## Into the Ride #2 MESH SEAT BACK AND TENSION

Before the mesh back seat our bikes featured a neat little fiberglass seat. This seat was small and light, but did not have the universal appeal of our famous mesh back seat. It did have a low weight, only about 2.5 pounds, and for what it's worth I always enjoyed riding the hard shell seats.



One of the properties I liked about the hard shell seat has been captured in our new mesh design. The new 2003 mesh has eliminated the zip ties in favor of straps and buckles, a feature that allows the rider to adjust the "hardness" of the seat mesh. In addition to the crosswise buckles, we added a couple buckles and straps on the vertical axis. The two lower buckles allow the mesh to be tensioned vertically. Putting on or taking off the seat mesh is now as simple as working a few buckles. To understand how important this "hardness" is, imagine riding a mesh seat with stretchy fabric\*. As you pedal you can feel the back of the seat give. At first it feels kind of nice, but as you continue to ride you start to notice something. When you start from a dead stop the bike is a little slower to accelerate. Underway you may think things are normal, and the sluggish starts are the only aspect of this cushy seat back, but if you look closely you would see a different story. With every stroke there is a pulse, even the smoothest rider makes a pulse. During each stroke the pulse recoils against the seat back, into the mesh. The mesh does spring back, but not without absorbing some energy. With our new seat mesh, the critical feature becomes the tension we can apply vertically. This is new, before with the zip ties that only applied cross tension the mesh could slacken vertically. With vertical tension you can actually feel a

firmer seat back, somewhat similar to our early hard shell seats, but with a controllable rate of give. With a firmer seat back you will notice smarter acceleration, but don't forget the value of using your quads. Too many people have the impression the seat back on a recumbent is for pressing against the pedals, but it is only half the engine. If you develop your spin to have a good solid pull stroke, you will conqueror hills and hold higher average speeds. As your quads gain strength it really will be like adding the other half of the engine!



Recumbents are a natural for developing spin. A smooth spin is inherit due to the offset of the upper torso. I remember how tough it was to get my spin smooth on my road bike and how amazed I was at how easy and smooth is was on a recumbent.

With your legs out front, and your upper torso behind, there is little harmonizing between, thus less bobbing. This repositioning of body mass is why it is easy to spin smooth and fast on a recumbent.

Could the original hard shell seat make a comeback? I have learned long ago never say never, but with the new mesh it's a good chance it won't! If you are interested in the seat mesh see your favorite bike dealer, or check it out on SHOP RANS. I am sure you will enjoy the new mesh and discover comfort and performance can be had together.

\*We actually tried a mesh that stretched, needless to say it did not make it into production, but it was very high quality material with excellent eye appeal, and fit the seat frame nicely.

INTO THE RIVE