

SERVICE NOTES

for

RCA Victor Model R-71-B

ELECTRICAL SPECIFICATIONS

"A" Batteries Required.....	Eveready Aircell "A" Battery
"B" Batteries Required.....	Four 45 Volt Blocks, Preferably of Heavy Duty Type
"A" Battery Current.....	0.48 Amperes
Average "B" Battery Current.....	18 M. A.
Type of Circuit.....	Super-Heterodyne with A. V. C., Class "B" Output Stage and Compensated Volume Control
Type and Number of Radiotrons.....	3 RCA-234, 1 RCA-232, 4 RCA-230—Total 8
Number of R. F. Stages.....	One
Number of I. F. Stages.....	One
Type of Second Detector.....	Pentode, Combining Detector, A. V. C. and Audio Amplification
Number of Audio Stages.....	Two
Undistorted Output	1.00 Watt

PHYSICAL SPECIFICATIONS

Height.....	18 $\frac{1}{16}$ Inches
Depth.....	10 $\frac{1}{2}$ Inches
Width.....	14 Inches
Weight Alone.....	34 Pounds
Weight Packed for Shipment.....	40 Pounds

RCA Victor Model R-71-B is an eight tube battery operated Super-Heterodyne radio receiver incorporating such features as Super-Control R. F. Amplifier Pentode Radiotrons in the R. F. and I. F. stages, automatic volume control, combination Pentode second detector, compensated Class "B" audio amplifier and the inherent sensitivity, selectivity and tone quality of the RCA Victor Super-Heterodyne. The chassis and permanent magnet dynamic loudspeaker are enclosed in a standard R-71 cabinet. The performance of this receiver is comparable in all respects to the A. C. model of the same designation, except in output volume.

SERVICE DATA

Except for different chassis design the circuit used in the R-71-B is very similar to that of the P-31 Portable Radiola. A reference to this Service Note should therefore be made for a description of the circuit and manner of making adjustments. The voltage readings are given below and the replacement parts on page 3. Figure 1 shows the schematic circuit diagram and Figure 2 the chassis wiring diagram.

RADIOTRON SOCKET VOLTAGES

(No signal being received)

Radiotron No.	Control Grid to Filament Volts	Screen Grid to Filament Volts	Plate to Filament Volts	Screen Current M. A.	Plate Current M. A.	Filament Volts
1. R. F.	0.2	65	157	1.0	3.0	2.0
2. 1st Detector	0.5	65	157	0.1	0.2	2.0
3. Oscillator	1.0	—	65	—	4.0	2.0
4. I. F.	0.5	65	157	1.0	3.0	2.0
5. 2d Detector	2.0	155	0	4.0	0	2.0
6. 1st A. F.	1.0	—	155	—	2.5	2.0
7. Power	14.0	—	155	—	1.2	2.0
8. Power	14.0	—	155	—	1.2	2.0

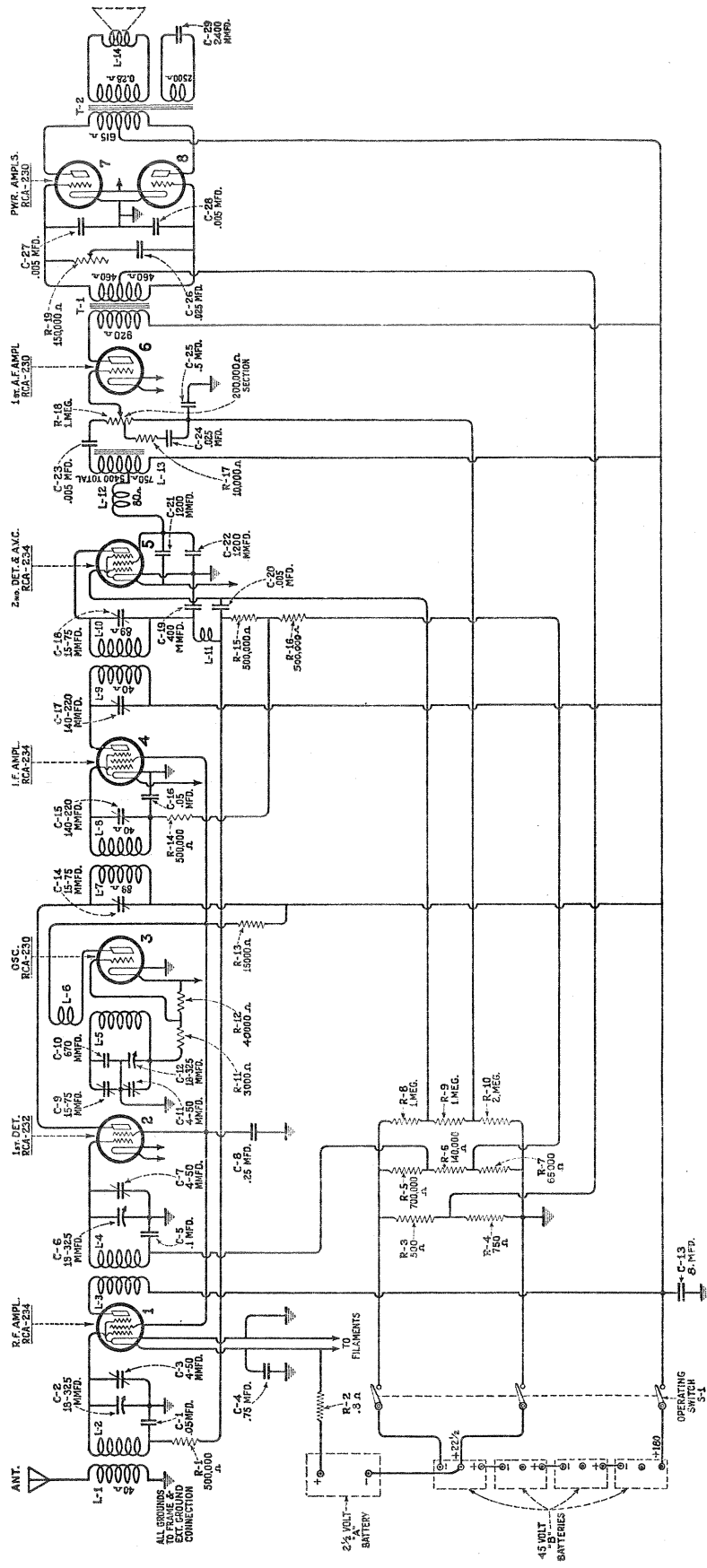


Figure 1—Schematic Wiring Diagram of R-71-B

REPLACEMENT PARTS

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

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
RECEIVER ASSEMBLIES					
2012	Capacitor—1200 mmfd. capacitor	\$0.55	6312	Capacitor — 650 mmfd. capacitor — Package of 5	\$1.50
2747	Contact cap—Package of 5 . . . . .	.50	6317	Capacitor—0.05 mfd. capacitor . . . . .	.40
2749	Capacitor—2400 mmfd. . . . .	.35	6323	Shaft—Tuning condenser drive shaft with one flat washer and two "C" washers—Package of 2 . . . . .	.20
2962	Capacitor—0.005 mfd. capacitor . . . . .	.60	6326	Transformer — 1st intermediate fre- quency transformer	2.05
3003	Cushion—Sponge rubber chassis sup- port cushions—Package of 4 . . . . .	.30	6327	Transformer — 2nd intermediate fre- quency transformer	2.85
3033	Resistor—1 megohm— $\frac{1}{4}$ watt—Car- bon type—Package of 5	1.00	6328	Volume control—Complete with mount- ing nut	1.45
3043	Resistor—0.8 ohm—Wire wound . . . . .	.35	6329	Tone control—Complete with mount- ing nut	1.25
3085	Capacitor—400 mmfd. capacitor . . . . .	.30	6330	Scale—Tuning dial scale . . . . .	.45
3088	Knob—Operating switch knob—Pack- age of 5 . . . . .	.50	6331	Shield—Radiotron shield . . . . .	.20
3238	Screw—Set screw for switch knob No. 3088—Package of 10 . . . . .	.25	6332	Switch—Operating switch	1.60
3252	Resistor — 100,000 ohms — $\frac{1}{2}$ watt — Carbon type—Package of 5	1.00	6333	Cable—Battery connecting cable . . . . .	.70
3358	Resistor—3,000 ohms— $\frac{1}{2}$ watt—Car- bon type—Package of 5	1.00	7062	Capacitor—Adjustable trimming capac- itor—15 to 70 mmfd. . . . .	.50
3381	Resistor—10,000 ohms— $\frac{1}{4}$ watt—Car- bon type—Package of 5	1.00	7439	Drum—Dial drum with set screws . . . . .	.35
3382	Resistor—750 ohms— $\frac{1}{2}$ watt—Carbon type—Package of 5	1.00	7501	Capacitor—3 gang variable capacitor, less drive shaft and drum	4.20
3383	Resistor—500 ohms— $\frac{1}{2}$ watt—Carbon type—Package of 5	1.00	7524	Coil—Detector and oscillator coil com- plete with mounting bracket	2.30
6176	Escutcheon—Operating switch escutch- eon—Engraved "OFF—ON"—Pack- age of 5 . . . . .	.50	7525	Capacitor pack—Comprising one 8.0 mfd., one 0.05 mfd., one 0.1 mfd., one 0.5 mfd., one 0.25 mfd., one 0.75 mfd., two 0.005 mfd. and one 0.025 mfd. capacitors in metal container	4.50
6186	Resistor — 500,000 ohms — $\frac{1}{4}$ watt — Carbon type—Package of 5	1.00	7526	Transformer—Audio input transformer	2.50
6192	Spring—Condenser drive cord tension spring—Package of 10 . . . . .	.30	7527	Transformer—Audio transformer pack comprising interstage and output transformers in metal container	3.25
6241	Resistor — 140,000 ohms — $\frac{1}{4}$ watt — Carbon type—Package of 5	1.00	CABINET ASSEMBLIES (Prices furnished upon request)		
6242	Resistor—2 megohm— $\frac{1}{4}$ watt—Car- bon type—Package of 5	1.00	6113	Felt—Cabinet felt foot—Package of 15 . . . . .	.50
6244	Resistor — 700,000 ohms — $\frac{1}{4}$ watt — Carbon type—Package of 5	1.00	7523	Escutcheon—Station selector escutch- eon . . . . .	.50
6245	Resistor — 65,000 ohms — $\frac{1}{4}$ watt — Carbon type—Package of 5	1.00	X118	Baffle board and grille cloth	
6279	Resistor — 15,000 ohms — $\frac{1}{2}$ watt — Carbon type—Package of 5	1.00	X146	Cabinet—Complete less equipment	
6285	Choke coil—2nd detector plate choke coil . . . . .	.72	REPRODUCER ASSEMBLIES		
6288	Knob—Station selector, volume control or tone control knob—Package of 5	1.00	2975	Rivet—Eyelet rivet for mounting cone —Package of 100 . . . . .	.50
6298	Cord—Tuning condenser drive cord— Package of 5 . . . . .	.60	6166	Board—Terminal board with two ter- minals—Package of 5	1.00
6300	Socket—4 prong Radiotron socket . . . . .	.35	3702	Ring—Cone retaining ring . . . . .	.50
6308	Coil—R. F. coil complete with mount- ing bracket	1.36	3828	Bracket—Cone bracket and magnet assembly	4.60
			8921	Cone—Reproducer cone complete with voice coil—Package of 5	6.00

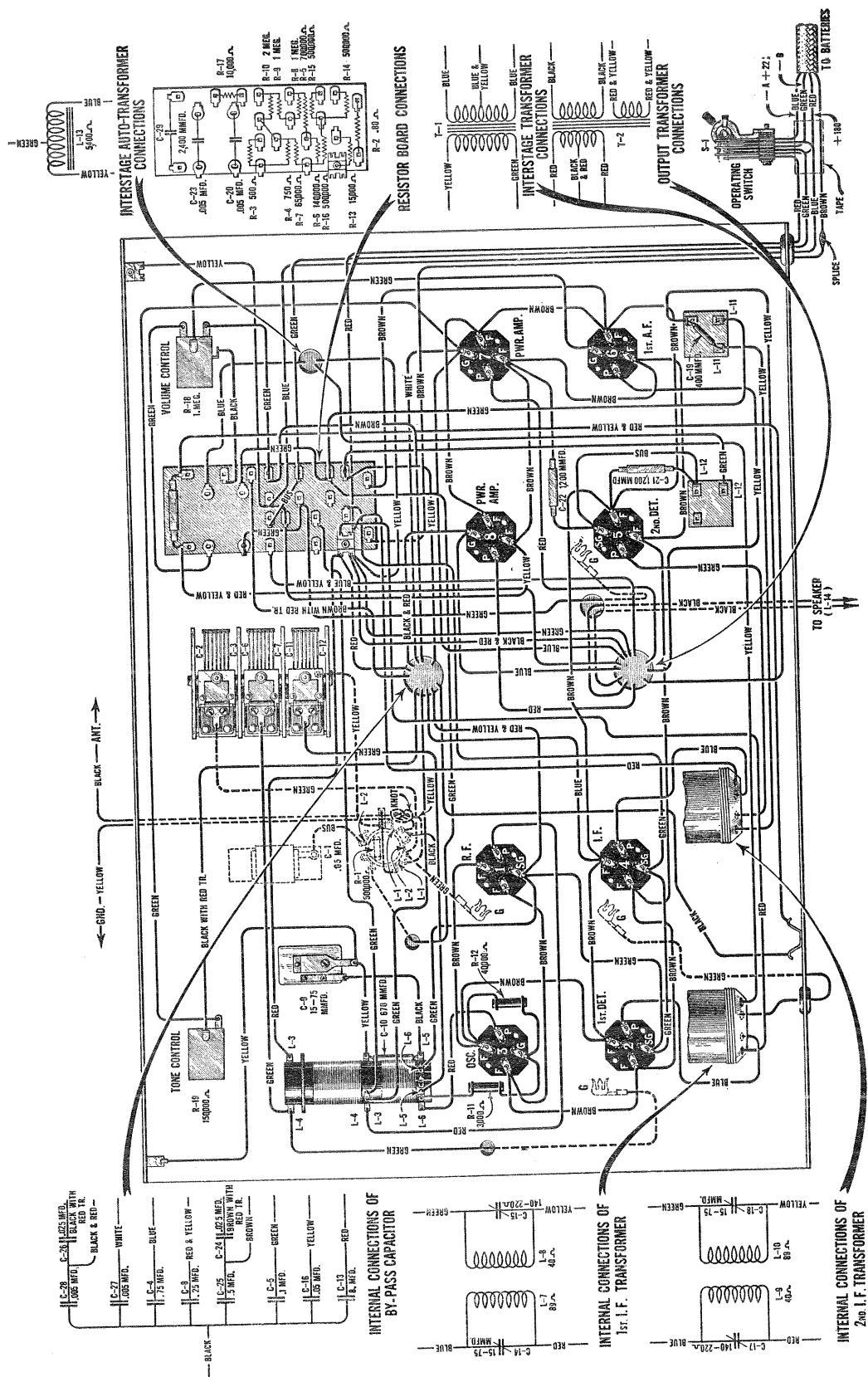


Figure 2—Chassis Wiring Diagram of R-71-B

SERVICE DIVISION
RCA Victor Company, Inc.
 Camden, N. J., U. S. A.