



# RCA VICTOR

# SERVICE DATA

A-C Operated Radio Receiver

## MODELS 2-R-51, 2-R-52

Chassis No. RC1119

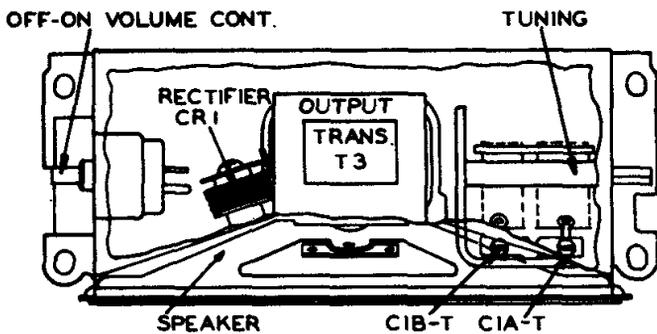
Tuning Range ..... 540-1600 kc

Intermediate Frequency ..... 455 kc

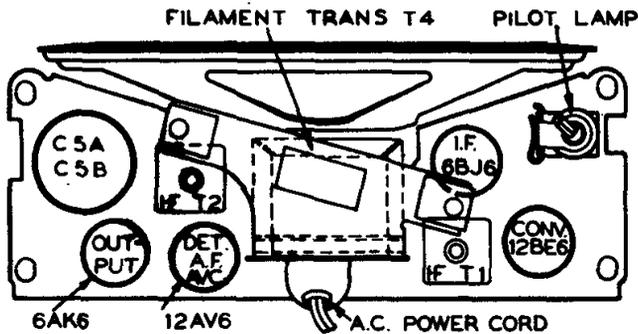
**Tube Complement:**

- (1) RCA 12BE6 ..... Converter
  - (2) RCA 6BJ6 ..... I.F. Amplifier
  - (3) RCA 12AV6 ..... Det.-AVC-A.F. Amp.
  - (4) RCA 6AK6 ..... Output
- RCA Stock No. 77292 ..... Rectifier

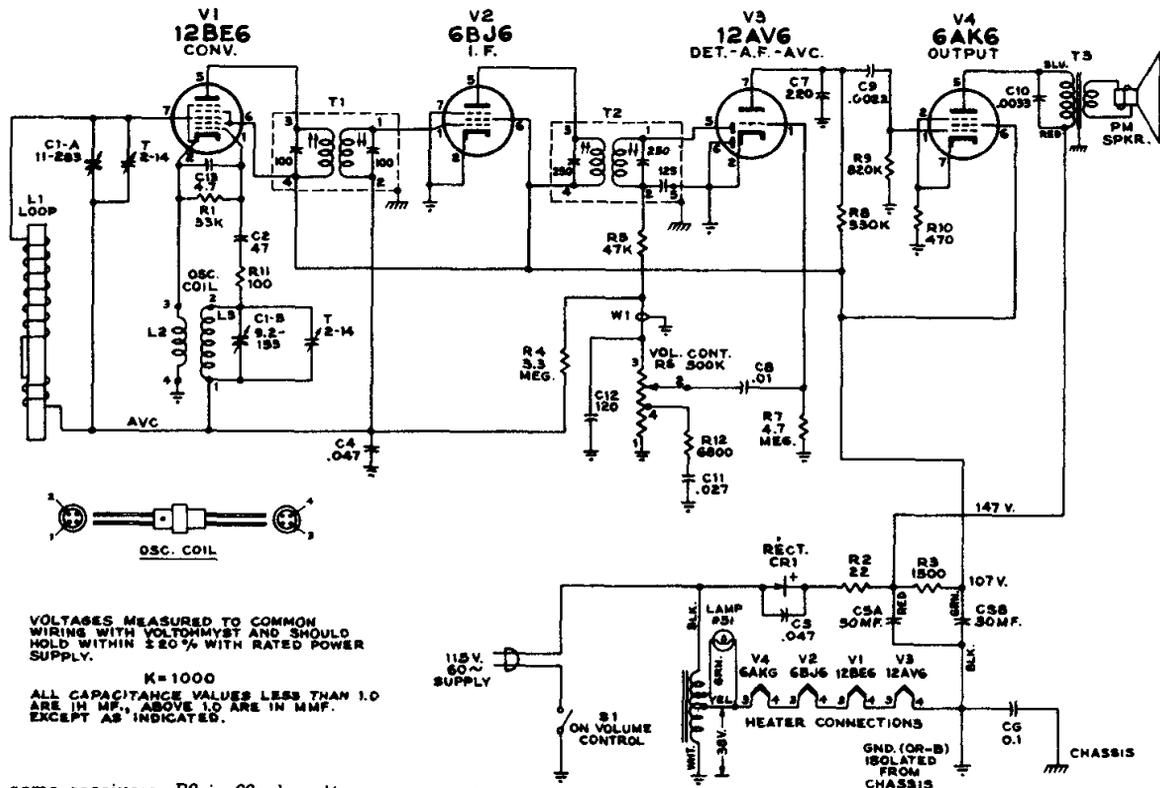
**Top View**



Tube and Trimmer Locations



**Bottom View**



VOLTAGES MEASURED TO COMMON WIRING WITH VOLTOHMIST AND SHOULD HOLD WITHIN  $\pm 20\%$  WITH RATED POWER SUPPLY.

K=1000  
ALL CAPACITANCE VALUES LESS THAN 1.0 ARE IN MF., ABOVE 1.0 ARE IN MMF. EXCEPT AS INDICATED.

### CRITICAL LEAD DRESS

1. Oscillator coil should be centered in space provided and have at least  $\frac{1}{4}$  inch between winding and chassis.
2. The filament wiring should be dressed down on chassis and away from audio leads and audio coupling condensers.
3. The I.F. plate and grid leads, including the 2nd I.F. diode lead should be as short as practical.
4. The output plate by pass condenser should be dressed against the side of the chassis and away from the 1st audio grid condenser and the diode filter resistor.
5. Output transformer primary leads should be dressed away from the selenium rectifier.
6. The loop antenna should be accurately centered in its position on the fishpaper cover. The ends must not project beyond the fishpaper.

### ALIGNMENT PROCEDURE

**Test-Oscillator**—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the oscillator output as low as possible to avoid a-v-c action.

On a.c. operation an isolation transformer (115 v./115 v.) may be necessary for the receiver if the test oscillator is also a.c. operated.

**Output Meter**—Connect meter across speaker voice coil. Turn volume control to maximum.

Step	Connect the high side of test-oscillator to—	Tune test-osc. to—	Turn radio dial to—	Adjust the following for max. output
1	6BJ6 I-F grid through .01 mfd. capacitor	455 kc	Quiet-point 1600 kc end of dial	T2 (top and bottom) 2nd I-F. trans
2	Stator of CIA through .01 mfd.			T1 (top and bottom) 1st I-F. trans
3	Short wire placed near loop to radiate signal	1620 kc	Min. cap.	osc. trimmer CIB-T
4		1400 kc	1400 kc signal	ant. trimmer CIA-T
5		Repeat steps 3 and 4		

Note: In some receivers, R2 is 22 ohm, 1/2 w. composition