# WH-M959-disc WH-M575-disc WH-M540

Wheel

## **General Safety Information**

## WARNING

- 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.
- · Before use, check the wheels to make sure that there are no bent or loose spokes, dents, scratches or cracks on the rim surface. Do not use the wheel if any of these problems are
- The wheel is designed for cross-country riding. Do not use it for downhill riding, otherwise the wheel may become bent or otherwise damaged, and accidents may occur as a result.
- If the quick release mechanism is not used correctly, the wheel may come off the bicycle and serious injury could result. Read the Service Instructions for the quick release mechanism thoroughly before use.
- The WH-M959 is designed exclusively for use with disc brakes. Do not use these wheels with rim brakes.
- When installing the rotor to WH-M959-disc and WH-M575-disc front wheels, be sure to use the mounting bolts (L=9 mm) and locking plate which are provided. If other types of bolt are used, there is the danger that the rotor may not be secured tightly enough. When installing the rotor to the rear wheel, use the mounting bolts and locking plate which are provided
- Use rim tape which is wide enough to cover the spoke holes completely, otherwise sudden punctures may occur, and accidents may occur as a result.
- Be sure to carefully read the Service Instructions for the disc brakes also.
- · Obtain, read and carefully service instructions when installing parts. A loose, worn, or damaged parts may cause injury to the rider.
- We strongly recommend that only genuine Shimano replacement parts be used.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference

## CAUTION

- Use of genuine Shimano spokes, nipples and washers is strongly recommended. If non-Shimano parts are used, the area where the nipple seats into the hub flange may become
- Before use, check that there are no pieces of metal or other foreign objects sticking to the brake pads. If any such items are present, they may cause damage to the rim when the brakes are applied.
- The nipples have large diameters and are easy to rotate in order to make it easier to increase the spoke tension. However, be careful not to overtighten the nipples when adjusting the spoke tensions. If the nipples are overtightened, damage to the rim may
- (We recommended that you ask authorized bicycle dealers to make the adjustments.)
- The tires should be inflated to a suitable pressure before use.

- If the wheel becomes stiff and difficult to turn, you should lubricate it with grease.
- Do not apply any lubricant to the inside of the hub, otherwise the grease will come out.
- The hollow on the other side of the valve from the hole is a guide for indicating the wear of the rim. If this hollow is no longer visible, the rim is at the end of its useful life.

  • Use tire tubes with valve lengths of 50 mm or more.
- · Special spoke wrenches are available as optional accessories.
- We recommend that you ask authorized bicycle dealers to adjust the spoke tensions if there is any initial play in the spokes and after the first 1,000 km of riding.
- Reflectors are also sold separately. Please ask your bicycle dealer for details.

Model number	Specification	Coloer
RR-550-WUWSW	CPSC	White
RR-550-WUASW	AS	Amber

• When using the CS-M750 11-32T cassette sprocket with the WH-M575-disc/WH-M540, the applicable spoke protector is the CP-WH11

Model number	CP-WH10	CP-WH11	CP-FH75
Applicable wheels	WH-M540 WH-M575-disc	WH-M540 WH-M575-disc	WH-M959-disc

- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.

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

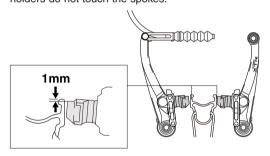
Wheel	WH-M959-disc	WH-M575-disc	WH-M540
Chain	CN-7701/CN-HG93/CN-HG73		
Cassette sprocket	CS-M953 CS-M750*	CS-M953/CS-M750/CS-HG70-9	

<sup>\*</sup> The WH-M959-disc cannot be used with the CS-M750 11-32, as the alloy sprocket carrier will interfere with the hub shell

Specification	s			
Model number		WH-M959-disc WH-M575-disc WH-M540		
Speeds		9		
No. of spokes		16		
Applicable spoke length	For front	260mm	262mm	258mm
	For rear	260mm	260mm	250mm / 266mm
Rim width			24mm	
Rim size		26"		
Applicable tire size		26×1.5~2.25		
Applicable brakes		Disc brake	Disc brake V-Brake V-Brake	

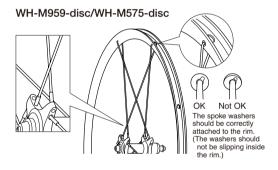
## Brake shoe setting position

WH-M540/M575-disc (For rim brakes)
Make sure that the brake shoes and brake shoe holders do not touch the spokes.



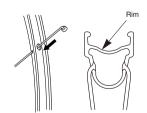
## Spoke lacing

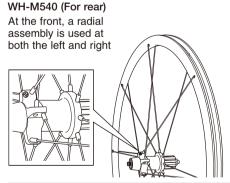
Lace the spokes as shown in the illustration.



# Replacing the spokes

Hook the spoke through the rim.as shown in the illustrationa.





Spoke tension value				
Model number	For front	For rear		
		Right (sprocket) side	Left side	
	980-1180N (220-265 lbf)	1050-1280N (236-288 lbf)	980-1180N (220-265 lbf)	
WH-M540			780-980N (175-220 lbf)	

<sup>\*</sup>These values should be used as a guide only.

<sup>\*</sup> Cassette sprockets other than the CS-M750 12-34, 11-34 and the CS-M953 cassette sprockets cannot be used with the WH-M959-disc, as the alloy sprocket carrier will interfere with the hub shell.

# Installation of the HG sprockets

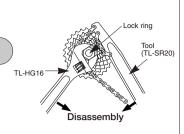
For each sprocket, the surface that has the group mark should face outward and be positioned so that the wide parts of the gear projections on each sprocket and the A part (where the groove width is wide) of the freewheel body are aligned.

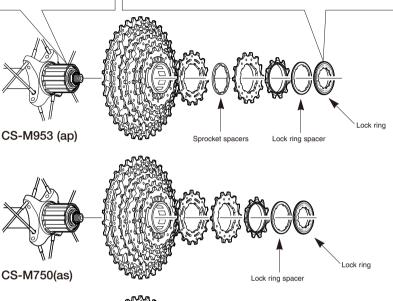


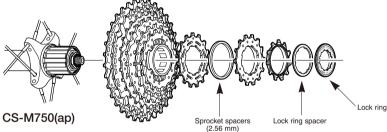
 For installation of the HG sprockets, use the special tool (TL-HG16) to tighten the lock ring.

Tightening torque: 30 - 50 N·m {261 - 434 in. lbs.}

 To replace the HG sprockets, use the special tool (TL-HG16) and TL-SR20 to remove the lock ring.







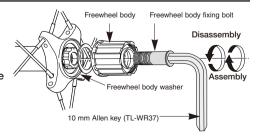
# Replacement of the freewheel body

After removing the hub axle, remove the freewheel body fixing bolt (inside the freewheel body), and then replace the freewheel body.

### Note

Do not attempt to disassemble the freewheel body, because it may result in a malfunction.

Tightening torque: 35 - 50 N·m {305 - 434 in. lbs.}

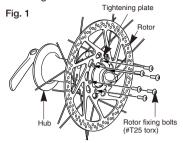


# Installation of the rotor (SM-RT75/RT60)

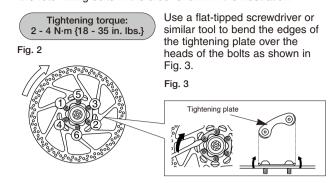
### WH-M959-disc/WH-M575-disc

#### <For disc brakes>

Install the rotor and the tightening plate, and then provisionally tighten the rotor fixing 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.



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