

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-R800A

Rear Drive System

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

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

Series	C050	C050
CI-DECK	ID-C050	ID-C050
Gears	SIS 6-gears	SIS 7-gears
REVOSHIFT	SB-C050-6R, SB-C051-6R	SB-C050-7R, SB-C051-7R
Outer casing	SIS40	SIS40
Rear derailleur	RD-C050	RD-C050
Multiple freewheel	MF-ZH36	MF-ZH37
Chain	CN-UG50	CN-UG50
Bottom bracket cable guide	SM-SP18 / SM-BT18 SM-SP17 / SM-BT17	SM-SP18 / SM-BT18 SM-SP17 / SM-BT17

Specifications

Rear Derailleur	
Model number	RD-C050
Total capacity	43T
Largest sprocket	34T
Smallest sprocket	11T
Front chainwheel tooth difference	20T

Freewheel tooth configurations

Type	Gears	Group name	Tooth combination
ZH	6	cx	13, 15, 18, 21, 24, 34T
ZH	7	cy	13, 15, 17, 19, 21, 24, 34T

CI-DECK

Model number	Shift lever	Rear derailleur	Use
ID-C050-6R	SB-C050-6R/SB-C051-6R	Rapid Rise	Rear 6-gears
ID-C050-7R	SB-C050-7R/SB-C051-7R		Rear 7-gears

Note

- Adjust the RD-C050 Rapid Rise rear derailleur (reverse spring type) from the low side.
- Because the high cable resistance of a frame with internal cable routing would impair the SIS function, this type of frame should not be used.
- 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.
- 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 bottom bracket cable guide.
- Operation of the levers related to gear shifting should be made only when the front chainwheel is turning.
- Read these Service Instructions together with the Front Drive System Service Instructions.
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.

This service instruction explains 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.



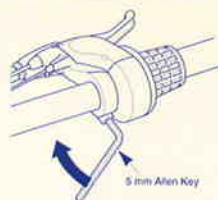
SHIMANO AMERICAN CORPORATION
One Holland Irvine CA 92618 U.S.A. Phone 949-931-5033

SHIMANO EUROPA
Industrieweg 21 NL-8071 CT Hunspeet Holland Phone 31-941-272222 77 Omisatocho 3-chō Sakai Osaka 590-8577 Japan Phone 0722-23-3243

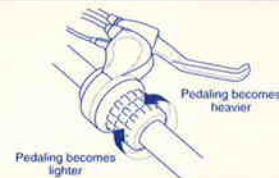
Please note: specifications are subject to change for improvement without notice. (English)
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Mounting the shifting lever

Tightening torque:
6 - 8 Nm (53 - 69 in. lbs.)



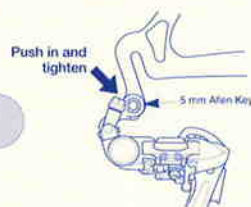
Gear shifting operation



Installation of the rear derailleur

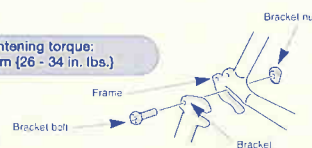
Direct-mount type

Tightening torque:
8 - 10 Nm
(70 - 86 in. lbs.)



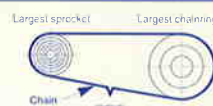
Bracket type

Tightening torque:
3 - 4 Nm (26 - 34 in. lbs.)



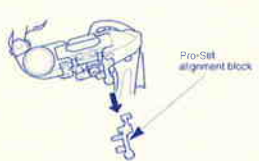
Chain length

Add 2 links (with the chain on both the largest sprocket and the largest chaining)



Installation of the chain

1. Install the chain with the Pro-Set alignment block still attached. After installing, remove the Pro-Set alignment block.

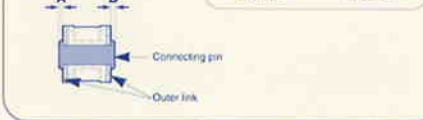


2. Turn the crank arm to set the derailleur to the low position.

Checking the chain connection

For chains, insert the chain gauge (TL-CN24) into the inner link which is next to the chain connecting pin to check that the inner link width is correct. Check that the connecting pin protrudes past the outer link by the same amount on both sides, and that the amount of protrusion is 0.2 mm or more.

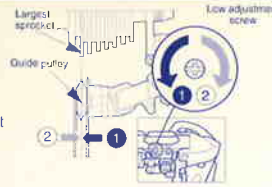
A, B ≧ 0.2mm



Adjustment

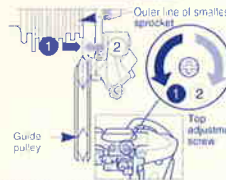
1. Low adjustment

Turn the low adjustment screw so that the guide pulley moves to a position directly in line with the largest sprocket.



2. Top adjustment

Turn the crank arm while pulling the derailleur with your hand to move the derailleur to the top position, and then turn the top adjustment screw to adjust so that the guide pulley is in line with the outer line of the smallest sprocket when looking from the rear. Turn the crank arm to set the derailleur to the low position.



3. Securing the outer cable and inner cable

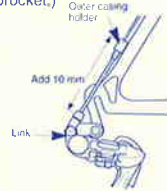
Inserting the inner cable
Insert the inner cable into the outer casing from the end with the marking on it. Apply grease from the end with the marking in order to maintain cable operating efficiency.



Place the outer casing so that it does not touch the basket and mudguard, otherwise it may cause a problem with the performance of the derailleur.

Set the outer casing so that its length is as follows.

•If routing the casing upward:
(The chain should be on the largest chaining and on the largest sprocket.)
Add 10 mm to the length of the outer casing from the end that is inserted into the outer casing holder to the end which is inserted into the link.

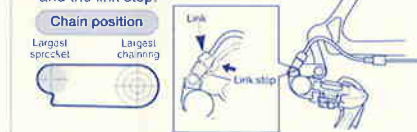


Chain position

Largest sprocket Largest chaining



•If routing the casing downward:
(The chain should be on the largest chaining and on the largest sprocket.)
Set the length of the outer casing so that it describes a smooth arc, and so that the link stops in a position where there is a small gap between the link and the link stop.



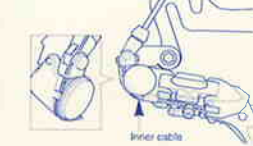
Cutting the outer casing

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.



Connect the inner cable to the derailleur as shown in the illustration.



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



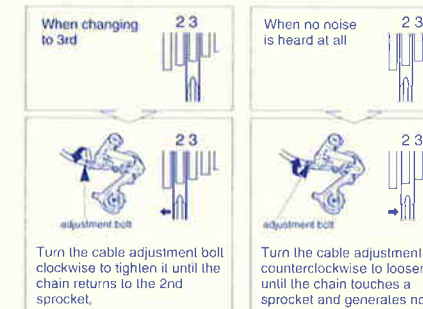
Connect the cable to the rear derailleur and, after taking up the initial slack in the cable, re-secure to the rear derailleur as shown in the illustration.



Tightening torque:
5 - 7 Nm (44 - 60 in. lbs.)

4. SIS adjustment

Operate the Revoshift while turning the crank arm to move the derailleur to the largest sprocket. Then operate the Revoshift once to move the derailleur to the 2nd-gear sprocket. After this, operate the Revoshift just as far as the extent of play, and then turn the crank arm.



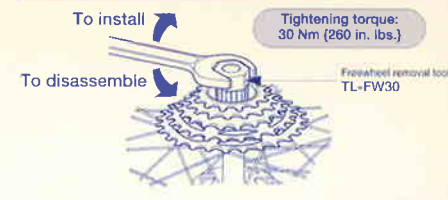
Best setting

The best setting is when the cable adjustment bolt is tightened (turned clockwise) until noise occurs without the Revoshift being operated, and then loosened (turned counterclockwise) 90 - 180 degrees from that point.

Operate the Revoshift to change gears, and check that no noise occurs in any of the gear positions.

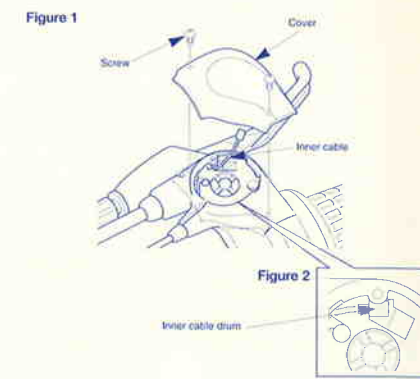
For the best SIS performance, periodically lubricate all power-transmission parts.

Installation of the freewheel



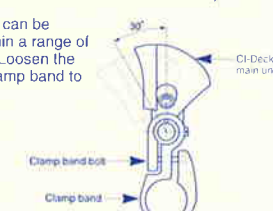
Replacing the inner cable

1. Remove the screw, and then remove the cover.
2. Pull out the inner cable as shown in Figure 1, and then install the new inner cable. At this time, check that the inner cable drum is in the position shown in Figure 2, and then replace the cover.

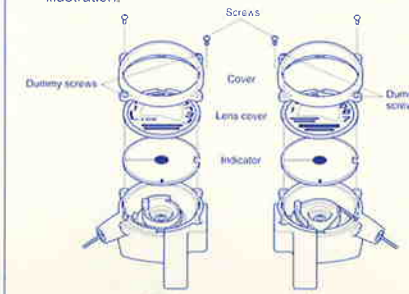


Installing the CI-Deck

1. Install to a handlebar with a diameter of 25 mm. (Use an adapter if the handlebar diameter is 22 mm.)
2. The CI-Deck can be adjusted within a range of 30 degrees. Loosen the bolt of the clamp band to adjust.

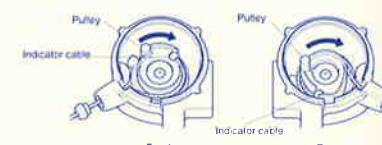


3. The length of the cable which connects the CI-Deck and the Revoshift unit will vary depending on the handlebars being used. If the cable is too long or too short, the indicator display will not be correct.
4. Replacement of the indicator cable
< At the CI-Deck side >
Remove the cover fixing screws and then remove the cover, lens cover and indicator as shown in the illustration.



Tightening torque:
0.1 Nm (1 in. lbs.)

Turn the pulley and remove the cable as shown in the illustration. Turn the pulley clockwise, and then insert the end of the new cable until it is in the position shown in the illustration. Install the indicator, lens cover and cover in that order.



< At the Revoshift lever side >
Remove the cover fixing screws, and then remove the cover as shown in the illustration. Turn the adjustment bolt to remove it, and then remove the cable from the Revoshift lever main unit. Pull the end of the new cable until it is positioned in the pulley as shown in the illustration. Check that the cable is securely in the groove at this time. Tighten the adjustment bolt, install the cover and secure it with the screws.



5. Making fine adjustments to the indicator cable
The indicator cable is equipped with an adjustment bolt. Turn the adjustment bolt to adjust to the optimum setting so that the needle points to "2" (at both front and rear).

