SERVICE INSTRUCTIONS SI-5E60A

FD-R440

Front derailleur

Before use, read these instructions carefully, and follow them for correct use.



MARNING

• Obtain, read and carefully service instructions when installing parts. A loose, worn, or damaged parts may cause injury to the rider.

We strongly recommend that only genuine Shimano replacement parts be used.

Note

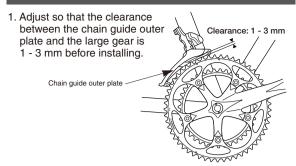
- For smooth operation, use the specified outer casing and
- of shiboth operation, use the specified outer casing and bottom bracket cable guide.
 Grease the inner cable and the inside of the outer casing before use to ensure that they slide properly.
- For maximum performance we highly recommend Shimano 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.

Shifting lever	SL-R440		
Outer casing	SP40		
Gears	18		
Front derailleur	FD-R440		
Front chainwheel	FC-6500	FC-5501	FC-4400
Bottom bracket	BB-6500	BB-5500	BB-UN52
Rear derailleur	RD-6500 /	RD-5500	/ RD-4400
Freehub	FH-6500 /	FH-5500	/ FH-4400
Cassette sprocket	CS-6500 / CS-HG70-9 / CS-HG50-9		
Chain	CN-HG92 / CN-HG72		
Bottom bracket cable guide	SM-SP17		

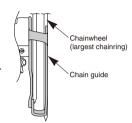
Specifications			
Туре	Band type / Brazed on type		
Front derailleur installation band diameter	S (28.6mm), M (31.8mm)		
Chainstay angle (α)	61° - 66°		
Chain line	43.5mm		

Installation of the front derailleur



- 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.

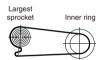
Tightening torque: 5 - 7 Nm {44 - 60 in. lbs.}

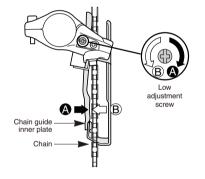


SIS adjustment

1. Low adjustment

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





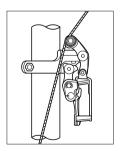
2. Connection and securing of cable

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



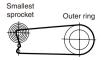
Tightening torque: 5 - 7 Nm {44 - 60 in. lbs.}

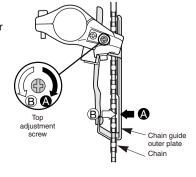
After taking up the initial slack in the cable, resecure to the front derailleur as shown in the illustration.



3. Top adjustment

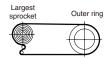
Set so that the clearance between the chain guide outer plate and the chain is 0-0.5 mm.





4. Adjustment of the cable tention

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



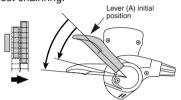
■ Front shifting (SL-R440)

Both lever (A) and lever (B) always return to the initial position when they are released after shifting. When operating one of the levers, always be sure to turn the crank arm at the same time.

To shift from a small chainring to a larger chainring

When lever (A) 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.

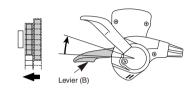


To shift from a large chainring to a smaller chainring

When lever (B) 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.



(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 chaib guide yo the minimum (0-0.5mm).

Clearance:
0 - 0.5mm

Chain guide
inner plate
Chain guide
Chain

Be sure to read these service instructions in conjunction with the service instructions for the SL-R440 before use.



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