

Cycling answers

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

THE EXPERTS



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■ FAMILY CYCLING WHICH TRAILER-CYCLE?

Q I was looking for some advice on towing a child of almost five who is now too large to put in a seat, but cannot yet ride her own bike. Most tag-alongs have 20" wheels and look too big. I was thinking of a Trail-gator which would allow her to continue to sit on her 14" wheel bike. Any comments?

Lee Griffiths, Congleton



A I think you'll find most trailer-cycles will fit an average-sized child of four years or more. Wheel diameter isn't a determining factor with this type or machine since the saddle is in front of that wheel and can be as low as the shortness of the seat tube permits.

Try a few more trailer-cycles before deciding. The best designs couple to a point above your rear wheel on a specially strong rear luggage carrier – then the trailer tracks properly around corners at the same lean angle as the towing bike. Burley and Islabikes (pictured) supply trailer-cycles of that design.

Coupling to the seatpost is second best by a long way: a cheap fix that'll do, provided you don't go very far or fast. Hitching up a child's own bike that way is a third-best bodge that also, almost miraculously, works! If you do that keep your rides really slow and short and check the rig very carefully each time.

Unfortunately the cheap has

all but eliminated the good from the horribly price-driven UK/US child cycling market; and now only Burley (distributed by Fisher Outdoor – www.fisheroutdoor.co.uk) and Islabikes (www.islabikes.co.uk) still supply the better design of trailer cycle.

Chris Juden

■ GEARING REPLACING A CHAINRING

Q The outer chainring on the Shimano Deore set on my 2000 vintage Dawes Super Galaxy is worn and needs replacing. As far as I can see this should be straightforward – just a question of unfastening the chainring from the spider with an allen key, slipping it off and putting a new one on. If it is this simple I'll do it myself, but are there hidden complications in this job?

I've looked for a Shimano Deore outer chainring on the CTC shop site but can't find one (is the Deore chainset now obsolete?), so can you advise me what chainring I need to buy? Would another Shimano type do the job? Also, I can't make sense of the way that chainrings are specified. Could you please tell me what PCD means, and what PCD number I'd need? The chainwheel I want to replace has 48 teeth.

John Everard, London

A Replacing an outer or middle chainring is that simple. One slight complication is the nut sometimes turns with the allen-key bolt, rather than remaining stationary in the

middle chainring. There's a special tool to hold it still, but a wide screwdriver or the edge of a cone spanner will often do. To replace an inner ring you also need to take the crank off (but if you have only two rings, your inner is as easy to remove as the middle of a triple).

Chainrings are sold by number of bolts and PCD or BCD, which is the same thing and stands for Pitch or Bolt Circle Diameter. Easier than diameter to measure is the centre-to-centre distance between two adjacent bolts. That can then be multiplied by the appropriate geometrical factor to get the PCD: in the case of 4 bolts $\times 1.414$ or 5 bolts $\times 1.701$.

Shimano Deore chainsets have come in several different designs, all of which were around in Y2K.

So the number of outer bolts and diameter could be: 5 \times 110mm, 5 \times 94mm or 4 \times 104mm.

A corresponding chainring of any make will be a suitable replacement, but mail-order shops often sell only the more expensive 'upgrade' brands, so see if your local dealer can supply something

cheaper. Steel rings cost least and last longest. If weight is important however, it's worth paying for a really hard aluminium alloy.

Chris Juden



■ HEALTH THUMBS DOWN TO BIKING?

Q Mountain biking has its slips and falls, and in one of these recent falls after hitting

some debris in the floods around Ottery St Mary, I managed to rupture my ulnar collateral ligament. This is commonly a skier's accident, but possibly also common to cyclists. My hand is currently in a thumb spica cast and I'll regain the use of the thumb, but what is the prognosis for cycling in the future?

Will I ever be able to mountain bike again? Will I ever be able to road bike? The surgeon was great, but had too little knowledge of cycling to be able to offer advice. Thanks for your help.

Simon Green, East Budleigh, Devon

A The ulnar collateral ligament (UCL) of the thumb is a strong fibrous band running along the ulnar side (next to the index finger) of the metacarpophalangeal (MCP) joint at the base of the thumb, where it connects to the palm of the hand. Injuries are usually due to a sharp force, which pulls the thumb away from the hand. Hence it is often referred to as skier's thumb – falling on an outstretched thumb while holding a ski pole is a common cause.

The UCL may tear either partially (sprain) or completely (rupture) causing the MCP joint to become painful, swollen and unstable. The thumb may feel weak and squeezing or gripping may be difficult.

Partially torn ligaments usually heal without surgery but a completely torn UCL often requires an operation. In both cases, the thumb is usually then immobilized for four to six weeks in a special cast called a thumb spica.

Physiotherapy or occupational therapy exercises and devices can then help regain the range of movement and strengthen grip. Depending on whether surgery is required, most people are back to full activity from about three months after the injury, possibly longer following an operation.

Sometimes the ligament itself will

RAISING THE BAR

Q I like my handlebars to be higher than the threadless headset on my new bike allows for and think the extensions required to raise them look terribly ugly, whilst probably adding (a little) extra weight to the bicycle. So I would love to go back to the more elegant shape of a threaded headset and the longer extension it would provide. Can the bike be converted?

Clare Prosser, Sheriff Hutton, Yorks

A Yes it can. But threadless is a better design: stronger, can't rattle loose and weighs so much less that an extender is unlikely to tip the scales – particularly now that quill stems are made only for cheap and heavy bikes. A neater and lighter way to omit the ugly extender is to get a steeper sloping stem, of which there's a great variety of designs in the threadless system, in angles up to 40° (see picture, below). Alternatively, get a replacement fork the same as you have, but taller for a bigger size of frame, plus a stack of spacers to put between stem and headset.

Beauty, they say, lies in the eye of the beholder. I've become accustomed to the appearance of threadless and now think the stalk of a quill stem looks spindly compared to adjacent components. But if you must go threaded, it may be possible for a bike repairer to cut the appropriate thread on the existing fork – if its steerer is steel tube of the correct specification. Failing that it's a new fork, which probably must be custom-made to match your existing rake and length.

Chris Juden

not tear but instead pulls a small piece of bone away from the base of the thumb (avulsion fracture). If the bone fragment remains close to its original position, it usually heals without surgery. However, if the ligament pulls it further away, an operation may be needed.

All injuries differ but many make an excellent recovery and it's more than likely you'll be able to return to both on- and off-road cycling. A further fall may damage it again so consider a thumb stabiliser (available from the CTC Shop) or taping which may help to protect the ligament.

Matt Brooks



A threadless stem with a steep rise puts your handlebars higher

“I've ruptured the ulnar collateral ligament in my thumb while mountain biking. Will I ever be able to ride off-road again?”

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■ GEARING

REMOVING STI LEVERS

Q How do I remove my ten-year-old Shimano RSX brake/gear levels from my dropped bars, as I wish to change handlebars? I cannot find the usual allen key releasing bolt inside the body. Are there any exploded diagrams available?

Robert Fickling, Macclesfield

A Yes, there's too much other stuff in there for a drawbolt in the usual interior location, so it's further back and angled to the outside instead. You'll see a groove in the outer metal surface of the lever body, deepening as it disappears under the rubber shroud. Poke a 5mm allen key down there and you'll find something you can literally turn to your advantage! Exploded views can be found of Shimano's website, but there's not much point in exploding an STI lever as it has no replaceable parts.

Chris Juden

■ FOOTWEAR

HEAVY FOOTED?

Q Please would Chris Juden tell me the weight of his Exustar Stelvio shoes. The Exustar website does not say.

Colin Wood, Abingdon



A Whilst I cannot rival Mrs Marcos, 25 years of testing bike stuff for CTC has allowed me to accumulate a moderately embarrassing collection of footwear! All the following weights are for a single size 41 shoe, with standard SPD cleat attached (i.e. minus the removable patch of sole).

425g: Exustar Stelvio – original

OVER TO YOU

CYCLING ONE HANDED

Following on from Chris Hill's letter to the April/May magazine, it may be beneficial for him to make contact with Remap. Remap is a charity which is able through its nationwide network of panels (voluntary groups) to assist people with disabilities by use of engineering solutions to problems such as this. Chris should make contact with the Leeds & Bradford panel: Mr F Tindall, tel: 01484 715748 (office) or Mr JM Stephenson, tel: 01422 203138. See also the Remap website: www.remap.org.uk

Jim Rodgers



version.

395g: Exustar Stelvio – new model.

390g: Shimano T071 – 'sport touring' shoe.

490g: Shimano M038 – popular all-purpose SPD shoe.

410g: Carnac Carlit – old touring favourite.

330g: Gaerne SPD Gold – discontinued racing/touring shoe.

530g: Shimano Winter Boot – heavy but cosy.

520g: Lake Sandal – strewth! And it's only a sandal!

As I guessed, the Exustar Stelvio is nothing out of the ordinary and all of its moderate weight is doing something useful. Any lighter shoes in my collection have thinner uppers (for colder, wetter feet), smaller heels and narrower soles, which wear out sooner and are less comfortable for walking.

■ NEW BIKE ADVICE

A MOST VERSATILE BIKE

Q I currently have only an off-road bike (Marin Palisades Trail) which is fine – off-road.

But I like to cycle to where I'm going to cycle (i.e. no car/carrier). So I'm looking for a road bike that will get me quickly around the Surrey Hills and further on road, with the capability of using the wider trails off-road. No really rough stuff or mud. For the road I'd like drop handlebars. Low gears essential. Any suggestions?

Tony Questa, Chilworth, Surrey

A What you are describing is the most versatile bike imaginable, one that performs most normal cycling tasks so well that very few people (if they were fortunate to own one) would need any other kind of bike at all. Does such a paragon exist? It does!

You need to knock three times (if necessary with fist on shop counter) and ask for a Traditional British Touring Bike! Like a Dawes Galaxy or a Hewitt Cheviot. Both have dropped handlebars and space for 38mm tyres, which is enough for roughish roads and half-decent paths and tracks. And of course they both have low gears.

Some shops will suggest a cyclo-cross bike. Do not be diverted from your quest. A 'cross bike is another of those one-trick ponies, one that looks a bit more capable but doesn't have all the features and versatility of a true tourer.

Chris Juden

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 p79). Technical enquiries will get there quicker if they go direct to Technical Officer Chris Juden (same address as the Information Office).