

1. Turn the FUNCTION switch to PTT. The pilot lamps and the tube filaments should light. Watch to see that the meter remains at zero; if it should start to deflect, the Transceiver should be turned off immediately, as the bias circuit of tube stages V6 and V7 is probably shorted and must be corrected before proceeding.
2. Place the Meter switch in the OPERATE TUNE position and adjust the S METER ADJ control for a zero indication on the meter.
3. Remove the dummy load from the ANT socket and plug an antenna into the ANT socket.
4. Turn up the AF GAIN control until noise is heard in the speaker. Tune up and down the band with the VFO. Stations should be heard if there is any local activity.
5. Tune in a station that gives approximately a midscale (S9) meter reading.
6. Adjust the top and bottom slugs of receiver IF transformer T3 for the highest meter reading. Use the short end of the alignment tool for the top slug, and the long end of the alignment tool for the bottom slug. When passing the long end of the alignment tool through the top slug to reach the bottom slug, be careful not to disturb the adjustment of the top slug.
7. Repeat the adjustment of T3 for the highest meter reading.
8. Turn the FUNCTION switch to OFF.
9. Turn the VFO dial fully counterclockwise until the plates of the VFO capacitor are fully closed.
10. Rotate the calibrated dial so that the end of the white stripe near the 3.8 marking is aligned with the hairline and tighten the setscrew. Check to see that full rotation of the dial does not cause any drag or rubbing. If it does, move the dial or knob slightly on the shaft, then recalibrate and retighten the setscrew.
11. Bend the pilot lamp bracket and adjust the lamp positions for best illumination of the dial and meter.

VFO CALIBRATION

Disconnect the antenna from the Transceiver and plug the dummy load into the ANT socket.

Following are two ways in which to check the dial calibration with two different types of receivers. Use the method that applies to the type of receiver available.

CALIBRATION WITH A STANDARD AM BROADCAST RECEIVER

1. Connect one end of a short wire to the antenna terminal of the receiver. Place the other end of this wire near tube V14 in the Transceiver.
2. Set the receiver dial to ~~1495~~ kc and the VFO dial to ~~3.8~~ ^{3.6} ₁₂₉₅
3. Set the FUNCTION switch to PTT and allow the Transceiver to warm up.
4. Adjust the slug of coil L5 until a whistle is heard in the speaker of the receiver. Coil L5 will normally have to be turned in a counterclockwise direction, viewed from the top of the chassis.
5. If this portion of the AM band has too much noise, set the receiver dial at ~~1695~~ kc and the Transceiver dial at ~~4.0~~ ¹⁴⁹⁵. Then repeat the adjustment of L5. Trimmer C131B need not be adjusted at this time. _{3.8 MC}
6. Turn the FUNCTION switch to OFF.

This alignment should provide fairly close calibration of the VFO. However, operation of the Transceiver near the ends of the VFO dial should be avoided until the VFO calibration is checked with a crystal calibrator or a very accurate amateur receiver.

CALIBRATION WITH AMATEUR BAND RECEIVER

1. Connect one end of a short wire to the antenna terminal of the receiver. Place the other end of this wire near tube V4 in the Transceiver.
2. Temporarily remove V5, the 12BY7 tube.
3. Turn the FUNCTION switch to TUNE and allow the Transceiver to warm up.