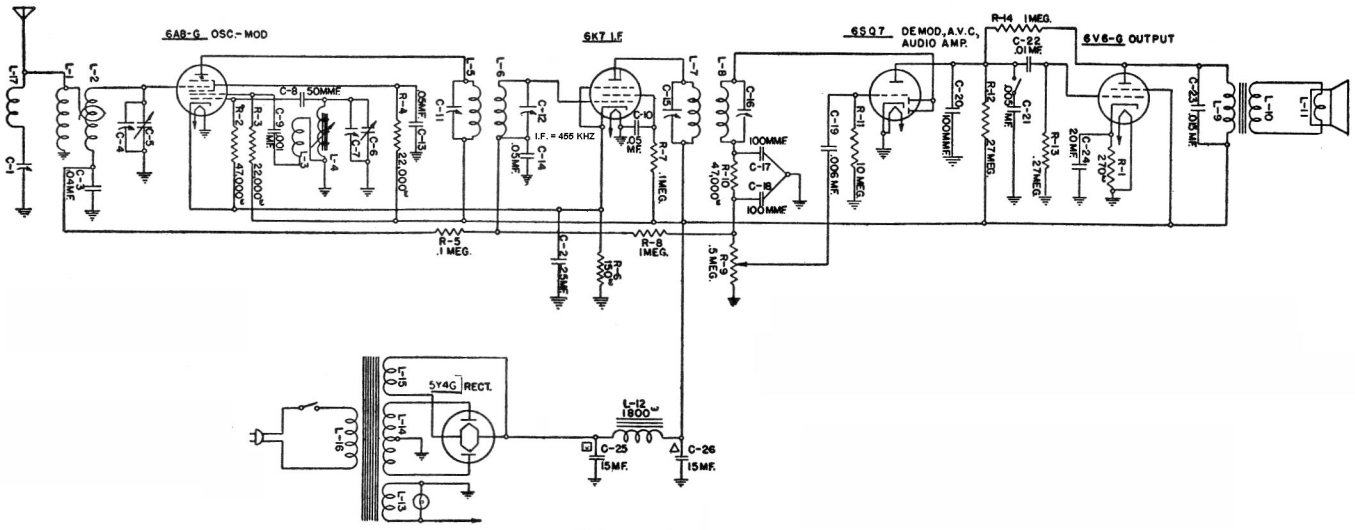
Stromberg-Carlson Model 951 Voltages & Schematic

NORMAL VOLTAGE READINGS

Use a good high resistance voltmeter having a resistance of at least 1000 ohms per volt.
Take all D. C. voltage readings on the 500 volt scale except where an asterisk appears.
Take all readings with chassis operating and tuned to 1000 Kc.—no signal.
Use a line voltage of 120 volts or make allowance for the variation.
Read from indicated socket terminals to chassis base.
See Location Chart on Page 3 for position of terminals.
A. C. Voltages are indicated by italics.

Tube	*Circuit*	*Cap*	*Terminals of Sockets* 1	2	3	4	5	6	7	8	*Heater Voltages Between Heater Terminals* *Socket Terminal Numbers*	*Volts A. C.*
6A8G	Mod.—Osc.	0	0	0	+175	+82	—	+100	*6.3*	+2*	2-7	*6.3*
6K7	I. F. Amp.	0	0	0	+175	+65	+2*	—	*6.3*	+2*	2-7	*6.3*
6SQ7	Dem.—A. V. C. —Audio	—	0	0	0	0	0	+75	*6.3*	0	7-8	*6.3*
6V6G	Output	—	0	0	+160	+175	0	+75	*6.3*	+8*	2-7	*6.3*
5Y4G	Rectifier	—	0	0	*255*	—	*255*	—	+265	+265	7-8	*5*

***Read on lowest possible scale of voltmeter.**



Schematic Circuit

Stromberg-Carlson Model 951 Alignment & Chassis Layout

ALIGNING INFORMATION

NEVER REALIGN UNLESS ABSOLUTELY NECESSARY.

Use a good modulated signal generator (test oscillator) with variable output voltage and a sensitive output meter across the voice coil of the speaker.

Always align using the smallest possible input from the signal generator (except when wave trap adjustments are made). A strong signal makes adjustments inaccurate.

Always have receiver volume control "full on".

Never align with tone control in bass position.

See Location Chart above for location of all the aligning adjustment screws.

Aligning Procedure (follow this order exactly)

I. Dial Pointer Adjustment.

With the plates of the gang tuning capacitor fully engaged, set the dial pointer directly on the upper black line at the low frequency end of the dial.

II. Intermediate Frequency Adjustments.

1. Tune set to extreme low frequency position. (.54 megacycles on dial scale).
2. Connect the ground terminal of the signal generator to the ground binding post of the receiver.
3. Introduce a modulated signal of 455 kilocycles, using a 0.1 microfarad capacitor in series with the lead from the signal generator to the grid cap of the 6A8G tube. (Do not remove the grid clip from this tube.)
4. Adjust the I. F. Aligners for maximum output in the following order:

   a. Secondary of Second I. F. Transformer.
   b. Primary of Second I. F. Transformer.
   c. Secondary of First I. F. Transformer.
   d. Primary of first I. F. Transformer.

III. Wave Trap Adjustment.

1. Tune set to 1,000 kilocycles.
2. Leave the ground terminal of the signal generator connected to the ground binding post of the receiver.
3. Introduce a fairly strong modulated signal of 455 kilocycles to the antenna binding post using a 200 mmf. capacitor in series with the lead from the signal generator.
4. Adjust the wave trap aligner for **minimum** signal.

IV. Radio Frequency Adjustments.

(Leave the signal generator connected in the same way as for the wave trap alignment).

1. Set the signal generator's frequency and the receiver's tuning dial to 0.6 megacycles.
2. Adjust the iron core in the oscillator coil for maximum signal.
3. Set the signal generator's frequency and the receiver's tuning dial to 1.5 megacycles.
4. Adjust the two aligning capacitors on the variable capacitor for maximum signal.
5. Reset both the signal generator's frequency and the receiver's tuning dial to 0.6 megacycles and repeat operation 2.
6. Reset both the signal generator's frequency and the receiver's tuning dial to 1.5 megacycles and repeat operation 4.

NOTE. Operation 5 and 6 may be repeated as often as necessary to obtain maximum sensitivity.