

Battery Operated Vibrator type.

CALIBRATION AND ALIGNMENT

ALIGNING EQUIPMENT: For proper alignment, an output meter and an accurately calibrated oscillator with a tuning range from 456 KC. to 16 MC. are required.

Connect the output meter across the voice coil terminals.

ALIGNING THE I.F. AMPLIFIER: Turn the volume control to maximum volume position and keep it in this position throughout the entire alignment procedure. Turn the range switch to the broadcast position (fully clockwise).

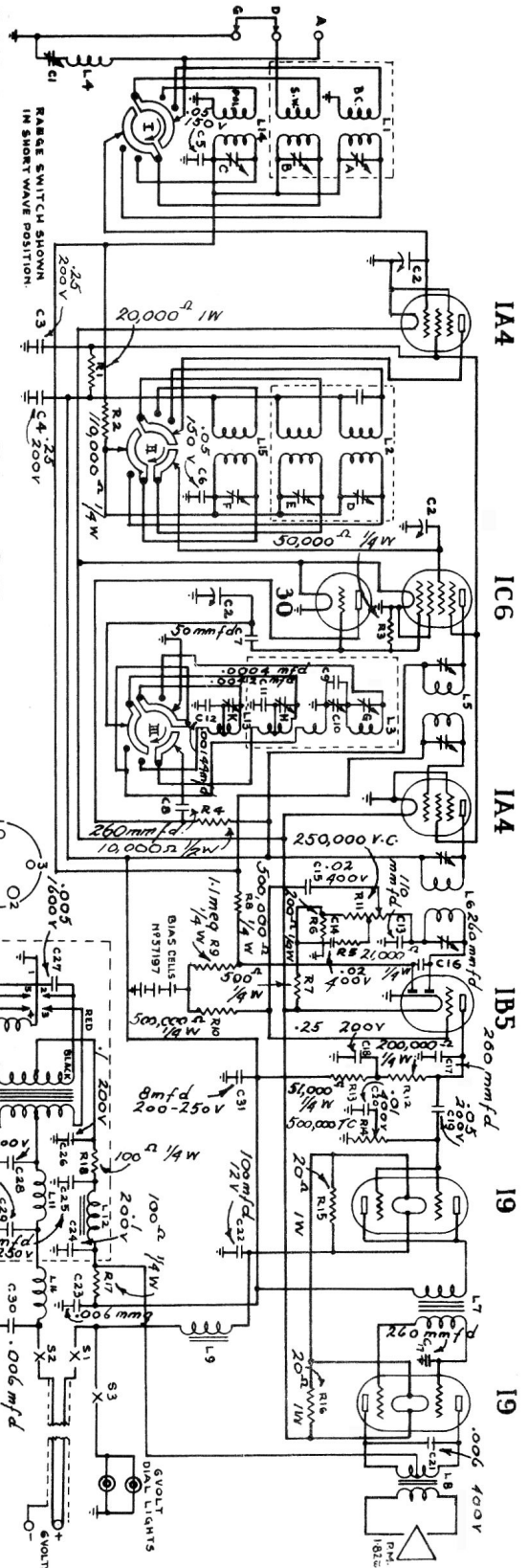
Connect the test oscillator output leads to the 106 control grid and chassis with a .1 mfd. condenser in series with the oscillator output. Set the oscillator to exactly 456 KC. Set the receiver dial at any point where it has no tuning effect on the oscillator signal.

Adjust the four I.F. trimmers for maximum output, beginning with the second stage and then repeat the operation.

WAVE-TRAP ADJUSTMENT: The wave-trap adjusting trimmer, C1, is located on the back of the chassis. Leave the test oscillator at 456 KC. Connect the oscillator output to the A and G terminals with a 400 ohm resistor in series with the A terminal and oscillator output. Then adjust the wave-trap trimmer, C1, for MINIMUM output. If some particular station with a frequency near 456 KC. causes code interference, it may be desirable to adjust the wave-trap on the actual frequency of the interfering station.

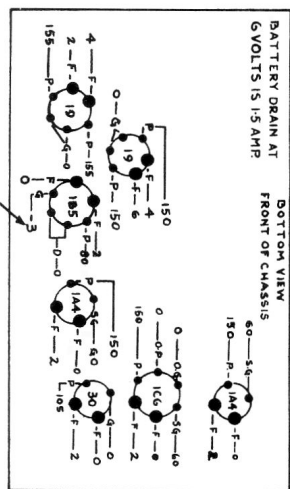
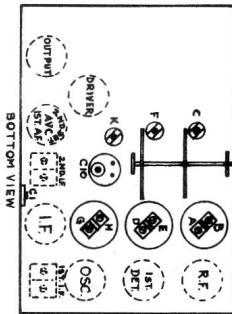
BROADCAST BAND CALIBRATION AND ALIGNMENT: With the gang condenser in full mesh, the dial pointer should be on the white horizontal line below 530 KC. on the dial scale. Leave the range switch in the extreme clockwise position, and leave the test oscillator connected to the A and G terminals of the receiver through a 400 ohm resistor.

Adjust the test oscillator to exactly 1500 KC. and turn the receiver dial pointer to 1500 KC. on the tuning dial. To calibrate the dial, adjust trimmer G for maximum output. Carefully tune the receiver to the signal and adjust trimmers A and D for maximum output.



IF 456 KC.

CHASSIS MODEL R-195 (Receiver Model 1955)



CANNOT BE MEASURED WITH AN ORDINARY VOLTMETER. THIS VOLTAGE IS OBTAINED FROM THE BIAS CELLS.

Adjust the test oscillator to 600 KC. and tune the receiver to the signal. Adjust trimmer C10 for maximum output. Then try to increase the output meter reading by detuning C10 slightly and retuning the receiver dial. If the output goes down, detune the trimmer in the opposite direction. Continue detuning the trimmer and retuning the receiver dial until maximum output meter deflection is secured. This operation is commonly known as "rocking" and when performed as described will give maximum selectivity and sensitivity even though the dial may be slightly off calibration at 600 KC.

BAND NO. 2 CALIBRATION AND ALIGNMENT: Turn the range switch to the center position.

Adjust the test oscillator to exactly 5.0 MC. and turn the receiver dial pointer to exactly 5.0 MC. on the tuning dial. To calibrate the dial, adjust trimmer K for maximum output. If two peaks are found, the proper one is that with the trimmer screw farthest OUT.

Carefully tune the receiver to the signal and adjust trimmers C and F for maximum output. Then try to increase the output by detuning F slightly and retuning the receiver dial. Continue detuning F and retuning the dial until the output meter deflection is a maximum. Then readjust C for maximum output.

BAND NO. 3 CALIBRATION AND ALIGNMENT: Turn the range switch to the extreme counter-clockwise position. Be sure the D and G terminals on the antenna terminal strip are connected together.

Set the test oscillator to 16 MC. and turn the receiver dial pointer to exactly 16 MC. on the tuning dial.

To calibrate the dial, adjust trimmer H for maximum output. Check to see that it has been adjusted to the proper peak by tuning the receiver to approximately 16.1 MC. A repeat signal should be heard at this point. If none is present, even with greatly increased oscillator output, retune the receiver to 16 MC. and adjust trimmer H to the proper peak with the trimmer screw farther OUT.

Carefully tune the receiver to the signal and adjust trimmers B and E to a peak. Then try to increase the output by detuning E slightly and retuning the dial until a maximum output meter deflection is secured. Then readjust B for maximum output. Check the adjustment by tuning the receiver to the image at about 15.1 MC. The image should be much weaker than the 16 MC. signal. If the signal at 15.1 MC. dial setting is equal to or stronger than the 16 MC. signal, trimmer E is not set to the proper peak. Turn the trimmer in a turn or so, then readjust as above.