

Many of us are not aware of the use of a Diesel Particulate Filter (DPF) in modern engines. Even less aware of what they are, why they are fitted and what the benefits are, to help you understand what the DPF is so we have broken it down for you.

What is a Diesel Particulate Filter?

All modern diesel vehicles are fitted with a Diesel Particulate Filter (DPF) which removes harmful soot from the exhaust gases before they enter the atmosphere.

Why do we need a DPF?

For vehicle manufacturers to meet strict European emissions legislation, the DPF reduces exhaust smoke and black soot, significantly lowering emissions and protecting the environment.

How does it work?

Diesel Particulate Filters or 'traps' simply do that, they catch bits of soot in the exhaust. As with any filter, they must be emptied to allow them to maintain performance. The process of cleaning the filter is known as 'regeneration'.

Can I notice when DPF Regeneration is taking place?

Yes, there are symptoms that will allow you to determine when DPF regeneration is taking place,

- Cooling fans running
- Increased idle speed
- Deactivation of auto Start/Stop (where Start/Stop is fitted)
- A slight increase in fuel consumption
- A hot, acrid smell from the exhaust
- Engine note change

Can DPF Regeneration be prevented from happening naturally?

Yes, there are circumstances that can prevent DPF regeneration taking place,

- Short Stop/Start journeys where the engine doesn't reach normal temperature
- Incorrect engine oil, DPF requires low sulphur/low ash engine oil.
- A low fuel level, a general rule less than a ¼ of a tank will prevent DPF regeneration.
- Oil counter/Service interval, exceeding these may prevent DPF regeneration.
- A problem with the Exhaust Gas Recirculation (EGR) system.
- If the vehicle uses an 'Additive', a low level may prevent DPF regeneration.
- A warning light on or a diagnostic trouble code logged in the engine management system.

How will the DPF affect me?

In most cases you are unlikely to be affected; your vehicle carries out DPF regeneration naturally. However if the DPF doesn't reach it's required temperature and DPF regeneration is not completed, before any long term harm is caused the driver will alerted by a warning light and/or a message appearing in the instrument panel, depending on the make and model of the vehicle.

What should I do if the warning light comes on?

Firstly, do not ignore it. If the light has come on, it does not necessarily mean there is a fault. It's warning you that the DPF on your vehicle needs help in carrying out DPF Regeneration. To do this, you need to drive in a particular way to increase the exhaust temperature - typically a 10-15 minute journey at a suitable road speed, whilst maintaining the engine at approximately 2,500rpm. (This may vary depending on the make and model of the vehicle). This should clean the DPF, however if the light doesn't go out we recommend you immediately contact your vehicle manufacturer or franchised dealer.

What happens if I ignore the warning light?

If you fail to address the issue and the DPF light remains on, additional lights or symbols may also come on as soot levels will continue to increase in the DPF. This could end up with a very costly repair bill.

How long does a Diesel Particulate Filter last?

DPF's are designed to last in excess of 100,000 miles. If the vehicle is operated correctly many will see the DPF exceed this mileage.

What do we recommend?

If you buy a vehicle with a DPF we would recommend you read your vehicle handbook section about DPF so you are fully aware of what action to take should your DPF light come on, **ignoring this could be very costly.**