TECH TALK

Installing Your New Tires

Bicycle rubber products (tires and tubes) are not typically covered under a manufacturer warranty. There are many mistakes that a consumer can make when installing a tire/tube that can cause the tire to fail. Innertubes and tires that are damaged from improper installation, overinflation, potholes or punctures are not defects, and cannot be replaced under warranty. Follow these instructions to ensure that you are installing your tires and tubes properly, and that you don't ruin a new tire or create a dangerous situation for yourself! If these instructions are above your skill level, the Hostel Shoppe highly recommends that you enlist the help of a competent bike shop to ensure proper assembly and adjustment. Click on any of the images for a larger view.

Note: *These instructions are assuming you have a new tire and tube. Repairing a flat follows these same steps, but in a flat repair it is important to determine and repair the cause of the flat before installing a new tire or tube.*

Step 1: Double check that you have a compatible tire, tube and rim combination before attempting installation. Inflate your innertube enough to give it some shape, but not so much that it starts to expand.

Step 2: Starting with the tire alone (no tube), line up the decal on the tire with the valve hole in the rim. Some cyclists like to align the inflation pressure information with the valve stem. Either way, if you always install your tires the same way, it will help you determine the puncture location in the event of a flat tire.

Step 3: Starting at the valve hole, slide one side of the bead over the lip of the rim. Hold the tire in place at your starting point with one hand, and use your other hand to work your way around the rim, pushing the bead over the rim as you go.

Step 4: After half of your tire is installed, lift the uninstalled bead at the valve hole and insert your innertube's valve stem into the rim. If necessary, tuck the base of the valve stem into the tire.

Step 5: Working from the valve stem, start tucking the innertube into the tire with your fingers.
TIP: Don't use baby powder! The only thing "lubricating" the innertube with baby powder will do is glue it to the tire after a rainy ride. Contrary to popular myth, it does nothing to help prevent flats, but true talcum powder will help prevent the innertube from vulcanizing to the inside of the tire.

Step 6: Work your way around the tire, ensuring that the tube is evenly distributed in the tire. If you have extra tube at the end, or not enough, re-check that you have the correct diameter innertube. Do not fold an innertube over to make it fit!

Step 7: After your tube is inserted into the tire, start at the valve hole again and begin working the remaining bead onto the rim. Ensuring that the bead is pushed tightly down into the rim as you go will make the final bead "pop" much easier.

Step 8: Using both hands opposite each other, continue working the bead onto the tire, making sure the bead is tight against the rim.

Step 9: Many beads will be very tight for the last few inches, but you should avoid using tire levers if at all possible. Being persistent with your thumbs will almost always work. If the last bit of the bead seems impossibly tight, go back to the start of the bead installation and make sure you have the bead as tight as possible all the way up to the final few inches and that there isn't any innertube wedged between the tire bead and rim.

TIP: Never, ever, ever use a screwdriver!

Step 10: Before inflating the tire, push the valve stem into the tire to ensure the valve base is inside the bead. If you don't the innertube will lift the tire off the rim as you inflate it.

Step 11: Pull the valve stem back out, and make sure it is straight. If you have a threaded presta valve, you might want to affix the valve nut to hold the valve steady.

Step 12: Inflate the tire until it begins to take shape and firm up slightly (10-20psi). You are trying to help the innertube seat itself inside the tire.

Step 13: Now, deflate the tire enough so that you can squeeze the bead away from the rim sidewall, as shown. Starting at the valve, work your way around the tire, squeezing as you go, making sure that the tube is seated in the tire completely. Flip the tire over and repeat.

Warning: This picture shows a section where the innertube is between the bead and rim. If this occurs, pinch the tube and tire together with your fingers and work them around until the tube works its way back inside. *DO NOT use a tire lever or other object to "stuff" the tube back in.*

Warning: This picture shows the innertube beginning to bulge out from under the tire after inflation. About 5 seconds from this point, the innertube will expand quickly out, lifting the tire off the rim before blowing. Most high pressure tires have enough pressure to blow the sidewall out of a brand new tire, so inflate your tires slowly to their *recommended* pressure while looking for areas where the tire is not seated properly on the rim.