Emissions Recall Code: 24HF



Subject

Engine Control Module (ECM) Software

Release Date

October 27, 2021

REVISION SUMMARY

Claiming and work instructions updated with information about P0606 fault

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2022	2022	TAOS	149

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.

About this Action

Due to a documentation process error, engine control module software was not properly certified. Affected vehicles will be updated to the latest software level. This topic has no impact on vehicle emissions.

Code Visibility

On or about October 5, 2021, the campaign code was applied to affected vehicles.

Owner Notification

Owner notification took place in October 2021. 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.vwhub.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> <u>delivery to consumers</u>

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.vwhub.com.

October 2021 24HF Page 1 of 12

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 <u>open on the day of repair</u> to the repair order. If customer refused campaign work:

✓ U.S. dealers: Submit request via WISE under the Campaigns/Update/Recall Closure option.

O.S. dealers. Outstrik request via WISE under the Campaigns/Opuate/Necall Closure Option.						
Service Number	24HF					
Damage Code	0099					
Parts Vendor Code	wwo					
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					
	<u>U.S.A.:</u> Loaner/rental coverage cannot be claimed under this action. However, loaner/rental may be covered under the Alternate Transportation Program. Please refer to the Volkswagen Warranty Policy and Procedures Manual for loaner claims information and reimbursement details.					
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 (up to 40 TU)	Update engine control module software			
		Add only if MIL is on v	with fault P0606 after the flash			
	0150 00 00	10	Perform OBD operations to clear fault			

October 2021 24HF Page 2 of 12

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

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>

Subject: Emissions Recall 24HF- Engine Control Module (ECM) Software

Dear Volkswagen 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 2022 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

About this service action: Due to a documentation process error, engine control module software was not properly certified. Affected vehicles will be updated to the latest software level. This topic has no impact on vehicle

> IMPORTANT! Please note that if 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 it to original factory specifications is NOT covered under this action.

What should you do?

Please contact your authorized Volkswagen dealer as soon as possible to schedule this service. To set up an appointment online, please visit www.vw.com/find-a-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.

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 Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, or if you should have any questions about this communication, please don't hesitate to contact Customer CARE, Monday through Friday by phone at 800-893-5298. You are also welcome to e-mail or chat through the "Contact Us" page http://www.vw.com/contact/.

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 www.vw.com/owners/recalls and enter your Vehicle Identification Number (VIN) into the Recall/Service Campaign Lookup tool.

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,

Volkswagen Customer Protection

24HF Page 3 of 12

Required Tools



Battery Tester/Charger
- GRX3000VAS(or equivalent)



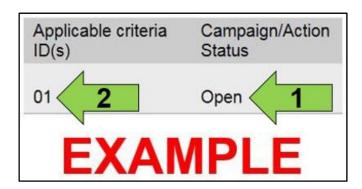
Diagnostic Tester
-VAS6150X/VAS6160X(or equivalent)

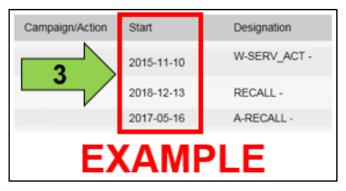
Repair Instruction

Section A - Check for Previous Repair

i TIP

If Campaign Completion label is present, no further work is required.





• 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.
- 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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

October 2021 24HF Page 4 of 12

Section B – Update Engine Control Module Software

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.
- 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!



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.

24HF Page 5 of 12

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.

• 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.
 - Open the hood.
 - Open the battery cover.
 - 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.

① 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.

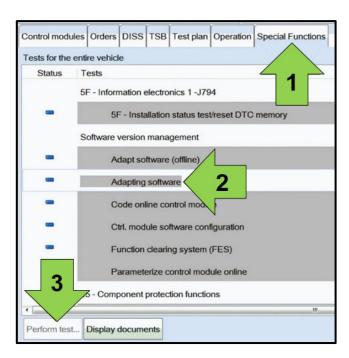
Turn the hazards on.

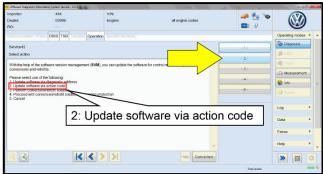
A CAUTION

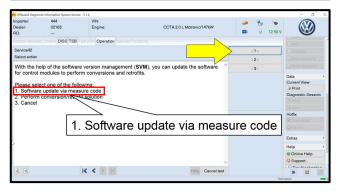
The procedure may cancel itself if the hazard warning lights are not switched on. The hazard warning lights prevent the system from switching to bus sleep mode during the update.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.









- Confirm that scan tool is communicating with the diagnostic head by USB <Green Arrow>.
 - If the Bluetooth symbol is shown <Red Arrow> then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.
- Upon ODIS startup, verify the "Diagnosis" operating mode is selected <as shown>.
- Once the GFF scan is complete, select "Special functions" <arrow 1>, then "Adapting software" <arrow 2>, then select "Perform test" <arrow 3>.

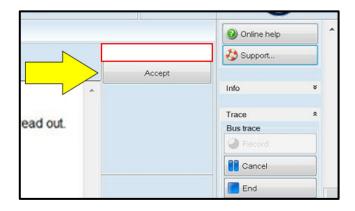
 Select the correct option to "Update software via action code" OR "Software update via measured code".



The different options to perform the SVM operation may vary based on model.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

October 2021 24HF Page 7 of 12





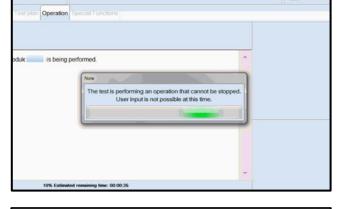
Using <u>Bluetooth</u> or <u>WiFi</u> for this action is PROHIBITED!

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> and follow the on screen prompts.
- During the flash, this screen appears when each operation is performed.



Select Complete/Continue <arrow> after each operation is completed.



Deata version in the vehicle is current.

K (> | > |

- When the SVM update is complete a confirmation message is displayed <as shown>.
- Select "Complete/Continue" <arrow>.



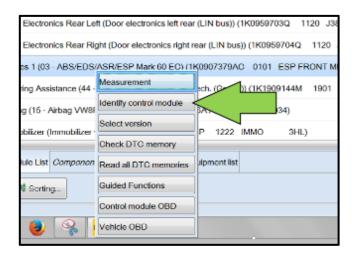
If the software in the vehicle is already current, a message may appear indicating this. If this occurs, complete the ODIS test plan and send the diagnostic protocol online.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

>> E

October 2021 24HF Page 8 of 12





U NOTE

- It is <u>IMPERATIVE</u> that <u>ALL</u> of the ignition cycle on/off delay requests are fulfilled in their entirety during this flash process <arrow 1>.
- Failing to wait for the ignition on/off timing cycle to complete (progress bar and countdown timer <arrow 2>) before cycling the ignition on/off MAY damage a control module.
- Damage to control modules as a result of failing to wait the specified time displayed by the progress bar and countdown timer <arrow 2> are <u>NOT</u> covered under this action.
- After the software update is completed and before sending the GFF Log Online:
 - Select the "Control Module" tab.
 - Scroll down and right click on the module that was updated (0001).
 - Select "Identify Control Module" <arrow>.



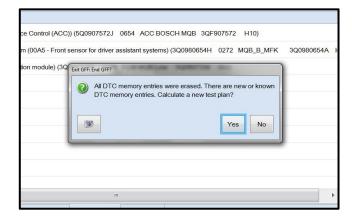


In rare cases, a P0606 fault with symptom code 32902 may set after three key cycles after performing a software update. In order to prevent a comeback the following steps must be followed.

- Turn off the ignition.
- Disconnect the diagnostic head from the OBD port.
- Wait 30 seconds.
- Turn on the ignition.
- Perform three key cycles (wait 30 seconds between each ignition off to on cycle).
- Reconnect the diagnostic head to the OBD port.
- Re-identify 0001-Engine Control Module.
- If, after re-identifying the ECM, fault P0606 with Symptom Code 32902 is stored:
 - See the "Important Repair Steps" at the end of this procedure.
- If no faults are stored:
 - Proceed to the next step.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

October 2021 24HF Page 9 of 12



 Exit GFF and send diagnostic protocol online when prompted.

() NOTE

Static communication faults may store in various control modules during the flash. These faults can only be cleared by following one of these steps:

- Drive the vehicle a short distance (around the parking lot, for example).
- After selecting "Yes", turn the ignition off for 30 seconds, turn it back on and repeat the GFF exit program.
- Clear faults using OBD (an additional key cycle may also be required).
- Release the parking brake.
- Disconnect the VAS tester.
- Switch off and disconnect the battery charger.
- Reinstall the battery cover.

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 Volkswagen dealer. ©2021 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

October 2021 24HF Page 10 of 12

! IMPORTANT REPAIR STEPS

In rare cases, a P0606 fault with symptom code 32902 may set after three key cycles after performing a software update. In order to prevent a comeback repair these steps must be followed.

- If MIL is illuminated, check ECM fault memory using Control Module OBD.
- If fault P0606 with symptom code 32902 is stored:
 - Upload a copy of the GFF log to GFF Paperless and/or save a copy of the OBD log for review by warranty (10 additional TU can be paid ONLY if fault P0606 with symptom code 32902 is stored AND a GFF Paperless log is available or an OBD log showing the fault can be provided)
 - Follow this workaround to clear the fault:
 - 1. Open hood and install a battery maintainer
 - 2. Using OBD, clear the individual fault in the ECM from the results tab
 - 3. Perform 3 key cycles
 - 4. If fault stays cleared, perform a bus sleep and re-evaluate fault. If fault remains cleared:
 - a. No further work is required
 - b. Proceed to Section C
 - 5. If fault remains:
 - a. Activate (Switch on) transport mode
 - b. De-activate (Switch off) transport mode
 - c. Using OBD, clear the individual fault in the ECM from the results tab
 - d. Perform three key cycles
 - e. Recheck for fault
 - 6. If fault stays cleared, perform a bus sleep and re-evaluate fault. If fault remains cleared:
 - a. No further work is required
 - b. Proceed to Section C
- If the MIL is on and any fault other than P0606 with symptom code 32902 is stored:
 - o Perform normal diagnosis of fault.
 - Diagnosis and repair of any fault other than P0606 with symptom code 32902 will not be covered under this action.

Section C - 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 D (California only).

Section D - 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.vwhub.com.

i TIP

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*.

October 2021 24HF Page 12 of 12