



## Wheel, Rim and Tire Instructions

Hi there. Thanks for spending your hard-earned cash on this Surly product. Surly stuff is designed to be useful and durable. We're confident it will serve you well for years to come.

**⚠️WARNING: Cycling can be dangerous. Bicycle products should be installed and serviced by a professional mechanic. Never modify your bicycle or accessories. Read and follow all product instructions and warnings including information on the manufacturer's website. Inspect your bicycle before every ride. Always wear a helmet.**

**⚠️WARNING: Tires are a part of your bike that will wear out with use. Tires may pick up foreign objects such as glass or road debris that will puncture the tire and inner tube, causing a loss of air pressure and reduced ability to control or stop the bike, which could lead to a crash resulting in serious injury or death. Before each ride check to ensure that your tires are in good condition, properly seated on the rim, and properly inflated. Spin each wheel slowly and look for cuts in the tread or sidewall, or excessive wear. Replace damaged or worn tires before riding the bike.**

For additional safety information about all Surly products visit: [Surlybikes.com/safety](http://Surlybikes.com/safety)

## Wheel Compatibility

Ensure that the wheels are compatible with your bicycle (built-in dimensions of the frame and fork) as well as with all other parts such as type of brake, cassette, tire, inner tube, valve and rim tape.

**⚠️WARNING: Mounting the wrong size tires can result in the tires hitting the fork or frame when riding. If this happens, you can lose control of your bike and you can be thrown off. A moving tire can be stopped because it touches the fork or frame. Do not mount oversized tires, ones that rub or hit the fork or frame, ones that result in too little clearance, or ones that can hit the fork or frame when the suspension is fully compressed or when riding. Take care that the tires you select are compatible with your bike's fork or frame design. Also, be sure to follow the manufacturer's recommendations of your front fork and rear shocks. When you are considering tires for your bike consider, the actual measured size of a tire may be different than its sidewall marking. Each time you mount a new tire, take the time to inspect the actual clearance between the rotating tire and all parts of the frame. Allowing for lateral rim flex and a wheel or rim that is out-of-true will likely mean choosing a rear tire that provides even more clearance.**

**⚠️WARNING: Surly rims are for disc brake only.**

**⚠️WARNING: Not all Surly wheels, rims, and tires are designed for tubeless applications. Please check packaging for Tubeless Ready designation. Using Surly wheels, rims or tires that are not designated as Tubeless Ready in a tubeless application will void the warranty and may result in component failure, wheel damage, or a crash resulting in serious injury or death.**

## Rim Compatibility with Surly Tires

- Knard (650b/700c x 41mm)—Designed for use with rims 23–30mm wide
- Plus tires (2.7–3.0")—Designed for use with rims 35–65mm wide
- Black Floyd 26 x 3.8"—Best used with rims 50–65mm wide
- Fat tires (3.7–4.3") tires—Best used with rims 50–100mm wide
- Fatter tires (4.5–4.8") tires—Best used with rims 65–100mm wide

**NOTE:** All widths are listed as general outside width measurements.

**NOTE:** Due to different manufacturer designs, some rims will not seat a Surly tire as well as a Surly rim will. Conversely, some tires will not seat as well on a Surly rim as a Surly tire will. For the safest and most reliable fit, Surly recommends that Surly tires and Surly rims be used together.

**NOTE:** Surly recommends inflating tires to the lowest listed pressure of Surly's or other tire manufacturer's suggested pressure range. This applies when using Surly tires with Surly rims, other manufacturer's tires with Surly rims, and Surly tires with other manufacturer's rims.

**⚠️WARNING: Before every ride check the condition and trueness of the both wheels to ensure that there is adequate clearance between the frame, fork, wheel, tire, and rim. Surly recommends no less than 4mm tire clearance for ASTM Condition 1 bikes and no less than 6mm for bikes designated as Condition 2 and above.**

**⚠️WARNING: Rims that are too narrow with respect to the tire width could adversely affect the tire's stability and possibly cause a tire to roll off the rim, leading to a crash resulting in serious injury or death. Overly wide rims will change the shape of the tire and ultimately its handling. In addition, wide rims will allow the casing of the tire to stretch beyond the footprint of the tire tread, which exposes the casing to damage.**

## Tire Pressure

Each tire has MAX PRESSURE indicated on the sidewall. In general, the max pressure should only be used while trying to seat the tire during installation. The recommended operating pressures for Surly tires are as follows:

5–15 PSI	Fat tires (3.7–4.8")
15–30 PSI	Plus tires (2.7–3.0")
50–70 PSI	Skinny tires (700c x 41mm)

**⚠️WARNING: Do not inflate tire over the MAX PRESSURE noted on the tire sidewall as it may lead to injury or wheel damage.**

## Tools Required

- Tire levers
- Floor pump with a gauge

## Installing a Tire—Tube Setup

1. Inspect the rim and rim tape, make sure there is no debris on the inner tire surface of the rim, and that all spoke holes and nipples are covered. If the rim or the rim tape appear to be damaged, replace them before tire install.  
**NOTE:** For rims with cutouts between the spokes, ensure that the cutouts are fully covered by a rimstrip with a width designated for the rim.
2. Install one side of the tire onto the rim. (Figure 1)
3. Inflate the tube slightly so that it is round but smaller than the tire.
4. Insert the inner tube valve into the valve hole on the rim. (Figure 2) You may install the lock nut onto the valve at this time, but leave it loose against the rim. Push the remainder of the inner tube into the partially installed tire. Ensure that the tube is not twisted and that the valve is perpendicular to the rim.
5. Starting opposite from the valve carefully push the loose tire sidewall over the rim lip. (Figure 3) Take care to make sure that the inner tube is not pinched between the rim and the tire. Work your way around the tire until the tire is fully installed into the rim. If you find the tire install difficult, use a free hand to work around the rim, squeezing the tire, and forcing the bead into the valley of the rim. If you are unable to install the tire by hand, a tire lever can be used to gain leverage. Take care not to pinch the inner tube or damage the rim with a tire lever.  
**NOTE:** For rims with cutouts between the spokes, do not fully inflate the tube without checking to make sure the rimstrip has stayed in place throughout the installation, and that all cutouts are fully covered by the rimstrip and prevent the tube from coming through.
6. Once the tire is installed, visually inspect the space between the tire sidewall and both sides of the rim by squeezing the tire, and ensure that the inner tube is not pinched between the rim and tire. (Figure 4)
7. Inflate the tire so that it is pressing against the tire in all locations and then repeat Step 6.
8. While inflating the tire further, inspect it on both sides to monitor the progression of the bead toward the outside edges of the rim. If the tire is migrating off the rim, stop, deflate the tire, and try again. Keep inflating the tire until the tire bead has fully seated on the rim. You can determine when the tire is fully seated by inspecting the distance between the rim and a fine line on the tire. When the tire is fully seated, the distance between the rim and the fine line will be equal all the way around the tire on both sides.
9. Adjust tire pressure to desired level.
10. Close air valve, finger tighten lock nut, and install valve cap.
11. Inspect the tire for any bulges, de-lamination or obvious defects.



Figure 1



Figure 2



Figure 3



Figure 4

## Installing a Tire—Tubeless Setup

**Disclaimer:** Tubeless tire setup is basically arts and crafts time with a dash of mountain biking. It can be a rewarding enterprise, but it can also be a huge pain in the ass. The goal is to keep air in a system by sealing that system using a rim strip, tubeless rim tape, a tubeless valve and tire sealant; all of which must work in tandem to create a seal so that no air can leak out from any point. The following guidelines are here to assist in tubeless setup of Surly tubeless ready rims. For further tips, tricks, and advanced instructions or videos, check out [surlybikes.com](http://surlybikes.com)

1. Clean inner surface of rim thoroughly using alcohol, acetone or some other evaporating solvent.
2. Install rim strip.
3. Install tubeless rim tape.
4. Adhere tubeless rim tape.
5. Create a hole in the tape for your tubeless valve.
6. Push tubeless valve through the tape.
7. Install spacer on valve then thread on the valve nut.
8. Install tire on rim. You should NOT need a tire lever to install the tire. Install the other bead of the tire, ensuring that the bead is sitting in the middle of the rim as you work your way around the tire.
9. Prepare the tire for inflation. Work your way around the wheel pulling on the sidewalls of your tire to move the bead to the outer edges of the rim. Make sure the tire bead is located on the outer edges of the spoke nipples around the entire rim.
10. Use an air compressor to inflate tire rapidly and seat both beads on rim. Tire will likely make an audible snapping noise when seated fully.

**⚠ WARNING: Inspect tire closely during inflation to ensure that it is seating appropriately. Wear safety glasses to protect yourself in the case of a failure during installation.**

11. Apply tubeless tire sealant. After the tire has seated, deflate the tire and remove the valve core from the tubeless valve. Install the sealant through the tubeless valve by following the instructions on the sealant kit. Its is recommended that at least 4 ounces of sealant is used for a 3.5" tire.
12. Reinstall valve core into valve.
13. Re-inflate tire to your max PSI and then deflate to your chosen PSI.
14. Spread the tubeless sealant around the tire by shaking the wheel in all directions and orientations.
15. Inspect tire for leaks.
16. Adjust air pressure to desired level.

## Removing a Tire

1. Remove valve cap, open air valve, deflate tire, and remove lock nut.
2. Push the tire sidewall inwards away from the rim to unseat the tire from the rim all the way around.
3. Using a proper bicycle tire lever, carefully pry one edge of the tire up and over the rim. Depending on the tire one may need to use two levers to achieve this, or none.
4. Use the tire lever to work around the tire, fully removing one side of the tire from the rim.
5. Remove the tube from the rim and tire.
6. Remove the remaining side of the tire from the rim.

## Ongoing Maintenance

Keep your tires properly inflated. Check for tread wear, dried out rubber, and cuts or tears in the material. After long term use, replace tires that show excessive wear. The tire is no longer usable when it no longer holds air or when inflation causes the tire to bulge or deform. The more wear your tire has, the greater chance you have of getting a flat.

**NOTE:** Over exposure to direct sunlight could reduce the life of your tire.

Check the wheels regularly for proper setup and damage. At a minimum, make sure there are no loose spokes, the rim is true, there is no play in the hub axle, and the wheel bearings rotate smoothly. Additionally, check for any dents, cracks, or other damage to any component. If something is out of adjustment or damaged, do not ride the bike and immediately contact your local Surly dealer for inspection, repair or replacement.

## Limited Warranty

This Surly product is warranted against defects in materials and workmanship for one year from the date of retail purchase of the product, subject to the limitations detailed below. Save your dated receipt for proof of purchase.

This warranty does NOT cover the following:

- Damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the user or assembler
- Products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use
- Installation of components, parts or accessories not originally intended for or compatible with Surly product as sold
- Damage or deterioration to the paint, surface finish, aesthetics or appearance of the product
- Normal wear and tear
- Labor required to remove and/or refit and re-adjust the product within the bicycle assembly

This limited warranty is expressly limited to the repair or replacement of a defective product, at the option of Surly, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the Surly product and is not transferable. This warranty applies only to products purchased through an authorized dealer or distributor. In no event shall Surly be liable for any loss, inconvenience or damage, whether direct, incidental, consequential, or otherwise resulting from breach of any express or implied warranty or condition, of merchantability, fitness for a particular purpose, or otherwise with respect to our products except as set forth herein.

This limited warranty gives the consumer specific legal rights, and those rights and other rights may vary from place to place. This limited warranty does not affect your statutory rights.

TO THE EXTENT NOT PROHIBITED BY LAW, THESE WARRANTIES ARE EXCLUSIVE AND THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS INCLUDING WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

### **OTHER PRODUCTS:**

Give us a call for a free catalog or visit our website to check out all our stuff—you won't be disappointed.

### **Surly**

6400 West 105th Street  
Bloomington, MN 55438

**The Watts Line:** 877.743.3191

**The Email:** derby@Surlybikes.com

**The Web Address:** Surlybikes.com