

## 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 T310 Main circuit board

##### .. RF Oscillation frequency adjustment

###### 1-1, Measurement equipments and the T310 set up

###### a Spectrum analyzer setup

- . Center frequency, 668.000MHz
- . SPAN, 200kHz
- . Frequency counter, ON

###### b T310 LCD Setup

- . Frequency, 668.000MHz
- . RF-POWER, HI
- . GAIN, -6dB

###### 1-2, TT310 adjustment

Turn the VC300 on the T310 circuit board and set the oscillation frequency to 668.000MHz

##### .. RF output peak adjustment

###### 2-1, Measurement equipments and the T310 setup

- a Spectrum analyzer setup
  - . Center frequency,668.000MHz
  - . SPAN 200kHz

- b T310 setup
  - . Same as 1-1-b

#### 2-2, T310 adjustment

- a. Connect CNP100 output to the Spectrum Analyzer input
- b. Adjust the VC100 and set RF output power to maximum

### .. RF Power adjustment

#### 3-1, Measurement equipments and the T310 setup

- a RF Power meter setup
  - . Measurement range: Auto
- b T310 setup
  - . Same as 1-1-b

#### 3-2, T310 adjustment

- a Connect CNP100 output to the RF Power meter input
- b Set the LCD power indicator to Low
- c Adjust the VR100 and set RF output power to 10mW.

### .. Tone signal modulation level adjustment

#### 4-1, Measurement equipments and the T310 setup

- a Spectrum analyzer setup
  - . Center frequency,668.000MHz
  - . SPAN 200kHz
  - . Marker: On
- b T310 setup
  - . Same as 1-1-b

#### 4-2 , T310 adjustment

Adjust VR200 and set level difference between Main carrier and tone carrier to 30dBc

.. Audio modulation level adjustment

5-1, Measurement equipments and the T310 setup

a Deviation Meter setup

- . Sensitivity,P-P/2
- . Range,100kHz
- . HPF,50Hz
- . LPF,20kHz
- . Frequency,668.000MHz

b Audio signal applied to CN2

- . Frequency,1kHz
- . Level,+4dBV (at CN2 terminal.

c T310 setup

- . Same as 1-1-b

5-2 T310 adjustment

Adjust VR201 and set deviation to +/- 30KHz