



# Learning to Fish

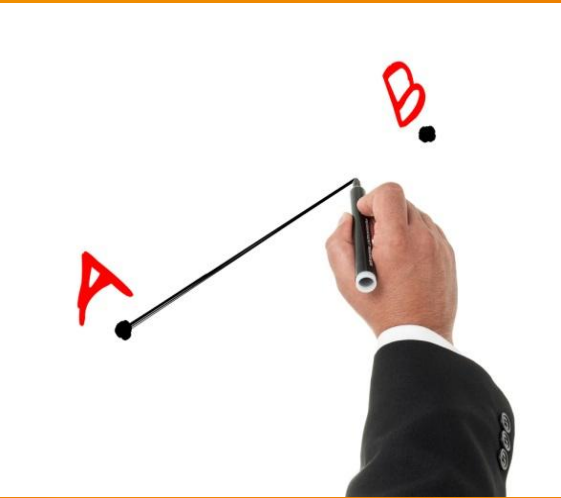
Workshop 15

Self-help Guide to Bike Fit

# Objectives for Bike Fit

## What matters most?

- Comfort
- Performance
- Injury Prevention



## Is there one position to rule them all?

- Rider's objectives (road vs circuit vs TT vs Alps vs ...)
- Limitations in flexibility and mobility
- Injury or injury history

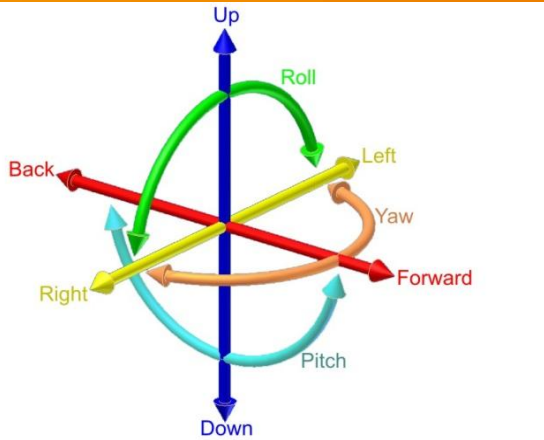
## Physical assessment

- Straight leg raise (saddle height)
- Hip hinge (reach & drop to bars)
- Press-ups (core strength & shoulder strength)

# Process & Degrees of Freedom

## Feet

- Cleats (fore/aft, rotation, stance width)
- Shoe design (curved or straight last)
- Arch support (default = flat foot)



## Bum

- Saddle (Rider's position + height, fore/aft, tilt)
- Crank length (shorter is better)
- Saddle design (shape, padding, pressure relief, etc.)

## Hands

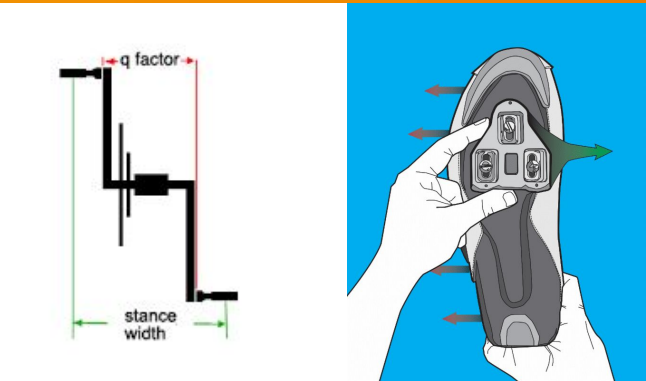
- Stem (length, angle, spacers)
- Handlebar shape (reach to hoods & distance to drops)
- Handlebar width (= / < clavicle width)

# Cleat Set-up



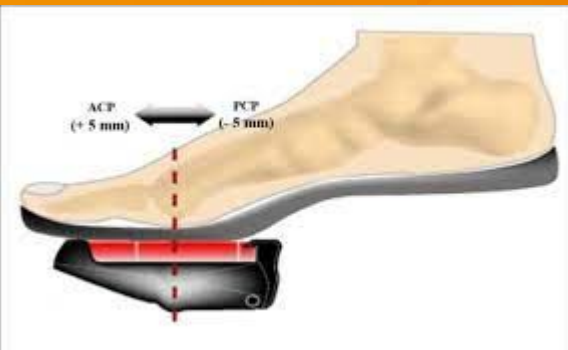
## Rotation

- Toe-out, Straight-ahead, Toe-in
- Match your off-the-bike orientation
- **ALWAYS** buy cleats with “float”



## Stance width

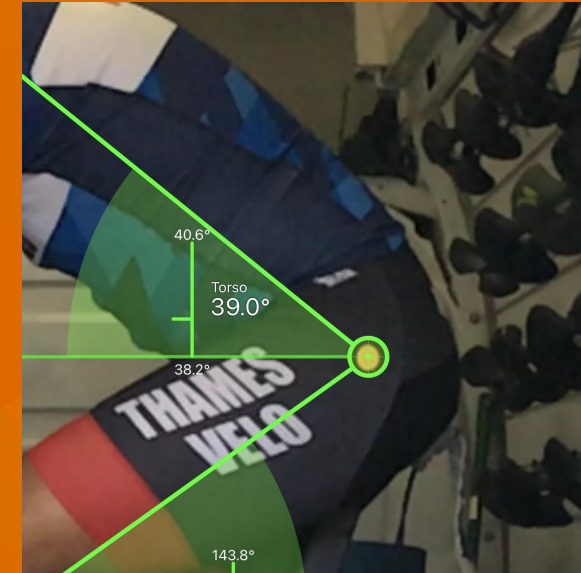
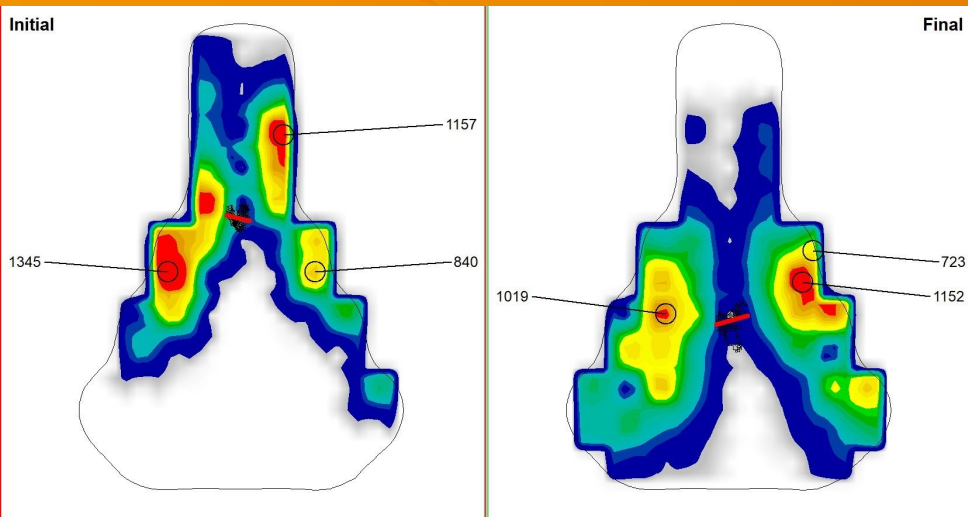
- Centre of shoe (avoid pressure on either side of foot)
- Change spindle length to change stance width



## Fore / Aft Position

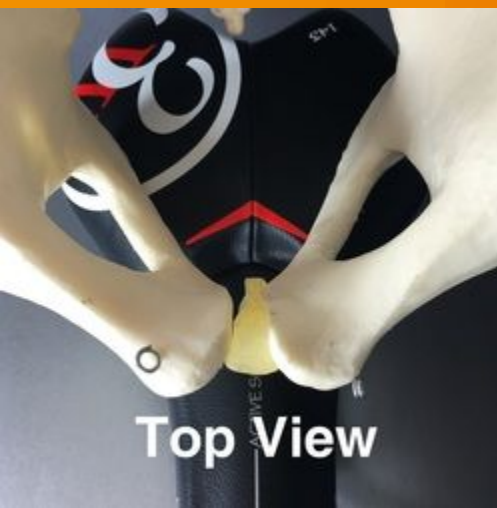
- Centre the ball of your foot over pedal axle

# Position on Saddle



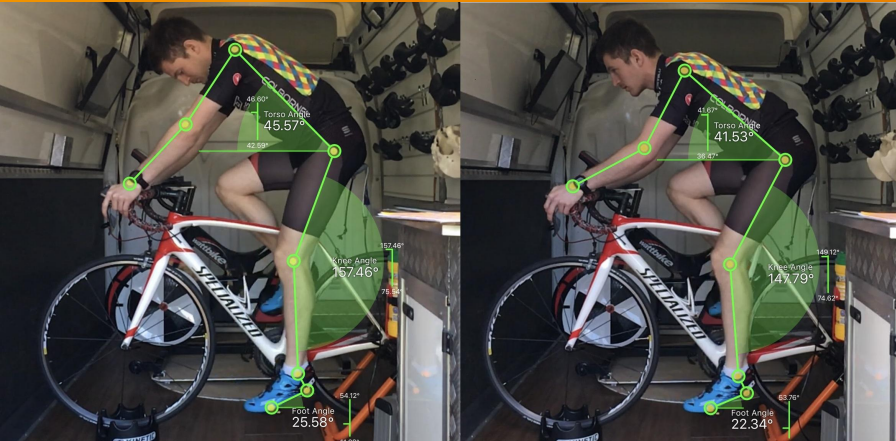
**If you are too far forward...?**

- Bones go off the edge of the saddle
- Pressure shifts onto soft tissues
- Lose support for pedal stroke



- Get V-shaped bones onto Wings of saddle
- You should always be able to see nose of saddle

# Position of Saddle



## Height

- Leg extension of 140 - 150 degrees
- Avoid rocking & excessive toe point
- Use heel on pedal method
  - Bike on turbo, heels on pedals, pedal backward, full leg extension without rocking



## Fore / Aft

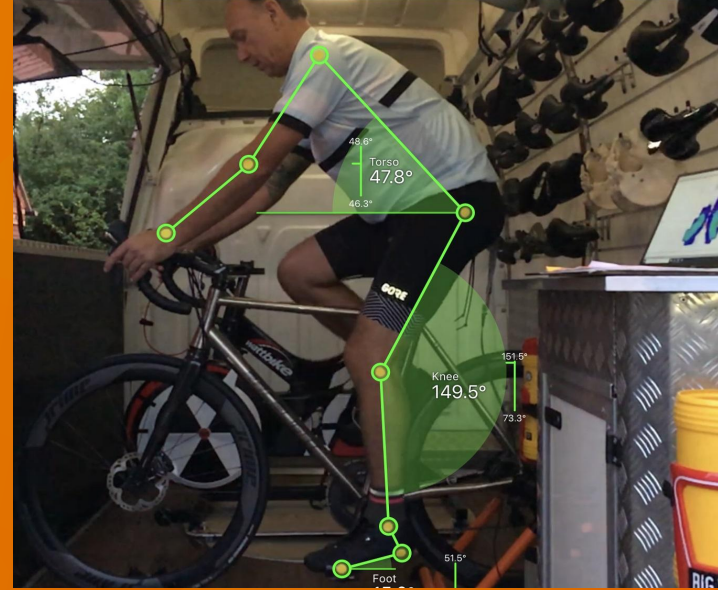
- Always pushing at tangent (90 degrees)
- With feet level, knee over the pedal spindle
- Front of knee 2 - 3 cm ahead of spindle

## Tilt

- **ONLY** the nose is level (NOT full front-back)
- The rear is designed to kick up
- Matches rotation forward of pelvis



# Hands & Upper Body

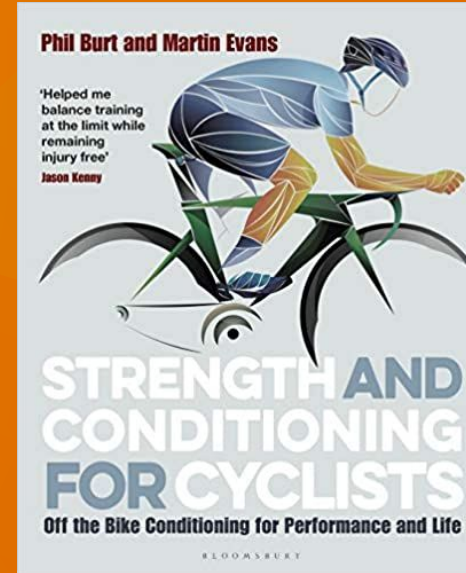
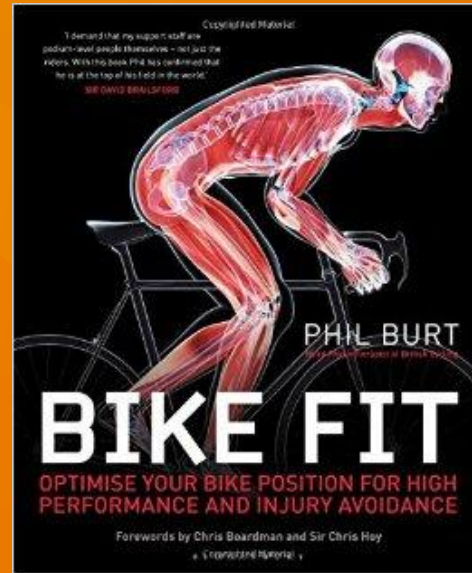


## Reach and Drop to Bars + Posture

(Use stem length & angle + spacers above/below stem)

- Neutral wrists with hands on controls - not rotated out or up
- Relaxed shoulders - not thrust forward and tense
- “Soft elbows” absorbing bumps - not locked out to “hold you up”
- Hip hinge for “neutral” (straightish) back - not curled into “C” shape
- S&C, S&C, S&C: Strong core is essential to deliver power to pedals

# Additional Resources



- **Bike Fit by Phil Burt**
- **Strength & Conditioning for Cyclists by Phil Burt and Martin Evans**
- **[BikeDynamics.co.uk/shop.htm](http://BikeDynamics.co.uk/shop.htm) (45 page self-help download for £3.99)**
- **[www.slipstreamers.co.uk/2015/08/royces-bike-fit-session-18th-april/](http://www.slipstreamers.co.uk/2015/08/royces-bike-fit-session-18th-april/)**
- **[Royce@velocitysportscycling.com](mailto:Royce@velocitysportscycling.com)**



# Tuesday – 29 March – YOUR Topics

What do you want to discuss?

- More depth on something we've covered
- Something we have not covered at all
- A burning question or confusing topic



Suggest topics / questions in advance if you can

- Mention it to me on Saturday
- eMail [info@slipstreamers.co.uk](mailto:info@slipstreamers.co.uk) and put “Question for Royce” in the Subject line



# See you in Zwift !

7:30 start with Martin and Duncan