



XT125/250/500

12 Volt Conversion

Skill Rating:



Thank you for purchasing our XT 12 volt conversion kit. This kit is a “plug and play” add-on with neither modification to the generator nor any wiring needed. Using 12 volts instead of 6, plus an efficient full wave rectifier, means that more of the generator’s output is available for lighting with less power lost within the electrical system. With a 12 volt system you will notice that indicators become more reliable, the headlamp is noticeably brighter (even when using the same wattage bulb) and charging of the battery is better controlled. Basic kits convert the generator to 12 volts only, we offer additional “accessory packs” with options on 12 volt battery, bulbs, indicator relay & horn. These are available to purchase separately.

The kit is available for XT125/200 1982 & 83 & XT250 1980–83 (order number 12VC–4) as well as all XT500 models, including US models with CDi (order number 12VC–Basic). Electrical connection is the same for all models; you may need to refer to the standard workshop manual either to locate the electrical parts or for details on removal of the seat and fuel tank.

There are no changes needed to the ignition, which remains as standard in all cases.

The XT500 version is 100% compatible with all our XT500 electronic ignition kits

The accessory pack options differ only in whether they contain a battery, a battery eliminator or neither. All contain the running bulbs; tail light, indicators & instrument lamps also indicator relay & a horn. Headlamp bulbs need to be chosen separately according to the market variation your bike has. Rex’s also offer an H4 headlamp conversion to replace sealed beam units and also to allow bulbs to be bought at most petrol stations.

- **The Basic kit gives 12 volts from the generator ONLY.**
- **The accessory packs contain all the right parts and ensure that your conversion will work correctly.**

Basic + Option 1. No battery or eliminator. Recommended where a battery is to be bought locally.

Basic + Option 2. Comes with a battery eliminator. Recommend for off road machines.

Basic + Option 3. UK only. Comes with the correct gel battery for road going machines.

If a basic kit is mixed with non genuine PME parts and does not work as expected, you will be required to fit the correct genuine PME parts BEFORE our technicians can commence trouble shooting.

You must not use:

LED bulbs (LEDS are OK for the indicators only)

HID ‘projector’ bulbs

Lithium-ion batteries,

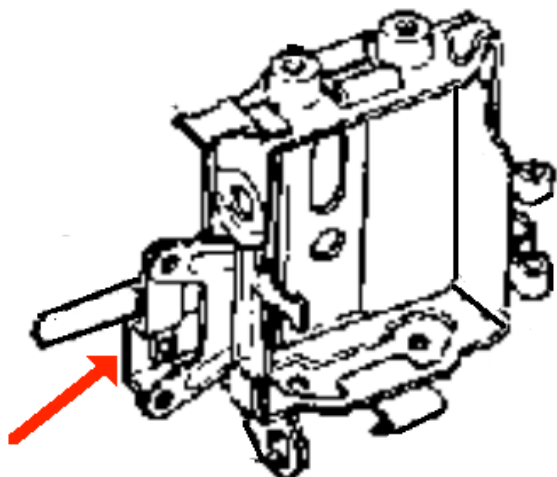
Battery eliminators other than our BE1 or BE2.

These kits are intended to convert the power source of the lighting system from 6 to 12 volts, it is a condition of sale that the installer assumes all responsibility and liability in ensuring that the system complies with local vehicle lighting laws and safety regulations.

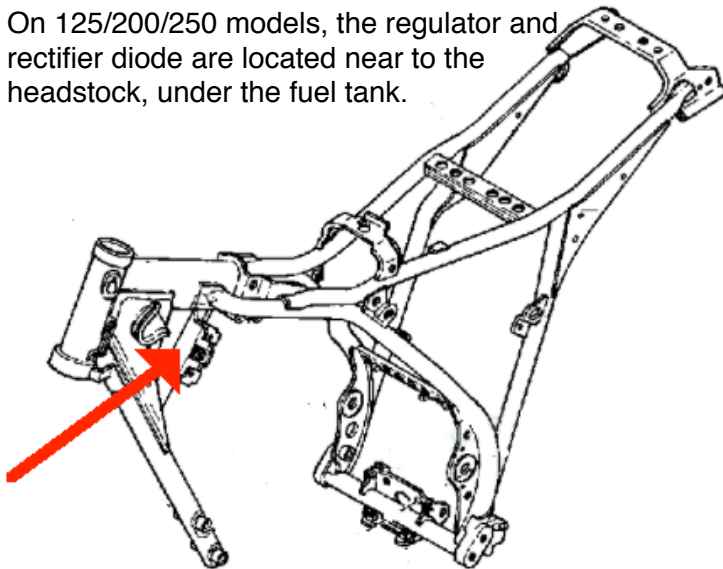
Fitting Guide

1. Locate and remove the 6 volt regulator and the small black rectifier. The regulator has a single yellow wire (sometimes yellow & white but has the same function as a yellow wire). The rectifier has two wires, one red and one white (some 250 models white is replaced with green/white).

On XT500 models, the regulator & rectifier diode are under the left side panel mounted on the battery carrier.



On 125/200/250 models, the regulator and rectifier diode are located near to the headstock, under the fuel tank.



2. Remove both the regulator and the rectifier from the bike.

3. Fit the new combined regulator/rectifier unit to the bracket where the old regulator was fitted. Place the black wire, with the ring terminal, under the bolt. Make sure a good ground connection to the frame is made. If the frame has been powder coated or painted, a poor connection will result. If the 12 volt system over—charges the battery, a poor earth at this point is the likely cause.

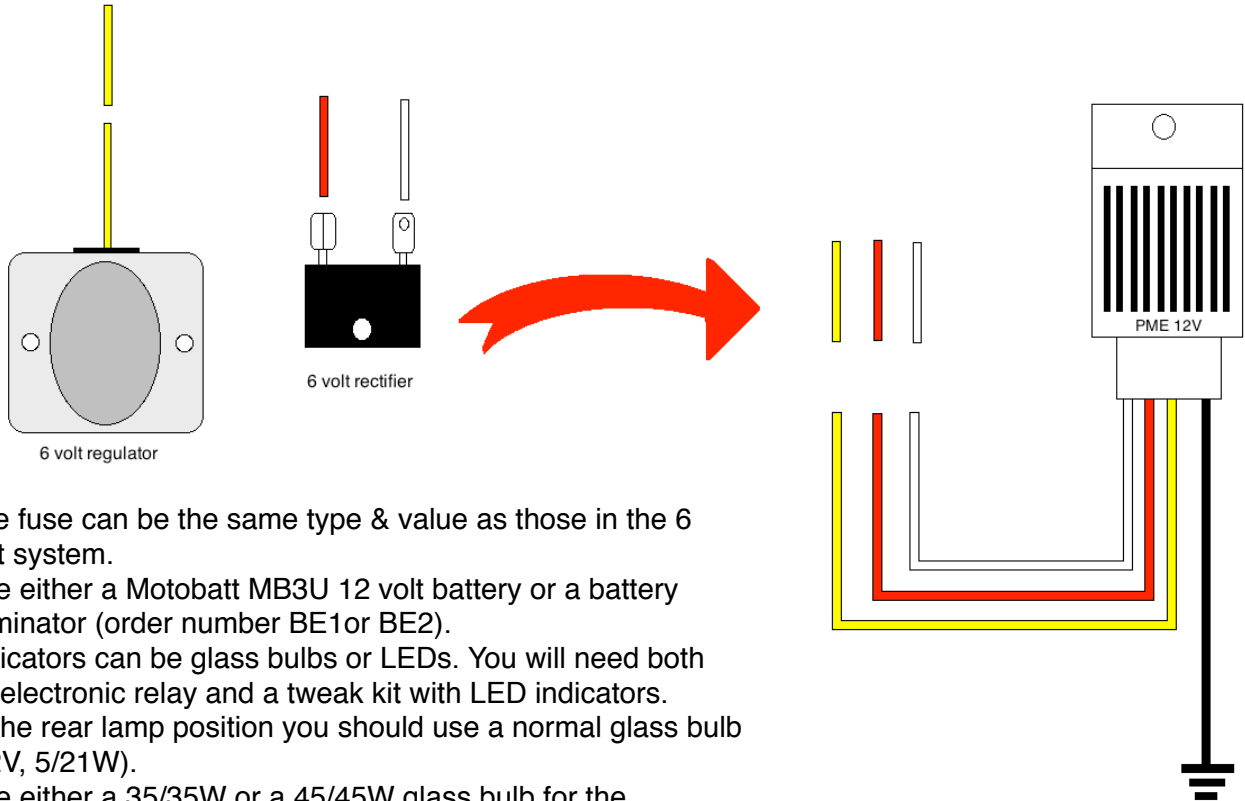
4. Connect the wires from the new 12 volt unit to the wires that were previously connected to the 6 volt regulator and the 6 volt rectifier. The new connectors will match a standard loom – wire colours will match too. Note: older bikes may have faded wire colours, a red may have faded to pink for example.

5. Replace the 6 volt battery, bulbs, indicator relay & horn with 12 volt items. We recommend you replace the battery with a motobatt MB3U

Serious injury and/or damage to your motorcycle can result if you apply 12 volts to a 6 volt battery. Batteries can explode or leak acid if the wrong voltage is applied to them. Battery acid is highly corrosive and toxic. We recommend only AGM or sealed lead/acid batteries, to reduce the possibility of injury and/or damage to equipment.

6. Check that all the wiring is safe and secure and does not interfere with other controls. Confirm the lighting is working correctly, according to the law in your country. This is the responsibility of the person fitting this kit. To check the system is charging, measure the battery voltage, at 2,500 RPM it should read between 13.8 and 14.7 volts regardless of whether the headlamp is on or off.

Wiring Guide



Tips

- The fuse can be the same type & value as those in the 6 volt system.
- Use either a Motobatt MB3U 12 volt battery or a battery eliminator (order number BE1 or BE2).
- Indicators can be glass bulbs or LEDs. You will need both an electronic relay and a tweak kit with LED indicators.
- In the rear lamp position you should use a normal glass bulb (12V, 5/21W).
- Use either a 35/35W or a 45/45W glass bulb for the headlamp. Halogen or normal bulbs can be used.
- If you wish to use a USB powered device (to charge phones or to run a Sat Nav), the head lamp should not be more than 35 watts. We do not guarantee that the system will supply a USB device. If more power is needed use LEDs in the instrument illumination and pilot light.
- Never use a HiD "projector" or LED headlamp.
- Never attempt to use only the DC output to power all electrical loads.
- Not suitable for use with heated grips or clothing.

Available from www.rexs-speedshop.com – 12V accessory packs & optional heavy duty 12 volt lighting coils

