

19 Coolant leak in area of coolant thermostat housing/coolant pump - 2.0TFSI

19 20 10 2061604/1 December 14, 2020.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A3	2007 - 2013	All	Evo2
A4	2007 - 2016	All	Evo2
A5	2010 - 2016	All	Evo2
A6	2012 -2015	All	Evo2
Q3	2012 - 2018	All	Evo2
A8	2013	All	Evo2
Q5	2011 - 2017	All	Evo2
TT	2009 - 2014	All	Evo2

Condition

Customer state:

- The coolant temperature warning light is on.
- There are clear coolant marks under the front end/engine compartment.

Workshop findings:

- The leak can be reproduced.
- The cause for the coolant loss is found around the coolant thermostat housing or the coolant pump.



Technical Background

Coolant loss from the coolant thermostat housing (Figure 1, position 1) or the coolant pump (Figure 1, position 2).



Figure 1. Coolant thermostat/coolant pump. Parts are available separately, see parts table below.

Production Solution

Not applicable.

Service



Refer to Warranty Policy and Procedures section 3.21.9 (Only category 3 leaks in the table Categorization of leaks can be claimed under warranty).

Check the cooling system for leaks according to the repair manual (pressure check).

Only replace the leaking component (coolant pump or coolant thermostat housing).

Proceed as follows:

1) Remove the coolant thermostat housing including the coolant pump according to Elsa at repair manual: Engine >> 4 - Cylinder Direct Injection >> 19 Cooling System >> Coolant Pump/Coolant Thermostat >> Coolant Pump, Removing and Installing.



- 2) Separate the water pump and coolant thermostat housing by removing the five connecting bolts (Figures 1 2).
- 3) Replacing the leaking component (coolant thermostat housing or coolant pump) with a replacement part, proceed as follows:
 - Assemble the coolant thermostat housing and the coolant pump and attach the five connecting bolts.
 - Align the two components against one another in such a way that both components are flush to one another in the areas marked in red (Figure 2). The thermostat housing must not be higher/lower than the coolant pump (run your finger over the three areas to check).
 - Torque the connecting bolts of the two components to 10 Nm.

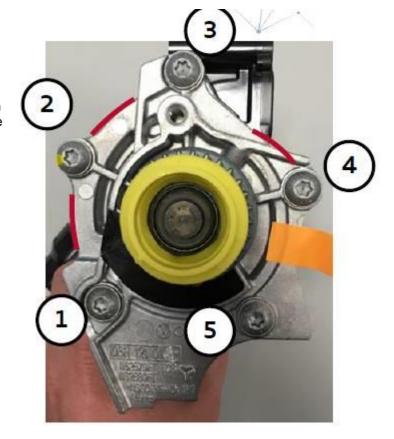


Figure 2. Securing bolts of the coolant pump (1 to 5).

4) Install the assembled coolant module to the engine. Make sure the bolts are only hand-tight at this point.



5) Check the toothed belt tension (Figure 3) by pressing the toothed belt together centrally between the two toothed belt sprockets. The measured distance of the backs of the toothed belt should be between 28mm and 30mm. A measuring caliper can also be used for toothed belt compression and measurement.

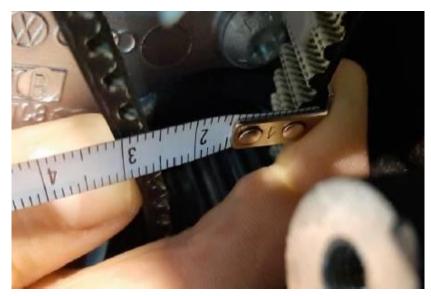


Figure 3. Checking the toothed belt tension.

The measured distance is between 28mm and 30mm:

Complete the installation of the coolant module according to the instructions in ELSA (Step 7 is not necessary).

The measured distance is smaller than 28mm and greater than 30mm:



7) Adjustment of the toothed belt tension is necessary.

Proceed as follows (Figure 4) for assistance:

- Note down the measured value (e.g. 26mm) from step 5).
- Remove the cooling module from the engine again, loosen the coolant pump bolts (Figure 2) and make adjustments as outlined below.
- If the measured distance of the backs of the toothed belt (pressed together) is less than 28mm (e.g. 25mm), then the belt tension is too low. A slight adjustment away from the balance shaft is necessary (direction "a").
- If the distance of the backs of the toothed belt (pressed together) is greater than 28mm (e.g. 32 mm), then the belt tension is too great. A slight adjustment towards the balance shaft is necessary (direction "b").

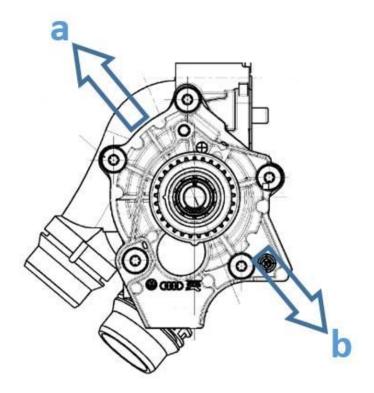


Figure 4. Adjusting the toothed belt tension.

8. Tighten the five securing bolts of the coolant pump and repeat steps 4 and 5.

Warranty

Claim Type:	 110 up to 48 Months/50,000 Miles. G10 for CPO Covered Vehicles – Verify Owner. 	
	If the vehicle is outside any warranty, this Technical Service Bulletin is informational only.	
Service Number:	1950 (Coolant Pump).1955 (Thermostat Housing).	
Damage Code:	0050	
Labor Operations:	A3, Q3, and TT:	



	Remove and install the coolant pump	1950 1937	See SRT with associated operations	
	A4, A5, A5 Cab, A6, and Q5:			
	Remove and install the coolant pump	1950 1913	See SRT with associated operations	
	All:			
	Replace water pump and check/adjust tooth belt tension	1950 5599	20 TU	
	Replace thermostat housing and check/adjust tooth belt tension	1955 1999	20 TU	
Diagnostic Time:	GFF	No allowance	0 TU	
	Road test prior to the service procedure	No allowance	0 TU	
	Road test after the service procedure	No allowance	0 TU	
Claim Comment:	As per TSB #2061604/1			

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

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.					
Part Number	Part Description	Quantity			
See ETKA	Fasteners, Bolts, Nuts, Screws, and additional gaskets as needed per the Repair Manual	See ETKA/ELSA			
06H121010A	Water Pump (only if leaking)	01			
06H121111R	Thermostat Housing (only if leaking)	01			
06H121043	Gasket	01			



Additional Information

More information on this system can be found in the following resources:

- Warranty Online: Warranty Policy and Procedures section 3.21.9.
- Elsa: Engine >> 4 Cylinder Direct Injection >> 19 Cooling System >> Coolant Pump/Coolant Thermostat >> Coolant Pump, Removing and Installing.

All parts and service references provided in this TSB (2061604) are subject to change and/or removal.

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