

SHIMANO BL+BR MT400 Acera

Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit User Manual

Model: BL+BR MT400 Acera

1. INTRODUCTION

This manual provides essential information for the safe and correct installation, operation, and maintenance of your Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit. Please read this manual thoroughly before using the product and retain it for future reference. This kit is designed for bicycle use and provides reliable hydraulic braking performance.



Image 1.1: Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit. This image displays the primary components of the brake kit, including the hydraulic brake lever and the disc brake caliper, typically used for the front wheel.

2. SAFETY INFORMATION

Always prioritize safety when installing, adjusting, or operating your bicycle brakes. Failure to follow these instructions could result in serious injury or death.

- **Professional Installation Recommended:** Installation and adjustment of hydraulic disc brakes require specialized tools and knowledge. It is highly recommended that a qualified bicycle mechanic perform these procedures.
- **Brake Fluid:** This system uses mineral oil. Do not use DOT fluid, as it will damage the system. Avoid contact with skin and eyes. In case of contact, rinse thoroughly with water and seek medical attention if irritation persists.
- **Brake Pads:** Ensure brake pads are correctly installed and not worn beyond their service limit. Worn pads reduce braking performance.
- **Rotor Condition:** Regularly inspect disc rotors for damage, wear, or contamination. A contaminated rotor can significantly reduce braking power.
- **Brake Lever Adjustment:** Adjust brake levers to a comfortable position that allows full braking power without bottoming out against the handlebar.

- **Test Brakes:** Always test brakes thoroughly in a safe area before riding. Ensure both front and rear brakes function correctly and provide adequate stopping power.
- **Wet Conditions:** Braking performance is reduced in wet conditions. Exercise extra caution and allow for longer stopping distances.

3. PACKAGE CONTENTS

The Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit typically includes the following components. Please verify all parts are present upon unboxing.

- Hydraulic Brake Lever (BL-MT400)
- Hydraulic Disc Brake Caliper (BR-MT400)
- Pre-bled Hydraulic Hose (connected to lever and caliper)
- Brake Pads (pre-installed in caliper)
- Mounting Bolts and Adapters (as required for standard installation)
- User Manual (this document)

Note: Specific contents may vary slightly depending on the kit version and region. Rotors are typically sold separately.

4. SETUP AND INSTALLATION

Proper installation is crucial for brake performance and safety. If you are not confident in your mechanical abilities, seek assistance from a professional bicycle mechanic.

4.1 Tools Required

- Hex wrenches (various sizes)
- Torque wrench
- Cable cutters (for hose shortening, if necessary)
- Bleed kit for Shimano hydraulic brakes (if bleeding is required)
- Clean rags and isopropyl alcohol

4.2 Installation Steps (Overview)

1. **Mount Brake Lever:** Attach the brake lever to the handlebar in a comfortable and accessible position. Ensure it is securely tightened to the manufacturer's specified torque.
2. **Mount Caliper:** Attach the disc brake caliper to the fork (for front brake) or frame (for rear brake) using the appropriate adapter and bolts. Ensure correct orientation and torque specifications are met.
3. **Install Rotor:** If not already installed, mount the disc rotor to the wheel hub according to the rotor manufacturer's instructions. Ensure the rotor is clean and free of contaminants.
4. **Align Caliper:** Loosen the caliper mounting bolts slightly. Squeeze the brake lever firmly and hold it. While holding the lever, tighten the caliper mounting bolts to center the caliper over the rotor. Release the lever and check for proper alignment and clearance.
5. **Check Hose Routing:** Ensure the hydraulic hose is routed correctly, without kinks or excessive bends, and does not interfere with steering or suspension movement.
6. **Bleed System (if necessary):** If the brake lever feels spongy or if the hose was shortened, the system may require bleeding to remove air bubbles. Refer to Shimano's official bleeding instructions for your specific model.

7. **Final Inspection:** Double-check all bolts for correct torque. Ensure the brake lever has a firm feel and the pads engage the rotor smoothly without rubbing when the lever is released.

5. OPERATING INSTRUCTIONS

The Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit provides powerful and consistent braking. Understanding proper operation is key to safe riding.

- **Brake Lever Operation:** Squeeze the brake lever to engage the brake. The amount of force applied to the lever directly correlates to the braking power.
- **Modulation:** Hydraulic disc brakes offer excellent modulation, allowing you to control braking power precisely. Practice applying varying amounts of pressure to the lever to get a feel for the brake's response.
- **Front vs. Rear Brake:** The front brake (typically on the left handlebar) provides most of the stopping power. The rear brake (typically on the right handlebar) helps control speed and stability. Use both brakes simultaneously for optimal stopping.
- **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 cruising speed, allowing the pad material to transfer evenly to the rotor surface. Avoid hard, prolonged braking during this period.
- **Environmental Factors:** Braking performance can be affected by weather conditions (rain, snow), terrain (loose gravel, steep descents), and rider weight. Adjust your braking technique accordingly.

6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the lifespan of your brake system.

- **Cleanliness:** Keep brake calipers, rotors, and pads clean. Contamination from oil, grease, or dirt can severely reduce braking power and cause noise. Use isopropyl alcohol for cleaning rotors.
- **Pad Wear:** Inspect brake pads regularly for wear. Replace pads when the friction material is worn down to 0.5mm or less.
- **Rotor Inspection:** Check rotors for excessive wear, warping, or damage. Replace if necessary.
- **Brake Fluid Check:** While a sealed system, check for any leaks around the lever, hose, or caliper. If the lever feel becomes spongy, the system may need bleeding.
- **Hose Inspection:** Inspect the hydraulic hose for any cuts, abrasions, or bulges. Replace damaged hoses immediately.
- **Bolt Torque:** Periodically check the torque of all mounting bolts (lever, caliper, rotor) to ensure they are secure.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your hydraulic disc brakes.

Problem	Possible Cause	Solution
Spongy Brake Lever	Air in the hydraulic system; low fluid level.	Bleed the brake system. Check for leaks.

Problem	Possible Cause	Solution
Poor Braking Power	Contaminated pads/rotor; worn pads; air in system; improper bedding-in.	Clean rotor with isopropyl alcohol. Replace contaminated pads. Bleed system. Re-bed pads.
Brake Rubbing/Noise	Misaligned caliper; bent rotor; worn pads; contaminated pads/rotor.	Re-align caliper. Inspect/replace rotor. Replace pads. Clean rotor.
Brake Lever Bottoms Out	Excessive pad wear; air in system; low fluid.	Replace pads. Bleed system. Check for leaks.

If troubleshooting steps do not resolve the issue, consult a professional bicycle mechanic or contact Shimano support.

8. SPECIFICATIONS

Key technical specifications for the Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit:

- **Model Name:** BL+BR MT400 Acera
- **Part Number:** EMT400KLFPR100
- **Brake Type:** Hydraulic Disc Brake
- **Brake Fluid:** Shimano Mineral Oil
- **Material:** Aluminum (Lever and Caliper)
- **Color:** Black
- **Item Weight:** Approximately 7.04 ounces (0.2 kg)
- **Item Dimensions (LxWxH):** Approximately 3.94 x 3.94 x 3.94 inches
- **Manufacturer:** Shimano

9. WARRANTY INFORMATION

This Shimano BL+BR MT400 Acera Hydraulic Disc Brake Kit is covered by a **2-Year Manufacturer Warranty**.

The warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, accidents, misuse, neglect, normal wear and tear, or modifications. Please retain your proof of purchase for warranty claims.

For detailed warranty terms and conditions, please refer to the official Shimano website or contact Shimano customer support.

10. SUPPORT AND CONTACT

For further assistance, technical support, or to locate an authorized service center, please visit the official Shimano website:

bike.shimano.com

You may also contact your local Shimano distributor or the retailer from whom you purchased the product.

