



Safety Recall

Code: 93B4

Subject	High-Voltage Battery Management System Software
Release Date	March 08, 2016
Affected Vehicles	U.S.A.: Certain 2015-2016 MY Volkswagen e-Golf <i>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 <u>only</u> valid campaign inquiry & verification source.</i> <ul style="list-style-type: none">✓ 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	Under certain conditions, oversensitive diagnostics in the high-voltage battery management system may inadvertently classify a brief internal electrical current surge/peak as a critical battery condition. This can cause an emergency shutdown of the high-voltage battery, which in turn deactivates the vehicle's electrical drive motor. Unexpected shutdown of the vehicle's electrical drive motor ("stalling") can lead to a crash. Other vehicle systems like power steering, brakes, lights and airbags remain unaffected as they are powered by the 12V low voltage system.
Corrective Action	Update high-voltage battery management system software.
Dealer Requirements – e-Golf	This recall repair must only be performed by an authorized Volkswagen dealer certified to conduct repairs on e-Golf vehicles.
Parts Information	Software update only – no parts required.
Code Visibility	On or about March 08, 2016, affected vehicles will be listed on the Inventory Vehicle Open Campaign Action report under My Dealership Reports (found on www.vw.com & OMD Web). A list will not be posted for dealers who do not have any affected vehicles. On or about March 08, 2016, this campaign code will show open on affected vehicles in Elsa. On or about March 08, 2016, affected vehicles will be identified with this campaign code in the VIN Lookup tool at www.vw.com and on the NHTSA VIN lookup tool at www.safercar.gov .
Owner Notification	Owner notification will take place mid-March 2016. An owner letter example is 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. IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALLS <u>New Vehicles in Dealer Inventory:</u> It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied. By law, dealers must correct, prior to delivery for sale or lease, any vehicle that fails to comply with an applicable Federal Motor Vehicle Safety Standard or that contains a defect relating to motor vehicle safety. <u>Pre-Owned Vehicles in Dealer Inventory:</u> Dealers should not deliver any pre-owned vehicles in their inventory which are involved in a safety or compliance recall until the defect has been remedied. Dealers must ensure that every affected inventory vehicle has this campaign completed <u>before</u> delivery to consumers. Fill out and affix Campaign Completion Label (CAMP 010 000) after work is complete. <i>Labels can be ordered at no cost via the Compliance Label Ordering portal at www.vw.com.</i>

This notice applies to your vehicle: <VIN>

NHTSA: <INSERT NUMBER>

**Subject: Safety Recall 93B4 – High Voltage Battery Management System Software
2015-2016 Model Year Volkswagen e-Golf**

Dear Volkswagen Owner,

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Volkswagen has decided that a defect, which relates to motor vehicle safety, exists in certain 2015-2016 model year Volkswagen e-Golf vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? Under certain conditions, oversensitive diagnostics in the high-voltage battery management system may inadvertently classify a brief internal electrical current surge/peak as a critical battery condition. This can cause an emergency shutdown of the high-voltage battery, which in turn deactivates the vehicle's electrical drive motor. Unexpected shutdown of the vehicle's electrical drive motor ("stalling") can lead to a crash.

Other vehicle systems, like power steering, brakes, lights and airbags remain unaffected as they are powered by the 12V low voltage system.

What will we do? To help correct this defect, your authorized Volkswagen e-Golf dealer will install updated high-voltage battery management system software. This work will take about two hours to complete and will be performed for you free of charge.

What should you do? Please contact your authorized Volkswagen e-Golf dealer without delay to schedule this recall repair. 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. For your convenience, you can also visit www.vw.com and click on the "Owners" link to locate a dealer near you and schedule this service online.

Lease vehicles and address changes If you are the lessor and registered owner of the vehicle identified in this action, the law requires you to 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.

Reimbursement of Expenses If you have previously paid for repairs relating to the condition described in this letter, please refer to the enclosed form that explains how to request reimbursement.

Can we assist you further? If your authorized Volkswagen e-Golf 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 from 8AM to 10PM EST and Saturday from 9AM to 5PM EST, or 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 click on the **Look Up Recalls** link at www.vw.com and enter your Vehicle Identification Number (VIN) into the **Recall/Service Campaign Lookup** tool. As always, if you have any questions or if you need additional assistance, please contact Customer CARE or your authorized Volkswagen e-Golf dealer.

If you still cannot obtain satisfaction, you may file a complaint with: The Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to <http://www.safercar.gov>.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Volkswagen Customer Protection

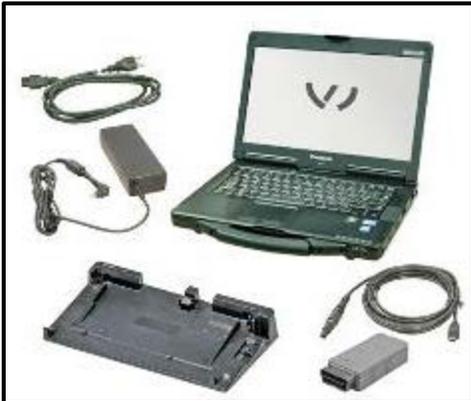
ATTENTION!

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.

ATTENTION! DEALER REQUIREMENTS – e-GOLF

This recall repair must only be performed by an authorized Volkswagen dealer certified to conduct repairs on e-Golf vehicles.

Required Tools



- VAS6150C – Diagnostic Tester (or equivalent)



- VAS5054A – Remote Diagnosis Head (or equivalent)



- GRX3000VAS – Battery Tester/Charger (or equivalent)

Work Procedure

TIP

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

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

EXAMPLE

Two green arrows point to the table cells: arrow 1 points to '01' and arrow 2 points to 'Open'.

Section A – Check for Previous Repair

- 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.

- Ensure that the Status is “Open”
<arrow 2>
- Note the Applicable Criteria ID
<arrow 1> for use in determining the correct work to be done and corresponding parts associated

Proceed to Section B

Section B – Update high-voltage battery management system software



Note:

Prior to launching VAS Diagnostic Device application and starting control module update process, confirm tester screen saver and power settings are off.

Failure to do so may result in the tester entering power save mode during data transfer, and subsequent control module failure.

When using any tester in conjunction with a VAS 5054A wireless transmitter head for a flash procedure:

- Connect the tester using an Ethernet “hard line” cable between the tester and the on-line network. **DO NOT USE WI-FI.**
- Connect a USB cable between the transmitter head and the tester. Failure to do so may lead to errors during the flash procedure.
- **DISABLE BLUETOOTH and ensure that the tester is NOT communicating via Bluetooth as the Bluetooth protocol is not a robust data transfer environment for the flash process. DO NOT USE BLUETOOTH for flashing. Control module failures caused by flashing via Bluetooth will not be covered.**

All Volkswagen scan tool devices must only be used with their power adapters plugged in. Under no circumstances should they be used on battery power alone during the programming procedure.

Critical Warning: The Midtronics Battery Charger **must** be connected to the vehicle battery for the duration of the programming, to ensure the battery state of charge remains above 12.5 volts during the update process. If the battery drops below 12.5 volts, the programming could fail which may result in damage to the control module.

Control modules damaged by insufficient voltage will not be covered.

The technician should verify the vehicle voltage prior to starting the update process, and should monitor the voltage for the duration of the update.

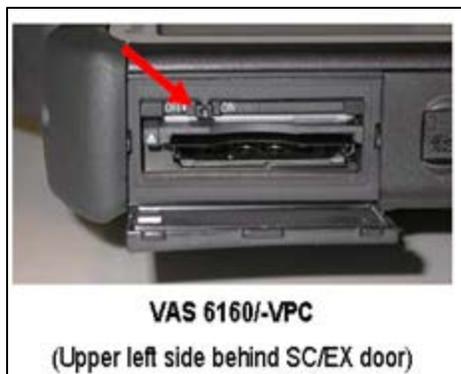


VAS 6150 & VAS 6150A
(Front panel behind handle)

- Switch the ignition OFF.
- Open the hood.
- Connect the battery charger to the vehicle.
- Connect the VAS tester to the on-line network using an Ethernet cable.
- Connect the VAS 5054A transmitter head to the VAS tester using the USB cable.
- Disable the Bluetooth by physically turning the switch to the “off” position.

! NOTE

If the Bluetooth wireless VAS 5054A transmitter head is used in conjunction with a VAS tester, the transmitter head **MUST BE** connected with a USB cable to the tester.



! NOTE

The Bluetooth function of the scan tool **MUST BE PHYSICALLY SWITCHED OFF** prior to performing this update. <See pictures>

Prerequisites for SVM software update

1. Ensure the customer's vehicle condition matches the conditions stated in this campaign circular.
2. Ensure the user has a valid GeKo ID and password.
3. Only perform operations explicitly stated in this campaign circular.
4. Ensure that the following tester requirements are met:
 - Off-board Diagnostic Information System Service (ODIS) is installed and up to date.
 - VAS tester is plugged into a 120V AC power supply at all times.
 - The VAS tester is connected, via wired connection, to the internet.
 - The VAS tester is connected via USB cable to the VAS5054A Bluetooth head **PRIOR** to launching the ODIS program.

NOTE

Prior to launching the ODIS application and starting the control module update process, confirm the tester screensaver and power settings are in accordance with Special Tools and Equipment - Service Information Document # VSE-08-18. Failure to do so may result in the tester entering power save mode during data transfer and subsequent control module failure. When performing a flash procedure using a VAS tester in conjunction with a VAS 5054A wireless transmitter head, please connect a USB cable between the transmitter head and the tester. Failure to do so may lead to errors during the flash procedure and may damage Control Modules.

5. Ensure the following vehicle requirements are met:

- Connect the vehicle to a powered, Volkswagen approved, GRX3000VAS battery tester/charger (or equivalent).
- The vehicle battery MUST have and MUST maintain a minimum no-load charge of 12.5V.
- Switch OFF the radio, HVAC, headlights, and all other accessories.
- Apply the parking brake to disable the daytime running lights (DRL).

6. Start Diagnosis using ODIS. Allow GFF to interrogate all control modules before proceeding.

NOTE

If GFF does not interrogate all control modules, manually select and interrogate remaining modules before proceeding. Address or record all DTCs related to a customer concern before continuing. Sporadic communication DTCs will be created during the flash procedure and must be erased with all other sporadic DTCs by GFF after exiting the flash test plan.

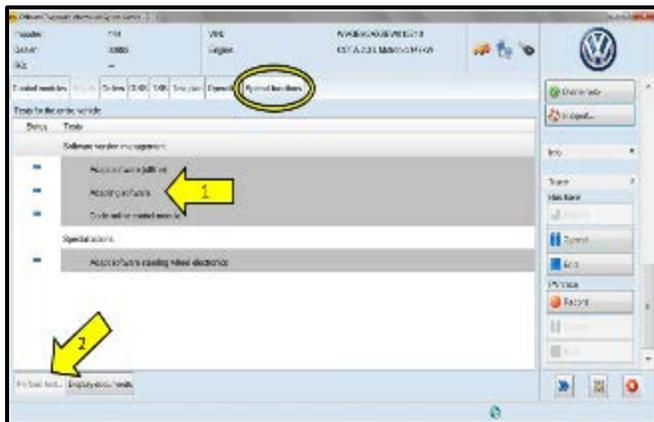


- Switch the ignition on.
- Apply the parking brake.
- Switch the headlights off.
- Attach an appropriate VAS tester to the vehicle.

NOTE
The VAS 5054A **MUST** be connected using the USB cable **PRIOR** to launching the ODIS program.

NOTE
The wireless settings on the VAS tester **MUST** be switched OFF prior to launching the ODIS program.

- Start the ODIS program.
- Upon ODIS startup, verify the “Diagnosis” operating mode is selected <as shown>.

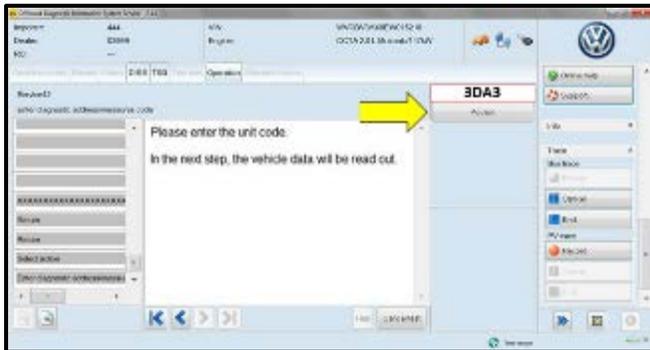


- Using ODIS, perform a Guided Fault Finding scan of the vehicle.
- Once the GFF scan is complete, select “Special functions” <circle>, then “Adapting software” <arrow 1>, then select “Perform test” <arrow 2>.



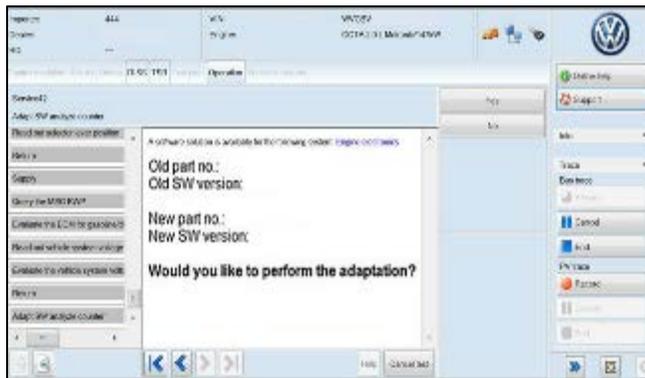
- Select the appropriate option to update “through measures code” <arrow>.

NOTE
Read this screen carefully. The option to update software through measures code is **NOT** always selection #1 on this screen.

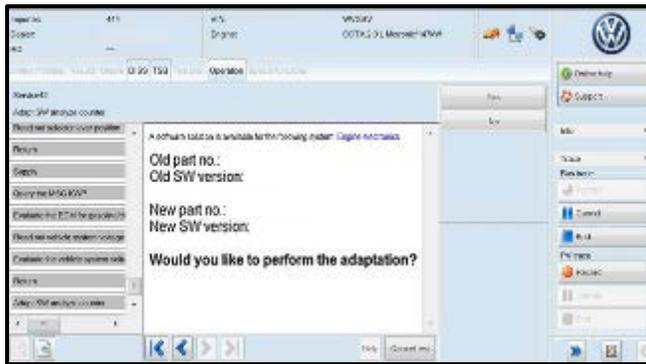


- Enter “3DA3” <as shown>.
- Select “Accept” <arrow>.

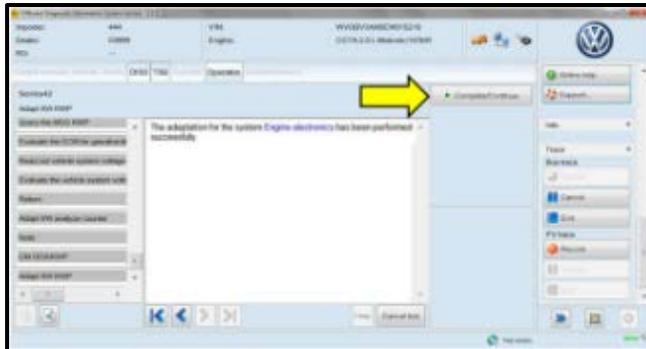
Software Change Table			
Original Control Module Part Number	Original Software Level	Updated Control Module Part number	Update Software Level
5QE915227H	All	5QE915227M	0722
5QE915227J			
5QE915227K			



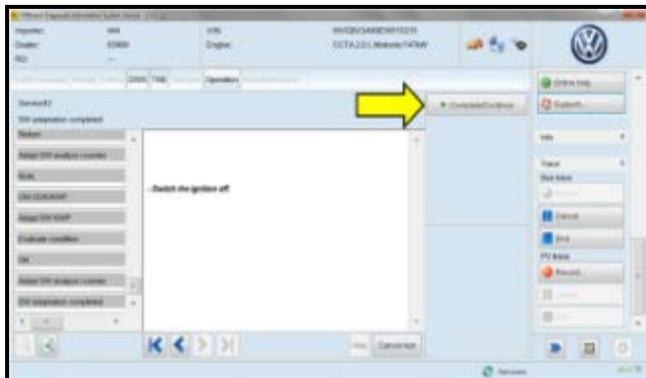
- Compare the old and new part number and software version.
 - If the old and new software versions displayed are the same **Work Complete, proceed to Section C.**
 - If the old and new software versions displayed are different **continue to next step.**



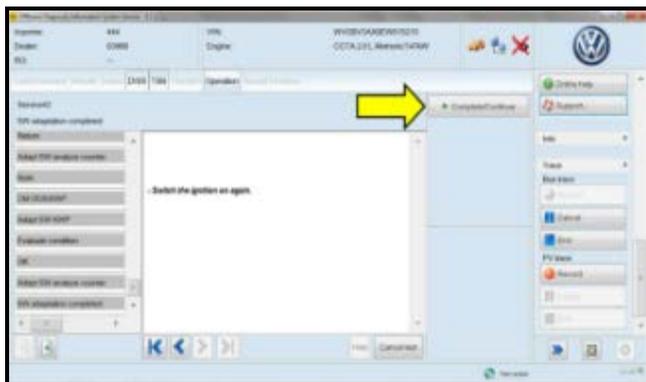
- If the old and new software versions displayed are different, Select “Yes” and follow the on-screen prompts to complete the test plan.
- Reference the ECM Software Change Table above for affected ECMs.



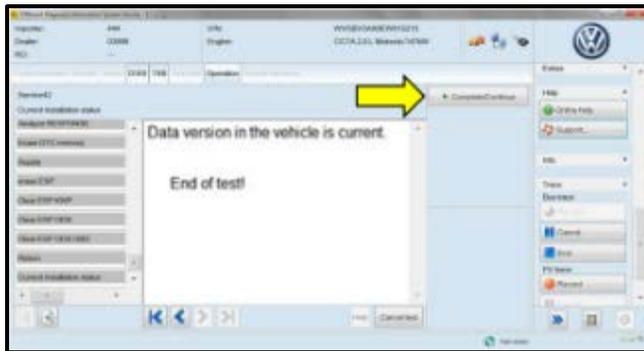
- When the SVM update is complete a confirmation message is displayed <as shown>.
- Select “Complete/Continue” <arrow>.



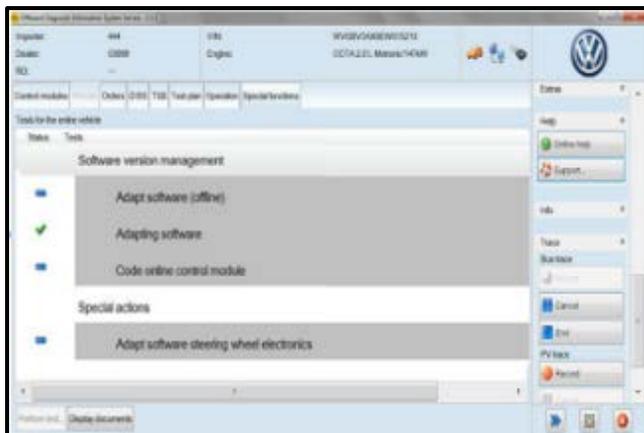
- Switch the ignition off, then select “Complete/Continue” <arrow>.



- Switch the ignition on, then select “Complete/Continue” <arrow>.



- Select “Complete/Continue” <arrow>.



- The green check mark indicates the test plan was successfully carried out.

- Release the parking brake.
- Disconnect the VAS tester.
- Switch off and disconnect the battery charger.
- Reinstall the battery cover.
- Close the hood.

! NOTE
 Before releasing the vehicle to the customer it MUST be driven briefly at greater than 15 MPH. Calibration of the e-machine takes place after clearing faults with GFF and will cause a brief hesitation the first time the vehicle accelerates.

Proceed to Section C

Section C – Campaign Completion Label

Install Campaign Completion Label

- Open the hood.
- 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).

- Close the hood.

ALL WORK IS COMPLETE