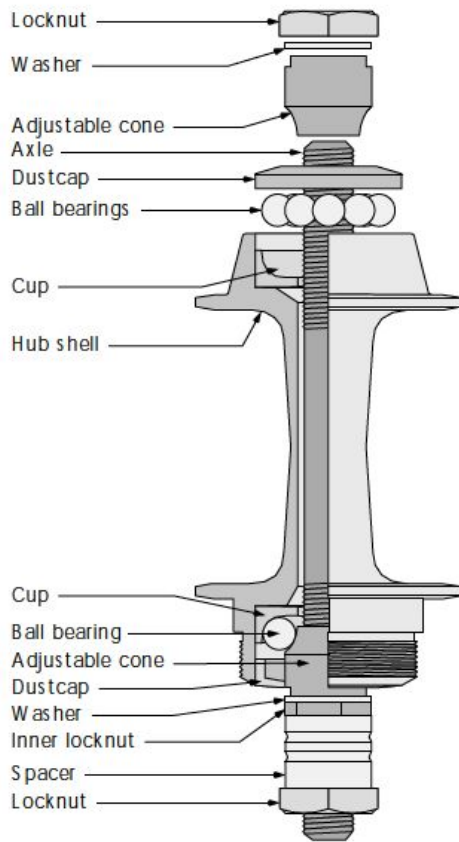


Wheel Hubs

<http://www.southcoastbikes.co.uk/Dont-Buy-a-Cheap-Bike>



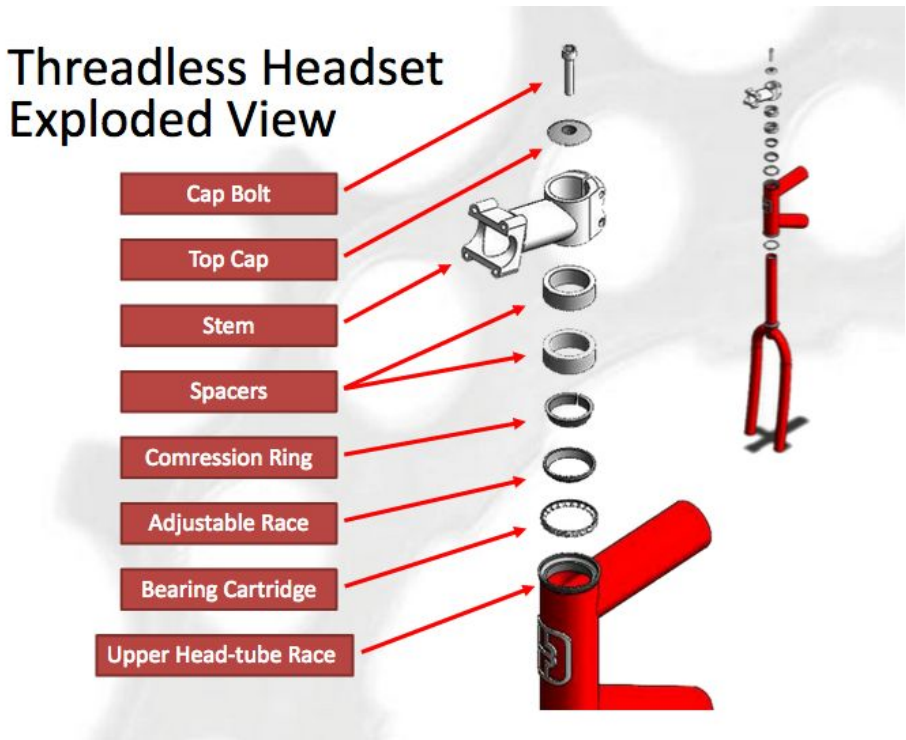
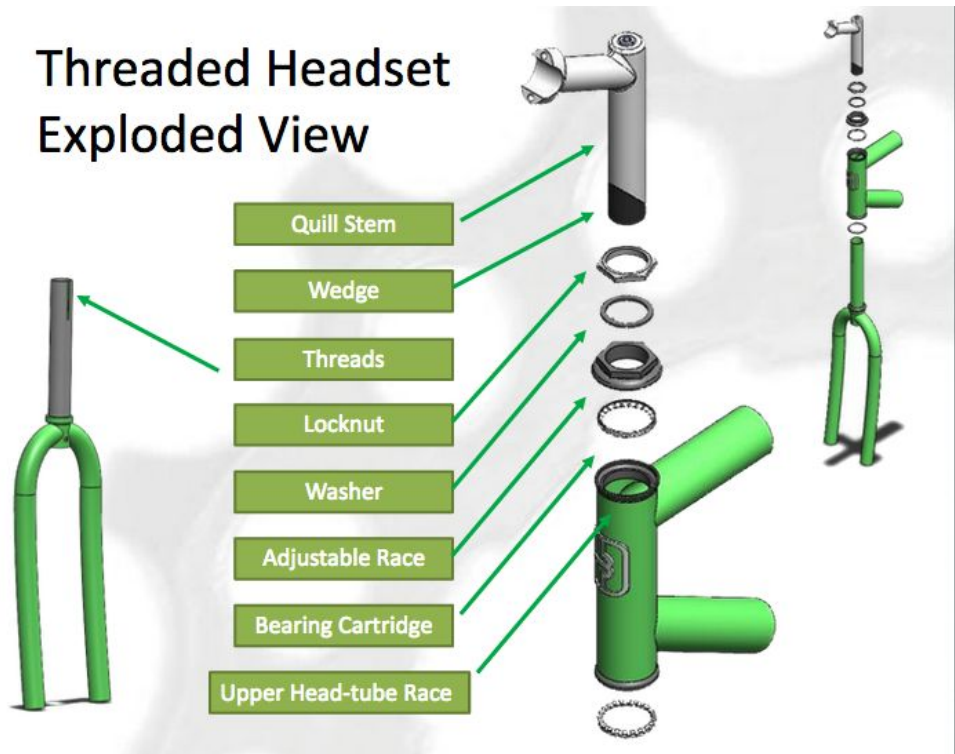
Cup and Cone Bearing System

http://www.parktool.com/uploads/images/blog/repair_help/hub74.jpg



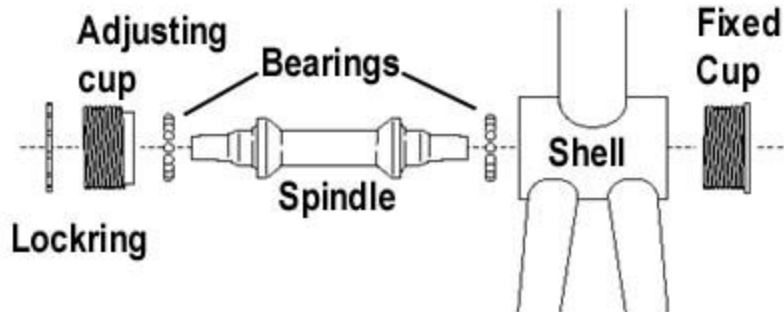
Headsets

<http://slideplayer.com/slide/1678189>



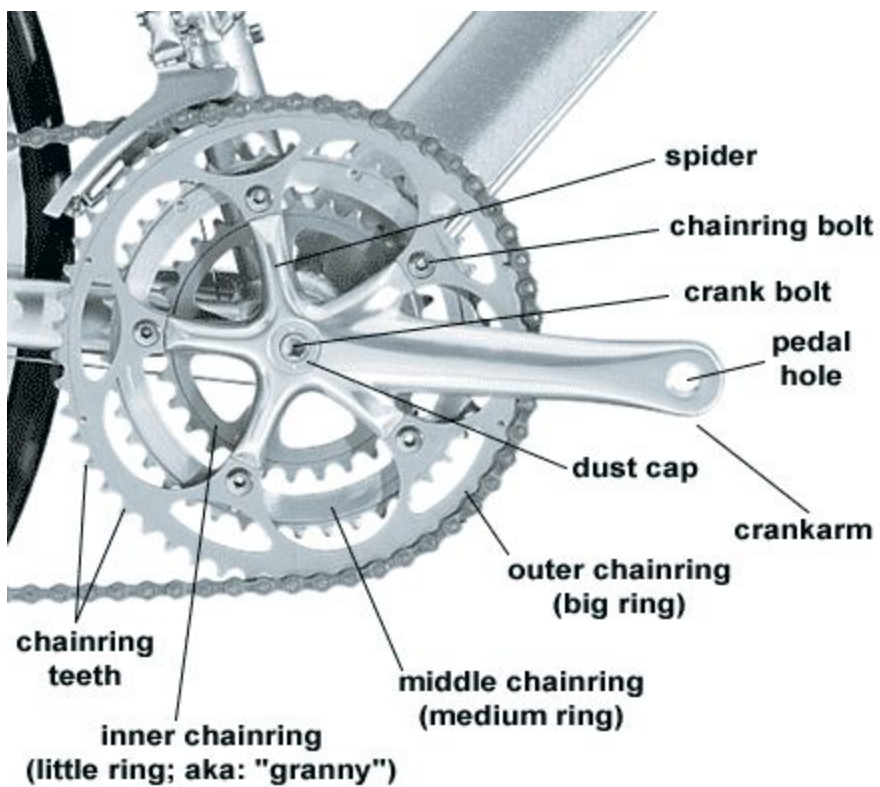
Bottom Brackets

<http://www.parktool.com/blog/repair-help/adjustable-type-bottom-bracket-service>



Crankset

<http://trekstorecolumbus.com/articles/bike-pictionary-crankset-pg58.htm>



Cutaway picture of a square tapered crank

<http://sheldonbrown.com/tooltips/images/cotterless2sm.jpg>



Different spindle types

<http://www.sheldonbrown.com/bbsize.html>



Nice step-by-step overhaul procedure, but missing the crucial adjustment step:

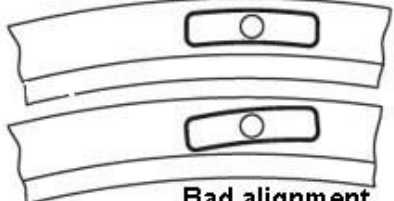

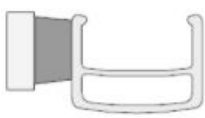
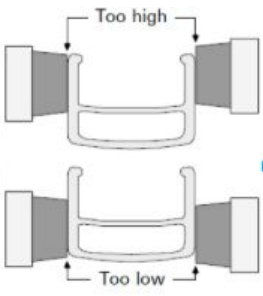
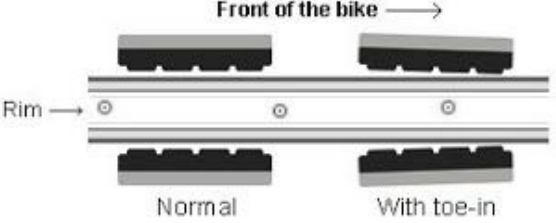
http://www.localmotion.org/documents/Picture_This/Bottom_Bracket_Overhaul.pdf

Brakes

<http://www.bike-advisor.com/bicycle-guides/how-to-choose-a-city-bike.html>

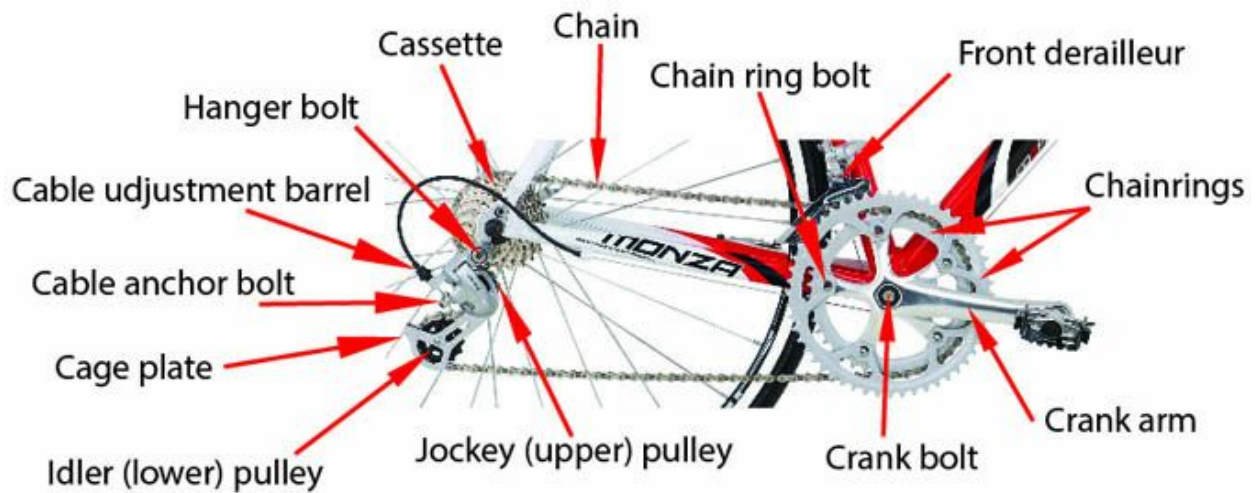


Brake Pad Alignment

<p>Tangent</p> <p>The pad should be evenly spaced, with the front and back ends of the pad the same distance from the top of the rim.</p> <p>View: from the side of the wheel</p>	<p style="text-align: center;">Good alignment</p>  <p style="text-align: center;">Bad alignment</p>
<p>Vertical Face</p> <p>The entire face of the pad should sit flat against the rim.</p> <p>View: from the front or back of the wheel</p>	 <p style="text-align: center;">Good alignment Bad alignment</p>
<p>Vertical Height</p> <p>Pads should be near the upper edge of the rim for brake arms that travel on an arc moving downward, including linear pull and cantilever brakes.</p> <p>Note: The pad must not touch the tire or sit below the rim at any point in the wheel rotation. If the brake arm travels on an arc moving upward, pads should be near the bottom of the rim.</p> <p>View: from the front or back of the wheel</p>	<p>Good alignment (linear pull, cantilever)</p>  <p>Bad alignment</p> 
<p>Toe (optional, only if squealing)</p> <p>A slight gap at the trailing edge of the pad may be needed to stop squealing noises.</p> <p>View: from above the wheel</p>	<p style="text-align: center;">Front of the bike →</p>  <p style="text-align: center;">Rim →</p> <p style="text-align: center;">Normal With toe-in</p>

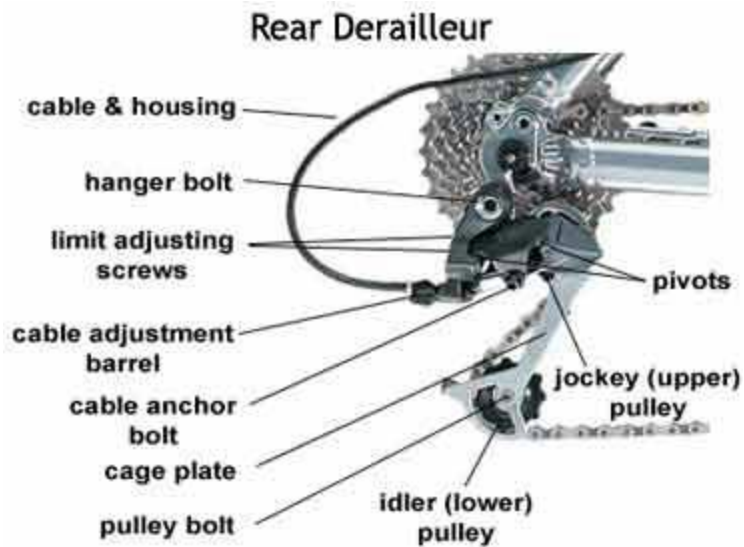
Drivetrain

<http://www.webikela.com/wp-content/uploads/2013/05/diagramsb.jpg>



Rear Derailleur

<http://www.activetravelvietnam.com/resources/images/adventure/biking/06-131-rear-derailleur.jpg>



Nice description of gear ratios at

<http://www.whycycle.co.uk/buying-a-bike/bike-jargon-buster/bike-gears-explained/>

Mobile Repair Kit

- Tire patch kit & tire levers
- Tire tube
- Mini air pump or CO2 inflator
- Multi-tool with hex or Torx wrenches, phillips and flathead screwdriver
- Dollar bill or scrap piece of tire tube to make a tire boot

Basic Tools

- Chain oil
- Grease
- Combination wrenches: 8, 9, 10, 12, 13, 14, 15, 17 mm
- Hex wrenches (Allen keys): 4, 5, 6 mm or Torx wrenches: T-10, T-25, T-30
- Y-shaped socket wrench: 8, 9, 10 mm
- Phillips and flathead screwdrivers
- Pliers
- Adjustable wrench

Specialty Tools

- Cable cutters
- Headset wrench (a.k.a Big Flat Wrench): 30, 32, 36 mm
- Crank puller (if your bike has a square tapered bottom bracket spindle)
- Bottom bracket removal tool (whichever one your bike requires)
- Cone wrenches for hubs: 13, 15 mm
- Pedal wrench (a 15 mm combination wrench also works)

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ABC Quick Safety Check



A is for Air: Inflate tires to the recommended air pressure on the sidewall of your tire. Check for any cuts, tears, rocks, or other flaws in the tires.

B is for Brakes: Make sure the whole brake pad squeezes tightly on the wheel's metal rim. When bike levers are pulled tight, there should be space between the lever and the handlebar. If your brakes do not fully stop the bicycle, do not ride until they are fixed.

C is for Chain and Cranks: Clean the chain, apply a tiny drop of chain lube to each link, then wipe off excess. Shift through all the gears and check that the chain does not fall off at either extreme. Wiggle cranks side to side to make sure they are tight. Check that pedals are tight.

Quick is for Quick Release: Make sure any quick releases on seat posts and wheels are closed tightly and pointed towards the back of the bicycle. If the bike has bolts instead of quick releases on the seatpost and wheels, make sure they are tight.

Check is for Check Bolts: Make sure all bolts are tight. If you see any broken spokes, missing nuts or bolts, or have a wiggly seat that won't tighten, do not ride. Otherwise, do a short ride in a safe place, listening for strange noises and checking brakes and gears again.