Dealer's Manual

ROAD	MTB	Trekking
City Touring/ Comfort Bike	URBAN SPORT	E-BIKE

FLAT PEDAL

DEORE XT

PD-M8140

CONTENTS

CONTENTS 2
IMPORTANT NOTICE 3
TO ENSURE SAFETY 4
LIST OF TOOLS TO BE USED 6
INSTALLATION/REMOVAL 7
Installing to the crank 7
ADJUSTMENT 8
Adjusting the gripping force 8
MAINTENANCE 9
Replacing the pins 9
Adjusting axle bearings 9
Installing/removing the reflectors 12

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 distributor for assistance.
- Make sure to read all 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 manuals and technical documents are accessible online at https://si.shimano.com.
- For consumers who do not have easy access to the internet, please contact a SHIMANO distributor or any of the SHIMANO offices to obtain a hardcopy of the User's Manual.
- 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

- **Be sure to follow the instructions provided in the manuals when installing the product.**
  Only use SHIMANO genuine parts. If a component or replacement part is incorrectly assembled or adjusted, it can lead to component failure and cause the rider to lose control and crash.
-  Wear approved eye protection while performing maintenance tasks such as replacing components.

Be sure to also inform users of the following:

- If the gripping force between the shoes and the pedal bodies (the force which stops shoes from slipping sideways) is insufficient, replace the pins with longer pins. When using longer pins, 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, install short pins instead.
- 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.
- Do not continue riding the bicycle if the reflectors are dirty or damaged. Otherwise, it becomes more difficult for others to see you.
- Be sure to attach reflectors to the bicycle when traveling on roads.

NOTICE

Be sure to also inform users of the following:

- Before riding the bicycle, check that there is no gap or looseness between fastening section.
- Before riding the bicycle, check that there is no gap or looseness in the pins.
- If pedaling performance does not feel normal, perform an inspection again.
- If you experience any trouble with the rotating parts of the pedal, the pedal may require adjustment. Consult a place of purchase or a distributor.
- Be sure to retighten the crank arms and pedals at periodic intervals at the place of purchase or a distributor.
- 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 mainly to explain the procedures for using the product.

LIST OF TOOLS TO BE USED

The following tools are needed for installation/removal, adjustment, and maintenance purposes.

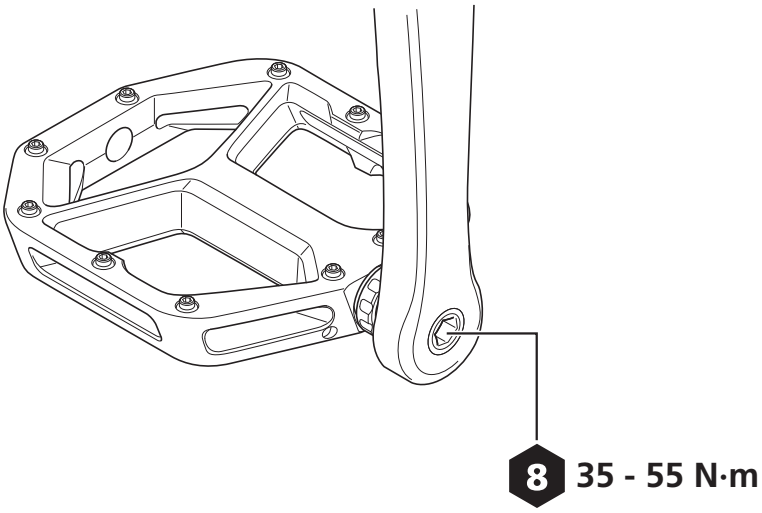
Tool	
	2 mm hexagon wrench
	8 mm hexagon wrench
	7 mm spanner
	10 mm spanner
	TL-PD40
	TL-PD63
	TL-PD33

INSTALLATION/REMOVAL

Installing to the crank

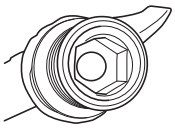
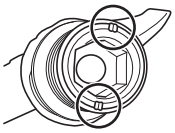
1. **Apply a small amount of grease to the threads.**
2. **Install the pedals using an 8 mm hexagon wrench.**

   The right pedal has a right-hand thread; the left pedal has a left-hand thread.



NOTICE

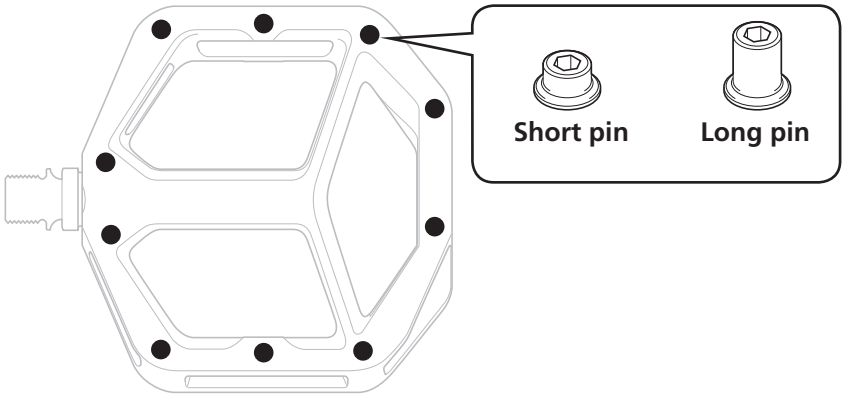
- Pay attention to the difference between the left and right pedals.

Right pedal	Left pedal
	
No groove in the thread.	There is a groove in the thread.

ADJUSTMENT

Adjusting the gripping force

Replace the long pins or short pins to adjust the gripping force between the shoes and the pedal bodies.

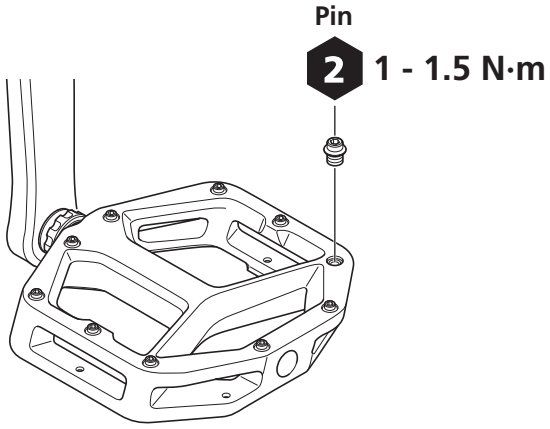


MAINTENANCE

Replacing the pins

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

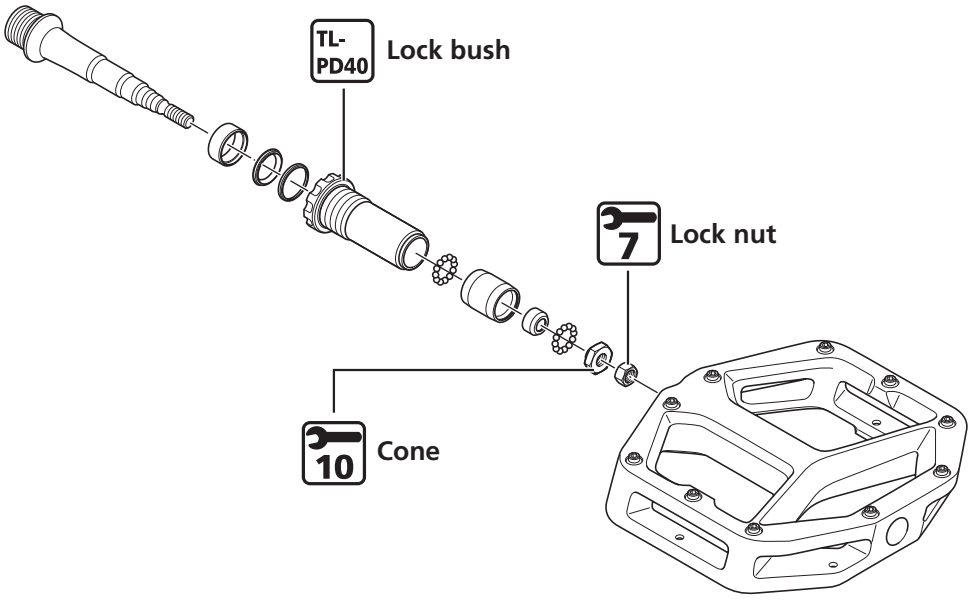
1. Replace pins as shown in the figure.



Adjusting axle bearings

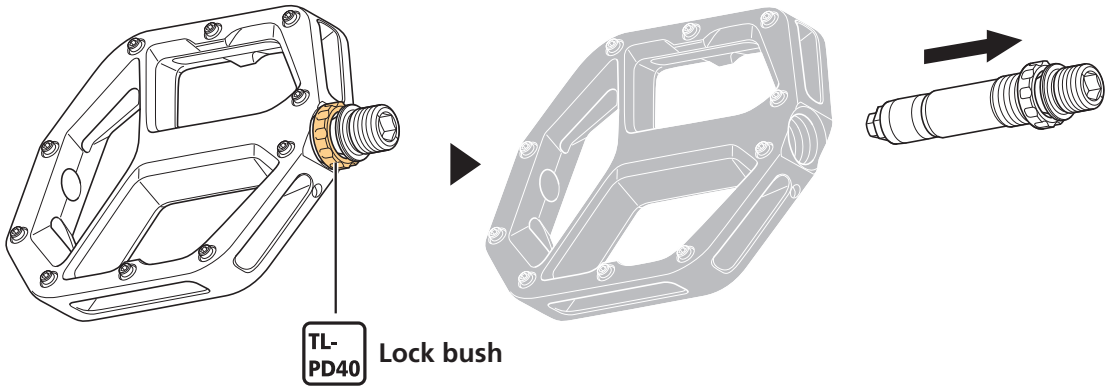
Adjustment is required if the rotating parts are not functioning properly. Follow the procedure shown below.

Reference: Parts breakdown



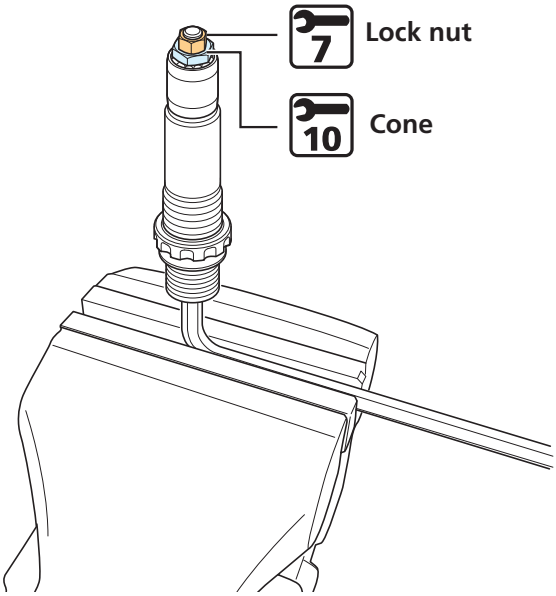
1. Loosen the lock bush and remove the axle unit.

The lock bush of the right pedal has a left-hand thread; the lock bush of the left pedal has a right-hand thread.



2. Loosen the lock nut.

Use a vise or an axle vise to hold the axle unit in place. Use the tools described below to perform the adjustment.



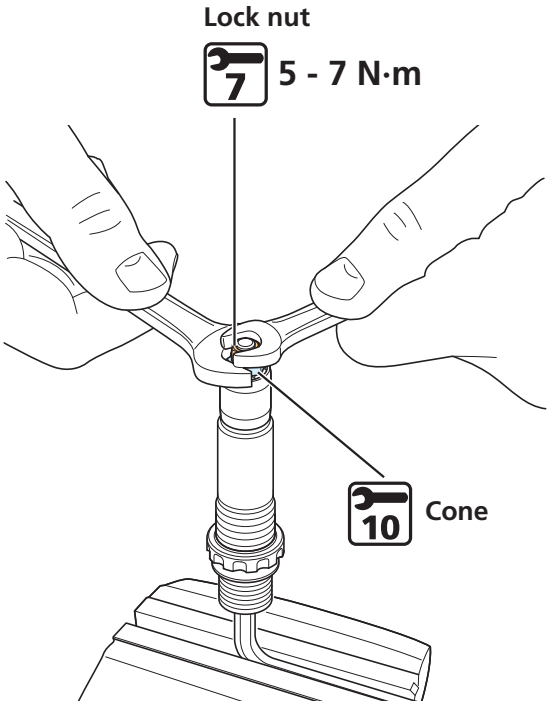
TECH TIPS

- TL-PD63/TL-PD33 can be used for a lock nut and cone if preferred.
- The rotating parts are fastened when the axle unit is set into the pedal. Adjust them slightly loosely before setup.

3. Turn the cone to adjust the bearing preload.

4. With the cone held secure, tighten the lock nut in place.

If rotation is loose after setting the axle unit into the pedal, readjust from Step 2.



NOTICE

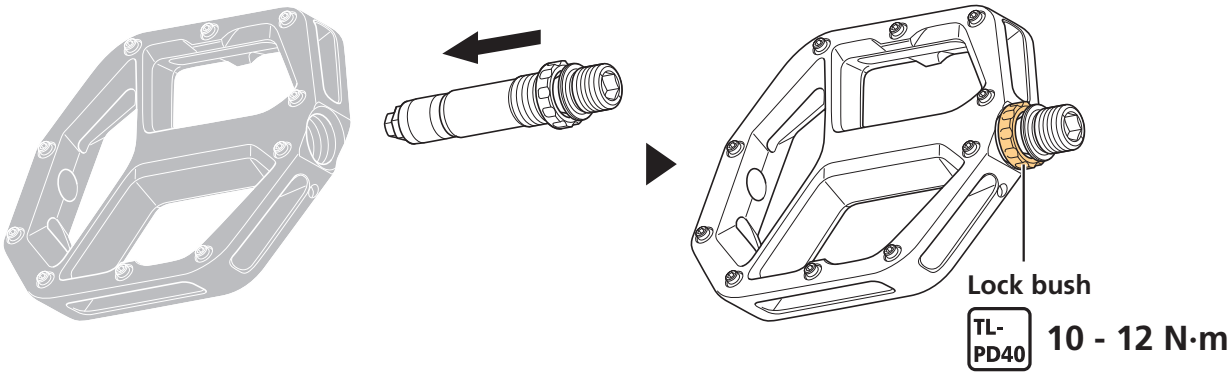
- Both the cone and lock nut are threaded left-hand for the right pedal and threaded right-hand for the left pedal.
- Adjust the cone so as to achieve a smooth rotation without looseness when the axle unit is set into the pedal.
- When assembling the body cup, please note the direction of the parts.

5. Remove old grease and apply an appropriate amount of new grease to the bottom of the pedal body.

TECH TIPS

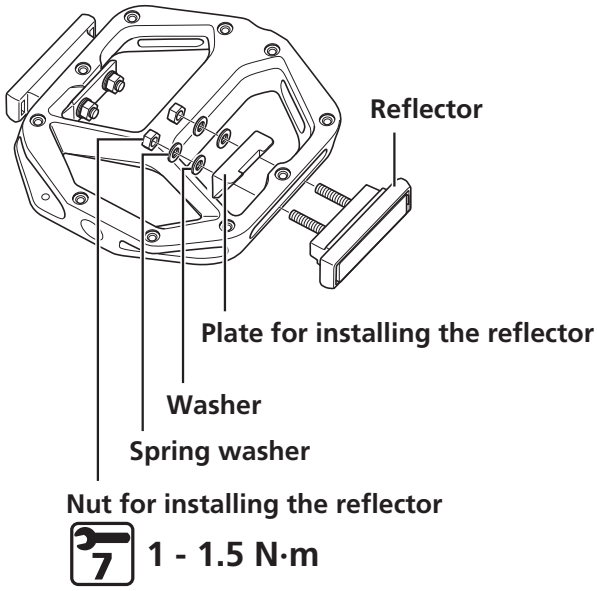
- Apply grease to the extent that it does not flow out when the axle is set into the pedal (about 1.5 g).

6. Insert the axle unit into the pedal body, then tighten the lock bush.



Installing/removing the reflectors

1. Install the reflector as shown in the figure.



SHIMANO

SHIMANO NORTH AMERICA BICYCLE, INC.
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.
High Tech Campus 92, 5656 AG Eindhoven, The Netherlands Phone: +31-402-612222

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

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