



BATTERY TEMPERATURE

- Don't charge if the battery feels hot to the touch.
- Don't charge immediately after riding in hot weather.
- Extreme heat can cause thermal runaway, which is the cause of most e-bike fires.

THERMAL RUNAWAY

- Batteries produce heat during normal operation. During thermal runaway, the battery produces more heat than it can dissipate, which causes the heat to rise uncontrollably and can cause a fire.
- Although thermal runaway is rare, it is serious. Always use a certified battery and charger, and follow our battery safety tips.

MORE E-BIKE INFO

In the state of Nevada, an e-bike:

- Has fully operable pedals
- Includes a seat for the rider
- Contains an electric motor of not more than 750 watts
- Meets the criteria of one of three classifications (Class 1, 2, or 3)

E-BIKE CLASSES



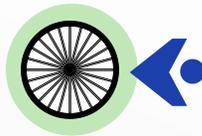
CLASS 1

Pedal-assist only (motor stops when the bicycle reaches 20 mph),



CLASS 2

Throttle-assisted (motor can propel the bike without pedaling, but stops at 20 mph).



CLASS 3

Pedal-assist only (motor stops at 28 mph).

DO I HAVE AN E-BIKE OR E-MOTO? If it doesn't have operable pedals (typically has pegs) and/or goes > 28 mph (SurRon/Talaria-style machine) it may be treated as an e-moto with different regulations.

Western Nevada Safe Routes to School

E-Bike Battery Safety

Charge Smart. Store Safely. Prevent E-Bike Fires.





HOW TO SAFELY CHARGE YOUR BATTERY

- Inspect the battery before charging - look for cracks, bulging or unusual smells or noises.
- Use the correct charger - avoid cheap replacements or generic brands.
- Charge in a safe location - batteries do not like extreme temperatures. Choose a cool, dry place in an open area. Avoid carpets and other flammable materials.
- Plug directly into the wall - Don't use extension cords or power strips.
- Don't leave unattended - Avoid overnight charging. It's helpful to choose a place where you can keep an eye on it while plugged in.

E-BIKE BATTERIES

Most e-bikes use lithium batteries. While they are lightweight and powerful, they are also sensitive. Read the manufacturer guidelines when you receive your battery.

Batteries usually catch fire because:

- They overheat during charging
- They have damaged or low-quality battery cells
- The chargers are mismatched or faulty
- They are stored in hot or damp places
- The casing around the battery is physically damaged from a crash or drop



HOW TO STORE E-BIKE BATTERIES

- **DAILY Storage** - Store in a cool, dry place, out of direct sunlight.
- **WINTER Storage** - avoid freezing garages, store between 50-77 °F.
- **SUMMER Storage** - Do not store in direct sunlight or in a hot car.
- **LONG-TERM Storage** - Don't leave lithium batteries plugged in permanently.

WHAT TO DO IF YOUR E-BIKE BATTERY OVERHEATS OR CATCHES FIRE

- Have a safety plan in place.
- Stop using it immediately.
- If it's safe, move it outdoors.
- If smoke or sparks appear, call 911 and evacuate the area.
- Do not use WATER to put out a fire. Lithium batteries need a CLASS D fire extinguisher, ideally formulated for lithium ion battery fires, to put out flames.
- Do not try to repair or reuse a damaged e-bike battery.