



# RCA VICTOR



STEREO-ORTHOPHONIC HIGH-FIDELITY  
RADIO-PHONOGRAPH COMBINATION

## MODELS

SHC-460 "THE LEXINGTON"

SHC-461 "THE NEW DEBONAIRE"

## SERVICE DATA



Model SHC-460 "The Lexington"



SHC-461 "The New Debonaire"

### Electrical and Mechanical Specifications

#### TUNING RANGE

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

#### TUBE COMPLEMENT

V-1-A	RCA ½ 6CG7	1st Audio Amp. — Left Channel
V-1-B	"	" Right Channel
V-2-A	"	2nd. " Left Channel
V-2-B	"	" Right Channel
V-3-A	"	3rd " Left Channel
V-3-B	"	" Right Channel
V-4	6V6GT	Left Channel output
V-5	"	Right Channel output
V-6	6BE6	Converter
V-7	6BA6	IF Amplifier
V-8	6AV6	2nd Det. AVC — Phase Inverter
V-9	5Y3GT/G	Rectifier

#### POWER SUPPLY RATING

Power Supply Rating ..... 115 volts, 60 cycles Watts

#### Record Changer

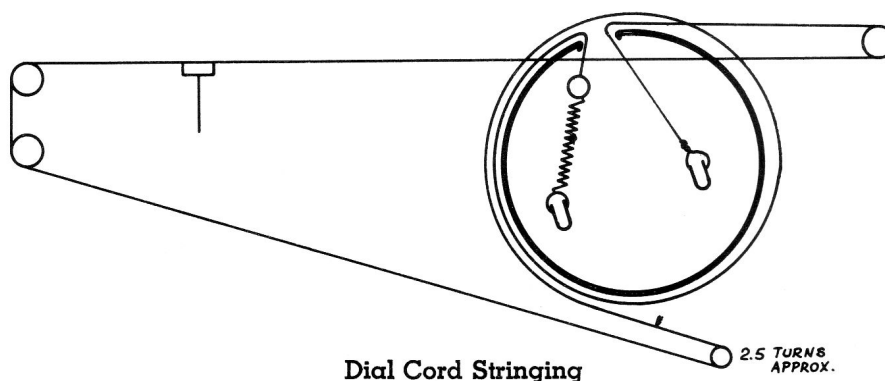
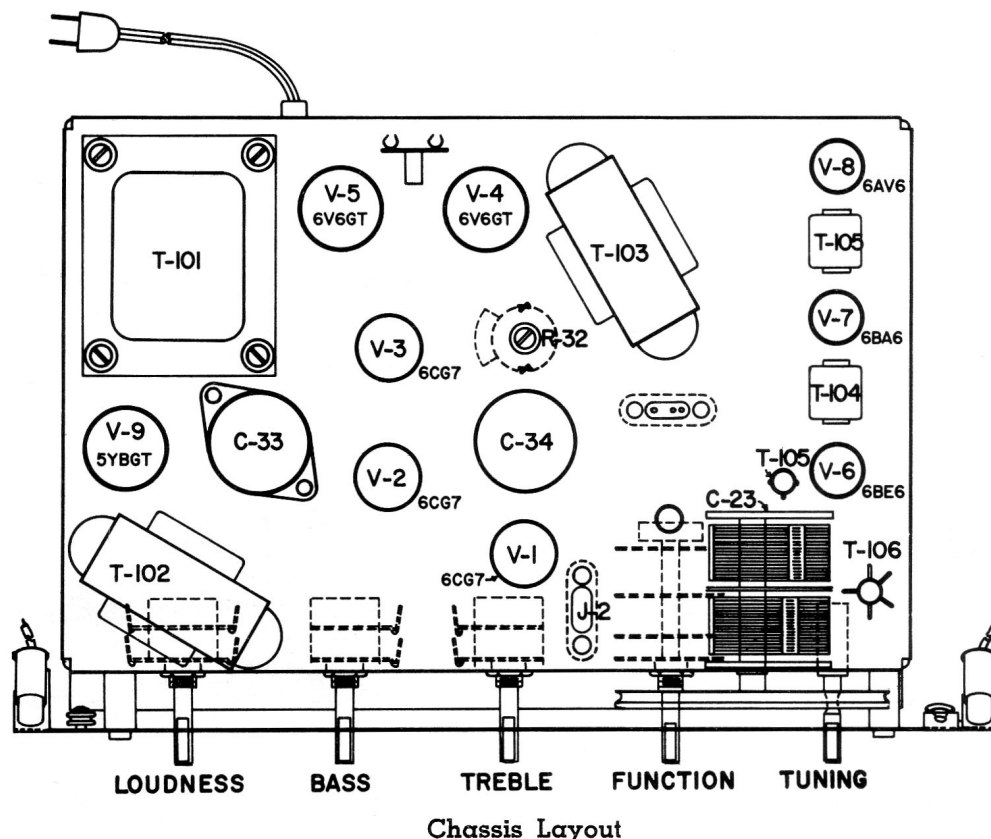
Turntable speed ..... 16 2/3, 33 1/3, 45 or 78 r.p.m.  
Record capacity ..... up to fifteen 7 inch or twelve  
10 inch or ten 10 inch inter-  
mixed  
Pickup Stock #106770 ..... Stereophonic Ceramic.  
Audio Power Output ..... 12 Watts  
Frequency Responses ..... 50 cycles to 20,000 cycles

#### Loud Speakers

One 10" PM "Woofer" (SHC 460) 3.2 ohm at 400 cycles  
One 12" PM "Woofer" (SHC 461) 3.2 ohm at 400 cycles  
Two 3½" PM "Tweeter (both) .... 8 ohm at 3,000 cycles

ISSUED BY  
SERVICE DIVISION  
RCA VICTOR COMPANY LTD.  
MONTREAL, CANADA

—1958 No. 13—



## Alignment Procedure

- Line Voltage .....117 volts — 60 cycles  
Standard Output .....1.3 volts across 3.2 ohms voice coil  
or 0.9 volts across each speaker when  
external speaker is used.  
Dummy Antenna .....10 mmf and dummy loop
1. With range switch in radio position, gang capacitor fully opened, and oscilloscope connected at junction of R-51 and R-52, apply 455 Kc sweep signal to V-7-1 (6BA6) through a 01 mfd. capacitor.  
Adjust T-105 (second IF Transformer) for symmetrical curve.
  2. Apply 455 Kcs sweep signal to V-6-7 (6BE6), through 0.1 mfd capacitor, and adjust T-104 (1st IF transformer) for maximum output.
  3. Disconnect Scope and sweep Generator.
  4. Connect AC output meter across voice coil, turn tone and

- volume controls to maximum clockwise position, and correct dummy loop to the black and green antenna leads and apply RF signals through a 10 mmf capacitor to the green lead. Connect low side of signal to chassis.
5. With gang fully closed, adjust pointer to start point (54 Kcs).
  6. Turn gang condenser, until pointer is over the 600 Kc. point. Feed in 600 Kcs. signal, and adjust oscillator and antenna coils for maximum output.
  7. Turn gang condenser, until pointer is over the 1,500 Kcs. point, and adjust oscillator and antenna trimmers for maximum output.
  8. Repeat steps 6 and 7 until no further improvements in sensitivity can be made.



## CHANNEL GAIN EQUALIZATION

A gain equalization control is provided to enable the gain of the **RIGHT CHANNEL** (internal speakers) to be balanced with the gain of the **LEFT CHANNEL** (external speakers).

This equalization control R-32 is located on the top of the chassis. When adjusting this control, five conditions must exist:

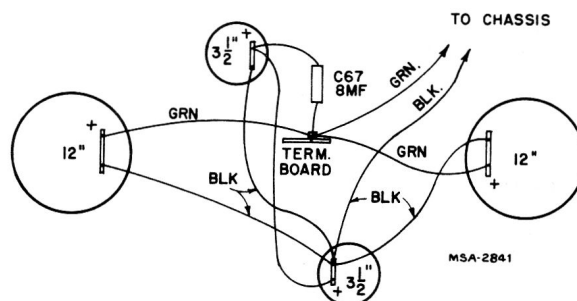
1. A **monaural signal input** must be used. This should be a monaural test record; use a frequency test record when measuring with an output meter or use a music record for listening test.
2. The **function switch** must be in **#3 position (PHONO)**.
3. The **Function Switch** must be **STEREO position**. This enables the two channels to have independent outputs.
4. The **speaker selection switch** must be in the **"INT. & EXT. SPKRS."** position. This is necessary for the two channels to have independent outputs.
5. Both internal and external speaker systems must be **connected** or the output loaded equally with resistors. If output is measured with an output meter, a channel having no speakers connected will have an abnormally high output voltage reading.

Adjust the equalization control (R-32) to obtain right channel output equal to left channel output. The left channel gain is not adjustable.

### NOTES

It is not necessary to measure the audio output while making the equalization adjustment; sufficient accuracy can usually be had by listening. This is best done by playing a monaural record with the left channel speaker placed for stereo listening. Adjust the balance control until the sound appears to be coming from a point midway between the two speakers.

If the external speaker system is other than 3.5 ohms impedance, the output voltages will not be equal for equal power output.



*Speaker Wiring Assembly*

## RECORD PLAYER INFORMATION

**MODEL SHC - 460**

For Record Player Information  
Refer To

**COLLARO STEREO CONQUEST**  
Record Player

Service Data

**MODEL SHC - 461**

For Record Player Information  
Refer To

**RP - 205 SERIES**  
Record Player

Service Data

## SPEAKER PHASING

For information on speaker phasing, refer to Supplementary Information at front of this volume.

**All parts subject to change or withdrawal without notice.**