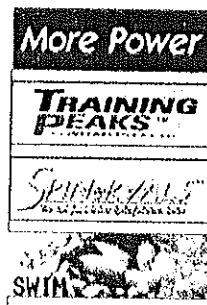


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## What Should I Buy?...Road Bike vs. Tri-Bike

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One of the most frequently asked questions among individuals new to the sport of triathlon is...

"What type of bike should I buy...a triathlon bike or a road bike."

A good question and one that deserves some attention.

To begin with, let us take a look at the differences between a triathlon bike and a road bike.

The major difference between the triathlon bike and the traditional road bike lies in the geometry of the bicycle frame. Specifically, I am referring to the seat tube angle. The seat tube is the long tube extending from the bottom bracket upward towards the seat. And the angle of this tube relative to a horizontal line drawn at the bottom bracket represents your seat tube angle. Click here for diagram

For a triathlon bike, the seat tube angle is typically 76-78 degrees. A good bit steeper than the 72-degree angle found on most traditional road bikes. The steeper angle places the rider further forward on the bike creating a more aerodynamic body position.

When the sport of Triathlon was created in Hawaii 20 years ago, the 112 mile cycle portion of the Ironman® took on the flavor of a traditional "road race" performed during most cycling events. The "road race" is typically a longer Point A to Point B bike race requiring both endurance and strategy. Speed usually takes a back seat until the latter part of the race. And the most famous event of this type is the Tour de France. A three week bike race almost entirely made up of daily "road races" covering over 100 miles per ride.

However, as the sport of triathlon began to draw more participants, not everyone wanted to or could handle the distances covered in an Ironman - 2.3 mile swim, 112 mile bike and 26 mile run. So in order to make this sport more appealing to the masses, the distance of the triathlon was shortened. For the cycling portion of the triathlon, this meant shortening the distance from 112 miles to 25 miles. No longer was endurance and strategy a major component of the bike ride. The

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new objective of the tri-cyclist was to get from point A to point B as fast as possible. The cycle leg had taken on an entirely new personality resembling the traditional "time trial" also held during cycling events. But the increase in speed brought about a new dilemma for the triathlete: How to overcome leg fatigue in preparing for the run after a 25-mile bicycle sprint.



Typically, a cyclist competing in a "time trial" will perform the event aboard a road bike with the standard 72-degree seat tube angle. This angle places the rider in a position on the bike so that he or she can utilize the major muscle groups of the legs - the quadriceps and the hamstrings. And when using these muscles to their fullest extent, the cyclist can achieve maximum output or power with the result yielding speeds in excess of 30 mph.

Not bad huh?

But...

The cyclist, at the completion of the "time trial", will climb off the bike and REST.

Not so for the triathlete.

A triathlete has to hop off the bike, strip off a helmet, pull on some running shoes and take off on a run at any number of distances depending upon the race. And the speed at which the muscles acclimate to running legs from cycling legs is critical to the outcome of the overall triathlon performance.

By the mid-to-late 80's, triathletes at all levels struggled to find a solution to this problem. I remember viewing a classic stand off between Mike Pigg and Mark Allen during the 1988 Bud Light National Triathlon Championships held on Hilton Head Island. During the cycling leg of the race, I notice something very unusual and relatively radical at the time. While riding his traditional road frame Pigg was sitting on the forward tip of his saddle...OUCH!

But why?

The theory was (and still is), that by riding at a more forward position, not only are you more aerodynamic on the bike, but you are also putting less emphasis on your quadricep muscles. Thus saving your legs for the run portion of the triathlon.

Bicycle pioneer such as Dave Empfield believed in this theory and sought to create a product to satisfy the growing demand of concerned triathletes.

Within a few years, the tri-bike was created, offering the triathlete aerodynamics, speed and muscular efficiency. And let us not forget the use of the smaller 650c wheels - a radical departure from the traditional 700c wheels. These smaller, lighter wheels also proved beneficial providing less rolling resistance allowing the rider to

