

## 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.
- Obtain and read the service instructions carefully prior to installing the parts. Loose, worn or damaged parts may cause the bicycle to fall over and serious injury may occur as a result. 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.

### Note

- The new 7900 hub is designed so that it will achieve optimal rotational feel when it is built into a wheel and installed on a bicycle. The axle rotation will feel heavier prior to lacing into a wheel. Since the hub is unaffected by the binding pressure from the quick release, it is unnecessary to allow any play when adjusting the axle unit.
- Do not use the CS-7900 in any combination other than with the 10-speed super narrow chain. Other chains cannot be used as the sizes do not match.
- An 11T and a 12T lock ring are available for use with the CS-7900. Use whichever lock ring matches the sprocket configuration.
- If the wheel becomes stiff and difficult to turn, you should lubricate it with grease.
- Do not apply any oil to the inside of the hub, otherwise the grease will come out.
- You should periodically wash the sprockets in a neutral detergent and then lubricate them again. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the useful life of the sprockets and the chain.
- If the chain keeps coming off the sprockets during use, replace the sprockets and the chain.
- 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-3D80A-004

# FH-7900

## Specifications

### Freehub

Model No.	FH-7900
Gears	10 / 9 / 8
No. of spoke holes	24 / 28 / 32 / 36 (Flat spokes : 24 / 28)
Overlock nut dimensions	130 mm

### Cassette sprocket

Sprockets marked by  are secured.

Model No.	CS-7900									
	11T - 21T	11T, 12T, 13T, 14T, 15T, 16T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 18T,	<input type="checkbox"/> 19T, <input type="checkbox"/> 21T						
	11T - 23T	11T, 12T, 13T, 14T, 15T, 16T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 19T,	<input type="checkbox"/> 21T, <input type="checkbox"/> 23T, <input type="checkbox"/> 25T						
	11T - 25T	11T, 12T, 13T, 14T, 15T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 19T,	<input type="checkbox"/> 21T, <input type="checkbox"/> 24T, <input type="checkbox"/> 27T						
	11T - 27T	11T, 12T, 13T, 14T, 15T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 19T,	<input type="checkbox"/> 21T, <input type="checkbox"/> 24T, <input type="checkbox"/> 28T						
	11T - 28T	11T, 12T, 13T, 14T, 15T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 19T,	<input type="checkbox"/> 21T, <input type="checkbox"/> 23T, <input type="checkbox"/> 25T						
	12T - 23T	12T, 13T, 14T, 15T, 16T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 18T,	<input type="checkbox"/> 19T, <input type="checkbox"/> 21T, <input type="checkbox"/> 23T						
	12T - 25T	12T, 13T, 14T, 15T, 16T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 19T,	<input type="checkbox"/> 21T, <input type="checkbox"/> 23T, <input type="checkbox"/> 25T						
	12T - 27T	12T, 13T, 14T, 15T, 16T,	<input type="checkbox"/> 17T, <input type="checkbox"/> 19T,	<input type="checkbox"/> 21T, <input type="checkbox"/> 24T, <input type="checkbox"/> 27T						

## SHIMANO

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

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

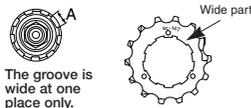
SHIMANO INC.  
3-77 Oimatsu-cho, Sakai-ku, Sakai-shi, Osaka 590-8577, Japan

\* Service Instructions in further languages are available at : <http://techdocs.shimano.com>

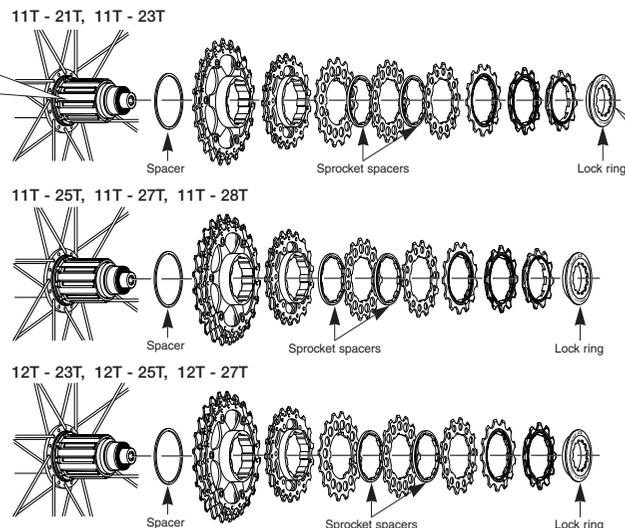
Please note: specifications are subject to change for improvement without notice. (English) © Nov. 2010 by Shimano Inc. XBC SZK Printed in Japan.

## 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.



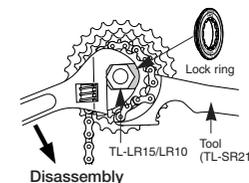
When installing the CS-7900 (10-gears) freewheel, install a spacer in the position shown in the illustration.



For installation of the HG sprockets, use the special tool (TL-LR15/LR10) to tighten the lock ring.

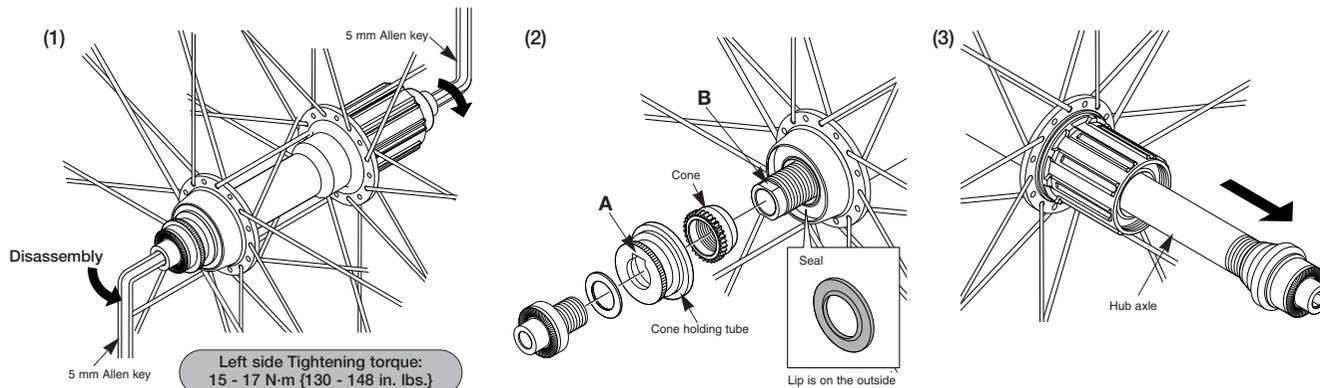
Tightening torque:  
30 - 50 N·m {261 - 434 in. lbs.}

To replace the HG sprockets, use the special tool (TL-LR15/LR10) and TL-SR21 to remove the lock ring.



## Replacement of the freewheel body

- First, pull out the hub axle by following the procedure shown in the illustration. Disassembly from the freewheel side is not possible.



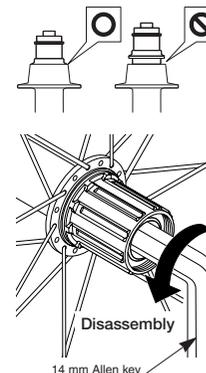
### Note:

- When removing and installing the seal, do it very carefully so that the seal does not become bent. When reinstalling the seal, make sure that it is facing the right way, and insert it as far as it will go.
- Tighten the cone onto the hub axle until it has no looseness. While aligning the knurls of the cone and the knurls of the cone holding tube, align section A of the cone holding tube with section B on the hub axle.

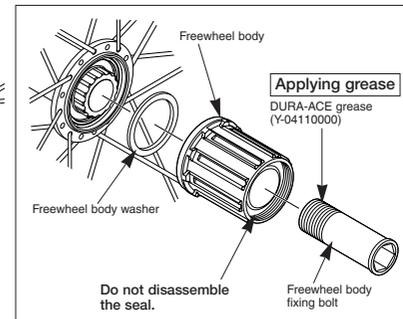
- After removing the hub axle, remove the freewheel body fixing bolt (inside the freewheel body), and then replace the freewheel body.

### Note:

- When replacing the freewheel body, replace the freewheel body fixing bolt at the same time. Be sure to apply grease to the thread of the freewheel body fixing bolt, otherwise looseness or sticking may occur. Do not disassemble the freewheel or apply oil or grease to it, otherwise problems with operation may occur.



Tightening torque:  
45 - 50 N·m {392 - 434 in. lbs.}



Do not disassemble the seal.