



Emissions Service Action

Code: 24DR

Revision

Subject	Engine Control Module (ECM) Software
Release Date	March 01, 2019
REVISION SUMMARY	Updated Work Procedure: Added note to perform Safety Recall 23R1 before performing the 24DR. (page 9).
Affected Vehicles	U.S.A.: 2013-2017 MY Beetle Convertible, Beetle, Jetta and 2014-2017 MY Passat CANADA: 2013-2017 MY Beetle & Jetta and 2014-2017 MY Beetle Convertible & Passat <i>Check Campaigns/Actions screen in Elsa on the day of repair to verify that a VIN qualifies for repair under this action. Elsa is the <u>only</u> valid campaign inquiry & verification source.</i> <ul style="list-style-type: none">✓ Campaign status must show "open."✓ If Elsa shows other open action(s), inform your customer so that the work can also be completed at the same time the vehicle is in the workshop for this campaign.
Problem Description	Current ECM software may cause unintended system faults. If present, these faults could lead to illumination of the malfunction indicator light (MIL). If the MIL is on, the vehicle will not pass an emissions inspection.
Corrective Action	Update ECM software.
Parts Information	Software update only; no parts needed.
Code Visibility	On or about September 14, 2018, affected vehicles were listed on the Inventory Vehicle Open Campaign Action report under My Dealership Reports (found on www.vwclub.com & OMD Web). A list will not be posted for dealers who do not have any affected vehicles. On or about September 14, 2018, this campaign code showed open on affected vehicles in Elsa. On or about September 14, 2018, affected vehicles were identified with this campaign code in the VIN Lookup tool at www.vw.com .
Owner Notification	Owner notification took place in September 2018. Owner letter examples are included in this bulletin for your reference.
Emissions Campaigns Requirements (CALIFORNIA ONLY)	The California Air Resources Board and the Department of Motor Vehicles (DMV) require emissions-related campaigns to be completed prior to vehicle registration renewal. When campaign work is done you must provide the owner with a signed "Vehicle Emission Recall – Proof of Correction" certificate (RC EMISCAVWAWU). Order certificates online via the Compliance Label Ordering portal at www.vwclub.com .
Additional Information	Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions. Dealers must ensure that every affected inventory vehicle has this campaign completed <u>before delivery to consumers</u> . Fill out and affix Campaign Completion Label (CAMP 010 000) after work is complete. Labels can be ordered at no cost via the Compliance Label Ordering portal at www.vwclub.com .

Customer Letter Example (United States)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <VIN>

**Subject: Emissions Service Action 24DR - Engine Control Module (ECM) Software
Certain 2013-2017 Model Year Volkswagen Beetle Convertible, Beetle, Jetta and
Certain 2014-2017 Model Year Volkswagen Passat**

Dear Volkswagen Owner,

In cooperation with the United States Environmental Protection Agency and the California Air Resources Board, we are informing you of our decision to conduct an emissions service action on certain 2013-2017 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? Current Engine Control Module (ECM) software may cause unintended system faults. If present, these faults could lead to illumination of the malfunction indicator light (MIL). If the MIL is on, the vehicle will not pass an emissions inspection.

What will we do? Your authorized Volkswagen dealer will update the ECM software. This work will take less than an hour to complete and will be performed for you free of charge. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

IMPORTANT!

Please note that if the ECM in your vehicle has been “chipped,” “tuned,” or otherwise modified from original factory specifications with aftermarket components and/or software, work needed to repair, replace, or return the ECM to original factory specifications is NOT covered under this action.

What should you do? Please contact your authorized Volkswagen dealer as soon as possible to schedule this service. To set up an appointment online, please visit www.vw.com/find-a-dealer.

Lease vehicles and address changes If you are the lessor and registered owner of the vehicle identified in this action, please forward this letter immediately via first-class mail to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

Important information for California Vehicle Owners – California Regulations California regulations require that this campaign be completed prior to the time you renew your vehicle registration. Therefore, **please make sure that this campaign is completed prior to the renewal of your vehicle registration**, and that you furnish proof of completion to the Department of Motor Vehicles (DMV) in the form of a copy of the dealer’s repair order, including a signed “Proof of Correction” certificate. You obtain this from your dealer after the campaign has been completed. Please retain the signed “Proof of Correction Certificate” with your vehicle records. DO NOT MAIL THIS FORM to the DMV, unless requested.

Can we assist you further? If your authorized Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, or if you should have any questions about this communication, please reach out to us using your preferred method of communication at www.vw.com/contact or by calling us at 800-893-5298.

Checking your vehicle for open Recalls and Service Campaigns To check your vehicle’s eligibility for repair under this or any other recall/service campaign, please visit www.vw.com/owners/recalls and enter your Vehicle Identification Number (VIN) into the Recall/Service Campaign Lookup tool.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your vehicle continues to meet and exceed your expectations.

Sincerely,

Volkswagen Customer Protection

Customer Letter Example (CANADA)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <VIN>

**Subject: Emissions Service Action 24DR - Engine Control Module (ECM) Software
Certain 2013-2017 Model Year Volkswagen Beetle & Jetta and
Certain 2014-2017 Model Year Volkswagen Beetle Convertible & Passat**

Dear Volkswagen Owner,

This notice is sent to you in accordance with the requirements of the *Canadian Environmental Protection Act, 1999*. Volkswagen has determined that a defect, which relates to a prescribed emission standard, exists in certain 2013-2017 model year Volkswagen vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue? Current Engine Control Module (ECM) software may cause unintended system faults. If present, these faults could lead to illumination of the malfunction indicator light (MIL). If the MIL is on, the vehicle will not pass an emissions inspection. To mitigate any potential impact to emissions, VW is proactively releasing an ECM Software update.

What will we do? Your authorized Volkswagen dealer will update the ECM software. This work will take less than an hour to complete and will be performed for you free of charge. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

IMPORTANT!

Please note that if the ECM in your vehicle has been “chipped,” “tuned,” or otherwise modified from original factory specifications with aftermarket components and/or software, work needed to repair, replace, or return the ECM to original factory specifications is NOT covered under this action.

What should you do? In order to limit any possible inconvenience, please contact your authorized Volkswagen dealer as soon as possible to schedule this service. On or about September 14, 2018 the necessary repair instructions will be available to your authorized Volkswagen dealer.

Lease vehicles and address changes If you are the lessor and registered owner of the vehicle identified in this action, please forward this letter immediately via first-class mail to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

Can we assist you further? If your authorized Volkswagen dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Customer Relations, Monday through Friday from 8AM to 8PM EST by phone at 1-800-822-8987 or via our “Contact Us” page at www.vw.ca.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your vehicle continues to meet and exceed your expectations.

Sincerely,

Volkswagen Customer Protection

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.
- Diagnosis and repair of pre-existing conditions in the vehicle are not covered under this action.
- See Appendix A for issues addressed under this recall.

Required Tools



Battery Tester/Charger
- GRX3000VAS-
(or equivalent)



Diagnostic Tester
-VAS6150X/VAS6160X-
(or equivalent)

Repair Instruction

Section A - Check for Previous Repair

TIP

If Campaign Completion label is present, no further work is required.

Applicable criteria ID(s)	Campaign/Action Status
01 ← 2	Open ← 1

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.

- Confirm the Campaign/Action is open <arrow 1>. If the status is closed, no further work is required.
- Note the Applicable Criteria ID <arrow 2> for use in determining the correct work to be done and corresponding parts associated.

Proceed to Section B.

Section B – Repair Procedure

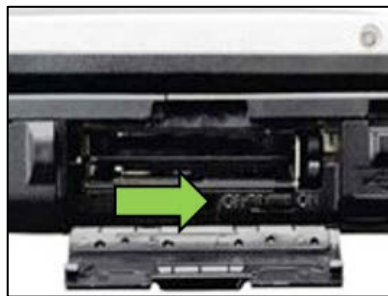
NOTE

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

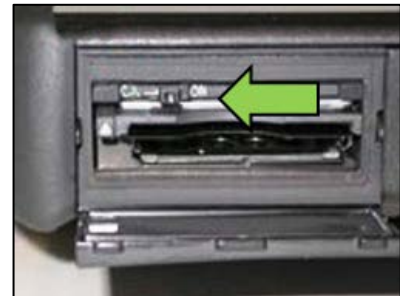
- ✓ **The ODIS software is completely up to date.**
 - Refer to the “Alerts” section on ServiceNet home page for the current ODIS version.
- ✓ **The battery charger is connected to the vehicle battery and remains connected for the duration of the software update.**
 - Battery voltage must remain above 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!

 **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.
- Switch the ignition on.
- Apply the parking brake.
- Switch off all consumers (headlights, heated seats, climate control, etc.).
- Connect the VAS6150X/VAS6160X Diagnostic Tester to the vehicle.
- Start the ODIS program.
- Attach the GRX3000VAS Tester/Charger (or equivalent) to the vehicle battery.

 **NOTE**

Vehicles with Battery Monitoring Control Module -J367- and/or an EFB Battery:

When connecting the charger to the battery, connect the positive cable to the positive terminal of the battery and connect the negative cable to the grounding lug on the chassis. DO NOT connect the ground cable directly to negative terminal of the battery.

- Turn the hazard warning lights on.

 **CAUTION**

The procedure may cancel itself if the hazard warning lights are not switched on. The hazard warning lights prevent the system from switching to bus sleep mode during the update.

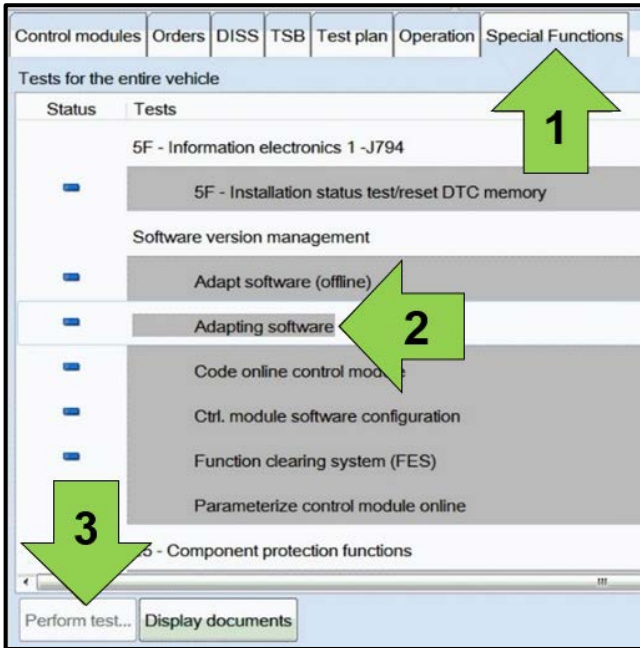


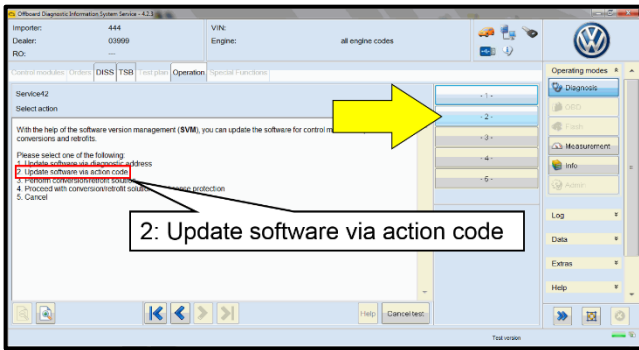
! RISK OF REPEAT REPAIR

If the vehicle is equipped with Driver Assist features, record customer's settings in the event these settings change during the software update.



- 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>.
- Once the GFF scan is complete, select "Special functions" <arrow 1>, then "Adapting software" <arrow 2>, then select "Perform test" <arrow 3>.





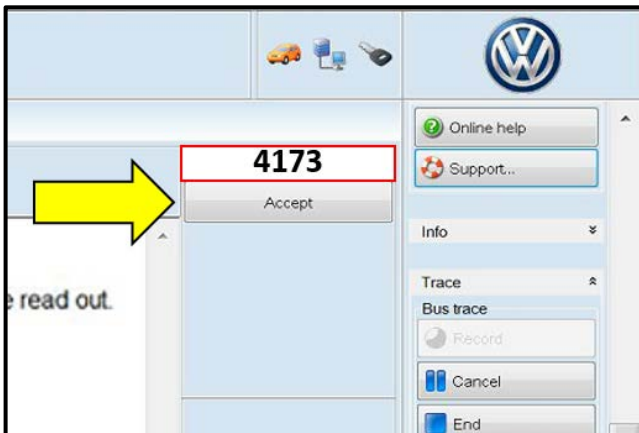
- Select option 2 to “Update software via action code”.



NOTE

STOP! STOP!

If Safety Recall 23R1 is also open in ELSA at the time the 24DR is being performed, the 23R1 must be performed before completing the 24DR.



NOTE

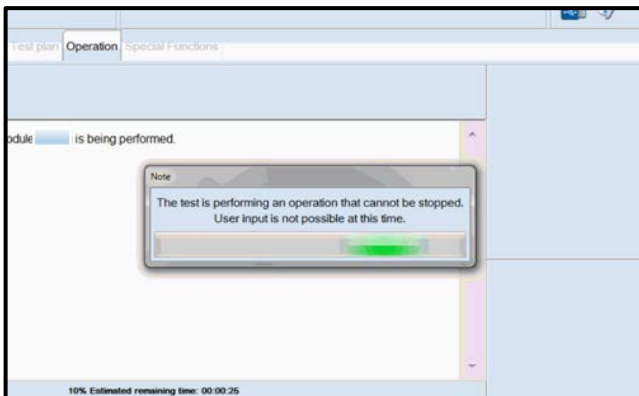
Using Bluetooth for this action is PROHIBITED!

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

- Enter the corrective action code (SVM code) as listed below.

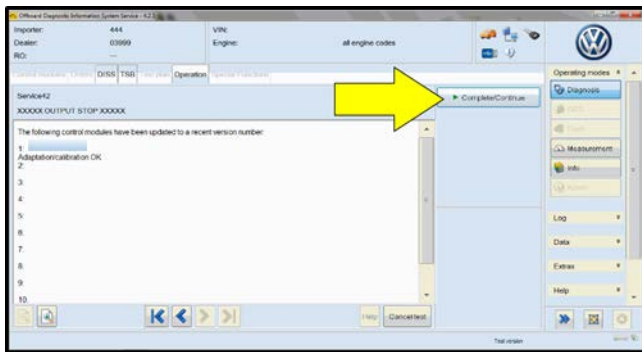
SVM code
4173

- Select “Accept” <arrow> and follow the on screen prompts.
- During the flash, this screen appears when the flash operations are performed:

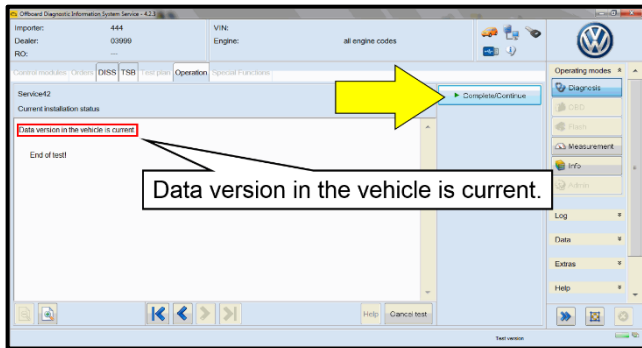


TIP

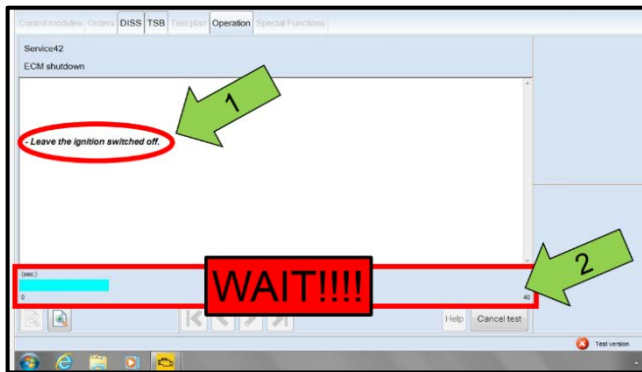
If the software in the vehicle is already current, a message will appear indicating this. If this occurs, complete the ODIS test plan and send the diagnostic protocol online.



- Select Complete/Continue <arrow> after each operation is completed.

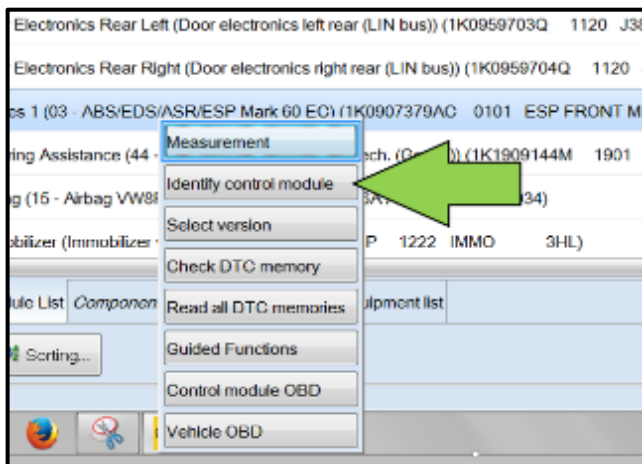


- When the SVM update is complete a confirmation message is displayed <as shown>.
- Select "Complete/Continue" <arrow>.

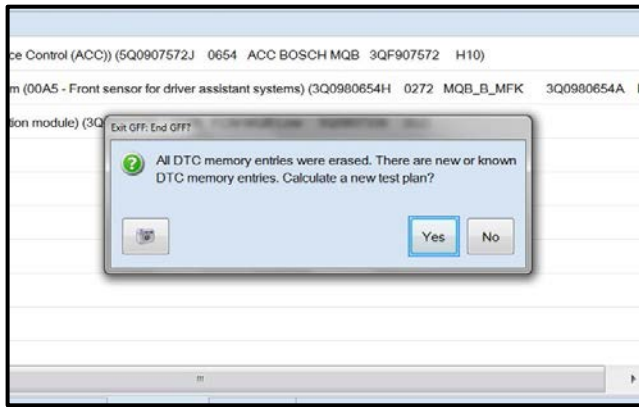


NOTE

- It is **IMPERATIVE** that **ALL** of the ignition cycle on/off delay requests are fulfilled in their entirety during this flash process <arrow 1>.
- Failing to wait for the ignition on/off timing cycle to complete (progress bar and countdown timer <arrow 2>) before cycling the ignition on/off MAY damage a control module.
- Damage to control modules as a result of failing to wait the specified time displayed by the progress bar and countdown timer <arrow 2> are **NOT** covered under this action.



- After the software update is completed and before sending the GFF Log Online:
 - Select the "Control Module" tab.
 - Scroll down and right click on the module that was updated (0001).
 - Select "Identify Control Module" <arrow>.



- Exit GFF and send diagnostic protocol online when prompted.

NOTE

Static communication faults may store in various control modules during the flash. These faults can only be cleared by following one of these steps:

- Drive the vehicle a short distance (around the parking lot, for example).
- After selecting “Yes”, turn the ignition off for 30 seconds, turn it back on and repeat the GFF exit program.
- Clear faults using OBD (an additional key cycle may also be required).

- Release the parking brake.
- Disconnect the VAS tester.
- Switch off and disconnect the battery charger.
- Reinstall the battery cover.
- If vehicle is equipped with Driver Assist features, reset customer’s Driver Assist settings to the previously recorded settings if the settings changed during the software update.

NOTE

After the flash, the throttle valve may lose its adaptation causing faults P0068 and/or P2279. If these faults set immediately after the flash, reset the throttle adaptation using the GFF test plan or by clearing the faults in the ECM using OBD three times in a row while the engine is idling.

Proceed to Section C.

Section C – Campaign Completion Label

- Fill out and affix Campaign Completion Label, part number CAMP 010 000, next to the vehicle emission control information label.

TIP

Ensure Campaign Completion Label does not cover any existing label(s).

- **Proceed to Section D (California only).**

Section D – California Only Requirements

CALIFORNIA ONLY Requirements for Emissions Campaigns Having Customer Notification

The California Air Resources Board and the Department of Motor Vehicles (DMV) require emissions-related campaigns to be completed prior to vehicle registration renewal. **When campaign work is done you must provide the owner with a signed “Vehicle Emission Recall – Proof of Correction” certificate (RC EMIS_CAL VW).** Certificates can be ordered at no cost online via the Compliance Label Ordering portal at www.vwclub.com.

TIP

Ensure owners are aware of the importance of retaining the completed certificate for their records. It should be mailed to the California DMV only upon request.

Appendix A – Topics Addressed

- Improved Lambda control.
- Deactivation of CAN Message (CAN message sent from the ECM to the TCM which the TCM does not need to process).
- Radiator shutter blockage (erroneous blockage faults).

Potential ECM Faults	
DTC	Description
P05A0	Active Grille Air Shutter "A" Stuck On
P05A3	Active Grille Air Shutter "A" Control Circuit Range/Performance

- Knock control faults (erroneous fault detection at idle).

Potential ECM Faults	
DTC	Description
P039B	Cylinder 1 Pressure Too High
P03A5	Cylinder 2 Pressure Too High
P03AF	Cylinder 3 Pressure Too High
P03B9	Cylinder 4 Pressure Too High
P2336	Cylinder 1 Above Knock Threshold
P2337	Cylinder 2 Above Knock Threshold
P2338	Cylinder 3 Above Knock Threshold
P2339	Cylinder 4 Above Knock Threshold

- Improved monitoring of the fuel high pressure system.
- Improved OBD "readiness" monitoring.
- Small RPM fluctuation after engine start.
- Deactivation of two diagnostics for the frozen throttle valve "ice break function".
- Implausible gearshift when the cruise control transgresses the set speed.
- Calibration to avoid undesired gear shifts.
- Oil pressure diagnosis (not checked enough times).
- Vehicles speed limitation (set cruise control speed displayed does not increase correctly).
- Stuck open thermostat not detected.