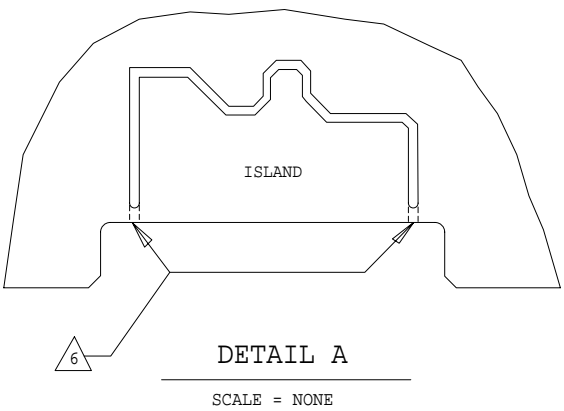


10. TEST PER SPEC 03-925021-20 "FID ELECTROMETER CALIBRATION PROCEDURE AND FUNCTIONAL TEST REQUIREMENTS".
9. INSTALL DETECTOR SHIELD COVER (ITEM 18) TO PWA USING 2 LONG SCREWS (ITEM 61) AND WASHERS (ITEM 62).
8. BEFORE INSTALLING DETECTOR SHIELD BASE (ITEM 19), ADD LABEL (ITEM 63). THEN PLACE BNC CONNECTOR J1 (ITEM 20) THRU D HOLE AS SHOWN AND SECURE WITH SUPPLIED HARDWARE. ONCE THIS IS ACHIEVED INSTALL SHIELD BASE TO PWA USING 2 SHORT SCREWS (ITEM 60), AND THEN SOLDER WIRE (ITEM 64) TO THE CENTER PIN OF J1 (ITEM 20) AND CLEAN WITH COTTON SWAB. SEE DETAIL B.
7. AFTER CUTTING TABS, RINSE AR2, Q1, C3 AND C4 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.
6. AFTER INSTALLATION AND SOLDERING OF COMPONENTS ON THE ENTIRE BOARD, TRIM ALL COMPONENT LEADS ON SOLDER SIDE TO 0.100 MAX., THEN CUT TABS (2 PLACES) WITH HIGH SPEED ABRASIVE TOOL TO FREE ISLAND. MAKE CUTS AT LEAST .040 WIDE, SEE DETAIL A.
5. SOLDER THE 22 GAGE SOLID WIRE (ITEM 64) TO PWA PAD MARKED J1 (CUT AND FORM AS REQUIRED) AS SHOWN ON DETAIL B.
4. FOR A/W SEE 03-925023-00.
3. FOR SCHEM SEE 03-925024-00.
2. MARK CURRENT LEVEL REV IN AREA PROVIDED WITH PERMANENT TYPE NON-CONDUCTIVE BLACK INK.
1. _____

NOTES: (UNLESS OTHERWISE SPECIFIED).



SHT 1 OF 2
SHT 2 IS "A" SIZE

X3-925021-01		REFURBISHED			
03-925021-01		NEW			
03-925021-00		DRAWING ONLY			
PART NUMBER		DESCRIPTION			
DRAWN	DATE	APPROVED	DATE	CODE	
SAL TEDESCO	2-6-95	D. DE FORD	3-30-95		
CHECKED	DATE	APPROVED	DATE	CLASS	
S.T.	3-30-95	D. DE FORD	5-2-96		
ASSY, PWA, FID, ELECTROMETER					
NOT OTHERWISE SPEC: ANG#					
varian					
APVD					
ECO		M75	M84	M104	20188
DFT	SAM	SAM	SAM	ST	ST
CHK	ST	ST	ST	ST	ST
DATE	3-15-95	3-9-96	3-25-96	4-2-96	5-1-96
REV	C1	C2	C3	C4	1

DO NOT SCALE DRAWING					
"C" RELEASE					
NUMEROUS CHANGES SEE ECO					
OBSOLETE PART SEE ECO					
ITEM 2 WAS 62-603463-00 SEE ECO					
"B" RELEASE					
NUMEROUS CHANGES SEE ECO					
FIN. ✓ DEC .X ± .XX ± .XXX ±					
FULL	38	1 OF 2	D	03-925021-00	2
SCALE	DIV	SHEET	SIZE	DRAWING NO	REV

PWA: FID

ASSEMBLY: 03-925021-01

DATE: Wed 15-APRIL-1997

REV: 2

Sheet: 2 of 3

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
1		1	03-925022-01	FAB,PWA,FID
2	AR1	1	62-602966-00	AMP,AD706JN,DUAL_OP-AMP
3	AR2	1	62-602988-00	AMP,LMC662CN,DUAL_OP-AMP
4	C1	1	41-764923-00	CAP,0.022UF,100V,10%,MYLAR
5	C2	1	41-290047-00	CAP,100PF,100V,5%,CER,COG
6	C3	1	41-290040-00	CAP,1PF,200V,+/-0.25PF,CER,COG
7	C4	1	41-290027-00	CAP,10PF,100V,10%,CER,COG
8	C5-7, C16, C20, C22-25	9	41-290010-00	CAP,0.1UF,50V,20%,CER,Z5U
9	C8	1	41-290028-00	CAP,220PF,100V,10%,CER,COG
10	C9	1	41-764917-00	CAP,0.1UF,63V,10%,MYLAR
11	C10, C19	2	41-290043-00	CAP,1000PF,100V,5%,CER,COG
12	C11-13	3	41-503914-00	CAP,47UF,25V,20%,AL.ELECT
13	C14-15	2	41-709230-00	CAP,0.047UF,250V,10%,MYLAR
14	C17, C21	2	41-609401-00	CAP,4.7UF,35V,20%,TANT
15	C18	1	41-264452-00	CAP,0.001UF,1000V,20%,CER
16	CR1, CR3	2	66-304148-00	DIODE,1N914_OR_1N4148
17	CR2	1	66-304936-00	DIODE,1N4936,400V,1A,F.R.
18	DC1	1	03-925202-01	SHIELD,COVER,DET,PWA
19	DC2	1	03-925201-01	SHIELD,BASE,DET,PWA
20	J1	1	58-029991-00	CONN,BNC,BULKHEAD
21	J2	1	51-411038-00	CONN,3-PIN,MOLEX_0.156,R.A.
22	L1	1	43-300016-00	INDUCTOR,1.2MH,60MA,RF_CHOKE
23				
24	Q1-2	2	62-990723-00	XSTR,LS312,MATCHED_DUAL_NPN
25	Q3, Q5-6	3	62-798033-00	XSTR,MOSFET,NMOS,IRFD110,100V,1A
26	Q4	1	62-990747-00	XSTR,DMOSFET,N-CHAN, VN0535N3,350V
27	R1, R5, R7, R9, R19	5	31-102405-00	RES,MF,100K,1/4W,1%,100PPM
28	R2, R16, R18	3	31-102501-00	RES,MF,1.00M,1/4W,1%,100PPM
29	R3	1	31-102510-00	RES,MF,2.05M,1/4W,1%,100PPM

PWA: FID

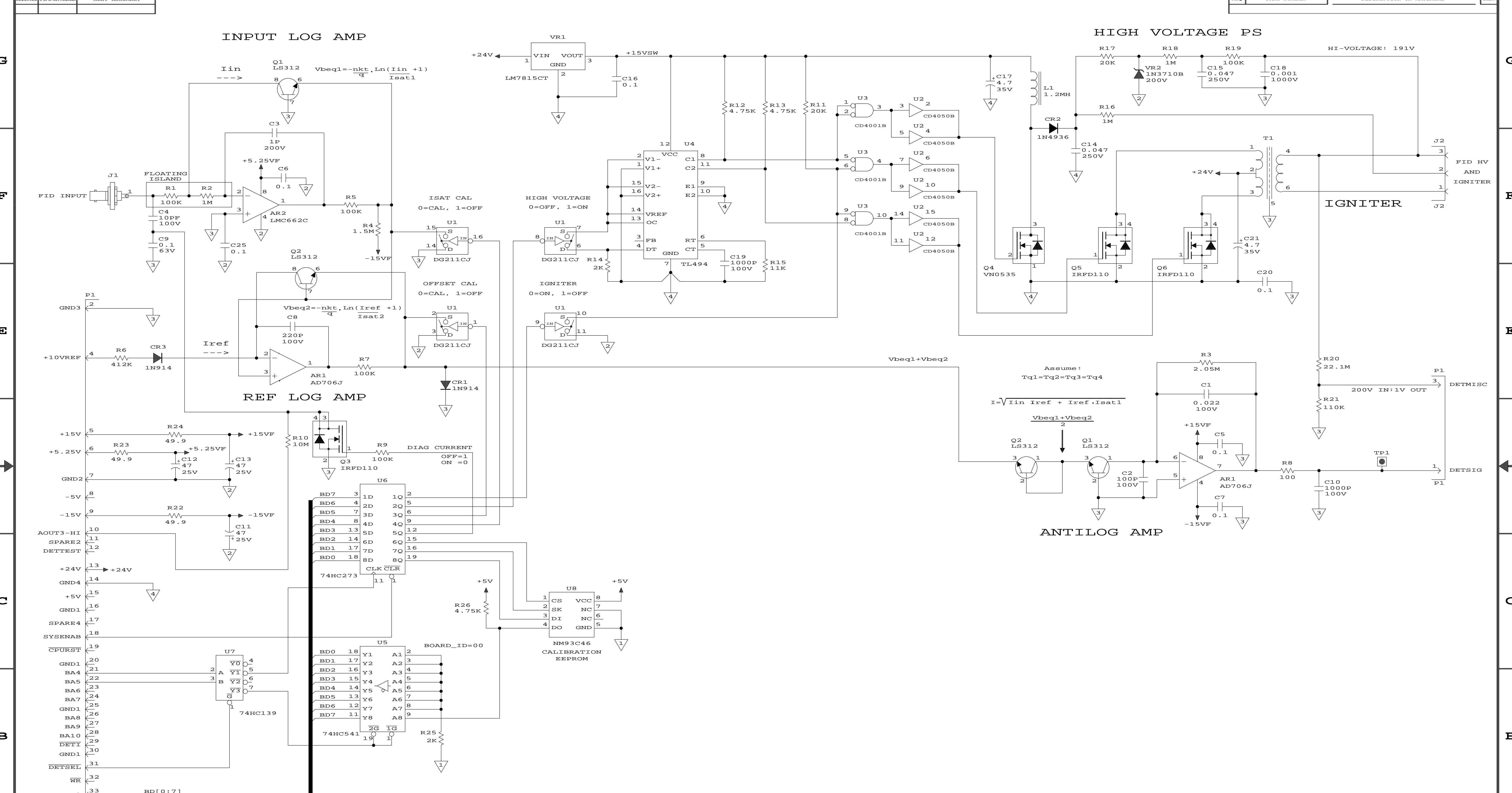
ASSEMBLY: 03-925021-01

DATE: Wed 15-APRIL-1997

REV: 2

Sheet: 3 of 3

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
30	R4	1	31-102508-00	RES,MF,1.5M,1/4W,1%,100PPM
31	R6	1	31-102464-00	RES,MF,412K,1/4W,1%,100PPM
32	R8	1	31-102117-00	RES,MF,100,1/4W,1%,100PPM
33	R10	1	31-102531-00	RES,MF,10M,1/4W,1%,100PPM
34	R11, R17	2	31-102338-00	RES,MF,20K,1/4W,1%,100PPM
35	R12-13, R26	3	31-102278-00	RES,MF,4.75K,1/4W,1%,100PPM
36	R14, R25	2	31-102242-00	RES,MF,2K,1/4W,1%,100PPM
37	R15	1	31-102313-00	RES,MF,11K,1/4W,1%,100PPM
38	R20	1	31-102538-00	RES,MF,22.1M,1/4W,1%,100PPM
39	R21	1	31-102409-00	RES,MF,110K,1/4W,1%,100PPM
40	R22-24	3	31-102088-00	RES,MF,49.9,1/4W,1%,100PPM
41	T1	1	03-925203-01	TRANSFORMER,IGNITER
42	U1	1	62-601723-00	IC,DG211CJ,QUAD_ANALOG_SW
43	U2	1	62-600071-00	IC,CD4050B,HEX_BUFFER
44	U3	1	62-601391-00	IC,CD4001B,QUAD_NOR
45	U4	1	62-601414-00	IC,TL494CN,SWITCHER
46	U5	1	62-601815-00	IC,74HC541N
47	U6	1	62-602007-00	IC,74HC273N
48	U7	1	62-601894-00	IC,74HC139N
49	U8	1	62-603060-00	IC,NM93C46,1024_BIT,SERIAL_EEPROM
50	VR1	1	62-600496-00	IC,LM7815CT,LINEAR_REG,+15V
51	VR2	1	66-313710-00	DIODE,1N3710B,ZENER,200V,5%,1W
52-59				
60		2	12-901162-00	SCREW,PHIL,SEMS,6-32X1/4
61		2	12-222006-20	SCREW,PHIL,PH,6-32X1
62		2	14-312006-00	WASHER,EXT_LOCK,#6
63		1	03-925421-01	LABEL,DET,IDENTIFICATION
64		A/R	81-099922-00	WIRE,SOLID,CU,22GA



4-15-1997_11:00 DO NOT SCALE DRAWING SHEET 1 OF 1 (FID)

5. FOR A/W SEE 03-925023-00
 4. FOR FAB SEE DRAWING 03-925022-00, PART 03-925022-01
 3. FOR ASSY SEE DRAWING 03-925021-00, PART 03-925021-01
 2. ALL CAPACITORS ARE IN UF,50V
 1. ALL RESISTORS ARE IN OHMS, MF, 1/4W, 1%, 100PPM
 NOTES: (UNLESS OTHERWISE SPECIFIED))

SUPPLY CONNECTIONS			
U7	74HC139	GND1	+5V
U6	74HC273	8	16
U5	74HC541	10	20
U2	CD4050B	8	1
U3	CD4001B	7	14
U1	DG211CJ	5	12
		13	4

DC1 DETECTOR COVER
 DC2 DETECTOR BASE

U7 74HC139
 U6 74HC273
 U5 74HC541
 U2 CD4050B
 U3 CD4001B
 U1 DG211CJ

4-15-1997_11:00 DO NOT SCALE DRAWING SHEET 1 OF 1 (FID)

REVISION	DESCRIPTION	DATE	BY	APP'D
REV 1	"C" RELEASE	22MAR95	R.COMMINS	R.COMMINS
REV 2	ADDED C93 ADDED LABEL	30MAR95	ST	R.COMMINS
REV 3	OBSOLETE AD706J	01MAY96	ST	R.COMMINS
REV 4	CHANGED AR1 TO AD706J	01APR96	ST	R.COMMINS
REV 5	"B" RELEASE	01MAY96	ST	R.COMMINS
REV 6	CHANGED R2, R4 AND C9	17MAR97	ST	R.COMMINS

SCHEM, PWA, FID

NOT OTHERWISE SPECIFIED	FRAC +/-	ANG +/-	SCALE
FIN ✓	DEC .X +/-	.XX +/-	.XXX +/-
WCID	D	03-925024-00	2
DIVISION	SIZE	DRAWING NO.	REV