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TR-6000 FREQUENCY CHANGE PROCEDURE

1. Set dip switches S1, S2 and S3 for the desired output frequency.
2. Set the output filter jumpers for low or high band.
3. Adjust the power control VR1 to it's minimum position.
4. Turn VR10 and VR11 fully counter clockwise.
5. Apply power to the unit.
6. Measure the oscillator frequency at U11 pin 13.
7. Adjust C57 for an oscillator frequency of 10MHz.
8. Check U13 pin one for the carrier frequency.
9. Adjust C146 for five volts peak to peak on U13 pin one.
10. Adjust VR8 for a 40% duty cycle square wave at U17 pin five.
11. Adjust VR9 for a 40% duty cycle square wave at U18 pin five.
12. Adjust VR1 for ten volts on the drain of Q6.
13. Adjust VR7 for five volts on the center tap of T3.
14. Adjust C123 for maximum power output.
15. Increase VR1 to it's maximum position and adjust VR2 for the desired maximum power. (not to exceed 30W)
16. Increase VR10 and VR11 until their effect on output power diminishes.
17. Reset VR2.
18. Calibrate the RF power meter with VR13.
19. Apply a 1KHz audio signal to J4.
20. Adjust VR3, VR4 and VR6 for 90% - 100% modulation from the point of clipping the input amplifier to the bottom end of the limiter's input range.
21. Calibrate the VU meter with VR5.
22. Check the audio frequency response, carrier frequency and RF spectral purity of the unit.
23. Seal all potentiometers except VR1 and VR3.

SYSTEMS

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TR-6000 TEST PROCEDURE

1. Check the circuit board for solder shorts and bad solder joints
2. Check for proper installation of diodes, transistor and IC's
3. Set all potentiometers to their center position
4. Install jumper on J7 pins one and two.
5. Install jumper on J5 pins one and two.
6. Remove U12.
7. Set dip switches S1, S2 and S3 for the desired output frequency.
8. Apply power to the unit and check for the power LED to illuminate.
9. Check the output of the variable regulator, twenty volt regulator, twelve volt regulator and the five volt regulator.
10. Instal jumper J8-A.
11. Measure the oscillator frequency at U11 pin 13.
12. Adjust C57 for an oscillator frequency of 10MHz.
13. Turn off the power and install U12.
14. Power up the unit and check U13 pin one for the carrier frequency.
15. Adjust C146 for five volts peak to peak on U13 pin six.
16. Adjust VR8 for a 40% duty cycle square wave at U17 pin five.
17. Adjust VR9 for a 40% duty cycle square wave at U18 pin five
18. Adjust VR7 for ten volts on the drain of Q6.
19. Adjust VR7 for five volts on the center tap of T3
20. Adjust C123 for maximum power output.
21. Increase VR1 to it's maximum position and adjust VR2 for the desired maximum power (not to exceed 30W)
22. Increase VR10 and VR11 until their effect on output power diminishes. (Approximately negative two volts on the gates of Q8 and Q9)
23. Reset VR2.
24. Calibrate the RF power meter with VR15
25. Apply a - 20 dBm,1KHz audio signal to J4.
26. Adjust VR3 fully clockwise.
27. Adjust VR4 for 90% modulation at the point of clipping the input amplifier.
28. Reduce the audio generator level by 40 dB and adjust VR6 for 90% modulation at the limiter threshold
29. Enable the TIS filter by moving the J5 jumper to pins two and three.
30. Re-adjust VR6 for 90% modulation.
31. Calibrate the VU meter with VR5.
32. Check the audio frequency response, carrier frequency and RF spectral purity of the unit
33. Seal all potentiometers except VR1 and VR3
34. Install the circuit board in the chassis and install the top cover.
35. Turn the unit on and re-adjust C123 for maximum power output.

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SYSTEMS

CARRIER FREQUENCY STABILITY WITH EXTERNAL 3.579545 MHz TELEVISION COLOR BURST REFERANCE INPUT

(Worst case Fc:1700KHz)

Long time variation: 2.00ppM Max. Dev.:4.7481Hz
(per EIA RS-343A Electrical Performance Standard)

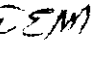
Test performed by:T.E.M  Date 9-1-98

EXHIBIT-I
B7MTR-6000TIS-WB