



NOVA RIDE

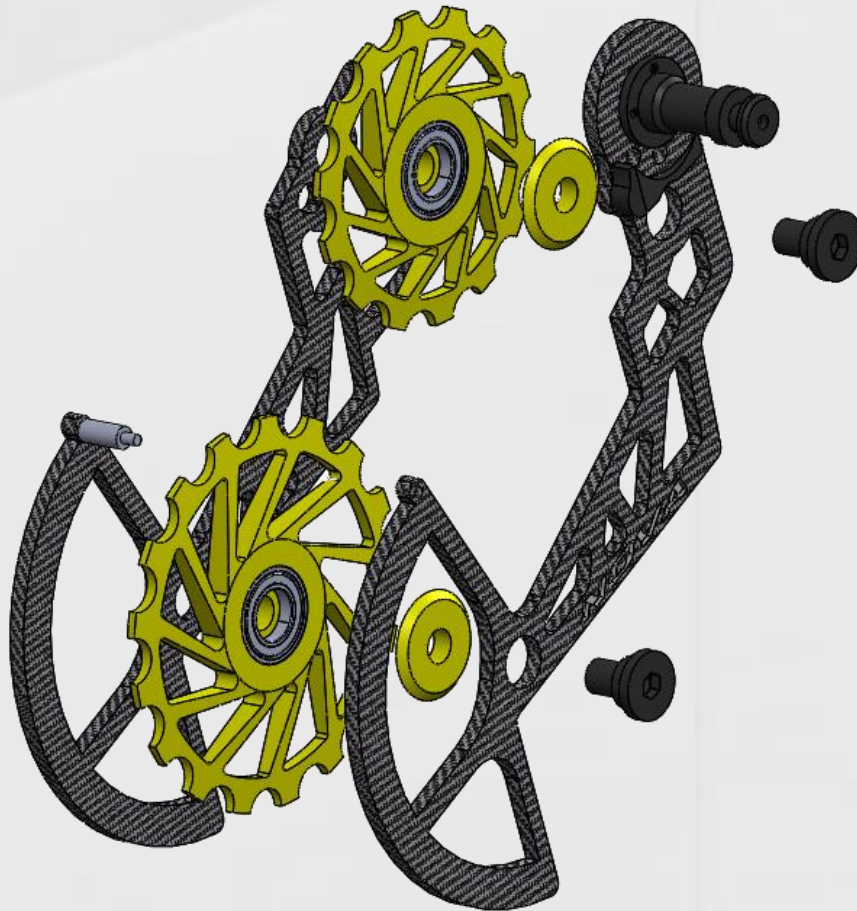


Mounting Manual

**Oversized Pulley Wheel System for Shimano
Ultegra R8XXX – Dura-Ace R91XX**



General Overview NOVA RIDE OSPW



Tools required

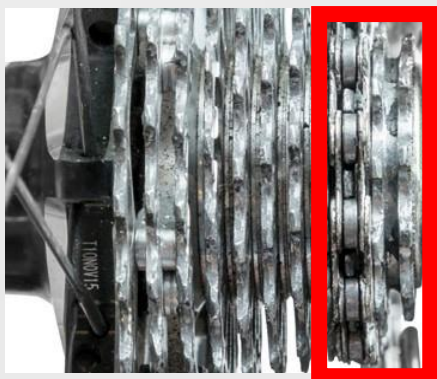
For the installation of your new NOVA RIDE Oversized Pulley Wheel System R8XXX-R91XX you will need the following tools:

1. Chain Tool
2. T10 Torx Screwdriver
3. Philips screwdriver no. 2



Mounting NOVA RIDE OSPW on Shimano R8XXX – R91XX derailleur

Nova Ride provides the highest quality products possible, however, to ensure the best performance it's crucial that the OSPW is mounted correctly. Please take a close look to the following instructions for the installation. Visit the 'Nova Ride' YouTube channel to see the mounting video: <https://www.youtube.com/watch?v=lnAyf8G1qB0>



1. Mount your bike in a stand, shift to the 3rd smallest gear (counted from R-L). Then remove the back wheel.



2. Remove your chain with a proper chain Tool. You will need a new chain with approximately 3 links more to complete the installation. Note: Nova Ride don't recommend adding links to a previously ridden chain.



3. Shift the derailleur upwards past the cable routing point. Use one hand to rotate down the front cage plate (A). Locate and remove the Philips head pulley cage stop screw (B). Carefully allow the pulley cage spring to unwind, releasing the spring tension. Your derailleur cage will appear to be upside down (C).



4. Locate the black mounting screw on the bottom of the derailleur body. Use the T10 TORX to remove the mounting screw. As the screw is not fully threaded once the screw is 1 cm out you can slide it out.



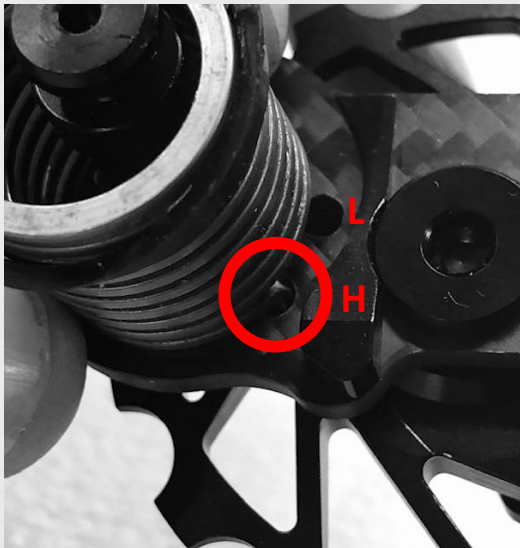
5. Slide out the original Shimano pulley cage and spring. Do this very carefully and don't let it drop. Collect the pulley spring and plastic spacer.



6. Remove the spring and plastic spacer from the Shimano cage. The end of the spring is hooked to lock into the pulley cage. Keep the aside as you will need to reuse these for the installation of the OSPW.



7. Place the original spring and plastic spacer over the mounting post of the NOVA RIDE OSPW in the same manner they were removed from the Shimano cage. The hooked end goes towards the OSPW cage as well as the flat edge of the plastic spacer.



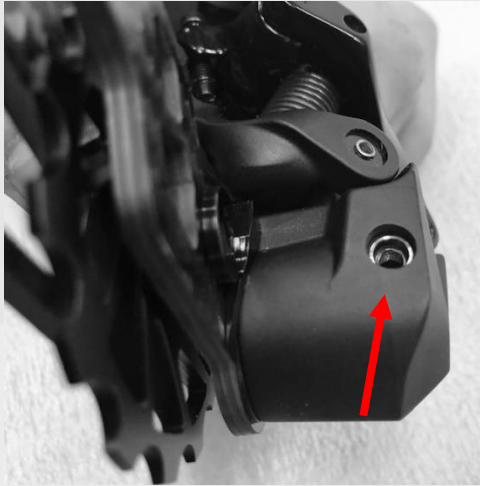
8. Note the two spring tension settings on the OSPW cage: from H (high) to L (low). The L tension setting will reduce both chain tension and friction, but will also result in slightly compromised shifting performance. The H tension setting provides the best in shifting performance, yet it will increase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

NOVA RIDE recommends using H tension

Insert the hooked end of the spring completely. This may need to be pressed firmly. The plastic spacer will rest freely on the spring until aligned at the back of the derailleur body.



9. Rotate the derailleur body back, align the mounting post of the OSPW with the back of the derailleur body and the cage pointing to the front of the bike. Align the tension spring and plastic spacer with the squared slot on the derailleur body and insert until the cage is flush to the derailleur. Ensure the OSPW cage rotates smoothly and the spring is properly situated.



10. Hold the OSPW cage against the derailleur body and rotate counter-clockwise (first up and then to the back of the bike and downward) until you feel the ramped stop tower click past the stop point on the derailleur.



11. Secure the cage by reinstalling the original black T10 screw (removed at step 4). Installation torque is 1Nm.



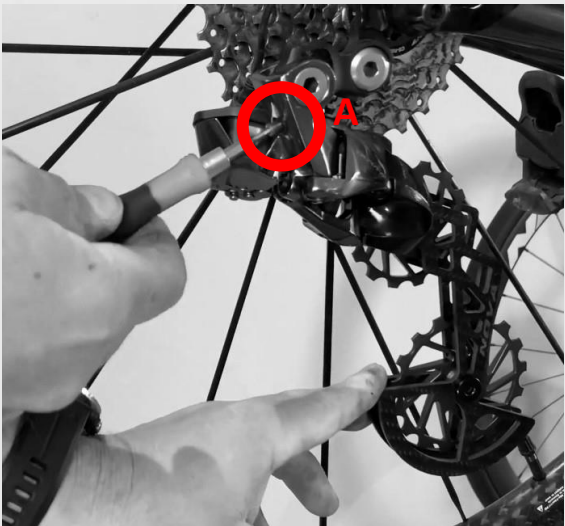
12. Your new OSPW System is now installed. For the chain installation and derailleur setting please go to the next page.

Chain installation and Derailleur Setting

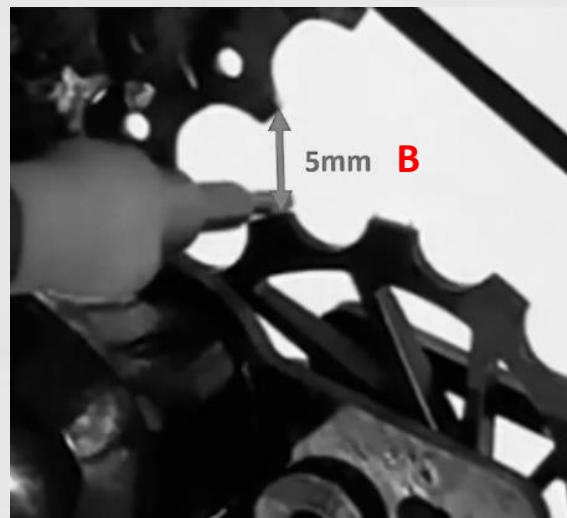
For 53 tooth chainrings and larger, start with a 114 link chain. For 52 tooth chainrings and smaller, start with a 112 link chain. Specific adjustments may be required depending on the specific cassette size and chain stay length on your bike. Check our 'Nova Ride' YouTube channel for the video: <https://www.youtube.com/watch?v=r1z0D6rfHJA>



1. Install the rear wheel and check upper and lower stops of the derailleur. Adjust the limit screws as needed, as well as any cable tension or Di2 trim adjustments for proper alignment between the sprockets and pulley wheels.
2. Shift the derailleur to the biggest sprocket of the cassette (closed to the wheel). Hold the cage with one hand on the position on the picture.

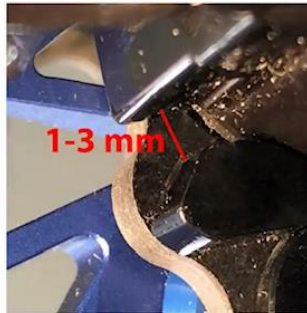


3. Set with the tension screw (A) the derailleur so that the teeth of the biggest sprocket are around 5mm from the upper wheel teeth of the NOVA RIDE OSPW (B). After setting is done shift to smallest sprocket (closed to derailleur).





4. Take the new (longer) chain and install it on the bike. Put it on the smallest front chainring and the smallest sprocket from the cassette.



5. Adjust the chain length so that the derailleur is pulling the chain. In this configuration the stopper isn't allowed to touch the derailleur body. The stopper and derailleur body must have 1-3mm clearance between both parts.



6. Check the shifting and if needed reset the index of your derailleur in the junction box. This following the standard Shimano Di2 procedures. For mechanical groupsets adjust the tension screw on the derailleur.

Recommended chain length:
53/39 chainrings and 11-(23-32)
cassette: 114 links.
50/34 chainrings and 11-(23-32)
cassette: 112 links.

