

Dealer's Manual

ROAD	MTB	Trekking
City Touring/ Comfort Bike	URBAN SPORT	E-BIKE

SHIFTING LEVER

ALIVIO
SL-M3100

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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 distributor for assistance.
- Make sure to read all 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 manuals and technical documents are accessible online at <https://si.shimano.com>.
- For consumers who do not have easy access to the internet, please contact a SHIMANO distributor or any of the SHIMANO offices to obtain a hardcopy of the User's Manual.
- 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.**
Use SHIMANO genuine parts only. Inappropriate assembly or adjustment of products and replacement parts may bring about product malfunctions which may cause the bicycle to fall over and lead to serious injury.
-  Wear approved eye protection while performing maintenance tasks such as replacing components.

NOTICE

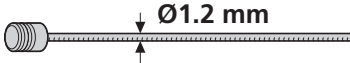

Be sure to also inform users of the following:

- Be sure to keep turning the crank arm during the shifting lever operation.
- If gear shifting operations do not feel smooth, wash the shifting unit and lubricate all moving parts.
- 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.

For installation to the bicycle, and maintenance:

- Grease the inner cable and the sliding portions of the outer casing before use to ensure that they slide properly.
- Use an OT-SP41 cable and a cable guide (SM-SP17/SP18) for smooth operation.
- A special grease is used for the gear shifting cable. Do not use Premium Grease or other types of grease, otherwise, they may cause deterioration in gear shifting performance.
- Use an outer casing which still has some length to spare even when the handlebars are turned all the way to either side. Furthermore, check that the shifting lever does not touch the bicycle frame when the handlebars are turned all the way.
- If gear shifting adjustments cannot be carried out, check the alignment of the dropout and check if the cable is cleaned and lubricated or if the outer casing is too long or too short.

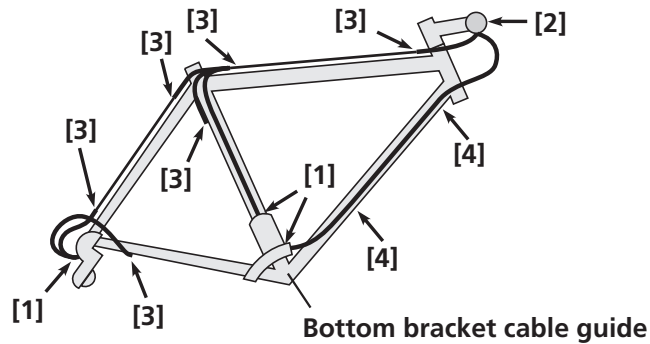
• List of cables used


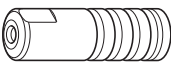

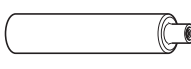
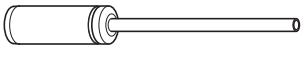
Designated inner cable	Recommended outer casing
 <p>Ø1.2 mm</p>	<p>SP41 outer casing</p>  <p>Ø4 mm SHIMANO SP41</p>

* Refer to the list of recommended outer caps.

* Do not let dust adhere on the inner cable. If the grease on the inner cable is wiped off, the application of SIS SP41 grease (Y04180000) is recommended.

• Chart of recommended outer caps






[1]	[2]	[3]	[4]
 <p>A</p>	 <p>B</p>	 <p>C</p>	 <p>D</p>
 <p>E</p>			

Type of outer cap	Remarks
A Sealed outer cap (aluminum type)	FD/RD side Recommended when the outer casing moves to a large degree, such as in bicycles with suspension frames
B Sealed outer cap (resin type)	Shifting lever/FD/RD side
C Sealed outer cap with tongue	Outer casing holder on frame side
D Rubber shield	
E Outer cap with long tongue	Recommended for bikes with internal cable routing where the outer casing cannot be inserted into the frame at a straight angle and/or the inner cable contacts the frame where it enters the frame

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

The following tools are needed for installation/removal, adjustment, and maintenance purposes.

Tool	
	5 mm hexagon wrench
	Cross head screwdriver [#1]
	Cross head screwdriver [#2]

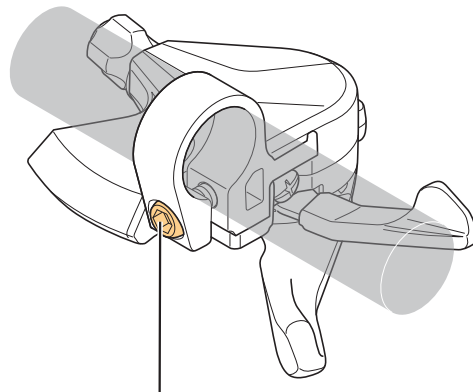
INSTALLATION/REMOVAL

Installing the shifting lever

When installing parts onto a carbon frame/handlebar, confirm the recommended tightening torque with the carbon frame or handlebar manufacturer. This will prevent damage to the frame/handlebar due to over-torquing or inadequate securing of the components.

1. Tighten the mounting screw.

Use a handle grip with a maximum outer diameter of $\varnothing 36$ mm or less.



Mounting screw

5 5 N·m

NOTICE

- Check that the brake and gear shifting operations are not obstructed.

MAINTENANCE

Replacing the inner cable

Before beginning the replacement tasks, loosen the cable fixing bolts (nuts) of the front derailleur and rear derailleur.

Shifting lever

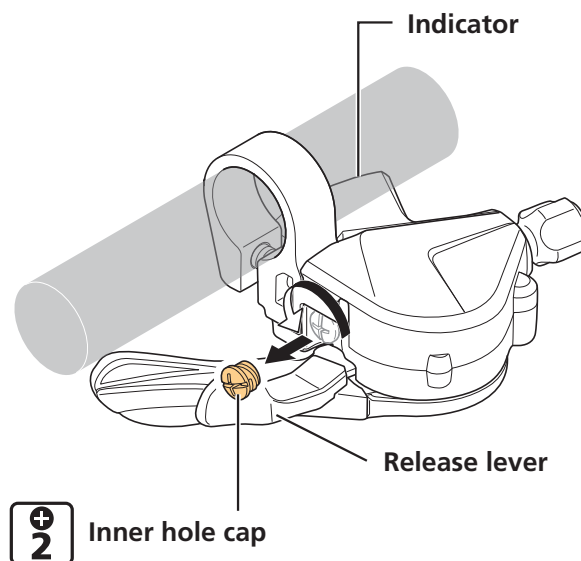
1. Set the shifting lever in its initial position.

Operate the release lever 8 or more times for a right hand lever and 2 or more times for a left hand lever.

2. Check the gear shifting position displayed on the indicator. (Front: 1, Rear: 9)

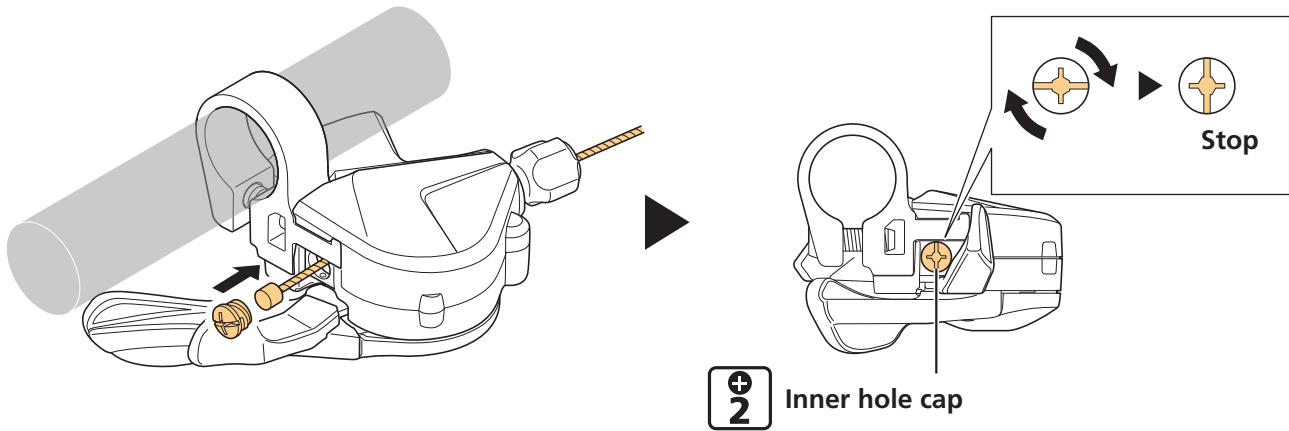


3. Remove the inner hole cap.



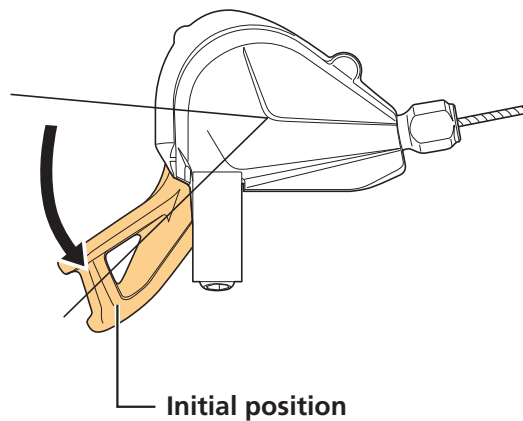
4. Replace the inner cable and install an inner hole cap.

Turn and stop the inner hole cap at the position shown in the figure. If you force it to turn, it may damage the screw thread on the cap.

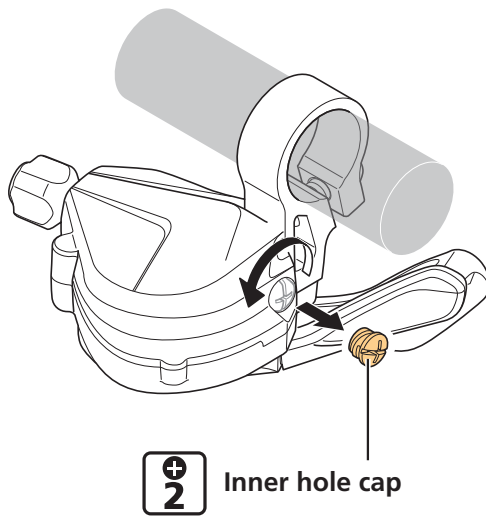


Shifting lever (MONO lever)

1. Set the lever in its initial position.

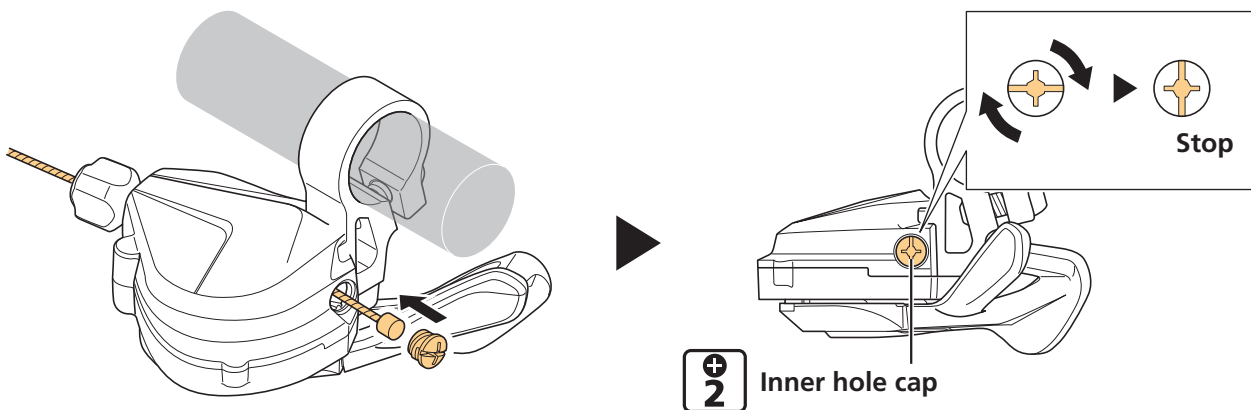


2. Remove the inner hole cap.



3. Replace the inner cable and install an inner hole cap.

Turn and stop the inner hole cap at the position shown in the figure. If you force it to turn, it may damage the screw thread on the cap.

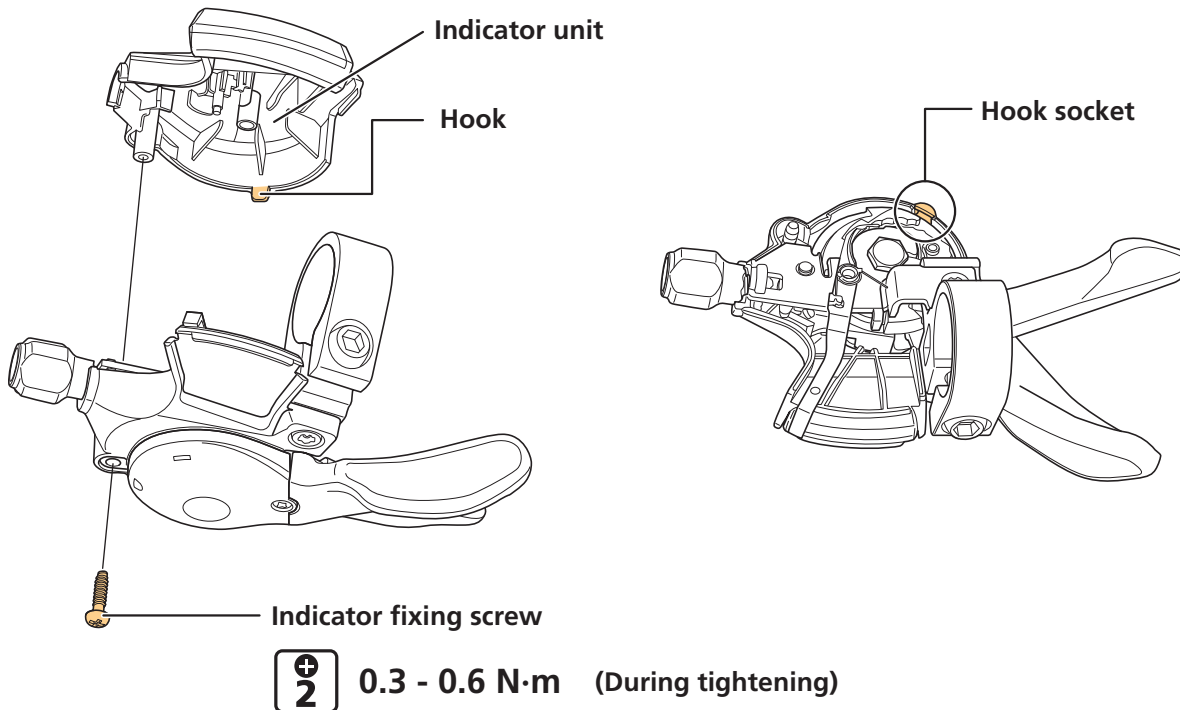


Replacing the indicator unit

Disassembly and assembly should only be conducted when replacing the unit.

* The MONO lever unit cannot be replaced.

1. Remove the indicator fixing screw and then remove the indicator unit.



2. Set the shifting lever in its initial position.

Operate the release lever 8 or more times for a right hand lever and 2 or more times for a left hand lever.

3. Align the gear shifting position to front: 1 and rear: 9 as displayed on the indicator.

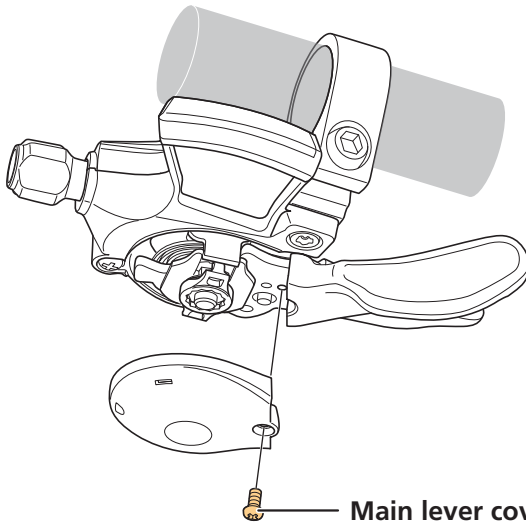
4. Install the new indicator unit by first engaging the catch, and then secure it with an indicator fixing screw.

5. Check that it is operating correctly.

If it does not operate correctly, replace the indicator unit again while paying particular attention to steps 2, 3, and 4.

Replacing the cover

The MONO lever cover cannot be replaced.



Main lever cover fixing screw



0.1 - 0.3 N·m (During tightening)

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

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