

## MACFOX X1S Hydraulic Disc Brake Replacement Set

# MACFOX E-Bike X1S Hydraulic Disc Brake Replacement Set Instruction Manual

Brand: MACFOX | Model: X1S Hydraulic Disc Brake Replacement Set

## INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your MACFOX E-Bike X1S Hydraulic Disc Brake Replacement Set. Designed for enhanced stopping power and reliability, this hydraulic brake system is a significant upgrade for your e-bike. Please read all instructions carefully before proceeding with installation or use.

**Note: Please confirm the model of the Macfox e-bike you currently own before making a purchase to ensure compatibility.**

## PACKAGE CONTENTS

The MACFOX E-Bike X1S Hydraulic Disc Brake Replacement Set includes the following components:

- Left Brake Lever
- Right Brake Lever
- Left Disc Brake Caliper
- Right Disc Brake Caliper
- Hydraulic Cables (pre-filled)
- Mounting Screws for Calipers
- 2PCS Disc Rotors (160mm)
- Screws for Disc Rotors
- Cable Ties
- Multi-tool (for installation)



Image: All components of the MACFOX E-Bike X1S Hydraulic Disc Brake Replacement Set, including brake levers, calipers, cables, screws, and disc rotors.

## SETUP AND INSTALLATION

Follow these steps to install your new hydraulic disc brake system. It is recommended to watch the accompanying video for visual guidance.

### Video Guide: MACFOX X1S Replacement Hydraulic Brake Kit Installation

Video: A comprehensive guide demonstrating the step-by-step installation process for the MACFOX X1S Hydraulic Disc Brake Replacement Set on an e-bike.

#### Step-by-Step Installation:

##### 1. Prepare the Handlebars:

- Unfold the protection cable from the existing wiring harness.
- Unplug the brake sensor cable.
- Remove the display unit from the handlebars.
- Remove the existing brake lever.
- Remove the grip from the handlebars.
- Remove the headlight switch.

##### 2. Remove Front Wheel Components:

- Remove the front wheel center axle screws.
- Take out the front wheel.
- Remove the mechanical disc brake caliper from the front fork.
- Remove the old brake disc from the front wheel and replace it with the new 160mm disc rotor provided.

##### 3. Install Front Hydraulic Brake:

- Install the front wheel back onto the fork.

- Tighten the front wheel axle screws.
- Install the new hydraulic disc brake caliper onto the front fork, ensuring it aligns correctly with the new disc rotor. Tighten the screws securely.

#### 4. Remove Rear Wheel Components:

- Remove the brake screw from the rear caliper.
- Remove the rear wheel center axle screws.
- Remove the chain limit screw.
- Cut off the motor cable ties.
- Push the back wheel forward, remove the chain, and take out the back wheel.
- Cut off the brake cable tie.
- Remove the old brake disc from the rear wheel and replace it with the new 160mm disc rotor provided.

#### 5. Install Rear Hydraulic Brake:

- Install the back wheel and chain.
- Adjust the chain adjustment screw to the appropriate position.
- Tighten the tire screws.
- Plug in the motor cable harness and tie it up securely.
- Install the new hydraulic disc brake caliper onto the rear frame, ensuring it aligns correctly with the new disc rotor. Tighten the screws securely.
- Tie the hydraulic disc brake cable along the frame.

#### 6. Reassemble Handlebars:

- Install the new brake handle, instrument display, and headlight switch in sequence onto the handlebars.
- Plug in the brake sensor cable.
- Tie up the wiring harness neatly.

## OPERATING INSTRUCTIONS

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Hydraulic disc brakes offer superior stopping power and modulation compared to mechanical systems. Apply the brake levers smoothly and progressively to control your speed. Avoid sudden, harsh braking unless in an emergency to prevent skidding and maintain control.

### Brake Bedding-In Process:

For optimal performance, new brake pads and rotors require a bedding-in process:

1. Find a safe, flat area with no traffic.
2. Accelerate to a moderate speed (approx. 10-15 mph).
3. Apply the brakes firmly but without skidding, slowing down to walking speed. Repeat this 10-20 times.
4. Accelerate to a higher speed (approx. 20 mph).
5. Apply the brakes very firmly, almost to a stop, but do not lock the wheels. Repeat this 5-10 times.
6. Allow the brakes to cool down before riding normally. This process transfers brake pad material to the rotor, improving braking consistency and power.

## MAINTENANCE

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

- **Clean Rotors:** Regularly clean disc rotors with a clean cloth and isopropyl alcohol to remove dirt, oil, or grease. Avoid touching the rotor surface with bare hands.
- **Check Brake Pads:** Inspect brake pads for wear. Replace them when the pad material is less than 0.5mm thick.
- **Brake Fluid:** Hydraulic brakes are pre-filled. If the brake lever feels spongy or loses power, the system may need bleeding or fluid replacement. Consult a professional bike mechanic for this service.
- **Cable Inspection:** Although hydraulic, ensure the external cables are securely tied and not rubbing against moving parts or sharp edges.
- **Caliper Alignment:** If you hear rubbing noises, check the caliper alignment. Loosen the caliper mounting bolts slightly, squeeze the brake lever, and retighten the bolts while holding the lever to self-align the caliper.

## TROUBLESHOOTING

Here are some common issues and their potential solutions:

- **Squealing Brakes:**
  - **Cause:** Contaminated pads/rotors, misaligned caliper, new pads/rotors not bedded in.
  - **Solution:** Clean rotors with isopropyl alcohol, re-align calipers, perform bedding-in procedure. If persistent, replace pads.
- **Spongy Brake Lever/Poor Stopping Power:**
  - **Cause:** Air in the hydraulic system, worn pads, low fluid level.
  - **Solution:** Bleed the brake system (professional service recommended), replace worn pads.
- **Brake Rubbing:**
  - **Cause:** Misaligned caliper, bent rotor.
  - **Solution:** Re-align caliper (as described in maintenance), true the rotor (professional service recommended) or replace if severely bent.

## SPECIFICATIONS

Feature	Specification
Brand Name	MACFOX
Model Name	Hydraulic Disc Brake Set
Color	BLACK
Material	Aluminum
Suggested Users	unisex-adult
Manufacturer	E-Link Technology Co., Ltd
Included Components	Hydraulic Disc Brake Set
Size	900mm (cable length, specific to front/rear)
ASIN	B0FB3J2XMV
Date First Available	May 28, 2025

## WARRANTY AND SUPPORT

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**Warranty Description:** 1 year manufacturer's warranty.

For technical support, troubleshooting assistance, or warranty claims, please contact MACFOX customer service through the retailer where the product was purchased or visit the official MACFOX website.