

BICYCLE TIRE RESOURCE PAGE

(by Joe Cote © 6/10/2022)

Preventing Flats

1. Regularly check your tire for glass, wires, and cuts.
 - a. Deflate your tire and slowly move around the tire pinching the sidewalls together. Glass will appear as a white speck.
 - b. Check any cuts for something inside. Use a pointy tool to probe the cut.
 - c. Thin wires are the hardest to spot and can cause repeated flats
 - d. Any time you have the tire off the rim, check the inside.
2. Purchase tires that are more puncture resistant (e.g., Continental Gatorskins)
3. Use tubeless tires. They contain a sealant that will fill any holes that form. But they can be tricky to work with.
4. Replace your tires when they get worn. Most new tires have wear marks. Ask how to find your wear marks when you buy the tire.

Removing and Mounting the Tire

1. This video going through the whole process <https://www.youtube.com/watch?v=yi5VSwleWAK>
2. This excellent video provides very useful hints for making tire mounting and removal easier. You should adopt tips 1 and 4 as standard practice. <https://www.youtube.com/watch?v=jvvXrlAUUfU>. Use the same process for removing the tire.

Inflating the Tire

Many riders don't know the ideal pressure for their tires. A common misperception is that higher pressure is better (faster). This is NOT true; higher pressure can actually be slower (see <https://www.renehersecycles.com/myth-16-higher-tire-pressure-is-faster/> for a detailed explanation). Higher tire pressures also result in a rougher ride and more flats. But if your tire pressure is too low, the tire can collapse (roll off the wheel) when cornering (think crash). The ideal tire pressure depends on many factors – most notably your weight and the size tire you are riding.

1. Here is a simple tire pressure calculator <https://cycleschinook.com/tire-pressure-calculator/>
2. Here are some more comprehensive pressure calculators <https://silca.cc/pages/sppc-form> or <https://axs.sram.com/guides/tire/pressure>
3. This is a more detailed explanation of key issues around tire pressure – maybe overkill for the average rider <https://www.bicycling.com/repair/a20009629/4-ways-your-tire-pressure-is-wrong/>

Items You Should Always Carry on a Ride

1. Spare tube
2. Tire levers
3. Tire boot – It isn't common, but sometimes you can get a larger cut in the tire. If the cut is large enough, the tube will bulge from the tire causing it to blow out. I have also seen several cases where the tire wall separates from the bead. You can prevent this by avoiding tires with sidewalls that have cracks or are brittle (rubber not completely smooth and flexible).

If you get a large cut and don't have a tire boot, your ride is done unless you are carrying an extra tire. The tire boot is a piece of thicker material that you put between the tube and the tire. It covers the cut and keeps the tube inside the tire. There are commercially available tire boots such as the Park Tool TB-2 Emergency Tire Boot. Some people just used a folded dollar bill. ANY TIRE BOOT IS A TEMPORARY FIX. It is designed simply to get you home. Take the most direct route home and replace tire before riding your bike again.

4. Inflator

- a. Frame pump – this is a hand operated pump that can be stored on your bike frame. I recommend a frame pump over a CO2 inflator as they are more reliable and don't run out of air (cartridges). You can also better control the amount of air going in the tire.

There are many options, but some are much easier to use than others. The Topeak Mountain Morph (least expensive), Topeak Road Morph G (mid priced) or Topeak Turbo Morph (most expensive) are consistently top rated and very easy to use. They essentially convert into a mini floor pump. Other manufacturers offer this style of pump. I would avoid pumps that only work when you hold them in your hands.

- i. Mountain morph has a larger barrel so it will fill tires faster, but it has no pressure gauge.
 - ii. Road Morph has a tire gauge, but it can be difficult to read. Still very useful for higher pressure road tires.
 - iii. Turbo Morph has the larger barrel and an easy to read dial pressure gauge. If I were purchasing a pump today, this is the pump I would buy.
- b. CO2 inflators make the job much easier, but are not as reliable. I have frequently seen people use all their CO2 cartridges and still not have the tire filled. Also, you need a new CO2 cartridges every time you fill a tire. Be careful about purchasing a CO2 inflator as some are difficult to use. Make certain you test it out. The Genuine Innovations G20310, Ultraflate works well and is intuitive https://www.amazon.com/Genuine-Innovations-G20310-Ultraflate-Inflator/dp/B01LXM2EXF/ref=sr_1_6?crd=2Q9DYK70RCEZI&keywords=co2+inflator+bicycle&qid=1654898744&srefix=co2r+inflator+bicycle%2Caps%2C175&sr=8-6. Don't forget extra CO2 Cartridges.

Items You Should Probably Carry on a Ride

1. Hand wipes – changing tires can be a messy business and your hands can get greasy.
2. Nitrile Gloves – prevent your hands from getting dirty in the first place
3. Patch kit – There are numerous reasons why you might want a patch kit. You might have multiple flats. This can happen if your tire is worn thin or you don't find the cause of the original puncture. I would guess that 20% of the times you get a flat, you will have multiple flats.
4. This video offers several good hints about patching tires <https://www.youtube.com/watch?v=CWs2aotADdo>. This longer video offers a more complete set of instructions https://www.youtube.com/watch?v=T0F_hibWHIU