Essential eBike Battery Safety Tips

AWARNING

Improper charging, use, or storage of your battery could lead to death, personal injury, or property damage. Always read and follow all the warnings and instructions in this document and in your Lectric eBike User Manual.

We get it: battery maintenance can sound intimidating. But don't worry — it's not much different from caring for other electronics you already own, like your smartphone, laptop, or even a power drill. A little know-how and a few good habits go a long way toward protecting your battery and maximizing its performance.

Below, we'll cover everything you need to know — from charging and storage to what to do if your battery is damaged.

Why Battery Safety Matters

Your Lectric eBike uses a lithium-ion battery — the same technology found in electric cars, smartphones, and laptops. These batteries can be efficient and reliable when treated properly.

Using the wrong charger, exposing the battery to extreme temperatures, or tampering with internal components can damage a lithium-ion battery and lead to reduced performance, permanent failure, or even a fire.

Storing Your Battery: Where and How

If you won't be riding for a while — whether it's a few weeks, a long vacation, or wintertime — proper battery storage is key to maintaining its health.

Here's what to do:

- With the battery installed in your eBike, check the battery's charge level and charge up to 60% if needed. Remove the battery from the eBike and store at 60% charge. This reduces strain on the cells compared to full or empty storage.
- Check the charge level every 3 months when not in use and charge up to 60% if needed.
- Store indoors in a dry, well-ventilated area, away from moisture, water, or humidity.
- Make sure the room has a smoke alarm. Place the battery on a non-flammable surface and away from heat sources.
- Do not leave the battery in direct sunlight or inside a hot car especially during summer.

And while it may seem convenient to leave the battery in your eBike when stored, always remove the battery from your eBike when not in use and store in a cool and dry location.

Need help checking your battery level? Learn more about your eBike's display and how to access battery charge level and voltage in your <u>user manual</u>.

Charging Your Battery: The Right Way

Charging your Lectric battery correctly is one of the easiest ways to extend its life and reduce the risk of an issue. Here's what you need to know:

Only use the proper charger.

Only use Lectric provided chargers that are specific for your battery. Third-party chargers can cause serious damage, even if they may charge your battery.

Charge regularly.

Fully charge your battery before your first ride and after long periods of storage. Even if you don't ride often, check the charge level every 3 months and charge it to 60% if needed.

Avoid completely draining your battery.

Avoid regularly riding until your battery is down to 0%. Unlike other electronics, lithium-ion batteries should not be completely drained and can be damaged if drained to 0% repeatedly.

Mind the temperature.

Only charge your battery when the ambient temperature is between 32°F (0°C) and 104°F (40°C).

Never leave it unattended while charging.

Always unplug your battery within an hour of the green light turning on, and never charge for more than 12 hours at a time.

Plug directly into a wall outlet.

Always plug your eBike battery charger directly into a wall outlet. Do not use power strips or extension cords. Learn more about how to charge your battery in your <u>user manual</u>.

Charge in a safe environment.

Charge in a dry, well-ventilated area, away from moisture, water, or humidity.

Looking for replacement chargers or batteries? Check out our official <u>parts & accessories</u> to keep your eBike running strong.

Keeping Your Battery Healthy & Performing Well

These simple habits will help it perform at its best for as long as possible:

Operate within safe temperatures.

Avoid exposing your battery to extreme heat or cold while riding or charging. Only charge your battery when the ambient temperature is between 32°F (0°C) and 104°F (40°C), and only use your battery when the ambient temperature is between -4°F (-20°C) and 113°F (45°C).

Keep it clean and dry.

Your battery is weather-resistant but not waterproof. Wipe it down if it gets wet and never fully submerge your battery in water. If your battery is ever submerged in water or other liquid, store it in a non-flammable container (like a metal box with sand or kitty litter) away from any structures and flammable materials. Do not attempt to charge or repair it. Then contact your local fire department, recycling center, or Lectric eBikes for help with proper disposal. Always remove dirt and debris from your battery's connectors.

Inspect regularly.

Inspect your battery periodically. If you ever notice damage, bulging, odd smells, or unusual heat, stop using it and contact Lectric eBikes immediately.

Remove the battery before maintenance or transport.

Always remove the battery from your eBike before performing maintenance, placing your eBike on a car rack, or shipping your eBike by ground or air.

Avoid short circuits.

Keep the battery terminals clean and away from metal objects to prevent short-circuiting the battery.

Mind the temperature.

Only ride your eBike when the ambient temperature is between -4°F (-20°C) and 113°F (45°C).

What is the BMS — and Why You Shouldn't Mess With It

Your Lectric battery is equipped with a Battery Management System (BMS). The BMS monitors charging, discharging, temperature, and the overall health of your battery — keeping you and your bike safe.

Think of the BMS as the "brain" of the battery — quietly protecting the battery from overcharging, overheating, or other issues.

Never attempt to open, bypass, or modify the BMS. Doing so:

- Voids your warranty
- Disables crucial safety features
- Can lead to fire, injury, or permanent battery damage

If you ever suspect a problem with your battery or BMS, reach out to our support team. We're here to help!

The Do's and Don'ts of Battery Safety

DO:

- Only use Lectric batteries and chargers.
- Always charge up to 60% charge level before storing for long periods of time.
- Check the charge level every 3 months when not in use and charge up to 60% if needed.
- Store in a dry, well-ventilated area, away from moisture, water, or humidity.
- Inspect your battery before each ride for damage.
- Charge when the ambient temperature is between 32°F (0°C) and 104°F (40°C).
- Ride when the ambient temperature is between -4°F (-20°C) and 113°F (45°C).

DON'T:

- Use chargers, batteries, or parts not supplied by Lectric eBikes.
- Open, modify, or tamper with the battery or its Battery Management System (BMS).
- Fully discharge the battery or continue charging the battery after the charger's light has turned green.
- Expose the battery to water, submerge it, or puncture the casing.
- Continue using if you ever notice damage, bulging, odd smells, or unusual heat.

Need more maintenance tips? Visit our <u>eBike Care & Maintenance</u> page for additional resources.

What To Do If Your Battery Is Damaged

Even with proper care, battery related incidents can happen. Stop using your battery immediately if it is ever:

- Cracked, punctured, or visibly damaged
- Swollen or misshapen
- Smoking, leaking, or smelling odd
- Submerged in water or other liquids

If any of the above happens, take the following precautions:

- 1. Place it in a non-flammable container (like a metal box with sand or kitty litter).
- 2. Keep it away from any structures and flammable materials. Do not attempt to charge or repair it.
- 3. Contact your local fire department, recycling center, or Lectric eBikes for help with proper disposal.

Recycling or Disposing of Your Battery

When your battery eventually reaches the end of its life, don't just toss it in the trash — that's unsafe and, in many places, illegal.

Instead, bring it to a certified battery recycling center.

When transporting a used or damaged battery, always place it in a non-flammable container and handle it carefully.

By recycling responsibly, you're protecting the environment and helping keep lithium out of landfills.

Quick Battery Safety Checklist:

- Remove battery and store at 60% charge level when not riding for a while
- Keep battery cool, dry, and away from direct heat or flames
- Charge regularly but only when the ambient temperature is between 32°F (0°C) and 104°F (40°C)
- Only use only Lectric batteries and chargers
- Don't tamper with the battery or BMS
- Recycle responsibly when the time comes

Your Lectric eBike is built for adventure — and your battery is built to keep up. Treat it well, and it'll power countless miles of unforgettable rides.

Ready to roll? Charge up, ride on, and explore our newest models today!

Looking for more tips or tools?

Shop Parts & Accessories

Explore Our eBikes