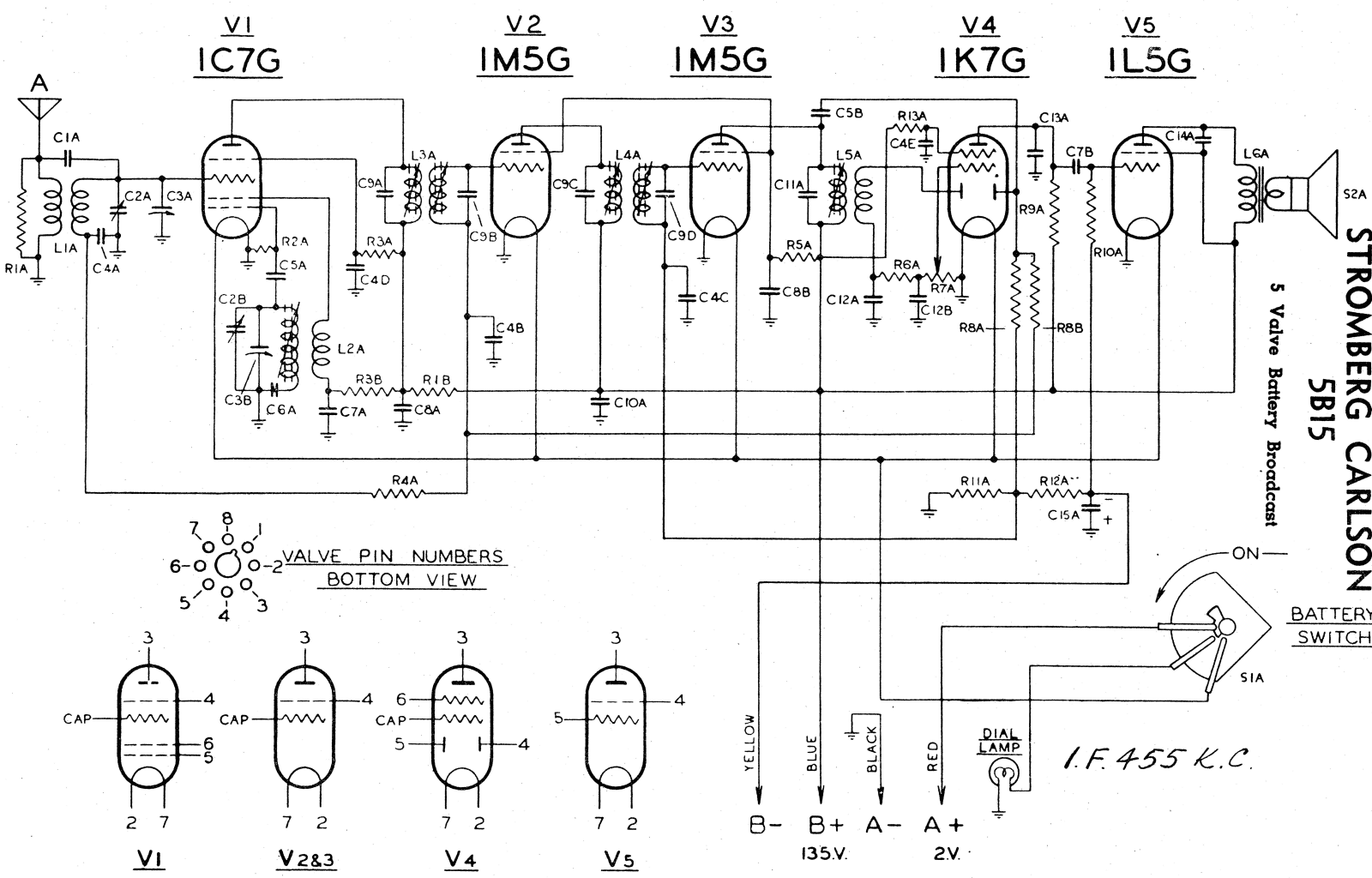


STROMBERG CARLSON 5B15

5 Valve Battery Broadcast



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CONDENSERS:—

C1A	Fixed 5 mmF. (on coil)	1E
C2A	Variable Trimmer Dual — Aerial	1C
C2B	Variable Trimmer Dual — Oscillator	1B
C3A	Variable 12-420 mmF. Type "H" 2 Gang	—
C3B	Variable 12-420 mmF. Type "H" 2 Gang	—
C4A	Fixed 0.05 mF. Paper Tubular 200V.	1G
C4B	Fixed 0.05 mF. Paper Tubular 200V.	2G
C4C	Fixed 0.05 mF. Paper Tubular 200V.	6H
C4D	Fixed 0.05 mF. Paper Tubular 200V.	6A
C4E	Fixed 0.05 mF. Paper Tubular 200V.	1M
C5A	Fixed 100 mmF. Mica $\pm 10\%$	3B
C5B	Fixed 100 mmF. Mica $\pm 10\%$	3M
C6A	Fixed 440 mmF. Mica $\pm 2\frac{1}{2}\%$	5G
C7A	Fixed 0.01 mF. Paper Tubular 600V.	5D
C7B	Fixed 0.01 mF. Paper Tubular 600V.	4P
C8A	Fixed 0.1 mF. Paper Tubular 200V.	6G
C8B	Fixed 0.1 mF. Paper Tubular 200V.	2G
C9A	Fixed 250 mmF. Mica $\pm 5\%$	7B
C9B	Fixed 250 mmF. Mica $\pm 5\%$	7B
C9C	Fixed 250 mmF. Mica $\pm 5\%$	5J
C9D	Fixed 250 mmF. Mica $\pm 5\%$	5J
C10A	Fixed 0.5 mF. Paper Tubular 200V.	1K
C11A	Fixed 150 mmF. Mica $\pm 5\%$	5L
C12A	Fixed 250 mmF. Mica $\pm 10\%$	7K
C12B	Fixed 250 mmF. Mica $\pm 10\%$	7H
C13A	Fixed 250 mmF. Mica $\pm 10\%$	2P
C14A	Fixed 0.006 mF. Paper Tubular 600V.	4S
C15A	Fixed 10 mF. Electrolytic 40 P./V. ET.717	8M

RESISTORS:—

R1A	Fixed 5,000 Ohms $\frac{1}{2}$ Watt	3F
R1B	Fixed 5,000 Ohms $\frac{1}{2}$ Watt	6J
R2A	Fixed 50,000 Ohms $\frac{1}{2}$ Watt	3B
R3A	Fixed 50,000 Ohms 1 Watt	6B
R3B	Fixed 20,000 Ohms 1 Watt	7D
R4A	Fixed 250,000 Ohms $\frac{1}{2}$ Watt	2H
R5A	Fixed 200,000 Ohms 1 Watt	4J
R6A	Fixed 20,000 Ohms $\frac{1}{2}$ Watt	8J
R7A	Variable 0.5 Megohm Volume Control	8G
R8A	Fixed 1.75 Megohms $\frac{1}{2}$ Watt	4P
R8B	Fixed 1.75 Megohms $\frac{1}{2}$ Watt	3N
R9A	Fixed 250,000 Ohms 1 Watt	3P
R10A	Fixed 0.5 Megohm $\frac{1}{2}$ Watt	4R
R11A	Fixed 100 Ohms $\frac{1}{2}$ Watt	7P
R12A	Fixed 300 Ohms $\frac{1}{2}$ Watt	7R
R13A	Fixed 1 Megohm $\frac{1}{2}$ Watt	3L

MISCELLANEOUS:—

L1A	Coil—Broadcast Aerial	3E
L2A	Coil—Broadcast Oscillator	6F
L3A	Transformer—First I.F.	7B
L4A	Transformer—Second I.F.	5K
L5A	Transformer—Third I.F.	5L
L6A	Transformer—Speaker, 15,000 ohms	—
S1A	Battery Switch	7T
S2A	Speaker—Magnavox 5-11	—
—	Glass Dial Scale	—
—	Knob—Moulded	—
V1	Valve Type 1C7G	3B
V2-V3	Valve Type 1M5G	3J-L
V4	Valve Type 1K7G	3P
V5	Valve Type 1L5G	3S
—	Cabinet Body	—
—	Cabinet Front Panel	—

STROMBERG CARLSON 5B15

VOLTAGE ANALYSIS.

The following voltages are measured between the socket pins and the chassis with a 1000 ohm per volt voltmeter with Receiver in "no signal" condition:—

Valve.		Plate.	Screen.	Heater.
1C7G	Mixer	110	40	2
1M5G	I.F. Amplifier	130	30	2
1M5G	I.F. Amplifier	130	30	2
1K7G	Demodulator A.V.C. 1st Audio	24	—	2
1L5G	Output	125	130	2

The 1C7G Oscillator Plate is supplied by a 20,000 ohm Resistor from the H.T.

The 1K7G Screen is supplied by a 1 megohm Resistor from the H.T.

Bias for the 1L5G and I.F. Amplifier is obtained by a Resistor network consisting of R11A and R12A in the H.T., negative lead being 5V. and 1.2V. respectively.

RECEIVER ALIGNMENT INSTRUCTIONS.

The adjustment of the trimmers should be undertaken by a qualified serviceman with a calibrated test oscillator.

The five trimming adjustments for the intermediate frequency amplifier transformers will be found at top and bottom of the first and second, and at the back of the speaker for the third.

The three adjustments for the R.F. circuits are accessible through three holes at the back of the chassis marked A, O, and P, which denote aerial, oscillator and padder, respectively.

I.F. TRIMMER ADJUSTMENT.—Connect the test oscillator to the grid of the 1C7G valve through a 0.5 mfd. condenser, leaving the normal grid clip on the valve.

Turn the volume control full on and set the test oscillator to 455 K.C. Adjust the five trimmers to maximum output.

During all adjustments the output from the test oscillators should be gradually reduced so that output is as low as possible. This will prevent error in alignment due to A.V.C. action.

R.F. TRIMMER ADJUSTMENT.—Before proceeding with the R.F. adjustment it is necessary to set the pointer and dial drive correctly.

On the six-inch diameter dial drive disc are stamped six short lines. These indicate the alignment points, 1500 K.C., 1400 K.C., 1000 K.C., 600 K.C., and the gang in its closed and wide open positions.

The disc should be set with the gang closed (maximum capacity), so that the outside line is exactly above the line painted on the front of the chassis. Then when the condenser is turned out of mesh the 600 K.C., 1000 K.C., 1400 K.C., and 1500 K.C. will pass the line on the chassis. The gang wide open position is indicated by the sixth line.

Set the dial pointer to lie exactly over the gang closed and gang wide open position.

Proceed as follows to align the Receiver:—

- Connect test oscillator to aerial terminal of the set through dummy antenna, or failing this a 0.00025 mfd. condenser.
- Adjust test oscillator to 1500 K.C., tune Receiver until 1500 K.C. line on drive disc is above line on chassis.
- Adjust oscillator trimmer (marked O on back of the chassis), for maximum output.
- Set test oscillator to 1400 K.C., tune Receiver to this frequency and adjust aerial trimmer (marked A on back of chassis), for maximum output.
- Set test oscillator to 600 K.C., tune Receiver dial until 600 K.C. mark on disc is above chassis line. Adjust padder for maximum output while rocking the gang back and forth.
- Repeat operations (b) to (e).