

#### 15 Oil leak from the cylinder head - 2.9 and 3.0TFSI only

15 21 38 2053278/7 April 1, 2021. Supersedes Technical Service Bulletin Group 15 number 21-37 dated February 16, 2021 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4, Q5	2018 - 2020	All	2.9 and 3.0 TFSI
Q5, SQ5	2021	000001 - 044156	2.9 and 3.0 TFSI
A4	2021	000001 - 019775	2.9 and 3.0 TFSI
A6, A7, S6, S7, A8, S8, and Q8	2019 - 2020	All	2.9 and 3.0 TFSI
A6, A7, S6, and S7	2021	000001 - 028126	2.9 and 3.0 TFSI
Q7, SQ7, and SQ8	2020	All	2.9 and 3.0 TFSI
A8, S8	2021	000001 – 008158	2.9 and 3.0 TFSI
Q8, SQ8	2021	000001 – 013958	2.9 and 3.0 TFSI
Q7, SQ7	2021	000001 – 017837	2.9 and 3.0 TFSI
RS 5, RS 5 Cabriolet, and RS 5 Sportback	2019	All	2.9 and 3.0 TFSI
RS 5, RS 5 Cabriolet, and RS 5 Sportback	2021	900001 - 900620	2.9 and 3.0 TFSI

### **Condition**

REVISION HISTORY		
Revision	Date	Purpose
7	-	Revised Warranty (Updated Labor Operations)
6	02/16/2021	Revised Required Parts and Tools (Updated part number)
5	01/30/2021	Revised header (Added VIN break)
		Revised Service (Revised DOC-IT note)



#### **Customer states:**

- Oil loss in the area around the engine compartment, front end, and underbody.
- Oil level warning (too low).
- There is a smell coming from the engine compartment.

#### Workshop findings:

- There is a leak in the area around the cylinder head cover, valve cover, and cylinder head.
- There is a leak in the area around the injector.
- There is a leak in the area around the Audi valvelift system actuator.

### **Technical Background**

Metal shavings produced during manufacture in sealing groove between cylinder head cover and the cylinder head

### **Production Solution**

Improved production processes.

### **Service**

As the oil loss in the area of the cylinder head cover may involve two different issues, proceed as follows to clearly determine the source of the leak.

1. Remove the engine compartment cover and the heat shield below it.



2. Remove the upper noise insulation of the affected cylinder bank (Figure 1).



Figure 1. Removing the upper noise insulation.

3. Remove the Audi valvelift system actuator of the affected cylinder.

**A.** If there is a substantial quantity of oil below the Audi valvelift system actuator (illustration), the cause of the leak is the O ring of the Audi valvelift system actuator.



#### Note:

Please take photos of the oil under the Audi valve lift system actuator as shown in Figure 2. Then upload them into DOC-IT with the repair order. Photos should:

- Have a date stamp and VIN reference.
- Be taken in focus and with sufficient light. Replace the Audi valvelift system actuator with an O ring, clean the engine compartment, and if necessary replace the noise insulation (if it is soaked in oil) (Figure

**B.** If there is no substantial quantity of oil below the Audi valvelift system actuator continue with Step 4!

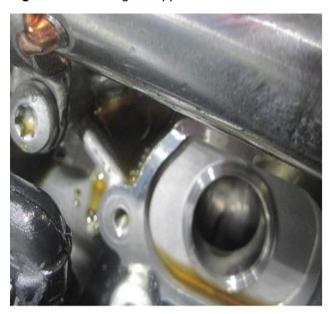


Figure 2. Oil in the Audi valve lift system.



- 4. Remove the lower noise insulation.
- Locate the affected cylinder. Oil should have gathered in the area of the injector (Figure 3) and the noise insulation should also be soaked in oil.



Figure 3. Locating the affected cylinder.

6. Remove the cylinder head cover and the seal (Figure 4).



Figure 4. Remove the cylinder head cover and gasket.



7. Inspect the gasket groove in the cylinder head cover and remove any casting residues with a suitable tool (Figure 5). The residues can be removed with a small flat screwdriver (Figure 6).



#### Note:

Make sure not to damage the seal groove!



Figure 5. Before the repair.



Figure 6. After the repair.

8. Install a new seal, re-assemble the camshaft cover, clean the engine compartment, and if necessary replace the noise insulation (if it is full of oil).



#### Note:

Do not replace the Audi valvelift system actuator(s) with an O-ring seal when the leak has been determined to be around the area of the injector(s).



Warranty

warranty				
Claim Type:	• 110 up to 48 Months/50,000 Miles.			
	G10 for CPO Covered Vehicles – Verify Owner	r.		
	If the vehicle is outside any warranty, this Tecl only.	nnical Service Bulleti	n is informational	
Service Number:	1580 (Leak on injector)			
	1551 (Leak on Audi valvelift system actuator)			
Damage Code:	• 0050 (1580 only)			
	• 0010 (1551 only)			
Labor Operations:	For 3.0L engines			
	Adjusting mechanism for Valvelift system remove	1551 2043 (left)	See SRT with	
	+ reinstall (if AVS leak location)	1551 2044 (right)	associated operations	
		1551 9999 <b>(Q8)</b>	110 TU (Right)	
			170 TU (Left)	
	Camshaft adjusters remove + reinstall (if injector	1584 1943 (left)	See SRT with	
	leak location)	1584 1944 (right)	associated operations	
	Camshaft housing remove + reinstall (if injector	1503 1993 (left)	See SRT with	
	leak location)	1503 1994 (right)	associated operations	
	Clean engine cover, heat shield, upper and engine	1083 9999	40 TU	
	Radar sensor adjust (if applicable)	9163 1650	See SRT with	
		Or	associated operations	
		9163 1550	operations	
	Preparation Driver Assist Calibration (if	9092 0050	See SRT with	
	applicable)		associated operations	
	Vehicle front + rear check (if applicable)	4495 0100	See SRT with associated operations	



Overhead view camera adjusted (if applicable)	9083 1500	See SRT with associated operations
For 2.9L engines (RS models)		
Adjusting mechanism for Valvelift system remove + reinstall (if AVS leak location)	1551 1945 (left) 1551 1946 (right)	See SRT with associated operations
Front bumper cover remove + reinstall (if injector leak location)	6329 1900	See SRT with associated operations
Front bumper remove + reinstall (if injector leak location)	6310 1950	See SRT with associated operations
Radiator remove + reinstall (if injector leak location)	1970 1995	See SRT with associated operations
Camshaft adjusters remove + reinstall (if injector leak location)	1584 1995 (left) 1584 1996 (right)	See SRT with associated operations
Camshaft housing remove + reinstall (if injector leak location)	1503 1995 (left) 1503 1996 (right)	See SRT with associated operations
Clean engine cover, heat shield, upper and engine	1083 9999	40 TU
Overhead view camera adjusted (if applicable)	9083 1500	See SRT with associated operations
Radar sensor adjust (if applicable)	9163 1650	See SRT with associated operations
Preparation Driver Assist Calibration (if applicable)	9092 0050	See SRT with associated operations



	Vehicle front + rear check (if applicable)	4495 0100	See SRT with associated operations
Diagnostic Time:	GFF (if applicable)	0150 0000	Time stated on the diagnostic protocol (Max 50 TU)
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	0121 0004	10 TU
Claim Comment:	As per TSB #2053278/7		

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.

## **Required Parts and Tools**

Part Number	Part Description	Quantity
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA
06M906048F	Solenoid valve (if applicable)	01
06M103650D	Gasket Cylinders 1-3 (if applicable)	01
06M103649D	Gasket Cylinders 4-6 (if applicable)	01
G 12E050S0	Coolant concentrate 1.5L (if applicable)	02

### **Additional Information**

All parts and service references provided in this TSB (2053278) are subject to change and/or removal.

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