

Technical Service Bulletin



01 Idle speed characteristic during cold start

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Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Cabrio	2007-09	All	Engine BKH
A4	2005-09		Engine BKH
A6	2005-09		Engine BKH
S5	2008-12		Engine CAUA
S6	2007-11		Engine BXA
S8	2007-09		Engine BSM
R8 V8	2008-10		Engine BYH
R8 V8	2011-13		Engine CNDA
R8 V10	2009-13		Engine BUJ
R8 V10	2012-13		Engine CMPA
RS 5	2013-2014		Engine CFSA
S6	2013-2015		Engine CEUC
S7	2013-2015		Engine CEUC
S8	2013-2015		Engine CGTA
A8 4.0T	2013-2015		Engine CEUA

Condition

REVISION HISTORY		
Revision	Date	Purpose
3	-	Revised header data (New models added)
2	7/18/12	Revised header data
1	1/13/2012	Original publication

Noises/inconsistent engine operation after cold start during the catalyst heating phase.

The customer may interpret this engine roughness as misfiring.

Technical Background

To comply with the legal requirements on exhaust gas emissions according to the LEV-1 and LEV-2 standards, a high exhaust gas quality must be ensured. The necessary catalyst only operates at a temperature over 300°C (572°F). To achieve this, the catalyst is heated up. The catalyst heating phase is achieved by a late ignition angles and by introducing additional fresh air to the exhaust valves (secondary air system).

Late ignition angles make sure that the exhaust gas from the cylinders has a higher temperature. This exhaust gas includes fuel that is un-burnt, and was deliberately injected into great quantities. The secondary air system adds fresh air to the exhaust gas as it leaves the cylinder and the extra fuel is burnt. As a result, the temperature of the exhaust gas and of the catalyst increases quickly.

Effects:

The afterburning in the exhaust manifold before catalyst changes the sound characteristic of the engine. This heating-up of the catalyst, including afterburning, is normal and has no effect on the service life of the engine. During this catalyst heating phase the engine has increased idle speed, may have increased vibrations, and a different sound characteristic.

Conditions for the catalyst heating phase:

Depending on conditions the time of the catalyst heating phase varies.

Production Solution

No change

Service

Please do not repair. Explain the technical background to the customer.

Warranty

This TSB is informational only and not applicable to any Audi warranty.



Additional Information

All parts and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.