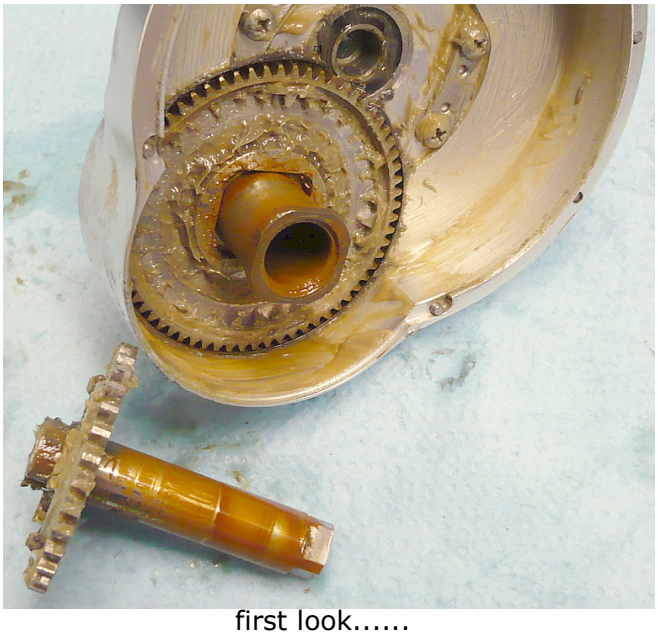
Improved anti-reverse and protection against seawater intrusion in the IAR.

Boss XTreme 400N, **Boss Magnum 665H** and **Boss Magnum 197**

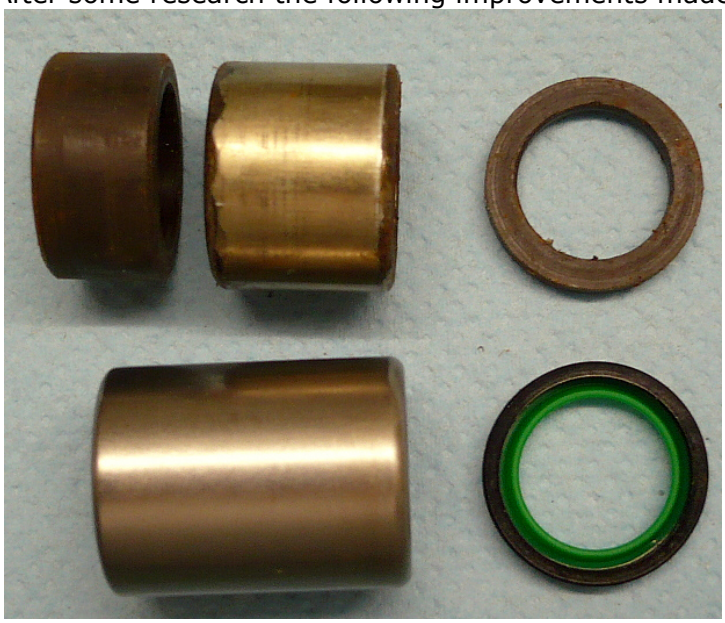
The IAR in all reels were heavily rusted. In one reel the Drive Shaft could only be hammered out and the IAR pressed out after almost two weeks in a penetrating oil bath...

Why Accurate does not use ball bearings in front of and behind the IAR for better guidance of the Drive Shaft and to take pressure from the IAR, but instead uses plastic bushings.....
.Maybe two ball bearings are too expensive... Also the front bushing does not prevent seawater from penetrating in the IAR.



first look.....

After some research the following improvements made



Above the factory configuration. Plastic bushings in front and behind the IAR. These do not have the stability to guide the Main Shaft like ball bearings. Even manufacturers point out the additional use of ball bearings.

Below the new parts. Instead of a HF bearing i used so called HFL bearing. This has integrated ball bearings on both sides to take pressure from the cylinders in the IAR during cranking. In the housing cover is still 3mm clearance to the front side. Here a shaft sealing ring was pressed in to prevent the intrusion of seawater.

Plastic bushings in front and behind an IAR do not have the stability to guide the Main Shaft like ball bearings. Even IAR manufacturers recommend the additional use of ball bearings!

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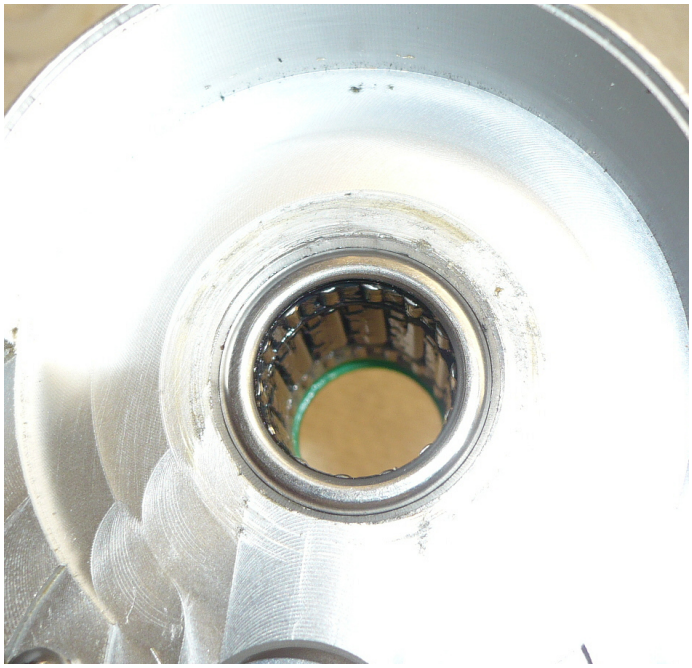
HFL Bearing 14x20x26MM
The integrated ball bearings at both ends are clearly visible

Sealing Ring 14x20x3MM

The two sealing lips are in close contact with the Drive Shaft and prevent the intrusion of seawater. This does not make cranking more difficult. The crank feeling is more comfortable and quiter. Probably the teeth of the Main and Pinion Gear mesh more cleanly.



The HFL and the Sealing Ring are flush with the housing cover on both sides.