

How to strip a bike: procedure and helpful tips

The Bike Kitchen and Co-op are dependent on donations of used bikes and parts to keep our shop and many of our programs running. Unfortunately, most of the donations we get are largely low-quality and neglected. Some may have parts that are still useful, others may just be completely wrecked. Either way, since sustainability is a huge part of what we do at the Co-op and Kitchen, we should save what we can and recycle the remaining materials as best as possible. The following guide will walk you through the basic procedure for stripping a bike, as well as offering helpful tricks.

Goals

Save useful/still working parts as designated by a mechanic, co-ordinator, or board member.

Separate recyclable materials from each other. (i.e. metal from plastic from rubber, etc.)

Make the bike and the parts to be recycled as small as possible so they fit in our limited recycling storage space.

General Procedure

Common tools you will likely need: 15mm or socket wrench, 8, 9, and 10 mm box wrenches, 5 and 6 mm allen keys (hex wrenches), cable cutters, flathead screwdriver, exacto knife, pedal wrench, crank puller, tire levers, hammer.

Some people find it easier to start at the front or the rear of the bike, and work to the other end. Another popular approach is work from big parts to small parts. Whichever way works for you. As you strip more bikes, you'll develop a bit of a system and get more efficient.

Let's use the big-to-small approach:

Remove both the front and rear wheels. If it's an old bike, you'll likely need a socket wrench to loosen the nuts of the axle on each side of each wheel. If it's newer, the bike might have quick release skewers. Remember to disengage the brakes or deflate the tires to let the wheels drop out.

Remove the tires/tubes with the tire levers

Cut all the brake and shift cables near their endpoints with the cable cutters, then loosen the pinch bolts holding the cables, with either wrenches or allen keys of appropriate size. This frees up the components the cables are attached to.

Remove the brakes, derailleurs, brake levers and shifters. Look for the point at which they mount or attach or clamp to the frame. Try to keep the mount bolts, the pinch bolts and other bits of hardware with the component.

Loosen and remove the stem and handlebars. If the stem is seized or difficult to move, leave the handlebars inside to use as leverage to move it.

Take off the pedals. Always turn the pedal wrench towards the rear of the bike to remove them. Then remove the dust caps (if any) and crank bolts from the crank and then use the crank puller to take off the cranks off. Ask a mechanic or the coordinator for the correct way to use the tool.

Loosen the seatpost clamp (or quick release) and remove the seatpost. If it's stuck, ask for help. Seized seatposts can be tricky. Once the seatpost is out, remove the saddle by loosening the clamp bolt(s), and sliding/wiggling the rails out.

If it's an older or low quality bike, use headset wrenches to unthread the headset and remove the fork. If it's a new bike, typically the fork will drop out when you loosen the bolts on the stem.

Remove any accessories or extras attached to the frame (lock mounts, lights, etc.)

Sort parts to be saved and put things to be recycled in their correct places. Ask a mechanic if you don't know where things go.

YOU'RE DONE! NICE!

Helpful tips

If something is seized or giving you a lot of resistance, double check with a mechanic, coordinator or board member that you are using the tool correctly. When in doubt, don't force things. This is how injuries happen or tools get damaged.

Be careful. Be mindful of where your head, hands, arms, etc. will go if a tool slips.

Use the right size wrench, and the right tools in general! Avoid pliers, adjustable wrenches, etc. They are cumbersome to use and will make a job more difficult.

Pay attention to the tool interface on a component. Always use a tool that will give you the most engagement and won't easily strip something out.

Don't take apart the components themselves (don't disassemble derailleurs or shifters), unless specifically instructed to do so. Often things are most useful with all their bits still attached.

If something is really stuck and taking a lot of time or effort, move on to something else. Always work within your capacity, every strip is different and sometimes it just makes sense to leave a component on the bike and continue stripping other parts. If unsure, ask a mechanic.

Ask questions, lots of questions! Remember, this process is about recycling, yes, but also about learning. The mechanic or coordinator may look busy, but they will always be happy to help you out and offer instruction.