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# Oversized Pulley Wheel System for SRAM mechanical Mounting & Maintenance



# Congratulations with your new CeramicSpeed Oversized Pulley Wheel System for SRAM mechanical

Personally, I want to thank you for joining the growing number of CeramicSpeed users worldwide. The Oversized Pulley Wheel System you have bought is developed and handmade in Denmark and contains the unique CeramicSpeed Balls and components, carefully chosen from high quality suppliers. This system is compatible with mechanical SRAM Red, Force, Rival and Apex 10s and 11s groupsets.

Our aim, as the world's best performing ceramic bearings and optimised racing chains manufacturer, is to deliver products that contribute to your performance as a rider. We are confident that you will love your new purchase.

To ensure the best lifetime and performance, it is important that your new Oversized Pulley Wheel System is mounted and maintained correctly. Familiarise yourself with the technical information supplied in this brochure. Should you have any concerns or issues, please contact your local dealer or the technical department at CeramicSpeed, at any time.

Happy and safe riding, and once again welcome to CeramicSpeed.

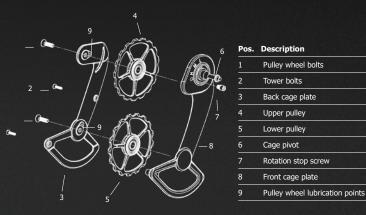
Best regards, **CeramicSpeed** 

Martin Panks

Martin Banke
Managing Director

Part of the Victory

#### Mounting Manual



#### Tools required

For the installation of your new CeramicSpeed Oversized Pulley Wheel System for SRAM mechanical (henceforth referred to as OSPW System) you will need the following tools:







- A. Chain Tool
- B. Phillips screwdriver no. 1
- C. Allen key (2.5 mm)
- D. We recommend the use of torque tools in order to secure the right torque when assembling the OSPW System

## Mounting the CeramicSpeed Oversized Pulley Wheel System for SRAM mechanical

To ensure the very best in riding performance it is vital that your new OSPW System is mounted correctly. Follow these instructions to install your OSPW System for SRAM mechanical groupsets:



 Begin with your bike mounted in a stand. Shift to the lowest (smallest) cog and remove the rear wheel. Shift the derailleur to the largest (most open) gear setting for easier access.



2. Using the proper chain tool, remove your chain. When completing the installation of the OSPW System you will need to use a new, uncut chain. Note: it is not recommended to add links to a previously ridden chain.



3. Press down on the pulley cage body to access the silver mounting screw on the bottom of the derailleur body. Using a Phillips screwdriver remove the silver mounting screw. Only half of the screw is threaded. Once the screw is about 1 cm out and the threads are not engaged, slide the screw the rest of the way out.



4. Hold the cage carefully as there is still spring tension on the pulley cage. Gently pull the pulley cage away from the derailleur, allowing it to rotate in a clockwise manner to relase the spring tension. Once the cage is around 7 mm out, the rotation stop screw will be clear off the derailleur body and the cage will rotate forward until there is no spring tension. Complete removing the pulley cage, careful to not drop the pulley spring.



**5.** Using a 2.5 mm Allen key, remove the silver rotation stop screw (7) from the OSPW cage (8). Set aside for installation later.



**6.** Apply a small amount of grease onto the cage pivot (6) flange.



Note the three spring tension settings on the OSPW cage: H (high), M (medium) and L (low). The L tension setting will reduce both chain tension and friction, but will also result in slightly compromised shifting performance. The H tension setting provides the best in shifting performance, yet it will increase friction performance slightly over the L and the M tension settings.



8. Align the OSPW cage with the derailleur body. Select the spring tension setting desired and insert the end of the spring into the corresponding hole. Be careful to align the opposite end of the spring with the stop hole inside the derailleur.



9. Insert the OSPW cage pivot (6) and tension spring into the derailleur body. The cage should sit flush against the derailleur body. Test the fit by rotating the OSPW cage counter clockwise and back forward. Using the original mounting silver screw (see step 3), press the screw into the derailleur body until you reach the threads. The OSPW cage is not secured in place yet.



10. Install the original silver mounting screw using the Phillips screwdriver. Once a few threads are secured the OSPW cage should be secured in place. With the cage secured on the silver mounting screw, thread the screw in until tight. This is approximately 0,2 Nm.



11. Pull the cage up and backwards (counter clockwise) to add spring tension. While holding the OSPW cage down against the spring tension, locate the rotation stop screw mounting hole. Mount the rotation stop screw (7) and tighten it to 0,3 Nm.



**12.** Carefully allow the cage to rotate back until it rests on the rotation stop screw (7).



13. Reinstall the rear wheel, carefully pull down on the OSPW cage to allow room for the cassette if necessary. Remove the rear derailleur and verify the alignment of the hanger both vertically and horizontally. Reinstall the rear derailleur.



14. In the 'small-small' gear combination, add tension to the B limit screw (A) to allow clearance from the upper pulley (4) and the smallest cog. Be sure to check the low (B) and high (C) set screws. Now shift to the largest gear in the rear.



(4) to the large cog is greater than 8 mm you need to remove a link of the chain and readjust the B limit in the 'small-small' combination. Once the upper pulley (4) is within 8 mm of the largest cog and does not rub the smallest cog you are at the correct chain length. Note that hanger alignment is crucial for gear shifting performance. We recommend that you use a derailleur hanger alignment gauge to secure the correct fitting of your OSPW System.

#### Maintenance

No set of rules can be made for how often your Oversized Pulley Wheels are to be maintained. Maintenance frequency depends on the weather conditions that you are riding in.

A worn chain will increase the wear on the pulley wheels significantly, so make sure that you change your chain before it is completely worn out. Under normal conditions, we recommend that you maintain the Oversized Pulley Wheels when you have ridden under wet conditions, washed your



bike or each time you lubricate the chain. For normal maintenance, add a drop of oil into the lubrication points (9) for optimal performance. You will find the lubrication points on the back cage plate (3). Make sure to position the OSPW System horizontally to ensure that the oil reaches the Oversized Pulley Wheel bearings.

We recommend the use of CeramicSpeed Oil on the OSPW System. This can be purchased from the CeramicSpeed dealers worldwide or from our webshop. Watch our maintenance video on ceramicspeed.com in the Techlab section.

When travelling, your OSPW System will not fit in the bike travelling bag. We recommend that you dismount the whole rear derailleur and pack it aside.

#### **EXTENDED MAINTENANCE**

Approximately once every half a year we recommend that you provide an extended maintenance. In this case, you should dismount the Oversized Pulley Wheels from the cage, remove the seals from both sides and clean all parts in a shaker with degreaser. After cleaning, dry the components off, put two drops of oil onto the CeramicSpeed Balls, place the seals back on and remount the Oversized Pulley Wheels. When dismounting the cage plates, you will need a 2.5 mm Allen key for the pulley wheel bolts (1) and a 2 mm Allen key for the tower bolts (2). To remount the screws, tighten the pulley wheel screws up to a max torque of 1 Nm and the tower bolts up to 0.3 Nm. For this, a torque tool is recommended. If you're riding in wet and muddy conditions, we recommend you to provide an extended maintenance more frequently and replace oil with All Round Grease for a better protection.

#### Up to 6 years warranty

Thankfully, we do not have to deal with our warranty too often. Nevertheless, we are happy to introduce you to our comprehensive warranty program.

#### Standard products 4 years

Bottom Brackets
Pulley Wheels
Wheel Kits
Headsets
Oversized Pulley Wheel Systems
Single Bearings

#### Coated products 6 years

Bottom Brackets
Pulley Wheels
Wheel Kits
Headsets
Oversized Pulley Wheel Systems
Single Bearings



We are committed to manufacturing and delivering the best ceramic bearing products in the industry. Should your CeramicSpeed product not live up to your expectations, and this is caused by defects in materials and/or workmanship, we encourage you to contact us.

Register your product within the first 30 days of purchase on ceramicspeed.com/sport under the section Warranty. Should you thereafter, and within the warranty period need to file a claim, please return to the same section on our website and fill in your claim. We will always strive to revert to you concerning your claim within 24 hours.

# Benefit from other products in the CeramicSpeed family

A broad range of CeramicSpeed products is available for you to upgrade your bike. Apart from the OSPW Systems you can upgrade with CeramicSpeed Bottom Brackets, Wheel Kits, Pulley Wheels and UFO Racing Chains, available for most standards and brands on the market. You have also the chance to upgrade with Headsets.

CeramicSpeed manufactures the cycling industry's leading, most sought-after ceramic bearings and optimised chains. Delivering exceptional performance, our OSPW System provides you with increased energy savings, smooth drivetrain performance and unmatched lifetime.

It is proven that CeramicSpeed Bearings installed in the bottom bracket, wheels and pulley wheels can save a rider between 6-9 watts. On top of that, thanks to the CeramicSpeed UFO Racing Chains we deliver an additional energy saving between 2-5 watts. The new OSPW Systems add a saving of minimum 1.6 watts (SRAM) and minimum 2.4 watts (Shimano) to boost your performance and round up the total savings to 10-16

watts. Many of the fastest World Tour riders and international triathletes choose to ride CeramicSpeed – simply because it makes a difference.



ceramicspeed.com/sport/techlab