

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

80 13 04 2033806/3 August 9, 2013. Supersedes Technical Service Bulletin Group 80 number 13-03 dated May 13, 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		
3	-	Revised header data (Updated customer codes) Revised <i>Required Parts and Tools</i> (Updated part numbers)		
2	5/13/2013	Revised Warranty (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.

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- 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.

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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 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

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.				
Service Number:	8015	8015			
Damage Code:	0050	0050			
Labor Operations:	See ElsaWeb for the specific model being serviced for this concern:				
	For solenoid valve N82:				
	See ElsaWeb for applicab	See ElsaWeb for applicable labor operations			
	For solenoid valves N488 or N509:				
	See ElsaWeb for applicable labor operations		XX TU		
Diagnostic Time:	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)				
Claim Comment:	As per TSB #2033806/3				

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
4H0121670A	Solenoid valve	1
4H0121671D	Solenoid valve	1

## **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 service manuals for the latest information.

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