

Each time you cycle it's worth just giving the brakes a squeeze to check they feel OK before setting off, and spin the pedals backwards to check the bike is in gear and doesn't have a bent derailleur or other gear issue. Then as you ride if you notice anything rattling, grinding or making a noise it's *always* worth investigating for safety's sake and because a problem discovered early and nipped in the bud is often less costly to fix.

On a regularly used bike, every week or two: inspect the tyres for damage and give them a squeeze to check the pressure; check both wheels' quick releases are tight; check the condition and position of brake blocks; check the chain and wipe down and oil if needed (see below).

Every 3 months or so:

- Check the wheel rims and brake blocks for wear, and make sure they're not rubbing on the tyre
- Check and lube gear and brake cables, and adjust if required

There are numerous online videos about how to do basic adjustments to brakes and gears, or Jake's Bikes offers bike maintenance tuition, see www.jakesbikes.co.uk/tuition for details. It's important to get the bike **professionally serviced at least annually**, and more often if it's used regularly. Any unresolved problems or unusual noises, rattles etc. spotted in the meantime should also be investigated by a mechanic.

PROPER LUBRICATION OF YOUR BIKE CHAIN

If your chain squeaks or makes a 'hissing' sound as you pedal it probably requires oiling. Several types of oil are available. Conventional 'wet' oil is a good choice but attracts dirt if too much is applied. 'Dry' oil is thinner and evaporates after it is applied, leaving a low-friction coating (e.g. Teflon) on the chain. This stays clean but is easily washed off so must be reapplied often and is best for summer use. 'Green Oil' is an eco-friendly option which lubricates the chain well but washes off quite easily and must be reapplied a bit more frequently.

Before oiling the chain, wipe off any dirt: hold a rag around the lower length of chain and turn the pedals backwards. Then apply oil sparingly: backpedal whilst continuously applying a small amount of oil to the chain, avoiding the wheel rims and brakes. The aim is to lubricate the entire chain with a minimum of oil. There is no need to oil the cogs. Then take a clean rag and lightly wipe the chain to remove surface oil: lubrication is only required *inside* the chain links, excess oil is counter-productive as it will attract dirt.

A clean and lubricated chain is easier to pedal, less noisy, and will wear out less quickly. During a service the chain will be professionally cleaned using a degreaser which cleans the inside of each of the chain's links.

THE EASY WAY TO DEAL WITH PUNCTURES

You will need: tyre levers; a pump; a puncture repair kit; a spare inner tube; a spanner to remove wheel.

To fix the puncture:

1. Remove the wheel from the bike (disconnecting the brakes if necessary to get the tyre past).
2. Press the valve to deflate the tyre completely if it is not already flat.
3. Use two tyre levers to remove one complete bead (side) of the tyre from the wheel rim.
4. Remove the old inner tube completely, roll it up and keep it for repair later (see below).
5. Carefully check the inside of the tyre for thorns, glass, nails etc. Check the rim tape is intact.
6. Slightly inflate the new inner tube and stuff it into the tyre all the way around, and then put the tyre back on the rim, one complete edge first, then the other. **Do not** use tyre levers as this can puncture the tube or damage the tyre. If the tyre is tight, deflate the tube and push the tyre's edge downwards and inwards, into the centre of the wheel rim all the way around to gain an extra few millimetres of slack. See www.jakesbikes.co.uk/video-tube
7. Put the wheel back on the bike, ensuring it is central, and tighten the nuts or quick release. Reconnect the brake and check the brake blocks do not rub on the tyre. Correctly centre the wheel if they do.

When you get home:

1. Inflate the old inner tube and listen for hissing. To find a slow puncture you may need to place the inner tube in a bucket of water and watch for bubbles.
2. Dry off the inner tube. Rough up the whole area around the hole with a small piece of sandpaper.
3. Apply tyre glue to an area larger than the patch and leave it for 10 minutes until it is no longer wet.
4. Select a patch, remove the foil or plastic backing, and press the patch firmly onto the inner tube, especially around its edges. Leave the backing paper in place for 24hrs to allow the glue to dry fully.
5. After removing the backing paper, dust chalk on the area to prevent it sticking to the inside of the tyre. You can now keep this inner tube as a spare for next time you have a puncture.

WHAT KIND OF BICYCLE PUMP IS BEST?

Portable hand-pumps are lightweight and compact, but aren't really powerful enough to fully inflate a road bike's tyres, and the modern hose-less designs tend to allow the valve to flex, easily bending it or breaking it off the inner tube. A floor pump or track pump solves these problems and is ideal to keep at home or work, but is too large to carry around. The simplest solution can be a mini track-pump, the best of both worlds!

DO NOT STORE YOUR BIKE OUTSIDE

Do not leave your bike out of doors on a permanent basis. Cheap bikes have many steel components which will rust within months. All bikes have steel bearings and chains which will rust if exposed to the elements. Other problems include corroded cables, degradation of tyres by sunlight, oil and grease being washed away, and risk of theft. If you do leave your bike outside, it should be protected by a bike shelter or quality tarpaulin.