

Alien Electric Bicycle 24v Lithium Ion Conversion Kit

Firstly, I'd like to thank you for purchasing this kit allowing you to convert your boring old existing bike to an all singing, all dancing electric one! I appreciate your business!

Secondly, what I'd also like to do, is to make the process of installing the kit as painless as possible.

The first thing to be aware of is that there aren't all that many components to think about and it's all pretty straightforward. So, let's begin.....



The Process

Although this is one of my Alien Titan bikes, this is something like what you're aiming to achieve.

You'll be replacing your existing front wheel with the new one supplied, adding an electronic "thumb throttle" and replacing the brake levers with ones which cut power to the motor when applied (if required).

You'll also be adding an assembly below the bike seat which will hold the controller unit and onto which the battery pack is slid.

Step 1

Firstly, remove your front wheel and replace it with the complete wheel assembly supplied.

NB - THE WHEEL SHOULD BE LOCATED SO THAT THE MOTOR WIRE IS COMING OUT THE RIGHT HAND SIDE OF THE BIKE WHEN YOU ARE SITTING ON IT.

Also, please ensure that the locating washer is positioned against the fork leg so as **to stop the motor rotating within the wheel.**

Bring the wire up the fork leg and along the top tube to below the seat simply laying it in place at this time.



Step 2

Replace the brake levers with the new levers and attach the thumb throttle on the right hand side of the handlebars. Also, attach the "Displayer" on the bars. (Note that it is not technically necessary to replace your brake levers with the ones supplied but, when applied, these cut the power to the motor which is a legal European and UK requirement.)

Bring all cables along the handlebars and then the top tube to below the seat. Secure all cables including the motor

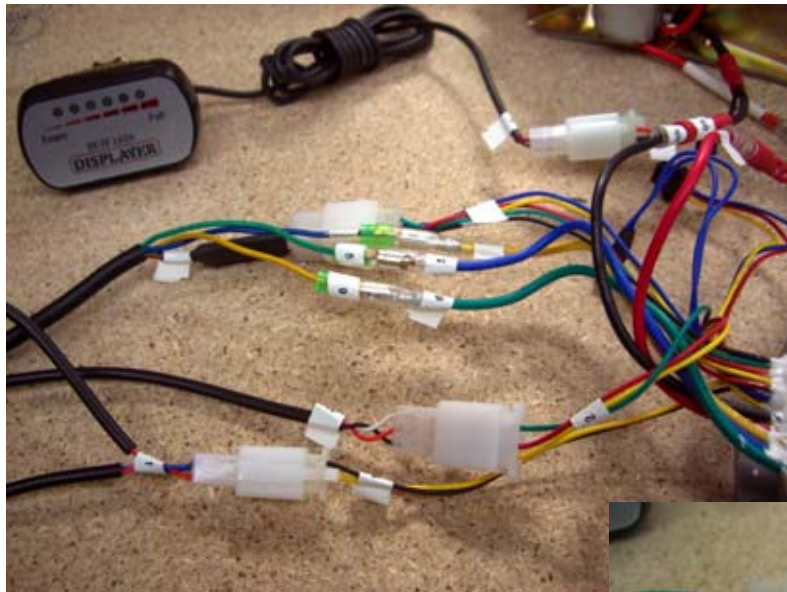
Step 3

Locate the controller mounting/battery holder consisting of the parts shown along with a packet of screws.



Step 4

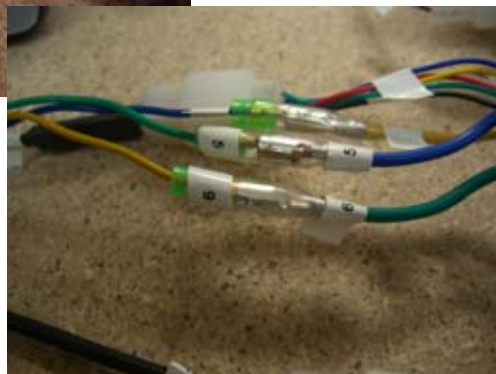
Mount the metal section of the unit onto the bike below the seat post as shown. At this time, ignore the two black plastic sections as these will be attached later.



Step 5

Locate the controller assembly and connect the cables which you brought to the back of the bike as shown. This has been made as easy as possible by the use of tags with numbers printed on them.

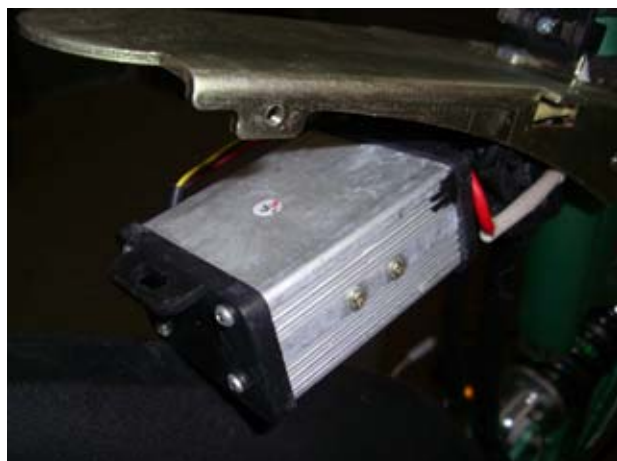
Identify the connector marked "1" and the matching connector marked "1" and simply push them together. Repeat for those marked "2" etc.



Step 6

The controller assembly should now be located in this position ready for the plastic sides to be added.

See also Page 4 "Modifications"



Step 7

Using the screws supplied, attach the two black plastic sections to either side of the metal unit ensuring that the controller is in place and that there are no trapped wires.



Step 8

Slide the battery pack onto the battery plate as shown.



Finally, switch the battery on using the keys supplied and then simply twist the throttle (NB Lock is spring loaded so push inwards). Please also note that the motor will respond immediately so either have the front wheel off the floor or be ready to walk forward.

Charging the Battery

Lithium Ion batteries are lighter than other equivalent batteries and MUCH lighter than Lead Acid batteries. They do not suffer from memory effect and also have a low self-discharge rate of approximately 5% per month, compared with over 30% per month in nickel metal hydride (NiMH) batteries.

However, to preserve your lithium-ion battery it should be charged early and often so when you come back from a ride, simply plug the bike into the charger regardless of how much power you've used.

The Battery Management System, integrated into the charger and the controller, will take care of how much charge the battery needs. Please note that if you're going to leave your bike for a long time then charge up the battery every now and then to ensure that the battery charge doesn't fall to too low a level. **NB IF YOU LET THE BATTERY GO FLAT FOR ANY LENGTH OF TIME, IT MAY NOT BE POSSIBLE TO RECOVER IT.**

Modifications

Many customers ask how they can modify the speed for “off road use only” of course:-

You are looking for two blue leads which come out of the controller and end in a small electronic device called a “potentiometer”. If you look closely you will see that the “pot” has a screw in it so, taking a small screwdriver, turn the screw as far clockwise as it will go. Please note that, although the speed will go up, your range will definitely go down. It’s then a matter of trial and error to get it right for the journeys you are doing - long distance, turn down, short distances but want the extra speed, turn up.

Please also note that, as per the listing, this modification can only legally be used off road in the UK and I do not accept any responsibility for any repercussion resulting from carrying out this modification!