

Forefoot Measuring Device (FFMD)



Use FFMD to easily and quickly determine forefoot tilt and calculate a starting point for the number of wedges needed.
FFMD Part# 7010101
Form# 0010141

A bike fitting session is not complete without using this simple, yet effective, tool. Measuring forefoot tilt is a foundational aspect for anyone wanting more efficiency, power and less chance for injury (Determining the need for wedging is one of the five adjustments at the foot/pedal interface that should happen during a bike fit).

Stainless steel construction. Measures 5-3/4" in length to 8-3/4" when extended. It's another Paul Swift designed product.

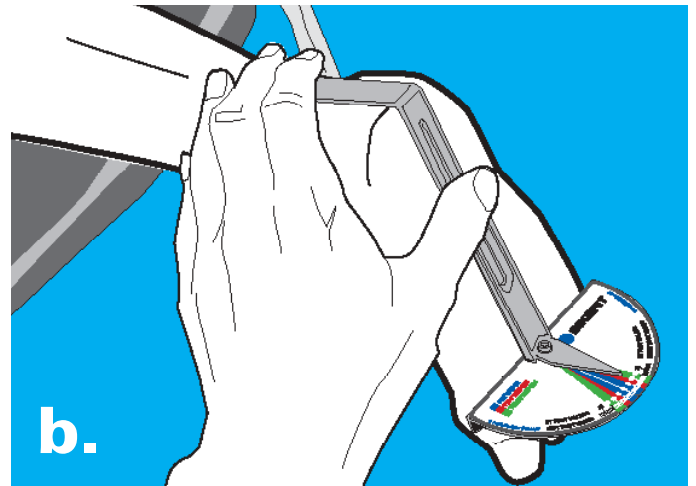
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Measuring Forefoot Tilt:

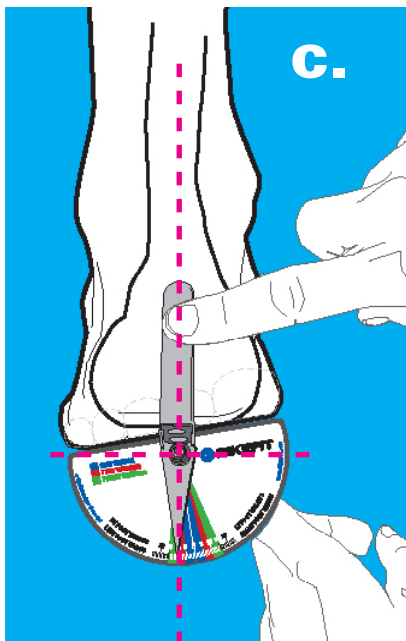
This is a measurable way to determine the starting point for the number of wedges you may need for each foot. Use the following steps to get your starting point.



a. Kneel on a chair, facing the back, with relaxed feet extending over the edge.



b. Place the Forefoot Measuring Device (FFMD) on the bottom of each foot pushing the handle against the heel so the vertical portion is aligned dividing the heel in two equal halves.



c. With FFMD in place, position the top flat surface of the Device (½-circle protractor portion) on the ball of the foot. Make a note of the angle indicated by the protractor. Repeat this procedure 3 times for each foot to achieve a left & right foot forefoot tilt average. Use this number as your starting point for wedge usage shown in the chart in step d.

d. You may try using the number of Cleat Wedges (between the shoe & cleat) or ITS Wedges (in the shoe) as per this chart.
PLEASE NOTE: Specialized BG shoes generally require the same number of Wedges in a varus position as all other cycling shoes.
 Use comfort & feel as your guides for what is best.

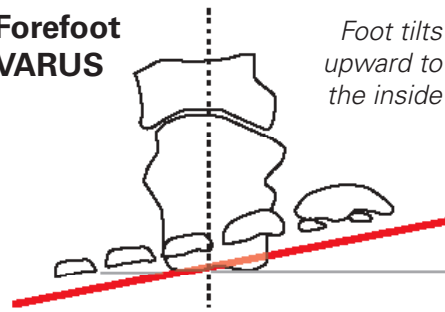


Number of Degrees	Approx. # of Cleat Wedges	Approx # of ITS-F Wedges
0 - 2	0	0
3 - 7	1	1
6 - 12	Up to 2	consider combo w/ Cleat Wedges
12 - 20+	Up to 3	consider combo w/ Cleat Wedges

Recent studies show 96% of all cyclists are misaligned in their connection to the bicycle, decreasing comfort & efficiency.

Due to the fact that the front of the foot is where pedal contact is made when cycling, 96% of cyclists who clip in flat-footed are misaligned. All conventional pedal systems require a cyclist to clip in flat-footed. This predisposes cyclists to mechanical defects in their pedaling stroke.

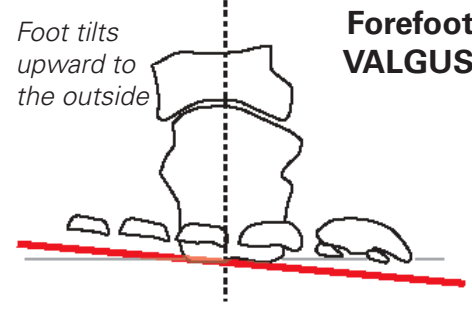
Forefoot VARUS



Foot tilts upward to the inside

87% of people affected

Forefoot VALGUS

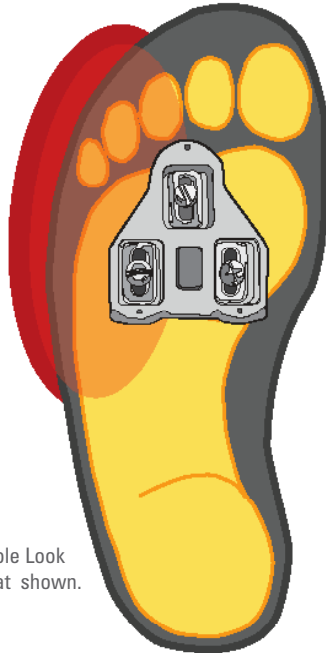


Foot tilts upward to the outside

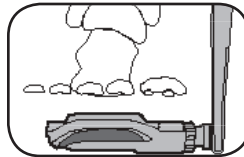
9% of people affected

Without any Wedge

The typical pressure point created between the foot and pedal is shown here.



3-hole Look Cleat shown.



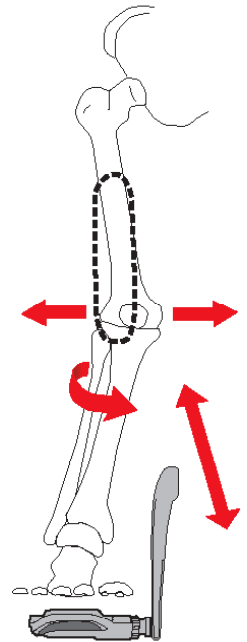
Lower leg rotates inward causing the knee to move in towards the bike frame in the pedaling downstroke.

Pressure may be felt toward the outside of the foot when a varus tilt is present in the forefoot.

Result:

- 1. Repetitive side-to-side movement of the knee decreasing power and efficiency**
- 2. Increased potential for injury**

A foot with a Forefoot Varus must press down to meet the pedal, thus causing the stresses in the chain reaction shown to the right.



With Wedge(s) added.

An even pressure point is created between the foot & pedal with correct alignment.



2-hole SPD Cleat Wedge shown. 3-hole Look & 4-hole Speedplay Cleat Wedge styles work the same. ITS (in-the-shoe) Wedges perform the same but are limited by shoe volume.



The Knee follows a near vertical path with Wedge(s) added. Foot/pedal connection point is improved.

The patented Cleat Wedge places the foot in a neutral position throughout the pedaling cycle.

Result:

More power and efficiency with less potential for injury.

Wedges fill the gap of the foot to meet the pedal.

