

Rear Drive System

Before use, read these instructions carefully, and follow them for correct use.

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

Series	DEORE-XT	DEORE-LX
Rapidfire SL	SL-M739	SL-M569
Outer casing	SIS-SP sealed	
Rear derailleur	RD-M739	RD-M567
Type	SGS	
Freehub	FH-M737	FH-M565
Sprockets	8	
Cassette sprocket	CS-M737-I	CS-HG70-I
Chain	CN-IG90	CN-IG70
Bottom bracket cable guide	SM-SP18 / SM-BT18	

Specifications

Rear Derailleur		
Model number	RD-M739	RD-M567
Type	SGS	
Sprockets	8	
Total capacity	39 teeth or less	
Largest sprocket	32T	
Smallest sprocket	11T	
Front chainwheel tooth difference	20T	

Cassette sprocket tooth combination

Sprockets	Group name	Tooth combination
8	R / ah	11, 12, 14, 16, 18, 21, 24, 28T
	ak / an	11, 13, 15, 17, 20, 23, 26, 30T

Rapidfire SL

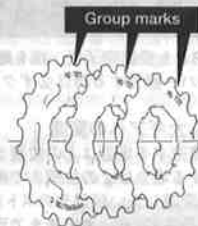
Model number	SL-M739	SL-M569
Sprockets	8	

Freehub

Model number	FH-M737	FH-M565
Sprockets	8	
No. of spoke holes	36 / 32	

Note

- Always be sure to use the HG sprocket set bearing the same group marks. Never use in combination with a sprocket bearing a different group mark.
- Because of the high cable resistance of a frame with internal cable routing would impair the SIS function, this type of frame should not be used.
- Use an outer casing which still has some length to spare even when the handlebars are turned all the way to both sides. Furthermore, check that the shifting lever does not touch the bicycle frame when the handlebars are turned all the way.
- Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.
- The indicator and lever internal unit cannot be replaced as unit parts.



This service instruction explains how to use and maintain the Shimano bicycle parts which have been used on your new bicycle. For any questions regarding your bicycle or other matters which are not related to Shimano parts, please contact the place of purchase or the bicycle manufacturer.

SHIMANO

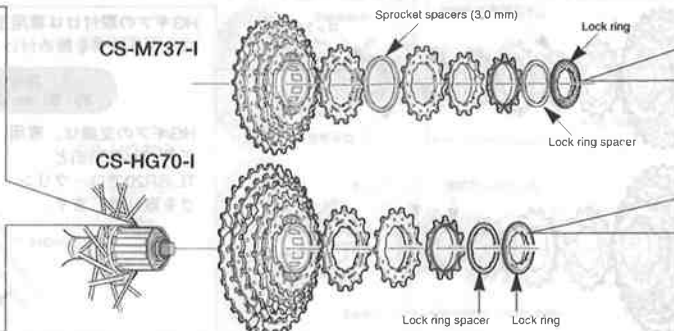
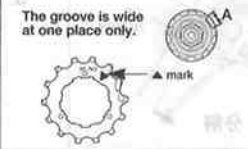
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Please note: specifications are subject to change for improvement without notice, (English)
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Installation of the HG sprockets

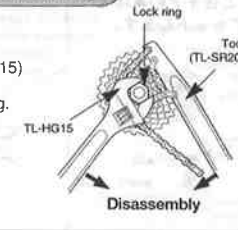
For each sprocket, the surface that has the group mark should face outward and be positioned so that the triangle (▲) mark on each sprocket and the A part (where the groove width is wide) of the freewheel body are aligned.



For installation of the HG sprockets, use the special tool (TL-HG15) to tighten the lock ring.

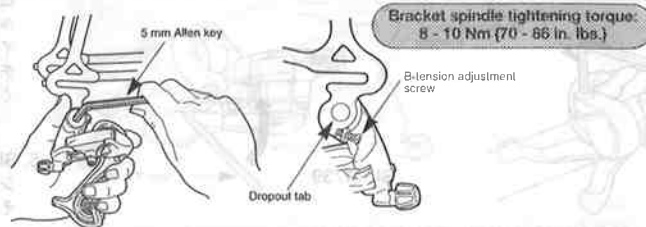
Tightening torque:
30 - 50 Nm (261 - 434 in. lbs.)

To replace the HG sprockets, use the special tool (TL-HG15) and TL-SR20 to remove the lock ring.



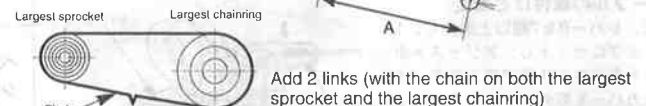
Installation of the rear derailleur

When installing, be careful that deformation is not caused by the B-tension adjustment screw coming into contact with the dropout tab.



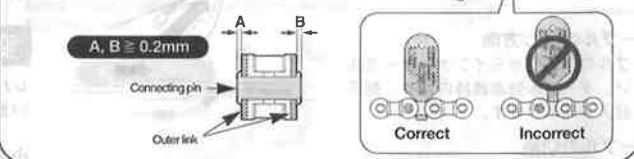
Chain length on bicycles with rear suspension

The length of A will vary depending on the movement of the rear suspension. Because of this, an excessive load may be placed on the drive system if the chain length is too short. Set the length of the chain by adding two links to the chain when the rear suspension is at a position where dimension "A" is longest and the chain is on the largest sprocket and the largest chainring. If the amount of movement of the rear suspension is large, the slack in the chain may not be taken up properly when the chain is on the smallest chainring and smallest sprocket.



Checking the chain connection

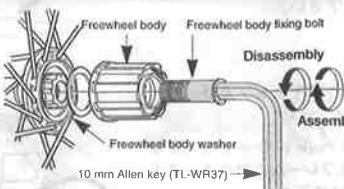
For IG chains, insert the chain gauge (TL-CN24) into the inner link which is next to the chain connecting pin to check that the inner link width is correct. Check that the connecting pin protrudes past the outer link by the same amount on both sides, and that the amount of protrusion is 0.2 mm or more.



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.

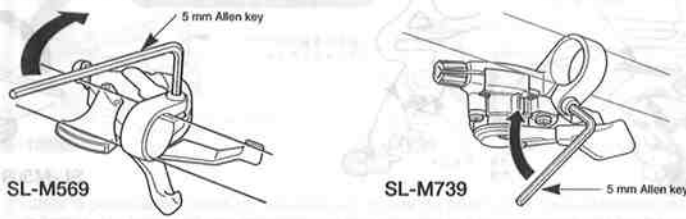
Tightening torque:
35 - 50 Nm (305 - 434 in. lbs.)



Mounting the shifting lever

Use a handlebar grip with a maximum outer diameter of 32 mm.

Tightening torque:
5 Nm (44 in. lbs.)

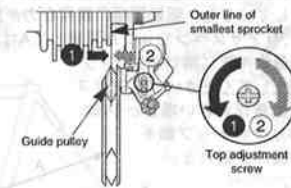


Install the brake lever in a position where it will not obstruct brake operation. Do not use in a combination which causes brake operation to be obstructed.

Adjustment

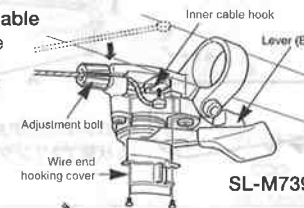
1. Top adjustment

Turn the top adjustment screw to adjust so that the guide pulley is in line with the outer line of the smallest sprocket when looking from the rear.



2. Connection and securing of the inner cable

- For the SL-M739, operate lever (B) 7 or more times to set the lever to the highest position, and then turn the adjustment bolt until the slit is on the same side as the handlebar. After removing the wire end hooking cover and hooking the inner cable hook onto the inner cable, insert the inner cable into the slit and then install the wire end hooking cover.
- For the SL-M569, operate lever (B) 7 or more times to set the lever to the highest position, and then connect and adjust the inner cable.



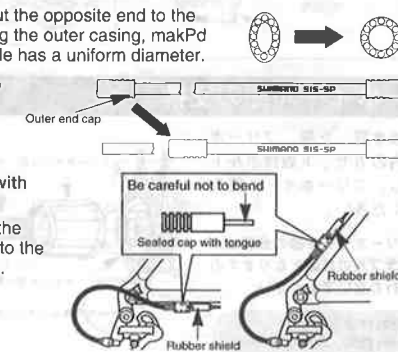
Inserting the inner cable

Insert the inner cable into the outer casing from the end with the marking on it. Apply grease from the end with the marking in order to maintain cable operating efficiency.

Cutting the outer casing

When cutting the outer casing, cut the opposite end to the end with the marking. After cutting the outer casing, mark Pd round so that the inside of the hole has a uniform diameter.

Attach the same outer end cap to the cut end of the outer casing.



Note regarding the sealed cap with tongue and rubber shield

The sealed cap with tongue and the rubber shield should be installed to the outer casing stopper of the frame.

Tightening torque: 5 - 7 Nm (44 - 60 in. lbs.)

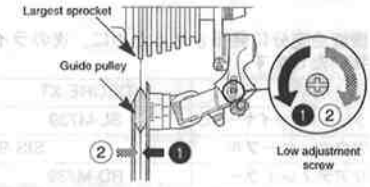
Note: Be sure that the cable is securely in the groove.

Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, re-secure to the front derailleur as shown in the illustration.



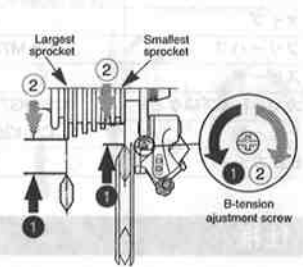
3. Low adjustment

Turn the low adjustment screw so that the guide pulley moves to a position directly in line with the largest sprocket.



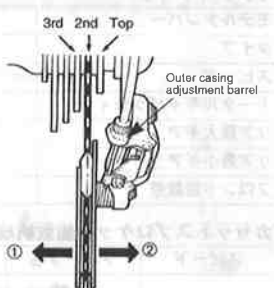
4. How to use the B-tension adjustment screw

Mount the chain on the smallest chainring and the largest sprocket, and turn the crank arm backward. Then turn the B-tension adjustment screw to adjust the guide pulley as close to the sprocket as possible but not so close that it touches. Next, set the chain to the smallest sprocket and repeat the above to make sure that the pulley does not touch the sprocket.

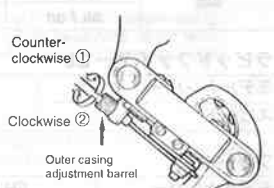


5. SIS Adjustment

- Operate the shifting lever to move the chain from the top gear to the 2nd gear.
 - If the chain will not move to the 2nd gear, turn the outer casing adjustment barrel to increase the tension----① (counter clockwise)
 - If the chain moves past the 2nd gear, decrease the tension---② (clockwise)



- Next with the chain on the 2nd gear, increase the inner cable tension ① while turning the crank arm forward. Stop turning the outer casing adjustment barrel just before the chain makes noise against the 3rd gear. This completes the adjustment.



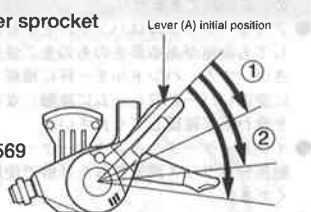
For the best SIS performance, periodically lubricate all power-transmission parts.

Gear shifting operation

Both lever (A) and lever (B) always return to the initial position when they are released after shifting. When operating one of the levers, always be sure to turn the crank arm at the same time.

To shift from a small sprocket to a larger sprocket

To shift one step only, press lever (A) to the (1) position. To shift two steps at one time, press to the (2) position. A maximum three-step shift can be made in this manner.



To shift from a large sprocket to a smaller sprocket

Press lever (B) once to shift one step from a larger to a smaller sprocket.

