How to Fix a Flat Tire on a Bike

Items needed: tire irons, new tube (or patch the old one), pump and a patch kit with instructions on patching.

1. If it's the back tire, change gears using the rear derailleur so that the chain is over the smallest chain ring.
2. Put your bike on a stand or lay it on the ground with the gears facing the sky.
3. Remove the back (or front) wheel by loosening the skewer lever by turning counter-clockwise.
4. If the back wheel has the flat, push down on the top of the rear derailleur and pull the wheel downward to remove it. For the front wheel, just loosen the skewer and remove the wheel.
5. Lay the wheel flat on the ground. If it's the rear tire, DON'T place the gear side down on the ground.
6. If the stem has a silver ring on it, remove it.
7. Use the tire irons to remove the tire from the rim by sticking a tire iron in between the tire and rim. Push down towards the center of the wheel and clip the iron onto a spoke.
8. Then do the same thing again about 2-3+ inches from the first tire iron and clip it to a spoke.
9. Unclip & slide one of the tire irons along the opening in the tire by pulling the tire iron along the rim of the wheel.
10. You should now have one side of the tire outside of the rim.
11. At the rim hole, push away on the tire and remove the stem from the hole in the rim.
12. Remove the tube and remember how it was positioned. (This will help determine where the puncture is.)
13. Pump the tube and fill it with air to find the hole. You can feel the air coming out the tube with your hand. Mark it or remember where that hole is.
14. Lay the tube on top of the tire in the exact way that it came off. At the place of the tube hole, look around the tire area in that location for a hole, nail, glass, etc. This is where the puncture is in the tire. Look and gently feel (in case there is a piece of glass or nail sticking in the tire) where the puncture is. Try to find the problem so that when you put a new tube (or patched tube) back into the tire it doesn’t puncture the tube again.
15. Run your fingers with “care” around the inside of the tire to feel for foreign objects like glass, thorns and nails.
16. Use a new tube or patch the hole in the old one.
17. Pump a little air (not very much) in the tube, place the stem of the tube back into the hole in the rim.
18. Place the rest of the tube inside the tire around the rim, making sure the tube isn’t twisted or pinched. Use your fingers to feel that it is aligning correctly under the tire. Keep an eye on it so it doesn’t get twisted.
19. Push the top of the stem in toward the tire about an inch.
20. At the place of the stem, put the cord of the tire in and under the rim on both sides of the rim hole. Continue to place the tire cord back into and under the rim by hand.
21. When it gets tough, use your tire irons to help by inserting the irons under the tire at the rim and pull back so that the tire slips into place under the rim. Be “careful” not to puncture the tube while you’re doing all this.
22. Put your rear wheel back into the frame by pushing the top of the derailleur down to allow the chain to be inserted onto the chain gear and in between the brake pads. For the front tire, insert the wheel into the front fork.
23. Pump a little more air into the tube...about 20 psi.
24. Place the skewer into the slot where the bike frame is and slightly tighten the pressure.
25. Inflate the tire to 90+ psi with your pump.
26. Put the bike upright and loosen the pressure on the skewer and align the wheel into the center of the frame...meaning that the space from the tire to the center of the frame are equal on both sides and then tighten the pressure at the skewer.

If you need help, bike riders are known for their bike camaraderie and will be willing to help you get back on the road with any type of help. Or, contact our BBP SAG coordinator to pick you up.

I hope this helps,

Hime