

SHIMANO RTMT800

SHIMANO RT-MT800 Center-Lock Disc Brake Rotor Instruction Manual

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your SHIMANO RT-MT800 Center-Lock Disc Brake Rotor. The RT-MT800 features SHIMANO's advanced Ice Technologies Freeza, designed to enhance braking performance through superior heat dissipation. This brake disc is constructed with stainless steel and aluminum layers, incorporating integrated cooling fins to maintain consistent braking power and extend component lifespan. It is compatible with both resin and metallic disc brake pads.

Please read this manual thoroughly before attempting any installation or maintenance procedures to ensure safe and optimal performance of your bicycle's braking system.

2. KEY FEATURES

- **Ice Technologies Freeza Construction:** Utilizes a multi-layer sandwich structure of stainless steel and aluminum with integrated cooling fins to significantly reduce heat buildup during braking.
- **Center-Lock Mount:** Ensures quick and secure installation to compatible hubs, providing a rigid and efficient connection.
- **Enhanced Heat Dissipation:** The design actively lowers braking temperatures, which contributes to consistent braking performance, especially during prolonged descents, and prolongs the life of both the rotor and brake pads.
- **Material Composition:** Crafted from durable steel and aluminum for a balance of strength, heat management, and weight.
- **Compatibility:** Designed for use with both resin and metallic disc brake pads.

3. INSTALLATION

The SHIMANO RT-MT800 rotor utilizes a Center-Lock mounting system for straightforward installation. Ensure your wheel hub is compatible with the Center-Lock standard.

1. Clean the hub's splines and the rotor's mating surface to remove any dirt or debris.

2. Align the rotor with the splines on the hub.
3. Place the Center-Lock ring over the rotor and thread it onto the hub.
4. Tighten the Center-Lock ring using a compatible lockring tool (e.g., a cassette lockring tool). The recommended torque specification is 40 N·m. Refer to your hub manufacturer's instructions for specific torque values if different.
5. Ensure the rotor is securely fastened and does not wobble.



Figure 1: Angled view of the SHIMANO RT-MT800 Center-Lock Disc Brake Rotor, showing the splined interface for secure hub attachment.

4. OPERATION (ICE TECHNOLOGIES FREEZA)

The primary benefit of the RT-MT800 rotor is its Ice Technologies Freeza design, which actively manages heat generated during braking. This technology uses a layered construction (stainless steel-aluminum-stainless steel) to draw heat away from the braking surface and dissipate it through integrated aluminum cooling fins. This process prevents excessive heat buildup, which can lead to brake fade and reduced braking power, especially during long or steep descents.

During operation, the Ice Technologies Freeza ensures:

- **Consistent Braking Performance:** Maintains stable braking power even under demanding conditions.

- **Reduced Brake Fade:** Minimizes the loss of braking effectiveness due to overheating.
- **Extended Pad Life:** Lower operating temperatures contribute to longer lifespan for brake pads.
- **Improved Modulation:** Offers better control and feel at the brake lever.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and performance of your disc brake rotor.

- **Cleaning:** Regularly clean the rotor with a clean cloth and isopropyl alcohol to remove dirt, oil, and brake dust. Avoid using harsh chemicals or lubricants that can contaminate the braking surface.
- **Inspection:** Periodically inspect the rotor for signs of wear, cracks, or damage. Check for any discoloration that might indicate excessive heat.
- **Thickness Check:** Measure the rotor thickness. The minimum recommended thickness is typically 1.5 mm. Replace the rotor if it falls below this specification or if it shows significant uneven wear.
- **Pad Replacement:** Replace brake pads when they are worn down to their minimum thickness. Always use compatible resin or metallic pads as recommended by SHIMANO.
- **Torque Check:** Periodically check the torque of the Center-Lock ring to ensure it remains at 40 N·m.



Figure 2: The SHIMANO RT-MT800 Disc Brake Rotor being weighed, illustrating its lightweight design. Regular inspection includes checking for wear and ensuring it meets minimum thickness specifications.

6. SPECIFICATIONS

Specification	Detail
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Specification	Detail
Brand	SHIMANO
Model Name	RT-MT800
Mount Type	Center-Lock
Material	Aluminum, Steel
Exterior Finish	Black
Item Diameter	140 Millimeters (other sizes may be available)
Item Weight	Approximately 100 Grams (for 140mm)
Model Year	2023
Sport Type	Brake Disc
Recommended Torque (Center-Lock)	40 N·m

7. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your SHIMANO RT-MT800 Disc Brake Rotor, please refer to the official SHIMANO website or contact your authorized SHIMANO dealer. Keep your proof of purchase for any warranty claims.

Official SHIMANO resources can be found at: [SHIMANO Store on Amazon](#)