

Dealer's Manual

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

Front derailleur

SORA

FD-R3000
FD-R3030

CLARIS

FD-R2000
FD-R2030

CONTENTS

IMPORTANT NOTICE.....	3
TO ENSURE SAFETY.....	4
LIST OF TOOLS TO BE USED.....	7
INSTALLATION	9
Mounting the backup plate	11
ADJUSTMENT	13
Adjusting the cable route (FD-R3000/FD-R2000).....	13
SIS adjustment.....	18
MAINTENANCE.....	27
Lubricate	27
Replacing the skid plate	28

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.


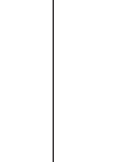
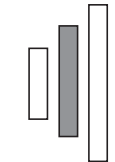
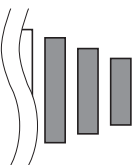

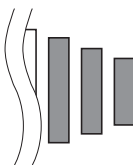
Be sure to also inform users of the following:

- Be careful not to let the hemming of your clothes get caught in the chain while riding. Otherwise you may fall off the bicycle.

NOTE

Be sure to also inform users of the following:

- If gear shifting operations do not feel smooth, wash the derailleur and lubricate all moving parts.
- When the chain is in any of the positions shown in the illustration, the chain may come into contact with the front chainring or front derailleur and generate noise. If the noise is a problem, shift the chain onto the next largest sprocket or the one after.

	Double	Triple	
Front chainring			
Rear sprocket			

For Installation to the Bicycle, and Maintenance:

- A triple front derailleur cannot be used with a double crankset because the shifting points do not match. Similarly, a double front derailleur cannot be used with a triple crankset.

Double: FD-R3000/FD-R2000

Triple: FD-R3030/FD-R2030

For detailed specifications, refer to specifications on our website for dealer's manuals.




- For frames with suspension, the chainstay angle will vary depending on whether the bicycle is being ridden or not being ridden. When the bicycle is not being ridden and the chain is positioned on the largest chainring and on the smallest sprocket, the chain guide outer plate of the front derailleur may touch the chain.
- Use an OT-SP cable and cable guide for smooth operation.
- If the amount of looseness in the links is so great that adjustment is not possible, you should replace the derailleur.
- A special grease is used for the gear shifting cable. Do not use premium grease or other types of grease, otherwise they may cause deterioration in gear shifting performance.
- Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.
- Operation of the levers related to gear shifting should be made only when the front chainwheel is turning.
- 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.

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	
	2mm hexagon wrench		Screwdriver[#2]
	5mm hexagon wrench		

INSTALLATION

INSTALLATION

NOTE

When installing components to a carbon frame (handlebars), there is a risk of causing damage to the frame (handlebars) or inadequate fixing force, even at the recommended tightening torque. Verify the appropriate torque to apply with the bicycle or frame (handlebar) manufacturer.

1

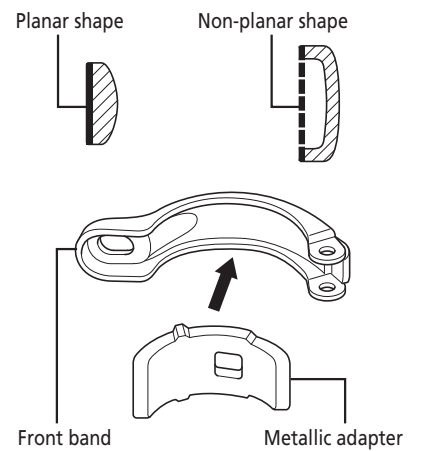
When using the adapter, install it in the position shown in the illustration, relative to the front band or the rear band.

(z) Align

- (A)** Adapter
- (B)** Front band/Rear band

NOTE

Be sure to use a metallic adapter for a front band which has a non-planar shape.



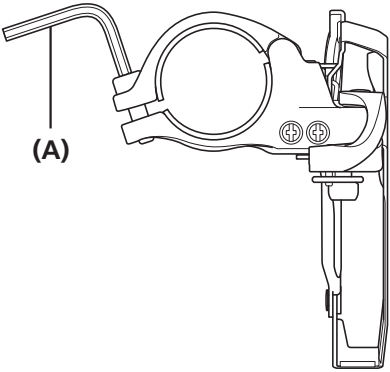
- (A)** Chain guide outer plate
- (B)** Largest chainring

2

Adjust so that there is a clearance of 1 – 3mm between the chain guide outer plate and the largest chainring. After tentatively tightening the clamp bolt, align the flat portion of the outer plate of the chain guide in parallel with the flat surface of the largest chainring.

(z) 1 – 3mm

3



(A)

When the adjustment is complete, tighten the clamp bolt.

(A) 5mm hexagon wrench

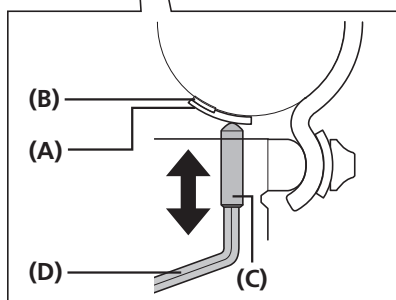
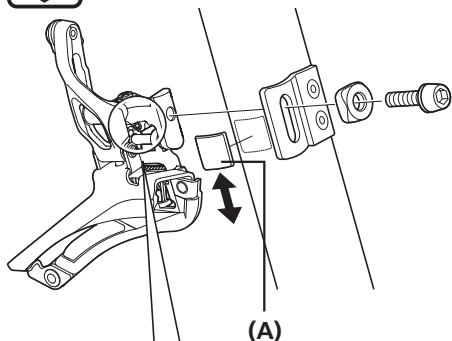
Tightening torque



5 - 7 N·m

■ Mounting the backup plate

If installing the front derailleur to a brazed-on type frame, a backup plate must be attached to the seat tube. Be sure to install a backup plate in order to prevent damage to the frame from the pressure of the front derailleur support bolt.

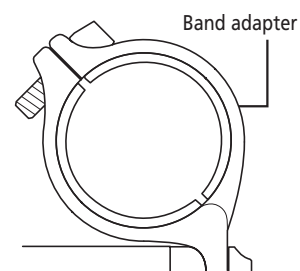


Check the position where the support bolt directly touches the frame when the support bolt of the front derailleur is being adjusted, and attach the backup plate in that position. In addition, avoid positioning the tape that attaches the backup plate to the seat tube in the location where the support bolt directly touches the frame.

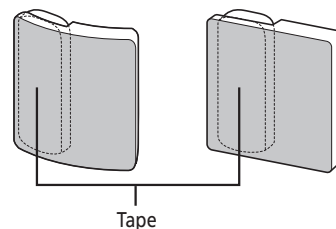
- (A) Backup plate
- (B) Tape
- (C) Support bolt
- (D) 2mm hexagon wrench



* When the mounting band adapter (SM-AD90/79/67) is used, the support bolt is not required.



There is a backup plate with a curved adhesion surface and one with a flat adhesion surface, as shown in the illustration; use whichever type matches the shape of the frame.



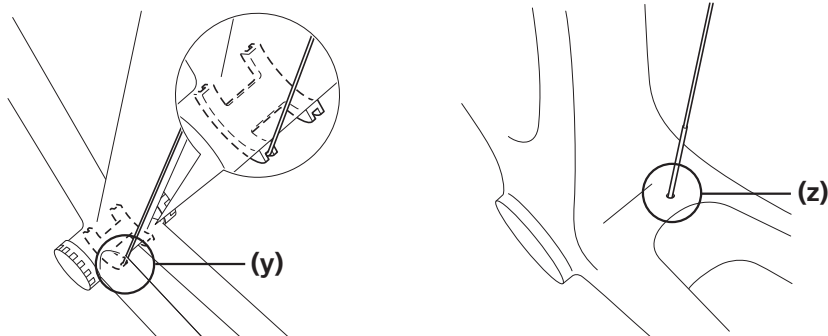
ADJUSTMENT

ADJUSTMENT

■ Adjusting the cable route (FD-R3000/FD-R2000)

The distance of the movement of the front derailleur varies according to the end point of the cable guide or the position of the hole in the frame through which the cable is passed. Adjust the distance of the movement by turning ON/OFF the converter.

1



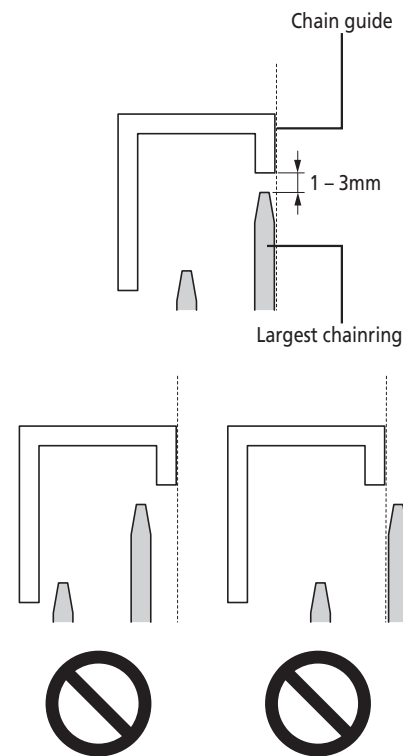
- (y) End point of the cable guide
- (z) Hole in the frame through which the cable is passed

Use the converter judgment tool (TL-FDR30) to determine the appropriate orientation for the converter.

2

TECH TIPS

Before using the converter judgment tool, align the chain guide outer plate parallel to the surface of the largest chainring.



Using the converter judgment tool

1

Loosen the cable fixing bolt to form a gap between the plate and the outer link.

(z) Form a gap

- (A)** Plate
- (B)** 5mm hexagon wrench
- (C)** Cable fixing bolt
- (D)** Outer link

2

Fold the folding part on the converter judgment tool.

- (A)** Folding part

3

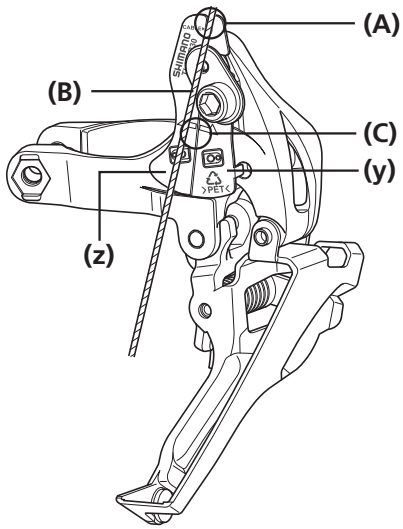
Attach the converter judgment tool by sliding it into the gap between the plate and the outer link. At this time, insert the folding part on the tool into the hole in the outer link. After attaching the tool, temporarily tighten the cable fixing bolt.

(z) Insert the folding part on the tool into the hole in the outer link

- (A)** Converter judgment tool (TL-FDR30)
- (B)** Plate
- (C)** Cable fixing bolt
- (D)** Outer link
- (E)** Folding part
- (F)** 5mm hexagon wrench

▶▶ Adjusting the cable route (FD-R3000/FD-R2000)

4



Align the cable with the cable slot on the tool and then pull it. Check whether the cable is passing over the Converter ON side or Converter OFF side of the center line.

Set the converter ON/OFF in accordance with the indication provided by the tool.

(y) Converter ON side

(z) Converter OFF side

(A) Cable slot

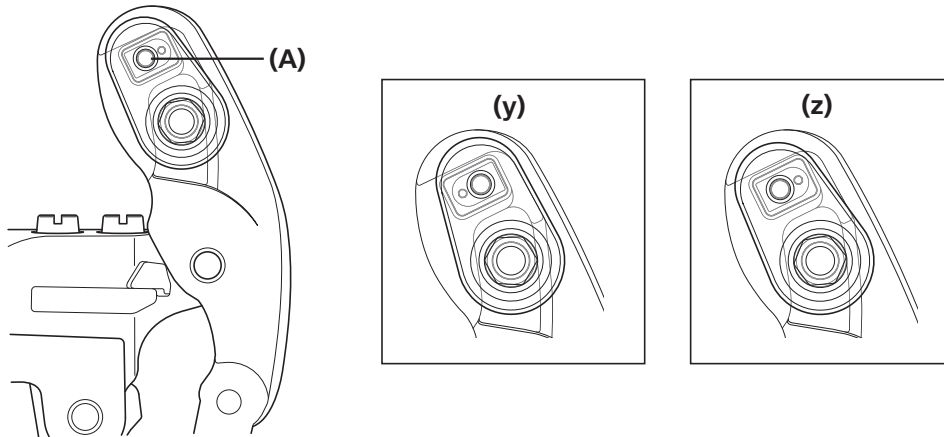
(B) Cable

(C) Center line

Turning ON/OFF the converter

The protrusion on the converter and the dent beside it serve as a guide.

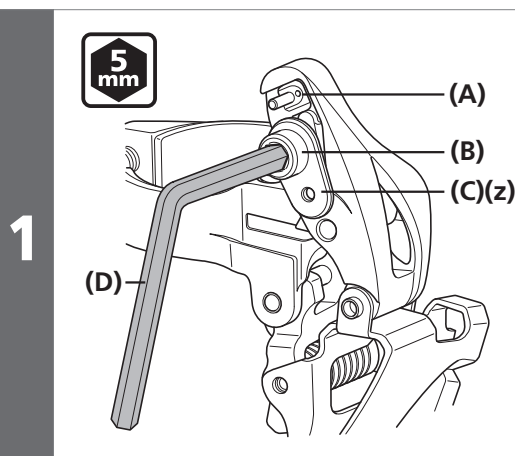
- The protrusion is on the outer side of the bicycle: OFF
- The protrusion is on the inner side of the bicycle: ON
(Either ON or OFF can be selected if the cable is on the center line.)



(y) Converter: OFF

(z) Converter: ON

(A) Converter



Loosen the cable fixing bolt. Expose the converter by rotating the plate downward.

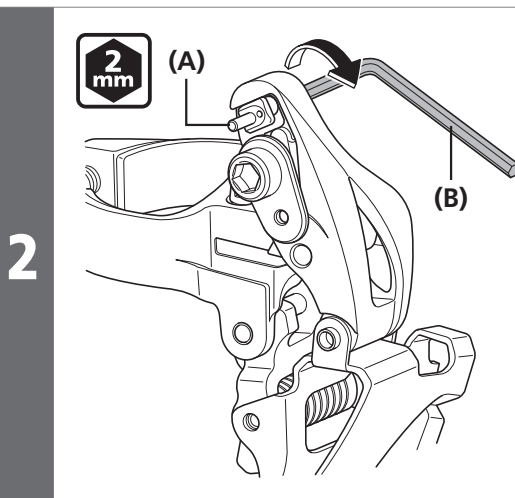
(z) Rotate the plate downward.

(A) Converter

(B) Cable fixing bolt

(C) Plate

(D) 5mm hexagon wrench



Insert a 2mm hexagon wrench into the reverse side of the converter and push it out. Turn the converter 180 degrees counterclockwise.

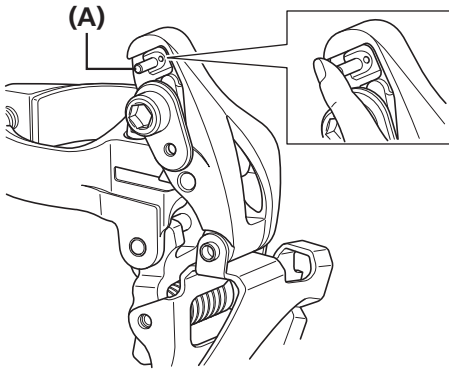
(A) Converter

(B) 2mm hexagon wrench

ADJUSTMENT

▶▶ Adjusting the cable route (FD-R3000/FD-R2000)

3



Push back the pin of the converter with a finger.

(A) Converter

SIS adjustment

Double: FD-R3000/FD-R2000

Low adjustment

Chain position

Adjust so that the clearance between the chain guide inner plate and the chain is 0 - 0.5mm.

- (A) Largest sprocket
- (B) Smallest chainring

- (A) Chain guide inner plate
- (B) Chain
- (C) Screwdriver[#2]
- (D) Low adjustment bolt

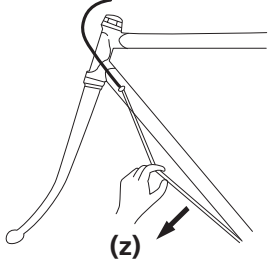
Connecting and securing the inner cable

While pulling the inner cable, tighten the fixing bolt with a 5mm hexagon wrench to secure the cable.

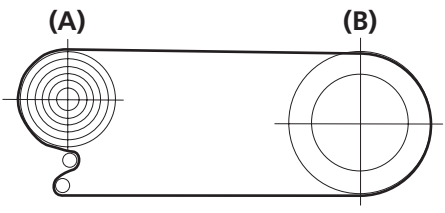
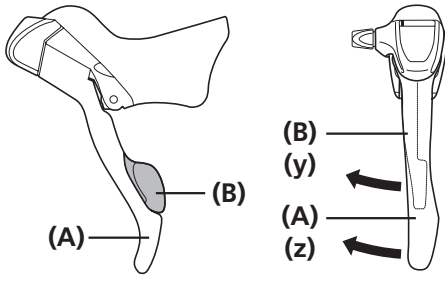
- (y) Converter: OFF
- (z) Converter: ON

- (A) Cable fixing bolt

Tightening torque	
	5 - 7 N·m

2		<p>After taking up the initial slack in the cable, re-secure to the front derailleur as shown in the illustration.</p> <p>(z) Pull</p>
---	---	---

Adjustment of cable tension

1	<p>Chain position</p> 	<p>Set the chain on to the largest sprocket at the rear and, at the front, shift the chain to the smallest chainring and then back to the largest chainring.</p>	<hr/> <p>(A) Largest sprocket (B) Largest chainring</p> <hr/>
	<p>How to shift front chainrings</p> 	<p>(y) From largest chainring to smallest chainring</p> <p>(z) From smallest chainring to largest chainring</p>	<hr/> <p>(A) Lever [a] (B) Lever [b]</p> <hr/>

2

Perform trimming (noise prevention operation).

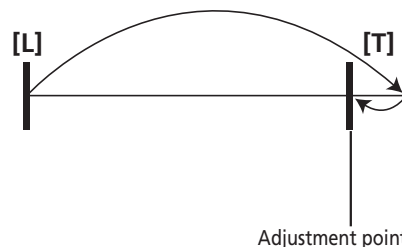
- Gently press the lever [b]. (A "click" sound will be heard.)

NOTE

Trimming operation (noise prevention operation)

There are two front derailleur positions when shifting to the largest chainring. Make sure that the derailleur is in the innermore of the two positions.

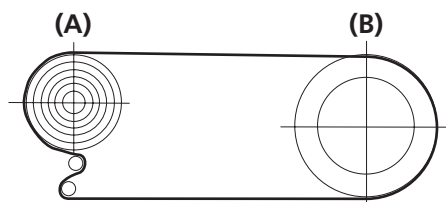
* Gear shift from the smallest chainring [L] to the largest chainring [T], then gently press lever [b] until there is a click.



TECH TIPS

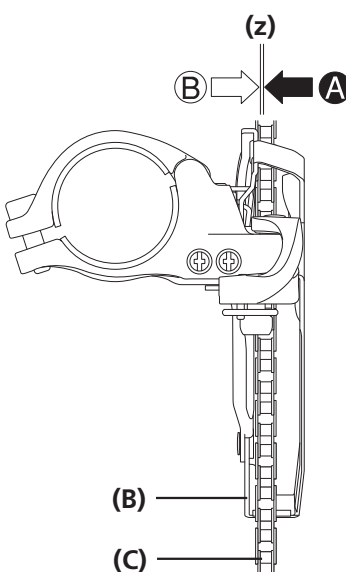
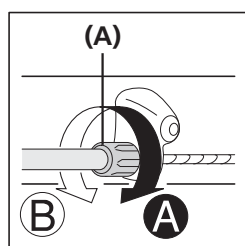
Move lever [b] lightly while turning the crank, and check that the front derailleur moves slightly toward the smallest chainring. At this time, if the front derailleur moves considerably and causes the chain engage the smallest chainring, turn the top adjustment bolt counterclockwise by 1/8 turn. Then, after returning the chain to its original position, adjust and check the trimming mechanism.

Chain position



After trimming, use the cable adjustment barrel to adjust the clearance between the chain and the chain guide inner plate to 0 - 0.5mm.

3



- (A) Largest sprocket
- (B) Largest chainring

(z) Clearance: 0 - 0.5mm

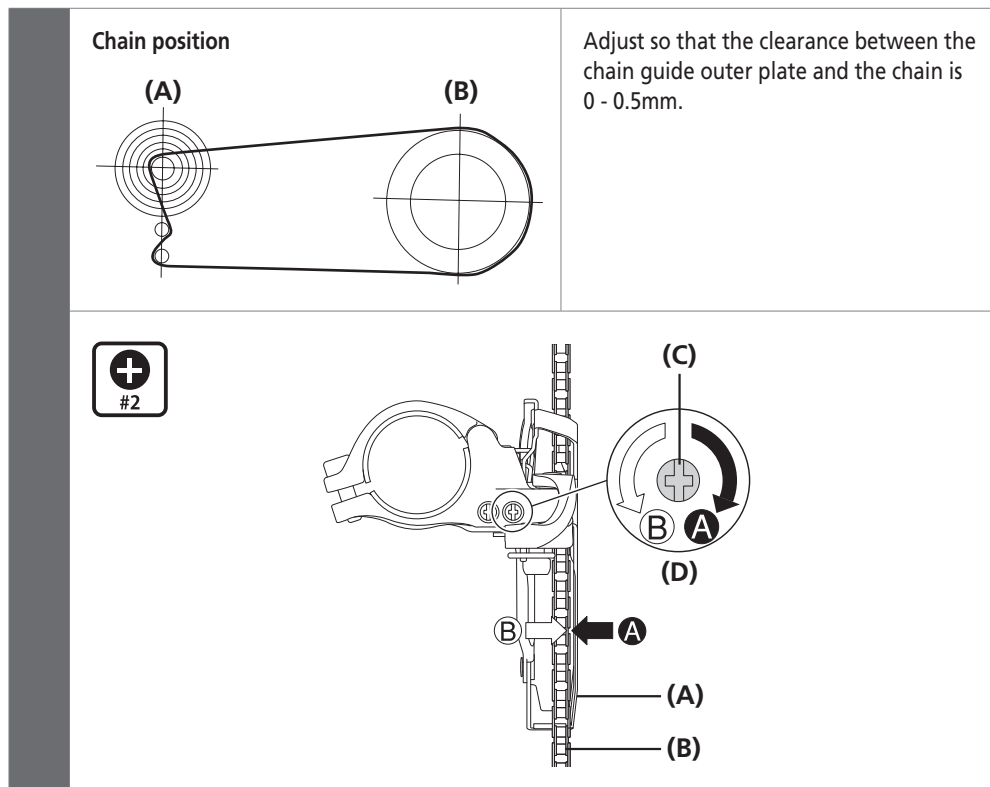
- (A) Cable adjustment barrel
- (B) Chain guide inner plate
- (C) Chain

TECH TIPS

Adjustment is possible using the dual control lever (with cable adjuster).

For the adjustment method, refer to the dual control lever section.

Top adjustment



- (A)** Smallest sprocket
 - (B)** Largest chainring
-
- (A)** Chain guide outer plate
 - (B)** Chain
 - (C)** Screwdriver[#2]
 - (D)** Top adjustment bolt

Checking gear shifting and minor adjustments

After completing low adjustment, connecting and securing the inner cable, cable tension adjustment, and top adjustment, check gear shifting by operating the shifting lever.
 (This also applies if shifting becomes difficult during use.)
 * Turn the bolt by 1/8th turn for each adjustment.

If the chain falls to the crank side	Turn the top adjustment bolt clockwise.
If shifting is difficult from the smallest chainring to the largest chainring	Turn the top adjustment bolt counterclockwise. If this does not improve the condition, readjust cable tension.
If shifting is difficult from the largest chainring to the smallest chainring	Turn the low adjustment bolt counterclockwise.
If the chain falls to the bottom bracket side	Turn the low adjustment bolt clockwise.
If the gear shifting to the smallest chainring is stiff and difficult to carry out after trimming	Turn the cable adjustment barrel clockwise until gear shifting to the smallest chainring becomes smooth. * Note that turning the cable adjustment barrel too much at one time may result in poorer gear shifting performance to the largest chainring.

Triple: FD-R3030/FD-R2030

Low adjustment

Chain position

Adjust so that the clearance between the chain guide inner plate and the chain is 0 - 0.5mm.

- (A) Largest sprocket
- (B) Smallest chainring

- (A) Chain guide inner plate
- (B) Chain
- (C) Screwdriver[#2]
- (D) Low adjustment bolt

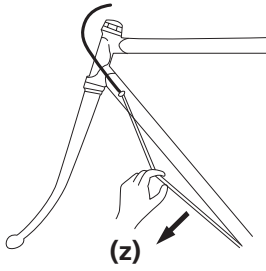
Connecting and securing the inner cable

While pulling the inner cable, tighten the fixing bolt with a 5mm hexagon wrench to secure the cable.

- (A) Cable fixing bolt

Tightening torque	
5 mm	5 - 7 N·m

2

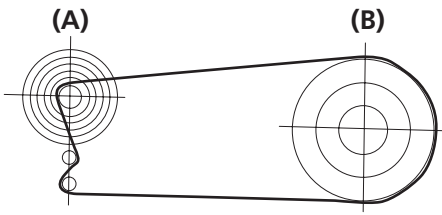


After taking up the initial slack in the cable, re-secure to the front derailleur as shown in the illustration.

(z) Pull

Top adjustment

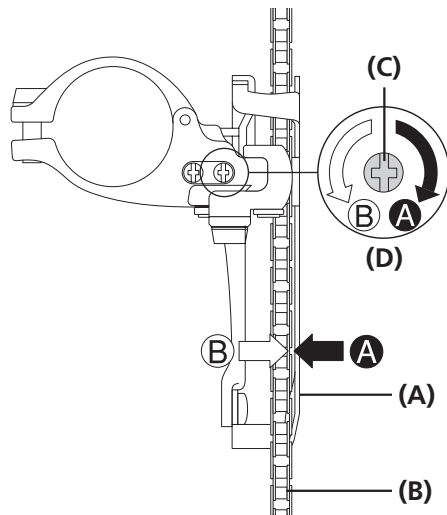
Chain position



Adjust so that the clearance between the chain guide outer plate and the chain is 0 - 0.5mm.

(A) Smallest sprocket

(B) Largest chainring



(A) Chain guide outer plate

(B) Chain

(C) Screwdriver[#2]

(D) Top adjustment bolt

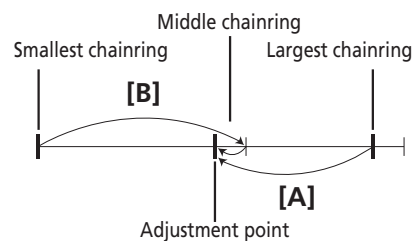
Adjustment at the middle chainring

1

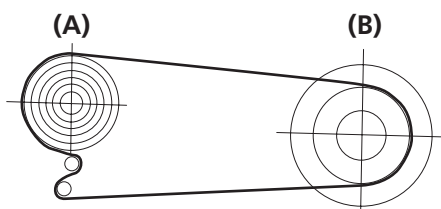
When adjusting, set the chain to the largest sprocket, and at the front, set the chain to the middle chainring.

NOTE

There are two ways to shift into the middle chainring: shifting from the largest chainring to the middle chainring, method [A], and shifting from the smallest chainring to the middle chainring, method [B]; use method [A]. This is because the position of the front derailleur differs.

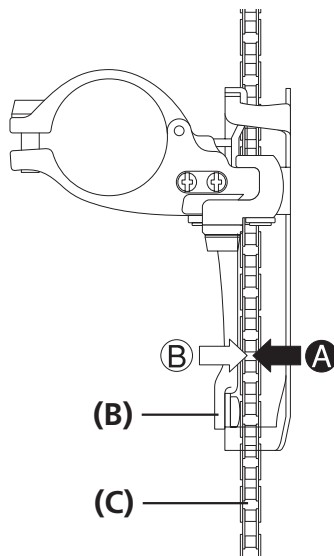
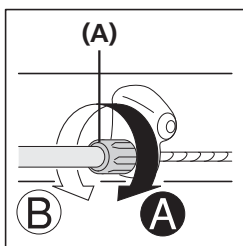


Chain position



Adjust the cable adjustment barrel so that the clearance between the chain guide inner plate and the chain is 0 - 0.5mm.

2



- (A) Largest sprocket
- (B) Middle chainring

- (A) Cable adjustment barrel
- (B) Chain guide inner plate
- (C) Chain

TECH TIPS

Adjustment is possible using the dual control lever (with cable adjuster).

For the adjustment method, refer to the dual control lever section.

Checking gear shifting and minor adjustments

After completing low adjustment, connecting and securing the inner cable, top adjustment, and adjustment at the middle chainring, check gear shifting by operating the shifting lever.

(This also applies if shifting becomes difficult during use.)

* Turn the bolt by 1/8th turn for each adjustment.

If the chain falls to the crank side	Turn the top adjustment bolt clockwise.
If shifting is difficult from the middle chainring to the largest chainring	Turn the top adjustment bolt counterclockwise.
If shifting is difficult from the middle chainring to the smallest chainring	Turn the low adjustment bolt counterclockwise.
If there is interference between the chain and the front derailleur outer plate when the chain is on the largest chainring	Turn the top adjustment bolt counterclockwise.
If the middle chainring is skipped when shifting from the largest chainring	Turn the cable adjustment barrel counterclockwise.
If there is interference between the chain and the front derailleur inner plate when the chain is shifted to the largest sprocket while it is on the middle chainring	Turn the cable adjustment barrel clockwise.
If the chain falls to the bottom bracket side	Turn the low adjustment bolt clockwise.
If there is interference between the chain and the front derailleur inner plate when the chain is shifted to the largest sprocket while it is on the smallest chainring	Turn the low adjustment bolt counterclockwise.

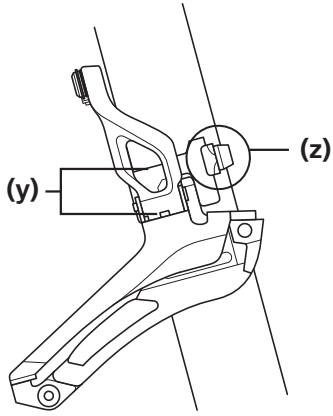
MAINTENANCE

MAINTENANCE

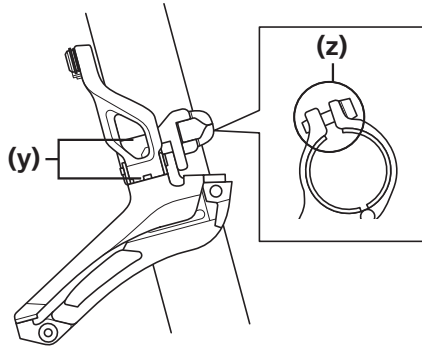
■ Lubricate

Lubricate moving parts (the links) shown in the illustrations.

Type F



Type B



(y) Link

(z) Mounting section

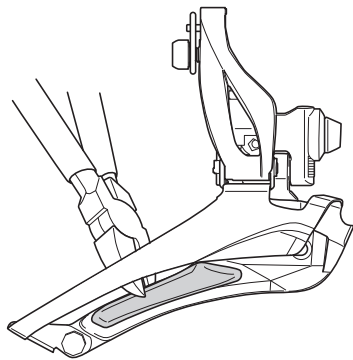


TECH TIPS

If gear shifting operations do not feel smooth, wash the derailleur and lubricate all moving parts.

■ Replacing the skid plate

Removing the skid plate

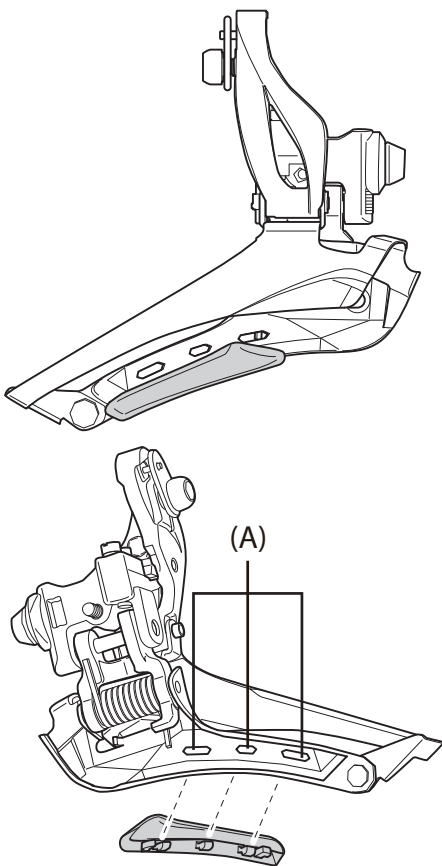


Make a slit in the skid plate at the position illustrated using pliers, and then remove the skid plate.

NOTE

The skid plate attached to the outer plate cannot be replaced.

Mounting the skid plate



Insert the skid plate into the mounting holes.

After insertion, check that the claws of the skid plate are engaged properly on the back side.

(A) Mounting holes

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)

© Sep. 2016 by Shimano Inc. ITP