

01. PRODUCT INFORMATION AND SALES AIDS AREA

01.03 DID YOU KNOW...

Emissions control systems

Walker® catalytic converters

**WALKER**

EMISSIONS CONTROL

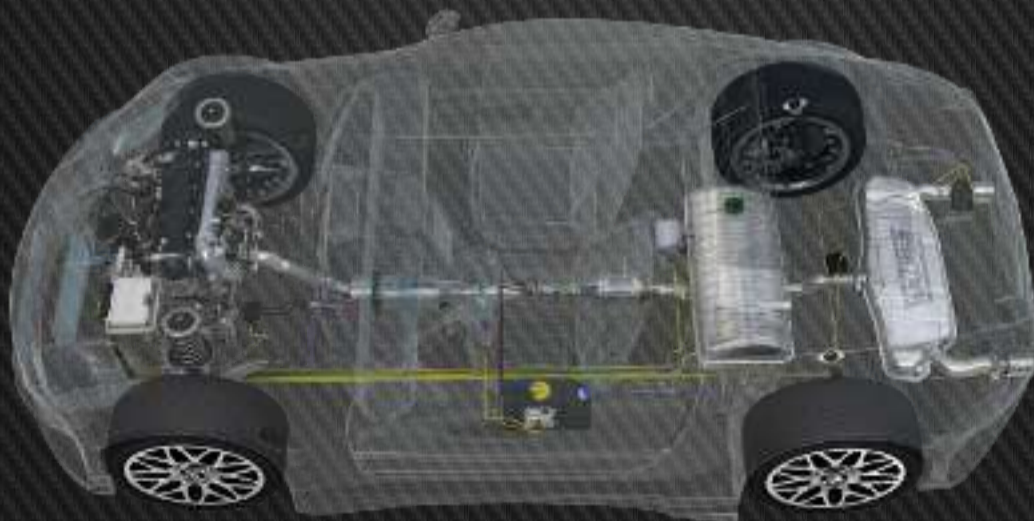
**WALKER®  
CATALYTIC  
CONVERTERS**



## Walker® catalytic converters

### Did you know that...

- The use of universal or non homologated silencers in vehicles fitted with catalytic converters ends up melting the monoliths of these units (producing the characteristic knocking noise under the car). Once the monolith of the catalytic converter is melted, the catalytic converter stop working losing its capability of transforming the pollutant gases of the exhaust system. This dangerous process appears as a result of the loss of unburnt fuel escaping in the so-called "valve overlap time" due to the differences of the back-pressure levels of the universal or non homologated silencers compared to the homologated or original equipment ones.



## Walker® catalytic converters

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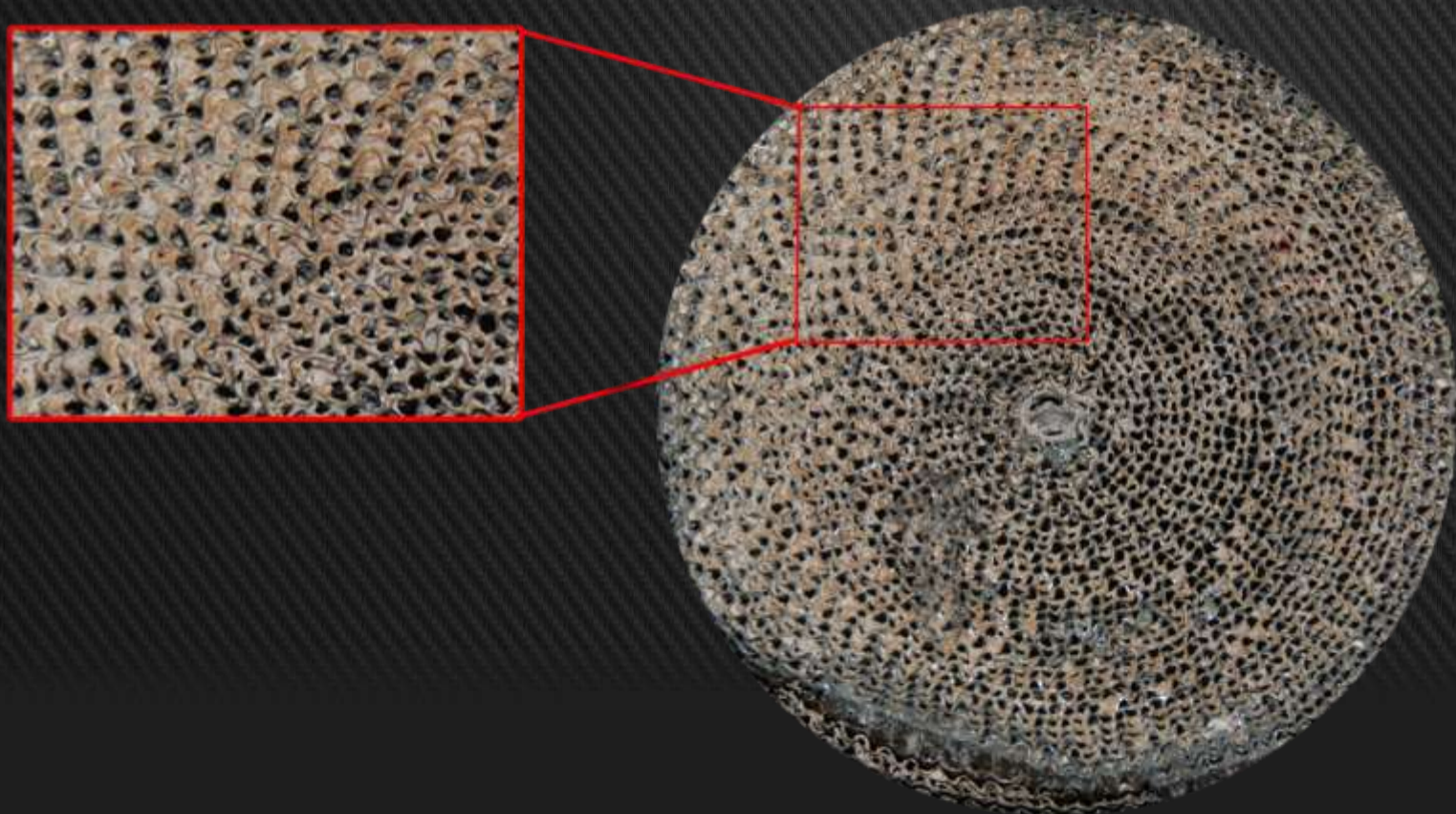
- Catalytic converter monoliths are highly sensitive to unburnt fuel as this auto-ignites when it comes into contact with the walls of the monolith because they are very often above the 450°C needed for the petrol to start burning spontaneously. The petrol burns at 1850°C, ceramic monoliths melt at 1400°C and the metal monoliths melt at 1600°C, so if fuel should enter the hot catalytic converter, the monolith will begin to be damaged in direct proportion to the amount of fuel which reaches them. When the monolith begins to melt, it ends up coming out of its location in the catalytic converter housing. Due to the knocking it suffers against the metal housing, it cracks becoming smaller and causes the typical noise under the car until it is completely destroyed leaving the catalytic converter empty and the silencer completely blocked by the released particles. An incorrect level of back-pressure, due to the use of universal or non homologated exhaust pipes, exhaust pipes rusty on the inside, breakage or cracking in the exhaust pipes, are the main cause of broken catalytic converters today.



## Walker® catalytic converters

### Did you know that...

- If the vehicle consumes more than 1 litre of engine oil for every 1,000 km the catalytic converter will be severely damaged due to the accumulation of phosphorus deposits from the oil combustion. These deposits will block the cells of catalytic converter monolith and dramatically increase the back-pressure in the exhaust system with all of the problem is that this causes (increased consumption, lost of power, possible fusion of the catalytic monolith, damage to the exhaust valve seats due to overheating, etc.).



## Walker® catalytic converters

### Did you know that...

- The use of sealing pastes up-stream the catalytic converter can cause severe damage to the components of the pollution system (catalytic converters, oxygen sensors, particulate filters, etc.) which are rendered useless due to the accumulation of silicone deposits from the combustion of the sealing paste remaining inside the pipe in the area of the seal. This kind of problem can be easily avoided by using the proper gaskets specially designed for these joints up-stream the catalytic converter and the oxygen sensors.

