

#### 1. TOOLS

#### All Versions:

- Chain Whip P9522
- HG Sprocket remover
- Plastic mallet
- Degreaser (eg.lsopropanol, Brakecleaner)
- Fluent grease
  For QR-Version:
- 5mm Allen Key
- 10 mm Allen Key For TA 142x12 / X12 Version:
- 17 mm Cone Wrench
- 3mm Allen Key For TA 135x 10mm Version:
- 17mm Cone Wrench
- 10mm Allen Key



#### 2. DEMONTAGE

- Note the order of the spacers used.
- Disassemble sprocket / spider / pulley and brake disc.





Attention: Observe spacer sequence! Otherwise noise and malfunctions may occur.

Remove left cap





 Pull the right-hand end cap with axle, spacer sleeve and freewheel body out of the hub - if necessary, knock carefully with a plastic mallet.



 Pull the spacer sleeve and freewheel body off the axle - if necessary, tap lightly with a plastic mallet.



 Clean and degrease the toothing in the hub body and the axle. Use a soft cloth and a gentle degreaser. (Isopropanol)



Remove the retaining ring



#### Make sure not to bend or damage the retaining ring

- Handle circlip carefully.
- Hold pawls and springs securely during disassembly and assembly.
- Remove circlip.





- Remove pawls and springs from the freewheel body.
- Thoroughly clean all components and the toothed ring in the hub housing.
- Check all components for wear.
- Replace worn components. Have defective bearings replaced in a specialist bicycle workshop.



 Insert pawls and springs into the freewheel body in the correct position.



Fit the circlip in the correct position.
 The hook is in the bore of the freewheel body.



- Check pawls for correct function.
- Do they return spontaneously to their original position? If this is not the case, replace the whole freewheel body including pawls.





- Tighten the right end cap and axle against each other with tightening torque 5 N·m (44 lbf-in).
- Place the freewheel body and spacer sleeve on the greased axle.



 Carefully grease all components, the gear ring in the hub housing, the seals and the surface of the bearings with fluid grease especially between pawls and their sliding surfaces on the freewheel body.



- Carefully insert the axle into the hub - Slowly turn the freewheel body counterclockwise. Slightly press in the pawls with a screwdriver if necessary.
- The pawls snap into the toothed ring.



- Fit the left end cap.
- Check freewheel for correct function (freewheel and frictional connection).





 Mount sprocket / spider / pulley and brake disc.



 Tighten the lock ring with an HG tool 40Nm 30ft-lb

