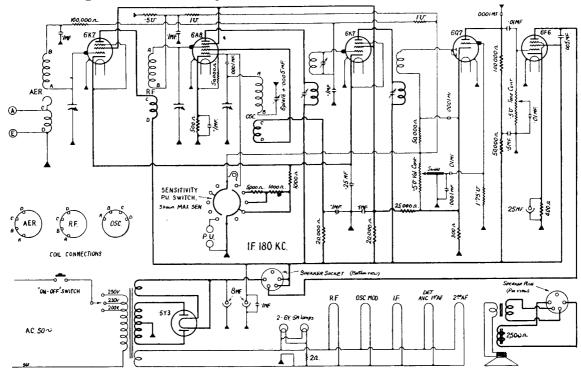
"Healing" A.C. Operated Broadcast Model 56E



Healing model "56E" is a six-valve receiver designed for broadcast coverage and operation from 200—250 volts, 50 cycles, A.C. mains. It is housed in a console type cabinet and is fitted with a ten-inch diameter loud-The field resistance of the speaker is 2,500 ohms.

Five controls are fitted to this receiver. These are, in order from left to right, for sensitivity and gramo, switching (3 positions sensitivity, fourth position, gramo,); volume; tuning; tone (continuous); and power control. A sixth control is fitted to the side of the power transformer casing for adjustment of the receiver to suit different supply voltages.

The design of this receiver is fairly straightforward, and no difficulty should be experienced in following the the sensitivity control switch is in its "maximum" position before making any tests. Note that this control regulates the bias on both the R.F. and I.F. valves. The I.F. used in this receiver is exactly 180 KC.

OPERATING VOLTAGES.

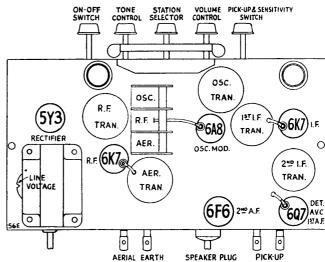
The following measurements were taken with a "1,000 ohms per volt" meter between the socket contact indicated and chassis. During the tests the aerial was disconnected, the sensitivity switch was at the receiver was detuned from any signal. The "50 volts" scale of the meter was used for the enthedren and the receiver was deforted by the standard for the enthedren and the sensitivity of the

was used for the cathode measurements and the "250 volts" scale for all others.

6K7, R.F. Amplifier: Plate, 240 v.: screen, 80 v.; cathode, 6 v.

6A8, Frequency Converter: Plate, 240 v.; screen, 80 v.; cathode, 5 v.; oscillator plate, 145 v.

6K7, 180 KC. I.F. Amplifier: Plate, 240 v.; screen, 80 v.; cathode, 6 v.



6Q7, Detector, A.V.C. Rectifier and Audio Amplifier: Plate, 90 v.; cathode, 1.5 v

6F6, Output Pentode: Plate, 220 v.;

screen, 240 v.; cathode, 15 v.

5Y3, Rectifier: The unfiltered output voltage from the rectifier should be 380 v. D.C. This may be measured directly (between one filament pin and chassis) or indirectly by measuring the voltage drop in the speaker field. This should be 140 volts which, when added to the filtered high-tension voltage makes up the required total of 380 volts.

SPECIAL NOTE.

The first audio valve biasing system in this "Healing" model is of the "bleed" type, and as no cathode by-pass is used on the 6Q7 in this model, it is suggested that an improvement in performance can be obtained by shunting the 300 ohms bias resistor with a low-voltage, high-capacity, electrolytic condenser,