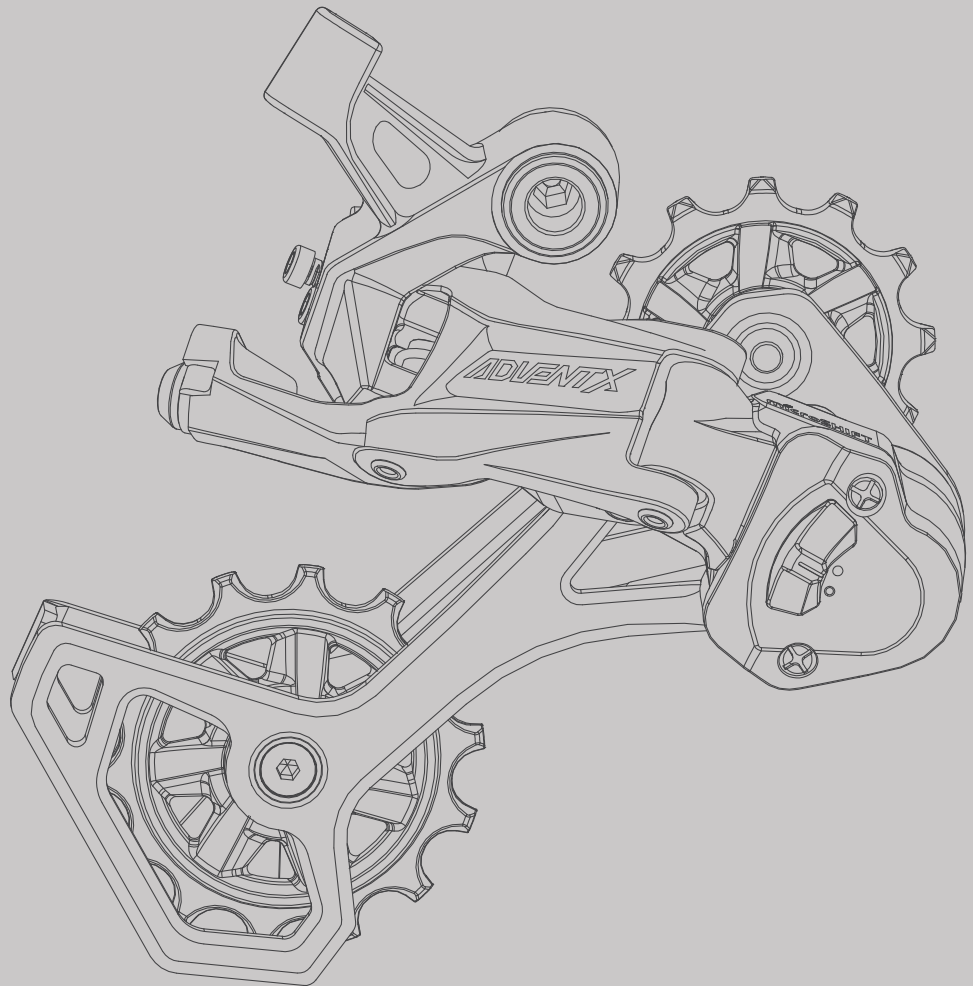


microSHIFT

ADVENT X Rear Derailleur User Manual

ADVENT X



Important Notice



REMINDER

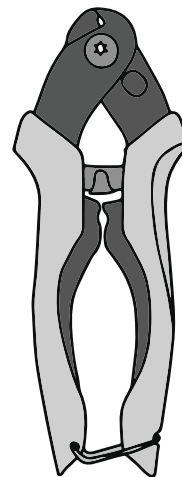
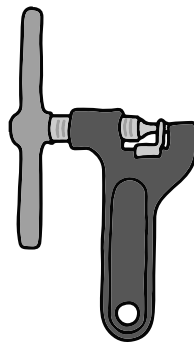
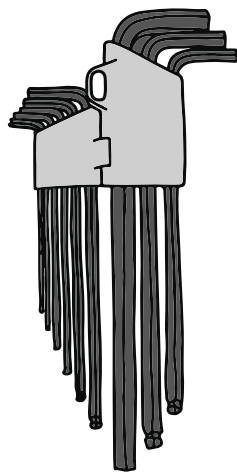
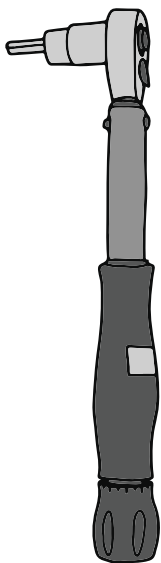
Before installing the products, please read and understand the installation procedures. Improper installation can lead to premature product failures or even injuries. If you have any questions on how to install, please contact us or consult with a professional bicycle mechanic.

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Tools and Supplies

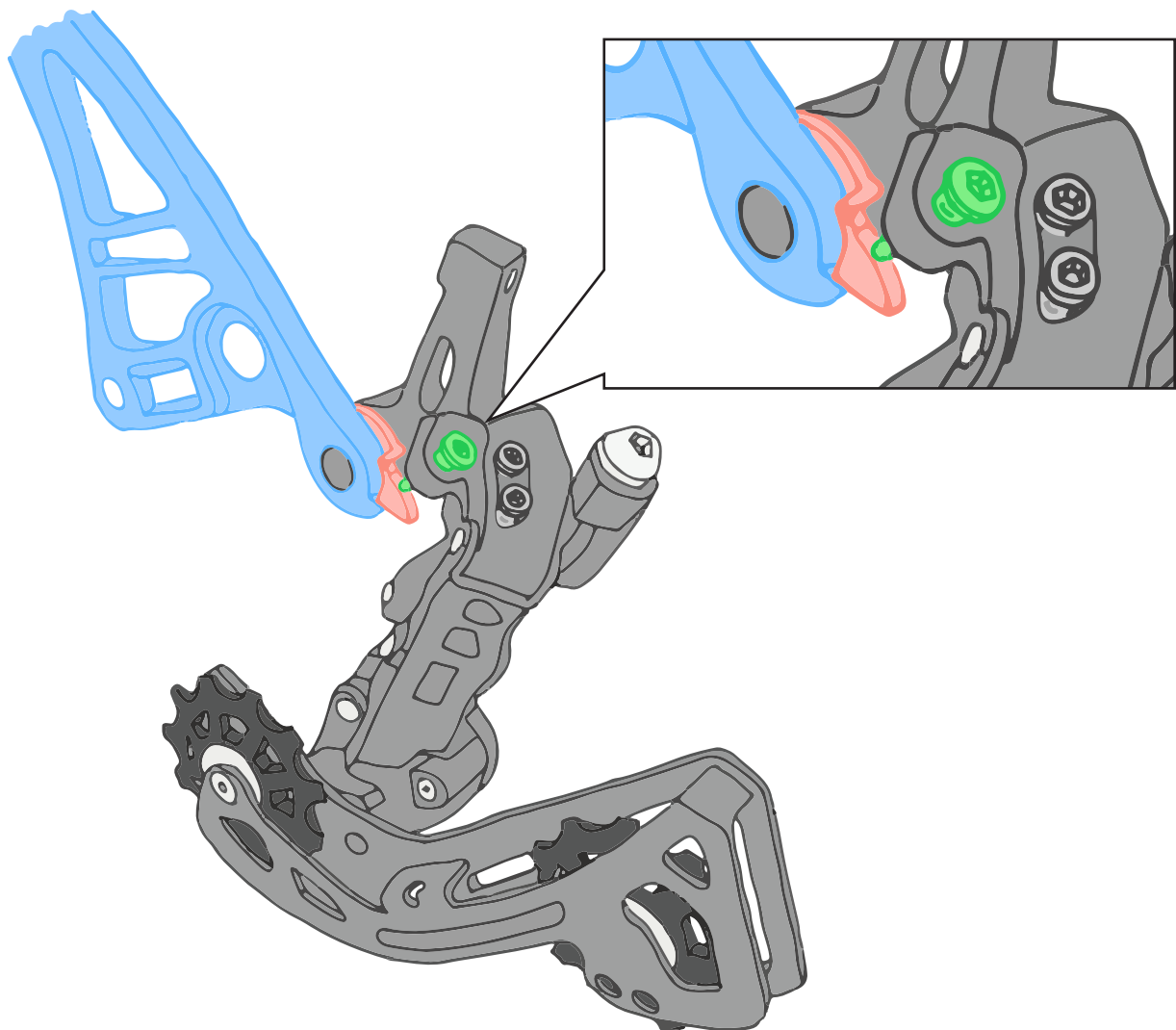
1. Torque wrench
2. 4mm & 5mm Hex bits
3. Allen wrenches
4. Chain breaker
5. Cable cutter
6. Tape measurer



1. Rear Derailleur Attachment

Part I

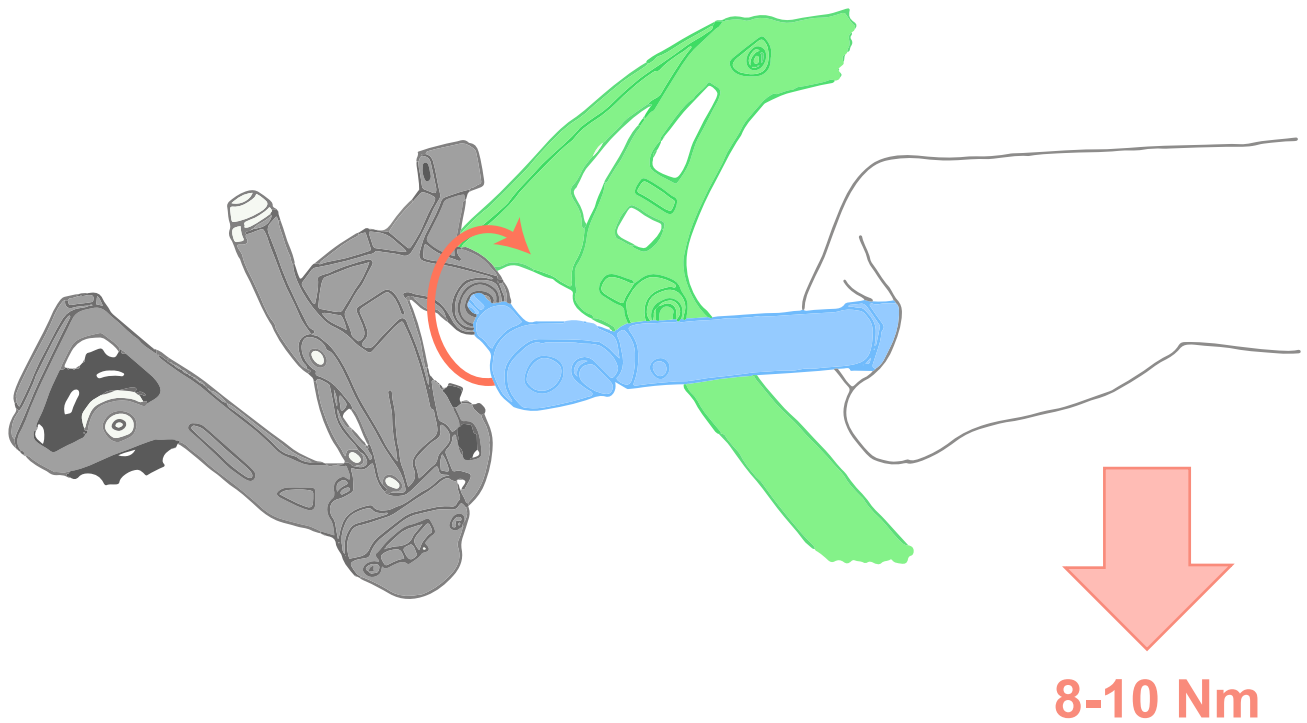
Attach rear derailleur to the bike. Make sure the **B-tension washer** is above the **derailleur dropout** and engages correctly with the **B-tension adjustment screw**.



1. Rear Derailleur Attachment

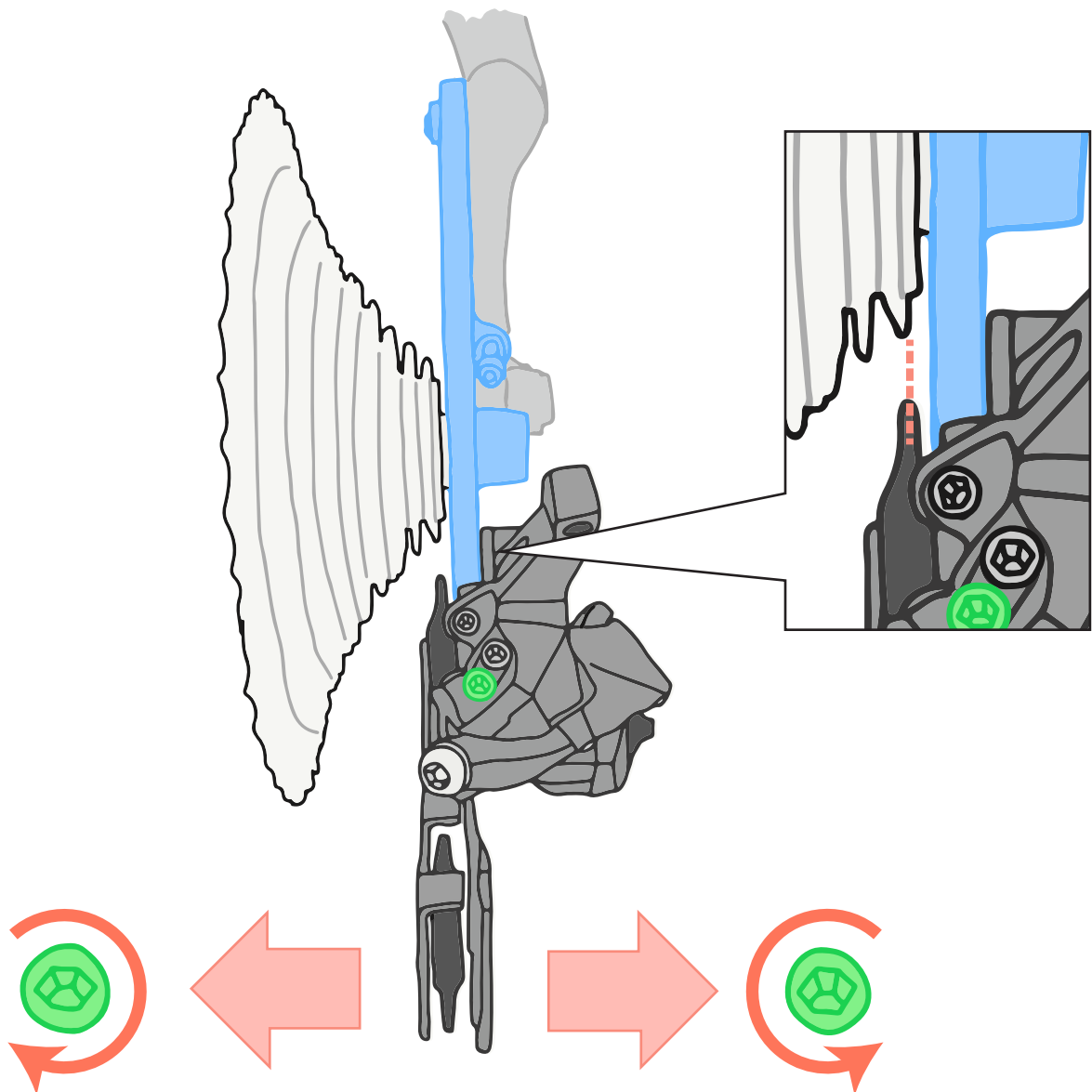
Part II

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



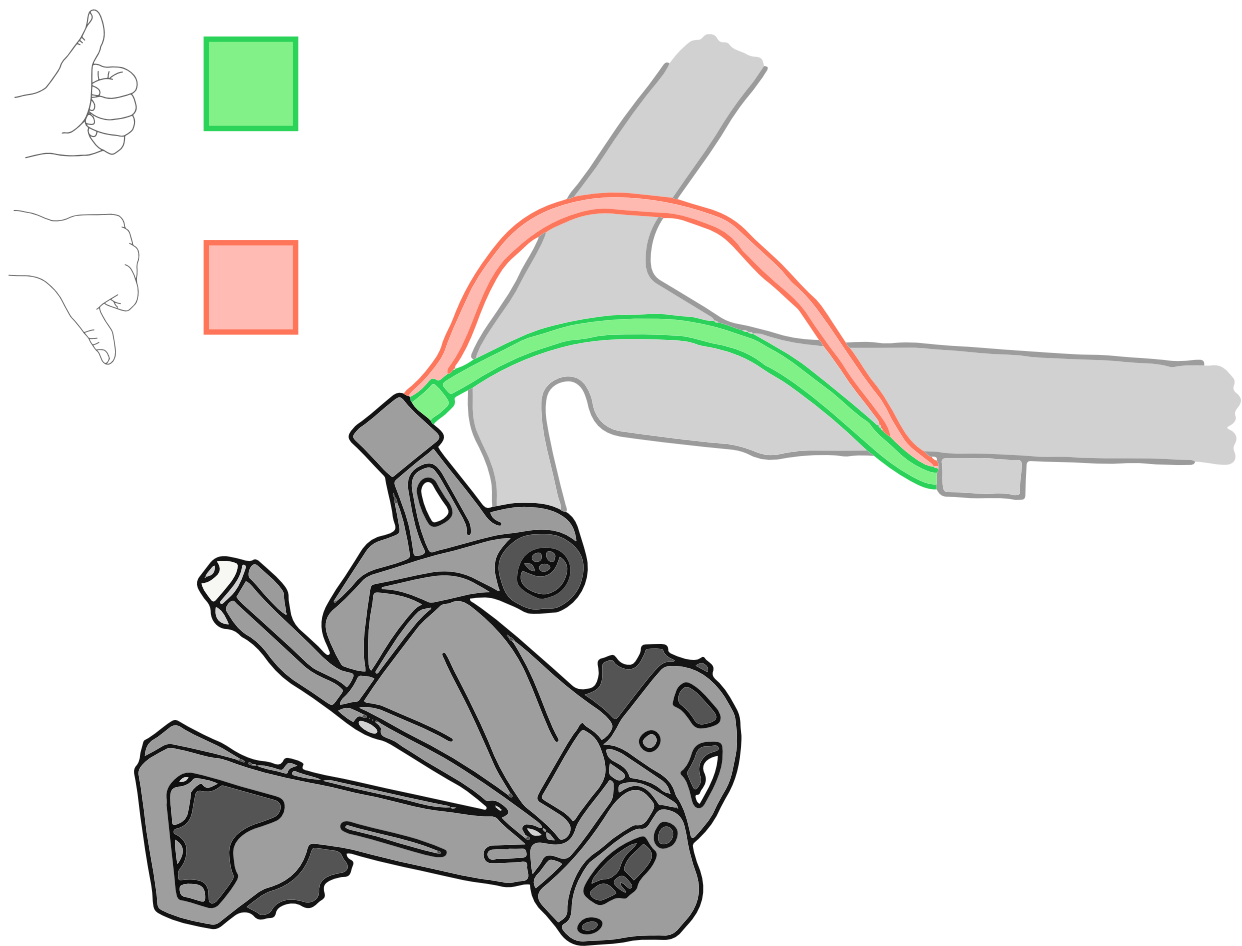
2. H-Limit Screw Adjustment

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



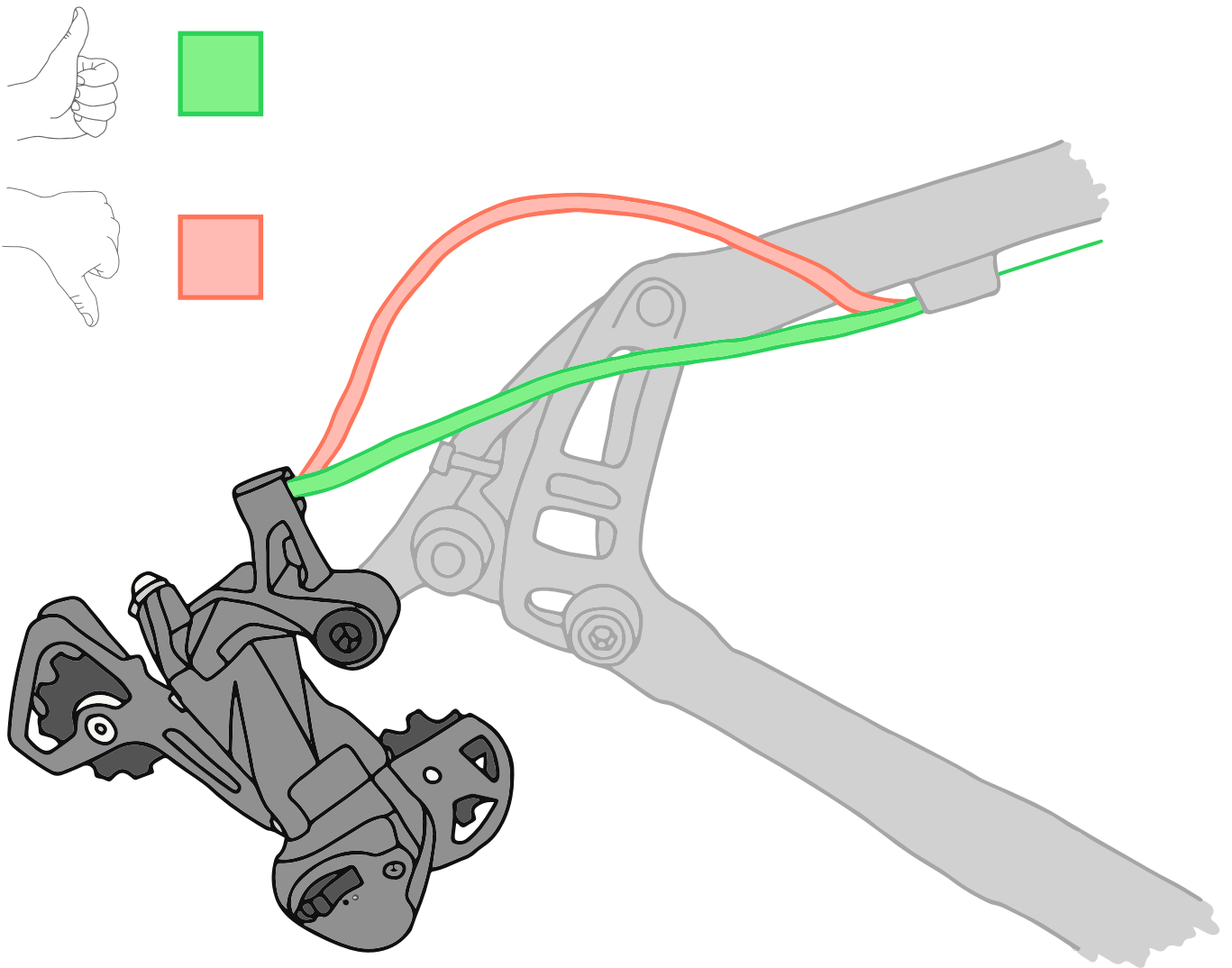
3. Proper Cable Housing

Every frame manufacturer has different cable routing guidelines, so make sure you consult those before cutting the housing. ADVENT works best when there is not too much of a curve in the housing, and not too little slack either. Make sure the end of the housing is sitting against the rear derailleur as well.



3. Proper Cable Housing

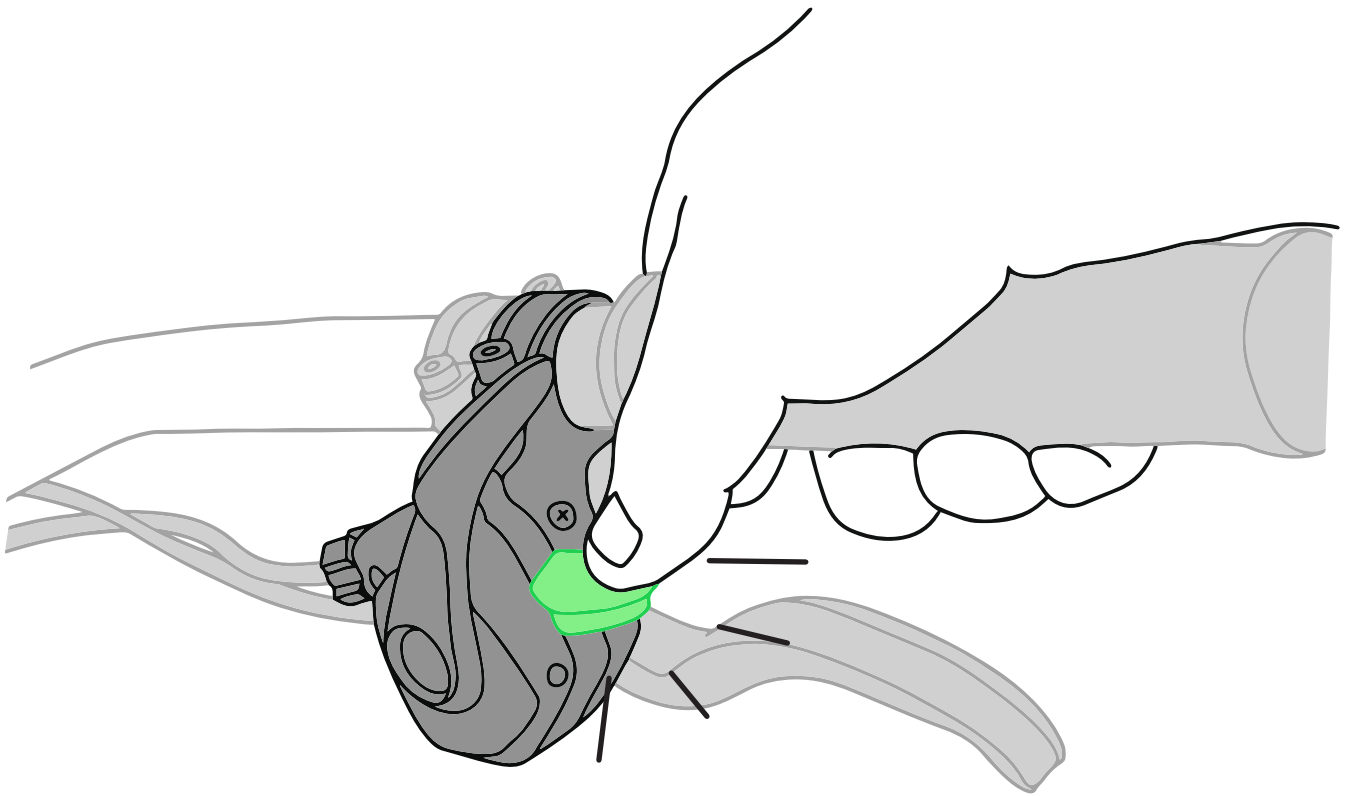
Part II



4. Cable Installation

Part I

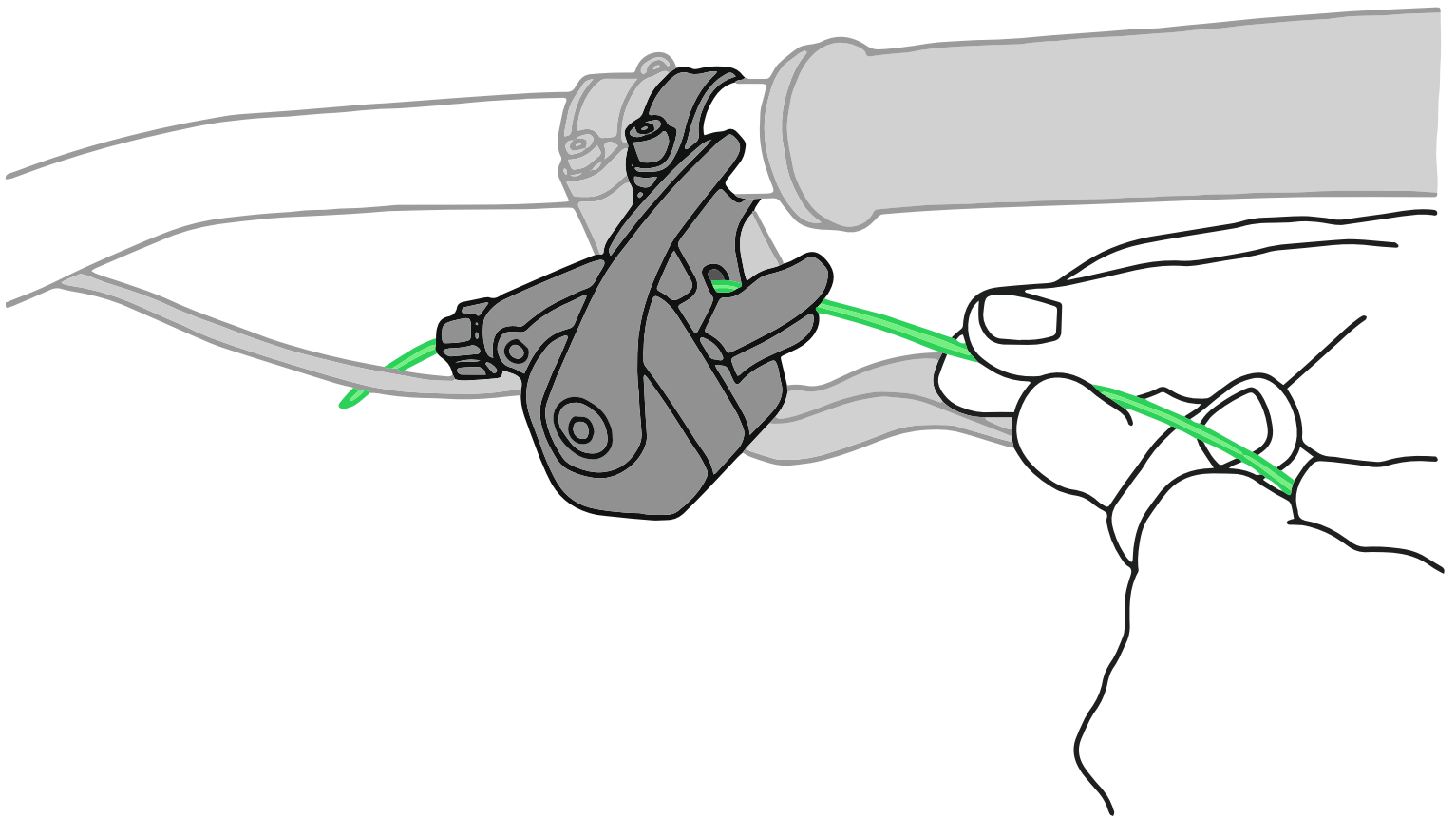
Before installing the cable, use the **trigger lever** to shift to the highest gear.



4. Cable Installation

Part II

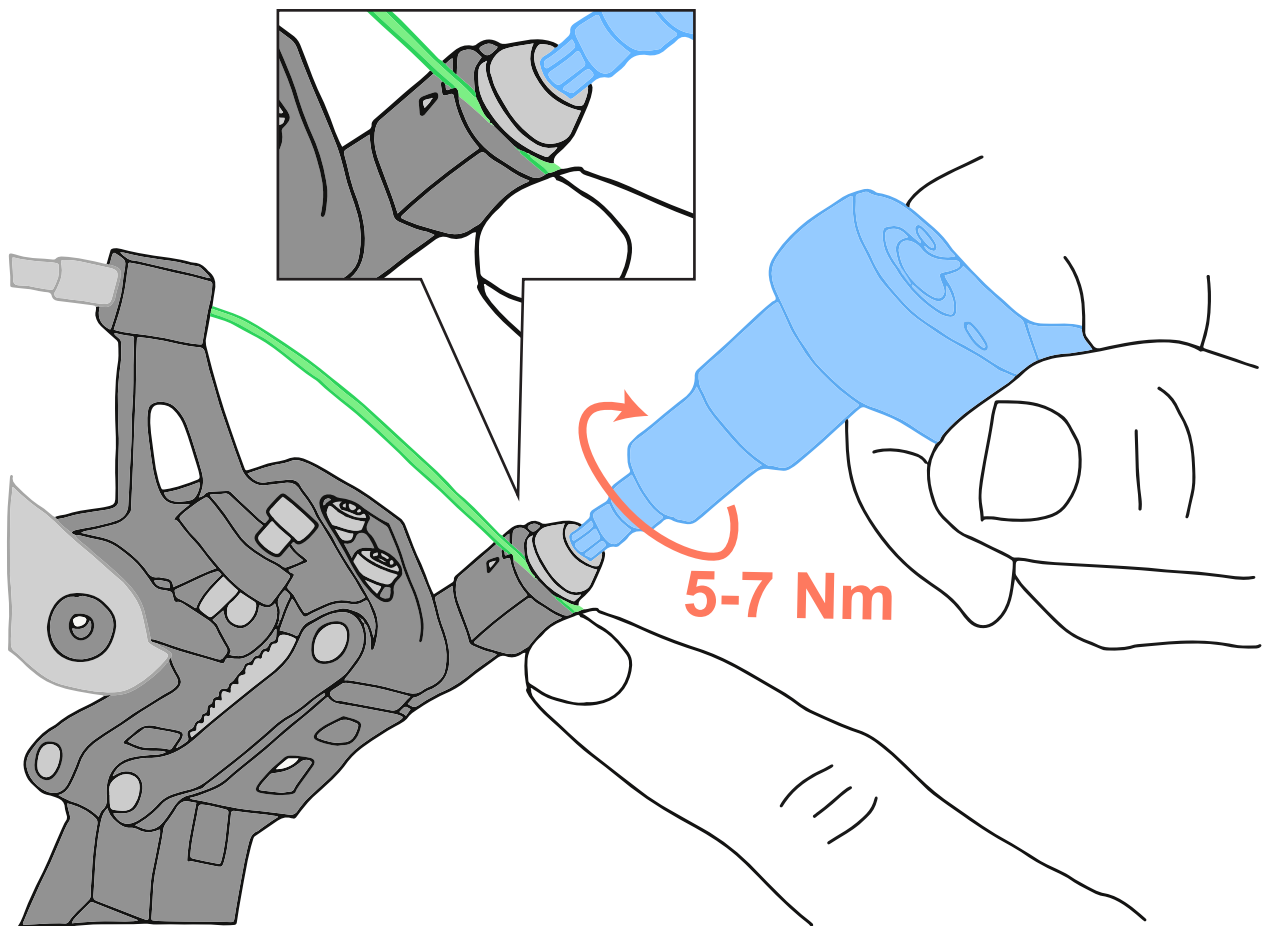
Route the **cable** through the shifter, housing, and rear derailleur.



4. Cable Installation

Part III

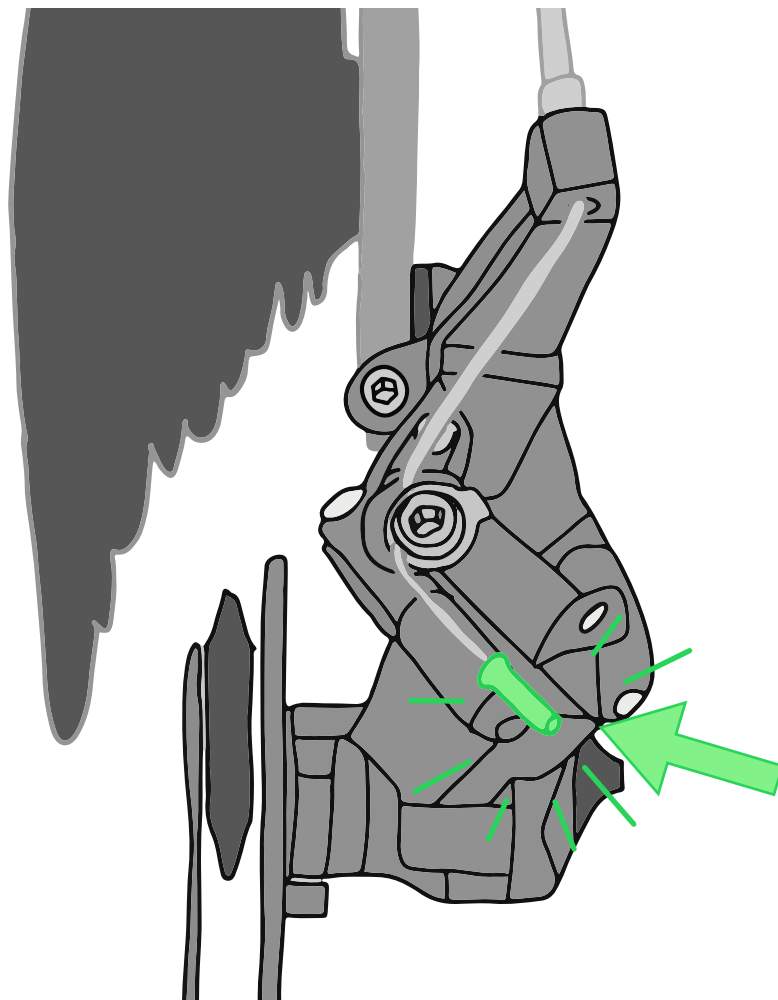
Route **the cable** underneath the cable fixing bolt and washer. Make sure **the cable** is resting in the groove under the washer. Tighten to **5-7 Nm**.



4. Cable Installation

Part IV

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

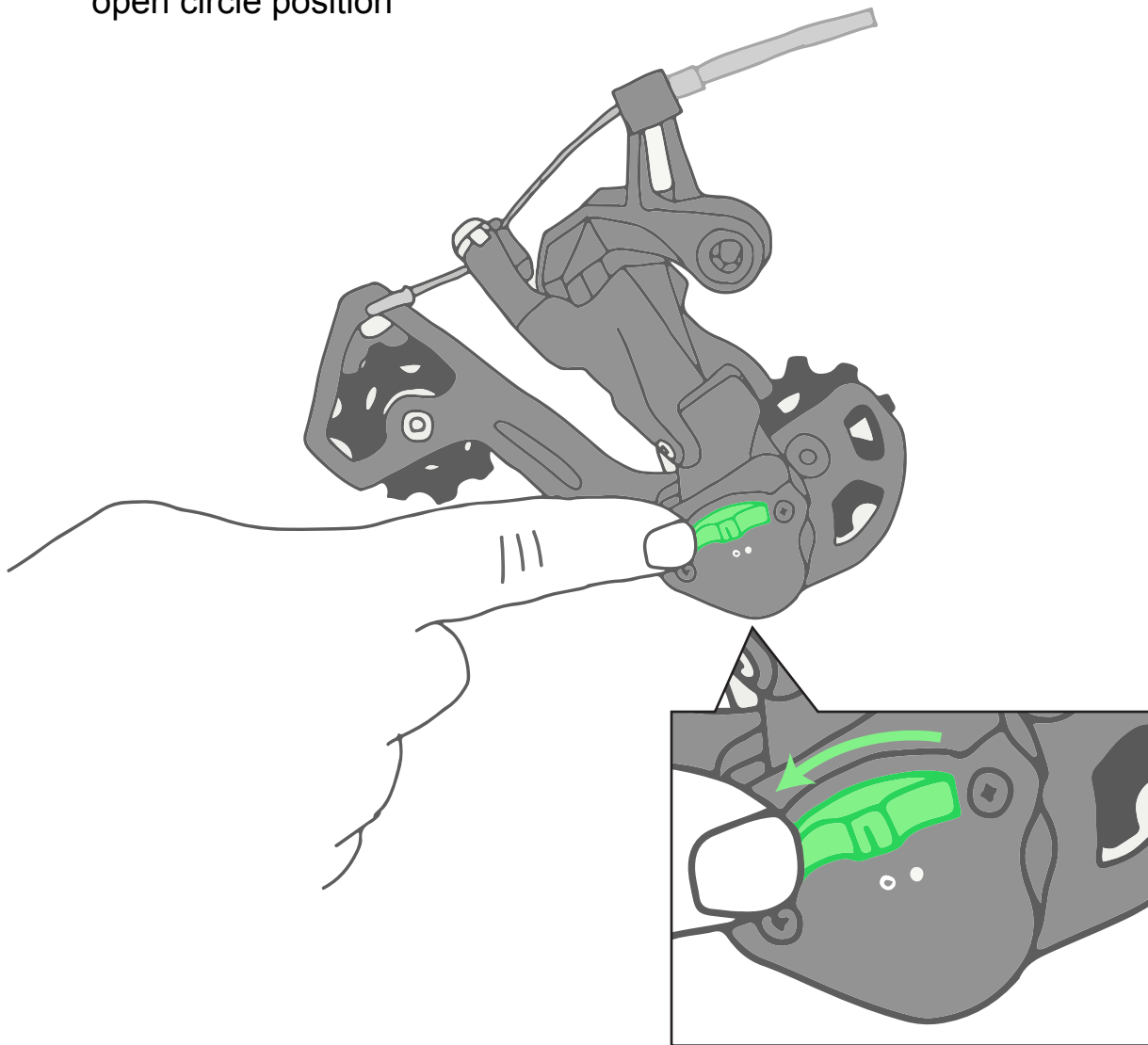


5. Disable Clutch



Clutch Rear Derailleur Only

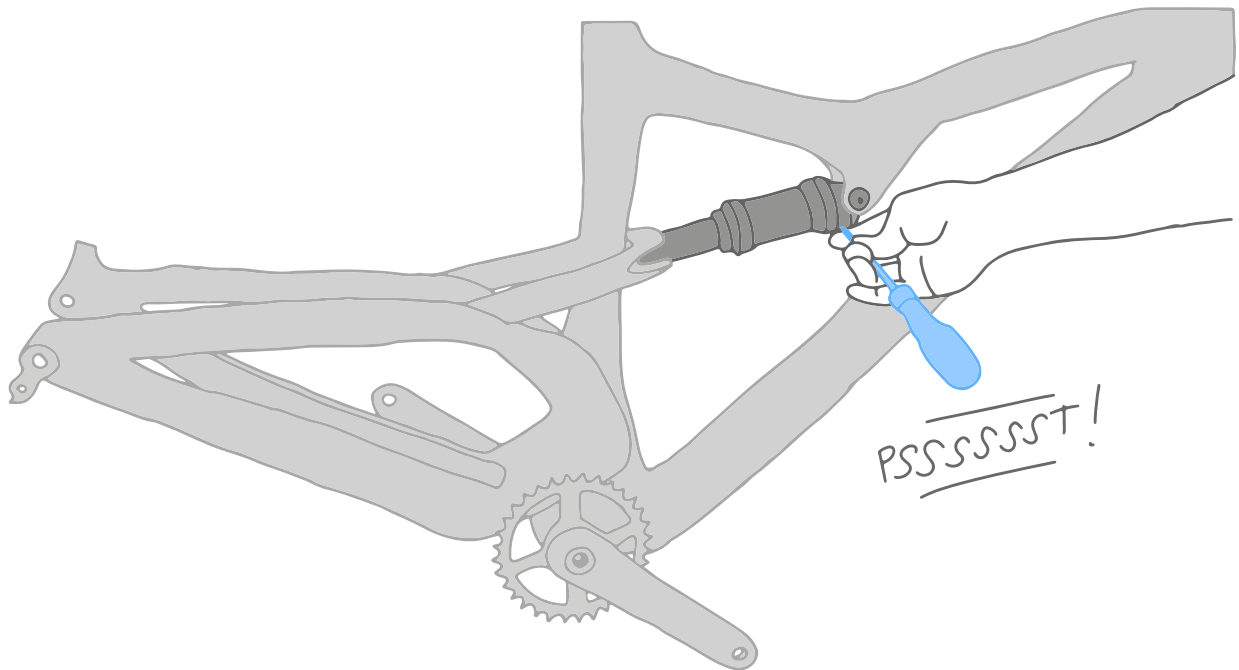
Disable the clutch by moving the **switch** on the side of the derailleur to the open circle position





Full Suspension Bike Only

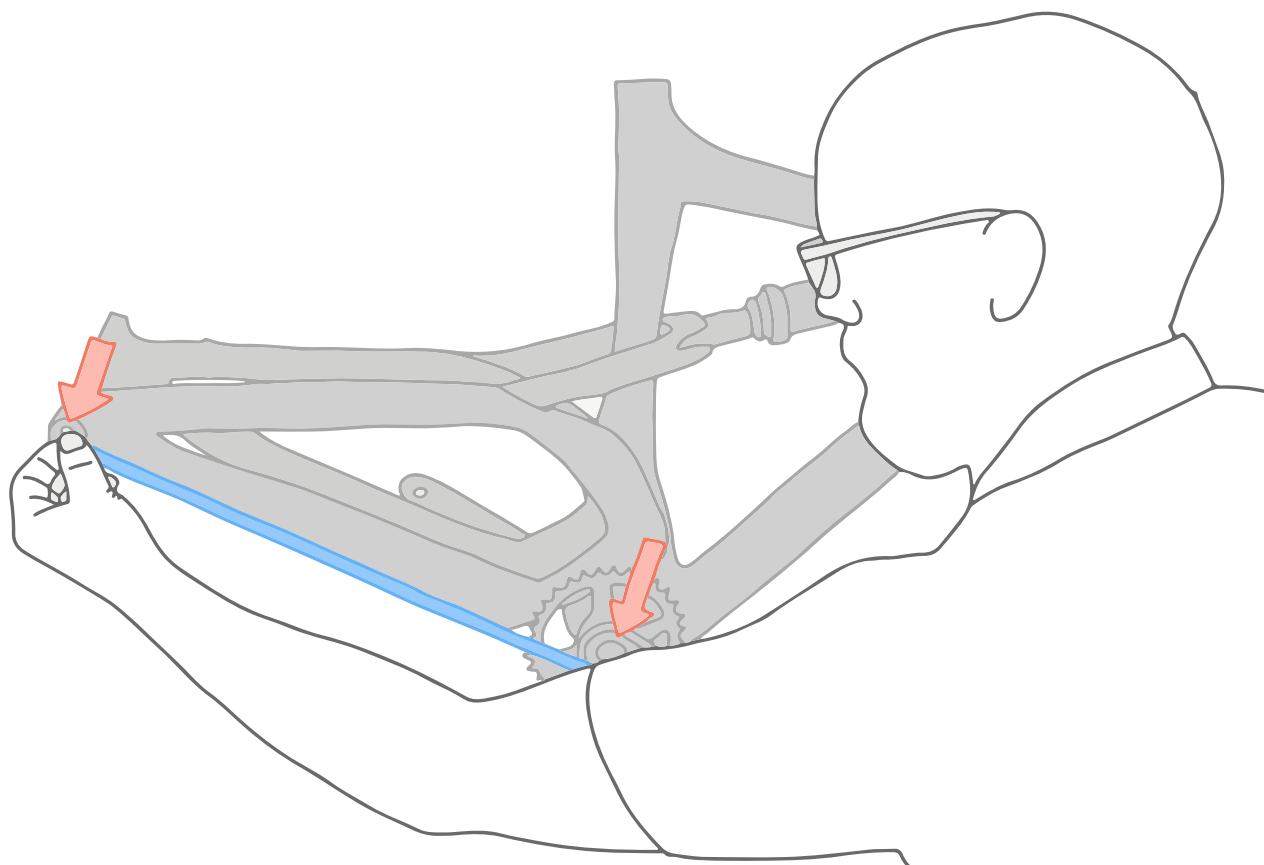
To properly size the chain on a full suspension bike, release air from the rear shock or remove the shock completely.





Full Suspension Bike Only

Move the rear axle up and down as you measure the distance between **the bottom bracket** and **the rear axle**. Find the position where they are furthest apart and perform the next step at this position.

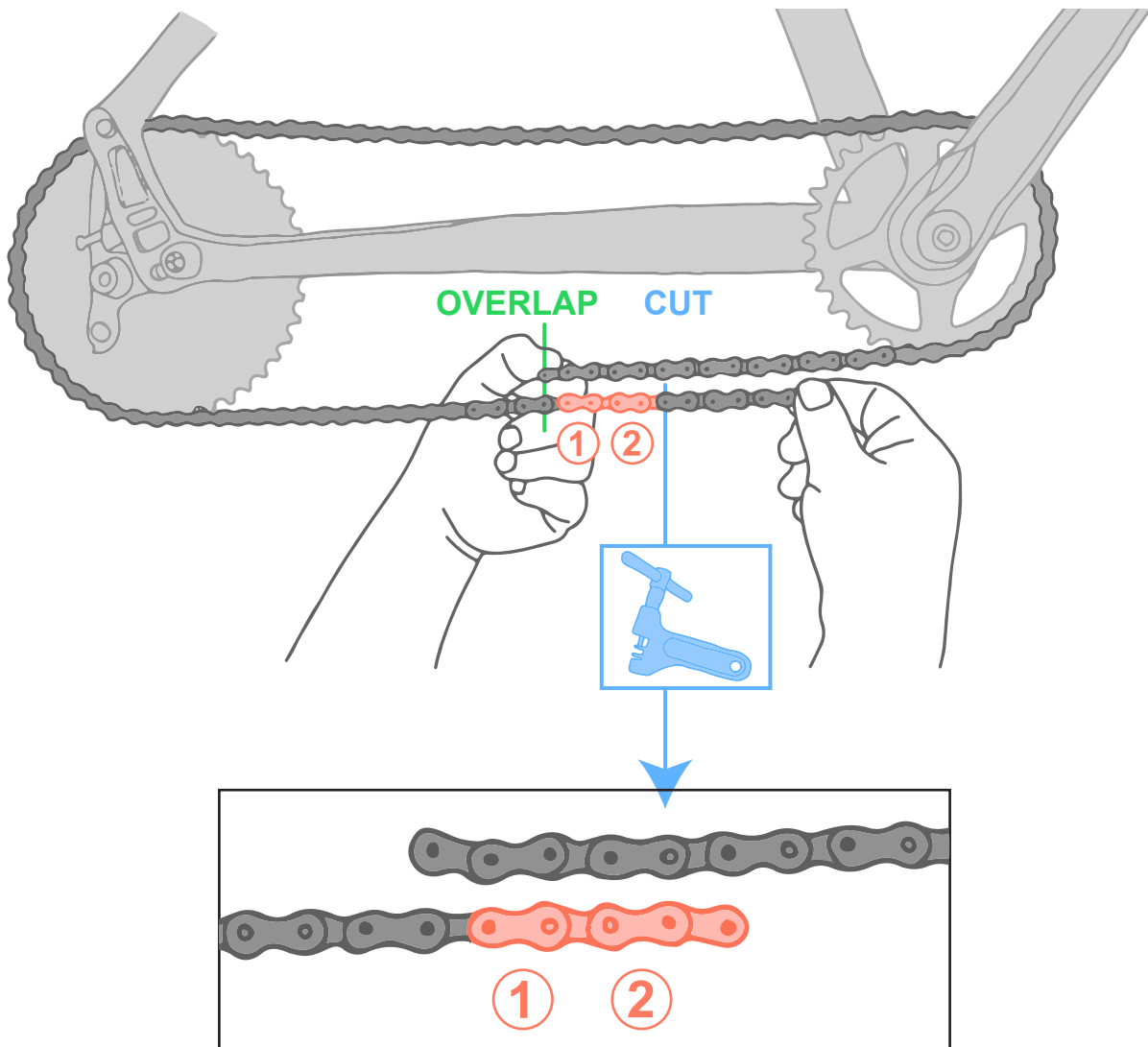


6. Chain Sizing

Wrap the chain around the chainring and the largest cassette cog without routing through the rear derailleur. From the spot where the chain first **overlaps**, add **two full inner links** of length and **cut the chain** there.



For chains WITH quick connectors

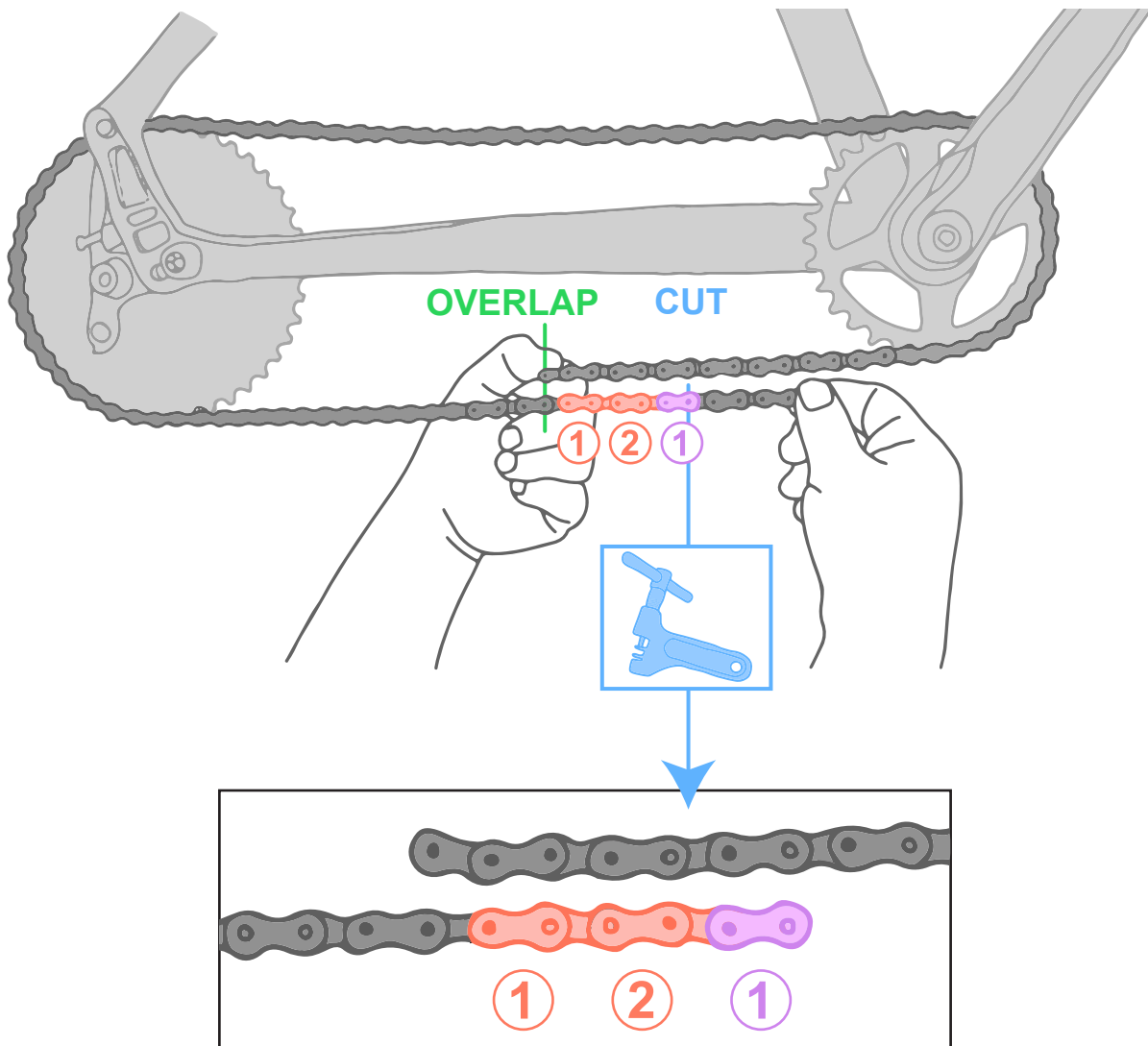


6. Chain Sizing

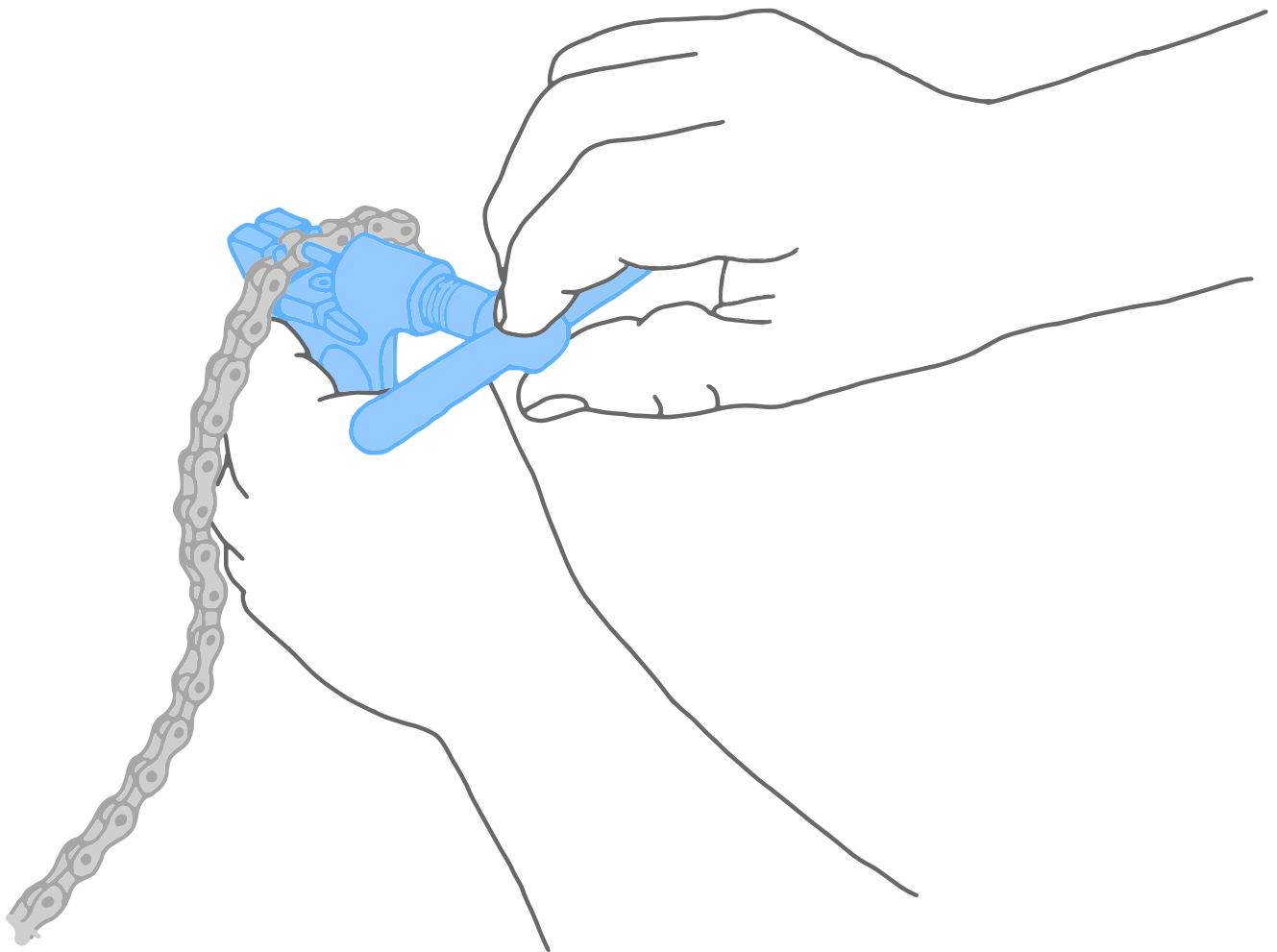
For chains without a quick connector: From the chain first **overlaps**, add **two full inner links** and **one empty outer plate** and **cut the chain** there.



For chains **WITHOUT** quick connectors

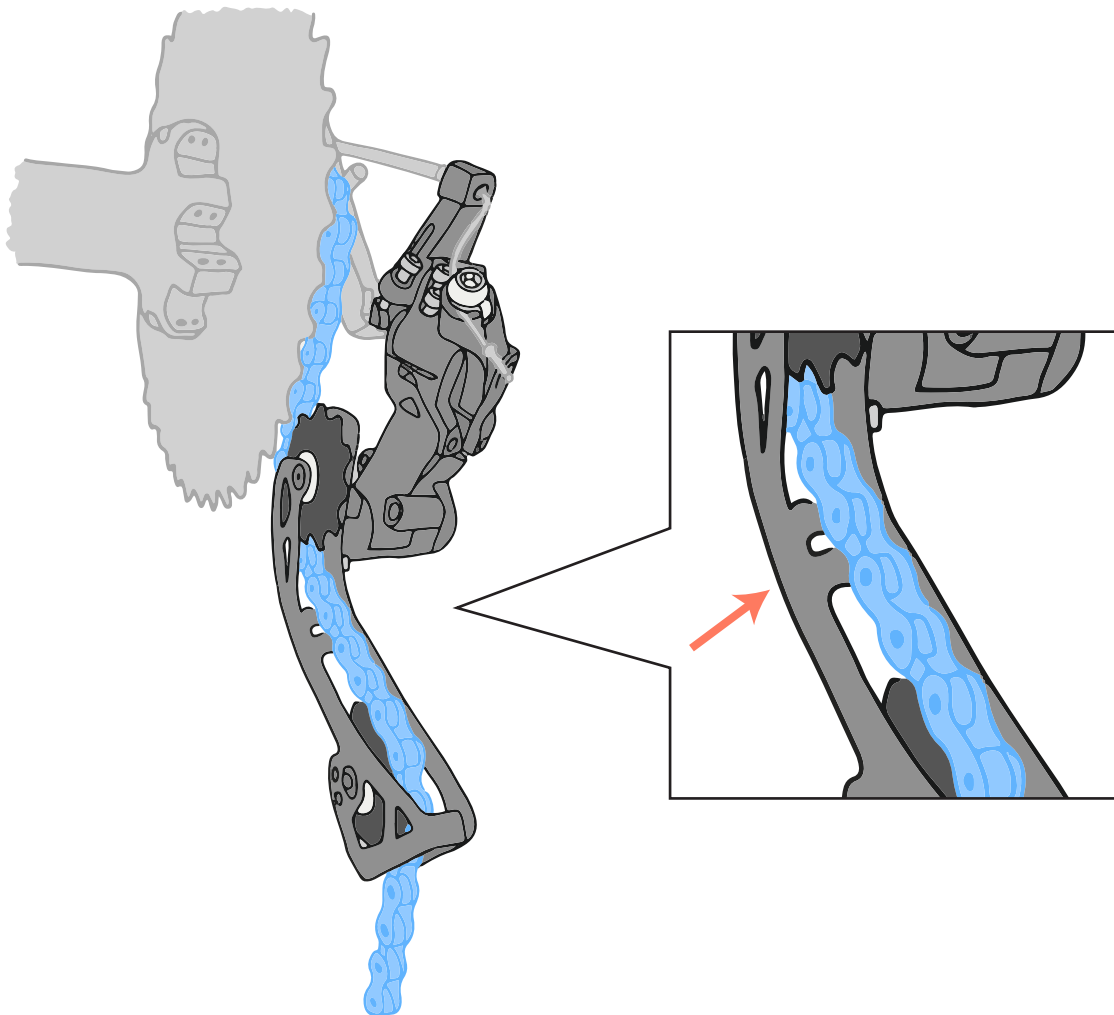


Cut the chain using a **chain breaker**.



7. 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.



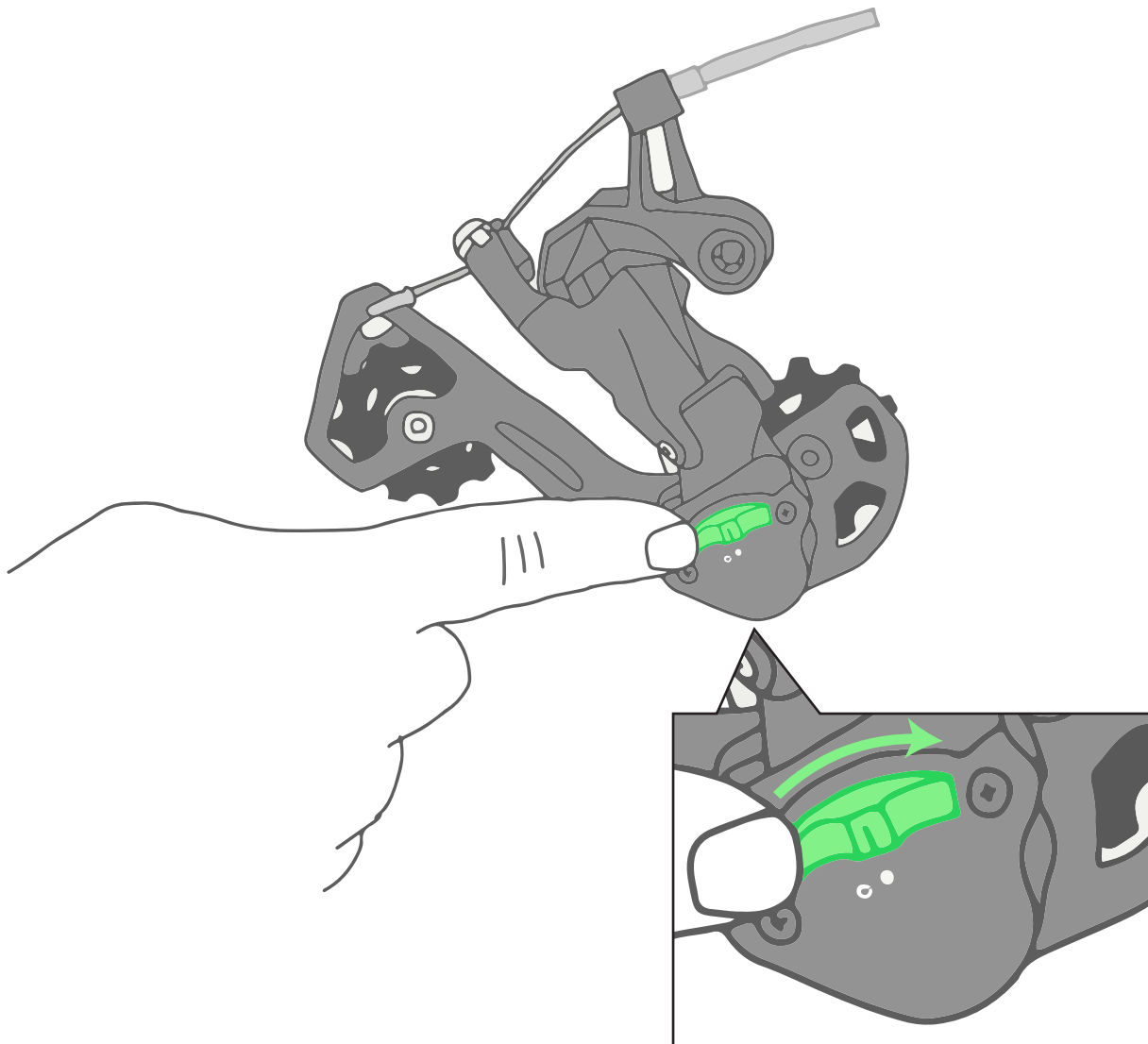
8. Shifting Adjustment

Part I



Clutch Rear Derailleur Only

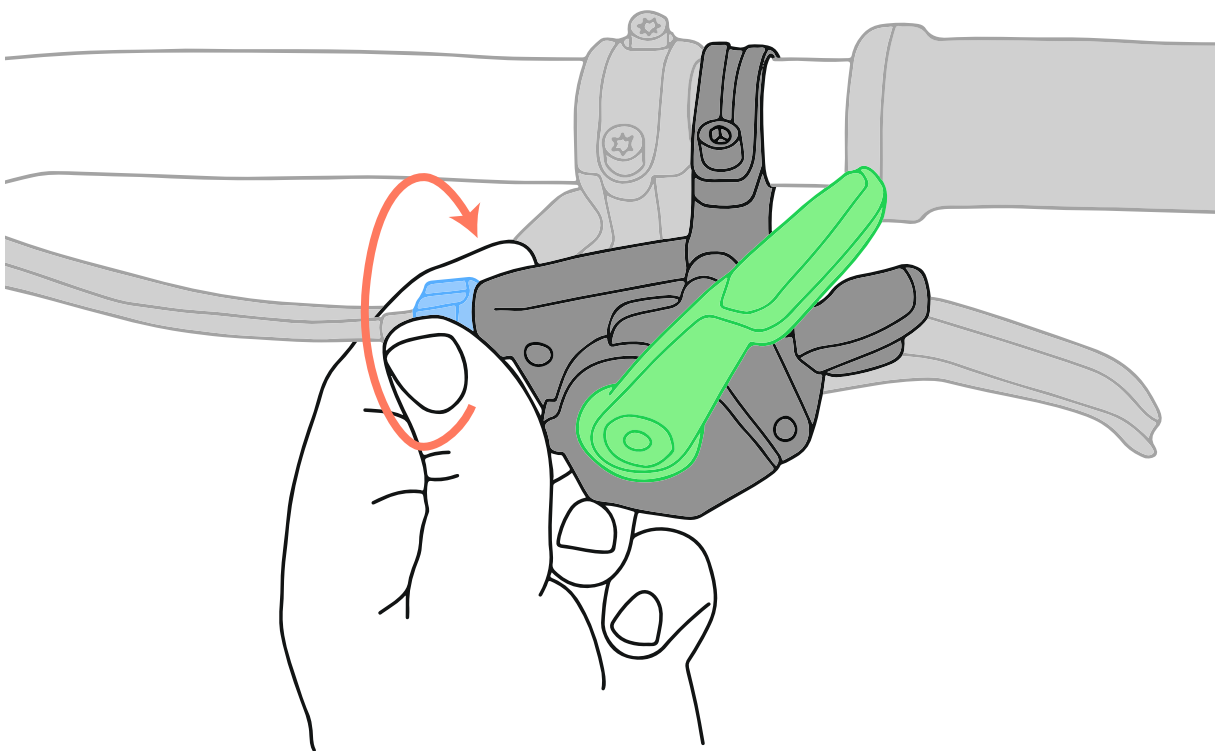
Before adjusting the shifting, enable the clutch by moving the **switch** on the side of the derailleur to the closed circle position.



8. Shifting Adjustment

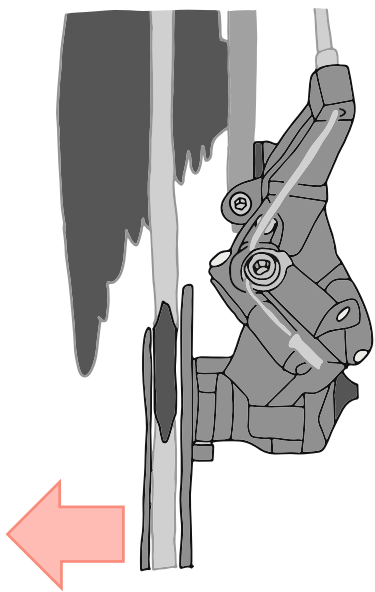
Part II

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

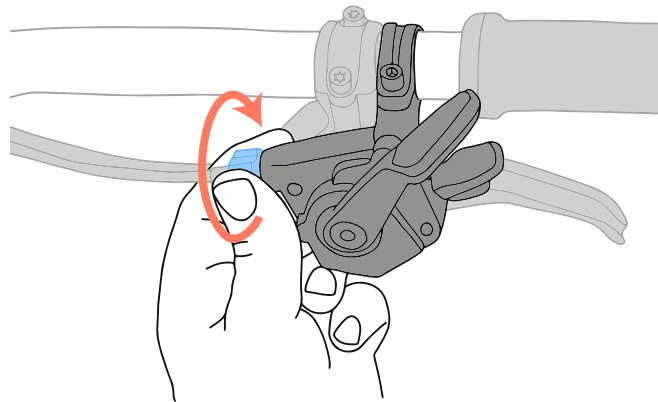


8. Shifting Adjustment

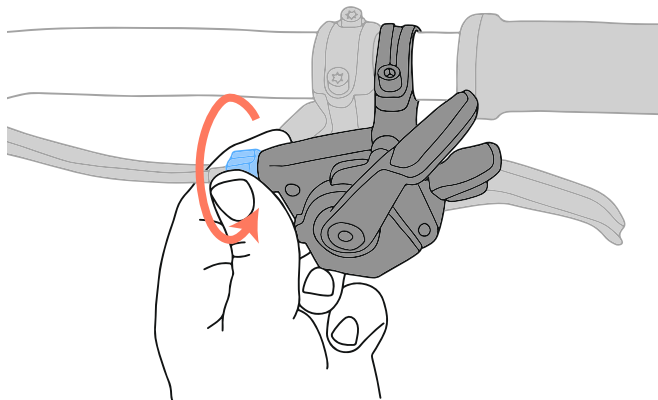
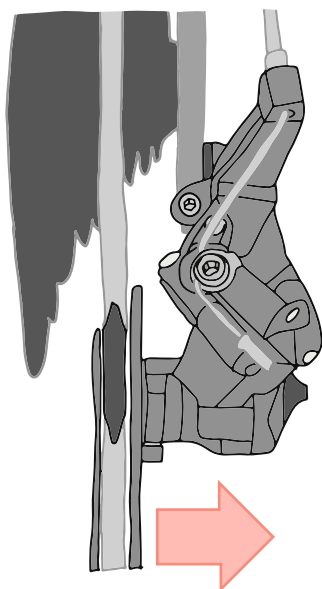
Now make several shifts up and down the cassette. If shifting is slow to move to a larger cog, turn the **barrel adjuster** counter-clockwise. If the shifting is slow to move to a smaller cog, turn the **barrel adjuster** clockwise.



Slow to shift to larger cogs



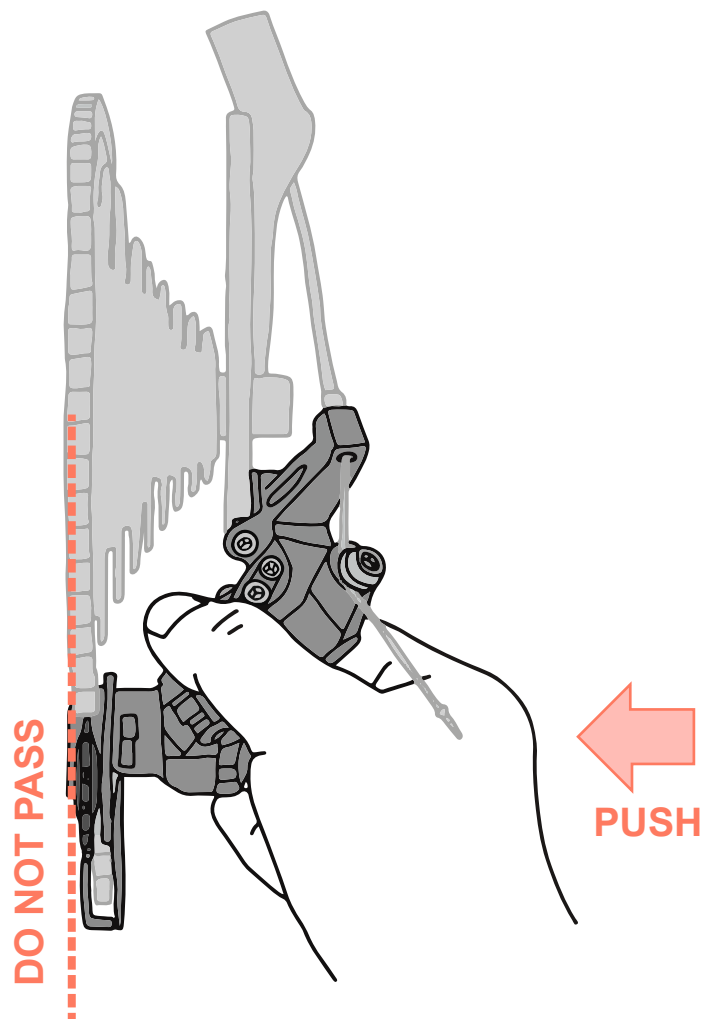
Slow to shift to smaller cogs



9. L-Limit Screw Adjustment

Part I

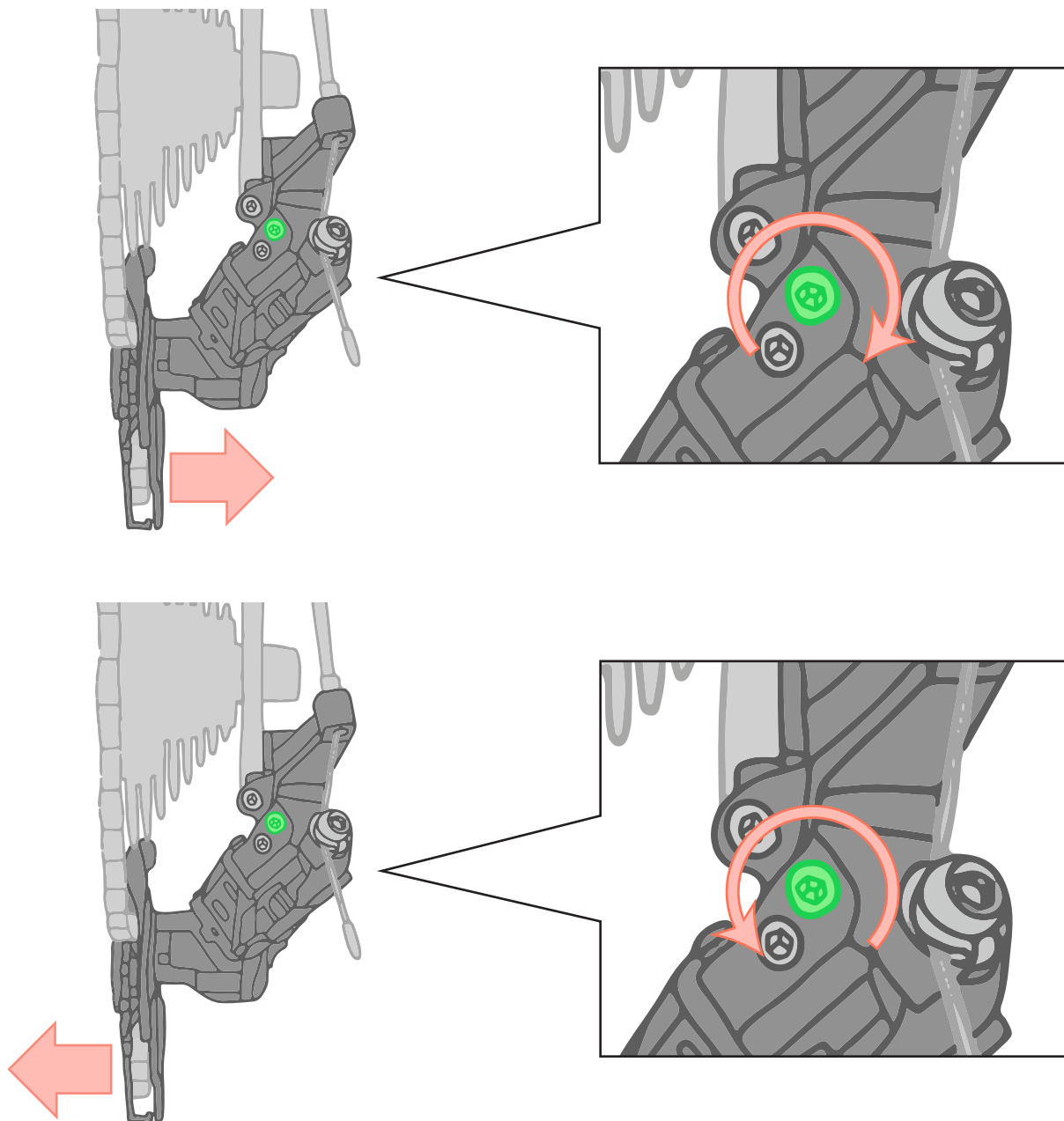
Shift to the largest cog on the cassette. Using your hand, try to push the rear derailleur past the largest cog. If the derailleur can move past the cog, adjust the low limit screw.



9. L-Limit Screw Adjustment

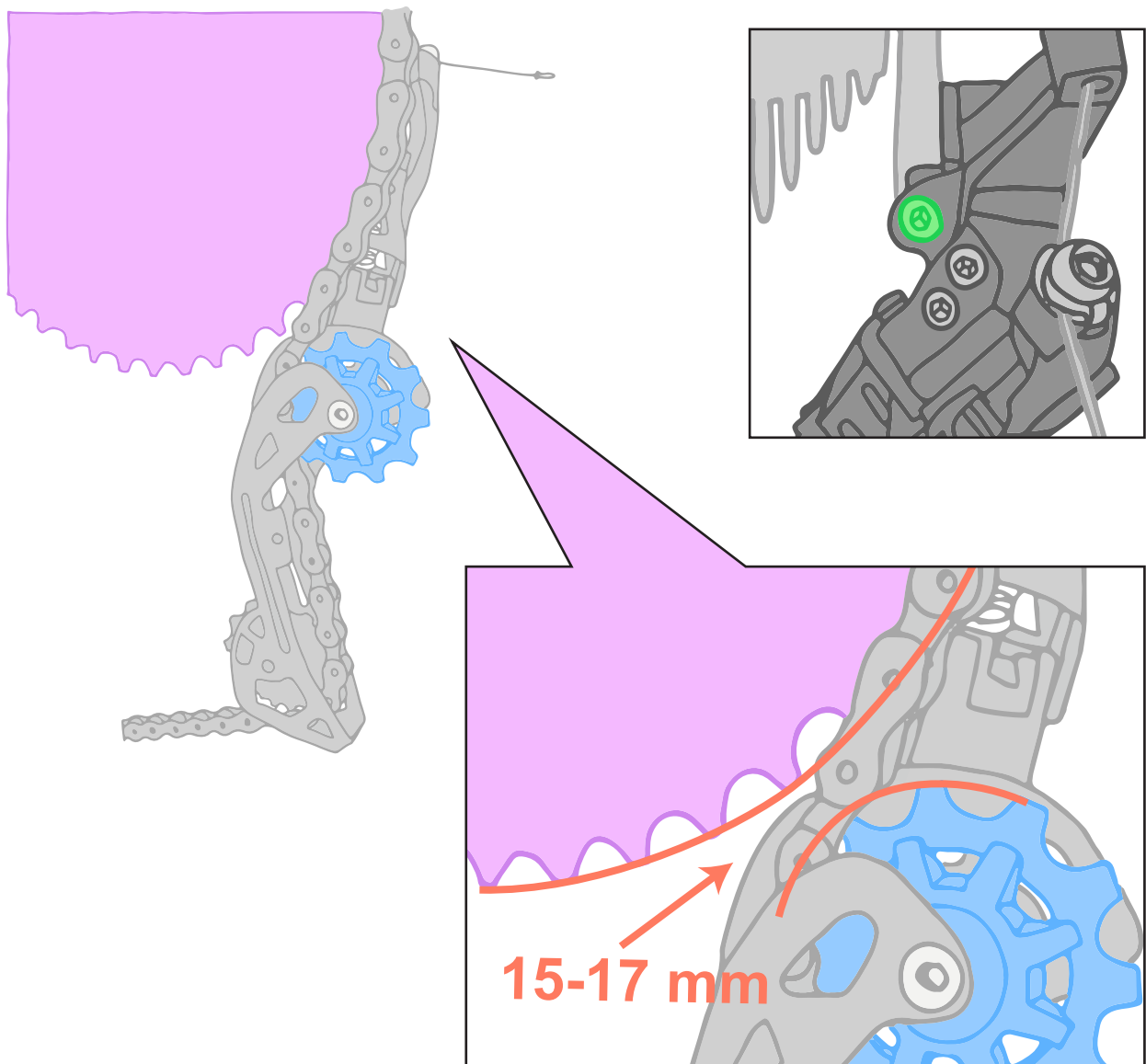
Part II

Tighten the **low limit screw** until you can't move the derailleur past the largest cog. Shift down and back up to the largest cog. If it is slow to shift to the largest cog, loosen the **low limit screw**.



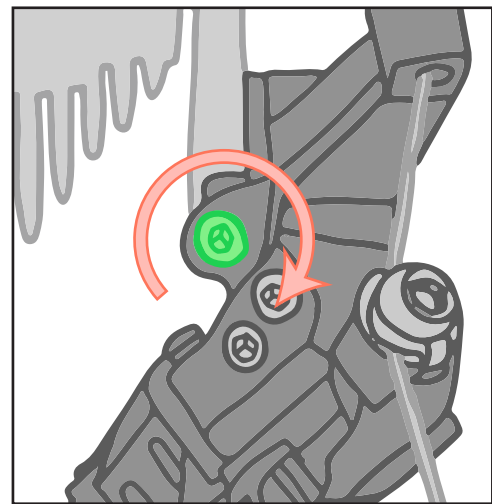
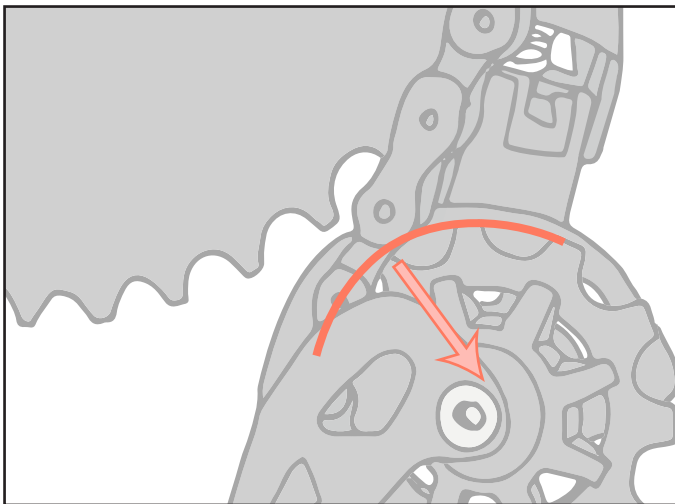
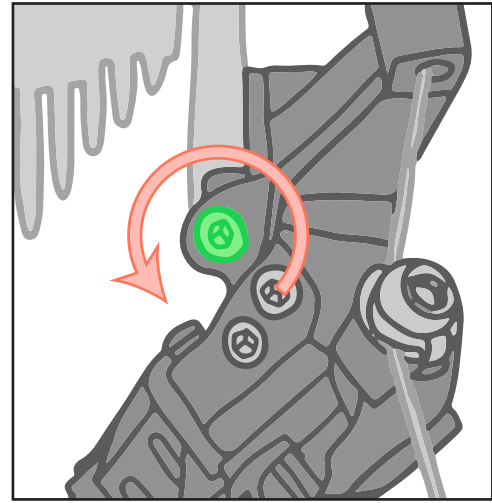
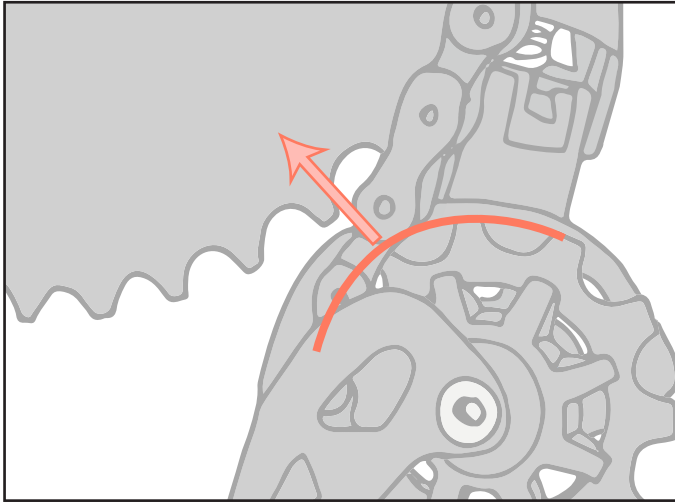
10. B-Tension Screw Adjustment

With the chain in the largest cog, adjust the **B-tension screw** until there is **15-17mm** of distance between the **guide pulley** and the **tallest teeth of the largest cog**.



10. B-Tension Screw Adjustment

Part II



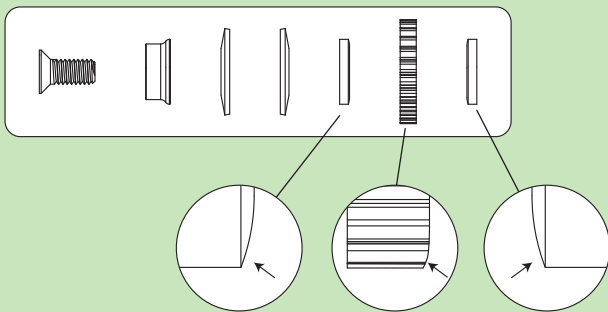
 Repeat shifting adjustment if necessary

Exploded Diagram & Service Parts

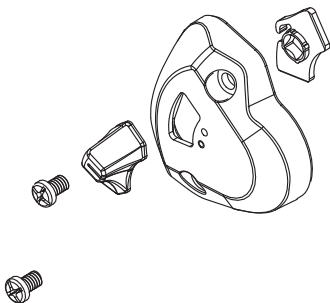
Part I



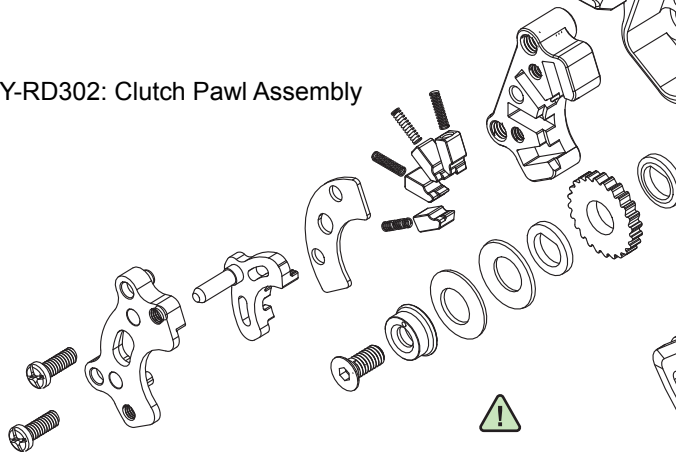
Follow installation order and orientation.



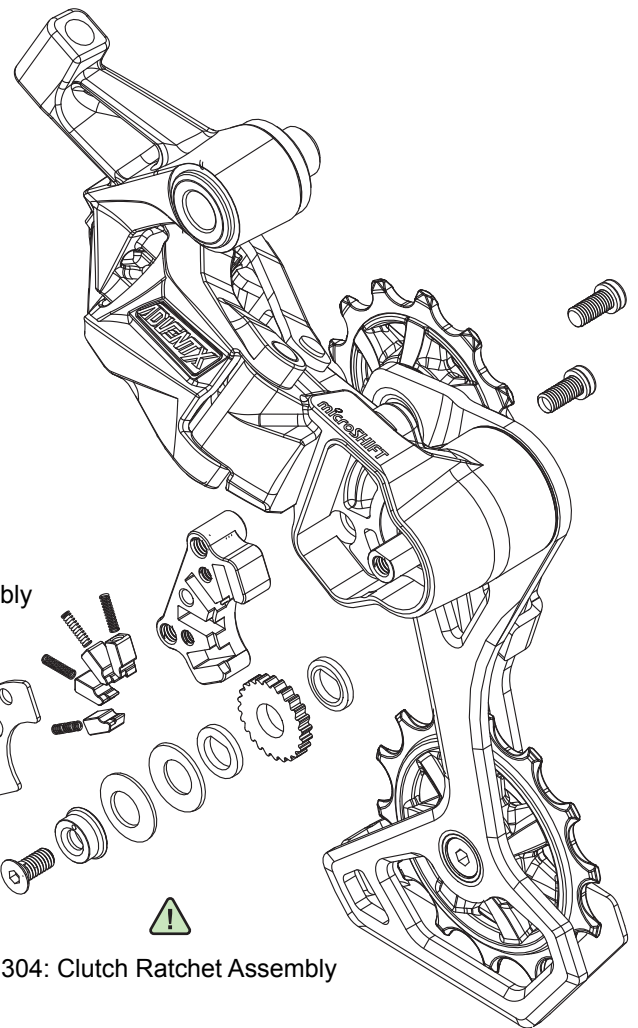
Y-RD303: Clutch Cover



Y-RD302: Clutch Pawl Assembly



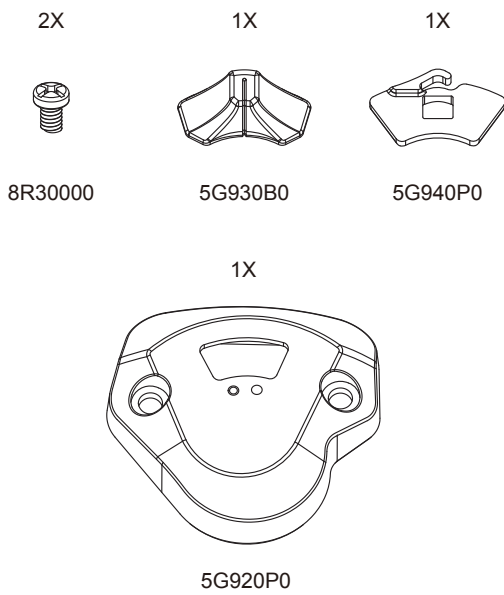
Y-RD304: Clutch Ratchet Assembly



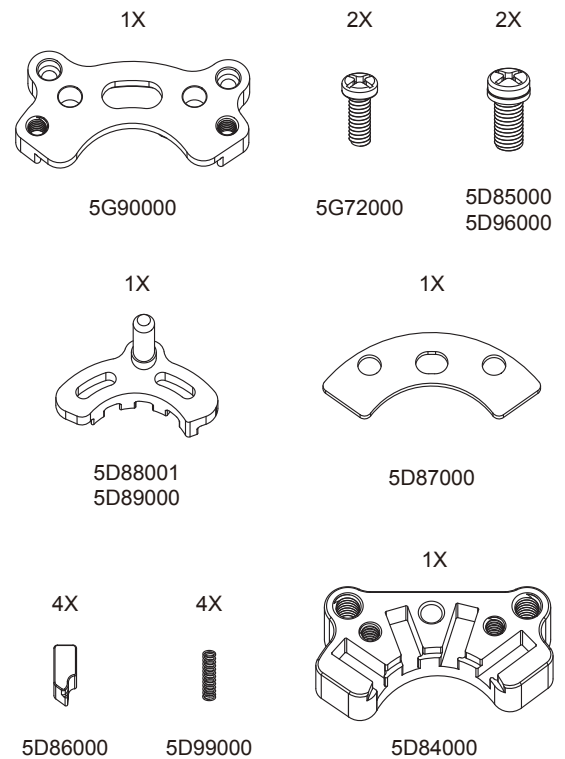
Exploded Diagram & Service Parts

Part II

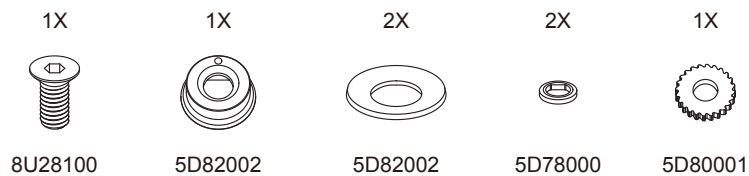
Y-RD303: Clutch Cover Kit



Y-RD302: Clutch Pawl Assembly



Y-RD304: Clutch Ratchet Kit



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