

Cycling answers

Your technical, legal and health questions answered by CTC's experts

THE EXPERTS



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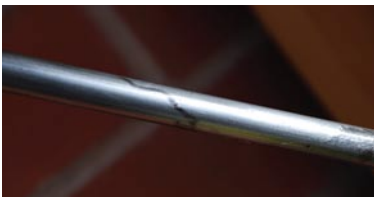
DR MATT BROOKS
Cycling GP

■ FRAMES RUST BUCKET?

Q Recently I decided to respray my 28-year-old Claud Butler tourer. Only a little rust was visible so I did not expect any problems. Having thoroughly stripped off the paint, I was concerned to find several wiggly brown lines on the metal surface. Could these be cracks starting to come through from inside?

With many of us keeping an older machine for commuting or shopping trips, it would be helpful to have some advice. You see quite a few 'rust buckets' being ridden and although one is supposed to be pretty safe with steel, there must be a point at which a frame should be discarded as unsafe.

Peter Cecil, Hereford



A You should discard a frame that clearly has a crack in it, but that isn't what I see here – as far as one can tell from a photograph. A crack would be more sharply defined; and although it might start at an angle, I'd expect it to grow across that tube rather than along it.

This is more of a smudge than a line and looks to me like a stain from some rusting that occurred under the old paint. Stove enamel shrinks on cooling and can form hairline cracks. To relieve tension in the paint these cracks tend to spiral just like that wiggly line around the tube. I've seen frames with rusty cracks in the paint that looked really dangerous until

the paint was removed, revealing something similar to what you appear to have here: proof that the crack was only skin deep.

Indeed you are 'pretty safe with steel'. Frames do sometimes rust through from the inside, but rarely from the outside and in all the cases I've heard of the bike could be brought to a more or less controlled halt.

The best thing to do for peace of mind, once the frame and fork have been resprayed, is to squirt 'Frame Saver' into any breather holes, then tumble so that it coats all the inside surfaces. Frame Saver is a thinner, more easily spread relative of 'Waxoyl' for rustproofing cars. It's imported by Ceeway Framebuilding Supplies (see <http://www.framebuilding.com/framesaver.htm>) and you can buy it from bicycle frame builders. Alternatively, the car stuff is better than nothing.

Chris Juden

■ LEGAL DOORED!

Q I have yet to be hit by a car door opening in front of me, mainly because I overtake with enough room between me and the car. On a recent visit to London, however, I nearly fell foul when the passenger in a taxi opened the door in front of me. I was undertaking the taxi so as to enter an advanced stop area for cyclists at a set of traffic lights. This was a couple of car lengths in front of me.

While I know you should be cautious when undertaking stationary traffic, I understand it to be legal. And you could only enter this advanced stop area via

its dotted line if you did undertake rather than overtake the traffic. Anyway, I stopped in time and did not collide with the passenger or the door. But what if I hadn't? Who would be responsible: me or the taxi passenger?

Named and address supplied

A Opened car doors are a frequent cause of accidents involving cyclists. Rule 239 of the latest 2007 edition of the Highway Code emphasises the importance of checking before opening car doors, and it illustrates this with a reference to a cyclist.

For the cyclist it is prudent to be vigilant as to the risk of opening car doors. However, cycling towards the middle of the road may be a greater hazard than cycling close to a line of parked vehicles. I am of the view that it is unlikely that a cyclist would be held to be contributory negligent for cycling too close to a parked vehicle.

It is an offence to open a car door when it is unsafe to do so by virtue of the Motor Vehicles (Construction & Use) Regulations 1986, Reg 105 which provides: 'No person shall open or cause or permit to be opened any door of a motor vehicle or trailer on a road so as to cause injury or danger to any person.'

The motorist who has control of the vehicle is under a duty to ensure that his passengers alight from the vehicle when and where it is safe to do so. The driver is in the best position to check when it is safe for a passenger to alight from a vehicle through the positioning of wing and rear view mirrors.

In my experience, motorist

"The driver is under a duty of care to ensure that his passengers alight from the vehicle when and where it is safe to do so"

HEART FIBRILLATION

Q I suffer from Intermittent Heart Fibrillation, a problem for many riders my age. A small beta blocker suffices for routine life, but not when riding. I wear a heart monitor to see what is going on, and when I go into fibrillation, my only fix is to stop, sit at the roadside, and wait for my heart to slow down, and reset. This can be cold, and very uncomfortable. Is there a faster fix of this annoying condition? Can it be prevented? I have an unusually healthy heart, and my doctor is not worried. *Mick Davey*



A It sounds as if you may have paroxysmal (intermittent) atrial fibrillation (AF) which occurs where the heart goes into an abnormal irregular rhythm, although your doctor will confirm this.

Contraction of the heart chambers (two atria on top and two ventricles below) is normally coordinated, but in AF the atria 'fibrillate' (partially contract) rapidly and the ventricles which pump blood then contract irregularly and often fast. AF, which can be paroxysmal, persistent or permanent, is more common with increasing age. Predisposing factors include high blood pressure, underlying heart conditions (like ischaemic heart disease, valve or structural problems) and an overactive thyroid gland. Sometimes there is no apparent cause, and the heart is otherwise normal.

Palpitations, dizziness, chest pain and breathlessness can result although not everybody has symptoms. An ECG can confirm the diagnosis. Blood tests and an echocardiogram (ultrasound scan of the heart) look for an underlying cause.

Treatment depends on the type of AF. Where possible, identify and correct any underlying cause. If alcohol or caffeine is a trigger, avoid these. Medication may help by slowing the heart rate. In paroxysmal AF, options include a 'pill-in-the-pocket' (tablet to take when the AF comes on), a regular beta-blocker or another drug.

Rhythm control using cardioversion (an 'electric shock' or drugs) is sometimes an option to convert the irregular heartbeat to normal, but success is variable.

All AF, including paroxysmal, increases the risk of a stroke. This varies depending on age, heart disease and other factors, which your doctor will consider. Anticoagulation using warfarin (or aspirin) may be advised to 'thin the blood'.

If your condition is restricting your activities, speak to your GP again. He may consider other treatments or referral. *Matt Brooks*

insurers usually admit liability when a passenger opens a car door hitting a cyclist. The insurers usually take the view that the negligent act of the passenger is self-evident that the motorist is in a position to provide instructions to the passenger when it was safe to alight.

In the example given, the member was cycling along the inside of stationary traffic. It is often safer to proceed cautiously along the inside of stationary traffic and move to the advance stop area ahead of the line of traffic. Commonly there is a cycle lane leading up to the advance stop area. I am of the view that there would be no difficulty in establishing liability against the taxi driver in the example given. It was a dangerous position to allow a passenger to alight from his vehicle. Furthermore, having selected this position to drop off his passenger

he should have ensured that there were no cyclists proceeding along the road before allowing his passenger to alight. He ought to have driven to a position where he were able to pull up alongside the kerb and thus avoid the risk of cyclists passing on the inside of his vehicle. Taxis are fitted with passenger door locks. The door should have been unlocked by the taxi driver only when it was safe for the door to be opened.

Paul Kitson

SECURITY A LOCK FOR TOURING

Q I would like to tour from town to town, lock up my cycle and explore the place for an hour or two. My dilemma is that locks that weigh less, and therefore are easier to tour with, have a lower security rating. Which



The folding Trelock Cops 400 is a compact lock that's rated Silver. It weighs 1.26kg

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would you recommend as giving the best weight-to-security benefit?

Gerard J Murphy, Altrincham, Cheshire

A Looking through the list of locks tested by Sold Secure and comparing their ratings with weights, you're right: it's truly amazing how constant is the relationship between these two qualities! Bronze (withstands a 1-minute attack with one simple tool) can be had for about 1kg, Silver (3 min with a couple of bigger tools) for 1.3kg and Gold (5 min with heavy tools) for 1.6kg. Those weights are for D locks with regular-sized shackles. Smaller ones weigh less, but with a risk you'll not find anything that slim worth locking to. Larger shackles, capable of tethering a bike to fatter posts etc., clearly weigh more.

“For a given level of security, you can't really beat typical D-lock weights: 1kg for Bronze, 1.3kg Silver, 1.6kg Gold”

For a given level of security, you can't really beat those typical D-lock weights. But there are a few alternatives that give a bit more flexibility without the even greater weight of a padlock and chain. The Abus Granit Steel-o-Flex 80 is a heavily armoured cable that achieves gold for 1.55kg in its shortest, 80cm length.

The folding bars of the silver-rated Trelock Cops 400 can wrap around almost any shape of object up to 85cm in perimeter. At 1.26kg it doesn't actually save much weight compared to an equivalent D-lock, but packs small enough (0.5 litre) to provide a compromise between security and portability that may be attractive to touring cyclists.

Personally, I do not take a very strong lock on tour. I visit rural

OVER TO YOU

NO PLAY, NO SQUEAL

Everyone always misses the main factor when it comes to squealing brakes. All sounds are the result of oscillations, in this case forward and backward movements of the brake pads as they grip and alternately slip on the wheel rim.

This movement is the result of flex in the arms and play in the pivots, as I have proved on more than one bicycle. The latest came with cheap and nasty plastic-on-steel V-brakes. You could rock the brake pad about 1/8 inch and the sound when braking was deafening.

The cure was to throw them away and fit some solid alloy brakes, with a thin shim

washer to further reduce the play. Result: silent braking!

Toeing in and filing lumps out of the pads (last issue p56) are only temporary measures that don't deal with the source of the problem.

The same applies to dual-pivot brakes: check the pivots and if necessary tighten the bolts, leaving just enough play to let the arms pivot freely.

David Gallé, Cowfold, W Sussex

Chris Juden adds: A few people might actually know this already (see Cycle Q&A February/March 2002) but good advice is worth repeating every few years.

attractions mostly, where the pickings are too thin to attract professional bike thieves. And when an interesting town is en route, I aim to spend the night there: leaving the bike safely indoors at my accommodation whilst spending the afternoon of arrival, or morning of departure, seeing the sights on foot. But as cycling becomes more popular so do stolen bikes, and it's probable that I'll be packing a folding bar lock in future.

Chris Juden

upsized to 1 1/8 in. So the chances of your finding a carbon fork with a one-inch threadless steerer, plus the headset to go with it, are not good. Add the mudguard eyes requirement and I think they reduce to no chance at all.

I must modify my reply to: yes, if the existing headset is 1 1/8 in size. If not: best stick to what you have.

Chris Juden

■ FORKS GOING THREADLESS

Q Can a frame that currently is fitted with a threaded headset and fork be converted to a threadless headset and fork? I wonder because I have two early 80s' handbuilt 531 frames (both built for 700C wheels) and would like to try a carbon fork.

Assuming it can be done, are there any brands of carbon fork that have mudguard eyes?

John Hodges, Tirabad, Powys

A The answers are yes and yes. Carbon forks with eyes (and some, if not very generous, clearance) can be found with a bit of searching.

However your old bikes will have one inch headsets, and whilst one-inch threadless was initially used on some racing bikes, they quickly



Carbon forks with eyelets and clearance for a mudguard are available

CONTACTING THE EXPERTS

Each issue, *Cycling Answers* addresses a selection of questions that we receive. We regret that *Cycle* magazine cannot answer all unpublished queries. Please note, however, that general and technical enquiries can also be made via the CTC Information Office, tel: 0844 736 8450, cycling@ctc.org.uk. And don't forget that CTC operates a free-to-members advice line for personal injury claims, tel: 0844 736 8452.

Enquiries for possible publication should be sent to the Editor (see p82). Technical enquiries will get there quicker if they go direct to Technical Officer Chris Juden (same address as the Information Office).