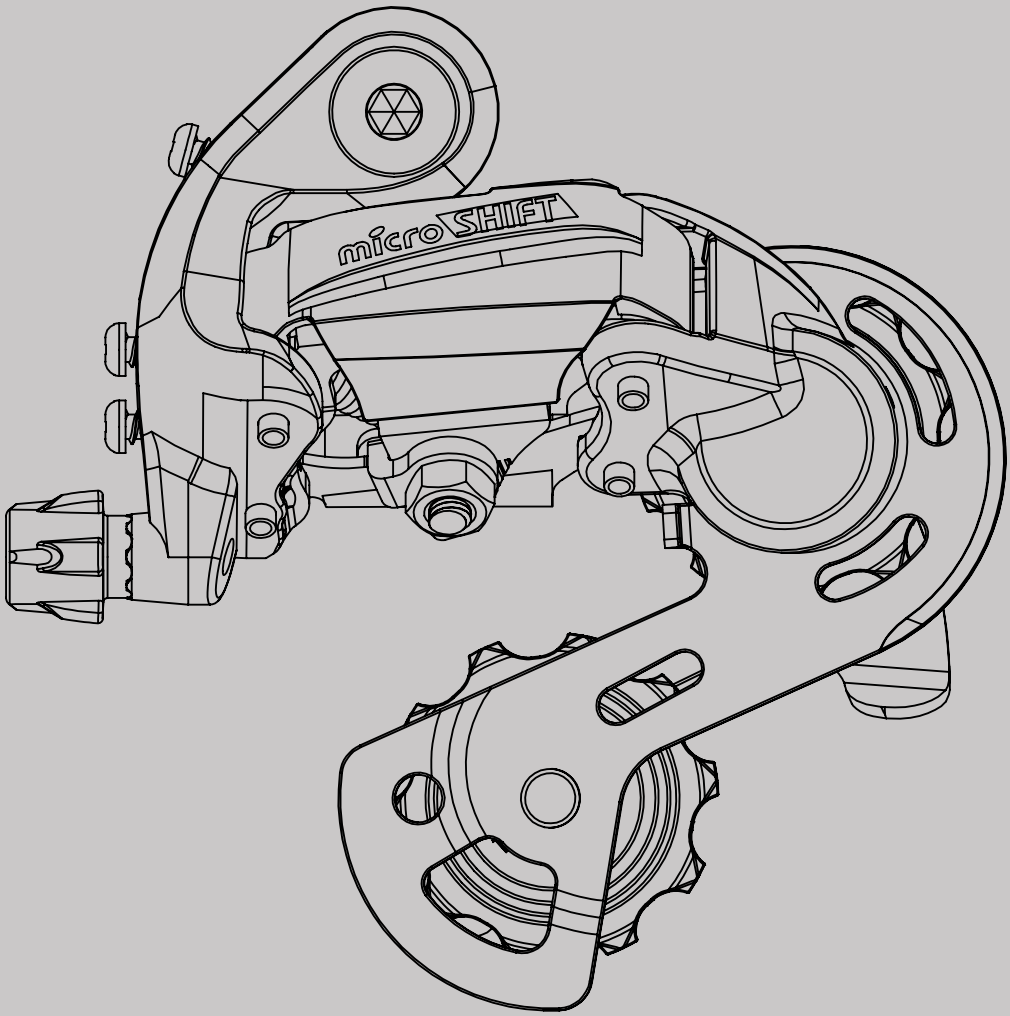
microSHIFT

# M21 Rear Derailleur Installation






RD009-001
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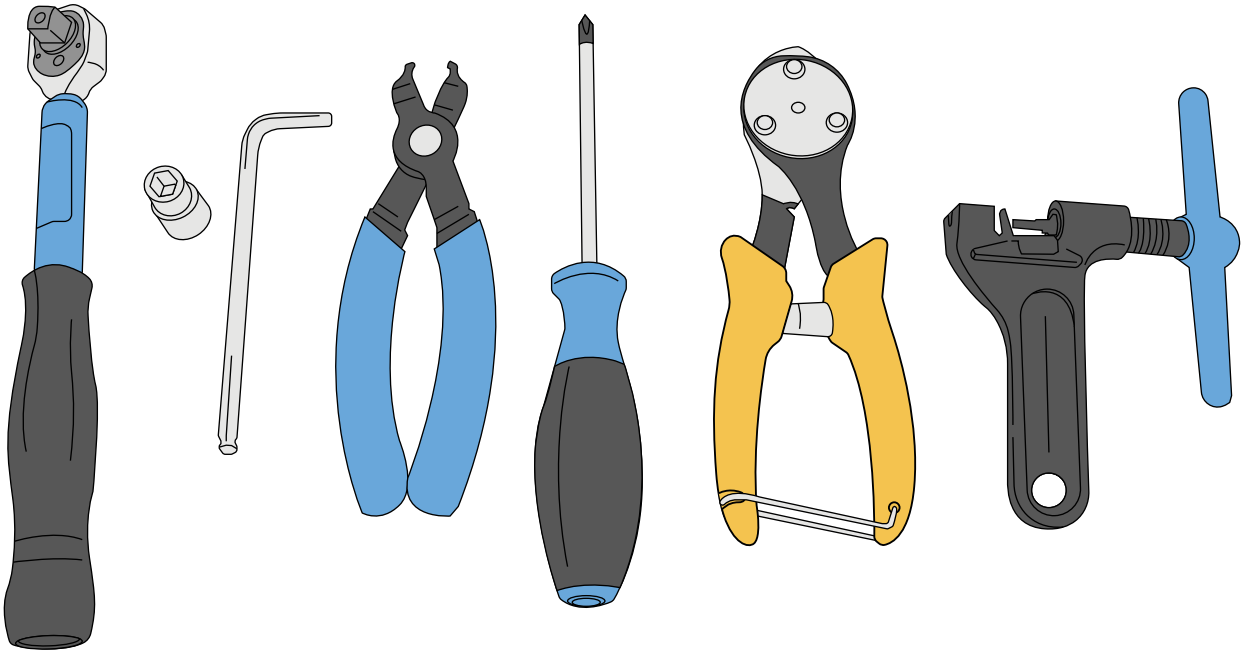
# Important Notice

## REMINDER

Before installing the products, please read and understand the installation procedures. Improper installation can lead to premature product failures or even injuries. If you have any questions on how to install, please contact us or consult with a professional bicycle mechanic.

# Tools and Supplies

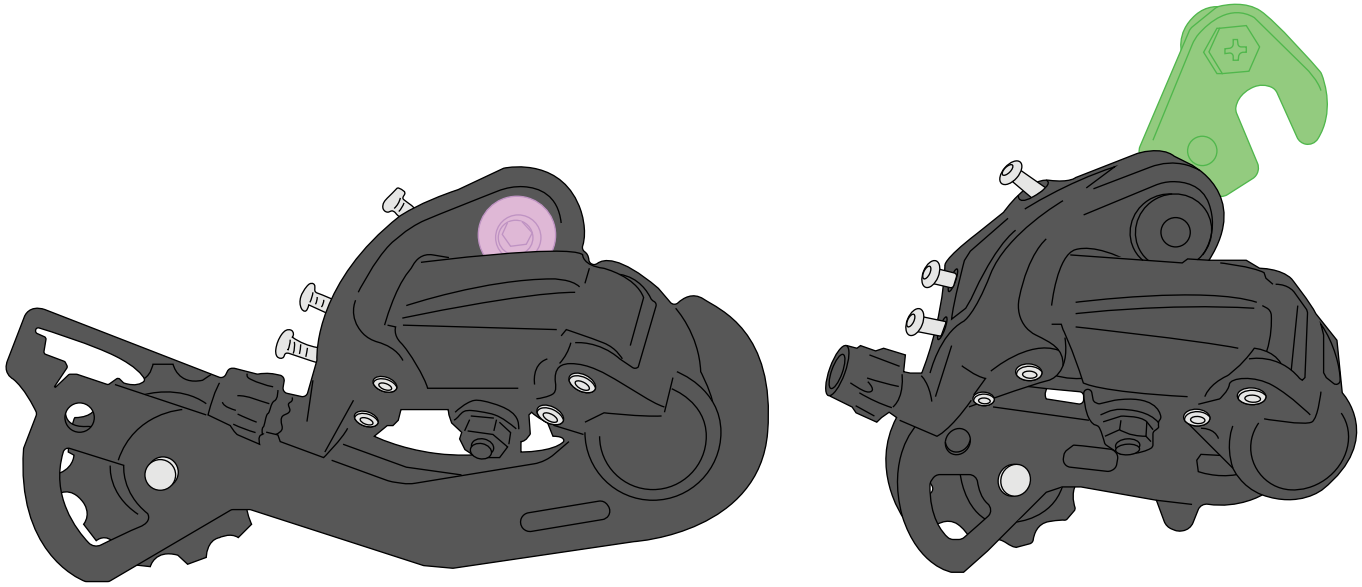
1. Torque Wrench
2. 9mm Crescent or Socket Wrench
3. 5mm Hex Wrench
4. Master Link Pliers
5. Philips Head Screwdriver
6. Cable Cutter
7. Chain Breaker



# 1.

## Rear Derailleur Attachment

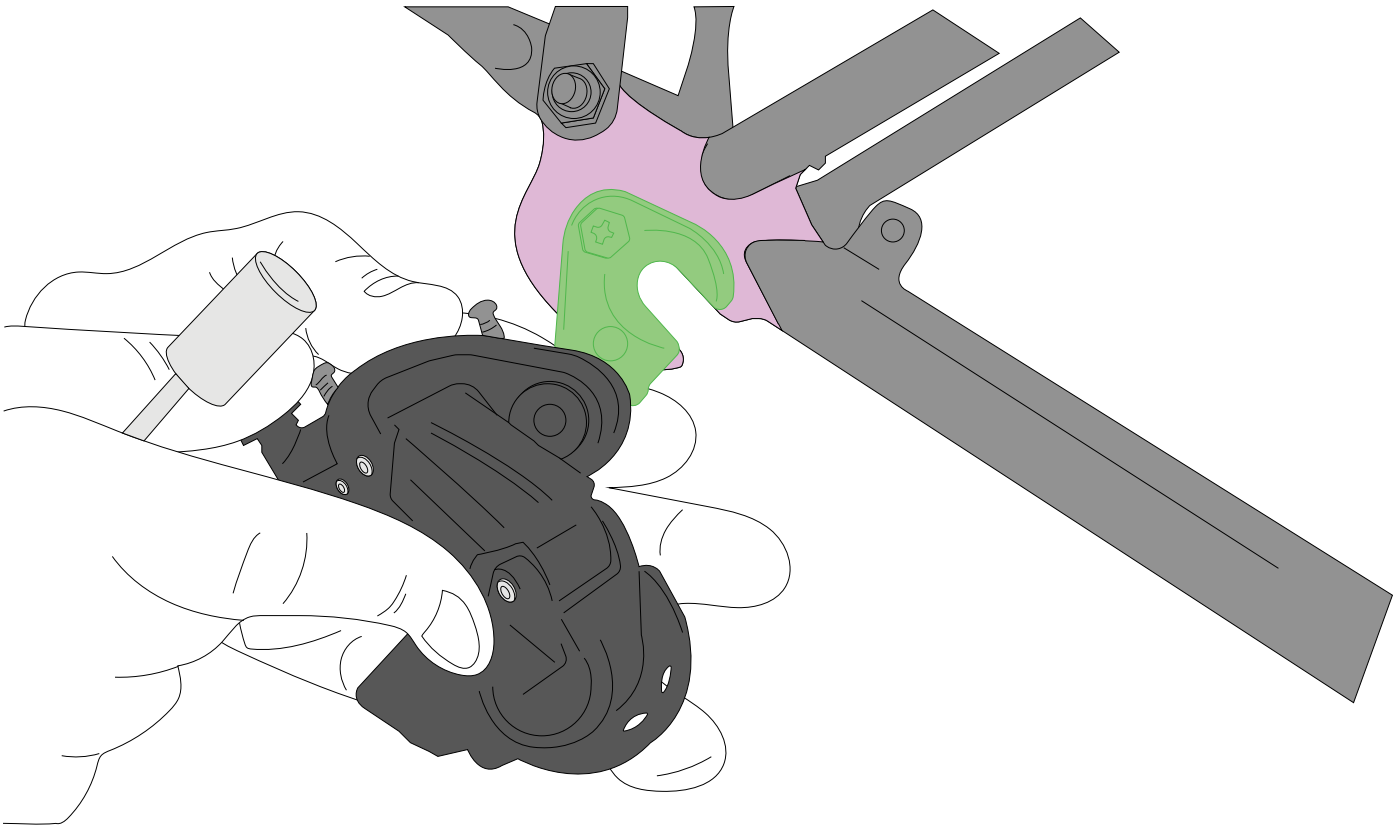
The M21 derailleur comes in two mounting styles, a **standard mount** and a **bracket mount**.



# 1.

## Bracket Mount Attachment

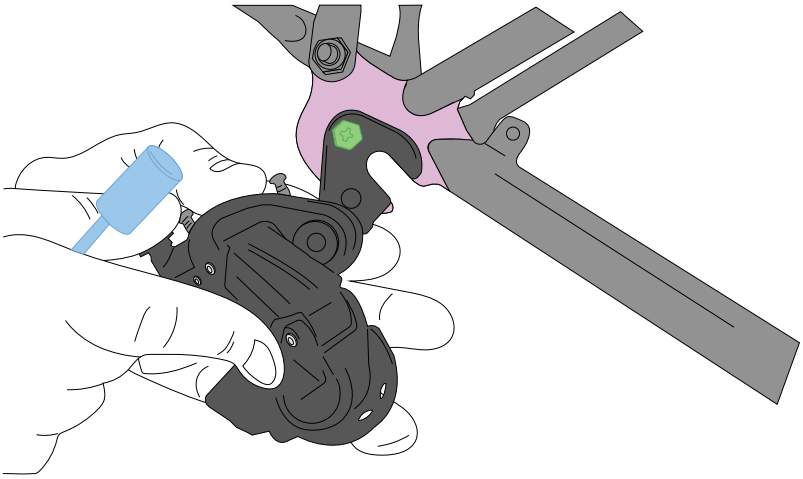
Attach the derailleur to the frame.  Make sure the **axle grove of the bracket mount** lines up with the **axle grove on the frame**.



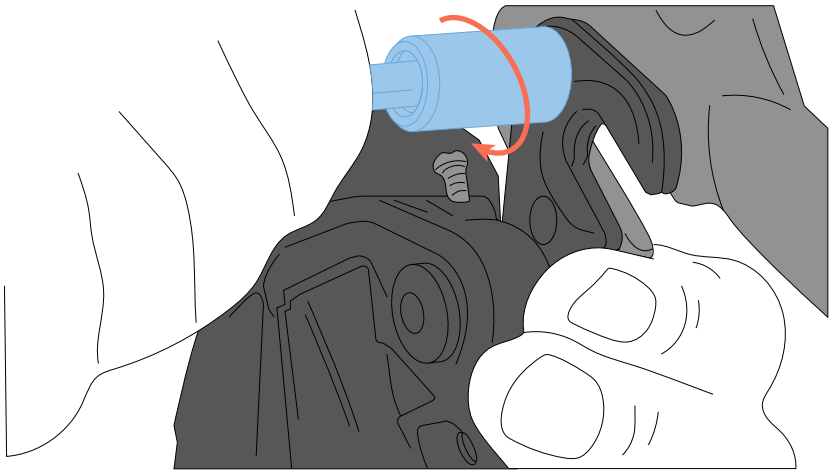
# 2.

## Bracket Mount Attachment

When the axle groves are aligned, tighten the **bracket mounting bolt** to **3-4Nm** .



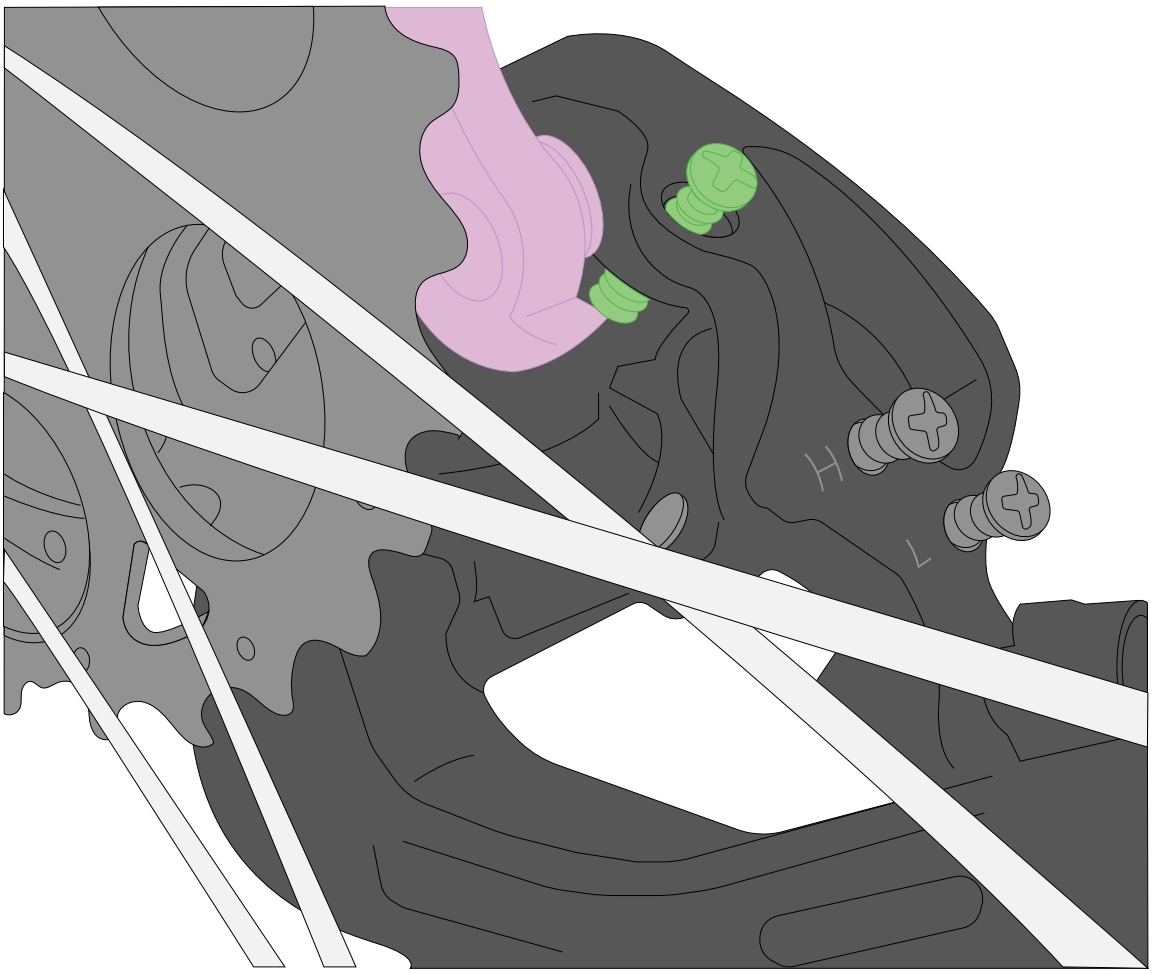
**3-4Nm**



# 1.

## Standard Mount Attachment

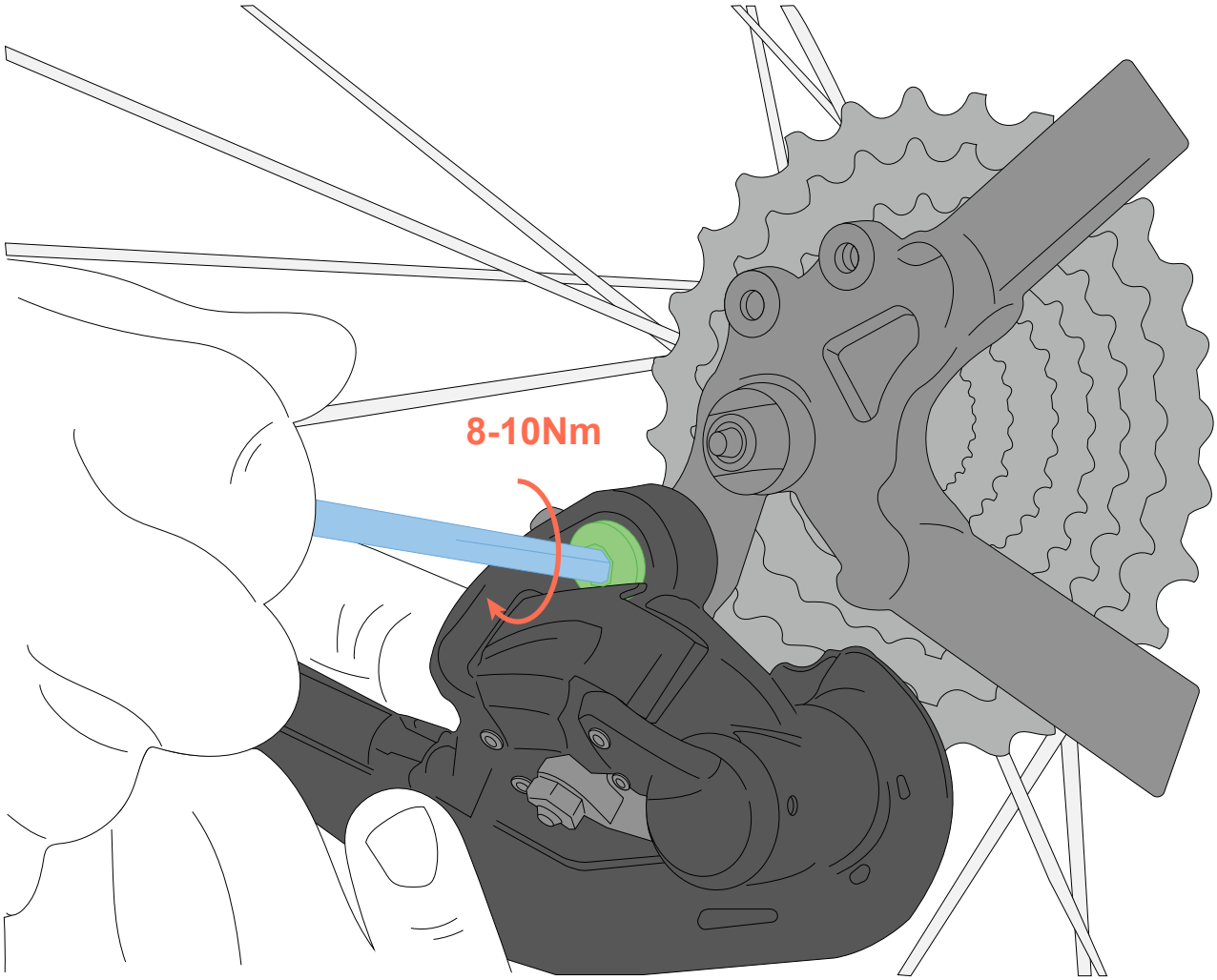
Attach the derailleur to the bike with a 5mm hex wrench.  Make sure the **b-tension** screw is above the derailleur dropout and engages directly with the **hanger tab**.



# 2.

## Standard Mount Attachment

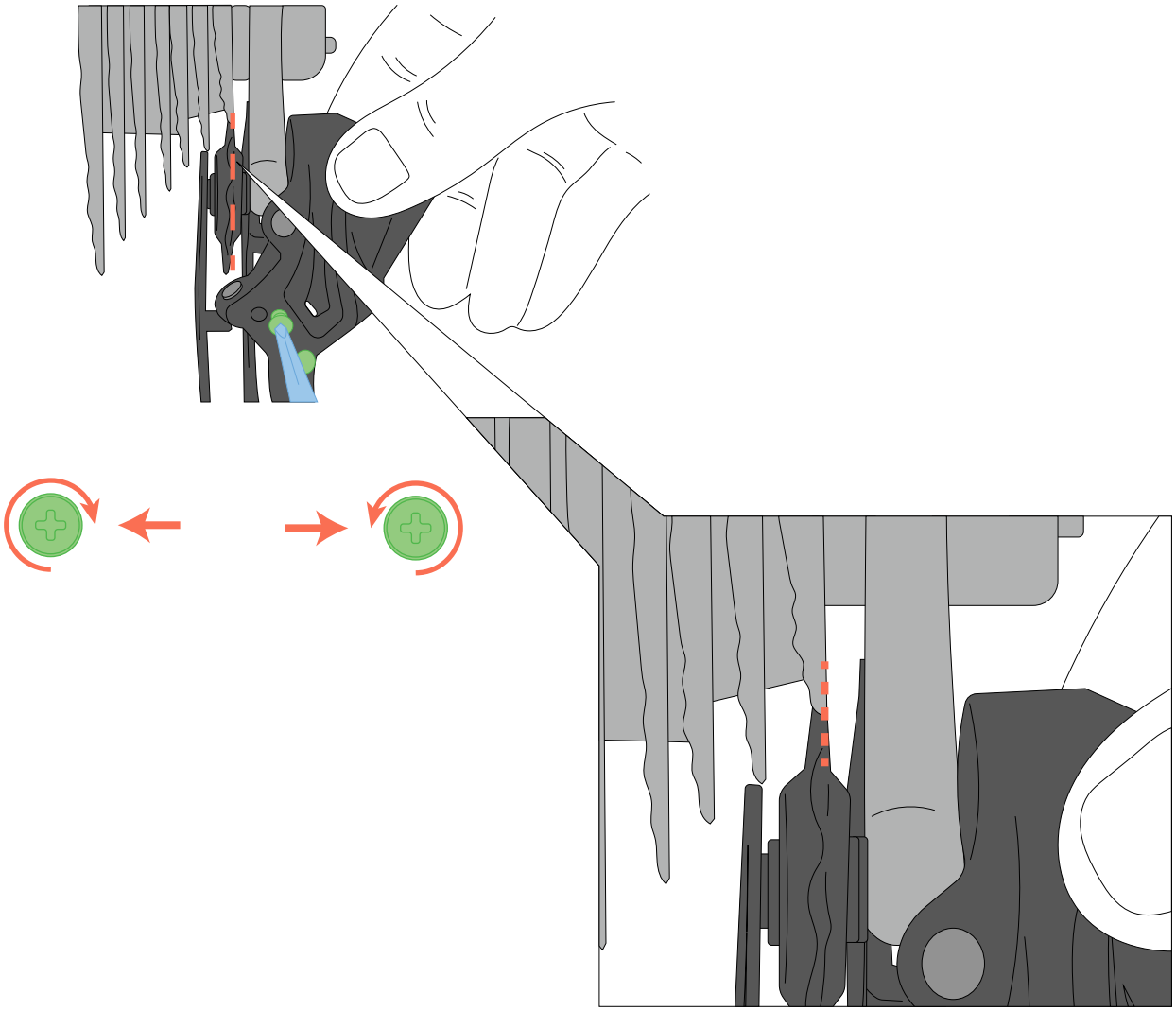
Torque the **rear derailleur fixing** bolt to 8 – 10Nm with a **5mm hex bit**.
Check to make sure that the derailleur can rotate freely.



# 1.

## High Limit Screw Adjustment

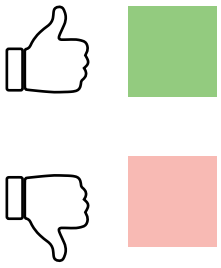
Adjust the **high-limit screw** until the center of the guide pulley **aligns** with the outer edge of the smallest cog.

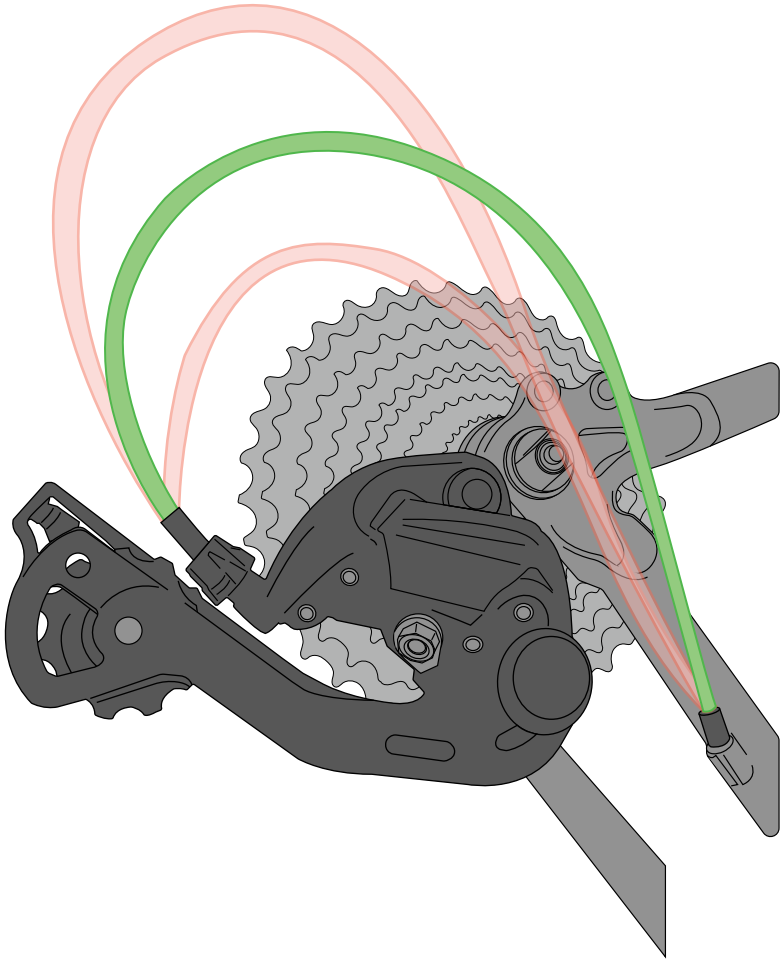


# 1.

## Cable Installation

Every frame manufacturer has different cable routing guidelines, so make sure you consult those before cutting the housing. If the housing is too short, it will rotate the derailleur back and forth at the attachment bolt.  If the housing is too long, there will be too much friction between the shift cable and housing.  You want the housing to go straight into the housing stop with a gentle bend.

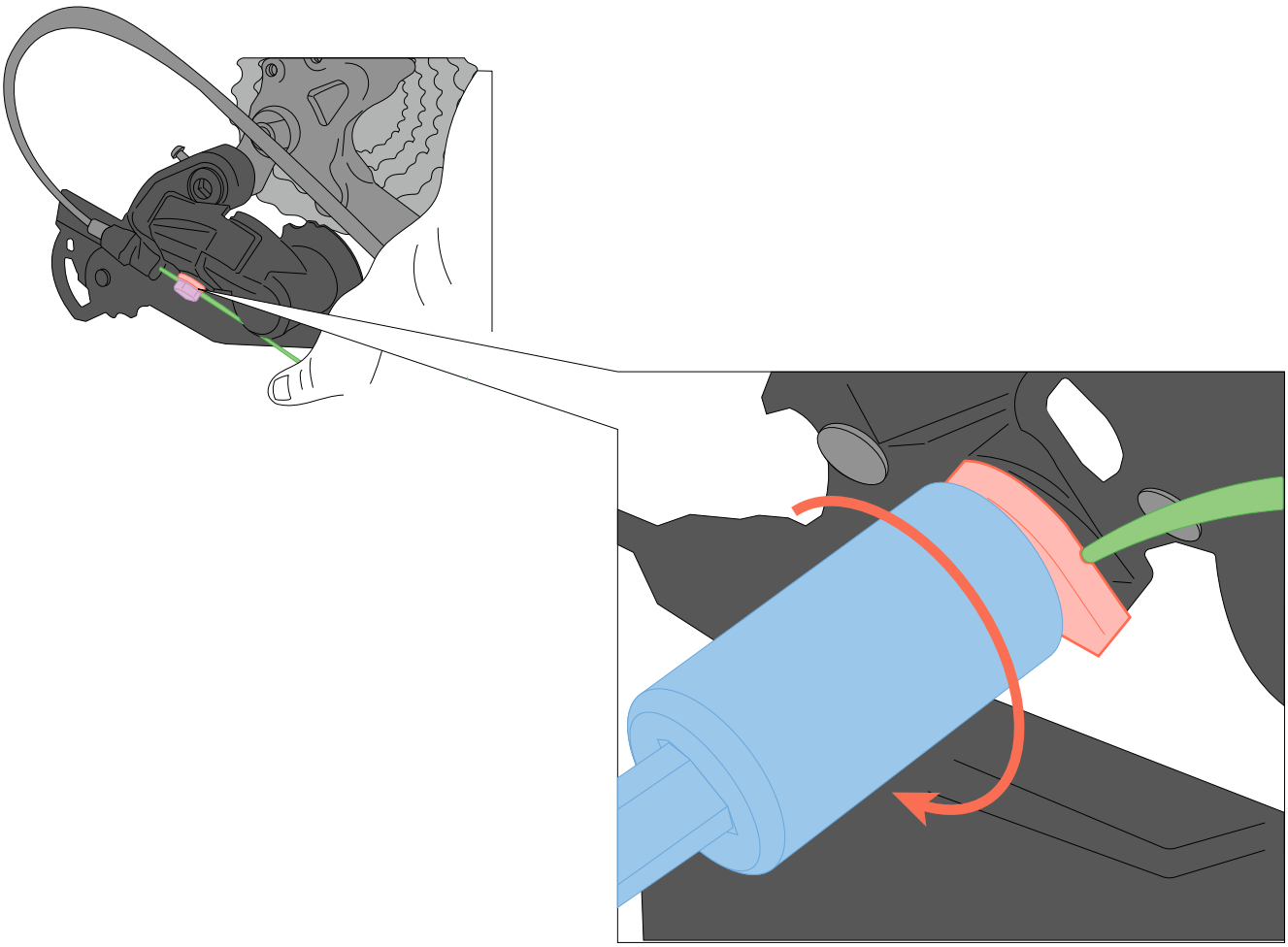




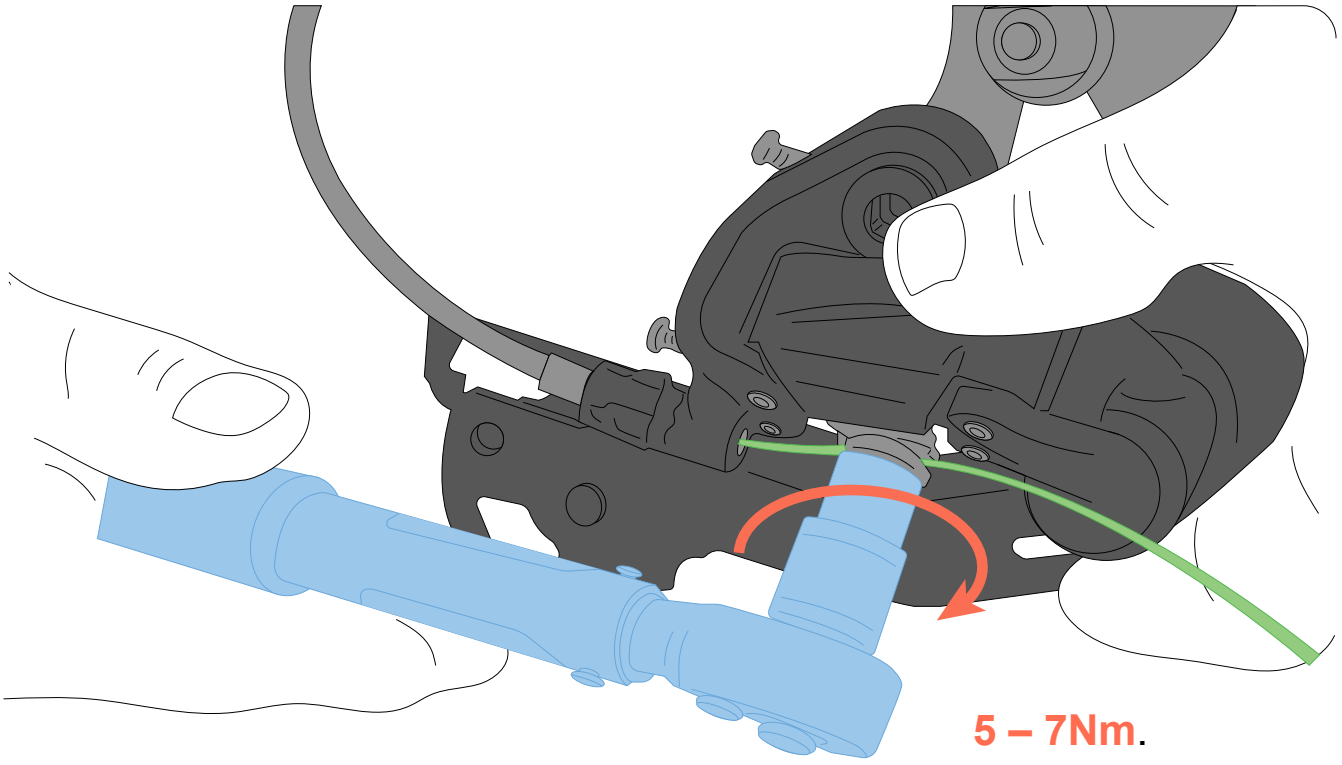
# 2.

## Cable Installation

With your shifter in the high gear position, route the **shift cable** through the housing and to the rear derailleur.  Route the cable under the **cable fixing bolt** and washer.  Pull the cable tight.  Make sure the cable sits in the grove of the **cable fixing washer** and tighten the cable fixing bolt.



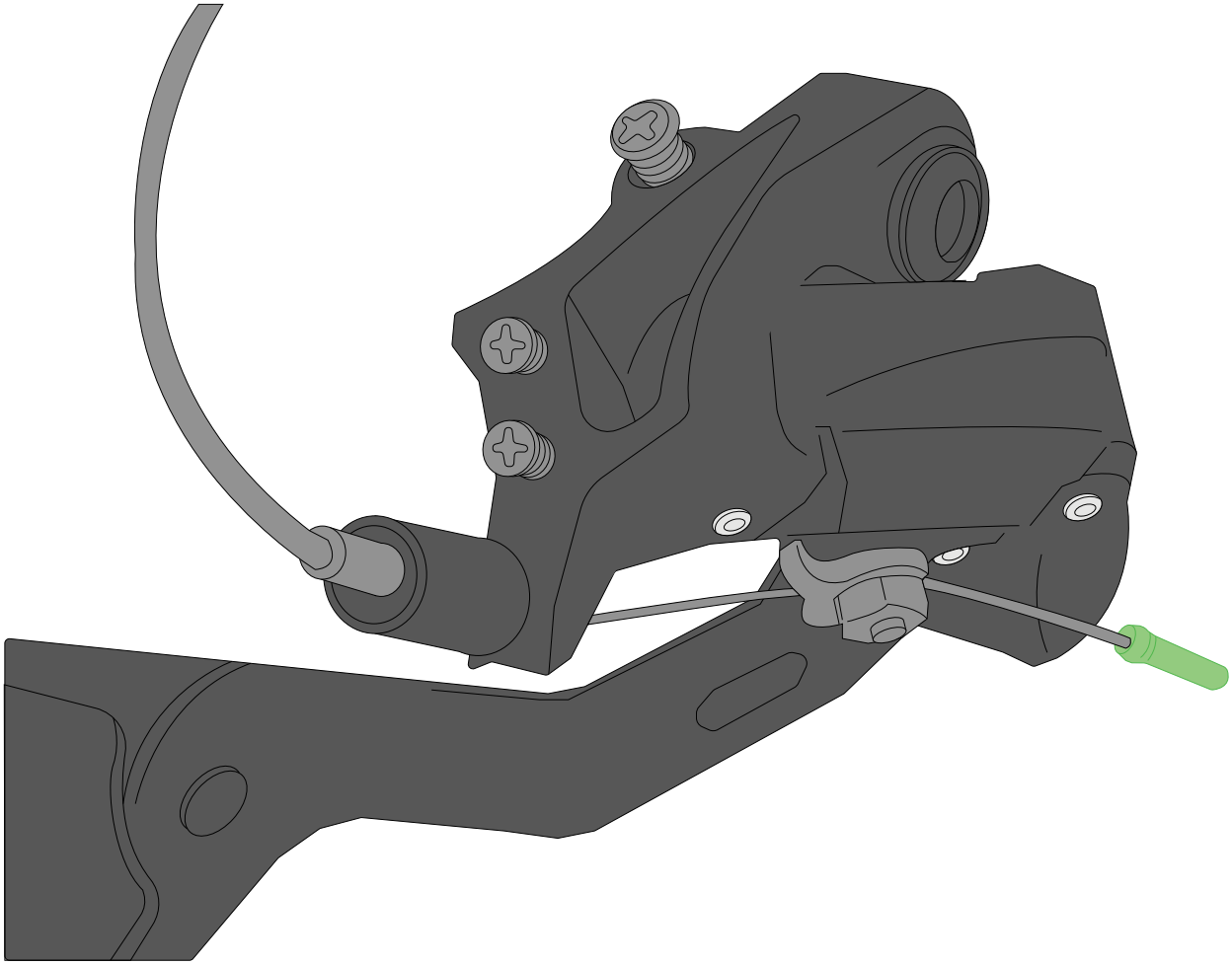
Torque the cable fixing bolt to **5 – 7Nm**.



# 4.

## Cable Installation

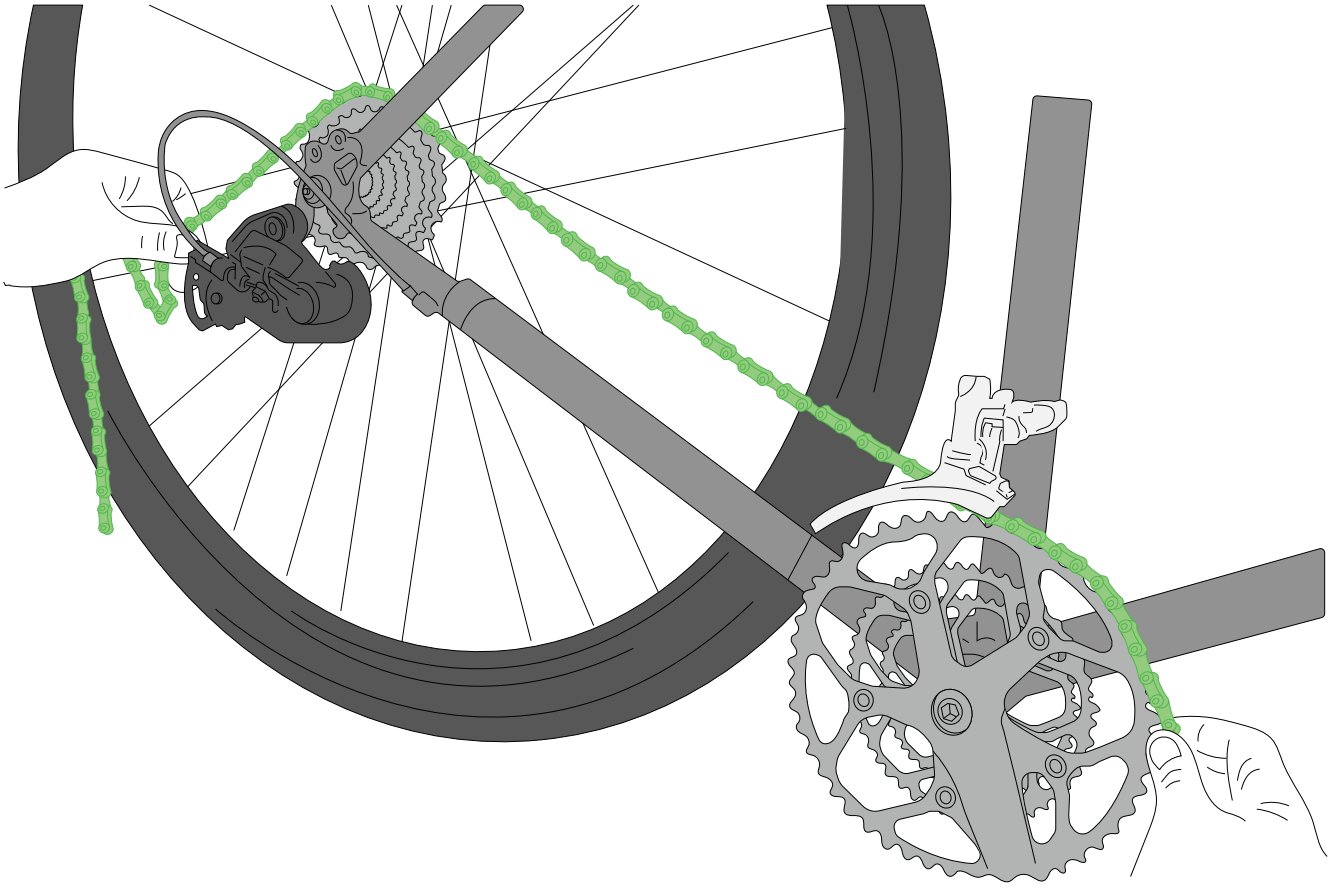
Cut the cable and attach the **cable end**.



# 1.

## Chain Installation

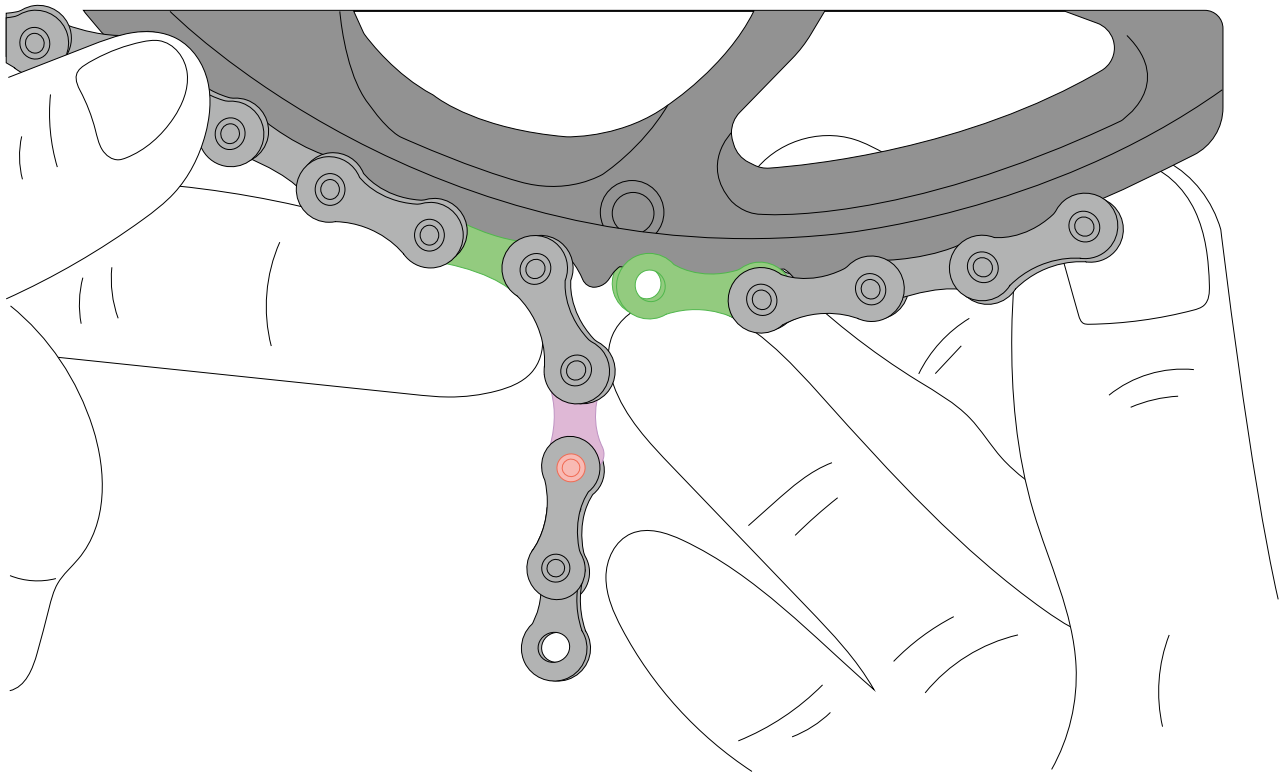
Wrap **the chain** around the chainring and the largest cassette cog without routing through the rear derailleur.



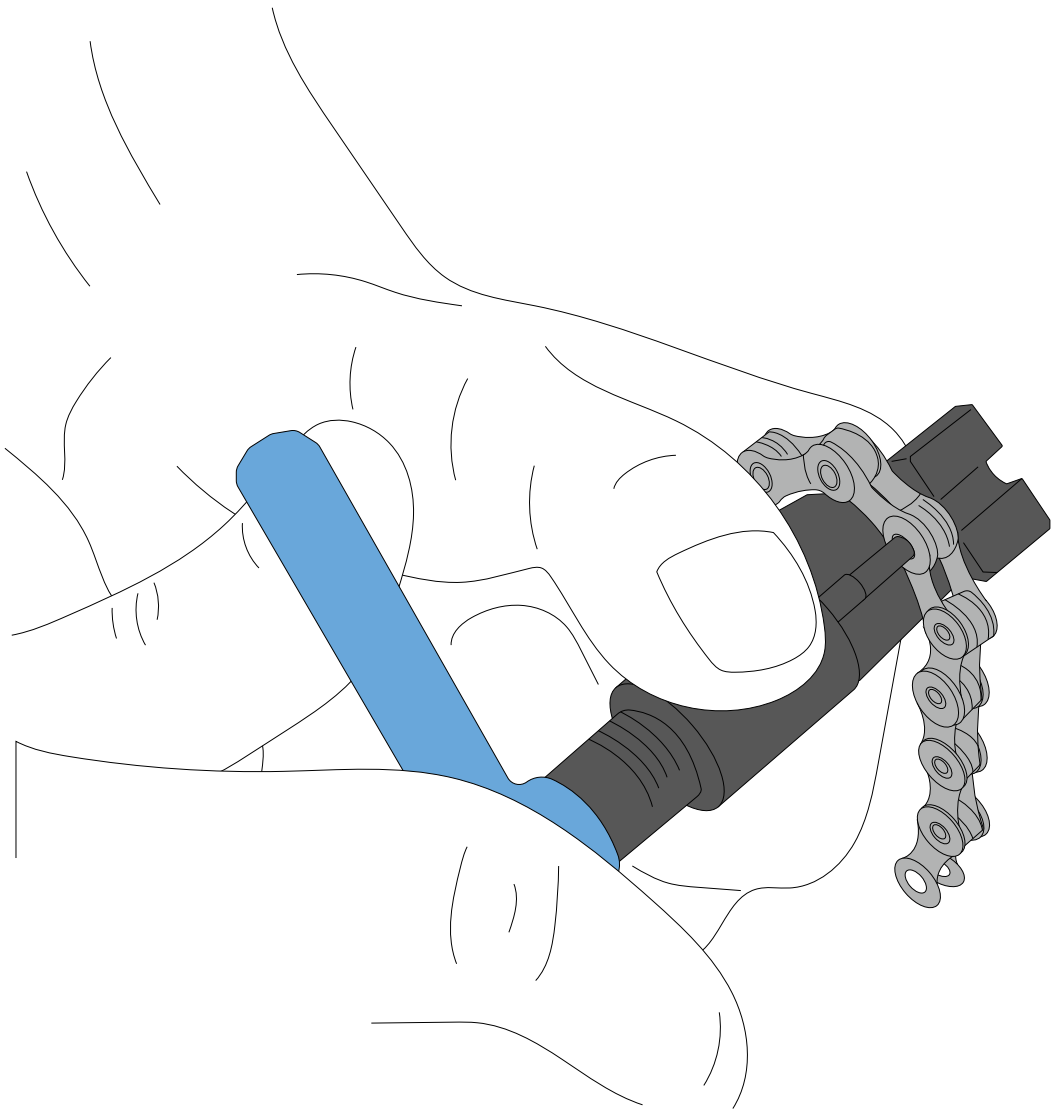
# 2.

## Chain Installation

Stretch the chain tight.  Place **two inner links** next to each other on the chainring.  Add **one extra inner link** and **make your cut there.**



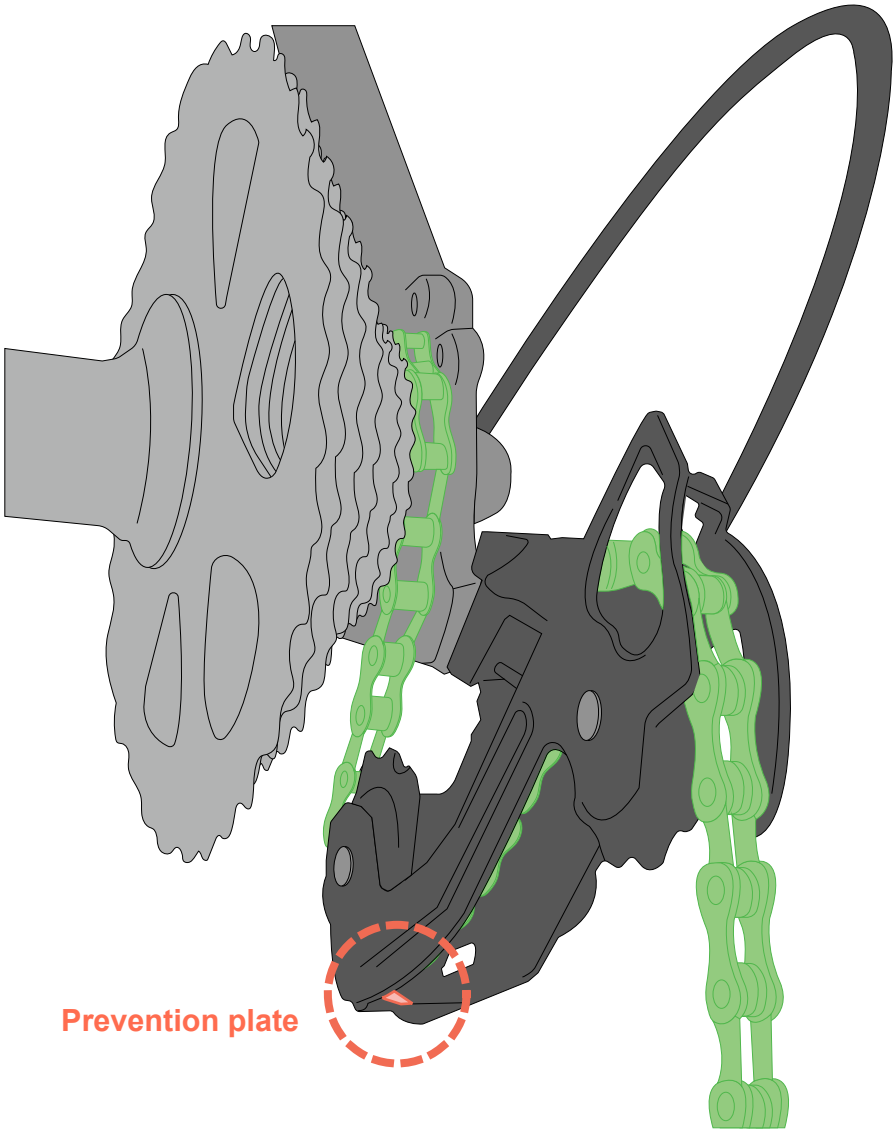
Cut the chain using a chain breaker.



# 4.

## Chain Installation

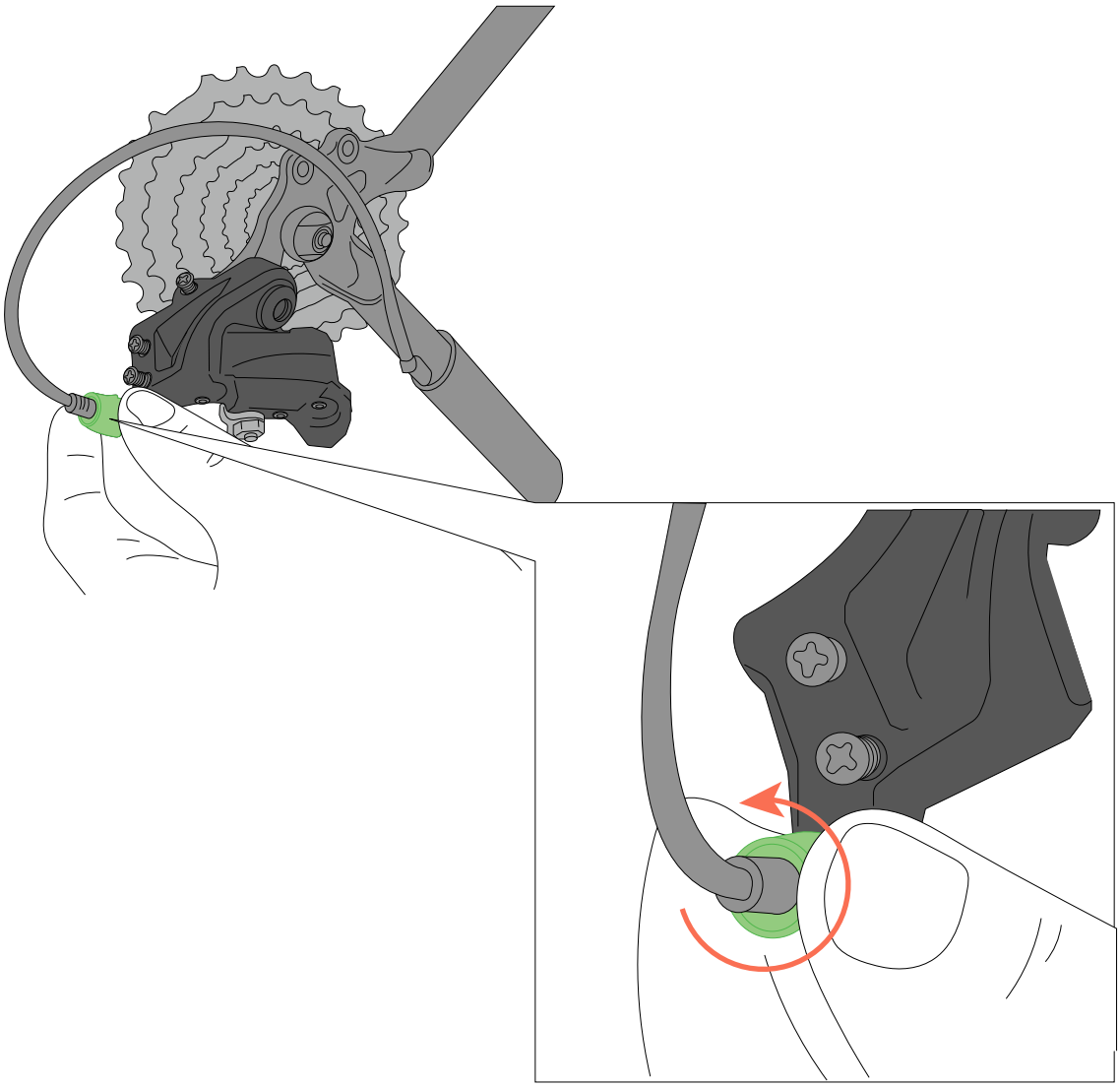
Route **the chain** over the smallest cog, in front of the guide pulley, behind **the derailment prevention plate**, and behind the tension pulley. Wrap the chain around the chainring and connect the chain according to the chain manufacturer's instruction manual.



# 1.

## Shifting Adjustment

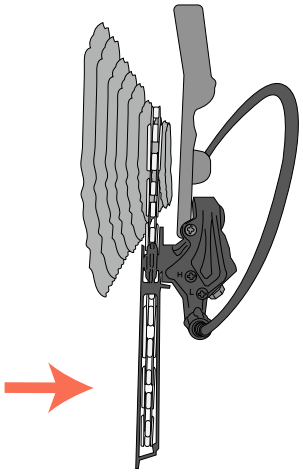
Shift from the smallest cog to the 2nd smallest cog.  If the chain doesn't move, turn the **barrel adjuster** on the derailleur counter-clockwise. Repeat until the derailleur shifts to the 2nd smallest cog.

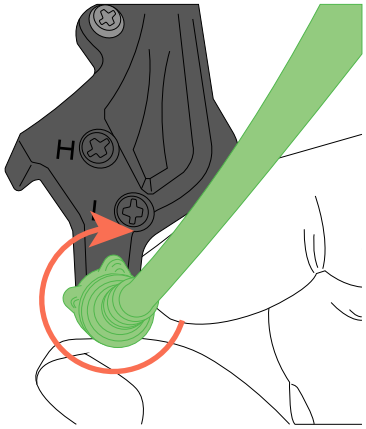


# 2.

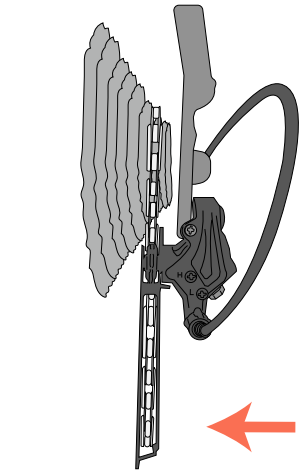
## Shifting Adjustment

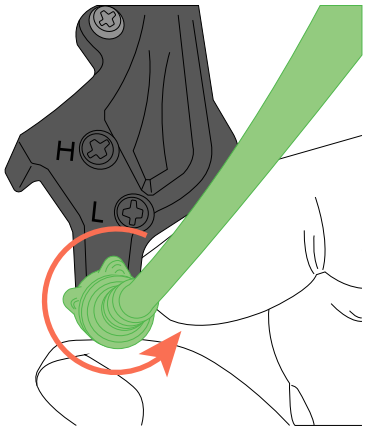
Make several shifts up and down the cassette. If shifting is slow to move to a larger cog, turn **the barrel adjuster** counter-clockwise. If the shifting is slow to move to a smaller cog, turn **the barrel adjuster** clockwise.






**Slow shift**
**toward smaller cogs**



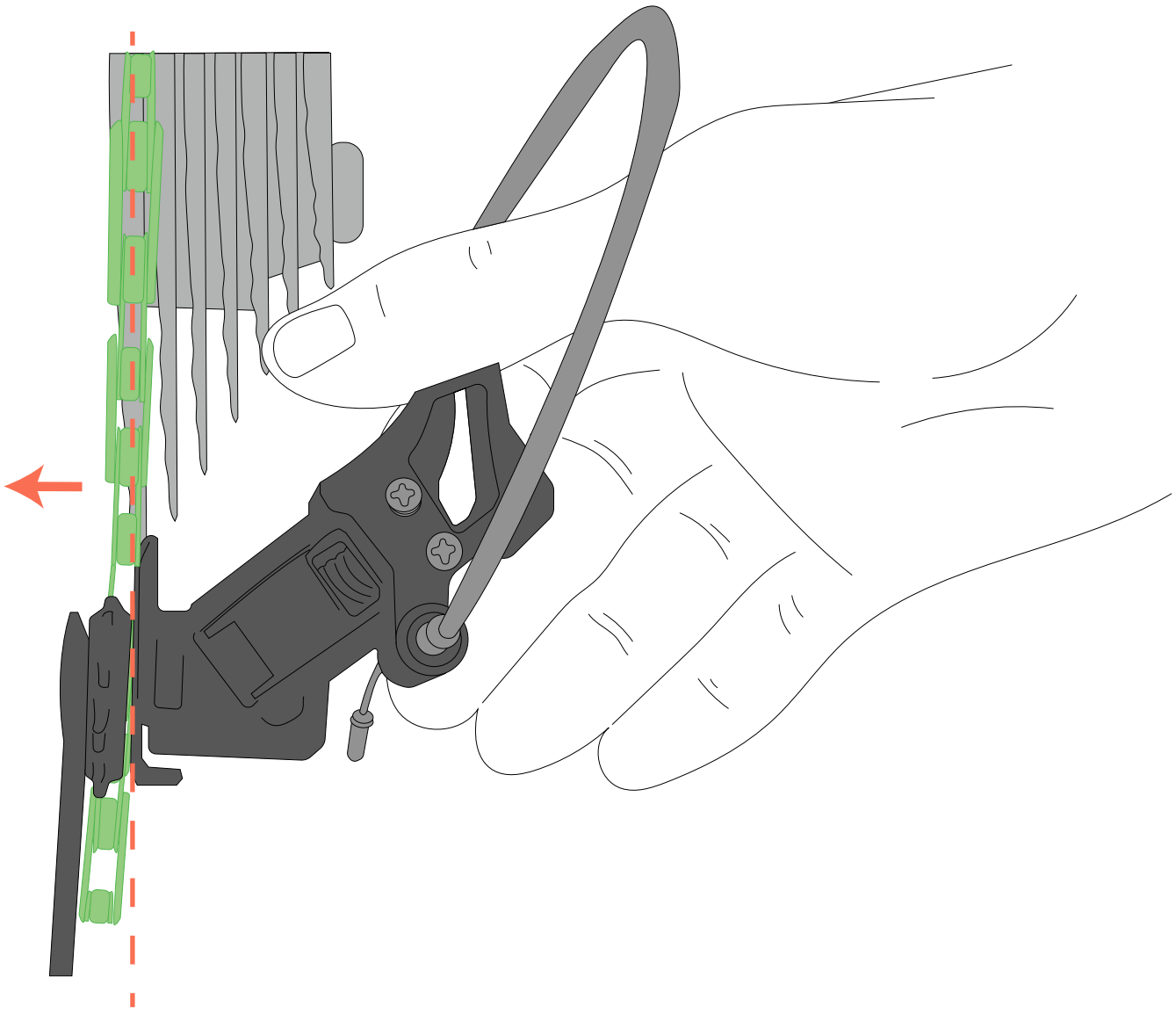



**Slow shift**
**toward larger cogs**

# 1.

## Low Adjustment

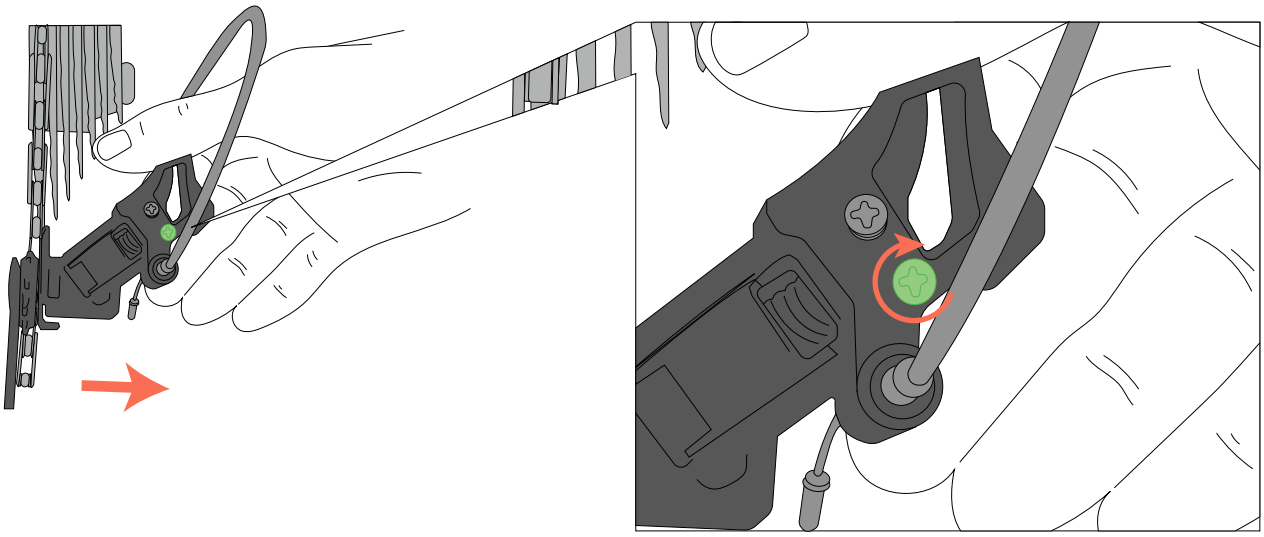
Shift to the largest cog on the cassette. Using your hand, try to push the rear derailleur past the largest cog. If the derailleur can move **past the cog**, adjust the low limit screw.

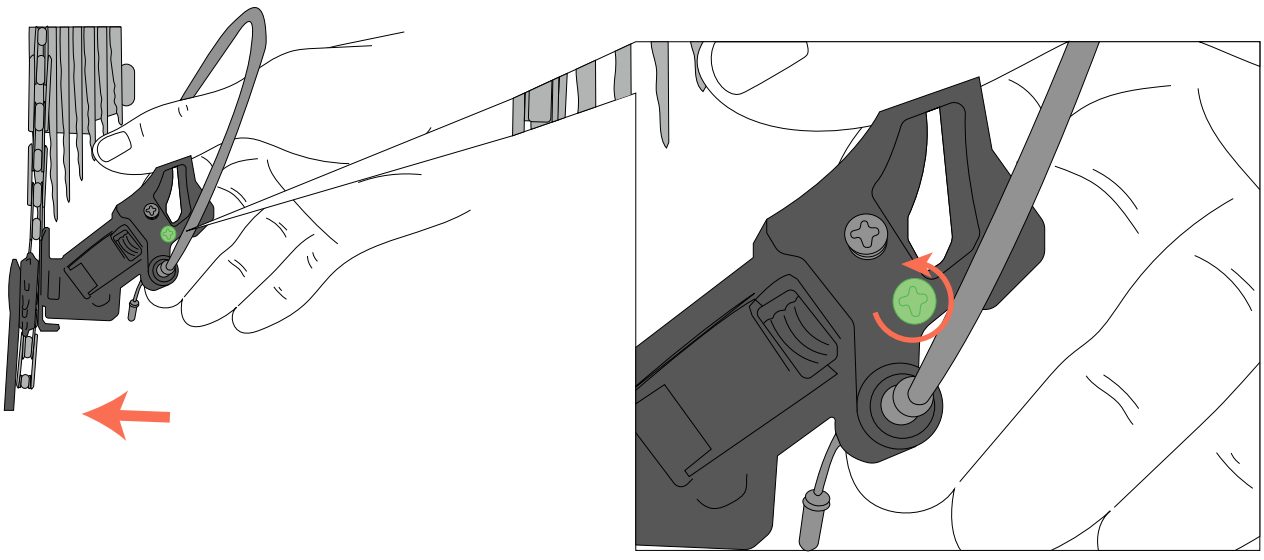


# 2.

## Low Adjustment

Turn the low limit screw until you can’t move the derailleur past the largest cog.

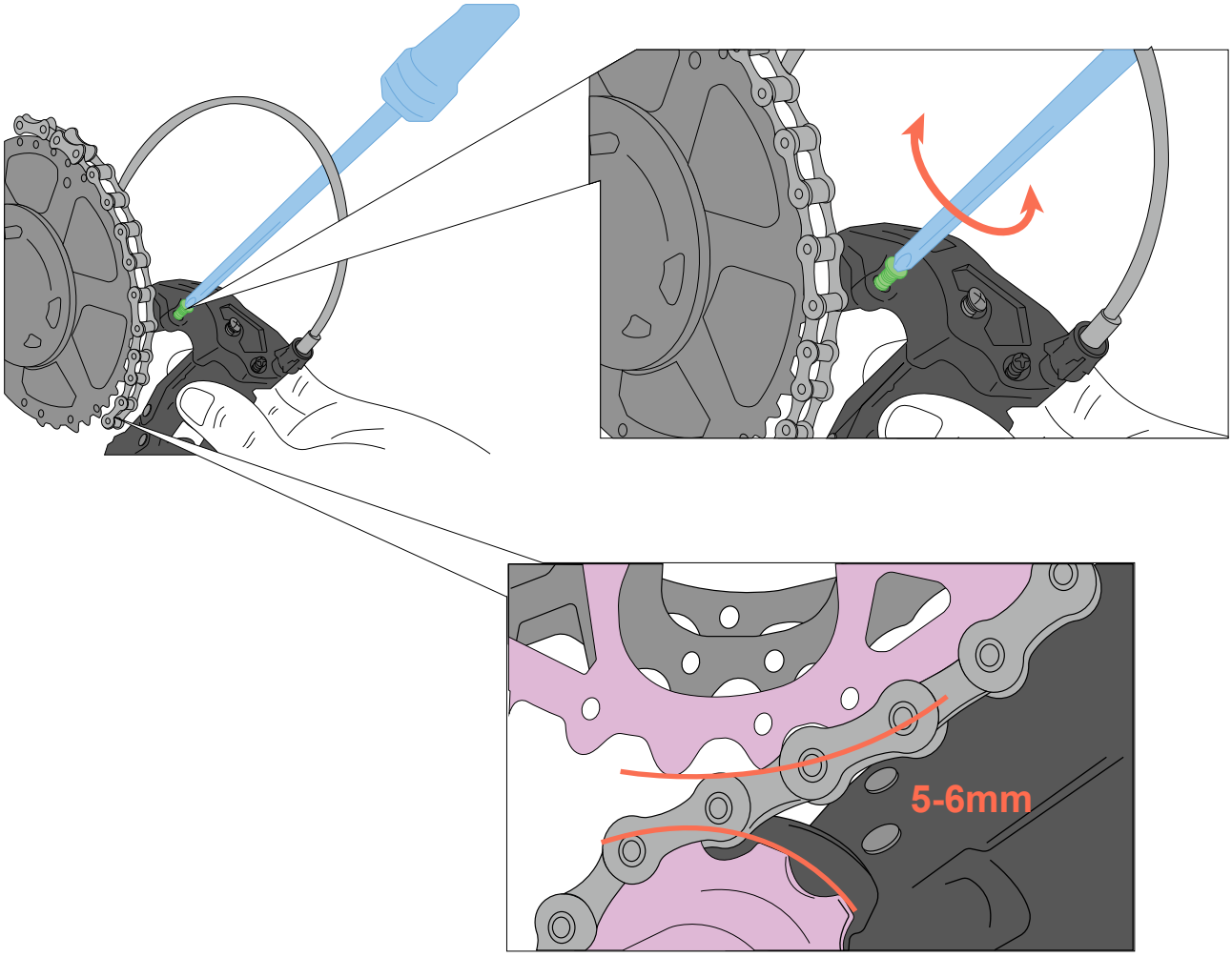




# 3.

## Low Adjustment

Adjust the **B-tension** screw until there is **5-6mm** of distance between the **guide pulley** and the tallest teeth of the **largest cog**.



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