

Technical Service Bulletin



17 Oil consumption measurement - R8

17 15 56 2020666/4 February 12, 2015. Supersedes Technical Service Bulletin Group 17 number 10-13 dated December 13, 2010 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
R8	2008 - 2015	All	Not Applicable

Condition

REVISION HISTORY		
Revision	Date	Purpose
4	-	Revised header data (Added model year, updated customer code) Revised attachment (New oil consumption measurement form) Revised <i>Service</i> (Updated tester to ODIS)
3	12/13/2010	Revised header data (MY)
2	8/6/2009	Revised header data (New customer codes)
1	5/21/2009	Original publication

Customer states that oil consumption is higher than what is stated in the vehicle owner's manual.

Technical Background

In order to provide effective lubrication and cooling of internal engine components, all internal combustion engines consume a certain amount of engine oil. Oil consumption varies from engine to engine, and may change significantly over the life of the engine. Typically, engines with specified break-in periods consume more oil during the break-in period, and the oil consumption will stabilize after the break-in period. Refer to the Owner's Manual for specific break-in procedures.

Under normal conditions, the rate of oil consumption depends on the quality and viscosity of the oil, the RPM at which the engine is operated, the ambient temperature and road conditions. Further factors are the amount of oil dilution from water condensation or fuel residue and the oxidation level of the oil.

Production Solution

Not applicable.

Service

Before Testing or Attempting Repair

1. Explain the *Technical Background* to the customer as stated in the Owner's Manual.
2. Obtain detailed information regarding the customer's perceived oil consumption before starting the test. If the oil usage is lower than the Audi oil consumption standard that is listed in the vehicle owner's manual, advise the customer that the engine oil consumption is within specifications and no further testing is needed at this time.
3. Ensure a minimum of 3,000 miles (5,000 km) have been put on vehicle. It is normal for the oil consumption of a new engine to reach its lowest value after a certain mileage has been driven. A vehicle must be driven about 3,000 miles (5,000 km) before oil consumption can be properly assessed.
4. If the vehicle is within the New Vehicle Limited Warranty, you *must* obtain authorization from the Audi Technical Assistance Center before proceeding.



Note:

Only R8-certified technicians are allowed to perform the following measurement.

Oil Consumption Test, Part 1

1. Select the test plan in the ODIS tester: *Function/Component Selection: Powertrain >> Engine >> Engine lubrication >> Partial systems >> Oil consumption measurements.*



Tip: Technician must select the correct model year and engine code from the GFF selection screen.

2. Follow the ODIS test protocol exactly. Document all information on attached oil measurement sheets (Keep a copy of the oil measurement sheet in the vehicle's service file and attach a copy to the TAC ticket) .



Tip: Due to the dry-sump lubrication design with multiple drain plugs, the oil draining procedure below must be followed *exactly* for *both* parts of the consumption tests to achieve accurate and consistent measurements.

- a. Remove both sections of rear dampening pan (Figure 1).

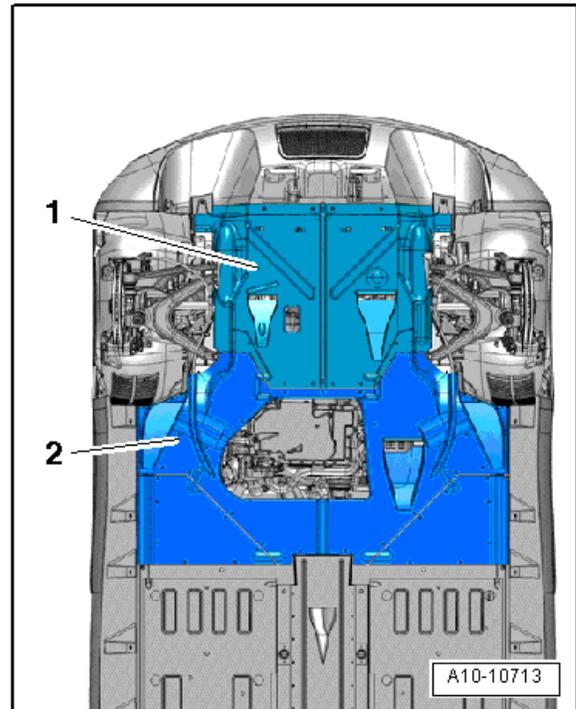


Figure 1. The rear dampening pan.

- b. Open the oil drain plug (Figure 2, label 1) and drain for **10** minutes. Reinstall drain plug with new gasket and torque to specification.

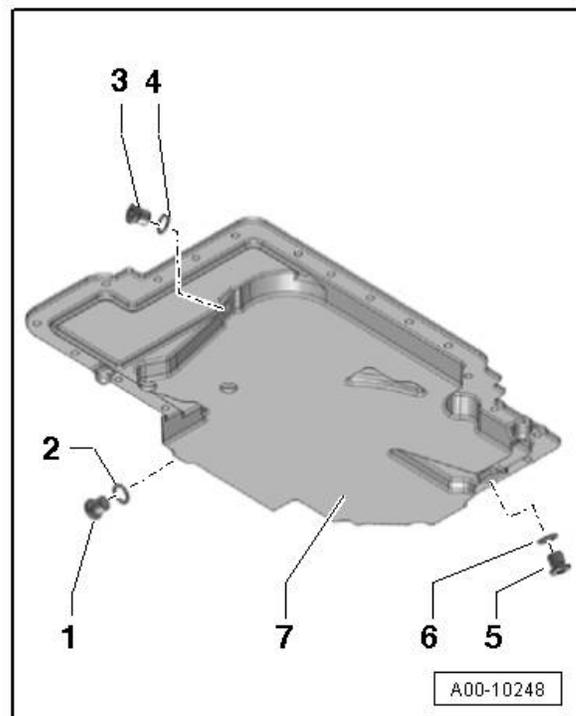


Figure 2. The oil drain plugs (1, 3, and 5).

- c. Open the oil drain plug (Figure 2, label 3) and drain for **5** minutes. Reinstall drain plug with new gasket and torque to specification.
- d. Open the oil drain plug (Figure 2, label 5) and drain for **5** minutes. Reinstall drain plug with new gasket and torque to specification.
- e. Open the oil drain plug on the oil reservoir (Figure 3) with a 12 mm multi-point socket comparable to VAS 5301/19. Drain for **5** minutes. Reinstall drain plug with new gasket and torque to specification.

Tightening Specifications:

Oil drain plugs to oil pan: 10 Nm

Oil drain plug to oil reservoir: 22 ± 2 Nm

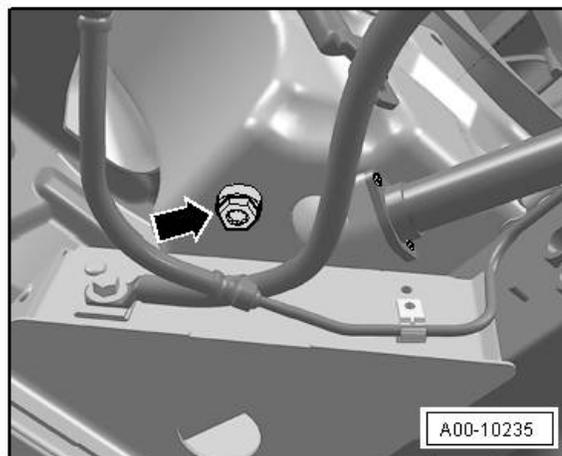


Figure 3. The oil drain plug on the oil reservoir.

3. Archive the diagnostic log and oil measurement test sheets in the vehicle service file.
4. Advise the customer that if the low oil level warning light comes on before the required 630-mile test is completed, the vehicle must be taken directly to the dealership for Part 2 of the oil consumption test regardless of the miles accumulated.

Oil Consumption Test, Part 2

1. When the customer returns the vehicle to the dealership, complete Part 2 of the oil consumption test. Ensure the oil is drained in the manner described above.

If the GFF printout from Part 2 of the test indicates an oil consumption rate outside the permissible tolerance *and* the vehicle is within the New Vehicle Limited Warranty, authorization to perform any repairs is required from the Audi Technical Assistance Center (TAC). Attach the GFF log to the TAC contact.

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Warranty

If the result of the test is that the oil consumption is within the permissible tolerance, another oil consumption test on the same engine will not be covered under Warranty within the next 25,000 miles (40,000 km).

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	1716		
Damage Code:	0010		
Labor Operations:	Oil consumption test Part 1, includes removing both sections of rear dampening pan.	1716 0199	120 TU
	Oil consumption test Part 2, includes removing both sections of rear dampening pan.	1716 0299	90 TU
Diagnostic Time:	GFF	No allowance	0 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 #2020666/4		

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

Tool Number	Tool Description
T40159	Socket XZN 8
See below	Digital scale with 15 kilogram capacity and 5 gram accuracy

The digital scale with 15 kilogram capacity and 5 gram accuracy can be obtained locally if necessary. Adam Equipment, Inc. offers a Model CPW plus 15 and will provide a 20% discount for this item to our dealer network, plus freight. They may be contacted at:

Adam Equipment, Inc.

26 Commerce Drive

Dandury, CT 06810

Phone: 888-355-3868

Fax: 203-792-3406

E-mail: sales@adamequipment.com

Additional Information

All parts and service references provided in this TSB (2020666) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.