



RCA VICTOR



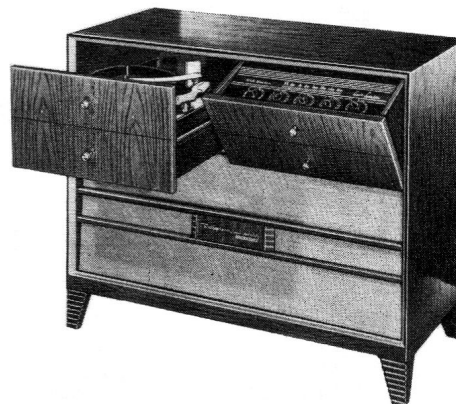
HIGH FIDELITY RADIO-PHONOGRAPH COMBINATION

MODEL VHF-819 (The Debonaire)

SERVICE DATA

GENERAL DESCRIPTION

The model VHF-819 "Debonaire" is a "Hi-Fi" Combination Receiver incorporating a nine tube Superheterodyne Radio (Standard Broadcast Band) with one 12 inch speaker and two 3½ inch P.M. Speakers. The record changer is a 3-speed automatic Collaro RC-54 mechanism.



MODEL VHF-819

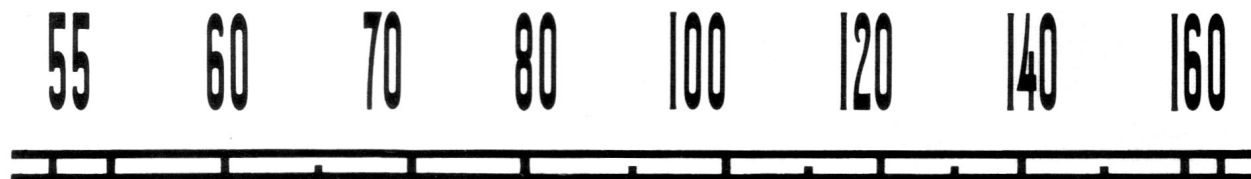
Electrical and Mechanical Specifications

Standard Broadcast ----- 540 - 1600 Kc
Intermediate Frequency ----- 455 Kcs.

Tube Complement

Symbol No.	Tube No.	Function	Tuning Drive Ratio ----- (17.1) or 8½ turns of Knob
V1	RCA 6BA6	R.F. Amplifier	POWER OUTPUT
V2	" 6BE6	Osc/Mixer	Undistorted ----- 8 watts
V3	" 6BA6	IF Amplifier	Maximum ----- 10 watts
V4	" 6AV6	Second Detector	LOUDSPEAKERS
V5A	" ½ 12AU7	1st Audio Amplifier	Type ----- (1) 12" PM, (2) 3½ PM
V5B	" ½ 12AU7	2nd Audio Amplifier	PHONOGRAPH-COLLARO RC54
V6A	" ½ 12AU7	3rd Amplifier	Turntable ----- 33-1/3, 45 & 78 RPM
V6B	" ½ 12AU7	Phase Inverter	CABINET DIMENSIONS
V7	" 6V6GT	Output	Height ----- 30-1/16"
V8	" 6V6GT	Output	Width ----- 38-1/16"
V9	" 5Y3GT	Rectifier	Depth ----- 18"

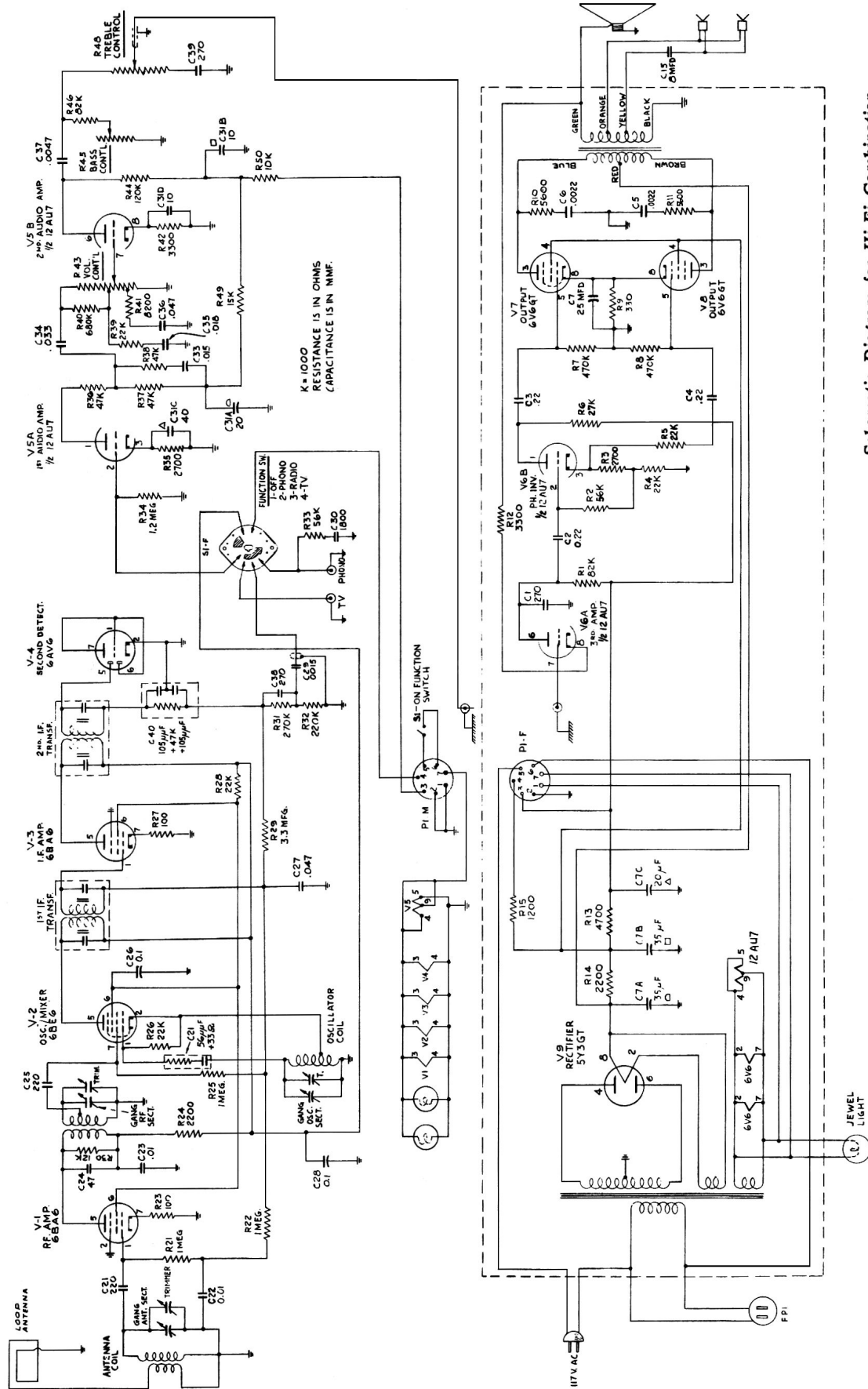
For Record Changer mechanism, please refer to the Collaro RC54 Record Changer Service Note.



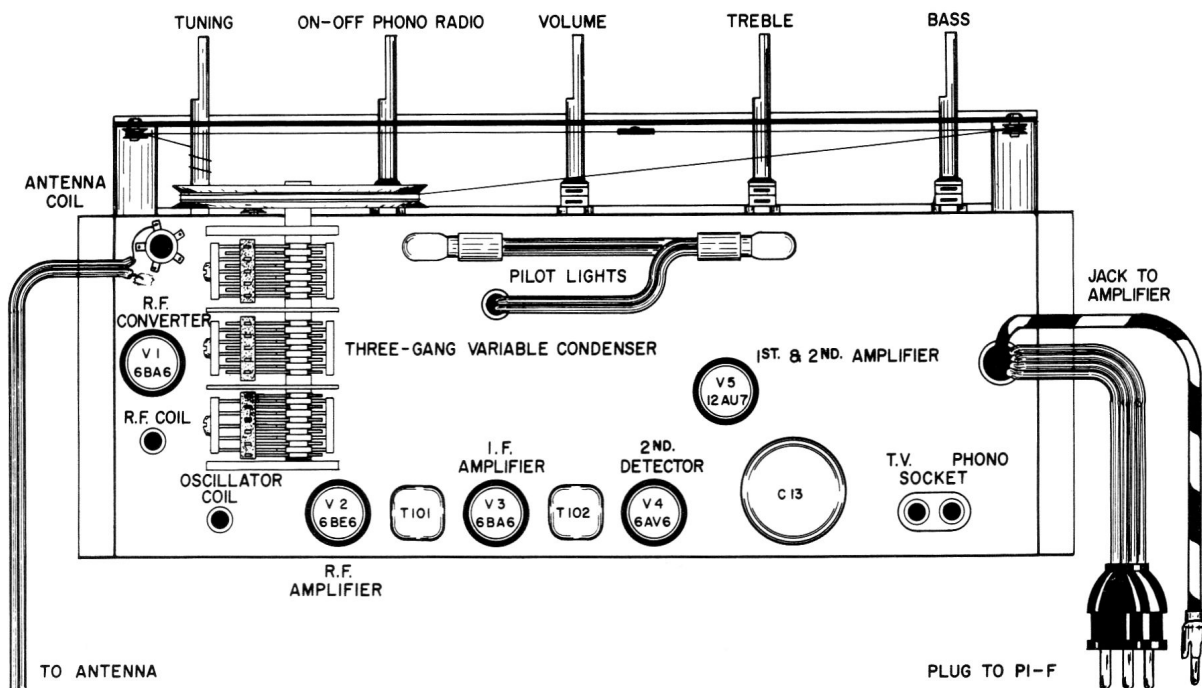
DIAL SCALE VHF-819

The Dial Scale Drawing shown is a full size reproduction. It can be used as a reference in alignment procedure.

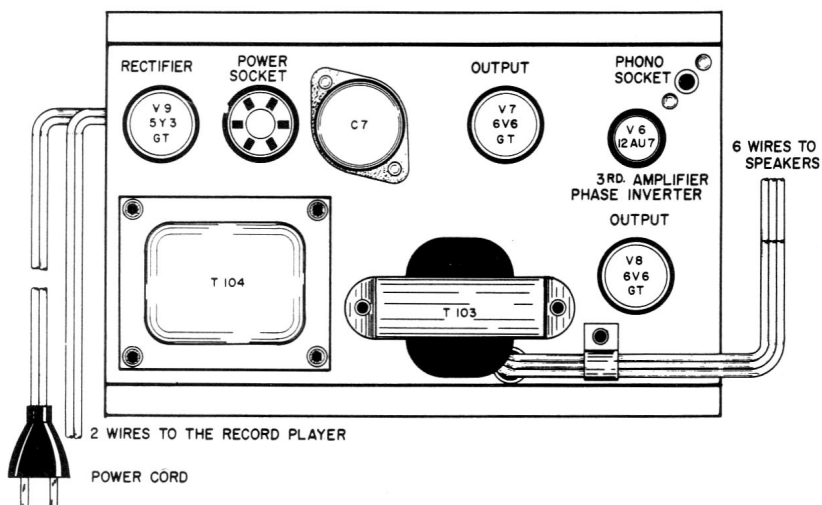
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GENERAL SERVICE DEPARTMENT
RCA VICTOR COMPANY, LTD.
MONTREAL, CANADA



Schematic Diagram for Hi-Fi Combination
Model VHF-819



Chassis Layout and Dial Stringing



Power Supply Layout

Alignment Procedure

Line Voltage -----117 volts
 Standard Output -----1.4 volts across 4.0 ohm voice coil
 Dummy antenna -----10 mmf and dummy loop.

1. With range switch in radio position, gang wide open, and oscilloscope connected at junction of R29 and R31, apply 455 kc sweep signal to 6BA6 I.F. Grid (Pin #1), through 0.1 mfd. capacitor. Adjust second I.F. transformer for symmetrical curve.
2. Apply 455 kc sweep signal to 6BE6 grid (pin #7), through 0.1 mfd capacitor, and adjust first I.F. transformer for symmetrical curve.
3. Disconnect scope and sweep generator.
4. Connect AC output meter across voice coil, turn tone and volume controls to maximum clockwise, connect dummy loop to the black and green antenna leads, and apply R.F. signals to the green lead (through a 10 mmf capacitor). Connect low side of signal to chassis.
5. With dummy dial scale in place and gang fully closed, adjust pointer to start point.
6. Turn gang until pointer is over the 600 kc point. Feed in 600 kc signal and adjust oscillator, R.F., and antenna cores for maximum output.
7. Turn gang until pointer is over the 1500 kc point and adjust oscillator, R.F., and antenna trimmers for maximum output.
8. Repeat steps 6 and 7 until no further improvement in sensitivity can be made.

REPLACEMENT PARTS

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

SYMBOL #	STOCK #	DESCRIPTION	SYMBOL #	STOCK #	DESCRIPTION
C-1		Capacitor - Mica 270 mmf. 500V	R-24		Resistor - 2200 ohms, 20% 1/2 watt
C-2		Capacitor - Paper 0.22 mfd 400V	R-25		Resistor - 1.0 megohm 20% 1/2 watt
C-3		Capacitor - Paper 0.22 mfd 400V	R-26		Resistor - 22000 ohms, 10% 1/2 watt
C-4		Capacitor - Paper 0.22 mfd 400V	R-27		Resistor - 100 ohms, 10% 2 watt
C-5		Capacitor - Paper 0.0022 mfd 1000V	R-28		Resistor - 22000 ohms, 10% 1/2 watt
C-6		Capacitor - Paper 0.0022 mfd 1000V	R-29		Resistor - 3.3 megohm, 20%
C-7A	*S-20521	Capacitor - Electrolytic - 35 mfd. 350V	R-30		Resistor - 12000 ohms, 10% 1/2 watt
C-7B		Capacitor - Electrolytic - 35 mfd. 350V	R-31		Resistor - 27000 ohms, 10%
C-7C		Capacitor - Electrolytic - 20 mfd.	R-32		Resistor - 22000 ohms, 10%
C-7D		Capacitor - Electrolytic - 25 mfd.	R-33		Resistor - 5600 ohms, 10%
C-8			R-34		Resistor - 1.2 mehogm, 10%
C-21	*S-20390	Capacitor - Ceramic - Hi-K 220 mmf. 20%, 500V	R-35		Resistor - 2700 ohms, 10%
C-22	*S-20391	Capacitor - Disc - Hi-K .01 mfd -0% +100% 500V	R-36		Resistor - 47000 ohms, 10%
C-23		Capacitor - Disc - Hi-K .01 mfd -0% +100% 500V	R-37		Resistor - 47000 ohms, 10%
C-24	*S-20392	Capacitor - Ceramic - 47 mmf.10% 500V	R-38		Resistor - 47000 ohms, 10%
C-25		Capacitor - Ceramic - Hi-K 220 mmf 20%, 500V	R-39		Resistor - 22000 ohms, 10%
C-26		Capacitor - Paper - .1mfd. 20% 400V	R-40		Resistor - 680000 ohms, 10%
C-27		Capacitor - Paper - .047mfd. 20% 400V	R-41		Resistor - 8200 ohms, 10%
C-28		Capacitor - Paper - .1 mfd 20% 400V	R-42		Resistor - 3300 ohms, 10%
C-29		Capacitor - Paper - .0015 mfd. 10% 400V	R-43	*S-20607	Control - Volume Control -
C-30	S-20393	Capacitor - Ceramic - Hi-K - 1800 mmf. 10% 500V	R-44		Resistor - 120000 ohms, 10%
C-31A	*S-20520	Capacitor - Electrolytic - 20 mfd.	R-45	*S-20605	Control - Bass Control -
C-31B		Capacitor - Electrolytic - 10 mfd.	R-46		Resistor - 82000 ohms, 10%
C-31C		Capacitor - Electrolytic - 10 mfd.	R-47		Resistor - 220000 ohms, 10%
C-31D		Capacitor - Electrolytic - 40 mfd.	R-48	*S-20606	Control - Treble Control -
C-32			R-49		Resistor - 15000 ohms. 10%
C-33		Capacitor - Paper - .15 mfd. 10% 400V	R-50		Resistor - 10000 ohms. 10%
C-34		Capacitor - Paper - .033 mfd. 10% 400V	S-1	*S-20611	Switch - Function Switch
C-35		Capacitor - Paper - .015 mfd. 10% 200V	T-101	S-20404	Transformer - 1st IF Transformer
C-36		Capacitor - Paper - .047 mfd. 10% 200V	T-102	S-20405	Transformer - 2nd IF Transformer
C-37		Capacitor - Paper - .0047 mfd. 10% 400V	T-103	S-20406	Transformer - Audio Output
C-38	*S-20394	Capacitor - Mica 270 mmf. 10% 500V	T-104	S-20407	Transformer - Power Transformer-60 cyc.
C-39		Capacitor - Mica 270 mmf. 10% 500V	T-104	S-20408	Transformer - Power Transformer-25 cyc.
C-40		Capacitor -2-105 mmf. 10%, 500V-47K 1/4w.			
C-41		Capacitor-56 mmf. +50%, -20% 500V			
	*S-20610	Capacitor-33 ohms, 20%, 1/4w			
	S-20396	Condenser - Variable Condenser			
	*S-20608	Coil - Antenna Coil			
	S-20609	Coil - RF Coil			
		Coil - Oscillator Coil			
R-1		Resistor - 82000 ohms, 1/2 watt			
R-2		Resistor - 56000 ohms, 1/2 watt			
R-3		Resistor - 27000 ohms, 1/2 watt			
R-4		Resistor - 22000 ohms 1/2 watt			
R-5		Resistor - 22000 ohms 1/2 watt			
R-6		Resistor - 27000 ohms 1/2 watt			
R-7		Resistor - 470000 ohms 1/2 watt			
R-8		Resistor - 470000 ohms 1/2 watt			
R-9		Resistor - 330 ohms 2 watts			
R-10		Resistor - 5600 ohms 1 watt			
R-11		Resistor - 5600 ohms 1 watt			
R-12		Resistor - 3300 ohms 1/2 watt			
R-13		Resistor - 4700 ohms 1/2 watt			
R-14	S-20399	Resistor - 2200 ohms, 5 watt 10%			
R-21		Resistor - 1.0 megohm - 20% 1/2 watt			
R-22		Resistor - 1.0 ohms 20% 1/2 watt			
R-23		Resistor - 68 ohms. 10% 1/2 watt			

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

All parts subject to change or withdrawal without notice.