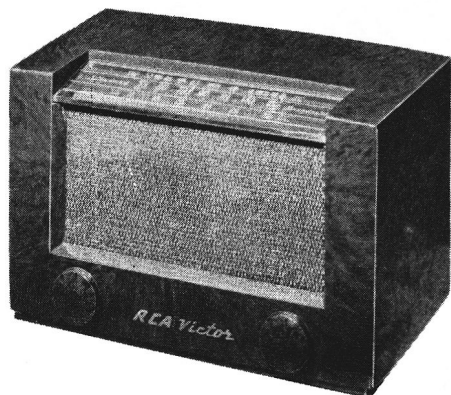




MODEL BT-504



RCA VICTOR



BATTERY RECEIVER MODEL BT-504 SERVICE DATA

—1949 No. 27—

GENERAL SERVICE DIVISION
RCA VICTOR COMPANY LIMITED
MONTREAL, QUE.

Electrical and Mechanical Specifications

FREQUENCY RANGES

"Standard Broadcast" 540 kcs. to 1600 kcs.
"Short Wave 1" 1600 kcs. to 2900 kcs.
"Short Wave 2" 5.8 mcs. to 18 mcs.
Intermediate Frequency 455 kcs.

RADIOTRON COMPLEMENT

- (1) Type-1R5 First Detector—Oscillator
(2) Type-1U4 Intermediate Amplifier
(3) Type-1U5 Second-Detector, A.V.C.,
and A-F Amplifier
(4) Type-1A5GT Power Output
(5) Type-1A5GT Power Output

POWER OUTPUT RATING

Undistorted 2 watts
Maximum 38 watts

LOUDSPEAKER

Type 4½" P.M.
Voice-Coil Impedance 3.4 Ohms at 400 Cycles

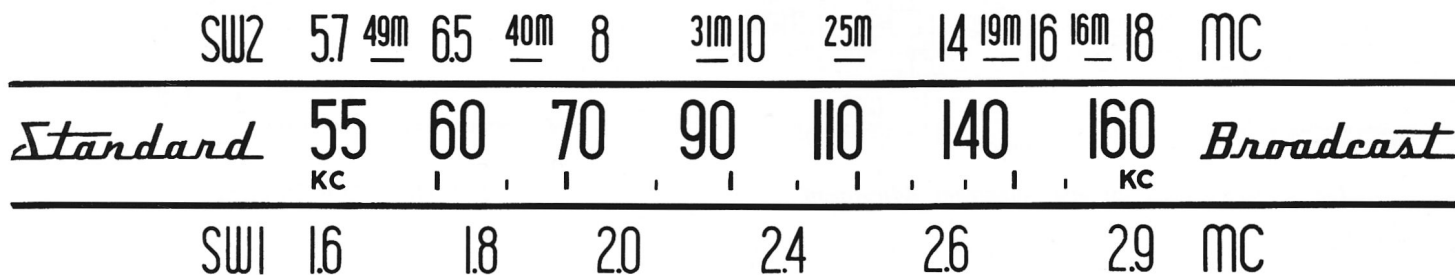
CABINET DIMENSIONS

Height 7 inches
Width 11½ inches
Depth 6¼ inches

CURRENT CONSUMPTION

"A" at 1.4 Volts 250 Ma.
"B" at 90 Volts 12 Ma.

Batteries Required One No. 758T Eveready Pack.
OR "A"—one 1.4. Volt Air Cell or 1.5 Dry Cell. "B"—two 45 Volt heavy duty "B" Batteries.



The Dial Scale drawing shown is a full size reproduction It can be used as a reference in alignment procedure.

Fig. 1—Dial Scale

REPLACEMENT PARTS FOR MODEL BT-504

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

STOCK NO.	DESCRIPTION	LIST PRICE	STOCK NO.	DESCRIPTION	LIST PRICE
Chassis Assembly			Chassis Assembly - Cont'd		
S-5561	Capacitor - trimmer 3 section 2.20 MMF. (C-3, C-9) 40-280 MMF. (C-2)		--	Resistor - 6.8 Megohm + - 20% ½ watt (R-5)	
S-5128	Capacitor - Ceramic 4 MMF. (C-16)		--	" - 10 " + - 20% ½ " (R-9)	
31871	" - Ceramic 20 MMF. + - 5%		S-5371	Switch - Range switch (S-1)	
71924	" - " 56 MMF. + - 20% (C-7)		73129	Transformer - 1st I.F. Trans. (L-7, L-8, C-14, C-15)	
73152	" - " 100 MMF. + - 20% (C-5)		73130	" - 2nd I.F. " (L-9, L-10, C-19, C-20, C-21)	
12724	" - Mica 120 MMF. + - 5% (C-8)		S-5373	" - Output transformer (T-1)	
S-5419	" - " 390 MMF. + - 5% (C-10)		S-5562	Volume Control & Power Switch 1.0 Meg. (R-8, S-2, S-2A)	
S-5258	" - " 3900 MMF. + - 5% (C-11)		Speaker Assembly		
S-5560	" - Multi section 100 MMF. (C-25)		S-5355	Cone - cone & voice coil assy	
	200 MMF. (C-22)		Miscellaneous Assemblies		
	.002 Mfd. (C-23)		S-5559	Back Cover	
	.004 Mfd. (C-26)		S-4313	Cord - dial drive cord (Standard)	
	.005 Mfd. (C-24)		S-5558	Decal	
--	Capacitor - paper, .003 Mfd. 200 V. (C-17)		S-4246	Cable - battery cable	
--	" - " .005 Mfd. 400 V. (C-27)		S-5357	Cabinet	
--	" - " .05 Mfd. 200 V. (C-18, C-29)		S-5361	Dial Scale	
S-3221	" - Electrolytic 10 Mfd. 150 V. (C-28)		S-5366	Grille cloth	
S-5367	Condenser - Variable (C-4, C-6, C-12, C-13)		37831	Fastener - push fasteners for cabinet back (1 set)	
S-3695	Choke - filament choke (L-14)		S-3883	Knob - tuning - volume control	
S-5368	Coil - antenna coil (L-1, L-2, L-3)		S-5365	Knob - range switch	
S-5369	Coil - oscillator coil (L-4, L-5, L-6)		S-5372	Pointer - station selector dial pointer	
--	Resistor - 330 Ohms + - 10% ½ w. (R-13)		12827	Plug - "A" battery cable plug	
--	" - 15,000 ohms + - 10% ½ Watt (R-3)		S-2398	" - "B" battery cable plug	
--	" - 100,000 " + - 20% ½ " (R-1, R-7)				
--	" - 1.0 Megohm + - 20% ½ " (R-2, R-11)				
--	" - 3.3 " 20% ½ " (R-4, R-6, R-10, R-12)				

Only items listed under stock numbers are available as Replacement Parts.
All parts and prices subject to change or withdrawal without notice.

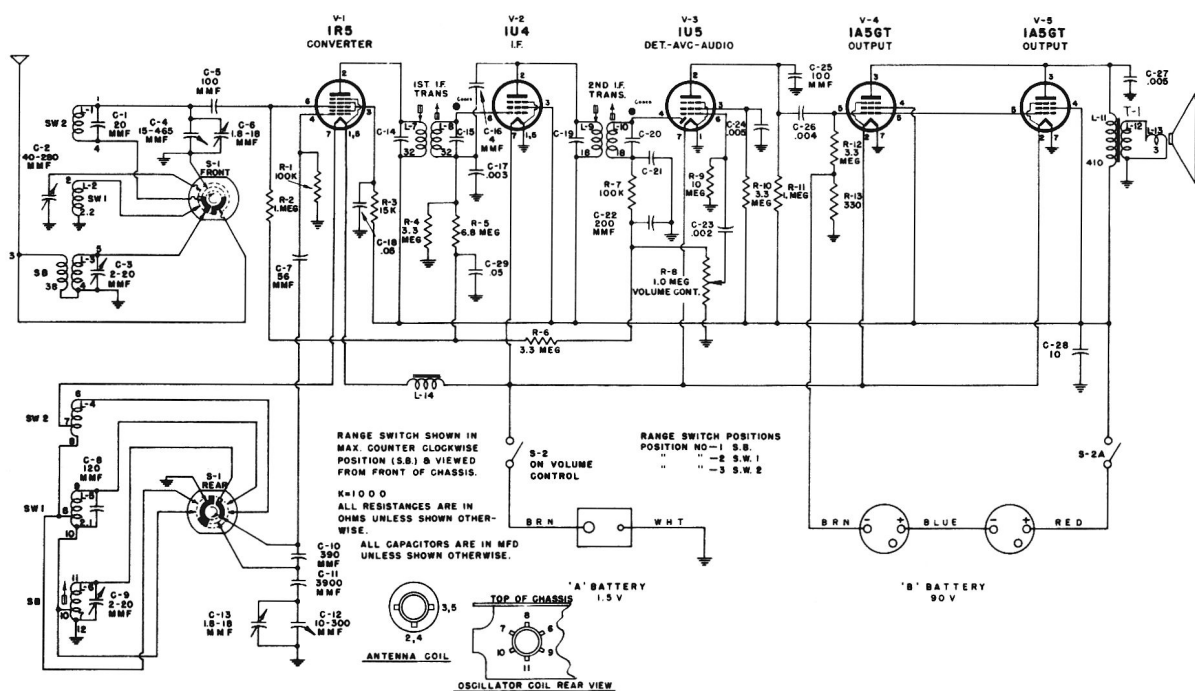


Fig. 2—Schematic Diagram

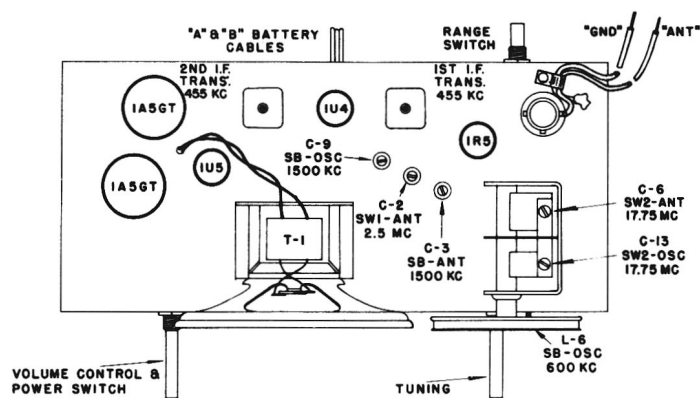


Fig. 3—Chassis Layout and Alignment Adjustment

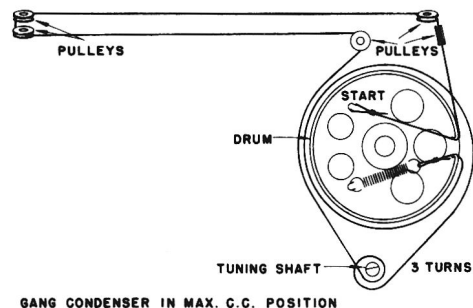


Fig. 4—Dial Cord Stringing

Alignment Chart

Order of Alignment		TEST OSCILLATOR				RECEIVER				
		Connect "HI" Side to	Connect "LO" Side to	Dummy Antenna	Frequency Setting	Range Selector	Dial Setting	Circuit to Adjust	Adjustment Symbols	Notes
I.F. ALIGN.	1	IR5 Grid Pin #6	Gnd	.1 Mfd	455 Kc	S.B.	"HI" End	1st & 2nd I.F.	L-7, L-8 L-9, L-10	Max.Out.
S.W.2 ALIGNMENT	2	"Ant." Lead	Gnd	300 Ohm	17.75 Mc	S.W.2	17.75 Mc	Osc.	C-13	Max.Out.
	3	Same	Same	Same	17.75 Mc	Same	17.75 Mc	Ant.	C-6	Same
	4	Repeat Steps 2, 3.								
S.W.1 ALIGNMENT	5	"Ant." Lead	Gnd	300 Ohm	2.44 Mc	S.W.1	2.44 Mc	Ant.	C-2	Max.Out.
S.B. ALIGNMENT	6	"Ant." Lead	Gnd	220 Mmf	600 Kc	S.B.	600 Kc	Osc.	L-6 (Rock In)	Max.Out.
	7	Same	Gnd	Same	1500 Kc	Same	1500 Kc	Osc.	C-9	Same
	8	Same	Same	Same	1500 Kc	Same	1500 Kc	Ant.	C-3	Same
	9	Repeat Steps 6, 7 and 8.								