

# General Safety Information

## WARNING – To avoid serious injuries:

- The tire outer diameter for wheels which are compatible with the DH-3R30-H/DH-3R30-N hub dynamo is 646 – 716 mm.  
If the hub dynamo is used on a bicycle with a tire outer diameter which is smaller than 646 mm, the braking force may be too great, which could cause the wheels to lock and the bicycle to lose its balance and fall over.
- The hub of the DH-3R30-H/DH-3R30-N has a built-in power modulator which controls the braking force to prevent it from being too great. When the braking force reaches a certain level, the power modulator operates to prevent the braking force from going past that level.  
The recommended operating range for the power modulator is for bicycles with a gross weight (bicycle + rider + luggage) of 80 – 140 kg (177 – 310 lb.) (for the DH-3R30-H) or 65 – 120 kg (144 – 265 lb.) (for the DH-3R30-N). If the gross weight of the bicycle is heavier than the recommended weight range, the braking force may be insufficient, and if it is lighter than the recommended weight range, the braking force may become too great and the wheels may lock and bicycle may fall over. It is essential that you fully understand and test the performance of the power modulator before use.  
The power modulator is not equipped with a function to prevent the wheel from locking up.
- 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.
- Check that the wheels are fastened securely before riding the bicycle. If the wheels are loose in any way, they may come off the bicycle and serious injury may result.
- Check that the lamp illuminates normally when riding at nighttime.
- Read these Technical Service Instructions carefully, and keep them in a safe place for later reference.

## 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:

- Carefully read the Front Inter-M Brake System Service Instructions for roller brakes in conjunction with these Service Instructions.
- According to German regulations (StVZO), a hub dynamo in Germany requires overvoltage protection. This hub dynamo does not have overvoltage protection inside the hub itself. Use an external overvoltage protector with a symbol to show that it complies with the German regulations (Shimano SM-DH10 overvoltage protector or similar product).
- 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 lamp and a 6 V/0.6 W bulb for the taillamp.
- If the bulb of either the front lamp or taillamp blows, excessive voltage will be applied to the remaining lamp and shorten the operating life of the bulb, so any blown bulbs should be replaced as soon as possible.
- If the lamp is frequently turned on when riding at high speed ranges, it will shorten the operating life of the bulbs.
- Do not disassemble the internal hub mechanism.
- Do not apply any lubricant to the inside of the hub, otherwise the grease will come out and it may cause problems with conductivity.
- The hub dynamo will cause the turning of the wheel to become slightly heavier because of the magnet inside the hub.
- Parts are not guaranteed against natural wear or deterioration resulting from normal use.

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# DH-3R30-H DH-3R30-N

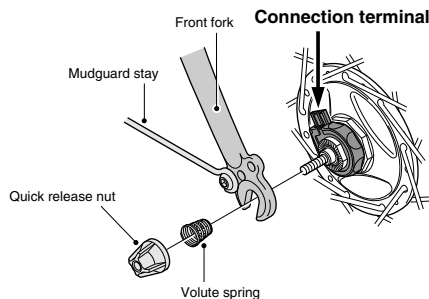
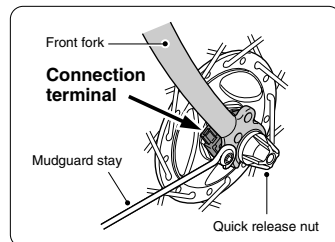
Hub Dynamo

## 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 nut or the cap nut has been secured.

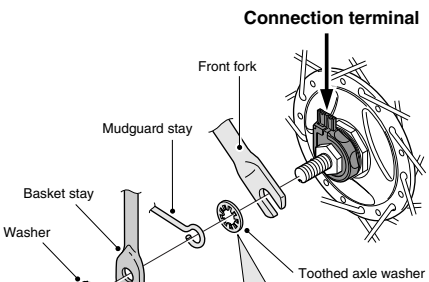
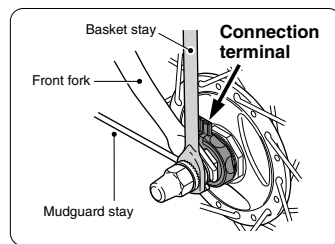
#### For quick release type



### Note:

- Do not use the toothed axle washer with a quick release type.
- Connect the two wires to ensure that the current flows smoothly.

#### For nut type



Tightening torque:  
20 N·m {174 in. lbs.}

Cap nut (M9)

### Note:

When tightening the cap nuts, tighten the nuts alternately on both sides and do not concentrate all of the effort for tightening and loosening the cap nut on one side of the wheel only, otherwise the hub axle may turn, which could excessively tighten or loosen the lock nuts.

### Note:

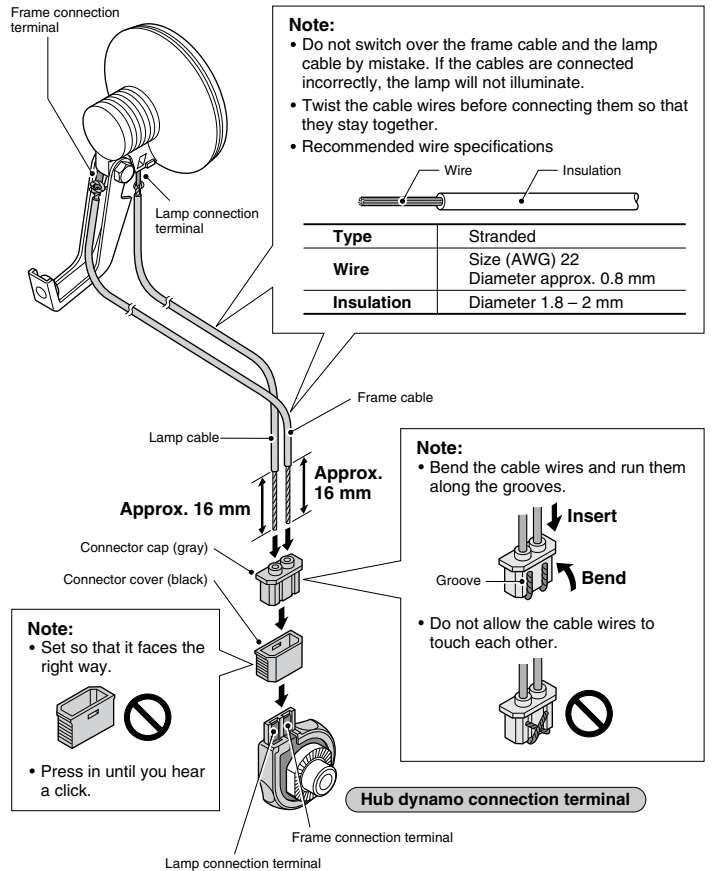
- If the cable connected to the ground terminal is not properly grounded, check that the toothed axle washer perforates the paint surface of the front fork. If the toothed axle washer is not perforating the paint surface, the lamp will not illuminate properly, so scrape away a small amount of paint from the front fork.
- It is recommended that you connect the two wires to ensure that the current flows smoothly.

## Connection of the cables

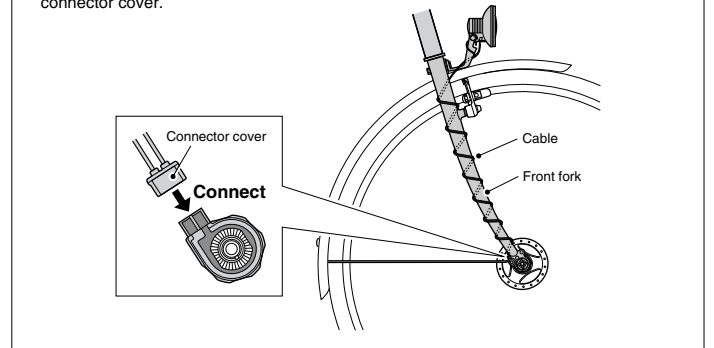
Connect the cables as shown in the illustration below.

### Note:

Scrape away the paint from the lamp's frame connection terminal and the lamp connection terminal when connecting the cables.

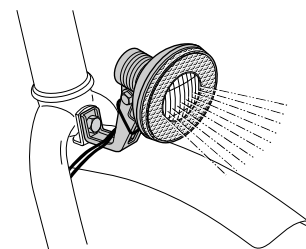


- Secure the cable to the front fork or the basket stay so that it will not get caught in the spokes or any other parts while riding. If the position of the hub dynamo may change with respect to the lamp while riding, for example when using a suspension fork, make sure that the cable is connected so 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 lamp connection terminal of the hub dynamo to the frame connection terminal.
- To disconnect the lamp 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 lamp illumination

Rotate the front wheel and check that the lamp 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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