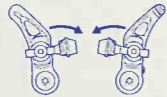


## WARNING

- 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 found.
- Check that the recommended brake shoe holders have been installed, and that adjustment is correct. If the brake shoes are adjusted incorrectly, the brake shoe holder may contact the spokes when the brake is applied, causing noise.
- Do not use in combination with brakes types such as cantilever brakes in which the brake shoes move in an arc pattern, as the brake shoes may gradually move closer to the spokes and touch them as the brake shoes wear.
- Do not use in combination with bottom link-type suspension forks. With these types of forks, the clearance between the hub axle and the brake shoes can change due to the operation of the suspension, so that when the brakes are applied, the brake shoes may touch the spokes.
- 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.
- Use rim cement to securely affix tubular tires to the rims. If the tires are not fully secure, they may come off the rims, and serious accidents and injury may result.
- These wheels are designed for riding on paved surfaces. If the wheels are used on unpaved surfaces, the wheels may become bent or damaged, and accidents may result.
- 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.



## CAUTION

- When the brake shoes become worn, the brake shoe holders may interfere with the spokes and cause frictional noise when the brakes are applied or brake performance may drop, even if the brake shoes have been installed correctly. If this occurs, replace the brake shoes as soon as possible.
- Two types of rim are available for use with either tubular tires or clincher tires. Use whichever type of rim is suitable for the type of tires used, and make sure that the tires are inflated to the correct pressure.
- If using the rim with clincher tires, use rim tape which can withstand high pressures, otherwise the tires may suddenly puncture and come off, and severe injury may result.

## CAUTION

- The Shimano R55HC (high performance) brake shoes use an aggressive compound designed with an emphasis on a maximum performance in wet conditions, however they will cause accelerated rim wear. Shimano accepts no responsibility for reduced rim life which might occur from using R55HC brake shoes with WH7700/6500 wheels.
- 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 damaged.
- 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 hub 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 result. (We recommended that you ask authorized bicycle dealers to make the adjustments.)

## SERVICE INSTRUCTIONS

SI-4A00E

WH-7700  
WH-6500  
WH-R535

Wheel

Before use, read these instructions carefully, and follow them for correct use.

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

Applicable tire size	Clincher tire		Tubular tire
	700C	650C	700C
Wheel	WH-7700 WH-6500 WH-R535	WH-7700	WH-7700
Chain	9-speed	CN-7700 / CN-HG92 / CN-HG72	
	8-speed	CN-HG50	
Cassette sprocket	9-speed	CS-7700 / CS-6500 / CS-HG70-9	
	8-speed	CS-HG50-8	
Applicable brake shoe holder	BR-7700 / BR-6500 / BR-5500		

## Specifications

Model number	WH-7700		WH-6500	WH-R535
Speeds	9			
Rim size	700C	650C	700C	700C
Applicable tires	Clincher	○	○	○
	Tubular	○	—	—
Applicable spoke length	For front	294mm	268mm	294mm
	For rear	291mm	265mm	291mm
Rim width	18.8mm		18.8mm	19.2mm

## Applicable tire size

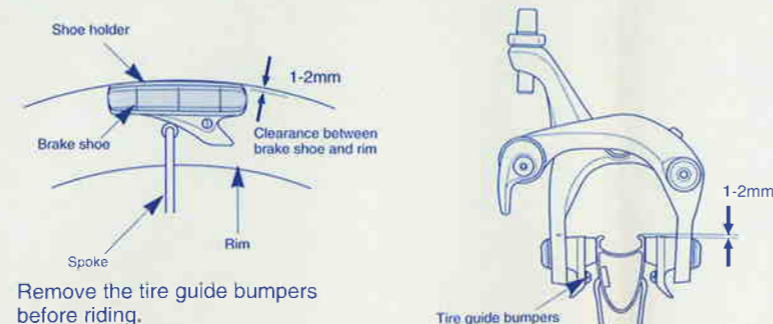
Clincher tire	Tubular tire
700C(19-28C),650C(19-28C)	700C(19-25C)

## Note:

- 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.
- A reflector (SM-RF77) and spoke protector (CP-WH53) are also sold separately. Please ask your bicycle dealer for details.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.

## Brake shoe setting position

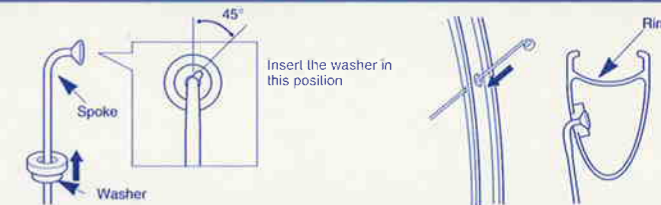
Make sure that the brake shoes and brake shoe holders do not touch the spokes.



Remove the tire guide bumpers before riding.

## Replacing the spokes

Place a washer onto the spoke as shown in the illustration, and then hook the spoke through the rim.



## Spoke lacing

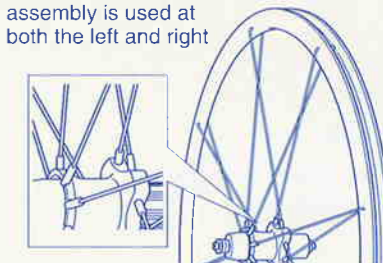
Lace the spokes as shown in the illustration.

WH-7700/6500



WH-R535(For rear)

At the front, a radial assembly is used at both the left and right



Spoke tension value		
For front	For rear:	
980-1180N (86-103 in.lbsf)	Right (sprocket) side 1050-1280N (92-118 in.lbsf)	Left side 980-1180N (86-103 in.lbsf)

\*These values should be used as a guide only.

## Installation of the HG sprockets

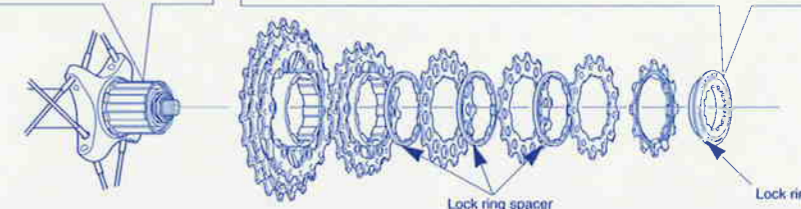
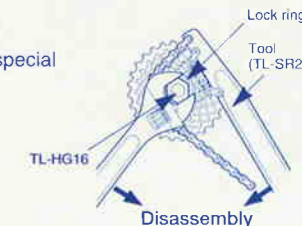
For each sprocket, the surface that has the group mark should face outward and be positioned so that the wide parts of the gear projections on each sprocket and the A part (where the groove width is wide) of the freewheel body are aligned.



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

Tightening torque:  
30 - 50 Nm {261 - 434 in. lbs.}

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

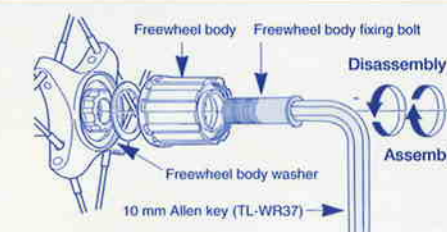


## Replacement of the freewheel body

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 Nm {305 - 434 in. lbs.}



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