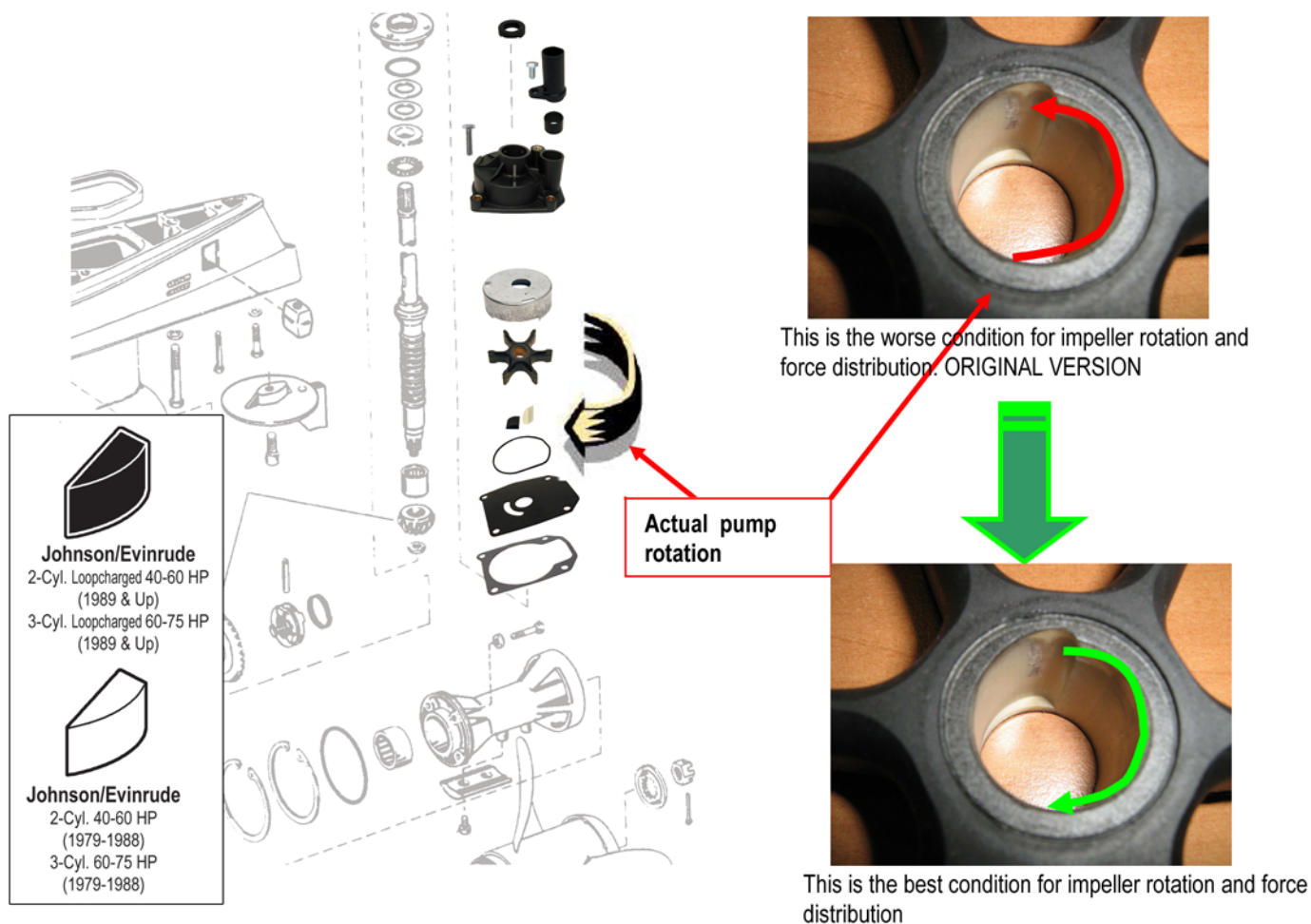
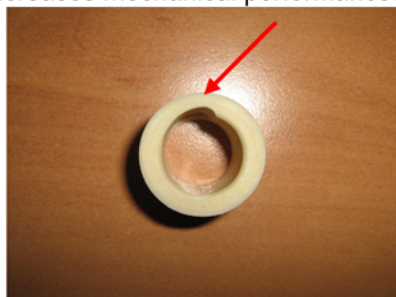


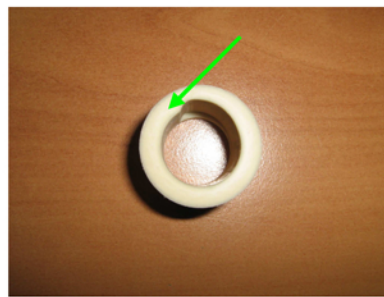
## Mechanical Improvement applied to GLM No. 89710



The hub shape inversion, as explained on pictures below, guarantees a better force application. In the right picture you can see as the force transferred by the shaft (counter-clock rotation sense) is applied to a more thickness hub region against the left picture where the force is applied to the less thickness region. In OEM version the force, applied by the shaft, wedges the key between shaft and hub causing a premature cracking. The improved hub avoids the "wedge" effect and increases mechanical performances.



OEM version



Improved version

Tortional test demonstrate that with actual impeller rotation the force needed to crack nylon hub is from 30 to 35 Nm and in the new version 45-50 Nm need to crack the key without hub rupture. With this shape change we have obtained a mechanical performance increase up to 50%.