Preventative Bike Maintenance

*With just a few simple steps, you can keep your bike running safely & smoothly, & extend the life of some expensive parts.*

- Keep your tires inflated to the pressure listed on the side of the tire. Check weekly. A floor pump with a gauge makes it simple. This will help to avoid flats & make for an easier ride.

- Wipe your wheel rims* with a clean rag to remove dirt. This will improve braking & extend the life of your wheels (expensive to replace!). Do this as needed, more frequently during wet weather. Less messy if you wait until rims are dry.

- Wipe the dirt and grit off your chain - to do this lean your bike against a wall & rotate the pedals backwards, running the chain through a rag. You can also spray degreaser (like Simple Green) on the rag to help remove any gunk.

- Thoroughly dry your chain, then apply oil sparingly to each link in the chain, again while rotating the pedals backwards. Use a chain oil - your local bike shop has what you need. DO NOT use WD-40 on your chain. Let the oil soak in for a few minutes, then wipe off any excess with a rag.

- Inspect your brake pads periodically*. If they are worn beyond or near the line on the side of the pad, it’s time to replace them. Visit your friendly local bike shop - brake pad replacement isn’t expensive, & it’s a very wise investment in your cycling safety.

* with disc brakes you can skip this!

Bicycle Maintenance & Repair Resources:

**ON LINE:**

- Jim Langley: Bicycle Afficionado
  fun assortment of stories & stuff; good maintenance tips!
  jimlangley.net

- Sheldon Brown
  the legendary & encyclopedic Sheldon simply defies description.
  sheldonbrown.com

- Park Tool
  all facets of bike repair & maintenance; well-designed & illustrated.
  parktool.com/blog/repair-help

**IN PRINT (at the Multnomah County Library):**

- Zinn & the Art of Road Bike Maintenance
  by Lennard Zinn

- The Bicycling Guide to Complete Bike Maintenance
  by Todd Downs

GOT BIKE QUESTIONS?
Portland’s many local bike shops are filled with friendly & knowledgeable people.
Flat Tire Repair

The #1 bicycle ailment. Once you’ve tried it, it’s fairly easy.
You’ll need: tire levers & patch kit (plus a new tube if your tube is unpatchable). Getting lots of flats? Your tires may be worn out.

1. Turn your pedals & shift the chain to the smallest rear cog (if rear tire).
2. Release brake cable & carefully turn bike upside-down to rest it on the seat & handlebars.
3. Open the quick release* (or loosen the nut) and remove the wheel from the bike frame.
4. Fully deflate the tire, & 1 insert a tire lever between tire & rim & 2 hook to spoke; then 3 insert a second lever just like the first one & 4 “unzip” the rest of the tire from the rim.
5. See box below for PATCHING a Tire Tube instructions.
6. Carefully inspect inside and outside of tire for any glass particles, or other source of puncture.
7. Insert new or patched tube (very slightly inflated so it holds its shape) into the tire. Insert valve stem in wheel rim and remount one side of the tire on the rim by hand.
8. Starting at the valve stem, mount the second side of the tire on the wheel rim. As you work toward the side opposite the stem it will get progressively more difficult. Make sure the tube is not being pinched between the tire and the edge of the rim.
9. Fully deflate the tire. Using the heels of your hands & thumbs 5 little by little roll the remaining tire over the lip of the wheel rim. This can require quite a bit of hand strength!
10. Push the valve stem up into the tire, then pull back down. Inflate the tire to about 25 lbs. & check around the edge of the wheel rim to be sure the tire is seating correctly. If there is any bulging, deflate & shift the tube and tire around to get it to seat better, then re-inflate & re-check.
11. If tire is seating correctly, pump the tire up to the pressure listed on the side of the tire.
12. Put wheel back on the bike. For the rear wheel, pull derailleur back toward rear of bike & slip chain over the cog. Be sure the wheel is straight once the quick release (or nuts) are tightened, then reconnect the brake cable. Flip bike back over & you’re ready to ride!

More Detailed Flat Repair Info On-line:

➤ Jim Langley - Bicycle Aficionado
This one’s got it all! Terrific illustrations, & several helpful videos. Good instruction on safely using a quick-release, too. JimLangley.net/wrench/wrench.html & click on “Basic Maintenance”

➤ Intown Bicycles
Excellent video on flat repair. Intownbicycles.com & click on “How To” & then “Bicycle Repair Videos”

➤ Park Tool
 parktool.com/blog/repair-help/tire-and-inner-tube-replacement

➤ Sheldon Brown
Lots of arcane information about tires & flats, Sheldon-style. sheldonbrown.com/flats.html

Need bicycle maps & information?
503.823.7699 / timo.forsberg@portlandoregon.gov or visit our website: portlandoregon.gov/transportation

PORTLAND BUREAU OF TRANSPORTATION