General Questions

Do you have wheel installation instructions?

Download carbon fiber racing wheel assembly instructions.

How do I install Mud Plugs?

Download our carbon fiber racing wheel mud plug assembly instructions.

What are the torque specs and patterns for my HiPer Wheels?

Center Section – Torque center section bolts with 3/8 ” drive ratchet, maximum 9 – 11 ft-lbs (108 – 132 in-lbs) in a two-stage star or criss-cross pattern.

Bead-Lock Ring – Torque bead-lock ring bolts with 3/8” drive ratchet, maximum 8 – 11 ft-lbs (96 – 132 in-lbs), (NOTE: DO NOT EXCEED TORQUE SPECIFICATIONS)

How can a carbon fiber wheel be stronger than aluminum?

Our Carbon Fiber materials yield strength is almost three times higher than 6061-T2 aluminum (CF40 = 44.5KSI compared to 6061-T2 = 16KSI). The low mass of our material also allows us to use thicker cross sections, which adds to the strength. Twice the strength is an understatement.

How can a carbon fiber wheel flex without breaking?

Our Carbon Fiber material has a very high yield strength, which allows it to flex under extreme loading and return to its original shape, just like a spring. 6061-T2 aluminum has a low yield strength, which makes it very easy to permanently deform.

How can a carbon fiber wheel cost the same as aluminum?

Raw Carbon Fiber material costs more and is worth more than aluminum. However, since we use half the weight of material to build a wheel, our manufacturing cost is not dominated by the cost of the raw material. The cost saving is made up in our manufacturing efficiency. Much of the cost of aluminum wheels is in manufacturing, i.e. forming, welding, polishing, etc. HiPer has none of those costs. HiPer has the best solution…Go HiPer

What makes the carbon fiber wheels so light?

Weight is determined by material density and the amount of material used. Our Carbon Fiber material has a much lower density than aluminum but we use a thicker cross section. On average, HiPer Racing Wheels then are around the same weight of an aluminum equivalent, but is 2-3 times the strength. We traded equal weight for three times the strength. You win. Go HiPer

What do you mean by modular design?

The wheel is built in 3 basic pieces or modules. There are two wheel halves and one center section. Each module can be purchased separately, allowing the owner to upgrade and replace components individually. Additional modules can be purchased separately allowing you to create your own offsets for your particular race car setup.

Why do the rims look more like plastic than carbon fiber?

Carbon fiber composites come in many forms. The most common form is a translucent epoxy matrix with carbon fiber fabric reinforcement, which produces the woven appearance usually associated with Carbon Fiber. This form of carbon fiber is used to produce very high uni-directional strength but tends to delaminate and may deteriorate with outdoor exposure. Our wheels use a form of carbon fiber that is mixed with an opaque nylon resin matrix. The discontinuous carbon fiber reinforcement, looks like plastic because the carbon fibers are hidden under the matrix. This form of carbon fiber is multi-directional in strength and highly impact and weather resistant.

If you scratch a wheel will it break?

Not likely, this form of carbon fiber is much less scratch sensitive than fabric laminate carbon fiber where scratches lead to delaminating. Our material is homogenous and will not delaminate. If the scratch is not deep, keep racing… if it is deep, replace the wheel module as soon as you can.

How are the wheels made?

The exact manufacturing process is proprietary. We're not telling the whole story here, but it is basically a thick wall molding injection molding process.

How can you tell if the rim is damaged internally?

Our carbon fiber composite is a homogeneous material, which will not delaminate internally and hence is not subject to "internal damage".

What does the term "run-out" mean?

The run-out of a wheel is a dimensional tolerance that defines the trueness and roundness of a wheel. High precision wheel like HiPer wheels will have low run-out measuring in the few thousands of an inch.

HiPer Warranty Questions

What does the 1 year warranty cover?

HiPer One Year Limited Warranty

Tech 3 ATV wheels
CF1 ATV wheels
Fusion UTV wheels
Sidewinder UTV wheels
Stratus UTV wheels

WARRANTY COVERAGE

HiPer Technology warrants this product to be free from defects in materials and workmanship for a period of one year from the date of sale. You must include proof of purchase complete with date of purchase from HiPer Technology direct or from an authorized dealer: To return an item, please contact us and we will give you a Return Merchandise Authorization Number. Please include this number on all correspondence with us and make sure the returned items are tagged with this number. You must include proof of purchase complete with date from HiPer Technology direct of from an authorized dealer. All returns must be properly packed and shipped freight prepaid. Should the product be defective we will, at our option, either repair or replace the item and return it to you with a credit for inbound freight charges.

LIMITATIONS OF WARRANTY

Repair or replacement of the product by us is our sole and exclusive remedy. Claims or credits for new products will not be accepted. HIPER TECHNOLOGY WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF ANY OF OUR PRODUCTS. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES WHICH EXTEND BEYOND THOSE SET OUT ABOVE. BEADRINGS ARE NOT COVERED. Some states do not allow the exclusion or the limitation of incidental or consequential damages, so some of the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.

MX Motocross Questions

I have seen the competitor’s rims with billet centers break at the MX track. Why do you think yours will hold up to MX?

Our wheels are a modular design, which uses fasteners to clamp the wheel halves to each side of our 6061-T6 billet hub center. This eliminates the heat effect zone caused by welding which tends to weaken the material next to the joint.

I thought the large sidewalls were for cushion?

Riders like the extra cushion the sidewalls provide to help prevent rider fatigue during long moto’s. The fatigue is a result of the suspensions feed back, which is affected by characteristics such as shock setup, suspension geometry, and unsuspended mass. The sidewalls help dampen that feedback. Taking away unsuspended mass will do the same by improving the suspensions response time. Our wheels with 18×11-10 tires reduce unsuspended mass by more than 6 pounds. Let your suspension do its job and let the tires do their job.

Sand Dune Questions

What are the best rims for the Dunes?

Our UTV Beadlock wheels are ideal for your dune driving. We recommend a 4+4 offset front and a 5+5 offset rear on our 14″ wheels. This combination will help your steering and acceleration.

Many ATV dune riders and drag racers are ordering our 9×9 dual beadlocks because of their ability to swap tires without using a tire bead breaking tool. Our 10×9, 10×10 and the 9×9 with the 3+6 offset rims are the choice for the jumper and duners who use Sandskate II's.

TT Tourist Trophy Questions

What does TT stand for?

TT stands for Tourist Trophy. TT is part of the Grand National Series and is much like road racing but with small high speed jumps. The coarse is designed with high speed and low speed right and left hand turns and is usually run on hard packed dirt/clay. TT quads are built light and fast.

Why do your TT rims have dual bead locks when most racers run one or none?

Most racers do not run dual beadlocks for TT because of weight. The weight of a 10×10 .190″ wall aluminum beadlock is astronomical and greatly effects straight-line acceleration and brake wear due to the additional rotating inertia. The wheel weight also affects the suspension tuning, as adding un-sprung weight slows the suspension's response time. Some Pro's are running a somewhat ingenious hidden bead retainer which locks the tire on using screws, as they realize that beadlocks are still a necessity. They also realize that a hard bump with a competitor or an obstacle could give them a bent rim and a nice fat DNF for their record. Our 10×10 rims solve these problems as they only weigh 6.8lbs (6.5 lbs w/titanium fasteners) while having the much needed dual beadlocks.

XC Cross Country Questions

How do they hold up against rocks?

Designed specifically for the rigors of Cross Country and Desert racing our 9×9 rears incorporate dual beadlocks. The beadlock rings have a tapered edge to deflect off of the rocks or stumps along with counter sunk fasteners, which allow the beadlocks to slide across obstacles without catching. Our beadlock rings are designed to absorb the punishment while protecting the inner wheel halves. The inner wheel half is designed to flex, protecting your axels, your quad, and yourself.