

Emissions Service Action

Code: 23BZ



Subject Engine Control Module (ECM) Software

Release Date October 08, 2020

Affected Vehicles

| Country | Beginning Model Year | Ending Model Year | Vehicle | Vehicle Count |
|---------|----------------------|-------------------|---------|---------------|
| USA | 2009 | 2010 | TOUAREG | 2,551 |
| CAN | 2009 | 2010 | TOUAREG | 1,055 |

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 emission 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 08, 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.vwhub.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 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.

| | | | |
|----------------------------|---|---|---|
| Service Number | 23BZ | | |
| 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.S.A.: Loaner/rental coverage cannot be claimed under this action. However, loaner/rental may be covered under the mobility program. Please refer to the Volkswagen Warranty Policy and Procedures Manual for loaner claims information and reimbursement details. Canada: Loaner/rental coverage cannot be claimed under this action. Please refer to Volkswagen Service Loaner Program to determine loaner eligibility. | | |
| 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 (up to 100 TU) | 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 23BZ – 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 Volkswagen 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 Volkswagen 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 Volkswagen 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 Volkswagen 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 Volkswagen dealer.

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.

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 reach out to us using your preferred method of communication at www.vw.com/contact or by calling us at 800-893-5298.

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 of America

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. ©2020 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

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 23BZ – 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 Volkswagen 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 Volkswagen 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 Volkswagen 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 Volkswagen 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 Volkswagen dealer.

On or about October 08, 2020 the necessary repair instructions and parts 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.

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 Canada

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 ← 2 | Open ← 1 |

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.

| Campaign/Action | Start | Designation |
|-----------------|------------|--------------|
| ← 3 | 2015-11-10 | W-SERV_ACT - |
| | 2018-12-13 | RECALL - |
| | 2017-05-16 | A-RECALL - |

EXAMPLE

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 – 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.
- ✓ **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.

TIP

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

 **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.

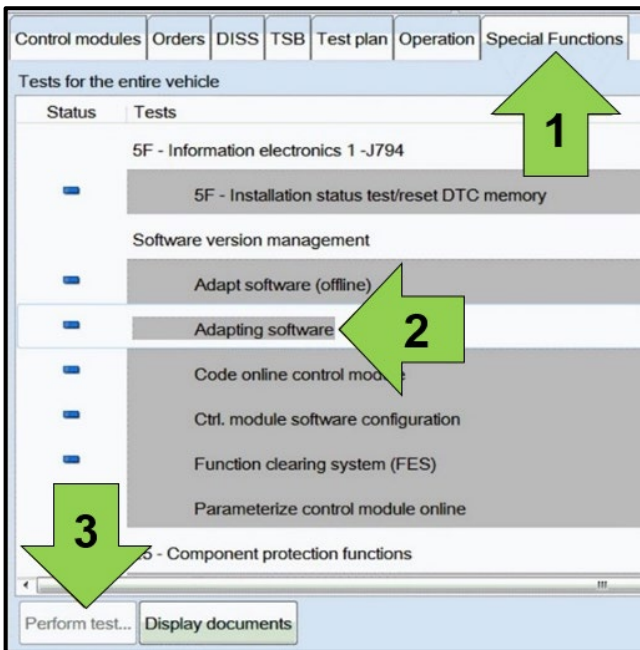
- Turn the hazards on.

 **CAUTION**

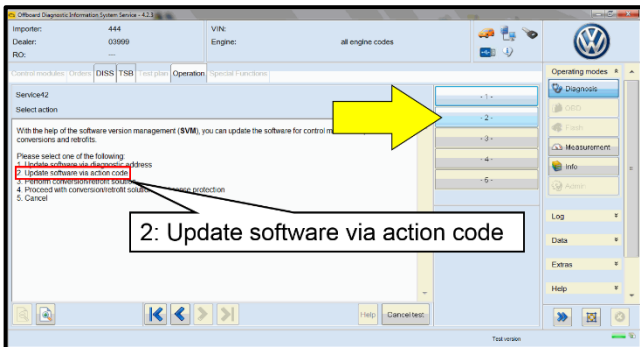
The procedure may cancel itself if the hazard warning lights are not switched on. The hazard warning lights prevent the system from switching to bus sleep mode during the update.



- 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>.

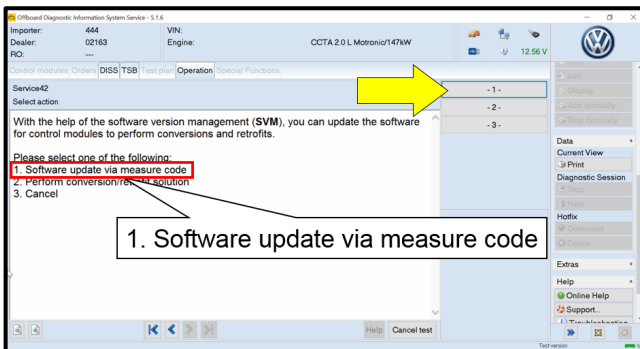


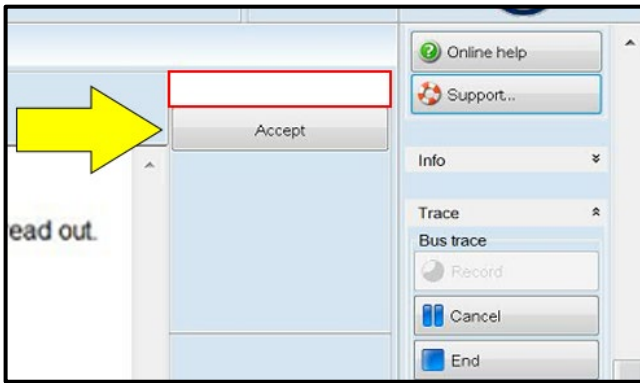
- Once the GFF scan is complete, select “Special functions” <arrow 1>, then “Adapting software” <arrow 2>, then select “Perform test” <arrow 3>.



- 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

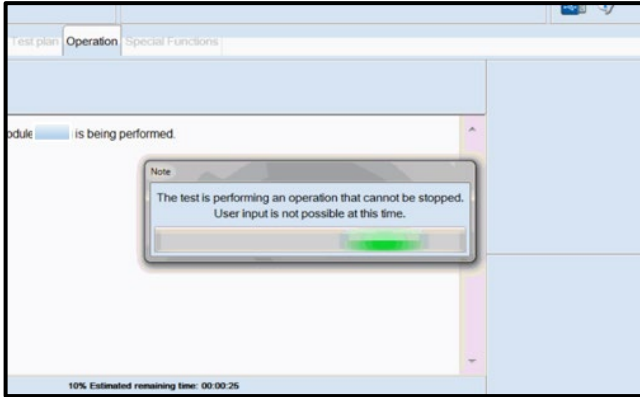
Using Bluetooth or WiFi for this action is PROHIBITED!

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

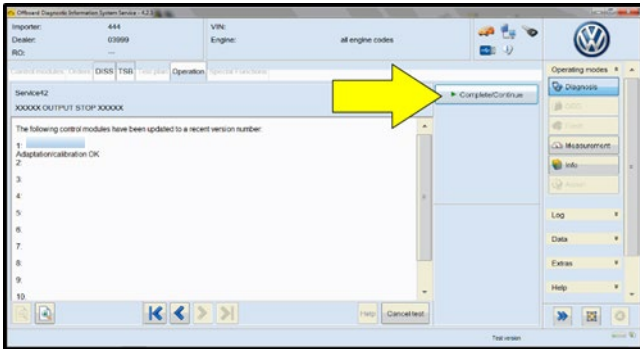
- Enter the corrective action code (SVM code) as listed below.

| |
|-----------------|
| SVM code |
| 4473 |

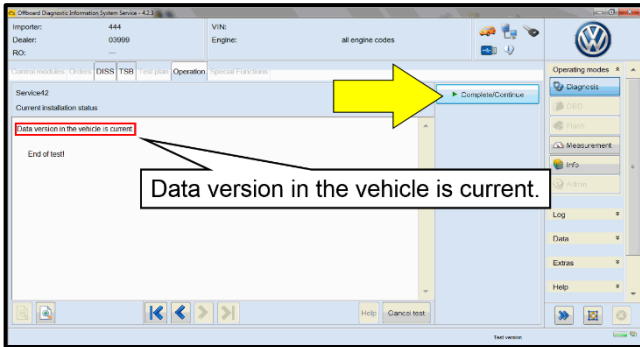
- Select "Accept" <arrow> and follow the on screen prompts.
- During the flash, this screen appears when each operation is performed:



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

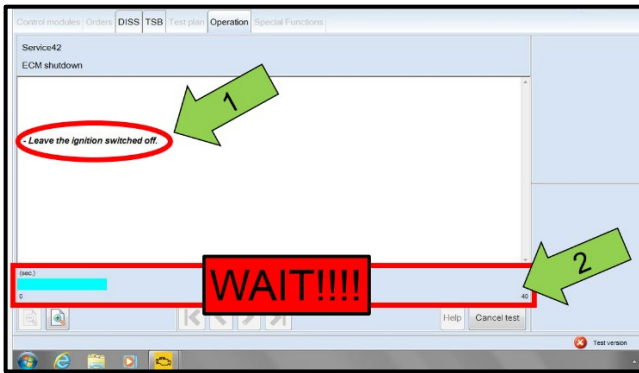


- When the SVM update is complete a confirmation message is displayed <as shown>.
- Select "Complete/Continue" <arrow>.



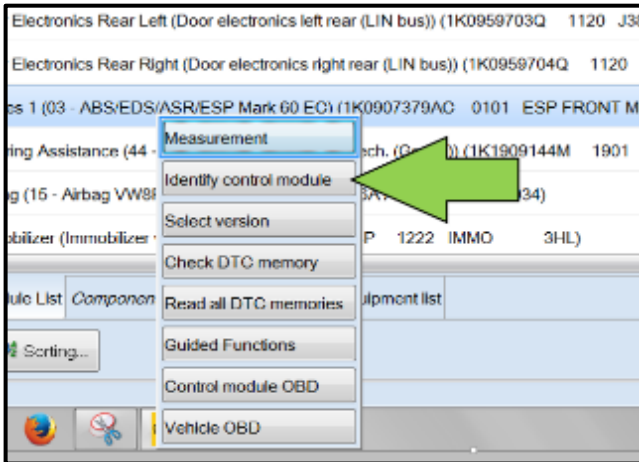
TIP

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.

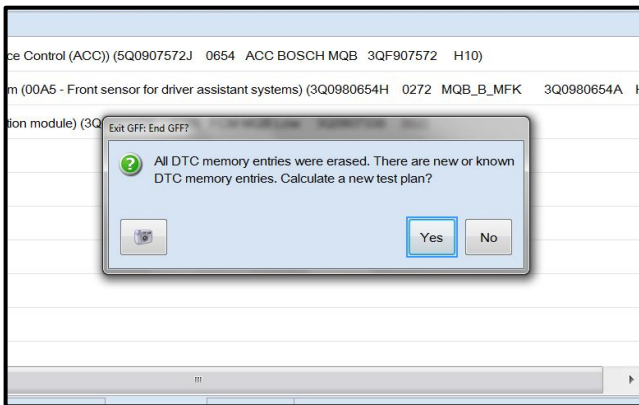


NOTE

- 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).
 - 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).