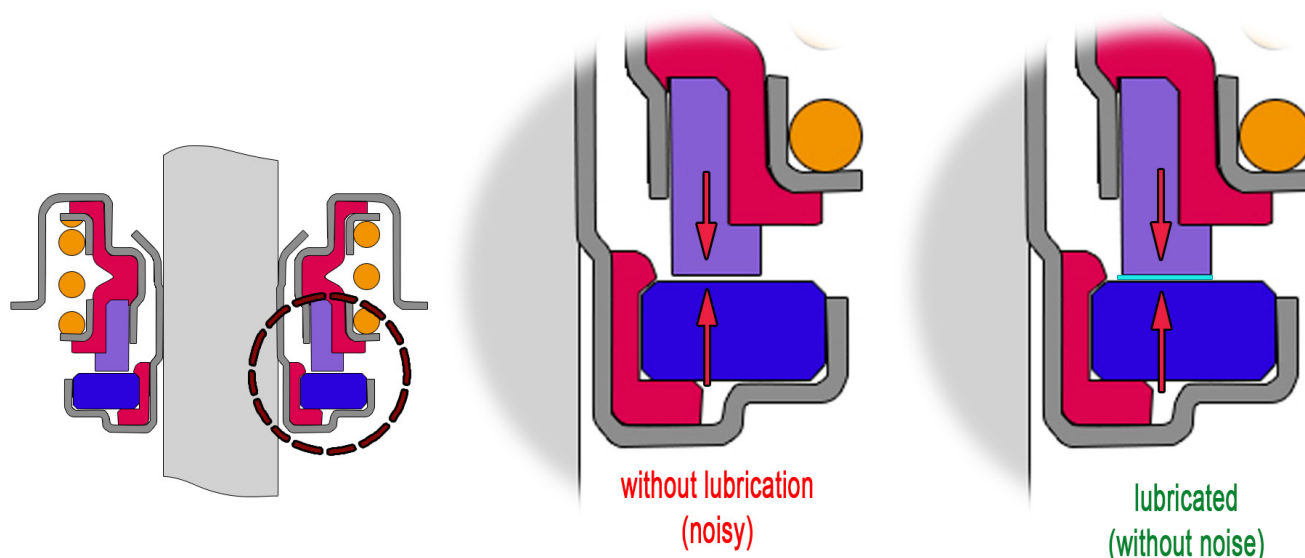


WATER PUMP

MECHANICAL SEAL NOISE

A common issue during fitment of a water pump is a very noticeable noise coming from the mechanical seal inside the water pump. This noise is amplified when the water pump has a plastic impeller.

This problem is directly related with the mechanical seal running dry due to lack of lubrication between the slip ring surfaces (see picture below). Irrelevant of the material (ceramic or silica carbide) the seal can run dry. It is more obvious in the silica carbide seal due to its surface properties that support better thermal shock resistance.



Slip ring surfaces require lubrication from the coolant to ensure correct performance, an acceptable life span and to avoid noise.

Good practice during fitment of a water pump is to flush the cooling system to avoid any contamination that could lead to premature failure. Also ensure that the system is bled correctly with no air locks left in the system.