Changes Necessary

for

Adapting Radiolas 21 *or* 22

for use with

Radiotrons RCA-230 RCA-231 *and* RCA-232

Radiola Division

RCA Victor Company, Inc.

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

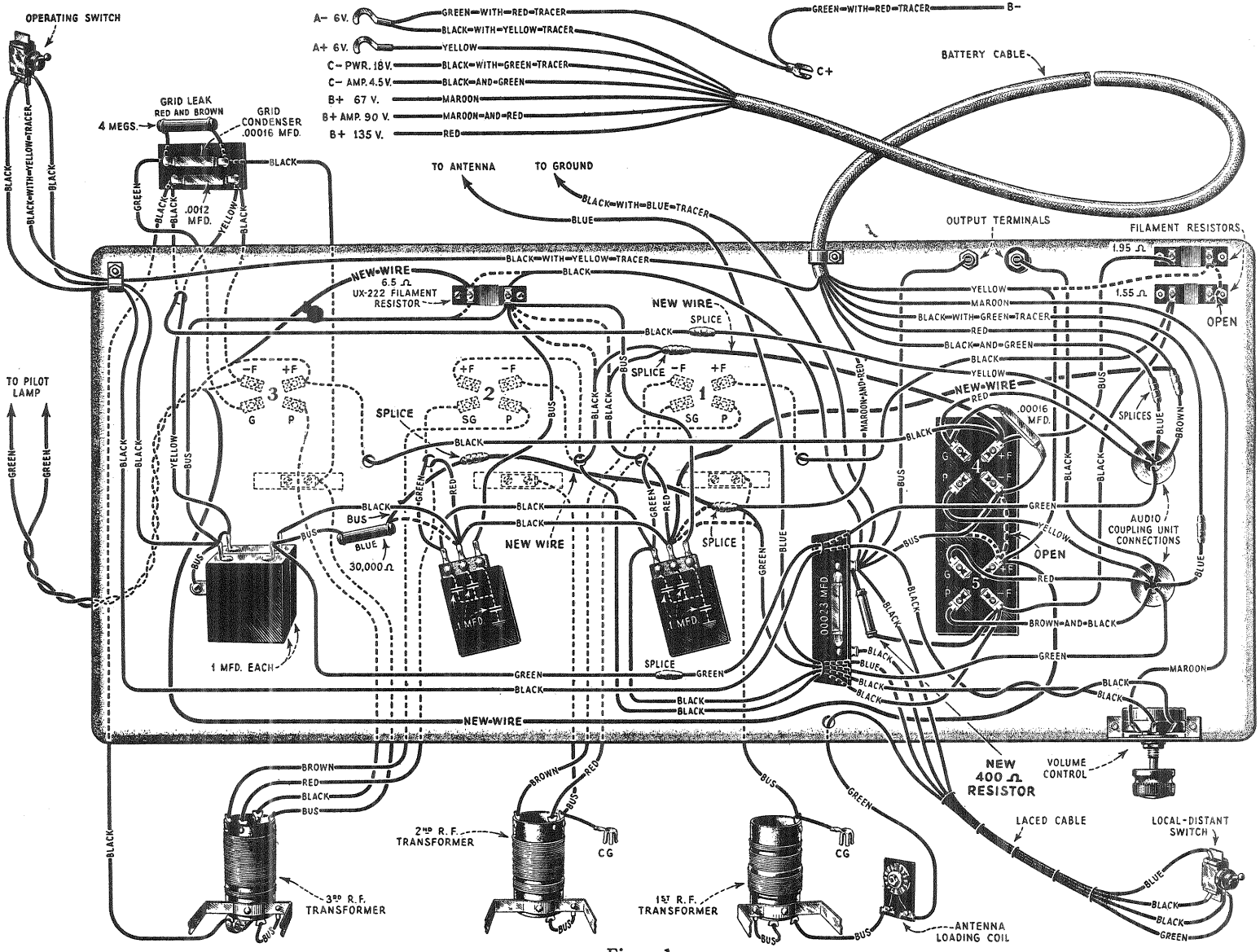
OPERATING SWITCH
A– 6V.
A+ 6V.
C– PWR. 18V.
C– AMP. 4.5V.
B+ 67 V.
B+ AMP. 90 V.
B+ 135 V.
GREEN-WITH-RED-TRACER
BLACK-WITH-YELLOW-TRACER
YELLOW
BLACK-WITH-GREEN-TRACER
BLACK-AND-GREEN
MAROON
MAROON-AND-RED
RED
C+
B–
BATTERY CABLE
GRID LEAK
RED AND BROWN
4 MEGS.
GRID CONDENSER
.00016 MFD.
.0012 MFD.
TO ANTENNA
TO GROUND
BLACK-WITH-BLUE-TRACER
BLUE
OUTPUT TERMINALS
FILAMENT RESISTORS
1.95 Ω
1.55 Ω
OPEN
NEW-WIRE
6.5 Ω
UX-222 FILAMENT RESISTOR
NEW WIRE
SPLICE
TO PILOT LAMP
SG
P
G
BUS
30,000 Ω
1 MFD.
1 MFD. EACH
.00023 MFD.
SPLICES
AUDIO COUPLING UNIT CONNECTIONS
BROWN-AND-BLACK
NEW 400 Ω RESISTOR
VOLUME CONTROL
LACED CABLE
LOCAL-DISTANT SWITCH
2ND R.F. TRANSFORMER
3RD R.F. TRANSFORMER
1ST R.F. TRANSFORMER
CG
ANTENNA LOADING COIL

Figure 1

Changes Necessary for Adapting Radiolas 21 or 22 for use with Radiotrons RCA-230, RCA-231 and RCA-232

1. Remove receiver assembly from cabinet, place in a position convenient for work and turn upside down. Make the following changes. Figure 1 shows the wiring after the changes have been made, the dotted heavy lines indicating the old connections. Figure 2 shows the schematic diagram of the Radiola after changes have been made.

2. Remove bus from —F4 to +F5.

3. Shift bus bar connected to +F5 from +F5 to —F4. The other end of this bus connects to the .00023 mfd. condenser.

4. Solder yellow cable lead formerly connected to 1.95 ohm resistor to +F5.

5. Shift the two black leads connected from —F1 and —F2 to the 6.5 ohm resistor from the 6.5 ohm resistor to +F4. It will be necessary to splice and tape a wire to these leads in order to make this change.

6. Clip the bus between the 1.95 and the 1.55 ohm resistor.

7. Shift all connections to the 6.5 ohm resistor to one terminal. This should be the terminal closest to socket No. 1.

8. Unsolder both connections to the pilot lamp. Clip these off at socket No. 3 and tape up the exposed ends. Solder two new thin leads to the pilot lamp connecting one to the terminal on the 6.5 ohm resistor to which no connections are present. Connect the other to +F5. It is best to run these leads through the hole in the bottom of the chassis into the detector stage and thence out of the side of the casting to the pilot lamp.

9. Remove the maroon and red cable lead from the center terminal of the third (closest to socket No. 1) by-pass condenser block. Also remove the green A. F. transformer lead from the same point. Unsolder the 30,000 ohm resistor from the center connection of the second by-pass condenser block, solder on about a three-inch length of wire, and then solder the other end of this wire to the maroon and red cable lead and the green transformer lead already exposed. Tape both joints carefully.

10. Connect about a three-inch length of wire to the center connection of the third by-pass condenser block. (Where the maroon and red cable lead was formerly connected.) The other end of this wire is connected to the splice between the red cable lead and the brown output choke lead. Tape carefully after soldering.

11. Solder a 400 ohm, 1 watt resistor from —F5 to the ground side of the .00023 mfd. condenser.

12. Substitute new cable tag supplied for old one.

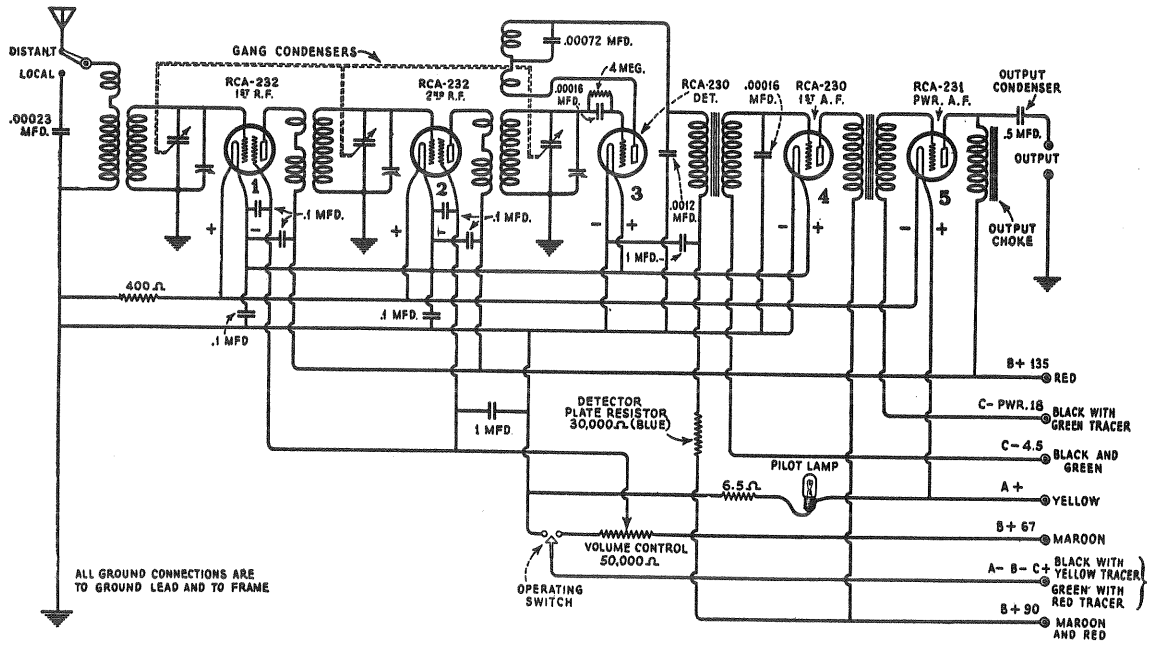

Figure 2

13. Paste new license notice over old one in cabinet.

14. Remove instruction book and guarantee card in envelope and substitute new card furnished. Destroy guarantee card as guarantee is printed on license label.

15. Place new Radiotrons in sockets as indicated on new instruction card, connect batteries in accordance with new battery tag and test Radiola.

16. Return chassis to cabinet in reverse manner of that used to remove it and return to shipping carton.