

## Dynamo Regulator

The dynamo regulator unit is designed to replace the mechanical voltage regulator and cut-out used on many motorcycles using the **LUCAS E3 TWO BRUSH DYNAMO**. This dynamo is designed to charge a 6 volt system, but when connected to a Boyer Bransden Dynamo Regulator Unit it will charge 12 volts at over 120 watts without placing undue load on the dynamo windings. It will also replace the electronic aftermarket direct current regulator units.

The dynamo regulator unit uses a very efficient switching device controlled at over 500 times/sec., it's on/off ratio is adjusted electronically by a circuit measuring the dynamo voltage, this switch controls the magnetic field of the dynamo stator without the power loss in the stator coil winding present with a normal direct current system.

Also incorporated is a method of maintaining the magnetic field when the switching device is in the off condition. This control is so good that even without a battery, lighting circuits and horn can be run direct from the dynamo without flicker. (Ignition can only be fed when a battery is fitted as no voltage is available at kick-start speeds). With a 6 volt system, charging will start at 1200 RPM; on a 12 volt system 1600-1800 RPM is required. Reduced output voltage will be available from 500 RPM upwards. If lighting is run direct without a battery then the bulbs will be at half brilliance at tick over and full output at 2500 RPM. Battery charging is by voltage control with current regulation, if higher charging currents are prolonged. Stability is maintained by internal thermistor control. A dynamo that has been rewound for 12 volts will start charging at a lower RPM and will work well with this unit.



Four units are available –

- 6 volt positive earth
  - 6 volt negative earth
  - 12 volt positive earth
  - 12 volt negative earth
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- Size: 66mm x 62mm x 35mm
  - Weight: 200 grams
  - 4 x 6mm mounting holes

The Lucas voltage control cover can be fitted over the regulator box to give an original appearance.