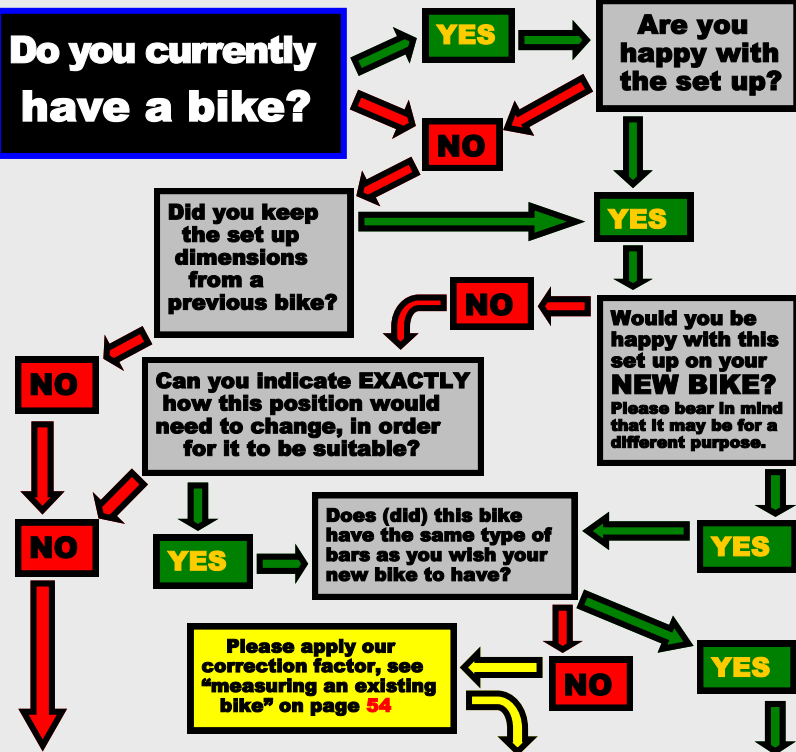


## How to get the perfect set up on your bike.



**Please fill in ALL the details requested in the section "PERSONAL DETAILS"**  
 We will use this data to calculate the set up of your new bike. Alternatively, you can make an appointment to visit us.  
 UK 01278 441505  
 sales@thorncycles.co.uk

**Please fill in ALL the measurements in the section "Measuring an existing bike"**  
 (Which you'll find on page 60)  
 We will then use **YOUR MEASUREMENTS** to set up the position on your new bike.

## Customers' Personal details

We only need these if you can't supply set up dimensions  
 The dimensions we need are really quite simple.

In order for US to be able to **CALCULATE** and determine a suitable position for your next THORN bike, we must have very specific and perhaps, to some people, very personal information. We need **EVERY BIT** of the information requested in the table below.

Alternatively, you may be able to complete the set up details **EXACTLY** as requested in the section "MEASURING AN EXISTING BIKE".

Or, as a **THIRD OPTION**, you are most **WELCOME to VISIT US** and we'll be very happy to measure and advise you and/or in the case of one of our Rohloff bikes, let you take one out for a test ride.

**PLEASE NOTE:** Unless one of the 3 options above are followed exactly, we are unable to guarantee the results and only your statutory rights may apply.

### DATA FOR THE PERSON THE BIKE IS FOR: Name

DIMENSIONS AND OTHER DATA.	GENDER M OR F	
<b>We must have an answer in every box.</b>	WEIGHT (kg)	
	AGE	
	HEIGHT (bare feet in mm.)	
	BFSO in mm (Bare foot stand over height in mm.)	
	SHOE SIZE (continental)	
	ARM SPAN (mm)	
<b>POSITION REQD. Please tick one box, or 2 boxes.</b>  <b>If you tick 2 boxes, we will aim for a position between them.</b>	VERY RELAXED	
	RELAXED	
	FAIRLY RELAXED	
	FAIRLY SPORTY	
	SPORTY	
<b>CHOICE of SADDLE and TYPE of HANDLEBARS REQUIRED. Please tick one. Please state width required, if Flat Track bars are chosen.</b>	SADDLE LENGTH (mm) Or NAME and MODEL	
	CONVENTIONAL DROPS	
	STRAIGHT	
	FLAT TRACK width (mm)	
<b>OTHER ESSENTIAL INFORMATION Please tick one box.</b>	COMFORT	
	Experienced, fit and confident cyclist.	
	Less experienced but keen and reasonably fit cyclist.	
	Casual and/or nervous cyclist.	

### There are 2 problems with measuring BFSO:-

**[1]** How far into the crotch should you push the square?  
 The answer is, until it causes the soft tissue to gently touch bone.

**[2]** It's possible to tilt the pelvis without realising it, which makes a nonsense of the result.  
 To avoid tilting the pelvis, stand against a vertical wall, with your head, heels and shoulder blades touching the wall.

Now try and touch the small of your back and calf muscles against the wall, the pelvis is immobilised and a meaningful measurement may now be taken.  
**Please see diagram on the left.**

You'll need someone else to help you to take this measurement. You may need to improvise to find a suitable square. Really big coffee table books are an option. A carefully cut and folded sheet of card, taken from an extra large carton is another option.

**ARM SPAN.** This is very simple to measure. Stand facing a wall and, with your arms horizontal, touch the corner of the wall with the longest finger of one hand and then see how far you can extend the corresponding finger of the other hand. Mark this point. It's then easy to measure from the corner to the mark.

Head upright and flat against the wall.

Shoulders relaxed and shoulder blades flat against the wall.

Try and press the small of the back flat against the wall.

Try and press the knees and calf muscles flat against the wall.

Heels flat against the wall, feet 150mm apart.

## HOW TO MEASURE YOUR BFSO

(bare foot stand over height)  
**IT DOES TAKE 2.**

**90° square, or LARGE COFFEE TABLE BOOK pressed up into the crotch (perineal area) until it just touches bone.**

Measure from top of square (OR BOOK) to ground

**VERY RELAXED:** This is a position which places a very considerable amount of the rider's weight on the saddle. The rider is leaning forward slightly but is sufficiently upright to enable them to look around easily. This position is ideal for gentle cycling, or for cycling slowly and defensively in traffic. The very relaxed position is not efficient at speed, or in high winds but it is possible to exaggerate the bend in the arms, in order to obtain a lower position, for short periods of time.

**PLEASE NOTE:** The bike will look more aesthetically pleasing, if comfort bars are used to gain some of the considerable height which is required. A very relaxed position is often only achievable, for very tall cyclists, by using comfort bars.

Most men and all women will need a **Short Mercury, Raven or Sherpa** to achieve this position with straight bars.

**This position is NOT achievable with drop bars.**

**VERY RELAXED**



**RELAXED**



**RELAXED:** This is a position which places most of the rider's weight on the saddle. The rider is leaning forward a little more than with a very relaxed position but is still sufficiently upright to enable them to look around, without appreciably changing their position.

Many men but practically all women will need a **Short Mercury, Raven or Sherpa** to achieve this position with straight bars.

**This position is (almost certainly) NOT achievable with drop bars.**

**FAIRLY RELAXED**



**FAIRLY RELAXED:** This is a position which places much of the rider's weight on the saddle. The position is efficient for fairly brisk riding and is suited to assertive riding in traffic. More of the rider's weight is supported by their arms and hands. The rider is still sufficiently upright to enable them to look around - but only when they make a positive effort to do so.

A few men and many women will need a **Short Mercury, Raven or Sherpa** to achieve this position with straight bars.

**This position may not be achievable with drop bars.**

**FAIRLY SPORTY**



**FAIRLY SPORTY USING SKI BENDS**



**FAIRLY SPORTY:** This is an even lower position, which spreads the rider's weight between saddle and bars. The position is fairly aerodynamic and much more suited to brisk riding. The rider is still able to raise themselves to look around when necessary.

It may be uncomfortable to ride sedately in this position. **It's unlikely that this position is achievable with comfort bars.**

**SPORTY**



**SPORTY USING SKI BENDS**



**SPORTY:** This is a much lower position and it is well suited to covering long distances at a brisk pace efficiently and in comfort. The position is not as low as a racing position but most cyclists are not racing cyclists. It would almost certainly be uncomfortable to ride slowly for any distance, in this position.

The majority of cyclists ought to still be able to look around when necessary - others may have to ride with one hand to facilitate this. Please don't confuse "looking around" with being able to glance behind.

**This position is NOT achievable with comfort bars.**



Steve, our senior salesperson, is around average height for a man (1745mm). He also has average length arms and legs for his height.

**Please note,** we make allowance for height, BFSO, gender and for body type.

We also add 20mm to the height of the positions shown and cut the cables to suit - this is our margin for error - you can easily drop the bars by 20mm when you receive the bike.

**Please note.** In the above pic of the "sporty" position, the stem we've used is longer than we'd normally use on this size bike. Normally we'd have used a longer frame to achieve this position. We fitted the 150mm stem simply to illustrate the "sporty" position. It also serves to illustrate that no one frame can be chosen for every set up position

You can see that Steve's position, when using the ski bends on a fairly sporty set up, is very similar to his position on the grips with a sporty set up. Steve's position, on the sporty set up, when using the ski bends is almost a full racing tuck. Don't underestimate the variety of positions you can achieve, with straight bars and bar ends - particularly if you choose the Ergon GP5-L bar ends.

## Achieving your perfect position on your bike

We can set your bike up in many different positions:-

**VERY RELAXED, RELAXED, FAIRLY RELAXED, FAIRLY SPORTY or SPORTY**

We will even take instruction to split the difference between 2 of the main positions. If this is your wish, please tick both boxes.

For example many customers choose a position between "Fairly Relaxed" and "Fairly Sporty" - we call this **SPORTY/ RELAXED**

Almost every man and most women would need a **Long Mercury, Raven or Sherpa** to achieve this position with straight bars.

# Measuring an existing bike

The dimensions we ask for, will enable us to set up your new bike exactly as your favourite machine.  
**Please provide either "L" or "H".**

Experience has shown us that these dimensions are the easiest dimensions to take, that will plot **exactly** where your saddle is, in relation to your pedals. They also establish **exactly** where your bars are in relation to your saddle.

**Please use this method only.**

The dimensions we need to duplicate your position.  
**Please refer to diagram below.**

<b>N</b>	Overall saddle length in mm. And/or name of saddle.
<b>S</b>	The distance in mm. <b>FROM THE UPPER SURFACE OF THE LOWER PEDAL</b> (with crank in line with seat tube) to the top of the saddle, measured along the seat tube. <b>MAKE CERTAIN THAT YOU GET THIS RIGHT - PLEASE CHECK CAREFULLY WHAT WE'RE ASKING FOR - WE'RE NOT ASKING FOR CENTRE of BB TO TOP OF SADDLE - IF YOU GET THIS WRONG YOU WILL ALMOST CERTAINLY GET THE WRONG SIZE FRAME.</b>
<b>B</b>	The distance that a plumb line falls behind the <b>CENTRE</b> of the BB, when suspended from the nose of the saddle. <b>IF YOU GET THIS WRONG IT WILL SERIOUSLY AFFECT THE REACH.</b>
<b>L</b>	On a <b>STRAIGHT BAR BIKE</b> , it's the distance that the <b>TOPS</b> of the <b>GRIPS</b> are <b>LOWER</b> than saddle. On a <b>DROP BAR BIKE</b> , it's the distance that the <b>TOP</b> of the <b>BARS</b> are <b>LOWER</b> than the saddle. Use a long bubble level or a straight edge with a small bubble level taped to it and measure from the top of the saddle to the top of the bars (at their closest point to the stem). The bike must be on a level surface.
<b>H</b>	On a <b>STRAIGHT BAR BIKE</b> , it's the distance that the <b>TOPS</b> of the <b>GRIPS</b> are <b>HIGHER</b> than saddle. On a <b>DROP BAR BIKE</b> , it's the distance that the <b>TOP</b> of the <b>BARS</b> are <b>higher</b> than the saddle. You can use the same methodology as described in L above to measure this
<b>DS</b>	This is the distance from the nose of the saddle to the centre of the bars, on a bike with <b>3-5° STRAIGHT BARS</b> . These are the most common straight bars in use today, most MTB low rise bars are 5°. Our THORN STRAIGHT BARS and THORN NARROW BARS are both 5° BARS.
<b>DD</b>	This is the distance from the nose of the saddle to the centre of the bars, on a bike with <b>DROP BARS</b>
<b>DF</b>	This is the distance from the nose of the saddle to the centre of the bars, on a bike with <b>10° THORN FLAT TRACK</b> or <b>12.5° THORN BARS (eXp or FFT)</b>
<b>DC</b>	This is the distance from the nose of the saddle to the centre of the bars, on a bike with <b>THORN COMFORT BARS</b> , which have an 18° bend.
<b>DX</b>	This is the distance from the nose of the saddle to the centre of the bars on a bike with <b>ANY OTHER BAR</b> . <b>PLEASE NOTE...YOU MUST BE ABLE TO COMMUNICATE TO US EXACTLY WHAT THESE BARS ARE.</b>

## Correction of 'D'

Compared to our 5° bend straight bars, the following table shows how much shorter, or longer a stem probably needs to be in order to achieve a similar position with a different type of bar.

<b>DS</b>	<b>0mm</b>
<b>DD</b>	<b>-55mm</b>
<b>DF</b>	<b>+15mm</b>
<b>DC</b>	<b>+35mm</b>
<b>DX</b>	<b>???mm</b>

## PLEASE NOTE:

The dimensions that you give us must be accurate. Please get someone else to check your measurements.

