SHIMANO EBRT610FX41XLP

SHIMANO BR-T610 Deore V-Brake Front Instruction Manual

Model: EBRT610FX41XLP

1. Introduction

This manual provides essential information for the proper installation, adjustment, and maintenance of your SHIMANO BR-T610 Deore V-Brake Front. Please read this manual thoroughly before use to ensure safe and correct operation. Keep this manual for future reference.
The SHIMANO BR-T610 Deore V-Brake is designed for front wheel application on bicycles, offering reliable stopping power and durability. It features an X-Type design with S70C brake shoes and a 90-degree inner cable lead unit.

2. Safety Information

WARNING: Improper installation or maintenance of bicycle brakes can result in serious injury or death. If you are unsure about any part of the installation or adjustment process, consult a professional bicycle mechanic.

- Always wear appropriate safety gear when working on your bicycle.
- Ensure all bolts are tightened to the specified torque values. Overtightening or undertightening can lead to component failure.
- Regularly inspect brake pads for wear. Replace worn pads immediately.
- Check brake cable tension and ensure smooth operation before each ride.
- Braking performance can be affected by weather conditions. Exercise caution when riding in wet or icy conditions.

3. Package Contents

The SHIMANO BR-T610 Deore V-Brake Front package typically includes the following components:

- V-Brake arms (front set)
- S70C Brake shoes (pre-installed)
- Fixing bolts (16.0mm and 25.0mm)
- Inner cable lead unit (90-degree)

- Rubber boots for cable protection



Image 1: SHIMANO BR-T610 Deore V-Brake Front components. Shows the two brake arms, brake pads, and associated hardware.

4. Installation

Follow these steps to install the SHIMANO BR-T610 Deore V-Brake on your bicycle's front fork.

4.1 Mounting the Brake Arms

1. Clean the brake boss mounts on your bicycle's front fork.
2. Apply a thin layer of grease to the brake boss mounts.
3. Slide each V-brake arm onto its respective brake boss. Ensure the spring tension pin on the brake arm engages with the correct hole on the brake boss. There are typically three holes for spring tension adjustment; start with the middle hole for a balanced feel.
4. Secure each brake arm with the provided fixing bolts (16.0mm or 25.0mm, depending on your fork's requirements and desired spacer configuration). Tighten the bolts securely.

4.2 Installing the Brake Cable

5. Route the brake cable from your brake lever through the cable housing to the V-brake.
6. Insert the inner cable lead unit (90-degree noodle) into the cable stop on one of the brake arms.
7. Thread the brake cable through the noodle and the cable clamp bolt on the other brake arm.
8. Pull the cable taut, ensuring the brake pads are close to the rim but not touching.
9. Tighten the cable clamp bolt to secure the cable.

4.3 Adjusting Brake Pads

9. Ensure the S70C brake pads are aligned correctly with the rim's braking surface. The entire pad surface should contact the rim when the brake is applied.
10. Adjust the toe-in of the brake pads. The front edge of the pad should touch the rim slightly before the rear edge (approximately 0.5-1mm). This helps prevent brake squeal.
11. Tighten the brake pad fixing bolts securely once alignment and toe-in are correct.

5. Adjustment and Operation

5.1 Brake Lever Reach and Cable Tension

- Adjust the brake lever reach to a comfortable position using the adjustment screw on the brake lever (if available).
- Fine-tune cable tension using the barrel adjuster on the brake lever or the V-brake arm. Turn clockwise to loosen tension (increase lever travel) and counter-clockwise to tighten tension (decrease lever travel).
- Ensure there is approximately 1-3mm of clearance between the brake pads and the rim when the brake is not applied.

5.2 Spring Tension Adjustment

- Each brake arm has a spring tension adjustment screw. Use a small hex key to adjust the tension.
- Adjust the screws so that both brake arms return evenly and quickly when the brake lever is released. The pads should retract equally from the rim.
- If one arm is closer to the rim than the other, increase the spring tension on the arm that is closer, or decrease it on the arm that is further away.

6. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your V-brakes.

- **Cleaning:** Keep brake pads and rim braking surfaces clean and free of dirt, oil, or grease. Use a clean cloth and appropriate cleaner if necessary.
- **Inspection:** Periodically check brake cables for fraying or corrosion. Inspect brake pads for wear indicators. Replace pads when they reach their wear limit.
- **Lubrication:** Apply a small amount of light grease to the brake boss pivots annually or as needed to ensure smooth arm movement. Do not get grease on brake pads or rims.
- **Cable Replacement:** Replace brake cables and housing if they become stiff, corroded, or damaged.

7. Troubleshooting

Problem	Possible Cause	Solution
Weak braking power	Worn brake pads, loose cable, contaminated rim/pads, incorrect pad alignment.	Replace pads, tighten cable, clean rim/pads, adjust pad alignment.
Brake squeal	Incorrect pad toe-in, contaminated pads/rim, loose components.	Adjust pad toe-in, clean pads/rim, check all bolts for tightness.
Brake arms do not return fully	Insufficient spring tension, dirty/corroded pivots, stiff cable housing.	Adjust spring tension, clean and lubricate pivots, replace cable/housing.

Problem	Possible Cause	Solution
One brake arm rubs the rim	Uneven spring tension.	Adjust spring tension screws to balance arm retraction.

8. Specifications

Model Number: EBRT610FX41XLP

Series: DEORE

Brake Type: V-Brake

Application: Front

Brake Shoe Type: S70C

Fixing Bolts: 16.0mm / 25.0mm

Inner Cable Lead Unit: 90-degree

Arch Size: 107mm

Weight: Approximately 186g

Color: Black

9. Warranty and Support

For warranty information and technical support, please refer to the official SHIMANO website or contact your authorized SHIMANO dealer. Keep your proof of purchase for warranty claims.
Official SHIMANO Website: bike.shimano.com

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