

SERVICE BULLETIN

AMATEUR RADIO

SUBJECT

TS-930S CW VBT

DATE

7-15-83

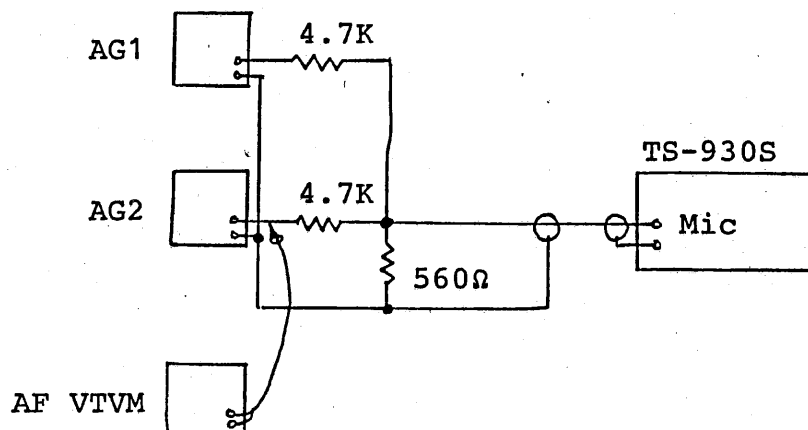
This procedure will allow a simplified alignment method for the TS-930S CW VBT section, when a VBT-1 jig is not available.

TEST EQUIPMENT REQUIRED

Oscilloscope
Audio signal generator (2)
AF VTVM

PROCEDURE

1. Preset the TS-930S controls as follows:
 - 1) MODE:LSB
 - 2) Disconnect the DRV connector from the Signal Unit.
 - 3) Confirm that CAR2 frequency is the same when switched from transmit to receive. If it does not stay constant adjust VR23.
2. Connect the oscilloscope probe to R176 in the Signal Unit.
3. Connect the two Audio Generators as shown in the figure below. Set AG1 to 300 Hz and AG2 to 2.9 KHz.



4. Ensure that the output level of AG1 and AG2 are equal by using the AF VTVM.
5. Connect the cathode of D133 to that of D132 in the Signal Unit using a 0.01 μ F capacitor.
6. Clip the lead of D124 and place the STBY switch to SEND.
7. Adjust TC4 (CAR1 8.8315 MHz for USB) so that a complete tone waveform is observed, as shown in figure 2. Return to REC, and resolder D124.

KENWOOD

#873

SERVICE BULLETIN

AMATEUR RADIO

SUBJECT

TS-930S CW VBT (cont.)

DATE

7-15-83

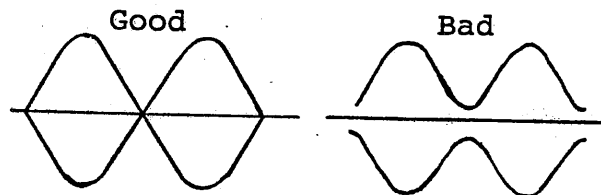


Figure 2

8. Remove the $0.01\mu\text{F}$ capacitor installed in step 5.
9. Set STBY to SEND and adjust TC3 (CAR2 8.375MHz) so that a complete two tone signal is displayed, as in Fig. 2.
10. Return to REC, and reconnect the DRV connector. This completes the simplified alignment procedure.

CLM/clm

TRIO-KENWOOD COMMUNICATIONS

1111 WEST WALNUT STREET • COMPTON, CALIFORNIA 90220 U.S.A.
MAILING: P.O. BOX 7065 • COMPTON, CALIFORNIA 90224
TELEPHONE: (213) 639-9000 SERVICE TELEPHONE: (213) 639-7140