

Carbon Rim/Wheelset User Guide

Proper Lacing Guidelines

Please take note of these pointers when building up your Loaded Precision Carbon rims. Not only will this allow years of enjoyment out of your new wheel(s), but will also preserve the warranty coverage. If your wheel(s) were not built by our seasoned wheel builders, it is very important to follow these guidelines so you will have worry free performance.

- Your new rim(s) should be built by a certified or experienced wheel builder.
- Our rims are directional. This means that they have a forward rotating direction. Between the rim walls, there is a decal that will indicate which side is the drive side for the rear wheel and which side is the rotor side for the front wheel. If this decal is omitted, please contact us for determining proper direction. Our rims are not front or rear specific.
- Proper lacing is optimal at 3-cross with "pulling" spokes being "head out" at the hub flange. Some builders would choose to lace the pulling spokes "head in", but it is a simple matter of reversing the way the lacing is done.
- We recommend using our Quad-Butted Round Spokes when lacing your new wheel(s). Carbon is such a rigid structure that some elasticity is required in order to prevent excessive impact loads. Too rigid a lace-up, and premature failure is more likely.
- Nipple Washers must be used when lacing and they are included with our Carbon Wheel Nipples. The washers prevent binding at the nipple hole as the spoke turns. In addition, they spread the load of the nipple across a larger surface instead of focusing the load immediately around the nipple hole preventing any focused load failure.
- Tension on the butted spokes should be between 20-25 Nm on a spoke tension gauge. The spokes should have absolute tension with each spoke's tension falling within this range. Spoke tension will vary slightly if different spokes are used. Please contact Loaded Precision for additional assistance with spoke tension for non-Loaded Precision spokes.
- Please be sure wheels are properly tensioned and pre-loaded after final lacing.

Proper Tubeless Set-up Guidelines

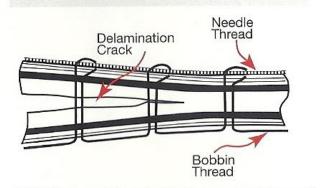
- Our carbon rims are tubeless ready, all you will need is sealant tape and a tubeless rim valve.
- We suggest that you use our Orange Seal tubeless kit for the best fit. Please follow the instructions included with your tubeless kit for best results.
- Start the rim tape at the valve hole and layer the tape twice around circumference of the rim overlapping about an inch from where you started. Adhere it securely ensuring the nipple holes are completely covered.
- Puncture the tape at the valve hole and insert your valve as illustrated.
- Install your tubeless tire and add about 4oz of sealant through the valve.
- Inflate your tire to no more than 60psi. Ensure there are no leaks.

Carbon Technologies

Utilizing state of the art manufacturing processes and cutting edge technology, Loaded Precision has produced quite possibly the strongest and lightest tubeless carbon fiber mountain bike rims available today.

Fortified Nipple Bed

Carbon Knitting Technique (CKT)



Loaded has developed a proprietary technique that unlike typical adhering methods, secures the carbon layers together through a refined knitting and bonding process. By carefully knitting the carbon layers together, the strength of the carbon rims are significantly increased. This unique Carbon Knitting Technique allows for:

Improved Delamination Fatigue Resistance
Improved Impact Damage Tolerance
Significantly Higher Ballistic Impact Loading
Weight Reduction

Technology (FNBT)

Isotropic Spoke Tension Transfer

Loaded's Fortified Nipple Bed Technology allows for isotropic spoke tension transfer without the added material and weight. This technology is designed to transfer the spoke tension away from the spoke hole and into the rim body. This not only decreases spoke tension and spoke fatigue but creates a significantly stronger rim nipple junction. By eliminating continuous reinforcement, extra weight is eliminated in non-essential locations, overall resulting in a lighter and stronger rim.

Nano-Elastomer Infused Resin

Loaded Carbon Rims are manufactured with high grade carbon that is infused with Nano-Elastomers. Using Nano-Elastomers within the carbon structure allows the carbon surface area to be less affected by fracturing caused by impacts. The Nano-Elastomers provide ultra-high dampening to block cracking and maintain adhesion of the resin to the carbon fiber.