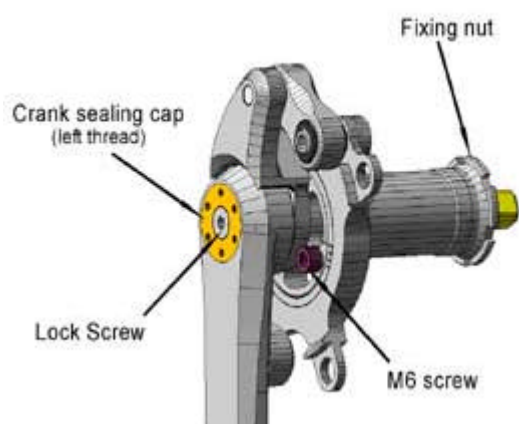


ASSEMBLY INSTRUCTIONS RCK02

THE ROTOR DIAGRAM

This diagram will prove useful for whenever we want to know what pieces we should use when fitting the Rotor.



1.- CLEANING AND PREPARING THE BOTTOM BRACKET HOUSING

Clean the frame's bottom bracket housing of dirt, grease, and oil, dry any residual water and prepare the bottom bracket housing ready to place the Rotor.

- Check that there are no obstructions within the housing e.g. a long screw for the gear cables
- You may have to go over the nuts using the appropriate tool for threading (english or Italian thread depending on the case)



2.- PREPARING THE ROTOR

Take off the left crank and unscrew the fastening nut (see illustration)

Put the M6 screw tightened on the eccentric



3.- USE SUFFICIENT ADHESIVE

Apply sufficient medium strength threadlocker adhesive (anaerobic resin like *LOCTITE 243* or *Würth*) on the screw on the right side of the shaft, spreading the glue all over.

Very important: you must use the suggested type of threadlocking adhesive to achieve an optimal result by installing the Rotor. **NEVER** use any type of grease during this assembly step: if grease is been used, the mechanism would not be fixed by pedalling and the Rotor body maybe broken.

WHY

The use of grease or low strength adhesive may cause following consequences:

- the mechanism could be seriously damaged (for english thread version)
- the regulation point could change during pedalling (for both english and italian thread versions)

For the english thread, the thread turns left while the pedalling direction turns right. For this reason, the system can be unscrewed while pedalling and the system will be broken on the left side, where the fixing nut could be forced up to split the cartridge.

On the other hand, a high strength adhesive may prevent the extraction of the Rotor whenever necessary and it could also seriously damage the threads of the bottom bracket housing.

Medium strength threadlocking adhesives are usually of blue color and the high strength ones are of green color.

4.- FOR THE INSTALLATION OF A TRIPLE CHAINRING ONLY (MTB or Road)

Place without securely fixing (ie. Do not put on the chainring screws) the small chainring onto the shaft. Put the chainrings on last!

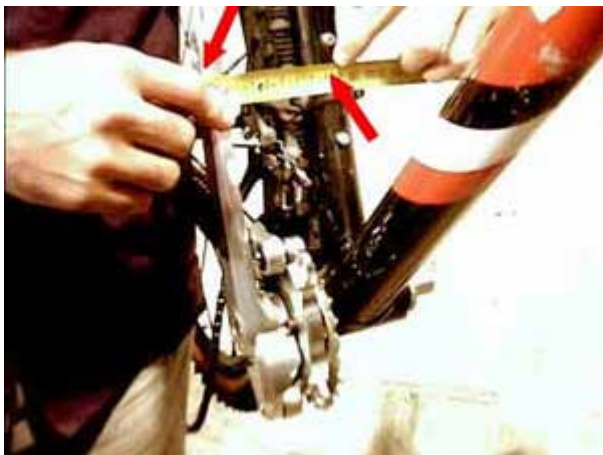
Place without fixing the smallest chainring onto the cartridge. Do not put on the chainring screws, this is in order to prevent any damage of the chain stay

Please look at the picture in order to know how the chainring should be installed.

5.- SCREWING ON THE ROTOR

Screw the ROTOR RCK (by hand and without forcing it) onto the crankset, turning the right crank backwards (english thread) or forwards (italian thread). Do not screw on completely!

If it is not possible, you may have to go over the nuts in the frame using the appropriate tool for threading (english or Italian thread depending on the case).



6.- MEASURING DISTANCES

Turn until the distance between the outside part of the leg drive and the centre of the vertical tube measures approximately:

75,5mm for 2 chainring Road.

79,5mm for 3 chainring Road.

82mm for MTB.

Note: each time we screw or unscrew the Rotor System, the system pull in or out aprox 1mm.



7.- SCREWING ON THE FASTENING NUT

Screw on the fastening nut but not too tightly.

Very important:

- If your Rotor has an English screw, the fixing nut will be cone shaped. The conic part of the fixing nut has to be positioned looking at the bottom bracket housing and it has to be assembled with grease. The cone will get centered progressively by tightening.
- If your Rotor has an Italian screw it will be bowl shaped. The fixing nut crown should not touch the frame. The fixing nut must tighten then cartridge into the housing otherwise the Rotor will turn on itself and will lose its regulation reference. We suggest to use a little bit of medium strength threadlocker adhesive for the Italian fixing nut.



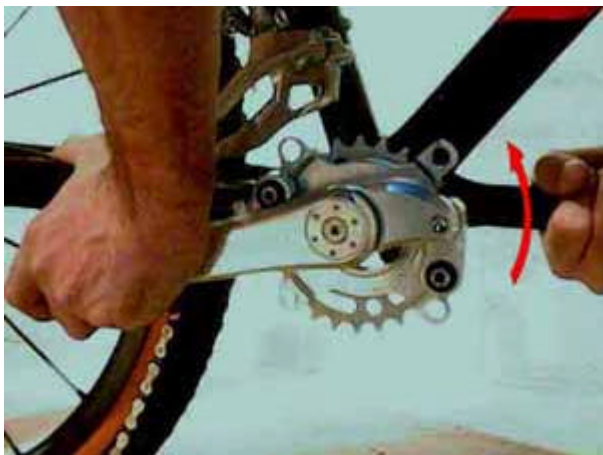
8.- REGULATING

With the bike in a horizontal position, with the wheels on the floor (please check the wheels are properly blown up), and the right crank facing downwards (building a 90° angle with the floor), position the eccentric so that the reference point coincides with the 3rd point (counting from the top) on the "spider-wheel".

To check which reference point the Rotor has been regulated to, position the right crank facing downwards again.

The option of using another point depends on the user, taking into consideration his or her physical characteristics, form of pedalling etc. so that it is possible to change whenever necessary. Using lower points the cyclist obtains a better acceleration and more comfort during climbing (lower muscular requirement). Using higher points the cyclist gets a higher top speed, but with higher muscular requirement. Normally, MTB cyclists used to ride with higher regulations and road cyclists lower ones.

If you wish to change the regulation point, we recommend to remove the Rotor and follow the assembly instructions from the beginning in order to ensure that the threadlocking adhesive works.



9.- FASTENING THE ROTOR

Turn the right crank towards pedalling direction as far as the M6 screw stops the crankset from turning (5 cm approximately under the chain stay).

Holding the right crank and the chain stay with your left hand, tighten with your right hand the fixing nut, using the special Rotor spanner.

Important: Do not give the Rotor System a good hard pull while tightening, to avoid the regulation point moves. If this would happen, the regulation procedure should be followed again.



10.- TAKING THE M6 SCREW OFF THE ECCENTRIC



11.- SAFETY MEASURES

We recommend you apply a little bit of threadlocker adhesive to the spindle to ensure that the crank is securely fastened, especially for titanium shafts.



12.- PLACING THE LEFT CRANK

Place the left crank on to the shaft and tighten (torquing to aprox. 50 Nm) the nut using an N° 8 Allen key.





13.- PLACING THE 2 ° CHAINRING

We recommend placing the left crank facing downwards and help the chainring fall into place.



14.- INSTALLING CHAINRINGS

1st (large) and 2nd (medium)

The reference arrow on the 2nd chainring must follow the direction of the pedal.

Install the large chainring, facing the pivot behind the right crank.

We recommend: install the chainrings bolts with grease.



15.- INSTALLING THE SMALL CHAINRING (FOR TRIPLE CHAINRING)

Finally fix the small chainring (for triple chainring bikes). The reference arrow on the small chainring must follow the direction of the pedal.

We recommend: install the chainrings bolts with grease.



IMPORTANT: please do not ride your bike immediately after the assembly procedure. Your bike should be not used during the next 3 hours, to prevent the Regulation point moves.