

## Disc brake installation and operation manual

T-3 mechanical disc brake  
(compatible with bicycles/E-bicycles)

Lanxi Jieke Sports Apparatus  
Manufacturing Corporation Ltd.

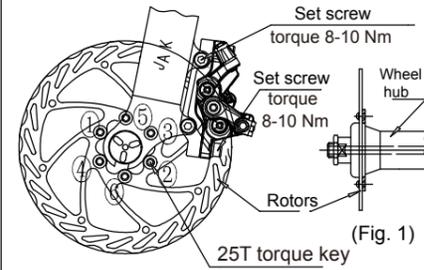
[Http://www.discbrake.cn](http://www.discbrake.cn)

### Installation Instruction

#### 1. Rotor installation (Fig. 1)

Attach the rotor to the hub. Make sure that the rotation arrow label on the rotor pointing in the same direction as the forward rotation of the wheel. Use 6 rotor screws to tighten the disc rotor onto the disc hub in the sequence shown in Fig. 1 (torque 6 Nm).

**Warning:** Safety problems may occur if the disc is reversed (Fig. 2).



(Fig. 1)

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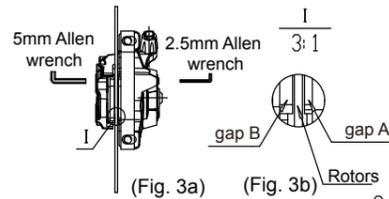
The mark is outward, and the arrow direction is the same as the forward rotating direction of the wheel.

(Fig. 2)

Arrow markers on the hub  
Recommend: 2.3 mm-thick rotors should be used for rotors larger than 180mm in diameter

#### 2. Caliper installation

(1).Align calipers to the rotor and make sure the rotor is centered between 2 brake pads (Fig. 3a).



(Fig. 3a)

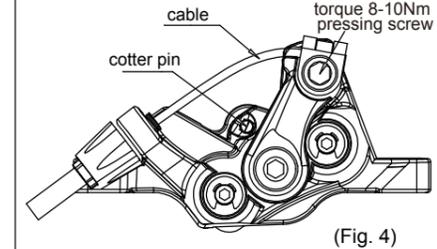
(Fig. 3b)

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(2).Align the caliper adaptor slots with the fork mounting holes.  
(3).Tight the brake adaptor bolts by using torque 8-10Nm (Fig. 1).  
(4).Re-adjust the caliper position to make sure the rotor is centered to 2 brake pads (Fig. 3b).  
(5).Fix the caliper to the caliper mount bracket by alternatively tightening 2 mounting bolts (Fig. 1).

#### 3.Brake inner cable installation

(1).Thread the brake inner cable through the adjusting screw on the caliper force arm.  
(2).Continue to thread the brake inner cable through the cable pressing plate of the pull rod on the caliper. The pull rod is pulled forward for 3-7 degrees for pre-tightening, and then tighten the cable anchor bolt (torque 8-10 Nm) (Fig. 4).  
(3).The tension of the brake cable can be adjusted by the adjusting screw on the force arm or the adjusting screw on the brake lever.



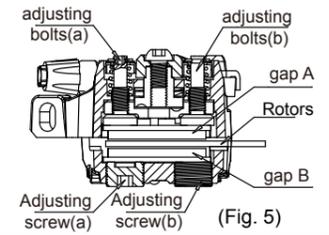
(Fig. 4)

#### 4. Caliper adjustment

(1).Check the clearance between brake pad A and rotor, then use a 5mm Allen wrench to adjust the clearance between rotor and pad by adjusting the adjusting bolts a and b. Make sure the rotor is parallel to pad A and the clearance is appropriate (the clearance should be as small as possible given that the pad and rotor are not in contact with each other) (Figs. 3 and 5).

(2).Check the clearance between brake pad B and rotor, then use a 5mm Allen wrench to adjust the clearance between rotor and pad by adjusting the adjusting screws a and b. Make sure the rotor is parallel to pad B and the clearance is appropriate (the clearance should be as small as possible given that the pad and rotor are not in contact with each other) (Figs. 3 and 5).

**Note:** This adjustment should not be conducted directly if the pad and rotor sit at a large angle. Therefore, this adjustment is not allowed if the pad and rotor contact with each other. If it happens, please loosen the mounting bolt on the calipers and conduct a readjustment.



(Fig. 5)

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### 5. Brake pads replacement

The brake pads need to be replaced immediately if the brakepads are worn to a total thickness of less than 2.7 mm, if oil stains are found on the pads or any other necessary reasons.

#### When replacing brake pads:

a)The caliper needs to be removed first when replacing brake pads. Then remove the cotter pin and pull out the brake pads (Fig.4). Reinsert new brake pads and fix them with the cotter pins.

b)After the brake pads are replaced, repeat the following steps: Step 2. Caliper installation; Step 3. Brake inner cable installation; Step 4. Caliper adjustment.

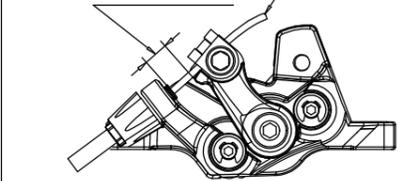
**Note:** The standard thickness of the brake pad used for thisdisc brake is 5 mm. And 4 mm thick brake pads are required if a 2.8 mm thick rotor is used.

#### Warning:

(1).The length of the tail end of the brake inner cable must be no more than 20 mm, in case of danger caused by the brake inner cable accidentally caught into the disc.

(2).When pulling the brake lever tightly, the gap between the pull rod and the force arm is at least 9 mm under normal condition.

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(Fig. 6)

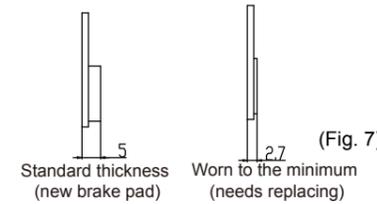
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3.When the brake pads are worn too thin, the manner to compensate for the wear by tightening the inner cable is not allowed in case of affecting the normal brake operation (If the inner cable is inappropriately over-tightened, the pull rod will be too close to the caliper force arm, and the pull rod will lose the motion range required for normal braking, and thereby fails the braking function shown in Fig. 6).

4.Before riding a bicycle, please check the thickness of the brake pads. When the wear of the brake pads exceeds 0.8 mm, the replacement of the pads is recommended. When the total thickness of the worn brake pad is less than 2.7 mm, the pads must be replaced to ensure safe riding (Fig. 7).

Standard thickness (new brake pad)

Worn to the minimum (needs replacing)



(Fig. 7)

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#### Notes:

1.The thin-headed screw is non-adjustable (Fig. 5). Users are not allowed to screw the thin-head screw to avoid damaging the calipers.  
2.After it has been frequently used for a long time or not used for at least one month, the disc brake must be checked whether it works normally, whether the wear of the brake pads is within normal range, and whether the rotor is worn/deformed or not (when the deformation deflection exceeds 0.2mm, the rotor must be replaced).  
3.Keep pads clean and free of oil or grease. If they become contaminated, they should be replaced to make sure safe riding.

4.When users use the brake during riding, there may be slight noise caused by the friction of the brake pads and the rotor. It is normal and no need to worry about it.

5.It is critical to completely understand the operation of the bicycle braking system. Any improper use of brakes may lead to a loss of control or even an accident and possible severe injury. Make sure to learn the proper braking technique and operation of bicycles because each bicycle may handle differently. Please consult a professional bicycle dealer or the manual for assistance and improve the riding and braking technique.

6.Before each ride, please check whether the disc brakes can work normally. If abnormal occurrence, such as poor braking feeling, insufficient braking force, or brake failure happens, please consult a professional technician in bicycle dealers for inspection and tune-up.

7.When replacing the brake pads, make sure that the new brake pads are the same shape as the original brake pads. Inconsistent replacement could lead to safety issues.

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8.In order to avoid the potential risk of loose screws due to the loss of the anti-loose rubber, all removed anti-loose screws during maintenance and repair must be replaced with new ones.

9.When riding a bicycle for the first time, it is normal to have a light disc brake rub or insufficient braking force. Both issues would be automatically eliminated after a certain distance of riding.

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### Product warranty

1.During the warranty period, if damage occurs under normal use according to the instruction and operation manual, our company will provide professional after-sale service, but there are exceptions; the warranty last 12 months from the sale of the disc brake but the brake pads are not warranted.

2.If damage is caused by the following listed reasons, it will not be covered by the warranty during the warranty period. However, the company is still happy to serve you by charging parts and service fees.

The followings are not covered by the warranty:

- Failure to perform proper maintenance according to the manual
- Arbitrary disassembly and assembly or not using original parts
- Damage caused by collision due to external force
- Abnormal or improper use
- Damage occurs due to force majeure
- Selfy-modified or repaired by dealers unauthorized by the company

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