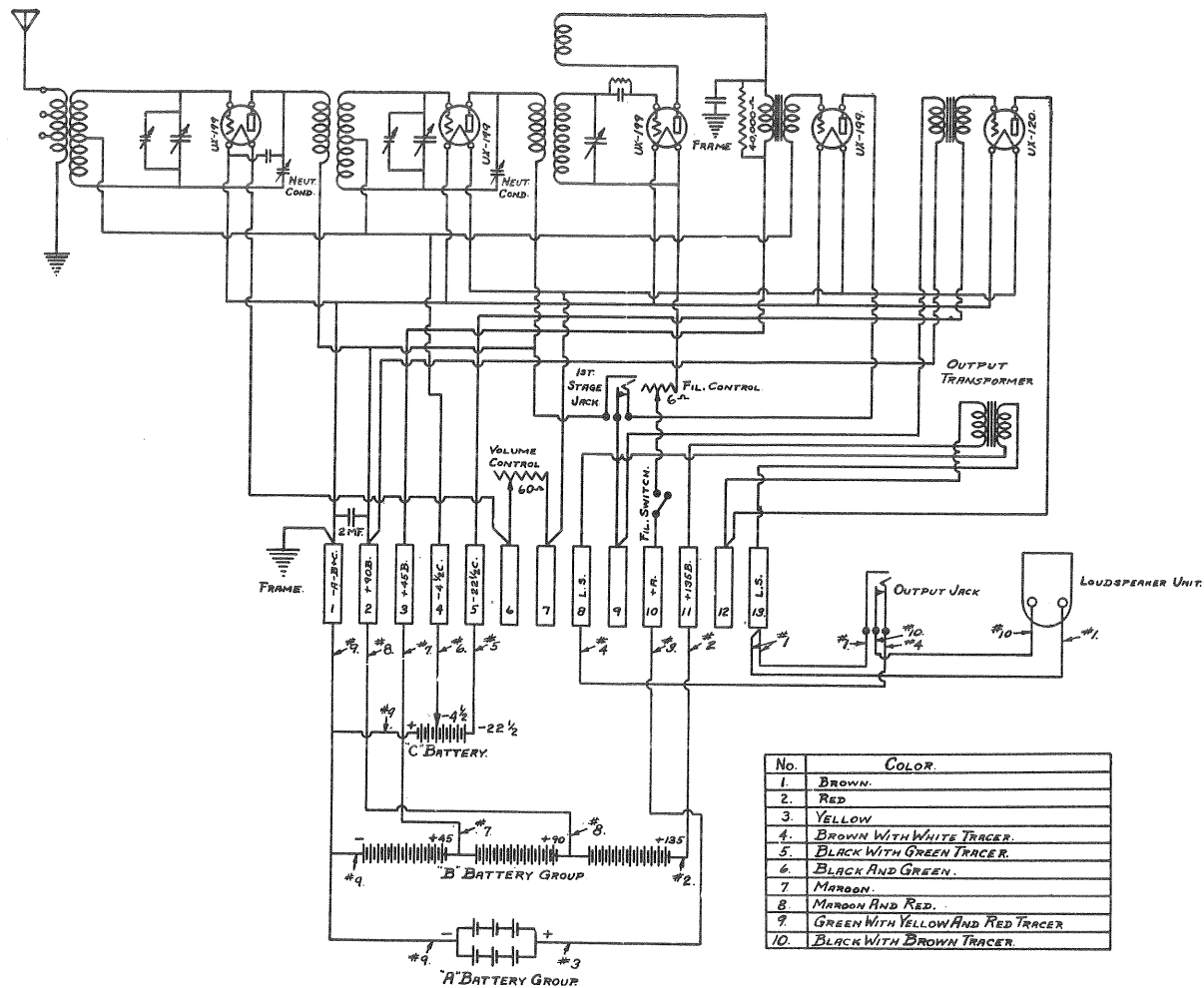


Victor Model 7-3

Victor Model 7-30



Wiring Diagram for Models 7-3, 7-30, and R-20

IF THE TROUBLE HAS NOT BEEN FOUND TO LIE IN THE BATTERIES OR TUBES, THE FOLLOWING TESTS TO LOCALIZE THE TROUBLE IN THE SET ITSELF SHOULD BE MADE WITH TUBES REMOVED AND BATTERIES CONNECTED.

1. Using a low scale of meter with positive lead inserted in any — socket contact, insert negative lead in each "G" contact as shown in Fig. 2. The following table illustrates the results that should be obtained.

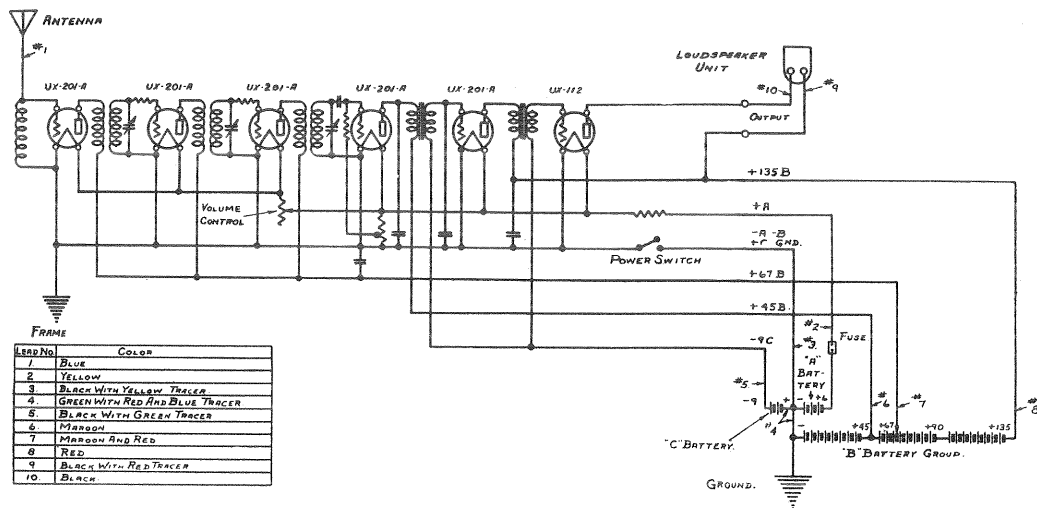
Normal	Faulty	Fault
G-1—4½	0	Open coil or broken wire.
G-2—4½	0	Open coil or broken wire.
G-3—1½	0	Open AF transformer or broken wire.
G-4— .3	0	Open AF transformer or broken wire.
G-5—0	Reversed	Short circuited grid condenser.

2. Using a high scale meter with negative lead inserted in any socket contact, insert positive lead in each P contact as shown in Fig. 2. The following are results that should be obtained:

Normal	Faulty	Fault
P-1—90	0	Open Coil or broken wire.
P-2—90	0	Open Coil or broken wire.
P-3—110	0	Open output transformer or broken wire.
P-4—85	0	Open audio transformer or broken wire.
*P-5—35 to 40	0	Open audio transformer or open tickler coil, or open tickler lead or broken wire.
	45	Short circuited by-pass condenser.

NEUTRALIZING PROCEDURE SAME AS SHOWN UNDER VICTOR MODEL 7-1

Victor Model 7-10



Wiring Diagram for Victor Radiola 16
(Used in Model 7-10)

VICTOR RADIOLA 16 (AS USED IN MODEL 7-10)

The Radiola used in combination with the Ortho-phonous Victrola in the model 7-10 is a six-tube battery operated tuned radio frequency receiver of the inside or outside antenna type, employing three stages of radio frequency amplification, a detector, and two stages of audio amplification. The UX-112-A power tube is used in the last stage of audio amplification. The Radiotrons UX-201-A are used in all the other stages and in the detector.

Most of the common causes of trouble can be located and corrected by the tests given below. In making the tests the use of a Weston Radio Set Tester is recommended. If this is not available, a high resistance voltmeter of reliable manufacture, having two scales (0-7.5 and 0-150 volts), should be used. The meter should be equipped with flexible insulated leads.

1. Test "A," "B" and "C" batteries or battery eliminator if used.
2. Test all cable connections to the batteries.
3. Test loudspeaker unit.
4. Test tubes.

If the Weston Radio Set Tester is used, the tube tests can be made in the regular manner by placing the plug in socket No. 1, Fig. 1. If the set tester is not available, the low scale of the voltmeter can be used, the procedure being as follows:

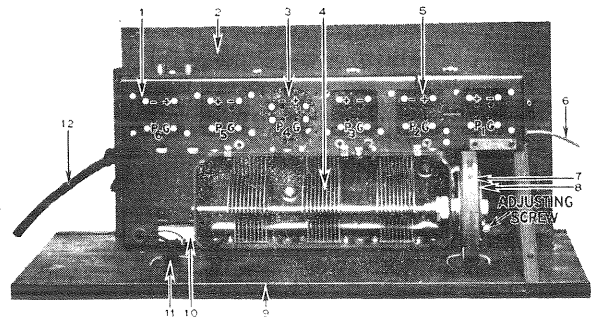


Fig 1

- a. Remove Radiotrons from all sockets except the one to the extreme right. Filament regulation in this socket can be obtained by means of the Volume Control.
- b. Place the two leads connected to the low scale of the voltmeter in the two filament socket contacts of Radiotron Socket No. 2 marked "+" and "-" as shown in Fig. 1; regulate the voltage to 5 volts.
- c. Remove the +67½B lead from the battery terminal, and connect this lead to the 7.5 terminal of the meter; connect from the + terminal of the meter to the +67½B on the "B" battery.
- d. Note the deflection of the meter when the latter is connected as described above, and compare this deflection with that given by a tube which is known to be good. The amount of deflection depends on (1) the meter used, (2) the condition of the "B" batteries, and (3) the condition of the tube under test. (1) and (2) remaining unchanged, a comparative indication of the condition of the various tubes can be obtained; in general a high deflection indicates a good tube, and a low deflection indicates a poor tube.
- e. All Radiotrons may be tested in the same manner. The UX-112-A will ordinarily give a higher reading than the UX-201-A.