

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
All Except Routan	2002-2014	All	All	All	All

## Condition

**01 14 07** March 18, 2014 **2014603** Supersedes Technical Bulletin V011005 dated April 1, 2010 to update SVM function information and to include *Response Codes* with explanation.

#### **Software Version Management**

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

Troubleshooting information is included in the Additional Information Section.

### **Technical Background**

A VAS 5051B, VAS 5052A, VAS 6150X, VAS 6160 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.

### **I** Note:

An Update document changes the vehicle control module software level in Volkswagen vehicles. This system uses the VAS 5051B, VAS 5052A 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.

#### Page 1 of 11 plus attachment



#### **Current Tuned ECM or TCM 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.

#### Page 2 of 11 plus attachment

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### 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 RVU.

- 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.

### Note:

Prior to launching the ODIS 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 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/InCharge 940 (INC-940) tester/charger
- Battery MUST have and MUST maintain a minimum no-load charge of 12.5V
- 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 using ODIS. Allow GFF to interrogate all control modules before proceeding.

### Note:

If GFF does not interrogate all control modules, manually select and interrogate remaining modules before proceeding.

Address or record all DTCs related to a customer concern before continuing. Sporadic communication DTCs will be created during the flash procedure and must be erased with all other sporadic DTCs by GFF after exiting the flash test plan.

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Page 3 of 11 plus attachment



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



Figure 1

Page 4 of 11 plus attachment



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

nporter:	nostic Information System Service - 2.1.0 444	VIN:	WVGEF9BP9DD002603		
ealer:	03999	Engine:	CGRA 3.6 L FSI / 206kW	a 🗙 🗞	(VA)
D:		Engine.	0010430 21 3172000	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
ntrol modu	les Results Orders DISS TSB Test plan	Operation Special functio	ns		Operating modes
sts for the	entire vehicle				📎 Diagnosis
Status	Tests			*	(M OBD
	5F - Information electronics 1 -J794				6 Flash
-	5F - Installation status test/reset DT	C memory			A Measurement
	Software version management				info
-	Adapt software (offline)				Admin
-	Adapting software				- age / varian
-	Code online control module			1	Log
-	Ctrl. module software configuration			£	Data
-	Function clearing system (FES)			L	
-	Parameterize control module online				Extras
YS_X_X_1	_0711_X_SERVICE42_SVM@00011	п			Help
erform test.	Display documents			-	> 🛛 🔇

#### Figure 2

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

Importer: Dealer:	444 03999		VIN: Engine:			9DD002603 FSI / 206kW	a 🗙 💊	1		
RO: Control modules Res		TED	Oneration					Onerati	ng modes	8
	uits Orders Di33	136 Testplan	Operation				 	Q Dia		
Service42 Select action							-1-	() OB	D	
		With the help of th	e software v	ersion management (S	VM), you can update t	he software	· 2 ·	G Flat		
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Select action	=							Help		×
	•									
		<b>K K</b>			Help	Cancel test		>>>	國	3
							Test version			

#### 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.



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

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/RVU (Figure 5):

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

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Cffboard Diagnostic Inf	ormation System Service - 2.1.0					o x
importer:	444	VIN:	WVGEF9BP9DD002603			
Dealer:	03999	Engine:	CGRA 3.6 L FSI / 206kW	🧀 🍢 🌘		)
R0:						
Control modules Re	esults Orders DISS TSB Test plan	Operation Special fun			Operating modes	*
Service42				Complete/Continue	Diagnosis	
XXXXXXXSW UPD	ATEXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	x			() OBD	
		ule(s) will be updated to	a new software version during the following		🕼 Flash	
Service42_START					Measuremen	,
Check mark	- Make sure tha 'Software adap		s' CD is not in the CD drive.			
Query general activ	on codes - Continue by p	ressing Done.			linfo	
ок					Admin	
Return					Log	¥
Analyze RESPON	SE					×
Evaluate counter					Data	
XXXXXXHW REP	LACEMENTXXX				Extras	×
XXXXXXXSW UPD	ATEXXXXXXXX				Help	×
• •						
	К <	> >	Help Cancel test		>>	0
				Test version		-

#### Figure 5

#### Page 6 of 11 plus attachment



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



#### Figure 6

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

Offboard Diagnostic Info	rmation System Service - 2.1.0	the second se				D X
Importer:	444	VIN:	WVGEF9BP9DD002603			
Dealer:	03999	Engine:	CGRA 3.6 L FSI / 206kW	🥪 📑 🗞		
RO:						
Control modules Re	sults Orders DISS TSB Test p	an Operation Special function			Operating modes	*
Service42					Disgrocis	
Adapt ODX SW					() OBD	
Cobbit		tation for control module Engine	electronics is being performed.		🕼 Flash	
Query the MSG KW					A Measurement	
Read out the vehicle	e system voltage	Note			info Info	
Evaluate the vehicle	e system voltage		ning an operation that cannot be stopped. put is not possible at this time.		Admin	
Return			porte not possible at this time,		- Admin	
Adapt SW analyze	counter				Log	¥
Note					Data	8
CU ODX/KWP						
Clear ESP ODX					Extras	¥
Adapt ODX SW	3	3			Help	¥
<	, 0		100			
	K <	× >	Help Cancel test		>>	0

#### Figure 7

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Page 7 of 11 plus attachment



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

Importer: Dealer: RO:	444 03999 	VIN: Engine:	WVGEF9BP9DD002603 CGRA 3.6 L FSI / 206kW	<i>4</i> 🛃 🏷		)
Control modules Res	ults Orders DISS TSB Tes	plan Operation Special functions	5		Operating modes	*
Service42 Return					Diagnosis	
Clear ESP ODX Adapt ODX SW					C Flash	t
Evaluating condition	- Switch the Complete C	ne ignition off.			📦 Info	
Adapt SW analyze o SW adaptation comp	ounter				Log	\$
Vehicle query, specia					Data	¥
Reading out KWP/O					Extras	¥
Update control modu	Jie data •				Help	¥
	K	S > >	Help Cancel test		≫ ⊠	0

#### Figure 8

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

Confloced Degratitic information system service Importer: 444 Dealer: 03999 RO:		VIN: Engine:		P9DD002603 L FSI / 206kW	<i>4</i> 🛃 🏷		
Control modules Results Orders DIS	S TSB Test plan	Operation Special funct	lions			Operating modes	* 1
Service42						V Diagnosis	
Return						() OBD	
Clear ESP ODX						S Flash	
Adapt ODX SW						A Measurement	-
Evaluating condition	- Switch the igni					😭 Info	-
ок	Complete/Continue					🚱 Admin	
Adapt SW analyze counter							
SW adaptation completed						Log	¥
Vehicle query, special case, old veh.						Data	¥
Reading out KWP/ODX control mod						Extras	¥
Update control module data						Help	×
Contrares						нер	· .
	K < >		Help	Cancel test		>	3

#### Figure 9

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

nporter: lealer:	444 03999	VIN: Engine:	WVGEF9BP9DD002603 CGRA 3.6 L FSI / 206kW	an 🧞 🍾	<b>X</b>	)
ontrol modules	 ISUITS Orders DISS TSB Test	plan Operation Special function	ns		Operating mode	es *
Service42					📎 Diagnosis	
Return					()) OBD	
-1446 6 1 6 1161161	Data version	a in the vehicle is current.			C Flash	
Supply	End of t				A Measureme	ent
rase ESP	Complete C				😭 Info	_
Clear ESP KWP					Admin	
Xear ESP ODX						
lear ESP ODX O	BD				Log	¥
letum					Data	×
Surrent installation	status				Extras	¥
Return					Help	¥
			Help Cancel test			
<u>a</u>			Help Cancel test		× 🕅	8

#### 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!"

### i 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/RVU 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.

#### Page 9 of 11 plus attachment



### **I** 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:

Response Code	Description	Steps to Take
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, and contact Support.
ERP0603E	No Coding or Parameterization was available for this Request.	Take a screenshot, save the diagnosis log, and contact Support

### Note:

Any other ERP Codes during SVM that cause a stop in work need to be sent in to Support teams for assistance.

## Warranty

Information only.

## **Required Parts and Tools**

No Special Parts required.

No Special Tools required.

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## **Additional Information**

#### **Technical Helpline Contact Requirements:**

Contact the Technical Helpline via the Volkswagen Technical Assistance (VTA) system in ElsaWeb 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 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, ElsaWeb, ElsaPro 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

, 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 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