


General Safety Information

⚠ WARNING

- The HB-M976 front hub is not designed for off-road bicycle riding and extreme mountain bike riding, that are represented in part by North Shore style riding, "trials riding", or urban stunt riding. However, depending on the riding condition, The hub axle could develop a crack, which may result in failure of the hub axle. This can lead to an accident that could result in serious injury or even death. Before riding, you should carefully check your hubs to make sure that there are no cracks in the axles, and if you find any sign of a crack or any other unusual condition, do NOT use the bicycle.
- The securing method and tightening torque for the front wheel both vary depending on the type of front suspension fork being used. When installing the front wheel to the front suspension fork, always be sure to follow the directions given in the Service Instructions for the front suspension fork. If the directions are not followed, the front wheel may fall out of the front suspension fork and serious injury may result.
- 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 any oil or grease do get on the pads, you should replace the pads. If any oil or grease gets on the rotor, you should clean the rotor. If this is not done, 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.
- Check that the wheels are fastened securely before riding the bicycle. If the wheels are loose in any way, they may come off the bicycle and serious injury may result.
- Obtain and read the service instructions carefully prior to installing the parts. Loose, worn, or damaged parts may cause injury to the rider. 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.
- Be sure to carefully read the Service Instructions for the disc brakes also.

⚠ CAUTION

- When using the special tool (TL-FC32) 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.
 - Do not turn the rotor while the special tool (TL-FC32) is installed to it. If the rotor becomes bent, the rotor and brake pad may interfere with each other and generate noise. In addition, it may cause the braking force to drop.
- **Burn-in period**
- 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.

Note

- If the brake caliper mounting boss and the dropout are not parallel, the rotor and caliper may touch.
- If the rotor is worn, cracked or warped, it should be replaced.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.

Technical Service Instructions

SI-26H0A

HB-M976

Front hub

In order to realize the best performance, we recommend that the following combination be used.

Series	XTR	
Caliper	BR-M975	
Brake Lever	ST-M975 / BL-M975	
Rotor	SM-RT97	
Brake pad unit	Resin Pads	M07Ti
	Metal Pads	M06Ti

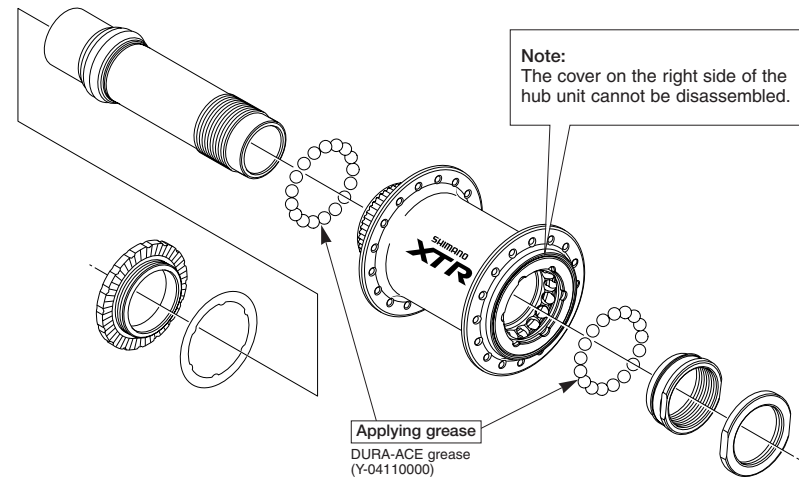
Specifications

Front hub

Model No.	HB-M976
No. of spoke holes	36 / 32

Maintenance

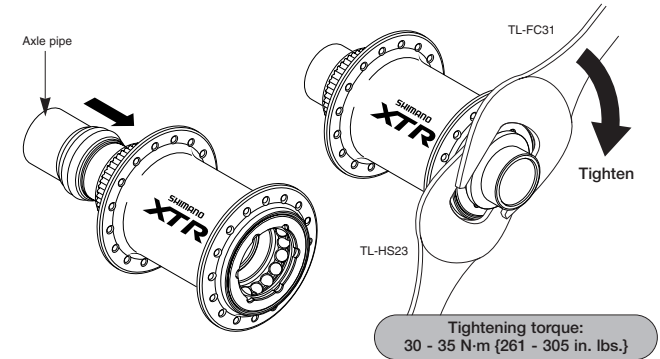
These units can be disassembled as shown in the illustrations. Grease should be applied to each part at periodic intervals.



<Assembly>

Install the axle pipe, and then use the special tools (TL-HS23 and TL-FC31) to tighten the lock nut so as to double-lock the mechanism as shown in the illustration.

Use the TL-HB80 to adjust the hub rotation performance.

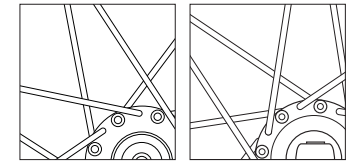


Wheel spoke lacing

Check that the spokes have been laced as shown in the illustration. A radial assembly cannot be used.

Rotating direction of wheel

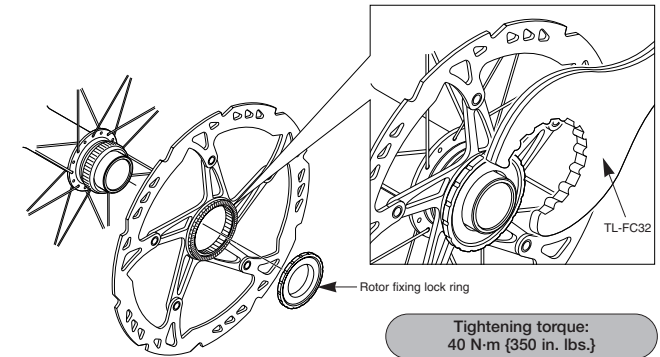
Front left Front right



Installation of the rotor

⚠ CAUTION

When using the special tool (TL-FC32) 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.



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