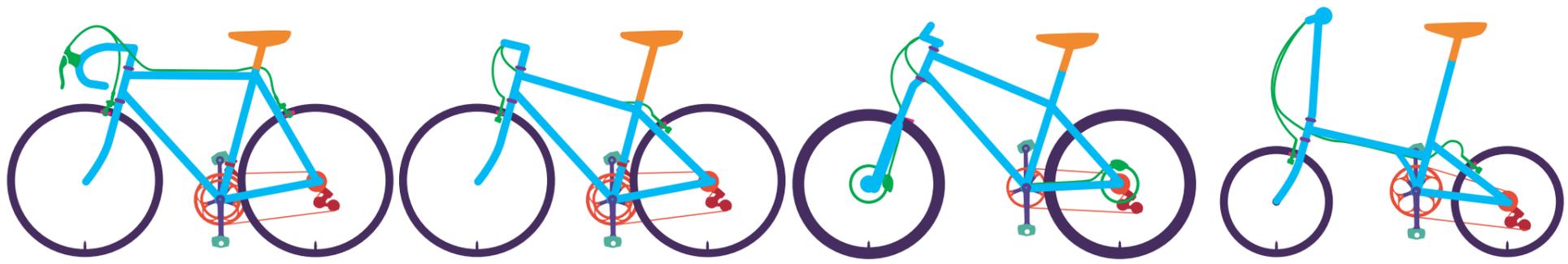


# DR BIKE'S HOW TO BUY A BIKE



**CYCLE FRIENDLY SCOTLAND**  
media v.2 distributed for FREE by  
Recycle to Cycle Ltd.  
[www.thebikestation.org.uk](http://www.thebikestation.org.uk)

PRINTED ON 100% SUSTAINABLE PAPER WITH 100% BIOLOGICAL INKS



**USED OR RECONDITIONED**  
Some shops sell reconditioned bikes that have been rebuilt with all the new components needed to make the bike safe to ride. Reconditioned bikes start from around £80, and come with a few months' warranty. This is a good way to get a reasonable used bike.

**Road Bike:** slim tyres and an overall design focussed on going fast on-road as effortlessly as possible. Their riding position is more aggressive than others, which requires more flexibility to ride. They are designed for long distance rides.

**Cyclocross** bikes have clearance for bigger tyres, and **touring bikes** are designed to carry loads. Both touring and cyclocross bikes look similar to road bikes but tend to be more versatile. They are also designed for long distance rides.

**Hybrid:** a popular all rounder. A hybrid is like a road-bike with flat handlebars, a hybrid between a road bike and a mountain bike. Most hybrids are designed for commuting and touring, so they are able to take pannier racks.

Some hybrids come with front suspension the benefits of which may be outweighed by its physical weight.

**Mountain Bike:** mountain bikes are designed to go off-road: gravel trails, forestry tracks and dedicated mountain bike trails. They come in many flavours and can be tedious to ride on-road as they have tyres which are sluggish on paved roads.

Mountain bikes can come with no suspension (rigid), only front suspension (hard tail) or front and rear suspension (full suspension).

**Folding Bikes:** the lower end are suitable for short rides and can be folded to fit in the boot of a car. The higher end are lighter weight and fold down into an easy to carry format, designed to be taken on public transport and suitable for medium-length rides.

**IT'S TOO GOOD TO BE TRUE**  
You can also buy a used bike privately, but this can be a false economy. Classifieds are often where you will find them, but if the price looks too good to be true, it might be. A lot of stolen bikes end up on classifieds: if you buy a bike which is then discovered to have previously been stolen, there is no refund and the Police can take the bike away. Ask for proof that a used bike is not stolen.

## WEAR AND TEAR

**Chain & sprockets (drivetrain):** Check for chain wear and make sure that the sprockets aren't worn into shark-fins.

**Rust:** The chain can be a little rusty, but if it is stiff you will need to replace it. Rust is more critical when it is bubbling up paint and digging into the frame.

**Seat post:** Check that the seat post moves! It is worth checking that a seat post moves before purchasing a used bike, as a seized post can write-off a frame.

**A CHEAP FIX?**  
Buying a battered bike to keep things cheap can be a false economy. Steel rims will always be heavier and yield inferior braking performance. Common things that need replacing on old bikes are cables, brake pads and the chain, so just to give you a rough idea:

cables	£3	x4
brakes	£6	x2
chain (8 speed)	£8	
Labour	£25	
<b>total</b>	<b>£57</b>	

## BIKE FIT & SIZING

If your bicycle doesn't fit your body, then you will develop pain and discomfort, and you will be less efficient (get tired sooner).

You don't need to be able to put your feet flat on the ground from the saddle! In fact, if you can you will get sore knees very quickly.

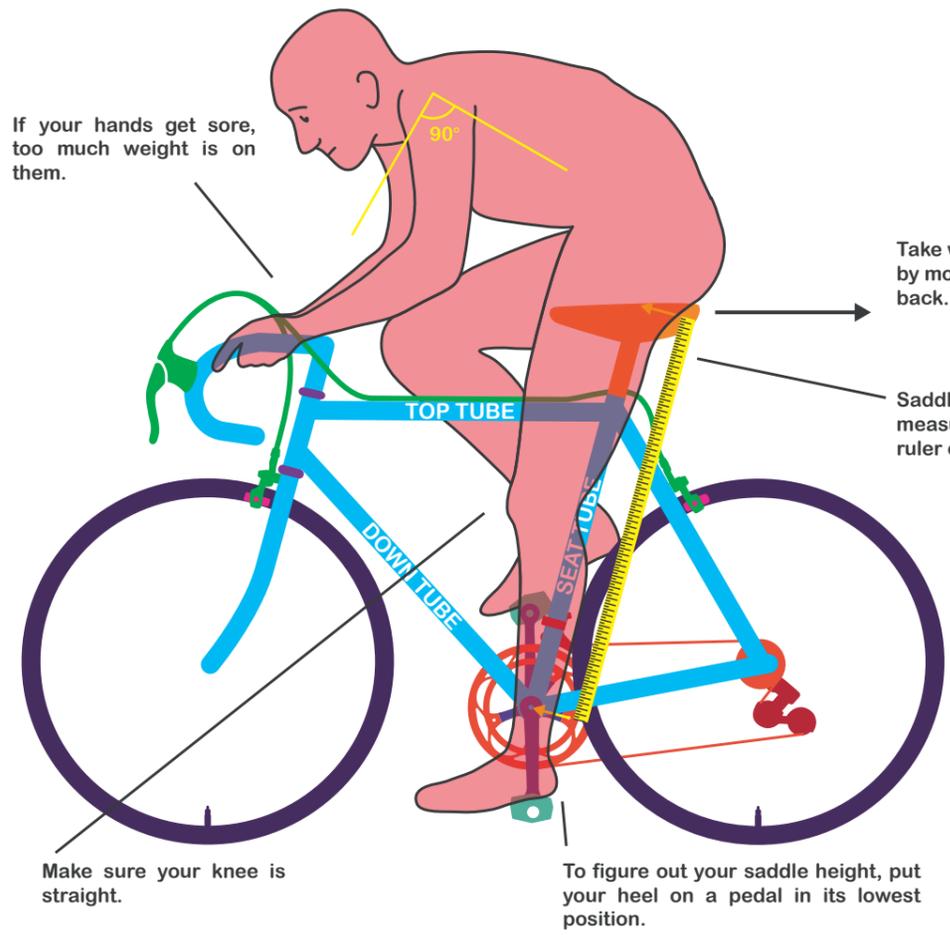
On any bike it is important that you have some space between you and the top-tube when standing with both feet on the ground (standover). Set your saddle so that - sitting squarely with your heel on a pedal in its lowest position - your knee is straight (see illustration). When sitting in a primary position (hands on the brake hoods or grips), you should have an angle of about 90° between your arms and torso.

Bicycle sizing can be hard to understand, especially since road bikes are measured in centimetres, hybrids and mountain bikes are measured in inches.

Mountain bikes are often sized by rider height: most big retailers have size charts on their websites (sizes are often S, M and L).

Folding bikes usually come in a single size, with some adjustments that can be made.

Road, touring and cyclocross bikes can be sized more accurately as more sizes are available.



**DR BIKE**

**DR BIKE'S HOW TO BUY A BIKE & FIX A PUNCTURE**



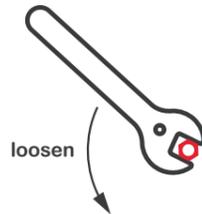
# DR BIKE'S HOW TO FIX A PUNCTURE

“Every time I see an adult on a bicycle, I no longer despair for the future of the human race.”

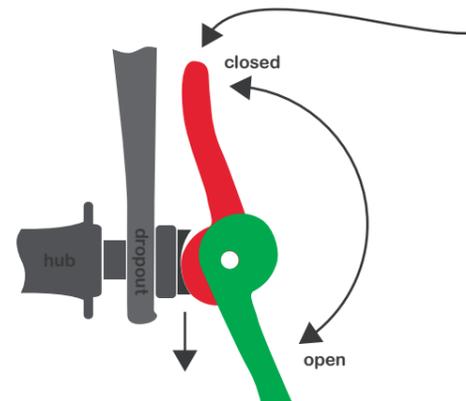
— H G Wells

## #1 TAKE OFF YOUR WHEEL

Open or unhook your rim brakes.

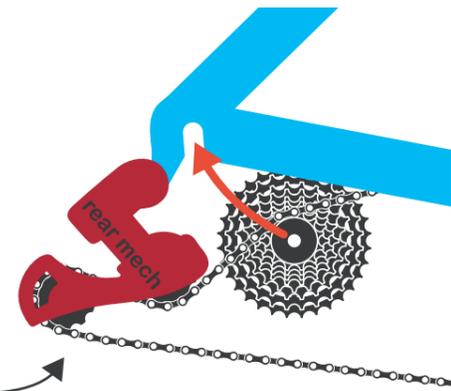


If your wheel has nuts, then loosen them with a 15mm spanner.

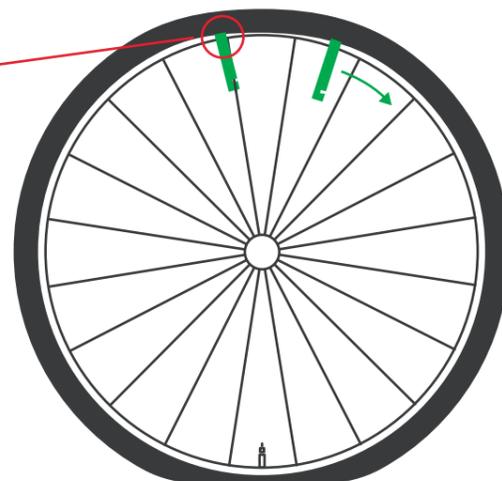
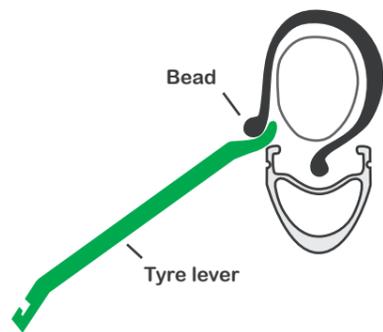
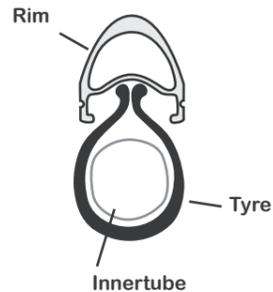


Most wheels have a quick release skewer: to remove it, open the cam lever. You may need to loosen the nut on the other side of the wheel (by turning the open cam lever counter-clockwise). With a back wheel, it helps to shift to the smallest sprocket.

Replacing the back wheel, you hook the chain onto the smallest sprocket, if necessary pull the rear mech back with your hand, and slide the wheel into the dropout. Tighten the quick release or axle nuts and re-connect your brakes.



## #2 REMOVE TYRE & TUBE



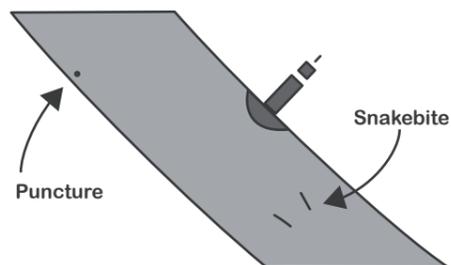
#1 Push the tyre bead into the well (middle) of the rim - this will loosen the tyre around the rim.

#2 Using a tyre lever, prise the bead out and over the rim edge. Start opposite the valve, and use more than one lever if available.

## WHAT IS A PUNCTURE?

The tyre provides grip with the ground, and the inner tube is a thin rubber membrane which contains the air which cushions you from the bumps and vibrations of the road.

A puncture is caused by something sharp or because you have hit a kerb or a pothole with insufficient pressure to keep the tyre and rim from cutting the tube (snakebite).

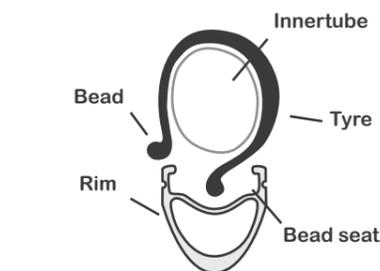


## #4 REPLACE & INFLATE

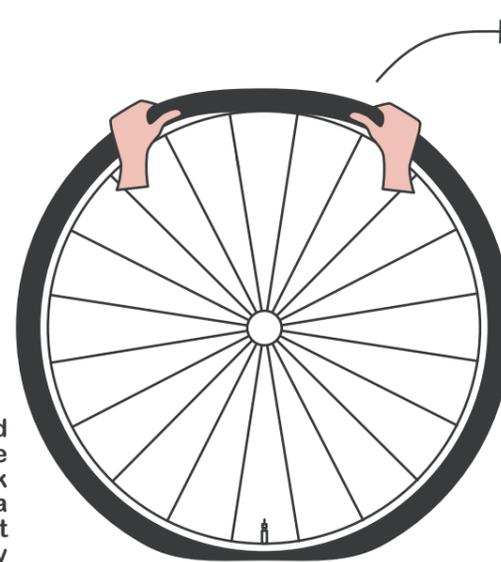
#1 Check the inside of the tyre for a thorn or bit of glass. This is best done by feel, but be careful of your fingers! Also, check that the rim tape is correctly centred and not sitting on the bead seat.

#2 Put some air in the innertube first, just enough that it holds its shape: this makes it easier to not damage it during the process.

#3 Tuck the innertube into the tyre, then insert the valve into its hole, and fit one bead into the rim. Starting from the valve, push the second bead of the tyre into the rim with your hands.



#4 Pump the tyre to under 10psi and visually inspect the tyre to make sure it is seated evenly on the rim - check both sides! Tyres often have a seam-line in the rubber which makes it easy to check that the tyre is evenly seated.



#5 Check your tyre's recommended pressure and inflate to near the upper limit.

## FIX OR REPLACE?

Patches often don't stick if its raining or cold, so always carry a spare innertube. If you puncture, fit the replacement and fix the puncture at home.

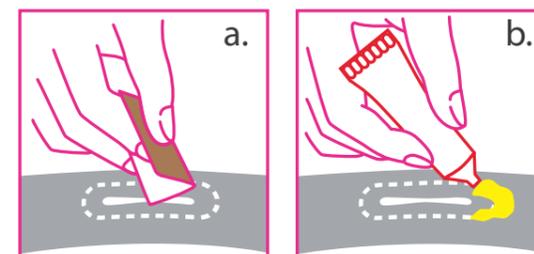
There is no real advantage to replacing an innertube. A patched tube is just as good, so it's really down to cost, convenience and waste.

## #3 FIX THE PUNCTURE

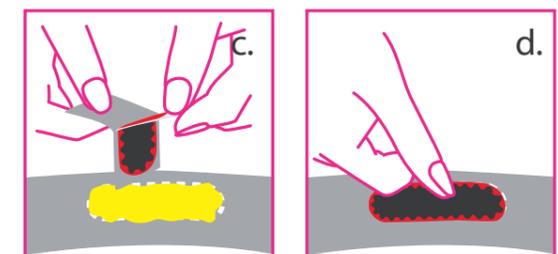
#1 To find the puncture, inflate the tube.

#2 Look for a hole in the tube. If you can't see it try listening or holding the tube near your lips to feel any leaking air.

#3 Mark where the hole is with chalk, a pen or keep your finger on it until you are ready to patch it.



WAIT 5 MINUTES



#4 Patch the puncture.

a. Clean puncture with sandpaper.  
b. Apply thin layer of glue.

c. Peel foil backing off patch.  
d. Press patch firmly onto tube, then remove plastic backing.

## WHAT DO I NEED?

Not much, and nothing very expensive. A new inner tube costs around £6, having a shop fix your puncture costs about £10. All you need to repair a puncture is a puncture repair kit (from £2.50) and a pump (from £2.50).

The cheapest pump that you can get may not be the easiest to pump up balloon tyres, or reach 100psi, but this doesn't mean that you have to spend a fortune to get a good pump.