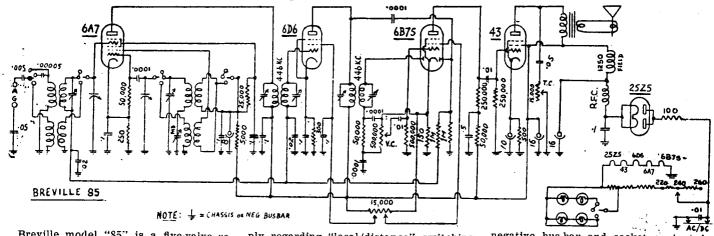
## "Breville" A.C./D.C.-operated Dual-Wave Mantel Model 85



Breville model "85" is a five-valve receiver designed for dual-wave coverage and operation from 220-260 v., A.C. or D.C. power supplies. This receiver is of the mantel type and is fitted with four controls, these being for volume, tuning, tone (continuous) and wave-change (with extra position for "local broadcast" reception). The loudspeaker employed is a 6-inch diameter unit with a field-coil resistance of 1,250 ohms. This model was marketed during 1937

In its general design, this model follows the lines of model "81" (see above) very closely and the same remarks ap-

ply regarding "local/distance" switching and alignment. Major variations between the two models are provided by the "universal" power supply system and the valve complement changes necessary as a result of the alteration in power supply arrangements. Points to watch are the complete isolation of the aerial and earth terminals and the danger attendant on accidental chassis-earth shorts when working with "positive ground" supply mains.

**Operating Voltages** 

The following measurements were made with a 1,000 o/v meter between the

negative bus-bar and socket contact indicated. The receiver was operated on 240 v. A.C. mains and was tuned to a point of "no signal."

6A7, Frequency Converter: Plate, 150 v.; screen, 70 v.; cathode, 2 v.; osc. anode grid, 140 v.

6D6, 446 kC. I.F. Amplifier: Plate, 150 v.; screen, 70 v.; cathode, 2 v.

screen, 70 v.; cathode, 2 v. 6B7S, Detector, A.V.C. Rectifier and A.F. Amplifier: Plate, 25 v.; screen, 15 v.; cathode, 1.5 v.

43, 25 v. Heater Output Pentode: Plate, 140 v.; screen, 150 v.; cathode, 20 v.

25Z5, Rectifier: Rectified Output, 230 v. Note use of 100 ohms "surge limiting" resistor in series with lead to paralleleid anodes.