TEKTRO HD-M750

TEKTRO HD-M750 Hydraulic Disc Brake Set Instruction Manual

Model: HD-M750

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your TEKTRO HD-M750 Hydraulic Disc Brake Set. The HD-M750 features a 4-piston caliper design and is supplied with 180mm rotors, offering powerful and consistent braking performance for bicycles. Please read this manual thoroughly before installation and use to ensure proper function and safety.

2. Safety Information

Always prioritize safety when working with bicycle components. Improper installation or maintenance of braking systems can lead to serious injury or death. If you are unsure about any step, consult a professional bicycle mechanic.

- Wear appropriate safety gear, including eye protection, during installation and maintenance.
- Ensure all bolts are tightened to the manufacturer's specified torque settings. Overtightening or undertightening can cause component failure.
- Brake fluid can be an irritant. Avoid contact with skin and eyes. In case of contact, rinse thoroughly with water and seek medical attention if irritation persists.
- Never ride a bicycle with improperly functioning brakes. Test brakes thoroughly before each ride.
- Brake rotors and calipers can become extremely hot during use. Avoid touching them immediately after riding.
- Keep brake components free from oil, grease, or other contaminants, which can severely reduce braking performance.

3. Components Overview

The TEKTRO HD-M750 Hydraulic Disc Brake Set typically includes the following main components:

- **Brake Levers:** Ergonomically designed levers for hydraulic fluid actuation.
- **Hydraulic Calipers:** 4-piston design for powerful braking, housing the brake pads.
- **Hydraulic Hoses:** Connect the brake levers to the calipers, transmitting fluid pressure.
- **Brake Rotors:** 180mm diameter discs that attach to the wheel hub, providing the braking surface.
- **Brake Pads:** Friction material inside the caliper that clamps onto the rotor.
- **Mounting Hardware:** Bolts and adapters for securing components to the bicycle frame and fork.

Image 3.1: TEKTRO HD-M750 Brake Lever. This image shows the black brake lever assembly, which includes the master cylinder and the lever blade.

Image 3.2: TEKTRO HD-M750 4-Piston Caliper. This image displays the black 4-piston brake caliper, which houses the brake pads and connects to the hydraulic hose.

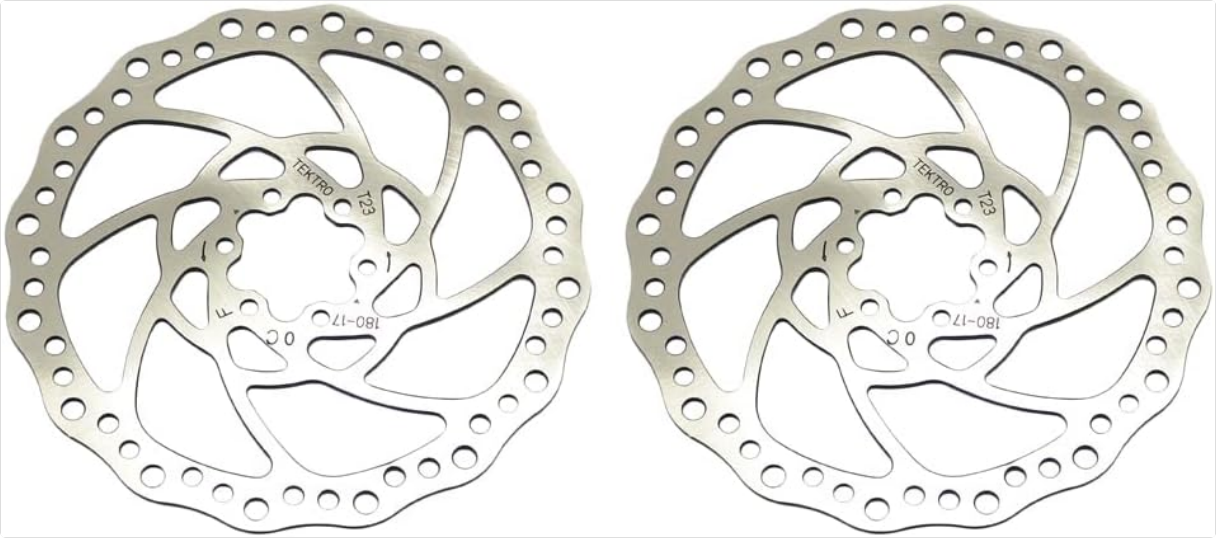

Image 3.3: TEKTRO 180mm Disc Brake Rotors. This image shows two silver 180mm disc brake rotors with a standard 6-bolt mounting pattern.

4. Setup & Installation

Proper installation is crucial for brake performance and safety. If you lack experience, it is highly recommended to have a qualified bicycle mechanic perform the installation.

4.1 Rotor Installation

1. Clean the rotor and wheel hub mounting surface thoroughly with isopropyl alcohol.
2. Align the 180mm rotor with the 6-bolt mounting holes on your wheel hub. Ensure the rotation direction arrow on the rotor (if present) matches the wheel's forward rotation.
3. Install the six rotor bolts, tightening them in a star pattern to the manufacturer's specified torque (typically 4-6 Nm). Use a torque wrench for accuracy.

4.2 Caliper Mounting

1. Identify the correct adapter (if needed) for your frame/fork and rotor size. The HD-M750 is designed for 180mm rotors.
2. Mount the caliper to the frame/fork using the appropriate bolts and washers. Do not fully tighten the bolts yet; the caliper needs to be aligned.
3. Insert the wheel into the frame/fork and secure it.

4.3 Brake Lever Mounting

1. Mount the brake levers onto the handlebar. Position them so they are comfortable to reach and operate with one or two fingers.
2. Ensure the levers are positioned inward from the grips, allowing space for other handlebar accessories (shifters, dropper post levers).
3. Lightly tighten the lever clamp bolts. Final tightening will occur after hose routing and adjustment.

4.4 Hydraulic Hose Routing & Connection

Route the hydraulic hoses from the levers to the calipers, following your bicycle's frame guides. Ensure hoses are not kinked, stretched, or interfering with steering or suspension movement. Connect the hoses to the calipers and levers according to TEKTRO's specific instructions (often involves olive and barb fittings). This step may require specialized tools and expertise for cutting and bleeding the lines.

4.5 Caliper Alignment

1. With the caliper mounting bolts slightly loose, squeeze the brake lever firmly and hold it.
2. While holding the lever, tighten the caliper mounting bolts to the specified torque. This aligns the caliper over the rotor.
3. Release the lever and check for proper pad clearance and rotor alignment. The rotor should spin freely without rubbing. Adjust if necessary.

4.6 Brake Bleeding (If Hoses were cut or system is spongy)

If the hydraulic lines were cut or the brake lever feels spongy, the system will need to be bled to remove air. This process requires a TEKTRO bleed kit and specific hydraulic fluid. Refer to the detailed bleeding instructions provided with the bleed kit or consult a professional mechanic. Improper bleeding can lead to brake failure.

4.7 Bedding-In Procedure

New brake pads and rotors require a bedding-in process to achieve optimal performance. This involves gradually heating the pads and rotors to transfer friction material from the pads to the rotor surface.

1. Find a safe, flat area with no traffic.
2. Accelerate to a moderate speed (approx. 15-20 km/h) and apply the brakes firmly until you slow to walking speed. Do not come to a complete stop. Repeat this 10-15 times.
3. Accelerate to a higher speed (approx. 25-30 km/h) and apply the brakes very firmly, almost to a stop, but avoid locking the wheels. Repeat this 5-10 times.
4. Allow the brakes to cool down completely before riding normally. You should notice improved braking power and consistency.

5. Operation

The TEKTRO HD-M750 hydraulic disc brakes provide powerful and modulated stopping power. Familiarize yourself with their feel before riding in challenging conditions.

- **Brake Lever Feel:** The brake levers should feel firm and consistent throughout their travel. A spongy or inconsistent feel indicates air in the system or other issues requiring attention.
- **Modulation:** Hydraulic brakes offer excellent modulation, allowing you to control braking force precisely. Practice applying varying pressure to the levers to understand the brake's response.
- **Front vs. Rear Brake:** The front brake provides most of the stopping power. Use both brakes simultaneously for effective and controlled deceleration. Avoid sudden, hard application of the front brake, especially at high speeds or on loose surfaces, to prevent loss of control.
- **Wet Conditions:** Braking performance may be slightly reduced in wet conditions. Apply brakes earlier and with more caution.

6. Maintenance

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

6.1 Daily/Pre-Ride Checks

- Check brake lever feel for firmness and consistency.
- Inspect brake pads for wear. Replace if the friction material is less than 0.5mm thick.
- Check rotors for bends, cracks, or excessive wear. Ensure they are clean and free of contaminants.
- Verify all mounting bolts are secure.

6.2 Cleaning

Clean calipers and rotors with a clean cloth and isopropyl alcohol. Avoid using harsh chemicals or degreasers, which can contaminate brake pads and reduce performance. Do not spray lubricants or cleaning agents directly onto rotors or calipers.

6.3 Brake Pad Replacement

When brake pads wear down, they must be replaced. Consult a professional mechanic or refer to specific TEKTRO instructions for your pad type. Always replace pads as a set (both left and right pads in a caliper). Ensure new pads are properly bedded-in after installation.

6.4 Rotor Inspection and Replacement

Inspect rotors for signs of damage, excessive wear (thinning), or discoloration from overheating. The minimum thickness for TEKTRO 180mm rotors is typically stamped on the rotor itself (e.g., 1.5mm). Replace rotors that are below the minimum thickness or show significant damage.

6.5 Hydraulic Fluid Service

Hydraulic fluid should be replaced periodically (e.g., annually or every two years, depending on usage and conditions) or if it becomes contaminated. This procedure requires specialized tools and knowledge. It is strongly recommended to have this service performed by a qualified bicycle mechanic.

7. Troubleshooting

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

7.1 Spongy Brake Lever

- **Cause:** Air in the hydraulic system.
- **Solution:** The brake system needs to be bled. This is a technical procedure; consult a professional mechanic.

7.2 Poor Braking Performance / Lack of Power

- **Cause:** Contaminated brake pads or rotor.
- **Solution:** Clean rotor with isopropyl alcohol. If pads are contaminated, they must be replaced.
- **Cause:** Worn brake pads.
- **Solution:** Replace brake pads.
- **Cause:** Improperly bedded-in pads/rotors.
- **Solution:** Perform the bedding-in procedure (Section 4.7).
- **Cause:** Air in the system.
- **Solution:** Bleed the brake system.

7.3 Squealing or Noisy Brakes

- **Cause:** Contaminated pads or rotor.
- **Solution:** Clean rotor with isopropyl alcohol. Replace pads if contaminated.
- **Cause:** Misaligned caliper.
- **Solution:** Re-align the caliper (Section 4.5).
- **Cause:** Loose mounting bolts.
- **Solution:** Check and tighten all mounting bolts to specified torque.

- **Cause:** Worn pads or rotor.
- **Solution:** Inspect and replace if necessary.

7.4 Rotor Rubbing

- **Cause:** Misaligned caliper.
- **Solution:** Re-align the caliper (Section 4.5).
- **Cause:** Bent rotor.
- **Solution:** True the rotor with a rotor truing tool or replace it if severely bent.
- **Cause:** Overfilled hydraulic system (pads too close).
- **Solution:** Consult a professional mechanic to remove a small amount of fluid.

8. Specifications

Feature	Detail
Brand	TEKTRO
Model Number	HD-M750
Caliper Type	4-Piston Hydraulic
Rotor Diameter	180mm
Material	Aluminum (Lever, Caliper)
Vehicle Service Type	Bicycle
Item Weight	1280 Grams (approx. for set)
UPC	793565958236

9. Warranty & Support

TEKTRO products are manufactured to high standards. For specific warranty terms and conditions, please refer to the warranty information provided with your purchase or visit the official TEKTRO website.
Warranty coverage typically applies to manufacturing defects and does not cover normal wear and tear, improper installation, or misuse.
For technical support, spare parts, or warranty claims, please contact your authorized TEKTRO dealer or visit the official TEKTRO website for contact information and service center locations.
Official TEKTRO Website: www.tektro.com