



**Gone**  
**in 42 seconds!**

## You always lock up your bike in town. But is it safe? What kind of protection is your lock actually providing? **Carlton Reid** investigates

I'd be a poor bike thief. I'm just not meaty enough. To break into a £100 chain you need to be beefy but, critically, you must also 'want to bust into the lock like your life depended on it.' This was the advice given to me by Mr X, a strong and determined gentleman from Essex who claimed he could breach expensive locks in seconds.

On behalf of Cycle, I bought a load of such locks – you may be using any of them on your pride and joy right now – and Mr X was true to his word. He used big bolt cutters or pocket-sized jacks to quickly smash into a variety of locks. A lock that's rated Gold by Sold Secure, a security products standard body, is meant to resist attacks for at least five minutes. None that Mr X attacked lasted longer than 42 seconds.

When I tried to cut into the £100 chain using the same big bolt cutters I failed, however hard I tried. Yet even a weakling like me equipped with smaller, less conspicuous bolt croppers could breach a £50 lock that was also rated Gold. The so-called armour over a thick cable was about as easy to cut through as the plastic casing. By bending it to expose a joint I cut through this expensive lock like the proverbial hot knife through butter. It took me 10 seconds.

### THIEVES LIKE US

Am I giving would-be bike thieves tips and tricks to launch their careers? I don't think so. Pro thieves are already out there using these techniques and their specialist equipment. Wannabe thieves could Google some techniques in seconds.

Ever been locked out of your house? Call in a locksmith and you'll be surprised how quickly he can gain entry. Using a slim, specialist tool and some deft jiggling he can bypass what you thought were super-secure locks. Professional house-breakers use these secret locksmith tools. Common or garden house-breakers use bricks.

Bike locks are there to foil the



Snip! With 36-inch bolt croppers, the lock above lasted less than 2 seconds. The one opposite lasted 10.6 seconds to mere cable cutters

opportunist thief and slow down the professional. Nothing can offer 100 per cent security. Channel 4 newsreader and CTC president Jon Snow has had bikes stolen from the ITN building, even when they were well locked in a caged compound with a security camera keeping watch.

A bike lock – even the most expensive in the shop – doesn't guarantee security: it buys you time. If a bike thief scans your security and sees it will take more than a minute to breach your system, he'll look for an easier target. If your bike is valuable – to a professional thief – the level of protection you'd need to carry to prevent it going walkabouts would make it unrideable. Yet even with cheaper locks it's possible to make life harder for professional thieves.

Use one or more of the security tactics below and always lock your bike close to other bikes. It allows the thief to see there are bikes easier to steal than yours.

### SECURITY ALERT

There are measures you can take to reduce the chances of having your bicycle stolen.

### DON'T RIDE A BIKE

Not an option you would take, but according to a French study (<http://tinyurl.com/yvfv4r>), only 25% of cyclists re-buy a new bike after a theft and 23% won't return to cycling at all. (The study also reports that 20% of stolen bikes were not protected with *any* form of locks, while 90% of those locked were secured with an easily cut lock...)

### RIDE A RUBBISH BIKE

Or one that looks rubbish. Thieves are on the lookout for easy touches, bikes they can steal easily. But they are also on the lookout for bikes they can shift down the pub or on the street market. Branded mountain bikes are the easiest to sell on. Keep your sexy MTB for your weekend warrior trips and cycle in town on a hack bike.

This can be a genuinely rubbish bike – rust is your friend – or a wolf in sheep's clothing. Disguise a good bike with tatty tape on the frame tubes. To go the whole hog you've got to disguise the components, too. Could you really bear to take a rasp to your Shimano XTR rear mech?

If your rubbishified bike still has the basic shape and look of a mountain bike, it could still be nickable. One of the best security devices on the market is the drop handlebar. Thieves, on the whole, give these a wide berth. Nobody down the pub wants a touring bike. However, there are some thieves who know what a good road bike is when they see one so the drop handlebar trick isn't failsafe.

### MARRY YOUR MACHINE

Travel light, forget the lock, and take your bike with you wherever you go. This is a very secure option but can limit the places you'll be welcome. A folding bike increases your chances of slipping under the radar but not everybody appreciates bikes being inside, even one that concentinas.

### USE A LOCK

Even one you can cut with a Leatherman is far better than no

"Bike locks are there to foil the opportunist thief and slow down the professional. Nothing can offer 100 per cent security."

lock at all. There are plenty of cyclists who turned their backs on their unlocked bikes 'just for a second' while they popped into a shop only to find it gone on coming out. Locks aren't just for long-term parking. Clunk-click every trip.

There's also a good case for locking your bike to an immovable object when it's stored in a secure place such as your garage or shed. Fit a ground anchor and make the local no-goods sweat to get your prized possessions.

### USE A GOOD LOCK

This article shows that a determined, professional thief can breach even seemingly impregnable locks. Such thieves are – depending on where you live – relatively rare. There's not a lot you can do to thwart a tool-ed thief with time on his hands and just your bike in his sights.

Your bog standard bike thief isn't beefy and isn't equipped with long bolt croppers. He (nicking bikes is a male occupation) is more likely to be in need of a fix, desperate to sell your £400 MTB for a tenner, and will be equipped with basic tools. This type of thief can be thwarted with



Mr X cut through this £85 Sold Secure Gold chain-and-padlock in 26.1 seconds. It's supposed to last five minutes or more...

Professionals don't need power tools. Mr X and Mr Y didn't even need the largest (42-inch) bolt croppers...



almost any lock thicker and stronger than a thin cable.

Nine times out of ten, this would-be bike thief will pass by those bikes locked with meaty chains and U-locks and will attempt to steal those bikes 'protected' with flimsy locks. It's simple to cut a cable lock, even those that look tough. Some have thick plastic sheathes that make the thin cable within seem chunkier.

A cheap U-lock is tougher to crack than a thin cable lock. But even expensive U-locks can be smashed in seconds with a small bottle jack. This is a specialist tool. A five-inch hydraulic jack can be extended to ten inches, smashing almost any U-lock after just a few pumps – given the right conditions.

### BE TIME SENSITIVE

It pays to be security-aware at all times, but if you live in a university town there are certain times of the year when the bike theft figures go into overdrive. Basically, whenever there's a new influx of students, there's a ready market for 'second-hand' bikes. At these times of the year, bikes are stolen hand over fist and it's best to employ ultra-secure methods of securing your bike.

### THINK LIKE A THIEF

Bike thieves don't like a challenge. They're not Pink Panther style cat burglars. They prefer easy meat. There's a reason why Sheffield stands are hoops. Street furniture posts may look secure but could a thief hoist a locked bike over the top of the post, or just cut the top right off? If they could, they will.

### LOCK EVERYTHING

Specialist thieves thwarted by good locks attached down low and with few vulnerabilities can strip a bike of its components instead. Specialist tools required? An Allen key and wire cutters. That's for half-inching the handlebars and stuff; for the wheels and seatpost all that's generally needed is a palm. Components attached with quick releases risk going walkies quickly. Consider switching to Pinhead skewers and seatpost-retention devices. These ship with a special key that opens all the devices.

### ADD ON THE EXTRAS

Post-coding your frame or fitting a machine-readable chip the size of a grain of rice adds just a modicum

of security. But it all helps. All you're trying to do is buy a bit more time.

### FILL THAT LOCK

A up-to-date U-lock with a 16mm thick shackle will be pick-proof, Bic-proof and largely impervious to hammer strikes, chisel attacks, pipe bending and cutting by anything other than workshop grinding tools.

But a twenty quid bottle jack, easily bought on eBay, can breach U-locks in seconds. The small bottle jacks – known as 'stubbies' – are specialist tools, not much use for jacking up cars. A stubby slips into a coat pocket and can 'open' a U-lock almost as quickly as the key holder.

The thief needs wriggle room. A bottle jack can only be used on a U-lock where there's space to squeeze it in. Fill that space with frame, spokes and security post and the bike thief will move on to another U-lock where there is space. 'Bad Bones' slip on to U-locks to fill space but at only 2.5mm thick they can be cut.

To work, a bottle jack must sit level in the lock and a thief will search to find a shackle lock at the perfect angle. It was instructive to watch our friendly 'bike thieves' at work: Mr Y could open shackles with his bottle jack when the conditions were right, but had to give up when the shackle couldn't be jiggled into an accessible position.

'There, that's how to lock a bike,' said a frustrated Mr Y. So, use a short U-lock and fit it around the bottom bracket, not the top tube. Make it a tight fit every time.

Look for bike racks that make such locking tactics easier. The best Sheffield stands are those in an 'M' shape not a 'U'. Lock at the lowest point of the 'M'. If you prefer chains, coil them in and out of your bike and the post, leaving little or no slack. A tight chain is harder to attack.

### EXPECT PUBLIC APATHY

Don't expect the general public to step in if someone tries to steal your bike. YouTube has lots of bike theft videos that demonstrate bikes being pinched. There's a famous one from the Neistat brothers of New York City. They used a hack-saw, bolt cutters and even an angle grinder to snatch their own bike in broad daylight: passers-by didn't bat an eye-lid, allowing even slow and cumbersome lock-breaking

techniques to be used at will. Watch it here: <http://tinyurl.com/yut458>.

**TOOLS AND TACTICS**

Mr X and his mate Mr Y are lovely blokes. They aren't thieves, but they're concerned about motorcycle and bicycle security. Or lack thereof. They're both big fellers and can breach hardened steel chains in just over half a minute.

In fact, on some of the locks it took longer to get past the pesky zip-ties on the packaging than to breach the actual lock. To breach the tough, expensive chains Mr X and Mr Y had to work at it, even with big bolt cutters. When the chains snapped after 40+ seconds of hard effort the links shot apart in an explosive fashion. To deaden the sound of the 'explosion', and hide some of the tool, some pro thieves use a thick blanket.

Some thieves operate in pairs, with one as the breaker, the other the lookout. Motorcycle thieves operate out of (stolen?) white vans and sometimes also turn their attention to bicycles, especially high-value ones. A white van can carry all sorts of heavy cutting equipment and is also useful as a shield to work behind.

Expensive bike locks tend to be breached with fairly expensive tools. The bigger bolt cutters can cost hundreds of pounds and have expensive jaws that need replacing every 30 'cuts' or so. Such specialist equipment is a big investment – unless it is stolen from building sites...

**HOW SAFE IS MY LOCK?**

Many locks now come liberally plastered with Gold, Silver and Bronze logos supplied by Sold Secure.

Sold Secure was established in 1992 by Northumbria and Essex Police with the backing of the Home Office and is now an ISO-quality accredited test house for all manner of locks and ground anchors. It's a not-for-profit company owned by the Master Locksmiths Association and it charges lock companies a four-figure sum for the testing of each lock. Each lock also attracts an annual fee payable to Sold Secure.

Sold Secure says its lock breaching methods are those commonly in use by thieves, with the information provided by police and insurers. Sold Secure technicians attack locks with a tight-knit selection of tools.

Depending on whether it's Gold, Silver or Bronze being tested for, the tools include screwdrivers, junior hacksaw, pliers, stilsons, steel tube, ball-peign hammer, HSS hacksaw, punch set, club hammer, TCT hacksaw, freezing agent, cold chisels, 24" wrecking bar, scissor jack, slide hammer and lock picking tools. The tool set does not include stubby bottle jacks or bolt cutters. D'oh!

Sold Secure's Gold standard is awarded to those bicycle locks that can resist a combination of tools for five minutes per attack. I was able to breach a Gold-certified product with 36" bolt croppers in ten seconds.

Sold Secure says its tools are those that 'a typical burglar would carry.' Following complaints about Sold Secure's testing regime, Trading Standards officers are currently testing a batch of motorcycle locks in an attempt to see whether they can be breached quicker than claimed by Sold Secure.

A Trading Standards spokesman said the 'results of the screen testing will determine whether any further formal tests are carried out.' The spokesman said any formal investigation would look at 'whether the product is being manufactured to the same standard it was when the approval was given.'

Motorcycle security products have to pass the tougher Thatcham standards, and without accreditation many insurers won't insure the motorbikes being locked. Another standards body you may see on some locks is ART of the Netherlands. Sweden has its locks accredited by SSF and Germany uses VDS. For more on the various standards, see [www.thatcham.org](http://www.thatcham.org), [www.stichtingart.nl](http://www.stichtingart.nl) and [www.soldsecure.com](http://www.soldsecure.com).



(Far left) If there's enough room to fit a stubby bottle jack in a U-lock's shackle... (Above) ...this is the result. Fill that empty space! (Near left) An armoured cable, snipped in half by cable cutters

**BIKE THEFT BY NUMBERS**

These are Home Office figures for bike thefts in England and Wales:  
 2001-02: 102,713  
 2002-03: 97,755  
 2003-04: 105,467  
 2004-05: 106,064  
 2005-06: 113,206

There's likely to be some under-reporting, but Halifax insurance company claims there are 440,000 thefts a year. The true figure is likely to be between the two. Part of the problem is that many passers-by will ignore bike theft.

So whatever lock or locks you use, don't forget your last line of defence: insurance. CTC Cyclecover Cycle Insurance offers new for old cycle replacement, inclusive accessory cover and up to 30% discount on cover for additional cycles. Phone 0870 873 0067 or see [www.cyclecover.co.uk](http://www.cyclecover.co.uk)

Next issue: DIY hack bikes for less than the price of a lock.

LOCK	BREACH TIME	STANDARD	TOOL
£3 cable	1 sec	None	Small cable cutters
£8.99 cable	2.2 sec	Sold Secure Bronze	Small cable cutters
£24.99 combi cable lock	10.6 sec	Sold Secure Gold	Small cable cutters
£19 chain and padlock	1.8 seconds	None	36" bolt croppers
£84.99 110cm chain and padlock	26.1 seconds	Sold Secure Gold & ART and Thatcham	36" bolt croppers
£100 11mm thick 100cm chain and mini steel shackle	37.3 seconds	Sold Secure Gold & ART	36" bolt croppers
£34.99 U-lock shackle	10 seconds	Sold Secure Gold	Stubby bottle jack
£55 U-lock shackle	42.7 seconds	Sold Secure Gold	Stubby bottle jack