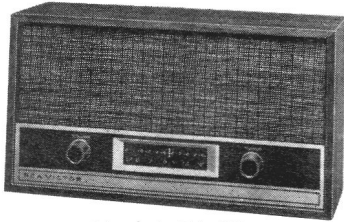




RCA VICTOR



Model RA-21



Model RA-22

RADIO RECEIVER

SERVICE DATA

MODELS RA-21, RA-22

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 Audio Output
- (5) RCA 35W4 Rectifier

POWER SUPPLY RATING

110-120 volts, 50-60 cycles 30 watts

LOUDSPEAKER

Size and Type (RA-21) 3 x 5" PM
 Voice Coil Impedance 3.2 ohms
 Size and Type (RA-22) 4" PM
 Voice Coil Impedance 8 ohms

DESCRIPTION

The Models RA-21 and RA-22 are 5 tube (including rectifier) table model radios. They are designed to operate on a 100-120 volt AC or DC power supply and to cover the standard AM broadcast band, 540-1620 kc.

The chassis utilizes superheterodyne circuitry consisting of a pentagrid converter stage, an IF amplifier stage, a detector and AVC stage, an AF stage and a audio 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

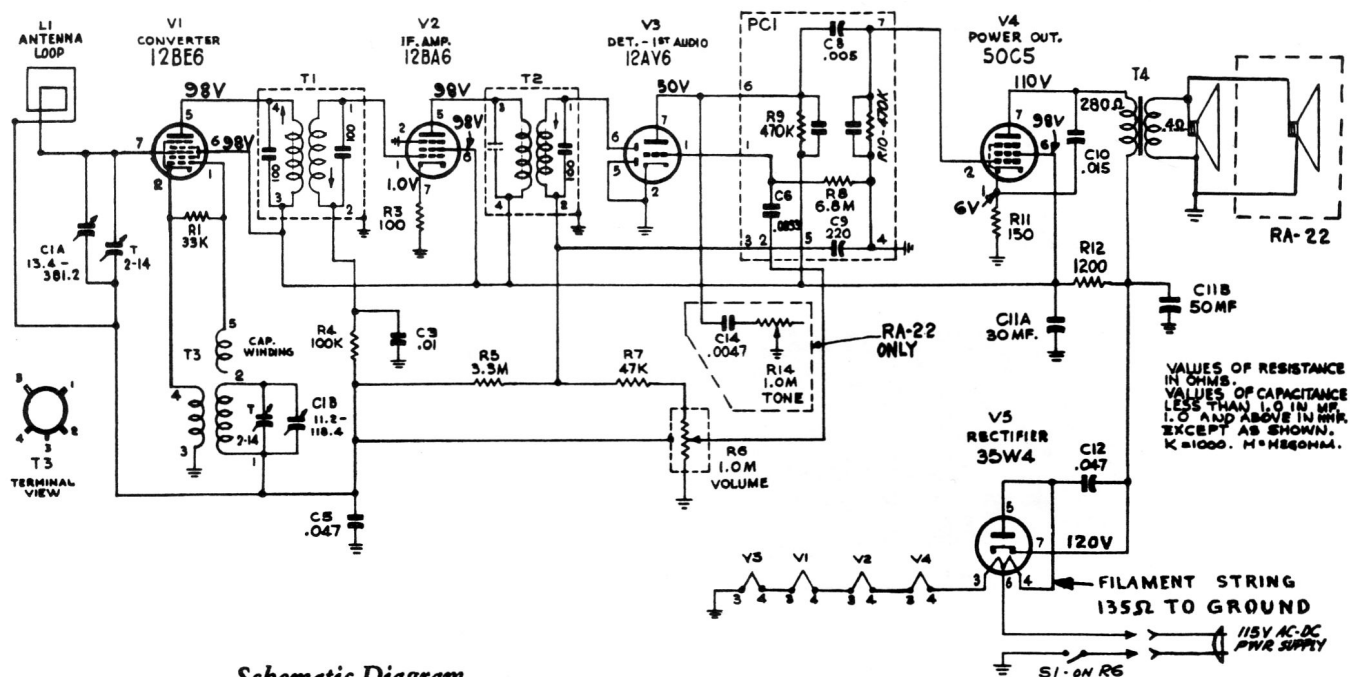
Issue	Subject

ISSUED BY

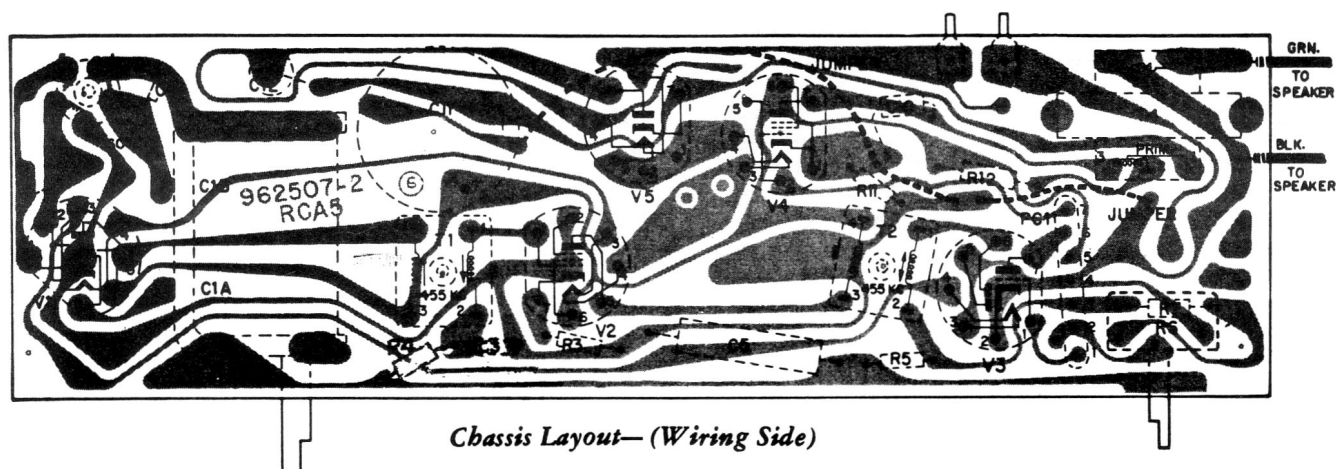
SERVICE DIVISION PUBLICATIONS
 RCA VICTOR COMPANY, LTD.
 MONTREAL, CANADA

Price 35c

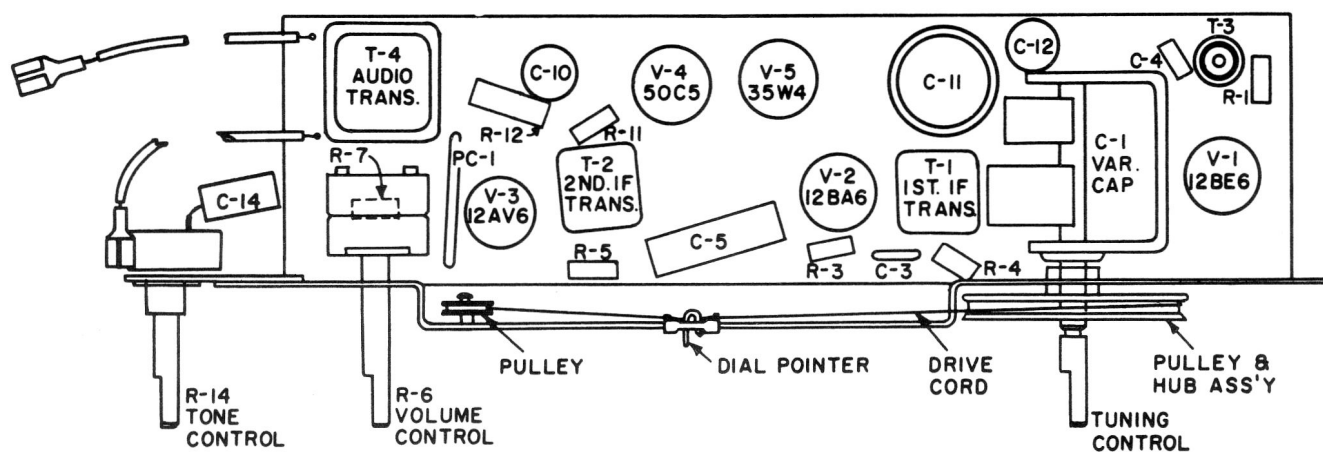
1967 No. 4
 Printed in Canada.



Schematic Diagram



Chassis Layout—(Wiring Side)



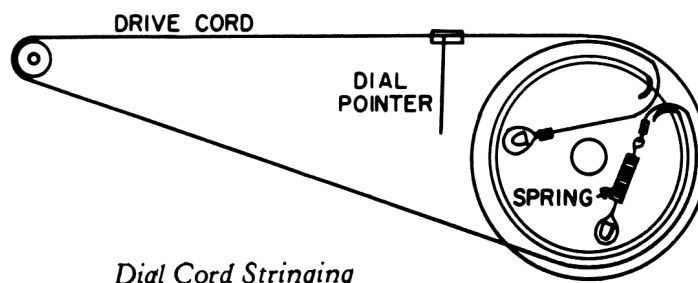
Chassis Layout—(Component Side)

ALIGNMENT PROCEDURE

MODELS RA 21, RA-22

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 cores
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			



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					
C-1A, C-1B	63-29057	Capacitor - Variable Tuning		62-106993	Clip-Retainer Clip Power Cord
C-11A, C-11B	63-24464	Capacitor - Electrolytic 30 50 mfd. 150 150 Volts		63-24774	Connector - Interlock
L-1		Antenna - Loop Antenna (Part of Back Cover)		63-26342	Cord - Power Cord
PC-1	63-25670	Circuit - Printed Circuit Consist of R-8, R-9, R-10, C-6, C-7, C-8, C-9		*63-8861	Cover - Back Cover & Loop - RA-21
PW-1	*63-8923	Board - Printed Board Assembled (less tubes) RA-21		*63-8860	Cover - Back Cover & Loop - RA-22
PW-1	*63-8924	Board - Printed Board Assembled (less tubes) RA-22		*63-8834	Knob - Volume, Tuning, Tone
PW-1	63-27364	Board - Printed Board Stripped		*63-8836	Plate - Trim Plate RA-21
R-6	63-29056	Control - On Off Volume - 1 meg. ohms		*63-8835	Plate - Trim Plate RA-22
R-14	63-29121	Control - Tone RA-22		63-29122	Plate - Tone Control RA-22
S-1		Switch - On Off (Part of Volume Control)		*63-8865	Pointer - Dial Scale
T-1	63-24467	Transformer - 1st IF Transformer		63-29060	Pulley - Pulley & Hub Ass'y
T-2	63-22922	Transformer - Second IF Transformer		63-27438	Pulley - Tuning
T-3	63-110518	Transformer - Oscillator Coil		*63-8853	Scale - Dial Scale
T-4	63-25651	Transformer - Audio Output		63-24461	Socket - Tube Socket 35W4
MISCELLANEOUS ASSEMBLY					
	*63-8851	Cabinet - Walnut - RA-21		63-24462	Socket - Tube 12BE6, 12BA6
	*63-8852	Cabinet - Walnut - RA-22		63-24481	Socket - Tube 12AV6
				63-24551	Socket - Tube 50C5
				63-24786	Speaker - 3 x 5" PM Speaker RA-21-3.2 ohms
				62-15430	Speaker - 4" PM Speaker RA-22-8 ohms
				63-15341	Spring - Dial Cord

* Indicates New Stock Items.

Only items listed under stock numbers are available as Replacement Parts

All parts subject to change or withdrawal without notice.