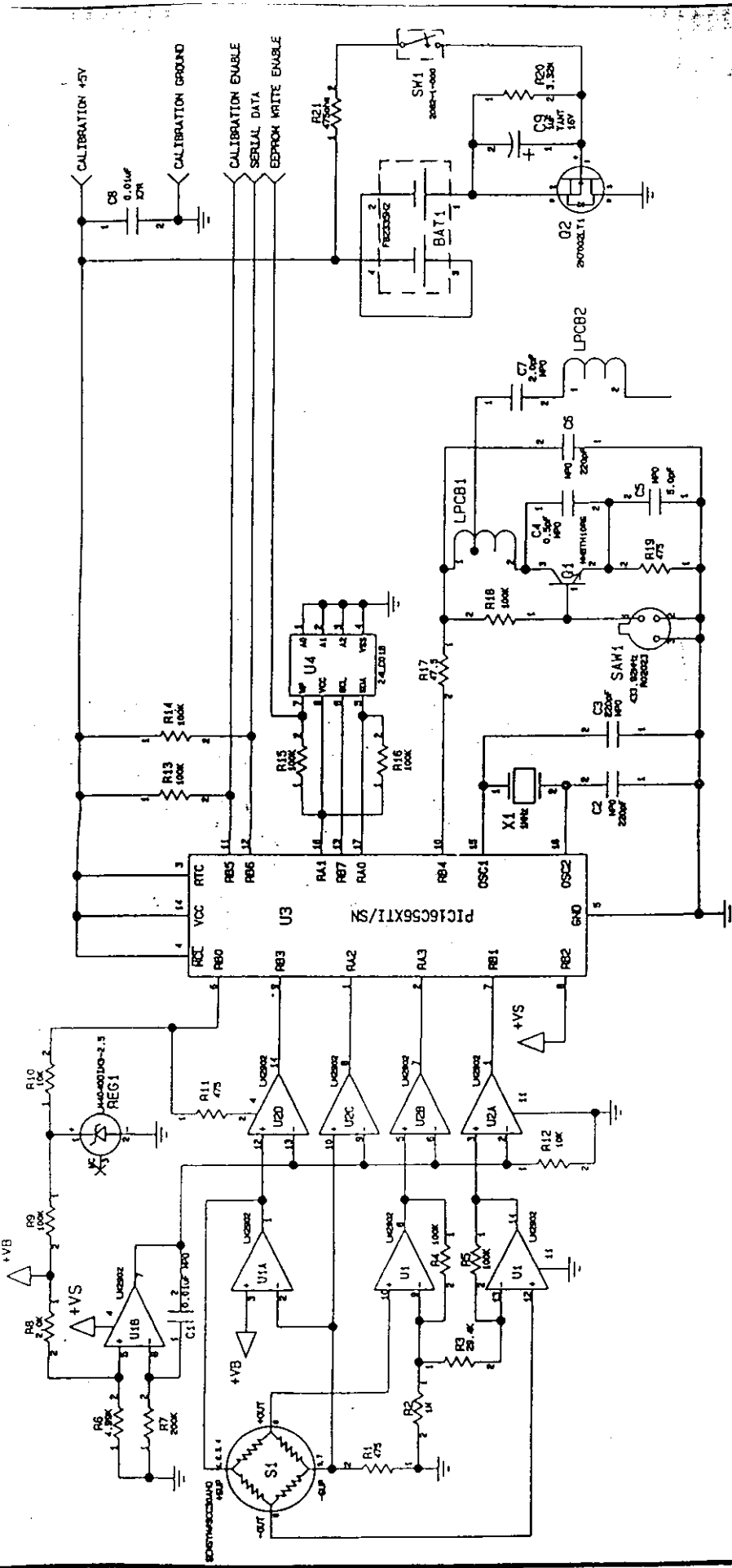
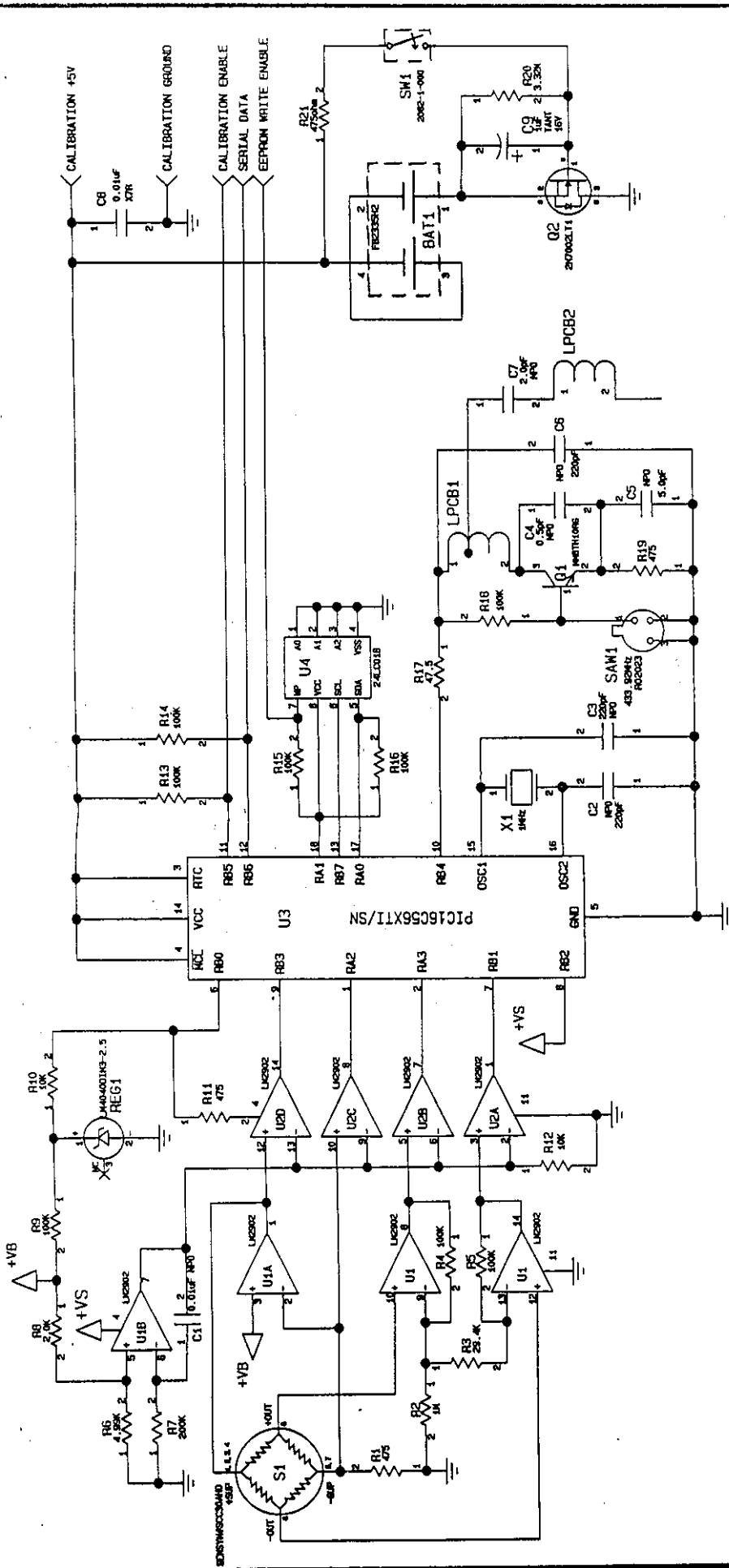




COMPANY: EPIC TECHNOLOGIES, INC.		ENGINEER: CHRIS MAROE	
WHERE USED/POB NO.:		1700 0152	
APPROVALS		DATE	
DRAWN		AGS 25MAR94	
CHECKED		CAM 25MAR94	
REV		BY	
01		PROTOTYPE	
REV		EDM	
DRAWING DESCRIPTION:		DIRECT PRESSURE READOUT TRANSMITTER 433.92MHz	
SIZE		B	
DRAWING NO.		1003 5309	
SCALE		NONE	
SHEET		1 OF 1	

4 3 2 1

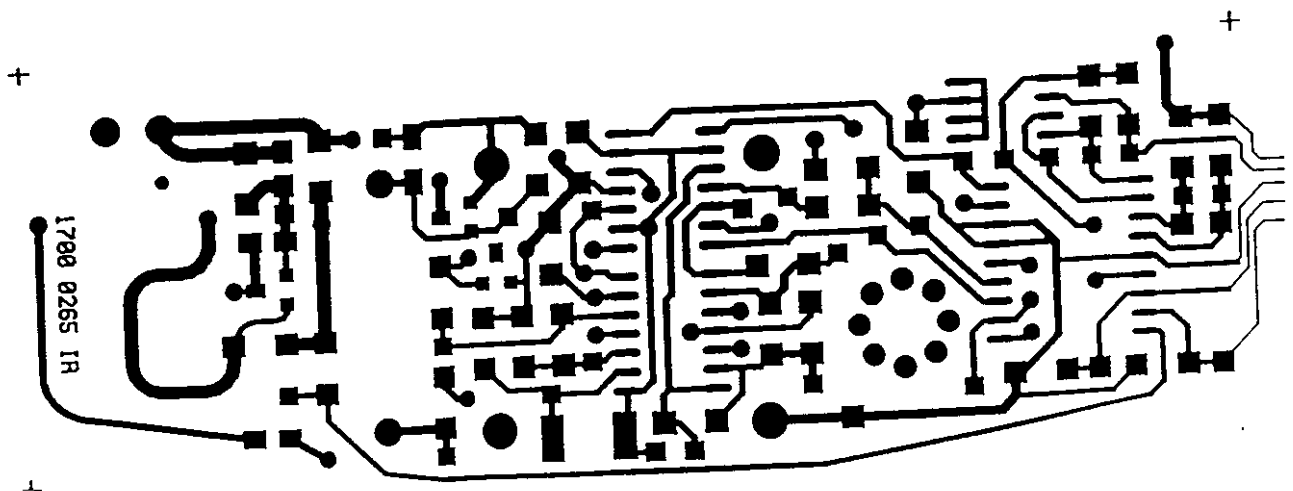
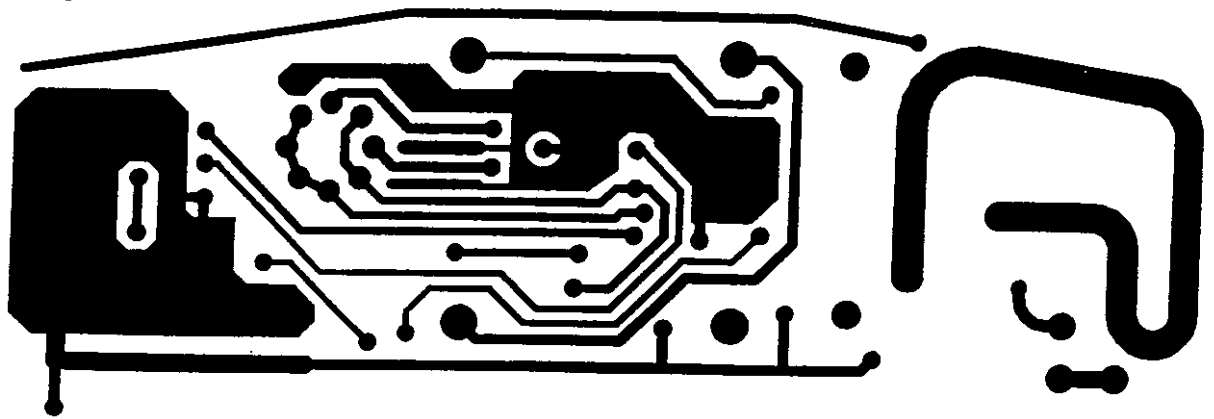


COMPANY:		ENGINEER:		WHERE USED/PCB NO.:		APPROVALS		DATE	
EPTIC		EPTIC TECHNOLOGIES, INC.		CHRIS MUNROE		1700 0152			
DRAWING DESCRIPTION:		DIRECT PRESSURE READOUT TRANSMITTER, 433.92MHz							
SIZE		B		DRAWING NO.		1003 5309			
SCALE		NONE		SHEET		1 OF 1			

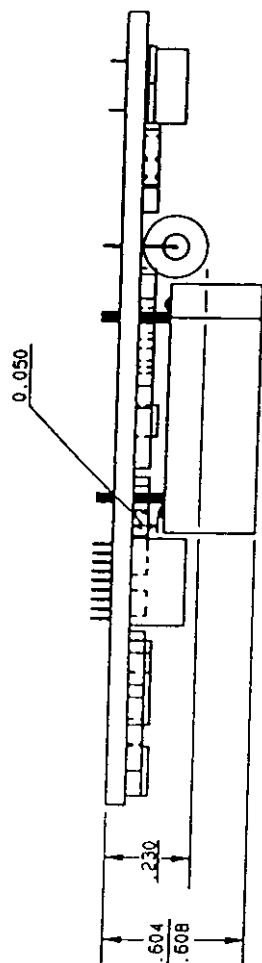
REV	ED#	BY	CHK	DATE
01	PROTOTYPE	AGS	AGS	28MAR94

1 2 3 4

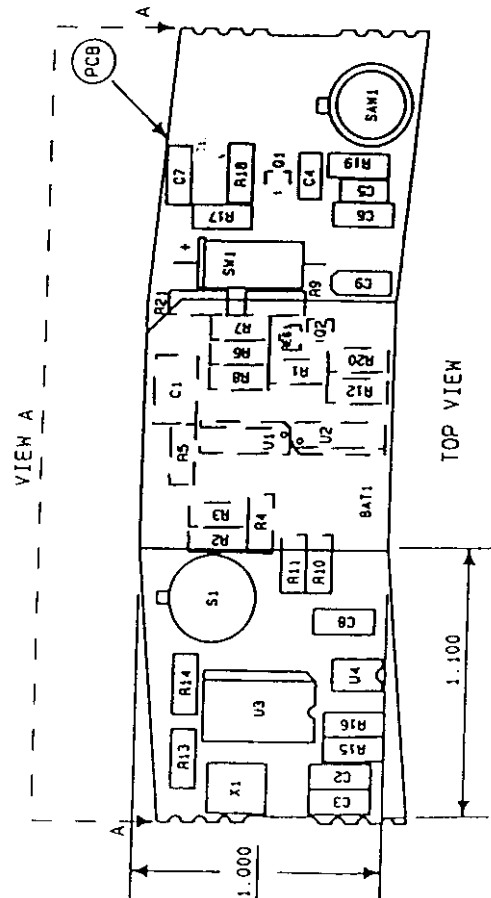
European 433 Transmitter: 200.0051 Solder Layout Diagram



CONFIDENTIAL



FRONT VIEW



TOP VIEW

NOTES

1. CENTRIFUGAL SWITCH (SW1) TO BE BONDED TO PCBA WITH RTV (MS-1023).
2. COVER PRESSURE SENSOR PORT PRIOR TO CONFORMAL COATING.
3. CONFORMAL COAT BOARD PER PS-1003 AND IPC-CC-830 TYPE UR (POLYURETHANE) CLASS 2. REMOVE COVER PRIOR TO FINAL ASSEMBLY.
4. 100% BURN IN: 24 HOURS. CYCLE TEMPERATURE FROM -40°C TO 100°C. WITH 1 HOUR SOAK AT EXTREME TEMPERATURES. APPLY +5.5VDC $\pm$ 0.25VDC TO TRANSMITTER CALIBRATION SUPPLY LINES.
5. ASSEMBLY CONFORMANCE PER WORKMANSHIP MANUAL
6. EXERCISE SPECIAL CAUTION IN HANDLING PRESSURE SENSORS, AND ASSEMBLIES CONTAINING THESE PARTS. SPECIAL BINNING IS ADVISED TO AVOID JUMBLING PARTS, WHICH CAN BECOME A SOURCE OF REJECTS OR EARLY FIELD FAILURE. IF DROPPED, REPLACE THESE PARTS OR SCRAP THE ASSEMBLY. FOR SCHEMATIC SEE

8. NO CHANGES OR DUPLICATIONS PERMISSABLE WITHOUT WRITTEN PERMISSION
9. ALL DIMENSIONS IN INCHES.
10. TOLERANCE UNLESS OTHERWISE SPECIFIED.

.XX = ±.010
.XXX = ±.005

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0	Original	23-Jan-98	CL	INIT
REV	DESCRIPTION	DATE		

SMARTTIRE™
 Inertia Systems, Inc.
 #150-1311 North Macle, Richmond, British Columbia V6V 2J1

Drawn	Checked	Designer	Manager
C. Libero			
Time			

PRB Associates, Inc. 477 Main St. 01913

SmarTire Systems Inc.

Acceptance -Bill of Materials

Checklist

Item	Signature - Engineering Manager	Signature - Production Manager
BOM contains all required components		
All components are acceptable as per Specification Sheets or engineering drawings		
All suppliers are acceptable		
Kits; Marketing manager signature		

210.0108.03

BOM

210.0108.03--PCB ASSY, 433MHZ, progID=3

Revision 1 Release 1

Material cost (\$Can)=\$0.00

Stock code	Qty/Cost	Part Description	Rev/Rel	Part designations	Supplier
<u>210.0112.03</u>	1	PROGRAMMED EPROM-TIRE ID-3	/	PROGRAMMED EPROM - SEE MANUFACTURING SPEC 248.0030	EPICTEC
<u>215.0039</u>	1	PCB BARE 433 TRANSMITTER EPIC :1003 5360/1700 0265	0/ 0	PCB 1	
<u>222.0007</u>	4	RESISTOR 475R 1% 1/8W 1206 ROHM:MCR18EZHMFX4750	/	R1 R11 R19 R21	
<u>222.0008</u>	1	RESISTOR 1M 1% 1/8W 1206	/	R2	
<u>222.0009</u>	1	RESISTOR 29K4 1% 1/8W 1206 ROHM:MCR18EZHMFX2942	/	R3	
<u>222.0010</u>	7	RESISTOR 100K 1% 1/8W 1206 ROHM:MCR18EZHMFX1003	/	R4 R5 R9 R13 R14 R15 R16 R18	
<u>222.0011</u>	1	RESISTOR 4K99 1% 1/8W 1206 ROHM:MCR18EZHMFX4991	/	R6	
<u>222.0012</u>	1	RESISTOR 200K 1% 1/8W 1206 ROHM:MCR18EZHMFX2003	/	R7	
<u>222.0013</u>	1	RESISTOR 2K0 1% 1/8W 1206 ROHM:MCR18EZHMFX2001	/	R8	
<u>222.0014</u>	2	RESISTOR 10K 1% 1/8W 1206 KOA:RK73H2BT1002F	/	R10 R12	
<u>222.0015</u>	1	RESISTOR 47R5 1% 1/8W 1206 ROHM:MCR18EZHMFX4752	/	R17	
<u>222.0016</u>	1	RESISTOR 3M32 1% 1/8W 1206 KOA:RK73H2BT3324F	/	R20	
<u>230.0036</u>	1	CAP 1mfd 10% 16V TAN 1206 NEMCO:PCT1/16AK	/	C9	UTECH E
<u>230.0054</u>	1	CAP 220PF 10% 50V NPO 1206 AVX:I2065A221KATMA	/	C6	
<u>230.0055</u>	2	CAP 100PF 10% 100V NPO 1206 AVX:I2065A101JATMA	/	C2 C3	
<u>230.0056</u>	1	CAP 10NF 10% 50V X7R 1206 AVX:I2065C103KATMA	/	C8	

<u>231.0024</u>	1	CAP .5P +-.25P 50V NPO CR 805	/	C4	UTECH E
		ROHM:MCH21 5 A R50 C K			
<u>231.0028</u>	1	CAP 5P6 +-.25P 50V CR NPO 0805	/	C5	UTECH E
		CALCHIP:GMC 21 CG 5R6 C 50NT			
<u>231.0049</u>	1	CAP 2P0 +-.25P 50V NPO CER 805	/	C7	EPICTEC
<u>234.0001</u>	1	CAP 10N 10% 50V NPO 1812	/	C1	
<u>242.0012</u>	1	TRANSISTOR 10RG RF SOT23	/	Q1	PIONEER
		NAT SEMI: MMBTH10RG			
<u>242.0015</u>	1	TRANSISTOR FET 2N7002 SOT-23	/	Q2	
		SILICONIX:2N7002-T1			
<u>243.0024</u>	2	IC 2902 LOW PWR OP AMP	/	U1 U2	
		NATIONAL:LM2902			
<u>243.0025</u>	1	IC 4040 VOLTREF 2.5V SOT-23	/	REG1-NO SUBSTITUTIONS PERMITTED,	FAI
		NATIONAL:LM4040DIM3-2.5			
				-USE NATIONAL PART ONLY	
<u>249.0014</u>	1	IC 16CR58 MPU-ROM 2K	/	U3 - PROGRAMMED BY MICROCHIP	
		MICROCHIP:PIC16CR58A-04 I /SO			
				-CODE SUPPLIED BY SMARTIRE	
<u>255.0042</u>	1	RESONATOR 1MHz CERAMIC	/	X1	
		AVX/KYOCERA:KBR-1000YTR			
<u>255.0044</u>	1	SENSOR, PRESSURE, 30 PSIA TO5	/	S1	
		SENSYM:SCC30AH/SZ75336			
<u>255.0046</u>	1	RESONATOR SAW 433.92Mhz	/	SAW1	
		TO-39B			
		RFM:RO2101			
<u>261.0015</u>	1	SWITCH CENTRIFUGAL .650"C-C	/	SW1	
		FLYING D ENT:2082-1-000			
<u>263.0063</u>	1	BATTERY 2325 3V LITHIUM	/	BAT-1	
		RAYOVAC:FB2325H2			
<u>999.9990</u>	0	REVISION CONTROL NOTES	/	CREATED 9-FEB-98 CL REV 0 REL 1	
				ECO 139 REV 1 REL 1 RP 30-MAR-98	
				-DELETE 231.0042 ADD 231.0028	
				-(CHANGE C5 FROM 5P TO 5P6)	