

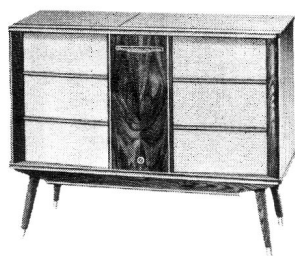


RCA VICTOR

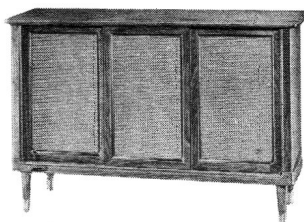


STEREO-HIGH FIDELITY COMBINATION MODELS

SERVICE DATA



Model SHC562
"THE DEBONNAIRE"



Model SHC563
"THE WAGNER"



SHC564
"THE GLENDON"



Model SHC566

ELECTRICAL AND MECHANICAL SPECIFICATIONS

TUBE COMPLEMENT

AM - FM Tuner

Symbol	Type	Function
VI-A	RCA ½6DT8	FM — RF Amplifier
VI-B	RCA ½6DT8	FM — Osc — Mixer
V-2	RCA 6BA6	1st FM — IF Amplifier
V-3	RCA 6BA6	2nd FM — IF Amplifier
V-4	RCA 6AU6	3rd FM — IF Amplifier
V-5	RCA 6AL5	FM — Detector
V-6	RCA 6BE6	AM — Converter
V-7	RCA 6BA6	AM — IF Amplifier
V-8	RCA 6AV6	AM — 2nd Detector
V-9A	RCA ½6CG7	1st Audio Amplifier — Left Channel
V-9B	RCA ½6CG7	1st Audio Amplifier — Right Channel
V-10A	RCA ½6CG7	2nd Audio Amplifier — Left Channel
V-10B	RCA ½6CG7	2nd Audio Amplifier — Right Channel
V-11	RCA 6FG6	Tuning Indicator—(Model SHC563 only)

AM-FM Power Audio Amplifier—Model SHC562, SHC564, SHC566

V-101A	RCA ½6CG7	AF — Amplifier — Left Channel
V-101B	RCA ½6CG7	AF — Amplifier — Right Channel
V-102	RCA 6BQ5	Output — Left Channel
V-103	RCA 6BQ5	Output — Right Channel
V-104	RCA 5U4GB	Rectifier

Power Audio Amplifier — Model SHC563

VIA,B	RCA 6CG7	Audio Amplifier — Left Channel
U2A,B	RCA 6CG7	Audio Amplifier — Right Channel
V-3	RCA 6BQ5	Push-pull Output — Left Channel
V-4	RCA 6BQ5	Push-pull Output — Left Channel
V-5	RCA 6BQ5	Push-Pull Output — Right Channel
V-6	RCA 6BQ5	Push-Pull Output — Right Channel
V-7	RCA 5U4GB	Rectifier

TUNING RANGE

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

INTERMEDIATE FREQUENCIES

AM	455 kc.	FM	10.7 mc.
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POWER SUPPLY RATING

115 volts, 60 cycles, 145 watts (includes record changer)
Record Changer — Collaro Conquest Stereo (SHC564)
Record Changer — Garrard RC88/4 (SHC562, 563, 566)
Turntable speed16-2/3, 33-1/3, 45 or 78 r.p.m.
Record CapacityUp to fifteen 7 inch or twelve 10 inch or ten 12 inch or ten 10 inch and 12 inch intermixed
Pickup Stock No. S-23550Collaro Changer
Pickup Stock No. S-23698Garrard RC88/4

AUDIO POWER OUTPUT (SHC562,564,566)15 watts maximum
(Each Channel)

AUDIO POWER OUTPUT SHC56330 watts maximum
(Each Channel)

FREQUENCY RESPONSE45 cycles to 20,000 cycles

LOUDSPEAKERS

Two 10" PM "woofers"	10 ohms @ 400 cycles
Two 3½" PM "tweeters"	6-8 ohms @ 3000 cycles
Two 12" PM "woofer" SHC563	8 ohms @ 400 cycles
Two 3½" PM "tweeter" SHC563	16 ohms @ 3000 cycles

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

1959 No. 21

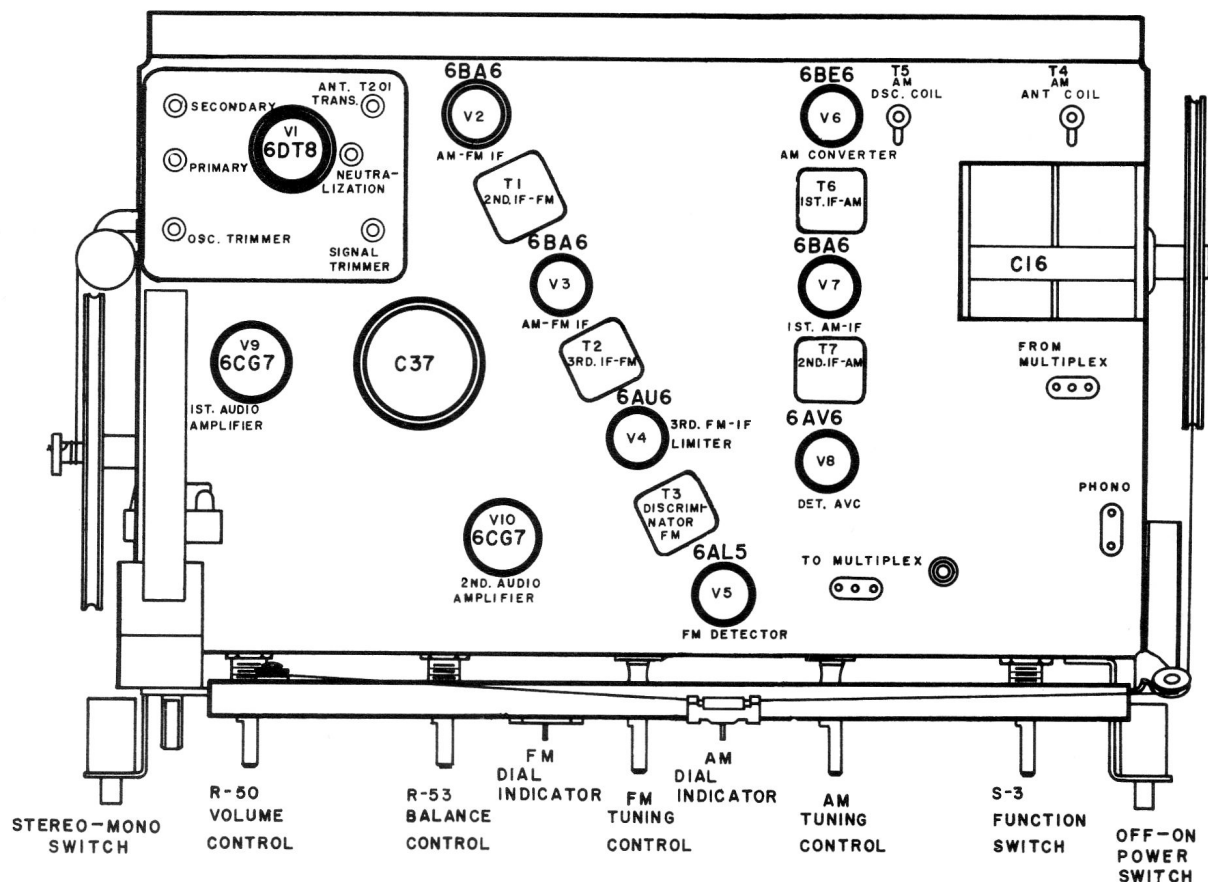


Fig. 1 — AM-FM Tuner Chassis Showing Location of Tubes and Major Components

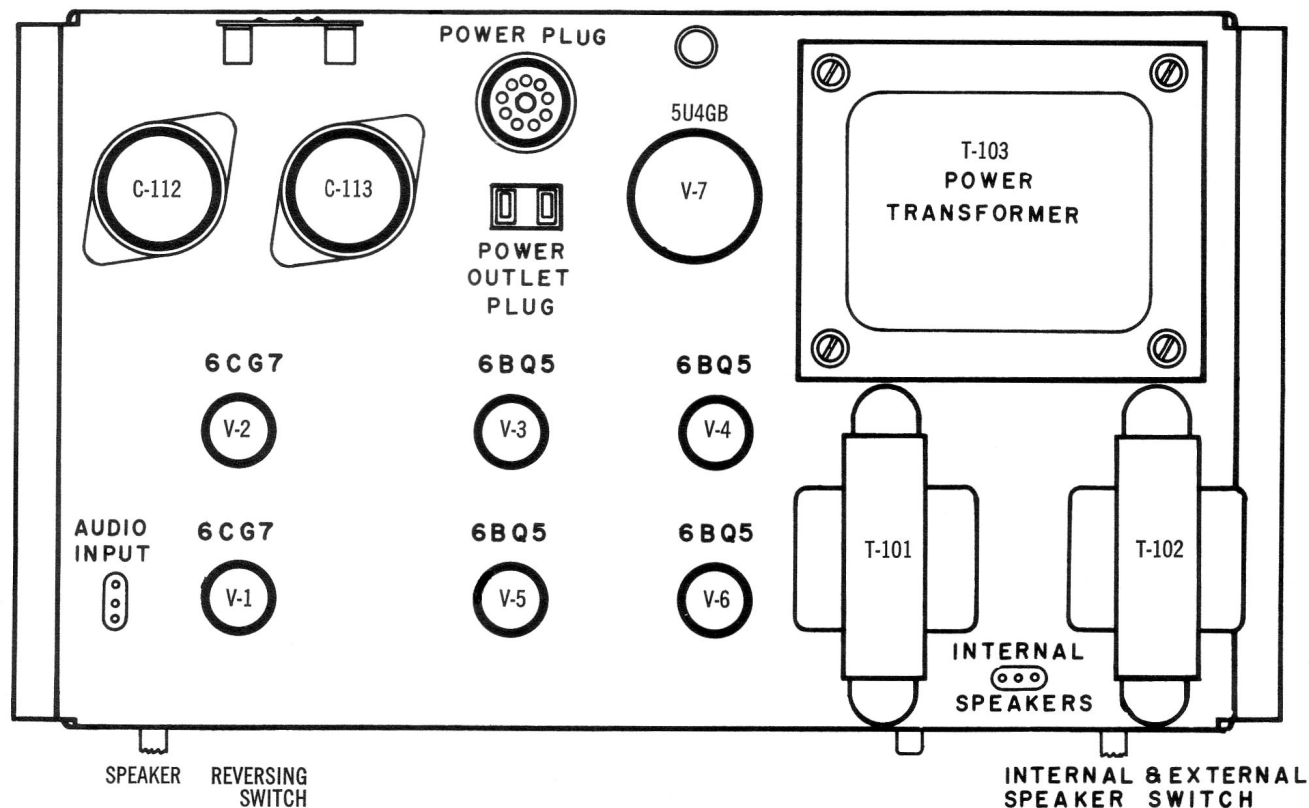


Fig. 2 — AM-FM Amplifier Chassis Showing Location of Tubes and Major Components
For Model SHC563

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 #2 of V-7 in series with .01 mfd Pin #1-V-6 in series with .01	455 kc. (mod.)	Quiet point at high freq. end	T-7 bottom core (sec.) top core (pri.)
2				T-6 Bottom core (sec.) T5 top core (pri.)
3	Short wire placed near loop for radiated signal	1620 kc. (mod.)	1620 kc. (gang fully open)	C-16B-T (osc.)
4				
5		600 kc. (mod.)	600 kc. signal	T-5 (rock gang)
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 discriminator T-3 top core for 10.7 mc crossover, and T-3 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-4. 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-16		
2			—	Max. Top T-1
3			—	Max. Bottom T-1
4		10.7 mc	—	Max. Top T-2
5			—	Max. Bottom T-3
6	Antenna Terminal board through 270 ohms	Repeat steps 2, 3, 4, 5		
7		Connect VoltOhmyst across R-16 & R-17 Zero VoltOhmyst Half scale		
8		10.7 mc	—	Zero Top T-3 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 C-212
11		95 mc *	Tuning coil slug closed	Max. RF trimmer C-207

* 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.

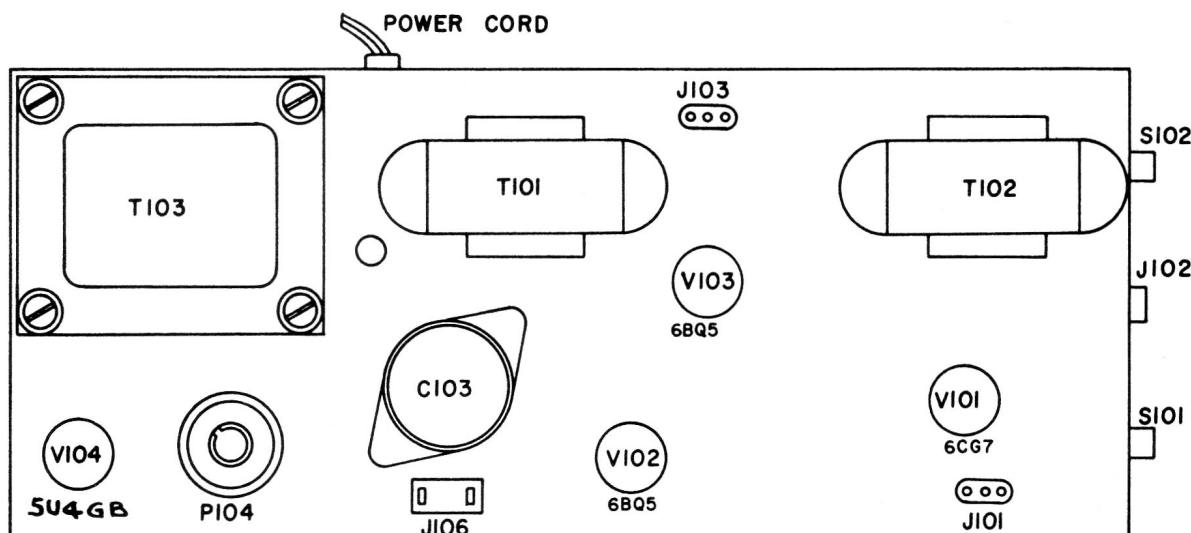
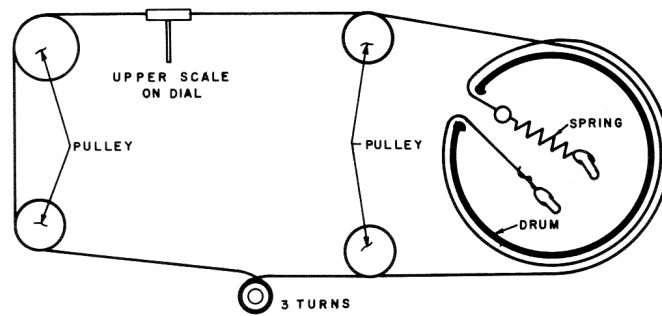


Fig. 3 — AM-FM Amplifier Chassis Showing Location of Tubes and Major Components
For Models SHC562, SHC564, SHC566

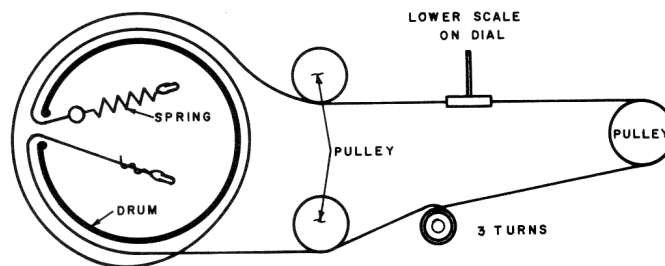


AM-FM Tuner Schematic

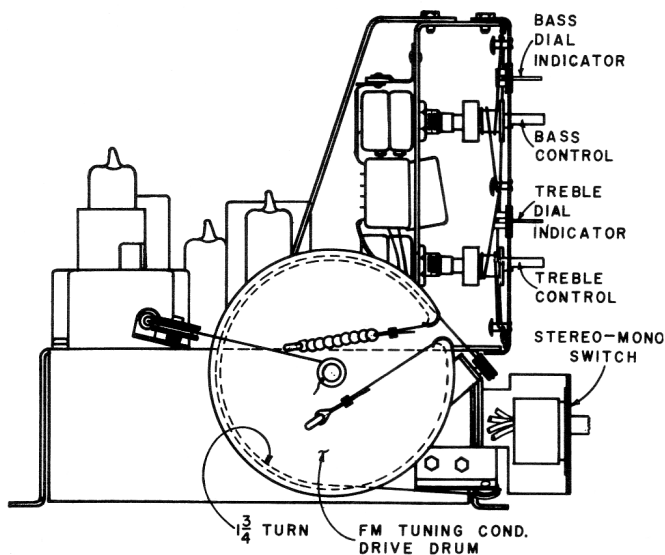




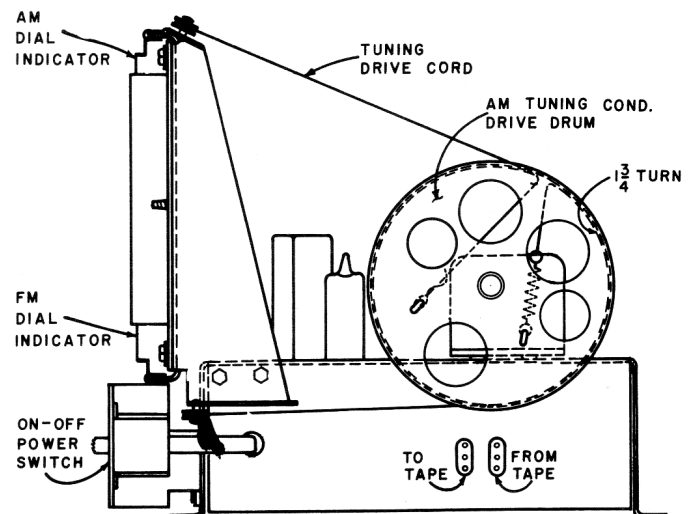
AM-Dial Cord Arrangement
with Gang Capacitor in Closed Position



FM-Dial Cord Arrangement



Left Side View of Chassis Headend
Showing Components



Right Side View of FM Chassis
Showing Components

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
		STEREO POWER AMPLIFIER CHASSIS Cont'd.	R-114		Resistor-27,000 ohms, 10%, 1/2W
C-102			R-115		Resistor-470,000 ohms, 10%, 1/2W
C-103		Capacitor-0.27 mfd. 400V	R-116		Resistor-470,000 ohms, 10%, 1/2W
A/B/C			R-117		Resistor-470,000 ohms, 10%, 1/2W
/D	S-20521+	Capacitor-Electrolytic-35/35/20/20	R-118		Resistor-470,000 ohms, 10%, 1/2W
R-101		Resistor-470,000 ohms, 10%, 1/2 W	R-119		Resistor-130 ohms, 5%, 4W
R-102		Resistor-3,300 ohms, 10%, 1/2 W	R-120		Resistor-130 ohms, 5%, 4W
R-103		Resistor-100,000 ohms, 10%, 1/2 W	R-121		Resistor-8,200 ohms, 10%, 1/2W
R-104		Resistor-470,000 ohms, 10%, 1/2 W	R-122		Resistor-8,200 ohms, 10%, 1/2W
R-105		Resistor-47 ohms, 10%, 2 W	R-123		Resistor-5,600 ohms, 10%, 1/2W
R-106		Resistor-470,000 ohms, 10%, 1/2 W	R-124		Resistor-5,600 ohms, 10%, 1/2W
R-107		Resistor-6,800 ohms, 10%, 1/2 W	R-125		Resistor-1,200 ohms, 10%, 2W
R-108		Resistor-100,000 ohms, 10%, 1/2 W	R-126		Resistor-2,200 ohms, 10%, 2W
R-109		Resistor-470,000 ohms, 10%, 1/2 W	R-127		Resistor-3,300 ohms, 10%, 1/2W
R-110		Resistor-47 ohms, 10%, 2 W	R-128		Resistor-1,500 ohms, 10%, 7W
R-111		Resistor-68 ohms, 10%, 2 W	R-129		Resistor-47 ohms, 2W
R-112		Resistor-1,200 ohms, 10%, 2 W	R-130		Resistor-47 ohms, 2W
R-113		Resistor-4,700 ohms, 10%, 1/2 W	R-131		Resistor-47,000 ohms, 10%, 1/2W
R-114		Resistor-4,700 ohms, 10%, 1/2 W	R-132		Resistor-47,000 ohms, 10%, 1/2W
R-115		Resistor-8,200 ohms, 10%, 2 W		76971+	Socket-9 Pin Socket for 6BQ5, 6CG7
R-116		Resistor-6,800 ohms, 10%, 1/2 W	S-10694+		Socket-Octal Socket for 5U4GB
R-117		Resistor-6,800 ohms, 10%, 1/2 W	J-101	101998\$	Socket-Audio Input 3 Pin Speaker Socket
S-101	*S-23559+	Switch-Channel Reverse Switch	J-104	*S-23563\$	Socket-9 Pin Power Socket
S-102	S-23599+	Switch-Speaker Selector Switch	J-106	*S-23644\$	Socket-AC Multiplex Socket
T-101	*S-23564+	Transformer-Left Audio Output Transformer	S-101	*S-23558+	Switch-Channel Reverse Switch
T-102	*S-23565+	Transformer-Right Audio Output Transformer	S-102	*S-23558+	Switch-Internal-External Speaker Switch
T-103	*S-23748+	Transformer-Power Transformer	T-101	*S-23645+	Transformer-Left Audio Output
	S-23568\$	Assembly-Phono Motor Socket & Lead Ass'y.	T-102	*S-23646+	Transformer-Right Audio Output
	S-23567\$	Assembly-Jewel Light Socket & Lead Ass'y.	T-103	*S-23614+	Transformer-Power Transformer
	11891+	Light - Jewel Light			SPEAKER ASSEMBLY
	76971+	Socket - 9 Pin Tube Socket for 6BQ5, 6CG7	*S-22443+		Speaker Ass'y. - 3-1/2" PM (8 ohms) SHC562, 564, 566
	S-10694+	Socket-Octal Tube Socket for 5U4GB	S-13094+		Speaker Ass'y. - 3-1/2" PM (16 ohms) SHC563
	S-23563+	Socket - 9 Pin Power Socket	S-23555\$		Speaker Ass'y. - 10" PM (10 ohms) SHC562, 564, 566
		SHC563 - POWER AUDIO AMPLIFIER	*S-13091\$		Speaker Ass'y. - 12" PM (8 ohms) SHC563
C-101		Capacitor-.27 mfd. 400V			MISCELLANEOUS & CABINET ASSEMBLIES
C-102		Capacitor-.27 mfd. 400V	*S-23647\$		Assembly-Back Cover Ass'y.-SHC563
C-103		Capacitor-.27 mfd. 400V	*S-23749\$		Assembly-Back Cover Ass'y.-SHC562
C-104		Capacitor-.27 mfd. 400V	*S-23750\$		Assembly-Back Cover Ass'y.-SHC564
C-105		Capacitor-.27 mfd. 400V	*S-23751\$		Assembly-Back Cover Ass'y.-SHC566
C-106		Capacitor-.27 mfd. 400V	S-23573\$		Antenna-FM Antenna Assembly
C-107		Capacitor-100 mmf. 500V	S-23330\$		Board-AM/FM Antenna Terminal Board
C-108		Capacitor-100 mmf. 500V	S-22034\$		Cap-Jewel Lamp Cap - Green
C-109	S-12969+	Capacitor-Electrolytic - 4 mfd.	S-23546\$		Emblem - Stereo Emblem
C-110	S-12969+	Capacitor-Electrolytic - 4 mfd.	S-13049\$		Emblem - Dog Emblem
C-112A	*S-23738+	Capacitor-Electrolytic - 40 mfd. 400V	*S-23741\$		Ferrules - Leg Ferrules (4 req'd.) SHC563
B		- 20 mfd. 25V			
C		- 20 mfd. 25V			
C-113/B	*S-23739+	Capacitor-Electrolytic-40/40x450/450 V	*S-23740\$		Glide - Door Glide - SHC563
R-101		Resistor-470,000 ohms, 10%, 1/2 W			Hinge - Bottom Hinge - 2 req'd.
R-102		Resistor-470,000 ohms, 10%, 1/2 W	S-13099+		Knob Ass'y - Balance - Volume - Function Control
R-103		Resistor-56,000 ohms, 10%, 1/2 W	S-23649+		Knob Ass'y - Balance - Volume - Function SHC564
R-104		Resistor-56,000 ohms, 10%, 1/2 W	S-23562+		Knob Ass'y - Bass - Treble Control
R-105		Resistor-2,700 ohms, 10%, 1/2 W	S-23650+		Knob Ass'y - Bass - Treble SHC564
R-106		Resistor-2,700 ohms, 10%, 1/2 W	S-23561+		Knob Ass'y - Tuning Control
R-107		Resistor-22,000 ohms, 10%, 1/2 W	S-23648+		Knob Ass'y - Tuning SHC564
R-108		Resistor-22,000 ohms, 10%, 1/2 W	11891+		Lamp - Jewel Lamp
R-109		Resistor-82,000 ohms, 10%, 1/2 W			
R-110		Resistor-82,000 ohms, 10%, 1/2 W	74809\$		Nameplate - RCA Nameplate
R-111		Resistor-22,000 ohms, 10%, 1/2 W			
R-112		Resistor-22,000 ohms, 10%, 1/2 W			
R-113		Resistor-27,000 ohms, 10%, 1/2 W			

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

All parts subject to change or withdrawal without notice.

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
		MISCELLANEOUS & CABINET ASSEMBLIES - Cont'd.			
	S-23575\$	Manual-Customer's Instruction Manual		*S-23615\$	Scale - Dial Scale - SHC563
	S-23574\$	Manual-Customer's Instruction Manual (SHC564 only)		*S-23543\$	Support - Lid Support SHC563
	*S-23742\$	Pulls - Door Pulls		*S-23880	Support - Lid Support SHC562, 564, 566
	S-23571\$	Scale - Dial Scale - SHC562, 564, 566		S-23572\$	Trim - Control Plate
				S-23559\$	Trim - Dial Scale Retainer

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