

## FD-A410-T

## Front derailleur

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

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

Series	SHIMANO RSX
Shifting lever	ST-A410
Outer casing	SIS-SP36
Front derailleur	FD-A410-T
Front chainwheel	FC-A413
Bottom bracket	BB-LP25
Chain	CN-HG50 / CN-UG50
Bottom bracket cable guide	SM-SP17

## Specifications

## Front Derailleur

Type	Band type
Front derailleur installation band diameter	S (28.0 - 28.6 mm), M (31.8 mm)
Stroke (A-A')	36 - 50
Chainstay angle (α)	63°-66°



## Note

- Apply grease to the bottom bracket before installing it.
- For smooth operation, always be sure to use the specified outer casing and the bottom bracket cable guide.
- This front derailleur is for triple front chainwheel use only. It cannot be used with the double front chainwheel, as the shifting points do not match.
- For the chain, be sure to use only the Shimano narrow type chain. The wide type chain cannot be used.
- For any questions regarding methods of installation, adjustment, maintenance or operation, please contact a professional bicycle dealer.

SHIMANO

These service instructions are printed on recycled paper and can be recycled again.



SHIMANO AMERICAN CORPORATION

One Shimano Drive P.O. Box 19615 Irvine California U.S.A. 92713-9615 Phone 714-951-5003

SHIMANO (EUROPA) GmbH

Kleinbühl 1-3 40724 Hilden Germany Phone 02103-5005-0

SHIMANO INC.

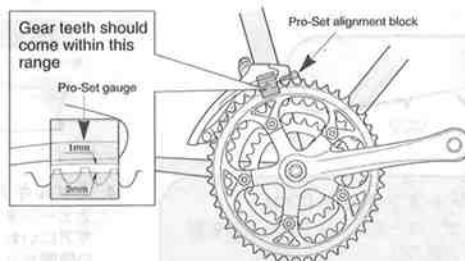
77 Oimatsu-cho 3-cho Sakai Osaka, 590 Japan Phone 0722-23-3243

Please note: specifications are subject to change for improvement without notice. (English)

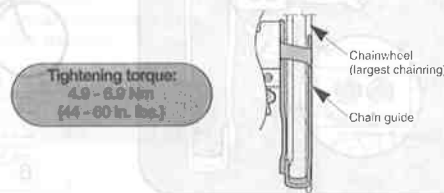
© Jul. 1994 by Shimano Inc. XBC SZK Printed in Japan.

## 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.



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

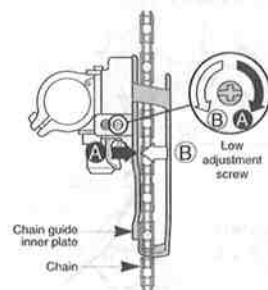


## SIS adjustment

Be sure to follow the sequence described below.

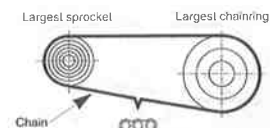
## 1. Low adjustment

First remove the Pro-Set alignment block. Next, set so that the clearance between the chain guide inner plate and the chain is 0-0.5mm.



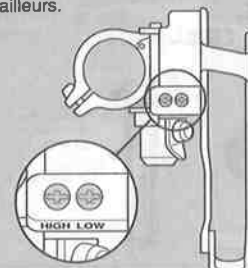
## Chain length

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



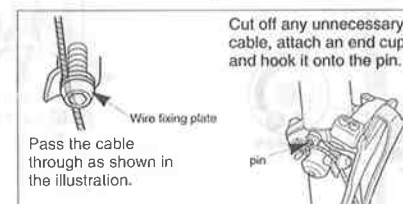
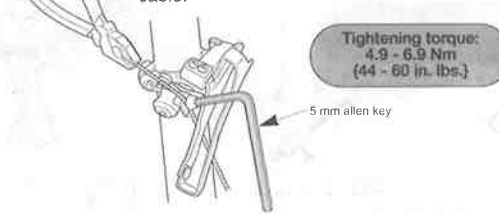
## FD-A410-T Adjustment Bolts

Because of the different construction of the new link, the positions of the top and low adjustment bolts on the FD-A410-T are reversed from the positions on previous front derailleurs.

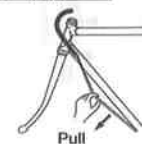


## 2. Connection and securing of cable

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

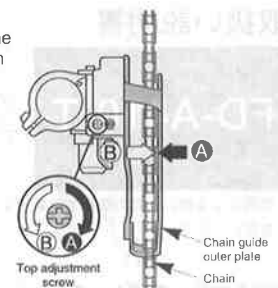


After taking up the initial slack in the cable, re-secure to the front derailleur as shown in the illustration.



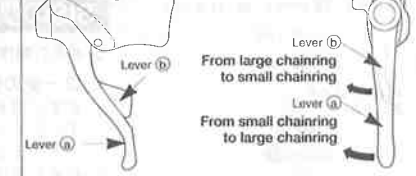
## 3. Top adjustment

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



## 4. Adjustment of the 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).