

How to Install Tubeless Tires on a Mountain Bike

Introduction // Purpose

Making the change to tubeless tires serves as a relatively inexpensive upgrade to one's mountain bike. By eliminating the need for inner tubes, tubeless tires give you the freedom to inflate your tires to a lower tire pressure, prevent pesky pinch flats, and allow you to keep riding even if something punctures your tire. Tubeless tires work by replacing your inner tubes with **sealant** - a rubbery fluid that dries within minutes of exposure to air. Overall, tubeless tires are a must-have upgrade for the novice mountain biker looking to step their riding experience up.

Prerequisite Knowledge

This set of instructions assumes you know how to remove a wheel from your bike and a tire from your wheel - two very simple yet important skills to have memorized.

Materials

To install tubeless tires, you will need the following materials:

- Presta Valve Stems (\$10-\$15)
- Tubeless Tire Sealant (~\$20)
 - **Important:** Be sure you purchase sealant meant for bikes and not automobiles.
- Air Compressor or Floor Pump (\$20)
 - If you do not have an air compressor and want to make inflation really easy, you can also go to a gas station and use the air machine meant for cars.
- Plastic Tire Levers (\$5)
 - Can be installed without tire levers but helpful to have if your tire gets stuck while removing it from your wheel
- Tubeless Rim Tape OR Gorilla Tape
 - This is only required if your rims are not 'tubeless ready'. If your rims are tubeless ready, it should say on the rim.

Installation Steps

Tire Preparation

1. Begin by removing the front and rear wheels from your bike.

2. Remove a tire from one of your wheels. If the bead of the tire (the raised edge of the tire that sits on your wheelrim) gets stuck inside of the rim of the wheel, use your tire levers to help you pop the bead.
3. Separate the inner tube from the tire and put the tube to the side.
 - a. **Important:** If your inner tube is in good working condition be sure not to throw the tube away! The tube can still be used in the case of an emergency.
4. If your tire is exceptionally dirty, now is a good time to clean it.
5. If your rim is tubeless-ready, proceed to the next step. If not, take your rim tape or Gorilla tape and wrap it around the rim multiple times as shown in the below picture. The goal in doing this is to build thickness around the inside of the rim which creates a better, thicker seal.

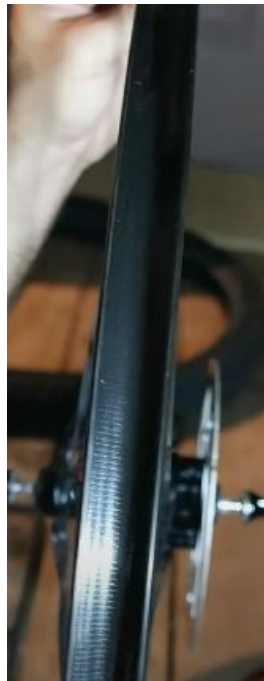


Photo Credit: Seth's Bike Hacks - [Tubeless Conversion on Maxxis Holy Rollers](#)

Installing Valve Stems and Adding Sealant

1. Install one of your Presta valve stems by removing the nut from the valve, placing the valve inside of the valve hole on the rim, and screwing the nut back onto the valve. To keep the nut from coming loose, take a pair of needle-nose pliers and carefully torque the nut down **without** scratching your rim.

2. Place your tire back on the rim. Push the bead to the side of the rim and repeat until one side is completely back inside the wheel and $\frac{1}{4}$ of the other side is still exposed which creates a pocket for you to pour your sealant into the tire.
3. Shake your bottle of tire sealant well.
4. After shaking, pour 2 oz or 60mL of sealant into your tire as illustrated in the below picture.



Picture Credit: Mahalo my Dude - [How to Install Tubeless Tires](#)

5. Carefully rotate your wheel such that the opening is at the top of your wheel and the sealant has spread through your tire.
6. Finish installing the bead so your tire is set in place around the entirety of the wheel.

Inflation and Final Steps

1. Inflate your tire until you hear a loud POP (the sound of the bead popping into place). Inflation (seating the bead of the tire) is most easily done with an air compressor or gas station tire inflator but inflation can also be achieved with a lot of manual effort from a floor pump.
2. After seating the bead, rotate, shake, and spin your wheel around to evenly disperse the sealant. If there are any leaks, the sealant should fill small gaps within the next 5 minutes. If you continue to hear air leaking out, repeat steps 5-10.
3. If there are no leaks within 5 minutes, reinstall your wheel and repeat all of the previous steps for your other wheel.

4. After installing both wheels, go out for a ride to really create an even distribution of sealant inside your tires.

Congrats! You have now installed tubeless tires.

Maintenance

Tubeless tires are pretty simple to maintain. It's a good idea to replace the sealant at the start of every riding season which entails repeating the same process from above while also scrubbing your tire free of the old sealant.

When riding, it's a good idea to carry a tubeless repair kit which helps if you puncture your tire and the hole is too big for the sealant to fill by itself. Keeping your old inner tube with you is also great for emergencies when you don't have your tubeless repair kit and want to ride (not walk) your bike home.

Other Resources

Here are some helpful videos to watch if still confused about the installation process:

<https://www.youtube.com/watch?v=9f2BtQuvB6E>

<https://www.youtube.com/watch?v=C2iQxpgpd84>