# **Tubeless Conversion Instructions**

## What do I need before starting?

- Mountain bike or cyclocross wheel with tire
- Stan's NoTubes Conversion Kit
- Safety glasses
- Hand drill with 3/8" (9.5mm) drill bit for Presta valve or 7/16"(11mm) drill bit for Schrader valve
- Small hand file that fits valve stem hole
- Soap and water solution: Use a small bucket and mix 1/8 cup (30 ml) of liquid dish soap to 2 cups (475ml) of water
- Large brush with soft bristle to apply the soap and water solution
- Floor pump / Air compressor
- Plastic tire lever (Do not use screwdrivers, metal tire levers, or sharp tools!)
- Cardboard box with open top or bucket to lay rim on

#### **Information and Precautions:**

- A. Verify you are using the correct conversion kit for your wheel see Rim Compatibility Chart. Visit help.notubes.com
- B. You can convert any tires except for the following: Hutchinson Air Light.
- C. Do not inflate tires over 40psi without a tube or the tire may blow off the rim.
- D. Watch the Installation Instruction Movie. Visit www.notubes.com/Movies.aspx

# **Installation Steps**

#### 1. Remove tire and tube from your wheel.

Leave on your existing rim tape or install 2 layers of Stan's yellow Universal Kit Tape.

**2.1. Important:** If you already have any Tubeless Rim (UST, Bontrager, etc.) do not enlarge valve stem hole and skip the following step. When using the cyclocross kit it is usually not necessary to drill your rim. Never drill any of Stan's ZTR tubeless rims.

### 2.2. Enlarge Valve Stem Hole

**Procedure:** Enlarge ONLY the inside valve stem hole of your rim cavity. Presta valve stem: enlarge to 3/8" (9.5mm) or Schrader valve stem: enlarge to 7/16" (11mm). Remove metal filings in valve stem hole with a small hand file. The valve stem needs to be enlarged to make inflation easier. This will not affect the rim's ability to use a tube. If you choose not to drill your rim the rim strip will work but inflation can be more difficult.

### 3. Install the Rim Strip

**Preparation:** Coat the rim strip with the soap and water solution. This will lubricate the rim strip and help it stretch evenly around the rim.

**Procedure:** The rim strip is designed to contact the sides of the rim and seat under the tire bead lock (Photo 1). To install the rim strip start with the valve stem and finger tighten the nut. While installing the rim strip stretch it evenly all around the rim, and leave no narrow spots. To help push the rim strip under the bead lock, use a plastic tire lever.

#### 4. Mount and Inflate the tire without Sealant

Important: Always use safety glasses when inflating.

**Procedure:** Mount your tire on the rim using a plastic tire lever only. Use the soap & water solution to cover the inner part of the tire bead and rim strip with soap suds (Photo 2). Hang the wheel to fully suspend the tire with the valve stem toward the top (see photo 3). Inflate the tire until it is seated into the bead – **Note:** Do not exceed 40 psi during inflation. If using a hand floor pump rapid pumping may be necessary. The tire may now be leaking air; this is normal when inflating the tire without sealant which will be added in step 5. If you are having trouble seating the tire on the bead, remove the rim strip and try the tips below.

Tips: For the following fixes remove the rim strip

- If the tire fits too tight on the rim and does not seat on the bead or inflate properly, remove your existing rim tape and use Stan's thin yellow nylon spoke tape. Use 2 layers over the spoke holes, pull the tape tightly while applying and overlap 2" (5 cm). Carefully cut a hole for the valve stem.
- If the tire fits too loosely on the rim and does not inflate, add additional layers of tape or use a thicker rim tape like Velox. This will build up the center of the rim and help the tire inflate.
- For new tires that are not inflating, mount the tire and inflate with a tube to 35. This will stretch and shape the bead to help inflate the tire tubeless.

**Note:** Follow step 3 when reinstalling the rim strip.

### 5. Adding Sealant

**Important:** While shaking and pouring sealant, the bottle must be turned upside down. (See photo 5). The sealant contains micro sealing particles; these particles need to be suspended in the sealing fluid for maximum performance.

**Procedure:** Cut the spout at the first line (see photo 4). Shake the bottle thoroughly to suspend the sealing particles, and then attach the spout. Before pouring sealant, turn the bottle upside down, with your finger tip over the spout and hold for 10 seconds and then move finger to side and fill scoop, 2oz (60ml) bottle, or injector (see photo 5). This will allow the sealing particles to collect in the tip of the spout.

**Adding sealant to tire with scoop:** Push a part of the bead [edge] of the tire up and away from the rim. Pour sealant in tire. With your finger tip over the spout hole invert and re-shake the bottle, pour in the correct amount of sealant, 3oz(90ml) 1 scoop = 2oz(60ml). You can then re-mount your last section of bead.

**Optional Applicators Procedure:** See photo 7 or 8 if you have are using our Injector or 2oz (60ml) bottle. Carefully remove your valve core with a pair of pliers or Stan's Core Remover tool, fill the injector/bottle with sealant and inject the sealant through the valve stem. Re-install the valve core and tighten with pliers or Stan's Core Remover tool.

## 6. Re-inflating and sealing your tire

**Procedure:** Hang the tire with valve stem at the top (see photo 3). Inflate the tire to 35 psi (never inflate over 40 psi). Now hold the tire upright between your legs. Let it sit for a few seconds so the sealant can puddle at the bottom. Gently bounce the tire 2-3 inches (5-7cm) off the ground, with each bounce rotates the tire 3-4 inches (7-9 cm). Bounce and rotate the wheel at least two complete revolutions. Re-apply the soap & water solution to the side walls. The soap & water solution will bubble where the leaks are located. Simply rotate the tire to seal these areas. Let the sealant flow to the largest leaks first and then work your way to the smaller ones.

- To complete the sealing process lay the tire flat on an open cardboard box for 1 minutes; the tire should be parallel to the ground allowing the sealant to seal any small leaks on the bead sidewall area. Next, re-bounce, and flip tire to opposite side for an additional 1 minutes (photo 10) Repeat the sealing process until all small leaks are sealed. This should take less than 30 minutes even with difficult tires! Spinning the tire will not seal small leaks on the sidewall; you must shake the wheel to slosh sealant onto the sidewalls.
- Pay close attention to the sidewalls. There are small holes in most tires around this area causing slow leaks. Re-apply the soap & water solution as needed; it will bubble showing any holes or leaks your tire may have.
- To successfully seal these holes, hold the tire and bounce the tire in the areas that are still leaking. Keep re-applying the soap and work until all areas holes are found and are sealed.
- Some tires have small imperfections or tiny bubbles in the rubber that need to be broken with a
  fingernail or piece of plastic or they will may pop and leak on their own while the tire is sitting under
  pressure. Look closely around the sidewall for these small tiny rubber bubbles and pop them then
  reseal the area..

**Tips:** If your tire goes flat or loses significant air pressure then you have not successfully sealed all of the holes and leaks. Re-inflate to 35 psi, re-soap sidewalls, and repeat the sealing process.



Photo 1: Correctly installed rim strip. Note: Rim strip should contact the sides of the rim and be evenly stretched.



Photo 2: Cover the bead and rim in soap suds.



Photo 3: Hang the tire with the valve stem at the top.



Photo 4: Cut open spout hole at first line.



Photo 5: Shake sealant thoroughly and pour from bottle while holding bottle upside down.

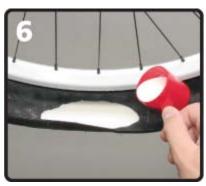


Photo 6: Adding sealant to tire using the scoop provided.



Photo 7.Adding sealant with optional injector.



Photo 8. Adding sealant with optional 2oz (60ml) bottle.



Photo 9: Bounce and rotate wheel on a hard floor to coat inside of the tire with sealant.



Photo 10: Lay tire parallel to the ground.