Motobecane MT200

Motobecane Shimano MT200 Hydraulic Disc Brake System User Manual

Model: MT200

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Motobecane Shimano MT200 Hydraulic Disc Brake System. Please read this manual thoroughly before installation and use to ensure proper function and safety. This system is designed for bicycles requiring reliable hydraulic braking performance.

Important Safety Information

- Always wear appropriate safety gear, including a helmet, when riding your bicycle.
- Ensure all components are correctly installed and tightened according to specifications before riding. Incorrect installation can lead to serious injury.
- Regularly inspect your brake system for wear, damage, or fluid leaks. Do not ride with damaged or malfunctioning brakes.
- Brake performance can be affected by weather conditions, terrain, and rider weight. Adjust your riding style accordingly.
- Brake rotors and calipers can become very hot during use. Avoid touching them immediately after riding to prevent burns.
- Use only genuine Shimano mineral oil for brake fluid maintenance. Mixing fluid types can damage the system.

Package Contents

Verify that all the following components are included in your package:

- Shimano MT201 Brake Levers (Left Front / Right Rear)
- Shimano MT200 Calipers with Resin Pads (B01S) installed
- Pre-bled Front Brake Line (1000mm)
- Pre-bled Rear Brake Line (1650mm or 1600mm, depending on selection)
- Shimano RT56 160mm Rotors (x2)
- IS Adapters for Calipers (x2)
- All necessary installation hardware (bolts, washers)



Figure 1: Overview of the complete Shimano MT200 Hydraulic Disc Brake Set, including two brake levers, two calipers, pre-bled brake lines, and two 160mm RT56 rotors. All components are black with some red accents on the calipers.

Setup and Installation

This brake system comes pre-bled with mineral oil, simplifying the installation process. However, careful attention to detail is crucial for optimal performance and safety.

1. Rotor Installation

1. Attach the 160mm RT56 rotors to your wheel hubs using the provided 6-bolt hardware. Ensure the rotation direction indicated on the rotor matches the wheel's forward rotation.
2. Tighten the rotor bolts evenly in a star pattern to the manufacturer's specified torque (typically 2-4 Nm).



Figure 2: The complete brake set laid out, showing the two brake levers, two calipers, pre-bled brake lines, two 160mm RT56 rotors, and the included mounting bolts and washers. The rotors have a distinct 6-bolt pattern.

2. Brake Lever Mounting

1. Mount the left brake lever (front brake) on the left side of your handlebar and the right brake lever (rear brake) on the right side.
2. Position the levers for comfortable reach and operation. Tighten the clamp bolts securely, but do not overtighten.



Figure 3: Close-up view of a Shimano MT200 brake lever, highlighting the oil filling hole (for mineral oil) and key dimensions: lever length approximately 100mm (40in) and handlebar clamp width 22mm (0.87in).

3. Caliper Mounting

1. Attach the front caliper to your front fork and the rear caliper to your frame's rear triangle. Use the appropriate IS adapters if your frame/fork requires them.
2. Ensure the caliper is centered over the rotor. Loosely install the caliper mounting bolts.
3. Squeeze the brake lever firmly and hold it. While holding the lever, tighten the caliper mounting bolts to the specified torque. This helps to self-align the caliper.



Figure 4: A close-up view of a Shimano MT200 caliper connected to its brake lever via the hydraulic line. The caliper is black with red accents on the pad retention pin, and the brake line is visible.

4. Brake Line Connection (Pre-Bled System)

The brake lines are pre-bled and connected to the levers and calipers. Ensure the lines are routed correctly and do not interfere with steering or suspension movement.

- Verify that the brake line connections at both the lever and caliper are secure.
- The system uses Shimano SM-BH59-JK brake lines.



Figure 5: Detail of the brake line interface connecting to the lever body. The brake line itself is labeled "SHIMANO SM-BH59-JK SG 22 135", indicating its model and manufacturing details.

5. Final Checks

- Spin the wheels to ensure the rotors do not rub against the brake pads. If rubbing occurs, repeat the caliper alignment process.
- Test the brake levers. They should feel firm and engage the brakes effectively. If the levers feel spongy, the system may require bleeding (refer to maintenance section).
- Perform a low-speed test ride in a safe area to confirm proper brake function before riding at higher speeds.

Operating Instructions

The Shimano MT200 hydraulic disc brakes offer powerful and consistent stopping performance. Proper braking technique is essential for control and safety.

- **Progressive Braking:** Apply brake pressure gradually. Hydraulic brakes are very powerful, and sudden, hard

braking can cause loss of traction or control.

- **Front and Rear Brake Use:** For most situations, use both front and rear brakes simultaneously. The front brake provides significant stopping power, while the rear brake helps with stability and modulation.
- **Modulation:** Learn to modulate brake pressure to control your speed effectively without locking up the wheels. The MT200 system allows for fine control.
- **Wet Conditions:** In wet or muddy conditions, braking performance may be reduced. Apply brakes earlier and with more caution.
- **Bedding-in New Pads/Rotors:** New brake pads and rotors require a "bedding-in" period to achieve full performance. This involves several moderate stops from a moderate speed, allowing the pad material to transfer to the rotor surface. Avoid hard braking during this initial phase.

Maintenance

Regular maintenance ensures the longevity and optimal performance of your hydraulic disc brake system.

1. Brake Pad Inspection and Replacement

- The MT200 calipers use Shimano B01S resin pads. Inspect pads regularly for wear. Replace pads when the pad material is worn down to approximately 0.5mm or less.
- To replace pads, remove the wheel, then remove the pad retention pin (often secured by a clip). The pads can then be pulled out. Install new pads, ensuring the spring is correctly positioned, and re-insert the retention pin.
- After replacing pads, it is recommended to bed them in as described in the Operating Instructions.

2. Rotor Inspection

- Check rotors for excessive wear, warping, or damage. Rotors have a minimum thickness; consult Shimano specifications for your RT56 rotors.
- Clean rotors with a clean cloth and isopropyl alcohol to remove any contaminants (oil, grease) that can reduce braking performance and cause noise.

3. Brake Fluid and Bleeding

- The system uses Shimano mineral oil. Do not use DOT fluid.
- While the system comes pre-bled, over time, air can enter the system or fluid can degrade. If your brake lever feels spongy or inconsistent, the system may need to be bled.
- Bleeding hydraulic brakes is a technical procedure. If you are not confident, it is recommended to have this service performed by a qualified bicycle mechanic. Refer to official Shimano bleeding instructions for detailed steps if performing yourself.

4. General Cleaning and Inspection

- Keep calipers and levers clean. Avoid spraying lubricants or cleaning agents directly onto brake components.
- Periodically check all bolts (caliper mounting, lever clamp, rotor bolts) for proper torque.

Troubleshooting

Problem	Possible Cause	Solution
Spongy Brake Lever	Air in the hydraulic system; low fluid level.	Bleed the brake system. Check for leaks.
Brake Squeal/Noise	Contaminated pads/rotor; misaligned caliper; worn pads.	Clean rotor with isopropyl alcohol. Re-align caliper. Replace pads if worn or contaminated.
Poor Braking Power	Contaminated pads/rotor; un-bedded pads; air in system; worn pads.	Clean rotor/pads. Bed-in pads. Bleed system. Replace worn pads.
Rotor Rubbing Pads	Misaligned caliper; bent rotor; sticky caliper piston.	Re-align caliper. True or replace bent rotor. Clean caliper pistons.

Specifications

Brand: Motobecane (Shimano components)

Model: BR-MT200 (Caliper) / BL-MT200 (Lever)

Color: Black

Material: 6061 Aluminum Alloy (Levers/Caliper body)

Brake Pads: Resin pad B01S (pre-installed)

Braking Type: Two-way braking

Cylinder: Integrated cylinder

Front Brake Line Length: 1000mm

Rear Brake Line Length: 1600mm / 1650mm (variant dependent)

Rotor Model: Shimano SM-RT56

Rotor Size: 160mm

Rotor Mounting: 6-bolt (P.C.D. 44mm)

Fluid Type: Shimano Mineral Oil

Approx. Weight: Front: 278.4g, Rear: 290.4g (excluding rotors)

Warranty Information

This product comes with a**1-year warranty** from the manufacturer, Motobecane. This warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, misuse, neglect, accidents, or normal wear and tear. For warranty claims, please contact your retailer or the manufacturer directly with your proof of purchase.

Support

For further assistance, technical questions, or to purchase replacement parts, please refer to the following resources:

- **Retailer:** Contact the store or online vendor where you purchased the product.
- **Manufacturer Website:** Visit the official Motobecane or Shimano website for additional product information, technical documents, and support contacts.
- **Qualified Bicycle Mechanic:** For complex installations, adjustments, or repairs, it is always recommended to consult a professional bicycle mechanic.