

## Dealer's Manual

ROAD	MTB	Trekking
City Touring/ Comfort Bike	URBAN SPORT	E-BIKE

# Front hub/ Freehub (Disc brake)

HB-M4050  
FH-M4050  
HB-M3050  
FH-M3050  
HB-RM33  
FH-RM33  
FH-RM35  
HB-TX505  
FH-TX505

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## IMPORTANT NOTICE

- **This dealer's manual is intended primarily for use by professional bicycle mechanics.**  
Users who are not professionally trained for bicycle assembly should not attempt to install the components themselves using the dealer's manuals. If any part of the information on the manual is unclear to you, do not proceed with the installation. Instead, contact your place of purchase or a local bicycle dealer for their assistance.
- Make sure to read all instruction manuals included with the product.
- Do not disassemble or modify the product other than as stated in the information contained in this dealer's manual.
- All dealer's manuals and instruction manuals can be viewed on-line on our website (<http://si.shimano.com>).
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.

**For safety, be sure to read this dealer's manual thoroughly before use, and follow it for correct use.**

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings. The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.

 **DANGER**

Failure to follow the instructions will result in death or serious injury.

 **WARNING**

Failure to follow the instructions could result in death or serious injury.

 **CAUTION**

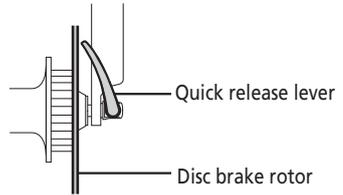
Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.

## TO ENSURE SAFETY

### ⚠ WARNING

- **Be sure to follow the instructions provided in the manuals when installing the product.**  
It is recommended to use genuine Shimano parts only. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury.  
In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury.
-  Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.
- After reading the dealer's manual thoroughly, keep it in a safe place for later reference.

#### Be sure to also inform users of the following:

- **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.**
  - If the quick release lever is on the same side as the disc brake rotor, there is the danger that it may interfere with the disc brake rotor.  
Make sure that, even if the quick release lever is tightened as much as possible by hand, the quick release lever does not interfere with the disc brake rotor. If the lever interferes with the disc brake rotor, stop using the wheel and consult a dealer or an agency.
- 
- Make sure that the disc brake rotor has cooled down before operating the quick release lever. Failure to follow these instructions may result in burns or injury.
  - Failure to properly install this quick release hub (wheel) onto the bicycle may cause the wheel to become detached from the bicycle while riding and result in serious bodily injury.
  - Make sure to read the instruction manual for the quick release lever.

#### For Installation to the Bicycle, and Maintenance:

- 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 instructions are not followed, the front wheel may fall out of the front suspension fork and serious injury may occur. When the front wheel is tightened onto the front suspension fork in accordance with the instruction manual, the front wheel's rotation may become stiff; however, the instructions must always be followed.

#### ■ Quick release type

- Use a front fork which is equipped with a wheel retention mechanism.

### NOTE

#### Be sure to also inform users of the following:

- This product is not warranted against damage resulting from improper use, such as jumping while riding or if the bicycle falls over, except if such malfunctions are caused by manufacturing methods.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.

#### For Installation to the Bicycle, and Maintenance:

- If the wheel becomes stiff and difficult to turn, lubricate it with grease.
- Do not lubricate the internal parts of the hub. Otherwise, grease will flow out.

The actual product may differ from the illustration because this manual is intended mainly to explain the procedures for using the product.

# **LIST OF TOOLS TO BE USED**

## LIST OF TOOLS TO BE USED

The following tools are needed for installation, adjustment, and maintenance purposes.

Tool		Tool		Tool	
	10mm hexagon wrench		TL-LR15		TL-HS37
	12mm hexagon wrench		TL-HS33		
	Adjustable wrench		TL-HS35		

# INSTALLATION

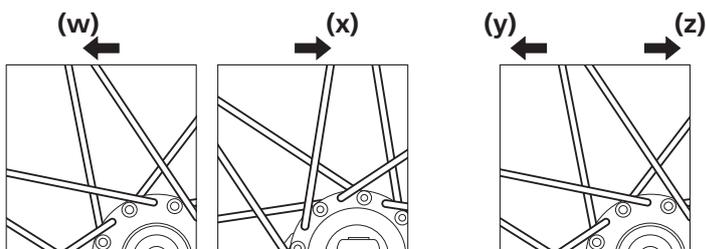
# INSTALLATION

## ■ Spoke lacing

Check that the spokes have been laced as shown in the illustration.

A radial lacing cannot be used.

Rotating direction of wheel



**(w)** For front: Left (disc brake rotor) side

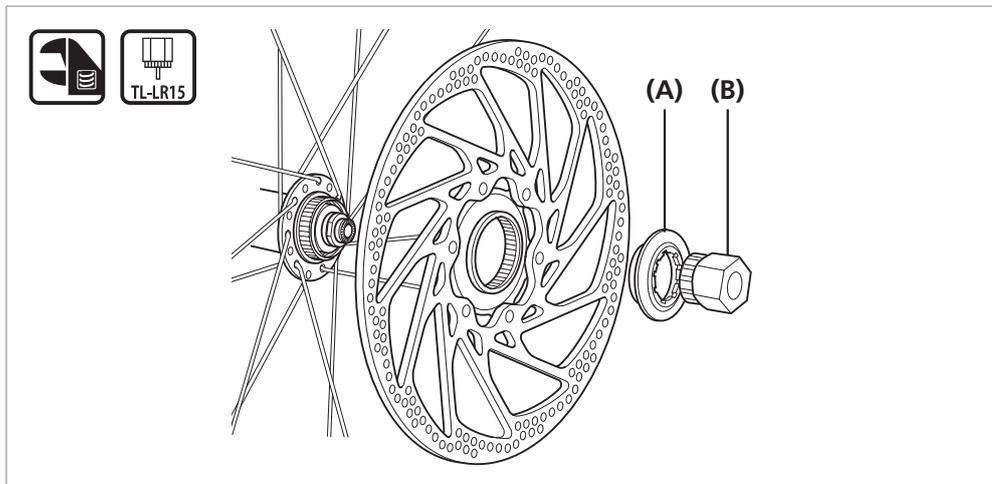
**(x)** For front: Right side

**(y)** For rear: Left (disc brake rotor) side

**(z)** For rear: Right (sprocket) side

## ■ Installation of the disc brake rotor

### Quick release type



**(A)** Disc brake rotor fixing lock ring

**(B)** TL-LR15

#### Tightening torque

 	<p><b>40 N·m</b></p>
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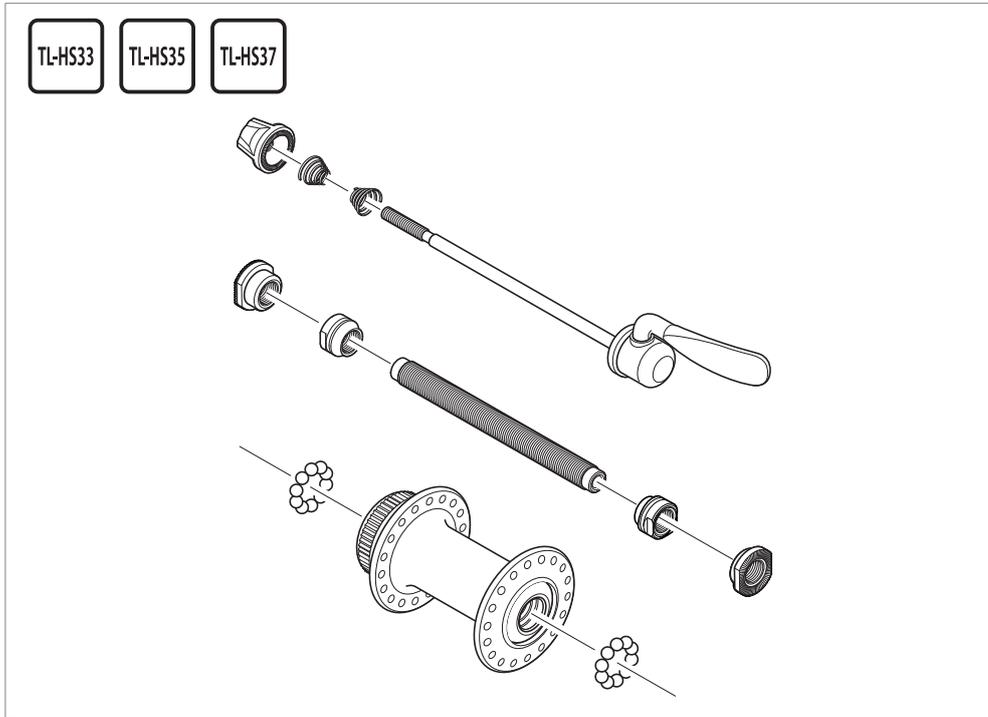
# MAINTENANCE

# MAINTENANCE

## ■ Front hub

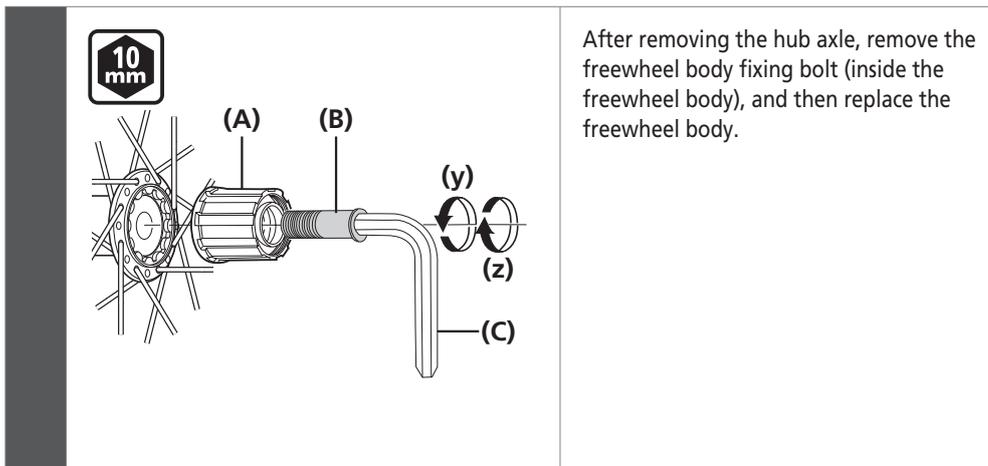
The front hub can be disassembled as shown in the illustration. Apply grease to the various parts at periodic intervals. (The shape of the part varies depending on the product.)

HB-RM33





## Replacement of the freewheel body

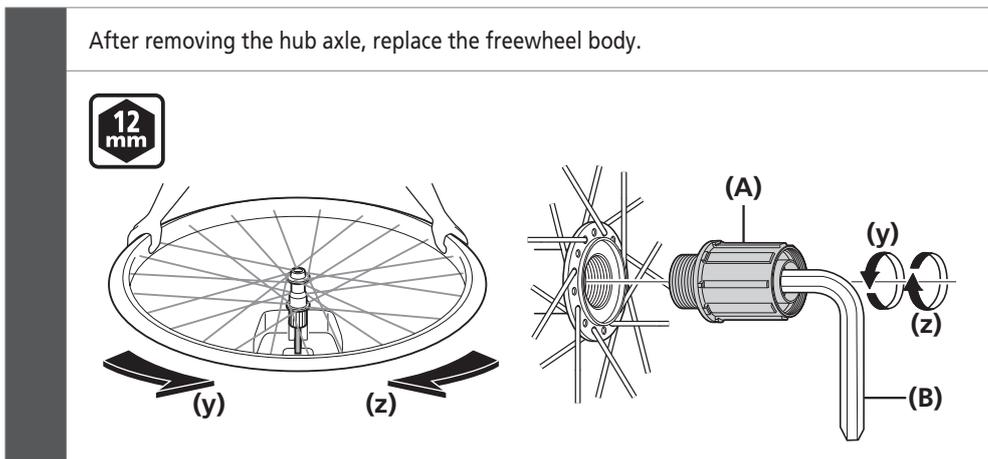


- (y) Disassembly
- (z) Assembly

- (A) Freewheel body
- (B) Freewheel body fixing bolt
- (C) 10mm hexagon wrench

Tightening torque	
<b>10 mm</b>	35 - 50 N·m

### FH-TX505



- (y) Disassembly
- (z) Assembly

- (A) Freewheel body
- (B) 12mm hexagon wrench

Tightening torque	
<b>12 mm</b>	147 - 200 N·m

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

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