

Puncture repair

Punctures don't happen that often, but they are the most common form of breakdown so it's worth learning how to mend them.

To mend a puncture:

- 1 Release brake calipers and remove the wheel.
- 2 Use tyre levers, available from bike shops, to remove the tyre.
- 3 Carefully run your fingers around the inside of the tyre to check for sharp objects, such as nails, splinters of glass or thorns. Remove the cause of the puncture and check that there are no more spikes in the tyre.
- 4 Find the hole in the tube, either by pumping it up and holding it underwater to look for bubbles, or by feeling for escaping air.
- 5 Mark the hole with pen or chalk. Use sandpaper or the scratcher from the puncture repair kit to scuff the area around the hole to help secure the glue to the tube.
- 6 Spread glue thinly and evenly over and around the hole and wait for the glue to dry until it feels tacky to touch. Place a patch over the marked hole and apply pressure. (A faster alternative is to use the new glueless patches.)



photo: J Bewley/Sustrans

- 7 Lightly pump up the tube. Place one edge of the tyre around the wheel rim and push the tube's valve into the rim's hole. Starting from the valve, push the rest of the tube into the tyre. Ensure the valve stem is perpendicular to the rim and that the tube isn't twisted. Once the tube is inside the tyre, begin to place the second edge of the tyre onto the rim. About 75% of the tyre will go on easily, the rest will need strong fingers or tyre levers to coax it onto the rim. Take care not to pinch and damage the tube. When complete, pump a little more air into the tube and check that the tube isn't caught between the rim and the tyre.
- 8 Slide the wheel back into place on the bike and tighten the bolts gradually, ensuring that the wheel remains aligned straight to the frame. Reconnect the brakes.
- 9 If you are happy with it, fully pump up the tyre. Take the bike on a short ride, and test that the brakes are still set up correctly

Tip: save time on journeys, by carrying a spare inner tube with you, so that you can mend any punctures when you get home.

Checklist

- ✓ Daily: general check, tyres.
- ✓ Weekly: lubricate moving parts, gears, brakes, levers, chain.
- ✓ Monthly: check tyres & wheels, brakes, gears, steering, pedals and frame.

Further information

Some bike shops, cycle groups and local authorities run courses on bicycle maintenance. Alternatively, you can teach yourself using a good book.

Recommended are:

The Bike Book by Fred Milson (Haynes) ISBN 1-85960-323-8 Includes step-by-step guidance on all aspects of bike care.

Richards 21st Century Bike Book by Richard Ballantine (Pan) ISBN 0-33037717-5 A definitive guide to all aspects of cycling.

Both available from Sustrans and good bookshops.

Other leaflets in this series:

- Cycling: the right bike for you
- Cycling: in different conditions
- Cycling: security matters
- Cycling: sharing your route
- Cycling: with children
- Cycling: finding your way
- Cycling: clothes & accessories

For more copies of this leaflet or others in the series, or for advice on where to cycle, including maps and guides, contact Sustrans on 0117 929 0888 or visit www.sustrans.org.uk

Acknowledgements

Sustrans and Bristol City Council would like to thank the Government of Western Australia for guidance on the preparation of these leaflets and Garlands Cycles, Bristol.



Designed and produced by Visual Technology, Bristol City Council.

Cover & additional photos: Chris Bahn P&S No.024071



Cycling basic bike maintenance





Like any machine, a bicycle will work better and last longer if it is properly maintained. By carrying out certain simple maintenance jobs on a regular basis you can avoid expensive repair, and increase the pleasure of your cycling into the bargain.

Gaining confidence on a bike is generally a lot easier than learning to drive a car. And once you're in the saddle, it's often quicker and easier to get around by bike. This leaflet is one of a series giving tips to help you get going - and enjoy the freedom and convenience of cycling.

Do it yourself

It is advisable to take your bike to an experienced mechanic once a year for a thorough service. However, with a little investment in tools and time, the majority of repair and maintenance jobs can be carried out at home.

What you need

There is a range of bicycle tools available, however all you need to start with are screwdrivers, Allen keys, spanners, a pump, tyre levers, cleaning rags, an old toothbrush, lubricants and a puncture repair kit.

Daily maintenance

Each day you use your bike, give it a quick once-over. In particular, check the condition of the tyres and their pressure.

Weekly maintenance

Lubricate exposed moving parts of the bike, such as the chain and gear mechanisms taking care not to get any on wheel rims or brake blocks. Clean dirt and grease off wheel rims with a cloth and some lubricant spray.



photo: J Bewley/Sustrans

A little chain oil will help your bike run more smoothly

Monthly maintenance

Wheels: Check tyre pressure and condition. Make sure your wheels are properly fastened and in line with the frame.

Brakes: Check the brake blocks for wear and ensure they contact squarely with the rim, not the tyre. Replace worn or frayed brake cables and adjust brakes so that the brake levers don't come into contact with the handlebars when braking hard.

Gears: Check gears work correctly and cables move freely (though it's best to leave gear repairs to a bicycle mechanic). Clean the chain with a rag soaked in degreaser then re-oil.

Steering: Check for looseness in the handlebar and stem and tighten where necessary.

Pedals: Pedals should spin freely so check the pedal axles for looseness and tighten.

Frame: Regularly inspect the frame for any damage. Ensure the seat height is correct and that the seat post bolt is tight.



photo: Paul Challis

It's better to leave bigger repair jobs to the experts!



photo: J Bewley/Sustrans



photo: J Bewley/Sustrans

