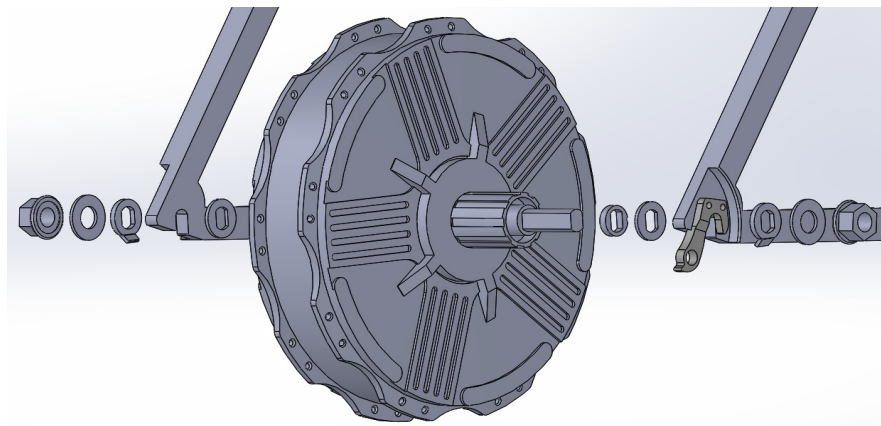


RH212 Motor Installation Guide

Rev 1

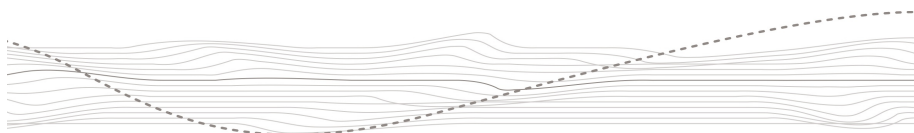


Grin Technologies Ltd

Vancouver, BC, Canada

ph: (604) 569-0902
email: info@ebikes.ca
web: www.ebikes.ca

Copyright © 2022



RH212 Motor Installation Guide



Rev 1

1. Parts Included

- RH212 Hub Motor
- 2x M14 x 1.5 Axle Nuts
- 2x Large Washers
- 2x Tabbed Washers
- 2x Small Washers with Flats
- 3mm Space Washer

2. Tools Needed

- Large Adjustable Wrench or 22mm Box Wrench

3. Installation

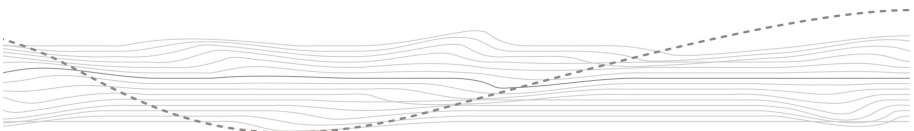
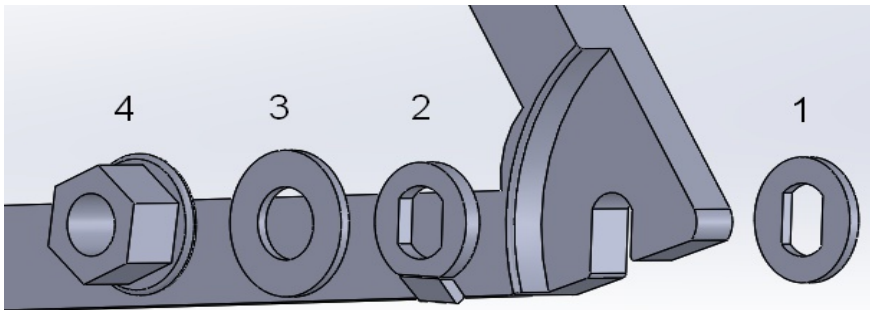
Install the cassette on the motor, and disc rotor if the bike has disc brakes – follow installation practices for the cassette and brake rotor as per manufacturer instructions (see cassette compatibility notes below).

The order of hardware on the non-drive side (cable side) is:

1. Washer with flats (if required for proper spacing)

Dropout

2. Tabbed washer (oriented with tab towards the ground)
3. Large washer
4. Axle nut



RH212 Motor Installation Guide



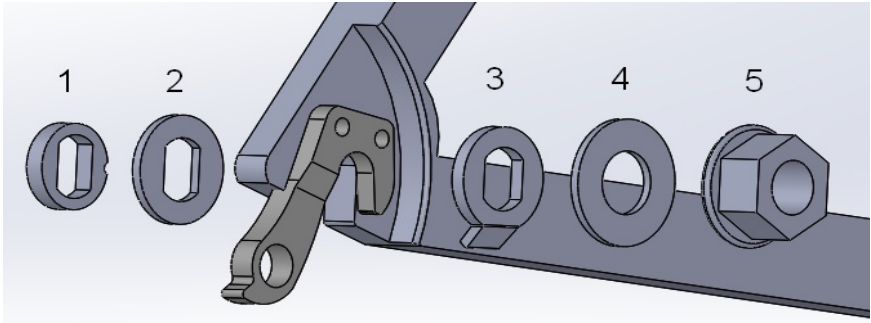
Rev 1

On the drive side (non-cable side), the order of hardware is:

1. 3mm space washer (for 9spd, 10spd & 11spd drivetrains)
2. Washer with flats (if required for proper spacing)

Dropout

3. Tabbed washer (oriented with tab towards the ground)
4. Large washer
5. Axle nut



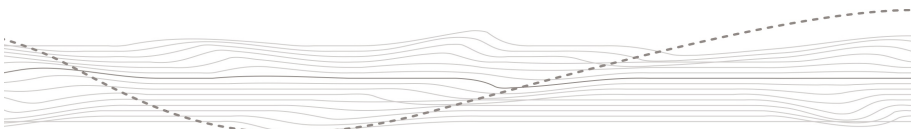
If using a torque arm, mount it on this side between the outside of the dropout and the large washer. The tabbed washer can be omitted if using a torque arm.

*****Important*****

In high power or regen capable controllers, the torque arm should be installed on the non-cable side of the axle. Otherwise all torsion will be transferred via the weaker side of the axle with the cable channel, resulting in possible axle breakage.

Ensure the tabbed washers and motor are oriented such that the cable exits downwards. Upwards orientation of the cable can cause water ingress.

Once the motor is installed in the dropouts and the hardware is in place, tighten the axle nuts firmly to 60Nm (45 ft-lb).



RH212 Motor Installation Guide

Rev 1



Cassette Compatibility

7 speed cassettes usually require a freehub body spacer on the cassette freehub body for correct fit (this will be included and pre-installed if you purchase the motor and 7 speed cassette from us at the same time). This spacer is also available on our website.

<https://ebikes.ca/shop/electric-bicycle-parts/motor-hardware/freewheel-spacer.html>

9-11 speed cassettes often require a spacer on the axle (provided) to prevent the cassette from rubbing against the inside of the dropouts.

If the lockring of the cassette bottoms out before fully tightening, there is a rubber washer on the inside of the cassette freehub that can be removed.

