Tech sheet

CeramicSpeed Bearing Cleaning & Maintenance

Introduction

To preserve the highest levels of efficiency and prolong the life of your CeramicSpeed bearings, preventative maintenance is required.

Depending on climate and normal riding conditions*, you may need to maintain your CeramicSpeed Bearings more often or select a different grease. The below recommendations are based on using CeramicSpeed All Round blue grease.

CeramicSpeed Bottom Brackets and Wheel Bearings should be maintained every 5,000-8,000 km or 3,000-5,000 miles and generally last 5 times longer compared to what you would experience with a standard bearing. CeramicSpeed headset bearings can be maintained once per year for most riders.

*Hot regions (average at or above 35*C/95*F), high humidity climates, riding in extremely sandy/ desert like conditions or riding in constant rainy/wet conditions will result in more frequent maintenance needs. CeramicSpeed Long Life grease will also hold up for longer intervals in any of these conditions.

Preparation

When possible, standard maintenance can and should be done without removing the bearings from their cup, frame bore, or hub shell. This will limit potential stress or impact damage from knocking out the bearings and reinstalling.

For cranks, remove the cranks, any spacers, and dust covers.
For hubs, follow the hub/wheel manufactures instructions for removing axel end caps and/or dust covers to access the face of the bearings.

With the face of the bearing visible, use a knife edge or flat pick to lift off the bearing seal starting on the inner lip (at the inner race) and carefully lifting up. Small, smooth movements will help prevent damaging the seal during removal. Once the seal is removed, wipe both sides clean, ensure it is completely flat, and set aside. You should now have access to the individual balls inside of the bearing. Using a cloth or shop rag, wipe away grease on the face of the bearing, revealing the balls. If you see a solid ring, you are looking at the back of the bearing. There is no direction to the performance of the bearing, but cleaning and maintenance are easier and more efficient when performed from the face/front of the bearing. You may choose to turn the bearing around at this time to allow adequate cleaning and ease of future maintenance.

Normal cleaning

To flush and clean CeramicSpeed bearings. UFO Clean Bearings was developed as a non-toxic easy to use bearing cleaner. Use the pipette to add a few drops of cleaner into each bearing (Approx. 0,5 – 2,0mL dependent on the bearing size). Rotate the bearing to cause an 'agitation' effect inside the bearing.

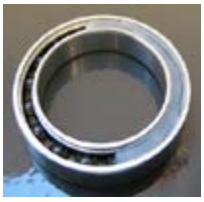
After soaking for 3-5 minutes, use compressed air to flush out the grease and contamination. Repeat this process a second time if needed to fully clean the bearing. Once the bearing is visually cleaned out and rotates smoothly, allow the bearing to air dry prior to applying fresh grease. Follow grease selection and application guide at the bottom of this document for best performance and longevity. Once grease is applied, reinstall the face seal by laying it on the bearing (the all-rubber side should face out) and evenly pressing it into the groove on the outer race. The seal should sit flat and even on the bearing. Be sure to take careful note of the direction on any dust covers when reassembling the parts.

Deep cleaning

In the event that normal cleaning is not providing an adequate cleaning level, or if the bearings have been neglected well outside of the suggested service intervals, you may need to perform a deeper cleaning process to achieve a smooth functioning bearing again. Carefully remove the bottom bracket cups from the frame or remove the bearings from the hubs or from the frame if there are no cups, and remove all accessible seals. Place the bearings into a suitable container and submerge in UFO Clean Bearings. Agitate the bearings a few times or use a container with a lid and shake to flush the solvent throughout the bearing, letting sit for 3-5 minutes. It is suggested to use protective gloves and eyewear, as well as working in a ventilated area. Remove the bearings from the container and dry with compressed air. If fully cleaned and not permanently damaged the bearings should spin freely and smoothly now. Apply the rear seal and follow the below grease selection and application charts based on your intended use.

Using the correct bearing press & drifts, carefully reinstall the bearings into your frame or hubs, or install the cups into the frame and reassemble the remaining parts per original manufactures specifications.

Application and product		Riding conditions	
Discipline	**CeramicSpeed Components**	**Dry and sunny conditions**	**Wet and harsh conditions**
Road	Bottom Brackets & Wheel Kits	All Round Grease	All Round / Long Life Grease
	Pulley Wheels & OSPW Systems	CeramicSpeed Oil	All Round Grease / CeramicSpeed Oil
	Headsets	Long Life Grease	Long Life Grease
Off-road	Bottom Brackets, Wheel Kits & Headsets	All Round / Long Life Grease	Long Life Grease
	Pulley Wheels & OSPW Systems	All Round Grease / CeramicSpeed Oil	All Round Grease
TT/Track	Bottom Brackets & Wheel Kits	Race Day Grease	All Round / Race Day Grease
	Pulley Wheels & OSPW Systems	CeramicSpeed Oil	All Round Grease / CeramicSpeed Oil
	Headsets	Long Life Grease	Long Life Grease

CeramicSpeed All Round Grease	CeramicSpeed Race Day Grease	CeramicSpeed Long Life Grease
		
Race conditions: all-round Low friction	Dry race condition (only short distances!) Race Day Greae – extremely low friction	All training conditions
Standard, all conditions grease for any/all CeramicSpeed bearings	Short service interval (re-lubrication) Always lubricate before / after use	Long service interval High protection of the bearings
		
Recommended 60-80% filling rate	Recommended 30-50% filling rate	Recommended 70-100% filling rate