



Removal of the DPF and it's implications for diesel vehicle drivers.

The diesel particulate filter (DPF) is the filter in a diesel engine's exhaust which prevents carcinogenic soot emissions entering the atmosphere. However, all filters get 'full', so the engine systems will perform a periodic 'regeneration process' to burn off the deposits in the filter to clear it for further use. With city driving, the engine systems may not get the opportunity to carry out the regenerations properly and blockage of the DPF can result, bringing on an engine warning light. There are several options to overcome this which are explained [on our DPF/EGR page](#), but some drivers opt for having the insides of the DPF removed and reprogramming (remapping) the engine systems to operate correctly without it. the questions you should ask are these: -

- 1. Will my car run properly without the DPF?**
- 2. Will my car pass the MOT without the DPF?**
- 3. Is it legal to remove the DPF?**
- 4. What about the EGR valve?**

1. If the modification of the vehicle's software is done properly, then your engine will run perfectly well without a DPF. However, if it's done poorly, it can lead to serious engine problems and we have had to help out several customers who have had a poorly executed 'DPF deletion' carried out by other tuning companies and exhaust centres.



2. The MOT includes a visual inspection to check the diesel particulate filter (DPF) is still in place (since 2014). If it has been removed from a vehicle that originally had a DPF, the vehicle will fail its MOT. However, if the DPF canister is still in place having had its insides removed, the vehicle would probably pass the visual inspection and because the



emission standards of a modern common-rail diesel engine are better than the current MOT threshold, even without its DPF.

At the moment (Feb 2018), the UK MOT test for diesel cars does not include an emissions test as such, but it does include a smoke test. This smoke test assesses the level of smoke in the exhaust during a specific test procedure and the car will pass or fail depending on the density of the smoke. It is an optical test which measures the opacity of the exhaust gas. That is to say, it measures how much light is blocked or absorbed. The figures below give the maximum allowable percentage of light absorbed when passed through 1 metre of exhaust gas. This is the current MOT pass threshold: -

Pre 1/7/2008 turbocharged - 3.00/m

Pre 1/7/2008 non-turbocharged - 2.50/m

Post 1/7/2008 all engines - 1.50/m

Most diesel engined vehicles in good condition will still pass this smoke test with their DPF removed, but a new Road Worthiness Directive came into force in May 2017 and [new MOT rules come into force in May 2018. The new test includes much more stringent testing of the DPF and if the DPF is suspected of being removed or tampered with, the vehicle will fail. Also, the vehicle will fail if any visible smoke is emitted.](#)

3. As far as we can determine, it is not illegal to actually remove a DPF, **but it is illegal to subsequently use that vehicle on the road!** As well as a likely MOT failure after May 2018, there are potential penalties of £1,000 for a car and £2,500 for a van. It is an offence under the Road Vehicles (Construction and Use) Regulations (Regulation 61a(3)1 to use on the road, a vehicle which no longer complies with the air pollutant emissions standards it was designed to meet. (Even if it meets the MOT standard.)

All this is a headache for the diesel owner who tends to do city driving, giving little opportunity for the DPF systems to carry out regeneration.

4. The EGR valve (exhaust gas recirculation valve) allows a small amount of exhaust gas to recirculate and mix with the new incoming air. The purpose is to reduce the production of Nitrogen Oxides - NO and NO₂ known as NOX and to reduce fuel consumption during part load conditions. It is also used within the regeneration cycle

of the DPF on later vehicles. Removal or disabling the EGR valve could have very detrimental affect on the vehicle's DPF if it is fitted with one.

To conclude:-

Will Halesowen Engine Remapping remove your DPF for you? -

No. We'll direct you to a reputable cleaning service to carry out a forced regeneration and/or clean as appropriate.

Will we carry out a software modification if you've already had the DPF removed? -

In the past, we have done so very reluctantly if a customer really wanted us to, while making them fully aware of the implications outlined above, including the fact that it is illegal to drive on the road having had the DPF removed and that the vehicle will fail its MOT. However, having considered the environmental implications, and the compromising position DPF deletion places the customer in, we no longer offer this service.

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