

## 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.

### CAUTION

– To avoid serious injuries:

- 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.

### NOTE:

- 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-6M20A-001

**SL-S500** Shifting Lever  
**CJ-8S20** Cassette Joint

## Technical Service Instructions

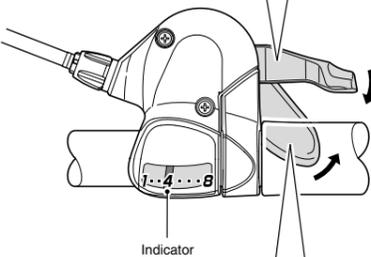
**SHIMANO**  
**ALFINE**

Be sure to read these service instructions in conjunction with the service instructions for the SG-S500 hub or Inter-8 hub before use.

## Shifting lever operation

After you release your finger from lever A/lever B once shifting is complete, the lever will always return to its original position.

**Lever B:**  
Pedaling becomes lighter.  
(Indicator moves toward 1)

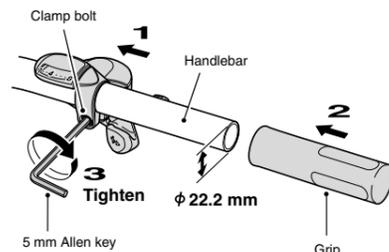


**Lever A:**  
Pedaling becomes heavier.  
(Indicator moves toward 8)

## Installation of the shifting lever

Install the shifting lever as shown in the illustration.

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



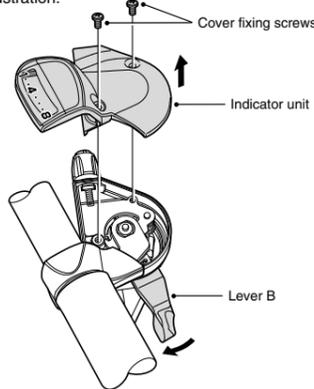
**Tightening torque:**  
5 – 7 N·m {50 – 70 kgf·cm}

## Replacement and assembly of the indicator unit

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

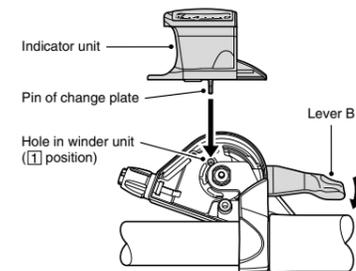
### Removal

1. Operate lever B 7 times or more 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.

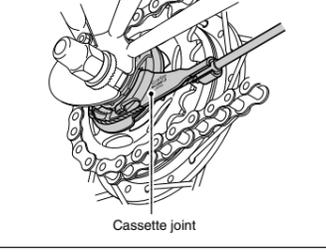
**Tightening torque:**  
0.3 – 0.5 N·m {3 – 5 kgf·cm}

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.

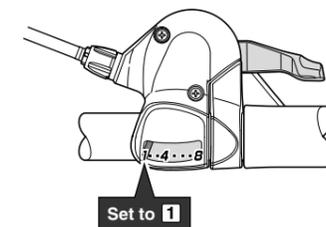
Do not disassemble the indicator unit or the shifting lever unit. Disassembling them may result in malfunctions.

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

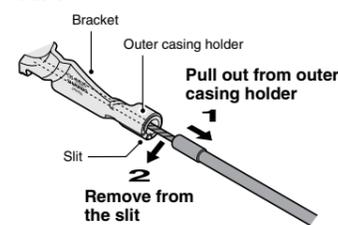
Disconnect the cable from the cassette joint when removing the rear wheel from the frame.



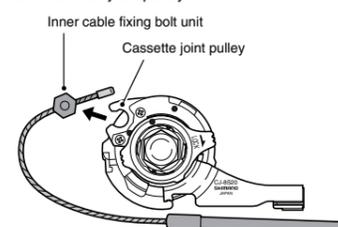
1. Set the shifting lever to 1.



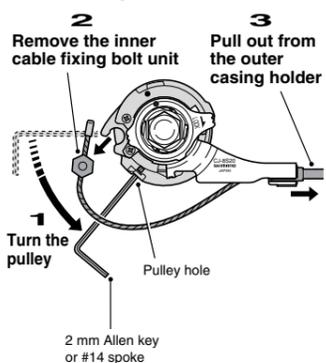
2. Pull the outer casing out from the outer casing holder of the cassette joint, and then remove the inner cable from the slit in the bracket.



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.

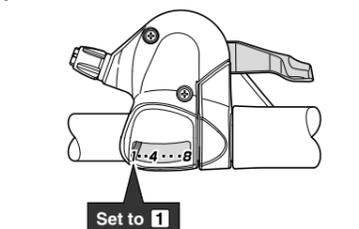


**Note:**  
If reusing the cable, refer to steps 7 to 9 in "Installation of the shifting cable".

## Installation of the shifting cable

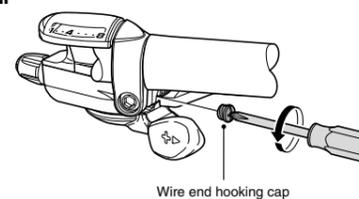
Use a shifting cable with one inner cable drum.  
Cable with one inner cable drum:  
SIS-SP41/SP40 (4 mm dia.)

1. Set the shifting lever to 1.

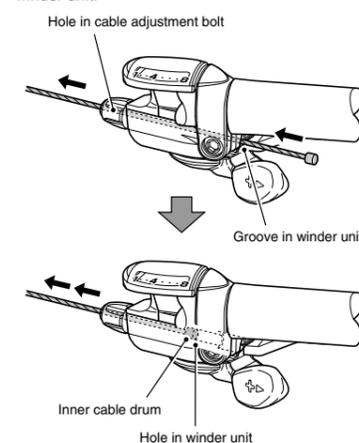


### Shifting lever side

2. Loosen and remove the wire end hooking cap.

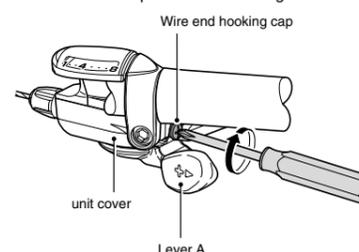


3. Insert the inner cable into the groove in the winder unit, and then pass it through the hole in the cable adjustment bolt. Next, pull the inner cable so that the inner cable drum fits into the hole in the winder unit.

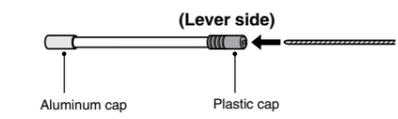


4. Screw in the wire end hooking cap as shown in the illustration until it stops. If it is turned any further, it will damage the screw thread in the cover.

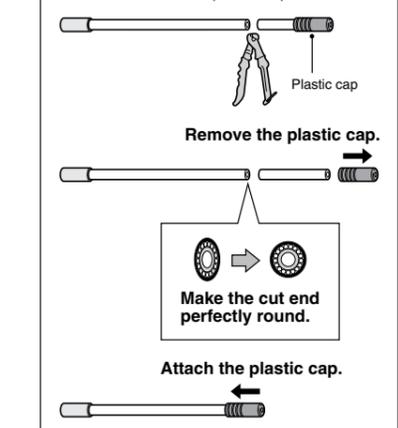
In addition, the unit cover may become bent, which may cause an obstruction between the unit cover and lever A, and lever A may not operate correctly. If lever A does not return properly, loosen the wire end hooking cap slightly to make a gap between lever A and the unit cover, and check that this improves the returning of lever A.



5. Pass the inner cable through the SIS-SP41/SP40 outer casing through the end with the plastic cap.

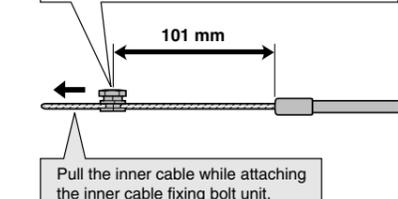
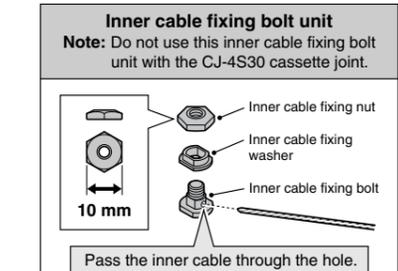


If cutting the outer casing, cut it near the end with the plastic cap while the cap is still attached. Then make the cut end perfectly round and attach the plastic cap.



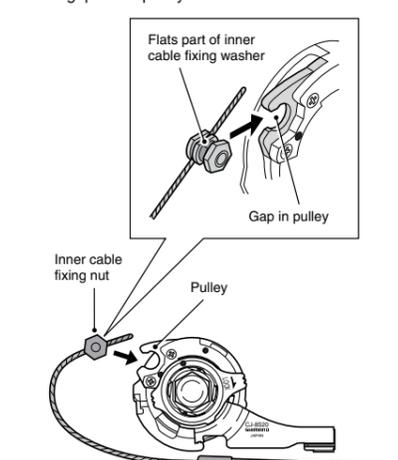
### Cassette joint side

6. 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.

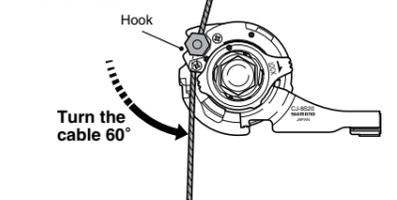


**Tightening torque:**  
3.5 – 5.5 N·m {35 – 55 kgf·cm}

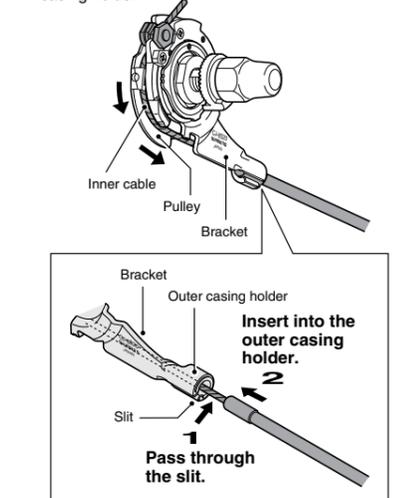
7. Bring the cable around to the cassette joint pulley, hold so that the inner cable fixing nut is facing to the outside (toward the fork end), and then slide the flats part of the inner cable fixing washer into the gap in the pulley.



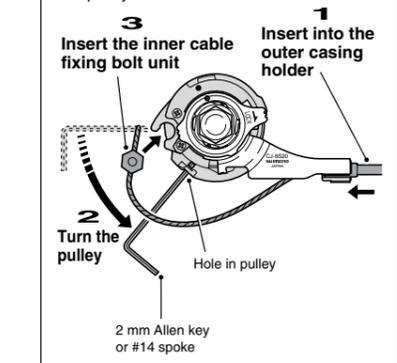
8. Turn the cable 60° counterclockwise and attach it to the hook.



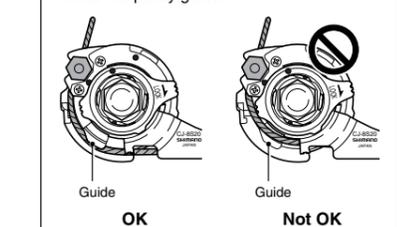
9. Attach the inner cable to the pulley as shown in the illustration, pass the inner cable through the slit in the cassette joint bracket, and then insert the end of the outer casing securely into the outer casing holder.



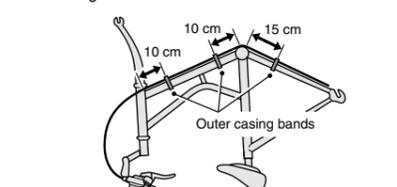
If first inserting the outer casing into the outer casing holder is easier, then first insert the outer casing into the outer casing holder, and then insert a 2 mm Allen key or a #14 spoke into the hole in the cassette joint pulley, and then turn the pulley so that the inner cable fixing bolt unit fits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



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

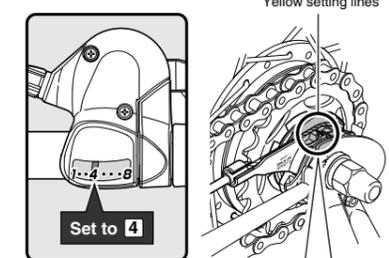


10. Secure the cable to the frame with the outer casing bands.



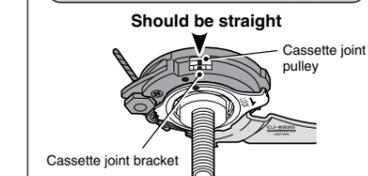
## Adjusting the cassette joint

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

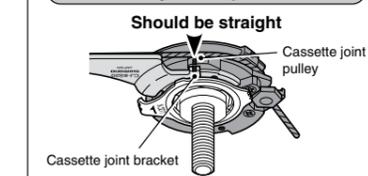


The yellow setting lines on the cassette joint are located in two places. Use the one that is easiest to see.

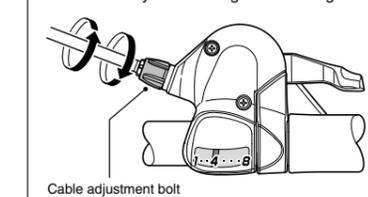
### When bicycle is standing up



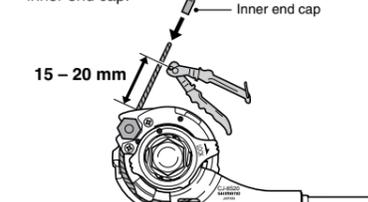
### When bicycle is upside down



If the yellow setting lines are not aligned, turn the cable adjustment bolt of the 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 yellow 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.

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

**SHIMANO**

SHIMANO AMERICAN CORPORATION  
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.  
Industrieweg 24, 8071 CT Nunspeet, The Netherlands Phone: +31-341-272222

SHIMANO INC.  
3-77 Oimatsu-cho, Sakai-ku, Sakai, Osaka 590-8577, Japan

© Dec. 2008 by Shimano Inc. PIT. SZK. Printed in Japan