

TUNING PROCEDURES FOR THE CST-2001/V

The factory has programmed f1 to 154.0000 MHz and f2 to 174.0000 MHz.

1. Apply power to the transmitter 6.0 Vdc
2. Connect a coax cable to the 50 ohm test point, and place a 30 Dbm pad in series with a spectrum analyzer.
3. Turn the transmitter ON in the f2 channel position, monitor the supply current.
4. Measure the voltage at the junction of R12 and R13, by compressing the oscillator coil (L2) adjust the voltage to 3.25 volts.
5. Monitor the frequency of the transmitter with a frequency counter. The frequency should be 174.000000 MHz. Adjust the reference (X2) to the above frequency +/- 100 hz.
6. Monitor the power output with a watt meter (power output should be 250 mw +/- 1 Dbm.) @ 130 ma.
7. Adjust C34 while in f2 to reduce the second harmonic of the transmitter to 55 dbc maintaining 250 mw.
8. Slide the switch to f1 the frequency should read 154.000000 MHz +/- 100 Hz. The voltage at the junction of R12 and R13 should be 1.2 volts. Monitor the second harmonic with the spectrum analyzer, the second harmonic should be > 44 Dbc.
9. Monitoring the frequency with a modulation meter, whistle into the microphone and adjust R22 to 2.8 kHz deviation on f2 (174.0000 MHz).