Installation Manual

for

Tubester Sets 75S-3/3A and 75S-3B/C

The receivers will operate just fine with only one Tubester replacing a tube, or with any mix of Tubesters and tubes, or with all Tubesters. They may be exchanged for the tubes in any order, and no precautions need be observed in operating the receivers after they are installed. However, TUBESTERS WILL BE DESTROYED IF INSTALLED OR REMOVED WHILE THE RECEIVER POWER IS ON, OR IF INSTALLED IN THE WRONG SOCKET AND POWER TURNED ON.

One additional caution: The heat sinks on the power transistors are "hot". Assure that they don't touch chassis metal after installing the Tubesters, and don't touch the sinks with the receiver power on.

SHORT FORM INSTALLATION INSTRUCTIONS:

Remove the tubes and put the Tubesters in the sockets for which they are labeled. Put the Mute Jack Adaptor in the Mute jack, and the transmitter cable in the Adaptor. Clip the Clip-on Capacitor booted lead to the top lug of the AGC switch, the bare clip to the dial light cover. The switch is behind the panel, just left of the S-Meter. Turn the power switch to STANDBY. The receiver should respond instantly.

Then:

Zero the S-Meter.

Set the Calibrator to WWV.

Touch-up the RF and OSC trimmers on all bands.

Check the BFO and adjust L10 if needed.

Check the Rejection Tuning and peak the notch with L8 and R77.

Set R57 IF Gain, per the Collins manual or Paragraph 11, Page 3 following.

The installation is complete.

STEP BY STEP INSTALLATION INSTRUCTIONS:

- 1. Turn on the receiver. Using the USB mode, RF Gain maximum, Rejection Tuning OFF and BFO OFF, any band, assure that the receiver operates properly. TURN THE RECEIVER OFF.
- 2. Remove the (4) 9-pin tubes. Place the color dots from the 9-pin Tubester package near the tube markings on the chassis; they will aid in proper socket Tubester installation:

	Tubester Will			Tubester Will			
Color	Type	Replace	At	Color	Туре	Replace	<u>TA</u>
White	ST201	(6EA8 or 6U8A)	•		•	(6EA8 or 6U8A)	-
DrkBlu	ST202	(12AX7)	V 5	Orange	ST204	(6EA8 or 6U8A)	₹4

- 3. Install the (4) 9-pin Tubesters. Take care that the ST204 heat sink does not touch metal; it may be bent or twisted a bit for clearance without damage.
- 4. Turn on the receiver. It should respond and operate normally.
- 5. Align the Notch Filter: Using either side band mode, Rejection Tuning Off, tune in the calibrator on any band to the center of the IF pass-band, an audio tone of about 1350 Hz (the exact frequency is not critical). Turn the Rejection Tuning knob to its center position (pointer straight up), then adjust 18 and R77 for maximum rejection of the signal. The adjustments interact, so adjust them alternately a few times. The null should give 9 S-units or better rejection. Turn Rejection Tuning eff.