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 fixing nut.
Put the M6 screw tightened on the eccentric.

3. USE SUFFICIENT ADHESIVE
Apply sufficient medium strength thread locker adhesive (anaerobic resin like LOCTITE 243 or Würth) on the screw on the right side of the shaft, spreading the glue all over.

4. FOR THE INSTALLATION OF A TRIPLE CHAINRING ONLY (MTB or Road)
Place without securely fixing (i.e. do not put on the chain ring screws) the small chain ring onto the shaft. Put the chain rings on last.

5. SCREWING ON THE ROTOR
Screw the ROTOR RCK (by hand and without forcing it) onto the crank set, 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 CHAIN LINE
Turn until the distance between the outside part of the leg drive and the center of the vertical tube measures approximately:
   -75,5 mm for 2 chain ring Road.
   -79 mm for 3 chain ring Road.
   -82,5 mm for MTB.
Note: each time we screw or unscrew the Rotor System, the system pull in or out approx 1mm.

7. SCREWING ON THE FIXING NUT
Screw on the fixing nut but not too tightly. The reference regulation point (triangle) on the eccentric should be positioned facing forward.
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. This nut can be mounted in the two positions: it is recommended to prove first with the close cone towards the frame, but if the bottom bracket housing has a comfortable entrance, the nut will enter too much and in that case it will be necessary to mount it by the widest cone. The fixing nut will be tightened always by the conical part, never having left the straight part of this nut stuck on the frame.
   - 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. 

8. REGULATING
With the bike in a horizontal position, with the wheels on the floor (please check the wheels are properly blowed up), and the right crank facing downwards (building a 90° angle with the floor), position the eccentric so that the reference point (triangle) coincides with the smaller triangle of the “spider-wheel”.
To check which regulation point (triangle) has been chosen, position the right crank facing downwards again.

We recommend to regulate the Rotor System by letting coincide the triangle of the eccentric with the smaller one of the “spider-wheel” (see picture). The selection of a different regulation point depends on the user, taking into consideration his or her physical characteristics, form of pedaling 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 thread locking adhesive works.

9. FIXING THE ROTOR
Turn the right crank towards pedaling direction as far as the M6 screw stops the crank set from turning (10 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 a standard bottom bracket tool.

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

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10. TAKING THE M6 SCREW OFF THE ECCENTRIC

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

12. INSTALLING THE LEFT CRANK
* Degrease the axle and the crank square tapered heads.* We recommend that you use medium strength thread locking on the threads of the BB spindle (required on the titanium model).
* Using a long handle ratchet or a long 8mm Allen/hex tool, tighten the left-crank fixing bolt while watching to be certain the left crank is correctly & evenly pulling tight on the taper of the BB spindle. Tighten the bolt to 29.6 lb·ft or 40 N·m.

13. PLACING THE 2º CHAINRING
We recommend placing the left crank facing downwards and help the chain ring fall into place.

14. INSTALLING CHAIN RINGS
1st (large) and 2nd (medium) The reference arrow on the 2nd chain ring must follow the direction of the pedal. Install the large chain ring, facing the pivot behind the right crank.

We recommend: install the chain rings bolts with grease.

15. INSTALLING THE SMALL CHAINRING (FOR TRIPLE CHAINRING)
Finally fix the small chain ring (for triple chain ring bikes). The reference arrow on the small chain ring must follow the direction of the pedal.

We recommend: install the chain rings bolts with grease.

16. 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.

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**STEPS TO REMOVE THE ROTOR**

1. Take off chain wheels
2. Take off the left crank
3. Put the M6 screw tightened on the eccentric
4. Using a standard bottom bracket tool and holding the right crank against screw M6 (to prevent that the Rotor is turned), loosen the fixing nut
5. Remove the fixing nut
6. Turn the right crank unscrewing the rotor until it is completely removed

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**MAINTENANCE INSTRUCTIONS RS03 / RSTi03**

**Cleaning**
At the time of washing the bicycle not to use pressure washing machines, like “kärcher” or the machines that we may find in the powerboats.

Do not direct a water spurt to pressure directly on the Rotor System since the water entrance in the bearings could cause oxidize and to spoil them, arriving given the case to even block the system.

**Lubrication**
It is recommended to make a periodic lubrication of the four points of turn or pivots of the “pushers”, especially after exits with much rain or after washing in depth. For this reason each pivot has a lubrication screw (torx tool) that once retired allows to deposit fat in the interior of the pivot, having this a lubrication channel to the bearing.

The cartridge of pedalier of the Rotor also has the possibility of being lubricated without disassembling it. For it the grease passes through the interior of the axle (hollow) to which is acceded retiring the fixing screw of the left crank.

**Overhauls**
Points that we recommend to review periodically are:
- If the screw that fixes the left crank to the axle is properly screwed on tightly
- If the fixing nut is screwed on tightly, if this had become loose we recommend to review the regulation since the eccentric could have moved.