

Cycling answers

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

THE EXPERTS



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BROOKS**
Cycling GP

■ GEARING HUBGEAR CONVERSION

Q My day-to-day work bike, a Claud

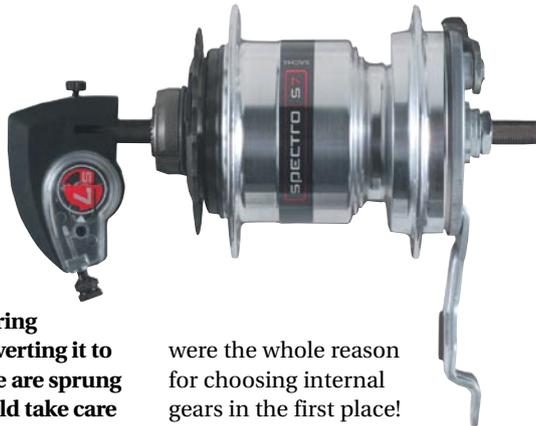
Butler Urban 100, will shortly need most of the transmission replacing. I was wondering of the feasibility of converting it to hub gears? I know there are sprung jockey wheels that would take care of chain tensioning, but the main problem – I think – will be the spacing between the chain-stays.

Derek Robertson

A Most modern hub gears have the same or very similar 'over-locknuts' dimension as modern derailleur hubs, so no problem. I'd go for the Sram Spectro 7-speed (pictured with optional drum brake) as this one is very reliable.

Shimano internal gears are more readily available and sophisticated. A disadvantage of the attendant complexity is they need to be stripped down and re-greased every two years or 2,000 miles, whichever comes first, or at least have an annual dunk of the internals in a special oil supplied by Shimano. They also supply a special dipping can that makes the job really easy and economical.

But notwithstanding the ubiquity of Shimano products and the eagerness with which bike shops sell them, very few repairers in this derailleur-driven country have equipped themselves to service Shimano internal gears. So Brits are generally left to run their hubs until they're broken. At which point the shop finds it most convenient to sell them a whole new wheel, or at least a complete internal assembly. Unfortunately this does *not* deliver the lower maintenance costs that



were the whole reason for choosing internal gears in the first place! And thus is perpetuated the derailleur hegemony.

So you need a hub that will thrive on neglect, and Sram's older 3-, 5- and 7-speed designs (dating back to when the company was Fichtel & Sachs) do that better than any other – including Sturmey-Archer, which incidentally are not made in UK anymore. However, thanks to an old understanding between S-A and F&S not to poach on each other's estates, Sram's 'Spectro' commuter cycling products can be very hard to find in this country.

The result of these market imperfections is to defeat technical logic, making it a whole lot simpler (in Britain) and possibly even cheaper to just keep replacing derailleur bits as required!

Chris Juden

■ TYRES THINNER TYRES NO FASTER?

Q I recently purchased a Dawes Galaxy and am now looking to fit a narrower section tyre than those it came with. The rims are WTB Dual Duty and carry the lettering 19-622. They're fitted with Schwalbe Marathon 700x32C tyres. If a narrower section tyre, i.e. 23C or 25C can be fitted, would I need to replace the innertubes as well?

Mervyn Wright, Ackworth, W Yorks

A Something a little narrower than 32mm, i.e. 28mm, could be fitted, but there's nothing to gain from doing that and your rims, at 19mm internal, are certainly too wide for anything as narrow as 25 or 23mm.

To perform as intended, any tyre has to be mounted as intended. Spread it over something wider and the tyre will not flex as easily as it should, which makes the ride not only more uncomfortable than you'd expect from a narrow tyre, but also slower.

If you want to use fast narrow tyres on your Galaxy, you first need narrower rims – and then some narrower tubes. On your existing 19mm rims you'll get best



■ HEALTH

ACHILLES TROUBLE

Q I cycle around 170 miles a week year round. Last year I decided to try LEJOG with full camping gear. I did too many miles too quickly – 320 miles in the first two days. On the morning of day three I could barely walk let alone pedal. Both Achilles tendons swelled and the surrounding area went black, like a bad bruise. My GP suggested leaving it a week before continuing the ride. A week later I still couldn't bear to ride the bike and it was painful to walk. After two months off I'm just now back on bike. The tendons are still a little sore. Should I be riding?

Frank Manning

A This sounds like Achilles tendonitis, in which there is inflammation of the Achilles tendon (which connects the heel bone to the calf muscle) and its sheath. It usually results from overuse, especially a sudden increase in intensity. Although more common in runners, it is also seen in cyclists. A low saddle position may exacerbate it.

Symptoms can include pain and stiffness over the tendon (which may worsen with strenuous activity) and swelling. Your GP would have ruled out the less common but more serious rupture of the Achilles tendon which requires urgent referral to an orthopaedic specialist.

It's not unusual for full recovery from Achilles tendonitis to take months. In terms of exercise, it's important to strike a balance between optimising recovery and exacerbating the problem. Don't be tempted to push things too far too soon as recovery will be slower in the long term. That said, cycling should be fine as long as you take things relatively easy. Try shorter, flatter rides and avoid pushing too hard. Maybe try your 30-mile commute on only a couple of days each week.

Make sure you warm-up and warm-down thoroughly and do some Achilles stretches (just Google 'Achilles stretches') before and after any ride. Check your saddle height is correct. Anti-inflammatories, such as ibuprofen, and ice may help. Off the bike, avoid running, strenuous hill walking or any other activity that seems to make it worse.

If things don't seem to be improving, consider seeing a physiotherapist for assessment and a tailored exercise regime, or return to your GP. Steroid injections (and rarely surgery) are occasionally used for persistent cases.

Dr Matt Brooks

performance from 32mm tyres or 37mm. More important than size are the maximum pressure and quality of the casing (in threads-per-inch): more PSI and TPI are what you're looking for.

Contrary to popular belief: a wider tyre rolls easier than a narrow tyre when all other factors, such as pressure and casing quality, are equal. But for a given strength of casing, a narrower tyre can always hold a higher pressure and that will usually give it a slight advantage – on a smooth road. Narrower tyres also have less frontal area, and better aerodynamics is the main reason racing bikes have such slim wheels. On the rougher roads and at the lower speeds most people ride, those benefits are quite illusory however. It really is a matter of horses for courses.

Chris Juden

■ BIKE CHOICE

WHAT SIZE FRAME?

Q I am about to buy a new Dawes Galaxy and I would like to be sure to get the right frame size for my dimensions. Any advice?

Ron Burrows

A The variety of ways in which modern bicycles are not only designed but also measured and described, have devalued the seat-tube as a yardstick and made a nonsense of old rules for relating its length to inside leg. The best you can do is assume the manufacturer aims to sell a bicycle to most of the people who may wish to buy one: i.e. 90% of men plus a few tall women. And with all the adjustment available from modern seatposts, body length matters just as much as legs. So you

(Left) On smoother roads, higher pressure narrow tyres roll best. But on rougher roads, fatter is faster



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might as well go by overall stature.

It's a pretty safe assumption, therefore, that a man of average stature (176cm or 5'9) will fit whatever comes middle of the size range offered. If you are not of average stature: for every 2cm taller or shorter you should choose a frame sized 1cm bigger or smaller than middle.

If a model range has no actual middle size, simply imagine one. If, for example the range comprises four sizes 50, 53, 56 and 60cm: the middle size is an imaginary 55cm. And if you were 180cm tall for example, you would choose the 56cm because that's nearest to the 57cm you'd ideally want. Simple!

Chris Juden

LEGAL FALLING ON ICE

At this time of year, through the CTC accident line, I regularly receive instructions from cyclists who have suffered injuries as a consequence of skidding off their bikes as a result of snow or ice.

Claims against Highway Authorities as a result of accidents caused by snow or ice are notoriously difficult. Following the decision of the House of Lords in *Goodes v East Sussex County Council* in 2000, it appeared that there would be an absolute bar to such claims. In the *Goodes* case, the House of Lords held that, whilst under Section 41 (1) of the Highways Act 1980, there was an absolute duty to maintain the road so that it is safe for the passage of those who use the highway, this did not include a duty to prevent the formation of ice or remove the snow or ice on the road.

This judgment was heavily

criticised. It was felt that this would give Highway Authorities an excuse not to use gritter lorries in foul weather conditions. As a consequence of the criticism, there was an amendment to the Highways Act 1980. Section 111 of the Railways and Transport Safety Act 2003 added to Section 41 (1) of the Highways Act 1980 a duty 'to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice'.

This amendment provided a statutory reversal of the House of Lords ruling in *Goodes*. However, the words 'reasonably practicable' are significant and provide the Highway Authority with a potential defence. Also, the Court is

instructed to take into account the character of the highway and the traffic which is expected to use it.

A CTC member contacted me recently, unhappy that the Hampshire Highway Authority had classified a cycle path as a Category 4 path. Under their own criteria, they only grit lower classification roads or paths if an extended period of frost conditions is forecast *and* in response to specific circumstances.

This doesn't help cyclists who avoid using the prioritised major roads. The key to success is proving that there was an ineffective winter maintenance policy or that, better still, the Highway Authority failed to comply with its own policy.

Paul Kitson

(Above) Women-specific off-the-peg tourers don't exist. But you can adapt men's

(Below) If you fall on ice on a smaller road, it's difficult to claim against the Highway Authority



BIKE CHOICE WOMEN-SPECIFIC TOURER

Q I'm looking for a women's specific, light tourer. As it is to be used for cycling in the Lake District (home) and touring abroad we want gearing well in the low 20s (inches). Budget: up to £1000. Please advise on what is available to fit these needs.

Graham Jackson

A There are no ready-made women-specific touring bikes. These have to be custom-built, and that costs more than £1,000. The closest thing I can suggest (if the woman is at least of average height) is a Hewitt Cheviot (pictured) since these tend to have shorter top-tubes than the ubiquitous Dawes Galaxy and because Hewitt offers a near-custom fit by choice of stem length and height. To get the gearing down I suggest also swapping the usual 'trekking' chainset for a mountain-bike model with 22/32/44 teeth. I think that'll be more than £1,000, but maybe not too much more.

Chris Juden



CONTACTING THE EXPERTS

Send health and legal questions to the Editor (details on p80). We regret that *Cycle* magazine cannot answer unpublished health and legal queries. Technical and general enquiries, however, are a CTC membership service. Contact the CTC Information Office, tel: 0844 736 8450, cycling@ctc.org.uk (general enquiries) or [Chris Juden, technical@ctc.org.uk](mailto:Chris.Juden@ctc.org.uk) (technical enquiries).

You can also write to: CTC, Parklands, Railton Road, Guildford, GU2 7JX. And don't forget that CTC operates a free-to-members advice line for personal injury claims, tel: 0844 736 8452.