Service Action Code: 91VH

Subject

Vehicle Software (SW Level 5.4.3)

Document History

Date	Summary
11/18/2025	Original publication

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2024	2025	ID.4	11,434
CAN	2025	2025	ID.4	2,655

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 Service Action

Under this service action, a software update has been made available to improve vehicle operation, performance, and comfort, and may include new features or functionality. Accordingly, completing this software update is important, since some features and functions might not be available or optimal if this software update is not completed.

Depending on a vehicle's configuration, the updated software available under this service action will provide bug fixes, enhancements and improvements to certain vehicle systems, such as:

- Vehicle Connectivity
- Charging System Robustness
- Seat Memory Functionality
- Window Operation

Additionally, we strongly recommend that owners have the vehicle's software updated prior to using the Volkswagen-approved NACS DC charging adapter (when available for purchase) to charge the vehicle, as this update includes additional safeguards to prevent certain risks such as property damage, fire, and/or injury, that could occur in the case of adapter misuse. Please note that regardless of the vehicle software level, **customers must only use the Volkswagen-approved NACS DC charging adapter for the vehicle to charge at DC fast chargers**. In no circumstance should a NACS DC charging adapter be used with AC home wall chargers or Destination chargers.

Code Visibility

On or about November 18, 2025, the campaign code will be applied to affected vehicles.

Owner Notification

Owner notification will take place in December 2025. Owner letter examples are included in this bulletin for your reference.

Campaign Expiration Date

This campaign expires on ***November 15, 2030.*** Work must be performed on or before this date to be eligible for payment. Keep this expiration date in mind when scheduling customers for this action. If a customer wishes to have this work performed after the expiration date, your normal parts and labor cost associated with this work will apply.

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

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 a customer declines campaign work, refer to the "Customer Declines Campaign/Update Repair" section in the Campaign/Update Policy and Procedures Manual.

Service Number	91VH
Damage Code	0099
Parts Vendor Code	WWO
Claim Type	Sold vehicle: 7 X1 Unsold vehicle: 7 X9
Causal Indicator	Mark labor as causal
Vehicle Wash/Loaner	Do not claim wash/loaner under this action. Loaner/rental coverage cannot be claimed under this action. However, loaner/rental may be covered under the current loaner/mobility 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
0150 00 10	See ELSA	GFF/Guided functions *(connect battery charger + setup)*
9710 25 99	70	Update ICAS3 with USB
2706 02 99	25 TU per bus sleep	Perform up to four bus sleep procedures
NOTE: Two bus sleep procedures are required during the flash process. The reasoning for any additional bus sleep procedures must be documented in the claim comments.		
0121 00 04	See ELSA	Test drive
0150 00 60	Time stated on diagnostic protocol	Perform software update SVM, software configuration SVM and complete all necessary GFF test plans
NOTE: If the software update and related GFF work is performed on more than one diagnostic session, the multiple GFF logs can be added together. *Ensure the GFF logs are added together correctly. For example, two logs from the same diagnostic session are not allowed.* *The GFF paperless log IDs should be documented in the claim comments.* *Claims and GFF logs may be audited to ensure that the actual GFF log time is being claimed.*		

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: Service Action 91VH – Vehicle Software (SW Level 5.4.3)

Dear Volkswagen Owner,

As part of Volkswagen's ongoing commitment to customer satisfaction, we are informing you of our decision to conduct a service action on certain 2024-2025 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

About this Service Action:

Under this service action, a software update has been made available to improve vehicle operation, performance, and comfort, and may include new features or functionality. Accordingly, completing this software update is important, since some features and functions might not be available or optimal if this software update is not completed.

Depending on your vehicle's configuration, the updated software available under this service action will provide bug fixes, enhancements and improvements to certain vehicle systems, such as:

- Vehicle Connectivity
- Charging System Robustness
- Seat Memory Functionality
- Widow Operation

Additionally, we strongly recommend that you have your vehicle's software updated prior to using the Volkswagen-approved NACS DC charging adapter (when available for purchase) to charge your vehicle, as this update includes additional safeguards to prevent certain risks such as property damage, fire, and/or injury, that could occur in the case of adapter misuse. Please note that regardless of the vehicle software level, customers must only use the Volkswagen-approved NACS DC charging adapter for your vehicle to charge at DC fast chargers. In no circumstance should a NACS DC charging adapter be used with AC home wall chargers or Destination chargers.

This work will take your authorized Volkswagen dealer about a day to complete. Please keep in mind that your dealer may need additional time for the preparation of the work, as well as to accommodate their daily workshop schedule.

What should you do?

Please contact your authorized Volkswagen dealer without delay to schedule this work. To set up an appointment online, please visit www.vw.com/find-a-dealer.

Additional Information

- This service action will be available for you free of charge **only until November 15, 2030.** If you wish to have this work performed after that date, your dealer's normal costs associated with this repair will apply.
- 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 your authorized Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, if you have changed your address or no longer own the vehicle identified in this letter, 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.
- 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

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: Service Action 91VH – Vehicle Software (SW Level 5.4.3)

Dear Volkswagen Owner,

As part of Volkswagen's ongoing commitment to customer satisfaction, we are informing you of our decision to conduct a service action on certain 2025 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

About this Service Action:

Under this service action, a software update has been made available to improve vehicle operation, performance, and comfort, and may include new features or functionality. Accordingly, completing this software update is important, since some features and functions might not be available or optimal if this software update is not completed.

Depending on your vehicle's configuration, the updated software available under this service action will provide bug fixes, enhancements and improvements to certain vehicle systems, such as:

- Vehicle Connectivity
- Charging System Robustness
- Seat Memory Functionality
- Widow Operation

Additionally, we strongly recommend that you have your vehicle's software updated prior to using the Volkswagen-approved NACS DC charging adapter (when available for purchase) to charge your vehicle, as this update includes additional safeguards to prevent certain risks such as property damage, fire, and/or injury, that could occur in the case of adapter misuse. Please note that regardless of the vehicle software level, customers must only use the Volkswagen-approved NACS DC charging adapter for your vehicle to charge at DC fast chargers. In no circumstance should a NACS DC charging adapter be used with AC home wall chargers or Destination chargers.

This work will take your authorized Volkswagen dealer about a day to complete. Please keep in mind that your dealer may need additional time for the preparation of the work, as well as to accommodate their daily workshop schedule.

What should you do?

Please contact your authorized Volkswagen dealer without delay to schedule this work.

Additional Information

- This service action will be available for you free of charge **only until November 15, 2030.** If you wish to have this work performed after that date, your dealer's normal costs associated with this repair will apply.
- 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 your authorized Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, if you have changed your address or no longer own the vehicle identified in this letter, or if you should have any questions about this communication, please contact Customer Relations, Monday through Friday from 8AM to 8PM EST by phone at 1-800-822-8987 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.

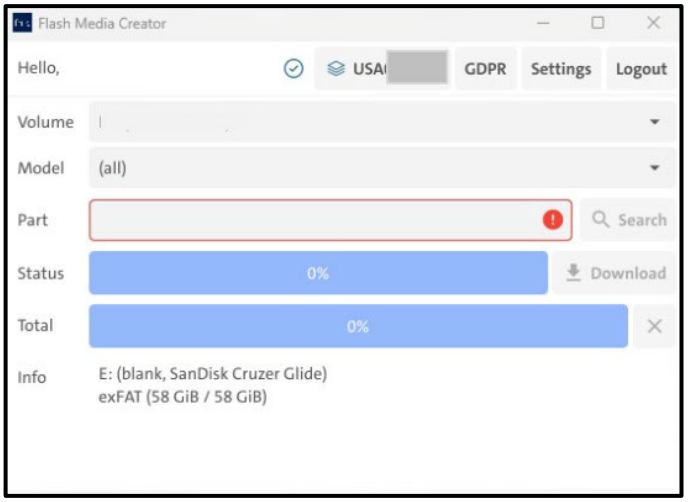
Sincerely,

Volkswagen Customer Protection

Required Tools

	Battery Tester/Charger capable of **minimum 100 Amp** continuous supply		Diagnostic Tester -VAS6150D- (or higher)
	Diagnostic Interface W-LAN -VAS6154A- (or higher)		USB Module -VAS6154/4A- (included with -VAS6154A-)

Required USB Drive



- The required software will have to be downloaded onto a USB (or USB-C) drive using the Flash Media Creator (Edgebox).
- **Reference the latest version of VOS-25-26 for additional information about the Flash Media Creator.**
- **Use ONLY a 32 GB USB stick.**

NOTE

The required USB drives cannot be ordered via the parts ordering system, they must be created using the Flash Media creator.

The required USB drive is a servicing material. Therefore, the cost of the USB drive will not be reimbursed.

The USB drive can be used for future software updates.

NOTE

If the search for the software part number returns no result, check if the certificate is valid.

Go to Settings and select the current, valid certificate used in ODIS.

Software Part Number
3G8.919.360.DC

TIP

As a best practice, the USB drive should be recreated on a regular basis to avoid file corruption which can lead to USB update errors.

NOTE

Only use the Flash Media Creator or SD card creator to make the USB drive. Do not use files saved locally to the PC. Loading files from a local source, such as files saved to the desktop, is not an acceptable method of creating the USB drive.

General information for creating the USB stick:

- The Infotainment system uses a USB-C input.
- If the software is downloaded onto a USB drive, a USB to USB-C adapter will be required.
- If the software is downloaded onto a USB-C drive, a USB-C to USB adapter will be required since the VAS tester does not have a USB-C drive.
- **Use ONLY a 32 GB USB stick.**
- USB type C (at least USB 2.0), reading/writing speed: at least 40 MB/s / 10 MB/s.
- USB type A including type C (at least USB 2.0), reading/writing speed: at least 40 MB/s / 10 MB/s.

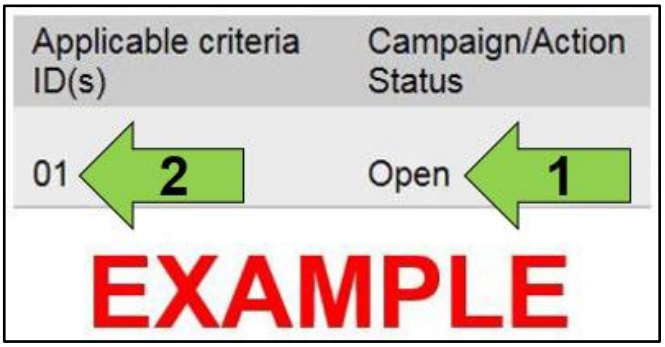
  Do not use a USB hub (USB distributor to use several USB devices on one USB port) to install the software update.

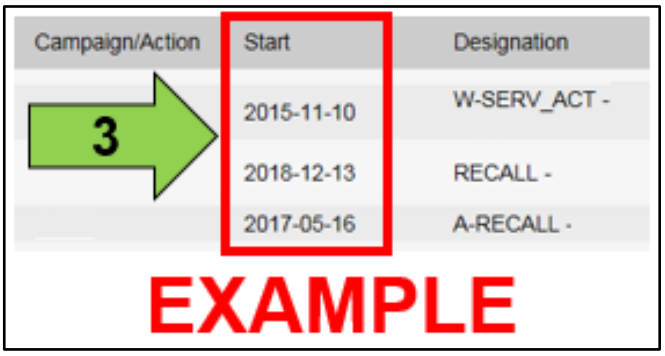
Repair Instruction

Section A - Check for Previous Repair

TIP

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





- 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

STOP!

All campaigns/actions with a repair available must be performed in order of the Start date <arrow 3>. The oldest should be performed first (unless otherwise noted in the repair instructions).

Proceed to Section B

Section B – Repair 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.

CAUTION

The rear wiper may activate during the software update. Ensure that the rear window is free of any obstructions.

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.

Before starting the software update, the following conditions must be met:

- ODIS Service version MUST be completely up to date.
- ODIS Feedback must be set up correctly:
  - Offboard Diagnostic Information System Service (ODIS Service) Number: **VOS-25-22** / Subject: New ODIS Support Feedback Procedure Date: Mar. 7, 2025
- Dealership's internet firewall settings must meet the specified requirements.
  - See communication: Diagnostic Device Hardware & Windows®, Number: **VHW-24-10** / Subject: VAS Diagnostic Device Firewall Settings / Date: December 20, 2024
- ODIS user must have GRP access.
  - See communication: Offboard Diagnostic Information System Service (ODIS Service), Number: **VOS-24-35** / ODIS log in Procedure for Group Retail Portal (GRP) Date: Mar. 27, 2024
- Windows Power Options must be set according to the ODIS tester setup directions:
  - See communication: Diagnostic Device Hardware & Windows®, Number: **VHW-22-13** / Subject: Change Power Options in Windows® 10 / Date: Nov. 1, 2022
  - The "Device Power Management" sections from the VAS 6150X Diagnostic Laptop – Unpacking and Setup Instructions can also be referenced.
- Dealership's Edge Box must be installed and configured correctly:
  - See communication: D3 Edge Box server Installation and Troubleshooting Guide.
- Only one key can be in the vehicle when performing this software flash.
- The vehicle key's battery must be ok.
- Any additional keys must be a minimum of 20 meters away from the vehicle.
- The car MUST NOT be hooked up to a high-voltage charger.
- If the work steps must be interrupted for any reason, the best stopping point is at one of the bus sleep steps.

CRITICAL REPAIR STEP

STOP!

Ensure that port 8080 on your diagnostic device is enabled for incoming TCP connections. Please contact your local IT administrator as needed. If there are any support-related queries, please contact ODIS service support. The relevant firewall settings can be found in the table below.

See communication: Diagnostic Device Hardware & Windows®, Number: VHW-24-10 / Subject: VAS Diagnostic Device Firewall Settings / Date: December 20, 2024

Configuration:	**Communication between ODIS service and TCP port 8080**
Direction:	Inbound
Firewall profile:	Private network
Program path to be released:	All programs
Protocols & ports:	TCP/Local port/8080
Local IP address:	Any IP address
Remote IP address:	192.168.13.69, 192.168.13.100-192.168.13.254

CRITICAL REPAIR STEP

STOP!

- Check for pre-existing faults.
- Any module with a “Faulty Control Module” fault must be addressed prior to starting the flash. The flash may fail for the affected control module.
- Diagnosis and repair of pre-existing conditions are not covered under this action.

CRITICAL REPAIR STEP

STOP!

Before starting programming, it is essential to perform the following actions for the -VAS5908- battery charger.

The battery charger's default setting will switch the charger off automatically after a period of time. To prevent this, the following must be carried out.

Switch it OFF and then ON again each time the charger is connected.

The battery charger's display must have switched off before it's restarted.

The charging time can be changed in the charger's settings menu (access code = 6161). Refer to the owner's manual for further information. DO NOT change any settings that will damage the charger or the vehicle.

- Connect battery charger -VAS5908-.
- When connecting the charger to the battery, connect the positive cable to the positive charging terminal for 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.

NOTE

If the customer is enrolled in Car-Net and they have the myVW app downloaded on their phone, they may receive several notifications during the update process.

Repair Overview

1. Document customer settings
2. Perform software update of ICAS.3 via USB
3. Perform bus sleep procedure
4. Document 12V battery adaptation values
5. Perform first software update via SVM
6. Perform bus sleep procedure
7. Perform ICAS.1 factory reset
8. Perform second software update via SVM
9. Perform function restoration of the ICAS.1
10. Perform VKMS adaptations
11. Perform 12V battery adaptation
12. Perform manual basic settings
13. Perform test plans generated by the flash process
14. Perform bus sleep procedure
15. Restore customer settings

Step 1 – USB Flash of ICAS3

IMPORTANT!

To ensure the software update does not cause customer dissatisfaction or customer complaints, the vehicle settings must be documented at this point (photographed) and restored at the end of the flash.

- Ensure the battery charger is connected.
- Ensure there is nothing connected to the OBD diagnosis connection.
- Ensure that no other USB drives are connected.

NOTE

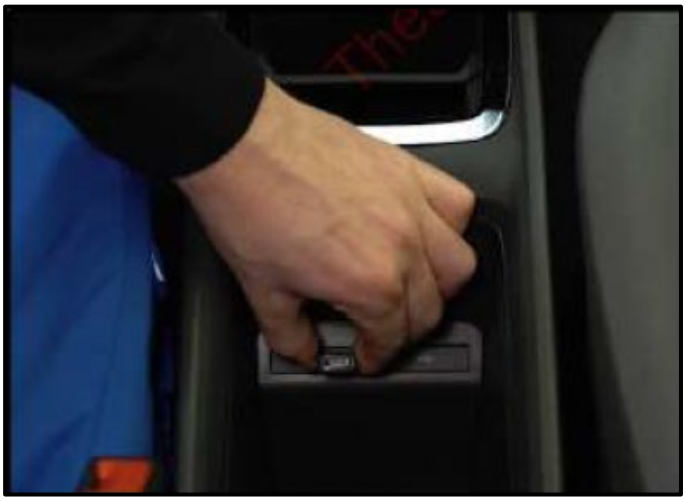
The ignition must remain on during the entire flashing process.

- **The hazards must remain on.**
- **The driver door must remain open.**
- **Insert the seat belt into the driver seat belt buckle.**

NOTE

Observe the ignition status often. Even with the door open and seat belt buckled, it may be possible that the ignition turns off on its own. If this occurs, turn the ignition back on and the update should continue.

- Place the vehicle key over the reader coil in the cup holder area as shown.
- Any additional keys must be a minimum of 20 meters away from the vehicle.



- Insert the USB drive into one of the USB ports.
- Turn the ignition ON.

NOTE

The radio may display “Sorry, no playable files are available” when the ignition is turned on. This is normal. DO NOT remove the USB drive from the USB port.

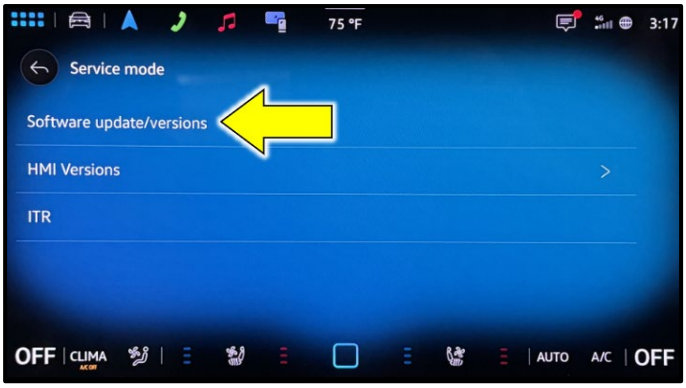
- Press and hold the home key.
- During the update, the instrument cluster display will change multiple times.

NOTE

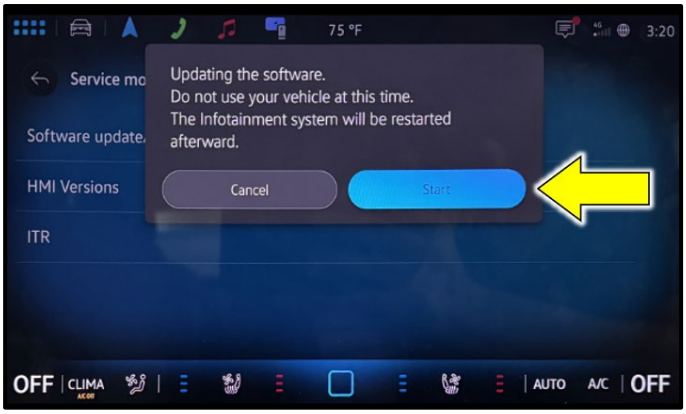
Observe the ignition status often. Even with the door open and the seat belt buckled, it may be possible that the ignition turns off on its own.

CAUTION

Unless an error has occurred, the USB should never be removed from the USB port while the software update is in progress.



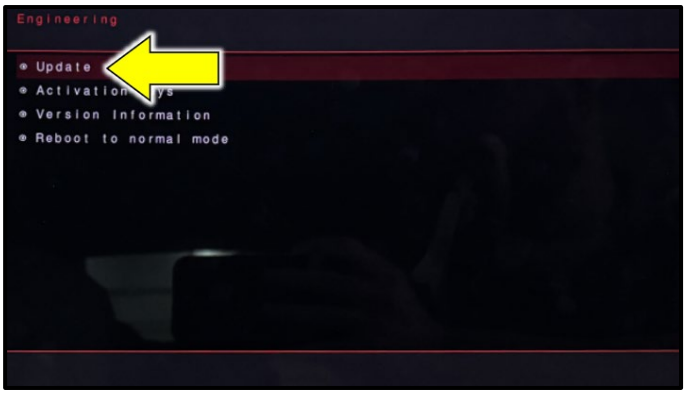
- Select “Software update/versions”.



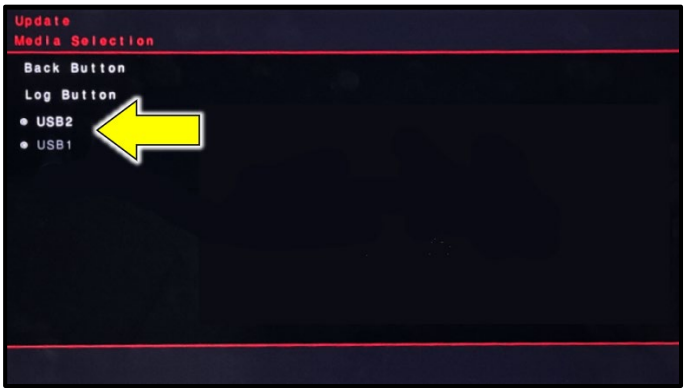
- Select “Start” when prompted.

NOTE

After selecting the “Start” option, the infotainment screen will go blank and the red engineering menu (REM) will populate after a few moments.



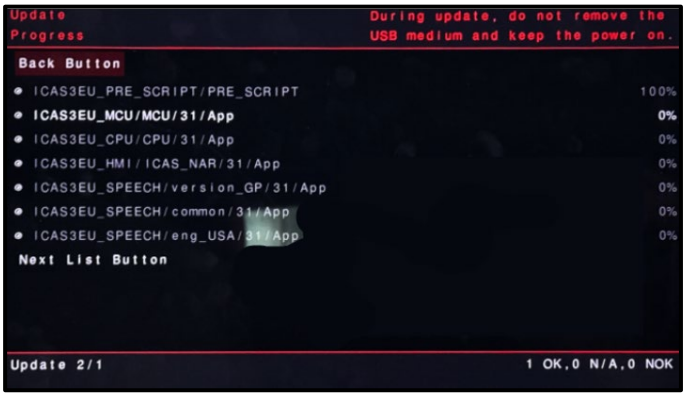
- Select “Update”.



- Select the applicable USB port.

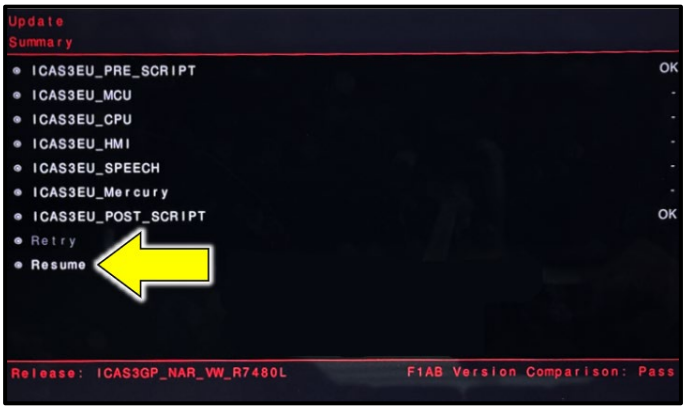
- Select “Start update”.

- Select “Start update”.

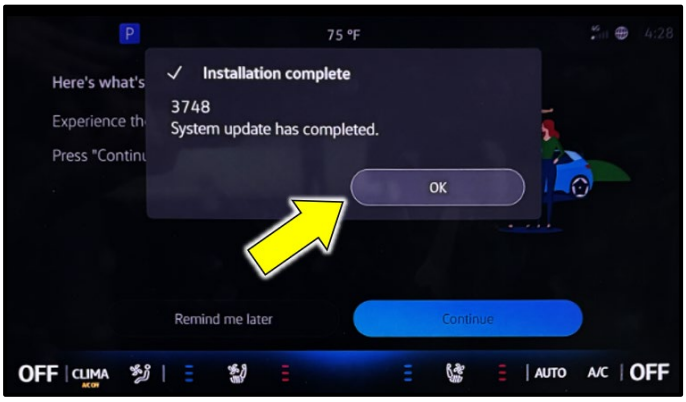


NOTE

The infotainment display will show the software update progress.



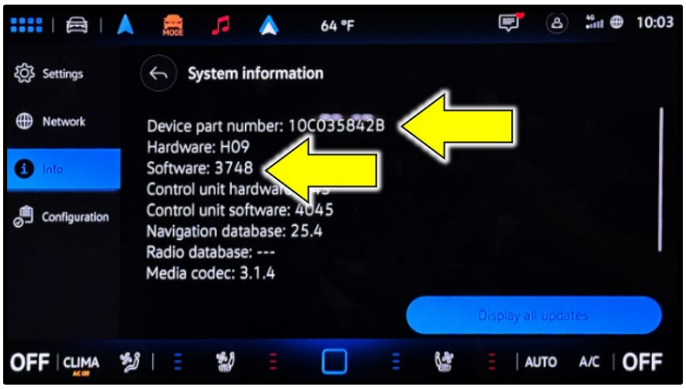
- Once the software update has successfully completed, select “Resume”.



NOTE

After the update has been completed and the system is back on the home screen, after a few moments a message confirming the installation was completed will populate.

- Select the option for “OK”.
- Remove the USB drive.



- Check software version and device part number on infotainment display.

NOTE

If software version did not update to 3748, if there were any update failures while in the REM, or if the Device part number did not change to 10C035842B:

Turn off ignition

Remove USB if still installed

Reset ICAS3:

- Open driver door
- Remove fuse for the J794/ICAS3 for at least 10 seconds, reinstall fuse and reattempt update from the beginning.

If the update still does not complete, recreate the USB and restart from the beginning.

CRITICAL REPAIR STEP

STOP!

If a diagnostic session was started, address 005F and address 8125 must be re-identified before performing the software update in Step 4.

Failure to do so can result in error code ODS5003E or ERP0215E when the SVM is attempted in Step 4.

Proceed to Step 2 for performing a bus sleep.

Step 2 – Perform Bus Sleep Procedure

- Carry out the following steps in the specified sequence to put the vehicle in a bus sleep.
- Switch off the ignition.
- Remove diagnosis interface from the vehicle diagnosis connection.
- Remove battery charger from the 12V battery.
- Close front and rear lid as well as all doors.
- Lock vehicle.
- Move vehicle key (remote control) at least 20 meters away from the vehicle.
- Wait at least 15 minutes until the vehicle is in bus silence.
- Then unlock vehicle again.
- Connect and switch on battery charger.
- Insert diagnosis interface on vehicle diagnosis connection.
- Switch on the ignition.
- Place a vehicle key (remote control) in the cup holder area on the reader coil.

Proceed to Step 3 for performing recording 12V battery adaptation information

Step 3 – Record 12V Battery Adaptation Information

- Select the “Test plan” tab
- Select the “Self-select test plan” option
- Select “Service Work”
- Select “Checks on 12V system”
- Select “Read 12V battery adaptation” and attach to the test plan
- Perform the test
- Record the 12V battery information.

Proceed to Step 4 for performing software update via SVM

Step 4 – Perform Software Update SVM

CRITICAL REPAIR STEP

STOP! STOP!

DO NOT start the flash and leave the vehicle unattended overnight, or for long periods of time. Doing so can cause irreparable damage to control units or lead to inaccurate log times. Requests for additional GFF time and/or damage to control units caused by the flash running overnight will be denied.

NOTE

Flashing times will vary. The time it takes to complete the software updates is dependent on several factors.

NOTE

Only one key can be in the vehicle when performing this software flash.

The vehicle key's battery must be ok.

Any additional keys must be a minimum of 20 meters away from the vehicle.

The car MUST NOT be hooked up to a high-voltage charger.

The seat belt must be inserted into the buckle.

The driver door must be open.

NOTE

As a best practice, document the customer settings prior to starting the SVM software updates. For example: Document the customer's max charge level setting as this may change after the software update.

NOTE

The battery charger may shut off automatically after several hours due to a default setting. Each time the battery charger is reconnected, it must be turned OFF and then back ON to reset the charging start time.

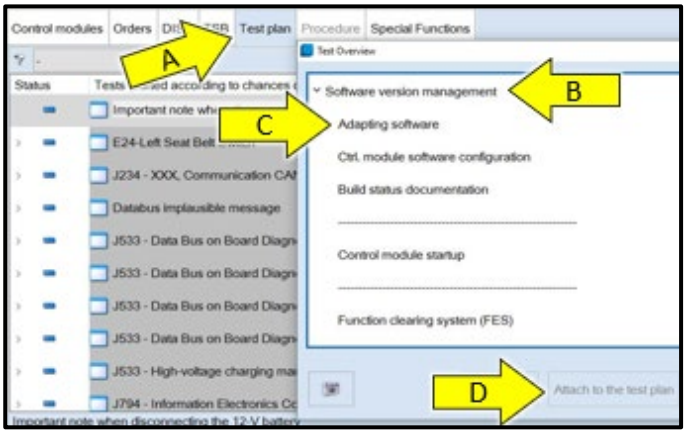
- Turn battery charger OFF, then back ON.
- Connect battery charger.
- **Cycle the ignition OFF, then back ON.**
- Confirm that scan tool is communicating with the diagnostic head by USB <Green Arrow>.
    - If the Bluetooth symbol is shown <Red Arrow> then disconnect the diagnostic head from the vehicle 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>.

CRITICAL REPAIR STEP

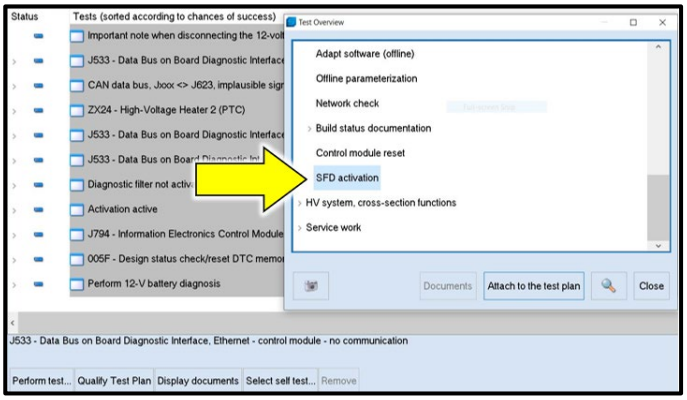
STOP!

- Check for pre-existing faults.
- If any of the modules being updated are offline, the communication issue must be addressed prior to starting this procedure.
- Any module with a “Faulty Control Module” fault must be addressed prior to starting the flash. The flash may fail for the affected control module.
- Diagnosis and repair of pre-existing conditions are not covered under this action.



All vehicles:

- Once the GFF scan is complete, select “Test plan” <arrow A>, then “Software version management” <arrow B>, then “Adapting software” <arrow C>, then select “Attach to the test plan” <arrow D>.

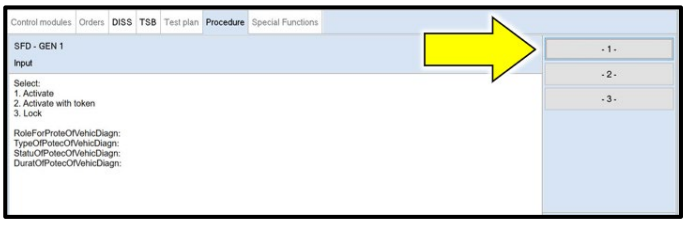


Only for vehicles equipped with heads-up display (DA 0082):

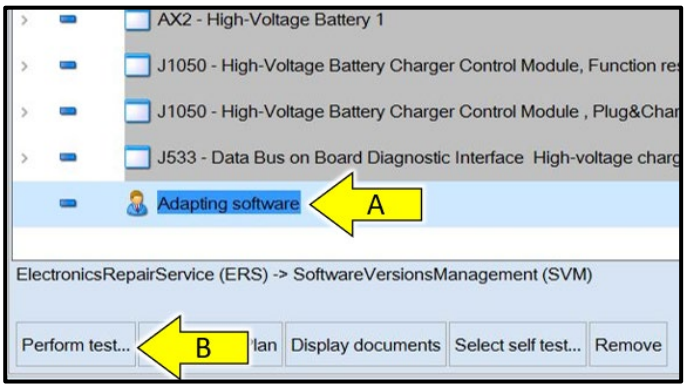
- Select “SFD activation” and attach it to the test plan.
- Perform the test plan.

NOTE

If the SFD activation is not performed for the heads-up display (DA 0082), the flash may fail, and error code 8113 may occur.

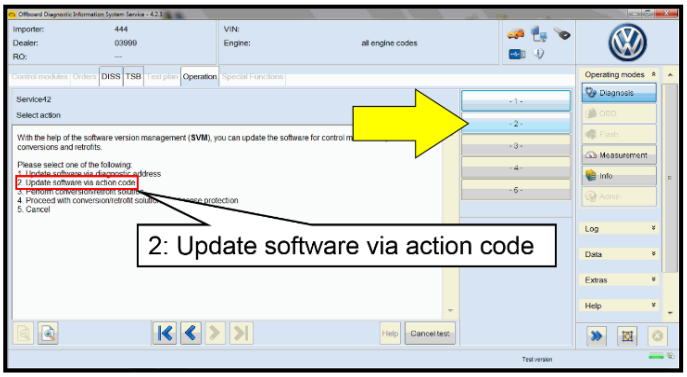


- Select option for “Activate”.
- When prompted by the test plan, enter 0082 for the diagnostic address.
- Follow the on-screen prompts.



Continuation for all vehicles:

- Select “Adapting software” <arrow A> from the test plan list.
- Select “Perform test” <arrow B>.



- Select the correct option to “Update software via action code”.

NOTE

The “update software via action code” selection number and wording may vary between ODIS versions. Pay close attention when selecting an option in the test plan.

NOTE

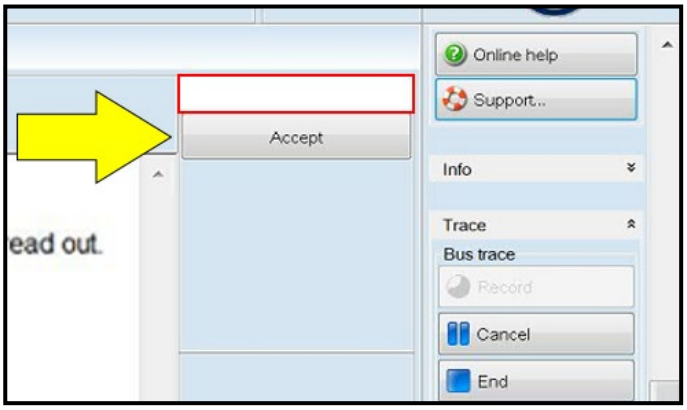
If any errors occur, see Appendix A for information and possible solutions. If the information provided in Appendix A does not resolve the concern, please create a TAC WEB ticket for further direction before performing any more flash attempts.

CRITICAL REPAIR STEP

STOP! STOP!

THE FIRST SVM CODE MUST BE FULLY COMPLETED PRIOR TO STARTING THE SECOND SVM CODE.

- See page 28 for details regarding how to check if the flash completed successfully.
- If the second SVM is performed before the first is fully complete and/or the SVMs are run out of order, this can result in problems that require special repair measures.
- The time associated with diagnosis and recovery of a vehicle due to SVMs being performed out of order will not be covered under the campaign.



NOTE

Using Bluetooth or WiFi for this action is PROHIBITED!

Damage caused to electronic components during the SVM flash process is not covered.

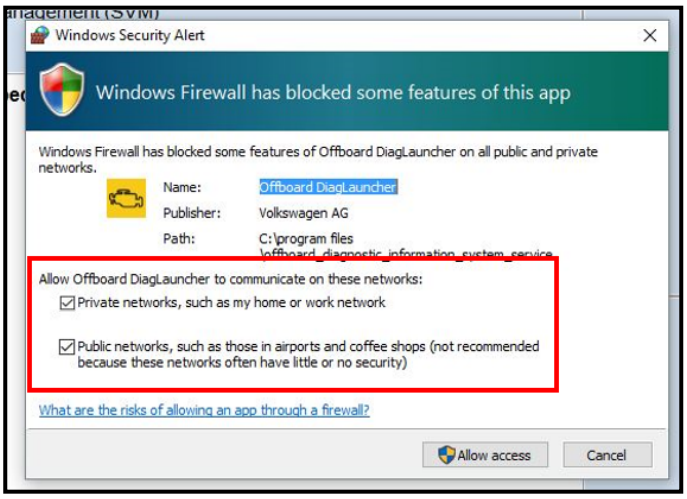
- Cycle the ignition switch off and back on prior to starting the update.
- Enter the corrective action code (SVM code) as listed below.

SVM code
S4210F543

- Select “Accept” <arrow> and follow the on-screen prompts.

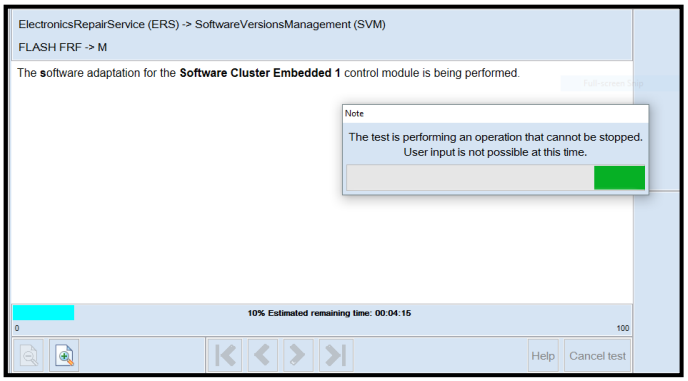
NOTE

Do not unplug the sound generator.



NOTE

If the Windows Firewall popup appears, ALL network options should be checked. Failure to do so could cause the update to fail.



CRITICAL REPAIR STEP

STOP! STOP!

The initial update may take several minutes to start.

Multiple control modules are updated during this procedure. Some modules will take a while to be updated. **DO NOT** cancel the update procedure, turn the ignition off, remove the battery charger, or interrupt the update procedure in any way. Doing so could cause irreparable damage to control units, which is NOT covered under this action.

NOTE

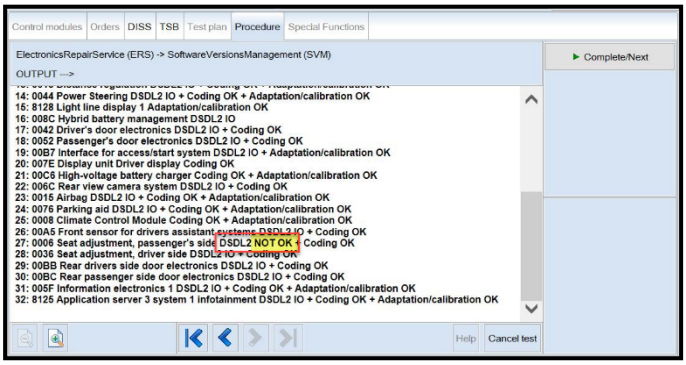
In-vehicle messages and warnings stating the HV battery state of charge is at 0% may occur during this software update process. This is normal.

NOTE

If the progress bar for the first update stops briefly at **6%** (it may also appear that the progress bar stops at 10% briefly, then quickly goes to the end), there may be a firewall issue.

IMPORTANT

If the software update fails for any reason, ODIS feedback must be sent prior to further diagnosis. This ensures the failure/error is reported. Failure to do so may result in non-payment of consequential requests for additional time or parts.



- Pay attention to the status report of the control module updates.
- Any module stating NOT OK will have to be updated again.
- It may take more than one attempt to update every control module.

- Do not end the diagnostic session
- **DO NOT proceed to the next SVM update until SVM S4210F543 has 100% completed successfully.**

Proceed to Step 5 for performing a bus sleep.

Step 5 – Perform Bus Sleep Procedure

- Carry out the following steps in the specified sequence to put the vehicle in a bus sleep.
- Switch off the ignition.
- Remove diagnosis interface from the vehicle diagnosis connection.
- Remove battery charger from the 12V battery.
- Close front and rear lid as well as all doors.
- Lock vehicle.
- Move vehicle key (remote control) at least 20 meters away from the vehicle.
- Wait at least 15 minutes until the vehicle is in bus silence.
- Then unlock vehicle again.
- Connect and switch on battery charger.
- Insert diagnosis interface on vehicle diagnosis connection.
- Switch on the ignition.
- Place a vehicle key (remote control) in the cup holder area on the reader coil.

Proceed to Step 6 for performing ICAS.1 factory reset

Step 6 – Perform ICAS.1 Factory Reset

Before carrying out the SVM code, a factory reset of the ICAS.1 must be performed:

- Select the “Test plan” tab
- Select the “Self-select test plan option
- Select “Software version management”
- Select “Special measures”
- Select “Special functions”
- Select “ResetToFactory” and attach to the test plan
- Perform the test
- Select the option for “ECU Reset (to Factory Setting)”
- When prompted, enter 0019 as the control module to be reset
- Follow the on-screen prompts

Proceed to Step 7 for performing software update via SVM.

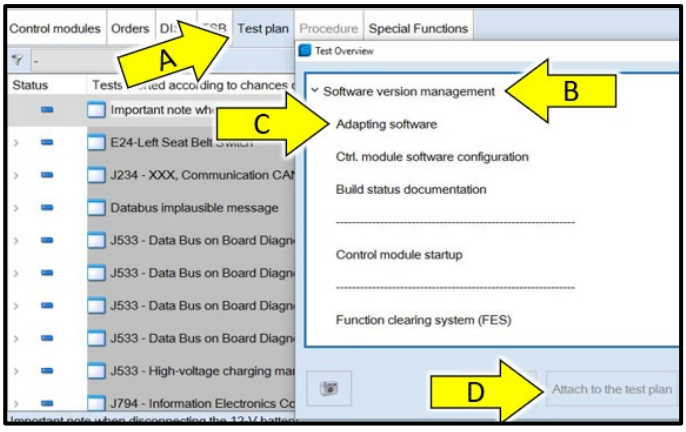
Step 7 – Perform Software Update SVM

NOTE

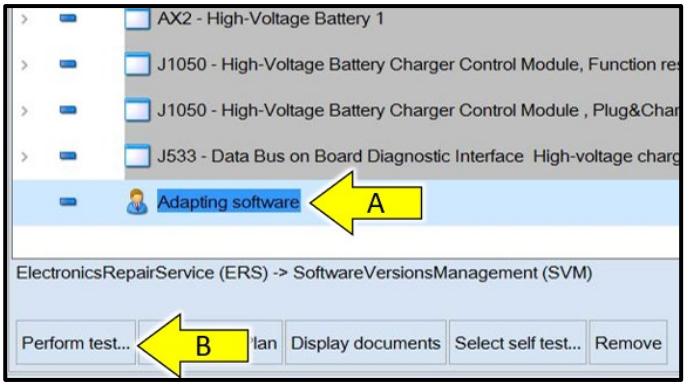
The battery charger may shut off automatically after several hours due to a default setting. Each time the battery charger is reconnected, it must be turned OFF and then back ON to reset the charging start time.

- Turn battery charger OFF, then back ON.
- Connect battery charger.
- Cycle the ignition off and on.

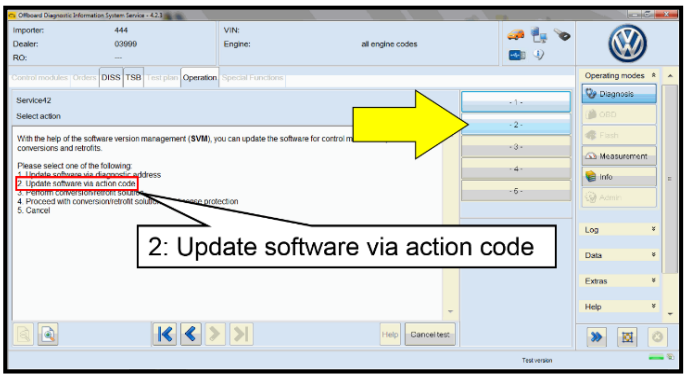
- Confirm that scan tool is communicating with the diagnostic head by USB <Green Arrow>.
    - If the Bluetooth symbol is shown <Red Arrow> then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.
- Upon ODIS startup, verify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



- Once the GFF scan is complete, select “Test plan” <arrow A>, then “Software version management” <arrow B>, then “Adapting software” <arrow C>, then select “Attach to the test plan” <arrow D>.



- Select “Adapting software” <arrow A> from the test plan list.
- Select “Perform test” <arrow B>.



- Select the correct option to “Update software via action code”.

NOTE

The “update software via action code” selection number and wording may vary between ODIS versions. Pay close attention when selecting an option in the test plan.

NOTE

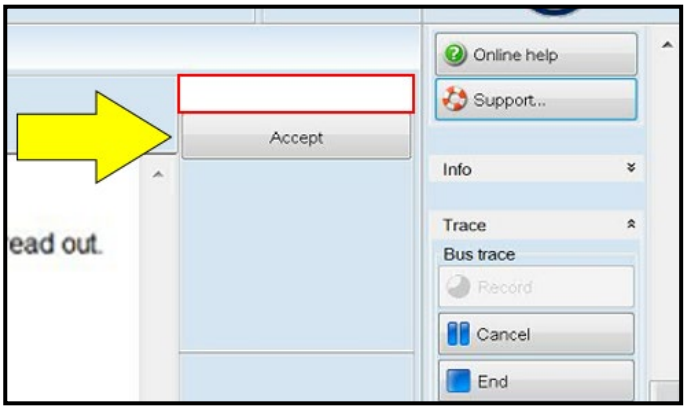
If any errors occur, see Appendix A for information and possible solutions. If the information provided in Appendix A does not resolve the concern, please create a TAC WEB ticket for further direction before performing any more flash attempts.

CRITICAL REPAIR STEP

STOP!

THE FIRST SVM CODE MUST BE FULLY COMPLETED PRIOR TO STARTING THE SECOND SVM CODE.

- See page 28 for details regarding how to check if the flash completed successfully.
- If the second SVM is performed before the first is fully complete and/or the SVMs are run out of order, this can result in problems that require special repair measures.
- The time associated with diagnosis and recovery of a vehicle due to SVMs being performed out of order will not be covered under the campaign.



NOTE

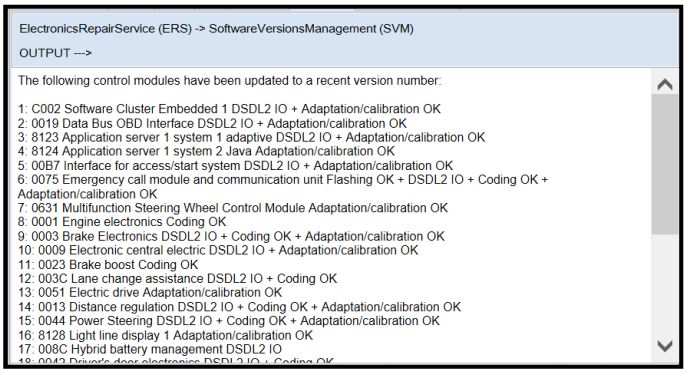
Using <u>Bluetooth or WiFi</u> for this action is <u>PROHIBITED</u>!

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

- **DO NOT start this SVM until the first SVM has been fully completed!**
- Enter the corrective action code (SVM code) as listed below.

SVM code
F543

- Select “Accept” <arrow> and follow the on-screen prompts.



- Pay attention to the status report of the control module updates.
- Any module stating NOT OK will have to be updated again.
- Selecting “Complete/Next” will begin another attempt to update the control module.
- Do not end the diagnostic session.

NOTE

After completion of the update, an error for the dynamic road sign assist <arrow> may occur in the infotainment display. This error will be eliminated during the three-phase drive motor calibration road test.

IMPORTANT

If the software update fails for any reason, ODIS feedback must be sent prior to further diagnosis. This ensures the failure/error is reported. Failure to do so may result in non-payment of consequential requests for additional time or parts.

Proceed to Step 8 for performing function restoration

Step 8 – Perform Function Restoration (FFS)

- Select the “Test plan” tab
- Select the “Self-select test plan option
- Select “Software version management”
- Select “Function enable system (FFS)”
- Select “3. Restore function”
- When prompted, enter 0019 as the control module to be restored
- Follow the on-screen prompts

Proceed to Step 9 for performing VKMS adaptation

Step 9 – Perform VKMS Adaptation

- Select the “Test plan” tab
- Select the “Self-select test plan option
- Select “Self-diagnosis system”
- Select “0025 - immobilizer”
- Select “VKMS functions”
- Select “Adapt VKMS” and attach to the test plan
- Perform the test
- Follow the on-screen prompts

Proceed to Step 10 for performing adaptation the 12V battery

Step 10 – Adapt the 12V Battery

- Select the “Test plan” tab
- Select the “Self-select test plan option
- Select “Service Work”
- Select “Checks on 12V system”
- Select “Perform 12V battery adaptation” and attach to the test plan
- Perform the test
- Follow the on-screen prompts and enter the previously recorded battery data

Proceed to Step 11 for performing manual basic settings

Step 11 – Perform Manual Basic Settings (if necessary)

With the software update the basic settings of the steering angle sender -G85- and the end stops (soft stop) of the electric window lifters might be lost.

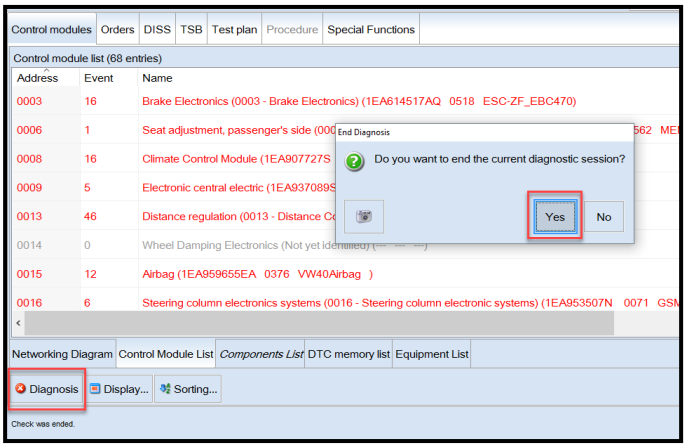
- Perform manual basic settings of steering angle sender -G85-:
  - Create drive readiness.
  - Turn steering wheel completely to the left and hold in the end position for 3 seconds.
  - Turn steering wheel completely to the right and hold in the end position for 3 seconds.
  - Return steering wheel to straight-ahead position.
  - Yellow steering light in cluster should go out.
- Adapt end stops (soft stop) of the electric window lifter for all windows:
  - Lower window completely. Release the switch. Hold window switch in the down position, at the second detent for 3 seconds.
  - Raise window completely. Release the switch. Hold window switch in the up position, at the second detent for 3 seconds.

NOTE

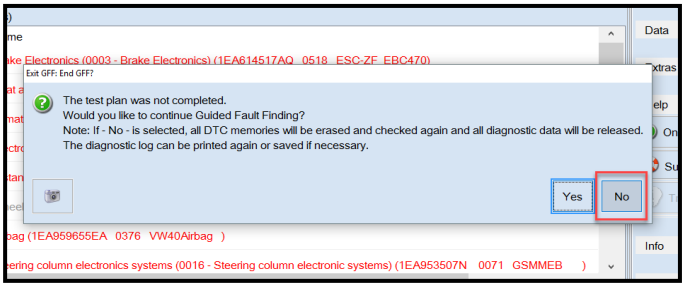
After completion of the software updates, restore any customer settings that have changed back to what was previously stored.

Proceed to Step 12 for performing GFF test plans for faults created by the flash process

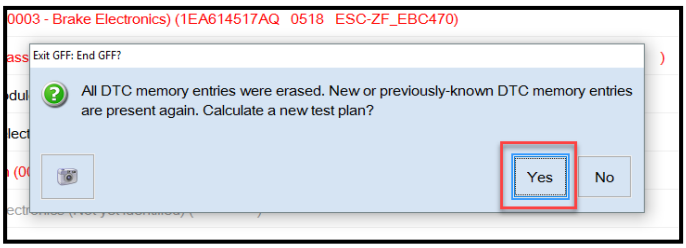
Step 12 – Perform GFF Test Plans for All Faults Created by the Flash Process



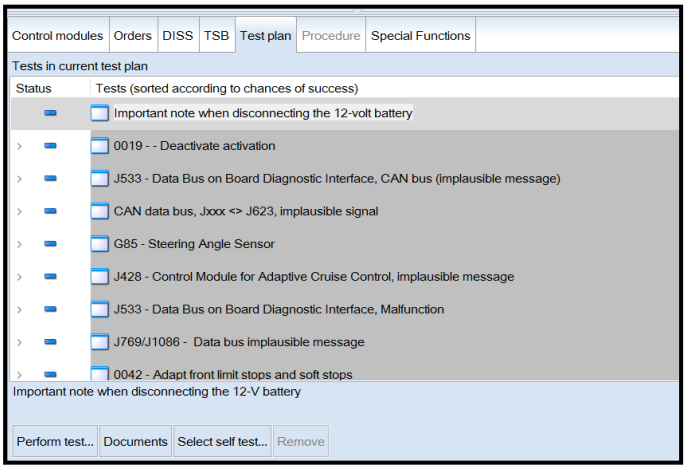
- Exit Diagnosis and select “Yes” to end the diagnostic session.



- When prompted to continue Guided Fault Finding, select “NO”.
- GFF will be exited, and faults will be erased.



- Static faults created by the flash process will remain.
- When prompted, select “YES” to populate new test plans.



- Work through all test plans for faults created by the flash process.
- Reference any applicable TSBs that address “ghost” faults.
- Pay close attention to all steps outlined in the test plans and follow them exactly as described.

NOTE

Driver assist systems will not require re-calibration due to this software update.

NOTE

Static faults may store in various control modules during the flash.

The ID Light may not operate as designed after the flash.

It may be necessary to perform the following in order to clear the faults and restore the ID Light operation:

- Drive the vehicle a short distance (around the parking lot, for example).
- Perform a bus sleep.

Proceed to Section C

Section C – Road Test for Three-Phase Drive and Travel Assist Verification

⚠ CRITICAL REPAIR STEP

STOP! STOP!

Perform a test drive above 20 mph/35 kph to calibrate the three-phase drive -VX54-.

When performing this road test, the vehicle will momentarily lose acceleration when the three-phase drive -VX54- calibrates. Ensure the road test is performed in a safe manner.

NOTE

The software flash may result in the loss of adaptation of the Travel Assist Function. The steps below must be performed after completion of the flash.

- Prior to performing the road test, document the customer cruise control settings in the instrument cluster using the buttons on the steering wheel.
- Switch to “ACC” mode.
- Once ACC mode is selected, perform the road test to calibrate the 3-phase motor.
- After the 3-phase motor calibration is completed, press the “Set” button to activate the ACC system.
- Once the ACC system is activated, the procedure is complete.
- Return the cruise control settings back to the previous customer settings.

Perform Bus Sleep Procedure:

- Carry out the following steps in the specified sequence to put the vehicle in a bus sleep.
- Switch off the ignition.
- Remove diagnosis interface from the vehicle diagnosis connection.
- Remove battery charger from the 12V battery.
- Close front and rear lid as well as all doors.
- Lock vehicle.
- Move vehicle key (remote control) at least 20 meters away from the vehicle.
- Wait at least 15 minutes until the vehicle is in bus silence.
- Then unlock vehicle again.
- Connect and switch on battery charger.
- Insert diagnosis interface on vehicle diagnosis connection.
- Switch on the ignition.
- Place a vehicle key (remote control) in the cup holder area on the reader coil.
- Exit GFF and send diagnostic protocol online.

Restore Customer Settings:

- Restore the customer vehicle settings using the previously recorded information.

Proceed to Section D

Section D – 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).

Appendix A – Flash Errors and Possible Solutions

IMPORTANT

The recovery steps in the tables below may have to be performed multiple times throughout the flash process.

If the information provided in Appendix A does not resolve the concern, please create a TAC WEB ticket for further direction before performing any more flash attempts.

- **Example #1:** Error “A” is received for a control module when the first SVM is performed. The recovery steps for error “A” corrected the issue and the first SVM completed successfully. The same error is received when performing the second SVM. The recovery steps listed for error “A” should be utilized again.
- **Example #2:** Error “B” is received for a control module when attempting the first SVM. It has been verified that the correct diagnostic equipment specified in this circular is being used. The recovery steps are not working. The recovery steps have been attempted two times, but error “B” is still occurring during the first SVM for the same control module. **A TAC case MUST be created prior to performing the SVM again.**
- **Example #3:** Error “C” is received for a control module when performing the first SVM code. The recovery steps are performed and the first SVM continues past this error. Towards the end of the end of the first SVM, it fails with error “D” for different control module. The recovery steps should be utilized for the new error prior to creating a TAC WEB ticket.

WARNING

Requests for additional GFF time resulting from the scenarios listed below will not be covered by the campaign:

- SVM codes unnecessarily repeated
- The recovery steps listed below were not utilized
- A TAC case was not created after the recovery steps were exhausted

NOTE

Requests for additional parts and/or labor to resolve IT issues or problems in relation to dealer tools will not be covered under the campaign.

FLASH ERROR INFORMATION		
Error	**Cause**	**Possible correction**

ERP8113	The measure cannot be carried out because of SFD security access/activation.	• Verify that a VAS 6150 D (or higher) scan tool is being used.
		• Verify that a VAS USB cable that is in good condition is being used (no third-party USB cables)
		• Verify that a VAS 6154 A (or higher) diagnostic head is being used
		  ○ **Usage of a VAS 6154 (no index) diagnostic head is prohibited and may result in 8113 errors**
		• Perform SFD activation test plan for the following modules:
		  ○ 0009, 0019, 8123, 8124, C002, and 0082 (if equipped)
		  ○ Repeat the appropriate SVM
		• If the error occurs for modules that are not associated with the modules listed above, DA 0075 for example:
		  ○ Perform SFD activation test plan for the affected module
		  ○ Repeat the appropriate SVM

ERP0220E	Unknown SVM code	• Check the SVM codes being entered into the test plan • Correct as necessary • Repeat the appropriate SVM
ODS5003E or ERP0215E	On at least one control unit, the operating conditions for the measure are not fulfilled (for example, incorrect SW part number/HW part number/hardware/software)	• Manually identify the affected control module(s) or start a new GFF session and repeat the appropriate SVM • Perform a bus sleep or reset the control module, then repeat the appropriate SVM

ERP8067
or
ERP8101
	Reference-baseline does not match any mapping as actual baseline.
	or
	SDB responds with disallowed messages to DA: XXXX.
		• Ensure that the first SVM code has fully completed prior to attempting the second SVM code:
		  ○ This can be done by reviewing the completion list in the test plan, see page 28
		  ○ This can also be done by reviewing the completion list in the fault log
		  ○ Repeat the appropriate SVM
		• If the SVM codes were run out of order, perform the first SVM code again and note if either error returns
		  ○ If these errors DO NOT return, and the first SVM completes, proceed with the campaign instructions. A TAC Case is not needed.
		  ○ If the errors return, and the SVMs are failing, a TAC WEB ticket will be required

Continued on next page

Error	Cause	Possible correction

ERP8118
or
ERP8075
or
ERP0225E
	The measure cannot be carried out because of missing control unit data. Often not all necessary control units are “identified” or “reachable”.	• Attempt to manually identify the affected module
		• If the module **can** be identified and it is responding properly:
		  ○ Repeat the appropriate SVM
		• If a module **cannot** be manually identified:
		  ○ Switch off ignition
		  ○ Send diagnostic protocol online
		  ○ Disconnect diagnostic interface from vehicle
		  ○ Restart ODIS
		  ○ Remove the fuse for the module that had the failure for 10 seconds
		  ○ Reinstall the fuse
		  ○ Perform a bus sleep
		  ○ Start a NEW GFF session
		  ○ Identify the module
		  ○ Repeat the appropriate SVM
		• If this does not correct the issue:
		  ○ A terminal 30 reset (capacitive discharge) **MUST** be performed
		  ○ Refer to Appendix B for instructions on how to properly perform a capacitive discharge on an ID.4
		  ○ Restart the Scan tool
		  ○ Start a NEW GFF session
		  ○ Identify the affected module
		  ○ Repeat the appropriate SVM

ERP9024 or ERP9999	There are connection issues to the D3 Edge Box that need to be resolved.	• Contact IT support in order to check the URL configuration and software version of your D³ infrastructure • Ensure that the scan tool firewall and port settings are configured per **VHW-24-10** • Repeat the appropriate SVM after the IT issue has been resolved
“No vehicle connected” message	There is a poor connection between the vehicle and the scan tool or Terminal 15 did not switch back on.	• Cycle the ignition back on • Check the USB connections at the diagnostic head and the scan tool • Check the USB cable for damage • Check for pin fit issues at the DLC • Repeat the appropriate SVM after the connection issue has been resolved

Appendix B – ID.4 Capacitive Discharge Procedure

- With the key on the reader coil, remove the negative cable from the 12V battery, leaving the positive cable in place.
    - **Do not touch the 12V battery positive and negative cables together for any reason!**
- Press and release the brake pedal briefly.
- Verify that the instrument cluster has shut off.
    - If the cluster does not turn off, switch the ignition on and press the brake pedal again.
- Once the instrument cluster switches off after pressing the brake pedal, leave the vehicle in this state for 2-3 minutes.
- Once the capacitive discharge has been completed, reconnect the negative battery cable.
- Continue with the appropriate recovery steps listed in appendix A.