



Electric Bike Conversion Kit
Installation's Manual

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1. Before installation

Before installing this kit please note that there is a minimum skills required to run a successful installation. If the end user feels uncomfortable to carry on the assembly process it is advised to take it to the nearest dealer or good bicycle shop with workshop facilities. To run a successful installation the assembler will need the basic workshop tools too. Please read the next chapter

2. Tools required for installation

All good bicycle workshops will have all necessary tools to carry on the assembly process:

Tools required for installation:

- Set of allen (hex) keys, 2-6mm
- Cable cutters
- Crank puller
- Bottom Bracket Tool
- 19mm spanner (wrench)
- Set of tyre levers
- Bicycle pump

3. Installing the motor

Step 1

Fit the bicycle tyre along with the rim tape to the new OXYDrive wheel.

Step 2

Try to slot the motor into the forks drop outs. Please note that some forks may only have a 9mm drop outs. The motor axle is 10mm and therefore may not fit.

IMPORTANT: The motor's axle must slot in to the dropouts easily with no use of any force. If you fork dropout is too narrow please use a file to file off the surface by 0.5 mm on each side.

Step 3

It is generally better to direct the motor cable towards the bottom. It will prevent then any possibility of water getting into the motor. For mountain bike users this position of motor cable brings higher risk of ripping the motor cable in the off road terrain.

Cable from the right for disc brake motors:



Cable from the left for V-brake motors:



Step 4.

It is crucial to pay extra attention of the order of fitting the locking nuts.



Step 5.

Securing the front wheel is very important. The locking nuts should be well tight with a minimum torque of 12Nm.

IMPORTANT: The locking nuts should be regularly checked every few rides to ensure the wheel is securely fitted.

4. Installing the battery unit



The battery holding unit should be fitted normally in the place of the water bottle cage. Most of the bicycles already have ready made frame decals where the water battery holding unit can be fitted.

This manual does not give any recommendations on the bolts size or torque as it all depends on the each individual frame requirements. Please note that battery holding unit should be well secured to the frame. Please use at least the same torque as for the water bottle cage. Due to higher weight it is advised to use additional 10mm wide zip ties to secure the battery holding unit to the frame. This is particularly advised to the off road user (mountain bikers)

Warning to high performance tubing

Please note that some manufacturers use high performance double or even triple butted tubing's to reduce the weight of the frame. It means that frame's tubing's are very weak in some sections and should not be pressed with any kind of clamps. Please pay extra attention when securing your battery holding unit with additional zip ties to avoid the damage to the frame.

5. Installing pedal assist sensor

Before attempting this step please note that you'll need the crank puller and the bottom bracket tool.

The speed sensor can be located on either left or right side of the bottom bracket. It entirely depends on the type of the bike and the available space for the speed sensor and the magnet disc.



The speed sensor should be located under the bottom bracket shell.



The magnet disc should be fitted on the axle with magnets located approx 1-3mm from the speed sensor.

IMPORTANT: OXYDrive is currently compatible with the square tapered bottom brackets. In some case if the axle is too short or there is not enough room the bottom bracket might need to be replaced for the one with longer axle.

6. Fitting the LCD console

Installation of the LCD console is fairly easy. The console should be located on the left hand side of the handlebars. This can be slotted on the handlebars and should be secured with allen key.



Fitting the throttle and the power setting buttons will depend on the type of the bike and this has to be tried by each user. Throttle can be located on either left or right hand side of the handlebars. If fitted on the left the thumb twist will have to move forward then.

7. Installing the brake cut off switches.

Brake sensors should be fitted directly on the brake cable and the outer. It is important that the brake can run smoothly through the sensor.



8. Connecting the connectors.

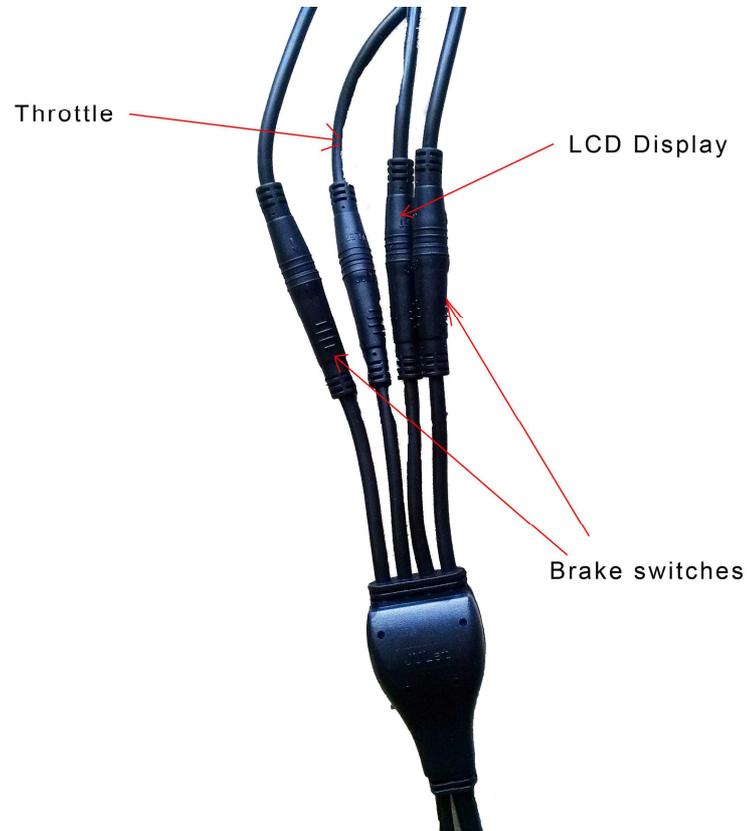
When connecting the connector the extra attention should be paid. Each connector has an arrow molded on the surface. When joining connectors it is crucial that the arrows always are pointing out on each other. In this set the right pins meet their joining sockets.

Please note that neglecting this step may cause the shortcuts in the entire system which will cause the permanent damage to the controller and the harness.

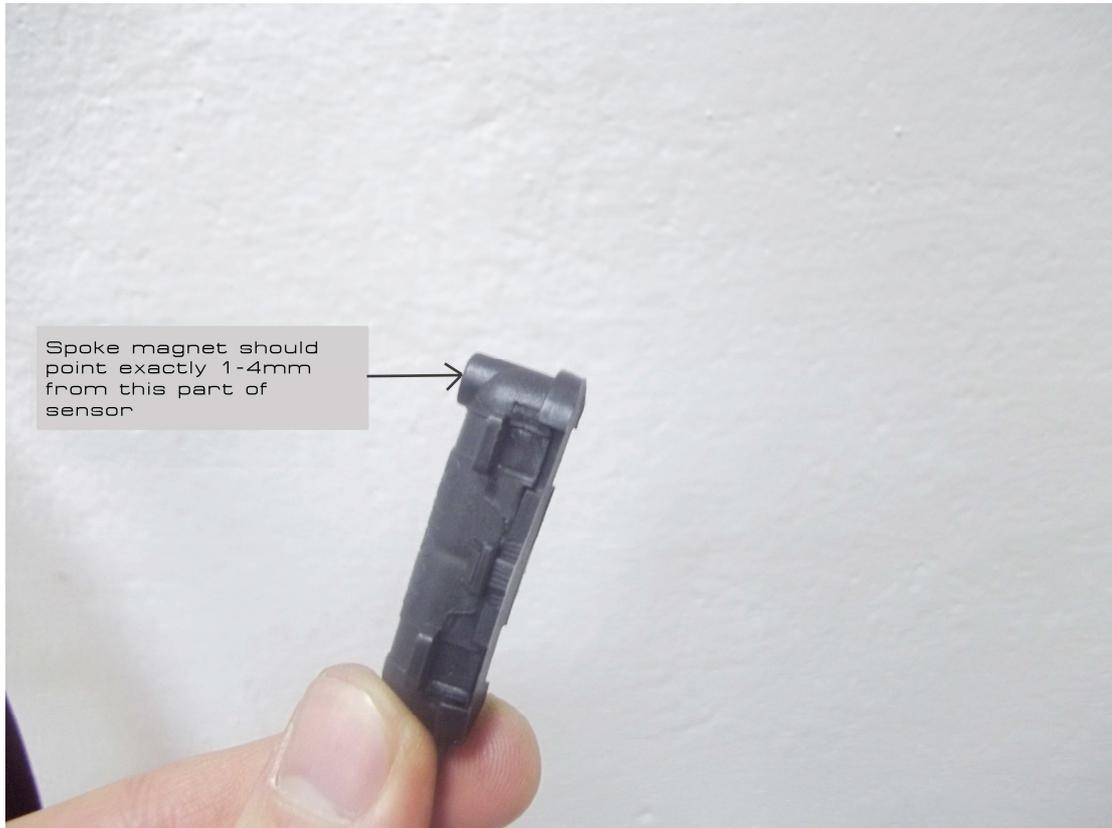


9. Harness and the connectors

The harness is a junction box for all the connectors including a brake switches, throttle and the LCD display. In case any of the components needs service the parts can be disconnected at the junction box by pulling out the connectors. PLEASE NOTE: The new harness does not come with the holding bracket. The manifold junction box should be zip tied to one of the cables on the bike.



10. Installing the speed sensor



With the use of cable ties supplied with the kit attach the speed sensor to one of the forks legs. The spoke magnet should be installed on one of the spokes with the help of screwdriver. The magnet should point exactly at the point indicated by arrow at the above picture. The distance of the magnet from the sensor should be approx 1 to 4 mm.

Thanks for reading, still got some question please email us at info@oxygenbicycles.com or call directly on +447738866502 or +442081443350