

THORN

Sherpa

A stunning, derailleur geared, rugged 26" wheel touring bike

Issue 01
Dec 2008

May also be built into a 26" wheel hybrid trekking bike or a bike for general-purpose commuting and day rides

Available in a choice of 2 colours and 10 sizes

Blood Red

Stealth black



**Bike shown is
size 560S in
World Tour
spec.**



The most durable, sweetest-natured, derailleur-geared, go-anywhere, off the shelf touring bike, obtainable today...irrespective of price!

We have hundreds of happy Sherpa owners, some have cycled around the world, others have enjoyed reliable day to day transport, why not try one yourself, without any risk? (Please read on for more details.)

About Thorn

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.



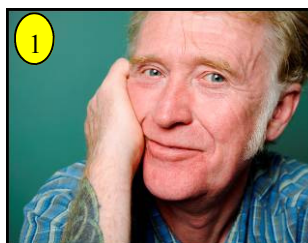
In 1989, the first employee was taken on – Andy Blance, a friend and very experienced audax rider.

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, air-conditioned shop and a very superior workshop; the rear was left as a long single-storey 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 frameshop 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.



(1) Andy 2007

(2) Robin 2007

(3) Robin and Andy back in 1992



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.

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 post-fitting (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?

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

Titanium is two-thirds of the weight of steel...but it is 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 gives a scary ride down steep hills!

It is either impossible or extremely expensive to have the required fittings on a Ti frame and furthermore, all titanium frames, that we have known, have also broken! It is usually impossible to repair a cracked 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, steel rides better, is relatively inexpensive and a steel frame can have all the fittings you require.



You couldn't have these fittings on an alloy, carbon or titanium frame

Thorn Sherpa *By Andy Blance*

On the front cover, I say that the Sherpa is “the most durable, sweetest natured, derailleur-gearred, go-anywhere, off the shelf touring bike, obtainable today...irrespective of cost.”

How can I justify such a bold statement?

A huge effort and many years of experience and experimentation has gone into the production of the Sherpa. I don't want to do anything which encourages or perpetuates today's so-called “throwaway society”. I know that I could reduce the service life of the Sherpa considerably, by making it a little bit lighter but I don't want to do that and I believe that enough cyclists still want a bicycle that is made to last. I still believe that being “durable” is a good thing!

How can a bike have a sweet nature? You'd need to own (or at least ride) one to find out! The Sherpa is designed to be very manoeuvrable at low speed (considerably more so than an MTB) but it is also reassuringly stable at high speed (with, or without, heavy luggage) it's down to its perfect geometry, more of that later. The “go-anywhere” description of the Sherpa, refers to its ability to be at home on smooth

tarmac, broken tarmac, dirt roads or on the worst gravel roads in the world. It is at home because the resilience of the steel frame and fork and the clever geometry mean that the bike is genuinely comfortable. The strong frame and clever geometry (again!) enable the bike to hold a chosen line perfectly, whilst maintaining responsive steering to allow you to choose a different line if desired (this is often necessary on difficult surfaces!) Because it can travel with such accomplished style on these roads, it will take bridleways, tow paths or any “Wild Wales” cycle routes in its stride! “Off the shelf” means that we have all the sizes, in all the colours, actually in stock. “Irrespective of price” means that, no matter how much money you have to spend, we sincerely believe that our Sherpa offers superior performance, at a really keen price!

Drop handlebars, straight bars, comfort bars or “butterfly” bars?



Drop handlebars are more popular amongst touring cyclists from the UK than they are with touring cyclists from any other country, with the possible exception of Californian Americans. Drop bars offer 3 different positions:- the brake lever hoods are, beyond doubt, the most frequently used position, accounting for about 90% of usage. The position on either side of the stem (usually referred to as “the tops”) accounts for about 9% of usage, whilst the actual dropped section, (often called “the hooks”) are used very rarely by touring cyclists...usually to get more leverage on the brake levers than is possible from “the tops”

These two most frequently used positions (on drop bars) are duplicated by **straight bars with bar ends**, except that, instead of holding handle bar tape, the position using the “straight bit” can have very comfortable anatomical handlebar grips, from where a very powerful squeeze on the brake



levers is immediately possible. This position is used for, perhaps as much as, 75% of riding. Bar ends are available in many different configurations and materials, the rubber covered, “ergo control” bar ends are the most comfortable that I have used. Bar ends allow a 90 degree rotation of the wrist, compared to the position offered by the grips, which makes them as different a position as it is possible to have. (This is also the case with drop bars)

Bar ends are biomechanically efficient when climbing, particularly when out of the saddle. Our own **Thorn comfort bars** (please see page 12) were designed by a senior physiotherapist. They offer one supremely comfortable position. The reason that these bars are so comfortable is that they have an 18 degree bend, which puts the wrists into perfect alignment with the forearm and thence the elbow. The reason that there is only one position available is that the bends, which are necessary to achieve this position (and also to dampen out much road vibration) take up a lot of the room and there is physically not enough room to fit bar ends and average sized hands, onto the straight section. In my opinion, these bars are the perfect width for the “hands on the grips position” but are already too wide for sensible positioning of bar ends and to make them even wider, in order to fit bar ends, would not be sensible.

Fiona and I use Thorn comfort bars extensively when cycle camping, mountainbiking and for general cycling. During these activities we have several different hand positions, these include cycling and not cycling!

Butterfly bars are very popular in Europe, especially Northern Europe but we have reservations about them. They do offer many different positions but the most important position, the one that gives you access to the brakes, is a very narrow position, furthermore, by virtue of the massive length of tubing needed, the bars also flex significantly when this position is used.

This flexing is a positive thing, when riding slowly on flat cycle paths and at low speeds, it enhances comfort but at high speed down bumpy mountain roads (or hilly country lanes) it becomes alarming! It is alarming and yet you have to hold the bars here, because that is where the brakes are.

In heavy traffic, the narrow position offered, when covering the brakes, can not be used to advantage, when filtering through slow moving or stationary vehicles, because, despite the very narrow hand position whilst “on the brakes”, the overall width of these bars is very wide. On loose (or greasy) surfaces a bike is much easier to control, during heavy braking if it has wide bars. Northern Europe is blessed with an abundance of high quality, flat cycle paths and also with drivers who have a courteous attitude towards cyclists, I too might use butterfly bars, if I lived there!

In the quest for the perfect bicycle, you must choose, at the very outset, whether you will have dropped or butterfly bars or if you want straight or comfort bars and you must accept that a frame, which is perfect for dropped or butterfly bars, is very unlikely to be suitable for straight or comfort bars.

“It is somewhat ironic that mountainbikers wax lyrical about the “sweet handling” of their mounts on singletrack, when actually, a well designed touring bike would literally “run rings around them!”

A bike which is designed for drop handlebars needs to have a shorter top tube than a bike which is designed for “straight” handlebars. The reason is simple...drop bars have a very pronounced forward throw, whereas straight bars have no such throw (indeed they usually sweep back, towards the rider, by a small amount). The brake hoods, which are the position used 90% of the time, whilst cycling on drops, also throw the rider’s hands forward. If drop bars are used on a bike designed for straight bars, they will produce a position which is far too overstretched.



Straight bars and even more especially comfort bars need to be used with frames with long top tubes (Please see “important notes” on page 7). Because they bend so significantly deeply, back towards the rider, butterfly bars should only be mounted to very long handlebar stems. The stem must be long enough (at least 120mm) to place the rider’s hands forward of the “centre of steering”, when on the brakes. If you ride in a position, with your hands behind the centre of steering, you run the risk of, not only being unable to control a speed wobble but of actually precipitating one in the first place! Most people who choose butterfly bars are looking for a relaxed position, with the opportunity to “drop forward” into a more sporty position. Butterfly bars provide these positions and, like bar ends, also give a comfortable hand hold, with the wrists rotated through 90 degrees, at the sides of the bars.

Given the absolute necessity of using a long stem with butterfly bars, they are more suited to our short top tube frames. If you are looking for a sporty position, which drops into a very aggressively racy position, you may choose butterfly bars with our long top tube frames. **It is also ironic that, because there are very few sizes of extreme length stems available, butterfly bars, which appear to offer such a wide choice of position, may in fact be unable to provide a comfortable reach for the position that you have to use for much of the time, in order to operate the brakes!**

Derailleur gears need little explanation. There is the choice between where you have the shift levers with drops. We can still mount down tube levers to your bike if you wish but we advise strongly against it, handlebar end mounted levers offer all the benefits of simplicity and longevity with the advantage that your hands are always still holding something which is part of the handlebar. Many tourists have succumbed to the benefits of Mr. Shimano’s “integrated into the brake lever” STI drop bar gear change system. STI is considerably more expensive to run and maintain, more difficult to keep correctly adjusted and may not always provide the instant, slick down-shift required, when a hill unexpectedly rears up. Although we fit “drop bar STI” to our “Audax” and “Club Tour” bikes, we really don’t recommend it for the Sherpa.

It’s a different story with straight bar STI; Mr. Shimano had more room to make the mechanism larger and more durable. Straight bar Deore STI is standard equipment on the “trekking spec” option of the Sherpa. We still have serious reservations about STI’s long-term suitability on expedition touring bikes.

26” wheels. Whilst the traditional British, Continental and American, touring cycles of the past would have had 27” (630) or 700c (622) wheels, we favour the 26” (559) wheel for many applications and we have no doubt whatsoever that, in the most extreme of demanding situations, the 26” wheel is not only vastly superior, it is also the only tyre size which can be obtained literally everywhere in the world. **The superb frame and easy availability of a wide selection of different tyre widths and tread patterns, confirms the Sherpa’s right to be called a “go anywhere touring bike”.**

Designing a bike to carry loads.

The story of the evolution of the Sherpa.

It is very easy and incredibly cheap, to construct a bike which can carry large loads reliably, simply use lots of mediocre quality metal, witness the ubiquitous “Hero” bikes at work, in India!

It is much more difficult to construct a bike which can carry large loads reliably, in great comfort. Enough steel must be used to support and steady the load and absorb large bumps but not so much that the frame can not absorb multiple small impacts. **The only way to be certain of achieving this perfect balance, is by trial and error and much actual road testing. In 1983 I embarked on the long process of improving the design of touring bikes.**

I live close to the edge of Exmoor (an area of severely pitched hills; there are many 20% gradients, a sprinkling of 25% gradients and a couple of 33% gradients for good measure!) I have always enjoyed descending at high speed on my bicycle. It was important to me, from the outset, to have the best-handling bike that I could possibly have. I soon realised that, if I really wanted this, I would have to design my own! Initially I concentrated upon high-speed handling but (in 1984) upon riding the newly introduced mountainbikes from the US, I was made to see that, having the ultimate in high speed handling (a quality, they had in abundance) was detrimental to low speed manoeuvrability (a quality of which they had little!) It is somewhat ironic that mountainbikers wax lyrical about the “sweet handling” of their mounts on singletrack,

when actually a well designed touring bike would, literally, run rings around them!

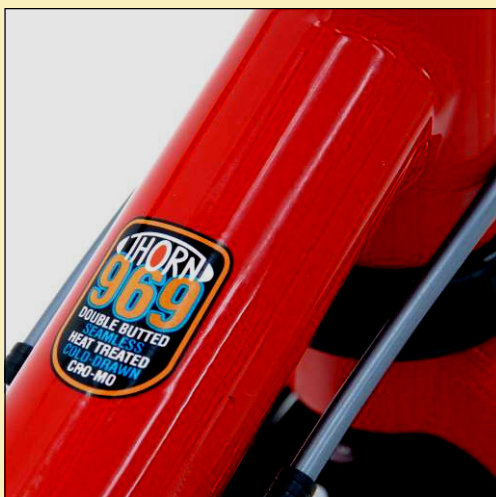
By 1990 I believe that I owned and was riding, the very finest 700c touring bike to have been made up to that time...the frame was made to **my exact and specific design** from Columbus SPX tubing by Argos Racing Cycles of Bristol. Shortly after this bike was built, my interest in riding tandem intensified and I became aware of the advantages of using the, newly available, 26” MTB road-going tyres for tandem use, on severely hilly and twisty audax rides. I soon built myself a road-going, drop bar solo, from a Cannondale Cad 3 MTB frame, for winter “Wednesday evening club bashes”.

Whilst the benefits of 26” tyres, on a solo, were not as earth shattering as they had been on tandem, the ferocious grip did inspire confidence on dark, hilly, twisty, mucky, poorly surfaced lanes. The Cannondale’s handling left much to be desired and, whilst it was unbelievably stable at very high speed, it could not be steered accurately around road debris, on the steep climbs regularly used for training.

I enjoyed the grip, comfort and responsiveness of the ‘Dale and the 26 x 1.5” Nimbus tyres but I missed the handling of the Argos that I’d designed. The next step was predictable and the Thorn Nomad was born, refined and quickly followed by the lighter, more sporty, xTc.

The “Thorn Nomad” became the benchmark for expedition touring bikes. We began to see poorly conceived and poorly executed copies of the Nomad appearing and we eventually decided to “copy” our Nomad ourselves!

We sought the finest frame builders in Taiwan, I tweaked the frame design a little and we called the bike the “Sherpa”. We were truly astonished at the high quality of the work, yet it took a little time to realise that, if we were to give it the same quality tubes as the Nomad, the Sherpa would be a superior bike (to the Nomad) yet cost significantly less money. **Well we did and here it is!**



The Sherpa’s geometry varies sensibly and precisely, with each frame size.

This has enabled us to offer a bike, which has no toe overlap, even with 26 x 2.0” tyres and wide mudguards, not even if you cycle in walking boots! Each size of Sherpa handles perfectly, whether on tow paths, country lanes, city streets, twisty, alpine descents or on the diabolical surfaces found on South American “ripio” or Himalayan dirt roads. The Sherpa is an absolute joy to ride, whether it is lightly loaded, loaded heavily at the rear only or if it has the luxury of weight being perfectly distributed in 4 panniers. Having dedicated brazed on bosses for rear carriers, front lo-loaders and 3 sets of bottle bosses, means that almost all of the weight which is carried, is

able to be secured directly to the bicycle frame, this is obviously superior to and safer than, using cable ties or hose clips to secure such carriers. Nobody can be comfortable unless they are relaxed. It is impossible to relax, unless you have confidence in your abilities. No matter how accomplished a cyclist you are, you can only compensate so much for a bike that simply doesn't handle properly, or one which does not carry a load without wobbling.

It follows that a bike which handles its load perfectly will be much safer to ride than one which doesn't! It also follows that a bike which is stable in strong crosswinds on a bumpy 80kph descent, yet reacts precisely to steering inputs, whilst climbing a 1:4 slope (allowing it, for example, to manoeuvre accurately around road debris) will be safer to ride in "everyday situations" than a bike which can do neither of these things.

Reliability. A touring bike is a "proper vehicle", genuinely capable of providing an alternative transport solution and, as such, it must be reliable. If it is not, at best you will "let the side down" by being late for work. More seriously, you could have your meticulously planned (and eagerly anticipated) holiday ruined. In some remote parts of the world, a mechanical failure



can have much more serious implications; if a bike can't be pedalled, you must walk and push, which is between 4 and 6 times slower than cycling! This is a nuisance if you are an hour away from home, it's rather more serious if you are 2 days away from water!

In order to be able to offer the frame and fork with a genuinely meaningful lifetime guarantee, we have not only used the finest steel and we have not only specified the most appropriate gauge for each tube, we have gone the extra mile and also designed and specified our own Thorn tube sets!

The smallest frames' top and down tubes are "standard oversized tubes" (Inch and an eighth top tube and inch and a quarter down tube) this produces a more comfortable ride for riders who, on average, weigh considerably less than riders of the larger frames.

The larger frames' top and down tubes are made from extra oversize tubes (Inch and a quarter top tube and inch and three eighths down tube). When you also consider that a small frame is inherently stiffer and stronger than a larger frame, you can see how sensible this approach is.

THORN 969 tubes are 100% seamless, cold drawn, conical, double butted, heat treated Cro-Mo.

"Seamless" means to have been drawn from a pierced billet of steel, rather than to have been formed by rolling a sheet of steel into a tube and then welding a seam along its length.

"Cold drawn", means that the drawing process needs to be done when the steel is cold, this aligns the molecular structure of the steel and thus "work hardens it". The down tubes and top tubes, are drawn down to a smaller diameter at one end producing a taper gauge (or, in plain English) a "conical" tube. Conical tubes are significantly stiffer, for a given weight of material, than a cylindrical tube. The tubes need to be drawn (with the aid of a mandrel) to a thinner gauge in the centre, to save weight and increase resilience, leaving the ends suitably thick (where tube joints are.) This process is called butting...if both ends are left with thicker walls, the tubes are said to be "double butted".

In the final phase of the manufacture of our tube sets, before they are sent to the frame builder, they are "heat treated". Apart from significantly raising the ultimate tensile strength, and making the tubing even more resistant to denting, heat treating the tubes massively increases a, difficult to describe but easy to notice quality, which is unique to steel frames, that quality is resilience!

It can cost more to heat treat a tube than it does to manufacture it (from iron ore to tube) in the first place! It is little wonder that very few steel frames are heat treated! You can be certain that if a frame doesn't claim to be heat treated, it won't be!

Regarding the standard options and upgrades, whilst we have not chosen the most expensive items, we have taken great care to choose reliable components. We have been especially careful with the specification of the wheel options!

(You may individually specify every component, if you wish but our standard options and upgrades, will always provide excellent service and far better value for money).

THORN 969 DOUBLE BUTTED SEAMLESS HEAT TREATED COLD-DRAWN CRO-MO



Frame sizing.

I just have to smile to myself, when I see other suppliers making such a big deal about measuring you for a frame, when they can only supply you with:- small, medium, large or extra large! Can there really be anybody who, given the choice of those 4 options, doesn't know whether they are small, medium, large or extra large? Well that's marketing! The smile slips a bit, when I realise that these same four sizes are supposed to suit straights, drops or butterfly bars. Now, come on guys, that really is rubbish!

We can offer customers, who are looking for a derailleur geared touring bike, the choice of the traditional 700c Club Tour (in 10 different sizes!) or the more modern Sherpa (with 26" wheels) which is also available in 10 different sizes!

There are 4 different sizes, with short top tubes, which are suitable for drops, or for a relaxed position with butterfly bars. We can also offer 4 different sizes with longer top tubes (slightly confusingly called XL) which are suitable for straight bars or for a fairly aggressively sporty position with butterfly bars.

We also have 2 sizes with medium length top tubes (even more confusingly called L) these are suitable for some cyclists with long legs and a short body and arms (often female), who want to sit upright, with straight bars, or have a moderately sporty position with butterfly bars. These frame are also suitable for cyclists (usually male) who wish to use drops but who have long arms and back (compared to their actual height) or who wish to have a more stretched position.

I really must emphasise that we offer a "money back if not delighted" policy. I can assure you that you will get the correct size frame, it may take a few adjustments for you to then achieve the perfect position, upon that frame but we guarantee that you will achieve it!

I sincerely believe that it is best to listen to what your own body tells you, about where it wants to sit and where it wants the bars, rather than to expect to find the solution, in a measurement, based completely on an averagely health body, of (probably) a different age to your own! It is all but certain that you will have various weaknesses and injuries, for which you are already compensating, in your posture. Your position, on the bike, needs to take account of these pre-existing conditions.

Of course, if you already have a bike upon which you are comfortable, you won't want to change that position and we certainly wouldn't want you to change it either! If you know where you want to sit, in relation to your pedals and where you want the bars, in relation to your saddle, we are able to duplicate this position, exactly, for you. I have developed an easy system, to accurately determine the minimum number of essential measurements, which are necessary to reproduce that position exactly (Please see "set up dimensions" on page 14).

As I've explained, our Sherpa is, in my (obviously unbiased) opinion, the very epitome of fine handling and the most superb luggage-carrying bike that you will have ever ridden.

Living on a planet with limited resources, it is frustrating to know that all touring bikes could be as good as this one... ..but the simple truth is that they are not.

The Thorn Nomad was the benchmark expedition touring bike; the Sherpa is better! You will only find out how good it really is by riding one yourself and we guarantee to refund your money, if you feel that it falls short, in any way, of being the exceptionally special touring bike, promised to you in this brochure.

Please see page 7 for details of our "14 day money back warranty"

If you choose the most suitable tyres for your own unique criteria, it will make a huge difference to the performance of your Sherpa and thus, vastly increase your enjoyment, when you ride it .

Unless you ride on the same type of road surface, every time you cycle, you will have to make some compromises when selecting which tyres to fit to your Sherpa. Sherpa frames and forks are designed for a long service life and to carry a load. If you are seeking comfort, I don't recommend narrower tyres than 26 x 1.5" for Sherpas. Tyres narrower than 1.5" require a significant pressure to make them "impact puncture resistant". High tyre pressures transmit "road buzz" more effectively than lower pressures.

Which tyres to choose on a Sherpa?

We strongly recommend that you choose the fittest tyre, that you plan to use with mudguards, when you buy the bike...this will allow us to not only supply the appropriate width mudguard but to also set it the correct distance from the tyre and it will mean that we don't cut the stays too short to allow these tyres to be fitted in the future.

The **1.5" Panaracer Pasela** is, beyond any doubt, the best 1.5" road tyre, that I have ever used is it is quick on smooth surfaces, it hardly ever punctures, it wears well and it has reasonable tow path potential. The fatter the tyres that you choose, the more comfortable the bike will be and the more easily the wheel will roll on rough surfaces, the larger air pocket is very effective, zero-maintenance suspension. But the fatter a tyre you choose, the heavier it is and the harder it will be to accelerate.

The **1.75" Panaracer Pasela** is my all time favourite, sporty multi condition tyre...it is only slightly less "sporty" than the 1.5 but, apart from that, it is superior in every way. It is more comfortable and it offers better grip on loose surfaces, it has the potential for use on bridleways.

Fiona and I have cycled on **Schwalbe Marathon XR** tyres, for tens of thousands of miles, without a puncture, they are the most reliable tyres we have ever used. But the better the puncture protection, the heavier the tyre is and the less flexible the casing will be, this makes it harder to accelerate (because of the weight) and the lack of flexibility reduces comfort and increases the energy required to keep it rolling. The less pronounced the tread pattern on the tyre is, the better the bike will corner, on good surfaces and the less need there is for top level puncture protection (as the tyre will pick up fewer foreign objects) this helps to keep the ride "supple". Fiona and I used **Schwalbe Marathon Supreme 2.0"** tyres on our recent 3000 mile tour, on the often broken roads of the Western Ghats, in Southern India. We were very impressed with the comfort and the grip. Please note that the less tread depth a tyre has, particularly the lack of side knobs, the scarier that tyre will be when cycling off road or on gravel roads. The more pronounced the tread pattern, the better the bike will grip on rough or loose surfaces but the more slippery the tyre will be when used on greasy tarmac. If the tread pattern is very pronounced, energy will be wasted in compressing the tread.

The **Schwalbe Hurricane HS 352 folding 2.0"** tyre has pronounced side knobs and a less aggressive central section, it is a perfect compromise for multi-surface usage, providing the multiple surfaces include some "real" off road sections.

I know each of these 5 tyres very well, I have used (and I am still using) all of them! If you contemplate the various different and specific situations that you plan to cycle in and if you accurately prioritise the qualities you would wish to have (in those situations) I know for certain that one of these 5 tyres will be the best possible choice that you could make.



Andy Blance's personal assessment of suitable tyres for your Sherpa.

Note that the scores (out of 10) are relative to the best that could be reasonably hoped for from a tyre in a particular situation. E.g. the Paseslas score 9 for grip on dry tarmac and 9 for grip on wet tarmac, I am most definitely not saying that you could lean the bike over as far in the wet as you could in the dry!

	Comfort & performance unloaded...smooth tarmac	Comfort & performance unloaded...broken surfaces	Comfort & performance unloaded...gravel roads	Comfort & suitability med loads on smooth tarmac	Comfort & suitability med loads on broken surfaces	Comfort & suitability med loads on gravel roads	Comfort & suitability heavy loads on smooth tarmac	Comfort & suitability heavy loads on broken surfaces	Comfort & suitability heavy loads on gravel roads	Grip on dry tarmac	Grip on wet tarmac	Grip on broken surfaces	Grip on gravel	Grip on wet grass and mud	Reliability	Longevity	Puncture protection
Panaracer Pasela 1.5"	10	5	2	9	4	2	8	2	1	9	9	5	3	1	8	5	8
Panaracer Pasela 1.75"	9	7	5	10	6	4	9	5	4	9	9	6	4	2	9	6	8
Schwalbe Marathon XR 2.0"	3	6	8	4	8	9	6	9	10	8	7	8	8	4	10	10	10
Schwalbe Mara Supreme 2.0"	8	9	2	9	10	2	10	10	2	10	8	9	2	1	9	9	9
Schwalbe Hurricane folding 2.0"	5	8	10	6	7	9	7	8	8	7	5	9	10	5	7	5	7

Frame size	969 Tube set	Slope	Seat Tube C to C	Virtual top tube	BB Drop	Seat Angle	Chain Stay	Mid-Tube S/O (Standover height)	Height of top tube @ junction with head tube
460S	Standard Oversize	40	420	490	47	75	435	730	750
460XL	Standard Oversize	40	420	560	47	73.5	440	730	750
485L	Standard Oversize	45	440	540	47	73	440	750	770
510S	Standard Oversize	50	460	520	47	74	440	770	795
510XL	EXTRA Oversize	50	460	590	47	73	440	770	795
535L	EXTRA Oversize	55	480	575	42	72	445	790	820
560S	EXTRA Oversize	60	500	550	42	73.5	445	810	840
560XL	EXTRA Oversize	60	500	615	42	72	450	810	840
610S	EXTRA Oversize	65	545	575	42	73	450	850	880
610XL	EXTRA Oversize	65	545	635	42	71.5	450	850	880

Buy a Sherpa with complete confidence. Ride it for 14 days and, if you are not totally delighted, upon its return, we will refund the purchase price. How is that for confidence in the quality and performance of our product?



Sherpa 2008 size matrix

Important notes on Sherpa frames

In the table above, you will notice that the smaller frames are made with **Thorn 969 standard oversized** tubing, these smaller frames are more resilient but will not carry such a large all-up load, **18Kg** is the maximum load at the rear and **8Kg** is the maximum for the forks.

The larger sizes are made from **Thorn 969 extra oversized** tubing, these are used to keep the luggage carrying qualities, of the Sherpa, proportional to its size. These larger frames are stronger but slightly heavier, they will carry **22Kg** at the rear and **8Kg** at the front.

You will also notice that some frames are marked as "S" this stands for short and means that the frame size is (almost) exclusively suitable for drops and "conventional" butterfly bars, which must use a long stem, such as the Modolo Yuma bars.

The "XL" frames are extra long, compared to drop bar frames (but actually only about the same length as our Raven Tour L frames for a given size).

These frames are designed (almost) exclusively for straight bars, comfort bars or perhaps for "forward throw" type butterfly bars such as Modolo Dumbo. Some frames (485L and 535L) are marked as being "L" this is long relative to a drop bar frame, but shorter than a straight bar frame. These sizes may be suitable for some people (mostly men with drop bars or mostly women with straight bars) who are not perfectly served by the S or the XL frames.

The reason for this slight confusion is that originally the Sherpa frames were designed for drop bars and were available as short or long...the popularity of the Sherpa and the popularity of straight bars, when touring, has led to the introduction of 4 new sizes, made for straight bars. We didn't want to re-classify the L frames as medium, as they are stamped "L" so the new frames had to be called XL.

Frame size	Steerer length	Stem length	Stem Angle	Crank Length SJS crank and TA ring upgrade	Crank Length Other STI Specifications	Drop-Bar Width
460S	240	80	6	160	170	42
460XL	240	90	15	165	170	N/A
485L	260	90	15	165	170	42
510S	280	100	17	170	170	42
510XL	280	100	17	170	170	N/A
535L	305	100	17	170	170	44
560S	330	110	17	175	175	44
560XL	330	110	17	175	175	N/A
610S	380	110	17	175	175	44
610XL	380	120	17	175	175	N/A

Sherpa default dimensions Matrix. Please note, unless you request otherwise, these are the dimensions of various components we will use, when building each size of bike. All dimensions are in mm (except drop bar width, which is traditionally measured in cm.) angles are in degrees. We always fit the stems "reversed"...which, in the case of a 17 degree stem, makes it parallel to the ground...this allows extra bar height to be achieved later, if required, by the simple expedient of "flipping" the stem. **PLEASE NOTE stem lengths do not apply to butterfly bars, which must use stems at least 120mm long (larger sizes may require 150+mm)**

Finish The Sherpa frames and forks have a multi stage finish. The frames are treated internally with a rust inhibitor. The outside surfaces are sprayed with a rust-inhibiting primer. The frames are then coated with a super tough and environmentally friendly powder coat finish, the decals are applied and the frames are given a second coat of powder, this time it's clear powder "lacquer". The decals are effectively "sealed into the finish" and you couldn't pick them off if you wanted to.

Colour options The Sherpa frames are available in a choice of two colours. We have a choice of a very bold red, which we call "blood red", with silver decals or you can choose "satin black" with silver decals. The red is completely "in your face", whilst the satin black is cool, sophisticated and melts into the background. I can't advise you on colour, other than to repeat what is surely common knowledge, "red bikes are invariably the quickest".



We strongly recommend that you choose the fattest tyre, that you plan to use with mudguards, when you buy the bike...this will allow us to not only supply the appropriate width mudguards but to also set them the correct distance from the tyres and it will mean that we don't cut the stays too short to allow these tyres to be fitted in the future.

We Offer the Sherpa in a choice of 4 different specifications:-

- (1) SJSC Special, drop bar specification
- (2) Thorn World Tour drop bar spec.
- (3) Trekking straight bar STI spec.
- (4) Full on Expedition straight bar spec

OPTION (1) SJSC Special drop bar spec.

The "SJSC Special" 27 speed has been chosen specifically to be the longest-lasting, most reliable specification possible, with due regard to cost! There is a huge range of gears available to the Sherpa's owner. The spread of gears is greater than anything currently offered by other manufacturers. We had to "think outside the box" and add mountainbike transmission to our Sherpa because we know how essential it is to have really low gears, in severe terrain...especially when you have a touring load and more especially, when you are really tired!

Transmission.

The transmission we have selected, whilst not being expensive, is really rather nice, we have used a Shimano Deore 22/32/44 chainset and 11-32 Cassette with Deore derailleurs. This **100% Shimano transmission** works really well and produces an awesome range of gears (582% in fact) which should give most people a gear for every situation likely to be encountered on the Sherpa. If you prefer a tighter spread of gears, we can substitute an Ultegra 12-27 cassette for a small upcharge).

Alternatively, you can choose to have either the 26/36/48 Deore or 30/39/50 Tiagra triple chainset at a small charge.

We have chosen bar end shifters for the Sherpa, rather than STI integrated shifter and brake lever, there are several reasons for this.

- [1] Bar end shifters are more reliable than STI in shifting performance, particularly between chainrings, they can always be relied upon to change gear in difficult situations.
- [2] Bar end shifters will continue to shift nicely with part-worn chains, cassettes and rings that wouldn't stand a chance of working with STI.
- [3] Bar end shifters are easy to set up and don't require much maintenance.
- [4] Bar end shifters are less vulnerable to damage.
- [5] It is far easier to change from one extreme of the gear range to the other (such as when cresting a summit) with bar end shifters.
- [6] Bar end shifters have the longest service life of any component we use on a derailleur touring bike.
- [7] Tektro brake levers may be used with bar end shifters, these brake levers actually work properly with V brakes and V brakes are much more powerful and easy to maintain than cantilever brakes.

Wheels and tyres.

The beauty of 26" wheels is that very strong and reliable, yet not excessively heavy wheels can be built economically.

We equip the "Sherpa SJSC Special" with a set of "proper wheels", hand built by a master wheel-builder. We use black **Rigida grizzly rims**, with 36 top quality DB stainless spokes to promise long-term reliability. We have specified the very durable and reliable **Shimano Deore sealed MTB hubs** with 135mm axle spacing, to reduce wheel dish. We fit **1.75mm Panaracer Pasela tyres**, which have a great reputation for grip, reliability, long life and, most importantly, comfort! Paselas don't pick up many punctures either! We also know that the 1.75" Pasela is adequately fast...almost certainly the quickest 1.75", puncture-resisting, non folding tyre ever made. Having sold literally thousands; we also know for certain that this 500g tyre is the most reliable.

If you have more specific duties in mind for your Sherpa you can choose alternative tyres please see "Choosing tyres" on page 6

The Sherpa frame can easily accommodate 2.1" tyres and mudguards, with enough clearance for them to be an asset, rather than a liability!

Brakes. We fit the SJSC spec Sherpa with Shimano Deore V brakes and Tektro V brake specific drop bar levers. These Tektro levers, unlike other manufacturers previous attempts to marry drops with V's, actually work and have great "feel".

You can make the small upgrade to LX brakes, which have cartridge pads, or you can take the expensive plunge, into the best rim brakes ever to have been made, XTR V brakes.

Finishing kit items specific to SJSC Special spec.

Good quality alloy, anatomical drop handlebars and a front loading, threadless, 1.125" forged stem are fitted to the SJSC spec Sherpa, these are wrapped with black cork tape. The appropriate width bars are chosen for each size of frame, please see "Default dimensions Matrix" on the bottom left of page 7. For information on recommended and desirable upgrades, please see pages 12 and 13.



Sherpa SJSC Special spec, what you see is what you get!

Size Shown is

510S



OPTION (2) Thorn World Tour drop bar spec

The "World Tour spec" uses many top quality and consequently relatively expensive components, not to look "flash" but to further enhance durability and reliability. This is the drop bar derailleurs bike to choose, if you really are going on a world tour! It is also a great option, if you are travelling highways and byways within these shores and have sufficient funds for long-lasting, high quality items throughout the bike. (Please note the emphasis on long lasting and high quality, unfortunately there are many ways of spending huge sums of money on flashy "eye candy", which actually reduce reliability and service life...we absolutely hate and despise items of that nature!)

Transmission.

We fit a 100% Shimano 27sp transmission. XT Triple chainset 22/32/44 and 11-34 (M770) XT cassette, with XT front and rear mechs with Dura ace 9sp bar end levers.

Wheels and Tyres.

For the World Tour's wheels, we have chosen Shimano XT hubs, laced into Rigida Andra 30 CSS rims. These wheels have been hand built by a master wheel builder and they will provide the longest possible service life, whilst carrying huge camping loads, yet they are not excessively heavy or ridiculously expensive.



The tungsten carbide brake surface will outlast up to half a dozen conventional rims, whilst providing excellent wet weather braking. Should you be looking for lighter wheels, at the expense of slightly less durability, you can choose the Grizzly CSS rims, at no extra cost.

Brakes.

The World Tour spec uses the finest rim brakes ever to have been made, the Shimano XTR V brakes, these stunning-looking brakes are a dream to use and very easy to maintain once set up, the pads do not need to be adjusted to keep them on the brake track as they wear down, because of Mr. Shimano's clever parallelogram mechanism. There is no better way of operating these brakes with drop bars than by using the Tektro brake levers used on the SJSC spec.

Carriers and cages

As the Sherpa World Tour spec is designed to be capable of carrying full camping kit, we thought that it would make sense to equip it with the best possible quality carriers right from the start, so we fitted our own Thorn Expedition rear carrier and Lo-loader carrier. We also decided to fit 3 profile cages (complete with Thorn bottles), these are superior quality and are (these days) made especially for us!

Finishing kit items specific to World Tour spec.

Good quality alloy, anatomical drop handlebars and a front loading, threadless, 1.125" forged stem are fitted to the SJSC spec Sherpa, these are wrapped with black cork tape. The appropriate width bars are chosen for each size of frame, please see "Default dimensions Matrix" on the bottom left of page 7.



Finishing kit for all specification options of Sherpa

All the options of Sherpa are equipped with the highest quality mudguards available, the SKS (formerly ESGE) chromo plastic mudguards. The width we supply will be determined by your tyre choice (or by your specific instruction). It therefore makes great sense to specify the widest tyres that you intend to use, with mudguards, when choosing your specification. You have the choice of silver or black mudguards.

We fit bikes for male customers with the **Selle San Marco Rolls saddle**; several decades ago, this was considered to be the ultimate saddle by many professionals. Whilst not being the lightest currently available, the Rolls is certainly not heavy and it is still regarded by many cyclists as being the most comfortable saddle ever made. Whilst we can't know if your backside will find it comfortable, the Rolls is certainly very well made and will last for very many years...the genuine leather upholstery, securely fitted, over high density foam, to a high density plastic under pan, supported by steel rails, sees to that! Bikes for female customers are, by default, fitted with a saddle that has been made especially for us by "Velo". This saddle has the necessary width for typical female anatomy (but not the ridiculous and out of date shortness of other so-called women's' saddles). This saddle has very firm foam, to support the "sit bones" properly and thus avoid bearing weight on the soft tissues.



Sherpa in World Tour spec, what you see is what you get!



Size Shown is **560S**

OPTION (3) Trekking straight bar STI spec

Many cyclists prefer to use straight bars (or comfort bars) for cycle touring. The Trekking spec Sherpa is the straight handlebar option of the SJSC special. (please see important notes on Sherpa frame on page 7). Tyres up to 2.0 may be fitted into the Sherpa's frame and forks.

When fitted with appropriate tyres, the Sherpa is capable of very competent off road performance! It handles tricky, twisty sections with much more aplomb than an early rigid mountainbike!

A Sherpa ought not be your first choice, for extreme MTB riding! But, when suitably shod, it is the perfect choice to follow routes, which comprise a mixture of country lanes and bridleways.

It makes a "bomb proof" commuting bike (many city streets being in worse condition than some MTB routes!)

You could upgrade to our expedition carrier and fit our front lo-loaders (and 2 more profile cages) and take the machine for a cycle camping tour, anywhere in the world, with total confidence in the bike's abilities!

Transmission.

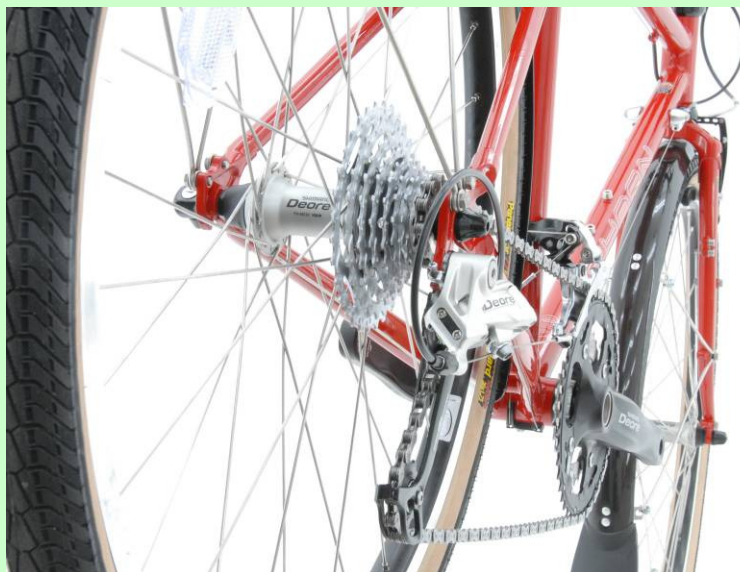
We fit a 100% Shimano Deore transmission with 22/32/44 chainrings and an 11-32 cassette. (Should you prefer a tighter range of gears, a 12-27 Ultegra 9speed cassette is available at an upcharge) We use Deore rapid fire STI pods and separate brake levers, these work really well, with a light action and a level of sophistication that wouldn't have been available on top of the range components, a few years ago.

Wheels and tyres.

We fit the wheels from the SJSC Special Spec, which are certainly strong enough to withstand serious trekking use. Tyre choice makes a significant difference to the performance of any bike. Having such large diameter wheels, tyre choice makes an absolutely massive difference to the performance of a trekking bike. As the standard spec, we fit 26 x 1.75" Panaracer Pasela Tourguards, these give a wonderfully plush and secure ride on broken road surfaces, gravel cycle paths and hard packed, predominantly dry, bridleways. For more information on tyres, please see page 6.

Brakes.

The use of straight bars allows us to fit V brake levers and callipers. Deore V brakes are very powerful, they have a nice "feel" and they are easy to maintain, what more do you need?



Finishing kit items specific to Trekking spec bikes.

The trekking spec bikes are equipped with our own high quality straight (5 degree bend) handlebars. These bars are 580mm wide.

We have also chosen to fit the very upmarket and totally superb Ergon GP-1 anatomical grips. For information on recommended and desirable upgrades, please see pages 12 and 13.



Size Shown is

460XL



Note, to allow accurate comparison of sizes, the 460L is shown at exactly the same scale as the 610XL on the next page

Trekking STI spec Sherpa, what you see is what you get!

OPTION (4) Full on Expedition spec.

For serious expedition touring, straight (or comfort bars) are much more popular throughout the world than drops (see page 3). Out in the wilds, bike shops are few and far between, components, especially wheels, should be chosen for strength and reliability and really, it is much better to do without STI shifters. Such a bike also makes a fabulous heavy duty, low maintenance, extremely comfortable machine, as long as speed is not the main priority. We can build you a Sherpa Full on expedition bike, using one of the frames designed for straight bars. (Please see "important notes on Sherpa frames" on page 7 for more details.)

Transmission.

We have chosen to fit a Shimano XT chainset, 11-34 (M770) XT cassette and XT derailleurs but we have specified indexed "thumbshifters" to operate them. Of course nobody makes thumbshifters per se but we have had clamps machined (SJSC part No.



10405) which fit to 22.2mm MTB bars and to which Dura ace bar end shifters may be fitted. These shifters allow multiple gears to be shifted at one time, they are considerably easier than STI levers to set up, maintain and adjust. They allow gear changes to be made, using kit that is "hanging together" whereas, for STI to work, every component must be in good and fairly unworn condition, these constraints are too much to ask of a bike that will be used as hard as an expedition bike deserves to be used! Of course we have an option to change the specification to XT STI shifters (I won't call it an upgrade) for those who require it.

Wheels and Tyres.

XT hubs are beautifully engineered and they have excellent bearings and seals, they will do the job! It is worth having sturdier rims on an expedition bike. It is also worth having the Tungsten carbide braking surface to enable maximum service life to be realised. We fit 36h Rigida Andra 30 CSS rims. The wheels are hand built, using top quality stainless spokes, by a master wheel builder.

Heavier duty tyres make great sense on such a tough bike we fit fast rolling 2.0" Schwalbe Marathon Supreme tyres as standard, these are the best tyres I have ever used, when cycling on an interesting mixture (!) of good and horribly broken tarmac with short sections of dirt. For more serious dirt and gravel roads you may wish to specify 2.0" Schwalbe Marathon XR tyres. Choosing 2.0" tyres now, allows us to set the mudguards for wide rubber. You can swap to 1.75" or narrower 1.5" tyres immediately, safe in the knowledge that these, more serious tyres, will fit, when you need them for that special trip.

Brakes.

Having straight bars allows us to fit V brakes with V brake levers. We've fitted super wheels, with CSS rims so we have decided to fit the finest rim brakes and levers ever to have been made, Shimano XTR, to these we fit Swissstop blue, carbide compatible, cartridge brake pads. This is the best, the most reliable, the most easily serviced and the nicest to use brake system that it is possible to choose on a touring bike.

Finishing kit items specific to Expedition spec bikes.

The Full on Expedition spec bikes are equipped with our own high quality straight (5 degree bend) handlebars. These bars are 580mm wide.

We have also chosen to fit the very upmarket and totally superb Ergon GP-1 anatomic grips, along with our own, rubber covered, Thorn ergo control bar ends. The two hand positions obtained are a "90 degree rotation of the wrist apart", which makes them as anatomically different from each other as possible, these positions duplicate the 2 most comfortable positions used with drop bars) This in turn gives great comfort during long and/or bumpy rides.

We have equipped the expedition spec Sherpa with our own Thorn expedition, tubular, heat-treated Cro-Mo carrier, which will readily carry in excess of 30Kg of luggage. A pair of our Thorn expedition Lo-loader carriers are also fitted, along with a set of 3 Profile bottle cages, complete with Thorn bottles. For more information on these items please see pages 12. and 13.

Top quality controls used throughout!



Size Shown is 610XL

Expedition spec Sherpa , what you see is what you get!

Choosing handlebar width, crank length, tyre width and set up.

Whilst no cyclist should use dropped bars which are narrower than their shoulders, because they will restrict breathing, there are no physiological concerns about using bars which are wider.

Wider bars can give more control in difficult circumstances but they are obviously marginally less aerodynamic. As a general rule, riders of smaller frames, are happier with bars which are narrower than the bars of riders of larger frames but this is not set in stone. Please see the default dimensions matrix on page 7, to see what we would fit, unless you specify otherwise.

There is a very definite requirement for having cranks which are the correct length for you. Too long and you will over flex your knees, too short and you will not be able to generate maximum power, because you have lost leverage. There is also a very definite correlation between leg length and frame size...if you require a different length crank, to that given in the default dimensions matrix (on page 7), you must ask yourself if you have the correct sized frame.

The default tyre size is 26 x 1.75" If you choose narrower tyres, you will progressively lose comfort and, on rough country roads, you will also waste energy, unless you significantly reduce tyre pressures, which is likely to lead to "snake bite" punctures...which reduce speed much more dramatically!

If you have a bike, upon which you are comfortable (or something which you believe could be comfortable, if you were able to change something slightly) we are able to duplicate this position exactly, if you can fill in our set up dimensions accurately, in exactly the manner we ask. **Please see page 14.**

If you don't have a comfortable bike, we can make certain that you have the correct size frame and, with some fiddling, you will achieve a comfortable position.

Please note that if you give us your trouser size, instead of your standover height, you are quite likely to get the wrong size frame!

Recommended upgrades.

We can see the good sense in having a bike built using our excellent frame, along with a superlative pair of hand built wheels and then economising on the transmission, finishing kit etc. **We offer some superb quality hand built wheels with XT hubs, Rigida CSS rims and top-quality stainless steel spokes** (these high quality rims have super-hard wearing, tungsten carbide braking surfaces) You can choose between the Rigida Grizzly CSS rims or the Rigida Andra 30 CSS rims. The Grizzly rims are lighter in weight (520g) which makes them more suitable for lighter, more sporty usage (or for use by lightweight riders on heavy duty trips). The Andra 30 rims are heavier duty (and heavier at 686g) they will withstand more abuse and are most suitable for heavy duty touring, although heavier riders may choose them for sportier cycling if they are seeking maximum reliability. Tungsten carbide is exceptionally hard (Tungsten carbide cutting tools are used to machine stainless steel) "ordinary" brake blocks will disappear at an alarming rate, particularly when the rims are new. We have sourced special hard pads from Swisstop, once bedded in there appears to be very little wear on these pads and we have been unable to measure any wear on the rims, even after several heavy camping trips in the Andes.

CSS rims and cartridge brake shoes, fitted with Swisstop pads, are standard equipment on the World Tour and Expedition spec Sherpas.

When CSS rims are chosen on the SJSC and Trekking spec Sherpas, we will automatically upgrade to LX cartridge shoe brake callipers, fitted with Swisstop pads.

Alternative but not necessarily recommended, drop bar STI spec.

You will have read on page 8 why we have chosen to fit bar end shifters to the SJSC Special, drop bar and Thorn World Tour drop bar specifications of the Sherpa.

However, you have the opportunity to choose

Tiagra, 105 or Ultegra STI (STI needs Shimano BR-R550 cantilever brakes). Simply tick the relevant boxes on page 15.

Shimano XT equipment is widely regarded as being excellent value for money, when used on bikes that are expected to have a long and hard working life. The World Tour and Expedition spec Sherpas use many XT components. They don't use XT V brakes because XT brakes tend to squeal and keep squealing, whereas XTR V brakes, if they do squeal when new, soon bed in and become silent. XTR V brakes have the best "feel" of any brake I have ever used apart from top of the range racing side pull brakes. The Deore brakes, which are fitted to the SJSC and Trekking spec Sherpas are certainly powerful enough to lock either wheel but the superior feel of the XTR brakes (and levers) allows you to more easily achieve maximum retardation, without locking the wheels!

Thorn Ergo control bar ends are provided on the Expedition spec Sherpa and they are an upgrade on the Trekking spec. Comfort bars are a bit too wide for these to be a recommended upgrade with. You can read more about these bar ends on page 11

Thorn Comfort bars these have been designed by a senior physiotherapist and you can read more about them on page 3

Modolo Yuma butterfly bars, you can read our opinions on butterfly bars on page 3

Modolo Dumbo bars.



These sensitively named bars offer an alternative solution to cyclists looking for multiple hand positions. The bars themselves are adjustable for height, width, angle of sweep and angle of rotation. Whilst the picture above shows the bars set up for Rohloff, I'm sure that you can see the possibilities.

Saving weight.

The Sherpa has been conceived, designed, developed and manufactured to be a highly durable, real world bicycle. The most effective places to save weight, seat post, bars and stem are all items that could potentially cause you grief if they fail. We think it is best to have the good quality items that we have sourced for our bikes and put up with the extra weight. If you have a specific need to save weight we can fit items from the Shimano Pro PLT range of components.

Recommended additions.

A Blackburn Mtn. carrier is a lightweight and very useful accessory.

It can easily carry a small pair of panniers and/or a rack top bag. Having a flat top, it can also accommodate that most high-tech of luggage solutions, the plastic bag and bungee!



If you plan to ever carry more than 15Kg on the bike, or if you regularly plan to carry more than 10Kg, the Blackburn carrier will not be strong enough and you need something significantly stronger and stiffer. Our Thorn Expedition, heat-treated, tubular Cro-Mo carrier will not break in use. It has specific bosses for mounting mudguard stays, (this not only saves a little weight, it also enables the rear mudguard mounting to be super rigid). The carrier also has a bracket, which will accept a wide choice of different rear lights and positions the light behind any panniers (or top-mounted luggage), allowing the light to shine right into the faces of drivers of vehicles approaching from behind.

If you intend to carry the maximum permissible weight on the Sherpa, you will need to use lo-loader carriers on the front fork. Not only will these increase the total "pay load" but also, by carrying some weight at the front, you will balance up the handling of the bike, when the maximum 30 Kg (26Kg on the smaller sizes) is being carried at the rear.

If you plan to fit lo-loaders, you should consider our tubular steel Thorn lo-loaders. These Mk5 (Expedition) Lo-loader carrier (560g) will carry an enormous weight...far in excess of that which it is safe to carry on the Sherpa fork.

There is no point in wearing a sweaty hydration pack on a lightweight touring bike! The Sherpa has the capacity to carry 3 bottle cages mounted on its brazed-on bosses.

The original "profile cage" of the early nineties was great...so great in fact that we got more made especially for us. It is very durable and comes very highly recommended, on this style of bike, you should have 2 fitted, perhaps you even want 3! A computer is a nice thing to have, it gives you encouragement, and extra interest. The Cateye CC-MC100W wireless computer is easy to use and it is undoubtedly the most reliable on the market. Maybe you already have suitable pedals which you can use? If not you will require some.

SPD pedals give great control and are highly recommended for serious use. Shimano's M520 double sided SPD pedals allow you to try the system yourself very inexpensively. The model above these, in Shimano's range, is the M540, these are slightly better quality and still relatively inexpensive.

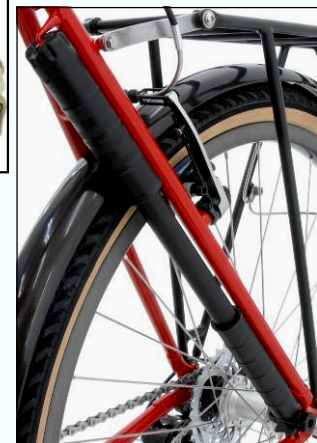
Or perhaps you want to use conventional clips and straps with traditional cycling shoes? The MKS platform pedal is highly effective, comfortable and an "all time cycling design classic". We can still obtain these pedals and the steel clips to use with them, which are to be preferred, for both comfort and safety, over bendy plastic ones. You may want to have flat, double-sided pedals, without SPD or clips or straps. The urban BMX market has brought us a superb, high quality offering in the shape of Shimano MX30DX pedals. These have adjustable and replaceable raised stainless set screws, which provide superb grip for your shoes, with minimum risk to your shins.



light for spirited riding, in country lanes, on moonless nights. We supply the dynamo built into a wheel and we supply it fully wired in to a Busch and Miller Lumotec switchable headlight, which may be mounted in a variety of positions...please discuss with sales person and write in the notes. Instead of wiring-in a poor quality incandescent bulb rear light, we fit the headlight with an uprated bulb to provide even more light to see with! (The preceding Cateye rear light is the best rear light you can currently fit and you can be certain that, unlike a bulb rear light, it can't blow and leave you unaware that you now no longer have an operational rear light).



The Cateye HL-EL530 Opticube LED front light is *BS approved*. The Power Opticube offers 30 hours of "headlight quality" light on 4AA batteries. It features an innovative magnetic switch and it is highly water resistant. The side visibility is excellent and the tool-free bracket is simple and effective. This is beyond doubt the best and most reliable 4AA battery light available. The unit could be used as a sole light, on a lightweight machine, even in rural areas but it is at its very best, in our opinion, when it is used as an auxiliary and back up light to a dynamo system...as such it is far superior to any sort of standlight mounted in a headlight. It can be seen from several miles away and it can be easily detached, if a light is needed to read a map, shine at a road sign or mend a puncture.



All sizes of the Sherpa have pump pegs which allow a Zefal HPX pump to be fitted to the LH seat stay. This is a very convenient place to keep a pump, it doesn't reduce the number of bottles which may be carried and it doesn't need to be removed if the bike is lifted by the top tube. The Zefal pump is highly reliable and it makes short work of reaching the 90psi (and more) that is necessary with fairly narrow 700c tyres. Sizes 460S, 460XL, 485L, 510S, 510XL, and 535L take a size 1 pump. Sizes 560S, 560XL, 610S and 610XL take a size 2 pump.



Thorn 105mm Accessory bar. This useful device clamps directly to the steerer tube of the Sherpa's fork, in place of some spacers. It can be used to mount various accessories, including lights and computers. The accessory bars is strong enough to accept a handlebar bag. The lower a bar bag is mounted, the less detrimental effect it will have on the bike's handling. Many bikes have their bars high enough to allow a handlebar mounted light, to shine over the top of a bar bag, that is mounted on one of our accessory bars.

Lighting

Regarding rear lights, I can see no logical argument for choosing anything other than the brightest, most visible light on the market...especially when this light is so reasonably priced. The Cateye TL-LD1100LED is **the rear light** to choose. It has 10 super bright LEDs, it is highly water resistant and reliable and each bank of 5 LEDs can be set in 4 different modes, this means that you can have 5 LEDs on constantly and 5 LEDs flashing! Run time 50 hours constant and 100 hours flashing.

In some circumstances it makes great sense to generate your own electricity, to power up lights, which are bright enough for you to be able to see where you are going. A Schmidt dynamo will give as much light as many 6w rechargeable systems, for very little effort (none at all downhill!) whilst not perhaps bright enough for riding at full bore, down steep mountain roads (it depends upon the age of your eyes!) it certainly produces enough

The Cateye HL-EL530 Opticube LED front light is *BS approved*. The Power Opticube offers 30 hours of "headlight quality" light on 4AA batteries. It features an innovative magnetic switch and it is highly water resistant. The side visibility is excellent and the tool-free bracket is simple and effective. This is beyond doubt the best and most reliable 4AA battery light available. The unit could be used as a sole

THORN Sherpa ORDER FORM

- Frame and fork kit..... £399
- Complete bike...SJSC Special drop bar spec..... £899
- Complete bike...World Tour drop bar spec.....£1399
- Complete bike...Trekking straight bar STI spec.....£899
- Complete bike...Full on Expedition spec (straight bars)...£1449

Upgrade **custom built eXp26** frame...this is an extra **£1100**
 (See back page for details please write clear notes on a securely attached, separate sheet)

Size and colour

- 460S Ex Small short TT
- 460XL Ex Small long TT
- 485L Small medium TT
- 510S Small/Med short TT
- 510XL Small/Med long TT
- 535L Medium medium TT
- 560S Med/Large short TT
- 560XL Med/Large long TT
- 610S X Large short TT
- 610XL X Large long TT

- Matt black powder
- Blood Red powder

- Mudguard colour
- Black.....
- Silver.....

Crank Length 170 175

Other Thorn cranks with expensive TA rings only

Handlebar width Default see page 7 Other please specify

- Tyres** Please choose, see page 6
- 1.5" Panaracer Pasela
 - 1.75" Panaracer Pasela
 - 2.0" Schwalbe Marathon XR
 - 2.0" Schwalbe Marathon Supreme
 - 2.0" Schwalbe Hurricane folding

Cut fork steerer

Cut to default length.....
 (Please see matrix on page 7)

Cut to different length...
 please specify

Handlebar stem length.

Equip cycle with default stem....
 Please see matrix on page 7.

Provide different length/angle...
 Please specify

Total sale price £_____ Deposit paid £_____

- Card
- Cash
- Other

Notes specific to this sale

Invoice No _____

Gender...Male Female Title _____

First name _____

Surname _____

Address _____

Town _____

County _____

Country _____

Postcode

Telephone numbers.

Home _____

Work _____

Mobile _____

Email _____ @ _____



Call sales on 01278 441 500

Email sales@thorncycles.co.uk

Online

www.sjscycles.com

St John St Cycles,
 Thorn Cycles Ltd,
 91-93 St John St,
 BRIDGWATER,
 Somerset
 TA6 5HX

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. 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)

Set up dimensions

Height = _____ mm Standover Height = _____ mm Shoe size = _____

Preferred riding position, please tick one (or two) boxes below.

- Racing
- Sporty
- Relaxed
- Upright

- Please tick box below to indicate handlebars to be used.
- Dropped
 - Straight
 - Comfort
 - Other

The following dimensions will enable us to set up your new bike exactly like your favourite machine. Please choose "L" or "H"

N = _____ mm
 Overall saddle length & name of saddle:

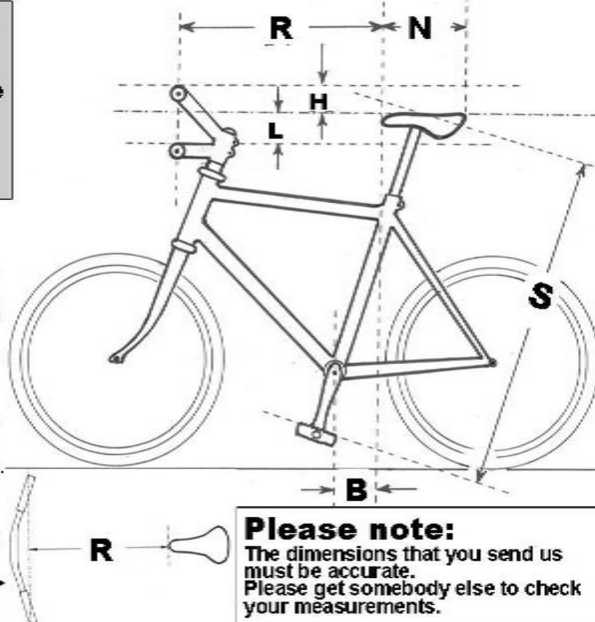
S = _____ mm
 Distance from top of pedal (with crank in line with seat tube) to the top of the saddle, measured along the seat tube.

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 with drops. Or to the top of the handlebar grips with straight, riser or comfort bars. Bars are lower than saddle.

H = _____ mm
 Distance from the bottom of a level straight edge, from the top of the stem, with drop bars. Or from the top of the handlebar grips with straight, riser or comfort bars to the top of the saddle. Bars are higher than saddle.

B = _____ mm
 Distance that a plumb line (a 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 the tip of the saddle to a centre line through the handlebar grips. (Or the tops of drops) Please see diagram

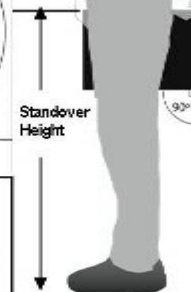


Please note:
 The dimensions that you send us must be accurate. Please get somebody else to check your measurements.

How standover height is to be measured.

- [1] Cycle shoes must be worn
- [2] Measure the distance from the ground to the top of a tube (or thick book) which is parallel to the ground.
- [3] Raise the tube (or book) as high as it will go, until contact with the crotch is made.

Standover height is **NOT** trouser length, trousers go down to the ankle...
 ...feet go down to the ground with **shoes!**



Upgrade or addition. Please see text for details, this is the order they appear, starting with "SJSC Special Spec" and continuing through to the end of "recommended additions"	SJSC Special drop bar spec.	World Tour drop bar spec.	Trekking straight bar STI spec.	Expedition straight bar spec.
Deore 26/36/48 Chainset	£0	This is a down grade	£0	This is a down grade
22t inner ring fitted in place of 26t	£5	£5	£5	£5
Ultegra 12-27 Cassette	£20	£0	£20	£0
XT 11-34 Cassette (M770)	£40	Supplied with this spec	£40	Supplied with this spec
Tiagra 30/39/50 Chainset	£18	This is a down grade	£18	This is a down grade
Heavier duty Rigida Andra 30 rims	£0	This is a down grade	£0	This is a down grade
Hand built wheels 36h XT hubs Rigida Andra 30 CSS rims LX brake callipers and Swiss stop brake pads	£100	Supplied with this spec inc. XTR callipers	£100	Supplied with this spec inc. XTR callipers
Hand built wheels 36h XT hubs Rigida Grizzly CSS rims LX brake callipers and Swiss stop brake pads.	£110	£0	£110	£0
Tiagra drop bar 27 speed STI requires Shimano BR-R550 cantilever brakes to be fitted...any of above chainsets work	£75	£50	Not with straight bars	Not with straight bars
Shimano 105 drop bar 30 speed STI 30/39/50 and 12-27 with 105 F+R mechs and Shimano BR-R550 cantilever brakes (must be used)	£200	£65	Not with straight bars	Not with straight bars
Shimano Ultegra drop bar 30 speed STI 30/39/50 and 12-27 with Ultegra F+R mechs and Shimano BR-R550 cantilever brakes (must be used)	£250	£100	Not with straight bars	Not with straight bars
Brooks B17 saddle Please tick box	<input type="checkbox"/> Honey <input type="checkbox"/> Black	£17	£17	£17
Brooks B17 Titanium Saddle Please tick box	<input type="checkbox"/> Honey <input type="checkbox"/> Black	£70	£70	£70
Other saddle (write in notes)	£'s Vary	£'s Vary	£'s Vary	£'s Vary
Thorn Comfort bars	Not with Drop bars	Not with Drop bars	£0	£0
Thorn Ergo control bar ends	Not with Drop bars	Not with Drop bars	£15	Supplied with this spec
Modolo Yuma Butterfly bars (must use 120mm+ stem)	Not with Drop bars	Not with Drop bars	£10	£0
Modolo Dumbo bars inc. "grab on" foam grip (see page 11)	Not with Drop bars	Not with Drop bars	£30	£20
XTR V Brake callipers	£90	Supplied with this spec	£90	Supplied with this spec along with XTR levers
XTR V Brakes with XTR levers and XT STI pods	Not with Drop bars	Not with Drop bars	£150	£25
XT Front and rear mechs	£30	Supplied with this spec	£30	Supplied with this spec
XT M771 Chainset 26/36/48 rings	£89	Supplied with this spec	£89	Supplied with this spec
Thorn Dura ace "thumb shifters".	Not with Drop bars	Not with Drop bars	£30	Supplied with this spec
Blackburn Mtn. carrier Black supplied, silver to be requested	£25	This is a down grade	£25	This is a down grade
Thorn Expedition carrier	£70	Supplied with this spec	£70	Supplied with this spec
Thorn Mk5 Expedition Lo-Loader Black powder	£70	Supplied with this spec	£70	Supplied with this spec
2 x Profile design bottle cages	£12	This is a down grade	£12	This is a down grade
3 x Profile design bottle cages	£18	Supplied with this spec	£18	Supplied with this spec
Cateye CC-MC100W wireless computer fitted and set up	£35	£35	£35	£35
Shimano M520 double sided SPD pedals inc cleats	£16	£16	£16	£16
Shimano M540 double sided SPD pedals inc cleats	£40	£40	£40	£40
Shimano PD-A530 inc cleats These excellent pedals have SPD pedal one side and a concave platform on the other.	£45	£45	£45	£45
MKS platform pedals (inc clips and straps) Tick clip size	<input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> L <input type="checkbox"/> XL	£28	£28	£28
Cateye TL-LD1100LED rear light	£27	£27	£27	£27
Schmidt Dyno Hub Silver (built into wheel) B and M Lumotec switchable light.	£170	£155	£170	£155
Schmidt Dyno Hub Black (built into wheel) B and M Lumotec switchable light.	£195	£180	£195	£180
Cateye HL-EL530 opticube LED front light	£42	£42	£42	£42
Zefal HPX pump (size varies with frame size please see page 13)	£20	£20	£20	£20
Thorn 105mm accessory bar	£16	£16	£16	£16

eXp 26 custom built frame upgrade

“Hand built for you in Somerset”

The Thorn eXp has received the highest possible critical acclaim, it truly is the definitive derailleur-g geared touring bike

The eXp 26 can be either a “hand built in Somerset” fillet brazed version of the Sherpa, in any size that you wish, or it can be a mega-heavy duty, Long-wheelbase Expedition bike, designed to carry 50Kg over the roughest terrain in the world.

Our “off the shelf” Sherpas are truly superb bikes, there is absolutely no need for a custom built frame for 99% of individuals.

Our “Hand built for you in Somerset” range of frames are however, more than just superbly functional machines, they are works of art.

The smooth-filleted brazed machines are embellished with brazed-on stainless steel badges and these frames have sealed tubes, to ensure that internal rust can not prematurely destroy them. The eXp range are built to last 2 lifetimes, although we only guarantee them for one!

The cost of our most expensive bicycle is less than the loss incurred during the first 10 seconds of ownership of a new motor car!

It's little wonder then, that some cyclists, who could easily find a perfect fit on an off the shelf frame, choose to treat themselves to the very best of the best!

Andy Blance (our designer) has developed, with Reynolds, a vast array of tubes (mostly 853) in different gauges and diameters, to ensure that your new baby delivers exactly what you are looking for, be in no doubt that Andy will certainly tell you if you are looking for the impossible.

Kevin Sayles is our resident master builder, we won't say that he is the finest builder in the world, we just say that, if you travel the world, you won't find a better one!



A perfect job can't be improved upon. Kevin works slowly and methodically, with painstaking detail, he is a master “with the torch”, every one of his frames is an individual work of art and we pay him a generous wage.



It should now be obvious that these frames are not, by any means, going to be cheap; even we would agree that they are fiercely expensive! But, considering the end result, the expertise, the guarantees and the pleasure it will give over a lifetime, each one represents excellent value for money.

(Please see page 14 for current upgrade cost)