



Technical Service Bulletin

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

01 15 31 2033806/7 July 21, 2015. Supersedes Technical Service Bulletin Group 80 number 14-07 dated August 11, 2014 for reasons listed below.

| Model(s) | Year | VIN Range | Vehicle-Specific Equipment |
|--------------|-------------|--|----------------------------|
| A6, A7 | 2012 | All | Not Applicable |
| A6, A7 | 2013 | 000001 - 155596 | Not Applicable |
| A8 | 2010 - 2012 | All | Not Applicable |
| A8 | 2013 | 000001 - 034562 | Not Applicable |
| Q7 | 2011 - 2013 | All | Not Applicable |
| Q7 | 2014 | 000001 - 000973 | Not Applicable |
| A5 Cabriolet | 2012 - 2013 | All | Not Applicable |
| A5 Cabriolet | 2014 | 000001 - 000174 900000 - 900019 | Not Applicable |
| TT | 2012 - 2014 | All | Not Applicable |
| A4 | 2012 - 2013 | All | Not Applicable |
| A4 | 2014 | N000001 - N000184 A000001 - A247958 | Not Applicable |
| Q5 | 2012 - 2014 | All | Not Applicable |
| A5 | 2012 | All | Not Applicable |
| A5 | 2013 | 000001 - 077920 900000 - 903086 | Not Applicable |

Condition

| REVISION HISTORY | | |
|------------------|-----------|---|
| Revision | Date | Purpose |
| 7 | - | Revised title (Changed prefix to "01") Revised <i>Production Solution</i> (Updated to show that solution is now implemented) |
| 6 | 8/11/2014 | Revised <i>Warranty</i> (Updated service number and labor operations) |
| 5 | 3/11/2014 | Revised title |

- The customer may have one or more of the following concerns:
 - MIL 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 may be 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 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 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: | When servicing N82: 8015 When servicing N488 or N509: 1945 | | |
| Damage Code: | 0050 | | |
| Labor Operations: | See Elsa for the specific model being serviced for this concern: | | |
| | For solenoid valve N82: | | |
| | See Elsa for specific labor operations | 8015 9999 | Use actual time |
| | For solenoid valves N488 or N509: | | |
| | See Elsa for specific labor operations | 1945 9999 | Use actual time |
| Diagnostic Time: | 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 |
| | 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 #2033806/7 | | |

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.