User’s manual

Hydraulic Disc Brake

IMPORTANT NOTICE

- Contact the place of purchase or a distributor for information on installation, adjustment, and replacement of the products which are not found in the user’s manual. A dealer’s manual for professional and experienced bicycle mechanics is available on our website (https://si.shimano.com).

For safety, be sure to read this “user’s manual” thoroughly before use, follow it for correct use, and store it so that it can be referenced at any time.

Important Safety Information

WARNING

- Because each bicycle may handle slightly differently depending on the model, be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. Improper use of your bicycle’s brake system may result in a loss of control or a fall, which could lead to severe injury.
- Do not disassemble or modify the product. This may cause the product to not operate correctly, and you may suddenly fall and be seriously injured.
- Make sure that you completely understand the braking characteristics before using the brakes. The 203 mm and 180 mm disc brake rotors provide a higher braking force than the 160 mm disc brake rotors. If you ride the bicycle without familiarizing yourself with the characteristics of this brake, brake lock-up may result in an accident that could lead to serious injury or even death.
- Please use extra caution to keep your fingers away from the rotating disc brake rotor. The disc brake rotor is sharp enough to inflict severe injury to your fingers if caught within the openings of moving rotor.
- Make sure that the calipers and disc brake rotor will become hot when the brakes are operated, so do not touch them while riding or immediately after dismounting from the bicycle, otherwise you may get burned.
- Be careful not to allow any oil or grease to get onto the disc brake rotor and brake pads. Riding the bicycle with oil or grease on the disc brake rotor and brake pads may prevent the brakes from operating and result in serious injury due to a fall or collision.

CAUTION

- Check the thickness of the brake pads and do not use them if they have a thickness of 0.5 mm or less. Doing so may prevent the brakes from operating and result in serious injury.
- Do not use the disc brake rotor if it is cracked or deformed. The disc brake rotor may break, and result in serious injury due to a fall.
- Do not use the disc brake rotor if its thickness is 1.5 mm or less. Also do not use it if the aluminum surface becomes visible. The disc brake rotor may break, and you may fall off the bicycle.
- Do not continuously apply the brakes. Doing so may cause a sudden increase in the brake lever stroke and prevent the brakes from operating and result in serious injury.
- Do not use the brakes if fluid leaks. Doing so may prevent the brakes from operating and result in serious injury.
- Do not apply the front brake too strongly. If you do so, the wheel may lock and the bicycle may fall forward, and serious injury may result.
- Because the required braking distance will be longer during wet weather, reduce your speed and apply the brakes early and gently. You may fall or collide and be seriously injured.
- A wet road surface may cause tires to skid; therefore, to avoid this, reduce your speed and apply the brakes early and gently. If the tires skid, you may fall and be seriously injured.

For use with the dual control lever hydraulic disc brake type

- This hydraulic brake system has different braking characteristics from those of the rim brake type, demonstrating relatively high braking force at the beginning of braking (higher than the rim brake type); familiarize yourself sufficiently with the braking characteristics before using it. If you ride the bicycle without becoming sufficiently familiar with the braking characteristics, braking may cause you to fall off the bicycle, potentially causing serious injury or a fatal accident.
- The braking force for a hydraulic brake system will increase along with the size of the disc brake rotor (140 mm/160 mm/180 mm/203 mm).
- Do not use a 203 mm disc brake rotor. This will excessively increase the braking force, which could cause you to lose control of the bicycle, fall, and be seriously injured.
- Only use a 180 mm disc brake rotor if you are unable to obtain sufficient braking force with a 160 mm disc brake rotor upon a trial ride, such as when riding an electronic assist road bicycle or if the rider is heavy. Otherwise, you may lose control of the bicycle, fall, and be seriously injured.
- If you feel that the braking force is too high or too low, stop use and consult a place of purchase or a distributor. Otherwise, you may lose control of the bicycle, and result in serious injury due to a fall or collision.

Notice

- In the case of carbon levers, wash them by using a soft cloth. Be sure to use a neutral detergent. Otherwise, the material may get damaged, and the strength may be affected.
- Avoid leaving the carbon levers in places where high temperatures are present. Also keep them well away from fire.
- When the bicycle wheel has been removed, it is recommended that pad spacers should be installed. Do not depress the brake lever while the wheel is removed. If the brake lever is depressed without the pad spacers installed, the pistons will protrude further than is normal. If that happens, consult a dealer.
- Use soap water or a dry cloth when carrying out cleaning and maintenance of the brake system. Do not use commercially available brake cleaners or silencing agents. Such substances can cause damage to parts such as seals.
- Products are not guaranteed against normal wear and deterioration from normal use and aging.
- For maximum performance we highly recommend SHIMANO lubricants and maintenance products.

Operation

This product is equipped with a reach adjustment function. If you feel that the brake lever is far and difficult to use, consult a dealer or an agency.

Regular inspections before riding the bicycle

Before riding the bicycle, check the following items. If any problems appear, or in the following items, contact the place of purchase or a bicycle dealer.

- Is the brake oil leaking?
- Do the front and rear brakes work correctly?
- Does each pad have a thickness of 0.5 mm or more?
- Is the disc brake rotor cracked or deformed?
- Are the levers securely installed in the handlebar?
- Are there any abnormal noises?

Names of parts

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Please note: specifications are subject to change for improvement without notice. (English)