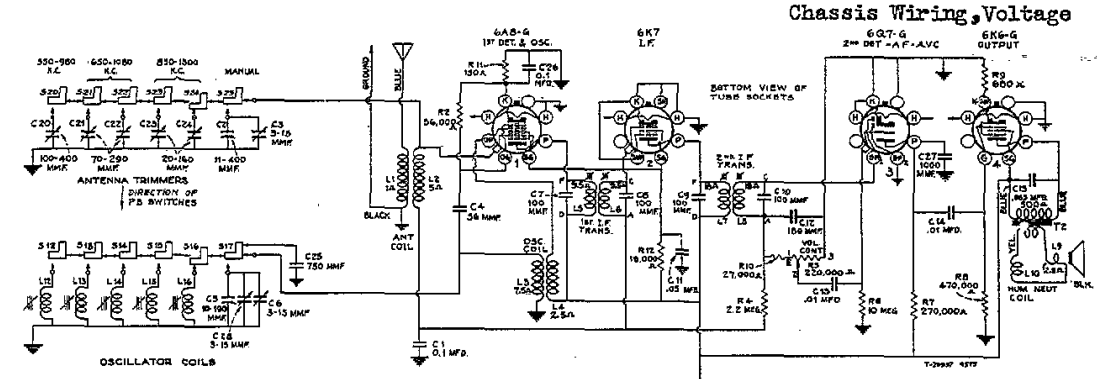
R.C.A. Victor Co. Inc. - 95T5 Schematic

Manufacturer: R.C.A. Victor Co. Inc.

RCA MFG. CO., INC.

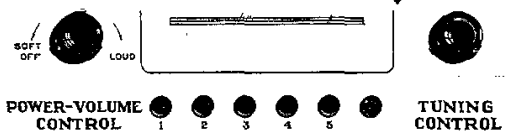
MODEL 95T5
Schematic, Socket, Trimmers
Chassis Wiring, Voltage



Model 95T5 Schematic Circuit Diagram

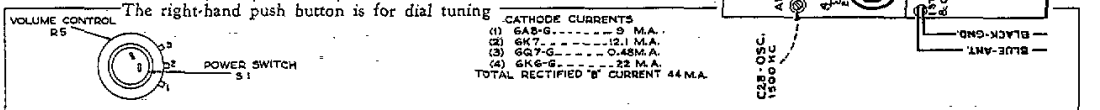
IF PEAK 455 KC

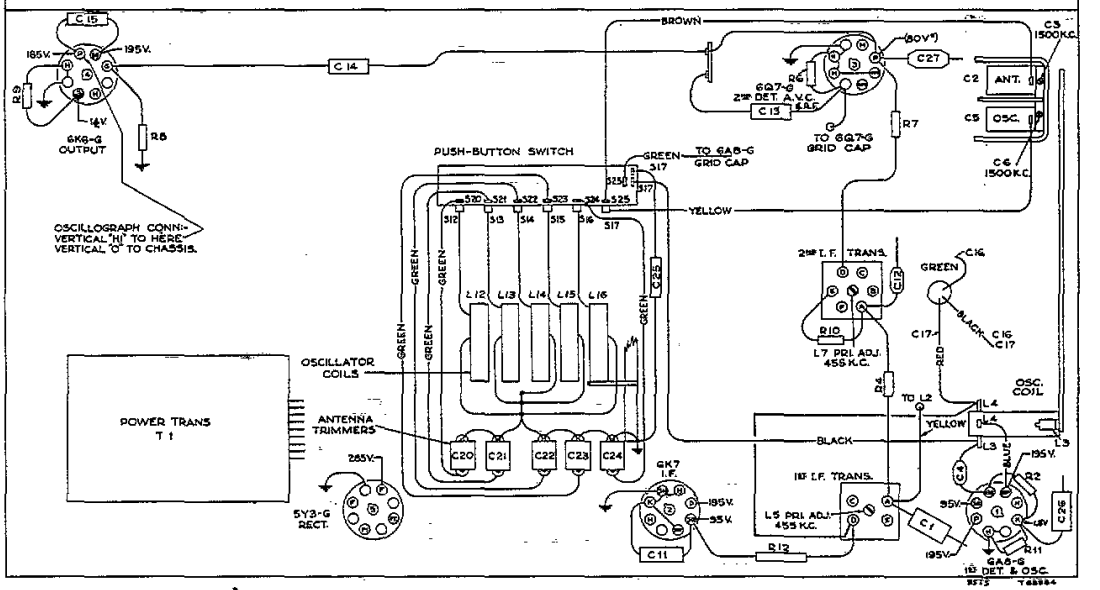
FOR OTHER DATA SEE INDEX



Location of Controls, Model 95T5

The right-hand push button is for dial tuning





Model 95T5 R-F Wiring Diagram and Socket Voltages

Measurements made to chassis unless otherwise indicated, with set tuned to quiet point and volume control at minimum. Values should hold within approximately ±20% with 117-volt a-c supply.

*NOTE: Values with star (*) are operating voltages in circuits with high series-resistance. The actual measured voltages will be lower, depending on the voltmeter loading.

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RCA MFG. CO., INC.

MODELS 95T5,96E,96T,96T1
Alignment,Tuner,Specs.

Alignment Procedure

Cathode-Ray Alignment is the preferable method. Connections for the oscillograph are shown in the chassis drawing. Turn the receiver volume control to maximum.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the output as low as possible to avoid a-v-c action.

Calibration Marks.—The tuning dial is fastened in the cabinet and can not be used for reference during alignment. Therefore calibration marks corresponding to dial readings of 600 kc and 1,500 kc have been stamped in the plate on the front of the chassis, as shown in the accompanying drawing. These marks are used for reference during alignment.

Drum and Dial Indicator Adjustment.—As the first step in r-f alignment, check the position of the drum on the front shaft of the gang condenser. With the gang at maximum (full mesh) the drum set-screw should be pointing directly down as shown in the drawing. With the drum in this position, and the gang at maximum, move the dial indicator along the drive cord to coincide with the left-hand line as shown. The indicator is held to the drive cord by means of spring clips.

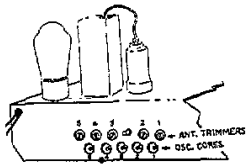
After completion of alignment, and after the chassis has been fastened in the cabinet, turn the gang to maximum and note whether the dial indicator is at the left-hand end mark on the dial; if it is not, loosen the drum set-screw (which is accessible through a slot in the bottom of the cabinet), turn the drum slightly so that the indicator is at this mark, and then tighten the set-screw.

After completion of alignment, seal the i-f core-adjustment screws with household cement.

For additional details, refer to booklet, "RCA Victor Receiver Alignment."

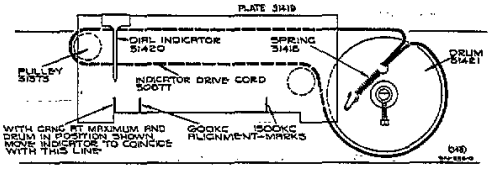
Steps	Connect the high side of test-osc. to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output
1	6K7 I-F grid cap, in series with .01 mfd.	456 kc	Quiet point between 550-750 kc	L7 and L8 (2nd I-F Trans.)
2	6A8-G grid cap, in series with .01 mfd.	455 kc		L5 and L6 (1st I-F Trans.)
3	Antenna lead (blue) in series with 200 mmf.	1,500 kc	1,500 kc calibration mark.	C6 (osc.)* C3 (ant.)
4	Follow "Adjustments for Electric Tuning."			

*The oscillator section of the gang condenser has two trimmers, one on top, accessible through a hole in the chassis, and the other on bottom. It may be necessary to adjust both of these trimmers to secure a peak on 1,500 kc.



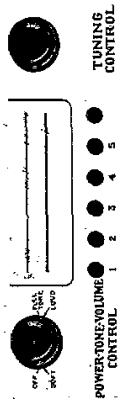
Push-Button Adjustments

No. 1—Approximately 550-980 kc.
Nos. 2, 3—Approximately 650-1,080 kc.
Nos. 4, 5—Approximately 850-1,500 kc.



Dial-Indicator and Drive Mechanism

Refer to "Alignment Procedure" for explanation of the "calibration marks" shown in this drawing



Location of Controls, Models 96E, 96T, and 96T1
The right-hand push button is for dial tuning

Adjustments for Electric Tuning

These models have six push buttons. The right-hand button connects the gang condenser for dial tuning. The other five buttons are for electric tuning of five different stations in the standard-broadcast range. The station buttons connect to separate magnetite-core oscillator coils and separate antenna trimmers which must be adjusted for the desired stations. Use an insulated screwdriver or alignment tool such as RCA Stock No. 31031. Allow at least five minutes warm-up period before making adjustments. Use a regular antenna for the preliminary adjustments.

The procedure is as follows:

1. Make a list of the five desired stations, arranged in order from low to high frequencies.
2. Push in the dial-tuning (right-hand) button, and manually tune in the first station on the list.
3. Push in station-button No. 1 (left-hand) and adjust No. 1 oscillator core (L12) to receive this station. Screw the core all the way in, to lowest frequency, and then unscrew slowly until the station is received.
4. Adjust No. 1 antenna trimmer (C20) for maximum output on this station.
5. Adjust for each of the remaining four stations in the same manner.

(Clockwise adjustment of oscillator cores and antenna trimmers tunes the circuits to lower frequencies.)

6. Make a final careful adjustment of the oscillator cores and antenna trimmers, using one or two feet of wire as an antenna to ensure sharp peaking.

Precautionary Lead Dress.—

1. Dress green lead from antenna coil to switch away from the chassis and gang.
2. Dress green leads from oscillator coils away from the adjustment screws.
3. Dress leads in power-transformer primary circuit to left end of chassis.
4. In 95T5, C27 must be dressed close to chassis and clear of rotor.
5. In 96E, 96T, and 96T1, dress ground bus from heater of 6H6 close to chassis, and dress blue lead from 2nd I-F transformer to volume control close to chassis.

General Description

Model 95T5 is a five-tube superheterodyne. Models 96E, 96T, and 96T1 are six-tube superheterodynes. All of these models have push-buttons for electric-tuning of five stations in the standard-broadcast range, and one push-button for dial-tuning over the entire range of 540 to 1,720 kc.

Features of design include magnetite-core i-f transformers, and magnetite-core electric-tuning oscillator coils; temperature-stabilized capacitor in the oscillator circuit; automatic volume control; electrodynamic loudspeaker, and edge-illuminated straight-line dial. The six-tube models have continuously-variable high-frequency tone control.

	Model 95T5	Models 96E, 96T, 96T1
Power Output		
Undistorted	1.0 watts	2 watts
Maximum	1.5 watts	4 watts
Power Supply Ratings		
Rating A—105-125 volts, 50-60 cycles	50 watts	75 watts
Rating B—105-125 volts, 25-60 cycles	50 watts	75 watts
Rating C—105-125/200-250 volts, 50-60 cycles	50 watts	75 watts

Loudspeaker (Electrodynamic)	95T5	96E	96T	96T1
Diameter (inches)	5	6	5	6
V. C. Impedance at 400 cycles (ohms)	3.1	2.6	5.0	2.6

Frequency Range—540-1,720 kc
One Station between approximately 550-980 kc (Button No. 1—left)
Two Stations between approximately 650-1,080 kc (Buttons 2 and 3)
Two Stations between approximately 850-1,500 kc (Buttons 4 and 5)
R-F Alignment Frequency—1,500 kc (osc., ant.)
Intermediate Frequency—455 kc

RCA Tube Complement

Model 95T5		Models 96E, 96T, and 96T1	
(1) RCA-6A8-G	First Detector—Oscillator	(1) RCA-6A8-G	First Detector—Oscillator
(2) RCA-6K7	I-F Amplifier	(2) RCA-6K7	I-F Amplifier
(3) RCA-6Q7-G	Second Det., A.V.C., and A-F Amp.	(3) RCA-6H6	Second Det., and A.V.C.
(4) RCA-6K6-G	Power Output	(4) RCA-6F5	Audio Voltage Amplifier
(5) RCA-5Y3-G	Full-Wave Rectifier	(5) RCA-6K6-G	Power Output
		(6) RCA-5Y3-G	Full-Wave Rectifier

Pilot Lamp (1)—Mazda 44, 6.3 volts, .25 amp.

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Push-Button Adjustments
No. 1 - Approximately 550 - 980 kc
Nos. 2, 3 - Approximately 560 - 1,080 kc
Nos. 4, 5 - Approximately 850 - 1,500 kc

Drum shown with gang at maximum capacity
Dial-Indicator and Drive Mechanism
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Please note: we carry a wide range of products which will fulfill the specifications above. Please use our search function or browse our products to find what you need!