

# Safety Recall

## Code: 21H7



<b>Subject</b>	Oil Strainer				
<b>Release Date</b>	August 04, 2022				
<b>Affected Vehicles</b>	<b>Country</b>	<b>Beginning Model Year</b>	<b>Ending Model Year</b>	<b>Vehicle</b>	<b>Vehicle Count</b>
	USA	2013	2017	A8	7,874
	USA	2014	2017	RS7	3,305
	USA	2013	2017	S6 SEDAN	6,385
	USA	2013	2017	S7	5,040
	USA	2013	2017	S8	3,449
	CAN	2013	2017	A8	326
	CAN	2014	2017	RS7	808
	CAN	2013	2017	S6 SEDAN	567
	CAN	2013	2017	S7	548
	CAN	2013	2017	S8	292
	<p>Check Campaigns/Actions screen in Elsa on the day of repair to verify that a VIN qualifies for repair under this action. Elsa is the <u>only</u> valid campaign inquiry &amp; verification source.</p> <ul style="list-style-type: none"> <li>✓ Campaign status must show "open."</li> <li>✓ If Elsa shows other open action(s), inform your customer so that the work can also be completed at the same time the vehicle is in the workshop for this campaign.</li> </ul>				
<b>Problem Description</b>	<p>The oil strainer within the oil supply for the turbocharger might become blocked by oil/carbon deposits contained in the engine oil. A blocked oil strainer within the oil supply for the turbocharger leads to a lack of lubrication of the turbocharger bearings. This causes wear on the bearings and, as a result, the turbine wheel of the turbocharger may contact the housing, or the turbocharger shaft can break. This could lead to a lack of power or even stalling, which could increase the risk of a crash.</p>				
<b>Corrective Action</b>	<p>The oil strainer within the oil supply for the turbochargers will be replaced and an oil change will be performed. A tester routine on the scan tool will check and document the correct performance of the boost pressure system.</p>				
<b>Precautions</b>	<p>A defect on the turbochargers and boost pressure system can lead to different warning messages such as the EPC, MIL, or oil warning light being displayed. In addition, the customer may notice indications like extended cranking, rough idling or lack of power. Owners experiencing these conditions are advised to contact an authorized Audi dealer to have the vehicle diagnosed/repared.</p>				
<b>Code Visibility</b>	<p>On or about August 04, 2022, the campaign code will be applied to affected vehicles.</p>				
<b>Owner Notification</b>	<p>Owner notification will take place in August 2022. Owner letter examples are included in this bulletin for your reference.</p>				
<b>Additional Information</b>	<p><b>Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions.</b></p>				

**IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALLS**

**New Vehicles in Dealer Inventory: It is a violation of federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied. By law, dealers must correct, prior to delivery for sale or lease, any vehicle that fails to comply with an applicable Federal Motor Vehicle Safety Standard or that contains a defect relating to motor vehicle safety.**

**Pre-Owned Vehicles in Dealer Inventory: Dealers should not deliver any pre-owned vehicles in their inventory which are involved in a safety or compliance recall until the defect has been remedied.**

Dealers must ensure that every affected inventory vehicle has this campaign completed before delivery to consumers.

## Parts Information

<b>Parts Control Type:</b> <b>Free Order</b>	Parts will be managed by Free Order
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<b>Initial Allocation:</b> <b>NO</b>	There will be no parts allocation. Please reference the Repair Projection Tool (below) to view your potential VIN population.
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<b>Repair Projection Tool:</b> <b>(right click to open)</b>	
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Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method
01	1	079-115-175-G	STRAINER	Free Order
	1	079-103-161-Q	GASKET	
	3	079-103-583	SEAL	
	1	079-129-717-J	GASKET	
	1	079-129-717-K	GASKET	
	1	079-145-818	SEAL	
	1	079-198-405-D	FILTERELEM	
	2	4E0-121-666	SEAL RING	
	See ELSA	G -12E-050-1G DSP -or- G -013-A8J-1L-DSP	COOLANT	
	1	N -013-815-7 -or N -013-849-8	WASHER (engine oil drain plug seal – confirm part number in ETKA)	
	10	N -101-243-06	BOLT	
	1	N -904-095-01	HOSE CLAMP	
	1	N -104-057-02	TORX SCREW	
	2	N -903-038-01	SEAL RING	
	1	WHT-001-011	SEAL RING	
	Up to 2	WHT-005-529	SEAL RING	
	See ELSA	N/A	5W-40 Engine Oil	
	<i>The following parts are only needed if the oil pressure switch or the right side turbo coolant pipe are removed during the repair. They may not be necessary in every repair.</i>			
1	N -013-811-5	SEAL (oil pressure switch)	Free Order	
1	WHT-001-011-A	SEAL RING (right turbo coolant pipe)		

### NOTE

The specified part numbers reflect the status at the start of this action. Interim updates made in ETKA can cause a listed part number to become unavailable. In this case, the new part number specified in ETKA should be used.

## Claim Entry Instructions

The labor times listed here may differ from the labor operations and labor times listed in ELSA.

After campaign has been completed, enter claim as soon as possible to help prevent work from being duplicated elsewhere. Attach the Elsa screen print showing action open on the day of repair to the repair order.

If customer refused campaign work:

- ✓ U.S. dealers: Submit the request through Audi Warranty Online under the Campaigns/Update option.
- ✓ Canada dealers: Upload the repair order [signed by customer] to Audi WIN/Operations/Campaign Closure.

<b>Service Number</b>	21H7			
<b>Damage Code</b>	0099			
<b>Parts Vendor Code</b>	002			
<b>Claim Type</b>	Sold vehicle: 7 10 Unsold vehicle: 7 90			
<b>Causal Indicator</b>	Mark STRAINER* as causal part			
<b>Vehicle Wash/Loaner</b>	Do not claim wash/loaner under this action			
<b>Criteria I.D.</b>	01			
	Check for related faults in ECM. Remove charge air cooler housing. Replace oil strainer. Change engine oil and filter. Road test vehicle. Recheck ECM for faults.			
	<b>LABOR</b>			
	<b>Model</b>	<b>Labor Op</b>	<b>Time Units</b>	<b>Description</b>
	A8, S8	1726 19 99	590	Replace oil strainer
	S6, S7, RS7	1726 20 99	650	Replace oil strainer
		2706 89 50	10	Connect battery charger
	ALL	0150 00 00	Time stated on diagnostic protocols	GFF Operations*
	<i>*NOTE: if multiple GFF operations are performed, add the logs together</i>			
	<b>PARTS</b>			
	<b>Quantity</b>	<b>Part Number</b>	<b>Description</b>	
	1.00	079115175G	STRAINER*	
	1.00	079103161Q	GASKET	
	3.00	079103583	SEAL	
	1.00	079129717J	GASKET	
	1.00	079129717K	GASKET	

**Continued on next page**

PARTS (continued)		
Quantity	Part Number	Description
1.00	079145818	SEAL STRIP
1.00	079198405D	FILTER ELEMENT WITH GASKET
2.00	4E0121666	ROUND SEAL
Up to 2.00	G 12E050S0	COOLANT <b>(U.S. ONLY)</b>
Up to 80.00	G 12E050S0	COOLANT <b>(CANADA ONLY)</b>
Up to 90.00	G 052167S0	ENGINE OIL
1.00	N 0138115	SEAL RING (if necessary)
1.00	N 0138157 -or- N 0138498	WASHER (engine oil drain plug seal – confirm part number in ETKA)
10.00	N 10124306	OVAL HEXAGON SOCKET HEAD BOLT
1.00	N 10405702	OVAL HEXAGON SOCKET HEAD SCREW
2.00	N 90303801	ROUND SEAL
1.00	N 90409501	RETAINING CLIP
1.00	WHT001011	ROUND SEAL
1.00	WHT001011A	ROUND SEAL (if necessary)
Up to 2.00	WHT005529	ROUND SEAL

-AND-	<b><u>S6, S7 or RS7 Models ONLY</u></b>	
	Add as needed depending on vehicle equipment	
	LABOR	
	Labor Op	Description
	9092 00 50	Preparation Driver Assist Calibration
	4495 01 50	Preparation Driver Assist Calibration
	9080 15 50	Camera f night vision sys adjust
	9083 15 50	Overhead view camera adjust
	9163 16 50	Radar sensor adjust

## Customer Letter Example (USA)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

**This notice applies to your vehicle:** <MODEL YEAR> <BRAND> <CARLINE>, <VIN>

**NHTSA:** 22V178

**Subject: Safety Recall 21H7 – Oil Strainer**

Dear Audi Owner,

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Audi has decided that a defect, which relates to motor vehicle safety, exists in certain 2013-2017 model year Audi vehicles. Our records show that you are the owner of a vehicle affected by this action.

**What is the issue?** The oil strainer within the oil supply for the turbocharger might become blocked by oil/carbon deposits contained in the engine oil. A blocked oil strainer within the oil supply for the turbocharger leads to a lack of lubrication of the turbocharger bearings. This causes wear on the bearings and, as a result, the turbine wheel of the turbocharger may contact the housing, or the turbocharger shaft can break. This could lead to a lack of power or even stalling, which could increase the risk of a crash.

**What will we do?** To correct this defect, your authorized Audi dealer will replace the oil strainer within the oil supply for the turbochargers and perform an oil change. Additionally, a tester routine on the scan tool will check and document the correct performance of the boost pressure system. This work will take about a day to complete and will be performed for you free of charge. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

**What should you do?** Please contact your authorized Audi dealer without delay to schedule this recall work. For your convenience, you can also visit [www.audiusa.com](http://www.audiusa.com) and click on the "Find a Dealer" link to locate a dealer near you and schedule this service.

**Precautions you should take** A defect on the turbochargers and boost pressure system can lead to different warning messages such as the EPC, MIL, or oil warning light being displayed. In addition, the customer may notice indications like extended cranking, rough idling or lack of power. Owners experiencing these conditions are advised to contact an authorized Audi dealer to have the vehicle diagnosed/repared.

**Lease vehicles and address changes** If you are the lessor and registered owner of the vehicle identified in this action, the law requires you to forward this letter immediately via first-class mail to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

**Reimbursement of Expenses** If you have previously paid for repairs relating to the condition described in this letter, the enclosed form explains how to request reimbursement. We would be pleased to review your reimbursement request.

**Can we assist you further?** If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Experience at 1-800-253-2834 or via our "Contact Us" page at [www.audiusa.com](http://www.audiusa.com).

**Checking your vehicle for open Recalls and Service Campaigns** To check your vehicle's eligibility for repair under this or any other recall/service campaign, please visit the **Recall/Service Campaign Lookup** tool at [www.audiusa.com](http://www.audiusa.com) and enter your Vehicle Identification Number (VIN).

If you still cannot obtain satisfaction, you may file a complaint with: The Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to <http://www.safercar.gov>.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Audi Customer Protection

The repair information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Audi dealer. ©2022 Audi of America, Inc. and Audi Canada. All Rights Reserved.

## Customer Letter Example (Canada)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

**This notice applies to your vehicle:** <MODEL YEAR> <BRAND> <CARLINE>, <VIN>

**Transport Canada Recall:** 2022-133

**Subject: Safety Recall 21H7 – Oil Strainer**

Dear Audi Owner,

This notice is sent to you in accordance with the requirements of the *Motor Vehicle Safety Act*. This is to inform you that your vehicle may contain a defect that could affect the safety of a person. Our records show that you are the owner of a vehicle affected by this action.

**What is the issue?** The oil strainer within the oil supply for the turbocharger might become blocked by oil/carbon deposits contained in the engine oil. A blocked oil strainer within the oil supply for the turbocharger leads to a lack of lubrication of the turbocharger bearings. This causes wear on the bearings and, as a result, the turbine wheel of the turbocharger may contact the housing, or the turbocharger shaft can break. This could lead to a lack of power or even stalling, which could increase the risk of a crash.

**What will we do?** To correct this defect, your authorized Audi dealer will replace the oil strainer within the oil supply for the turbochargers and perform an oil change. Additionally, a tester routine on the scan tool will check and document the correct performance of the boost pressure system. This work will take about a day to complete and will be performed for you free of charge. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

**What should you do?** Please contact your authorized Audi dealer without delay to schedule this recall work.

**Precautions you should take** A defect on the turbochargers and boost pressure system can lead to different warning messages such as the EPC, MIL, or oil warning light being displayed. In addition, the customer may notice indications like extended cranking, rough idling or lack of power. Owners experiencing these conditions are advised to contact an authorized Audi dealer to have the vehicle diagnosed/repared.

**Lease vehicles and address changes** If you are the lessor and registered owner of the vehicle identified in this letter, you shall forward this letter (and any subsequent notice, if applicable) to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle identified in this letter, please fill out the enclosed prepaid Owner Reply Card and mail it to us so we can update our records.

**Reimbursement of Expenses** If you have previously paid for repairs relating to the condition described in this letter, the enclosed form explains how to request reimbursement. We would be pleased to review your reimbursement request.

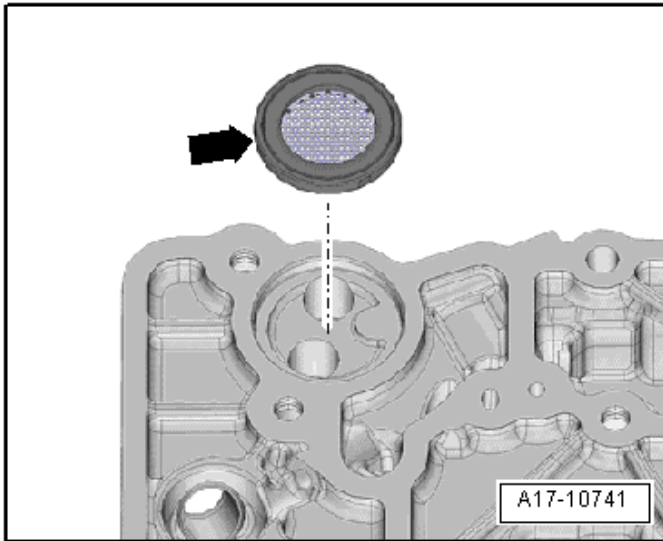
**Can we assist you further?** If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Relations Monday through Friday from 8AM to 8PM EST at 1-800-822-2834 or via our "Contact Audi Canada" page at [www.audi.ca](http://www.audi.ca).

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Audi Customer Protection

## Repair Overview







- Replace oil strainer.

### NOTE

- These repair instructions may differ from the labor operations and labor times listed in ELSA.
- Damages resulting from improper repair or failure to follow these work instructions are the dealer's responsibility and are not eligible for reimbursement under this action.
- This procedure must be read in its entirety prior to performing the repair.
- Due to variations in vehicle equipment and options, the steps/illustrations in this work procedure may not identically match all affected vehicles.
- Diagnosis and repair of pre-existing conditions in the vehicle are not covered under this action.
- When working during extreme temperatures, it is recommended that the vehicle be allowed to acclimate inside the shop to avoid temperature-related component damage/breakage.



## Required Tools

 <p>Engine Bung Set -VAS6122- (or equivalent)</p>	 <p>Hose Clip Pliers -VAS6362- (or equivalent)</p>
 <p>Trim Removal Wedge -3409- (or equivalent)</p>	 <p>Guide Pins -T10093-</p>
 <p>Hex Ball Socket -T10058- (or equivalent)</p>	 <p>Cooling System Charge Kit -VAS6096-</p>

## Repair Instruction

### Section A - Check for Previous Repair

Applicable criteria ID(s)	Campaign/Action Status
01 ← 2	Open ← 1

**EXAMPLE**

Campaign/Action	Start	Designation
→ 3	2015-11-10	W-SERV_ACT -
	2018-12-13	RECALL -
	2017-05-16	A-RECALL -

**EXAMPLE**

- Enter the VIN in Elsa and proceed to the “Campaign/Action” screen.

#### TIP

On the date of repair, print this screen and keep a copy with the repair order.

- Confirm the Campaign/Action is open <arrow 1>. If the status is closed, no further work is required.
- Note the Applicable Criteria ID <arrow 2> for use in determining the correct work to be done and corresponding parts associated.

#### CRITICAL REPAIR STEP

 **STOP!** 

If multiple software update Campaign/Actions are open, they must be performed in order of the Start date <arrow 3>. The oldest should be performed first.

- **All Safety Recalls must be completed prior to completing this campaign.**
- **Proceed to Section B.**

## Section B – Fault Interrogation

- Connect a battery maintainer and perform a full GFF scan using the latest version of ODIS.
- Check fault memory of the ECM (address 0001).
- If faults related to a failed turbocharger are NOT stored:
  - No further diagnosis is required under this action.
  - Exit GFF and send diagnostic log to GFF Paperless.
  - Proceed to Section C for replacing the oil strainer.
- If faults related to a failed turbocharger are stored:
  - Work through the populated test plan(s) for the fault.
  - If diagnosis leads to replacing the turbos due to damage from the impellers making contact with the housing:
    - Send diagnosis log to GFF Paperless.
    - Stop the ODIS session.
    - Take photos of damaged turbo(s).
    - U.S. dealers: Upload photos of damaged turbos to Doc-It for review. Contact Audi Warranty for authorization.
    - Canadian dealers: Create an ATA WEB ticket and attach photos of damaged turbos for review.
    - The oil strainer must still be replaced, Proceed to Section C.
  - If diagnosis leads to an issue other than damage to the turbo (air leak, for example), the diagnosis and repair of the fault will not be covered under this action.
    - After repairing the cause of the fault, the oil strainer must still be replaced, Proceed to Section C.

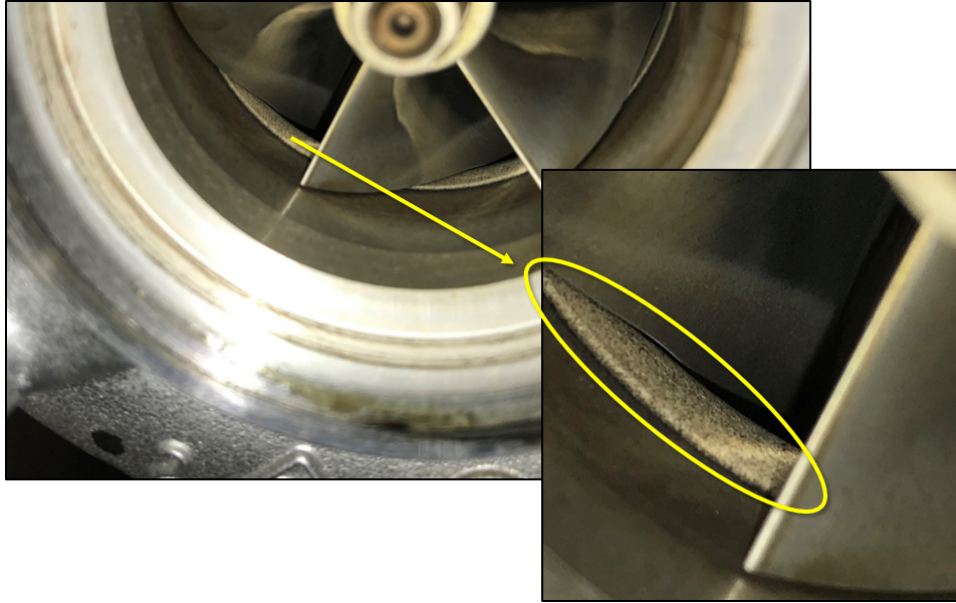
### NOTE

Below are examples of damaged turbos with excessive wear due to failed impeller bearings.



**NOTE**

- Turbos on engine codes CRDB, CWUB, CWUC and DDTA have an integrated and abradable sealing ring.
- Visible contact marks (as shown below) in the area of the sealing ring are OK.
- Visible contact marks (shown in the previous photos of excessive wear) outside the area of the sealing ring are NOT OK.

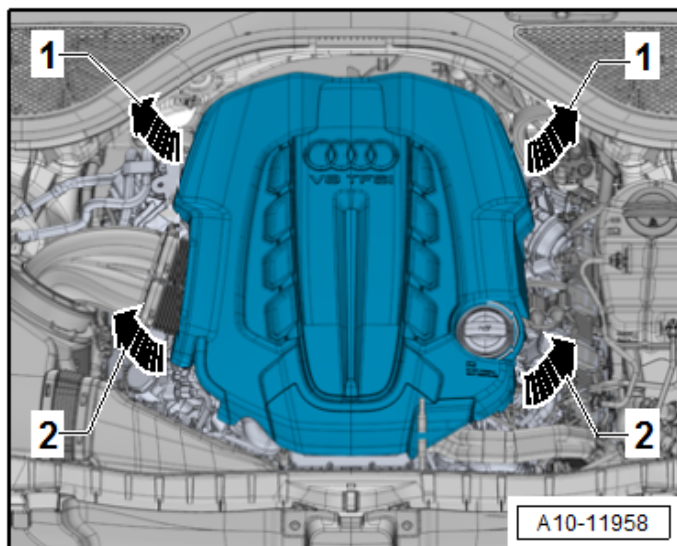


Example of acceptable contact on turbos with an integrated and abradable sealing ring.

## Section C – Replacing Oil Strainer

Even small pieces of debris can cause faults. Observe the following guidelines for cleanliness when working on the turbo charging system:

- Before loosening, thoroughly clean the connection points and surrounding areas with engine or brake cleaner, and then allow the cleaned area to dry completely.
- Immediately seal off any open lines and connections with clean plugs taken from the Engine Bung Set -VAS6122-, for example.
- Place the removed parts on a clean surface and cover them. Only use lint-free cloths.
- Carefully cover or seal opened components if repairs are not performed immediately.
- Only install clean parts: remove the replacement parts from their packaging just before installing them. Do not use parts that have been stored outside of their packaging (for example, in tool boxes etc.).
- Do not work with compressed air when the system is open. Do not move the vehicle if at all possible.
- Protect any disconnected connectors from dirt and moisture, and only connect them when they are completely dry.



**Remove engine cover:**

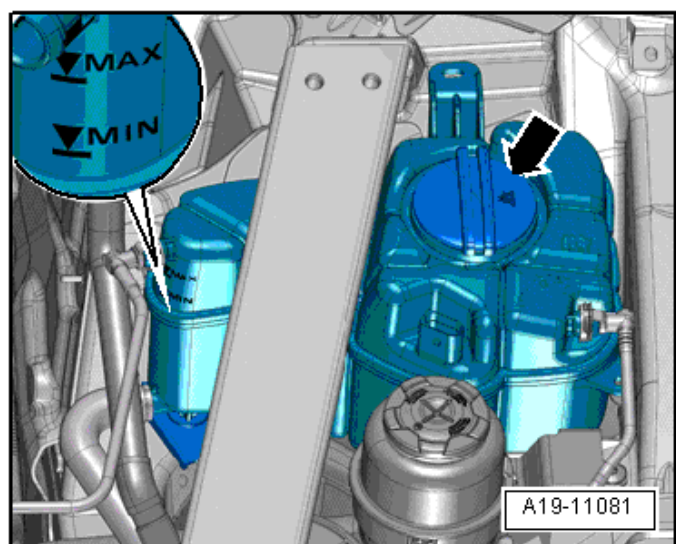
- First pull off the engine cover at the rear mounting points <arrows 1>.
- Then pull off the engine cover at the front mounting points <arrows 2>.

### **⚠ WARNING**

**Fire hazard and risk of damage due to a missing engine cover.**

The engine cover must always be installed before the hood is closed.

The engine may not be started and the vehicle may not be driven with the hood closed without an engine cover.



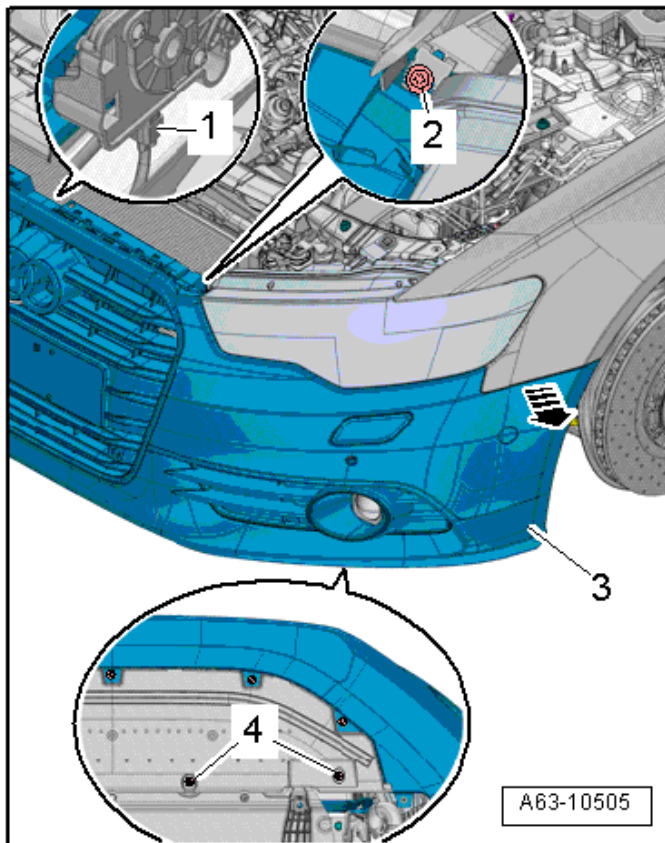
**Open coolant reservoir cap:**

### **⚠ WARNING**

**The cooling system is under pressure when the engine is warm. There is a risk of scalding due to hot steam and hot coolant.**

**Scalding the skin and other parts of the body is possible.**

- Wear safety gloves.
  - Wear protective eyewear.
  - Reduce the pressure by covering the coolant expansion tank cap with a cloth and carefully opening it.
- Open the coolant reservoir cap <arrow>.



#### Remove noise insulation:

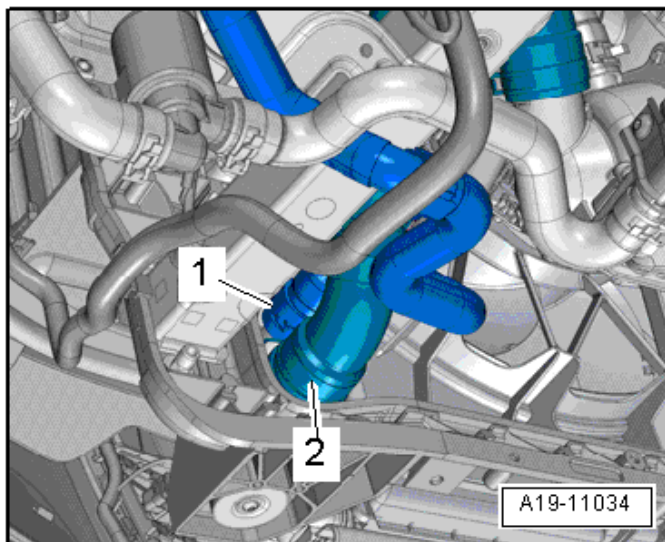
- See ELSA Repair Manual: *Repair manual > Body > Body Exterior > 66 Exterior Equipment > Noise Insulation > Front Noise Insulation, Removing and Installing.*

#### Remove front bumper cover (S6/S7/RS7 only):

- See ELSA Repair Manual: *Repair manual > Body > Body Exterior > 63 Bumpers > Front Bumper > Bumper Cover, Removing and Installing*

#### Bring lock carrier into Service Position (S6/S7/RS7 only):

- See ELSA Repair Manual: *Repair manual > Body > Body Exterior > 50 Body Front > Lock Carrier > Service Position, Implementing and Resetting*



#### Drain coolant:

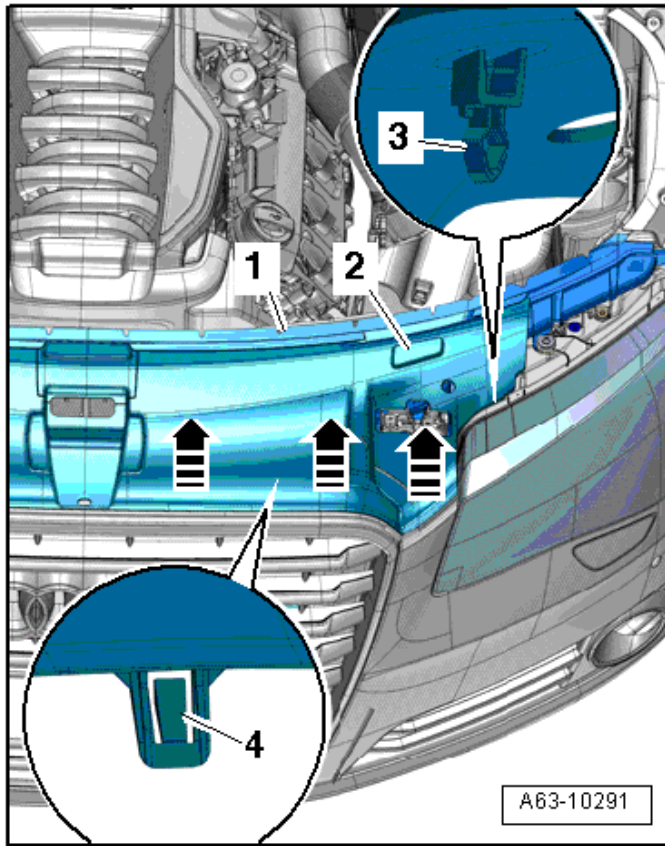
#### **⚠ WARNING**

The cooling system is under pressure when the engine is warm. There is a risk of scalding due to hot steam and hot coolant.

Scalding the skin and other parts of the body is possible.

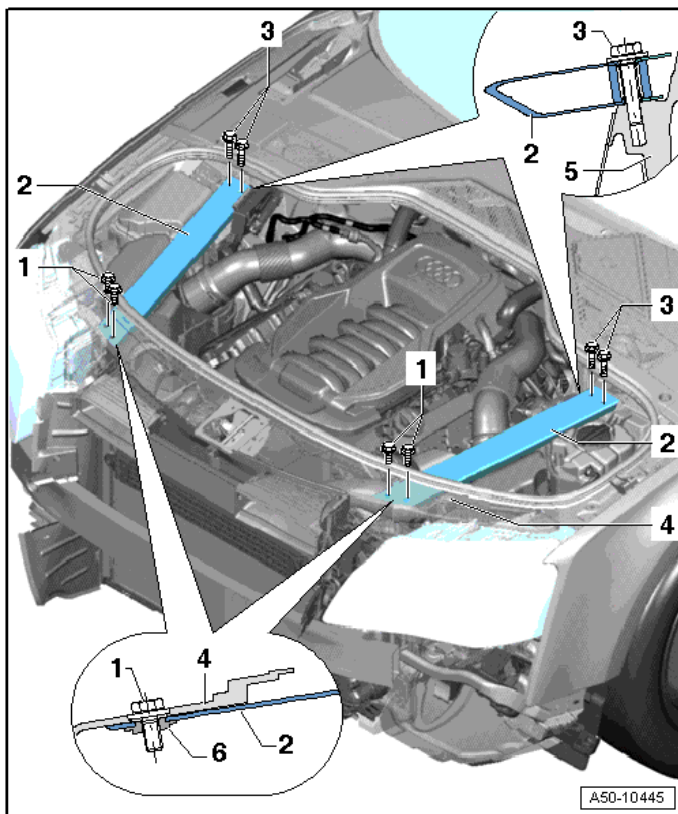
- Wear safety gloves.
- Wear protective eyewear.
- Reduce the pressure by covering the coolant expansion tank cap with a cloth and carefully opening it.

- See ELSA Repair Manual: *Repair manual > Engine > 8-Cylinder Direct Injection 4.0L 4V TFSI Engine > 19 Cooling System > Coolant System/Coolant > Coolant, Draining and Filling*



### Remove lock carrier cover (A8/S8):

- Remove the lock carrier cover <2> in direction of <arrows>.
- If equipped, at the same time release the tab <3>. While doing this the retaining tabs <4> will unlock.
- Remove the cover from the groove on the lock carrier <1>.

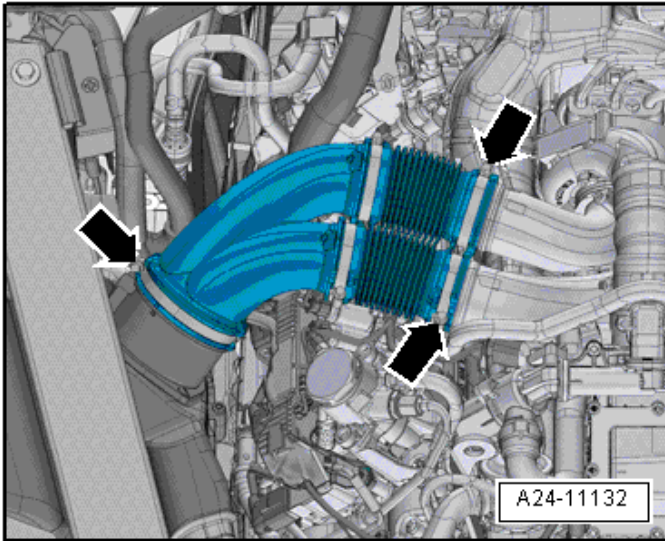


### Remove left and right longitudinal members (A8/S8):

- Remove the front bolts <1> and rear bolts <3> and lift out the longitudinal members <2>.

#### NOTE

Only the right side has to be removed for the A8.

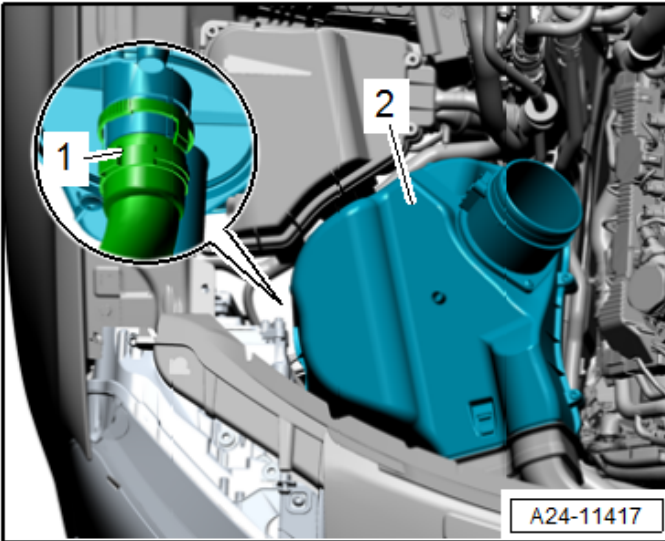


**Remove air filter housing(s) and air duct (A8/S8):**

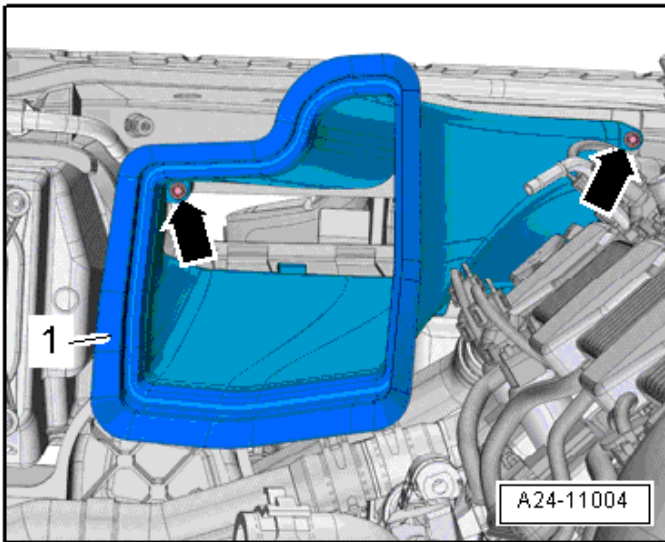
- Loosen the hose clamps <arrows> to remove the air duct pipe.

**NOTE**

A8 shown. Procedure for S8 will be similar.

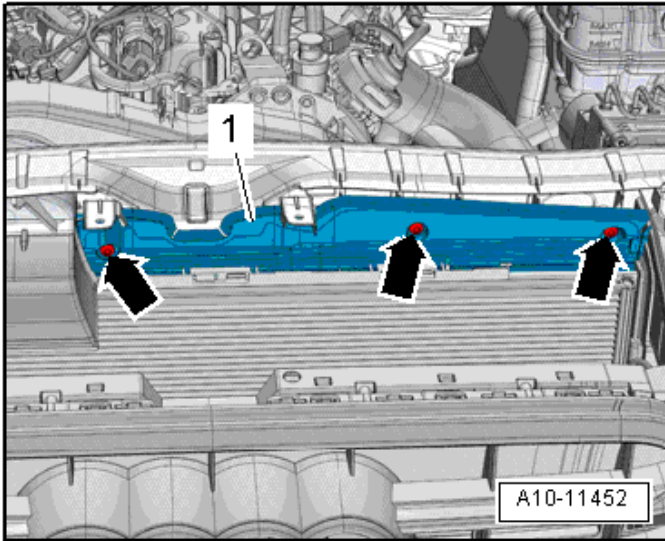


- From underneath the vehicle, press the release buttons and remove the secondary air hose <1> (right side).
- Remove the air filter housing <2> upward.



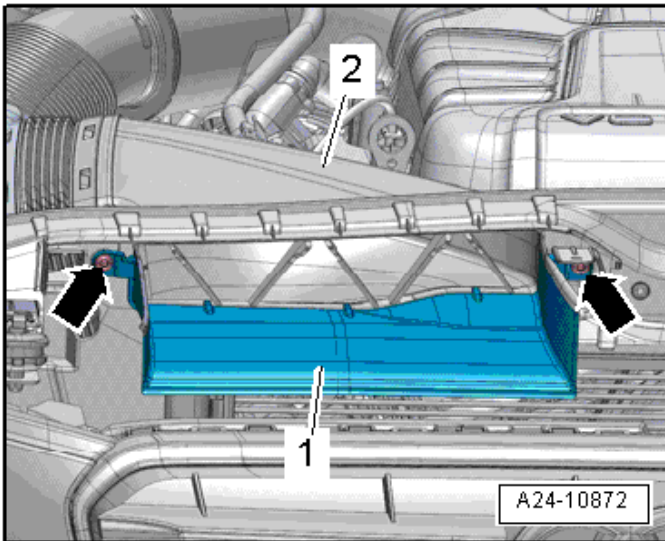
- Remove the bolts <arrows> and then remove the air duct <1>.



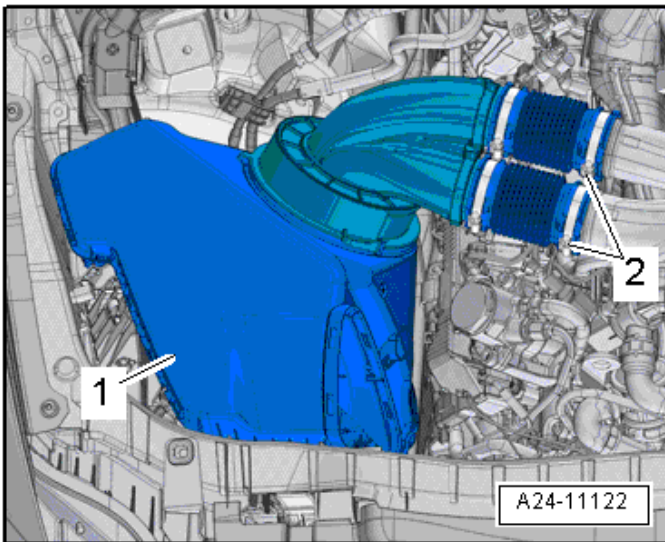


**Remove air duct and air filter housing (S6/S7/RS7):**

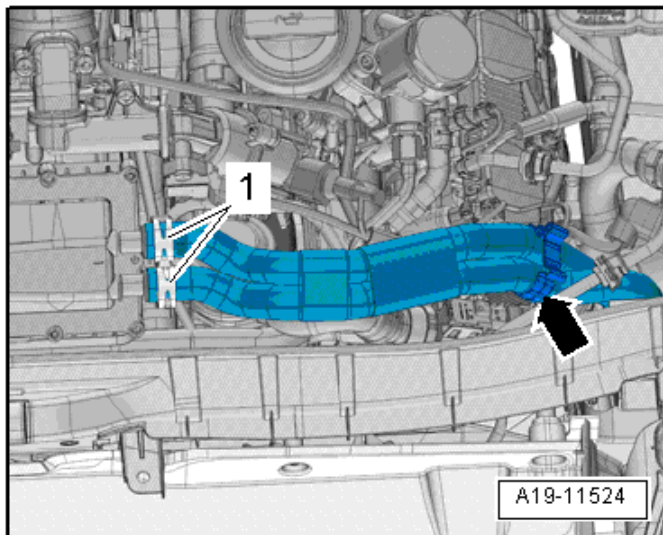
- Remove the bolts <arrows> and air duct <1>.



- Remove the bolts <arrows> and the air duct <2>.

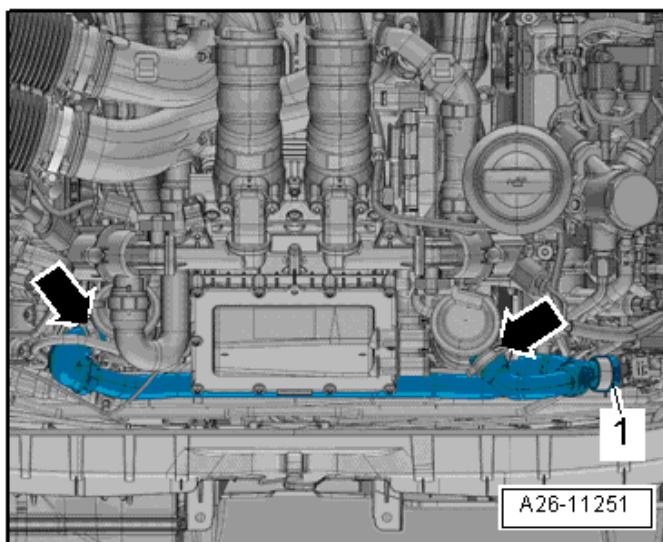


- Remove the air duct hoses by loosening the hose clamps <2>.
- Remove the air filter housing <1> with the air duct hoses upward.



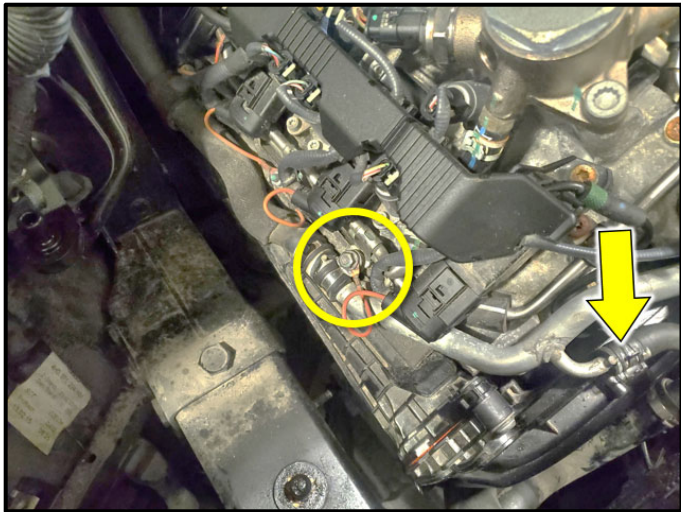
**Disconnect coolant hoses from charge air cooler:**

- Loosen the clamps <1> and remove the coolant hoses.
- Ignore the <arrow>.



**Remove secondary air injection hose:**

- Loosen the hose clamps <arrows> and press the release buttons <1> to remove the secondary air injection pipe.



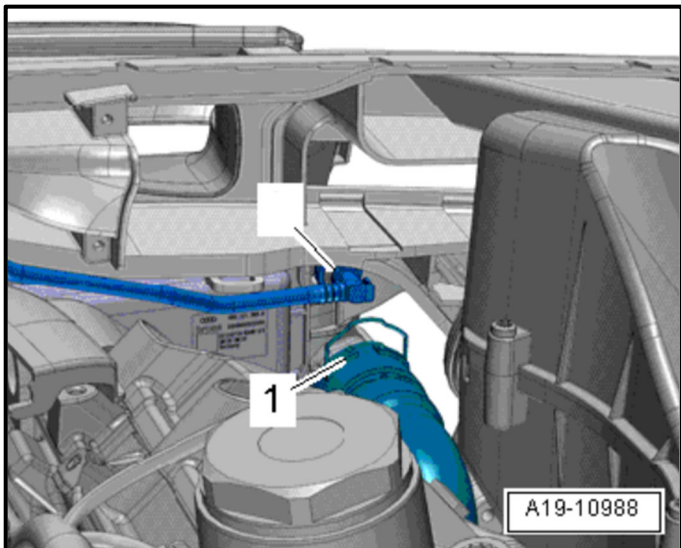
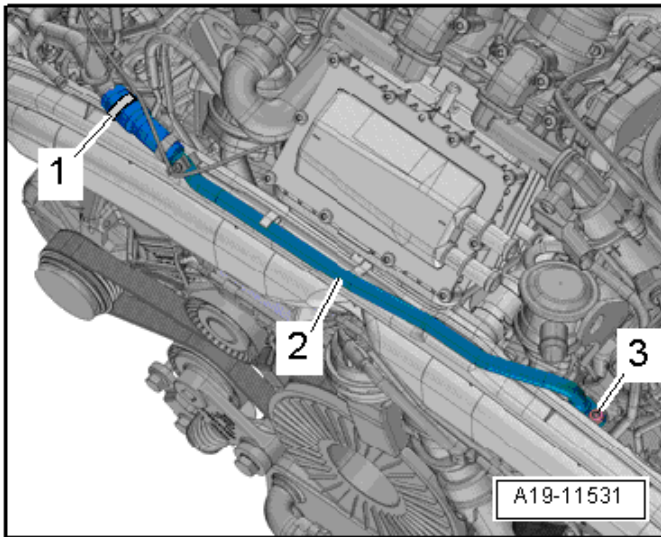
### Free up front coolant pipe and coolant hoses:

- Remove nut <circle> from right cylinder head.
- Loosen the clamp <arrow> and remove the coolant hose.
- Free up the wiring harness.
- Remove the bolt <3>, then remove the front coolant pipe <2> from the left cylinder head and from the right cylinder head.

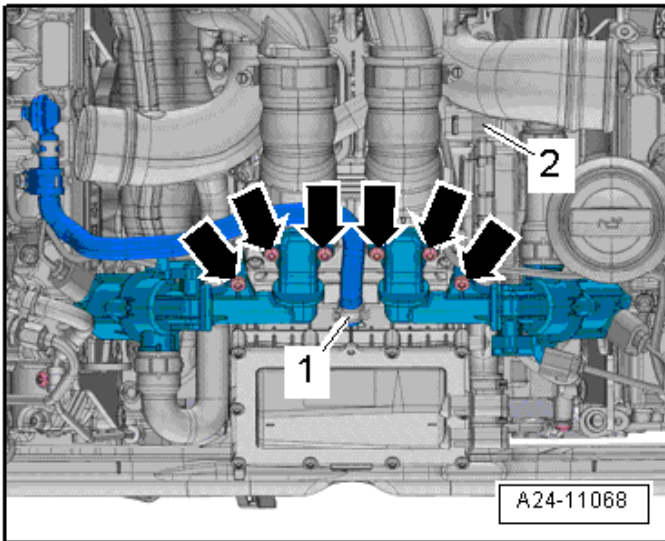
### ! NOTE

When removing seized coolant pipe from the cylinder head:

- Use penetrating oil around the pipe to cylinder head connection.
- LIGHTLY tap each side of the coolant line near the connection with a small hammer.
- DO NOT attempt to remove the pipe until the pipe can be moved back and forth.
- Rotate the line gently back and forth until the connection is rotating in the cylinder head.
- Once the connection is moving freely, pry up on the pipe with slight even pressure using a pry bar while rotating the pipe back and forth.

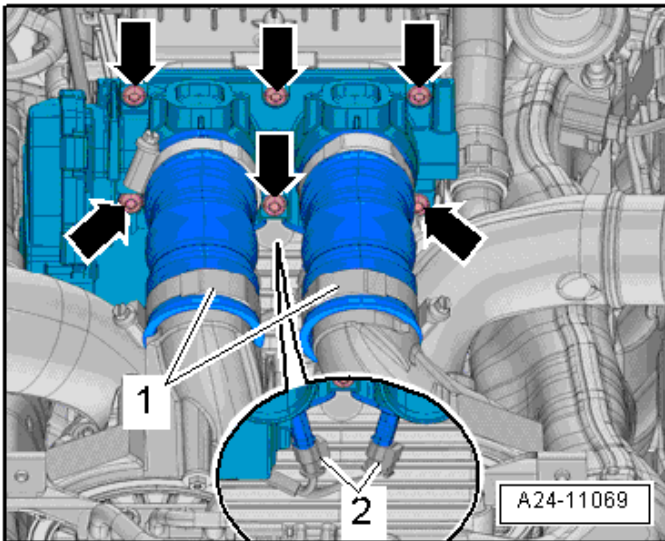


- Open the clip <1> and disconnect the upper right coolant hose from the radiator.

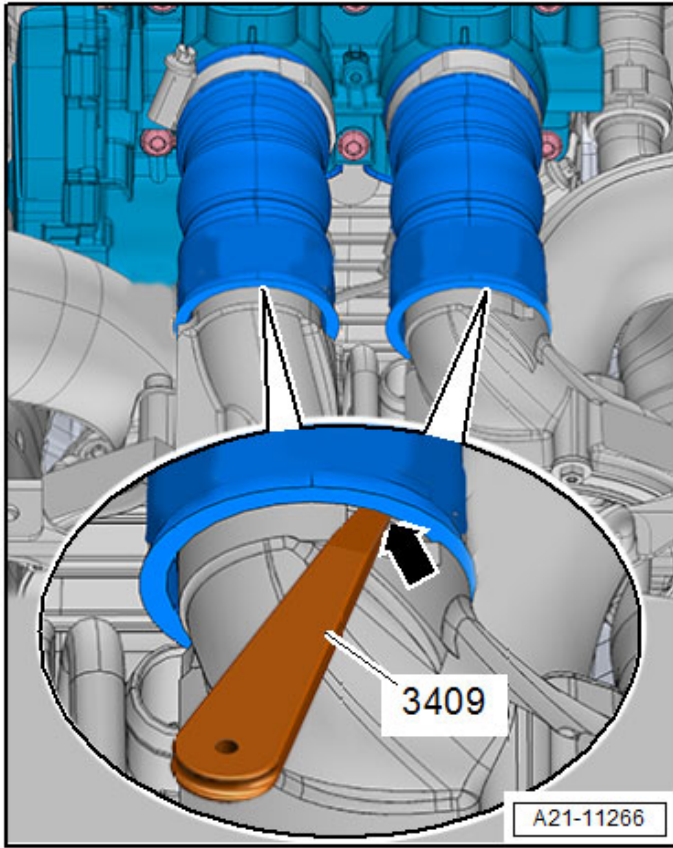


**Remove Throttle Valve Control Module -J338-:**

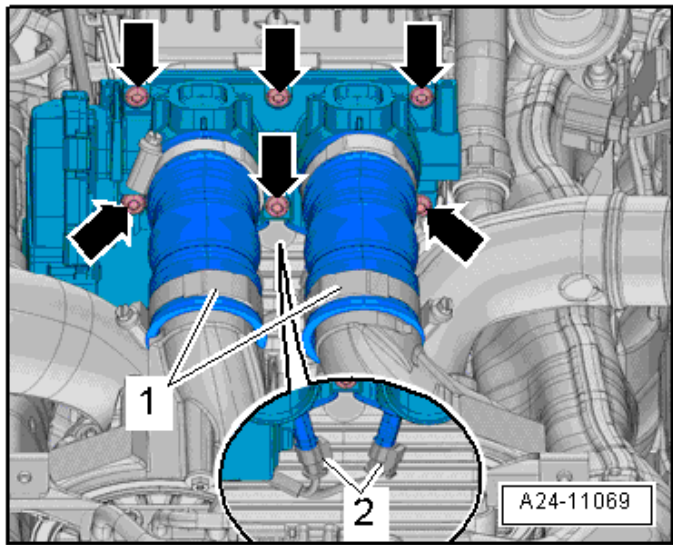
- Loosen the clamp <1> and remove the air duct hose.
- Unlock and disconnect the connector <2> and free up the wire.
- Remove the bolts <arrows> and push the Turbocharger Recirculation Valve -N249- and Turbocharger Recirculation Valve Bank 2 -N427- to the side.



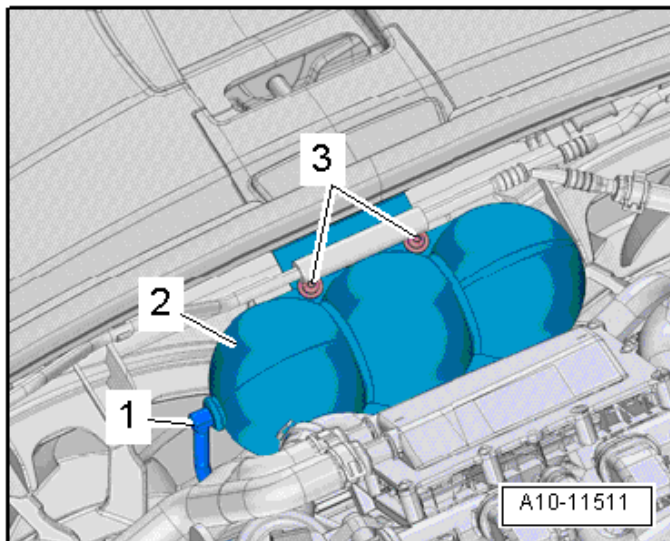
- Remove the bolts <arrows> and loosen the hose clamps <1>.



- To prevent damage to the air duct hoses, carefully lift the respective air duct hoses using the -3409- and spray some silicone spray between the hose and the hose connections <arrow>.

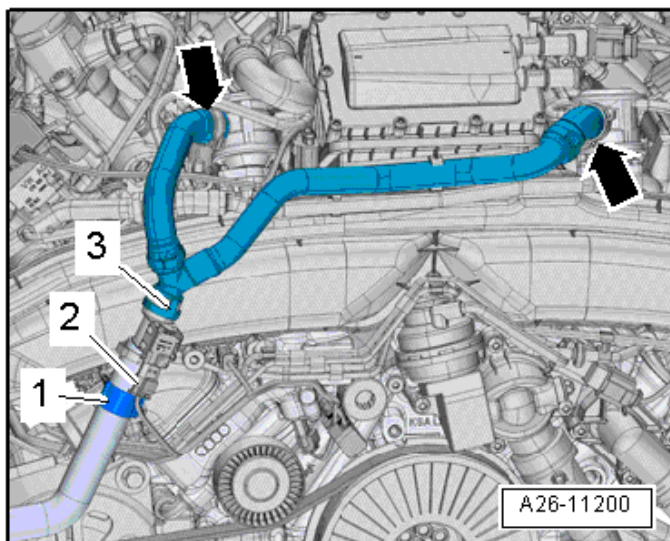


- Disconnect connectors <2> and remove Throttle Valve Control Module -J338-.

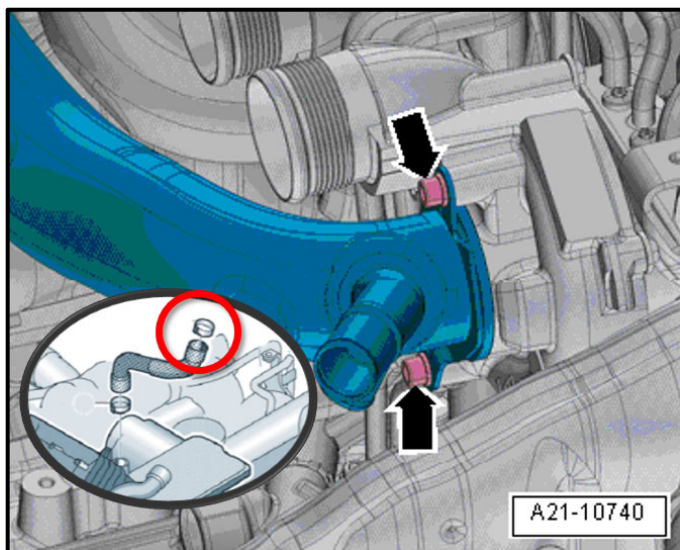


**Remove components in preparation of removing charge air cooler (as needed):**

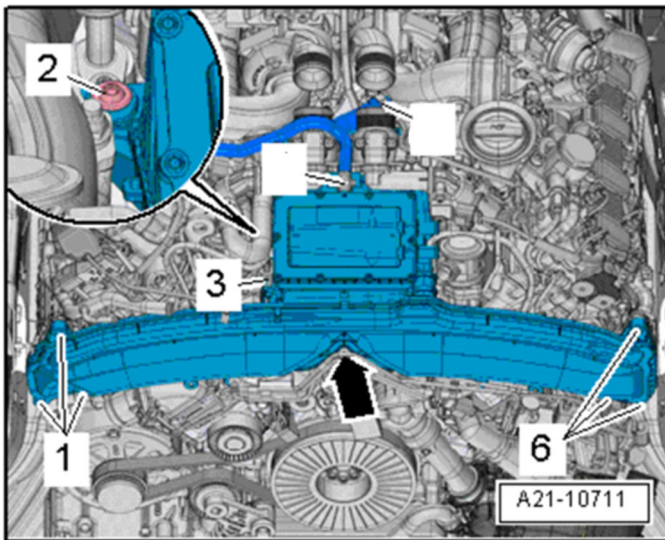
- Disconnect the vacuum hose <1>.
- Remove the bolts <3> and then remove the vacuum reservoir <2>.



- Press the release button <3> and loosen the hose clamps <arrows> to remove the secondary air injection hose.
- Disconnect the connector <2>.
- Free up the secondary air injection hose <1> and press it downward.



- Remove the bolts <arrows>.
- Remove upper clamp <circle> on hose between the air duct pipe and the oil separator.
- Remove the air duct pipe.



- Disconnect the connector <3>.
- Free up the vacuum hoses <arrow>.
- Remove the bolts <2> (quantity: 3).
- Remove the bolts <1 through 6> pull the housing for the charge air cooler slightly forward.

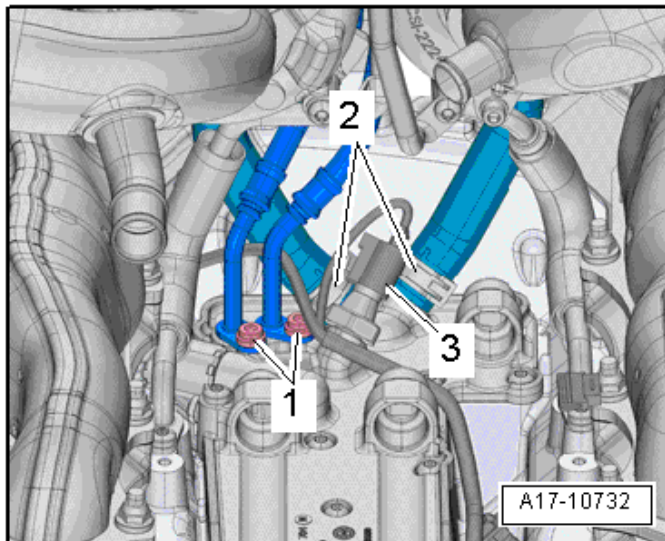
### ⚠ CAUTION

**There is a risk of contamination from leaking engine oil.**

When removing the charge air cooler housing, up to 0.5 liters of engine oil can drain from the oil separator into the area between the cylinder heads. Extract engine oil that has leaked and clean the engine.

### Remove cover in inner-V:

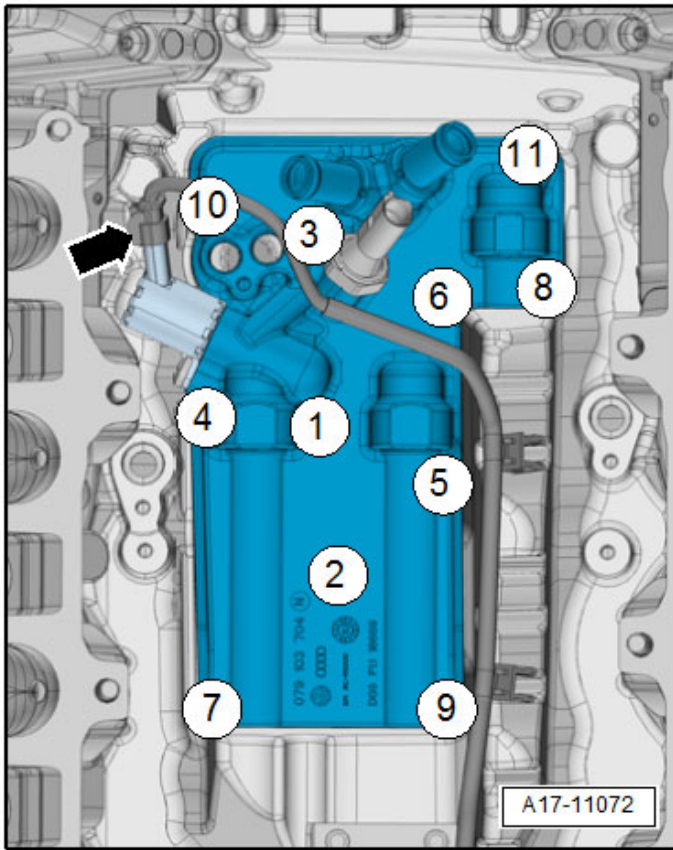
- Disconnect the connector <3>.
- Remove the bolts <1> and then remove the hose lines.
- Loosen the hose clamps to remove the oil return hoses <2>.



### **i** TIP

It may be necessary to remove the right side turbo coolant supply line from the cylinder head in order to remove the oil supply lines. If this line is removed, the seal must be replaced.

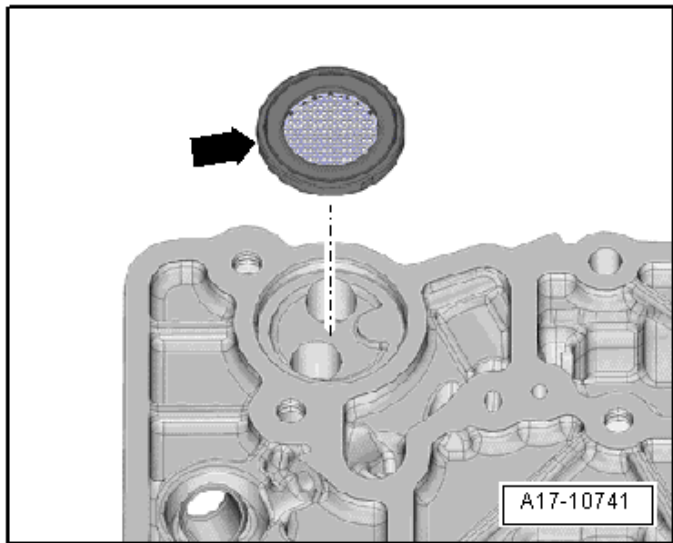
It may be necessary to remove the oil pressure switch in order to access the coolant hose clamps <2>. If the oil pressure switch is removed, the seal must be replaced.



**⚠ CRITICAL REPAIR STEP**

**Observe the guidelines for clean working conditions:**

- Remove all dirt and debris around the cover before removing.
- If the bolt heads are full of dirt, ensure the bolt heads are clean before removing.
- Remove the bolts in the following sequence <11 to 1>, and then remove the cover in the inner-V.
- Disconnect the connector <arrow> and free up the wire.

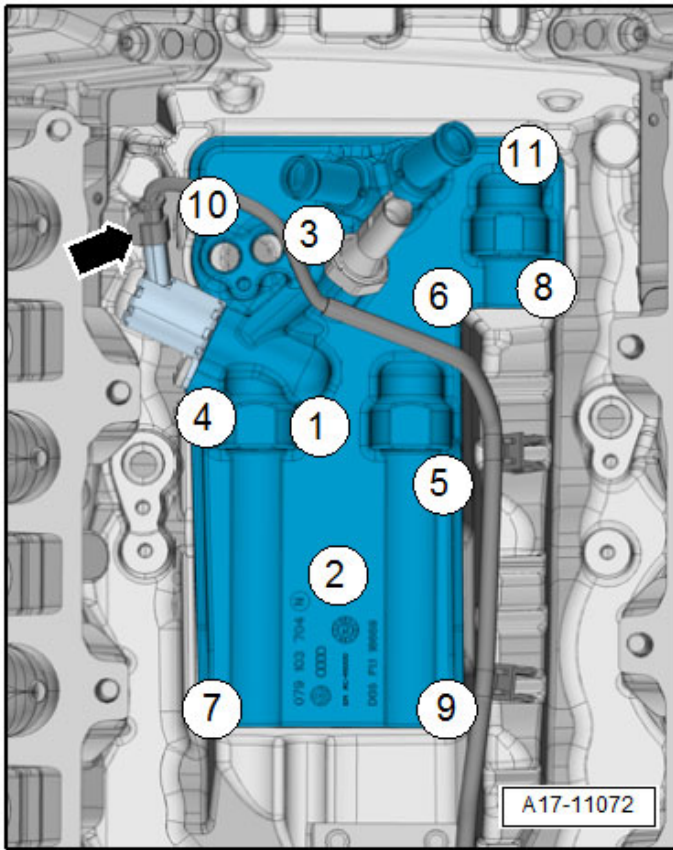


**Replace oil strainer:**

- Remove oil strainer <arrow>.
- Clean mounting area for oil strainer with a lint free cloth.
- Install new oil strainer in the reverse order of removal.

Part Number	Part Description
079-115-175-G	Oil Strainer





### Install cover in inner-V:

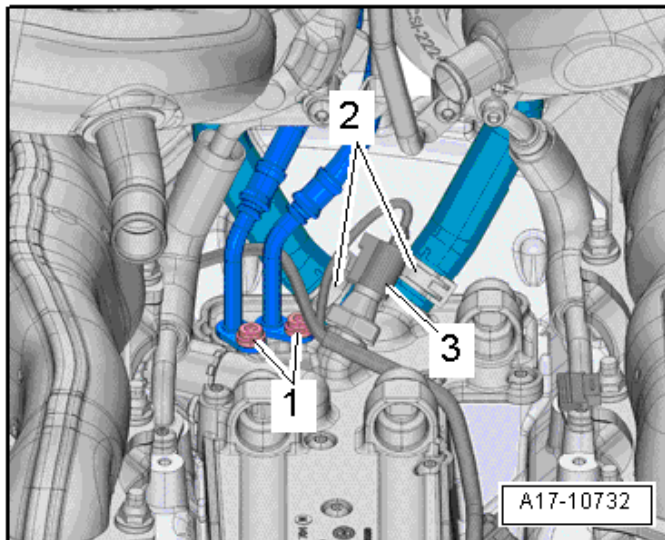
- Clean the mounting surface for the cover.
- Replace cover gasket.
- Replace cover bolts.

Part Number	Part Description
079-103-161-Q	Gasket
N -101-243-06	M6x20 Bolt (x10)
N -104-057-02	M6x45 Bolt (x1) (pos. #4)

- Install cover in the reverse order of removal.
- Torque bolts in the following sequence:

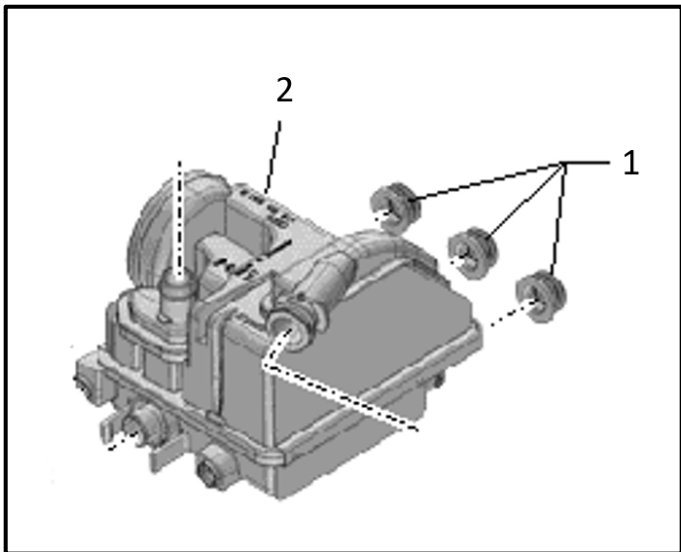
Step	Bolts	Tightening Description
1	<1-11>	Install by hand all the way
2	<1-11>	5 Nm diagonally
3	<1-11>	Turn an additional 90° in a diagonal sequence

- Reconnect connector <arrow>.



- Install oil return hoses and secure clamps <2>.
- Replace o-rings for oil supply lines.
- Connect oil supply lines and torque bolts <1> to 9 Nm.
- Connect connector <3>.
- If the oil pressure switch was removed:
  - Replace seal.
  - Torque switch to 20 Nm.
- If the right side coolant supply line was removed.
  - Replace seal.
  - Torque bolt to 9 Nm,

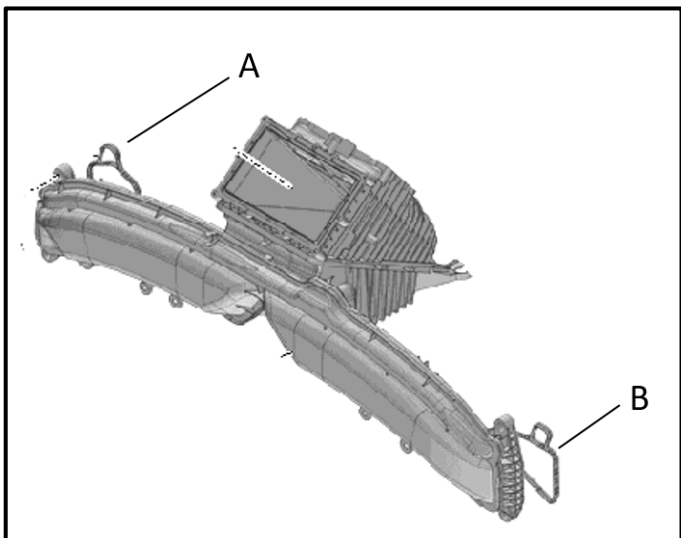
Part Number	Part Description
N -903-038-01	O-ring - oil supply pipe (x2)
N -013-811-5	Seal for oil pressure switch (if necessary)
WHT-001-011-A	O-ring - right side coolant supply pipe (if necessary)



**Replace oil separator seals:**

- Replaces seals <1> for oil separator <2>.

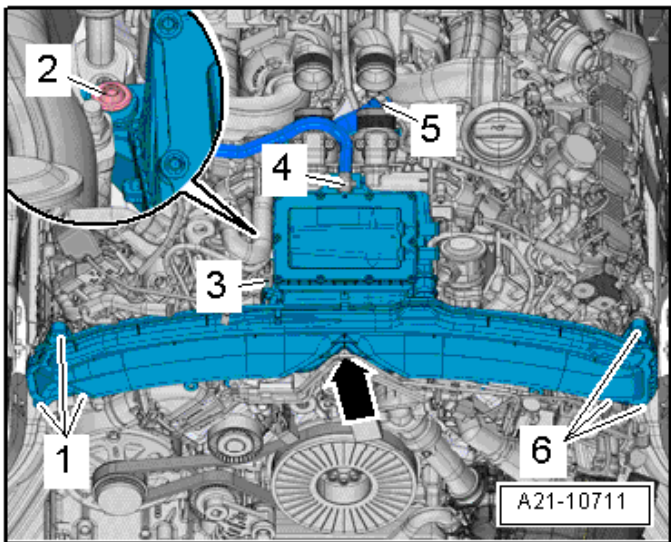
Part Number	Part Description
079-103-583	Seal (x3)



**Reinstall charge air cooler housing:**

- Installation is the reverse order of removal.
- Replace gaskets.

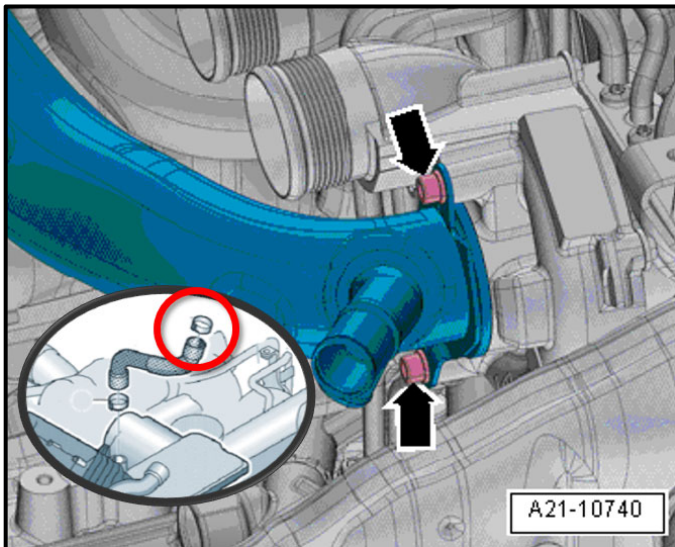
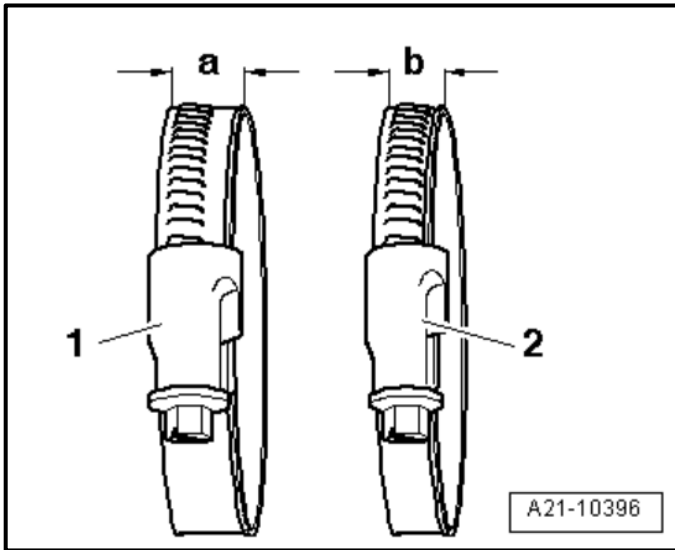
Part Number	Part Description
079-129-717-K	Gasket – right side <A>
079-129-717-J	Gasket – left side <B>



- Torque bolts <1, 2 and 6> to 9 Nm.

**Reinstall remaining engine components in the reverse order of removal:**

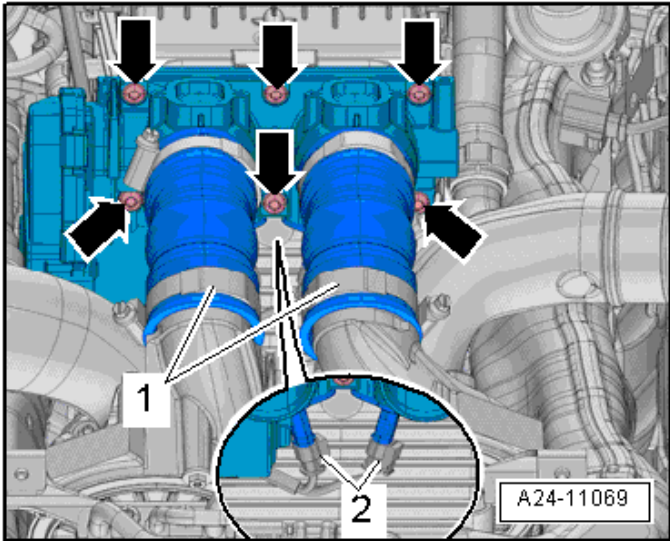
- Reference ELSA Repair Manual as needed.
- Torque screw clamps as follows:
  - 1 - Hose Clamp -a- = 13 mm wide: 5.5 Nm
  - 2 - Hose Clamp -b- = 9 mm wide: 3.4 Nm



- Reinstall the air duct pipe.
- Replace the o-ring.
- Install new clamp <circle>

Part Number	Part Description
WHT-005-529	O-ring
N -904-095-01	Clamp

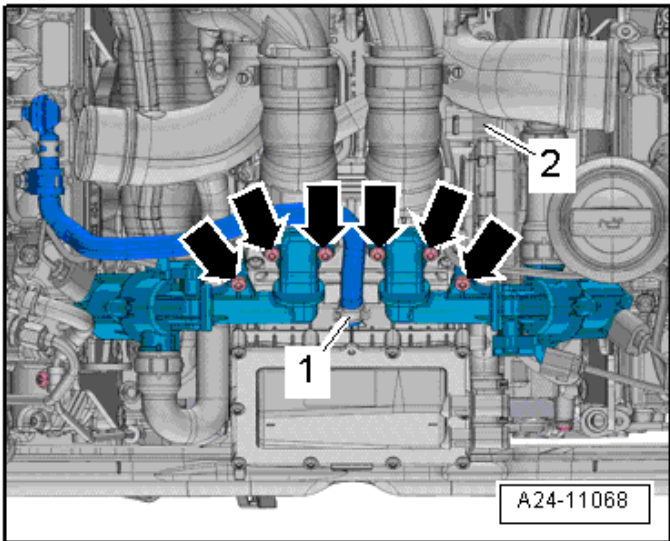
- Torque bolts <arrows> to 9 Nm.



- Reinstall throttle valve unit in the reverse order of removal.
- Replace the gasket for the throttle valve unit.

Part Number	Part Description
079-145-818	Gasket

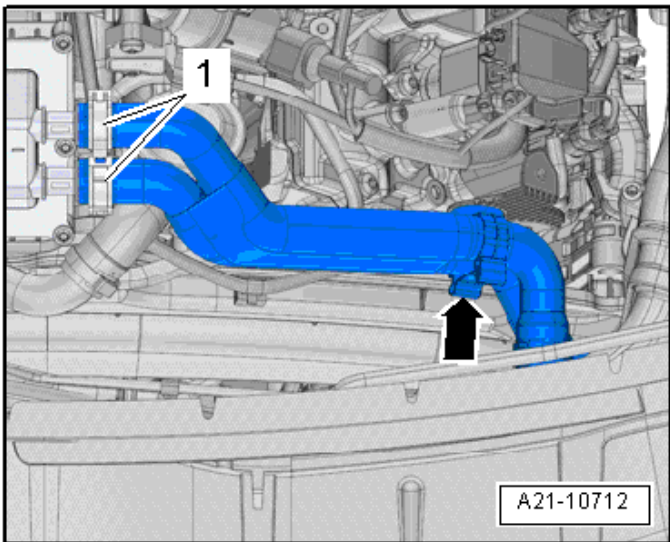
- Torque bolts <arrows> to 5 Nm.
- Torque screw clamps <1> to 5.5 Nm.



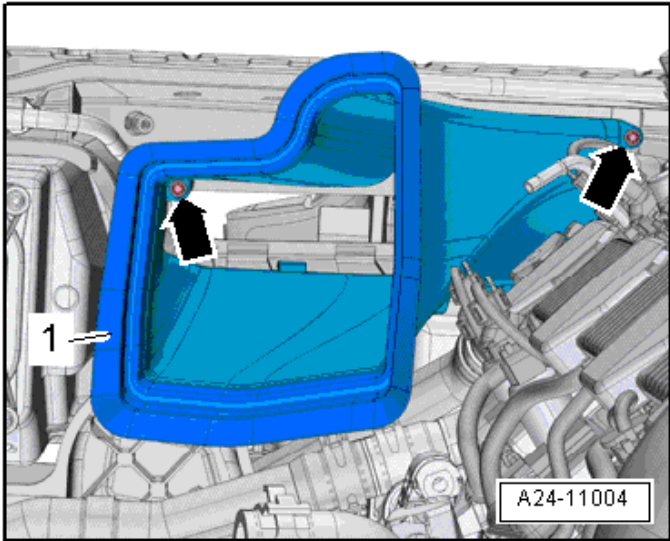
- Reinstall Turbocharger Recirculation Valve -N249- and Turbocharger Recirculation Valve Bank 2 -N427- in the reverse order of removal.
- Torque bolts <arrows> to 9 Nm.

**NOTE**

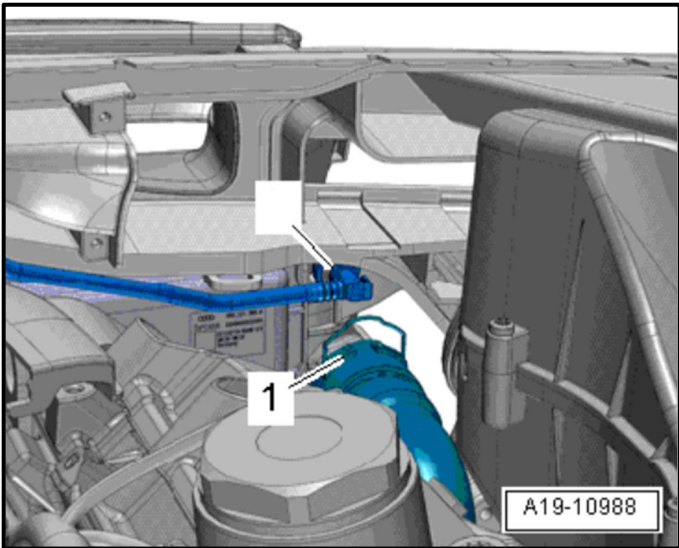
Contrary to the repair manual, the seals for the recirculation valves can be reused.



- Reinstall and secure coolant hoses and clamps <1> in the reverse order of removal.

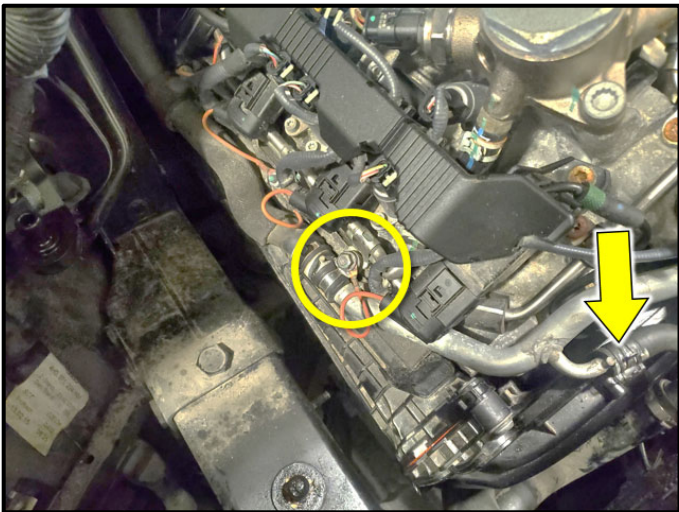


- Reinstall air ducts in the reverse order of removal.
- Torque bolts <arrows> to 2.5 Nm.

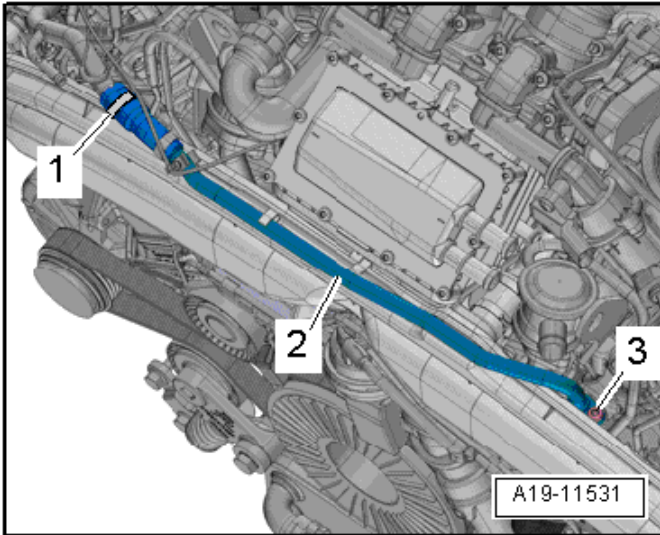


- Reconnect all coolant hoses.
- Replace seals for the upper and lower radiator hoses.

Part Number	Part Description
4E0-121-666	O-ring (x2)



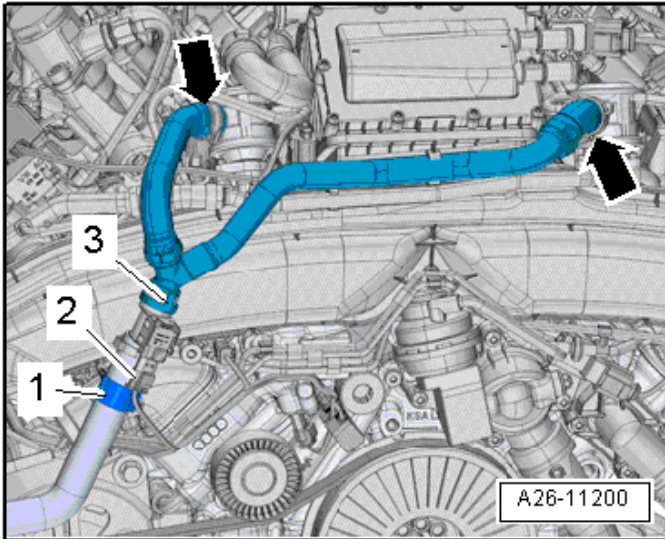
- Reinstall coolant hose and clamp <arrow> in the reverse order of removal.
- Ensure ground cable is attached and torque nut <circle> to 9 Nm.



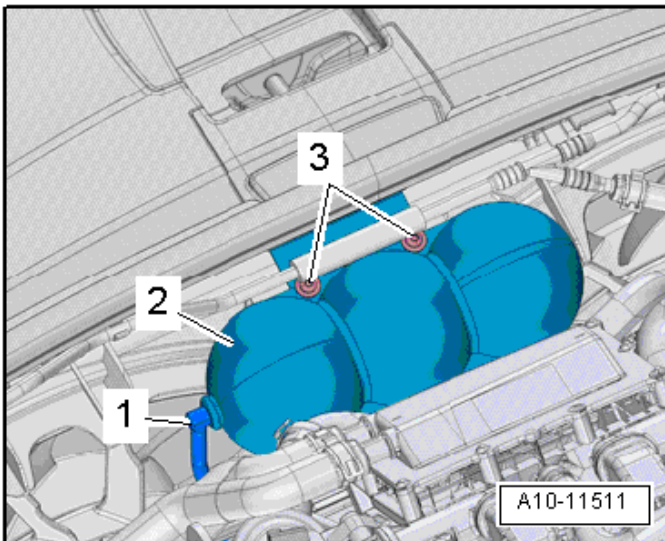
- Reinstall the front coolant pipe <2> in the reverse order of removal.
- Replace o-ring for connection to left cylinder head.

Part Number	Part Description
WHT-001-011	O-ring

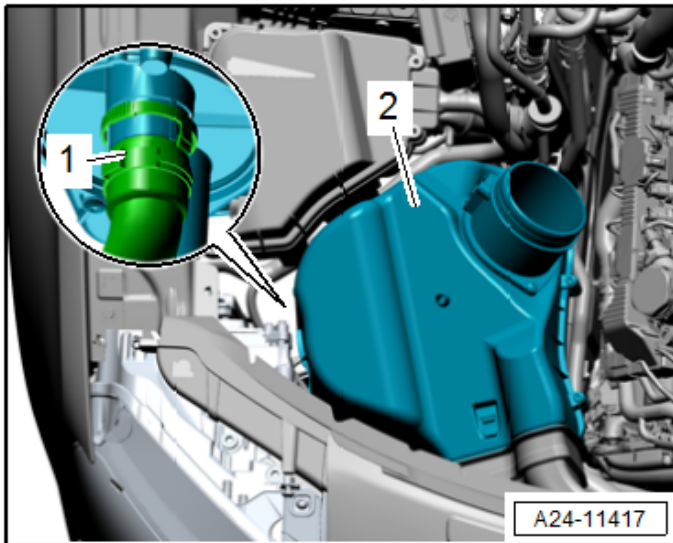
- Torque bolt <3> to 9 Nm.



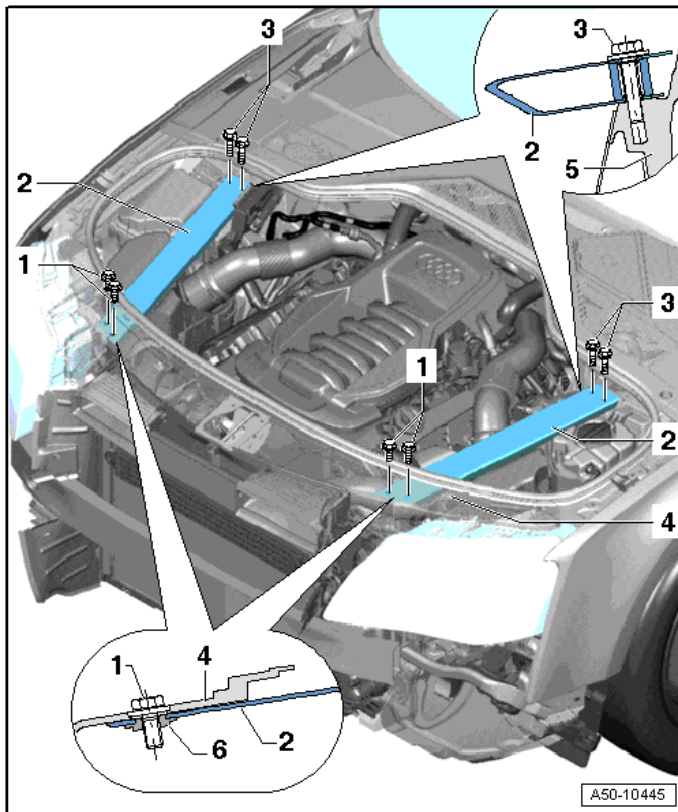
- Reinstall the secondary air injection hose <1> in the reverse order of removal.



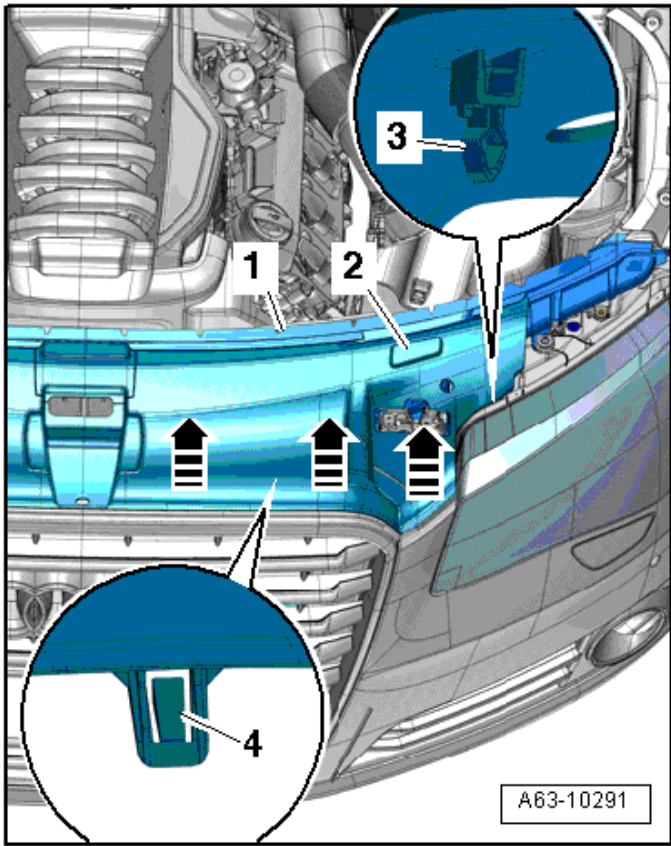
- Reinstall vacuum reservoir <2> in the reverse order of removal.
- Secure vacuum line <1>.



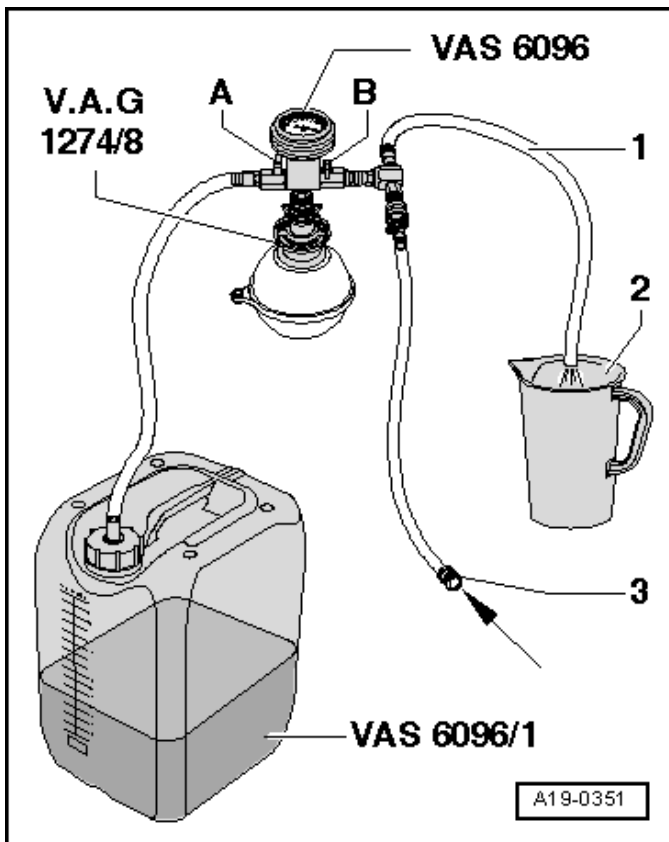
- Reinstall air filter housings in the reverse order of removal.



- Reinstall longitudinal members <2> in the reverse order of removal.
- Torque bolts <1 and 3> to 24 Nm.



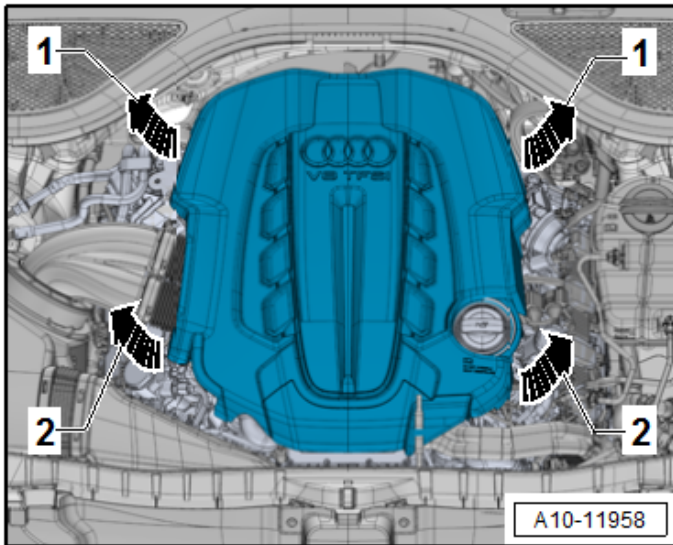
- Reset service position (reference ELSA Repair Manual).
- Reinstall lock carrier cover <2> in opposite direction of removal.
- Install the lock carrier cover into the guides on the lock carrier, the radiator grille and the bumper cover.



**Fill coolant:**

- See ELSA Repair Manual: *Repair manual > Engine > 8-Cylinder Direct Injection 4.0L 4V TFSI Engine > 19 Cooling System > Coolant System/Coolant > Coolant, Draining and Filling*





**Reinstall engine cover in the reverse order of removal.**

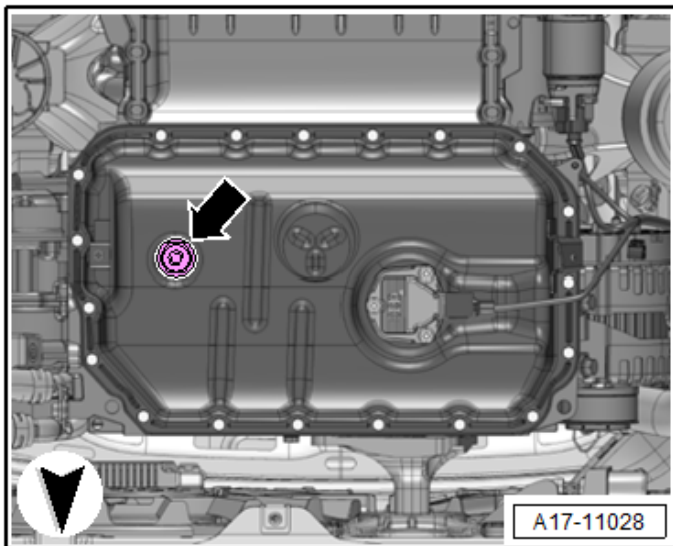
- To prevent damage to the engine cover, do not hit it with a fist or a tool.
- Pay attention to the oil filler tube when positioning the engine cover.

**⚠ WARNING**

**Fire hazard and risk of damage due to a missing engine cover.**

The engine cover must be always be installed before the hood is closed.

The engine may not be started and the vehicle may not be driven with the hood closed without an engine cover.



**Change engine oil and filter:**

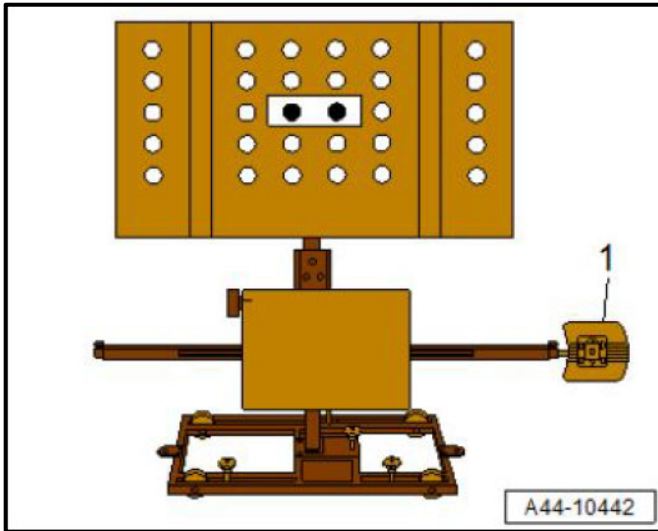
- Reference ELSA Repair Manual as needed.
- Replace drain plug seal.
- Torque drain plug to 20 Nm.
- Torque oil filter housing to 25 Nm.

Part Number	Part Description
N/A	Engine oil
079-198-405-D	Oil filter
N -013-849-8 -or- N -013-815-7	Drain plug seal (confirm part number in ETKA)

- Reinstall front noise insulation in the reverse order of removal.

**Road test and recheck fault memory:**

- Perform a short road test.
- Recheck ECM fault memory to ensure fault P0299 is not present.
- Send diagnostic log to GFF Paperless.



**Calibrate driver assist systems depending on vehicle equipment (S6/S7/RS7 ONLY):**

- See ELSA Repair Manual for driver assist system calibration steps.

**Proceed to Section D**

## Section D – Campaign Completion Stamp

I certify that this campaign  
has been performed in strict  
accordance with the applicable  
Audi repair procedure.

SAGA Code: \_\_\_\_\_  
Technician: \_\_\_\_\_  
Date: \_\_\_\_\_

Item#: AUD4927ENG

-OR-

Je certifie que cette  
campagne de rappel a été  
exécutée suivant les strictes  
directives de réparation  
d'Audi

Code de SAGA: \_\_\_\_\_  
Technicien: \_\_\_\_\_  
Date: \_\_\_\_\_

Item # AUD4927FRE

- Once the campaign has been completed, the technician should stamp the repair order.
- Stamps are available for ordering through the Compliance Label Ordering Portal.
- **Proceed to Section E**

## Section E - Parts Return/Disposal

Properly store (retain), destroy or dispose of removed parts in accordance with all state/province and local requirements, unless otherwise indicated and/or requested through the Warranty Parts Portal (WPP) for U.S. and the Part Destruction and Core Disposition Report for Canada.