Ranger RCI-2950 Documentation Project CBTricks.com

PLL Alignment

PLL Alignment Locations

SETTINGS	CONNECTION	ADJUST	ADJUST FOR
Remove TP1, TP2, TP3 Jumper PCB.			
VCO & OSC: Frequency: 28.0000 MHz MIC Gain: Fully counter- clockwise RF Power. Fully clockwise RF Gain: Fully clockwise Clarifier: 12 o'clock Vol : Comfortable level Squelch: Fully counter- clockwise Mode selector - AM	Disconnect shorting board from test points TP1, TP2 and TP3 Connect Freq. Counter to L61	VC1	Adjust for reading of 10.240MHz ± 10Hz.
	Connect Oscilloscope to L61	L4	Adjust for Max.
	Connect a Freq. Counter to L65	VC2	Adjust for 17.305MHz ±10Hz.
	Connect a Freq. Counter to L65	VR21	Key Transmitter and adjust for 17.305MHz ±10Hz.
	Connect Voltmeter to IC7 Pin3	L21	Adjust for 1.2VDC ±.1VDC.
	Connect Voltmeter to J13	L17	Adjust for 2.0VDC ±.1VDC.
	Connect Oscilloscope to L65	L19	Adjust for Max.
	Connect Freq. Counter to IC13 pin8	L23	Very carefully adjust for 11.350MHz ±10Hz.
	Connect Oscilloscope to IC17 pin13	L24 L25	Very carefully adjust and for best waveform
AM TX OSC: Same as above	Connect a frequency counter to cathode of D45	L27	Key transmitter and adjust for 10.6950 MHz ±10Hz.
USB TX OSC: Adjust VR7 fully clockwise. Put mode selector on USB.	Leave frequency counter connected to D45	L29	Key transmitter and adjust for 10.6925 MHz ±10Hz.
LSB TX OSC: Put mode selector in LSB. After adjustment return VR7 to approximate middle of rotation.	Leave frequency counter connected to D45	L28	Key transmitter and adjust for 10.6975 MHz ±10Hz.
Replace TP1, TP2, TP3 Jumper PCB.			

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