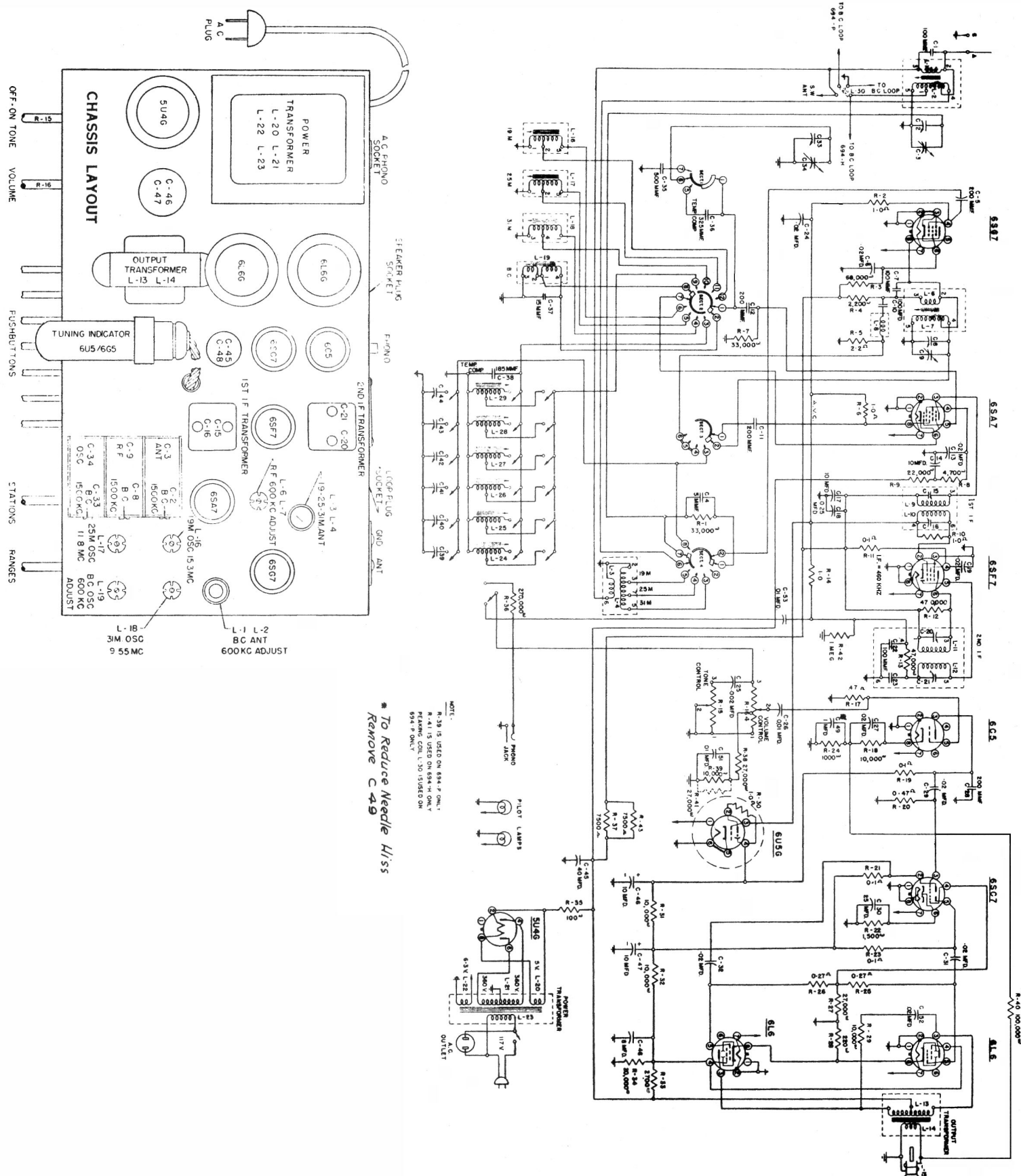
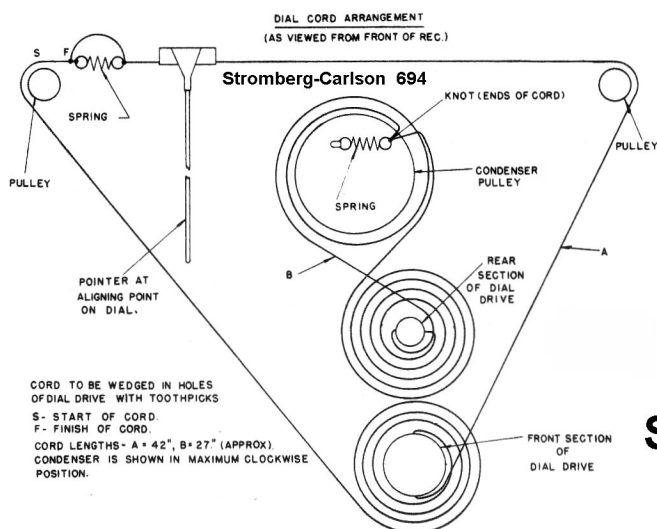


Stromberg-Carlson Model 694 Schematic & Chassis Layout



Stromberg-Carlson Dial Stringing & Voltage Reading Chart



NORMAL VOLTAGE READINGS—MODEL 694

Tube	Circuit	Socket Terminals							
		1	2	3	4	5	6	7	8
6SG7	R.F. Amplifier				.25		90	5.8	300
6SA7	Modulator-Oscillator			280	110	-.5		5.8	
6SF7	I.F. Amplifier Demodulator & AVC				70		280	5.8	
6C5	1st Audio Amplifier			120	210			5.8	5
6SC7	2nd Audio and Phase Inverter		140			150	2	5.8	
6L6G	Push-Pull Output			340	290		340	5.8	20
6L6G	Push-Pull Output			340	290			5.8	20
5U4G	Rectifier		360		325		325		360
6U5-6G5	Tuning Indicator	5.8	1		200				

Stromberg-Carlson Model 694 Alignment Chart

NORMAL VOLTAGE READINGS

Take all readings with the chassis operating and tuned to 1000 Kc—no signal.

Use a line voltage of 117 volts or make allowance for any variations.

Use a good high resistance voltmeter having a resistance of at least 1000 ohms per volt.

Read from the indicated terminals in inaccurate. Always turn the receiver volume control "Full on".
AC voltages are indicated by italics.

ALIGNING INFORMATION

Never Re-align Unless Absolutely Necessary

Use a good modulated signal generator (test oscillator with variable R.F. 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, as a strong signal makes adjustments inaccurate. Always turn the receiver volume control "Full on".

Be sure the Broadcast Loop is plugged into its socket when alignment of the Broadcast Band is made.

ALIGNING PROCEDURE (Follow this order exactly)

1. Dial Pointer Adjustment

With the plates of the gang condenser fully engaged, check to be sure the dial pointer is in a vertical position directly on the calibration mark located at the low frequency end of the dial scale. It appears as a small gold dot at the lower left hand corner of the dial opening. Adjust if necessary.

2. Intermediate Frequency Adjustments.

- 2.1 Set the range switch to "A" broadcast position.
- 2.2 Set the pointer to the extreme low frequency end of the dial.
- 2.3 Connect the ground terminal of the signal generator to the chassis ground terminal.
- 2.4 Introduce a modulated 460 kilocycle signal to the "signal" grid of the 6SA7 modulator tube (#8 terminal or C₈), using a .1 mfd. capacitor in series with the output lead from the signal generator.
- 2.5 Adjust the I.F. 460KC trimmers for maximum output in the following order:
 - A. Secondary of 2nd I.F. transformer C21
 - B. Primary of 2nd I.F. transformer C20
 - C. Secondary of 1st I.F. transformer C16
 - D. Primary of 1st I.F. transformer C15
 Repeat A, B, C, D for maximum results.

3. Radio Frequency Adjustments.

Broadcast Range

- 3.1 Set the range switch to broadcast "A" band.
- 3.2 Set the signal generator frequency and the receiver tuning dial to 1500 KC.
- 3.3 Connect a 200 mmfd. capacitor in series with the antenna lead from the signal generator to the "Ant." terminal on the set, replacing the .1 mfd. capacitor.
- 3.4 Adjust the "A" band oscillator trimmer C33 for maximum signal and correct calibration.
- 3.5 Adjust the "R.F." and "Ant." trimmers C₁ and C₂ for maximum output. "Rock" the gang to obtain maximum peak.
- 3.6 Tune the receiver dial and the signal generator to 600KC.
- 3.7 Adjust the iron core of the "BC" oscillator coil L19 for correct calibration at 600KC.
- 3.8 Adjust the iron cores of the "RF" and "Ant." coils L7 and L2 for maximum sensitivity. "Rock" the gang during adjustment.
- 3.9 Repeat 3.5 and 3.8 until further adjustment at either 1500KC or 600 KC makes no improvement in performance.

4. Shortwave Spreadband Ranges.

- 4.1 Set the range switch to "B" 31 meter band.
- 4.2 Set the signal generator frequency and the receiver tuning dial to 9.500 megacycles.
- 4.3 Connect a 400 ohm carbon resistor in series with the antenna lead from the signal generator to the "Ant." terminal on the set, replacing the 200 mmfd. capacitor.
- 4.4 Adjust L18 Osc. 31M: Band-Centering screw for maximum signal and correct calibration.
- 4.5 Check sensitivity at 9.350 and 9.850 megacycles.
- 4.6 Set the range switch to "C" 25 meter band and the signal generator frequency to 11.8 megacycles.
- 4.7 Adjust L17 Osc. 25M band-centering screw for maximum signal and correct calibration.
- 4.8 Check sensitivity at 11.500 and 12.100 megacycles.
- 4.9 Set the range switch to "D" 19 meter band and the signal generator frequency to 15.300 megacycles.
- 4.10 Adjust L16 Osc. 19M band-centering screw for maximum signal and correct calibration.
- 4.11 Check sensitivity at 14.800 and 15.650 megacycles.

Since the average service oscillator is not, as a rule, calibrated finely enough to be set to the above band "center-frequencies" it is always advisable to check the spreadband ranges on actual reception of shortwave stations of known frequency.