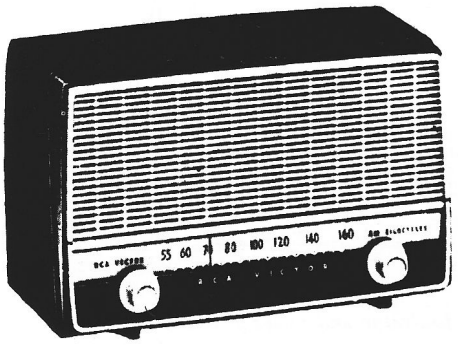


Model X-212

RCA VICTOR

"HIS MASTER'S VOICE"

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....11¼" Depth....6¾"

REPLACEMENT PARTS

SYMBOL No.	STOCK No.	DESCRIPTION
		CHASSIS ASSEMBLY
C1A, B, C	79287	Capacitor—Variable tuning capacitor
C2	71503	Capacitor—Fixed, headed lead type, 3.3 mmf., ±10%, 500 v.
C3	101372	Capacitor—Fixed, ceramic, 47 mmf., ±10%, 500 v.
C4		Capacitor—Fixed, paper, 0.047 mf., ±20%, 400 v.
C5	101372	Same as C3
C6 to C10	79058	Part of PC1
C11A, B	75980	Capacitor—Electrolytic, 80/50 mf., 150 v.
C12	78854	Capacitor—Fixed, paper, 0.0068 mf., ±10%, 400 v.
C13		Capacitor—Fixed, paper, 0.047 mf., ±20%, 400 v.
C14		Capacitor—Fixed, paper, 0.1 mf., ±10%, 400 v.
C15		Capacitor—Fixed, paper, 0.1 mf., ±10%, 400 v.
C17	71502	Capacitor—Fixed, headed lead, 2.2 mmf., ±10%, 500 v.
C18		Capacitor—Fixed, paper, 0.1 mf., ±10%, 200 v.
J1	35787	Connector—Female, phono input connector
L1	S20451	Antenna—Loop and back cover assy. complete with capacitor C2
PC1	S20468	Circuit—Printed circuit, includes C6, C7, C8, C9, C10, R8, R9, R10
R1		Resistor—Fixed, composition, 180 ohms, ±10%, ½ w.
R2		Resistor—Fixed, composition, 8200 ohms, ±10%, ½ w.
R3		Resistor—Fixed, composition, 33,000 ohms, ±10%, ½ w.
R4		Resistor—Fixed, composition, 120 ohms, ±10%, ½ w.
R5		Resistor—Fixed, composition, 2.2 megohms, ±10%, ½ w.
R6		Resistor—Fixed, composition, 56,000 ohms, ±10%, ½ w.
R7		Control—Volume control with "on-off" switch
R8 to R10	S20454	Part of PC1
R11		Resistor—Fixed, composition, 150 ohms, ±10%, ½ w.
R12		Resistor—Fixed, composition, 1200 ohms, ±10%, 1 w.
R13		Resistor—Fixed, composition, 33 ohms, ±10%, 1 w.
R14		Resistor—Fixed, composition, 2700 ohms, ±10%, 1 w.
R15		Resistor—Fixed, composition, 270 ohms, ±10%, ½ w.
R16		Resistor—Fixed, composition, 1 megohm, ±10%, ½ w.
S1		On-Off Switch—Included with vol. cont. R7
S2	S20455	Switch—S.P.D.T. slide switch—phono/radio
T1	S20465	Coil—RF coil
T2	S20467	Coil—Oscillator coil
T3	75486	Transformer—1st I.F. transformer
T4	73037	Transformer—2nd I.F. transformer
T5	S20464	Transformer—Output transformer
	100512	Bushing—Tuning shaft bushing
	75474	Connector—Single contact male connector for speaker leads (2 req'd)
	70392	Cord—AC power cord and plug
	S4313	Cord—Tuning dial drive cord
	102624	Plate—Dial backplate with calibration and letters
	102625	Pointer—Dial pointer
	102621	Shaft—Tuning selector drive shaft assby.
	79263	Shield—Tube shield
	73117	Socket—Tube socket 7 pin miniature for V1, V2, V3 and V4
	101375	Socket—Tube socket 7 pin miniature for V5 and V6
		SPEAKER ASSEMBLY
	S20471	Speaker—4" x 6" PM speaker complete with cone
		MISCELLANEOUS
	Y2984	Cabinet—Plastic cabinet—black with dial and white grille
	Y2985	Cabinet—Plastic cabinet—gray with dial and light gray grille
	37831	Fastener—Metal fastener for retaining back cover (2 req'd)
	102623	Knob—Volume and tuning control knob with spring—gray
	102622	Knob—Volume and tuning control knob with spring—white
	S-22314	Dial
	S-22316	Grille—Pearl grey

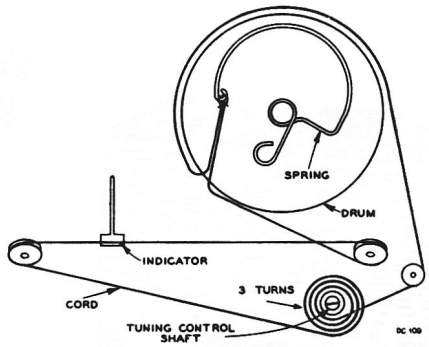
NOTE.—If reception is not obtained on d. c. operation, reverse plug in outlet receptacle. On a. c. operation this may reduce hum.

ALIGNMENT PROCEDURE

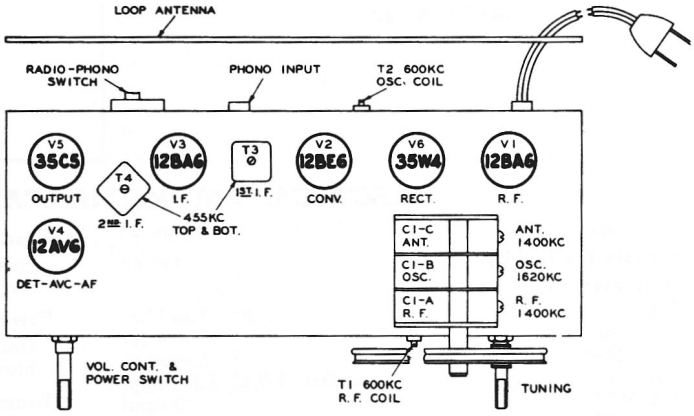
Output Meter Alignment.—If this method is used, connect the meter across the voice coil and turn the receiver volume control to maximum.

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.

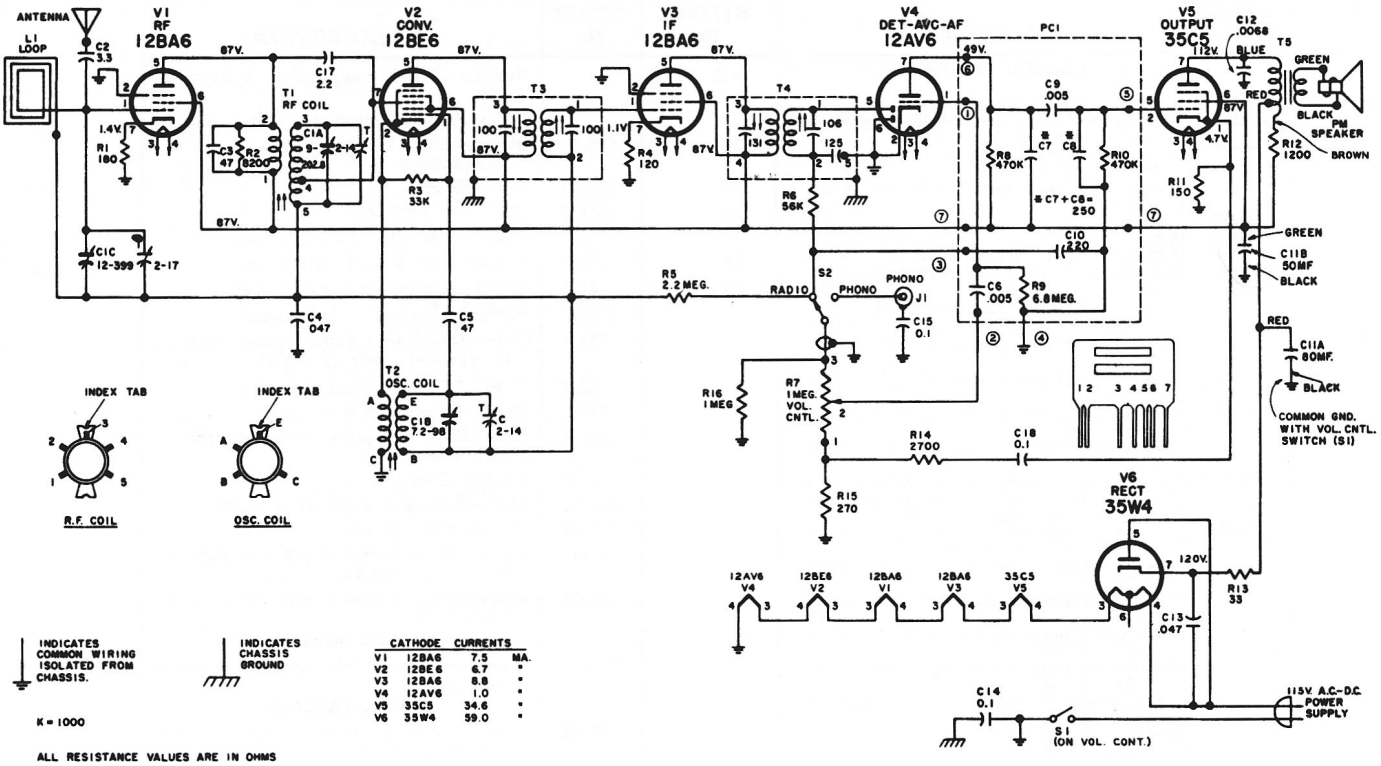
Step	Connect high side of sig. gen. to—	Sig. gen. output	Turn radio dial to—	Adjust for peak output
1	Pin No. 7 of 12BE6 (V2 conv.)	455 kc	Quiet point near 600 kc	Top and bottom cores of T3 and T4
2	"External Antenna" terminal	1620 kc	Gang open	C1-B Osc.
3		1400 kc	1400 kc signal	C1-A R.F. C1-C Ant.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



Dial Indicator and Drive Mechanism



Tube and Trimmer Locations



Schematic Diagram