

## General Safety Information

### 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.
- 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.
- 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.

### CAUTION

- 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 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.
- 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 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 result. (We recommended that you ask authorized bicycle dealers to make the adjustments.)

### Note

- 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.
- 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.
- Spoke protectors (CP-WH20) are also sold separately. Please ask your bicycle dealer for details.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- Reflectors (manufactured by CATEYE) are also sold separately. Please ask your bicycle dealer for details.

Model number	Specification	Color
RR-550-WUWSW	CPSC	White
RR-550-WUASW	AS	Amber
RR-317-WUASW	DIN	Amber

- 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.

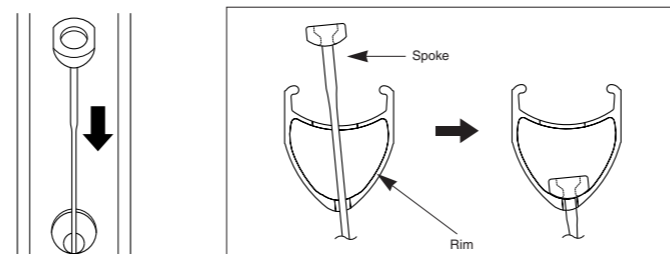
Applicable tire size	Clincher tire	Tubular tire
	700C (19C - 28C)	700C (19mm - 25mm)
Wheel	WH-7800	
Chain	10-speed	CN-7800
Cassette sprocket	10-speed	CS-7800

## Specifications

Model number	WH-7800	
Speeds	10	
Rim size	700C	
Applicable tires	Clincher	X
	Tubular	X
Applicable spoke length	For front	280mm
	For rear	274mm / 300mm
Rim width	20.8mm	

## Replacing the spokes

Hook the spoke through the rim as shown in the illustration. (The illustration shows clincher tire specifications.)



## Technical Service Instructions

SI-4B80B

WH-7800

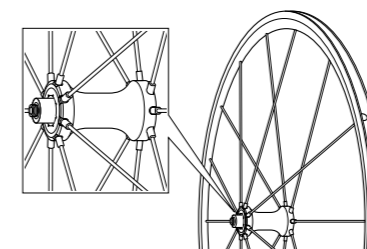
Wheel

## Spoke lacing

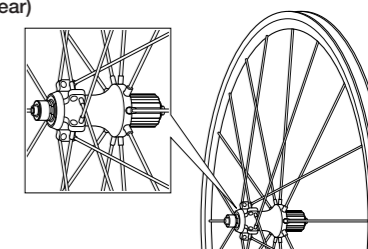
Lace the spokes as shown in the illustration.

(For front)

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



(For rear)

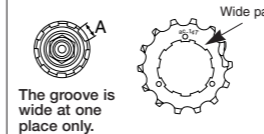


Spoke tension value		
For front	For rear	
	Right (sprocket) side	Left side
980-1400N (220-315lbf)	1000-1600N (225-360lbf)	600-1100N (135-247lbf)

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

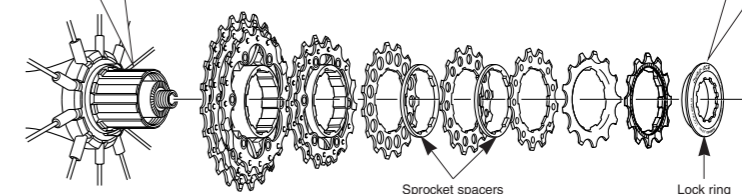
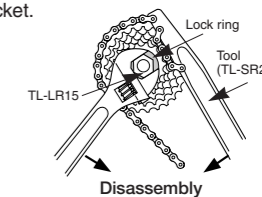
## Installation of the HG sprockets

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-LR15) to tighten the lock ring.
- To replace the HG sprockets, use the special tool (TL-LR15) and TL-SR20 to remove the lock ring. Install the TL-SR20 to the largest sprocket.

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



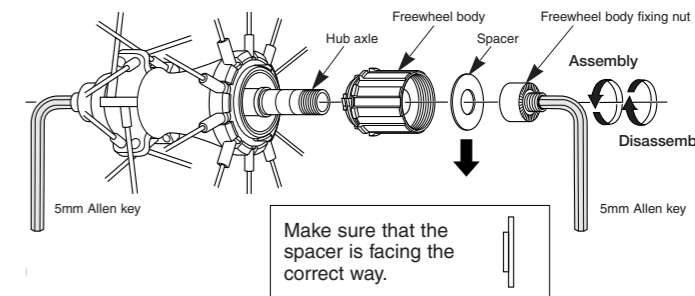
## Replacement of the freewheel body

- Remove the freewheel body fixing nut (inside the freewheel body), and then replace the freewheel body. (The freewheel body fixing nut has a left-hand thread.)
- Special grease is used for the freewheel body. Do not mix it with other types of grease, as this may cause problems with the operation of the freewheel clutch mechanism. (Grease part number: Y-3B980000)

Note:

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

Tightening torque:  
10 - 15 N·m  
{86 - 130 in. lbs.}



Make sure that the spacer is facing the correct way.

These service instructions are printed on recycled paper.

**SHIMANO**

SHIMANO AMERICAN CORPORATION  
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE HOLDING B.V.  
Industrieweg 24, 8071 CT Nunspeet, The Netherlands Phone: +31-341-272222

SHIMANO INC.  
3-77 Oimatsu-cho, Sakai, Osaka 590-8577, Japan

Please note: specifications are subject to change for improvement without notice. (English)  
© Jan. 2004 by Shimano Inc. XBC SZK Printed in Japan