

Front Drive System



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

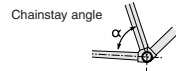
Series	Tourney (SIS)		Tourney (Non SIS)	
	3 x 7-gears	3 x 6-gears	3 x 7-gears	3 x 6-gears
Gears	SL-RS36-L	SL-RS36-L	SL-RS36-LN	SL-RS36-LN
Shifting lever (Left)	OT-SIS40		OT-SIS40	
Outer casing	FD-TY10 / FD-TX51 / FD-TX50		FD-TZ31 / FD-TZ30 / FD-TX51 / FD-TX50	
Front derailleur	FC-M131		FC-M131	
Bottom bracket	BB-UN26		BB-UN26	
Chain	CN-UG51 / CN-HG40		CN-UG51 / CN-HG40	
Bottom bracket cable guide	SM-SP18		SM-SP18	

* FD-TZ31/TZ30 are Non SIS compatible, and cannot be used in combination with the SL-RS36-L.

Specifications

Shifting lever

Model number	SL-RS36-L	SL-RS36-LN
Gears	SIS 3-gears	Non SIS



Front Derailleur

Model number	FD-TX51 / FD-TX50	FD-TY10	FD-TZ31 / FD-TZ30
Front derailleur installation band diameter (Normal type)	S, M, L	S, M	S, M
Front derailleur installation band diameter (Top route type)	S, M, L	S, M	S, M
Chainstay angle (α)	63°- 66°, 66°- 69°	66°- 69°	66°- 69°

Front chainwheel

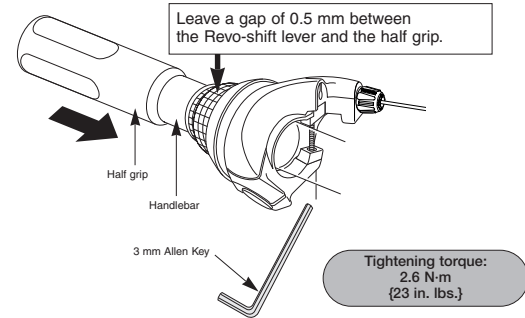
Model number	FC-M131	FC-M131
Front chainwheel tooth combination	48T-38T-28T	42T-34T-24T
Crank arm length	170 mm	170 mm
Pedal thread dimensions	BC 9/16" X 20 T.P.I. (English thread)	BC 9/16" X 20 T.P.I. (English thread)
Bottom bracket cup thread dimensions	BC 1.37" X 24 T.P.I. (68, 73 mm)	BC 1.37" X 24 T.P.I. (68, 73 mm)
Applicable front derailleur	FD-TZ31 / TX51	FD-TY10 / TZ30 / TX50

Bottom Bracket

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

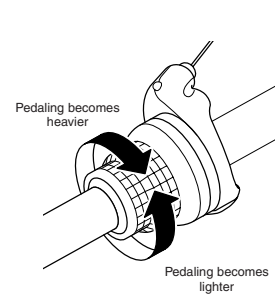
Mounting the shifting lever

Install the brake lever in a position where it will not obstruct brake operation.
Do not use in a combination which causes brake operation to be obstructed.



Tightening torque:
2.6 N·m
(23 in. lbs.)

Gear shifting operation



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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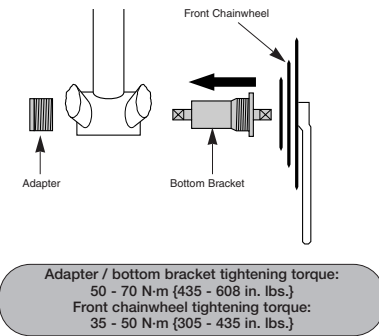
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3-77 Oimatsu-cho, Sakai-ku, Sakai-shi, Osaka 590-8577, Japan

* Service Instructions in further languages are available at : <http://techdocs.shimano.com>
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Installation of the bottom bracket

Install using the special tool TL-UN74-S / TL-UN66.
First install the main body, then the adapter.

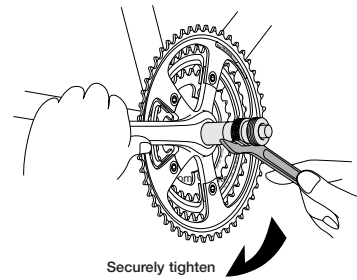


Adapter / bottom bracket tightening torque:
50 - 70 N·m (435 - 608 in. lbs.)
Front chainwheel tightening torque:
35 - 50 N·m (305 - 435 in. lbs.)

Installation of the front chainwheel

Use the cotterless crank extractor (TL-FC10 / TL-FC11) to install the front chainwheel.

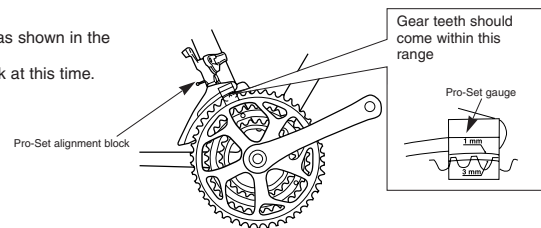
Tightening torque:
35 - 50 N·m (305 - 435 in. lbs.)



Installation of the front derailleur

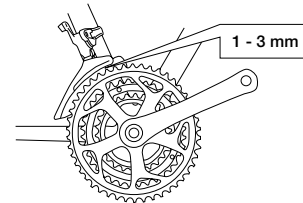
1. < FD-TY10 / TX51 / TX50 >

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 / 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.

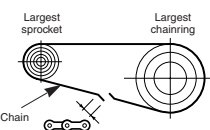
3. Secure using a 9 mm spanner (TY10, TZ31, TZ30) or a 5 mm Allen key (TX51, TX50).

Tightening torque:
5 - 7 N·m (44 - 60 in. lbs.)

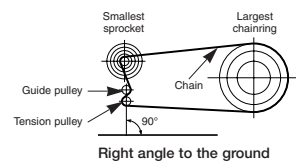
Chain length

< GS >

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



< SS >

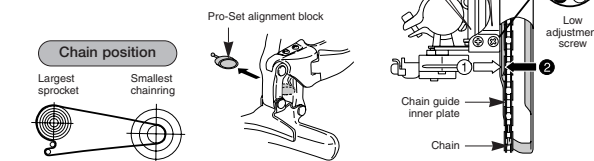


Adjustment

Be sure to follow the sequence described below.

1. Low adjustment
< FD-TY10 / TX51 / TX50 >

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 / TZ30 >

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



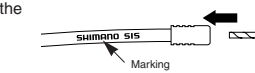
2. Connection and securing of cable

While firmly pulling the cable, tighten the fixing bolt with a 9 mm spanner (TY10, TZ31, TZ30) to secure the cable.

Tightening torque:
5 - 7 N·m (44 - 60 in. lbs.)

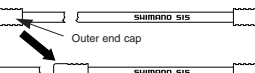
Inserting the inner cable

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

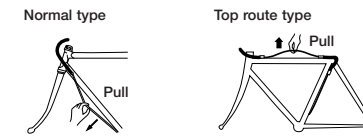
When cutting the outer casing, cut the opposite end to the end with the marking. After cutting the outer casing, make the end round so that the inside of the hole has a uniform diameter.



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

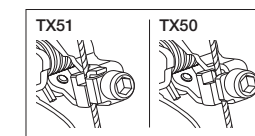
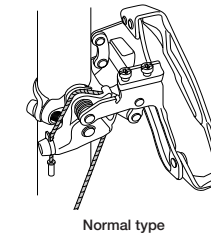
3. Adjustment of cable tension

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



Use a 5 mm Allen key to tighten the wire fixing bolt. Cut off the excess length of inner cable and then install the inner end cap.

< FD-TX51 / TX50 >

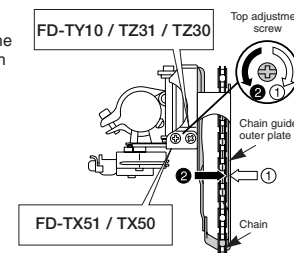
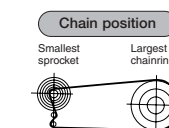


Note:
Pass the cable through as shown in the illustration.

Tightening torque :
5 - 7 N·m (44 - 60 in. lbs.)

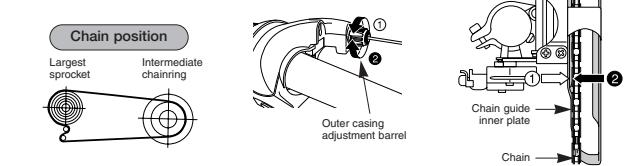
4. Top adjustment

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

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-RS36-L

Replacing the inner cable

1. Operate the shifter to set it to the low position. Loosen the screws at point A and B with a screw driver in order to remove the cover.

2. Replace the inner cable by carrying out steps ① to ③ as shown in the illustrations.

