

SERVICE NOTES

for

RCA Victor Models R-8 and R-12

ELECTRICAL SPECIFICATIONS

Voltage Rating.....	105-125 Volts
Frequency Rating.....	50-60 cycles and 25-40 cycles
Power Consumption.....	100 Watts
Type of Circuit.....	Super-Heterodyne
Type and number of Radiotrons.....	2 RCA-235, 3 UY-227, 1 UY-224, 1 RCA-247 and 1 UX-280
Number of R.F. Stages.....	One
Number of I.F. Stages.....	One
Type of Second Detector.....	Power self biasing
Type of Tone Control.....	Variable resistance in series with condenser that tunes secondary of interstage transformer at "low" position
Type of Automatic Volume Control.....	UY-227 controlling R.F. and I.F. stages by means of drop across resistor in plate circuit constituting bias on R.F. and I.F. stages
Number of Audio Stages.....	One—Single Pentode
Type of Rectifier.....	Full wave, UX-280
Undistorted output.....	2.5 Watts

PHYSICAL SPECIFICATIONS—R-8

Height.....	19 inches
Depth.....	10 $\frac{3}{4}$ inches
Width.....	14 inches
Weight alone.....	38 lbs.
Weight Packed for Shipment.....	44 lbs.

PHYSICAL SPECIFICATIONS—R-12

Height.....	40 inches
Depth.....	11 $\frac{1}{2}$ inches
Width.....	23 $\frac{1}{2}$ inches
Weight alone.....	61 lbs.
Weight Packed for Shipment.....	84 lbs.

RCA Victor Models R-8 and R-12 are eight tube Super-heterodyne radio receivers incorporating such features as Super-Control, Screen Grid Radiotrons, Automatic Volume Control, Pentode output tube and the inherent sensitivity, selectivity and tone quality of the RCA Victor Super-Heterodyne.

Model R-8 is a table type receiver and the R-12 is of the Console type. Except for the Dial Scale, both models use the same chassis, which is also identical with that of the R-10.

A reference to the Service Notes already published on the R-11 and R-7 will give details of any service information required on these receivers. Figure 1 shows the schematic diagram and Figure 2 the wiring. The voltage readings are listed below and the replacement parts on the following pages.

RADIOTRON SOCKET VOLTAGES

120 VOLT LINE
VOLUME CONTROL DOES NOT AFFECT VOLTAGES

Radiotron No.	Cathode to Heater Volts, D. C.	Cathode or Filament to Control Grid Volts, D. C.	Cathode or Filament to Screen Grid Volts, D. C.	Cathode or Filament to Plate Volts, D. C.	Plate Current M. A.	Screen Current M. A.	Heater or Filament Volts, A. C.
1. R. F.	4.0	0.5	70	260	4.0	0.5	2.66
2. Osc.	4.0	0	—	65	6.0	—	2.66
3. 1st Det.	7.0	6.0	70	260	0.75	0.1	2.66
4. I. F.	4.0	4.0	70	260	4.0	0.5	2.66
5. 2nd Det.	28.0	10.0	—	250	1.0	—	2.66
6. A. V. C.	0	0	—	25	0	—	2.66
7. Power	—	10.0	290	280	35.0	—	2.66

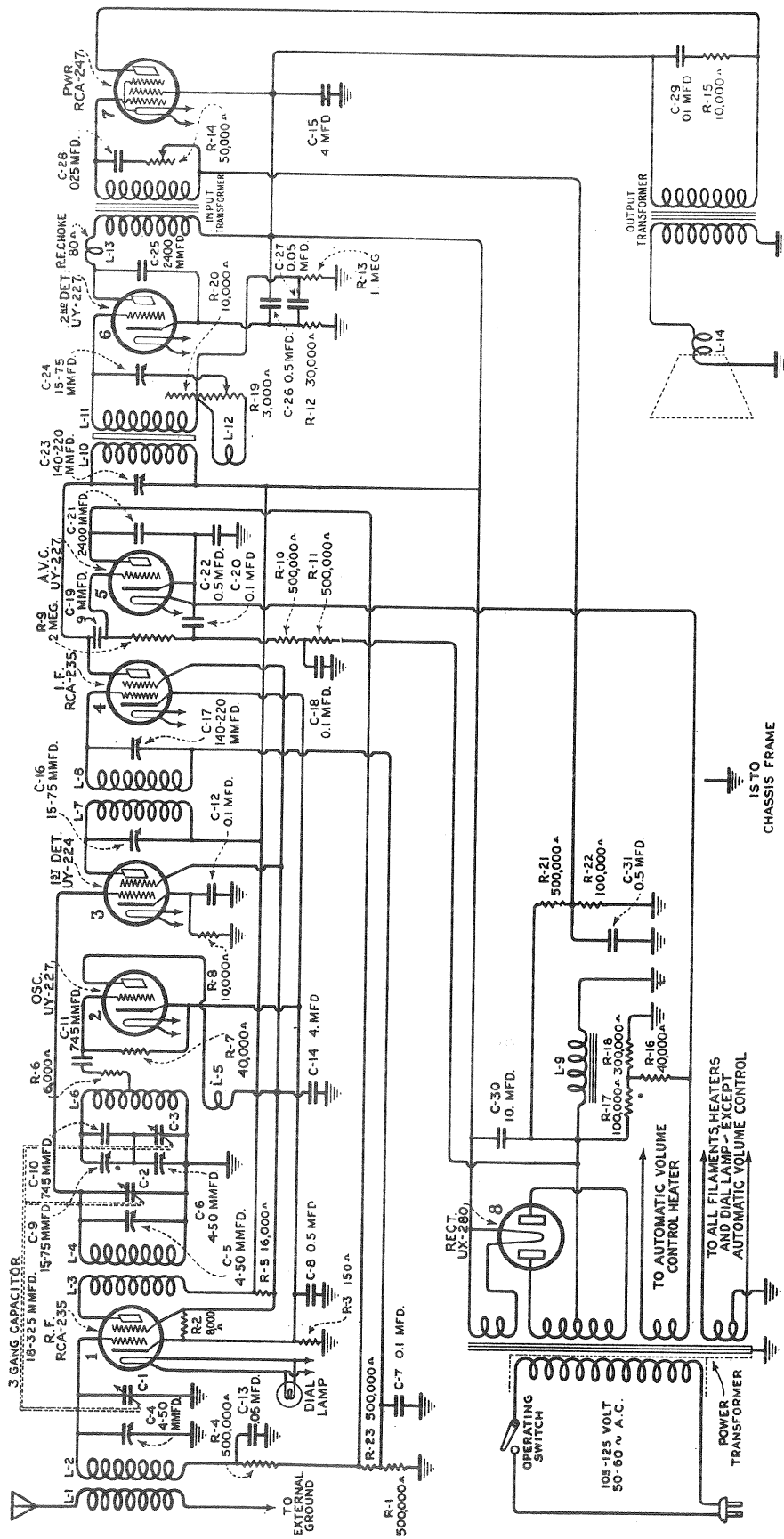


Figure 1—Schematic Diagram

REPLACEMENT PARTS

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
	RECEIVER PARTS COMMON TO R-8 AND R-12		7343	Transformer—Audio transformer.....	\$3.85
2563	Resistor—6,000 ohms—Carbon type—1 watt— Package of 5.....	\$3.00	7344	Transformer—Power transformer.....	8.00
2734	Capacitor—745 mmfd.—Package of 5.....	2.20	7348	Board—Resistor board complete less resistors and capacitors.....	2.30
2746	Socket—Dial lamp socket.....	.50	7362	Capacitor—0.025 mfd.....	1.50
2747	Cap—Grid contactor cap—Package of 5.....	.50	8770	Transformer—Power transformer—105-125 volts, 25-40 cycles.....	12.00
2749	Capacitor—2400 mmfd.....	1.50	8771	Transformer—Power transformer—220 volts, 60 cycles.....	9.00
2882	Socket—UY Radiotron socket complete with insula- tion strip—7 used.....	.50	8837	Support—Receiver chassis metal mounting bracket —Package of 4.....	.70
2963	Resistor—8,000 ohms—Carbon type—1 watt— Package of 5.....	2.50		RECEIVER PARTS SPECIAL TO R-8	
2968	Socket—UX Radiotron socket complete with insula- tion strip—1 used.....	.50	2999	Shaft—Tuning condenser drive shaft complete.....	.50
2970	Resistor—500,000 ohms—Carbon type—1 watt— Package of 5.....	2.50	3029	Bracket—Dial lamp bracket and indicator.....	.50
3003	Cushion—Sponge rubber cushion—Package of 4.....	.50	3097	Scale—Dial drum and scale with set screws—Pack- age of 2.....	.50
3024	Capacitor—9 mmfd.—Package of 2.....	.50	7241	Capacitor—3 gang tuning capacitor.....	8.00
3045	Resistor—40,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.50		RECEIVER PARTS SPECIAL TO R-12	
3048	Resistor—500,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.50	6189	Bracket—Dial lamp bracket and indicator—Pkg. of 2	.65
3049	Resistor—150 ohms—Carbon type— $\frac{1}{2}$ watt—Pack- age of 5.....	2.50	6190	Shaft—Tuning condenser drive shaft complete with 3 washers—Package of 5.....	.85
3056	Shield—Radiotron shield—4 used—Package of 2.....	.50	6191	Cord—Tuning condenser drive cord—Package of 5..	.55
3076	Resistor—1 megohm—Carbon type— $\frac{1}{2}$ watt—Pack- age of 5.....	2.50	6192	Spring—Tuning condenser drive cord tension spring —Package of 10.....	.50
3077	Resistor—30,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.50	7438	Capacitor—Variable tuning capacitor.....	5.20
3078	Resistor—10,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.50	7439	Drum—Dial drum with set screw.....	.50
3079	Resistor—40,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.50	7440	Scale—Dial and dial scale.....	.75
3081	Resistor—16,000 ohms—Carbon type—3 watt.....	.60		LOUDSPEAKER	
3092	Volume control—Volume control complete with mounting nut.....	1.50	6174	Screw assembly—Speaker mounting screw assembly —Comprising 4 screws, 8 nuts, 4 washers and 4 eyelets—Package of 1 set—For R-8.....	.50
3095	Coil—R. F. coil—Complete with mounting bracket..	1.90	3237	Screw assembly—Speaker mounting screw assembly —comprising 4 screws, 8 nuts, 4 washers and 4 eyelets—Package of 1 set—For R-12.....	.50
3137	Knob—Tuning control, volume control and tone control knob—Package of 5.....	3.25	6184	Board—Terminal board complete with 3 terminals and mounting rivets—Package of 5.....	.50
3234	Tone control—Tone control complete with mounting nut.....	1.90	7345	Coil—Speaker field coil assembly—Comprising coil, cone housing and magnet.....	5.00
3235	Coil—First detector and oscillator coil.....	2.85	8559	Ring—Cone retaining ring.....	.80
3251	Coil—R. F. choke coil.....	.90	8601	Cone—Speaker paper cone—Package of 5.....	15.00
6185	Resistor—100,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.00		R-8 CABINET PARTS	
6186	Resistor—500,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.00	X-32	Baffle board and grille cloth.....	.90
6187	Resistor—300,000 ohms—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.00	6113	Foot—Cabinet felt foot—Package of 15.....	.50
6188	Resistor—2 megohm—Carbon type— $\frac{1}{2}$ watt— Package of 5.....	2.00	7435	Escutcheon—Tuning dial escutcheon complete with mounting screws.....	.90
7054	Cord—Power cord.....	1.00	9402	Cabinet—Cabinet complete less equipment.....	16.00
7062	Capacitor—Adjustable capacitor—15-70 mmfd.....	1.00		R-12 CABINET PARTS	
7298	Capacitor—0.01 mfd.....	.80	X-44	Top.....	4.65
7340	Transformer—First intermediate transformer.....	3.00	X-45	Leg.....	2.00
7341	Transformer—Second intermediate transformer.....	3.00	X-46	Foot.....	1.10
7342	Capacitor—Comprising two 0.05 mfd., four 0.5 mfd., one 10.0 mfd., two 4.0 mfd. and four 0.1 mfd. capacitor in metal container.....	7.85	X-47	Stretcher.....	4.50
			X-48	Baffle board and grille cloth.....	.95
			X-49	Mouldings—Control panel mouldings—Comprising 1 bottom moulding, 4 vertical mouldings, 1 top moulding and 2 center ornaments—Package of 1 set.....	3.95
			7441	Escutcheon—Tuning dial escutcheon complete with mounting screws.....	1.05
			9405	Cabinet—Cabinet complete less equipment.....	47.50

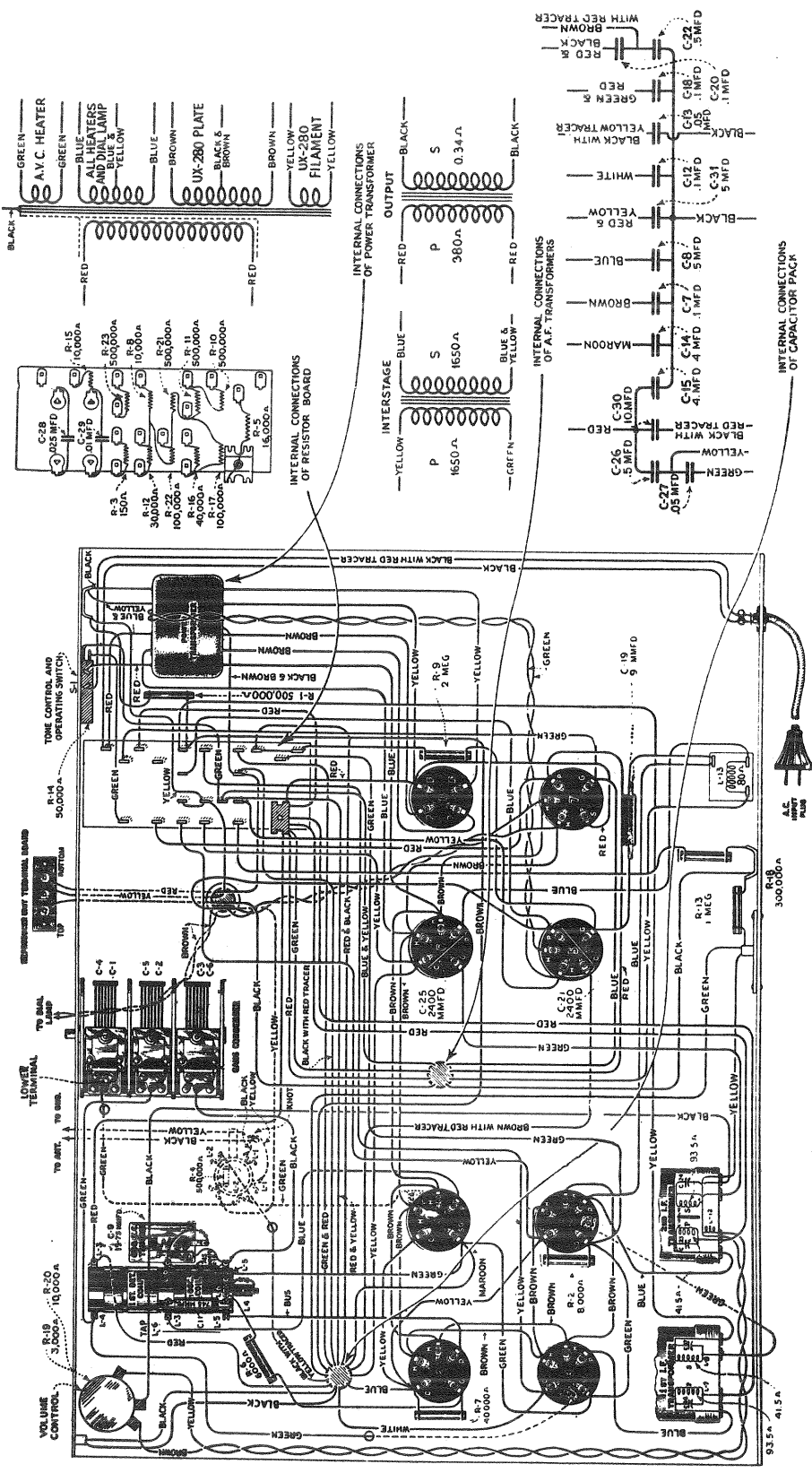


Figure 2—Wiring Diagram

SERVICE DIVISION
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 Camden, N. J., U. S. A.