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Thorn Raven Tour

Are the days of the derailleur-equipped touring bike numbered? Dan Joyce tests a tourer with the 14-speed Rohloff hub and decides



The German-made Rohloff Speedhub was designed for the kind of off-road conditions that destroy a derailleur-bike's drivetrain. Yet you'll more often see this 14-speed hub gear on high-end city bikes. Over the last year it's made inroads into the UK touring bike market; St John Street Cycles have been pushing it hard.

There are now four bikes in Thorn's Rohloff-equipped Raven range: two hardtail mountain bikes and two 26-inch wheel tourers. The Tour is designed for 'adventure touring, cycle camping, rough-stuff, bombproof commuting'. The lighter Sport Tour is for fast touring. Both come with back-curved riser bars, but drop bars are one of the many 'a la carte' options.

FRAME

The Tour's frame and fork are TIG welded in Taiwan from three types of heavier-than-aluminium-but-more-dependable steel. The fork is a traditionalist's favourite: Reynolds 531ST, here with a twin-plate crown designed to improve lateral stiffness. The stays are Reynolds 725, which has a better strength to weight ratio than 531. The main frame triangle is '969', which is Thorn's name for their custom, butted 4130 chrome-moly tubeset. The numbers refer to the wall thickness, which changes from 0.9mm to 0.6 and 0.9 again along the tube. The down tube is 'conical': it's oversized and wider at the bottom bracket than at the head tube, and so stiffer where the twisting forces from pedalling are greater.

Useful frame features include a deep vertical left-hand dropout, which allows the use of a mini torque arm for the hub. This is neater than a chainstay mount and means the rear wheel comes off without tools – the gear cables are separable, thanks to bayonet-style couplings. An eccentric bottom bracket deals with chain tensioning. There are braze-ons for a bottle dynamo, a pump, and some tidy head tube guides for the gear cables.

GEARS

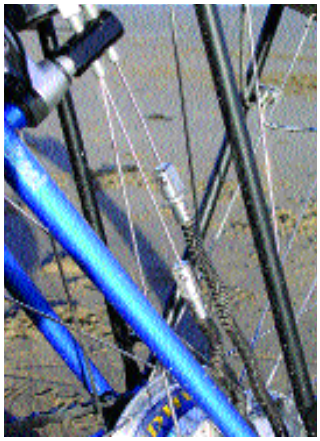
The Speedhub's 14 gears are evenly spread across a 526% range. It's comparable to a triple chainset derailleur set-up, in terms of usable gears and overall range. The ratios in full are: 0.28, 0.32, 0.36, 0.41, 0.46, 0.53, 0.60, 0.68, 0.77, 0.88, 1, 1.14, 1.29, and 1.47. On the test bike, fitted with 26x1.75" tyres (not the nominal 26x2" tyres used for SJSC's catalogue figures), the gear range is 19.5-102". Direct drive, which you'll need to multiply by the ratios shown to get the other gears, is about 70" (69.6").

How come 11th gear is direct drive? What you've got is a 7-speed hub for gears 8-14, with a reduction gear that kicks in for gears 1-7. You need to back off pedalling between 7th and 8th (and vice versa) because the reduction gear is disengaging and the 7-speed hub is simultaneously shifting from top to bottom. Apart from that shift, though, all others are quick and easy, whether pedalling or stationary. The gear indexing is done inside the hub, so gear cable tension isn't critical.

Black, racing green and red are other frame colours

Gears 8-14 feel slick and efficient, albeit with loud freewheeling in some gears. Gears 1-7 are noisier and feel rougher and less efficient, a problem emphasised by the fact that 7th is the noisiest of the lot. Imagine you've got a really nice 7-speed hub with seven not-quite-so-good bail-out gears, which you can hear churning as you winch up climbs. That, in essence, is the Speedhub.

The gear cables push-twist apart without tools



The hub does get quieter and smoother with use: I've ridden two Raven Tours, one brand new and this one, which had about 1,000 miles on

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the hub. Nevertheless, it's worth specifying chainring and sprocket sizes that will keep you in gears 8-14 for as much of your riding as possible. I'd recommend 38x16 – losing the 44x16T's top gear for better low-middle gears.

Of course the Speedhub brings benefits too. Mine never missed a shift. It's protected from weather and dirt – although it's a pity that a lightweight chaincase isn't one of the many options, eccentric bottom bracket notwithstanding. There's no rear mech to damage (a fact I appreciated when I crashed the test bike...). Maintenance is minimal, and durability should be much better.

OTHER COMPONENTS

As the Rohloff shifter is designed for 22.2mm bars, it won't fit 23.8mm diameter drops. So here it's on a stem-mounted accessory bar. It's inelegant – I'd prefer Hubbub's bar end mount (www.hubbub.com) – but it works fine, a bit like down tube levers. To my mind, it's a better compromise than flat or riser bars for touring.

There's not a lot of space to talk about the other components. The wheels deserve a mention. Front and rear have just 32 spokes, as the Speedhub only comes with 32 holes. Normally that's too few for laden touring. However, lack of wheel dish makes for a stronger wheel. The 26" wheel size is also stronger, and I've yet to hear of any problems with spoke breakages.

I like 26" wheels on a tourer, despite the slight drop in rolling performance compared to 700C. You can fit wide tyres like these 1.75" ones without compromising mudguard clearance, and comfort is better.

Although the Rohloff is disc-brake compatible, the Raven Tour uses V-brakes. Because of the drop bars, they're operated by Dia Compe 287V levers. These worked fine, and the wheel rims have wear indicators.

THE RIDE

The Raven Tour rides like the heavy-duty tourer that it is. Our fully-equipped Large size test bike tipped the scales at 15kg. For its avowed purposes, this isn't a problem; panniers are rarely filled with cotton wool. If you'll also be doing fast day rides, you'll want another bike (the Sport Tour?) or at least an alternate set of road-only tyres, such as Continental's Sport Contact.

The riding position is high, due to the long steerer and steerer-mounted accessory bar. This suits me fine as I've a bad back. You could put the accessory bar above the handlebar if you prefer.

The frame was stiff enough for any weight that I wanted to hang off it in panniers, and didn't shimmy. The combination of drop bars, good brakes and fat tyres made for confident descending.

SUMMARY

A Speedhub alone costs £625, so the Raven Tour is great value. It's good for laden touring, rough-stuff, commuting, and general use. If you value durability and lack of maintenance above all, you'll like it – as will those who spend most of their time in gears 8-14. Climbing in gears 1-7 is noisier and not so efficient as with a derailleur, so some mountain tourists may find it frustrating. The derailleur tourer isn't dead, but one with a Rohloff *is* a viable alternative. I'd buy one.







Top: Neat head-tube gear-cable guides

Centre: Not elegant, but it works fine

Bottom: Inside a Speedhub. Luckily they're very reliable

THORN RAVEN TOUR SPEC'

PRICE: £1339 as tested (from £1099)
CONTACT: St John Street Cycles 01278 441500, www.thorncycles.co.uk
SIZES AVAILABLE: XS, S, M, M/L, L, XL
WEIGHT: 15.1kg (size L, with racks, guards, pedals)
FRAME: Thorn 969 main tubes (custom, over-size 4130 chrome-moly), Reynolds 725 stays, Reynolds 531ST fork with twin-plate crown. Rohloff-specific dropouts, eccentric bottom bracket. Braze-ons for three bottles, mudguards, front and rear racks, pump, dynamo
WHEELS: 26x1.75" (42-559) Panaracer Pasela Tour Guard tyres, Sun CR18 alloy rims, 32 14g stainless steel spokes, Rohloff Speedhub 500/14 (rear), Shimano STX-RC hub (front)
TRANSMISSION: Shimano UN52 cartridge bottom bracket, Thorn alloy 170mm triple chainset with 44T chainring, Rohloff Speedhub twistshift, Rohloff Speedhub 500/14 with 16T sprocket, Sram PC48 3/32in chain, no pedals. Fourteen gears, 19.5-102"
BRAKING: Shimano Deore M510 V-brakes with Dia-Compe 287V levers
STEERING AND SEATING: FSA Orbit XLII threadless headset, 100mm 12° Thorn threadless stem, 44cm (c-c) ITM anatomic drop bars, cork tape, 27.2mm Thorn alloy micro-adjust seatpost, San Marco Rolls Classic saddle
ACCESSORIES: 55mm Thorn accessory bar, SKS P45 700C mudguards, Thorn 531 rear carrier, Thorn MKII heavy duty low-loader front carrier, Zéfal HPX pump

VARIATIONS ON A THEME

A number of bespoke frame builders offer Rohloff bikes, but off the peg ones remain relatively rare except in Germany. Here's three you could get:



CANNONDALE STREET ROHLOFF: £2299.99
Aluminium, Headshok-sus', Magura discs, 700x37C tyres. Cannondale 00 31 541 573 580, www.cannondale.com



THORN RAVEN ENDURA: £1999
Hardtail Reynolds 853 frame with Fox Vanilla RL Forx and Hope mini disc brakes. Also from St John Street Cycles



STREET MACHINE SUPERBIKE: £2836
Full-sus' tourer with Rohloff, disc brakes, Schmidt dynohub, carbon fairing. Bikefix 0207 405 1218, www.bikefix.co.uk