Technical.bulletin

EC-08 2011

| Engine Cooling

Water pump

Fitting instructions

All vehicles

General fitting advises for water pump installation

Application or not of sealing paste, during new pump installation

During the intervention of a new water pump installation on a vehicle engine, should be carefully examined the need or not of sealing paste application on the new part. The application of sealing paste on a part, when there is no need for that, can lead to part destruction as well as engine description due to overheating.

One **rule of thumb** is that, **no need for sealing paste** application **when sealing O-ring** is fitted **on the pump**. Also **no need for sealing paste on the pump**, **when sealing gasket** (paper or rubber) is used for the fitting of the part. Just soaking with water the paper gasket to accommodate fitting.

Sealing past should be applied appropriately, when pump metallic flange face is in direct contact with the engine block.

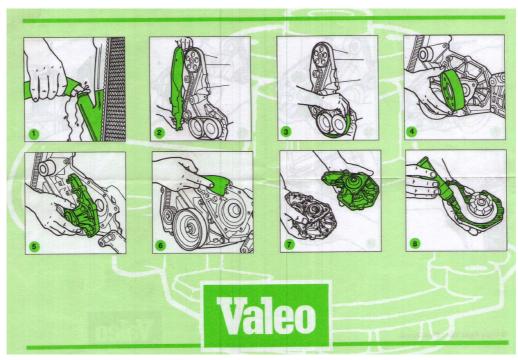
Valeo water pumps are delivered, with all the appropriate sealing accessories (O-rings, sealing gaskets etc.). Also fitting guidelines are included in the product box, mentioning when sealing paste should be applied.



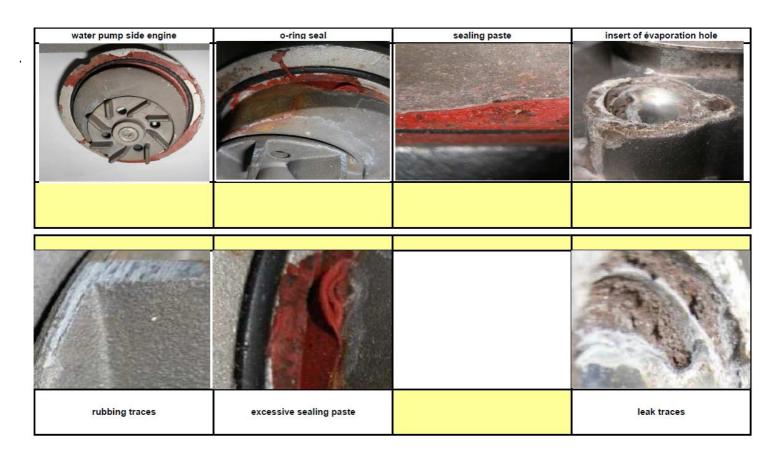
The use of sealing paste in a wrong way or in excess quantity, can lead to premature failure of the water pump. Leaks and noise can appear, due to pump evaporation chamber obstruction and axel bearing destruction (contamination of grease by engine coolant)







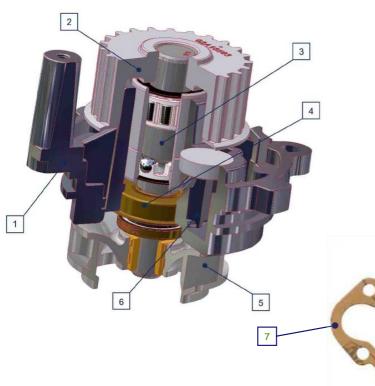
Fitting guidelines for water pump installation, included in Valeo product box.



<u>Product warranty analysis, presenting leakage due to unnecessary application of sealing paste</u>
<u>on a pump, where sealing O ring exists</u>



After water pump installation on the engine block, the belt should be tensioned correctly, according to the vehicle manufacturer specifications. An excess of 20% on the tensioning force of the belt, leads to 50% shortening of the water pump axle bearing life-time.



- 1. Housing of the pump including holes for the fixation to the engine
- 2. Pulley or hub who is driven by the belt
- 3. Bearing assembly
- 4. Seal
- 5. Impeller
- 6. Evaporation chamber
- 7. Gasket



Water pump in cut, parts presentation



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