MAINTAINING AND REPLACING THE FTS-X FREE WHEEL MECHANISM

This new free wheel system uses the same operating principles as the FTS-L system, but integrates new parts (particularly pawls and a lip seal) to better meet the demands of intensive use.

This new system is used on all new 2007 MTB wheels. Wheels using the FTS-X system are easily identified by the factory fitted label around the free wheel body.

These new parts are 100% compatible with all road and MTB FTS-L hubs marketed since September 2000. You are therefore able to "update" older wheels when carrying out periodic hub maintenance.

To ensure long lasting performance of Mavic hubs, we recommend the following operations are carried out every 3000 kilometers for road use and every 1000 kilometers for off-road use.

Depending on climatic conditions and the type of terrain (mud, very fine dust, dirty roads, rain...), this maintenance interval should be reduced.

Tools needed

- Mavic mineral oil M40122
- · A pointed, non-cutting tool

Remove the axle following the procedure for the hub in question (refer to www.tech-mavic.com or the technical manuals from previous years).



Remove the free wheel body by turning it anti-clockwise.



Remove the pawls.



Carefully remove the lip seal using a pointed, non-cutting tool.

Meticulously clean the hub body, the pawls, the free wheel body, the spacer washer and the lip seal.



Push the lip seal fully home into the hub body by pushing it between the base and the lip using a pointed, noncutting tool.



If you removed the plastic part from the pawls, refit it so as the spring clipping pin is in the inside bend radius of the pawl.



Lubricate the toothed area inside the free wheel body such that 2 to 3 grooves of the free wheel body are filled. Also place a drop of Mavic mineral oil M40122 on the seal lip.



Fit the spacer washer to the hub body bearing, lower the pawls and refit the free wheel body to the hub.

Refit the axle following the procedure for the hub in question (refer to www.tech-mavic.com or the technical manuals from previous years).

The new 2-part pawls wear less quickly than the pawls used up to now. It is pawl wear that is responsible for prematurely clogging up the free wheel system and the associated malfunctioning.

The new seal has been designed to minimize the friction caused by its direct contact with the free wheel body:

- A more supple material
- New Teflon surface treatment.

Frictional torque is thus halved.

Hence, excessive lubrication of the seal serves no purpose: a drop of Mavic mineral oil M40122 suffices.

Use only Mavic mineral oil M40122. The use of grease or any other oil will irreparably damage the components of the free wheel system and voids the Mavic warranty.