

INDUSTRY NINE

LEGACY HUB SERVICE GUIDE





- 2 X 5MM ALLEN WRENCHES
- 1 X 1.5MM ALLEN
- 1 X .050" ALLEN WRENCH
- DEAD BLOW MALLET
- PVC OR METAL TUBE (FOR SUPPORTING FREEHUB BODY)

- BLUE LOCTITE
- DENTAL PICK
- BEARING PRESS BUSHINGS
- THREADED BEARING PRESS ROD/THREADED ROD
- MARINE GREASE





1 Remove cassette and rotor.

2 If you have a thru axle, simply pull off the drive side endcap.

If you have quick release then you will need two 5mm allen wrenches and use them to break the drive side endcap free.

If the disc side breaks free first, you'll need to re-apply red loctite to that endcap and retry once it has had time to set up.

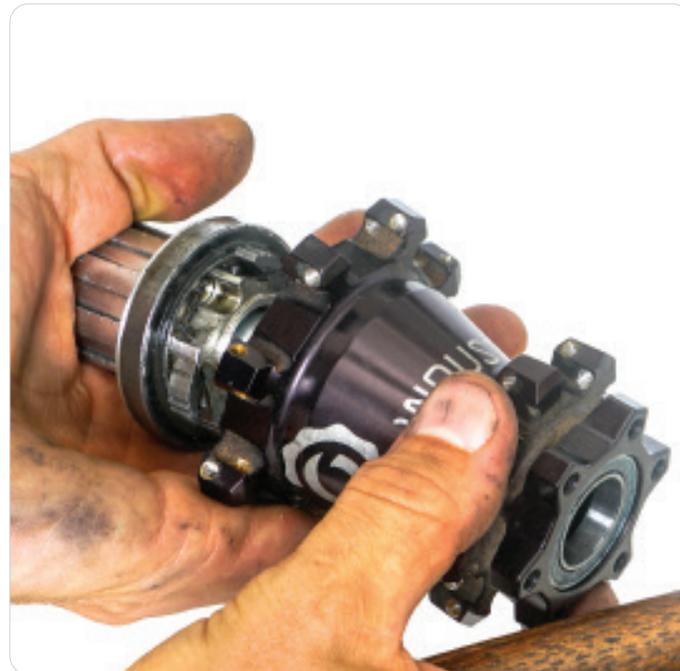
Once the drive side endcap is removed, slide the endcap spacer off the axle.



3 The freehub body is pressed into the hubshell so it won't just pop out. To remove it you can use the axle itself (it has a machined shoulder) to help push out the freehub.

To remove the freehub, first use a 1.5mm allen wrench to loosen the grub screw on the adjustable dust cover.

Unthread the dust cover completely.



4 Using a soft mallet, tap on the disc side of the axle to push the freehub assembly out of the hubshell.

You may want to use a section of pvc pipe to rest the hubshell on when doing this to prevent anything from possibly falling on the ground.

Use a rag and or q-tip to remove any excess grease.



5 Wipe any excess grease from around the pawls. Use a .050" allen to loosen the six allen bolts that hold the pawl springs in place. Wipe down the pawls and pawl pockets.

There is a circlip that helps retain the 61808 bearing to the freehub. Use a pick or razor blade to remove it. Tap the freehub on a flat surface to help slide the bearing off the shell.



6 To remove the two inner bearings, use a punch or dowel to catch the inner races.

The outermost bearing is pretty easy to access, but the inner one may be a little tricky as there isn't a ton of clearance.

Using something that's between 17.2 and 17.5mm in diameter will work.

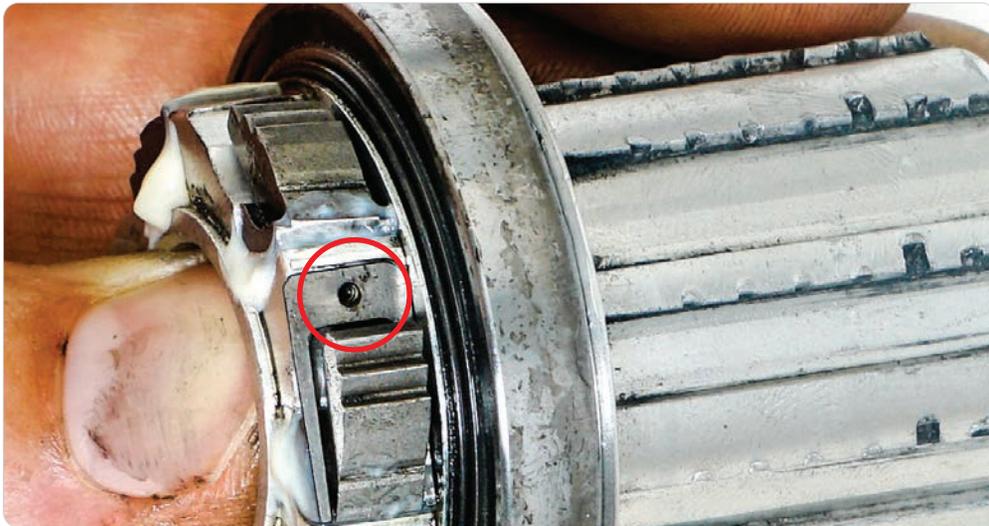
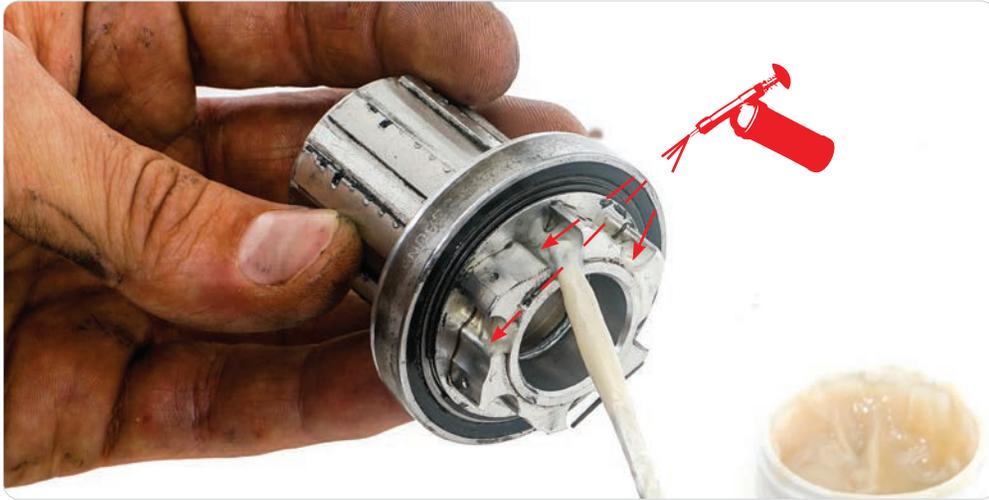
There will be a spacer in between the two bearings that spaces them out by the outer diameter.



7 Use a punch or dowel to remove the disc side 61804 bearing.



8 Use a bushing or section of pvc to press the 61808 bearing back on. Reinstall the bearing retainer circlip.



9 Put a small dab of fresh grease in all six of the pawl pockets before placing each pawl back in.

10 The pawl springs have an asymmetrical design. Be sure to place them with the radius facing

toward the big bearing. The flat side will be facing towards the disc side. Then use a small bit of blue loctite on the pawl spring bolts and lightly torque them down. The pawl springs may want to

shift as you do this, so hold them in place with your finger as you torque the bolts down. They are very tiny and don't need too much torque. Applying too much torque will round the bolts out.



11 Use a bushing to press the first bearing all the way into the freehub. Apply a light film of grease to the bearing spacer and push it in. Install the second bearing.



12 Apply a layer of grease on the drive ring. gently place the freehub assembly into the hubshell to get it straight before pushing any further. ratchet the mechanism to ensure it's lined up and not crooked in the bore.



If you press it in while it's crooked, you may damage the pawl springs. Try to free wheel the freehub as you are pressing it in as that will reduce the likelihood of damaging the springs. If it feels rough, you may need to push the freehub out and start again.



13 Press the disc side bearing in.



14 Apply grease to inner bearing races as well as the bearing seats on the axle. Apply grease to the threads for the adjustable dustcover. Reapply blue loctite to the 1.5mm grub screw. Install the axle and install drive side endcap. Install adjustable dustcover until there is a small amount of lateral play.

Place wheel back in frame and tighten your axle like you would normally before a ride, then take out the rest of the play in the dustcover. No need to tighten more than finger tight. If you overtighten this, it can overload the bearings and cause premature wear. Tighten down 1.5mm grub screw to lock the dustcover on.