

BOLANY 1-181017A

BOLANY MTB Bicycle Suspension Fork User Manual

Model: 1-181017A

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your BOLANY MTB Bicycle Magnesium Alloy Suspension Fork. Please read this manual thoroughly before installation and use to ensure safe and optimal performance of your bicycle fork.

The BOLANY suspension fork is designed for mountain biking, offering enhanced shock absorption and control. It is available in 26, 27.5, and 29-inch wheel sizes, with options for Tapered or Straight steerer tubes, and Manual or Remote Lockout mechanisms.

2. SAFETY INFORMATION

- Always wear appropriate safety gear, including a helmet, when riding.
- Ensure all components are correctly installed and tightened to the manufacturer's specifications before each ride.
- Regularly inspect the fork for any signs of damage, cracks, or wear. Do not ride if any damage is detected.
- Do not modify the fork. Unauthorized modifications can compromise safety and void the warranty.
- Adjust air pressure according to your weight and riding conditions. Incorrect pressure can affect performance and safety.
- If you are unsure about any installation or maintenance procedures, consult a professional bicycle mechanic.

3. PRODUCT OVERVIEW AND COMPONENTS

The BOLANY suspension fork features a robust design with high-quality materials for durability and performance. Understanding its key components is crucial for proper use and maintenance.



Figure 3.1: BOLANY Suspension Forks (Manual and Remote Lockout versions)

This image displays two BOLANY suspension forks. The left fork features a manual lockout mechanism on the crown, while the right fork is equipped with a remote lockout lever connected via a cable, allowing for on-the-fly adjustments.



Figure 3.2: Key Components of the BOLANY Suspension Fork

This diagram highlights the main components: Aluminum Alloy Steerer, Air Chamber Crown, Remote Lockout mechanism, Brake cable fixed buckle, 9mm Quick Release (QR) dropouts, and the removable sticker on the fork leg.

- **Steerer Tube:** Connects the fork to the bicycle frame's head tube. Available in Tapered (1.5" to 1 1/8") and Straight (1 1/8") options.
- **Crown:** The part that connects the steerer tube to the stanchions. Contains the air chamber and lockout mechanism.
- **Stanchions (Upper Tubes):** The inner tubes that slide into the lower legs, providing suspension travel.
- **Lower Legs:** The outer part of the fork that houses the stanchions and connects to the wheel axle.
- **Lockout Mechanism:** Allows for stiffening the fork for climbing or smooth terrain. Available as a manual crown lockout or a remote handlebar-mounted lockout.
- **Air Chamber:** Located in the crown, this is where air pressure is adjusted to set the fork's stiffness and sag.
- **Quick Release (QR) Dropouts:** The ends of the lower legs where the wheel's quick release skewer is secured (9mm x 100mm axle).
- **Brake Mount:** Designed for disk brakes.

4. SETUP AND INSTALLATION

Proper installation is critical for the safety and performance of your BOLANY suspension fork. If you are not confident in your mechanical abilities, please seek professional assistance.

4.1 Pre-Installation Checks

- Verify that the fork's steerer tube type (Tapered or Straight) matches your bicycle frame's head tube.
- Ensure the fork's wheel size (26", 27.5", or 29") is compatible with your bicycle's wheels.
- Confirm that your bicycle uses disk brakes, as this fork is designed for disk brake systems.

4.2 Installation Steps

1. **Remove Old Fork:** If replacing an existing fork, carefully remove the old fork, headset components, and front wheel.
2. **Measure and Cut Steerer Tube:** Measure the required steerer tube length for your frame and headset stack height. Use a specialized tool to cut the steerer tube to the correct length. Ensure a clean, straight cut.
3. **Install Crown Race:** Install the crown race onto the base of the steerer tube. This component provides a bearing surface for the lower headset bearing.
4. **Install Fork into Frame:** Insert the steerer tube through the head tube of your bicycle frame. Install the headset bearings, spacers, and stem in the correct order.
5. **Install Top Cap and Preload:** Install the top cap and bolt, then tighten to apply preload to the headset bearings. Ensure smooth steering without play.
6. **Tighten Stem Bolts:** Align the stem with the front wheel, then tighten the stem clamp bolts to secure the fork.
7. **Install Front Wheel:** Mount your front wheel onto the 9mm QR dropouts. Ensure the quick release skewer is properly tightened.
8. **Install Brake Caliper:** Attach your disk brake caliper to the fork's brake mount. Ensure proper alignment and clearance.
9. **Route Brake Cable:** Secure the brake cable using the integrated brake cable fixed buckle on the fork leg.
10. **Install Remote Lockout (if applicable):** If your fork has a remote lockout, install the lever on your handlebar and route the cable to the fork crown, securing it appropriately.

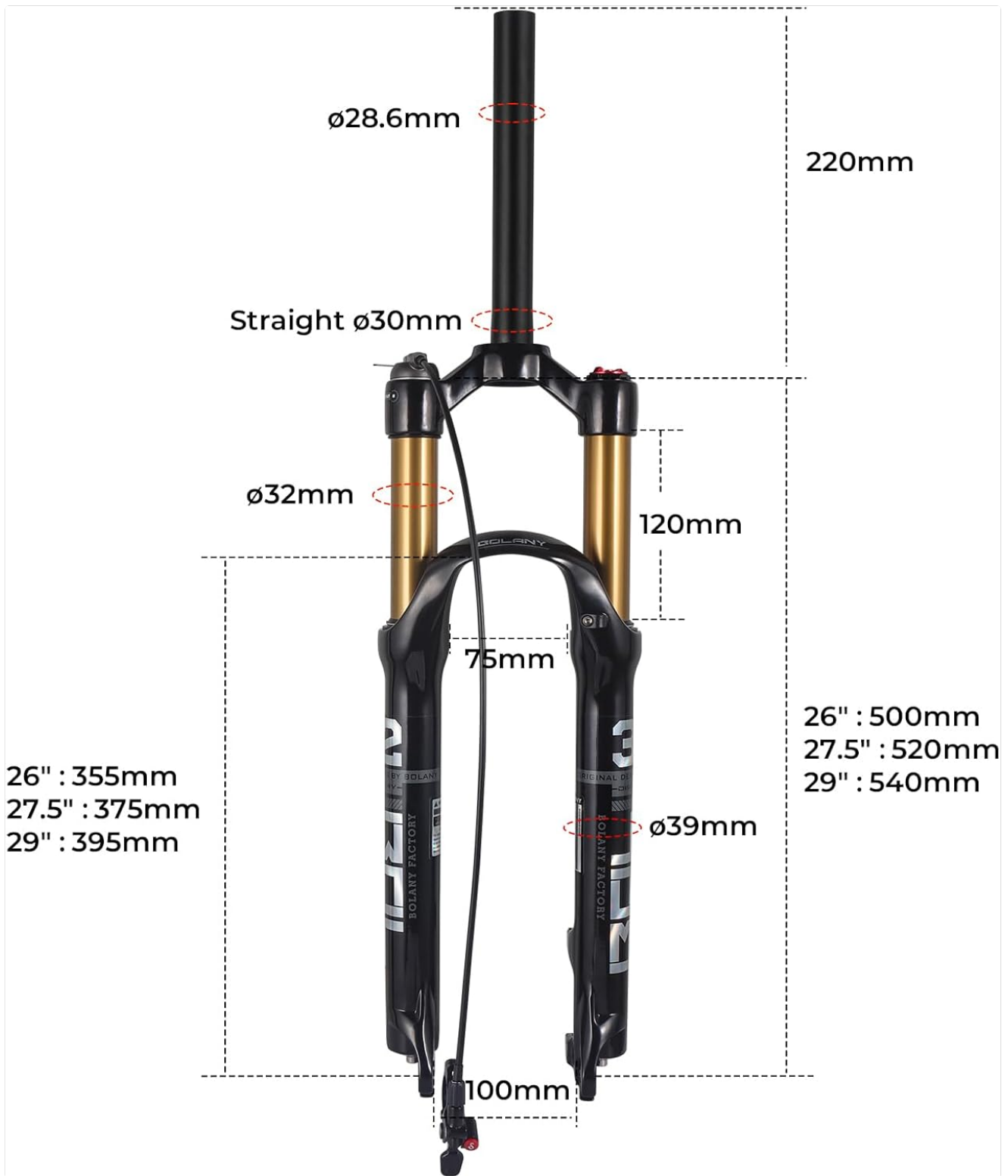


Figure 4.1: Fork Dimensions for Installation

This diagram provides critical dimensions for the fork, including steerer tube diameter ($\varnothing 28.6\text{mm}$), stanchion diameter ($\varnothing 32\text{mm}$), and axle to crown measurements for 26" (500mm), 27.5" (520mm), and 29" (540mm) wheel sizes. These measurements are essential for compatibility and proper fit.



Figure 4.2: 9mm Quick Release (QR) Dropout

This image shows a detailed view of the 9mm Quick Release (QR) dropout, indicating the axle diameter and the mechanism for securing the front wheel.

5. OPERATING INSTRUCTIONS

The BOLANY suspension fork is designed for optimal performance and comfort. Understanding how to adjust and operate its features will enhance your riding experience.

5.1 Adjusting Air Pressure (Sag)

The fork's stiffness is controlled by the air pressure in its chamber. Adjusting this pressure allows you to set the 'sag' – the amount the fork compresses under your body weight when you are in a riding position. Proper sag ensures optimal suspension performance.

- Locate the air valve cap on the top of the fork crown (typically on the left side).
- Remove the cap and attach a high-pressure shock pump.
- Refer to the fork's specifications or a sag chart (often provided by fork manufacturers) for recommended pressure ranges based on rider weight.

- Add or release air until the desired pressure is reached.
- To measure sag: With the shock pump removed, sit on your bike in your normal riding position. The O-ring on the stanchion will indicate the sag. Aim for 15-25% of the total travel (100mm for this fork).
- Replace the air valve cap.



Figure 5.1: Air Chamber Crown and Remote Lockout

This image provides a detailed view of the fork's crown, highlighting the red cap for the Air Chamber, where air pressure is adjusted, and the Remote Lockout mechanism with its cable routing.



Figure 5.2: 100mm Travel Measurement

This close-up shows the markings on the fork stanchion, indicating the available travel. The BOLANY fork has a travel of 100mm, which is important for setting sag and understanding suspension performance.

5.2 Using the Lockout Mechanism

The lockout feature allows you to stiffen the fork, reducing suspension movement. This is beneficial for climbing, riding on smooth roads, or sprinting, as it prevents energy loss from fork bob.

- **Manual Lockout:** If your fork has a manual lockout, turn the lever on the fork crown to the locked position (usually indicated by a closed padlock icon or a specific direction). Turn it back to the open position for suspension activity.

- **Remote Lockout:** If your fork has a remote lockout, press the lever on your handlebar to engage or disengage the lockout. This allows for quick adjustments without removing your hands from the grips.
- Note: While locked out, the fork may still have a small amount of movement or a "blow-off" feature to prevent damage from large impacts.

6. MAINTENANCE

Regular maintenance is essential to ensure the longevity, performance, and safety of your BOLANY suspension fork. Cleanliness and proper lubrication are key.

6.1 Daily/Pre-Ride Checks

- Wipe down the stanchions with a clean, soft cloth after each ride to remove dirt and debris.
- Check for any visible damage, leaks, or excessive play in the fork.
- Ensure the quick release skewer is securely tightened.
- Verify brake function and alignment.

6.2 Regular Cleaning and Lubrication

- For thorough cleaning, use mild soap and water. Avoid high-pressure washers directly on seals.
- After cleaning, apply a small amount of suspension-specific lubricant to the stanchions, then cycle the fork a few times to distribute it. Wipe off any excess.
- The fork's design, including the outer tube and internal oil and gas structure, helps prevent dust contamination and ensures smooth rebound.

6.3 Internal Component Maintenance

Over time, internal components like oil seals, O-rings, sponge rings, and Teflon sliding sleeves may require inspection or replacement to maintain optimal performance and prevent contamination. This is typically a more advanced procedure and may require specialized tools.



Figure 6.1: Internal Fork Components

This diagram illustrates the internal components of the fork's sliding sleeve system, including the oil seal, O-ring, sponge ring, and Teflon sliding sleeve. These parts are crucial for the fork's smooth operation and sealing against contaminants.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your BOLANY suspension fork.

Problem	Possible Cause	Solution
Fork feels too stiff or too soft.	Incorrect air pressure.	Adjust air pressure using a shock pump according to your weight and desired sag.
Fork not locking out completely.	Cable tension (remote lockout) or internal mechanism issue.	Check remote lockout cable tension and adjust if necessary. If manual lockout, ensure lever is fully engaged. Consult a professional if issue persists.
Excessive oil on stanchions.	Normal lubrication or worn seals.	A small amount of oil is normal. Wipe clean after each ride. If excessive or persistent, seals may need inspection/replacement by a professional.
Creaking or knocking noises from fork.	Loose headset, stem, or internal components.	Check headset preload and stem bolt tightness. Inspect for any loose parts. If noise persists, seek professional inspection.
Fork not returning to full travel.	Low air pressure or internal issue.	Check and adjust air pressure. If problem continues, internal service may be required.

8. SPECIFICATIONS

Detailed technical specifications for the BOLANY MTB Bicycle Suspension Fork.

Feature	Description
Brand	BOLANY
Model Number	1-181017A
Wheel Size Options	26 inch, 27.5 inch, 29 inch
Steerer Tube Options	Tapered Steerer, Straight Steerer
Lockout Mechanism	Crown Manual Lockout, Remote Lockout
Travel	100mm
Axle Type	9mm x 100mm Quick Release (QR)
Brake Type	Disk Brakes

Feature	Description
Material	Aluminum Alloy + Magnesium Alloy
Item Weight	Approx. 1.72 Kilograms
Color	Black + Gold
Country of Origin	China

9. WARRANTY AND SUPPORT

Your BOLANY Suspension Fork comes with a manufacturer's warranty to cover defects in materials and workmanship.

9.1 Warranty Information

The BOLANY Suspension Fork is covered by a **1-Year Warranty** from the date of purchase. This warranty covers manufacturing defects under normal use and service. It does not cover damage resulting from improper installation, misuse, neglect, accidents, or unauthorized modifications.

9.2 Customer Support

For technical assistance, warranty claims, or any questions regarding your BOLANY product, please contact your retailer or visit the official BOLANY website for support information.

You can also visit the BOLANY Store on Amazon for more information:[BOLANY Store](#)