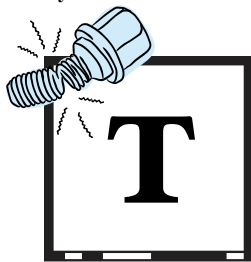




Seize the Bolt

by NICOLA NEMY



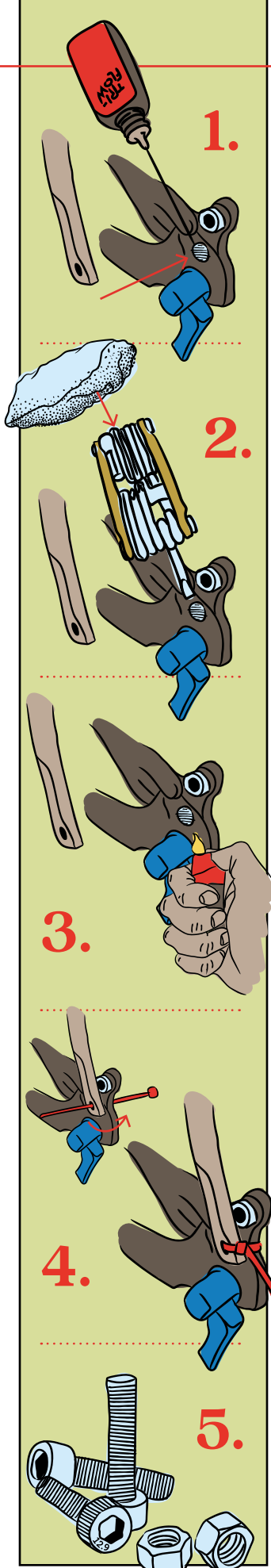
The line between an epic tour and an epic fail is narrower than we ever like to think it is. It's actually a pretty sketchy ridgeline, a rocky spine with smoothly self-sufficient days on one side and a mountaintop meltdown just over the other. We tour along, one sleepless airport bike assembly, section of dusty washboard, or cross-threaded bolt away from our adventures dissolving into misadventures.

I've spent years teetering along that ridge before becoming a mechanic. It turns out that you don't actually need to know much about your bike to strap some stuff to it and set off on an epic tour. No one at the airport or park entrance checks that you have the first clue what you're doing. My good fortune exhausted itself somewhere in New Mexico, or maybe it was southern Idaho, or Oregon, but by the time I got lost in Vancouver Island's old-growth forest, my bike started to disintegrate underneath me, along with my naive certainty that everything would work out fine for the two of us.

Now I wistfully recall that rigid steel plus bike that looked like it had been dredged out of the foggy harbor that stretches out below us every time a rider drags a touring rig into my bike shop. Their bike troubles always seem to arise out of our maritime fog, a cable snapping, frame failing, or bolt shearing as they're "just riding along." This column is going to poke some of these "JRA" troubles, and since they never happen as you're riding past the local bike shop, I'll approach them as you might from the trail — with some tools you hopefully have with you, likely without cell service, possibly in the rain.

We'll kick things off with the snapped bolt. Bolts mounting a loaded rack to a frame are the most likely to shear, so I'll use that as an example, but this generally applies to most frame and fork bolts. **1.** You'll first want to soak the bolt face with a couple of drops of light oil or penetrating fluid. I carry Tri-Flow when I tour, using it as a high-viscosity chain lube that can also perform some trailside alchemy if things seize up elsewhere on your bike.

When the head of a bolt snaps off, there's no longer any tension on it. This means that removing a snapped bolt is often just a matter of getting a grip on it and threading it back out. You can try a pick if you have one with you, or wedge the flathead on your multitool somewhere on the face of the sheared bolt and gently tap it in a counter-clockwise direction.



Too easy? **2.** Try hammering the flathead right into the bolt face — the impact will loosen any corrosion and might create enough of a tool fitting that you can spin it out. If you know the threads have factory Loctite on them (the blue stuff), some gentle heat will loosen that up (but only if your frame isn't plastic; sorry, carbon riders!). **3.** We'd do this with a propane torch and a Dremel tool in the shop, but get creative and be careful of the surrounding frame or fork material. Rocks, lighters, and patience are your friends here. Hopefully it's stopped raining.

The next solutions are neither particularly chic, nor meant for long-term use on something like a rack, but they'll buy you a few (or, *sshhh*, often a few thousand) miles. **4.** Take a heavy-duty zip tie and thread it through the lower rack eyelet, tightening it right around your frame. I know someone who rode across Canada with zip ties supporting his loaded rear rack when a braze-on snapped right off his frame. You can achieve a similar provisional effect with steel plumbing clamps, but try to protect your frame with electrical tape underneath them if you're able.

5. Plan ahead and carry spare bolts (hint: you'll find 8.8, 10.9, or 12.9 printed on steel bolt heads, standardized strength measurements that indicate its resistance to shear, load, and traction, so carry some strong spares in case you find those weaker ones breaking), plus a few tools and fallbacks like zip ties and P-clamps. Voilé or Titan straps, or even toe straps, can also save the day by holding up everything from a failed rack to a busted pannier or that one last memento that won't fit anywhere. I toss a loose handful of chainring, rotor, cleat, seatpost, and rack bolts into the bottom of my framebag before every tour, making a little wish as I do. In my other job as a touring guide, I've rummaged around for each at some point. Often, you're lucky to have a nearby attachment point and can reattach the rack to another eyelet (likely a fender mount), suffer a slight change of the rack's angle or bend of its aluminum stays, and off you go. If you're running fenders and the bolt is long enough, go ahead and double them up to get back into town.

Grease your threads. Torque them, but not obsessively, or they may fail too. Take a moment. Reflect on the long walk you won't have to take. Maybe have a snack. Then just keep riding along. ⚠️



Nicola Nemy spends most of her time thinking about dirt she can grow food in or ride bikes on. She's worked as a bike mechanic and a guide for cycling tours all over Canada's Maritimes, where she also organizes the Monthly Cycle, a social riding and advocacy group for women, trans,

femme, and non-binary riders. She loves biking over pine needles, dogs with soft ears, assembling her bike in an airport at the start of an adventure, and lunch.