

instruction sheet

FOR THE



OPTIONAL SQUELCH CONVERSION FOR CB-1 AND W-CB-1 TRANSCEIVERS

If you have not yet assembled your CB-1 Kit begin here; if you have completed your CB-1, start at the next arrow.

Refer to Page 36 and change the first step to read as follows.

- () Cut the free yellow output transformer lead to 6" and strip 5/16". Connect the end to speaker lug 1, and solder lightly so this lead may be removed later in the construction.

Again refer to Page 36, and change the second step to read as follows.

- () Connect a bare wire between speaker lug 2 (solder the wire lightly to permit easy removal as before) and the ground lug near this terminal.

Now proceed with the construction and testing of your CB-1 Kit. After completion of the testing procedure, when you have determined your CB-1 to be operating properly as outlined in the manual, complete the remainder of the operations outlined on this sheet.

If you have a CB-1 already assembled, or a W-CB-1 factory wired unit, begin here. Be sure to use ROSIN CORE solder only; keep the connections clean and heat the connection enough to make the solder flow. Do not move the connections until the solder has solidified.

- () Remove the cabinet, if it is on the unit, by removing the 4 screws on the back of the cabinet.
- () Disconnect the yellow output transformer lead from speaker lug 1, and temporarily leave the end free.

- () Disconnect the bare wire between speaker lug 2, and the ground lug and discard.

Refer to Figure 1 and assemble the terminal strip and components, as a separate unit before installation.

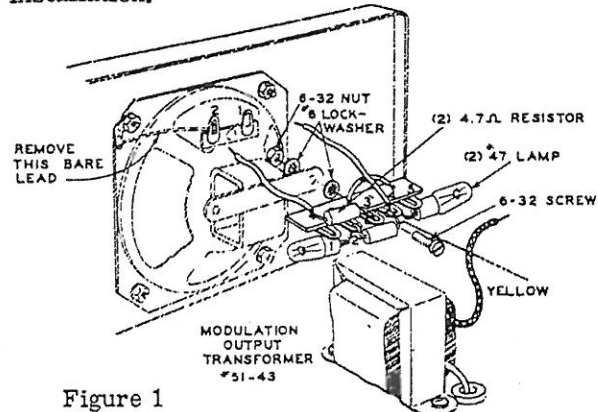


Figure 1

- () Connect one resistor from the bottom hole in terminal strip lug 1 to lug 3. Solder only the lead on lug 3.
- () Cut a 2-1/4" length of hookup wire and remove 1/4" of insulation from each end. Connect one end to the bottom hole in terminal lug 1. Solder both leads on this lug. Leave the other end free.
- () Connect a short length of wire from the bottom hole in terminal strip lug 3 to the bottom hole in lug 5. Be sure this wire is not touching lug 4. Solder one lead to each of these lugs.
- () Cut a 2-3/4" length of hookup wire and strip 1/4" of insulation from each end. Connect one end to terminal strip lug 4. Do not solder yet. Leave the other end free.
- () Solder the metal base of a #47 lamp bulb to terminal strip lug 1, as shown.
- () In a similar manner, solder the remaining bulb to lug 5.
- () Connect the remaining resistor from lug 2 to lug 4, as follows. Pass the resistor lead through lug 2 until the resistor body is in the position shown in the illustration. Next, bend the lead over until it touches the solder tip on the end of the #47 bulb soldered to lug 1. Solder the lead to this solder tip, and

clip off the excess resistor lead. Repeat this operation with the other lead of the resistor, lug 4, and the other #47 lamp bulb. Now solder the two leads on lug 4 on the terminal strip.

- () Now mount the terminal strip component assembly on the speaker frame as shown in Figure 1. Tighten securely, to assure a good ground connection.
- () Connect the yellow output transformer lead to lug 2 on the terminal strip. Solder both leads on lug 2.
- () Connect the free end of the lead attached to terminal strip lug 1 to speaker lug 2. Solder.
- () Connect the free end of the lead attached to terminal strip lug 4 to speaker lug 1. Solder the wire to lug 1.

This completes the installation of the squelch unit.

ADJUSTMENT AND OPERATION

If the receiver section of your transceiver was properly adjusted and operating normally before installation of the squelch unit, no readjustment should be required. To check the squelch operation, turn the unit on, with the antenna disconnected. Set the VOLUME control to about 1/4 of its travel and wait for the set to warm up. After warmup, a low hiss should be heard. Now slowly advance the VOLUME control setting toward maximum volume, and listen for a "null" or quiet spot as the control is advanced. This null should occur at approximately 1/2 travel of the VOLUME control. If this is not

the case, readjust the Regeneration control slightly until this is achieved. (If more than a slight adjustment is made, the detector coil will probably require readjustment as outlined below.

Connect the antenna and tune in a station of known operating frequency. Refer to Figure 2 and set the TUNING knob to the frequency of the station used for this adjustment. Slowly rotate the detector coil (see the manual for the location of this coil) until the station is tuned in properly. This should require only a slight readjustment of the detector coil.

Tune to a spot on the band where no signal is present, and set the VOLUME control to the null point previously described. Now, when a signal is present, the unit should respond much as before, but with somewhat reduced volume. The VOLUME control can be set to the desired level during communication periods, if desired, and then reset to the null condition for standby operation.

The cabinet may now be reinstalled, and the unit put back into service.

In the event you install this squelch in your unit and then at some later date find it necessary to write to us concerning your kit, please refer to it as a model "CB-1A."

CIRCUIT DESCRIPTION

This circuit operates as a bridge, consisting of two resistors and two lamps. The lamp resistance varies with signal level. At a certain hiss level the bridge will be balanced, and no sound will be heard. A signal will reduce the hiss, unbalance the bridge and thus let the sound signal through to the speaker.

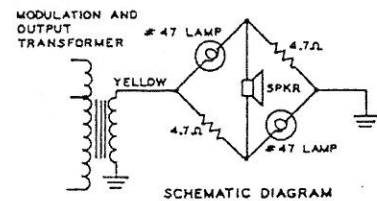
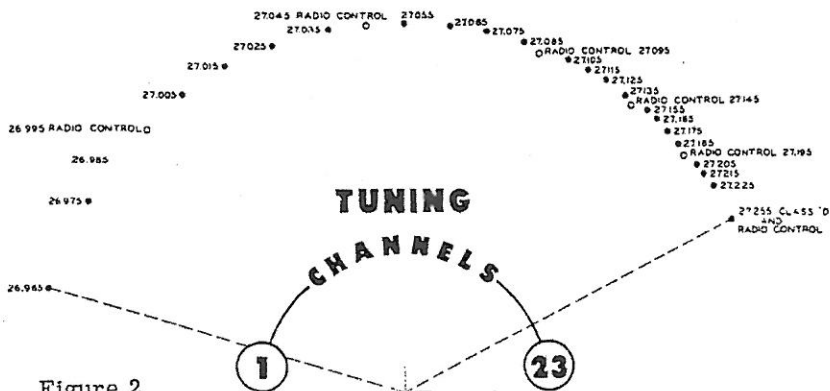


Figure 2