# THORN RIPIO THORND Issue 03

A superb derailleur geared, adventure-touring MTB.

# **Available in 3 popular sizes**

Jan 2011



449 Frame on (Including FSA headset and seatpost

Suspension specific frame has generous clearances for 2.4" tyres. All 8 tubes are Reynolds 725 (heat treated double butted) steel. We use heavy gauge tubes for a long life and great durability. The Ripio will carry 20Kg at the rear...over the roughest terrain... ...but it will *cope* with 30Kg whenever necessary. ISO disc mount and open hose guides + removable V brake bosses. Full complement of brazed on stainless fittings...3 bottle cages.

#### THORN RIPIO

**Iss**ue 3 - Jan 2011

# About Thorn Steel is rea

The business began as St John Street Cycles, in 1984 when Robin Thorn took over an almost defunct toy and cycle shop at 36 St John Street. He chose Bridgwater quite by chance - he was having holiday in the area from his home in Norfolk, and was amazed to see the number of people on bicycles in the town. In an instant the decision was made and the shop was leased that day.



Robin borrowed a small sum from his parents and worked all hours of the day and night to build up the business. He soon became a well-known figure with his oil-stained brown overall and wild hair and beard, often working on the pavement in the sunniest weather to draw further attention to his shop.

In 1989, the first employee was taken on - Andy Blance, a friend and very experienced audax rider.

In 1992, the first tentative moves were made into national advertising, concentrating on the touring and tandem markets, which were the particular interests of Robin and Andy. The emphasis had completely changed from cheap bikes to very high quality, specialist machines, though still often sold at a bargain price made possible by Robin's buying prowess.

In 1993, Robin decided to move up the road to number 91-93. The entire building front was gutted to give a modern, light, airconditioned shop and a very superior workshop; the rear was left as a long singlestorey brick store. St John Street Cycles was rapidly becoming known as one of the major touring and tandem suppliers in the country. We were gaining an extremely good reputation for the quality of our service and the breadth of our knowledge in the field.

In late 1995 we began to consider manufacturing our own bikes. We had become increasingly frustrated by the mistakes and missing features on the bikes we could buy and wanted to design what we considered to be the ideal touring bike and the ideal tandem. Andy used his wealth of experience and study of the subject to design the bikes, and the THORN brand was launched. The first bikes were so well received that we didn't even have to advertise them - they sold as quickly as we could get them made. At this point we set up our own frame shop and Andy designed complete ranges of Thorn bikes. Thorn quickly became established as a premier brand in the tandem touring market. At the same time, our mail order business and online store had been growing apace, and our internet site recognised as an industry best.

In 2000, the limited company Thorn Cycles Ltd. Was formed, with Robin and Helen Thorn as joint owners. St John Street Cycles remains as a trading name of the company.

High quality steel is the best possible material for a strong, comfortable, well equipped, long lasting frame ... all our bikes are high quality heat treated 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!

The final heat treatment process can double the cost of a steel cycle tube. Heat treatment significantly raises the UTS (ultimate tensile strength) which makes the tubes stronger and more resistant to cracking, it also makes the tubes more resistant to denting. It also greatly enhances steel's much talked of and easy to notice but hard to describe quality of "resilience". Because heat treatment is so expensive, the steel tubes used in most cycles are not heat treated. If a frame doesn't say "heat treated", you can be certain that the tubes won't be.

#### All the tubes used in Thorn frames are heat treated.

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.

Expensive (thin walled) aluminium

frames are less uncomfortable and they are quite light but they can't have the fittings required for touring and they break! Dealing with a broken lightweight aluminium frame is easy ... You recycle it into bottle tops!

Carbon fibre frames can be very lightweight and very durable...as long as you don't scratch them ... a gouge in a carbon frame is a catastrophic failure waiting to happen. I'd have no hesitation using one for racing...

#### ... if I raced !

and (especially) if somebody else was paying for it!

It is difficult to manufacture a carbon frame with bosses...I don't know whether to laugh or cry, when I see a "cool" carbon road racing frame being used for lightweight touring...I see rattling mudguards, held on with cable ties, mega heavy alloy seat postfitting (seat post breaking?) carriers with loads being carried, which are too high and too far back for stability ... or I see no provision for luggage at all, with the rider looking like a cricket umpire, clothing tied around their waist...how cool is that...in both senses of the word?

I also frequently see the dangers and difficulties associated with toe overlap.

Titanium is two-thirds of the weight of steel...but even the top quality, cyclespecific tubes are much less stiff. To make a frame which is as stiff as a good, high quality steel frame, you have to use considerably more volume of material, which does not give that much of a weight saving! Many customers however want a





weight saving with a Ti frame and they end up with a frame which is not stiff enough...this not only wastes energy ... it can give a scary ride down steep hills!

Much of the titanium used today is not only of a very low grade but it is also "plain gauge" material, that is, it is not butted at all! If low grade steel frames can be nicknamed "gas

pipe", perhaps these tubes should be called "nuclear reactor cooling pipe". Such tubes may be an improvement on "gas pipe" steel but they



are far inferior to top quality steel, unless, of course, they are actually being used in a reactor!

They remind me of the story of "the Emperor's new clothes'

It is either impossible or extremely expensive to have the required fittings on a high quality butted Ti frame and furthermore, all such titanium frames, that we have known, have also broken! It is usually impossible to repair a cracked titanium frame. Perhaps there are some proper 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, is much more durable and could be easily repaired if necessary, steel rides better, is relatively inexpensive and a steel frame can have all the fittings you require.



#### THORN RIPIO

### Why I designed the Ripio. (By Andy Blance)

Whilst on our travels in the Andes, Fiona and I have met many cyclists, who have admired our beautiful Rohloff equipped bikes and the effortless way that they carry our luggage.

Many of these cyclists are managing to cope, with an aluminium Cross Country MTB, by using a backpack and a flimsy rear carrier, often held on with cable ties. I know how much harder work it is, to carry kit on your back, rather than on the bike. I also know how much harder it is to ride a frame, which is so flexible, that it "ties itself in knots", when you load it and apply power. As many cyclists can't afford a **Rohloff hub geared Thorn Nomad Mk2** I decided to design **a replacement steel frame** to carry the weight properly, give proper tyre clearance, be more comfortable and yet much more rugged than an alloy XC frame. The Ripio frame has stainless fittings, 3 bottle bosses, open hose guides for rear disc, an ISO disc mount and removable V brake bosses. You can fit all the bits from your current XC MTB onto our **Ripio frame...** 

and for only **£449**, take your next trip on super, front suspension, adventure touring bike!

Cast stainless seat clamp, silver-brazed in place



#### Clockwise, from the Right. It reached 47C in the early afternoon! A day and a half later at 4200m...making breakfast, the morning after the -30C night! A few hours later, the top of the 230Km climb of the Agua Negra, from sea level in Chile to 4753m in Argentina. A meeting with some Argentine cycle tourists

on XC bikes





With our rigid Mt Tura fork and our Lo-Loaders, the Ripio will carry 30Kg and cope with up to 50Kg!

RIP

The Ripio will carry 20Kg at the rear and it will cope with 30Kg whenever required.

**The Ripio frames.** These are heavy duty "Reynolds 725" frames, which I've designed for heavy touring with suspension forks and derailleur gears. The frames have the perfect geometry for an 80mm to 120mm fork; here is what I'm saying about them:-Adventure touring strength, derailleur geared hard tail, 100% built from Reynolds 725. ISO disc mount + removable V brake bosses, brazed in stainless seat clamp, 3 x stainless bottle bosses, stainless carrier bosses, top tube routed slotted gear cable guides and open disc brake line guides. Supplied with high quality 28.6mm FSA headset, micro adjusting alloy seat pin.

This beautifully built, matt blue powder coated frame is up to carrying a heavy load over any terrain, thanks to the strong frame and long chainstays. It is designed for a 100mm fork but will work with 80mm or 120mm. It is also designed to function superbly with our Mt.-Tura suspension-replacing fork. You could take all the kit off your harsh but fragile alloy cross country MTB and fit it onto this frame and produce a superb, rugged Adventure Touring bike, which was designed to do the job, by somebody who, in recent years, has crossed the Andes 22 times on ripio "roads", with full camping gear...me!"

If the frame sizes sound confusing, you can think of the 578S, 580 and 595 as being 15", 16" and 18" respectively but it's best to think of the 578S as small/med with short TT (top tube), the 580 as small/med with regular TT and the 595 as med/large with regular TT.

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The Ripio is what I'd use myself, if Rohloff didn't exist and if, as a consequence, I didn't have my Rohloff equipped bike! I'm not keen on front carriers on a suss bike, they seem to dive into every hole but that's your choice and sometimes "needs must".

We have no plans to sell a complete bike because the price would look silly...there are complete MTBs for sale for less than we can buy the bits for. Buy such a bike, swap the frame add carriers and suitable tyres, eBay the new MTB frame (and tyres?) and off you go!

If you don't have the mechanical expertise to do this, we can build you a Ripio bike by substituting the frame for a Sherpa frame and using the Sherpa Brochure as a start point. **Note** we will not fit any front carrier to suss forks, it will void the fork's warranty...if you want one, you must fit it yourself.



Please Note, the Ripio makes a superb hard tail MTB for "normal" MTB riding, especially for heavier cyclists. With our Rigid fork the Ripio is a first rate expedition bike, perfect for trouble free, extended tours.

### **THORN RIPIO PRICES**

Frame only (includes FSA head set and seat post)	.£449
Frame and Magura Menja air fork (100mm, ISO + V bosses)	.£799
Thorn expedition heat treated tubular Cro-Mo rear carrier	£70
Thorn Mt Tura Fork. (see Mt Tura brochure)	.£100
Thorn expedition Lo-Loaders for Mt Tura (Not for suss fork)	£70

## THORN RIPIO SIZE MATRIX 2010

[1] FRAME SIZE	<sup>[2]</sup> Actual Seat tube Length	Slope [1] - [2]	Virtual top tube length. C to C	BB drop	Seat Angle With L1 =470mm (Most 100mm travel forks)	Chainstay Length
578S (Small/Medium with short top tube)	340	238	565	48	73.5	440
580 (Small/Medium with std. length top tube)	360	220	585	45	73	445
595 (Medium/Large with std. length top tube)	415	180	605	40	72.5	450

Finish and Colour . Rust proof treatment applied internally and externally before painting. Highly durable Matt Blue powder coat, with silver blue decals, applied under powder lacquer.





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Male Female	Title
First name	
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Address	
Town	
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	RND
Call on 0127	8 441 500
Email sales@tl	norncycles.co.uk
Online www.sj	scycles.com
St John St Cycles, Thorn Cycles Ltd, 91-93 St John St,	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 affect on function. No surcharge will be made for this

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BRIDGWATER,

Somerset

**TA6 5HX** 

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

