

Cycling answers

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

THE EXPERTS



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■ TECHNICAL FRONT SHIFTING PROBLEMS

Q I bought a custom built cycle in early 2006 but have had various problems with the transmission, which uses a 46-36-24 TA Carmina triple, a 10-speed Shimano cassette, and Shimano 105 mechs. I've switched from drop bar to flat bar controls, including 10-speed shift levers type SL R770

The chain used to slip between the chainrings when changing from the outer to the middle, which Longstaffs cured by fitting a thinner spider. I've also had problems with the front mech fouling the middle chainring teeth; with jammed shifts; and with the chain missing the inner ring when changing down. A Jump-Stop chain guide means the chain at least stays on now.

Is the 105 front mech okay to accommodate 46-36-24 rings?

Mike Green

A That chainset is much smaller than any current road front mech is designed for. It'll be workable if you ease the mech into position with an old-type friction control (still made for the left side of dropped bar-ends, down-tube and some very cheap flat-bar thumb shifters) and provided the outer-middle difference corresponds with specification. But front indexing is another kettle of fish – can of worms more like!

To give it a chance, let's look at the outer-middle difference. The only way to determine this vital factor is from the chainset the mech is usually sold with. The 105 10-speed triple is 50/39/30.

So the 105 mech wants an 11-tooth difference between middle and outer. So I think you'd better

swap the outer for 47T, which will be 2mm closer to the front mech – probably at about the right distance now. That's why you had to jack the mech up the frame a bit to clear the middle ring. The thinner spider you had before was a workaround answer to a problem actually caused by wrong sized chainrings. With the outer now only 3T smaller than the 50T the mech is designed for, its teeth will more closely correspond with the curved shape of the mech's outer guide and shifting should be generally better.

Those chainrings were also probably designed for 8- or 9-speed chain. To avoid narrower 10-speed chain falling into the gap between them, the inner surface of the outer ring may need some thickness adding to it. Thinning the spider is another wrong answer workaround, which is liable to mess up front indexing.

Downshifts from middle are a miracle every time – when it's that much smaller than the outer – since the part of the mech that does that shift must then be so far away. This miracle is made possible by Shimano leaving gaps in the teeth and shortening those that remain. TA like to leave you a bit more tooth, so it lasts longer, but those teeth do rather tend to hang onto the chain. The smaller inner ring shouldn't make much difference, but may be more easily missed by a chain that's finally released in a rush. A Jump-Stop is the answer. Keep it.

The biggest spanner in these works though is the switch to flat bars and those new controls. They pull cable like other flat bar shifters, i.e. what mountain front mechs need, which is too much for road front mechs. So they overshift, which can be limited with the stop screws, but only up to a point.

If you were running 9-speed I'd

say get a mountain/trekking front mech and increase that outer ring to 48T (or reduce the middle to 34T since those like a 12T outer-middle difference), but I can't predict how they'd handle 10-speed chain – badly probably.

I think you need the mech that's really intended to go with those shifters and with the chainset that's closest to what you already have, namely the special flat-bar road front mech for 10-speed triples with 50T top (really means 11T outer-middle difference): FD-R773-0.

Chris Juden

■ HEALTH WRIST OSTEOARTHRITIS

Q I'm 55 and have just been diagnosed with osteoarthritis in both wrists.

Pain is more usually associated with twisting of the wrists, so not so much a problem cycling unless lifting the bike.

I find it more comfortable on straight bars to keep my thumb close in line with my hand and on the top of the bar. This seems to lessen any pressure or vibration to my wrists. In your opinion, do you consider that there are handlebars that have a more osteoarthritis friendly shape? Or position?

Nigel Roper

A I didn't know the answers to all of your questions and, although wrist osteoarthritis (wear and tear of the cartilage) is a fairly common problem, I found a lack of good advice.

Your osteoarthritis is on the side of the wrist below the base of the thumb. As twisting movements exacerbate the pain, common sense would suggest that a handlebar position with a neutral thumb and wrist position (i.e. thumb close to the hand and wrist straight with palms facing each other) ought to





■ TECHNICAL

PRESTA OR SCHRAEDER?

Q I've noticed that it's become fashionable for higher-spec MTB rims to be drilled for presta only, whereas the MTB market has traditionally been exclusively schraeder. Anybody know why this is happening? I thought the reason for fitting schraeder was that it's easier to use in a high-volume, low-pressure application

Chris Butch

A It's not a high-volume, low-pressure thing. Schraeder are also used on air shocks, which contain a tiny volume at enormous pressure! The difference is that schraeder has a spring to keep the piston shut whereas with presta you have to turn a little nut. That's more effort, some chance of bending the piston rod or whatever. Schraeder is more idiot proof, plus you can use your car pump, but is a more bulky valve so the bigger hole causes a significant weakness in a narrow rim. So presta is the choice for more discerning and competent cyclists.

MTBs started with schraeder as standard because they evolved from balloon tire USA kids bikes, originally sold to households where the only pump was for the car and if junior had a puncture he headed for the nearest gas station.

Incidentally, I've noticed a contrary trend to sell rims (for touring/trekking/hybrid bikes at least) drilled only for schraeder, with a plastic adaptor sleeve for presta. I call that a downgrade.

Chris Juden

be most comfortable.

It sounds as if you've already been trying out different handlebar positions. Ask in your local bike shop whether you can test out some other handlebar styles. As for brake levers, I would have thought that the more you can limit the amount you have to stretch your hand to use the brakes, the better.

Check your riding position, particularly the height of the seat relative to the handlebars. Adjust the seat post or handlebar stem accordingly. A more upright seated posture may be more comfortable but you'll need to experiment.

Ensure good padding or tape on the bars and well-cushioned cycling gloves to reduce vibrations on the hands. As you mention, a wrist support may help too.

Choice of handlebars will ultimately come down to personal

preference. Anecdotally, for road cycling, many people seem find drop bars (palms facing more towards each other) less likely to cause wrist pain. Flat bars (palms facing downwards, wrists more rotated) have their advantages particularly for off-road biking. If you prefer these then a riser bar end, available in various shapes and sizes, should help put the wrist in a more neutral position. You can also buy ergonomic flattened grips (e.g. Ergon) which give a larger area to rest your hands on.

Matt Brooks

■ LEGAL

'S'NO JOKE

Q What is the CTC's stance and legal position on people throwing snowballs at cyclists? I had three thrown at me on my commute home. One

(Above) Presta is the choice for discerning cyclists - even off-road

(Left) A road triple front mech like this will change gear best with a matching road front shifter (drop or flat bar); an MTB shifter can cause overshifts

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missed, one was irritating, the third potentially very dangerous. It was thrown from behind a bridge pillar as I negotiated a busy roundabout. It hit my shoulder but could easily have hit me in the eye. It could have injured me or more likely, caused me to swerve in front of a car.

I called 999 and followed the youths but lost them. Would CTC legal help be available if, for instance, the culprit was identified by the Police but they decided to take no action?

Andy Short, Bristol

A I would agree with Andy Short that the throwing of any objects at a cyclist is irresponsible behaviour and highly dangerous. I would also agree that this constitutes an assault and should be taken seriously by the Police and or the Crown Prosecution Service. I am afraid that in my long experience of acting for cyclists I have come across many cases of deliberate assaults on cyclists by pedestrians or motorists.

The CTC legal services scheme is available to support any cyclist in respect of a claim where they have been injured whilst cycling or wheeling their bicycle. As long as the claim has reasonable prospects of success i.e. more than 50% chance of successful recovery of damages, then the CTC legal services scheme is available. In respect of criminal assaults there are a number of possible routes to obtaining compensation:

- Criminal Injuries Compensation Authority. A victim of a crime of violence can claim an award under a tariff based scheme. It is a requirement that the assault be reported to the Police as soon as possible. An application to the

■ TECHNICAL Eazy Wheels

Q I'm the proud owner of a Brompton folder with rear rack. I love it! However I'd like to replace the small, rattly transit wheels, which facilitate movement when folded. I aspire to fitting four small inline skate wheels, preferably black, with integral bearings. Where can I buy these and what wheel size / bearing specification would you recommend?

Arthur Spurr

A Making your own from skate wheels and bearings is no longer necessary (and probably more expensive), so I'll not go into that. For £15 you can have a set of four Brompton Eazy Wheels from any of several shops revealed by Googling that phrase. Some of them advertise regularly in Cycle magazine, so there should be no problem.

You can find out more about the Eazy Wheels on Brompton's own website. Either go to www.brompton.co.uk and enter 'Eazy Wheels' into the search box at the top right, or go directly to the relevant page by using this 'tiny URL': <http://tinyurl.com/yzqr6w5>

Chris Juden



- CICA needs to be lodged within two years of the incident.
- Motor Insurers Bureau. There are two MIB agreements. The first is the Uninsured Drivers Agreement (which provides compensation to victims of uninsured motorists – it is estimated that approximately 900,000 motorists under the age of 30 are uninsured), and the second is the Untraced Drivers Agreement (which provides compensation to victims of untraced motorists i.e. a motorist driving off after an accident). Under the CTC legal services scheme we are currently pursuing claims to the MIB under the untraced drivers' agreement in respect of two separate incidents where cyclists were pushed off their bikes by a passenger in a passing vehicle. We have

- persuaded the MIB that the passenger was engaged in a 'joint enterprise' with the driver.
- Civil Claim. A civil claim can be pursued against an individual who deliberately causes an injury to a cyclist. If a motorist uses their vehicle as a weapon then their insurers are obliged to deal with the claim (if they are uninsured then the claim can be pursued against the MIB). If the assault was not caused by a vehicle then a civil claim against an uninsured assailant would only be worth pursuing if they have the means to meet a judgment.
- Criminal Prosecution. In the event of a criminal prosecution the Courts do have the power to make compensation orders against convicted assailants.

Paul Kitson

(Below left) Throwing snowballs at cyclists could be construed as assault



CONTACTING THE EXPERTS

Send health and legal questions to the Editor (details on p84). 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 (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.