



# CRANK INSTALLATION & ASSEMBLY

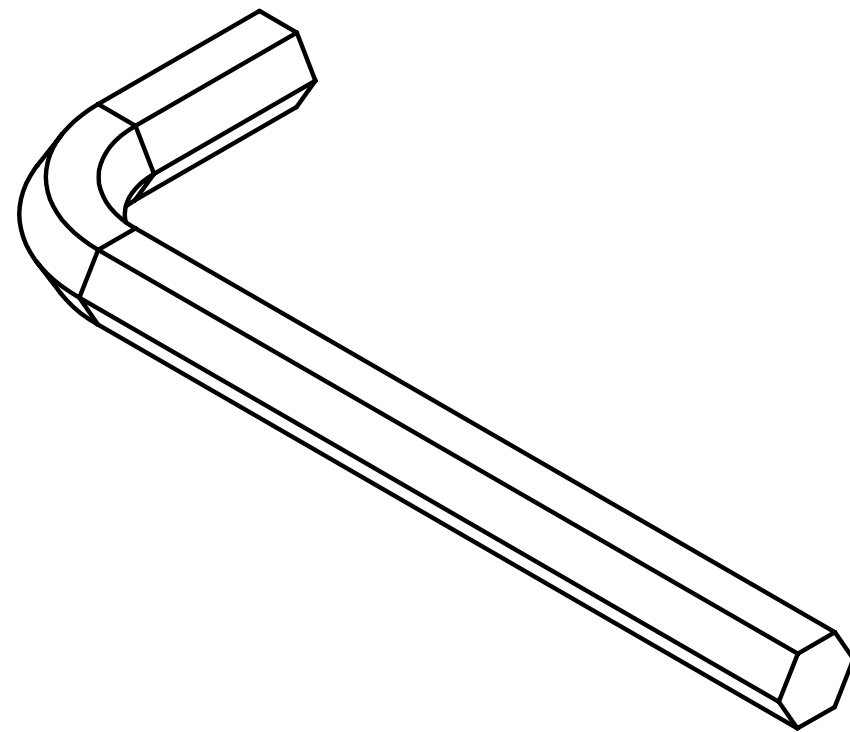
## IMPORTANT NOTICE

Make sure to read all instruction manuals included with the product. Do not disassemble or modify the product other than as stated in the information contained in this manual. This manual is currently a draft document. It is not to be publically shared until it has been reviewed and added to an Early rider user manual. If any part of the information on the manual is unclear to you, do not proceed with the installation. Instead, contact your place of purchase or a local bicycle dealer for their assistance. Users who do not consider themselves as a competent bicycle mechanic may want to visit an Early rider dealer for support during bicycle assembly. Early Rider is not responsible for any costs this may incur.

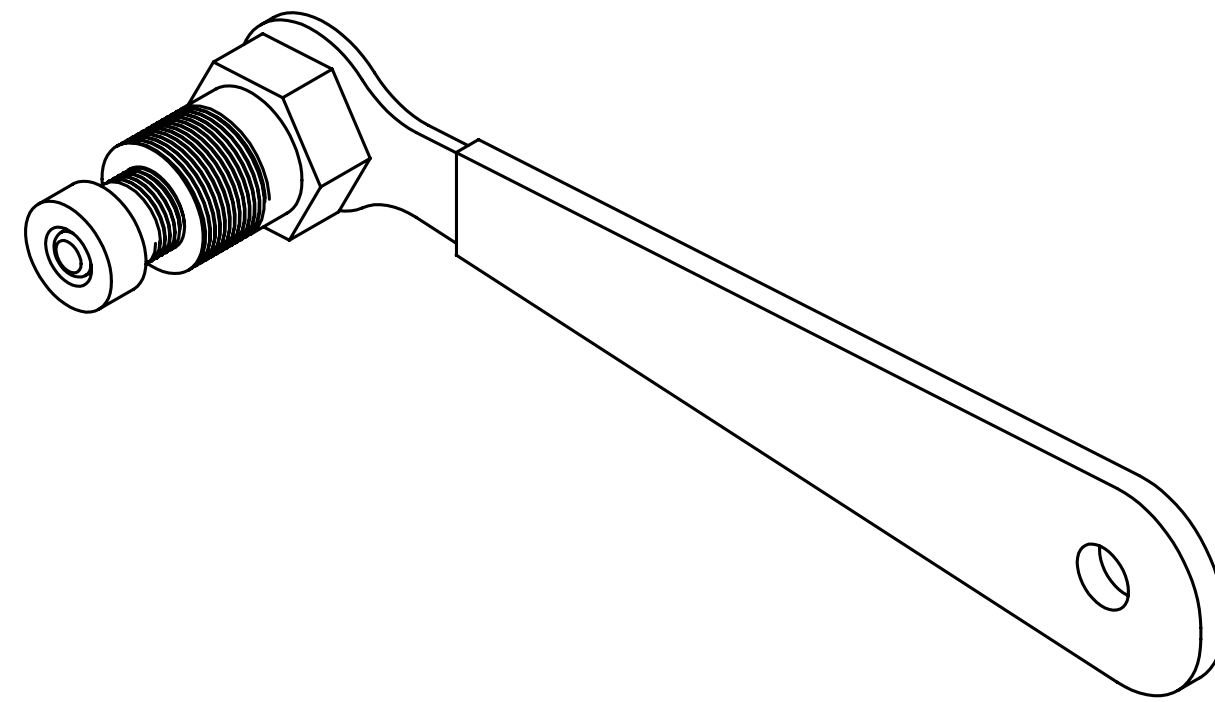
## SAFETY WARNING

Be sure to follow the instructions provided in the manuals when installing the product. It is recommended to use genuine Early Rider parts only. If parts such as bolts and nuts become loose or damaged, the bicycle may suddenly fall over, which may cause serious injury. In addition, if adjustments are not carried out correctly, problems may occur, and the bicycle may suddenly fall over, which may cause serious injury. Be sure to wear safety glasses or goggles to protect your eyes while performing maintenance tasks such as replacing parts. After reading the manual thoroughly, keep it in a safe place for later reference. Make sure only to use the correct tools specified in this user manual.

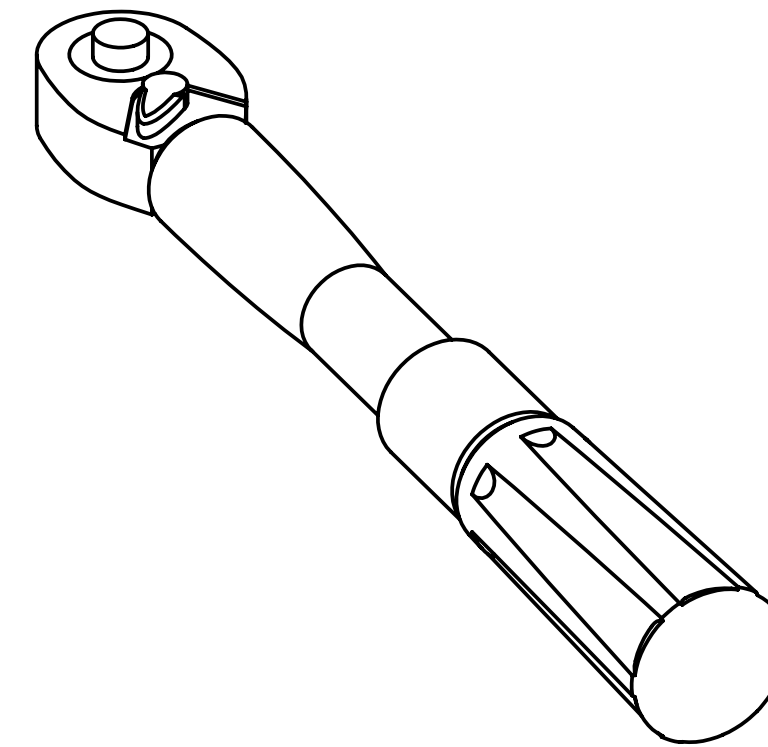
## TOOLS REQUIRED



8mm Allen Key



Crank Puller



8mm Torque Wrench



Suitable bike grease

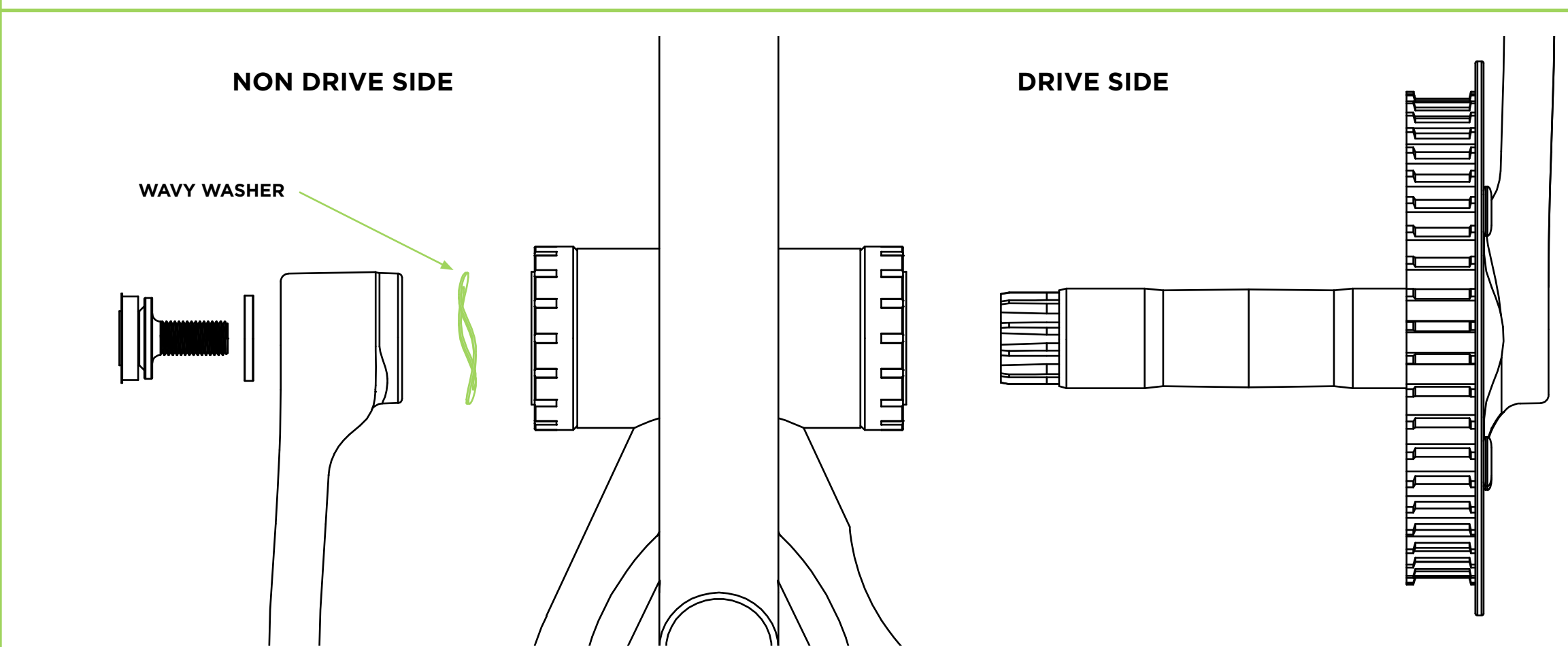
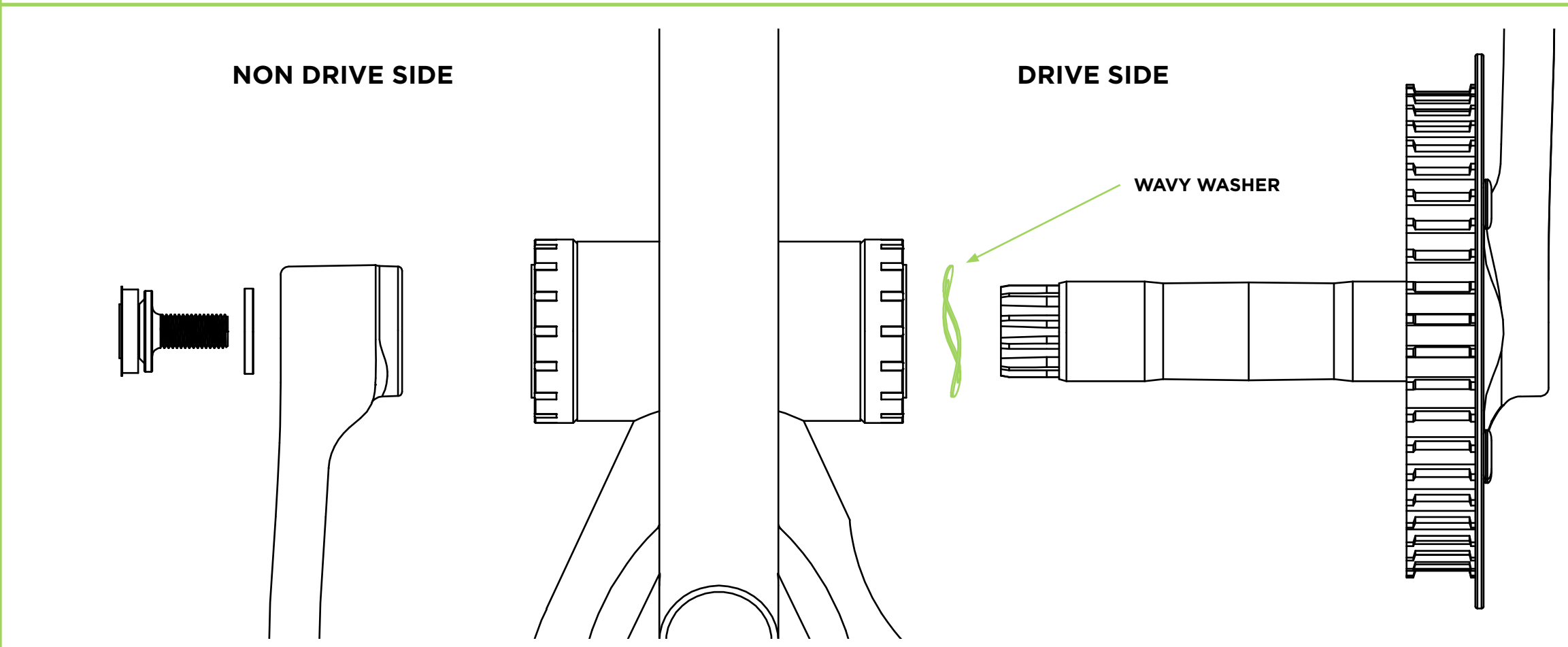


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## BELT LINE ADJUSTMENTS & TROUBLESHOOTING

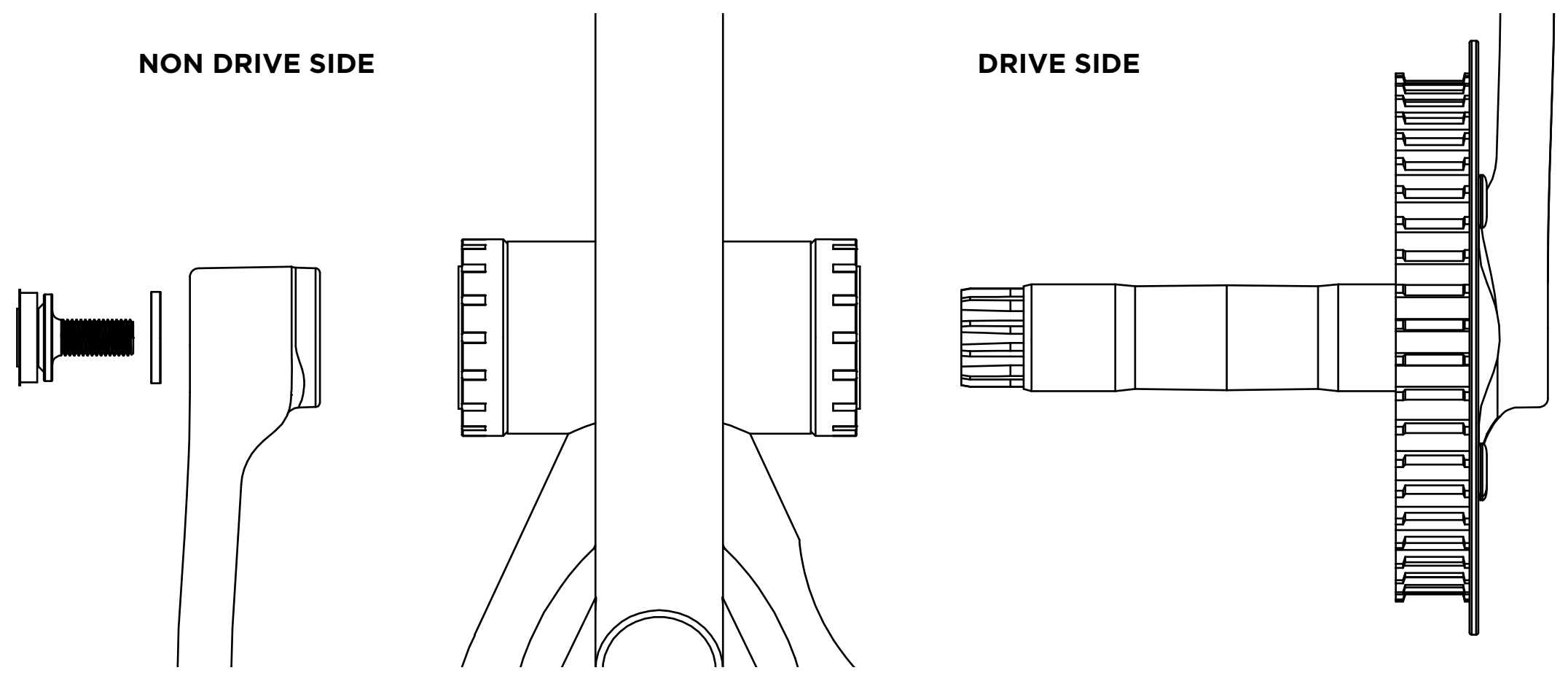
The front sprocket beltline can be adjusted by the position of the wavy spring washers fitted in between the bottom bracket face and the drive side or non drive side crank arm. Depending on the tolerance stack of the complete crank & bottom bracket assembly, there are multiple possible configurations. The crankset can be installed with no wavy washer, or with one or two.

If you are having problems with the alignment of the belt on the front sprocket, then you can adjust the position of these spring washers based on the symptoms.

SYMPTOM	CAUSE	SOLUTION	
Belt riding up on the inside lip of the front sprocket.	The cranksets belt line is too wide.	Remove any wavy washers from the drive side, and install them between the non drive side crank arm and bottom bracket face - install 1 wavy washer at a time.	
Belt rubbing on the outside edge of the front sprocket.	The cranksets belt line is too narrow.	Remove any wavy washers from the non drive side, and install them between the drive side crank arm and bottom bracket face - install 1 wavy washer at a time.	

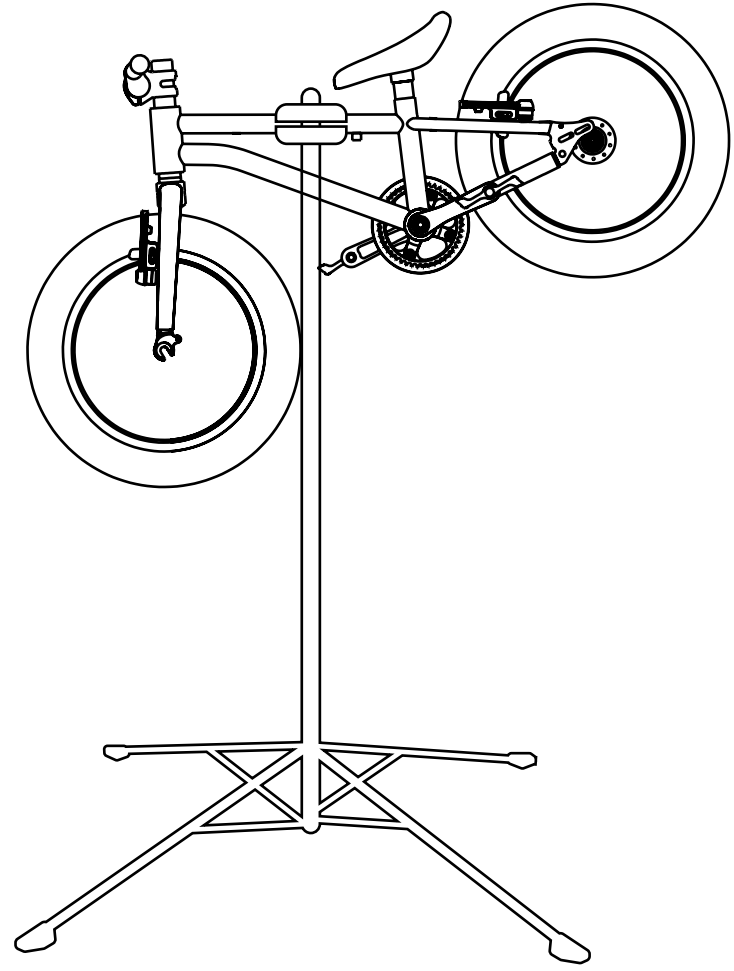


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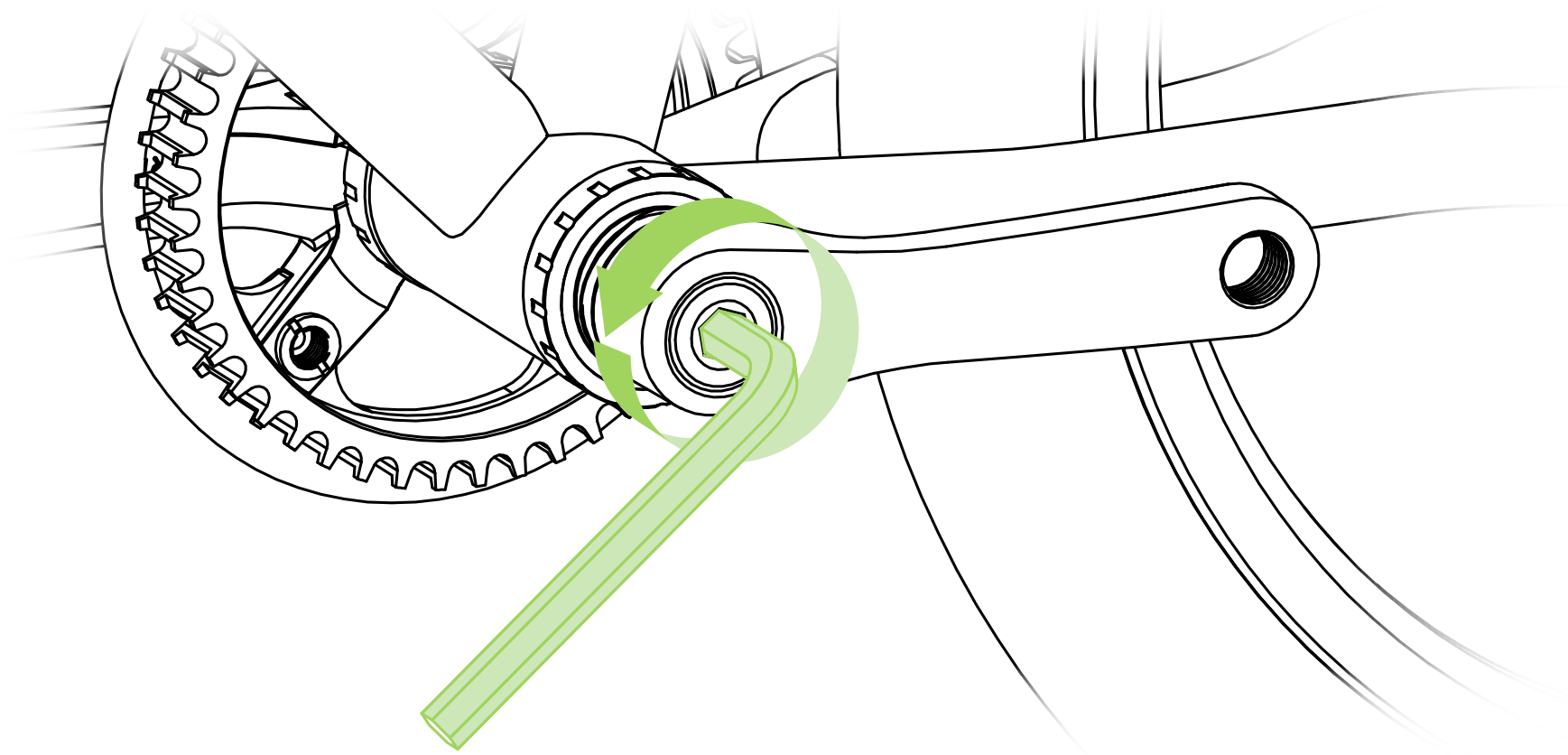
SYMPTOM	CAUSE	SOLUTION	IMAGE
<p>There is resistance in the cranks rotation.</p>	<ol style="list-style-type: none"><li>1. Excessive preload on the bottom bracket bearings caused by too many wavy washers.</li><li>2. Bottom bracket is worn.</li></ol>	<p>Remove 1 wavy washer at a time to see if this improves the cranks rotation - if no wavy washers are installed, ensure there is no lateral movement in the crankset when assembled.</p>	 <p>The image contains three technical line drawings. The first drawing, labeled 'NON DRIVE SIDE', shows a crank arm being inserted into a bottom bracket shell. The second drawing, also labeled 'NON DRIVE SIDE', shows the crank arm fully seated in the shell. The third drawing, labeled 'DRIVE SIDE', shows the crank arm inserted into the opposite side of the bottom bracket shell, with a wavy washer visible between the shell and the crank arm.</p>



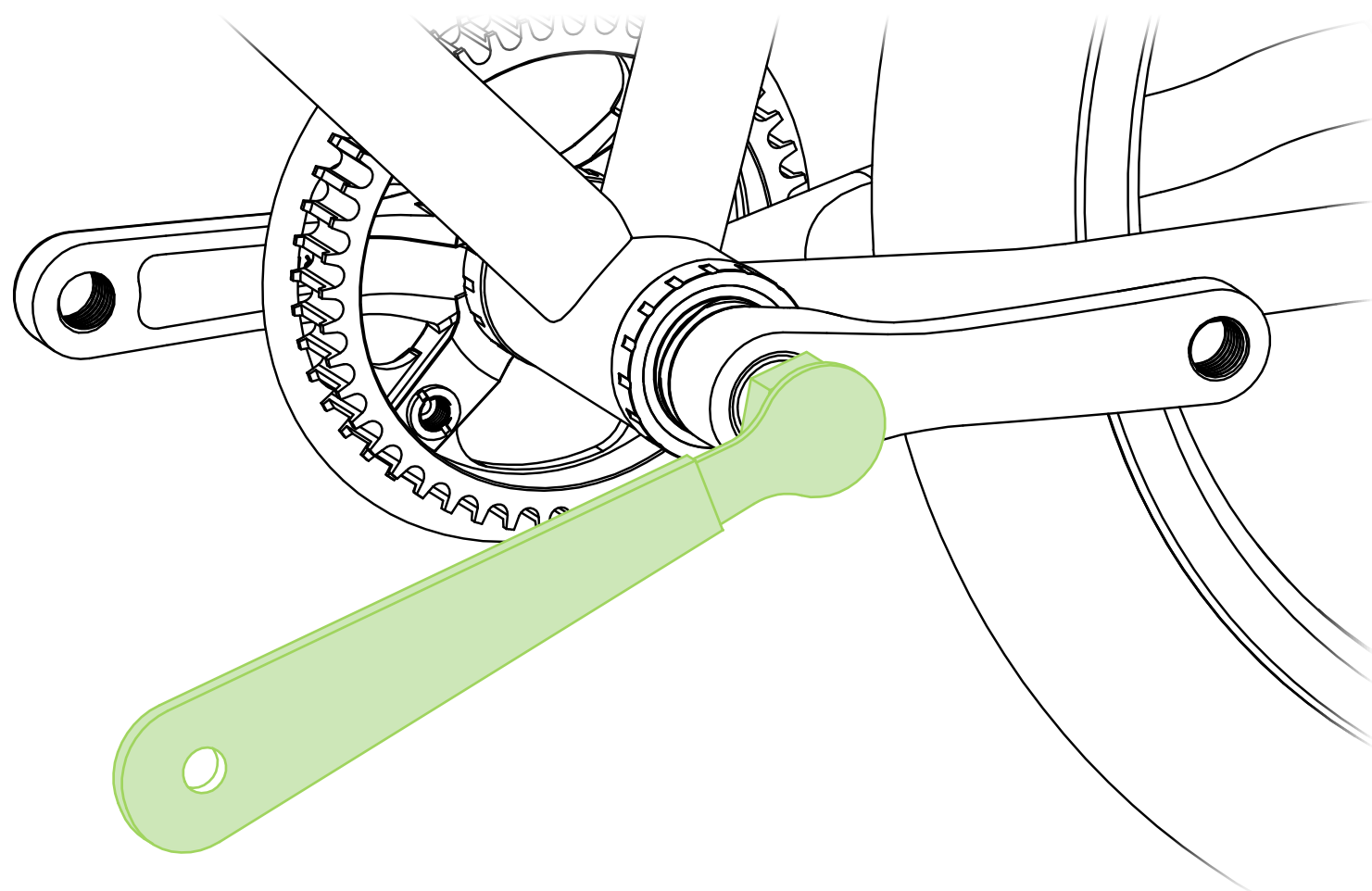
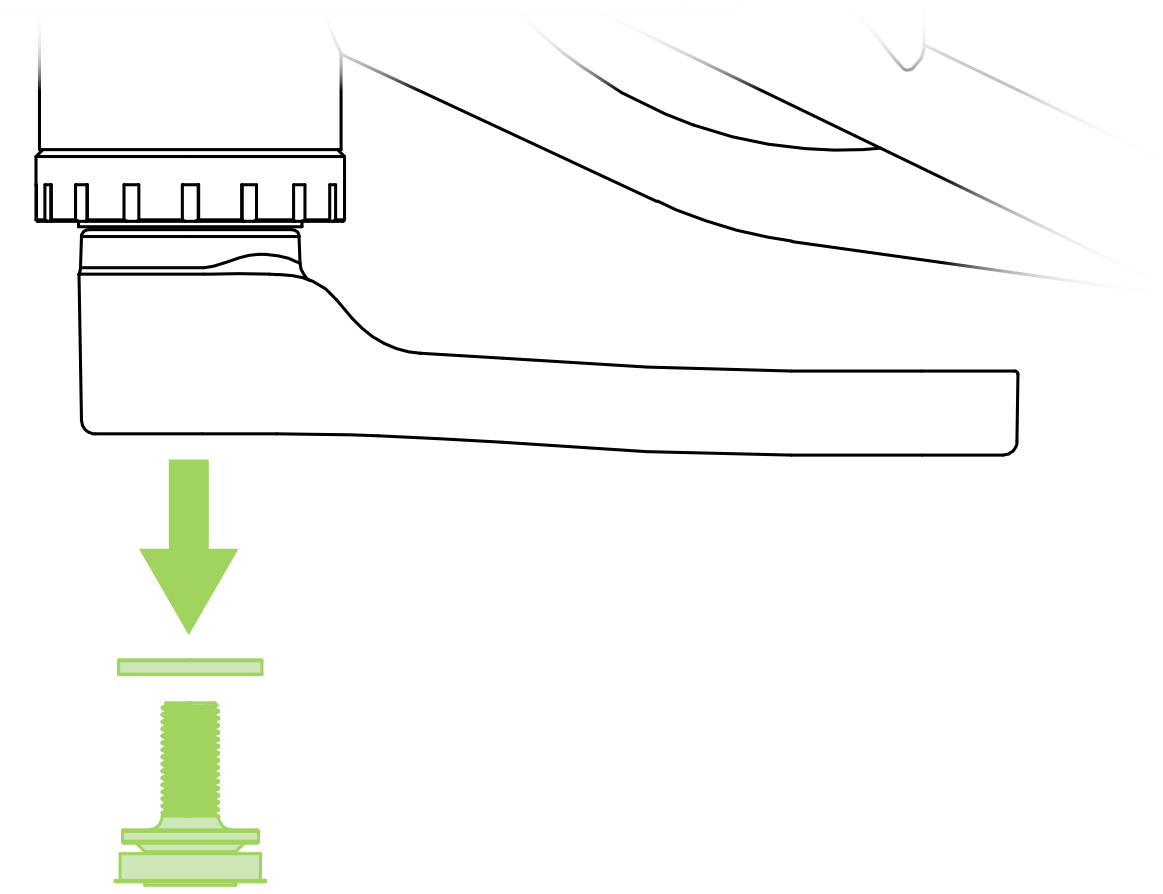
# CRANK REMOVAL



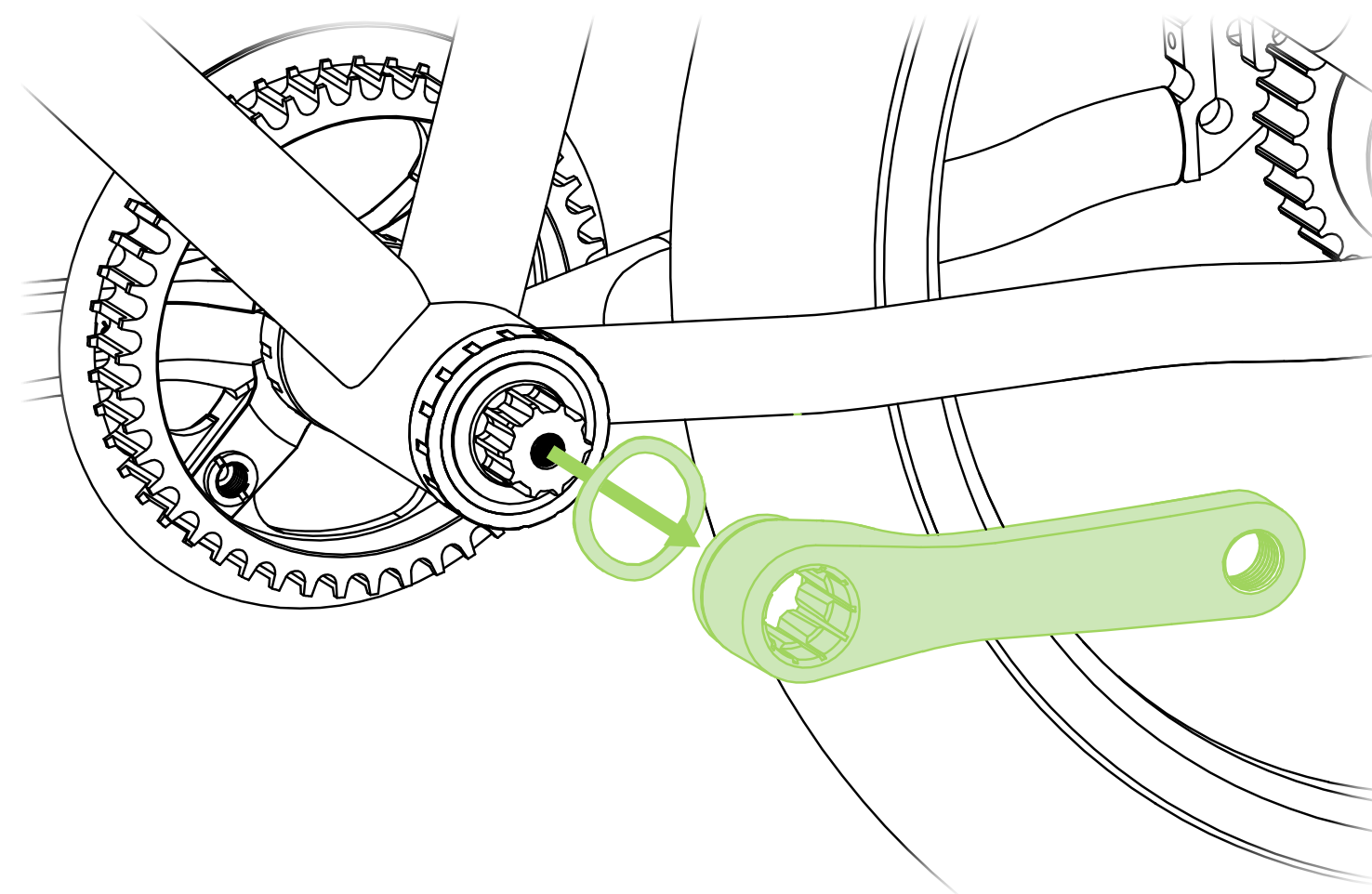
**1** Place the bike in a workstand.



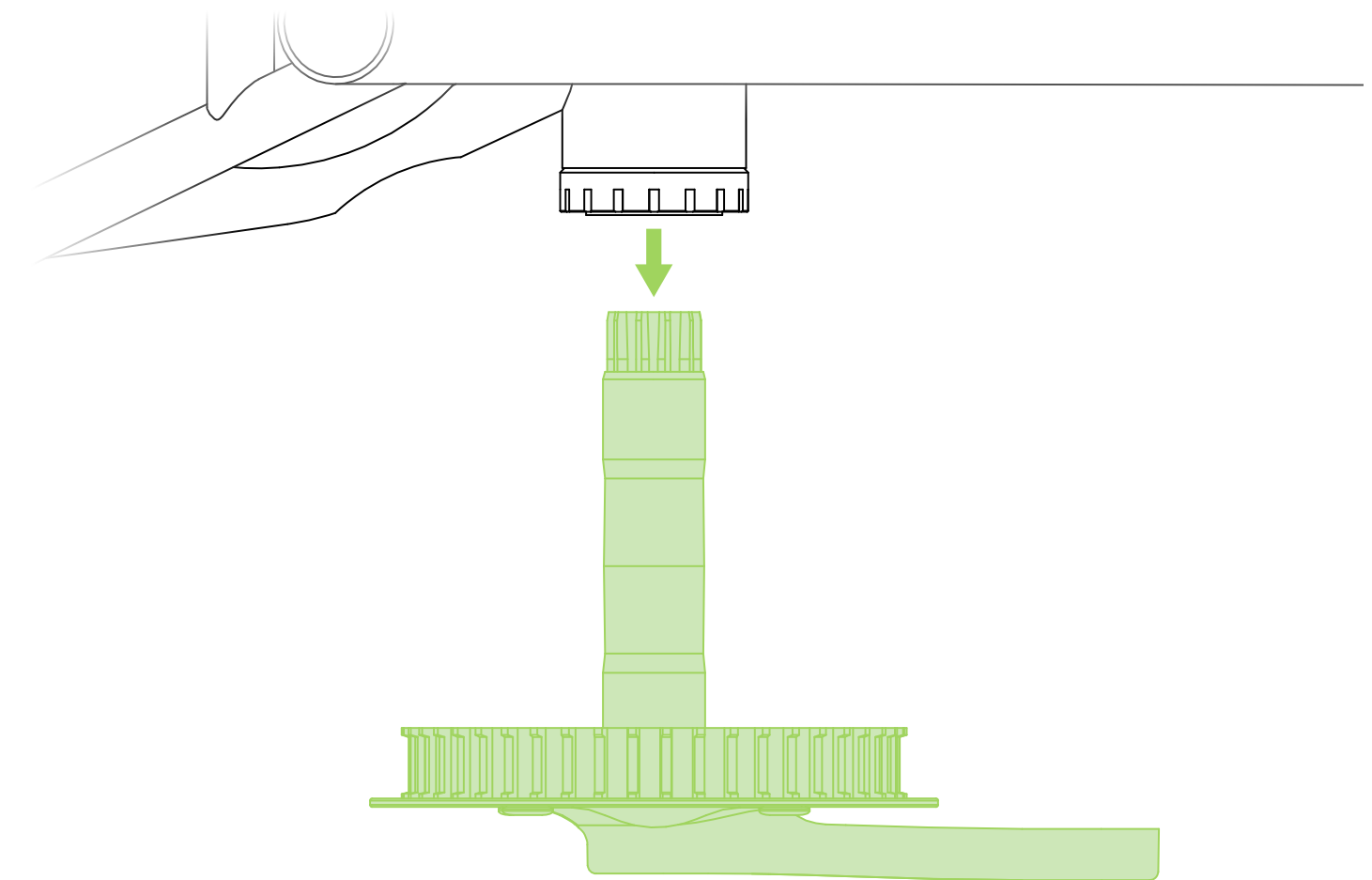
**2** Using the 8mm Allen Key, Remove the crank bolt & washer from the Non drive crank arm. It is important that only the NON DRIVESIDE CRANK ARM is removed from the bike.



**3** Install the crank puller as per manufacturer's instructions to remove the non drive side crank arm from the bike, and remove the crank arm & steel wavy washer (if installed)



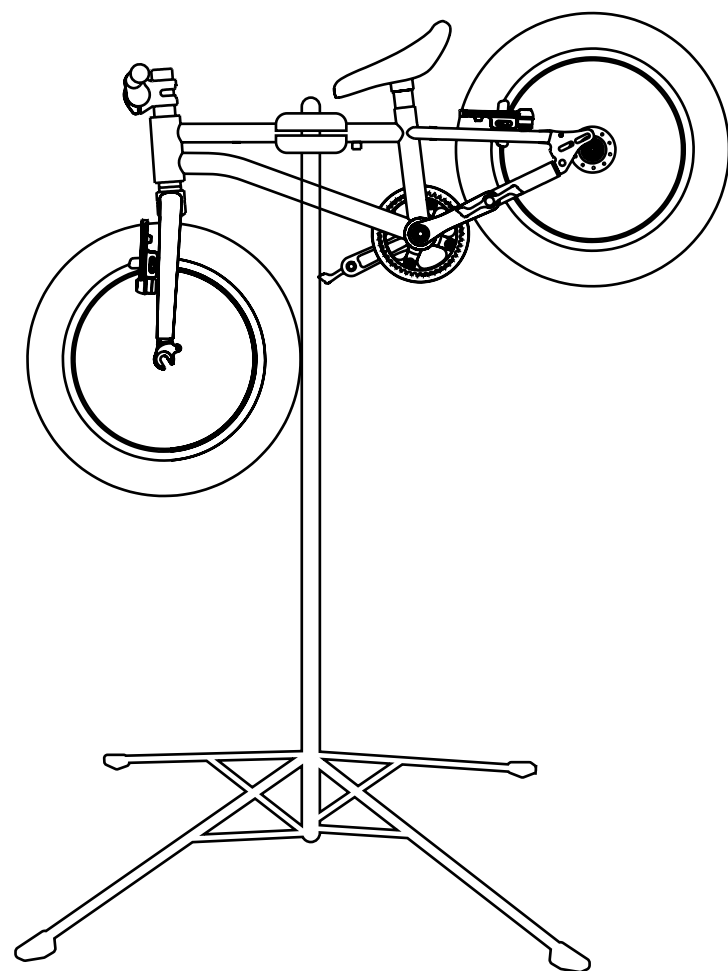
**4** Remove the drive side crank assembly from the bike. At this point it is always advisable to check the condition of the bottom bracket and the bottom bracket bearings.



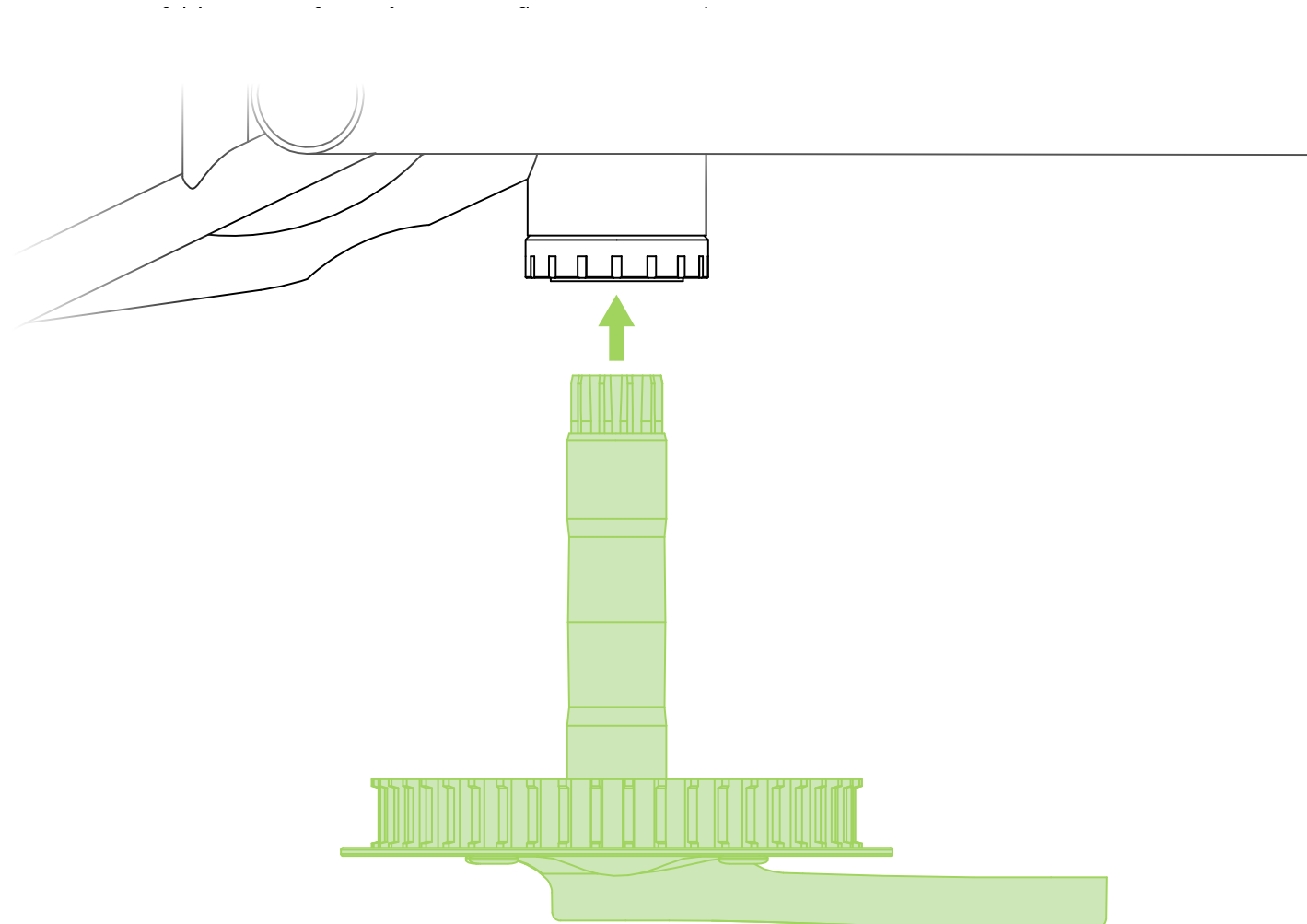




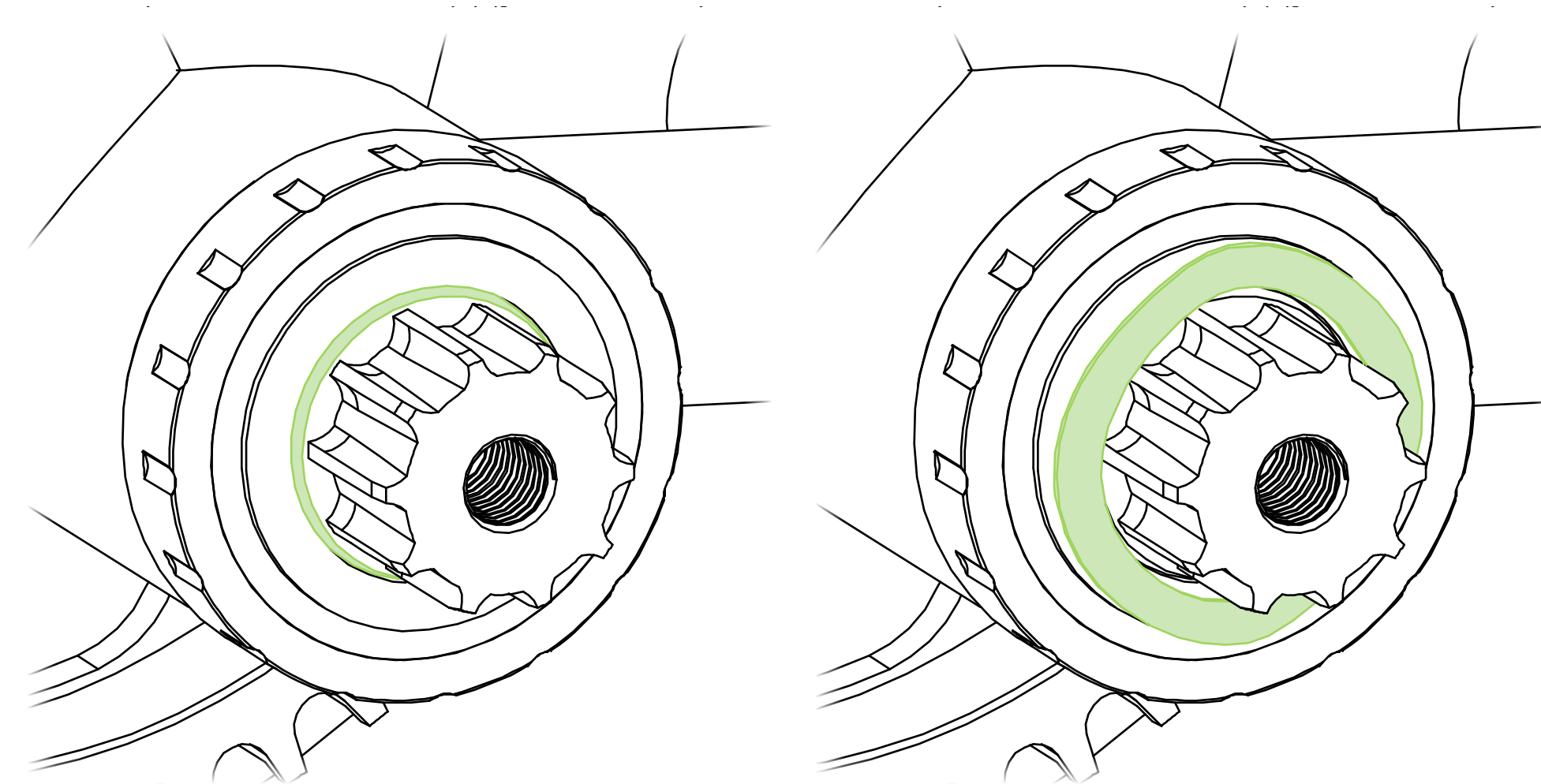
# CRANK INSTALLATION



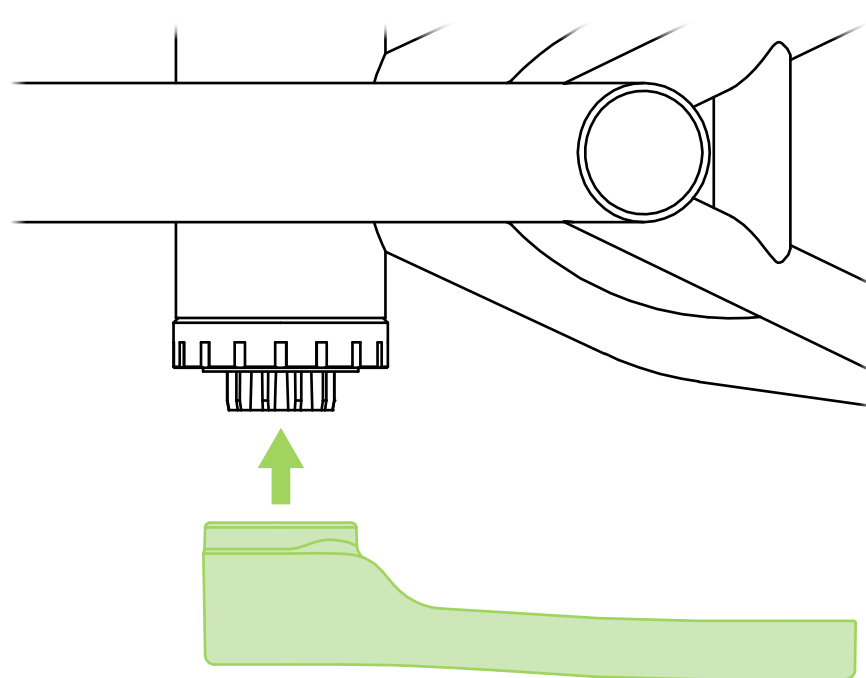
**1** Place the bike in a workstand.



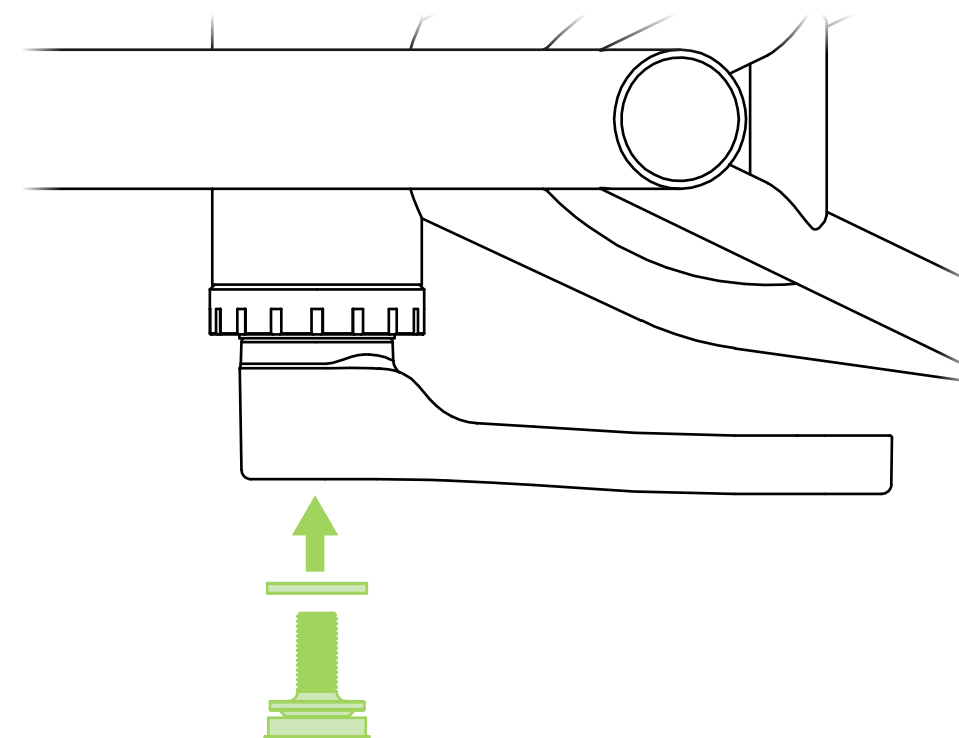
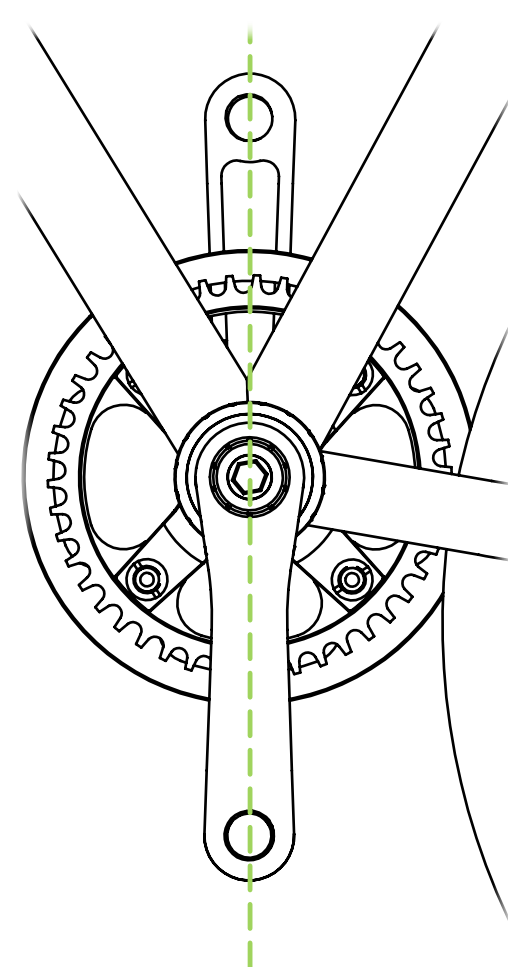
**2** Coat the crank axle in a thin film of suitable bicycle grease and push the drive side crank assembly through the bottom bracket. Be careful not to push out the plastic bottom bracket caps.



**3** Install the steel wavy washer but make sure this sits over the lip on the crank axle.



**4** Install the non drive side crank arm at 180 degrees to the driveside.



**5** Install the steel washer and then the crank bolt assembly and turn a few threads by hand to engage the thread. Tighten the crank at first using the 8mm allen key. Using a torque wrench, tighten the crank bolt to 30Nm, check the rotation of the crank by spinning the crankset. If there is any resistance please get in touch with [info@earlyrider.com](mailto:info@earlyrider.com) to discuss further options.

