

SHARP PRECISION WHEELS



WHEEL CARE INSTRUCTIONS.

CONTENTS

WHEEL CARE INSTRUCTIONS:

“Thank you for your purchase from Sharp Precision Wheels. I put all my knowledge and skill as a wheel builder into every pair, ensuring they are built with the highest precision. As a rider I know how valuable time on the bike can be, and a great pair of wheels can make it all the more special. I am committed to providing the best after sales care that I can, to ensure you get the most from your investment. In this booklet you’ll find help and advice on how best to care for your wheels. If something doesn’t meet with your expectations, you have a crash, or need any help in the future, I’m here to provide support.

Full contact details can be found on the back page.”



Ben Sharp - Sharp Precision Wheels

INSTALLATION AND SETUP

- Freehub body preparation and longevity
- Brake pad selection and adjustment / Disc rotor installation and adjustment
- Gear Indexing
- Tyre pressures
- Tightening QR's / QR Selection

TYRE LEVERS

ROUTINE CLEANING

HUB SERVICING

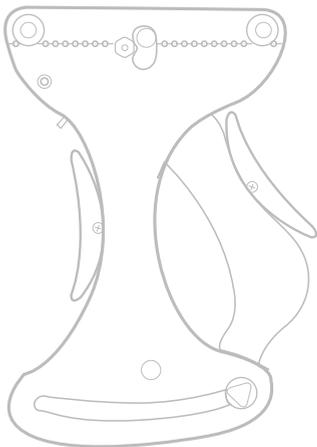
ROAD TUBELESS

ACCIDENTS / COMPONENT FAILURE AND THIRD-PARTY REPAIRS

INSTALLATION AND SETUP

Once you have unboxed your wheels, it can be tempting to put them on the bike and head out the door immediately for a test ride.

If you are not having wheels fitted by a trained mechanic, there are a few simple steps you can follow to ensure everything is set up properly and guarantee the maximum performance and durability of your investment.



FREEHUB BODY PREPARATION AND LONGEVITY:

Included in the box is a small pot of grease for the freehub body splines. Please use a small art paintbrush or similar to apply a thin coating to all the freehub body splines before installing the cassette. The cassette lock ring threads can also be greased with a small amount of this grease, or some anti-seize paste if you have any available. Take care when installing the lock ring to avoid cross-threading, and make sure it is torqued down to the manufacturer's specification.

Light alloy freehub bodies have become commonplace in the market. For hub manufacturers, using aluminium alloy is one of the best ways to reduce overall hub weight to an acceptable level for the consumer. Ultimately this comes at the cost of durability to the freehub body. After a while under heavy load, the individual sprockets of the cassette can start to dig into the freehub body. This means that it may become harder to remove cassettes in the future, and manufacturers such as DT Swiss recommend that as part of routine maintenance your freehub may require the splines to be filed down. Greasing the freehub body can significantly reduce this biting or chewing of the metal, as can ensuring you have made the appropriate chainring selection for your level of riding: this ensures you are pedalling hard in the larger sprockets which are typically mounted to carriers which spread the load.

RIM BRAKE PAD SELECTION AND ADJUSTMENT:

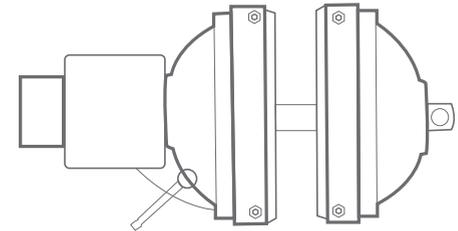
For carbon rims, it is critical to use the brake pad which is supplied with the rim. Pads are usually tested and designed by rim manufacturers in-house to perform with the specific brake track texture and design of their rims, as well as the specific resins used in production. Using other types of brake pad may invalidate any warranty offered.

For alloy rims, I normally suggest that customers upgrade to a quality aftermarket pad, such as the SwissStop

Original (Black) or BXP (Blue) pads. These pads are a much softer compound than those supplied as standard on Shimano, SRAM or Campagnolo groupsets, and offer increased stopping performance as well as being kinder to the alloy rim.

It is crucial to ensure your brake blocks are aligned correctly in the centre of the brake track before riding. The brake callipers should be centred so that pads contact the rim on either side at the same time under braking, to ensure even

application of force. Pads should not be set too close to the rim: a gap of at least 2.5mm is recommended.



Disc Rotor Installation and Adjustment:

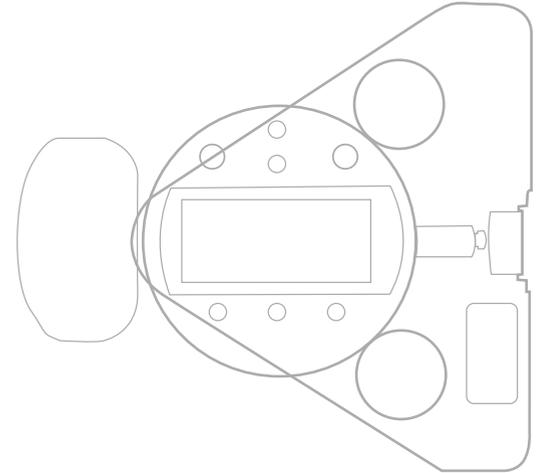
For 6-bolt rotors, please ensure bolts are torqued to manufacturer specification. For centrelock rotors, it is good practise to apply a small amount of anti-seize paste to the centrelock splines, as well as a small amount of grease or anti-seize paste to the rotor locking threads, before torquing the rotor down to manufacturer's specification.

Extra care should be taken during installation and cleaning of disc rotors not to contaminate either the rotor or the pad with any kind of grease, as this will impact the performance of the braking system. Please also note that the hub and rotor are in a fixed position in the dropouts of the bike. You may experience some rubbing of new rotors on brake pads, which can be eliminated with a rotor-truing tool and adjustment of the calliper, but not usually with any adjustment to the wheel.

GEAR INDEXING

Please ensure that you have adjusted and indexed your rear derailleur specifically with your new wheels installed before going for a ride. Pay close attention to the adjustment of the stop screws, to ensure that the chain cannot over-shift past the largest sprocket and into the spokes, or over the smallest sprocket onto the frame.

Because modern 11+ speed drivetrains operate at extremely fine tolerances, it is not appropriate to change rear wheels without making sure the rear derailleur is adjusted to suit. Even a fraction of a millimetre difference in hub tolerance or design may cause drivetrain inefficiency or malfunction.



Tyre Pressures

Please refer to the Birth Certificate supplied with your wheels for your ideal tyre pressure. This figure is calculated by considering the tyre size, width of rim, and rider weight/height. Modern road rims tend to be much wider, increasing the volume of a tyre and turning the profile from a lightbulb shape to a “U” profile. Under these conditions, much less pressure is required to maintain

the shape of the tyre during riding. You should experience greater grip and stability when cornering, and a general improvement in ride quality.

It is important to note that over inflation of tyres relative to a rider’s physical attributes will harm the performance of the wheel. Over inflation reduces the tyre’s ability to deform to the road surface and roll

effectively (increasing rolling resistance), and also causes a significant additional reduction in spoke tension, which reduces wheel stiffness.

Try to make sure you have an accurate track pump or digital tyre gauge to make sure you can get your tyre pressures dialled in perfectly.

TIGHTENING QR'S / QR SELECTION:

Please ensure that QR's are tightened to adequately hold the wheel in the bike, without being excessive. Over-tightening causes excessive load on the bearings, and may cause them to feel rough, or wear out prematurely.

QR selection can be very important in ensuring your wheels perform at their best. Lighter is not always better, even when climbing. For riders over 75Kg, or those who are particularly tall and ride a bike with a larger frame size, a steel closed cam QR such as those produced by Shimano or Paul Components may be necessary to ensure the wheel and rear-end of the bike remain as stiff as possible, maximising power transfer and reducing brake rub.



TYRE LEVERS:



I try to recommend to all my clients that they learn the dark art of fitting and removing tyres without a tyre lever. Years of hard work and “thumbs of steel” gained in the workshop certainly make this easier, but for the most part it is about learning the correct technique to get the tyre mounted with minimum struggle. On modern rims which are tubeless ready, tyres can be an especially tight fit, but these rims feature a deep central channel which the tyre bead should be mounted into when fitting, or pushed into prior to removal. This decreases the diameter of the rim and makes the tyre easier to fit. For full instructions, please see the tutorial on the website, or pop down to the workshop: you are always welcome.

If you need to use a tyre lever, especially with frozen cold hands on a winter's training ride, make sure they are plastic or nylon, and that you use caution not to exert too much pressure on the rim brake track or rim bed.



ROUTINE CLEANING:

IT IS ALWAYS GOOD TO KEEP A BIKE CLEAN TO PROLONG THE LIFE OF COMPONENTS, BUT THERE ARE A FEW BEST PRACTICES WHICH CAN BE ADOPTED TO AVOID DOING MORE HARM THAN GOOD.

In summertime, a damp rag or microfibre cloth is often the best way to clean the entire bike.

Avoid jet washing of hubs or any bearings on the bike: this forces out grease and the water ingress will cause premature bearing degradation.

If you are using water to clean the bike, it is usually best to remove the wheels prior to cleaning.

Try to use a pH neutral cleaner like Autoglym car shampoo, which is kind to alloy components. Some traditional bike cleaners contain aggressive detergents which will damage parts if not rinsed properly. These detergents can settle and become trapped inside rims, or under spoke elbows, leading to corrosion.

If you are using a chain cleaner, try not to let degreaser run down the back of the freehub body and into the hub: this will strip grease from inside the hub and lead to component failure. If possible, remove the chain for cleaning separately. For the same reason, do not use spray degreaser on cassette sprockets while they are still mounted to the wheel.

Check brake tracks for excessive wear and brake pads for embedded debris. A clean pad with no trapped metal or glass will preserve the life of the rim. Rotors can be cleaned with acetone or brake cleaner and a clean rag to remove any oily contaminants, being careful not to spill this cleaner on any painted surface, which will be harmed.

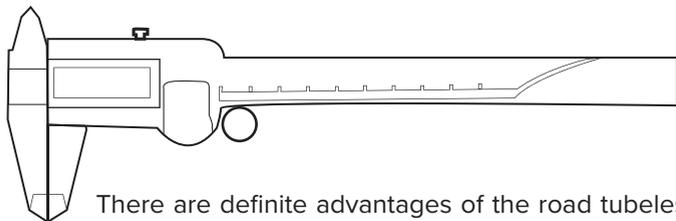
HUB SERVICING:

Service intervals are extremely hard to predict. They vary from rider to rider and are highly dependant on weather conditions, mileage and cleaning intensity. For bikes ridden in good conditions and limited mileages I would suggest an annual service to keep everything moving

smoothly. This enables us to check wheels in the workshop to ensure they are still performing at their best and suggest changes to cleaning or servicing routines to prolong their life. Prevention is almost always preferable (and less expensive) than cure.

During winter riding on salty roads, or wet, high mileage conditions, hubs may require cleaning and servicing as often as every 3 months to perform at their best.

Hubs such as Chris King require careful adjustment of bearing



There are definite advantages of the road tubeless system, being able to run a lower tyre pressure and resistance to minor punctures being among them. In most cases I urge caution for my customers who are new to this tyre technology and would recommend you think very carefully about how the use of road tubeless tyres will affect the day to day riding and maintenance of your bicycle.

Road tubeless tyres are typically much harder (tighter) to fit onto rims, which can increase the risk of wheel damage during tyre fitment and removal. In the event of a serious puncture or slash to the tyre, it can be very hard and very

Road Tubeless:

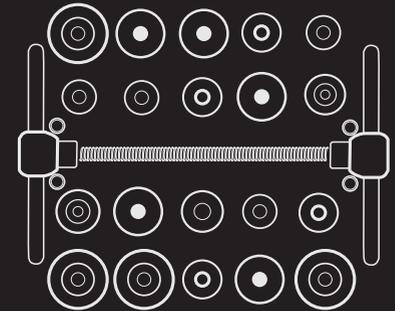
messy at the side of the road trying to fit a replacement tube. The road tubeless tyre system also has a more severe effect on spoke tension when compared to traditional clincher tyres. This can essentially lead to a rear wheel which exhibits more flex in the bike and can sometimes cause brake rub. Such a reduction in spoke tension can also cause the wheel to feel less responsive in acceleration.

Please contact me directly or see the website for more information if you are considering running a tubeless setup on your wheels.

pre-loaders periodically and can be difficult and complex to perform a full service on. Others, such as DT Swiss, require less input from the rider and are relatively simple to perform a basic field service on. Please see our website for articles on maintenance of specific hubs or get in contact to

discuss what is best for your wheels.

I always try to use products which are well designed and inherently serviceable: a little bit of care goes a long way to keeping your wheels at their best.



ACCIDENTS / COMPONENT FAILURE AND THIRD-PARTY REPAIRS:

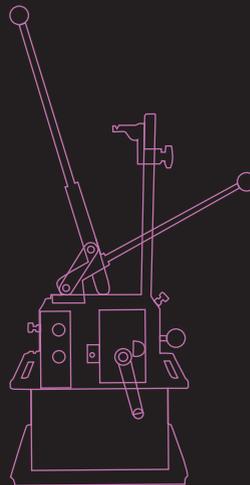
Accidents happen, mass manufactured components fail. If you've had an accident or experienced any form of component failure, please get in touch immediately. Be as honest and descriptive as you can be, providing as much detail regarding the wheelset and circumstances as possible. I will always do my best to

put things right for you. In the case of component failures, it is hugely beneficial to send the wheel back for a full inspection in the workshop. Often, we can identify the cause of the failure, enabling us to prevent it from happening again in the future.

If you've damaged your

wheel in an accident while racing, or with a pothole, it is also always best to send it back to the workshop for repair. I have the tooling and measuring equipment necessary to determine if a wheel is safe to repair, and the experience to repair it without affecting the long-term durability of the wheel. It is critical to monitor spoke tension to

ensure the long-term durability of the wheel and evaluate any permanent damage which may have been done to the rim or spokes. It might seem quicker to take your wheel to a local bike shop for a basic repair, but this can lead to further complications down the line.



SHARP PRECISION WHEELS

First Floor: The Cottage
Rosier Business Park
Coneyhurst Road
Billingshurst
West Sussex
RH14 9DE

Tel: 01403 333 211
Email: ben@sharpwheels.co.uk
www.sharpwheels.co.uk

  @sharpprecisionwheels

 @sharpprecision