

General Safety Information

⚠ WARNING

- When changing the oil, be careful that no oil gets on the disc brake rotor, brake pads, on the rim when using rim brakes, etc. If oil gets on any of these parts, there is a danger that brake performance may be reduced. Take care of this problem according to the procedures in the brake instruction manual.
- Since there is a risk of explosion or fire, do not smoke, eat, or drink while using this oil. In addition, keep it away from ignition sources such as heat, sparks, open flames, or high temperatures and prevent it from catching fire due to static-electricity sparks or other sparks.
- Use only outdoors or in a well-ventilated area. Inhalation of oil mist or vapors may cause nausea. Be careful to provide ventilation and use a respirator-type mask. If mist or vapor is inhaled by mistake, go immediately to an area with fresh air. Stay warm and quiet, and seek professional medical advice if required. If breathing stops, perform artificial respiration, and if breathing is difficult, provide the affected person with oxygen.

■ Cautions regarding handling of SG-S700 Oil

- Use safety glasses when handling, and avoid contact with eyes. Contact with eyes may result in irritation. In the event of eye contact, flush with fresh water and seek medical assistance immediately.
- Use gloves when handling. Contact with skin may cause a rash and discomfort. In the event of skin contact, wash well with soap and water. If skin condition becomes abnormal, seek medical assistance immediately.
- Do not drink the oil. If it is drunk by mistake, do not induce vomiting. Make the affected person drink 1 to 2 cups of water and seek medical assistance immediately. If the affected person loses consciousness, do not give the person anything by their mouth. If vomiting occurs naturally, tilt the body to prevent inhalation.
- After use, be sure to wash hands thoroughly.
- When storing, close the container tightly to prevent water or foreign materials from entering. Store out of reach of children. Do not store in areas subject to direct sunlight, areas subject to temperatures above 40°C, areas subject to water or high humidity where rust is likely to occur, or in areas where there is a risk of freezing.
- Dispose of used oil, old oil, or oil used for cleaning in accordance with applicable local laws and regulations.
- To maintain product performance, oil should be changed after the first 1,000 km from start of use of the product, and once every 2 years thereafter (after every 5,000 km if bicycle is ridden frequently).
- When performing maintenance, use only Shimano SG-S700 OIL. Use of other oils may cause problems such as oil leakage, faulty operation of speed changer, etc.
- When using a 1L can of oil, it may become impossible to suck out oil with a syringe when there is only a little oil left. First, transfer all oil to a different container.
- Read these instructions carefully, and keep them in a safe place for later reference.

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TL-S703

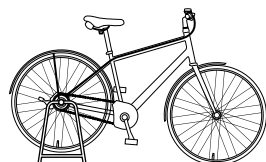
Oil Maintenance Kit

Tools including the kit

Syringe, Tube, Bleed nipple, Container

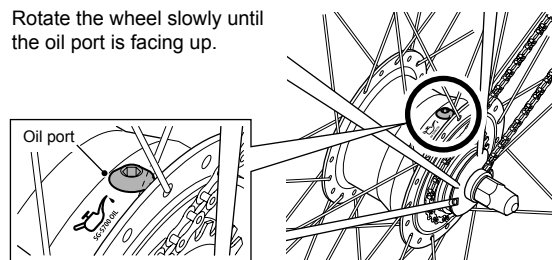
Internal hub: Oil replacement

Using a stand, etc., enable the rear wheel to turn while performing work.



A: Drain out the old oil

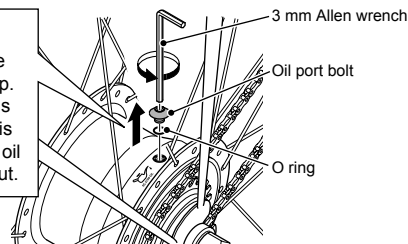
- Rotate the wheel slowly until the oil port is facing up.



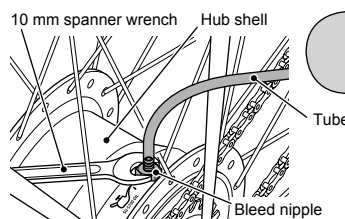
- Remove the oil port bolt and O ring.

Note:

Be careful that the oil port is facing up. If the oil port bolt is loosened when it is not facing up, the oil inside may leak out.



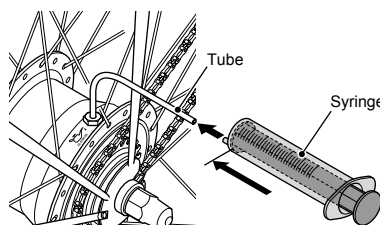
- Attach the bleed nipple with tube attached to the hub shell.



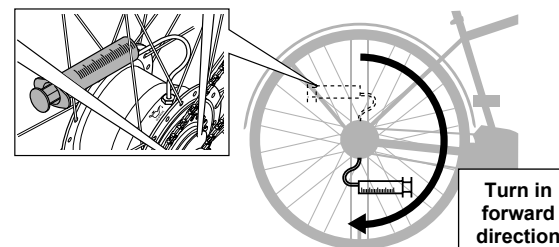
Tightening torque:
1 – 3 N·m
{9 – 26 in. lbs.}

* Using the removed O ring at this time will prevent oil from leaking during work.

- With the piston of the syringe pushed fully in, firmly connect the syringe to the tube.

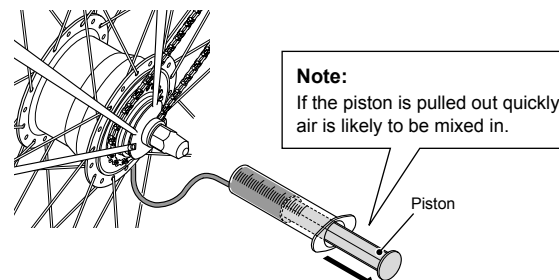


- Insert the syringe between the spokes, and slowly turn the wheel forward until the oil port is facing down.



Turn in forward direction

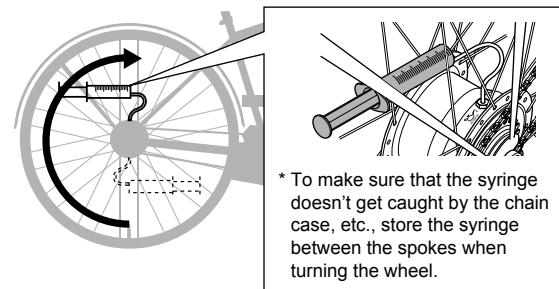
- Wait about 5 minutes with the hub kept still and not turning so that the oil settles.
- Pull the piston out slowly to draw out the oil inside the hub shell.



Note:

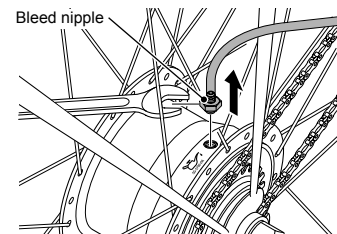
If the piston is pulled out quickly, air is likely to be mixed in.

- Slowly turn the wheel so that the oil port is facing up.

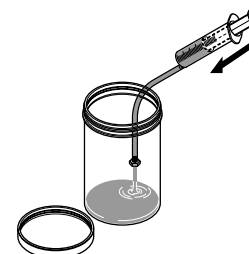


* To make sure that the syringe doesn't get caught by the chain case, etc., store the syringe between the spokes when turning the wheel.

- While being careful that the tube does not come off the syringe, remove the bleed nipple.



- Remove the old oil from the syringe.



B: Cleaning the inside

- Attach the bleed nipple to the hub shell.

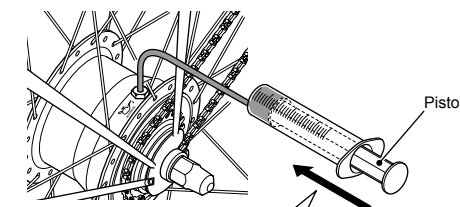
Tightening torque:
1 – 3 N·m {9 – 26 in. lbs.}

* Using the removed O ring at this time will prevent oil from leaking during work.

- Suck 25 ml of new oil into the syringe and connect it firmly to the tube.

* If the syringe or tube becomes dirty when removing old oil or cleaning the inside of the hub, clean the syringe and tube using parts cleaner, etc. if necessary.

- Push the piston to inject the new oil into the inside of the hub.



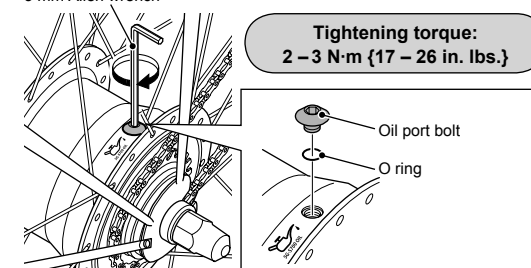
* When the oil is forced in, the internal pressure will increase and the piston may push back. If the piston is periodically pulled back to reduce the pressure inside the hub, the oil will be easier to inject into the inside of the hub.

- After pulling back the piston to reduce the internal pressure, remove the bleed nipple.

* If the bleed nipple is removed without pulling back the piston, the oil may flow back into the piston together with air from inside the tube and spill out of the piston.

- Install the O ring and the oil port bolt.

3 mm Allen wrench



Tightening torque:
2 – 3 N·m {17 – 26 in. lbs.}

- While performing gear-change operations, turn the pedals to turn the wheel for about 1 minute.
- Keep the wheel still without rotating for about 1 minute.
- Remove the oil from inside by following Procedure A above.

C: Injecting new oil

- Inject 25 ml of new oil into the hub by following steps B–1. to B–5. above.
- Clean off any oil that may have gotten on the hub, etc.

* Service Instructions in further languages are available at :

<http://techdocs.shimano.com>

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

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