

This Manual is provided by
CBTricks.com

Someone who wanted to help you repair your equipment put together this information.

Royce 1-648 Alignment Instruction from Owner's Manual
Ser. 1

If you would like to help us put more manuals online support us.

If you would like to help with this project let us know.

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

If your company would like to provide technical information to be featured on this site I will put up on the site as long as I can do it in a non-commercial way.

The site is supported with donation from users, friends and selling of the Galaxy Service Manual CD to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

ALL the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). This work was not done for someone else to make money also, for example the ebay CD sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners.

This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.

Thank you for any support you can give.

I-648 Alignment Instruction

RECEIVER

- A. Inject at the ant. jack a 27.185MHz signal ($\pm .001\%$; 30% modulation at 1KHz).
- B. Connect an audio voltmeter and oscilloscope across on 8 ohm load and plug into external speaker jack.

Test Equipment	Test Point	Adjust	Remarks
1. RF signal generator (low range to avoid audio saturation)	Inject at ant. jack	Channel set to 19	
		T1, T2, T3	Max. output with vol. control at max, squelch control at min. output should be more than 500mW (2.0V/8 ohm) with gen. voltage at $1\mu\text{V}$; S + N/N more than 10dB on all channels

AGC RESPONSE

Set the output voltage of a signal generator at $50000\mu\text{V}$ and adjust the volume control so that the voltmeter output is 500mW (2.0V/8 ohm). Then, lower the output voltage of the generator so that the voltmeter output is 10dB down. The output voltage of the signal generator should be under $5\mu\text{V}$ at this time.

AUDIO POWER CHECK

With a generator output of 1mV and squelch control at minimum, audio output should be more than 3.5W (5.7V/8 ohm) at maximum position of volume control.

TRANSMITTER

- A. Power Supply — 13.8VDC.
- B. Use a suitable power meter, non-inductive dummy load and oscilloscope connected to antenna jack.

Test Equipment	Test Point	Adjust	Remarks
1. Power Meter	antenna jack	T6, T7, L4	Adjust for maximum output power
2. Freq. Counter	across dummy load	—————	Check all channels $\pm 800\text{Hz}$
3. A.F. Oscillator with AF voltmeter in shunt (1KHz 20mV)	Inject at mic input	VR3	-90% modulation oscilloscope
		—————	Reduce AF oscillator output to 5mV; modulation $\geq 50\%$