# General Safety Information

**⚠ WARNING** – To avoid serious injuries:

Obtain and read the service instructions carefully prior to installing the parts. Loose, worn, or damaged parts may cause serious injury to the rider.
We strongly recommend only using genuine Shimano replacement parts.

**⚠ CAUTION** – To avoid serious injuries:

The hub dynamo generates an extremely high voltage. Never touch the connection terminal of the hub dynamo directly while riding the bicycle or while the wheel is spinning. Touching the dynamo terminal may cause an electric shock.

**NOTE:**

- Be sure to read these Service Instructions together with the Service Instructions for the disc brake system.
- Check the degree of parallel of the front fork end. If the front fork end is severely out of parallel, deformation of the hub axle may cause noise from an obstruction inside the hub dynamo to be generated.
- Install the hub dynamo to the front fork so that the side with the connection terminal is on the right when facing toward the front of the bicycle. If the side with the connection terminal is facing toward the left, the hub dynamo may not turn properly while riding.
- Check that the hub dynamo connection terminal is securely connected before using the hub dynamo.
- Use a 6 V/2.4 W bulb for the front light and a 6 V/0.6 W bulb for the taillight.
- Do not disassemble the internal hub mechanism.
- The hub dynamo will cause the turning of the wheel to become slightly heavier because of the magnet inside the hub.

CE SI-NX70A

# HB-NX70

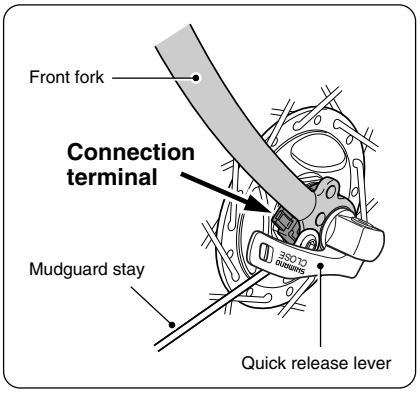
Hub Dynamo

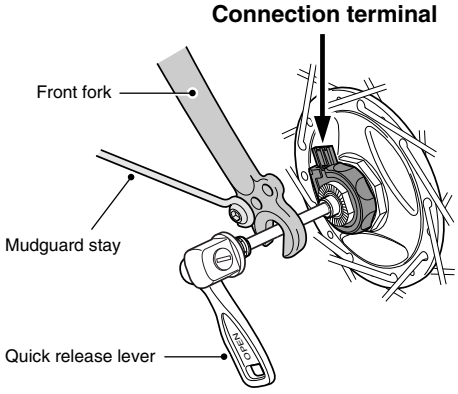
Before use, read these instructions carefully, and follow them for correct use.

## Technical Service Instructions

## Installation of the front wheel

***Install the wheel so that the side with the hub dynamo connection terminal is on the right side when looking toward the front of the bicycle, and so that the hub connection terminal is aligned with the front fork or with the basket stay.***
***Then install by following the procedure shown in the illustration below so that the connection terminal is facing upward. Do not force the connection terminal to turn after the quick release lever has been secured.***



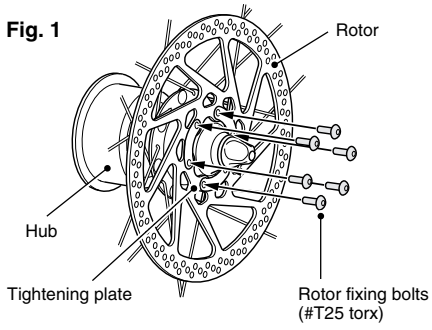




**Note:**
- The toothed axle washer is not necessary for a quick release type.
- Connect the two wires to ensure that the current flows smoothly.

## Installation of the rotor

**1.** Install the rotor and the tightening plate, and then provisionally tighten the rotor fixing bolts as shown in Fig. 1.

**Fig. 1**




**2.** While wearing gloves, apply a force to the rotor to turn it in a clockwise direction as shown in Fig. 2. While doing this, tighten the rotor fixing bolts in the order shown in the illustration.

**Tightening torque:**
**2 – 4 Nm {17 – 35 in. lbs.}**

**3.** Use a flat-tipped screwdriver or similar tool to bend the edges of the tightening plate over the heads of the bolts as shown in Fig. 3.

**Fig. 2**

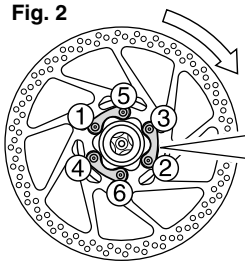
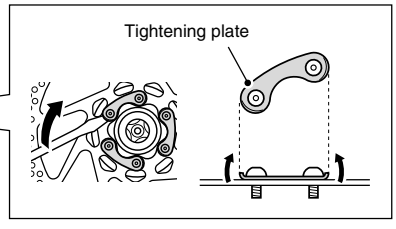


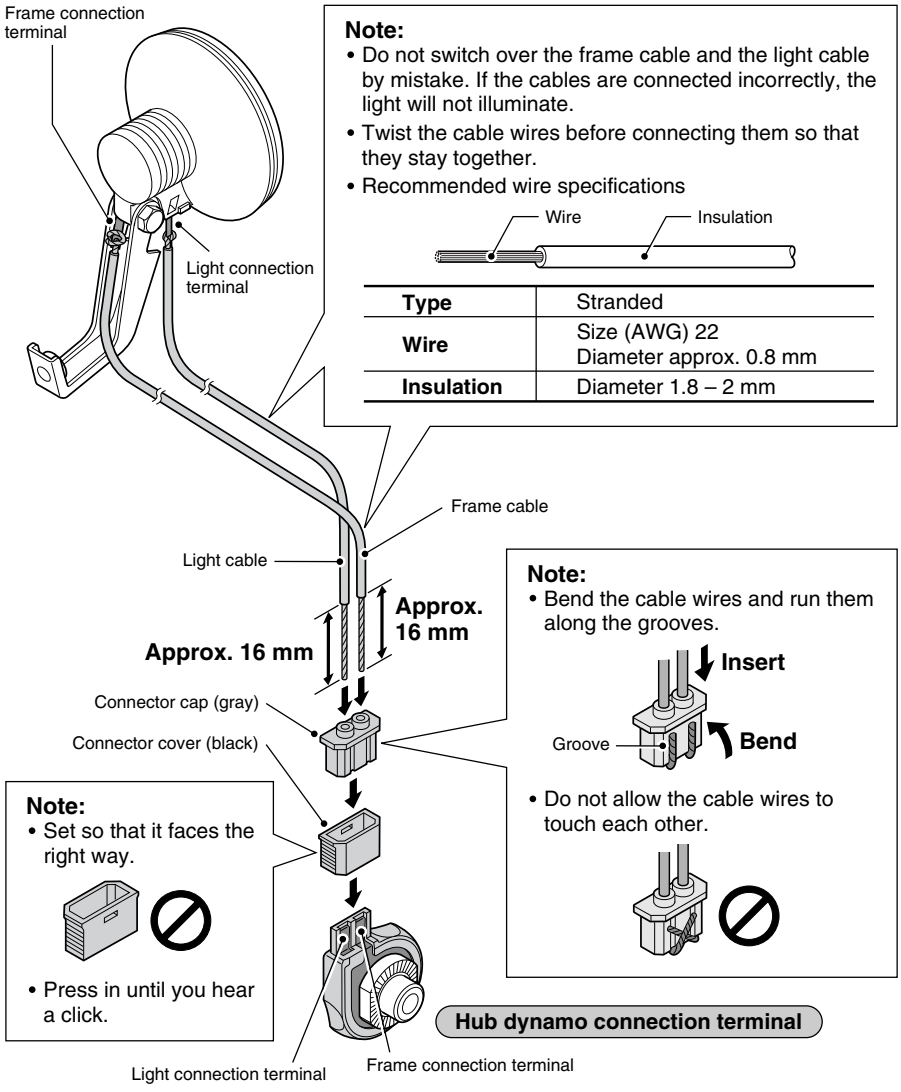

**Fig. 3**



## Connection of the cables

Connect the cables as shown in the illustration below.

**Note:**
Scrape away the paint from the light's frame connection terminal and the light connection terminal when connecting the cables.




**Note:**
- Do not switch over the frame cable and the light cable by mistake. If the cables are connected incorrectly, the light will not illuminate.
- Twist the cable wires before connecting them so that they stay together.
- Recommended wire specifications

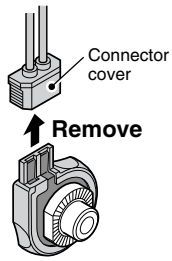
| | |
|---|---|
| **Type** | Stranded |
| **Wire** | Size (AWG) 22<br>Diameter approx. 0.8 mm |
| **Insulation** | Diameter 1.8 – 2 mm |

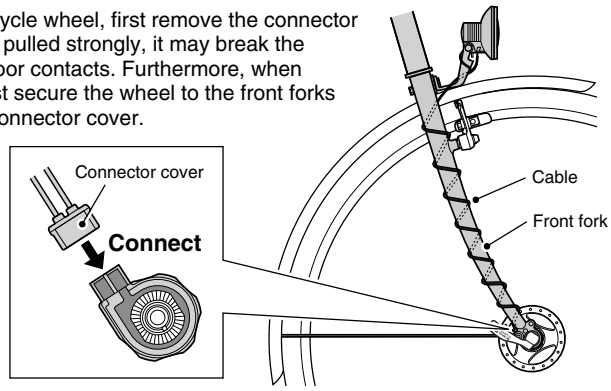
**Note:**
- Bend the cable wires and run them along the grooves.
- Do not allow the cable wires to touch each other.

**Note:**
- Set so that it faces the right way.
- Press in until you hear a click.

**Note:**

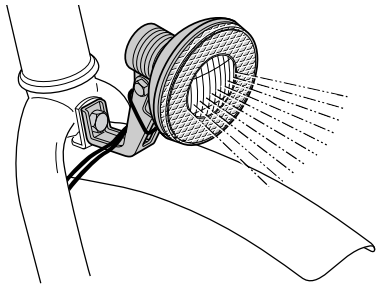
- Secure the cable to the front fork or the basket stay so that it will not get caught in the spokes or any other parts while riding. If the position of the hub dynamo may change with respect to the light while riding, for example when using a suspension fork, make sure that the cable is connected so that it will not be too loose or too tight at any point within the range of movement.
- Connect so that the current from the hub dynamo flows through the cable from the light connection terminal of the hub dynamo to the frame connection terminal.
- To disconnect the light from the hub dynamo, remove the connector cover.
- Do not ride the bicycle while the connector cover is removed, otherwise the cable might get caught in the bicycle wheel.
- When removing the bicycle wheel, first remove the connector cover. If the cables are pulled strongly, it may break the cable wires or cause poor contacts. Furthermore, when installing the wheel, first secure the wheel to the front forks and then connect the connector cover.




## Checking the light illumination

Rotate the front wheel and check that the light illuminates.



These service instructions explain how to use and maintain the Shimano bicycle parts which have been used on your new bicycle. For any questions regarding your bicycle or other matters which are not related to Shimano parts, please contact the place of purchase or the bicycle manufacturer.

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

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