

LL SHIM DESIGN

These flat, but conformable Leg Length (LL) Shims are designed to allow cyclists to compensate for functional or measurable differences in leg length. A Leg Length Shim 'stack' can be attained by using a LL Shim(s) [and/or alternating stacked Cleat Wedges].

An example:
4mm shim 'stack' is
(1) 3mm LL Shim
& (2) Cleat Wedges

It is not generally recommended to use more than two Leg Length shims with 2-hole cleat connections (nor is it generally recommended to use more than two Cleat Wedges with two hole cleats) in a stack.

Your structural health care professional, BikeFit Pro fitter or even your own experience will help to determine the size of the shim stack best suited to your needs. These simple suggestions and hints listed below will help you get the best out of your LL Shim purchase.



BIKEFIT
MTB
Leg Length Shim
Part# 3230103
Form# 0210102

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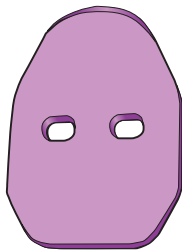
Fitting Instructions & Helpful Hints

Thank you for your purchase and interest in using our products. We hope that Leg Length Shim will exceed your expectations and help you with your cycling activities.

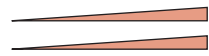
As an esteemed customer of ours, we would be glad to hear from you. Please provide any feedback at our website www.BikeFit.com.

Your kit includes: 2-Hole Leg Length Shim (SPD mtb style)

- 2 x 14 mm countersunk M5
- 2 x 16 mm countersunk M5



Leg Length Shim
3mm stack height



2 x Cleat Wedges

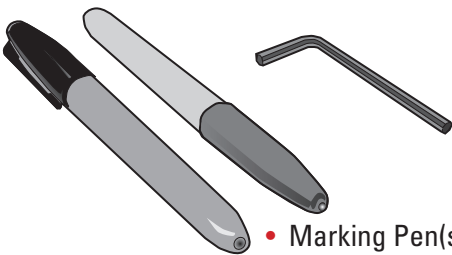
1° tilt per Cleat Wedge

Compatible with:

- Shimano SPD
- Bebob
- Time Atac
- Speedplay Frog
- Crank Bros.

& other popular 2-hole MTB type pedals

Tools Required:



- Marking Pen(s)
- Allen wrench

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MTB - Crank Bros.

1 LL Shim & 1 Cleat Wedge ONLY
(90% of riders need thick side of Cleat Wedge towards crank)

MTB - TIME ATAC

1 LL Shim & 1 Cleat Wedge ONLY
(90% of riders need thick side of Cleat Wedge towards crank)

MTB - SPD

Best Practices

For 1 Cleat Wedge (either above or below LL shim) & 1 LL Shim

For 2 Cleat Wedge (one above & below LL shim - but not together) & 1 LL Shim

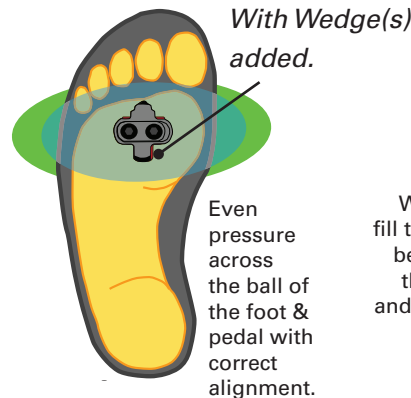
SPD Cleat
Cleat Wedge
LL Shim
Cleat Wedge

For more than one LL Shim you may want to bevel the front to better allow engagement into the pedal. Some buildup of the tread may also be needed to aid in connecting.

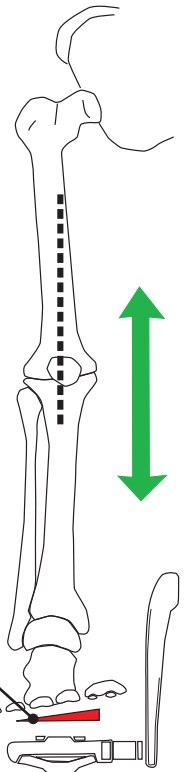
Why a Wedge?

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

BECAUSE... 87% of people with feet have a forefoot that tilts up & to the inside (Forefoot Varus) and 9% of people with feet have a forefoot that tilts up and to the outside (Forefoot Valgus). ALL conventional pedal systems require a cyclist to connect to the pedal flat-footed. Without correction, this predisposes cyclists to mechanical defects in their pedaling stroke.

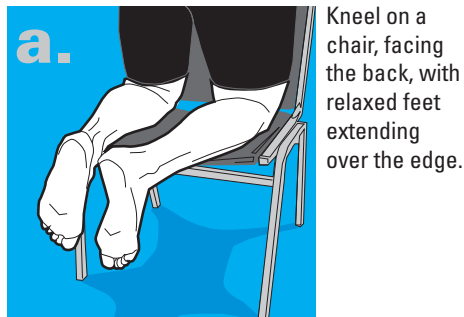


Wedges fill the gap between the foot and pedal.

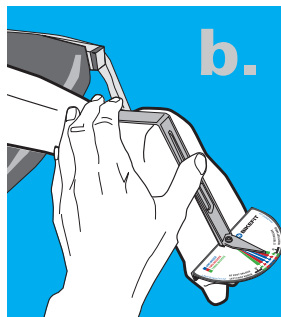


continued from other side...

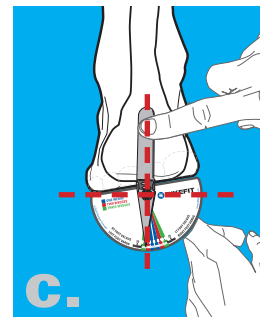
Most people can benefit from a Wedge, so remember to check forefoot tilt to see if you can improve knee alignment by using an **ITS Wedge** inside your shoe or external **Cleat Wedges**. Check each foot for tilt, as they may be different. Use the Forefoot Measuring Device (FFMD) shown below, to easily and quickly determine forefoot tilt and calculate a starting point for the number of wedges needed. **FFMD BikeFit Part# 7010101**



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.

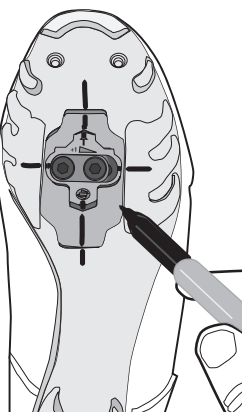


c. With FFMD in place, position the top flat surface of the Device (1/2-circle protractor) on ball of foot. Note angle indicated by the protractor. Repeat 3-times / foot to achieve a left & right forefoot tilt avg. Use this as your starting point for Cleat Wedge usage.

FITTING INSTRUCTIONS

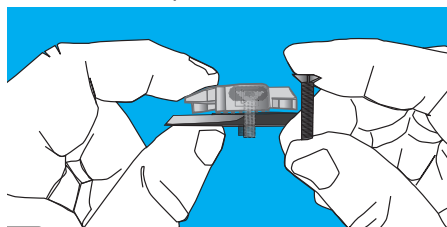
STEP 1.

Mark your cleat position (*make sure the marks extend well beyond to account for LL Shims to be installed*). This will aid you greatly when putting things back together.



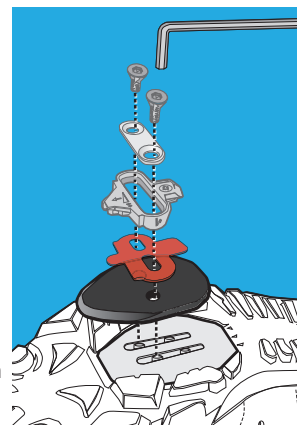
STEP 2.

Remove cleat from shoe and measure length of the existing screws. Add the size of the LL Shim(s) you plan to use to the measurement of the length of mounting screws to determine the length of new screws that you'll need.



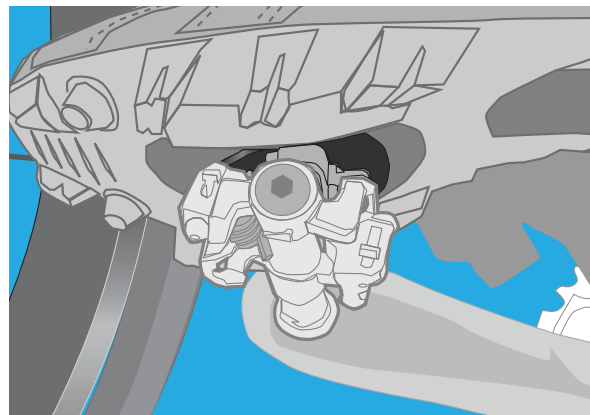
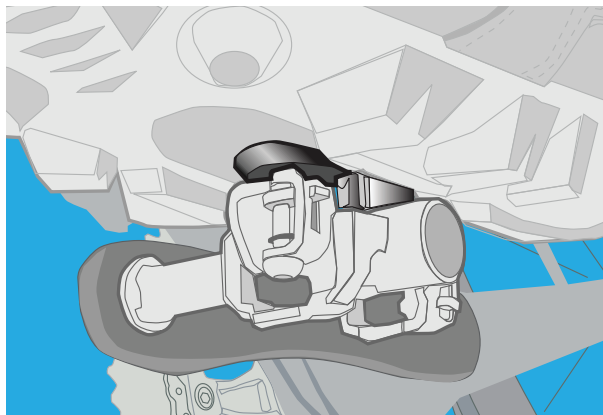
STEP 3.

Place Shim stack on sole of shoe, place cleat on top & screw bolts into shoes but don't tighten fully. Adjust the cleat to desired position using marks on sole & then tighten bolts evenly until secure.



STEP 4.

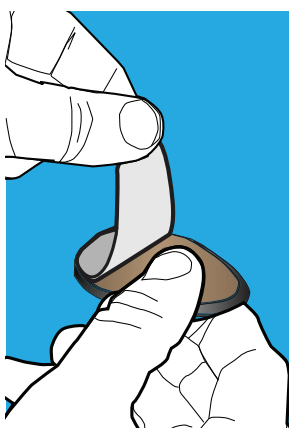
Leg Length Shims extend well beyond the front of the cleat, facilitating easy engagement by providing a solid platform. If you catch the LL shim, when clipping in, unweight foot and try the procedure again.



HELPFUL HINTS:

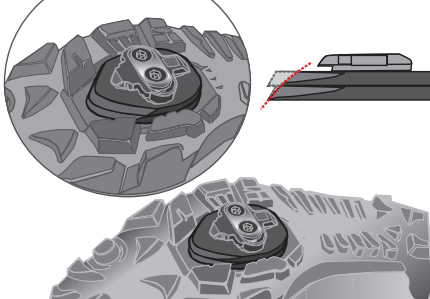
HINT a.

If using more than one LL Shim, you may use double sided tape or a dab of glue for plastic, between each Shim in the stack. This will help them stay in place when you replace cleats in the future.



HINT b.

For sizeable shim stacks you may want to use a file or grinder to bevel an angled ramp on the front of the stack to allow easier engagement with the pedal.



HINT c.

SPD Cleat Wedges have a directional "arrow" pointing to the front edge of the wedge. This is the correct orientation for SPD type Cleats. Some of the Cleat Wedge will "overhang" in the back.

