Thorn Raven Sports Tour

Tim Wainwright

All photos: Tim Wainwright



The Thorn Raven Sports Tour is a complete rethink of the touring bike usually sought by tourists and leisure cyclists alike. Gone is the triple chainset and derailleurs, replaced by the 14-speed German-made Rohloff Speedhub. I opted for the straight bar option rather than the dropped bars on a couple of counts: first, I thought it looked more aesthetic on a mountain bike-style frame and secondly, the gear-change grip came to hand immediately, rather than having to remove my hand from the bars to reach a twist-grip mounted on the side of the stem.

The Sports Tour has been designed throughout by Thorn's chief designer, long-time tourist and audaxer, Andy Blance. Andy has put a great deal of expertise into this bike, using his experience of many miles on tandems and solos and major tours in Australia and South America, carrying camping equipment, food and water for extended tours in wilderness conditions.

Frame and forks

The frame is built with a Reynolds conical 853 tubeset, 725 stays and 531 Competition fork blades with a hollow cast crown. The conical-tubed frame has a top tube which is wider at the head tube tapering to the seat tube, while the oversized down tube widens from the BB to the head tube, helping the frame resist the twisting forces of pedalling.

For simple chain tensioning, there is an alloy concentric bottom bracket in a steel shell, allowing adjustment to chain tension by loosening two bolts.

The TIG-welding is very neatly executed, having the appearance of a custom fillet-brazed frame. After an anti-corrosion process the frame is powder-coated, the decals applied, and another clear powder coating applied to seal the decals.

A new feature on this bike is the behind-the-forks front V-brake, which Andy says helps to stop brake squeal and in use, this works well.

There are enough braze-ons any tourist could ask for: three bidon cages, mudguard and rack bosses on the rear vertical dropouts with a four-point fixing on the seat stays. There are lo-loader mounts on the forks and concealed bosses for screwing mudguards directly to the frame. Under the top tube are four bosses specially designed to carry the three rear cables (one for the brake and two for the gears) and bosses on the head tube prevent the cables rubbing the paint off.

A really nice touch is that all braze-ons and dropouts are made from stainless steel. Andy is pragmatic enough to know that cables and QRs will eventually rub the paint away, but the bosses will not rust as a result. All these stainless steel fittings had to be specially designed and commissioned for the range of Thorn bikes, as they are not fittings normally made for the trade.

Gears

The 14 gears are evenly spaced with changes approximating a two-tooth jump on a cassette. Direct gear is number 11, so basically there are seven higher gears on 8 to 14 while gears 1 to 7 are reduction gears. The change between 8 to 14 and 7 to 1 is instantaneous with no need to back off pedalling, but when changing from 8 to 7 or 7 to 8, you have to slacken off a bit or you will get caught in either top gear or bottom gear. This is quite disconcerting when you find yourself in top gear climbing a hill when you want to be in gear 8, but, as with learning derailleur shifting, you soon learn to slacken off the pressure.

There is a small red spot on the grip shifter to align with which gear you are in, but I had trouble seeing the black figures moulded into the black grip, especially on grey days or when not wearing my reading glasses. Andy told me he has painted some white lines on his at 7 and 11 for better visibility.

Apart from this small gripe, the gears change smoothly and accurately – far quicker and more precisely than modern cassettes – and the beauty is you can change gear while stationary, ideal for starting when fully loaded after stopping in a high gear.

I specified a 42 x 16 combination, giving direct drive (gear 11) of 68.3 inches, a gear I can 'pedal all day'. The full range is: 19, 21.6, 24.6, 27.9, 31.7, 36.1, 41, 46.5, 52.8, 60.1, 68.3, 77.5, 88.2,

100. You can specify higher or lower ratios, but gear 11 is the key for your most-used gear. The Thorn chainring is reversible when worn, as is the Rohloff rear sprocket, so you can double the usage. Rohloff claim they have never had a hub fail, and with reports of up to 90,000 km use, what more could you ask for in a touring wheel?

Wheels

Rohloff only make a 32-hole hub, no other choice is available. Some might consider this too few for loaded touring, but without having to dish the rear wheel, Rohloff claim this combination is as strong as a 48-hole one. Andy Blance will vouch for this, following his heavy-duty tours of the wild regions of the world. The rims are sturdy black anodised Sun CR18 with wear indicators. Weighing in at 440g each with a 22.5mm width, they accommodate tyres up to 1.75 inch with mudguard clearance on this frame. Spokes are 14/15 gauge DT Competition stainless double-butted with brass nipples, crossed two on rear and three on front.

The test bike came with the latest Panaracer Pasela Tour Guard 26 x 1.5 (37-559) which at 512g each, roll very well and so far have been puncture-free.

The Rohloff hub has a standard quick-release skewer and the gear cables separate with bayonet-style couplings, making wheel removal a quick and painless procedure.

The front hub is Shimano Deore parallax, in black to match the rear Speedhub. Overall, these are a very sturdy pair of touring wheels which should give good service and longevity.

Finishing kit

I specified an upgrade for the brakes to Shimano XTR, well worth the extra. Incredible stopping power with just one finger, giving you great confidence when descending fast, just don't overdo the pressure or the back wheel will lock up. Handlebars are Thorn Superlight carbon, mated with Cane Creek end grips and Ergon MP1 anatomic grips which gave a comfortable hand position. Stem is a Thorn Ahead silver alloy with a FSA Orbit headset.

A classic San Marco black saddle sits atop of the 27.2mm carbon seatpost, with a matching black Blackburn MTN rear rack and Profile bidon cages. Black SKS guards finish the bike off nicely. For the weight-watchers amongst you, full carbon guards are available as an upgrade.

A Thorn 170mm self-extracting alloy crankset with black 42-tooth chainring, an upgrade Rohloff SLT-99 chain and Shimano M520 SPD pedals completed the transmission.

Conclusion

Reynolds 853 makes the Raven a stiff but comfortable frame, ideal for lightweight touring, commuting, and fast(ish) day rides/audaxing. A quick and dirty test I use for stiffness, OK not very scientific, is to hold the bike steady and put my foot on the crank at the bottom bracket and push. The Raven flexed about 50 per cent less than my 753 Condor and Roberts Columbus Nivachrom. All-up weight of the Sports Tour is 30lb (inclusive of pedals and rack), and while not really noticeable on the flat or if loaded with panniers, the extra weight will slow you down on hills. I found I was using gears slightly lower than on a lightweight bike and I did miss the 'riding on the hoods' position when out of the saddle – the wide bars and end grips took a bit of getting used to when climbing.

With the excellent brakes, wide tyres and no frame flex, cornering and descending inspired confidence and I would have no hesitation using this bike for extended touring. The design and components are top quality and all credit goes to Andy Blance for a well-engineered touring machine.

Price for this bike with the above specifications is £1,762.95 which includes delivery. Thorn offer a 100-day money back guarantee if you are not satisfied with your bike.



Rear-mounted front brake



Neatly TIG-welded



Carbon bars

Andy Blance, Raven designer, in St John Street Cycles' showroom

