

# **SUPER DUPER EIGHT™**

CASSETTE HUB

## **Installation & Maintenance Instructions**

### **Wheel Building**

The **SUPERDUPEREIGHT\*** is designed to be laced up with 14 gauge or 14/15 butted spokes in a three cross configuration. Do NOT use a radial spoke configuration. Radial spokes will void the factory warranty.

Hub dimensions:                      Spacing 135mm  
    Flange Diameter 52.0mm  
    Center To Flange L34.0mm R21.0mm

### **Cog Mounting**

The **SUPERDUPEREIGHT** is supplied with one alloy cog spacer. If you are using a seven speed cog stack it is necessary to place this spacer on the inboard side of the cogs. If you are running an eight speed set up you will not need to use the spacer.

### **Maintenance**

The **SUPERDUPEREIGHT** is supplied with high quality double sealed bearings; it is best to leave these alone. The seals and factory lubrication have proven to be very effective against dirt, dust, grime and water spray. However, when cleaning your bike, do not spray solvents or water near the bearing seals. Also, submersion of the bearings during water crossings should be avoided. Splashing through a shallow crossing is OK, but going through axle deep water is a surefire way to contaminate the bearings and reduce their service life.

The **SUPERDUPEREIGHT** cassette hub features three independently sprung pawls that engage simultaneously with a ratchet ring that has 36 teeth. This enables the mechanism to engage at ten degree increments (twice as fast as our previous model). The system is designed to have very low drag when coasting. Periodic cleaning and lubrication is required to insure continued smooth operation and long service life.

The three pawl ratchet mechanism is designed for ease of disassembly and maintenance. Maintenance should be performed on a regular basis at intervals determined by how harsh your riding environment is (extremely dusty or wet conditions will require more frequent maintenance). If you notice that the chain feeds forward while coasting or that it is difficult to back pedal, it is definitely time to clean and lubricate the operating parts of the ratchet mechanism. The ratchet mechanism comes ready to race from the factory and is lubricated with a medium weight oil (PEDRO'S MTB). Do not use grease to lube the pawls. Grease retards the action of the pawls and may prevent full engagement with the ratchet teeth. The use of grease in the ratchet mechanism will void the factory warranty.

### **Cleaning & Lubrication Procedure**

A 5mm hex key and a 16mm flat cone wrench are required for disassembly.

- Step 1* Remove cogs from the cog carrier.
- Step 2* Slide the 5mm hex key into the non-drive side portion of the axle.
- Step 3* Use the 16mm flat wrench to thread off the nut on the drive side. This is standard thread.
- Step 4* The cog carrier will now slide off the axle. In some cases where the assembly is dirty you may need to use a gear puller to remove the cog carrier - remount the cog lock-ring which will serve as a lip for the gear puller to grab.
- Step 5* To clean and lube, carefully remove the pawls and springs. It is **extremely important** that the springs do not get bent or stretched. We find it easiest to clean the cog carrier, pawls and ratchet ring with a cotton swab.
- Step 6* For re-assembly, replace the springs first, then put a drop of medium weight oil in each pawl retaining pocket and slip the pawls into place. Make sure the spring is seated in the spring pocket of the pawl.
- Step 7* Place a drop of oil on the O-ring seal.
- Step 8* Slide the cog carrier back onto the axle. The pawls must be compressed so that they will engage with the ratchet ring. One method is to make a wrap around the pawls with a string. When the pawls are partially engaged with the ratchet ring remove the string. Now slide the cog carrier all the way on.
- Step 9* Replace the drive side nut and tighten in back down with the 16mm flat wrench.
- Step 10* Make sure the cog carrier ratchets freely.

\* PATENT PENDING

# **Ringlé®**

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