KENWOOD

ASB-1047

Service Bulletin

Amateur Radio Division

Subject: TS-950SDX Carrier Point Adjustment **Date:** March 28, 1994

Symptom:

The background audio tone is different between the LSB and the USB mode, when no signal is present, i.e. the carrier point is incorrect. Occassionally, this tone is still different after adjustment per the service manual, specifically Item 9 on page 196.

Countermeasures:

Change the adjustment procedure for Item 9 as follows:

Test Equipment

- Two RF Signal Generators with good frequency accuracy.
- A two-signal combiner.
- An Oscilloscope.

Preparation:

1. Adjust the two signal generators for equal output levels.
2. Connect the test equipment as shown in the accompanying diagram.
3. Set the frequency of SSG1 to 1.850.2 MHz.
4. Set the frequency of SSG2 to 1.852.8 MHz.
5. Fine tune the output levels of the two SSG's for a good two-tone output on the oscilliscope (Fig. 3).

Adjustment Procedure:

1. Connect the transceiver and the test equipment as shown in Figure 2.
2. Select the Adjustment Mode on the transceiver by pressing and holding the 3 and 9 keys on the keypad while the POWER SW is turned on.
3.
   - Set the output of the two signal generators for a -73 dBm level.
   - Set the SSB SLOPE TUNE control to the NORMAL position.
   - Set the AGC to AUTO.

Time required for this modification is 60 minutes or less.

Service code A:11 B:20 C:241 D:91

- Select MENU 00 using the M.CH/VFO knob.
- Select USB mode.
- Press the 8.83 MHz filter key until there is no indicator illuminated (no filter.)
- Press the 455 kHz filter key until 2.7 k appears in the display.
- Set the frequency of the transceiver to 1.850.0 MHz.
- Adjust the TX VFO/SUB encoder control until the waveforms displayed on the oscilliscope cross as shown in Figure 3.

4.

- Switch to LSB.
- Press the 8.83 MHz filter key until 6 kHz appears in the display.
- Leave the 455 kHz filter set at 2.7 kHz.
- Select a dial frequency of 1.853.0 MHz.
- Adjust the TX VFO/SUB encoder control until the waveforms displayed on the oscilliscope cross as shown in Figure 3.

5.

- Select MENU 01.
- Switch to USB.
- Press the 8.83 MHz filter key until 2.7 KHz appears in the display.
- Leave the 455 kHz filter set at 2.7 kHz.
- Select a dial frequency of 1.850.0 MHz.
- Adjust the TX VFO/SUB encoder control until the waveforms displayed on the oscilliscope cross as shown in Figure 3.

6.

- Select LSB.
- Select a dial frequency of 1.853.0 MHz.
- Both filters should remain at 2.7 kHz.

Time required for this modification is 60 minutes or less. **Service code A:**11 **B:**20 **C:**241 **D:**91

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- Adjust the TX VFO/SUB encoder control until the waveforms displayed on the oscilliscope cross as shown in Figure 3.

Note: This completes the adjustment.

7. To return to the normal display and save these settings you should press the CLR key one time.

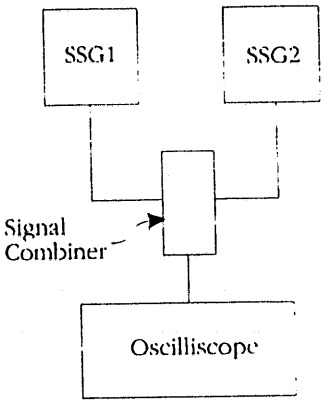

Fig. 1

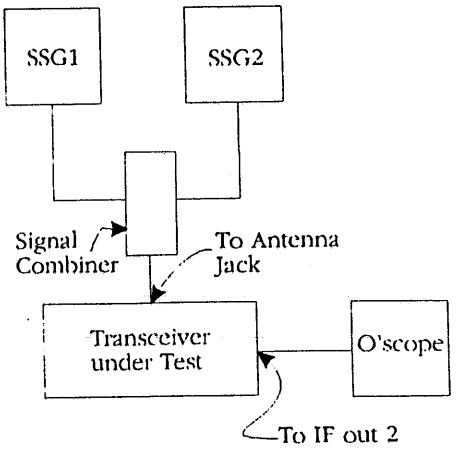

Fig. 2

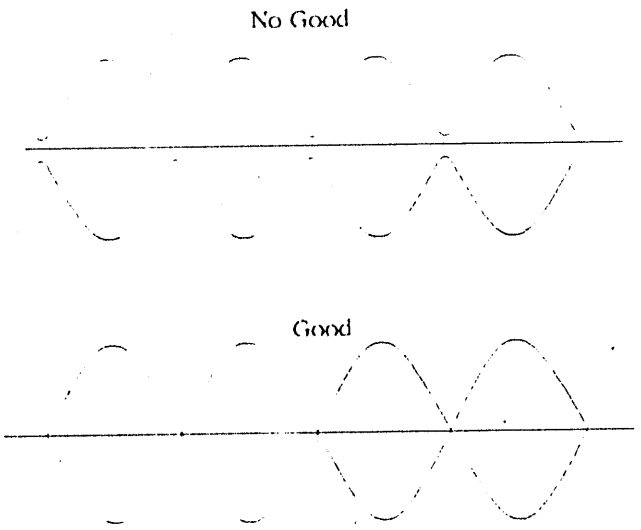

Fig. 3

Time required for this modification is 60 minutes or less.

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