# YOUR GUIDE TO

## E-Bikes and E-Scooters

E-bikes and e-scooters are becoming increasingly popular – however, they can be dangerous if they are not stored safely; or when cheap, imitation chargers and batteries are bought instead of authentic, licensed and tested products.

E-bikes use lithium batteries which can cause serious, rapidly growing fires that are hard to extinguish and generate toxic fumes which can cause injury or death.

#### Top tips for e-bike/e-scooter purchases

- It's always advisable to buy a brand-new e-bike/e-scooter from a reputable seller. Be wary of buying a second-hand, refurbished or converted e-bike/e-scooter because it may not meet the necessary safety standards.
- 2. Don't make any modifications to your e-bike/e-scooter. Any changes you make to the motor or battery will likely be unsafe and increase the chances of it malfunctioning and causing a serious fire. Any e-bike modified to go faster than 15.5mph will be deemed an unregistered motorbike under UK law, so don't change the maximum speed to which it has been purposely limited.
- 3. Similarly, be wary of converting a traditional push bike into an e-bike by adding your own motor.

- 4. Don't be tempted to buy cheaper battery packs or chargers online from non-authorised, non-official manufacturers use reputable suppliers who will sell you a genuine, rigorously-tested product.
- 5. Once you've bought your e-bike, register it with the manufacturer so that you are easily contactable if they need to put out a safety alert or product recall.

### Looking after the battery

You need to be careful with the battery in your e-bike:

- Once it has reached full charge, you need to unplug it. Don't leave it charging for longer than it needs, and don't leave it on charge overnight or while you're out.
- Check the instruction manual to see how long it takes to get back up to 100% charge and make sure you take it off charge when it's finished.
- If you've been using your e-bike for a sustained period, the battery will likely be hot. Let it cool down before plugging it in to charge.
- Batteries shouldn't be exposed to extreme temperatures.
- Keep batteries out of direct sunlight.

#### Safe spaces for charging

Ideally, any storage space separate to your home is the safest charging spot, such as your:

- Garage.
- In a shed (located at least six metres away from your home or your neighbours home).

If it really must be inside your home, choose a location where it won't block people's access coming or going, and somewhere away from flammable materials. If you're storing it in the kitchen, you need to install a heat alarm. Other rooms in your house should have smoke alarms fitted, if you're going to be charging your e-bike indoors.



#### Where (and when) you shouldn't charge it

- Don't charge it in a hallway, entrance way, or near an exit.
- Don't block your escape routes, e.g. stairs, doorways, near front door or back door.
- Never leave it to charge unattended.
- Don't charge it while you are asleep.
- Don't charge it if you haven't fitted a heat alarm or smoke alarm in the room where you're charging it.

#### Warning signs for fire risk

**Heat** - It's normal for batteries to generate some heat when charging or in use, but if it feels extremely hot to the touch, it may be defective and at risk of fire, so stop charging it immediately.

**Bulging, lumps and leaks** - A battery bulging or swelling out of shape is a common sign of it failing. You should stop using it immediately. The same applies if there is any type of lump or leak from the device.

**Noise -** Failing lithium batteries have been reported to make hissing or cracking sounds.

**Smell** - A strong or unusual smell (which could be toxic) from the battery could be a sign that it's failing.

**Performance** - Failure to fully charge, or longer charge times, can be a sign that your battery is failing.

**Smoke -** If your battery or device is smoking, a fire has already started. Raise the alarm, get out, stay out and call 999 immediately.

#### Disposing of a lithium battery

If you need to dispose of a damaged or end-oflife battery, do not dispose of it in your household waste or normal recycling. These batteries can cause fires in bin lorries and at recycling and waste centres.

The manufacturer or importer of your e-bike or scooter must offer a free take-back service for waste battery packs. Contact them for details or ask the retailer where you bought it. Alternatively, check with your local authority for suitable battery recycling arrangements in your area.

