

Punctures on a Bike

There is nothing worse than getting a puncture on a ride especially if it is raining. Generally there are two types of puncture: that slow leak that takes 20 minutes to go down while riding and that sudden phiss, phiss, phiss as you ride over a piece of glass. If you are riding in a bunch call "puncture" and try to slow and stop gently without causing injury. If you are riding on the right hand side of the bunch then move to the right and let the bunch pass on the left. When all the riders have passed by move safely to the left and stop. Hopefully the rest of the bunch will stop and wait.

To remove the wheel, loosen the brakes via the lever on the brakes where the cable attaches for Shimano, or the push lever on the brake lever for Campagnolo. Mountain bikes generally require the V-brakes to be squeezed at the wheel by hand and unclipping the cable. If a rear wheel needs to be removed then move the chain to the small ring at the front and the small cog at the back. Loosen the skewer and the wheel should drop out without touching the chain. The skewer on the front wheel will need to be loosened then undone about 4-6 turns also. The wheel should drop out also. Have a quick look at the tyre and see if anything obvious has caused the puncture. If you see some glass it can be removed but make a note of where on the tyre it was.

To remove the tyre unscrew the valve and let any remaining air out. Push the tyre off the bead of the rim towards the centre of the rim on both sides to allow your tyre levers to fit in. Some of the expensive race tyres just about fall off the rim when they are not inflated. Other tyres require 2-3 tyre levers to remove the tyre. Start opposite the valve and insert 2 tyre levers in the gap between the tyre and the rim. Place one near a spoke and the other one about 50 – 60mm further around. Push the tyre lever in just enough to catch the tyre but not the tube as well. Lever the one near the spoke first and hook the end around the spoke. The tyre should be starting to come off the rim. Generally you have to hold the second lever in place while unclipping the tyre with the first lever. Lever the second one and more of the tyre will be off the rim. If you can move the second lever around the rim away from the first lever then the rest of the tyre should come off the rim. It may be necessary to use the third tyre lever and keep getting small parts of the tyre off the rim. When the tyre is fully off one side then you can remove the first lever if it has not fallen out and start removing the tube from the tyre.

Start opposite the valve when removing the tube from the tyre. Move around towards the valve from both directions. When you are at the valve push the tyre over the top of the tube so the tube and valve can be removed easily. Pump the bad tube up and try to locate where the leak is. When you find the leak place the old tube around the tyre to help yourself locate where the hole in the tyre is. When I fit my tyres I place the name label near the valve to use as a reference point when locating punctures. Carefully inspect the area for any debris (usually glass). Sometimes you have to run your finger around the inside of the tyre to find the glass. When found remove from the tyre. I have known riders to carry small tweezers to do this. Sometimes glass is hard to find and it will be necessary to pull the tyre completely off the rim to inspect. If your tyre has a bad cut then you will have to protect your new tube. Place something inside the tyre, between the tyre and tube eg Muesli bar

wrapper, \$5 note wrapped up or your membership card. Anything that may help to get you home. Sticky rubber patches are available from bike shops for this purpose.

When you are sure the tyre is clear then place a small amount of air in your replacement tube. Only a very little amount of air will do. Start at the valve side and push the tyre back over the rim to expose the valve hole. Push the valve through the hole and pull the tyre back over the tube. Carefully work your way around the wheel pushing the tube into the tyre being careful not to twist the tube or fold the tube. Remember only a little air. Let some out if necessary. When the tube is fully in go back to the valve side and push the valve into the tyre slightly to allow you to start sitting the tyre back into the rim. Make sure the valve is at right angles to the rim i.e. not slanting. Keep going around the wheel from both sides away from the valve. Use your thumbs to push the tyre over the rim making sure you don't pinch the tube between the tyre and rim. I usually crouch down with the wheel pushed into my stomach and resting on my knees. You are then pushing the tyre away from you to get over the rim. The last part can get very hard but generally most tyres will pop over the rim. Try to avoid using tyre levers to get the last bit over as you risk pinching the tube. Recheck the valve for straightness and if at an angle generally you can move the tyre around on the rim by holding the spokes and rotating the tyre.

Pump the tube back up now. If you are using a pump try to wrap a finger around a spoke to stabilise the pump preventing the valve from wriggling backwards and forwards as you pump. I sometimes use a post or something to place my finger against while pumping. If you have an air canister then use that. I would try using one at home first though so you know how it works. Some types will get very cold around the valve. Better to try at home the first time than out on the road. Have a check round the wheel to make sure the tyre has seated properly on the rim i.e. no bulges. Refit the wheel to the bike and tighten the skewer and brakes. The back wheel can usually be refitted without touching the chain by locating the chain onto the smallest cog and pulling the wheel up into the frame. Spin the wheel by hand to make sure nothing rubs and change the gears back to an easier cog for starting off. I make sure my skewer is pointing upwards on the front and into the frame at the rear. When tightening the skewer the lever should move easily to horizontal then pull tight from there.

I always carry two spare tubes and wrap them in a plastic bag to prevent chafing. Keep the little valve cover fitted also to stop the valve wearing a hole in your spare. Buy a decent set of tyre levers to use. The soft plastic ones that come with some repair kits are not worth carrying. I have bright coloured ones that are easy to see when you place them on the ground (especially at night). One thing I do while riding is rub my tyres with my fingers to get rid of any debris. I know this will not be for everybody but when doing it I place my thumb on the frame before rubbing the back tyre so as not to jam my fingers between the tyre and frame. There are little wire gadgets you can fit to your bike to catch debris.

Lastly I usually inspect my tyres after every ride for glass and pick bits out. Monthly I will let the pressure out of my tyres and squeeze them to reveal more glass. I would be happy to demonstrate how to replace a tube and repair a puncture. Some of my tubes have 4 patches before they are retired to the garden shed.