



RCA VICTOR



STEREO-HIGH FIDELITY COMBINATION

MODEL SHC761 "THE PRELUDE"

SERVICE DATA



MODEL SHC761 "THE PRELUDE"

ELECTRICAL AND MECHANICAL SPECIFICATIONS

TUNING RANGE

Standard Broadcast (AM) 540-1,600 kc.
Frequency Modulation (FM) 88-108 mc.

INTERMEDIATE FREQUENCIES

AM 455 kc. FM 10.7 mc.

POWER SUPPLY RATING

115 volts, 60 cycles, 145 watts (includes record changer)

TUBE COMPLEMENT

Symbol	Type	Function
V-1	RCA-6DT8	FM-RF Amplifier and Mixer-Oscillator
V-2	RCA-6BA6	1st. FM - IF Amplifier
V-3	RCA-6AU6	FM Driver and AM Detector
V-4	RCA-6AL5	FM Ratio Detector
V-5	RCA-6BE6	AM - Mixer - Oscillator
V-6	RCA-7025	Two Channel AF Amplifier
V-7	RCA-6BQ5	Right Channel Output
V-8	RCA-6BQ5	Left Channel Output
V-9	RCA-6CA4	Rectifier

RECORD CHANGER (BSR-UA-14)

Turntable speed 16 $\frac{2}{3}$, 33 $\frac{1}{3}$, 45 or 78 r.p.m.
Record capacity Up to fifteen 7 inch
or twelve 10 inch
or ten 12 inch and 10 inch intermixed
Pickup (Stock No. 63-24044) Stereophonic Ceramic
Stylus (Stock No. 63-24045) 3 mil syn. sapphire
Stylus (Stock No. 63-24046) 0.7 mil diamond

MAXIMUM MUSIC POWER OUTPUT 6 watts (each channel)

FREQUENCY RESPONSE 50—20,000 cycles

LOUDSPEAKERS

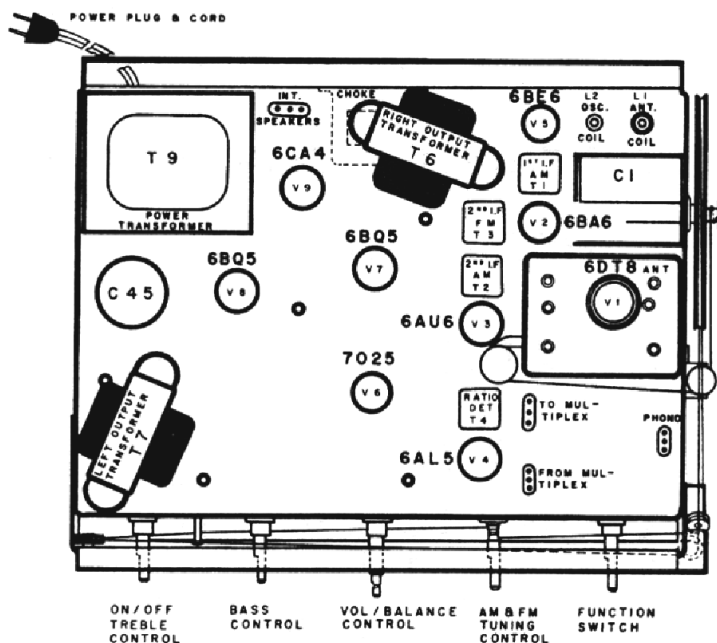
Two 10" PM "woofers" 8 ohms @ 400 cycles

SUPPLEMENTARY INFORMATION

Issue	Subject
List related Service Letters and Service Tips above.	

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





CHASSIS LAYOUT — Showing Location of Tubes and Components.

ALIGNMENT PROCEDURE

ALIGNMENT INDICATORS:

An RCA VoltOhmyst® or equivalent VTVM is necessary for measuring developed d-c voltage during FM alignment. Connections are specified in the alignment tabulation. An output meter is also necessary to indicate maximum audio output during AM alignment. Connect the output meter across the speaker voice coil. The RCA VoltOhmyst can also be used as an AM alignment indicator, either to measure audio output or to measure AVC voltage. When audio output is being measured, the volume control should be turned to maximum. Adjust tone control to mid-position.

SIGNAL GENERATOR:

For all alignment operations, connect the low side of the signal generator to the receiver chassis, close to the point of signal injection. If output measurement is used for AM alignment, the output of the signal generator should be kept as low as possible to avoid AVC action.

AM Alignment

FUNCTION SWITCH IN AM POSITION—VOLUME CONTROL MAXIMUM—TONE CONTROL CENTER

Steps	Connect high side of sig. gen. to—	Set Sig. gen. to—	Set radio dial to—	Adjust— for max.
1	Pin #1 of V-2 in series with .01 mfd	455 kc. (mod.)	Quiet point at high freq. end	T-2 bottom core (sec.) top core (pri.)
2	Pin #1-V-5 in series with .01			T-1 Bottom core (sec.) top core (pri.)
3	Short wire placed near loop for radiated signal	1600 kc. (mod.)	1600 kc. (gang fully open)	C-1-BT (osc.)
4				
5		1600 kc. (mod.)	1600 kc. signal	C-1A-T (ant.)
6		Repeat Steps 4 and 5 until Maximum gain is obtained		

Oscillator frequency is above signal frequency on both AM and FM.

If an FM sweep generator is used for FM alignment, adjust for 10.7 mc, 0.4 mc sweep. Connect oscilloscope across C-13, adjusting T-4 top core for 10.7 mc-crossover, and T-4 bottom core for balanced peaks. Peak separation should be approximately 330 kc. When aligning the other FM tuned circuits, connect oscilloscope lead through a 270K resistor to pin 1 of V-3. Follow alignment table sequence, adjusting for maximum gain and symmetrical curves.

FM Alignment

FUNCTION SWITCH IN FM POSITION—VOLUME CONTROL MINIMUM—TONE CONTROL CENTER

Steps	Connect High side of sig. gen. to—	Set sig. gen. to—	Set radio dial to—	Adjust for—
1	Pin #1 of V-2 (6BA6)	Connect VoltOhmyst across R-26		
2			—	Max. Top T-3
3			—	Max. Bottom T-3
4		10.7 mc	—	Max. Top T-4
5			—	Max. Bottom T-4
6	Antenna Terminal board through 270 ohms	Repeat steps 2, 3, 4, 5		
7		Connect VoltOhmyst across R-26 Zero VoltOhmyst Half scale		
8		10.7 mc	—	Zero Top T-4 pointer should swing through zero rapidly
9		87.5 mc	Tuning coil slug closed	FM Tuner string drive collar
10		108.5 mc	Tuning coil slug opens	Max. Osc. trimmer
11		95 mc	Tuning coil slug closed	Max. RF trimmer

* Adjust output level of signal generator to provide approximately 1 volt indication on VoltOhmyst.

† Alternate loading may be required for accurate peaking; the winding not being peaked should be loaded with a resistor, 270 ohms in Step 8 and 470 ohms in Step 9.

REPLACEMENT PARTS LIST

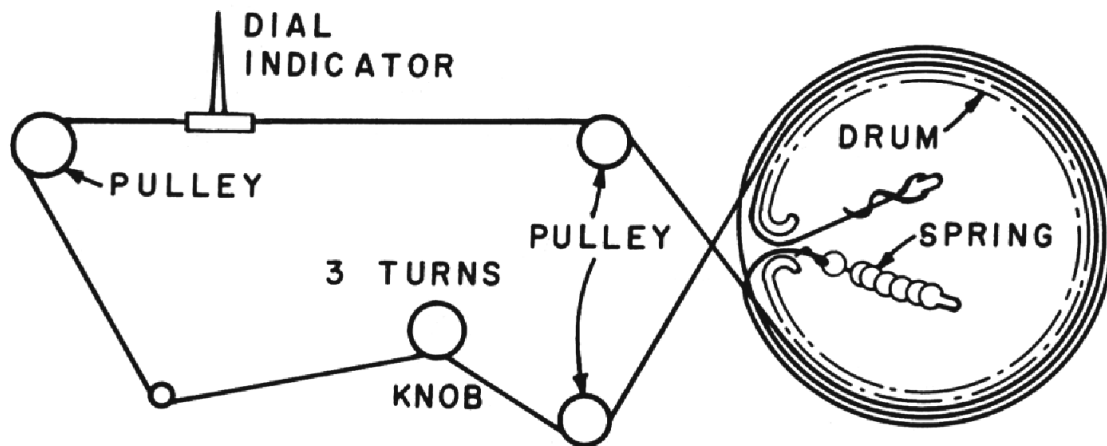
Insist on Genuine Factory Tested Parts, which are readily identified and may be purchased from Authorized Dealers.

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SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
CHASSIS ASSEMBLY			R-60	63-24529	Resistor-2700 ohms, 7W 10%
C1A, 1B	63-23846	Capacitor-(AM Variable Tuning Capacitor	R-63		Resistor-18,000 ohms, 1W 10%
C-2		Capacitor-1000 mmfd. 500 volts	R-64	63-23784	Resistor-130 ohms, 5W
C-3		Capacitor-56 mmfd. 500 volts	R-65		Resistor-47,000 ohms, 1/2W 10%
C-4		Capacitor-.01 mfd. 500 volts	R-66	63-24454	Control-Tone Dual Control-2.0 meg.
C-7		Capacitor-1000 mmfd. 500 volts	R-67		Resistor-47,000 ohms, 1/2W 10%
C-8		Capacitor-4700 mmfd. 500 volts	R-68		Resistor-1,500 ohms, 1/2W 10%
C-9		Capacitor-4700 mmfd. 500 volts	R-69		Resistor-1,5 meg. 1/2W 10%
C-10		Capacitor-.01 mfd. 500 volts	R-70		Resistor-47,000 ohms, 1/2W 10%
C-11		Capacitor-33 mmfd. 500 volts	R-72		Resistor-1,5 meg. 1/2W 10%
C-12		Capacitor-.01 mfd. 500 volts	R-73		Resistor-47,000 ohms, 1/2W 10%
C-13		Capacitor-.01 mfd. 500 volts	R-74		Resistor
C-14		Capacitor-.047 mfd. 200 volts	R-75		Resistor
C-15		Capacitor-100 mmfd. 500 volts	S-1	*63-25042	Switch-Function Switch
C-16		Capacitor-100 mmfd. 500 volts	T-1	63-23844	Transformer-1st IF Transformer (AM)
C-17		Capacitor-4700 mmfd. 500 volts	T-2	63-23844	Transformer-2nd IF Transformer (AM)
C-18		Capacitor-4700 mmfd. 500 volts	T-3	63-27513	Transformer-2nd IF Transformer (FM)
C-19		Capacitor-100 mmfd. 500 volts	T-4	63-23856	Transformer-Ratio Detector
C-20		Capacitor-330 mmfd. 500 volts	T-6	63-24449	Transformer-Output Transformer-Right
C-21		Capacitor-1000 mmfd. 500 volts	T-7	63-24448	Transformer-Output Transformer-Left
C-22		Capacitor-2200 mmfd. 500 volts	T-9	63-23748	Transformer-Power Transformer
C-23		Capacitor-4700 mmfd. 500 volts			
C-24		Capacitor-2 mfd. 500 volts			
C-25		Capacitor-2200 mmfd. 500 volts			
C-27	62-9743	Capacitor-Electrolytic-25 mfd. 25 volts			
C-29		Capacitor-.0068 mfd. 400 volts			
C-33		Capacitor-.047 mfd. 400 volts			CHASSIS ASSEMBLIES
C-35		Capacitor-.0047 mfd. 400 volts			
C-37		Capacitor-.0068 mfd. 400 volts			
C-41		Capacitor-.047 mfd. 400 volts			
C-42	62-9743	Capacitor-Electrolytic-25 mfd. 25 volts	*63-25046		Antenna-Antenna FM
C-44		Capacitor-.0047 mfd. 400 volts	*63-25044		Cord-Drive Cord
C-45	63-24452	Capacitor-Electrolytic 60/60/20/20 mfd. 350 volts	63-23901		Cord-Power Cord
C-48		Capacitor-1000 mmfd. 500 volts	*63-25048		Dial-Dial Scale
C-49		Capacitor-4700 mmfd. 500 volts	71-11891		Lamp-Dial Lamp
C-53, C-54	62-12434	Capacitor-560 mmfd. 1000 volts	63-23883		Pulley-Bracket Pulley FM
			63-23884		Pulley-Bracket Pulley AM
			63-23860		Plate-Dial Back Plate
			63-23866		Pointer-Dial Pointer
			63-72602		Pulley-Pulley 13/32 Diam.
			63-102043		Pulley-Pulley 5/8 Diam.
			63-24442		Socket-Socket & Lead Ass'y.(Dial Light)
			63-76971		Socket-Tube Socket-9 pin
			63-87937		Socket-Tube Socket-7 pin
			63-23862		Socket-Phono Speaker-3 pin
			63-23861		Shaft-Drive Shaft
			63-23852		Tuner-FM Tuner
			62-13749		Retainer-Dial Glass Retainer
					MISCELLANEOUS ASSEMBLY

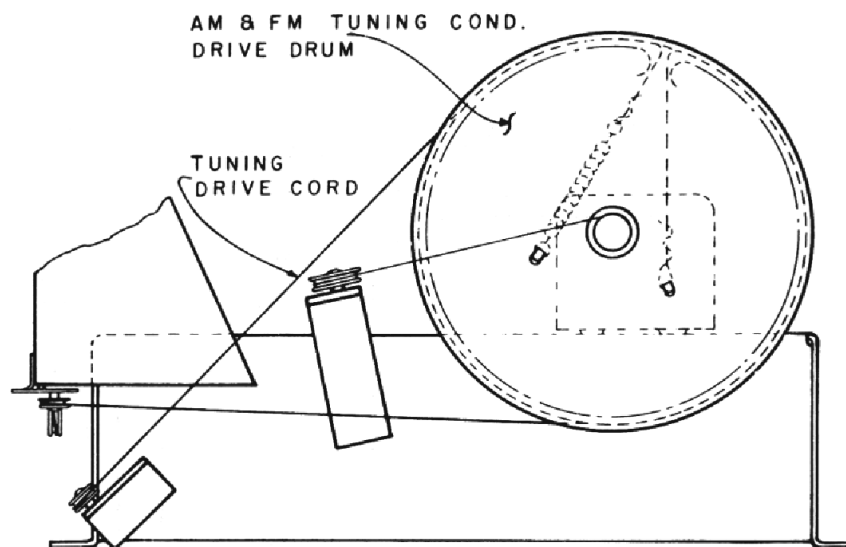
* Indicates New Stock Items.

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

All parts subject to change or withdrawal without notice.



AM Dial Cord Arrangement — Capacitor in Closed Position



Right Side View of AM & FM Chassis showing Tuning Drive Cord Arrangement