



Cranklock why it works?

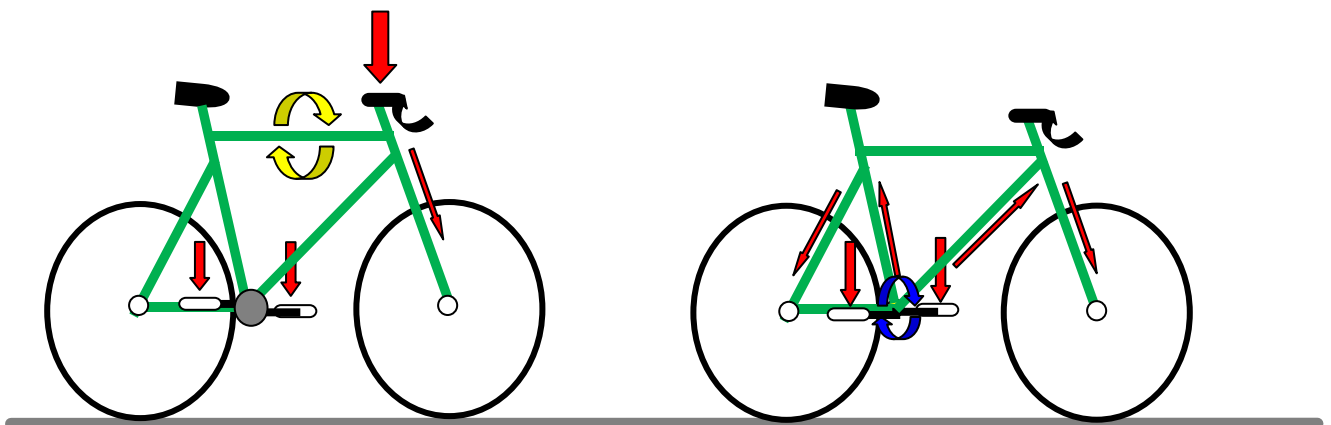
We all know bicycles are by their very nature are unstable. In the hands of the average rider, they wobble along the road often scaring the daylighters out of following motorists, sometimes even scaring themselves. These wobbles happens for several reasons and some of them can be eliminated by fitting a Cranklock to your bike.



Firstly riders balance precariously on two narrow rubber tires, plus they have to do this by constantly adjusting the majority of their body weight on three very mobile axles. All of these axles are mounted in oily slippery bearings so they can move freely to allow you to pedal and drive yourself forward.

Secondly while you are doing this your arms are hanging onto the handlebars that are also mounted in oily slippery bearings so they too can turn freely as well, to let you change direction rapidly and freely.

Peddalling straight forward most of your weight is directed down to the tires by the pedals and only a small amount goes into the handlebars. However, this all changes when you approach a corner. The outer pedal is lowered and your lower bodyweight is shifted to the outer pedal, this to get weight as low as possible and stop the pedal hitting the ground as you turn. At the same time as much downforce as possible is applied to the handlebars to try stabilise the bike, plus increase front wheel traction to improve cornering speeds.

Unfortunately this means a large amount of upper bodyweight is now wobbling around way up high on the bike, and your centre of gravity has just shifted upwards right when you need it down low. Any race car driver can tell you when you go around a corner you need the centre of gravity as low as possible. Cranklock lets you lower your C.O.G to be similar to that of a lightweight motorcycle. Here's how it works.



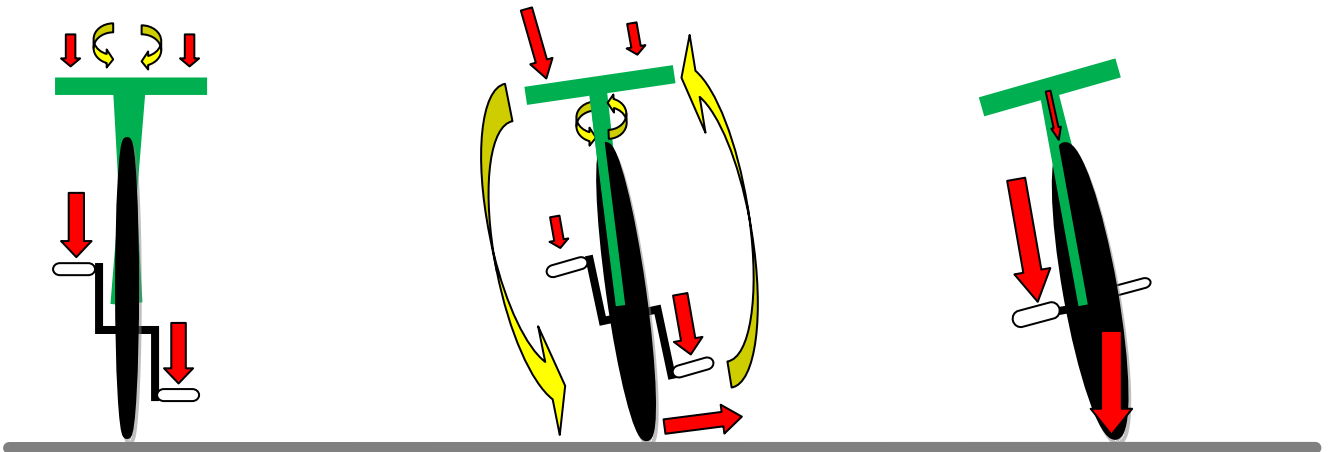
Cranklock locks the pedals to the frame just when you need it. When the pedals are locked and all your bodyweight is placed on them the C.O.G. Centre of Gravity moves from being around here  on the bike to right down around here.  Moving this much weight, this far down the bike, brings some dramatic and fun handling improvements.




On a conventional bike travelling in a straight line weight transmits to the tires in an oscillating motion via the pedals and handlebars as riders shift the C.O.G.


On a conventional bike when cornering any change in the riders position alters the weight balance / C.O.G between the handle-bars and pedals and weight placed low on the outside pedal actually pulls tyres 'off' the road so the slightest bump puts you off line and headed into trouble.



On a bike with Cranklock fitted, weight is kept low and on the inside of the frame in relation to the corner. More downforce is able to be applied to the contact surfaces of the tires as weight placed here travels up the frame from the crank housing, then down the head stem and rear suspension arms. This provides much higher levels of traction producing greater lean angles, higher cornering speeds, and totally eliminates 'speed wobbles'

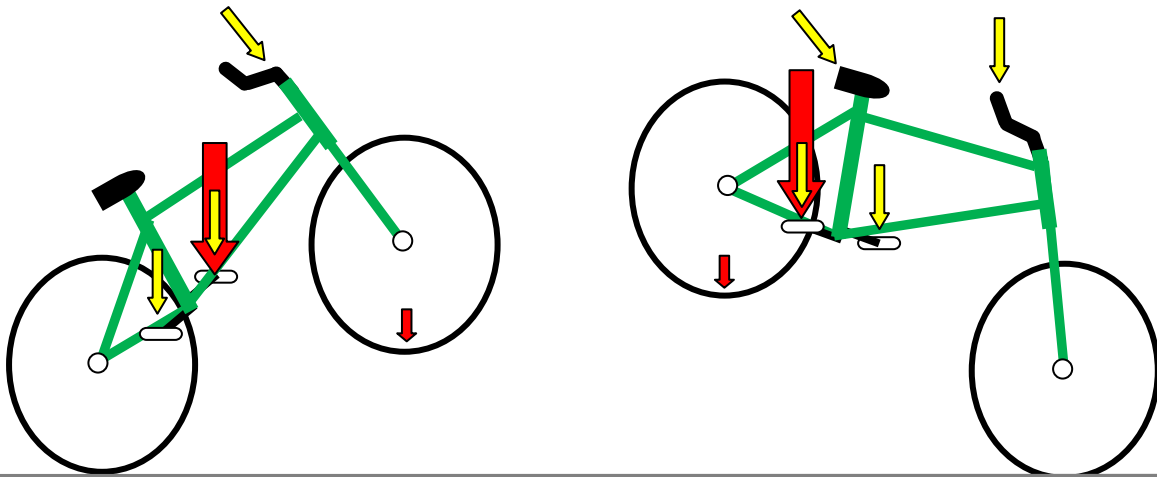



Any minor bump in the road surface can produce oscillations  that can cause rider to lose control and crash. With Cranklock, if oscillations start, the ability to place more pressure down onto the road stabilises the bike, plus it greatly reduces cornering radius to stop you "running wide" off the road and into the safety railing.



Once a bicycle is in the air your options for stability become even less. If you've ever watched a downhill mountain bike race you will have seen riders crash over the front of the bike or lose control of the back wheel on landing. Riders must commit their weight here  to try and get the wheels back on the ground, often with disastrous results.

With Cranklock the pedals instantly become a stable platform and all a riders weight can be applied in any direction left right down even up. Giving you a huge range of options. You can literally push the bike in any direction  you want and **it will go there**. If you need the front wheel on the ground just lock and push down on the front pedal. Need the back wheel down flip the pedals lock  and push down on the back pedal. Need the bike to go forward or back left or right just push it that way that's the way it will move.



From above the ability to move your weight forward to improve front tire traction becomes obvious. With the pedals locked, all your weight can shift from side to side instantly. Great for carving through traffic when you're coasting. Flip the pedals over, lock load and lean. Put your weight here  and the bike leans and turns that way. Instantly.

With more precision than you've ever had before and with lean angles that are just like a motorbike, you can wear your tyres off the edges if you want, and a slide no longer means a crash, so there's longer a need to live in fear of white painted road lines all winter.

Cranklock. Unlocking your bikes hidden potential.

