RB340 — SUPPLEMENT TO PART 4

PUBLICATION 1448 Ex. 5th Edition, 1963
(Generator and Control Box Tests)

Recent design modifications made to RB340 control boxes, affects the servicing data given in the above publication. The revised details are as follows: —

REVISED VR AND CR GAP SETTINGS FOR LATER UNITS

The use of non-magnetic material in the top gap of voltage and current regulators has now been discontinued, this took effect in December, 1963. Therefore, when setting the air gaps of later units, a thicker gauge must be used to allow for the space formerly occupied by copper; the total gap measurement being unchanged. To do this, the gauge thickness of 0.045" (1.14 mm.) previously given must be increased by 0.007", to 0.052" (1.32 mm.).

The top gap of the cut-out relay remains unchanged.

Identification of Modified Units

Whether or not a unit is fitted with copper shims can be ascertained either by inspection or by reference to the Part No. suffix letter. The letter at which the modification was introduced is given below for all units at present in production or specified. Future units (identifiable) by having numerically later Part Nos. than those listed) will incorporate the modification from suffix letter "A".

Control Box Part Numbers with Suffix Letters Denoting Deletion of Copper Shims from VR and CR Bobbin Cores

37330 — E	37353 — D	37378 — B
37331 — E	37354 — D	37387 — B
37342 — E	37362 — D	37391 — B
37344 — E	37363 — D	37392 — D
37347 — E	37374 — B	37419 — B

Since this publication was published, certain other modifications have been introduced, as follows:

CONTACTS RESISTOR

The contacts resistor used in units controlling generator model C48 has been increased in value from 40 ohms to 80 ohms and is identifiable by a dab of orange paint.

FIELD PARALLEL RESISTOR

The field parallel resistor in the above units has been increased in value from 40 ohms to 100 ohms and this, also, is identifiable by the colour orange.

BACK GAP

The measurement limits for the narrowest part of the (non-adjustable) back gaps have been increased from 0.030" — 0.035" (0.76 — 0.89 mm.) to 0.030" — 0.040" (0.76 — 1.02 mm.).

CUT-OUT RELAY "FOLLOW THROUGH"

The "follow through" limits of the cut-out relay moving contact have been modified from 0.010" — 0.020" (0.25 — 0.51 mm.) to 0.010" — 0·035" (0.25 — 0.89 mm.).

The final "follow through" measurement of the moving contact blade may only be obtained when setting the drop-off voltage. An approximate first setting is obtained by inserting a 0.015" (0.38 mm.) thick flat steel feeler gauge between the armature and the copper shim on the bobbin core, and then adjusting the fixed contact bracket until the two contacts just touch.

Note: Certain models of the C42 range of generators now incorporate a new field winding having an ohmic value of 5.25 ohms (previously 4.5 ohms). Suffix letter changes have been made to the machines concerned, which will assist in identification. They are as follows:—
22900 — E, 22901 — E, 22902 — E, 22903 — B, 22904 — D, 22906 — B.

The new field value should be noted when carrying out TEST 2 on page 4, as the ammeter will register a value less than that for 4.5 ohm field generators.

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