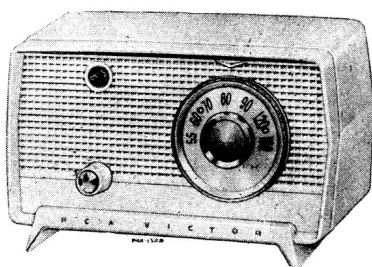


Model Nipper VII



Model X-210



RCA VICTOR



AC-DC Radio Receiver

MODELS

X-210-NIPPER VII,

SERVICE DATA

— 1957 No. 9 —

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

ELECTRICAL AND MECHANICAL SPECIFICATIONS

TUNING RANGE 540-1,600 kc

INTERMEDIATE FREQUENCY 455 kc

TUBE COMPLEMENT:

- (1) RCA 12BE6 Converter
 - (2) RCA 12BA6 I.F. Amplifier
 - (3) RCA 12AV6 Det.-AVC-A.F. Amp.
 - (4) RCA 50C5 Output
 - (5) RCA 35W4 Rectifier
- (A type #1847 dial lamp is used on Model X-210.)

POWER SUPPLY RATING:

115 volts d.c. or 50 to 60 cycles a.c. 30 watts

TUNING DRIVE RATIO 1:1 (direct drive)

LOUDSPEAKER:

Size and type 4 in. P.M.
Voice coil impedance 3.2 ohms at 400 cycles

POWER OUTPUT:

Undistorted 1.0 watts
Maximum 1.3 watts

WEIGHT:

Nipper VII 2 lbs., 11 ozs.
X-210 3 lbs., 4 ozs.

CABINET DIMENSIONS:

	Height	Width	Depth
Model Nipper VII	6-9/16"	9½"	5-9/16"
Model X-210	7"	11½"	6"

DESCRIPTION

The Models Nipper VII and X-210 are five-tube (including rectifier) table model radio receivers designed for operation on 115 volts AC or DC power supply. The cabinet is a one-piece polystyrene molding with the speaker grille located at the left front. A conventional superheterodyne circuit is employed using 150-milliam-pere series-string miniature tubes.

The chassis is of the "printed wiring" type in which all electrical components, except loop antenna and

speaker, are mounted on an insulation plate. All wiring is "printed" on the underside of the insulation plate.

The power supply attachment cord is fastened to the cabinet back cover and becomes disconnected from the chassis when the back cover is removed.

A special feature of the Model X-210 is the use of a push-pull type of "ON-OFF" switch on the volume control. Models X-210 are also equipped with a dial light.

Alignment Procedure

Test-Oscillator—For all alignment operations, connect the low side of the test-oscillator through an isolating capacitor to the "common negative wiring." Keep the oscillator output as low as possible to avoid a-v-c action.

An isolation transformer (115 v./ 115 v.) may be necessary for the receiver if the test-oscillator is also a.c. operated.

TO REMOVE BACK COVER

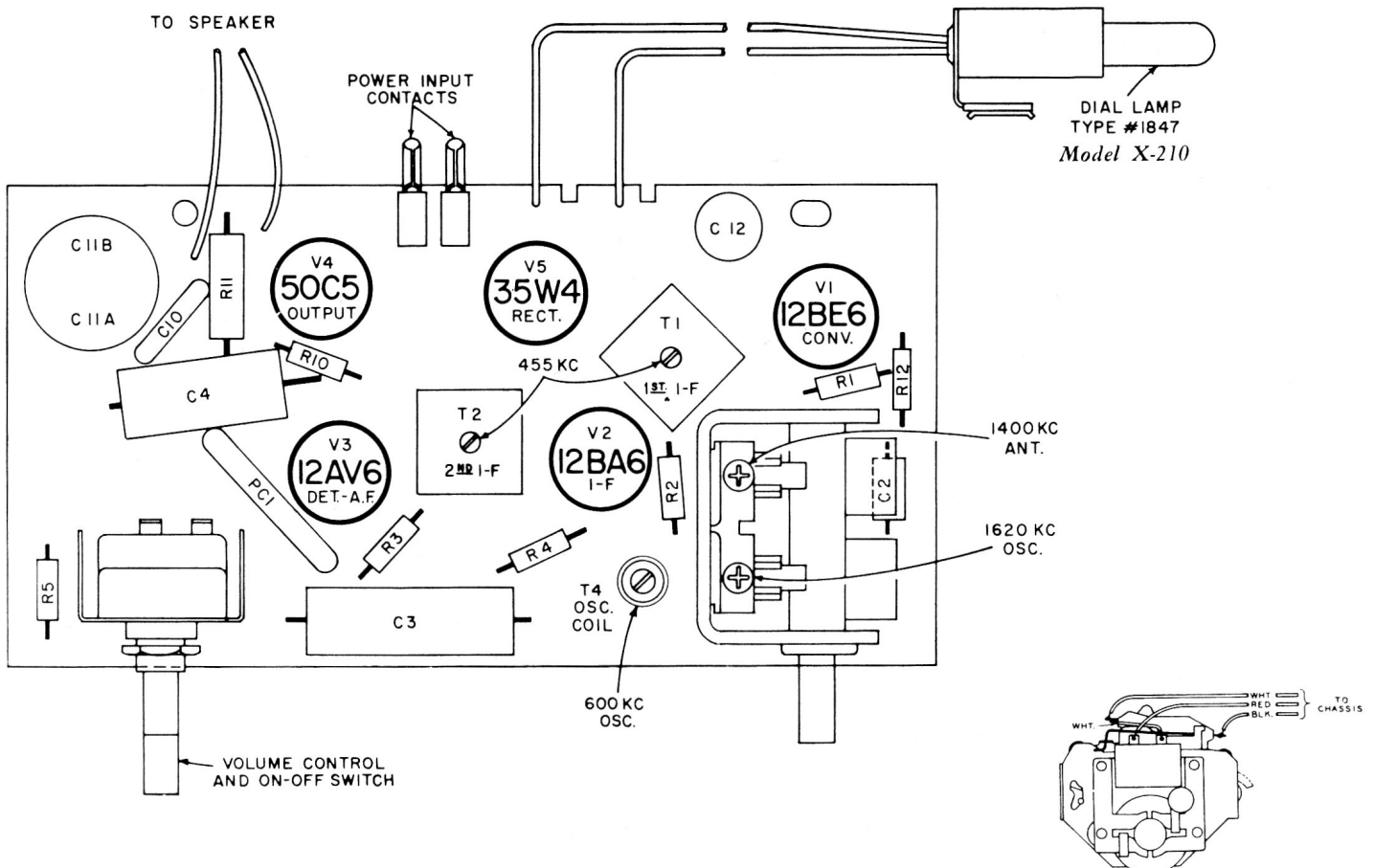
1. Slip out of lower groove while pressing downward on bottom edge of cabinet.
2. Tilt outward to free interlock contacts, then drop from top grooves.

Avoid strain on loop connections.

REMOVAL OF CHASSIS

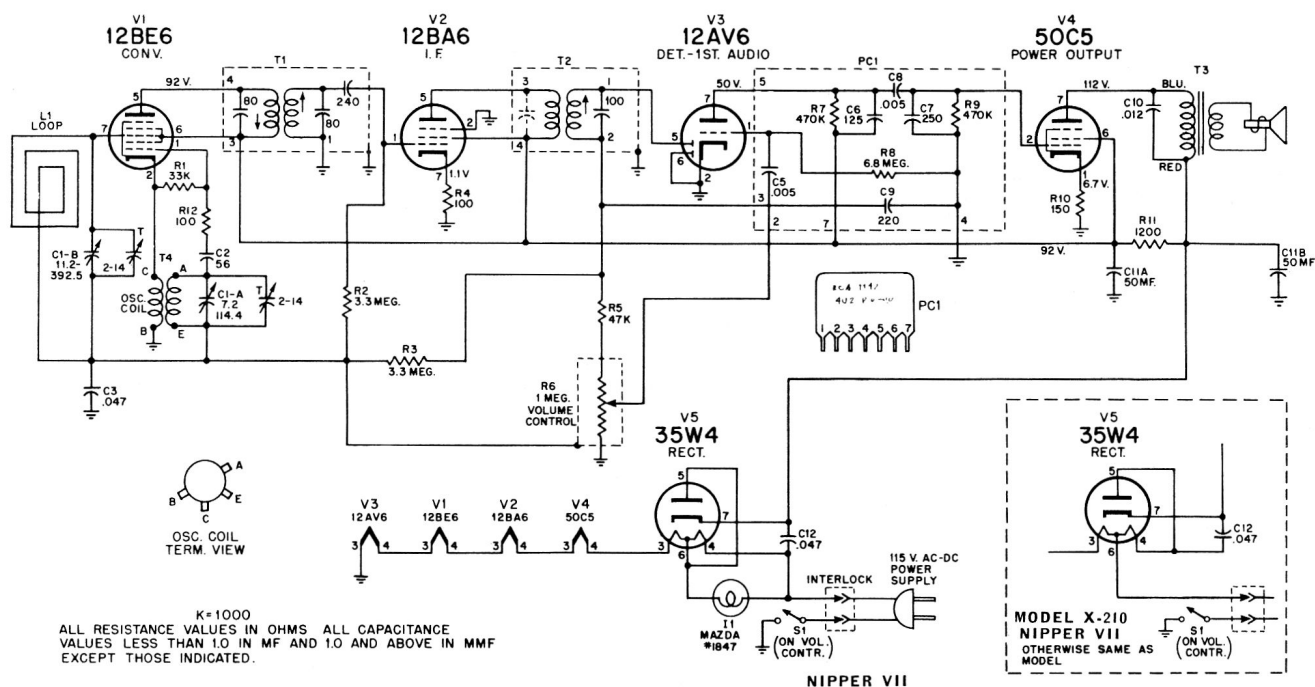
1. Pull off volume control and tuning knobs.
2. Remove back cover.
3. Remove two screws holding chassis assembly to cabinet.

Step	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. output
1	12BA6 I-F grid through .01 mfd. capacitor	455 kc	Quiet-point 1,600 kc end of dial	T2 (top) 2nd I-F trans.
2	Stator of C1-B through .01 mfd.			T1 (top and bottom) 1st I-F trans.
3	Short wire placed near loop to radiate signal	1,620 kc	Gang fully open	osc. trimmer C1-A
4		1,400 kc	1,400 kc signal	ant. trimmer C1-B
5		600 kc	600 kc signal	osc. coil T-4 (rock gang)
6		Repeat steps 3, 4, and 5		

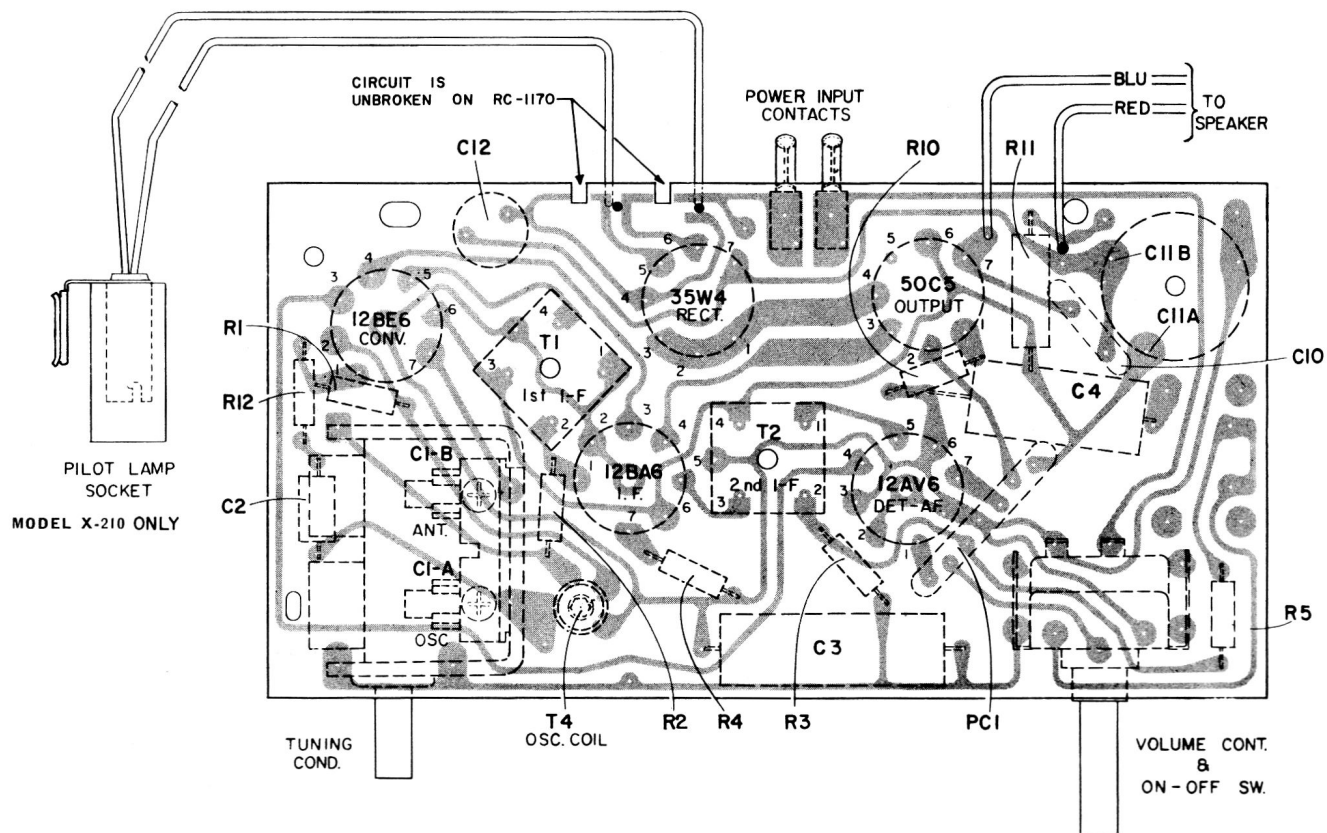


Tube and Trimmer Locations

Clock Connections



Schematic Diagram



Chassis Wiring and Components — View from Wiring Side

REPLACEMENT PARTS LIST

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
CHASSIS ASSEMBLIES			MISCELLANEOUS Nipper VII		
C1A, C1B	S-21912	Capacitor—Variable tuning capacitor	L1	*103619	Antenna — Antenna and back cover assembly
C2	*100085	Capacitor—Fixed, ceramic, 56 mmf., ± 10%, 500 v.		*Y4091	Cabinet—Antique white plastic cabinet
C3		Capacitor—Fixed, paper, 0.047 mf., ± 20%, 400 v.		*Y4090	Cabinet — Black plastic cabinet
C5 to C9 incl.	—	Part of PC1		*Y4092	Cabinet — Green plastic cabinet
C10	—	Capacitor—Fixed, paper, 0.012 mf., ± 10%, 400 v.		*Y4093	Cabinet — Pink plastic cabinet
C11A	103197	Capacitor — Electrolytic, 50/50 mf., 150 v.		*S-22001	Cable — Power cord and plug
C11B	—	Capacitor—Fixed, paper, 0.047 mf., ± 20%, 400 v.		*100162	Emblem — Trademark emblem
C12	—	Capacitor—Fixed, paper, 0.047 mf., ± 20%, 400 v.		*103625	Knob — Tuning control knob with spring
PC1	*103205	Circuit—Printed circuit, audio coupling (Includes R7, R8, R9, C5, C6, C7, C8, C9)		*103622	Knob — Volume control knob with spring — Antique white
R1	—	Resistor — Fixed, composition, 33,000 ohms, ± 20%, ½ w.		*103621	Knob — Volume control knob with spring—Black—
R2, R3	—	Resistor — Fixed, composition, 3.3 megohms, ± 20%, ½ w.	*330720 -117	*103623	Knob — Volume control knob with spring—Green—
R4	—	Resistor — Fixed, composition, 100 ohms, ± 20%, ½ w.		*103624	Knob — Volume control knob with spring—Pink—
R5	—	Resistor — Fixed, composition, 47,000 ohms, ± 20%, ½ w.		*103618	Support—Chassis mounting support—formed wire
R6	*103208	Control—Volume control & “on-off” switch—For Nipper VII			Instructions
R6	*S-22006	Control—Volume control & push-pull “on-off” switch—Model X-210		MISCELLANEOUS Model X-210	
R7 to R9 incl.	—	Part of PC1			
R10	*502115	Resistor — Fixed, composition, 150 ohms, ± 10%, ½w.		*S-21999	Antenna — Antenna loop and back cover assembly
R11	*512212	Resistor—Fixed, composition, 1200 ohms, ± 10%, 1 w.		*S-21995	Cabinet—Antique white plastic cabinet
R12	—	Same as R4		*S-21996	Cabinet—Canary yellow plastic cabinet
S1	—	Part of R6		*S-21994	Cabinet—Charcoal gray plastic cabinet
T1	*103206	Transformer — 1st I.F. transformer	L1	*S-21997	Cabinet—Pink plastic cabinet
T2	*103207	Transformer — 2nd I.F. transformer		*S-22001	Cable—Power cord and plug
T3	77993	Transformer — Output Xtrans.		100162	Emblem—Trademark emblem
T4	*103204	Coil — Oscillator coil		*S-21998	Knob — Tuning control knob with spring
	103206	Connector — Single contact female connector for AC line cord (2 reg'd)		*S-22003	Knob — Volume control knob with spring — Antique white
	103211	Lamp — Pilot lamp, Mazda #1847 — Used on X-210 only		*S-22005	Knob — Volume control knob with spring — Canary yellow
	*S-22000	Socket—Pilot lamp socket and leads		*S-22002	Knob — Volume Control knob with spring — Charcoal gray
	103201	Socket—Tube socket, 7 pin miniature for V1, V2 and V3		*S-22004	Knob — Volume Control knob with spring
	103200	Socket—Tube socket, 7 pin miniature for V4 and V5		103618	Support—Chassis mounting support—formed wire
				*S21993	Instructions — Booklet
SPEAKER ASSEMBLY					
	79696	Speaker — 4" PM speaker with cone—less output transformer			

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