

## GENERAL MECHANICAL AND MAINTENANCE SKILLS

### 1. Threads

- Pedals, stem bolts or waterbottle bolts, grease everything before installing
- Boat trailer bearing grease is inexpensive and waterproof
- Grease all flats on bolt heads that will be up against other metal pieces

### 2. Bearings

- Bearings should be repacked (cleaned and re-greased) yearly
- Races are smooth, precision surfaces on which bearings roll; clean then re-grease
- Bearings are easily destroyed if you don't understand how to adjust them properly

### 3. Cranks

- Grease crank bolts, never grease bottom bracket tapers; you may damage crankarms
- Grease chainring bolts and surfaces where chainrings attach to crankarm
- Clean out pedal threads with a rag, bristle brush or degreaser

### 4. Cranks

- Take care not to lay bike down on its derailleurs; you might damage them
- Remove dirt or lube related buildup with a rag and flathead screwdriver
- Inspect derailleur cables and housing for cracking and fraying; replace if necessary

### 5. Bearings

- Bearings in your headset need annual re-packing; more often if you ride in the rain
- Clean bearing surfaces, re-grease and replace bearings; use grease to hold them in
- Clean old grease out with rag, inspect bearing for wear and replace if necessary

### 6. Seatpost

- Use sand paper to smooth out inside of seat tube to avoid scratching seatpost
- Apply liberal coating of grease to top three inches inside seat tube
- Grease help keep water out of frame tubes and allow easy removal of seatpost

### 7. Hubs

- Hubs roll on bearings like your headset; regular service is necessary
- Turn axle by hand to check hub status; if it feels loose and gritty, clean and re-grease
- Riding on hubs with no grease can destroy bearings and races

### 8. Noises

- Creaks are usually caused by metal shifting on metal under stress, like pedaling
- Every place two pieces of metal are touching, there should be grease between them
- Locate noise and silence by re-assembling with a liberal coating of grease

### 9. How tight is tight?

- Most parts on a bike do not need to be as tight as humanly possible, just snug
- Turn bolt until threads are buried then a quarter turn to tight
- Grease on threads helps to overcome friction and allows proper fastening