



FITTING INSTRUCTIONS

REGULATOR/RECTIFIER RR29

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Regulator/Rectifier for use with a permanent magnet generator.

The CB750A and the GL1000 Goldwing have a separate regulator and rectifier. The GL1100 and GL1200 Goldwing use a combined regulator/rectifier. The RR29 is that combined regulator/rectifier. It can also be used to replace the separate regulator and rectifier used on the CB750A and the GL1000 Goldwing.

ORIGINAL BIKE WIRE	RR29 WIRE	FUNCTION
3x Yellow	3x Yellow	3 phases from generator stator
2x Red	2x Red	Charging current to battery (+)
2x Green	2x Green	Charging current return from battery (-)
Black	Black	Volt sense wire from IGN switch (not used with RR29 *)

* The volt sense function is internally wired inside the new RR29 module. The black wire in the bike harness becomes redundant, just leave that wire alone, naturally terminating in the 8 pole connector block.

If the battery still fails to charge correctly, these fault finding notes may be of help.

Start with the generator:

Generator faults generally result in poor charging at low speeds. The stator resistance is typically 0.75Ω measured between any 2 phase wires, all 3 combinations must measure to the same value. Any turn to turn shorts in the stator winding, or winding to ground shorts, will result in reduced charging capability and can damage the original regulator/rectifier. With the RR29 **NOT YET CONNECTED** start up the bike and measure the AC volts between all possible pair combinations of the 3 yellow wires from the generator at the 8 pole block connector on the bike wire harness. The voltage should measure between about 15V AC and about 18V AC at idle (950 RPM). If voltage is too low, or different between pair combinations, then the generator is defective. A very good test tool can be made by wiring up a 55 Watt headlamp bulb to a pair of the yellow wires. The bulb should light up brightly when plugged alternately into each of the 3 possible combinations of 2 wires. Brightness must be the same in all 3 cases. This shows that the generator will actually produce power, not just voltage.

Wring to the battery:

Faults in the green and red battery circuit generally result in poor battery charging at low speed, and very poor charging at higher speeds. With everything connected and the engine running at over 2000 RPM, the battery voltage should be about 14.2V to 14.8V measured on the battery itself, not the fusebox nor anywhere else. Voltage less than around 13V is no good. A good test is to use two pieces of house wire (use at least 1.5mm^2) and bypass the entire red and green circuits on the bike. Connect one side of the first test wire directly to the + of the battery, and the other side to either red of the 8 pole connector block (stick it into the back of the connector). Connect one side of the second test wire directly to the - of the battery, and the other side to either green of the 8 pole connector block. Start the engine, running at over 2000 RPM should charge the battery at 14.2 to 14.8 volts.

