

# Diagnosis: From Replacing Parts to Solving Root Causes

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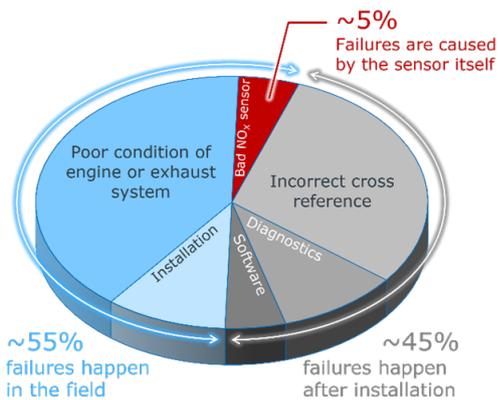
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Your Partner in Exhaust and Emission

The fault code doesn't always tell the full story. That's a reality many workshops are dealing with today – and with the increasing complexity of exhaust and emission systems, the challenge is only growing. The solution is proper diagnosis. Successful repairs now depend less on replacing individual components and more on understanding how the entire system behaves, and which symptoms point to the true root cause.

## The numbers tell a clear story



Market data indicates that only 5% of NO<sub>x</sub>-sensor related failures, have a root cause which is related to the actual sensor. The remaining 95% are related to other circumstances, typically involving installation or maintenance of the system overall, and engine components.

We've seen it countless times: a fault code points to a DPF or a NO<sub>x</sub> sensor, the component is replaced, the vehicle leaves – and returns weeks later with the same issue. In many cases, the failed component wasn't the real problem, but simply the first part to react.

Market data shows that 89% of DPF failures are caused by upstream issues. Roughly 95% of NO<sub>x</sub> sensor failures are linked to engine-, exhaust- or EGR-problems or incorrect installation, while about 50% of SCR and DEF failures can be traced back to neglected maintenance.

## Emission systems don't fail in isolation

DOCs, DPFs, SCR systems and sensors operate as a tightly connected system. When something goes wrong upstream – poor combustion, turbo or EGR issues, oil or coolant contamination, or unsuitable duty cycles – the aftertreatment system absorbs the impact. Sensors become contaminated, regeneration patterns change, and components fail under thermal or chemical stress.

## Supporting better diagnosis in a changing workshop

As emission systems become more complex, workshops need more than parts – they need understanding. That's why Dinex focuses on transferring OEM-level insight to the aftermarket, helping mechanics move from symptom-based repairs to confident diagnosis. Together with our distributors, Dinex supports workshops through on-site technical training, online sessions, and practical explainers and videos. Installation guides with dedicated troubleshooting sections help technicians avoid common pitfalls during repairs.

To support learning beyond the workshop floor, Dinex is preparing the launch of a Training Library within the Partner Portal, offering accessible material for all users and more in-depth content for registered partners – making knowledge available when it's needed most.



Dinex has the most extensive offering of technical training opportunities in Exhaust and Emission technologies for Heavy-Duty vehicles, ranging from online resources available 24/7, to customized training sessions on-site or on-line.

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