



NeoDrives Conversion Kit by eBike Outlet

PRODUCT
INSTALLATION GUIDE



Before getting started

01

YOU WILL NEED...

- Allen key set
 - Sizes will depend on your bike but most commonly sizes 2-6mm will be needed.
- Cable ties long enough to secure wiring to your bike's frame.
- Side cutters or scissors to trim cable ties
- 15mm spanner
- Chain whip
- Standard cassette removal tool
- T-25 Torx driver if you have disc brakes

02

WE ADVISE...

- Read this manual before attempting to install your kit. If you are unsure of any step, reach out to our support team.
- If you don't feel comfortable installing on your own, then we recommend bringing your kit to your local bike shop for professional installation.

03

ON RIDING SAFELY...

- Wear an approved safety helmet when riding your eBike.
- Wear brighter clothing at night for increased visibility. You should ALWAYS use a front and rear light when riding at night.
- Obey the traffic code. Riding a bicycle is privilege.
- Always inspect the brakes and tyres before each ride for safety.

1



Put your bike on a work stand

- If you don't have a work stand then flip it over and remove the back wheel (as seen above).
- You will now need to remove the gear cassette, tyre and tube from your existing bike.
- You need to install the gear cassette, tyre and tube onto your new wheel.
- Note: You will need 2 special tools to remove and install the gear cassette. If you don't have these it may be cheaper and faster to have a bicycle shop do the cassette swap over for you. Oh and cleaner.

2



You are now going to fit your new hub motor wheel.

3

Slide the wheel in to dropouts of the frame, be sure to fully insert the axles and torque arm.



- If your bike has disc brakes, you will need adjust where the brake caliper is located. It may be easier to remove the caliper to install the wheel, then adjust the caliper mounts to fit the disc properly.
- If you have very shallow dropout, the torque arm may not have any purchase on the frame. This may cause the wheel to move inside the frame.
- To resolve this, rotate the wheel until the torque arm is resting against the frame. This will stop the rotation of the wheel inside the frame.

4

Now that the wheel is installed you can tighten the nuts. Fully tighten the drive side first.



- The drive side is the side that has the gears on it.
- Now check that the brakes are functioning properly. For disc brakes, check the alignment of the brake caliper. For rim brakes, you may need to adjust the location of the pads to compensate for your bike's new rim width.
- If you are not confident adjusting the brakes yourself, continue the install and have a bike shop or mechanic check the brakes before test riding.

5



Now get your bike upright for the rest of the install.

6.1



6.2



Attach the motor pigtail.

6.3

These need to be pushed very hard together. They almost click into the place. This is so that water will not get in. If you don't connect these tightly with force there may be a communication error with the motor and the wheel won't operate.



INSTALLING YOUR EBIKE CONVERSION KIT

7.1



Offer up the rack over the rear wheel.

7.2



8.1



8.2



Fasten the legs of the rack into the frame with an allen key.

Do these up loosely initially so there is a little play that will allow you to adjust the rest of the setting on the rack before tightening up properly.

8.3



9



Fasten the arms to the seat stays.

10.1



Adjust the height of the legs so there is clearance to the wheel.

10.2



The height setting will allow you to make the rack level.

10.3



The rack should be level like this. Now tighten all the bolts up securely.

11.1



Then thread the power cable from the rack through the seat stays.

11.2

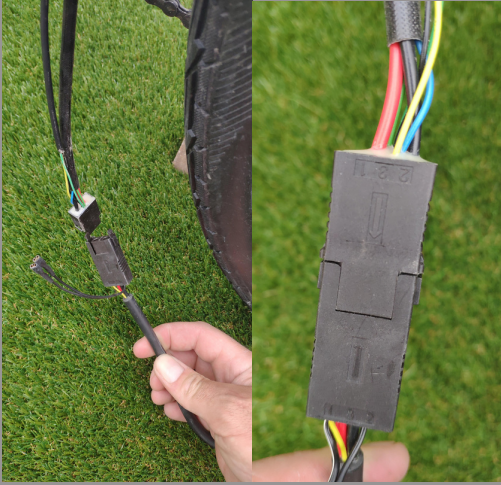


12



Do the same again following the seat tube down to the chainstays.

13



You can now plug in the motor cable.

14



Get some cable ties.

15.1



15.2



- Fasten the motor cable to the chain stay.
- Make sure each side of the connector is secured.
- Cut off the excess tail of the cable tie so that it does not interfere with the wheel.

16.1



- Fasten the power cable to the seat tube.
- Make sure each side of the connector is secured.
- Cut off the excess tail of the cable tie so it does not interfere with the wheel.

16.2



If there is excess cable pass it back through to tie it under the rack.

16.3



- Secure the extra looped cable underneath the rack with a cable tie.
- Cut off the excess tail of the cable tie so it does not interfere with the wheel.

16.4



17.1



Find the display cable.

17.2



Thread it toward the top tube.

17.3



Thread the display cable alongside a gear cable or brake cable.

17.4



Use cable ties to secure the cable to either gear or brake cable. Just be sure to not interfere with either cable's function.

18



Remove the grips, brake lever, and shifter from the left-hand side of the handlebars.

19



Thread on the remote switch, then refit the brake, shifter and handle grip as before.

- Be sure to secure the brake lever, shifter, and grip securely to avoid any movement when using the controls.

20.1



Using cable ties attach the display cradle.

20.2



21.1



Now plug the display cable onto the cradle.

21.2



22



Use cable ties to bundle any excess cable.

There are additional connectors on the wiring loom. These are used for lights on the original design. You should use electrical tape to protect them from weather. Secure them with the electrical tape against the rest of the wiring loom.

Once charged, fit your battery.



- Insert the front lugs into the connector box on the rack while the battery is on an angle as shown.
- Lower the back side of the battery to make it level and push lightly. The battery will click in place.
- There is a lever under the rack that releases the battery.
- The lock for the battery is found under the reflector on the back of the battery. To open it, place your fingers under the reflector and lift upward. The reflector comes off to reveal the lock.

24.1



24.2



Fit your display by docking at 10 o'clock and twisting clockwise.

25



Press the middle button on the remote to wake the system.

- Use the up/down buttons on the handlebar to set the level of assistance.
 - Double-clicking the middle button opens the settings menu. Use middle button to toggle through the menu tree and the up/down buttons to change each option.
 - Note: the date and time function do not work on this display as we are not running a DC converter to feed power to it. Please safely use your mobile phone as an alternate. NEVER use your phone while riding the bicycle.
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26



Your new eBike is now ready to ride!

Do's & Don'ts for eBikes

- Your battery will last longer if you deplete it more before recharging. That is, don't recharge it every time you use it unless you need more range.
- If you don't use your bike for 2 months+, charge the battery for just 15 minutes.
- If you deplete the battery fully, be sure to charge it that day. Do not let sit dead or the battery may fail.
- Avoid leaving the battery in the sun. If you park it outside all day bring the battery inside while not in use.
- Only charge the battery away from the elements and preferably in a warm area. DO NOT place the battery on or near a heat source while charging.
- When charging, place the charger connector into the battery first. Then plug the power cable into the wall socket with the plug turned off. Then turn the socket on. Connecting the charger in other order may cause the power to arc, which could damage the battery and/or lead to a fire.
- When cleaning the bike, avoid harsh chemicals on the eBike kit. DO NOT use a power washer or high pressure water to clean any part of the kit or connectors.
- You can ride the bike in the rain, but you CANNOT submerge the kit in water. Be careful of riding through puddles that may be deep enough to submerge the rear motor. This may lead to failure of the system and is not covered by warranty.

Do's & Don'ts for eBikes (cont.)

- All eBike batteries are susceptible to temperature. The operating range for eBike batteries is 5 to 35 degrees. While they can operate above and below that, the range of the battery will drop by at least a third. This is normal.
- If you do store the bike over the winter, try to have it in a warm dry space. If that is not possible, then at least make sure the battery is inside in a warm dry place.
- Finally, wear an helmet and remember that eBikes are quieter and faster than a regular bike. Pedestrians are far more likely to step out in front of you.

eBike Maintenance Tips

- eBikes are more prone to tyre punctures. Check the tyre pressure more often to reduce the occurrence of punctures and provide maximum range.
- You may need to lubricate the chain more often, as eBike motors place extra stress on the drive line components.
- You may need to replace brake pads more frequently as you will be traveling faster and most likely for longer distances.
- To repair a puncture on the rear wheel...
 1. Cut the cable ties holding the motor connector on the swingarm and then disconnect the wire connecting the motor.
 2. Remove the wheel as you would on a normal bicycle and repair the puncture.
 3. When remounting the rear wheel into the frame, make sure the torque arm is firmly secure in the dropout, or in some cases against the frame for those with shallow drop outs.
 4. When tightening the wheel nuts back up, make sure to tighten the gear side first. Tightening the other side first may damage the axle.
 5. Reconnect the motor cable and replace the cable ties on each side of the connector.

Reach out!



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