



**SERVICEINFO**

**AIC** Germany  
Automotive Components

**NOx SENSOR**

## The correct NOx sensor



Thick air in city centres? One measure to counteract this is the increased use of NOx storage catalytic converters with associated NOx sensors in vehicles with petrol engines. After all, the highly developed components ensure that the nitrogen oxides (NOx) produced during combustion are converted into harmless nitrogen and oxygen in chemical processes. However, natural wear and tear, constant temperature fluctuations and combustion errors put a lot of strain on the sensors. If the function of the sensor is impaired, it sends incorrect signals to the engine control unit. This stores an error and the engine switches to emergency mode. The result is not only poorer exhaust emissions, but also higher fuel consumption. If the engine indicator lamp lights up, in many cases the NOx sensor is defective.

1. Compare the new AIC sensor with the old one, which was removed from the vehicle. The OE number that we assign to this AIC item must be identical to the one installed in the vehicle.
2. Only use the AIC NOx sensor for the OE number approved by us.
3. Should a newer sensor model be used based on the vehicle manufacturer's OE number replacement chain (e.g. partslink), it is essential to update the vehicle's software.
4. The sensor must be replaced and reprogrammed in accordance with the vehicle manufacturer's specifications. Various error messages may occur if the sensor is not programmed accordingly.
5. When replacing the sensor, the electrical plug connections, contacts and cables should be checked for proper functioning and cleanliness.
6. Check the old, removed NOx sensor. If the sensor head is heavily rusted, clogged or has prematurely failed, there is a likelihood of heavy soot formation or moisture in the exhaust gas. In such cases, the engine, EGR and turbocharger should be checked first.
7. The stored NOx values from the old sensor must be deleted before the new sensor is reprogrammed.
8. Before performing a function test on the newly installed sensor, the engine must have reached its operating temperature.
9. Installation may only be carried out by authorised and trained specialists.