MAINTENANCE ON THE FLY
Pump or C02 inflation system – C02 systems are light and compact, but if you’re planning a long ride, take additional C02 cartridges or a back-up frame pump as well.

Multi-tool – These come in multiple sizes and configurations. At a minimum, carry a tool with 4, 5 and 6mm Allen wrenches, plus flat and Phillips head screwdrivers. If you use clipless pedals, be sure to carry the right size Allen wrench for cleat bolts.

FLATS HAPPEN

Whether your bike is on the road, trail, or simply sitting in the garage, a flat tire is bound to rear its ugly head at some point in time. For quick repairs every time, follow these simple directions:

1. Immediately pull over to the side of the road or trail where you will be out of danger, and where you can see traffic from all directions.
2. Shift your chain to the largest front chainring and the smallest rear cog.
3. Release any remaining air from the tire.
4. Remove the affected wheel by either flipping open the quick release lever or loosening the nuts on the wheel's axle.
5. To get the wheel out you may have to loosen the brake.
   a. On a road bike, open the quick release lever on the brake caliper (the part that contacts the wheel when compressed).
   b. On a mountain bike, squeeze the caliper arms together with your hand to free the cable-end knob from the slot on the brake.
   c. On a bike equipped with disc brakes, do nothing. The brake disc slides easily out of the caliper. (Never compress hydraulic disc brake levers with the disc removed; this will push the caliper pistons inward and make it difficult to reinsert the disc.)
   d. Do NOT loosen the brake cable in any case.
6. Once you’ve removed the wheel, lay the bike gently on the ground, resting on its left side, on the handlebar, seat and left pedal. Never lay a bike on the right side, or you may damage the drive train components.

A LITTLE PREPARATION

GOES A LONG WAY

Though we can’t prevent all riding mishaps, we sure can try. The best way to avoid trouble while you ride is to regularly go through the following pre-flight bike check:

- Squeeze the brakes and rock the bike back and forth to make sure the brake calipers are tight and that there is no play in the headset (the mechanism and bearings that allow the handlebars and fork to rotate).
- Check that brake levers don’t bottom out against the handlebar before reaching maximum compression.
- Rock the handlebars slightly to check for any tell tale squeaks or movement in the handlebar-to-stem connection.
- Look for any frayed brake or shifter cables, which can lead to breakage.
- Check each pedal to make sure they are tightly fastened to the crankset. The right pedal tightens when turned clockwise; the left pedal tightens when turned counterclockwise.
- Lube and wipe excess lubricant from the chain.
- Check each tire for wear, cuts, blisters, or lodged glass.
- Pump tires to the manufacturer-recommended pressure. (You can find this on the tire’s sidewall.)
- If you use clipless pedals, check your shoes to be sure that the cleats are securely fastened.

If you notice anything wrong during this check, either fix it yourself (if you know how) or take your bike to a local Performance Bicycle shop before you ride.

Next, make sure you have the right tools for on the bike repairs or emergencies. Don’t leave home without the following:

- Spare tube – Fold it up and stash it in a seat bag or jersey pocket.
- Patch kit - Make sure that the glue is viscous – not dried up.
- Tire levers - You’ll need these for tight-fitting tires.

SOONER OR LATER, SOMETHING WILL NEED FIXING.

In a perfect world, bikes never get flat tires or need repair. Unfortunately, the world would be an extremely boring place without any terrain or challenges to push you and your bike. So, we’ll accept the way of the world and its occasional causes for repairs while riding. This guide will help you head out prepared and confident that you have what it takes to deal with road- and trail-side fixes.
7. If you are unable to pry the flat tire off the rim with your hands alone, insert the flat end of a tire lever to pry a section of the tire off the rim. Then hook the other end to one of the spokes.
8. Two spokes away, use a second lever to pry more of the tire off. Then slide the second tool around the rim until one entire side of the tire is free of the rim.
9. Pull the tube from the tire and inspect it and the tire for cuts, embedded debris or blisters that may have caused the flat. Also inspect the tape on the inside of the rim, especially if there is no other apparent reason for the flat.

Tips & Tricks:

1. Practice changing a flat at home, before putting your skills to the test on the road or trail.
2. Resist putting the bike upside down when you change a rear flat. It’s too easy for the chain to get tangled, which leads to greasy hands every time.
3. Never use a screwdriver to remove or re-mount a tire or new tube. You’ll damage the rim, and risk pinching or puncturing the tube before you even get a chance to pump it up.
4. Never use high pressure air hoses at gas stations. They can quickly blow a tire right off the rim and potentially injure you.
5. Always carry a cell phone, ID card and any special medical alerts you may have. Be aware of the risks when riding alone or in remote locations.

If you are unsure of your work, ask another cyclist or stop by the nearest Performance Bicycle shop and have them take a look.

ACCIDENTS HAPPEN TOO

Even the most skilled riders take a tumble from time to time; which is why a helmet is absolutely essential. While you certainly don’t want to plan for a crash, you do need to know how to take care of yourself and your bike if one occurs. In the unfortunate event that you experience a severe crash, do not move. Seek immediate help from other riders, motorists or pedestrians. In the event of a minor spill, follow these steps:* 

1. Check your body for any evidence of injury. Treat yourself before you treat your bike.
2. Use your water bottle to rinse away any road grime, dirt or blood.
3. Apply pressure to any areas that are significantly bleeding. In a pinch, you can use a spare tube and a cycling sock or arm/leg warmer to fashion a pressure wrap.
4. If you feel any evidence that something may be broken, avoid movement and seek help immediately.

5. Once you’ve established that you’re OK, check your bike for obvious and not so obvious damage.
6. Check your frame, fork, handlebars, stem, seat post, seat rails, crankset and wheels for cracks, or blistering of paint, which may indicate a crack underneath.
7. Spin the wheels to make sure they are still true, and that the tires are still properly seated.
8. If you’ve broken a spoke, carefully remove it or if necessary wrap it around the nearest in-tact spoke on the same side.
9. Check the rear derailleur hangar to make sure it hangs straight and parallel and isn’t bent or cracked.
10. If your handlebars or stem are askew, loosen the bolts, re-position the bar and/or stem, and re-tighten. Follow a similar process if your saddle is twisted.

*None of these steps are permanent fixes, but temporary solutions to get you safely home. Seek medical attention if need be, and have your bike checked by a local Performance Bicycle shop before your next ride.