



TUBELESS-READY BEAD TIRE INSTRUCTIONS

SAY GOODBYE TO COLD. SAY HELLO TO COMFORT.

45North is built on real-world needs and knowledge. Our collection delivers unrivaled comfort and control through advanced technical design and effective use of materials. We have more people who ride more miles in colder weather than anywhere on the planet. Enjoy.

⚠ 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.

Additional Product and Safety Information can be found on www.45NORTH.com/safety.

GENERAL SAFETY CONSIDERATIONS

Riding bicycles in the winter is a lot of fun. You get to ride in different places, in different ways, with different gear than most other seasons. Our mission at 45North is to enhance the comfort and control our customers experience while riding in cold weather. While we produce gear that improves control on ice and snow, there are inherent risks one assumes while riding in such conditions. Like other cycling disciplines, winter cyclists have different skill levels and experience. It is your responsibility to ride in ways that do not jeopardize your safety. We help you gain comfort and control with technical solutions for hands, feet and traction. You help yourself by using your common sense! With that, here are some basic winter cycling guidelines to consider:

- Use blinking lights and reflective materials on your bicycle and body
- Dress in layers using clothing made of wool, synthetic fibers, and windproof materials
- Carry spare gloves, socks, and a light insulating jacket with real or synthetic down-fill

Riding studded tires on ice or snow does not provide the same amount of traction as a normal tire on pavement—use caution whenever you ride on ice or snow!

INTENDED USE

Studded tires: winter commuting, fatbiking and winter off-road cycling.

Fatbike tires: for bicycles that accommodate a 26 x 3.7" or larger tire, for winter off-road cycling.

NOTE: 45North Studded tires are not intended for long-haul loaded touring on pavement.

RIM COMPATIBILITY

⚠ WARNING: Standard bead 45North tires are not tubeless ready.

Tire Width	Outside Rim Width
30mm	20–25mm
35mm	20–25mm
38mm	20–28mm
54mm (2.1")	25–35mm
60mm (2.35")	25–40mm
102mm (4.0")	65–102mm
115mm (4.6–4.8")	80–102mm

BEFORE EACH RIDE

Before each ride check to ensure that the tire is in good condition and is properly inflated to recommended pressure range as printed on the sidewall. Use a pump with a pressure gauge to ensure proper inflation.

- Ensure that the tire is properly seated on the rim
- Verify that your brakes are engaged and working properly

⚠ 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, take into account that the actual measured size of the inflated tire on your rim 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. 45North recommends no less than 6mm of clearance between the frame, fork, wheel, tire, and rim. 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 than the CPSC recommends.

FOR ADDITIONAL PRODUCT AND SAFETY INFORMATION GO TO WWW.45NORTH.COM/SAFETY.

45NORTH
6400 WEST 105TH STREET
BLOOMINGTON, MN 55438-2554
P. 952-941-9391 EXT. 1277

45NORTH.COM

⚠ 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.

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

TOOLS:

Tire levers
Floor pump with a gauge

INSTRUCTIONS:

Installing a Tire on a Standard (Non-Tubeless) Rim with a Tube

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.
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.
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 (Figure 5). 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, delamination or obvious defects.



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5

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Removing a Tire Installed on a Standard (Non-Tubeless) Rim with a Tube

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.

45NORTH LIMITED WARRANTY

45North guarantees its products against defects in materials and workmanship for a period of twenty-four (24) months from the original date of purchase, subject to the limitations below. The proof of purchase date is the one that is specified on the retail sales receipt issued by the authorized 45North dealer. 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
- Damage or deterioration to the surface finish, aesthetics or appearance of the product
- Installation of components, parts, or accessories not originally intended for use with or compatible with 45North product
- Normal wear and tear
- Minimal loss of studs on studded tires (it is common to lose 5–10 studs under normal use)
- 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 45North, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the 45North product and is not transferable. This warranty applies only to 45North products purchased through an authorized dealer or distributor. In no event shall 45North 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 45North products except as set forth herein. This warranty gives the consumer specific legal rights, and those rights and other rights may vary from place to place. This warranty does not affect your statutory rights.

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