

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 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.

Note

- Do not use the CS-7800 in any combination other than with the CN-7801 / CN-6600 / CN-5600. 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-7800. 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 a 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-3D10A-001

FH-7850

Freehub

Specifications

Freehub

Model No.	FH-7850
Gears	10 / 9 / 8
No. of spoke holes	24 / 28 / 32 / 36
Overlock nut dimensions	130 mm

Cassette sprocket

Sprockets marked by are secured.

Model No.	CS-7800									
	11T - 21T	11T, 12T, 13T, 14T, 15T, 16T,	17T, 18T,	19T, 21T						
	11T - 23T	11T, 12T, 13T, 14T, 15T, 16T,	17T, 19T,	21T, 23T						
Sprocket tooth configuration	12T - 21T	12T, 13T, 14T, 15T, 16T,	17T, 18T,	19T, 20T, 21T						
	12T - 23T	12T, 13T, 14T, 15T, 16T,	17T, 18T,	19T, 21T, 23T						
	12T - 25T	12T, 13T, 14T, 15T, 16T,	17T, 19T,	21T, 23T, 25T						
	12T - 27T	12T, 13T, 14T, 15T, 16T,	17T, 19T,	21T, 24T, 27T						

SHIMANO

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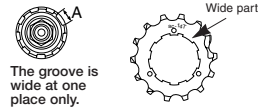
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SHIMANO INC.
3-77 Oimatsu-cho, Sakai-ku, Sakai-shi, Osaka 590-8577, Japan

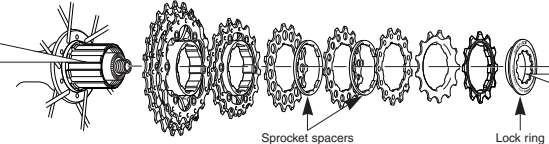
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Installation of the HG sprockets

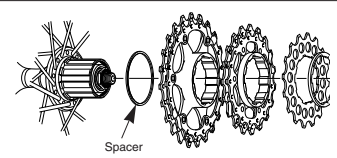
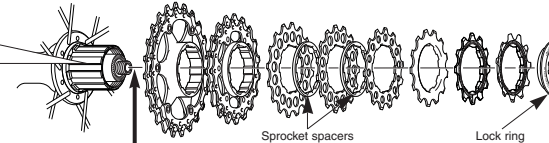
For each sprocket, the surface that has the group mark should face outward and be positioned so that the wide parts of the gear projections on each sprocket and the A part (where the groove width is wide) of the freewheel body are aligned.



12T - 21T, 12T - 23T, 12T - 25T, 12T - 27T



11T - 21T, 11T - 23T



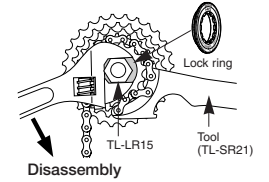
When installing the CS-7800 / CS-6600* / CS-5600 freehub, install a spacer in the position shown in the illustration.

* For the CS-6600 (13-25T / 14-25T / 15-25T / 16-27T), there is no need to install the spacer.

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

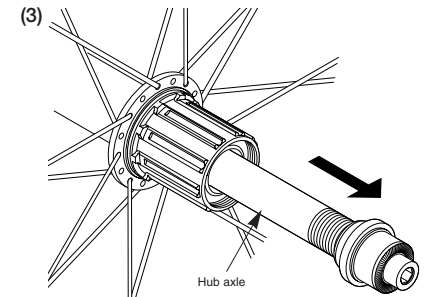
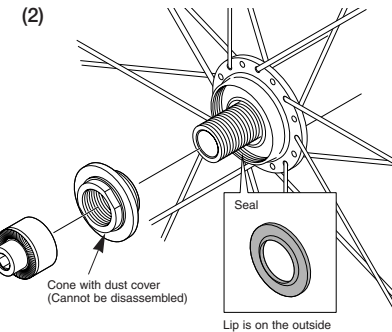
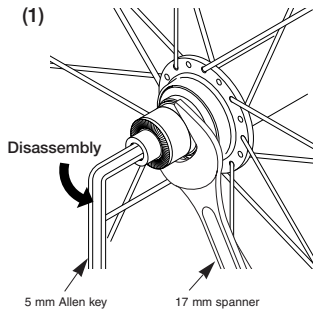
Tightening torque:
30 - 50 N·m {261 - 434 in. lbs.}

To replace the HG sprockets, use the special tool (TL-LR15) 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. The double-lock section at the freewheel side cannot be disassembled.



Left side Tightening torque:
15 - 20 N·m {132 - 172 in. lbs.}

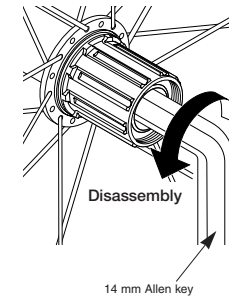
Note:

- 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.
- Do not disassemble the dust-proof cover which is crimped onto the cone.

- 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 attempt to disassemble the freewheel body, because it may result in a malfunction.



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

