

RCA Victor

MODELS 9X6, 9X11, 9X12, 9X13, and 9X14

Chassis No. RC-350A

Four-Tube, Single-Band, AC-DC, T-R-F Receiver

TECHNICAL INFORMATION AND SERVICE DATA

— 1938 No. 16A —

SERVICE DIVISION • RCA MANUFACTURING COMPANY, INC. • CAMDEN, N. J., U. S. A.

A Service of the Radio Corporation of America

Electrical and Mechanical Specifications

Frequency Range..... 540-1,760 kc
Alignment Frequency..... 1,760 kc (ant., det.)

RCA TUBE COMPLEMENT

- (1) RCA-6K7..... R-F Amp.
- (2) RCA-6J7..... Detector
- (3) RCA-25L6..... Output
- (4) RCA-25Z6..... Rectifier

Dial Lamp..... Mazda No. 40, 6.3 volts, .15 amps.

POWER SUPPLY RATINGS

A-C Rating..... 105-125 volts, 50-60 cycles, 50 watts
D-C Rating..... 105-125 volts, 50 watts

POWER OUTPUT (125-volt, 60-cycle supply)
Undistorted..... 1.0 watt
Maximum..... 1.5 watts

LOUDSPEAKER

Type..... 8-inch Electrodynamic
Voice-Coil Impedance..... 8 ohms at 400 cycles

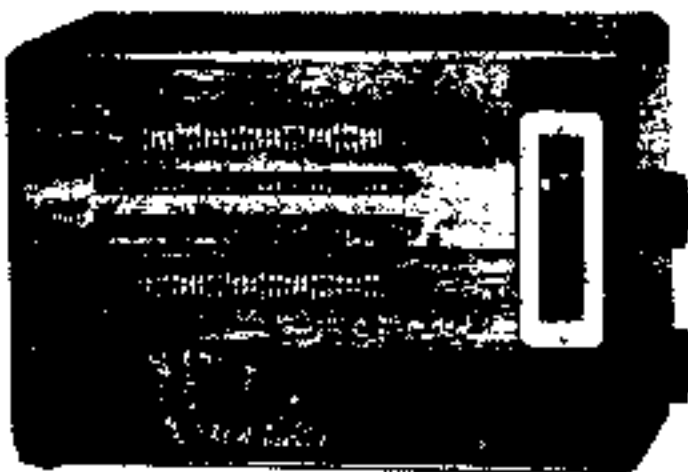
	Height	Width	Depth
Cabinet Dimensions.....	5½ inches	7½ inches	4-7/16 in.
Chassis Base.....	1½ inches	5½ inches	3½ inches
Over-all Chassis Height.....	4 inches		
Weight.....	4½ lbs. (Net), 5 lbs. (Shipping)		
Operating Controls.....	(1) Power Switch—Volume; (2) Tuning		

Alignment Procedure

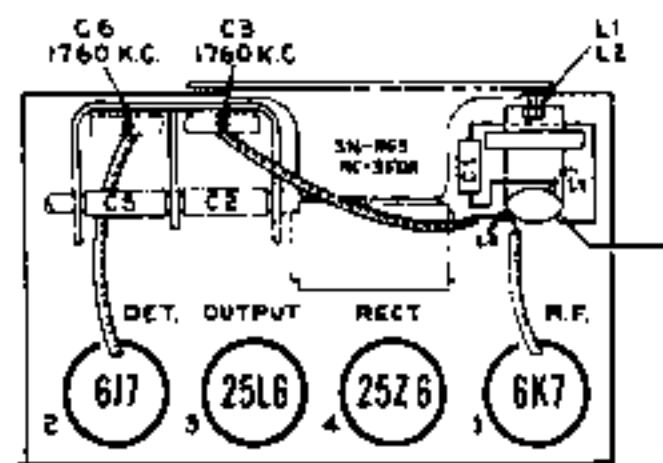
Reel up the antenna wire, and keep it away from chassis during alignment. Connect the high side of test-oscillator through an 80 mmfd. capacitor to the antenna terminal. Connect low side of oscillator to receiver chassis through a 0.1 mfd. capacitor. Turn gang condenser to minimum (full out), tune oscillator to 1,760 kc, connect an output meter across the voice coil, and turn volume control to maximum.

Adjust the two trimmers (C3 and C6) on side of gang condenser for maximum output, using lowest possible output from test-oscillator.

Pre-setting Dial.—With gang condenser rotor plates turned full in for maximum capacity, loosen dial-drum set-screw, and turn drum so that the top edge of dial (low-frequency end) is approximately 1/16-in. below level of gang frame, and tighten set-screw.



Model 9X6, wood, walnut.
Model 9X11, catalin, Brazilian onyx, green.
Model 9X12, catalin, jet black.
Model 9X13, catalin, Arizona onyx, cream.
Model 9X14, catalin, burl onyx, brown.



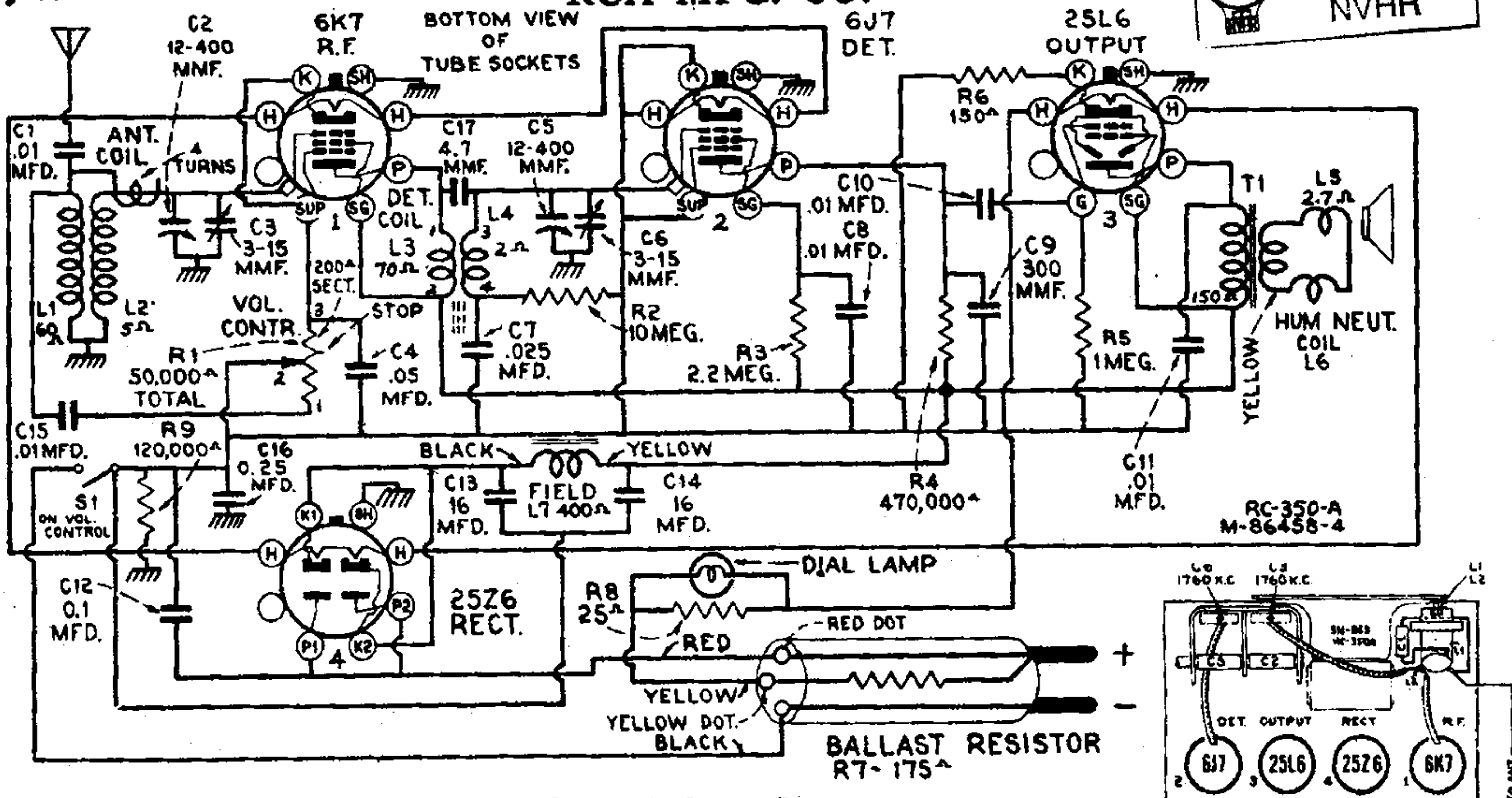
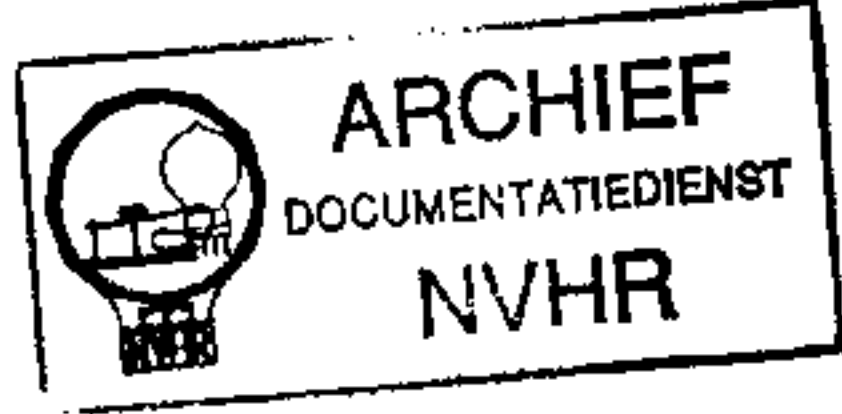
Replacement Parts

Insist on genuine factory-tested parts, which are readily identified and may be purchased from authorized dealers.

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
14392	Capacitor—4.7 mmfd. (C17).....	13601	Resistor—10 meg., ½ watt (R2).....
30883	Capacitor—300 mmfd. (C9).....	4387	Screw—No. 6-32 headless set screw for drum, Stock No. 31315.....
14393	Capacitor—.01 mfd. (C15).....	31318	Socket—Dial lamp socket.....
4870	Capacitor—.025 mfd. (C7).....	31319	Socket—Tube socket.....
30882	Capacitor—.05 mfd. (C4).....	32029	Transformer—Output transformer (T1).....
30899	Capacitor—.1 mfd. (C12).....	32026	Volume control and power switch (R1, S1).....
12484	Capacitor—.25 mfd. (C16).....	SPEAKER ASSEMBLIES (86309-2)	
31323	Capacitor—16 mfd. (C13, C14).....	31325	Cone—Speaker cone and voice coil (L5).....
30875	Coil—Antenna coil (L1, L2).....	32025	Speaker complete.....
32027	Coil—R-f coil (L3, L4).....	MISCELLANEOUS ASSEMBLIES	
31321	Condenser—2-gang variable tuning condenser (C2, C3, C5, C6).....	31326	Escutcheon—Station selector dial escutcheon—Model 9X6.....
32030	Cord—Resistance power cord (R7).....	31915	Escutcheon—Station selector dial escutcheon—Models 9X11, 9X12, 9X13 and 9X14 only.....
31314	Dial—Station selector dial scale.....	31914	Knob—Station selector or volume control knob—Models 9X12 and 9X13 only.....
31315	Drum—Station selector dial scale drum—less scale.....	31204	Knob—Station selector or volume control knob—Models 9X6, 9X11 and 9X14 only.....
4340	Lamp—Dial lamp.....	30900	Spring—Retaining spring for knobs.....
31193	Lead—Antenna lead—approximately 25 ft. long.....		
32028	Resistor—25 ohms, 3 watts, wire wound (R8).....		
13428	Resistor—150 ohms, ½ watt (R6).....		
13734	Resistor—120,000 ohms, ½ watt (R9).....		
12285	Resistor—470,000 ohms, ½ watt (R4).....		
13730	Resistor—1 meg., ½ watt (R5).....		
12679	Resistor—2.2 meg., ½ watt (R3).....		

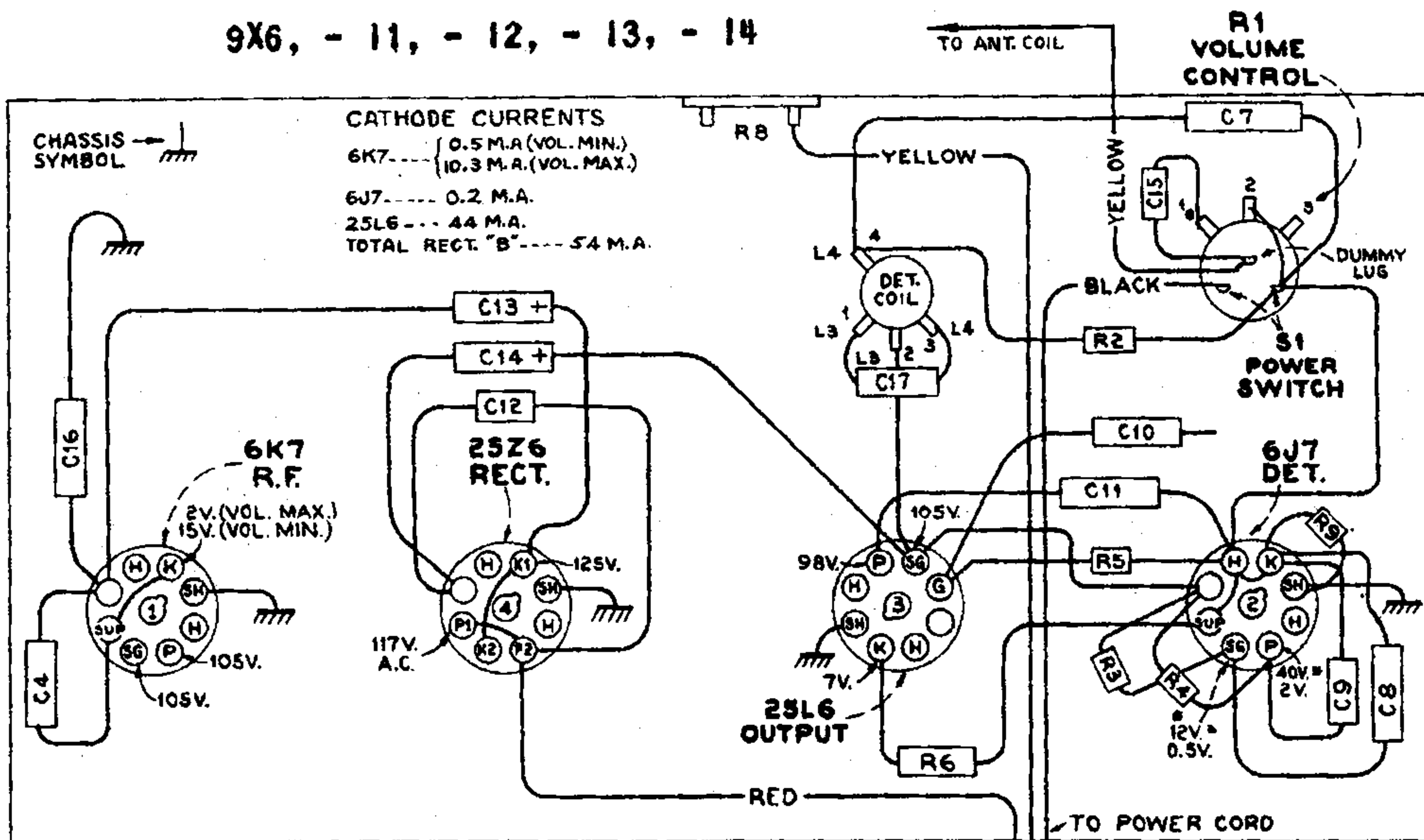
MODELS 9X6, 9X11, 9X12, 9X13, 9X14

RCA MFG. CO.



Schematic Circuit Diagram

9X6, - 11, - 12, - 13, - 14



BOTTOM VIEW - REAR OF CHASSIS

R-F Wiring Diagram and Socket Voltages

* Note: Values with (*) are operating voltages. Values not starred are actual measured voltages.

Measurements made to common negative line, unless otherwise specified.

Measurements made with set tuned to quiet point, volume control at minimum, using 1,000-ohm-per-volt meter, having ranges of 10,

Precautionary Lead Dress

1. Dress green lead from antenna coil to gang up from speaker chassis.
2. Green lead from gang to grid of 6J7 must be dressed down and away from top of bracket, and centered in gang section.
3. Green lead from detector coil to gang must be dressed under pilot lamp bracket: Any excess wire should be pulled through to under side of chassis.
4. Pilot lamp leads must be dressed clear of gang rotor.
5. Magnetite core in detector coil must not be in contact with base or mounting screw.

50, and 250 volts. (Use nearest range above the specified measure voltage.)

Values should hold within approximately $\pm 20\%$ for 117-volt 60-cycle a-c supply. On d-c, voltages are approximately 10% lower, except heaters, which remain the same.

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.

Antenna.—The set is equipped with a 25-foot antenna. Do not connect the antenna to ground. If an outdoor antenna is used, it should not be longer than 100 feet, including lead-in. If it is longer, connect a 100 to 200 mmfd. capacitor in series with the lead-in.

25-Cycle Operation

For 25-cycle operation, connect a 16 mfd., 150-volt dry electrolytic capacitor (Stock No. 31323) in parallel to C13.

RCA MFG. CO.

MODELS 9X6, 9X11, 9X12,
9X13, 9X14
MODEL X-55

MODELS 9X6, - 11, - 12, - 13, - 14

(RC-350A) Replacement Parts

Dial Lamp..... Mazda No. 40, 8.3 volts, .15 amps.

POWER SUPPLY RATINGS

A-C Rating..... 105-125 volts, 50-60 cycles, 50 watts
D-C Rating..... 105-125 volts, 50 watts

POWER OUTPUT (125-volt, 60-cycle supply)

Undistorted..... 1.0 watt
Maximum..... 1.5 watts

LOUDSPEAKER

Type..... 3-inch Electrodynamic
Voice-Coil Impedance..... 8 ohms at 400 cycles

Alignment Procedure

Reel up the antenna wire, and keep it away from chassis during alignment. Connect the high side of test-oscillator through an 80 mmfd. capacitor to the antenna terminal. Connect low side of oscillator to receiver chassis through a 0.1 mfd. capacitor. Turn gang condenser to minimum (full out), tune oscillator to 1,750 kc, connect an output meter across the voice coil, and turn volume control to maximum.

Adjust the two trimmers (C8 and C6) on side of gang condenser for maximum output, using lowest possible output from test-oscillator.

Pre-setting Dial.—With gang condenser rotor plates turned full in for maximum capacity, loosen dial-drum set-screw, and turn drum so that the top edge of dial (low-frequency end) is approximately 1/16-in. below level of gang frame, and tighten set-screw.

SPEAKER ASSEMBLIES
(85309-2)

31325 Cone—Speaker cone and voice coil (L5).....
32025 Speaker complete.....

MISCELLANEOUS ASSEMBLIES

31326 Escutcheon—Station selector dial escutcheon—
Model 9X6.....
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Models 9X11, 9X12, 9X13 and 9X14 only..
31914 Knob—Station selector or volume control knob
—Models 9X12 and 9X13 only.....
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30900 Spring—Retaining spring for knobs.....

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30883	Capacitor—300 mmfd. (C9).....
14393	Capacitor—.01 mfd. (C15).....
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30882	Capacitor—.05 mfd. (C4).....
30889	Capacitor—0.1 mfd. (C12).....
12484	Capacitor—0.25 mfd. (C16).....
31323	Capacitor—16 mfd. (C13, C14).....
30875	Coil—Antenna coil (L1, L2).....
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