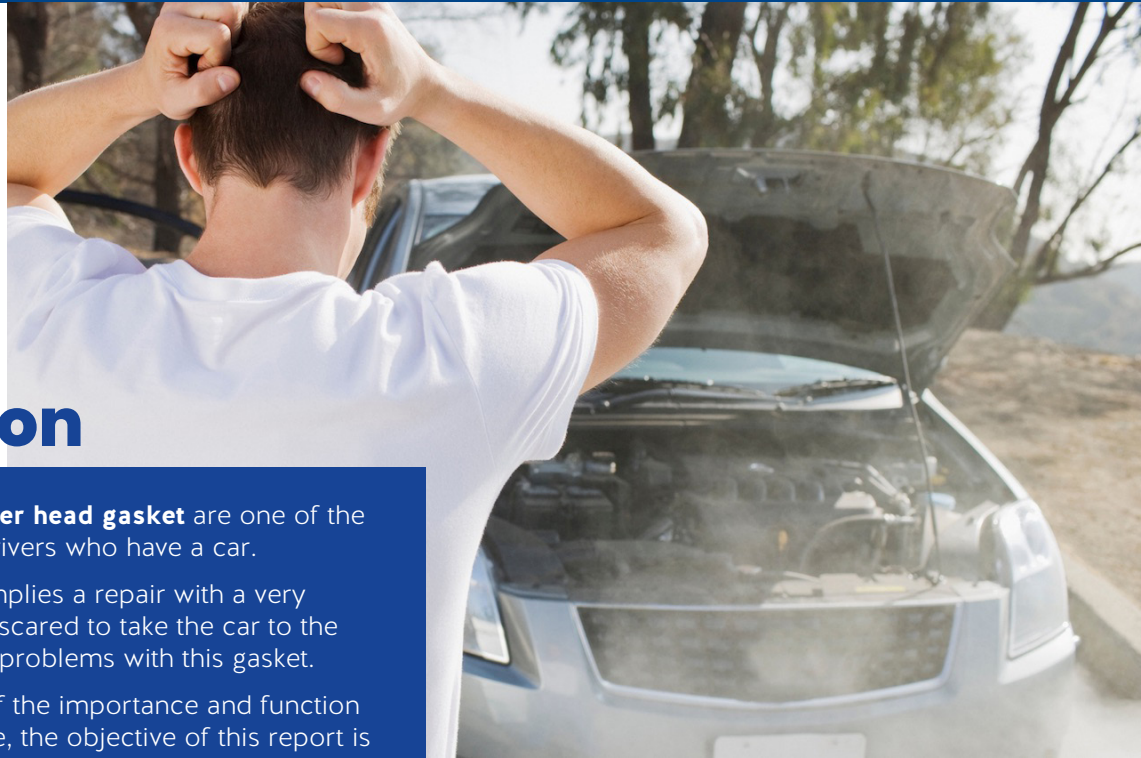


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# TECHNICAL REPORT

How do I know if my car's head gasket is damaged?





## introduction

Failures related to the **cylinder head gasket** are one of the problems that most worry drivers who have a car.

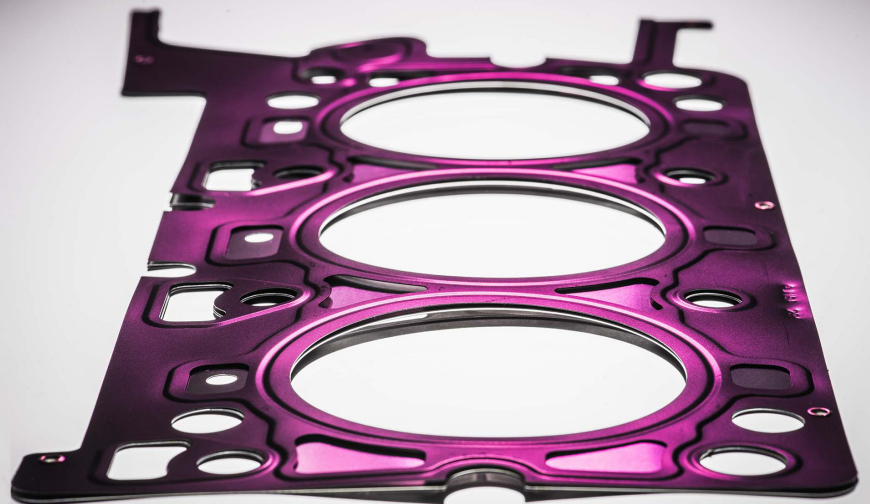
This type of failure usually implies a repair with a very **high cost**, so we are always scared to take the car to the mechanic and that there are problems with this gasket.

Many people are unaware of the importance and function of the head gasket. Therefore, the objective of this report is to resolve the main doubts that the user may have regarding failures of this type: what exactly is a head gasket? what causes a head gasket to fail? what are the signs head gasket failure?

## function of a cylinder head gasket

The head gasket is a **vital engine component** located between the cylinder head and the engine block. Its function is to seal the combustion pressure of the cylinders, preventing coolant and engine oil from leaking into adjacent cylinders or outside the engine.

The head gasket is **one of the most important gaskets in the engine**, as it must withstand the stresses of the two surfaces that expand, contract, deform, and rub against each other while sealing the pressure of the cylinder, coolant, and engine oil that run through the engine's ducts.



## causes of a blown head gasket

There are several possible causes of a blown head gasket:

**Engine overheating** is one of the main causes, as it causes the cylinder head and engine block to expand too much, even deforming, which causes a failure in the head gasket.

**Detonation** can also cause head gasket failure, as it damages the fire rings and allows cylinder pressure to leak past, burning the gasket.

## symptoms of a blown head gasket

Because the head gasket seals the coolant passages, a bad head gasket will **allow coolant to enter the cylinders or oil circuit**. This will cause:

White smoke from the exhaust pipe (coolant consumption)

Blue smoke from the exhaust pipe (oil consumption)

Bubbles in the radiator and coolant reservoir

Unexplained coolant consumption without leaks

White colour of the oil

Overheating engine



Since the head gasket also seals coolant and oil, you may see drops of oil and coolant coming from the gasket. You may also notice a loss of engine power due to reduced cylinder compression if the head gasket leaks into adjacent cylinders.

If you experience any of these symptoms, the cooling system may be pressurized, so turn off the engine and do not attempt to release the pressure. **Have your vehicle checked by a professional technician**, and always use replacement gaskets that meet the manufacturer's specifications.

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## how to prevent head gasket failure?

Prevention is the best way to avoid head gasket failure. Keeping your **engine coolant clean** and at the proper level is crucial.

Never use water but use the **proper coolant** according to the manufacturer's specifications. If you experience coolant leaks on the bottom of your vehicle or in your garage, have it checked. Also, get used to monitoring your temperature gauge; if you notice it getting too hot, consult with your trusted mechanic.

In conclusion, a **blown head gasket can be a costly and dangerous** problem for any vehicle. It's important to know the symptoms and causes of head gasket failure, as well as take preventive measures to keep your vehicle in good condition.

If you have any concerns about the head gasket of your vehicle, do not hesitate to contact our technical service: [customerservice2@ajusa.es](mailto:customerservice2@ajusa.es) | 967 216 212

