### **Technical Service Bulletin**

## **24iR UPDATE**

## Software Update – (NVLW) REVISION



Applicable Vehicles					
Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count	
USA	2022	2022	JETTA	18,729	
USA	2022	2022	TAOS	77,335	
CAN	2022	2022	JETTA	3,650	
CAN	2022	2022	TAOS	12,268	

Revision History				
Revision	Date	Purpose		
1	November 10, 2022	Original publication		
2	March 14, 2023	Additional Taos vehicles added under criteria 02		

## **Condition/Technical Background**

This Update has been released proactively to prevent certain DTCs stored in the ECM, and includes additional improvements to vehicle diagnostics and drivability.

Criteria	Technical Background					
	This update has been proactively released to prevent the following DTCs that may be stored in ECM Fault Memory:					
	P2421 - EVAP emission system evaporative valve stuck open					
	P013E - Oxygen sensor delay response					
	P2025 - EVAP fuel vapor temperature sensor performance					
	P0169 - Incorrect fuel composition					
	P30C0 - Fuel Quality poor					
	P0606 (with symptom code 32903) - ECM/PCM Processor					
01 or 02	P0606 (with symptom code 43736) - ECM/PCM Processor					
010102	P0606 (with symptom code 43781) - ECM/PCM Processor					
	P060C (with symptom code 30935) - ECU performance					
	P290C - Crankcase Oil Separator Underspeed					
	U01C3 - Lost Communication With Crankcase Oil Separator					
	P0196 Engine Oil Temperature Sensor Circuit range/performance					
	P2D10 (With P0196 also present) Engine Pre-Ignition Above Threshold – Forced Limited Power					
	P0148 Fuel Delivery Error					
	P01C8 Fuel Rail/System Pressure Bank 2 Too Low					

The repair 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 inlended 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. ©2023 Volkswagen of America, Inc. All Rights Reserved.

24iR UPDATE Software Update		
•	P2432 Secondary Air Injection System Air Flow/Pressure Bank 1 Sensor Cir	cuit Low
•	P2433 Secondary Air Injection System Air Flow/Pressure Bank 1 Sensor Cir	cuit High
•	P0131 O2 Sensor Circ.,Bank1-Sensor1 Low Voltage	
•	P0132 O2 Sensor Circ.,Bank1-Sensor1 High Voltage	
•	P2263 Turbocharger/Supercharger Boost System Performance	
•	P0324 Knock Control System Error	
Included	in the software update are additional performance improvements to address	the following:
•	Customer may experience engine torque variations in the 1200 to 2000 er bad fuel	ngine rpm range with
•	Dissatisfaction with the drive-off behavior	
•	Rough idling due to early camshaft positions (especially in hot ambient temp	peratures)
•	The engine temperature could unexpectedly rise into high ranges due to the not sufficiently being commanded under hot ambient air conditions (high in temperature)	e radiator cooling fan htake air and coolant
•	Prolonged engine cranking is noticed around -10°C	
L I		

## Remedy

Criteria	Remedy		
01 or 02	Update engine control module software (Jetta)		
010102	Update engine control module software and transmission control module software (Taos)		

This Update is in effect until removed.

Vehicle must meet all of the following criteria:

- Procedure is valid only for vehicles that show the 24iR code in the ELSA Campaign/Action Information screen • on the day of repair.
- Vehicle must be within the New Vehicle Limited Warranty. •
- Procedure must be performed within the allotted time frame stated in this Technical Service Bulletin. •
- Procedure must be performed on applicable vehicles in dealer inventory prior to sale.

#### **Release Date** 03/14/2023

Software Update – (NVLW) REVISION



## 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.



All Safety Recalls must be completed prior • to completing this campaign.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

## Software Update – (NVLW) REVISION



## **I**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. $\checkmark$ 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. The VAS Diagnostics Interface MUST ONLY be connected to the tester with a USB cable. Performing a software update using a Bluetooth or WiFi 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 or WiFi. 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! 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. As a best practice, customer presets should be documented prior to performing any update in the event these settings are lost during the update.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved.

### **Technical Service Bulletin**

## 24iR UPDATE

## Software Update – (NVLW) REVISION



### **I**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.

#### NOTE

- All campaign software updates must be completed during a single, standalone ODIS Diagnostic Session. You must fully complete this campaign and send all logs before beginning any other campaigns or operations.
- If there are any ODIS "Hot-Fix" patches installed, they must be removed from the scan tool before beginning this operation. ODIS "Hot-Fix" patches may affect the update process.
  - 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 a Battery Tester/Charger capable of • minimum 70 Amp continuous supply.

### 

#### 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 hazards on.

#### 

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.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

### **Technical Service Bulletin**

## **24iR UPDATE**

## Software Update – (NVLW) REVISION



Control modules	Orders	DISS	TSB	Test plan	Operation	Special Functions	
Tests for the entire vehicle							
Status T	ests						
51	F - Inform	nation e	electro	nics 1 - J79	4		
-	5F - Installation status test/reset DTC memory						
S	oftware	version	mana	gement			
-	A	Adapt software (offline)					
Adapting software							
-	Code online control mode						
-	C	Ctrl. module software configuration					
<ul> <li>Function clearing system (FES)</li> </ul>							
2	Pa	aramete	erize c	control mod	ule online		
- Component protection functions							
				ш			
Perform test	Display	docume	ents				

- Confirm that scan tool is communicating with the diagnostic head by USB <Green Arrow>.
  - If the Bluetooth symbol is shown <Red 0 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>.

The repair 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 inlended 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023



Software Update – (NVLW) REVISION







#### Select the correct option to "Update software via action code" OR "Software update via measured code".

## **I** NOTE

The different options to perform the SVM operation may vary based on model.

## 

#### Using <u>Bluetooth or WiFi</u> 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> and follow the on screen prompts.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023



Software Update – (NVLW) REVISION

# Operation dule is being performed The test is performing an operation that cannot be stopped User input is not possible at this time

K < > > Dano >> 101

😋 Offboard Diagnostic Information System Service	-423					1 <u>×</u>
Importer: 444	V	nn:	al engles order	🥔 🛃 😜		
RO: ····		ngaro.	all origino couros	🚾 4)		
Control modules Orders DISS TSB	Test plan Operation S				Operating modes	* ^
Service42				Complete/Continue	O Diagnosis	
Current installation status					🐌 OBD	
Data version in the vehicle is current.			· · ·		🐗 Flash	
End of test!					A Measurement	
	$ \rightarrow $				📦 Info	
	Data v	ersion in	the vehicle	is current.	🖓 Admin	
					Log	*
					Data	¥
					Extras	*
			-		Help	۰.
	$ \langle \rangle$	>	Holp Cancel test		> 🛛	3
				Test version		

During the flash, this screen appears when each operation is performed:

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>.

### **i** TIP

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







## Software Update – (NVLW) REVISION



## Service42 ECM shutd ٠ • •

Electronics Rear Lef	t (Door electronics left rear	(LIN bus))	(1K09597	703Q 1	120 J38
Electronics Rear Rig	ht (Door electronics right r	ear (LIN bu	s)) (1K09	59704Q	1120 .
es 1 (03 - ABS/EDS/	ASR/ESP Mark 60 EC) (1)	K0907379/	C 0101	ESP FF	RONT M
ring Assistance (44 -	Measurement	sch. (G	<u>1)) (1К19</u>	09144M	1901
g (15 - Airbag VW8i	Identify control module	An		(34)	
bilizer (Immobilizer ·	Select version	P 1222	IMMO	3HL	)
	Check DTC memory				,
lule List <i>Componen</i>	Read all DTC memories	upment list	t		
Sorting	Guided Functions				
	Control module OBD				
🕘 🚳	Vehicle OBD				

- 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. 0
  - Scroll down and right click on the 0 modules that were updated.
  - Select "Identify Control Module" 0 <arrow>.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

## 03/14/2023

## **Technical Service Bulletin**

## 24iR UPDATE

**Release Date** 

## Software Update – (NVLW) REVISION



	RITICAL REPAIR STEP
<u> </u>	STOP! STOP!
n rar 32902 a soft he fo	re cases, a P0606 fault with symptom code 2 may set after three key cycles after performing ware update. In order to prevent a comeback llowing steps must be followed.
٠	Turn off the ignition.
•	Disconnect the diagnostic head from the OBD port.
•	Wait 30 seconds.
•	Turn on the ignition.
•	Perform three key cycles (wait 30 seconds between each ignition off to on cycle).
٠	Reconnect the diagnostic head to the OBD port.
•	Re-identify 0001-Engine Control Module.
•	If, after re-identifying the ECM, fault P0606 with Symptom Code 3290 <u>2</u> is stored:
	<ul> <li>See the "Important Repair Steps" at the end of this procedure.</li> </ul>

- If no faults are stored: .
  - o Proceed to the next step.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

**Release Date** 

Software Update – (NVLW) REVISION

03/14/2023



Exit GFF and send diagnostic protocol online when prompted.

## **I** 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.

The repair 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 inlended 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

## Software Update – (NVLW) REVISION

03/14/2023



#### ()**IMPORTANT REPAIR STEPS**

In rare cases, a P0606 fault with symptom code 32902 may set after three key cycles after performing a software update. In order to prevent a comeback repair these steps must be followed.

- If MIL is illuminated, check ECM fault memory using Control Module OBD. •
- If fault P0606 with symptom code 32902 is stored:
  - Upload a copy of the GFF log to GFF Paperless and/or save a copy of the OBD log for review 0 (10 additional TU can be paid ONLY if fault P0606 with symptom code 32902 is stored AND a GFF Paperless log is available or an OBD log showing the fault can be provided)
  - Follow these steps to clear the fault:
    - Put the car into "Transport Mode" from the special functions tab using Operating Mode "Diagnosis".
    - Using Operating Mode "OBD", select the ECM and go to "Control Module OBD > Adaptation".
    - In Adaptation, in the filter box type "Protective Function". Select Protective Function and double click on the input field and change from Enabled to OFF, then select Apply.
      - If you receive an error message, click on the green drop down arrow and select DTC memory. Click on OBD systems and clear faults.
    - Switch to Operating Mode "Diagnosis". Under the Special Functions tab deactivate "Transport Mode".
    - Return to ECM Control Module OBD. The DTC P0606 should now be "passive". Erase DTC by clicking on OBD systems and clear faults.
    - From ECM Control Module OBD, select Adaptation.
    - In Adaptation, find "Protective Function" and change from OFF to Enabled.
- If the MIL is on and any fault other than P0606 with symptom code 32902 is stored:
  - Perform normal diagnosis of fault. 0
  - Diagnosis and repair of any fault other than P0606 with symptom code 32902 will not be covered 0 under this action.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March. 2023

Software Update – (NVLW) REVISION



## Warranty

#### **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: Upload the repair order [signed by customer] to Volkswagen WIN/Operations/Campaign  $\checkmark$ Closure.

Service Number	24iR					
Damage Code	0099					
Parts Vendor Code	WWO					
Claim Type	Sold vehicle: 7 10	Sold vehicle: 7 10				
	Unsold vehicle: 7 90	)				
Causal Indicator	Mark labor as causa	Mark labor as causal				
Vehicle Wash/Loaner	Do not claim wash/loaner under this action					
	<ul> <li><u>U.S.A.</u>: Loaner/rental coverage cannot be claimed under this action. However, loaner/rental may be covered under the Alternate Transportation Program. Please refer to the Volkswagen Warranty Policy and Procedures Manual for loaner claims information and reimbursement details.</li> <li><u>Canada:</u> Loaner/rental coverage cannot be claimed under this action. Please refer to the Volkswagen Service Loaner Program to determine loaner eligibility.</li> </ul>					
Criteria I.D.	01 or 02					
		LABC	R			
	Labor Op	Time Units	Description			
	2706 89 50	10	Connect battery charger			
	2470 25 99	Time stated on diagnostic protocol (Up to 40 TU)	Update software			
	A	Add only if MIL is on with fat	ult P0606 after the flash:			
	0150 00 00	10	Perform OBD operations to clear fault			

The repair 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 inlended 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

Software Update – (NVLW) REVISION



Additional Actions	Some of the affected vehicles may be involved in additional Actions. Please check your ELSA Campaign/Action Information screen so that any <i>additional required work can be done simultaneously.</i>
Verifying Vehicle Eligibility	To verify vehicle eligibility for this Update, <i>always</i> check the ELSA Campaign/Action Information screen. The ELSA system is the <i>only</i> binding inquiry and verification system; other systems are not valid and <i>may result in non-payment</i> of a claim.
Help for Claim Entry	For questions regarding claim entry, contact Volkswagen Warranty.
Required Customer Notification	Inform your customer in writing by recording on the Repair Order any and all work that was conducted on the vehicle, including any and all updates completed under this Update.

The repair 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023

Software Update – (NVLW) REVISION



## **Required Special Tools**



## **Additional Information**

All parts and service references provided in this Update are subject to change and/or removal. Always check ELSA for the most current version of this document.

The repair 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 inlended 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. ©2023 Volkswagen of America, Inc. All Rights Reserved. March, 2023