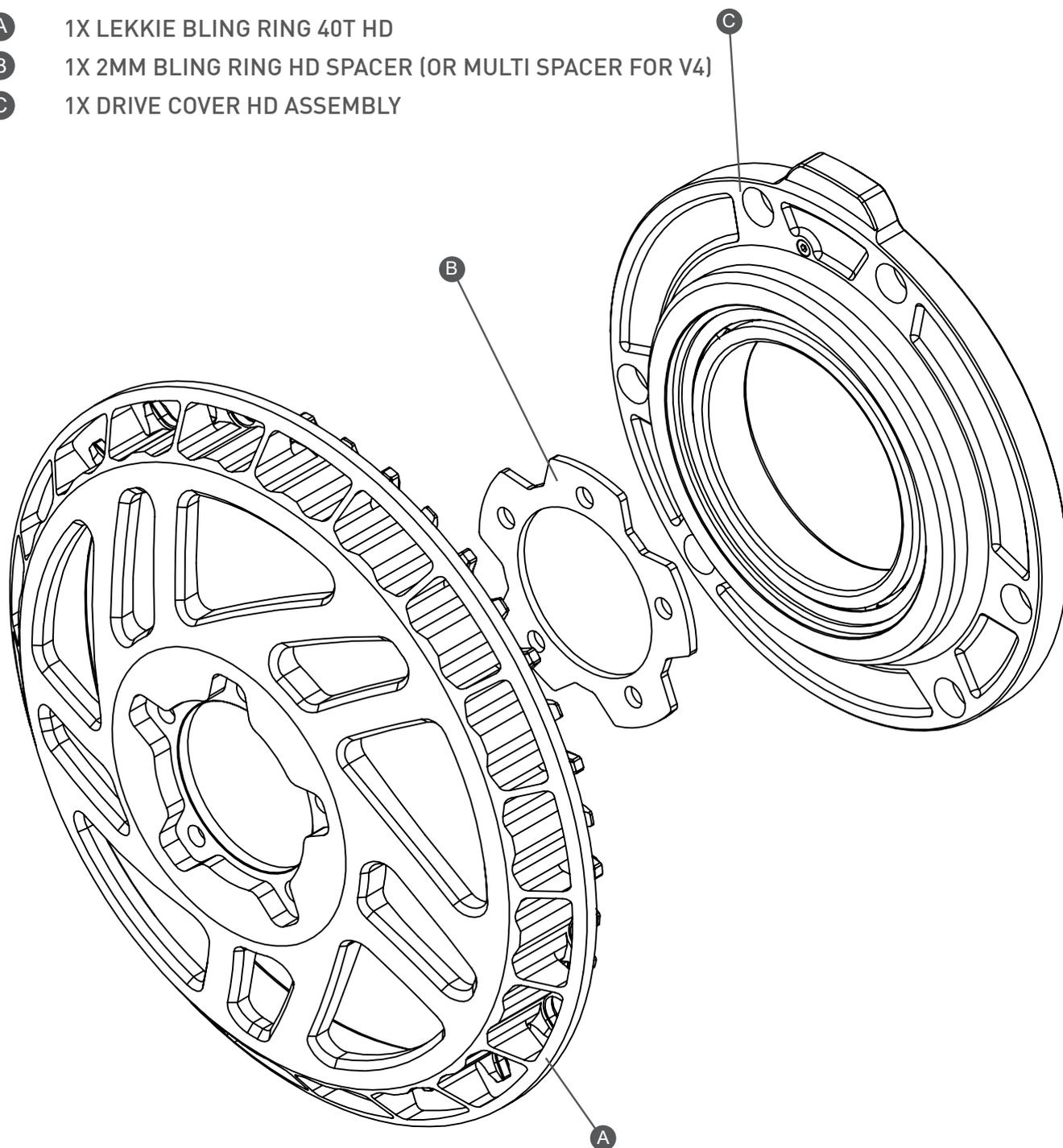


PARTS LIST

FOR BLING RING 40T HD PACKAGE
COMPATABLE WITH **BAFANG BBSHD**

INCLUDES

- A** 1X LEKKIE BLING RING 40T HD
- B** 1X 2MM BLING RING HD SPACER (OR MULTI SPACER FOR V4)
- C** 1X DRIVE COVER HD ASSEMBLY

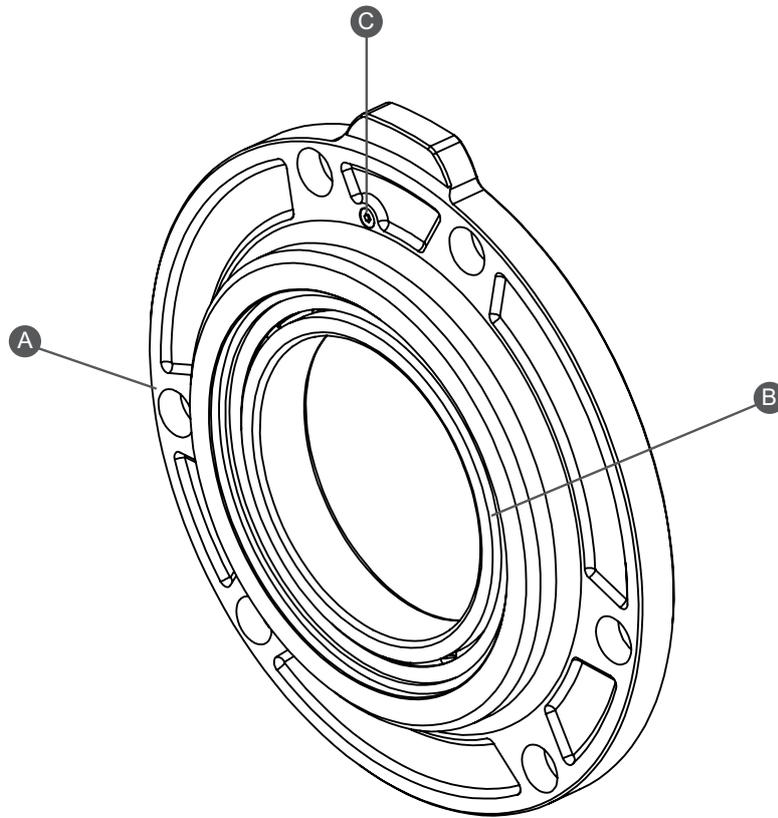


TIPS AND TRICKS

YOU MUST INSTALL THE **LEKKIE DRIVE COVER HD FIRST**

INCLUDES

- A** 1X DRIVE COVER HD V2
 - B** 1X MAIN BEARING
 - C** 1X GREASE PORT SCREW
- NOTE: FOR V2 OR NEWER



TOOLS REQUIRED

- 8mm hex/Allen key
- 4mm hex/Allen key
- Rubber mallet
- Bearing press
- Moly-grease
- All purpose lithium grease
- High viscosity cassette grease
- Loctite 243
- Scribe/fine tip marker
- Small metal file

When installing the Lekkie Drive Cover HD you will require some tools and some hands on experience with your motor. If you do not have the required tools, confidence or skills to install this take your motor to your local bike shop or engineering shop and they should be able to help you out.

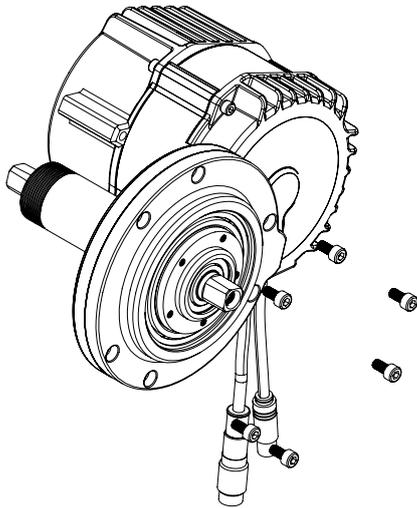
INSTALL TIPS

Here are some tips to keep in mind while completing the install.

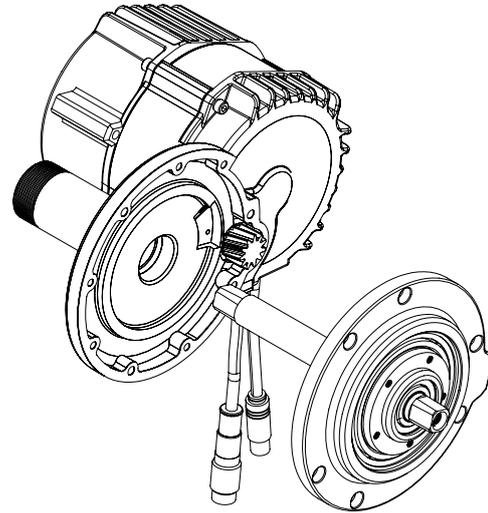
- Check paper gasket and replace if damaged.
- When the motor is open check all bearings and replace/re-grease if need be.
- To keep everything running smooth end easy to maintain make sure you grease all metal to metal surfaces.
- Clean any excess grease out of the motor while it is open.
- Clean and grease the main gear and pinion.
- Always grease the axle taper before installing cranks.

DISASSEMBLY

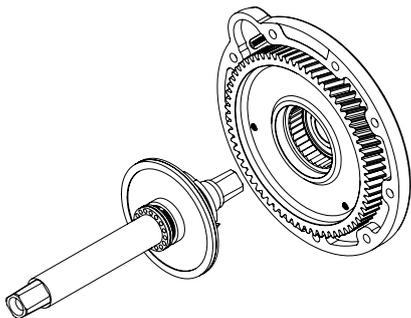
Before you can install the Lekkie Drive Cover HD you need to remove the stock Bafang cover and bearing. This also gives you the opportunity to check the condition of your drive gear, pinion and bearings and replace any parts as needed. It is important to keep the internal components free from dirt/grit, so before opening the housing thoroughly wipe down external surfaces and keep a clean work area to ensure it all goes back together without contamination. The drive cover can be fitted without the need to remove the motor from the bike, however you will need to remove both cranks and the chainring first.



1. Using a 4mm hex/Allen key unscrew the six screws holding on the stock cover and remove.

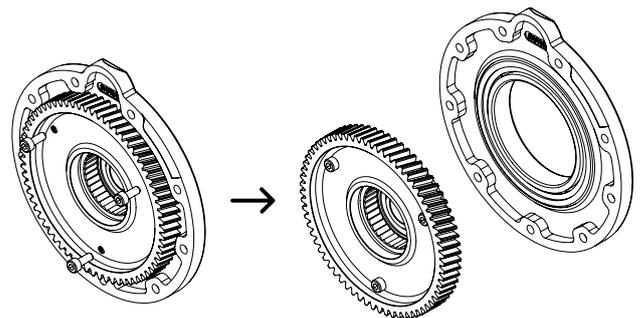


2. Tap the axle from left side of motor, loosening the drive assembly and remove assembly.



3. Holding the stock drive cover, gently tap the axle from the drive side and pull out the axle assembly.

Note: This will remove the whole axle assembly so be careful not to lose any parts.

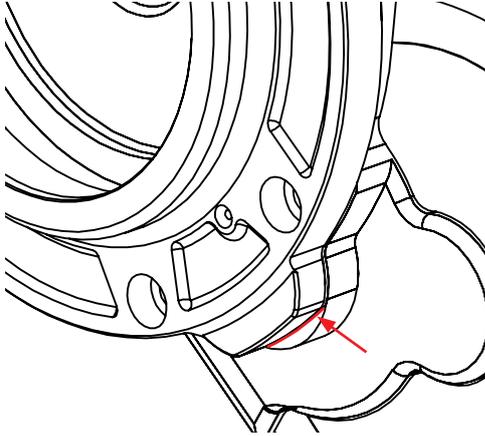


4. Screw 3 M4 screws into the back side of the drive gear until they are touching the bearing. Start turning one screw one turn, then the next screw once, then turn the next screw one turn, then the next. Repeat until the gear is removed.

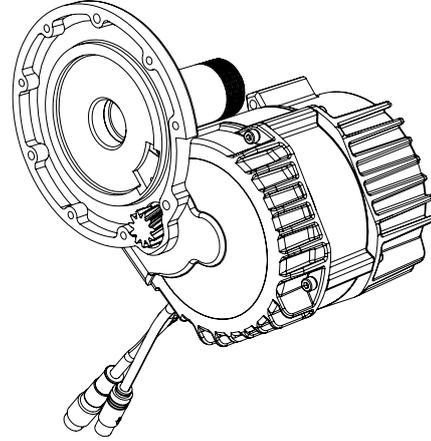
Note: Occasionally the large bearing comes out of the OEM drive cover. It needs to be removed from the gear Assembly before proceeding.

MOTOR MODIFICATION

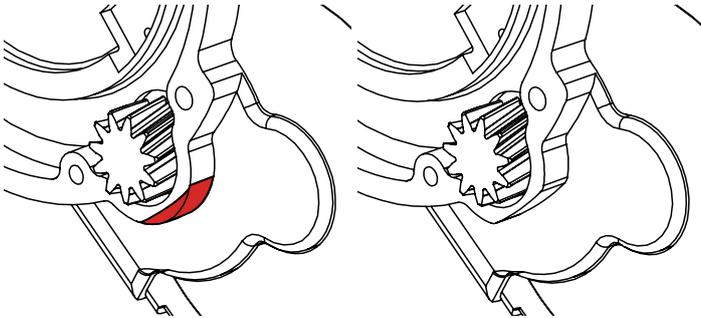
Only required if you are installing a Bling Ring 40T **without** a spacer. You must complete the motor modification steps or your Bling Ring 40T will hit your motor and damage the Bling Ring. This modification will require you to file a small amount of material off your motor. If completed correctly the performance and durability of the motor will not be effected. If you are not comfortable doing this you will just need to use the supplied chainring spacer to clear the motor.



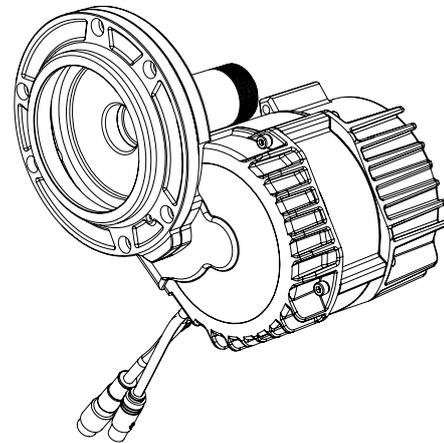
1. Place the Lekkies Drive Cover HD on the motor and mark the edge of the cover, scribing onto the motor housing in the area shown.



2. Remove the Lekkies Drive Cover HD. Note the scribed mark showing material requiring removal.



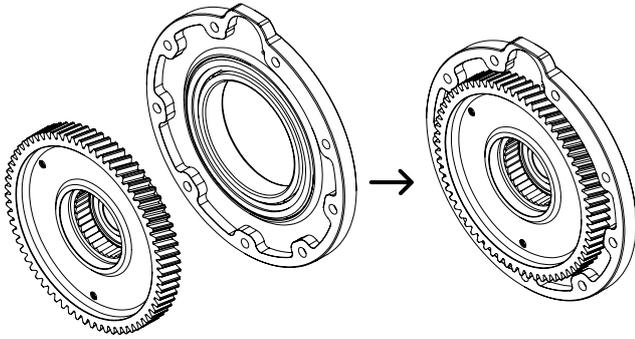
3. Using a file, carefully remove highlighted material to the scribed line making it the same shape as the Lekkies Drive Cover HD. You may also need to trim the paper gasket. Note: We advise covering the pinion and inside of the motor so that the metal filings do not make it into the motor.



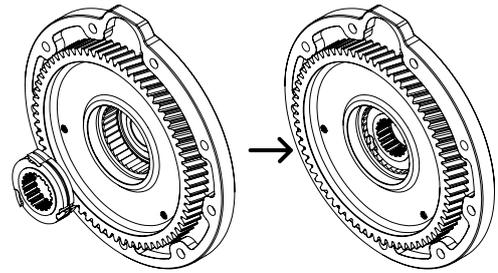
4. Place the Lekkies Drive Cover HD on the motor and check the shape. Repeat previous steps if more material removal is required.

ASSEMBLY

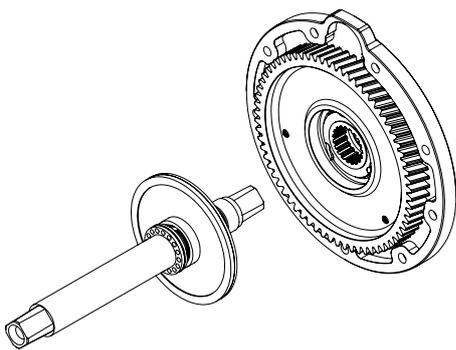
Re-assembly is easy and painless. When re-assembling the motor, make sure you grease all metal-on-metal parts. Do not force any parts and if you are unsure, stop the assembly and contact us.



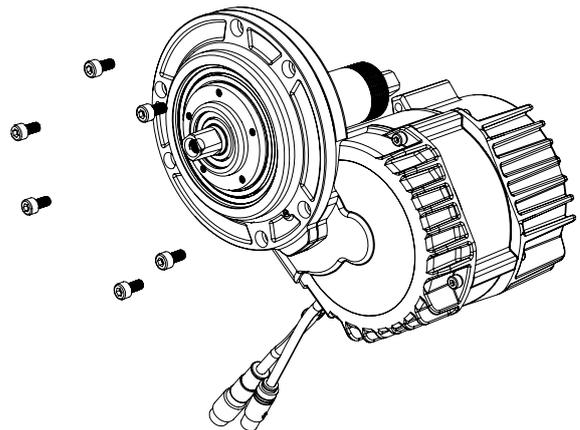
1. Press the main drive gear into the new bearing in the Lekkier Drive Cover HD.
Note: Grease the inner edge of the bearing.



2. Insert the clutch assembly into the drive gear, making sure the pawls are engaging the correct way.
Note: If the motor is well used, check that the Pawls in the clutch move freely and are not worn. You can lubricate the clutch with a light coating of a medium viscosity oil used to maintain cassette freewheels.



3. Slide the remaining axle assembly in.
Note: Grease all touching surfaces to make maintenance easy.



4. Install paper gasket then slide the new drive assembly in. Clean, apply Loctite 243 to threads, and install the six M5 drive cover bolts. Tighten to 6Nm.
Note: Replace gasket if damaged.

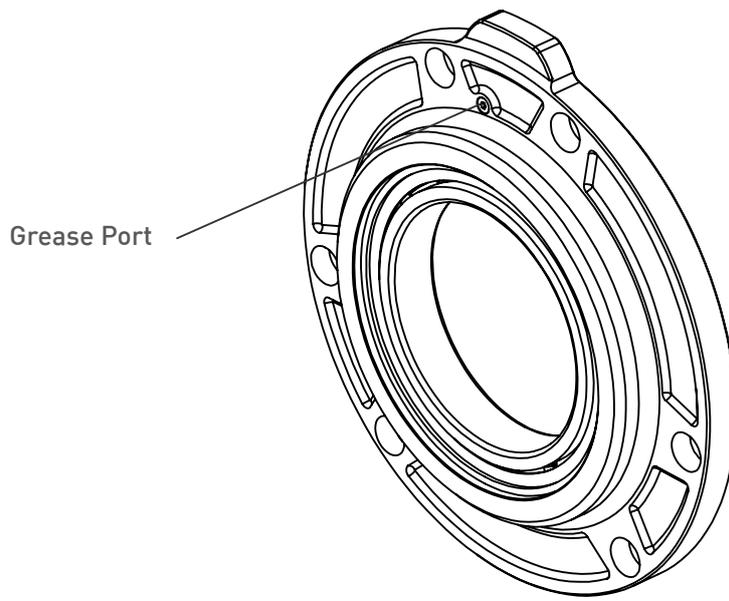
GREASE PORT

To keep your motor running its best its important to regularly grease the main drive gear and pinion. We have added a grease port to the Lekkie Drive Cover HD V2 to allow this.

To do so simply remove the grease port screw and using a grease gun, squirt moly-grease in while slowly turning the motor.

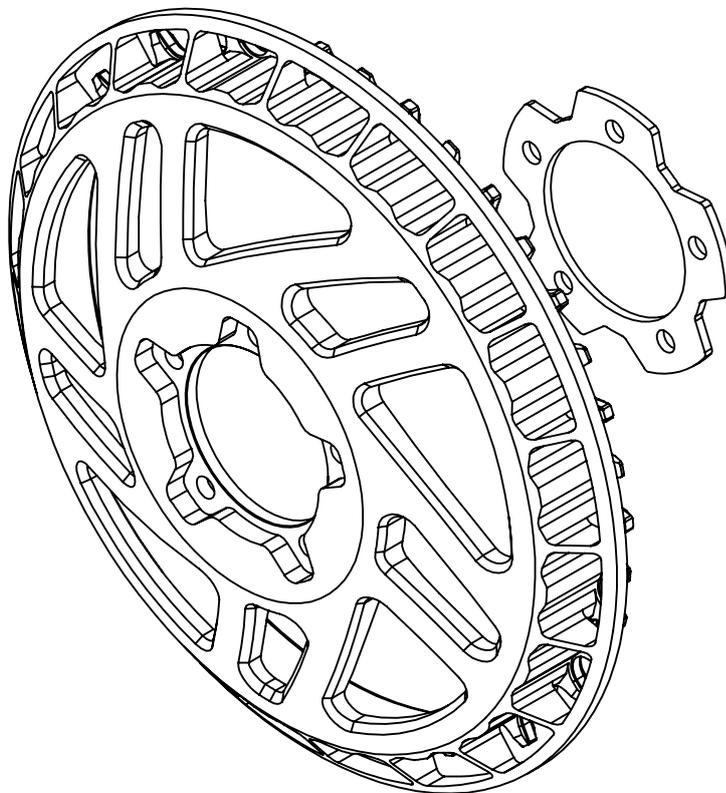
The port is positioned at the junction of the drive gear and pinion.

Note: The grease port is only on V2 or newer.



TIPS AND TRICKS

NEXT YOU CAN INSTALL THE **BLING RING 40T HD**



TOOLS REQUIRED

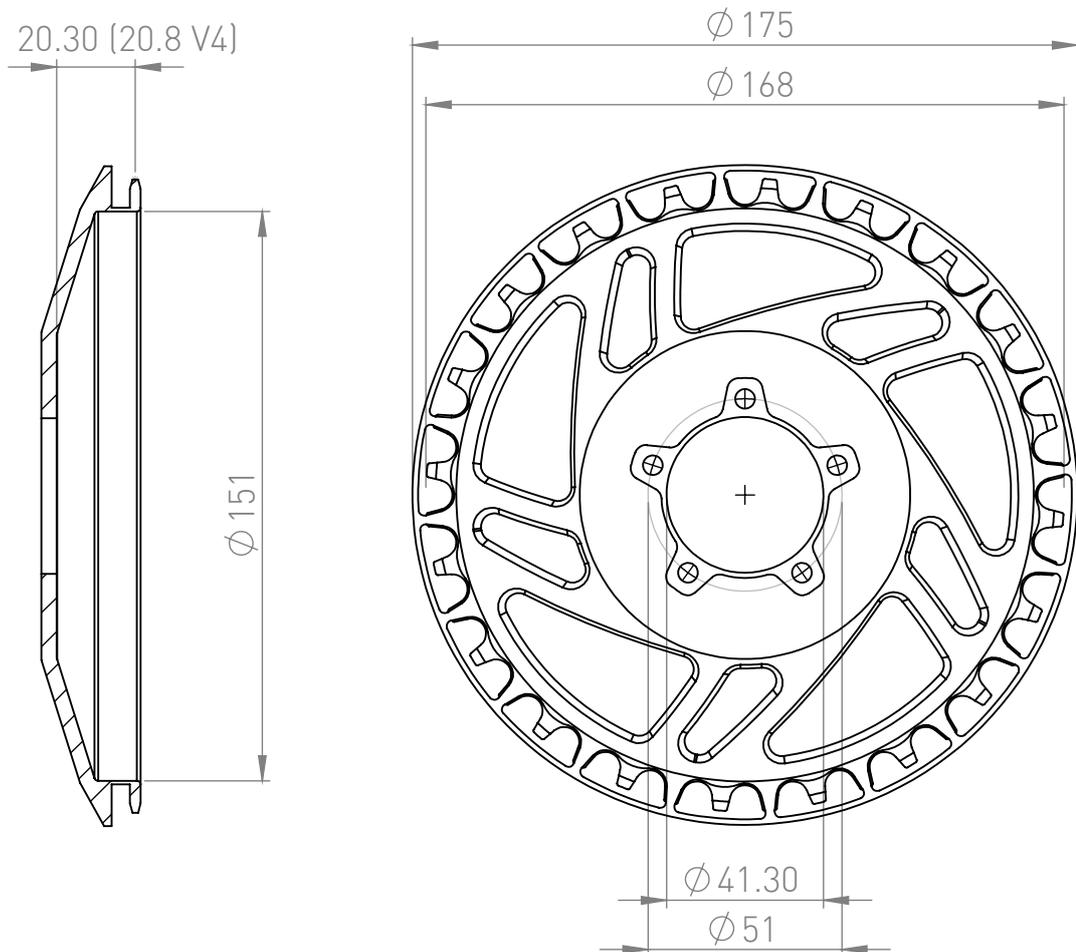
- 4mm hex key

INSTALL TIPS

- Clean and lubricate axle with a multi-purpose grease before install.
- Apply Loctite 243 to bolt thread.
- Always install a new chain when installing a Bling Ring
- If you are offsetting by more than 2mm use longer bolts.
- Make sure when you install your Bling Ring you have at least 1.5mm gap between wide tooth and chainstay to allow flex.
- Tighten to 6Nm
- Try to get the chainline to the centre of your cassette - see below for details.
- Clean and lubricate chain regularly.
- DO NOT use half links in the chain.
- Always grease axle before re-installing cranks.

DIMENISONS

Here are the basic dimensions of the Bling Ring. Note the image is just an illsutation to explain the drawing.



Note the package includes a 2mm Spacer so that you can space the Bling Ring out to the same offset as the original Bling Ring offset. We decided to offset the Bling Ring an extra 2mm so that users could try get that perfect chainline for the 73mm BB frames. If you are building a 73mm BB frame try installing without the spacer. You should have at least 1.5mm gap between the ring and chain-stay.

MULTISPACER - BLING RING 40T HD V4 ONLY

When we originally designed the 40T we introduced the Multispacer, to allow users to adjust their offsets. In the later versions we removed the Multispacer because we found a simple 2mm Bling Ring spacer was all that was needed.

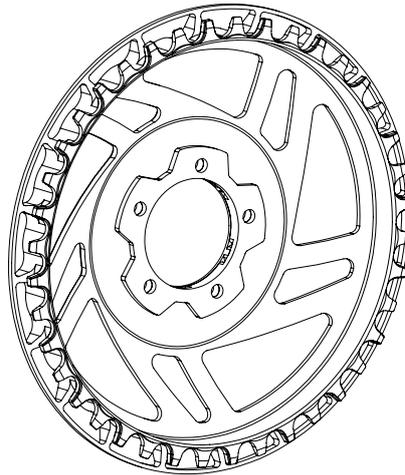
Bling Ring 40T HD V4 used the Multispacer which allows you to set 3 different offsets - 20.8mm, 18.3mm, 15.8mm.

NO SPACER
20.8mm offset



- Motor was spaced out to clear the frame
- needing to be offset further for chainline correction

KEYED IN MULTISPACER
18.3mm offset



- Same offset and standard Bling Ring
- To clear chainstay

FLIPPED SPACER
15.8mm offset

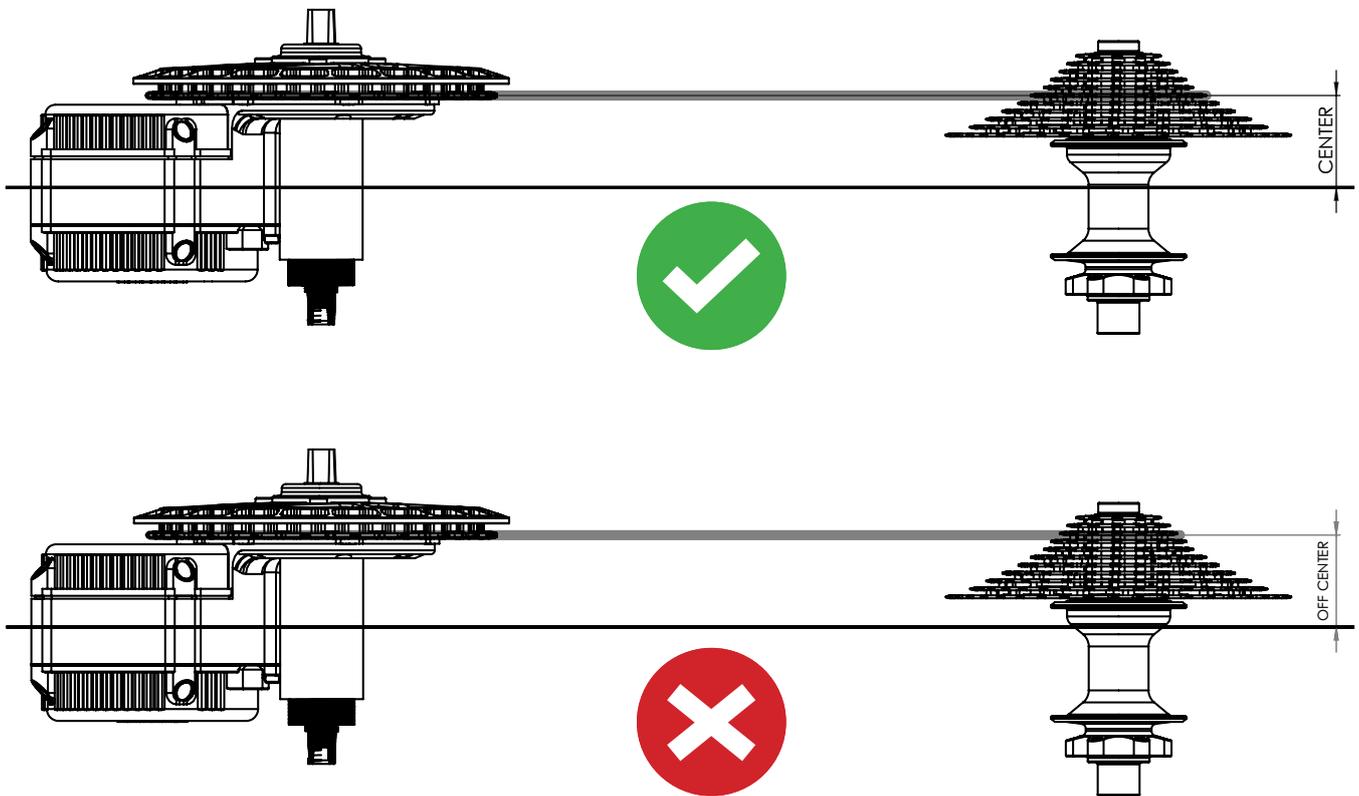


- To clear chainstay

CHAINLINE

When building your machine you want to replicate the chainline that was on the bike before you converted it. Ideally you want the chainline to line up with the centre of your cassette.

The Blingring is designed to give you the best possible chainline however sometimes you may need to adjust your offset using spacers to get that chainline perfectly suited to the unique geometry of your build.



CHAIN COMPATIBILITY

The Lekkie Bling Ring is compatible with most chains. If your chain is not sitting well on the chainring try using a Shimano chain compatible with the number of gears. EG HG-X11 11 Speed.

GEOMETRY

The 42T and 46T offset gives you the best possible chainline without interfering with the motor. However chainstay interference is a big issue in building your bike - the larger the sprocket the closer the chainstay gets so you may need to use a spacer to clear the chainstay.

WARRANTY

At Lekkie we don't accept anything but the best workmanship and quality. If a part has slipped through our QC system and made it to your hands let us know and we will put it right.

If one of our products fails we want to know so we can make our products better. If you destroy a lekkie product in extreme use tell us. We can learn from this and sell you something so suit your needs.

If you are in anyway unhappy with your Lekkie product get in touch so we can put it right.