

space to carry goods or people. However, many people in the UK have missed out on these benefits due to barriers such as cost or a lack of secure storage, and now concerns about battery fires have been added to the mix.

“We know that when purchased from a reputable manufacturer and used with the right batteries and chargers, e-cycles are very safe. To provide that assurance, along with advice on how to identify a safe e-bike, we’ve partnered with Bosch, the Bicycle Association, SHIFT Active Media, and the Association of Cycle Traders to launch the E-bike Positive campaign.”

You can read more about the campaign on page 43. If you’ve already bought an e-bike, or are considering doing so, what follows is a user’s guide.

CHARGING YOUR E-BIKE

Charging e-bike batteries safely – or rather, the failure to do so – is something that’s been in the news lately due to a number of e-bike fires. Occasionally these fires happen ‘spontaneously’. Most happen during charging.

While the headlines are alarming, statistically these fires are very rare. Some estimates say there are more than two million e-bikes in the UK. Battery fires occur at the rate of less than one a day, meaning the chances of it happening to you are statistically insignificant. Of course, you’ll still want to charge as safely as possible. If you follow a few basic battery care rules, you can rest easy that this should not happen to you.

The key thing is to get a good-quality battery manufactured to a high standard in the first place. There are a number of longstanding, successful and well-recognised e-bike brands you can have confidence in. Conversely, avoid those brands whose agenda is to sell solely online at the lowest possible price.

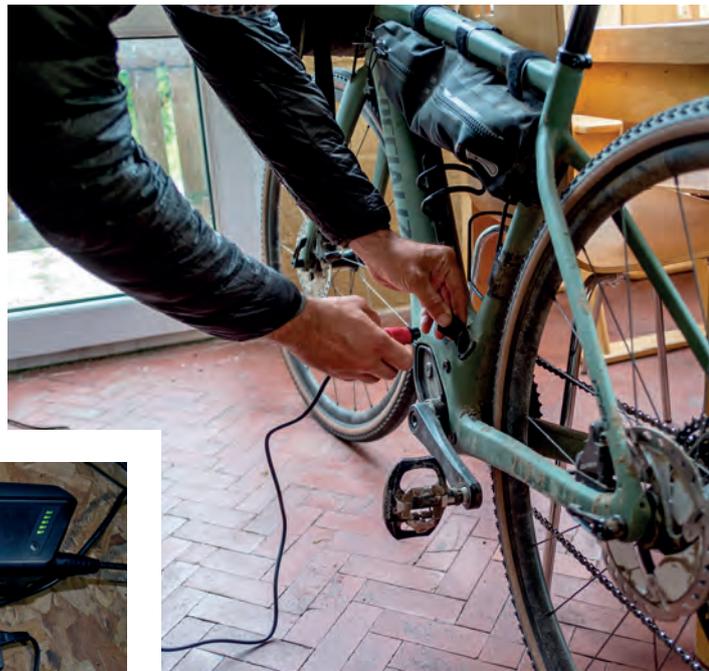
If your battery pack is certified to UL 2271 this is good news: it means it has undergone rigorous safety checks. If the e-bike itself is certified to UL 2849, that’s even better. The whole bike will have been tested for electrical and fire safety, mechanical stability and the performance of e-bike components. Bosch is one of the few manufacturers certified to UL 2849.

How you charge your e-bike’s battery also has an impact.



Above and right: Indoor charging helps avoid temperature extremes, which can damage batteries

Below: Always use the correct charger and the right battery for your e-bike
Bottom: Once charged, unplug the charger. Don’t leave it and go to bed



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• Avoid temperature extremes

Batteries are least stressed at room temperature. Don’t charge and store batteries in very cold conditions (sub zero) or very hot places (especially in strong summer sun and behind glass). If you ride regularly in very cold weather, it could be worth getting a battery cover. Fahrer (fahrer-berlin.de/en/products/e-bike) makes a variety of covers from neoprene and cordura.

• Charge correctly

This shouldn’t be a problem with a smart charger but avoid over-charging. Don’t leave the charger plugged into the battery for too long once it is full. Always use the correct charger for your battery and never use one that wasn’t specifically made for it.

• Avoid shocks and store correctly

Too much vibration and jolting to a battery through rough handling or careless treatment can lead to a shortened life at best and to damaged cells at worst. Try to avoid long periods of storage as this may lead to batteries self-discharging beyond the point of no return. If you do need to store one for a period of months, check what the manufacturer’s recommended discharge state is for storage.

BATTERY MATTERS

At some point your e-bike’s battery will need to be replaced, and a good-quality, reasonably sized replacement will cost several hundred pounds. However, the original battery should last three to five years – potentially more if it’s a good one that’s well looked after.