



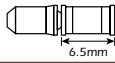
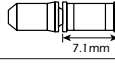
Rear Drive System

- The ST-EF35I is only for use with the NEXAVE C530 INTEG0.

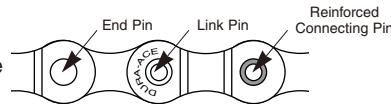
General Safety Information

⚠ WARNING

- Use neutral detergent to clean the chain. Do not use alkali-based or acid based detergent such as rust cleaners as it may result in damage and/or failure of the chain.
- Use the reinforced connecting pin only for connecting the narrow type of chain.
- There are two different types of reinforced connecting pins available. Be sure to check the table below before selecting which pin to use. If connecting pins other than reinforced connecting pins are used, or if a reinforced connecting pin or tool which is not suitable for the type of chain is used, sufficient connection force may not be obtained, which could cause the chain to break or fall off.

Chain	Reinforced connecting pin	Chain tool
9-speed super narrow chain such as CN-7701 / CN-HG93	 Silver 6.5mm	TL-CN31 / TL-CN22
8- / 7- / 6-speed narrow chain such as CN-HG50 / CN-IG51	 Black 7.1mm	TL-CN31 / TL-CN22 and TL-CN30 / TL-CN21

- If it is necessary to adjust the length of the chain due to a change in the number of sprocket teeth, make the cut at some other place than the place where the chain has been joined using a reinforced connecting pin or an end pin. The chain will be damaged if it is cut at a place where it has been joined with a reinforced connecting pin or an end pin.
- Check that the tension of the chain is correct and that the chain is not damaged. If the tension is too weak or the chain is damaged, the chain should be replaced. If this is not done, the chain may break and cause serious injury.
- Obtain and read the service instructions carefully prior to installing the parts. Loose, worn, or damaged parts may cause 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

- If gear shifting operations cannot be carried out smoothly, clean 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.
- You should periodically clean the derailleur and lubricate all moving parts (mechanism and pulleys).
- 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.
- If you hear abnormal noise as a result of looseness in a pulley, you should replace the pulley.
- If the wheel becomes stiff and difficult to turn, you should lubricate it with grease.
- Do not apply any lubricant to the inside of the hub, otherwise the grease will come out.
- You should periodically wash the sprockets in a neutral detergent and then lubricate them again. In addition, cleaning the chain with neutral detergent and lubricating it can be a effective way of extending the useful life of the sprockets and the chain.
- If the chain keeps coming off the sprockets during use, replace the sprockets and the chain.
- Install the cables so that they still have some slack in them even when the handlebars are turned fully in either direction.
- For smooth operation, use the specified outer casing and the bottom bracket cable guide.
- Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.

- 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.
- 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.

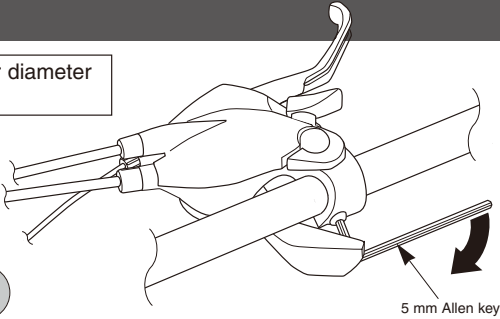
In order to realize the best performance, we recommend that the following combination be used.

Series	SHIMANO NEXAVE INTEG0
Shifting lever	ST-EF35I
Gears	8
Outer casing	SP40
Rear derailleur	RD-M510SS
Type	SS
Rear hub	IF-C530
Cassette sprocket	CS-HG30-8I
Chain	CN-HG50
Bottom bracket cable guide	SM-SP18

Mounting the shifting lever

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

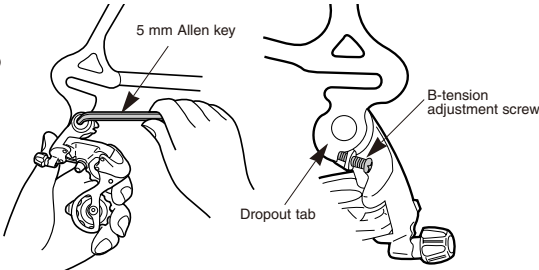
Tightening torque :
6 - 8 N·m {53 - 69 in. lbs.}



Installation of the rear derailleur

When installing, be careful that deformation is not caused by the B-tension adjustment screw coming into contact with the dropout tab.

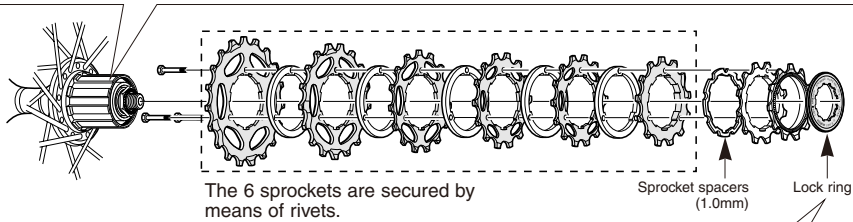
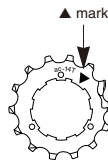
Bracket spindle
tightening torque:
8 - 10 N·m
{70 - 86 in. lbs.}



Installation of the sprockets

For each sprocket, the surface that has the group mark should face outward and be positioned so that the triangle (▲) mark on each sprocket and the A part (where the groove width is wide) of the freewheel body are aligned.

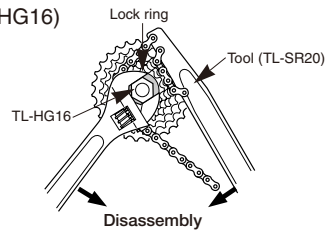
The groove is wide at one place only.



- For installation of the sprockets, use the special tool (TL-HG16) to tighten the lock ring.

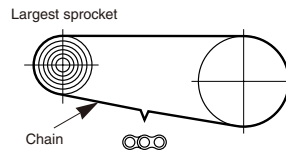
Tightening torque:
30 - 50 N·m {261 - 434 in. lbs.}

- To replace the sprockets, use the special tool (TL-HG16) and TL-SR20 to remove the lock ring.



Chain length

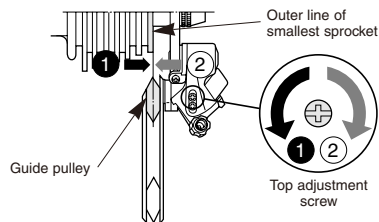
Add 2 links (with the chain on the largest sprocket)



Stroke adjustment and cable securing

1. Top adjustment

Turn the top adjustment screw to adjust so that the guide pulley is below the outer line of the smallest sprocket when looking from the rear.

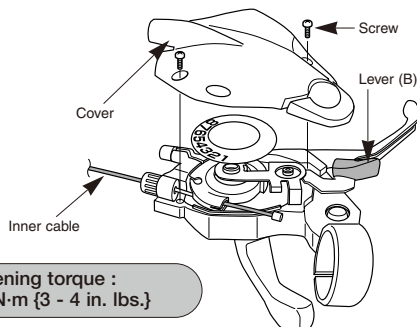


2. Connecting and securing the inner cable

Operate lever (B) at least eight times to set the lever to the highest position.

Remove the screw, and then remove the cover.

Pull out the inner cable as shown in Figure, and then install the new inner cable.



Tightening torque :
0.3 - 0.5 N·m {3 - 4 in. lbs.}

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.

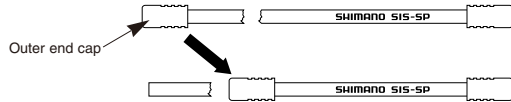


Cutting the outer casing

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.

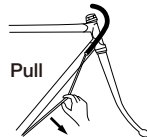


Attach the same outer end cap to the cut end of the outer casing.



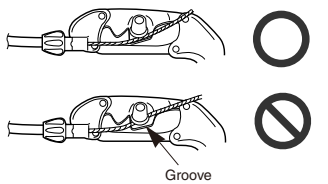
3. Connection and securing of the cable

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.



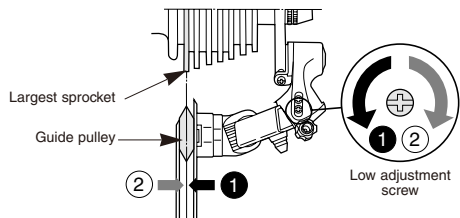
Tightening torque:
5 - 7 N·m {44 - 60 in. lbs.}

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



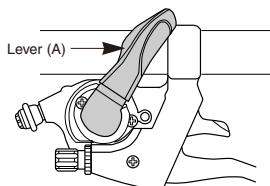
4. Low adjustment

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

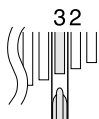


5. SIS Adjustment

Operate the shifting lever several times to move the chain to the 2nd sprocket. Then, while pressing the lever just enough to take up the play in the lever, turn the crank arm.



When shifting to 3rd



When no sound at all is heard



Tighten the outer cable adjusting barrel until the chain returns to the 2nd sprocket. (clockwise)



Loosen the outer casing adjustment barrel until the chain touches the 3rd sprocket and makes noise. (counter clockwise)

Best setting

The best setting is when the shifting lever is operated just enough to take up the play and the chain touches the 3rd sprocket and makes noise.



* Return the lever to its original position (the position where the lever is at the 2nd sprocket setting and it has been released) and then turn the crank arm clockwise. If the chain is touching the 3rd sprocket and making noise, turn the outer casing adjustment barrel clockwise slightly to tighten it until the noise stops and the chain runs smoothly.

Tip

If there are some points where gear shifting does not occur, loosen the B tension adjustment bolt by turning it counterclockwise 2-3 turns, and then check if gear shifting is normal. If there are still some points where gear shifting does not occur, carry out the steps in "5. SIS adjustment" once more.

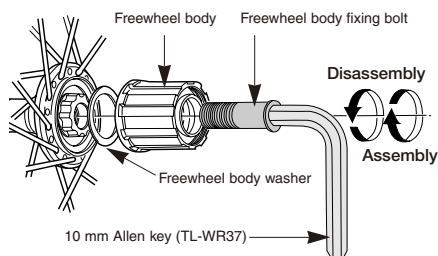
For the best SIS performance, periodically lubricate all power-transmission parts.

Replacement of the freewheel body

After removing the hub axle, remove the freewheel body fixing bolt (inside the freewheel body), and then replace the freewheel body.

Note:

Do not attempt to disassemble the freewheel body, because it may result in a malfunction.

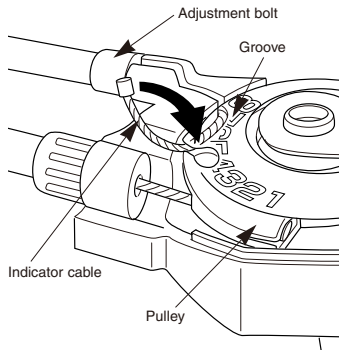


Tightening torque:

35 - 50 N·m {305 - 434 in. lbs.}

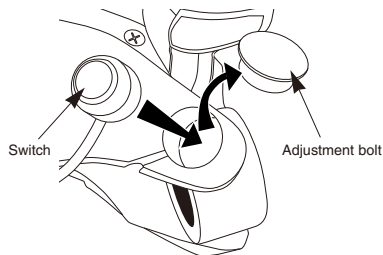
Replacement of the indicator cable

Operate lever (B) at least eight times to set the lever to the highest position.
Remove the cover fixing screws, and then remove the cover as shown in the illustration.
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.



Installation of the switch

Remove the switch cap and install the switch as shown in the illustration.



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

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

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

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

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