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REVISONS		DESCRIPTION	
CRNO.	REV		
	D	INITIAL RELEASE	
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.	05-14-01
5204	F	SEE DESCRIPTION PER CHANGE REQUEST.	07-09-02


**TABLE I  
CUT RUN DATA <sup>20</sup>**

CUT NO.	PWB SIDE	FROM CIRCUIT POINT	TO CIRCUIT POINT
201	B-TOP RIGHT	U3-6 PAD	U3-6 VIA
202	A-MIDDLE RIGHT	R428-TOP LAND	R428-TOP LEFT TRACE

**TABLE II  
BUSWIRE DATA <sup>21</sup>**

CONDUCTOR COND NO.	ITEM NO.	PWB SIDE	FROM CIRCUIT POINT	TO CIRCUIT POINT
601	704	B-BOTTOM LEFT	L5-1	L5-4
602		B-BOTTOM LEFT	L5-2	L5-3
603		B-BOTTOM LEFT	L7-1	L7-4
604		B-BOTTOM LEFT	L7-2	L7-3
605		B-BOTTOM LEFT	L8-1	L8-4
606		B-BOTTOM LEFT	L8-2	L8-3
607		B-MIDDLE CENTER	L9-1	L9-4
608		B-MIDDLE CENTER	L9-2	L9-3
609		B-MIDDLE RIGHT	Q17-2	Q17-3
610		B-MIDDLE RIGHT	Q20-2	Q20-3
611		B-MIDDLE RIGHT	R70-TOP	R70-BOTTOM
612		A-MIDDLE LEFT	R288-TOP	R288-BOTTOM
613		B-TOP RIGHT	R903-LEFT	C19-LEFT
614		B-TOP RIGHT	R903-RIGHT	C19-RIGHT
615		B-TOP RIGHT	R904-TOP	C12-LEFT
616		B-TOP RIGHT	R904-BOTTOM	C12-RIGHT
617	704	B-MIDDLE LEFT	U14-14 LAND	C87-BOTTOM LAND

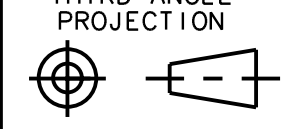
**NOTES:**

- ASSEMBLE PER ITEM 701.
- 


THIS ASSEMBLY INCLUDES COMPONENTS WHICH ARE SUBJECT TO DAMAGE BY ELECTROSTATIC CHARGES; THEREFORE, ALL COMPONENTS SHALL BE HANDLED IN ACCORDANCE WITH GUIDELINES FOR ELECTROSTATIC DISCHARGE DAMAGE.
- COMPONENT LEADS PROTRUSION SHALL BE .060 MAXIMUM, BARE COPPER PERMISSIBLE ON COMPONENT LEADS AT TRIMMED SURFACES.
- MAXIMUM COMPONENT HEIGHT SIDE B SHALL BE .800, EXCEPT AREA NOTED ON CCA TO BE .550 MAX, AND HEATSINK BAR (ITEM 2) AND ATTACHED COMPONENTS TO BE 1.180 MAX.
- SECURE C8, C12, C13, C19 - C22, C32, C33, C49, C62, C64, C65, C111, C113, C124, AND CR19 TO PWB (ITEM 1) USING RTV (ITEM 704). HISTORICAL NOTE: SOME CCA'S WERE ASSEMBLED USING VHB AND RTV.
- CONFORMAL COAT CCA PER ITEM 702, EXCEPT AREAS NOTED.
- SHADED COMPONENTS ARE NOT INSTALLED.
- REMOVE PINS J1-3, J1-8, AND J4-4 BEFORE INSTALLING.
- P1 SHALL BE FLUSH TO .010 MAX ABOVE SIDE B OF ITEM 1.
- INSTALL ITEM 10 IN P1-11 AND P1-52 CONTACTS FROM THIS SIDE.
- APPLY 5.0±.5 INCH-LBS OF TORQUE TO ITEM 6 AND ITEM 12.
- SECURE: C6, C7, C9 - C10; C24 - C28 AND C41 - C46; C66 - C69 AND C80; C75 - C77; C90 - C94; C102 - C104, C117, C118 WITH RTV (ITEM 703) ALONG TOP SURFACE OF PART TO ADJACENT PARTS.
- SECURE C11, L6 AND T1 - T4 TO PWB (ITEM 1) USING RTV (ITEM 703). COMPONENTS ARE TO BE FLUSH TO WITHIN .010 OF PWB (ITEM 1) AND ARE TO BE SECURED AFTER BEING SOLDERED TO THE PWB.
- SECURE C95, C96, C101, AND C116 TO PWB (ITEM 1) AND TO ADJACENT PART USING RTV (ITEM 703).
- SECURE L1 TO PWB (ITEM 1) USING RTV (ITEM 703).
- COMPONENTS CR3, C37, CR8, CR12, Q2, Q3, Q9, Q11, Q15, Q19, Q22, AND Q25 MUST MOUNT FLUSH TO HEATSINK BAR (ITEM 2).
- MILL .375 WIDE SLOT .180 TOWARDS BOTTOM EDGE OF BOARD. THIS REWORK TO BE DONE PRIOR TO COMPONENT PLACEMENT.
- C17, C18, AND C141 ARE 1210 SIZE CAPACITORS THAT ARE PLACED ON 1206 PADS.
- THE POLARITY ON THE PWB SILKSCREEN FOR CR55 IS SHOWN INCORRECTLY. THIS ASSEMBLY DRAWING SHOWS THE CORRECT ORIENTATION.
- MAKE CUTS PER TABLE I, LEFT OR RIGHT, TOP OR BOTTOM, AS VIEWED FROM INDICATED SIDE.
- INSTALL BUS WIRES PER TABLE II, LEFT OR RIGHT, TOP OR BOTTOM, AS VIEWED FROM INDICATED SIDE.
- INSTALL COMPONENTS PER TABLE III, LEFT OR RIGHT, TOP OR BOTTOM, AS VIEWED FROM INDICATED SIDE.
- INSTALL R900 ON PADS OF C179.
- INSTALL C900 ON TOP OF U3 PER DETAIL N. USE RTV (ITEM 703) TO SECURE C900 TO U3.
- SOLDER R901 ON TOP OF C181 AND SOLDER R902 ON TOP OF C199.
- INSTALL C903 AND R904 APPROXIMATELY AS SHOWN. USE RTV (ITEM 703) TO SECURE COMPONENTS TO PWB.
- DESOLDER PINS 1 AND 2 OF T1 AND SWAP LEADS. SLEEVE LEAD GOING TO PIN 1 IF NECESSARY.
- OMIT CONFORMAL COAT (ITEM 702) ON HEATSINK BAR AND ATTACHED COMPONENTS (ITEMS 2 THRU 9, ITEM 12, CR3, CR7, CR8, CR12, Q2, Q3, Q9, Q11, Q15, Q19, Q25 AND Q25) SIDES A AND B.

**TABLE III  
COMPONENT INSTALLATION DATA <sup>22</sup>**

REF DES	PIN	TO CIRCUIT POINT	PWB SIDE	SLEEVING ITEM NO.	NOTE
R900	1	C179-1	A-TOP LEFT	NONE	<sup>23</sup>
	2	C179-2			
C900	1	U3-6-PAD	B-TOP RIGHT	NONE	<sup>24</sup>
	2	C48-TOP			
R901	1	C181-1	A-TOP LEFT	NONE	<sup>25</sup>
	2	C181-2			
R902	1	C199-1	A-TOP LEFT	NONE	<sup>25</sup>
	2	C199-2			
R903	LEFT	C19-LEFT	A-TOP RIGHT	NONE	<sup>25</sup>
	RIGHT	C19-RIGHT			
R904	TOP	C12-LEFT	A-TOP RIGHT	NONE	<sup>25</sup>
	BOTTOM	C12-RIGHT			

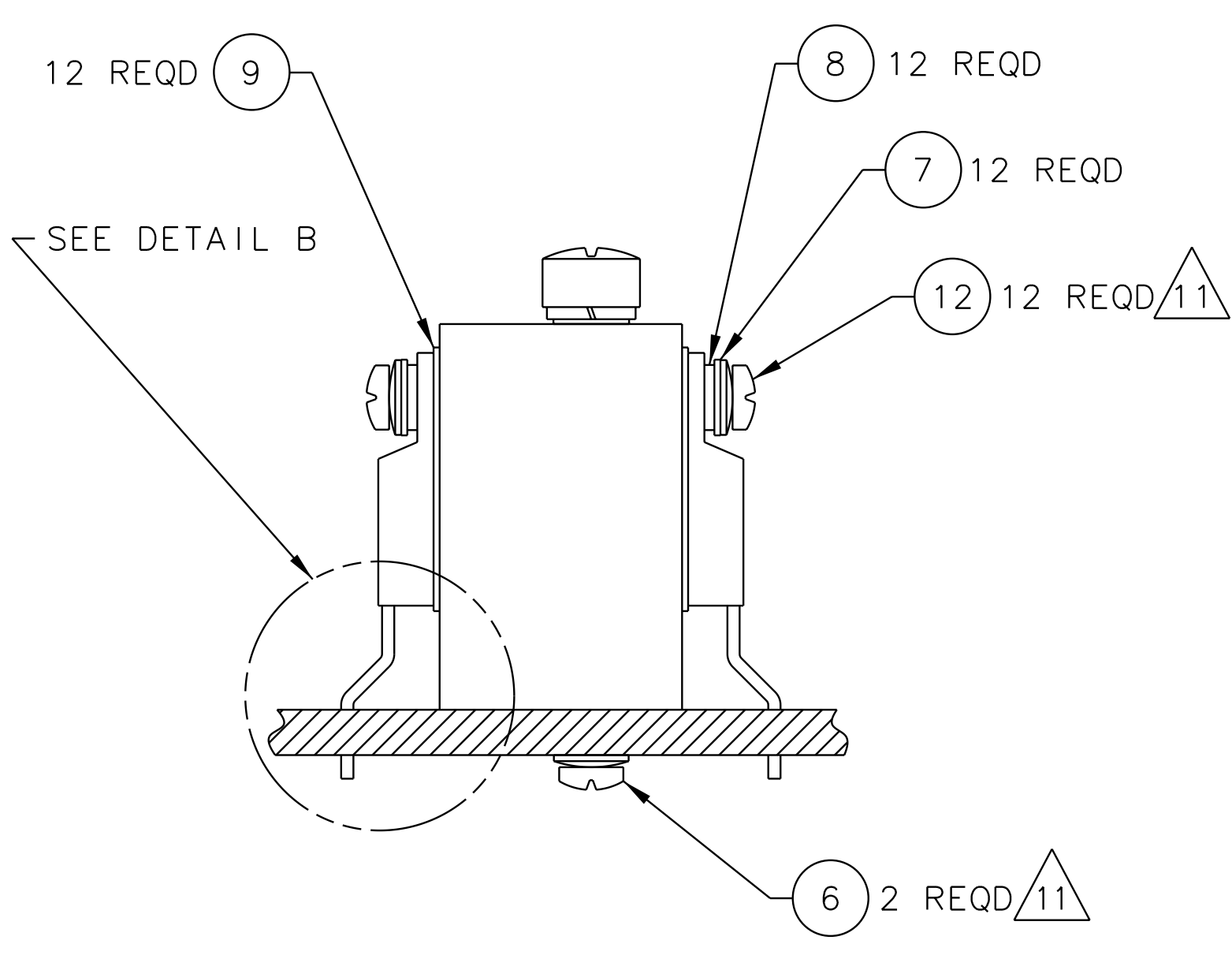
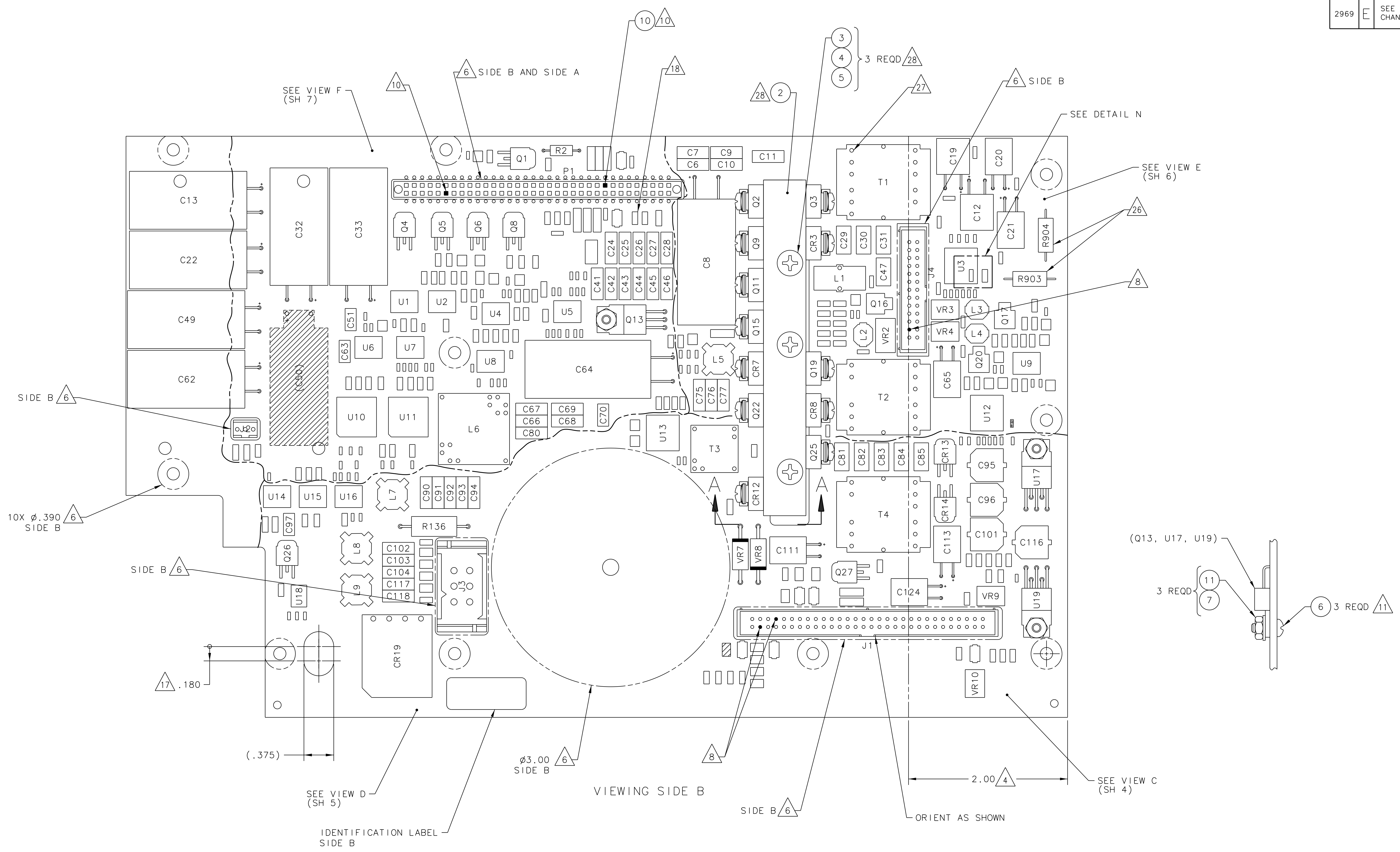
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES; TOLERANCES: ANGLES ± - 2 PL DEC ± - 3 PL DEC ± -		THIRD ANGLE PROJECTION	CONTRACT	OPERATIONAL NOTE
INTERPRET DIMENSIONS AND TOLERANCES PER AMSE Y14.5M-1994			DRAWN BY BRAD SCHROEDER	DATE 07-06-01
FOR REFERENCE		APPVLS/MFG	CHECKED BY	DATE
ORIGINAL C.R.	PRODUCT LINE NO.	APPVLS/ENG	CORY MCCORMICK	DATE
AW/PS ANALYSIS EB	REF DWG	APPVLS/QE		DATE
REF SPEC	REF SPEC	APPVLS/		DATE
9000000	9000000	APPVLS/		DATE
NEXT ASSY	USED ON (SYS)	APPVLS/		DATE
APPLICATION				

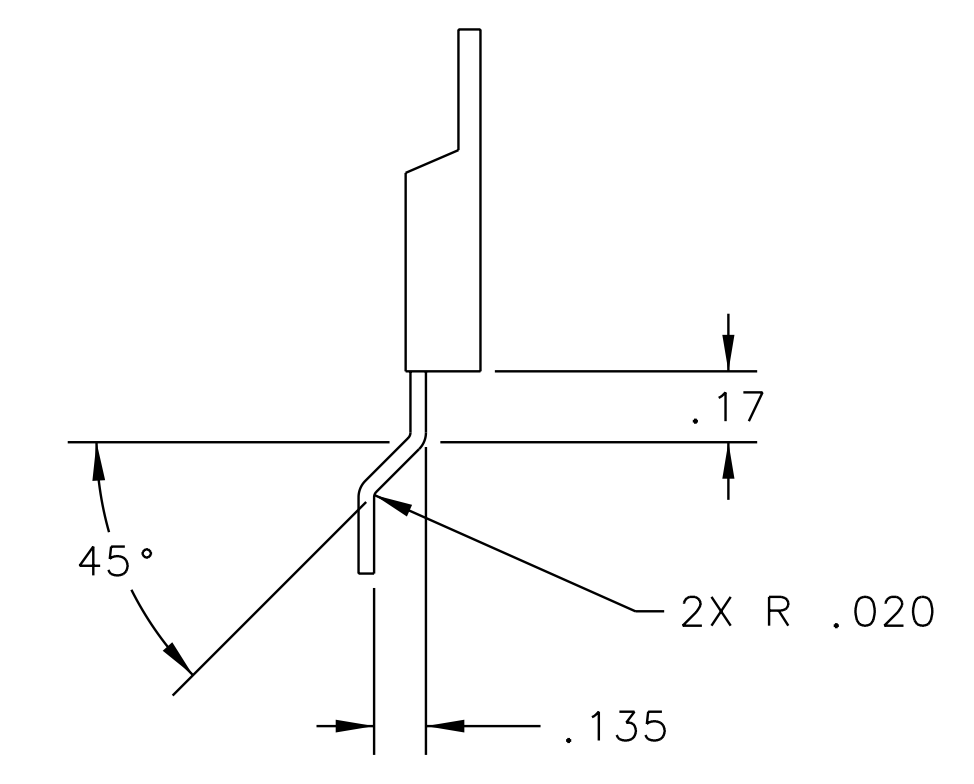
 Avision Communications & Surveillance Systems 19810 North 71st Avenue Phoenix, Arizona 85027-4400	
TITLE <b>CIRCUIT CARD ASSEMBLY                  OUTLINE - POWER SUPPLY (A4)</b>	
SIZE E11WYD3	DRAWING NO. 900015-001
SCALE NONE	SHEET 1 OF 32

REV. NO.		REVISIONS
CRNO.	REV	DESCRIPTION
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.

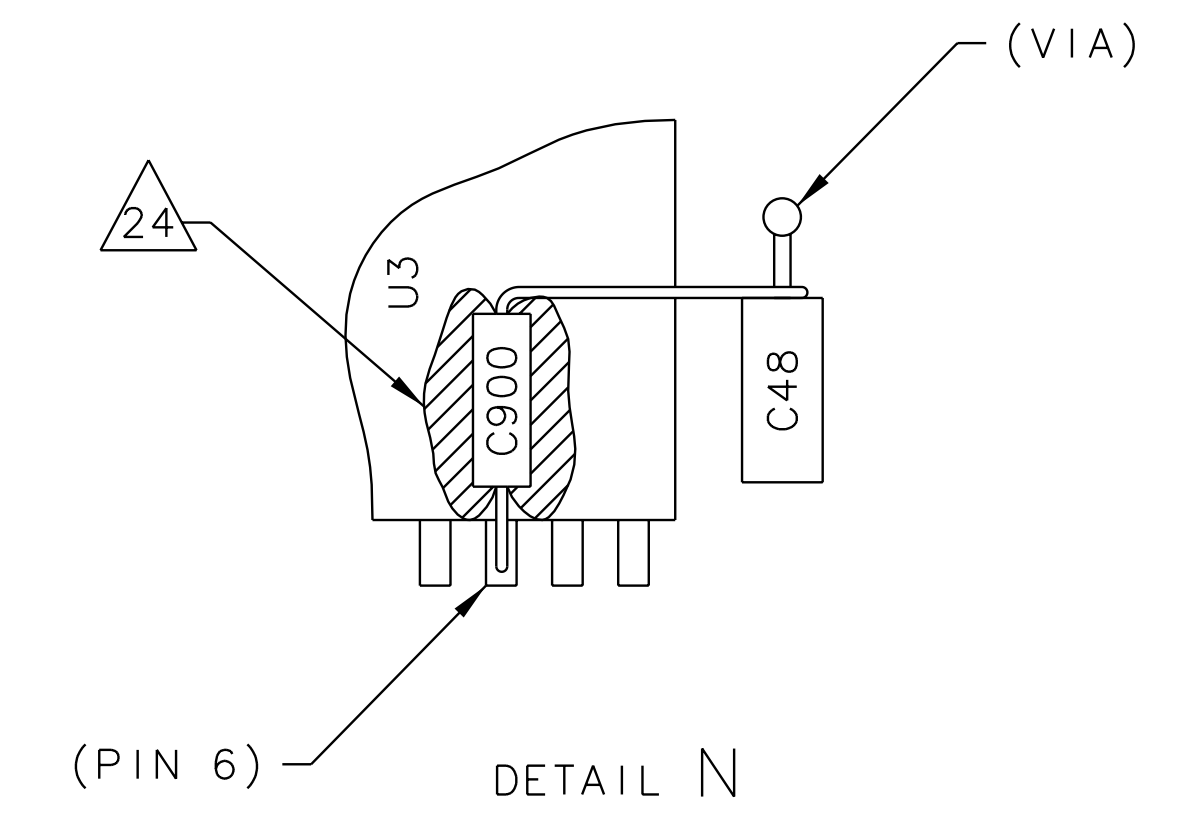
05-14-01



SECTION A-A  
SCALE: NONE

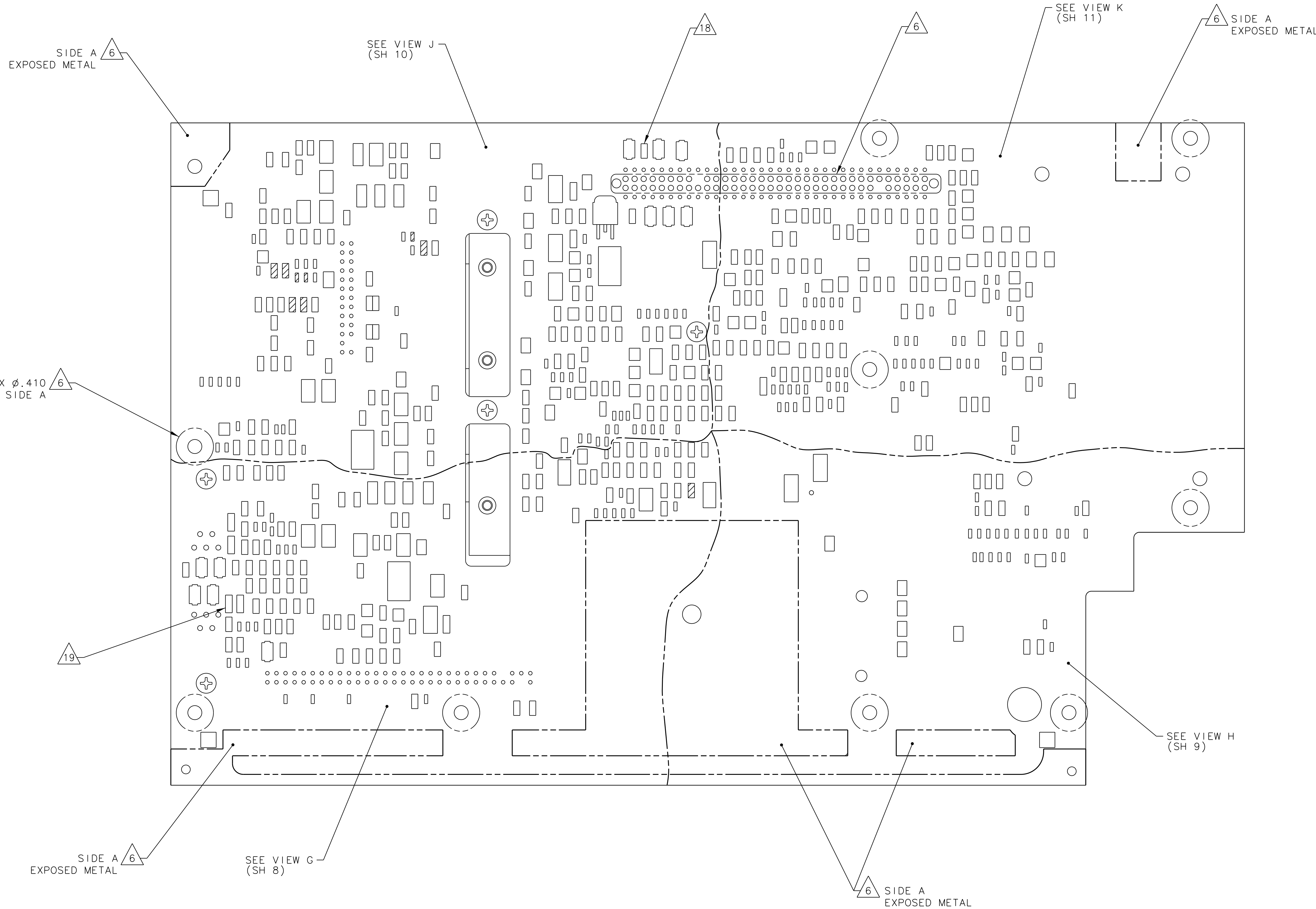


DETAIL B  
REFERENCE  
LEAD FORMING FOR CR3, CR7, CR8, CR12,  
Q2, Q3, Q9, Q11, Q15, Q19, Q22, AND Q25



(PIN 6) DETAIL N

REVNO.		REV	DESCRIPTION	DATE
2969		E	SEE DESCRIPTION PER CHANGE REQUEST.	05-14-01

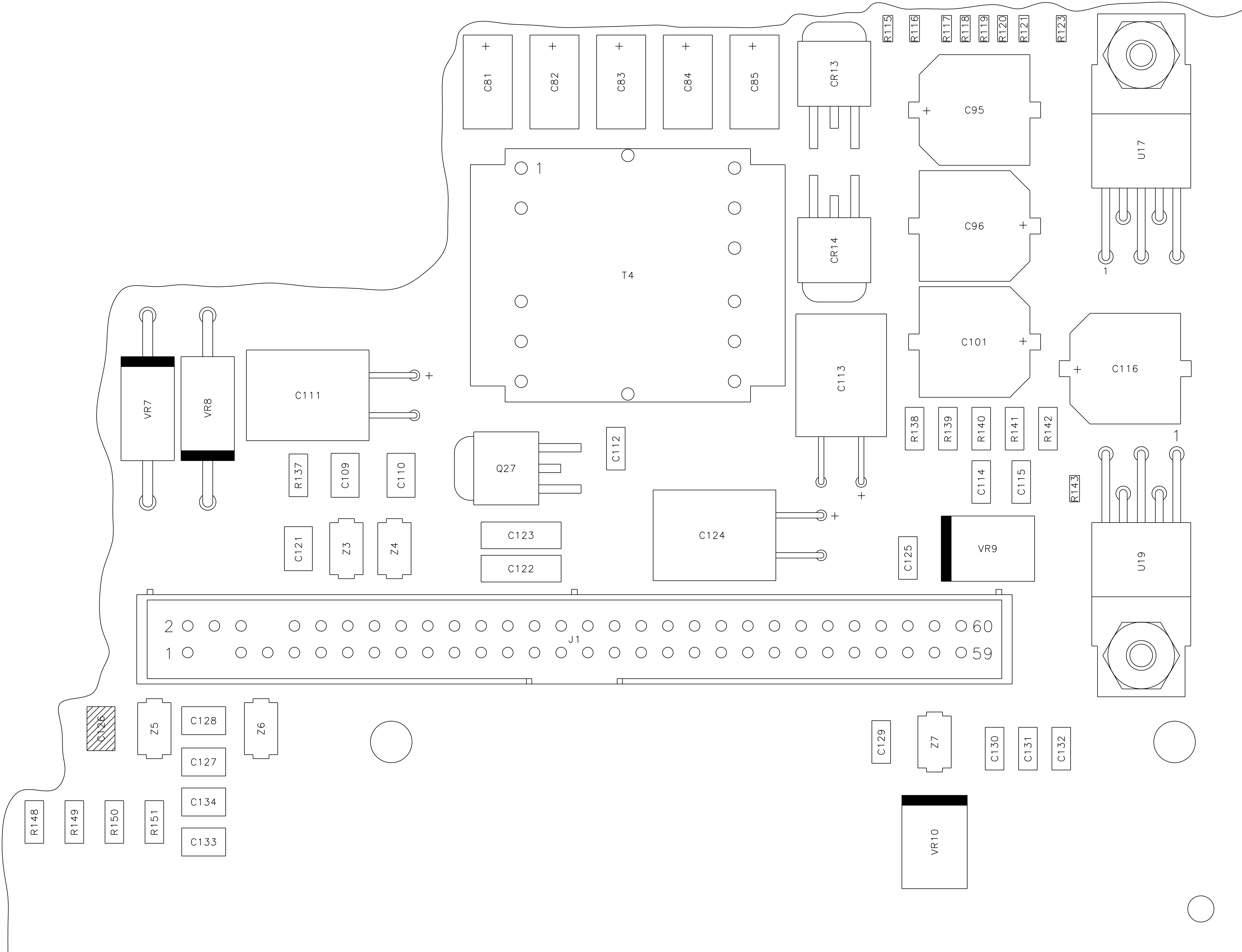


VIEWING SIDE A

FIG NO. 9000015-001  
 SF 3

REV. NO.		REVISIONS
CRNO.	REV.	DESCRIPTION
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.

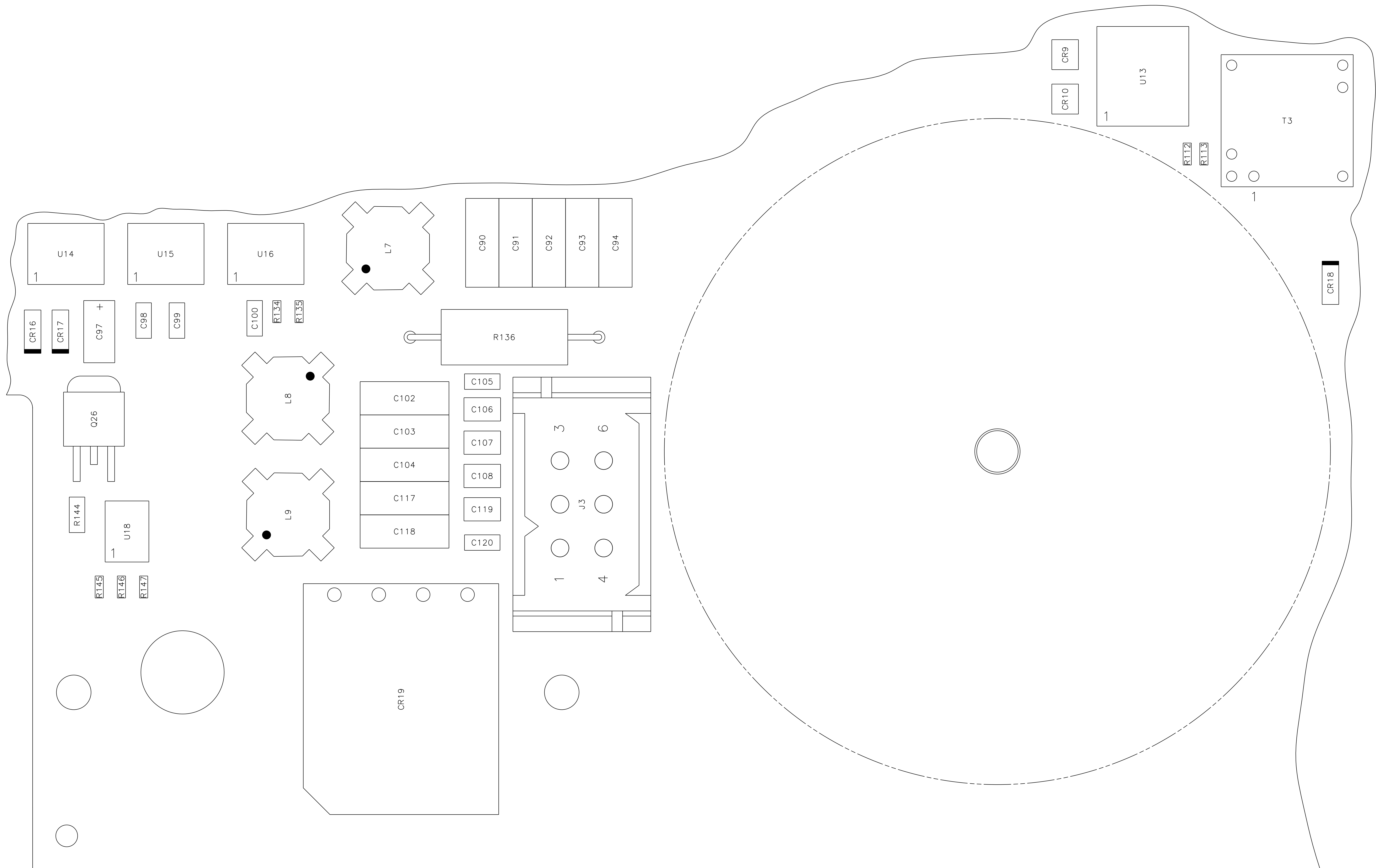
05-14-01



VIEW C  
(FROM SH 2)

9000015-001

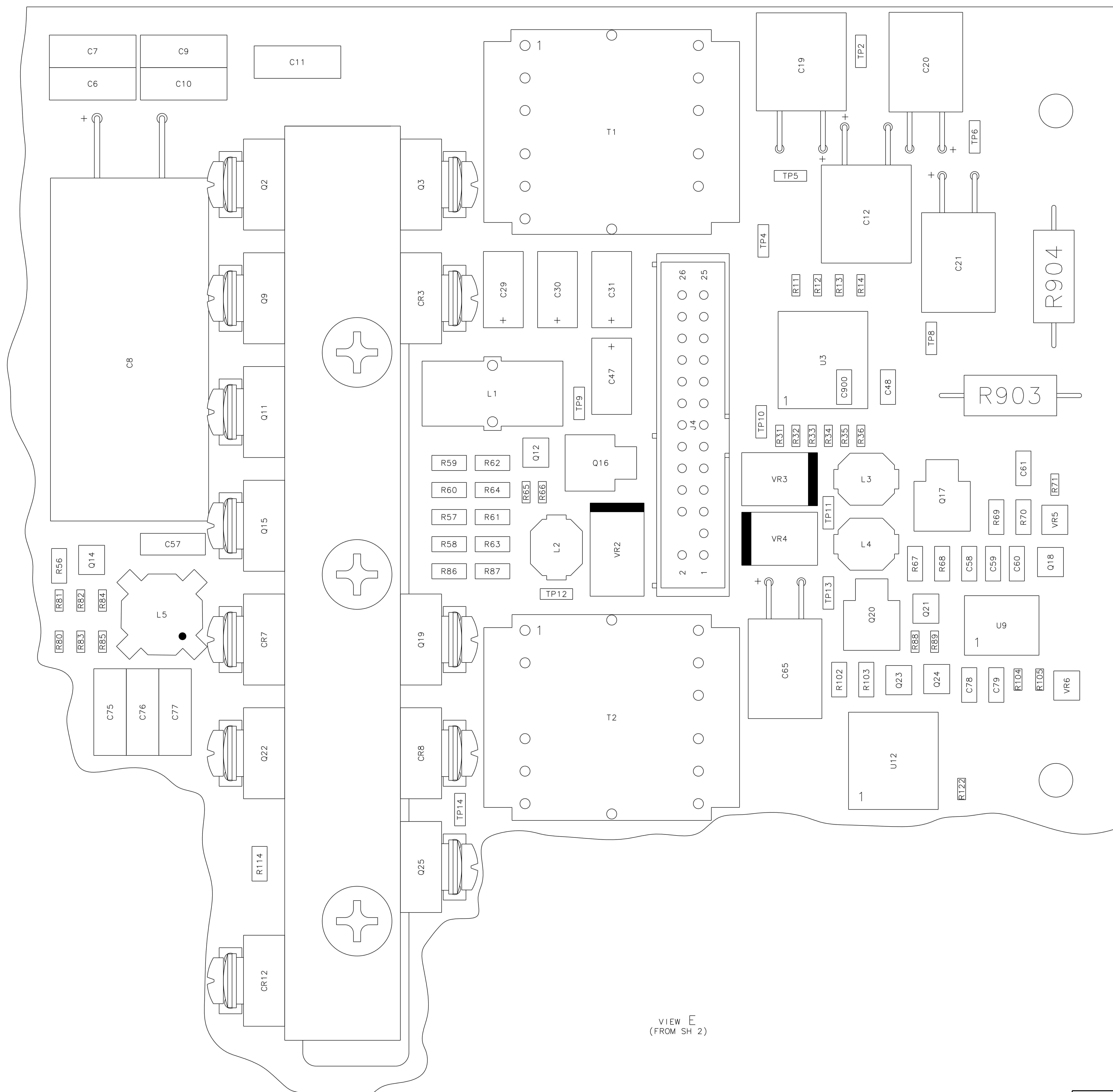
REV. NO.		DESCRIPTION	DATE
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.	05-14-01



VIEW D  
(FROM SH 2)

REVNO.		REV	DESCRIPTION
2969		E	SEE DESCRIPTION PER CHANGE REQUEST.

05-14-01



VIEW E  
(FROM SH 2)



REV. NO.		DESCRIPTION	REV. NO.
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.	05-14-01



VIEW F  
(FROM SH 2)

REVISONS		
CRNO.	REV	DESCRIPTION
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.

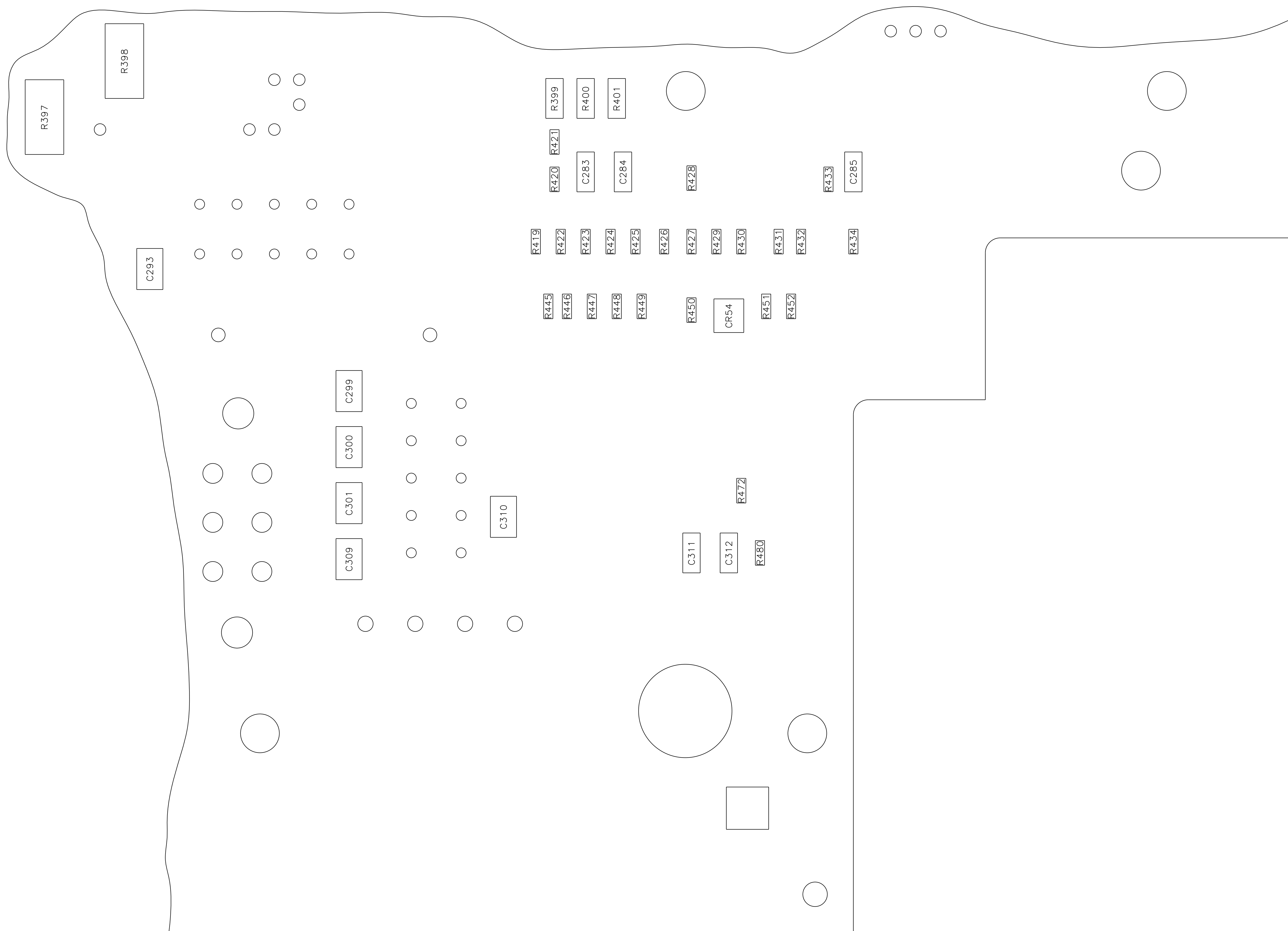
05-14-01



VIEW G  
(FROM SH 3)



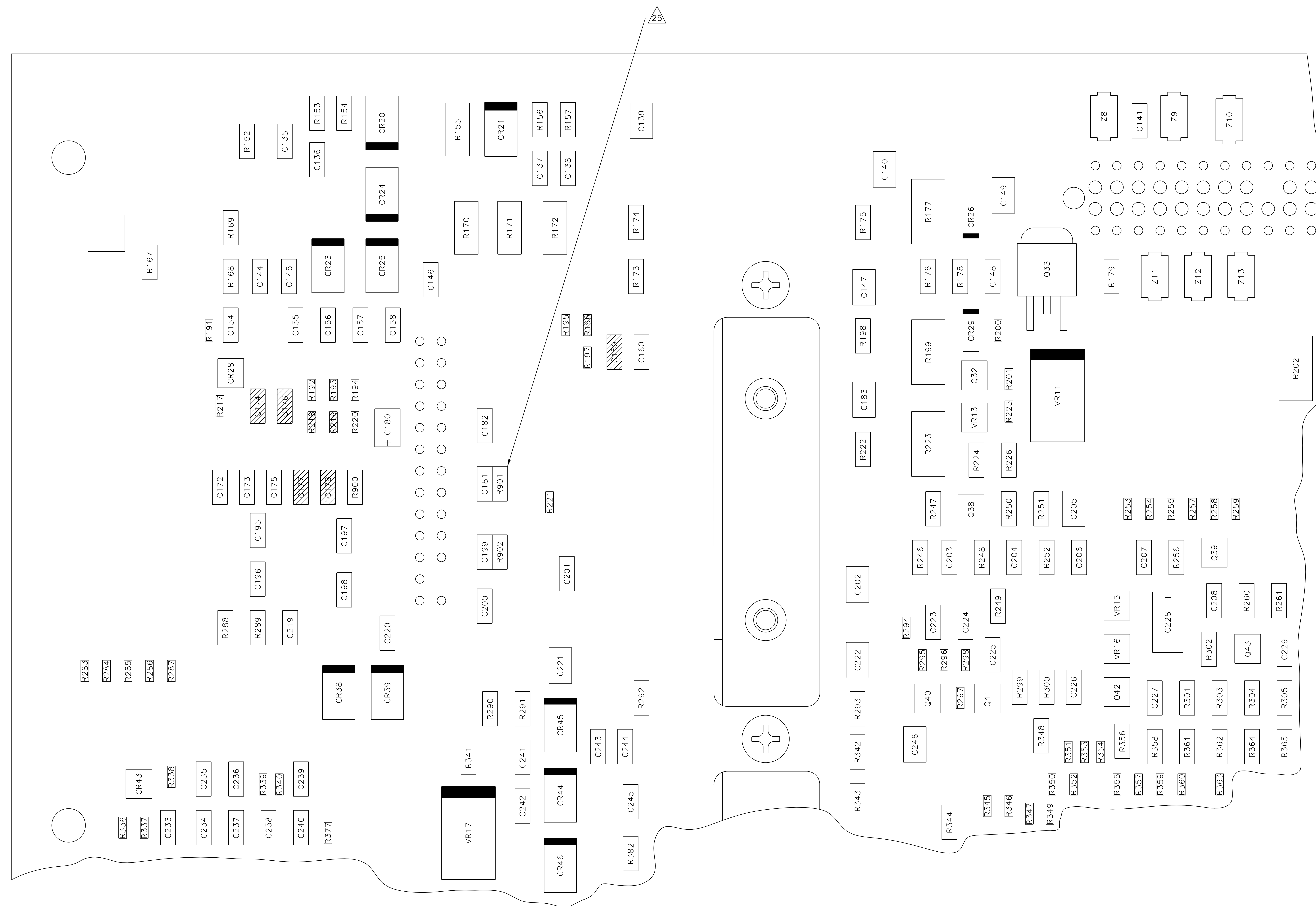
REV. NO.		DESCRIPTION	DATE
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.	05-14-01



VIEW H  
(FROM SH 3)

REV. NO.		DESCRIPTION
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.

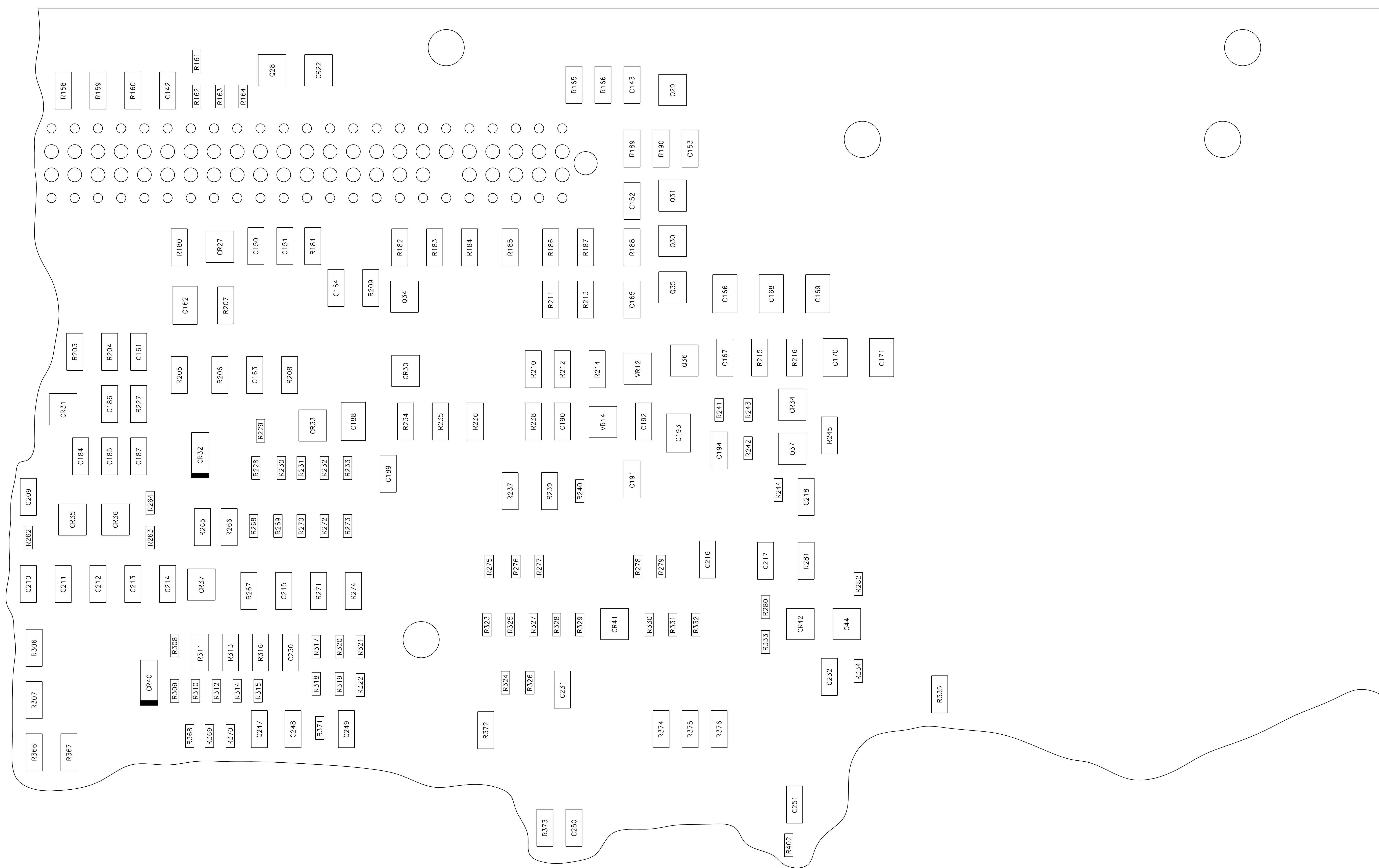
05-14-01



VIEW J  
(FROM SH 3)

REVISONS		DESCRIPTION
CRNO.	REV	
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.

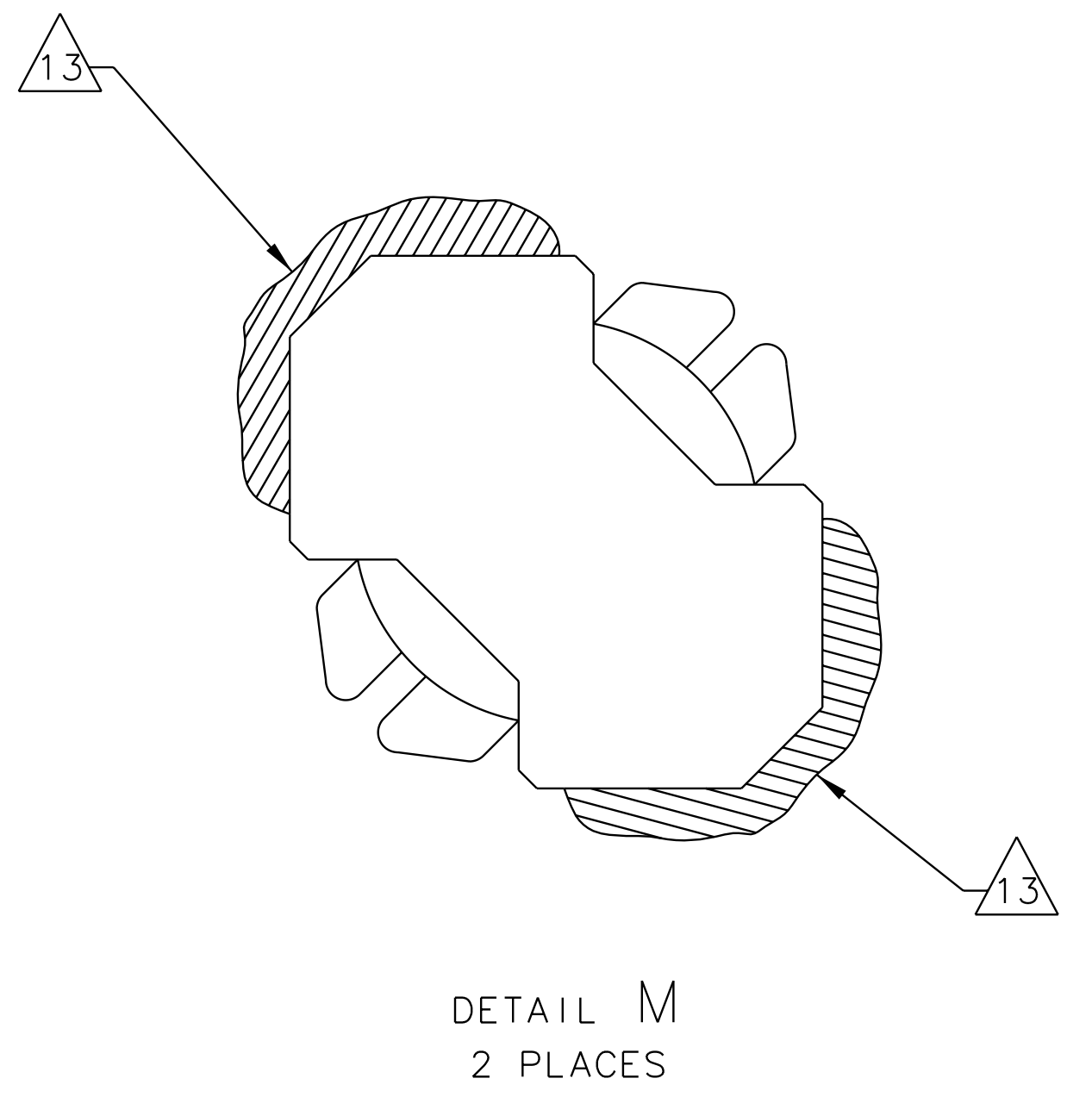
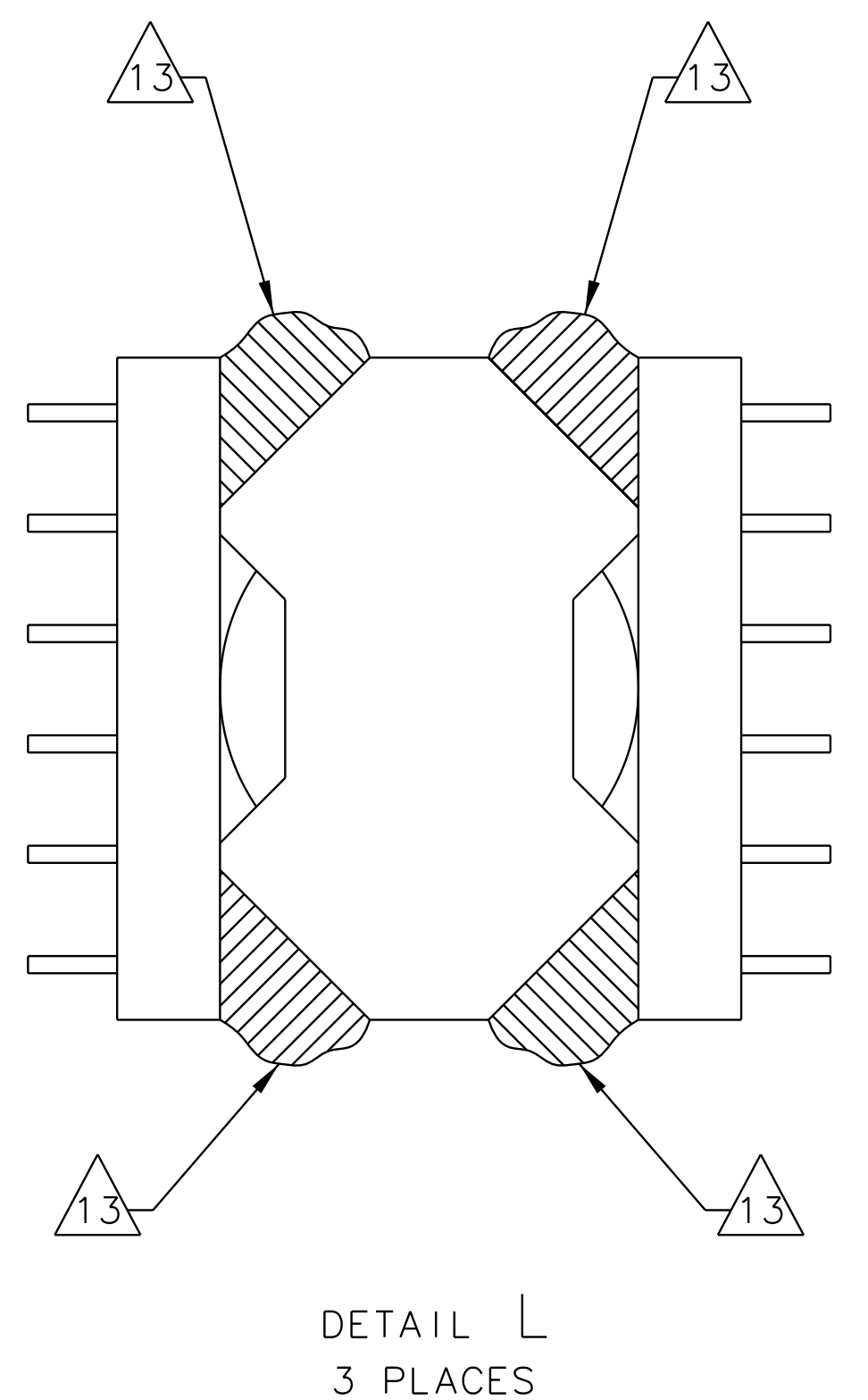
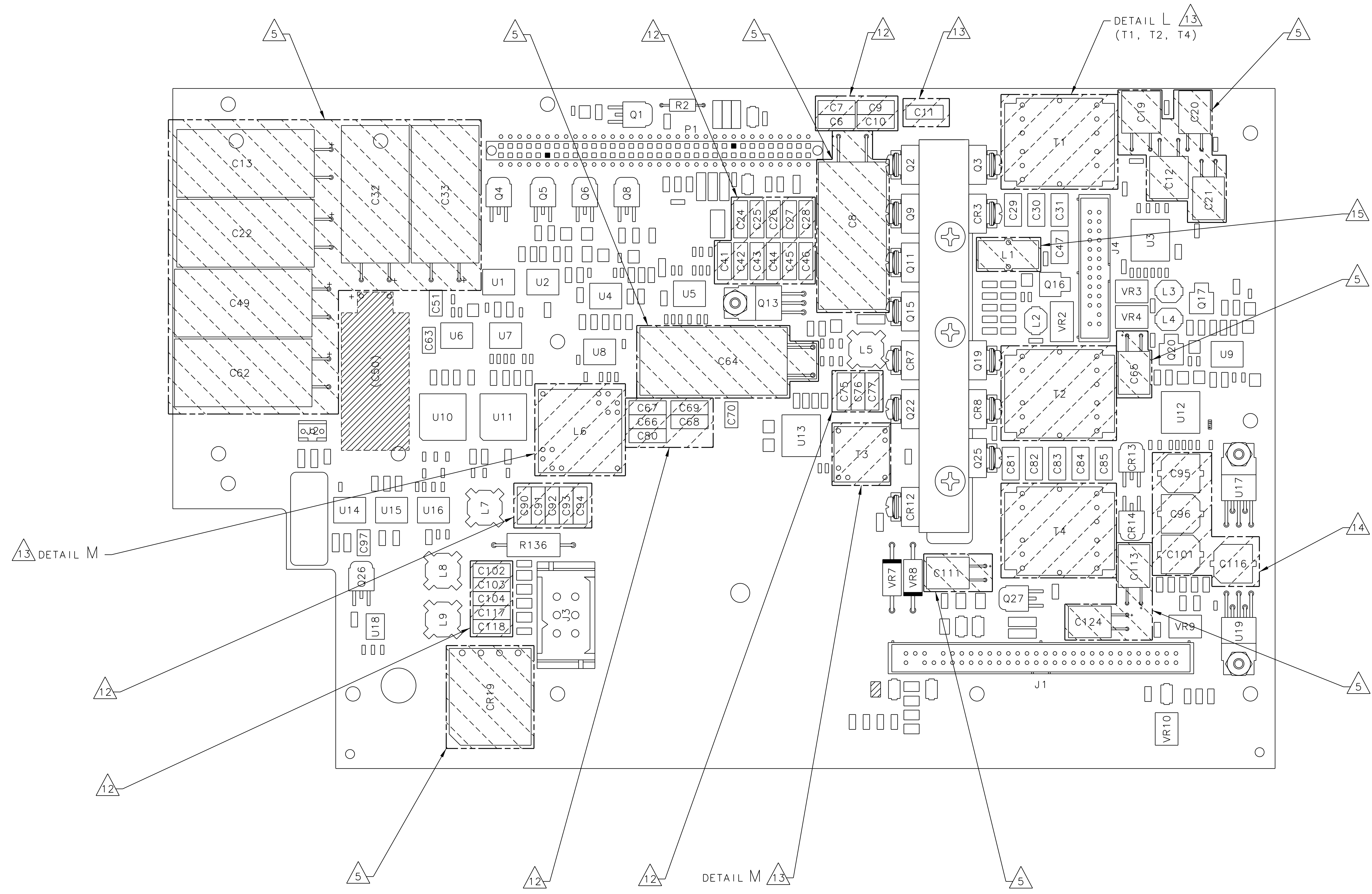
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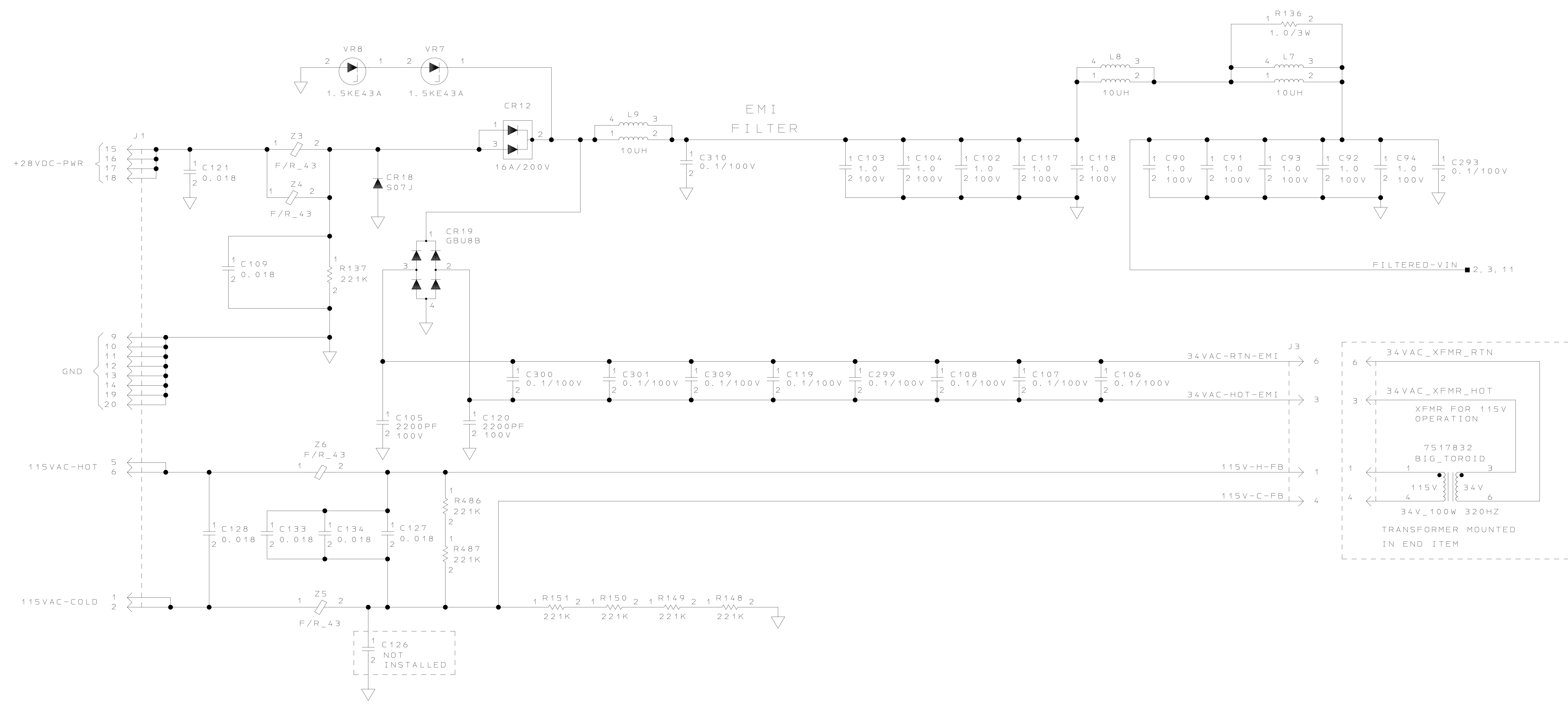
VIEW K  
(FROM SH 3)

1001000006

REVISONS		DESCRIPTION	
2969	E	SEE DESCRIPTION PER CHANGE REQUEST.	05-14-01
5204	F	SEE DESCRIPTION PER CHANGE REQUEST.	07-09-02



REVISED		DESCRIPTION	
2969	E	CHANGED L7 - L9 TO 4 PIN INDUCTORS.	05-14-02
5204	F	CHANGED BORDER, REFORMATTED OLD REVISION BLOCK TO MATCH NEW BORDER. ADDED REV E CR NUMBER.	07-09-02



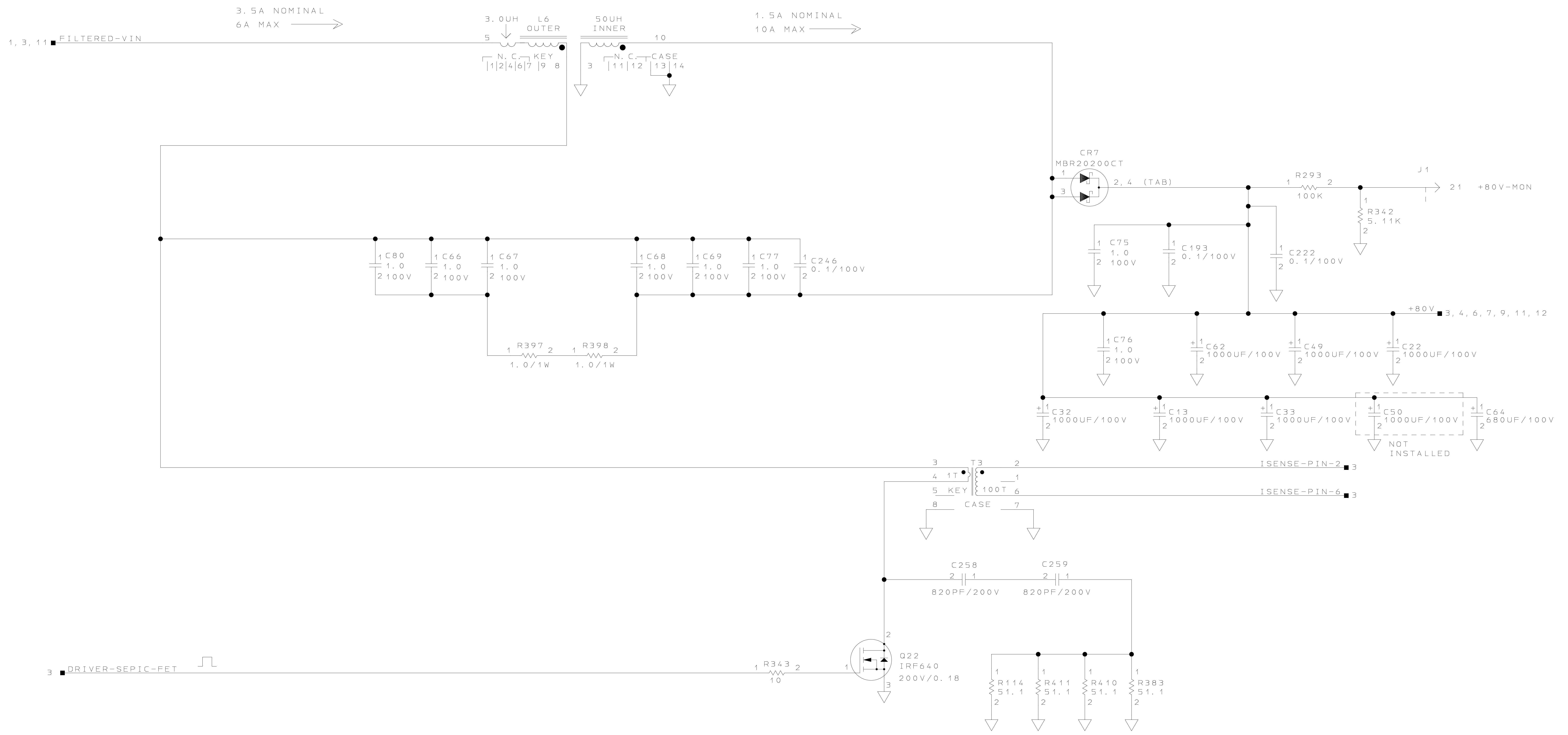
NOTES:  
 UNLESS OTHERWISE SPECIFIED:  
 1. ALL CAPACITANCE VALUES ARE IN MICROFARADS.  
 2. ALL RESISTANCE VALUES ARE IN OHMS.  
 3. ALL INDUCTANCE VALUES ARE IN MICROHENRIES.  
 4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN; FOR COMPLETE DESIGNATIONS PREFIX PART DESIGNATION WITH SUBASSEMBLY DESIGNATION.  
 5. INTERPRET DRAWING PER ANSI Y32.2-1975 AND ANSI/IEEE STD 991-1986. LOGIC SYMBOLS CONFORM TO ANSI/IEEE STD 91-1984.

EMI FILTER AND DIODE BRIDGE  
 SCHEMATIC DIAGRAM SH NO. 1 OF 20

COMPUTER GENERATED

7-3-2002_16:01	SEE FIRST SHEET FOR CONTRACT NUMBER, USE OR DISCLOSURE OF INFORMATION ON THIS SHEET IS SUBJECT TO THE RESTRICTIONS ON THE FIRST SHEET OF THIS DOCUMENT.	SIZE E 1WYD3	CAGE CODE 9000015-001	DRAWING NO. 9000015-001	REV F
ACSS	SCALE	SHEET 13		DATE/TIME	

REV		DESCRIPTION	DATE
5204	F	CHANGED BORDER.	07-09-02



SEPIC POWER STAGE  
SCHEMATIC DIAGRAM SHEET NO. 2

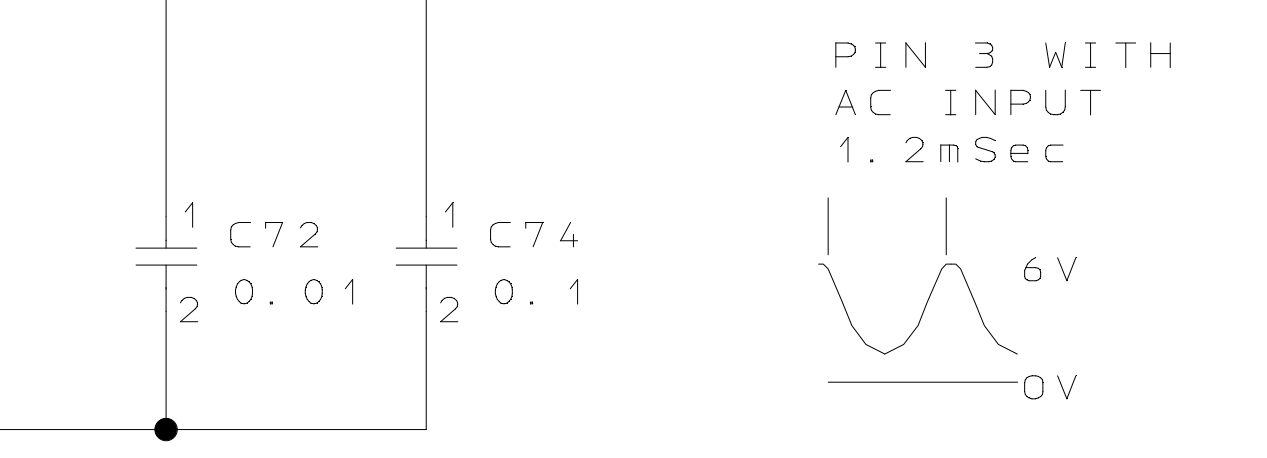
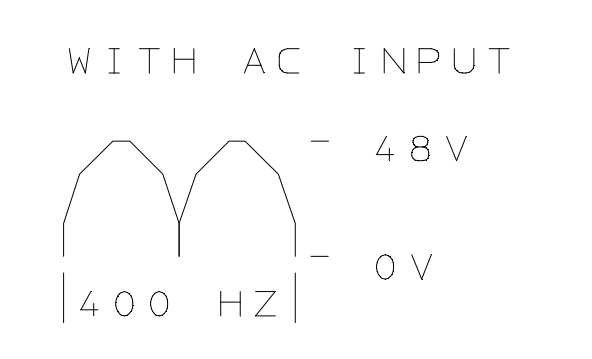
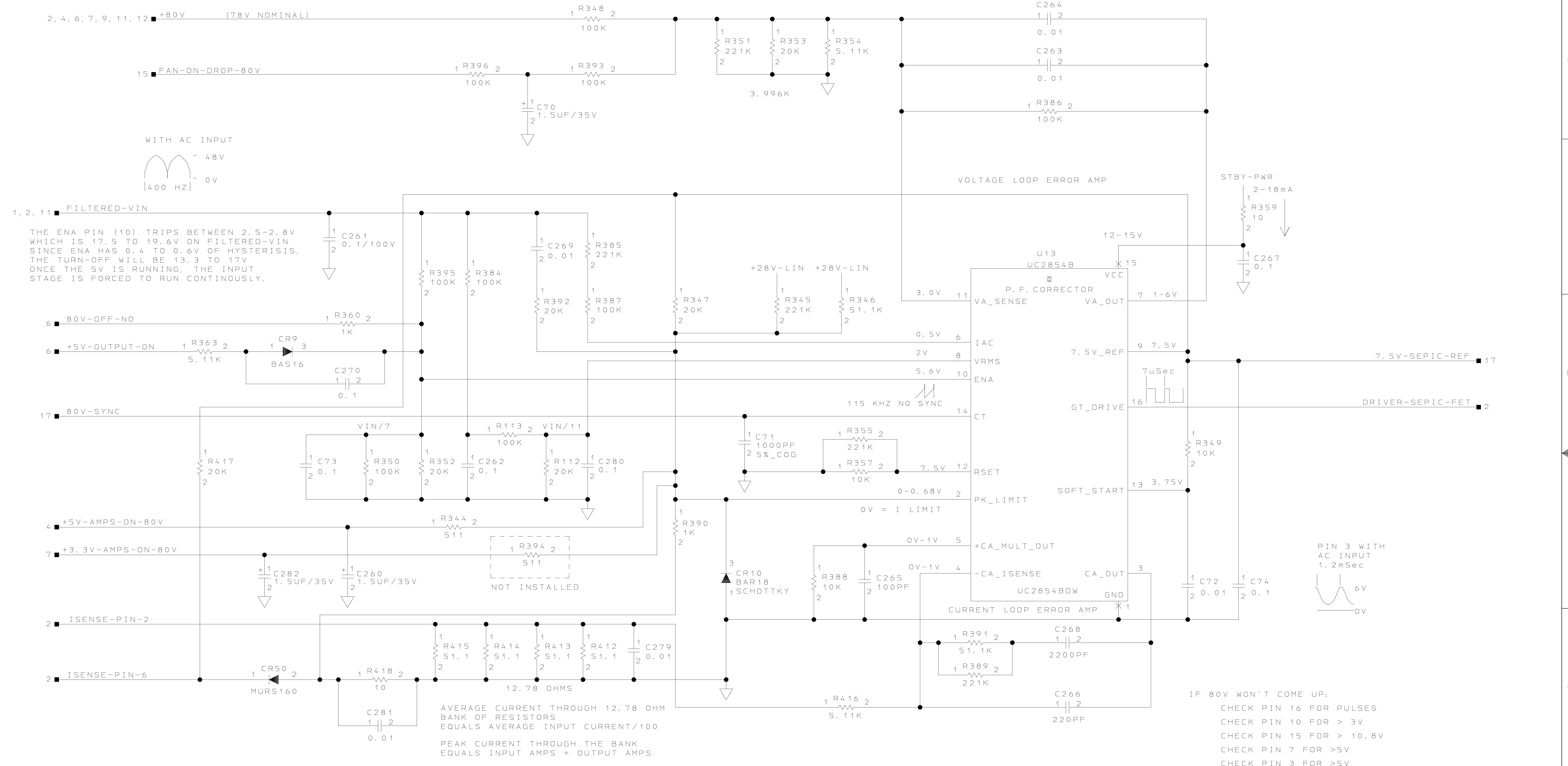
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7-100-5100006-02

REV		DESCRIPTION	DATE
2969	E	UNINSTALLED R394.	05-14-02
5204	F	CHANGED BORDER. REFORMATTED OLD REVISION BLOCK TO MATCH NEW BORDER. ADDED REV E CR NUMBER.	07-09-02



$$V(\text{PIN } 5) = \frac{R(\text{PIN } 5) * I(\text{PIN } 6) * (V(\text{PIN } 7) - 1.5V) * 1V}{(V(\text{PIN } 8)) ^ 2}$$

- IF 80V WON'T COME UP:
- CHECK PIN 16 FOR PULSES
  - CHECK PIN 10 FOR > 3V
  - CHECK PIN 15 FOR > 10.8V
  - CHECK PIN 7 FOR > 5V
  - CHECK PIN 3 FOR > 5V
  - CHECK PIN 5 FOR > 0.4V
  - CHECK PIN 14 FOR TRIANGLE CLOCK
  - CHECK PIN 2 FOR SPIKES TO 0V (10USEC/DIV)

SEPIC CONTROLLER  
SCHEMATIC DIAGRAM SHEET NO. 3

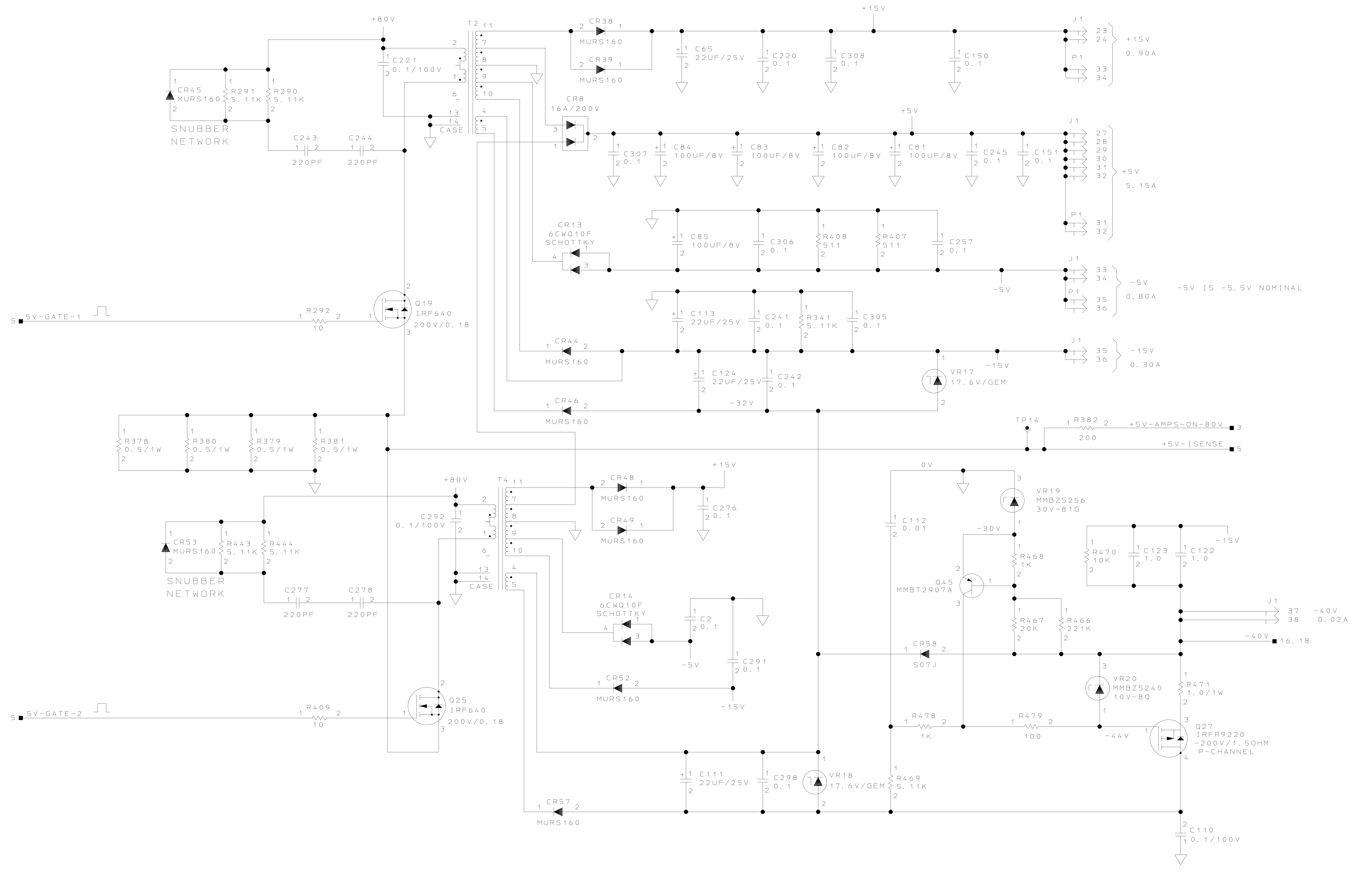
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REVISED		DESCRIPTION	DATE
CR	REV		
5204	F	CHANGED BORDER.	07-09-02

THE FOUR 100UF CAPS ON THE 5V LINE ARE RATED FOR 3A RMS EACH AT 105C.



5V FLYBACK SUPPLY  
SCHEMATIC DIAGRAM SHEET NO. 4

COMPUTER GENERATED  
7-3-2002\_16:01

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		SCALE	SHEET 16		