



# Technical Service Bulletin

## 01 Coolant loss from coolant valve, engine warning light on, "Limp Home" mode active, cabin heating is insufficient

01 19 99 2033806/9 January 10, 2019. Supersedes Technical Service Bulletin Group 01 number 16-80 dated October 13, 2016 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4	2012 - 2013	All	Not Applicable
A4	2014	N000001 - N000184 A000001 - A247958	Not Applicable
A5	2012	All	Not Applicable
A5	2013	000001 - 077920 900000 - 903086	Not Applicable
A5 Cabriolet	2012 - 2013	All	Not Applicable
A5 Cabriolet	2014	000001 - 000174 900000 - 900019	Not Applicable
A6, A7	2012	All	Not Applicable
A6, A7	2013	000001 - 155596	Not Applicable
Q5	2012 - 2014	All	Not Applicable
Q7	2011 - 2013	All	Not Applicable
Q7	2014	000001 - 000973	Not Applicable
TT	2012 - 2014	All	Not Applicable

## Condition

REVISION HISTORY		
Revision	Date	Purpose
9	-	Revised bulletin (Updated to 2019 standard)
8	10/13/2016	Revised header (Removal of A8)
7	07/21/2015	Revised title (Changed prefix to "01") Revised <i>Production Solution</i> (Updated to show that solution is now implemented)

The customer may have one or more of the following concerns:



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- MIL on.
- Climate system heating performance is insufficient.
- Coolant level warning is on.
- Engine temperature is elevated.
- “Limp Home” mode is active.

## Workshop findings:

The results of the diagnosis based on the customer concern may reveal one or more of the following:

One of the following faults may be stored in the transmission control module (TCM), J217 (address word 0002):

- **DTC P275300** (Transmission Fluid Cooler Control Circuit Open)
- **DTC P275500** (Transmission Fluid Cooler Control Circuit High)
- Coolant loss is found from one or more control valves: N82, N509, or N488. Coolant may have migrated into the wiring harness through the connector and into various control units.
- Climate system heating performance is insufficient due to coolant loss as a result of coolant migration in the electrical harness, faults in 08-Heating and Air Conditioning Electronics that result from coolant migration in the electrical harness, or a faulty N82 control valve.

## Technical Background

Inspection of the coolant control valves N82, N509, or N488 reveals the presence of coolant inside the electrical connector as shown in the illustration (Figure 1).



*Figure 1. Coolant residue in the connector housing of the coolant regulating valve.*



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The connectors, wiring harness, and/or connected control units may have been damaged from exposure to coolant (Figure 2).



**Figure 2.** Corrosion formation on the connector pins.

## Production Solution

Improved coolant control valves are installed in production.



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## Service

1. Diagnose the defective coolant valve (N82, N509, or N488) using Guided Fault Finding (GFF) where the stored DTCs are found.
2. Replace the defective coolant valve.



**Tip:** Check the connectors, wiring harness, and connected control units for coolant damage. Perform repairs as necessary.

## Warranty

<b>Claim Type:</b>	<ul style="list-style-type: none"> <li>• 110 up to 48 Months/50,000 Miles.</li> <li>• G10 for CPO Covered Vehicles – Verify Owner.</li> <li>• If vehicle is outside any warranty, this Technical Service Bulletin is informational only.</li> </ul>		
<b>Service Number:</b>	When servicing N82: 8015 When servicing N488 or N509: 1945		
<b>Damage Code:</b>	0050		
<b>Labor Operations:</b>	See Elsa for the specific model being serviced for this concern:		
	<b>For solenoid valve N82:</b>		
	See Elsa for specific labor operations	8015 9999	Use actual time
	<b>For solenoid valves N488 or N509:</b>		
	See Elsa for specific labor operations	1945 9999	Use actual time
<b>Diagnostic Time:</b>	GFF	0150 0000	Time stated on diagnostic protocol (Max 50 TU)
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	No allowance	0 TU
<b>Claim Comment:</b>	As per TSB #2033806/9		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.



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## Required Parts and Tools

<b>Please reference ETKA using the VIN of the subject vehicle to ensure that the correct valve is being ordered.</b>		
<b>Part Number</b>	<b>Part Description</b>	<b>Quantity</b>
4H0121670A	Solenoid valve	01
4H0121671D	Solenoid valve	01
See ETKA	Fasteners, Bolts, Nuts and Screws as needed per the Repair Manual	See ETKA/ELSA

## Additional Information

All parts and service references provided in this TSB (2033806) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.

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