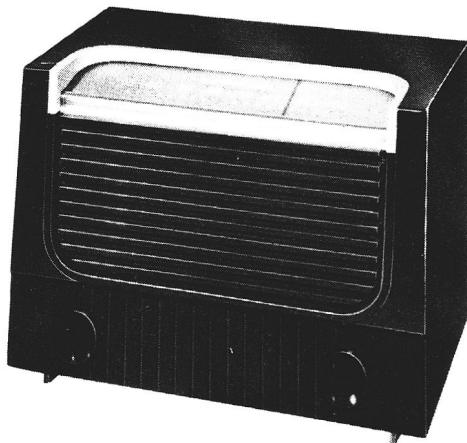




Model X-608



RCA VICTOR



AC-DC RADIO RECEIVER

MODEL X-608

SERVICE DATA

—1953 No. 5—

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

ELECTRICAL AND MECHANICAL SPECIFICATIONS

Tuning Range -----540—1600 kc

Intermediate Frequency -----455 kc

TUBE COMPLEMENT

- (1) RCA 12SK7 ----- R.F. Amplifier
(2) RCA 12SA7 ----- Converter
(3) RCA 12SK7 ----- I.F. Amplifier
(4) RCA 12SQ7 ----- Det.-A.V.C.-A.F. Amp.
(5) RCA 35L6GT ----- Output
(6) RCA 35Z5GT ----- Rectifier

POWER SUPPLY RATING

115 volts d. c. or 50 to 60 cycles a.c. ----- 35 watts

DIAL LAMP ----- S-4508

LOUDSPEAKER

Size and type ----- 4-in. P.M.

Voice coil impedance ----- 3.2 ohms at 400 cycles

POWER OUTPUT

Undistorted ----- 0.85 watt

Maximum ----- 1.15 watts

TUNING DRIVE RATIO ----- 8.5 to 1 (4¼ turns of knob)

WEIGHT ----- 8 lbs.

CABINET DIMENSIONS

Height ----8⅝" Width ----11¾" Depth ----7½"

REPLACEMENT PARTS LIST FOR MODEL X-608

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-6864*	Antenna - Antenna loop & back cover assembly (Maroon)		Resistor-220,000 " 10% ½ W. (R5,R6)
S-6860*	Capacitor - Variable tuning (C1,C-2,C-3,C-4,C-5,C-6)	S-4834	Resistor-470,000 " 10% ½ W. (R10)
	Capacitor - 47 mmf. (C-8)		Resistor-2.2 megohms, 10%, ½ W. (R8)
	Capacitor - 56 mmf. (C-9)		Resistor-4.7 megohm 10%, ½ W. (R9)
	Capacitor -150 mmf. (C-12,C-13)		Socket - tube socket
S-20024*	Capacitor- 80 mfd. 150V. (C19A)	33634	Switch - "Radio Phono" switch (S-2)
	(Electrolytic) 50 mfd. 150V.(C19B)	S-4487	Transformer- 1st I.F. Transformer T-1
	Capacitor - .0022 mfd. 600 volts (C14)	73037	" 2nd I.F. " T-2
	Capacitor - .015 " 600 " (C-16)	S-6885*	Transformer-Output transf. T-3
	Capacitor - .022 " 400 " (C-15)	SPEAKER ASSEMBLY	
	Capacitor - .047 mfd. 400 " (C17,C18)	S-6624	Speaker - 4 P.M., complete with cone and voice coil assembly
	Capacitor - 0.1 mfd. 400 " (C10-C11)	MISCELLANEOUS ASSEMBLY	
	Capacitor - 22 mfd. 400 " (C21)	S-6862*	Cabinet - Plastic - Maroon (Complete with dial ass'y)
S-6882*	Coil-Osc. coil L-3 & L-4	S-6863*	Cabinet - Plastic - Ivory complete with dial ass'y
S-6883*	Coil-R.F. Coil L-1, L-2	S-4458	Cord - Drive cord
S-4454	Clip- Mtg. clip for I.F. Transformer	S-6858*	Cord - Power cord
35787	Connector - Phono Input	S-6884*	Dial - Polystyrene-dial scale
S-6857*	Control-Vol.control & Power switch (R-14, S-1)	S-6866*	Escutcheon-dial escutcheon
	Resistor - 33 ohms, 20% 1watt, (R13)	S-6859*	Knob-Control knob-Maroon
	Resistor -120 " 10% ½ W, (R4,R11)	S-20028*	Knob- " " Ivory
	Resistor -180 " 10% ½ W, (R1)	S-4508	Lamp - dial lamp
	Resistor -270 " 10% ½ W. (R15)	S-6861*	Pointer-Station selector
	Resistor-1200 ohms, 10% 1-watt (R-12)	30900	Spring-Retaining spring for knobs
	Resistor 12,000 ohms 10% 1/2 W. (R2)	35969	Washer "C" -washer for tuning knob shaft.
	Resistor 22,000 " 10% ½ W. (R3)		
	Resistor 56,000 " 10% ½ W. (R7)		
	Resistor-100,000 ohms, 10%-½ W. (R16)		

* 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.

NOTE.—If reception is not obtained on d. c. operation, reverse plug in outlet receptacle. On a. c. operation this may reduce hum.

The position of the speaker is adjustable; the correct position is indicated on the illustration "Tube and Trimmer Locations."

ALIGNMENT PROCEDURE

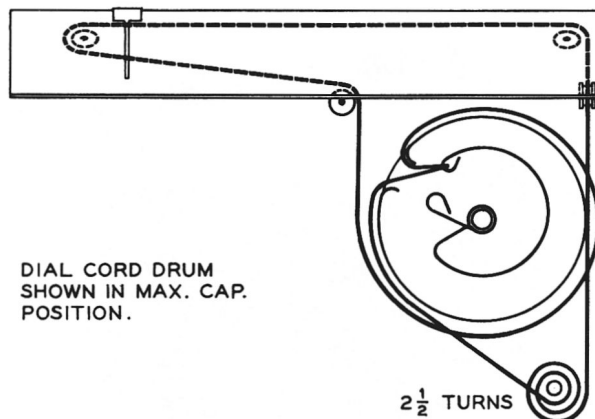
Cathode Ray Alignment is the preferable method. Connections for the oscilloscope are shown on the schematic diagram.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil and turn the receiver volume control to maximum.

Test Oscillator.—Connect low side of test oscillator to common wiring in series with a .1 mf. capacitor. If the test oscillator is a. c. operated it may be necessary to use an isolation transformer for the receiver during alignment and the low side of the test oscillator connected directly to common wiring at the electrolytic capacitor. Keep the oscillator output low to prevent a-v-c action.

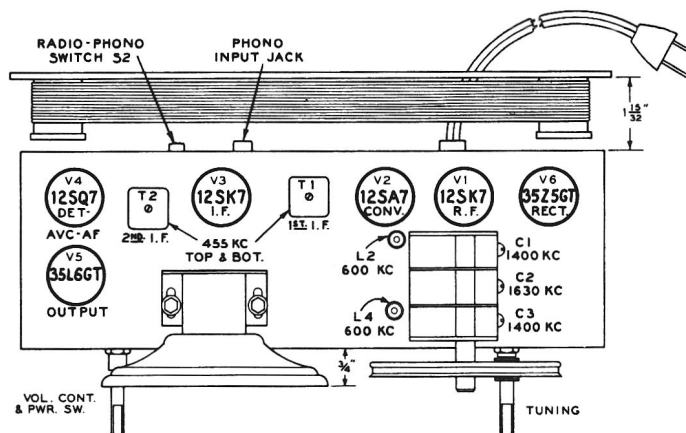
Step	Connect high side of sig. gen. to—	Sig. gen. output	Turn radio dial to—	Adjust for peak output
1	Pin No. 4 of 12SK7 tube	455 kc	Quiet point near 600 kc	Top and bottom cores of T2
2	Pin No. 8 of 12SA7 tube			Top and bottom cores of T1
3	"External Antenna" terminal through 100 mmf. capacitor	1620 kc	1620 kc	C6 Osc. C5 R.F. C4 Ant.
4		Shunt C5 with 22,000 ohm resistor		
5		600 kc	600 kc	L4 Osc. (Rock gang)
6		Remove 22,000 ohm resistor from C5		
		600 kc	600 kc	L2 R.F.
		Repeat steps 3, 4 and 5		

The position of the loop antenna in relation to the chassis affects adjustment of C4. The correct position is indicated on the illustration "Tube and Trimmer Locations."

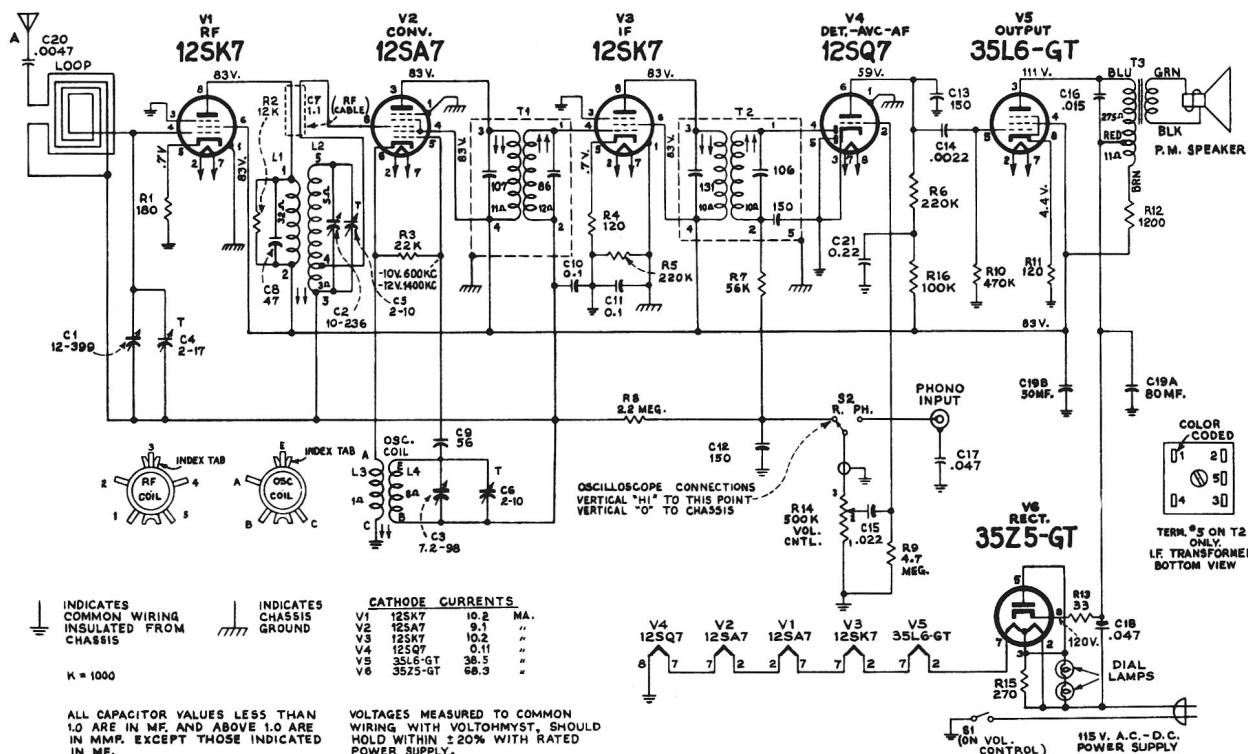


DIAL CORD DRUM SHOWN IN MAX. CAP. POSITION.

Dial Indicator and Drive Mechanism



Tube and Trimmer Locations



Schematic Diagram