## ■ ADJUSTMENT (VHF)

| Item | Adjustment point(s) | Adjustment method |
|---|---|---|
| VCO Voltage | [D] TC1<br>TC2<br>(VCO BOX) | At 445.000 MHz (T) or 435.000 MHz (E), adjust TC1 so that the voltage of TP3 on [B] substrate is 1.8 V. |
| | | At 445.000 MHz (T) or 435.000 MHz (E), pressing the PTT button, adjust TC2 so that the voltage of TP3 on [B] substrate is 3.8 V. |
| | [E] L4<br>(VCO BOX) | At 145.000 MHz, adjust TP2 so that the voltage of TP2 on [A] substrate is 4.0 V. |
| Basic Frequency | [A] TC1 | Pressing PTT button, adjust TC1 so that f-counter indicates 444.950 ±0.1 kHz (T) or 434.950 ±0.1 kHz (E) MHz. |
| TX Power | [O] VR2<br>VR3 | On "LO" position, pressing the PTT button, adjust VR2 and VR3 so that the power is maximum at 145.95 MHz (T) or 144.95 MHz (E). |
| Power Output | [O] VR2 (Hi) | On "Hi" position, turn VR2 for 46 W output at 145.95 MHz (T) or 144.95 MHz (E).<br>Verify the lighting of the entire RF meter. |
| | [O] VR4 (Lo) | On "Lo" position, turn VR4 for 5 W output at 145.95 MHz (T) or 144.95 MHz (E). |
| RF meter | [O] VR1 | On "Lo" position, adjust VR1, so that [5] on the RF metter lights up at 145.95 MHz (T) or 144.95 (E). |
| Deviation | [A] VR3 | Enter the AF level of OdBm, then pressing the PTT button, adjust VR3 so that you obtain 4.6 kHz/Dev at 145.95 MHz (T) or 1449.95 MHz (E) and AF 1 KHz. |
| Protection Circuit | [O] VR3 | Disconnect the antenna, then pressing the PTT button and adjust VR3 so that the current consumption is 4.5 A at 145.95 MHz (T) or 144.95 MHz (E). |
| Subaudible Tone Deviation (DR-570T) | | Pressing the tone button and the PTT button at 145.95 MHz, verify 0.5~1 kHz/Dev at tone frequency of 88.5 Hz. |
| 1750 Hz Tone Deviation (DR-570E) | | Connect Microphone (EHM-34A or 33A), then pressing the tone button, verify that the tone frequency is 1750 Hz and the deviation is 3.5 kHz ±0.5 kHz. |
| Discrimination | [A] L7, 8, 9 | At 146.03 MHz (T) or 145.03 (E) and 60 dBμ input, adjust L7, 8, 9, so that the distortion is minimum at 50 m W. |
| Sensitivity | [A] L2, 3, 4, 5, 6 | Adjust L2, 3, 4, 5, 6 so that 12 dB SINAD sensitivity is the highest at 146.03 MHz (T) or 145.03 MHz (E). |
| Squelch Sensitivity | [A] VR1 | At 146.03 MHz (T) or 145.03 MHz (E), turn the main squelch knob to the minimum and cut SG output, then adjust VR1 so that the noise is maximum. |

## ■ ADJUSTMENT (UHF)

| Item | Adjustment point(s) | Adjustment method |
|---|---|---|
| VCO Voltage | [D] TC1<br>TC2<br>(VCO BOX) | At 445.000 MHz (T) or 435.000 MHz (E), adjust TC1 so that the voltage of TP3 on [B] substrate is 1.8 V. |
| | | At 445.000 MHz (T) or 435.000 MHz (E), pressing the PTT button, adjust TC2 so that the voltage of TP3 on [B] substrate is 3.8 V. |
| | [E] L4<br>(VCO BOX) | At 145.000 MHz, adjust TP2 so that the voltage of TP2 on [A] substrate is 4.0 V. |
| TX Power | [B] VR5 | On "Lo" position, pressing the PTT button, adjust VR5 so that the power is maximum at 444.95 MHz (T) or 434.95 MHz (E). |
| Power Output | [B] VR5 (Hi) | On "Hi" position, turn VR5 for 35 W output at 444.95 MHz (T) or 36 W output at 434.95 MHz (E).<br>Verify the lighting of the entire RF meter. |
| | [B] VR7 (Lo) | On "Lo" position, turn VR7 for 5 W output at 444.95 MHz (T) or 434.95 (E). |
| RF meter | [B] VR6 | On "Lo" position, adjust VR1 so that [5] on the RF meter lights up at 444.95 MHz (T) or 434.95 MHz (E). |
| Deviation | [B] VR3 | Enter the AF level of QdBm, then pressing the PTT button, adjust VR3 so that you obtain 4.6 KHz/Dev at 444.95 MHz (T) or 434.95 MHz (E) and AF 1 kHz. |
| Subaudible Tone Deviation (DR-570T) | | Pressing the tone button and the PTT button at 444.95 MHz, verify 0.5~1 kHz/Dev at tone frequency of 88.5 Hz. |
| 1750 Hz Tone Deviation (DR-570E) | | Connect Microphone (EHM-34A or 33A), then pressing the tone button, verify that the tone frequency is 1750 Hz and the deviation is 3.5 (±0.1) kHz. |
| Helical Filter | [B] TC1, 2<br>L3, 4 | Connect a tracking generator to the antenna and a spectrum analyser to TP1, then adjust TC1, 2 and L3, 4 so that the sensitivity is at its peak between 440 and 450 MHz at maximum gain.<br>(570 E: 430−440 MHz) |
| Discrimination | [B] L9, 11 | At 445.03 MHz (T) or 435.03 MHz (E) and 60 dBμ input, adjust L9, 11 so that the distortion is minimum at 50m W. |
| Sensitivity | [B] L8, TC3 | Adjust L8 and TC3 so that 12 dB SINAD sensitivity is the highest at 445.03 MHz (T) or 435.03 MHz (E). |
| Squelch | [B] VR1 | 1) At 146.03 MHz (T) or 145.03 MHz (E) of the main band, cut the SG output power and adjust the main squelch knob so that the noise is intermittent.<br>2) At 445.03 MHz (T) or 435.03 MHz (E) of the main band, cut the SG output power and adjust VR1 so that the noise is intermittent. |
| S-meter | [B] VR2 | At 445.03 MHz (T) or 435.03 MHz (E) and-3 dBμ [EMF], adjust VR2 so that [1] in the S-meter begins to light. |