General Safety Information



- 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.
 Losse, 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

- Use the CS-MX66 cassette sprocket.
- 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.
- 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-3DW0A-001

FH-MX71

Freehub

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

Series	DXR
Brake Lever	BL-MX70
V-BRAKE	BR-MX70
Freehub	FH-MX71
Front hub	HB-MX71
Gears	1
Cassette sprocket	CS-MX66

Specifications

Freehub

Model No.	FH-MX71
Gears	1
No. of spoke holes	32 H / 36 H
Applicable rear dropout thickness	5 - 10 mm *
Applicable rear dropout demensions	10 mm
Overlock nut dimensions	112 mm

^{*} If using a chain tensioner, the hub axle mount (the maximum combined width of the dropout and the chain tensioner) should be 15 mm or less.

Cassette sprocket

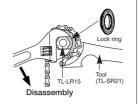
Model No.	CS-MX66
No. of sprocket teeth	14T, 15T, 16T, 18T

Installation of the sprocket

To install the sprocket, use the special tool (TL-LR15) to tighten the lock ring.

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

To replace the sprocket, use the special tool (TL-LR15) and the TL-SR21 to remove the lock ring.



Lock ring space

Sprocket spacer (Make sure that it faces correctly.)

Chain line 43 / 44 / 45 / 46 / 47 mm 43 mm 44 mm 45 mm 46 mm 47 mm Sprocket (CS-M/K66)

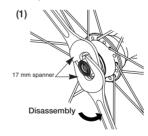
<Chain line adjustment>

The chain line can be adjusted to between 43 and 47 mm by installing 1 mm thick spacers.

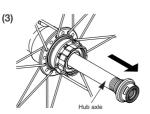
Spacers (1 mm

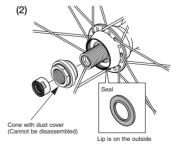
Replacement of the freewheel body

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



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





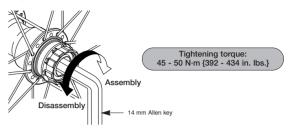
Note

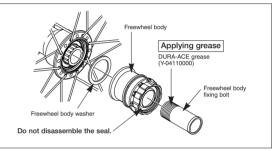
- When removing and installing the seal, do it very carefully so that the seal does not become bent.
 When reinstalling the seal, make sure that it is facing the right way, and insert it as far as it will go.
- Do not disassemble the dust-proof cover which is crimped onto the cone.

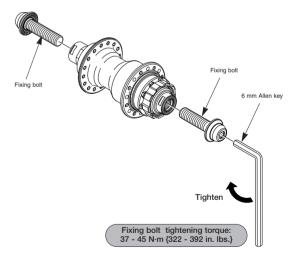
After removing the hub axle, remove the freewheel body fixing bolt (inside the freewheel body), and then replace the freewheel body.

Note

Be sure to apply grease to the 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.







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

Please note: specifications are subject to change for improvement without notice. (English) © Mar. 2009 by Shimano Inc. XBC SZK Printed in Japan