## **\*NUKEPROOF**

## HOW TO CONVERT A NUKEPROOF NEUTRON V2 HG OR XD HUB TO MICROSPLINE

This step by step guide explains how to convert a HG or XD Neutron V2 hub to Microspline so that a Shimano 12 speed Microspline freehub can be fitted.

## PARTS AND TOOLS REQUIRED

- Nukeproof Neutron V2 Microspline conversion kit -Nukeproof Part NUKNEUV236MSCONV.
- Hammer.
- Small Flat Head Screwdriver.
- Bearing Press.
- Grease.
- If your bearing press isn't specially for hubs, you will also need something to allow the axle to float allowing to press against the hub shell. Block of wood with 32mm wide hole bored will work.
- Something to support the hub with the axle "floating" for axle removal – the block of wood above also works for this.

**Note:** The freehub will come with a new seal on it, this needs to be removed by pressing the pawls and taking it off.



## STRIP



1. Remove driveside end cap by pulling it off.



3. Remove spacer if it has not come off inside the freehub.



Pull off the freehub, turn ANTICLOCKWISE as you pull.



4. Remove non-driveside end cap.



Remove the seal on the non-driveside using your flat 6. The bearing should now be visible. head screwdriver.





Set the hub on the support non-driveside down.



Carefully hit the end of the axle with the hammer to push the non-driveside bearing out.



9. Take the bearing off the end of the axle.



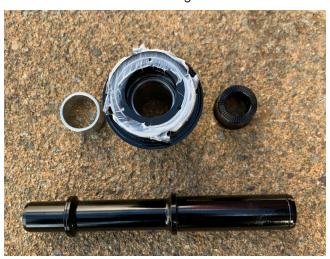
10. Remove the axle from the hub.



11. A new driveside seal is supplied with the freehub. If your seal is damaged it can be removed with the hub shell using the flat headscrew driver but this is not essential unless it is damaged.



12. The hub is now stripped.



13. Set the old freehub, axle, spacer and end cap to the side. These parts are now not required.



14. Check the inside of the non-driveside of the hub shell to ensure it is smooth and free from burrs then apply grease to aid bearing installation.



15. Insert the microspline axle into the hub from the non-driveside – stepped section is the driveside.



16. Apply grease to the non-driveside bearing and set into place.



17. Press the non-driveside bearing back into place in the hub. When the bearing has been pressed ensure the axle has no play and spins smoothly.



18. Apply grease to the outside non-driveside bearing.



19. Apply grease to the non-driveside seal and press back into place.



20. Refit the driveside end cap.



21. If you removed the driveside seal in step 11, apply grease to the new seal and press into place. The "V" lip should face outwards



22. Get the freehub spacer and fit on the axle.



23. Apply grease to the freehub pawls and springs.

**NOTE:** There is a step inside this so it will only fit one way and should cover the step on the axle.



24. Apply grease to the driveside bearing on the freehub



25. Push the freehub onto the hub – turn ANTICLOCKWISE as you push it on



26. Apply the dust cover for the bearing



27. Refit driveside end cap.



Your hub is now rebuilt. Ensure that there is no play in the axle, bearings are smooth and freehub functions correctly.