ENVO

D-SERIES + R-SERIES CONVERSION KIT

USER MANUAL

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TABLE OF CONTENTS

⚠WARNING

Read, understand, and follow all of the instructions and safety precautions in this manual and on all product labels. Failure to follow the safety precautions could result in serious injury or death.

1. INTRODUCTION

WELCOME TO THE ENVO FAMILY

Thank you for choosing an ENVO Conversion Kit. As a leader in electric bike design and distribution in Canada, we are passionate about our customers riding their bikes more and driving their cars less. We are focused on ensuring that you have a safe and enjoyable riding experience for years to come. At ENVO, we are committed to developing sustainable zero emission mobility systems and work hard to maintain the satisfaction of our customers. Please stay connected and share anything that can help us improve our products and service.

1.1. USE OF MANUAL

For safe and enjoyable operation and installation of all ENVO Drive Systems products please carefully read and follow the recommendations outlined in this manual. It is critical that you clearly understand all general operations of various parts of your ENVO Drive Systems product.

Please pay extra attention to any information marked with a caution or warning symbol:

⚠WARNING **⚠CAUTION**

1.2. SERVICE & TECHNICAL SUPPORT

Please contact us regarding any technical issues that you encounter, we are here to help. Give us a call, visit our help centre at **support.envodrive.com**, or refer to the tutorial videos on our website. This manual is not intended to be an extensive service guide.

1.3. ILLUSTRATIONS

The illustrations in this manual may not be perfect representations of your ENVO Electric SnowBike Kit, and some of the components may differ. The models illustrated are for instructional purposes only.

2. SAFETY & GENERAL TIPS

2.1. STREET LEGALITY

- Electric bikes or conversion kits considered street legal under Canadian and US Federal Electric Bike Regulations are viewed as bicycles, not motorized vehicles and do not require an insurance license plate or driver's license. It is important to check your province/state, county, and local laws to ensure that your ebike complies with local regulation provisions
- ENVO ebikes general settings comply with 32km/h (20mph) max assisted speed, 500W max mechanical power, equipped with brake cut-off switches and options to control assist power while riding. These provisions suffice all Canadian federal and provincial regulations. Parks and other privately managed properties might have different rules. ENVO ebikes are considered ebike Class II in the US
- Please note street legal does not mean cyclists can ride an electric bike or trike on bicycle pathways and trails that restrict the use of electric assist bikes
- There may be components such as throttle that have a different legal definition depending on the province/state you are located in. Because of this we have provided controller settings that can adapt to a variety of specifications
- By modifying an electric bike or conversion kit's settings, upgrading a component's capacity, such as the controller or motor, the product may lose its street legality even if modifications are done by a professional. If at any point ENVO Drive Systems is asked to implement upgrades, we will notify you if the modifications exceed street legal limits
- ENVO is not liable for the legality of use of products in various locations

⚠CAUTION

Your insurance policy may not provide coverage for accidents related to the use of an ebike. Make sure to contact your insurance company to know about your coverage.

2.2. RULES OF THE ROAD

⚠WARNING

Failure to follow recommendations outlined in this section may cause damage to property, injury, or even death.

- Always obey all the traffic rules, regulations, signs, and signals
- Always wear a bicycle helmet that meets or exceeds safety standards
- Ride in a single file on the right side of the road
- Avoid drain grates, soft road edges, gravel, sand, potholes, and uneven paving
- When crossing the railroad track, pay extra attention as you may lose control
- Avoid unsafe actions when riding the ebike
- Do not carry a payload that shifts your balance, hinder your vision, or affect your hearing
- Always have both of your hands on the handlebar
- Do not tow or push the product
- Replace broken parts immediately
- If any ebike component is not functioning properly, end the ride immediately

2.3. BEFORE YOUR FIRST RIDE

- If you have an impairment or disability such as visual impairment, hearing impairment, physical impairment, cognitive impairment, and/or a seizure disorder, consult your physician before riding any ENVO Drive Systems product
- Before going on your first ebike adventure, take time to get familiar with your ebike
- Make sure everything on the bike is secured and tight, the battery is locked, and there is no play in any screws or bearings
- Check if you are able to turn the handlebar while the wheel is held in place **Figure 2.3.A**
- Check if the handle bar is secured to the stem by trying to twist the bars forward and backward **Figure 2.3.B**
- Ride around a quiet area at the lowest PAS (Pedal Assist LCD) setting, get familiar with your brakes and settings
- Be sure to bed in the brakes (See Brakes, Section 5.5.). Failure to do so will result in lower than optimum braking performance and can lead to squealing

Figure 2.3.A

Figure 2.3.B

2.4. BATTERY & CHARGER SAFETY

- Please keep the battery away from excessive heat and moisture, do not spray with high pressure water, and do not store outdoors in freezing temperatures below 0°C
- Always store your battery in a well ventilated, cool, dry room at room temperature
- Keep away from children and pets
- If you notice any SMOKING OR SPARKING while charging immediately disconnect the battery
- Disconnect the battery from the charger once the charger light is green. And disconnect the charger from the wall plug
- Always fully charge the battery before storage and continue to check up on and charge every 2 months. Failure to do so can result in a loss of capacity to the battery and may even permanently damage the battery cells, which will void the warranty
- Always unplug the charger when not in use
- Take care of the pins. Always be gentle when pulling the charging pin out. Rough use of the pins can cause irreversible damage to the pins and battery
- Always use the charger provided by ENVO for the ENVO battery
- Make sure you always seal the USB port when not in use
- Port is only designed for charging low voltage electronics. The output of the USB port is 5V, 1A
- Always unplug the charger when not in use
- To minimize chances of sparking, first gently plug the charger into the battery and then plug the charger into the wall
- The charger may get hot while charging. Make sure charger's surrounding is open for natural heat dissipation

⚠WARNING

NEVER disassemble the battery, there is significant risk of shock and damage to the battery. Doing so will also void the warranty. DO NOT puncture or crush the battery, or expose to server vibrations and impacts.

⚠WARNING

Do not puncture or crush the battery. Do not expose the battery to severe vibrations or impacts. Failure to properly use, charge, and store your battery as instructed will void the warranty and could cause a hazardous situation.

⚠CAUTION

Do not use the ENVO battery charger for any purpose other than charging your ebike. Do not use the ENVO battery as a power source for any other devices than your ENVO ebike. If you do so the warranty will not be applicable, and ENVO Drive Systems will not be liable for any damage to the system or injury to the persons.

2.5. FIRST CHARGE

- When you first receive your battery it will have about 50-70% of charge
- After your first few rides charge your battery fully as close to 12 hours, but no longer than that
- This may require you to leave the battery in charge even when the charger light is green
- This is to ensure that each and every cell is charged to its full capacity leading to a more efficient and long lasting system
- The full voltage of the 36V battery pack is around 42V, and can be checked in the LCD display
- Future charging times should only be limited to 5-6 hours

⚠WARNING

Do not drop the battery. Damaged batteries can cause fire and may explode which can lead to damaged property, injury or even death.

2.6. BATTERY REMOVAL & INSTALLATION

Figure 2.6.A

Figure 2.6.B

Figure 2.6.C

Figure 2.6.D

BATTERY REMOVAL

- Turn the key counterclockwise to unlock the battery
- The lock is located on the left side of the bike **Figure 2.6.A**
- Hold the battery and push with your thumb while pulling with your fingers. The battery should easily come off **Figure 2.6.B**

BATTERY INSTALLATION

- To reinstall, first gently turn the key into the lock position
- Then line the pins at the back of the battery with the slots and make sure the battery is aligned **Figure 2.6.C**
- Give a gentle push towards the back, then firmly press the front of the battery down. If done correctly, you should hear a click locking battery into the place
- Make sure the battery is firmly locked before operating the ebike **Figure 2.6.D**

2.7. CHARGING YOUR BATTERY

- When it comes to charging the battery, there are two options you can either charge the battery while it is on the bike, or you may take it with you and charge it in your home or office
- For safety, always turn off your battery before charging
- Your bike comes with an on-board charging system accessed by the pull-out zip chord on the left side of the controller, if you choose to charge while battery is still on the bike
- If you choose to take the battery with you to charge, there is a charging port near the bottom of the battery. Located on the bottom side there is a pullout zip chord.
- Always charge in a well ventilated, cool room
- Do not leave unattended for long periods of time
- Charging time: 5-6hrs or until the charger light is green no longer than 9hrs

IMPORTANT NOTE:

As your battery ages, it will gradually lose capacity. With proper care and maintenance, your lithium ion battery will retain up to 70% of its capacity for about 500 full discharge/recharge cycles. As capacity diminishes, you will notice a gradual drop off in max range capability. When range falls to an unacceptable level, contact your local ENVO dealer to purchase a new battery.

⚠CAUTION

Please make sure you are gentle anytime you are inserting or removing the port's charging cable. Failure to do so can result in damaged pins and poor connections.

2.8. BATTERY TRANSPORT

- Lithium-ion batteries are subject to many regulations and are often considered dangerous or hazardous materials by carriers. Be sure to check for relevant laws and ask the carrier for approval prior to shipping a Lithium-ion battery or transporting it by air

2.9. BATTERY DISPOSAL

- Be a friend to the environment. Recycle your old batteries at a local battery recycle centre
- Batteries should never be thrown in the garbage
- Contact ENVO for more information about how to recycle your batteries

⚠WARNING

Disposing of Lithium-Ion batteries incorrectly can allow moisture and oxygen to enter the battery. This can lead to the oxidation of lithium components and which can cause a heat reaction that may include fire or explosion. In addition overcharging, overheating, shock from dropping, or crushing can lead to a heat reaction. Batteries must always be recycled. They should not be thrown in the garbage.

2.10. LOCAL REGULATIONS

Generally, the regulations for ebikes throughout North America follow the same guidelines; however, there may be local differences such as where you can ride, minimum rider age, or required equipment and registration. Please follow the specific regulations for the use of an electric bicycle in your local municipality. It is the rider's responsibility to know the local regulations that apply to an electric bicycle and to obey them.

2.11. GENERAL RIDING TIPS

⚠WARNING

Read, understand, and follow all of the instructions and safety precautions in this manual.

Electric Bikes can be dangerous to use. The user or consumer assumes all risk of personal injuries, damage, or failure of the bicycle or system and all other losses or damages to themselves and others and to any property, arising out of or as a result of using the bicycle.

As with all mechanical components, your bicycle is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail, possibly causing injuries to the rider. Any form of crack, scratches or change of coloring in highly stressed areas indicate the life of the component has been reached and should be replaced.

⚠WARNING

The pedal assist is activated as soon as you spin the pedals or stimulate the throttle, make sure you are firmly seated on the bike and have at least one brake engaged prior to engaging the motor. Failure to do so may result in injury or even death.

⚠WARNING

Electric bikes, like any other vehicle, require regular maintenance by mechanically inclined persons to guarantee safety of use. Screws and nuts are subject to become loose due to road vibration, especially within the first few kilometers of use. Make sure you inspect your bike often and have it serviced by a professional regularly.

⚠WARNING

Failure to wear a helmet and other recommended safety gear when riding an ebike can lead to serious injury or death.

- Always ride at a speed that's appropriate for the conditions. Higher speed means higher risk
- Ensure brakes and motor cut off switch are working prior to every ride
- Ensure nothing is loose (ie bolts, battery, wheels, pedals, and handlebar) and everything is secured on the bike prior to every ride
- Always keep both hands on the handlebars and both feet on the pedals
- Do not operate if you are sleepy, sedated or while under the influence of drugs and/or alcohol
- If motor speed is noticeably dropping while climbing a hill, assist the motor by pedaling
- Do not pedal around a corner as you may gain to much speed and lose control
- Always keep the brakes covered, and be prepared to stop in case of emergency
- Apply both brakes simultaneously and smoothly
- Make sure you clearly understand that it is very difficult for any vehicle to notice your presence, ALWAYS assume that you cannot be seen and dress in bright colours, reflective gear and use bright lights
- Ebikes are silent and move faster than people and traffic expect them to. Ensure those around you are aware you are approaching by ringing your bell and verbally address pedestrians when passing by, or when riding in areas where wildlife are located
- Wet weather impairs traction, braking and visibility, both for the cyclist and for other vehicles sharing the road. The risk of an accident is dramatically increased in wet conditions
- Reflectors are not a substitute for required lights. Riding at dawn, at dusk, at night or at other times of poor visibility without adequate bicycle lighting systems and without reflectors is dangerous and may result in serious injury
- Ensure your wheels are TRUED before each ride. Spin each wheel and check for brake clearance and side to side wobble. If a wheel wobbles side to side even slightly or rubs against or hits the brake pads, take the bike to a qualified bike shop to have the wheel trued
- Never ride with headphones. They mask traffic sounds and emergency vehicles sirens, distract you from concentrating on what is going on around you. Headphone wires can tangle in the moving parts of the bicycle, causing you to lose control
- Wear proper attire, including bright clothing, protective glasses, and sturdy shoes. Never wear a loose-fitting dress or long dress when riding as it can get caught in the moving parts of the bike and cause serious injury or even death

- Always wear an approved helmet and ensure it fits according to the manufacturers' instructions. Ensure your helmet meets the latest certification standards and is appropriate for the type of riding you do and if there are any special requirements for riding an electric bike
- At temperatures below -10°C the motor grease might be too stiff for sudden throttle, high speed and high-power rides. Give the motor some low speed and low power spins and warm up the gears before going full power
- Avoid changing gears very rapidly from first gear to the last gear, or vice versa. If you change multiple gears too quickly, the chain may come off the front sprocket
- Never pedal backwards while shifting, this could jam the chain and cause serious damage
- Never shift gears under heavy loads, this may break the chain. You must only apply just enough force so that the gear can shift

2.12. SAFE OPERATING CONDITIONS

2.12.1. CARRYING CARGO

- Always ensure that any luggage or child seat is securely attached to the bike and there are no loose cables. Carrying a load requires getting accustomed to. Practice maneuvering and braking on a flat, hazard and traffic free street with and without a load before going out into the road. Carrying a seated passenger or heavy load involves risks, foremost of which can be decreased braking power and increased stopping distance. The maximum weight capacity is 140kg shared between the rider and cargo, for more details consult bike's manufacturer's instructions

2.12.2. UNSAFE USE

- Do not use this bike for jumping over curbs, riding on technical mountain trails, or any use other than for commuting and cruising in a safe, relaxed manner
- Never exceed 32 km/h on this bike

3. PRODUCT DESCRIPTION

3.1. ENVO CONVERSION KIT COMPONENTS

Figure 3.1.A

Parts provided in your ENVO Conversion Kit Box:

1. Controller Bag (20A controller)
2. Motor extension cable
3. Controller
4. Front/Rear Hub Motor
5. Battery Charger
6. Battery

4. ASSEMBLY INSTRUCTIONS

4.1. GENERAL REQUIREMENTS

ENVO Conversion Kit components need to be installed professionally, as they require fine-tuning and adjustment after installation. It is highly recommended to get help from an experienced mechanic. Find a local ENVO dealer or book an appointment with us for an installation session. If you choose to do it yourself, please refer to our online guides at **support.envodrive.com**, to ensure you install your product safely.

Use a soft surface for the workplace area, you can use the thermocol that came with the box. The bike can be placed on a bike stand; however, the motor is quite heavy and it would be easier if the bike is placed upside down resting on the handlebar and seat. Please make sure it is firmly placed.

REQUIRED TOOLS

- Allen key set
- Philips screw driver
- 10,13, and 15mm wrenches

⚠CAUTION

Be careful when dealing with any moving parts as you may get pinched. Do not wear loose clothing. Always wear safety glasses, and gloves during installation.

4.2. UNBOXING AND UNPACKING

- Open the box from the top and cut all the zip ties
- Use caution when pulling out the wheel, protect all cables and carefully remove all components

4.3. REAR HUB MOTOR

4.3.1. REMOVAL OF THE REAR WHEEL

- Shift the chain into the smallest gear before attempting to remove the wheel. You may also remove the chain for easier removal of the wheel but it is not necessary
- If you have V type brakes or any type of rim brakes, you may find it difficult to remove the wheel without deflating your tire first. You may also need to disconnect the 2 brake pads from one another as well, as they can restrict the tire from being removed, (depending on tire size)
- Use a wrench to unscrew the bolts on either side of the wheel. If you have a quick release then pull on the lever to unlock the wheel
- Remove the wheel from the frame
- If you have disc brakes, DO NOT squeeze your brake levers at any time while removing the wheel, this can affect the pistons positioning within your calipers
- You may also remove your brake caliper as this can make the future installation of the rear motor wheel easier
- It is much easier to fit the motor wheel with the caliper removed. The disk brake rotor installs onto the side of the motor hub just like a regular hub. You will need to use the existing screws that are already installed into the side of the hub. Loosen them, install your disc rotor and then tighten the bolts. Max 5Nm (40 lbs) tightening torque. If you over-tightened these bolts, you may risk stripping the hub, which is not covered in the warranty

4.3.2. REMOVAL OF THE TUBE TIRE AND BRAKE ROTOR FROM THE OLD RIM

Note: For this procedure you will require 2-4 plastic tire levers

⚠CAUTION

Do not use anything other than plastic tire levers for tire removal, you may damage your rims or end up with a punctured tube.

- To begin, first pinch the tire as much as you can away from the rim and insert the tire lever under the tire
- Lift up the lever over the rim and secure it to the nearest spoke with the hooked end
- Insert the second lever approximately 10cm/4" away from the first lever and repeat the procedure, however this time instead of hooking right away try to slide around the rim getting as much of the tire off and over the rim as possible then secure the lever

- Repeat sliding and lifting all around the rim until the whole side (bead) of the tire is off the rim
- Now starting on the opposite side of the valve, pull the inner tube from the tire. Lift valve from valve hole and remove tube from wheel. Remove the second bead from the rim, by using both hands placed firmly on top of the tire and push the tire down with the weight of your body and force the tire off the rim
- Check tube for any punctures by inflating and listening for any escaping air
- The new motor rim does not include the rim tape on the rim, you may use new tape or you may remove the ones from your old rim
- Remove the brake rotor, unscrew each screw in a star pattern

4.3.3. INSTALLATION OF TUBE, TIRE, AND BRAKE ROTOR ON NEW RIM

- The first step is to install rim tape onto the new rim, make sure it is centered all along the rim. Ensure that the valve hole is not covered
- Add a little bit of air into the tube, just enough so it has shape
- Get one side of the tire bead onto the rim, using tire levers will make it easier
- Insert the tube in the tire and insert the valve through the valve stem
- Using the tire levers get the other side of the tire bead onto the rim using the same technique as before
- The last bit of remaining tire can sometimes be very stiff, just go around the rim and make sure that both beads are centered on the rim. This should give you some more wiggle room to get the last part of the bead onto the rim

Figure 4.3.4.A

Figure 4.3.4.B

Figure 4.3.4.C

4.3.4. TRANSFERRING YOUR CASSETTE

- To remove the cassette, you must first loosen the lockring using the chain whip and the lockring tool, **Figure 4.3.4.A** some cassettes may need a more specific tool
- Wrap the chain around the middle chain and have a firm grip on the cassette
- Now with a 19mm wrench **Figure 4.3.4.B** apply some force and rotate the lockring anti-clockwise
- Once loosened, remove the tools and pull the cassette off the wheel. Keep everything in the same order
- Install the cassette onto the new rim
- Hand tighten the lock ring as much as you can
- Tighten the bolt to the manufacturer-recommended torque and don't be tempted to over tighten as it can damage the freehub body threads **Figure 4.3.4.C**

Figure 4.3.5.A

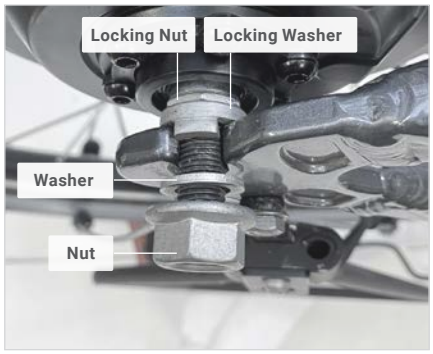
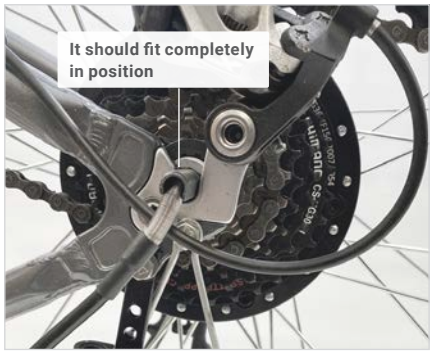


Figure 4.3.5.B

Figure 4.3.5.C



4.3.5. INSTALLING MOTORIZED RIM TO THE FRAME

- First pull on the derailleur and guide the cassette into position in between the chain (If you have removed your chain, reinstall your chain after the wheel is fully installed)
- Align the axles with the dropouts. If you have disk brakes, and you did not remove your caliper then take care while inserting the disk into the brake caliper. Do not apply pressure if you are unable to insert it. Check if something is not aligned properly
- Use the locking nut and align it as per the cassette or freewheel, the locking nut must be at the same level as the cassette or freewheel when tightening **Figures 4.3.5A**
- Both ends of the axle should rest on the dropouts of each side
- The order that you should use to install the hardware to the dropouts are shown in **Figures 4.3.5.B** and **Figure 4.3.5.C**
- Use an 18mm wrench to tighten up the nuts to 40Nm, rotating in a clock rotation on both sides
- Install the nut cap and secure the wire
- Inflate the tire to the recommended tire pressure (written on the tires sidewall)
- Do a final check of everything making sure no wires are caught, the wheels not loose, brakes are aligned and gears are shifting smoothly
- Congratulations you have installed your motor! Flip over your bike and take it for a spin

⚠CAUTION

The axle should fit perfectly, if not then you have to use torque arm for safety, we will not be responsible if the axle comes out of the frame at anytime and condition.

4.4. DOWNTUBE BATTERY INSTALLATION

There are multiple options available for installing a battery, it can be customized to fit on any frame with varying techniques such as mounting on the downtube or placed on the rear rack; this has to be decided before purchasing a kit. The battery can be 36V or 48V, the mounting process is typically consistent on all regular bike frames.

4.4.1. INSTALLATION OF THE DOWNTUBE BATTERY MOUNT TO THE FRAME

Figure 4.4.1.A

Figure 4.4.1.B

Figure 4.4.1.C

- You will have two options for installation depending on weather you purchased a 350W or 500W conversion kit
- 350W controller which comes pre-installed in the battery mounting bracket (17A controller) **Figure 4.4.1.B**
- 500W controller which has to be installed under the seat in a controller bag (20A controller) **Figure 4.4.1.C**

Figure 4.4.1.D

Figure 4.4.1.E

Figure 4.4.1.F

Figure 4.4.1.G

- Your bike frame should have a bottle mounting option, most of the ENVO batteries can be attached where a bottle mount would typically attached **Figure 4.4.1.D, Figure 4.4.1.E**
- If you do not find any mounting options on the frame purchase clamp nuts for the battery mount
- If you have the bottle mount, remove the screws and set them aside
- Use the Stainless-steel screws which are provided in the battery box (DO NOT use aluminum screws, they may break and it may cause injury or even death)
- Attach the battery bracket to the frame and check the alignment, you can slide the bracket up or down, while attaching the battery you have to visually check if the bracket is touching any moving parts like chainring or gears **Figure 4.4.1.F**
- Once alignment is confirmed you can proceed to tighten up the bolts, do not over tighten as this may strip the screws and they will become loose **Figure 4.4.1.G**

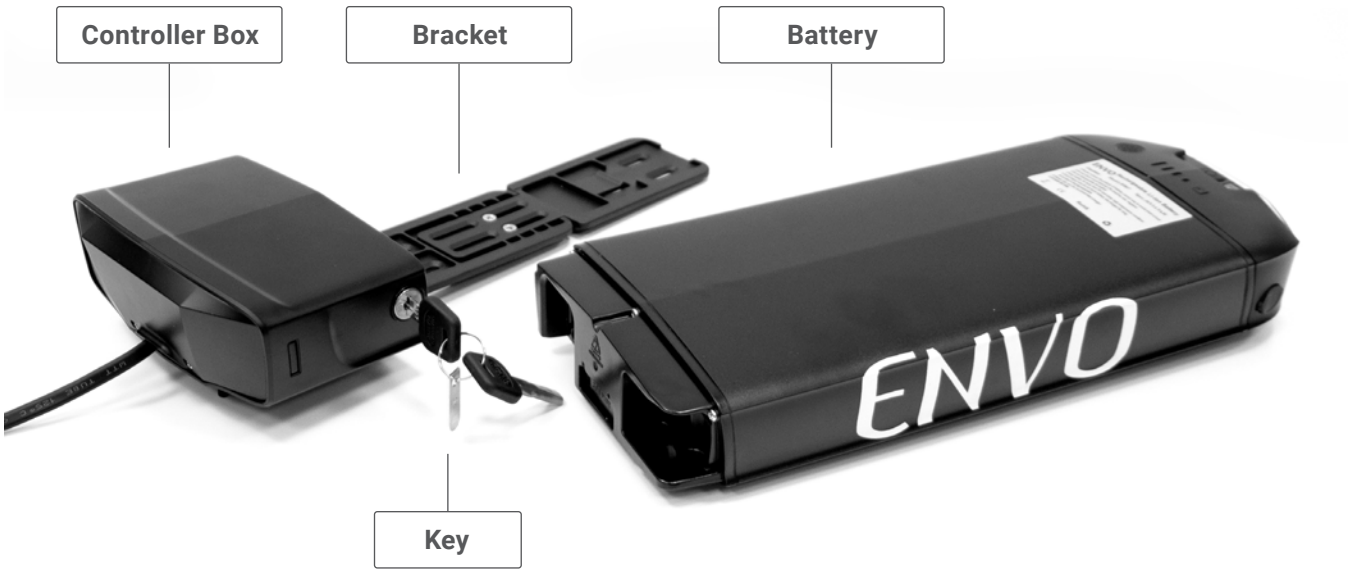
Figure 4.4.2.A

4.4.2. OPERATING THE BATTERY SWITCH

- Initially the battery is sent to you in the off position
- Unlock the battery and remove it
- Find the switch on the battery indicating **I** or **O**
- **I** indicates **ON**
- **O** indicates **OFF**
- Press the switch to the ON position and place the battery back and lock it

4.5. RACK BATTERY INSTALLATION

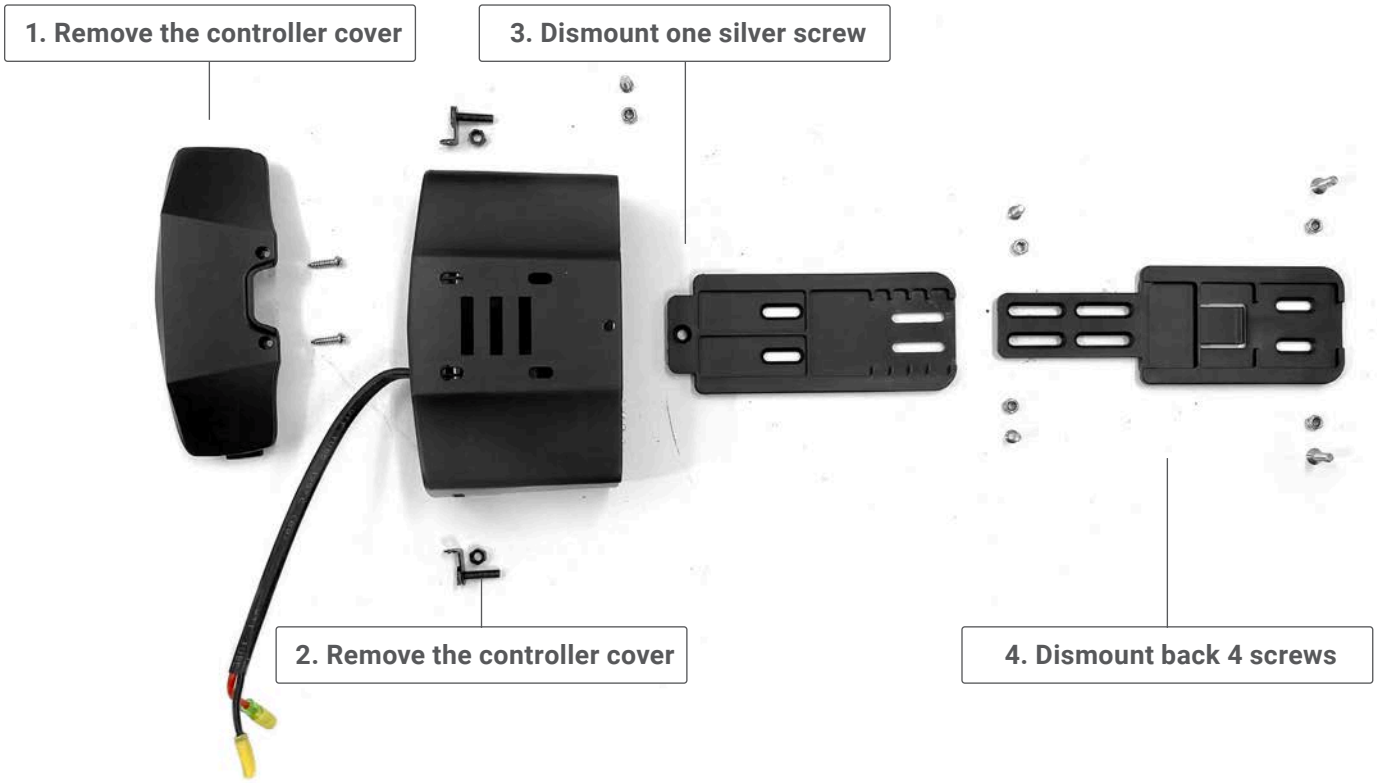
Figure 4.5.A



4.5.1. INSTALLING THE BATTERY TO THE RACK

- Remove the plastic cover from the battery and detach the mounting bracket from the battery. Keep the battery aside to charge. We have to mount the bracket to the metal rack
- Remove the screw from the controller box to detach it from the bracket. Remove screws in the following order:

Figure 4.5.1.A



- Place the screws so that they don’t get mixed up. You can find extra screws in the battery box
- Now place the controller box on the rack and fasten it to the rack. You must use the same screws to place the controller box you need to put two black screws and one silver screw with the bracket, all should be mounted on the rack, you must align it perfectly and tighten up the screws

Figure 4.5.2.A

Figure 4.5.2.B

Figure 4.5.2.C

Figure 4.5.2.D

4.5.2. INSTALLING THE RACK TO THE BIKE FRAME

- Install the rack supports on either side of the motor using an Allen Key **Figure 4.5.2.A**
- Slide down the rack on the rack support on both side at the same time **Figure 4.5.2.B**
- You should give some space between the rack and the fender (5mm to 10mm) **Figure 4.5.2.C**
- You will find multiple holes in the vertical support bar; those are provided to tighten up the rack after you figure out suitable height. You have to tighten up the nut from inside
- Install the rack onto the frame. Secure the rack stays to the mounting holes provided on your frame image, there should one on either side of the frame by the wheels, and either side near the seat
- Make sure the rack is firmly secured in place, if so you can now slide the battery into the rack **Figure 4.5.2.D**
- You have to check the battery sliding mechanism two or three times to check if there is any kind of friction, try to adjust the battery bracket and see if there is any loose bolts
- The key is important, keep a spare key at a safe location before you go out for a ride. Do not keep the key attached to the rack, you may lose the key while riding

Figure 4.5.3.A

4.5.3. OPERATING THE BATTERY SWITCH

- Initially the battery is sent to you in the off position
- Unlock the battery and remove it
- Find the switch on the battery indicating **I** or **O**
- **I** indicates **ON**
- **O** indicates **OFF**
- Press the switch to the ON position and place the battery back and lock it

4.6. DISPLAY, THROTTLE, E-BRAKE SENSORS & HEADLIGHT INSTALLATION

In this section we will install the LCD Display for user interface, Throttle, E-brake sensors and headlight.

Figure 4.6.A

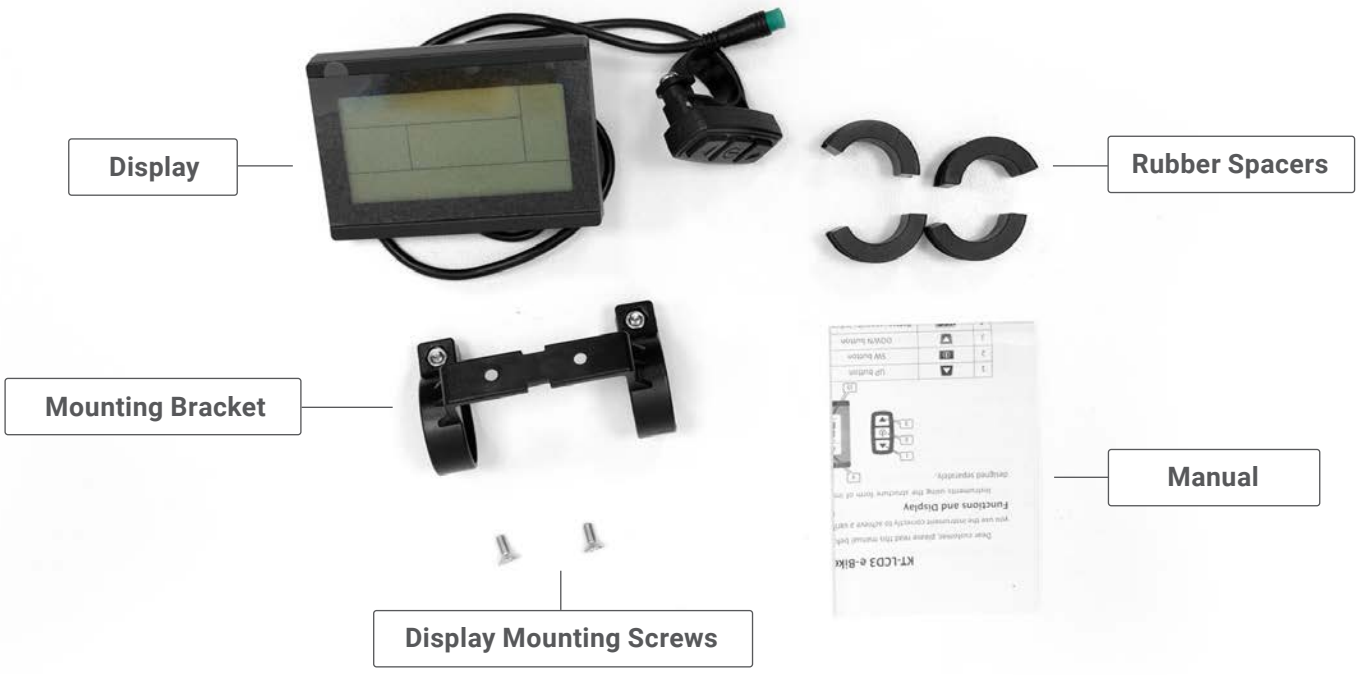


Figure 4.6.1.A

Figure 4.6.1.B

Figure 4.6.1.C

Figure 4.6.1.D

4.6.1. INSTALLING THE DISPLAY

- You can find the KT-LCD display in the controller box; it has a separate box with all the mounting fixtures and manual
- Place everything on a soft surface as to not damage or scratch anything
- Install the LCD display onto the mounting bracket using the two screws provided, be gentle to much force may break the mount **Figure 4.6.1.A**
- There are 4pcs of rubber spacers included in the LCD display box, use them to your discretion depending on your bikes handlebar diameter
- Simply place the spacers within the mounting clamps **Figure 4.6.1.B** and **Figure 4.6.1.C**
- Now mount the mounting bracket onto the handlebars, you must first unscrew the bracket screws so that you can open the clamps and place them into position
- Once in the correct position, screw them back in firmly but not with excessive force as you may break the clamps. Make sure the tallest vertical rectangle is in the bottom left corner as shown in **Figure 4.6.1.D**

4.6.2. INSTALLING THE DISPLAY CONTROL

- Now it's time to install the display control, this can be installed on either side of the handlebar, whichever is more comfortable for you
- Simply unscrew and open the clamp
- Place over the handlebar and screw the clamp shut firmly in your chosen position
- After installing the thumb control, you have to check if you are able to read the buttons easily. The buttons will allow you to select the power assist level and turn the system on and off

Figure 4.6.4.A

4.6.3. THROTTLE INSTALLATION

- Remove the right handlebar grip
- lose up the gear shifters and brakes on the right side
- Push the gear shifter and brakes bit inside around 20mm and make space for throttle
- Slide the throttle on the handlebar
- Use the throttle washer and fix it to the throttle as shown in the picture
- Put back the handle grip (without lubrication)
- Adjust the gear shifter, brake lever and throttle. Make adjustments as per your comfort and tighten up the bolts

4.6.4. THROTTLE BRACKET INSTALLATION (OPTIONAL)

- The throttle bracket is usually used when the handlebar is too big or too small compare to an average. This accessory is not part of the package and its purchase has to be made in advance **Figure 4.6.4.A**

Figure 4.6.5.A

Figure 4.6.5.B

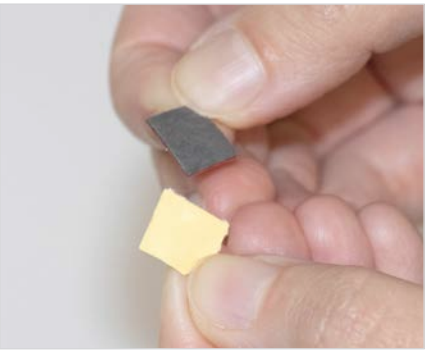


Figure 4.6.5.C

Figure 4.6.5.D

4.6.5. E-BRAKE SENSOR INSTALLATION

The Main function of the E-brake sensor is to shut off power of the motor when you apply the brake. They can also function with regenerative mode and can also be activated with e-brakes. If your brakes are hydraulic then you have to do some customizations to be able to attach the sensors.

- In the controller box you have a pair of E-brakes sensors, a pair of magnets, a 3M all-weather double-sided tape **Figure 4.6.5.A**
- Before proceeding make sure the brake lever area is clear for any lubricant, dust or water
- Peel the 3M tape and stick it to the magnet **Figure 4.6.5.B** and **Figure 4.6.5.C**
- Attach the magnet to the lever as shown in **Figure 4.6.5.D**
- Now after applying the magnet, you have to attach the E-brake sensor, to do that you need to peel off the red glue cover on the back of the sensor and attach it directly on the lever body as shown in the picture
- It is extremely important that the E-brake sensor is aligned with the magnet. If it is not aligned, then E-brakes will remain activated all the times and the power won't be delivered to the motor
- Conduct the same procedure on the other brake lever

Figure 4.7.A

Figure 4.7.B

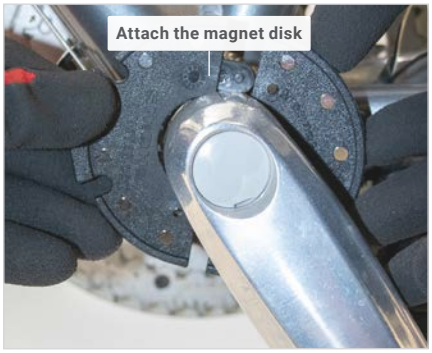


Figure 4.7.C

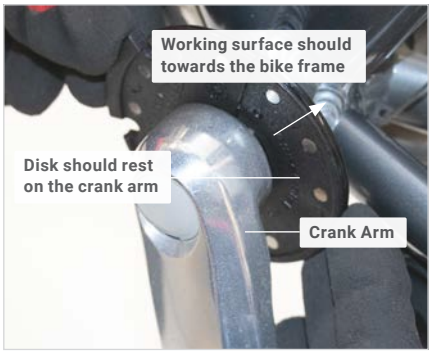
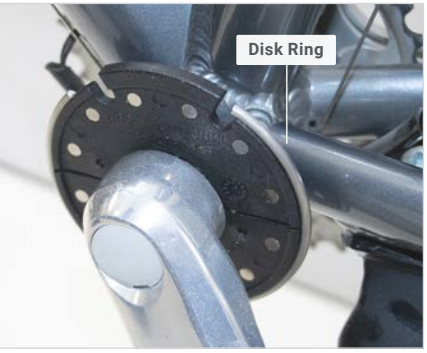


Figure 4.7.D



4.6.6. INSTALLATION OF HEADLIGHT

When it comes to installing the headlight there are two different versions, there is front headlight only and front headlight and rear headlight version. Make sure to insert the connectors carefully and refer to the wiring diagram for clarification. Figure

4.7. PAS INSTALLATION

The Pedal Assist Sensor works by sensing when the rider has begun rotating the pedals, once in place the (PAS) activates the motor and delivers power. It does not matter how much force is applied or the terrain, all that matters to the sensor is if the pedals are rotating or not. ENVO conversion systems provide 5 Levels of PAS assist.

- Before installing make sure you check the controller box for the following items. You should also have an estimation of crank shaft diameter. On average crank shaft is around 15mm but on your bike it may be larger than that **Figure 4.7.A**

4.7.1. SETTING UP THE MAGNET DISK

- Detach the magnet disk into the two parts and re connect them around the crankshaft **Figure 4.7.B**
- If the shaft is bigger than the center hole, cut the strips down to the right size
- Be careful when cutting as you don't want to cut the strips too short
- When attaching the disk together on the crank, make sure that the working surface (written on the disk) is facing the bike frame. PAS will not work if placed incorrectly **Figure 4.7.C**
- The disk must rest on the crack arm, later you need to glue it in place with epoxy once we are finished with the testing procedure
- Attach the disk ring to the magnet disk , this will hold the parts together **Figure 4.7.D**

Figure 4.7.2.A

Figure 4.7.2.B

4.7.2. INSTALLATION OF THE PAS SENSOR TO THE BIKE FRAME

- Before moving forward, wipe up all the dust and grease around the crankshaft with a moist cloth and some isopropyl alcohol. Let the surface dry before the next step
- Peel the red cover on the backside of the sensor and attach it to the frame **Figure 4.7.2.A**
- While attaching the PAS sensor you have make sure the sensor and the magnets are perfectly aligned **Figure 4.7.2.B**
- The gap between the magnets and the sensor should not be more than 3mm
- Secure the sensor with some zip ties

Figure 4.7.2.C

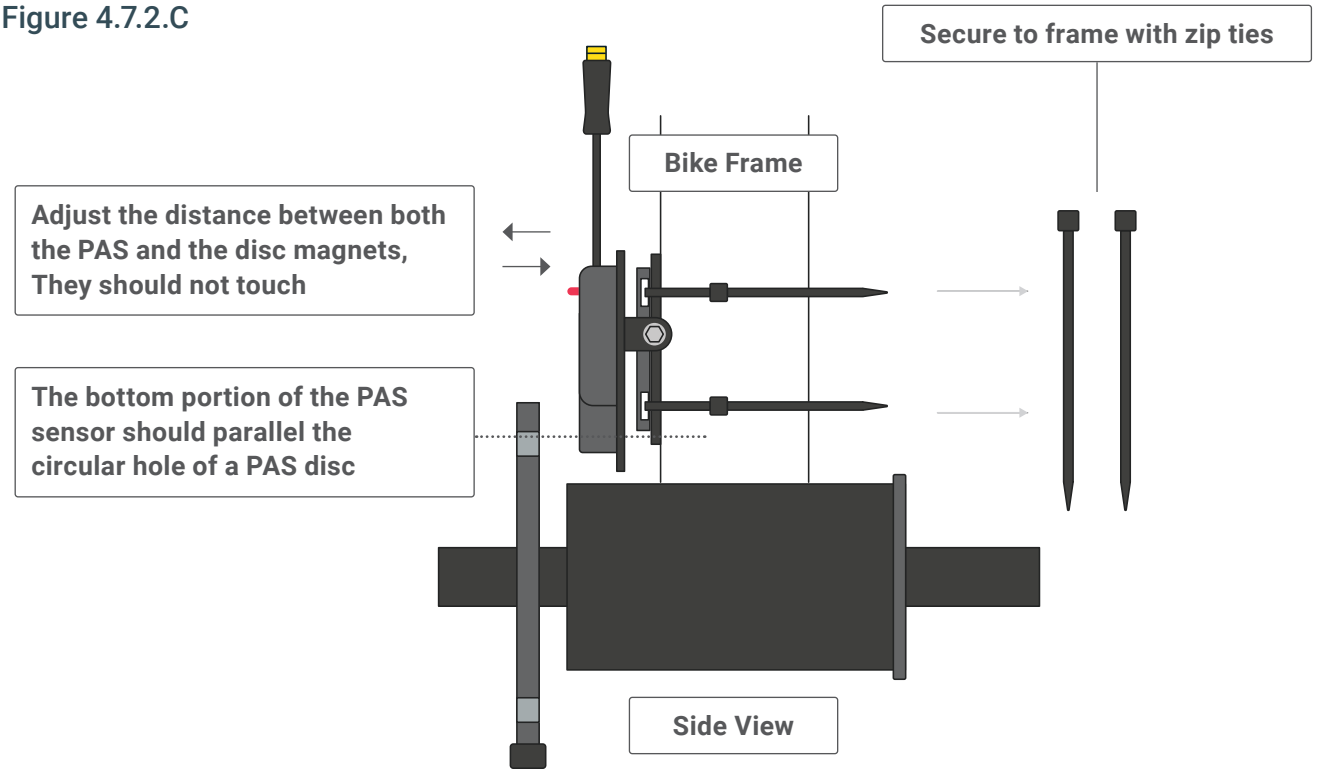


Figure 4.8.1.A

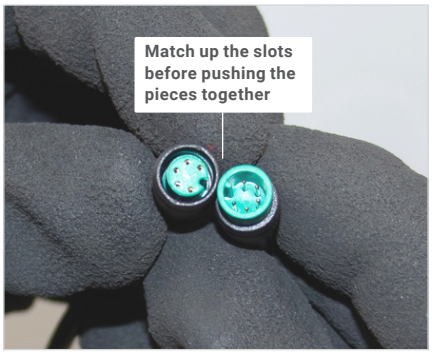


Figure 4.8.1.B

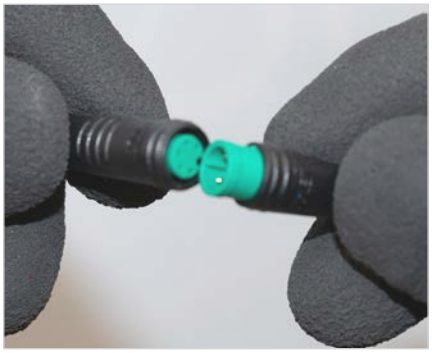


Figure 4.8.1.C

4.8. WIRING

In this section we are going to look at how everything is connected together, please remember to always be gentle with the connectors whenever connecting or disconnecting. Never pull on the cables as this will stretch them, always pull on the connectors. Never force anything as too much force can damage the pins.

4.8.1. WIRING FOR DISPLAY, THROTTLE, E-BRAKE SENSOR, AND HEADLIGHT

- We will start by connecting the display cables. They are green in color and are 5 pin julet connectors
- These connectors are waterproof and universal
- Connectors are easy to install but may also be easily damaged if not used properly
- Pay attention to how the 5 pins and slots are positioned and line them up with each other **Figure 4.8.1.A**
- Gently press them against each other and they should connect without too much force **Figure 4.8.1.B**
- If you feel like you are applying a lot of force STOP for a moment and check the alignment of the pins. Make sure the arrows on the outside of the connectors match up correctly **Figure 4.8.1.C**
- All other connectors follow the same procedure, just make sure to be very cautious during connection process as you do not want to damage the connector pins
- E-brake sensor and Headlight will connect to the red color connector
- Throttle cable will be connected to the yellow color connector

Figure 4.8.2.A

Figure 4.8.2.B

4.8.2. WIRING OF DATA CABLE, CONTROLLER, AND MOTOR

With these connections you have to be extra cautious as there are more pins in this connector. Make sure you align them perfectly and make sure you pay attention to the guiding arrows

- Connect the data cable to the Controller with the 8 or 9 pin connector **Figure 4.8.2.A**
- DO NOT use excessive force
- The motor cable comes with an extension, make sure you attach it perfectly
- Pay close attention to the arrows and gently push the connectors together **Figure 4.8.2.B**
- You have to perform the same procedure for connecting the cable from the controller to the motor
- Take care to not twist the cable or make any sharp turns, the cable should run straight
- DO NOT loop the cable as this will cause the motor to overheat

4.9. WIRING MAP

Figure 4.9.A

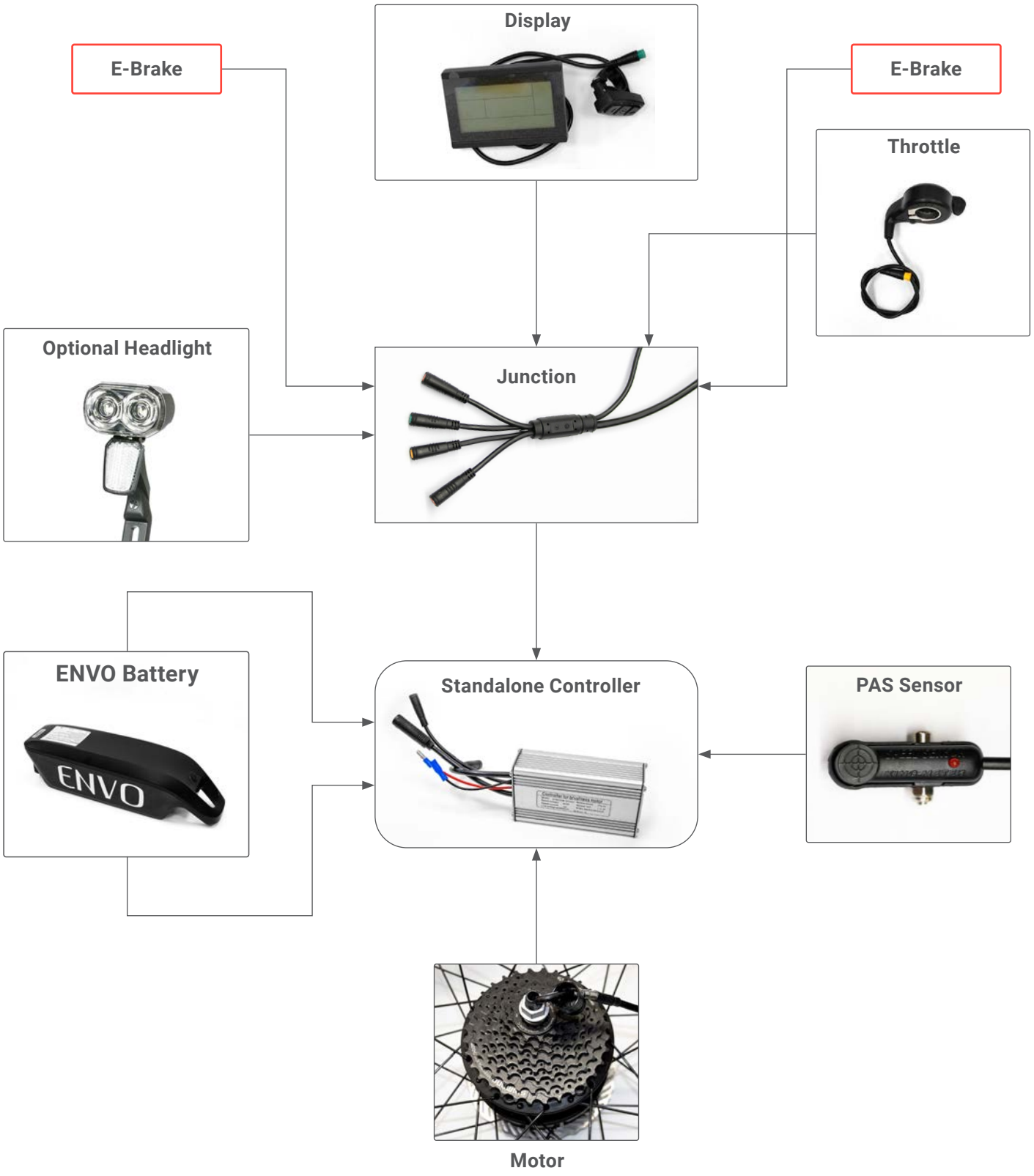


Figure 4.10.A

Figure 4.10.B

Figure 4.10.C

4.10. CONTROLLER & CONTROLLER BAG SETUP

- All the electrical components in an ebike are operated through a controller. For the 36V and 18A configuration the controller will be enclosed in the battery bracket, but in case of a 20A controller or larger controller, you will need a controller bag to enclose. We have provided a controller bag which is capable of carrying 36V 20A & 48V 25A controllers. This bag can be easily mounted under your seat
- Open the controller bag and you will find all the necessary items as shown in the image
- Make a slot in the bottom of the bag for the cables to run through
- Put all the cables through the slot into the bag, do not apply any pressure to wires, don't bend them, keep them in a nice straight line
- Make sure you have all the cables; Motor, Data, PAS and Battery cable
- Attach the battery cables to the controller
- The pins are color coded, remember to be gentle during connection and to line up the pins and arrows

4.11. TESTING OF SENSORS & MOTOR

When all the wires are connected, which are the headlight, e-brakes, PAS, battery, motor, display and throttle. It is important to conduct some basic testing of the bike making sure all the sensors are operating well.

1. Turn on the battery and attach it to bracket
2. Turn on the display by holding power button for 2 second
3. Apply left/right brakes and brake status will be updated on the display, this makes sure the E-brakes are functioning well
4. Press down button multiple times until the assist level is 0. Apply throttle and there should be an indication on the bottom right corner (rotating lines)
5. Press the up button to set assist level at 1 and lift the motor wheel (making sure its not touching ground) and give a gentle hit to the throttle. The motor should spin, which confirms the motor connection is okay. If there is error info 3 on display then the motor cables are not connected correctly
6. Also rotate the pedal to check the PAS sensor, the more assist level the more power will be available on the motor. There is a small led on the PAS sensor which indicates the sensing of the magnets by the sensor. It should blink when rotating the pedal
7. If you press and hold the up button on the display for 3 second then the optional headlight should turn on

Once all the sensors and function well then you can proceed with attaching the cables well to the frame.

5. OPERATING YOUR PRODUCT

5.1. LCD CONTROLLER FUNCTION OVERVIEW

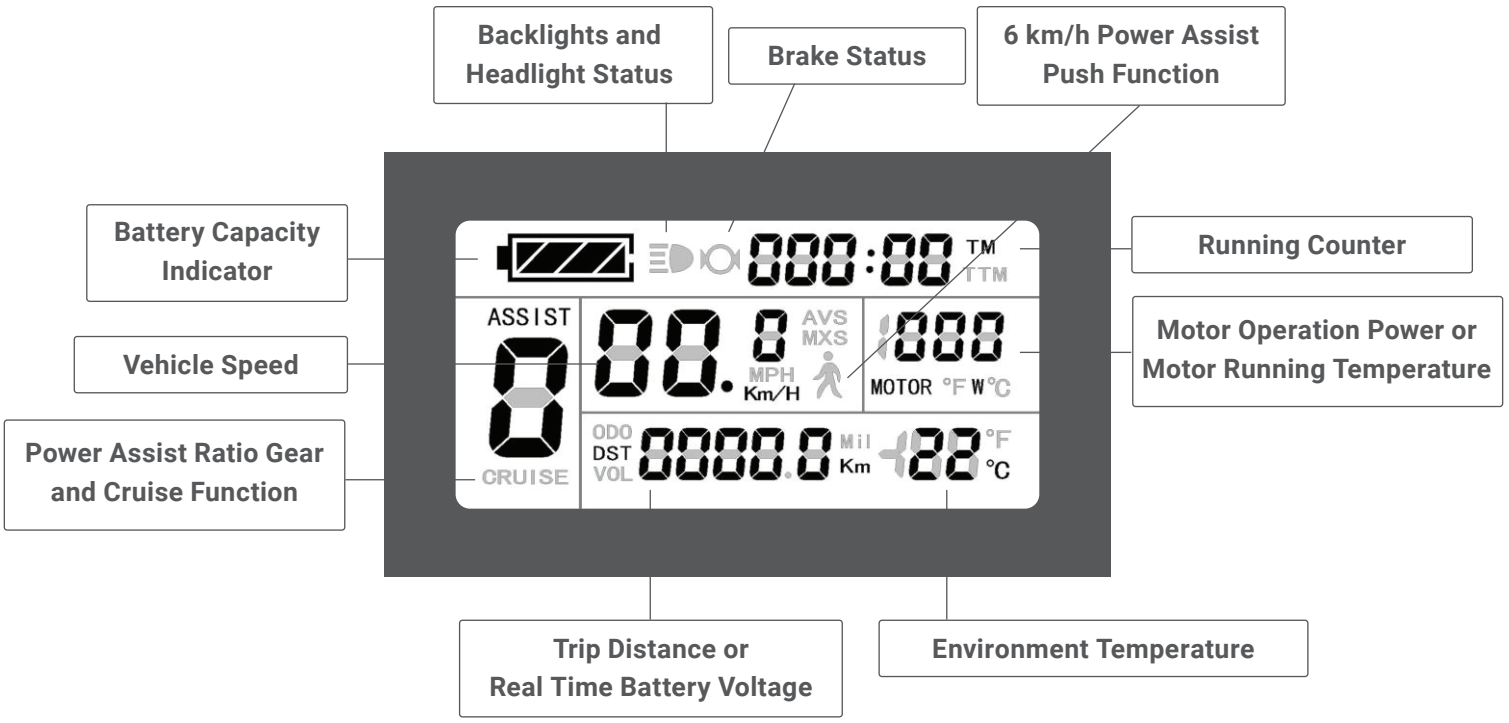
Your ENVO Conversion Kit LCD meter monitors pedal assist, speed, odometer, trip distance, riding time, and battery energy level. To turn the meter on, make sure the ENVO battery is fully inserted into the and the on/off switch is **ON**.

- With the display **ON** you are ready to ride in throttle or Pedal Assist Mode. The throttle will be active and will power the motor if the assist level is 1 or higher. Pedal Assist Mode is also operative
- The Pedal Assist Sensor, installed on the bottom bracket senses pedal crank rotation electronically
- Using the **UP** and **DOWN** arrows you can set pedal assist from 0 - 5 speed modes. 1 being the lowest and 5 being the highest
- With non-zero Pedal Assist Mode, the motor will now turn on when you begin pedaling, and you will not need to use the throttle. You do have the ability, however, to increase your speed with throttle application while using Pedal Assist Mode. Full throttle will be comparable to using the system on level 5 of assist; hence the throttle will not have any noticeable effect on level 5.
- Please note that it takes about a quarter of pedal rotation before Pedal Assist kicks in and turns on the motor
- To turn the head and LCD lights **ON** and **OFF**, simply press and hold the **UP** arrow on the LCD display for about two seconds until you see the display light up

⚠CAUTION

The acceleration provided by the electric motor may feel very uncomfortable at first. It is best to start out in PAS mode 1 and move up to the faster modes as you become more comfortable with the acceleration. If you start out in the higher modes 3, 4 or 5, the motor kick might cause panic. In 0 mode the pedal assist and the throttle are NOT active.

5.2. DISPLAY CONTENT



5.3. LCD METER PROGRAMMING AND USE

- The LCD Display on your Electric Bike can be programmed to change various functions
- You do not need to change any of those parameters. Please do not do so if not necessary. Wrong settings may stop the system from functioning or loss of some functionalities
- If a bike is damaged due to wrong parameter settings, the warranty will be null and void

5.3.1. P PARAMETER DEFAULT VALUES

NUMBER	PARAMETER NAME	DEFAULT VALUE
P1	Motor Characteristic Parameter Setting Mode	87
P3	Power Assist Control Mode	1
P4	Handlebar Startup Mode	0
P5	Power Monitoring Mode	12

5.3.2. C PARAMETER DEFAULT VALUES

NUMBER	PARAMETER NAME	DEFAULT VALUE
C1	Power assist sensor and parameter select mode	7
C2	Motor phase classification coding mode	0
C3	Power assist ratio gear initialization mode	2
C4	Handlebar function setting mode	0
C5	Controller maximum current adjustment mode	0
C6	Backlight brightness adjustment mode	2
C7	Cruise function setting mode	0
C8	Motor operating temperature display mode	1
C9	Startup password setting mode	0
C10	Restore default settings	n
C11	Meter attribute settings	0
C12	Controller minimum voltage settings	4
C13	Abs breaks and anti charge control settings	4
C14	Power assist tuning settings	3

⚠CAUTION

Please make sure you store your ebike in a safe and closed environment away from children, the display has a small battery inside which has to be charged fully. If by accident someone applies throttle the motor may get activated. ENVO Drive Systems will not be liable for any consequences.

5.4. HAND THROTTLE CONTROL

- ENVO conversion kit are equipped with a thumb throttle, which is located on the right side of the handlebar
- Like on a motorcycle, a bike throttle is designed to let the user apply 0-100% of the motor's power at will. The throttle can act independently or in tandem with or without Pedal Assist System
- When the Pedal Assist Mode is set to 1 or higher, the throttle will accelerate the bike forward. You can control the throttle by pushing on the throttle thumb attachment. The further the throttle switch is from its resting position, the more power is delivered to the motor to accelerate the electric bike
- When you want to slow down, you simply release the throttle and let it return to its resting position and simultaneously apply the brakes. The conversion kit also comes with a Throttle Override function, which allows the throttle to work in Pedal Assist Modes

5.5. BRAKES

- ENVO conversion kit are equipped with microswitches which cut-off the motor power when the brake levers are squeezed. You should check the operation of your brake disconnect switch before every ride. While riding slowly in a controlled environment (like your driveway), engage the motor then squeeze each brake separately. The motor should lose power immediately and remain off, as long as a brake lever is depressed
- A circular brake sign will show up on the screen whenever you brake
- Always apply both brakes simultaneously. Applying only the front brake to slow or stop at high speeds may result in the rider being ejected from the saddle and continuing forward over the handlebars. It is best to apply even pressure to both brake levers when slowing or stopping

⚠CAUTION

Always check the cable switch before your ride as it can malfunction or become disconnected/ loose. Always pull both brakes in an emergency or when you need the motor to disengage.

5.6. OPERATING RANGE

Your ENVO Conversion kit has an expected range of 40km with average rider weight, medium pedal assist and throttle use, level terrain and light winds and a maximum range of 80km with light motor use.

The range of your ebike can vary greatly and is heavily dependent on these factors:

- Battery age
- Rider and luggage weight
- Road conditions (gravel or smooth)
- Tire condition and PSI
- Wind speed and direction
- Bike usage (heavy acceleration and high speeds will drain the battery faster) and gear selection

5.7. MAXIMIZE YOUR RANGE

- Fully charge your battery before each ride
- Ride in Pedal Assist Mode as much as you feel comfortable. The more you assist the motor, the longer it will assist you
- Service your bike periodically, ensuring bearings run smoothly, and the brakes do not rub the rotors or rims
- Minimize the weight you carry
- Lubricate the chain every few rides, more so if riding in the rain
- Clean the drivetrain as often as you can and at least thoroughly clean it once a month

6. MAINTENANCE & REPAIR

6.1. MAINTAINING PARTS

- Electric bikes like normal bikes need regular maintenance. The drivetrain needs cleaning and lubrication, the brake pads need to be changed periodically, and levers need to be bled if hydraulic or cables are changed
- In this manual we provide important basic guidelines on how to maintain and inspect your bicycle. We cannot teach you everything you need to know to properly inspect and service your bicycle. That is why we repeatedly urge you to take your bicycle to your bike mechanic for professional care and attention
- Make sure the tires are correctly inflated, check them by using a tire pressure gauge
- Your bike should be periodically cleaned, and tires should be changed when tread is below manufacturers recommended tread depth
- It is very important that you understand the type of wheel securing method on your bike, that you know how to secure the wheels correctly, that you know how to apply the correct clamping force that safely secures the wheel. Ask a bike mechanic to instruct you in correct wheel removal and installation and ask him to give you any available manufacturers instruction
- ENVO bikes have two ways of securing the wheels – front wheels are secured using the hollow axle with a shaft (“skewer”) running through it which has an adjustable tension nut on one end and an over –center cam on the other. The back wheel uses a Hex nut and hex key bolts, which are threaded onto the hub axle
- We highly recommend that you carry a spare inner tube when you ride your bike. Have an authorized mobile mechanic’s number handy when riding
- Never inflate a tire beyond the maximum pressure marked on the tire’s sidewall. Exceeding the recommended pressure may blow the tire off the rim which could cause damage to the bike and serious or fatal injury to the rider and injury to bystanders
- We recommend that you frequently check the kickstand and tighten the bolt as the high stress put upon by the spring can cause the bolt to loosen over time

6.2. IN CASE OF ACCIDENT

⚠WARNING

If you have an accident, drop your ebike or your ebike falls over, your ebike is unsafe to ride until you follow the instructions included in this section. Failure to follow these instructions could lead to component or bike operation failure which could lead to serious injury or death.

1. Remove the battery before performing any additional service, inspection, or maintenance on your electric bike. Failure to remove the battery could lead to the bicycle turning on unexpectedly, causing serious damage or injury
2. Read, understand and comply with the drive system user manual. Do not disassemble or attempt to service components unless you have been advised how to do so, explicitly in writing, by the ENVO Drive Systems
3. Check whether the wheels are still firmly fixed in the dropouts and whether the rims are still centered with respect to the frame or fork. Spin the wheels and observe the gaps between the frame and tire and between the brake pads and the rim sides
4. If the width of the gap has changed markedly and you have no way to true the wheel at your location, you will need to release the rim brake pads without touching them. Please note that in this case, the brakes may not act as powerfully as you are used to
5. Check the handlebars and stems to confirm that neither are bent or broken, and that they are level and upright. Make sure the stem is firmly fixed on the fork by trying to turn the handlebars relative to the front wheel. Briefly lean on the brake levers to make sure the handlebars are firmly fixed in the stem
6. Realign the components if necessary and carefully tighten the bolts to ensure reliable clamping of the components. The maximum torque values are printed directly on the components and/or specified in the enclosed operating instructions. If neither are available, contact ENVO support for assistance
7. Check whether the chain still runs on the chain rings and sprockets. If your bike fell over onto the chain side, check that the gears function properly. Ask someone to lift the bike by the saddle and carefully shift through all the gears. Make sure the rear derailleur does not get too close to the spokes as the chain climbs onto the larger sprockets

8. If the rear derailleur or the dropout/derailleur hanger is bent, the rear derailleur may collide with the spokes. This can result in damage to the rear derailleur, the rear wheel and/or the frame. Check the function of the front derailleur. A displaced front derailleur can throw off the chain, which will suddenly interrupt the drive of the bike, potentially leading to an accident, injury or death
9. Confirm the saddle is not out of alignment, using the top tube or the bottom bracket shell as a reference
10. Let your bike bounce on the ground from a low height. If there is any rattling, see where it comes from. Check the bearings, the bolts and the proper seating of the battery and the connectors, as necessary
11. Check the display. Are all the values displayed as usual? Do not use your bike if the display shows an error message or a warning. If necessary, switch off the system and wait at least 10 seconds before turning it on and checking it again

⚠WARNING

Do not set off on your bike with drive assistance if the control element shows a warning. Doing so could lead to serious injury or death.

12. Take a good look at the whole bike to detect any deformation, colour changes, cracks. Ride back very carefully or walk your bike back to a professional mechanic and have the mechanic check the bike and help resolve any issues
13. If you have had an accident and are unsure whether your bike will function properly, leave your bike rather than risk riding and endangering yourself and others
14. If you do ride your bike, do not accelerate or brake hard until the bike has been checked by a bike mechanic
15. Deformed components, especially those made of aluminum, can break without previous warning. If this occurs, they may not be repaired, i.e. straightened, as the imminent risk of breakage will remain. This applies in particular to the fork, the handlebars, the stem, the cranks, the seat posts and the pedals. When in doubt, you should replace these components
16. At no time should you make any modifications to your ebikes electrical systems, unless they are explicitly approved by the manufacturer in writing
17. Contact your dealer or ENVO support for repairs and replacement parts in case of damage

6.3. QUICK TROUBLESHOOTING

If your Electric Bike is not working, check the Quick Disconnect Fittings to make sure they did not come loose or unplugged.

There are 5 total colored Quick Disconnect Fittings to check:

1. Throttle
2. Left Brake Lever
3. Right Brake Lever
4. Motor
5. LCD Meter

Simply unwrap the black spiral wire covering until the Quick Disconnect Fitting is exposed. If necessary, unplug and replug the Quick Disconnect Fitting(s).

6.4. TROUBLESHOOTING TABLE

COMPONENT	ISSUE	CAUSE	SOLUTION
Charger	Charger gets hot	This is normal	Give the charger plenty of space in a well ventilated room
Battery	Power cuts and screen turns off	Low charge	Charge the battery
		LCD display connector is loose	Reconnect and check all other connections inside the controller housing
Battery	The mounting bracket is melted	Dust and dirt may cause loose connections between connection pins which can cause sparking that leads to melting	Make sure to frequently keep connections clean and secured. Order replacement parts
	Battery does not charge up with standard charger	Battery is already fully charged	Check the battery voltage when the system is on, on page 3 of screen, (double clicking middle screen button). Above 41 for 36v is considered full, and above 53v for 48v is considered full. Press the power button. 4 lights on then is 100%

Battery		Charger does not function	Green LED may turn on when charger is plugged into battery but not connected to the wall. Check all connections are tight Try different plugs as well as different charger cables
	Not getting enough range	Check your tire pressure, check brakes for rubbing, throttle use	Make sure tires are at correct pressure. Riding with full throttle will give much reduced range
Pedal Assist	System is on, Pedal Assist is not working, but the throttle is working	PAS sensor is disconnected	Check wires and connections or restore parameters to default
Throttle	System is on and the throttle not working but the Pedal Assist is working	Throttle has a connection issues	Check connections
		Throttle magnet can see interference from any nearby metal objects	Try moving metal objects further away from throttle
		Error info 01	Check throttle positioning. Clean throttle area. It may be stuck on something, make sure you leave some space around the throttle
Motor	Motor making noise	This is normal when motor is under heavy load (hills, heavy cargo)	Try giving motor more assist under heavy loads
		Motor vibrations causing resonance on other bicycle components	Reposition parts and add vibration damping, make sure motor is secured
	System is on but motor has no power	Loose connections	Check connections, make sure to align arrows
		Brake cut off sensor is malfunctioning	Disconnected the brake cut off sensor, check if motor is powering
		Battery not sufficiently charged	Check battery voltage,. If below 34V the system will turn on but motor will not give power

Motor	System is on but motor has no power	Loose connections	Check connections and reconnect, make sure to align arrows
		Brake cut off sensor is malfunctioning	Disconnected the brake cut off sensor, check if motor is powering
		Battery not sufficiently charged	Check battery voltage,. If below 34V the system will turn on but motor will not give power
LCD Display	Every time I restart the ebike the display clock needs reset	LCD has small battery inside that does not come fully charged	Small battery needs to be charged for 72 hours
LCD Display	Error 30H	Occurs when green pin connection comes loose or disconnected or pins become bent	Check connection and pins should be straight, reconnect
Gear shifter	Gears skipping	Derailleur not in optimal position for gear	Adjust derailleur position with barrel adjuster located on the shifter

For any additional troubleshooting help, refer to **support.envodrive.com** or contact your local ENVO Electric Bike dealer.

7. TRANSPORTATION & STORAGE

7.1. TRANSPORTATION

- Please remove the battery and turn it off before transporting the bike. Batteries are not designed to be on the bike while being transported
- Store the battery in a secure location
- Always remove the battery before using a rack

⚠WARNING

Misuse of vehicle racks could result in potentially hazardous situation that could lead to property damage serious injury or death.

7.2. STORAGE

- Always fully charge the battery before storage
- If you are storing the battery long term, check and charge the battery every 2 months
- Always store the bike somewhere where it is protected from rain, snow, or sunlight
- Store the battery in a cool, well-ventilated room at room temperature

8. GENERAL TERMS & WARRANTY

8.1. WARRANTY

- All products including ebikes and conversion kits, as well as components purchased including motor, controller, display, battery, charger, throttle, PAS sensor, brake sensors are covered by 12 months FREE warranty unless otherwise specified. You can purchase an extended warranty up to 24 months where offered
- Although our warranty is designed to ensure you receive a perfect product at the time of purchase your product will still require maintenance by the user
- Replacement mechanical parts such as chain, brake, tire, gear adjustment or loose screws or connectors are not covered under the warranty. The warranty is for intrinsic parts defects only
- We do not offer bicycle service and tune up as a part of warranty service
- The warranty supports you if you have intrinsically defective parts such as a cracked frame weld seam or controller circuit failure. It does not include labour or delivery
- Delivery of the defective products or parts for repair or replacement to our service shop is the customer's responsibility
- An ebike is a vehicle that functions in real working conditions and is exposed to unwanted impacts, shocks, vibrations, heat and cold, accidents, water penetration, salt splash etc. which may cause damage. These damages are not covered under the warranty
- If you find a defective product or part within the eligibility period, we supply will supply a free replacement part for you. You might be billed for the cost of delivery or installation fee
- If the problem is caused by an accident, wrong or careless installation by the customer, wire stretch, bad storage or not following the instruction manual, the customer will pay the cost of the part and replacement. The cause of the failure and warranty eligibility should be verified by the head of our technical department
- Our warranty terms and conditions apply to all customers purchasing our products through dealers, 3rd party or second hand
- To claim a warranty, please submit an application through our customer service ticketing system at **support.envodrive.com**
- If a warranty extension is offered for any of our products, you can pay the fee and get covered for the extension through the same terms and conditions. You may apply up to 1 day before the regular warranty period expires

8.2. REGISTERING YOUR PRODUCT WARRANTY

Please register your ENVO Drive Systems product by submitting filling out our product warranty registration form at **Envodrive.com/warranty-registration**.

IMPORTANT NOTE:
You must register your electric bike with ENVO Drive Systems within 30 days of receiving your product for warranty to be valid.

8.3. EXCLUSIONS

ENVO is released and discharged of any liability for any damages, injuries or claims occurring as a result of neglect, the owner is responsible for the maintenance and safety of all structural and mechanical components of their ebike such as brakes, headset, forks, etc.

8.4. SATISFACTION GUARANTEED

We offer guaranteed satisfaction on all our products and services. We provide in-depth free technical sales support to ensure you choose the product that best suits your needs.

8.5. CUSTOMER SERVICE

Our highest priority is to provide the best customer service possible and cultivate a long lasting relationship with each client built on trust and respect. Our customer service is not passive; we are available to actively support you through all ordering or service procedures. We are happy to have in depth conversations with our customers about their requirements or problems. Our personal connection with each client is what differentiates us from common “No-Question” customer service models offered by Amazon or department stores. At ENVO we are real hardworking people trying to bring great products and services to you in a way no one else does.

8.6. TROUBLESHOOTING, REPAIRS & TECHNICAL SERVICE

- We have a dedicated Help Center including a troubleshooting guide and user manuals to help customers maintain and fix their system in case of errors or failure. You are required to go through the guides and if the solution is not achieved contact our customer service through our ticketing system, providing all observations for our technicians to help figure out the issue
- 90% of cases can get to a solution at this stage by knowing the problem even without need for sending any replacement parts

- In case the issue is not diagnosed by standard ways; for our hub motor kits, ENVO ebikes, and other house brand products, since the electrical system is modular and has easy access. We would be able to easily send you replacement parts such as a controller to swap and test and return the defective one. You may be required to purchase the parts initially and pay for the shipping costs. You can return the unused parts for full refund later on
- Customers are required to have a level of technical knowledge with tools to recover their system remotely and safely without our assistance
- If at any stage of the diagnostics or even after parts replacement, it turns out to be a part intrinsic defect within the warranty criteria; we will refund the cost of the purchased component as accepted by warranty validated by the head of technical debt

CONTACT

LOCATION

ENVO Drive Systems Inc.
1685 Ingleton Avenue
Burnaby, BC V5C 3V6
Canada

BUSINESS HOURS

Monday – Friday: 10am – 5pm PST
Saturday: 11am – 3pm PST
Sunday: Closed
Please check online to see our most up to date hours

PHONE

+1 (604) 423-3381
Toll free: (888) 229-2980

WEBSITE

envodrive.com
support.envodrive.com