MODEL 9W75

RCA VICTOR

"HIS MASTER'S VOICE"

RADIO PHONOGRAPH COMBINATION

MODEL 9W75

SERVICE DATA

— 1949 NO. 19 —

GENERAL SERVICE DIVISION
RCA VICTOR COMPANY LIMITED
MONTREAL, QUE.

Electrical and Mechanical Specifications

Tuning Ranges:

Standard Broadcast	540-1600 KC.
Short Wave	5.8-18.2 MC.
Intermediate Frequency	455 KC.

Tube Complement

(1) RCA 6BE6	Converter
(2) RCA 6BA6	I.F.
(3) RCA 6AV6	Phase Inverter & A.V.C.
(4) RCA 6AV6	Audio
(5) RCA 6V6GT	Output
(6) RCA 6V6GT	Output
(7) RCA 6X5GT/G	Rectifier
Dial Lamps	(3) Mazda 51
Tuning Drive Ratio	10 to 1 (5½ turns of knob)

Power Output

Undistorted	5.5 watts
Maximum	7.5 watts

Loudspeaker

Type	12" P.M.
Voice coil impedance	2.2 ohms at 400 cys.

Power Supply Ratings

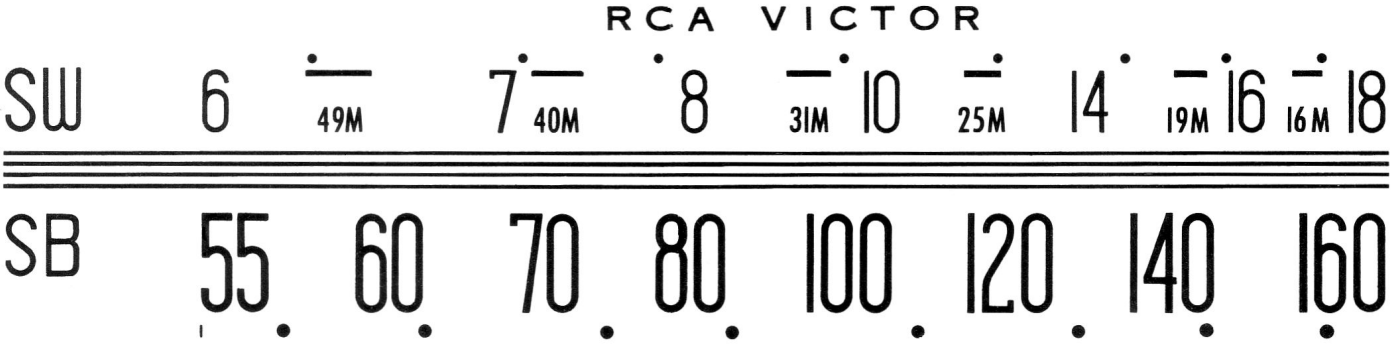
Rating A—105—125 volts, 60 cycles, .55 amps, 64 watts
Rating B—105—125 volts, 25 cycles, .55 amps, 64 watts

Cabinet Dimensions

Height	33"
Width	28⅞"
Depth	16"

Phonograph

Type	RP168A-1
Record capacity	Ten 7 in.
Turntable Speed	45 R.P.M.
Pickup	Crystal (Medium output)



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

Fig. 1—Dial Scale

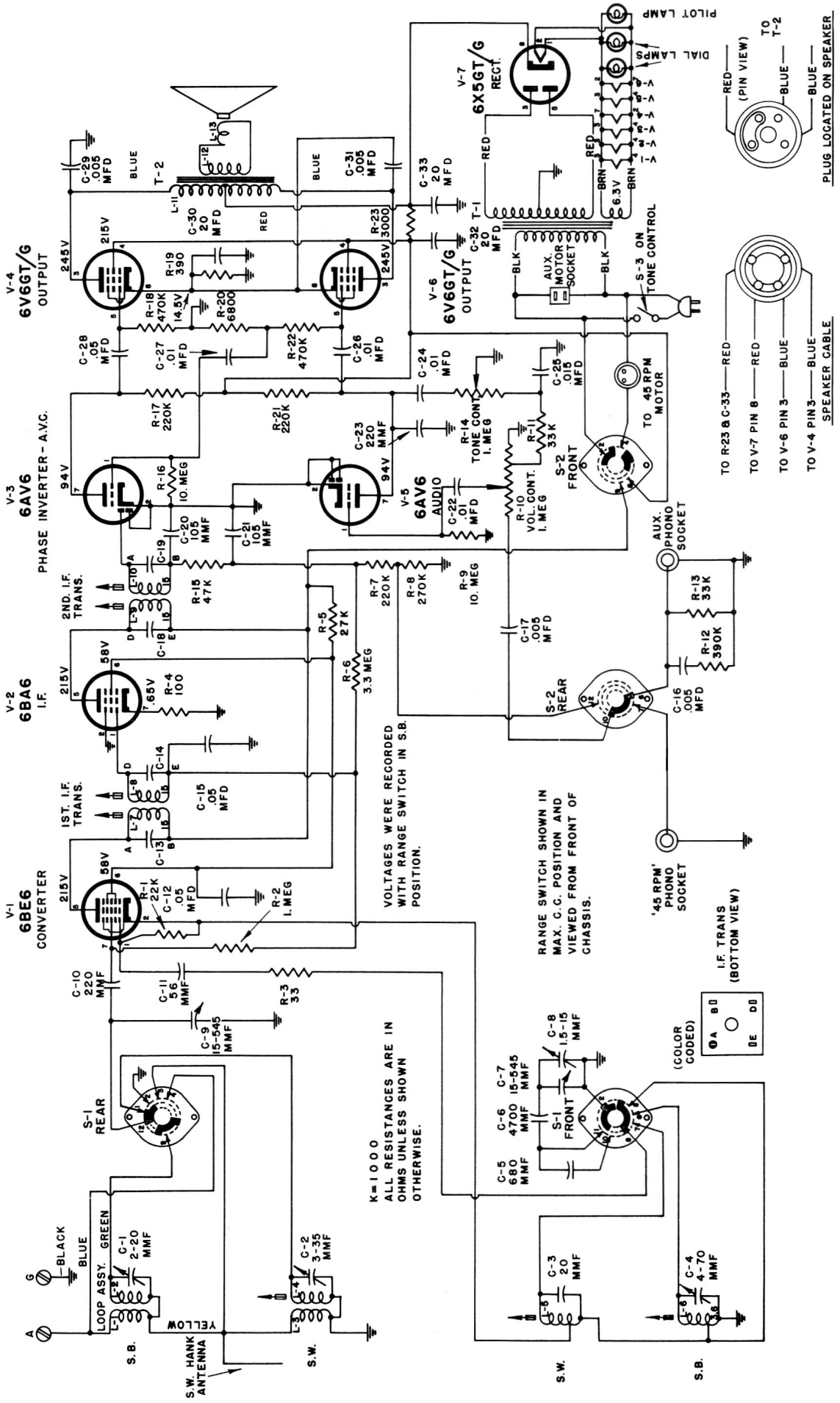


FIG. 2. SCHEMATIC DIAGRAM

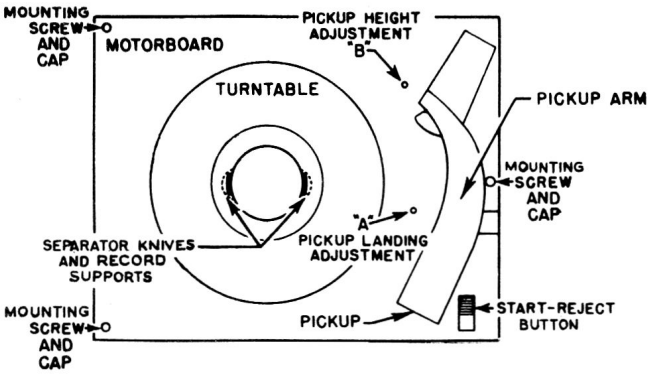


FIG. 3—TOP VIEW RP168A-1 RECORD CHANGER

Pickup Landing Adjustment "A"

The pickup point should land half-way between the outer edge of the record and the first music groove.

If the pickup lands inside the starting grooves—turn screw "A" slightly clockwise. If pickup lands outside the starting grooves—turn screw "A" slightly counterclockwise.

Pickup Height Adjustment "B"

During cycle the pickup arm must rise high enough to clear a stack of ten records on the turntable, but not high enough to cause the top of the arm to touch records resting on the record supports.

If pickup does not clear a stack of ten records—turn screw "B" slightly clockwise. If pickup arm touches records on record supports—turn screw "B" slightly counterclockwise.

Record Separators

In the out of cycle position the record separator knives or discs are normally concealed inside the center post. During service, the position of the star wheel on the underside of the record changer may be accidentally shifted; this may cause the separator knives to be extended when they should be concealed.

If the separator knives are thus extended—turn the power on so that the turntable is revolving, gently press fingers against the extended knives until they disappear inside the center post—DO THIS ONLY WHILE MECHANISM IS OUT OF CYCLE.

Care of Sapphire

The record changer sapphire is protected by a permanent metal guard. LINT MAY COLLECT TO CLOG THE OPENING IN THE GUARD AT THE SAPPHIRE POINT AND CAUSE POOR RECORD REPRODUCTION. This may require occasional cleaning of the guard opening—clean by carefully brushing with a small soft brush.

Critical Lead Dress

Dress the blue and the green leads, from the terminal board to the tone control, away from each other.

Alignment Procedure

Before aligning the receiver, set the gang condenser for maximum capacity and then set the dial cursor on the calibration point at the extreme 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.

ALIGNMENT CHART

Order of Alignment		TEST OSCILLATOR				RECEIVER				
		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	V-2, 6BA6 Pin #1	GND	.1MFD.	455 KC	S.B.	"HI" End	2nd I.F. Trans.	L-9, L-10	Max. Out.
	2	V-1, 6BE6 Pin #7	Same	Same	Same	Same	Same	1st I.F. Trans.	L-7, L-8	Same
	3	Repeat Steps 1 and 2.								
S.W. Alignment	4	"Ant" Terminal	GND	300 OHMS	5.7 MC	S.W.	"LO" End	S.W. Osc.	L-5	Same
	5	Same	Same	Same	6.1 MC	Same	6.1 MC	S.W.-Ant.	L-4	Same
	6	Same	Same	Same	18.5 MC	Same	"HI" End	S.W.-Osc.	C-8	Same
	7	Same	Same	Same	15.2 MC	Same	15.2 MC	S.W.-RF	C-2	Same
	8	Repeat steps 4 to 7								
S.B. Alignment	9	"Ant" Terminal	GND	220 MMF	600 KC	S.B.	600 KC	S.B.-Osc.	L-6 (Rock In)	Same
	10	Same	Same	Same	1630 KC	Same	"HI" End	S.B.-Osc.	C-4	Same
	11	Same	Same	Same	1500 KC	Same	1500 KC	S.B.-Ant.	C-1*	Same
	12	Repeat steps 9 to 11								

* It is advisable to Align C-1 when the loop antenna & receiver are both in the cabinet.

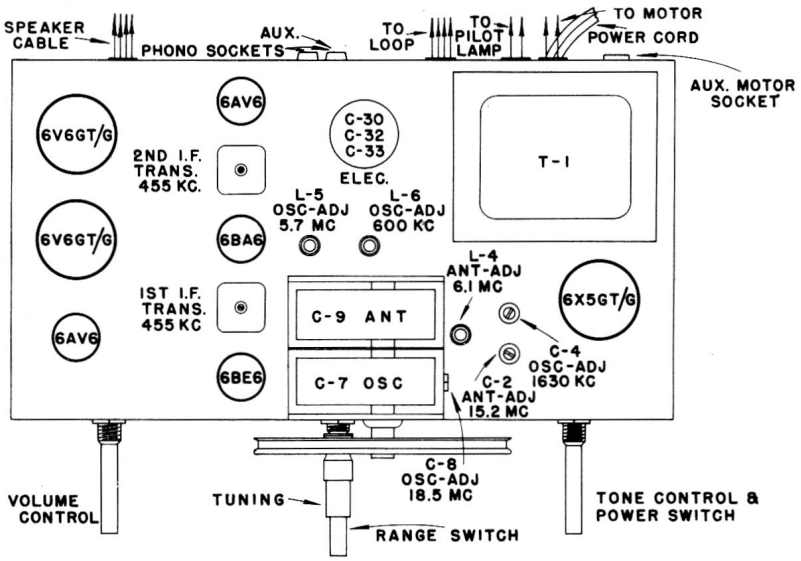
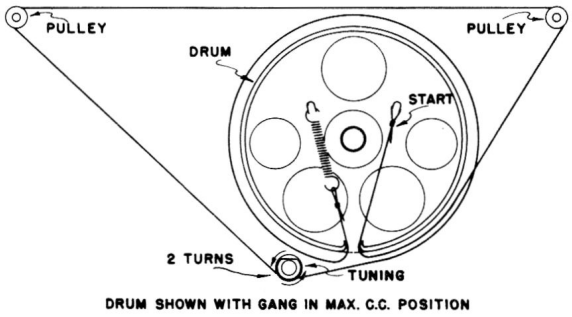


FIG. 4—CHASSIS LAYOUT AND ALIGNMENT ADJUSTMENT



DRUM SHOWN WITH GANG IN MAX. C.C. POSITION

FIG. 5—DIAL CORD STRINGING

REPLACEMENT PARTS FOR MODEL 9W75

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

Stock No.	Description	List Price
	Chassis Assembly	
S-4514	Capacitor - trimmers, 2 section, 3-35 MMF. & 4 - 70 MMF. (C-2, C-4)	
31871	" - ceramic, 20 MMF. +- 5% (C-3)	
S-4523	Capristor - 56 MMF. and 33 ohms (C-11, R-3)	
S-4614	" - 2 - 105 MMF. & 1 - 47,000 ohms (C-20,C-21,R-15)	
S-4221	Capacitor - Ceramic, 220 MMF. +- 20% (C-10,C-23)	
14498	" - Mica, 680 MMF. +- 5% (C-5)	
39668	" - " 4700 MMF. +- 5% (C-6)	
--	" - Paper .005 Mfd. +- 20%, 200 V. (C17)	
--	" - " .005 Mfd. +- 10%, 400 V. (C16)	
--	" - " .005 Mfd. +- 10%, 1000 V. (C-29, C-31)	
--	" - " .01 Mfd. +- 20%, 200 V. (C-22, C-27)	
--	" - " .01 Mfd. +- 10%, 400V. (C24)	
--	" - " .01 Mfd. +- 20%, 400 V. (C26)	
--	" - " .015 Mfd. +- 10%, 200 V. (C25)	
--	" - " .05 Mfd. +- 20%, 200 V. (C15)	
--	" - " .05 Mfd. +- 20%, 400 V. (C-12 C-28)	
S-5273	" - Electrolytic, 3 sections 20 Mfd., 400 V. (C-33) 20 Mfd., 350 V. (C-32) 20 Mfd., 25 V. (C-30)	
S-5360	Condenser & drum (C-9, C-7, C-8)	
S-5356	Control - volume control (R-10)	
S-5269	" - tone control & power switch (R-14,S-3)	
S-5351	Coil - S.W. ant. coil (L-3, L-4)	
S-5352	" - S.B. osc. coil (L-6)	
S-5353	" - S.W. Osc. coil (L-5)	
--	Resistor - 100 ohms, +- 20%, ½ watt (R-4)	
--	" - 390 " +- 10%, " " (R-19)	
--	" - 3000 " +- 5% 2 watts (R-23)	
--	" - 6800 " +- 10% ½ watt (R-20)	
--	" - 22000 " +- 20% " " (R-1)	
--	" - 27000 " +- 10% 2 watts (R-5)	
--	" - 33000 " +- 10% ½watt (R-11,R-13)	
--	" - 220,000 ohms +- 10% ½ watt (R-7)	
--	" - 220,000 " +- 20% " " (R17,R21)	
--	Resistor - 270,000 ohms +- 10% ½ watt (R-8)	
--	" - 390,000 " +- 10% " " (R-12)	
--	" - 470,000 " +- 10% " " (R-22)	
--	" - 470,000 " +- 20% " " (R-18)	
--	" - 1.0 Megohm +- 20% " " (R-2)	
--	" - 3.3 " +- 20% " " (R-6)	
--	" - 10.0 " +- 20% " " (R16,R22)	
S-5358	Switch - Range switch (S-1, S-2)	
S-4487	Transformer - 1st I.F. transformer (L-7, L-8, C-13, C-14)	
S-4662	" - 2nd I.F. transformer (L9, L10, C18, C19)	
S-4379	" - power (60 cycles) T-1	
S-4381	" - power (25 ") T-1	
	Speaker Assembly	
S-3568	Cone & voice coil assembly (L-13)	
S-5387	Transformer - output transformer (T-2)	
	Record Changer Mechanism	
	Refer to RP-168 series record changer Service Note	
	Miscellaneous Assemblies	
S-4313	Cord - dial cord (Standard)	
S-5388	Decalcomania	
S-5263	Dial scale	
S-5389	Grille Cloth	
S-4390	Knob - walnut	
S-5275	" - mahogany	
S-5276	" - blonde	
S-4387	" - walnut	
S-5277	" - mahogany	
S-5278	" - blonde	
S-3870	" - walnut	
S-5279	" - mahogany	
S-5280	" - blonde	
S-5354	Loop - loop assembly (L-1, L-2)	
S-5272	Pointer - station selector pointer	

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

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