



RCA VICTOR



X-624

AC-DC Radio Receiver

MODEL X-624 SERVICE DATA



Model X-624

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Tuning Range 540—1600 kc
Intermediate Frequency 455 kc
Tube Complement
(1) RCA 12BA6 R.F. Amplifier
(2) RCA 12BE6 Converter
(3) RCA 12BA6 I.F. Amplifier
(4) RCA 12AV6 Det.-A.V.C.-A.F. Amp.
(5) RCA 35C5 Output
(6) RCA 35W4 Rectifier

Power Supply Rating

115 volts d. c. or 50 to 60 cycles a. c. 32 watts

Loudspeaker

Size and type 4" x 6" P.M.
Voice coil impedance 3.2 ohms at 400 cycles

Power Output

Undistorted 0.8 watt
Maximum 1.2 watts

Tuning Drive Ratio 10 to 1 (5 turns of knob)

Cabinet Dimensions

Height... 7-3/16" **Width**... 11-1/4" **Depth**... 6-7/16"

REPLACEMENT PARTS LIST FOR MODEL X-624

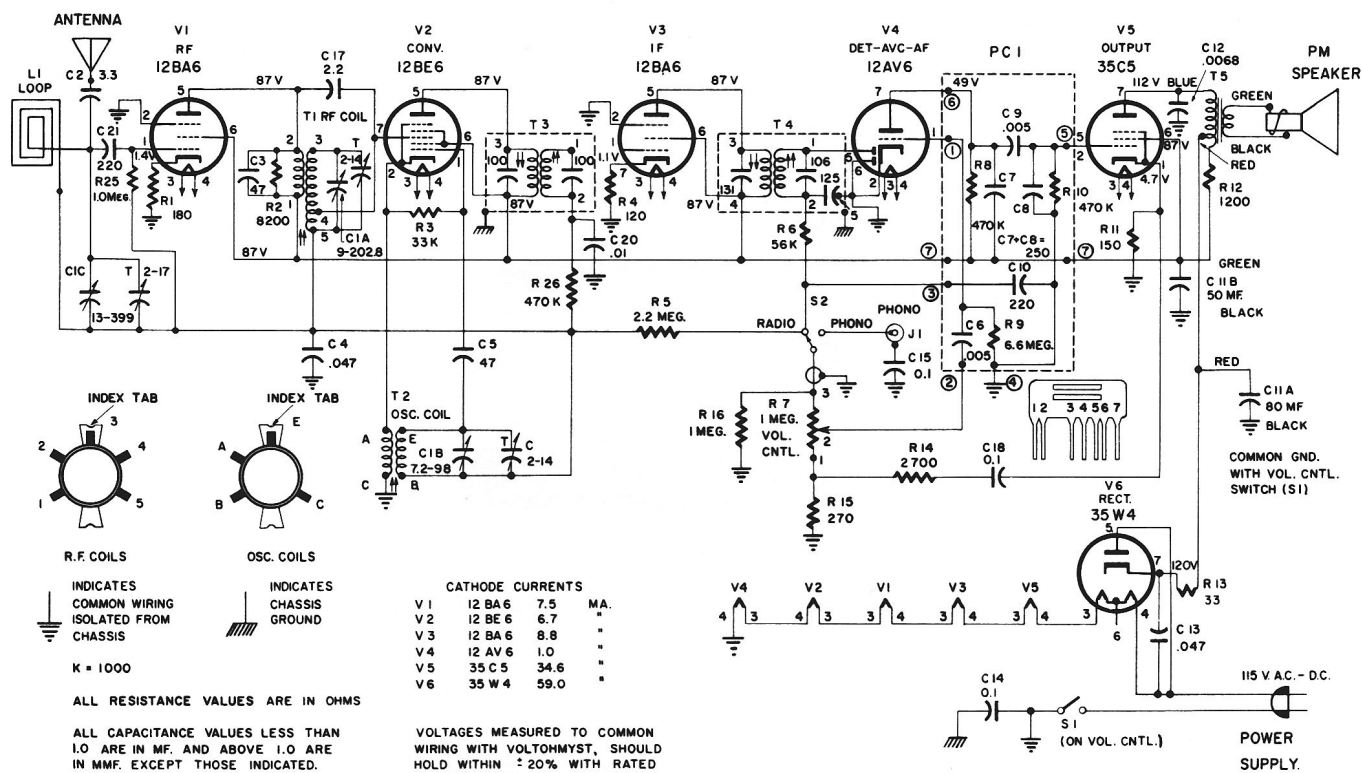
Insist on Genuine Factory Tested Parts, which are readily identified and may be purchased from Authorized Dealers.

Symbol No.	Stock No.	Description	Symbol No.	Stock No.	Description
C1A, C1B, C1C	*S-20470	Capacitor - Variable tuning capacitor complete with drive drum	S-1	S-20454	On-Off Switch - Included with volume control R7
C2	71503	Capacitor - Fixed, headed lead type, 3.3 mmf. $\pm$ 10%, 500V	S2	*S-20455	Switch - "Radio-Phono" switch - slide type
C3	76348	Capacitor - Ceramic, 47 mmf. 500V	T1	*S-20465	Coil - R. F. coil
C4		Capacitor - Paper .047 mf. 400V	T2	*S-20467	Coil - Oscillator coil, complete with adjustable core
C5		Capacitor - Ceramic, 47 mmf. 500V	T3	75486	Transformer - 1st. I. F. transformer
C6 to C10 Incl.		Part of PC1	T4	73037	Transformer - 2nd. I. F. transformer
C11	75980	Capacitor - Electrolytic, 80 mf. and 50 mf. at 150V	T5	*S-20464	Transformer - Output transformer
C12	78854	Capacitor - Paper, 0.0068 mf. 400V	SPEAKER ASSEMBLY		
C13		Capacitor - Paper, 0.047 mf. 400V	*S-20471		Speaker - 4" x 6" PM speaker complete with cone and voice coil.
C14		Capacitor - Paper, 0.1 mf. 400V	MISCELLANEOUS ASSEMBLY		
C15		Capacitor - Paper, 0.1 mf. 400V	*S-20451		Back - Back Cover and Loop
C16		Not used.	70392		Cord - Power Cord & Plug
C17		Capacitor - Headed lead 2.2 mmf. 500V	S-4313		Cord - Dial Cord
C18		Capacitor - Paper, 0.1 mf. $\pm$ 10%, 200V	*S-20452		Cabinet - Black plastic cabinet
C21		Capacitor - 220 mmf. $\pm$ 10%, 400V	*S-20453		Cabinet - Ivory plastic cabinet
PC1	*S-20468	Printed Circuit - Includes C6, C7, C8, C9, C10, R8, R9, R10	*S-20469		Dial - Dial Scale
R1		Resistor - 180 ohm $\pm$ 10%, 1/2 w	*S-20463		Grille - Blue plastic grille
R2		Resistor - 8200 ohm, $\pm$ 10%, 1/2 w	*S-20460		Grille - Chartreuse plastic grille
R3		Resistor - 33,000 ohm, $\pm$ 10%, 1/2 w	*S-20462		Grille - Green plastic grille
R4		Resistor - 120 ohm, $\pm$ 10%, 1/2 w	*S-20461		Grille - Red plastic grille
R5		Resistor - 2.2 meg. $\pm$ 10%, 1/2 w	*S-20459		Grille - White plastic grille
R6		Resistor - 56 000 ohm, $\pm$ 10%, 1/2 w	*S-20457		Knob - Tuning Control or volume control knob
R7	*S-20454	Control - Volume control and "On & Off" switch S1	*S-20466		Monogram - RCA Emblem
R8 to R10 Incl.		Part of PC1	79296		Plate - Dial back plate
R11		Resistor - 150 ohm, $\pm$ 10%, 1/2 w	*S-20456		Pointer - Dial Pointer
R12		Resistor - 1200 ohm, $\pm$ 10%, 1 w	S-4947		Socket - Tube Socket - 7 pin - Min.
R13		Resistor - 33 ohm, $\pm$ 10%, 1 w	*S-20458		Trim - Grille Trim
R14		Resistor - 2700 ohm, $\pm$ 10%, 1/2 w			
R15		Resistor - 270 ohm, $\pm$ 10%, 1/2 w			
R16		Resistor - 1 meg. $\pm$ 10%, 1/2 w			
R25		Resistor - 1.0 meg. $\pm$ 10%, 1/2 w			

* Indicates New Stock Items.

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

—1955 No. 3—



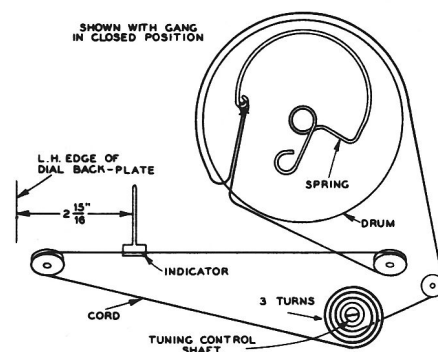
Schematic Diagram

NOTE.—If reception is not obtained on d. c. operation, reverse plug in outlet receptacle. On a. c. operation this may reduce hum.

ALIGNMENT PROCEDURE

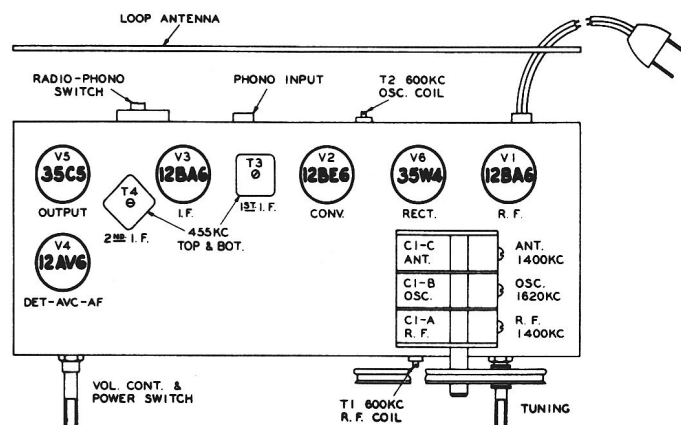
Output Meter Alignment.—If this method is used, connect the meter across the voice coil and turn the receiver volume control to maximum.

Test Oscillator.—Connect low side of test oscillator to common wiring in series with a .1 mf. capacitor. If the test oscillator is a. c. operated it may be necessary to use an isolation transformer for the receiver during alignment and the low side of the test oscillator connected directly to common wiring at the electrolytic capacitor. Keep the oscillator output low to prevent a-v-c action.



Dial Indicator and Drive Mechanism

Step	Connect high side of sig. gen. to—	Sig. gen. output	Turn radio dial to—	Adjust for peak output
1	Pin No. 7 of 12BE6 (V2 conv.)	455 kc	Quiet point near 600 kc	Top and bottom cores of T3 and T4
2	"External Antenna" terminal	1620 kc	Gang open	*C1-B Osc.
3		1400 kc	1400 kc signal	C1-A R.F. C1-C Ant.
4		Shunt C1-A with 22,000 ohm resistor		
5		600 kc	600 kc	T2 Osc. (Rock gang)
5		Remove 22,000 ohm resistor from C1-A		
5		600 kc	600 kc	T1 R.F.
6	Repeat steps 3, 4 and 5			



Tube and Trimmer Locations