

## BUCKLOS 700569A4

# BUCKLOS Mountain Bike Dual Piston Mechanical Disc Brake Kit User Manual

Model: 700569A4

## 1. INTRODUCTION

---

This manual provides essential information for the installation, operation, and maintenance of your BUCKLOS Mountain Bike Dual Piston Mechanical Disc Brake Kit. Please read these instructions carefully before installation and use to ensure proper function and safety.

The BUCKLOS mechanical disc brake kit is designed for various bicycle types, including mountain bikes, e-bikes, folding bikes, and fat bikes, offering reliable stopping power with its dual-piston design and durable aluminum alloy construction.

## 2. PRODUCT OVERVIEW

---

The BUCKLOS Dual Piston Mechanical Disc Brake Kit features a robust design for consistent braking performance. Key components include:

- **Dual Piston Caliper:** Provides uniform force distribution for stronger, more stable braking without rotor deformation.
- **Aluminum Alloy Construction:** Ensures durability, corrosion resistance, and wear resistance.
- **160mm Rotor:** Standard size for effective heat dissipation and braking surface.
- **Resin Brake Pads:** Designed for quiet operation, wear resistance, and durability, with a short break-in period.
- **Universal IS/PM Adapter:** Allows for versatile mounting on different frame types.

# PRODUCT DETAILS

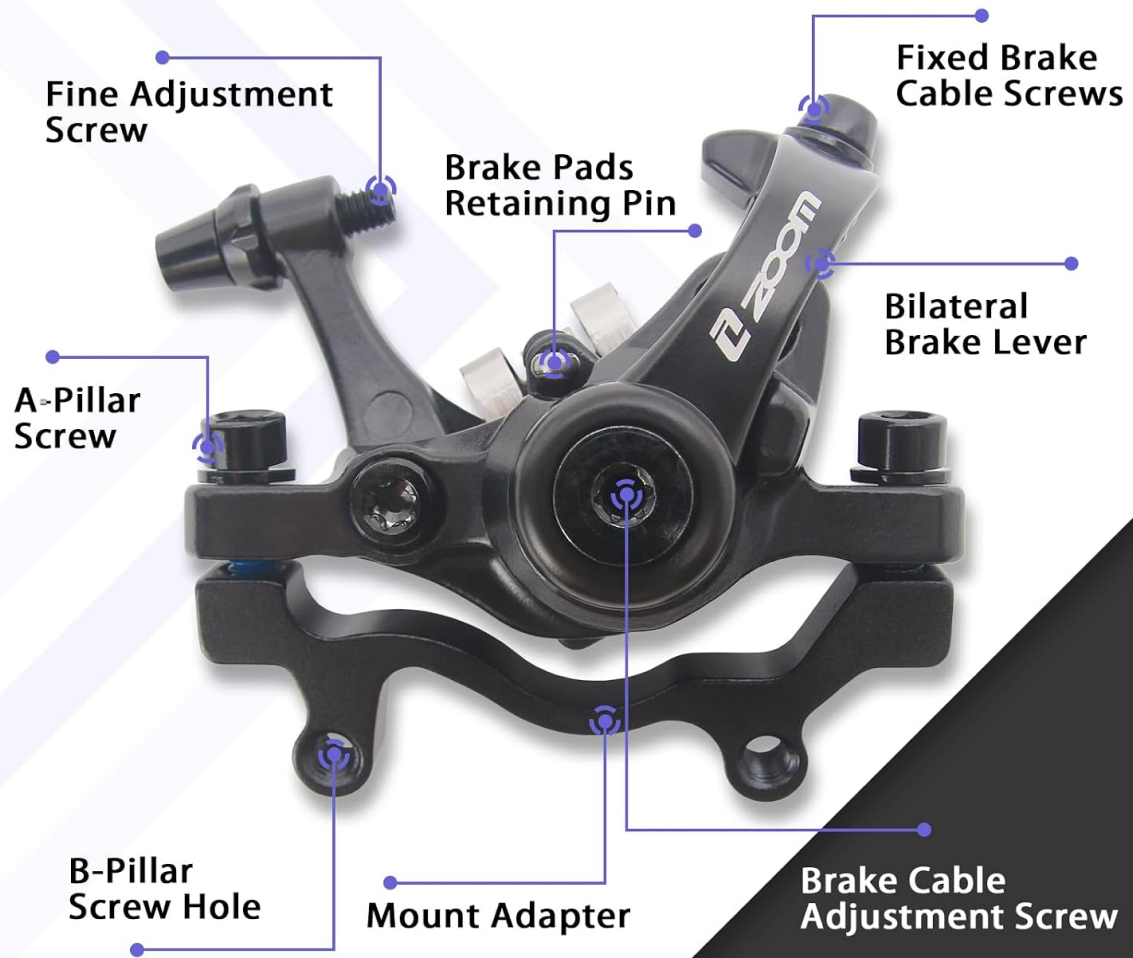


Figure 2.1: Detailed view of the BUCKLOS mechanical disc brake caliper, highlighting components such as the fine adjustment screw, brake pads retaining pin, fixed brake cable screws, bilateral brake lever, A-pillar screw, B-pillar screw hole, mount adapter, and brake cable adjustment screw.

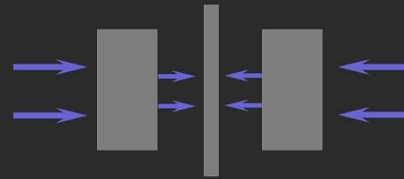


Figure 2.2: Product dimensions and weights. The front brake caliper weighs 233.6g, and the rear brake caliper weighs 239.0g. Both calipers measure 51mm in width and 74mm in length. The rotor has a diameter of 160mm with a 44mm bolt circle diameter.

# DOUBLE PISTON CALIPER

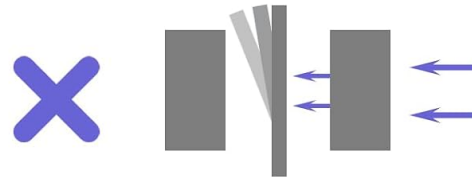


## Double Piston Drive Work



The brake rotor is evenly stressed, will not be deformed, and the braking is stable

## Unilateral Drive Friction Plate



The brake rotor is easily deformed, uneven friction, and limited braking force

Figure 2.3: Illustration comparing the double piston drive work with a unilateral drive friction plate. The double piston system applies even stress to the brake rotor, preventing deformation and ensuring stable braking. A unilateral system can cause rotor deformation, uneven friction, and limited braking force.



Figure 2.4: Information on the resin brake pads. They have a thickness of 4mm and dimensions of 35mm x 31mm. Benefits include silent braking, strong wear resistance, not wearing out rotors, and a short running-in period.

### 3. SETUP AND INSTALLATION

The BUCKLOS mechanical disc brake kit is designed for straightforward installation. Ensure you have the necessary tools before beginning.

#### 3.1 Pre-Installation Check

- Confirm your bike frame is compatible with disc brakes.
- Identify whether your bike frame uses an A-pillar (straight mounted) or B-pillar (side mounted) brake mount. This determines if the mount adapter needs to be removed.

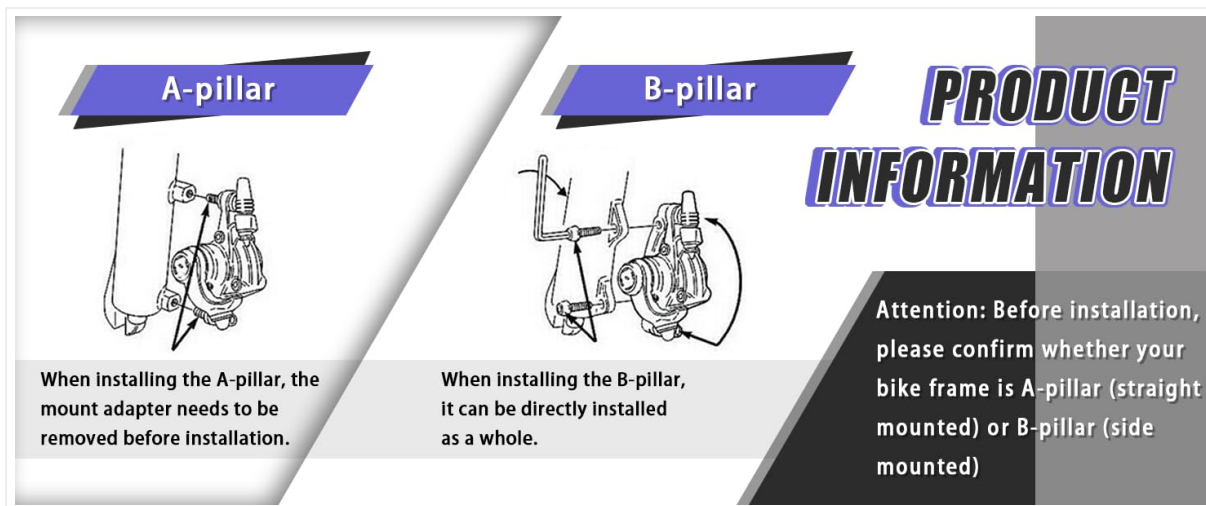


Figure 3.1: Guide for A-pillar and B-pillar installation. For A-pillar mounting, the mount adapter must be removed. For B-pillar mounting, the caliper can be installed as a whole unit directly.

### 3.2 Installation Steps

1. **Mount the Rotor:** Secure the 160mm rotor to your wheel hub using the appropriate bolts. Ensure bolts are tightened to manufacturer specifications.
2. **Install the Caliper:**
  - For A-pillar frames, remove the mount adapter from the caliper before attaching the caliper to the frame.
  - For B-pillar frames, the caliper can be installed directly with the adapter.

Attach the caliper to the bike frame's brake mount using the provided screws. Do not fully tighten yet.

3. **Connect Brake Cable:** Route the brake cable from your brake lever to the caliper. Insert the cable into the fixed brake cable screws and secure it.
4. **Adjust Caliper Position:** Loosen the caliper mounting bolts slightly. Squeeze the brake lever to center the caliper over the rotor. While holding the lever, tighten the caliper mounting bolts. Release the lever and check for proper alignment and clearance.
5. **Fine-tune Adjustments:** Use the brake cable adjustment screw and fine adjustment screw on the caliper to achieve optimal brake lever feel and pad clearance. Ensure the brake pads do not rub against the rotor when the lever is released.
6. **Test Braking:** Perform several test stops at low speed to ensure the brakes engage smoothly and effectively.



Figure 3.2: Examples of the BUCKLOS mechanical disc brake calipers installed on a bicycle, demonstrating proper mounting and cable routing.

## 4. OPERATING INSTRUCTIONS

---

Proper operation of your disc brakes is crucial for safety and performance.

### 4.1 Break-in Period

New brake pads and rotors require a break-in period to achieve full braking power. During this period, perform approximately 20-30 moderate stops from a speed of about 15-20 mph (25-30 km/h) without coming to a complete stop. Allow the brakes to cool between stops. This process helps to bed the pads to the rotor, improving friction and reducing noise.

### 4.2 Braking Technique

- Apply both front and rear brakes simultaneously for balanced stopping power.
- Modulate brake lever pressure to control deceleration. Avoid sudden, hard braking unless in an emergency.
- Shift your weight backward when braking hard to prevent pitching forward.
- In wet conditions, braking performance may be reduced. Apply brakes earlier and with more caution.

## 5. MAINTENANCE

---

Regular maintenance ensures the longevity and optimal performance of your BUCKLOS disc brakes.

### 5.1 Cleaning

- Keep rotors and brake pads clean and free from oil, grease, or dirt. Contaminants can severely reduce braking performance and cause noise.
- Use a clean cloth and isopropyl alcohol to clean rotors. Avoid using harsh chemicals.

### 5.2 Inspection

- Regularly check brake pads for wear. Replace pads when the friction material is less than 1mm thick.
- Inspect brake cables for fraying, kinks, or corrosion. Replace damaged cables promptly.
- Check rotor for bends, cracks, or excessive wear. Replace if damaged.
- Ensure all mounting bolts are securely tightened.

### 5.3 Adjustments

- Adjust cable tension as needed to maintain proper brake lever feel and engagement point.
- If brake pads rub, re-center the caliper as described in the installation section.

## 6. TROUBLESHOOTING

---

Common issues and their solutions for your BUCKLOS mechanical disc brakes.

Problem	Possible Cause	Solution
<b>Weak Braking Power</b>	<ul style="list-style-type: none"><li>• New pads/rotors not broken in.</li><li>• Contaminated pads/rotor (oil, grease).</li><li>• Worn brake pads.</li><li>• Loose brake cable.</li><li>• Misaligned caliper.</li></ul>	<ul style="list-style-type: none"><li>• Perform break-in procedure (Section 4.1).</li><li>• Clean rotor with isopropyl alcohol; replace contaminated pads.</li><li>• Replace brake pads (Section 5.2).</li><li>• Adjust cable tension (Section 5.3).</li><li>• Re-center caliper (Section 3.2).</li></ul>
<b>Squealing/Noisy Brakes</b>	<ul style="list-style-type: none"><li>• Contaminated pads/rotor.</li><li>• Misaligned caliper.</li><li>• Loose bolts.</li><li>• New pads/rotors (during break-in).</li></ul>	<ul style="list-style-type: none"><li>• Clean rotor; replace contaminated pads.</li><li>• Re-center caliper.</li><li>• Check and tighten all bolts.</li><li>• Noise should reduce after break-in.</li></ul>
<b>Brake Lever Feels Spongy</b>	<ul style="list-style-type: none"><li>• Loose brake cable.</li><li>• Cable stretch.</li></ul>	<ul style="list-style-type: none"><li>• Adjust cable tension.</li><li>• Replace old or stretched cable.</li></ul>

## 7. SPECIFICATIONS

---

Feature	Detail
Model Name	Disc Brake Set
Part Number	700569A4
Brand	BUCKLOS
Material	Aluminum
Color (Variant)	Dual Piston Caliper (Sliver)
Rotor Size	160mm
Item Weight	16 ounces (approx. 453g)
Package Weight	0.35 Kilograms (approx. 12.35 ounces)
Included Components	Brake Calipers, Rotors, Levers, Adapters
Suggested Users	Unisex-adult

## 8. WARRANTY AND SUPPORT

---

### 8.1 Warranty Information

This BUCKLOS product comes with a **30-day warranty** from the date of purchase. This warranty covers manufacturing defects. It does not cover damage resulting from improper installation, misuse, neglect, accidents, or normal wear and tear. Please retain your proof of purchase for warranty claims.

### 8.2 Customer Support

For any questions, technical assistance, or warranty claims, please contact BUCKLOS customer support through the retailer where the product was purchased. You may also visit the official BUCKLOS store on Amazon for more information and contact options:

[Visit the BUCKLOS Store on Amazon](#)