# General Safety Information



 The 203 mm and 180 mm rotors provide a higher braking force than the 160 mm rotors. Make sure that you have a complete feel for the braking characteristics before using the brakes.



- Please use extra caution to keep your fingers away from the rotating disc brake rotor during installing or servicing the wheel. The rotor is sharp enough to inflict severe injury to your fingers if caught within the openings of moving rotor.
- The calipers and 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. Check that the brake components have cooled
  down sufficiently before attempting to adjust the brakes.
- Always make sure that the front and rear brakes are working correctly before you ride the bicycle.
- Be careful not to allow any oil or grease to get onto the rotor and brake pads, otherwise the brakes may not work correctly.
- If the quick release lever is on the same side as the rotor, there is the danger that it may interfere with the rotor, so check that it does not interfere.
- Obtain and read the service instructions carefully prior to installing the parts. Loose, worn or damaged parts may cause the bicycle to fall over and serious injury may occur as a result. We strongly recommend only using genuine Shimano replacement parts.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.



 Disc brakes have a burn-in period, and the braking force will gradually increase as the burn-in period progresses. Make sure that you are aware of any such increases in braking force when using the brakes during the burn-in period. The same thing will happen when the brake pads or rotor are replaced.

### **Technical Service Instructions**

SI-0095A-001

# Installation of the rotor



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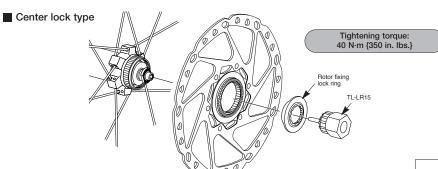
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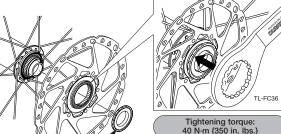
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Please note: specifications are subject to change for improvement without notice. (English) © Jan. 2009 by Shimano Inc. XBC IZM Printed in Japan.



**A** CAUTION

When using the special tool (TL-FC36) to remove and install the rotor mounting ring, be careful not to touch the outside of the rotor with your hands. Wear gloves to protect your hands from getting cut.

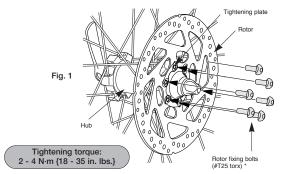


#### 6 bolt type

Install the rotor and the rotor tightening plate to the hub, and then install and tighten the bolts as shown in Fig. 1.

While wearing gloves, apply a force to the rotor to turn it in a clockwise direction as shown in Fig. 2. While doing this, tighten the rotor fixing bolts in the order shown in the illustration

Use a flat-tipped screwdriver or similar tool to bend the edges of the tightening plate over the heads of the bolts as shown in Fig. 3.



Rotor fixing lock ring

\* TORX is a registered trademark of Camcar LLC.

