

Bike Cleaning and Inspection Before Winter Storage

Clean and inspect the following:

- Frame
- Wheels (hubs, rims, spokes, tires)
- Drive train (chain, chain rings, cassette, derailleurs)
- Cables and Casings (brakes and derailleur)
- Brakes
- Bottom Bracket
- Pedals

Useful items to have on hand:

- Soft rags – cotton or flannel, some in strips
- Old toothbrush (for cleaning chain)
- Spray cleaner (e.g., orange degreaser type, or Simple Green or Windex or similar)
- Pan of warm soapy water (e.g. Palmolive dish liquid, to clean clipless pedals)
- Scrub brush to clean clipless pedals
- Rubber gloves
- Sandpaper strip ~80 grit to clean and groom brake pads and rims
- Hex wrenches, screwdriver

It helps to get the bike up around eye level. Use a bike stand, or hang the bike from the rafters, or use your bike rack on the back of your car.

Cleaning

1. Clean frame to shiny new with soft rags and spray cleaner
Look for any cracks, dents or deep gouges
2. Dip pedals into soapy water, brush to remove dirt and grit, rinse, dry
3. Clean rims with spray cleaner to remove dirt and brake pad rubber residue, rinse.
For heavy residue deposits, you may need to rub it lightly with sandpaper. Clean the sides of the tires
4. Clean the chain using spray degreaser, toothbrush and rags. Take your time, a clean chain is very important (see below)!!
5. Using the degreaser and the strips of soft rag, clean in between the gears on the front crankset and the rear cassette. Use the dental floss technique to clean between all the rings. Clean the derailleur pulleys. For a thorough cleaning of these parts, it helps to remove the wheels. Before removing the rear wheel, shift the chain to the smallest cog. To more easily clean the front chainrings, gently remove the chain from the chainring and place it on the bottom bracket.

Inspection

1. Wheel

Is it true? Look at the wheel head-on near the brakes. Spin the wheel and look for wobbles or bulges as it passes by the pads.

If out of true, check for loose or broken spokes.4/12/2009

Cracks around spoke nipples?

Cracks in rim?

Does the tire look dry, cracked? Any bulges, cuts? Exposed fibers? Worn out tread?

Does the axle spin smooth and free? Take the wheel off the bike. With both hands, hold the wheel by the axle and spin it. Does it feel smooth or does it feel lumpy and gritty? (If so you may need to have your hubs overhauled)

2. **Cables and Casings**

Steel cables incased in plastic pull your brakes and shift your gears. The cables can wear at the anchor points and the casings can fill with dirt/grime. This can cause poor shifting and/or poor brake release.

Inspect all cables, look for broken wires, sharp bends/kinks, chalky deposits. After squeezing the brakes, do the levers spring back or are they sluggish?

3. **Brakes**

Spin wheel, slowly squeeze brake. Do the pads touch the rim simultaneously?

Remove wheel from the bike to do the following:

Check brake pads for wear. Look at the wear indicator – has the brake pad worn down to the edge of the indicator?

Is the pad flat or does it have any ridges? Use the sandpaper to remove ridges. Keep sandpaper flat against brake pad and rub gently.

Pad position may need adjustment if ridges are forming (pad is not lined up well on the rim).

Glaze on brake pads can be removed using sandpaper. Use the sandpaper to remove glaze. Tiny, shiny bits of metal embedded in the brake pad can be removed carefully with a sharp knife.

Lube all pivots on brakes and brake levers.

4. **Drive Train**

Front chain rings:

Any bent or broken teeth?

Check shape of teeth on rings. Symmetrical or hooked like a shark fin?

Shark fin shape means it's time for new rings.

Chain rings are aluminum and can wear out grinding against an old unmaintained chain.

The rear cassette rings are steel and will not wear out as fast, but check them.

Pulley wheels:

Check that they rotate smoothly.

Chain:

Chains wear due to the pivot links losing metal from abrasion. This wear shows up as chain "stretch" or an apparent lengthening of the chain. A worn chain wears the gears out and does not shift well from gear to gear. Keep your shifting crisp and avoid damage to your gears by keeping your chain clean and lubed during your riding season and for storage.

Ways to check your chain length:

a. Chain checker tool

b. 12" ruler. A new chain will have the center of a link at 0" and at 12". A worn chain will have the link at 12 1/8". Doesn't sound like much, but a chain is cheap to replace (\$15) – front chainrings are expensive to replace

- (\$40 each, plus a new chain too)
- c. Finger-pull technique. With the chain on the largest chainring, grab the chain at the 3:00 position and pull it away from the chainring. If you pull it far enough that you can see a tooth, the chain is worn out.

Lube the chain. Put lube on each link, let it soak in, turn the pedals. Then wipe off the excess. Too much lube on the outside surface can attract dirt and grit, so try to keep the chain free of too much surface lube. You want the lube between the links, not all over the surface.

Lube all of the pivot points on the rear and front derailleur.

Lube the pulley wheels

5. **Bottom bracket, headset bearings and pedals**

Check for looseness and play.

If you have clipless pedals, check that the cleats on your shoes are tight and not wearing out.

6. **Fasteners**

Finally, check that each fastener (hex nut and screw) on the bike is tight (i.e. bottle cages, seat post, brakes, derailleur attachments, racks, stem, levers, etc.). Things can shake loose over time!

Now What??

If all looks good, Store the bike in a dry place for the winter. In the spring, wipe down the chain and lube it again. Pump the tires and *RIDE!!*

If you found some problems, you can bring the bike to the shop while they have plenty of time to fix it, or you have time to obtain replacement parts from the shop or the catalogs.

Christmas List for Santa

- Pump that fits on your bike or in your pack, or a CO₂ cartridge
- Patch kit
- Tire irons if you need them for your tires (some tires can't be removed without them)
- Spare tube that fits your tire
- Set of hex wrenches
- Under-seat bag to hold spare tube, patch kit and tools
- Light (a small red flashing clip on type is useful)
- Brightly colored shirt
- Brightly colored rain/wind jacket

New Year's Resolutions

- Know how to remove your wheels and replace them
- Know how to fix a flat tire