

7. Retest and, if necessary, re-adjust until the correct drop-off setting is obtained.

This should result in a contact "follow through" or blade deflection of between .010 and .20 in. (.254 and .508 mm.).

8. Restore the original connections and refit the cover.

ADJUSTMENT OF AIR GAP SETTINGS

(See Fig. 13)

Air gap settings are accurately adjusted during production of the control box and should require no further attention. If the original adjustments have been disturbed, it will be necessary to reset as described under the following heading.

Armature-to-Bobbin core gaps of Voltage and Current Regulators

1. Using the correct tool, turn the adjustment cam to the point giving minimum lift to the armature tensioning spring, i.e. by turning the tool to the full extent anti-clockwise.
2. Slacken the adjustable contact locking nut and screw back the adjustment contact.
3. Insert a flat steel feeler gauge of .045 in. thickness (1.143 mm.) between the armature and the copper separation on the core face, taking care not to turn up or damage the copper shim. The gauge should be inserted as far back as the two rivets heads on the underside of the armature.

4. Retaining the gauge in position and pressing squarely down on the armature, screw in the adjustable contact until it just touches the armature contact.

5. Retighten the locking nut and withdraw the gauge.

6. Carry out the electrical setting procedure.

Contact "Follow-through" and Armature-to-Bobbin core gap of Cut-out Relay

1. Press the armature squarely down against the copper separation on the core face.

2. Adjust the fixed contact bracket to give a "follow-through" or blade deflection of the moving contact of between .010 and .020 in. (.254 and .508 mm.).

3. Release the armature.

4. Adjust the armature back stop to give a core gap of between .035 and .045 in. (.889 and 1.143 mm.). Check the cut-in and drop-off voltage settings.

CLEANING CONTACTS

Regulator contacts

To clean the voltage or current regulator contacts, use fine carborundum stone or silicon carbide paper followed by methylated spirits (denatured alcohol).

Cut-out relay contacts

To clean cut-out relay contacts, use a strip of fine glass paper—never carborundum stone or emery cloth.