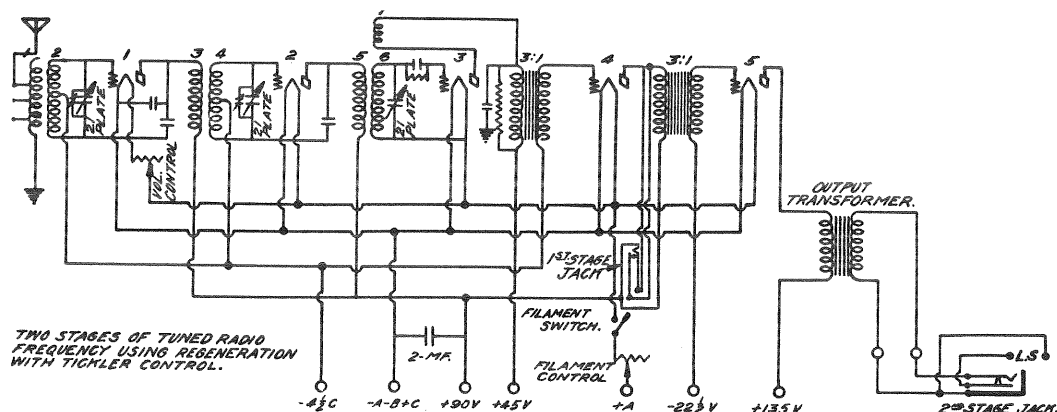


Victor Model 7-1 (Alhambra I)



Wiring Diagram Alhambra I (7-1)

If there is evidence of the radio receiver being improperly neutralized, steps should be taken to make the necessary adjustments to bring the equipment to its normal operating efficiency.

1. Prepare the following material:

- a. A "modulated oscillator," the circuit and requirements of which are shown in Fig. 1.
(A 4-megohm grid leak is recommended: do NOT use a variable grid leak in the construction of the oscillator.)



Fig. 2

- b. A screw driver, of bakelite construction (with metallic blade) similar to that shown in Fig. 2.
- c. A UX-199 Radiotron, from which one of the filament (LARGE) prongs has been sawed close to the base.
Note:—DO NOT use a tube with burnt out, broken, or shorted filament.
- d. A pair of headphones.

2. Proceed as follows; being sure that the (black or red enameled) shipping strip has been removed.

- a. Place oscillator in operation, near the antenna lead in wire at a point approximately 15 to 20 feet from the receiver. Adjust the oscillator to a frequency of approximately 1100 kilocycles, so that its note is picked up by the radio receiver when the Station Selector is set at 60.
- b. Set the panel voltmeter at 3 volts and place the amplification dial at "0." Tune in the oscillator to full volume on the receiver, adjusting the vernier condensers for maximum volume.
- c. Plug head phones in first stage jack on panel.
- d. Remove Radiotron No. 1 (Fig. 2 in Service Bulletin 5-A) and substitute the special tube.

If this change causes signal to disappear, it is an indication that the first radio frequency stage is properly neutralized.

3. If signal is heard, even though weakly—proceed as follows:

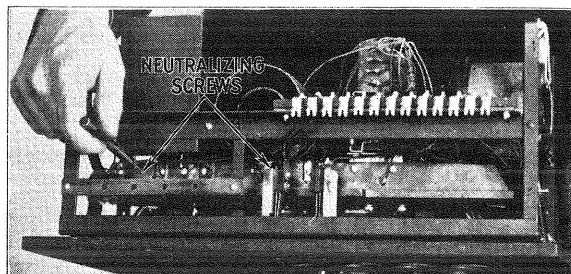
- a. With insulated screwdriver, shown in Fig. 2, adjust the neutralizing condenser located directly behind first tube (Fig. 3) until signal disappears—or is reduced to a minimum.
- b. Remove the special tube and re-insert the original Radiotron.

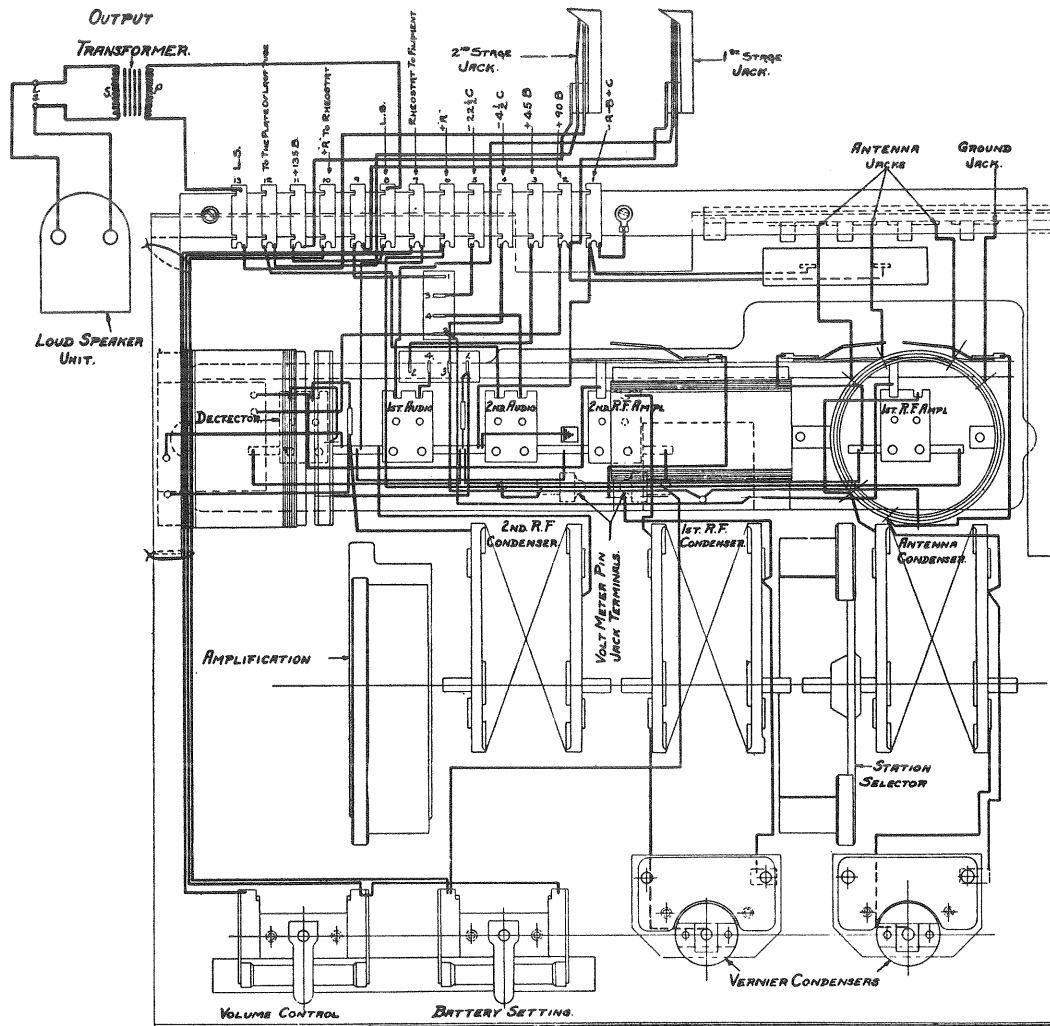
4. Repeat the procedure as outlined above, on next radio frequency stage (second tube in Fig. 2 of Service Bulletin 5-A) adjusting the other neutralizing condenser (Fig. 3).

- a. Remove the special tube from the second socket and re-insert the original.

If now properly adjusted, the receiver should NOT oscillate at any position of the Tuning Control, with "Amplification" at zero. It should oscillate only after amplification dial has been turned to approximately 6 or 7. The setting of the amplification dial necessary to produce oscillation in the detector circuit will depend upon

- a. The setting of the Station Selector.
- b. The condition of the detector tube.
- c. The detector B voltage.





Panel Assembly Diagram for Alhambra 1 (7-1)

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.