

THE SEASON PART II

You know that this writing is a novel in disguise because Roman Numeral II is included in the title !

Its time to revisit bike the bike fit. This is especially true if progress is in a straight line. In training, the old cliché "The harder I work, the behinder I get" can apply. A review of the bike fit may find the answer to pedaling mechanics gone awry.

Start at the bottom--not yours--the feet. The pedal axle is the fulcrum and placement of the foot is critical for best performance. I start the fit process by placing the ball of the foot over the center of the pedal axle. When this is done, a good fitting & supportive race shoe will tend to put the heel up about two inches while pedaling. Stress on the calf muscles should be minimal. Each foot must be placed with its pedal because the foot size & length will vary. This neutral setting is best for most people & most conditions. The adjustments are subtle so don't make gross adjustment in the foot position. Special conditions will mean special settings e.g. large feet may have to be placed further forward & extra high saddle positions may dictate a slightly rearward position.

Step two in the fit process is setting the forward & aft position. This is assuming that the saddle height is near right. There are a number of choices of method in this setting. I use a plumb from the Tibial Tuberosity to the center of the crank axle. The Tibial Tuberosity is the bump on the shin just below the knee joint. An alternate method is to go from the front of the kneecap to the front of the crank arms. A third method is to go from the center of the knee joint to the center of the crank arms. This last method appears flawed because of the difficulty for the average person in determining the center of the knee. In simple terms these settings are for putting the lever on the fulcrum as it moves around. Once the center settings are learned then variations can be marked on the seat rails. Triathletes customarily use a saddle forward position as do Sprinters. With both settings, a little adjustment can make a big difference.

Seat height is the third setting. Saddle height has been written about & cussed & discussed for ages. There probably is not a "best way" to set height but a guideline or two will put you on the right track. If the seat is set too high, oxygen consumption goes up. If the heel is below the pedal axle when the cranks are straight down & the leg is locked, the seat is too low. The seat is too high if the hips rock while pedaling backwards. At the top level seat height is sometimes set by using oxygen consumption vs. power.

Muscle & cadence are the next topics for self examination. One of my old mentors regularly said "The only way to go Fast is to push a Big Gear Fast". It takes muscle to push big gears. Frequently during the season, high training volume & high race volume make muscles more efficient but they lose reserve strength & mass. This is characterized by saying "I'm fit but I just can't go fast". There are only two solutions possible to make improvements, higher cadence & more muscle. To work on the leg speed, get a speedometer with cadence. Racing is done between 95 & 105 RPM & most time trials are done in the neighborhood of 85RPM. Improvement is easily done with short sprints in little gears.

Specific strength improvement is the exact opposite of perking up the leg speed. Improving cycling muscle while in season is similar to lifting heavy weights slowly. The routine is simple. Put the bike in the gear that you have difficulty pushing & go uphill for a minute or two at 50 RPM or so to failure. If you don't fail, the gear is too low or the hill is not steep enough. Spin for one to five minutes and then repeat the recipe. This is very tiring on the leg muscles but can increase strength very rapidly. The strength gain is usually quick but if rest is not taken between sessions then the high volume training will take it away as fast as its built. This is just a simple application of the **Overload Principle**. Keep track of your improvements by doing short time trials & noting the results.

Here is a couple of audience tips: Portland is hosting the World Masters Games in early August & this will be an excellent opportunity for cyclists to see some of the best. Events include a Road Race, Time Trial & a full boat of Track Events at Alpenrose Velodrome. This is a great opportunity for time trialists to see how time trials are done on the track. In fact you can watch Track Racing every Thursday evening all summer long at Alpenrose Velodrome.

Questions Welcome!

Phil Sanders