



RCA VICTOR



Model 2QX53

AC-DC RADIO RECEIVER MODEL 2QX53 SERVICE DATA — 1955 NO. 5 —

GENERAL SERVICE DEPARTMENT
RCA VICTOR COMPANY, LTD
MONTREAL, CANADA

ELECTRICAL AND MECHANICAL SPECIFICATIONS

SPECIFICATIONS

Frequency Ranges

Standard Broadcast ("A" Band).....520-1605 kc (577-187 m)
Medium Wave ("B" Band).....2.2-7 mc (136-42.8 m)
Short Wave ("C" Band).....7-22 mc (42.8-13.7 m)

Intermediate Frequency.....455 kc

Tube Complement

(1) RCA 12BE6 Converter
(2) RCA 6BJ6 I.F. Amplifier
(3) RCA 12AV6 Det., A.V.C. and A.F. Amplifier
(4) RCA 50C5 Output
(5) RCA 35W4 Rectifier
Dial Lamp (1).....Mazda No. 47, 6-8 volts, .15 amp.

Power Supply Ratings

RC-1124—105-125 volts D.C. or 25-60 cycles A.C....30 watts
RC-1124A—210-250 volts D.C. or 25-60 cycles A.C....60 watts

Power Output

Undistorted 1.0 watt
Maximum 1.6 watts

Loudspeaker

Type 6½" permanent-magnet dynamic
Voice-coil impedance 3.2 ohms at 400 cycles

Cabinet Dimensions

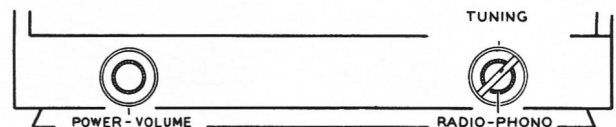
Height 9⅝ inches (24.5 cm)
Width 15 1/16 inches (38.3 cm)
Depth 6⅞ inches (17.5 cm)

POWER SUPPLY POLARITY—For operation on D.C. the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On A.C. reversal of the plug may reduce hum.

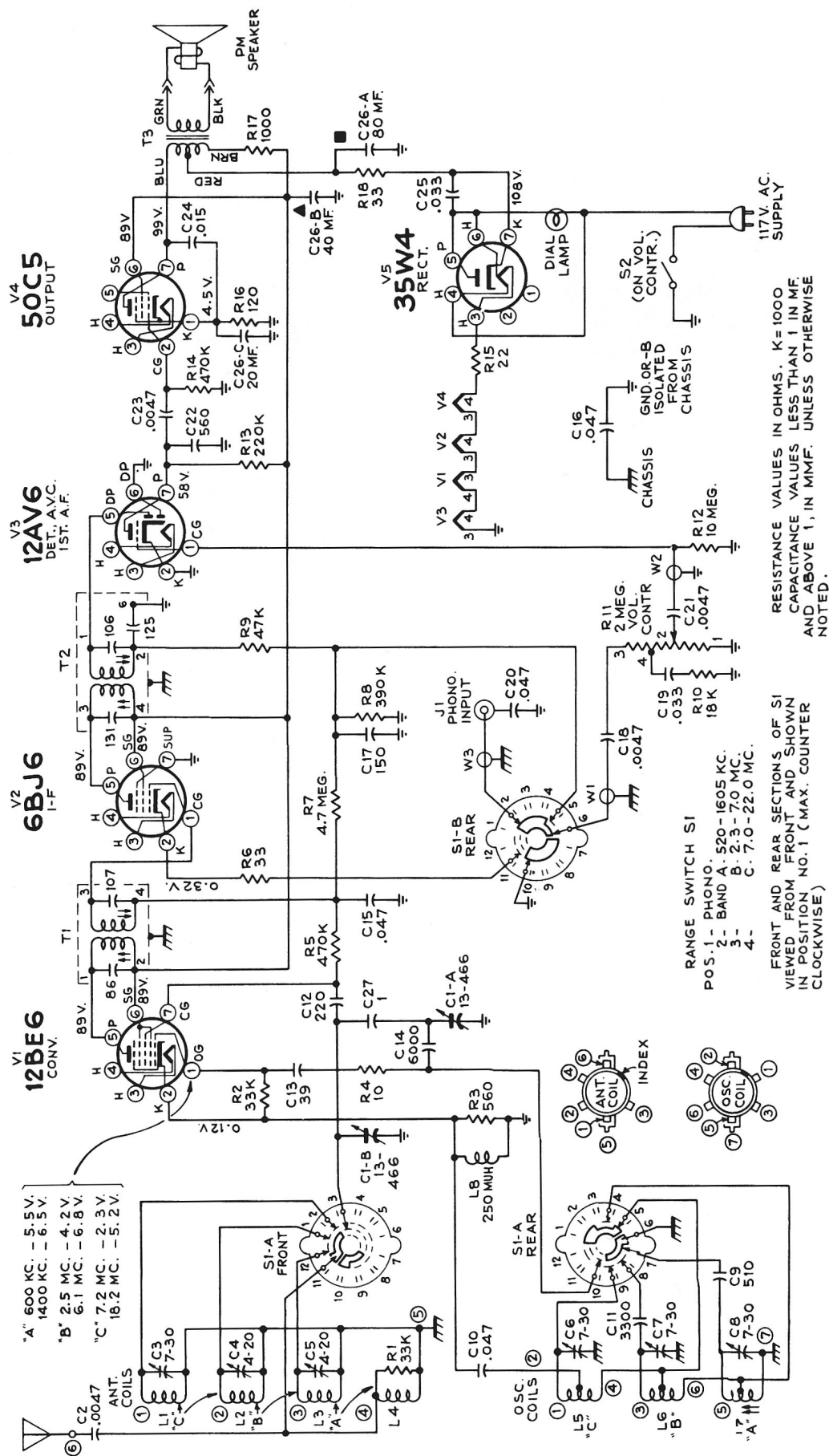
CRITICAL LEAD DRESS

Model 2QX53

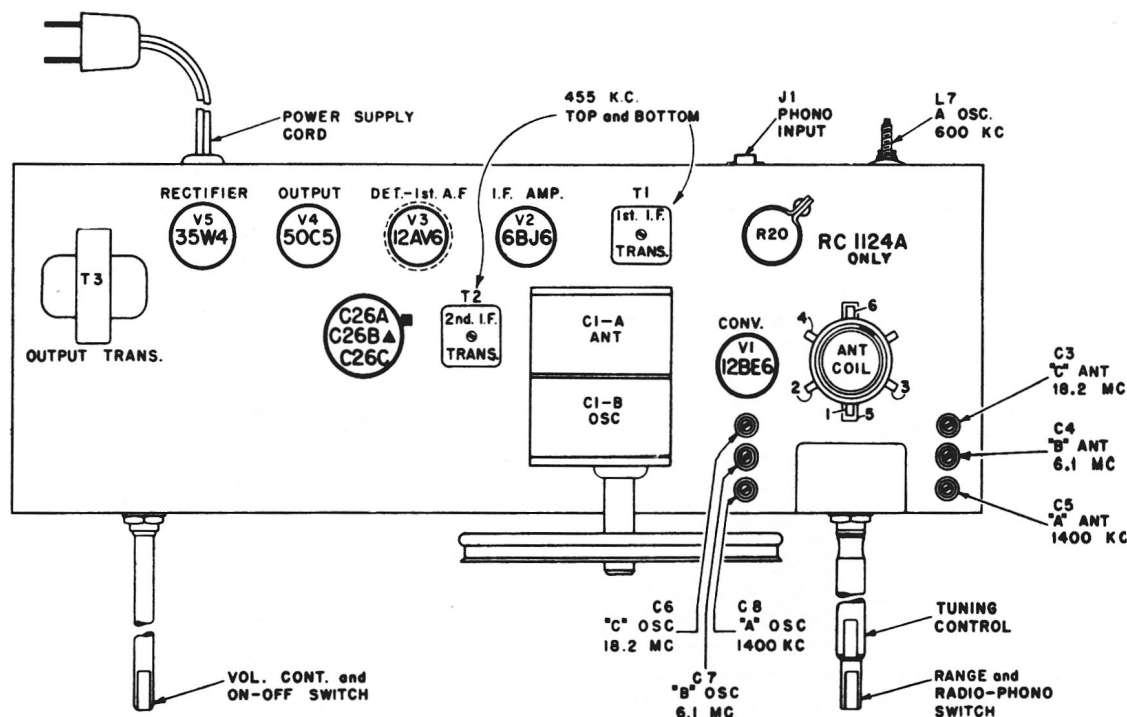
1. Dress C2 away from antenna coil windings and away from R20.
2. All wires from the antenna and oscillator coil are critical for length and should not be changed.
3. Dress the oscillator capacitor (C13 & R4) away from the chassis base.
4. Dress all filament, —B and +B leads close to chassis base.
5. Dress lead from J1 to S1-B rear terminal No. 2 close to chassis base and away from V1 filament leads (117 volt version only).
6. Dress R5, R18, and R19 away from all leads.
7. Dress leads from V5 to R20 under pilot lamp lead cable clamp and close to chassis.



Location of Controls



Schematic Diagram



Tube and Trimmer Locations

ALIGNMENT PROCEDURE

Output Meter Alignment—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the oscillator output low to avoid a-v-c action.

NOTE—If the test-oscillator is A.C. operated it may be necessary to use an isolation transformer (117v/117v) for the receiver during alignment.

Calibration Scale—

Improvise a pointer made from a piece of wire attached to the tuning capacitor frame. With the tuning capacitor fully meshed bend the wire so the end will point to the 180° calibration mark on the tuning drum. The correct setting of the gang in degrees, for each alignment frequency, is given in the alignment table.

Dial-Indicator Adjustment—After fastening the chassis in the cabinet, attach the dial indicator to the drive cable with indicator at the end calibration mark, and gang condenser fully meshed. The indicator has a clip for attachment to the cable.

Order of Alignment		TEST OSCILLATOR				RECEIVER				
		Connect "H" Side To	Connect "LO" Side To	Dummy Antenna	Frequency Setting	Range Selector	Receiver Dial Setting	Circuit to Adjust	Adjustment Symbols	Notes
I.F. Alignment	1	6BJ6 Grid Pin 1	GND	.01 MFD.	455 KC	'A' Band	'H1' End	2 nd I.F. Trans.	T-2	Max. Out.
	2	12BE6 Grid Pin 7	Same	Same	Same	Same	Same	1 st I.F. Trans.	T-1 *	Same
"A" Band Alignment	3	Ant. Lead	Same	200 MMF	1400 KC	Same	1400 KC	Osc.	C-8	Same
	4	Same	Same	Same	Same	Same	Same	Ant.	C-5	Same
	5	Same	Same	Same	600 KC	Same	600 KC	Osc.	L-7	Same
	6	Repeat Steps 3, 4 & 5.								
"B" Band Alignment	7	Ant. Lead	GND	300 Ohms	6.1 MC.	'B' Band	6.1 MC	Osc.	C-7 †	Same
	8	Same	GND	Same	Same	Same	Same	Ant.	C-4 ‡	Same
	9	Repeat Steps 7 & 8.								
"C" Band Alignment	10	Ant. Lead	GND	300 Ohms	18.2 MC	'C' Band	18.2 MC	Osc.	C-6 †	Same
	11	Same	Same	Same	Same	Same	Same	Ant.	C-3 ‡	Same
	12	Repeat Steps 10 & 11.								

* Do not Re-Adjust T-2

† Use minimum capacity peak if two peaks can be obtained.

‡ Rock Gang.

REPLACEMENT PARTS LIST FOR MODEL 2QX53

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

Stock Number	Description	Stock Number	Description
	CHASSIS ASSEMBLY	70251	22 ohms, 1 watt for RC 1124 (R15)
78064	Bracket - Drive cord bracket and pulley assembly.	75968	160 ohms, 5 watt for RC 1124A (R16)
36397	Calibrator - Drive drum calibrator		Resistors - Fixed composition
78057	Capacitor - Variable tuning capacitor complete with drive drum (C1A, C1B)		33 ohms, $\pm 10\%$, 1/2 watt (R6)
78067	Capacitor - Capacitor (39 mmf) and resistor (10) ohms assembly (C13, R4)		33 ohms, $\pm 10\%$, 1/2 watt (R8)
	Capacitors - Adjustable, mica:		120 ohms, $\pm 10\%$, 1/2 watt (R17)
75967	4-20 mmf. (C4, C5)		1,000 ohms, $\pm 10\%$, 1 watt (R17)
75189	7-30 mmf. (C3, C6, C7, C8)		18,000 ohms, $\pm 10\%$, 1/2 watt (R10)
	Capacitors - Fixed, ceramic, insulated, High "K":		33,000 ohms, $\pm 10\%$, 1/2 watt (R1)
	150 mmf $\pm 20\%$, 500 volts (C17)		\pm R2)
	220 mmf $\pm 20\%$, 500 volts (C12)		47,000 ohms, $\pm 10\%$, 1/2 watt (R9)
	560 mmf $\pm 10\%$, 500 volts (C22)		220,000 ohms, $\pm 10\%$, 1/2 watt (R13)
	Capacitor - Fixed, headed-lead, 1 mmf, $\pm 10\%$, 500 volts (C27)		390,000 ohms, $\pm 10\%$, 1/2 watt (R8)
	Capacitors - Fixed, mica:		470,000 ohms, $\pm 10\%$, 1/2 watt (R5, R14)
71932	510 mmf, 500 volts (9)	78063	4.7 megohm, $\pm 10\%$, 1/2 watt (R7)
39664	3300 mmf, 500 volts (C11)	73584	10 meholm, $\pm 10\%$, 1/2 watt (R12)
78066	6000 mmf, 500 volts (C14)	73117	Shaft - Tuning knob shaft
72281	Capacitor - Electrolytic, comprising 1 section of 80 mfd., 150 volts, 1 section of 40 mfd., 150 volts and 1 section of 20 mfd, 25 volts (C26A, C26B, C26C)	77566	Shield - Tube shield for 12AV6 tube
	Capacitors - Fixed, moulded paper:	78060	Socket - Tube socket, 7 pin, minature, wafer
	.0047 mfd., 600 volts (2, C18, C21, C23)	74918	Socket - Lamp socket
	.015 mfd., 600 volts (C24)		Switch - Phono-range switch (S1)
	.033 mfd., 400 volts (C19)		Transformer - 1st I. F. transformer complete with adjustable cores (T1)
	.033 mfd., 1000 volts (C25)	73254	Transformer - 2nd I. F. transformer complete with adjustable cores
	.047 mfd., 400 volts (C10, C15, C16, C20)	78027	Transformer - Output transformer (T3)
73935	Clip - Mounting clip for I. F. transformer		Speaker Assemblies
78058	Coil - Antenna coil - "A", "B" and "C" bands (L1, L2, L3, L4)	78069	Speaker - 6 1/2" P.M. speaker complete with cone and voice coil (3.2 ohms)
78059	Coil - Oscillator coil - "A", "B", and "C" bands (L6, L5, L7)		Miscellaneous
73268	Coil - Peaking coil (250 muh) (L8, R3)	78072	Back - Cabinet back
35787	Connector - Phono input connector (J1)	78070	Board - Speaker baffle board and grille cloth
78061	Control - Volume and power switch (R11, S2)	Y2530	Cabinet - Plastic cabinet - maroon.
S-4313	Cord - Drive cord (approx. 42" overall)	78080	Decal - Function decal for phone-range switch
70392	Cord - Power cord and plug	78071	Dial - Dial Scale
72602	Pulley - Drive cord pulley	77033	Emblem - "RCA Victor" emblem
75962	Resistor - Fixed, ceramic, insulated, 375 ohms, $\pm 10\%$, 25 watts for RC 1124A (R20)	78074	Guide - Station selector pointer guide rail
	Resistor - Fixed, wire wound.	78078	Knob - Phono-range switch knob - maroon (inner)
		78077	Knob - Tuning control knob - maroon (outer)
		78076	Knob - Volume control and power switch knob - maroon.
		31480	Lamp - Dial lamp - Mazda Type No. 47
		78073	Pointer - Station eleector pointer
		78075	Spacer - Pointer guide rail spacer.

* Indicates new stock items.

Only items listed under stock numbers are available as Replacement Parts.
All parts subject to change or withdrawal without notice.