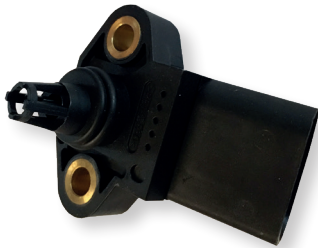


MAP SENSOR



ITS FUNCTION



The Manifold Absolute Pressure (MAP) sensor is a sensor used in electronic injection engines. Its main function is to **measure the pressure inside the intake manifold in order to provide essential information to the engine control unit (ECU)**. This data is used to adjust fuel injection and ignition timing to optimise engine performance and reduce pollutant emissions.

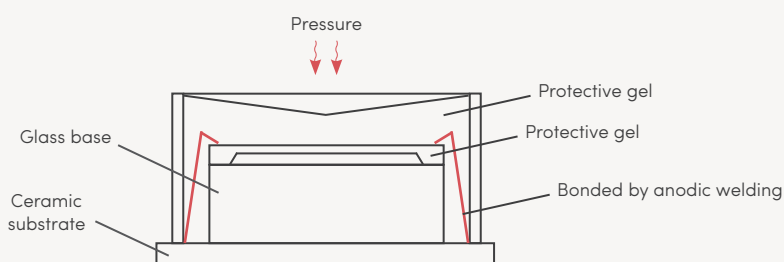
GOOD TO KNOW

The MAP sensor can be located in different places depending on the engine configuration:

- **On the intake manifold:** mounted directly on the manifold to measure pressure.
- **On the engine block, with a connection to the manifold via a hose:** used in certain designs where direct mounting on the manifold is not possible.
- **Integrated into the engine control unit (in some modern vehicles):** the sensor is mounted directly on the ECU, with a connection via a pipe.



ILLUSTRATION



Operation of the piezoresistive membrane



TECHNOLOGIES

There are **three different technologies** on the market: piezoresistive membrane sensors, capacitive sensors and sensors with thermal compensation.

Piezoresistive membrane sensors are the most widely used, due to **their reliability, accuracy and cost**. What's more, they are easy to integrate into different motor designs.



TECHNICAL HOTLINE

+33 (0)4 72 88 12 63

hotline.aftermarket@efiautomotive.com