

### 7 - 2 - 2 CALIBRATION OF THE MARKER

1. Set the MODE Switch in the CW position and BAND switch in the 10MHz position, then turn ON the POWER switch.
2. The FREQUENCY DISPLAY will show "10.100.0". Turn the TUNING CONTROL knob to tune to WWV (or other standard frequency station) on 10.000MHz, and a 800Hz beat tone will be heard. Set the TUNING RATE switch in 10Hz steps for fine tuning.
3. Set the MARKER Switch on the top cover in the "100K" or "25K" and adjust the MARKER CALIBRATION CONTROL on the top cover, so that the two tones are of the same pitch (in zero beat).

### 7 - 2 - 3 CALIBRATION OF THE TRANSCEIVER

1. Set the MODE switch in the CW position and the TUNING RATE switch in 100Hz position. Tune to the lower band edge of the band you want to calibrate, as an example, "21.000.0".
2. Ground the KEY jack on the rear panel so that the CW sidetone becomes audible. (Don't transmit.)
3. Set the MARKER switch in the "100K" or "25K", and adjust the FREQUENCY SET CONTROL of the set so that the two tones are of the same pitch (in zero beat).
4. The frequency calibration is sufficient on a frequency on the same band, but it is required for each band.

## 7 - 3 FM UNIT IC-EX242

This unit has a 9.0115MHz FM generator, 2nd IF amplifier, and FM detector circuits that will upgrade the IC-740 to a complete all-mode transceiver. The unit provides a clear, powerful FM signal, and interference-free steady reception for 29MHz FM and/or a VHF/UHF transverter.

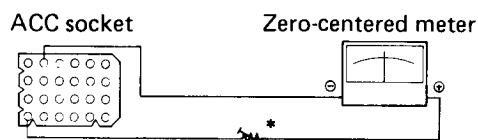
### 7 - 3 - 1 ASSEMBLY PROCEDURE

1. Install this unit into the position shown in the photo on page 6 - 1, using the attached screws.
2. Unplug P25 (2 pins with a coaxial cable) which is plugged into J16 of the IF unit, and then plug it into J4 to this unit.
3. Plug P26 (3 pins with a shielded wire and red wire) from the IF unit, into J1 of this unit.
4. Plug P28 (7 pins with white, gray, yellow, purple, red, black, and brown wires) from the front panel, into J2 of this unit.
5. Plug P29 (3 pins with brown, blue and yellow wires) from the front panel, into J3 of this unit.
6. Plug P1 (2 pins with a coaxial cable) of this unit, into, J16 of the IF unit.

7. Plug P2 (3 pins with a coaxial cable and green wire) of this unit into J12 of the IF unit.
8. Plug P3 (2 pins with a shielded wire) of this unit, into J25 of the MAIN unit.
9. Replace the speaker cord connector, and top and bottom covers.
10. No adjustment is required, and the unit provides a complete FM operation.

### 7 - 3 - 2 OPERATION

Refer to page 3 - 8 for the FM operations. When you would like to use a discriminator-meter, connect a zero-centered meter ( $\pm 50\mu A$  -  $100\mu A$ ) across Pin 1 and Pin 8 (ground) of the ACCESSORY socket on the rear panel of the set.



\* Insert a trimmer resistor if the meter swings too much.

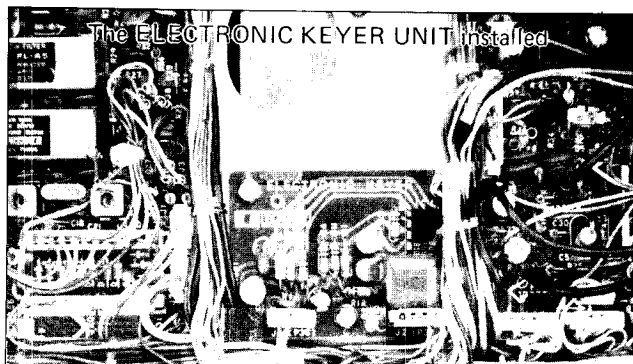
## 7 - 4 ELECTRONIC KEYSER UNIT IC-EX243

This unit provides automatic keying function with an iambic paddle. This unit is built with a single CMOS IC. Features designed into this IC include contact debouncing, RF immunity, self-completing character generation, dot memory and weight control.

The keying speed can be changed between 5 - 45 wpm by the VOX GAIN/KEYER SPEED CONTROL on the front panel of the set.

### 7 - 4 - 1 ASSEMBLY PROCEDURE

1. Install this unit into the position shown in the photo on page 6 - 1 using the attached screws.
2. Plug P36 (3 pins) from the front panel, into J1 of this unit.
3. Plug P37 (4 pins) from the front panel, into J2 of this unit.



4. Connect an iambic paddle with a 3-p 1/4 inch key plug as shown in the following illustration.