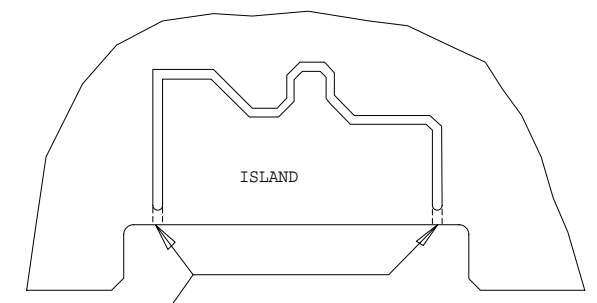


10. TEST PER SPEC. 03-925070-20 "TSD ELECTROMETER CALIBRATION PROCEDURE AND FUNCTIONAL TEST REQUIREMENTS."

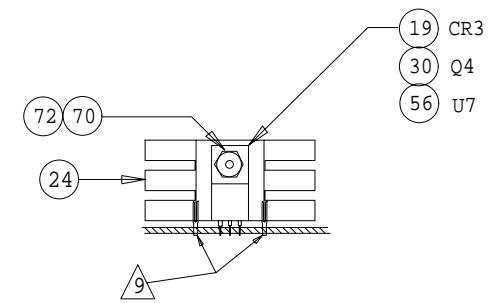
- 9. MOUNTING CLIPS ARE INCLUDED WITH HEATSINK (ITEM 24), SEE DETAIL C.
- 8. INSTALL DETECTOR SHIELD COVER (ITEM 22) TO PWA USING 2 LONG SCREWS (ITEM 68) AND WASHERS (ITEM 69).
- 7. BEFORE INSTALLING DETECTOR SHIELD BASE (ITEM 23), ADD LABEL ITEM (ITEM 71) TO BASE (ITEM 23). THEN PLACE BNC CONNECTOR J1 (ITEM 25) THRU D HOLE AS SHOWN AND SECURE WITH SUPPLIED HARDWARE. ONCE THIS IS ACHIEVED, INSTALL SHIELD TO PWA USING 2 SHORT SCREWS (ITEM 67). SOLDER WIRE (ITEM 73) TO THE CENTER PIN OF J1 (ITEM 25) AND CLEAN WITH COTTON SWAB. SEE DETAIL B.
- 6. AFTER CUTTING TABS, RINSE AR2, C3, C4 AND Q1 WITH DE-IONIZED WATER FROM A SQUIRT BOTTLE. RINSE THE PARTS ON ALL SIDES, INCLUDING THE SPACE BETWEEN THE PARTS AND THE BOARD. AVOID TOUCHING THIS AREA AFTER WASHING. IF REWORK IS REQUIRED, REPEAT RINSE OPERATION.
- 5. AFTER INSTALLATION AND SOLDERING OF ALL COMPONENTS ON THE ENTIRE BOARD, TRIM ALL COMPONENT LEADS ON SOLDER SIDE TO .100 MAX. THEN CUT TABS (2 PLACES) WITH HIGH- SPEED ABRASIVE TOOL TO FREE ISLAND. MAKE CUTS AT LEAST .040 WIDE, SEE DETAIL A.
- 4. SOLDER THE 22 GAGE SOLID WIRE (ITEM 73) TO PWA PAD MARKED J1 (CUT AND FORM AS REQUIRED) AS SHOWN ON DETAIL B.
- 3. FOR A/W SEE 03-925072-00.
- 2. FOR SCHEM SEE 03-925073-00.
- 1. MARK CURRENT REV LEVEL IN AREA PROVIDED WITH A PERMANENT TYPE, NON-CONDUCTIVE BLACK INK.

NOTES: (UNLESS OTHERWISE SPECIFIED).

COMPONENT SIDE



DETAIL A  
SCALE = NONE



DETAIL - C  
SCALE = NONE

SHT 1 OF 2

SHT 2 IS "A" SIZE

X3-925070-01		REFURBISHED	
03-925070-01		NEW	
03-925070-00		DRAWING ONLY	
PART NUMBER		DESCRIPTION	
DRAWN	DATE	APPROVED	DATE
S. McRAE	7-25-95	R. COMMINS	11-10-95
CHECKED	DATE	APPROVED	DATE
S.T.	11-10-95	R. COMMINS	8-14-96
ASSY, PWA, TSD		CLASS	
NOT OTHERWISE SPEC:		ANG:	
FIN. ✓ DEC .X ± .XX ± .XXX ±		varian	
FULL	38	1 OF 2	D
SCALE	DIV	SHEET	REV
			3

03-925070-00

A

PWA: TSD  
ASSEMBLY: 03-925070-01  
DATE: Wed 16-Jul-1997  
REV: 3

Sheet: 2 of 3

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
1		1	03-925071-01	FAB,PWA,TSD
2	AR1	1	62-602966-00	AMP,AD706JN,DUAL_OP-AMP
3	AR2	1	62-602988-00	AMP,LMC662CN,DUAL_OP-AMP
4	AR3	1	62-601360-00	AMP,OP-07CP,OP-AMP
5	AR4	1	62-600058-00	AMP,LM324N,QUAD_OP-AMP
6	C1	1	41-764923-00	CAP,0.022UF,100V,10%,MYLAR
7	C2	1	41-290047-00	CAP,100PF,100V,5%,CER,COG
8	C3	1	41-290040-00	CAP,1PF,200V,+/-0.25PF,CER,COG
9	C4	1	41-290027-00	CAP,10PF,100V,10%,CER,COG
10	C5-7, C9-10, C17-18, C20-21, C24, C27-28, C31	13	41-290010-00	CAP,0.1UF,50V,20%,CER,Z5U
11	C8	1	41-764917-00	CAP,0.1UF,63V,10%,MYLAR
12	C11	1	41-290028-00	CAP,220PF,100V,10%,CER,COG
13	C12, C19, C29	3	41-290043-00	CAP,1000PF,100V,5%,CER,COG
14	C13-16	4	41-503914-00	CAP,47UF,25V,20%,AL.ELECT
15	C22-23, C30	3	41-503937-00	CAP,1200UF,35V,20%,AL.EL,LO_ESR
16	C25-26	2	41-609455-00	CAP,10UF,35V,10%,TANT
17	C32-33	2	41-764919-00	CAP,1.0U,50V,10%,MYLAR
18	CR1-2, CR5, CR7	4	66-304148-00	DIODE,1N914_OR_1N4148
19	CR3	1	66-393210-00	DIODE,MBR745,7.5A,45V,SCHOTTKY
20	CR4	1	66-393207-00	DIODE,MUR110,100V,1A,FAST_REC.
21	CR6	1	66-306263-00	DIODE,1N6263,SCHOTTKY
22	DC1	1	03-925202-01	SHIELD,COVER,DET,PWA
23	DC2	1	03-925201-01	SHIELD,BASE,DET,PWA
24	HS1-3	3	66-899999-00	HEATSINK,TO-220,TH6070B
25	J1	1	58-029991-00	CONN,BNC,BULKHEAD
26	J2	1	51-411038-00	CONN,3-PIN,MOLEX_0.156,R.A.
27				
28	Q1-2	2	62-990753-00	XSTR,LS352,MATCHED_DUAL_PNP
29	Q3	1	62-798033-00	XSTR,MOSFET,NMOS,IRFD110,100V,1A
30	Q4	1	62-990752-00	XSTR,MOSFET,NMOS,IRFZ34,60V,30A
31	R1, R4, R6, R8	4	31-102405-00	RES,MF,100K,1/4W,1%,100PPM
32	R2	1	31-102501-00	RES,MF,1.00M,1/4W,1%,100PPM

PWA: TSD

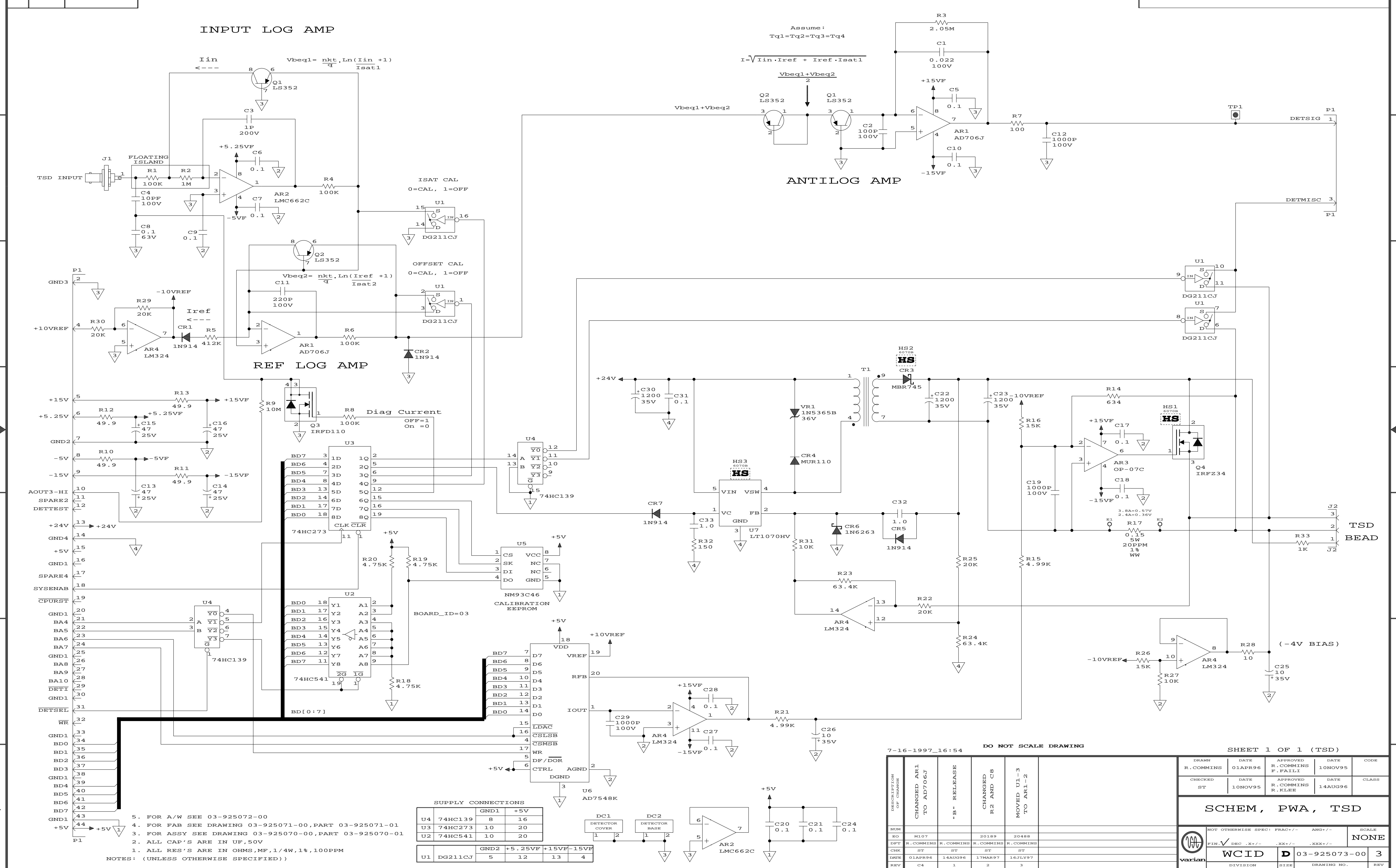
ASSEMBLY: 03-925070-01

DATE: Wed 16-Jul-1997

REV: 3

Sheet: 3 of 3

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
33	R3	1	31-102510-00	RES,MF,2.05M,1/4W,1%,100PPM
34	R5	1	31-102464-00	RES,MF,412K,1/4W,1%,100PPM
35	R7	1	31-102117-00	RES,MF,100,1/4W,1%,100PPM
36	R9	1	31-102531-00	RES,MF,10M,1/4W,1%,100PPM
37	R10-13	4	31-102088-00	RES,MF,49.9,1/4W,1%,100PPM
38	R14	1	31-102194-00	RES,MF,634,1/4W,1%,100PPM
39	R15, R21	2	31-102280-00	RES,MF,4.99K,1/4W,1%,100PPM
40	R16, R26	2	31-102326-00	RES,MF,15.0K,1/4W,1%,100PPM
41	R17	1	31-597106-00	RES,WW,0.15,5W,1%,20PPM
42	R18-20	3	31-102278-00	RES,MF,4.75K,1/4W,1%,100PPM
43	R22, R25, R29-30	4	31-102338-00	RES,MF,20K,1/4W,1%,100PPM
44	R23-24	2	31-102386-00	RES,MF,63.4K,1/4W,1%,100PPM
45	R27, R31	2	31-102309-00	RES,MF,10.0K,1/4W,1%,100PPM
46	R28	1	31-102021-00	RES,MF,10,1/4W,1%,100PPM
47	R32	1	31-102134-00	RES,MF,150,1/4W,1%,100PPM
48	R33	1	31-102213-00	RES,MF,1K,1/4W,1%,100PPM
49	T1	1	03-925373-01	TRANSFORMER,TSD
50	U1	1	62-601723-00	IC,DG211CJ,QUAD_ANALOG_SW
51	U2	1	62-601815-00	IC,74HC541N
52	U3	1	62-602007-00	IC,74HC273N
53	U4	1	62-601894-00	IC,74HC139N
54	U5	1	62-603060-00	IC,NM93C46,1024_BIT,SERIAL_EEPROM
55	U6	1	62-602641-00	IC,AD7548KN,DAC_12_BIT
56	U7	1	62-603324-00	IC,LT1070HVCT,SWITCHING_REG
57	VR1	1	66-325365-00	DIODE,1N5365B,ZENER,36V,5%,5W
58-66				
67		2	12-901162-00	SCREW,PHIL,SEMS,6-32X1/4
68		2	12-222006-20	SCREW,PHIL,PH,6-32X1
69		2	14-312006-00	WASHER,EXT_LOCK,#6
70		3	13-312004-00	NUT,KEP,4-40,SST
71		1	03-925421-04	LABEL,DET,IDENTIFICATION
72		A/R	88-298900-00	HEATSINK-COMPOUND
73		A/R	81-099922-00	WIRE,SOLID,CU,22GA



7-16-1997\_16:54 DO NOT SCALE DRAWING

SHEET 1 OF 1 (TSD)

DRAWN	R.COMMINS	DATE	01APR96	APPROVED	R.COMMINS	DATE	10NOV95	CODE	
CHECKED	ST	DATE	10NOV95	APPROVED	R.COMMINS	DATE	14AUG96	CLASS	

SCHEM, PWA, TSD

DESCRIPTION	CHANGED AR1 TO AD706J	RELEASE	CHANGED R2 AND C8	MOVED U1-3 TO AR1-2
NUM	M107		20189	20488
EO	R.COMMINS	R.COMMINS	R.COMMINS	R.COMMINS
DFT	ST	ST	ST	ST
CHK	01APR96	14AUG96	17MAR97	16JLY97
ENR	C4	1	2	3

NOT OTHERWISE SPECI	FRAC+/-	ANG+/-	SCALE
FIN	√	DEC	.XX+/-
WCID	D	03-925073-00	3
DIVISION	SIZE	DRAWING NO.	REV

SUPPLY CONNECTIONS

U4	74HC139	GND1	+5V
U3	74HC273	10	20
U2	74HC541	10	20

U1	DG211CJ	GND2	+5.25VF	+15VF	-15VF
		5	12	13	4

DC1 DETECTOR COVER

DC2 DETECTOR BASE