FUSHIBEARING 6801MAX

FUSHIBEARING 6801 VRS MAX Cartridge Bearings

Instruction Manual

1. Introduction

This manual provides essential information for the proper use, installation, and maintenance of your FUSHIBEARING 6801 VRS MAX Cartridge Bearings. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of the bearings.

2. Product Overview

The FUSHIBEARING 6801 VRS MAX Cartridge Bearings are high-quality, chrome steel bearings designed specifically for demanding applications such as bicycle suspension pivots. These bearings feature a MAX type design, allowing for a maximum number of balls to be inserted, which significantly increases their load capacity compared to standard radial bearings.
Key features include:

- **Dimensions:** 12 mm inner diameter, 21 mm outer diameter, 5 mm thickness.
- **Structure:** Full complement design without a retainer, providing up to 45% increased load capacity.
- **Clearance:** C2 small clearance with no horizontal swing, pre-adjusted manually.
- **Sealing:** Double VRS dual-lip labyrinth seals to prevent dust ingress and grease overflow.
- **Grade:** ABEC 3 precision, utilizing grade 10 Chromium Steel Balls and 52100 High Chromium Steel Races.
- **Material:** Alloy Steel.

Image: A set of four FUSHIBEARING 6801 VRS MAX Cartridge Bearings, each featuring a silver outer race and a distinctive blue inner seal. These bearings are designed for high-load applications like bike pivots.

Image: A digital caliper precisely measuring the inner diameter of a single 6801 VRS MAX bearing, displaying a reading of 12.00 mm. This confirms the specified internal dimension.

Image: A digital caliper measuring the outer diameter of a 6801 VRS MAX bearing, showing a reading of 21.00 mm. This illustrates the external dimension of the bearing.

Image: A digital caliper measuring the thickness of a 6801 VRS MAX bearing, displaying a reading of 5.00 mm. This confirms the bearing's profile dimension.

Image: A single 6801 VRS MAX bearing placed on a digital precision scale, indicating a weight of 6.01 grams. This provides information on the individual bearing's mass.

Image: A close-up view of the blue seal on a 6801 VRS MAX bearing, clearly showing the "6801VRS" marking. This highlights the specific model and sealing type.

Image: A detailed view of the side of a FUSHI MAX BALL bearing, displaying the engraved brand and product type. This confirms the authenticity and specific design of the bearing.

Image: Two FUSHIBEARING 6801 VRS MAX Cartridge Bearings placed side by side, showcasing their identical appearance and blue seals. This illustrates the typical pairing for installation.

Image: A stack of four FUSHIBEARING 6801 VRS MAX Cartridge Bearings, demonstrating the typical packaging quantity and the compact design of the bearings.

3. Setup and Installation

Proper installation is crucial for the longevity and performance of your FUSHIBEARING 6801 VRS MAX Cartridge Bearings. These bearings are commonly used in bicycle suspension pivots.

Tools Required

- Bearing press tool (recommended for proper seating)
- Appropriate drifts or sockets matching bearing outer diameter
- Grease (if applying additional, ensure compatibility)
- Clean cloths

Installation Steps

1. **Preparation:** Ensure the bearing housing or pivot point is clean and free of debris, old grease, or rust. Inspect for any damage or burrs.
2. **Lubrication:** Apply a thin layer of appropriate grease to the bearing seat. This aids in smooth installation and provides initial corrosion protection.
3. **Alignment:** Carefully align the new bearing with the housing. Ensure it is perfectly straight before applying pressure.
4. **Pressing:** Use a bearing press tool to gently and evenly press the bearing into its seat. Apply pressure only to the outer race of the bearing. *Never press on the inner race or the seal, as this can damage the bearing.*
5. **Seating:** Continue pressing until the bearing is fully seated against its stop. Do not over-press.

6. **Verification:** Once installed, check that the bearing spins freely and smoothly without any binding or excessive play.

Caution:
Improper installation can lead to premature bearing failure. If you are unsure about the installation process, consult a professional mechanic or refer to specific bicycle manufacturer guidelines for pivot bearing replacement.

4. Operating Considerations

FUSHIBEARING 6801 VRS MAX Cartridge Bearings are designed for high-load, low-speed rotational applications typical of suspension pivots. Their full complement design provides superior load capacity.

- **Load Capacity:** Due to their MAX design, these bearings can withstand higher radial and axial loads than standard bearings of the same size.
- **Sealing:** The VRS dual-lip labyrinth seals offer excellent protection against water and dirt ingress, which is critical in outdoor and demanding environments.
- **Smooth Operation:** The ABEC 3 precision and pre-adjusted clearance ensure smooth and noiseless movement when properly installed and maintained.

Important:
While designed for durability, these bearings are not intended for high-speed continuous rotation applications like wheel hubs. Their primary function is in pivot points where oscillating or limited rotational movements under heavy loads occur.

5. Maintenance

FUSHIBEARING 6801 VRS MAX Cartridge Bearings are sealed and pre-greased, requiring minimal maintenance. However, periodic inspection can extend their lifespan.

Recommended Maintenance Schedule

- **Regular Inspection:** Periodically check the bearings for any signs of play, roughness, or noise. This can be done during routine bicycle maintenance.
- **Cleaning:** Keep the areas around the bearings clean. Wipe away any accumulated dirt or grime from the seals and housing. Avoid using high-pressure washers directly on the bearings, as this can force water past the seals.
- **Regreasing (Optional):** While sealed, if a bearing begins to feel rough or noisy over time, it may be possible to carefully pry off one seal (if designed for it) and add a small amount of compatible high-pressure bearing grease. Reinstall the seal carefully. *Note: This should only be attempted if you are experienced, as it can compromise the seal.*
- **Replacement:** If a bearing develops significant play, roughness, or becomes seized, it should be replaced immediately to prevent damage to other components.

6. Troubleshooting

This section addresses common issues you might encounter with your FUSHIBEARING 6801 VRS MAX Cartridge Bearings.

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
Bearing feels rough or gritty.	Contamination (dirt, water) inside the bearing; lack of lubrication; damaged balls or races.	Clean the area around the bearing. If roughness persists, the bearing may need replacement. Attempting to regrease might help if seals are intact and contamination is minimal.
Bearing has excessive play (wobbles).	Improper installation (not fully seated); worn out bearing; incorrect bearing size.	Re-check installation to ensure proper seating. If correctly installed, the bearing is likely worn and requires replacement. Verify correct bearing dimensions for your application.
Bearing is noisy (squeaking, grinding).	Lack of lubrication; contamination; damaged components; over-tightening during installation.	Inspect for external debris. If noise persists, consider replacement. Ensure proper torque if the bearing is part of a bolted assembly.
Bearing seized or difficult to turn.	Severe contamination; corrosion; catastrophic internal failure; extreme over-tightening.	Immediate replacement is necessary. Investigate the cause to prevent recurrence.

7. Specifications

The following are the technical specifications for the FUSHIBEARING 6801 VRS MAX Cartridge Bearings:

Attribute	Value
Brand	FUSHIBEARING
Model Number	6801MAX
Bearing Number	6801
Inner Diameter	12 mm
Outer Diameter	21 mm
Thickness	5 mm
Material	Alloy Steel (Chrome Steel)
Precision Grade	ABEC 3
Seal Type	VRS (Double dual-lip labyrinth seals)
Grease Fill	80%-90% fill of Krupp or Mobil High-Pressure Grease
Hardness	HRC-62.5
Balls	Grade 10 Chromium Steel Balls

Attribute	Value
Races	52100 High Chromium Steel Races
Structure	Full Complement (MAX type)

8. Warranty and Support

FUSHIBEARING stands behind the quality of its products. For specific warranty information regarding your 6801 VRS MAX Cartridge Bearings, please refer to the purchase documentation or contact FUSHIBEARING customer support directly.

Customer Support

For technical assistance, questions about installation, or warranty claims, please visit the official FUSHIBEARING store on Amazon or contact their customer service through the platform where the product was purchased.
You can visit the FUSHIBEARING Store at: FUSHIBEARING Amazon Store