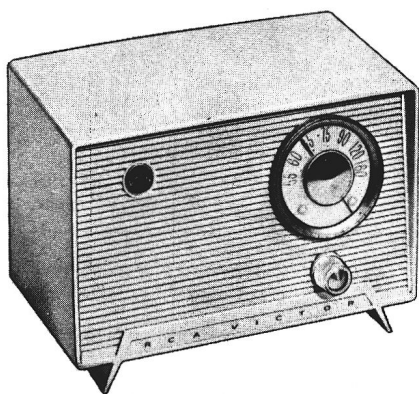




RCA VICTOR



Nipper VI

AC-DC Radio Receiver

MODEL NIPPER VI SERVICE DATA

— 1956 No. 12 —

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

POWER SUPPLY RATING:

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

LOUD SPEAKER:

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

POWER OUTPUT:

Undistorted 1.0 watts
Maximum 1.5 watts

TUNING DRIVE RATIO 1:1 (direct drive)

WEIGHT 2½ lbs. net

CABINET DIMENSIONS:

Height 6⅞" Width 9⅞" Depth 6"

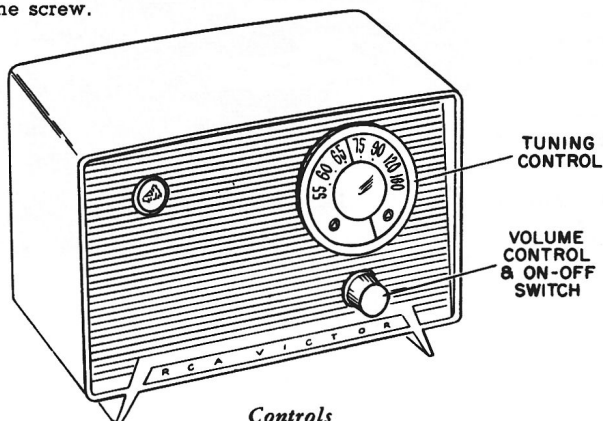
GENERAL DESCRIPTION

The Nipper VI Series are five-tube (including rectifier) table model radio receivers designed for operation on 105 to 125 volts AC or DC power supply. The cabinet is a one-piece polystyrene molding with a speaker grille located on the left side of the case front. A conventional superheterodyne circuit is employed using 150-milliampere series-string miniature tubes.

The chassis is of the "printed wiring" type in which all components, except loop antenna and speaker, are mounted on an insulation plate. All wiring, except for two short jumpers, 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. The chassis fits into two grooves molded into the cabinet and is held in position by one screw.



Controls

Nipper VI

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 upper groove while pressing upward on top edge of cabinet.
2. Tilt outward to free interlock contacts, then lift from bottom grooves.

Avoid strain on loop connections.

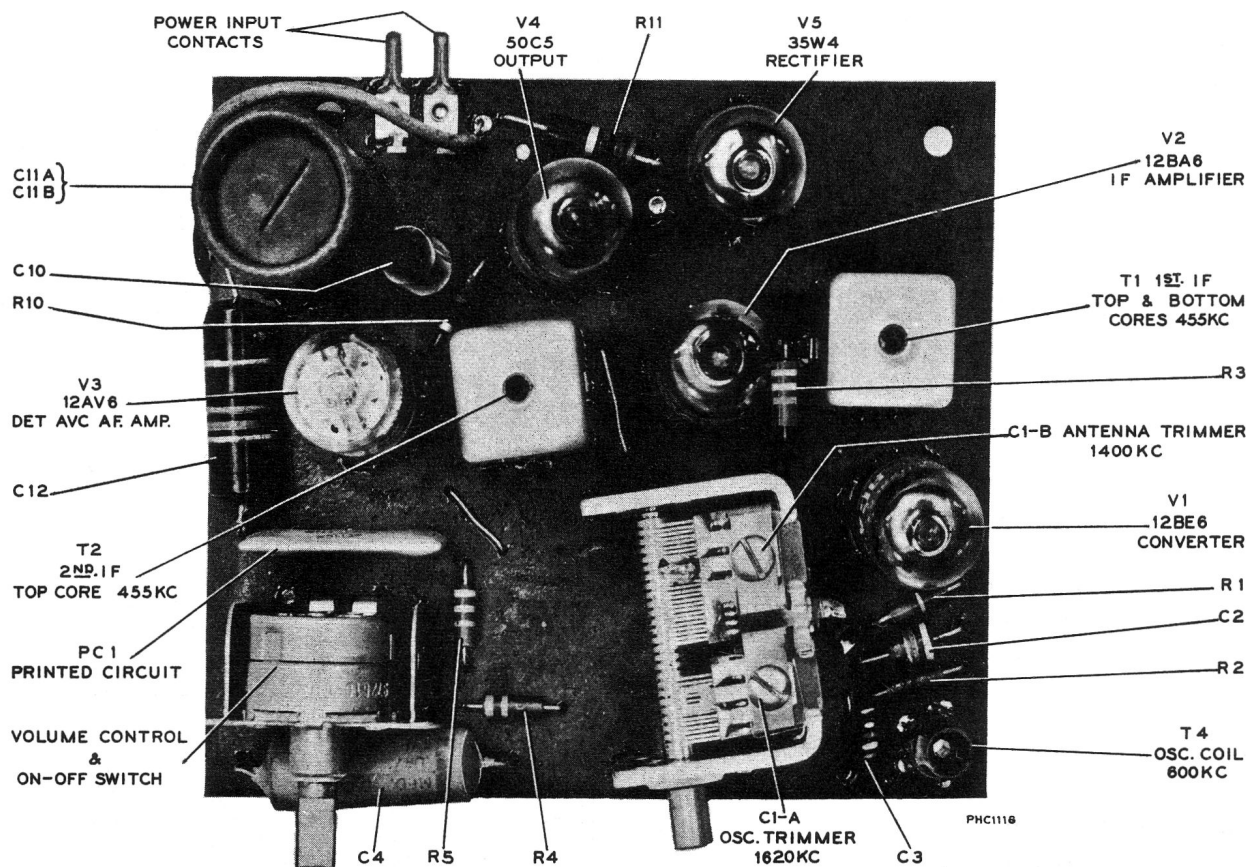
REMOVAL OF CHASSIS

1. Pull off volume control and tuning knobs.
2. Remove back cover.
3. Remove one screw (near volume control) holding chassis to cabinet.

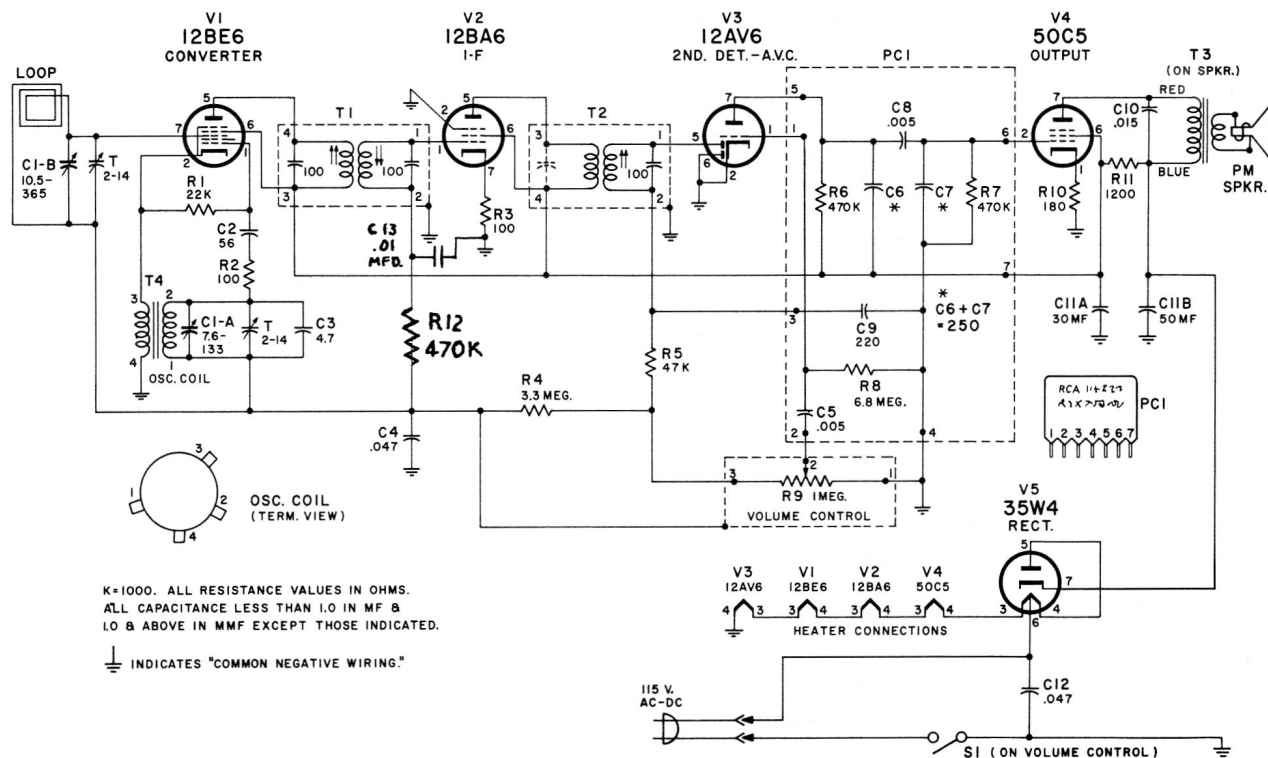
LEAD DRESS

1. The red and blue leads to the speaker should be dressed between the electrolytic capacitor and the bottom of the chassis.
2. The blue lead to the loop antenna should be dressed through the blank hole at upper rear of chassis.

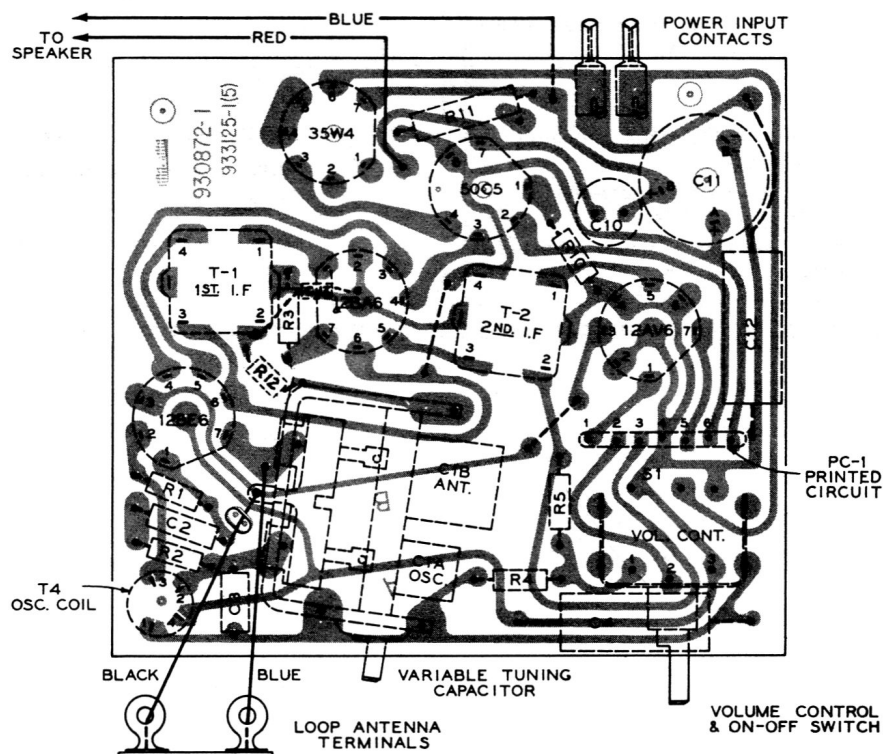
Step	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. output
1	12BA6 I-F grid through .01 mfd. capacitor	455 kc	Quiet-point 1,600 kc end of dial	T2 (top) 2nd I-F trans.
2	Stator of C1-B through .01 mfd.			T1 (top and bottom) 1st I-F trans.
3	Short wire placed near loop to radiate signal	1,620 kc	Max. clockwise	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



Schematic Diagram



The assembly represented above is viewed from the wiring side of the board.

The printed wiring, on the near side of the board, is presented in "phantom" view superimposed on the component layout of the reverse side.

Component replacement, when necessary, should be made following the techniques outlined in Printed Circuit Board Information — 1956 No. T-2.

Chassis Wiring and Components

View from Wiring Side

REPLACEMENT PARTS

SYMBOL NO.	STOCK NO.	DESCRIPTION	SYMBOL NO.	STOCK NO.	DESCRIPTION
CHASSIS ASSEMBLY			S1		Part of R9
C1A, C1B	101071	Capacitor—Variable tuning capacitor	T1	101067	Transformer—1st I.F. transformer complete with adjustable cores
C2		Capacitor—Fixed, ceramic, 56 mmf., $\pm 10\%$, 500 v.	T2	101066	Transformer — 2nd I.F. transformer complete with adjustable cores
C3	77471	Capacitor—Fixed, ceramic, 4.7 mmf., $\pm 10\%$, 500 v.	T3	77993	Transformer—Output transformer
C4	73553	Capacitor — Fixed, paper, .047 mf., $\pm 20\%$, 400 v.	T4	101072	Coil—Oscillator coil
C5 to C9 Incl. }		Part of PC1		101060	Socket—Tube socket, 7 contact miniature for V1, V2, V3, V4, V5
C10		Capacitor—Fixed, tubular, .015 mf., $\pm 10\%$, 400 v.	SPEAKER ASSEMBLY		
C11A, C11B	101074	Capacitor — Electrolytic, 30/50 mf., 150 v.	S-20491		Speaker — 4" PM speaker complete with cone and voice coil (3.2 ohms)
C12	73553	Capacitor — Fixed, paper, .047 mf., $\pm 20\%$, 400 v.	MISCELLANEOUS		
PC1	101065	Circuit—Printed circuit consisting of C5, C6, C7, C8, C9; R6, R7, R8	101063		Antenna — Antenna loop and back cover assy. with power cord and plug
R1		Resistor — Fixed, composition, 22,000 ohms, $\pm 5\%$, $\frac{1}{2}$ w.	*S-21254		Cabinet—Plastic cabinet—black
R2, R3		Resistor — Fixed, composition, 100 ohms, $\pm 5\%$, $\frac{1}{2}$ w.	*S-21255		Cabinet—Plastic cabinet—ivory
R4		Resistor—Fixed, composition, 3.3 meg-ohms, $\pm 5\%$, $\frac{1}{2}$ w.	*S-21257		Cabinet—Plastic cabinet—maroon
R5		Resistor — Fixed, composition, 47,000 ohms, $\pm 5\%$, $\frac{1}{2}$ w.	*S-21256		Cabinet—Plastic cabinet—spruce green
R6 to R8 Incl. }		Part of PC1	*S-21982		Cabinet—Plastic Cabinet—Pink
R9	101070	Control—"On-Off" volume control Includes S1	*S-21258		Cabinet—Plastic cabinet—kitchen white
R10		Resistor — Fixed, composition, 180 ohms, $\pm 10\%$, $\frac{1}{2}$ w.	101064		Cord—AC power cord and plug
R11		Resistor — Fixed, composition, 1200 ohms, $\pm 10\%$, 1 w.	101068		Knob—Tuning control knob
			101062		Knob—Volume control knob
			100162		Monogram—Trademark emblem

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