



# FD-4400

Front derailleur

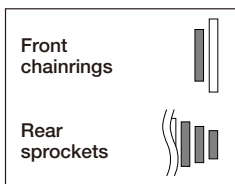
## General Safety Information

### ⚠ WARNING

- 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.
- Be careful not to let the cuffs of your clothes get caught in the chain while riding, otherwise you may fall off the bicycle.
- 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.
- 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.
- 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.
- 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.

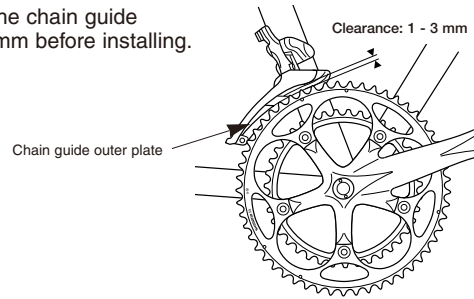
Series	TIAGRA
Shifting lever	ST-4400 / ST-R600 / SL-7700 / SL-R440
Outer casing	SP40
Gears	18
Front derailleur	FD-4400
Front chainwheel	FC-4401
Bottom bracket	BB-ES51 / BB-ES30
Rear derailleur	RD-4400-SS
Freehub	FH-4400
Cassette sprocket	CS-HG50-9
Chain	CN-HG53
Bottom bracket cable guide	SM-SP17

## Specifications

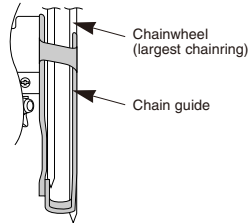
Type	Band type / Brazed on type
Front derailleur installation band diameter	S (28.6mm), M (31.8mm)
Chainstay angle ( $\alpha$ )	61° - 66°
Chain line	43.5mm

## Installation of the front derailleur

1. Adjust so that the clearance between the chain guide outer plate and the large gear is 1 - 3 mm before installing.



2. The level section of the chain guide outer plate should be directly above and parallel to the largest chainring.
3. Secure using a 5mm Allen key.

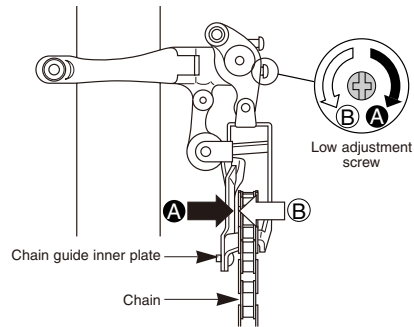
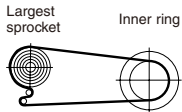


Tightening torque:  
5 - 7 N·m  
{44 - 60 in. lbs.}

## SIS adjustment

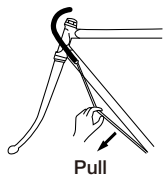
### 1. Low adjustment

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



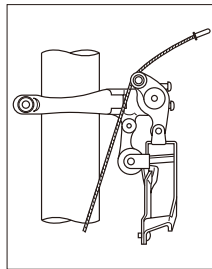
### 2. Connection and securing of cable

While pulling the inner cable, tighten the wire fixing bolt with a 5 mm allen key to secure the cable.



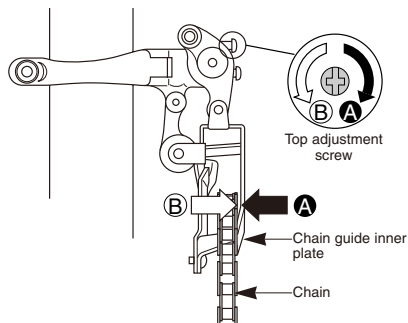
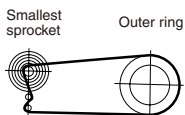
Tightening torque:  
5 - 7 N·m {44 - 60 in. lbs.}

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



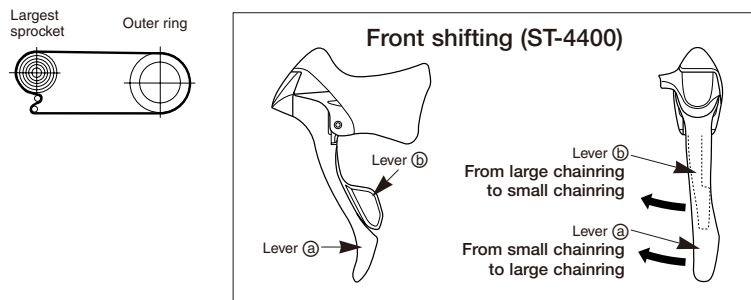
### 3. Top adjustment

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



#### 4. Adjustment of the cable tension

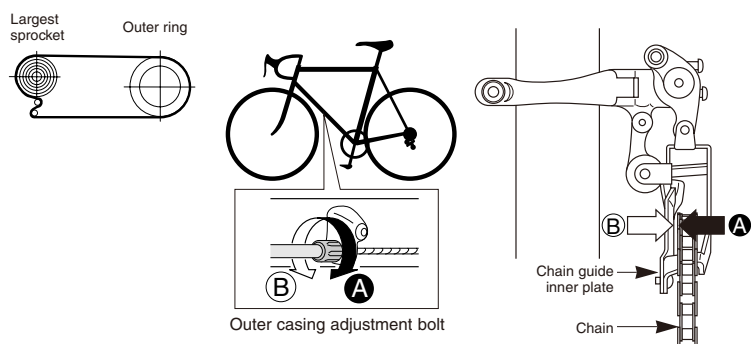
- (1) Set the chain to the largest rear sprocket, and shift the front to top gear.



- (2) Perform the trimming.

■ **Trimming (noise-prevention mechanism)**  
Gently press the lever (b).  
(A "click" sound will be heard.)

- (3) After trimming, adjust the clearance (by using the cable-adjustment bolt) of the chain and chain guide to the minimum (0 - 0.5 mm).



Be sure to read these service instructions in conjunction with the service instructions for the ST-4400 / ST-R600, SL-7700 / R440 before use.

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