

- ( ) 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.
- ( ) Repeat the adjustment of T3 for the highest meter reading.
- ( ) Turn the FUNCTION switch to OFF.
- ( ) Turn the VFO dial fully counterclockwise until the plates of the VFO capacitor are fully closed.
- ( ) Loosen the setscrew of the dial. Rotate the dial so that the end of the white strip near the 7.3 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 with the spring washer compressed about half way.
- ( ) Bend the pilot lamp bracket and adjust the lamp position 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.

The following steps present two ways 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

- ( ) Connect one end of a short wire to the antenna terminal of the broadcast receiver. Place the other end of this wire near tube V14 in the Transceiver.
- ( ) Tune the receiver dial to a station of known frequency near 1600 kHz. Now, subtract this frequency from 8,885 kHz and set the VFO dial to the difference between these two frequencies.

Example:

	8885 kHz
Receiver frequency:	<u>1600</u> kHz
Set VFO dial to:	7285 kHz

- ( ) With the Sideband switch in LSB, set the FUNCTION switch to PTT and allow the Transceiver to warm up.
- ( ) Adjust the slug of coil L6 until the VFO is heard in the speaker of the receiver. Coil L6 will normally have to be turned counterclockwise, as viewed from the top of the chassis. The VFO trimmer need not be adjusted at this time.
- ( ) Turn the FUNCTION switch to OFF.

This alignment should calibrate the VFO fairly closely. However, do not operate the Transceiver near the ends of the VFO dial until the VFO calibration is checked with a crystal calibrator or a very accurate amateur receiver.

#### Calibration With Amateur Band Receiver

NOTE: The following procedure gives the correct dial readings for zero beat (carrier frequency) in LSB only. In USB, the dial reading is 3.4 kHz higher than the carrier frequency.

- ( ) 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.
- ( ) Temporarily remove V5, the 12BY7 tube.
- ( ) With the Sideband switch in the LSB position, turn the FUNCTION switch to TUNE and allow the Transceiver to warm up.
- ( ) Move the Meter switch to BIAS SET. The meter should indicate "0." If it is not at "0," check to see that the BIAS ADJUST control is in its fully counterclockwise position. If the meter still will not reach "0," turn the Transceiver OFF and check the bias circuitry before proceeding.
- ( ) Set the dials of the receiver and Transceiver to 7.25 megahertz. The receiver should be operated in the CW mode.