

THE E2E CHALLENGE, LONG DISTANCE BASICS

Part 2: The Bike

The bike must be appropriate for the journey and be proven to be comfortable. You would need to have spent plenty of time riding your bike and adjusting components and position so that the commonly encountered discomforts associated with poor bike fit – of knee, back, neck, feet or hand pains – have been sorted out.

A wide range of gears are needed so that a cadence (pedalling speed) of typically between 75 to 90 revolutions per minute can be maintained, no matter what the terrain. Spinning in a low gear – as opposed to labouring in a high gear – conserves energy and prevents muscle and joint injury when riding day after day.

Bike weight is an important factor but is of lesser importance than comfort, and comfort begins with choosing a frame sized for your body, with appropriate angles, that is fitted with a suitable handlebar stem, handlebars of correct width, and saddle positioned to provide correct leg extension and knee-to-peddle relationship. If all this is gibberish to you, seek advice! Incorrect seat height alone is the culprit of a large number of knee problems.

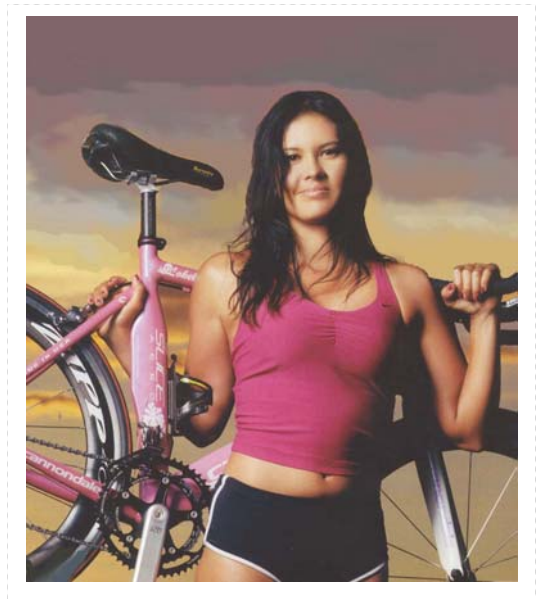
It is advisable to select a road bike for this journey. A full suspension off-road machine with knobbly tires would be an inappropriate choice.

Suspension not only absorbs bumps but also your energy, especially when you have to “honk” out-of-saddle on a long climb. Some front suspensions can be locked out but the typically available four inches of rear suspension travel generally cannot be locked out. Long travel is unused on tarmac so you end up lugging around energy absorbing weight. Knobbly tyres increase rolling resistance and this slows you down and drains your energy.

My friend refers to his groupset – the set of components comprising front and rear derailleurs, wheel hubs, headset, bottom bracket, crankset, brake callipers and levers – as “jewellery”. Indeed, the expense and beauty of a top-end groupset does arguably qualify this as jewellery, however, the engineering that accompanies such well-made components results not only in superior performance but also in longer periods of use without the need to tinker. As a rule of thumb, a groupset that is no more than three levels below the top is far better suited to hard weather riding and long distance touring. At three levels down, weight may be sacrificed but the essential performance and durability aspects are retained.

The choice of wheels is very important for reasons relating to performance, your comfort and practicality. Boxed or mildly-aero 36 or 32 spoke clincher rims, laced “cross three”, are the favourite choice for distance riders. There are quite a few reasons:

- Breakage of a spoke on a 36 or 32 spoke wheel, miles from a service point, is simply not a disaster.
- Deep section “aero” rims such as those shown in the picture look great, and are indeed suited for the fast lane. These rims with few spokes have superb aerodynamic properties and are essentially designed for time trials. Shock damping properties are poor resulting in the transmission of more shock to your body which causes the earlier onset of fatigue.
- Wheels with wide spokes and deep rims are readily affected by cross-winds and passing traffic, especially by the vacuum created by passing trucks. Controlled response – correction of unwanted deviation from a straight line – is more difficult.



The easiest way to improve efficiency is to keep the rolling mass of your wheels low. When you reduce this, you make the bike easier to peddle. Installing lighter innertubes is one of the most economical ways to improve efficiency as they cost only a few Euros more than standard tubes. Excellent quality lightweight Butyl or Latex innertubes are available from Michelin, Continental, and Hutchinson.

Inflate the tube in your road bike tyre to the pressure specified on the tyre wall. This will prevent the very common “pinch flat” or “snake bite” puncture from occurring and will also keep the rolling resistance low, further improving efficiency.

(Note that it is generally ill advised, with the possible exception of riding in wet weather, to under-inflate road bike tyres, whereas it is quite in order to adjust your mountain bike tyre pressures to meet off-road riding needs. For instance, off-road cornering and shock absorption are improved by decreasing the air pressure in mountain bike tyres.)

Inspect your tyre’s treads regularly for embedded glass or other foreign objects. These potential puncture producers can often be removed before they work through the tyre casing and into the tube.

There is much written about bicycle saddles – choose wisely. The key factor in saddle choice is the distance between your “sit bones”. These should be your contact points with the saddle top. Because women generally have a wider distance between their “sit bones”, wider saddles are available to suit the female anatomy. Don’t begin your long journey with a new saddle.

The condition of your bike is of paramount importance, especially that of your bike’s drivetrain (gears and chain), headset, bottom bracket, and wheel bearings. Check the drivetrain for wear, the headset for undue play and for smooth and predictable steering, the bottom bracket for absence of play and for smooth rotation, and the wheel bearings for excessive looseness or stiffness. Make sure that the correct lubrication is applied, and re-apply lubrication to exposed parts – especially your chain – after riding in the rain.

Most non-specialist wheels have spokes with heads orientated 90° to the spoke shaft. These spokes are prone to fatigue at the junction where they pass through the hub flange. If you are an aggressive climber or a particularly heavy person, it is quite common to experience spoke breaks after as little as 3500 kms. So, if your wheels have seen some distance, have them re-spoked before the long ride.

Always carry a repair kit comprising at least a pump, a spare tube, and a puncture repair kit.



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