

## TEKTRO MD-C550

# Tektro MD-C550 Dual-Piston Mechanical Disc Caliper User Manual

Model: MD-C550

### INTRODUCTION

Thank you for choosing the Tektro MD-C550 Dual-Piston Mechanical Disc Caliper. This manual provides essential information for the proper installation, operation, maintenance, and troubleshooting of your new brake caliper. Please read this manual thoroughly before installation and keep it for future reference to ensure optimal performance and safety.

The Tektro MD-C550 is a high-performance mechanical disc caliper specifically engineered for road bikes. Its dual-piston design ensures consistent and reliable braking power, making it an excellent upgrade or replacement component for your bicycle's braking system.

### PRODUCT OVERVIEW



Image: The Tektro MD-C550 Dual-Piston Mechanical Disc Caliper, black in color, shown from a side angle. The caliper features a robust design with visible brake pads and an adjustment knob at the top. The 'TEKTRO' logo is clearly visible on the side, along with a '3mm PAD IN' indicator for pad adjustment.

The MD-C550 caliper is designed for flat mount frames and forks, providing a clean and integrated look. It is compatible with short-pull road bike brake levers. The dual-piston mechanism applies even pressure to both sides of the rotor, enhancing braking efficiency and modulation.

## SETUP AND INSTALLATION

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### Required Tools:

- Hex wrenches (various sizes, typically 4mm, 5mm, 6mm)
- Cable cutters
- Cable crimps
- Torque wrench (recommended)
- Brake cleaner and clean cloth

### Installation Steps:

1. **Prepare the Mounting Surface:** Ensure the flat mount surface on your frame or fork is clean and free of debris.
2. **Mount the Caliper:** Position the MD-C550 caliper onto the flat mount bosses. Secure it loosely with the appropriate mounting bolts.
3. **Install Rotor (if not already present):** Ensure your disc rotor is clean and properly installed on your wheel hub.
4. **Align the Caliper:** Loosen the caliper mounting bolts slightly. Squeeze the brake lever firmly to center the caliper over the rotor. While holding the lever, tighten the mounting bolts evenly to the manufacturer's recommended torque specifications (refer to your frame/fork manual for specific torque values). Release the brake lever and check for rotor rub. Adjust as necessary.
5. **Connect the Brake Cable:** Route the brake cable from your short-pull road lever to the caliper. Insert the cable through the barrel adjuster and secure it firmly in the cable clamp bolt on the caliper. Ensure there is no slack in the cable.
6. **Adjust Cable Tension:** Use the barrel adjuster on the caliper to fine-tune cable tension, ensuring proper lever feel and pad clearance.
7. **Trim Excess Cable:** Once tension is set, trim any excess brake cable, leaving approximately 2-3 cm. Install a cable crimp on the end of the cable to prevent fraying.
8. **Bed-in the Pads:** Perform a series of controlled stops from moderate speed to high speed to properly bed-in the brake pads. This process helps the pads conform to the rotor surface, improving braking performance.

## OPERATING INSTRUCTIONS

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### Brake Adjustment:

The MD-C550 features a pad adjustment mechanism. To adjust the pad position, locate the adjustment dial on the caliper (marked with '3mm PAD IN' and an arrow). Rotate this dial to move the pads closer to or further from the rotor. Adjust until the pads are close to the rotor without rubbing when the brake is not applied.

### Braking Technique:

Always apply both front and rear brakes simultaneously for controlled stopping. Avoid sudden, hard braking with only the front brake, especially at high speeds, as this can lead to loss of control. Practice braking in a safe environment to become familiar with the feel and stopping power of your new brakes.

## MAINTENANCE

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Regular maintenance is crucial for the longevity and performance of your Tektro MD-C550 caliper.

- **Cleaning:** Keep the caliper and rotor clean. Use a dedicated disc brake cleaner or isopropyl alcohol to remove dirt, oil, and grime from the rotor. Avoid getting lubricants on the brake pads or rotor.
- **Pad Inspection:** Regularly inspect the brake pads for wear. Replace pads when the friction material is worn down to approximately 0.5mm or less, or if they show signs of contamination (e.g., oil, grease). The MD-C550 uses QBP Disc Pad Finder #55 brake pads.
- **Cable Inspection:** Check the brake cable for fraying, kinks, or corrosion. Replace damaged cables immediately. Ensure the cable moves freely within its housing.

- **Bolt Torque:** Periodically check all mounting bolts and cable clamp bolts to ensure they are tightened to the correct torque specifications. Loose bolts can lead to poor performance or component failure.
- **Rotor Condition:** Inspect the rotor for bends, cracks, or excessive wear. A worn rotor can compromise braking performance and safety.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Squealing/Noisy Brakes	Contaminated pads/rotor, misaligned caliper, worn pads, new pads not bedded-in.	Clean rotor with disc brake cleaner. Re-align caliper. Replace worn pads. Bed-in new pads properly.
Poor Braking Performance	Worn pads, contaminated pads/rotor, loose cable, misaligned caliper, improper bed-in.	Replace worn pads. Clean pads/rotor. Adjust cable tension. Re-align caliper. Re-bed-in pads.
Brake Lever Feels Spongy	Cable stretch, loose cable, worn housing.	Adjust cable tension using barrel adjuster. Inspect and replace cable/housing if damaged.
Rotor Rubs on Pads	Misaligned caliper, bent rotor, pads too close.	Re-align caliper. Check rotor for trueness (true or replace if bent). Adjust pad position using the dial.

## SPECIFICATIONS

Feature	Specification
Model	MD-C550
Brake Type	Mechanical Disc Brake Caliper
Piston Type	Dual-Piston
Mount Type	Flat Mount
Brake Lever Actuation	Short Pull (Road Levers)
Pad Compound	Metal Ceramic
Compatible Pads	QBP Disc Pad Finder #55
Rotor Included	No
Color	Black
Weight	155 grams
Item Package Dimensions L x W x H	6.06 x 4.25 x 2.83 inches
Item Dimensions LxWxH	6.11 x 4.31 x 2.87 inches

## WARRANTY AND SUPPORT

Tektro products are manufactured to high standards and are designed for durability and performance. For specific warranty information regarding your MD-C550 caliper, please refer to the warranty policy provided with your purchase or visit the official Tektro website.

If you encounter any issues or have questions that are not covered in this manual, please contact Tektro customer support or your authorized Tektro dealer for assistance. When contacting support, please have your product model (MD-C550) and purchase information ready.