FH-M600

Freehub

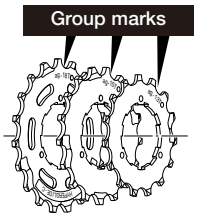
General Safety Information

⚠ WARNING

- Make sure that you understand the following points regarding the dropout thickness before use.
  If the left and right end thicknesses are not within 7 - 10 mm, the dropout cannot be used. If you use a dropout with thicknesses that are less than 7 mm, the hub axle fixing nut will protrude and it will not secure the hub sufficiently. If it is more than 10 mm, the hub axle fixing nut will not be long enough to fully grip and it may damage the thread.
- Before riding, confirm that the hub axle has been tightened with torque of 35 - 45 N·m and the wheel has been secured to the frame. Serious injury can result from falling if the wheel comes off.
- 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

- 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.
- Always be sure to use the sprocket set bearing the same group marks. Never use in combination with a sprocket bearing a different group mark.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.
- For maximum performance we highly recommend Shimano lubricants and maintenance products
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.



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

Series	HONE
DUAL CONTROL lever	ST-M600
Outer casing	SIS-SP41
Rear derailleur	RD-M600
Type	SGS / GS
Freehub	FH-M600
Gears	9
Cassette sprocket	CS-M580
Chain	CN-HG73
Bottom bracket guide	SM-SP17 / SM-BT17

Specifications

Freehub

Model number	FH-M600
Gears	9
No. of spoke holes	36 / 32

Cassette sprocket tooth combination

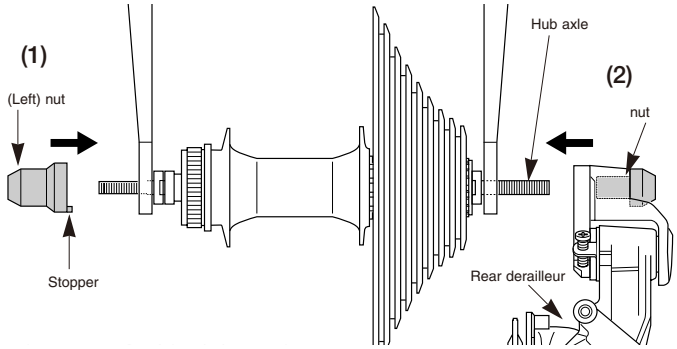
Model number	Group name	Gears	Tooth combination
CS-M580	ar	9	11, 12, 14, 16, 18, 21, 24, 28, 32T
	au	9	11, 13, 15, 17, 20, 23, 26, 30, 34T

Installation to the frame

1. Secure the freehub to the frame with the (left) nut.
   (Secure the freehub to the frame at the position where the stopper of the left nut is inside the notch of the dropout.)
2. Secure the freehub and the rear derailleur with the nut.
   Check that the pawl on the fork end is set into the end stopper.

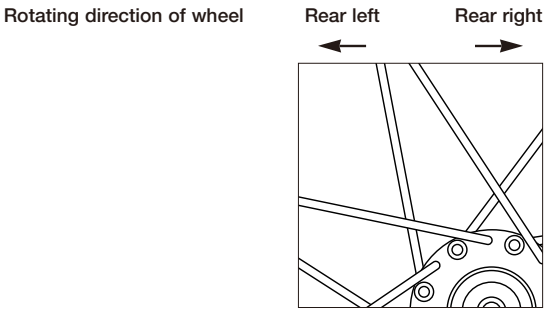
Freewheel hub / Rear derailleur
tightening torque:
35 - 45 N·m {305 - 392 in.lbs}

Be sure to read these service instructions in conjunction with the service instructions for the RD-M600 before use.

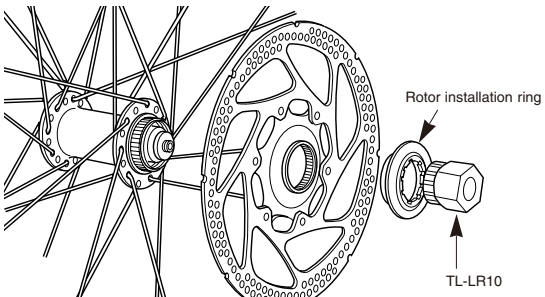


Wheel spoke lacing

Check that the spokes have been laced as shown in the illustration.
A radial assembly cannot be used.



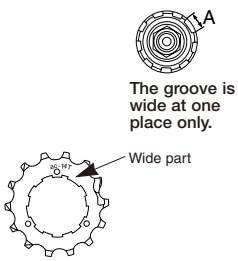
Installation of the rotor

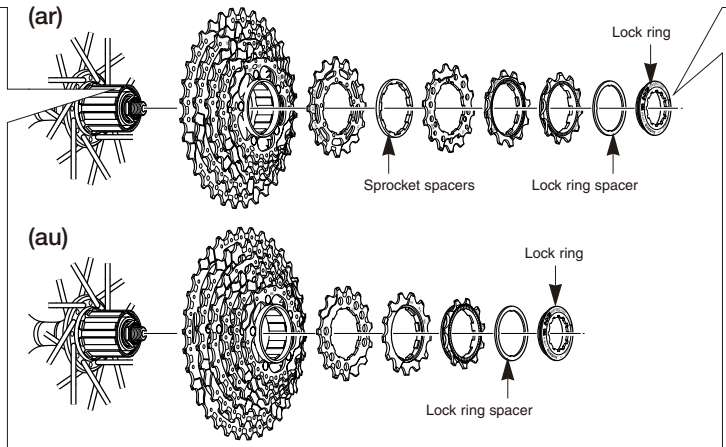


Tightening torque:
40 N·m {350 in. lbs.}

Installation of the sprockets

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

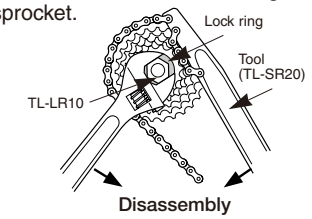




- For installation of the sprockets, use the special tool (TL-LR10) to tighten the lock ring.

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

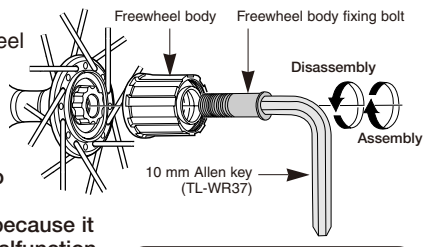
- To replace the sprockets, use the special tool (TL-LR10) and TL-SR20 to remove the lock ring.
  Install the TL-SR20 to the largest sprocket.



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 N·m {305 - 434 in. lbs.}