### **Technical Service Bulletin**

### **24HM UPDATE**

# **Engine Control Module Software – (FED\_EMS)**



Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2020	2020	SQ7	821
USA	2020	2020	SQ8	559
CAN	2020	2020	SQ7	92
CAN	2020	2020	SQ8	50

Revision History				
Revision	Date	Purpose		
1	10/26/2021	Original publication		

# **Technical Background**

This Update has been proactively released to prevent the following condition(s) from occurring in the vehicle:			
Criteria	Technical Background		
01	Affected Engine Control Software does not disable the warm-up correction factor following engine start and warm-up as described in Auxiliary Emission Control Device (AECD) documentation.		

# Remedy

Criteria	Remedy	
01	Update engine control module software	

This Update is in effect until removed.

Vehicle must meet all of the following criteria:

- Procedure is valid only for vehicles that show the **24HM** code in the Elsa Campaign/Action Information screen on the day of repair.
- Vehicle must be within the Federal Emissions Warranty.
- Procedure must be performed within the allotted time frame stated in this Technical Service Bulletin.
- Procedure must be performed on applicable vehicles in dealer inventory prior to sale.

October 2020 24HM Page 1 of 9

#### **Technical Service Bulletin**

#### 24HM UPDATE

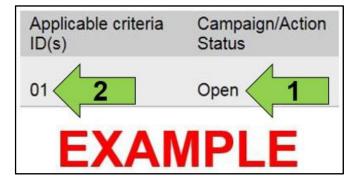
### **Engine Control Module Software – (FED\_EMS)**

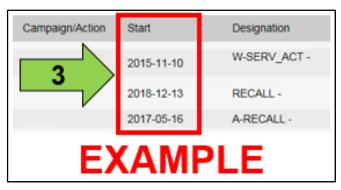


### **Service**

#### NOTE:

- Elsa is the only valid inquiry/verification source. Check Elsa on the day this vehicle UPDATE will be performed to verify vehicle eligibility for the UPDATE. Status must show "open". Attach an Elsa printout showing the "open" status to the repair order.
- If this UPDATE appears to have already been performed but the code still shows open in Elsa, contact Warranty before proceeding further. Another dealer may have recently performed this UPDATE but not yet entered a claim for it in the system.
- Elsa may also show additional open action(s); if so, inform your customer this work can be done while the vehicle is in for this UPDATE.
- Contact the Warranty Helpline (U.S.) or the Warranty Campaign Specialist (Canada) if you have any questions.





 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 prior to completing this campaign.

October 2020 24HM Page 2 of 9

#### **Technical Service Bulletin**

#### 24HM UPDATE

### **Engine Control Module Software – (FED\_EMS)**



### **SVM Update Instructions**



#### 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.



As a best practice, customer presets should be documented prior to performing any update in the event these settings are lost during the update.

October 2020 24HM Page 3 of 9

**Release Date** 

10/26/2021

#### **Technical Service Bulletin**

#### 24HM UPDATE

## **Engine Control Module Software – (FED\_EMS)**



# U NOTE

- All campaign software updates must be completed during a single, standalone ODIS Diagnostic Session.
   You must fully complete this campaign and send all logs before beginning any other campaigns or operations.
- If there are any ODIS "Hot-Fix" patches installed, they must be removed from the scan tool before beginning this operation. ODIS "Hot-Fix" patches may affect the update process.

### **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.
- Open the battery cover.
- Attach the GRX3000VAS Tester/Charger (or equivalent) IN POWER SUPPLY MODE to the vehicle battery or underhood charging posts.

### () 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.

October 2020 24HM Page 4 of 9

#### **Technical Service Bulletin**

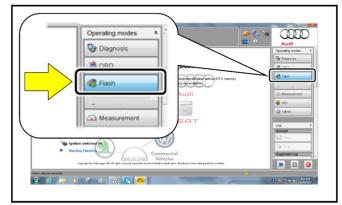
### **24HM UPDATE**

## **Engine Control Module Software – (FED\_EMS)**





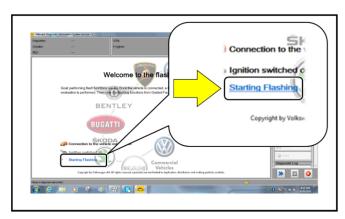
- Confirm that scan tool is communicating with the diagnostic head by USB cable.
  - If the Bluetooth or WiFi symbol is shown, then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.



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



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



 Select "Starting Flashing" and follow the onscreen prompts.

24HM Page 5 of 9

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. ©2021 Audi of America, Inc and Audi Canada All Rights Reserved.

### **Technical Service Bulletin**

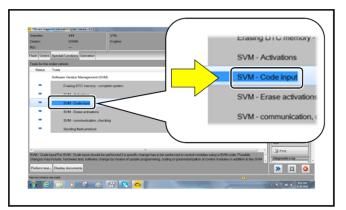
### 24HM UPDATE

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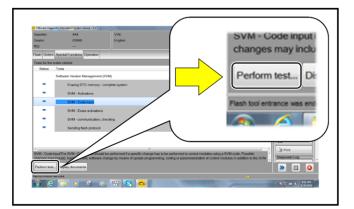




• Select "No RO".



• Highlight "SVM – Code Input".



• Select "Perform test".

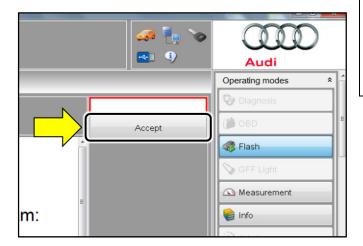
October 2020 24HM Page 6 of 9

#### **Technical Service Bulletin**

#### 24HM UPDATE

## **Engine Control Module Software – (FED\_EMS)**







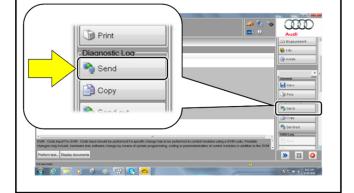
#### Using <u>Bluetooth or WiFi</u> for this action is PROHIBITED!

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

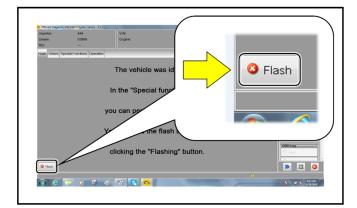
 Enter the corrective action code (SVM code) as listed below.



- Select "Accept" <arrow>.
- Follow the on-screen prompts.



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



• Click "Flash" <arrow> to exit the flash session.



Various event memory entries may be generated after the flashing procedure on some vehicles. Put the vehicle in a corresponding bus sleep mode after performing the update in order to clear the faults.

To put the vehicle in bus sleep mode, disconnect the diagnostic tester, remove the key from the vehicle and lock the vehicle with the remote for 5 minutes.

### **Technical Service Bulletin**

### 24HM UPDATE

# **Engine Control Module Software – (FED\_EMS)**



# Warranty

#### **Claim Entry Instructions**

After Update 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 or vehicle is out of the specified warranty parameter for this Update:

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

Service Number	24HM				
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		
	2470 25 99	Time stated on diagnostic protocol	Update engine control module software		

Additional Actions Some of the affected vehicles may be involved in additional Actions. Please check your

Elsa Campaign/Action Information screen so that any additional required work can be

done simultaneously.

Verifying Vehicle Eligibility To verify vehicle eligibility for this Update, *always* check the Elsa Campaign/Action Information screen. The Elsa system is the *only* binding inquiry and verification system;

other systems are not valid and may result in non-payment of a claim.

Help for Claim

Entry

For questions regarding claim entry, contact Audi Warranty.

**Release Date** 

10/26/2021

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Required Customer Notification Inform your customer in writing by recording on the Repair Order any and all work that was conducted on the vehicle, including any and all updates completed under this Update.

# **Required Special Tools**



Battery Tester/Charger
- GRX3000VAS(or equivalent)



Diagnostic Tester
-VAS6150X/VAS6160X(or equivalent)

### **Additional Information**

All parts and service references provided in this Update are subject to change and/or removal. Always check Elsa for the most current version of this document.

October 2020 24HM Page 9 of 9