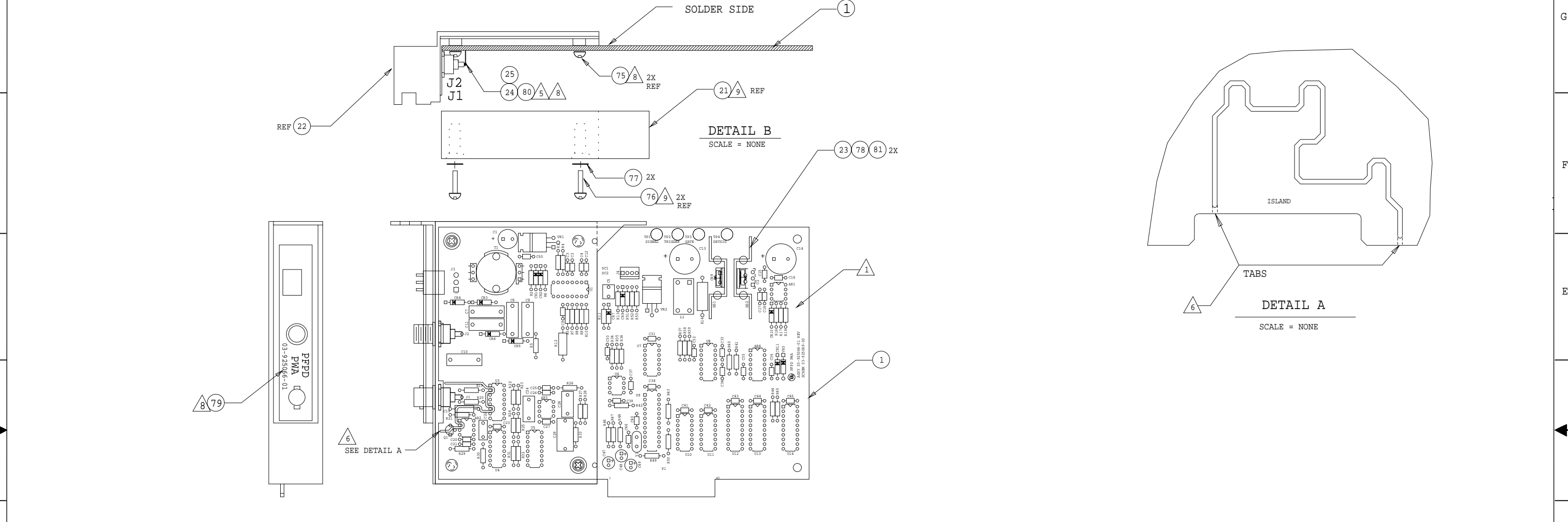


DASH NO	TYPE OR MODEL	NEXT ASSEMBLY
3800		

QTY	PART NUMBER	DESCRIPTION OR MATERIAL	ITEM
-----	-------------	-------------------------	------



- 9. INSTALL DETECTOR SHIELD COVER (ITEM 21), TO PWA USING 2 EACH, LONG SCREWS & LOCKWASHERS (ITEMS 76 AND 77).
- 8. BEFORE INSTALLING DETECTOR SHIELD BASE (ITEM 22), ADD LABEL (ITEM 79) TO BASE. PLACE BNC CONNECTOR J1 (ITEM 24) AND TNC CONNECTOR J2 (ITEM 25) THRU D HOLES AS SHOWN AND TIGHTEN SECURELY WITH SUPPLIED HARDWARE. ONCE THIS IS ACHIEVED, INSTALL SHIELD BASE TO PWA USING TWO SHORT SCREWS (ITEM 75), AND THEN SOLDER THE 2 SEPARATE WIRES (ITEM 80) TO THE CENTER PIN OF J1 (ITEM 24), AND J2 (ITEM 25), AND WIPE WITH CLEAN COTTON SWAB. SEE DETAIL B.
- 7. AFTER CUTTING TABS, RINSE R2, C19, R19, R21, R20 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.
- 6. AFTER INSTALLING AND SOLDERING COMPONENTS ON THE ENTIRE BOARD, TRIM ALL COMPONENT LEADS ON THE 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 80) TO PWA PADS MARKED J1 AND J2 (CUT AND FORM AS REQUIRED) AS SHOWN ON DETAIL B.
- 4. FOR SCHEMATIC SEE 03-925069-00.
- 3. FOR FAB DRAWING SEE 03-925067-00, FOR PART 03-925067-01.
- 2. FOR A/W SEE 03-925068-00.
- 1. MARK CURRENT REV LEVEL IN AREA PROVIDED WITH A PERMANENT TYPE NON-CONDUCTIVE BLACK INK.

NOTES: (UNLESS OTHERWISE SPECIFIED)

SHT 1 OF 4
SHEETS 2 through 4 ARE -A- SIZE

DO NOT SCALE DRAWING		X3-925066-01		REFURBISHED	
		03-925066-01		NEW	
		03-925066-00		DRAWING ONLY	
		PART NUMBER		DESCRIPTION	
DESCRIPTION OF CHANGE	C RELEASE	NUMEROUS CHANGES SEE ECO	B RELEASE	NUMEROUS CHANGES SEE ECO	ASSY CHANGE ONLY SEE ECO
APVD		M159		19956	20501
ECO					
DFT	ST	ST	ST	ST	ST
CHK	ST	ST	ST	ST	ST
DATE	6-21-96	8-13-96	10-17-96	3-18-97	9-8-97
REV	C1	C2	1	2	3

NOT OTHERWISE SPEC: ANGE		varian	
FIN. ✓	REC .X ±	.XX ±	.XXX ±
FULL	38	1 OF 3	D 03-925066-00 3
SCALE	DIV	SHEET	SIZE
			DRAWING NO
			REV

PWA: PFPD

ASSEMBLY: 03-925066-01

DATE: Sept-8-1997

REV: 3

Sheet: 2 of 4

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
1		1	03-925067-01	FAB,PWA,PFPD
2	AR1	1	62-601003-00	AMP,LM358N,DUAL_OP-AMP
3	AR2-3	2	62-602794-00	AMP,AD648JN,DUAL_OP-AMP
4	AR4	1	62-600058-00	AMP,LM324N,QUAD_OP-AMP
5	C1	1	41-505838-00	CAP,100UF,50V,20%,AL.ELECT
6	C2, C9, C12, C15-18, C20-21, C23, C26-27, C30-39, C41-45, C50	28	41-290010-00	CAP,0.1UF,50V,20%,CER,Z5U
7	C3-4, C25	3	41-290043-00	CAP,1000PF,100V,5%,CER,COG
8	C5	1	41-764922-00	CAP,0.47UF,63V,10%,MYLAR
9	C6-8, C10-11	5	41-744802-00	CAP,0.01UF,1KV,10%,MYLAR
10	C13-14	2	41-503937-00	CAP,1200UF,35V,20%,AL.EL,LO_ESR
11	C19	1	41-708777-00	CAP,5PF,630V,5%,POLYPROPYLENE
12	C22	1	41-718857-00	CAP,0.039UF,50V,2%,P.CARB
13	C24, C28	2	41-708262-00	CAP,0.18UF,50V,5%,P.CARB
14	C29	1	41-708223-00	CAP,0.33UF,250V,10%,P.CARB
15	C40, C46	2	41-290032-00	CAP,33PF,100V,5%,CER,COG
16	C47-49	3	41-503914-00	CAP,47UF,25V,20%,AL.ELECT
17	CR1-2, CR8, CR10	4	66-304148-00	DIODE,1N914_OR_1N4148
18	CR3-6	4	66-393318-00	DIODE,F20,2KV,FAST_RECOVERY
19	CR7, CR11	2	66-306263-00	DIODE,1N6263,SCHOTTKY
20	CR9	1	66-393210-00	DIODE,MBR745,7.5A,45V,SCHOTTKY
21	DC1	1	03-925202-01	SHIELD,COVER,DET,PWA
22	DC2	1	03-925201-01	SHIELD,BASE,DET,PWA
23	HS1-2	2	66-899999-00	HEATSINK,TO-220,TH6070B
24	J1	1	58-029991-00	CONN,BNC,BULKHEAD
25	J2	1	58-028912-00	CONN,TNC,BULKHEAD
26	J3	1	51-411038-00	CONN,3-PIN,MOLEX_0.156,R.A.
27	J4	1	51-411149-00	CONN,4-PIN,(MOLEX_0.1)
28	L1	1	43-111859-00	INDUCTOR,30UH,3.2A,TOROID

PWA: PFPD

ASSEMBLY: 03-925066-01

DATE: Sept-8-1997

REV: 3

Sheet: 3 of 4

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
29				
30	Q1	1	62-903904-00	TRANSISTOR,2N3904,NPN
31	R1	1	31-102358-00	RES,MF,32.4K,1/4W,1%,100PPM
32	R2, R6, R46-48	5	31-102088-00	RES,MF,49.9,1/4W,1%,100PPM
33	R3, R13, R37, R40-41	5	31-102309-00	RES,MF,10.0K,1/4W,1%,100PPM
34	R4, R16-17, R25	4	31-102376-00	RES,MF,49.9K,1/4W,1%,100PPM
35	R5	1	31-102455-00	RES,MF,332K,1/4W,1%,100PPM
36	R7, R30, R51-53	5	31-102280-00	RES,MF,4.99K,1/4W,1%,100PPM
37	R8	1	31-102380-00	RES,MF,54.9K,1/4W,1%,100PPM
38	R9, R43, R45, R49-50	5	31-102278-00	RES,MF,4.75K,1/4W,1%,100PPM
39	R10	1	31-102349-00	RES,MF,26.1K,1/4W,1%,100PPM
40	R11	1	31-102366-00	RES,MF,39.2K,1/4W,1%,100PPM
41	R12	1	31-699894-00	RES,MO,4.99M,1/2W,1%,100PPM
42	R14	1	31-402510-00	RES,WW,0.1,3W,1%,20PPM
43	R18	1	31-102234-00	RES,MF,1.65K,1/4W,1%,100PPM
44	R19	1	31-102511-00	RES,MF,2.21M,1/4W,1%,100PPM
45	R20, R31	2	31-102434-00	RES,MF,200K,1/4W,1%,100PPM
46	R21, R29	2	31-102537-00	RES,MF,20M,1/4W,1%,100PPM
47	R22	1	31-102318-00	RES,MF,12.4K,1/4W,1%,100PPM
48	R23	1	31-102347-00	RES,MF,24.9K,1/4W,1%,100PPM
49	R24	1	31-102405-00	RES,MF,100K,1/4W,1%,100PPM
50	R26	1	31-102117-00	RES,MF,100,1/4W,1%,100PPM
51	R27-28, R33, R42	4	31-102501-00	RES,MF,1.00M,1/4W,1%,100PPM
52	R32	1	31-102463-00	RES,MF,402K,1/4W,1%,100PPM
53	R34, R36	2	31-102258-00	RES,MF,2.94K,1/4W,1%,100PPM
54	R35, R38-39, R44	4	31-102213-00	RES,MF,1K,1/4W,1%,100PPM
55	T1	1	03-908325-01	TRANSFORMER,PFPD,20KHZ
56	U1	1	62-601414-00	IC,TL494CN,SWITCHER
57	U2	1	62-602977-00	IC,LT1074CT,SWITCHING_REG

PWA: PFPD

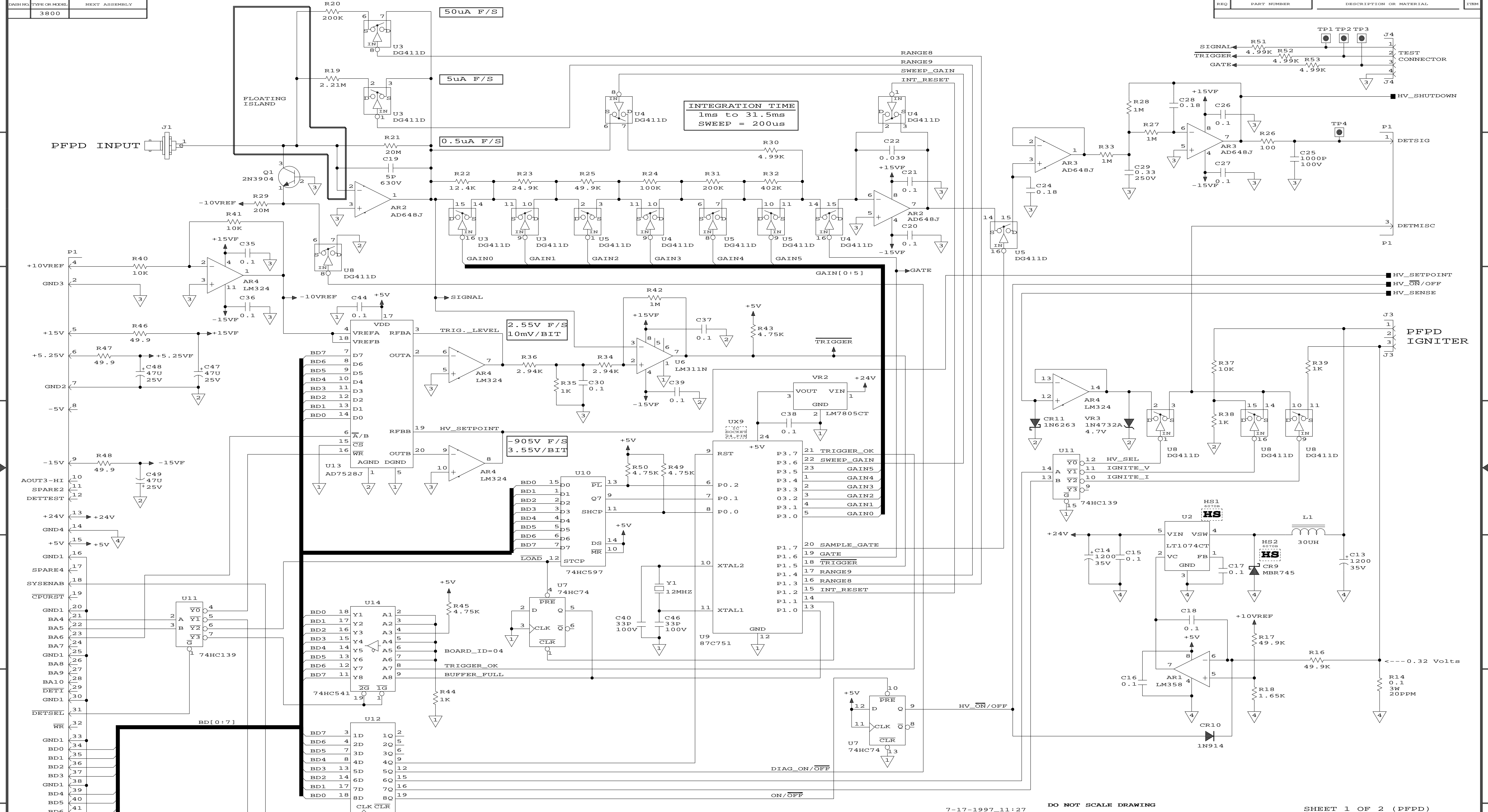
ASSEMBLY: 03-925066-01

DATE: Sept-8-1997

REV: 3

Sheet: 4 of 4

<u>Item</u>	<u>Ref Designator</u>	<u>Qty</u>	<u>Part Number</u>	<u>Part Description</u>
58	U3-5, U8	4	62-603373-00	IC,DG411DJ,QUAD_ANALOG_SW
59	U6	1	62-600183-00	AMP,LM311N,COMPARATOR
60	U7	1	62-601848-00	IC,74HC74,DUAL-D-FF
61	U9	1	03-910740-01	IC,MICROCONTROLLER,87C751
62	U10	1	62-603375-00	IC,74HC597
63	U11	1	62-601894-00	IC,74HC139N
64	U12	1	62-602007-00	IC,74HC273N
65	U13	1	62-601756-00	IC,AD7528JN,DUAL_8_BIT_DAC
66	U14	1	62-601815-00	IC,74HC541N
67	UX9	1	54-910467-00	SOCKET,IC,24PIN,0.300_WIDE
68	VR1	1	62-600496-00	IC,LM7815CT,LINER_REG,+15V
69	VR2	1	62-600497-00	IC,LM7805CT,LINER_REG,+5V
70	VR3	1	66-314732-00	DIODE,ZENER,1N4732A,4.7V,1WATT
71	Y1	1	66-478113-00	CRYSTAL,12MHZ
72				
73				
74				
75		2	12-901162-00	SCREW,PHIL,SEMS,6-32X1/4
76		2	12-222006-20	SCREW,PHIL,PH,6-32X1
77		2	14-312006-00	WASHER,EXT_LOCK,#6
78		2	13-312004-00	NUT,KEP,4-40,SST
79		1	03-925421-05	LABEL,DET,IDENTIFICATION
80		A/R	81-099922-00	WIRE,SOLID,CU,22GA
81		A/R	88-298900-00	HEATSINK-COMPOUND

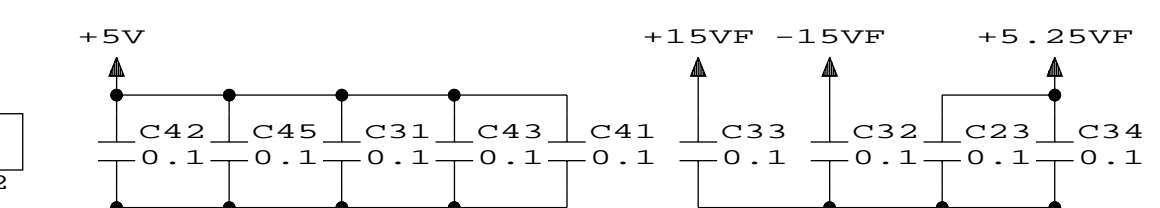
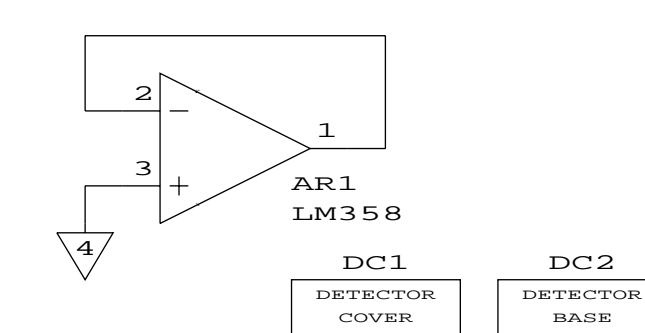


5. FOR A/W SEE 03-925068-00
 4. FOR FAB DRAWING SEE 03-925067-00, PART 03-925067-01
 3. FOR ASSY DRAWING SEE 03-925066-00, PART 03-925066-01
 2. ALL CAPACITORS ARE IN UF, 50V
 1. ALL RESISTORS ARE IN OHMS, MF, 1/4W, 1%, 100PPM
 NOTES: (UNLESS OTHERWISE SPECIFIED))

SUPPLY CONNECTIONS

IC	Part Number	GND1	+5V
U10	74HC597	8	16
U7	74HC74	7	14
U11	74HC139	8	16
U14	74HC541	10	20
U12	74HC273	10	20

IC	Part Number	GND2	+5.25VF	+15VF	-15VF
U3	DG411D	5	12	13	4
U4	DG411D				
U8	DG411D				



7-17-1997_11:27 DO NOT SCALE DRAWING

DESCRIPTION	DATE	BY	APPROVED
REDUCE NOISE ON THE HV SUPPLY	05-03-96	R. COMMINS	D. DEFORD
"B" RELEASE	09-03-96	R. COMMINS	F. FAILI
TO PREVENT DETMISC OUTPUT EXCEEDING +/-5V	09-03-96	R. COMMINS	F. FAILI
CHANGED R1, R52, R53 TO 4.99K	18MAR97	R. COMMINS	F. FAILI

SHEET 1 OF 2 (PFPD)

DRAWN	DATE	APPROVED	DATE	CODE
R. COMMINS	05-03-96	D. DEFORD	21JUN96	
CHECKED	DATE	APPROVED	DATE	CLASS
ST	21JUN96	D. DEFORD	09OCT96	

SCHEM, PWA, PFPD

NOT OTHERWISE SPECI	FRAC+/-	ANG+/-	SCALE
FIN	√ DEC	.XX+/-	.XXX+/-

varian **WCID** **D** 03-925069-00 **3**

11

10

9

8

7

5

4

D 03-925069-00

2

1

G

G

F

F

E

E

C

C

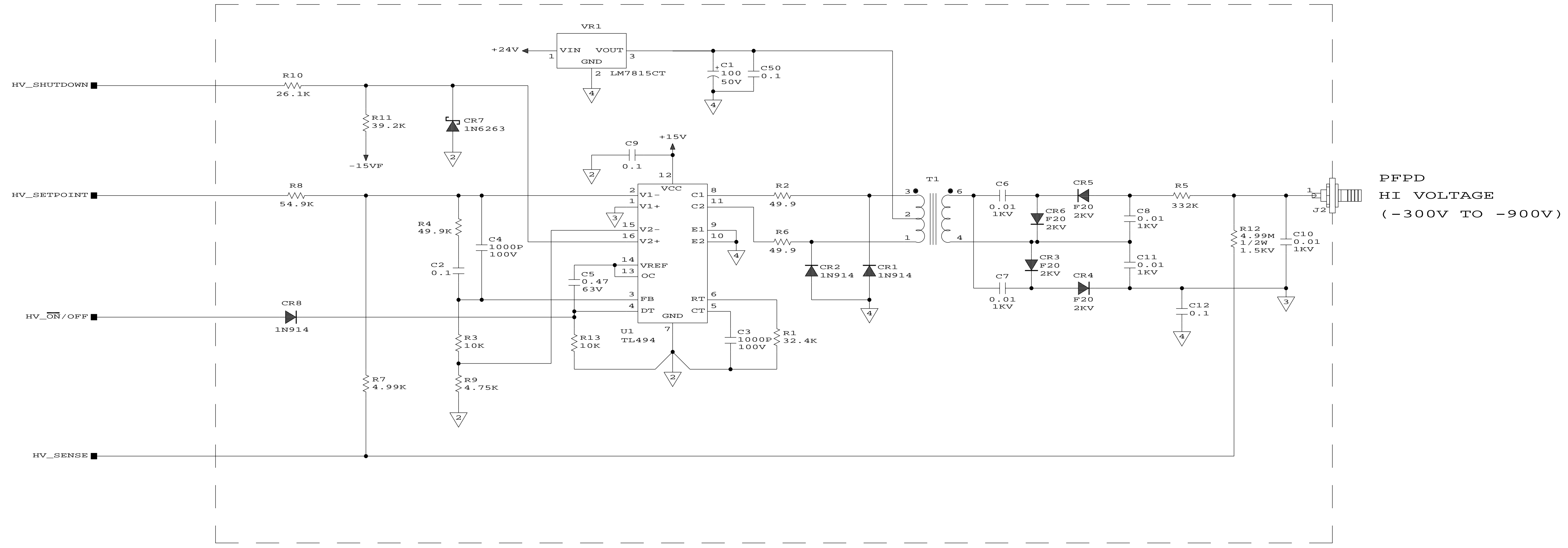
B

B

A

A

WARNING: HI VOLTAGE EXPOSED WHEN DETECTOR COVER REMOVED



7-17-1997_11:27 DO NOT SCALE DRAWING

SHEET 2 OF 2 (PFPD)

DESCRIPTION OF CHANGE	NUM	EO	DFT	CHK	EMR	REV

DRAWN	DATE	APPROVED	DATE	CODE
R.COMMINS	04-22-96	D.DEFORD	21JUN96	
CHECKED	DATE	APPROVED	DATE	CLASS
ST	21JUN96	D.DEFORD	09OCT96	
SCHEM, PWA, PFPD				
NOT OTHERWISE SPEC: PRAC+/- ANG+/-			SCALE	
FIN. ✓ DEC .X+/- .XX+/- .XXX+/-			NONE	
WCID		D 03-925069-00	3	
DIVISION		SIZE	DRAWING NO. REV	

11

10

9

8

7

5

4

3

2

1

CAD=VIEWLOGIC