ALIGNING THE I. F. CIRCUIT

(1) Connect an output meter across the voice coil terminals of the speaker.

(2) Turn the volume control to maximum and leave it at this setting throughout the whole alignment procedure. Ground the antenna lead to the chassis.

(3) Adjust the test oscillator to exactly 456 KC and connect its output between the 1C7G control grid cap and the chassis. Use an .05 mfd. condenser in series with the lead if there is not already one in the oscillator itself.

(4) Adjust the four I.F. trimmer condensers on top of the cans, beginning with the second stage which feeds the 1H6G for maximum output as indicated on the output meter.

(5) Repeat section 4 as the adjustment of any one trimmer will have some effect on the remaining ones.

DIAL CALIBRATION

If the receiver should require calibration, proceed as follows:

(1) Disconnect the antenna lead from the ground and connect it to the output of the test oscillator through a dummy antenna. A 200 or 250 mmfd. condenser will serve the purpose.

(2) Turn the gang condenser to full mesh and check to see that the pointer lines up with the horizontal line **below** 530 KC on the scale. If it does not, shift the pointer.

(3) Adjust the test oscillator to 1400 KC and connect it to the set through the dummy antenna.

(4) Turn the knob till the pointer indicates 1400 KC on the scale and adjust the trimmers on the gang for maximum output using the weakest input signal that will give a satisfactory reading on the output meter.

R. F. ALIGNMENT

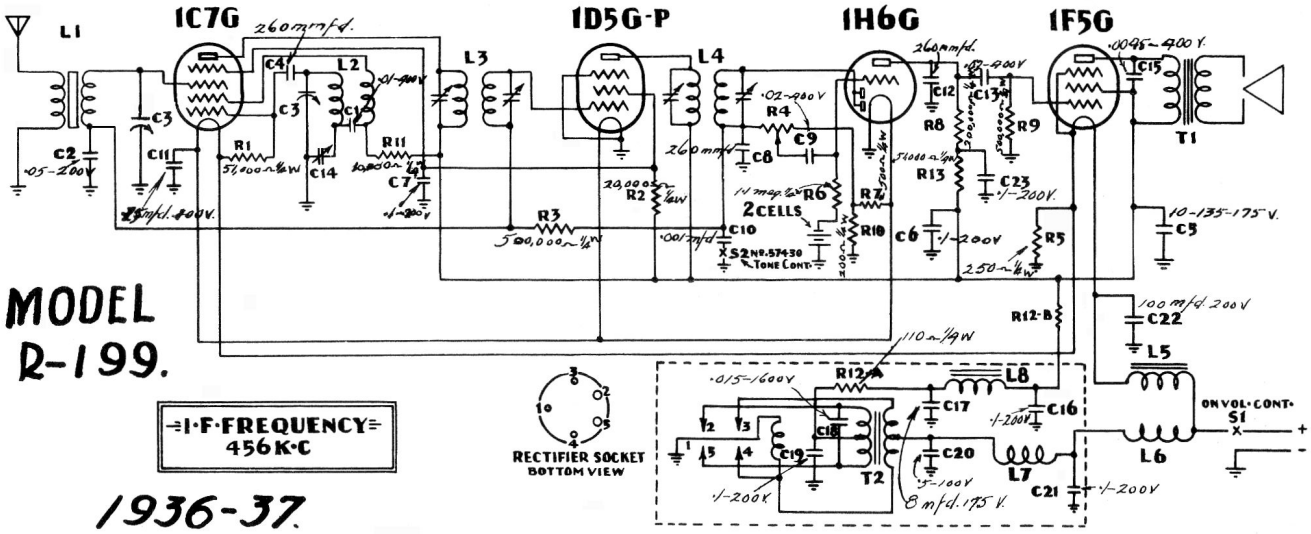
(1) Set the test oscillator at 1720 KC and apply it to the set as above.

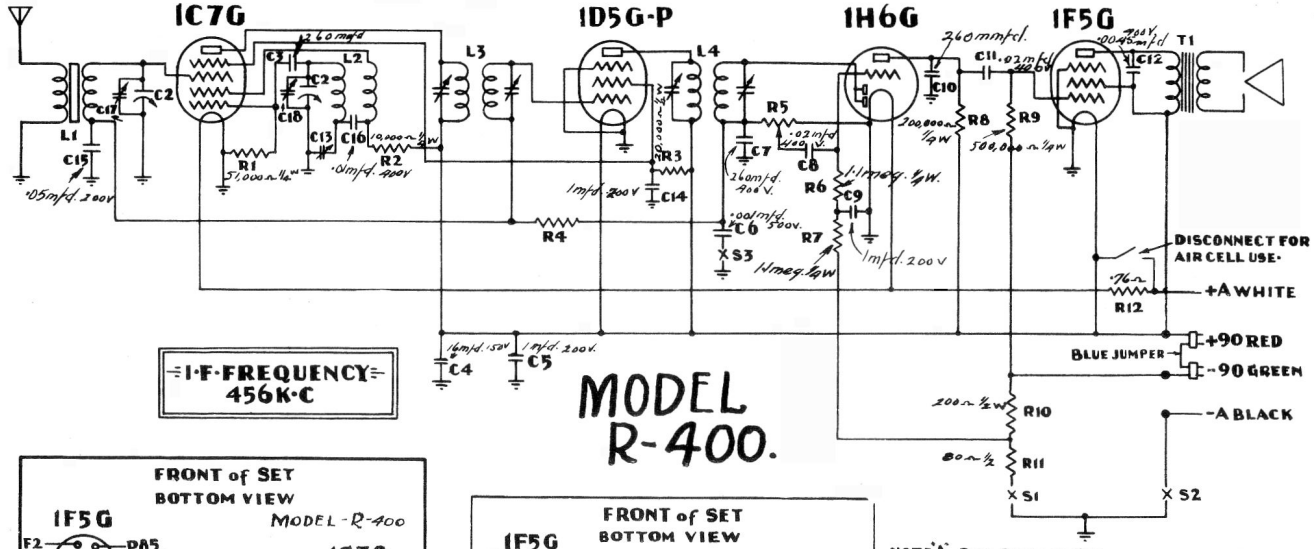
(2) With the gang condenser set in the minimum capacity position, adjust trimmer, on back section of gang, for maximum output using the weakest input signal that will give a satisfactory reading on the output meter.

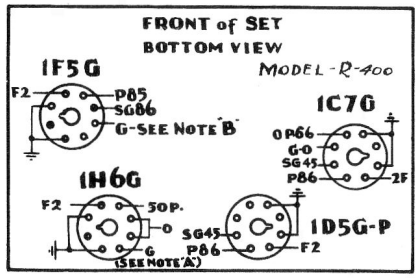
(3) Adjust the receiver and test oscillator in tune at 1400 KC and adjust trimmer on front section of gang for maximum output, keeping the input signal from the test oscillator as low as possible as before. Do not change adjustment of trimmer on back section of gang. (C-13 on Model R-400)

(4) Adjust the receiver and test oscillator in tune at 600 KC and align C-14 for maximum output, rocking the tuning condenser back and forth slightly while aligning.

(5) If an appreciable change in C-14 was necessary operation 3 should be repeated. (C-13 on Model 400)

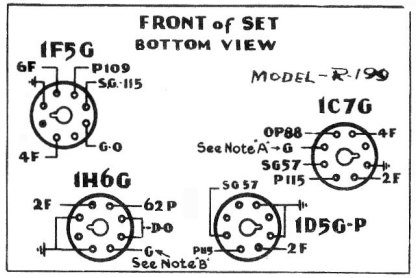






ALL VOLTAGES MEASURED FROM TUBE SOCKETS TO CHASSIS WITH METER OF AT LEAST 1000 OHMS PER VOLT, EXCEPT AS OTHERWISE NOTED.

"B" BATTERY DRAIN 12 MA.



Note:-BATTERY DRAIN AT 6 VOLTS IS .86 AMPS.

NOTE A - BIAS OBTAINED THROUGH A-V-C CIRCUIT.

NOTE B - BIAS (-2 V.) OBTAINED FROM BIAS CELLS NOT MEASURABLE.

ALL VOLTAGES MEASURED FROM TUBE SOCKETS TO CHASSIS WITH METER OF AT LEAST 1000 OHMS PER VOLT, EXCEPT AS OTHERWISE NOTED.

STEWART-WARNER-42

DATA SHEET