

# RCA VICTOR



## AC-DC RADIO RECEIVER MODEL X602 SERVICE DATA —1952 NO. 6—

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

### Electrical and Mechanical Specifications

TUNING RANGE -----540-1600 kc  
INTERMEDIATE FREQUENCY -----455 kc  
TUBE COMPLEMENT  
(1) RCA 6BJ6 ----- R.F. Amplifier  
(2) RCA 12SA7 ----- Converter  
(3) RCA 6BJ6 ----- I-F Amplifier  
(4) RCA 12SQ7 ----- Det.—A.V.C.—A-F Amp.  
(5) RCA 50L6GT ----- Output  
(6) RCA 35Z5GT ----- Rectifier  
POWER SUPPLY RATING  
115 volts a.c., 50 to 60 cycles or d.c.-----30 watts  
POWER OUTPUT  
Undistorted ----- 1.1 watts  
Maximum ----- 1.75 watts

DIAL LAMPS (2)-----Mazda type 1490, 3.2 volts, 16 amp.

LOUDSPEAKER  
Size and Type -----8 in. PM  
Voice Coil Impedance-----3.2 ohms at 400 cycles

CABINET DIMENSIONS  
Height-----9 $\frac{3}{4}$ " Width-----12 $\frac{1}{2}$ " Depth-----8 $\frac{3}{8}$ "

TUNING DRIVE RATIO -----9 to 1 (4 $\frac{1}{2}$  turns of knob)

POWER SUPPLY POLARITY.—For operation on d.c., the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On a.c., reversal of the plug may reduce hum.

### REPLACEMENT PARTS FOR MODEL X602

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

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
	<b>Chassis Assembly</b>		
	Capacitor, ceramic 2.2 MMF, 20% 350V (C-3A)		" 22000 Ohms 20% $\frac{1}{2}$ Watt (R-2)
	" " 47 MMF, 10% 350V (C-1A)		" 27000 Ohms 10% Watt (R-9)
	" " 56 MMF, 10% 350V (C-5A)		" 56000 Ohms 10% Watt (R-4)
	" " 82 MMF, 10% 350V (C-11)		" 220000 Ohms 20% Watt (R-12) (R-18)
	" " 150 MMF, 20% 350V (C-7)		" 470000 Ohms 20% Watt (R-13) (R-7)
	" " (C-14)		" 1.0 Megohm 10% Watt (R-8)
	" paper .001 MFD, 20% 200V (C-9)	S-5761	" 3.3 Megohm 20% Watt (R-5)
	" " .003 MFD, 20% 400V (C-10)	S-5587	" 10 Megohm 20% Watt (R-11)
	" " .01 MFD, 10% 200V (C-12)	S-5767	Transformer, 1st I.F. Trans. (T-2)
	" " .01 MFD, 10% 400V (C-15)		" 2nd I.F. Trans. (T-3)
	" " .01 MFD, 10% 600V (C-17)		" Output Trans. (T-4)
	" " .022 MFD, 10% 200V (C-20)		<b>Speaker Assembly</b>
	" " .02 MFD, 20% 200V (C-13)	S-5822	Speaker (8 inches)
	" " .047 MFD, 20% 400V (C-8)	S-5772	Cone - Cone & Voice Coil Assy.
	" " (C-18)		
	" " .1 MFD, 10% 400V (C-19)		<b>Miscellaneous Assemblies</b>
	" " (C-6A)		
S-5768	" Electrolytic, 3 sections	S-3467	Cord - Power Cord
	1 - 40 MFD. (C-16A)	*S-6702	Cover - back cover less loop
	2 -120 MFD. (C-16B)	*S-6701	Cover & loop
	(C-16C)	*S-6703	Dial back plate assy.
S-5760	Condenser, Tuning Condenser (C1-C3-C5)	*S-6705	Dial - dial scale
S-5765	Coil - R.F. Coil (T-1)	S-5757	Decalcomania
S-5764	Coil - Oscillator Coil (L3)	S-5661	Emblem "RCA Victor"
S-5766	Control - Volume Control 1.5 Meg. (R-10)	*S-6707	Grille assy.
S-5771	Resistor, Fuss Type - 33 ohms, 20% (R-16)	*S-6706	Grille cloth assy.
	" , 150 Ohms 10% $\frac{1}{2}$ Watt (R-14)	*S-6709	Knob assy (Tone - Phono)
	" , 220 Ohms 20% $\frac{1}{2}$ Watt (R-2A)	*S-6708	Knob assy (Tuning - Volume)
	" 330 Ohms 20% $\frac{1}{2}$ Watt (R-17)	*S-6700	Loop - Loop less back cover
	" 1000 Ohms 10% $\frac{1}{2}$ Watt (R-15)	*S-6704	Pointer - Station selector pointer
	" 12000 Ohms 10% $\frac{1}{2}$ Watt (R-3)	S-5763	Switch - Tone & power switch
	" 18000 Ohms 10% $\frac{1}{2}$ Watt (R-19)		

\* Indicates new stock items

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

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

## Alignment Procedure

### CRITICAL LEAD DRESS

1. Dress all heater leads down to chassis and away from all audio grid and plate wiring.
2. Dress power cord to back apron and away from phono jack.
3. Dress capacitor C18 against back apron.
4. Connect shielded capacitor C13 direct and with a minimum of exposed leads.
5. Dress dial lamp leads on top of chassis.
6. Dress output transformer leads down to chassis.
7. Dress excess loop leads away from tubes and clear of tuning condenser.

**TEST-OSCILLATOR.**—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the oscillator output as low as possible to avoid a-v-c action.

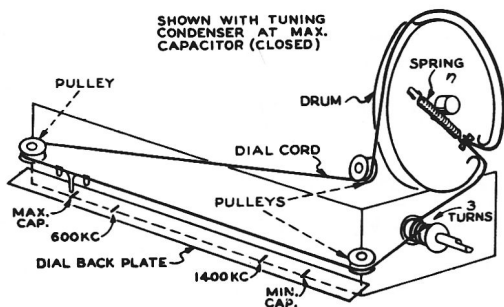
On AC operation an isolation transformer (115v./115 v.) may be necessary for the receiver if the test oscillator is also AC-DC operated.

### DIAL CALIBRATION

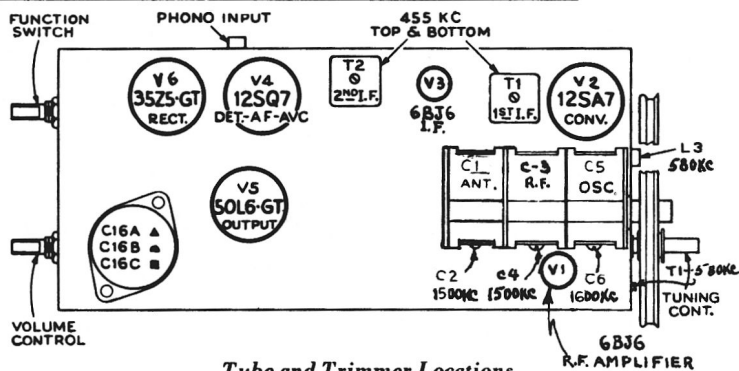
With the tuning condenser fully meshed, the dial pointer should be set to the first score mark at the left-hand end of the dial back plate. The four score marks represent: Max. cap. 600 kc 1600 kc min. cap.

## ALIGNMENT CHART

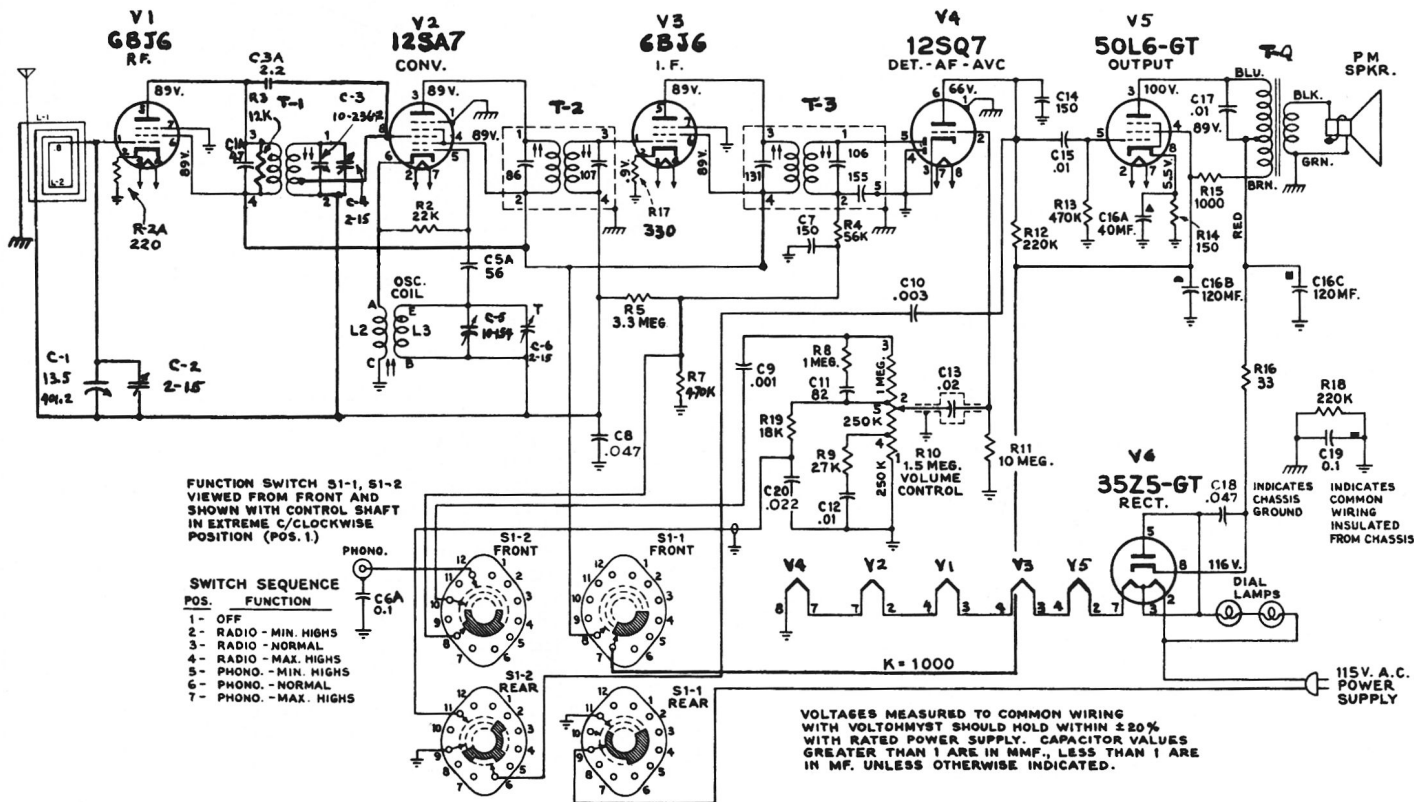
Order of Alignment	TEST OSCILLATOR				RECEIVER				
I.F. Alignment	Connect "HI" Side to	Connect LOW Side to	Dummy Antenna	Frequency Setting	Range Selector	Receiver Dial Setting	Circuit To Adjust	Adjustment Symbols	Notes
1-	V3 6BJ6 Pin #1	GND	"	455KC	S.B.	"L.H." of Dial	2nd IF. T3	Top & Bottom	Max-Out
2-	V2 12SA7 Pin #8	"	"	"	"	"	1st IF. T2	"	"
R.F. Alignment	Ant. Terminal	"	220 ohms	580KC	"	580KC	Oscillator & R.F. Stage	L3 Core T1 Core	"
	"	"	"	1600KC	"	"RH" of Dial	Osc. Trim.	C6	"
	"	"	"	"	"	1500KC	R.F. Stage Ant. & R.F. Trim.	C4 & C2	"
	Repeat Steps 3, 4 & 5.								



Dial Indicator and Drive Cord



Tube and Trimmer Locations



Schematic Circuit Diagram