

Technical Report #2

Report about application of sealing products for different engine parts



Technical Report

Report purpose

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Introduction

If two surfaces were completely flat, rigid, parallel and bolts could be tighten at the same time, it would seal without needing a gasket.

A sealing gasket is a detached component used for creating and maintaining a sealing of liquids or gases between two separable surfaces. Materials of the gaskets maybe different depending on the parts to put together. In those cases where there is no gasket, gasket makers are usually used.

Application of sealing products

Gaskets must secure sealing by themselves, without needing a gasket maker, except in the cases because of the design of pieces a gasket maker is needed, or by recommendation of the engine manufacturer.

Parts of the engine where sealing products are often applied

The first and most important thing is that there is no rule that states on what parts of the engine or on what part of a gasket you can apply a gasket maker.

There are some parts of an engine where the tendency is to eliminate the traditional gasket and apply gasket makers existing in the market. In the case of automotive components, the product must have certain features able to withstand the high demands of an engine (temperature, pressure, chemical agents, etc.) and with the necessary quantity on the required area.

At the time of performing an action on an engine, it is always advisable to work with the engine manufacturer specifications.

Parts of engines and sealing gaskets where engine manufacturers recommend to apply a sealing product to complement and secure sealing on these areas:

- The sealing on an engine component in contact with two different pieces. Intersection of the vacuum pump.
- Junction of two different parts when a liquid flows between them. Junction between water pump and lateral side of the block, thermostatic box, junction of the crankcase with the bottom side of the block, etc.
- Junction of engine parts on different planes creates critical areas where a gasket maker is often applied. The valve cover that closes over the camshaft cap, the closing cover over the seal, etc.



