



Model 9W653



RCA VICTOR



RADIO & DUAL PHONOGRAPH COMBINATION

MODEL 9W653

SERVICE DATA

—1950 No. 2—

GENERAL SERVICE DIVISION
RCA VICTOR COMPANY LIMITED
MONTREAL, QUE.

Electrical and Mechanical Specifications

TUNING RANGES

Standard Broadcast ----- 540-1600 K.C.
Short Wave ----- 5.8-18 MC.
Intermediate Frequency ----- 455 K.C.

TUBE COMPLEMENT

(1) RCA 6BE6 ----- Converter
(2) RCA 6BA6 ----- I.F.
(3) RCA 6AV6 ----- Audio
(4) RCA 6C4 ----- Driver
(5) RCA 6K6GT ----- Output
(6) RCA 6X5GT ----- Rectifier
Dial Lamps ----- (2) Mazda 51
Tuning Drive Ratio ----- 12 to 1 (6 turns of knob)

POWER OUTPUT

Undistorted ----- 2.5 watts
Maximum ----- 3.5 watts

LOUDSPEAKER

Type ----- 8 inch P.M.
Voice coil impedance ----- 2.2 ohms at 400 cycles

POWER SUPPLY RATINGS

Rating A—105-125 volts, 60 cycles, .50 Amps., 58 watts
Rating B—105-125 volts, 25 cycles, .50 Amps., 58 watts

CABINET DIMENSIONS

Height ----- 31"
Width ----- 26½"
Depth ----- 16½"

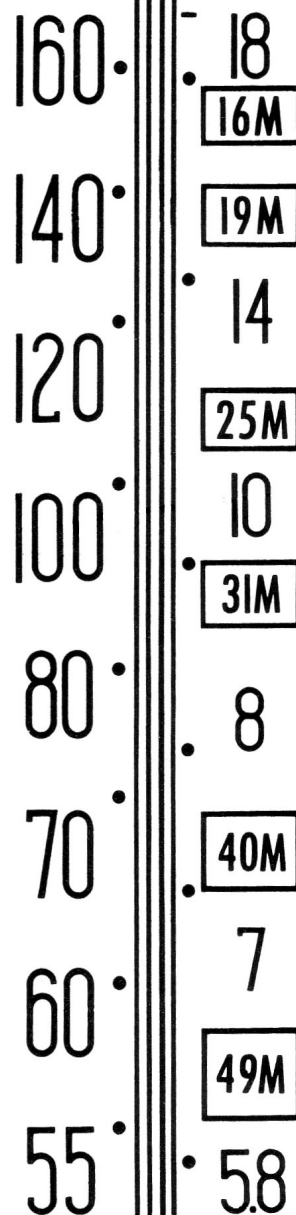
PHONOGRAPH (RP168A-1)

Record capacity ----- Ten 7 in.
Turntable speed ----- 45 R.P.M.
Pickup ----- 6 volts at 1000 cycles across 1 Megohm load

PHONOGRAPH (RP-200)

Record capacity ----- Ten twelve inch or twelve ten inch
Turntable speed ----- 33-1/3 or 78 R.P.M.
Pickup ----- 1.4 volts at 4000 cycles across 500,000 ohm load

Refer to the RP168 and RP200 Service Notes for information on the 45 and 33½-78 R.P.M. record changers respectively.



Stock No. S-5342

Fig. 1.—The Dial Scale Drawing shown is a full size reproduction. It can be used as a reference in alignment procedure.

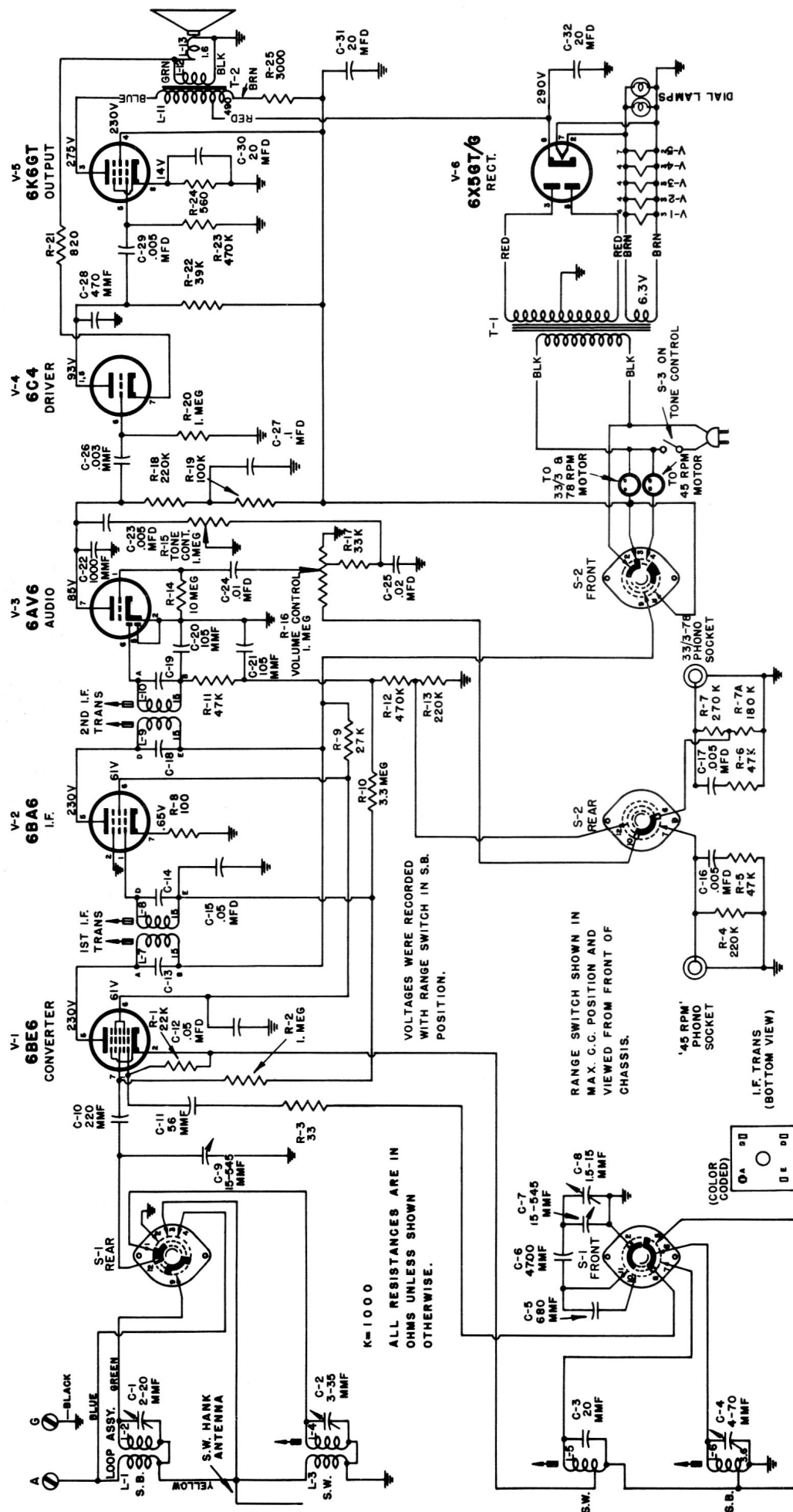


Fig. 2.—Schematic Diagram.

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.

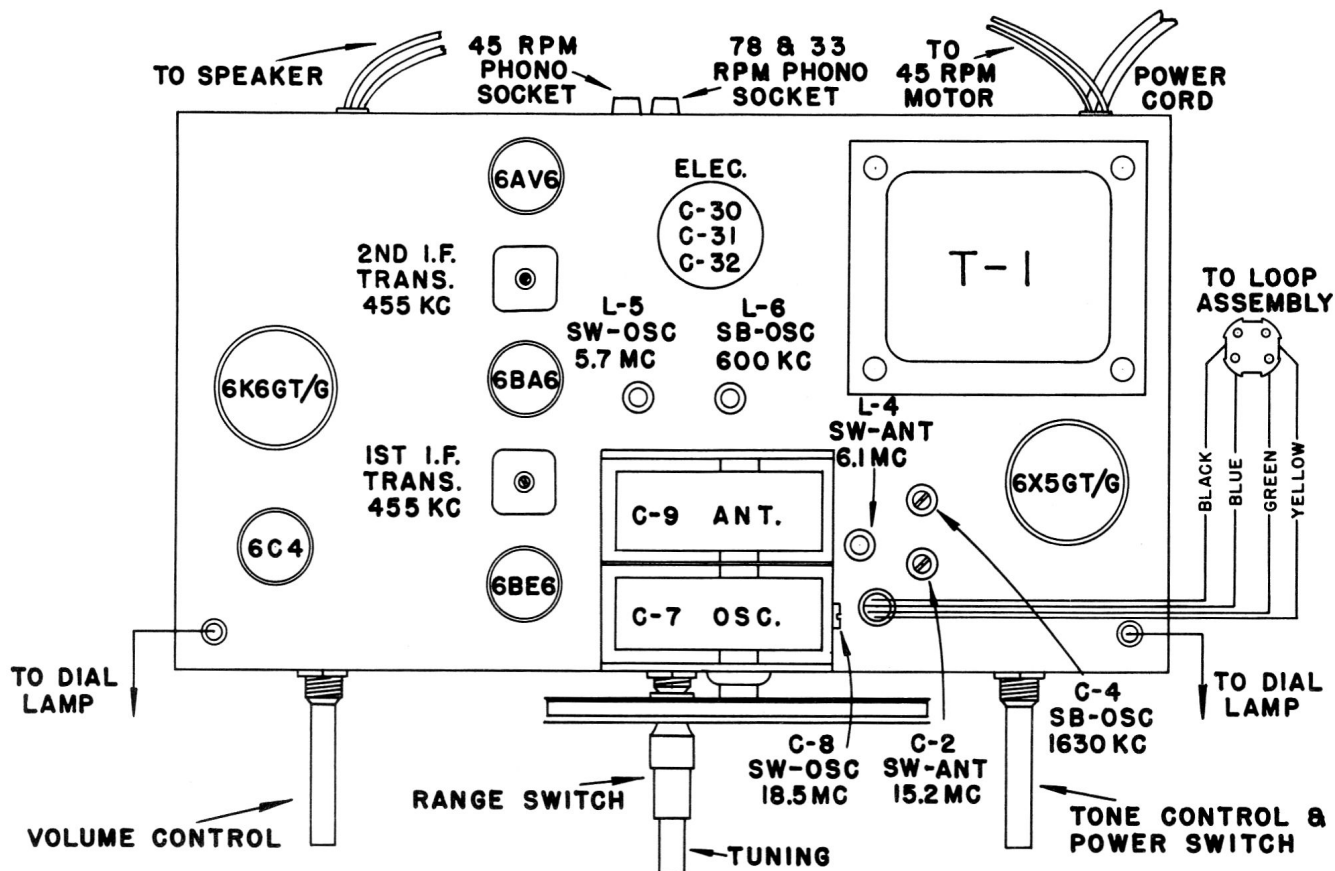


FIG. 3—CHASSIS LAYOUT AND ALIGNMENT ADJUSTMENT

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. ALIGNMENT	1	Pin #1 6BA6	Gnd.	.1 mfd	455 KC	S. B.	"HI" END	2nd I.F. Trans.	Top & Bottom Slugs	Max. Out.
	2	Pin #7 6BE6	Same	Same	Same	Same	Same	1st I.F. Trans.	Top & Bottom Slugs	Same
	3	Repeat steps 1 & 2.								
S.W. ALIGNMENT	4	Ter. "A" on loop	Gnd.	300 ohms	5.7 Mc	S. W.	"LO" End	Osc.	L-5	Same
	5	Same	Same	Same	18.5 Mc	Same	"HI" End	Osc.	C-8	Same
	6	Same	Same	Same	6.1 Mc	Same	6.1 Mc	Ant.	L-4	Same
	7	Same	Same	Same	15.2 Mc	Same	15.2 Mc	Ant.	C-2	Same
	8	Repeat steps 4 to 7.								
S.B. ALIGNMENT	9	Same	Same	220 mmf	600 Kc	S. B.	600 Kc	Osc.	L-6 Rock to Loop	In Same
	10	Same	Same	Same	1630 Kc	Same	"HI" End	Osc.	C-4	Same
	11	Same	Same	Same	1500 Kc	Same	1500 Kc	Loop Trimmer	C-1*	Same
	12	Repeat steps 9 to 11								

* Align C-1 when receiver & loop assembly are in the cabinet.

REPLACEMENT PARTS FOR MODEL 9W653

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-5363	Capacitor - Trimmer (C1,C4)			Resistors-1 Megohm 20% 1/4 watt (R2,R20)	
31871	" - Ceramic 20 MMF,5%, 500V. (C3)			" 3.3 " 20% 1/4 " (R10)	
S-4221	" - " 220 MMF,20%,350V.(C10)			" 10 " 20% 1/4 " (R14)	
S-4819	" - " 470 MMF,20%,350V.(C28)		S-5358	Switch - Range (S1,S2)	
14498	" - Mica - 680 MMF,5%, 500V.(C5)		S-5344	Socket - Phono socket - dual	
S-5370	" - Ceramic 1000 MMF,20%,350V.(C22)		S-4378	Transformer - Power 60 cycle (T1)	
S-4523	Capristor - 56 MMF and 33 Ohms (C11,R-3)		S-4380	" " 25 " (T1)	
S-4614	" - 2 of 105 MMF & 1-47000 Ohms (C20,C21,R11)		S-4487	" - 1st I.F.(C13,C14,L7,L8)	
39668	Capacitor - Mica-4700 MMF, 5%, 500V. (C6)		S-4662	" - 2nd I.F.(C18,C19,L9,L10)	
"	- Paper.005 MFD,20%, 400V. (C23, C29)		S-5269	Tone Control (R15,S-3) 1.0 Megohm	
"	- Paper.005 MFD,10%, 200V. (C16, C17)		S-5356	Volume Control (R16) 1.0 Megohm	
"	- Paper.003 MFD,20%, 400V. (C26)		S-5359	Transformer, Output - (T2) (1-11,1-12)	
"	- Paper.05 MFD,20%, 400V. (C12)		SPEAKER ASSEMBLY 8"		
"	- Paper.05 MFD,20%, 200V. (C15)		S-4349	Cone - Cone & Voice Coil Ass'y. (L13)	
"	- Paper.02 MFD,10%, 200V. (C25)		MISCELLANEOUS ASSEMBLY		
"	- Paper.01 MFD,20%, 400V. (C24)		S-4313	Cord - Dial cord	
"	- Paper.1 MFD,20%, 400V. (C27)		S-5350	Dial Scale	
S-5360	Condenser & Drum (C2,C9,C7,C8)		S-5323	Decal	
S-5362	Capacitor-Electrolytic 20-20-20 MFD (C30,C31,C32)		S-4390	Knob - Walnut (Tuning)	
S-5351	Coil - S.W. Antenna Coil (L3,L4)		S-4387	" - " (Range Selector)	
S-5352	Coil - BC Oscillator Coil(L6)		S-3870	" - " (Vol. and Tone Control)	
S-5353	Coil - S.W. Oscillator Coil (L5)		S-5275	" - Mahogany	
Resistors -	100 ohms 20% 1/4 watt (R8)		S-5277	" - "	
"	180 " 20% 1/4 " (R7A)		S-5279	" - "	
"	560 " 10% 1/2 " (R24)		S-5276	" - Blonde	
"	820 " 10% 1/4 " (R21)		S-5278	" - "	
"	3000 " 5% 1 " (R25)		S-5280	" - "	
"	47,000 " 10% 1/4 " (R6)		S-5354	Loop - Loop assembly (L1,L2)	
"	22,000 " 20% 1/4 " (R1)		S-5272	Pointer	
"	27,000 " 10% 1 " (R9)		AUTOMATIC RECORD CHANGER		
"	33,000 " 10% 1/4 " (R17)		Refer to RPL68 Series Service Note for replacement parts and service data.		
"	39,000 " 10% 1/2 " (R22)				
"	47,000 " 10% 1/4 " (R5)				
"	100,000 " 20% 1/4 " (R19)				
"	220,000 " 10% 1/4 " (R13)				
"	220,000 " 20% 1/4 " (R4, R18)				
"	270,000 " 10% 1/4 " (R7)				
"	470,000 " 10% 1/4 " (R23)				
"	470,000 " 20% 1/4 " (R12)				

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

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