

DT Swiss HXYXXX00N7683S

DT Swiss Ratchet LN Freehub Body Upgrade Kit - Shimano HG 11 MTN Instruction Manual

Model: HXYXXX00N7683S

INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your DT Swiss Ratchet LN Freehub Body Upgrade Kit. This kit is designed to enhance your bicycle's performance by converting compatible hubs, such as the 360 and 370 series, to the high-performance Ratchet System. It is specifically compatible with Shimano HG 11-speed mountain bike cassettes, offering superior engagement and durability. Please read these instructions carefully before proceeding with installation or use.

PACKAGE CONTENTS

- DT Swiss Ratchet LN Freehub Body (Aluminum)
- Ratchet Rings (36T)
- Springs
- Sealed Bearings (pre-installed in freehub body)



Image: Components of the DT Swiss Ratchet LN Freehub Body Upgrade Kit. This image displays the freehub body, two ratchet rings, and two springs, which are the core components for upgrading your hub's engagement system.

SETUP AND INSTALLATION

This section outlines the general steps for installing the Ratchet LN Freehub Body Upgrade Kit. Professional installation is recommended if you are unfamiliar with bicycle hub maintenance.

Required Tools (Not Included):

- Cassette lockring tool
- Chain whip
- Appropriate wrenches or hex keys for axle removal
- DT Swiss special tool for Ratchet ring removal/installation (if replacing existing ratchet rings)
- DT Swiss special grease (or equivalent compatible grease)
- Clean rags

Installation Steps:

1. **Remove Wheel:** Carefully remove the rear wheel from your bicycle.
2. **Remove Cassette:** Using a chain whip and cassette lockring tool, remove the cassette from the existing

freehub body.

3. **Remove End Caps:** Remove the drive-side and non-drive-side end caps from the hub axle. These usually pull off by hand or require light prying.
4. **Remove Existing Freehub Body:** Pull the existing freehub body directly off the hub axle. The pawls and springs (if applicable) will be exposed.
5. **Clean Hub Shell:** Thoroughly clean the inside of the hub shell and the axle to remove any old grease, dirt, or debris.
6. **Install Ratchet Rings and Springs:**
 - Apply a thin layer of DT Swiss special grease to the teeth of both ratchet rings.
 - Place one spring into the hub shell, followed by one ratchet ring, ensuring the teeth face inwards.
 - Place the second spring into the freehub body, followed by the second ratchet ring, ensuring the teeth face outwards.
7. **Install New Freehub Body:** Carefully slide the new Ratchet LN freehub body onto the hub axle, aligning the ratchet rings. Ensure the springs are properly seated and the ratchet rings engage smoothly. You may need to gently rotate the freehub body to help the teeth align and engage.
8. **Reinstall End Caps:** Push the end caps back onto the hub axle until they are fully seated.
9. **Reinstall Cassette:** Install your Shimano HG 11-speed mountain bike cassette onto the new freehub body and tighten the lockring to the manufacturer's specified torque.
10. **Reinstall Wheel:** Mount the rear wheel back onto your bicycle and ensure all quick releases or thru-axles are properly secured.

Your browser does not support the video tag.

Video: This video demonstrates the components of a 54T Star Ratchet Hub Kit, showing the two ratchet rings and springs. While this video features a 54T kit, the principle of assembly for the 36T Ratchet LN system is similar, illustrating how the ratchet rings and springs interact.

OPERATING INSTRUCTIONS

Once installed, the DT Swiss Ratchet LN Freehub Body operates automatically as part of your bicycle's drivetrain. The primary function is to allow the rear wheel to freewheel when you stop pedaling and to engage the drivetrain when you resume pedaling.

- **Engagement:** The 36-tooth ratchet mechanism provides a precise and quick engagement, minimizing pedal lag and transferring power efficiently to the rear wheel.
- **Freewheeling:** When you stop pedaling, the ratchet system disengages, allowing the wheel to spin freely.
- **Sound:** The Ratchet System typically produces a distinct, crisp freewheeling sound. This is normal and indicates proper function.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your DT Swiss Ratchet LN Freehub Body.

- **Cleaning:** Periodically remove the freehub body (as per installation steps 3-4) and clean the ratchet rings, springs, and hub shell interior. Use a clean rag to wipe away old grease and any accumulated dirt or debris. Avoid harsh solvents that could damage seals or bearings.
- **Lubrication:** After cleaning, apply a thin, even layer of DT Swiss special grease (or a compatible, non-migrating grease specifically designed for ratchet systems) to the teeth of both ratchet rings and the springs. Do not over-grease, as this can impede engagement.
- **Inspection:** While performing maintenance, inspect the ratchet rings for any signs of wear, chipping, or

damage. Check the springs for deformation or breakage. Inspect the sealed bearings for smooth rotation and any play. Replace any worn or damaged components immediately.

- **Frequency:** Maintenance frequency depends on riding conditions. For frequent or aggressive riding, inspect and lubricate every 3-6 months. For casual riding, once a year may suffice.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Noisy Freehub / Grinding Sound	Insufficient or incorrect grease; dirt/debris in ratchet mechanism; worn ratchet rings or bearings.	Disassemble, clean, and re-grease with DT Swiss special grease. Inspect for wear and replace components if necessary.
Freehub Not Engaging / Slipping	Springs are bent or broken; ratchet rings are worn or damaged; excessive grease preventing engagement.	Disassemble and inspect springs and ratchet rings. Replace if damaged. Clean off excess grease and re-lubricate sparingly.
Excessive Play in Freehub Body	Worn bearings; improperly seated end caps.	Check that end caps are fully seated. If play persists, bearings may need replacement.

SPECIFICATIONS

Feature	Detail
Model Name	Ratchet LN Freehub Body Upgrade Kit
Part Number	HXYXXX00N7683S
Compatibility	DT Swiss 360 and 370 series hubs (for conversion to Ratchet System), Shimano HG 11-speed MTN cassettes
Ratchet Teeth	36T
Material	Aluminum
Bearings	Sealed Bearing
Item Dimensions (LxWxH)	2.33 x 1.99 x 1.62 inches
Package Weight	0.13 Kilograms

WARRANTY INFORMATION

The DT Swiss Ratchet LN Freehub Body Upgrade Kit comes with a **Limited Warranty**. For specific terms, conditions, and duration of the warranty, please refer to the official DT Swiss website or contact DT Swiss customer support. The warranty typically covers manufacturing defects in materials and workmanship under normal use.

Please retain your proof of purchase for any warranty claims.

CUSTOMER SUPPORT

If you have any questions, require technical assistance, or need to report an issue with your DT Swiss Ratchet LN Freehub Body Upgrade Kit, please contact DT Swiss customer support through their official website. You can typically find contact information, FAQs, and additional resources on the manufacturer's support pages.

Manufacturer: Dt Swiss

Website: www.dtswiss.com *(Note: This is a general placeholder; please refer to the official product packaging or DT Swiss website for the most accurate support contact details.)*