

## 4. How do I achieve the right rollout?

### On a fixed wheel (track or BMX) bike:

This is “simply” a matter of fitting the right combination of chainwheel and rear cog. There are however a couple of things you need to watch out for.

Firstly, make sure the chainwheel you are putting on has the same bolt pattern as the crank set on your bike or it won't fit, - so if you are buying new chainwheels take the old one along with you to make sure.

Secondly, because you will be changing the diameters of the two circles the chain goes around (i.e. the front and rear cogs), the length of the chain you require will also change. If you are changing to a bigger chainwheel/rear cog, you will need to move the rear wheel closer to the frame, or vice versa, in order to get the right tension on the chain. Unfortunately the distance you can move the rear wheel is limited (usually only 30-40mm) so you may not be able to get the right tension on the chain.

If the chain remains too loose, you will need to remove some links from the chain, or if it cannot fit on the chainwheel, you will need a longer chain or add a few links. You will need a chain-breaking tool for this.

If all this sounds complicated, it isn't really. Just ask one of the JDP team and we will help you out.

### On a geared (road or mountain) bike

This is easier because you have a range of combinations available because you have two or three chainwheels at the front and 7-10 rear cogs to choose from. Rather than selecting a single combination, you limit the movements in the front and rear derailleurs so they cannot select a combination that gives greater than the required rollout.

For most *chainsets* (i.e. the front cogs/pedals) the large chainwheel will be too big to achieve any junior rollout. Generally on a double chainset, the small chainwheel will be a 39 tooth, (42 in older chainsets) and this is the largest that can be used to effectively get a junior rollout. Therefore it is simply a matter of adjusting the front derailleur so that it cannot move across far enough to select the large chainwheel. This is done by adjusting one of the two small screws on top of the front derailleur (you will have to experiment as different manufacturers put the screws in different places).

On the rear derailleur, you adjust the screw that is marked “H”; - this sets the limit of the derailleur in selecting high (small) gears. It should only require a couple of turns and simple experimentation will let you see how far you need to turn it.

Again, ask for help from the JDP team if you need it.