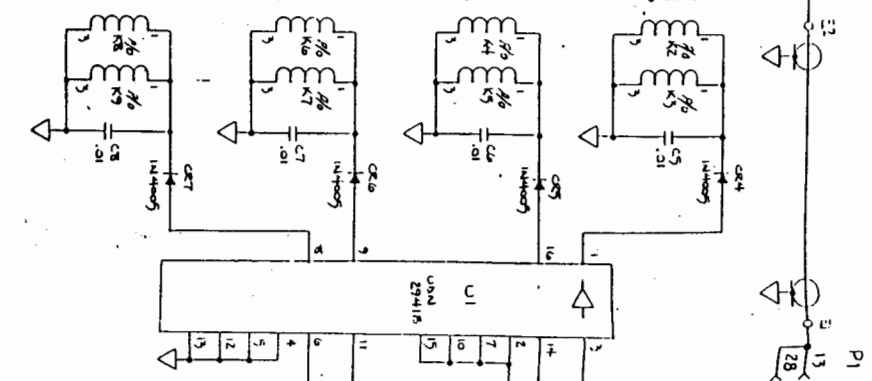
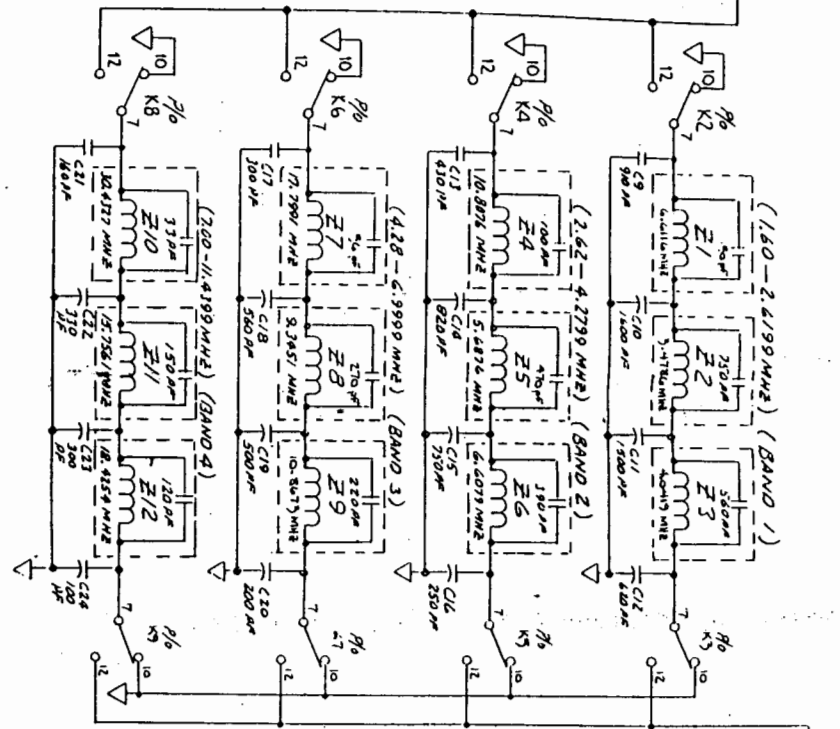
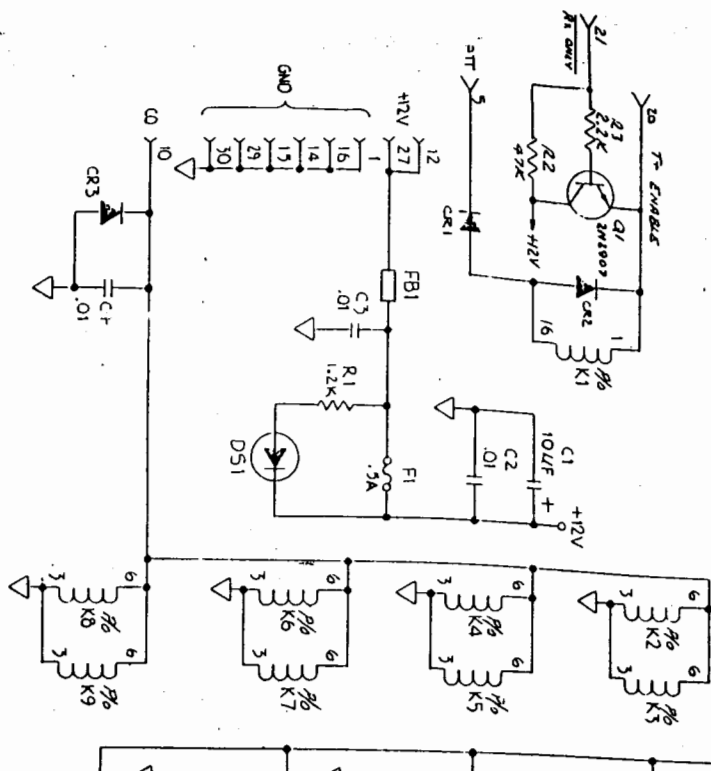
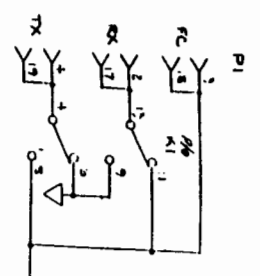
7
 6
 5
 4
 3

ALL LAMP DIMENSIONS ON CIRCUIT SIDE OF BOARD TO BE .030 MAX. AS SHOWN.
 DIMENSIONS NOT TO EXCEED BEYOND MAX. HEIGHT AS INDICATED.
 WIRING PANS TO BE DERIVED AS INDICATED.
 MOUNT WITH STOCK MOUNTS, USING (18 PX) KROY TYPE TAIL.
 MOUNT WITH LAMPS NETWORK, USING (20 PX) KROY TYPE TAIL.
 MOUNT WITH LAMPS NETWORK, USING (20 PX) KROY TYPE TAIL.
 MOUNT WITH LAMPS NETWORK, USING (20 PX) KROY TYPE TAIL.



DIMENSIONS ARE IN INCHES			
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

100% INSPECTED
 100% TESTED
 100% ASSEMBLED
 100% FINISHED



C	R	O	C	R	F	B	D	S	E	K	F	P	J
2	5	3	1	1	7	1	1	1	2	9	1	1	1

1. DIODES ARE IN4148.

2. CAPACITOR VALUES ARE IN MICROFARADS.

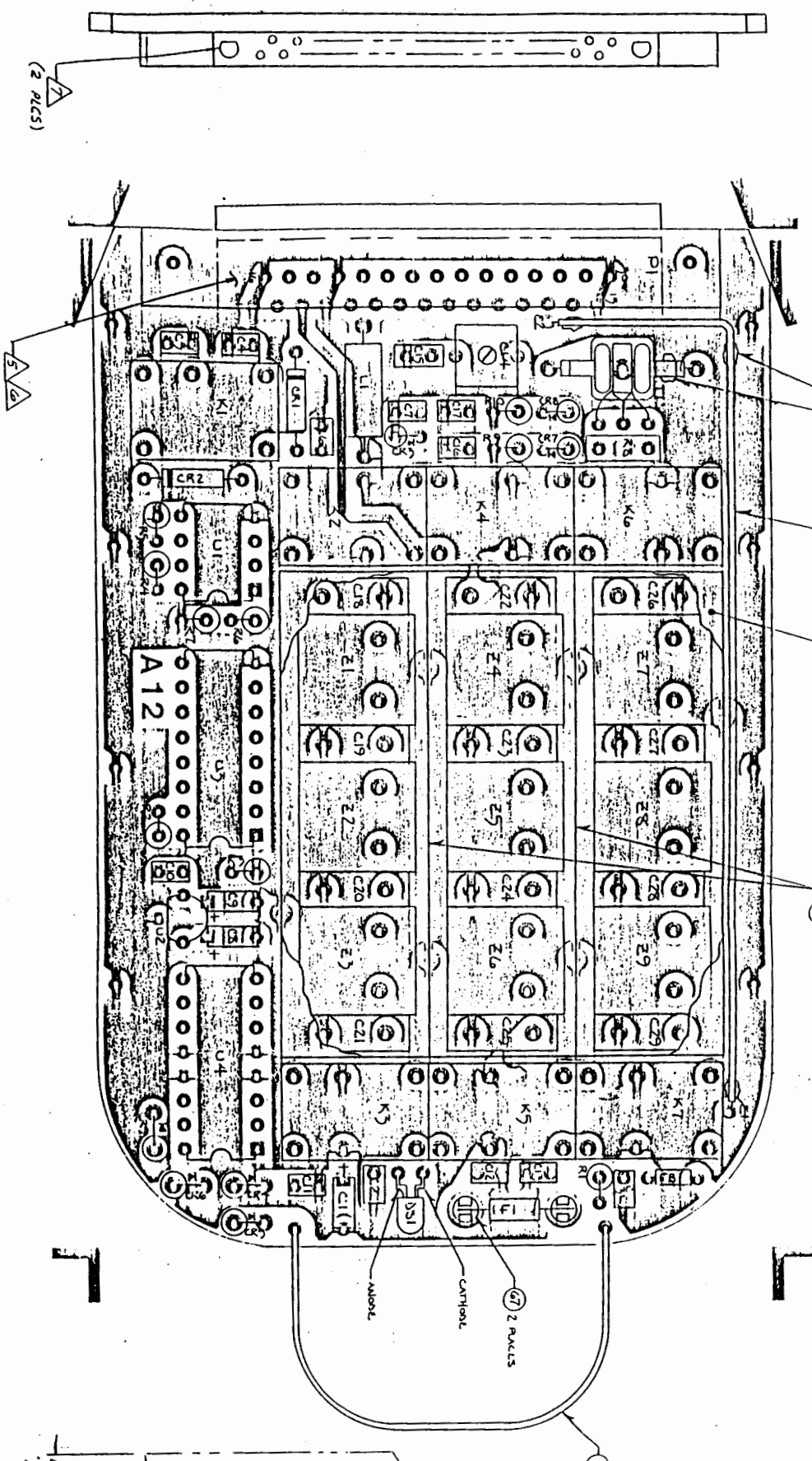
3. RESISTORS ARE 1/8W, 5% VALUES IN OHMS.

4. VALUES GIVEN IN SPECIES

COMMERCIAL	RESISTOR	DIODE	WIRE	WIRE	WIRE

REPAIR PARTS	REPAIR PARTS
REPAIR PARTS	REPAIR PARTS

TOUCH UP AS SHOWN
(TYPE 4 PLACES)



ALL I/O EXTENSIONS ON CIRCUIT SIDE OF BOARD TO BE .030 MAX. AS SHOWN.
COMPONENTS NOT TO EXTEND BEYOND MAX. HEIGHT AS INDICATED.

PLACING MUST BE ORIENTED AS INDICATED.

IDENTIFY WITH STOCK NUMBER, USING (10 PT.) KROY TYPE TYPE.

IDENTIFY WITH LATEST REVISION, USING (10 PT.) KROY TYPE TYPE.

DOORS ARE .1875 INCHES.

SEE 21 THROUGH 29 TO THE PCB WITH A SMALL AMOUNT OF TYP.

(ITEM 2) APPROVED UNDER THE GOALS.

PRECISION VALUES ARE SPECIFIED IN CHINA AND ARE 1/8 W. 2.5X.

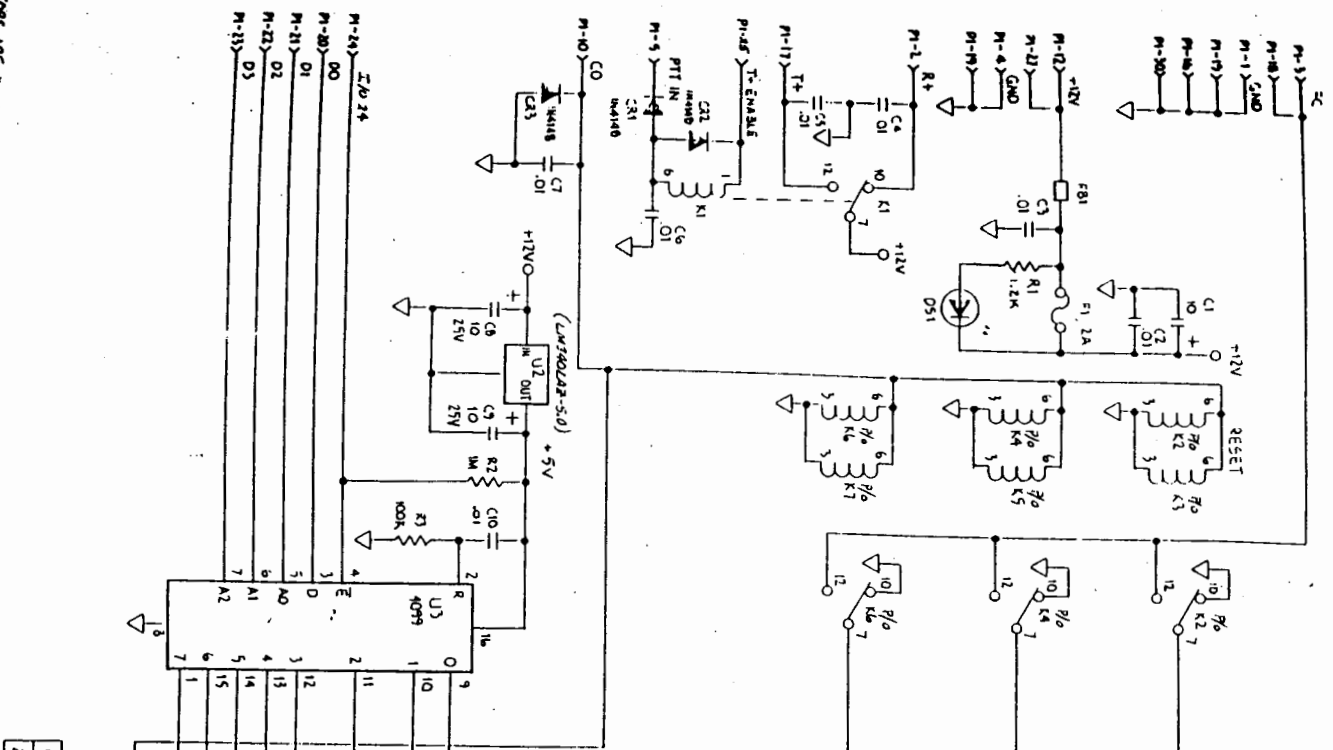
UNLESS OTHERWISE SPECIFIED

REV	DESCRIPTION	DATE	BY	CHKD	USED	MTY
1	ASSEMBLY DRAWING				ON	ASST
2	SCHEMATIC DRAWING					
3	SCHEMATIC					
4	SCHEMATIC					
5	SCHEMATIC					
6	SCHEMATIC					
7	SCHEMATIC					

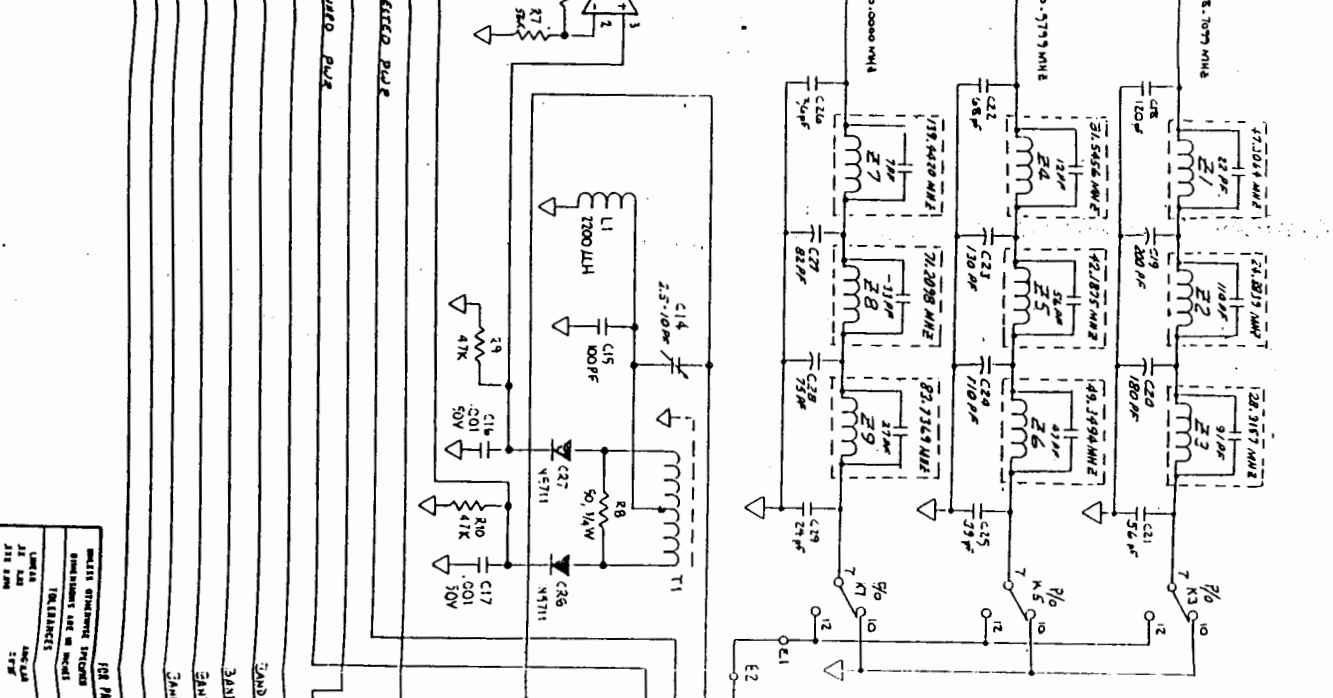
UNLESS OTHERWISE SPECIFIED	CONTRACT NUMBER
DIMENSIONS ARE IN INCHES	
TOLERANCES	
LINEAR	
ANGULAR	
XX ± .02	
XX ± .010	
HOLES PER ANSI B92.1	
ALL MACHINED SURFACES	
FINISH	

9400
 ALL DIMENSIONS ON THIS DRAWING ARE UNLESS OTHERWISE SPECIFIED IN THE NOTES OR IN THE DIMENSION LINES.
 DIMENSIONS ARE IN INCHES.
 TOLERANCES ARE AS SHOWN.
 UNLESS OTHERWISE SPECIFIED.
 CONTRACT NUMBER

INDICATORS ARE IN MICROFARADS.
RESISTORS ARE 1/8W, 5%, VALUES IN OHMS.



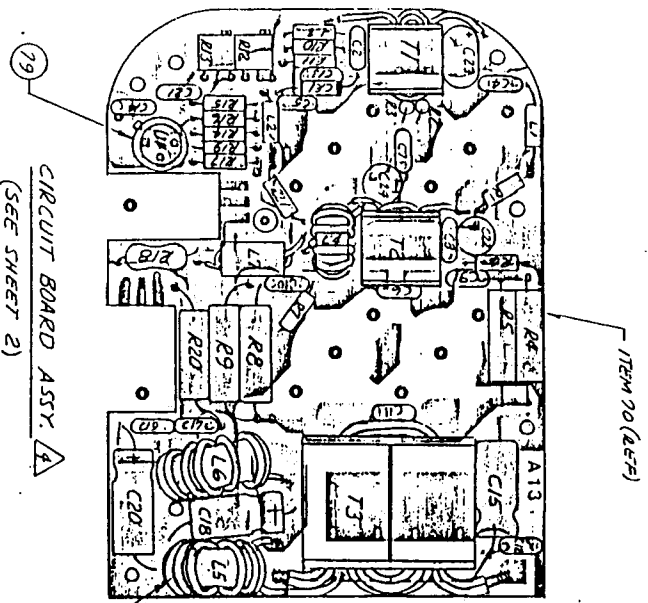
C	R	G	U	Z	T	L	K	F	F	8	0	9	P	I	E
29	10	9	4	9	1	1	7	1	1	1	1	1	1	1	2



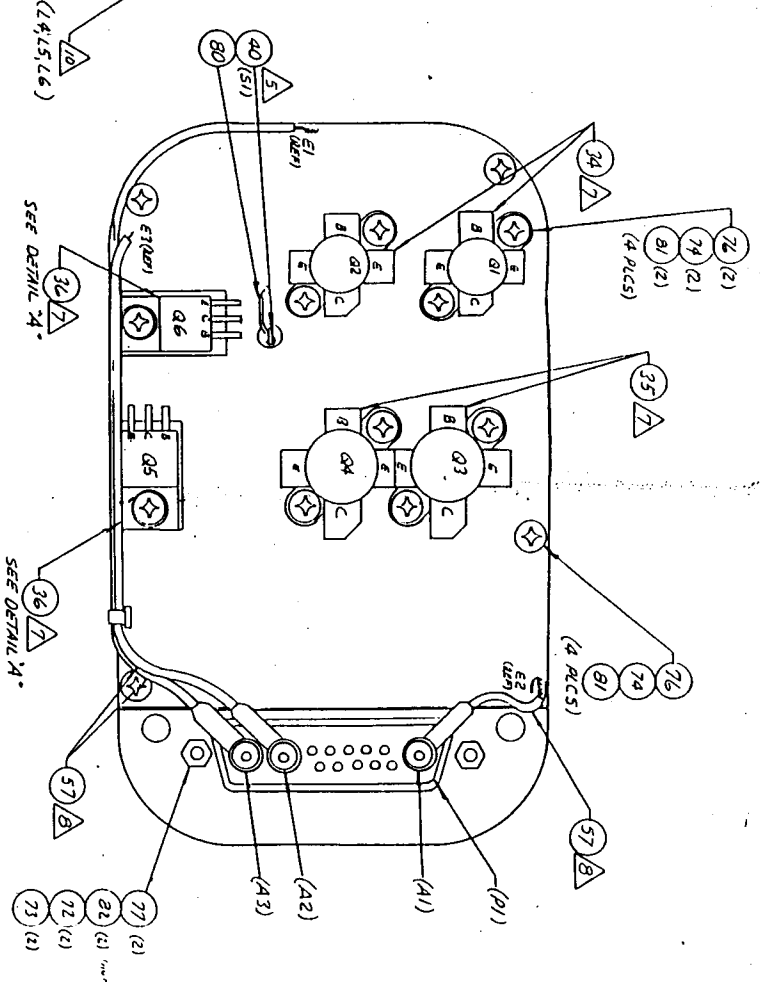
DATE	DESIGNED BY	CHECKED BY
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.
1968	J. H. H. H.	J. H. H. H.

FOR PARTS LIST

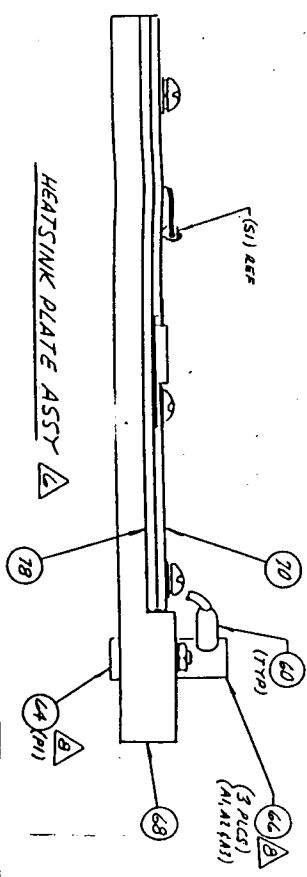
ANTENNA



CIRCUIT BOARD ASSY. A
(SEE SHEET 2)



HEAT SINK PLATE ASSY
(COMPONENTS ON PCB REMOVED FOR CLARITY)
SEE DETAIL "A"
SEE DETAIL "A"



HEAT SINK PLATE ASSY

- STEP 1) SECURE L4, L5 P.L.C TO BOARD USING ITEM B9 AS REQ.
- STEP 2) INSTALL ITEM 69, 65, 58 & 59 TO HEAT SINK PLATE ASSY. AFTER STEPS 1 THRU 5 HAS BEEN COMPLETED. TERMINATE ALL WIRES TO DESIGNATED AREA SHOWN ON SH 2.
- STEP 3) INSTALL COAX (PI), ITEM 64 WITH HARDWARE TO BE FOLLOWED BY INSTALLING ITEM 66 (3 PLS)(A1-A3) WITH ITEM 57 COAX WIRES. TERMINATE COAX WIRES TO DESIGNATED AREA AS SHOWN ON SH 1.
- STEP 4) INSTALL ITEM 34, 81 & 82, ITEM 35, 84 & 85, USING SOLDER & HARDWARE. INSTALL ITEM 36, 85 & 86 USING DETAIL "A" ON SHEET 1.
- STEP 5) ASSEMBLE ITEM 68, 70 AND 78 USING PROPER HARDWARE (4 PLACES) AS SHOWN ON SHEET 1.
- STEP 6) INSTALL THERMOSTAT, ITEM 40, TO HEAT SINK PLATE, ITEM 68, AS SHOWN ON SH 1.
- STEP 7) INSTALL ALL COMPONENTS TO CIRCUIT BO. APPROX. AS SHOWN ON SHEET 1.

ITEM	DESCRIPTION	QTY	UNIT	REMARKS
1	ASSEMBLY DRAWING	1	OW	
2	SCHEMATIC DRAWING	1	OW	
3	SCHEMATIC	1	OW	
4	SCHEMATIC	1	OW	
5	SCHEMATIC	1	OW	
6	SCHEMATIC	1	OW	
7	SCHEMATIC	1	OW	

UNLESS OTHERWISE SPECIFIED	CONTRACT NUMBER
DIMENSIONS ARE IN INCHES	
TOLERANCES	
FRACTIONS	
DECIMALS	
ANGLES	
UNLESS OTHERWISE SPECIFIED	
ALL SURFACES	
FINISH	
DESIGN	
REVISION	
DATE	
BY	
CHECKED	
DESIGNED	
DRAWN	
PROJECT	
REVISION	
DATE	
BY	
CHECKED	
DESIGNED	
DRAWN	
PROJECT	
REVISION	
DATE	
BY	
CHECKED	

UNLESS OTHERWISE SPECIFIED

7

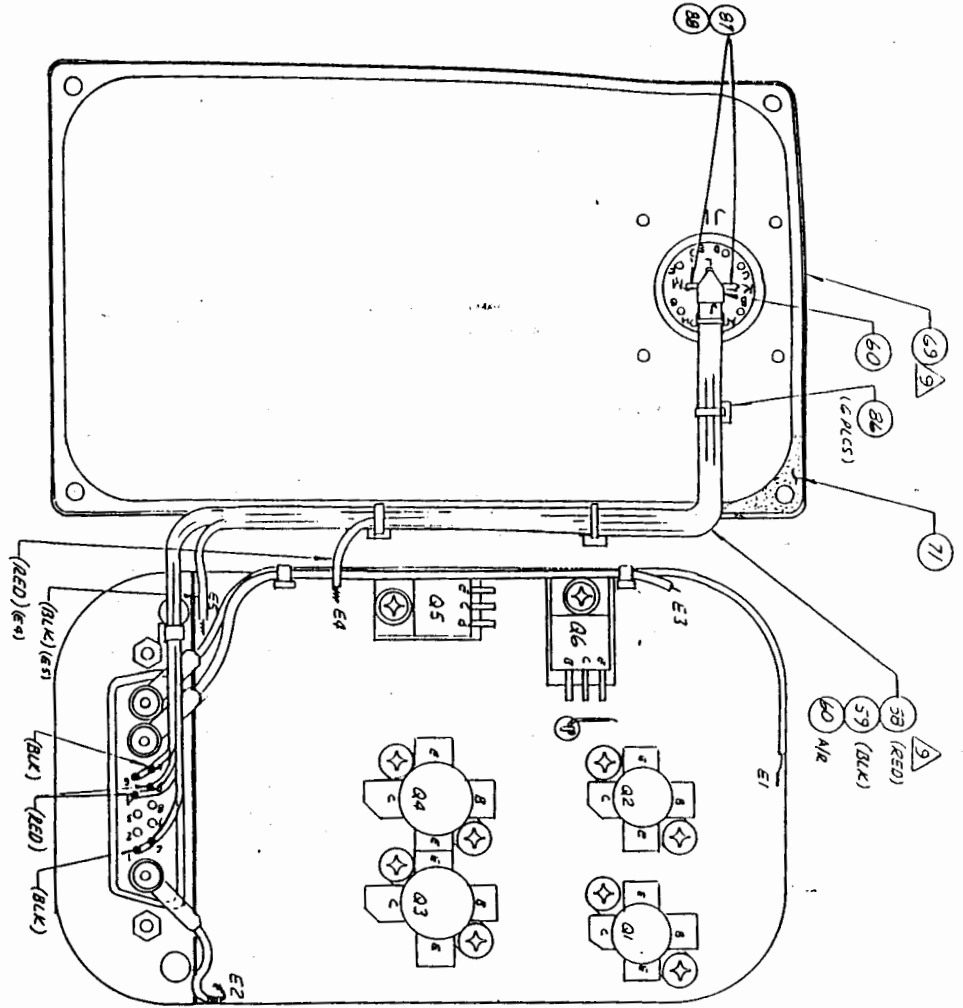
6

5

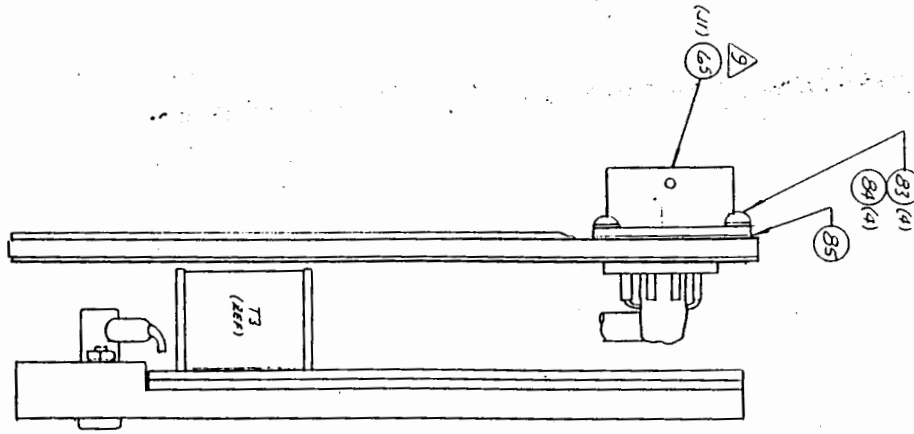
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4

3

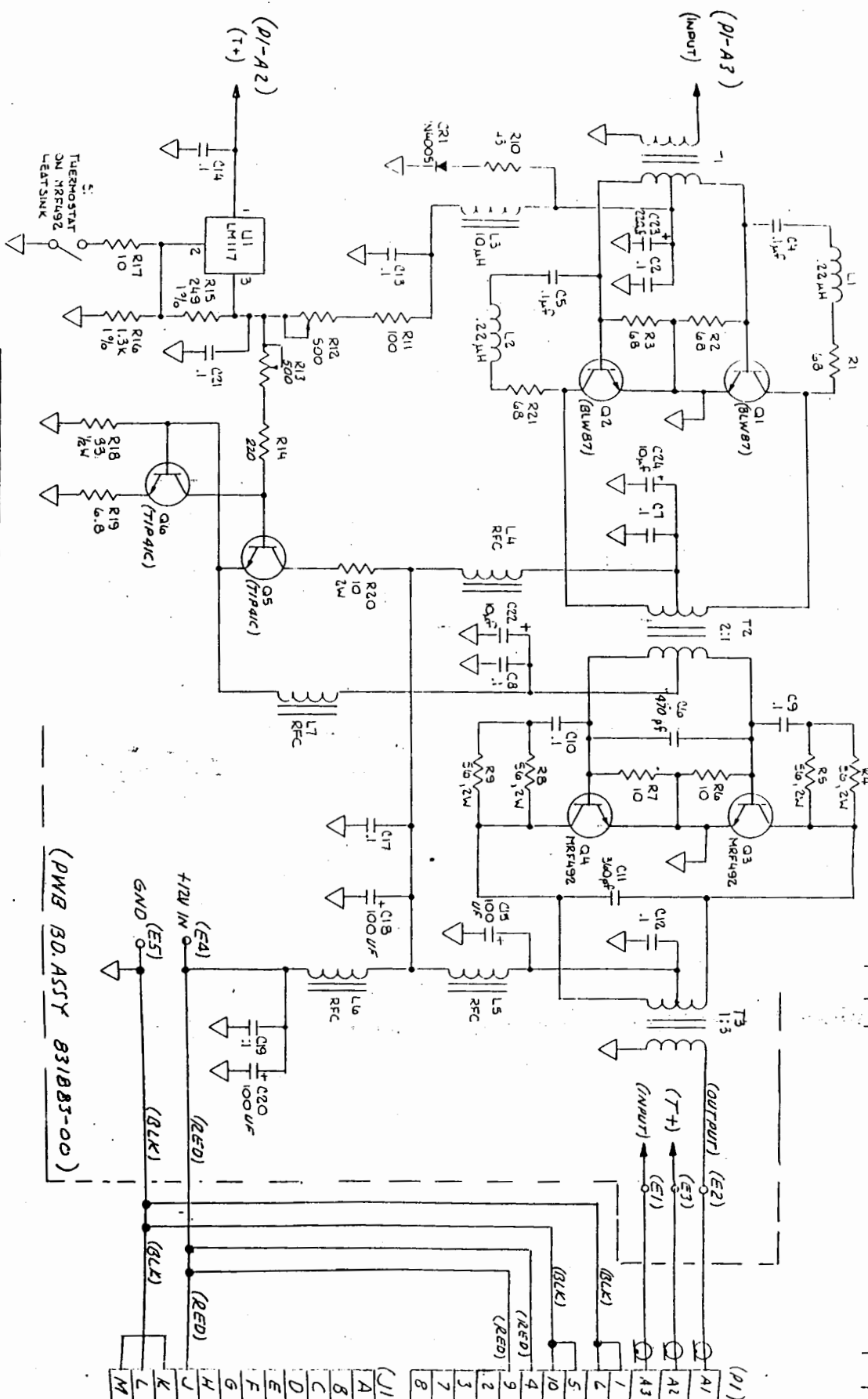


ALL COMPONENTS REMOVED
ON PCB FOR CLARITY.



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REV	DATE	DESCRIPTION
1		SEE SH 1



See SHEET 1.
NOTE: UNLESS OTHERWISE SPECIFIED

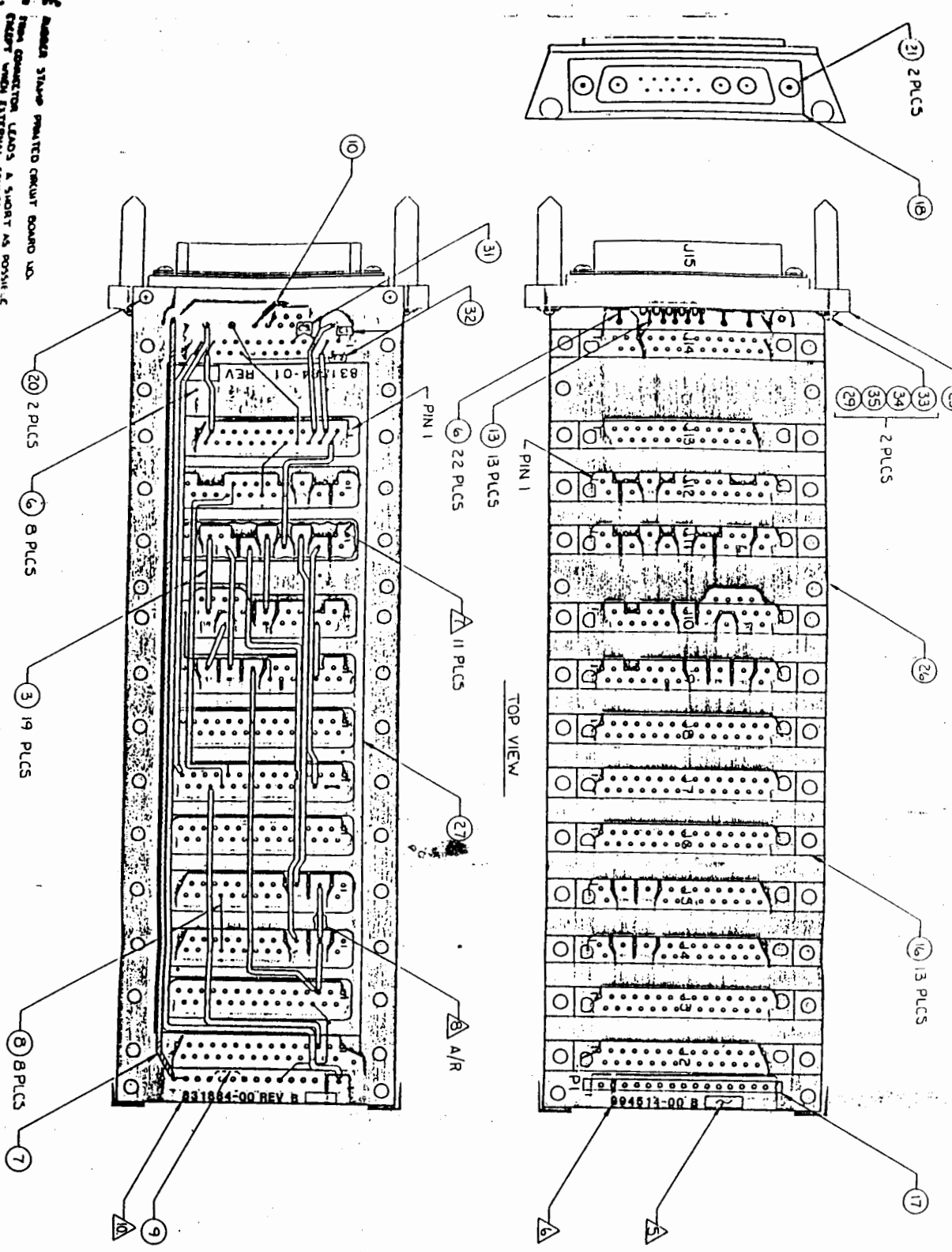
HIGHEST REF. DET. LIEED	REF. DET. MAT. USED
U1, S1, Q6, T3, L7, C21, R21, C24, ES	C1, 3, 16

COMMERCIAL	MILITARY	MILITARY
USED ON	USED ON	USED ON

FOR PARTS LIST SEE SEPARATE B/W NUMBER
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES
LUMINA
21 24
211 248
57M
ALL MACHINED SURFACES
FINISH
MATERIAL:
SOUTHWEST INTERNATIONAL
2210 METERS AVENUE
ESCONDIDO, CALIFORNIA
U.S.A.
SCHEMATIC DIAGRAM, POWER
AMPLIFIER (A13)
M5C
DRAWING NUMBER
994513-00
SCALE NONE
SHEET 3
6000 IDENT NUMBER 924

LESS OTHERWISE SPECIFIED

- ANALOG STAGE PRINTED CIRCUIT BOARD NO. FROM CONNECTOR LEADS A SHORT AS POSSIBLE BEING MADE ON THE BOARD. A SHORTER SHORTER THAN STUBS 3 TO ITEM 21. BOARD ITEM 17 TO ITEM 22, SLOTTED AREAS. STAGE ASSEMBLY NO. DRAWING NO. ALL DIMENSIONS AND TOLERANCES ARE IN INCHES UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.

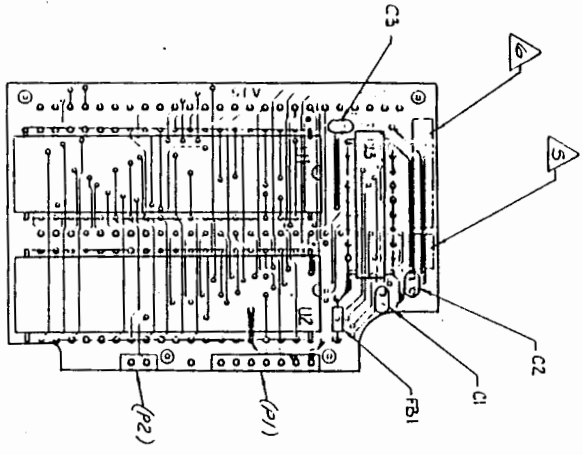


NO.	DESCRIPTION	QTY	UNIT	REMARKS
1	PCB BOARD	1	PCB	99-2521-00
2	RESISTOR	100	RES	
3	RESISTOR	100	RES	
4	RESISTOR	100	RES	
5	RESISTOR	100	RES	
6	RESISTOR	100	RES	
7	RESISTOR	100	RES	
8	RESISTOR	100	RES	
9	RESISTOR	100	RES	
10	RESISTOR	100	RES	
11	RESISTOR	100	RES	
12	RESISTOR	100	RES	
13	RESISTOR	100	RES	
14	RESISTOR	100	RES	
15	RESISTOR	100	RES	
16	RESISTOR	100	RES	
17	RESISTOR	100	RES	
18	RESISTOR	100	RES	
19	RESISTOR	100	RES	
20	RESISTOR	100	RES	
21	RESISTOR	100	RES	
22	RESISTOR	100	RES	
23	RESISTOR	100	RES	
24	RESISTOR	100	RES	
25	RESISTOR	100	RES	
26	RESISTOR	100	RES	
27	RESISTOR	100	RES	
28	RESISTOR	100	RES	
29	RESISTOR	100	RES	
30	RESISTOR	100	RES	
31	RESISTOR	100	RES	
32	RESISTOR	100	RES	
33	RESISTOR	100	RES	
34	RESISTOR	100	RES	
35	RESISTOR	100	RES	
36	RESISTOR	100	RES	
37	RESISTOR	100	RES	
38	RESISTOR	100	RES	
39	RESISTOR	100	RES	
40	RESISTOR	100	RES	

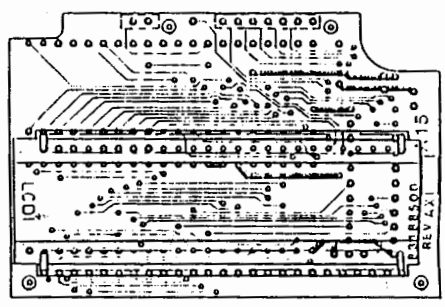
UNLESS OTHERWISE SPECIFIED	CONTRACT NUMBER
LINER	5, 1/4, 1/4
ANGLE	1/2, 1/4, 1/4
DRILLING	1/2, 1/4, 1/4
RESISTOR	1/2, 1/4, 1/4
MOUNTING	1/2, 1/4, 1/4
ETCHING	1/2, 1/4, 1/4
PROJECT	1/2, 1/4, 1/4
FINISH	1/2, 1/4, 1/4

SEE

ZONE



TOP VIEW
(COMPONENT SIDE)



BOTTOM VIEW
(CIRCUIT SIDE)

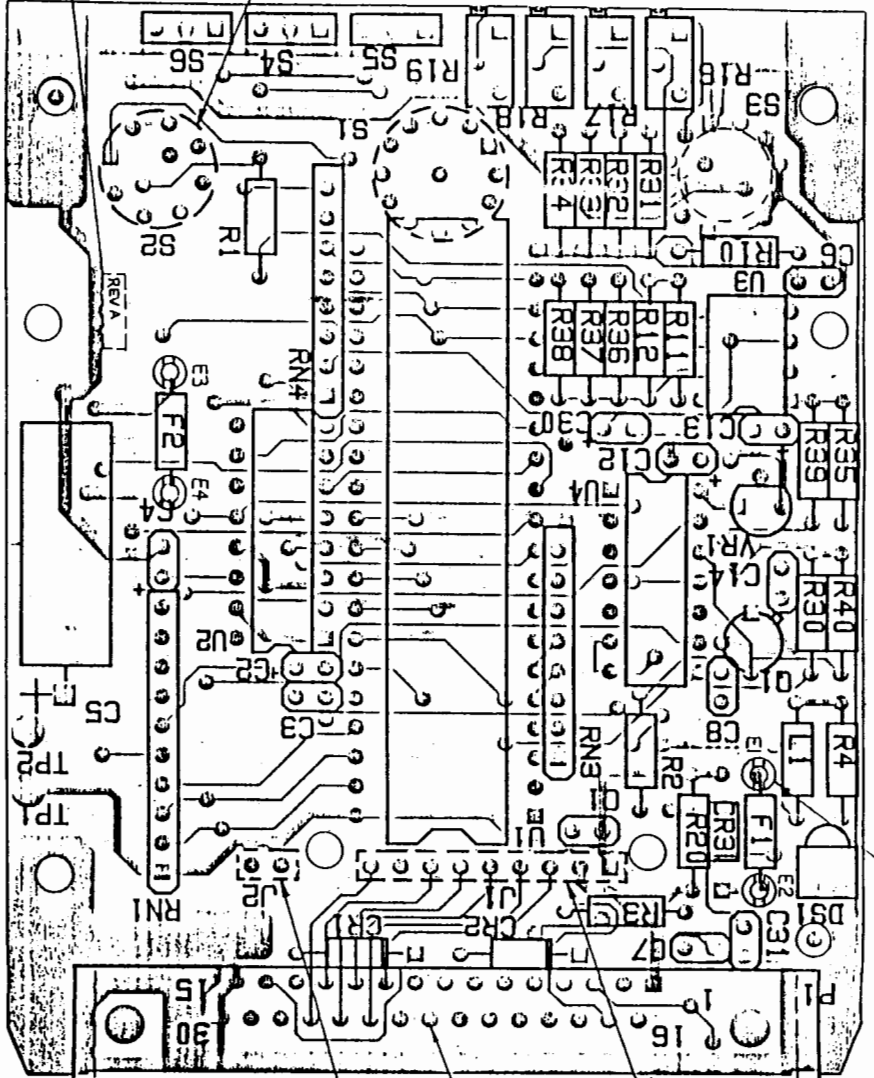
- 8 MAX. COMPONENT HEIGHT IS 0.29 INCHES.
- 7 LAD GIBSONS SHALL BE LESS THAN 0.03 INCHES.
- 6 QUANTITY WITH PART NUMBER PER 14.000933.
- 5 QUANTITY WITH LATEST REVISION.
- 4 ALL PAGES ARE UNMACHINED.
- 3 DIMENSIONS ARE SPECIFIED IN INCHES UNLESS OTHERWISE SPECIFIED.
- 2 DIMENSIONS ARE SPECIFIED IN MICROINCHES UNLESS OTHERWISE SPECIFIED.
- 1 DIMENSIONS ARE SPECIFIED IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

1 DTE UNLESS OTHERWISE SPECIFIED

7	DATE				
6	BY				
5	CHKD				
4	APPROVED				
3	DESIGNED				
2	ASSEMBLY DRAWING				
1	DATE				

UNLESS OTHERWISE SPECIFIED		DIMENSIONS ARE IN INCHES	
LINEAR	±0.005	ANGULAR	±0.5°
DIAMETER	±0.005		
ALL MACHINED SURFACES	±0.005		
FINISH	✓		

8 7 6 5 4 3



COMPONENT SIDE

- ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES.
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE TO BE CUT FLUSH WITH BACKSIDE OF BOARD.
- ALL DIMENSIONS ARE TO BE CUT FLUSH WITH BACKSIDE OF BOARD.
- UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE TO BE CUT FLUSH WITH BACKSIDE OF BOARD.

UNLESS OTHERWISE SPECIFIED

NO.	DESCRIPTION	QTY	UNIT	ASSEMBLY	TEST	ASSEMBLY
1	SCHEMATIC DRAWING	1	SET	MSO A	PPM522-00	
2	SCHEMATIC DRAWING	1	SET	MSO A	PPM522-00	
3	SCHEMATIC DRAWING	1	SET	MSO A	PPM522-00	
4	SCHEMATIC DRAWING	1	SET	MSO A	PPM522-00	

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UNLESS OTHERWISE SPECIFIED CONTRACT NUMBER

FINISH
 ALL MACHINED SURFACES

DESIGN APPROVAL
 DESIGNER: [Signature]
 CHECKED BY: [Signature]
 DATE: [Date]

ONE UNLESS OTHERWISE SPECIFIED

8

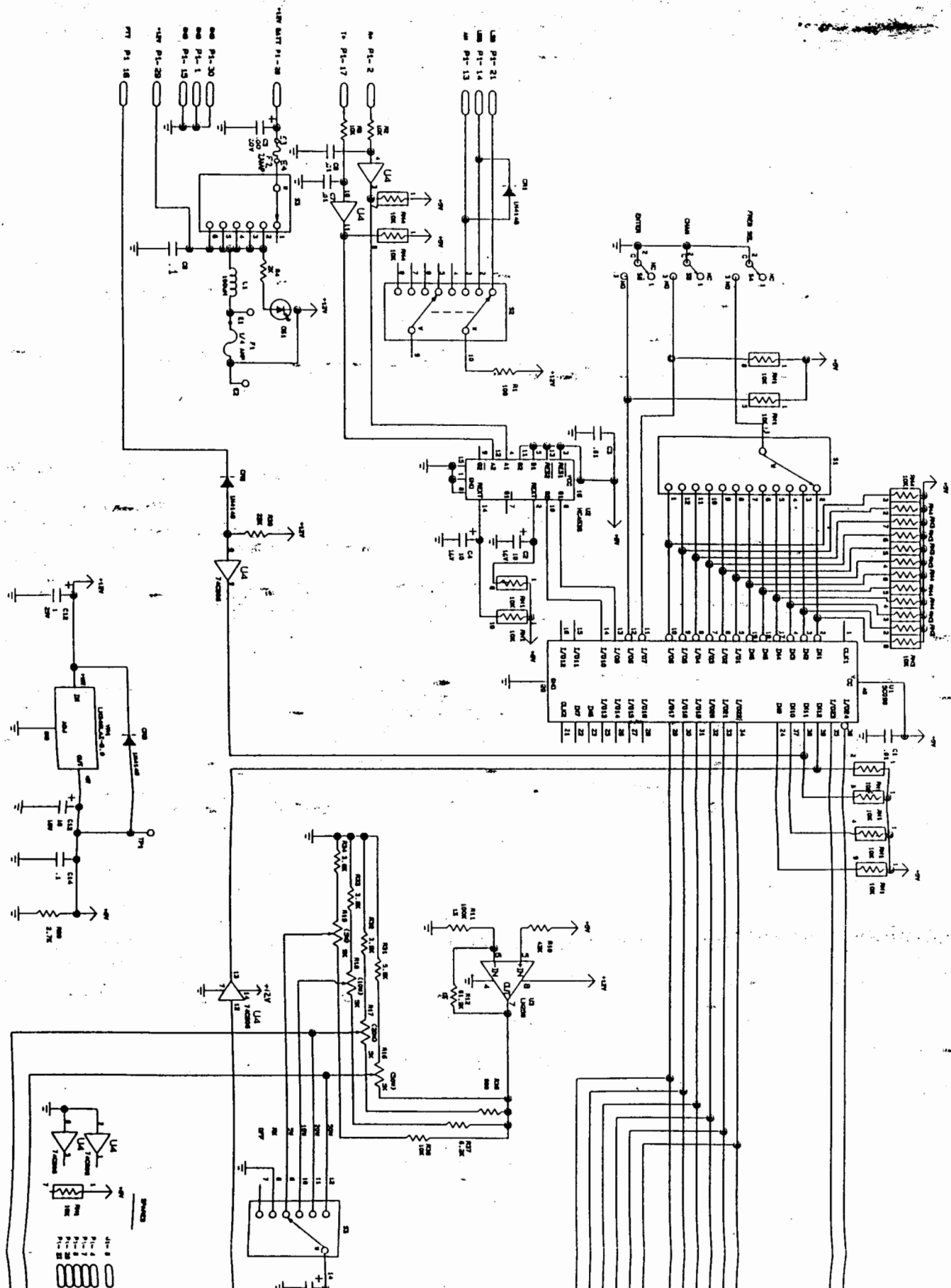
7

6

5

4

3

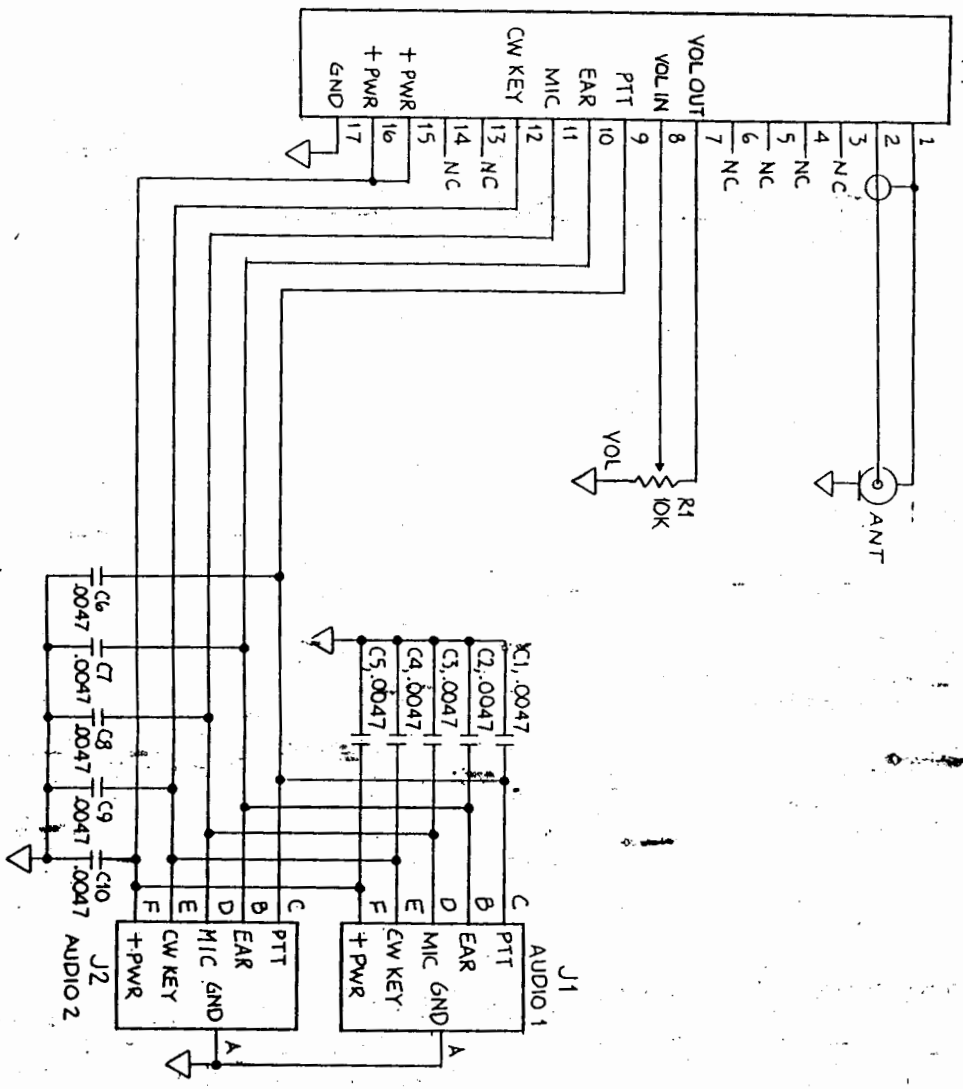


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ZONE	REV	DESCRIPTION
		REVISED & UPDATED 9/11/50
		REVISED 12-50

REVISIONS



C	R	J	P
10	1	2	1

1. RESISTORS ARE 1W, 10%, VALUES IN OHMS; UNLESS OTHERWISE SPECIFIED.
2. CAPACITOR VALUES ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
- NOTE: UNLESS OTHERWISE SPECIFIED

QTY REQD	COMMERCIAL	MILITARY	REXT ASST

FOR PARTS LIST SEE SEPARATE B/M NUMBER 9945

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES

FINISH: ALL MACHINED SURFACES

DATE: 12/50

SCALE: NONE

SIZE: 8263

CODE: ID

SOUTH

ESSE

SCHEMATIC DIAGRAM

PANEL INTERCONNECT



4

B

C

D

4

3

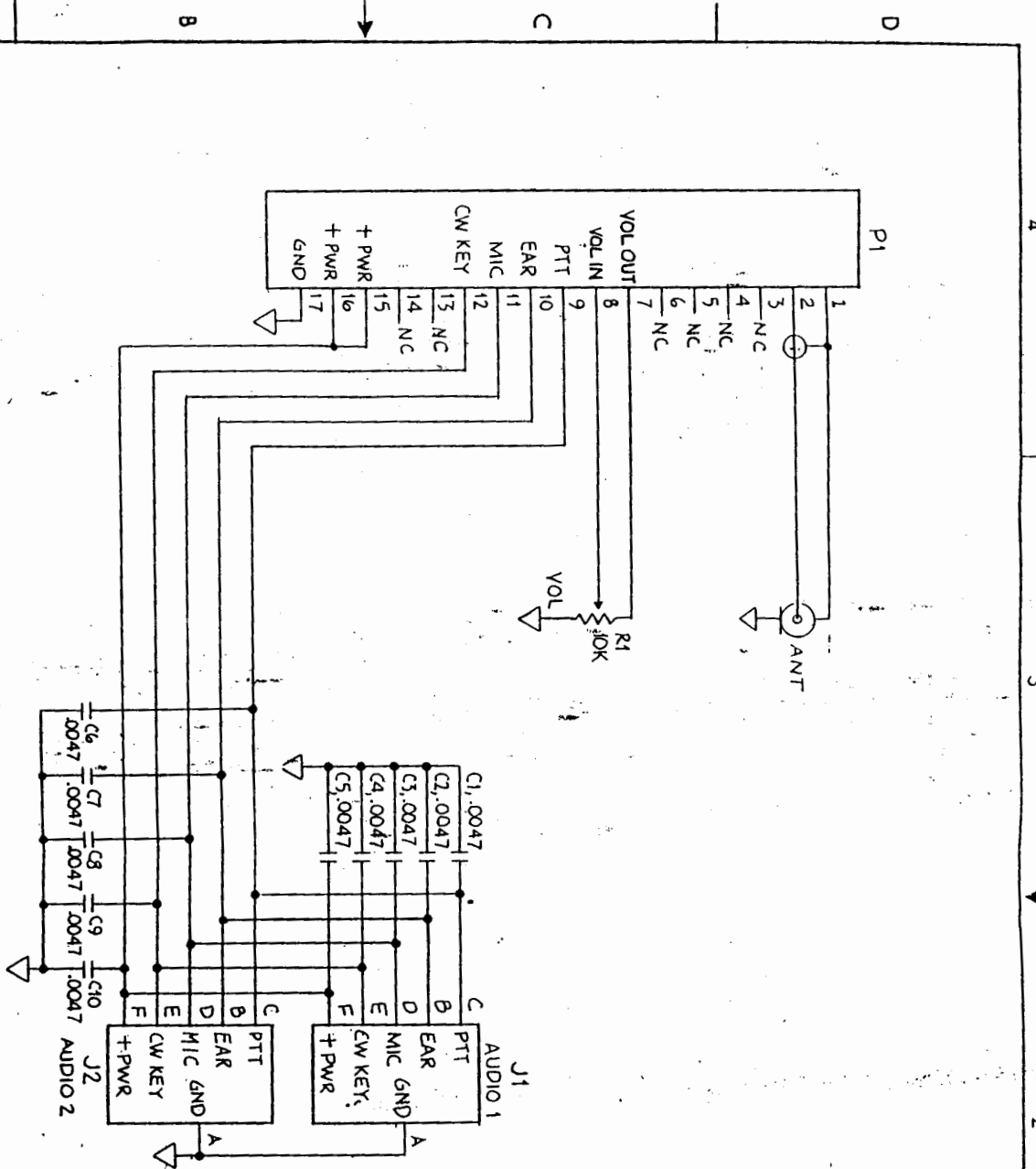
2

4

2

ZONE	REV	DESCRIPTION
		REVISED & UPDATED 91
		REVISED

REVISIONS



C	R	J	P
10	1	2	1

- 1. CAPACITOR VALUES ARE IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
- 2. RESISTORS ARE 1W, 10%, UNLESS OTHERWISE SPECIFIED.

NOTE: UNLESS OTHERWISE SPECIFIED

REV	DATE	DESCRIPTION	BY	CHKD
1				
2				
3				
4				

FOR PARTS LIST SEE SEPARATE B/M NUMBER 2924

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DATE: 11/10/53	DESIGN: 11/10/53	APPROVED BY: [Signature]
TOLERANCES	LENGTHS: .001, .002, .005, .010, .015, .020, .030, .040, .050, .060, .070, .080, .090, .100, .125, .150, .175, .200, .250, .300, .375, .450, .500, .625, .750, .875, 1.000, 1.250, 1.500, 1.750, 2.000, 2.500, 3.000, 3.500, 4.000, 4.500, 5.000, 5.500, 6.000, 6.500, 7.000, 7.500, 8.000, 8.500, 9.000, 9.500, 10.000	APPROVED BY: [Signature]	RELEASED BY: [Signature]

SCHEMATIC DIAGRAM
PANEL INTERCONNECT

FINISH: [Blank]

MATERIAL: [Blank]

SCALE: C 82
C 82
C 82
C 82

4 3 2 1