



RCA VICTOR

MODEL 54X



Five-Tube, Single-Band, AC-DC Superheterodyne Receiver

TECHNICAL INFORMATION AND SERVICE DATA

1948 No. 5

GENERAL SERVICE DIVISION

RCA VICTOR COMPANY LTD.

Electrical and Mechanical Specifications

FREQUENCY RANGE

Standard Broadcast S.B.540—1600 k.c.
Intermediate Frequency455 k.c.
Tuning drive ratio10 to 1

RADIOTRON COMPLEMENT

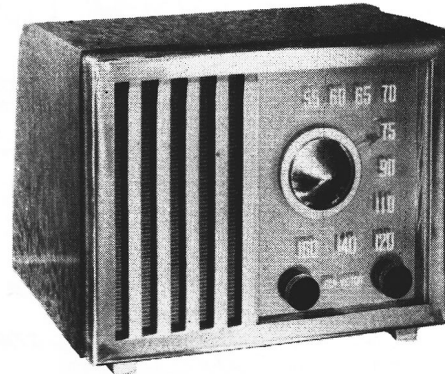
(1) Type 12SA7Converter
(2) Type 12SK7I.F. Amplifier
(3) Type 12SQ7Det A.V.C. & 1st A.F.
(4) Type 50L6GTPower Output
(5) Type 35Z5GTRectifier

POWER OUTPUT

Undistorted75 Watts
Maximum1.5 Watts

LOUDSPEAKER

Type5 inch Round P.M.
Voice coil impedance3.4 ohms at 400 cycles



POWER SUPPLY RATINGS

Rating A105—12 volts, 50-60 cycle, 30 watts

CABINET DIMENSIONS (Inches)

Height7³/₄"
Width10"
Depth7¹/₂"

REPLACEMENT PARTS FOR MODEL 54X

Insist on genuine factory tested parts, which are readily identified and may be purchased from authorized dealers.

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
RECEIVER ASSEMBLIES		SPEAKER ASSEMBLIES	
S-4307	Capacitor-56 MMF (C4).....	S-4309	Cone-Cone and voice coil (L11)....
S-4308	Capacitor-150 MMF (C14).....	S-4310	Speaker-(less transformer).....
S-4303	Capacitor-330 MMF (C15).....	S-4302	Output Transformer (L9,L10).....
S-3646	Capacitor-.005 Mfd.(C16).....	MISCELLANEOUS ASSEMBLIES	
70615	Capacitor-.05 Mfd.(C9,C19).....	72878	Bracket-Mounting bracket for pulley assy....
S-3651	Capacitor-.025 Mfd.(C17).....	72880	Bracket-Dial lamp bracket.....
S-3648	Capacitor-.01 Mfd.(C1,C13).....	72884	Baffle-Baffle board & grille cloth
S-3655	Capacitor-.1 Mfd.(C18).....	72883	Bezel only (less dial).....
72992	Condenser-Variable(C2,C3,C5,C6)....	32634	Cord-Drive cord (Universal).....
70408	Condenser-Electrolytic 30-50 Mfd. 150 V. (C20,C21).....	S-3467	Cord-Power cord.....
S-4304	Coil-Oscillator coil (L3,L4).....	72871	Cover-Bottom cover.....
72869	Indicator-Station selector pointer.	S-4278	Cabinet-(red-brown).....
72313	Resistor-33 ohms W.W.Fuse type(R10)	S-4294	Cabinet-(ivory).....
30880	Resistor-150 ohms-1/4 watt (R7)....	72868	Dial-Dial scale with lamp shield...
6134	Resistor-1200 ohms 1 watt (R9)....	72885	Foot-Mounting foot (Pkg.2).....
30492	Resistor-22,000 ohms 1/4 watt (R1)..	72283	Grommet(to mount tuning condenser (Pkg.10)
30787	Resistor-47,000 ohms 1/4 watt (R3)..	72867	Loop-Antenna loop(complete)(L1,L2)
14583	Resistor-220,000 ohms 1/4 watt(R5, R11).....	72870	Knob-(Red-brown).....
30648	Resistor-470,000 ohms 1/4 watt (R8)	72890	Knob-(Ivory).....
31417	Resistor-3.3 Megohms 1/4 watt (R2)	31480	Lamp-Pilot lamp (Mazda #47).....
30931	Resistor-4.7 Megohms 1/4 watt (R6)..	72882	Pulley-Dial scale indicator mount- ing pulley....
72877	Shaft-Tuning shaft.....	72881	Ring-Retaining ring for pulley assy.
32299	Socket-Tube socket.....	70390	Spring-Drive cord tension (Pkg.5).
S-3573	Transformer-1st I.F.(L5,L6,C7,C8)...	72879	Socket-Dial lamp socket.....
S-4306	Transformer-2nd I.F.(L7,L8,C10,C11)	14270	Spring-Knob retaining spring(Pkg.2)
S-4305	Volume Control (R4,S1).....	33726	Washer-"C" Washer for tuning shaft (Pkg.5).

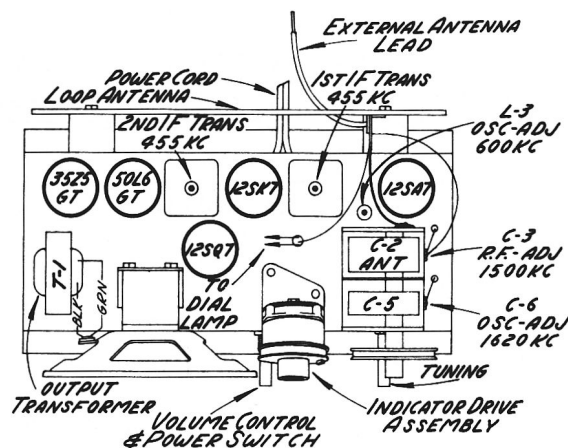
All parts and prices subject to change or withdrawal without notice.

Dial Cord Stringing

(Make lead dress before alignment)

1. Dress all heater leads to chassis.
2. Dress A.V.C. resistor away from 12SK7 tube socket.
3. Dress diode load resistor away from 12SQ7 socket.
4. Dress 12SQ7 plate resistor over second I.F. transformer terminal.
5. Dress power cord along chassis rear apron and next to bottom of chassis between 35Z5 and 50L6 tubes.
6. Dress audio coupling capacitor to bottom of chassis.
7. Keep lead of capacitor to Pin 3 of 50L6 socket short as possible.
8. Keep lead of capacitor to Pin 3 of 35Z5 socket short as possible.
9. Keep low side of power cord short as possible so as not to foul oscillator coil or associated circuits.

Type	Circuit	Plate	Screen	Cathode	Heater
12SA7	Conv.	93	93		12.6V
12SK7	I.F.	93	93		12.6V
12SQ7	1st Audio	56			12.6V
50L6/GT	Output	110	93	6V	50. V
35Z5/GT	Rect.			115	32 V



Chassis Layout and Alignment Adjustments

Order of Alignment		TEST OSCILLATOR				Range Selector	Receiver Dial Setting	Circuit To Adjust	Adjustment Symbols	Notes
		"Connect "HI" Side To	"Connect "LO" Side To	Dummy Antenna	Frequency Setting					
A.M. ALIGNMENT	1	12SK7 1st I.F. Grid	Ground thru. 0.1 mfd.	.01 mfd.	455 K.C. 30% mod. 400 Cy. A.M.	S.B.	High freq. end of dial	2nd I.F. Trans.	L7, L8	Adjust for max. A.C. voltage across voice coil.
	2	12SA7 Converter Grid	Same	Same	Same	Same	Same	1st I.F. Trans.	L5, L6	Same
S.B. ALIGNMENT	NOTE:- To compensate for the metal screen at the back of the cabinet, a shorted loop of hookup wire (of the same dimensions as the loop winding) must be spaced one inch away from the rear surface of the loop support.									
	3	Ant. Lead	Ground thru. 0.1 mfd.	200 m.m.f.	1500 K.C. 30% mod. 400 Cy. A.M.	S.B.	1500 K.C. on dial	Oscillator	C6	Adjust for max. A.C. voltage across voice coil
	4	Same	Same	Same	Same	Same	Same	Ant.	C3	Same
	5	Same	Same *	Same	600 K.C. 30% mod. 400 Cy. A.M.	Same	600 K.C. on dial	Oscillator	L3	*Same
	* NOTE:- Rock Oscillator in to loop at 600 K.C.									
	6	Repeat steps 3 to 5 for maximum output								