

A guide for new and rusty riders





Introduction

The Department of Planning, Transport and Infrastructure is committed to safer, greener and more active travel in South Australian communities and encouraging more people to cycle instead.

Getting started or dusting off the cobwebs? This guide is for you.

This guide provides practical information for people of all ages looking to ride for transport. It will be useful for 'rusty' riders and for those with limited experience of riding. For more detailed information on the particular cycling road rules of South Australia, refer to 'Cycling and the Law'.

It's easy to start a riding habit. All you need is a bike, a helmet and some basic know-how. There's no need for special riding clothes or expensive equipment. Read on for many helpful tips to prepare yourself and your bike for safe, comfortable riding.



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Types of bikes

You need to consider:

- > how often you will ride
- > the terrain (on-road, off-road, hilly or flat)
- > how far you will be riding
- > the type of trips e.g. commuting, shopping, recreational
- > additional needs e.g. carrying bags, lights for night riding.

A bike shop can be very helpful in finding the right solution for your needs and budget. Not only can they sell you a new bike, they can help make sure an old or second-hand bike is fully roadworthy.

TRY BEFORE YOU BUY

If you're unsure which bike is right for you, why not borrow one for a trial run? Ask a friend or family member, or hire a free bike from Adelaide Free Bikes at a range of locations across Adelaide. For details visit www.bikesa.asn.au/

AdelaideFreeBikes

The following descriptions cover most bikes that are available and will help you to decide what is best for you.

ROAD BIKES

Road bikes are generally light and provide good handling. Their narrow tyres are suited for road use and are great if you're looking for a fast ride. The dropped handlebars allow multiple hand positions and the large range of gears is useful for commuting to work, racing or touring.



CITY, COMFORT OR STEPTHROUGH STYLE BIKES

This broad style of bike often comes fitted with accessories (such as pannier racks and front basket) and is great for trips to the local shops. They have durable components such as internal hubs and may have fewer gears than other styles.





MOUNTAIN BIKES

Mountain bikes are generally versatile enough to be used both on and off road. They have a large range of gears and flat handlebars, making them a comfortable, easy ride.

Their design incorporates front and sometimes rear suspension to tackle rough paths, and wide tyres with knobbly tread to maintain grip.

This means more exertion is needed to achieve speed on-road, although fitting 'slicks' (smoother tyres) can help.

HYBRID BIKES AND FLAT BAR ROAD BIKES

Hybrid bikes combine components of road and mountain bikes to make them suitable for both urban street riding and moderate off-road riding. They feature limited suspension and an upright riding position with flat handlebars, to make riding comfortable and allow the rider to easily see, and be seen, in traffic.

For commuting or shopping trips consider adding accessories such as racks, panniers and mudguards. The smooth tyres allow for more speed than a mountain bike but are not as thin as on a road bike.





FOLD UP BIKES

Lightweight folding bikes are portable and easy to use and store. For short trips and combined journeys, these multipurpose bikes can be put in the car boot or taken on some public transport. The fold-and-carry nature is also great if you have little space at home for storage or you're unsure if your destination has secure bike parking. These bikes feature a small number of gears to assist with city riding and have a low, step-through frame for easy dismounting.



POWER ASSISTED PEDAL BIKES

More people are choosing modern power assisted bikes as a commuting option. A small attached motor can be used when necessary, meaning you could ride uphill to work without breaking into a sweat. Most feature a quiet electric motor powered by a rechargeable battery, which makes them heavier than a standard bike.

There is also a power assisted bicycle (or pedal cycle) that meets the European standard for a Pedelec. These pedal cycles have up to 250 watts of power and this power is controlled by the rider using the pedals. Specialist bike shops can help you with more information.

DOWNHILL, BMX, TRICK BIKES AND CRUISER BIKES

These are not ideal for commuting, cruiser and trick bikes having limited gearing and low seat position. BMXs have particularly small wheels, making long trips uncomfortable. Designed for extreme off-road conditions, downhill mountain bikes are often heavy, have a limited number of gears and very knobbly tyres.

SINGLE SPEED BIKES

These bikes have become an increasingly popular choice in Adelaide. They are simple to use and maintain and are suited to our relatively flat terrain. Low-tech clean lines and often retro styling make the single speed bike a statement in style.



Finding the right fit

The comfort, handling and efficiency of your bike all rely on the right fit. Bike frames come in different sizes, while seats and handlebars can be changed or adjusted to suit your body.

If you are buying a bike for a child, the appropriate size is important for safety and enjoyment. Oversized bikes are difficult to handle and dangerous, so don't buy a bike for a child to 'grow into'.

Bike stores offer expert advice on the right size and setup for you. Bikes are sized either in a number scale (inches or centimetres) or in categories (e.g. small, medium or large). If you find riding causes physical discomfort, seek assistance in adjusting your bike.

To test the fit yourself start by straddling the bike with your feet flat on the ground. If you can't easily reach the ground, it's too big. You should also consider the length of the frame. This affects how far you have to reach for the handlebars.





SEAT HEIGHT

Adjust the seat so that your leg is just less than fully extended at the bottom of the pedal stroke. This prevents you tilting your hips to reach the pedals.

HANDLEBAR HEIGHT

This depends on the type of riding and personal preference. Lower handlebars put you in a more crouched position for high speed riding. Higher handlebars put you in a more straight backed position, providing greater comfort and helping you easily see, and be seen, in traffic. Handlebars are often adjustable and should be set so arms are slightly bent and your body leans forward.

Dusting off your old bike

DO YOU HAVE AN OLD BIKE GATHERING DUST SOMEWHERE?

It could be suitable for your needs. Here's what you should consider

IS IT SUITABLE FOR THE TYPE OF RIDING YOU WISH TO DO?

Refer to the previous subsection, Types of bikes.

IS IT ROADWORTHY?

Check tyres and inner tubes for punctures and deterioration. Check brakes, gears and chain for corrosion, ease of movement and correct tension.

Your bike will likely require cleaning and lubrication as a minimum. The *Maintaining your bike* section has more information, plus a quick safety check and basic repair instructions, such as replacing a tube or tyre.

If you're not confident that the bike is suitable and roadworthy, take it to a bike store for advice. Most will provide a free appraisal and quote for any necessary repairs. This will help you decide whether to use your old bike or look for another. If you do decide that a new bike is in order, there are many charities that accept donated bikes.



Buying a new bike

Bikes have advanced considerably in recent years. As a form of reliable transport they represent excellent value for money. Many affordable new bikes include improvements such as lighter weight components, smooth gears, suspension and disc brakes.

A bike store can supply accessories as well as provide maintenance and servicing. There are local bike stores throughout South Australia and most offer a complimentary first service several months after the bike purchase. Buying a bike online is another option and might save you money. However, consider that you may have to assemble all or part of it yourself, and you won't have the chance to test it first for comfort and fit.

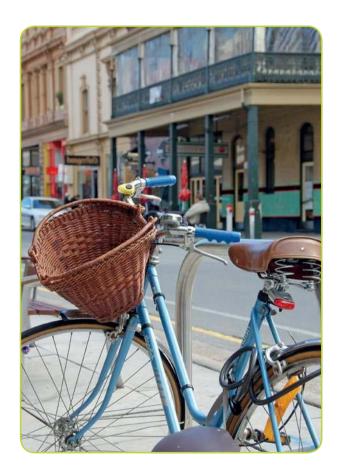


Buying second hand

Used bikes are available from a range of sources including online bike retailers, classifieds, second hand dealers such as not for profit organisations and online auction sites, as well as some bike stores. You might find a bargain, but remember it's only a good deal if it meets some important criteria.

Is the bike suitable for your needs? Is it the right size? (see *Finding the right fit*). Is it roadworthy? Has it been put together from second hand parts? Check for a bent, dented or cracked frame or forks, with particular focus on the joins or welds.

Look for rust, wear or distortion of components. While these can be replaced, it can be more expensive to fix an old bike than to buy a new one. A bike shop may be able to give you advice and an indication of cost on repairs and replacement parts.



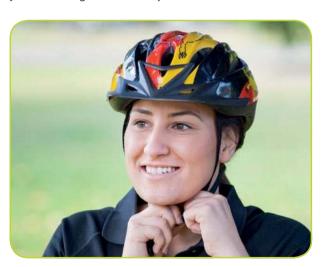


Required by law

HELMET

When riding you must wear a helmet. It must comply with Australian standard AS/NZ2063, be properly adjusted and securely fastened. A helmet must also be worn by any passenger, such as a child in a carrier seat or trailer.

A correct fit is important. Your local bike shop can help you find the right size and adjust it for best fit.



TIPS FOR CORRECT FIT

- 1. Position the helmet so that it protects the forehead (10 to 15mm above your eyebrows).
- Tighten helmet at red button or at the adjustment point at the back of the helmet.
- Fasten the strap under the chin, with one finger width ease between strap and chin.
- 4. Tighten the straps so that they are both firm and comfortable. The plastic slide should make the straps meet just below the ears.
- The helmet should fit securely and be unable to slide forwards, backwards or side to side.

In the event of a crash, you should purchase a new helmet even if damage is not visible. The foam in your helmet provides protection by absorbing the impact. This impact compresses the foam, reducing its future effectiveness.



WARNING DEVICES

Every bike must have an effective warning device such as a bell or horn, in working order and easy to reach, to alert others of your approach.

REFLECTORS AND LIGHTS

By law your bike must have a red rear reflector that is clearly visible for at least 50 metres from the rear, when light is projected onto it by low beam.

If you ride your bike at night or in weather with reduced visibility, such as heavy rain or fog, you must have (on you or your bike):

- a front flashing or steady white light that is clearly visible at least 200 metres from the front of the bike
- a rear flashing or steady red light that is clearly visible at least 200 metres from the rear of the bike.

These are the minimum accessories required and you may wish to use further lights, reflectors and reflective clothing to increase your own safety.

Safety can also be increased by positioning your lights to allow for maximum visibility. This can be achieved by tilting them down to illuminate the road ahead of you.

Optional accessories

The right accessories allow you to transport gear, fix mechanical breakdowns, improve safety and comfort.

TOOL KIT

A good basic kit would include tyre levers, spare tube/ puncture repair kit, pump and multipurpose tool. This allows for minor adjustments and puncture repair.

PUMP

A small hand pump can be attached to your bike or carried in a backpack or pocket and will cover both Presta (mostly road bike tubes) and Schraeder valves (same as a car valve) which are used most commonly on other bike types.

Another popular option is a CO² inflator, which works by providing pressurised gas to instantly inflate a repaired flat tyre.



OPTIONS FOR CARRYING YOUR GEAR

- Under seat bags these are attached to the seat and are normally only big enough to store your tool kit, plus carry small essentials like keys and money while you ride.
- > Backpacks if you're using a backpack regularly, investing in a cycling/walking specific backpack will be most comfortable. Most have straps across the chest and around the waist to ensure the bag doesn't slip around.
- > Baskets attached to the handlebars, baskets are handy for carrying various items when running errands locally.
- > Panniers these removable 'saddlebags' allow you to stow gear on the sides of your bike. Having panniers on both sides creates an even weight distribution.
- > Racks a rack is generally attached behind the seat. Here, you can hang panniers or strap a bag.
- > Trailers these can be used for larger items or even a child (with helmet).

WATER BOTTLE

It's important to stay hydrated when riding. Most bikes will come with a water bottle holder or can easily have one installed.

MUDGUARDS

During wet weather, mudguards will protect you from road spray and can generally be easily fitted and removed.

BIKE COMPUTER

If you're curious about how far or fast you're travelling, check out the variety of bike computers at your local bike shop.

MIRRORS

Some commuters like to use mirrors for added safety. Options include small mirrors that click onto handlebars and lenses that attach to helmets.

LOCK

The right type of lock may depend on whether it will be carried with you or stay attached to a permanent fixture e.g. a bike rail at your workplace. Options include cables and D locks. A bike shop can help you decide.

CHILD SEATS, TRAILERS AND 'TAG ALONGS'

Young children can sit in a child carrier seat attached to the rear or front of your bike, or can travel in a trailer. Slightly older children can ride a 'tag along' which attaches to your bike. Passengers must wear a helmet and any straps or buckles on seats or trailers must be securely fastened.



BIKE RACKS FOR CARS

Specialised bike racks, either as roof rack or tow bar attachments, allow you to transport your bike by car. Detailed information on the rules relating to trailers and racks is found in *Cycling and the Law*. By removing the front wheel, many bikes will fit in a car.





WHAT TO WEAR

- Suitable clothes you don't need to wear lycra or cycling shoes to ride a bike, but comfort and mobility are important. Short distances can be completed in your work attire or everyday clothes. For longer distances, padded bike shorts (knicks) can increase comfort. For night riding, light or bright coloured clothing, reflective yests and/or arm bands are recommended.
- Gloves wearing gloves will protect your hands from the elements and increase comfort and safety.
- Footwear if you are travelling for long distances you may want to invest in riding-specific shoes. Stiff-soled shoes with optional cleats (that slot or clip into pedals) increase pedalling efficiency. Some incorporate a recessed cleat with a flush sole, for walking comfort.
- Sunglasses these will keep insects, road debris and rain at bay as well as providing relief from sun glare.

Bicycle parts





Plan your route

Be prepared to start small by riding just a day or two a week, and build from there as your confidence and fitness grow.

Before beginning a regular bike trip, it's a good idea to plan your journey. Route selection depends on your level of riding experience, personal preference and access to bike lanes, paths and trails.

If you know someone who rides to your destination regularly, ask for advice. You may pick up some great tips on where to ride, park, shower and change if necessary. Most regular riders are happy to share tips to help others get started.

Some riders prefer riding on main roads for a direct route to their destination while others prefer local streets and off-road paths. Whichever you choose, consider doing a trial ride on a weekend, to check your route's suitability and the time it will take.

If you're riding within the Adelaide metropolitan area, plan your trip using the **Bikedirect** network, which includes main roads, bike lanes, local streets, off-road and unsealed paths.

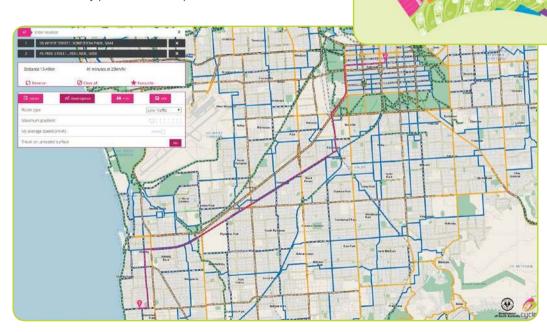
The *Cycle Instead Journey Planner* is an interactive tool which generates cycling routes using the **Bikedirect** network, allowing you to choose a variety of options that take into account fitness and confidence levels, road conditions and speed of travel.

These are available online: www.cycleinstead.com.au

If you prefer a hard copy, Cycling and Walking Maps complement the online Bikedirect maps. These six compact guides cover the majority of metropolitan Adelaide and are available from:

DPTI.TravelSmartSA@sa.gov.au

Outside the metropolitan area, organisations such as councils may provide local maps.



Riding for local trips

Think of a short trip you currently use the car for – could you ride instead? With some preparation you could ride to:

- > the local shops
- > sports practice or the gym
- the movies
- > catch up with friends or family
- > school with your children.

You'll be supporting local business, getting some exercise and avoiding the hazards and hassles of carparks.

Riding with your children is a great way to teach them how to ride safely. Quiet local roads and off-road paths provide a good learning environment. Changes to regulations also now mean that people of all ages are permitted to ride bicycles on footpaths (unless there is a sign stating otherwise) making it even easier for you and your family to enjoy riding together.

For more information and videos about supporting children to ride bikes go to www.dpti.sa.gov.au/Way2Go



Bike parking, security and insurance



If you are leaving your bike in a public area, try to choose a well lit place in full public view. Always lock your bike to an immovable object (parking rail if possible) with a good quality lock, even when only leaving it for a short time. Lock the frame and wheels to the rail. If security is important you may also want to remove accessories such as lights, pump, pannier bags or bike computers.

The following precautions can improve the chances of your bike being recovered if stolen:

- engrave your driver's licence number on the base of the frame (or a relative or friend's licence number)
- record the bike's serial number which is found under the bottom of the bike
- > keep a photograph or description of the bike (bike brand, model, size and colour).

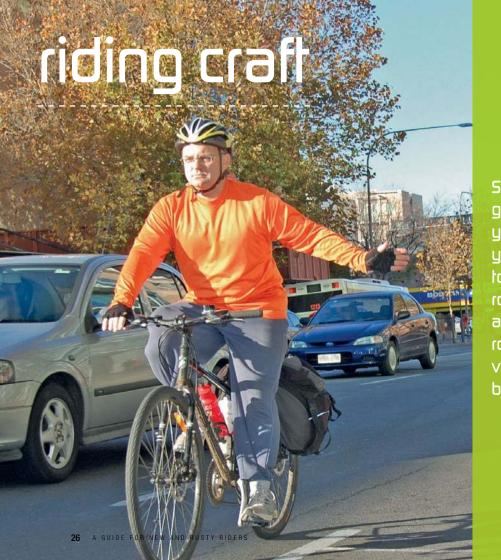
Some household insurance polices may cover your bike against theft. Some also provide public and personal liability coverage if you injure someone else or damage someone else's property whilst riding. Refer to your insurance policy or contact your insurance company for details. A number of cycling organisations provide third party public liability insurance and personal accident insurance.

Bikes and public transport in Adelaide

If your journey is too long to ride, why not combine riding with public transport? You may be able to ride to a public transport interchange and store your bike safely in a bike locker or cage. New secure bike cages are now available for use by those with a registered Metrocard at some of Adelaide's most popular public transport locations. You can also take your bike on a train for a low cost at peak travel times and free during off-peak times and weekends.

Visit the Adelaide Metro website **www.adelaidemetro. com.au** or call their infoline on 1300 311 108 for information on lockers, cages, timetables and public transport journey planning.





So, you have your bike and gear ready. You've planned your trips and routes. Do you feel confident enough to head straight out onto the road? As a bike rider, you are more exposed on the road than drivers in motor vehicles, so it's important to be aware and skilled.

Ride within your limits

Before you head out into traffic, be sure you are confident with balance, changing gears, cornering and braking. If you're new to riding on the road, or it's been a while since you rode in traffic, start by riding along off-road paths or quieter local roads. Take it at your own pace.

A number of organisations in South Australia deliver bike training courses to help you gain the skills and confidence for an enjoyable and safe ride.

Riding is an increasingly popular recreational activity and transport option. You're bound to know, work or study with someone who rides and who can offer you tips, or even become a bike buddy.





Know your road rules and responsibilities

Remember that a bike is a legal road vehicle. Bike riders have the same responsibilities and must obey the same rules as motor vehicle drivers.

The Driver's Handbook outlines all your road safety responsibilities and road rules while **Cycling and the Law** details all rules specific to bike riders. Both are available online: see the back of this guide.

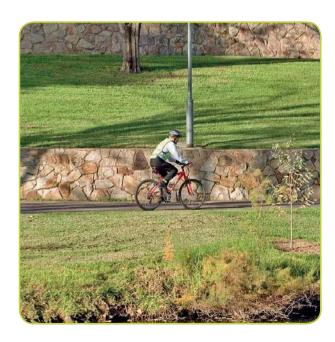
Recent years have seen new road treatments for bike riders installed through the Adelaide CBD such as bike boxes, priority signals and segregated bicycle lanes. Both of these publications give information on how to use them.

Be alert and aware

Riding in traffic requires you to be alert at all times.

- Make eye contact with other road users to ensure they have seen you.
- When riding past vehicles that are stationary be mindful of gaps in the traffic. Sometimes cars turn through these gaps in stationary traffic placing you in a dangerous position.
- If you are planning to overtake someone remember to use your bell for safety and courtesy.
- Give way to pedestrians when you are using shared use paths.
- Listening to music through headphones whilst riding does not allow you to have your full attention on the road.
- Constantly observe the traffic so you are aware of what's going on around you.
- Watch for people in parked cars who might open a door in front of you, and for motor vehicles reversing out of driveways. Do not assume they have seen you so leave a safe distance.
- Pedestrians may not see or hear you coming. On busy streets they may step out suddenly from between parked cars.

- Constantly check your riding environment for road debris, pot holes and uneven surfaces.
- In the rain, road markings, train and tram tracks and petrol spills can become slippery.



Be confident, predictable and considerate

Stay safer by ensuring that other road users are aware of your intentions.

- > Ride predictably and confidently.
- > Use hand signals and don't weave in and out of traffic.
- Use your bell or voice to alert other road users of your approach.
- You may ride abreast another cyclist but not more than 1.5 metres apart. Always be considerate of other road users.



Be seen

Make it easy for motorists to see you well in advance.

- Although the law states that you must ride as close to the left as practicable, give yourself room to ride out from the kerb to avoid debris in the gutter and to be more visible for motorists.
- > When stopped at an intersection, position yourself so you can be seen by other road users.
- > Don't ride too closely behind vehicles or in blind spots.
- Wear light or bright coloured clothing/items for daytime riding and reflective clothing/items for night-time rides.





Basic bike maintenance

A QUICK CHECK

Whilst it's a good idea to complete this check every time you ride, pay particular attention if you haven't had a ride on the bike recently, or have removed and replaced any components:

- check tyre pressure. Tyres should feel firm if squeezed hard. Firm tyres make riding easier and reduce the risk of punctures
- check that the seat height is correct for you and the seat post is firmly inserted
- check that both wheels are securely fastened and that quick release levers (if you have them) are tight and in the closed position, parallel to the front forks (front) or seat stay (rear)
- check the brake action by applying front and rear brakes, test riding carefully if unsure.

BASIC BIKE TOOLKIT

Most basic maintenance can be undertaken at home, using a few simple tools:

- > puncture repair kit
- tyre levers
- allen keys or multi tool
- spanners and a screwdriver
- cleaning rags and brush
- > bike specific lubricant
- floor pump (if you become a regular rider, a floor pump left at home will enable you to easily pump your tyres up to their recommended pressure).

Routine maintenance

Around once a month, depending on use, perform these maintenance tasks.

CHECK WHEELS AND TYRES

Check tyre pressure. The setting is written on the tyre's sidewall. Check for wear or cracks in the tyre rubber. Lift the bike and spin the wheels, observing any distortion in the rotation. If you have a buckled wheel, take it to a bike store.

DROP TEST AND FRAME CHECK

Hold the bike around 10-15cm off the ground. Then, while loosely supporting the frame, allow the bike to 'drop' to the ground. Listen and feel for any looseness in components. If detected, tighten using the appropriate spanner or allen key/multi tool. Pay particular attention to the handlebars and stem. Make a close visual inspection of the weld points on the frame for cracks.

BRAKE ADJUSTMENT

When braking hard, there should still be clearance between the brake lever and the handlebar. Use the cable adjustment screw on the brake lever to tighten if necessary. Make a visual inspection of brake pads or disc pads.

If brake pads are worn below grooves replace them. Disc pads can be difficult to replace if worn below the recommended thickness. Consult a bike shop for replacements.

CLEANING AND LUBRICATION

Use a cloth, brush or chain cleaning tool and a solvent/ degreaser to clean the chain. Apply a bike specific lubricant (don't use mineral oils such as car oil, as they attract dirt). Trickle lubricant onto each chain link, all cables, pivot points and wipe external surfaces with a cloth or paper towel. Cleaning and lubrication should be done more often when riding in wet or dirty conditions.

LIGHTS

Check operation and replace bike light batteries as soon as they become dim (see the Accessories section).

Professional bike servicing

Bike stores offer professional servicing, generally undertaken by qualified mechanics. This will help keep the more complex and inaccessible workings of your bike, like gears and bearings, in great condition. If you purchase a bike from a bike store you will generally be provided with a complimentary service after several months.

More information on bike maintenance is available from bookshops, libraries and the internet. In addition there are various organisations in South Australia that offer basic and advanced bike maintenance training. Ask at your local bike shop for details.



Fixing a flat tyre

Chances are you will get a puncture at some time. Knowing how to confidently repair a puncture makes it an inconvenience rather than a disaster.

The best approach is to carry a spare tube as well as a puncture repair kit and a pump. Replace the tube on the roadside and take the punctured tube home to discard or fix at your leisure.

Here's a quick guide to changing a tube and fixing a puncture. It's a good idea to practise this at home a few times before you find yourself needing to do it on the roadside.

REMOVE THE WHEEL

Turn the bike over, release or loosen the brake callipers, undo the wheel fastening (loosen the quick release or undo bolts on wheel). For the rear wheel, move the chain to the smallest gear of the chain wheel and cluster. Remove the wheel

REMOVE THE TYRE

Release one side of the tyre from the rim using tyre levers as shown and pull the tube out, starting at the valve.

FIND THE CAUSE

Check outside the tyre for obvious culprits such as thorns or nails. Carefully feel inside the tyre for sharp points. If you find the cause, remove it and proceed with installing your new tube.







INSTALLING A NEW OR REPAIRED TUBE

Start inserting the tube between the wheel rim and tyre, at the point where the valve goes through the rim hole. Then work your way around to insert the whole tube into the rim, making sure no tube protrudes. Take care to ensure the valve is seated correctly through the hole in the rim. Use hands and tyre levers to push the tyre back inside the wheel rim. Inflate to correct pressure. Reinstall the wheel and don't forget to re-tighten your brakes if you loosened them.



If you have found the puncture site, begin with the repair. If not, reinflate the tube and check the valve. If that seems fine, hold the tube under water in a bucket, looking for bubbles to indicate the puncture site, and mark when found. Sandpaper the area immediately surrounding the hole. Spread glue over the scratched area slightly larger than the patch size and leave 5 minutes for the glue to become tacky. Remove the foil cover from the patch and apply to the glued area firmly. If possible, allow to set under pressure (use a clamp or heavy object) overnight.











- > Cycling and the Law
- Road Traffic Act and Regulations
- > Bikedirect network
- Cycling and Walking Maps
- > Cycle Instead Journey Planner

The Department of Planning, Transport and Infrastructure

www.dpti.sa.gov.au/cycling email DPTI.enquiriesadministrator@sa.gov.au phone 131 084

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Cycle Instead... it's easier than you think

www.dpti.sa.gov.au/cycling

