

## ALIGNMENT PROCEDURES

### Transmitter Section

A. Set Instrument Connection be same as the Fig 1. And the Audio Signal Generator turn off.

#### 1. Frequency Alignment

(1). Adjust the CP18 to the Standard Frequency  $\pm 0.5$  KHz

#### 2. RF Output Power

(1).Set the unit to the HI power position.

Adjust the LT12,LT11,LT8,LT7,LT6,LT5,LT4 for the Maximum Output power and Minimum Harmonic.

(2).Adjust the RT26 to 5W power Output.

(3).Set the unit to the MID power position. Adjust the RT25 to 2.5W power Output.

(4).Set the unit to the LO power position. Adjust the RT24 to 1W power Output.

#### 3. Maximum Deviation:

(1).Instrument Connection is same as Fig 1. Turn On the Audio Signal Generator and Set to 1KHz 70 mV rms Sinwave plug in TP4.

(2).Adjust the RA14 to the deviation is 2.4KHz  $\pm 0.1$ KHz.

### Receiver Section

(B).Set Instrument Connection be same as the Fig 1.

#### 1. Intermediate Frequency Alignment

(1). Set the VHF Signal Generator to 21.4MHz, 1KHz @ 1.5KHz and Output level to the Maximum.

(2).The test unit set to Standard Frequency squelch off and the Audio Output turn to 0.64 Vrms with 8 ohm load.

(3).Adjust the IFT LA1, LF6, LF1 to the Maximum Output and Minimum Distortion.

#### 2. RF Sensitivity Alignment

(1).Set the VHF signal Generator to Standard Frequency, 1KHz @ 1.5KHz and the Output level is -118 dBm.

(2).As same process as Intermidate Frequency Alignment (2)

(3).Adjust the IFT LF5, LF4, LF3, LF2 to the Minimum distortion and best Signal to noise ratio.

(4)Repeat the process (3)

#### 3. Squelch Sensitivity Alignment

(1).Set the VHF signal Generator to Standard Frequency, 1KHz @ 1.5KHz and the Output level is -120 dBm.

(2).Set the Test Unit to squelch ON.

(3).Adjust the RA24 just to turn on the Squelch.

(4).Reduce the level to -125 dBm the Output should be turn off.

#### 4. Signal Level Alignment

(1).Set the VHF signal Generator to Standard Frequency, 1KHz @ 1.5KHz and the Output level is -103 dBm.

(2).Adjust the VR1 to the level meter display (5/M) just ON.