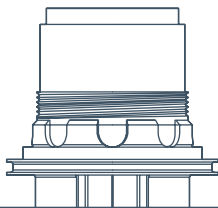


# Freehub replacement manual from Sram XD and Shimano 11HG to Shimano 12HG+.

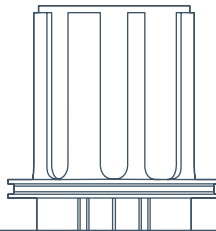
**What you need:** Sram XD/Shimano 11HG, 19mm socket wrench, Shimano 12HG+.  
**Processing time:** 15 min.

## Freehubs

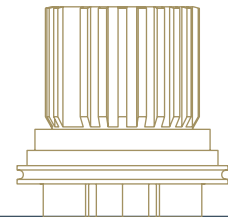
Sram XD



Shimano 11HG



**New Shimano 12HG+**



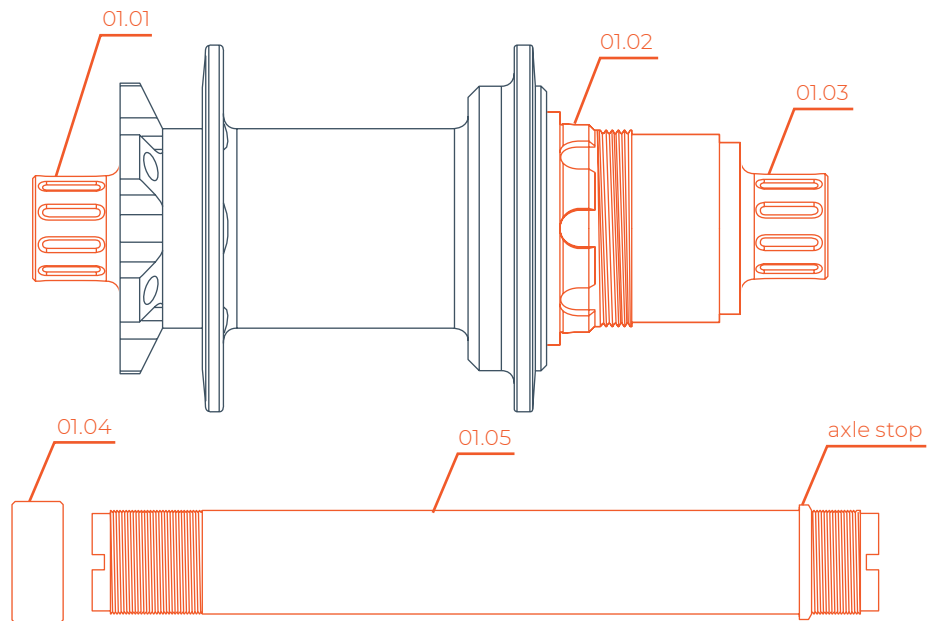
## Damil MTB Hub

### Pieces to be dismantled

- 01.01 Left adapter (disc side)
- 01.02 Freehub
- 01.03 Right adapter (freehub side)
- 01.04 Spacer
- 01.05 Axle

### Pieces to be replaced

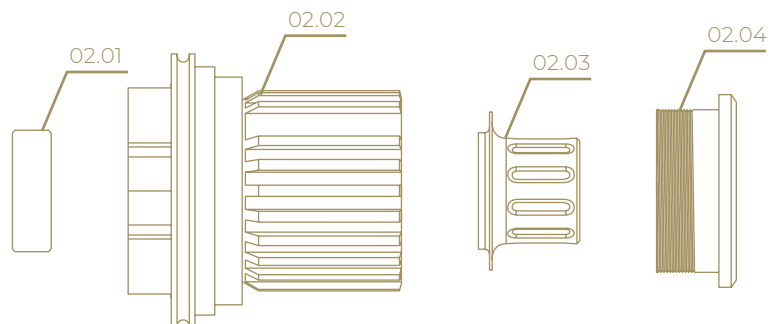
- 01.02 Freehub
- 01.03 Right adapter (freehub side)
- 01.04 Spacer



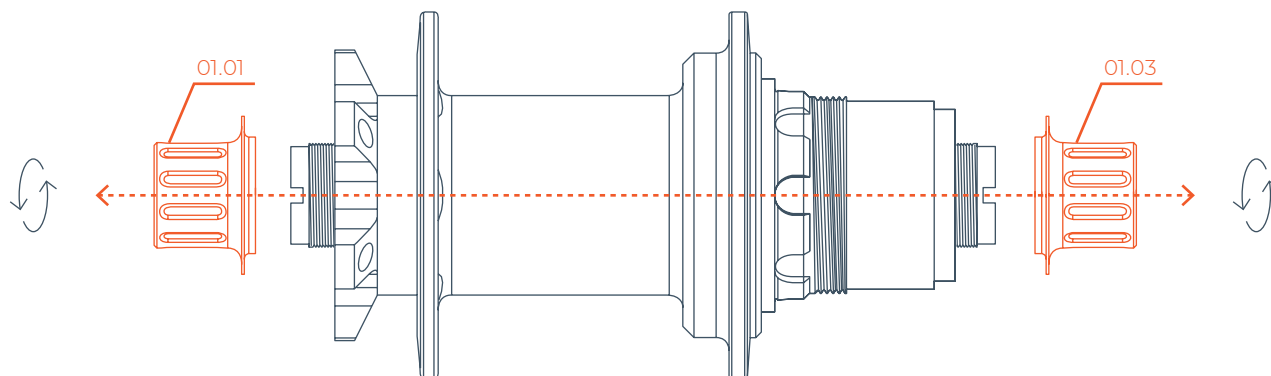
## New equipment

### Pieces to be replaced

- 02.01 Spacer
- 02.02 Shimano 12HG+
- 02.03 Right adapter (freehub side)
- 02.04 Ring nut

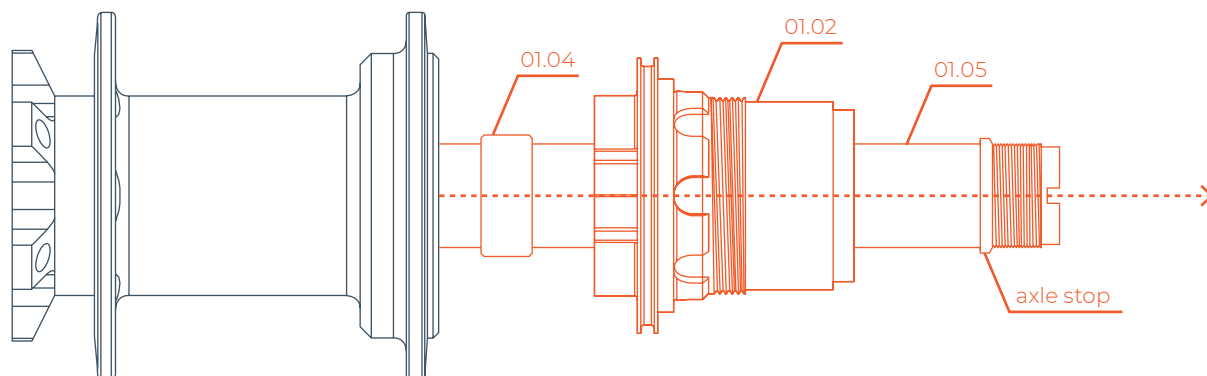


- 01.** Unscrew the two **adapters (01.01 - 01.03)**, with a 19mm diameter socket wrench from their seats. If an adapter does not unscrew, use the cut on the axle to block rotation and facilitate the loosening of the adapter.

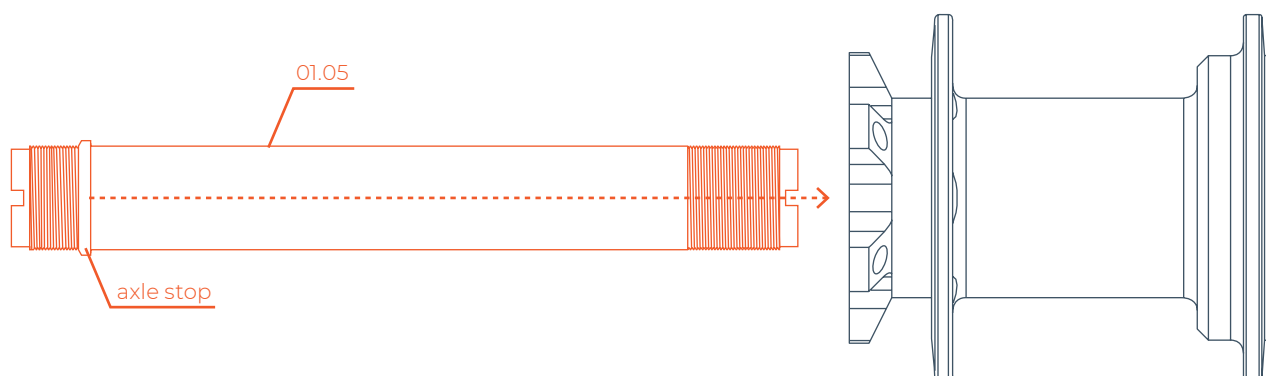


- 02.** Remove the **axle (01.05)**, the **freehub (01.02)**, and the **spacer (01.04)**, from their seats.

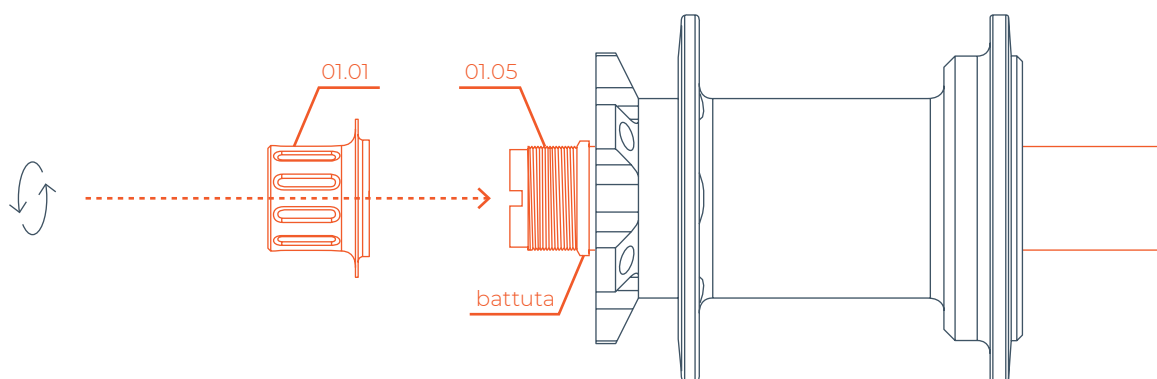
Partly store: Right adapter, freehub and spacer. These pieces will be replaced during the installation of the new freehub.



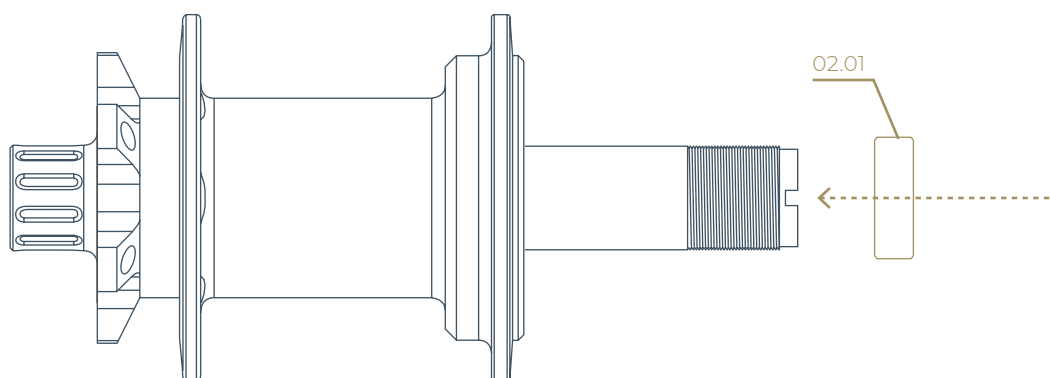
- 03.** **Rotate the axle 180° (01.05)** and insert it again inside the hub from the disc side.



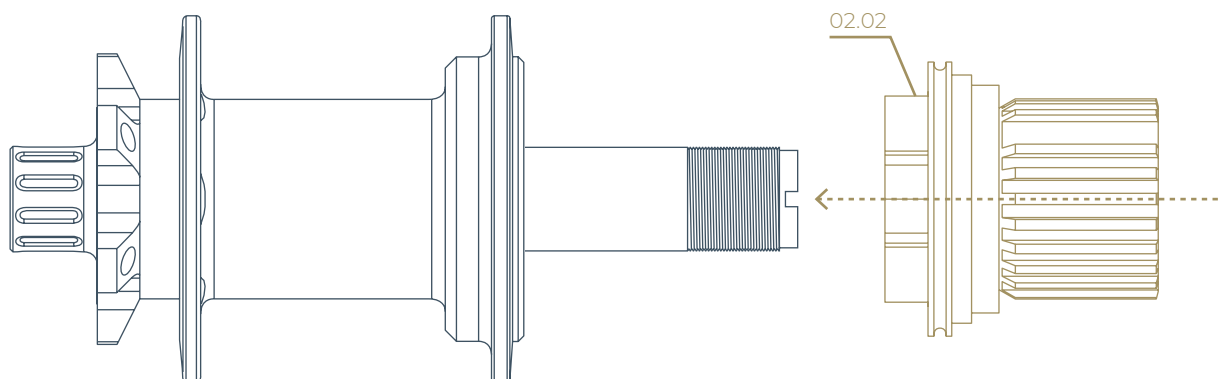
04. Screw and do not fix the **left adapter (01.01)**, on the **axle (01.05)**, from the side of the disc.



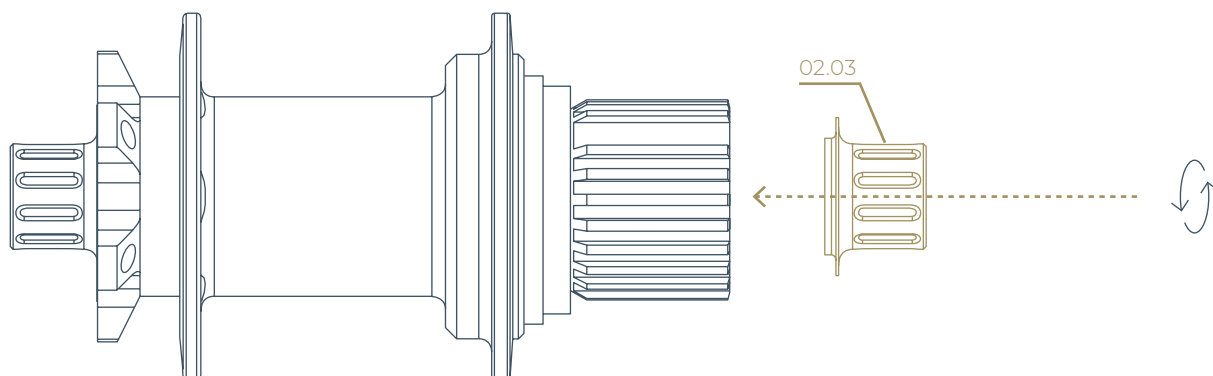
05. Insert the new **spacer (02.01)**, inside the hub.



06. Insert the **Shimano 12HG+ (02.02)** on the hub axle.



- 07.** Screw the **right adapter (02.03)**, on the freehub side.  
Close both adapters with a 19mm socket wrench, fix maximum 10Nm.



- 08.** Insert the Shimano 12 speed sprocket pack and complete the assembly by screwing the **ring nut (02.04)** on the pinion, supplied in the Damil kit.

