(English) DM-CASG002-03

# **Dealer's Manual**

ROAD	
City Touring/ Comfort Bike	

# **NEXUS**

# **INTER-5E**

SG-C7000-5

SL-C7000-5

CS-C7000

SM-C7000-5

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# MODELS COVERED BY THIS DEALER'S MANUAL

This Dealer's Manual is for the following models.

Part/	Series	INTER-5E
Internal geared hub	Coaster brake + Disc brake	-
	Disc brake	SG-C7000-5D
44	Coaster brake	SG-C7000-5C
	INTER M brake	SG-C7000-5R
	V-BRAKE	SG-C7000-5V
Shift lever	REVOSHIFT lever	SL-C7000-5

## **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 manuals and technical documents are accessible online at https://si.shimano.com.
- For consumers who do not have easy access to the internet, please contact a SHIMANO distributor or any of the SHIMANO offices to obtain a hardcopy of the User's Manual.
- 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.



#### **DANGER**

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



### **WARNING**

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



#### **CAUTION**

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

## TO ENSURE SAFETY

# **MARNING**

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

Only use SHIMANO genuine parts. If a component or replacement part is incorrectly assembled or adjusted, it can lead to component failure and cause the rider to lose control and crash.



Wear approved eye protection while performing maintenance tasks such as replacing components.

#### Be sure to also inform users of the following:

• Because each bicycle may handle slightly differently depending on the model, be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. Improper use of your bicycle's brake system may result in a loss of control, which could lead to serious injury due to a fall or collision.

#### For Installation to the Bicycle, and Maintenance:

- When securing the brake arm to the frame, be sure to use an arm clip that matches the size of the chainstay, and securely tighten them with the clip bolt and clip nut to the specified tightening torque.

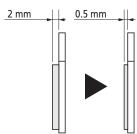
  Use a lock nut with nylon insert (self-locking nut) as the clip nut. It is recommended that SHIMANO made clip bolts, clip nuts, and arm clips be used. If the clip nut comes off the brake arm, or if the clip bolt or arm clip becomes damaged, the brake arm may rotate on the chainstay and cause the handlebars to jerk suddenly, or the bicycle wheel may lock and result in serious injury due to a fall or collision.
- When installing the hub to the frame, be sure to install the correct non-turn washers to the left and right sides, and securely tighten the hub nuts to the specified torques. If the non-turn washers are installed on one side only, or if the hub nuts are not tightened sufficiently, the non-turn washer may fall out, which could cause the hub axle to rotate and the cassette joint to turn, resulting in the handlebars being accidentally pulled by the shifting cable and an extremely serious accident.

#### ■ Disc brake rotor

• Keep your fingers away from rotating disc brake rotors. Disc brake rotors are sharp enough to severely injure your fingers if caught within the openings of a disc brake rotor.



- Do not touch the calipers or disc brake rotor while riding or immediately after dismounting from the bicycle. The calipers and disc brake rotor will become hot when the brakes are operated, so you may get burned if you touch them.
- Do not allow any oil or grease to get onto the disc brake rotor and brake pads. Riding the bicycle with oil or grease on the disc brake rotor and brake pads may prevent the brakes from operating and result in serious injury due to a fall or collision.
- Check the thickness of the brake pads and do not use them if they have a thickness of 0.5 mm or less. Doing so may prevent the brakes from operating and result in serious injury due to a fall or collision.



- Do not use the disc brake rotor if it is cracked or deformed. The disc brake rotor may break, and result in serious injury due to a fall or collision.
- Do not use the disc brake rotor if its thickness is 1.5 mm or less. Also do not use it if the aluminum surface becomes visible. The disc brake rotor may break, and result in serious injury due to a fall or collision.

#### **■** Coaster brake

• Do not touch the coaster brake while riding or immediately after dismounting from the bicycle. The coaster brake will become hot when the brakes are operated, so you may get burned if you touch them.

#### ■ Coaster brake hub

• When using a reversed rear dropout, use a chain adjuster to remove excess slack from the chain.

# **A** CAUTION

#### Be sure to also inform users of the following:

• Be sure to shift the shift lever one gear at a time. During shifting, reduce the force being applied to the pedals. If you try to force operation of the shift lever or perform multi-shifting while the pedals are being turned strongly, your feet may come off the pedals and the bicycle may fall over, which could result in serious injury.

Using the shift lever to multi-shift to a light gear may also cause the outer casing to spring out of the shift lever.

This does not affect the capabilities of the shift lever because the outer casing returns to the original position after shifting.

#### **■** Disc brake specifications

• Disc brakes have a bed-in period, and the braking force will gradually increase as the bed-in period progresses. Accidents or falls may occur due to losing control of the bicycle, possibly resulting in serious injury.

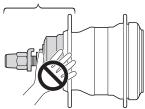
The same thing will happen when the brake pads or disc brake rotor are replaced.

#### **■** Coaster brake specifications

- Do not continuously apply the brakes when riding down long slopes. This will cause the internal brake parts to become very hot, weakening braking performance, as well as causing a reduction in the amount of brake grease inside the brake, which can lead to problems such as abnormally sudden braking.
- Spin the wheel and confirm that the braking force of the coaster brake is correct.

#### ■ Roller brake specifications

• When the brake is used frequently, do not touch the area around the brake for at least 30 minutes after riding the bicycle. The area around the brake may become hot.



- Do not continuously apply the brakes when riding down long slopes. This will cause the internal brake parts to become very hot, weakening braking performance, as well as causing a reduction in the amount of brake grease inside the brake, which can lead to problems such as abnormally sudden braking.
- The brake unit and front hub unit should never be disassembled. If they are disassembled, they will no longer work properly.

#### **NOTICE**

#### Be sure to also inform users of the following:

- The gears can be shifted while lightly pedaling, but on rare occasions the pawls and ratchet inside the hub may produce some noise afterwards as part of normal gear shifting operation. In addition, a loud sound may be temporarily emitted if the gears are shifted while strongly pedaling with E-BIKE, etc., but this is normal.
- The internal geared hub is not completely waterproof. Avoid using the hub in places where water might get inside and do not use high-pressure water to clean the hub, otherwise the internal mechanism may rust.
- All of the following occurrences are due to the internal gear-shifting structure and are not the failure of the internal components.

	Туре	Type of hub		
Phenomenon	For coaster brakes	For roller brakes / V-BRAKE	Gear positions where phenomenon might occur	
Noise occurs when the pedals rotate.	×	-	All gear positions except 1st	
Noise occurs when the bicycle is pushed backward.	×	×	All gear positions except 1st	
The hub has a built-in mechanism that supports gear shifting and when the mechanism operates during gear shifting, noise and vibrations occur.	×	×	All gear positions	
Depending on gear position, gear-shifting may feel different.	×	×	All gear positions	
Noise occurs when pedal rotation is stopped during riding.	×	-	All gear positions	

• 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.

#### **■** Coaster brake specifications

• If the wheels are not rotating smoothly, you need to replace or grease the brake shoes.

#### For Installation to the Bicycle, and Maintenance:

- In order to maintain proper performance, it is recommended that you lubricate the internal unit after riding 1,000 km from the start of use, then after about once every year (or once about every 2,000 km if the bicycle is used very frequently). If the bicycle is used under harsh conditions, more frequent maintenance is required. Also, for carrying out maintenance, the use of SHIMANO internal geared hub grease or a lubrication kit is recommended. If SHIMANO grease or a SHIMANO lubrication kit is not used, problems such as a malfunction in shifting unit may occur.
- If the wheel becomes stiff and difficult to turn, lubricate it with grease.
- 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.
- If the chain keeps coming off the gears during use, replace the gears and chain.

#### ■Internal geared hub specifications

• It is recommended that the front chainring have a tire size of 28 inches or shorter and be set so that the gear ratio is about 1.4 as shown in the table below.

Chainring	CS-C7000
34	24
38	27
42	30

• For information on gear ratios that can be used, refer to the table below.

Diameter	of wheel	24 inch		24 inch 26 inch			27 inch			
CS-C7000 (number of teeth)		30	27	24	30	27	24	30	27	24
	30	-	-	-	-	-	-	-	-	-
	31	-	-	1.29	-	-	1.29	-	-	1.29
	32	-	-	1.33	-	-	1.33	-	-	1.33
	33	-	-	1.38	-	-	1.38	-	-	1.38
	34	-	-	1.42	-	-	1.42	-	-	1.42
Chainring (number of teeth)	35	-	1.30	1.46	-	1.30	1.46	-	1.30	1.46
r of	36	-	1.33	1.50	-	1.33	1.50	-	1.33	1.50*
mbe	37	-	1.37	1.54	-	1.37	1.54*	-	1.37	1.54*
lnu)	38	1.27	1.41	1.58	1.27	1.41	1.58*	1.27	1.41	-
ıring	39	1.30	1.44	1.63	1.30	1.44	-	1.30	1.44	-
hain	40	1.33	1.48	1.67*	1.33	1.48	-	1.33	1.48*	-
	41	1.37	1.52	1.71*	1.37	1.52	-	1.37	1.52*	-
	42	1.40	1.56	1.75*	1.40	1.56*	-	1.40	1.56*	-
	43	1.43	1.59	-	1.43	1.59*	-	1.43	-	-
	44	1.47	1.63	-	1.47	-	-	1.47	-	-
	45	1.50	1.67*	-	1.50	-	-	1.50*	-	-

Diameter	plameter of wheel 700C			28 inch			
CS-C7000 (number of teeth)		30	27	24	30	27	24
	30	-	-	-	-	-	-
	31	-	-	1.29	-	-	1.29
	32	-	-	1.33	-	-	1.33
	33	-	-	1.38	-	-	1.38
<u> </u>	34	-	-	1.42	-	-	1.42
Chainring (number of teeth)	35	-	1.30	1.46*	-	1.30	1.46*
of 1	36	-	1.33	1.50*	-	1.33	1.50*
nber	37	-	1.37	-	-	1.37	-
(nur	38	1.27	1.41	-	1.27	1.41	-
ring	39	1.30	1.44*	-	1.30	1.44*	-
hain	40	1.33	1.48*	-	1.33	1.48*	-
D	41	1.37	1.52*	-	1.37	-	-
	42	1.40	-	-	1.40	-	-
	43	1.43	-	-	1.43*	-	-
	44	1.47*	-	-	1.47*	-	-
	45	1.50*	-	-	1.50*	-	-

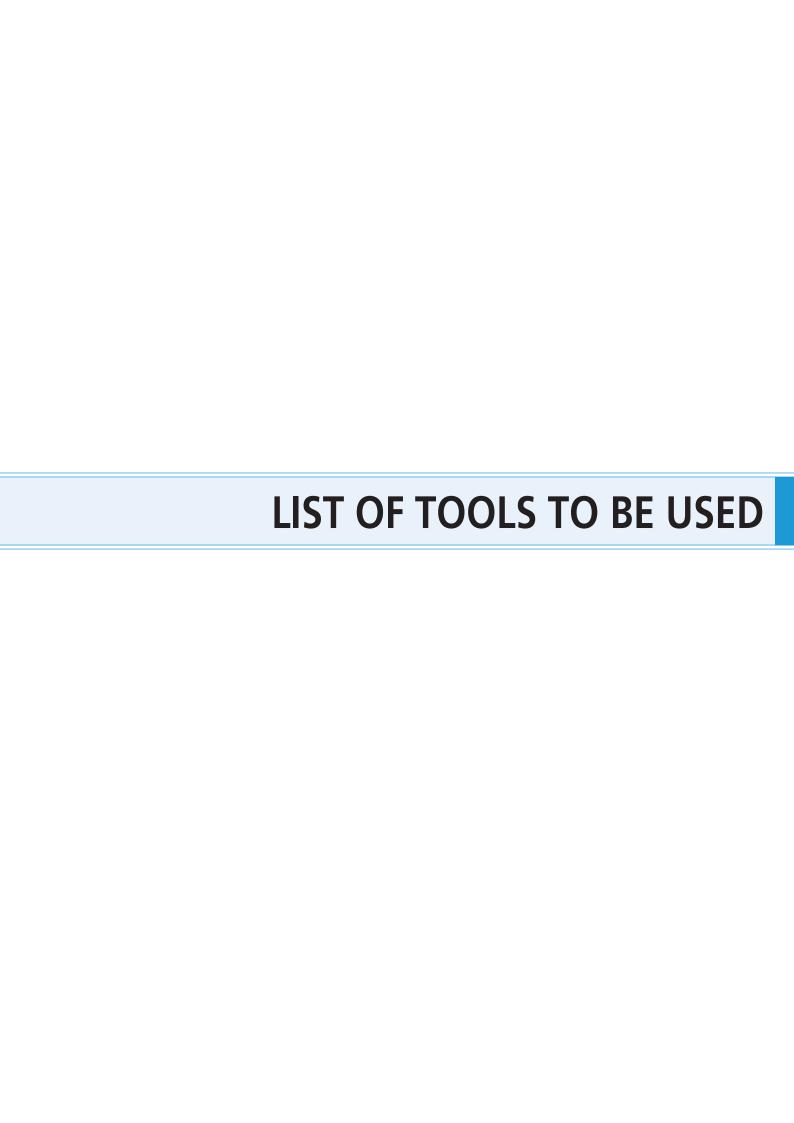
<sup>\*</sup> Can be used except for with coaster brake specifications.

#### **■** Coaster brake specifications

- Use a wheel with 3x or 4x lacing. Wheels with radial lacing cannot be used. Otherwise, the spokes or the wheel may get damaged, or noise may occur when braking.
- If the wheel becomes stiff and difficult to turn, you should replace the brake shoes or lubricate with grease.
- Use only the specified grease for the brake shoes and when using a lubrication kit, remove the brake shoes to avoid contact with the oil.

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

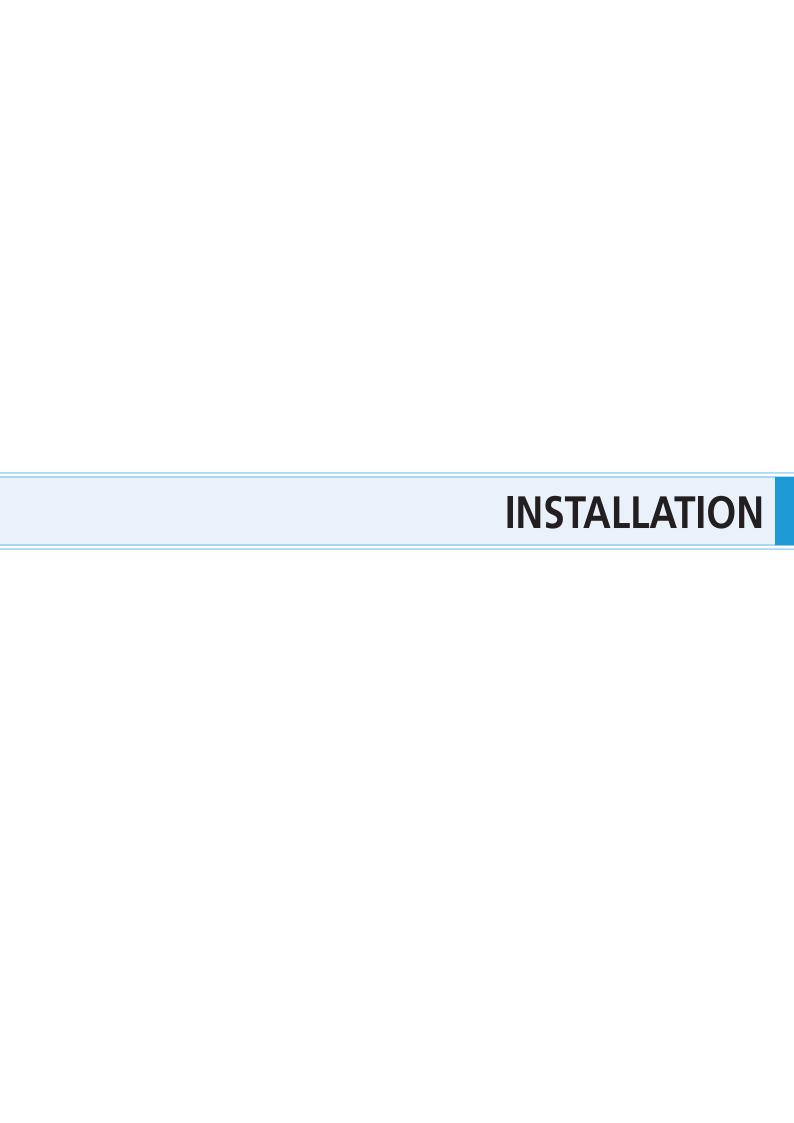
<sup>-:</sup> Cannot be used



# LIST OF TOOLS TO BE USED

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

	Tool	Tool		Tool	
3	3 mm hexagon wrench	#1	Screwdriver[#1]	TL-S700-B	TL-5700-B
10mm	10 mm spanner	TL-LR10	TL-LR10		Adjustable wrench



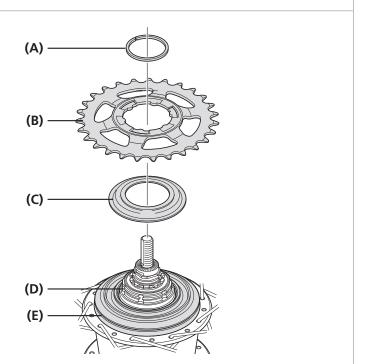
# **INSTALLATION**

# ■ Installation of the sprocket to the hub

Install right-hand dust cap C to the driver in the orientation shown in the illustration.

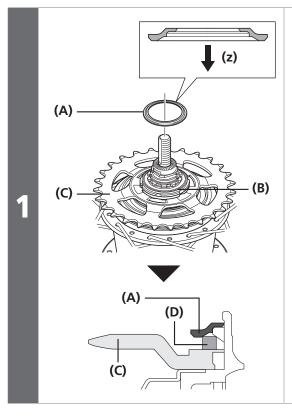
Next, install the sprocket and secure it in place with the snap ring.

Considientions	Applicable sprockets			
Specifications	Outward assembling	Inward assembling		
INTER-5E	24T, 27T, 30T	24T, 27T, 30T		



- (A) Snap ring
- **(B)** Sprocket
- (C) Right-hand dust cap C
- (D) Driver
- (E) Right-hand dust cap A

# ■ Installation of the cassette joint to the hub



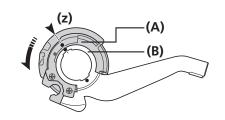
Install the driver cap to the driver as shown in the illustration.

Note the orientation of the driver cap.

(z) Driver side

- (A) Driver cap
- (B) Driver
- (C) Sprocket
- **(D)** Snap ring

2



Turn the cassette joint pulley in the direction of the arrow to align the red ● marks on the pulley and the bracket.

(z) Should be aligned

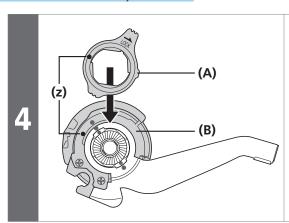
(A) Pulley

(B) Bracket

(A)
(Z)
(Z)
(Z)

Install it with the red ● marks (z) on the cassette joint aligned with the red ● marks (z) on the right side of the hub body.

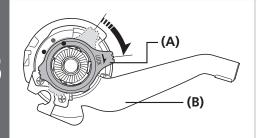
(A) Cassette joint



Secure the cassette joint to the hub with the cassette joint mounting ring.

When installing the cassette joint mounting ring, align the yellow ● mark (z) with the yellow ● mark (z) on the pulley of the cassette joint.

- (A) Cassette joint mounting ring
- (B) Pulley

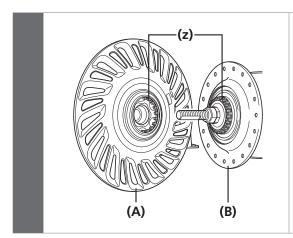


Turn the cassette joint mounting ring 45° clockwise.

Hold down the bracket securely when performing work.

- (A) Cassette joint mounting ring
- (B) Bracket

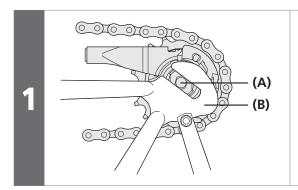
# ■ Installing the INTER M brake to the hub body



Engage the hub body splines (z) with the INTER M brake splines (z), then temporarily tighten with the brake unit fixing nut.

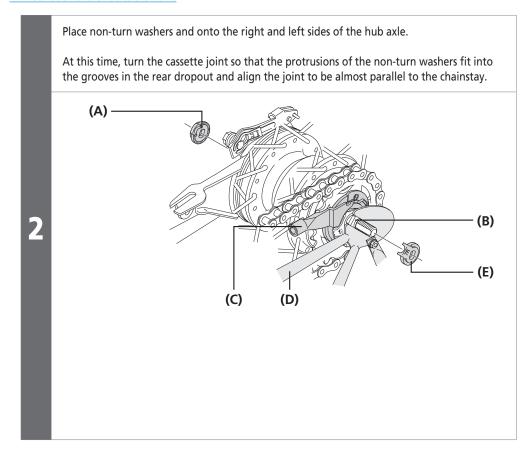
- (A) INTER M brake
- (B) Hub body

# ■ Installation of the hub to the frame



Mount the chain on the sprocket, and then set the hub axle into the rear dropout.

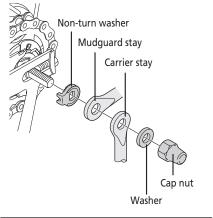
- (A) Hub axle
- **(B)** Rear dropout



- (A) Non-turn washer (for left-side use)
- **(B)** Rear dropout groove
- **(C)** Cassette joint
- (D) Chainstay
- **(E)** Non-turn washer (for right-side use)

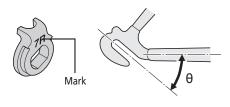
#### **NOTICE**

When installing parts such as a mudguard stay to the hub axle, install them in the order shown in the illustration below.





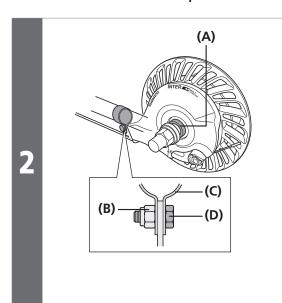
- The protrusion should be on the rear dropout side.
- Install the non-turn washer so that the protrusion fits securely in the rear dropout groove at the front and back sides of the hub axle.
- Use a non-turn washer that matches the shape of the rear dropout. Different non-turn washers are used for the left and right sides.



	Non-turn washer					
Rear dropout	Mark .	Size				
	For right	For left	Size			
Standard	5R/Yellow	5L/Brown	θ ≤20°			
Standard	7R/Black	7L/Gray	20°≤ ⊖ ≤38°			
Reversed	6R/Silver	6L/White	⊖ =0°			
Reversed (Full chain case)	5R/Yellow	5L/Brown	Θ =0°			
Vertical	8R/Blue	8L/Green	⊖ =60° - 90°			

**Note:** Vertical type does not include the coaster specifications

### In the case of INTER M brake specifications



Attach the brake arm of the INTER M brake to the chainstay with the brake arm clip.

Next, temporarily fix the clip bolt and clip nut by lightly tightening them.

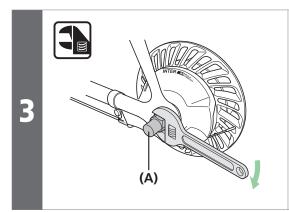
- (A) Brake fixing washer (insert manually)
- (B) Clip nut
- (C) Arm clip
- **(D)** Clip bolt (M6  $\times$  16 mm)

#### **NOTICE**

Check that the brake unit is firmly secured to the hub with the brake unit fixing washer.



If the hub nuts are cap nuts, use a frame with rear dropout that are at least 7 mm thick.



Take up slack in the chain and secure the wheel to the frame with the cap nut.

(A) Hub nut

### Tightening torque



30 - 45 N·m

## NOTICE

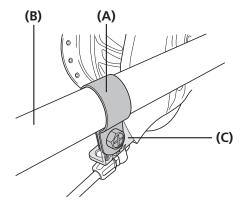
Check that the wheel is fixed securely to the frame with the hub nut.

Fix the brake arm securely to the chainstay with the arm clip.

Check that the brake arm is securely fastened to the chainstay with the brake arm clip.



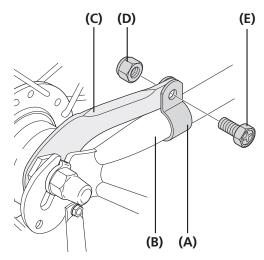




In the case of coaster brake specifications







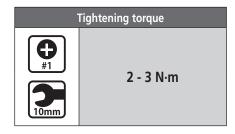
(A) Arm clip

(B) Chainstay

(C) Brake arm

(D) Clip nut

**(E)** Clip bolt (M6  $\times$  16 mm)

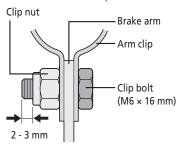


# **MARNING**

- When securing the brake arm to the frame, be sure to use a brake arm clip that matches the size of the chainstay, and securely tighten them with the clip bolt and clip nut to the specified tightening torque.
- Use a lock nut with a nylon insert (self-locking nut) as the clip nut.
- It is recommended that Shimano made clip bolts, clip nuts, and arm clips be used.
- If the clip nut comes off the brake arm, or if the clip bolt or arm clip becomes damaged, the brake arm may rotate on the chainstay and cause the handlebars to jerk suddenly, or the bicycle wheel may lock and result in serious injury due to a fall or collision.

### NOTICE

- If it is not installed correctly, braking performance will suffer. Be careful not to apply excessive force when installing.
- If excessive force is applied to the brake arm to secure it, the wheel will make noise and become difficult to turn.
- After installing the arm clip, check that the clip bolt protrudes about 2 to 3 mm from the end face of the clip nut.



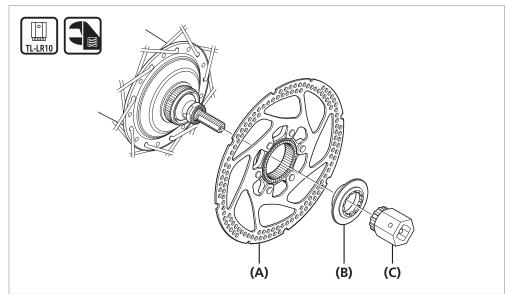
 Before using the Coaster Brake, check that the brake works properly and that the wheel turns smoothly.

4

# INSTALLATION

- Installation of the disc brake rotor
- Installation of the disc brake rotor

# Center lock type

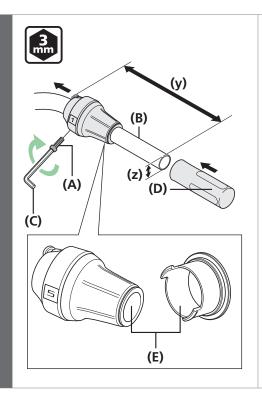


- (A) Disc brake rotor
- **(B)** Disc brake rotor fixing lock ring
- **(C)** TL-LR10



## Installation of the lever

Install the lever as shown in the illustration.



Attach the grip spacer to the lever and pass it through the handlebar.
Attach the half grip.

Tighten the fixing bolt with a 3 mm hexagon wrench.

- **(y)** 166 mm or more
- (z) Ø22.2 mm

- (A) Fixing bolt
- (B) Handlebar
- (C) 3 mm hexagon wrench
- (D) Half grip
- **(E)** Grip spacer

# Tightening torque



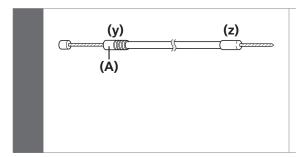
2 - 2.5 N·m



- If using Shimano half grip, the straight section of the handlebar should be 166 mm or longer.
  - Attach the REVOSHIFT lever to this straight section.
- Leave a gap of 0.5 mm between the REVOSHIFT lever and the half grip.

# ■ Installation of the shifting cable

For information on how to replace the inner cable, refer to the maintenance section.



Use a shifting cable with one inner cable drum.

Shifting cable with one inner cable drum:

OT-SP41

- (y) Shift lever side
- (z) Cassette joint side

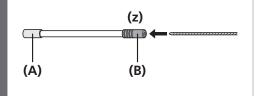
(A) Sealed outer cap

#### **NOTICE**

Make sure that the sealed outer cap is at the shift lever end.

# ■ Installing to the cassette joint

# For CJ-C7000-5



Pass the inner cable through the OT-SP41 outer casing to the end with the plastic cap.

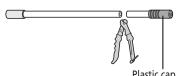
(z) Lever side

- (A) Aluminum cap
- (B) Plastic cap

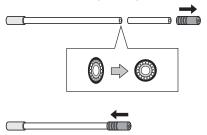


#### Cutting the outer casing

If cutting the outer casing, cut it near the end with the plastic cap while the cap is still attached.

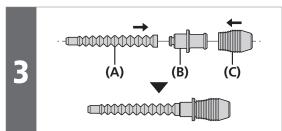


After cutting, make the cut end perfectly round and attach the plastic cap.



2 (A) Set SL-C7000-5 to 5.

(A) REVOSHIFT lever



If rubber bellows and a rubber cover are attached, install the rubber cover and rubber bellows to the outer casing holder body.

- (A) Rubber bellows
- **(B)** Outer casing holder body
- (C) Rubber cover

Wipe off any grease on the inner cable.

#### **NOTICE**

Use a new inner cable; do not use a cable which has had its end cut off.





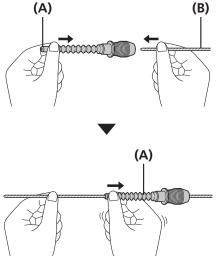
(A) (B)

Pass the inner cable through the outer casing holder body.

(A) Outer casing holder body

(B) Inner cable

Rubber bellows and rubber cover attached



If rubber bellows and a rubber cover are attached, hold the end of the rubber bellows and insert the inner cable. Slide and set the rubber bellows.

(A) Rubber bellows

(B) Inner cable

#### **NOTICE**

Be careful not to pierce the rubber bellows with the end of the inner cable at this time.

(A) (B) (C) Set the outer casing to the outer casing holder body.

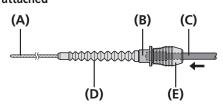
Push the outer casing so that it securely touches the outer casing holder body.

(A) Inner cable

**(B)** Outer casing holder body

(C) Outer casing

Rubber bellows and rubber cover attached

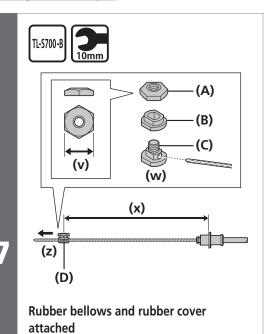


If rubber bellows and a rubber cover are attached, insert the outer casing into the rubber cover and set it into the outer casing holder body.

Push the outer casing so that it securely touches the outer casing holder body.

- (A) Inner cable
- **(B)** Outer casing holder body
- (C) Outer casing
- (D) Rubber bellows
- (E) Rubber cover

6



(x)

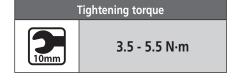
(D)

**(**y)

After checking that the end of the outer casing is securely set in the cable adjustment barrel of the shift lever, attach the inner cable mounting bolt unit to the inner cable.

- **(v)** 10 mm
- (w) Pass the inner cable through the hole
- (x) 145 mm
- **(y)** 63 mm or less
- (z) Pull the inner cable when securing

- (A) Inner cable mounting nut (Black)
- **(B)** Inner cable mounting washer (Black)
- (C) Inner cable mounting bolt (Black)
- **(D)** Inner cable mounting bolt unit



#### **NOTICE**

Use this inner mounting bolt unit as shown below.

Can be used: CJ-S700 / CJ-C7000-8 /

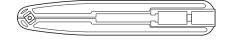
CJ-C7000-5

Cannot be used: CJ-NX10 / CJ-NX40 / CJ-8S20 /

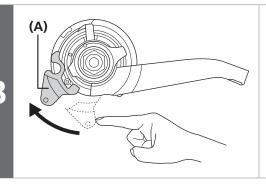
CJ-8S40



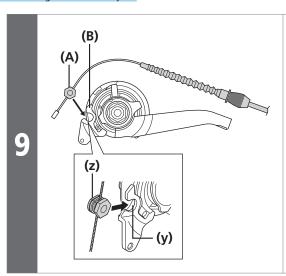
When installing the inner cable fixing bolt unit, use the setting tool TL-S700-B.



(A) Pulley lever

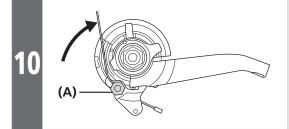


Turn the lever of the pulley clockwise. In the following steps 9 to 11, continue to work in this condition.



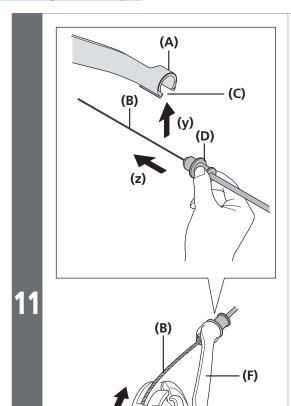
Bring the cable around to the cassette joint pulley, hold it so that the inner cable fixing nut is facing to the outside (toward the rear dropout), and then slide the flats part (y) of the inner cable fixing washer into the gap (z) in the pulley.

- (A) Inner cable fixing nut
- (B) Pulley



Turn the cable  $60^{\circ}$  counterclockwise and attach it to the hook.

(A) Hook

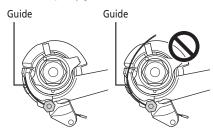


Set the inner cable in the pulley as shown in the figure, insert the inner cable into the slit in the cassette joint bracket (y), then securely set the outer casing holder body into the outer casing holder section of the cassette joint (z).

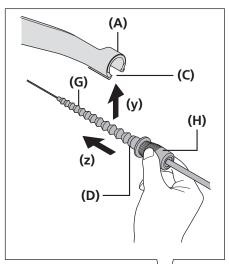
- (A) Outer casing holder section
- **(B)** Inner cable
- (C) Slit
- **(D)** Outer casing holder unit
- **(E)** Pulley
- (F) Bracket

### **NOTICE**

Check that the inner cable is correctly seated inside the pulley guide.



# Rubber bellows and rubber cover attached



(B)

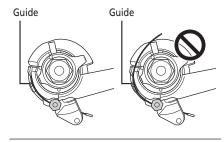
(F)

Set the inner cable in the pulley as shown in the figure and, while holding the rubber cover, insert the rubber bellows of the inner cable into the slit in the cassette joint bracket (y) and securely set the outer casing holder into the outer casing holder section of the cassette joint (z). Be careful not to damage the rubber bellows at this time.

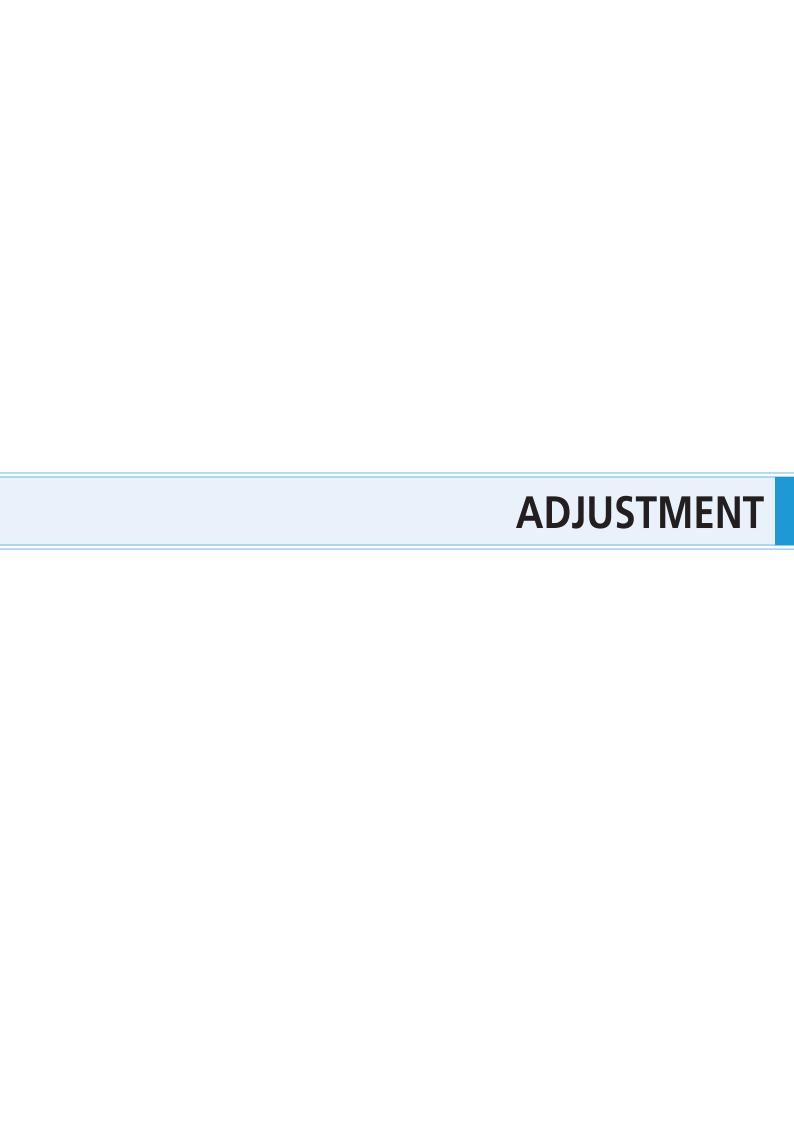
- (A) Outer casing holder section
- **(B)** Inner cable
- (C) Slit
- (D) Outer casing holder
- **(E)** Pulley
- **(F)** Bracket
- (G) Rubber bellows
- (H) Rubber cover

## NOTICE

Check that the inner cable is correctly seated inside the pulley guide.

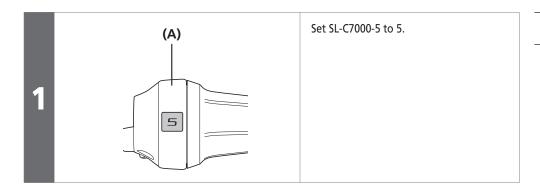


11

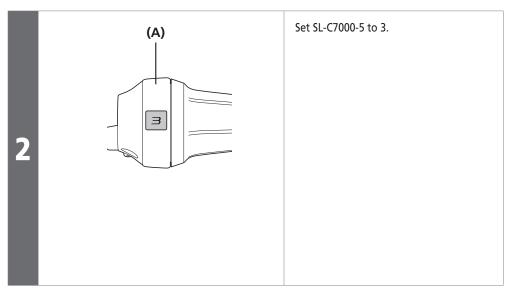


# **ADJUSTMENT**

# ■ Adjusting the cassette joint



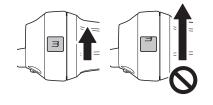
(A) REVOSHIFT lever

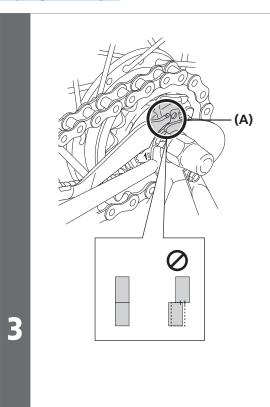


(A) REVOSHIFT lever

## NOTICE

When setting, do so gradually and with minimal force so as to avoid over-shifting. If you over-shift, the setting line will not return to the proper position, and the setting lines may not be aligned at the correct position. (Refer to procedure 3)





Check that the yellow setting lines on the cassette joint bracket and pulley are aligned with each other. (A) Yellow setting lines

## NOTICE

If the overlapping area falls short of two thirds of each setting line, the gears may not be properly engaged during pedaling, resulting in abnormal noise or free spinning of the pedals.

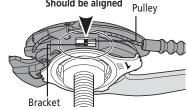




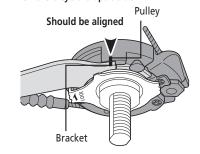


The yellow setting lines on the cassette joint are located in two places. Use the one that is easiest to see.

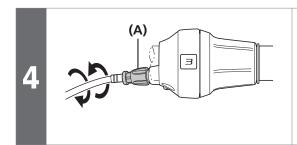
When the bicycle is upright Should be aligned



When the bicycle is upside down



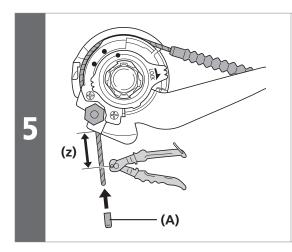
## If the yellow setting lines are not aligned



Turn the cable adjustment barrel of the REVOSHIFT lever to align the setting lines.

Move the REVOSHIFT lever once more from 3 to 5 and then back to 3, and then re-check to be sure that the yellow setting lines are aligned.

(A) Cable adjustment barrel

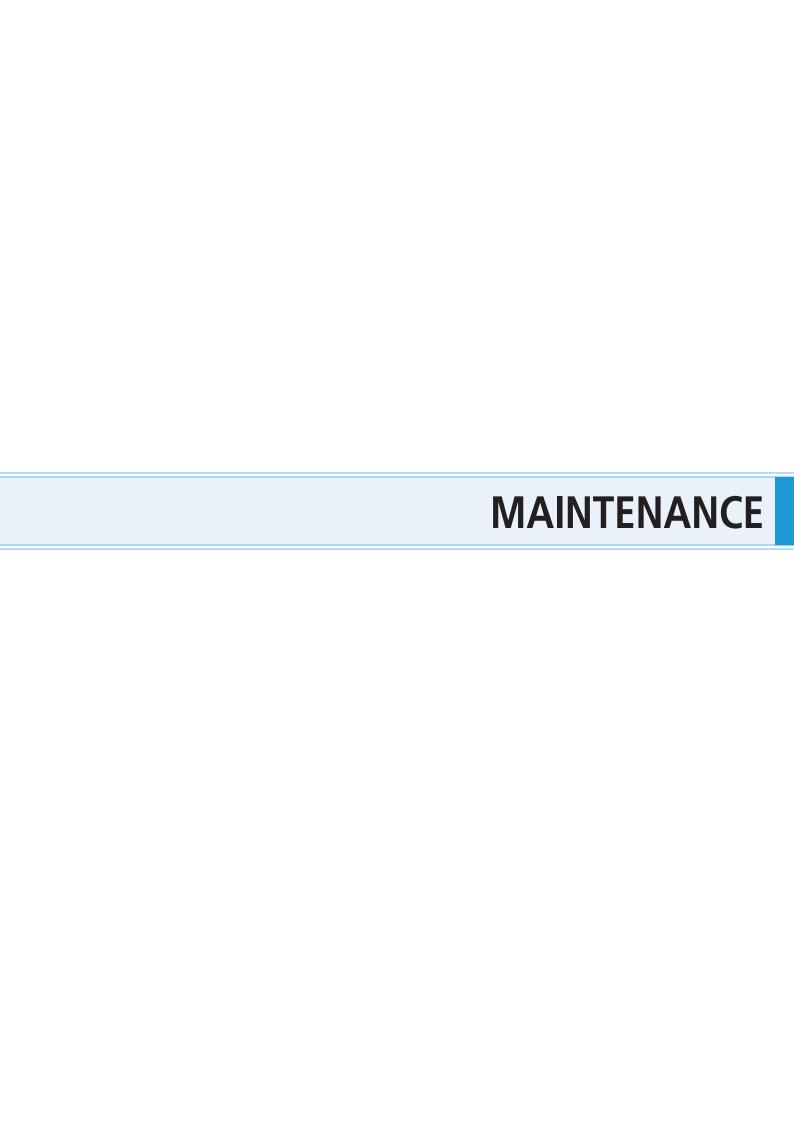


After adjusting the cassette joint, cut off the excess length of inner cable.

Next, install the inner end cap.

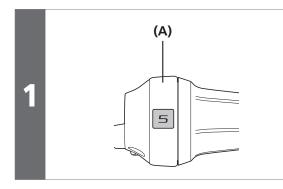
**(z)** 15 - 20 mm

(A) Inner end cap



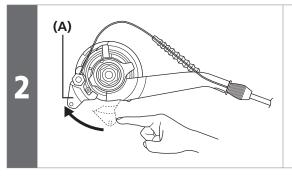
# **MAINTENANCE**

# ■ Disconnecting the shifting cable when removing the rear wheel from the frame



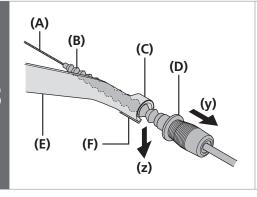
Set SL-C7000-5 to 5.

(A) REVOSHIFT lever



Press the lever of the pulley clockwise to loosen the inner cable. In the following steps 3 and 4, continue to work in this condition.

(A) Pulley lever



Remove the outer casing holder from the outer casing holder section of the cassette joint (y).

Remove the inner cable from the slit in the bracket (z). Be careful not to damage the rubber bellows at this time if they are attached. (A) Inner cable

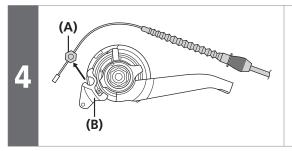
**(B)** Rubber bellows

**(C)** Outer casing holder section

**(D)** Outer casing holder

(E) Bracket

(F) Slit



Remove the inner cable fixing bolt unit from the cassette joint pulley.

(A) Inner cable fixing bolt unit

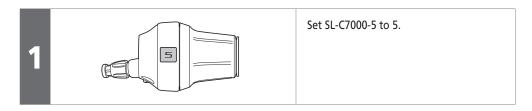
**(B)** Cassette joint pulley

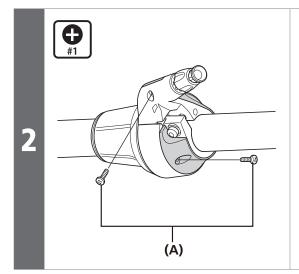
## **NOTICE**

If reinstalling the cable, refer to steps 9 to 12 in "Cassette joint end".

Detach the wheel.

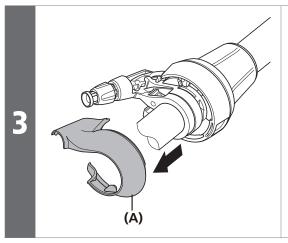
# ■ Replacing the inner cable





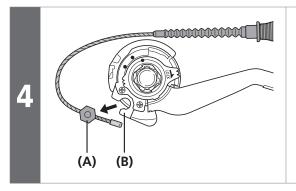
Loosen the cover fixing screw.

(A) Cover fixing screw



Remove the cover.

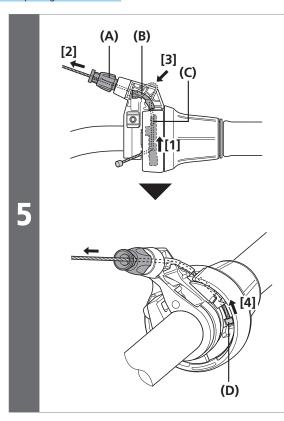
(A) Cover



Remove the inner cable mounting bolt unit from the cassette joint pulley.

- (A) Inner cable mounting bolt unit
- **(B)** Cassette joint pulley

### Replacing the inner cable

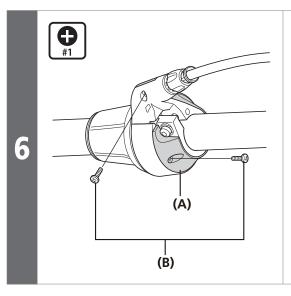


Pass the inner cable from the hole in the winder unit through the hole in the cable adjustment barrel.

Next, insert the inner cable into the groove of the cable guide.

Next, pull the inner cable so that the inner cable drum fits into the recess in the winder unit.

- (A) Hole in cable adjustment barrel
- **(B)** Groove of cable guide
- **(C)** Hole in winder unit
- (D) Recess in winder unit



Replace the cover and tighten the cover fixing screws.

(A) Cover

**(B)** Cover fixing screw

Tightening torque

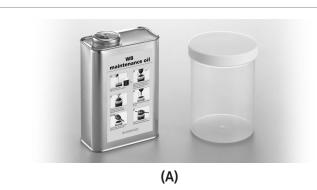


0.1 - 0.25 N·m

# Oil maintenance of the internal assembly

In order to maintain proper performance, it is recommended that you lubricate the internal unit after riding 1,000 km from the start of use, then after about once every year (or once about every 2,000 km if the bicycle is used very frequently). If the bicycle is used under harsh conditions, more frequent maintenance is required. Also, for carrying out maintenance, the use of SHIMANO internal geared hub grease or a lubrication kit is recommended. If SHIMANO grease or a SHIMANO lubrication kit is not used, problems such as a malfunction in shifting unit may occur.

(A) WB maintenance oil set (Y00298010)





Fill the container with maintenance oil to a height of 95 mm.

(z) 95 mm



Immerse the internal unit in the oil from the left side until the oil reaches up to ring gear unit 1, as shown in the illustration.

(z) Ring gear unit 1





Keep the internal unit immersed for approximately 90 seconds.

## MAINTENANCE

### Oil maintenance of the internal assembly



Remove the internal unit from the oil.

5



Let excess oil drain off for approximately 60 seconds.

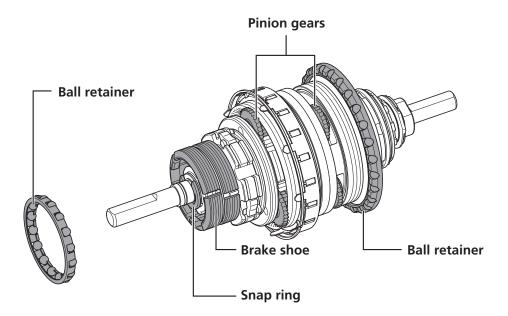
6



Reassemble the hub.

## **NOTICE**

After oil maintenance, it is recommended that you apply Grease (Y04130100) to the ball retainers, snap ring, brake shoe, and pinion gears.



The illustration shows an example.



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