

Dealer's Manual

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



INTER-8

- SG-C6001
- SG-C6011
- SB-C6000-8
- SL-C6000

INTER-7

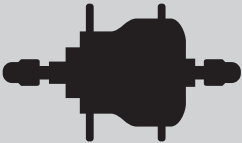


- SG-C3001
- SB-C3000-7
- SL-C3000

CONTENTS

MODELS COVERED BY THIS DEALER'S MANUAL.....	3
IMPORTANT NOTICE.....	4
TO ENSURE SAFETY.....	5
LIST OF TOOLS TO BE USED.....	11
INSTALLATION	13
Installation of the sprocket to the hub.....	13
Installation of the cassette joint to the hub	14
Installing the INTER M brake to the hub body.....	16
Installation of the hub to the frame.....	16
Installation of the disc brake rotor	20
Installation of the lever	23
Installation of the shifting cable	25
Installing to the cassette joint.....	26
ADJUSTMENT	36
Adjusting the cassette joint.....	36
MAINTENANCE	40
Disconnecting the shifting cable when removing the rear wheel from the frame	40
Replacing the inner cable	44
Oil maintenance of the internal assembly.....	46

MODELS COVERED BY THIS DEALER'S MANUAL

This Dealer's Manual is for the following models.

Part/Series		INTER-8	INTER-7
Internal geared hub 	Coaster brake + Disc brake	SG-C6001-8CD	-
	Disc brake	SG-C6001-8D	SG-C3001-7D
	Coaster brake	SG-C6001-8C	SG-C3001-7C SG-C3001-7C-DX
	INTER M brake	SG-C6001-8R SG-C6011-8R	SG-C3001-7R
	V-BRAKE	SG-C6001-8V SG-C6011-8V	SG-C3000-7V
Shifter 	REVOSHIFT shifter	SB-C6000-8	SB-C3000-7
Shifter 		SL-C6000	SL-C3000

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

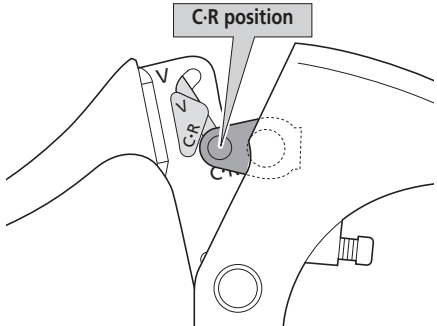
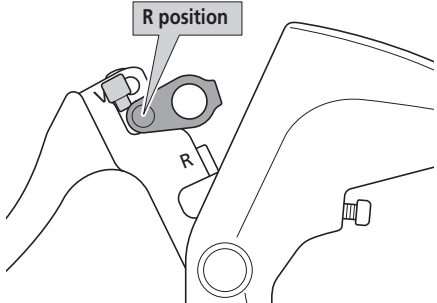
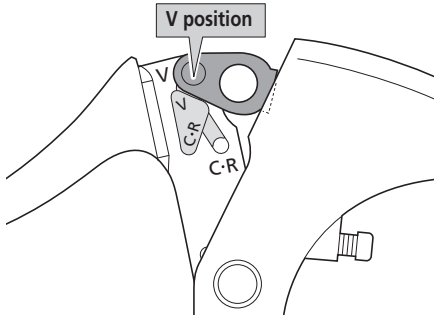
WARNING

- **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.

- Use brake levers with mode switching mechanism in the combinations shown in the figures. The brake levers are equipped with a mode switching mechanism which can be used to make them compatible with cantilever brakes, roller brakes or V-BRAKE brakes with power modulator. (SB-C6000-8 / SB-C3000-7 is compatible with roller brakes or V-BRAKE brakes with power modulator. Note that SB-C6000-8 / SB-C3000-7 is not compatible with cantilever brakes.) If the incorrect mode is selected, it may result in either excessive or insufficient braking force, which is highly dangerous. Select the correct mode as shown in the figures.

Mode position		Applicable brake caliper
<p>C : Mode position for compatibility with cantilever brakes R : Mode position for compatibility with roller brakes</p>		<ul style="list-style-type: none"> • Cantilever brakes • Roller brakes
<p>For SB-C6000-8 / SB-C3000-7 R : Mode position for compatibility with roller brakes</p>		<ul style="list-style-type: none"> • Roller brakes
<p>V : Mode position for compatibility with V-BRAKE brakes with power modulator</p>		<ul style="list-style-type: none"> • V-BRAKE brakes with power modulator

- Check that the wheels are fastened securely before riding the bicycle. You may fall or collide and be seriously injured.

For Installation to the Bicycle, and Maintenance:

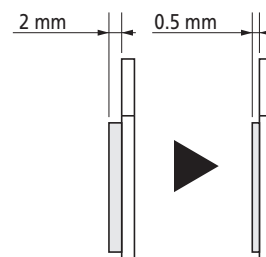
- When securing the brake arm to the frame, be sure to use an arm clip that matches the size of the chainstay, and securely tighten them with the clip bolt and clip nut to the specified tightening torque.
Use a lock nut with nylon insert (self-locking nut) as the clip nut. It is recommended that SHIMANO 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 gear 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.

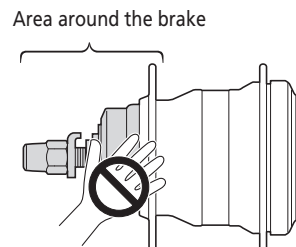
■ Coaster brake hub

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

CAUTION

Be sure to also inform users of the following:

- Be sure to shift the shifter one gear at a time. During shifting, reduce the force being applied to the pedals. If you try to force operation of the shifter or suddenly 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. Operating the shifter to multi-shift to a light gear may also cause the outer casing to spring out of the shifter. This does not affect the capabilities of the shifter because the outer casing returns to the original position after shifting.
- 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.



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.
- Perform the bed-in procedure and check that the braking force of the coaster brake is correct.

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.

Phenomenon	Type of hub		Gear positions where phenomenon might occur
	For coaster brakes	For roller brakes / V-BRAKE	
Noise occurs when the pedals rotate.	x	7-speed hub	All gear positions except 1st
Noise occurs when the bicycle is pushed backward.	x	8-speed hub	5th, 6th, 7th, 8th
The hub has a built-in mechanism that supports gear shifting and when the mechanism operates during gear shifting, noise and vibrations occur.	x	8-speed hub	All gear positions
Depending on gear position, gear-shifting may feel different.	x	8-speed hub, 7-speed hub	All gear positions
Noise occurs when pedal rotation is stopped during riding.	x	7-speed hub	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:

- The cassette joint should only be used with sprockets with 16 to 23T.
- The gear ratio of the front chainring to the rear is about 2.1-to-1.

Example) For 26 inch wheels

Front	36T	38T	46T
Rear	16T	18T	22T

- 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, it is recommended to use SHIMANO internal geared hub grease or a lubrication kit for the maintenance. If SHIMANO grease or a SHIMANO lubrication kit is not used, problems such as a malfunction in the shifting unit may occur.
- If the wheel becomes stiff and difficult to turn, perform an inspection.
- The chainrings and sprockets 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 chainrings, sprockets, and the chain.
- If the chain keeps coming off the gears during use, replace the chainrings, sprockets, and the chain.

■ Coaster brake specifications










- Use a wheel with 3x or 4x spoke 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.

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		Tool	
	2 mm hexagon wrench		10 mm spanner		Hexalobular[#25]
	3 mm hexagon wrench		Cross head screwdriver[#1]		Adjustable wrench
	5 mm hexagon wrench		TL-LR10		TL-CJ40 (Y70898020)

INSTALLATION

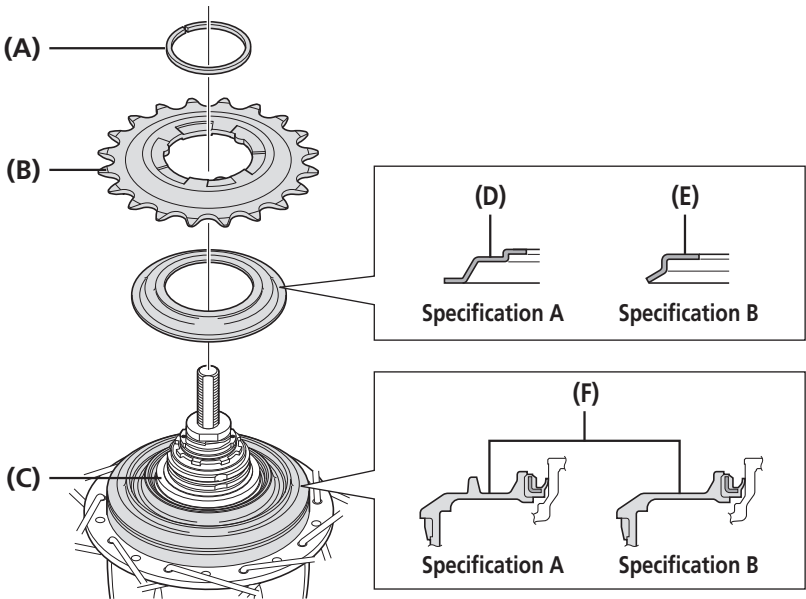
INSTALLATION

Installation of the sprocket to the hub

Place the right-hand dust cap B/right-hand dust cap C onto the driver on the right side of the hub body.

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

Specifications	Applicable sprockets	
	Outward assembling	Inward assembling
A	16-23T	20-23T
B	16-23T	



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

NOTICE

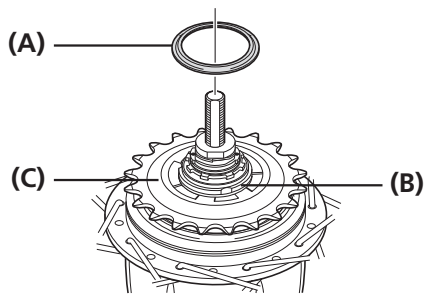
Note the orientation of the right-hand dust cap.

Specification A
If the sprocket is an inward assembling sprocket with 19T or fewer or for belt drive specifications, right-hand dust cap A will come into contact with the chain or pulley so specification B should be used instead.

Specification B
If the sprocket is an inward assembling sprocket with 16T and 3 mm teeth or for belt drive specifications, remove right-hand dust cap B before use.

Installation of the cassette joint to the hub

1

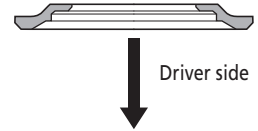


Install the driver cap to the driver on the right side of the hub body.

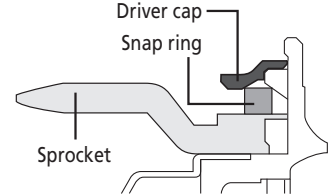
- (A) Driver cap
- (B) Driver
- (C) Sprocket

NOTICE

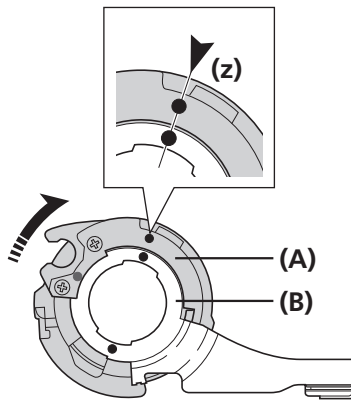
Note the orientation of the driver cap.



Install the driver cap in the position shown in the illustration.



2

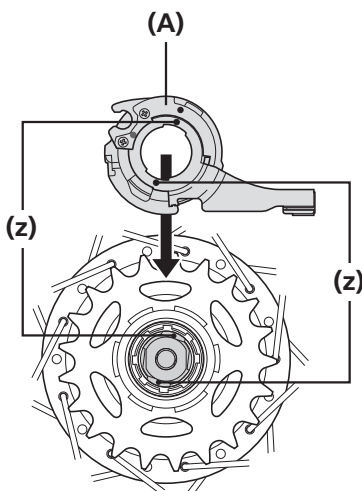


Turn the cassette joint pulley in the direction of the arrow to align the red ● marks on the pulley and the bracket.

(z) Should be aligned

- (A) Pulley
- (B) Bracket

3



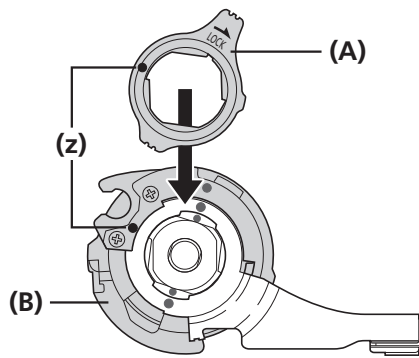
Install it with the red ● marks (z) on the cassette joint aligned with the red ● (SG-C6001 / SG-C6011) or yellow ▲ (SG-C3001) marks (z) on the right side of the hub body.

- (A) Cassette joint

INSTALLATION

▶▶ Installation of the cassette joint to the hub

4



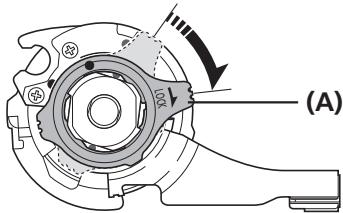
Secure the cassette joint to the hub with the cassette joint mounting ring.

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

5



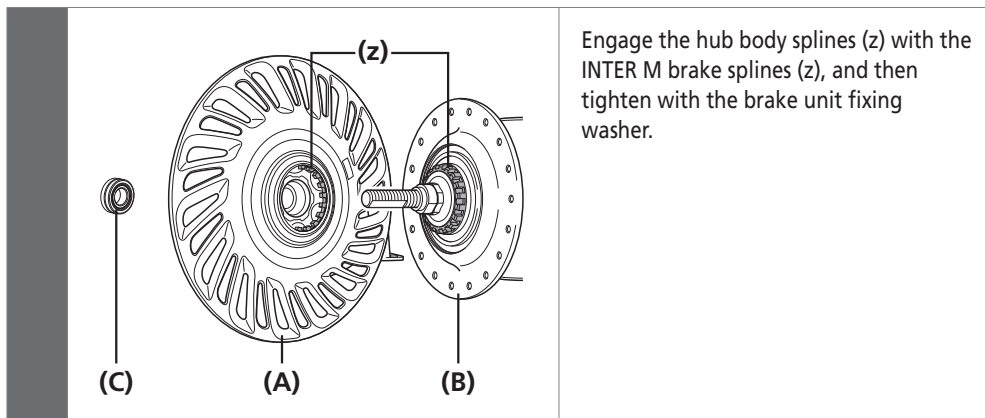
Turn the cassette joint mounting ring 45° clockwise.

(A) Cassette joint mounting ring

NOTICE

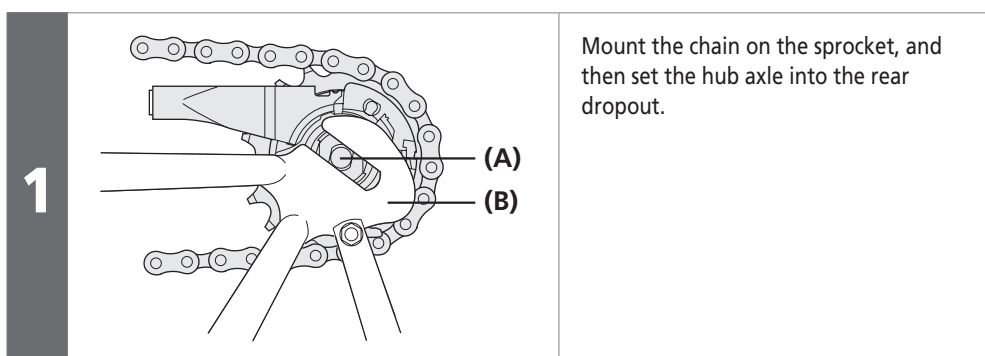
Hold down the cassette joint bracket securely when performing work.

■ Installing the INTER M brake to the hub body



- (A) INTER M brake
- (B) Hub body
- (C) Brake unit fixing washer

■ Installation of the hub to the frame

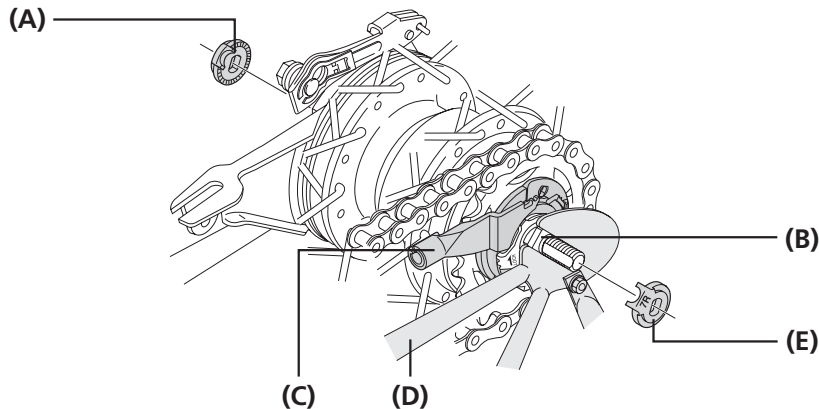


- (A) Hub axle
- (B) Rear dropout

2

Place non-turn washers and onto the right and left sides of the hub axle.

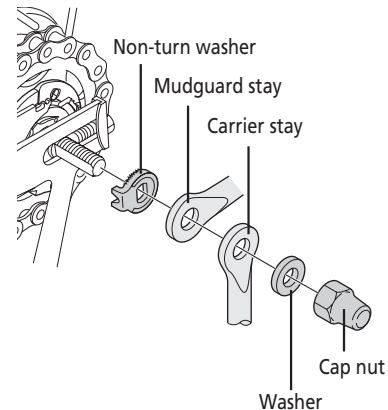
At this time, turn the cassette joint so that the protrusions of the non-turn washers fit into the grooves in the rear dropouts and align the joint to be almost parallel to the chainstay.



- (A) Non-turn washer (for left-side use)
- (B) Groove in rear dropout
- (C) Cassette joint
- (D) Chainstay
- (E) Non-turn washer (for right-side use)

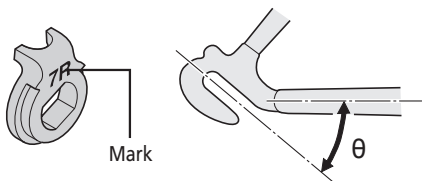
NOTICE

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



TECH TIPS

- 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.



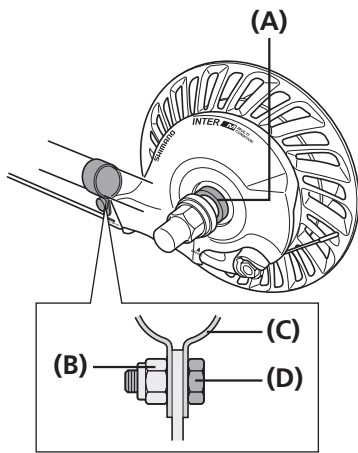
Rear dropout	Non-turn washer		
	Mark / Color		Size
	For right	For left	
Standard	5R / Yellow	5L / Brown	$\theta \leq 20^\circ$
	7R / Black	7L / Gray	$20^\circ \leq \theta \leq 38^\circ$
	9R / Light green	9L / Light brown	
Reversed	6R / Silver	6L / White	$\theta = 0^\circ$
Reversed (Full chain case)	5R / Yellow	5L / Brown	$\theta = 0^\circ$
Vertical	8R / Blue	8L / Green	$\theta = 60^\circ - 90^\circ$

Note: Vertical type does not include the coaster specifications



In the case of INTER M brake specifications

2



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 × 16 mm)

NOTICE

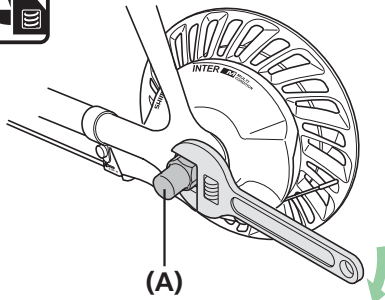
Check that the brake unit is firmly secured to the hub with the brake unit fixing washer.



TECH TIPS

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

3



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

- (A) Hub nut

Tightening torque



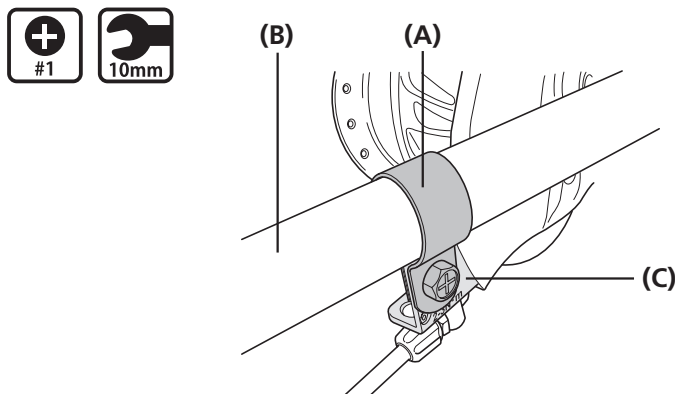
30 - 45 N·m

NOTICE

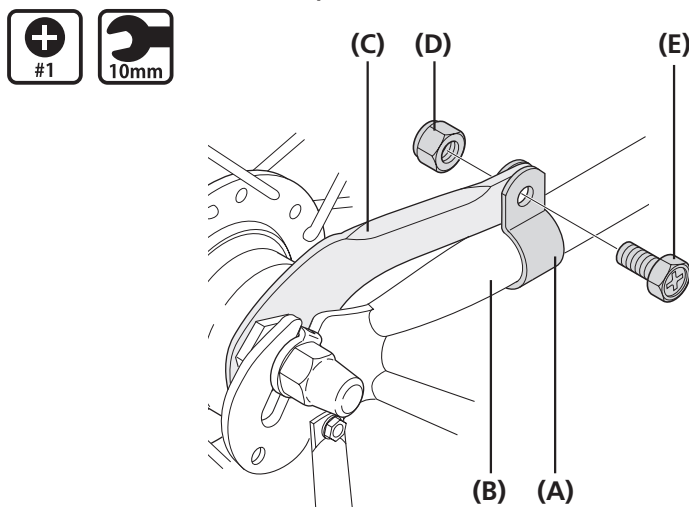
Check that the wheel is fixed securely to the frame with the hub nut.

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 x 16 mm)

Tightening torque



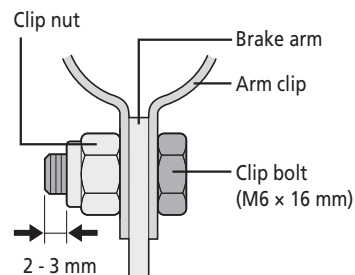
2 - 3 N·m

WARNING

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 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

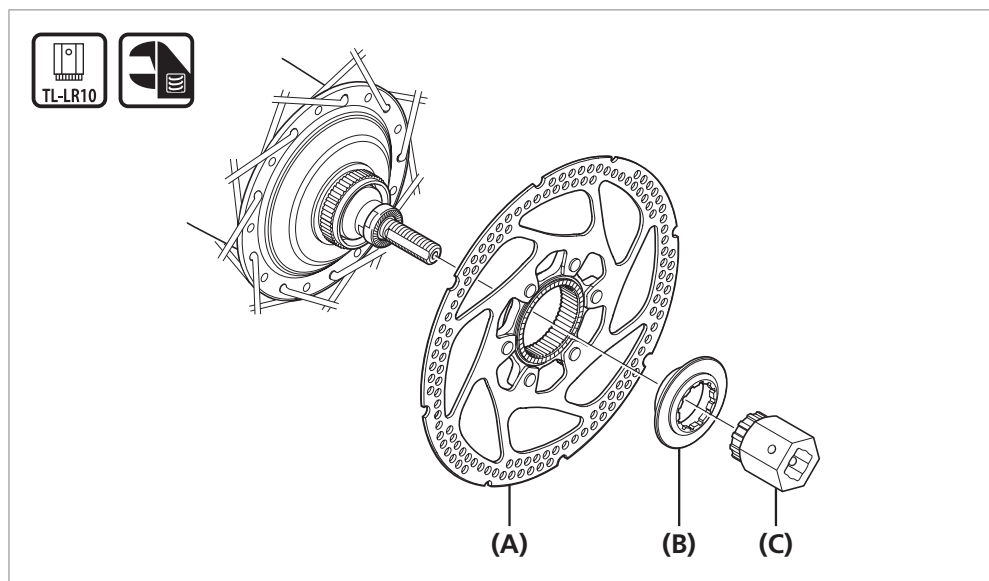
- If it is not installed correctly, braking performance will suffer. Be careful not to apply excessive force when installing.
- If excessive force is applied to the brake arm to secure it, the wheel will make noise and become difficult to turn.
- After installing the arm clip, check that the clip bolt 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.

■ Installation of the disc brake rotor

Center lock type

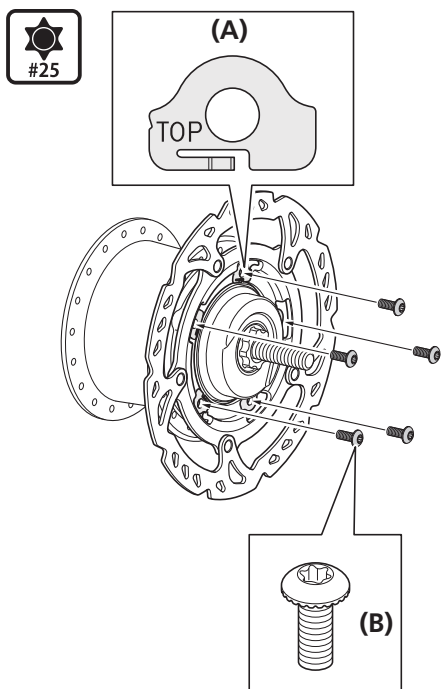


- (A)** Disc brake rotor
- (B)** Disc brake rotor fixing lock ring
- (C)** TL-LR10

Tightening torque	
 TL-LR10	40 N·m
	

5 bolt type (with lock washer)

1



Attach the disc brake rotor and the disc brake rotor lock washers to the hub, and then tighten them on with the bolts.

- (A) Lock washer
- (B) Disc brake rotor fixing bolt

Tightening torque

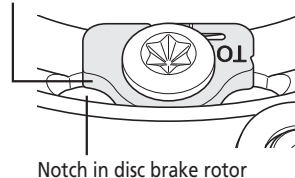


2 - 4 N·m

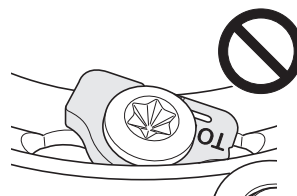
NOTICE

- Fit the lock washers so that the marking "TOP" is visible.
- Ensure that the hooked parts of the lock washer are securely caught on the notches in the disc brake rotor and then tighten on the lock washer with the disc brake rotor fixing bolt. If tightened while the hooked parts are against the surface of the disc brake rotor, the washer and its hooked parts will become deformed.

Hooked part of washer

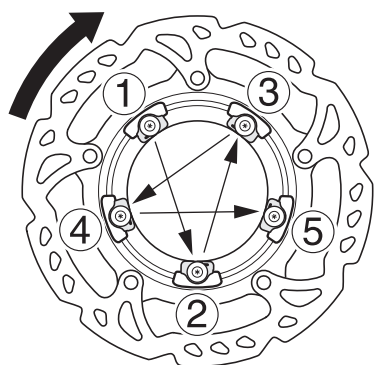


Notch in disc brake rotor



- The lock washers are not reusable. Always use new lock washers when installing/re-installing the disc brake rotor.
- Use the dedicated disc brake rotor fixing bolts.

2




Wear gloves and turn the disc brake rotor clockwise with some force.

At this time, tighten on the disc brake rotor fixing bolts in the order indicated in the illustration.

■ Installation of the lever


When equipped with mode switching mechanism

1



Use cross head screwdriver[#1] to loosen the screw.

2



Set the mode switch to the mode position for the brake installed.

TECH TIPS

For V-BRAKE brakes

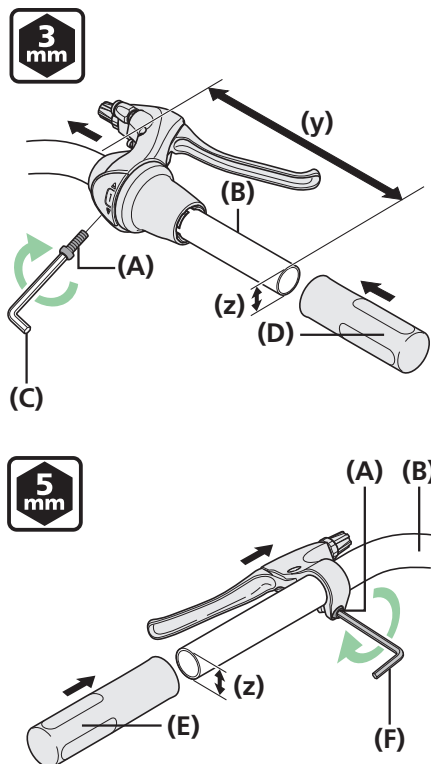


For caliper brakes/cantilever brakes/roller brakes



Installation of the lever

Install the lever as shown in the illustration.



Pass the lever over the handlebar and then attach the grip/half grip.

Tighten the fixing bolt with a 3 mm hexagon wrench or a 5 mm hexagon wrench.

(y) 166 mm or more

(z) Ø22.2 mm

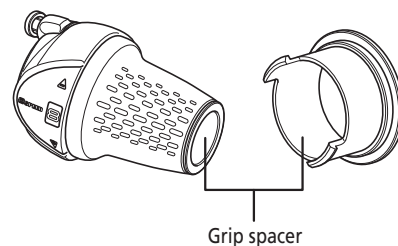
- (A) Fixing bolt
- (B) Handlebar
- (C) 3 mm hexagon wrench
- (D) Half grip
- (E) Grip
- (F) 5 mm hexagon wrench

Tightening torque

	2 - 2.5 N·m
	6 - 8 N·m

NOTICE

When using SL-C6000 / SL-C3000, make sure to install the handlebar with the grip spacer attached.

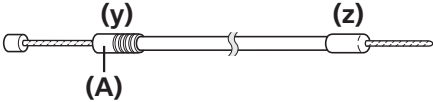


TECH TIPS

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

(z) Cassette joint side

(A) Sealed outer cap

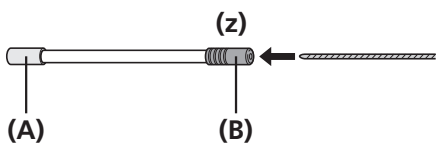
NOTICE

Make sure that the sealed outer cap is at the shifter end.

■ Installing to the cassette joint

CJ-NX10 / CJ-8S20

1



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

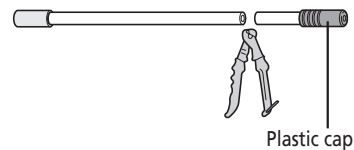
(z) Lever side

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

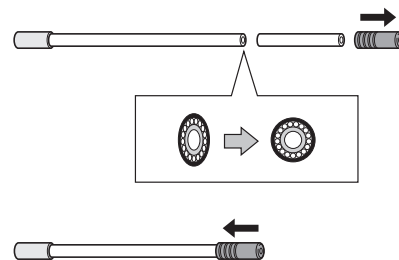


Cutting the outer casing

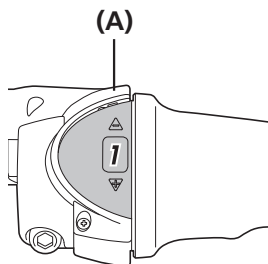
If cutting the outer casing, cut it near the end with the plastic cap while the cap is still attached.



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



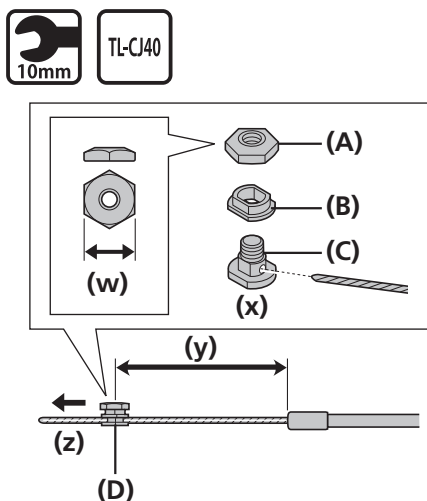
2



Set the REVOSHIFT shifter to 1.

- (A) REVOSHIFT shifter

3



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

- (w) 10 mm
- (x) Pass the inner cable through the hole.
- (y) 101 mm
- (z) Pull the inner cable when securing.

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

Tightening torque



3.5 - 5.5 N·m

NOTICE

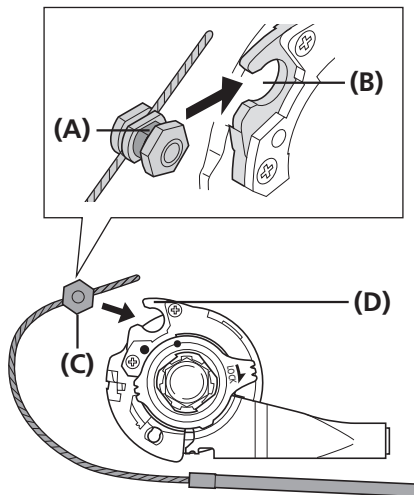
- This inner cable mounting bolt unit is designed only for CJ-NX10, CJ-NX40, CJ-8S20, and CJ-8S40. 11-speed mounting bolt units cannot be used.
- The tool is shipped ready to be used for CJ-NX10 and CJ-8S20.
- When installing the inner cable mounting bolt unit, use the setting tool TL-CJ40 (Y70898020).
- For CJ-NX10 and CJ-8S20, use the front side of TL-CJ40.

Front side of TL-CJ40



Nut fitting

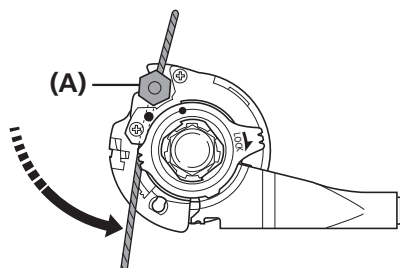
4



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

- (A) Flats part of inner cable fixing washer
- (B) Gap in pulley
- (C) Inner cable fixing nut
- (D) Pulley

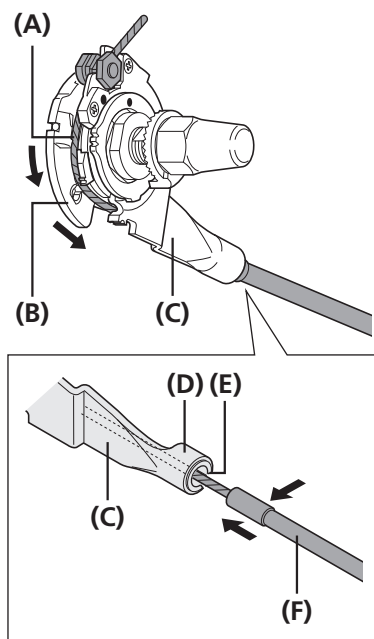
5



Turn the cable 60° counterclockwise and attach it to the hook.

- (A) Hook

6

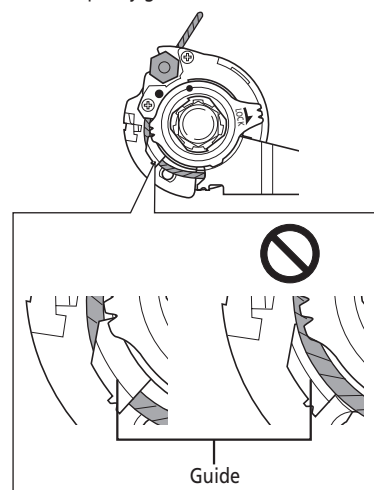


Attach the inner cable to the pulley as shown in the figure, pass the inner cable through the slit in the cassette joint bracket, then insert the end of the outer casing securely into the outer casing holder section.

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

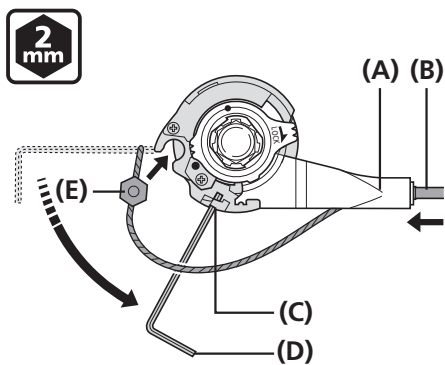
NOTICE

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



When inserting outer casing into outer casing holder section first

6



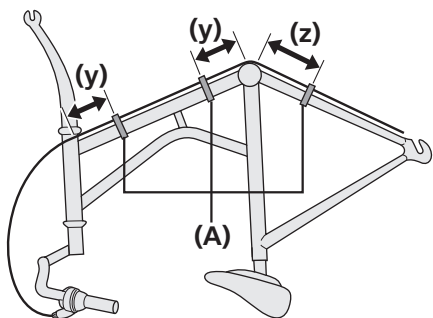
Insert the outer casing into the outer casing holder section.

Insert a 2 mm hexagon wrench or a #14 spoke into the hole in the pulley, and then turn the pulley.

Fit the inner cable mounting bolt unit into the gap in the pulley.

- (A) Outer casing holder section
- (B) Outer casing
- (C) Hole in pulley
- (D) 2 mm hexagon wrench or #14 spoke
- (E) Inner cable mounting bolt unit

7



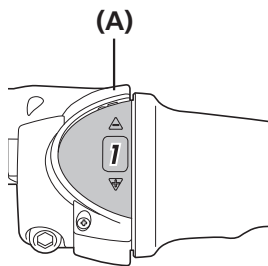
Secure the cable to the frame with the outer casing bands.

- (y) 10 cm
- (z) 15 cm

- (A) Outer casing bands

CJ-NX40 / CJ-8S40

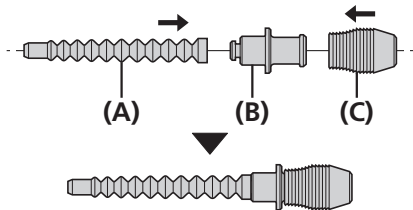
1



Set the REVOSHIFT shifter to 1.

(A) REVOSHIFT shifter

2



Install the rubber cover and rubber bellows to the outer casing holder body.

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

3

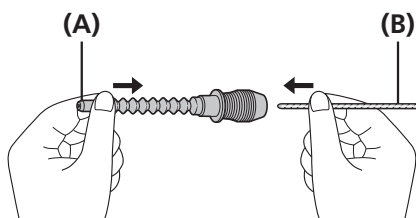
Wipe off any grease on the inner cable.

NOTICE

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



4



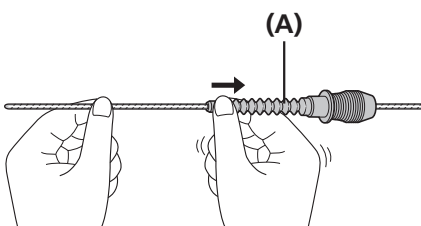
While holding the end of the rubber bellows, insert the inner cable.

(A) End of rubber bellows
(B) Inner cable

NOTICE

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

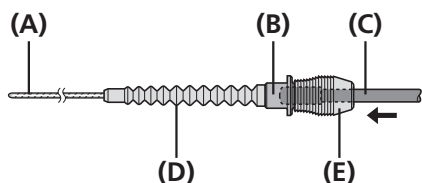
5



Slide the rubber bellows onto the inner cable.

(A) Rubber bellows

6

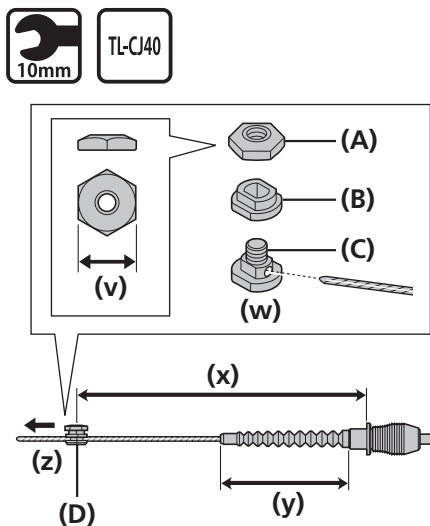


Insert the outer casing into the rubber cover and set it into the outer casing holder body.

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

7



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

- (v) 10 mm
- (w) Pass the inner cable through the hole
- (x) 127 mm
- (y) 63 mm or less
- (z) Pull the inner cable when securing

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

Tightening torque

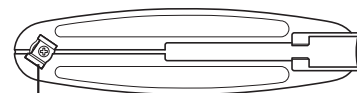


3.5 - 5.5 N·m

NOTICE

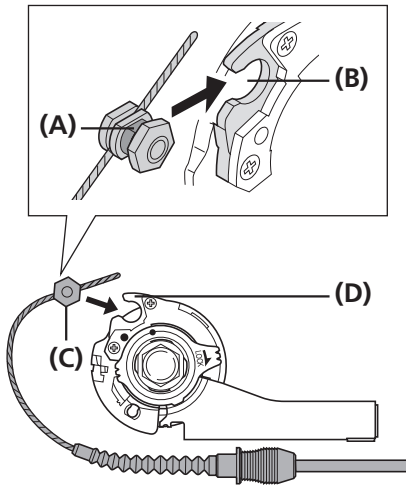
- This inner cable mounting bolt unit is designed only for CJ-NX10, CJ-NX40, CJ-8S20, and CJ-8S40. 11-speed mounting bolt units cannot be used.
- The tool is shipped ready to be used for CJ-NX10 and CJ-8S20.
- When installing the inner cable mounting bolt unit, use the setting tool TL-CJ40 (Y70898020).
- For CJ-NX40 and CJ-8S40, use the reverse side of TL-CJ40. Replace the nut fitting as shown in the illustration.

Reverse side of TL-CJ40



Nut fitting

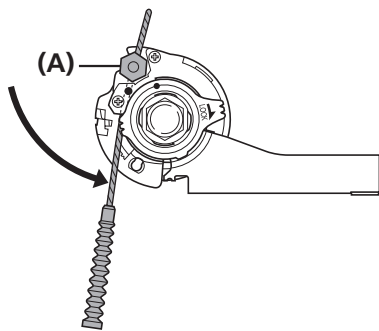
8



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

- (A) Flats part of inner cable fixing washer
- (B) Gap in pulley
- (C) Inner cable fixing nut
- (D) Pulley

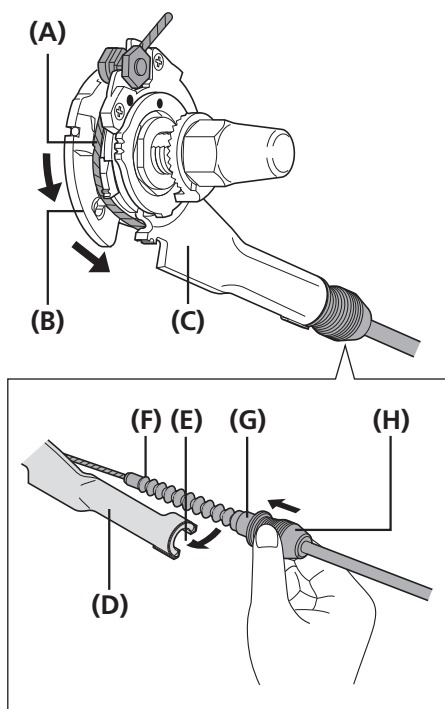
9



Turn the cable 60° counterclockwise and attach it to the hook.

- (A) Hook

10



Mount the inner cable into the pulley as shown in the illustration.

Holding the rubber cover, insert the rubber bellows part of the inner cable into the slit in the cassette joint bracket.

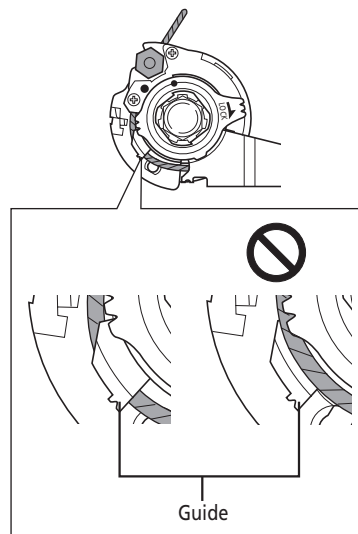
Next, insert the outer casing holder body securely into the outer casing holder section of the cassette joint.

Be careful not to damage the rubber bellows at this time.

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

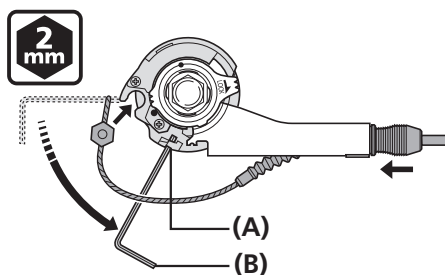
NOTICE

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



When inserting outer casing holder into outer casing holder section of cassette joint

10



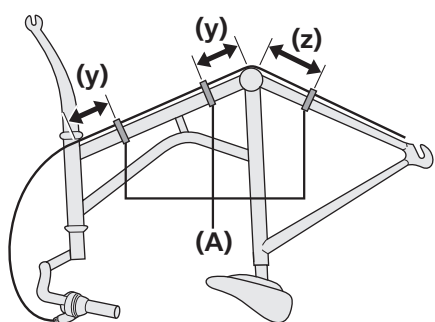
Insert the outer casing holder into the outer casing holder section of the cassette joint.

Insert a 2 mm hexagon wrench or a #14 spoke into the hole in the pulley, and then turn the pulley.

Fit the inner cable mounting bolt unit into the gap in the pulley.

- (A) Hole in pulley
- (B) 2 mm hexagon wrench or #14 spoke

11



Finally, fix the cable on the frame with the outer casing bands.

(y) 10 cm

(z) 15 cm

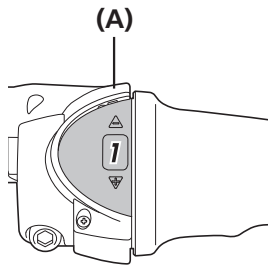
(A) Outer casing bands

ADJUSTMENT

ADJUSTMENT

■ Adjusting the cassette joint

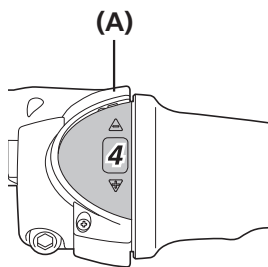
1



Set the REVOSHIFT shifter to 1.

(A) REVOSHIFT shifter

2

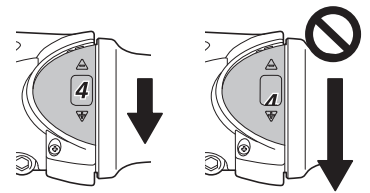


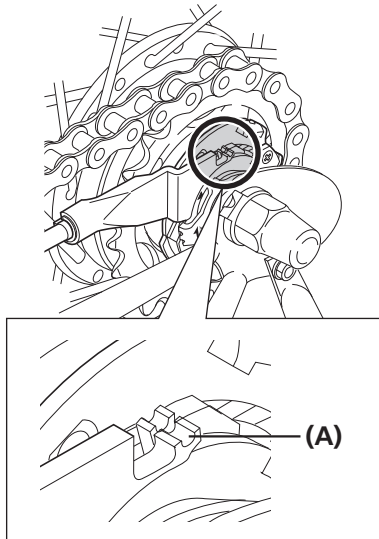
Set the REVOSHIFT shifter to 4.

(A) REVOSHIFT shifter

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)



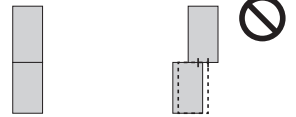


Check that the yellow setting lines on the cassette joint bracket and pulley are aligned with each other.

(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.

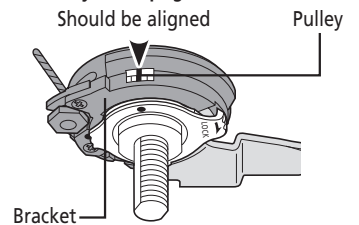


TECH TIPS

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

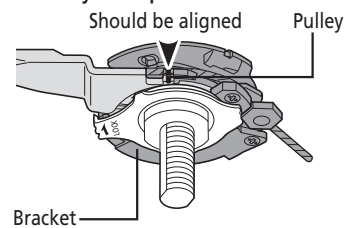
When the bicycle is upright

Should be aligned



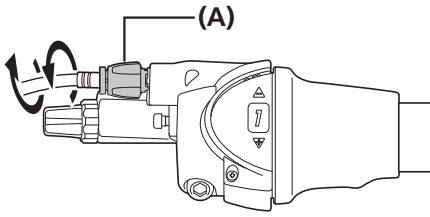
When the bicycle is upside down

Should be aligned



If the yellow setting lines are not aligned

3



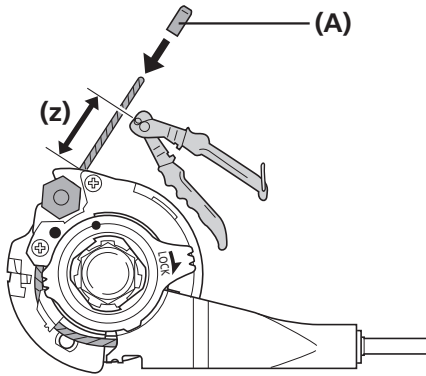
Turn the cable adjustment barrel of the REVOSHIFT shifter to align the setting lines.

Again, move the REVOSHIFT shifter from X to Y, then back to X, and confirm that the yellow setting lines are aligned.

	X	Y
8-speed	4	1

(A) Cable adjustment barrel

4



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

Next, install the inner end cap.

(z) 15 - 20 mm

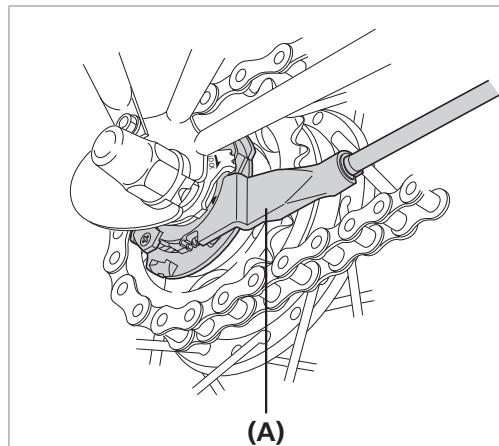
(A) Inner end cap

MAINTENANCE

MAINTENANCE

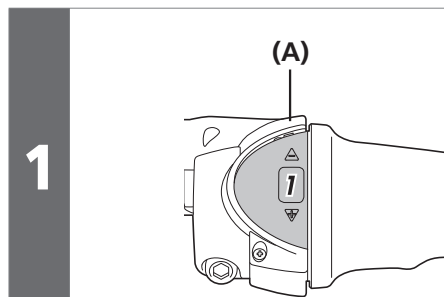
■ Disconnecting the shifting cable when removing the rear wheel from the frame

CJ-NX10 / CJ-8S20



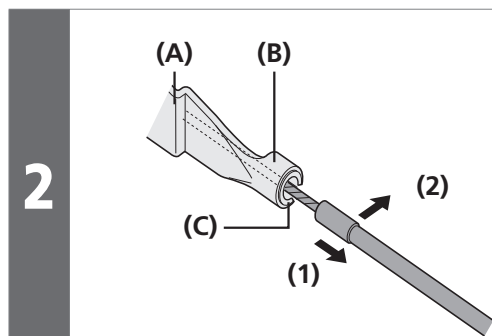
Disconnect the cable from the cassette joint when removing the rear wheel from the frame.

(A) Cassette joint



Set the REVOSHIFT shifter to 1.

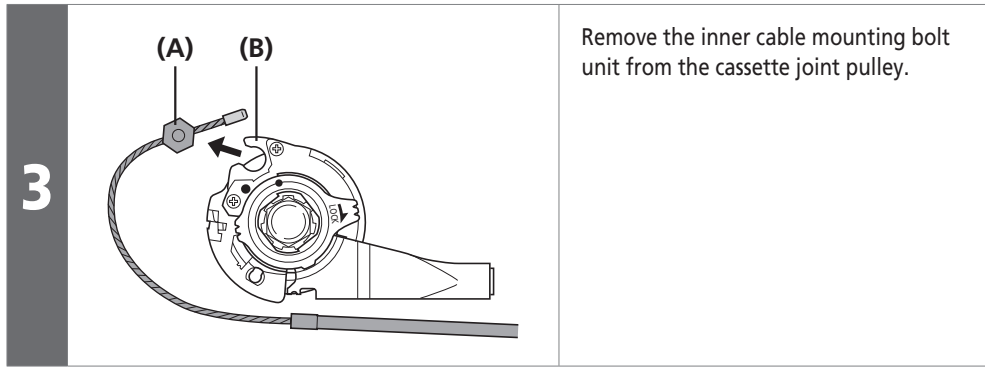
(A) REVOSHIFT shifter



Pull out the outer casing from the outer casing holder section of the cassette joint, and remove the inner cable from the slit in the bracket.

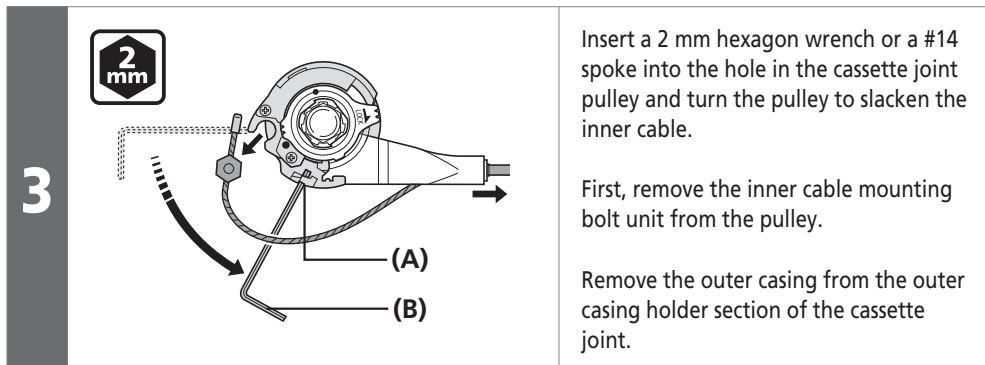
(A) Bracket
(B) Outer casing holder section
(C) Slit

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



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

When it is difficult to remove the outer casing from the outer casing holder section of the cassette joint



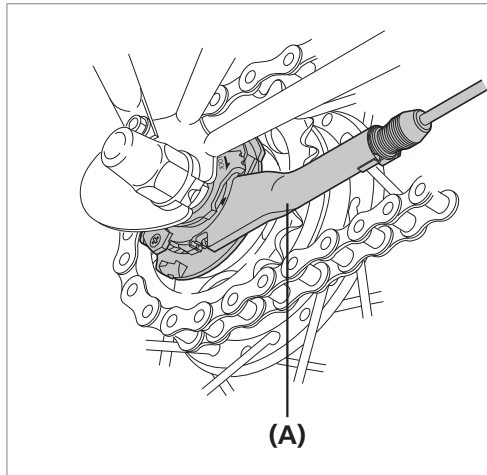
- (A)** Hole in pulley
- (B)** 2 mm hexagon wrench or #14 spoke



TECH TIPS

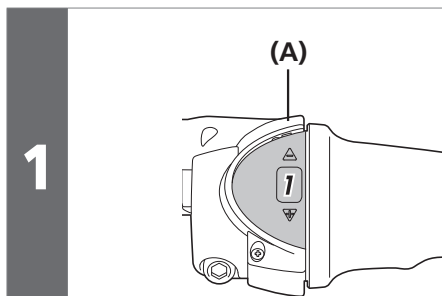
When remounting the cable, refer to the section "Installation of the shifting cable".

CJ-NX40 / CJ-8S40



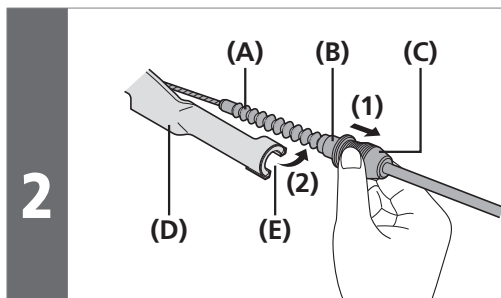
Disconnect the cable from the cassette joint when removing the rear wheel from the frame.

(A) Cassette joint



Set the REVOSHIFT shifter to 1.

(A) REVOSHIFT shifter



Hold the rubber cover and remove the outer casing holder body from the outer casing holder section of the cassette joint (1).

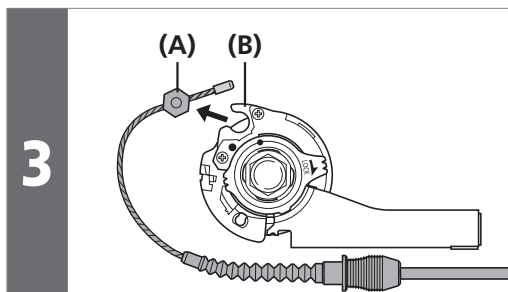
Remove the rubber bellows portion of the inner cable from the slit in the bracket (2).

Be careful not to damage the rubber bellows at this time.

(A) Rubber bellows
(B) Outer casing holder body
(C) Rubber cover
(D) Outer casing holder section
(E) Slit

NOTICE

Do not remove the cable by pulling the outer casing.



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

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

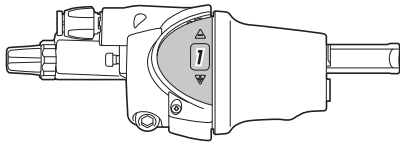
▶▶ Disconnecting the shifting cable when removing the rear wheel from the frame

When it is difficult to remove the outer casing holder body from the outer casing holder section of the cassette joint

<div data-bbox="159 219 236 295" data-label="Image"> </div> <div data-bbox="87 353 124 414" data-label="Text"> 3 </div> <div data-bbox="172 302 593 537" data-label="Image"> </div>	<p>Insert a 2 mm hexagon wrench or a #14 spoke into the hole in the cassette joint pulley and turn the pulley to slacken the inner cable.</p> <p>First, remove the inner cable mounting bolt unit from the pulley.</p> <p>Remove the outer casing holder body from the outer casing holder section.</p>	<div data-bbox="1129 208 1469 309" data-label="List-Group"> <ul style="list-style-type: none"> (A) Hole in pulley (B) 2 mm hexagon wrench or #14 spoke </div>
---	---	---

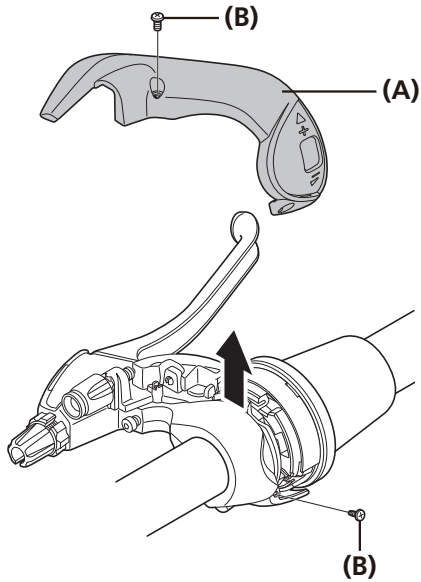
■ Replacing the inner cable

1



Set the REVOSHIFT shifter to 1.

2

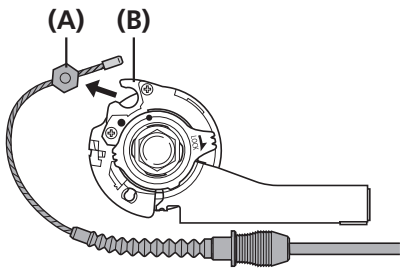


Loosen the cover fixing screws, and then remove the cover.

(A) Cover

(B) Cover fixing screw

3



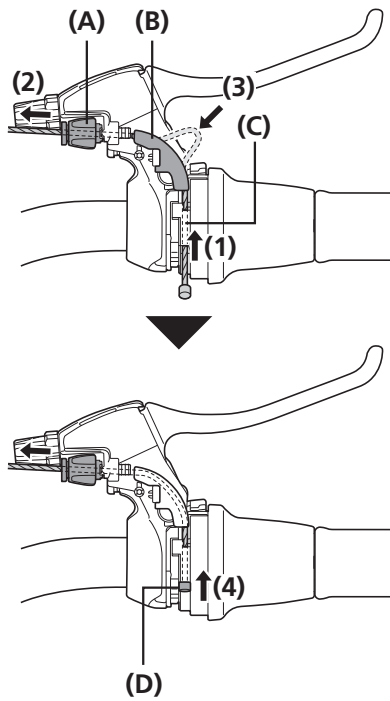
Remove the inner cable mounting bolt unit from the cassette joint pulley.

(A) Inner cable mounting bolt unit

(B) Cassette joint pulley

▶ Replacing the inner cable

4



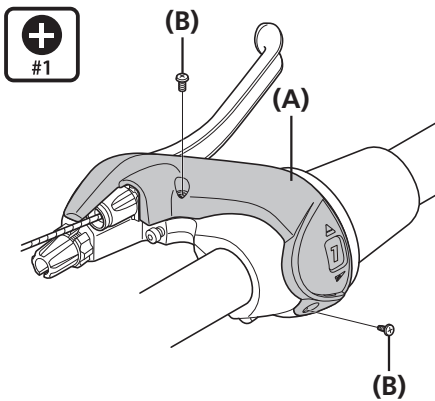
Pass the inner cable from the hole in the winder unit through the hole in the cable adjustment barrel.

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

5



Replace the cover and tighten the cover fixing screws.

- (A) Cover
- (B) Cover fixing screw

Tightening torque	
	0.1 - 0.2 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, it is recommended to use SHIMANO internal geared hub grease or a lubrication kit for the maintenance. If SHIMANO grease or a SHIMANO lubrication kit is not used, problems such as a malfunction in the shifting unit may occur.

(A) WB maintenance oil set
(Y00298010)



(A)

1



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

(z) 95 mm

2



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

3



Keep the internal unit immersed for approximately 90 seconds.

4



Remove the internal unit from the oil.

5



Let excess oil drain off for approximately 60 seconds.

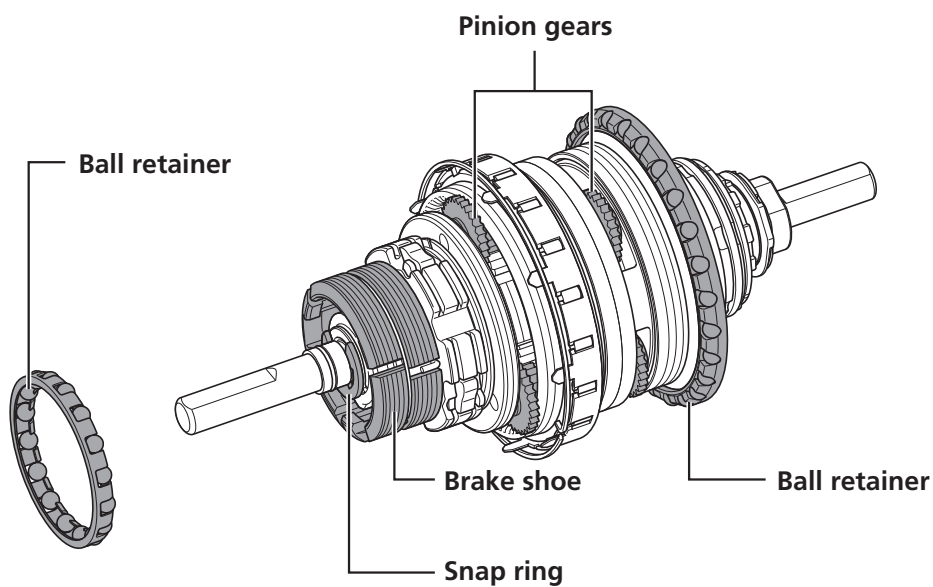
6



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.



SHIMANO NORTH AMERICA BICYCLE, INC.

One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.

High Tech Campus 92, 5656 AG Eindhoven, The Netherlands Phone: +31-402-612222

SHIMANO INC.

3-77 Oimatsu-cho, Sakai-ku, Sakai City, Osaka 590-8577, Japan

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

© Dec. 2023 by SHIMANO INC. ITP