



RCA VICTOR



RADIO PHONOGRAPH COMBINATION

Model V707

SERVICE DATA

— 1953 No. 8 —

HOME INSTRUMENT SERVICE DIVISION
RCA VICTOR COMPANY, LTD.
MONTREAL, QUE.

MODEL V-707

ELECTRICAL AND MECHANICAL SPECIFICATIONS

TUNING RANGE

Standard Broadcast 540-1600 KC.
Short Wave 5.8-19.6 MC.
I.F. 455 KC.

TUBE COMPLEMENT

1. RCA 6BJ6 R.F.
2. RCA 12BE6 Converter
3. RCA 12SK7 I.F. Amp.
4. RCA 12AV6 Audio, Det. A.V.C.
5. RCA 6C4 Ph. Inverter
6. RCA 35L6GT Output
7. RCA 35L6GT Output
Rectifier Selenium
Dial Lamps (3) S-7417
Tuning Ratio Drive 11.1 (5½ Turns of Knob)

POWER SUPPLY RATING

Rating A ---- 105-125 Volts, 25 cycles, .55 amps. 63 watts
Rating B ---- 105-125 Volts, 60 cycles, .55 amps. 63 watts

LOUDSPEAKER

Size and Type 12" P.M.
Voice coil impedance 3.4 ohms at 400 cycles

POWER OUTPUT

Undistorted 2.5 watts
Maximum 3.5 watts

RECORD CHANGER 124196 Series

Turntable Speed 33⅓, 45 or 78 r.p.m.
Record capacity Up to 14 seven inch
or 12 ten inch
or 10 twelve inch
or 10 ten and twelve inch intermixed

CABINET DIMENSIONS

Height 32¼"
Width 30¼"
Depth 16"

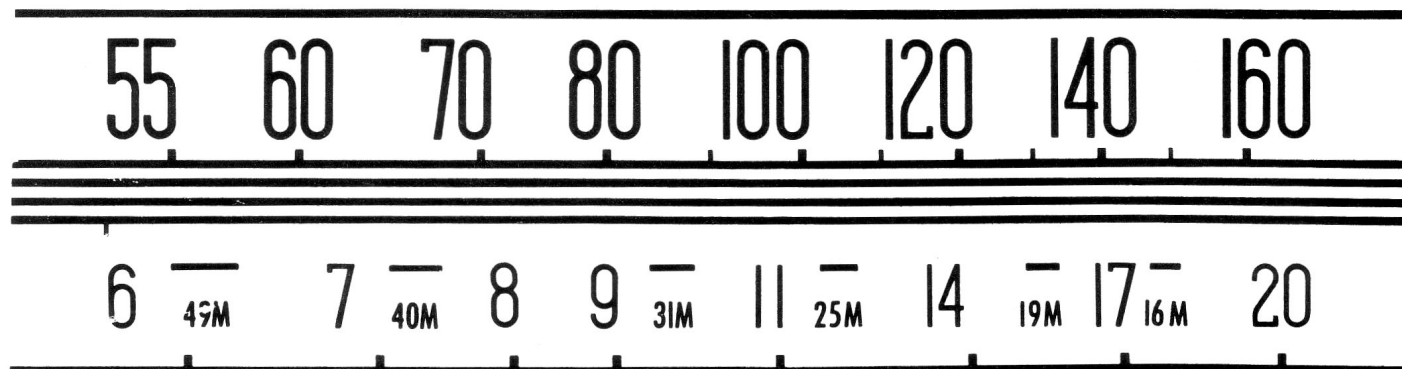


FIG. 1 DIAL SCALE V-707

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

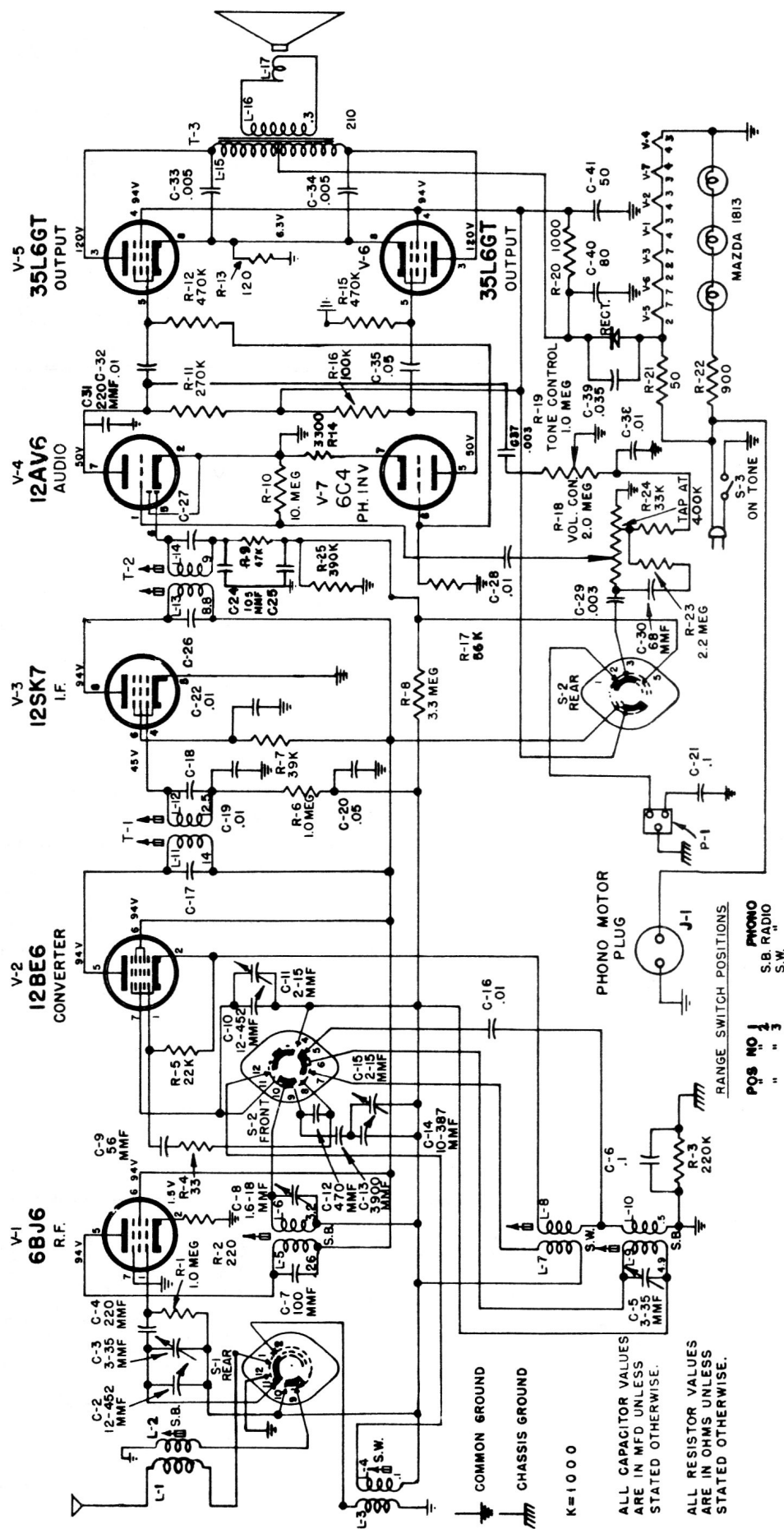


FIG. 2 SCHEMATIC DIAGRAM

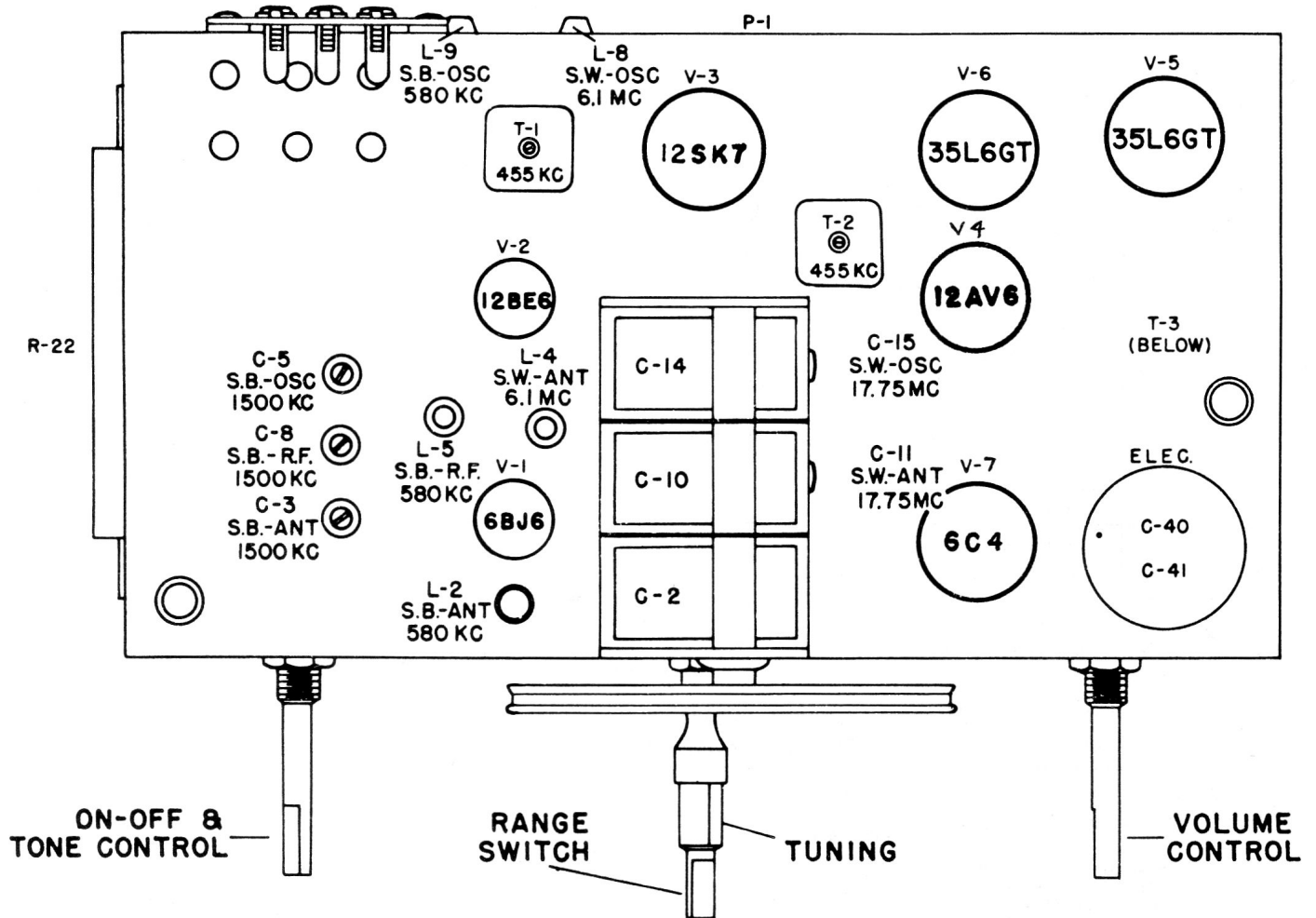


FIG. 3 CHASSIS LAYOUT AND ALIGNMENT ADJUSTMENT.

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 in the alignment chart.

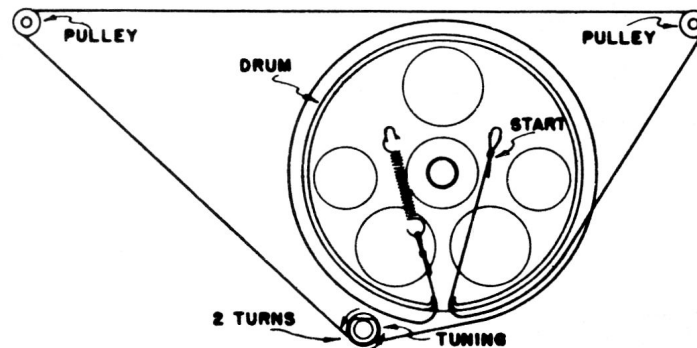


Fig. 4—Dial Cord Stringing

ALIGNMENT CHART

		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 #4 12SK7	Gnd.	.1 mfd	455 KC	S.B.	"HI" EMD	T-2 2nd I.F. Trans.	Top & Bottom Slugs	Max. Out.
	2	Pin #7 12BE6	Same	Same	Same	Same	Same	T-1 1st I.F. Trans.	Top & Bottom Slugs	Same
	3	Repeat steps 1 & 2.								
S.W. ALIGNMENT	4	Ant. Ter. BRD #1	Gnd.	300 ohms	17.75 Mc	S.W.	17.75 Mc.	Osc.	C-15	Same
	5	Same	Same	Same	17.75 Mc	Same	17.75 Mc	Ant.	C-11	Same
	6	Same	Same	Same	6.1 Mc	Same	6.1 Mc	Osc.	L-8	Same
	7	Same	Same	Same	6.1 Mc	Same	6.1 Mc	Ant.	L-4	Same
	8	Repeat steps 4 to 7.								
S.B. ALIGNMENT	9	"HI" Side of Loop	Same	10 mmf	1500 Kc	S.B.	1500 Kc	C-5 C-8 C-9	Osc. R.F. Ant.	Same
	10	Same	Same	Same	580 Kc	Same	580 Kc	L-9 L-5 L-2	Osc. R.F. Ant.	Same
	11	Repeat steps 9 to 10.								

REPLACEMENT PARTS FOR MODEL V-707

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					
C-2	*S-20019	Gang - Condenser & Drum	R-2		" 220 ohms, 20%, 1/2 W.
C-3	*S-20019	Capacitor - Trimmer 3-35 mmf.	R-3		" 220,000 ohms, 20%, 1/2 W.
C-4	S-6962	Capacitor - 220 mmf. - 20% 500V.	R-4	S-4523	Capristor 33 ohms, 56 mmf. 500V.
C-5	*S-20019	Capacitor - 3-35 mmf.	R-5		Resistor, 22,000 ohms, 20%, 1/2 W.
C-6		Capacitor - 0.1 mfd. 10% 400V.	R-6		Resistor, 1.0 megohms, 20%, 1/2 W.
C-7	75437	Capacitor - 100 mmf. 20% 500V.	R-7		Resistor, 39,000 ohms, 20%, 1/2 W.
C-8		Capacitor - Trimmer 1.6-18 mmf.	R-8		Resistor 3.3 megohm 20% 1/2 W.
C-9	S-4523	Capristor - 56 mmf. 33 ohms, 500V.	R-9		Capacitor 2-105 mmf. 47000 ohms.
C-12	S-6190	Capacitor - 470 mmf. 5% 500V.	R-10		Resistor - 10.0 megohms, 20%, 1/2 W.
C-13	S-6216	Capacitor - 3900 mmf. 5% 500V.	R-11		Resistor - 270,000 ohms, 10%, 1/2 W.
C-14		Capacitor - Trimmer 10-387 mmf.	R-12		Resistor - 470,000 " 10%, 1/2 W.
C-15		Capacitor - " 2-15 mmf.	R-13		Resistor - 120,000 ohms, 10%, 1 watt.
C-16		Capacitor - .01 mfd. 20% 400V.	R-14		Resistor - 3300 ohms, 10%, 1/2 W.
C-17		Capacitor - 1st I.F. Transf.	R-15		Resistor - 470,000 ohms, 10%, 1/2 W.
C-18		Capacitor - 1st I.F.	R-16		Resistor - 100,000 ohms, 20%, 1/2 W.
C-19		Capacitor - .01 mfd. 20%, 400V.	R-17		Resistor - 56,000 ohms 10%, 1/2 W.
C-20		Capacitor - .05 mfd. 20%, 200V.	R-18		Control - Vol. control 2.0 megohms
C-21		Capacitor - .1 mfd. 10%, 400V.	R-19		Control - Tone cont. 1.0 megohms
C-22		Capacitor - .01 mfd. 20%, 400V.	R-20		Resistor, 1000 ohms, 10%, 1 watt.
C-24	S-4614	Capristor - 105 mmf. 47000 ohms, 10%	R-21		Resistor, 50 ohms, 10%, 3 watt.
C-25	S-4614	Capristor - 105 mmf. 4700 ohms 10%	R-22	S-6236	Resistor, 900 ohms, 10 watt
C-26		Capacitor in 2nd I.F. Transf.	R-23		Resistor - 2.2 megohm 10%, 1/2 watt.
C-27		Capacitor in 2nd I.F. Transf.	R-24		Resistor - 33,000 ohms, 10%, 1/2 W.
C-28		Capacitor .01 mfd. 10%, 200V.	R-25		Resistor - 390,000 ohms, 10%, 1/2 W.
C-29		Capacitor .003 mfd. 20%, 200V.	S-1	S-6728	Switch - Range - Phono
C-30		Capacitor 68 mmf. 10%, 500V.	T-1	S-4487	Transformer - 1st. I.F. Transf.
C-31	S-6962	Capacitor 220 mmf. 20%, 500V.	T-2	S-6192	" - 2nd I.F. "
C-32		Capacitor .01 mfd. 20%, 400V.	T-3	S-6187	" - Output Transf.
		Capacitor .005 mfd. 10% 600V.	SPEAKER ASSEMBLIES		
		Capacitor .005 mfd. 10% 600V.	S-6981		Speaker 12" P.M.
C-35		Capacitor - .05 mfd. 20%, 400V.	S-20027		Cone & Voice coil ass'y.
C-36		Capacitor - .003 mfd.	MISCELLANEOUS ASSEMBLIES		
C-37		Capacitor - .0033 mfd. 10%, 400V.	*S-20016		Cover - Cabinet Back Cover (Wal.Mah.)
C-38		Capacitor - .01 mfd. 10%, 200V.	*S-20017		Cover - " " " (Oak)
C-39		Capacitor - .035 mfd. 10%, 400V.	S-4367		Cord - Power cord
C-40	S-5703	Capacitor - Electrolytic 80 mfd. 150V	S-6756		Decal - Trademark, RCA VICTOR
C-41	S-5703	Capacitor - " 50 mfd. 150V	*S-20031		Escutcheon
L-1	S-6235	Coil - S.B. Ant. Coill	S-6727		Insulator - Insul. cover for electrolytic
L-2	S-6235	" " " " "	S-6744		Knob - Knob ass'y (Dial)
L-3	S-6183	" S.W. " "	S-6755		Knob - Knob ass'y (Range)
L-4	S-6183	" S.W. " "	S-4631		Knob - " " (Vol. & Tone)
L-5	S-6182	Coil - S.B. R.F. Coill	S-7417		Lamp - Dial & Pilot lamp
L-6	S-6182	" " " " "	*S-20018		Pointer - dial pointer
L-7	S-6184	Coil - S.W. Osc. Coill	36422		Socket - Phono socket
L-8	S-6184	" " " " "	S-6479		Hinge - Door hinge - R.H. (Wal.Mah.)
L-9	S-6181	Coil - S.B. Osc. Coill	S-6750		Hinge - " " - L.H. (Wal.Mah.)
L-10	S-6181	" S.B. " " "	S-6751		Hinge - Door Hinge R.H. (Oak)
			S-6752		Hinge - " " L.H. (Oak)
	S-6681	Control - Vol. control 2.0 megohm	S-6193		Scale - Dial Scale
	S-5920	Control - Tone control, Power switch	*S-20030		Pull-Door Full
	S-6217	Rectifier - Selenium Rectifier			
R-1		Resistor 1.0 megohm, 20%, 1/2 W.			

All parts subject to change or withdrawal without notice. * Indicates New Stock Items.