



MODEL V610



RCA VICTOR



RADIO PHONOGRAPH COMBINATION

Model V610

SERVICE DATA

— 1952 No. 7 —

HEAD OFFICE SERVICE DEPARTMENT
RCA VICTOR COMPANY, LTD
MONTREAL, QUE.

ELECTRICAL AND MECHANICAL SPECIFICATIONS

TUNING RANGE

Standard Broadcast540-1600 KC.
Short Wave5.8-19. MC.
Intermediate Frequency455 KC.

TUBE COMPLEMENT

1. Type 6BA6R.F. Amp.
2. Type 6BE6Converter
3. Type 6BA6I.F. Amp.
4. Type 6AV6Det. A.V.C. Audio
5. Type 6C4Driver
6. Type 6V6GTOutput
7. Type 6V6GTOutput
8. Type 6C4Phase Inv.
9. Type 5V3GTRectifier
10. Type 6U5Magic Eye

Dial Lamp (2)Mazda 44
Pilot LampMazda 51
Tuning Drive Ratio16:1

POWER SUPPLY RATING

Rating A-105-125 Volts, 60 cycles, .8 amps.115 watts
Rating B-105-125 Volts, 25 cycles, .8 amps.115 watts

POWER OUTPUT

Undistorted8.5 watts
Maximum10.5 watts

LOUDSPEAKER

Type12" P.M.
Voice coil impedance3.2 ohms at 400 cycles

PHONOGRAPH (124196 Series)

Turntable Speed33 $\frac{1}{3}$, 45, & 78 R.P.M.
Record capacityUp to 14-seven inch
or12-ten inch
.....10-twelve inch
.....10-twelve and ten inch intermixed

CABINET DIMENSIONS

Height34"
Width32"
Depth16 $\frac{1}{2}$ "

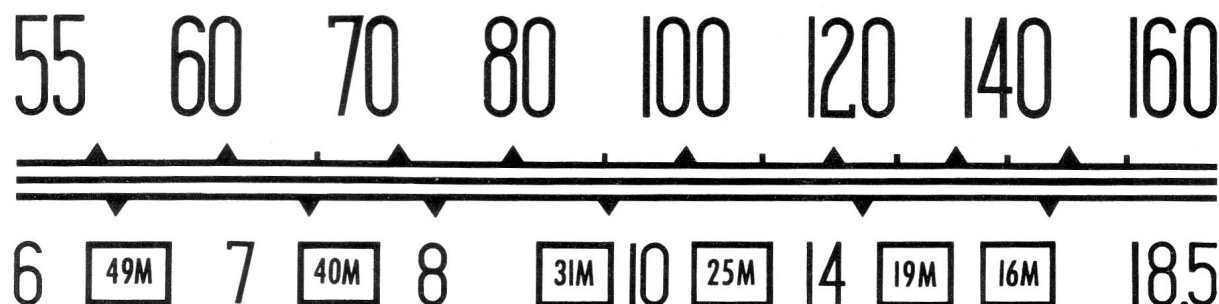


FIG. 1 DIAL SCALE DRAWING (Full Scale)

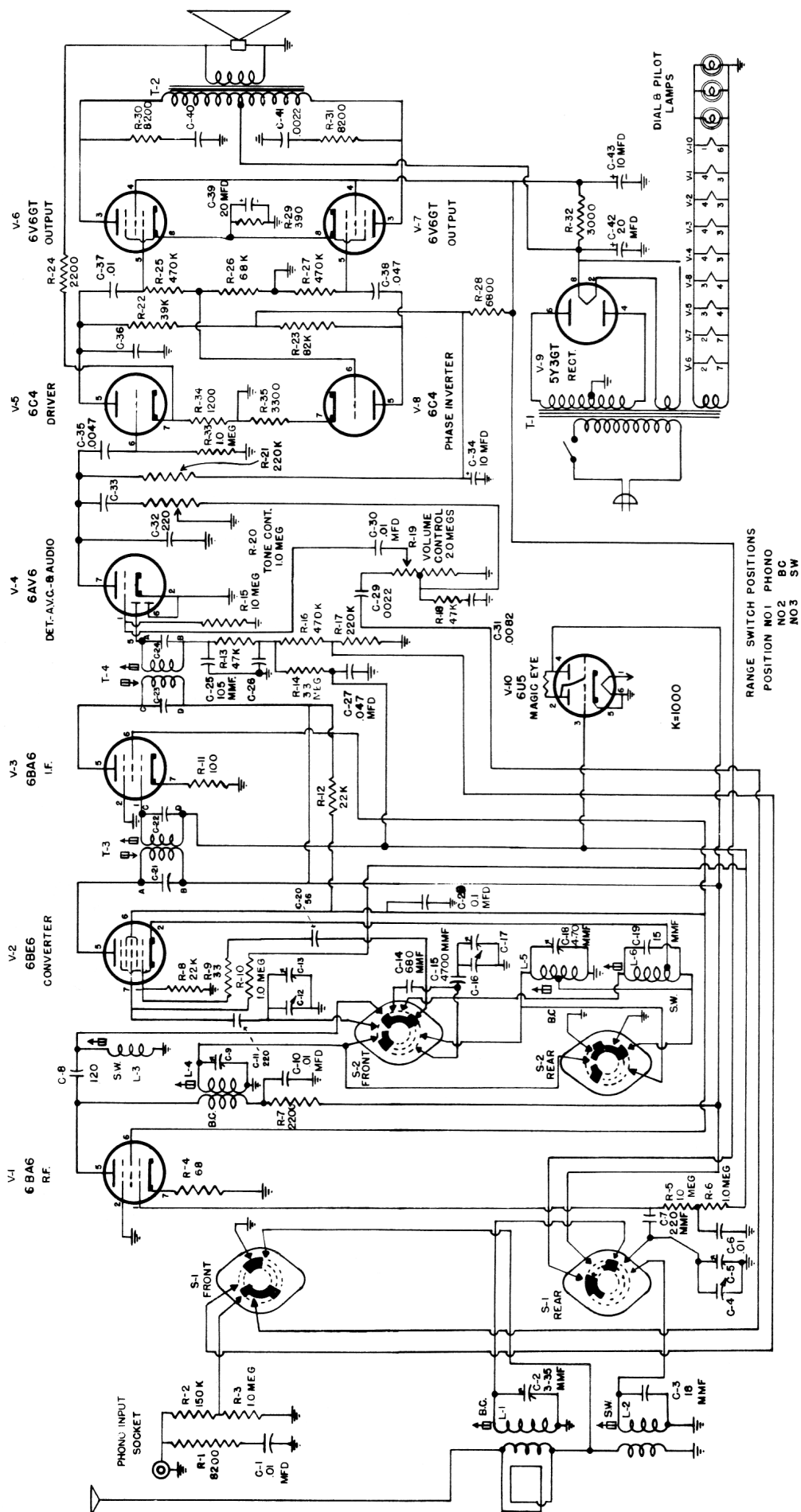


FIG. 2 SCHEMATIC DIAGRAM

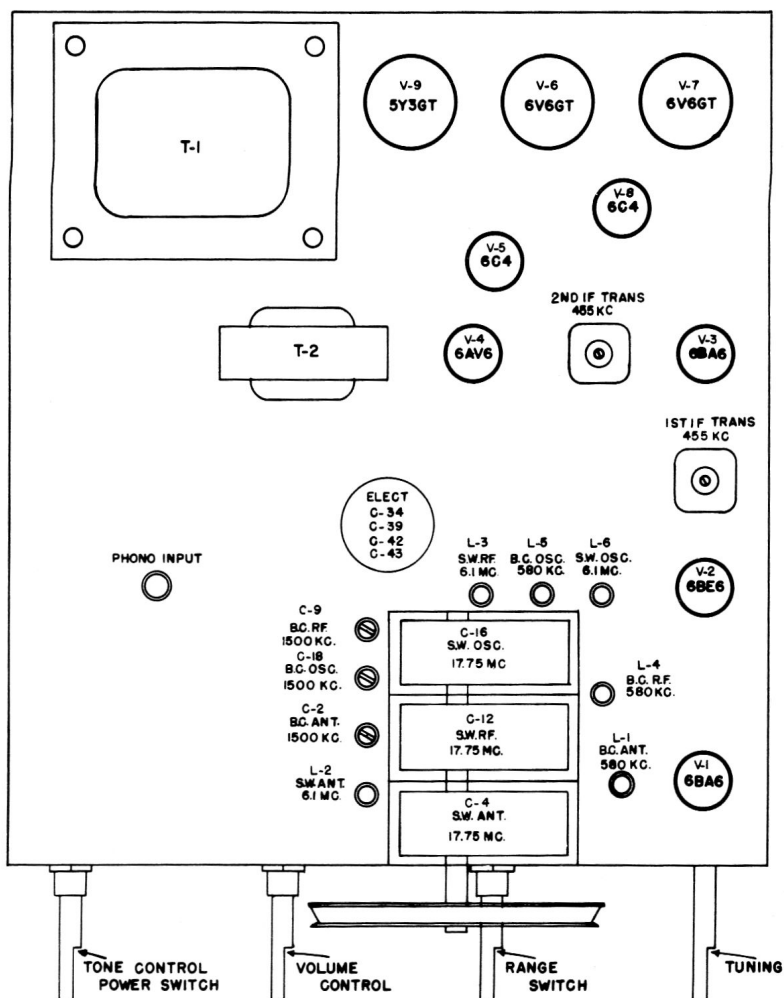


FIG. 3 CHASSIS ASSEMBLY

CRITICAL LEAD DRESS

Dress all B+ Leads from filter capacitor away from A.V.C. + Det.- audio tube V-4

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.

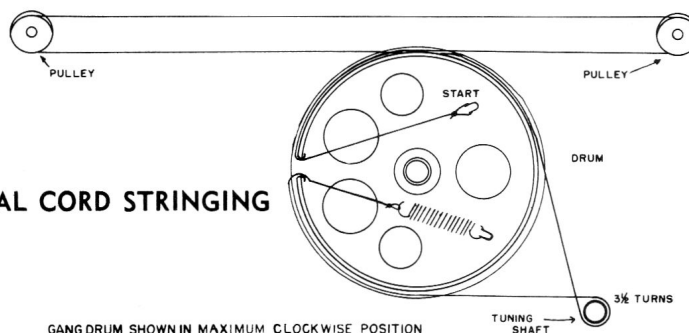
When only a portion of the circuit is to be aligned select the required portion and perform all the remaining steps.

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 "H1" Side To	Connect "L0" Side To	Dummy Antenna	Frequency Setting	Range Selector	Receiver Dial Setting	Circuit To Adjust	Adjustment Symbols	Notes
I. F. Alignment	1	V-3, 6BA6 Pin #1	GND	.1 MFD	455KC	S. B.	'H1' End	2nd I.F. Trans.	T-4 Top & Bottom	Max. Out.
	2	V-2, 6BE6 Pin #7	Same	Same	Same	Same	Same	1st I.F. Trans.	T-3 Top & Bottom	Same
	3	Repeat Steps 1 & 2								
S. W. Alignment	4	Ant Green Lead	GND	300 OHMS	6.1 MC	S. W.	6.1 MC	S. W. OSC = RF = ANT	L-6 L-3 L-2	Same
	5	Same	Same	Same	17.75 MC	Same	17.75 MC	S. W. OSC S. W. RF S. W. ANT	C-17 C-13 C- 4	Same
	6	Repeat Steps 4 & 5								
S. B. Alignment	7	Ant Blue Lead	GND	10 MMF	580 KC	S. B.	580 KC	S. B. OSC S. B. RF S. B. ANT	L-5 L-4 L-1	Same
	8	Same	Same	Same	1500 KC	Same	1500 KC	S. B. OSC S. B. RF S. B. ANT	C-18 C- 9 C- 2	Same
	9	Repeat Steps 7 & 8								

FIG. 4 DIAL CORD STRINGING



REPLACEMENT PARTS FOR MODEL V-610

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

SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
CHASSIS ASSEMBLY			CHASSIS ASSEMBLY (Cont'd)		
C-1		Capacitor, .01 mfd, 20%, 400V	R-12		Resistor - 22000 ohms, 10%, 2 watt
C-2	S-5093	Capacitor, 3-35 mmf, 500V	R-13	S-4614	Capacitor - 47000 ohms, 1/4 watt
C-3	36463	Capacitor, 18 mmf, 10%, 500V	R-14	S-4640	Resistor - 3.3 megohm, 20%, 1/2 watt
C-4		Capacitor - Gang - S.W. Ant.	R-15		Resistor - 10 megohm, 20%, 1/2 watt
C-5		Capacitor - Gang Trimmer - S.W. Ant.	R-16		Resistor - 470000 ohms, 10%, 1/2 watt
C-6		Capacitor, .01 mfd, 10%, 200V	R-17		Resistor - 220000 ohms, 10%, 1/2 watt
C-7		Capacitor, 220 mmf, 20%, 350V	R-18		Resistor - 47000 ohms, 10%, 1/2 watt
C-8	5546	Capacitor, 120 mmf, 10%	R-19	* S-6688	Resistor - 2.0 megohm, Volume Control
C-9		Capacitor, 3-35 mmf, 500V	R-20	* S-6689	Resistor - 1.0 megohm Tone Control
C-10		Capacitor, .01 mfd, 10%, 200V	R-21	S-5491	Resistor - 220K, 10%, 1/2 watt
C-11		Capacitor, 220 mmf, 20%, 350V	R-22		Resistor - 39000 ohms, 10%, 1/2 watt
C-12		Capacitor - Gang Condenser S.W.R.F.	R-23	S-6517	Resistor - 82000 ohms, 10%, 1/2 watt
C-13		Capacitor - Gang Condenser - Trimmer	R-24		Resistor - 2200 ohms, 10%, 1/2 watt
C-14		Capacitor, 680 mmf, 10%, 1000V	R-25		Resistor - 470000 ohms, 20%, 1/2 watt
C-15		Capacitor 47000 mmf, 5%, 500V	R-26		Resistor - 68000 ohms, 20%, 1/2 watt
C-16		Capacitor - Gang Condenser, S.W. Oscillator	R-27		Resistor - 470000 ohms, 20%, 1/2 watt
C-17		Capacitor - Gang Padder W. Oscillator	R-28		Resistor - 6800 ohms, 20%, 1/2 watt
C-18		Capacitor, 4-70 mmf.	R-2		Resistor - 390 ohms, 10%, 2 watt
C-19		Capacitor, 15 mmf, 10% 500V	R-30	S-6517	Resistor - 8200 ohms, 10%, 1/2 watt
C-20	73867	Capacitor, 56 mmf	R-31	S-6517	Resistor - 8200 ohms, 10%, 1/2 watt
C-21		Capacitor in 1st I.F. Transformer	R-32	S-3521	Resistor - 33000 ohms, - 5W.W.
C-22		Capacitor in 1st I.F. Transformer	R-33		Resistor - 1.0 megohm, 10%, 1/2 watt
C-23		Capacitor in 2nd I.F. Transformer	R-34	S-5006	Resistor - 1200 megohm, 10%, 1/2 watt
C-24		Capacitor in 2nd I.F. Transformer	R-35	S-6318	Resistor - 3300 ohms, 10%, 1/2 watt
C-25	S-4614	Capacitor - 105 mmf	S-1,		
C-26	S-4614	Capacitor - 105 mmf	S-2	* S-6693	Switch - Range Switch
C-27		Capacitor - .047 mfd, 20%, 400V	T-1	* S-6698	Transformer - Power Trans. - 100 cycle
C-28		Capacitor - .1 mfd, 10%, 400V	T-1	* S-6699	Transformer - Power Trans. - 25 cycle
C-29		Capacitor -.0022 mfd, 20%, 600V	T-2	* S-6696	Transformer - Output Transformer
C-30		Capacitor - .01 mfd,	T-3	S-4487	Transformer - 1st I.F. Transformer
C-31		Capacitor -.0032 mfd,	T-4	S-5086	Transformer - 2nd I.F. Transformer
C-32		Capacitor - 220 mmf, 20%, 350V	SPEAKER ASSEMBLY		
C-33		Capacitor -.0047 mfd, 10%, 400V		* S-6682	Speaker
C-34	S-4545	Capacitor - electrolytic, 10 mfd, 400V.		* S-6710	Cone and Voice Coil Assembly
C-35		Capacitor, .0047 mfd, 10%, 400V	MISCELLANEOUS ASSEMBLIES		
C-36		Capacitor, 680 mmf, 10%, 300V		* S-6686	Cable Assembly (Magic Eye)
C-37		Capacitor, .01 mfd,		* S-6690	Cover - Cabinet Back (Wal-Mah)
C-38		Capacitor, .047 mfd, 20%, 400V		* S-6691	Cover - Cabinet Back (Oak)
C-39	S-4545	Capacitor - electrolytic, 20 mfd, 400V		* S-6718	Decal - Complete Set
C-40		Capacitor, .002 mfd, 10%, 1000V		* S-6694	Dial - Dial Glass
C-41		Capacitor, .002 mfd, 10%, 1000V		* S-6719	Dial - Dial Plate Assembly Includes Dial
C-42	S-4545	Capacitor - electrolytic, 20 mfd, 400V.		* S-6720	Grille Cloth - (Wal-Mah)
C-43	S-4545	Capacitor - electrolytic, 10 mfd, 400V.		* S-6721	Grille Cloth - (Oak)
	S-6263	Gang Condenser and Drum		S-6021	Knob - Knob Assembly (Range)
L-1	* S-6692	Coil - B.C. Antenna		S-6019	Knob - Knob Assembly (Volume Tone Tuning)
L-2	S-6264	Coil - S.W. Antenna		* S-6687	Pointer - Station selector
L-3	S-6265	Coil - S.W. R.F.		* S-6722	Socket & Lead Assembly (Phono Motor)
L-4	S-6268	Coil - B.C. R.F.		* S-6683	Socket & Lead Assembly (Pilot Lamp)
L-5	S-6267	Coil - B.C. Oscillator Coil		* S-6684	Socket & Lead Assembly (Dial Lamp)
L-6	S-6266	Coil - S.W. Oscillator Coil		* S-6685	Socket & Lead Assembly (Dial Lamp)
R-1		Resistor - 8200 ohms, 10%, 1/2 watt		S-4202	Socket - Phono Socket
R-2		Resistor - 150000 ohms, 20%, 1/2 watt	RECORD CHANGER		
R-3		Resistor - 1.0 megohm, 10%, 1/2 watt	Refer to 124196 Series Service Note for Replacement Parts and Service Data.		
R-4		Resistor - 68 ohms, 10%, 1/2 watt			
R-5		Resistor - 1.0 megohm, 10%, 1/2 watt			
R-6		Resistor - 1.0 megohm, 10%, 1/2 watt			
R-7		Resistor - 2200 ohms, 20%, 1/2 watt			
R-8		Resistor - 22000 ohms, 20%, 1/2 watt			
R-9	73867	Capacitor - 33 ohms, 1/4 watt			
R-10		Resistor - 1.0 megohm, 10%, 1/2 watt			
R-11		Resistor - 100 ohms, 1/2 watt			

* Indicates new stock items.

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

All parts subject to change or withdrawal without notice.