HOW TO USE THE GEAR OF AN E-BIKE CORRECTLY

The extra power that ebikes have affects the transmission. Learning to change in the most appropriate way will help us pedal more naturally, preserve our transmission and can improve battery life.

You may have noticed that the e-bike does not **use the change in the same way as in a conventional bike**. Keep in mind that on the ebike you have motor assistance, which makes it possible to pedal with smaller cassette sprockets. In this **mode of use, if you do not have the appropriate cadence**, you will cause greater wear on all transmission components, in addition to spending more on the battery and the user's effort is greater.

To **properly use the transmission of the e-bike, it is making use of it the same as in the conventional bicycle**. One of the most common mistakes when making use of the change of the e-bike, is to **use too low cadences, that is to say to use very small sprockets and let the motor work when it comes to providing energy to the pedal stroke.** If you pedal the same as on a conventional bicycle, it will be done at **a higher cadence, using larger sprockets, lowering the power delivery of the engine, thus saving battery and wear on components will be less**. Shimano recently presented its DEORE XT component range, a specific range for e-bikes, thereby preventing permature wear on the e-bike transmissions.

This directly affects the way you use the assist modes. If you make use of the changes of the e-bike, in the same way that it is used in your normal bicycle. Normally, **with the eco mode or the less assistance mode of the e-bike, you can pedal in a very similar way to that of a conventional bicycle**. It is important to make u**se of the modes so that they provide you with the extra power**

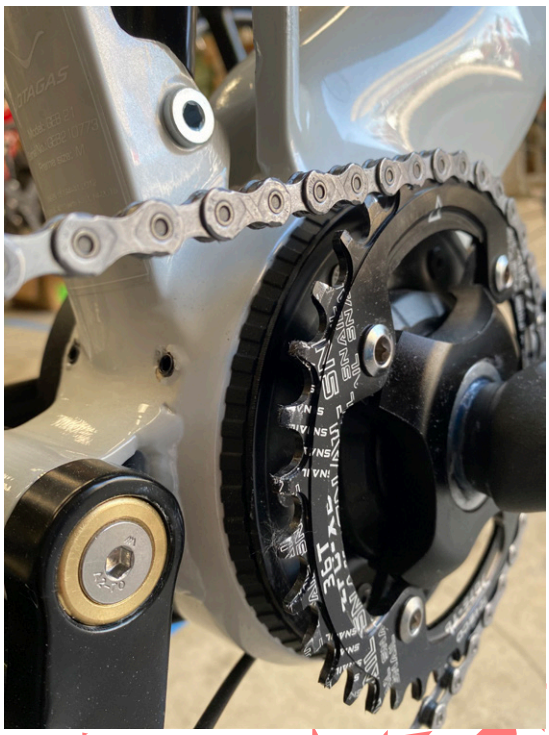
when it is needed, but it must be taken into account that the use of the modes **does not condition the use of the gearbox**. Many users, raise the assistance mode without changing the sprocket they are using, which does that it increases the power delivery of the engine, but **lowers the cadence and this implies a greater tension and wear of the chain, along with all the transmission components**.

Take advantage of the **versatility of the e-bike's power modes** and use a high cadence. This will help not only to pedal more naturally, but it will also generate **less battery drain and the transmission components will not suffer as much**.

If the **maximum assistance mode is used,** it will not only cause a **large battery drain**, but it will also be using more power than necessary. The basic modes provide **much more power and are more efficient on many occasions**. That is why the assist mode should be raised when the cadence begins to drop, instead of continuing in the same mode and raising a couple of sprockets. If you use the turbo or maximum power mode of the e-bike continuously, **the changes will not be smooth enough that they should**, in addition to that you will be requesting so much power from the engine, that the **battery will suffer notably**.

It is very important that regardless of the mode used,

the cadence of the pedaling is smooth and is coded by the conditions and inclination of the terrain, rather than raising or lowering the power assist of the motor. In other words, **if you go up a hill, you must raise the sprockets, in the same way as when using a conventional bicycle**. If this rule is constantly applied, **pedaling will be much more natural and more use will be made of the gearbox and less engine power will be abused**.



Another thing to take into account is the extra power given by the engine itself, **which can cause jerks in the chain when changing speed**. It should be taken into account that when it is changed and the motor is assisting, it is not only the power of the user's legs,

but also the power of the motor must be added. That is why it is important to change as if you were using a conventional bicycle and you must **follow the pedaling cycle at the time of the change**, without exerting too much force on the pedals. **The higher the assist mode the more important to consider**. These jerks can cause the chain to break, but **above all it will generate greater wear on the chain, chainring and cassette**. The noises that occur when changing can be largely avoided, they a**re much more striking than on a conventional bicycle**.

Main mistakes when making use of the gearbox on an e-bike:

- Continuous use of small sprockets with low cadence and high power mode.
- Increase assist mode, instead of raising cogs.
- Low cadence causes increased wear on drive components.
- Let the motor assist, without the need to change the sprocket.
- Using too powerful modes and not changing gear.

Tips on how to change your e-bike with greater precision and extend the life of your battery and transmission components:

- Change naturally, with a conventional bicycle.
- Try to raise sprockets and not do it in the assistance modes.
- Good use is made of the most basic assist modes with high cadences.
- Do not abuse small sprockets, just in case the speed generates a good cadence.
- When climbing hills, increase the speeds in the same way as on a conventional bicycle.
- It is important that the contribution of power by the user improves the autonomy of the battery.