

Basic safety checks

Carrying out a bicycle check

The bicycle check is necessary to ensure that the bicycle is of a suitable size and fit for the rider and all the components are working effectively. Any major faults should be fixed by a reputable bicycle mechanic. Carry out the bicycle and helmet check using templates provided to aid in familiarising yourself with the necessary steps involved. Identify any parts that require repair or adjustment prior to cycling.

It is important to check the following:

- The frame is in good order – with no rust or cracks
- The frame is the right size – when straddling the bicycle both feet are flat on the ground
- The seat is positioned at the correct height so that toes touch the ground when seated
- The handlebars are tight and secure - twist them to make sure they do not move independently of the wheel
- The handlebar grips are covering the ends of the handlebars
- The headset and stem are tight and secure with no movement
- The front and back brakes work well - make sure the brake pads are not too worn and are making good contact with the rims. The brake levers shouldn't pull too far towards the handlebar grips
- The wheel nuts are tight and the wheels spin freely
- Tyres are in good condition and correctly inflated
- The pedals spin freely and are not loose
- The chain is lightly oiled and not too slack
- The spokes are not broken or missing and wheels are not buckled
- The reflectors are visible, secure and clean
- The front and rear shock absorbers are working effectively (if applicable)
- The bicycle has a bell

You should not cycle if your helmet, bicycle or safety equipment does not meet the legal requirements, or has any other serious faults.



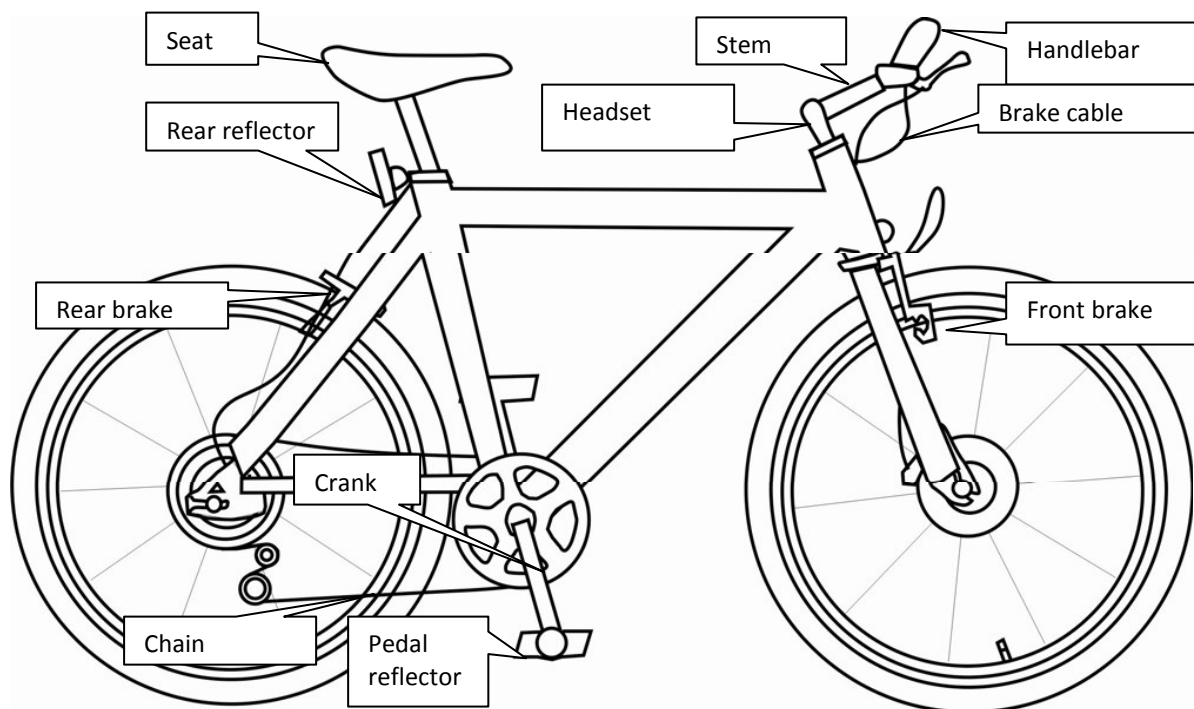
Bicycle inspection template

Type of bicycle (circle): BMX / road / mountain / other.....

Frame or identification number:

The purpose of this helmet and bicycle check is to examine the condition of the equipment prior to riding your bicycle. (Major faults must be fixed by a bicycle mechanic). Please use this template as a guideline.

Checklist	Pass	Fail/Adjust	Notes
Helmet			
Frame condition			
Frame size			
Seat, secure & height			
Handlebars secure			
Headset & stem			
Front Brakes			
Rear Brakes			
Wheels			
Pedals			
Chain			
Tyres			
Bell			
Reflectors			



Carry out a helmet check

It is a legal requirement to wear a standards-approved helmet and ensure that it is correctly fitted. The cycle helmet must be the correct size with little or no wobble when fitted on head. The shell and polystyrene of the helmet must be in good condition and should not be cracked or damaged, and the straps and buckles must be in good order (not frayed or broken). There should also be a standards-approved sticker on the helmet. Examples of the approved stickers are shown.



Australian standards approved sticker

Fitting

To check the size of the helmet, ensure that it touches the head all the way around the rim. The helmet should sit flat and square on the head, with the rim of the helmet 1–1.5cm above the eyebrows. It should be unable to be pulled back to expose the forehead and not be tilted forward, back or sideways. Chin and back straps should run in straight lines from the rim of the helmet, and meet on the jaw, below and to the front of the ear lobe. The straps must buckle up under the chin, not on the jaw. The chin strap should be firm but not too tight.

How to fix a flat tyre

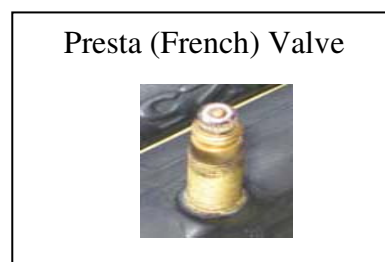
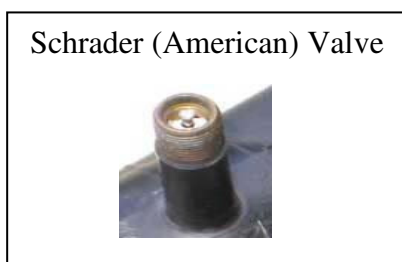
What you need

To fix a puncture, you'll need tyre leavers, a pump (make sure it's set up for the valves on your tyres), a repair kit (sandpaper, glue, chalk and patches) and / or a spare inner tube. Unless you have quick-release wheels, you'll need a spanner

What to do

It's far easier to fix a flat with the wheel off the bike, so start by disconnecting the brakes and removing the wheel from the bike.

1. Remove the valve cap (and, for Presta valves, the locknut at the base).
If air remains in the tyre, deflate it by pressing the pin at the top (for Presta valves, first unscrew the nut on the pin)





2. Use tyre levers to remove one side of the tyre from the wheel rim.



3. Slip the valve through the hole in the rim and remove the inner tube from the tyre

4. To locate the puncture, pump air into the tube and listen for air hissing out. If the puncture is really small, you might need to submerge the tube in a tub of water and look for bubbles to find the hole. Once you've found the puncture, mark it with chalk then examine the tyre to find the cause of the puncture. Remove any sharp objects like shards of glass or nails.



5. Use sandpaper or a metal rasp on the area immediately surrounding the puncture. This cleans dirt away and helps the patch to adhere.

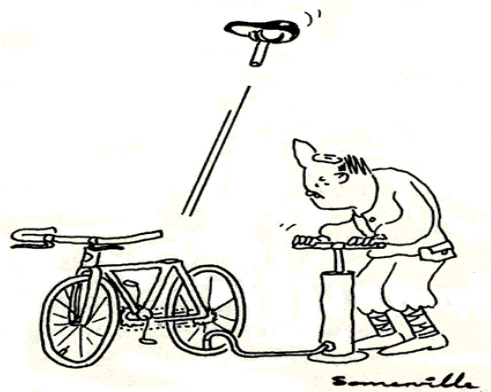
6. Choose a suitable sized patch (smaller is usually better). Apply an even coating of glue to an area slightly larger than the patch. Allow the glue to dry until it's tacky to the touch (about five minutes).



7. Remove foil from the back of the patch and press the patch firmly over the puncture, maintaining pressure for around a minute. Use the rounded edge of a tyre lever or your fingernail to press down the edges of the patch. The patch should fuse completely with the tube, leaving no loose edges

8. To refit the tube in the tyre, it helps to replace one side of tyre onto the wheel rim. Inflate the tube just a little - so that it holds some shape. Position the valve through the hole in the rim, ensuring it's straight and not on a slant. Fit the tube evenly back into the tyre. Don't squash the tube - if it seems too big, deflate it slightly and work it around.

9. Work the tyre back onto the wheel rim. First check that the rim tape still covers the spoke nipples (bolts) in the rim. Next, hold the wheel in front of you with one side of the tyre sitting on the wheel rim and the tube fitted inside. The valve should be straight. Use your thumbs to work the tyre onto the rim, starting at the valve. Avoid pinching the tube between the tyre and the rim. If necessary, deflate the tube a little towards the end and, if it's still too tight, use tyre levers to ease the last section onto the rim - carefully.





10. If necessary, check the tube isn't pinched between the tyre and the rim: work around both sides of the tyre, pulling it back to look (a pinched tube will explode loudly when it's pumped up).

11. Pump up the tyre (replacing the locknut on Presta valves). On Presta valves, tighten the nut after pumping. Replace the valve cap.

12. Replace the wheel and reconnect the brakes.

How to clean your bike

1. The best way to wash your bike is to get it up off the ground and into a stand. If no stand is available, hanging the bike from the saddle works.

Mix up a hot bucket of water and some car wash. There are specific bike wash products if you want to use these. Don't use dishwashing detergent as many are loaded with sodium. Grab the sponge and start working over the big areas on your bike.

Then do the same with wheels, spokes and tyres. Here, take a bottle brush to get at hubs and the spaces between spokes on the rim.

If there are a few grease spots on the frame or components, put some degreaser on a rag and wipe off. Now can be a good time to degrease the chain as well, followed by another wash off around the area with soapy water. Never use a power washer on a bike.

Finish off with a rinse of clean water.

2. Once your bike is dry, consider giving it some protection from the elements. Car wax or specific bike polishes work great. Apply a layer to the frame and fork and allow it to dry. Buff it off with a clean cloth.

Avoid applying polishes to contact areas (i.e. saddles, grips, tape, tyres, etc.) and braking surfaces.



How to lube your drive chain (chain)

What you need

Degreaser
Rags (cotton works best)
Protective gloves
Old toothbrush
Lubricant

What to do

1. Like everything on your bike, you should look at your drive train once in a while. If it's starting to look like a tar pit, it may be time to give it a scrub. Chains and cogs pick up contaminants from the road and build up. These nasties get down into the internals of your chain and when mixed with lubricants, create a grinding paste which rips through the rollers and pins.

Be wary of chemicals being used. Degreasers are fabulous for removing old lube from chains but they also strip moisture from your skin as well! Wear a pair of nitrile or latex gloves to combat this.

2. Grab your rag and your degreaser. Degreasers come in many forms. Citrus based degreasers are good at home and are environmentally friendly. Use them at full strength. Kerosene works well but please be careful with it in regard to your health and mother earths. If you like, products such as WD40 or Inox work as effective degreasers and are easy to handle.

Pour or spray an appropriate amount of degreaser onto a rag. Wrap the rag around the chain just in front of the derailleur on the bottom section. Rotate the pedals backwards and watch the mess come off. If the rag loads up, find a clean spot, apply more degreaser and repeat. If you have a heavy build-up of road grime, an old toothbrush soaked in degreaser will assist nicely.



3. Many different types of lubrication are available on the market. Choose something which is formulated for bicycles. Lubricants suitable for other applications are marginally suitable. 'Wet' lubricants such as Tri Flow and Pedros Syn Lube are a traditional lube which holds up well in wet conditions and can tend to hold onto chains longer.

'Dry' lubricants such as Rock 'n' Roll and Pedros Ice Wax are a lube designed to 'clean' your chain as you ride and reduce build up. They can be tricky to apply and the procedure listed must be followed. They are great for dry conditions.