## Dealer's Manual

<table>
<thead>
<tr>
<th>ROAD</th>
<th>MTB</th>
<th>Trekking</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Touring/Comfort Bike</td>
<td>URBAN SPORT</td>
<td>E-BIKE</td>
</tr>
</tbody>
</table>

### NEXUS Inter-8

**NEXUS**
- SG-C6001
- SG-C6011
- SB-C6000-8
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............................................................. 24
  Installing to the cassette joint ............................................................... 25

ADJUSTMENT ....................................................................................... 35
  Adjusting the cassette joint ................................................................. 35

MAINTENANCE ..................................................................................... 39
  Disconnecting the shifting cable when removing the rear wheel from the frame .................................................. 39
  Replacing the inner cable ................................................................... 43
  Oil maintenance of the internal assembly........................................... 45
This Dealer's Manual is for the following models.

<table>
<thead>
<tr>
<th>Part/Series</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal geared hub</strong></td>
<td></td>
</tr>
<tr>
<td>Coaster brake + Disc brake</td>
<td>SG-C6001-8CD</td>
</tr>
<tr>
<td>Disc brake</td>
<td>SG-C6001-8D</td>
</tr>
<tr>
<td>Coaster brake</td>
<td>SG-C6001-8C</td>
</tr>
<tr>
<td>Inter-M brake</td>
<td>SG-C6001-8R</td>
</tr>
<tr>
<td>V-brake</td>
<td>SG-C6001-8V</td>
</tr>
<tr>
<td></td>
<td>SG-C6011-8V</td>
</tr>
<tr>
<td><strong>Shifting lever</strong></td>
<td></td>
</tr>
<tr>
<td>REVOSHIFT lever</td>
<td>SB-C6000-8</td>
</tr>
</tbody>
</table>
**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 ⚠️

• Be sure to follow the instructions provided in the manuals when installing the product.
  It is recommended to use genuine Shimano parts only. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury.
  In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury.

• Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.

• After reading the dealer’s manual thoroughly, keep it in a safe place for later reference.

Be sure to also inform users of the following:

• Each bicycle may handle slightly differently depending on the model.
  Therefore, 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 or a fall, which could lead to severe injury. For proper operation, consult a professional bicycle dealer or the bicycle’s owner’s manual. It is also important to practice riding and braking, etc.
• The brake levers are equipped with a mode switching mechanism which can be used to make them compatible with cantilever brakes and roller brakes or V-BRAKE brakes with power modulator. (SB-C6000-8 is compatible with roller brakes or V-BRAKE brakes with power modulator. Please note that it 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 illustrations.

Brake levers with mode switching mechanism can be assembled as shown in the illustrations.

<table>
<thead>
<tr>
<th>Mode position</th>
<th>Applicable brake</th>
</tr>
</thead>
<tbody>
<tr>
<td>C : Mode position for compatibility with cantilever brakes</td>
<td>• Cantilever brakes</td>
</tr>
<tr>
<td>R : Mode position for compatibility with roller brakes</td>
<td>• Roller brakes</td>
</tr>
<tr>
<td>For SB-C6000-8</td>
<td></td>
</tr>
<tr>
<td>R : Mode position for compatibility with roller brakes</td>
<td>• Roller brakes</td>
</tr>
<tr>
<td>V : Mode position for compatibility with V-BRAKE brakes with power modulator</td>
<td>• V-BRAKE brakes with power modulator</td>
</tr>
</tbody>
</table>

• 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 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 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 on one side only, or if the hub nuts are not tightened sufficiently, the non-turn washer may fall out, which could cause the hub axle to rotate and the cassette joint to turn, resulting in the handlebars being accidentally pulled by the shifting cable and an extremely serious accident.

Disc brake rotor

• Please make sure to keep your fingers away from the rotating disc brake rotor. The disc brake rotor is sharp enough to inflict severe injury to your fingers if caught in the openings of the disc brake rotor while it is moving.

• The calipers and disc brake rotor will become hot when the brakes are operated; do not touch them while riding or immediately after dismounting from the bicycle. Otherwise you may get burned.

• Be careful not to allow any oil or grease to get onto the disc brake rotor and brake pads. Otherwise the brakes may not work correctly.

• If any oil or grease gets on the brake pads, consult a dealer or an agency. Otherwise the brakes may not work correctly.

• If noise occurs during brake operation, the brake pads may have been worn down to the usable limit. After checking that the temperature of the brake system has cooled down sufficiently, check that the thickness of each pad is 0.5mm or more. Or, consult a dealer or an agency.

• If the disc brake rotor is cracked or deformed, immediately stop using the brakes and consult a dealer or an agency.

• If the disc brake rotor becomes worn down to a thickness of 1.5mm or less, or if the aluminum surface appears, immediately stop using the brakes and consult a dealer or an agency. The disc brake rotor may break, and you may fall off the bicycle.

Coaster brake hub

• When using a reversed fork end, use a chain adjuster to remove excess slack from the chain.
TO ENSURE SAFETY

CAUTION

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 fall over, which could result in serious injury.

Using 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 riding the bicycle.

Coaster brake specifications

- Continuous application of the brakes when riding down long slopes will cause the internal brake parts to become very hot, weakening braking performance, and may also cause a reduction in the amount of brake grease inside the brake, leading 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:

- 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.

- 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.

- Do not disassemble the hub. If you need to disassemble it, contact the place of purchase.

- All of the following occurrences are due to the internal gear-shifting structure and are not the failure of the internal components.

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

- 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 the purchase.
TO ENSURE SAFETY

For Installation to the Bicycle, and Maintenance:

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

**Example) For 26 inch wheels**

<table>
<thead>
<tr>
<th>Front</th>
<th>36T</th>
<th>38T</th>
<th>46T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear</td>
<td>16T</td>
<td>18T</td>
<td>22T</td>
</tr>
</tbody>
</table>

- To maintain the product in good working order, it is recommended to have a bicycle dealer or nearest agency carry out maintenance such as lubrication of the internal parts about once every two years from the first time of use (once about every 5,000km if the bicycle is used very frequently). Also, for carrying out maintenance, the use of Shimano internal geared hub grease or a lubrication kit is recommended. If Shimano grease or a Shimano lubrication kit is not used, problems such as a malfunction in gear shifting may occur.
- If the wheel becomes stiff and difficult to turn, lubricate it with grease.
- The gears should be periodically washed with a neutral detergent. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the life of the gears and the chain.
- If the chain keeps coming off the gears during use, replace the gears and chain.

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.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Tool</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="2mm" alt="2mm" /></td>
<td>2mm hexagon wrench</td>
<td>Screwdriver[#1]</td>
</tr>
<tr>
<td><img src="5mm" alt="5mm" /></td>
<td>5mm hexagon wrench</td>
<td>TL-LR10</td>
</tr>
<tr>
<td><img src="10mm" alt="10mm" /></td>
<td>10mm spanner</td>
<td>Hexalobular[#25]</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Applicable sprockets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outward assembling</td>
</tr>
<tr>
<td>A</td>
<td>16T-23T</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

(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

NOTE

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 3mm 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.**

   ![Diagram](image1.png)

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

   **NOTE**

   Note the orientation of the driver cap.

   ![Diagram](image2.png)

   - Driver side
   - 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.**

   ![Diagram](image3.png)

   - (A) Pulley
   - (B) Bracket

   **(z) Should be aligned**

3. **Install it with the red ● marks on the cassette joint aligned with the red ● marks on the right side of the hub body.**

   ![Diagram](image4.png)

   - (A) Cassette joint

   **(z) Align the red ● marks to install.**

---

To be continued on next page
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 with the yellow mark on the pulley of the cassette joint.

(z) Align the yellow marks to install.

5

Turn the cassette joint mounting ring 45° clockwise.

(A) Cassette joint mounting ring
(B) Pulley

NOTE
Hold down the cassette joint bracket securely when performing work.
**INSTALLATION**

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.

(z) Align the serrations

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

Installation of the hub to the frame

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

(A) Hub axle
(B) Fork end
INSTALLATION

Installation of the hub to the frame

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 fork ends and align the joint to be almost parallel to the chainstay.

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

NOTE

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

TECH TIPS

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

<table>
<thead>
<tr>
<th>Fork end</th>
<th>Non-turn washer</th>
<th>Mark/Color</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mark on the</td>
<td>Right:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mark of the</td>
<td>Left:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For right</td>
<td>For left</td>
<td>θ ≤ 20°</td>
<td>0° ≤ θ ≤ 38°</td>
</tr>
<tr>
<td>Standard</td>
<td>5R/Yellow</td>
<td>5L/Brown</td>
<td></td>
</tr>
<tr>
<td>Reversed</td>
<td>6R/Silver</td>
<td>6L/White</td>
<td></td>
</tr>
<tr>
<td>Reversed (Full chain case)</td>
<td>5R/Yellow</td>
<td>5L/Brown</td>
<td></td>
</tr>
<tr>
<td>Vertical</td>
<td>8R/Blue</td>
<td>8L/Green</td>
<td>θ = 60° - 90°</td>
</tr>
</tbody>
</table>

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

**Installation of the hub to the frame**

**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.

   ![Diagram](image1)

   (A) Brake fixing washer (insert manually)
   (B) Clip nut
   (C) Arm clip
   (D) Clip bolt (M6 × 16mm)

   **NOTE**
   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 fork ends that are at least 7mm thick.

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

   ![Diagram](image2)

   (A) Hub nut

   **Tightening torque**
   
   ![Tightening torque](image3)

   **NOTE**
   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.

**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 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 the bicycle may fall over, causing serious injury.

**NOTE**

- 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 3mm 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.

---

**Tightening torque**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - 3 N·m</td>
<td></td>
</tr>
</tbody>
</table>
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 |

20
### INSTALLATION

#### Installation of the disc brake rotor

**5 bolt type (with lock washer)**

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

<table>
<thead>
<tr>
<th>Tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - 4 N·m</td>
</tr>
</tbody>
</table>

**NOTE**

- **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**

- **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.**

**Notch in disc brake rotor**

---

To be continued on next page
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 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 5mm hexagon wrench.

(y) 166mm or more
(z) Ø22.2mm

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

Tightening torque

6 - 8 N·m

TECH TIPS

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

Installation of the shifting cable

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

Use a shifting cable with one inner cable drum.
Shifting cable with one inner cable drum:
OT-SP40 (Ø4mm)

(y) Shifting lever side
(z) Cassette joint side

(A) Sealed outer cap

NOTE

Make sure that the sealed outer cap is at the shifting lever end.
Installing to the cassette joint

For CJ-NX10/CJ-8S20

1

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

(A) Aluminum cap
(B) Plastic cap

(z) Lever side

TECH TIPS

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.

Set the REVOSHIFT lever to 1.

(A) REVOSHIFT lever

(z) Set to 1

To be continued on next page
After checking that the end of the outer casing is securely set in the cable adjustment barrel of the REVOSHIFT lever, attach the inner cable mounting bolt unit to the inner cable.

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

### Notes

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

<table>
<thead>
<tr>
<th>Tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>![10mm][A]</td>
</tr>
<tr>
<td>3.5 - 5.5 N·m</td>
</tr>
</tbody>
</table>

### NOTE

- 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 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.

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

(A) Hook

(z) Turn the cable 60°
INSTALLATION

Installing to the cassette joint

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

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

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

When inserting outer casing into outer casing holder first

Insert the outer casing into the outer casing holder.

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

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

(y) 10cm
(z) 15cm

(A) Outer casing bands
**INSTALLATION**

Installing to the cassette joint

For CJ-NX40/CJ-8540

1. Set the REVOSHIFT lever to 1.

   ![Diagram](A) REVOSHIFT lever

   ![Diagram](z) Set to 1

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

   ![Diagram](A) Rubber bellows
   ![Diagram](B) Outer casing holder
   ![Diagram](C) Rubber cover

3. Wipe off any grease on the inner cable.

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

   ![Diagram](A) End of rubber bellows
   ![Diagram](B) Inner cable

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

5. Slide the rubber bellows onto the inner cable.

   ![Diagram](A) Rubber bellows

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

---

*To be continued on next page*
6

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

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

(A) Inner cable  
(B) Outer casing holder 
(C) Outer casing 
(D) Rubber casing 
(E) Rubber bellows

7

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

(v) 10mm  
(w) Pass the inner cable through the hole  
(x) 127mm  
(y) 63mm 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

**NOTE**

- 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
INSTALLATION

Installing to the cassette joint

8

Bring the cable around to the cassette joint pulley, hold it so that the inner cable fixing nut is facing outwards (towards the fork end), 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.

(z) Turn the cable 60°

(A) Hook

To be continued on next page
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 securely into the outer casing holder section of the cassette joint.

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

- (y) Insert the rubber bellows into the slit
- (z) Attach the outer casing holder

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

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

Insert a 2mm 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.

NOTE
Check that the inner cable is correctly seated inside the pulley guide.
Finally, fix the cable on the frame with the outer casing bands.

(y) 10cm  
(z) 15cm  
(A) Outer casing bands
Adjusting the cassette joint

1. Set the REVOSHIFT lever to 1.
   - (A) REVOSHIFT lever
   - (z) Set to 1

2. Set the REVOSHIFT lever as shown in the illustration.
   - (A) REVOSHIFT lever
   - (z) Set to 4

NOTE
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)
Adjusting the cassette joint

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

**NOTE**
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
- Pulley
- Bracket

*When the bicycle is upside down*
- Should be aligned
- Pulley
- Bracket
ADJUSTMENT

Adjusting the cassette joint

If the yellow setting lines are not aligned

3

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

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

<table>
<thead>
<tr>
<th>8-speed</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

4

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

Next, install the inner end cap.

(A) Cable adjustment barrel

<table>
<thead>
<tr>
<th>Inner end cap</th>
</tr>
</thead>
</table>

(A) Inner end cap

(z) 15 - 20mm
MAINTENANCE

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

For CJ-NX10/CJ-8S20

1. Disconnect the cable from the cassette joint when removing the rear wheel from the frame.
   - (A) Cassette joint

2. Set the REVOSHIFT lever to 1.
   - (A) REVOSHIFT lever
   - (Z) Set to 1

3. Pull out the outer casing from the outer casing holder of the cassette joint, and remove the inner cable from the slit in the bracket.
   - (A) Bracket
   - (B) Outer casing holder
   - (C) Slit

To be continued on next page
MAINTENANCE

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

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

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

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

Insert a 2mm hexagon wrench or #14 spoke into the hole in the cassette joint pulley and turn the pulley to slacken the inner cable.

First, remove the inner cable mounting bolt unit from the pulley.

Pull the outer casing out from the outer casing holder.

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

TECH TIPS
When remounting the cable, refer to the section “Installation of the shifting cable”.

40
**MAINTENANCE**

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

**For CJ-NX40/CJ-8S40**

1. **(A) Cassette joint**
   - Disconnect the cable from the cassette joint when removing the rear wheel from the frame.

2. **(A) REVOSHIFT lever**
   - Set the REVOSHIFT lever to 1.
   - (z) Set to 1

3. **(A) Rubber bellows**
   - (B) Outer casing holder
   - (C) Rubber cover
   - (D) Outer casing holder section
   - (E) Slit
   - Hold the rubber cover and pull the outer casing holder out 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.

4. **(A) Inner cable mounting bolt unit**
   - (B) Cassette joint pulley
   - Remove the inner cable mounting bolt unit from the cassette joint pulley.

**NOTE**

Do not remove the cable by pulling the outer casing.
Disconnecting the shifting cable when removing the rear wheel from the frame

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

Insert a 2mm hexagon wrench or a #14 spoke into the hole in the cassette joint pulley and turn the pulley to slacken the inner cable.

First, remove the inner cable mounting bolt unit from the pulley.

Pull the outer casing holder out from the outer casing holder section.

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

Replacing the inner cable

1. Set the REVOSHIFT lever to 1.
   (z) Set 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

To be continued on next page
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.

Replace the cover and tighten the cover fixing screws.

### Tightening torque

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

<table>
<thead>
<tr>
<th><strong>Tightening torque</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(A) Cover</strong></td>
</tr>
<tr>
<td><strong>(B) Cover fixing screw</strong></td>
</tr>
<tr>
<td>0.1 – 0.2 N·m</td>
</tr>
</tbody>
</table>
To maintain the product in good working order, it is recommended to have a bicycle dealer or nearest agency carry out maintenance such as lubrication of the internal parts about once every two years from the first time of use (once about every 5,000km if the bicycle is used very frequently). Also, for carrying out maintenance, the use of Shimano internal geared hub grease or a lubrication kit is recommended. If Shimano grease or a Shimano lubrication kit is not used, problems such as a malfunction in gear shifting may occur.

(A) WB maintenance oil set (Y00298010)

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

(z) 95mm

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.
### MAINTENANCE

**Oil maintenance of the internal assembly**

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Remove the internal unit from the oil.</td>
</tr>
<tr>
<td>5</td>
<td>Let excess oil drain off for approximately 60 seconds.</td>
</tr>
<tr>
<td>6</td>
<td>Reassemble the hub.</td>
</tr>
</tbody>
</table>