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P0160**Interruption of Signal for Oxygen Sensor behind Catalytic Converter (Cylinders 4 - 6)****Function**

To diagnose the readiness for operation of the oxygen sensors, the position of the sensor voltage is evaluated (in case of certain faults or conditions, the diagnosis is disabled).

Diagnosis Conditions

Diagnostic Trouble Code P0160 is stored in the Engine Control Module when the sensor voltage is between 400 mV and 500 mV for more than 400 seconds without interruptions.

Conditions for the diagnosis of the oxygen sensor signals:

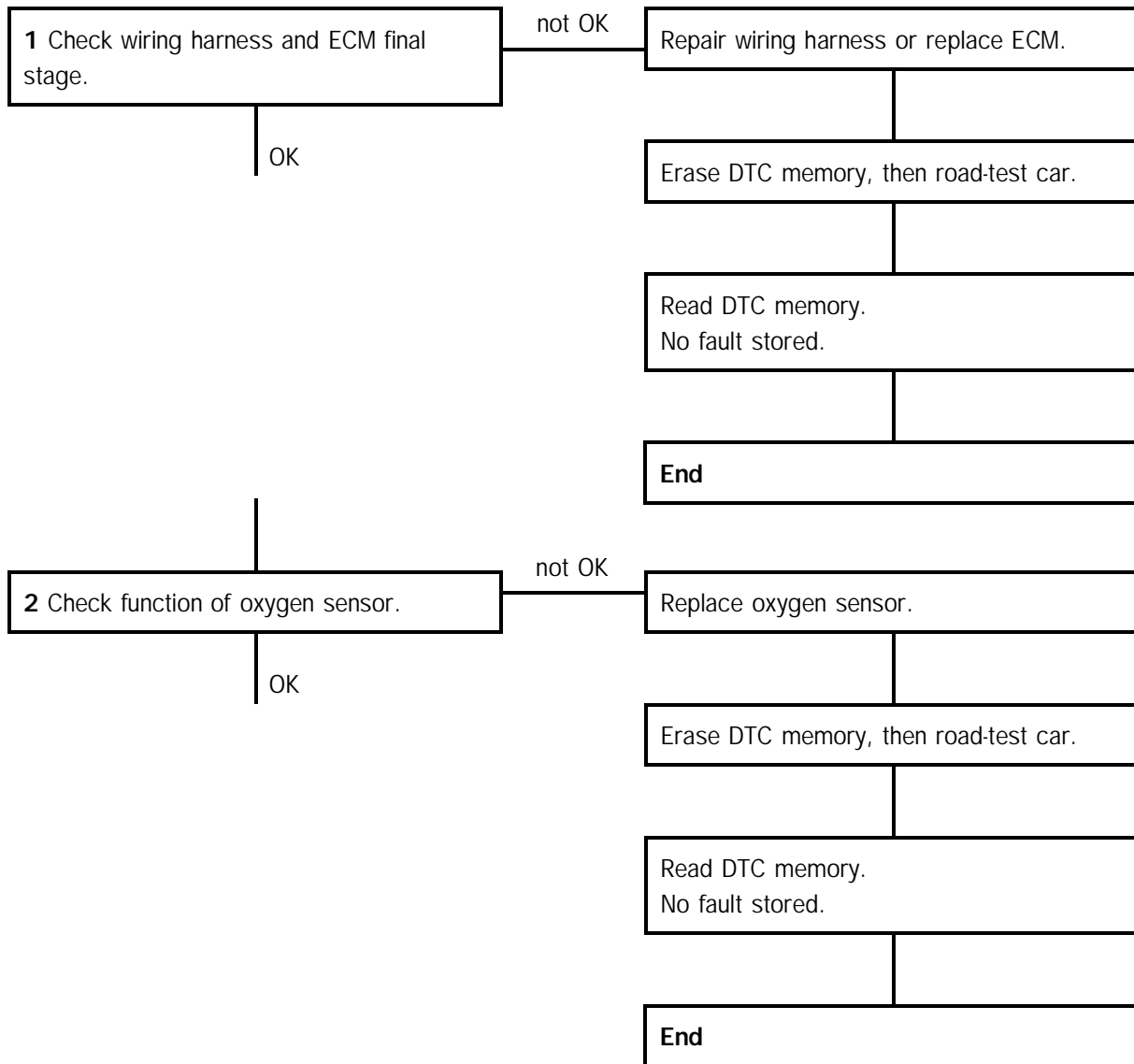
Sensor heating is active.

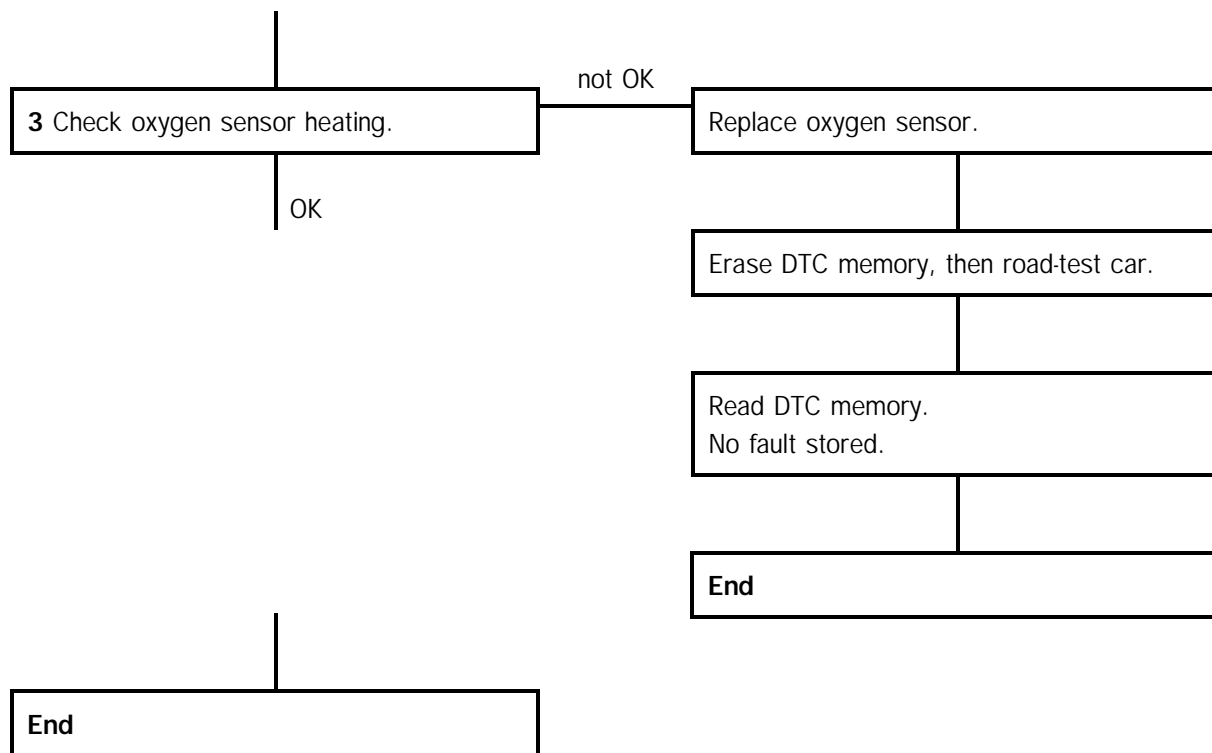
DTC No.	Fault conditions	Fault area
P0160	<ul style="list-style-type: none">- Interruption of signal wire or ground wire of <u>one</u> oxygen sensor.- Oxygen sensor heating not functioning.- ECM final stage faulty.	<ul style="list-style-type: none">- Wiring harness- Oxygen sensor- ECM

Note:

When DTC P0160 is stored, DTC P1121 may be stored as well.

Diagnosis Procedure





1 Check wiring harness.

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| <p>1. Remove all the four oxygen sensor connectors.</p> <p>2. Switch ignition on.</p> <p>3. Connect voltmeter at sleeve to pins 3 and 4 of oxygen sensor connector 2 behind catalytic converter.
Specified value: approx. 450 mV</p> <p>4. Connect voltmeter at sleeve to pin 3 and ground.
Specified value: approx. 720 mV</p> <p>5. Start engine and run engine at high speed for three minutes.</p> | <p>6. Connect voltmeter at sleeve to pins 1 and 2.
Specified value: battery voltage</p> <p>If the measurement according to items 3, 4, and 6 does not show the specified values, remove ECM connector and check wires for continuity.</p> <p>If no continuity can be detected, repair wiring harness.
If continuity OK, replace ECM.</p> |
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2 Check function of oxygen sensor.

1. Heat the oxygen sensors (road-test car under load or run engine without load at high engine speed).
2. Connect system tester or scan tool and read voltage of oxygen sensor 2 behind catalytic converter.
- Specified value: Voltage fluctuations between 100 mV and 800 mV.
→ Oxygen sensor OK.

3 Check oxygen sensor heating.

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| <p>1. Remove oxygen sensor connector 2 behind catalytic converter.</p> <p>2. Connect ohmmeter on pin side to pins 1 and 2 of the oxygen sensor connector.
Specified value: 1.8 - 2.5 Ω at 20 °C</p> | <p>3. Connect ohmmeter on pin side to pin 1 and the oxygen sensor housing.
Specified value: ∞ Ω</p> <p>4. Connect ohmmeter on pin side to pin 2 and the oxygen sensor housing.
Specified value: ∞ Ω</p> |
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