

## Production Test Procedures

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1. Connect a 3-volt DC supply to unit.
2. Turn on unit, verify LED 1 is ON and verify DC supply current is  $6 \pm 2$  ma.
3. With no input, using a low capacitance probe to verify the frequency at Q2 collector is 17.734475 MHz  $\pm$  2000 Hz and amplitude is TBD.
4. Connect TP1 to a RF spectrum analyzer and verify 88.67 MHz signal is TBD  $\pm$  2dB.
5. Connect a 100 mv p-p, 1 KHz test signal to the BlackJack input. Verify the demodulated audio output of a FM receiver located 10 feet away is TBD and distortion is less than 5%.
6. Replace DC supply with a 3-volt coin battery and repeat steps 3, 4, and 5.

## Microphone Test:

1. Bias microphone with a 3-volt DC supply via a 2 Kohm resistor. Verify DC voltage at J1-3 is  $1.5 \pm .5$  volt. AC couple J1-3 signal to a 40 dB gain test amplifier.
2. Speak normally to the microphone (about 1-foot away) and verify the peak-to-peak audio at the test amplifier output fluctuates from .2 to 2 volt.