



# Technical Service Bulletin

## 80 Coolant loss from coolant valve, engine warning light on, "Limp Home" mode active

80 13 03 2033806/2 May 13, 2013. Supersedes Technical Service Bulletin Group 80 number 13-02 dated May 9, 2013 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6 \ A7	2012 - 2013	All	Not Applicable
A8	2010 - 2013		
Audi Q7	2011 - 2013		
A5 Cabriolet	2012 - 2013		
TT	2012 - 2013		
A4	2012 - 2013		
Q5	2012 - 2013		
A5	2012 - 2013		

## Condition

REVISION HISTORY		
Revision	Date	Purpose
2	-	Revised <i>Warranty</i> (Updated labor operations)
1	5/9/2013	Initial publication

- The customer may have one or more of the following concerns:
  - Malfunction Indicator Lamp is on.
  - Climate system heating performance is insufficient.
  - Coolant level warning is on.
  - Engine temperature is elevated.
  - "Limp Home" mode is active.
- The results of the diagnosis based on the customer complaint may reveal one or more of the following:
  - One of the following faults is stored in the transmission control module (address word 02):
    - **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, or due to 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.*

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 in development.

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## Service

1. Diagnose the defective coolant valve (N82, N509, or N488) using Guided Fault Finding where 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>	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
<b>Service Number:</b>	8015		
<b>Damage Code:</b>	0050		
<b>Labor Operations:</b>	See ElsaWeb for the specific model being serviced for this concern:		
	<b>For solenoid valve N82:</b>		
	See ElsaWeb for applicable labor operations		XX TU
	<b>For solenoid valves N488 or N509:</b>		
	See ElsaWeb for applicable labor operations		XX TU
<b>Diagnostic Time:</b>	GFF	01 50 00 00	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
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
<b>Claim Comment:</b>	As per TSB #2033806/2		

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

Please reference ETKA using the VIN of the subject vehicle to ensure that the correct valve is being ordered.

Part Number	Part Description	Quantity
4H0121670	Solenoid valve	1
4H0121670A	Solenoid valve	1
4H0121671B	Solenoid valve	1
4H0121671D	Solenoid valve	1

## 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.