

Dealer's Manual

PD-MX80

IMPORTANT NOTICE

- This dealer's manual is intended primarily for use by professional bicycle mechanics.

Users who are not professionally trained for bicycle assembly should not attempt to install the components themselves using the dealer's manuals.

If any part of the information on the manual is unclear to you, do not proceed with the installation. Instead, contact your place of purchase or a local bicycle dealer for their assistance.

- Make sure to read all instruction manuals included with the product.
- Do not disassemble or modify the product other than as stated in the information contained in this dealer's manual.
- All dealer's manuals and instruction manuals can be viewed on-line on our website (<http://si.shimano.com>).
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.

For safety, be sure to read this dealer's manual thoroughly before use, and follow it for correct use.

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings.

The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.

 **DANGER**

Failure to follow the instructions will result in death or serious injury.

 **WARNING**

Failure to follow the instructions could result in death or serious injury.

 **CAUTION**

Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.


TO ENSURE SAFETY

WARNING

- **When installing components, be sure to follow the instructions that are given in the instruction manuals.**

It is recommended that you use only genuine Shimano parts. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury.

In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury.

-  Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts.
- After reading the dealer's manual thoroughly, keep it in a safe place for later reference.

Be sure to also inform users of the following:

- If the gripping force between the shoes and the pedals (the force which stops shoes from slipping sideways) is insufficient, remove spacers to increase the force. In that case, first raise your feet from the pedals and then slide them sideways to disengage your feet from the pedals. Otherwise, you may fall and be seriously injured.
- With one foot firmly on the ground, practice engaging and disengaging the other foot from the pedal repeatedly until you become used to the operation. If you cannot get used to this operation, use the product with spacers installed.
- Because the pins are long, they may cause injury if they come into direct contact with your skin. Be sure to wear clothing and protective gear which is suitable for the way in which the bicycle is to be used.
- Be sure to attach reflectors to the bicycle when riding at night. Do not continue riding the bicycle if the reflectors are dirty or damaged. Otherwise, it becomes more difficult for oncoming vehicles to see you.

NOTE

Be sure to also inform users of the following:

- Check that there is no looseness in any joints or connections before riding the bicycle.
- If pedaling performance does not feel normal, check this once more.
- Be sure to retighten the crank arms and pedals at periodic intervals at the place of purchase or a bicycle dealer.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.

For Installation to the Bicycle, and Maintenance:

- Be sure to retighten the crank arms and pedals at periodic intervals.

The actual product may differ from the illustration because this manual is intended chiefly to explain the procedures for using the product.

Tool

The following tools are needed to assemble this product.

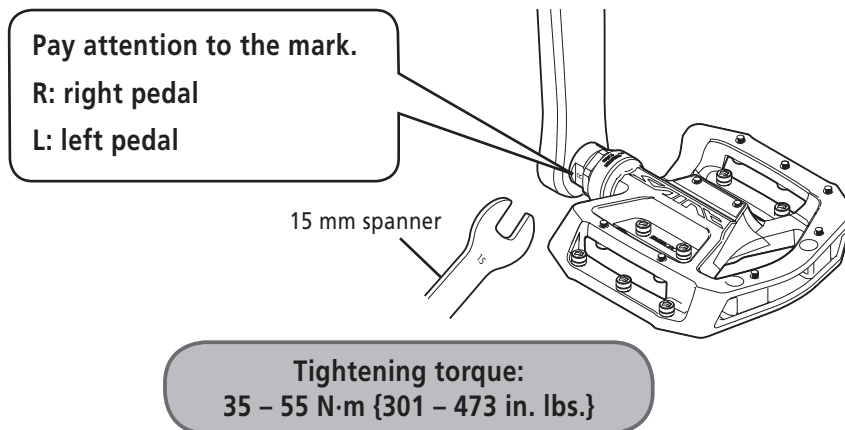
| Usage location | Tool |
|----------------|---------------|
| Crank | 15 mm spanner |
| Adjust pin | #T15 TORX® |

*TORX is a registered trademark of Acument Intellectual Properties, LLC.

INSTALLATION

■ Mounting the pedals on the crank arms

1. Apply a small amount of grease to the thread to prevent sticking.
2. Use a 15 mm spanner to mount the pedals on the crank arms.
 - The right pedal has a right-hand thread; the left pedal has a left-hand thread.
3. Remove any roughness or burrs on the joint, if detected.

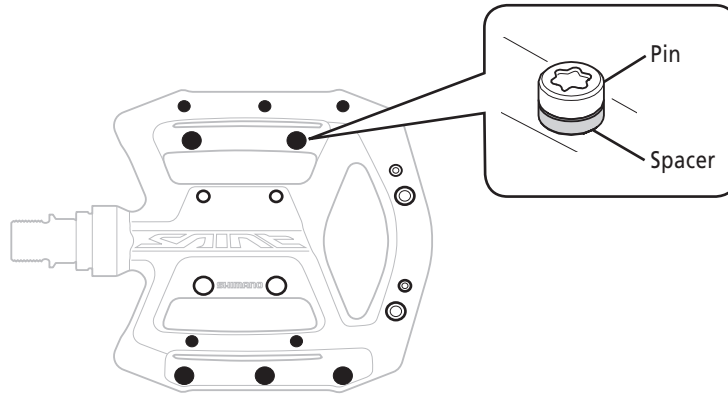


ADJUSTMENT

■ Adjusting the gripping force

1. Remove spacers or add pins to adjust the gripping force between the shoes and the pedals.

- On this pedal, there are 18 pin mounting locations on top and bottom in total. The pedal is shipped with the setup as shown below.
- Install spacers to reduce the protrusion of pins.

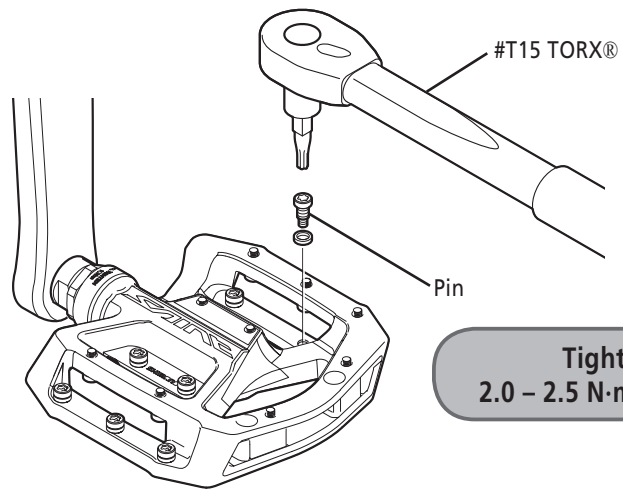


- : Spacers installed (short pins, low gripping forces)
- : Spacers not installed (long pins, high gripping forces)
- ⊙: No pins

MAINTENANCE

■ Pin

If the pins become worn or damaged, replace them with new pins.



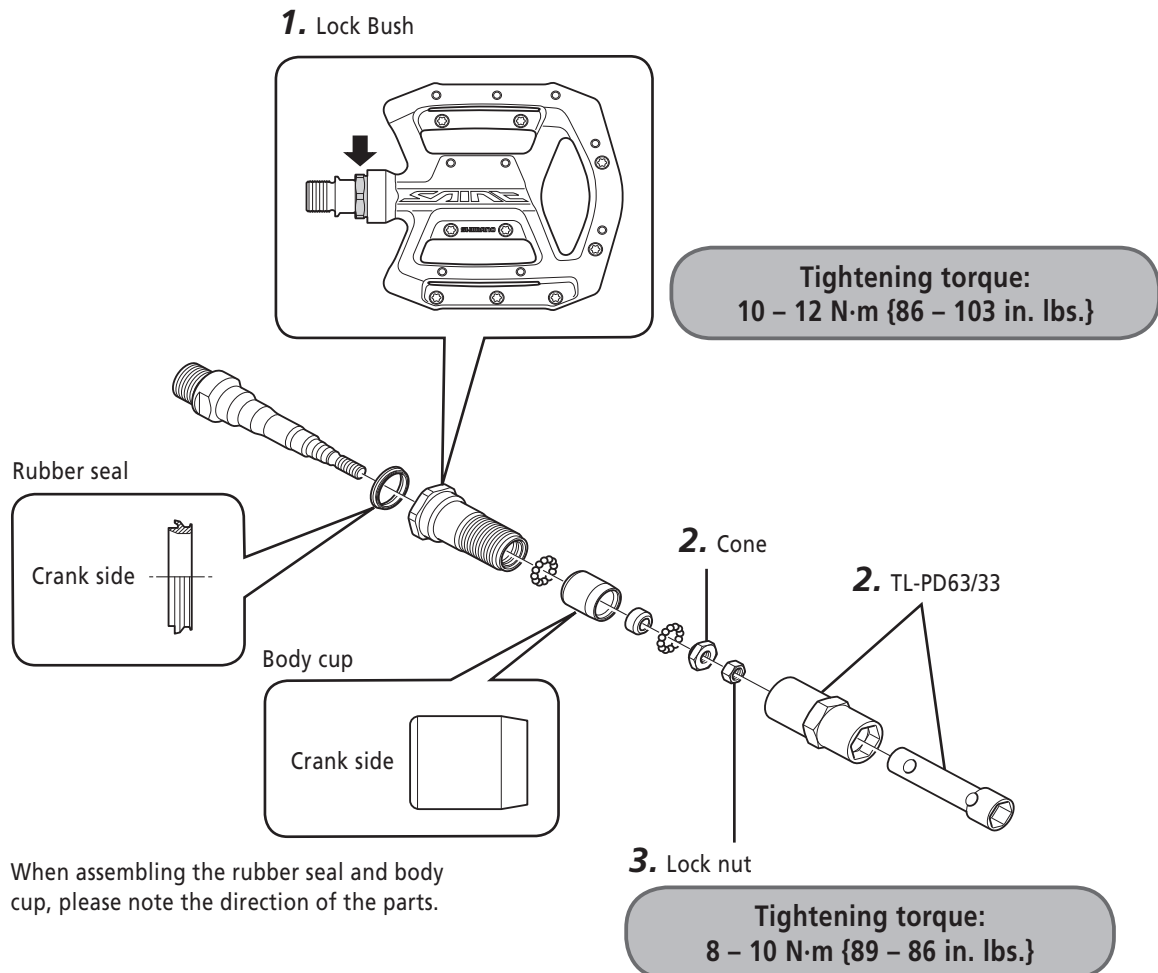
■ Axle unit

Adjustment is required if the rotating parts are not functioning properly. Follow the procedure shown below.

1. Using a 20 mm wrench, loosen the lock bush to pull out the axle unit.
 - The right pedal has a left-hand thread; the left pedal has a right-hand thread.
2. Use TL-PD63 or TL-PD33 special tool, or 7 mm or 10 mm open wrench to turn the cone (10 mm) to adjust the rotation.
3. With the cone locked, tighten the lock nut (7 mm).

Note:

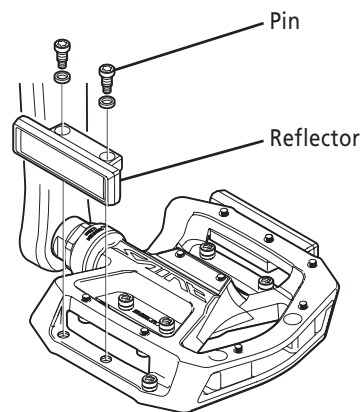
- Cones and lock nuts are right-hand threads on both right and left pedals.
 - Adjust the cone so as to achieve a smooth rotation without looseness when the axle unit is set into the pedal.
 - The rotating parts are fastened when the axle unit is set into the pedal. Adjust them slightly loose before setup.
4. Remove old grease and apply an appropriate amount of new grease to the bottom of the pedal body.
 - Apply grease to the extent that it does not flow out when the axle is set into the pedal (about 1.5 g).
 5. Tighten the lock bush and insert the axle unit.



■ Replacing and mounting the reflectors

A special reflector set SM-PD64 is available. Mount reflectors with pins.

Tightening torque:
2.0 – 2.5 N·m {17.2 – 21.5 in. lbs.}



Note:

- When using the product without a reflector, adjust the protrusion of pins using attached spacers. For details, refer to "Adjusting the gripping force".

P.8 Remove old grease and apply an appropriate amount of new grease to the bottom of the pedal linkage.
→ Remove old grease and apply an appropriate amount of new grease to the bottom of the pedal body.

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

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