

CYCLOPEDIA

Questions answered, subjects explained – Cyclopedia is your bimonthly cycling reference guide



Left: Alamy

where it is your word against theirs. The National Dash Cam Safety Portal (bit.ly/cycle-dashcamportal) that Cycling UK has promoted provides a way to upload this footage directly to police across the UK.

'Close passing' is a topical issue with Cycling UK. Highway Code Rule 163 gives the vague direction that drivers should give cyclists "as much room as when overtaking a car". The last edition of Cycle featured the 'Too Close for Comfort' campaign, where West Midlands Police introduced a new initiative that is being championed by Cycling UK. The campaign aims to reduce the number of these incidents by increasing awareness of how much space is needed when drivers overtake cyclists.

Richard Gaffney

Q & A

Legal

Dangerous drivers

Q Recently an SUV close-passed a group of five us cycling together. The driver then tried to force me (riding point) off the road. I reported this to the police, with the correct registration number, a description of the lone driver, and supporting evidence from the other four eyewitnesses.

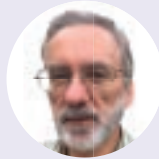
Four weeks after my report, the police received a completely different version of the incident from the driver, including that there were another three (imaginary) people in the vehicle. As it would be 'four against five' in terms of evidence for the CPS, no further action would be taken. Is this really the state of our justice system re. close-passing drivers?

Julian Bentley

A Lack of evidence is quite often the reason why a lot of near miss or close pass cases cannot be taken further by the police. In this case, it is simply your word against the driver's, and by extension your witnesses versus theirs. This quite often does not satisfy the burden of proof required to bring about court action.

So what can you do about it? Using a bike- or helmet-mounted camera can help. Such footage has been used to bring successful prosecution proceedings. If you have a recording of an incident, it negates a situation

Your Experts



DR DOUG SALMON
Cycling GP
(Health)



RICHARD HALLETT
Cycle's
Technical Editor
(Technical)



RICHARD GAFFNEY
Principal Lawyer,
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Pristine jockey wheels. Get some if your bike's look like throwing stars!

Technical

Mech makeover

Q The lower jockey wheel on the Shimano Deore rear derailleur on my tourer has collapsed. It seems impossible to remove and replace the jockey wheel. Is this right?

David Martin

A Have you cleaned it? Joking aside, the jockey wheels are held in their cage by small countersunk screws with, usually, 3mm Allen heads which, if filled by silt and/or transmission sludge, can be difficult to see. Use a small, sharp pick to dig such matter out of the heads, which will allow you to insert the correct Allen key. The screws are assembled using a thread-locking compound, so expect to find them hard to shift initially. If replacing both, it is often easier to replace one at a time than to try to do both at once and find yourself struggling to position various small parts.

Richard Hallett

Cycling UK Forum

Need an answer to a question right now? Try our forum: forum.cyclinguk.org



So long as the carrier and bikes don't exceed the permitted nose weight, you'll be fine

Technical

Towbar hitch

Q I cannot find advice on how to estimate whether a cycle carrier should be safe on my car's tow-ball. I am aware of the maximum nose weight for my vehicle. But even though the total weight of cycles plus carrier may be less than the maximum allowed nose weight, there is clearly an additional leverage factor as the rack will sit further back.

Fred Ross

A Permissible nose weight is calculated to ensure a vehicle's stability when its tow-ball is loaded. Too much weight on the tow-ball will lift weight from the vehicle's front wheels, negatively affecting steering.

Most tow-ball-mounted cycle carriers position bikes behind the tow-ball, with additional machines placed progressively further behind it. The lack of information in the literature of carrier manufacturers on the effect

of this on the car's handling suggests that it is not considered significant and that simply ensuring the total weight of your carrier and all the cycles on it does not exceed the nose weight is enough to ensure legality.

Richard Hallett

Health

Sitting uncomfortably

Q I have a perianal abscess that required an operation. I would like to get back on the bike as soon as possible. How long should I wait?

Name & address supplied

A Most perianal abscesses heal after prompt surgical drainage. The anal sphincter forms the muscular valve between the rectum and the outside world, and abscesses usually originate from one of the glands associated with this. More common in men, smokers, and diabetics, they are not related to lack of hygiene; excessive cleaning may make local infection more likely by damaging the skin and its normal bacteria.

There is good evidence that Sitz baths help healing – sitting repeatedly in warm water; no need to add salt. Constipation and straining are not helpful. Eat healthily. Avoid the bike for at least six weeks, until the skin has healed, and then build up very gradually from a few minutes at a time, getting off frequently.

Doug Salmon

Eat to ride

For a guide on what to eat to fuel your cycling, visit cyclinguk.org/eat-drink-cycling



Left: Alamy

A healthy, high-fibre diet is the best way to avoid rectum-related problems



SPD cleat bolts frequently become stuck fast. Consider replacing the bolts annually

Technical

Removing stuck SPD cleats

Q This evening, my mate spent an hour drilling out a worn-out cleat from my winter boots. What do people do to stop cleat bolts getting stuck?

foxyrider, via the forum

A Clipless pedal cleats operate in a gritty and often corrosive environment that almost guarantees that the bolts will get stuck fast over time. This is a particular problem for users of Shimano SPD cleats, which are forged in a very hard steel alloy. Their durability means there's plenty of time for the screws to rust and seize up.

First thing is to prep the bolt threads on assembly. Oil or grease should do the job, as will an anti-corrosion treatment such as ACF50, but perhaps the best option is some sort of non-permanent thread-locking compound such as Loctite 243, which not only prevents screws from vibrating loose, but protects the threads from corrosion.

Apply some of your chosen treatment to the faces of the countersunk screw heads, and remove, clean and replace the screws at least annually.

Richard Hallett

Get in touch

EMAIL your technical, health, or legal questions to cycle@jamespembroke.com. **co.uk** or write to Cyclopedia, Cycle, PO Box 313, Scarborough, YO12 6WZ. We regret that Cycle magazine cannot answer unpublished queries. But don't forget that Cycling UK operates a free-to-members advice line for personal injury claims, **TEL: 0844 736 8452**.

Knowhow



DAN JOYCE
Cycle Editor

Making sense of commonly misunderstood cycling subjects

Tyre sizing

“What tyres will fit my bike?”

Buying new tyres to fit your bike is more complicated than it should be because tyre sizes are ambiguously named. Measurements in inches like 26×1 1/2 are approximate, while French terms like 650×40B are even more confusing.

To cut through this chaos you need the tyre's ISO (International Organisation for Standardisation) designation. You may see this referred to as its ETRTO (European Tyre and Rim Technical Organisation) designation. They're the same thing.

The ISO designation is stamped on the side of the tyre: two digits, a dash, then three more digits. It looks like this: 32-622. The number before the dash is the tyre width in millimetres. The number after is the tyre's diameter in millimetres – the inner diameter,



Left: Jonny Gawler

Sizing up
For more on tyre sizes, including many more ISO designations, visit cyclinguk.org/tyresizes

where it sits on the rim, *not* the outer diameter from the ground to the top of the inflated tyre. The outer diameter is the ISO diameter plus twice the width, so a 28-622 tyre's overall diameter is 678mm (i.e. 622+28+28).

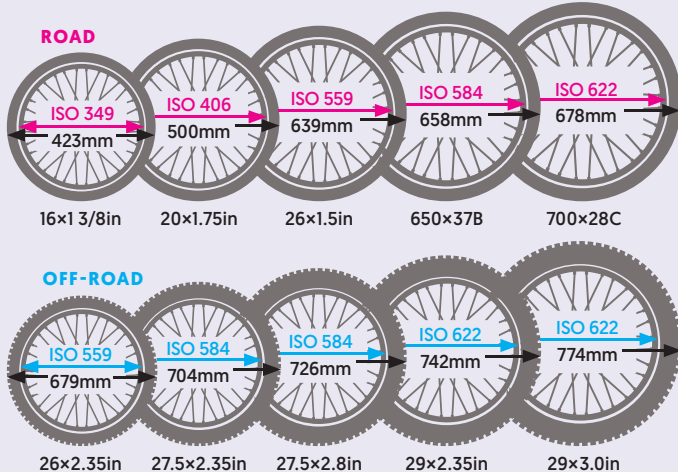
Rims have an ISO designation too, but it's written differently, diameter first, width second, like this: 622×19. The width is the rim's *internal* width, where the tyre sits. If it's not shown, measure the rim's external width and subtract 6mm.

Tyre tips

- **ISO tyre diameters are reliable** but widths vary; some 32mm tyres, for example, are narrower than others. To determine a tyre's exact width on a particular rim, you need a Vernier calliper to measure it.

Measuring up Selected sizes compared

The rim and tyre's ISO diameter is shown in colour. The figure below it is the overall diameter of the tyre size listed. NB. The wheels are NOT to scale.



Will it fit?

If the tyre and rim ISO diameters match, the tyre will go on the rim. That doesn't mean it *should*. A thinner rim suits a narrower tyre; a wider tyre needs a wider rim to support it.

Cycling UK's online article about tyre sizes (cyclinguk.org/tyresizes) has a handy formula for matching tyre widths to rim widths: the ideal ratio is roughly 1.8 to 1. So a 23mm tyre is just right on a 13mm rim (13×1.8=23.4). If you'd rather not do any maths, Schwalbe has a chart: bit.ly/cycle-tyresizes.

Tyre and wheel size is also limited by the space available in the bike's frame, fork, and mudguards. To get an idea of whether a different size will fit, check the tyre's listed ISO width – and for different wheels, the radius (half the overall tyre diameter) – against the gaps in your bike's frame/fork/mudguards. ●

- **Tubeless tyres use wider rims.** The ratio of tubeless tyre width to rim width may be significantly different from 1.8:1.
- **Tubeless rims and tyres** can be stubbornly tight fitting. They need to be so they don't 'burp' air and sealant. To go tubeless, tyre and rim must both be tubeless-ready. If either or both isn't, stick with innertubes.