



**VOLTAGE ANALYSIS**

Voltage at 35Z5GT cathode—115 volts.

Tube	Plate	Screen	Cathode	Fil.
6SS7 (r-f)	50	57	0	6.0
12SA7	87	89	0	12.0
6SS7	88	89	0	6.0
12SQ7	30	—	0	12.0
50L6GT	82	89	5.3	50.0

Readings should be taken with a 1000 ohms-per-volt meter. Voltages listed below are from point indicated to B minus (line switch) with the volume control turned on full and no signal. Line voltage for these readings was 117.5 volts, 60 cycles, a.c. All readings except heaters and cathodes were taken on 250 volt scale. Measurements made with 117.5 volts d.c. will be lower than those given below.

**I-f and Wave-trap Alignment**

Swing the variable condenser to the minimum capacity position. Feed 455 kc to the grid of the 12SA7 tube through a .01 mf condenser and adjust the four i-f trimmers for maximum response.

Feed 455 kc to the external antenna lead and adjust the wave-trap for minimum response.

Note: The grid of the 12SA7 tube is the No. 8 pin.

**R-f Alignment**

Set the dial pointer at 140. Set the signal generator at 1400 kc and feed its output into a loop of wire about 12 inches in diameter. Hold this radiating loop about 12 inches from and parallel to the receiver loop antenna. Advance the output of the signal generator until deflection is obtained on the output meter. Adjust first the oscillator trimmer (on front section of variable condenser) then the antenna trimmer (on rear section of variable condenser) for maximum response.

If the loop antenna has been replaced it may be necessary to adjust the loop inductance as follows. Align at 140. Set the pointer at 60 and feed 600 kc to the antenna lead. A portion of the outside turn of the loop may be swung to either side of the center to give maximum response. Realign at 140.

**Location of Coils and Trimmer Adjustments**

The first i-f transformer is mounted on top of the chassis deck next to the loop antenna. The trimmers are accessible through holes in the top of the can.

The second i-f transformer is mounted on top of the chassis between the 50L6 tube and the speaker. The trimmers are accessible through holes in the top of the can.

The trimmers for the antenna and oscillator coils are located on the variable condenser. The trimmer on the front section is for the oscillator coil.

The oscillator coil is located underneath the chassis. The loop antenna acts as the antenna coil.

