



WARNING

Obtain, read and carefully service instructions when installing parts. A loose, worn, or damaged parts may cause injury to the rider. We strongly recommend that only genuine Shimano replacement parts be used.

SERVICE INSTRUCTIONS

SI-6E80B

SL-3S35-E Bell Crank III Bell Crank IV

Revo-shift Lever

Bell Crank

Before use, read these instructions carefully, and follow them for correct use.

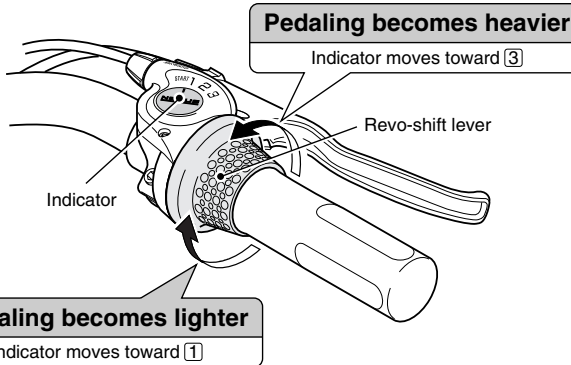
Be sure to read these service instructions in conjunction with the service instructions for the Inter-3 hub before use.

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. Doing so may cause problems with gear shifting.

Revo-shift lever operation

Turn the Revo-shift lever to shift to each of the three gears.

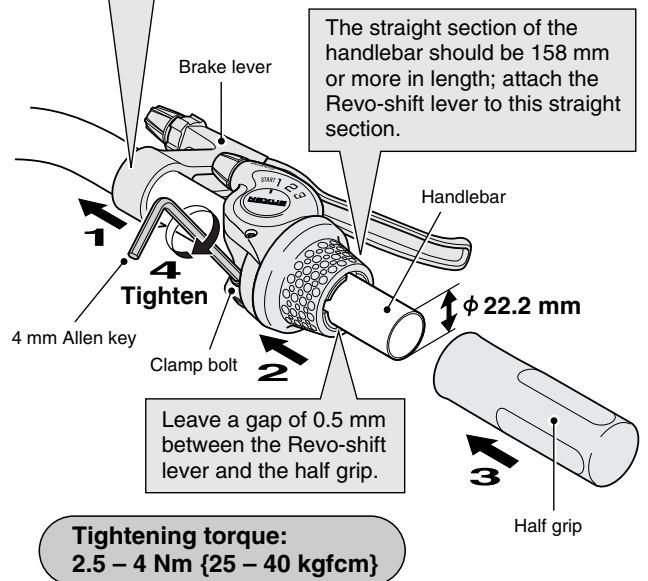


- ① Starting/Riding on sandy or rough road surfaces/
Riding up slopes/Carrying heavy loads/
Riding into head winds/When the light is illuminated
- ② Riding on flat road surfaces
- ③ Riding at high speeds

Installation of the lever

Install the lever as shown in the illustration.

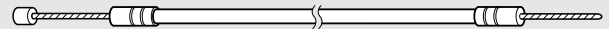
Use a brake lever band with a thickness of 4.3 mm or less so that it does not obstruct the brake lever and the Revo-shift lever.



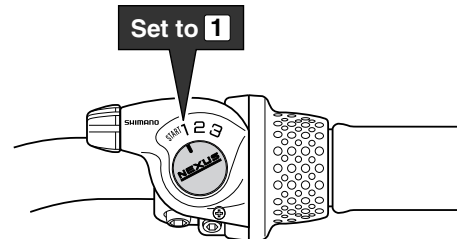
Installation of the shifting cable

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

SIS-SP40 (4 mm dia.)

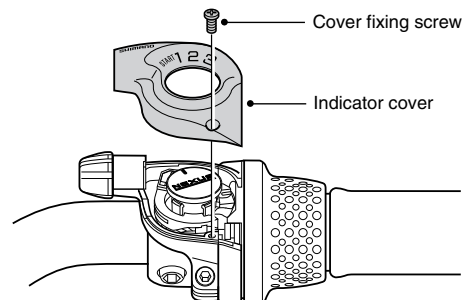


1. Set the Revo-shift lever to ①.



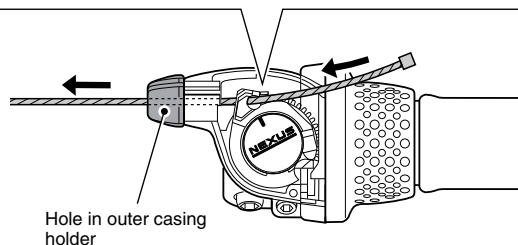
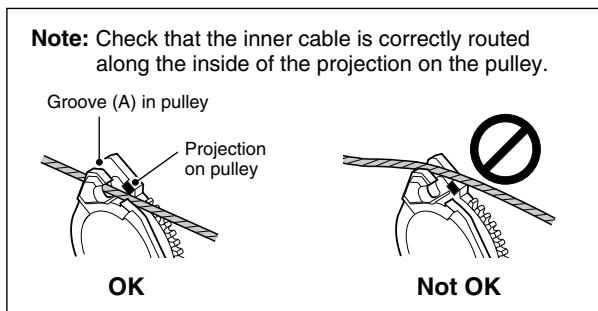
Revo-shift lever side

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

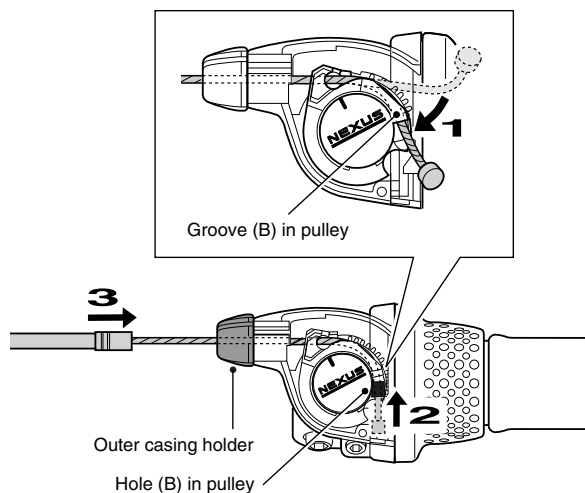


3. Set the inner cable onto the pulley.

- 1) Insert the inner cable into groove (A) from the inside of the projection on the pulley, and then pass it through the hole in the outer casing holder.



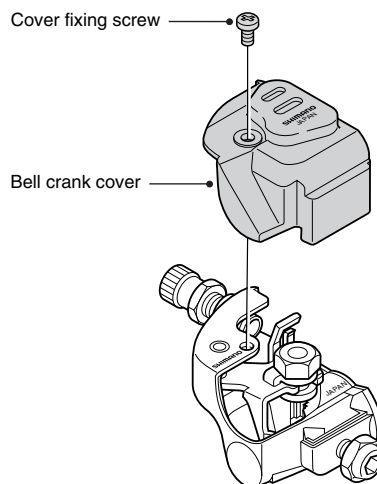
- 2) Hook the inner cable into groove (B) in the pulley, and pull the inner cable so that the inner cable drum fits into the hole (B) in the pulley. After this, insert the outer casing into the outer casing holder.



4. Replace the indicator cover and tighten the cover fixing screw.

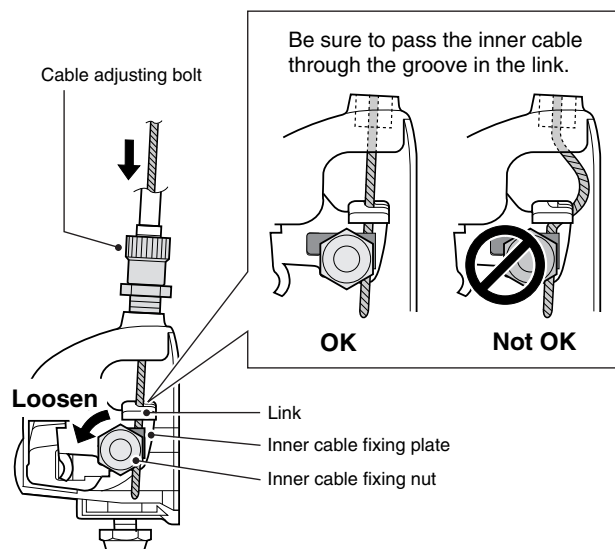
■ Bell crank side

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



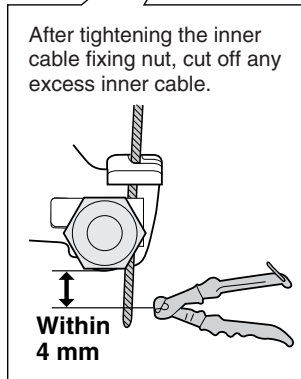
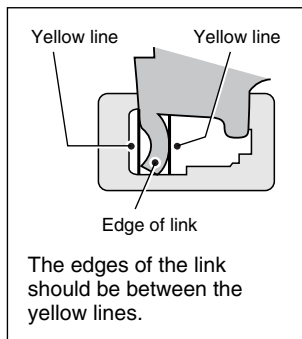
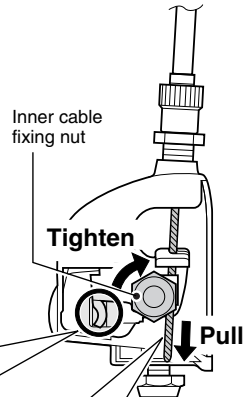
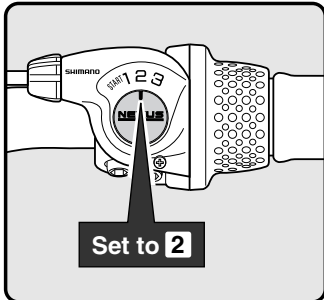
6. Set the inner cable into the link of the main bell crank unit.

- 1) 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.



- 2) Set the Revo-shift 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.

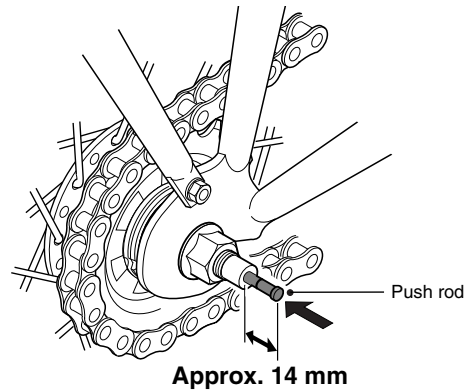
**Tightening torque:
4 – 6 Nm {40 – 60 kgfcm}**



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

Installation of bell crank

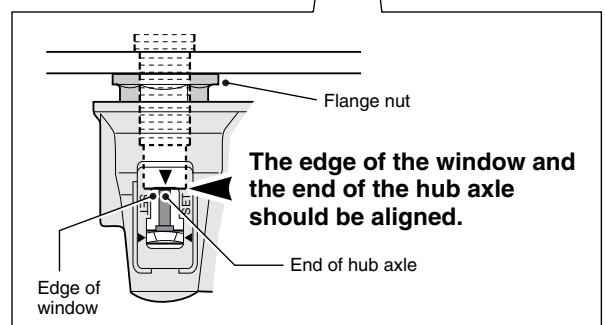
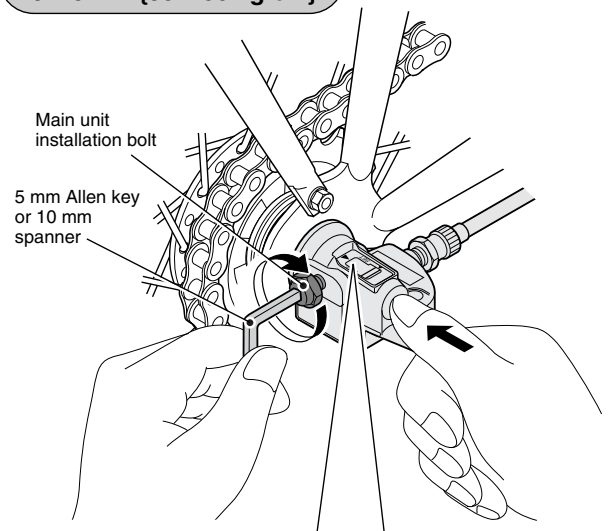
1. Insert the push rod into the hub axle.



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

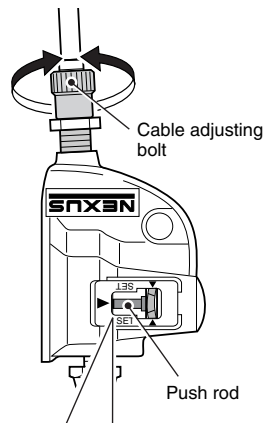
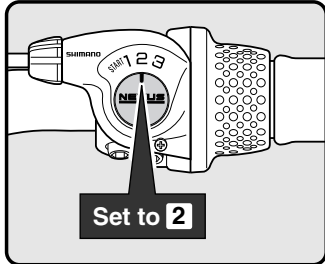
2. While pushing the main bell crank unit onto the hub axle, align the serrations inside the main bell crank unit with the flange nut, and then push the main bell crank unit on until it touches the end of the hub axle. In this position, tighten the main unit installation bolt onto the hub axle.

**Tightening torque:
3 – 5 Nm {30 – 50 kgfcm}**

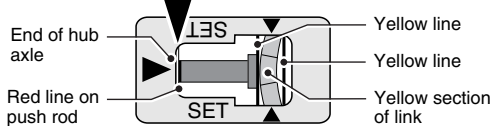


Adjusting bell crank

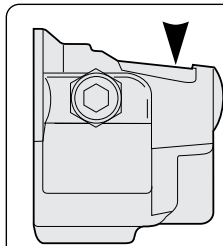
1. Set the Revo-shift lever to **2**. Next, turn the cable adjusting bolt until the red line on the push rod is aligned with the end of the hub axle.



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



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.

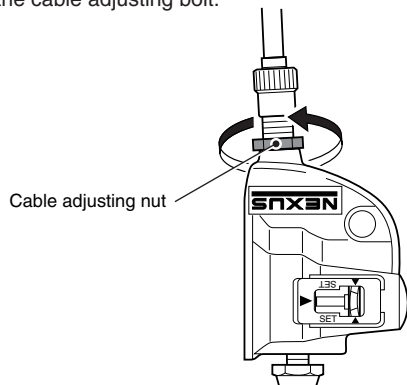


Note:
Look at the two yellow lines from directly above during adjustment.

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

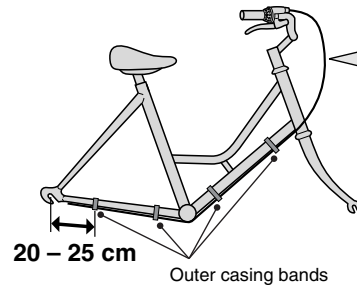
If they are not aligned, turn the cable adjusting bolt to make fine adjustments.

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



Securing the shifting cable to the frame

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



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

These service instructions explain how to use and maintain the Shimano bicycle parts which have been used on your new bicycle. For any questions regarding your bicycle or other matters which are not related to Shimano parts, please contact the place of purchase or the bicycle manufacturer.

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

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