



# Emissions Service Action

## Code: 23EP

**Subject** Engine Control Module (ECM) Software

**Document History**

Date	Summary
10/24/2023	Original publication

**Affected Vehicles**

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2009	2012	TOUAREG	314
CAN	2009	2012	TOUAREG	50

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.

**Problem Description**

Vehicles included in this action have been identified as having received the Diesel Approved Emissions Modification (AEM). Volkswagen dealers will inspect the software level on the vehicle's Engine Control Module (ECM) to ensure that the AEM software level is current. If a software discrepancy is found, the ECM software will be updated free of charge. Please note that the ECM software check will automatically result in a check of the Transmission Control Module (TCM) software level, which would also be updated to the AEM level, if a software discrepancy is found. Only in the event that current software is not found on a vehicle, there could be an impact on vehicle tailpipe emissions.

**Corrective Action**

Inspect and if necessary update engine and/or transmission control module software.

**Code Visibility**

On or about October 24, 2023, the campaign code will be applied to affected vehicles.

**Owner Notification**

Owner notification will take place in October 2023. 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.vwclub.com](http://www.vwclub.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 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.vwclub.com](http://www.vwclub.com).

## 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.S. dealers: Submit request via WISE under the *Campaigns/Update/Recall Closure* option.
- ✓ Canada dealers: Upload the repair order [signed by customer] to Volkswagen WIN/Operations/Campaign Closure.

<b>Service Number</b>	23EP		
<b>Damage Code</b>	0099		
<b>Parts Vendor Code</b>	WWO		
<b>Claim Type</b>	Sold vehicle: 7 10 Unsold vehicle: 7 90		
<b>Causal Indicator</b>	Mark labor as causal		
<b>Vehicle Wash/Loaner</b>	<p>Do not claim wash/loaner under this action</p> <p><b>U.S.A.:</b> 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.</p> <p><b>Canada:</b> Loaner/rental coverage cannot be claimed under this action. Please refer to Volkswagen Service Loaner Program to determine loaner eligibility.</p>		
<b>Criteria I.D.</b>	01		
	<b>LABOR</b>		
	<b>Labor Op</b>	<b>Time Units</b>	<b>Description</b>
	2706 89 50	10	Connect battery charger
	2470 25 99	Time stated on diagnostic protocol	Inspect and if necessary update engine and/or transmission control module software

## 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 Service Action 23EP – 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 service action on certain 2009-2012 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

**What is the issue?**

Your vehicle has been identified as having received the Diesel Approved Emissions Modification (AEM). Your authorized Volkswagen dealer will inspect the software level on your vehicle's Engine Control Module (ECM) to ensure that the AEM software level is current. If a software discrepancy is found, the ECM software will be updated free of charge. Please note that the ECM software check will automatically result in a check of the Transmission Control Module (TCM) software level, which would also be updated to the AEM level, if a software discrepancy is found. Only in the event that current software is not found on a vehicle, there could be an impact on vehicle tailpipe emissions.

**What will we do?**

Your authorized Volkswagen dealer will inspect and if necessary update the engine and/or transmission control module software. 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 any control module(s) 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 control module(s) to 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](http://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](http://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

## 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 23EP – Engine Control Module (ECM) Software**

Dear Volkswagen Owner,

This notice is sent to you in accordance with the requirements of the *Canadian Environmental Protection Act, 1999*. Volkswagen has determined that a defect, which relates to a prescribed emission standard, exists in certain 2009-2012 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

**What is the issue?**

Your vehicle has been identified as having received the Diesel Approved Emissions Modification (AEM). Your authorized Volkswagen dealer will inspect the software level on your vehicle's Engine Control Module (ECM) to ensure that the AEM software level is current. If a software discrepancy is found, the ECM software will be updated free of charge. Please note that the ECM software check will automatically result in a check of the Transmission Control Module (TCM) software level, which would also be updated to the AEM level, if a software discrepancy is found. Only in the event that current software is not found on a vehicle, there could be an impact on vehicle tailpipe emissions.

**What will we do?**

Your authorized Volkswagen dealer will inspect and if necessary update the engine and/or transmission control module software. 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 any control module(s) 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 control module(s) to factory specifications is NOT covered under this action.**

**What should you do?**

In order to limit any possible inconvenience, please contact your authorized Volkswagen dealer as soon as possible to schedule this service. On or about October 24, 2023 the necessary service action instructions will be available to your authorized Volkswagen 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 Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Customer Relations, Monday through Friday from 8AM to 8PM EST by phone at 1-800-822-8987 or via our “Contact Us” page at [www.vw.ca](http://www.vw.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,

Volkswagen Customer Protection

## Required Tools



Battery Tester/Charger  
- GRX3000VAS-  
(or equivalent)



Diagnostic Tester  
-VAS6150X/VAS6160X-  
(or equivalent)

## Repair Instruction

### Section A - Check for Previous Repair

#### TIP

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

Applicable criteria ID(s)	Campaign/Action Status
01	Open

EXAMPLE

Campaign/Action	Start	Designation
	2015-11-10	W-SERV_ACT -
	2018-12-13	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.**

## Section B – Work Procedure

### 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 “Current ODIS Service Version” circular found in Elsa2Go Service References.
- ✓ **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!


### 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.

 **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.

 **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.

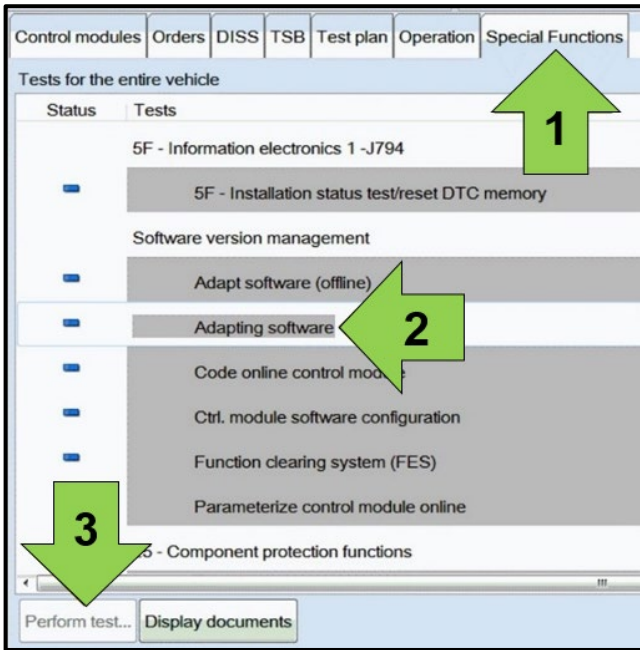
 **CAUTION**

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.

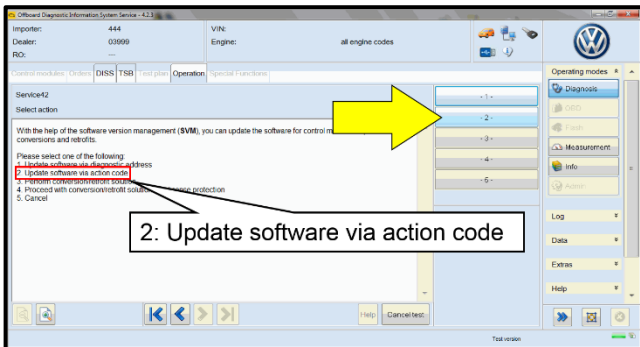




- Confirm that scan tool is communicating with the diagnostic head by USB <Green Arrow>.
  - If the Bluetooth symbol is shown <Red Arrow> then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.
- Upon ODIS startup, verify the “Diagnosis” operating mode is selected <as shown>.

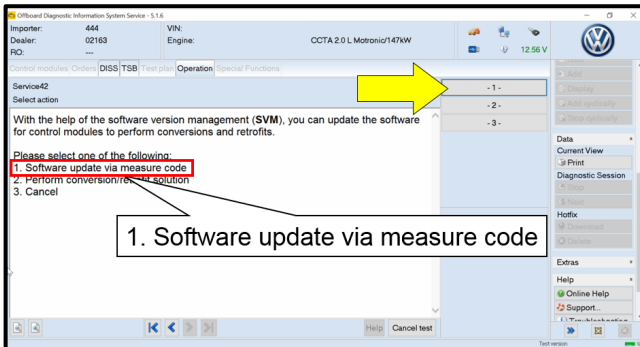


- Once the GFF scan is complete, select “Special functions” <arrow 1>, then “Adapting software” <arrow 2>, then select “Perform test” <arrow 3>.

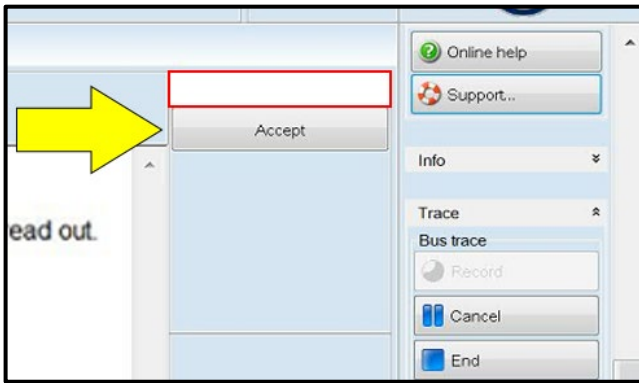


- Select the correct option to “Update software via action code” OR “Software update via measured code”.

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







**NOTE**

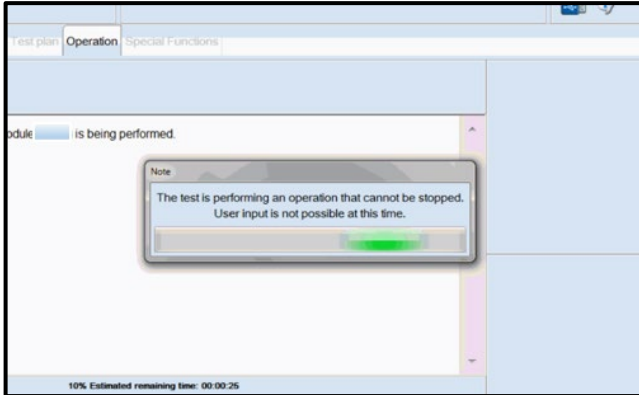
***Using Bluetooth or WiFi for this action is PROHIBITED!***

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

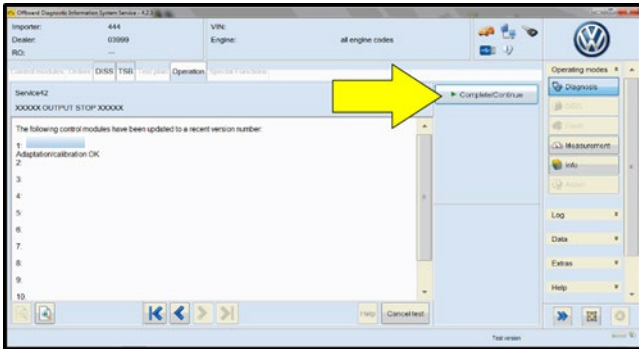
- Enter the corrective action code (SVM code) as listed below.

<b>SVM code</b>
<b>4A9C</b>

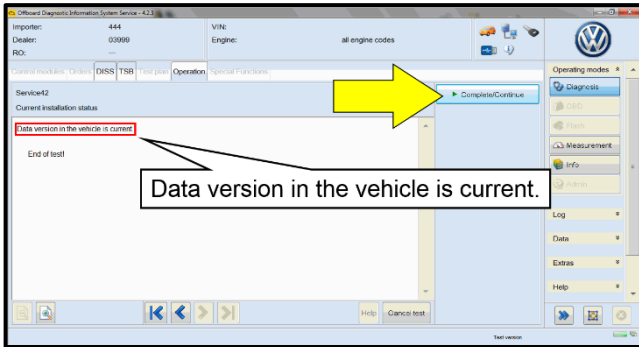
- Select "Accept" <arrow> and follow the on screen prompts.
- During the flash, this screen appears when each operation is performed:



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

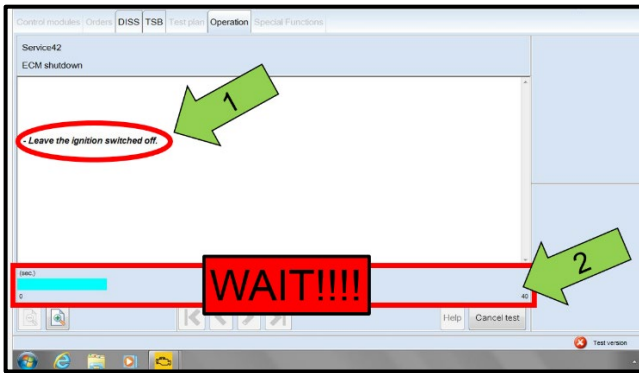


- When the SVM update is complete a confirmation message is displayed <as shown>.
- Select "Complete/Continue" <arrow>.



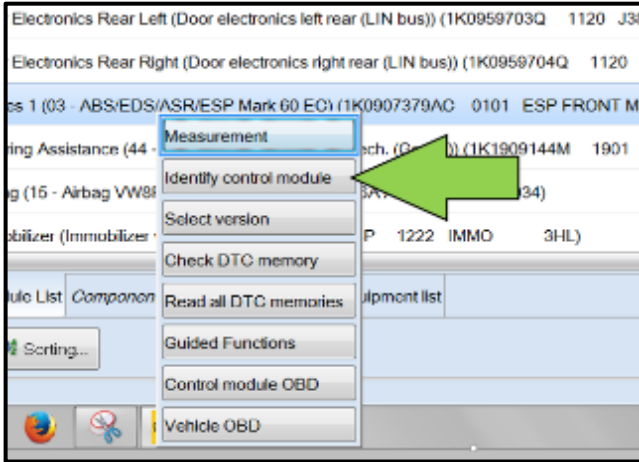
**TIP**

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.

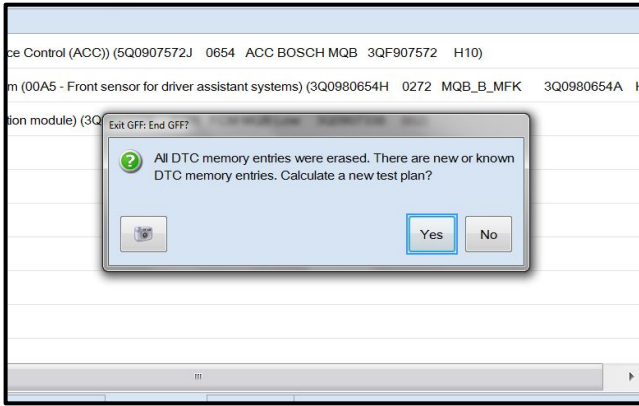


**NOTE**

- It is **IMPERATIVE** that **ALL** 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 **NOT** 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 and 0002).
  - Select “Identify Control Module” <arrow>.



- 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.

**Proceed to Section C.**

## 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.

### 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.vwclub.com](http://www.vwclub.com).

### 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.