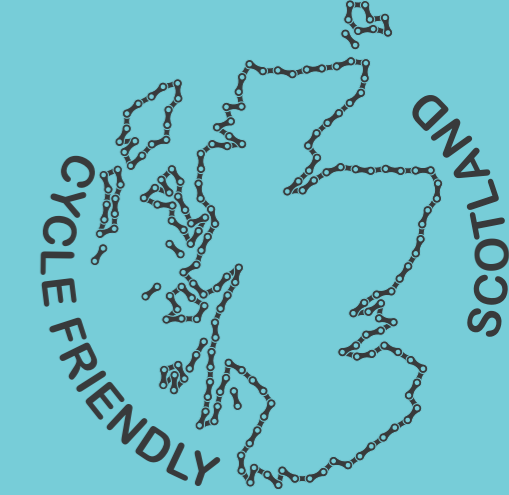


DR BIKE'S HOW TO MAINTENANCE TIPS



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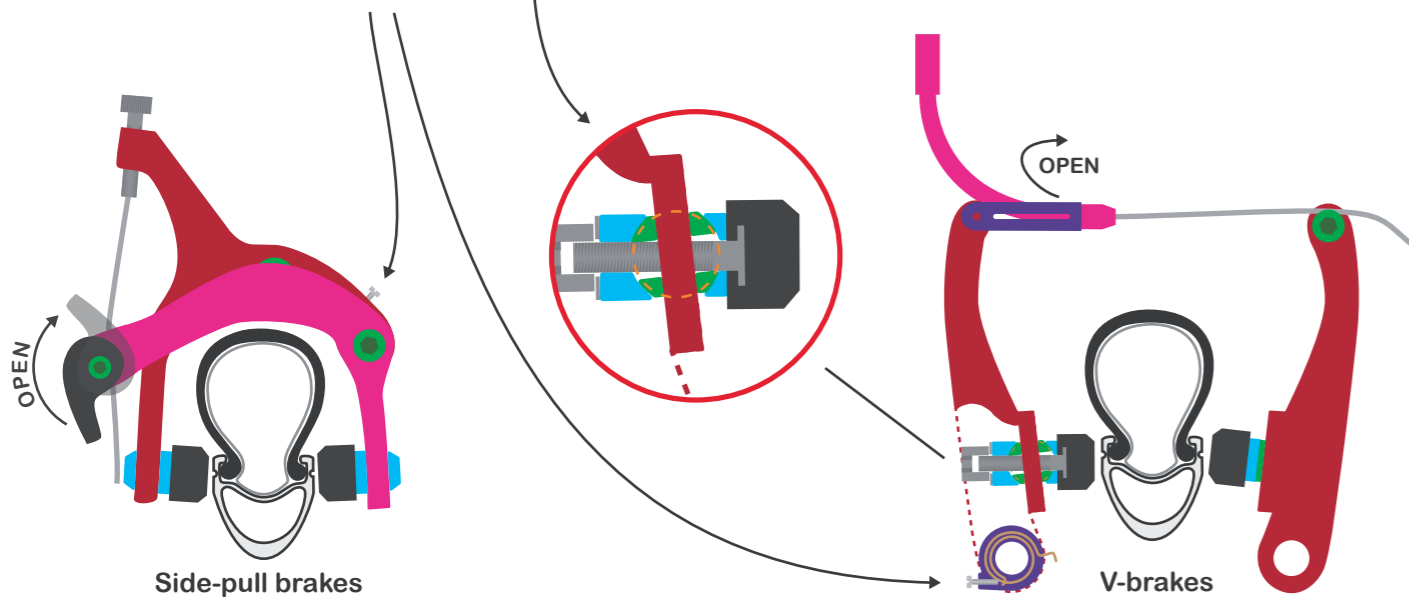
“The most important thing when fixing bikes is to look, listen and learn”
 — Dr Bike

BRAKES

Centring the brake is done by adjusting small screws which change the tension that opens the caliper (these screws can vary in position from brake to brake). Make small adjustments then squeeze the brake lever a couple of times and check alignment visually.

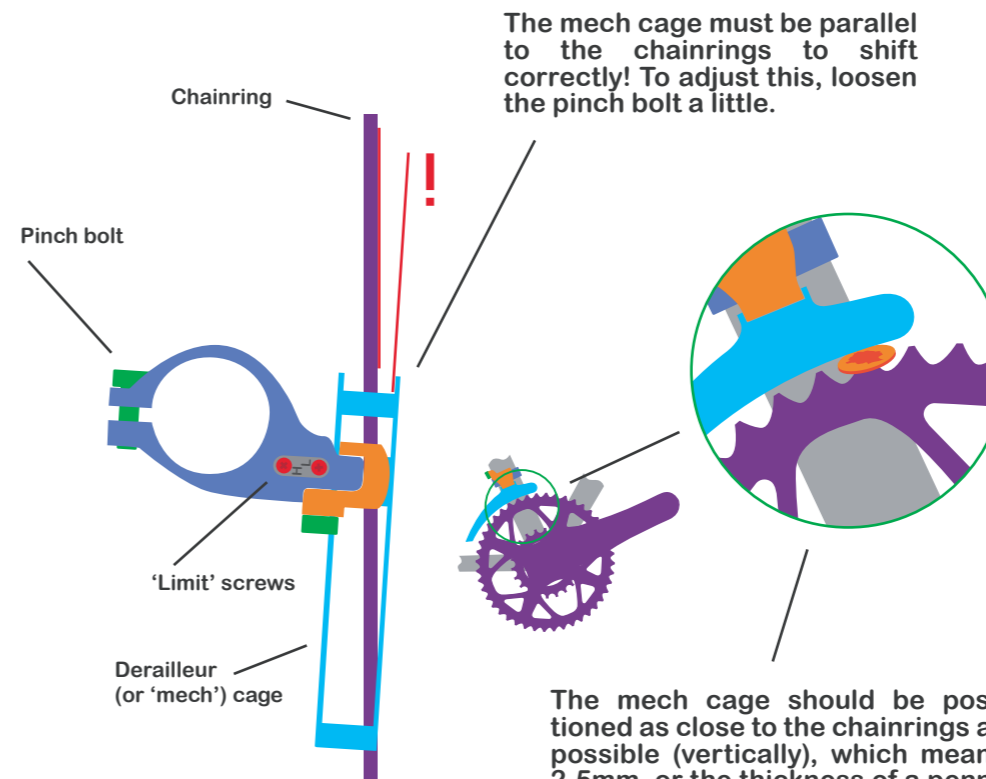
V-brake pads have dome-washers which allow you to adjust the angle of the pad to the rim: loosen the nut, position the pad on the rim and squeeze the brake by hand (to hold it all in place), then tighten.

Brake pads are made of a rubber compound which rubs against your rim. Pads range in type and cost and to perform at their best, the pads must touch a clean braking surface square on, and evenly spaced left to right.



GEARS

If your gears are ‘skipping’ - or simply not shifting crisply, your chain is clean and oiled and your drivetrain is not worn past its functional lifespan, then you probably just need to adjust them. It is easiest done from behind the bike, with the back wheel off the ground.



The mech cage must be parallel to the chainrings to shift correctly! To adjust this, loosen the pinch bolt a little.

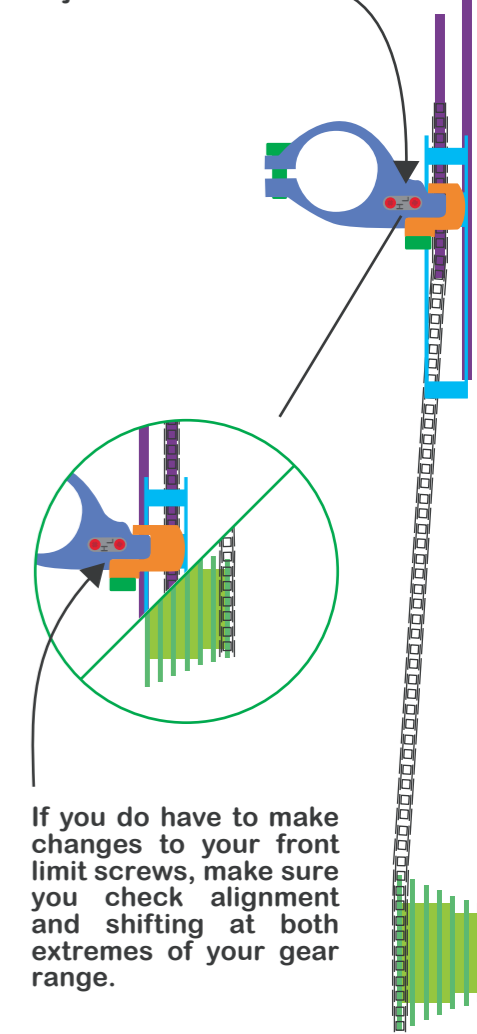
The mech cage should be positioned as close to the chainrings as possible (vertically), which means 2-5mm, or the thickness of a penny to a pound coin.

Sometimes with triple chainsets the cage will hit the middle chainring if it is too close, so check everything before tightening it all up.

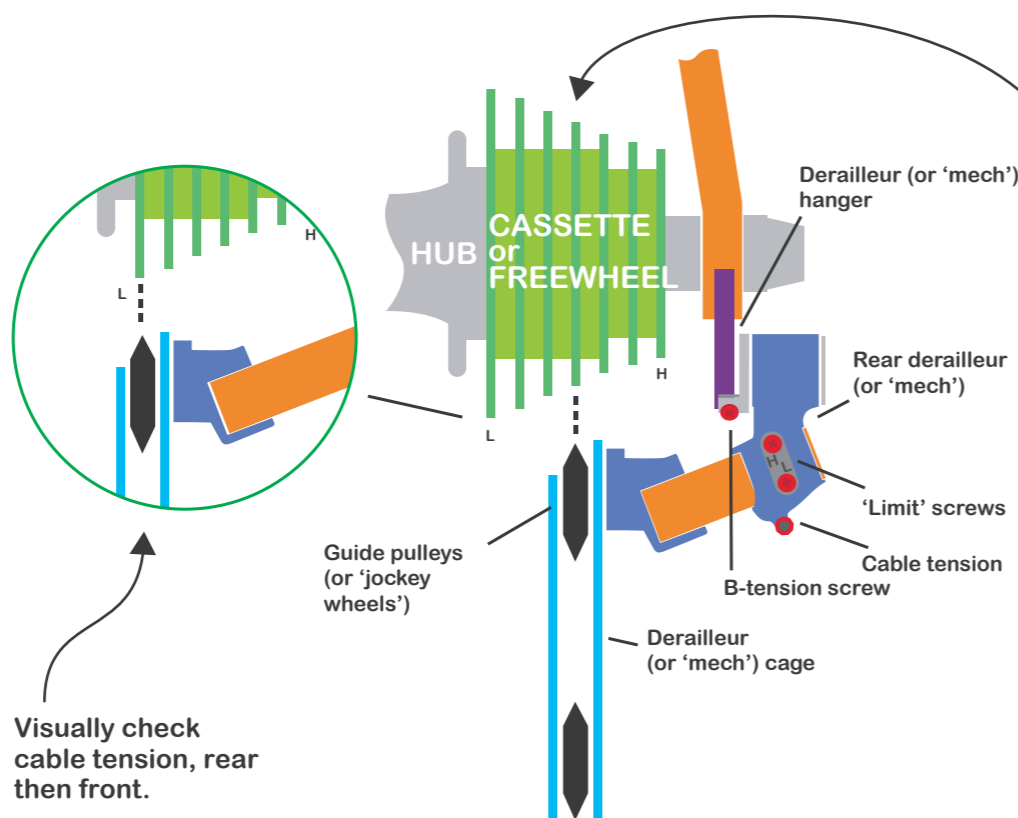
If any of your sprocket teeth have worn into shark fins, then your chain will slip, gears will jump and you will need to replace everything.



The limit screws keep the chain from falling off the cassette and chainrings. Once the gears are set up, you shouldn't ever need to adjust the limit screws.



If you do have to make changes to your front limit screws, make sure you check alignment and shifting at both extremes of your gear range.



Visually check cable tension, rear then front.

Usually the only adjustment needed is cable tension: shift gear to somewhere in the middle of the cassette, and adjust tension by tightening or loosening the barrel adjuster. This can be done visually by sighting the gap between the left of the chain against its neighbouring sprocket.

The limit screws keep the chain from falling off the cassette and chainrings. You shouldn't need to adjust the limit screws unless the hanger gets bent. As an emergency ‘fix’, limits can be adjusted, however a bent hanger should be fixed or replaced.

The B-tension screw adjusts the distance between the jockey wheel and the cassette.



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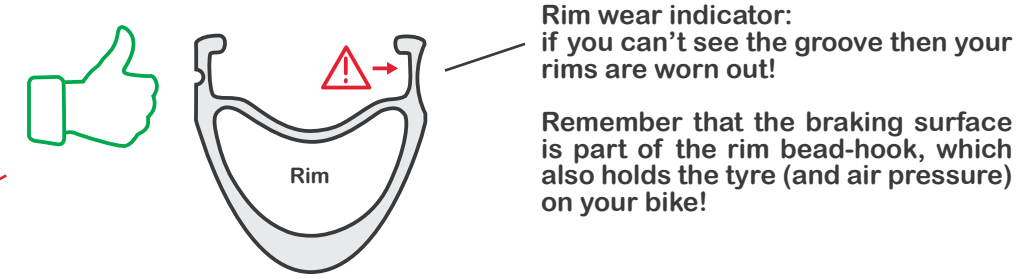
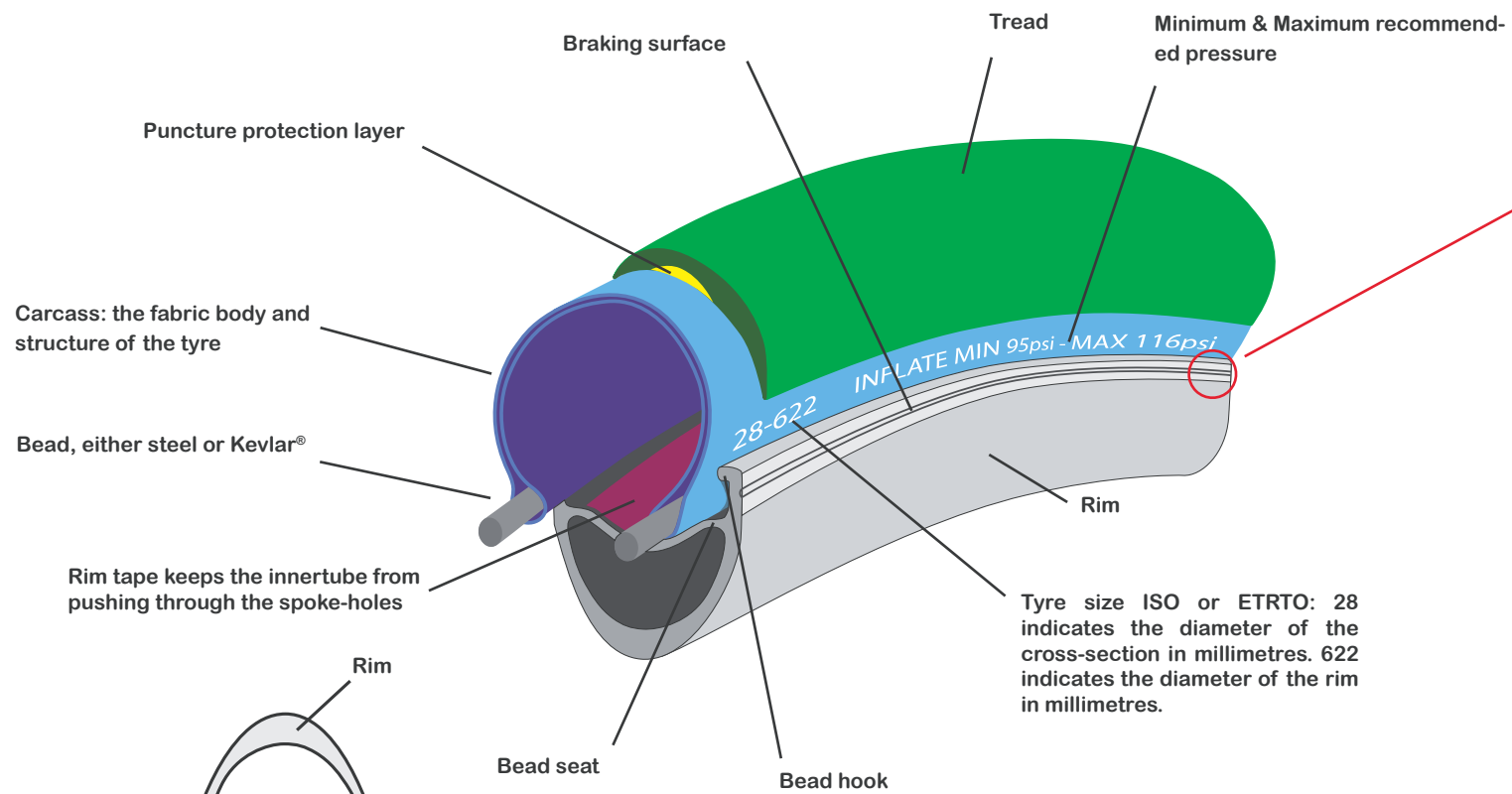
DR BIKE'S HOW TO MAINTENANCE TIPS

All tyres have a recommended pressure rating written on their sidewall. If you go **OVER** this rating, they may burst. If you let your tires get **UNDER** the rating you are at an increased risk of getting punctures.

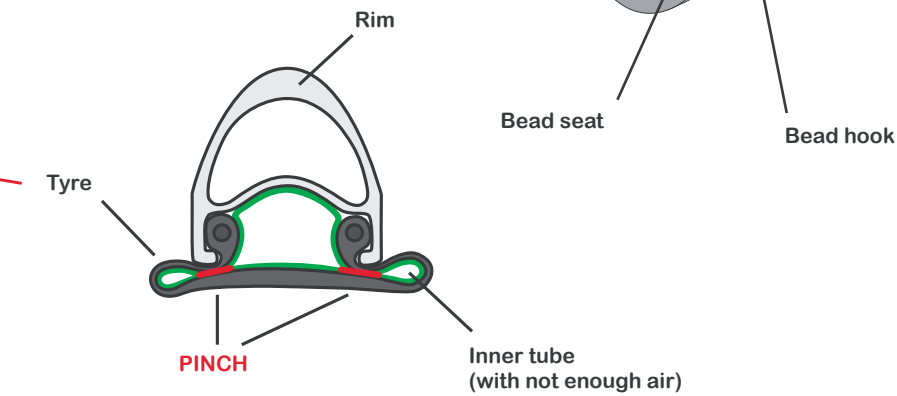
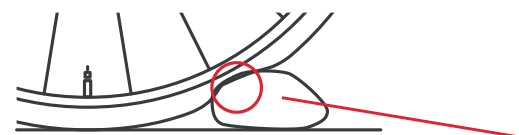
Pressure also has an effect on rolling resistance. Low pressure may have more grip on loose terrain, but will probably be sluggish on a hard surface. Fatter mountain bike tyres run at lower pressure than thin road tyres.

All tyres and tubes lose pressure over time! You should **check your tyre pressure every week or two**.

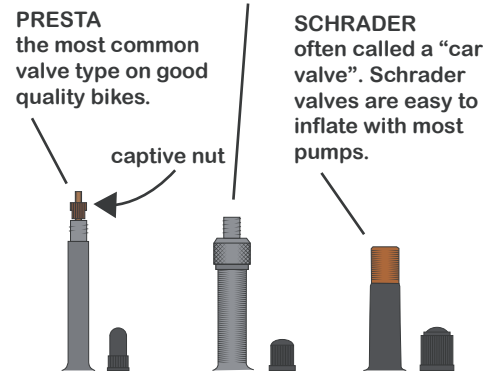
If your tyre pressure is too low, a pothole or even a large pebble can cause a pinch-flat. The minimum pressure rating on the sidewall of the tyre should be sufficient to avoid pinch-flats.



Remember that the braking surface is part of the rim bead-hook, which also holds the tyre (and air pressure) on your bike!



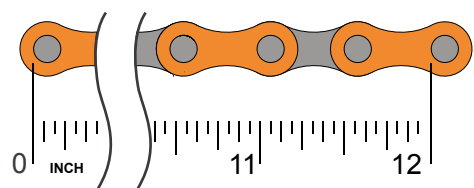
WOODS does not fit most pumps. Dr Bike recommends avoiding Woods valves.



Make sure your pump fits your valve, and can reach your recommended pressure. Hand pumps are often built for high volume or high pressure and not both.

Dust caps are not necessary, in fact many cyclists don't bother with them: they keep dust out, not air in.

NOTE that on Presta valves you must unscrew the captive nut before inflating the tube.

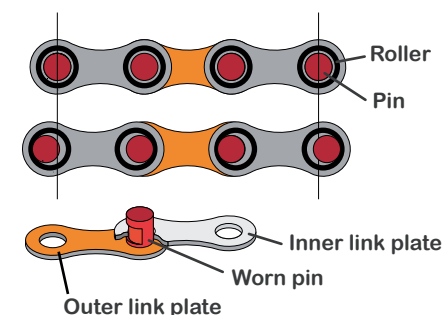


Over time a chain wears out. This looks like it stretches, because it gets longer. If your chain is 'stretched' it can wear out other parts of the drivetrain. You can measure chain wear with a ruler. At 12 inches a new chain will line up perfectly. If the chain looks like it has 'stretched' as much as 1/16" (1.6mm) then it is time to change it!

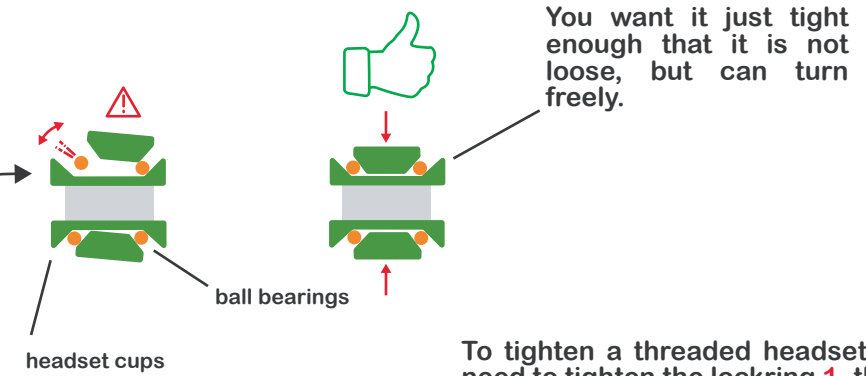
Chains are cheap (from £8) and changing chain+sprockets is not so cheap (from around £50), so it's worth oiling, cleaning and checking your chain (See illustrations).

When chains 'stretch' they develop a notch in each pivot, which means the links can move further apart. The rollers also tend to wear as they pass over the teeth of the sprockets, which increases the gaps between the chain and the teeth.

If your chain breaks, it can jam the back wheel causing a crash!



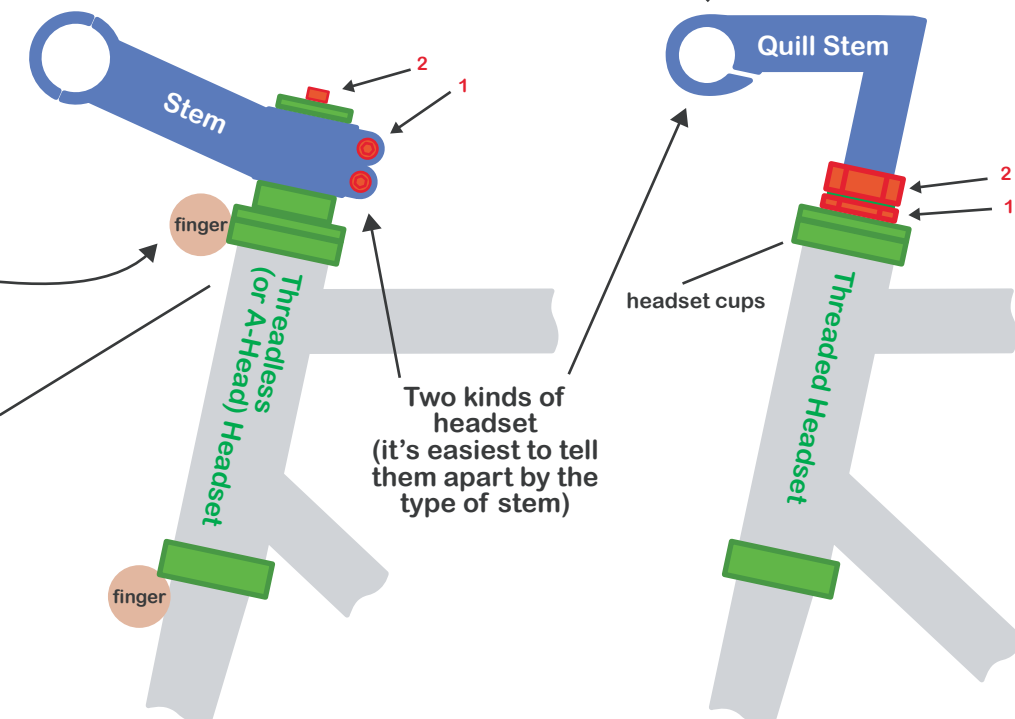
If the headset is loose, you will feel the play. This is dangerous! Loose or gritty headsets can affect balance and cause crashes!



To tighten a threaded headset, you need to tighten the lockring **1**, then **2** (to keep 1 in place). This can be a bit fiddly without a very thin headset spanner.

The way Dr Bike checks if your headset is loose is by placing a finger at the top or bottom pivot of the headset, hold the front brake and rock the bike back and forward.

To tighten a threadless headset, all you need is an allen key set. Loosen the pinch bolts (**1**), then tighten the preload bolt (**2**). When it feels right, check the stem is straight and tighten the pinch bolts.



Two kinds of headset (it's easiest to tell them apart by the type of stem)