

Important Safety Information

**⚠ 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.

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

• If you have any questions, consult a dealer or an agency.

**⚠ CAUTION**

• Be sure to shift the lever one gear at a time, and reduce the force being applied to the pedals during shifting. If you try to force operation of the shifting lever 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.

• Never place your foot on the bell crank. Otherwise, gear shifting may not function properly.

**Note:**

For maximum performance we highly recommend Shimano lubricants and maintenance products. Products are not guaranteed against natural wear and deterioration from normal use and aging.

SI-0123A-001

REVOSHIFT Lever/  
Bell Crank 4 /Bell Crank 6  
(For internal 3-speed hubs)

Instructions for use

Be sure to read these technical service instructions in conjunction with the technical service instructions for the Inter-3 hub.

REVOSHIFT lever operation

Turn the REVOSHIFT lever to shift one gear at a time.

**Pedaling becomes heavier**

Indicator moves toward **3**

**Pedaling becomes lighter**

Indicator moves toward **1**

**1**.....Starting/Riding on sandy or rough road surfaces/Riding up slopes/Carrying heavy loads/Riding into headwinds

**2**.....Riding on flat road surfaces

**3**.....Riding at high speeds

Installation of the lever

Install the lever as shown in the illustration.

Use a brake lever with a band width of 4.3 mm or lower so that the brake lever does not interfere with the REVOSHIFT lever.

The straight section of the handlebar must be 158 mm or longer. The REVOSHIFT lever is installed to this straight section.

Brake lever

Handlebar

Half grip

3 mm Allen key

Tighten

4

2

1

φ22.2 mm

3

**Tightening torque:**  
2 - 2.5 N·m {18 - 21 in. lbs.}

Leave a clearance of 0.5 mm between the REVOSHIFT lever and the half grip.

Installation of the shifting cable

Use a cable with one inner cable drum as the shifting cable.

Cassette joints side

REVOSHIFT lever side

Plastic cap

Plastic cap

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

**Set to 1**

■ REVOSHIFT lever side

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

**Bottom-fastening type**

Top-fastening type

Cover fixing screw

Cover

Cover fixing screw

**Note:**

The cover is fastened from the top or bottom, depending on the type being used. Check the specifications and remove the cover accordingly.

3. Connect the inner cable to the connecting cable. Hook the inner cable drum in the hole in the connecting cable and insert the inner cable into the groove in the outer holder.

Hole in the connecting cable

Groove in the outer holder

**Tightening torque:**  
0.1 - 0.2 N·m {0.9 - 1.7 in. lbs.}

**Bottom-fastening type**

Top-fastening

Cover fixing screw

Cover

Cover fixing screw

**Note:**

The cover is fastened from the top or bottom, depending on the type being used. Check the specifications and attach the cover accordingly.

■ Bell crank side

5. Loosen the cover fixing screw, and then remove the bell crank cover.

Cover fixing screw

Bell crank cover

6. Loosen the inner cable fixing nut on the main bell crank unit. Next, pass the inner cable from the cable adjusting bolt along the groove in the link and then in between the link and the inner cable fixing plate.

Cable adjusting bolt

Loosen

Link

Inner cable fixing plate

Inner cable fixing nut

Be sure to pass the inner cable through the groove in the link.

OK

Not OK

7. Set the REVOSHIFT lever to **2**. Next, pull the inner cable so that the edges of the link on the main bell crank unit are between the two yellow lines on the window, and then tighten the inner cable fixing nut at that position.

**Set to 2**

**Tightening torque:**  
4 - 6 N·m {35 - 52 in. lbs.}

Yellow line

Yellow line

Edge of link

The edges of the link should be between the yellow lines.

Tighten

Inner cable fixing nut

Pull

After tightening the inner cable fixing nut, cut off any excess inner cable.

Within 4 mm

8. Replace the bell crank cover and tighten the cover fixing screw.

Installation of bell crank

1. Insert the push rod into the hub axle.

Push rod

Approx. 14 mm

The end of the push rod should project from the end of the hub axle by approximately 14 mm.

2. While pushing the main bell crank unit onto the hub axle, align the serrations inside the main bell crank unit with the hub nut, and then push the main bell crank unit on until it touches the end of the hub axle. In this position, tighten the main unit installation bolt onto the hub axle.

Main unit installation bolt

5 mm Allen key or 10 mm spanner

Hub nut

Edge of window

The edge of the window and the end of the hub axle should be aligned.

End of hub axle

Adjusting bell crank

1. Set the REVOSHIFT lever to **2**. Next, turn the cable adjusting bolt until the red line on the push rod is aligned with the end of the hub axle.

Cable adjusting bolt

Push rod

**Set to 2**

The red line on the push rod and the end of the hub axle should be aligned.

End of hub axle

Red line on push rod

Yellow line

Yellow line

Yellow section of link

If the red line on the push rod is not visible, adjust so that the yellow section of the link is between the two yellow lines on the window.

**Note:**

Look at the two yellow lines from directly above during adjustment.

2. While turning the crank arm, move the REVOSHIFT lever from **3** to **1** and then from **1** back to **3** two or three times to check the gear shifting. Set the REVOSHIFT lever back to **2** and check that the red line on the push rod is aligned with the end of the hub axle.

If they are not aligned, turn the cable adjusting bolt to make fine adjustments.

3. After adjusting the bell crank, tighten the cable adjusting nut to secure the cable adjusting bolt.

Cable adjusting nut

**Tightening torque:**  
1.5 - 2.5 N·m {14 - 21 in. lbs.}

Securing the shifting cable to the frame

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

Outer casing bands

20 - 25cm

There should be enough slack so that the cable is not pulled too much when the handlebars are turned.

\* Service Instructions in further languages are available at: <http://si.shimano.com>

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

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