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#### **Technical Service Bulletin**

#### 90P4 UPDATE

### **Gateway Software Update - (NVLW)**



#### **Applicable Vehicles**

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2020	2020	A4 ALLROAD	1
USA	2020	2020	E-TRON SPORTBACK QUATTRO	791
CAN	2020	2020	A4 ALLROAD	173
CAN	2020	2020	A4 SEDAN	1,625
CAN	2020	2020	A5 CABRIOLET	128
CAN	2020	2020	A5 SPORTBACK	1,457
CAN	2020	2020	E-TRON SPORTBACK QUATTRO	23
CAN	2020	2020	S5 SPORTBACK	228

Revision History				
Revision	Date	Purpose		
1	11/03/2020	Original publication		



# A CRITICAL REPAIR INFORMATION



Operating mode "Diagnosis" will be used for this action. Some models will not allow the update to start after changing the communication path to DoIP using operating mode "Flash."

# **Condition/Technical Background**

This Update has been proactively released to prevent the following condition(s) from occurring in the vehicle:				
Criteria	Technical Background			
01	The internal time in the gateway may run asynchronously. As a result, requests automatically become invalid after approx. 60 minutes and are rejected. This means that the Audi connect vehicle-specific services can no longer be run.			

# Remedy

Criteria	Remedy	
01	Update Gateway Control Module software	

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This Update is in effect until removed.

Vehicle must meet all of the following criteria:

- Procedure is valid only for vehicles that show the 90P4 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.

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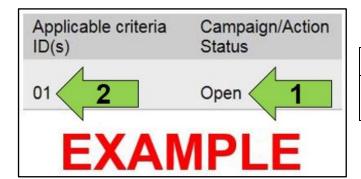
### **Gateway Software Update – (NVLW)**



### **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.





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

### i 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.



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

first.

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#### **SVM Update Instructions**



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.
- 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.



As a best practice, customer presets should be documented prior to performing any update in the event these settings are lost during the update.

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## U 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.

### **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.

- Open the hood.
- Open the battery cover.
- Attach the GRX3000VAS Tester/Charger (or equivalent) IN POWER SUPPLY MODE to the vehicle battery or underhood charging posts.

### () NOTE

When connecting the charger directly 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.

Switch on the hazard warning lights.

### **A** 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.

- the VAS6150X/VAS6160X Connect Diagnostic Tester to the vehicle.
- Start the ODIS program.

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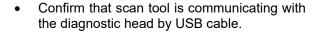
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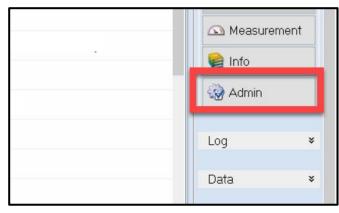
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If the Bluetooth or WiFi symbol is shown, then disconnect the diagnostic head from the vehicle and reconnect the USB cable to the diagnostic head and then reattach to the vehicle.

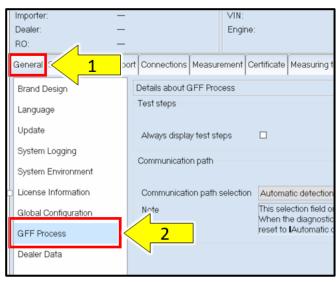






Changing the communication path to "Only allow DoIP communication" MUST be performed to ensure consistent success of this software update. The software update will fail if these steps are not followed.

 From the home screen of the scan tool, select "Admin."



From the "General" tab <arrow 1>, select "GFF Process" <arrow 2>.

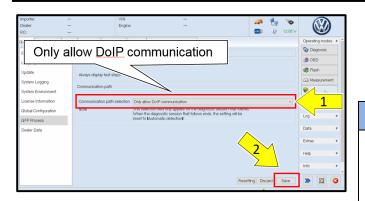
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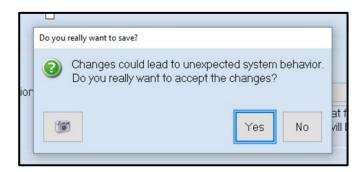




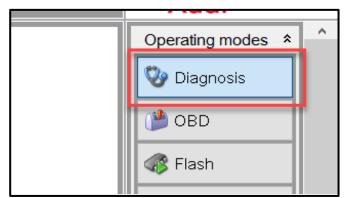
- From the "Communication path selection," select "Only allow DoIP communication" <arrow 1>.
- Select "Save" <arrow 2>.

### U NOTE

As stated in the Note on the scan tool, "This selection field only applies for the diagnostic session that follows. When the diagnostic session that follows ends, the setting will be reset to "Automatic detection."



- Select "Yes" when prompted, "Do you really want to save?"
- Return to the home screen of the scan tool.



- From the home screen of the scan tool highlight "Diagnosis" and perform a full GFF diagnostic scan.
- Follow the on-screen prompts.



Operating mode "Diagnosis" must be used. Some models will not allow the update to start after changing the communication path to DoIP using operating mode "Flash."

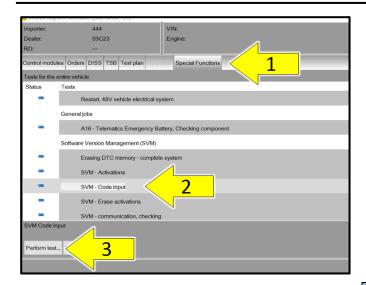
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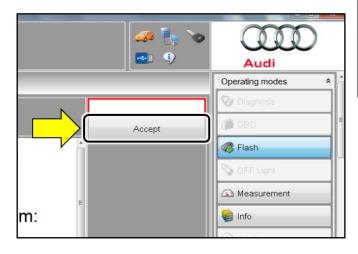
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- After the diagnostic scan is complete:
  - Select the "Special Functions" tab <1>.
  - Select "SVM Code Input" <2>.
  - Select "Perform test..." <3>.
- Follow the on screen prompts.



# NOTE

#### 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.

SVM code 90P4A576

- Select "Accept" <arrow>.
- Follow the on-screen prompts.

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This extra ignition cycle step must be followed, otherwise faults stored during the update may not be cleared upon exiting the Diagnosis program.

- After receiving confirmation that the update completed successfully, the ignition must be turned off for 60 seconds and then turned back on.
- Exit Guided Fault Finding and ensure the diagnostic protocol is sent to GFF Paperless..

### i TIP

Various event memory entries may be generated after the flashing procedure on some vehicles. Put the vehicle in a corresponding bus sleep mode after performing the update in order to clear the faults.

To put the vehicle in bus sleep mode, disconnect the diagnostic tester, remove the key from the vehicle and lock the vehicle with the remote for 5 minutes.

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## 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 <u>open on the day of repair</u> to the repair order.

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

- ✓ <u>U.S. dealers:</u> Submit the request through Audi Warranty Online under the <u>Campaigns/Update</u> option.
- ✓ <u>Canada dealers:</u> Upload the repair order to Audi WIN/Operations/Campaign Closure.

Service Number	90P4				
Damage Code	0099				
Parts Vendor Code	002				
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				
	LABOR				
	Labor Op	Time Units	Description		
	2706 89 50	10	Connect battery charger		
	9035 25 99	Time stated on diagnostic protocol	Update gateway control module software		

Additional Actions Some of the affected vehicles may be involved in additional Actions. Please check your

Elsa Campaign/Action Information screen so that any additional required work can be

done simultaneously.

Verifying Vehicle Eligibility To verify vehicle eligibility for this Update, *always* check the Elsa Campaign/Action Information screen. The Elsa system is the *only* binding inquiry and verification system;

other systems are not valid and may result in non-payment of a claim.

Help for Claim

**Entry** 

For questions regarding claim entry, contact Audi 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.

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# **Required Special Tools**



Battery Tester/Charger
- GRX3000VAS(or equivalent)



Diagnostic Tester
-VAS6150X/VAS6160X(or equivalent)

### **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.

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