Safety Recall Code: 1902



Subject

After-Run Coolant Pump

Release Date

February 18, 2020

REVISION SUMMARY

Work and claiming instructions updated as follows:

- Criteria 01 and 02: updated; install part number 06H965559K or 06H965559J
- Criteria 05 and 06: updated; install part number 06H959559H only on vehicles produced on or before 12/31/2012 and part number 06H965559K only on vehicles produced after 12/31/2012.

Affected Vehicles

U.S.A.: Certain 2012-2017 MY Audi vehicles with a 2.0L TFSI gasoline engine CANADA: Certain 2013-2017 MY Audi vehicles with a 2.0L TFSI gasoline engine

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 & verification source.

- ✓ Campaign status must show "open."
- ✓ 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.

Problem Description

Corrective Action

In certain vehicles with a 2.0L TFSI gasoline engine, the electric (after-run) coolant pump may short circuit and/or overheat, potentially leading to a vehicle fire.

Install a new electric (after-run) coolant pump and, if necessary, update ECM software.

Precautions

Audi recommends parking the vehicle outdoors as a precaution until one of these recall repairs has been completed.

Parts Information

Parts Control	Type:
VIN to order	

Due to the small number of affected vehicles there will not be a parts allocation. Please reference the Repair Projection Tool (below) to view your potential VIN population.

If parts are needed to support a vehicle repair:

- US Dealers use AVA
- CAN Dealers contact the Parts Specialists via phone (800-767-6552), email (<u>VWoAPartsSpecialists@vw.com</u>), or chat/text with the VIN to order

Criteria	Qty.	Part Number	Part Description	Ordering Method
01 or 02	1	06H-965-559-K OR 06H-965-559-J	Pump (Buehler)	VIN to Order
03 or 04	1	06H-965-559-H	Pump (Pierburg)	VIN to Order
	1	06H-965-559-K	Pump (Buehler) - models produced after 12.31.2012	VIN to Order
05 or 06			-OR-	
	1	06H-965-559-H	Pump (Pierburg) - models produced on or before 12.31.2012	VIN to Order

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. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

February 2020 1902 Page 1 of 21

Code Visibility

On or about December 13, 2018, affected vehicles were listed on the Inventory Vehicle Open Campaign Action report under My Dealership Reports (found on www.accessaudi.com & OMD Web). A list was not posted for dealers who did not have any affected vehicles.

On or about December 13, 2018, this campaign code opened on affected vehicles in Elsa.

On or about December 13, 2018, affected vehicles were identified with this campaign code in the VIN Lookup tool at www.audiusa.com and on the NHTSA VIN lookup tool at www.safercar.gov.

Owner Notification

Owner notification took place in January 2019. Owner letter examples are included in this bulletin for your reference.

Additional Information

Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions.

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.

<u>Pre-Owned Vehicles in Dealer Inventory:</u> 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 <u>before</u> <u>delivery to consumers</u>.

February 2020 1902 Page 2 of 21

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

	I				
Service Number	1902 (Letter O not	number 0)			
Damage Code	0099				
Parts Vendor Code	002				
Claim Type	Sold vehicle: 7 10				
Oldini Type	Unsold vehicle: 7 9	0			
	Unsold vehicle: 7 9	<u> </u>			
Causal Indicator	Mark after-run cool	ant pump as causal	part*		
Criteria I.D.	01				
	Replace after-run c	coolant pump			
	Labor operation:	1947 55 99	70 T.U.		
	Quantity	Dort Number	Description		
	Quantity 1.00	Part Number 06H965559K	Description After-run coolant pump*		
	1.00	001190333910	-OR-		
	1.00	06H965559J	After-run coolant pump*		
Criteria I.D.	02				
	Replace after-run coolant pump				
	Labor operation:	1947 55 99	70 T.U.		
	Quantity	Part Number	Description		
	1.00	06H965559K	After-run coolant pump*		
			-OR-		
	1.00	06H965559J	After-run coolant pump*		
	-AND-				
	Connect battery ch	Connect battery charger.			
	Labor operation:	2706 89 50	10 T.U.		
	-AND-				
	Connect vehicle diagnostic tester, update engine control module software				
	Labor operation:	2470 25 99	Time stated on diagnostic protocol		
	① NOTE	① NOTE			
	Operating mode "Flash" must be used. Performing this software update using "Diagnosis" (Guided Fault Finding) could result in non-payment of the claim.				

Continued on next page

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. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

February 2020 1902 Page 3 of 21

Criteria I.D.	03			
	Replace after-run coolant pump			
	Labor operation:	1947 55 99	70 T.U.	
	Quantity	Part Number	Description	
	1.00	06H965559H	After-run coolant pump*	
Criteria I.D.	04			
	Replace "Pierburg"	after-run coolant pui	mp	
	Labor operation:	Labor operation: 1947 55 99 70 T.U.		
	Quantity	Part Number	Description	
	1.00	06H965559H	After-run coolant pump*	
	-AND-			
	Connect battery charger.			
	Labor operation: 2706 89 50 10 T.U.			
	-AND-			
	Connect vehicle dia	Connect vehicle diagnostic tester, update engine control module software		
	Labor operation: 2470 25 99 Time stated on diagnostic protocol			
	① NOTE			
	Operating mode "Flash" must be used. Performing this software update using "Diagnosis" (Guided Fault Finding) could result in non-payment of the claim.			
Criteria I.D.	05			
	Replace after-run coolant pump			
	Labor operation:	1947 55 99	70 T.U.	
	Quantity	Part Number	Description	
	1.00	06H965559K	After-run coolant pump*	
	1.00	OCHOCEECII	-OR-	
	1.00	06H965559H	After-run coolant pump*	

Continued on next page

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. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

February 2020 1902 Page 4 of 21

Criteria I.D.	06			
	Replace after-run c	oolant pump		
	Labor operation:	1947 55 99	70 T.U.	
	Quantity	Part Number	Description	
	1.00	06H965559K	After-run coolant pump*	
			-OR-	
	1.00	06H965559H	After-run coolant pump*	
	-AND-			
	Connect battery cha	Connect battery charger.		
	Labor operation:	2706 89 50	10 T.U.	
	-AND-			
	Connect vehicle diagnostic tester, update engine control module software			
	Labor operation:	2470 25 99	Time stated on diagnostic protocol	
	① NOTE			
	Operating mode "Flash" must be used. Performing this software update using "Diagnosis" (Guided Fault Finding) could result in non-payment of the claim.			

- AND, ONLY IF NECESSARY -

Criteria I.D.	ALL (ONLY if after-run coolant pump connector found damaged)				
	Replace after-run co	Replace after-run coolant pump connector housing and wires.			
	Labor operation:	9709 41 99	50 T.U.		
	Quantity	Part Number	Description		
	Up to 1.00	000979940	Butt connector for 0.5 mm wire		
	Up to 2.00	000979941	Butt connector for 1.0 mm wire		
	Up to 1.00	000979034E	0.5 mm wire		
	Up to 1.00	000979159E	1.0 mm wire		
	Up to 3.00	3C0972741	Wire seal		
	Up to 1.00	4H0973703	Connector housing		

February 2020 1902 Page 5 of 21

Customer Letter Example (USA)

NHTSA: 18V229

Subject: Safety Recalls 1902/19N4 - Electric (After-run) Coolant Pump

Certain 2012-2017 Model Year Audi Vehicles with a 2.0L TFSI Gasoline Engine

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 2012-2017 model year Audi vehicles with a 2.0L TFSI gasoline engine. Our records show that you are the owner of a vehicle affected by this action.

Why you are receiving this recall notice

The electric (after-run) coolant pump in your vehicle is being recalled due to the safety defect described in this letter.

- Owners of affected vehicles were notified in September 2018 and advised about the interim repair available (Safety Recall 19N4) to disconnect the power to the electric (after-run) coolant pump to remove the safety defect. Our records show that recall work was <u>not</u> performed on your vehicle.
- Audi has a limited supply of replacement electric (after-run) coolant pumps available now and the repair to replace the pump is available (Safety Recall 1902).
- Because the pump supply is limited, Audi is keeping both safety recall codes (19N4 and 19O2) open on your vehicle so that your authorized Audi dealer can remove the safety defect from your vehicle by either disconnecting the pump (Safety Recall 19N4) or replacing it (Safety Recall 19O2).

What is the issue?

In certain vehicles with a 2.0L TFSI gasoline engine, the electric (after-run) coolant pump may short circuit and/or overheat, potentially leading to a vehicle fire.

What we will do

As mentioned above, Audi is keeping two safety recalls open on your vehicle to address this safety defect. Your vehicle will receive one of these recall repairs, depending on the parts your authorized Audi dealer has on hand.

- <u>Safety Recall 1902:</u> If your Audi dealer has a new electric (after-run) coolant pump available for your vehicle, the new pump will be installed for <u>FREE</u> under Safety Recall 1902. This work will take about one (1) hour to complete. The new pump will remove the safety defect from your vehicle and will also close out the associated Safety Recall 19N4.
- <u>Safety Recall 19N4:</u> If your Audi dealer does <u>not</u> have a new electric (after-run) coolant pump available for your vehicle, your dealer will disconnect power to the electric (after-run) coolant pump for <u>FREE</u> under Safety Recall 19N4. This work will take less than one (1) hour to complete. This will remove the safety defect from your vehicle and will also close out the associated Safety Recall 19O2.
 - Under a future service campaign, Audi will replace the disconnected pump with a new one for FREE. Audi will send you another letter when the service campaign is available and at that time you will be able to schedule installation of the new pump with your Audi dealer.
 - You will receive extended warranty coverage for the turbocharger in your vehicle after the pump is disconnected under Safety Recall 19N4. Audi will mail you a separate letter with details about the turbocharger extended warranty coverage.

For your convenience, you can visit www.audiusa.com and click on the "Find a Dealer" link to locate a dealer near you and schedule this work.

Precautions you should take

Until the recall work is done, you should park outdoors as a precaution in case of a vehicle fire due to the safety defect.

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.

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 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. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

Customer Letter Example (CANADA)

Subject: Safety Recalls 1902/19N4 – Electric (After-run) Coolant Pump Certain 2013-2017 Model Year Audi Vehicles with a 2.0L TFSI Gasoline Engine

Dear Audi Owner,

This notice is sent to you in accordance with the requirements of the 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 with a 2.0L TFSI gasoline engine. Our records show that you are the owner of a vehicle affected by this action.

Why you are receiving this recall notice

The electric (after-run) coolant pump in your vehicle is being recalled due to the safety defect described in this letter.

- Owners of affected vehicles were notified in September 2018 and advised about the interim repair available (Safety Recall 19N4) to disconnect the power to the electric (after-run) coolant pump to remove the safety defect. Our records show that recall work was **not** performed on your vehicle.
- > Audi has a limited supply of replacement electric (after-run) coolant pumps available now and the repair to replace the pump is available (Safety Recall 1902).
- Because the pump supply is limited, Audi is keeping both safety recall codes (19N4 and 19O2) open on your vehicle so that your authorized Audi dealer can remove the safety defect from your vehicle by either disconnecting the pump (Safety Recall 19N4) or replacing it (Safety Recall 19O2).

What is the issue?

In certain vehicles with a 2.0L TFSI gasoline engine, the electric (after-run) coolant pump may short circuit and/or overheat, potentially leading to a vehicle fire.

What we will do

As mentioned above, Audi is keeping two safety recalls open on your vehicle to address this safety defect. Your vehicle will receive one of these recall repairs, depending on the parts your authorized Audi dealer has on hand.

- <u>Safety Recall 1902:</u> If your Audi dealer has a new electric (after-run) coolant pump available for your vehicle, the new pump will be installed for <u>FREE</u> under Safety Recall 1902. This work will take about one (1) hour to complete. The new pump will remove the safety defect from your vehicle and will also close out the associated Safety Recall 19N4.
- <u>Safety Recall 19N4:</u> If your Audi dealer does <u>not</u> have a new electric (after-run) coolant pump available
 for your vehicle, your dealer will disconnect power to the electric (after-run) coolant pump for <u>FREE</u> under
 Safety Recall 19N4. This work will take less than one (1) hour to complete. This will remove the safety
 defect from your vehicle and will also close out the associated Safety Recall 19O2.
 - Under a future service campaign, Audi will replace the disconnected pump with a new one for <u>FREE</u>. Audi will send you another letter when the service campaign is available and at that time you will be able to schedule installation of the new pump with your Audi dealer.
 - You will receive extended warranty coverage for the turbocharger in your vehicle after the pump is disconnected under Safety Recall 19N4. Audi will mail you a separate letter with details about the turbocharger extended warranty coverage.

Please contact your Audi dealer without delay to schedule this work.

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 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.

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

① NOTE

- 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.

Repair Overview

Criteria	Description	Repair
01	Produced after 12.31.2012 and 19M1 flash was performed (Except A6 models)	Install 06H.965.559. K or 06H.965.559. J pump
02	Produced after 12.31.2012 and 19M1 flash was not performed (Except A6 models)	Install 06H.965.559. K or 06H.965.559. J pump and update ECM software
03	Produced on or before 12.31.2012 and 19M1 flash was performed (Except A6 models)	Install 06H.965.559. H (Pierburg) pump
04	Produced on or before 12.31.2012 and 19M1 flash was not performed (Except A6 models)	Install 06H.965.559. H (Pierburg) pump and update ECM software
05	A6 models produced on or before 12.31.2012 and 19M1 flash was performed	Install 06H.965.559. H pump
	A6 models produced after 12.31.2012 and 19M1 flash was performed	Install 06H.965.559. K pump
06	A6 models produced on or before 12.31.2012 and 19M1 flash was not performed	Install 06H.965.559. H pump and update ECM software
06	A6 models produced after 12.31.2012 and 19M1 flash was not performed	Install 06H.965.559. K pump and update ECM software

February 2020 1902 Page 8 of 21





After-run Coolant Pump Identifier

- 1. Pierburg
- 2. Buehler

2:



19O2 Criteria 01, 03 and 05 Vehicles:

Replace after-run coolant pump.

19O2 Criteria 02, 04 and 06 Vehicles:

 Replace after-run coolant pump and update ECM software.

February 2020 1902 Page 9 of 21

Required Tools



Battery Tester/Charger
- GRX3000VAS(or equivalent)



Diagnostic Tester
-VAS6150X(or equivalent)



Torque Wrench 5-50Nm -VAG1331-(or equivalent)



Torque Wrench 1783 2-10Nm -VAG1783-(or equivalent)



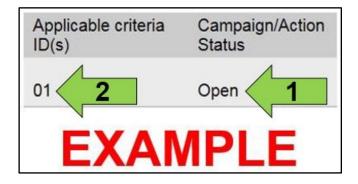
Hose Clamps - Up To 25mm -3094-(or equivalent)

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. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

February 2020 1902 Page 10 of 21

Repair Instruction

Section A - Check for Previous Repair



• Enter the VIN in Elsa and proceed to the "Campaign/Action" screen.

i 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.
- Proceed to Section B

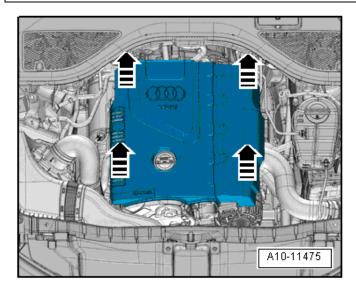
The repair information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Audi dealer. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

February 2020 1902 Page 11 of 21

Section B – Replace After-run Coolant Pump

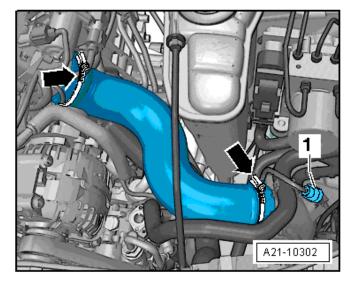
O IMPORTANT PARTS INFORMATION

- Vehicles with criteria 01 or 02 must only use coolant pump part number 06H.965.559.K or 06H.965.559.J.
- Vehicles with criteria 03 or 04 must only use coolant pump part number 06H.965.559.H.
- Vehicles with criteria 05 or 06 must only use coolant pump part number 06H.965.559.K or 06H.965.559.H depending on vehicle production date (refer to the Repair Overview).



Remove engine cover:

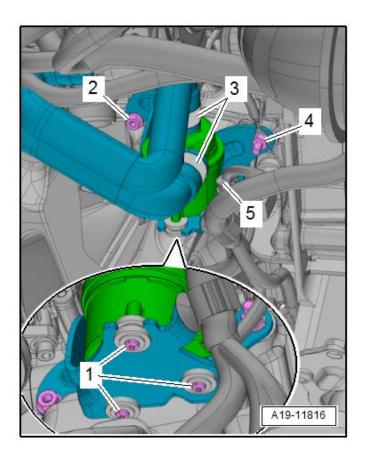
 Carefully pull the engine cover off the ball pins one after the other in direction of <arrows>. Do not pull sharply on the engine cover or pull it to one side.



Remove intake air hose:

 Loosen the hose clamps <arrows> and remove the air duct hose.

February 2020 1902 Page 12 of 21



Removing after-run coolant pump -V51-:

- Loosen the hose clamps <3>.
- Clamp off the coolant hoses with the -3094- and remove hoses from the after-run coolant pump.



Removing the coolant hoses from the after-run coolant pump before removing the pump from the engine will make removal and installation of the pump/bracket assembly easier.

- Disconnect the connector <5>.
- Remove the nut <4> free up the ground wire, and then remove the double bolt.
- Remove the nut <2>.



An extendable magnet may be required to ensure nut <2> isn't dropped during removal.

 The new after-run coolant pump comes with an updated bracket already installed. Bolts <1> will not require removal.



Inspect connector to after-run coolant pump -V51-:

- Check the wiring connector AND the coolant pump connector housing for the following:
 - Signs of overheating
 - Pin corrosion
 - Coolant intrusion
- The wiring connector housing, pins and seals <u>must</u> be replaced if the connector housing is found damaged at the time of repair.

Qty.	Part Number	Part Description
1	000.979.940	Butt connector for 0.5 mm wire
2	000.979.941	Butt connector for 1.0 mm wire
1	000.979.034.E	0.5 mm wire
1	000.979.159.E	1.0 mm wire
3	3C0.972.741	Wire seal
1	4H0.973.703	Connector housing

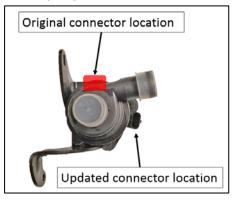
February 2020 1902 Page 13 of 21

Installing new after-run coolant pump -V51-:



U NOTE

Due to the new location of the connector on the new pumps, the after-run coolant pump wiring harness <arrow> may have to be routed so it does not come into contact with the pump coolant hose.



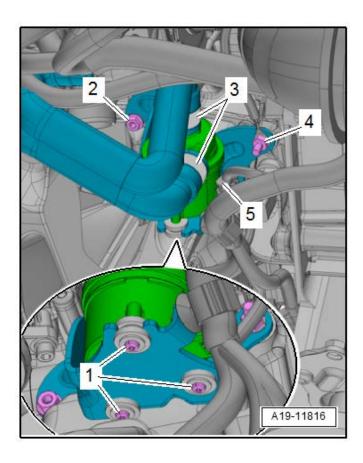


(i) TIP

When installing nut <2>, a swivel socket may not clear the coolant hose fitting.

- Attach securing nut to index finger using some sealant cord ("dum-dum").
- Position securing nut on stud with index finger.
- If necessary, hold securing nut from above with a flat-bladed screwdriver and at the same time screw on securing nut with index finger until a socket can be used on the nut.

February 2020 1902 Page 14 of 21



- Install new after-run coolant pump/bracket assembly.
 - o Refer to the "Repair Overview" at the beginning of these work instructions.
- Install nut <2> and torque to 9 Nm.
- Install double bolt at location <4> and torque to 9 Nm.
- Install ground wire.
- Install nut at location <4> and torque to 9 Nm.
- Install hoses and secure hose clamps <3>.



Before plugging in the connector for the after-run coolant pump, make sure there is no coolant inside the connector housing of the after-run coolant pump.

Connect connector <5>.

Criteria 02, 04 or 06, Proceed to Section D and update ECM software.

Criteria 01, 03 or 05, Proceed to Section E.

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. ©2020 Audi of America, Inc. and Audi Canada. All Rights Reserved.

February 2020 1902 Page 15 of 21

Section D – ECM Software Update

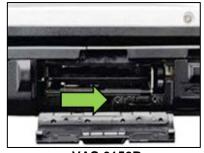
U NOTE

Prior to launching the VAS Diagnostic Tester and starting an update, ensure the following conditions are met:

- The ODIS software is completely up to date.
 - Refer to the "Alerts" section on ServiceNet home page for the current ODIS version.
- The battery charger is connected to the vehicle battery and remains connected for the duration of the software update.
 - Battery voltage must remain above 12.5 volts for the duration of the software update. Failure to do so may cause the update to fail, which could result in damage to the control module. Control modules damaged by insufficient voltage will not be covered.
- The screen saver and power saving settings are off.
 - Failure to do so may result in the tester entering power save mode during the software update, which could result in damage to the control module.
- The VAS Diagnostic Tester is plugged in using the supplied power adapters.
 - Under no circumstances should the tester be used on battery power alone during the software update. Failure to do so may result in the tester powering off during the update, which could result in damage to the control module.
- Flash process through "Audi Flashing" not Guided Fault Finding (GFF).
 - DO NOT USE Guided Fault Finding (GFF) to perform this flash. Damage caused to control modules while using GFF will not be covered.
- If using a Bluetooth transmitter head, it is connected to the tester with a USB cable.
 - Performing a software update using a Bluetooth connection increases the risk of losing connection during the update, which could result in damage to the control module. It also greatly increases the time required to perform the update. Requests for additional time or parts will be denied if the GFF log shows the update was performed using Bluetooth.
- The Bluetooth function of the scan tool is physically switched off <see pictures below>.



VAS 6150 & VAS 6150A (Front panel behind handle)



VAS 6150B (Right side behind WIRELESS door)



VAS 6150C (Left side behind SC/EX door)

A WARNING

Radiator Fan(s) may cycle ON high speed during the Update Process! There is a serious risk that personal injury may result if contact is made with spinning fan blades. Keep hands and all objects away from Radiator Fan(s) during Update Process!

i TIP

To Update-Programming using SVM, review and follow instructions in Technical Bulletin 2014603: Software Version Management (SVM) Operating Instructions.

The SVM Process must be completed in its entirety so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim.

- Open the hood.
- Attach the GRX3000VAS Tester/Charger (or equivalent) to the vehicle battery or underhood charging posts.

① NOTE

When connecting the charger directly to the battery, connect the positive cable to the positive terminal of the battery and connect the negative cable to the grounding lug on the chassis. DO NOT connect the ground cable directly to negative terminal of the battery.

• Switch on the hazard warning lights.

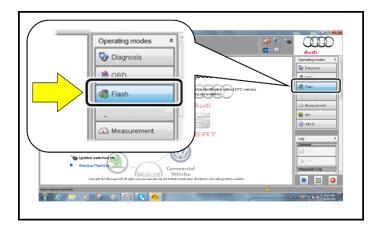
A CAUTION

The procedure may cancel itself if the hazard warning lights are not switched on. The hazard warning lights prevent the system from switching to bus sleep mode during the update.

- Connect the VAS6150X/VAS6160X Diagnostic Tester to the vehicle.
- Start the ODIS program.
- Confirm that scan tool is communicating with the diagnostic head by USB cable.
 - o If the Bluetooth or WiFi symbol is shown, then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.



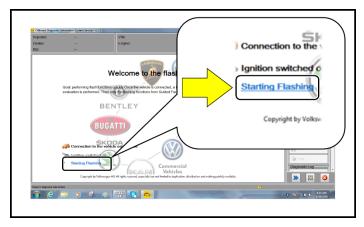
February 2020 1902 Page 17 of 21



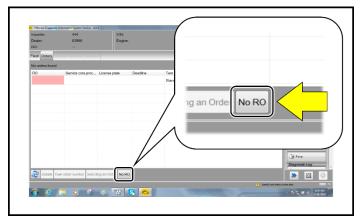
• From the home screen of the scan tool highlight "Flash".

U NOTE

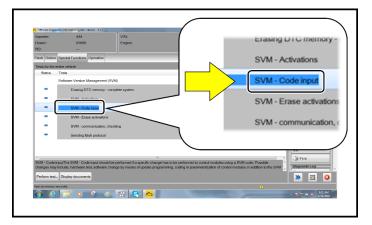
Operating mode "Flash" must be used. Performing this software update using "Diagnosis" (Guided Fault Finding) could result in non-payment of the claim.



 Select "Starting Flashing" and follow the onscreen prompts.

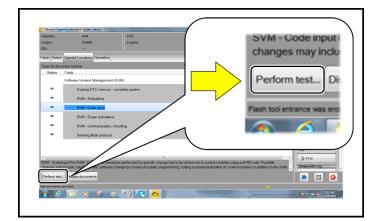


Select "No RO".

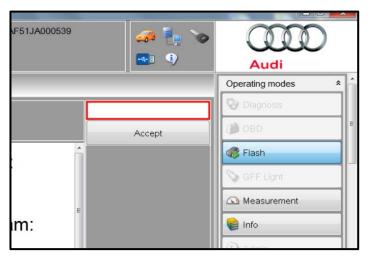


• Highlight "SVM - Code Input".

February 2020 1902 Page 18 of 21



Select "Perform test".



U NOTE

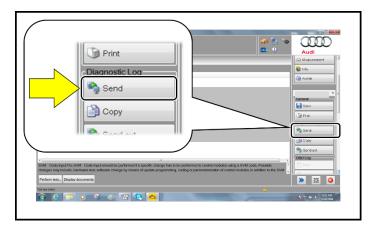
Using <u>Bluetooth</u> for this action is <u>PROHIBITED</u>!

Damage caused to electronic components (e.g. ECM, TCM, etc.) during the SVM flash process is not covered.

Enter the corrective action code (SVM code) that is applicable based upon the recall that was performed as listed below:

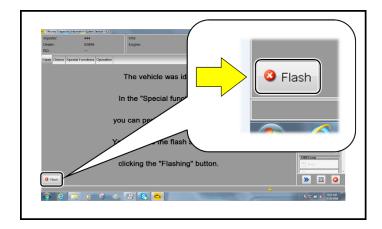


- Select "Accept".
- Follow the on-screen prompts.



- After receiving confirmation that the flash completed successfully, select "Send" to send the diagnostic protocol online.
- Follow the on-screen prompts.

February 2020 1902 Page 19 of 21



- Click "Flash" to exit the flash session.
- Proceed to Section E.

February 2020 1902 Page 20 of 21

Section E - 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.

Continue to Section F.

Section F - 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.

ALL WORK IS COMPLETE

February 2020 1902 Page 21 of 21