

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.

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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 <u>www.vw.ddsltd.com</u>, 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.



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 of the diagnostic connector unplugged during the flash procedure.

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

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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.

i 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.

Vehiole Self-Diagnosia	01 - Engine electronico ECM Part Number
Select diagnosis function	ECM depoription and poftware level Coding XXXXX Dealership number XXXXX
02 - Interrogate fault memory	
03 - Final control diagnosis	
04 - Basic settings	
05 - Erase fault memory	
06 - End output	
07 - Code control unit	
08 - Read data block	
09 - Reading individual measuring	value
10 - Adaption	
11 - Log-in procedure	
Update - Programming	
Go to	Print ? A

- 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.



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.

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

Vehiole Self-Diagnosis	01 - Engine electronica ECM Part Number			
Seleot	ECM depoription & poftware level Coding XXXXX			
disgnosis function	Dealership number XXXXX			
02 - Interrogate fault memory				
03 - Final control diagnosis				
04 - Basic settings				
05 - Erase fault memory				
06- End output				
07 - Code control unit				
08 - Read data block				
09- Reading individual measuring value				
10- Adaption				
11 - Log-in procedure				
Update - Programming				
Go to	Print ?			
	01-A319			

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" .

Vehiole Self-Diagnoaia	01 - Engine electronico ECM Part Number
Seleot diagnosis function	ECM decoription & coftware level Coding XXXXX Dealership number XXXXX
02 - Interrogate fault memory 03 - Final control diagnosis	
04 - Basic settings	
05 - Erase fault memory 06 - End output	
07 - Code control unit 08 - Read data block	
09- Reading individual measuring	value
11 - Log-in procedure	
Update - Programming	
Go to	Print ?
	01-A320

• Select " Update - Programming" option at bottom of screen (arrow).



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

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"Update - Programming" (flashing), performing

	01 - Engine electronics	
Update - Programming	ECM Part Number	
Programming can be carried out.	ECM description & software level Coding XXXXX Deslerahip number XXXXX	
WARNING!		
The programme version stored i	n the control unit will be erased	
n win de programmed with the h	ew version out	
Vehicle specific data (coding, ad be checked after successful pro	laptation etc.) might be lost. It must gramming	
After the continue button has be	en pressed the process cannot be	
After the continue button has be cancelled.	en pressed the process cannot be	
After the continue button has be cancelled. IMPORTANT PLEASE NOTE:	en pressed the process cannot be	
After the continue button has be cancelled. IMPORTANT PLEASE NOTE: Switching ignition off or disconr during programming may compl	en pressed the process cannot be necting the diagnostic connector ietely destroy the control module!	
After the continue button has be cancelled. IMPORTANT PLEASE NOTE: Switching ignition off or disconn during programming may compl Test instruments 60	en pressed the process cannot be necting the diagnostic connector letely destroy the control module!	

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.

Vehiole Self-Diagnosia Update - Programming Programming in progress	01 - Engine eleotronios ECM Part Number ECM decoription & coftware level Coding XXX0X Declership number XXXXX
Data Transfer in % 0 11	100
	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.

E Tip:

Approximate flashing time is 40 minutes.

Vehiole Self-Diagnosis Update - Programming Programming in progress		01 - Engine electronios ECM Part Number ECM description & software level Coding XXXXX Dealership number XXXXX				
				Dete	Transferred in %	
				0	Diagnosis bus faulty	100
	No voltage or voltage too low on diagnostic bus					
_	Is the battery voltage from the vehicle too low?					
	Is the diagnostic connecto	or connected to the vehicle?				
	· •					
	Repeat	Cancel				
		01-A138				

i 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.



On NO occasion should the "Cancel" button be selected.

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Once "Update - Programming" (flashing) is complete:

Vehiole Self-Diagnosis	01 - Engine electronica ECM Part Number	
Update - Programming		
Programming log	ECM depoription & poftware level 000X	
Save result?	Dealership number XXXXX	
Expanded identification old	Expanded identification new	
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxxxx	
Description and software level	0000	
Coding xxxxx Dealership number xxxxx	Dealerahip number xxxxx	
Unit number 942 Importer number 444	Unit number 0	
Programming statue		
Stetuo	No malfunction	
Counter programming status	1	
Counter autoceasful attempts	1	
Programming pre-condition	fulfilled	
Test Go to	Print ? 🔬 🕨	
	01-A323	

Similar screen appears.

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

i 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.

Vehiole Self-Diagnosis Update - Programming	01 - Engine electronico ECM Part Number ECM description & anfiware level
To continue, the control unit off/on cycle	requires an ignition
Switch off ignition.	
	01-A140

• 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."

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Fault memories, erasing after "Update - Programming" (flashing)

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

Vehiole Self-Diagnosis	01 - Engine electronico	
Update - Programming	ECM Part Number	
Erese fault memory	ECM description & software level Coding XXXXX Dealership number XXXXX	
The programming causes fa fault memories of all control	ult records in related control units. The I units in the vehicle must be erased.	
Pressing the Continue butto memories.	on will automatically erase the fault	
Pressing the Back button wi	ill not erase fault memories	
Test Instruments	Geo to Print ?	
	01 1001	

To erase ALL fault memories:

· Confirm by selecting the forward arrow button.

Once fault memories have been erased:

Vehiole Self-Diagnosis	01 - Engine electronica		
Update Programming	ECM Part Number		
DTC memories are ensed Function ended	ECM description & software level		
Vahicle systems with arased fault	Dealeranip number AXAXA		
01 Engine electronice	nenones.		
02. Gaarbay alastronias			
02 - Gearbox electronica			
15 Airbon			
15-Airbag			
25 - Immobilizer			
16 - Steering wheel electronics			
46-Convenience system central m	odule		
56 - Radio			
17 - Dash panel insert			
Function ended!			
Test Go to	Print Help		
	01-A142		

01 - Engine electronico ECM Part Number ECM description & coft Coding XXXXXX

Dealership number XXXX

? 🛆

01-A325

Vehiole Self-Diagnoaia

Update Programming ries are erased

03 - Brake electronics 15 - Airbag 25 - Immobilizer

17 - Dash panel insert Function ended!

Test Instrume

16 - Steering wheel electronics 46 -Convenience system central module

Vehicle systems with erased fault m 01 - Engine electronics 02 - Gearbox electronics

DTC memo

56 - Radio

Function ended

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" .

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Go to

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i 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 "A	As per Technical Bulletin 2012686" in comment section of Warranty Claim.	

Required Parts and Tools

Description	Part No:	Quantity
CD	W42SWU8900	1

i Tip:

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

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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

_____, 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:

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

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

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