Expert advice

Q&A

YOUR TECHNICAL, LEGAL, AND HEALTH QUESTIONS ANSWERED. **THIS ISSUE:** GRAVEL RIDING, NUMB HANDS, QUICK-LINKS, STURDY BIKES, AND MORE

MEET THE EXPERTS

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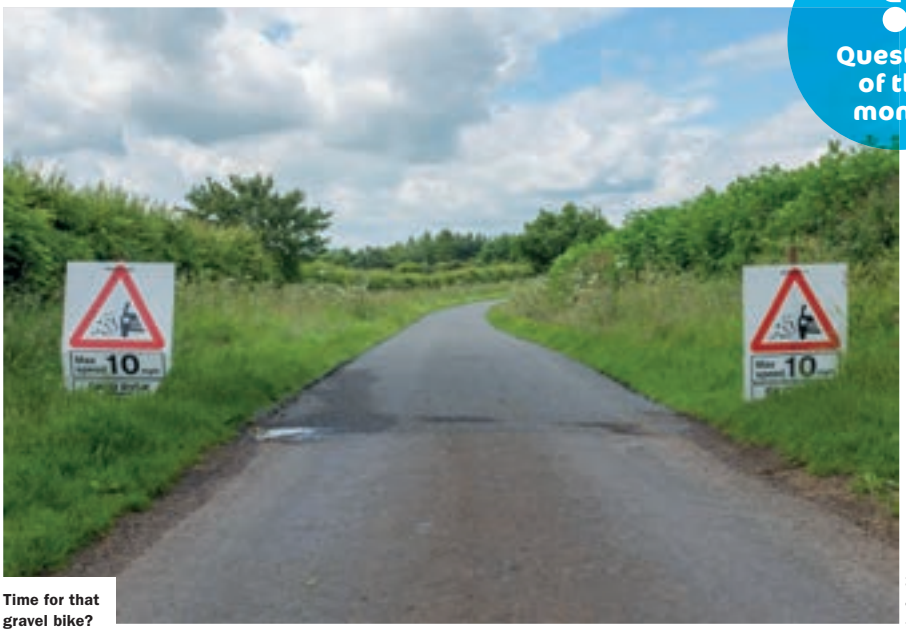


Question of the month

Time for that gravel bike?

Left: Alamy

Legal

LOOSE CHIPPINGS

Q Lots of local roads have been 'surface dressed' with gravel chippings. It's not very nice for cycling on, but a worse problem is the drifts of loose grit created. Is the local authority obliged to remove excess grit? If they fail to do so and the grit causes an accident, are they liable? I've not fallen off yet (touch wood) but have come close.
Name and address supplied

A Surface dressing is justified by highway authorities on the grounds that it is a much more economical approach than resurfacing the entire road. The process involves the supposed repair of any road defects, spraying the road surface with a thin layer of hot bitumen binder, spreading stone chippings over the top, and then the use of a heavy roller to stick the chippings to the surface. This leaves loose chippings, which require the flow of traffic to help embed them. A speed limit of 20mph is usually imposed. The road is then supposed to be swept regularly to remove excess chippings, starting the first day after the dressing has been completed, with the second sweep a week later.

There was a petition to the government in 2016 (attracting nearly 14,000 signatures) to stop highway authorities from using the surface dressing process. The Government responded by stating that surface dressing is an effective and efficient method for routine road surface maintenance. They maintain that it forms a water resistant layer, which in turn prevents that water from creating potholes and cracks in the road.

The legal position is that highway authorities are under a duty to repair the structure and fabric of the road. Whether this duty extends to surface dressing materials is more problematic. In the recent case of Valentine v Transport for London and others, the highway authority was not held liable to clear loose material on the road surface. In this case, a motorcyclist was fatally injured when loose gravel and debris caused him to skid and fall. The court felt it was akin to a situation where oil, landslip, mud, trees, etc. had been laid on the road, and that in those circumstances the highway authority's duty should not extend to surface lying materials.

However, in this situation, the local authority has actually laid the chippings! I suspect that the highway authority would still refer to the above case, although it might be challenged if the authority allowed the chippings to become a danger by failing to warn road users with sufficient signage. Equally, road users would be expected to take greater caution once so warned.

Richard Gaffney

Technical

ALUMINIUM FATIGUE

Q The two bikes reviewed in the June-July issue of Cycle both have aluminium forks. This seems dangerous to me, as a retired structural engineer, because aluminium is prone to fatigue, and the fork is safety critical.
Mr Cantrell

A Metal fatigue is the result of repeated, or 'cyclic', back and forth deflection of a structural component, and is well understood today. Unlike steel and titanium, aluminium does not have a lower limit to the amount of deflection below which fatigue will not occur, and aluminium parts must be designed accordingly. The forks on the two cycles reviewed are both engineered to be highly rigid and flex-resistant and may, therefore, be expected to give a long service life.
Richard Hallett

Bigger aluminium tubes work fine

Technical

BIKE FOR A HEAVY RIDER

Q I am on a health drive and need to purchase a cycle that can hold my weight, which is 23 stone. I would be grateful if you could give me any examples of heavy duty cycles to bear my weight, or links to sites that I can purchase one from. Any help you can offer is much appreciated.
Peter Fulbrook

A It's hard to give specific examples of mass-produced cycles specifically sold on the basis that they will support a rider weighing 140kg or more, although it is possible that many will do so. Two sturdily built bikes that spring to mind are the Ridgeback Panorama (tested in Cycle October/November 2017) and Surly's Disc Trucker. The latter has 36-spoke wheels and there's an option for 26-inch wheels, which are stronger. In any case, if you see a cycle you like, the manufacturer will be able to confirm if it's suitable for your purpose.
Richard Hallett

Health

UNCOMFORTABLY NUMB

Q I am looking for advice on preventing numb hands. The problem is most severe on my road bike. My fingers first go tingly, then numb after about an hour's cycling. It is starting to become a problem on my Mercian tourer, which I have not had problems with before. I have paid for an expensive fit on the road bike, put gel tape on the handlebar, and try to cycle with my arms bent and my hands relaxed on the hoods. The tyres are 25mm – about the largest that the bike will take with mudguards. I would welcome any suggestions on how to address the problem.
Will B, via the Cycling UK forum

A Numbness in the hands while cycling is most likely to be caused by pressure on either the median or ulnar nerve, two of the nerves which pass through the wrist. Other associated symptoms may include pain, tingling, and weakness in the hands and wrists.

The fingers that are affected can help establish which nerve is affected. In median nerve compression (carpal tunnel syndrome), the thumb, index, middle and part of the ring finger are commonly affected, whereas ulnar nerve compression affects the little finger and part of the ring finger. Carpal tunnel syndrome is more likely to arise if using a flat handlebar, while ulnar nerve compression is more common if using a drop handlebar, due to the position of the hand and wrist.

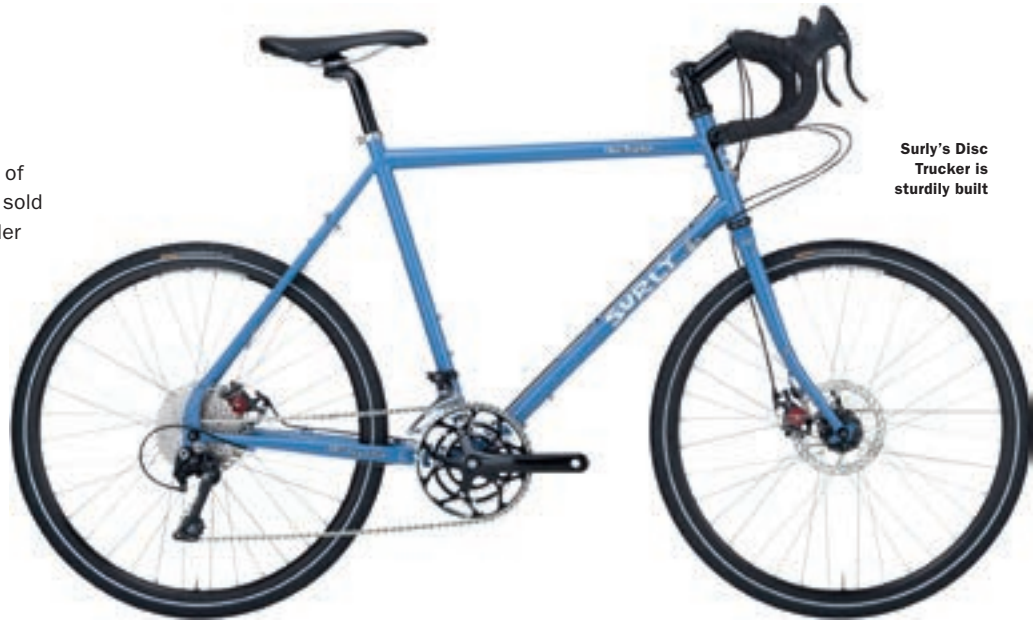
The following measures are worth trying first, although it sounds as if you have already covered most of these. Change the position of your hands on the handlebars frequently while riding and try to stay relaxed and not to squeeze the handlebar grips too tightly. Give each hand a good shake intermittently during a ride. Check your seat and handlebar are at the correct height, and consider using softer handlebar tape and good gloves with padding.

If these have not helped, or if you are getting the numbness at other times apart from while cycling, I would suggest you see your GP. Other treatment options may include a steroid injection in carpal tunnel syndrome, or referral to an orthopaedic surgeon. Your GP can also exclude other possible causes for the numbness.

After ten years, this is my final health Q&A for Cycle magazine. Thanks to everyone who has put forward a question during that time and I wish you all many more years of injury-free cycling!
Matt Brooks

Pressure causes numbness

Left: Alamy



Surly's Disc Trucker is sturdily built

Technical

NOT SO QUICK LINKS

Q The last couple of chains that I have fitted had very tight quick-links. This has led to desperate measures to remove such a quick-link. (With current chains, it seems far more risky to muck about with the normal links.) I am aware of a Park Tool tool that does fitting and removal. I also saw a pair of tools, from a different company, one for fitting, one for removal. This seems excessive! Any suggestions?

Graham, via the Cycling UK forum

A These links are designed to lock together once installed, and can be tricky to disengage for removal. Manufacturer KMC makes two tools, one to fit the link and one for removal. The former sits between the chain bushings and spreads them apart to lock the pins in the side plates. An easy way to do the same job is to install the link on the upper run of a new chain and then rap the descending pedal sharply downwards to jolt the link closed. The KMC removal tool squeezes the bushings together and makes light work of disengaging the link.

Richard Hallett

Technical

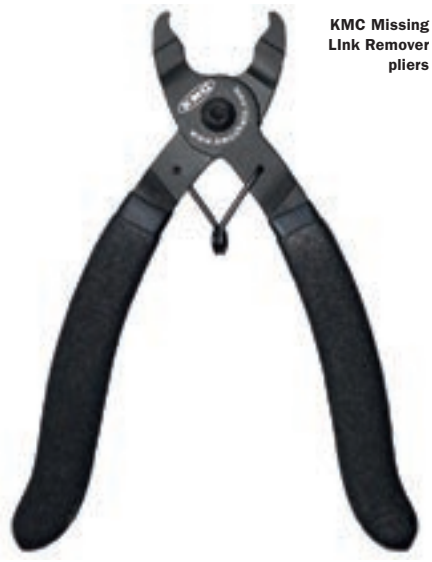
BRAKE PADS FALLING OUT

Q I bought two pairs of Ashima cantilever shoes (ASAP66C) and fitted one pair. After a few weeks, the pad fell out of one of the holders and the other pad had slipped halfway out. At the shop where I had bought them, a mechanic confirmed that I had fitted the pads and holders correctly but had lost the safety pins. He told me that I should have used pliers to squeeze the pins to keep the pads in place. There is no mention this in the fitting instructions. I am wondering if you have come across this before?

Alison Toy

A From the question, it appears that you bought and fitted an assembly comprising the rubber blocks, or pads, already mounted in their shoes, or holders. The shoe assemblies should have had the retaining pins fitted when you bought them; there is no need to disturb the pins on first fitting. If this is the case and the pins were missing when you bought and fitted the shoes, this should be reported to the supplier. If you buy blocks and fit them to the shoes yourself, be sure to note on removal the location of small parts such as the retaining pins and replace them before use. Any fitting instructions provided with the blocks should carry this information.

Richard Hallett



KMC Missing LInk Remover pliers

Technical

SLIPPING SEATPOST

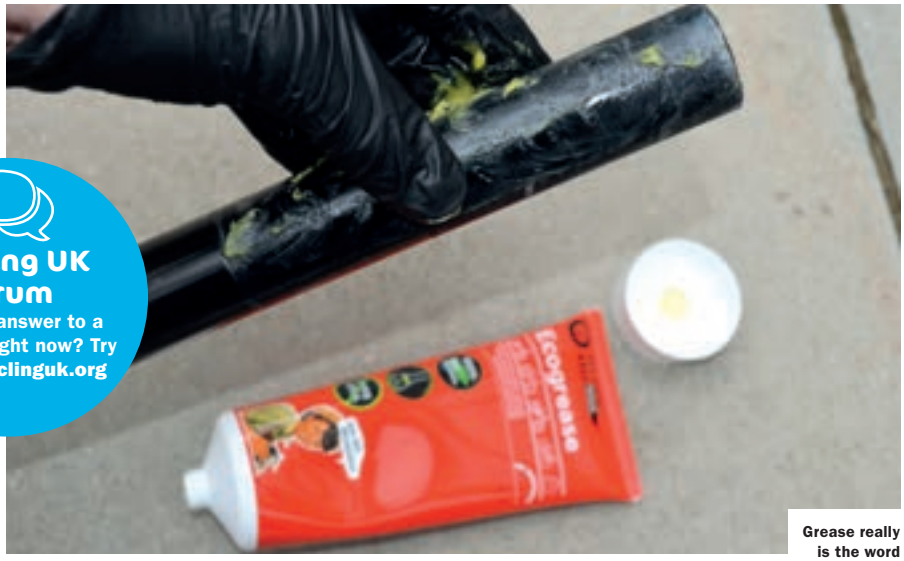
Q I have a Ritchey Classic seatpost and Spa Audax frame that worked nicely together for several months. I applied plenty of copper grease from the start. I recently fitted a new saddle and noticed while riding that I needed to raise the seatpost slightly. I did so despite the whole bicycle being covered in muck at the time. The clamp screw felt rough because of the muck. This may have reduced the clamping force for a given screw torque, but I was afraid to go much above what I remembered 7Nm to feel like (the limit printed on the Spa clamp). For the rest of the ride the seatpost slipped down slowly but repeatedly, despite my increasing the clamp screw torque each time. Should I just clean everything and try again? How much copper grease is too much? And is there much harm in going above 7Nm?

Samuel D, via the Cycling UK forum

A The function of whatever grease – it does not have to be copper grease – you use to coat the inside of the seat tube is to ease installation/removal and prevent corrosion, so a thin coating is enough. More important is to repeat the process roughly six-monthly to ensure the post has not begun to seize up. In this case, clean the post – there should be enough copper grease remaining in the frame – and the clamp screw, plus its thread.

The manufacturer's stated torque figure for the clamp screw should be respected, as exceeding it may strip the thread or shear the screw. Torque settings are common on the lightweight fasteners used on some of today's high-performance components. As your recollection of what 7Nm feels like was slightly low – subsequent increases apparently failed to strip or shear anything – then consider using a suitable torque wrench to ensure correct assembly.

Richard Hallett



Grease really is the word

Cycling UK forum

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

Contact the experts

Email your technical, health, legal, or policy questions to cycle@jamespembrokemedia.co.uk or write to Cycle Q&A, 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.