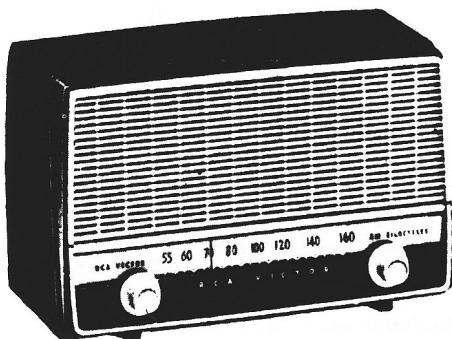




Model X-212



RCA VICTOR



AC-DC Radio Receiver

MODEL X-212 SERVICE DATA

— 1957 No. 18 —

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

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)

Weight 6 lbs. net

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

REPLACEMENT PARTS

SYMBOL No.	STOCK No.	DESCRIPTION	SYMBOL No.	STOCK No.	DESCRIPTION
CHASSIS ASSEMBLY					
C1A, B, C	79287	Capacitor—Variable tuning capacitor	R16		Resistor—Fixed, composition, 1 megohm, $\pm 10\%$, 1/2 w.
C2	71503	Capacitor—Fixed, headed lead type, 3.3 mmf., $\pm 10\%$, 500 v.	S1		On-Off Switch—Included with vol. cont. R7
C3	101372	Capacitor—Fixed, ceramic, 47 mmf., $\pm 10\%$, 500 v.	S2	S20455	Switch—S.P.D.T. slide switch—phono/radio
C4		Capacitor—Fixed, paper, 0.047 mf., $\pm 20\%$, 400 v.	T1	S20465	Coil—RF coil
C5	101372	Same as C3	T2	S20467	Coil—Oscillator coil
C6 to C10	79058	Part of PC1	T3	75486	Transformer—1st I.F. transformer
C11A, B	75980	Capacitor—Electrolytic, 80/50 mf., 150 v.	T4	73037	Transformer—2nd I.F. transformer
C12	78854	Capacitor—Fixed, paper, 0.0068 mf., $\pm 10\%$, 400 v.	T5	S20464	Transformer—Output transformer
C13		Capacitor—Fixed, paper, 0.047 mf., $\pm 20\%$, 400 v.	100512		Bushing—Tuning shaft bushing
C14		Capacitor—Fixed, paper, 0.1 mf., $\pm 10\%$, 400 v.	75474		Connector—Single contact male connector for speaker leads (2 req'd)
C15		Capacitor—Fixed, paper, 0.1 mf., $\pm 10\%$, 400 v.	70392		Cord—AC power cord and plug
C17	71502	Capacitor—Fixed, headed lead, 2.2 mmf., $\pm 10\%$, 500 v.	S4313		Cord—Tuning dial drive cord
C18		Capacitor—Fixed, paper, 0.1 mf., $\pm 10\%$, 200 v.	102624		Plate—Dial backplate with calibration and letters
J1	35787	Connector—Female, phono input connector	102625		Pointer—Dial pointer
L1	S20451	Antenna—Loop and back cover assy. complete with capacitor C2	102621		Shaft—Tuning selector drive shaft assby.
PC1	S20468	Circuit—Printed circuit, includes C6, C7, C8, C9, C10, R8, R9, R10	79263		Shield—Tube shield
R1		Resistor—Fixed, composition, 180 ohms, $\pm 10\%$, 1/2 w.	73117		Socket—Tube socket 7 pin miniature for V1, V2, V3 and V4
R2		Resistor—Fixed, composition, 8200 ohms, $\pm 10\%$, 1/2 w.	101375		Socket—Tube socket 7 pin miniature for V5 and V6
R3		Resistor—Fixed, composition, 33,000 ohms, $\pm 10\%$, 1/2 w.	SPEAKER ASSEMBLY		
R4		Resistor—Fixed, composition, 120 ohms, $\pm 10\%$, 1/2 w.	S20471		Speaker—4" x 6" PM speaker complete with cone
R5		Resistor—Fixed, composition, 2.2 megohms, $\pm 10\%$, 1/2 w.	MISCELLANEOUS		
R6		Resistor—Fixed, composition, 56,000 ohms, $\pm 10\%$, 1/2 w.	Y2984		Cabinet—Plastic cabinet—black with dial and white grille
R7		Control—Volume control with "on-off" switch	Y2985		Cabinet—Plastic cabinet—gray with dial and light gray grille
R8 to R10	S20454	Part of PC1	37831		Fastener—Metal fastener for retaining back cover (2 req'd)
R11		Resistor—Fixed, composition, 150 ohms, $\pm 10\%$, 1/2 w.	102623		Knob—Volume and tuning control knob with spring—gray
R12		Resistor—Fixed, composition, 1200 ohms, $\pm 10\%$, 1 w.	102622		Knob—Volume and tuning control knob with spring—white
R13		Resistor—Fixed, composition, 33 ohms, $\pm 10\%$, 1 w.	S-22314		Dial
R14		Resistor—Fixed, composition, 2700 ohms, $\pm 10\%$, 1 w.	S-22316		Grille—Pearl grey
R15		Resistor—Fixed, composition, 270 ohms, $\pm 10\%$, 1/2 w.			

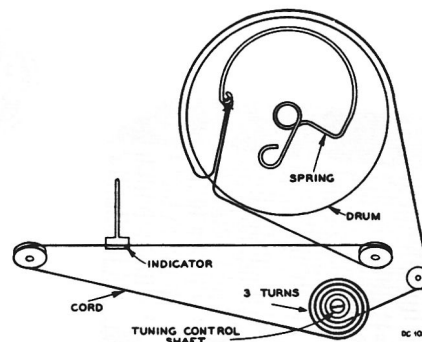
NOTE.—If reception is not obtained on d. c. operation, reverse plug in outlet receptacle. On a. c. operation this may reduce hum.

ALIGNMENT PROCEDURE

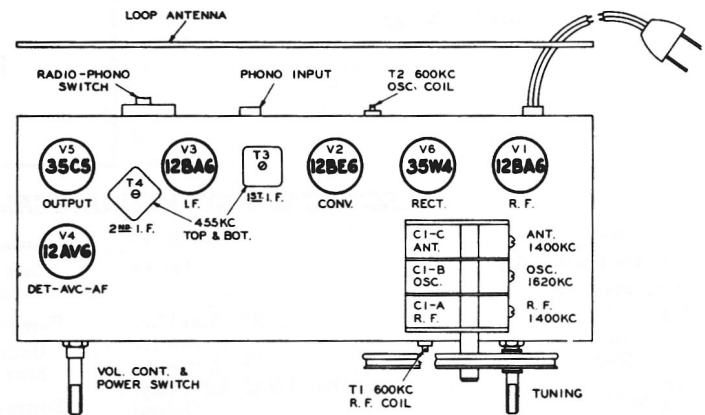
Output Meter Alignment.—If this method is used, connect the meter across the voice coil and turn the receiver volume control to maximum.

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.

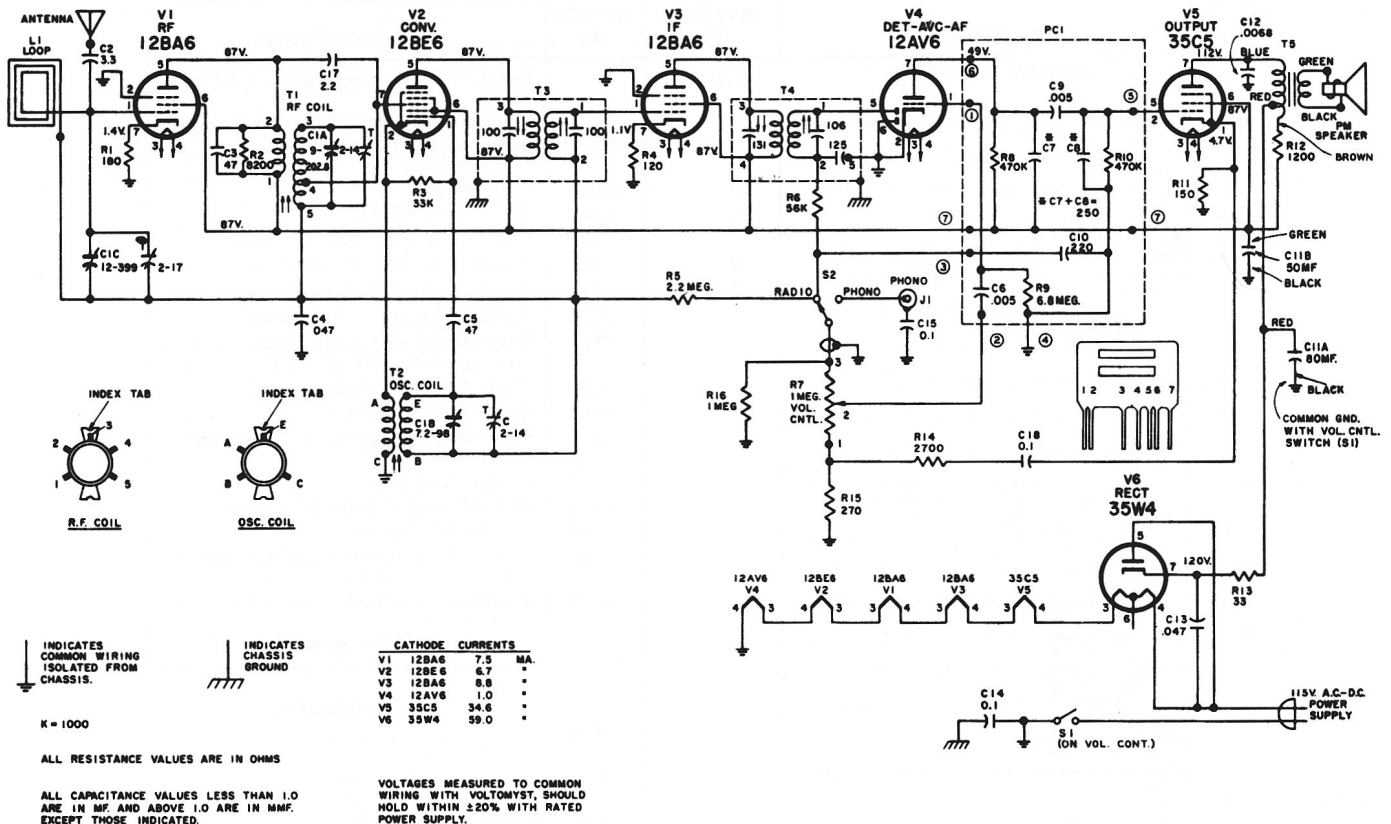
Step	Connect high side of sig. gen. to—	Sig. gen. output	Turn radio dial to—	Adjust for peak output
1	Pin No. 7 of 12BE6 (V2 conv.)	455 kc	Quiet point near 600 kc	Top and bottom cores of T3 and T4
2	"External Antenna" terminal	1620 kc	Gang open	C1-B Osc.
3		1400 kc	1400 kc signal	C1-A R.F. C1-C Ant.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



Dial Indicator and Drive Mechanism



Tube and Trimmer Locations



Schematic Diagram