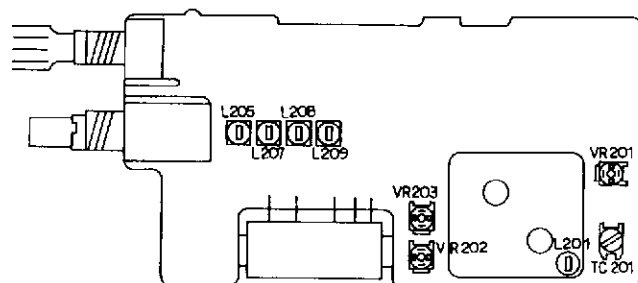
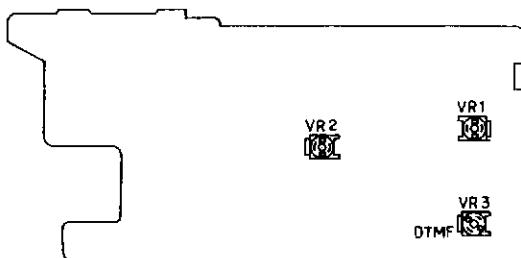


## ■ ADJUSTMENT F1-T/S1-T

Item	Adjustment method	Spec.
1. Standard frequency	Transmit at 146.03 on L.C.D. board, then adjust TC201 so that the frequency is 146.03MHz $\pm$ 50Hz. Adjusting point TC201	146.03MHz $\pm$ 50Hz
2. Output power		
1) High power	Transmit at 146.03MHz, then adjust VR202 so that the output power is 5.0W when operating power source at 13.8V. Adjusting point(s) VR202 main board	5W $\pm$ 0.1W
2) Middle power	Transmit at 146.03MHz, then adjust VR203 so that the output power is 1.0W when operating power source at 13.8V. Adjusting point(s) VR203 main board	1W $\pm$ 0.1W
3) Low power	Transmit at 146.03MHz, then verify that the output power is between 80mW and 200mW.	
3. Transmitting spurious	Transmit at 1144.03Hz, 146.03MHz and 147.99MHz, then verify the transmitting spurious is as follows when operating voltage is between 6V and 14V. High power ..... under -60dB Low power..... under -50dB Also verify no queer oscillation is occurring.	High Power under -60dB Low Power under -50dB
4. Modulation		
1) MIC modulation adjustment	Transmit at 146.03MHz and input low frequency of 1kHz 50mV from MIC input terminal. Then adjust VR201 so that the modulation is 4.5kHz. Adjusting point(s) VR201 main board	4.5kHz $\pm$ 0.1kHz
2) DTMF deviation	Transmit at 146.03MHz and press the ten-key [1]. Then adjust the VR3 so that the modulation is 3.1kHz. Adjusting point(s) VR3 CPU board	3.1kHz $\pm$ 0.1kHz
3) Sub-audible tone modulation	Set the sub-audible tone at 88.5MHz, then adjust VR1 so that the frequency is 800Hz when transmitting at 146.03MHz. Adjusting point(s) VR1 CPU board	800Hz $\pm$ 100Hz
5. Standard VCO voltage	At the receiving condition, adjust L104 so that the voltage of P/D is 0.7V with the frequency set at 146.03MHz. Adjusting point(s) VCO board L204 At the transmitting condition verify that the voltage of P/D is between 0.5V and 1.0V with the frequency set at 145.05MHz.	0.8 $\pm$ 0.1V
6. AIR BAND	At the receiving frequency of 125.03MHz, input the signal of AM 1kHz 30% output 8dB $\mu$ (disconnection terminal) from SG. Then verify that the S/N is more than 10dB. And, receivable from 118.00MHz to 142.99MHz.	
7. VHF front-end adjusting	At the receiving frequency of 146.03MHz, adjust L205, L207, L208 and L209 so that the 12dB sind gets maximum sensitivity. Adjusting point(s) L205, L207, L208, L209 main board	
8. S meter	At the receiving frequency of 146.03MHz input the signal of 20dB $\mu$ from the transceiver tester. Then adjust VR2 so that the FU11 in S meter starts lighting. Adjusting point(s) VR2 CPU board	



## ■ ADJUSTMENT F1-E/S1-E

Item	Adjustment method	Spec.
1. Standard frequency	Transmit at 145.05 on L.C.D. board, then adjust TC201 so that the frequency is 145.05MHz $\pm$ 50Hz. Adjusting point(s) TC201	145.05MHz $\pm$ 50Hz
2. Output power		
1) High power	Transmit at 145.05MHz, then adjust VR202 so that the output power is 5.0W when operating power source at 13.8V. Adjusting point(s) VR202 main board	5W $\pm$ 0.1W
2) Middle power	Transmit at 145.05MHz, then adjust VR203 so that the output power is 1.0W when operating power source at 13.8V. Adjusting point(s) VR203 main board	1W $\pm$ 0.1W
3) Low power	Transmit at 145.05MHz, then verify that the output power is between 80mW and 200mW.	
3. Transmitting spurious	Transmit at 145.05MHz, 144.05MHz and 145.95MHz, then verify the transmitting spurious is as follows when operating voltage is between 6V and 14V. High power ..... under -60dB Low power ..... under -50dB Also verify no queer oscillation is occurring.	High Power under -60dB Low Power under -50dB
4. Modulation		
1) MIC modulation adjustment	Transmit at 145.05MHz and input low frequency of 1kHz 50mV from MIC input terminal. Then adjust VR201 so that the modulation is 4.5kHz. Adjusting point(s) VR201 main board	4.5kHz $\pm$ 0.1kHz
2) DTMF deviation	Transmit at 145.05MHz and press the ten-key [1]. Then adjust the VR3 so that the modulation is 3.1kHz. Adjusting point(s) VR3 CPU board	3.1kHz $\pm$ 0.1kHz
3) Tone-burst modulation	Transmit at 145.05MHz, then adjust VR1 so that the modulation is 3.0kHz. Verify that the tone-burst is in the range of 1,750Hz $\pm$ 20Hz at this time. Adjusting point(s) VR1 CPU board	3.0kHz $\pm$ 0.1kHz
5. Standard VCO voltage	At the receiving condition, adjust L104 so that the voltage of P/D is 0.7V with the frequency set at 145.05MHz. Adjusting point(s) VCO board L204 At the transmitting condition verify that the voltage of P/D is between 0.5V and 1.0V with the frequency set at 145.05MHz.	0.7V $\pm$ 0.1V
6. AIR BAND	At the receiving frequency of 125.03MHz, input the signal of AM 1kHz 30% output 8dB $\mu$ (disconnection terminal) from SG. Then verify that the S/N is more than 10dB. And, receivable from 118.00MHz to 142.99MHz.	
7. VHF front-end adjusting	At the receiving frequency of 145.05MHz, adjust L205, L207, L208 and L209 so that the 12dB sind gets maximum sensitivity. Adjusting point(s) L205, L207, L208, L209 main board	
8. S meter	At the receiving frequency of 145.95MHz input the signal of 20dB $\mu$ from the transceiver tester. Then adjust VR2 so that the FU11 in S meter starts lighting. Adjusting point(s) VR2 CPU board	

