

5 Things You Need to Know About Catalytic Converters”

A Little History of Cars and the Environment

It's widely known that automated vehicles and machines have a negative impact on the environment. Although it has been noted for several decades that vehicles are harming our ozone layer and increasing the natural greenhouse effect, not to mention effecting allergy symptoms due to particulate matter that they produce, the car industry is still making profits. People still drive their car to the corner store instead of walking and public transportation is still looked at with disdain in a lot of instances. Hybrid cars are sold every day, but the amount of them on the road compared with the number of traditionally-fuelled cars aren't making any real dent in the negative environmental impact that burning fossil fuels creates.

We Need a Way to Make Gas Engines Burn Cleaner

Sounds easy, right? No problem. Just change the way the car works so that even when we use gas to fuel our minivan so we can get the kids to soccer practice, we won't do so much harm to the environment. This idea has been bantered around labs and manufactures' production rooms for decades. Voila, the hybrid car. Unfortunately, they are still in their childhood on the car market, and not everyone wants to reduce performance to be eco-conscious. It became obvious that manufacturers would have to look at the "how" of the traditional engine to give those non-hybrid buyers a cleaner option as well.

Catalytic Converters Filter Harmful Gases

The purpose of the catalytic converter in the car's engine is to trap the more harmful gases that are created by a combustion engine like carbon monoxide and nitrous oxide. Located between the engine and the muffler in the engine housing, the catalytic converter is made up of several sheets of metals with small holes, all layered together. Once these harmful gases bond to the metal layers, they react together to form other gases like oxygen and carbon dioxide.

Catalytic Converters and Economics

The major downfall of a catalytic converter in a car is the costs. The device is made up of very expensive and precious metals like platinum and rhodium and can add a \$500.00 price tag to your cars cost. Their overall functionality for clean-burning for cars is not economical either. Currently, most of the pollution from a combustion engine occurs during the first five minutes that a car is running, before the catalytic converter is functioning.

Car Manufacturers Look for Better Options

Scientists and car manufacturers alike are studying new metals that could be used in place of the platinum and rhodium to decrease the overall cost of catalytic converters. There are also studies being done to see if the chemical reactions that bond the harmful gases could be sped up to increase the effectiveness of the device so it produces lower emissions while still burning traditional fuels.

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