

UPDATE Technical Bulletin



May 22, 2017

37K7 UPDATE – TCM Software Update (NVLW)

NOTE:

- Perform this UPDATE on all applicable vehicles within NVLW
- It is MANDATORY to perform UPDATES on all applicable vehicles in dealer inventory PRIOR TO RETAIL SALE.
- Inform customers that this UPDATE will be available free of charge as long as their vehicle is within the Warranty parameters outlined in this UPDATE.

NOTE:

Required DMS Wording/Programming Text (SAGA claim comments):

UPDATE Code 37K7 - TCM Software

Model(s)	Year	Engine Code	Trans. Code
Atlas	2018	See ELSA	See ELSA

REVISION HISTORY		
Revision	Date	Purpose
1	May 20, 2017	Original publication
2	May 22, 2017	Work procedure steps updated

Condition

This update has been proactively released to address a Software update needed for smoothing the shift operation, driveshaft protection and transmission emergency mode for the AQ450 transmission.

This UPDATE is in effect until removed.

Vehicle must meet all of the following criteria:

- Procedure is valid only for vehicles that show the 37K7 code in Elsa, Campaign/Action Information screen *on the day of repair*.
- If the vehicle is sold it must be within the NVLW.
- Procedure must be performed within the allotted time frame stated in this UPDATE.
- Procedure must be performed on applicable vehicles in dealer inventory prior to sale.

Technical Background

Software update needed for smoothing the shift operation, driveshaft protection and transmission emergency mode for the AQ450 transmission. continued driving is still possible.

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Production Solution

Updated software introduced into production.

Service

NOTE:

- *Elsa is the only valid inquiry/verification source. Check Elsa on the day this vehicle UPDATE will be performed to verify vehicle eligibility for the UPDATE. Status must show “open”. Attach an Elsa printout showing the “open” status to the repair order.*
- *If this UPDATE appears to have already been performed but the code still shows open in Elsa, contact Warranty before proceeding further. Another dealer may have recently performed this UPDATE but not yet entered a claim for it in the system.*
- *Elsa may also show additional open action(s); if so, inform your customer - this work can be done while the vehicle is in for this UPDATE.*
- *Contact the Warranty Helpline (U.S.) or the Warranty Campaign Specialist (Canada) if you have any questions.*

Applicable Criteria ID (s)	Campaign/Action Status
01	Open

EXAMPLE

- 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

- Ensure that the Status is “Open”
<arrow 2>
- Note the Applicable Criteria ID
<arrow 1> for use in determining the correct work to be done and corresponding parts associated



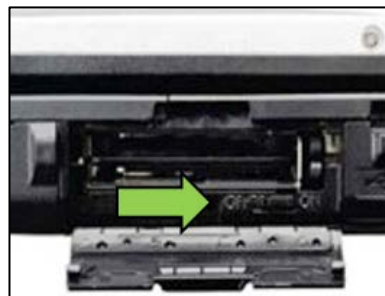
NOTE

Prior to launching the VAS Diagnostic Tester and starting an update, ensure the following conditions are met;

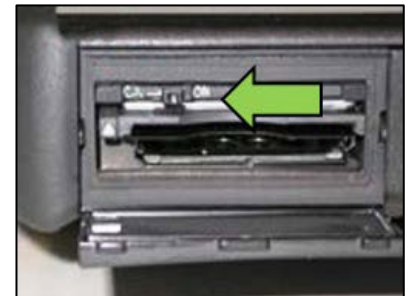
- ✓ **The ODIS software is completely up to date.**
 - Refer to the “Alerts” section on ServiceNet home page for the current ODIS version.
- ✓ **The battery charger is connected to the vehicle battery and remains connected for the duration of the software update.**
 - Battery voltage must remain above 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.
- ✓ **If using a Bluetooth transmitter head, it is connected to the tester with a USB cable.**
 - Performing a software update using a Bluetooth 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.
- ✓ **The Bluetooth function of the scan tool is physically switched off <see pictures below>.**



VAS 6150 & VAS 6150A
(Front panel behind handle)



VAS 6150B
(Right side behind WIRELESS door)



VAS 6150C/D
(Left side behind SC/EX door)



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!

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.
- This procedure must be read in its entirety prior to performing the repair.
- Due to variations in vehicle equipment and options, the steps/illustrations in this work procedure may not identically match all affected vehicles.

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.

- Open the hood.
- Open the battery cover.
- Attach the GRX3000VAS Tester/Charger (or equivalent) to the vehicle battery.
- Switch the ignition on.
- Apply the parking brake.
- Switch off all consumers (radio, headlights, etc.).
- Turn the hazard flashers on.
- Connect the VAS6150D Diagnostic Tester (or equivalent) to the vehicle.
- Start the ODIS program.

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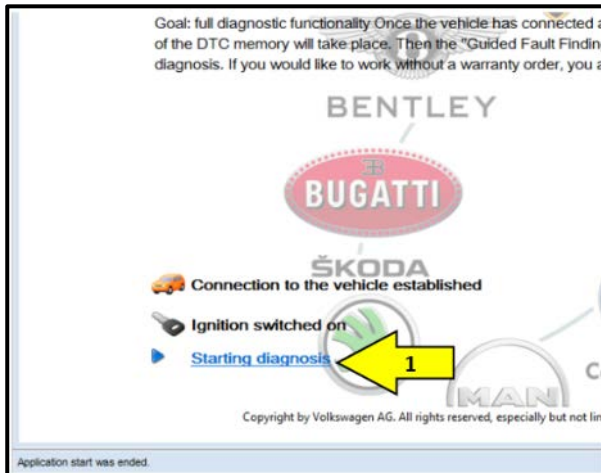


- Confirm that scan tool is communicating with the diagnostic head by USB <Green Arrow>.
- If the Bluetooth symbol is shown <Red Arrow> then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.
- Upon ODIS startup, verify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

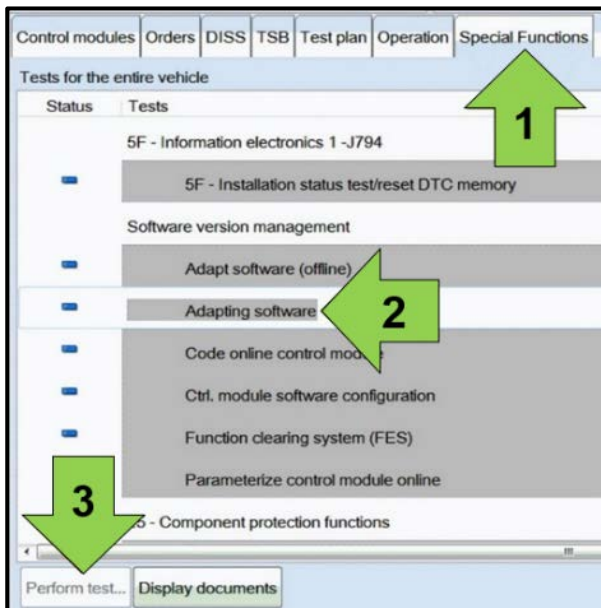
NOTE

Using Bluetooth for this action is PROHIBITED!

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

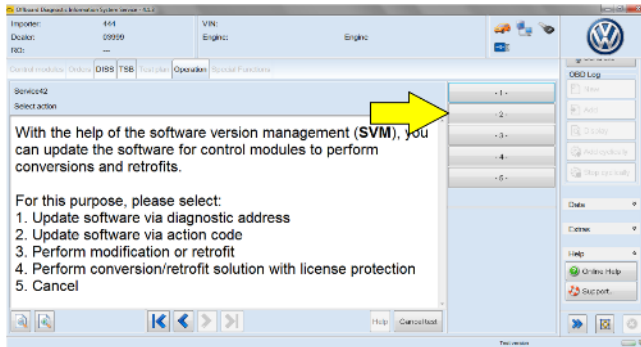


- Select “Starting Diagnosis” <1> and perform a GFF scan of the vehicle.



- Select “Special functions” <arrow 1>, then “Adapting software” <arrow 2>, then select “Perform test” <arrow 3>.

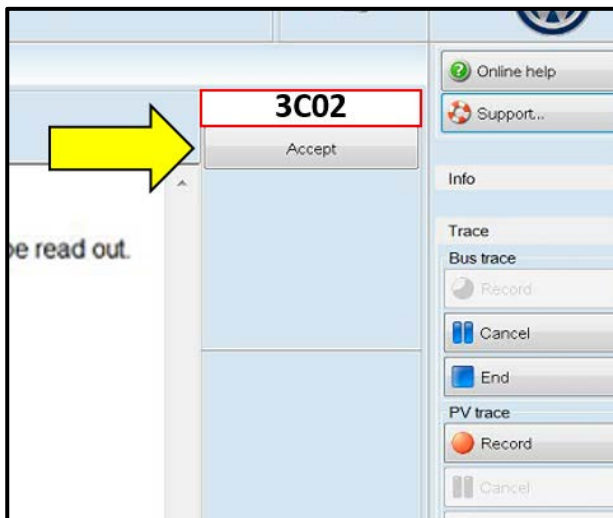
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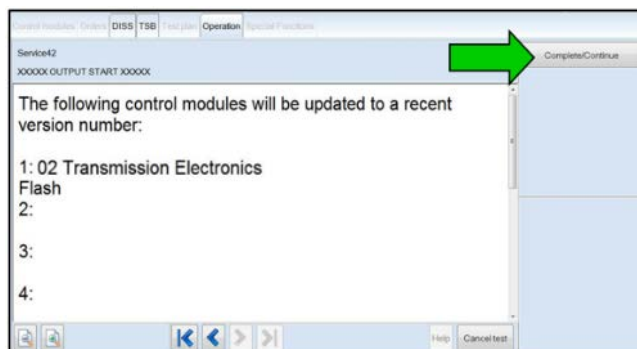
- Select the appropriate option to “Update software via action code” <arrow>.

TIP

Read this screen carefully. The option to update software via action code is **NOT** always selection #2 on this screen.

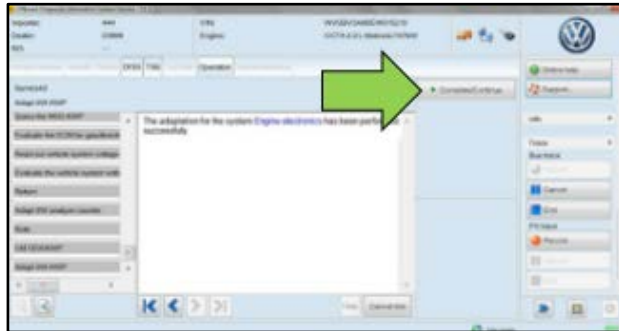


- Enter “3C02” <as shown>.
- Select “Accept” <arrow>.

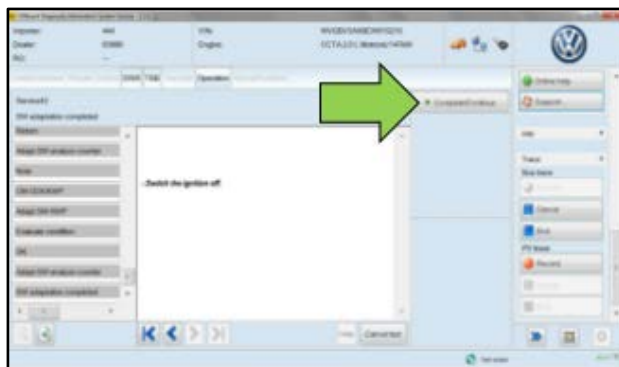


- Select “Complete/Continue” <arrow> to begin the software update process.
 - If the response indicates that the control modules are current **Flash Process is Complete, proceed to Section C.**
 - If the response indicates new software versions are available <as shown>, Select “Complete/Continue” and follow the on-screen prompts to **complete the test plan.**

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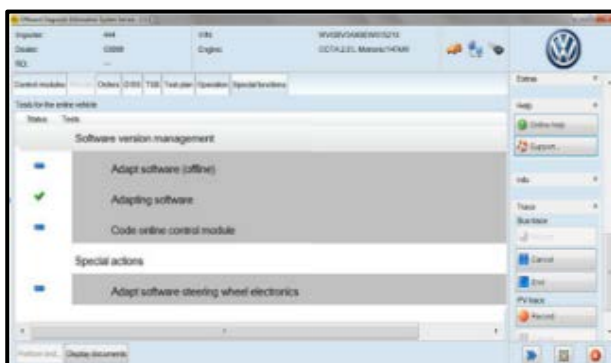
- When the SVM update is complete a confirmation message is displayed <as shown>.
- Select “Complete/Continue” <arrow>.



- Switch the ignition off, then select “Complete/Continue” <arrow>.

TIP

On Kessy vehicles, it may take more than one press of the Start/Stop button to turn the ignition off. If this occurs, it's possible that the ignition will also not turn back on. If the ignition will not turn on, unplug the diagnostic head from the vehicle, turn the ignition on, plug the diagnostic head back into the vehicle and continue with the test plan.



- The green check mark indicates the test plan was successfully carried out.

Proceed to Section C.

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Section C – Reset TCM Learned Values

NOTE

The TCM basic settings must be performed after the TCM software update. The test plan includes the following:

- Resetting TCM learned values.
- Adapting accelerator pedal.
- Adapting gear selector position.
- Adaptation test drive*.

*For this procedure, the adaptation test drive will NOT be performed. After resetting the TCM learned values, the TCM will self-adapt during normal driving.

Offboard Diagnostic Information System Service - 4.1.3

Importer: 444 VIN: Engine: Engine
Dealer: 03999
RO: ---

Control modules ← 1

Address	Incident	Name
0001	0	Engine Control Module 1 (0001 - Engine electronics 3.6l FSI) (03H906026J 4748 VR6 3.6l FSI)
0002	0	Transmission Control Module (0002 - Automatic transmission 8-speed 09P) (09G927158A 3210 Aisin 6DR 1)
0003	0	Brakes 1 (0003 - Brake Electronics) (5Q0614517CF 0513 ESC
0006	0	Seat Adjuster (0006 - Passenger Side (Not yet identified) (- - - - -)
0008	1	Air Conditioning (0008 - A/C/heating electronics (Climatronic)) (3CN907044F 1802 Climatronic
0009	0	Central Electrical System (0009 - Vehicle Electrical Control Module System) (5Q0937085BG 0236 BC
0013	1	Adaptive Cruise Control (0013 - Distance Control (ACC)) (5Q0907572H 0000 ACC
0015	0	Airbag (0015 - Airbag) (3Q0959655BC 0503 Airbag VW21)
0016	0	Steering Column Electronics (0016 - Steering column electronics) (5Q0953507JF 0140 Lenk

↑ 2

→ 3

→ 4

Networking diagram Control Module List Components List DTC memory list Equipment list

Diagnosis Display... Sorting...

Operating modes
Diagnosis
OBD
Flash
Measurement
Info
Admin
Log
Data
Extras
Help

- Select Control Module Tab <1>.
- Right click on “0002 – Transmission Control Module” <2>.
- Click on “Identify control module” <3>.
- After the TCM is re-identified, right click on “0002 – Transmission Control Module” again and click on “Guided Functions <4>.

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Offboard Diagnostic Information System Service - 4.1.3

Importer: 444 VIN: Engine: Engine
Dealer: 03999
RO: ---

Control modules Orders DISS TSB Test plan Operation Special Functions

Control module list (32 entries)

Address	Incident	Name
0001	0	Engine Control Module 1 (0001 - Engine elect
0002	0	Transmission Control Module (0002 - Automal
0003	0	Brakes 1 (0003 - Brake
0006	0	Seat Adjustment Passenger Side (N
0008	1	Air Conditioning (0008 - A/C/heating electronic
0009	0	Central Electrics (0009 - Vehide Electrical Co
0013	1	Adaptive Cruise Control (0013 - Distance Control (ACC)) (5Q0907572H 0620 ACC BOSCH MQB)
0015	0	Airbag (0015 - Airbag) (3Q0959655BC 0503 Airbag VW21)
0016	0	Steering Column Electronics (0016 - Steering column electronics) (5Q0953507JF 0140 Lenks. Modul)

Guided Functions

Transmission Control Module

- 0002 - Check ATF level
- 0002 - Check/erase event memory
- 0002 - Code control module
- 0002 - Identification Services
- 0002 - J217 - Basic setting
- 0002 - Read Measuring Values

Perform Cancel

Networking diagram Control Module List Components List DTC memory list Equipment list

Diagnosis Display... Sorting...

Control module identification was ended.

- Select "0002- J217 – Basic setting" <arrow> and follow the on screen prompts.

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Importer: 444
Dealer: 03999
RO: ---

VIN:
Engine: Engine

Control modules | Orders | DISS | TSB | Test plan | **Operation** | Special Functions

J217 - Basic setting
Test requirements

Test requirements:

- Parking brake engaged
- Ignition ON
- Selector lever in position P
- Transmission not in emergency mode
- No DTC memory entry present
- ATF testing temperature 65°C

ATF temperature: 35°C

Are the test requirements met?

Yes
No

Help Cancel test

Test version

- If the ATF temperature is below 65°C, select **Yes** and you will be prompted to bring the ATF to above 65°C.
- If the ATF temperature is above 65°C, select **Yes** and continue with the test plan.

TIP

The “Resetting of TCM learned values” portion of the test plan cannot be performed with the engine running.

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- After performing the “Resetting of TCM learned values” portion, the accelerator pedal and selector lever will be adapted.
- Select Complete/Continue <arrow> and follow the on screen instructions.

- When prompted to perform the adaptation drive with the diagnostic tester, select “No” <arrow>.
- The screens that follow will provide instructions for the adaptation drive. However, the adaptation drive will not be performed during this repair.

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- Select Complete/Continue <arrow>.

- Select Complete/Continue <arrow>.

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Importer: 444
Dealer: 03999
RO: ---

VIN: Engine
Engine: Engine

Control modules | Orders | DISS | TSB | Test plan | **Operation** | Special Functions

J217 - Basic setting
Prepare adaptation drive

Complete/Continue

NOTE
The transmission should not shift harsh at standstill or while driving.

- After performing the adaptation drive, check the shifting behavior of the transmission at standstill.

- Press the ► Complete/Continue button to continue with the program.

Help Cancel test

Test version

- Select Complete/Continue <arrow>.

Importer: 444
Dealer: 03999
RO: ---

VIN: Engine
Engine: Engine

Control modules | Orders | DISS | TSB | Test plan | **Operation** | Special Functions

J217 - Basic setting
Prepare adaptation drive

Complete/Continue

- Repeat the adaptation drive if the switching behavior of the transmission does not proceed correctly after the adaptation drive.

- Press the ► Complete/Continue button to continue with the program.

Help Cancel test

Test version

- Select Complete/Continue <arrow>.
- The TCM Basic Setting test plan should now be complete.

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- Continue with the on-screen prompts and return to the Control module list screen.
- Exit ODIS by clicking on the button in the bottom left corner <arrow>.
- When prompted, send the Diagnostic log online to GFF Paperless.

TIP

If the Diagnostic log cannot be sent to GFF Paperless, record the diagnostic protocol time units, print out the log and attach to the repair order or save the log to a flash drive.

- Remove the battery charger.

Work is complete.

NOTE

After resetting the TCM learned values, the TCM will self-adapt during normal driving. During this time, the customer may experience a harsh upshift or downshift. The amount of time for the TCM to fully adapt will vary based on individual driving situations.

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Warranty

Claim Entry Procedure	Enter your claim immediately upon completion of the UPDATE. Claims will only be paid for vehicles that show this UPDATE code open in Elsa on the day of repair. To help ensure prompt and proper payment, attach the screen print to the repair order.
Claim Help	<u>U.S. dealers</u> - Contact the Warranty Helpline toll-free at 1-866-306-8447 for help with claim entry. <u>Canadian dealers</u> - Contact your Warranty Campaign Specialist. For contact information, please proceed to "ServiceNet – Warranty/Contact Information/Campaigns – "Warranty Campaign Specialist."
Required Customer Notification	Ensure customers are aware of all work performed on the vehicle by recording the information on the repair order. Attach a copy of the <i>Vehicle UPDATE Fact Sheet</i> to the customer's copy of the repair order and take the time to explain this UPDATE to your customer.

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Claim Entry Instructions

After UPDATE 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 customer refused campaign work or vehicle is out of the specified warranty parameter for this Update:

- ✓ U.S. dealers: Submit request via WISE under the *Campaigns/Update/Recall Closure* option.
- ✓ Canada dealers: Fax repair order to Warranty at (905) 428-4811.

Service Number	37K7
Damage Code	0099
Parts Vendor Code	WWO
Claim Type	Sold vehicle: 7 10 Unsold vehicle: 7 90
Causal Indicator	Mark labor as causal
Vehicle Wash/Loaner	Do not claim wash/loaner under this action
Criteria I.D.	01
	<p>Connect Battery Charger Labor operation: 2706 89 50 10 T.U.</p> <p>-AND-</p> <p>Update TCM software and perform TCM basic settings Labor operation: 3735 25 99 Time stated on diagnostic protocol (max 80 TU)</p>

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Required Tools

Tool Description	Tool No:
Always ensure the ODIS Service application and brand diagnostic data versions are up-to-date prior to performing SVM.	VAS Diagnostic Device
Midtronics Battery Tester/Charger	InCharge 940 (INC-940) or GRX3000VAS

Additional Information

All part and service references provided in this Technical Bulletin are subject to change and/or removal. Always check Elsa for the most current version of this document.

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UPDATE FACT SHEET – UPDATE Code 37K7

Dear Volkswagen Customer,

Today we performed UPDATE code 37K7 on your vehicle. This was a software update to the Transmission Control Module software, and was performed for you free of charge.

After this update, the TCM will self-adapt during normal driving. During this time, you may experience a harsh upshift or downshift. The amount of time for the TCM to fully adapt will vary based on individual driving situations.

Volkswagen periodically makes updates like this available in order to ensure our customer's continued satisfaction with the quality of their Volkswagen vehicles.

We at Volkswagen are committed to providing our customers with reliable, quality products that are a pleasure to drive and own. If you should ever have any questions or vehicle concerns, your authorized Volkswagen dealer will be pleased to assist you.

Thank you for driving a Volkswagen!