

Diesel Particulate Filters

Before you order your diesel vehicle you should know about Diesel Particulate Filters (DPF), which may or may not come fitted to your vehicle. The DPF is now standard on most diesel vehicles and is part of the exhaust system responsible for cleaning the engine exhaust gasses before they enter the atmosphere.

How it works

In addition to converting harmful exhaust gasses, the DPF also catches soot particles emitted in the exhaust gas. The DPF continues to collect soot particles until a predetermined level is reached. At this point the DPF will clean itself through a process known as DPF regeneration. This process increases the temperature within the DPF unit and burns off the soot particles.

In order to carry out the regeneration process, the DPF needs to reach and maintain an exhaust temperature higher than its normal operating temperature. Under most conditions the vehicle is able to carry out the regeneration procedure unaided.

However, in some circumstances where the temperature cannot be achieved, i.e. frequent short journeys or stop-start driving, the vehicle may fail to regenerate the DPF. If this situation occurs, the DPF warning light will illuminate on the dash.

What to do if the DPF warning light comes on

The warning light could come on between 10 and 1,000 miles dependant on driving conditions. When the warning light is illuminated, it does not mean there is a fault on the vehicle, it simply means the vehicle requires help to carry out the regeneration process. The procedure involves the vehicle being driven in a certain way to help increase the exhaust temperature.

It is imperative that the warning light is not ignored and that the set procedure is followed and not interrupted to enable the correct regeneration of the DPF.

Most vehicles require to be driven continuously for 15-20 minutes at a speed of at least 45 mph in fourth or fifth gear (automatic transmissions, select sports mode), to maintain an engine speed of at least 2,000 rpm (refer to owner handbook).

If the conditions described are not met, the DPF warning light will not switch off and the level of soot in the DPF will continue to rise, whereupon the DPF unit will eventually block up completely and the vehicle will not be able to regenerate the DPF. If this situation occurs the DPF will need to be replaced.

If the DPF requires replacing and the manufacturer's guidelines and recommendations have not been followed, the cost of the replacement will not be covered by the manufacturer's warranty and may well be charged to you.

Things to consider if your vehicle has a DPF

- Continuous driving conditions in built up areas, and city centres do not provide optimum conditions for the regeneration process.
- Consider your regular driving style and length of your regular journeys to allow for the driving conditions required for DPF regeneration.
- If your normal driving conditions are any of the above, you must be prepared for the DPF warning light to illuminate on your vehicle. This will then involve having to drive the vehicle on a motorway for a period of up to 20 minutes continuously.