

Emissions Recall Code: 23Ai

Subject

Engine Control Module (ECM) Software

Release Date

December 10, 2019

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle
USA	2017	2018	A3
USA	2017	2018	A3 CABRIOLET
USA	2017	2018	A4
CAN	2017	2018	A3
CAN	2017	2018	A4

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

This action addresses an emissions system-related Engine-Off calculation error and improves the Oxygen Sensor Aging-Correction Factor. Neither concern has a direct impact to vehicle exhaust or evaporative emissions. However, either condition could affect proper operation of the Malfunction Indicator Lamp (MIL).

Corrective Action

Update Engine Control Module (ECM) software.

Parts Information

Software update only; no parts needed.

Code Visibility

On or about December 10, 2019, the campaign code will be applied to affected vehicles.

Owner Notification

Owner notification will take place in December 2019. Owner letter examples are included in this bulletin for your reference.

Emissions Campaigns Requirements (CALIFORNIA ONLY) The California Air Resources Board and the Department of Motor Vehicles (DMV) require emissions-related campaigns to be completed prior to vehicle registration renewal. When campaign work is done you must provide the owner with a signed "Vehicle Emission Recall – Proof of Correction" certificate (RC EMISCAVWAU). Order certificates online via the Compliance Label Ordering portal at www.accessaudi.com.

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.

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

Fill out and affix Campaign Completion Label (CAMP 010 000) after work is complete. Labels can be ordered at no cost via the Compliance Label Ordering portal at www.accessaudi.com.

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Claim Entry Instructions

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 <u>open on the day of repair</u> 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.
- ✓ Canada dealers: Upload the repair order [signed by customer] to Audi WIN/Operations/Campaign Closure.

Service Number	23Ai		
Damage Code	0099		
Parts Vendor Code	002		
Claim Type			
	Unsold vehicle: 7 90		
Causal Indicator	Mark labor as causal		
Vehicle Wash/Loaner	Do not claim wash/loaner under this action		
Criteria I.D.	01		
	Connect battery charger		
	Labor operation 2706 89 50	10 T.U.	
	-AND-		
	Perform SVM operation for Engine Control Module.		
	Labor operation: 2470 25 99	Time stated on diagnostic protocol	
		(Up to 50 T.U.)	

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Customer Letter Example (United States)

<MONTH YEAR>

<CUSTOMER NAME> <CUSTOMER ADDRESS> <CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <VIN>

Subject: Emissions Recall 23Ai - Engine Control Module (ECM) Software

Dear Audi Owner,

In cooperation with the United States Environmental Protection Agency and the California Air Resources Board, we are informing you of our decision to conduct an emissions recall on certain 2017-2018 model year Audi vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?

This action addresses an emissions system-related Engine-Off calculation error and improves the Oxygen Sensor Aging-Correction Factor. Neither concern has a direct impact to vehicle exhaust or evaporative emissions. However, either condition could affect proper operation of the Malfunction Indicator Lamp (MIL).

What will we do?

Your authorized Audi dealer will update the ECM software. This work will take about one hour 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.

IMPORTANT! Please note that if the ECM in your vehicle has been "chipped," "tuned," or otherwise modified from original factory specifications with aftermarket components and/or software, work needed to repair, replace, or return the ECM to original factory specifications is NOT covered under this action.

What should you do?

In order to limit any possible inconvenience, please contact your authorized Audi dealer as soon as possible to schedule this service. For your convenience, you can also visit www.audiusa.com and click on the "Find a Dealer" link to locate a dealer near you and schedule this service.

Lease vehicles and address changes

If you are the lessor and registered owner of the vehicle identified in this action, please 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.

Important information for **California Vehicle Owners** - California Regulations

California regulations require that this campaign be completed prior to the time you renew your vehicle registration. Therefore, please make sure that this campaign is completed prior to the renewal of your vehicle registration, and that you furnish proof of completion to the Department of Motor Vehicles (DMV) in the form of a copy of the dealer's repair order, including a signed "Proof of Correction" certificate. You obtain this from your dealer after the campaign has been completed. Please retain the signed "Proof of Correction Certificate" with your vehicle records. DO NOT MAIL THIS FORM to the DMV, unless requested.

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).

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your vehicle continues to meet and exceed your expectations.

Sincerely.

Audi Customer Protection

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>

Subject: Emissions Recall 23Ai - Engine Control Module (ECM) Software

Dear Audi Owner.

This notice is sent to you in accordance with the requirements of the Canadian Environmental Protection Act. 1999. Audi has determined that a defect, which relates to a prescribed emission standard, exists in certain 2017-2018 model year Audi vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?

This action addresses an emissions system-related Engine-Off calculation error and improves the Oxygen Sensor Aging-Correction Factor. Neither concern has a direct impact to vehicle exhaust or evaporative emissions. However, either condition could affect proper operation of the

Malfunction Indicator Lamp (MIL).

What will we do? Your authorized Audi dealer will update the ECM software. This work will take about one hour 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.

IMPORTANT! Please note that if the ECM in your vehicle has been "chipped." "tuned." or otherwise modified from original factory specifications with aftermarket components and/or software, work needed to repair, replace, or return the ECM to original factory

specifications is NOT covered under this action.

What should you do? In order to limit any possible inconvenience, please contact your authorized Audi dealer as

soon as possible to schedule this service. On or about December 10, 2019 the necessary

repair instructions and parts will be available to your authorized Audi dealer.

Lease vehicles and

address changes

If you are the lessor and registered owner of the vehicle identified in this action, please 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.

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 vehicle continues to meet and exceed your expectations.

Sincerely,

Audi Customer Protection

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U 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.
- Diagnosis and repair of pre-existing conditions in the vehicle are not covered under this action.

Required Tools



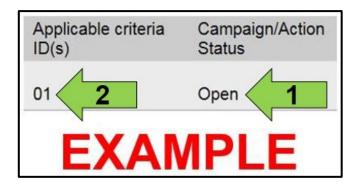
- GRX3000VAS-(or equivalent)



Diagnostic Tester
-VAS6150X/VAS6160(or equivalent)

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.
- All Safety Recalls MUST be completed before starting this Campaign.

Proceed to Section B.

Section B – Engine Control Module Software Update

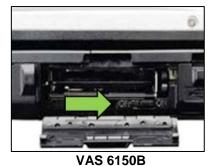
U NOTE

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)



(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 2011732: *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.
- Access the battery charging posts.
- Switch the ignition on.
- Apply the parking brake.
- Switch off all consumers (headlights, heated seats, climate control, etc.).
- Connect the VAS6150X/VAS6160X Diagnostic Tester to the vehicle.
- Start the ODIS program.
- Attach the GRX3000VAS Tester/Charger (or equivalent) to the vehicle battery charging posts.



Vehicles with Battery Monitoring Control Module -J367- and/or an EFB Battery:

When connecting the charger 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.

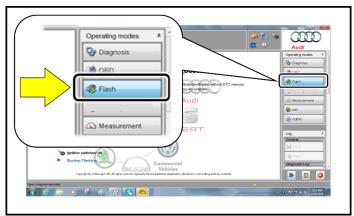
Turn the hazards on.

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.



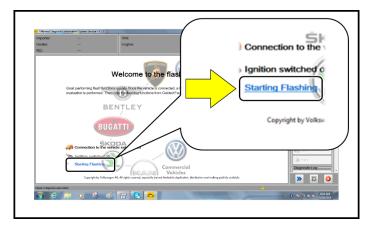
- Confirm that scan tool is communicating with the diagnostic head by USB cable.
 - If the Bluetooth or WiFi symbol is shown, then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.



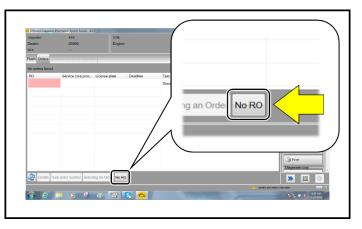
- From the home screen of the scan tool highlight "Flash" <1>.
- Follow the on-screen prompts.



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

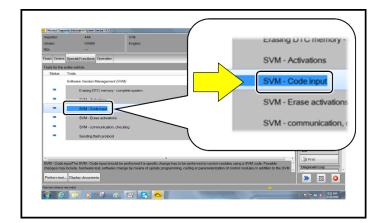


• Select "Starting Flashing" and follow the onscreen prompts.

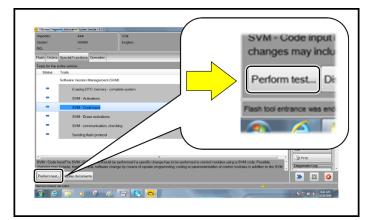


• Select "No RO".

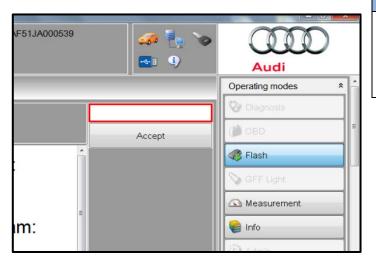
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Highlight "SVM – Code Input".



Select "Perform test".



① NOTE

Using Bluetooth for this action is PROHIBITED!

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

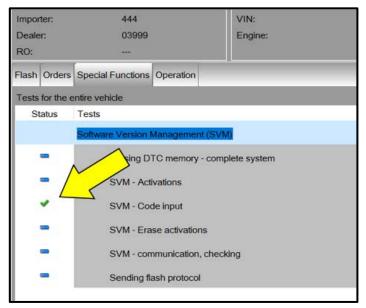
 Enter the corrective action code (SVM code) as listed below.

SVM code

23AiA540

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

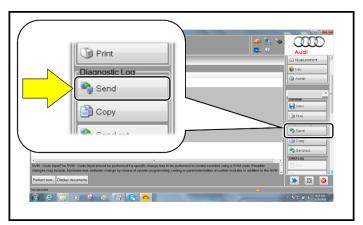
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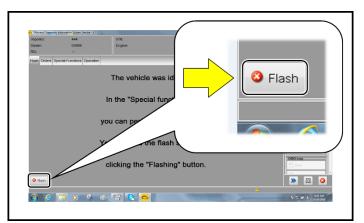


This extra ignition cycle step must be followed, otherwise faults stored during the update may not be cleared upon exiting the Flash program.

 After receiving confirmation that the update completed successfully (green check mark)
 <arrow>, the ignition must be turned off for 60 seconds and then turned back on.



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



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

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Section C - Campaign 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 (item# AUD4927ENG or AUD4927FRE).
- Proceed to Section D.

Section D – Campaign Completion Label

Install Campaign Completion Label

 Fill out and affix Campaign Completion Label, part number CAMP 010 000, next to the vehicle emission control information label.

i TIP

Ensure Campaign Completion Label does not cover any existing label(s).

Proceed to Section E (California only).

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Section E – California Only Requirements

CALIFORNIA ONLY Requirements for Emissions Campaigns Having Customer Notification

The California Air Resources Board and the Department of Motor Vehicles (DMV) require emissions-related campaigns to be completed prior to vehicle registration renewal. When campaign work is done you must provide the owner with a signed "Vehicle Emission Recall – Proof of Correction" certificate (RC EMIS_CAL VW). Certificates can be ordered at no cost online via the Compliance Label Ordering portal at www.accessaudi.com.



Ensure owners are aware of the importance of retaining the completed certificate for their records. It should be mailed to the California DMV *only upon request*.

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