

# Catalytic Converter

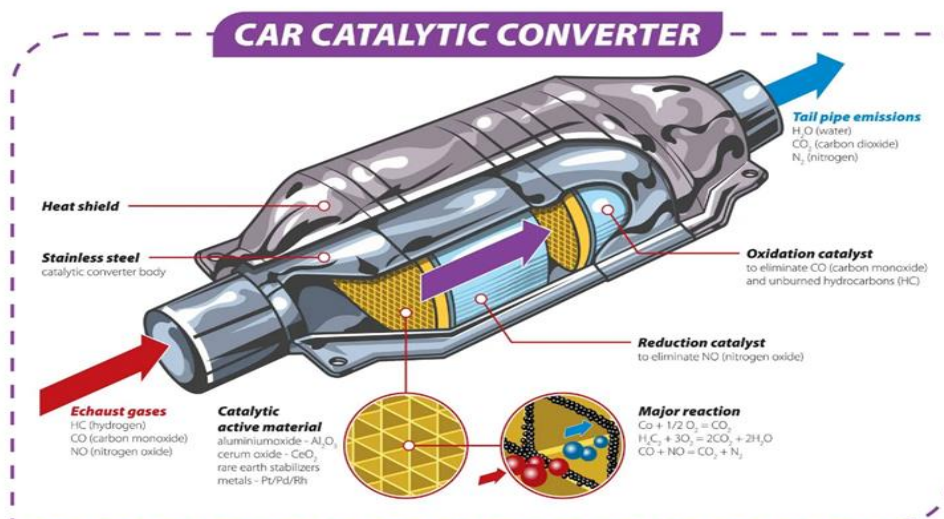
All MG petrol and hybrid vehicles registered in the UK have been fitted with Catalytic Converters to meet emissions regulations introduced as part of the European Emissions Standards aimed at reducing harmful pollutants emitted by vehicles.

## Operation

The Catalytic Converter resembles an exhaust silencer in appearance and is fitted within the exhaust system between the manifold and the silencer. It is designed with a chamber which allows for a high chemical reaction to take place converting harmful toxic gases into less harmful pollutants. A 3-way catalyst will change approximately 90% of the Carbon Monoxide (CO), Hydrocarbons (HC), Nitrogen Oxides (NOx), into Carbon Dioxide (CO<sub>2</sub>), Nitrogen (N) and Water (H<sub>2</sub>O).

A specific operating temperature is necessary for the Catalytic Converter to function correctly. This optimum temperature is not only required for the conversion process but aids in the breakdown and expulsion of soot content that if left in the system can lead to the Catalytic Converter becoming clogged and unserviceable.

It is important therefore to note the optimum temperature can be effected by driving styles. As an example, a vehicle that is frequently driven at sustained higher speeds (eg. motorway driving) due to the increase in engine and exhaust temperatures would actively burn soot particles trapped within the Catalytic Converter more effectively than short trips at a lower rev range not allowing the Catalytic Converter to reach an optimum temperature and thus leading to clogging and eventual failure.





### Common Causes of Catalytic Converter Damage

Aging can effect the Catalytic Converter and over a period of time it may become necessary to replace due to natural wear and tear.

In some circumstances however this could be due to reasons other than wear and tear such as:

- Putting the wrong fuel in your MG
- Failing to address an engine related concern, such as a misfire, engine management warning, oil leaks, coolant leaks to name some. We strongly advise if a fault becomes apparent or a warning lamp is illuminated, you contact your Local MG repairer immediately.
- The catalytic converter coming in contact with an object that leads to external and consequentially internal damage. Even damage to the muffler or tail pipe can effect the catalytic converter due to the potential build up of back pressure and raising the temperature within the Catalytic Converter.
- Lack of maintenance or delaying in servicing your MG at the appropriate schedule.

### Preventative Maintenance for Catalytic Converter Health

In order to maintain the durability and lifespan of your Catalytic Converter there are some steps we would recommend.

- Performing routine servicing as according to your vehicles schedule ensuring original equipment specification parts are used and the correct grade of oil.
- Addressing engine warning lamps and running concerns as soon as possible
- Using the correct fuel for your vehicle
- Varying your driving cycle

**Important Warranty Note:** Please note damage to the Catalytic Converter and/or gasoline particulate filter due to incorrect fuel, incorrect servicing, water immersion, running the vehicle with an engine fault or engine warning lamp illuminated and any damage to the fragile internal component as a result of an external blow or force would render the warranty void for both Catalytic Converter and gasoline particulate filter.