

Q&A

"I am having issues with the exhaust system on my vehicle. Can I remove the DPF to solve the problem?"

Robert Hatch - Vehicle Owner - Cheltenham

Before answering this question firstly, it is wise to understand what the DPF does. A diesel particulate filter (DPF) is a device designed to remove diesel particulate matter or soot from the exhaust gas of a diesel engine and reduces emissions according to the Euro V emissions regulation - 5mg per km (since 2009). Wall-flow diesel particulate filters usually remove around 85% or more of the soot and under certain conditions can attain soot removal efficiencies approaching 100%.

Diesel engines are widely used thanks to their high efficiency, reduced fuel consumption and durability. The drawback is the high particulate and nitrogen oxide (NOx) emissions. The most effective solution to reduce those emissions is a Diesel Particulate Filter (DPF).

The exhaust emissions standards for new cars have required the fitting of a DPF in diesel cars exhaust since 2009, when the 'Euro 5' standard was released. In fact, many cars registered before 2009 were also fitted with DPF's in anticipation of the change in standards.

"MOT Test will include a check for the presence of a DPF"

As of February 2014, the inspection of the exhaust system carried out during the MOT test included a check for the presence of a DPF. If the DPF is missing (where one was fitted when the vehicle was built) it will result in an MOT failure.

It can be an offence to use a vehicle which has been modified in such a way that is no longer complying with the air pollutant emissions standards it was designed at point of manufacture to meet. Removal of a DPF will contravene these requirements which in turn would make the vehicle illegal for road use.

"A DPF captures small soot particles preventing them being released into the atmosphere"

A DPF captures small soot particles, preventing them being released into the atmosphere. Like any other filters it needs emptying periodically. This process is done automatically in a process called regeneration. This process involves burning the soot to gas at a very high temperature which leaves behind only a very small residue. When this is not carried out correctly it can lead to a build up of soot which can lead to expensive repair costs. Some vehicle models have an additive tank and if this is low or empty it can make any DPF regeneration an unsuccessful process which consequently would cause premature failure of the DPF.



In some instances, fitters will change only the DPF presuming this will cure the issue going forward. However, it is important to understand this will only be an ineffective short term solution. To cure the issue going forward, the faults that caused the original DPF failure should be resolved.