

Subsection

2.983(d)(9): Factory Tune-up Procedure

Test Equipment

1. BNC-P to MM121454 Coaxial RF cable	Audio Technica custom RF cable
2. DC Power Supply	Leader LPS-160-2
3. Audio Signal Generator	Leader LAG-126S
4. Modulation Meter (FM liner detector)	Anritsu MS61A
5. Spectrum Analyzer	Advantest R3361D
6. RF Power Meter	Anritsu MS 4803A
7. RF Power Sensor	Anritsu MA4701A
8. Oscilloscope	Tektronix 475A
9. DC Volt Meter	Fluke 79
10. AC milli Volt Meter	Leader LMV-1817

Adjustment of T341 Main circuit board

RF Oscillation frequency adjustment

1-1, Measurement equipments and the T341 set up

a Spectrum analyzer setup

Center frequency 554.000MHz

SPAN 200kHz

Frequency counter ON

b T341 LCD Setup

Frequency 554.000MHz

RF-POWER HI

GAIN -6dB

1-2, T341 adjustment

Turn the TC301 on the T341 circuit board and set the oscillation frequency to 554.000MHz

RF output peak adjustment

2-1, Measurement equipments and the T341 setup

- a Spectrum analyzer setup
 - Center frequency 554.000MHz
 - SPAN 200kHz

- b T341 setup
 - Same as 1-1-b

2-2, T341 adjustment

- a. Connect CN301 output to the Spectrum Analyzer input
- b. Adjust TC302 and set RF output power to maximum

RF Power adjustment

3-1, Measurement equipments and the T341 setup

- a RF Power meter setup
 - Measurement range: Auto
- b T341 setup
 - Same as 1-1-b

3-2, T341 adjustment

- a Connect CN301 output to the RF Power meter input
- b Adjust the VR301 and set RF output power to 35mW
- c Set the LCD power indicator to Low
- d Adjust the VR300 and set RF output power to 10mW

Tone signal modulation level adjustment

4-1, Measurement equipments and the T341 setup

- a Spectrum analyzer setup
 - Center frequency 554.000MHz
 - SPAN 200kHz
 - Marker: On

- b T341 setup
 - Same as 1-1-b

4-2, T341 adjustment

Adjust VR 4 and set level difference between Main carrier and tone carrier to 30dBc

Audio modulation level adjustment

5-1, Measurement equipments and the T341 setup

a Deviation Meter setup

Sensitivity P-P/2

Range 100kHz

HPF 50Hz

LPF 20kHz

Frequency 554.000MHz

b Audio signal applied to CN2

Frequencyn 1kHz

Level +4dBV (at CN2 terminal)

c T341 setup

Same as 1-1-b

5-2 T341 adjustment

Adjust VR 3 and set deviation to +/- 30KHz