



## DIESEL PARTICULATE FILTER FAULTS

Diesel particulate filters generally known as DPF have been fitted to modern diesels since approx 2008 to reduce soot particulates predominately to meet stricter emission levels. Whilst they do a good job problems can occur causing them to block prematurely, when this happens usually you will get a warning light on the dash warning of a problem either a DPF light and or an engine management warning light.

There can be many reasons why a DPF can block, during normal driving of the vehicle will regenerate or burn off the accumulation of soot in the DPF it does this by the engine control unit monitoring the pressure in the DPF via a pressure sensor. When the readings get to a pre determined level the ECU will inject more fuel raising the combustion temperature to burn off the accumulation of soot and reduce the back pressure. For this function to happen certain conditions must be met, the vehicle will have to be driven at a constant speed usually 60 mph or above in a high gear 4<sup>th</sup> or 5<sup>th</sup> for at least 20 minutes, there must be no faults in the engine management control unit and all emissions components must be functioning correctly.

From our experience in dealing with DPF issues the most common causes of blockage are :-Insufficient use of the vehicle at sustained cruising speeds ( short journeys) , engine management faults preventing regeneration taking place commonly glow plug ,EGR,Turbo faults and pressure sensor failures . Two other factors often overlooked are the quality of diesel being used some cheaper non branded and supermarket fuels do not carry the same detergent qualities of the major brands and produce more soot causing premature blockage, equally important is the engine oil DPF vehicles require a low ash oil to prevent oil consumption clogging the DPF incorrect oils will cause major problems.

We can deal with all of the above issues and have an excellent success rate of regenerating most DPF. Our approach is to carry out diagnostic assessment of the vehicle checking for fault codes and live data of the common faults associated with DPF issues. If no faults are present and the DPF is not excessively blocked manufacturers usually give a facility to force regenerate a blocked DPF on the road where the vehicle cannot achieve the function itself. (Average cost £75 to £150 + vat). We can instigate this function via dealer software and drive the vehicle which normally works as long as the vehicle has not covered excessive mileage. Where faults are found we can rectify these faults first before attempting regeneration.

If the DPF cannot be regenerated then chemical cleaning can sometimes work to clear the excessive soot followed by on the road regeneration .If all else fails a new DPF will be required or on some vehicles we can offer removal of the DPF with a suitable engine management remap to delete the DPF requirements.

Diagnostic \ DPF regeneration costs are variable depending on what has caused the issue , the extent of the damage and time taken to diagnose and rectify the faults , we operate an open an honest pricing policy and keep our customers informed at each stage .

