

Stromberg-Carlson Model 4151 Schematic & Specifications

SPECIFICATIONS

Voltage Rating 105-125 Volts AC-DC (.23 amps @ 117 V.)

Type of Circuit..... Superheterodyne

Tuning Range 540-1640 kc.

Intermediate Frequency 455 kc.

Speaker Voice Coil Impedance 3.5 ohms at 400 cycles

Power Output Maximum 1.2 watts, 10% distortion .7 watts

MODEL No. 4151

Number and Type of Tubes—5

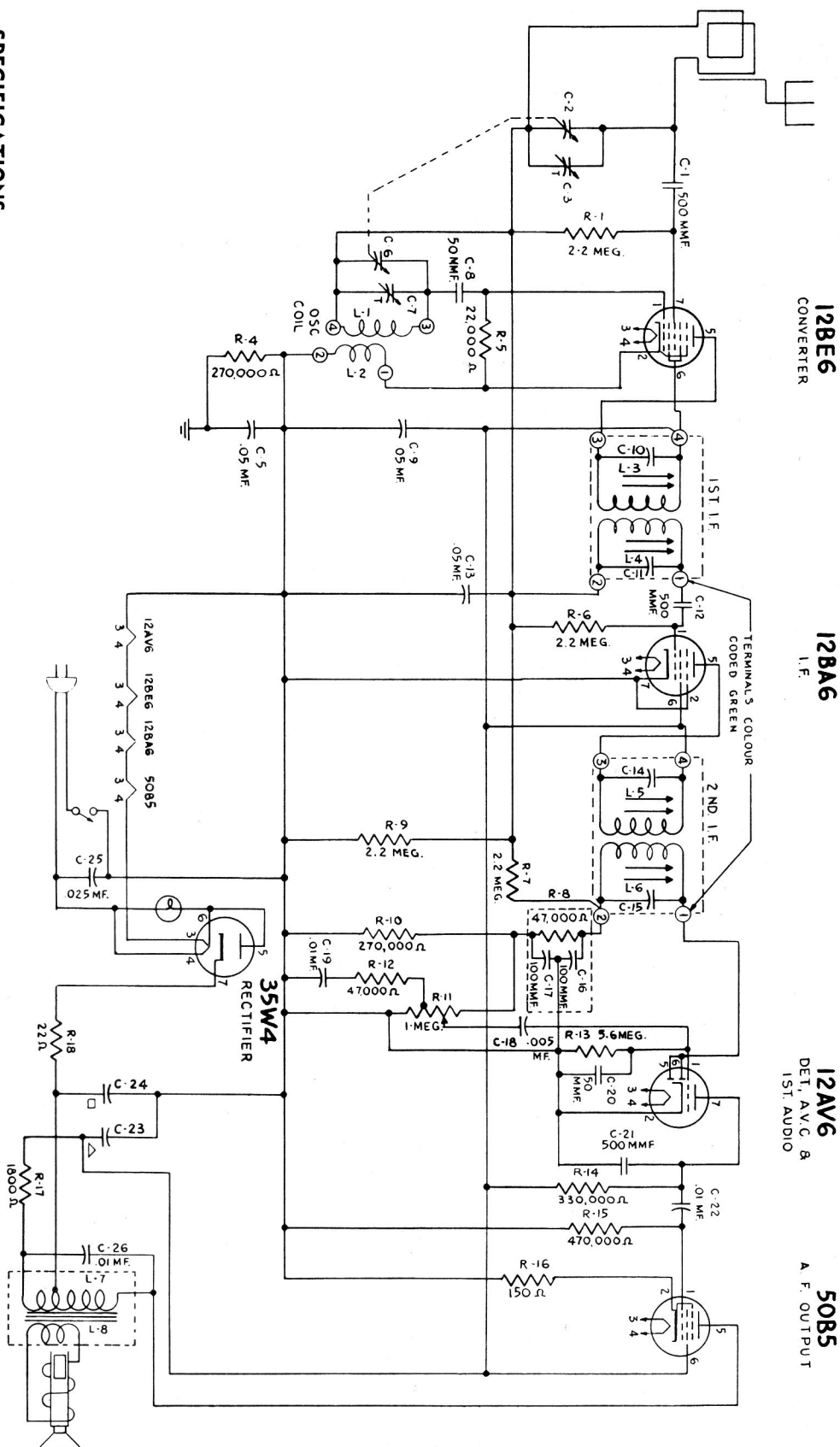
1—12BE6 Converter

1—12BA6 I.F. Amplifier

1—12AV6 Det., AVC, 1st Audio

1—50B5 Power Output

1—35W4 Rectifier



12BE6
CONVERTER

12BA6
I.F.

12AV6
DET., AVC, &
1ST. AUDIO

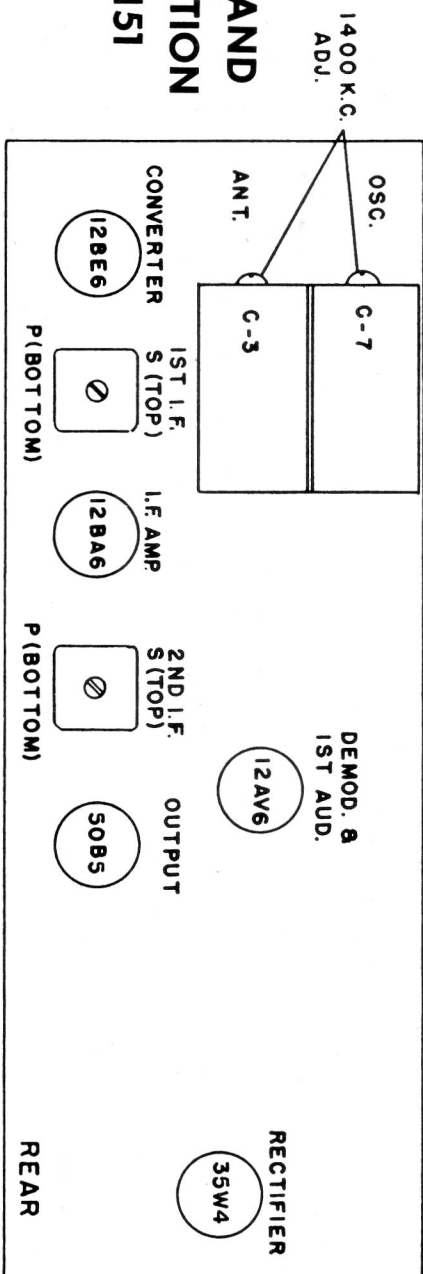
50B5
A. F. OUTPUT

Stromberg-Carlson Model 4151 AC / DC Receiver Alignment Data & Chassis Layout

ALIGNMENT PROCEDURE 4151

Setting Band and Pointer	Generator Setting	Input and Dummy	Connections Meter	Trimmer Adjustments and Notes
I.F. ALIGNMENT				
Lower end of band.	455 Kc.	Connect the signal generator ground-lead to the B minus (common bus) through a blocking condenser .2 mfd. or isolating transformer. The "hot" lead through a .1 mfd. capacitor to No. 1 pin of the 12BA6 I.F. socket.	Connect an output meter across the speaker voice coil.	Adjust the iron cores (top and bottom) of the 2nd I.F. transformer for maximum output with minimum input signal. Input should be approximately 4000 uvs
Lower end of band.	455 Kc.	Shift the input to No. 7 pin of the 12BE6 converter socket.	Connect an output meter across the speaker voice coil.	1. Adjust the iron cores (top and bottom) of the 1st I.F. transformer for maximum output with minimum input signal. Input should be approximately 100 uvs. 2. Return to the second I.F. and adjust the bottom core to attain maximum overall sensitivity of 100 uvs. or better, and correct tracking. 3. Repeat adjustment of all I.F. cores until no improvement is noted.
R.F. ALIGNMENT				
With the gang-condenser plates fully meshed, the pointer is adjusted to the calibration mark located at the upper left-hand edge of the dial frame.				
Extreme high frequency end of scale.	1650 Kc.	Input for the R.F. alignment should be applied through a standard Hazel-tine loop or equivalent.	Connect an output meter across the speaker voice coil.	Adjust the oscillator trimmer capacitor so that it is just possible to tune through the 1650 Kc. signal without going off the end of the scale.
1400 Kc.	1400 Kc.	Input for the R.F. alignment should be applied through a standard Hazel-tine loop or equivalent.	Connect an output meter across the speaker voice coil.	1. Adjust the antenna trimmer capacitor for correct tracking and maximum sensitivity. It will be necessary to "rock" the gang while this adjustment is made. 2. Check sensitivity at 1600 Kc. and 600 Kc.

TUBE LAYOUT AND TRIMMER LOCATION MODEL No. 4151

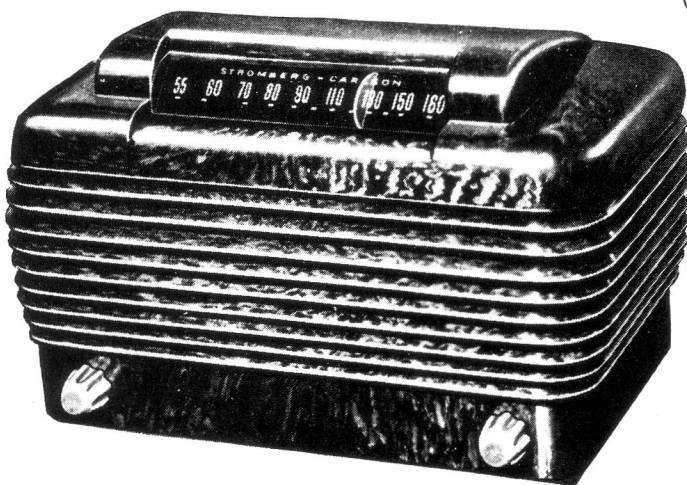


Stromberg-Carlson Model 4151 AC / DC Receiver Voltage Chart, Dial Cord Stringing & Photograph

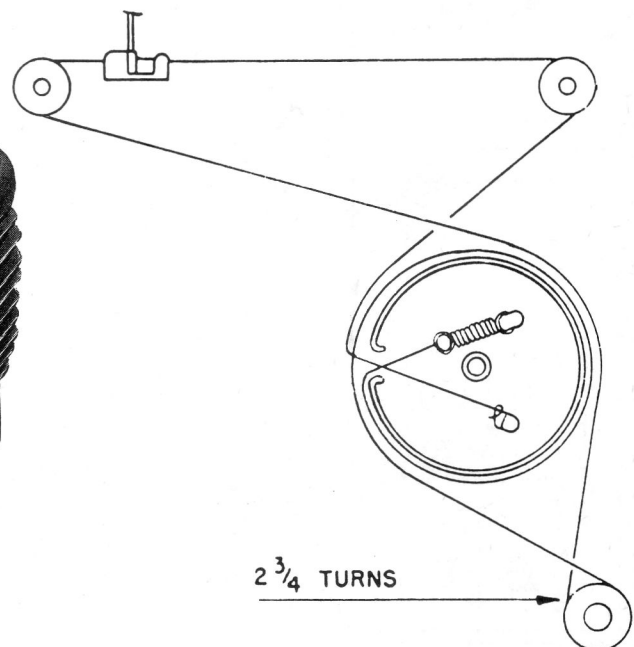
VOLTAGE CHART

SOCKET	FUNCTION	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7	PIN 8
12BE6	Converter	-.9	0	(11.5)	(23.5)	78.	78.	-.5	—
12BA6	I.F. Amplifier	-4.8	0	(23.5)	(36.)	78.	78.	0	—
12AV6	Demod., AVC, 1st Audio	-.9	0	0	(11.5)	-.5	-.5	45.	—
50B5	Power Output	0	5.	(35)	(84)	105.	78.	0	—
35W4	Rectifier	—	112	(84)	(115)	(107)	(107)	112.	—

Line volts 117. Frequency 25 cycles
Taken with a Sylvania Polymeter
Figures in brackets are AC readings
Negative meter lead to B- (common bus)



MODEL 4151



DRIVE CORD STRINGING DIAGRAM