

40 METER BAND

- ☐ Set the VFO dial to the known frequency.
- ☐ Adjust L-2 for the low end of the band.
- ☐ Set the VFO dial to the known frequency.
- ☐ Adjust C-3 for the high end of the band.
- ☐ Repeat the above steps to obtain the desired accuracy.

6 METER BAND

- ☐ Set the VFO dial to the known frequency.
- ☐ Adjust L-1 for the low end of the band.
- ☐ Set the VFO dial to the known frequency.
- ☐ Adjust C-2 for the high end of the band.
- ☐ Repeat the above steps to obtain the desired accuracy.

NEUTRALIZATION

For all practical purposes, sufficiently accurate neutralization of the final is obtained when the two orange wires are positioned as described and shown in the assembly instructions. If, however, a more accurate adjustment is desired, use the following procedure.

- ☐ Connect a dummy load to the transmitter output.
- ☐ Using the procedure described under "TUNING", tune up the transmitter on the 20-meter band.
- ☐ Turn the FUNCTION switch to STAND BY.
- ☐ Remove octal plug P-1, and the dummy load—IN THAT ORDER.
- ☐ Turn the OUTPUT METER ADJUST maximum clockwise for greatest sensitivity.
- ☐ Place the FUNCTION switch in VFO SPOT position.
- ☐ Rock the FINAL TUNE control for an indication on the meter, while adjusting the position of the orange wires in respect to the plates of both 6146 tubes for a minimum indication of the meter.

FOR THIS PURPOSE, USE AN INSULATED TOOL TO AVOID ANY SHOCK HAZARD.

Usually, the best adjustment will be arrived at when the wires ~~are~~ ^{curve horizontally} ~~between the tubes~~ and then curve back horizontally around the glass portion of the tube. The wire should not touch the glass, and should be about the center of the plate of each tube for greatest coupling effect. This one adjustment is sufficient for all bands.

CONTROL FUNCTIONS

METER: Connects the various test points to the meter for tuning of the transmitter.

AUDIO GAIN: Audio volume control. Controls the amount of carrier modulation in AM operation.

BUFFER TUNE: Matches the output impedance of V-3 to the input impedance of V-7 and V-8.

BAND: Selects the band of frequencies on which you wish to operate.

OSCILLATOR TUNE: Used to resonate the output tank circuit of the oscillator.

XTAL-VFO

XTAL: Use this position when operating with the crystal oscillator.
80: Use this position when operating in the 80 meter band while using the VFO.

40-10: Use this position when operating in either the 40, 20, 15 or 10 meter bands while using the VFO.

6: Use this position when operating in the 6 meter band while using the VFO.

FUNCTION

OFF: Turns power off and on.

VFO SPOT: Used to zero beat the VFO of your transmitter with a station on the air. This allows you to set the frequency of the VFO for a station you wish to contact. Also can be used to find a quiet place on the band by looking for a spot without a zero beat.

AM: Use this position for voice transmission.

STAND-BY: Turn to this position when receiving a reply to a transmission.

CW: Use this position for CW operation with a telegraph key.

FINAL TUNE: Resonates the output Pi network to the operating frequency.

LOAD: Matches the impedance of the antenna to the output of V-7 and V-8. Will match antennas ranging from 40 to 600 ohms.

OUTPUT METER ADJUST: Varies the sensitivity of the meter when the FUNCTION switch is in the RELATIVE OUTPUT position.

24) AROUND GLASS PORTION OF TUBES
AT THE JUNCTION OF THE METAL TUBES
ABOUT 1/2" AWAY FROM THE TUBES.