

# Raven Tour

Issue 12.0

Rohloff equipped



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## Steel is real



High quality steel is the best possible material for a strong, comfortable, well equipped, long lasting frame... all our bikes are high quality steel... we would not wish to build our bikes with anything else... and we

would not wish to use anything else for our own cycling!

Cheap (thick walled) aluminium frames are strong enough, they could have the fittings required on a touring bike but they are heavy and very uncomfortable. More expensive (thin walled) aluminium frames are less uncomfortable and they are quite light but they can't have the fittings required and they break! Dealing with a broken lightweight aluminium frame is easy... you recycle it into bottle tops!

Titanium frames are fairly light, they ride very well but it is extremely expensive to have the required fittings and furthermore, all titanium frames that we have known, have also broken! It is usually impossible to repair a titanium frame. Perhaps there are some titanium frames, being made today, or which may be made in the future, that won't break... but we doubt it. We certainly wouldn't want to risk such a huge sum of money, when steel is almost as light, much more durable (and could be easily repaired if necessary), rides better, is relatively inexpensive and a steel frame can have all the fittings you require. Steel is real!

## Frame

Frame wise, the Raven Tour is a direct descendant of our well known, much loved and very highly regarded Thorn Nomad. It has very slightly sportier geometry and the tubes are a little lighter in gauge but the top and the down tube are larger in diameter. This creates a superb multi-use frame.



To begin with, we designed and commissioned rugged, mega oversize THORN 969 frame tubes and stays.

These are cold drawn and butted from seamless Japanese 4130 Cro-mo blanks and the tubes are then heat-

treated. The resultant tubeset is "lightweight", considering its great strength. It is very stiff and very resilient... perfect for carrying heavy loads, perfect for long distance comfort. This Thorn 969 tubeset is exclusive to our bikes.

The heavy-duty chain stays are long enough to provide heel clearance with very large panniers. This makes the Raven Tour a genuine, first-class touring bike, which is well up to the demands of cycle camping... it is even capable of a global tour, if required to do so.



Its robust qualities also mean that the Raven Tour is a first-class day-to-day, all-year-round machine which, with a modicum of care, will give a lifetime of sterling service.

The Raven Tour is also more attractively priced than any other Rohloff equipped bike in the world! Be assured that, despite the bargain basement price (a Rohloff hub, sprocket and shifter etc. alone, not even built into a wheel, retails for £625) the Raven Tour is a very serious, well thought out and well specified machine... it is far better than many bikes costing twice the money and better, for its purpose, than any derailleur geared bike whatever the cost!

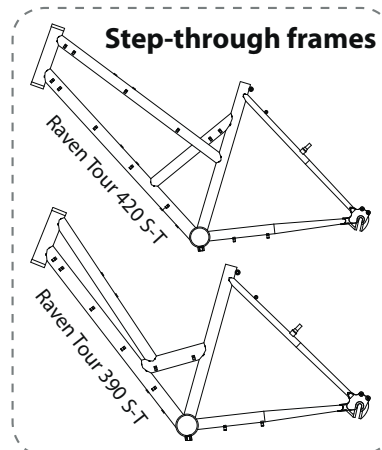
In fact, we would go as far as saying that, because of our great experience with touring bikes in general and the Rohloff hub in particular, the design features found on the Raven Tour make it so suitable for the purpose that only one of our (much more expensive) Thorn custom creations could, at this moment, be considered to be, in any way, superior as a multi-functional touring bike!

Remember, these are not empty words; we back them up with a 100 day "money back, if you don't agree" trial"





Raven Tour



## 2 new sizes of Raven Tour.

We have introduced two new sizes of Raven Tour, in fact, in many ways, it could be said that we have introduced two new styles of Raven tour. These new sizes are 390 S-T and 420 S-T, the "S-T" stands for step-through... we have never made a step-through frame before, so this is new ground for us. Both frames are available in exactly the same range of colours as the other Raven Tour frames. (Gloss black, Traditional BRG gloss, Cobalt blue pearl metallic, Rosso red pearl metallic) Complete bikes are available with the same choice of upgrades as other Raven tour frames...although, to improve cable runs with this style of frame, the frames are designed for use with an EX box Rohloff hub but we can fit the standard Rohloff hubs if you wish to save a little money. To make the

frames as strong as possible a different Thorn 969 tubeset has been used, which has butt profiles that are ideal for these frames.

The **420 S-T** is 420mm from the centre of the bottom bracket to the top of the seat tube; it has a 600mm step-through height and a virtual top tube length of 580mm. The 420 S-T's "X" frame is very rigid and this bicycle (unlike the 390 S-T) could be used for fairly heavy touring, a role it will perform almost as well as a "conventional" diamond framed Raven Tour. We are resisting calling this a "ladies frame" because the frame will also suit men who have hip problems, who/which would benefit from a step-through frame. The frame should suit a wide range of cyclists from about 5 feet to around 6 feet in height.

The **390 S-T** is a much smaller frame, as you may expect, it is 390mm from the centre of the bottom bracket to the top of the seat tube, it has a 492mm virtual top tube and it has a step-through height of 460mm. The low step-through height means that the frame can not be as rigid as other Raven Tours, which in turn means that, although it is a member of the Raven Tour family, the 390 S-T should not be considered as the first choice for loaded touring... you should ride a small diamond frame (or a 420 S-T) if you can. The 390 S-T will allow many more cyclists to enjoy the advantages of cycling with a Rohloff hub... indeed its small size and low step-through height will allow many to enjoy the benefits of cycling!



# Construction & features



The frames are beautifully T.I.G. welded, to our own exclusive design, by the finest frame builder in Taiwan and are subject to independent quality control at all stages of the process.

**All frames have a full complement of fittings:**



Steel fittings for extra neat, Rohloff-specific gear cable (and rear brake) routing under the top tube.



3 sets of bottle bosses are provided.

Bosses for directly screwing the mudguard to the seat stay and chain stay bridges.



The frames have V brake bosses and upper carrier bosses on the seat stays.



We have designed and specified our own lightweight alloy eccentric and steel shell, to adjust chain tension. Each frame has a unique frame number.



We have, at considerable expense, had our own Rohloff-specific, cast stainless steel, vertical, twin-eyed, socketed dropouts made.



We have ensured provision for a high efficiency pump behind the seat tube.

## Forks



The Raven Tour comes with our exclusive "Twin Plate Crown" fork, has Reynolds "Super Tourist" blades, as fitted to & developed on, our current eXp cycles.



The twin plates make the forks extra resistant to lateral movement, such as when wrestling with heavy loads in deep mud or sand; in these situations the extreme positive feel of the steering is of huge benefit.

The wonderful thing is that, although the twin plates make the forks laterally more rigid, they do not diminish the zero-maintenance, shock absorbing abilities that have made Reynolds forks legendary!

The forks have a full complement of brazed on fittings; the facility to directly screw the mudguard to the underside of the crown, fittings for lo-loader carriers, fittings for mudguard stays and a generator boss.

# Raven Tour - Order form

Frameset... £499.99

The THORN Raven **Tour** is available as **frame & fork only**

**Frameset:** Thorn Alloy eccentric, FSA Orbit XL II headset (fitted). Thorn Micro-adjustable alloy seatpin, touch-up paint, eccentric adjusting tool & all stainless screws. Twin Plate Crown fork. (please choose frame size & colour) **Tour frameset** £499.99

Complete Bike... £1299

Standard Specification.

Individually hand build to your exact specification... Please choose your desired frame size, frame colour & standard component options below. **Complete Bike** £1299

## Size & Colour

\* = Please  tick box required

Size { **390 S-T**  **420 S-T**   
**472 S**  **512 S**  **537 S**  **562 S**  **587 S**  **612 S**   
**487 L**  **512 L**  **537 L**  **562 L**  **587 L**

Colour { Powder Coat with matching colour Twin Plate Crown fork...  
**Black gloss**  **Cobalt Blue Pearl metallic**   
**Traditional British Racing Green gloss**  **Rosso Red Pearl metallic**

**Bike Build-up options...** Each bike is individually hand built from the frame up, to your exact specification, on our premises here in Bridgwater. We offer many upgrades and custom options as standard, and can accommodate most component requests... Talk to us now about your dream specification.

Invoice N°

Title: Mr / Mrs / Miss / Ms / Dr

First name \_\_\_\_\_

Surname \_\_\_\_\_

Address \_\_\_\_\_

Town \_\_\_\_\_

County \_\_\_\_\_

Postcode **Postcode** \_\_\_\_\_

Country \_\_\_\_\_

Telephone Number

Home \_\_\_\_\_

Work \_\_\_\_\_

Mobile \_\_\_\_\_

Email address

\_\_\_\_\_ @ \_\_\_\_\_



Call: **01278 441500**  
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issue: 05/07/2007

Thorn 100 day money back if not delighted pledge on all NEW Rohloff equipped complete cycles (excludes framesets and frame kits).

Please Note:- Occasionally some items become unavailable for long periods of time. We reserve the right to substitute items of similar (or greater) value where there will be no adverse difference in function. No surcharge will be made.

St John Street Cycles is a trading style of Thorn Cycles Ltd (incorporated in England 4121096 - registered office: St John Street Cycles 91-93 St John Street, Bridgwater TA6 5HX)

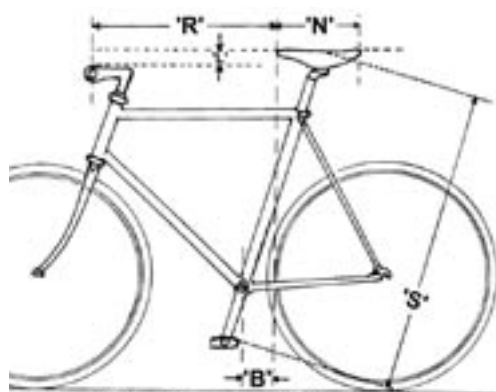
## Set-up Dimensions

Standover Height = \_\_\_\_\_ mm

Height = \_\_\_\_\_ mm

Preferred riding position =

Relaxed  Sporty  Racing  Upright



The following dimensions will enable us to set up your New bike exactly like your favourite machine.

**N** = \_\_\_\_\_ mm

Overall saddle length & name of Saddle:

**S** = \_\_\_\_\_ mm

Distance from top of pedal (crank in-line with seat tube) to top of saddle, measured along the seat tube.

**L** = \_\_\_\_\_ mm

Distance from the bottom of a level straight edge placed on the top of the saddle to the top of the handlebar stem.

**B** = \_\_\_\_\_ mm

Distance that a plumb line (weight on a bit of thread) falls behind the centre of the bottom bracket when suspended from the tip of the saddle.

**R** = \_\_\_\_\_ mm

Distance from tip of saddle to the centre of the handlebars.

**Note:** The dimensions you send us must be accurate, otherwise this is a meaningless exercise... Get somebody else to check your measurements.

# Raven Tour - Options

**Standard Components & Options** (no pedals included)\* = Please  tick box required

**Headset** - 1 1/8" threadless FSA Orbit XL II (aerospace bearings... currently **the best** available), black

**Wheels** - Rohloff Speedhub 500/14 32 hole rear hub in silver (135mm rear O.L.N), quick release skewer.

Rohloff reversible steel sprocket\* **15t**  **16t**  **17t**

32 hole Shimano® Deore M530 quick release front hub **Black**  **Silver** .

32 hole rims\* **Rigida Andra 30 (Rohloff drilling)**  **Sun Rhyno**  **Sun CR18**

black, stainless steel spokes, presta valve inner tubes, Velox rim tape.

Panaracer tyres\* **Hi Road 1.5"** (rigid bead)  **Pasela Tourguard 1.5"** (rigid bead)

**Pasela Tourguard 1.75"** (rigid bead)

**Chainset** - > Thorn alloy 110PCD chainset - choice of crank length\*

140mm  145mm  150mm  155mm

160mm  165mm  170mm  175mm

> Thorn highest quality alloy single 110PCD reversible chainring in black\*

**34t**  **36t**  **38t**  **39t**  **40t**  **42t**  **44t**

> SRAM PC48 chain.

> Shimano UN54 (110mm / 68mm shell) sealed bearing bottom bracket.

**Brakes** - Shimano Acera M420 alloy V-brake set.

> Rohloff twist grip shifter - with spare hub cable & fitting kit.

**Stem** - Thorn 1 1/8" alloy "front loading" threadless stem (length/angle + alloy spacers to suit)

**Stem** - Length \_\_\_\_\_ mm Angle° \_\_\_\_\_ (**Internal use only**)

**Handlebars\*** > **Thorn Comfort bars Mk2** - New improved design - Designed in consultation with a senior physiotherapist. Double butted (1.8/3.0/1.8mm) 2014 alloy, 18° sweep. Extra wide 25.4mm centre section gives more room for attaching bar bags, computers & lights etc. (easy adjustment of reach simply by rotating the bars) **Black**  **Silver**   
**Thorn high quality alloy straight bars Black**  **Silver**   
> Comfortable handlebar grips & bell

**Saddle\*** **Gents gel**  **Ladies gel**

**Gents San Marco Rolls Classic**

**Brooks Competition** - Lightweight saddle, 270g, alloy rails (**NOT Leather**)

> Thorn alloy 27.2mm micro-adjustable seatpin.

> High quality brake + gear inner wires and outer cables, no pedals included.

## Transmission Upgrades

> **Rohloff SLT-99 8 speed Road drive chain**, Includes a free 50ml bottle of Rohloff special chain lubricant ..... (Highest Quality, highly recommended) ..... + **£30**

> KMC Z610HX 3/32 single speed chain, bushless construction, thicker side plates and mudshrouded riveting for high pin power, ..... + **£4**

> Shimano Deore M530 HollowTech splined (Octalink) chainset (104 PCD, 4 arm)\*

**170mm**  **175mm**  in **Silver**  **Black** , Deore ES30 splined (Octalink) bottom bracket, Thorn highest quality alloy single 104PCD 4arm reversible chainring in black\* **32t**  **34t**  **36t**  **38t**  **39t**  **40t**  **42t**  **44t**  ..... + **£45**

> Shimano XT M770 HollowTech II chainset (104 PCD, 4 arm)\* **170mm**  **175mm** , Thorn highest quality alloy single 104PCD 4arm reversible chainring in black\*

**32t**  **34t**  **36t**  **38t**  **39t**  **40t**  **42t**  **44t**  ..... + **£90**

> Thorn alloy 110pcd chainguard in black (up to 44 teeth) ..... + **£15**

> EX external gear mech (for Step-through frames only) ..... + **£62**

## Wheel Upgrades

### Rims

> **Rigida Andra 30 CSS Carbide braking surface 32 hole rims (Rohloff drilling)**

**black**, includes set of 4 x SwissTop blue carbide cartridge brake pads (**Requires cartridge brake shoe, please select Shimano LX, XT or XTR V brake upgrade**) ..... Highly recommended ..... + **£55**

### Hubs

> Shimano XT M760 32 hole front hub **Black**  or **Silver**  ..... + **£20**

> **Rohloff hub in Black anodized finish** ..... (Improved resistance to winter salt corrosion) ..... + **£25**

> Schmidt Son dynamo front hub - 32 hole in silver, Busch & Muller Lumotec switchable halogen headlamp (without standlight), upgrade bulb for front use only & Highest Quality Thorn alloy headlamp bracket fitted to the fork crown... this will ensure a bar bag will not interfere with the beam (Highly recommended for cycling at night) ..... + **£150**

> **As above but black Schmidt Son dynamo front hub** (Resists salt corrosion better) + **£170**

Note - Busch & Muller Oval Plus switchable headlamp will not fit due to the Rohloff cable route.

## Brake Upgrades

> **Shimano Deore M530 V-brakes & levers** ..... + **£20**

> Shimano Deore LX M580 V-brakes & Deore M510 levers ..... + **£30**

> Shimano XTR M970 V-brakes & XTR M950 levers .... **THE BEST RIM BRAKE!** ... Excellent braking power & modulation, cartridge pad system allows quick replacement requiring no adjustment ..... + **£135**

## Handlebars

### Notes on handle bar grip and bar end compatibility with a Rohloff shifter.

**All handlebar grips on the Rohloff shifter side should be no shorter than 112mm. This is essential to allow the hand to rest free of the shifter.**

**1.** There is not enough room to fit inboard and outboard bar ends on any of our Comfort or straight handlebars with a Rohloff shifter (It is probably possible to do this on our MTB bars... but they would be much too wide to be sensible).

**2.** There is not enough room to fit bar ends on to the outside of Thorn Comfort bars with a Rohloff shifter.

**3.** When fitting inboard bar ends to Thorn Comfort bars the bar ends should be passed around the first bend.

**4.** Straight bars with Ergon grips and Cane Creek Ergo Control bar end grip II is a highly recommended setup.

**5.** Ergon's WP-1 anatomic women's handlebar grips are not as suitable for use with a Rohloff shifter. The diameter of the grip at the point that it meets the shifter is too small and will cause the hand to rub against the shifter. It is however perfectly suitable for use with SRAM grip shift or for a tandem stoker.

**6.** Thorn Anatomic Cork grips MUST NOT be shortened (cut down).

**7. MK2** Thorn Carbon anatomic bar ends are not suitable to be mounted inboard.

## Handlebar Upgrades

> Thorn Carbon Comfort Bar - A supremely comfortable, lightweight, yet strong solo comfort bar. Carbon Kevlar wrapped 2014 butted alloy. Rise 60mm, ø25.4mm, width 605mm, 18° sweep, 0° upsweep, 175mm straight grip section per side, 210g. Extra wide 25.4mm centre section gives more room for attaching bar bags, computers & lights etc. (easy adjustment of reach simply by rotating the bars) ..... + **£40**

> Thorn Carbon Anatomic carbon bar ends - perfect shape for a secure comfortable grip & only 44g each! ..... + **£49.99**

> Thorn Cork grips for Rohloff - Highly recommended ..... + **£10**

> **Ergon MP-1 anatomic grip Mens** ..... + **£19.99**

> Cane Creek Ergo Control bar end grip II ..... + **£29.99**

> **SJS Ergo Control bar end grip** ..... + **£14.99**

## Saddle & Seatpost Upgrades

### Gents Saddles

Fi'zi:k Nisene CP, Magnesium rails ..... + **£35**

Fi'zi:k Rondine (mens), Magnesium rails ..... + **£35**

Brooks B17 - black  honey  ..... + **£17**

Brooks Swift Titanium rails - black  honey  ..... + **£85**

Brooks B17 Titanium - black  brown  honey  ..... + **£70**

**Womens Saddles** Note: many women find B17 & B17 Titanium very comfortable

Brooks Finesse (womens) Titanium rails -

black  honey  or maroon  ..... + **£77**

Brooks B17 - black  honey  ..... + **£17**

Fi'zi:k Rondine (womens), Magnesium rails ..... + **£35**

### Seatposts

PRO PLT carbon seatpost, 350mm, micro adjustable alloy head, 250g ..... + **£60**

### Suspension Seatposts

Cane Creek 3G Thudbuster suspension seatpost, 3.9" (9.9cm) of plush travel, 400mm length, 590g, includes neoprene cover ..... + **£135**

USE XCR SUMO (with layback) suspension seatpost - 65mm travel, 390mm length, including shim, black, 382g ..... + **£75**

## Tour Rohloff Drop Bar Option

Anatomic alloy drop bars: 40cm  42cm  44cm  (centre to centre), Dia-Compe 287V (V-brake compatible) aero brake levers, black cork bar tape, Thorn alloy accessory bar: **55mm (recommended size)**  105mm , Shimano Deore M530 V-brakes ..... **£80**

# Tyre Upgrades

## Per pair

> Schwalbe Marathon XR **folding** tyre TravelGuard (HS359). THE EXPEDITION TYRE! ... **26 x 2.0** (50-559) 790g ... **(45mm MUDGUARDS ARE TOO NARROW) Please select option** [MG55N], [MG65W], [CMG2.0], [CC1] or [MG0] **from "Mudguard Options" below** ..... + £15

> Schwalbe Hurricane RaceGuard® **folding** tyre (HS352). **26 x 2.0** (50-559) 560g ... **(45mm MUDGUARDS ARE TOO NARROW) Please select option** [MG55N], [MG65W], [CMG2.0], [CC1] or [MG0] **from "Mudguard Options" below** ..... + £15

> Schwalbe Marathon XR **folding** tyre TravelGuard (HS359). THE EXPEDITION TYRE! ... **26 x 2.25** (57-559) 890g, **(45mm or 55mm MUDGUARDS ARE TOO NARROW) Please select option** [MG65W], [CMG2.25], [CC1] or [MG0] **from "Mudguard Options" below** + £15

> Panaracer Pasela Tourguard **folding** tyre with Aramid belt **26 x 1.5** (37-559) 411g ..... + £15

> Panaracer Pasela Tourguard **folding** tyre with Aramid belt **26 x 1.75** (42-559) 435g ..... + £15

> Panaracer Pasela Hi road Compe **folding** tyre **26 x 1.5** (40-559) 375g ..... + £15

# Mudguard Options

Please select an option to suit you requirements.

- > SKS mudguards (please select clearance option)\* **Silver**  **Black**
- [MG45] 45mm guards to fit 1.5" tyre ..... + £0
- [MG45N] 45mm guards to fit 1.75" tyre (narrow clearance) ..... + £0
- [MG55W] 55mm guards to fit 1.75" tyre (wide clearance) ..... + £5
- [MG55N] 55mm guards to fit 2.0" tyre (narrow clearance) ..... + £5
- [MG65W] 65mm guards to fit 2.0" tyre (wide clearance) ..... + £3
- [MG65-2.25N]<sup>†</sup> 65mm guards to fit 2.25" tyre (narrow clearance) ... + £3
- [MG0] No Mudguards ..... - £20
- [CC1] Crud Catcher front guard, black & Thorn Carbon Kevlar MTB rear guard, black - rear rack mounting ..... + £39
- [CMG1.5] 50mm Thorn Carbon mudguards to fit 1.5" tyre ..... + £70
- [CMG1.75] 50mm Thorn Carbon mudguards to fit 1.75" tyre ..... + £70
- [CMG2.0] 68mm Thorn Carbon mudguards to fit 2.0" tyre ..... + £120
- [CMG2.25]<sup>†</sup> 68mm Thorn Carbon mudguards to fit 2.25" tyre ... + £120

<sup>†</sup>Please also note: Because of close clearances this setup is not suitable for muddy conditions. This is due to the clearance between the mudguard and V brake inner wire.

# Accessories

## Carriers for Twin Plate Crown fork

Thorn steel lo loader, black ..... £70

## Rear Carriers

- Thorn steel expedition rear carrier, black** ..... £70
- Blackburn MTN rear carrier black  or silver  ..... £25
- Blackburn EX1 Expedition rear carrier black  or silver  ..... £30
- Thorn alloy Ultra-lightweight rear carrier, black (Max load: on-road 11kg, off-road 4kg) ..... £60

## Pedals

### SPD type

- Shimano (M324) double sided pedals - SPD system one side, standard rat trap style on the other, steel cage (inc cleats) ..... £39.99
- Shimano (M520) SPD double sided pedals (inc cleats) ..... £15.99
- Shimano LX (M540) SPD double sided pedals (inc cleats) ..... £39.99
- Shimano XTR (M970) SPD double sided pedals (inc cleats) ..... £69.99

### Platform type

Shimano MX30 DX ATB flat pedals ..... £49.99

### Clip & Strap type

> MKS GR9 alloy platform pedals, including toe clips & straps - Please select a size\* S  M  L  XL  ..... £30

> MKS Sylvan alloy Rat Trap pedals, including toe clips & straps - Please select a size\* S  M  L  XL  ..... £28

Other pedals please specify: \_\_\_\_\_

## Lighting

> Cateye TL-LD1100 LED rear light - The most visible LED rear light we've seen! 10 super bright LED's, highly water resistant, 4 modes... including simultaneous flashing and constant mode! Run time: 50 hours (constant), 100 hours (flashing) ..... £26.99

> Cateye HL-EL500 Power Opticube LED front light \*BS Approved\*. The Power Opticube offers 30 hours of headlight-quality run time on 4 AA batteries. It features an innovative magnetic switch and is highly water resistant. Side visibility and tool-free bracket make this simply the best and brightest LED light available ..... while stocks last only £19.99

## Accessories

**Original design Profile cage** "made exclusively for Thorn" **THE BEST EVER BOTTLE CAGE!** (Not to be confused with the current offering.) Great for touring, securely holds LARGE drinks bottles ..... Number required \_\_\_\_\_ x £5.99 each = £ \_\_\_\_\_

Composite MTN bottle cage, ultimate security and cleanliness ..... Number required \_\_\_\_\_ x £4.99 each = £ \_\_\_\_\_

**Ultimate bottle cage combination:** 2 x original design Profile Cages (seat tube & under down tube, for security and capacity) & 1 x Composite MTN bottle cage on top of down tube, for convenience ..... £16.97

Zefal HPX pump SIZE 1, best quality ever, easy to obtain high pressure ..... £19.99

Cateye CC-MC100W Micro wireless cycle computer - 10 function, LED back light, very neat + reliable, no messy wires, fitted and set up ..... £34.99

Thorn alloy accessory bar, black: 55mm  105mm  ..... £14.99

## Rohloff Spares

Rohloff special chain lubricant 50ml bottle - **We highly recommended this chain lube** ..... £4.99

Rohloff 2 stage full oil change kit for Speedhub 500/14 - includes cleaning oil, all season oil, syringe, oil filling tube & drain plug ..... £18.99

TS20 Torx screwdriver - required for changing hub and shifter cables ..... £4.99

Rohloff axle ring assembly complete - enables quick and simple road side cable replacement - **highly recommended when touring** ..... £46.00

Rohloff sprocket tool for Speedhub 500/14 ..... £19.99

Rohloff sprocket (steel) for Speedhub 500/14 ... 15t  16t  17t  ..... £19.99

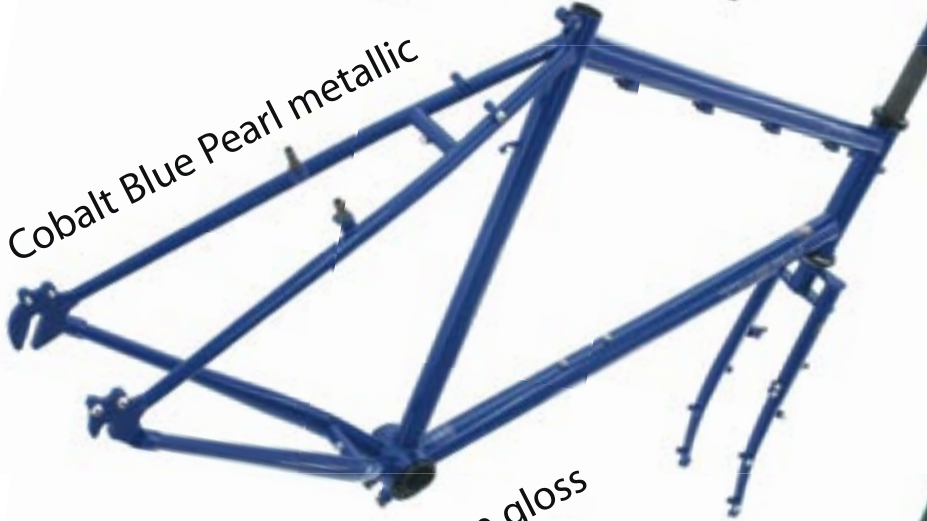
# Notes:

# 4 Colours

Black Gloss



Cobalt Blue Pearl metallic



Traditional British Racing Green gloss



Rosso Red Pearl metallic



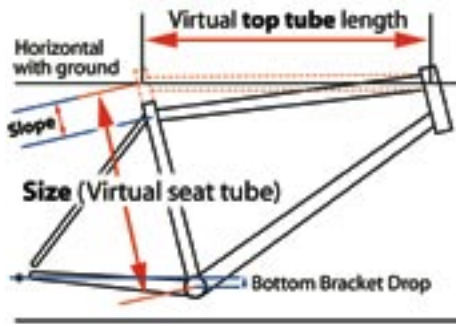
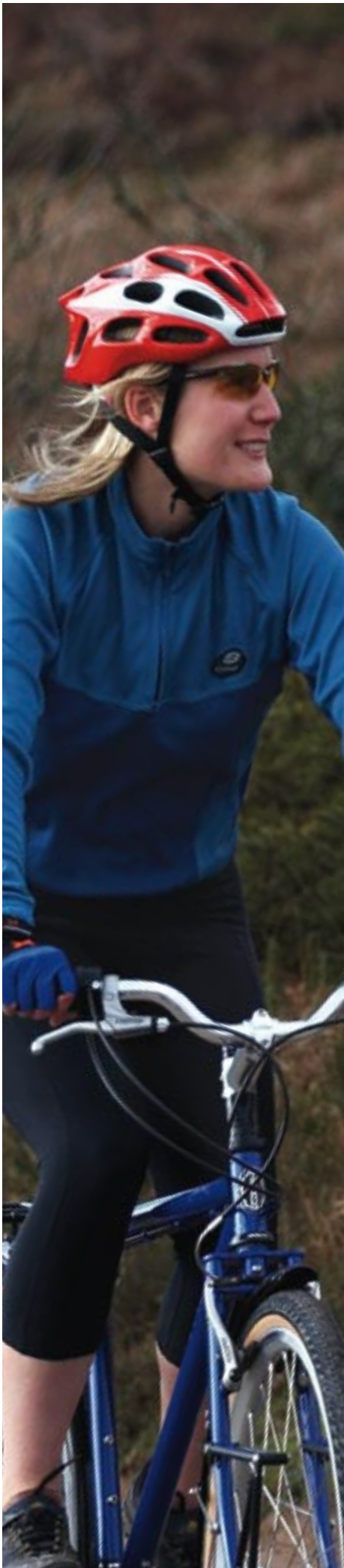
## Frame and fork finish

All the frames (and forks) undergo a multi-stage anti-corrosion process and are then powder coated in a modern, high tech facility, the decals are applied and then the frames are treated to a second clear powder coat to seal in the decals.

The Raven Tour is available in a choice of 4 colours, each with discreet decals, the colours available are;

- [1] Gloss black
- [2] Gloss traditional British racing green
- [3] Pearl cobalt blue
- [4] Pearl rosso red





## Raven Sizing... we now make 13 sizes!

We should be able to fit cyclists from 1524mm (5 feet) to cyclists of 1930+mm (6 feet 4 inches) perfectly.

Generally speaking, the short top tube frames are more suitable for drop bars and long top tube frames are more suitable for straight bars. Some cyclists may wish to sit in a very upright position and it is possible that a short frame with straight bars, may then be the best choice for these cyclists, who, due to a probable "long legs in comparison to their length of back" body shape, are most likely to be female. Very occasionally somebody (almost certainly male) will need a long top tube with drop bars.

Please also note that it is better to have one size smaller frame size with straight bars compared to drop bars i.e. somebody of average male size may need a 537L with straight bars and a 562S with drop bars. We think (and remember we see lots of people on bikes!) that this gives the best aesthetic and, as a consequence, we have designed the actual lengths of the top tubes to take account of this.

Our smallest size (472S) has a top tube that is shorter than average for the frame size, making it suitable for most people around 5 feet tall.

The next size up (487L) has a top tube which is longer than average for the frame size. The next 4 sizes (512, 537, 562 and 587) are available with either a short or a long top tube (S or L).

Our largest size (612S) is only available with a "short" top tube... this is because really tall people wanting straight bars should choose 587L and really tall people wanting drop bars should choose the next size up... 612S.

If you prefer, you may find it easier to think of the sizes this way; Size 572S is the smallest size possible... if you need this size fine, otherwise think of two ranges of bikes, one for drops one for straights.

The drop bar range is sized; X Small = 472S, Small = 512S, Small/Medium = 537S, Medium = 562S, Large = 587S and X Large = 612S

The straight bar range is sized; Small = 487L, Small/Medium = 512L, Medium = 537L, Large = 562L and X Large = 587L

## We almost certainly have a Raven to fit you!

**Please note that**, owing to the sloping top tube design of the frames, you are supposed to have considerable standover clearance on all, except possibly the smallest two, sizes.

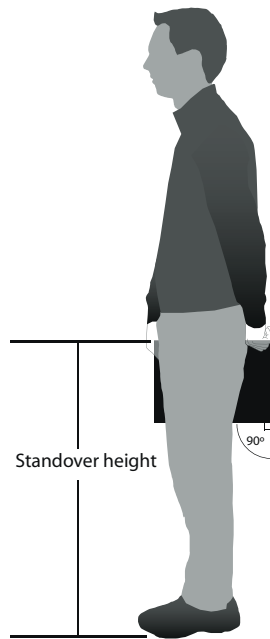
The largest sizes are for really tall people; if you are not really tall, then they would be the wrong choice for you!

Actual seat tube c-t (mm)	Actual seat tube c-t (mm)	Virtual top tube length (mm)	Step through height* (mm)	Standover height at head tube* (mm)	Standover height at mid tube* (mm)	Seat angle (degrees)	Chain stay length (mm)	Bottom bracket drop* (mm)
390S-T	390	492	460	825	600	74.5	442	50
420S-T	420	580	600	860	630	73.5	454	50

\* = with Panaracer Tourguard 26 x 1.75" tyres

Size	Actual seat tube c-c (mm)	Top tube	Virtual top tube length (mm)	Slope (mm)	Standover height at head tube* (mm)	Standover height at mid tube* (mm)	Seat angle (degrees)	Chain stay length (mm)	Bottom bracket drop* (mm)
472	402	short	490	70	747	717	75	430	46
487	422	long	575	65	769	735	73.5	442	46
512	442	short	530	70	785	752	74	442	46
512	442	long	590	70	785	753	73	442	46
537	457	short	545	80	810	772	73	454	46
537	457	long	605	80	817	781	72.5	454	46
562	472	short	560	90	839	797	73	454	40
562	472	long	615	90	836	795	72	454	40
587	497	short	575	90	860	819	72	454	40
587	497	long	630	90	863	819	71.5	454	40
612	522	short	590	90	882	841	71.5	454	40

\* = with Panaracer Tourguard 26 x 1.75" tyres



### To measure your standover height...

1. Stand in cycling shoes with your back against a wall, feet together.
2. Place a large coffee table style book (a thin hardback book is best) against the wall between your legs.
3. Raise the book as high as it will go. Without moving the book step forward and note the position of the top of the book.
4. Measure from the floor to the top of book... **that is your standover height!**



### Upgrades.

The Raven Tour has the option of many upgrade and accessories, you may choose whatever you wish, we can advise about the suitability of different tyres for different intended uses or about carriers etc. We highly recommend the brake upgrade to Deore V brakes and the upgrade to a black hub... polished alloy is a perfectly fine finish for bicycle hubs, but given the exceptionally long service life of a Rohloff hub you can be certain that the hub will become grey and dull over a long period of time... look at an old handlebar stem. Architectural quality, black anodizing is an expensive process for Rohloff to apply, producing an expensive upgrade but it will preserve the appearance of the hub over the years.



## Why the bikes are called Ravens

Rohloff have long used the raven as their logo; we asked their permission to use their artwork and the name 'Raven' on our new, Rohloff-specific bike, and Rohloff were kind enough to grant us permission. Had Rohloff used a wild boar as their logo, we would not have asked to use the name.

We admire ravens because they are considered to be the most intelligent of birds, they are also very social birds and in the wild they are only to be found high up in the mountains. We like to think that fellow cyclists are intelligent, social creatures and cycling is usually at its best in the mountains.

## Find out for yourself why so many of our customers own more than one Thorn bike!

### UNIQUE THORN 100 DAY PLEDGE

100 day money back if not delighted guarantee on all new Raven cycles

☆ We are so convinced of the superiority of our product that we will make you the following offer...

☆ Buy a Raven Tour, ride it for 100 days and, if you are not totally delighted, upon its return, we will refund the purchase price.

**Beat that!**



**is it heavier?... No!**



# Touring Tyres

Andy Blance writes...

In my opinion there are only a few tyres worth considering for touring use.

[1] The Panaracer 1.5" Hi-Road is a long-term favorite of ours and although they are very lightweight and superbly responsive, we have supplied literally thousands of these tyres for tandem use. They are ideal for sporty, performance use such as spring and summer Audax rides. They collect few punctures, despite not having a puncture-resistant casing.

[2] A folding version of the above is available, which saves a few ounces per wheel, giving a small but noticeable gain in performance. I would have no hesitation whatsoever in recommending this tyre (or the non folding version) for heavy touring, as long as fairly descent quality tarmac could be relied on for the duration of the trip.

[3] The Panaracer Pasela 1.75" is another favorite tyre, it is a little heavier than the Hi-road, which makes it marginally less sporty but, on the other hand, it is more comfortable, it has superior wet road grip and a small amount of off road potential. It is very reliable and, thanks to its puncture resistant strip, it almost never punctures. It is capable of higher mileages than the Hi-road. I would still classify the 1.75" Pasela as a performance touring tyre.

[4] Panaracer has recently introduced a 1.5" version of the Pasela Tourguard. The tyre appears to be every bit as reliable as the 1.75" Pasela, the sporty rider may appreciate the small but noticeable weight reduction and it may make sense for use on better quality roads. It appears to be only margin-

ally less sporty than the 1.5" Hi-Road, it is certainly more puncture resistant and its wet weather grip is superior too.

[5] There is a folding version of the 1.5" Pasela Tourguard available, this saves a useful 80g. This tyre, being lightweight, folding up small and being very durable, would also make a useful emergency spare tyre for all but the most extreme of adventures.

[6] The 2.0" Schwalbe Hurricane. Although this is no lightweight, at around 600g, it rolls well on the road; the two inch air pocket gives great comfort, the deep tread gives genuine off-road capability when required... we like this tyre, although we have not had enough time to get very many miles in on it, the Hurricane comes highly recommended by many lightweight adventure tourists.

[7] The 2.0" Schwalbe Marathon XR is a folding tyre. It is much heavier than a Pasela or a Hurricane and consequently feels much less sporty. It is very comfortable, it grips in all conditions and has some real (dry condition) off road potential. It is perhaps "too much tyre" for good surfaces, but the Marathon XR is really at home on dirt (or gravel) roads. I have never been unfortunate enough to puncture one.

[8] There is a 2.25" version of the Marathon XR, which I would seriously recommend for adventure touring... it is just possible to fit mudguards with adequate clearances for clean roads to a Raven Tour, when using this tyre... but leaving mudguards behind is a better option and generally not a problem for most adventure tourists. The Marathon XR tyres are capable of seriously high mileages and they are currently the ultimate tyre in terms of

reliability.

A good recommendation is to use 1.75" Paselas, with mudguards, when in the UK and leave the mudguards behind and fit Schwalbe Marathon XR 2.25" tyres for big holidays.

[9] Schwalbe Smart Sam 2.25" Alpencross. When traveling extensively on really poor gravel roads (as you would have to in South America) the front tyre is inclined to "wash out", especially in conditions of high side winds. The fitting of a 2.25" Schwalbe Smart Sam Alpencross tyre, to the front, makes a significant improvement to the bike's stability and maneuverability.

The Smart Sam rolls almost as well as the Marathon but its more aggressive tread and more pronounced side lugs bite more effectively into the "Ripio". We don't feel that, for expedition use, the Smart Sam would stand up to the exceptionally high loadings, encountered by a rear tyre, as well as a Marathon and, in any case, the Marathon performs really well on the Ripio as a rear tyre. The Smart Sam is very good on smooth tarmac too; there is only the slightest trace of road buzz in these situations. The front brake can be applied as hard as you like on dry tarmac and only the faintest sensation of squirm can be felt from the tread. We do advise a little caution when cornering hard in the wet, especially where diesel spills may be encountered. If you are traveling in remote areas (Himalayas or South America) consider using 2.25" Marathons and taking a 2.25" Smart Sam Alpencross as a spare.

# Choosing mudguards

It can be quite tricky and time-consuming to fit a pair of mudguards properly and once properly fitted it is impossible to increase the clearances by very much, therefore we need to know which size tyre size you want the mudguards to fit around. Without this information the mechanic building the bike will assume that the mudguards are to suit the tyres chosen in the specification... this may not be the case.

For example, you may specify the bike with 1.5" Hi road tyres but you may have every intention of fitting 2.0" Schwalbe tyres for heavier use some

time in the future... if we make the guards fit the 1.5" tyres, you won't be able to fit 2.0" tyres. If we supply the machine with (wider) mudguards which are set to fit 2.0" tyres you will be able to fit either tyre but the machine will not look as attractive (or as well set up) when the 1.5" tyres are being used. Also, when choosing mudguards to fit 1.75" tyres you have two options; you can have 45mm wide mudguards, which look very sporty and are very aerodynamic (being only just wider than the tyre) but these 'guards produce quite close clearances between the sides of the tyres and the mudguard

stays. Alternatively you can choose less sporty (and less aerodynamic) 55mm mudguards... these require less maintenance to prevent rubbing on the stays and of course they also do a better job of guarding against flying mud. The same issues are also involved in selecting mudguards for 2.0" tyre... i.e. you could have 55mm or 65mm guards. The choice is yours!

# CYCLING PLUS

DISTANCE BIKE OF THE YEAR



**CYCLING PLUS TESTED**  
C+ 184 June 2006  
OVERALL RATING  
**9/10**



Raven Tour - Cycling Plus distance bike of the year 2004 & 2006



**Overall Bronze Award Winner**

"The ultimate utility bike and so much more."

"The cheapest Rohloff equipped bike and possibly the best."



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14 speed internal hub gear.

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