

RANGE SW. VIEWED FROM FRONT AND SHOWN IN R.B. (MAX. COUNTER-CLOCKWISE) POSITION.

\*-16V. APPROX. MAX. AVC.  
 \*-6V. (600KC)  
 \*-11V. (1500KC) A  
 \*-8V. (B.5MC) C  
 \*-10V. (15.2MC) C

OSCILLOSCOPE CONN'S VERTICAL "HI" TO THIS POINT VERTICAL "O" TO CHASSIS.

- C40 — 10-160 MMF.
- C41-C42 — 25-250 MMF.
- C43-C44 — 50-400 MMF.
- C45 — 100-540 MMF.

VOLTAGES SHOULD HOLD WITHIN ± 20% WITH 117 V. AC. SUPPLY.

\* MEASURED WITH CHANALYST OR VOLTOHMST.

M = 1000

R.C.A. Victrola 58V, 58AV, Chassis RC-604

**Cathode-Ray Alignment** is the preferable method. Connections for the oscilloscope are shown in the schematic diagram.

**Output Meter Alignment.**—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

**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.

**Calibration Scale.**—The glass tuning dial may be easily removed from the cabinet and temporarily attached to the chassis for quick reference during alignment. In the event that only the chassis is returned for service, and the cabinet with its tuning dial is left in the customer's home, the full size scale printed in this service note can be used for reference.

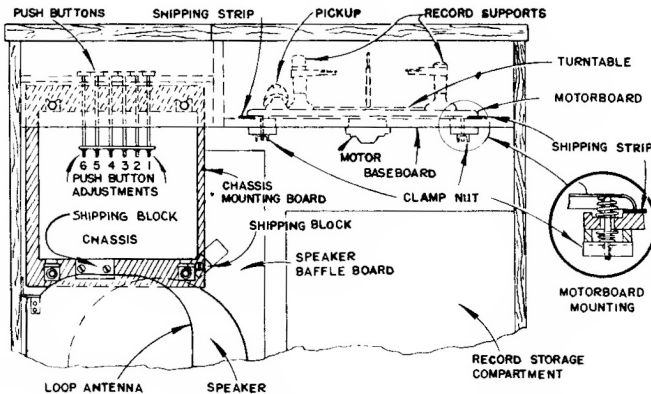
**Using Tuning Dial.**—

1. Remove glass dial from the cabinet.
2. With gang in full mesh, the dial pointer should be set to a point  $\frac{1}{16}$  inch to left of reference mark at left hand end of the dial backing plate.
3. Support the glass dial over the pointer with spacers so that the extreme left scale graduation coincides with the pointer. Use scotch tape to hold the glass dial in place.

**"C" Band Reception.**—For best reception on "C" band with an outside antenna, adjust the trimmer screw of C5 on the antenna coil. Turn screw carefully with an insulated screwdriver (RCA Stock No. 31031) while the receiver is tuned to a station in the 31-meter band. If returning to internal antenna at any time, close the link on the center terminal and readjust "C" band antenna trimmer (C5) for best reception on 31-meter band.

| Steps | Connect test-osc. output to—   | Tune test osc. to—    | Turn radio dial to— | Adjust the following for maximum peak output— |
|-------|--|-----------------------|---------------------|---|
| 1     | I-F grid in series with .01 mfd.   | 455 kc                | "A" band 540 kc     | L13-L12 (2nd I-F trans.)                      |
| 2     | 1st Det. grid in series with .01 mfd.  |                       |                     | L11-L10 (1st I-F trans.)                      |
| 3     | A-Terminal in series with 47 mmfd. (link closed)   | 15.2 mc               | "C" band 15.2 mc    | C8 (osc.)*<br>C7 (ant.)                       |
| 4     |  | 9.5 mc                | "C" band 9.5 mc     | C5 (ant.) (Rock gang)                         |
| 5     |  | Repeat steps 3 and 4  |                     |   |
| 6     | Yellow loop lead in series with 200 mmfd. (link closed)  | 1,500 kc              | "A" band 1,500 kc   | C10 (osc.)                                    |
| 7     |  | 600 kc                | "A" band 600 kc     | L9 (osc.)                                     |
| 8     |  | Repeat steps 6 and 7. |                     |   |
| 9     | Install and connect chassis in cabinet with antenna link closed. Tune in a radiated oscillator signal at 1,500 kc. and peak the "A" band trimmer C2 (on loop). Rock in L9 for peak output at 600 kc. |                       |                     |   |

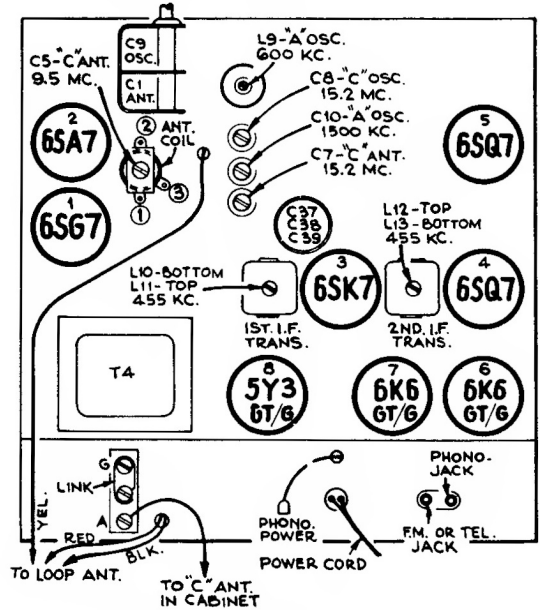
\*Use minimum capacity peak if two peaks can be obtained. Oscillator tracks 455 kc. above signal on all bands.



**Critical Lead Dress:**

1. Bus from "C" oscillator coil to range switch must be held to length and dressed close to coil.
2. C30 (audio coupling capacitor to volume control) should be dressed close to front apron.
3. A.C. cord and motor leads must be dressed away from phono and F.M. jack.
4. Excess trans. leads to be dressed between trans. and rectifier socket.
5. Keep R5, C16 bus (in grid circuit of 6SA7 tube) as short as possible.
6. Dress C28 (in plate circuit of 1st A.F.) close to socket.
7. Keep R21 (grid resistor) and C34 (coupling capacitor of output tube) close to socket.
8. Keep R25, C48 (in tone compensating circuit) close to front apron.
9. Dress green lead from osc. coil to trimmer close to oscillator coil.
10. Dress red A.C. leads away from I.F. trans. and 6SQ7 socket.
11. RF choke in plate of 6SG7 must be dressed toward back apron.

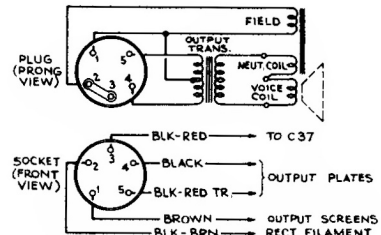
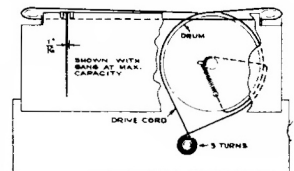
For Information on Automatic Mechanism refer to Service Data for Model 960001-1 Mechanism.



**TUBE AND TRIMMER LOCATIONS**

**CATHODE CURRENTS**

- (1) 6SG7 ----- 10.5 MA.
- (2) 6SA7 ----- 9.9 MA.
- (3) 6SK7 ----- 16.0 MA.
- (4) 6SQ7 ----- 0.3 MA.
- (5) 6SQ7 ----- 0.3 MA.
- (6) 6K6GT ----- 22.0 MA.
- (7) 6K6GT ----- 22.0 MA.
- (8) TOTAL RECT. ----- 81.0 MA.



**SPEAKER CONNECTIONS**

**VICTROLA 58V, 58AV**  
**Radio-Phonograph Combination**  
 Chassis No. RC-604



**RCA**