

RCA VICTOR BABY NIPPER



Five-Tube, Single-Band, AC-DC Superheterodyne Receiver

TECHNICAL INFORMATION AND SERVICE DATA

1948 No. 16

GENERAL SERVICE DIVISION

RCA VICTOR COMPANY LTD.

Electrical and Mechanical Specifications

Frequency Range
Standard Broadcast S.B 540-1720 k.c.
Intermediate Frequency455 k.c.
RADIOTRON COMPLEMENT
(1) Type 12SA7 Converter
(2) Type 12BA6I.F. Amplifier
(3) Type 12SQ7Det. A.V.C. & 1st A.F.
(4) Type 50L6GTPower Output
(5) Type 35Z5GT Rectifier
Power Output
Undistorted
Maximum1.5 Watts
Loudspeaker
Type4 inch Round P.M.
Voice coil impedance3.4 ohms at 400 cycles



 Height
 5½ inches

 Width
 8½ inches

 Depth
 4½ inches

CAUTION

Remove Power plug from outlet before servicing this receiver. Avoid contact of chassis or component parts to external ground.

REPLACEMENT PARTS FOR BABY NIPPER

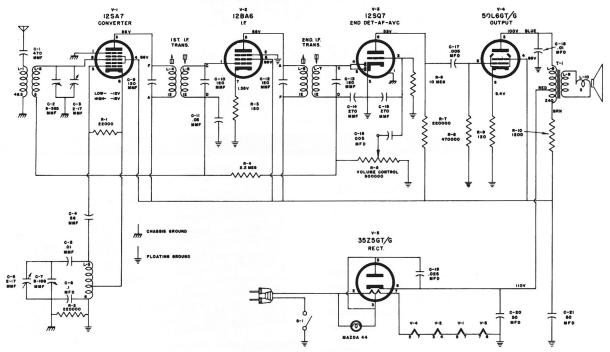
Insist on genuine factory tested parts, which are readily identified and may be purchased from authorized dealers.

STOCK NO. DESCRIPTION STOCK NO. DESCRIPTION						
NO. DESCRIPTION	STOCK			STOCK		
CHASSIS ASSEMBLY SPEAKER ASSEMBLY		DESCRIPTION			DESCRIPTION	
S-4817 Capacitor - 56 mmf. 10% mica(C4) S-4818	110.	DESCRIPTION		110.	2250.21 11011	
S-4817 Capacitor - 56 mmf. 10% mica(C4) S-4818		CHASSIS ASSEMBLY			SPEAKER ASSEMBLY	
S-4818		4M10010 11002. D21				
S-4818	C 4017	Connection 56 mmf 10% mice(CA)		35849	Dust Can (Pkg. 3)	
S-4819		" -270 mmf 20% " (C14-C15)		330.13	Sast tap (12g. 5)	"JI NE
S-3646		-270 mmf. 20% (C14-C13)		5-4330	Cone - cone & voice coil assy (I.10)	, - = 4
70615		" 005 mfd (C16_C17)		0-4330	cone - cone a voice coil apply (his)	
S-3651			0.0	8-4405	Sneaker	
\$\begin{align*} 3648 \\ S-3648 \\ S-3655 \\ S-3655 \\ S-4419 \end{align*} & \text{l mfd.} & \text{(C18-C5)} \\ S-4419 \\ S-4414 \\ S-4410 \\ S-4410 \\ S-681						
S-3655 "		1025 mau. (025)		5-4400	Curpus Grandrormer (10-113)	
S-4419 " Electrolytic (50-30 mfd.) (C20-C21) S-4414 Condenser - variable (C2-C7-C3-C6) S-4410 Coil - antenna coil (L1-L2) 32962 Coil - oscillator coil (L3) 30189 Resistor - 120 ohms 1/4 watt (R9) 30880 " - 150 " " " (R3) S-4681 " -1200 " 1 " (R10) 30492 " -22,000 ohms ½ " (R1) 14583 " 220,000 " " " (R1-R2) 30648 " 470,000 " " " (R8) 30649 " 2.2 megohms " " (R4) 30992 " 10 " " " (R6) S-4418 Socket - tube socket S-4410 Transformer 1st I.F. (L4-L5-C9-C10) S-4822 Cabinet - Brown S-4823 " - Rose S-4824 " - Green S-4825 " - Ivory S-3467 Cord - power cord S-4415 Disc - Dial back S-4416 Disc - Dial back S-4409 Knob - dial knob S-3903 " - Vol. control (Ivory) S-3903 " - Vol. control (Ivory) S-4825 " - " " (Brown) Lamp - pilot lamp (Mazda 44) S-4781 Button - brass button for tuning dial S-4782 Spring - to hold disc to tuning dial Spring - to hold disc			land .		MICCELL ANDOUG ACCEMBLY	
S-4414 Condenser - variable (C2-C7-C3-C6) S-4414 Coil - antenna coil (L1-L2) S-4420 Coil - oscillator coil (L3) S-4824 " - Green S-4824 " - Green S-4825 " - Ivory S-3467 Cord - power cord S-4415 S-4468 " - 1200 " " " (R10) S-4468 " - 1200 " " " (R10) S-4416 Disc - Dial back S-4416 Disc - Dial back S-4409 S-3903 " - Vol. control (Ivory) S-3903 " - Vol. control (Ivory) S-4825 " - " " (Brown) S-4826 S-4827 S-4827 S-4828 S-4418 S-4828 S-4		.i mid. (00)		120 - 140	MISCELLANEOUS ASSEMBLI	
S-4414 Condenser - variable (C2-C7-C3-C6) S-4410 Coil - antenna coil (L1-L2) 32962 Coil - oscillator coil (L3) Resistor - 120 ohms 1/4 watt (R9) 30880 " - 150 " " " (R3) S-4681 " - 1200 " 1 " (R10) 30492 " - 22,000 ohms 1 " (R1) 14583 " 220,000 " " " (R1-R2) 30648 " 470,000 " " " (R8) 30649 " 2.2 megohms " " (R4) 30992 " 10 " " " (R6) S-4418 Socket - tube socket S-4777 S-4411 Transformer 1st I.F. (L4-L5-C9-C10) S-4823 " - Rose S-4824 " - Green S-4415 Cord - power cord S-4416 Disc - Dial back S-4478 Disc - Dial back S-4409 Knob - dial knob S-3903 " - Vol. control (Ivory) S-3903 " - Vol. control (Ivory) S-4825 " - " " (Brown) Il891 Lamp - pilot lamp (Mazda 44) S-4781 Spring - to hold disc to tuning dial Spring - to hold disc to tuning dial (Pkg. 3)	8-4419	Election circ (30-30 mid.)		9 4922	Cohinet Brown	
S-4410 Coil - antenna coil (L1-L2) S-4824 " - Green S-4810 Goil - oscillator coil (L3) S-4815 " - Ivory S-3467 Cord - power cord S-4415 " - Ivory S-3467 Cord - power cord S-4417 S-4416 S-4417 S-4416 S-4417 S-4418 S-4417 S-4418 S-	0 4434					
S-4415						
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S-4681						
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14583						
30648 " 470,000 " " " (R8) 30649 " 2.2 megohms " " (R4) 30992 " 10 " " " (R6) S-4418 Socket - tube socket						
30649 " 2.2 megohms " " (R4) S-4825 " - " " (Brown) S-4418 Socket - tube socket S-4781 S-4781 Sutton - brass button for tuning dial S-4781 S-4781 S-4781 S-4782 Spring - to hold disc to tuning dial						
30992		" 470,000 " " " (R8)				
S-4418 Socket - tube socket S-4777 " - " " " S-4781 Button - brass button for tuning dial S-4782 Spring - to hold disc to tuning dial (Pkg. 3)		" 2.2 megohms " " (R4)				
S-4777 " - " " " S-4782 Spring - to hold disc to tuning dial (Pkg. 3)						
S-4411 Transformer 1st I.F. (L4-L5-C9-C10) (Pkg. 3)						
				S-4782		
					(Pkg. 3)	
	S-4412				and the state of t	
S-4413 Volume control - 1/2 meg. (R5-S1)	S-4413	Volume control - 1/2 meg. (R5-S1)				

GENERAL DESCRIPTION

The RCA Victor Baby Nipper is a five-tube, single band, AC/DC Superheterodyne chassis housed in a plastic cabinet of pleasing design. Features include a stable oscillator circuit, efficient I.F. transformers, attached

"hank" antenna; Beam power output tube; a well-filtered power supply and a 4 inch round P.M. speaker capable of handling the undistorted output of the receiver.



Schematic Circuit Diagram

POWER SUPPLY POLARITY.—For operation on DC, the power plug must be inserted in the outlet for correct polarity. If the set does not operate, reverse the plug. On AC, reversal of the plug may reduce hum.

CRITICAL LEAD DRESS

(Make lead dress before alignment)

- 1. Dress all heater leads to chassis.
- 2. Dress green lead from 2nd I.F. transformer to 12SQ7 diode plate away from oscillator coil.

 3. Dress white lead from oscillator coil tap to 12SA7
- cathode toward rear of chassis.
- 4. Some receivers have antenna section at front of tuning condenser. On these receivers, pass both leads to tuning condenser through hole below rear (oscillator) section.

ALIGNMENT PROCEDURE

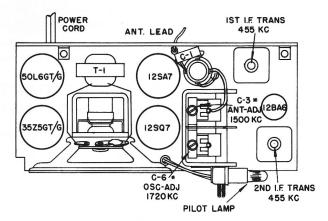
Test Oscillator:

Connect the low side of the test oscillator to the receiver chassis through a .01 mfd. capacitor. Keep the output as low as possible to avoid AVC action.

Pre-setting Dial:

With the gang condenser in full mesh, the dial should be positioned so that the small dot at the low frequency end is adjacent to the index mark on the cabinet.

Note:-All voltages are measured to common wiring insulated from chassis with a line voltage of 117 volts.



Chassis Layout and Alignment Adjustments

* Some receivers have antenna section (C3) at front of tuning condenser.

Order of Alignment		TEST OSCILLATOR					Receiver	Circuit	Adjustment		
		Connect "HI" Side To	Connect "LO" Side To	Dummy Antenna	Frequency Setting	Range Selector	Dial Setting	To Adjust	Symbols	Notes	
I.F.	ı	12BA6 st	Ground thru.Ol mfd.	.OI mfd.	455 K.C. 30% mod. 400 Cy. A.M.		High freg. end of dial	2nd l.F. Trans.	L6, L7	Adjust for max. A.C. voltage across voice coil.	
A.M. I.F. ALIGNMENT	2	2SA7 Converter Grid	Same	Same	Same		Same	ist i.F. Trans.	L4, L5	Same	
B.	3	Ant. Lead	Ground thru.Ol mfd.	47 m.m.f.	1720 K.C. 30% mod. 400 Cy. A.M.		High freq. end of dial	Oscillator	C6	Adjust for max. A.C. voltage across voice coil.	
S. B. ALI GNMENT	4	Same	Same	Same	1500 K.C. 30% mod. 400 Cy. A.M.		1500 K.C. on dial	Ant.	C3	Same	