



**xtreme  
carbon**

for triathletes & time trialists

# SERVICE AND MAINTENACE MANUAL

[www.xtreme-carbon.com](http://www.xtreme-carbon.com)



Congratulations on the purchase of your new xtreme carbon Wheelset. This manual provides information on the care, maintenance and use of your wheelset. Please read these instructions thoroughly before attempting to install, maintain and use the wheelset.

- If you misplace this manual visit our website: [www.xtreme-carbon.com](http://www.xtreme-carbon.com)
- Proper installation is required for compliance with xtreme carbon's warranty policy, and this product is not intended for use by children.

## IMPORTANT NOTE

- This user's manual is specific for xtreme carbon components and is not a substitute for all the safety information contained in the owner's manual for your bicycle.
- If you do not have your bicycle owner's manual, contact your bicycle's manufacturer for a copy.
- If your bicycle user's manual and xtreme carbon's user's manual conflict as to the use of specific xtreme carbon component, this user's manual should be followed.
- If you are unsure about the resolution of a conflict between this manual and any other manual, please contact us at: [www.xtreme-carbon.com](http://www.xtreme-carbon.com)

## SAFETY CHECKS BEFORE EACH RIDE

- Check that each quick release is properly adjusted and the wheel is properly seated in each dropout so that brakes and shifting are functioning correctly.
- Check that the wheel rolls "true" and rotates freely this means that, it does not wobble from side to side or "hop" up and down when rotated on the bike.
- Check that the spokes and nipples are not damaged or at improper tension, so you can check by applying finger tension to all spokes and comparing tension between them.
- Check that there is no visible damage to the wheels carbon surfaces.
- Check that your tires are properly inflated, seated correctly, have no surface cuts, abrasions, cracking or other irregularities.
- Check the carbon brake surface to make sure there are no cracks, deformities, scratches, gouges or chips in the carbon brake surface.
- Check the wear indicators on each brake pad, and if the indicator is worn down or the grooves are not visible **DO NOT** use the wheel as because the safety of the wheel may be compromised.

If any of the foregoing is not correct **DO NOT USE THE WHEEL**. The following instructions provide more detail on each of the points above. If you have any questions regarding these please contact our customer service desk on [www.xtreme-carbon.com](http://www.xtreme-carbon.com)

## GENERAL WARNINGS

- xtreme carbon wheels require a valve extender (included) in order to inflate the tire. Install the valve extender onto the valve stem of the tube before installing the tube onto the rim, making sure the extender is firmly attached and properly sealed to avoid losing air. **DO NOT** use any other valve extender other than the one supplied.
- xtreme carbon wheels should be used with 700c diameter tires only. Tubular rims can accommodate 19-23mm tire widths whilst the clincher rims can accommodate 22-24mm tire widths using the ISO or ETRTO measurement system. **DO NOT** use wider or narrower tires as this may cause damage to the rim and could result in a crash.
- xtreme carbon wheels should not be used for cyclocross (or off paved surfaces) or tandems.
- Xtreme carbon wheels rider weight limit for tubular and clincher models is (120kg).
- A creaking sound can be a sign of potential problems, so make sure all contact surfaces between components are clean. Bolt threads are greased or treated with thread lock and tightened to the bike manufacturer's specifications. If you continue to experience creaking stop using the xtreme carbon component and contact us at [www.xtreme-carbon.com](http://www.xtreme-carbon.com)



- Periodically examine all surfaces on xtreme carbon component after cleaning in bright sunlight to check for any small hairline cracks or fatigue at “stress points” such as welds, seams, holes, points of contact with other parts. If you see any cracks, no matter how small, stop using the xtreme carbon component and contact us at [www.xtreme-carbon.com](http://www.xtreme-carbon.com)
- Whenever you install any new component on your bike make sure you thoroughly test ride and try it out close to home with your helmet and all other safety gear where there is no obstacles or traffic. Make sure everything is working properly before going off on a ride or to a race.
- Bicycle racing (road, or multi-sport) places extreme stress on bicycles and their components and significantly shortens their usable life. If you participate in these types of events, the lifetime of the product may be significantly shortened depending upon the level of use and amount of racing. The “normal wear” of a component may differ greatly between competitive and non-competitive uses, which is why professional level riders often use new bikes and components each season as well as having their bikes serviced by professional bicycle mechanics. Particular care should be placed in the regular examination of your bicycle and it’s components to insure your safety.
- A number of factors can reduce the life of this component to less than its warranty period. These are:
  - Riders size and strength
  - Riding style
  - High mileage
  - Rough terrain
  - Abuse
  - Improper installation
  - Sweat
  - Environmental conditions (such as salt air or corrosive rain)
  - Travel damage (were components are repeatedly disassembled)
  - Crashes or accidents

The more factors that are present, the more the life of the component is reduced.

- All warnings and care instructions that pertain to metal parts apply doubly to carbon fibre parts except for corrosion, as they can be easily damaged during use. The use of a torque wrench is highly recommended as it is very easy to over or under tighten any carbon part resulting in a cracked part or worse, a part that breaks during usage.
- On a routine basis you must thoroughly check for cracks, wear marks, surface deterioration, delaminating, chipping of the finish and carbon fibre splintering especially where a carbon component contacts or is mated to a non-carbon component.
- Once the surface of a carbon part is compromised it can break. Do not apply any lubricant to any carbon surface where they come in contact with another carbon or metal part.

#### IMPORTANT TO NOTE

**After a crash carbon parts may be scraped but will not likely be bent like a metal part. However they can still be weakened and must be replaced. Contact us at [www.xtreme-carbon.com](http://www.xtreme-carbon.com) if you have any concerns regarding the safety of any xtreme carbon product.**

Where possible, in addition to industry standard descriptions, this xtreme carbon Owner’s manual references the American Society for Testing and Materials (“ASTM”) Standard Classifications for Bicycle Usage to describe Intended Use, along with Common Terms. See ASTM Designation F 2043-09 at [www.astm.org](http://www.astm.org)

For clarification, xtreme carbon defines “Tri / Road ASTM Condition 1” as a set of conditions for the operation of a bicycle on a regular paved surface where the tires may unintentionally lose ground contact. This style of riding does not include riding off paved surfaces and there is no jumping allowed. Condition 1 bicycles have no suspension.



## FITTED ITEMS

### 1) Rim tape

A rim tape is supplied pre-fitted on all road clincher wheels in the xtreme carbon range. Please ensure that it remains correctly positioned covering all the inner spokes holes and does not interfere with the tyre bead seating.

## TYRES AND TYRE PRESSURE

### 1) Mounting the tire:

Before mounting your tyres, check for cuts or debris in the sidewall and tread surface. Make sure the tire diameter and width is appropriate for your wheel.

Some xtreme carbon wheels will require inner tubes with a long valve stems or alternatively a valve extender may be required. Valve extenders are supplied with 60mm, 80mm and 90mm xtreme carbon wheels. If using a valve extender, ensure that the extender is firmly attached and properly sealed to avoid air loss.

### 2) Maximum tire pressure for clincher and tubular:

The maximum tyre pressure for road clinchers and tubular tires for road users must not exceed 125 PSI. If your road clincher tyres are rated at below 120 PSI, do not exceed the rated tyre pressure.

## MOUNTING/REMOVING THE CASSETTE

### 1) Mounting the cassette:

xtreme carbon rear hubs are designed and supplied to accept *Shimano* OR *Campagnolo* cassettes. Make sure you have the correct cassette for your free hub style.

xtreme carbon wheelsets using the xtreme carbon cassette free body feature a free-hub body that can be swapped over at a later date. In order to correctly install the cassette align the master spline on the freehub body to the corresponding master spline on the cassette. All xtreme carbon free-bodies are 10/11 speed compatible. All 10 speed cassettes need to use the spacer provided.

After tightening the cassette lock ring please check to ensure that there is no side to side movement in the cassette. If there is movement please read the manual provided with your cassette to check if a spacer is required.

### 2) Removing the cassette:

**ALWAYS** use the chain whip on the smallest gear to loosen the cassette lock ring. Failure to do this will result in damage to the aluminium spline.

## QUICK RELEASES

### 1) Installing Quick Release:

xtreme carbon wheelsets are supplied with quick release hardware. Failure to close the quick release properly can result in accident or injury. If you are having trouble ask our customer service staff or your closest qualified bicycle mechanic to help you install and remove your wheels safely. Check to ensure that your wheel quick releases are securely clamped every time before your ride your bicycle. The wheel quick release uses a cam action to clamp the bike's wheel in place.

**WARNING:** Holding the nut with one hand and turning the lever with the other hand until everything is as tight as you can get it **WILL NOT** clamp the wheel safely in the dropouts.

### 2) Adjusting the quick release:

The wheel hub is clamped in place by the force of the quick release cam pushing against the dropout and pulling on the tension-adjustment nut against the other dropout through the skewer. The tension-adjusting nut can control the level of clamping force.

Turn the tension-adjusting nut clockwise whilst preventing the cam lever from rotating to increase the clamping force. Turn it anti-clockwise whilst preventing the cam lever from rotating to reduce the clamping force. Less than half a turn of the tension-adjusting nut can make a difference between being a safe clamping force and an unsafe clamping force.



## BRAKE PADS

### 1) Brake Pad Adjustment:

Brake pads should be centred on the braking surface of the rim. Position the brake pads according to the manufacturer's adjustment information, to centre the brake surface, so the top of the brake is no more than 1mm from the top of the rim. Ensure the brake pads do not touch the rim decals and the brake pads **MUST NOT TOUCH** the tyre, as this can result in sidewall failure and injury. xtreme carbon wheel sets should be adjusted with the brake pad clearance of no greater than 3 mm between the brake pad surface and the rim surface for safe braking action.

Adjust your brake cables to accommodate the xtreme carbon rim width. Your brake manufacturer's owner's manual will include instruction about how to adjust the brake cables. Your brake pads should be adjusted so that they come into contact with the rim before the lever is no more than halfway depressed.

### 2) Brake Pad Recommendations:

xtreme carbon recommends a soft brake pad compound such as all-weather or wet weather pads to be used with all our rims. We do not recommend the use of hard compound brake pads on our aluminium rims as they result in excessive wear.

All xtreme carbon wheelsets with carbon braking surfaces are supplied with special carbon specific brake pads. Please use these supplied pads or other carbon specific brake pads at all times as the use of non-carbon specific pads will impair braking performance, damage the rim and void your warranty.

Replacement carbon specific pads can be purchased from [www.xtreme-carbon.com](http://www.xtreme-carbon.com) or your local bicycle retailers.

## REAR HUB

### 1) Bearing Adjustment:

All repairs should be performed by a professional bicycle mechanic. xtreme carbon hubs feature smooth running sealed bearings, the hubs should turn freely on the axles without any noticeable sideways play. If you experience any sideways play please consult with xtreme carbon customer service staff.

If replacement bearings are required please consult with your retailer to have new Enduro bearings supplied and fitted. Incorrect assembly of replacement bearings could result in premature failure.

## WHEEL ALIGNMENT

### 1) Wheel Truing:

All repairs should be performed by a professional bicycle mechanic. Xtreme carbon wheels were hand built and during this process spoke freeze is used on the spoke nipples. Your wheels have been carefully pre-stressed, tensioned and trued before shipping. You will need a **Twist Resist spoke clamp tool** to properly true your wheels due to the spoke freeze. You may cause your wheels to go out of true if you do not use this tool.

Your Xtreme Carbon wheelsets are supplied with replacement spokes, and If you have a broken spoke please always take your wheel to a professional bicycle mechanic for repair and truing, or contact xtreme carbon team.

**IMPORTANT:** Please check the spoke tension after the first few rides, if in the unlikely case that the spokes have lost tension or the wheel is out of true please consult your local qualified bicycle mechanic to adjust the tension in the spokes.

## CLEANING

### 1) Cleaning your wheels:

Remove and clean the wheel quick release regularly and check the tightness of the tension nut and cam lever. Clean your wheels using a mild soap and water solution only. **DO NOT PRESSURE CLEAN** or spray with water as this can damage the bearings.

Be sure to remove any grease or lubricant that might get onto the brake surface, and frequently clean the brake pads and remove any aluminium shavings and other debris that may be embedded in the brake pad surface.

Clean the brake pads with fine sandpaper or a small file. Proper care and cleaning of your xtreme carbon wheels will extend the life of the wheel and help to protect the braking surface.

**IMPORTANT:** Do not use harsh chemical cleaners on the rims or brake pad surface.



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## **WARRANTY**

xtreme carbon warrants to the original retail purchaser that the Xtreme Carbon product for which they received this warranty is free from defects in materials and workmanship for a period of one year.

Wheelsets are guaranteed against defects in materials and workmanship for a period of one year. This warranty does not include normal wear and tear. This warranty is only effective if the xtreme carbon wheel set is used on bitumen paved or sealed roads.

## **LIMITS OF THE WARRANTY**

xtreme carbon's sole obligation under this warranty is to repair or replace the product, at the discretion of a report from our engineers at xtreme carbon. Warranties only apply to the original owner. We do not provide a warranty on products purchased through eBay or similar online auction sites, unless through an xtreme carbon authorised dealer or website. All repairs should be performed by a Qualified Professional Bicycle Mechanic.

For further detail on our warranty visit [www.xtreme-carbon.com/service](http://www.xtreme-carbon.com/service)