



01-18-12 - Software Version Management

Release date: 6/27/2023

Condition

Applicable Vehicles					
Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
All (Except Routan)	2002-2024	All	All	All	All

Revision Table			
Instance Number	Published Date	Version Number	Reason For Update
2014603/19	6/27/2023	01-18-12	To include model year 2024 applicability.
2014603/18	6/22/22	01-18-12	To include model year 2023 applicability and minimum battery charger amperage.
2014603/17	6/21/21	01-18-12	To include model year 2022 applicability.
2014603/1	4/11/07	V011135	Original publication.

This Technical Bulletin details the general process for carrying out a Software Version Management (SVM) software update for any Technical Bulletin (TSB) / Update.



Note:

If software updates or flash campaign/actions are performed on a vehicle, a charger with at least 70A charging current MUST be used in order to avoid problems during software updates and flash campaign/actions.

ODIS-Service tester should be updated to the latest GFF technical version.

Troubleshooting information is included in the Additional Information Section.



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Technical Background

A VAS 6150X or VAS 6160X diagnostic tool sends vehicle control module data to the SVM database.

SVM is a process to update the programming in re-programmable (flashable) control modules using the diagnostic tools to send vehicle-specific data to the SVM database, download instructions from the SVM database, and to program control modules for identified software updates.

The technician must first diagnose the condition in the vehicle and find a Technical Service Bulletin that describes that condition. This conditional bulletin specifies the appropriate Unit Code (Action Code) for the programming update. SVM eliminates the wait for Flash CDs/DVDs to be sent to the dealer and problems such as scratched or missing discs.

**Note:**

An Update document changes the vehicle control module software level in Volkswagen vehicles. This system uses the VAS 6150X or VAS 6160X Programming procedure (flash) which may overwrite any "TUNED" ECM or TCM programming. A "TUNED" ECM or TCM is described as any ECM or TCM altered so as to perform outside the normal parameters and specifications approved by Volkswagen Group of America, Inc.

Current Tuned Engine/Motor Control Module -J623- or Transmission Control Module -J217- , - J514- requirements:

If you encounter a vehicle with a "tuned" ECM or TCM, your dealership must do the following before performing any procedure that updates ECM or TCM programming:

- Notify the owner that their ECM or TCM was found to have been tuned.
- Notify the owner any damage caused by the tuning of the ECM or TCM (including any adverse emissions consequences) will not be covered by Volkswagen of America, Inc. warranties.
- Obtain the owners written consent on the attached Control Module Tuning form prior to performing any repair that requires flashing. This document informs the customer that flashing the vehicle may automatically overwrite the "tuned" program.

Production Solution

No production change required.

Service

1. Ensure the customer's vehicle condition matches the conditions stated in the Technical Bulletin and the operator has a valid GeKo user ID and password. Only perform operations explicitly stated in the Technical Bulletin or Update.
2. 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 110V AC Power supply at all times.
 - Connect VAS Tester to the Local Network.



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**Note:**

Prior to launching the ODIS Service application and starting the control module update process, confirm the tester screen saver 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 or VAS 6154 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.

3. Ensure the following vehicle requirements are met:

- Connect vehicle to a powered Volkswagen approved Midtronics Battery Maintainer/Charger MTRMSP0702 (or equivalent 70 amp or higher).
- Battery MUST have and MUST maintain a minimum no-load charge of 12.5V and 70 amps.
- Switch OFF the radio and all other accessories, and when necessary, switch running lights OFF
- Switch off any appliances with high electromagnetic radiation (i.e. mobile phones)

4. The Owner's Control Module Tuning Consent Form has been completed as necessary.

5. Start Diagnosis by using the ODIS Service application. 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.



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6. On ODIS Service application start up, make sure to select “Diagnosis” under Operating modes and not “Flash” (Figure 1).



Figure 1



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7. Enter the SVM test plan by selecting the following inside GFF: Special Functions >> Software Version Management >> Adapting Software (Figure 2).

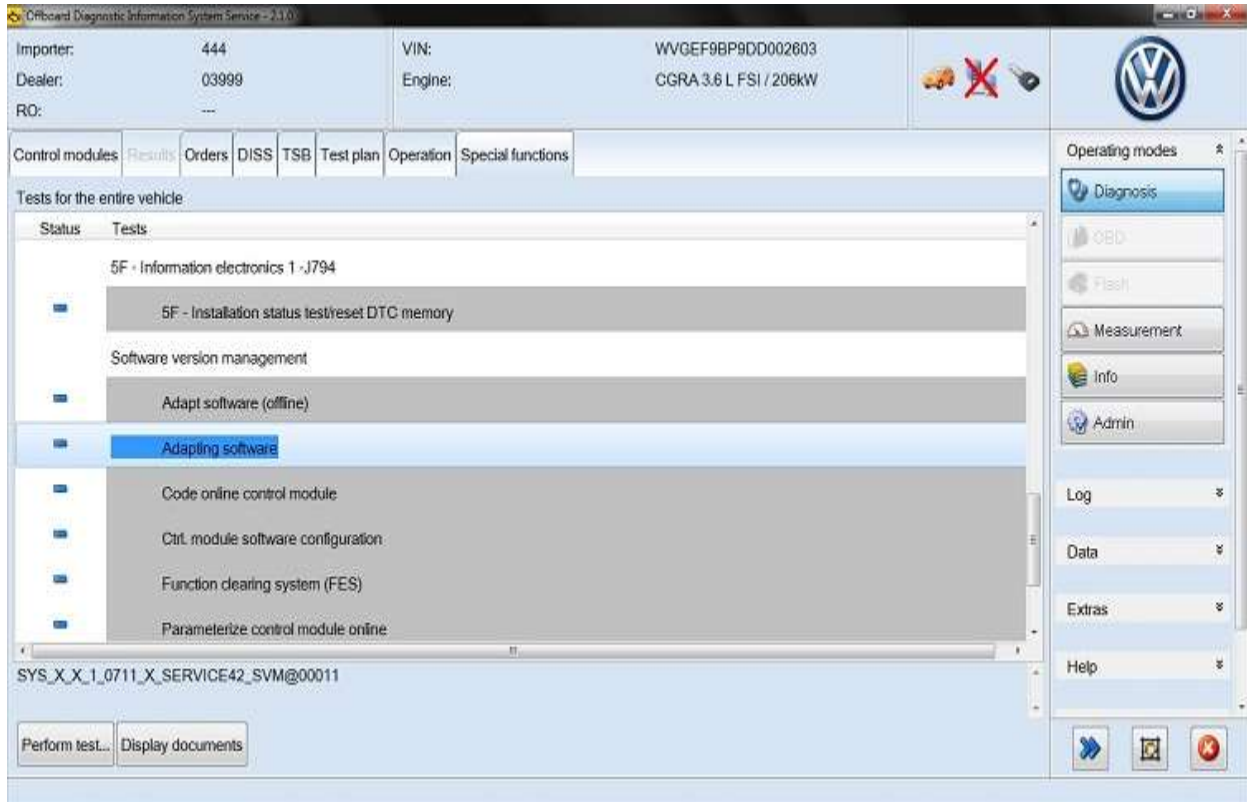


Figure 2



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8. Select update software through measures code (Figure 3).

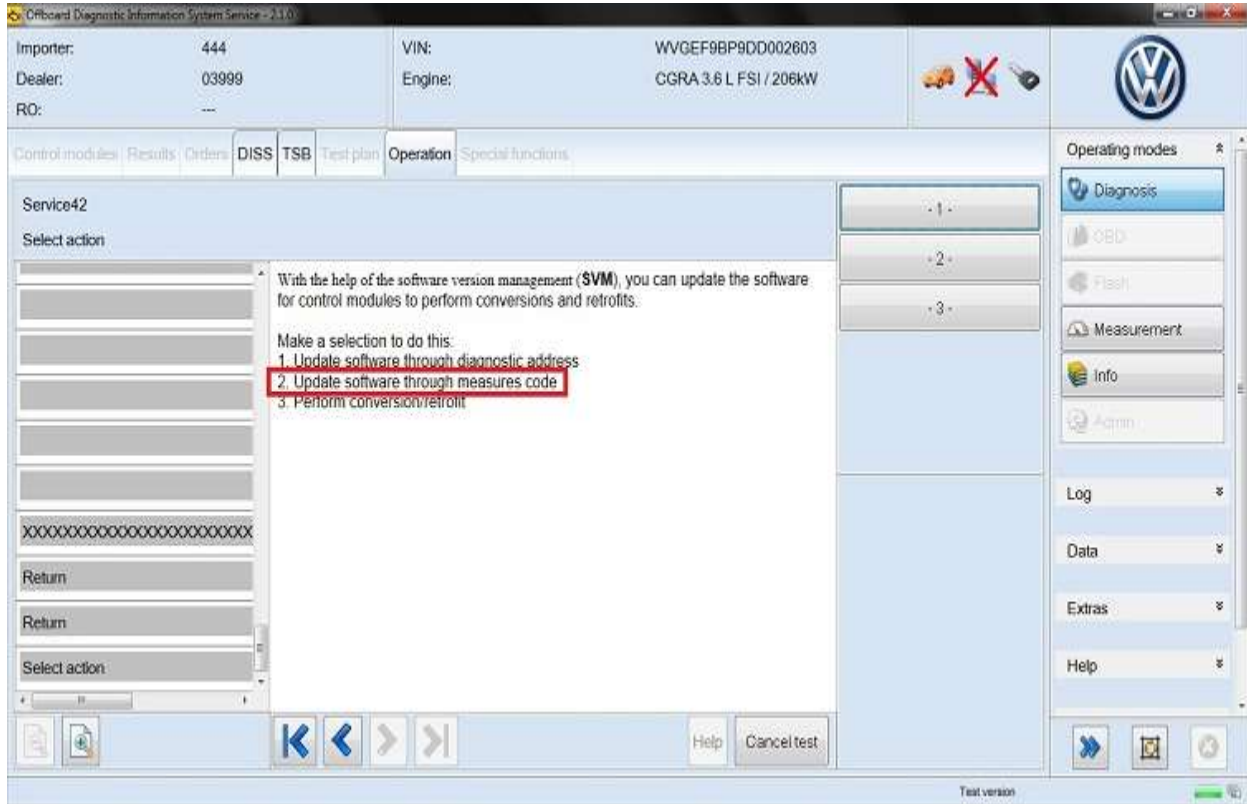


Figure 3

9. Follow the on screen prompts for the SVM update procedure and enter the SVM Unit Code (Action Code) found in the Conditional Technical Bulletin when requested.



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10. Enter your GeKo ID when requested. This will allow data to be transmitted to the SVM server and will provide instructions on how to continue the procedure (Figure 4).

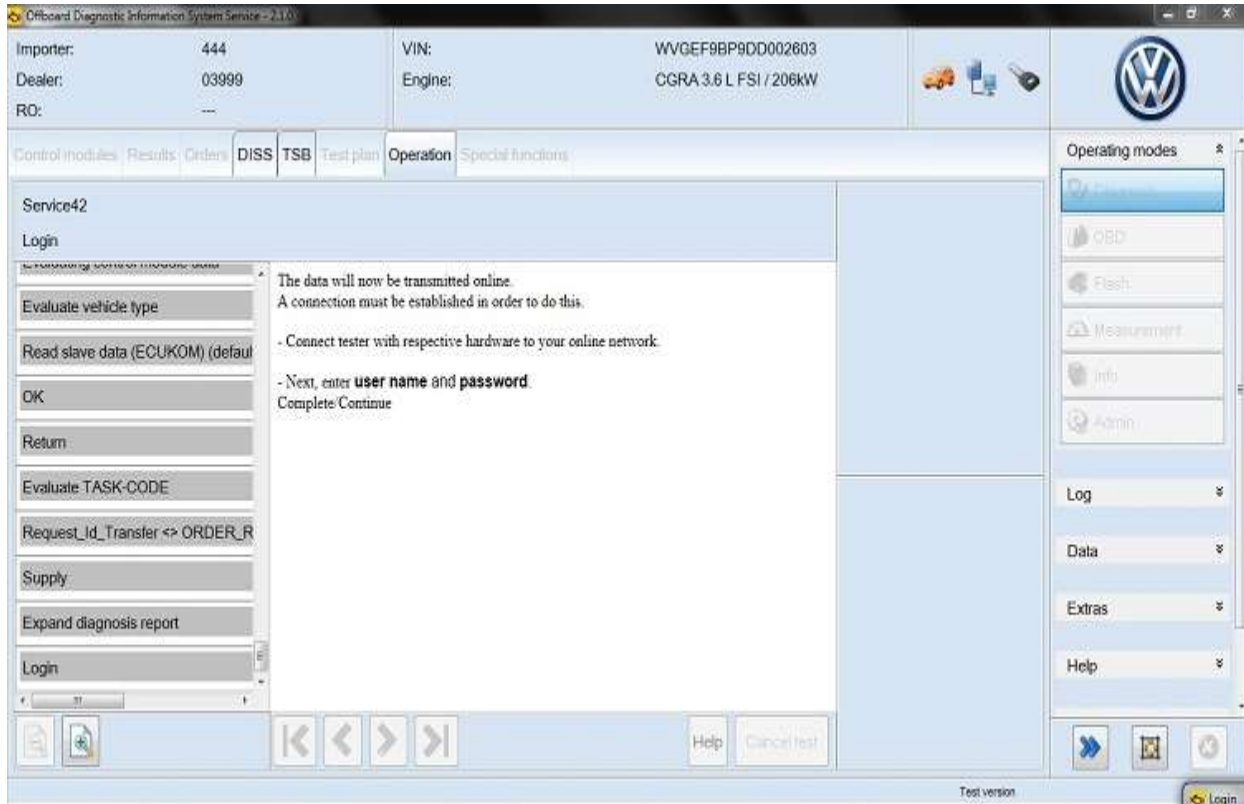


Figure 4



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11. The procedure may include one, or any combination of the following comments for one or more control modules as specified in the Technical Bulletin/Update (Figure 5):

- Update a Control Module (flash)
- Code or Adapt a Control Module

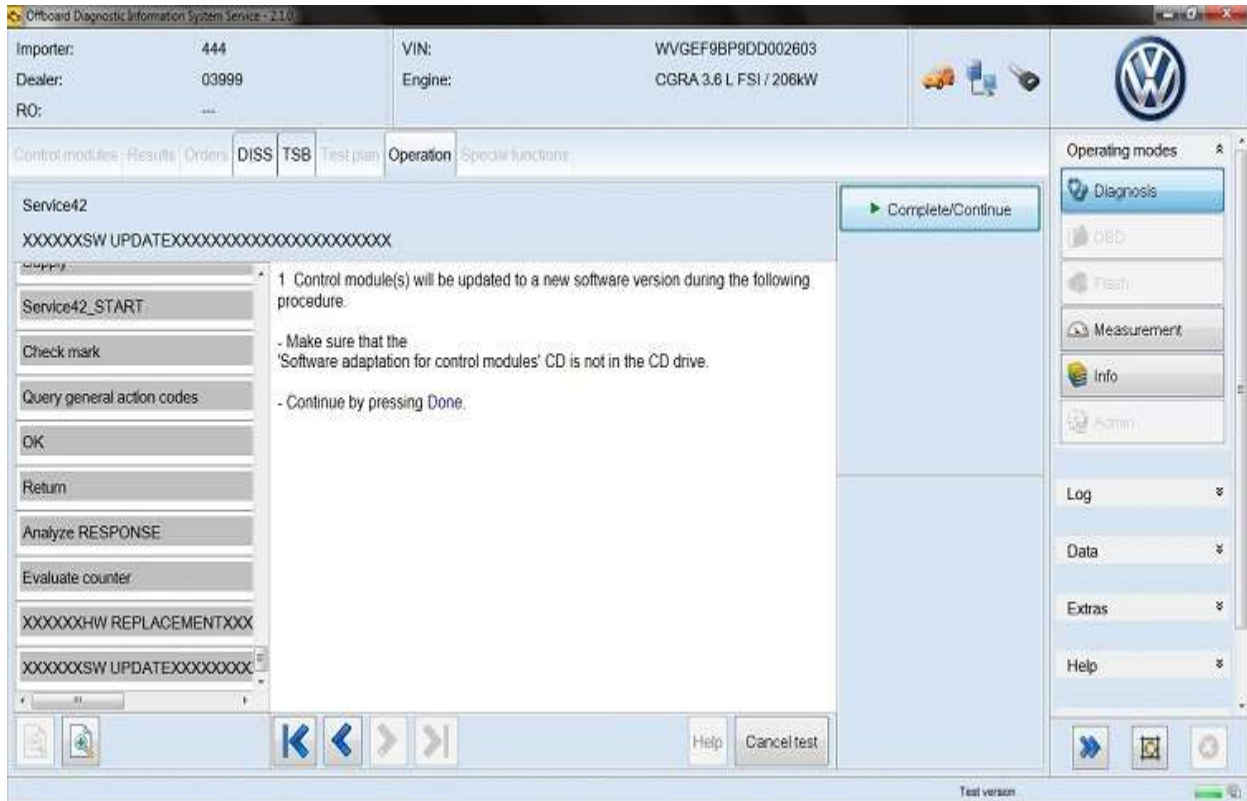


Figure 5



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12. Select "Yes" to perform adaptation (Figure 6).

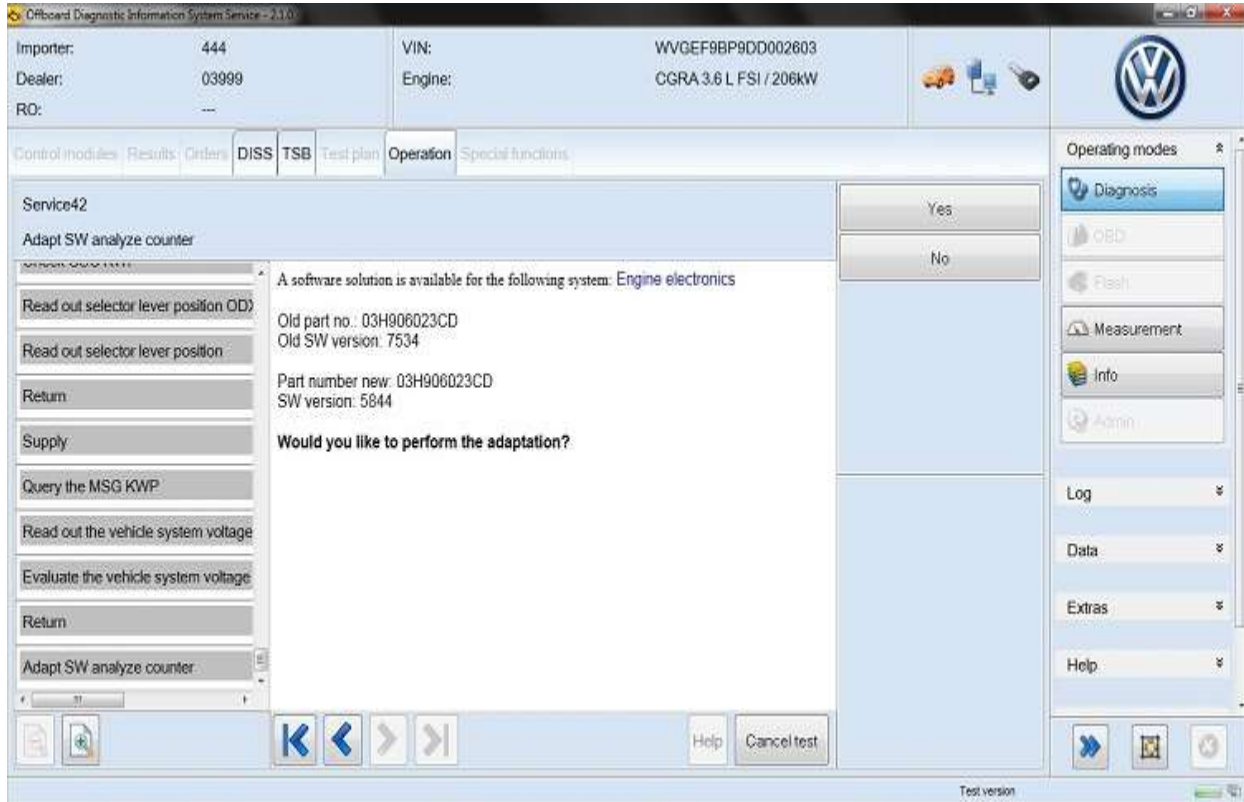


Figure 6



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13. Software adaptation is being performed (Figure 7).

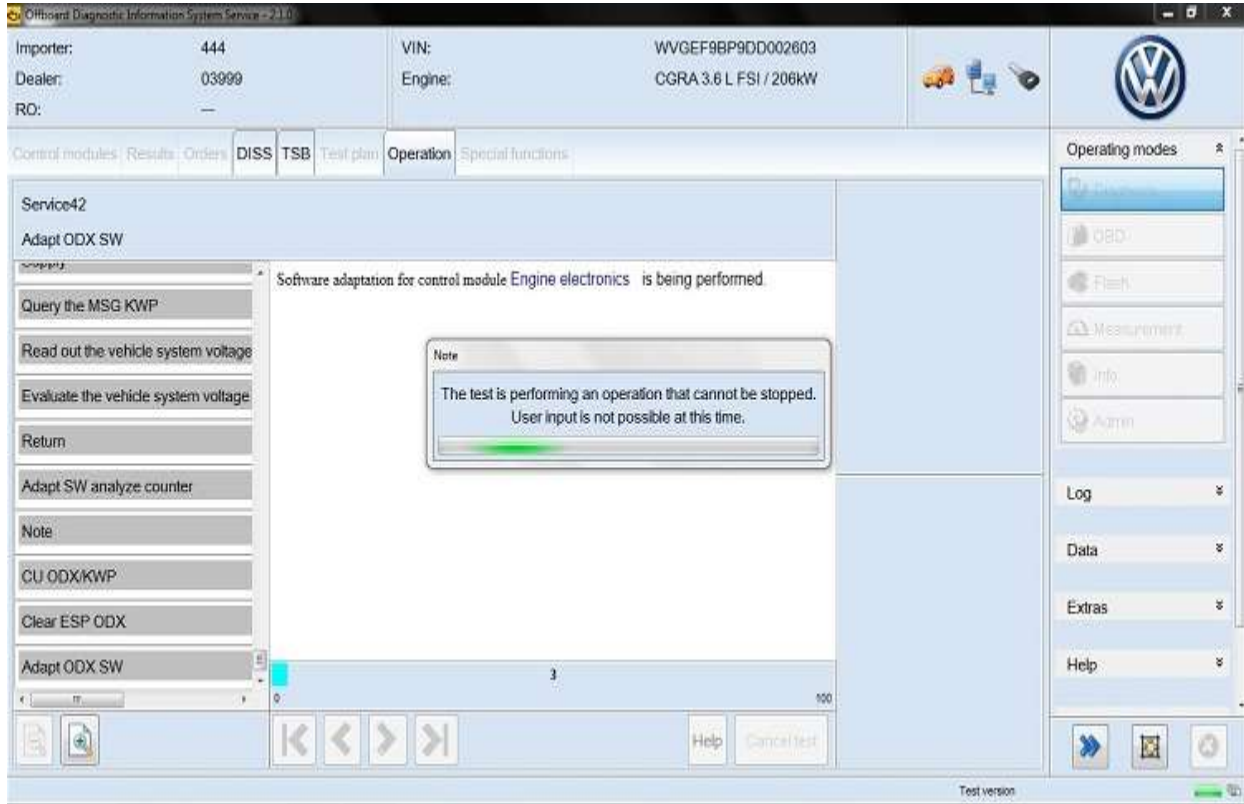


Figure 7



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14. When the adaptation completes, switch the ignition OFF (Figure 8).

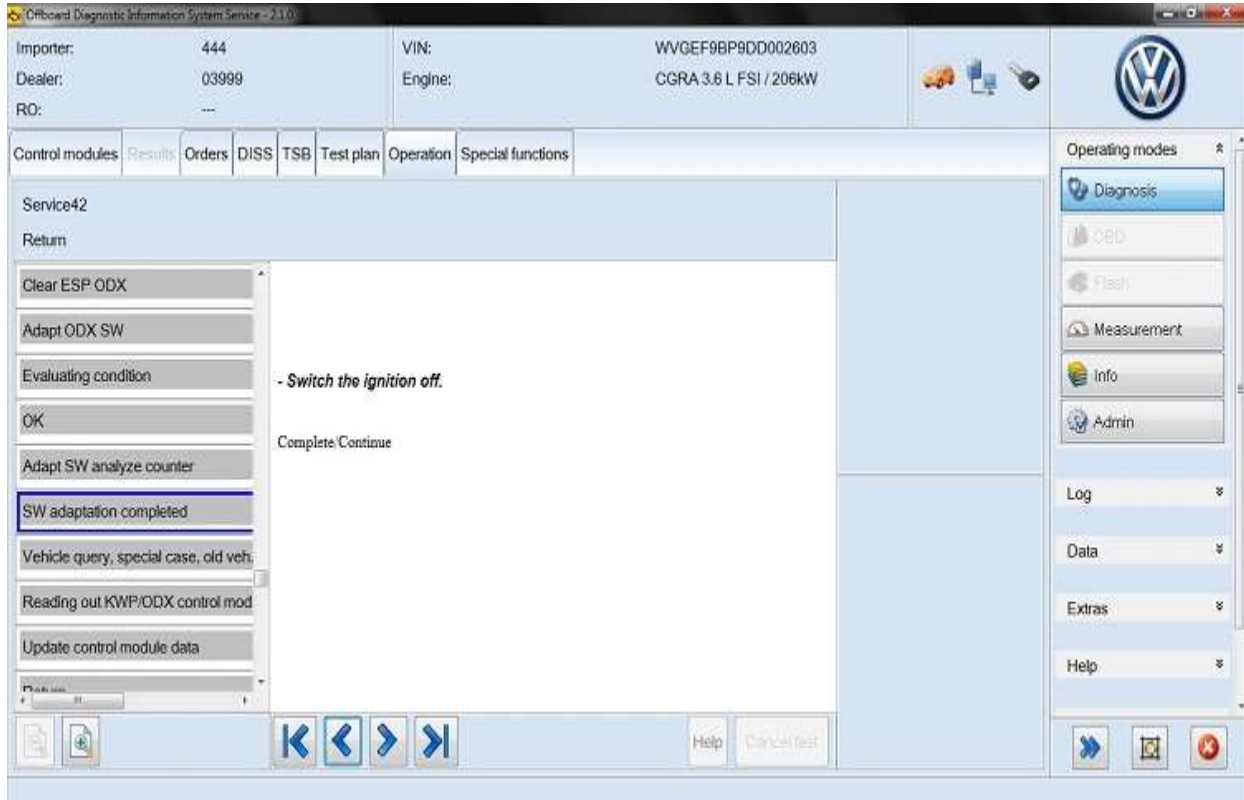


Figure 8



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15. When prompted, switch the ignition ON (Figure 9).

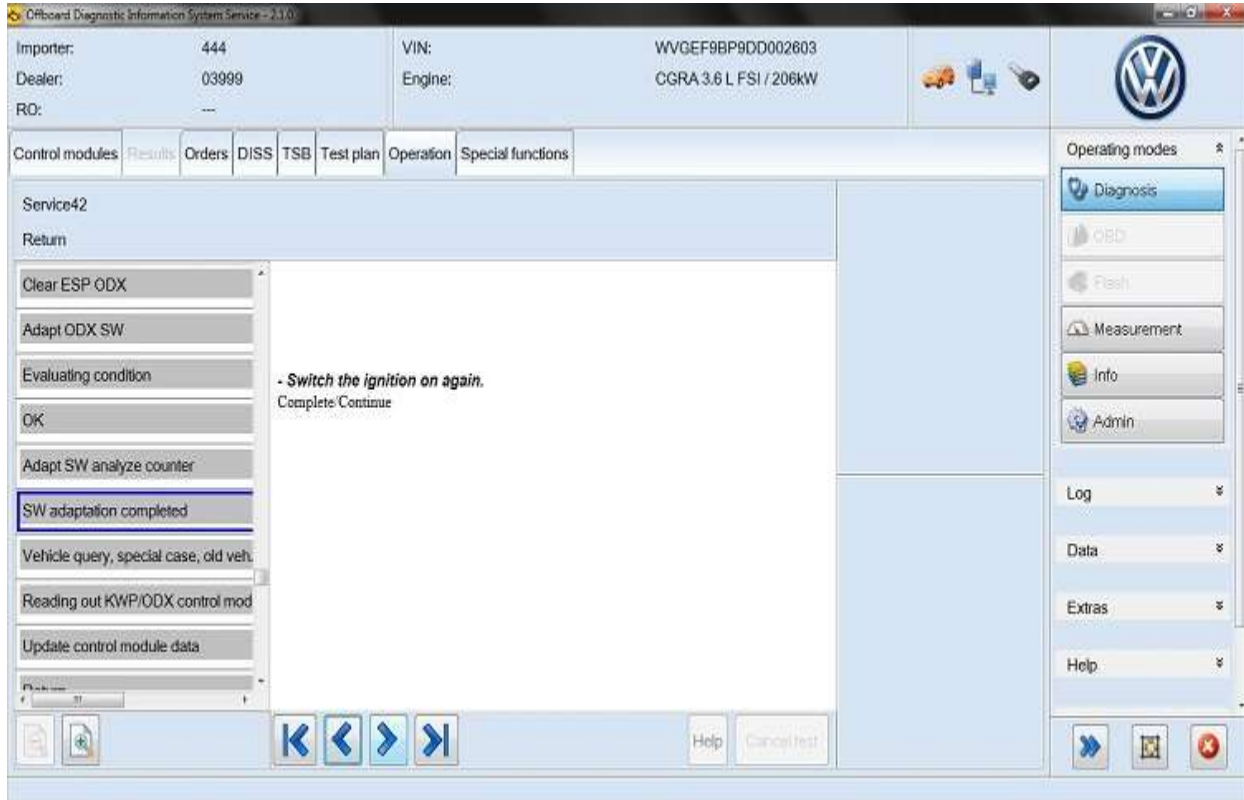


Figure 9



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16. This completes the software adaptation “flash” (Figure 10).

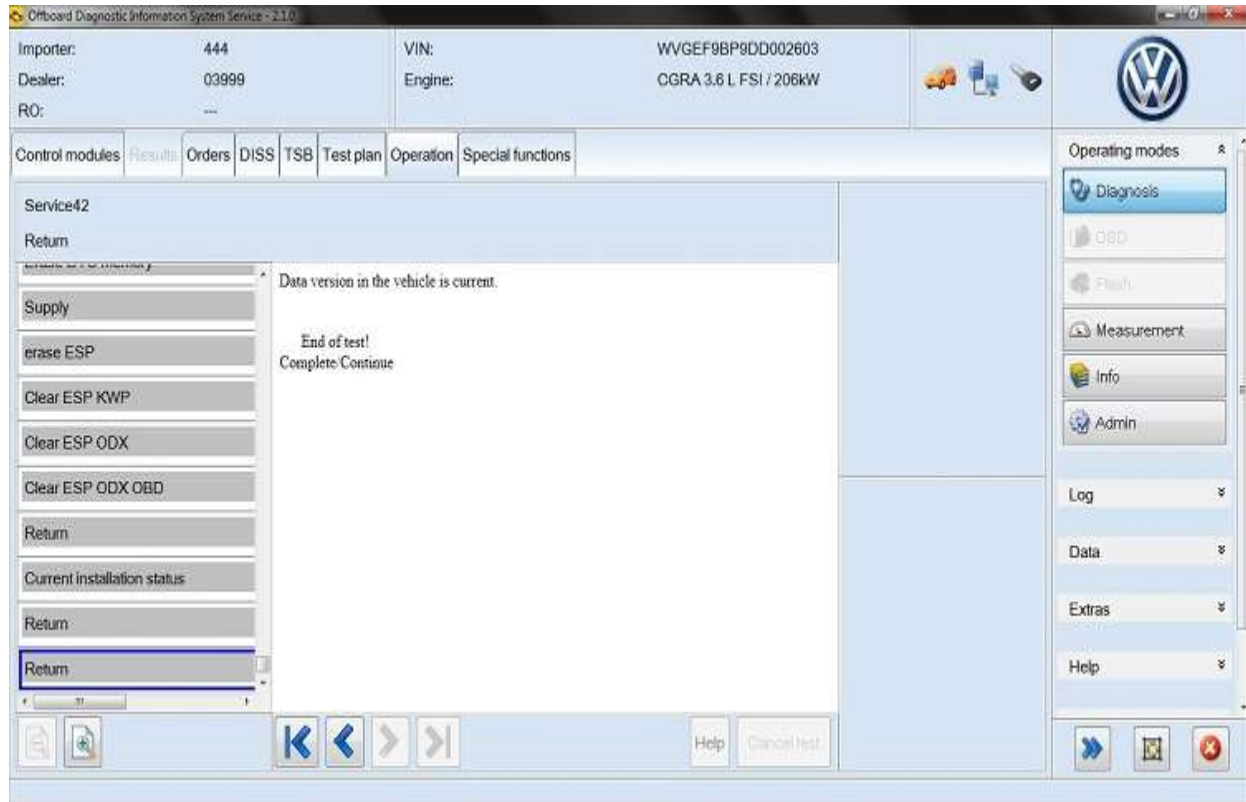


Figure 10

17. During the flash procedure, an estimated time will be shown. This is not used for actual SRT calculation at this time.

ALWAYS continue until the following text is displayed: “Data version in the Vehicle is current!”



Tip:

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 or actions other than described in this TSB.

18. Verify that all steps or special procedures mentioned in the Technical Bulletin/Updates have been carried out. Upon completion, finish the test plan and Exit GFF. Answer the Warranty questions accordingly and print out or save the Diagnostic Log when prompted.

**Note:**

SVM can provide a response code with a repair suggestion, or after a successful repair. The response code will appear in the diagnostic log. See below table for more information:

<u>Response Code</u>	<u>Description</u>	<u>Steps to Take</u>
ERP0203E	Vehicle does not meet the requirements for this update.	Check that the SVM code wasn't mistyped and/or that the car meets the requirements for the Update
ERP0220E	AM Code Unknown	Please make sure that the SVM code was entered in correctly.
ERP0501E	Error while performing function	Retry the update. If the issue persists, take a screenshot, save the diagnosis log, send ODIS feedback (see note below) and contact Support.
ERP0603E	No Coding or Parameterization was available for this Request.	Take a screenshot, save the diagnosis log, send ODIS feedback (see note below) and contact Support.



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Note:

Any other ERP Codes encountered during the SVM process that cause a stop in work need an ODIS Service application feedback sent to Support (see figure 11).

When sending an ODIS Service application feedback please ensure the option “Attach current diagnostic session” is selected.



Figure 11



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Warranty

Information only.

Required Parts and Tools

No Special Parts required.

Tool Description	Tool No:
Midtronics Battery Maintainer/Charger OR (equivalent 70 amp or higher)	MTRMSP0702
VAS Diagnostic Tool	VAS 6150/X & VAS 6160/X and ODIS Service with: current online updates

Additional Information

Technical Helpline Contact Requirements:

Contact the Technical Helpline via the Volkswagen Technical Assistance (VTA) system in Elsa or at 800-678-2389 in cases where there is a clear technical issue with the vehicle or response from the SVM system. Always include the following information in the VTA contact.

- SVM Action Code attempted.
- Control Module(s), affected part numbers and software levels, Address word(s) that are in question.
- The complete tester diagnostic log from the GFF session attached to the VTA helpline ticket.

Further Tester Assistance:

If any of the listed troubleshooting procedures and/or checks result in errors or yield no solution and further assistance is required, please follow these steps:

1. Send Feedback using the ODIS Service Application Support Button (Help > Support).
2. Report the problem to the shop network administrator for further investigation.
3. Contact the responsible support team for further assistance:
 - IT Service Desk: 866-892-3375 (this includes: GeKo, Elsa, Elsa-2-Go and Service Net)
 - VAS / ODIS Software Subscriptions: 800-544-8021
 - VAS Diagnostic Tester Software Support: 888-896-1298

All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check with your Parts Dept. and Repair Manuals for the latest information.



**OWNER INFORMATION ABOUT CONTROL MODULE TUNING*
ACKNOWLEDGEMENT AND AUTHORIZATION FOR
REPROGRAMMING (REFLASHING) OF CONTROL MODULE(S)**

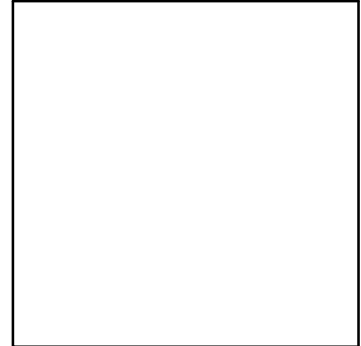
*) "TUNING" is described as the addition of or modification of any component which causes a Volkswagen vehicle to perform outside the normal parameters and specifications approved by Volkswagen Group of America / Volkswagen Group Canada.

Date: _____

Dealer Number: _____

Vehicle Identification Number: _____

Repair Order Number: _____



Dealer stamp

I _____, owner or driver of the above identified Volkswagen, confirm:

"Tuning" as described above (especially power increasing modifications) has NOT been performed on my vehicle.

"Tuning" as described above has been performed on my vehicle and the following components were modified or installed:

 TUNING was performed by (Please provide Company name and telephone number, if you wish us to contact them):

I understand that if my Control Module is determined to have been tuned, any damage caused by the tuning of the Control Module (including adverse emissions consequences) will not be covered by VWGoA / VGC warranties.

I am permitting an authorized Volkswagen Dealer to reflash (update) my Control Module, and by doing so, I understand that this process will automatically overwrite (destroy) and permanently delete any tuning program that was previously installed on the Control Module of my Volkswagen vehicle.

By signing below, I fully acknowledge and understand that the tuning program will not be restored and VWGoA / VGC, will not be liable in any way for the loss of tuning data.

 Signature of Customer