

General Safety Information

WARNING

- 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 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 the bicycle to fall over and serious injury may occur as a result. We strongly recommend only using genuine Shimano replacement parts.
- **Obtain and read the service instructions carefully prior to installing the parts.** If adjustments are not carried out correctly, the chain may come off and this may cause you to fall off the bicycle which could result in serious injury.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.

CAUTION

- If the chain is on the smallest or intermediate chainring, there is the danger of injury from the tips of the teeth on the largest chainring.

Note

- Be sure to use only the applicable chain and bottom bracket.
- **FC-2350:** When the chain is in the position shown in the illustration, the chain may contact the front chainrings or front derailleur and generate noise. If the noise is a problem, shift the chain onto the next-larger rear sprocket or the one after.
- Before riding the bicycle, check that there is no play or looseness in the connection. Also, be sure to retighten the crank arms and pedals at periodic intervals.
- If you feel any looseness in the bottom bracket axle, the bottom bracket should be replaced.
- In addition, if pedaling performance does not feel normal, check this once more.
- Do not wash the bottom bracket with high-pressure jets of water.
- Apply grease to the bottom bracket before installing it.
- To ensure the best performance, be sure to use only the specified type of chain. The wide type of chain cannot be used.
- If the chain keeps coming off the chainrings during use, replace the chainrings and the chain.
- 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.
- The cuffs of your clothing may get dirty from the chain while riding.
- 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.

Front chainrings



Rear sprockets



Technical Service Instructions

SI-1LN0B-002

FC-2300 / FC-2350 / FC-2303

Front chainwheel

SHIMANO

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

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Specifications

Front Chainwheel

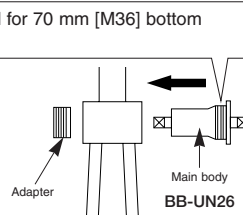
Model number	FC-2300	FC-2350	FC-2303
Chainwheel teeth	52-B / 39 T	50-F / 34 T	52-A / 42 / 30 T
Bolt circle diameter	130 mm	110 mm	130 / 74 mm
Crank arm length	170, 175 mm	170, 175 mm	170, 175 mm
Pedal threads	BC 9/16" x 20 T.P.I.	BC 9/16" x 20 T.P.I.	BC 9/16" x 20 T.P.I.
Applicable front derailleur	FD-2300	FD-2300	FD-2303
Applicable shift lever	ST-2300	ST-2300	ST-2303
Applicable chain	CN-HG50	CN-HG50	CN-HG50
Applicable bottom bracket	BB-UN26	BB-UN26	BB-UN26

Bottom Bracket

Model number	BB-UN26	BB-UN26
Type	Double / Compact	Triple
Spindle length	110 mm	113 mm
Chain line	43.5 mm	45 mm
Bottom bracket shell width (Thread dimensions)	68 mm (1.37 X 24 T.P.I.) 70 mm (M36 X 24 T.P.I.)	

Installation of the bottom bracket

clockwise thread for 70 mm [M36] bottom brackets



Front chainwheel

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

Tightening torque:
50 - 70 N·m
{435 - 608 in. lbs.}

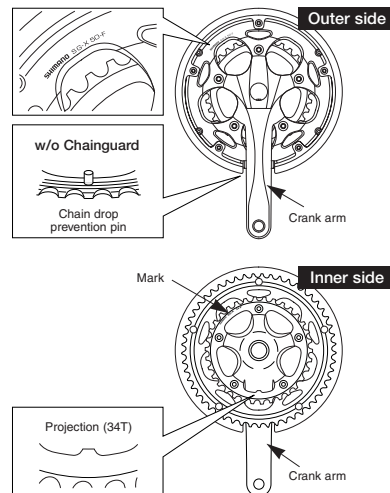
Installation of the chainrings

Smooth shifting will not be possible if the chainrings are incorrectly installed, so be sure to install them in the correct positions.

< FC-2350 >

With the marked surface of the larger chainring facing out, set the larger chainring so that the chain drop prevention pin is lined up with the crank arm position.

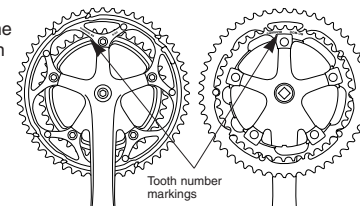
With the marked surface of the smaller chainring facing away from the crank arm, set the chainring so that the projection on the inside is aligned with the crank arm.



< FC-2300 >

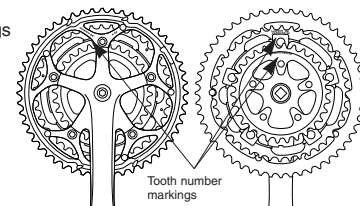
For the FC-2300, the tooth number marking on the large chainring should face outward, and the markings on the small chainrings should face inward.

Install so that the markings are in the positions shown in the illustration.



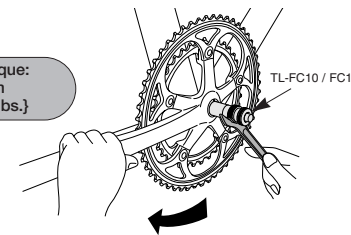
< FC-2303 >

For the FC-2303, the tooth number marking on the largest chainring should face outward, and the markings on the intermediate and smallest chainrings should face inward.



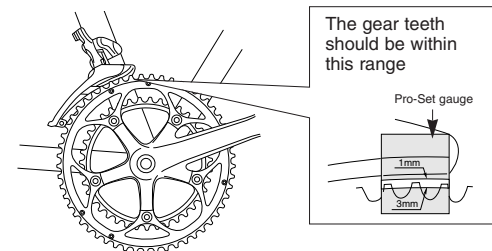
Installation of the front chainwheel

Tightening torque:
35 - 50 N·m
{305 - 435 in. lbs.}



Installation of the front derailleur

1. Install and then adjust the front derailleur as shown in the illustration.



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

3. Adjust the derailleur using a 5 mm Allen key.

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

