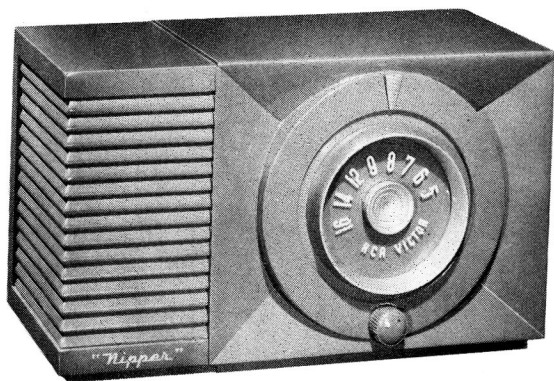




Nipper III



RCA VICTOR



AC-DC RADIO RECEIVER

Nipper II & Nipper III SERVICE DATA

—1953 No. 3—

HOME INSTRUMENT SERVICE DIVISION
RCA VICTOR COMPANY, LTD.
MONTREAL, QUE.

Electrical and Mechanical Specifications

FREQUENCY RANGES

Standard Broadcast ("A" Band) ----- 540-1,600 kc.

INTERMEDIATE FREQUENCY ----- 455 kc.

TUBE COMPLEMENT

- (1) RCA-12BE6 ----- 1st Detector-Oscillator
- (2) RCA-12BA6 ----- IF Amplifier
- (3) RCA-12AV6 2nd Detector, A.V.C. and A-F Amplifier
- (4) RCA-50C5 ----- Output
- (5) RCA-35W4 ----- Rectifier

POWER SUPPLY RATINGS (D-C or 25/60 cycles A-C)

105-125 volts ----- 30 watts

POWER OUTPUT RATING

Undistorted ----- 1.0 watt

Maximum ----- 1.5 watts

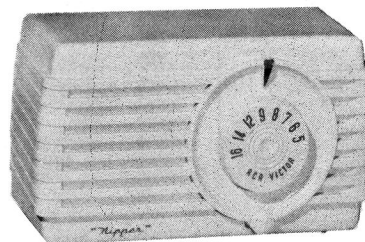
LOUDSPEAKER

Type ----- 4-inch Permanent-Magnet Dynamic

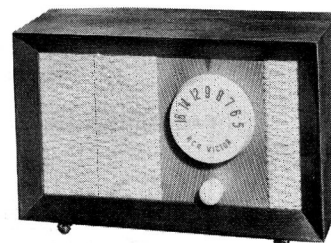
Voice Coil Impedance ----- 3.2 ohms at 400 cycles

Tuning Drive Ratio ----- Direct Drive

POWER SUPPLY POLARITY—For operation on d-c, the power plug must be inserted in the outlet for correct polarity.



Nipper II



Nipper II (Wood)

If the set does not function, reverse the plug. On a-c, reversal of the plug may reduce hum.

REPLACEMENT PARTS LIST FOR NIPPER II & NIPPER III

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

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
CHASSIS ASSEMBLY		MISCELLANEOUS ASSEMBLY	
S-5685	Gang Condenser-Nipper II (C1,C2,C6,C7)	S-6284	Cabinet-Brown -Nipper II
S-6918*	Gang " " III (C1,C2,C6,C7)	S-6844*	Cabinet-Blue- Nipper II
	Capacitor - 180 mmf. 20%, 300V (C3,C14)	S-6845*	" Green "
	" 390 mmf. 20%, 350V (C17)	S-6846*	" Grey "
	" .005 mfd. 20%, 400V. (C18)	S-6847*	" Ivory "
	" .01 " 20% 200V. (C16)	S-6848*	" Terra Cotta Nipper II
	" .01 mfd. 20% 400V. (C23)	S-6849*	" White "
	" .02 mfd. 10% 600V. (C20)	S-6535*	Cover-Bk.cover ass'y (Includes loop ant. (Nipper II Wood)
	" .05 mfd. 20% 200V. (C5)		
	" .05 mfd. 20% 400V. (C9)	S-6910*	Cabinet-Brown - Nipper III
	" .1 mfd. 10% 400V. (C8)	S-6911*	" Ivory " "
S-6289	Capacitor-Electrolytic	S-6912*	" Blue " "
	30-50 mfd. (C21,C22)	S-6913*	" Lt.Green " "
S-4523	(Capristor) 56 mmf & 33 ohms (C4 & R3)	S-6914*	" Terra cotta " "
S-6280	Control-Vol.control NIPPER II (R-7)	S-6915*	" Yellow " "
S-6923*	Control-Vol.control Nipper III (R-7)	S-6916*	" Grey " "
	Resistor - 150 ohms, 10%, 1/2 W. (R10,R4)	S-6917*	" Kitchen White " "
	" 1200 " 10% 1 W. (R11)	S-6922*	Cover-Bk. cover only (Nipper III)
	" 22000 " 20% 1/2 W. (R2)	S-6851*	Cord - Power cord
	" 220000 " 20% 1/2 W. (R12)	75495	FOOT- Cab.floor (Nipper II Wood)
	" 470000 " 20%, 1/2 W. (R8,R9)	S-6537	Grille Cloth-(Nipper II Wood)
	" 1 megohm 20%, 1/2 W. (R6)	S-6283	Loop-Ant. loop only
	" 10 megohm, 20%, 1/2 W. (R5)	S-5680	Knob-Vol. control (Used on all models except White.)
S-5682	Transformer - 1st I.F. Transformer	S-6287	Knob-Vol. cont.knob (Used on white only)
S-5683	" 2nd I.F. "	S-6919*	Knob-Tuning (Used on all except Yellow & Ivory)
S-5686	" Output transformer	S-6920*	Knob-Tuning (Used on Ivory & Yellow only)
S-5687	Coil - Oscillator Coil (L-2)	S-6921*	Knob-Tuning - (Used on White only)
		S-6285	Knob-Tuning (Ivory-Nipper II)
SPEAKER ASSEMBLY			
S-6819*	Speaker 4"		

* Indicates New Stock Items

Only items listed under stock numbers are available as Replacement Parts.

All parts and prices subject to change or withdrawal without notice.

NIPPER II
NIPPER III

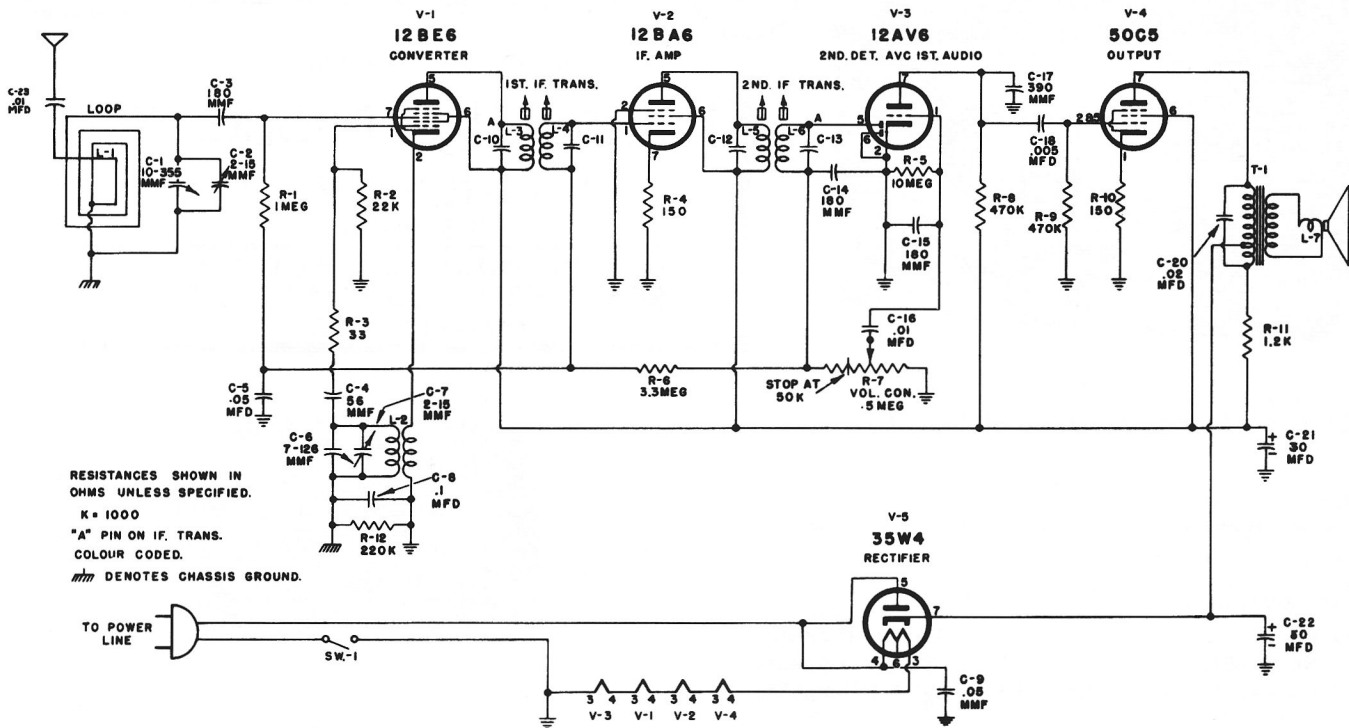


Fig. 1—Schematic Diagram

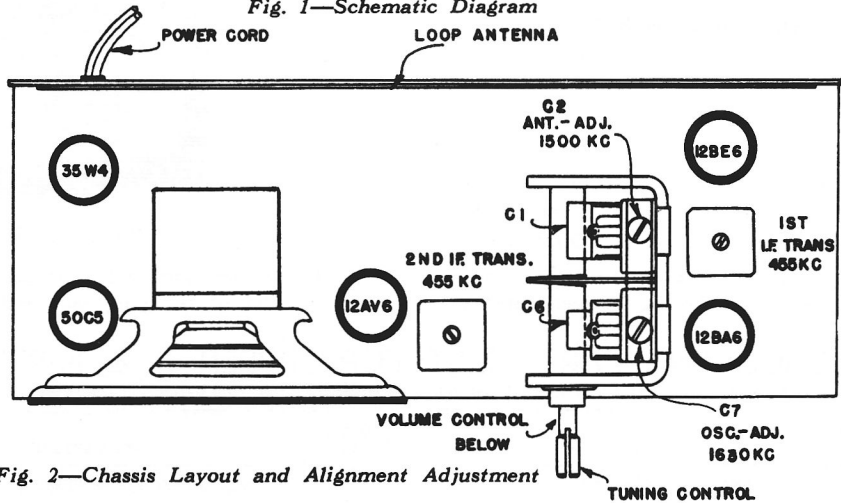


Fig. 2—Chassis Layout and Alignment Adjustment

Alignment Procedure

Before aligning the receiver, set the gang condenser for maximum capacity and then set the dial knob opposite 55 on left hand end of the dial.

When only a portion of the circuit is to be aligned select the required portion and perform all the remaining steps.

In order to obtain best results, it is advisable to align the 455

KC I.F.'s with the help of a cathode ray oscilloscope. The scope should be connected across the volume control. If this equipment is not available, use the method outlined below in the alignment chart.

NOTE: If the test-oscillator is ac/dc operated, it may be necessary to use an isolation transformer (117 v./117 v. for the receiver during alignment.)

Alignment Chart

TEST OSCILLATOR					RECEIVER				
Order of Alignment	Connect "HI" Side To	Connect "LO" Side To	Dummy Antenna	Frequency Setting	Range Selector	Receiver Dial Setting	Circuit To Adjust	Adjustment Symbols	Notes
I.F. ALIGNMENT	1 12BA6 Pin #1	Gnd.	.1 Mfd	455 KC		"HI" End	2nd I.F. Trans.	Top & Bottom cores	Max.Out.
	2 12BE6 Pin #7	Same	Same	Same	Same	Same	1st I.F. Trans.	Top & Bottom cores	Same
S.B. ALIGNMENT	3 Radiate signal			1600 KC		1600 KC	Osc.	C-7	Same
	4 Same			1500 KC		1500 KC	Osc.	C-2	Same
	5 Repeat Steps 3 & 4.								