

Ball bearing change on new first 211 keel system.

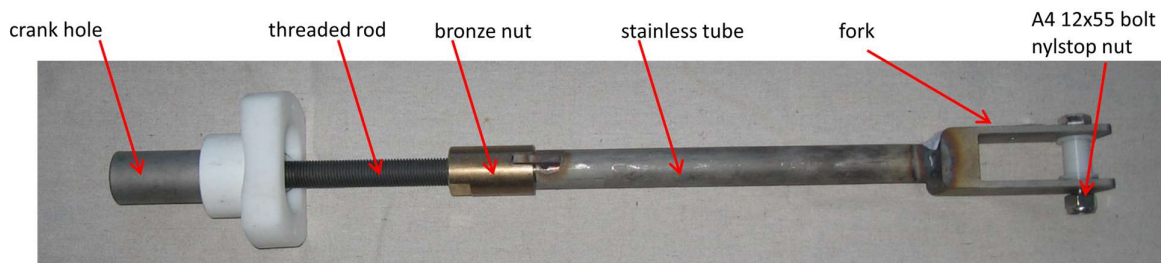
On our 211 built in 2000, the ball bearing (under the crank) is broken. To change it, you have to dismantle the entire lifting system. Ours was changed in June 2018 by Ocean Marine, Beneteau dealer in La Rochelle. So 18 years made the keel brackets and axis to be changed (by galvanized steel) and the lifting system was changed at the same time. The early lifting systems showed their weaknesses with the threaded rod in the lower part and were redesigned with a stainless steel tube in the lower part to protect the threaded rod and the bronze nut from corrosion. Cf note.

<http://first210.org/technotes/new-keel-lift/>

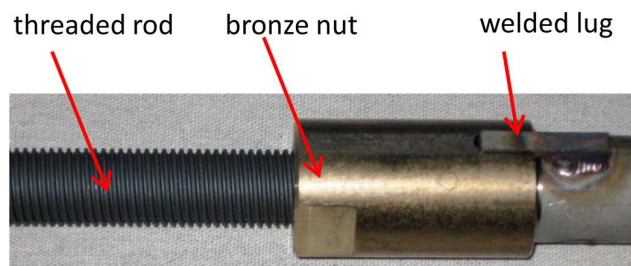
Disassembly



This is done with the keel down. In this position, the fixing of the fork on the keel is accessible. With 2 19mm spanners, the 12x55 stainless steel bolt which secures the fork to the keel is removed. Once this bottom bolt is removed, the system can be removed from above in the cabin. Remove the cord - knot on the fork - and leave it in place. Disembark the lifting system to work properly.



The lower stainless steel tube has a welded lug that locks the bronze nut.



This lug is gently twisted with a screwdriver to be able to unscrew the bronze nut from the stainless steel tube.



We can then access the bottom of the threaded rod which has a safety device to prevent it from coming out of the nut when the keel is lowered to the maximum and that we unfortunately continue to turn the crank counterclockwise. This security is a nylon washer, two steel washers and a bolt.



correct system



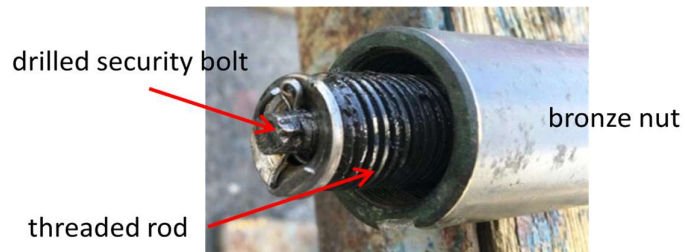
our 5 years old system. There was water in the lower tube

Once this security has been removed, you can finally unscrew the nut of the threaded rod to disassemble the nylon rings and put the new ball bearing in place.



Reassembly

Our security bolt broke when we tried to remove it from the threaded rod and we couldn't get it out. We therefore drilled it (2.5mm) in order to put a pin behind a stop washer.



We put the twisted lug back in place in the notch of the screwed nut on the stainless steel tube. This lug has not broken... To be checked later...



Three steps to complete the work :

1. After having greased it well, put the system back in place. Unscrew with the crank as far as possible in order to have sufficient travel to raise the keel.
2. Replace the control cord on the fork
3. Reassemble the lower keel mounting bolt.

About 55 turns of the crank to lower or raise the entire keel.

After 5 seasons, our lower tube contains water. This seized the safety bolt at the bottom of the threaded rod We should have checked this at each fairing. In addition to cleaning the hull and applying antifouling, the keel maneuvering system should be removed to be cleaned and lubricated each season.

Talking about this subject with other owners it turns out that this keel lifting system is widespread because used on the first 210-211 family, on other biggers boats as first 25.7 etc and also on all the Beneteau ranges with a lifting keel like the Oceanis range. The control, maintenance and annual lubrication of this system is necessary in particular to remove the water which can enter the lower stainless steel tube.

If necessary, it appears that some Bénéteau dealers have lost their skills and have difficulty finding the right spare parts because the lifting system comes in several versions. An owner told me about his difficulties in obtaining a new nut. He solved the problem by turning the part at a local turner shop for a price 4 times lower than that of Bénéteau.