

AUDI P1117: O2 CONTROL (BANK 1 SENSOR 2) OPEN

OVERVIEW

Severity	:	High
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$100-\$300
Can I Still Drive?	:	Yes

What Does The Audi P1117 Code Mean?

Engine started, battery voltage must be at least 11.5v, all electrical components must be off, the ground between the engine and the chassis must be well connected, the exhaust system must be properly sealed between the catalytic converter and the cylinder head, and the oxygen sensor heater for oxygen sensor before the catalytic converter must be properly functioning.

The ECM detected a measurement on the O2 sensor circuit that was outside the parameters to function properly.

Note: For resistance testing of sensor heating, oxygen sensor should be cooled to ambient temperature. High temperatures at oxygen sensor may lead to inaccurate measurements.

What Are The Potential Causes Of The Audi P1117 Code?

- Oxygen sensor (before catalytic converter) is faulty
- Oxygen sensor (behind catalytic converter) is faulty
- Oxygen sensor heater (before catalytic converter) is faulty
- Oxygen sensor heater (behind catalytic converter) is faulty
- Circuit wiring has a short to power or ground
- Engine Component Power Supply Relay is faulty
- E-box fuses for oxygen sensor are faulty
- Leaks present in the exhaust manifold or exhaust pipes

- HO2S signal wire and ground wire crossed in connector
- HO2S element is fuel contaminated or has failed
- ECM has failed

Reference Sources

[Audi A4 Avant 95-01 Service Repair Manual](#), page 38.