

**CHANGE/ERRATA**

**ISSUE NO: 1 8/94**

This change/errata contains information necessary to ensure the accuracy of the following manual.  
Enter the corrections in the manual if either one of the following conditions exist:

1. The revision letter stamped on the indicated PCA is equal to or higher than that given with each change.
2. No revision letter is indicated at the beginning of the changes or errata.

**MANUAL**

Title: 5100B Instruction Manual  
Part Number: 926634  
Print Date: October 1992  
Rev.- Date: 1, 1/94

**C/E PAGE EFFECTIVITY**

Page No. Print Date

1 - 8 8/94

**CHANGE #1 - 49109**

Rev. -AD, A13 Wideband Oscillator PCA (5100A-4120T)

On page 603-20, Table 603-7,

CHANGE: U3/IC,TTL,DUAL DIV BY 2, DIV BY 5 COUNTER/402552/01295/SN7439ON/1

TO: U3/IC,TTL,DUAL DIV BY 2, DIV BY 5 COUNTER/483594/89536/483594/1

**CHANGE #2 - 49134**

Rev. -AD, A17 Power Amplifier PCA (5100B-4083T)

On page 5-69, Table 5-24,

ADD: L2, L3/CORE TOROID, FERRITE,.047X.138X.118/321182/89536/321182/2

On pages 5-72 and 7-42, Figures 5-19 and 7-15, add L2 and L3 as shown in Figure A:

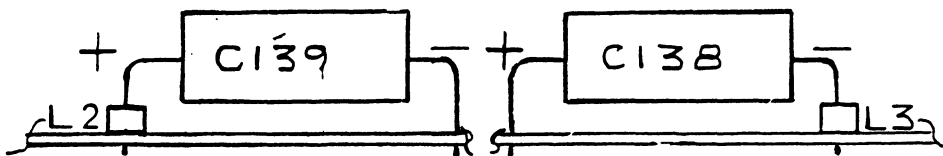


Figure A.

On page 7-44, Figure 7-15, add L2 and L3 as shown in Figure B:

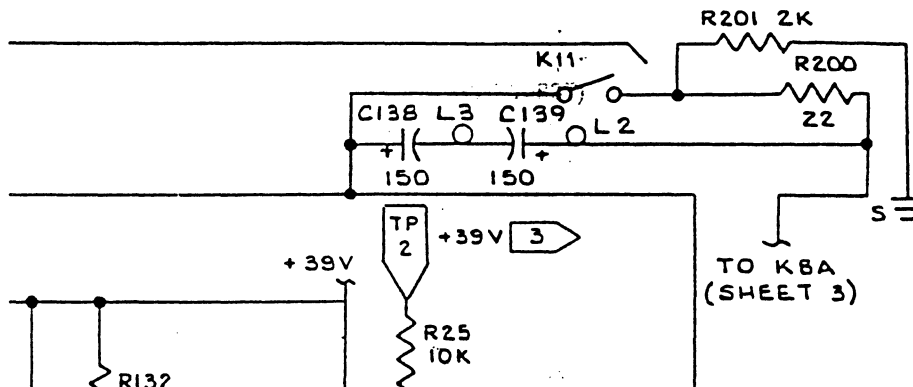


Figure B.

**CHANGE #3 - 49432**

Rev. -C, A16 Extended High Voltage PCA (5130A-4071T)

On page 5-65, Table 5-22,

CHANGE: CR12,13/DIODE,SI,BV-75V,IO-150MA,500MW/203323/65940/1N4448/2

TO: CR12,13,15/DIODE,SI,BV-75V,IO-150MA,500MW/203323/89536/203323/3

On page 5-66 and 7-39, Figure 5-17 and 7-14, add CR15 as shown in Figure C:

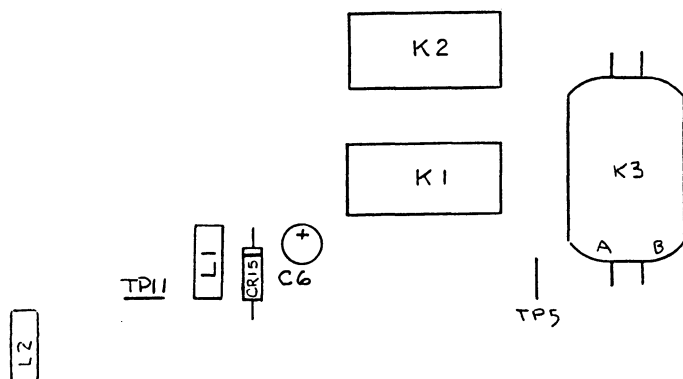


Figure C.

On page 7-40, Figure 7-14, delete Flagnote 6 under NOTES.

**CHANGE #4 - 49442**

Rev. -C, A21 Tape Drive PCA (5101B-4030T)

On page 5-81, Table 5-29, replace U8 with:

L1/CORE, TORROID, FERRITE, 047x138x.118/321182/1

On pages 5-82, add 7-53, add L1 as shown in Figure D.

On page 7-54, add L1 as shown in Figure E.

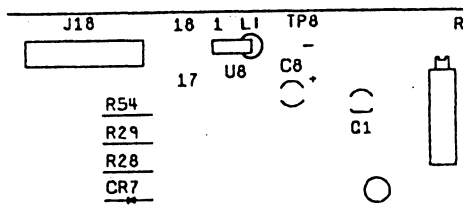


Figure D.

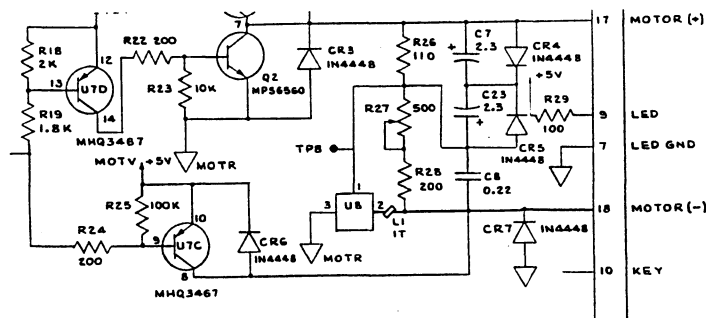


Figure E.

**CHANGE #5 - 49466**

Rev. -AE, A17 Power Amplifier PCA (5100A-4083T)

On page 5-70, Table 5-24,

CHANGE: Q112, 117/TRANSISTOR, SI, BV=80V, 10W, TO-202/343970/04713/SPS7104/2  
 TO: Q112, 117/TRANSISTOR, SI, BV=80V, 10W, TO-202/535468/89536/535468/2

**CHANGE #6 - 49734**

Rev. -AM, A12 Wideband Output PCA (5100A-4110T)

On page 603-16, Table 603-6, change the following:

FROM: C 28/CAP,CER,33PF,+5%,50V,COG/714543/89536/714543/1  
 TO: C 28/CAP,CER,27PF,+21%,100V,COG/816652/89536/816652/1

FROM: R24, 28/RES,MF,232,+1%,0.125W,100PPM/289975/91637/CMF-55 2320F T-1/2  
 TO: R24, 28/RES,MF,100,+1%,0.125W,100PPM/168195/89536/168195/2

FROM: R66/RES,MF,1K,+1%,0.125W,100PPM/168229/91637/CMF-55 1001F T-1/1  
 TO: R66/RES,MF,66.5,+1%,0.125W,100PPM/305987/89536/305987/1

FROM: R67/RES,MF,27.4K,+1%,0.125W,100PPM/484899/89536/484899/1  
 TO: R67/RES,MF,13.7K,+1%,0.125W,100PPM/236752/89536/236752/1

FROM: R93/RES,MF,8.66K,+1%,0.125W,100PPM/260364/89536/260364/1  
 TO: R93/RES,MF,3.48K,+1%,0.125W,100PPM/260687/89536/260687/1

Add the following:

ADD: R99/RES,MF,604,+1%,0.125W,100PPM/320309/89536/320309/1  
 ADD: R100/RES,MF,178,+1%,0.125W,100PPM/442996/89536/442996/1

On page 603-9 and 603-18 Figures 7-10 and 7-29, add R99 and R100 shown in Figure F:

On page 7-30, Figure 7-10, add R99 and R100 as shown in Figure G:

**CHANGE #3 - 49432**

Rev. -C, A16 Extended High Voltage PCA (5130A-4071T)

On page 5-65, Table 5-22,

CHANGE: CR12,13/DIODE,SI,BV-75V,IO-15OMA,500MW/203323/65940/1N4448/2

TO: CR12,13,15/DIODE,SI,BV-75V,IO-15OMA,500MW/203323/89536/203323/3

On page 5-66 and 7-39, Figure 5-17 and 7-14, add CR15 as shown in Figure C:

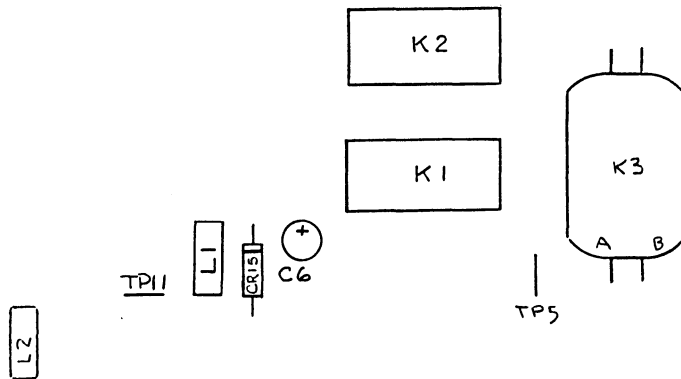


Figure C.

On page 7-40, Figure 7-14, delete Flagnote 6 under NOTES.

**CHANGE #4 - 49442**

Rev. -C, A21 Tape Drive PCA (5101B-4030T)

On page 5-81, Table 5-29, replace U8 with:

L1/CORE, TORROID, FERRITE, 047x138x.118/321182/1

On pages 5-82, add 7-53, add L1 as shown in Figure D.

On page 7-54, add L1 as shown in Figure E.

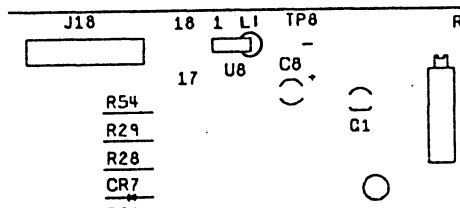


Figure D.

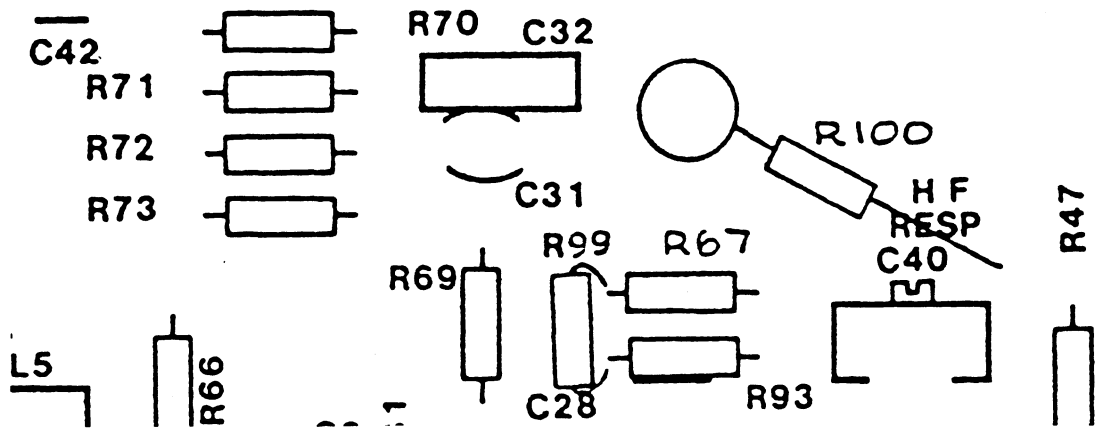


Figure F.

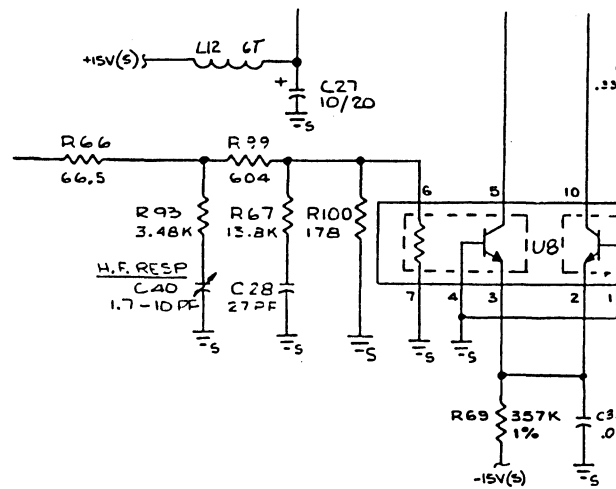


Figure G.

**CHANGE #7 - 49801**

Rev. -AV, A9 Power Supply Regulator PCA (5100A-4010T)

On page 5-47, Table 5-15, change and add the following:

FROM:	MP9/HEAT DIS, HORIZ, 1.18X1.00X0.50, TO-220/453878/13103/6106-B-14/4
TO:	MP9/HEAT DIS, HORIZ, 1.18X1.00X0.50, TO-220/453878/13103/6106-B-14/2
FROM:	MP11/HEAT DIS, VERT FIN, 1.00X.710X.50, BLACK/352765/13103/6107-B-14/4
TO:	MP11/HEAT DIS, VERT FIN, 1.00X.710X.50, BLACK/352765/13103/6107-B-14/2
FROM:	Q3, 13/TRANSISTOR, SI, BV- 70V, 90W, TO-127/325738/04713/MJE2955/2
TO:	Q3, 13/TRANSISTOR, SI, BV- 70V, 90W, TO-127/875117/89536/875117/2
ADD:	MP12/HEAT DISSIPATOR/831099/89536/831099/2
	MP13/HEAT DISSIPATOR/473678/89536/473678/1
	MP14/HEAT DISSIPATOR/816561/89536/816561/2
	H4/NUT, METAL/195255/89536/195255/4
	H5/SCREW/256164/89536/256164/4

On pages 5-49 and 7-16, replace Figures 5-10 and 7-6 with Figure H.

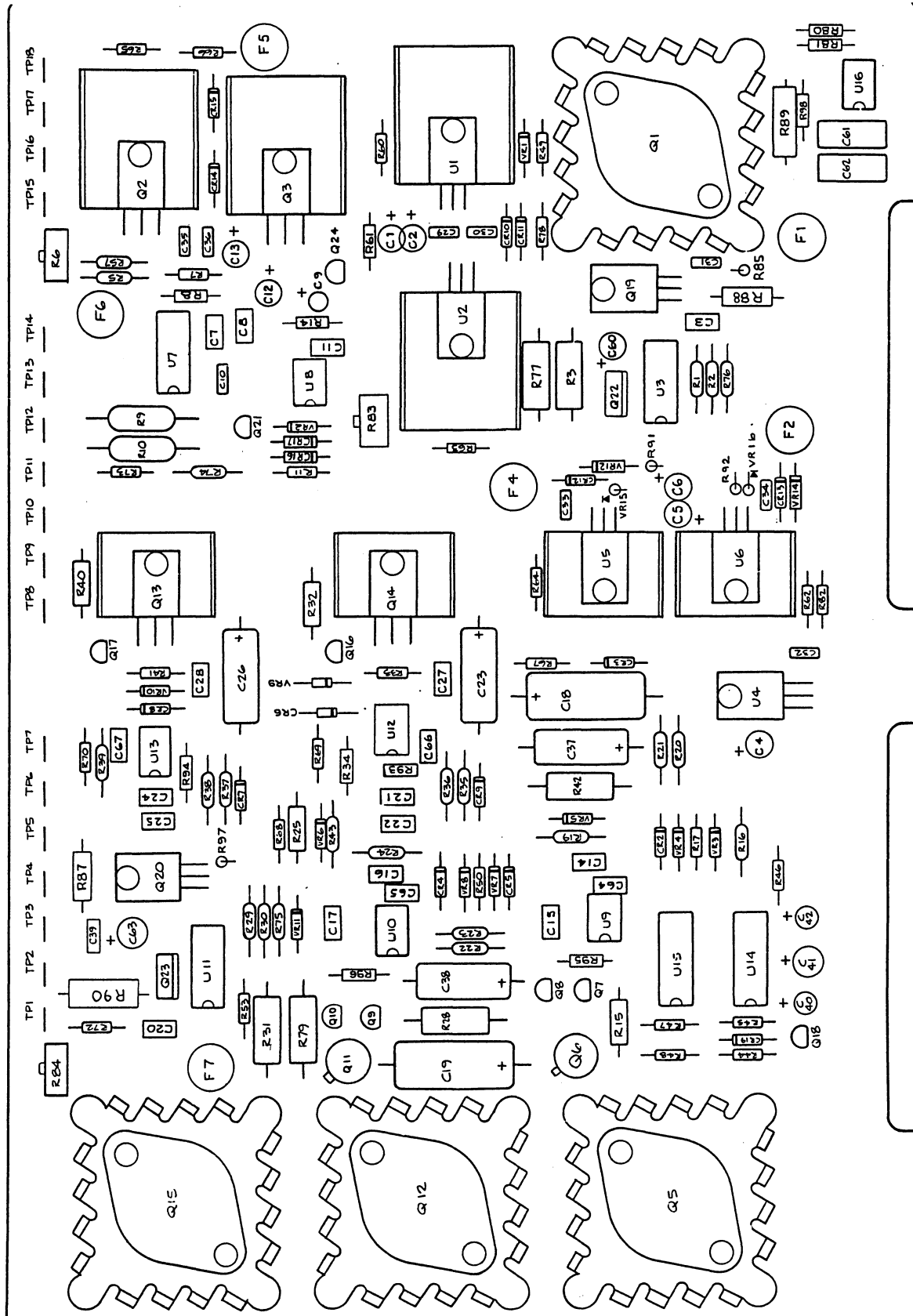


Figure H.

On page 7-17, replace Figure 7-6 with Figure I.

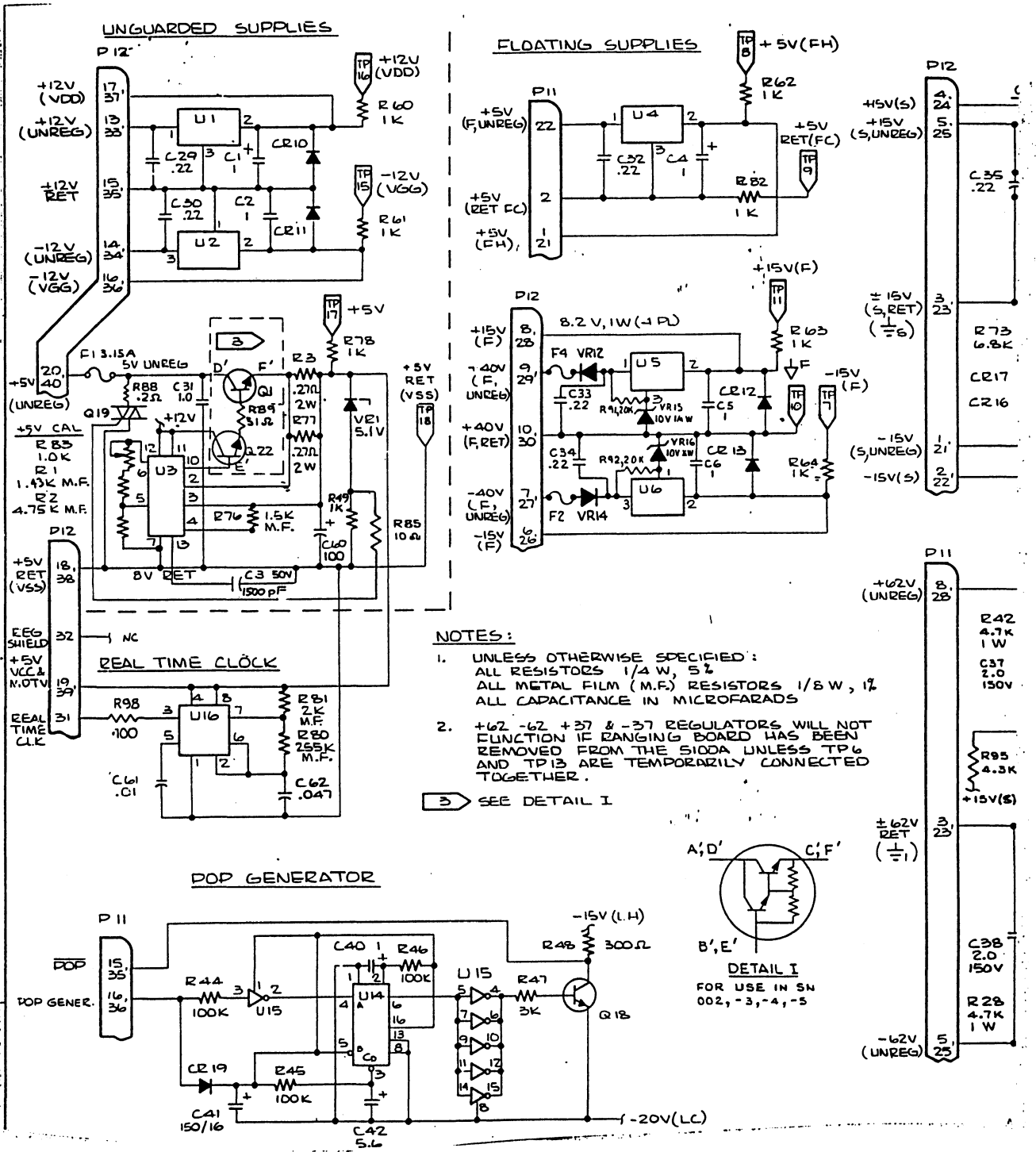


Figure I.



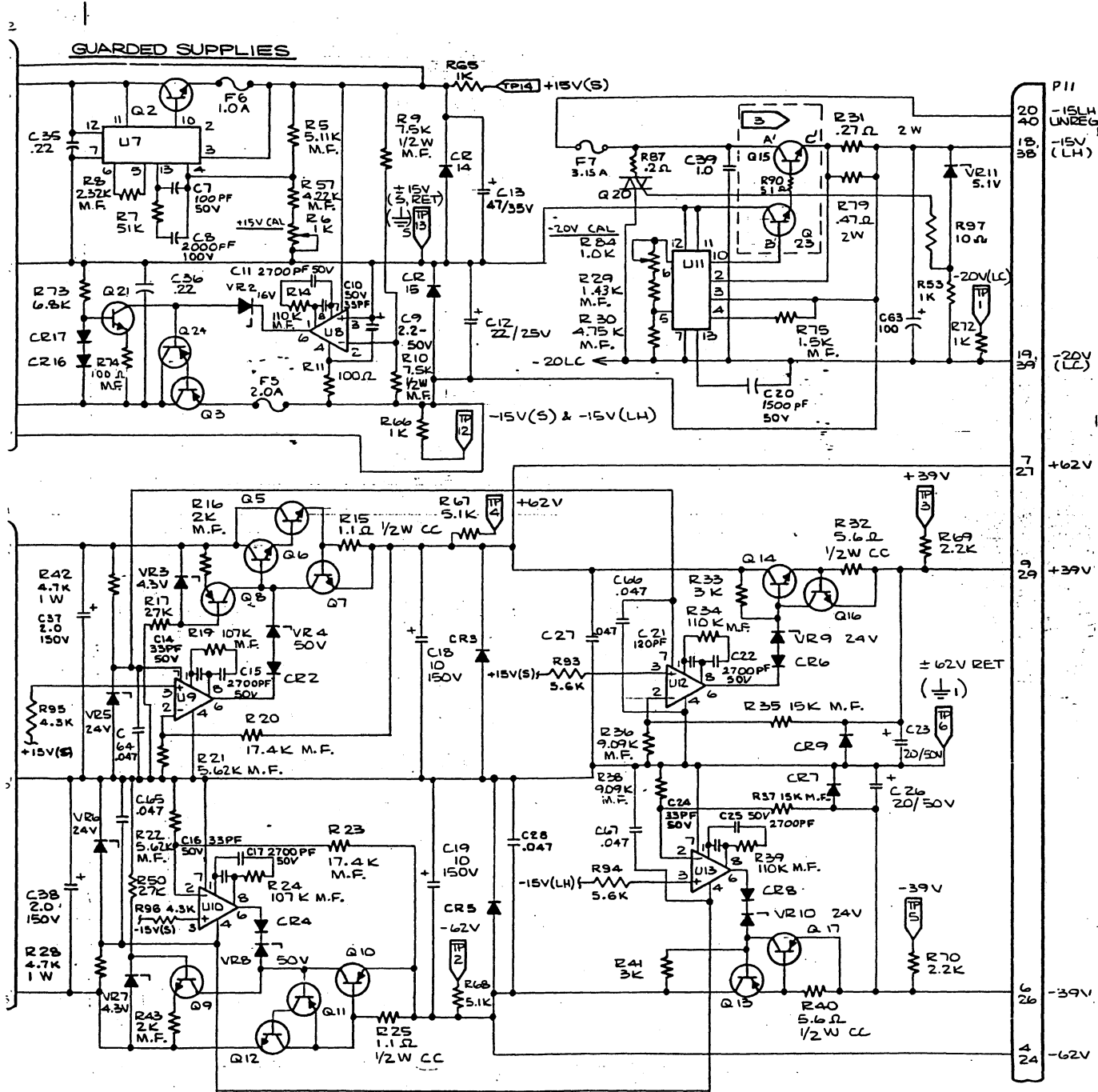


Figure 1 (cont)

**CHANGE #8 - 50017**

Rev. -AVI, A9 Power Supplier Regulator PCA (5100A-4010T)

On page 5-47, Table 5-18,

CHANGE: H1/SPACER, SWAGE, .250 RND, BR, 6-32, .070/342824/55566/3045B632B14-MOD.-.070/17  
 TO: H1/SPACER, SWAGE, .250 RND, BR, 6-32, .070/342824/55566/3045B632B14-MOD.-.070/15

**ERRATA #1**

On page 5-3,

CHANGE: A8/Tape Interface PCA (5101B)/458794/L  
 TO: A8/Tape Interface PCA (5101B)/702035/L

On page 5-45, replace Table 5-14 with Table 1:

**Table 1. A8 Tape Interface PCA**

REFERENCE DESIGNATOR	DESCRIPTION	FLUKE STOCK NO.	QTY
C 1, 13	CAP,POLYES,0.1UF,+10%,100V	393439	2
C 2	CAP,POLYES,0.01UF,+10%,250V	325548	1
C 3	CAP,TA,22UF,+20%,15V	423012	1
C 4, 14	CAP,POLYES,0.22UF,+10%,100V	436113	2
C 12	CAP,POLYES,0.001UF,+10%,200V	159582	1
C 15- 19	CAP,TA,0.22UF,+20%,35V	161331	5
C 20	CAP,MICA,240PF,+5%,500V	362863	1
J 10, 21	SOCKET,IC,16 PIN	276535	2
Q 10, 11 *	TRANSISTOR,SI,PNP,SMALL SIGNAL	226290	2
Q 12 *	TRANSISTOR,SI,NPN,SMALL SIGNAL,TO-92	218396	1
R 1	RES,MF,750,+1%,0.125W,100PPM	312801	1
R 2	RES,VAR,CERM,500,+20%,0.5W	267849	1
R 3	RES,CF,20K,+5%,0.25W	441477	1
R 8, 19, 21	RES,CF,150,+5%,0.25W	343442	3
R 9, 20, 22	RES,CF,22K,+5%,0.25W	348870	3
R 11	RES,MF,3.48K,+1%,0.125W,100PPM	260687	1
R 12, 15, 16,	RES,CF,3K,+5%,0.25W	441527	4
R 18		441527	
R 13	RES,VAR,CERM,2K,+20%,0.5W	267864	1
R 14	RES,MF,10K,+1%,0.125W,100PPM	168260	1
R 30	RES,CF,510,+5%,0.25W	441600	1
TP 1- 7	TERM,UNINSUL,FEEDTHRU,HOLE,TURRET	179283	7
U 1 *	IC,BPLR,TIMER,8 PIN DIP	402610	1
U 2, 24 *	IC,CMOS,DUAL JK F/F,+EDG TRIG	355230	2
U 3, 25 *	IC,CMOS,QUAD 2 INPUT AND GATE	408401	2
U 4 *	IC,CMOS,QUAD 2 INPUT NOR GATE	355172	1
U 5, 26 *	IC,CMOS,DUAL D F/F,+EDG TRG	418830	2
U 6 *	IC,CMOS,8BIT PAR/SER-I/O SHIFT RGS	380766	1
U 7, 8 *	IC,CMOS,QUAD D LATCH,W/XOR ENABLE	355149	2
U 9 *	IC,CMOS,TRIPLE 3 INPUT NAND GATE	375147	1
U 10 *	IC,CMOS,QUAD XOR GATE	355222	1
U 11, 14 *	IC,CMOS,PRSET BIN/DEC UP/DOWN COUNTER	452904	2
U 12 *	IC,LSTTL,RETRG MONOSTAB MULTIVB W/CLR	404186	1
U 15 *	IC,CMOS,QUAD 2 INPUT OR GATE	408393	1
U 16 *	IC,CMOS,DUAL 4 INPUT NAND GATE	355206	1
U 18 *	IC,CMOS,DUAL 4BIT SER-IN,PAR-OUT SHFT	340125	1
U 19, 20 *	IC,CMOS,QUAD D LATCH,+EDG TRG,W/RESET	412742	2
U 21, 22 *	IC,CMOS,HEX BUFFER W/3-STATE OUTPUT	407759	2
U 23 *	IC,CMOS,QUAD D F/F,+EDG TRG,W/CLR	452912	1
U 27 *	IC,CMOS,QUAD 2 INPUT NAND GATE	355198	1
XU 13	SOCKET,IC,14 PIN	276527	1

An \* indicates a static-sensitive part.