Hyper V3R

DESTINATION Cross country, Enduro.

Owner's manual

GUIDELINE

Periodically clean hub internals (every 6-12 months in normal and dry conditions, every 3 months in wet conditions and always before leaving the wheel un-used for more than 1 month) see Level1 instructions next page.

Never use high-pressure spray washing directly on hubs. Clean hubs externally with warm water and soap.

WARNING Avoid the following errors that will seriously damage the hub internal parts (immediately or in a very short time):

- Too much greasing.
- Uncorrect positioning of grease.
- Wrong grease type (Lithium grease is the most dangerous).
- Micro Tuner way off its correct range (this increases also the clearance between engagement teeth)
- Never couple new engagement parts in contact with worn-out ones.

Once engagement teeth got damaged by a slow / un-free movement of the Floating Ring there is no other way than replace the entire Freewheel assembly.

BEARING PRELOAD SET-UP:

Optimal bearing preload is important for a long bearing life. Incorrect bearing preload can damage bearings and freewheel parts additionally decreases hub performance.

Micro Tuner comes pre-adjusted from the factory. Do not modify its position if not necessary.

WARNING

- Riding with a too-tight Micro-Tuner reduce bearing life and performance.
- Riding with a loosen Micro-Tuner may causes an uncomplete freewheel engagement and damages mechanism permanently.

Checking

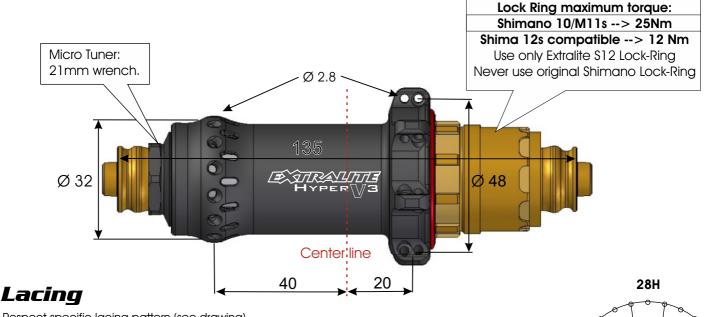
Before modifying bearing preload carefully check the complete wheel as follows:

- 1) Gently push Axle from right side using a plastic mallet.
- 2) Install wheel into dropouts and normally lock skewer.
- 3) Check there is no play at rim diameter.
- 4) Leave wheel free to completely stop spinning and carefully control latest instants of movement. Stopping should be very smooth.

Preload Tuning

If necessary fine tune as follows.

- 1) Gently push Axle from right side using a plastic mallet.
- 2) Install wheel into dropouts and normally lock skewer.
- 3) If you feel play at the rim turn in Micro Tuner (clockwise). Use a
- 21mm wrench, very delicate torque and manners.
- 4) Unscrew Micro Tuner for ca 1/4 of turn to release excessive preload on bearing balls and achieve max rolling smoothness.
- 5) Repeat Preload Checking and eventually slightly correct it.
- 6) The optimal bearing preload cancels play at the rim without affecting rolling smoothness.



Respect specific lacing pattern (see drawing).

See www.extralite.com to find pre-calculated spoke lengths.

Hubs are compatible with max 2.75mm spokes: Steel, Carbon and Berd (without tangential washer). Make sure hub is properly assembled and adjusted before lacing.

Hub maximum spoke tension:

Drive Side: 130 Kgf Left Side: consequently

In any case never exceed the maximum tension recommended

by rim manufacturer.

Do not laterally over-push Axle at the spoke stretching procedure.

Excessive lateral load may damage external bearings.

