



Technical Service Bulletin

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

01 16 80 2033806/8 October 13, 2016. Supersedes Technical Service Bulletin Group 01 number 15-31 dated July 21, 2015 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
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



Technical Service Bulletin

Condition

REVISION HISTORY		
Revision	Date	Purpose
8	-	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)
6	08/11/2014	Revised <i>Warranty</i> (Updated service number and labor operations)

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 Service Bulletin

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.

Technical Service Bulletin

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.

Technical Service Bulletin

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:	<ul style="list-style-type: none"> • 110 up to 48 Months/50,000 Miles. • G10 for CPO Covered Vehicles – Verify Owner. • 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)



Technical Service Bulletin

	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 #2033806/8		

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.

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.

©2016 Audi of America, Inc. All rights reserved. Information contained in this document is based on the latest information available at the time of printing and is subject to the copyright and other intellectual property rights of Audi of America, Inc., its affiliated companies and its licensors. All rights are reserved to make changes at any time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, nor may these materials be modified or reposted to other sites without the prior expressed written permission of the publisher.