

**TABLE I
TRANSMITTER ALIGNMENT CHART**

Band	Driver Setting	Tuning Dial Dial	Adjust Coils
40	12 o'clock	7180KC	L103, L202, L302
80	12 o'clock	3790KC	L201, L301
20	12 o'clock	14205KC	L203, L303
15	12 o'clock	21270KC	L101, L204, L304
10	12:30 o'clock	28920KC	L102*, L104*, L205, L305

Note: Adjust 40 Meter band first

*To adjust L102, connect one end of a 2.7K resistor to the hot side of L104. Connect a .10 uf disc capacitor from ground to the other end of the resistor. Adjust L102. To adjust L104, use the same procedure as above, but connect the capacitor and resistor to L102.

TROUBLESHOOTING CHART

DEFECT	POSSIBLE CAUSE
PA Idling Current Unstable	1. Defective Power Amplifier Tube (V4). 2. Defective BIAS control and/or associated components. 3. Defective bias power supply.
Inability to Load per Operation Instructions	1. Antenna not resonant at operating frequency. 2. Defective transmission line. 3. Defective antenna loading coil(s). 4. Tubes V1 through V4 defective.
Insufficient Sideband Suppression	1. Carrier Oscillator (Q3) operating on incorrect frequency. 2. Crystal filter defective or mistuned.
Insufficient Carrier Suppression	1. Tube V13 defective 2. Transformer T1301 defective or mistuned. 3. Carrier Oscillator (Q3) operating on incorrect frequency.
Microphonics in Transmitter	1. Tubes V13 and/or V14 defective. 2. IF coil L701 Defective or incorrectly adjusted. 3. Microphone defective.
Low Receiver Sensitivity	1. Tubes V5 through V10 defective. 2. Incorrect adjustment of the transmitter Pi-Network. 3. IF coil L801 incorrectly adjusted or defective. 4. K1 relay contacts defective.

**TABLE II
VFO AND CARRIER OSCILLATOR FREQUENCIES**

Tuning Dial	V1 Injection Frequency	Q1 Osc. Frequency	Q3 Osc. Carrier Frequency
3500 KC	9000 KC	9000 KC	5500 KC
4000 KC	9500 KC	9500 KC	5500 KC
7000 KC	12,500 KC	(1/2) 6250 KC	5500 KC
7300 KC	12,800 KC	(1/2) 6400 KC	5500 KC
14,000 KC	8500 KC	8500 KC	5500 KC
14,350 KC	8850 KC	8850 KC	5500 KC
21,000 KC	15,500 KC	(1/2) 7750 KC	5500 KC
21,450 KC	15,950 KC	(1/2) 7975 KC	5500 KC
28,000 KC	22,500 KC	(1/2) 11,250 KC	5500 KC
29,700 KC	24,200 KC	(1/2) 12,100 KC	5500 KC