



RCA VICTOR MODEL VRA67S



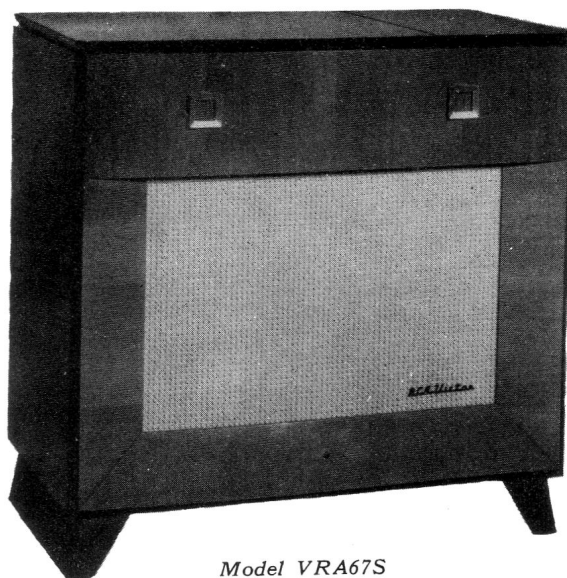
Six Tube, Two-Band, A-C, Superheterodyne Radio-Phonograph Combination

TECHNICAL INFORMATION AND SERVICE DATA

1948 No. 14

GENERAL SERVICE DIVISION

RCA VICTOR COMPANY LTD.



Model VRA67S

Electrical and Mechanical Specifications

FREQUENCY RANGE

Standard Broadcast S.B.	530-1630	K.C.
Short Wave	9.3-16	M.C.
Intermediate Frequency	455	K.C.

RADIOTRON COMPLEMENT

(1) Type 6SA7 ----- Converter
(2) Type 6SK7 ----- I.F.
(3) Type 6SQ7 ----- Det., A.V.C. & 1st A.F.
(4) Type 6AD7G ----Phase Inverter & Power Output
(5) Type 6F6G ----- Power Output
(6) Type 5Y3GT ----- Rectifier
Dial Lamps (2) -----Mazda No. 51 6-8 volts 0.2 amp.
Pilot Lamp (1) -----Mazda No. 47 6-8 volts 0.15 amp.

POWER OUTPUT

Undistorted	-----	4 Watts
Maximum	-----	5.5 Watts

LOUDSPEAKER

Type ----- 12 inch P.M.
Voice Coil impedance ----- 2.2 ohms at 400 cycles

CABINET DIMENSIONS (Inches)

	Height	Width	Depth
Model VRA67S	32-3/16	33	17-1/32

POWER SUPPLY RATINGS

Rating A ----- 105-125 volts, 50-60 cycle, 75 watts
Rating B ----- 105-125 volts, 25 cycle, 75 watts

PHONOGRAPH

Type RP-178 ----- Automatic
Record Capacity -----Twelve 10-inch or Ten 12-inch
Turntable Speed ----- 78 r.p.m.

PICKUP

Type -----	Crystal
Impedance -----	100,000 ohms at 1,000 cycles
Average Output -----	1.4 volts at 400 cycles across 500,000 ohm load

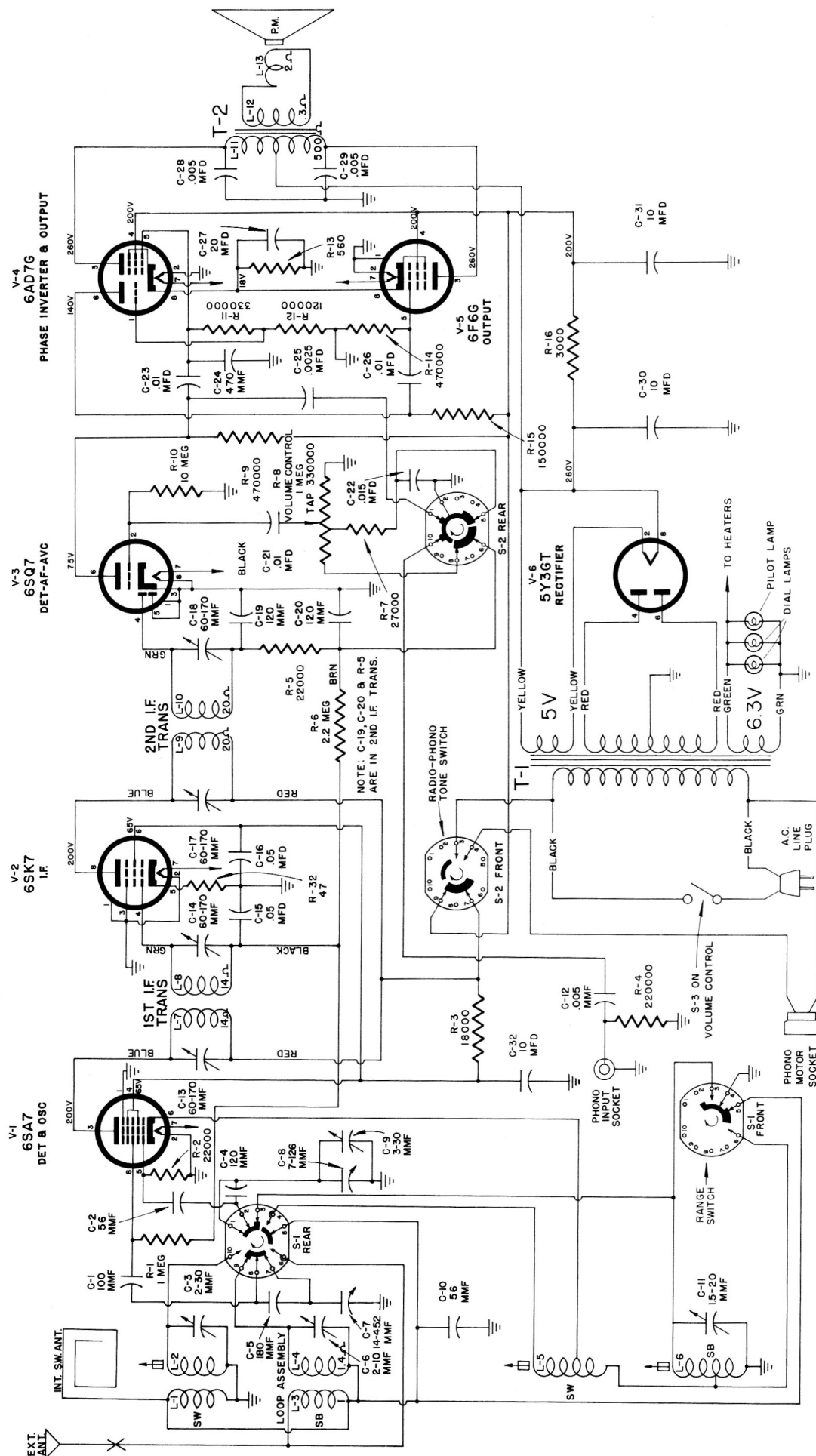


Fig. 1—Schematic Diagram.

Note:—The above voltages hold within plus or minus 20% when measured with a RCA Voltohmyst or equivalent, on a line voltage of 117 volts. All voltages are measured to chassis.

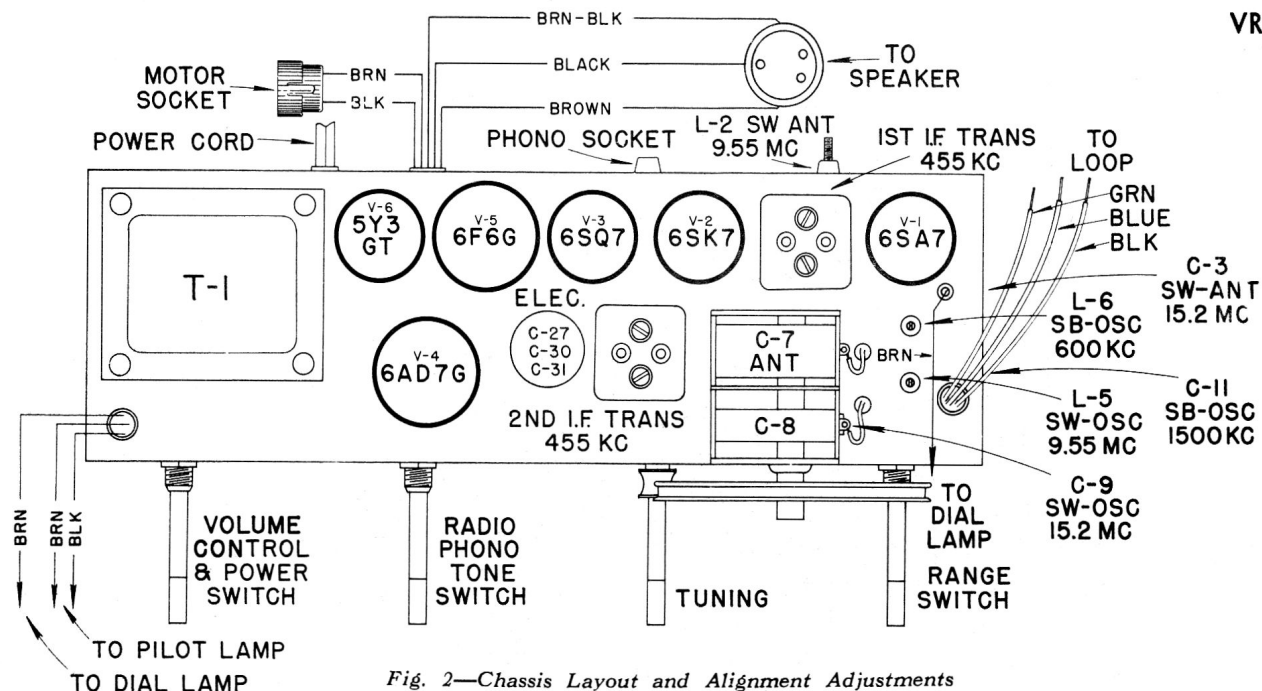


Fig. 2—Chassis Layout and Alignment Adjustments

ALIGNMENT PROCEDURE

Before aligning set, completely mesh the gang and set the dial pointer on the calibration point at the extreme left hand end of the dial.

When making a complete alignment follow in proper sequence the tabulated form below.

If only a portion of the circuit is to be aligned select the portion required, followed by the remaining steps in the chart.

Cathode-ray oscilloscope and sweep signal generator alignment of the 455 kc. A.M. I.F. transformers is the preferable method. Connect oscilloscope across the volume control. If the required equipment is not available use the method outlined below.

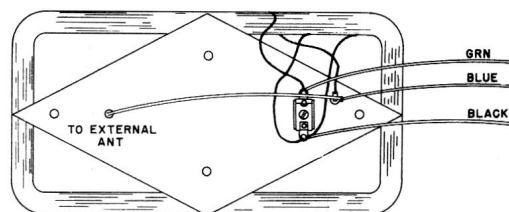


Fig. 3—Loop Connections

CRITICAL LEAD DRESS

(Make lead dress before alignment)

- (1) Dress plate lead (blue) of 2nd I.F. transformer close to chassis and away from 6SQ7 socket.
- (2) Dress audio coupling condenser to grid of 6SQ7 well up and away from 2nd I.F. transformer leads.

ALIGNMENT CHART

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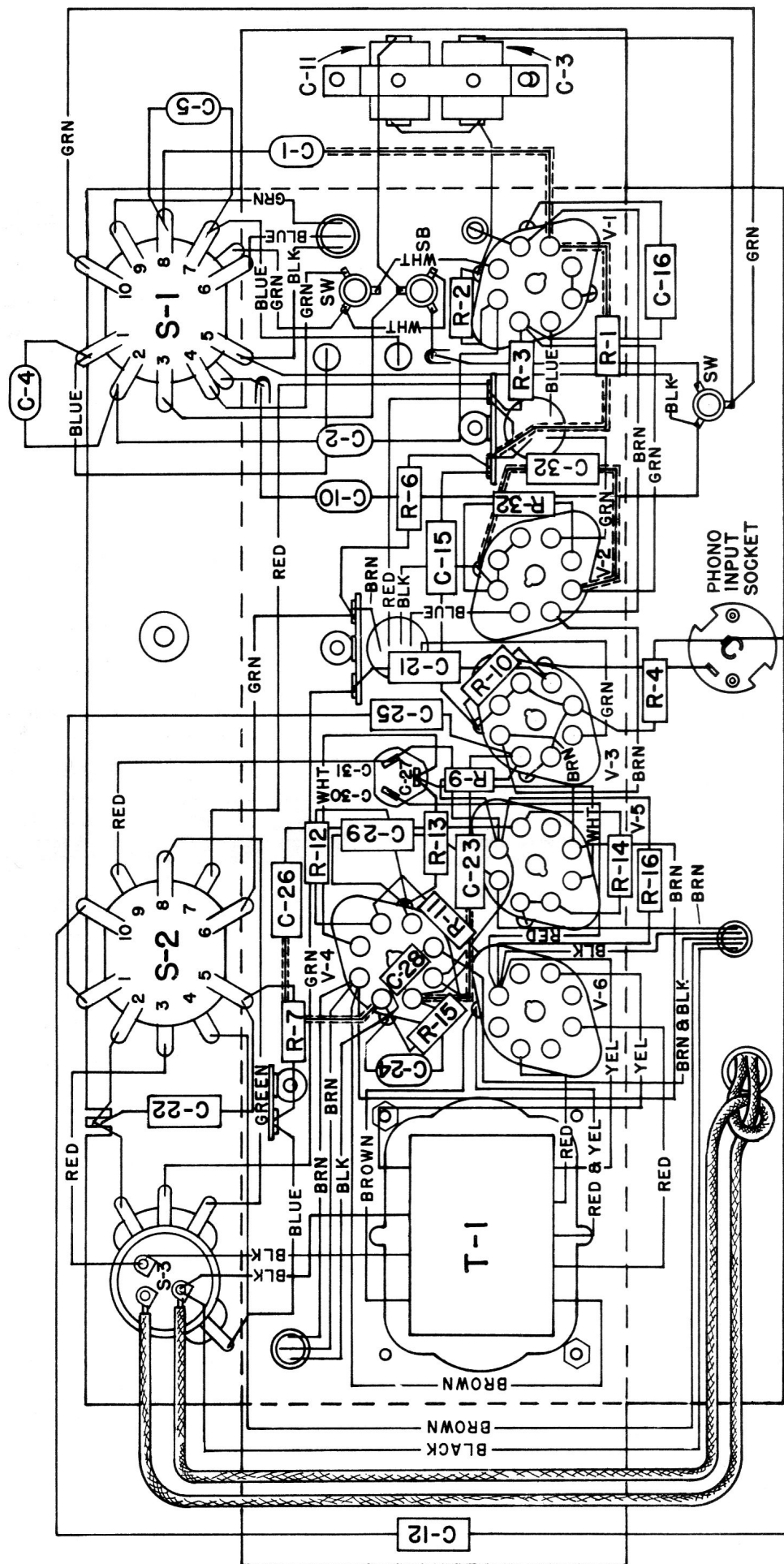


Fig. 4 Chassis Wiring Diagram

REPLACEMENT PARTS FOR MODEL VRA67S

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		S-4286 Transformer-Power 60 cycle (T1)....	
S-4431	Capacitor-trimmer assembly(C11,C3)...	S-4287	Transformer-Power 25 cycle (T1)....
S-4307	Capacitor-56 MMF (C2,C10).....	S-3503	Transformer-1st I.F.(L7,L8,C13,C14)
39628	Capacitor-100 MMF(C1).....	S-3504	Transformer-2nd I.F.(L9,L10,C17,
12724	Capacitor-120 MMF(C4).....		C18).....
39634	Capacitor-180 MMF(C5).....	S-4275	Volume Control (R8,S3).....
39644	Capacitor-470 MMF(C24).....	SPEAKER ASSEMBLY 12" P.M.	
S-3644	Capacitor-.0025 MFD (C25).....	31825	Dust Cap (Pkg.5).....
S-3649	Capacitor-.015 MFD (C22).....	S-4270	Cone-Cone and Voice Coil Assembly
S-3648	Capacitor-.01 MFD (C21,C23,C26)...		(L13).....
70615	Capacitor-.05 MFD (C15,C16).....	S-4274	Speaker.....
S-3646	Capacitor-.005 MFD (C28,C29,C12)...	S-2934	Output transformer (L11,T2).....
S-4670	Capacitor-Electrolytic 10 MFD (C32).	MISCELLANEOUS ASSEMBLY	
32240	Capacitor- " 10-10-20 MFD	S-4313	Cord-Drive cord.....
	(C27,C30,C31).....	S-4367	Cord-Power cord.....
S-4280	Condenser-Variable (C7,C8,C9).....	36891	Clamp-Dial clamp.....
S-4669	Coil-Oscillator coil (L6).....	13103	Cap-Lamp cap jewel.....
S-4433	Coil-Antenna coil S.W. (L1,L2).....	S-4671	Cover-Cabinet back cover.....
S-4434	Coil-Oscillator coil S.W. (L5).....	S-4678	Escutcheon.....
S-4281	Indicator-station selector pointer..	S-4366	Decal.....
S-4667	Loop-Loop Assembly (L3,L4).....	36386	Decal (HMV).....
S-4668	Resistor-47 ohms W.W. (R32).....	11765	Lamp-Pilot lamp (Mazda 51).....
30735	Resistor-560 ohms 1 watt (R13).....	31480	Lamp-Indicator lamp (Mazda 47).....
30151	Resistor-18,000 ohms, 1 watt (R3)...	S-4273	Knob-Walnut.....
30492	Resistor-22,000 ohms, 1/4 watt (R2).	S-4673	Knob-Blonde.....
12738	Resistor-27,000 ohms, 1/4 watt (R7).	30900	Spring-Knob retaining (Pkg.5).....
30180	Resistor-120,000 ohms,1/4 watt (R12)	33726	Washer-"C" washer for drive shaft
14020	Resistor-150,000 ohms,1/4 watt (R15)		(Pkg.5).....
14583	Resistor-220,000 ohms,1/4 watt (R4).	S-4040	Support-Lid support (LH).....
14983	Resistor-330,000 ohms,1/4 watt (R11)	S-4672	Monogram RCA Victor.....
30648	Resistor-470,000 ohms,1/4 watt(R9,	AUTOMATIC RECORD CHANGER MECHANISM:	
	R14).....	Refer to RP-178 Service	
30652	Resistor-1 Megohm 1/4 watt (R1).....	Note for Replacement	
30649	Resistor-2.2 Megohm 1/4 watt(R6)....	Parts and Service Data.	
30992	Resistor-10. Megohm 1/4 watt(R10)...	- - - -	
S-3521	Resistor-W.W.3000 ohms,5 watt (R16).		
S-4430	Switch-phono-tone (S2).....		
S-4277	Shaft-Drive shaft.....		
31418	Spring-Dial cord spring (Pkg.2).....		
S-4202	Socket-Phono socket.....		
S-4341	Socket-Tube socket.....		
S-4432	Switch-Range switch (S1).....		
S-4429	Scale-Dial Scale.....		

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