

Basic Bicycle Maintenance — © Timothy S. Oey, 1988

Basic Bicycle Anatomy

- Frame
 - Down tube
 - Seat tube
 - Top tube
 - Seat stay
 - Chain stay
 - Dropout
 - Front fork
- Wheels
 - Hub
 - Spokes
 - Rim
 - Tire
 - Inner tube
 - Rim tape
 - Quick release & axle
- Steering assembly
 - Handle bars
 - Stem
 - Headset
- Brakes
 - Levers
 - Hoods
 - Calipers
 - Brake pads
 - Brake cable & housing
- Drive train
 - Peddles
 - Crank arms
 - Chainring, chainwheel
 - Bottom bracket
 - Chain
 - Freewheel, cluster, cogs
 - Front derailleur
 - Rear derailleur
- Seat
 - Saddle
 - Seatpost

Preventative Maintenance

- Be careful with your bike - it's strong yet fragile
- Keep it clean (relatively)
- Be careful of derailleurs, they bend easily
- Listen for strange sounds while riding

Preride Bike Check

- Check tire air pressure
- Do the rock check
 - Squeeze front brake and rock bike
 - Check for excessive play in brakes & headset
 - Do same for rear
- Do the drop check
 - Lift bike and drop it a few inches
 - Listen for unidentifiable or strange sounds
- Check for loose wheels
- Spin each wheel, look for wobble, tire damage

Recommended Tools

- Pump
- Tire irons
- Patch kit (Tip Top is highly recommended)
- Screwdriver
- Small adjustable wrench
- Allen wrenches
- Baby powder (talcum or corn starch)

Fixing a Flat

- Remove wheel
 - Front wheel
 - Loosen brakes if you need to
 - Loosen nuts or quick release
 - Let front wheel drop out
 - Rear wheel
 - Shift to smallest cog
 - Loosen brakes if you need to
 - Loosen nuts or quick release
 - Pull rear wheel out while flexing derailleur
- Note
 - In some instances you may not need to remove wheel
- Check condition of tire
- Expel air
- Remove 1 bead of tire
- Pull inner tube out while retaining its orientation
- Inflate inner tube to locate leak
- Check inside of tire for problems
 - Object in tire
 - Protruding spoke, shifted rim tape
- Patch hole
 - Sit down with patch kit nearby
 - Use sand paper to roughen entire area around hole
 - Area should be slightly bigger than patch size
 - Try to keep area free from contaminants (finger oil, dirt)
 - Apply glue to area
 - Allow to dry completely
 - This takes just a couple of minutes
 - The glue is a contact cement
 - Use edge of patch to check dryness
 - Peel backing from patch
 - Apply patch and press it down hard
 - Rub patch with smooth hard object
- Reinflate tube to check for other leaks
- Deflate tube almost all of the way
- Coat tube with baby powder
- Put tube back in tire
- Put bead of tire back on
- Inflate tube partially
- Check that tire and tube are properly seated
- Reinflate tube fully
- Replace wheel
 - Tighten quick release or bolts
 - Tighten brakes
 - Spin the wheel

Good Luck!