



RCA VICTOR



HIGH FIDELITY RADIO-PHONOGRAPH COMBINATION

MODEL HFC-392(A) (The Fairfield)

SERVICE DATA

GENERAL DESCRIPTION

The model HFC-392 "The Fairfield" 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.



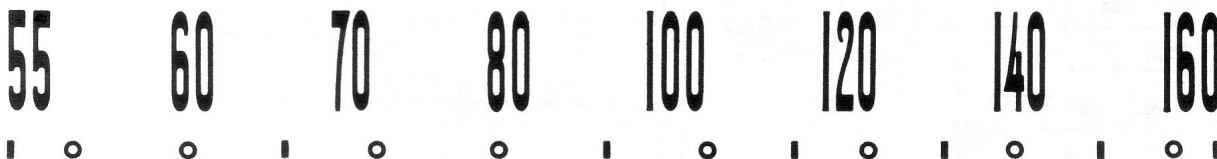
Electrical and Mechanical Specifications

MODEL HFC-392(A)

Standard Broadcast 540 - 1600 Kc
Intermediate Frequency 455 KCS.

Tube Complement

Symbol No.	Tube No.	Function	
V1	RCA 6BA6	R.F. Amplifier	Tuning Drive Ratio (17.1) or 8½ turns of Knob
V2	" 6BE6	Osc/Mixer	POWER OUTPUT
V3	" 6BA6	IF Amplifier	Undistorted 8 watts
V4	" 6AV6	Second Detector	Maximum 10 watts
V5A	" ½ 12AU7	1st Audio Amplifier	LOUDSPEAKERS
V5B	" ½ 12AU7	2nd Audio Amplifier	Type (2) 12" PM, (2) 3½ PM
V6A	" ½ 12AU7	3rd Amplifier	RECORD CHANGER MECHANISM
V6B	" ½ 12AU7	Phase Inverter	HFC-392: COLLARO RC457 Changer
V7	" 6V6GT	Output	HFC-392A: COLLARO Challenger Changer
V8	" 6V6GT	Output	Turntable Speeds 16 ⅔, 33 ⅓, 45 & 78 RPM.
V9	" 5Y3GT	Rectifier	

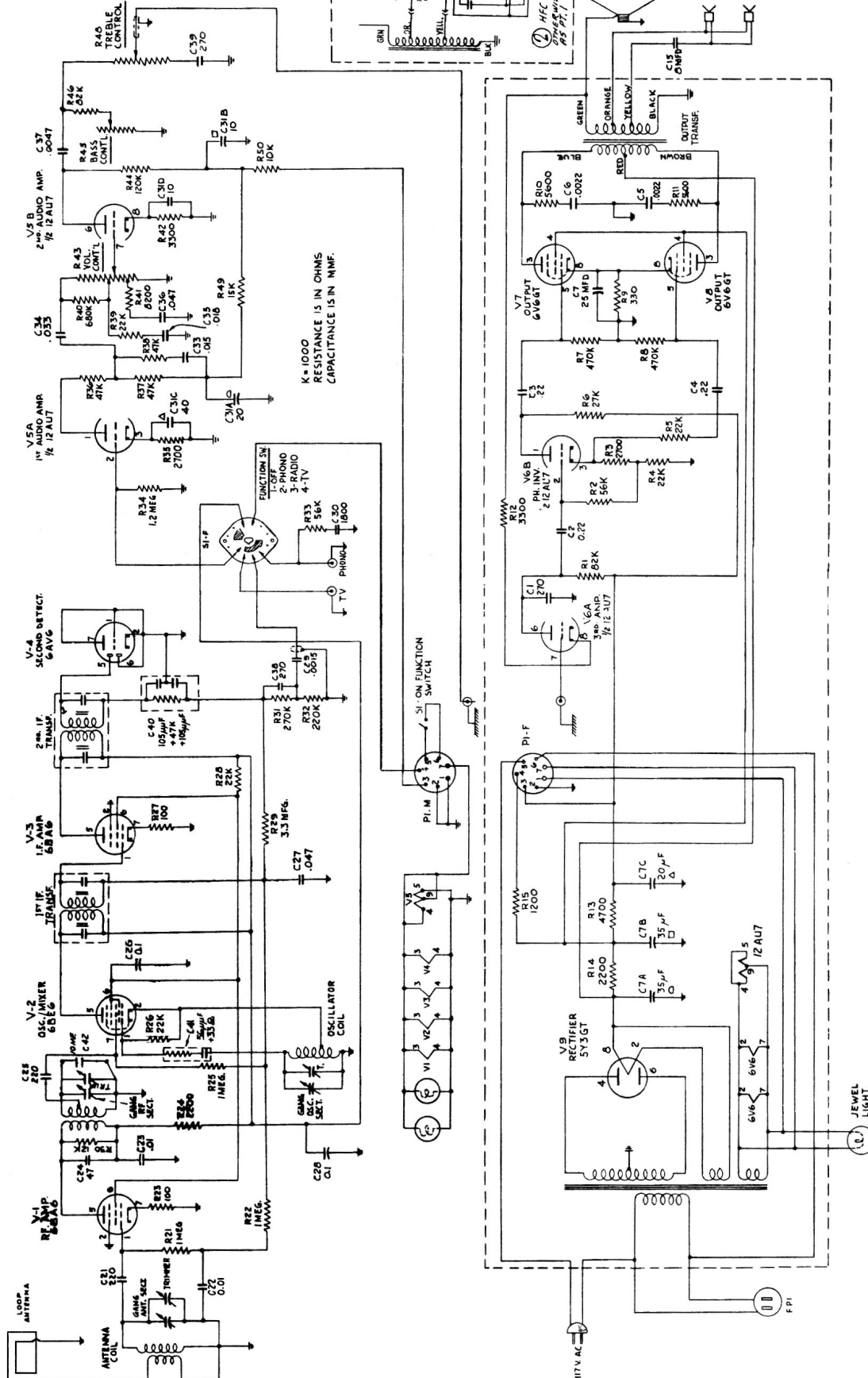


DIAL SCALE HFC-392 (A)

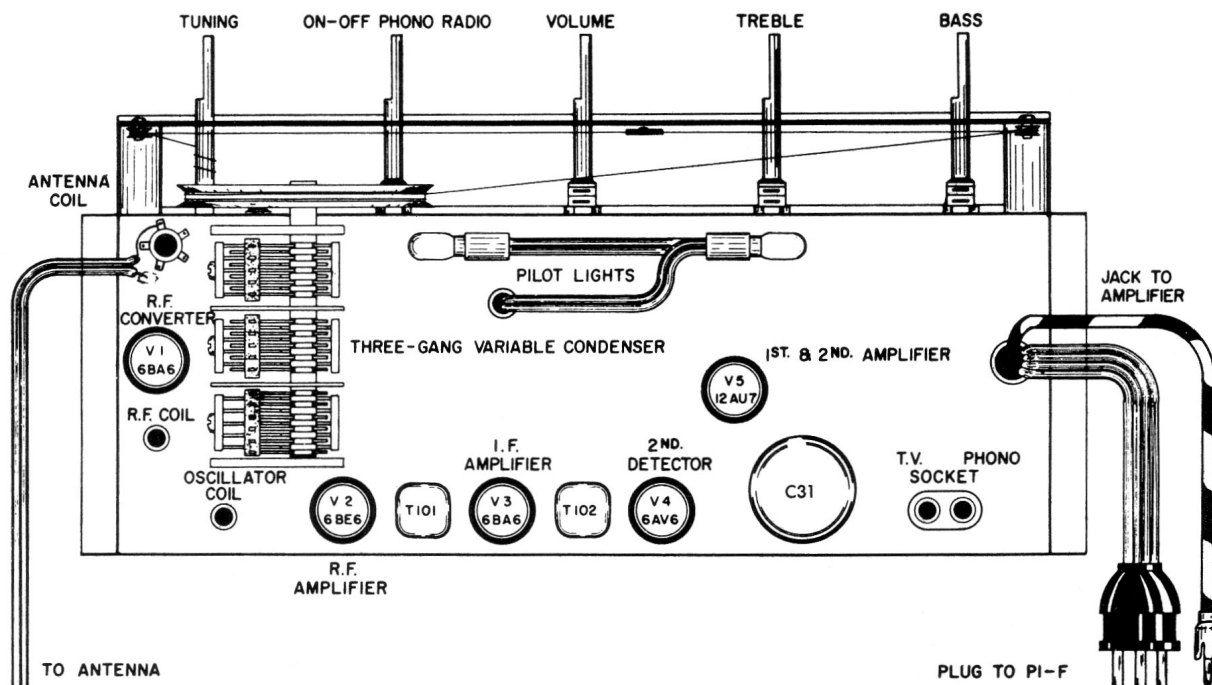
The Dial Scale Drawing shown is a full size reproduction. It can be used as a reference in alignment procedure.

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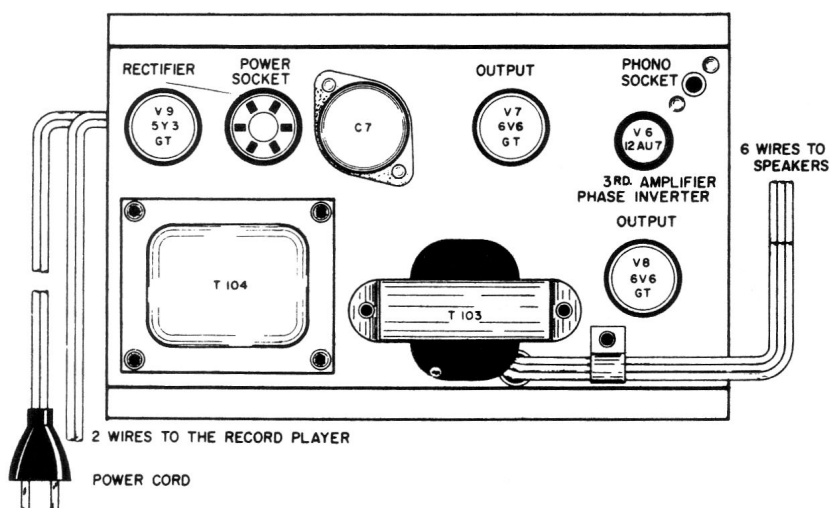
GENERAL SERVICE DEPARTMENT
RCA VICTOR COMPANY, LTD.
MONTREAL, CANADA



Schematic Diagram for Hi-Fi Combination
Model HFC-392 (A)



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 LIST

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

SYMBOL NO.	STOCK NO.	DESCRIPTION	SYMBOL NO.	STOCK NO.	DESCRIPTION
C-1		Capacitor — Mica 270 mmf. 500V.	R-11		Resistor — 3300 ohms $\frac{1}{2}W$
C-2		Capacitor — Paper 0.22 mfd. 400V.	R-12		Resistor — 3300 ohms $\frac{1}{2}W$
C-3		Capacitor — Paper 0.22 mfd. 400V.	R-13		Resistor — 4700 ohms $\frac{1}{2}W$
C-4		Capacitor — Paper 0.22 mfd. 400V.	R-14	S-20399	Resistor — 2200 ohms 10% 5W
C-5		Capacitor — Paper 0.0022 mfd. 1000V.	R-21		Resistor — 1.0 megohm 20% $\frac{1}{2}W$
C-6		Capacitor — Paper 0.0022 mfd. 1000V.	R-22		Resistor — 1.0 ohms 20% $\frac{1}{2}W$
C-7A)		Capacitor — Electrolytic — 35 mfd.	R-23		Resistor — 100 ohms 10% $\frac{1}{2}W$
)		350V	R-24		Resistor — 2200 ohms 20% $\frac{1}{2}W$
C-7B)	S-20521	Capacitor — Electrolytic — 35 mfd.	R-25		Resistor — 1.0 megohm 20% $\frac{1}{2}W$
)		350V	R-26		Resistor — 22000 ohms 10% $\frac{1}{2}W$
C-7C)		Capacitor — Electrolytic — 20 mfd.	R-27		Resistor — 100 ohms 10% $\frac{1}{2}W$
C-7D)		Capacitor — Electrolytic — 25 mfd.	R-28		Resistor — 22000 ohms 10% $\frac{1}{2}W$
C-15		Capacitor — Electrolytic — 8 mfd.	R-29		Resistor — 3.3 megohm 20%
C-21	S-20390	Capacitor — Ceramic - Hi-K 220 mmf. 20% 500V	R-30		Resistor — 12000 ohms 10% $\frac{1}{2}W$
C-22	S-20391	Capacitor — Disc - Hi-K .01 mfd. - 0% + 100% 500V	R-31		Resistor — 27000 ohms 10%
C-23		Capacitor — Disc - Hi-K .01 mfd. - 0% + 100% 500V	R-32		Resistor — 22000 ohms 10%
C-24	S-20392	Capacitor — Ceramic - 47 mmf. 10% 500V	R-33		Resistor — 5600 ohms 10%
C-25		Capacitor — Ceramic - Hi-K 220 mmf. 20% 500V	R-34		Resistor — 1.2 megohm 10%
C-26		Capacitor — Paper - .1 mfd. 20% 400V	R-35		Resistor — 2700 ohms 10%
C-27		Capacitor — Paper - .047 mfd. 20%	R-36		Resistor — 47000 ohms 10%
C-28		Capacitor — Paper - .1 mfd. 20% 400V	R-37		Resistor — 47000 ohms 10%
C-29		Capacitor — Paper - .0015 mfd. 10% 400V	R-38		Resistor — 47000 ohms 10%
C-30	S-20393	Capacitor — Ceramic - Hi-K 1800 mmf. 10% 500V	R-39		Resistor — 22000 ohms 10%
C-31A)		Capacitor — Electrolytic - 20 mfd.	R-40		Resistor — 680000 ohms 10%
C-31B)	S-20520	Capacitor — Electrolytic - 10 mfd.	R-41		Resistor — 8200 ohms 10%
C-31C)		Capacitor — Electrolytic - 10 mfd.	R-42		Resistor — 3300 ohms 10%
C-31D)		Capacitor — Electrolytic - 40 mfd.	R-43	*S-22044	Control — Volume Control
C-33		Capacitor — Paper - .015 mfd. 10% 400V	R-44		Resistor — 120000 ohms 10%
C-34		Capacitor — Paper - .033 mfd. 10% 400V	R-45	*S-22042	Control — Bass Control
C-35		Capacitor — Paper - .015 mfd. 10% 200V	R-46		Resistor — 82000 ohms 10%
C-36		Capacitor — Paper - .047 mfd. 10% 200V	R-47		Resistor — 220000 ohms 10%
C-37		Capacitor — Paper - .0047 mfd. 10% 400V	R-48	*S-22043	Control — Treble Control
C-38	S-20394	Capacitor — Mica - 270 mmf. 10% 500V	R-49		Resistor — 15000 ohms 10%
C-39	S-20394	Capacitor — Mica - 270 mmf. 10% 500V	R-50		Resistor — 10000 ohms 10%
C-40		Capacitor — 2-105 mmf. 10% 500V - 47K $\frac{1}{4}W$	S-1	*S-22035	Switch — Function Switch
C-41		Capacitor — 56 mmf. + 50%, - 20% 500V	T-101	S-20404	Transformer — 1st IF Transformer
C-42		Capacitor — 10 mfd.	T-102	S-20405	Transformer — 2nd IF Transformer
		Capacitor — 33 ohms, 20%, $\frac{1}{4}W$	T-103	S-20406	Transformer — Audio Output
		Condenser — Variable Condenser	T-104	S-20407	Transformer — Power Transformer 60 Cycle
	S-20610	Coil — Antenna Coil	T-104	S-20408	Transformer — Power Transformer 25 Cycle
	S-20396	Coil — RF Coil			SPEAKER ASSEMBLY
	S-20608	Coil — Oscillator Coil		78575	Speaker — 12" PM (1 req'd)
	S-20398			S-20615	Speaker — 3 $\frac{1}{2}$ " PM (2 req'd)
R-1		Resistor — 82000 ohms $\frac{1}{2}W$			MISCELLANEOUS ASSEMBLY
R-2		Resistor — 56000 ohms $\frac{1}{2}W$		*S-22034	Cap — Jewel Lamp Cap
R-3		Resistor — 27000 ohms $\frac{1}{2}W$		S-4313	Cord — Dial Drive Cord
R-4		Resistor — 22000 ohms $\frac{1}{2}W$		S-21696	Emblem — RCA Emblem
R-5		Resistor — 22000 ohms $\frac{1}{2}W$		*S-21262	Knob — Control Knobs (4 req'd) F
R-6		Resistor — 27000 ohms $\frac{1}{2}W$		S-21307	Knob — Control Knob (Tuning)
R-7		Resistor — 470000 ohms $\frac{1}{2}W$		*S-22045	Pointer — Dial Pointer
R-8		Resistor — 470000 ohms $\frac{1}{2}W$		*S-22037	Scale — Calibrated Dial Scale
R-9		Resistor — 330 ohms 2W		*S-22040	Shaft — Drive Shaft
R-10		Resistor — 5600 ohms 1W		33545	Shield — Pilot Lamp Shield
				*S-22038	Trim — Dial Scale Trim - Top
				*S-22039	Trim — Dial Scale Trim - Bottom
				*S-22041	Instruction Booklet
				S-21263	Plate — Control Knob
				S-22557	Handle — Mahogany
				S-22554	Handle — Walnut
				S-22553	Handle — Oak
				S-23010	Nylon Roller Slide Ass'y
				S-22321	Legs, Walnut, set of four
				S-22322	Legs, Maple, set of four
				S-22323	Legs, Oak, set of four

* Indicates new stock items