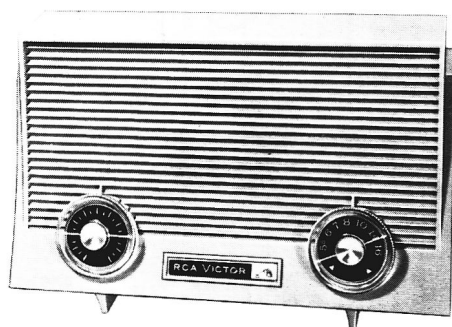




RCA VICTOR



Model RA-6

RADIO RECEIVER SERVICE DATA MODEL RA-6

GENERAL INFORMATION ELECTRICAL SPECIFICATIONS

TUNING RANGE 540-1620 kc

INTERMEDIATE FREQUENCY 455 kc

TUBE COMPLEMENT

- (1) RCA 12BE6 Converter
- (2) RCA 12BA6 IF Amplifier
- (3) RCA 12AV6 Detector, AVC, & Audio Amp.
- (4) RCA 50C5 Power Output
- (5) RCA 35W4 Rectifier

POWER SUPPLY RATING

110-120 volts, 50-60 cycles 30 watts

AUDIO POWER OUTPUT

Undistorted 1.0 watts

Maximum 1.3 watts

LOUDSPEAKER

Size and Type 4" PM

Voice coil impedance 3.2 ohms

TUNING DRIVE RATIO 1:1 (Direct Drive)

NET WEIGHT Approx. 3 lbs.

DESCRIPTION

The Model RA-6 is a 5 tube (including rectifier) table model radio. It is designed to operate on a 110-120 volt AC or DC power supply, and to cover the standard broadcast band 540-1620 KC.

The chassis and speaker are mounted in a molded plastic cabinet which uses a hardboard back upon which is mounted the loop antenna. The power cord is attached to the cabinet back thus providing a safety interlock that will break the power connection when the back is removed. Shock hazard is reduced by a tuning knob that is held captive to the cabinet and is not removable from outside of the cabinet.

The chassis utilizes superhetrodyne circuitry consisting of a pentagrid converter stage, an IF amplifier stage, a detector and AVC stage, an AF stage and a power output stage; they are powered through a vacuum tube rectifier. All components are mounted on one side of a "Security Sealed" wiring board with their leads extending through the board and dip soldered to the printed wiring on the opposite side.

CAUTION

THE CHASSIS IS CONNECTED DIRECTLY TO THE POWER LINE. TO AVOID SHOCK HAZARD, AN ISOLATION TRANSFORMER SHOULD BE USED DURING SERVICE WORK ON THE CHASSIS.

SUPPLEMENTARY INFORMATION LISTINGS

Issue	Subject

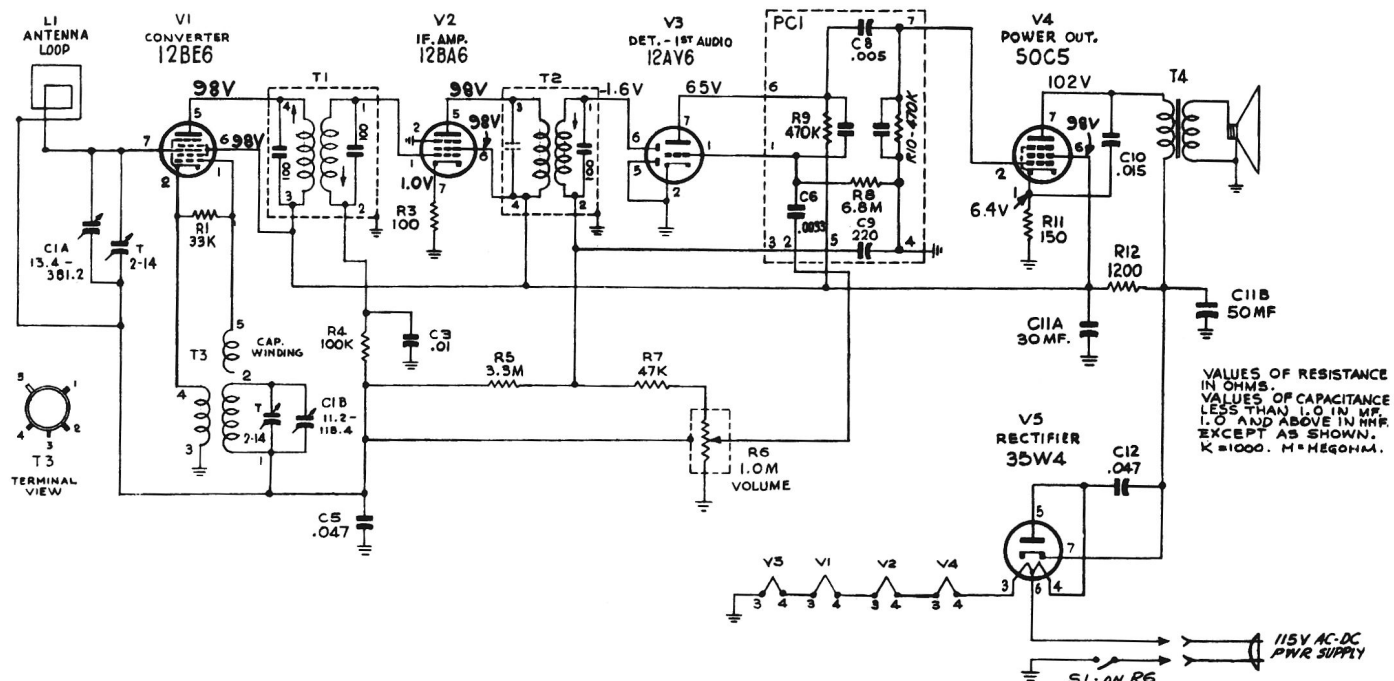
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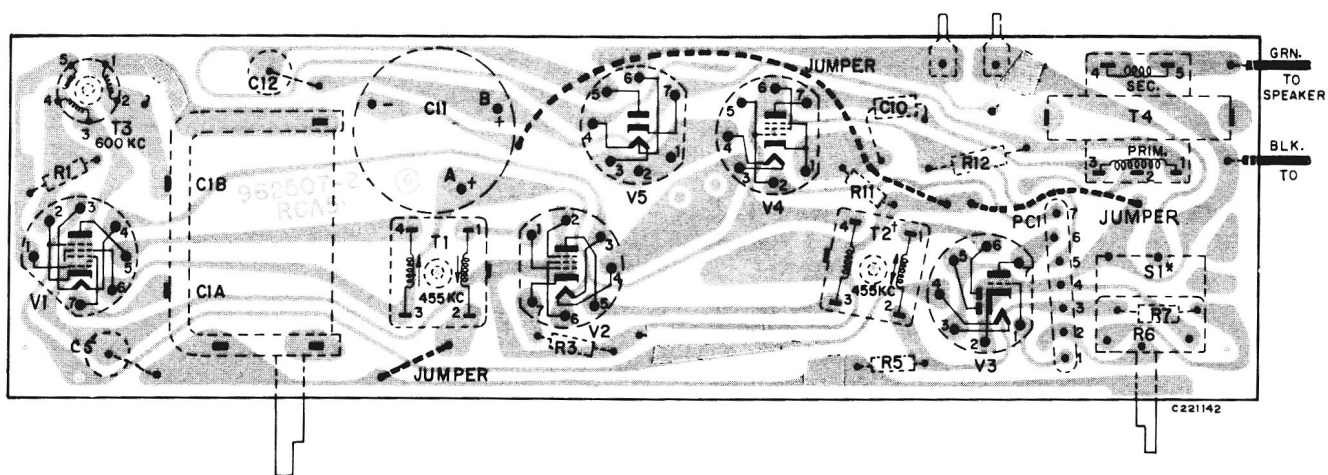
Price 35c

—1965 No. 10—
Printed in Canada.

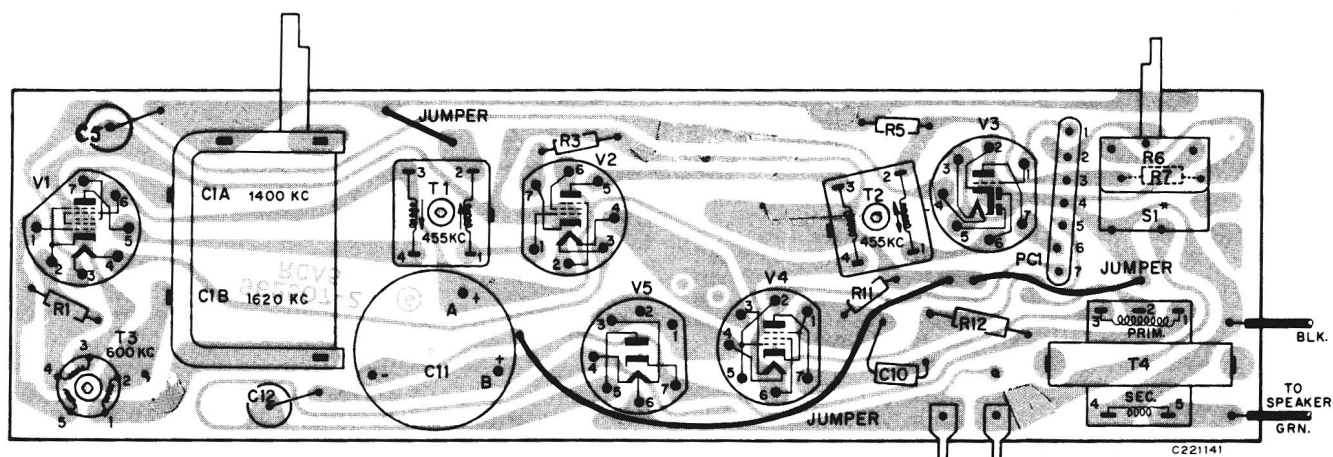
MODEL RA-6



Schematic Diagram



Chassis Layout—(Wiring side)



Chassis Layout—(Component side)

ALIGNMENT PROCEDURE

1. For all alignment operations connect low side of signal generator to common negative.
2. Connect output indicator to voice coil terminals of loudspeaker.
3. Set volume control to maximum.
4. Keep generator output as low as possible to avoid AVC action.

Step	Connect high side of signal gen. to—	Set signal gen. to—	Turn radio dial to—	Adjust—for peak output
1	Pin #1 of V2 (12BA6) through .01 mf capacitor	455 kc (Modulated)	Quite point near 1600 kc	T2 (2nd I-F trans.), top and bottom cores (See note)
2	Pin #7 of V1 (12BE6) through .01 mf capacitor			T1 (1st I-F trans.), top and bottom cores
3	Repeat steps 1 and 2			
4	Short wire placed near antenna to radiate signal	1620 kc (Modulated)	Gang fully open	C1-B-T (ocs. trimmer)
5		1400 kc (Modulated)	1400 kc	C1-A-T (Ant. trimmer)
6		600 kc (Modulated)	600 kc (rock gang)	T3 (osc. coil)
7	Repeat steps 3, 4 and 5			

TUBE AND CHASSIS ACCESSIBILITY

1. DO NOT ATTEMPT TO REMOVE THE KNOBS. The tuning and volume control knobs are held captive to the cabinet by retainers on their shafts.
2. Remove the back cover by lifting the protrusions on the bottom of the back cover, out of the slots in the base of the cabinet.
3. Unsolder speaker leads if necessary. Avoid putting a strain on the speaker leads.
4. Remove two chassis retainers (screws or clips), one at the volume control and one on the left end mounting.
5. Grasp tuning capacitor and volume control, and pull chassis out of knobs and mounting slots.

To reassemble—reverse above procedure.

REPLACEMENT PARTS LIST

Insist on Genuine Factory Tested Parts, which are readily identified and may be purchased from Authorized Dealers.

SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
CHASSIS ASSEMBLY			MISCELLANEOUS ASSEMBLY		
C-1A, C-1B, C-11A, C-11B	*63-29782	Capacitor-Variable Tuning	63-26360	Cabinet-Spice Beige	
	63-24464	Capacitor-Electrolytic 30/50 mfd. 150 volts	63-26361	Cabinet-Sky Blue	
L-1	63-26347	Coil-Antenna Coil and Back Cover Assembly	63-26362	Cabinet-Coral	
PC-1	63-25670	Circuit-Printed Circuit Consists of: R-8, R-9, R-10, C-6, C-7, C-8, C-9	*63-29847	Cabinet-Antique White	
PW-1	*63-29760	Board-Printed Board Assembled Less Tubes	62-106993	Clip-Power Cord	
PW-1	63-27364	Board-Printed Board Stripped	63-24774	Connector-Interlock	
R-6	*63-29761	Control-Resistor On/Off/Volume	63-26342	Cord-Power Cord	
T-1	63-24467	Transformer-IF Transformer	62-109640	Emblem-RCA Victor	
T-2	63-22922	Transformer-2nd IF Transformer	63-110312	Knob-Volume Tuning	
T-3	63-110518	Transformer-Oscillator	*63-29763	Overlay-Volume	
T-4	63-24465	Transformer-Audio Output	*63-29764	Overlay-Tuning	
			63-25019	Retainer-Loudspeaker	
			63-24461	Socket-Tube 35W4	
			63-24462	Socket-Tube 12BE6; 12BA6; 12AV6	
			63-24551	Socket-Tube 50C5	
			63-29062	Speaker-4" PM 3.2 ohms	

* Indicates New Stock Items.

Only items listed under stock numbers are available as Replacement Parts.

All parts subject to change or withdrawal without notice.