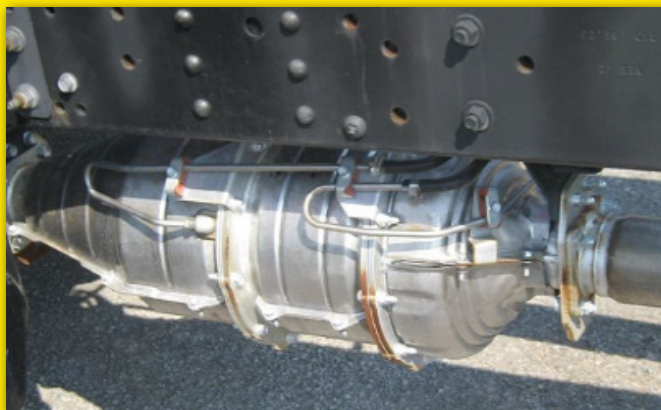


REAL Torque

October 2026

Contact maintenance for any questions on 0800 80 80 69



Diesel Particulate Filters

This month we are taking a look at diesel particulate filters (DPF), why we have them, how they work and what you need to know to keep your truck running clean, efficient and on the road.

The Big Picture

Diesel particulate filters have been a game changer in the journey to cleaner, greener vehicles. They capture harmful soot from the exhaust, reducing emissions and helping us meet environmental standards.

Diesel engines produce particulate matter - more commonly known as soot - as a by product of unburned fuel. This soot is harmful to the environment and the air we breathe. The DPF traps the soot in a filter and then burns it off during a process called regeneration, turning it into less harmful ash.

How Does It Work?

The DPF uses a ceramic filter with tiny pores. Exhaust gases pass through these small channels - letting the gas through, but trapping soot particles. Sensors monitor pressure and temperature to measure how full the filter is and tell the truck when a regeneration is needed.

When Does It Regenerate?



Automatic regeneration happens while you're driving. It needs the truck to be at operating temperature for a longer period - usually on longer trips or the motorway. This allows the heat to reach the right level to burn off the soot.



Manual regeneration is needed when the truck does a lot of stop-start driving, short trips or heavy city work. The system can't get hot enough on its own, so the truck will trigger a forced regen. You'll usually see a flashing DPF light on the dash. Follow the instructions in the operators manual or contact the TR maintenance team for help.

THE DPF PROCESS



Why Engine Oil Levels Can Rise

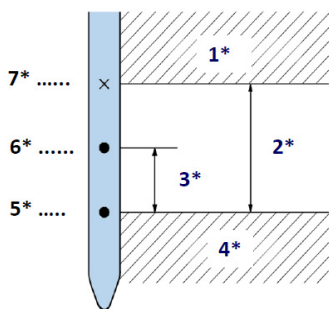
In some cases, DPF regenerations can cause the engine oil level to rise due to a small amount of fuel entering the oil during the regeneration process.

It is important to check your engine oil level regularly and ensure it does not exceed the maximum mark on the dipstick. An oil level above the maximum mark may indicate fuel dilution.

If the oil level becomes overfilled, an oil change may be required. Continued operation with diluted or overfilled oil can increase engine wear and potentially lead to engine damage.



This is an example of a severely blocked diesel particulate filter



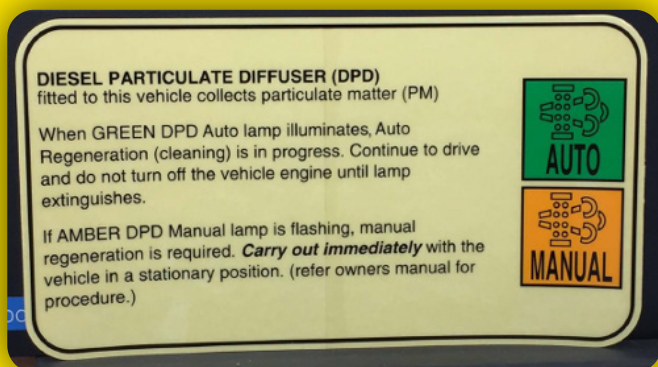
- 1* Oil change required
- 2* Oil level acceptable
- 3* Oil level full mark
- 4* Oil level low
- 5* Minimum oil level
- 6* Oil top up maximum level
- 7* Oil requires replacing

Why Regeneration Is Important

While ways of carrying out a regeneration can vary between manufacturers, the principle remains the same.

A regeneration uses extra fuel (in the exhaust system) to raise temperatures up to around **600°C** for a period of time, burning off the collected soot and converting it to ash

Carry out a regeneration as soon as the truck requests one. Ignoring the warning can cause an engine derate, DPF blockage and vehicle downtime.



TR Tips

Tips and Tricks

- ▶ Be aware of where you park your vehicle during a regeneration. Exhaust temperatures can become extremely high, so avoid parking on grass, dry vegetation or near flammable materials.
- ▶ A small amount of smoke or a burning smell during regeneration is normal. This is part of the DPF cleaning process.
- ▶ If your vehicle is producing excessive smoke outside of a regeneration event, it should be reported and investigated.
- ▶ Avoid repeatedly interrupting a regeneration. Consistently stopping the engine before a regeneration is complete can lead to increased soot build-up and more frequent regeneration requests.

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