

Dealer's Manual

ROAD	MTB	Trekking
City Touring/ Comfort Bike	URBAN SPORT	E-BIKE

Rear Derailleur

CLARIS
RD-R2000

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IMPORTANT NOTICE

- **This dealer's manual is intended primarily for use by professional bicycle mechanics.**

Users who are not professionally trained for bicycle assembly should not attempt to install the components themselves using the dealer's manuals. If any part of the information on the manual is unclear to you, do not proceed with the installation. Instead, contact your place of purchase or a local bicycle dealer for their assistance.

- Make sure to read all instruction manuals included with the product.
- Do not disassemble or modify the product other than as stated in the information contained in this dealer's manual.
- All dealer's manuals and instruction manuals can be viewed on-line on our website (<http://si.shimano.com>).
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.

For safety, be sure to read this dealer's manual thoroughly before use, and follow it for correct use.

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings. The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.



Failure to follow the instructions will result in death or serious injury.



Failure to follow the instructions could result in death or serious injury.



Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.


TO ENSURE SAFETY

WARNING

- **Be sure to follow the instructions provided in the manuals when installing the product.**

It is recommended to use genuine Shimano parts only. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury.

In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury.

-  Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.
- After reading the dealer's manual thoroughly, keep it in a safe place for later reference.
- **Obtain and read the dealer's manual 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. It is strongly recommended using only genuine Shimano replacement parts.
- **Obtain and read the dealer's manual carefully prior to installing the parts.**
If adjustments are not carried out correctly, the chain may come off. This may cause you to fall off the bicycle which could result in serious injury.

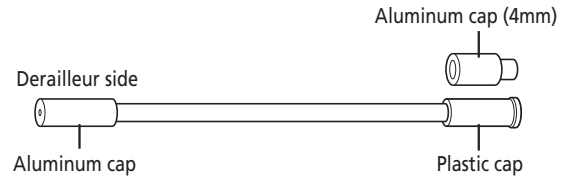
NOTE

Be sure to also inform users of the following:

- If gear shifting operations cannot be carried out smoothly, clean the derailleur and lubricate all moving parts.
- If looseness in the links is so great that gear shifting adjustments cannot be made, replace the derailleur.
- The gears should be periodically washed with a neutral detergent. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the life of the gears and the chain.
- Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.
- For smooth operation, use the specified outer casing and the bottom bracket cable guide.
- Periodically clean the derailleur and lubricate all moving parts (mechanism and pulleys).
- If gear shifting adjustment cannot be carried out, check the degree of parallelism at the rear end of the bicycle. Also, check if the cable is lubricated and if the outer casing is not too long or short.
- If you hear abnormal noise as a result of looseness in a pulley, you should replace the pulley.
- Using a frame with internal cable routing is strongly discouraged as it has tendencies to impair the SIS shifting function due to its high cable resistance.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.

For Installation to the Bicycle, and Maintenance:

- The end of the outer casing which has the aluminum cap should be at the derailleur side.



- When the chain is in any of the position combinations shown in the table, the chain and sprocket may come into contact and generate noise. If the noise is a problem, shift the chain onto the next largest sprocket or the one after.




	Double	Triple	
Chaining			
Sprocket			

The actual product may differ from the illustration because this manual is intended mainly to explain the procedures for using the product.

LIST OF TOOLS TO BE USED

LIST OF TOOLS TO BE USED

The following tools are needed for installation, adjustment, and maintenance purposes.

Tool		Tool	
	3mm hexagon wrench		5mm hexagon wrench
	4mm hexagon wrench		

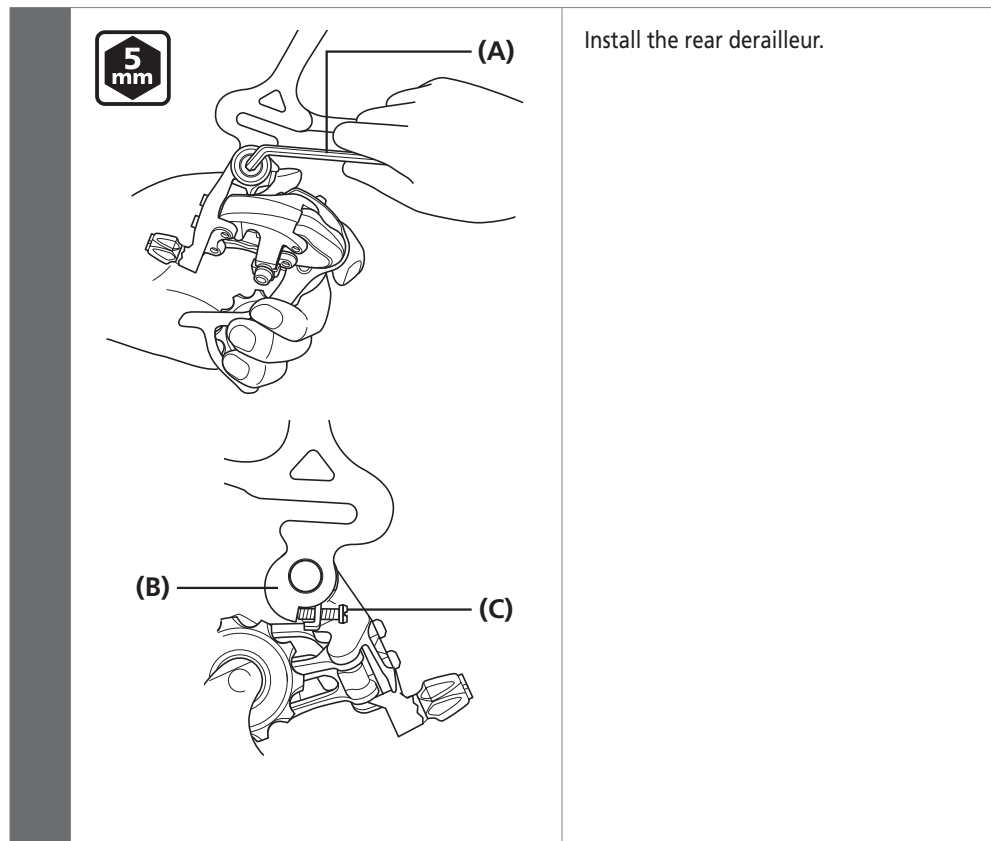
INSTALLATION

INSTALLATION

■ Installation of the rear derailleur

When installing, be careful that deformation is not caused by the B-tension adjust bolt coming into contact with the fork end tab.

Standard type



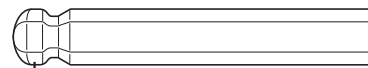
Install the rear derailleur.

- (A) 5mm hexagon wrench
- (B) Fork end tab
- (C) B-tension adjust bolt

Tightening torque	
	8 - 10 N·m

NOTE

- Make sure to insert the hexagon wrench all the way to the end of the bracket axle tool hole when tightening.
- Do not use a ball point hexagon wrench.



Ball point hexagon wrench

If tightening is performed incorrectly, the following phenomena may result:

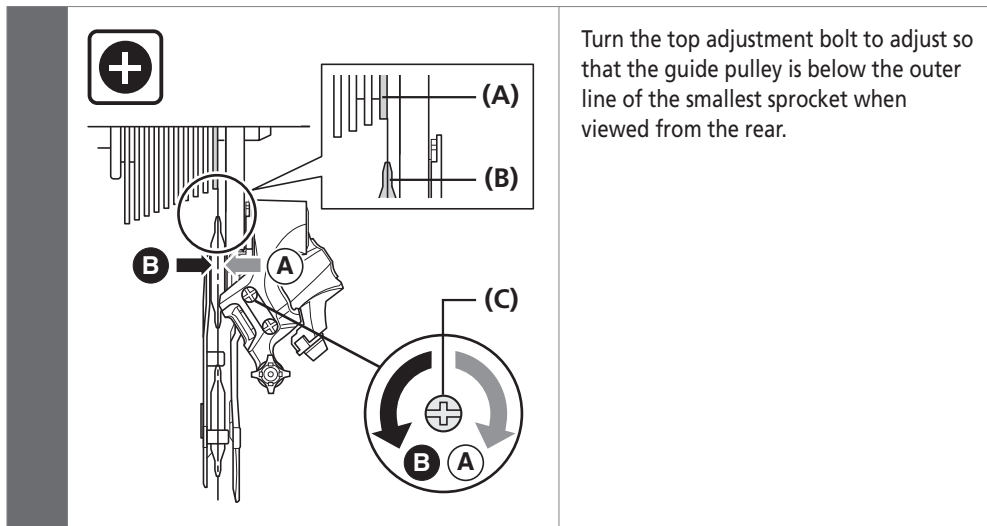
- Deformation of the tool hole preventing installation or removal.
- Suboptimal gear shifting performance.

ADJUSTMENT

ADJUSTMENT

■ Stroke adjustment

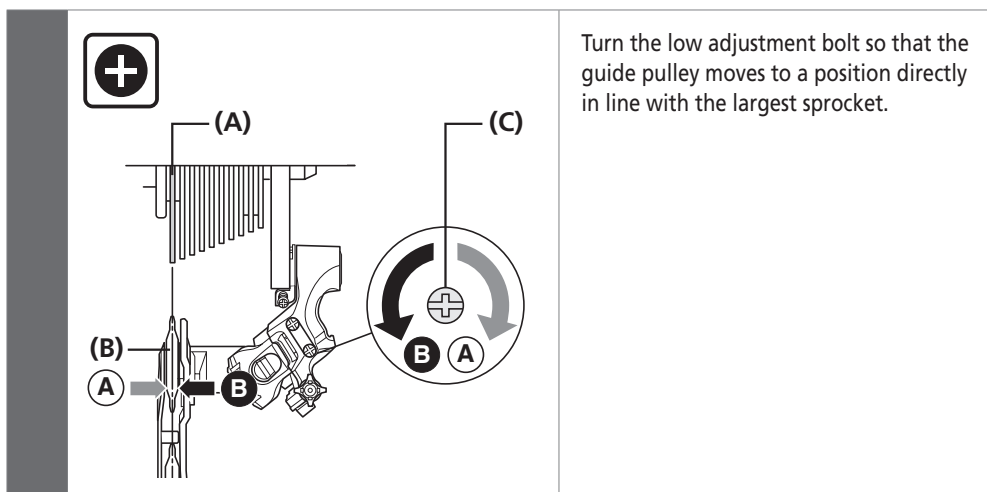
Top adjustment



Turn the top adjustment bolt to adjust so that the guide pulley is below the outer line of the smallest sprocket when viewed from the rear.

- (A) Outer line of smallest sprocket
- (B) Guide pulley
- (C) Top adjustment bolt

Low adjustment

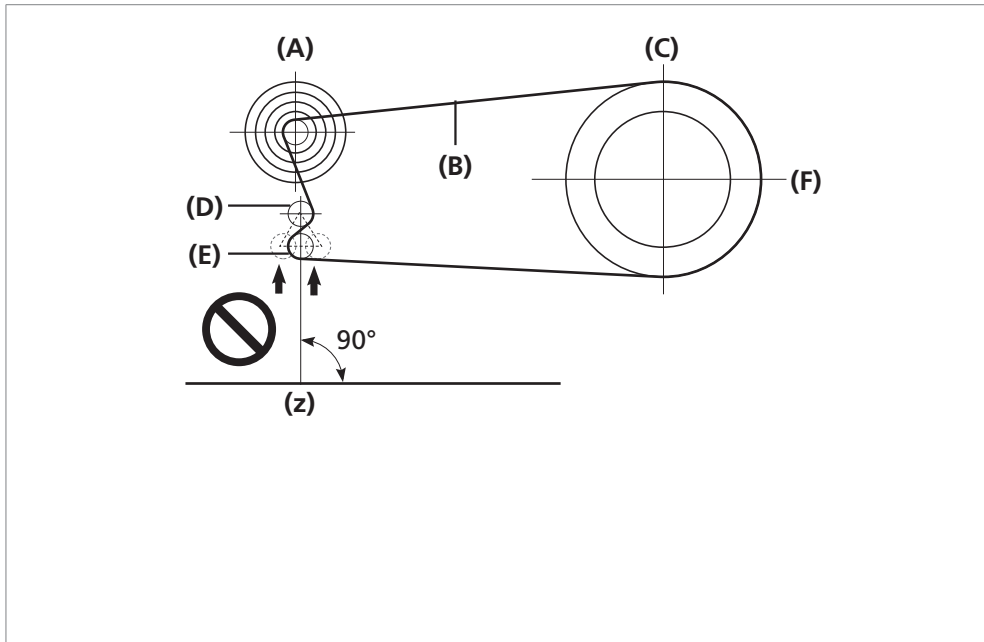


Turn the low adjustment bolt so that the guide pulley moves to a position directly in line with the largest sprocket.

- (A) Largest sprocket
- (B) Guide pulley
- (C) Low adjustment bolt

Chain length

When largest sprocket is 27T or smaller



(z) Right angle to the ground

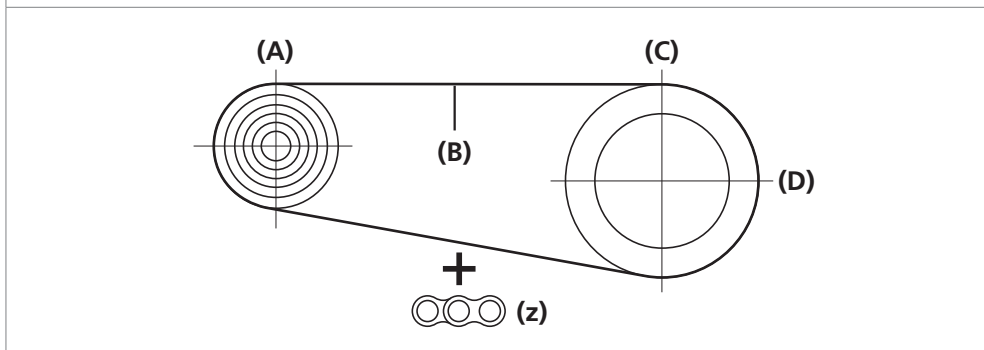
- (A) Smallest sprocket
- (B) Chain
- (C) Largest chainring
- (D) Guide pulley
- (E) Tension pulley
- (F) Front double

 TECH TIPS

When installing chain using, place chain in largest chainring and smallest sprocket. Set so that the line drawn through the guide pulley and tension pulley is 90° or greater to the ground.

When largest sprocket is 28T or larger

With the chain put on both the largest sprocket and the largest chainring, add 2 links to the "minimum number of links that can be connected".



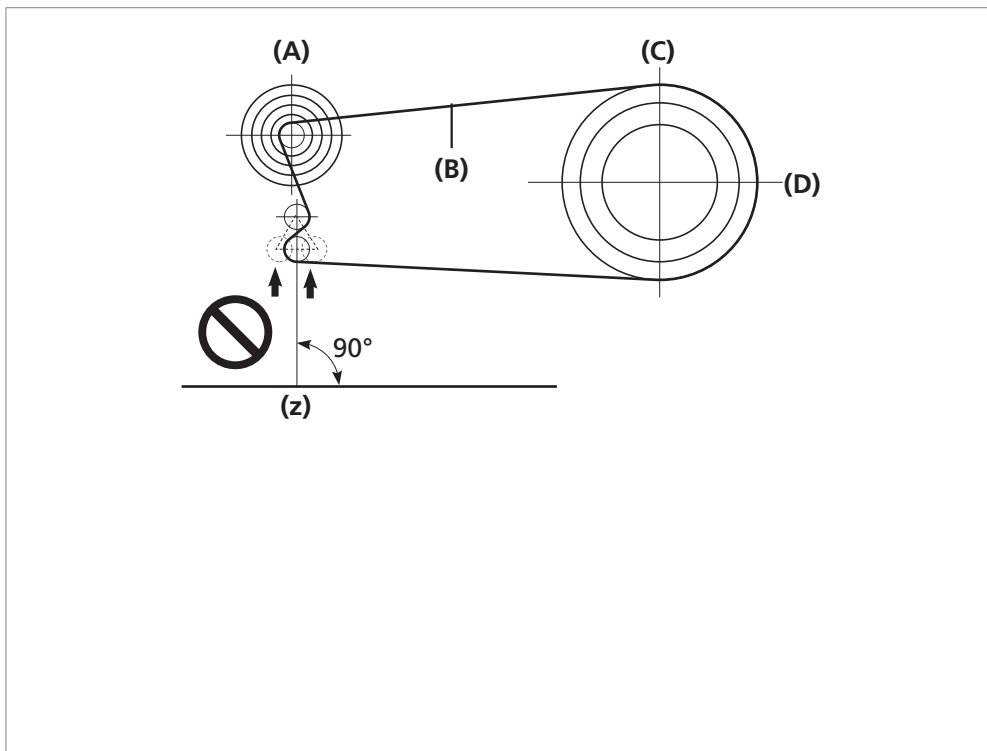
(z) +2 links

- (A) Largest sprocket
- (B) Chain
- (C) Largest chainring
- (D) Front double

ADJUSTMENT

Stroke adjustment

For front triple (when largest sprocket is 30T or smaller)



(z) Right angle to the ground

(A) Smallest sprocket

(B) Chain

(C) Largest chainring

(D) Front triple

NOTE

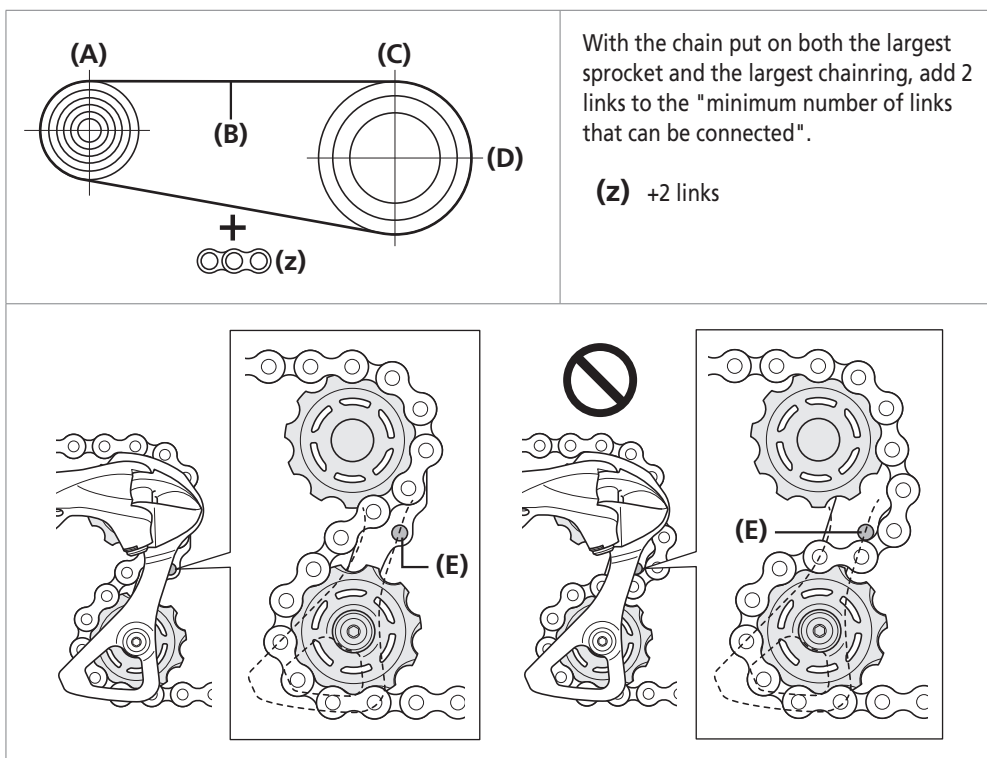
For RD-A070, follow the adjustment method in "For front triple (when largest sprocket is 32T or larger)" instead.



TECH TIPS

When installing chain using, place chain in largest chainring and smallest sprocket. Set so that the line drawn through the guide pulley and tension pulley is 90° or greater to the ground.

For front triple (when largest sprocket is 32T or larger)



With the chain put on both the largest sprocket and the largest chainring, add 2 links to the "minimum number of links that can be connected".

(z) +2 links

(A) Largest sprocket

(B) Chain

(C) Largest chainring

(D) Front triple

(E) Pin/plate for preventing chain derailment



TECH TIPS

The rear derailleur plate assembly is equipped with a pin or plate that prevents the chain from derailing.

When passing the chain through the rear derailleur, pass it to the rear derailleur body from the side of the pin/plate for preventing chain derailment as shown in the illustration. If the chain is not passed through the correct position, damage may be caused to the chain or rear derailleur.

■ Securing the cable

Cutting the outer casing

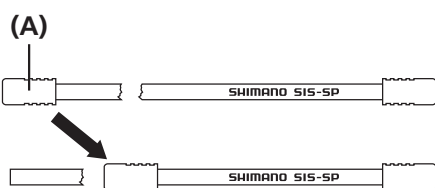
1



When cutting the outer casing, cut the end opposite to the end with the marking.

After cutting the outer casing, make the end round so that the inside of the hole has a uniform diameter.

2

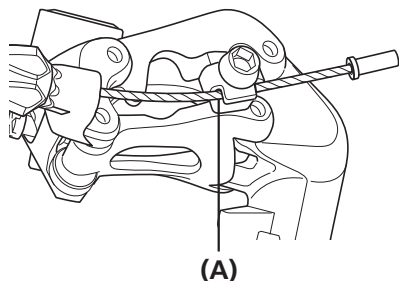


Attach the same outer cap to the cut end of the outer casing.

(A) Outer cap

Connecting and securing of the cable

1



Connect the inner cable to the rear derailleur.

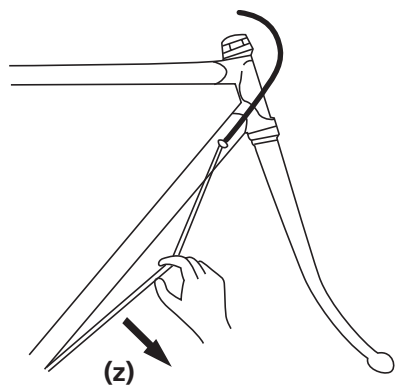
(A) Groove

Tightening torque



6 - 7 N·m

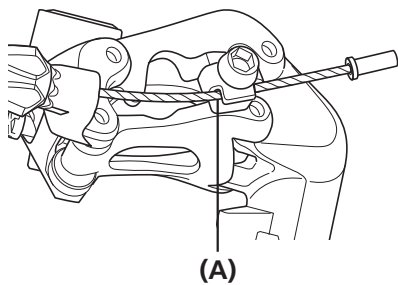
2



Remove the initial slack from the cable as shown in the illustration.

(z) Pull

3



Reconnect the inner cable to the rear derailleur.

(A) Groove

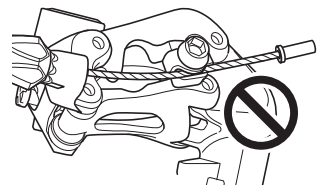
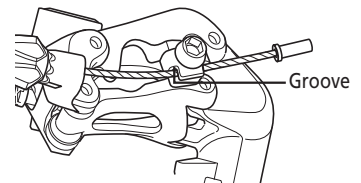
Tightening torque



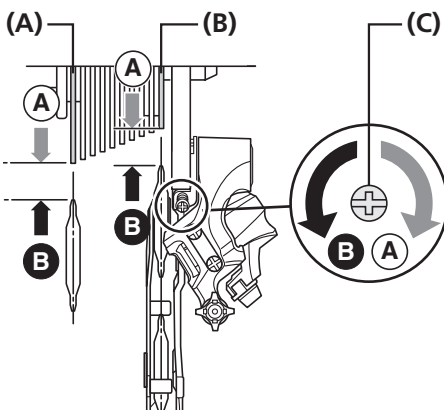
6 - 7 N·m

NOTE

Be sure that the cable is securely in the groove.



Using the B-tension adjust bolt



Mount the chain on the smallest chainring and the largest sprocket, and turn the crank arm for shifting.

Then turn the B-tension adjust bolt to adjust so that the guide pulley does not interfere with the sprocket but not so close that it touches the chain.

Next, set the chain on the smallest sprocket and repeat the above procedure to make sure that the pulley does not come into contact with the sprockets.

(A) Largest sprocket

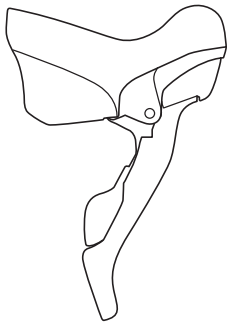
(B) Smallest sprocket

(C) B-tension adjust bolt

SIS adjustment

Confirming positioning on gear

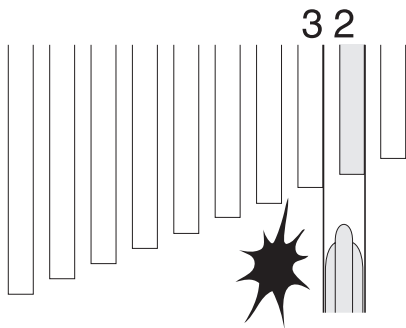
1



Operate the shifting lever several times to move the chain to the 2nd sprocket counting from the smallest sprocket.

Then, while operating the lever just enough to close the gap in the lever, turn the crank arm.

2

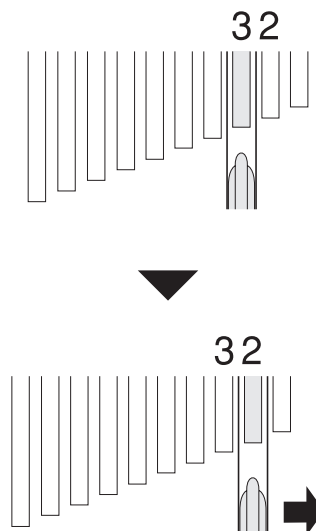
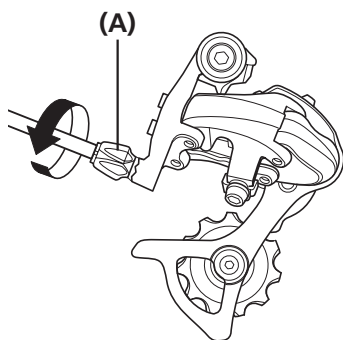


The best setting is when the shifting lever is operated just enough to close the lever gap and the chain touches the 3rd sprocket counting from the smallest sprocket and makes noise.

Adjusting SIS

When the chain shifts to the 3rd sprocket from the smallest sprocket

Tighten the cable adjustment barrel until the chain returns to the 2nd sprocket counting from the smallest sprocket. (Clockwise)

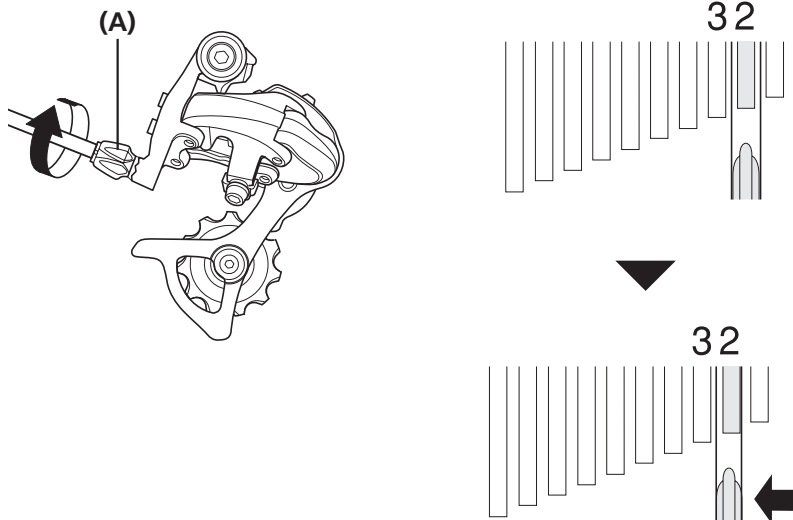


(A) Cable adjustment barrel

When no sound at all is generated

Loosen the cable adjustment barrel until the chain touches the 3rd sprocket counting from the smallest sprocket and makes a noise. (Counterclockwise)

1



(A) Cable adjustment barrel

Return the lever to its original position (the position where the lever is at the 2nd sprocket setting counting from the smallest sprocket and it has been released) and then turn the crank arm clockwise.

2

If the chain is touching the 3rd sprocket counting from the smallest sprocket and making a noise, turn the cable adjustment barrel clockwise slightly to tighten it until the noise stops and the chain runs smoothly.

Stop turning at the point where the noise just stops.

3

Operate lever to change gears, and check that no noise occurs in any of the gear positions.



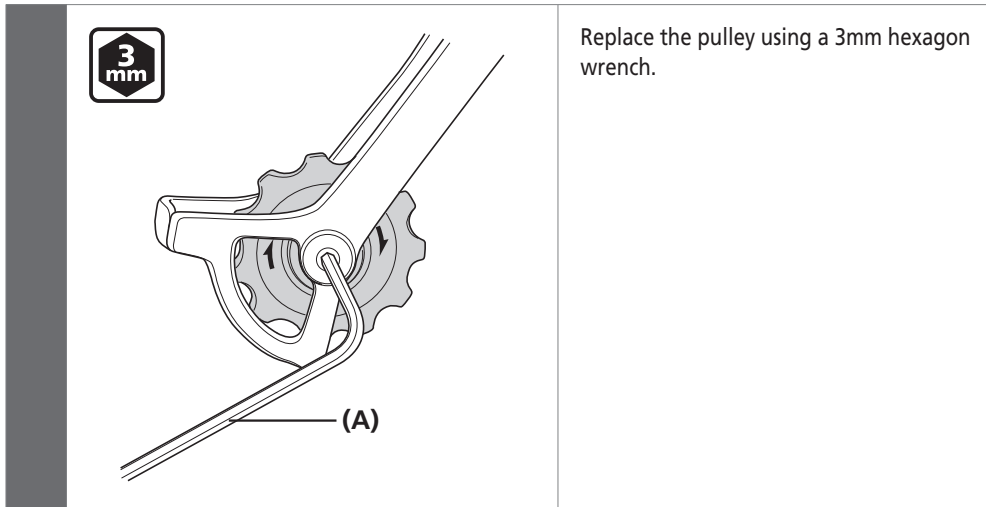
TECH TIPS

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

MAINTENANCE


MAINTENANCE

■ Replacing the pulley



Replace the pulley using a 3mm hexagon wrench.

(A) 3mm hexagon wrench

Tightening torque	
	2.5 - 5 N·m

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Please note: specifications are subject to change for improvement without notice. (English)

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