



# RCA VICTOR

## 66X11, 66X12, 66X13

Chassis No. RC-1046A, RC-1046, RC-1046B

## 66X14, 66X15

RC-1046B

Mfr. No. 274

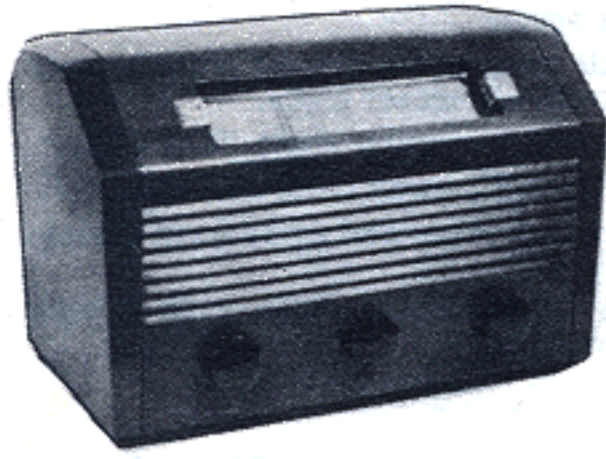
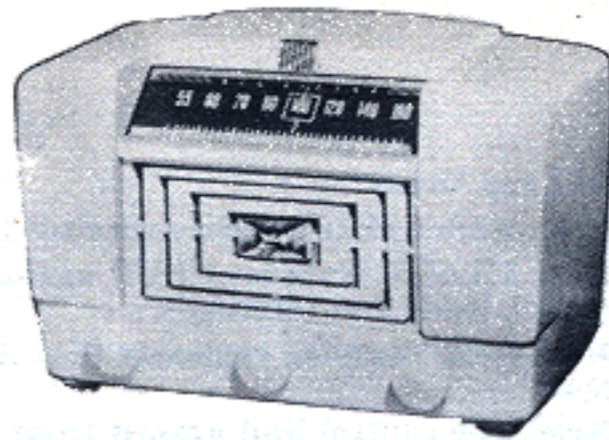
# SERVICE DATA

1947... No. 4

## RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION  
CAMDEN, N. J., U. S. A.

66X11—(Brown Plastic)  
66X12—(Ivory Plastic)



66X14—(Wood Blonde)  
66X15—(Wood Mahogany)

← 66X13—(Wood Walnut)



### Specifications

Frequency Range.....	540-1600 kc
Intermediate Frequency.....	455 kc
Power Output	
Undistorted.....	1.0 watt
Maximum.....	1.5 watts
Tube Complement	
(1) RCA-12SG7.....	Converter
(2) RCA-12SK7.....	I.F. Amplifier
(3) RCA-12SQ7.....	2nd Det., A.V.C., and A.F. Amplifier
(4) RCA-35L6GT.....	Power Output
(5) RCA-12J5GT.....	Oscillator
(6) RCA-35Z5GT.....	Rectifier

Loudspeaker (92572-2)

Type..... 5-inch PM  
V. C. Impedance..... 3.2 ohms at 400 cycles

Cabinet Dimensions

	Height	Width	Depth
66X11 (Brown Plastic).....	8 <sup>5</sup> / <sub>16</sub> "	13 <sup>5</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "
66X12 (Ivory Plastic).....	8 <sup>5</sup> / <sub>16</sub> "	13 <sup>5</sup> / <sub>8</sub> "	7 <sup>1</sup> / <sub>8</sub> "
66X13 (Wood—Walnut).....	9 <sup>3</sup> / <sub>16</sub> "	14 <sup>1</sup> / <sub>4</sub> "	7 <sup>7</sup> / <sub>8</sub> "
66X14 (Wood—Blonde).....	9 <sup>3</sup> / <sub>16</sub> "	14 <sup>1</sup> / <sub>4</sub> "	7 <sup>7</sup> / <sub>8</sub> "
66X15 (Wood—Mahogany).....	9 <sup>3</sup> / <sub>16</sub> "	14 <sup>1</sup> / <sub>4</sub> "	7 <sup>7</sup> / <sub>8</sub> "

Power Supply Rating

105-125 volts, AC, 50 or 60 cycles, or DC..... 30 watts

Pilot Lamp..... 2 type 1490 3.2 volts, 0.16 amp.

Tuning Drive Ratio..... 20.8:1

### Replacement Parts

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
	<b>CHASSIS ASSEMBLIES</b> RC-1046—66X12 RC-1046A—66X11 RC-1046B—66X13, 66X14, 66X15		<b>SPEAKER ASSEMBLIES</b> 92572-2
72571	Capacitor—Mica, 330 mmf. (C8)	72201	Speaker—5" P.M. speaker complete with cone and voice coil
70601	Capacitor—Tubular, .002 mfd., 200 volts (C10)		<b>SPEAKER ASSEMBLIES</b> 92510-1D 92510-1F 92510-1M 92510-1R 92510-1W
70606	Capacitor—Tubular, .005 mfd., 400 volts (C9)	70413	Speaker—5" P.M. speaker complete with cone and voice coil
70610	Capacitor—Tubular, .01 mfd., 400 volts (C1, C3, C4)		<b>NOTE:</b> If stamping on speaker in instrument does not agree with above speaker number, order replacement parts by referring to model number of instrument, number stamped on speaker and full description of part required.
70611	Capacitor—Tubular, .02 mfd., 400 volts (C7, C11)		<b>MISCELLANEOUS ASSEMBLIES</b>
70615	Capacitor—Tubular, .05 mfd., 400 volts (C2, C23)	*72646	Back—Cabinet back for 66X11
70617	Capacitor—Tubular, 0.1 mfd., 400 volts (C22)	*72647	Back—Cabinet back for 66X12
39152	Capacitor—Electrolytic, comprising 1 section of 30 mfd., 150 volts and 1 section of 50 mfd., 150 volts (C20, C21)	*72829	Back—Cabinet back for 66X13
*72604	Coil—Oscillator coil (L3, L4, L5, C15)	*72830	Back—Cabinet back for 66X14
*72607	Condenser—Variable tuning condenser (C12, C13, C14, C16)	*72897	Back—Cabinet back for 66X15
36228	Control—Tone control (S2)	*72648	Baffle—Baffle board for 66X11 and 66X12
38410	Control—Volume control and power switch (R13, S1)	Y1400	Cabinet—Brown plastic cabinet for 66X11
34662	Cord—Drive cord (approx. 56" overall length) (NOTE: Before assembling, stretch to full length)	Y1401	Cabinet—Ivory plastic cabinet for 66X12
*72798	Dial—Dial scale (polystyrene) for 66X13, 66X14, and 66X15	36890	Clamp—Dial clamp—L.H.—for 66X11 and 66X12
*72603	Drum—Drive drum	36891	Clamp—Dial clamp—R.H.—for 66X11 and 66X12
72283	Grommet—Rubber grommet to mount tuning condenser (3 required)	*72802	Clamp—Dial clamp (1 set) for 66X13, 66X14, and 66X15
*72799	Indicator—Station selector indicator for 66X13, 66X14, and 66X15	*72652	Dial—Glass dial scale for 66X11 and 66X12
*72606	Indicator—Station selector indicator for 66X11 and 66X12	37831	Fastener—Push fastener for backs for 66X11 and 66X12
71116	Lamp—Dial lamp—Type No. 1490	71595	Feet—Rubber feet for 66X13, 66X14 and 66X15 cabinets (4 required)
*72697	Loop—Antenna loop complete (L1, L2)	X1650	Grille—Grille cloth for 66X13, and 66X15
*72765	Nut—Speed nut to fasten dial logotype for 66X13, 66X14, and 66X15 (2 required)	X1651	Grille—Grille cloth for 66X14
*72601	Plate—Dial back plate complete with four (4) pulleys less dial for 66X12	*72651	Holder—Jewel holder for 66X11 and 66X12
*72797	Plate—Dial back plate complete with four (4) pulleys less dial for 66X13, 66X14, 66X15	*72650	Jewel—Decorative polystyrene jewel for cabinet front for 66X11, and 66X12
*72896	Plate—Dial back plate complete with four (4) pulleys less dial for 66X11	71821	Knob—Control knob—maroon—for 66X11, 66X13, and 66X15
72602	Pulley—Drive cord pulley	*72645	Knob—Control knob—ivory—for 66X12
30189	Resistor—120 ohms, 1/2 watt (R6, R14)	*72800	Knob—Control knob—brown—for 66X14
38896	Resistor—1200 ohms, 1 watt (R11)	*72649	Motif—Decorative motif cabinet top for 66X11 and 66X12
30654	Resistor—1500 ohms, 1/2 watt (R4)	*72803	Motif—Decorative motif for cabinet for 66X13, 66X14 and 66X15
30733	Resistor—3300 ohms, 1/2 watt (R1)	71126	Nut—Speed nut for fastening motif for 66X11 and 66X12
30492	Resistor—22,000 ohms, 1/2 watt (R2)	72765	Nut—Speed nut for fastening motif for 66X13, 66X14, and 66X15
30787	Resistor—47,000 ohms, 1/2 watt (R12)	30900	Spring—Retaining spring for knobs
14583	Resistor—220,000 ohms, 1/2 watt (R8, R10)	*72804	Window—Dial window for 66X13, 66X14, and 66X15
30648	Resistor—370,000 ohms, 1/2 watt (R7)		
31417	Resistor—3.3 megohms, 1/2 watt (R5)		
30931	Resistor—4.7 megohms, 1/2 watt (R9)		
71798	Screw—No. 8—32 x 5/16" square head set screw for drive drum		
*72608	Shaft—Tuning knob shaft		
*72605	Socket—Lamp socket		
37605	Socket—Tube socket		
31418	Spring—Drive cord spring		
70411	Transformer—First I.F. transformer (T1)		
70412	Transformer—Second I.F. transformer (T2) (C5, C6)		
36800	Transformer—Audio transformer (T3)		
33726	Washer—"C" washer for tuning shaft		

\*This is the first time this stock No. has appeared in service data.

APPLY TO YOUR RCA DISTRIBUTOR FOR PRICES OF REPLACEMENT PARTS  
Trademarks "RCA Victor," "Victor," "Chanalyst," "VoltOhmyst," Reg. U. S. Pat. Off.

## Alignment Procedure

**Test Oscillator.**—Connect high side of test oscillator as shown in chart. Connect low side through a .01 mf capacitor to common "—B." Keep the output signal as low as possible to avoid AVC action.

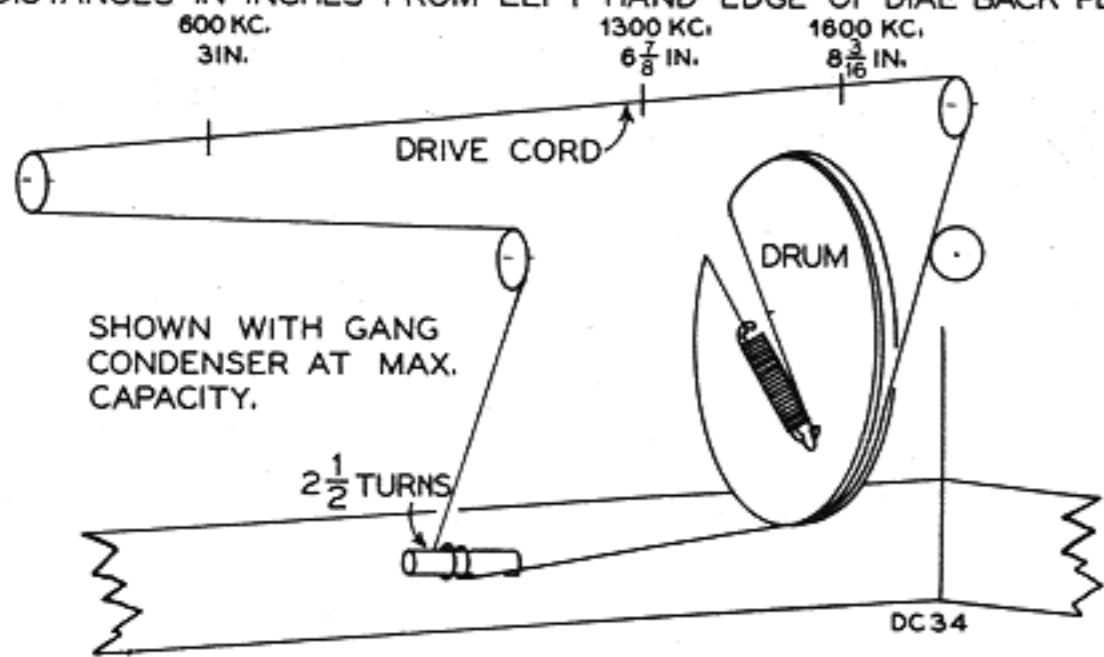
**Output Meter.**—Connect leads between speaker voice coil and chassis. Turn volume control to maximum clockwise, tone control to maximum highs (clockwise).

**Dial Pointer Adjustment.**—Rotate tuning condenser fully counterclockwise (plates closed). Adjust indicator pointer to  $2\frac{1}{8}$ " from left hand edge of dial back plate.

Steps	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. peak output
1	Stator of C-12 in series with .01 mfd.	455 kc	Quiet-point 1,600 kc end of dial	Sec. and pri. 2nd I-F trans.
2				Sec. and pri. 1st I-F trans.
3	Ant. lead in series with 200 mmfd.	1,600 kc	1,600 kc	C14 (osc.)*
4		1,300 kc	1,300 kc	C13 ant.
5		600 kc	600 kc	L4 (osc.) Rock in
6	Repeat steps 3, 4 and 5.			

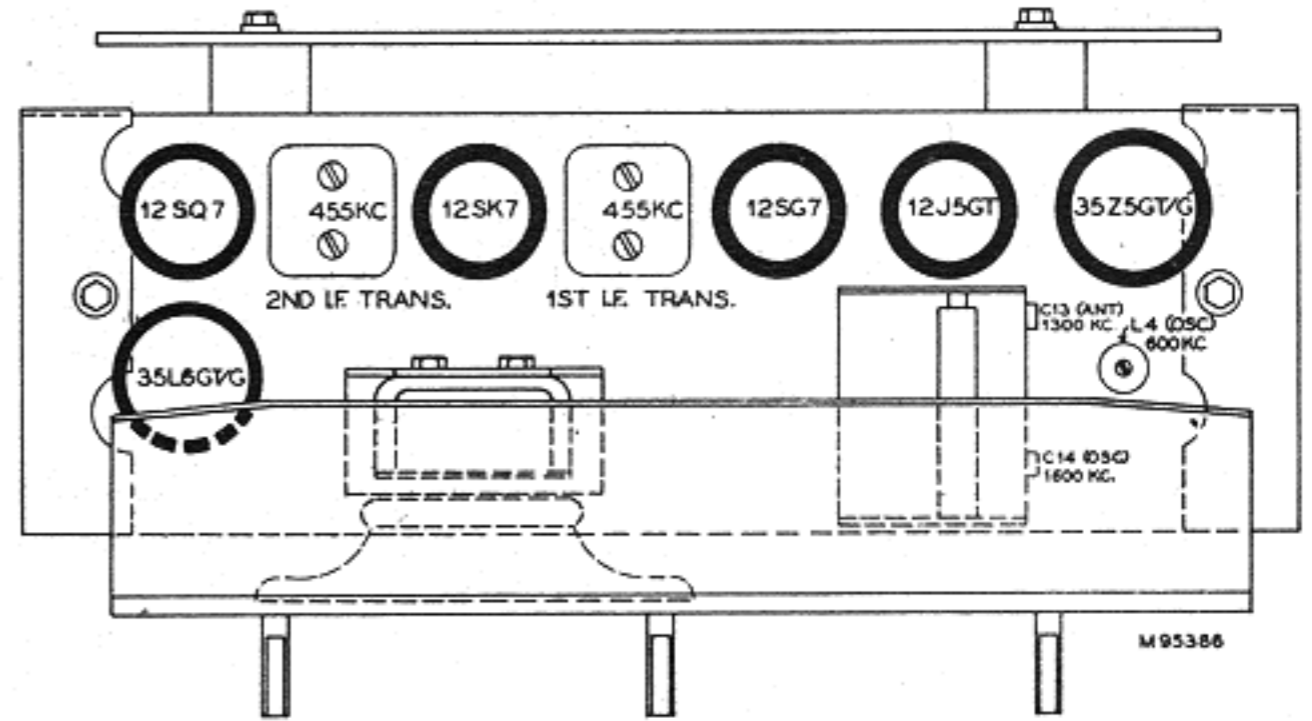
\*Left hand osc. trimmer should be pre-set approx.  $\frac{1}{4}$  turn from tight.

DISTANCES IN INCHES FROM LEFT HAND EDGE OF DIAL BACK PLATE



### Critical Lead Dress

1. Dress output plate bypass capacitor (C-11 .02 mf) against chassis.
2. Dress 35L6GT plate lead (red) against chassis and away from volume control, leads and terminals.
3. Dress audio coupling capacitor (C-7 .02 mf) away from 35L6GT heater leads.
4. Dress tone control lead against front apron.
5. Dress 2nd i-f yellow and brown leads away from output plate bypass capacitor (C-11, .02 mf.) and away from all heater leads.
6. Dress lead to speaker voice coil away from tuning shaft "C" washer.
7. Dress tone control capacitor (C-10, .002 mf.) away from oscillator coil.
8. Dress all uninsulated leads away from each other and away from chassis to prevent short circuits.
9. Dress blue and green leads of both i-f transformers back in shields leaving exposed lengths as short as possible.



Tube and Trimmer Locations

### Circuit Description

The superhetrodyne circuit is used, incorporating separate mixer, and oscillator stages; one stage of intermediate frequency amplification, a combined second detector-AVC-first audio stage, a beam power output stage, and a half wave rectifier. A loop antenna with provisions for an external antenna is used. A new standard two section variable capacitor of the cut plate type is used. The oscillator coil has a movable powdered iron core for inductance adjustment. Both I.F. transformers are compression tuned and AVC is applied to both the R.F. and I.F. stages. Optimum signal to noise ratio and I.F. stability is obtained by low initial bias on 1st detector and degenerative cathode resistor in the I.F. stage.

