



General Safety Information

WARNING

- To avoid serious injuries:
- Obtain and read the service instructions carefully prior to installing the parts. Loose, worn, or damaged parts may cause serious injury to the rider.
We strongly recommend only using genuine Shimano replacement parts.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.

NOTE:

- The CJ-NX40 cassette joint should only be used with sprockets from 15T to 23T.
- When lubricating the chain or the sprockets, be careful not to get any oil on the rubber bellows or the rubber cover of the cassette joint.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.

SI-NX40B

CJ-NX40

Cassette Joint

Technical Service Instructions

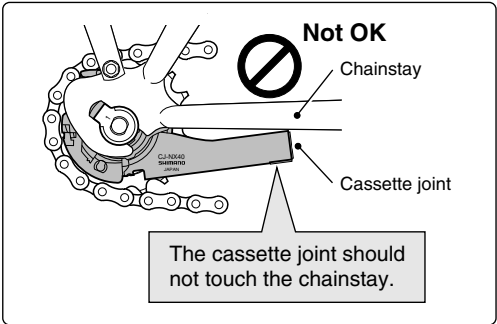
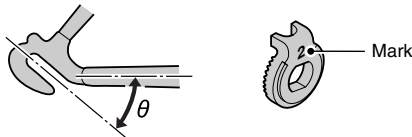
Installation of the cassette joint

Refer to the Service Instructions for the Inter-7 hub or the Inter-4 hub for details on installation of the cassette joint to the hub and installation of the non-turn washer.

Note:

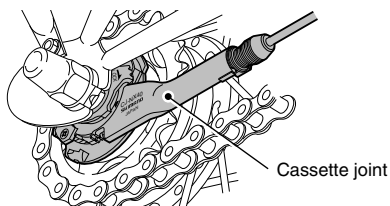
When installing the non-turn washer, if the fork end is standard but the size is less than 20° or more than 38°, or if the size is correct but the cassette joint cannot be installed correctly, use the non-turn washer for the reversed (full chain case) fork end. (Refer to the table below.)

Inter hub		Non-turn washer for reversed (full chain case) fork end	
		Mark	Color
Inter-7 hub		2	Yellow
Inter-4 hub	SG-4R35	5R (Right)	Yellow
	SG-4C35	5L (Left)	Brown
		5R	Yellow

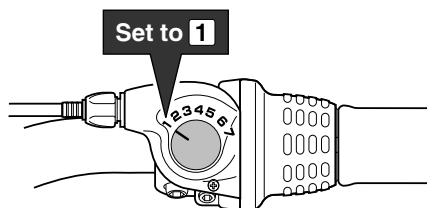


Disconnecting the shifting cable when removing the rear wheel from the frame

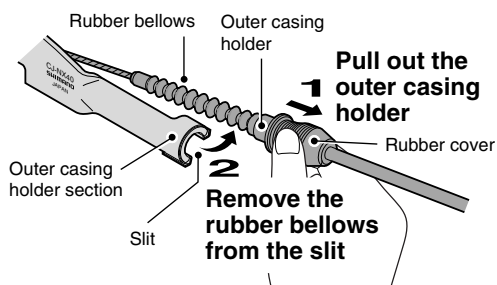
Disconnect the cable from the cassette joint when removing the rear wheel from the frame.



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



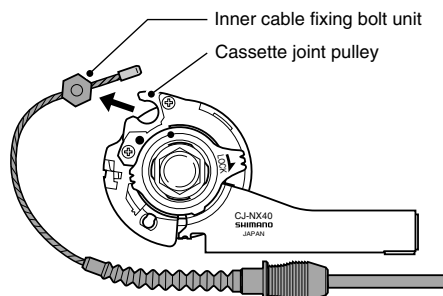
2. Hold the rubber cover and pull the outer casing holder out from the outer casing holder section of the cassette joint. Then remove the inner cable attached to the rubber bellows from the slit in the bracket. Be careful not to damage the rubber bellows at this time.



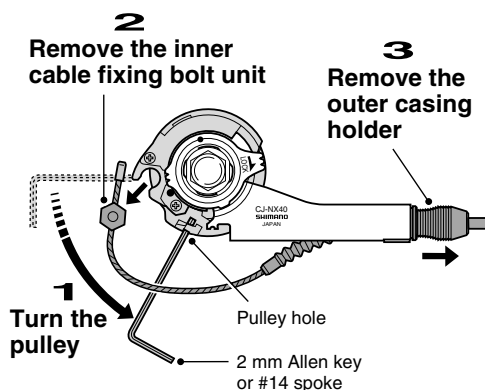
Note:

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.



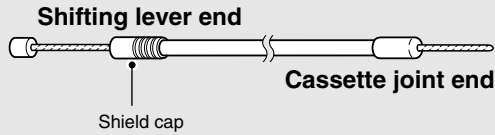
Note:

If reusing the cable, refer to steps 6 to 8 in "Installation of the shifting cable".

Installation of the shifting cable

Use a shifting cable with one inner cable drum.

SIS-SP (4 mm or 5 mm dia.)



Note:

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

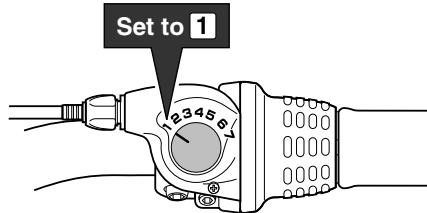
■ Shifting lever side

1. Connect the shifting cable to the shifting lever.

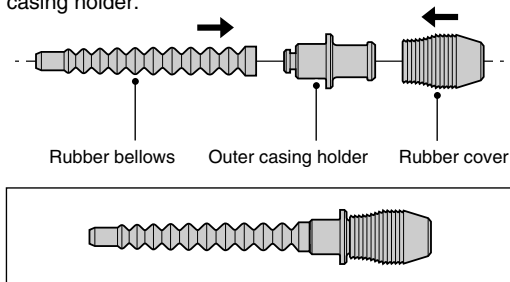
Refer to the Service Instructions which are provided with the Inter-7 or Inter-4 shifting lever.

■ Cassette joint side

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



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



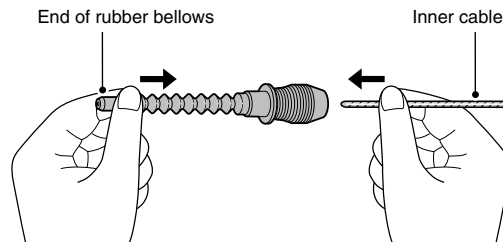
4. Wipe away any grease which may be on the inner cable, and then pass the inner cable through the rubber bellows. After this, insert the outer casing into the rubber cover and set it into the outer casing holder.

Use a new inner cable. Do not use a cable which has had the end cut off.

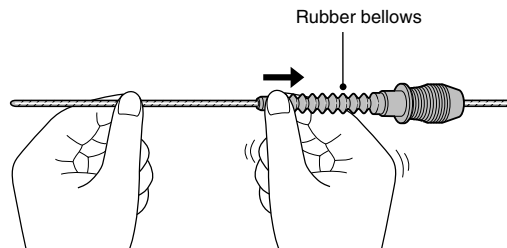
Be careful of the inner cable end



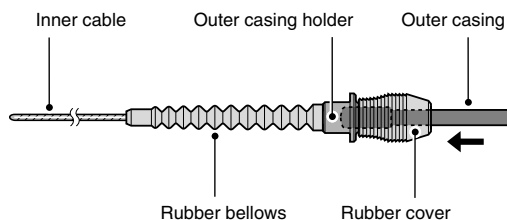
- 1) While holding the end of the rubber bellows, insert the inner cable. Be careful not to pierce the rubber bellows with the end of the inner cable at this time.



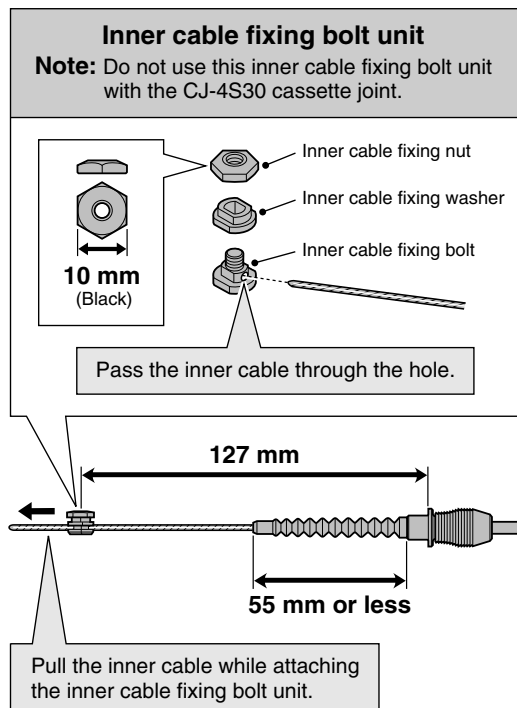
- 2) Slide the rubber bellows onto the inner cable.



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

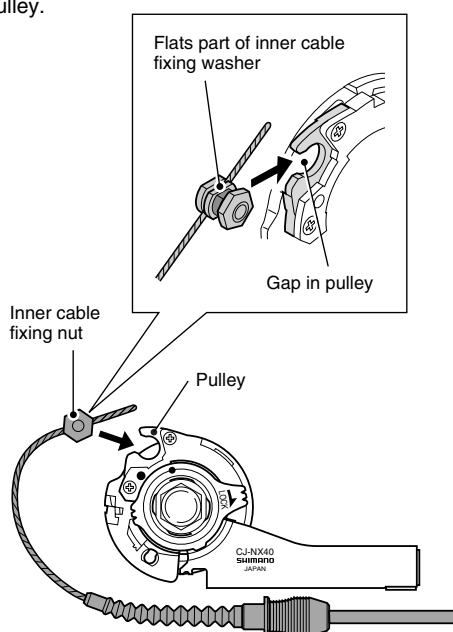


- After checking that the end of the outer casing is sitting securely in the cable adjustment bolt of the shifting lever, attach the inner cable fixing bolt unit to the inner cable.

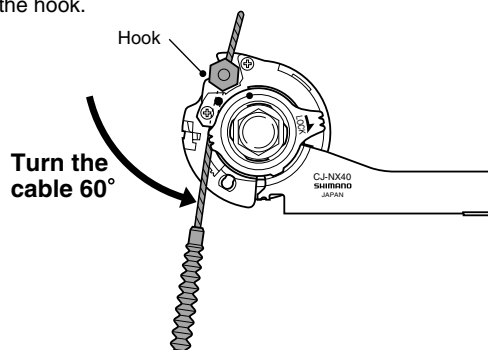


Tightening torque:
4 – 6 N·m {40 – 60 kgf·cm}

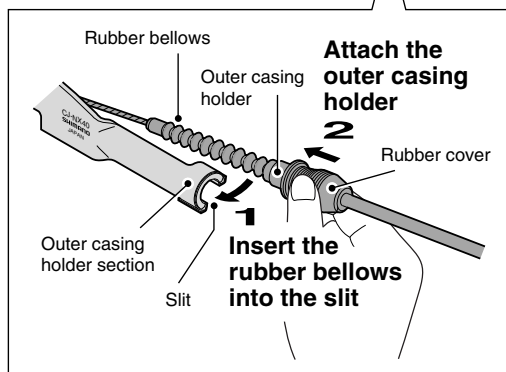
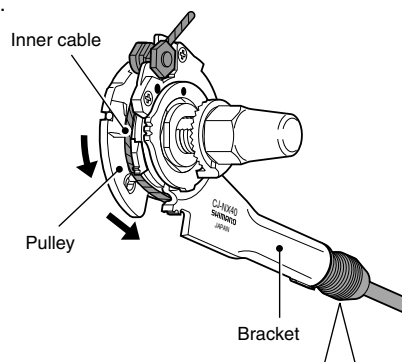
- Bring the cable around to the cassette joint pulley, hold so that the inner cable fixing nut is facing to the outside (toward the fork end), and then slide the flats part of the inner cable fixing washer into the gap in the pulley.



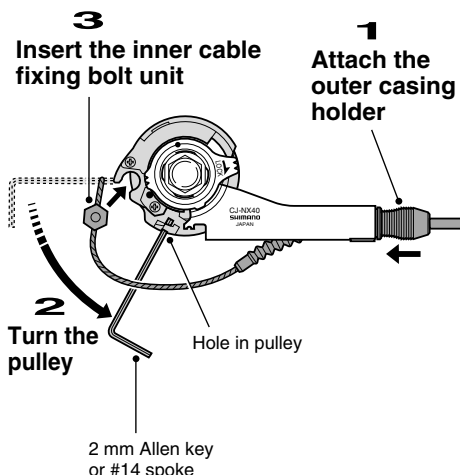
- Turn the cable 60° counterclockwise and attach it to the hook.



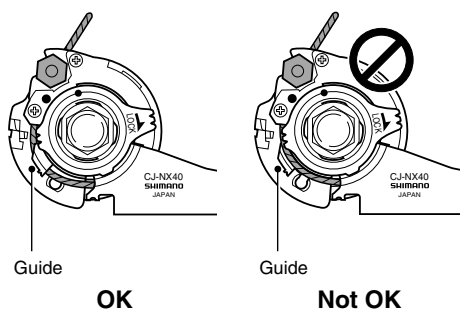
- Attach the inner cable to the pulley as shown in the illustration, pass the part of the inner cable which has the rubber bellows attached through the slit in the cassette joint bracket, and then insert the outer casing holder securely into the outer casing holder section. Be careful not to damage the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



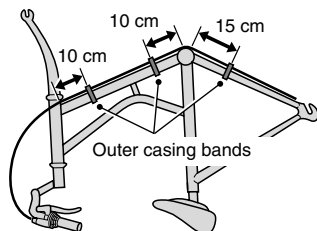
If first inserting the outer casing holder into the outer casing holder section of the cassette joint is easier, then first insert the outer casing holder into the outer casing holder section of the cassette joint, and then insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, 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.

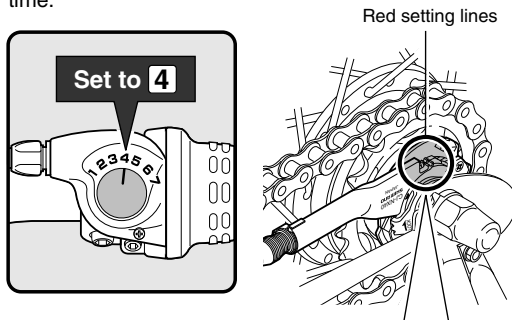


- 9.** Secure the cable to the frame with the outer casing bands.



Adjusting the cassette joint

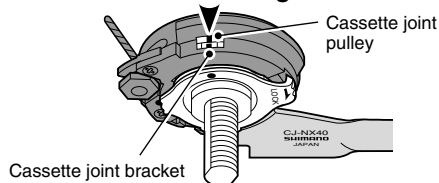
- 1.** Set the shifting lever to **4**.
Check to be sure that the red setting lines on the cassette joint bracket and pulley are aligned at this time.



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

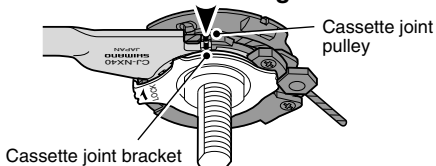
When bicycle is standing up

Should be straight

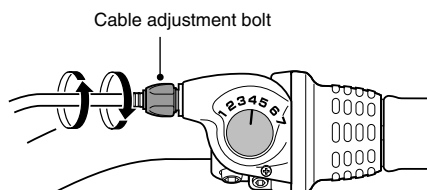


When bicycle is upside down

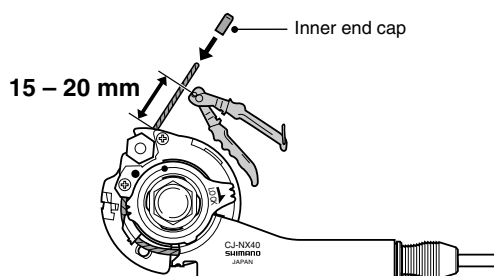
Should be straight



If the red setting lines are not aligned, turn the cable adjustment bolt of the shifting lever to align the setting lines. After this, move the shifting lever once more from **4** to **1** and then back to **4**, and then re-check to be sure that the red setting lines are aligned.



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



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.

These service instructions are printed on recycled paper.

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

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