

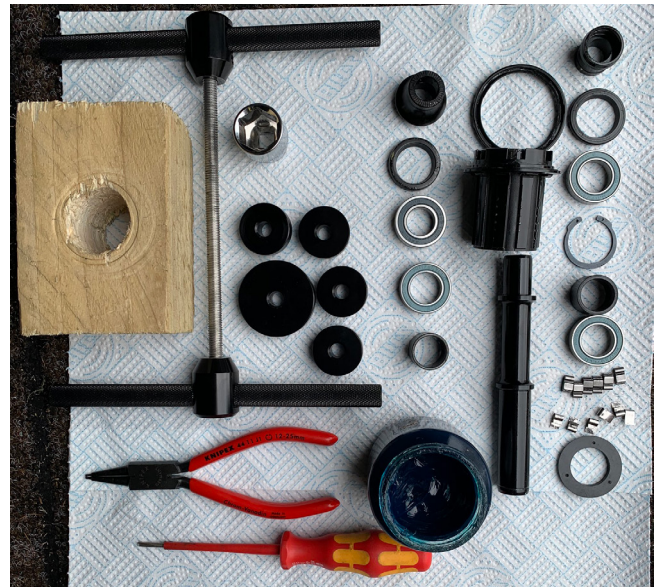
NUKEPROOF NEUTRON / HORIZON V2 HUB REBUILD PROCEDURE

For this guide we have used a hub with a Shimano HG freehub. Hub's with SRAM XD and Shimano Microspline freehubs follow the same procedure but have an extra bearing in the freehub. The procedure is the same for both our Horizon and Neutron V2 hubs.

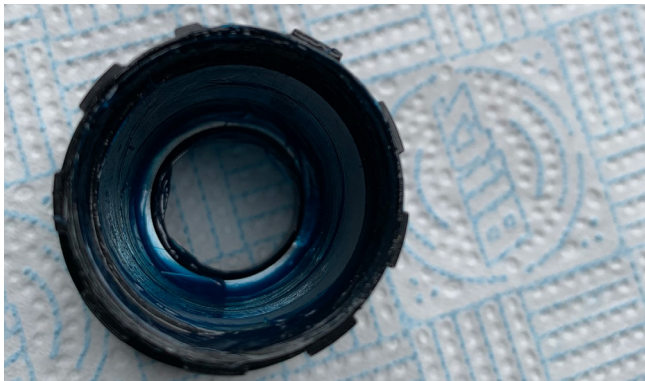
TOOLS REQUIRED

- Small Flat Head Screwdriver
- Internal Circlip Pliers - 1.3mm tips
- Bearing Press
- Grease
- If your bearing press isn't specially for hubs, you will also need something to allow the axle to float. You need to press against the hub shell rather than the axle. A block of wood with 32mm wide hole bored will work perfectly for this.

Note: If you are using our Nukeproof Enduro Bearings. The BLUE seal should always be facing outwards where it will be most likely be exposed to the weather as this is the full contact seal.



FREEHUB REBUILD



1. Check the internal of the freehub is smooth and free from burrs then apply a layer of grease inside – this is to aid the bearing installation.



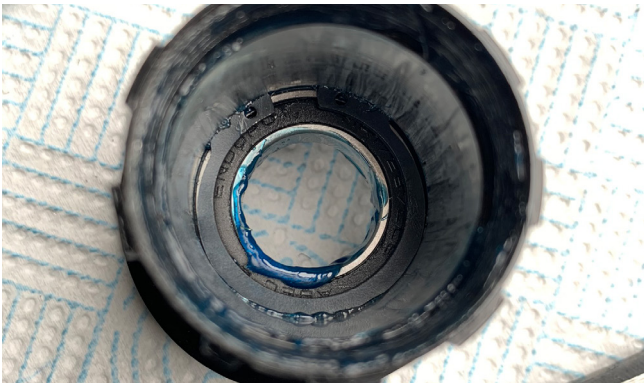
2. Take your first bearing and set it on the freehub ready to press in place.



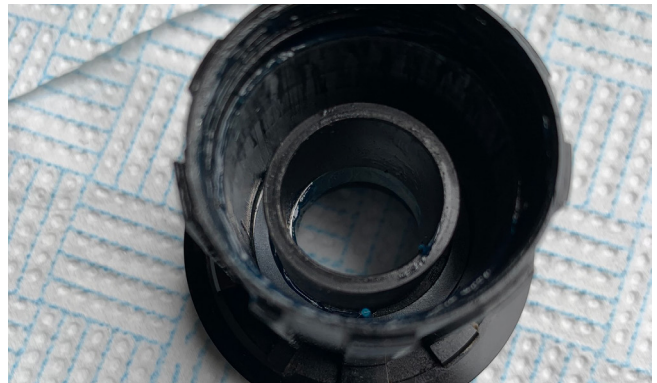
3. Get your press and correct drift, press the bearing into the freehub. Ensure it spins smoothly.



4. Get the circlip and install in front of the bearing.



5. Ensure it is fully seated by pushing it against the bearing.



6. Get the spacer and set into the freehub. This should sit central on the bearing you pressed in.



7. Take the next bearing and set it on the freehub ready to press.

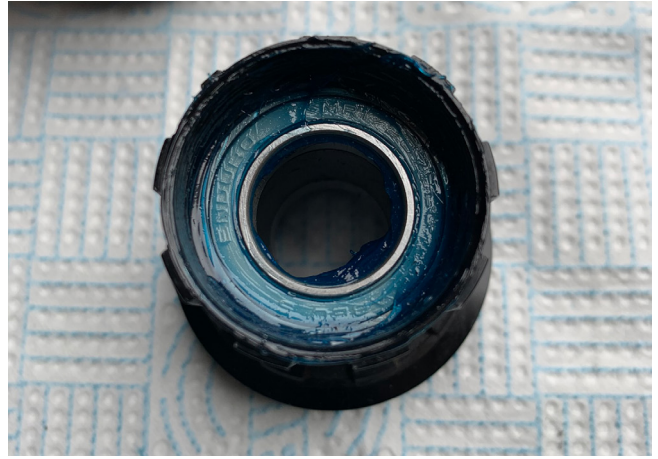


8. Get your press and press the bearing into place. Ensure it spins smoothly.

NOTE: If you are using a SRAM XD or Shimano Microspline freehub, re-follow steps 7 and 8 to also press in the final bearing.



9. With the bearings now in place, take your axle and push it through the freehub to ensure the spacer is now fully central and the axle goes through correctly.



10. Apply grease on the outside of the bearing.



11. Reinstall the driveside freehub seal.



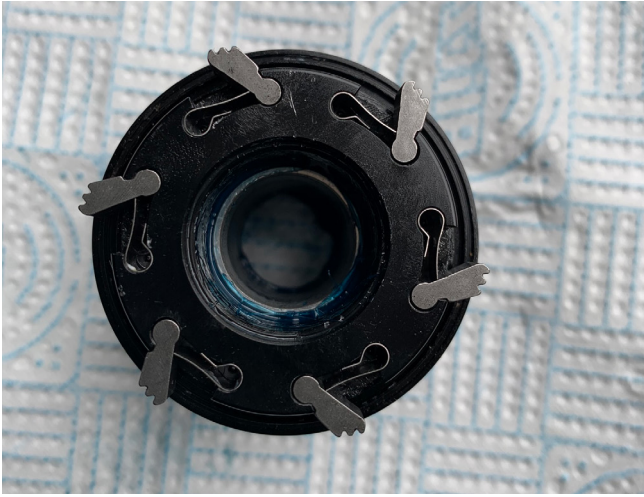
12. Turn the freehub over so the rear of the freehub can be seen.



13. Refit the springs.



14. Refit pawls – you will need to use the flat head screwdriver to push the springs down to allow you to get them in.



15. Check pawls and springs are fitted the correct way round and function correctly by pressing them.

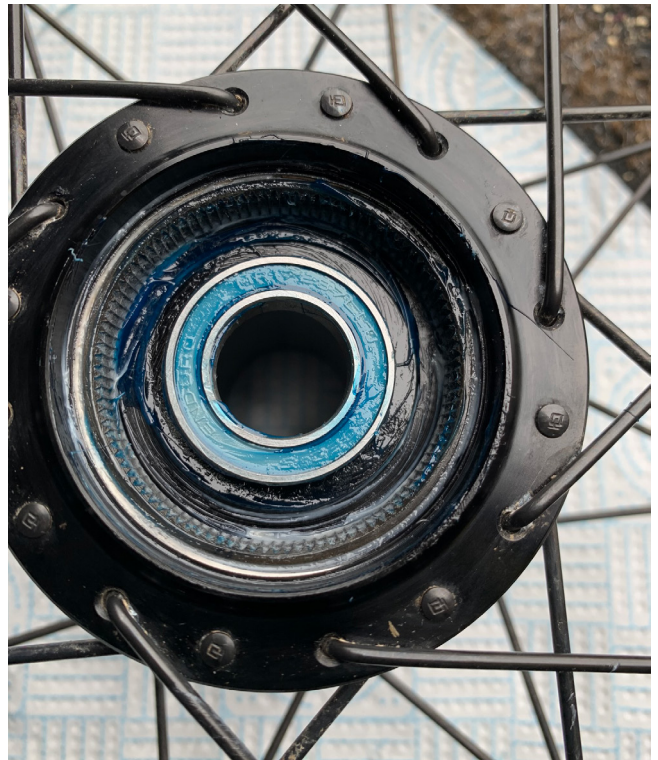


16. Refit the plastic protective cover.

HUB SHELL REBUILD



17. Check both sizes of the shell where your bearings will be pressed are smooth and free from burrs then apply a layer of grease.



18. Take your driveside bearing and set it in place on the hub shell.



19. Press the bearing into the shell. Ensure it spins smoothly.



20. Put the axle into the hub through the non-driveside.



21. Take your non-driveside bearing and press it into place. On this we have used the block of wood to allow the axle to "float" and for the press to then push against the hub shell to allow the non-driveside bearing to be pushed into place.



22. Apply a layer of grease to the non-driveside bearing.



23. Refit the non-driveside seal.



24. Refit non-driveside end cap.

REFITTING FREEHUB



25. Apply a layer of grease to the hub shell freehub seal and push onto hub shell.



26. Apply a layer of grease to the ratchet ring and around the driveside bearing in the hub shell.



27. Apply a layer of grease to the rear of the freehub over the pawls and springs.



28. Refit the freehub spacer into the rear of the freehub.



29. Slot the freehub over the axle, push onto the hub turning **ANTICLOCKWISE** as you do this to prevent damage to the seal.



30. Refit the driveside end cap.

Your hub is now fully rebuilt. Spin the wheel / axle and ensure that it spins freely and hub engages correctly. If you are using the Nukeproof Enduro bearings, the axle may feel stiff for a few rides due to the full contact seal. This is completely normal and after a few rides this will bed in and free up.

Exploded diagrams are available from Nukeproof.com

Spare parts are all available via a Nukeproof dealer.