R.C.A. Victor Co., Inc.

	Model: 111	Chassis:	Year: Pre March 1934
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		

Resources
Riders Volume 4 - RCA 4-55
Riders Volume 4 - RCA 4-56

Courtesy Nostalgia Air

RCA-VICTOR CO., INC.

MODEL RCA 110,111,115
Alignment, Voltage
Parts List

SERVICE DATA

This receiver is a five-tube Super-Heterodyne incorporating a dynamic loudspeaker as a part of the chassis; continuously variable tone control; single heater type Pentode Output tube and the inherent sensitivity, selectivity and tone quality of the Super-Heterodyne.

A special feature is the Range Switch that allows reception of signals either of the broadcast band or higher frequencies. Figure A shows the schematic and Figure B the wiring diagram. With the switch in the broadcast band position, the frequency range is from 540 to 1500 K. C. At the higher frequency position, the receiver covers the 1400 to 2800 K. C. band.

The circuit consists of an R. F. stage, a combined oscillator and first detector in the RCA-2A7 tube, an intermediate stage consisting of a transformer using two tuned circuits, a second detector, an output tube and a rectifier.

Line-up Capacitor Adjustment

The line-up capacitor adjustments for the I. F. stage and the gang capacitors are made in the following manner:

(a) Procure a modulated oscillator giving a signal at 175 K. C., 1400 K. C., and 2440 K. C. An output meter and non-metallic screw driver are also necessary.

(b) The I. F. line-up capacitors should be first adjusted. This is done by placing the oscillator in operation at 175 K. C., coupling its output between the control grid and ground of the first detector, connecting the output meter across the cone coil of the loudspeaker and adjusting the two I. F. line-up capacitors until maximum output is obtained.

(c) After the I. F. circuits are aligned, the broadcast band R. F. is adjusted at 1400 K. C. This is done with the Range Switch at the broadcast position. A similar manner is used as that of the I. F., except that the oscillator is set at 1400 K. C., its output is connected from antenna to ground of the receiver, and the dial is set at 140. The adjustment is made with the trimming capacitors located on top of the gang capacitor and each capacitor is adjusted for maximum output.

(d) The high frequency band is adjusted at 2440 K. C. This is done in a similar manner to the R. F. adjustments except that the oscillator is set at 2440 K. C., the dial at 120 and the Range Switch in the high frequency position. The line-up capacitors on the selector switch are adjusted for maximum output at this frequency.

RADIOTRON SOCKET VOLTAGES
115 Volt A. C. Line
MAXIMUM VOLUME CONTROL SETTING—NO SIGNAL

Radiotron No.	Cathode to Control Grid, Volts	Cathode to Screen Grid, Volts	Cathode to Plate, Volts	Plate Current, M. A.	Heater, Volts
1. RCA-58 R. F. Amplifier	3.0	95	250	5.0	2.33
2. RCA-2A7 First Detector Oscillator	3.0	95	250	3.0	2.33
3. RCA-57 Second Detector	6.0	89	170	0.3	2.33
4. RCA-2A5 Power Amplifier	18.0	235	220	32.0	2.33
5. RCA-80 Rectifier	275 Volts PLATE TO PLATE—60 M. A. TOTAL				4.82
TOTAL CATHODE CURRENT—11 M. A.					

REPLACEMENT PARTS

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

Stock No.	DESCRIPTION	List Price
	RECEIVER ASSEMBLIES	
2269	Capacitor—720 mmfd. (C8)	$0.75
3050	Resistor—14,000 ohms—Carbon type—3 watts (R9)	.25
3076	Resistor—1 megohm—Carbon type—½ watt (R2)—Pkg. of 5	1.00
3459	Capacitor—80 mmfd. (C9)	.44
3472	Capacitor—0.0024 mfd. (C13)	.32
3555	Capacitor—0.1 mfd. (C24)	.36
3572	Socket—Seven contact Radiotron socket	.38
3573	Socket—Four contact Radiotron socket	.32
3574	Coil—Choke coil (L9)	.68
3584	Ring—R. F. or oscillator coil retaining ring—Pkg. of 5	.40
3590	Escutcheon—Station selector escutcheon—Pkg. of 5	1.40
3591	Escutcheon—Name plate escutcheon—Pkg. of 5	1.40
3592	Knob—Station selector, volume control or tone control knob—Pkg. of 5	.80
3594	Resistor—50,000 ohms—carbon type—½ watt (R5, R7)—Pkg. of 5	1.00
3596	Capacitor—60 Mmfd. (C15)	.36
3597	Capacitor—0.25 Mfd. (C17)	.40
3602	Resistor—60,000 ohms—carbon type—¼ watt (R1)—Pkg. of 5	1.00
3604	Capacitor—400 Mmfd. (C14)	.30
3615	Knob—Range switch knob—Pkg. of 5	.60
3623	Shield—Antenna or R. F. coil shield	.30
3632	Resistor—500 ohms—carbon type—1 watt (R8)—Pkg. of 5	1.10
3641	Capacitor—0.1 mfd. (C3, C12, C18)	.35
3682	Shield—Radiotron shield—oscillator	.22
3713	Capacitor—.05 mfd. (C16)	.32
3783	Capacitor—9 mmfd. (C25, C27)—Pkg. of 2	.50
3789	Shield—Radiotron shield—R. F. or 2nd Detector	.25
3842	Screw—Chassis mounting screw assembly—Package of 4	.26
6228	Resistor—200,000 ohms—carbon type—½ watt (R4)—Pkg. of 5	$1.00
6303	Resistor—20,000 ohms—carbon type—½ watt (R12, R3)—Pkg. of 5	1.00
6306	Resistor—14,000 ohms—carbon type—1 watt (R10)—Pkg. of 5	1.10
6464	Transformer—I. F. transformer (C10, C11, L7, L8)	1.88
6465	Volume control (R11)	1.22
6471	Coil—Oscillator coil (L5, L6)	.74
6527	Coil—Antenna coil (L1, L2)	1.08
6528	Coil—R. F. coil (L3, L4)	.94
6620	Capacitor—Comprising one .005 and one .035 mfd. (C20, C30)	.50
6622	Dial—Condenser dial and drive assembly	.95
6623	Tone control (R13)	1.25
6624	Condenser—3-gang variable tuning condenser	3.50
6625	Switch—Range switch	1.60
6676	Socket—6-contact Radiotron socket—Output tube	
7485	Socket—6-contact Radiotron socket	.40
7589	Capacitor—Comprising two 4.0 mfd. capacitors (C22, C23)	1.64
7590	Capacitor—10 mfd. (C21)	1.40
8985	Transformer—Power transformer 105–125 volts, 50–60 cycles (T1)	4.26
8986	Transformer—Power transformer 220–250 volts, 50–60 cycles (T1)	4.38
9002	Transformer—Power transformer 105–125 volts, 25–40 cycles (T1)	6.00
	REPRODUCER ASSEMBLIES	
6467	Transformer—Output transformer (T2)	1.44
8987	Cone—Reproducer cone (L10)—Pkg. of 5	5.00
8988	Coil assembly—Comprising field coil, magnet and cone support (L11)	2.35
9435	Reproducer complete	4.75

Courtesy Nostalgia Air

MODEL RCA 110,111,115
Schematic, Data
Chassis wiring

RCA-VICTOR CO., INC.

IF Peak 175 KC

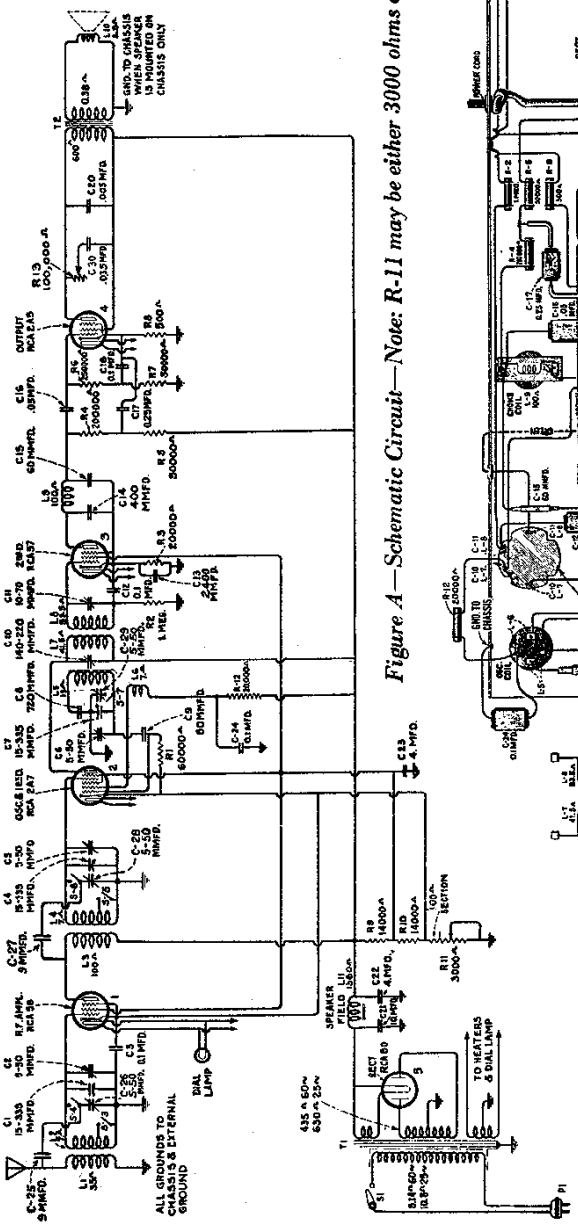

Figure A—Schematic Circuit—Note: R-11 may be either 3000 ohms or 4500 ohms

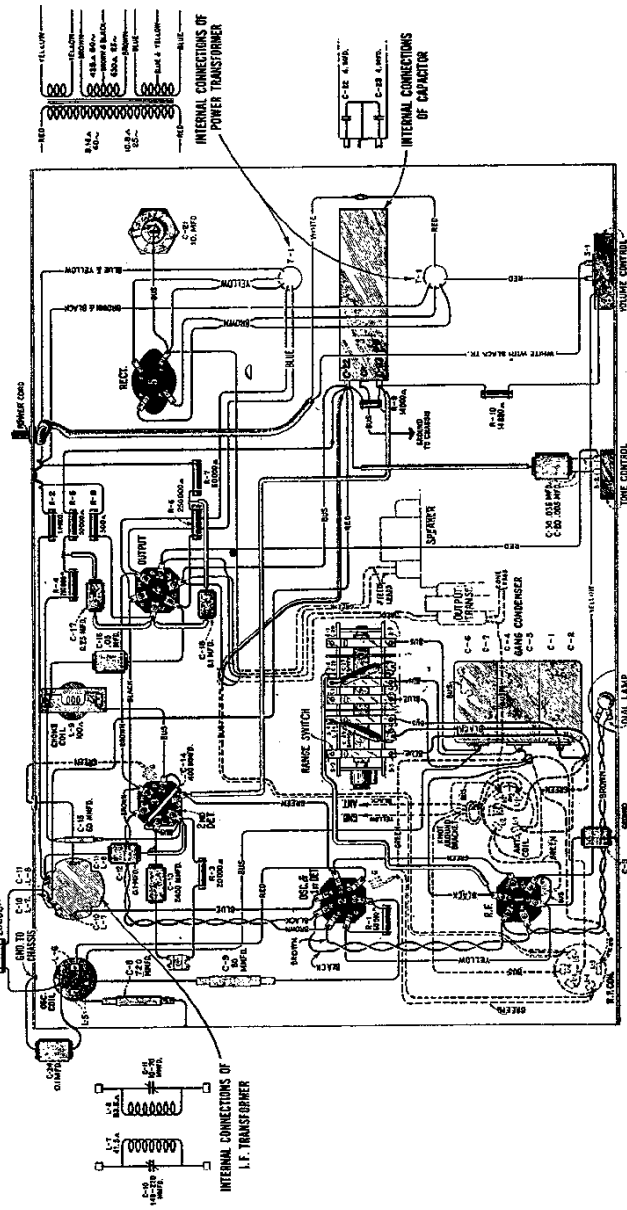

Figure B—Wiring Diagram

Voltage Rating.....115 Volts
Frequency Rating.....25–60 Cycles and 50–60 Cycles
Power Consumption.....60 Cycles—70 Watts
Number and Types of Radiotrons.....1 UX-280, 1 RCA-2A5, 1 RCA-58, 1 RCA-57, 1 RCA-2A7—Total 5
Undistorted Output.....1.75 Watts
Frequency Range.....540 K. C. to 1500 K. C. and 1400 K. C. to 2800 K. C.

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