

The Rooster RR6-150 (6v) and the RR12-150 (12v) are combined Single Phase Regulator Rectifier modules rated at 150 watts and are suitable for fitment to most classic motorcycles equipped with a permanent magnet alternator. The module can be used on machines with either Positive or Negative earth electrical systems.



The easiest way to install a Rooster RR6-150 or RR12-150 is as follows:-

Remove the original rectifier and regulator (if fitted). Often the module can be connected directly to wires that were connected to the original rectifier and the job is over.

The RED wire is the module +ve output wire and should be connected to the motorcycle frame if your machine is +ve earth or the +ve battery connection if the machine is wired for – ve earth.

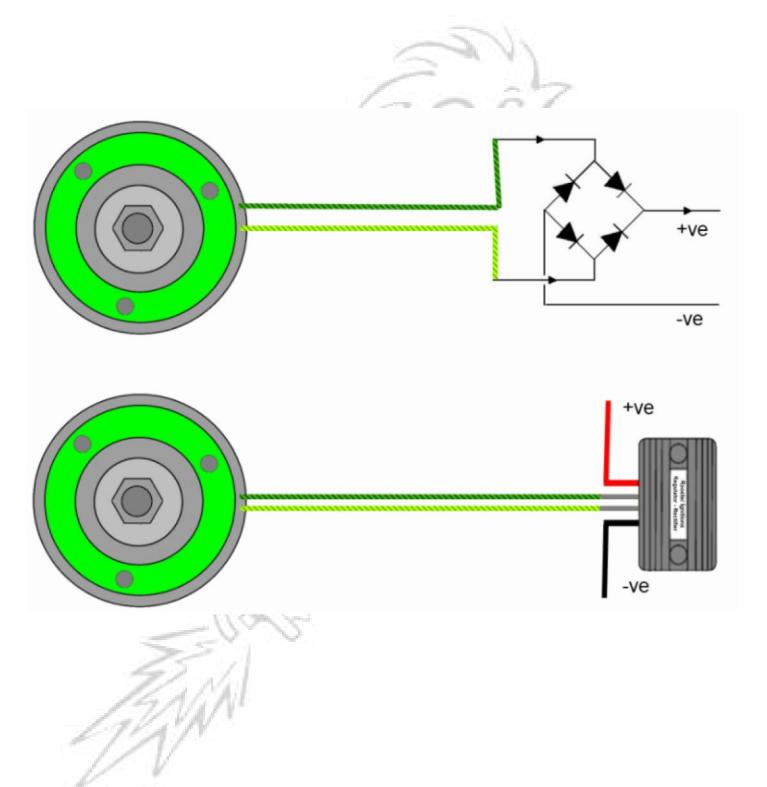
The BLACK is the module –ve output wire and should be connected –ve battery terminal if your machine is +ve earth or the frame if your machine is wired for –ve earth.

The two remaining wires on the module will be coloured either YELLOW, WHITE or GREEN, dependant on the modules output voltage. These should be wired to the output wires of the alternator. As this is AC it does not matter which of the two alternator output wires are connect to which of the two module input wires.

Please test the module is charging you battery by starting your machine and placing a meter across the battery whilst revving the bike.

You should get readings between 6.4 and 7.2 volts from an RR6-150 and between 12.8 and 14.4 volts from a RR12-150 module.







Please Note:

This module is not suitable for 3 phase alternator systems and you should ensure that your motorcycle is using a single phase unit.

Generally single phase alternators have 2 output wires and 3 phase models have 3.

If your alternator has more than 3 output wires then it may be designed for an ET ignition system such as the BSA Bushman models. If this is the case please contact us for further details.

Some single phase alternators have 3 wire connections like a 3 phase system. In these cases they usually switch alternator coils in and out of the circuit when the lighting is used in an early attempt to regulate the alternator output.

This is not required when using the Rooster RR6-150 \ RR12-150 and it is better to rewire the machine to pass all of its power into the regulator rectifier module.

This involves linking a couple of the alternator wires together. Which two wires will depend on the model of motorcycle you own.

This is a relatively simple modification and should not take long to achieve.

`12v Conversion with an RR12-150

Many machines originally fitted with 6v battery systems can be upgraded to 12v by installing an RB12-150 module and replacing the battery, horn, ignition coil and bulbs with 12v equivalents.

To ensure your existing alternator is capable of supplying enough voltage to be rectified to 12v DC operation, disconnect the alternator wires and connect a Multimeter \ Voltmeter set to AC (~) and a voltage range in excess of 50v.

Start the machine and you should have a minimum value of 20v AC when the engine is held just above tickover (idle).

Alternators with values below this are not suitable for a 12v conversion without an alternator replacement.



Known Alternator Wiring

Generic 2 Wire Lucas

- 1. Green\Yellow
- 2. White\Green

Wipac (1G1768) BSA Bantam D10\D14\B175 Triumph Cub T20

- 1. (Light) Green
- 2. Yellow
- 3. Orange

Note: To bypass the lighting switch and provide the full alternator output to the regulator link wires 2 and 3.

Generic 3 Wire Lucas (Single Phase)

- 1. White\Green (Light Green)
- 2. Green\Yellow (Mid Green)
- 3. Green\Black (Dark Green)

Note: To bypass the lighting switch and provide the full alternator output to the regulator link wires 2 and 3.

The following classic Lucas Alternators may not be suitable for this module

RM12

Red

Green

Purple

Yellow

Grey?

Energy Transfer 1

Black\Yellow

Black\White

Energy Transfer 2

Black\White

Black Yellow

Red

Brown

Brown\Blue

Rooster Ignitions, 52 Minstead Road, Bournemouth, BH10 5JZ, England Telephone; +44 (0)7929192832 – Fax: +44 (0)7092 230415

Web: <u>www.roosterignitions.com</u> Email: <u>support@roosterignitions.com</u>



Bantam Installation Notes:

Bantam D10, D14, B175 Colours....

Alternator - Yellow, Light Green, Orange.

Rectifier DC - Translucent (+ve Earth), Brown (-ve)

Rectifier AC – Light Green, White

To send the full power to the regulator regulator...

- 1/. Disconnect the battery.
- 2/. Link the Orange and Yellow wires from the Alternator then connect this union to either of the AC wire coming from the module.
- 3/. Take the Green wire from the original rectifier and connect it to the 'other' AC wire coming from the module.
- 4/. Take the Translucent wire from the original rectifier and connect it to the Red wire coming from the module.
- 5/. Take the Brown wire from the original rectifier and connect it to the Black wire coming from the module.
- 6/. Take the White wire from the original rectifier and insulate it with some tape or remove the bullet connector from the loom so that it is not used and cannot 'short circuit' to the frame, metalwork or any other wire.
- 7/. If required, you can no remove the redundant rectifier.
- 8/. Reconnect the battery.