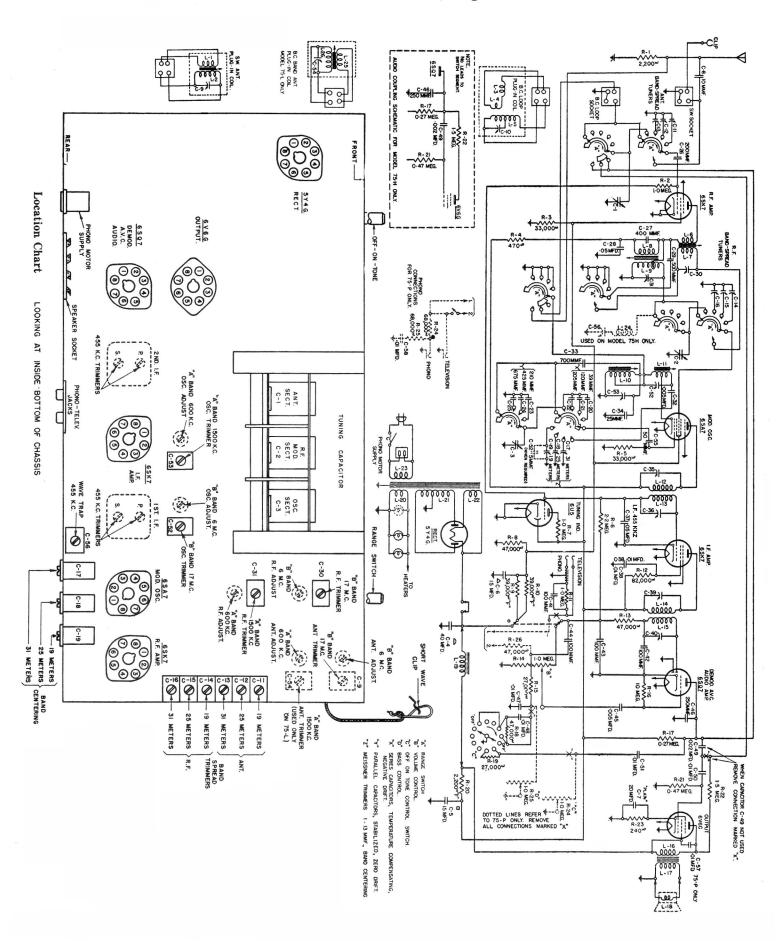
Stromberg-Carlson Model 75 Schematic & Chassis Layout



Stromberg-Carlson Models 75 & 95 Alignment, Pushbutton & Voltage Data

Take all readings with chassis operating and tuned manually to 1000 kc.—No signal. Use a line voltage of 120 volts or make allowance for the variations. Use a good high resistance voltmeter having a resistance of at least 1000 ohms per volt. operating and tuned

NORMAL VOLTAGE READINGS See location chart for position of terminals A.C. voltages are indicated by italics. Read from indicated terminals to chassis base Take all D.C. readings on the 500 volt scale except when an asterisk appears.

Model

Voltages

TERMINALS 1 2 3	1 2 3 4	TERMINALS OF SOCKETS 1 2 3 4 5	TERMINALS OF SOCKETS 1 2 3 4 5 6	TERMINALS OF SOCKETS 6 7
2 8 0 0	2 3 4 0 0 0 0	2 3 4 5 0 0 0 0		6
MINALS 3 0 +210	3 4 0 0 +210 +80	MINALS OF SOCKETS 3 4 5 0 0 +210 +80 0	MINALS OF SOCKETS 3 4 5 6 0 0 +80 +210 +80 0 0	
	OF SOCI	OF SOCKETS 4 5 0 +80 0		+80

*Read on lowest possible scale of voltmeter
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	+90 +95 +95 0 0
6 +95 0 0 0 0 0	
	+ 3855

*Read on lowest

Power Amplifier Chassis

Alignment Qo Pushbutton

Always align using the smallest possible input from the signal generator. A strong signal makes adjustments inaccurate. Use a good modulated signal generator (test oscillator with variable output voltage and a sensitive output meter across the voice coil of the speaker.)

ALIGNING PROCEDURE. (Follow this order exactly.) I. Dial pointer adjustment.

With the plates of the gang tuning capacitor fully engaged, check to be sure that the dial pointer is in a writcal position directly on the calibration marks located at the low frequency end of the dial scale. Adjust if necessary.

Intermediate frequency adjustments Set range switch to Standard Broadcast position.

Connect the ground terminal of the signal gen erator to the ground terminal of the chassis. Turn set to extreme low frequency end of dial

Introduce a modulated signal of 455 kilocycles to the grid of the 65A7 Modulator and Oscillator tube (terminal No. 8) using a 0.1 microfarad capacitor in series with the out-put lead of the signal generator.

Adjust the I. F. aligners for maximum output in the following order:

Secondary of second I. F. Transformer. Primary of second I. F. Transformer. Secondary of first I. F. Transformer. Primary of first I. F. Transformer.

Radio frequency adjustments.

Standard Broadcast Range (A Band).

Connect a 200 mmfd. capacitor in series with the antenna lead from the signal generator and the antenna binding post.

Set the range switch to "BR" position. Set the signal generator frequency and the receiver tuning dial to 600 kilocycles. Adjust the $600\ \mathrm{kc.}$ oscillator iron core for maximum signal.

Adjust the 600 kc. R. F. and antenna iron cores for maximum signal.

Adjust the 1500 kc. oscillatore 53 (23) R. F 31 (15) and antenna (10) aligning capacitors for maximum signal. Set the signal generator frequency and the receiver tuning dial to 1500 kilocycles.

Repeat operations 6 and 7.

Set the range switch to the short wave range position "S-W".

Adjust the 6.0 mc. oscillator iron core for maximum signal.

Adjust the 6.0 mc. R. F. and antenna iron cores for maximum signal. Note—"Rock" gang capacitor to obtain proper peak.

Set the signal generator frequency and the receiver tuning dial to 17 megacycles. (small red triangle).

Adjust the oscillator aligning capacitor c52/22 for maximum signal.

Adjust the R. F. 30(16) and antennac 9(6) aligning capacitors for maximum signal.

Note—Two peaks are usually obtained when adjusting the 1/I nc. aligning capacitor, using a strong signal signal. The peak highest in frequency is the correct one. This is important.

Adjust the R. F. and antenna aligning capacitors for maximum output. "Rock" the gang capacitor so that maximum peak is obtained.

Repeat operations 6, 7, 8 and 9. Repeat operations 3, 4 and 5.

Band Spread Ranges.

Before aligning the Band Spread ranges make certain that the short wave range is correctly aligned then do not make any changes on these aligners. Otherwise, the whole procedure will have to be repeated.

Set the range switch to the "31 meter" position. Set the signal generator frequency and the receiver tuning dial to 9.55 megacycles.

Short Wave Range (C Band).

Connect a 400 ohm carbon resistor in series with the antenna lead from the signal generator and the Fahnestock clip lead. Leave the antenna binding post free of all connections.

THOSE NOT IN BRACKETS ARE FOR MODEL 75 ONLY.

Models

 Adjust the band-centering aligning capacitor C 17 (30) for maximum signal. Adjust the R. F. and antenna cióar3 (19 a 88) band spread aligning capacitors.

It is important that the inner peak (serew tightenet) be used on the R. F. and antenna a ligning capacitors. It will also be found that adjustment will inflore the oscillator aligning expectors will inflore the oscillator that the ment, therefore it is very mortal that the gang capacitors are adjusted for true calibration and maximum signal.

Check for calibration and sensitivity at each end of the range. Sensitivity should not vary more than two to one from the centre point.

Set the range switch to the "25 meter" position. Set the signal generator frequency and the receiver tuning dial to 11.80 megacycles.

. Adjust the band-centering aligning capacitor c 18(31) for maximum signal.

Observe same precautions as in 3 and 4. Adjust the R. F. and antenna cistus (18 4 10 aligning capacitors for maximum signal.

c19(32) for maximum signal. Set the signal generator frequency and the receiver tuning dial to 15.30 megacycles. Set the range switch to the "19 meter" position

13. Adjust the R. F. and antenna aligning capacitors c/441(17 & 9) for maximum signal.

14. Observe the same precautions as in 3 and 4.

Wave Trap Adjustment (75-H only).

Set the signal generator frequency to 455 kc. and introduce a fairly strong modulated signal to the receiver.

INSTRUCTIONS FOR SETTING UP PUSH BUTTONS

Allow the set to run for about twenty minutes before setting up stations. IMPORTANT: The stations selected should be the local or favorite stations which give good reception at all

Turn the receiver "On".
 Push in the "Radio" button.
 Set the Range Switch as follows:

If an external antenna is used, set knob so arrow points to designation "BR" $^{\prime\prime}$

If the built-in loop antenna is used, set knob so arrow points to designation "Loop".

4. Turn volume control about three-quarters of the way on (in a clockwise direction):

5. Pull the six station push buttons off their levers.

6. Remove the call letters of the six selected stations from the call letter steets, which are in an envelone stapled to the cabinet. Insert the station call letters part way in the slots at the sides of the buttons. Next, insert a transparent tab in each slot in front of the station letters. Plen push both the transparent tabs and the call letters all the way into the slot. A pencil eraser may be helpful.

7. Loosen the set screw of the lever to be set up.

8. Push in the lever and manually tune in the desired station, observing the tuning indicator in order to bottain exact resonance.

IMPORTANT: For accurate set-up, be sure that the lever is pushed in, in the same manner and with the same amount of pressure as will be used when operating the push buttons.

Tighten the set screw. Be sure not to disturb the adjustment in any way while tightening the screw.

Check the accuracy of the adjustment by detuning the station and retuning with the button several times, pushing the button with an even pressure Readjust if necessary.

Set up the o'her five stations in the same