# **Internal Geared Hub**

User's manual

#### **IMPORTANT NOTICE**

 Contact the place of purchase or a distributor for information on installation, adjustment, and replacement of the products which are not found in the user's manual. A dealer's manual for professional and experienced bicycle mechanics is available on our website (https://si. shimano.com).

#### For safety, be sure to read this "user's manual" thoroughly before use, follow it for correct use, and store it so that it can be referenced at any time.

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.

Δ	DANGER	Failure to follow the instructions will result
		in death or serious injury.
	WARNING	Failure to follow the instructions could
	WARNING	result in death or serious injury.
	CAUTION	Failure to follow the instructions could
		cause personal injury or physical damage
		to equipment and surroundings.

#### **Important Safety Information**

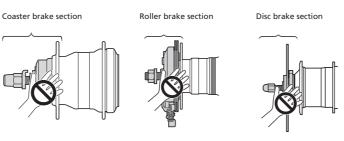
#### 

- Because each bicycle may handle slightly differently depending on the model, be sure to learn the proper braking technique (including brake lever pressure and bicycle control characteristics) and operation of your bicycle. Improper use of your bicycle's brake system may result in a loss of control or a fall, which could lead to severe injury.
- Do not disassemble or modify the product. This may cause the product to not operate correctly, and you may suddenly fall and be seriously injured.
- Check that the wheels are fastened securely before riding the bicycle. Otherwise, you may fall and be seriously injured.

## 

- Be sure to shift the shifting lever one gear at a time (one or two gears at a time for an 11-speed hub). During shifting, reduce the force being applied to the pedals. If you try to force operation of the shifting lever or suddenly perform shifting while the pedals are being turned strongly, your feet may come off the pedals and the bicycle may fall over, which could result in serious injury. Using the shifting lever to suddenly shift may also cause the outer casing to spring out of the shifting lever. This does not affect the capabilities of the shifting lever because the outer casing returns to the original position after shifting.
- Do not continuously apply the brakes when riding down long slopes.
  For coaster brakes or roller brakes, this will cause the internal brake parts to become very hot, weakening braking performance, as well as causing a reduction in the amount of brake grease inside the brake, which can lead to noise being generated or problems such as abnormally sudden braking. For hydraulic disc brakes, it may cause a sudden increase in the brake lever stroke, preventing the brakes from operating and resulting in serious injury.

• Do not touch the area around the brake for at least 30 minutes after riding the bicycle. If the brake is used frequently, the area around the brake may become hot.



### Notice

• A noise is generated by the gear-shifting structure in the internal geared hub. If you experience an abnormal noise, either consult with the place of purchase or refer to the dealer's manual.

• Maintenance for an 11-speed hub

- 1. The oil port screw on the hub shell is used to replace oil. Never loosen it unless you are replacing oil. Oil could leak and spray.
- 2. In order to maintain proper performance, it is recommended that you contact the place of purchase or a distributor to carry out maintenance such as internal oil replacement after riding 1,000 km from the start of use and then after about once every year (or once about every 2,000 km if the bicycle is used very frequently). If the bicycle is used under harsh conditions, more frequent maintenance is required.
- Maintenance for other hubs
- To maintain the product in good working order, it is recommended to have the place of purchase or nearest Pro shop carry out maintenance such as lubrication of the internal parts about once every year from the first time of use (once about every 2,000 km if the bicycle is used very frequently). If the bicycle is used under harsh conditions, more frequent maintenance is required. Also, for carrying out maintenance, the use of SHIMANO internal geared hub grease or a lubrication kit is recommended. If SHIMANO grease or a SHIMANO lubrication kit is not used, problems such as a malfunction in gear shifting may occur.
- The internal geared hub is not completely waterproof. Avoid using the hub in places where water might get inside and do not use high-pressure water to clean the hub, otherwise the internal mechanism may rust.
- The gears should be periodically washed with a neutral detergent. In addition, cleaning the chain with neutral detergent and lubricating it can be an effective way of extending the life of the gears and the chain.
- If chain skipping has started occurring, replace the gears and the chain at a place of purchase or a distributor.
- Never place your foot on the bell crank. Otherwise, gear shifting may not function properly.
- As you shift gears, stop pedaling or reduce the force being applied to the pedals. This will ensure smooth gear shifting. In addition, a loud sound may be temporarily emitted if the gears are shifted while strongly pedaling with E-BIKE, etc., but this is normal.
- Practice gear shifting until you become familiar with the operation.
- 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.

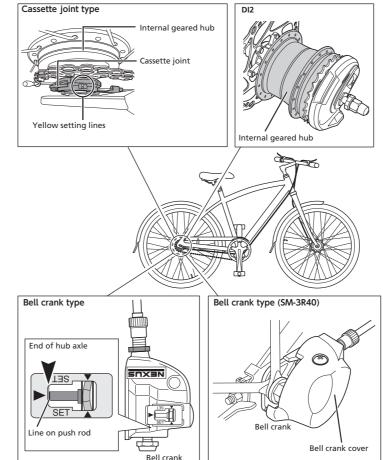
### **Regular Inspections Before Riding the Bicycle**

Before riding the bicycle, check the following items. If any problems are found, consult your place of purchase or a distributor.

- Is gear shifting carried out smoothly?
- Is there any noticeable damage to the electric wires?
- Do any abnormal noises occur during operation?

### Names of parts

The components differ according to the specifications of the internal geared hub.



• Spin the wheel and check the braking force of the brake.



#### 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 City, Osaka 590-8577, Japan

Please note: specifications are subject to change for improvement without notice. (English) © May. 2020 by SHIMANO INC. ITP