

Technical Service Bulletin

19 Coolant loss - coolant pump leak diagnosis

19 14 48 2036477/1 March 11, 2014.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A8	2011 - 2012	All	4.2 FSI

Condition

- The red coolant warning light may be on (Figure 1).
- The customer may complain that there is coolant loss.
- There is evidence of dried coolant from two leakage holes on the drive of the coolant pump (Figure 2).



Figure 1. Red coolant light.

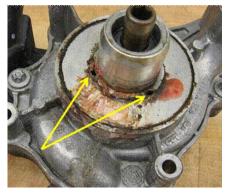


Figure 2. Dried coolant from two leakage holes on coolant pump.

Technical Background

The coolant pump is sealed with a slip ring seal to the input shaft. To prevent the seal from drying out, a minor coolant leak is necessary to keep the seal lubricated.

Excess coolant from the minor leak is discharged through two leakage holes on the coolant pump. This minor leak is normal operation of the coolant pump, and it is not responsible for coolant loss.

This discharged coolant may dry and encrust the coolant pump (Figure 3).

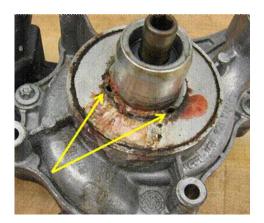


Figure 3. Dried coolant from two leakage holes on coolant pump.

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Production Solution

Not applicable.

Service

If there is evidence of dried coolant on the coolant pump, and the red coolant warning light is illuminated, proceed as follows:

- 1. Pressure test the cooling system with 1.5 bar, then check the coolant pump for fresh coolant leaks.
- 2. Use a small nylon bristle brush and water to remove any dried coolant from the coolant pump.
- 3. Test drive the vehicle to bring the vehicle to operating temperature.
- 4. With the vehicle at operating temperature, pressure test the cooling system with 1.5 bar again, then check for fresh coolant leaks.
 - If coolant continues to drip or flow from the leakage holes: Replace the coolant pump housing according to the instructions in Elsa under Engine >> Engine Mechanical >> 19 Cooling System >> Removal and Installation >> Coolant Pump.
 - If there is no evidence of fresh coolant leaks: Do not replace the coolant pump. Doing so will not fix the problem, as the cause of the coolant loss is elsewhere in the system. Continue to check the system for the source. Refer to TSB 2033806: 80 Coolant loss from coolant valve, engine warning light on, "Limp Home" mode active.



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Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.				
Service Number:	1950				
Damage Code:	0050				
Labor Operations:	Check cooling system	1901 0100	20 TU		
	Remove leaked coolant	1001 2999	10 TU		
	Check cooling system again after test drive (pressure check)	1901 0199	20 TU		
	Coolant pump remove+reinstall	1950 1919	220 TU		
Diagnostic Time:	GFF	No allowance	0 TU		
	Road test prior to service procedure	0121 0002	10 TU		
	Road test after service procedure	0121 0004	10 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 #2036477/1				

Required Parts and Tools

Part Number	Part Description	Quantity
079121014F	Coolant pump housing	1
079 121 119 B	Gasket – water pump	1
N 90806302	O-ring	1
N 91008902	O-ring	1
079103121BG	O-ring	1
WHT000881	O-ring	1



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Additional Information

All parts and service references provided in this TSB (2036477) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.