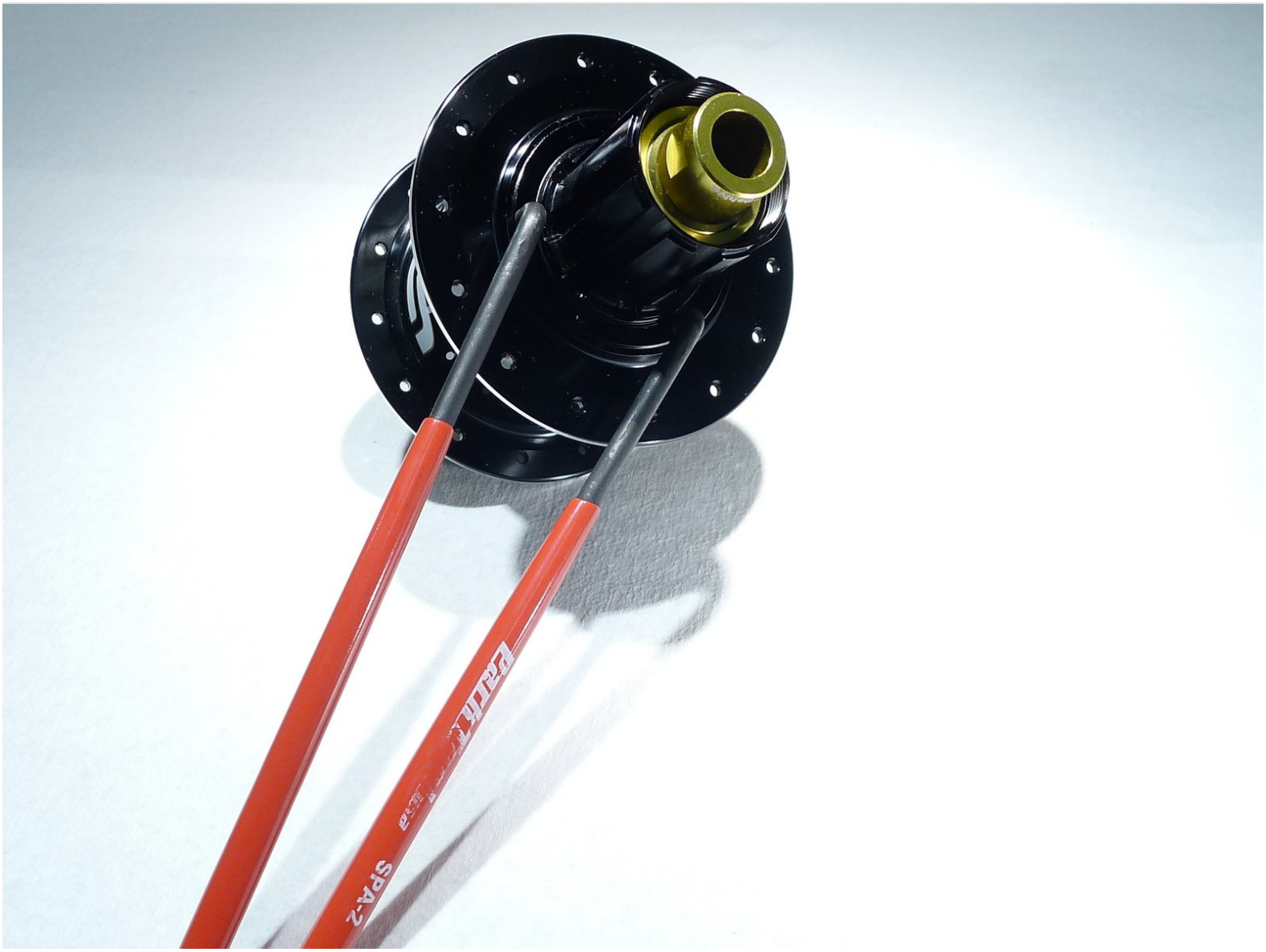
Gen 1 axle - TRS+ rear hub - 12x142 and 12x135 axle install and removal

How to remove and install the 1st generation 2pc axle used in 12x142 and 12x135 TRS+ hubs. This axle has since been replaced by the generation 2 axle which is backwards compatible for all TRS+ rear hubs

Written By: The Hive - Jeremy



INTRODUCTION

[video: http://www.youtube.com/watch?v=oHadfkhT5zc]

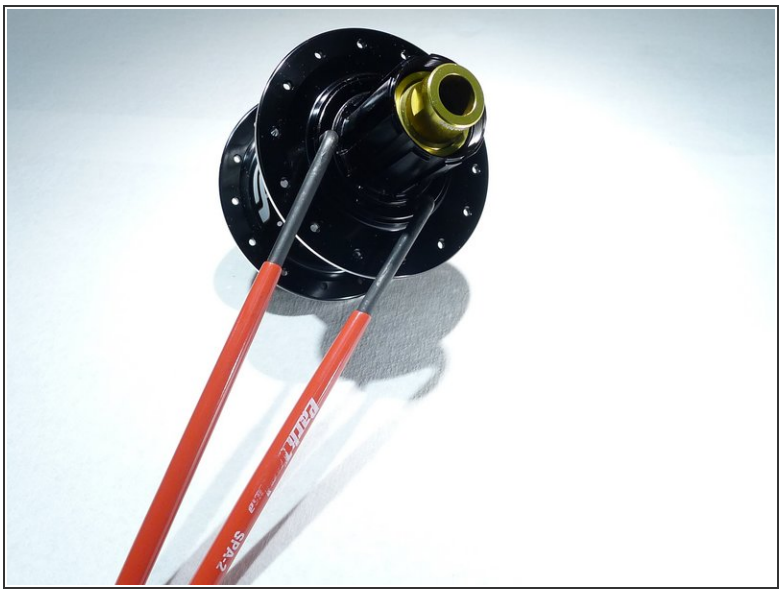
TOOLS:

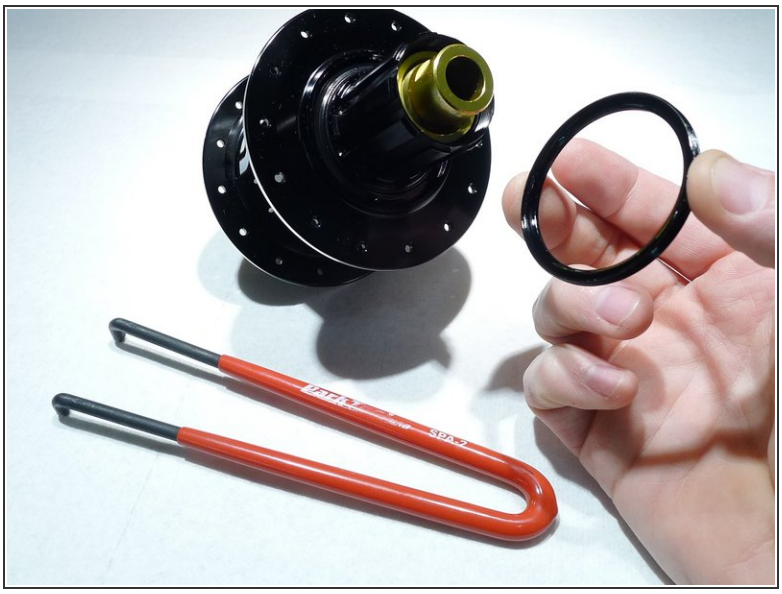
- 1.5mm hex wrench (1)
- 18mm cone wrench (1)
- 19mm cone wrench (1)
- Pin spanner (1)

PARTS:

- grease (1)
- Dumond Tech freehub oil (1)
- high strength threadlocker (1)

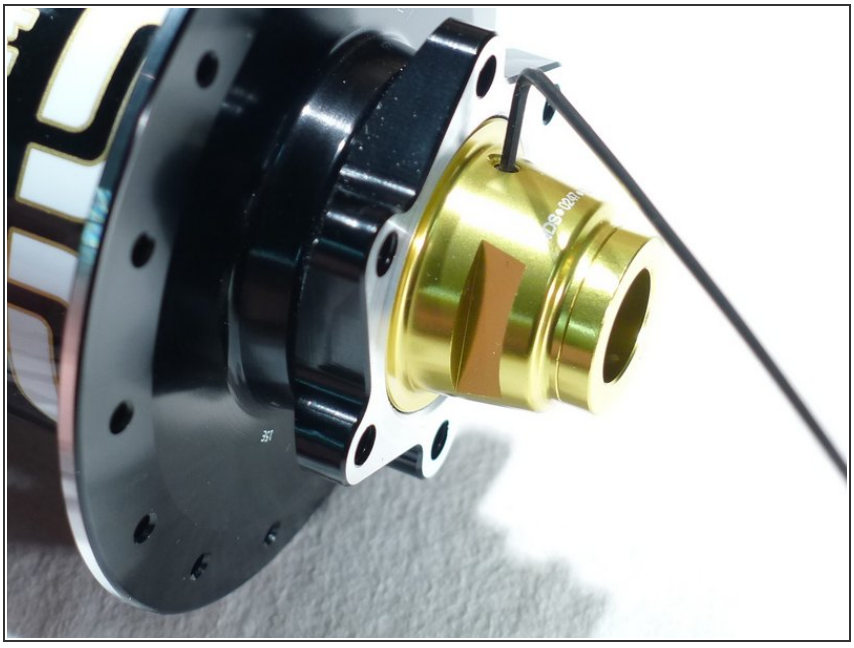
Step 1 — Gen 1 axle - TRS+ rear hub - 12x142 and 12x135 axle install and removal





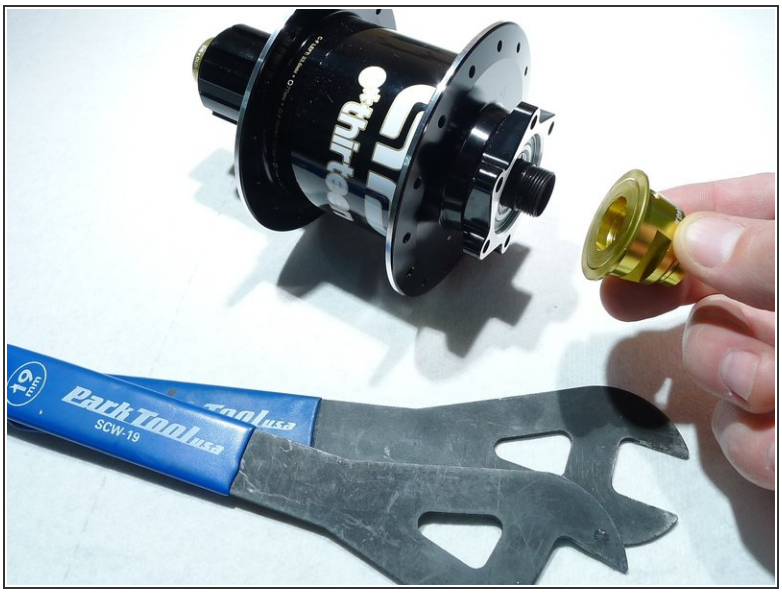
- Remove freehub lockring by turning counter clockwise with pin spanner

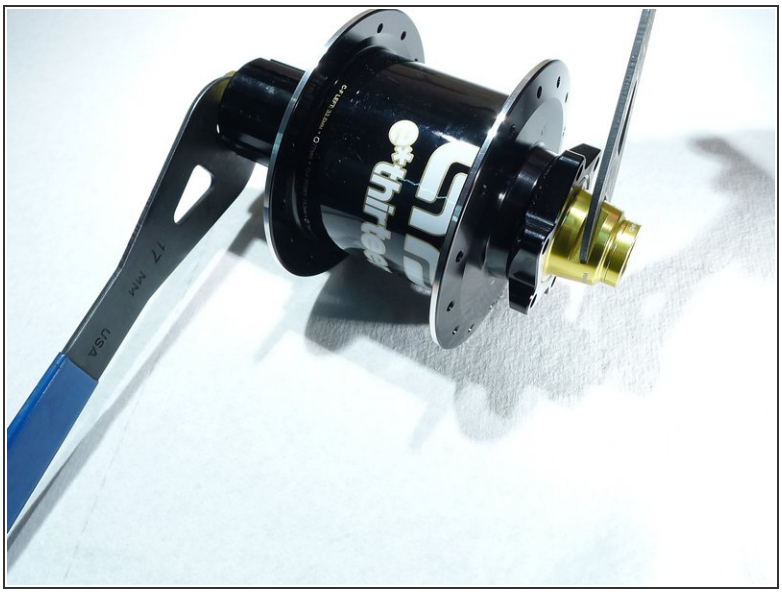
Step 2



- Loosen both 1.5mm grub screws on non-drive side endcap

Step 3

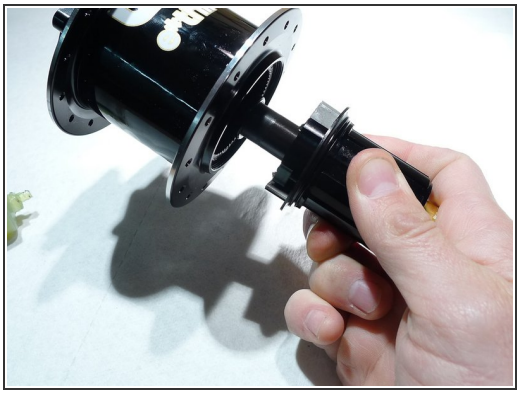


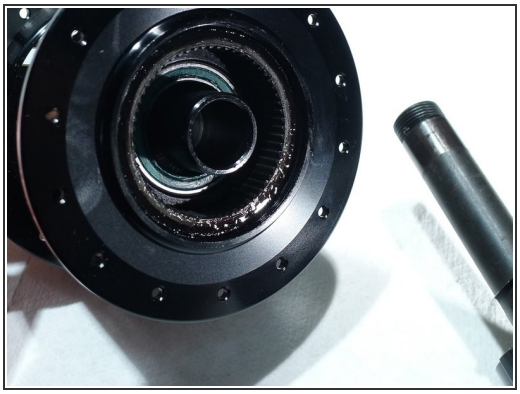


- Loosen hub by turning non-drive endcap clockwise

  ⓘ Use cone wrenches as needed, but often this can be done by hand

Step 4





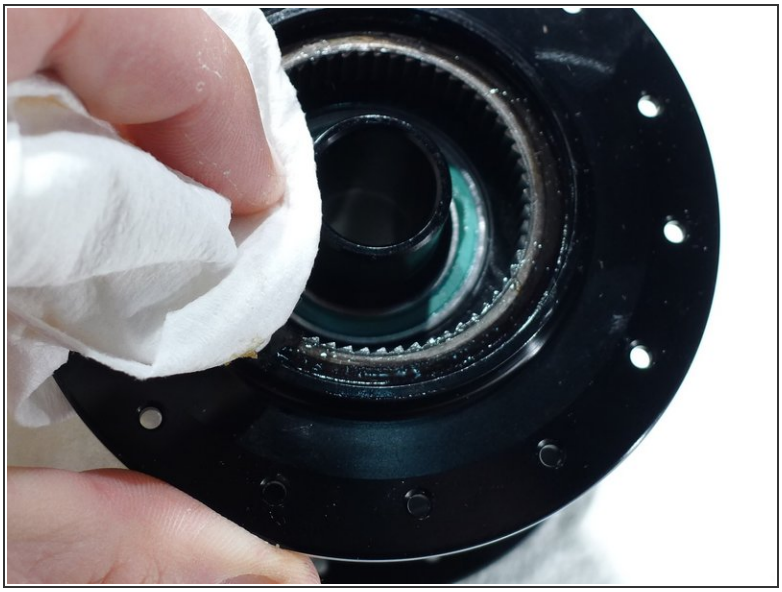
- Slide axle and freehub assembly out of hub shell

  ⚠ Be careful not to lose the pawls as they may fall while removing the freehub body

Step 5

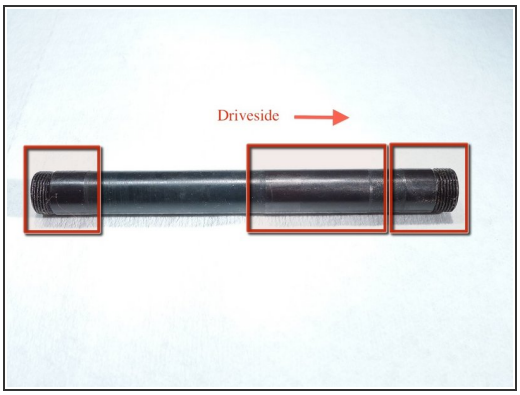
- Remove the axle reducer

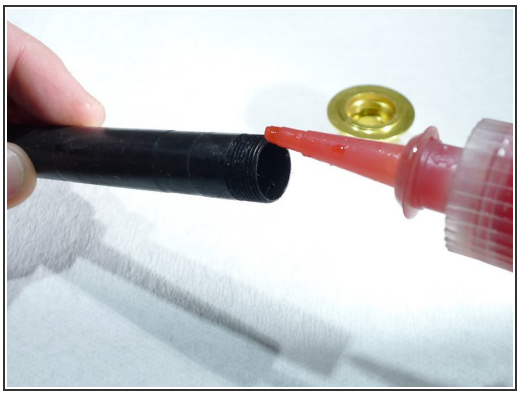
Step 6

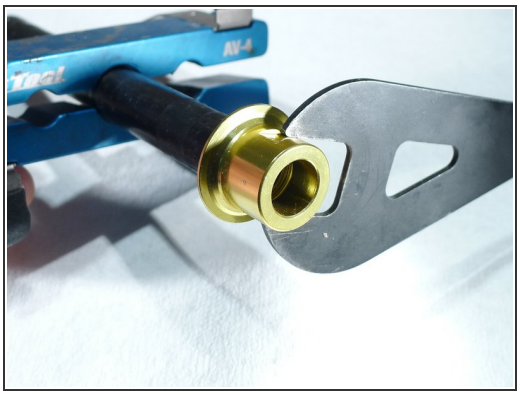


- At this point the hub is most of the way apart, you can service bearings, replace worn parts or just clean things up
- Next, let's install the axle

Step 7





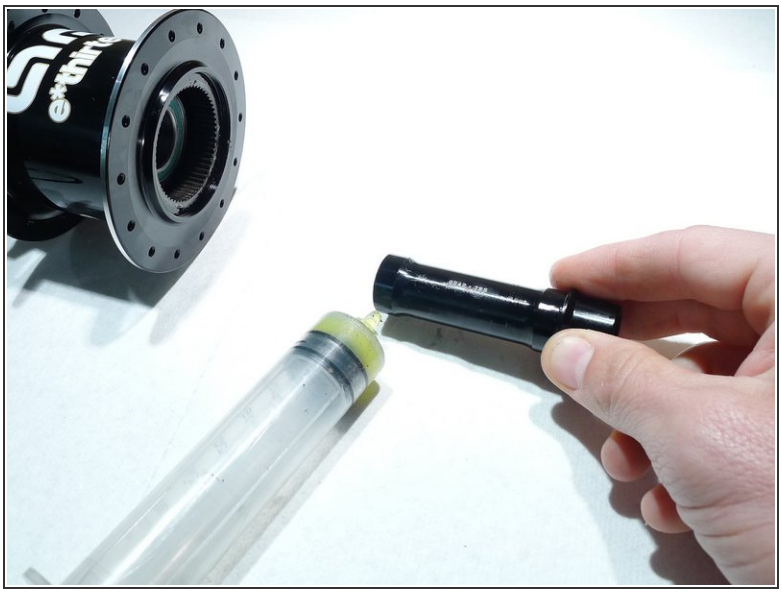


- Install drive side endcap onto steel axle
  - The drive side of the axle is the side with the bearing surface for the freehub body
  - Put two drops of high strength thread locker on endcap threads
  - Torque to 6nm using an axle vise to hold the axle

Step 8

- Lightly grease steel axle
- Slide freehub body onto axle

Step 9



- To install the axle, start by lightly greasing the reducer
- install it into the hub body from the drive side
  - Be sure it is fully seated in the hub bearings

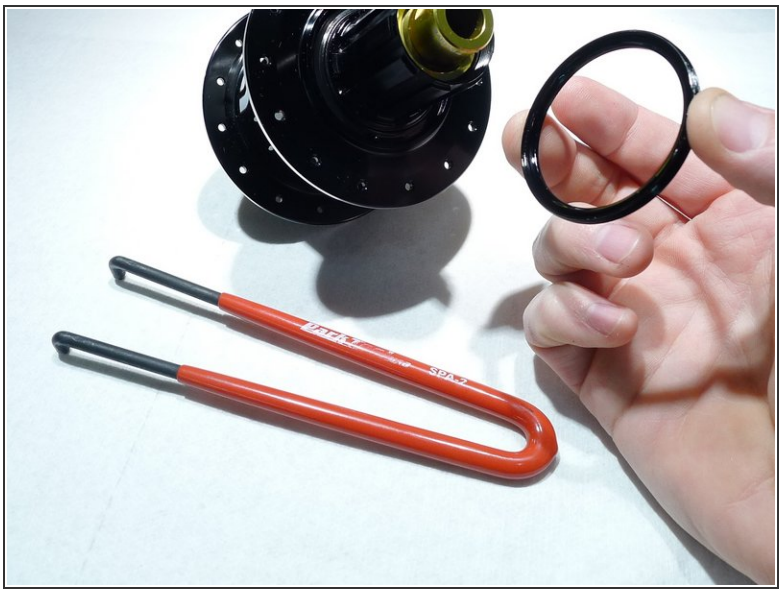
Step 10

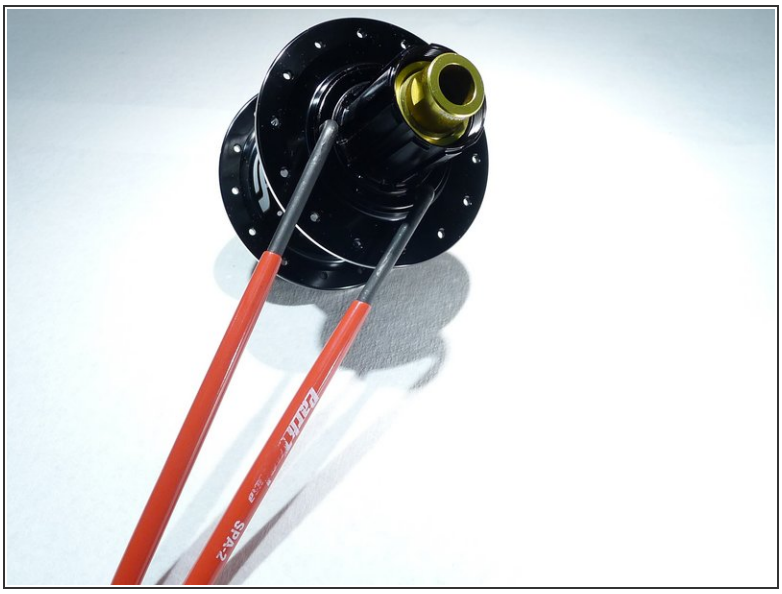
- Slide the axle and freehub assembly into the hub shell
- Turn freehub counterclockwise so that the pawls compress the springs and slide into the hub

  ⓘ You may need to use a tool to lightly depress the pawls as you turn the hub

  - Need to know how to lube the freehub? Go here

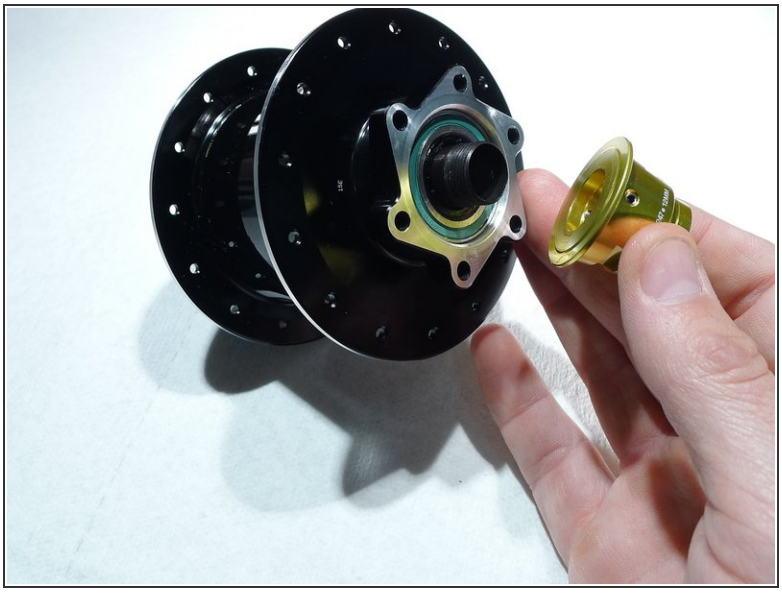
Step 11





- install the freehub seal lockring

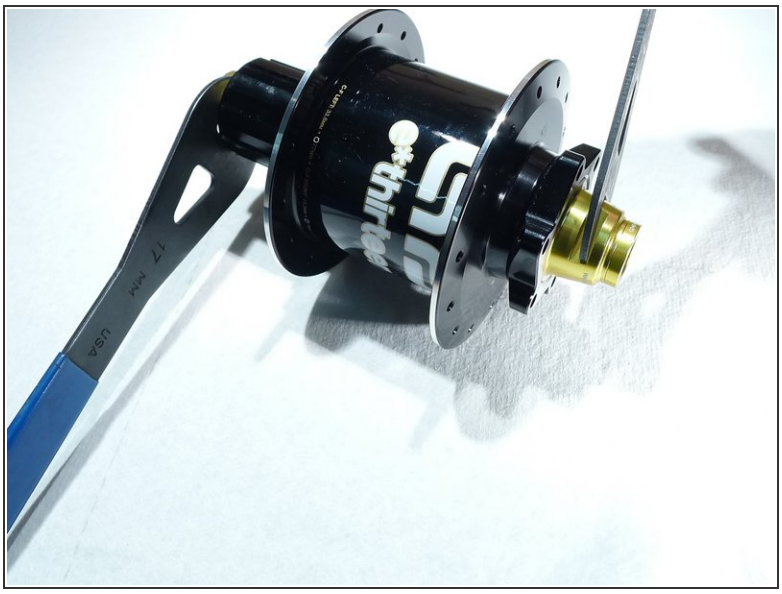
Step 12

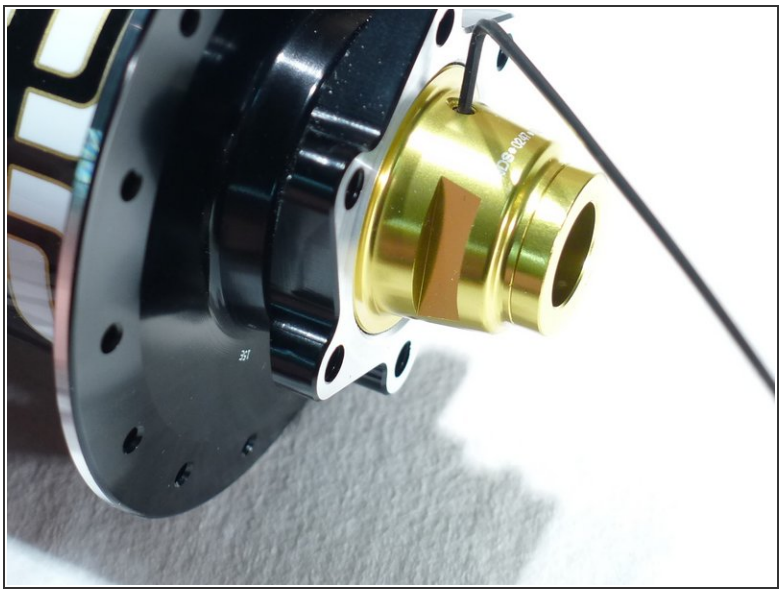


- Lightly grease non-drive endcap threads
- Install non-drive endcap

ⓘ Note that the endcap has a left hand thread so turn counter clockwise to tighten

Step 13





- Adjust the hub bearings, this can often be done by hand
- Tighten the 1.5mm screws to 3nm

Thanks for reading, now get out there and ride!