Emissions Recall Code: 23U4

Revision

Subject

2.0L TDI Engine (GEN 2 – Automatic Transmission)

Emissions Modification – Customer Only (Retail Sold) <u>USA ONLY</u>

Release Date

June 26, 2017

Revision Summary

Updated work instructions.

Repair Applicability

The ONLY Vehicles eligible for repair under this action are:

Customer owned automatic transmission vehicles only

Affected Vehicles

U.S.A. ONLY: 2012-2014 MY Volkswagen Passat 2.0L TDI (Automatic Transmission only)

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.

- ✓ 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

The Environmental Protection Agency and California Air Resources Board have determined that Volkswagen vehicles equipped with a 2.0L 4-cylinder TDI engine do not comply with applicable emissions regulations. The emissions control systems on the vehicles will not control emissions under off-cycle conditions as effectively as during the federal test procedure. The extent of the emissions increase under off-cycle conditions depends upon how the vehicles are driven.

Corrective Action

Install updated emissions control system software, install a supplemental Vehicle Emissions Control Information label and TDI Emissions Modification Completion Label.

At this time, affected new and used vehicles in dealer inventory are not included in this emissions modification release.

If the vehicle has been modified by the customer prior to receiving the emissions modification in a manner that may yield a non-compliant emissions system (for example, removal of a catalyst, installation of parts that impact emissions or emissions- related parts, or modifications to the ECU or computer software of the vehicle), Volkswagen may not be able to perform the emissions modification until the customer corrects such modification.

Code Visibility

On or about June 01, 2017, this campaign code showed open and available for repair on affected vehicles in Elsa.

On or about June 01, 2017, affected vehicles were identified and open for repair with this campaign code in the VIN Lookup tool at www.vw.com.

Owner Notification

Owner notification took place in May 2017.

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 EMISCAVWAU). Order certificates online via the Compliance Label Ordering portal at www.vwhub.com.

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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.

Fill out and affix the appropriate TDI Emissions Modification Proof of Completion label and the appropriate Supplemental Vehicle Emissions Control Information Label after work is complete. Additional shipments will be released based on the volume of completed repairs claimed through SAGA. The parts will not be available for order through the website at this time.

The information in this document is intended for use only by skilled technicians who have the proper tools, equipment and training to correctly and safely maintain your vehicle. These procedures are not intended to be attempted by "do-it-yourselfers," and you should not assume this document applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Volkswagen dealer. ©2017 Volkswagen Group of America, Inc. and Volkswagen Canada. All Rights Reserved.

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Claim Entry Instructions

After campaign 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:

✓ <u>U.S. dealers:</u> Submit request via WISE under the *Campaigns/Update/Recall Closure* option.

Service Number	23U4	
Damage Code	0099	
Parts Vendor Code	wwo	
Claim Type	Sold vehicle: 7 10	
Vehicle Wash/Loaner	Do not claim wash/loaner under this action	
Criteria I.D.	01	
	*Perform software update, install TDI Emissions Modification – Proof of Completion Label and install Supplemental Vehicle Emissions Control Information label. Labor operation: 2360 25 99 90 T.U. *Labels are sent free of charge. They cannot be charged to this campaign. At this time, affected new and used vehicles in dealer inventory are not included in this emissions modification release.	

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At this time, affected new and used vehicles in dealer inventory are not included in this emissions modification release.



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.

Required Parts

Quantity	Part Number	Part Description
1	03L 010 005 H	Supplemental Vehicle Emissions Control Information Label
1	CAMP TDI 2016_2	TDI Emissions Modification – Proof of Completion Label

Labels are sent free of charge. Additional shipments will be released based on the volume of completed repairs claimed through SAGA. The parts will not be available for order through the website at this time.

For any additional inquiries contact <u>labelrequest@vw.com</u>.

Required Tools



- VAS6150X Diagnostic Tester (or equivalent)
- VAS5054X Remote Diagnosis Head (or equivalent)



• GRX3000VAS – Battery Tester/Charger (or equivalent)



- Service Modification Validation Web App
- tdi-inform.track360.com



This web application is compatible with desktops and laptops running the most current versions of FireFox, Chrome, Safari, or Explorer as well as iOS 9+ on iPads and iPhones.



RISK of Non-payment!

Not using the IN-FORM tool to document and validate the modification will stop the processing of payment for your dealership even if the modification has been completed.

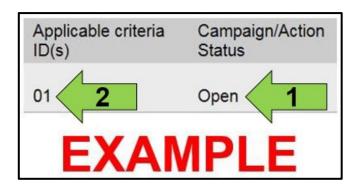
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Emissions Modification Instruction

Section A - Check for Previous Emissions Modification

i TIP

If the TDI Emissions Modification – Proof of Partial Completion Label (CAMP TDI 2016_2) is present, no further work is required.



• Enter the VIN in Elsa and proceed to the "Campaign/Action" screen.



On the date of repair, print this screen and keep a copy with the repair order.

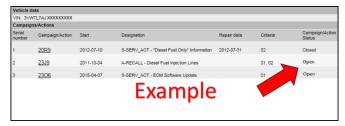
- Confirm the Campaign/Action is open <arrow 1>.
 If the status is closed, no further work is required.
- Note the Applicable Criteria ID <arrow 2> for use in determining the correct work to be done and corresponding parts associated.





RISK of Non-payment!

Not using the IN-FORM tool to document and validate the modification will stop the processing of payment for your dealership even if the modification has been completed.

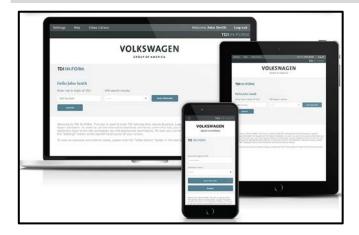


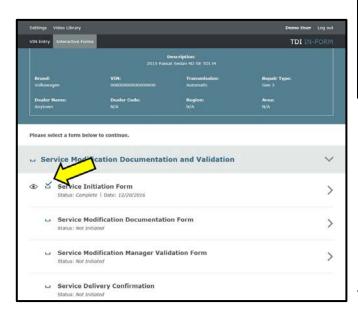
- Check for other Open campaign actions <red arrow above>.
- Other Open campaign actions must be completed prior to releasing the vehicle to the customer.

Proceed to Section B.

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Section B - Check for Service Initiation





• NOTE

RISK of Non-payment!

Not using the IN-FORM tool to document and validate the modification will stop the processing of payment for your dealership even if the modification has been completed. Look for the image below to indicate labor operations, parts, or labeling that requires IN-FORM tool image documentation.



• NOTE

RISK of Non-payment!

Ensure that the "check mark" <arrow> is present prior to beginning any work.

- Ensure the Service Initiation Form has a "check mark" <arrow>.
 - If the Service Initiation Form does not have a "check mark" <arrow>, immediately contact your Service Consultant to complete the initiation.
 - If "check mark" <arrow> is present, initiate
 Service Modification Documentation
 Form and continue work.

DO NOT proceed with any work unless you can initiate the Service Modification Documentation Form.

Proceed to Section C

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Section C - Check for Pre-existing MIL on conditions and Vehicle Modifications



- Check for illumination of the MIL <arrow>.
 - If MIL is illuminated, STOP, obtain GFF diagnostic log, create a VTA ticket and contact the Volkswagen Technicians Helpline.
 - If MIL is not illuminated, continue work procedure.

i TIP

- VTA cases regarding MIL ON conditions require a GFF diagnostic log to be uploaded at the time of first contact.
- The purpose for this step is to document vehicle condition prior to initiation of this action and does not authorize the repair of any pre-existing conditions.
- Check for vehicle modifications from original equipment.
 - If vehicle modifications from original equipment related to emissions components <u>are</u> found, STOP, create a VTA ticket and contact the Volkswagen Technicians Helpline.
 - If vehicle modifications from original equipment related to emissions components are <u>not</u> found, continue work procedure.

Proceed to Section D

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Section D - Software Update Procedure

U 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 the Bluetooth VAS 5054A transmitter head, it is connected to the tester with a USB cable.

! 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.

- 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)



(Right side behind WIRELESS door)



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

A 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!

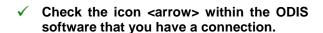
i TIP

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.

Things to check before starting Software Version Management (SVM):

√ Verify your network connection <arrow>
either thru LAN or WIFI by checking the
connection icon (lower right of the home
screen).

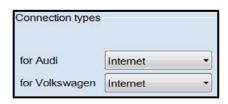


✓ Within the Connection Tab, verify that the Connection type(s) display "Internet" <as shown>.

✓ Start a connections test <arrow> and verify that all connections pass.

















- 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 the headlights off.
- Connect the VAS6150X Diagnostic Tester (or equivalent) to the vehicle.
- Start the ODIS program.





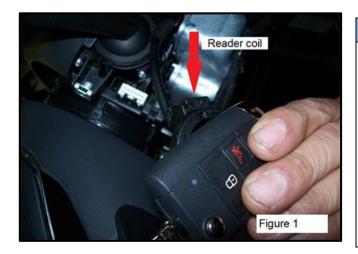
All TDI flashes <u>MUST</u> be completed during a single, standalone ODIS Diagnostic Session. You <u>MUST</u> fully complete this campaign and send all GFF Paperless logs before beginning any other campaigns or operations. You <u>MUST</u> also conclude any other campaigns or operations that have been started and end the corresponding diagnostic session and send all GFF Paperless logs before beginning this operation. Failure to independently separate the ODIS diagnostic session for this campaign will cause problems updating the FAZIT server in Germany and will delay if not negate the payment of the emissions modification.

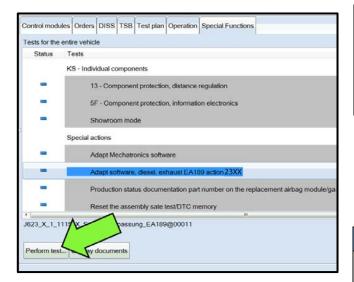
IMPORTANT!

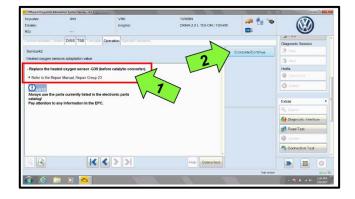
If there are any ODIS "Hot-Fix" patches installed, they <u>MUST</u> be removed from the scan tool before beginning this operation. ODIS "Hot-Fix" patches may affect the flash process.

- 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>.

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! NOTE

KESSY Vehicles!

It is **REQUIRED** to remove the reader coil cap and insert the key into the reader coil (if applicable), or place the key in the closest proximity possible to the reader coil throughout the flash process. If loss of communication between the reader coil and the key occurs during the flash, it may damage a control module. If the vehicle does not have a reader coil that the key can be placed into, you may secure the key in close proximity to the coil reader using a residue-free adhesive or tape, an elastic cloth or stretch bandage, or other improvised retaining device.

U NOTE

RISK of Scan Tool Damage!

Do not leave the scan tool on the windshield during the flash process, as it is possible that the windshield wipers may cycle.

- Once the GFF scan is complete, select "Special functions".
- Select the test plan "Adapt software, diesel, exhaust EA189 action 23XX" <as shown>.
- Select "Perform test" <arrow>.

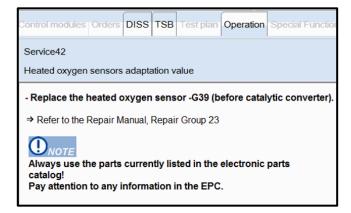
. NOTE

RISK of Improper Repair!

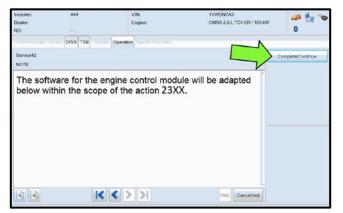
- DO NOT SELECT the normal test plan for "Adapting Software".
- ONLY SELECT the test plan "Adapt software, diesel, exhaust EA189 action 23XX" to perform this repair.
- After selecting "Perform test..." in the above step, the test plan will automatically run a selfcheck routine on the Heated Oxygen Sensor -G39-. Upon completion of this self-check, you may or may not receive a message indicating the condition of the Heated O2 Sensor -G39-.
- If you receive the message "Replace the heated oxygen sensor -G39- (before catalytic converter), Refer to the Repair Manual, Repair Group 23" <1> after the self-check routine completes, refer to campaign code 24CX upon completion of this action for further repair and claiming instructions.
 - There is NO action required at this time in regards to this campaign. This message and further repair instructions will be addressed in detail during the 24CX campaign.

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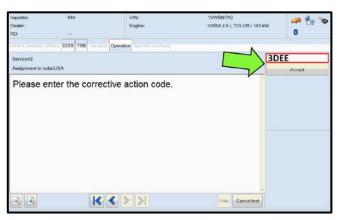
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 If received, select "Complete/Continue" to close this message window and proceed with the flash operation.



- If you did not receive the message indicated in the above step, the flash operation will continue without interuption.
 - NOTE: You will receive NO indication that the Heated Oxygen Sensor -G39-passes the automated self-check. If no message is received, the screen to the left will populate, and the Heated Oxygen Sensor -G39- has passed the self check.
- Select "Complete/Continue" <arrow> to proceed with the flash operation.

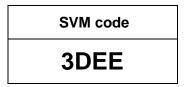




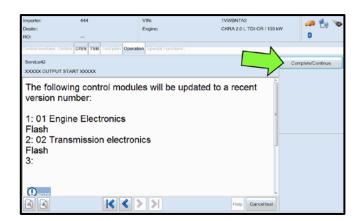
Using Bluetooth for this action is PROHIBITED!

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:

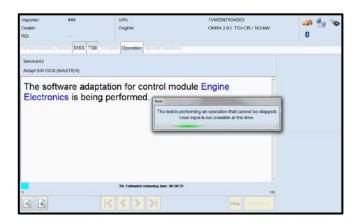


- Select "Accept" <arrow>.
- Select "Complete/Continue" <arrow> to begin the software update process.



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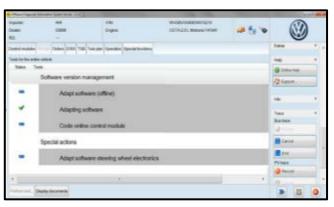
 Observe flash process and follow any on-screen prompts to complete the test plan.



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



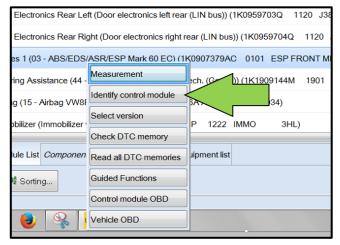
• Switch the ignition off, then select "Complete/Continue" <arrow>.

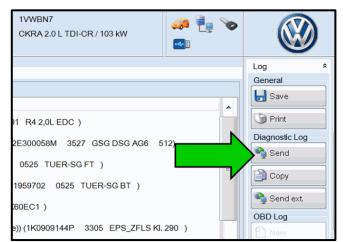


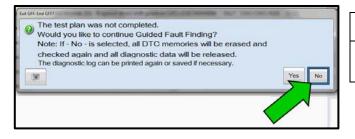
• The green check mark indicates the test plan was successfully carried out.

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U NOTE

In the event of a Flash Malfunction!

In the event of a flash error or malfunction, **STOP**. **DO NOT** exit the ODIS session, disconnect the scan tool, attempt the flash again, or continue further in the test plan.

Create a VTA ticket and allow the VW Technicians Helpline to provide direction with flash failures.

- After the software update is completed and before sending the GFF Log Online:
 - Select the "Control Module" tab.
 - Scroll down and right click on Address Word 0001/ Engine Control Module.
 - Select "Identify Control Module" <arrow>.

 At the end of the diagnostic session, Select "Send" <arrow> and follow the prompt for sending the log on-line.

U NOTE

RISK of Non-payment!

- Diagnosis logs must be sent on-line after the flash process to be considered for reimbursement.
- Verify that no other Campaigns or operations are performed during this ODIS diagnostic session before sending the log, and verify that the Engine Control Module has been reidentified.



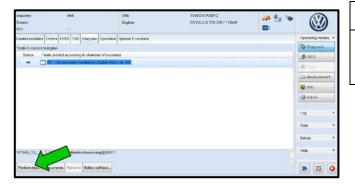
Technicians may find it helpful to also store the log on a USB stick for back-up.



When exiting GFF, it is important to select "No" <arrow>.

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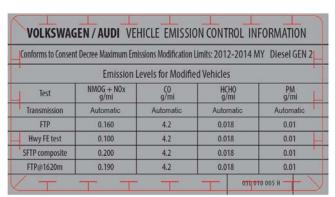


It is possible after the flash that the TPMS light may be illuminated. Follow test plan "03 – Tire pressure monitoring display" <as shown>.

- If TPMS light illuminates, follow test plan "03 Tire pressure monitoring display" by selecting "Perform test" <arrow>.
- End the diagnostic session fully, exit the scan tool, and disconnect the VAS tester.
- Switch off and disconnect the battery charger.
- · Reinstall the battery cover.
- Release the parking brake.
- Perform test drive.

Proceed to Section E

Section E – Supplemental Vehicle Emissions Control Information Label



03L 010 005 H



Install Supplemental Vehicle Emissions Control Information Label



- The surface where the label is to be installed must be clean, dry, and free from oil residue prior to installing the label.
- Label must NOT cover any existing label(s).
- Label must be installed in location shown.
- Photo documentation of label installed is required.
- Open the hood.
- Clean the surface where the label is to be installed <circle>.
- Install the supplemental Vehicle Emissions Control Information label, 03L 010 005 H, in the location shown <circle>.

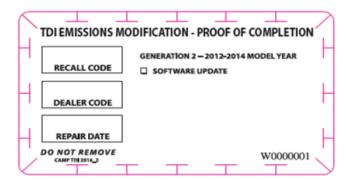
Proceed to Section F



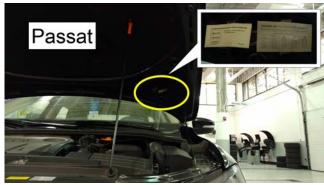
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Section F – TDI Emissions Modification – Proof of Completion Label



CAMP TDI 2016_2





Install TDI Emissions Modification – Proof of Completion Label



- The surface where the label is to be installed must be clean, dry, and free from oil residue prior to installing the label.
- Label must NOT cover any existing label(s).
- Photo documentation of label installed is required.
- Clean the surface next to the Vehicle Emission Control Information Label where the TDI Emissions Modification – Proof of Completion Label is to be installed.
- Fill out and install the TDI Emissions Modification

 Proof of Completion Label, part number CAMP
 TDI 2016_2.

• NOTE

Place the label next to the Vehicle Emission Control Information Label.

- Apply clear overlay (provided).
- · Close the hood.

Proceed to Section G (California only).

Proceed to Section H (All States except California).

Section G - 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.vwhub.com.



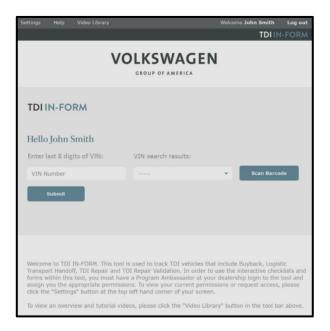
Ensure owners are aware of the importance of retaining the completed certificate for their records. It should be mailed to the California DMV <u>only upon request.</u>

Proceed to Section H

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Section H - Service Modification Documentation Requirements





Job Roles Summary:

- Service Consultant Initiates validation tool.
- Service Technician Completes service modification requirements.
- Manager Validates the modification was properly completed.
- Dealer Representative/Cashier Prints receipt, fuel economy label and delivers to customer.
- Warranty Administrator Enters claim into the SAGA system.



To access the interactive forms go to the TDI Settlement Program microsite on vwhub.com. Then Select the "TDI IN-FORM" Button from the lower left side of the microsite navigation.

- Enter the "TDI IN-FORM" tool <arrow>
- Enter the VIN for the vehicle that requires documentation.

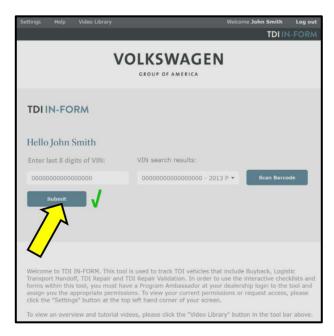


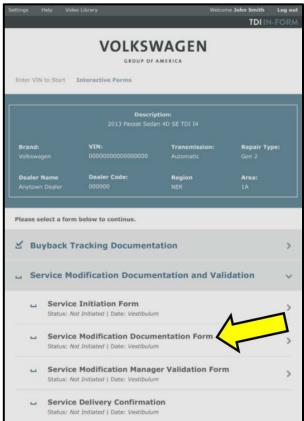
The VIN can be manually typed in or using an iPad or iPhone running i0S 9+, the camera can be used to scan the VIN Barcode.

Please note ambient lighting, camera quality, etc. may impact the effectiveness of the VIN scanning feature.

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$(oldsymbol{i})$ TIP

After the VIN has been entered, the system will automatically validate that it is a TDI VIN. This will be indicated by a green check mark that will appear next to the VIN.

 Validate the VIN is correct for the vehicle, then click the "Submit" button <arrow>.

- Select "Service Modification Documentation Form" <arrow>.
- Follow the on-screen prompts completely.



RISK of Non-payment!

Not using the IN-FORM tool to document and validate the modification will stop the processing of payment for your dealership even if the modification has been completed.



Upon completion of the Service Modification Documentation Form, the Manager must validate the repair in the IN-FORM tool.

All WORK IS COMPLETE for this Repair.

Refer to ELSA and complete the 24CX Campaign if applicable and open.



U NOTE

The IN-FORM Tool currently requires a photograph of the newly installed Snow Flap. The repair and claiming instructions can be found in the **24CX Campaign** Recall Circular. At this time, refer to the 24CX Campaign and complete this operation in order to fulfil the requirements of the IN-FORM Tool operation.

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