SHIMANO Y31F98070

SHIMANO 105 5800 Freehub Body Unit Instruction Manual

Model: Y31F98070

1. Product Overview

The SHIMANO 105 FH-5800 Freehub Body is a replacement component designed for road cycling hubs. It is engineered for durability and optimal performance, ensuring smooth power transfer and reliable gear shifts. Crafted from robust alloy steel, this freehub body offers exceptional strength and longevity, capable of withstanding the demands of road cycling. It provides a dependable interface for your cassette and hub assembly.

Key Features

- Durable alloy steel construction for long-lasting performance.
- Designed for HG 11/12-speed road cassettes, ensuring precise gear shifting.
- Integrated seal protects against dirt, water, and debris, enhancing durability.
- Includes essential fixing bolt and washer for secure installation.
- Optimized for efficient energy transfer and smooth rotation.



A close-up view of the Shimano 105 5800 11-Speed Freehub Body Unit, showing its black steel construction and internal splines for cassette engagement. The unit includes a sealed bearing area and the outer body with ribbed details.

2. Package Contents

Verify that all components are present in the package:

- 1 x SHIMANO 105 5800 Freehub Body Unit
- 1 x Fixing Bolt
- 1 x Washer

3. Specifications

Brand	SHIMANO
Model Number	Y31F98070
Manufacturer Part Number	Shimano-FW7570
Material	Alloy Steel
Color	Silver
Item Weight	7.04 ounces
Dimensions (L x W x H)	6" x 4" x 2"
Cassette Compatibility	HG 11/12-speed road cassettes
Hub Compatibility	SHIMANO 105 series hubs

GTIN/UPC	689228876217

4. Setup and Installation

This freehub body is designed for seamless compatibility with SHIMANO 105 series hubs and HG 11/12-speed road cassettes. Proper installation is crucial for optimal performance and safety. It is recommended that installation be performed by a qualified bicycle mechanic. If performing a DIY installation, ensure you have the correct tools and follow SHIMANO's official service instructions for your specific hub model.

General Installation Steps (Consult SHIMANO service manuals for detailed instructions):

1. Remove the existing freehub body from your hub, if applicable.
2. Clean the hub shell and axle thoroughly.
3. Apply a thin layer of appropriate grease to the hub shell threads (if applicable) and the freehub body's mating surface.
4. Install the new SHIMANO 105 5800 Freehub Body onto the hub shell, ensuring proper alignment.
5. Secure the freehub body using the provided fixing bolt and washer. Tighten to the manufacturer's specified torque using a torque wrench.
6. Install your HG 11/12-speed road cassette onto the freehub body, ensuring all cogs are correctly oriented and secured with the lockring.
7. Reassemble the wheel and install it onto your bicycle.
8. Perform a functional check of the drivetrain to ensure smooth shifting and proper engagement.

5. Operation

Once correctly installed, the SHIMANO 105 5800 Freehub Body facilitates the transfer of power from your pedals to the rear wheel and allows for coasting. Its design ensures precise engagement with your cassette, leading to consistent power transfer and reliable gear shifts across all 11 or 12 speeds. The internal mechanism allows the cassette to spin freely when you stop pedaling, preventing the chain from dragging.

6. Maintenance

Regular maintenance extends the lifespan and ensures optimal performance of your freehub body. The integrated seal provides protection against environmental elements, but periodic inspection and cleaning are still recommended.

Maintenance Tips:

- **Cleaning:** Periodically clean the exterior of the freehub body and cassette to remove dirt, grime, and old lubricant. Use a degreaser specifically designed for bicycle components.
- **Inspection:** Regularly inspect the freehub body for any signs of wear, damage, or corrosion. Check for play in the cassette or unusual noises during operation.
- **Lubrication:** While the freehub body is sealed, internal lubrication may degrade over time. If you notice any issues with engagement or excessive noise, consult a professional mechanic for servicing and re-lubrication of the internal pawls and bearings. Do not attempt to disassemble the freehub body without proper tools and knowledge.
- **Seal Integrity:** Ensure the external seals remain intact and free from damage to maintain protection against water and debris.

7. Troubleshooting

If you encounter issues with your SHIMANO 105 5800 Freehub Body, consider the following common problems and solutions:

- **Cassette Play/Wobble:** Ensure the cassette lockring is tightened to the manufacturer's specified torque. Check if all cassette spacers are correctly installed. If play persists, the freehub body bearings or hub bearings may require inspection or replacement.
- **Skipping Gears:** This is often related to derailleur adjustment, worn chain, or worn cassette cogs, rather than the freehub body itself. However, a damaged freehub body spline could contribute. Inspect the splines for damage.
- **Freehub Not Engaging (Pedaling Forward but No Drive):** This indicates an issue with the internal pawls or springs. This typically requires professional servicing or replacement of the freehub body.
- **Freehub Drag (Cassette Spins with Wheel when Coasting):** This can be caused by excessive friction in the freehub body's internal mechanism, often due to old, sticky grease or damaged bearings/seals. Professional servicing is recommended.
- **Unusual Noises (Clicking, Grinding):** Could indicate contamination, lack of lubrication, or worn internal components. Disassembly and inspection by a qualified mechanic are advised.

For complex issues or if you are unsure about a repair, always consult a professional bicycle mechanic.

8. Warranty Information

This SHIMANO product is covered by a **Limited Warranty**. The terms and conditions of the warranty are subject to the policies of SHIMANO and the retailer from whom the product was purchased. Please retain your proof of purchase for warranty claims. For specific details regarding coverage, duration, and claim procedures, refer to the warranty documentation provided with your original purchase or visit the official SHIMANO website.

9. Support

For technical assistance, service inquiries, or further information regarding your SHIMANO 105 5800 Freehub Body Unit, please contact SHIMANO customer support or visit their official website. You may also consult your local authorized SHIMANO dealer or bicycle mechanic for expert advice and service.

SHIMANO Official Website: bike.shimano.com