

Kit reviews

GEAR

COMPONENTS, KIT AND MEDIA SELECTED AND REVIEWED BY SPECIALIST JOURNALISTS AND CYCLING UK STAFF

TA CARMINA TRIPLE CHAINSET

£440 specialites-ta.com,
chickencyclekit.co.uk

A LITTLE UNFASHIONABLE right now, triple chainsets remain the answer to many cyclists' dreams: lots of closely-spaced gears, including some really low ones. TA's Carmina chainset can be configured either as a double or a triple.

It's a modular system, with a separate spider (available in a range of formats) attached to the right-hand crank using a lobular, splined interface and locking. The cranks are hot-forged in 6061 aluminium alloy and have a sculpted outer face offering plenty of ankle clearance. The inner face has a trough to save weight. Cranks are available in lengths from 155mm to 185mm.

There are almost as many spider types, including four-arm examples; the one tested here is the five-arm 110/74mm BCD triple. This will take a 24t inner chainring, with sizes going up to 32t. Middles go from 34 to 44t and outers from 40t to 56t. With such a vast

range, it should be possible to assemble a triple (or double) to suit almost any cycling activity. The test triple has 48/38/28 chainrings and 175mm cranks installed on TA's Axix Light bottom bracket axle.

This expensive component (another £140) is recommended for the crankset. Although not specified as such, the taper is a close match for the standard JIS format, so Carmina cranks will fit any JIS axle. The Axix is pretty light for a square-taper design, not least because there's no centre sleeve shrouding the axle. Instead, the cups tighten the sealed cartridge bearings against shoulders on the axle. There's no barrier to prevent the bearings being over-tightened, applying a destructive axial loading. The answer is

precise assembly to ensure the bearings are not side-loaded – or a suitable cartridge BB.

Given the extensive range of size options, it's no surprise that some component parts of the chainset (cranks, spider) are only available to special order; place yours in good time. I tested mine with Shimano Tiagra 4600 derailleurs operated by Dura-Ace 10-speed bar-end levers and an 11-32 cassette, giving ratios from 22" to 113". Shifting with the correctly set-up front derailer was crisp up or down. The cranks and their square taper interface are more than stiff enough for non-competitive cycling and the whole arrangement is delightful to use. It's expensive, for sure, but not hard to see why.

Richard Hallett

Review requests

Is there a product that you would like us to review?

WRITE TO: Cycle,
PO Box 313, Scarborough,
YO12 6WZ **EMAIL:**
cycle@jamespembroke-media.co.uk



- PROS & CONS**
- + Range of cranks & chainrings
 - + Classic looks
 - Expensive
 - Special order

OTHER OPTIONS



1 MIDDLEBURN RS8 X-TYPE TRIPLE £380

British-made modular system with fewer crank length/chainring size options. Comes in square taper and outboard-bearing crank formats. mountainbikecomponents.co.uk



2 STRONGLIGHT IMPACT £120

Old-school square-taper crankset with forged 6061 aluminium arms and 110/74mm BCDs, plus a choice of crank arm length and chainring combos. stronglight.com



PROS & CONS

- + Lightweight
- + High efficiency
- Low speed power output

Velogical RIM DYNAMO

€150 velogical-engineering.com

YOU'LL ADMIT TO A BIT OF a soft spot for bottle dynamos, traditionally a low-cost source of electrical power that can be disengaged when not in use to cut drag to nil. Against this must be put greater drag when in use than a hub dynamo, susceptibility to slippage in poor weather conditions, the potential for tyre sidewall wear, and noise.

Velogical's neat design is not far off the finest hub dynamos for initial purchase price. There's no need to have a wheel specially-built, of course, but it is nevertheless a costly item. Initial examination reveals why: it is precision made but with an artisanal quality appropriate to production on a small scale, and it is amazingly light. The dynamo itself weighs 52g and the complete installation less than 75g, or roughly one third of the weight penalty of the lightest dynamo hub.

Unlike most bottles, the Velogical runs on the wheel rim, using a standard-sized industrial O-ring for friction and smoothness. This greatly enhances efficiency since there's no tyre deflection to absorb energy. The dynamo is around 60% efficient at 30km/h, depending on engagement force.

It can be installed on almost any cycle; only those with unusually-shaped seat stays are likely to pose a problem. Velogical supply the dynamo with an appropriate fitting kit

and can even provide a threaded boss to be brazed onto a steel frame. Otherwise, there are kits to fit various round and oval stays as well as traditional cantilever bosses, as shown. This needed a packing spacer; some ingenuity may be required.

In operation, the key feature is electronics simplicity. This is an A/C dynamo that generates more power the faster it spins. The nominal output is 6V/1.5W, but at 30km/h it makes nearly 3W and so on. At higher speeds this could damage unsuitable lighting, so the dynamo must be used with an approved front light (list available from Velogical). It is supplied with a halogen bulb in a holder that functions as a thermistor, dissipating excess current as heat at higher speeds.

In use, the slight whine the Velogical makes is its only noticeable effect. Drag feels non-existent at any speed and didn't diminish appreciably when it was disengaged using the ingenious spring clip. I reached about 80km/h, at which the thermistor shone a pale yellow. Light output from a Lumotec Cyo Plus at 10km/h is enough for higher speeds. Riding through a deep puddle produced no slippage. The power output may not be enough to charge a mobile device at less than 30km/h, but this is otherwise an accessible way to power cycle lighting.

Richard Hallett

OTHER OPTIONS



1 B&M DYMOTEC 6 £35
Attractive dynamo with effective mounting system. 40% efficiency, 180g weight. en.bumm.de



2 AXA HR TRACTION £15
Basic but effective tyre wall-driven dynamo with plastic wheel. 200g. axasecurity.com



Beerbabe CUSTOM FRAME PACK **£80**

beerbabe.co.uk

EVER WONDERED WHAT to do with your old innertubes? You'll probably have a few destined to be chopped up and used to help secure bike light mounts or prevent rubbing from bike luggage. How else do you recycle them? Beerbabe founder Judy McNeill has an answer.

Inspired by a chance purchase of a bag made from tubes in the USA and wanting to user her craft skills more, Judy gave up her job in 2011 and began developing a range of bike luggage made from innertubes lined with malt sacks. The tubes are sourced from her local bike shops, like touring specialist Pilgrim Cycles near Box Hill, and also Bike Park Wales for larger quantities. Nearby breweries Firebird, Surrey Hills, and Dark Star supply the sacks.

As you'd expect from a keen mountain biker making bespoke bike equipment, there's a range of packs to fit most corners of your bike – although there's no seat pack.

Ordering (P&P is free) is a pain-free process, with clear and comprehensive instructions. Julie is on hand to take bespoke requests

and suggestions. It took just over a week for delivery of my frame bag after submitting my measurements. I foolishly rushed the measuring process and also forgot to mark out the braze-ons on the bottom of my down tube, which one of the straps can cover.

Despite the small size, the bag is cavernous, fitting my Lezyne Micro Floor Drive pump, tool bag, spare 29+ inner, waterproof, notebook, and a couple of snack bars. At full capacity, I have to release the top tube fastener closest to the seat post which is frustrating and due, I suspect, to my rushed measurements. Longer straps could have solved this problem, but as the bag is bespoke, so too are the straps.

If I had one issue with the bag, it would be the zip. It's tough, sturdy and conveniently two-way, but not fully stormproof as I found when I sprayed it with a hose. Horizontal torrential rain is not a common feature of my rides, but if camping you'd want to make sure you left your bike zip-side down overnight just in case.

Sam Jones

OTHER OPTIONS



1 UPSO POTTERS PANNIER **£50 EACH**

Made from used, waterproof lorry tarpaulins, with mounts provided by Carradice and a roll-top closure, these are a sustainable and tough alternative to standard panniers. upsobags.co.uk



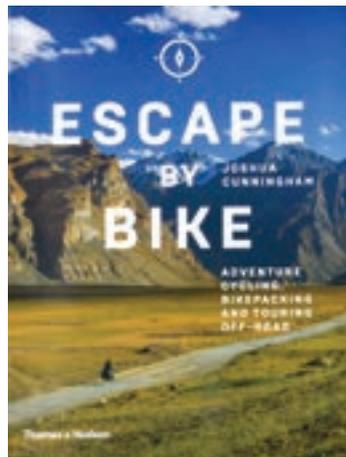
2 RESTRAP DIAGONAL STRAPS **£29.99**

Restrap take old seatbelts and turn them into easy to fit and adjust pedal straps, suitable for most flat pedals and footwear. restrap.co.uk

Book reviews

BOOKS

A ROUND-UP OF THE LATEST CYCLING-RELATED READS



Joshua Cunningham
ESCAPE BY BIKE £19.95
 thamesandhudson.com

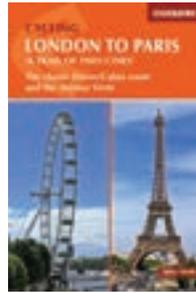
READING JOSHUA CUNNINGHAM'S EXPLOITS as he cycled from Dumfries to Hong Kong, it's clear why a publisher known for art and photography books has broken into cycle touring: the pictures are stunning. That's not surprising as Cunningham is a professional photographer whose work appears in sport and travel magazines. When you see these photos, you'll want to be there.

Escape by Bike is spread over five chapters that take different terrain as their themes. Each chapter then combines beautiful photography with vignettes of his travelling experience and advice for the would-be cycle tourist, whether travelling through forests, deserts, mountains, tropics, or cities. This combination did not work for me, as everything was just too light touch. The first chapter skipped from Dumfries in Scotland to Baku in Azerbaijan in seven pages, with more space devoted to pictures than words – a pattern repeated throughout the book.

The advice itself is scattered across each chapter, but for the cyclist already familiar with travelling by bike or even planning such a trip, it will not reveal anything new and feels lacking in substance.

All this being said, it reads well. Cunningham comes across as someone who tells a good yarn and would give good advice, if given the right platform to do so. Billed as a guide 'to planning every kind of road adventure', this book is not it. For advice and tips on travelling the world by bike, I'd head to the Cycling UK forum. But to explain to my partner or parents why I'm doing it, I'd give them Escape by Bike.

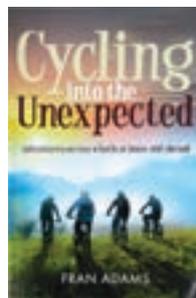
Sam Jones



Mike Wells
LONDON TO PARIS: A TRAIL OF TWO CITIES
 £14.95 cicerone.co.uk

LONDON TO PARIS is a well-travelled charity route, but don't let that put you off doing it. Mike Wells's guide provides a comprehensive, blow-by-blow account of not one but two routes linking the two capitals: the classic Dover-Calais route and the Avenue Verte. Having ridden both in the past, Mike's routing brought back fond memories of my trip (bit.ly/cycle-avenueverte-sj) and will help anyone planning these rides in either direction. Disappointingly, Mike's description of the Avenue Verte omits the route split on the French side that follows the River Oise into southern Picardy.

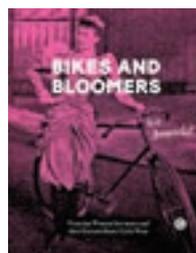
Sam Jones



Fran Adams
CYCLING INTO THE UNEXPECTED £12.99
 memoirspublishing.com

FRAN'S APPROACH TO FAMILY HOLIDAYS by bike proves that you don't need to have the latest bike, kit, or a big budget to have an adventure. Cycling into the Unexpected is about 15 separate cycling holidays Fran took in the UK and abroad. It starts in 1986 when her sons Pete and Malc are 14 and 12, but the chapters aren't in chronological order, which I found a bit confusing. Yet I loved Fran's honesty when it didn't quite go to plan. It's encouraging to read about a family who did it their own way and had a lot of fun in the process.

Victoria Hazael



Kat Jungnickel
BIKES AND BLOOMERS
 £24 gold.ac.uk/goldsmiths-press

MOST OF US TAKE FOR GRANTED the freedom to wear what's practical and comfortable both on and off the bike, but for women it's the result of a battle fought by early female cyclists. Kat Jungnickel's absorbing research into Victorian women's cycle clothing pays tribute to their ingenuity and bravery in designing clothes with pulleys, loops, and buttons that preserved their 'modesty' while cycling but looked 'normal' off the bike. Fascinating stuff in this centenary year of female suffrage. For free associated sewing patterns, see bikesandbloomers.com/patterns.

Julie Rand



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