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How Can I Make My Folding Bicycle Electric?

Electric bicycles are unquestionably on the rise, and with that more and more people are looking to make their folding bicycle electric. Last year, a study showed that more than 25 million Brits were thinking about using eBikes over traditional bicycles.

With a few conversion options to choose from, the question for many cyclists isn't whether or not they should go electric using their current bike, it's **how**. Making the Swytch to a front-wheel conversion kit is the answer. There are three main ways to join the e-mobility revolution and convert your standard folding bicycle into an eBike - central hub kits, rear hub kits, and front hub kits. Each version features an electric motor - either on or near the frame, the rear wheel or the front wheel. This motor works in tandem with your pedalling to power the bike forward.

Let's take a look at each option in turn, and how suitable they are for folding eBike conversions:

Rear hub kits

Rear hub motors are generally more powerful than front-wheel alternatives. They wear the chain down less, and if you want to be discreet the motor is usually hidden behind the gears. But, it's a trade-off.

They are **far** harder to install (they usually involve adjusting the derailleur around highly customised wheels). Plus the uneven weight distribution means that the rear tyre is more prone to getting a puncture than central or front hub conversions. All in all, they're not a good fit for lightweight folding conversions.

Central hub kits

This installation doesn't involve removing any wheels or brake/gear adjustments. As a result, central hubs are the most versatile option for bicycles with uncommon configurations. Stability is also slightly more improved over wheel-based hubs, given that the motor is situated in the centre of the bicycle's axis. But, central hubs do have their drawbacks.

The motor can sometimes be left exposed on the frame, making them unsuitable for inner-city commuting in restricted environments. And, if you run out of battery mid-ride, due to the way central hubs are connected to the drivetrain, you might have to pedal all the way home in the same gear!

Front-wheel conversions: Best Option - The Swytch Kit

The best way to make your folding bicycle electric is to Swytch it using one of our [universal front wheel conversion kits](#). Swytch Kits transform your bicycle into a 2-wheel drive eBike, with power distributed to the back wheels using your legs, and the front wheels via an electric motor.

The battery is good for 50km (31mi) and takes just a few hours to charge, making it ideal for short-range commutes. As the back wheel isn't burdened with extra weight, you'll see fewer flat tyres. Also, due to the placement of the motor, a Swytched bike that collapses into the centre is far less likely to get damaged than an eBike with a central motor for wires to get snagged on. Given that there are no gears or drivetrain to get in the way, front-wheel kits are also **significantly** easier to install than the rear or central motor alternatives. The only parts you'll need to adjust are your brakes.

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Before we get into the specifics, it's important to note that Swytch Kits are only compatible with cable brakes, hydraulic brakes, and disc brakes. If your folding bike uses any other kind of brake (e.g. hub, roller or coaster brakes), you'll need to swap them out for disc or rim brakes. If you've got a Brompton bike, we've got you covered - Swytch sells [dedicated Brompton conversion kits](#) that are compatible with all available models.

So, how does it all work? Swytch Kits feature a 250w high torque motor connected to a pedal sensor, linked to a Power Pack mounted on your handlebars which contains a lithium-ion 250Wh battery, and a controller. This might sound complex to anyone who hasn't used an eBike before, but [the entire](#)

installation process takes around 30 minutes. We've also specifically designed for cyclists with no prior knowledge of eBike maintenance.

Here's how it's done:

Replace your front wheel with the Swytch motor wheel

Fit the pedal sensor around your pedals

Fix the handlebar mount that holds the Power Pack

Connect all the wires, and you're good to go!

We can accommodate a broad range of wheel and frame setups. If you have any questions about your making the Swytch with your folding bike, get in touch.

Go to dev.swytchbike.com to explore our range of eBike conversion solutions