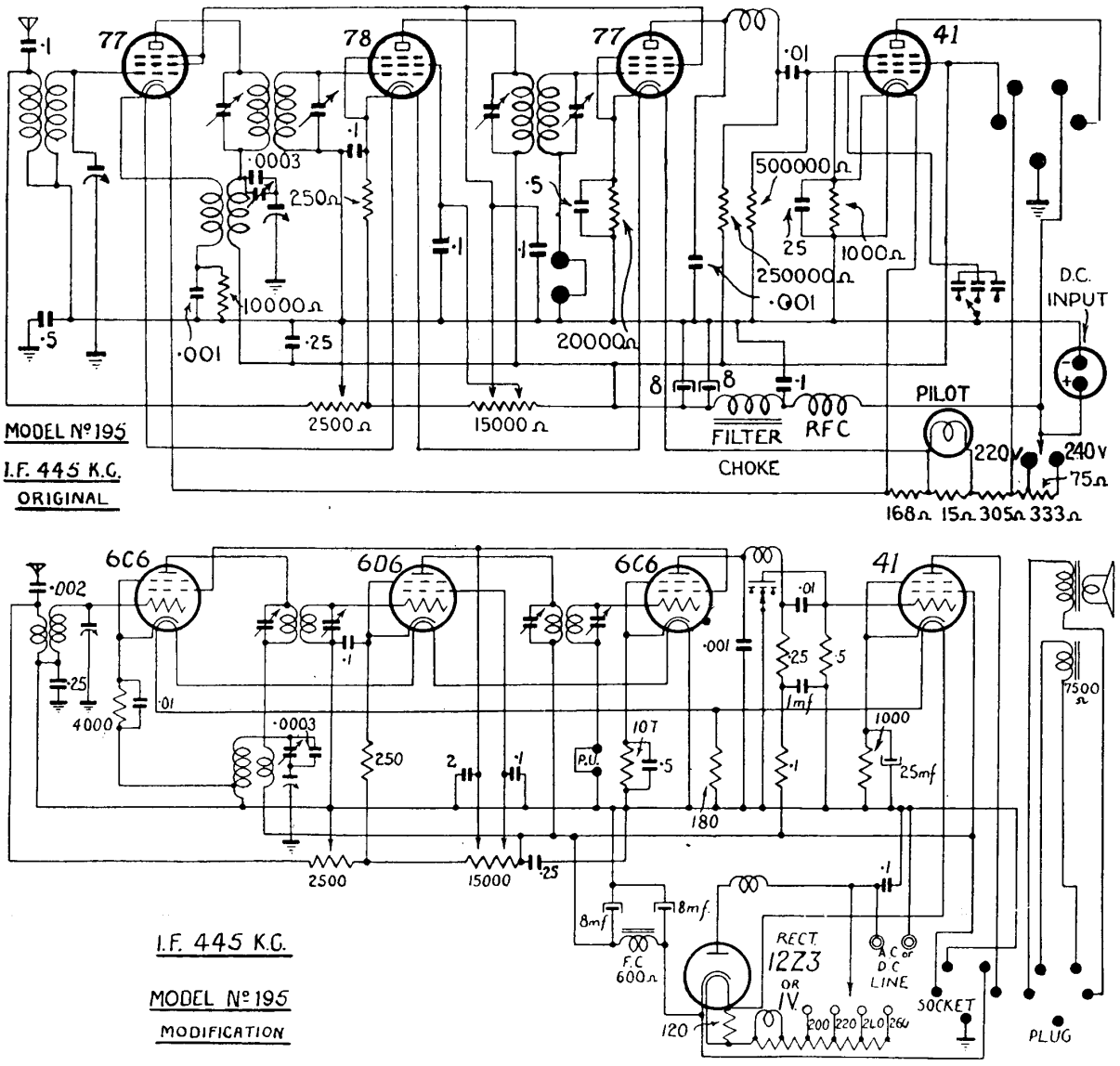
"Tasma" D.C. and A.C./D.C. Broadcast Models 195



Tasma model "195" was originally released, late in 1933, as a four-valve receiver designed for broadcast coverage and operation from 220-240 volts D.C. mains. About six months later (May, 1934) a rectifier valve was added, so that the receivers released from that time on were suitable for operation on either A.C. or D.C. mains. In addition to this change, alterations were made in the valve complement and some minor modifications were made in the circuit arrangement; circuit diagrams of both versions are therefore presented for convenience of reference.

Both versions of this "Tasma" model are fitted to console cabinets and both are fitted with three controls, these being for volume, tuning, and tone (three positions). The loudspeaker in each case is an 8-inch unit with a field-coil resistance of 7,500 ohms—the field being operated between a high-voltage D.C. point and earth, and filtering being effected by a separate choke in each case.

The circuit arrangements employed in these receivers are almost identical, but minor points of difference will be noted, such as the variation in the "autodyne" system; the arrangement of the power supply filter system; and the valve heater sequence. In connection with the latter, it should be borne in mind that the type 41 output pentode has a heater current rating of 0.45 A., whereas the other types used in these receivers only require 0.3 A. Consequently, shunts are provided for the excess current; these shunts being the 168 ohms resistor (to the left of the pilot lamp) in the D.C. circuit, and the 180 ohms resistor (to the right of the second detector bias system) in the A.C./D.C. circuit. Note also that the 120 ohms shunt across the rectifier heater is only correct when a 12Z3 rectifier (12.6 v. heater) is employed; some of these receivers are equipped with a type 1V rectifier (6.3 v. heater), in which case the rectifier heater shunt has a resistance of only 60 ohms. These heater shunts carry 150 mA. continuously and this fact must be borne in mind should replacement be necessary at any time.

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