



# Gen 1 - TRS+ rear hub - 135QR and 135x10 axle install and removal

Generation 1 Axle install, removal and adjustment for TRS+ hubs using the QR one piece axle. This axle has been replaced by the generation 2 axle which is backward compatible for all TRS+ hubs.

Written By: The Hive - Jeremy





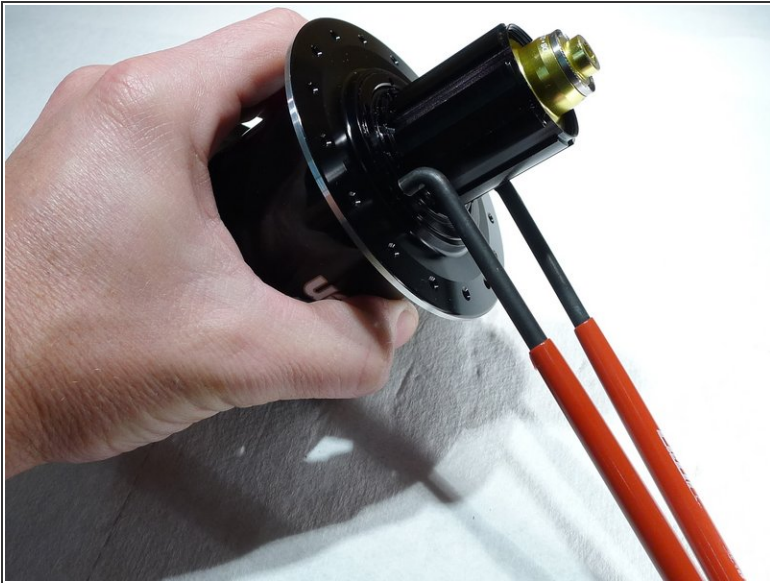
## TOOLS:

- [17mm cone wrench](#) (1)
- [19mm cone wrench](#) (1)
- [22mm cone wrench](#) (1)
- [5mm hex bit for torque wrench](#) (1)
- [5mm hex wrench](#) (1)
- [axle vise](#) (1)
- [Pin spanner](#) (1)
- [Torque wrench](#) (1)
- [Vise](#) (1)



## PARTS:

- [grease](#) (1)
- [high strength threadlocker](#) (1)
- [medium strength threadlocker](#) (1)

**Step 1 — Gen 1 - TRS+ rear hub - 135QR and 135x10 axle install and removal**

- Remove freehub lockring by turning counter clockwise with pin spanner

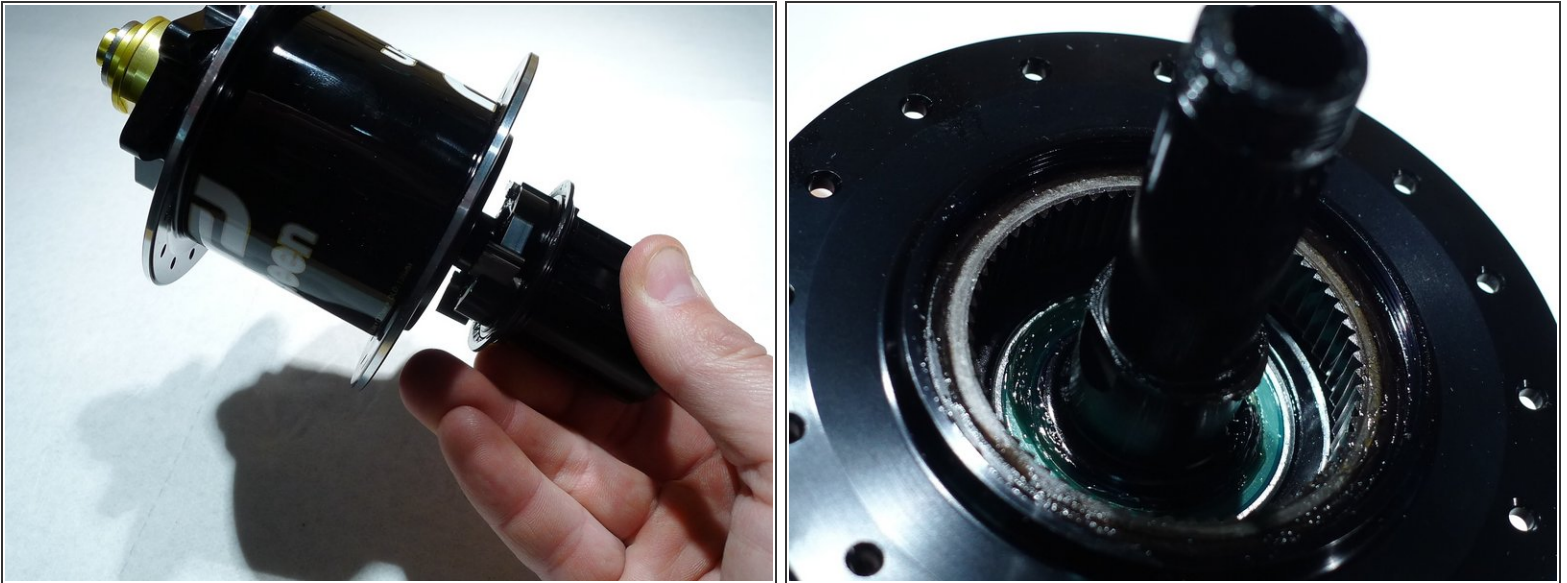
## Step 2



- Using two 5mm hex wrenches, loosen the endcaps by turning them counter clockwise from each other
- For 135x10 endcaps, use a 17mm cone wrench for the driveside endcap and a 19mm conewrench for the non-drive endcap
- The driveside endcap will normally loosen first

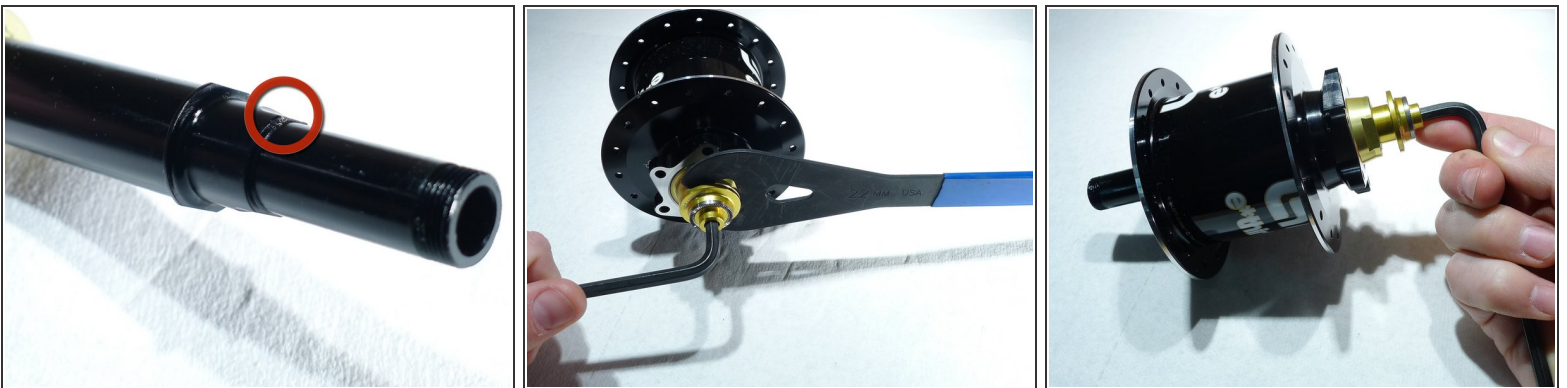


### Step 3



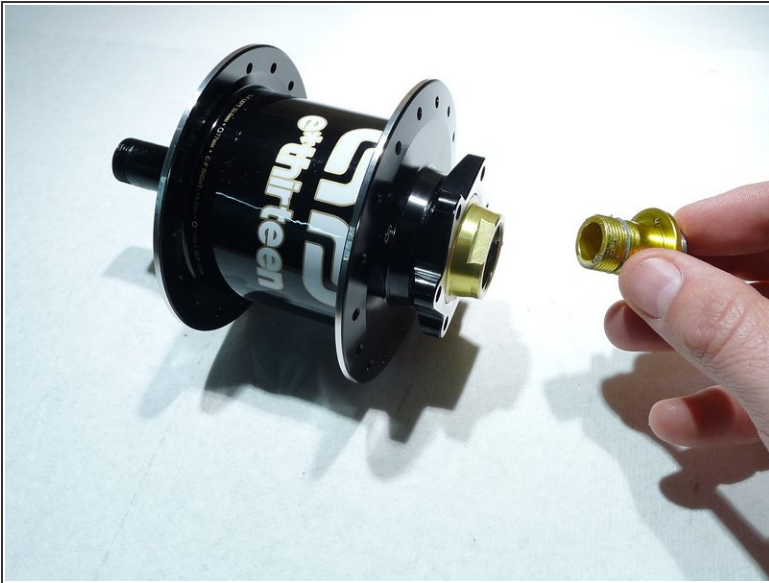
- Slide freehub assembly off of the axle
- Be careful not to lose the pawls as they may fall while removing the freehub body

### Step 4



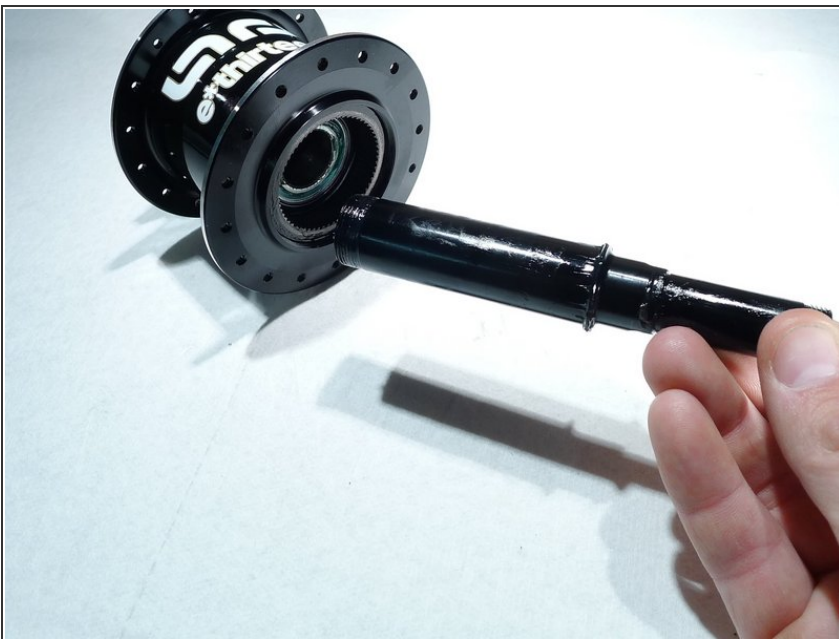
- Use an axle vise or insert the flats on the drive side of the axle into a smooth jaw vise
- While holding the axle in the vise, loosen the non-drive endcap by turning it counter-clockwise
- The preload adjuster may need to be held with a cone wrench while loosening the non-drive endcap

## Step 5



- Loosen the preload ring by turning it clockwise

## Step 6



- Slide the axle out of the hub shell by pushing from the non-drive side to the drive side
- 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

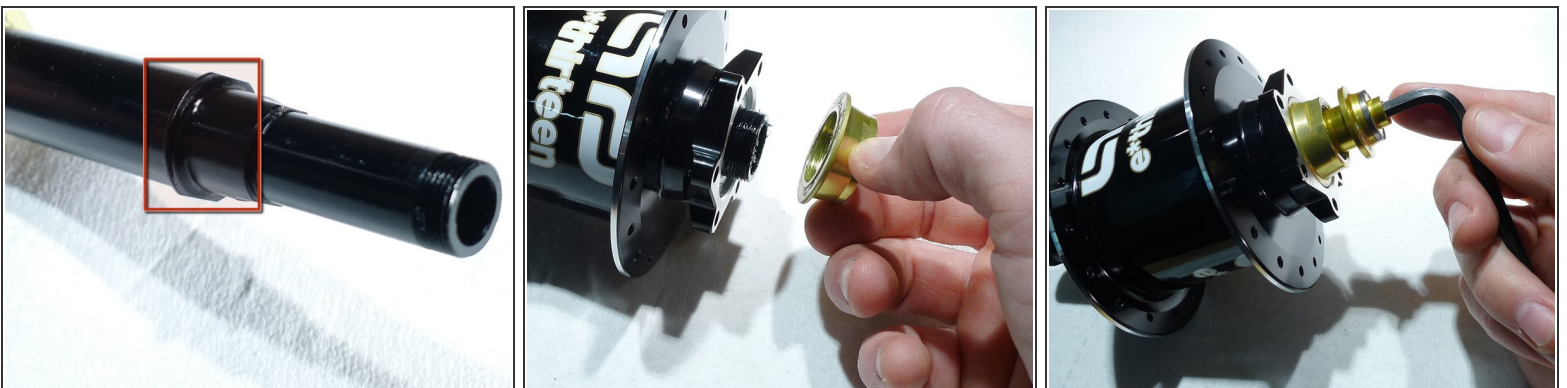


## Step 7



- Remember the drive side of the axle is the side with the bearing surface for the freehub body
- Start by lightly greasing the axle and sliding it back into the hub shell

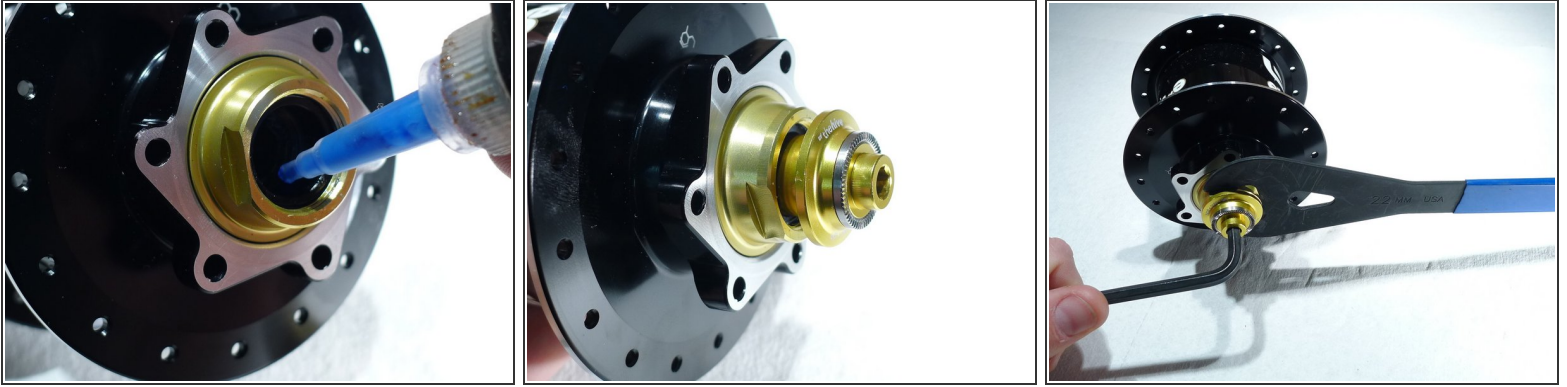
## Step 8



- Use an axle vise or insert the flats on the drive side of the axle into a smooth jaw vise
- While holding the axle in the vise, install the preload adjustment ring by turning it counter-clockwise
- Tighten the preload adjuster by hand
- Install the non-drive endcap by turning it counter clockwise



## Step 9



- Put two drops of medium strength threadlocker on the inner axle threads
- Begin threading in the non-drive endcap by turning it clockwise
- Lightly grease the face where the endcap and preload ring will meet
- Adjust the bearing preload using the preload ring
  - Tighten the preload ring so the bearings no longer have play in them, but such that they also do not have excess drag
- When you are happy with the adjustment, hold the preload ring with a cone wrench and tighten the non-drive endcap

## Step 10



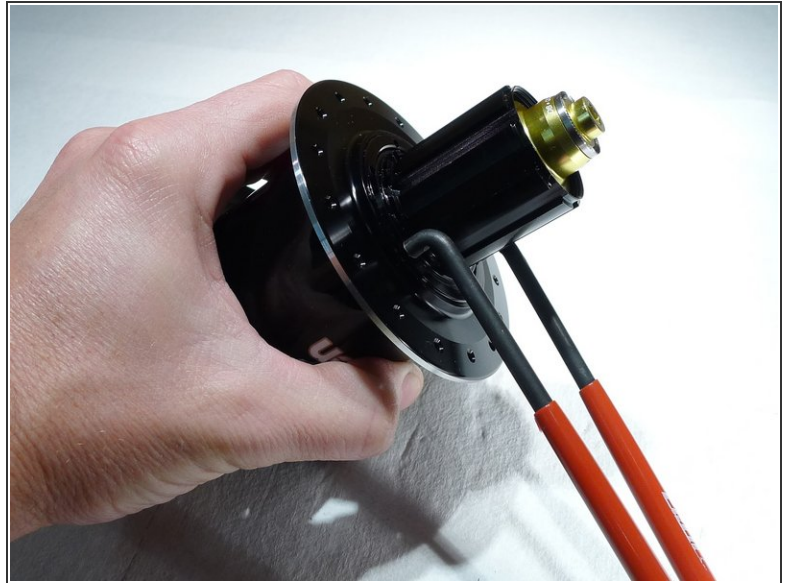
- Remove the axle from the vise
- Next, install the freehub assembly
- Learn how to lube the freehub properly using the [freehub service instructions](#)
- Slide the freehub body over the axle
- Turn freehub counterclockwise so that the pawls compress the springs and slide into the hub
- A tool may be used to lightly compress the pawls

## Step 11



- Put one drop of medium strength threadlocker on threads inside the driveside endcap
- Install the endcap by turning clockwise
- Tighten to 6nm

## Step 12



- Reinstall the freehub dust seal by turning clockwise
- tighten to snug

Thanks for reading, now get out there and ride!