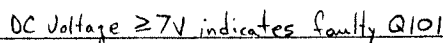


Fairchild
FJT/100
FRAGILE

pin 1,2 $\frac{T201}{.48\Omega}$
3,4 1.7Ω
3,5 20Ω



Input FET Q101 damaged by static or shorting to ground tube while biased at 200V

Maximum Gain is -3dB low to calibrate $\frac{1}{4}$ " 4136

Unity Gain remote R105
Short R107

TOLERANCES (EXCEPT AS NOTED)		IVIE ELECTRONICS			
DECIMAL	1E-2P	SCALE	DRAWN BY <u>ER</u>		
±		—	APPROVED BY <u>L.N.H</u>		
FRACTIONAL	TITLE				
±	MIC PREAMP SCHEMATIC				
ANGULAR	DATE	DRAWING NUMBER	REV	P/N	
±	11-3-78	B2PB01-S	0	2PB01	

IE-2P TEST

1. Apply +12V
2. Measure V_{ref} (TP1)
3. Choose and load R304 from Table 1
4. Measure $200V \pm 3V$ at TP2
5. Measure $28V \pm .4V$ at PP2
6. Measure $4.9V \pm .5V$ at output *for 10E03 input fet* 10Y03 $5.5v \pm .5v$
7. Measure 0 and 12V at HuV (pin 5) by moving the 0dB - 20dB gain switch. Leave it at 0dB gain.
8. Measure 0 to 9V gain (pin 2) and leave at 1.0V
9. Set generator to $4.4 V_{pp}$ ($1.56 V_{rms}$) at 1kHz
10. Attach function generator
11. Measure $10.2 \pm .6 V_{pp}$ on scope at output with $< 3\%$ distortion
12. Clean and spray P.C. board
13. Attach guard tube and delrin pieces. Apply Mylar tape over guard tube. Attach ground contact.
14. Attach shield tube and series 18pf capacitor and function generator on the input.
15. Check flatness from 4 Hz to 40 kHz with 2.5 Vpp in and $\pm .1dB$ out referenced to output at 1 kHz.
16. With the function generator set at 20 kHz measure the difference between the output with 3.3pf in series with the input and with the generator connected directly in.

$$\frac{V \text{ with } 3.3pf}{V \text{ direct}} > .93$$

This is equivalent to $< .25pf$
17. Place the IE-2P in an IE-30 and a 2D-S on the input (use adaptor)

$< 31.5dB$	A wt.	.1uV reference
$< 37dB$	Flt	
18. With a 2D-18 on the input

$< 40.5dB$	A wt.	.1uV reference
$< 55dB$	Flt.	
19. With the IE2P in the environmental chamber and 2.5 Vpp on the input at 1kHz check the output at $-10^{\circ}C$, $25^{\circ}C$ and $50^{\circ}C$. The output should not vary more than .014V.

IVIE SERVICE BULLETIN
11-20-80

IE-2P FET REPLACEMENT
Diode Protection Mod.

Check IE-2P plugged into IE-30A

Pin 1 DC voltage upon turn on should climb immediately to 8V then settle to 5V. A damaged FET will cause the pin 1 voltage to settle from 8V to 7V.

FET REPLACEMENT

1. Turn the case screw fully CCW (Counter Clockwise.)
2. Slide the electronics from the stainless steel housing.
3. Pull the clear plastic tape from the brass guard tube.
4. Carefully remove the solder from the base of the guard tube.
5. Slide the guard tube off the PC board tip.
6. Solder in place Protection Diode Fairchild FJT 1100 (see inset.)
7. Replace FET Q101 (10E03B, 2N5484.)
8. Check DC voltage on pin 1 (8V settles to 5V.)
9. Replace Brass Guard tube - tack solder tube base to PC board.
10. Replace clear tape around guard tube.
11. Insert electronics into housing.
12. Turn case screw fully CW.

INSET

