General Safety Information

⚠ WARNING

- **Downhill bicycle riding and freeriding are inherently dangerous activities. There is a risk of being involved in an accident that can result in a serious injury or even death. It is strongly recommended that riders wear protective head and body gear and perform thorough safety checks of their bicycles before riding. Please remember that you are riding at your own risk and that you have to consider your experience and your skills very carefully.**
- **Obtain and read the service instructions carefully prior to installing the parts.** Loose, worn or damaged parts may cause the bicycle to fall over and serious injury may occur as a result. 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

- If gear shifting operations do not feel smooth, wash the derailleur and lubricate all moving parts.
- If the amount of looseness in the links is so great that adjustment is not possible, you should replace the derailleur.
- If gear shifting adjustment cannot be carried out, check the degree of parallelism at the rear end of the bicycle. Also check if the cable is lubricated and if the outer casing is too long or too short.
- Use a frame with internal cable routing is strongly discouraged as it has tendencies to impair the SIS shifting function due to its high cable resistance.
- Use an outer casing which still has some length to spare even when the handlebars are turned all the way to both sides. Furthermore, check that the shifting lever does not touch the bicycle frame when the handlebars are turned all the way.
- A special grease is used for the gear shifting cable. Do not use DURA-ACE grease or other types of grease, otherwise they may cause deterioration in gear shifting performance.
- Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.
- For smooth operation, use the specified outer casing and the bottom bracket cable guide.
- Operation of the levers related to gear shifting should be made only when the front chainwheel is turning.
- This shifting lever is compatible with triple front chainwheels.
- This product is not warranted against damage resulting from use such as jumping while riding or if the bicycle falls over, except if such malfunctions result from non conforming materials or manufacturing methods.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.

Technical Service Instructions **SI-6R20B-001**

SL-M810

Shifting lever

In order to realize the best performance, we recommend that the following combination be used.

Series	SAINT
Shifting lever	SL-M810-A
Outer casing	OT-SP41
Gears	9 / 18
Front derailleur	FD-M815 / FD-M817
Front chainwheel	FC-M810/ FC-M815
Rear derailleur	RD-M810 / RD-M810-A
Type	SS /GS
Freehub	FH-M810 / FH-M815
Cassette sprocket	CS-M770 / CS-HG80 / CS-6500
Chain	CN-HG93
Bottom bracket guide	SM-SP17 / SM-BT17

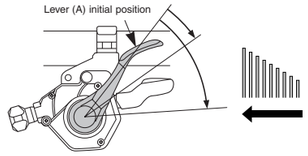
Gear shifting operation

- This release lever is equipped with a 2-way release mechanism which allows release operations to be carried out by either pushing or pulling the lever.
- Both lever (A) and lever (B) always return to the initial position when they are released after shifting. When operating one of the levers, always be sure to turn the crank arm at the same time.
- This lever is designed for use with double and triple chainwheels. When used in combination with a double chainwheel, if you try to overstretch the shifting lever to the top position, it may break.

< Rear >

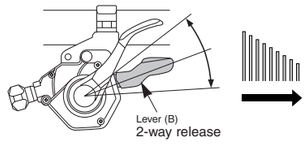
To shift from a small sprocket to a larger sprocket (Lever A)

To shift one step only, press lever (A) to the (1) position. To shift two steps at one time, press to the (2) position.



To shift from a large sprocket to a smaller sprocket (Lever B)

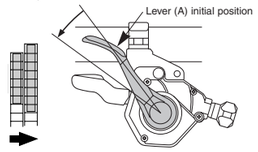
Press lever (B) once to shift one step from a larger to a smaller sprocket.



< Front >

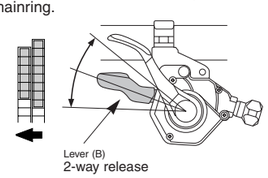
To shift from the small chainring to the large chainring (Lever A)

When lever (A) is pressed once, there is a shift of one step from the small chainring to the large chainring.



To shift from the large chainring to the small chainring (Lever B)

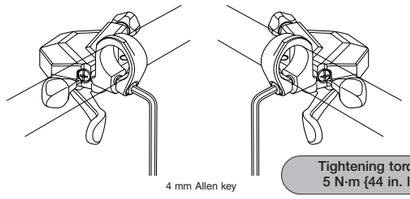
When lever (B) is pressed once, there is a shift of one step from the large chainring to the small chainring.



Installation of the lever

Use a handlebar grip with a maximum outer diameter of 36 mm.

< Front > < Rear >



Tightening torque : 5 N·m {44 in. lbs.}

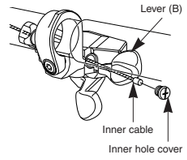
- Install the shifting lever in a position where it will not obstruct brake operation and gear shifting operation.
- Do not use in a combination which causes brake operation to be obstructed.
- When installing the components to carbon frame/handle bar surfaces, verify with the manufacturer of the carbon frame/parts for their recommendation on tightening torque in order to prevent over tightening that can cause damage to the carbon material and/or under tightening that can cause lack of fixing strength for the components.

Installing the shifting cable

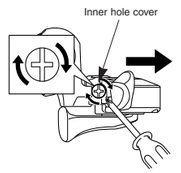
< Rear >

Connecting and securing the inner cable

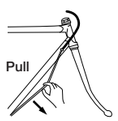
Operate the lever (B) 8 times or more to set the lever to the highest position. Then remove the inner hole cover and connect the inner cable.



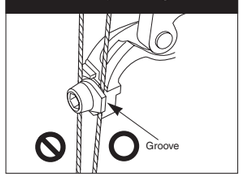
Move lever B in the direction of the arrow, and then install the inner hole cover by turning it as shown in the illustration until it stops. Do not turn it any further than this, otherwise it may damage the screw thread of the cover.



Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, re-secure to the rear derailleur as shown in the illustration.



Note: Be sure that the cable is securely in the groove.



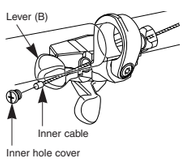
Tightening torque : 6 - 7 N·m {52 - 60 in. lbs.}

Be sure to read these service instructions in conjunction with the service instructions for the RD-M810 / M810-A before use.

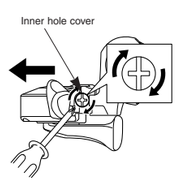
< Front >

Connecting and securing the inner cable

Operate the lever (B) 2 times or more to set the lever to the lowest position. Then remove the inner hole cover and connect the inner cable.

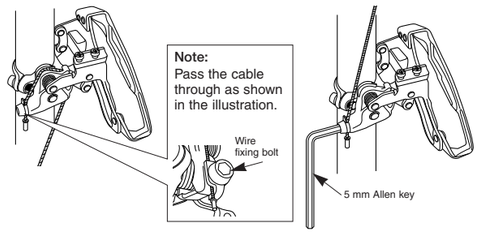


Move lever B in the direction of the arrow, and then install the inner hole cover by turning it as shown in the illustration until it stops. Do not turn it any further than this, otherwise it may damage the screw thread of the cover.



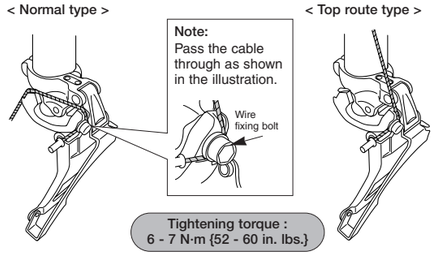
• FD-M815

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• FD-M817

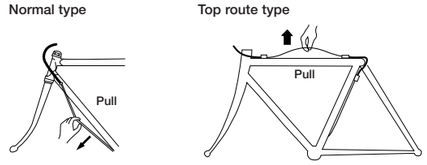
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Tightening torque : 6 - 7 N·m {52 - 60 in. lbs.}

After taking up the initial slack in the cable, re-secure to the front derailleur as shown in the illustration.

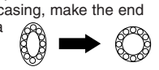
Normal type Top route type



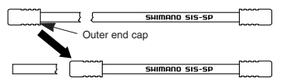
Be sure to read these service instructions in conjunction with the service instructions for the FD-M815 / M817 before use.

Cutting the outer casing (Rear / Front)

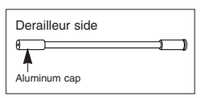
When cutting the outer casing, cut the opposite end to the end with the marking. After cutting the outer casing, make the end round so that the inside of the hole has a uniform diameter.



Attach the same outer end cap to the cut end of the outer casing.



* If the rear derailleur moves to a large degree, such as in bicycles with rear suspension, it is recommended that you replace the cap with an aluminum cap. The end of the outer casing which has the aluminum cap should be at the derailleur side.



Replacing the covers for the SL-M810

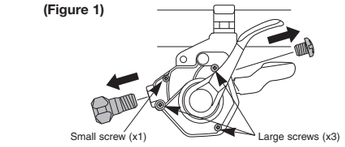
Cover replacement and reassembly

Disassembly and reassembly should only be carried out when the covers are being replaced.

■ Removal

1. Remove the inner hole cover, inner cable and adjustment bolt.
2. Remove the three large screws and the small screw which are securing the cover.
3. Turn the upper cover as shown in Figure 2 and then slide it in the direction of the arrow in Figure 3 to remove it.
4. Push lever (A) back as far as it will go as shown in Figure 4, and then turn the lower cover as shown in Figure 5 to remove it.

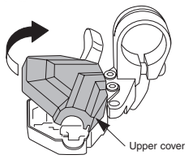
(Figure 1)



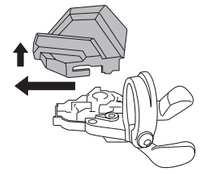
Tightening torque : 0.05 N·m {0.4 in. lbs.}

Tightening torque : 0.2 N·m {1 in. lbs.}

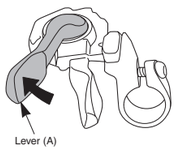
(Figure 2)



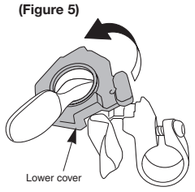
(Figure 3)



(Figure 4)



(Figure 5)



■ Reassembly

1. First install the lower cover and then the upper cover in the reverse procedure to removal. Assemble the upper and lower covers so the fit together with no gap between them.
2. Tighten the three large screws and the small screw which secure the covers.
3. Install the adjustment bolt, inner cable and inner hole cover in that order.

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-shi, Osaka 590-8577, Japan

* Service Instructions in further languages are available at : **http://techdocs.shimano.com**

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