FM IF and RF Alignment / FM MPX Alignment GTP-500II

Instruments: FM Stereo Signal Generator (400Hz, Modulated @ 100%), THD Analyzer, Oscilloscope, AC Voltmeter, Digital DC Voltmeter
Connections: THD Analyzer, Oscilloscope and AC Voltmeter to audio outputs (LEFT or RIGHT as necessary).

Step	Generator		Tuning Dial Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Not Necessary		87.5MHz	L107	3V reading, ± 0.1V, on DC Voltmeter across TP3 & TP4
2			108MHz	CT104	23V reading, ± 0.2V, on DC Voltmeter across TP3 & TP4
3	Repeat steps 1 and 2 until no further improvement is observed.				
4	Antenna terminal, input below limiting of IF	90MHz	90MHz	L102, L103, L104	Maximum reading on AC Voltmeter
5		105MHz	105MHz	CT101, CT102, CT103	Maximum reading on AC Voltmeter
6		98MHz	98MHz	L106	Maximum output, minimum distortion
7	Repeat steps 4, 5 and 6 until no further improvement is observed. (MUTING **OFF**)				
8	Antenna terminal, 1mV input	90MHz	90MHz	L151(A)	0.000V, ±0.003V, on DC Voltmeter connected across TP1&TP2
9				L151(B)	Minimum reading on THD Analyzer
10	Repeat steps 8 and 9 until no further improvement is observed. (MUTING **OFF**)				
11	Antenna terminal, 15uV input	90MHz	90MHz	VR 151	Muting level (**MUTING ON**)
12	Antenna terminal, 1mV input	90MHz	90MHz	VR 152	SIGNAL LEVEL INDICATOR 5th LED **ON**
13	Antenna terminal, 1mV input (L or R)	98MHz Pilot@10%, 1kHz @ 90% mod.	98MHz	VR 301	Best separation MUTING **ON**, HI BLEND **OFF**

AM IF and RF Alignment

Instruments: AM Signal Generator (400Hz, Modulated @ 30%), AC Voltmeter, Oscilloscope, DC Voltmeter,
Connections: AC Voltmeter and Oscilloscope to audio outputs (LEFT or RIGHT).

Step	Generator		Tuning Dial Setting	Adjust	Adjust for
	Coupling	Frequency			
1	Not Necessary		530kHz (531kHz) Europe	L203	3V, ± 0.1V, on DC Voltmeter across TP3 & TP4
2			1600kHz (1602kHz) Europe	CT202	25V, ± 0.2V, on DC Voltmeter across TP3 & TP4
3	Repeat steps 1 and 2 until no further improvement is observed.				
4	Use Test Loop.	450kHz	530kHz	L204	Maximum reading on AC Voltmeter
5	Use Test Loop. Radiate signal into loop antenna, 2mV input level	600kHz	600kHz	L202, L204	
6		1400kHz	1400kHz	CT201	
7	Repeat steps 5 and 6 until no further improvement is observed.				
8	Use Test Loop. Radiate signal into loop antenna, 5mV input level	1000kHz	1000kHz	VR201	SIGNAL LEVEL INDICATOR 5th LED **ON**

Chassis Layout GTP-500II