

TRANSMITTER SECTION

Test Equipment Required

- RF powermeter
- 50 ohm load(resistive)
- RF attenuuator
- Oscillator
- Audio generator
- DC power supply(13.8 volt, 2 AMP)
- Spectrum analyzer
- Frequency counter
- Coupler

Alignment Procedure

STEP	SETTING	CONNECTION	ADJUSTMENT	ADJUST FOR
1	RF driver stage- MIC: Transmit Volume: Optional Squelch: Optional CH selector: 19 Function: CB	Connection oscilloscope to base of Q305		Waveform on the oscilloscope
2	RF power stage- MIC: Transmit Volume: Optional Squelch: Optional CH selector:19 Function: CB	Connect dummy load and RF power meter to the EXT-ANT jack on the set	L301 L302	Maximum indication on the powermeter (3.8 watts) If indication is not in 3.8watts range, adjust L301,L302.
3	Second harmonic check- MIC: Transmit Volume: Optional Squelch: Optional CH selector:19 Function: CB	Connection RF power-meter with dummy load to spectrum analyzer through coupler/-40 dB attenuator to EXT-ANT jack on the set.		At no modulation, compare the level of fundamental frequency to the level of harmonic frequency. Suppression of the 2nd harmonic frequency level must be lower than 60dB Check for the other channels.

STEP	SETTING	CONNECTION	ADJUSTMENT	ADJUST FOR
4	Frequency check- MIC: Transmit Volume: Optional Squelch: Optional CH selector:19 Function: CB	Connect dummy load and frequency counter through coupler to RF power-meter. Connect RF power-meter to EXT-ANT jack on the set.	CT402	Be sure that the indication of the transmitter frequency is 27.185 MHz $\pm$ 300 Hz on the frequency counter.
5	TX power LEVEL adjustment- MIC: Transmit Volume: Optional Squelch: Optional CH Selector:1 Function: CB	Connect dummy load and oscilloscope through coupler to RF power-meter. Connect audio generator to microphone jack.	RV801	Adjust until the power meter's on bar indicate middle 3 and 5