

# Dealer's Manual




# Nexus

Inter-8  
Inter-7  
Inter-5

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## List of DM-compatible models

Parts / Series		Inter-8	Inter-7	Inter-5
 Internal hub gear	Coaster brake	SG-C6000-8C SG-8C31	SG-C3000-7C SG-7C30	-
	Inter-M brake	SG-C6010-8R SG-C6000-8R SG-8R31 SG-8R36 SG-8R60	SG-C3000-7R SG-7R50	SG-5R30 SG-5R35
	V-brake	SG-C6010-8V SG-C6000-8V SG-8R31-VS SG-8R36-VS SG-8R60-VS	-	SG-5R30-VS SG-5R35-VS
 Shifting lever	RAPIDFIRE Plus	-	SL-7S50	SL-5S50
 Shifting lever	REVOSHIFT	SL-8S31 SL-8S30	SL-7S31 SL-7S30	SL-5S30
Cassette Joint		CJ-8S40 CJ-8S20	CJ-NX40 CJ-NX10	CJ-8S40 CJ-8S20

## IMPORTANT NOTICE

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

Users who are not professionally trained for bicycle assembly should not attempt to install the components themselves using the dealer's manuals.

If any part of the information on the manual is unclear to you, do not proceed with the installation. Instead, contact your place of purchase or a local bicycle dealer for their assistance.

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

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

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings.

The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.

 **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

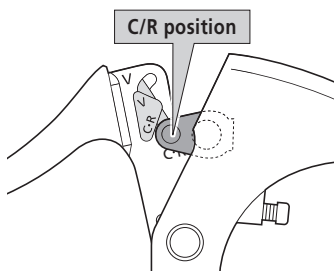
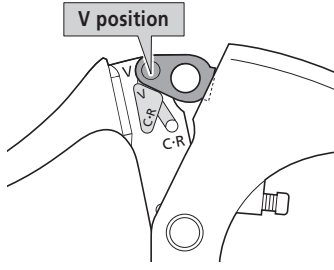
- **When installing components, be sure to follow the instructions that are given in the instruction manuals.**  
It is recommended that you use only genuine Shimano parts. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury.  
In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury.
-  Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.
- After reading the dealer's manual thoroughly, keep it in a safe place for later reference.

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

- It is important to completely understand the operation of your bicycle's brake system.  
Improper use of your bicycle's brake system may result in a loss of control or a fall, which could lead to severe injury. Because each bicycle may handle differently, be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. This can be done by consulting your professional bicycle dealer and the bicycle's owners manual, and by practicing your riding and braking technique.
- The brake levers are equipped with a mode switching mechanism to make them compatible with cantilever brakes and roller brakes or V-BRAKE brakes with power modulator.

**If the incorrect mode is selected it may cause either excessive or insufficient braking force to occur, which could result in dangerous accidents.**

**Be sure to select the mode in accordance with the instructions given in the table below.**

Mode position	Applicable brake
<p><b>C</b> : Mode position for compatibility with cantilever brakes</p> <p><b>R</b> : Mode position for compatibility with roller brakes</p> 	<ul style="list-style-type: none"> <li>• Cantilever brakes</li> <li>• Roller brakes</li> </ul>
<p><b>V</b> : Mode position for compatibility with V-BRAKE brakes with power modulator</p> 	<ul style="list-style-type: none"> <li>• V-BRAKE brakes with power modulator</li> </ul>

Use the brake levers with mode switching mechanism in the combinations given above.

- Check that the wheels are fastened securely before riding the bicycle. If the wheels are loose in any way, they may come off the bicycle and serious injury may result.

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

- 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 screw and clip nut to the specified tightening torque.  
Use a lock nut with a nylon insert (self-locking nut) for the clip nut. It is recommended that standard Shimano parts be used for the clip screw, clip nut and brake arm clip.  
If the clip nut comes off the brake arm, or if the clip screw or brake 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 the bicycle may fall over, causing serious injury.
- 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 to 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. This may then cause the handlebars to be accidentally pulled by the shifting cable, and an extremely serious accident could result.

#### < Coaster brake hub >

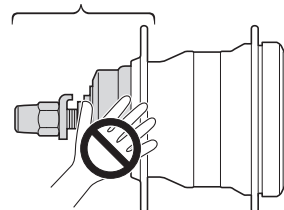
- When using a fork end with a rear-facing dropout, use the chain adjusters to remove excess slack from the chain.



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

- Be sure to shift the shifting lever one gear at a time. During shifting, reduce the force being applied to the pedals. If you try to force operation of the shifting lever or perform multi-shifting while the pedals are being turned strongly, your feet may come off the pedals and the bicycle may topple over, which could result in serious injury.  
Operating the shifting lever to multi-shift to a light gear may also cause the outer casing to spring out of the shifting lever. This does not affect the capabilities of the shifting lever because the outer casing returns to the original position after shifting.
- If the brake is used frequently, the area around the brake may become hot. Do not touch the area around the brake for at least 30 minutes after you finish riding the bicycle.

Area around the brake



#### < Coaster brake specifications >

- Avoid continuous application of the brakes when riding down long slopes, as this will cause the internal brake parts to become very hot, and this may weaken braking performance. It may also cause a reduction in the amount of brake grease inside the brake, and this can lead to problems such as abnormally sudden braking.
- Spin the wheel and confirm that the braking force of the coaster brake is correct.

**NOTE**

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

- You can shift gears 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.
- The internal hub is not completely waterproof. Avoid using the hub in places where water might get inside it and do not use high-pressure water to clean the hub, otherwise the internal mechanism may rust.
- Do not disassemble the hub. If you need to disassemble it, consult the dealer where you made a purchase.
- All of the following phenomena occur due to the internal gear-shifting structure and are not the failure of the internal components.

Possible phenomena	Number of gears for the hub	Types of hub		Gear positions where the phenomena might occur
		For coaster brake	For roller brakes/ V-BRAKE	
If you place your foot on a pedal and move the bicycle backwards, a clicking will be felt in the pedal.	7-gear hub	X	-	All gear positions
Noise occurs when the pedals are rotating.	7-gear hub	X	-	All gear positions
		-	X	2, 3, 4, 5, 6, 7-speed
	8-gear hub	X	-	Gear positions except the 1st
Noise occurs when the bicycle is pushed backward.	8-gear hub	X	X	5, 6, 7, 8-speed
The hub has a built-in mechanism for facilitating gear shifting. When the mechanism operates during gear shifting, noise and vibration may occur.	8-gear hub	X	X	All gear positions
Depending on the gear position, gear shifting may give different feels.	7-gear hub	X	X	All gear positions
	8-gear hub	X		
	5-gear hub	-		
When pedal rotation is stopped during riding, noise will be generated.	7-gear hub	X	X	All gear positions
	8-gear hub	X	-	
	5-gear hub	-	X	4, 5-speed

- 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. Consult the dealer where you made a purchase.

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

- The cassette joint should only be used with sprockets from 16T to 23T.
- It is recommended that the chain ring of the front be set to the following gear ratio.  
7, 8-gear: about 2.1  
5-gear: about 2.0

#### Example) In the case of 26 inch wheels

Front		36T	38T	46T
Rear	7, 8-gear	16T	18T	22T
	5-gear	18T	19T	23T

- In order to maintain proper performance of the product, it is recommended that you ask the place where you purchased the bicycle or your nearest Pro shop to carry out maintenance such as greasing the internal parts about once every two years from the first time of use (once about every 5,000 km if the bicycle is used very frequently). It is also recommended that you use the Shimano internal hub grease or lubrication kit when carrying out maintenance. If the special grease or lubrication kit is not used, problems such as gear shifting malfunction may occur.
- If the wheel becomes stiff and difficult to turn, you should lubricate it with grease.
- You should periodically wash the chainrings in a neutral detergent. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the useful life of the chainrings and the chain.
- If the chain keeps coming off the sprockets during use, replace the sprockets and the chain.

#### < Coaster brake specifications >

- Use a wheel with 3x or 4x spoke lacing. Wheels with radial lacing cannot be used because the spokes and the wheel can be damaged when applying the brakes and brake noise can be generated.
- If the wheel becomes stiff and difficult to turn, you should replace the brake shoes or lubricate with grease.
- Use only the dedicated grease for the brake shoes. 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 chiefly to explain the procedures for using the product.



# INSTALLATION

## List of tools to be used

The following tools are required to assemble the product.

	Where to use	Tool
	Hub nut	Adjustable wrench
	Brake lever	5 mm Allen key
Shifting lever	RAPIDFIRE Plus	5 mm Allen key
	Cover fixing screw	Screwdriver (#2)
	REVOSHIFT	3 mm Allen key
	Cover fixing screw	Screwdriver (#1)
Cassette joint	Inner cable fixing bolt unit	TL-CJ40 (Y70898020)

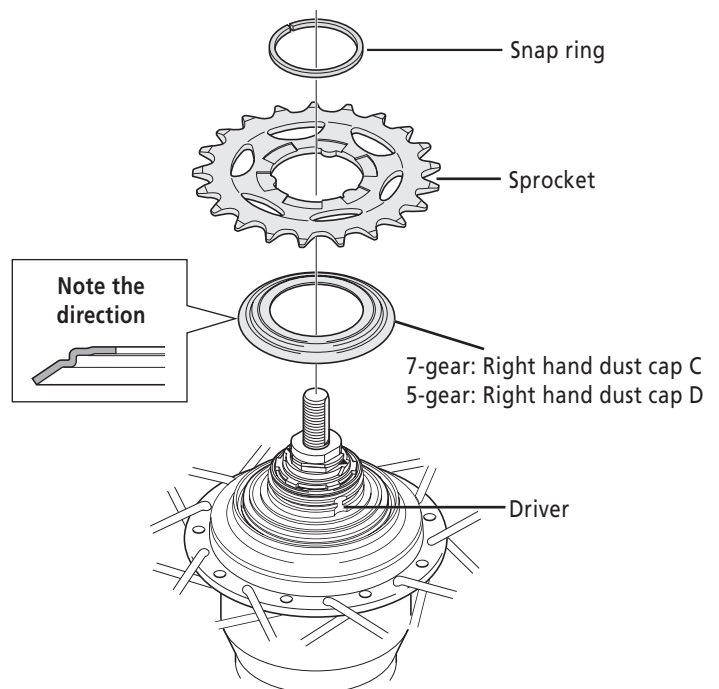
## ■ Installation of the sprocket to the hub

### < 7-gear hub / 5-gear hub >

Place right hand dust cap 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
7-gear	16T - 23T	18T - 23T
5-gear	16T - 23T	



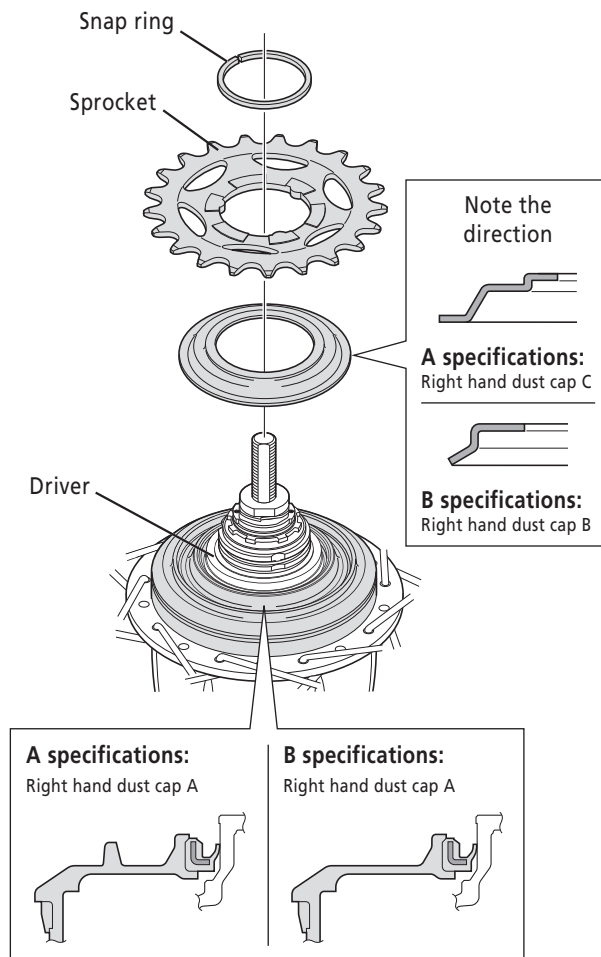
**< 8-gear hub >**

Place right hand dust cap C or B 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	16T - 23T	20T - 23T
B	16T - 23T	

**Note:**

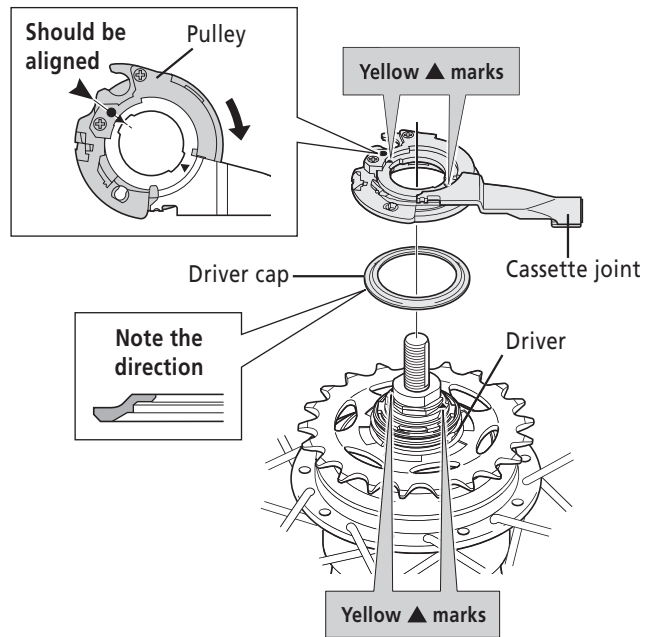
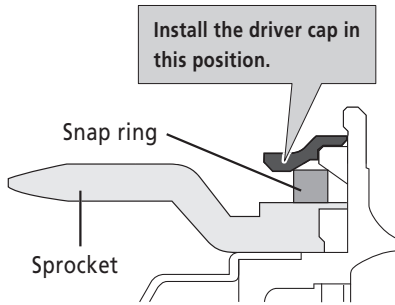
- For A specifications: If the sprocket is an inward assembling sprocket with 19T or less or for belt drive specifications, right hand dust cap A will come into contact with the chain or pulley and so B specifications should be used instead.
- For B specifications: If the sprocket is an inward assembling sprocket with 16T and 3 mm teeth or for belt drive specifications, remove right hand dust cap B before use.



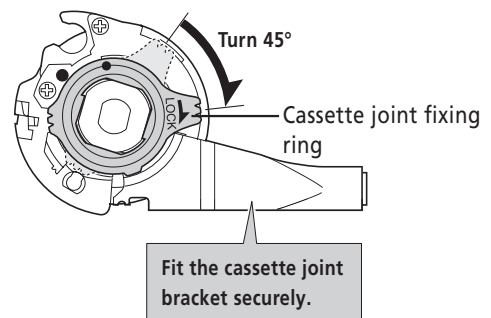
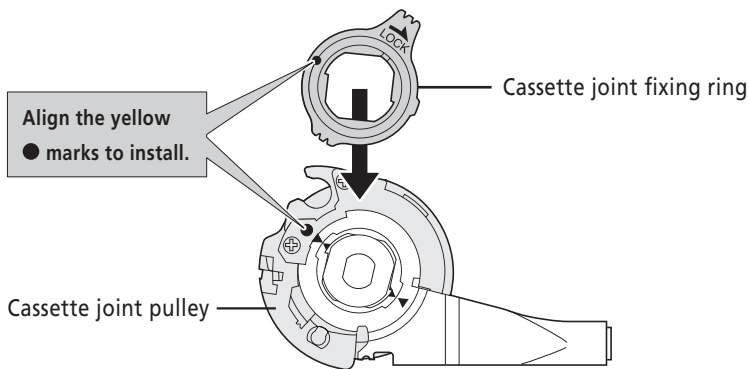
## ■ Installation of the cassette joint to the hub

< 7-gear hub >

1. Install the driver cap to the driver to the right side of the hub body. Next, turn the cassette joint pulley in the direction of the arrow so that the yellow ● mark is aligned with the yellow ▲ mark, and then align the yellow ▲ marks on the cassette joint with the yellow ▲ marks on the right side of the hub body.

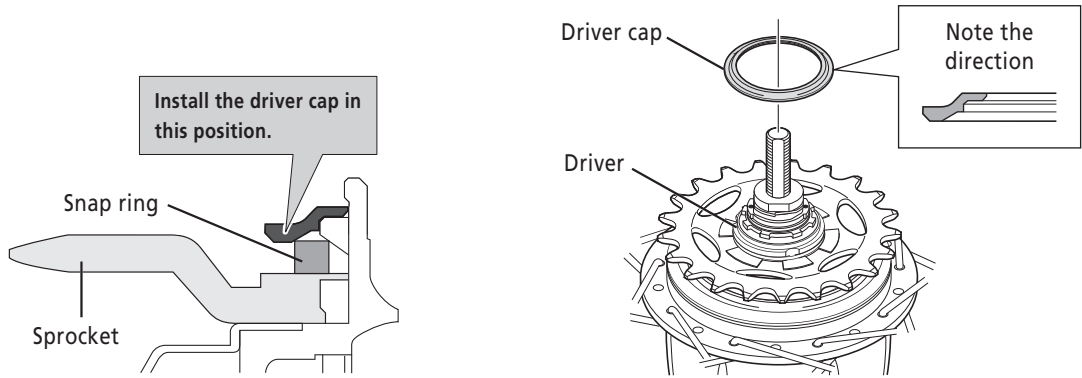


2. Secure the cassette joint to the hub with the cassette joint fixing ring. When installing the cassette joint fixing ring, align the yellow ● mark with the yellow ● mark on the cassette joint pulley, and then turn the cassette joint fixing ring 45° clockwise.

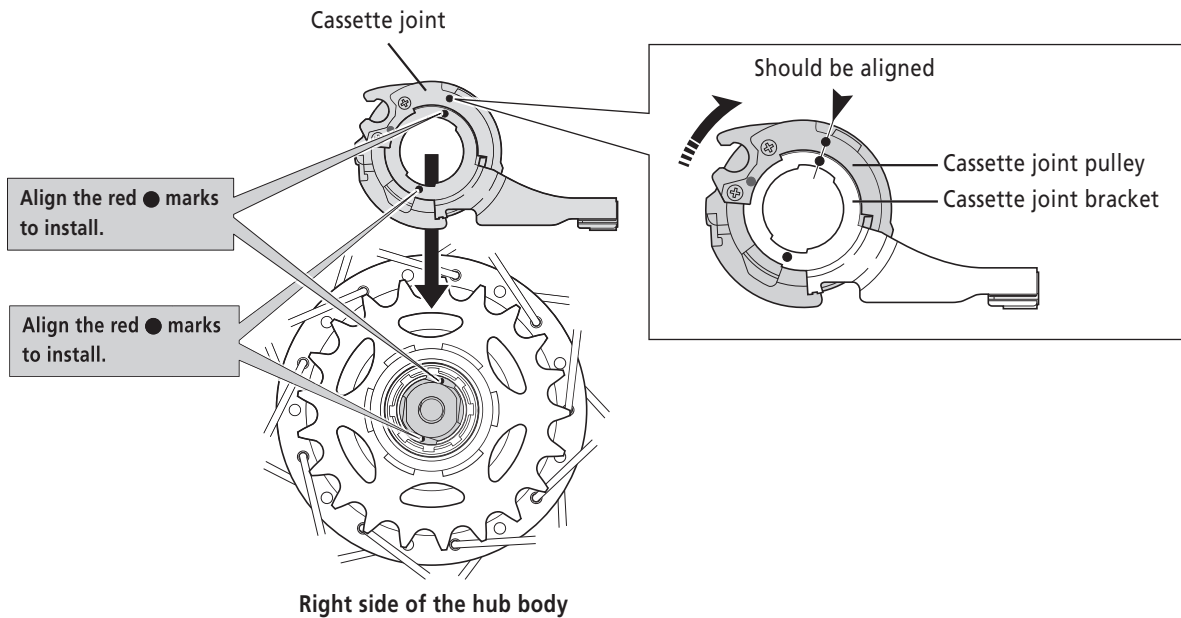


< 8-gear hub / 5-gear hub >

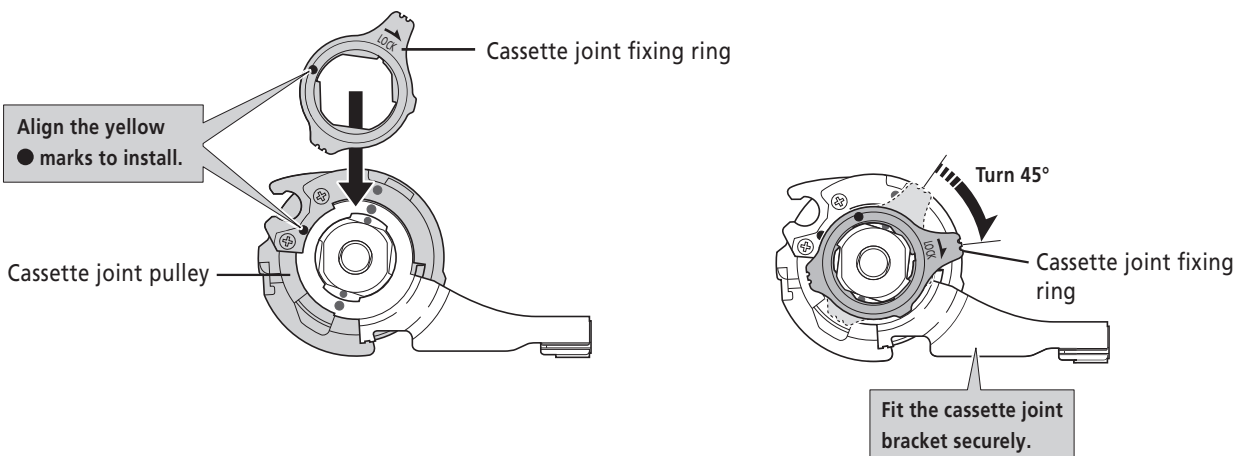
1. Install the driver cap to the driver on the right side of the hub body.



2. Turn the cassette joint pulley in the direction of the arrow in the illustration to align the red ● marks on the pulley and the bracket. With the cassette joint in this condition, install it so that the red ● mark on the cassette joint is aligned with the red ● mark on the right side of the hub body.

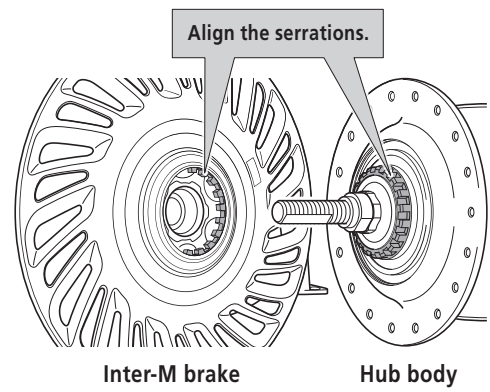


3. Secure the cassette joint to the hub with the cassette joint fixing ring. When installing the cassette joint fixing ring, align the yellow ● mark with the yellow ● mark on the cassette joint pulley, and then turn the cassette joint fixing ring 45° clockwise.



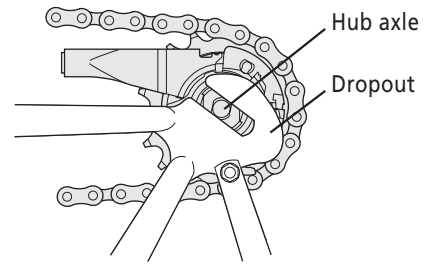
## ■ Installing the Inter-M brake to the hub body

Engage the serrations on the hub body with the serrations on the Inter-M brake, and then provisionally tighten the brake unit fixing nut.

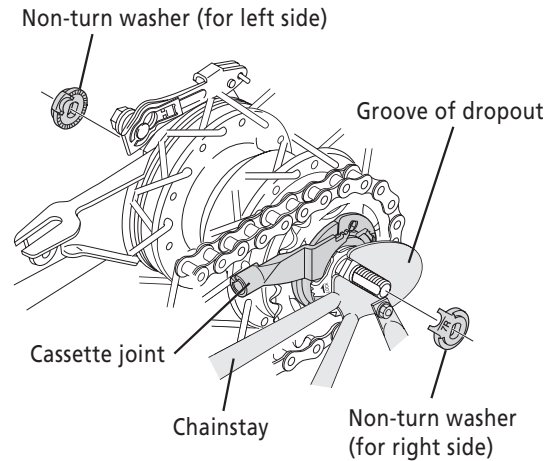


## ■ Installation of the hub to the frame

1. Mount the chain on the sprocket, and then set the hub axle into the dropouts.



2. Place the non-turn washers onto the right side and left side of the hub axle. At this time, turn the cassette joint so that the projecting parts of the non-turn washers fit into the grooves of the dropouts. If this is done, the cassette joint can be installed so that it is almost parallel to the chainstay.

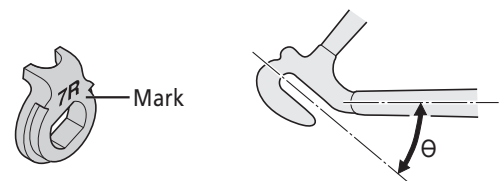


- Use whichever non-turn washers match the shape of the dropouts. Different non-turn washers are used at the left and right sides.

Dropouts	Non-turn washer		
	Mark / Color		Size
	Right	Left	
Standard	5R / Yellow	5L / Brown	$\theta \leq 20^\circ$
	7R / Black	7L / Gray	$20^\circ \leq \theta \leq 38^\circ$
Reversed	6R / Silver	6L / White	$\theta = 0^\circ$
Reversed (full chain case)	5R / Yellow	5L / Brown	$\theta = 0^\circ$
Vertical	8R / Blue	8L / Green	$\theta = 60^\circ - 90^\circ$

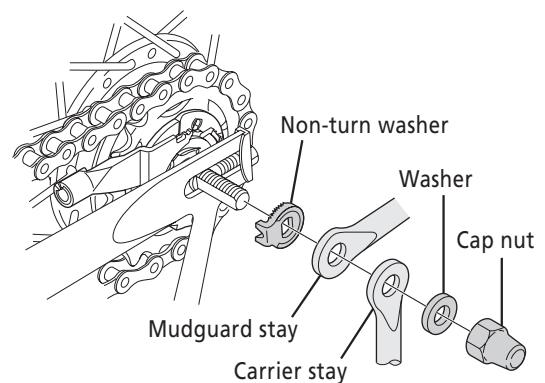
**Note:** Vertical: Excluding the coaster specifications.

- The projecting parts should be on the dropouts side.
- Install the non-turn washers so that the projecting parts are securely in the dropouts grooves on either side of the hub axle.



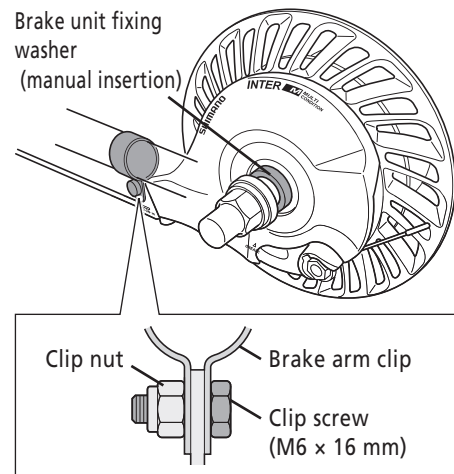
### Note:

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



< In the case of Inter-M brake specifications >

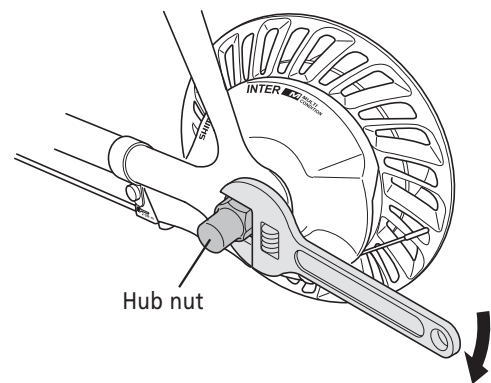
- Attach the brake arm of the Inter-M brake to the chainstay with the brake arm clip. Then temporarily fix the clip screw and clip nut by lightly tightening them.
- If the hub nuts are cap nuts, use a frame with dropouts that are at least 7 mm thick.
- Check that the brake unit is firmly secured to the hub with the brake unit fixing washer.



**3.** Take up the slack in the chain and secure the wheel to the frame with the cap nuts.

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

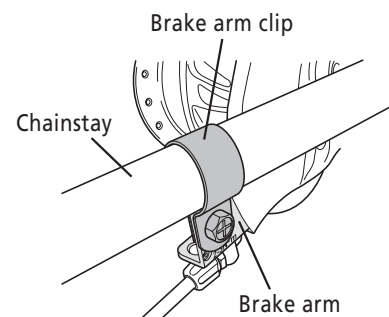
**Tightening torque:**  
30.0 - 45.0 N·m {262 - 393 in. lbs.}



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

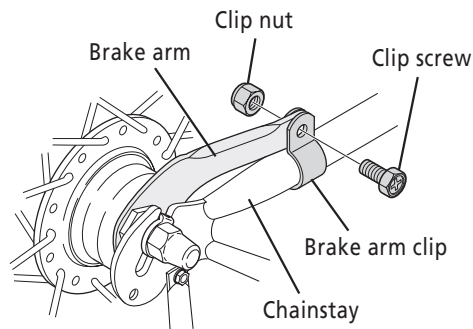
Check that the brake arm is securely fastened to the chainstay by the brake arm clip. If it is not installed correctly, braking performance will suffer.

- If excessive force is applied to the brake arm to secure it, the wheel will make noise and become difficult to turn. Make sure that you don't apply excessive force when installing.



**Tightening torque:**  
2.0 - 3.0 N·m {17 - 26 in. lbs.}

< In the case of coaster brake specifications >



**WARNING**

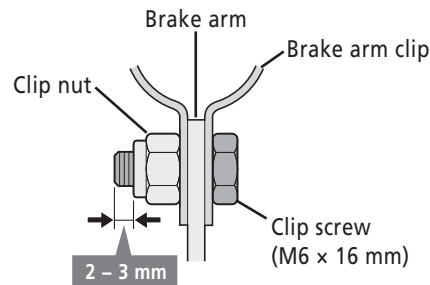
- When securing the brake arm to the frame, be sure to use a brake arm clip that matches the size of the chainstay, and securely tighten them with the clip screw and clip nut to the specified tightening torque.  
Use a lock nut with a nylon insert (self-locking nut) for the clip nut. It is recommended that standard Shimano parts be used for the clip screw, clip nut and brake arm clip.  
If the clip nut comes off the brake arm, or if the clip screw or brake 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 the bicycle may fall over, causing serious injury.

**Note:**

- When installing the brake arm clip, securely tighten the clip screw while holding the clip nut with a 10 mm spanner.

**Tightening torque:  
2.0 - 3.0 N·m {17 - 26 in. lbs.}**

- After installing the brake arm clip, check that the clip screw protrudes about 2 - 3 mm from the surface of the clip nut.



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



## ■ Installation of the lever

### Mode switching



1. Use the #1 Screwdriver to loosen the screw.



2. Align the mode switch with the position of the brake installed.



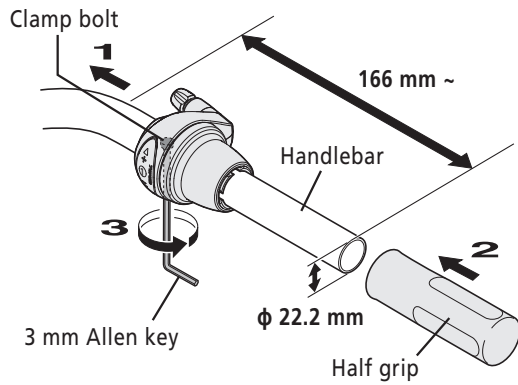
< V-BRAKE brakes >



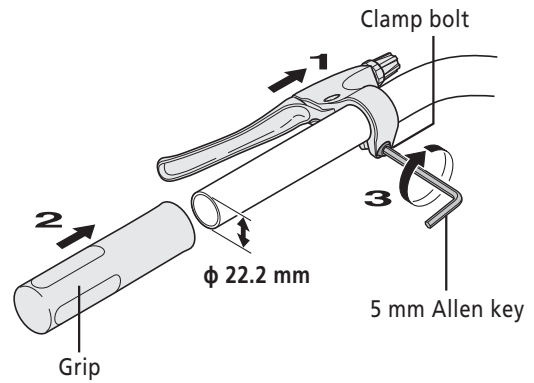
< Caliper brakes >  
< Cantilever brakes >  
< Roller brakes >

Install the lever as shown in the illustration.

< In the case of REVOSHIFT >



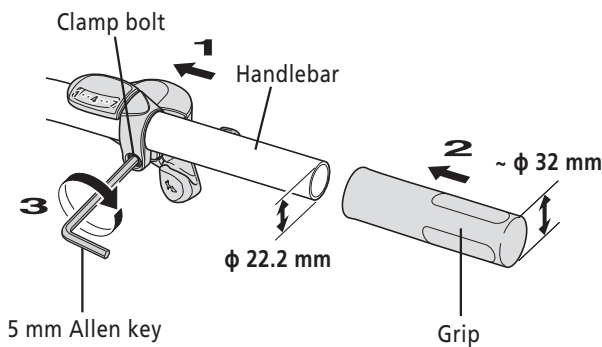
**Tightening torque:**  
2.0 - 2.5 N·m {17 - 22 in. lbs.}



**Tightening torque:**  
6.0 - 8.0 N·m {52 - 70 in. lbs.}

- In case of using Shimano half grip, the straight section of the handlebar should be 166 mm or more in length; attach the REVOSHIFT lever to this straight section.
- Leave a gap of 0.5 mm between the REVOSHIFT lever and the half grip.

< In the case of RAPIDFIRE Plus >



**Tightening torque:**  
5.0 - 7.0 N·m {44 - 61 in. lbs.}

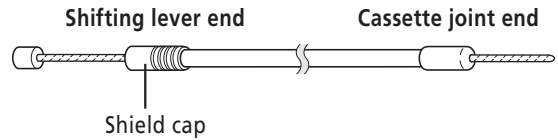
- Use a handlebar grip with a maximum outer diameter of 32 mm.

## ■ 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.

OT-SP40 (4 mm dia.)



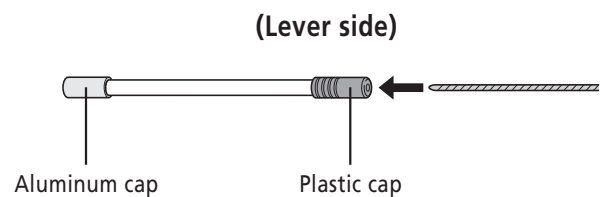
### Note:

Make sure that the shield cap is at the shifting lever end.

## ■ Installing to the cassette joint

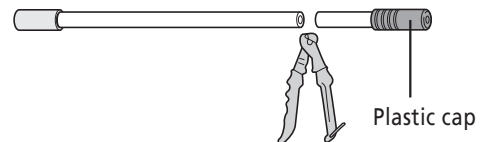
< In the case of CJ-NX10 / CJ-8S20 >

1. Pass the inner cable through the OT-SP40 outer casing through the end with the plastic cap.

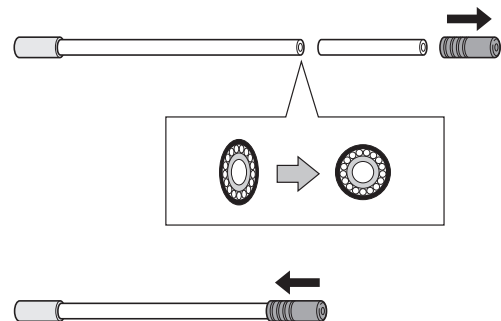


- **Cutting the outer casing**

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



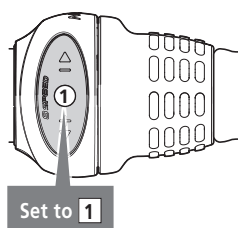
Then make the cut end perfectly round and attach the plastic cap.



2. Set the REVOSHIFT lever / shifting lever to 1.

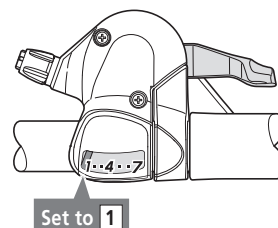
### REVOSHIFT

< REVOSHIFT Lever >



### RAPIDFIRE Plus

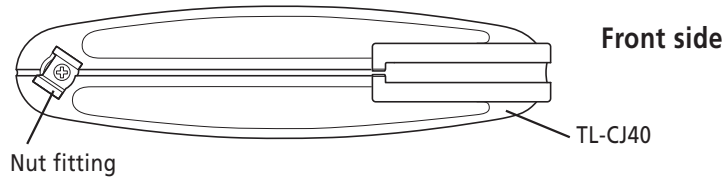
< Shifting Lever >



3. After checking that the end of the outer casing is sitting securely in the cable adjustment bolt of the REVOSHIFT lever / shifting lever, attach the inner cable fixing bolt unit to the inner cable.  
When installing the inner cable fixing bolt unit, use the setting tool TL-CJ40 (Y70898020).  
For CJ-NX10 and CJ-8S20, use the front side of TL-CJ40.

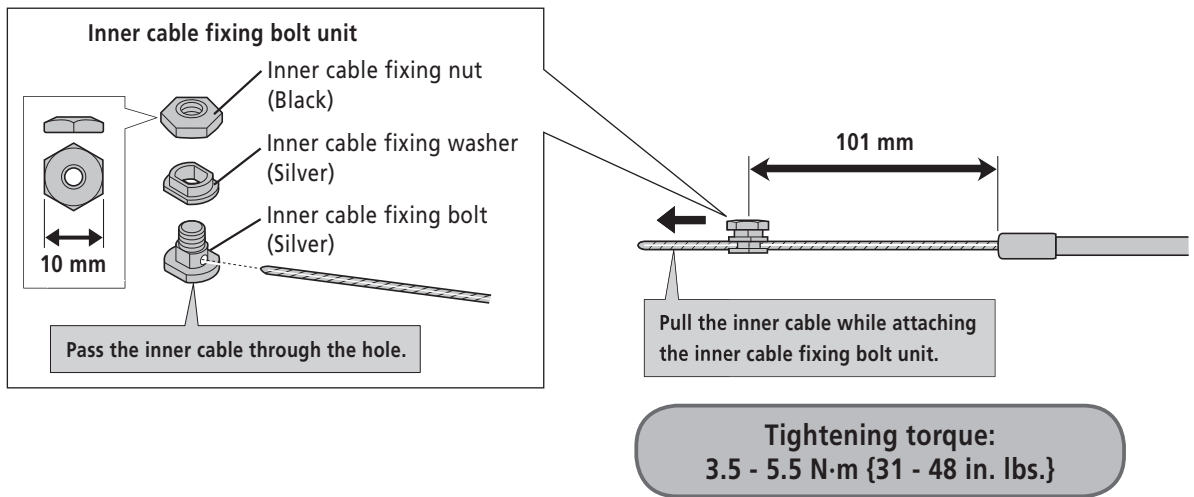
**Note:**

The tool is shipped ready to be used for CJ-NX10 and CJ-8S20.

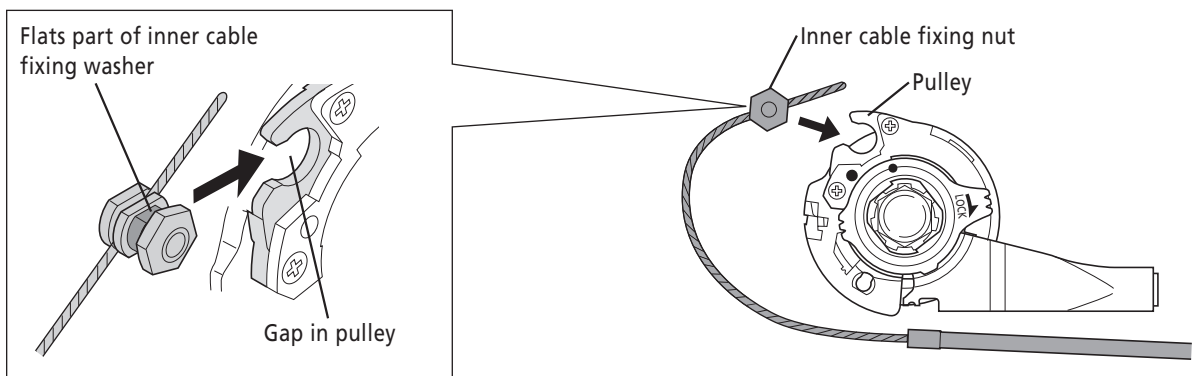


**Note:**

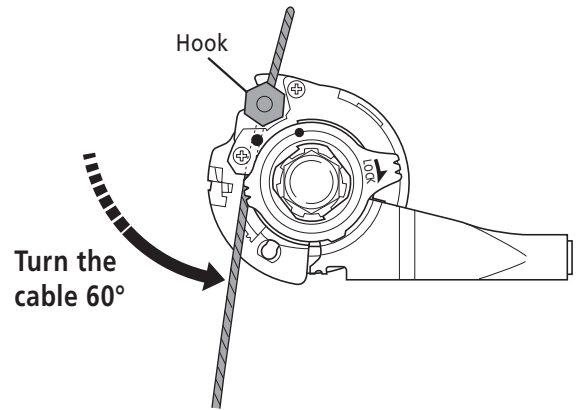
This inner cable fixing bolt unit is designed only for CJ-NX10, CJ-NX40, CJ-8S20, and CJ-8S40. 11-speed fixing bolt units cannot be used.



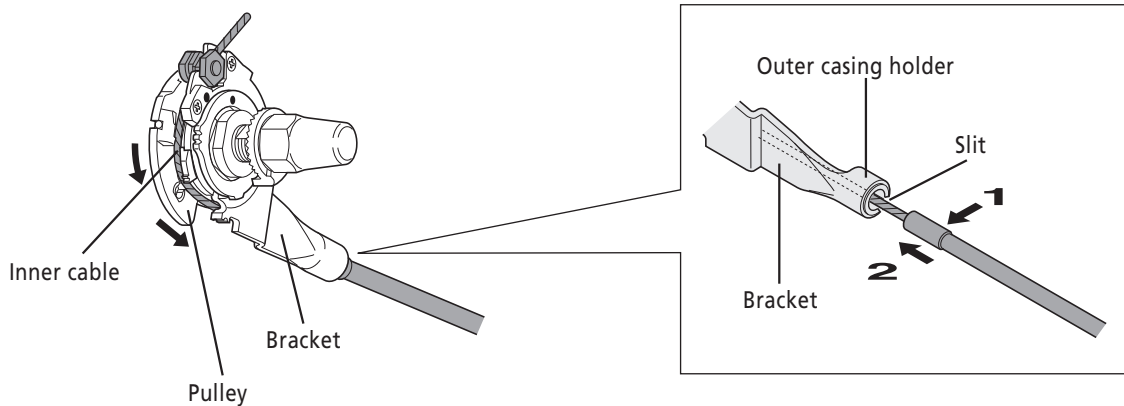
4. Bring the cable around to the cassette joint pulley, hold so that the inner cable fixing nut is facing to the outside (toward the fork end), and then slide the flats part of the inner cable fixing washer into the gap in the pulley.



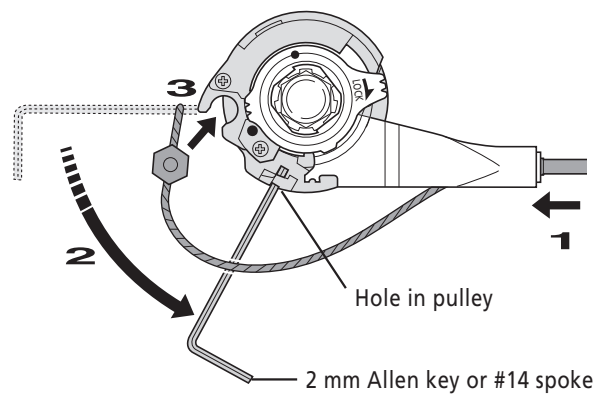
5. Turn the cable 60° counterclockwise and attach it to the hook.



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

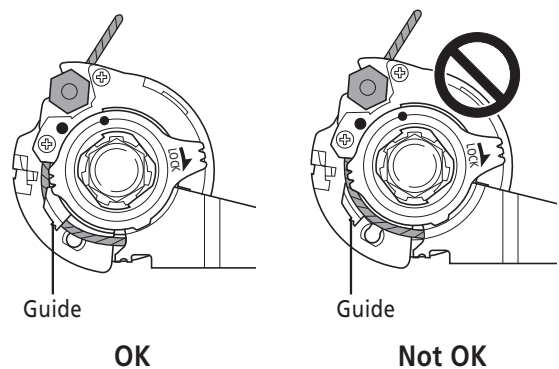


- If first inserting the outer casing into the outer casing holder is easier, then first insert the outer casing into the outer casing holder, and then insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, and then turn the pulley so that the inner cable fixing bolt unit fits into the gap in the pulley.

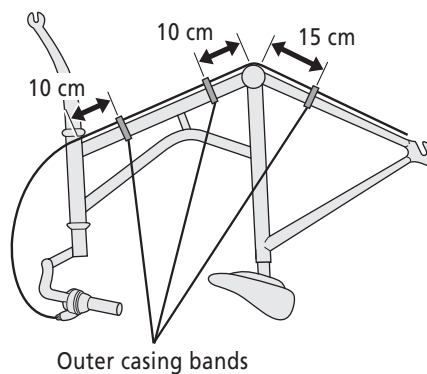


**Note:**

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



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

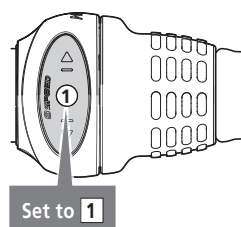


< In the case of CJ-NX40/CJ-8S40 >

1. Set the REVOSHIFT lever / shifting lever to 1.

**REVOSHIFT**

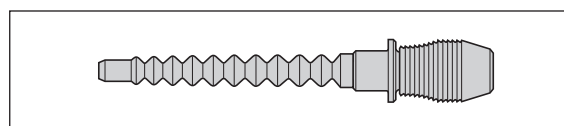
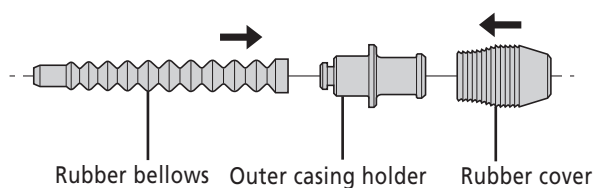
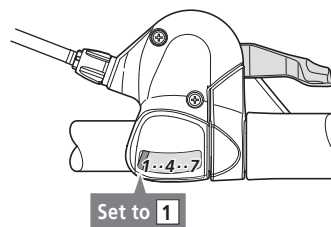
< REVOSHIFT Lever >



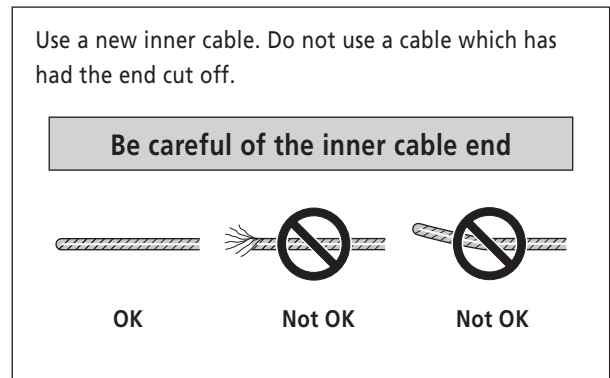
2. Install the rubber cover and rubber bellows to the outer casing holder.

**RAPIDFIRE Plus**

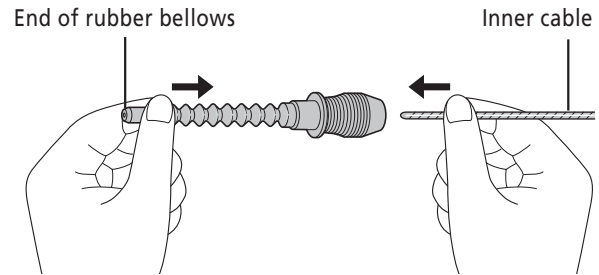
< Shifting Lever >



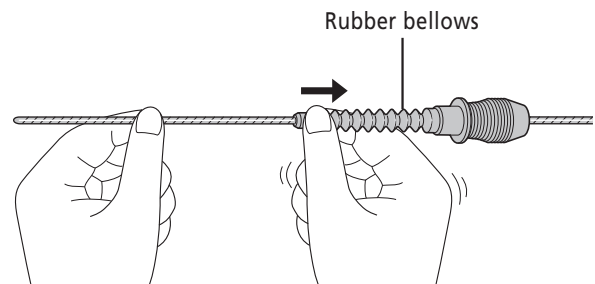
- Wipe away any grease which may be on the inner cable, and then pass the inner cable through the rubber bellows. After this, insert the outer casing into the rubber cover and set it into the outer casing holder.



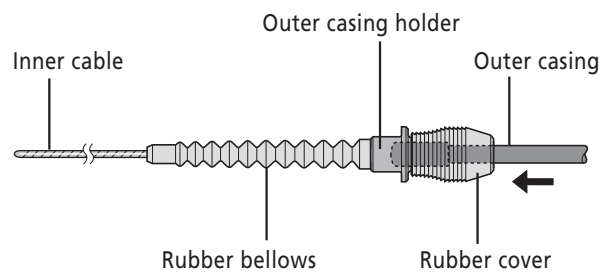
- While holding the end of the rubber bellows, insert the inner cable. Be careful not to pierce the rubber bellows with the end of the inner cable at this time.



- Slide the rubber bellows onto the inner cable.



- Push the outer casing on so that it securely touches the outer casing holder.



4. After checking that the end of the outer casing is sitting securely in the cable adjustment bolt of the shifting lever, attach the inner cable fixing bolt unit to the inner cable.

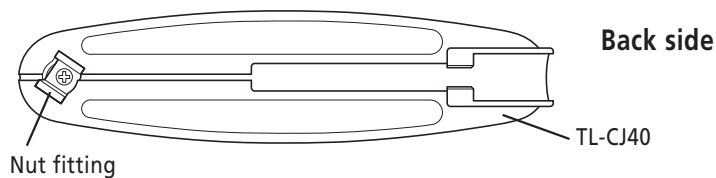
When installing the inner cable fixing bolt unit, use the setting tool TL-CJ40 (Y70898020).

For CJ-NX40 and CJ-8S40, use the back side of TL-CJ40. Replace the nut fitting as shown in the illustration.

**Note:**

TL-CJ40 is shipped ready to be used for CJ-NX10 and CJ-8S20.

For use with CJ-NX40 and CJ-8S40, replace the nut fitting on the back side as shown in the illustration.



**Inner cable fixing bolt unit**

**Note:** This inner cable fixing bolt unit is designed only for CJ-NX10, CJ-NX40, CJ-8S20, and CJ-8S40. 11-speed fixing bolt units cannot be used.

- Inner cable fixing nut (Black)
- Inner cable fixing washer (Silver)
- Inner cable fixing bolt (Silver)

10 mm

Pass the inner cable through the hole.

127 mm

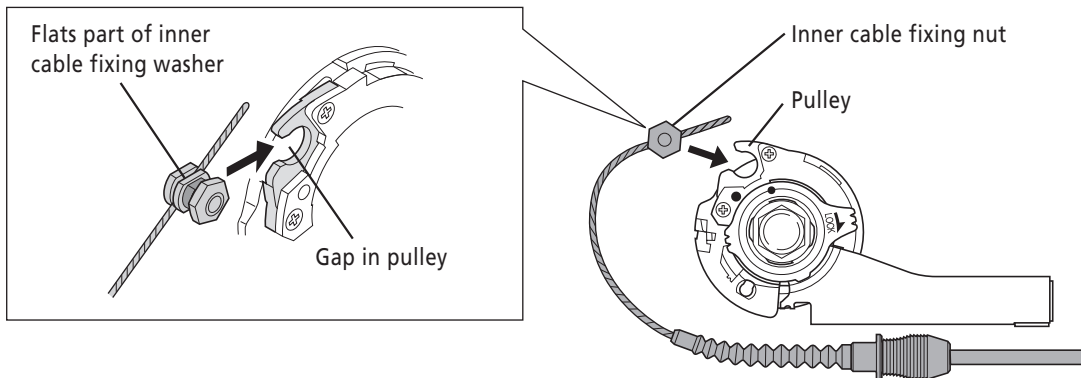
63 mm or less

Pull the inner cable while attaching the inner cable fixing bolt unit.

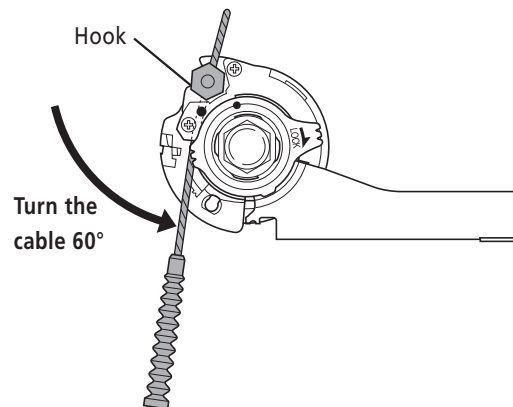
**Tightening torque:**  
3.5 - 5.5 N·m {31 - 48 in. lbs.}



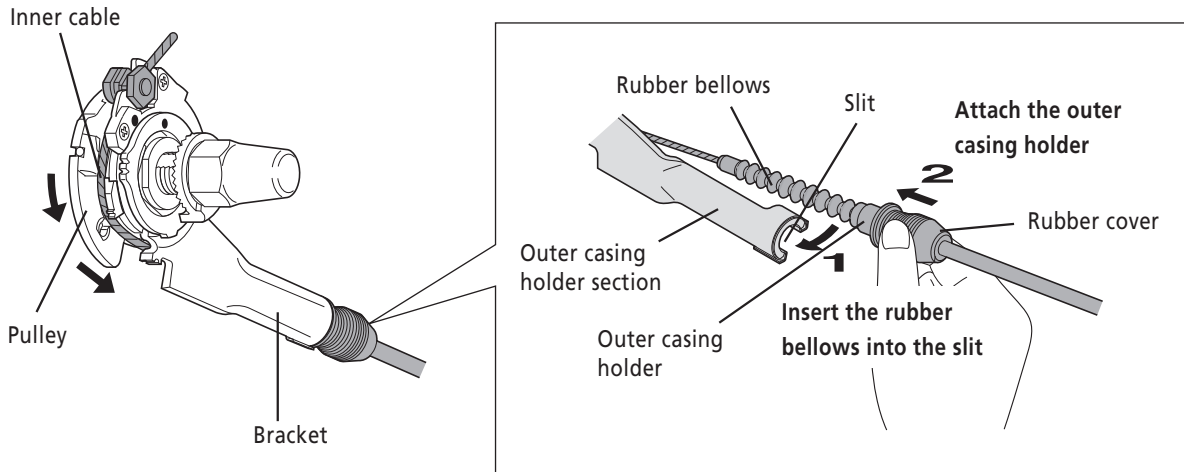
- 5.** Bring the cable around to the cassette joint pulley, hold so that the inner cable fixing nut is facing to the outside (toward the fork end), and then slide the flats part of the inner cable fixing washer into the gap in the pulley.



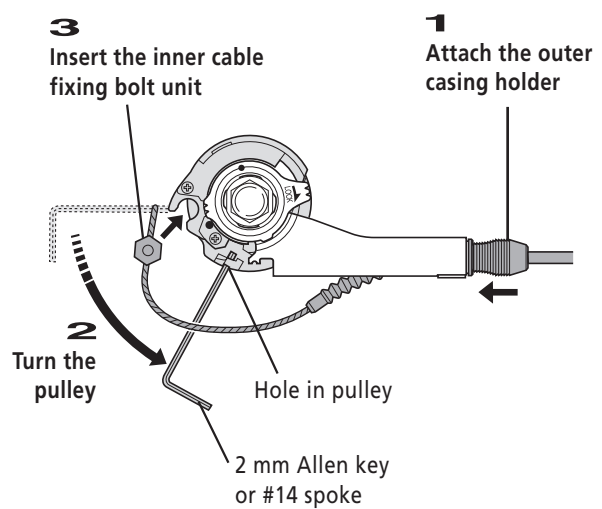
- 6.** Turn the cable 60° counterclockwise and attach it to the hook.



7. Attach the inner cable to the pulley as shown in the illustration, pass the part of the inner cable which has the rubber bellows attached through the slit in the cassette joint bracket, and then insert the outer casing holder securely into the outer casing holder section. Be careful not to damage the rubber bellows at this time.

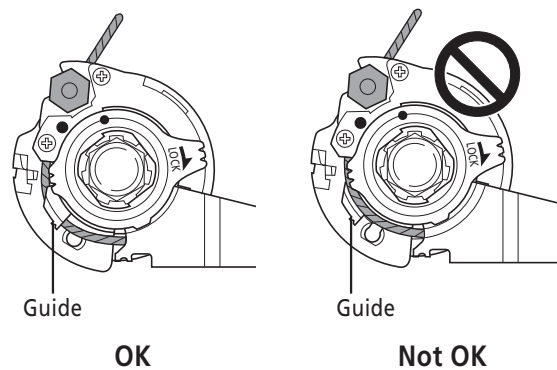


If first inserting the outer casing holder into the outer casing holder section of the cassette joint is easier, then first insert the outer casing holder into the outer casing holder section of the cassette joint, and then insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, and then turn the pulley so that the inner cable fixing bolt unit fits into the gap in the pulley.

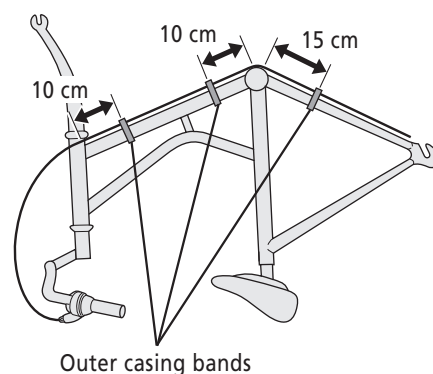


**Note:**

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



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



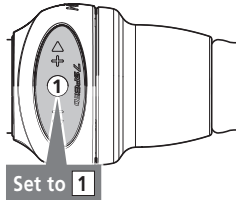
# ADJUSTMENT

## ■ Adjusting the cassette joint

1. Set the REVOSHIFT lever / shifting lever to **1**.

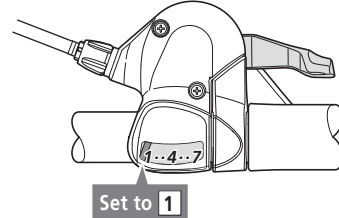
### REVOSHIFT

< REVOSHIFT Lever >



### RAPIDFIRE Plus

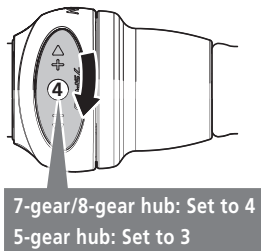
< Shifting Lever >



2. Set the REVOSHIFT lever / shifting lever as shown in the illustration.

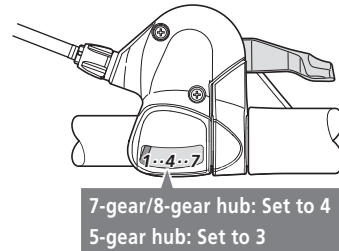
### REVOSHIFT

< REVOSHIFT Lever >



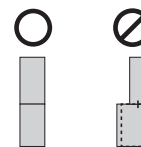
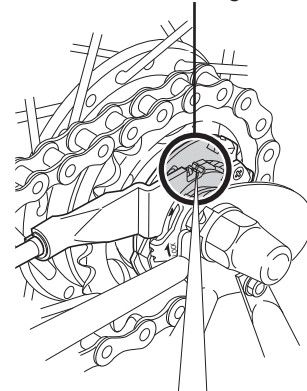
### RAPIDFIRE Plus

< Shifting Lever >



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

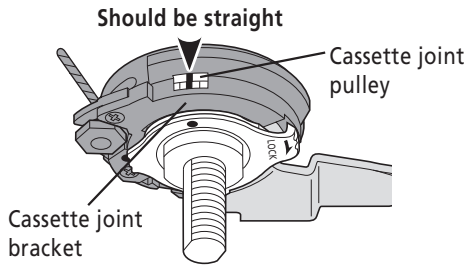
Yellow setting lines



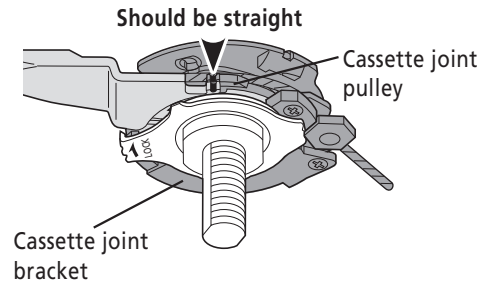
The overlapping area falls short of two thirds of each setting line.

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

< When bicycle is standing up >

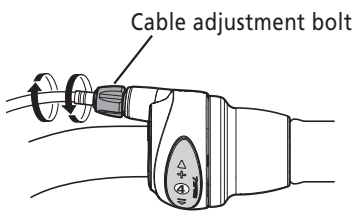


< When bicycle is upside down >



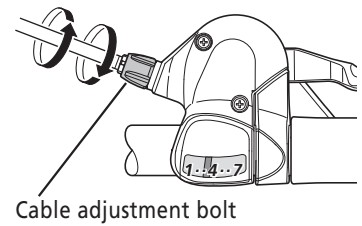
- If the yellow setting lines are not aligned, turn the cable adjustment bolt of the REVOSHIFT lever / shifting lever to align the setting lines. After this, move the REVOSHIFT lever / shifting lever once more from **X** to **Y** and then back to **X**, and then re-check to be sure that the yellow setting lines are aligned.

< REVOSHIFT Lever >

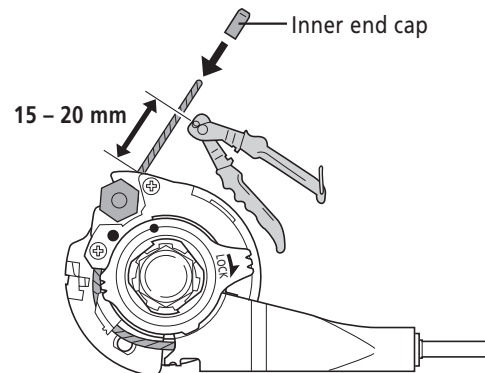


Note	X	Y
In the case of 8 gears.....	4	1
In the case of 7 gears.....	4	1
In the case of 5 gears.....	3	1

< Shifting Lever >



3. After adjusting the cassette joint, cut off the excess length of inner cable and then install the inner end cap.

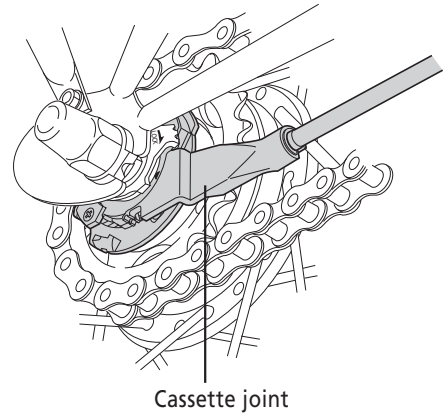


# MAINTENANCE

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

< In the case of CJ-NX10/CJ-8S20 >

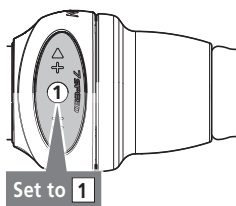
Disconnect the cable from the cassette joint when removing the rear wheel from the frame.



1. Set the REVOSHIFT lever / shifting lever to **1**.

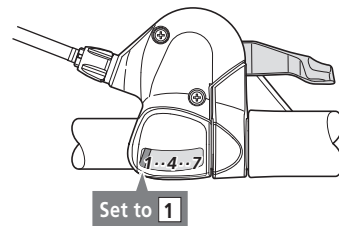
### REVOSHIFT

< REVOSHIFT Lever >

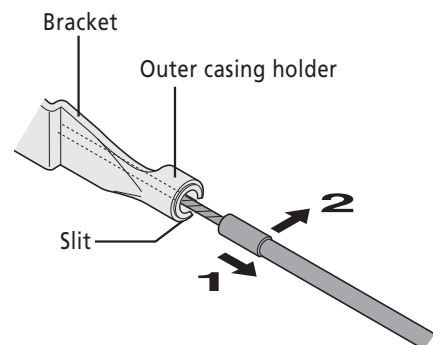


### RAPIDFIRE Plus

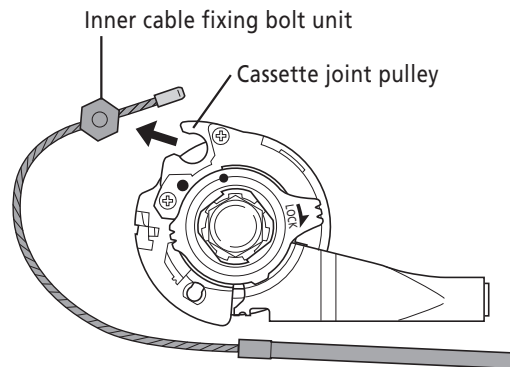
< Shifting Lever >



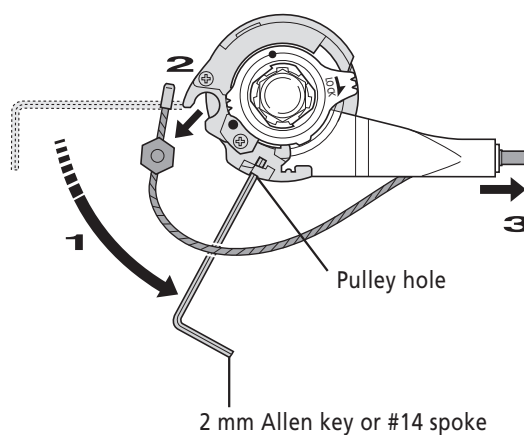
2. Pull the outer casing out from the outer casing holder of the cassette joint, and then remove the inner cable from the slit in the bracket.



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



- If it is difficult to pull the outer casing out from the outer casing holder of the cassette joint, insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, and then turn the pulley to loosen the inner cable. Then remove the inner cable fixing bolt unit from the pulley first, and after this remove the outer casing from the outer casing holder.

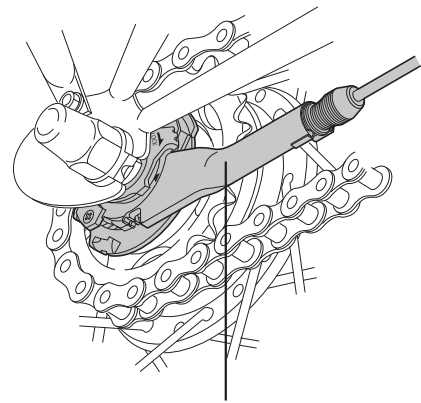


**Note:**

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

**< In the case of CJ-NX40 / CJ-8S40 >**

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

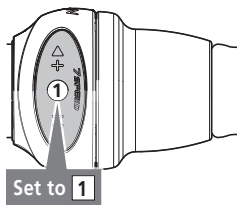


Cassette joint

1. Set the REVOSHIFT lever / shifting lever to **1**.

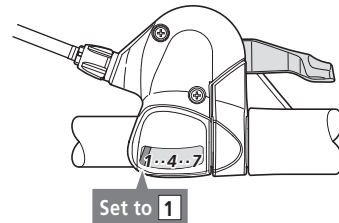
**REVOSHIFT**

**< REVOSHIFT Lever >**

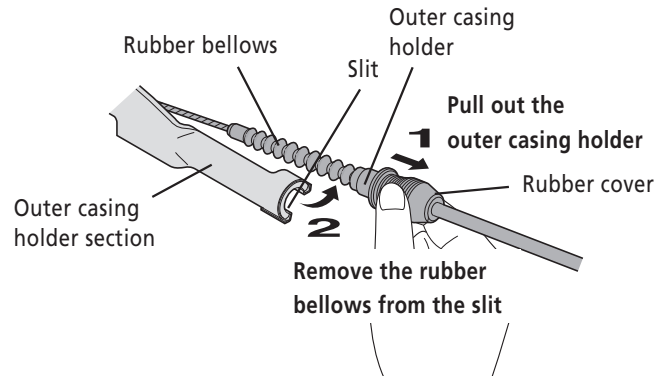


**RAPIDFIRE Plus**

**< Shifting Lever >**



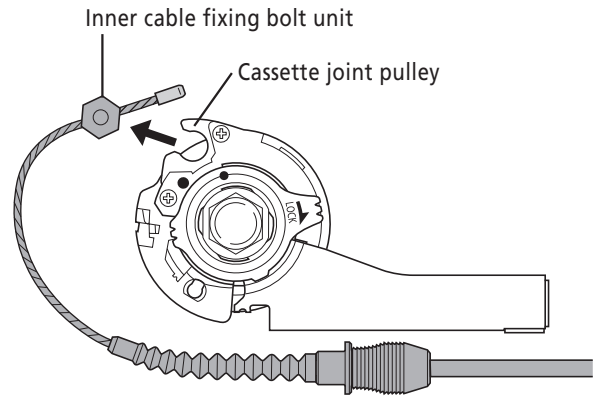
2. Hold the rubber cover and pull the outer casing holder out from the outer casing holder section of the cassette joint. Then remove the inner cable attached to the rubber bellows from the slit in the bracket. Be careful not to damage the rubber bellows at this time.



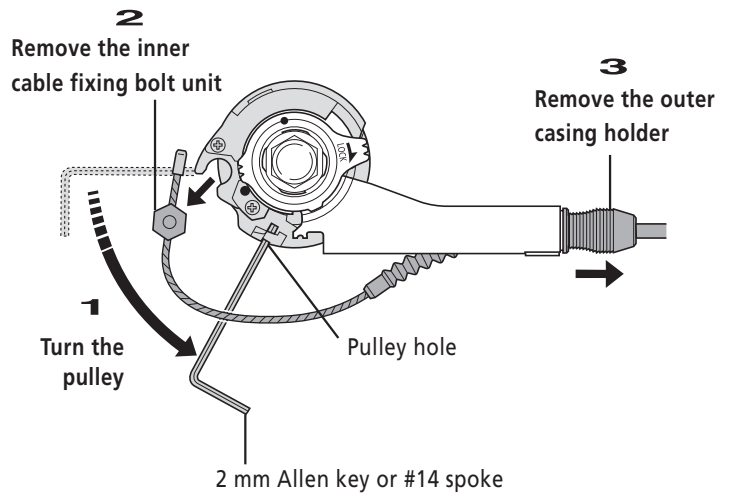
**Note:**

Do not remove the cable by pulling the outer casing.

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



- If it is difficult to pull the outer casing holder out from the outer casing holder section of the cassette joint, insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, and then turn the pulley to loosen the inner cable. Then remove the inner cable fixing bolt unit from the pulley first, and after this remove the outer casing holder from the outer casing holder section.



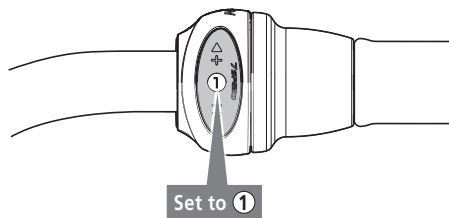


## ■ Replacing the inner cable

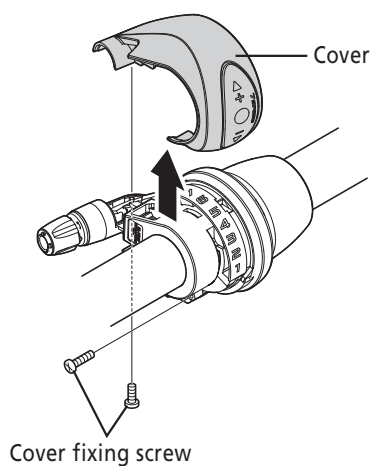
### REVOSHIFT

< REVOSHIFT lever side >

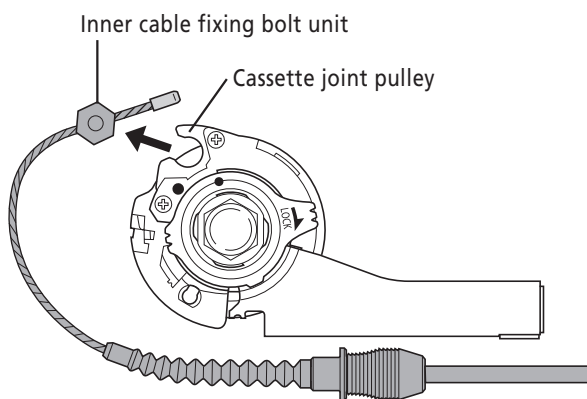
1. Set the REVOSHIFT lever to **1**.



2. Loosen the cover fixing screw, and then remove the cover.



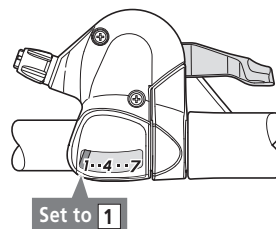
3. Remove the inner cable fixing bolt unit from the cassette joint pulley.



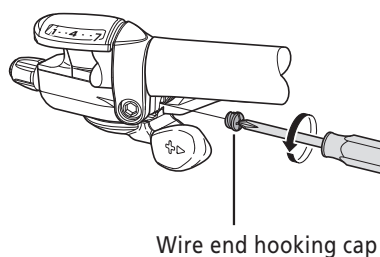
### RAPIDFIRE Plus

< Shifting lever side >

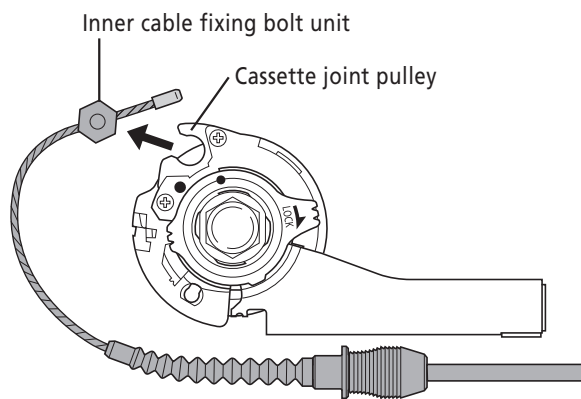
1. Set the shifting lever to **1**.



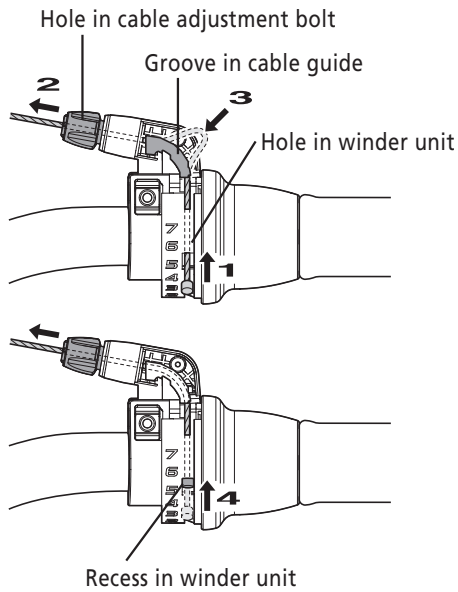
2. Loosen and remove the wire end hooking cap.



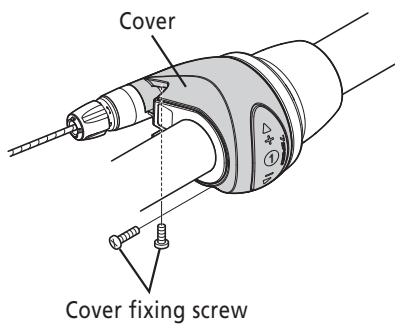
3. Remove the inner cable fixing bolt unit from the cassette joint pulley.



4. Pass the inner cable from the hole in the winder unit through the hole in the cable adjustment bolt. Next, insert the inner cable into the groove of the cable guide, and pull the inner cable so that the inner cable drum fits into the recess in the winder unit.

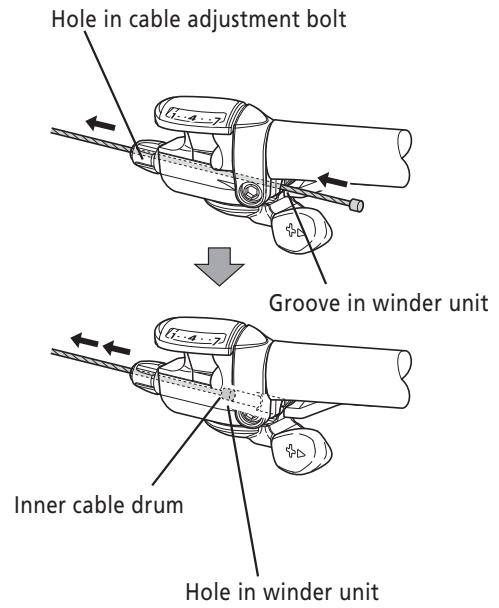


5. Replace the cover and tighten the cover fixing screw.

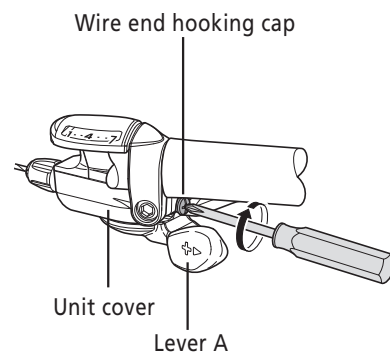


**Tightening torque:**  
0.1 - 0.2 N·m {1 - 2 in. lbs.}

4. Insert the inner cable into the groove in the winder unit, and then pass it through the hole in the cable adjustment bolt. Next, pull the inner cable so that the inner cable drum fits into the hole in the winder unit.



5. Screw in the wire end hooking cap as shown in the illustration until it stops. If it is turned any further, it will damage the screw thread in the cover. In addition, the unit cover may become bent, which may cause an obstruction between the unit cover and lever A, and lever A may not operate correctly. If lever A does not return properly, loosen the wire end hooking cap slightly to make a gap between lever A and the unit cover, and check that this improves the returning of lever A.



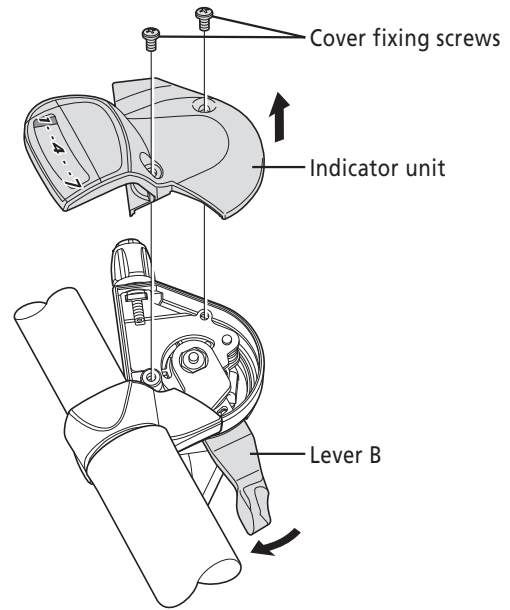
**Tightening torque:**  
0.3 - 0.5 N·m {3 - 4 in. lbs.}

## ■ Replacement and assembly of the indicator unit

Disassembly and assembly should only be carried out when removing and replacing the indicator unit.

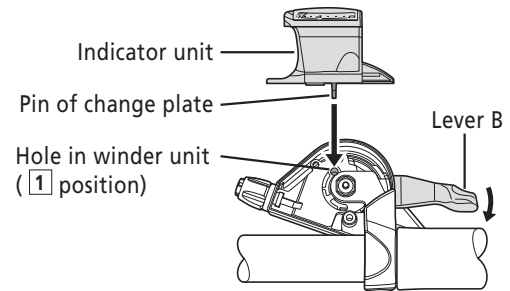
### < Removal >

1. Operate lever B to set it to **1**.
2. Loosen and remove the two cover fixing screws which are securing the indicator unit.
3. Remove the indicator unit as shown in the illustration.



### < Installation >

4. Check that the needle of the indicator is on the left side (**1** position), and then install the indicator unit so that it is facing straight upward. Insert the pin of the change plate that is protruding from the bottom of the indicator unit into the hole in the winder unit at this time.



5. Secure the indicator unit with the two cover fixing screws.

**Tightening torque:**  
0.3 - 0.5 N·m {3 - 4 in. lbs.}

6. Operate lever A and lever B, and check their operation. If they do not operate correctly, reinstall the indicator unit while taking particular note of step 4. above.

**Do not disassemble the indicator unit or the shifting lever unit. Disassembling them may result in malfunctions.**

## Oil maintenance of the inner set unit

- In order to maintain proper performance of the product, it is recommended that you ask the place where you purchased the bicycle or your nearest Pro shop to carry out maintenance such as greasing the internal parts about once every two years from the first time of use (once about every 5,000 km if the bicycle is used very frequently). It is also recommended that you use the Shimano internal hub grease or lubrication kit when carrying out maintenance. If the special grease or lubrication kit is not used, problems such as gear shifting malfunction may occur.



WB maintenance oil set  
Y00298010



1 Fill the bottle with WB oil to a height of 95mm.



2 Immerse the internal unit into the oil from the left side. Immerse until the oil reaches up to ring gear unit 1.



3 Keep the internal unit immersed as illustrated for approximately 90 seconds.



4 Remove the internal unit from the oil.



5 Let the excess oil drain off for approximately 60 seconds.



6 After lubrication is complete, reassemble by following the usual procedure.

# SHIMANO

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

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