

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

V-8

V-9

Intermediate Frequency 455 Kcs. TUBE COMPLEMENT V-1-A RCA 1/2 6CG7 1st Audio Amp. — Left Channel V-1-B Right Channel 2nd. " ,, V-2-A 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

Rectifier

2nd Det. AVC — Phase Inverter

6AV6

5Y3GT/G

Standard Broadcast 540 - 1600 Kcs.

POWER SUPPLY RATING

Power Supply Rating115 volts, 60 cycles Watts

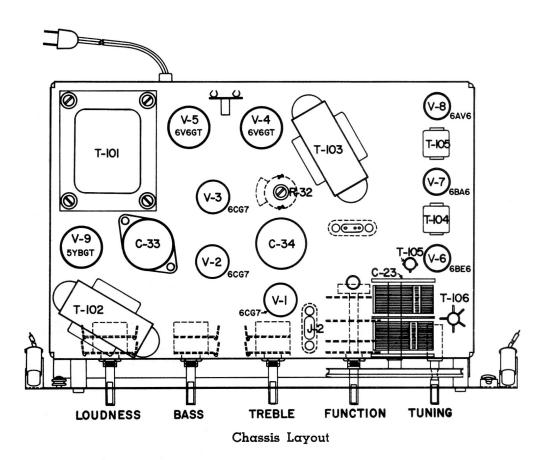
Record Changer

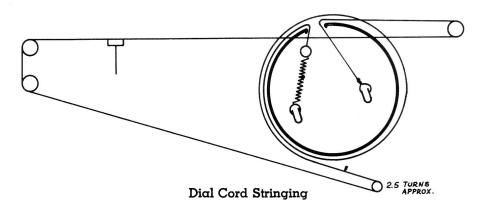
Turntable speed					
Record capacityup to fifteen 7 inch or twelve					
10 inch or ten 10 inch inter-					
mixed					
Pickup Stock #106770Stereophonic Ceramic.					
Audio Power Output12 Watts					
Frequency Responses50 cycles to 20,000 cycles					

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

SERVICE DIVISION
RCA VICTOR COMPANY LTD.
MONTREAL, CANADA



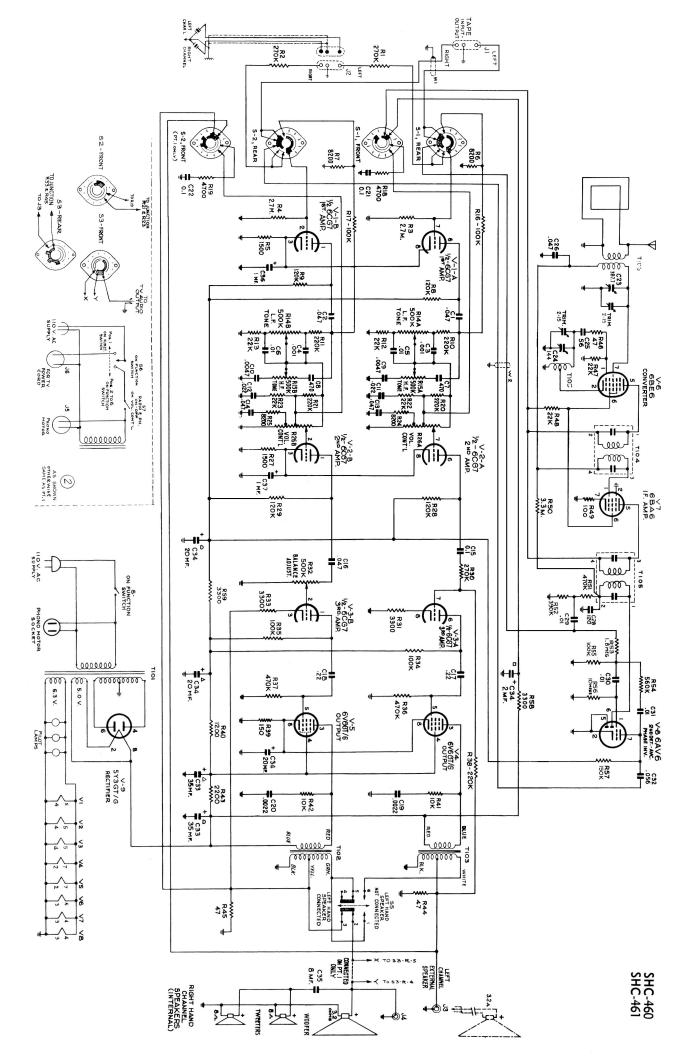


Alignment Procedure

- 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.
- 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).
- Turn gang condenser, until pointer is over the 600 Kc. point. Feed in 600 Kcs. signal, and adjust oscillator and antenna coils for miximum output.
- 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:

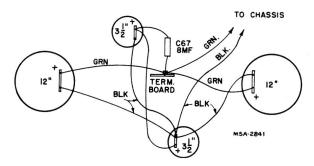
- A monaural signal input must be used. This should be a monaural test record; use a frequency test record when measuring with an output meter or use a music record for listening test.
- 2. The function switch must be in #3 position (PHONO).
- The Function Switch must be STEREO position. This enables the two channels to have independent outputs.
- 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.

REPLACEMENT PARTS LIST

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

	Thisist on Och	uine Factory Tested Parts, which are readily	1	, , ,	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
C-1		Capacitor047 mfd. 400 V. 10%	R-41		Resistor 10,000 ohms, 10% 1/2W.
C-2		Capacitor 047 mfd. 400 V. 10%	R-42		Resistor 10,000 ohms, 10% 1/2W.
C-3		Capacitor 001 mfd. 600 V. 10%	R-43		Resistor 2200 ohms, 10% 2W.
C-4			R-44		Resistor 47 ohms, 10% 2W.
C-5		Capacitor01 mfd. 200 V. 10%	R-45		Resistor 47 ohms, 10% 2W.
C-6		Capacitor 01 mfd. 200 V. 10%	R-46		Resistor 47 ohms, 10% 1/2W.
C-7		Capacitor - 470 mmf. 500 V. 10%	R-47		Resistor 22,000 ohms, 20% 1/2W.
C-8		Capacitor - 470 mmf. 500 V. 10%	R-48		Resistor 22,000 ohms, 20% 2W.
C-9		Capacitor0047 mfd. 400 V. 10%	R-49		Resistor - 100 ohms, $10\% 1/2W$.
C-10		Capacitor0047 mfd. 400 V. 10%	R-50		Resistor - 3.3. megs 20% 1/2W.
C-11		Capacitor022 mfd. 200 V. 10%	R-51		Resistor - 470,000 ohms, 10% 1/2W.
C-12		Capacitor 022 mfd. 200 V. 10% Capacitor 047 mfd. 200 V. 10%	R-52		Resistor - 390,000 ohms, 10T 1/2W.
C-13 C-14		Capacitor 047 mfd. 200 V. 10% Capacitor 047 mfd. 200 V. 10%	R-53		Resistor - 1.8 meg. 10% 1/2W.
C-15		Capacitor 1 mfd. 400 V. 10%	R- 54 R- 55		Resistor - 2, 7 meg. 10% 1/2W.
C-16		Capacitor047 mfd. 400 V. 10%	R-56		Resistor - 100,000 ohms, 10% 1/2W.
C-17	-	Capacitor22 mfd. 400 V. 10%	R-57		Resistor - 10 meg. 20% 1/2W. Resistor - 150,000 ohms, 10% 1/2W.
C-18		Capacitor22 mfd. 400 V. 10%	R-58		Resistor - 3300 ohms 20% 1/2W.
C-19		Capacitor0022 mfd. 1000 V. 10%	R-59		Resistor - 3300 ohms 10% 1/2W.
C-20		Capacitor0022 mfd. 1000 V. 10%	S-1	*S-22535	SWITCH - OFF/ON Function Switch
C-21		Capacitor - 0.1 mfd. 200 V. 10%	T-101	*S-12560	Transformer - Power Transformer
C-22		Capacitor - 0.1 mfd. 200 V. 10%	T-102	*S-12368	Transformer - Audio Output
C-23	S-12357	Capacitor - Variable Capacitor	T-103	* S- 12369	Transformer - Audio Output
C-24			T-104	S-20404	Transformer - 1st I. F. Amp.
C-25	7.	Capacitor - 56 mmf. 500 V.	T-105	S- 20405	Transformer - 2nd I. F. Amp.
C-26		Capacitor047 mfd. 200 V.	T-106	*S-22100	COIL - Oscillator Coil
C-27		Capacitor047 mfd. 200 V.	T-107	*S-20609	Coil - Oscillator Coil
C-28		Capacitor - 120 mmf. 500 V.			
C-29		Capacitor 01 mfd. 200 V. 10%			
C-30		Capacitor01 mfd. 200 V. 10%			
C-31		Capacitor33 mfd. 400 V. 10%			SPEAKER ASSEMBLY
C-32	0.10474	Capacitor056 mfd. 400 V. 10%			
C-33	S-12474	Capacitor - Electrolytic 35 x 35/400/400		400405	
C-34	S- 12475	Capacitor - Elec. 20x20x20x20/400/400/		100465	Speaker - 3-1/2" P. M. (8 ohms)
	0.01041	400/25		* S-22545	Speaker - 10" P. M. (4 ohm SHC-460)
C-35	S-21641	Capacitor - Electrolytic 8 mfd.		* S-22599	Speaker - 12" P. M. (SHC-461)
C-36 C-37	9.0	Capacitor - 1 mfd. 50 Volts Capacitor - 1 mfd. 50 Volts			
R-1		Resistor - 270K 10% 1/2W.			×
R-1 R-2		Resistor - 270K 10% 1/2W. Resistor - 270K 10% 1/2W.			MISCELLANEOUS ASSEMBLY
R-3		Resistor - 2.7 Meg. $10\% 1/2$ W.			
R-4		Resistor - 2.7 Meg. $10\% 1/2$ W.		* S-22929	Legs - Set of 4 Walnut (SHC-461)
R-5		Resistor - 1500 ohms, $10\% 1/2$ W.		*S-22539	Ass'y Dial Plate Assy.
R-6		Resistor - 8200 ohms, 10% 1/2W.		*S- 22634	Ass'y Stereo Bracket Assy.
R-7	4	Resistor - 8200 ohms, 10% 1/2W.		*S-12564	Ass'y Socket & Lead Assy. (SHC461)
R-8		Resistor - $120,000 \text{ ohms}, 10\% 1/2W$.		S-4313	Cord - Dial Cord
R-9		Resistor - $120,000 \text{ ohms}, 10\% 1/2W$.		*S-22387	Crest - RCA "DOG" Crest
R-10		Resistor - 220,000 ohms, 10% 1/2W.		*S-22543	Dial - Dial Scale SHC-460
R-12		Resistor - 220,000 ohms, 10% 1/2W.		*S-22544	Dial - Dial Scale - SHC461
R-13		Resistor - 220,000 ohms, 10% 1/2W.		*S-22588	Emblem - Stereo Emblem
	* S- 12364	Control - Bass Tone Control 500 K.		*S-22547	Knob Assy Bass-Treble - Control
R-15 A, B	* S- 12363	Control - Treble Tone Control 500 K.		* S-22549	Knob Assy Function Control
R-16		Resistor - 100,000 ohms, 10% 1/2W.		* S-22548	Knob Assy Tuning Control
R-17		Resistor - 100,000 ohms, 10% 1/2W.		* S-22546	Knob Assy Volume Control
R-18		Resistor - 4700 ohms, 10% 1/2W.		* S-10762	Lamp - Pilot Light
R-19		Resistor - 4700 ohms, 10% 1/2W.		*S-22550	Manual - Customer's Instr. manual
R-20		Resistor - 220,000 ohms, 10% 1/2W.			SHC-460
R-21		Resistor - 220,000 ohms, 10% 1/2W.		* S- 22551	Manual - Customer's Instr. manual
R-22		Resistor - 22,000 ohms, 10% 1/2W.		+0.00505	SHC-461
R-23		Resistor - 22,000 ohms, 10% 1/2W.		* S-22537	Plate - Trim Plate SHC-460
R-24 R-25		Resistor - 8200 ohms, 10% 1/2W.		*S-22538	Plate - Trim Plate SHC-461
R-26 A D	* S-22540	Resistor - 8200 ohms, 10% 1/2W. Control - Vol. Control		*S-22534 *S-22618	Pointer - Dial Pointer
R-27	5-22040	Resistor 1500 ohms, 10% 1/2W.		*S-22635	PULLS - Door Pulls - Bright Brass SHC-461 Retainer - Dial glass retainer strip
R-28		Resistor 120,000 ohms, 10% 1/2W.		5-22030	SHC-460
R-29		Resistor 120,000 ohms, 10% 1/2W.		*S-22636	Retainer - Dial glass retainer strip
R-30		Resistor 270, 000 ohms, $10\% 1/2$ W.		2 22000	SHC - 461
R-31		Resistor 3300 ohms, 10% 1/2W.		S-12358	Shaft - Drive Shaft
R-32	* S- 12366	Control - Balance Adjustment 500V.		* S-22590	Socket - Pilot Light Socket
R-33	_ 12000	Resistor - 3300 ohms, 10% 1/2W.		S-9513	Socket - 7-Pin Socket For 6AV6, 6EA6,
R-34		Resistor - 100,000 ohms, $10\% 1/2W$.			6BE6
R-35		Resistor - $100,000 \text{ ohms}, 10\% 1/2\text{W}$.		S-20727	Socket - 9 Pin Socket for 6CG7
R-36		Resistor - $470,000 \text{ ohms}, 10\% 1/2\text{W}.$		S- 12562	Socket - Octal Socket for 6V6GT
R-37		Resistor - $470,000 \text{ ohms}, 10\% 1/2\text{W}.$		S-12561	Socket-Socket-Phone Socket (2 required)
R-38		Resistor - 220,000 ohms, $10\% 1/2W$.			and a sound a none booker (a required)
R-39		Resistor - 150 ohms, 10% 2 W.		*S-22740	Support - Lid Support
R-40		Resistor - 1200 ohms, 10% 1/2W.		33726	Washer - "C" Washer for Drive Shaft
		,	L		

^{*} Indicates New Stock Items. Only items listed under stock numbers are available as Replacement Parts.