Lithium-Ion Battery Safety

Lithium-ion batteries supply power to many kinds of devices including smart phones, laptops, e-scooters and e-bikes, e-cigarettes, smoke alarms, toys, and even cars. If not used correctly, or if damaged, these batteries can catch on fire or explode.

The problem

- These batteries store a large amount of energy in a small amount of space.
- Sometimes batteries are not used the right way; batteries not designed for a specific use can be dangerous.
- Like any product, a small number of these batteries are defective. They can overheat, catch fire, or explode.

Safety Tips

- Purchase and use devices that are listed by a qualified testing laboratory.
- Always follow the manufacturer's instructions.
- Only use the battery that is designed for the device.
- Put batteries in the device the right way.
- Only use the charging cord that came with the device.
- Do not charge a device under your pillow, on your bed, or on a couch.
- Do not keep charging the device or device battery after it is fully charged.
- Keep batteries at room temperature when possible. Do not charge them at temperatures below 32°F (0°C) or above 105°F (40°C).
- Store batteries away from anything that can catch fire.

Signs of a Problem

Stop using the battery if you notice these problems: odor, change in color, too much heat, change in shape, leaking, or odd noises. If it is safe to do so, move the device away from anything that can catch fire. Call **9-1-1**.

Battery Disposal

- Do not put lithium-ion batteries in the trash.
- Recycling is always the best option.
- Take them to a battery recycling location or contact your community for disposal instructions.
- Do not put discarded batteries in piles.

Charging an E-bike

Charge your battery in a flat, dry area away from children, direct sunlight, liquids, tripping hazards, and in a location where the e-bike is not at risk of falling.

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