

## **Bike First Aid** (notes from our visit to BI Cycle and Classic Cycle on 1/28/16)

### **Working tips:**

- Best is to work on your bike while it is hanging (stand/hooks in ceiling/bike rack), so that you can easily get to all parts and move your drivetrain. Alternatively place your bike upside down. Putting a dropcloth under your bike will help prevent losing parts and makes clean-up easy.
- To remove rear wheel, shift to smallest cog.
- You need lots of rags.
- Use the right kind of lubricant for the right purpose.

### **After a ride:**

- Gently rinse off worst mud (no high pressure washing!). Avoid getting water in any bearings. If your hubs or bottom bracket became submerged during the ride, remove your seatpost and flip your bike upside down to drain out any liquid that may have entered.
- If possible and needed at all (at least once a month), fill bucket with warm soapy water (citrus degreaser or Dawn dish soap) and clean your bike with sponges and rags. Stubborn dirt can easily be removed with a Scotch-Brite pad.
- Next day (after bike is dry), rub off the film from the suspension sliders with a rag.

### **Brakes:**

- Disc-brakes: remove wheel, run a rag between brake pads, clean rotors with rag and rubbing alcohol.
- Rim brakes: clean wheelrims.
- Keep brakes properly adjusted, so that you do not have to pull the handles all the way to the handlebars to fully engage them, also make sure that they do not rub when you spin your wheels.

### **Chain:**

- To clean: run backwards through a rag.
- Apply proper chain lubricant when the chain starts to make noise (or looks rusty), and remove all excess oil by running through a rag again (otherwise it just collects more dirt).
- Replace when worn, this can be checked with a simple gauge. (roughly once a year for most of our riders). If your bike seems to skip gears when powering up a hill, it is because your chain/chainring/cassette is worn. This is not a derailleur problem.
- Chainsuck is caused by a badly worn chain and/or chainrings.

**Cassette:** To clean: run a rag between the cogs.

**Derailleur:** Shifting problem: troubleshoot in this order:

1. Chain ok? Pedal backwards and check for stiff links or a bent chain.
2. Hanger straight?
3. Cables ok? Move chain to big cog, then shift up (don't pedal) to loosen cable. Take housing out of frame eyes and try to slide them up and down the cable. Do they move smoothly? If not: clean with rag and apply some chain oil.
4. If problem is not solved, shift to middle gear setting on handle, check if chain is on correct cog with the guidewheels perfectly in line with cog, otherwise turn barrel adjuster until corrected.

### **Front derailleur:**

- check to make sure you have no bent teeth
- check to see if there is a twig stuck in the derailleur
- check to see if the derailleur plates are still straight

### **Fork:**

If your fork does not respond well (hard to press down, does not rebound well), it needs to be cleaned out and new grease/oil. Check your manual.

### **Sizing:**

Leg almost fully extended at bottom of stroke for most efficient pedaling (may lower seat a bit for more freedom of movement in technical terrain).

Tire pressure: depends on tire size and rider weight and personal preference. The numbers listed on the tire wall are too high, better is a range of 20 PSI (for small riders) to 40 PSI (for heavy riders).

<b>A Simple Bike Maintenance Chart</b>		
<b>Bicycles ridden in rain and mud typically require more frequent and extensive service.</b>		
<b>every ride</b>	<b>Weekly – Monthly</b>	<b>Annually</b>
Check tire pressure.	Clean bicycle frame with a cloth. Inspect frame and components for signs of wear, such as cracks or dents.	Clean and wax the frame to protect the paint/finish. Inspect bike frame and fork for any cracks or dents.
Glance over the tire tread on both tires for embedded debris, to avoid getting a flat.	Clean drivetrain: wipe the chain, derailleurs, chainrings and cassette cogs clean with a rag + earth-friendly degreaser. re-lube chain, cassette and derailleurs.	Check tires for wear, replace if cracks or wear are significant. Check your spare tube and patch kit: make sure the spare still holds air and the patch kit has glue + patches.
Check that quick release parts are tight and that the wheels are secure	Check the wheels for loose spokes. if the spokes are loose, you may need to replace them.	Clean and check wheels carefully for signs of wear such as worn sidewalls or cracks where the spoke touches the rim or hub
Spin wheels to check for wobbles. if the wheel wobbles you need to have your wheel trued	Using a wrench, test the tightness of the moving and connecting parts: crankarms, pedals, chainring bolts, seat bolt, seatpost bolt, stem bolts, handlebar bolts and all accessory mounting bolts/screws.	Check all bearing systems: hubs, bottom bracket, headset and pedals. Adjust and/or overhaul as needed, based on their condition. Refresh grease.
Squeeze brakes to make sure they're grabbing. Glance over brake pads to see that they are in good condition and that they touch the rims (not the tires!)	Clean brake parts (and rims in case of rim brakes). Check pads for wear, replace if needed. Adjust brakes if needed. Lube the brake pivot points.	Replace brake pads, rubber brake hoods and handlebar tape if necessary
Compress and release the bike's suspension to be sure that it's responding properly.	Clean and lube the brake and gear cables to prevent binding. Check the cables for fraying and rusting, replace if necessary.	Check for chain, cassette cog and chainring wear and replace worn parts as needed.
Look over the bike chain, add chain lube if it makes noise.	Check clipless pedals and cleats for loose screws/bolts. Lube pedal pivot point.	Maintain and lube your suspension components according to the advice in the owner's manual.
make sure you are prepared with tools (a spare tube and/or patch kit, tire levers and a pump).	Clean your suspension sliders. Check your suspension for proper working, maintain and lube as needed.	Lube your frame and home tire pump.