Before you set off
Bike Maintenance
Introduction

For safe and happy cycling, it’s important to understand how to check your bicycle before you set off on your journey and how to keep it maintained for optimum performance.

This series of guides, produced by Cycling UK, provides some basic tips on maintenance and repair.

You’ll find most of the common issues covered: the basic checks you should carry out before setting off, the essential tools you should always carry, how to fix a puncture, and how to adjust your brake and gear cables.
But remember, if unsure about your repairs, seek the advice of a qualified mechanic at your local bike shop.
Know your bike

It is recommended that you understand the anatomy of your bike and how each component works.

1. Stem and Bars
2. Brake Levers
3. Gear shifters/Levers
4. Headset
5. Head tube
6. Headset
7. Fork crown
8. Front suspension/forks
9. Tyre
10. Rim
11. Spokes
12. Front hub
13. Down tube
14. Frame
15 Top tube
16 Seat tube
17 Seat post clamp
18 Seat post and seat pin
19 Saddle
20 Cranks
21 Front chainrings
22 Bottom bracket
23 Front derailler
24 Chain
25 Rear derailler
26 Rear cassette
27 Quick release skewer/axle nuts
28 Disk brake (Calliper/Rotor)
It’s important to make sure your bike is safe to ride before every trip.

The M-check is an easy and thorough system that can be applied to any bike to check everything is in good, working order. Starting from assessing your rear tyre and check your bike following the letter M taking in your saddle and brakes.

Here’s what you should do and why it’s important to check each of these areas and components.
Things to look out for in the M Check

- Is the rear derailleur fitted correctly and does it shift smoothly?
- Ensure that the axle nuts/quick release are tight/No side to side play in the hubs
- Are the brakes fitted securely?
- Ensure spokes aren’t loose
- Are the tyres inflated and free from glass, thorns and nails?
- Is the saddle fitted securely and at the right angle?
- Is the seat post clamp tight?
- Is the front derailleur fitted correctly and does it shift smoothly?
- Are the pedals fitted correctly?
- Ensure front and rear suspension travel freely
- Is the frame free from rust damage and cracks?
- Are the brakes working correctly?
- Check right lever (front brake), check left lever (rear brake) - will they stop you in an emergency?
- Ensure that the steering operates freely with no excessive play or obstruction.
- Check the cables do not obstruct steering
- Are the right reflectors fitted?
- Ensure that the nuts/quick release are tight. Leave no side-to-side play in the hubs
- Wheels should be spinning freely and straight

You can also watch our short film to find out how to carry out the M-Check.
3 Lubricating your bike

To keep your bicycle in tip-top condition, we recommend you spend a few minutes each week giving it some love and attention.

All moving parts of a bike require lubrication to work effectively. Many of these are sealed (the bearings for example) so don’t need regular input from us, however others do. These typically include the:

- **chain**
- **cables**
- **mechs**
- **some types of clip in pedals**

By keeping it clean and lubricated, you’ll extend your bike’s life and avoid some more expensive problems and repairs later on.

Only lubricate your bike when it’s dry. If you oil elements when they are wet it can prevent the water from evaporating properly.

**Note:** When lubricating a bike ensure that you avoid getting oil on the brakes and braking surfaces e.g. wheel rims or discs. If there’s oil on these, they will not work effectively and will make the bike dangerous to ride.
The Chain

Use appropriate oil for the chain, to suit the conditions of the season.

Dry and wet variants are available from most manufacturers. Spray on lubricants should be applied behind the sprockets (1); dropper or non-propelled lubricants applied at the lower section of chain (2).

Apply the oil whilst pedalling the drive system backwards, ensuring that all the chain receives some. One full rotation of the chain should be sufficient. Avoid putting too much oil on as it will simply attract dirt and wear the components faster.

After letting the oil seep in for a couple of minutes, rub the chain with a rag.
Moving elements of the front (1) and rear (2) mech appreciate a light lube. These include the pivots and the jockey wheel bearings.

After the oil has dried, rub the mech with a rag to remove excessive oil that could pick up dirt and wear components faster.
Cables

Over time, cables can become stiffer and not run through the outer cable smoothly effectively making braking and changing gear harder and less accurate. To lubricate cables, first free the cable itself.

1. Cable brakes:
Release the brake at the callipers (a). Free the cable from the cable stops by pulling the outer cable away from the stop in the direction of the cable run (b), and then pull the inner cable through the cable stop slot.

2. Gear cables:
Put the mech into a large sprocket or large chainring position, then without pedalling, click the gear levers (shifters) until the mech would have been on the smallest chainring or sprocket. It is important not to pedal, as the chain now holds the mech in position. The cable is now loose and the outer and inner cables can be released as for the brakes above.
3. Using a rag
And focusing just on the areas where an outer cable sits, clean the inner cable (c), then coat with a light oil from the top (d) or use a cable oiler to help push the oil through the outer cable.

4. Re-site the cable
In its original position and replace it within the cable stops. If the position of the mech has slipped whilst lubing the cables, press the mech back up with your fingers to allow cable re-siting.