LUCAS WORKSHOP INSTRUCTIONS

CONTROL BOXES MODELS 3GC AND 5GC

SUPPLEMENTARY INFORMATION TO SECTION F-6 ISSUE 1

Two additional current-voltage regulators, models 3GC and 5GC, are being produced, primarily for overseas manufacture and marketing—model 3GC being made in India and the Argentine, and 5GC in Australia. The new units are interchangeable with each other and with model RB310. Internally, the design used for model RB340 has been employed and information on setting procedures, internal circuit and electrical values given in SECTION F-6 applies also to the new units. When correctly set, the regulators (as in model RB340) maintain load balancing up to the maximum capacity of the associated generator and also ensure that the trickle charging current into a fully charged battery does not exceed the appropriate 20-hour rate. The units are designed to operate under all normal conditions of vibration, humidity, dust and corrosion, and in ambient temperatures up to 83°C. (181.4°F.).

Bases, Covers and Terminals

Both units are carried on deep, rubber-mounted, metal base pressings, that of model 5GC being identical with the base of model RB310, as shown in SECTION F-4 ISSUE 2 Fig. 1 (but incorporating the later feature of cover non-reversibility).

The chief distinguishing features of the new units are the two-screw secured protective covers. The cover of model 3GC is a black phenolic moulding similar to that enclosing model RB340, while the cover of model 5GC is of natural-finish deep drawn aluminium similar to that enclosing model RB310. Screw-and-clamp type terminals are fitted to all units at present produced, the three terminals being designated 'B', 'F' and 'D', except for Tem-Lucas versions of model 3GC in which these terminals are designated 'BAT', 'CAM' and 'GEN'.

