



PME single phase 12V regulator/rectifier for classic British motorcycles

The PME solid state regulator/rectifier is straight forward to fit, gives better control of the charging system than a zener diode and can be used with positive & negative earth systems up to 200 watts in power. If using the high power 16 Amp RM23 stator we recommend this unit is attached to a heat sink or mounted in the air flow. A fuse of 15-20 amps rating should be fitted to isolate the battery from the electrical system if a fault occurs.

6V alternators with 3 wires (6 poles instead of 9) can be converted to 12 volts using our regulator/rectifier. The output is sufficient for points ignition and lighting but will not run an electronic ignition and lighting.

This unit can be used with a PME battery eliminator p/n BE1 or BE2, these work well with 3 phase alternators or the 16 amp (RM23 pattern, Lucas 42739) single phase unit. Other types may not provide enough power to start the engine.

Fitting instructions

1. Remove the battery from your bike. Check if your system is positive or negative earth.

IMPORTANT: An accidental spark or incorrect polarity while installing your new regulator/rectifier can destroy it. Units returned with burnt out rectifiers caused by wrong polarity or short circuiting will not be replaced under warranty. Check twice before connecting the battery!

2. Locate and remove the zener diode, this is not needed anymore.
3. Locate and remove the old rectifier, it is usually black and has three fins.
4. There should be three wires connected to the rectifier. The green/white and green/black go to the generator. The live wire is usually brown/white. This goes to the un-grounded side of the battery
5. Connect the two wires at the old rectifier to the two yellow wires on the new regulator/rectifier unit. **It does not matter which way round the yellow wires connect.**
6. Mount the new unit in an area with good air flow. The case is electrically isolated and does not have to be grounded.
7. For positive earth, connect the red wire to ground and the black wire to the battery negative terminal.
8. For negative earth, connect the black wire to ground and the red wire to the battery positive terminal.
9. Check everything is connected correctly then re-fit the battery.

12 volt conversion:

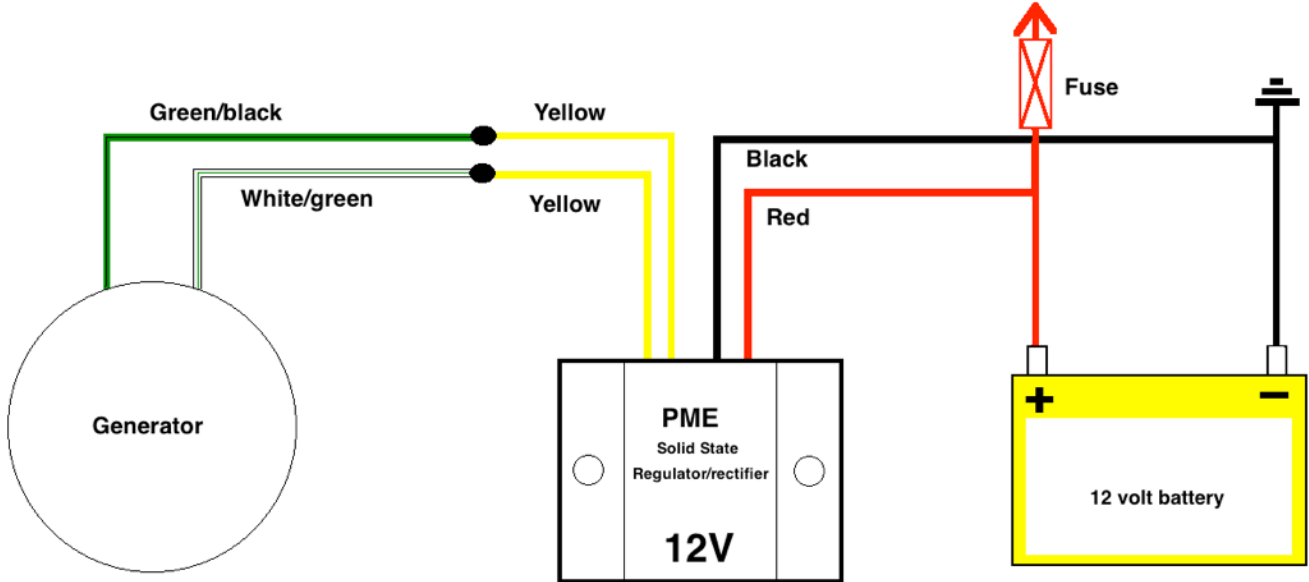
Simply connect together the green/yellow wire and the green/black from the generator with a double connector, this is now connected to one of the regulator's yellow wires. The green/white is connected to the other yellow

Double check you have the polarity correct as the regulator can be damaged if incorrectly connected

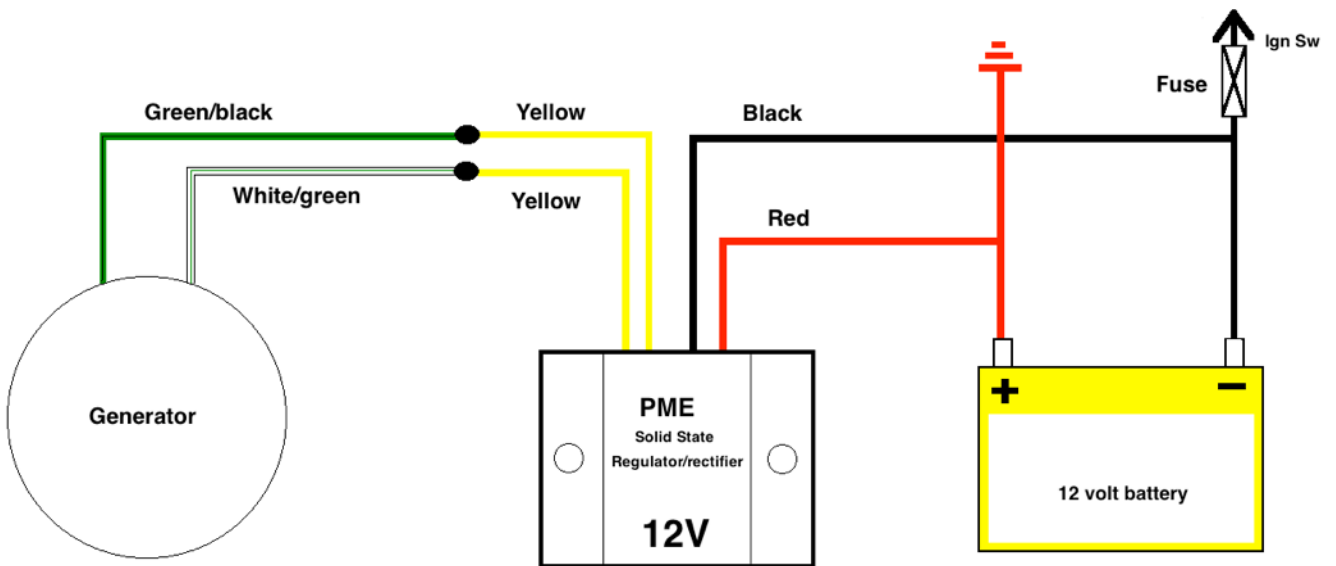
The regulator rectifier must be permanently connected to the battery or battery eliminator.

If a switch is placed between them, or the DC wires are disconnected while the engine is still turning, the regulator rectifier will be damaged!

Negative Earth:



Positive Earth:



12v conversion of 6 volt, 3 wire (6 pole) generator:

Note:

Early Lucas generators had light green, mid green & dark green wires. Join the mid and dark green wires for 12 volts.

Wipac:

These had orange, light green & white. Join the light green and orange for 12 volts.

