

Technical Bulletin



Condition

Update Programming To Eliminate the Possibility of a Slight Hesitation

Update Programming to address concerns of slight hesitation.

01 06 09 August 1, 2006, 2012686

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
Passat – Passat Wagon	2004 - 2005	BHW	All	All	All

Technical Background

The calibration strategy for the Exhaust Gas Recirculation system can lead to a condition which results in intermittent hesitation.

Production Solution

No production change required, factory production was finished at time of new software release.

Service

Update - Programming (Flashing)



Tip:

When performing the reflash procedure, ALL DTCs for all systems are erased. DTCs linked to Guided Fault Finding function tests will be lost. Therefore, always address stored DTCs for Customer concerns unrelated to the reflash procedure first.

The following "Update - Programming" (flashing) process may overwrite any "TUNED" ECM programming. A "TUNED" ECM is described as any ECM altered so as to perform outside the normal parameters and specifications approved by Volkswagen of America, Inc.

If you encounter a vehicle with a "Tuned" ECM, prior to performing the "Update - Programming" (flashing) procedure:

- Your Dealership should place the vehicle owner on notice in writing, that their ECM was found to have been tuned, and that any damage caused by the tuning of the ECM (including any adverse emissions consequences) will not be covered by Volkswagen of America, Inc. warranties.
- For any repair requested by the owner under warranty or outside warranty that requires flashing, which will automatically wipe out the "Tuning" program, your Dealership should advise the owner of the above and get Owner's written consent (see attachment, Control Module Tuning form) to the flashing procedure.

Technical Bulletin



Tool requirements:

VAS 5051 or 5052 (with Base CD V.08.01.00 and the Brand CD V.08.69.01 or higher) with old diagnosis logs erased prior to start.

“Update - Programming” (flashing) CD W42SWU8900.



Tip:

Additional copies of the “Update - Programming” CD (Literature Number W42SWU8900) may be ordered from the Volkswagen Technical Literature Ordering Center at www.vw.dds ltd.com, or by calling 1–800–544–8021 from 8:00 a.m. to 8:00 p.m. EST Monday through Friday. This number can be dialed in both the United States and Canada.

Vehicle requirements:

- Battery MUST have minimum no-load charge of 12.5V (failure to maintain voltage during update process can lead to ECM failure) (you must use an approved battery charger to maintain battery voltage).
- VAS 5051: connected to vehicle and to 110V AC Power supply at all times during procedure.
- VAS 5052: connected to vehicle with battery voltage requirements met.
- Any appliances with high electromagnetic radiation (i.e. mobile phones) switched OFF.
- No Stored DTC's, erase any stored DTC's.



Tip:

Non-observance of the following points may lead to ECM failure!

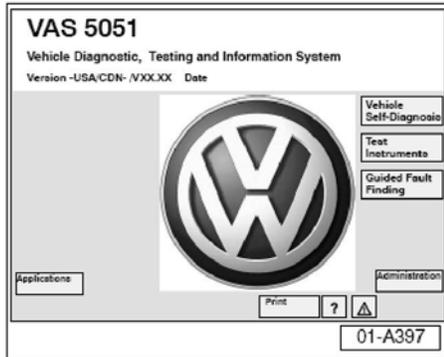
VAS 5051 or 5052 must always be connected to the approved power supply at the approved voltages. Under no circumstances should the power supply be interrupted or the diagnostic connector unplugged during the flash procedure.

Any appliances with high electromagnetic radiation (i.e. mobile phones) must be switched OFF.

Technical Bulletin



Update - Programming (Flashing) procedure, checking for update match



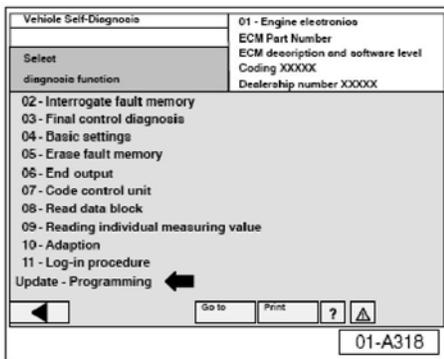
- Switch ignition ON.
- Switch VAS 5051/5052 ON and insert flash CD into CD drive as soon as start screen appears.



Tip:

You must return to the start screen before starting a new (flashing) session, otherwise the flashing CD will not be recognized by the tester.

Select "Vehicle Self Diagnosis" mode.



- Select vehicle system "01-Engine electronics" .
- Program checks software level.

If software level of ECM MATCHES level indicated by Flashing CD:

"Update-Programming" (arrow) will appear.



Tip:

The Update-Programming function is only available when the inserted flashing CD level and current vehicle ECM level are different.

If "Update Programming" does not appear:

Programming (flashing ECM) cannot be performed, continue to diagnose condition.

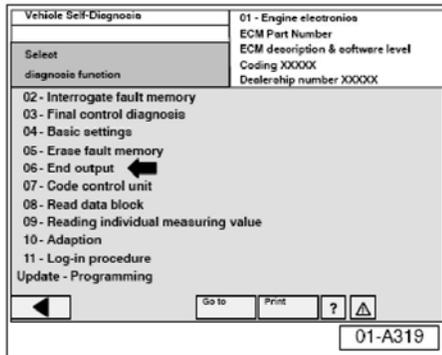
If software level DOES NOT match the level indicated on Flashing CD:

"Update Programming" (arrow) appears.

Technical Bulletin



PRIOR to performing procedure to Update-Programming (flash) the ECM:



All fault memories must be interrogated and erased.



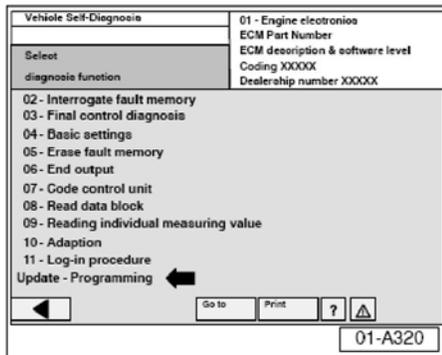
Tip:

Failure to erase ALL fault memories may cause Update-Programming (flashing) to fail!

- Select Diagnosis function 06 “End output” .
- Select Diagnosis function 00 “Collection services” .
- Select “Check DTC memory - complete system” which will interrogate all fault memories.
- Erase ALL fault memories.

Once ALL fault memories have been erased:

- Select vehicle system “01-Engine electronics” .



- Select “ Update - Programming” option at bottom of screen (arrow).



Note:

Once “Update - Programming” function has been started, switching ignition OFF or disconnecting the diagnostic connector may completely destroy the ECM.

Technical Bulletin



“Update - Programming” (flashing), performing

Vehicle Self-Diagnosis	01 - Engine electronics
Update - Programming	ECM Part Number
	ECM description & software level
	Coding XXXXX
	Dealership number XXXXX
Programming can be carried out.	
WARNING! The programme version stored in the control unit will be erased. It will be programmed with the new version 000X. The erasing programming process will last roughly XX minutes. The part number in the control unit identification may change. Vehicle specific data (coding, adaptation etc.) might be lost. It must be checked after successful programming. After the continue button has been pressed the process cannot be cancelled.	
IMPORTANT – PLEASE NOTE: Switching ignition off or disconnecting the diagnostic connector during programming may completely destroy the control module!	
◀ Test Instruments ▶ Go to Print ? ▲ ▶▶	
01-A321	

After selecting “Update - Programming” function, new program version 8900 will install for ECMs listed below:

- 038 906 016 L
- 038 906 016 R

Approximate timing for update is shown on VAS 5051/5052 screen.

- By selecting the forward arrow button, the programming procedure begins.

Vehicle Self-Diagnosis	01 - Engine electronics
Update - Programming	ECM Part Number
	ECM description & software level
	Coding XXXXX
	Dealership number XXXXX
Programming in progress	
Data Transfer in %	
0 11 100	
[Progress bar showing 11%]	
01-A137	

Similar screen appears:

The previous data in the ECM is erased and the new data is being transferred to the module from the flash CD.



Tip:

Approximate flashing time is 40 minutes.

Vehicle Self-Diagnosis	01 - Engine electronics
Update - Programming	ECM Part Number
	ECM description & software level
	Coding XXXXX
	Dealership number XXXXX
Programming in progress	
Data Transferred in %	
0 100	
[Progress bar showing 100%]	
Diagnosis bus faulty	
No voltage or voltage too low on diagnostic bus	
Is the battery voltage from the vehicle too low?	
Is the diagnostic connector connected to the vehicle?	
Repeat Cancel	
01-A138	



Tip:

If during the “Update - Programming”, a fault message is displayed:

- Confirm that VAS 5051 or VAS 5052 diagnostic tool power supply is adequate and that ALL appliances with high electromagnetic radiation (i.e. mobile phones) are switched OFF.
- The “Update - Programming” (flashing) process must then be started from the beginning using the “ Repeat” button (arrow). **DO NOT** use the “Cancel” button.



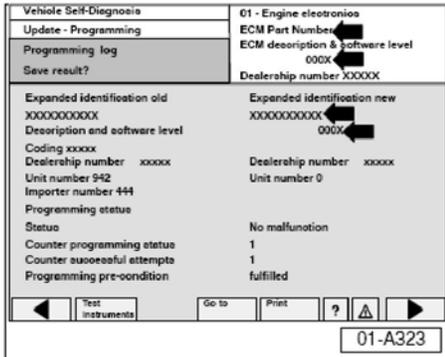
Note:

On NO occasion should the “Cancel” button be selected.

Technical Bulletin



Once “Update - Programming” (flashing) is complete:



Similar screen appears.

ECM Part Number and old software level is still displayed at (arrows).

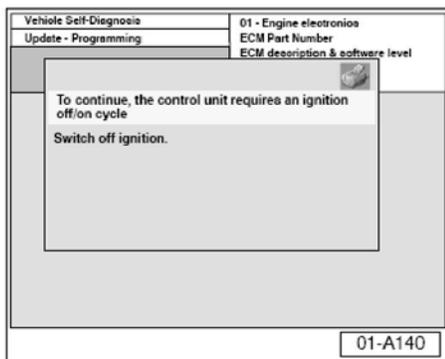


Tip:

New software level is not displayed until process is complete and fault memories have been erased.

- Select the “Print” , then “Screen” button.
- Attach print to vehicle Repair Order.

Once “Update - Programming” (flashing) is complete, the control module must be re-initialized.



- Select the forward arrow button.

The tester requests you to switch the ignition OFF.

- Switch ignition OFF.

The tester requests you to switch the ignition ON.

- Switch ignition ON when prompted.

After switching ignition ON, the ECM has been re-initialized, however, fault memories must now be erased.

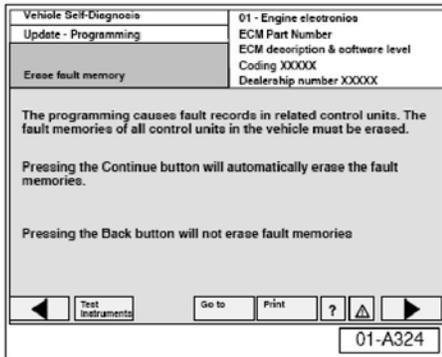
- Select the “Continue button.”

Technical Bulletin



Fault memories, erasing after “Update - Programming” (flashing)

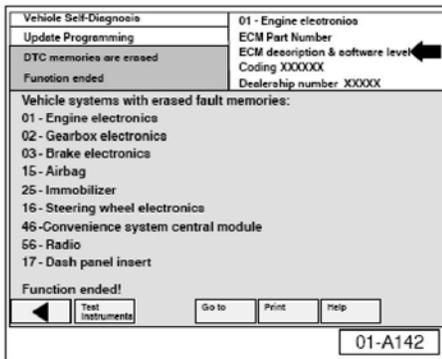
Due to the CAN bus system, fault messages will be stored in various Control Modules during programming.



To erase ALL fault memories:

- Confirm by selecting the forward arrow button.

Once fault memories have been erased:

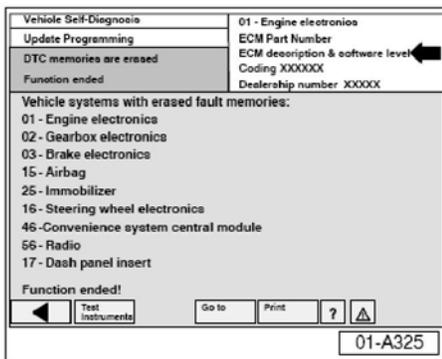


Similar screen appears.

Old ECM Part No. and software level still appear at (arrow).

Function ended appears at bottom of screen.

- Finish update of the ECM by selecting the backward arrow button.



Similar screen appears.

Updated software level will appear at arrow.

Flash CD can now be removed from VAS 5051 or VAS 5052 Diagnostic tool.

- Print the ECM screen to verify ECM update software level.
- Attach print to vehicle Repair Order.
- Select “Go to” then select “Exit” .

Technical Bulletin



 **Tip:**

It is not generally necessary to encode the ECM following the “update - Programming” (flashing procedure). However, you must set the readiness code.

- Set readiness code.

Use VAS 5051 or VAS 5052 to set readiness code.

Warranty

When procedure applies to vehicles within the New Vehicle Limited Warranty, use the following:	
Claim Type:	W2
Part Identifier:	2360
Damage Code:	2360 39 000 1
Labor Operation:	23602554 = 100TU
Diagnostic Time:	No Additional Diagnostic Time Allowed
Claim Comment: Input “As per Technical Bulletin 2012686” in comment section of Warranty Claim.	

Required Parts and Tools

Description	Part No:	Quantity
CD	W42SWU8900	1

 **Tip:**

Part number(s) are for reference only. Always see ETKA for the latest part(s) information.



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

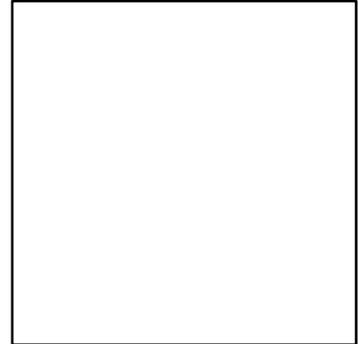
*) "TUNING" is described as the addition of or modification of any component which causes a Volkswagen vehicle to perform outside the normal parameters and specifications approved by Volkswagen of America, Inc..

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 Volkswagen of America, Inc. 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 Volkswagen of America, Inc., will not be liable in any way for the loss of tuning data.

Signature of Customer