P2234

Oxygen Sensor Ahead of Catalytic Converter, Bank 2 – Heater Coupling

Diagnosis conditions

- Vehicle at operating temperature, after this 3 minutes idle speed, then approx. 30 seconds increased idle speed.

Possible fault cause

- Oxygen sensor faulty (heater coupling)
- High-resistance shunt circuits

Affected terminals

DME control module connector A, pin 4, and oxygen sensor connector ahead of TWC, bank 2, pin 4

DME control module connector A, pin 12, and oxygen sensor connector ahead of TWC, bank 2, pin 5

DME control module connector A, pin 13, and oxygen sensor connector ahead of TWC, bank 2, pin 1

Diagnosis/troubleshooting

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Do not use contact spray on the oxygen sensor plug connections, as this may cause irreparable damage to the wiring (blocking the reference air channels).

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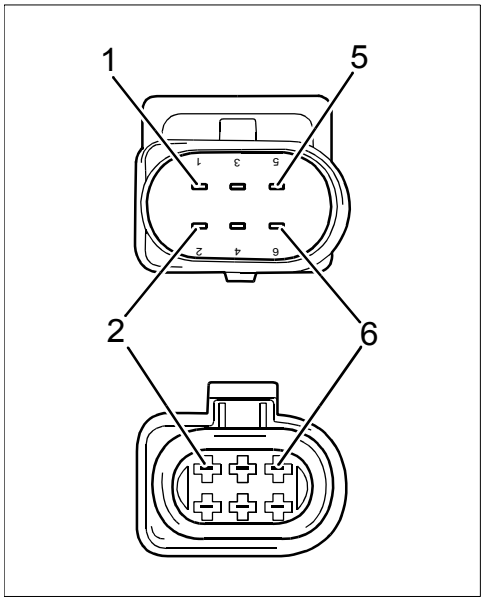
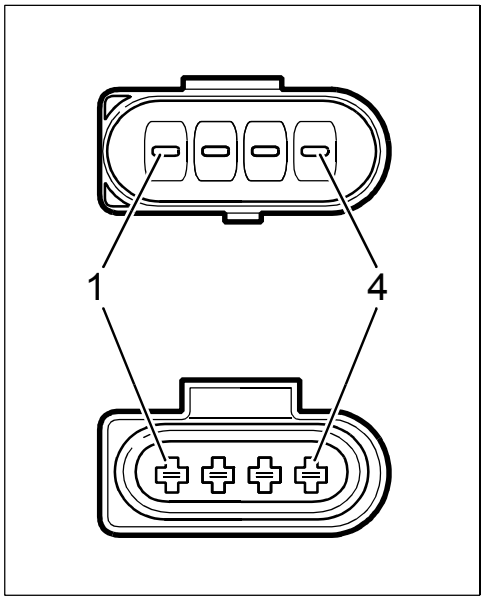
Do not confuse oxygen sensor ahead of catalytic converter and oxygen sensor after catalytic converter as this will cause implausible fault entries.

Distinguishing feature of both sensors:

Oxygen sensor ahead of catalytic converter (LSU) has a 6-pole connector ►



Oxygen sensor after catalytic converter (LSF) has a 4-pole connector ►



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If connector A is disconnected from the DME control module and the ignition is or was switched on, the 'DME Control Module TIME-OUT' fault is recorded in many control modules.

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If control module connector A was disconnected from the DME in the course of troubleshooting or if the voltage supply was interrupted elsewhere (battery, fuse), the throttle adjusting unit must be adapted!

Work instruction			**Display OK**	**If not OK**
1	Check oxygen sensor wiring harness for high-resistance shunt circuits	♦ Remove connector A from DME control module ♦ Visual inspection ♦ Disconnect oxygen sensor connector ♦ Visual inspection Measure resistance between DME control module connector A: ♦ Pin 4 and pin 12 ♦ Pin 4 and pin 13	∞ Ω ⇒ Step 2	Repair wiring harness, eliminate cause of damage if necessary → End
2	Replace oxygen sensor		→ End	⇒ Step 3
3	Check whether additional faults have been recorded		⇒ Step 4	Work through fault in accordance with instruction → End
4	Replace DME control module		To do this, you must observe the notes in the introduction on any potential causes of faults!	