SI-5MK0A-001-00

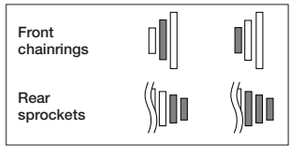
General Safety Information

⚠ 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.
- **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.

Note

- 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.
- 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.
- Shimano does not provide the bottom bracket mount fixing bolts.
- For smooth operation, use the specified outer casing and the bottom bracket cable guide.
- 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.
- Be sure to read the service instructions for the Front Drive System in conjunction with these service instructions.



Technical Service Instructions **SI-5MK0A-001**

FD-M771-10D / FD-M661-10D FD-M770-10E / FD-M660-10E

Front derailleur

Specifications

X = Available

Model number	Models without BB plate		FD-M771-10D	FD-M661-10D
	FD-M770-10E	FD-M660-10E		
Normal type	X		X	
Top route type	X		X	
Front chainwheel tooth difference	18T		18T	
Min. difference between top and intermediate	10T		10T	
Front derailleur installation band diameter	–		–	
Chainstay angle (α)	66° - 69°		66° - 69°	
Applicable chain line	50 mm		50 mm	
Applicable front chainwheel	For triple chainwheel only (42-32-24T)		For triple chainwheel only (42-32-24T)	

SHIMANO

SHIMANO AMERICAN CORPORATION
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.
Industrieweg 24, 8071 CT Nunspeet, The Netherlands Phone: +31-341-272222

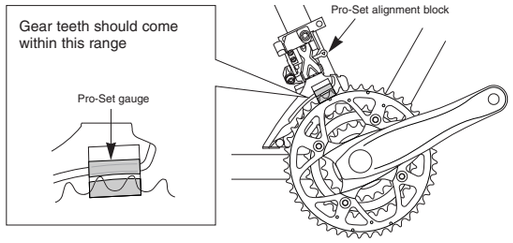
SHIMANO INC.
3-77 Oimatsu-cho, Sakai-ku, Sakai-shi, Osaka 590-8577, Japan

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

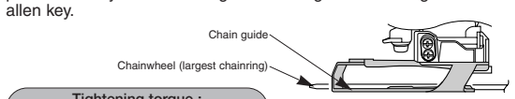
Please note: specifications are subject to change for improvement without notice. (English) ©Nov. 2009 by Shimano Inc. XBC SZK Printed in Japan.

Installation of the front derailleur

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

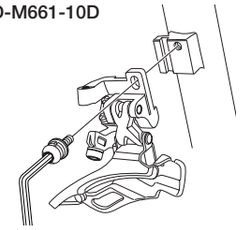


Adjust the height while the level section of the chain guide outer plate is directly above the largest chainring. Secure using a 5 mm allen key.



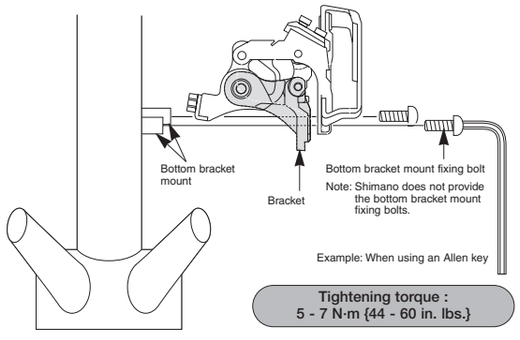
Tightening torque : 5 - 7 N·m {44 - 60 in. lbs.}

• FD-M771-10D / FD-M661-10D



Models without BB plate

• FD-M770-10E / FD-M660-10E



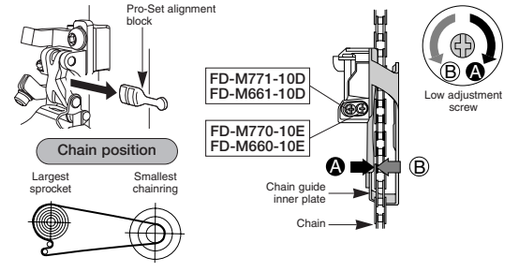
Tightening torque : 5 - 7 N·m {44 - 60 in. lbs.}

SIS Adjustment

Be sure to follow the sequence described below.

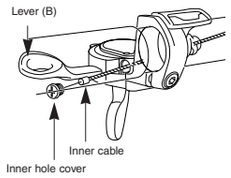
1. Low adjustment

First remove the Pro-Set alignment block (FD-M771-10D/ FD-M661-10D).
Next, set so that the clearance between the chain guide inner plate and the chain is 0 - 0.5 mm.

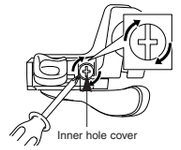


2. Connecting and securing the inner cable

Operate lever (B) two times or more, and check on the indicator that the lever is at the lowest position. Then remove the inner hole cover and connect the inner cable.



Install the inner hole cover by turning it as shown in the illustration until it stops. Do not turn it any further than this, otherwise it may damage the screw thread.

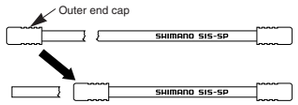


Cutting the outer casing

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.

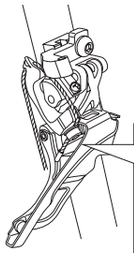


Attach the same outer end cap to the cut end of the outer casing.

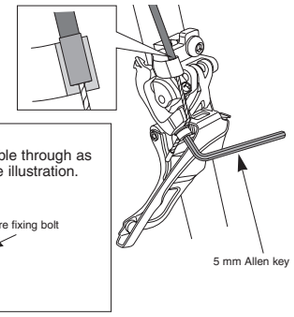


• FD-M771-10D

< Normal type >



< Top route type >

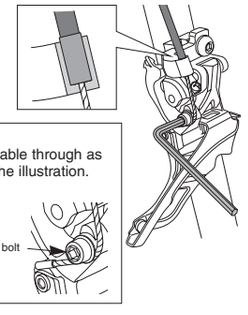


• FD-M661-10D

< Normal type >



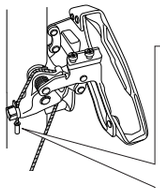
< Top route type >



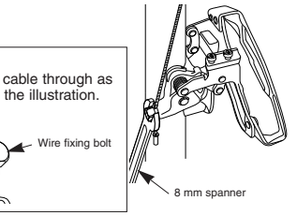
• FD-M770-10E / FD-M660-10E

Use an 8 mm spanner to tighten the wire fixing bolt.

< Normal type >



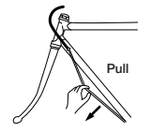
< Top route type >



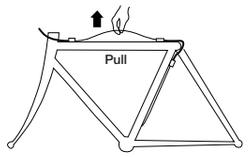
Tightening torque : 6 - 7 N·m {52 - 60 in. lbs.}

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

Normal type

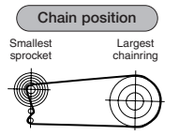


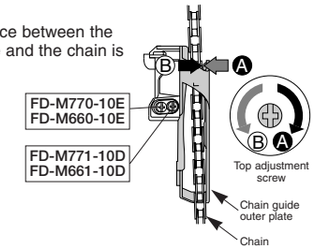
Top route type



3. Top adjustment

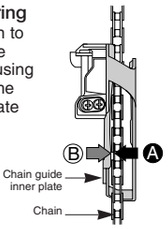
Set so that the clearance between the chain guide outer plate and the chain is 0 - 0.5 mm.

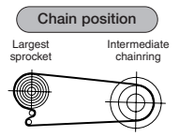


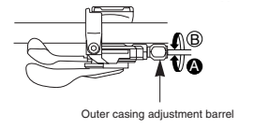


4. Adjustment of the intermediate chainring

When carrying out adjustment, set the chain to the largest sprocket, and at the front, set the chain to the intermediate chainring. Adjust using the outer casing adjustment barrel so that the clearance between the chain guide inner plate and the chain is 0 - 0.5 mm.







5. Troubleshooting chart

After completion of steps 1 - 4, 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 the chain falls to the bottom bracket side.	Tighten the low adjustment screw clockwise (about 1/2 turn).