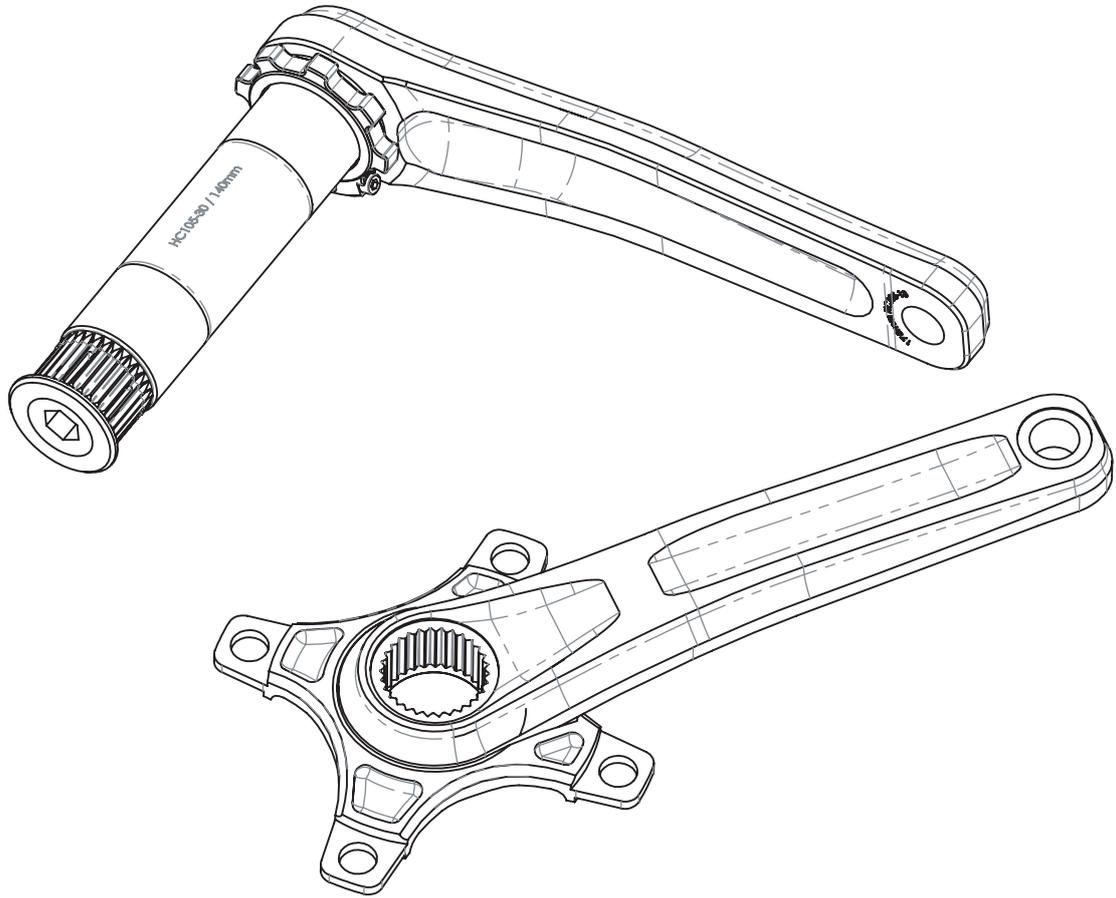
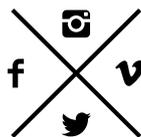
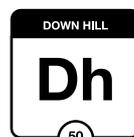
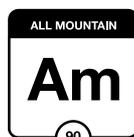


# hope



# CRANKS

## INSTALLATION GUIDE



## BOX CONTENTS:

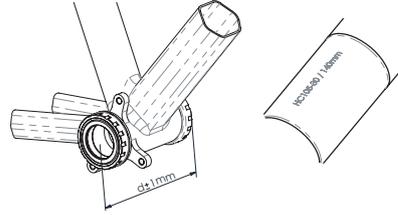
- Non drive side crankarm sub-assembly
- Drive side crankarm sub-assembly (fitted with spider or not)
- Chaining bolts, spider tab covers, pedal washers
- Toolset (assembly tool, extraction spanner, extraction spacer)

## TOOLS REQUIRED:

- Crankset specific toolset (provided)
- 19mm spanner and 19mm socket
- 10mm Allen key
- 2.5mm Allen key
- Torque wrench

## STEP 1: PRELIMINARY CHECKS

Firstly make sure you are using the right bottom bracket for the crankset - the bearing internal diameter must be 30mm diameter.  
The other critical dimension is the over bearing width (d in diagram) of the bottom bracket once fitted to the frame. This should measure the following:  
140mm shaft (used in 68/73mm frames) - 96.5mm +/-1mm  
155mm shaft (used in 83mm frames) - 111.5mm +/-1mm



## STEP 2: INSTALL SPIDER/SPIDERLESS CHAINRING AND CHAINRING

If not already installed, install the crankset spider or spiderless chainring as follows:

**001:** Make sure the drive side crankarm to spider interface is clean, free of dust and dirt. Apply a small amount of grease on the spline and thread.

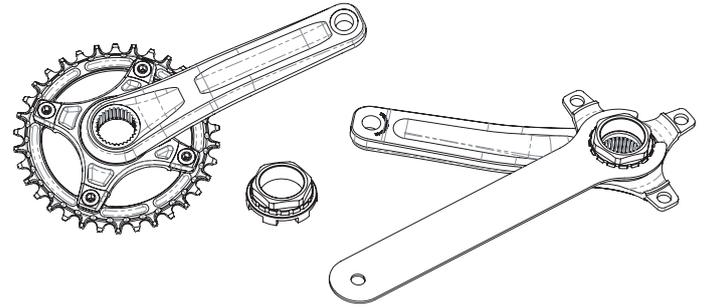
**002:** Install the spider or spiderless chainring onto the driving spline, making sure the orientation of the spider is correct. Fit the locking shim and engage the locking by hand on the first threads.

Do not use the locking tool at this point, the locking should thread on easily just using your fingers.

**003:** Finally using the specific locking tool (ref HC105-26T), tighten the locking. To do so you can either use a std BB spanner, 38mm socket or place the tool upside down in a vice.

Recommended tightening torque : 50-60 N.m

Following manufacturer instructions, if needed, at this point install the chainring onto the spider. Use the hardware provided and if you aren't using a bashring use the spider tab covers on the outside face of the spider.  
Chainring bolts recommended tightening torque : 10-12 N.m

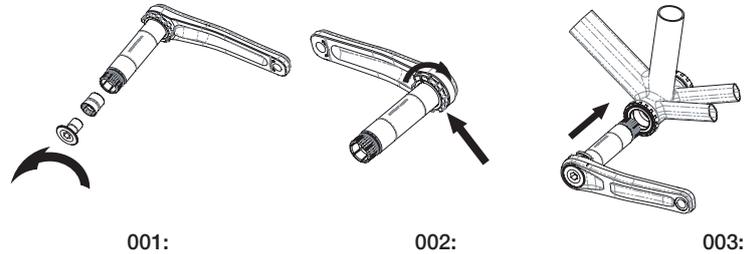


## STEP 3: INSTALL NON DRIVE SIDE SUB ASSEMBLY

**001:** On the free end of the shaft, unscrew the shaft end cap and shaft tapered plug. Apply grease on the bearing contact surface of the shaft and bearing inner race.

**002:** Make sure the bearing preload nut is fully screwed on so that there is no gap between the bearing preload ring and the non drive side crankarm.

**003:** Slide the sub assembly in to the bottom bracket from the non drive side of the bike. The shaft should slide in easily by hand. **DO NOT USE A HAMMER!**



## STEP 4: INSTALL DRIVE SIDE CRANKARM

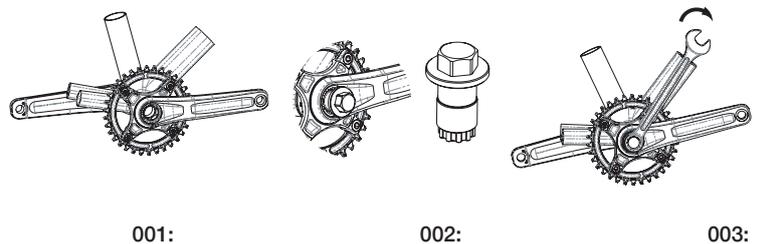
The next stage only presses the crankarm into its final position.

**001:** Apply grease to the shaft spline and slide the drive side arm on making sure it is positioned 180 degrees from non drive side arm!

**002:** Screw the crankset assembly tool in.

**003:** Using a 19mm spanner, tighten the crankset assembly tool until the drive side crankarm comes to a solid stop against the shaft angled shoulder.

**004:** Unscrew the crankset assembly tool.

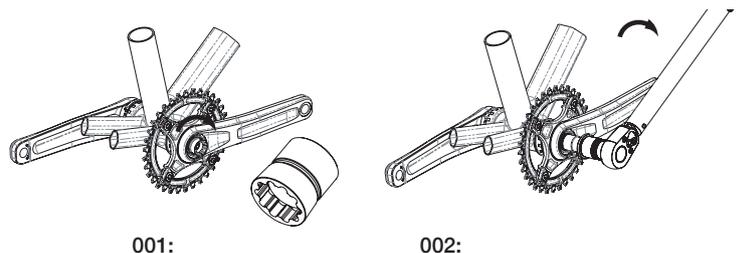


## STEP 5: INSTALL DRIVE SIDE CRANKARM TAPERED PLUG

**001:** If not already greased, apply some grease on the tapered plug thread and tapered face. Screw the plug in the shaft by hand first.

**002:** Fully tighten the tapered plug using the petal shaped end of the crankset assembly tool using a 19mm socket.

Recommended tightening torque : 70-75 N.m



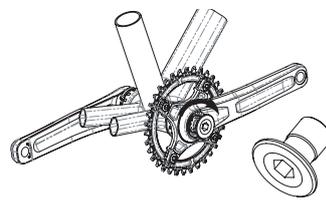
## STEP 6: INSTALL DRIVE SIDE SHAFT END CAP

**001:** If not already greased, apply some grease to the shaft end cap thread.

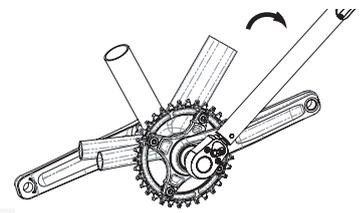
Screw the end cap in the tapered plug by hand first.

**002:** Fully tighten the end cap using a 10mm Allen key

Recommended tightening torque : 17-20 N.m



001:



002:

## STEP 7: PRELOAD THE BEARINGS

**IMPORTANT:** do not use the extraction spanner to tighten the bearing preload nut at this point. This would overload the bearings and lead to premature wear.

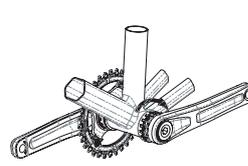
**001:** Unscrew the preload screw by hand until it comes into contact with the bottom bracket bearing shield.

**002:** There should be no visible gap between the preload nut and the bearing shield.

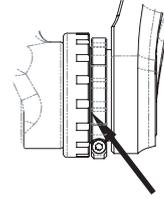
**003:** Using a 2.5mm Allen key, tighten the preload nut pinch bolt.

Recommended tightening torque : 0.6-0.8 N.m

**004:** Check that there is no side play in the crankset assembly and that the bottom bracket can spin freely.

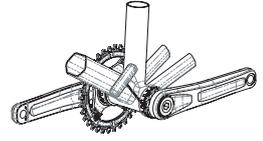


001:



NO GAP

002:

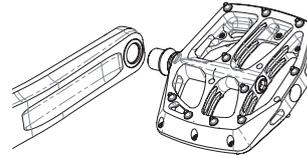


003:

## STEP 8: INSTALL THE PEDALS

Install the pedals making sure you use the pedal washers provided to avoid damaging your crankarm when tightening the pedals.

Recommended tightening torque : 35 N.m



## TEST RIDE

Go for a test ride!

## DISASSEMBLY PROCEDURE:

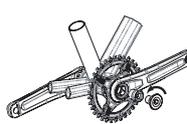
If you wish to disassemble the crankarm please follow the following steps

**001:** On the drive side fully unscrew the shaft end cap using a 10mm Allen key and the tapered plug using the crankset assembly tool and 19mm socket.

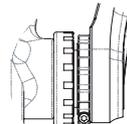
**002:** On the non drive side unscrew the bearing preload nut pinch bolt using a 2.5mm Allen key and then screw out the bearing preload nut to maximise the gap between the bearing shield and preload nut.

**003:** If possible, slide the crankset extraction spacer into the gap. Depending on the bottom bracket configuration the spacer may or may not fit in. If it does not fit move to 004

**004:** Using the crankset extraction spanner, screw in the bearing preload nut. This will pull out the non drive side arm sub assembly (arm and shaft) and extract the drive side arm.



001:



002:

MAXIMISE GAP



003:



## WARRANTY:

All Hope Technology components are covered for two years from original date of purchase against manufacturer defects in material and workmanship.

Proof of purchase is required. Products must be returned to the original place of purchase or to Hope Technology to process any warranty claim. Please print and fill the "goods returned form" found on the tech support section of our website should you wish to send a product back.

This warranty does not cover any damage caused through normal wear, mis-use or failing to comply by the recommendations given. This warranty does not affect your statutory rights.