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I’ve hacked London commuting — on a converted old Raleigh

Technology that converts even the oldest bike into an e-bike is changing commuters’ lives — and you are a lot less likely to have it stolen.

With the wind in my hair, I overtake an out-of-breath man pedalling hard on his bike. I fly past him effortlessly, as I’ve done to countless others already on this ride.

At the lights, he catches up with me, gives me a bemused look, and says: “How did you do that?”

“No offence,” he adds, “but your bike looks rather old — and I can see it’s not electric.”

I flash him a knowing smile and spin my handlebars round to face him, gesturing at a rectangular black box attached to them.

“I made it electric,” I say, his eyes widening with understanding.

After a brief exchange about how it works, the lights turn green and I bid him farewell. “Congratulations!” he shouts after me as I speed away — as if I’d designed the technology myself — which makes me just as bemused as he first was. But he’s right: congratulations are in order. This unassuming bit of kit has transformed my life.

It’s bike conversion technology — where you take whatever heavy, old, unloved bike you’ve got kicking about in the shed and transform it into a nippy, powerful and very useful electric one.



The perks? It’s a lot cheaper than buying an electric bike, you can still ride it like a normal bike should you so choose, and for Londoners it’s less of a target for theft — *especially* if the bike you convert isn’t particularly desirable.

My bike certainly fits the bill. Once, the bike storage room of my old flat in Brixton was broken into, with dozens of bikes nicked in one night — a selection of the more than 16,000 stolen each year in the capital.

I walked in, crestfallen, expecting mine to be gone too. But there it was, the last bike standing. The thieves couldn’t be bothered to take it.

It’s a dark red Raleigh— I couldn’t tell you the model — that was my mum’s in the Nineties. It’s at least 30 years old and astoundingly heavy, making even the gentlest incline feel like a mountain.

The longest ride I normally do is to my yoga studio in Brixton. It’s a six-mile journey that Google Maps has always optimistically estimated takes 36 minutes. In reality, it took me at least 51 — and I’d arrive a panting, sweaty mess. Not to mention demoralised, thanks to my pathetically (and apparently unusually) slow speed.

So when I learnt about a little black box that could change my embarrassing predicament, I was intrigued.



One of the leading companies selling electric bike conversion kits is Swytch. Set up by the engineers Oliver Montague and Dmitro Khroma in 2017, it’s been growing in popularity. Their latest model, the Max++, offers their longest range yet: up to 60 miles on a single charge.

It works by replacing your front wheel with one that has a built-in motor, powered by a sleek, removable battery pack mounted on the handlebars. A small sensor on your pedals detects when you are cycling and signals the motor to kick in, giving you an effortless electric boost.

https://www.swytchbike.com/press/ive-hacked-london-commuting-on-a-converted-old-raleigh/

The kits are compatible with 99 per cent of bikes — even mine — and aimed at, as Montague puts it, “anyone with a bike”.

“If you have a bike but you want an electric one, you can switch.” Catchy.

Commuting is the second most common reason people buy the product, Montague says. The first is leisure. “Just to go to the shops, or to see someone, or to go down the pub. Because people don’t know it’s electric, it’s a brilliant pub bike.”

Montague started converting bikes as a hobby. He was inspired after seeing his manager at an internship turn up to work calm, composed — and crucially, not at all sweaty — after cycling ten miles in a suit.

“I said: ‘Why aren’t you sweating? What’s with the suit? Have you moved house?’

“He said: ‘No, I’ve gone electric.’”

That sparked his interest, and he’s had the e-bike bug ever since. “There’s this smile that people do when they try an e-bike for the first time,” he says. “It’s one of joyous surprise.”

The drawback to an e-bike for many is the price; these are more affordable. Swytch’s cheapest model is £359, a snip compared with buying a new bike.



The installation process is easy — or so I'm told. I didn't do it myself. "If you can change a tyre, you can do it." I can't, so I delegated the task to someone more capable. You can also get it done in certain bike shops.

Then I was ready to go. I decided to test it on my regular route to the yoga studio — the one that normally left me knackered. I was stunned. I got all the way to Brixton with zero effort. It felt more like driving a car than riding a bike, except so much more fun. I whizzed there in nearly half the time, letting the motor do all the hard work.

I couldn't believe how easy the normally challenging ride was. Not a single drip of sweat on my brow, even with the sun beating down.

My cranky old bike from the Nineties has been transformed into a nippy speed machine and is now my favourite way to get from A to B.

It's a game-changer for any Londoner with a bike. We like to get places quickly, efficiently, with minimum hassle and no delays. This ticks all those boxes.

I tried both the Max (20-mile range) and the newest version, the Max ++ (60-mile range). I actually preferred the former: it's much lighter, so easier to mount on your handlebars, and 20 miles is plenty for me. The Max ++ does have a built-in light, which is handy — especially with handlebar real estate tight — and a USB port, which I suppose is helpful if your phone dies mid-ride. They are also working on a solution for delivery riders, addressing the growing public safety concerns around illegal and unsafe e-bike conversion kits, which will have longer range.

"Delivery riders are putting themselves and the public at risk by riding overpowered illegal kits that have fire safety issues, so we wanted to come up with a solution," says Ben Mepsted, the company's chief customer and content officer.

All in all, I'm obsessed with e-bike conversion. It's far cheaper than buying an electric bike, it's insanely fun to ride, the battery is removable (so theft-resistant), and best of all you feel smug overtaking men in Lycra with zero effort.

What better way to get around the city? I feel like I’ve hacked London commuting (and pub trips) for good.

Giulia Crouch on her converted Raleigh bike