

Atwater Kent 55

The early type of Model 55—see A-K page 3-21 in *Rider's Volume III* and page 159 in the *Rider-Combination Manual*—can be distinguished from the late type—see A-K page 3-23 in *Rider's Volume III* and page 161 in the *Rider-Combination Manual*—by the volume control. The first type has a single wire-wound volume control of 6000 ohms, with the movable arm going to the screen grid of the 1st r-f. tube and the late type has a dual wire-wound and carbon volume control. The wire-wound unit of 6000 ohms has its movable arm connected to the screen grids of the r-f. tubes and the carbon unit of 10,000 ohms is connected in the antenna circuit.

Early or First Type:

This set has only one bleeder resistor, which is connected in series with the positive lead to the volume control. In early production of the first type (also known as the Early type) the bleeder is a 6000-ohm tubular resistor No. 15286A (colored purple over the entire resistor) or a 4000-ohm tubular resistor, Part No. 15286B (with a purple band about $\frac{3}{4}$ inch wide). In later production of the first type Model 55, the bleeder is a 4000-ohm wire-wound resistor, Part No. 16295, which supersedes No. 15286A. No. 15286B is superseded by wire-wound resistor No. 16330.

This set has only one bias resistor and in all cases it is 160 ohms, which value is critical. In early productions of the first type Model 55, the r-f. bias resistor was wound on the same fibre base with the filament-shunt resistor, the part number of the combined unit being 15274. If either section of this unit is found to be defective, remove the resistor and use a No. 16988, 160-ohm resistor as the r-f. bias, and a No. 17077 flexible 10-ohm resistor as the filament shunt. In later production of the first type of Model 55, the r-f. bias resistor is a separate unit and, when defective, should be replaced with a No. 16988 resistor.

Late or Second Type:

This set has two bleeder resistors, which are connected in series with the wire-wound section of the volume control. Bleeder No. 1 (4000 ohms) is in the positive lead to the volume control and bleeder No. 2 (850 ohms) is in the negative lead to the volume control. Bleeder resistor No. 1 is Part No. 16295.

Bleeder resistor No. 2 was made in two different styles. At first it was wound on the same fibre base with the r-f. bias resistor, the part number of

the combined unit being 16868. If either section of this unit is defective, remove the resistor and install a No. 16988 as the r-f. bias and a No. 16340 as bleeder No. 2.

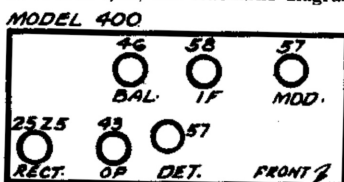
Later production of the second type Model 55 used a separate No. 16340 as the No. 2 bleeder.

The early production of the second type Model 55 had a combined r-f. bias resistor and bleeder No. 2, the part number of the combined unit being 16868. If either section of the unit becomes defective, remove the unit and replace with a No. 16988 as bias resistor and a No. 16340 as bleeder No. 2.

Later production of the second type Model 55 used a separate No. 16988 as the r-f. resistor.

Majestic 400

The accompanying illustration shows the socket layout for the Majestic Model 400, the schematic diagram



of which appears on page 3-42 of *Rider's Volume III* and page 1234 of the *Rider-Combination Manual*.

Philco Model G-Code 122

Run No. 1. A 25,000-ohm resistor, No. 71, Part No. 3656 has been added. One end is connected to the screen grid lead for the r-f., oscillator and i-f. tubes and the other end is grounded.

Run No. 2. Tuning condenser, No. 4, removed. Part No. 31-1274 added.

Run No. 7. Resistor No. 20 (1,500 ohms) replaced with Part No. 33-3048 (2,000 ohms).

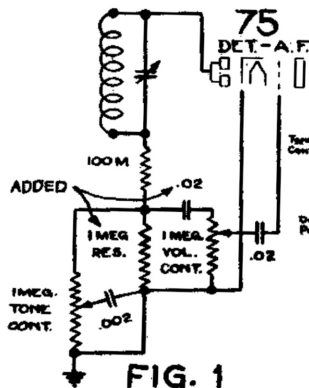


FIG. 1

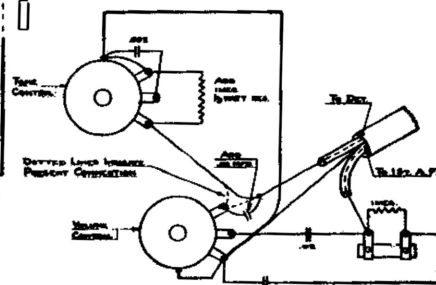


FIG. 2

By the addition of a 1-megohm resistor and a 0.02-mf. condenser, as shown in the diagrams above, noisy volume controls are quieted in these Silvertone sets.

G. E. A-66 and A-86

Please make a note in your *Index to Rider's Volume VI* that the General Electric receiver, Model A-66, uses the same chassis as Models A-64 and A-67. Also that Model A-86 uses the same chassis as Models A-82 and A-87.

G.E. A-70, A-75

On G. E. page 6-19 of *Rider's Volume VI* please change the value of the condenser, C-44, in the line between the switch S-6 and the resistor, R-4, in the cathode circuit of the 6A8, from 100 mmf. to 50 mmf.

In the list of replacement parts on G.E. page 6-23, delete "RC-235 Capacitor 100 mmf. (C-44)" and substitute for it "RC-210 Capacitor 50 mmf. (C-44) Mica Dielectric". In the stock number column you will find RC-091. Change the C-29 to C-28.

G. E. A-63

If a noisy Model A-63 is found, the trouble may be due to the field coil breaking down to ground. This trouble is not readily apparent, but it should be checked if you come across a very noisy receiver.

Silvertone 1822, 1831, 1824, 1830

A simple circuit change will correct noisy volume controls. Its effect is to remove the d-c. diode current from the volume control and in practically all cases, it will be found that the trouble will be corrected without changing the volume control. However, if the volume control is replaced, the circuit change should be made in addition to prevent noise difficulties.

Connect a 1-megohm resistor across the outer terminals of the tone control, as indicated in Fig. 1, the schematic, and Fig. 2, the wiring diagram.

Unsolder the two leads from the ungrounded outer terminal of the volume control and solder both these leads to one side of a 0.02-mf. condenser. Connect the other side of this condenser to the volume control terminal from which the two leads were removed.