

## A CYCLE OF FEETS II

This is a sequel to the original Cycle of Feet's which will be freely plagiarized. There are lots of revolving parts in the body in motion on a bike. More is at work than just foot & leg. The foot bone is connected to the leg bone, the leg bone is connected to the knee bone, the knee bone is connected to the hipbone & the hipbone is connected to the marketing manager- (where the wallet is sometimes stored). The marketing manager is connected to market research, market research is connected to the design group, the design group is connected to the ad department and the ad department is connected to the sales manager who is connected to the president of the company. All this is done without telling the foot bones who report to you as World Champion Racer.

We have gone from an all leather shoe with a nail on cleat for use with a regular pedal & toe straps to literally hundreds of choices in cycling shoes with "clip less" pedals. Older shoes rarely had a rigid heel counter & the sole became soft with use. Adjusting this combination was done by nailing & re-nailing cleats to make adjustments.

Listen up WCR's (World Champion Racers), bike fit starts here! The cycling cleat is usually set with the ball of the foot over the pedal axle. This basic setting is done when the crankarms parallel to the ground & the rider in race position on the drops or TT bars and the foot in pedaling attitude. Further adjustments may be made for the racing specialty such as Sprinters, Pursuiters, Time Trialists and Pro, or Stage Racing. Pedaling style can also be adjusted for. A typical readjustment is to put the foot slightly further forward on the pedal for large riders.

In Real Estate, the magic words are location, location, & location. In cycling shoes the magic words are fit, fit, & fit. Even longer touring rides can go over eight hours and a hundred miles. A poorly fitting shoe can not only be agony but can also lead to injury. The foot is at the end of a flexible lever which has to exert pressure over thousands of revolutions. Pedaling like a "sewing machine" with floppy shoes can cause excess knee excursion. Forcing the feet into a neutral position on a not too perfect style, can have the same effect. Ducks & pigeons probably need to set cleats toe in or toe out as needed.

We, the consumers are the benefactors of corporate competition. The shoes & pedals get better & the choices greater. Some of the shoes available are part of a "system", such as Time, & Shimano. There are over a dozen brands of shoes, including, Adidas, Diadora, Duegi, Carnac, Shimano, Sidi, Specialized, Nike, Lamson, Northwave, Look, Time, & Vittoria. You can do some information gathering on the web at <http://www.diadora.it>, <http://www.nike.com>, <http://www.northwave.com>, <http://www.sidiusa.com>, <http://www.lookcyclesusa.com>, <http://www.specialized.com>, <http://www.shimano.com>. The web information will give you appearance, features, materials & sometimes a price range. This information can be really helpful when visiting dealers to fit & try & buy.

But wait! There is more. There is more about the shoe & pedal combination to consider. If the knee has wide excursions and/or if the ankle moves or wants to move greatly from side to side then look at "floating" cleat & pedal systems. The largest range of rotation is probably found with the Speedplay system, which can rotate up to 25 degrees. Speedplay can be just the ticket for young riders or women. Their website is <http://www.speedplay.com>. Not often seen but worth investigating is the Time group of pedals. The competitive pedal comes in five models, has a 10-degree float. The top three of the competitive group has also 8mm of lateral float. The lateral float is unique to Time. Shimano offers three systems, clip/strap, SPD, & SPD-R. Newest from Shimano is the SPD-R with 0, 6deg. & 10deg of float via cleat change. This system can be adjusted easily while clipped in, both for release tension & foot position. Probably the most common system is the Look system with the plastic triangular cleat. Look has licensed to a number of makers including Shimano & Campagnolo. Some of the pedals had a float position and all of the

Look pedals will float with the red cleat. The Look style is quite easy to get into and has a broad foot platform. The advice to Look cleat users is to follow the directions on the cleats, that is pay attention to the wear holes. When the wear indicators are not there, then get new cleats.

But wait, there is still more! If cycling is still a knee wobbling & heel twitching experience with a spot of pain thrown in, then orthotics to the rescue. The pedaling levers work best straight or supported to a limited range of excursion. Pedaling "floppy" is like using a hand saw with a loose handle. A cramp in the foot can mean that the rider is contracting the toes to get better force on the pedals. Supporting the foot with a good orthotic can help align the bones for greatest efficiency & comfort. Efficiency can mean using a greater portion of the pedaling circle for power & speed. Life is best when the shoe, orthotic, pedal combination is not noticed. The newfound speed is free---except for the cost of the equipment changes.

Thanks for reading-  
Phil Sanders  
503-649-4632  
philipsanders@compuserve.com