

- (✓) Set the MODE switch at the TUNE position and slowly turn the MIC/CW LEVEL control in a clockwise direction until there is an indication of RF output on the meter or oscilloscope.
- (✓) Adjust the DRIVER PRESELECTOR control for maximum RF output.
- (✓) Adjust the FINAL tune (round knob) control for maximum RF output.
- (✓) Adjust the MIC/CW LEVEL control for an RF output of not more than S-3.
- (✓) Adjust transformer T1 for maximum RF output. It should not be necessary to adjust this transformer more than one complete turn.
- (✓) Again reduce the MIC/CW LEVEL for a low meter indication and again adjust Transformer T1 for maximum output.
- (✓) Turn the MIC/CW LEVEL control and DRIVER PRESELECTOR control to obtain maximum RF output on the meter or oscilloscope.
- (✓) Place the MODE switch at LSB. Leave the MIC/CW LEVEL control at its present setting.

NOTE: The long step following accomplishes the preliminary neutralizing adjustment. Read this step thoroughly and visualize what the step requires. When you perform the adjustments, have the Transceiver at full power output for the minimum time necessary. Then place the MODE switch at LSB and let the final stage tubes cool for at least 30 seconds before turning the Transceiver on again.

- (✓) Set the METER switch to the PLATE position.
- (✓) Turn the MODE switch to TUNE.
- (✓) Adjust the FINAL tune control for minimum plate current. Set the METER switch to REL PWR or observe the output on a monitor scope. Then adjust the FINAL tune control for maximum meter indication and note the position of the control. If maximum relative power and minimum plate current do not occur at the same point of tuning, turn the neutralizing capacitor a small amount. Check the position of the FINAL tune control at minimum plate current and also at the maximum relative power indication. The neutralizing capacitor should be adjusted a small amount at a time until minimum plate current and maximum relative power occur at the same point of tuning the FINAL tune control.

- (✓) Turn the MIC/CW LEVEL control fully counterclockwise.
- (✓) Turn the MODE switch to LSB, push the microphone button, and adjust the CARRIER NULL control for minimum RF output. Note that the smaller end of the nut starter fits the shaft of this control.
- (✓) Adjust the CARRIER NULL capacitor for minimum RF output.
- (✓) Turn the MODE switch to USB and, with the microphone button pressed in, adjust the CARRIER NULL control for minimum RF output.
- (✓) Adjust the CARRIER NULL capacitor for minimum RF output.
- (✓) Repeat the adjustments of the CARRIER NULL control, and the CARRIER NULL capacitor until the RF output or null reading is about the same on both the LSB and USB positions of the MODE switch. A receiver with an S Meter can be used for the carrier null indication, and it is usually more sensitive for this purpose.

NOTE: An 11 M $\Omega$  input voltmeter with an RF probe can also be used at this time, if one is available, to obtain additional accuracy in the carrier null adjustments. To null the carrier in this manner, measure the RF voltage with the RF probe at lug 1 (the center conductor) of the ANTENNA connector. Then adjust the CARRIER NULL control and CARRIER NULL capacitor for the lowest RF voltage, which should be 1/4 volt or less.

- (✓) Turn the MODE switch to TUNE and set the METER switch at the REL PWR position.
- (✓) Adjust the DRIVER PRESELECTOR and the FINAL TUNE and LOAD controls for maximum output. Then adjust the MIC/CW LEVEL control for a reading between 3 and 9 on the panel meter.
- (✓) Adjust heterodyne oscillator coil 3.5 for maximum output, with the tuning on the "slow" side of the peak.
- (✓) Repeat the two preceding steps for each position of the BAND switch, except adjust the HET OSC coil that has the same number as the BAND switch position.