



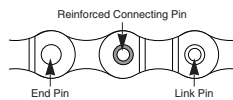
General Safety Information

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	TL-CN32 / TL-CN23
8-/7-/6-speed narrow chain such as CN-HG50 / CN-IG51	 Black	TL-CN32 / TL-CN23

- 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.
- Be careful not to let the cuffs of your clothes get caught in the chain while riding, otherwise you may fall off the bicycle.
- 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.
- Check that there are no cracks in the crank arms before riding the bicycle. If there are any cracks, the crank arm may break and you may fall off the bicycle.
- 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

- The reinforced connecting pins cannot be used with the UG chain, otherwise the connections will not move properly and noise will occur.
- FD-TZ31/TZ30 are Non SIS compatible, and cannot be used in combination with the SL-TX50-L.
- Apply grease to the thread section of the bottom bracket and to the inside thread of the adapter before installing the bottom bracket.
- In addition, if pedaling performance does not feel normal, check this once more.
- Check that there is no looseness in any joints or connections before riding the bicycle. (BB-FC, FC-PD)
- Do not wash the bottom bracket with high-pressure jets of water.
- If you feel any looseness in the bottom bracket axle, the bottom bracket should be replaced.
- 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.
- You should periodically wash the chainrings in a neutral detergent and then lubricate them again. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the useful life of the chainrings and the chain.
- If the chain keeps coming off the chainrings during use, replace the chainrings and the chain.
- 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.
- Operation of the levers related to gear shifting should be made only when the front chainwheel is turning.
- For smooth operation, use the specified outer casing and bottom bracket cable guide.
- To ensure the best performance, be sure to use only the specified type of chain. The wide type chain cannot be used.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.

Technical Service Instructions

SI-6DK0B

Front Drive System

SHIMANO
Tourney

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

Series	Tourney		
Gears	Right	7 / 6 - gears	7 / 6 - gears
	Left	SIS 3 - gears	Non SIS
Shifting lever	Left	SL-TX50-L	SL-TX50-LN/SL-TX30-LN
Outer casing	SIS		SIS
Front derailleur	FD-C051/FD-TY30 FD-C050/FD-TY10		FD-C051/FD-TZ31 FD-C050/FD-TZ30
Front chainwheel	FC-TX70/FC-TX71/FC-TY33		
Bottom bracket	BB-UN26		BB-UN26
Chain	CN-UG51/CN-HG50/CN-HG40		CN-UG51/CN-HG50/CN-HG40
Bottom bracket cable guide	SM-SP18/BT18		SM-SP18/BT18

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

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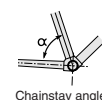
Specifications

Shifting lever

Model number	SL-TX50-L	SL-TX50-LN / TX30-LN
Gears	SIS 3 - gears	Non SIS

Front Derailleur

Model number	FD-C051/C050	FD-TY30	FD-TY10	FD-TZ31/TZ30
Front derailleur installation band diameter (Normal type)	S, M, L	S	S, M	S, M
Front derailleur installation band diameter (Top route type)	S, M, L		S, M	S, M
Chainstay angle (α)	66°-69°	63°-66° 66°-69°	66°-69°	66°-69°



Front chainwheel

Model number	FC-TX71	FC-TY33	FC-TX70
Front chainwheel tooth combination	48T-38T-28T		42T-34T-24T
Crank arm length	170mm		170mm
Pedal thread dimensions	BC 9/16" X 20 T.P.I. (English thread)		BC 9/16" X 20 T.P.I. (English thread)
Bottom bracket cup thread dimensions	BC 1.37" X 24 T.P.I. (68, 73 mm)		BC 1.37" X 24 T.P.I. (68, 73 mm)
Applicable front derailleur	FD-C051	FD-C051/TY30/TZ31	FD-C050

Bottom Bracket

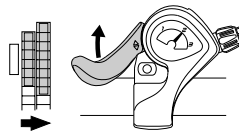
Type	Chain line	Spindle length	Shell width	Stamped marking	Thread dimensions
Triple	47.5mm	122.5mm	68mm	D-NL	BC1.37 X 24 T.P.I.

Gear shifting operation

< SL-TX50-L >

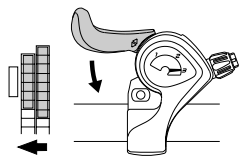
To shift from a small chainring to a larger chainring
When lever is pressed once, there is a shift of one step from a small chainring to a larger chainring.

Example:
from intermediate chainring to largest chainring.



To shift from a large chainring to a smaller chainring
When lever is pressed once, there is a shift of one step from a large chainring to a smaller chainring.

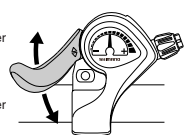
Example:
from largest chainring to intermediate chainring.



< SL-TX50-LN / TX30-LN >

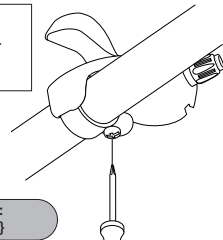
Pedaling becomes heavier

Pedaling becomes lighter

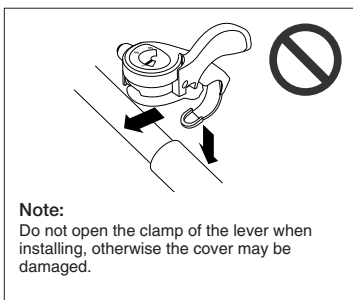


Mounting the shifting lever

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



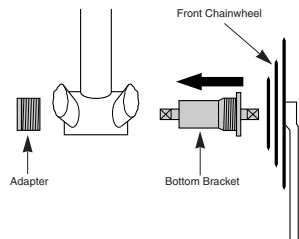
Tightening torque:
2.5 Nm [22 in. lbs.]



- 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.

Installation of the bottom bracket

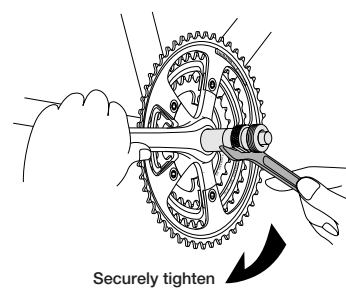
Install using the special tool TL-UN74.
First install the main body, then the adapter.



Tightening torque:
50 - 70 N-m [435 - 608 in. lbs.]

Installation of the front chainwheel

Use the cotterless crank extractor (TL-FC10) to install the front chainwheel.

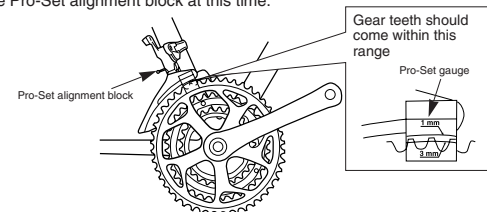


Tightening torque:
35 - 50 N-m [305 - 435 in. lbs.]

Installation of the front derailleur

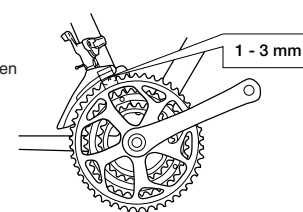
1. < FD-C051 / FD-C050 / FD-TY30 / FD-TY10 >

Adjust and then install the front derailleur as shown in the illustration. Do not remove the Pro-Set alignment block at this time.

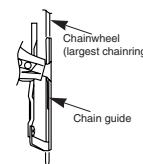


< FD-TZ31 / FD-TZ30 >

Install so that there is 1 - 3 mm of clearance at the closest point between the largest chainring and the bottom edge of the chain guide.



2. The level section of the chain guide outer plate should be directly above and parallel to the largest chainring.



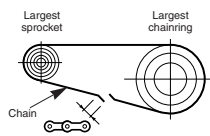
3. Secure using a 9 mm spanner (TY30, TY10, TZ31, TZ30) or a 5 mm Allen key (C051, C050).

Tightening torque:
5 - 7 N-m [44 - 60 in. lbs.]

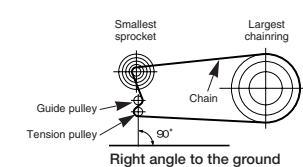
Chain length

< GS >

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



< SS >



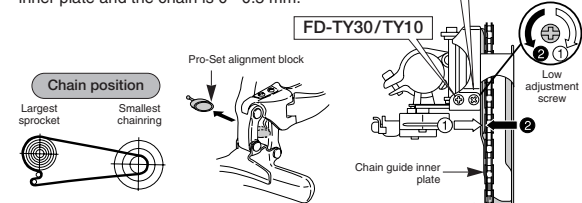
Adjustment

Be sure to follow the sequence described below.

1. Low adjustment

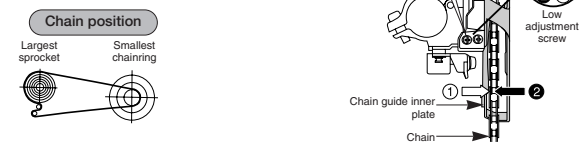
< FD-C051 / FD-C050 / FD-TY30 / FD-TY10 >

First remove the Pro-Set alignment block. Next, set so that the clearance between the chain guide inner plate and the chain is 0 - 0.5 mm.



< FD-TZ31 / FD-TZ30 >

Set so that the clearance between the chain guide inner plate and the chain is 0 - 0.5mm.



2. Connection and securing of cable

While firmly pulling the cable, tighten the fixing bolt with a 9 mm spanner (TY30, TY10, TZ31, TZ30) or a 5 mm Allen key (C051, C050) to secure the cable.

Tightening torque: 5 - 7 N-m [44 - 60 in. lbs.]

Inserting the inner cable

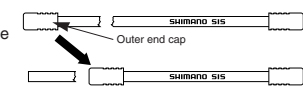
Insert the inner cable into the outer casing from the end with the marking on it. Apply grease from the end with the marking in order to maintain cable operating efficiency.



Cutting the outer casing

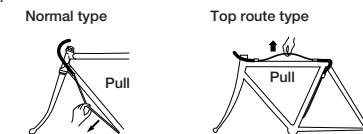
When cutting the outer casing, cut the opposite end to the end with the marking. After cutting the outer casing, make the end round so that the inside of the hole has a uniform diameter.

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



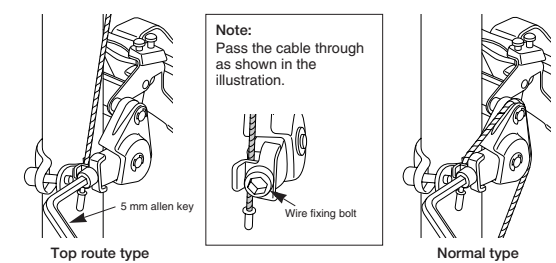
3. Adjustment of cable tension

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



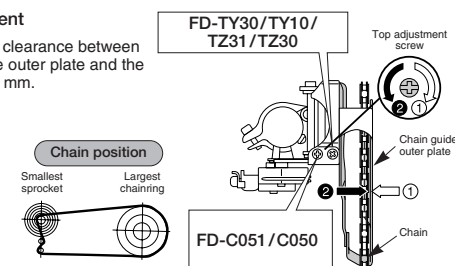
Cut off the excess length of inner cable and then install the inner end cap.

< FD-C051 / FD-C050 >



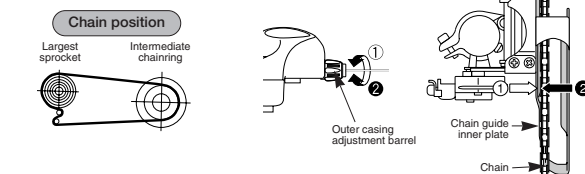
4. Top adjustment

Set so that the clearance between the chain guide outer plate and the chain is 0 - 0.5 mm.



5. Adjustment of the intermediate chainring (SL-TX50-L)

Set the chain onto the largest sprocket, and at the front, move the chain from the largest chainring to the intermediate chainring. Adjust using the cable adjusting bolt so that the clearance between the chain guide inner plate and the chain is 0 - 0.5 mm.



6. Troubleshooting chart

After completion of steps 1 - 5, move the shifting lever to check the shifting. (This also applies if shifting becomes difficult during use.)

If the chain falls to the crank side	Tighten the top adjustment screw clockwise (about 1/4 turn).
If shifting is difficult from the intermediate chainring to the largest chainring	Loosen the top adjustment screw counterclockwise (about 1/8 turn).
If shifting is difficult from the intermediate chainring to the smallest chainring	Loosen the low adjustment screw counterclockwise (about 1/4 turn).
If there is interference between the chain and the front derailleur inner plate at the largest chainring	Tighten the top adjustment screw clockwise (about 1/8 turn).
If there is interference between the chain and the front derailleur outer plate at the largest chainring	Loosen the top adjustment screw counterclockwise (about 1/8 turn).
If the intermediate chainring is skipped when shifting from the largest chainring	Loosen the outer casing adjustment barrel counterclockwise (1 or 2 turns).
If there is interference between the chain and front derailleur inner plate when the rear sprocket is shifted to the largest sprocket when the chainwheel is at the intermediate chainring position.	Tighten the outer casing adjustment barrel clockwise (1 or 2 turns).
If shifting is difficult from the largest chainring to the intermediate chainring	
If the chain falls to the bottom bracket side	Tighten the low adjustment screw clockwise (about 1/2 turn).

* SL-TX50-L

Replacing the inner cable

Operate the lever to set the chain to the first position (low), and then pass the inner cable through.

