



Emissions Service Action

Code: 23BY

Subject Engine Control Module (ECM) Software

Release Date October 8, 2020

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2009	2010	Q7	3,469
CAN	2009	2010	Q7	614

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 only 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.

IMPORTANT!
This Service Action
ONLY applies to
vehicles that have
received the AEM

- Dealers **MUST** provide a copy of the attached customer letter to each customer who presents their vehicle for repair.
- This action only applies to vehicles that have received the Approved Emissions Modification (AEM). The AEM must be completed **BEFORE** performing this work. If a vehicle has not received the AEM, this action does not apply.
- This repair **MUST** explicitly be elected by the customer and be clearly marked on the repair order **PRIOR** to commencing the software update.

Problem Description

During routine evaluation testing, it was determined that some software functions required updates.

Corrective Action

Install updated Engine Control Software that will improve On-Board Diagnostic (OBD) monitoring of vehicle emissions systems and otherwise improve the software used by your vehicle. These improvements have no impact to the vehicle's drivability, performance, fuel consumption, or emissions.

Parts Information

Software only; no parts needed.

Code Visibility

On or about October 8, 2020, the campaign code will be applied to affected vehicles.

Owner Notification

Owner notification will take place in October 2020. 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.

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

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 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.

Service Number	23BY		
Damage Code	0099		
Parts Vendor Code	002		
Claim Type	Sold vehicle: 7 10 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		
	LABOR		
	Labor Op	Time Units	Description
	2706 89 50	10	Connect battery charger
	2360 25 99	Time stated on diagnostic protocol	Perform engine control module software update

Customer Letter Example (United States)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

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

Subject: Emissions Service Action 23BY – 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 service action on certain Audi vehicles equipped with a 3.0L TDI engine. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? During routine evaluation testing, it was determined that some software functions required updates.

What will we do? Your authorized Audi dealer will install updated Engine Control Software that will improve On-Board Diagnostic (OBD) monitoring of vehicle emissions systems and otherwise improve the software used by your vehicle. These improvements have no impact to your vehicle's drivability, performance, fuel consumption, or emissions. This work will take about an 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 factory specifications with aftermarket components and/or software, work needed to repair, replace, or return the ECM to factory specifications is NOT covered under this action.

What should you do? If your vehicle has already received the Approved Emissions Modification (AEM) and you elect to receive this emissions service action, please contact your authorized Audi dealer to schedule this service.

If your vehicle has NOT received the Approved Emissions Modification (AEM) and you elect to receive an AEM and this emissions service action, please contact your authorized Audi dealer to schedule this service. At the time of service, the dealer will provide both the AEM and this emissions service action.

Please note: before the AEM and/or this emissions service action is applied to your vehicle, you will be required to provide written authorization to the Audi dealer.

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.

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 of America

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 Service Action 23BY – 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 on certain Audi vehicles equipped with a 3.0L TDI engine. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? During routine evaluation testing, it was determined that some software functions required updates. These improvements have no impact to your vehicle's emissions.

What will we do? Your authorized Audi dealer will install updated Engine Control Software that will improve On-Board Diagnostic (OBD) monitoring of vehicle emissions systems and otherwise improve the software used by your vehicle. These improvements have no impact to your vehicle's drivability, performance, fuel consumption, or emissions. This work will take about an 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 factory specifications with aftermarket components and/or software, work needed to repair, replace, or return the ECM to factory specifications is NOT covered under this action.

What should you do? If your vehicle has already received the Approved Emissions Modification (AEM) and you elect to receive this emissions service action, please contact your authorized Audi dealer to schedule this service

If your vehicle has NOT received the Approved Emissions Modification (AEM) and you elect to receive an AEM and this emissions service action, please contact your authorized Audi dealer to schedule this service. At the time of service, the dealer will provide both the AEM and this emissions service action.

Please note: before the AEM and/or this emissions service action is applied to your vehicle, you will be required to provide written authorization to the Audi dealer.

On or about October 8, 2020, 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 Canada

Required Tools



Battery Tester/Charger
- GRX3000VAS-
(or equivalent)



Diagnostic Tester
-VAS6150X/VAS6160X-
(or equivalent)

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 -
	2016-12-13	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



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**

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.

Section B – Update Engine Control Module Software

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. Using GFF will cause the flash to take longer. Requests for additional time will not be considered.
- ✓ **The VAS Diagnostics Interface MUST ONLY be connected to the tester with a USB cable.**
 - Performing a software update using a Bluetooth or WiFi 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 or WiFi.

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!

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) IN POWER SUPPLY MODE to the vehicle battery charging posts.

NOTE

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.

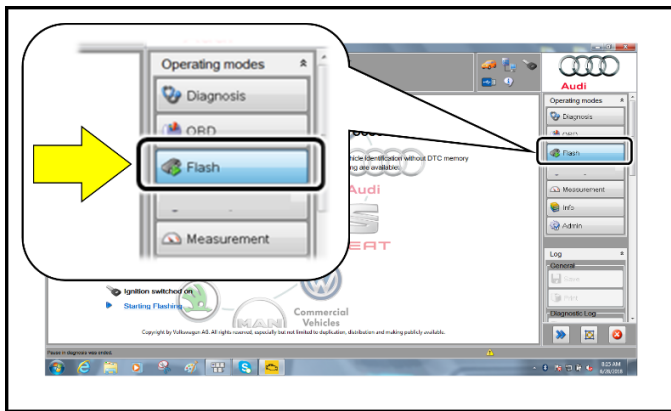
- Turn the hazards on.

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.



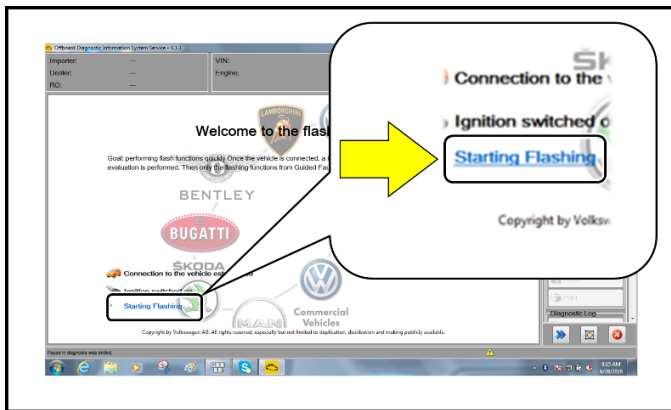
- Confirm that scan tool is communicating with the diagnostic head by USB cable.
 - If the Bluetooth or WiFi symbol is shown, then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.



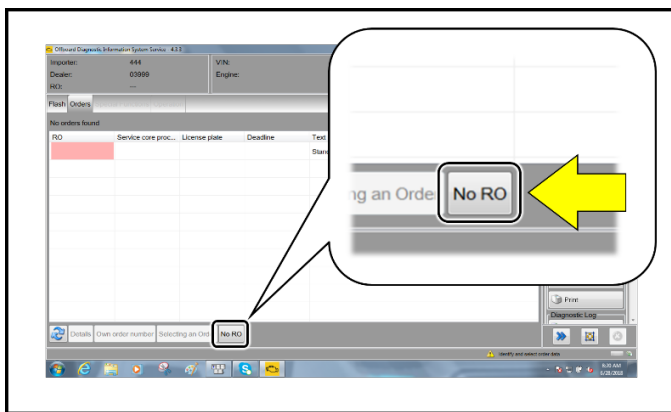
- From the home screen of the scan tool highlight “Flash” <1>.
- Follow the on-screen prompts.

NOTE

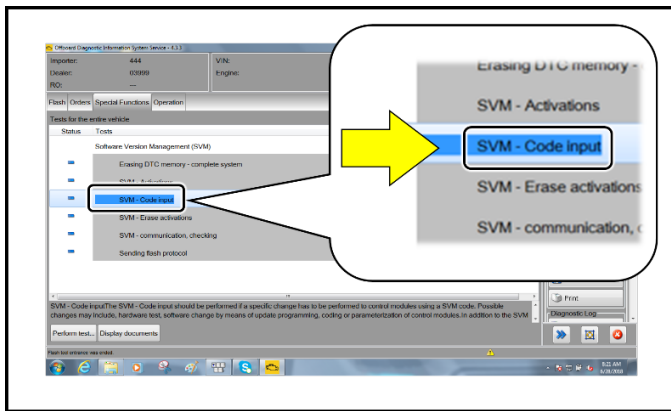
Operating mode “Flash” must be used. Performing this update using “Diagnosis” (Guided Fault Finding) could result in non-payment of the claim.



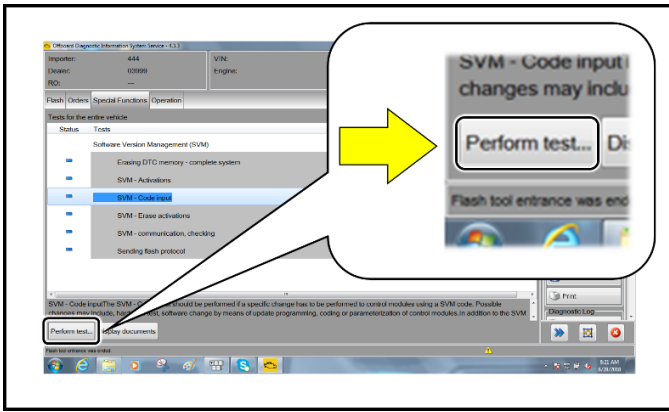
- Select “Starting Flashing” and follow the on-screen prompts.



- Select “No RO”.



- Highlight “SVM – Code Input”.

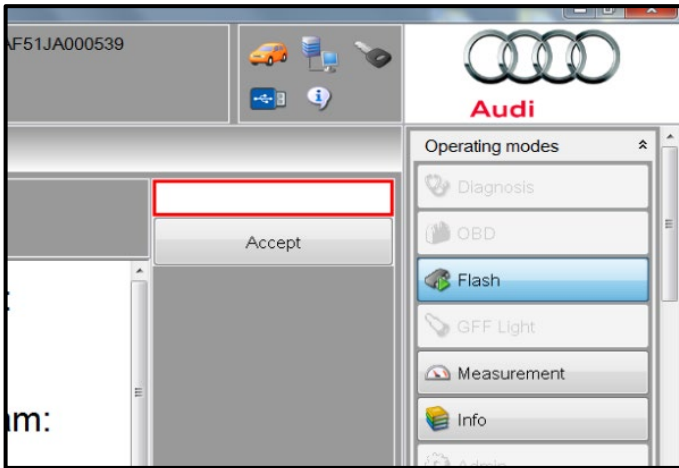


- Select “Perform test”.

NOTE

Using Bluetooth or WiFi for this action is PROHIBITED!

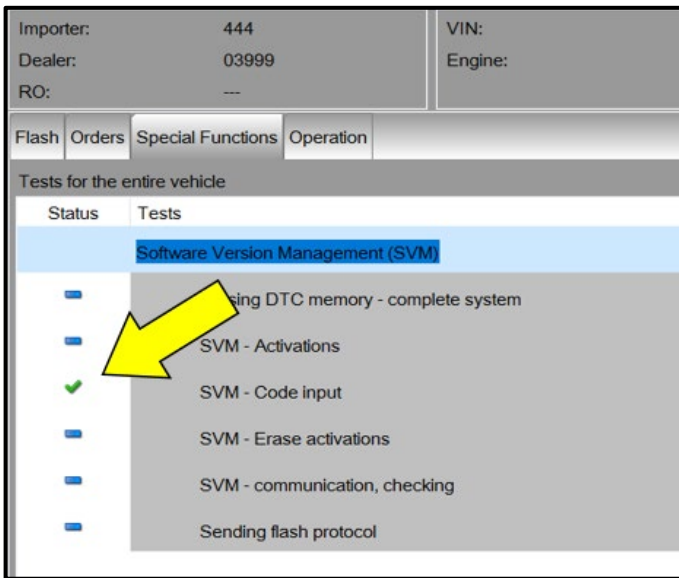
Damage caused to electronic components (e.g. ECM, TCM, etc.) during the SVM update process is not covered.



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

SVM code
23BYA300

- Select “Accept”.
- Follow the on-screen prompts.

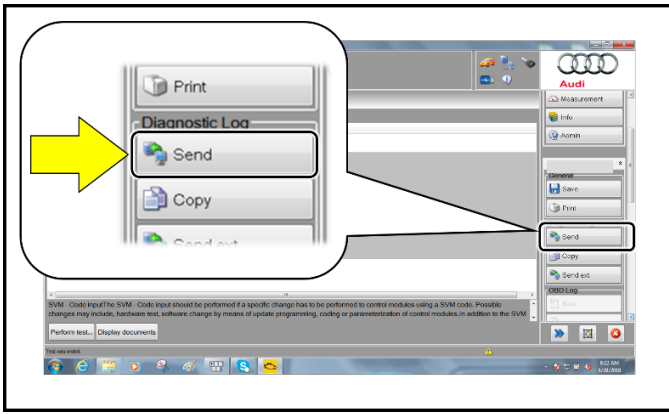


NOTE



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.**

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.



TIP

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