

NIK[®]

NIK E-Bikes

**48V 500W Hub Motor Bike
User Manual**

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Warnings

Thank you for purchasing a NIK E-Bike. Read this manual to familiarize yourself with your e-bike. Understanding the information in this manual will help ensure safe operation and help you avoid hazardous situations and prevent accidents while riding your e-bike. This manual contains details of the product as well as information on assembly, operation, and maintenance. Save this manual as a future reference to help keep your e-bike in proper working order. Review all warnings in this manual before operating your e-bike and always use extreme caution when riding. Please contact NIK E-Bikes if you have any questions regarding your e-bike or the information in this manual.

ATTENTION

- Riding an e-bike is inherently dangerous. Operating an e-bike always carries a risk of serious injury or death to the rider and those around them.
- Ensure that you read and understand all the information in this manual before riding your NIK e-bike.
- Keep this manual and all included documentation for future reference. For the most up to date information visit our website at www.nik-ebikes.com.
- This manual does not contain an exhaustive list of all situations and hazards that may be present when operating an e-bike. Some risks cannot be anticipated or predicted and are the sole responsibility of the rider.

Assembly and Fit

- Make sure that your e-bike properly fits you. Riding an e-bike that is too big or too small can interfere with safe operation of the e-bike resulting in serious injury or death.
- Follow the sizing recommendations on our website or consult your local dealer for more sizing information.
- It is recommended that you have a qualified mechanic build and maintain your e-bike. Improper assembly can lead to equipment failure and result in an e-bike that is unsafe to ride.
- If you choose to assemble the e-bike yourself, have a qualified mechanic perform a safety check before riding.

Aftermarket Components and Accessories

- Only replace the original components and parts of your e-bike with parts from reputable brands for similar use cases. Replacing original components or installing third-party accessories can jeopardize the safety of your e-bike, void warranty, or cause your e-bike to not conform to local laws. Altering the original specification or your NIK e-bike is always done at your own risk. Using components or accessories not tested by NIK E-Bikes could make your e-bike unsafe to ride, cause damage to your e-bike, or result in serious injury or death.

Safety Check

- Always perform a safety check on an e-bike before riding. Riding an e-bike without performing a safety check may create a dangerous situation. A safety checklist is included in the Assembly section of this manual.

Safety

General Safety

- Riding an e-bike carries the risk of damage, injury, and even death. If you choose to ride a bike you assume the responsibility for that risk. Knowing and observing responsible and safe riding practices and proper maintenance help minimize these risks but does not eliminate them.
- Never operate an electric bike under the influence of alcohol or controlled substances.
- Persons under the age of 18 should not ride or operate a NIK e-bike. All riders should have the physical condition, coordination, and mental capacity to safely navigate traffic, road conditions, and hazardous situations that may arise. Consult a doctor if you have questions about whether you are fit to operate an electric bike.
- Have your e-bike assembled by a qualified bicycle mechanic. Ensure all bolts are properly tightened and torqued as specified.
- All riders should know and observe local laws and ordinances pertaining to electric bikes and their operation. Familiarize yourself with all relevant laws in your area before riding.

Safe Operation

- Become familiar with operating your bicycle before riding on public roads. Make sure to understand how the electric assist, shifters, and brakes all operate before riding your e-bike.
- Perform a pre-ride safety check of your e-bike. Failure to perform a pre-ride safety check can lead to serious injury or death. Always confirm your e-bike is in proper working order before riding.
- Ensure your e-brake cutoff is working properly before riding.
- After any accident you should consider your e-bike unsafe to ride until you have consulted a qualified mechanic to ensure your e-bike is in proper working order.
- Using electric pedal assist and throttle functions on any e-bike can be dangerous. Familiarize yourself with the function of both before operating the e-bike. Accidental activation of either electric assist function can result in an accident.
- NIK recommends riders start pedaling before using the throttle function. Using the throttle from a complete stop can result in loss of control of the e-bike.
- Always start riding at the lowest pedal assist level until you are comfortable with the pedal assist function. Always ride at speeds within your physical ability and in accordance with local laws.

Safe Riding Practices

- Only use the throttle when already moving to maximize control of the e-bike.
- Throttle use will drain the battery considerably faster than using the pedal assist function.
- Always ride predictably and with traffic. Use proper hand signals to indicate turning. Use defensive riding practices and never assume a driver can see you.
- Keep an eye out for road hazards such as potholes, gravel, curbs, train tracks, road debris and other obstacles. Cross train tracks at a 90° angle and turn off electric assist when riding over surfaces with low traction.
- Be prepared for parked cars to open doors or back out of driveways.
- Take extra care when approaching intersections or passing other cyclists and pedestrians.

- Make sure any loose clothing is secured and cannot catch or snag while riding. Always wear close toed shoes when riding a bike. Do not wear headphones while riding your e-bike.
- Do not over apply the front brake when stopping. Locking up the front wheel can cause you to lose control of your bike. Do not follow other traffic too closely. Always allow a comfortable stopping distance between you and anything in your path.
- Only use minimal power assist when turning or riding on slick surfaces. Overuse of the power assist while turning can cause a loss of traction and result in an accident.
- Always wear a helmet when riding an e-bike. Failure to wear a helmet when riding can increase the chance of serious injury or death to the rider.
- NIK e-bikes are not for off road use. Do not use NIK e-bikes for stunts or extreme riding. Using your e-bike in this way can result in serious injury or death.

Poor Riding Conditions

- Do not ride in wet weather or at night if it is avoidable.
- This e-bike is not designed for riding during heavy rain or through large puddles or streams. Exposing the electrical system to water or submerging it can cause serious damage to the e-bike.
- Ride at slower speeds and allow more room for braking when riding in wet weather or at night.
- Wear reflective or bright clothing to make yourself more visible when riding during bad weather or night time.
- Ensure your bike has a functioning headlight and taillight to increase visibility.
- Road hazards can be more difficult to spot in wet weather and at night. Take extra care to avoid hazards and ride familiar and well lit roads when possible.

Safety Check List

Use the checklist below before riding to ensure that your e-bike is safe to ride and in proper working order. Consult a qualified bike mechanic or contact NIK E-Bikes if you are unsure how to perform an assessment of any part of your e-bike.

Battery	<ul style="list-style-type: none">- Check the battery charge.- Check for any damage.- Ensure the battery is properly installed in its mounting bracket.- Remove the key.- Unplug the battery from the charger.- Consult battery care instructions for more info.
Wheels and Tires	<ul style="list-style-type: none">- Rims are true.- Spokes are tensioned properly.- Axles are seated in the frame and fork properly.- Quick release skewers are properly tightened- Axle nuts are properly tightened to 45 N.m.- Tires are inflated to the specified pressure.
Motor	<ul style="list-style-type: none">- Motor spins freely and smoothly.- Wiring is secured and free of damage.
E-Brakes	<ul style="list-style-type: none">- Test front and rear brake levers for proper operation.- Check brake pad wear level.- Ensure brake levers are positioned correctly and secured to the handlebars.- Confirm the e-brake motor cutoff is functioning.
Crankset and Pedals	<ul style="list-style-type: none">- Crank arm bolts properly tightened.- Bottom bracket spins freely and has no play.- Pedals spin freely and are properly tightened.
Chain	<ul style="list-style-type: none">- Properly lube the chain.- Check for damage or kinks.
Wiring Harnesses	<ul style="list-style-type: none">- Wiring is secured and does not rub while in operation.- Wiring plugs connected securely and are undamaged.

Stem and Handlebars	<ul style="list-style-type: none"> - Stem and handlebars aligned with the fork and front wheel. - Stem is properly tightened on the steerer and handlebars.
Derailleurs and Mechanical Cables	<ul style="list-style-type: none"> - Derailleur is adjusted properly - Shifters secured to handlebars properly
Frame and Fork	<ul style="list-style-type: none"> - Check for any dents, cracks or other signs of damage. - Make sure the seatpost collar is properly tightened. - Headset has no play and turns smoothly.
Accessories	<ul style="list-style-type: none"> - Make sure fenders, racks, and lights are properly secured to the e-bike and do not interfere with safe operation of the e-bike.

Specifications

Max Assisted Speed	20 MPH
Motor	500W Brushless Geared Hub Motor
Wheel Size	27.5" (650b)
Battery	48V 12.8AH Li-Ion
Estimated Range Per Charge	30-60 miles depending on assist level
Tire Pressure	60 PSI
Charger	48V 2A
Charing Time	~8 Hours

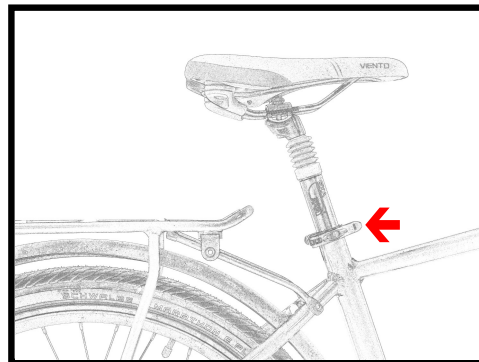
Assembly Instructions

Contents

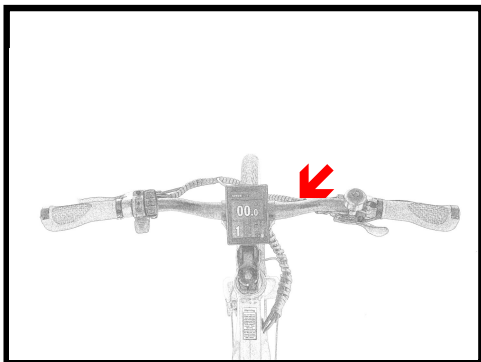
- E-Bike
- Front Light
- Charger Block
- Pedals (L & R)
- Charger Cable (US)
- Rear Rack and Light
- Battery and 2 Keys
- Fenders

Assembly

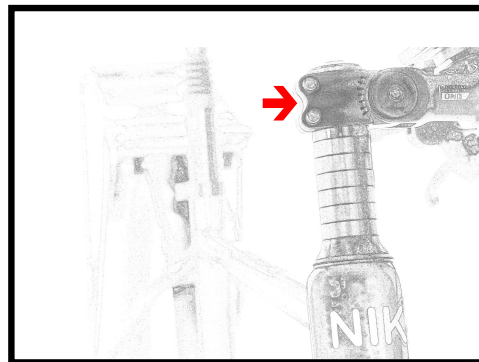
- 1) Unbox the e-bike. Set the small parts box and loose accessories aside for later.
- 2) Grease and insert seatpost and tighten the clamp. Place the e-bike in a work stand.



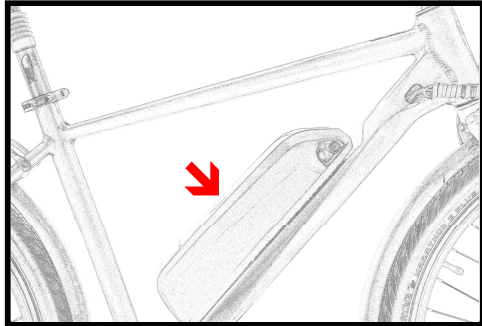
- 3) Remove packaging. Attach the handlebars and stem.



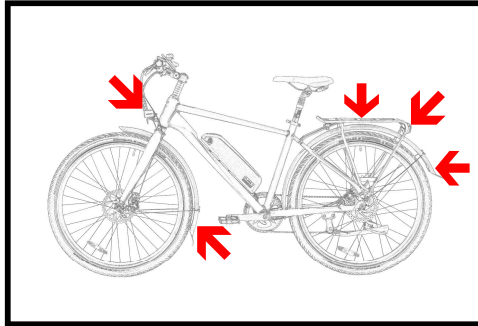
- 4) Preload the headset. Tighten steerer clamp and stem faceplate bolts to 5 Nm.



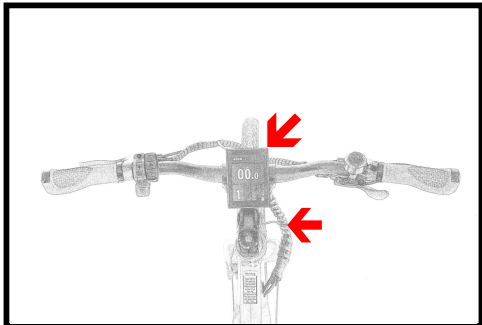
5) Remove and charge the battery.



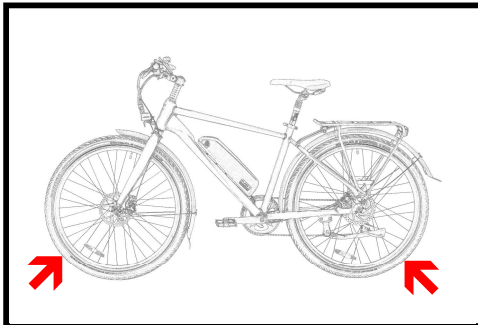
6) Install the fenders and rack. Attach the lights.



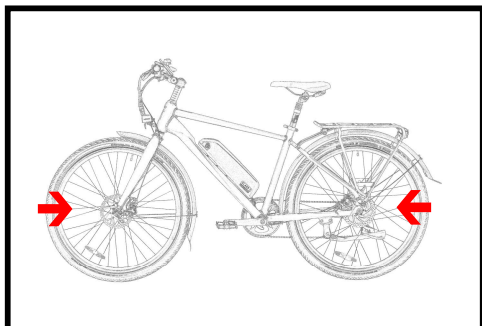
7) Orient the LCD display. Check all wiring plug connections.



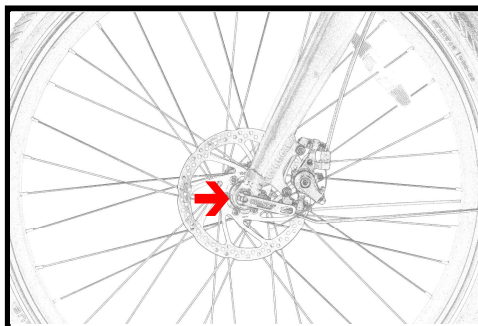
8) Inflate the tires to the pressure specified by the tire manufacturer.



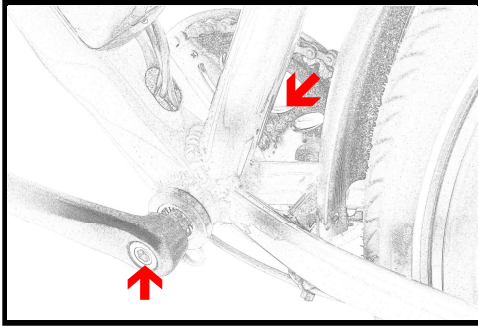
9) Check wheels for true and proper spoke tension.



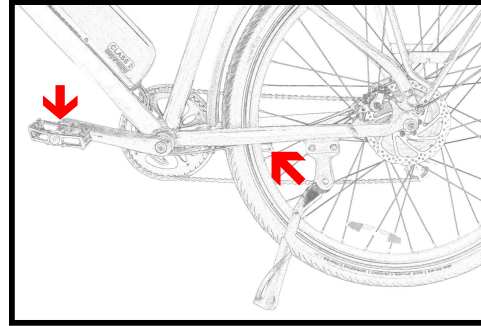
10) Install the front wheel in the fork. Make sure front is secure, and rear axle is secure with the axle nuts torques set at 45 N.m.



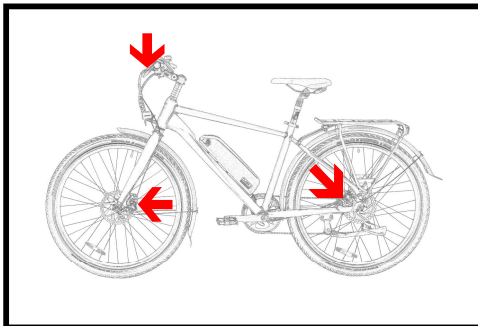
11) Tighten the crank bolts.



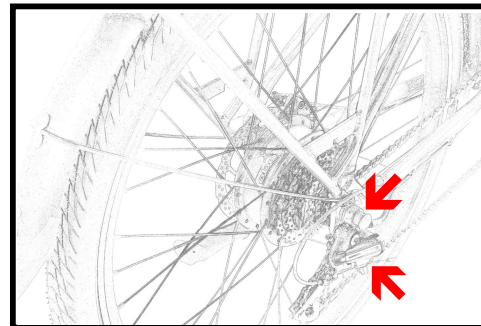
12) Grease and install the pedals.



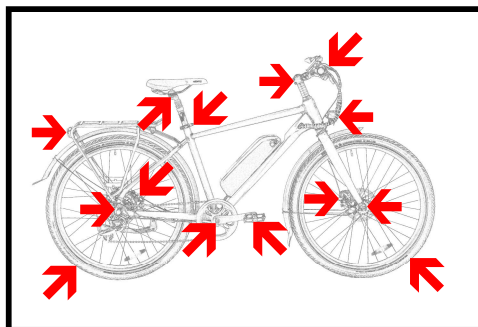
13) Adjust the front and rear brake levers and calipers.



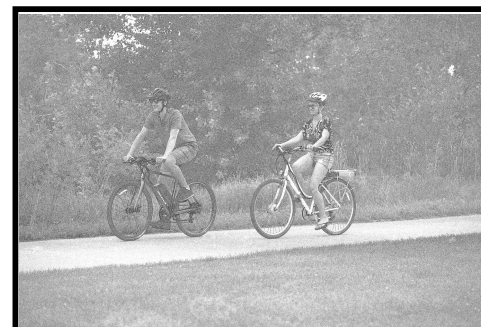
14) Adjust the shifter and derailleur
Check that both the Axle Nuts
Torques are set at 45 N.m. .



15) Perform a safety check.



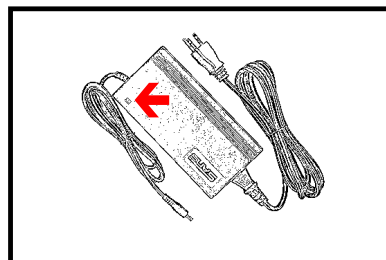
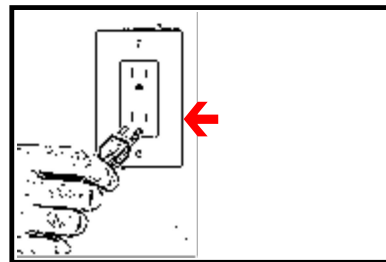
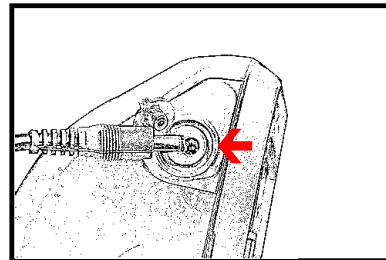
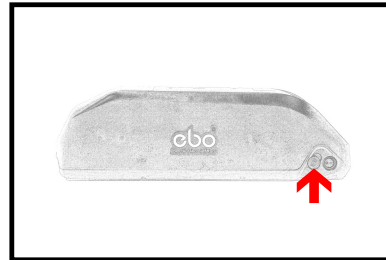
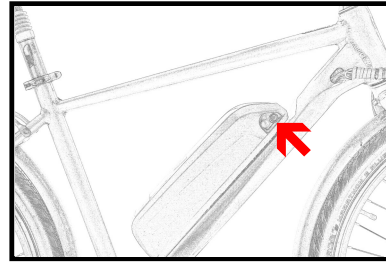
16) Go ride!



Battery

Charging Instructions

- 1) Turn off the battery. Unlock and remove it from the e-bike.
- 2) Remove the rubber cover from the battery charging port.
- 3) Connect the charger to the battery BEFORE plugging the charger into a power outlet.
- 4) Plug the charger power cord into a power outlet and set the battery and charger in a flat and dry area.
- 5) If the battery is charging the light on the charger will turn red. If the battery is fully charged the light on the charger will turn green.
- 6) The battery charge indicator can be used to determine the current battery charge level.



Best Battery Practices

- The battery should be charged under dry conditions and at room temperature
- The ideal charge for long term storage is about 60% or three diodes lit on the battery charge indicator.
- DO NOT clean with a high pressure washer. Remove the battery before cleaning the bike. If you need to clean the battery, ensure it is powered off and wipe it with a rag and dry it before use.
- DO NOT expose the battery to extreme hot or cold temperatures (less than 10°F or more than 100° F). When starting a ride in cold weather it is best to have the battery near room temperature.
- DO NOT leave a charger plugged into a fully charged battery.
- Charge the battery at least once every 3 months.
- Remove the battery from the e-bike when transporting the bike on a car mounted rack.
- Charging a battery from empty should take roughly 8 hours. Avoid charging your battery for longer than 12 hours.

Removing the Battery

- Turn off the e-bike's display using the power button on the handlebars.
- Turn off the battery using the red power switch on the side of the battery.
- Insert the key and turn counterclockwise to unlock the battery.
- Pull the battery forward towards the front of the bike to slide the battery along its mounting track.
- Pull the battery up off the track to pull it free.

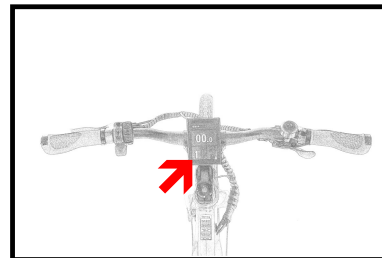
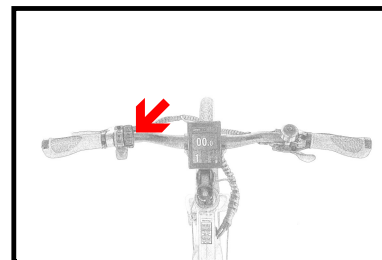
Installing the Battery

- 1) Make sure the power switch on the battery is in the off position.
- 2) Line up the tabs on the bottom of the battery with the slots on the battery mounting bracket.
- 3) Slide the battery down the track of the battery mounting bracket until it is seated completely.
- 4) Insert the key into the lock and turn it clockwise to lock the battery in the tray. Remove the key from the battery before riding.

Operation

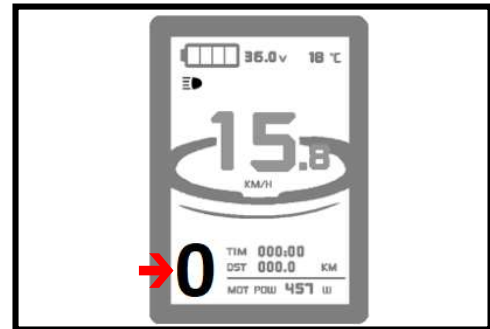
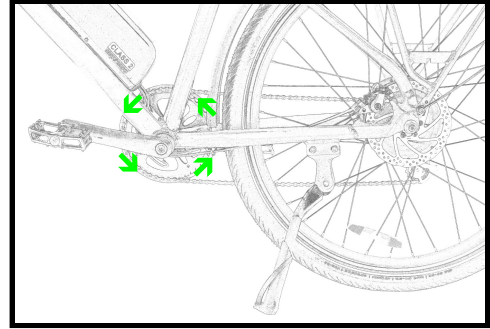
Turning Power On and Off

- 1) Flip the power switch on the battery to the on (-) position.
- 2) Mount the bicycle.
- 3) With your feet on the ground and the throttle in the off position, press the power button on the display remote to turn on the display.
- 4) Select the desired pedal assist mode and ride.
- 5) To power the system off, press and hold the power button on the display remote.
- 6) Flip the power switch on the battery to the off (o) position.



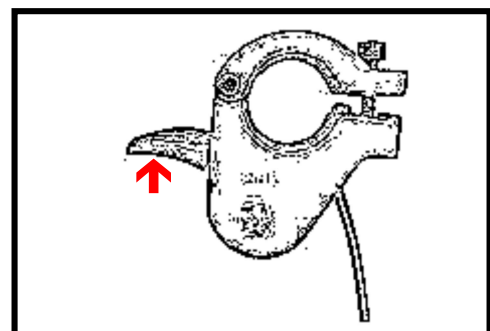
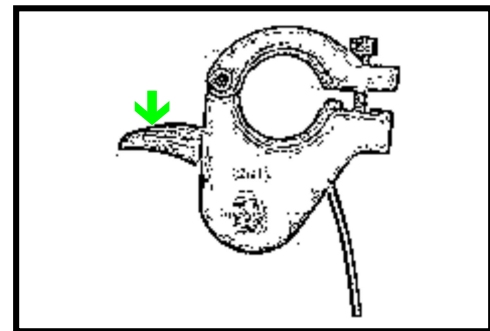
Activating Pedal Assist

- 1) Pedal assist will activate any time you continuously turn the pedals and the pedal assist mode is set between 1 and 5.
- 2) The higher the assist mode is set, the more power your motor will generate as you pedal. Assist mode 0 turns the pedal assist off.
- 3) It is recommended to start riding with the pedal assist turned off until and activate it only when moving.



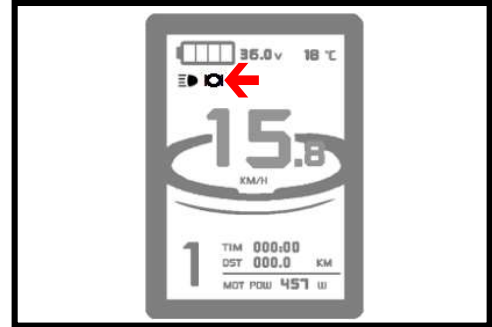
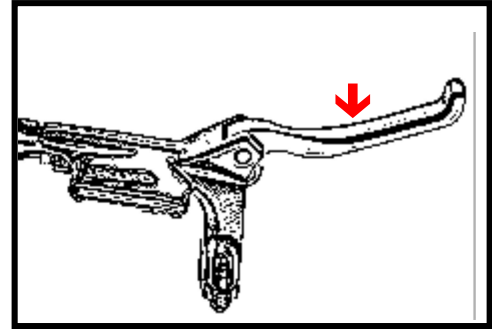
Activating Throttle

- 1) The throttle will manually activate the motor when the lever is pressed.
- 2) The farther the lever is pressed down the higher the power output of the motor.
- 3) Discontinue use of the e-bike if the throttle lever does not completely return when released.



E-Brakes

- 1) Pull the lever to activate the brake and the assist cutoff.
- 2) The >O< symbol indicates the cutoff is active.
- 3) Release the lever to release the brake and return throttle and pedal assist control.



Maintenance

Standard Bike Care

Your e-bike requires regular maintenance and tuning to ensure that it is safe to ride. If you do not have the necessary skills, knowledge, or tools to maintain and adjust your e-bike it is recommended you have a qualified mechanic perform the necessary work to keep your e-bike in working order.

Service Intervals

Regularly inspect and maintain your NIK e-bike to ensure it functions properly. Regular maintenance will help reduce the wear on your e-bike. The service intervals outlined on the next page are meant to be used as guidelines. The necessary maintenance for your e-bike may vary depending on the conditions and manner in which it is used. We suggest the guidelines in the table be followed for inspection and service and that necessary repairs and replacements be performed as needed.

Replace any worn out or broken components as needed. Do not ride your e-bike if any parts are worn past their usefulness, damaged, or broken.

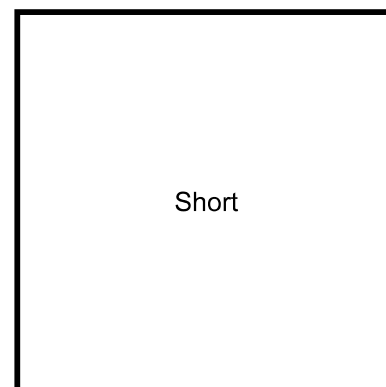
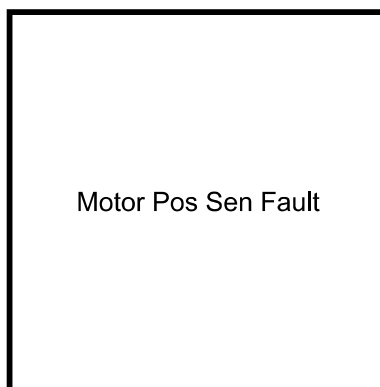
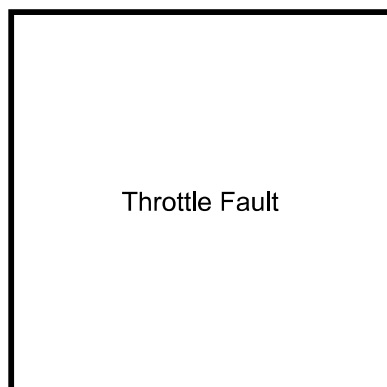
Recommended Service

Interval	Inspect	Service
Weekly (100 Miles)	<ul style="list-style-type: none"> - Check the frame, fork, or components for any damage. - Check tire tread and wheel true. - Check drivetrain tuning and alignment. - Check that all hardware is tightened to the proper torque. - Check that axles are seated in the dropouts and tightened properly. 	<ul style="list-style-type: none"> - Wipe clean the frame with a damp cloth. - Adjust derailleur cable tension with barrel adjusters as needed.
Monthly (500 miles)	<ul style="list-style-type: none"> - Check brake pad wear and alignment - Check brake lever function. - Check chain stretch using a chain checker. - Check shifter indexing. - Check spoke tension. - Check tire tread. - Check battery terminals for corrosion. 	<ul style="list-style-type: none"> - Replace brake pads once minimum pad thickness is reached. - Adjust brake calipers. - Replace chain once wear limit is reached. - Lube derailleur cables and housing. - True and tension wheels. - Replace worn tires.
Biannually (1000 miles)	<ul style="list-style-type: none"> - Inspect all drivetrain components for wear. - Check derailleur cables and housing for corrosion and wear. 	<ul style="list-style-type: none"> - Have a qualified bike mechanic perform a tune up. - Overhaul the bottom bracket. - Replace cables and housing as needed.
Annually (2000 miles)	<ul style="list-style-type: none"> - Check that the hub motor runs quietly and has no grinding or stuttering when creating power. 	<ul style="list-style-type: none"> - Clean and lubricate the internal planetary gears using lithium grease.

Troubleshooting

Error Prompts

The LCD on your NIK e-bike will display an error message when it detects something is wrong with the operation of your system. The table below outlines the possible error messages you may receive as well as possible causes and solutions to the issue. If your display shows an error message it is recommended you take your e-bike to a qualified mechanic or contact NIK E-bikes to resolve the issue.



Error Code	Possible Cause	Solution
Throttle Fault	<ul style="list-style-type: none">- Damaged throttle- Damaged wiring- Damaged connector	<ul style="list-style-type: none">- Check wiring and connectors for damage. Replace if needed.- Restart electrical system with throttle in the off position.- Replace throttle assembly if problem persists.
Motor Position Sensor Fault	<ul style="list-style-type: none">- Disconnected motor wire.- Faulty controller.- Damaged internal sensor in motor.	<ul style="list-style-type: none">- Check all motor wire connectors are fully connected and free from damage.- Replace controller.- Repair or replace internal motor sensor.
Controller / Motor Short	<ul style="list-style-type: none">- Damaged wiring inside the motor, or controller.- Damaged wiring.	<ul style="list-style-type: none">- Replace controller.- Check wiring and connectors for damage and replace as necessary.- Replace motor internals.