


Release Date	03/21/2024	Technical Service Bulletin		
49A4 UPDATE				 Audi
Brake System Software Update – (NVLW)				

Applicable Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2022	2024	E-TRON GT	5,278
USA	2022	2024	RS E-TRON GT	1,676
CAN	2022	2024	E-TRON GT	501
CAN	2022	2024	RS E-TRON GT	211

Revision History

Revision	Date	Purpose
1	03/21/2024	Original publication

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 operating noises made by the hydraulic unit may be louder than usual and/or brake pedal travel may be higher at very low speeds.

Remedy

Criteria	Remedy
01	Update the brake electronics and bleed the brake system.

This Update is in effect until removed.

Vehicle must meet all of the following criteria:

- Procedure is valid only for vehicles that show the **49A4** 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.

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 ← 2	Open ← 1

EXAMPLE

Campaign/Action	Start	Designation
← 3	2015-11-10	W-SERV_ACT -
	2018-12-13	RECALL -
	2017-05-16	A-RECALL -

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.

CRITICAL REPAIR STEP



If multiple software update Campaign/Actions are open, they must be performed in order of the Start date <arrow 3>. The oldest should be performed first.

- All Safety Recalls must be completed prior to completing this campaign.
- Proceed to Section A

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Section A – Brake Electronics Software Update


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 “Current ODIS Service Version” document in the Service References section of Elsa2Go.
- ✓ **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.
- ✓ **Flash process through “Audi Flashing” not Guided Fault Finding (GFF).**
 - DO NOT USE Guided Fault Finding (GFF) to perform this flash. Using GFF will cause the flash to take longer. Requests for additional time will not be considered.
- ✓ **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.

TIP

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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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!

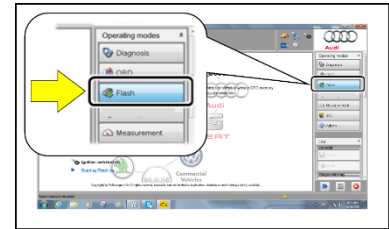
IMPORTANT

To Update-Programming using SVM, review and follow instructions in Technical Bulletin 2011732: *Software Version Management (SVM) Operating Instructions* for the US, or 2037026: *Working with the Software Version Management (SVM)* for Canada.

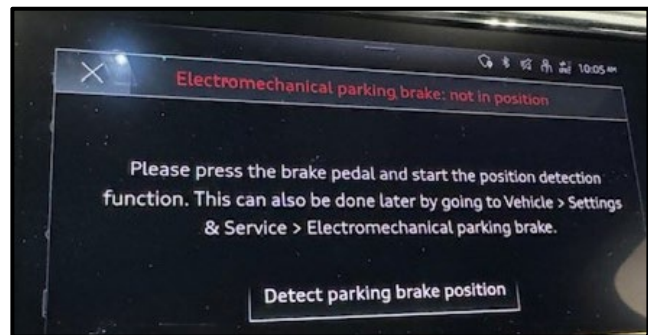
The SVM Process must be completed in its entirety so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim.

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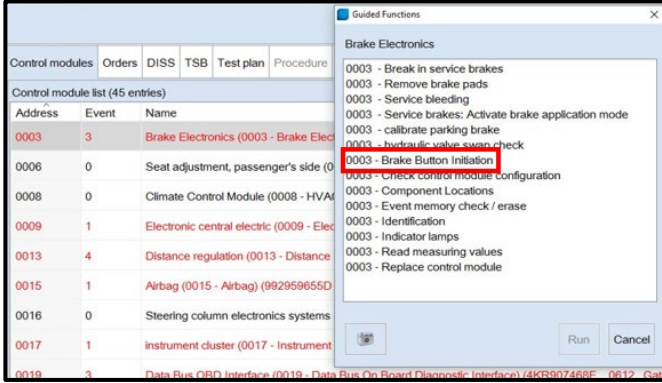
- Switch off all consumers, air conditioning, heater blower motor, lights, heated seats, etc.
- Ensure the latest version of ODIS is downloaded.
- Ensure diagnostic head is connected to ODIS tester via USB cable.
- Move selector lever to P.
- Use operating mode, FLASH.
- Select “SVM – Code Input”.
- Enter SVM code **49A4A144** and follow the on screen prompts.
- When exiting the FLASH program, ensure the diagnostic log is sent to GFF Paperless.
- If the message pictured is present in the MMI after completing the SVM, follow the on-screen steps in the MMI to detect the parking brake position.



Proceed to section B



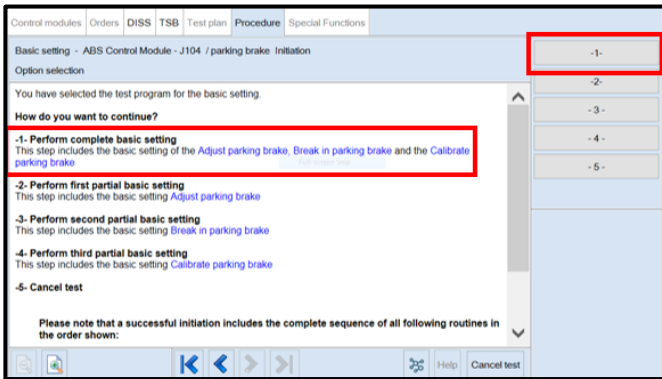
Section B – Brake System Bleeding



NOTE

After the SVM update, the following fault may have been logged: C10E1F2 – “Parking brake motor position not plausible”. This fault must be addressed before performing the brake system bleeding steps.

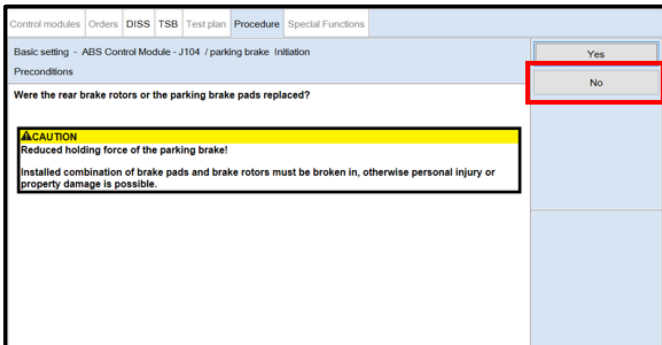
- Scan the vehicle using GFF.
- If the fault is not present or it is able to be cleared, continue with the brake bleed procedure.
- If fault code C10E1F2 is present and is not able to be cleared:
 - Perform the test plan “0003 - Brake Button Initiation” through guided functions of DA 0003.



NOTE

The test plan will state a road test is required. A road test is not required as there were not any parking brake components replaced.

- Select option #1 for “Perform complete basic setting”.
 - Follow the on screen prompts.
- When asked if the rear brake rotors or parking brake pads were replaced, select the option for “No”.
 - Complete the remaining test plan steps.
 - After the test plan has completed, cycle the ignition switch off and back on.
 - Continue with the brake bleed procedure.



49A4 UPDATE

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Component	Conventional bleeding	Bleeding using the Vehicle Diagnostic Tester	Bleeding the Brake Booster -NX6- using the Vehicle Diagnostic Tester
Brake Booster -NX6-	1	3	2
Brake line from Brake Booster -NX6- to the hydraulic unit	1	2	-
Hydraulic Unit	1	2	-
Suction Line	1	2	-
Brake line from hydraulic unit to brake caliper	1	-	-
Brake Caliper	1	-	-

CAUTION

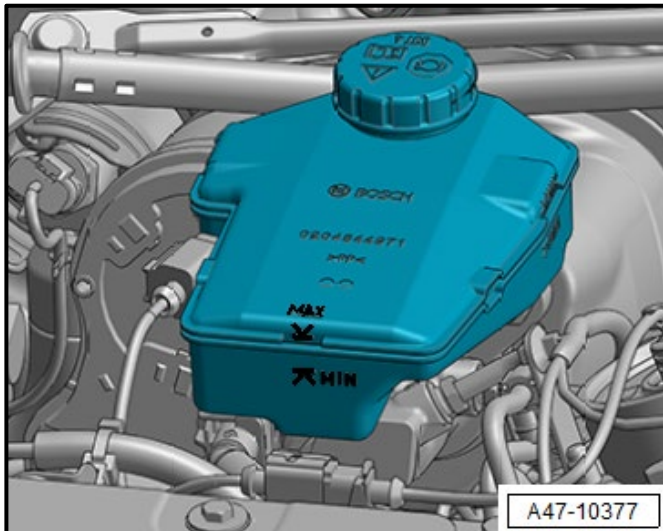
Risk of fluid overflow and paint damage

Portions of the brake bleeding procedure can use a significant amount of brake fluid. Make sure to monitor and empty the recovery container as required.

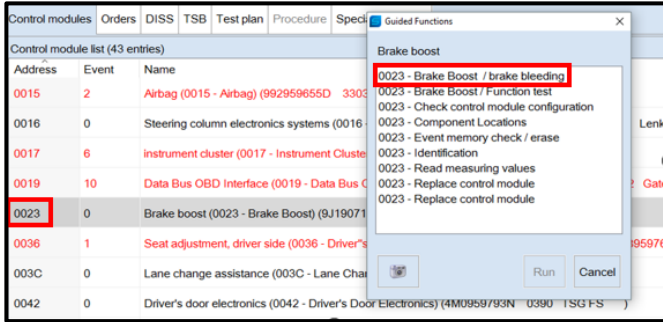
- The brake system will be bled in 3 steps:
 - Conventional brake bleeding.
 - Bleeding of the NX6 Brake booster via ODIS.
 - Perform service bleeding procedure via ODIS.

NOTE

While performing brake bleeding steps, there will be several warnings that appear in the instrument cluster and MMI, these can be ignored.

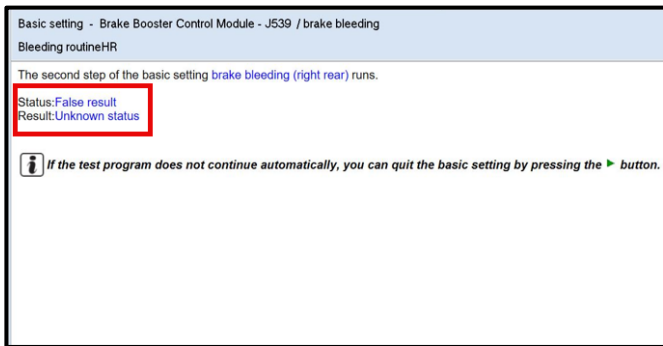
**Conventional brake bleeding:**

- Perform conventional bleeding of the brakes per the ELSA Repair Manual, referencing the “*Conventional bleeding*” section of the instructions:
 - *Repair manual > Chassis > Brake System > 47 Hydraulic Components > Hydraulic System > Hydraulic System, Bleeding.*
- Proceed to next brake bleeding step once the conventional brake bleeding is complete.





NX6 brake booster bleeding:

- Bleed the NX6 brake booster per the ELSA repair manual, referencing the *“Bleeding the Brake Booster -NX6- using the Vehicle Diagnostic Tester”* section of the instructions.
 - *Repair manual > Chassis > Brake System > 47 Hydraulic Components > Hydraulic System > Hydraulic System, Bleeding.*
- Select the appropriate test plan in ODIS:
 - Select DA 0023 and open guided functions.
 - Perform the test plan “0023 - Brake Boost / brake bleeding”.
 - Follow all test plan on screen prompts.



⚠ CRITICAL REPAIR STEP

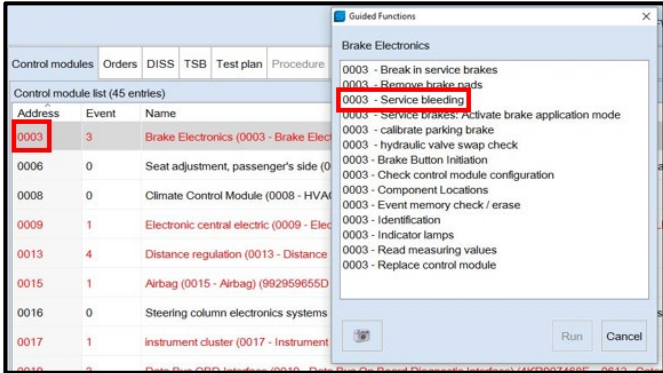

STOP!


While the test plan for bleeding the NX6 brake booster is running, the “Status” field may show “False result” and the “Result” field may show “Unknown status”. This is normal and not a test plan failure.

Do not press the complete/continue button! If used, the test plan will fail.

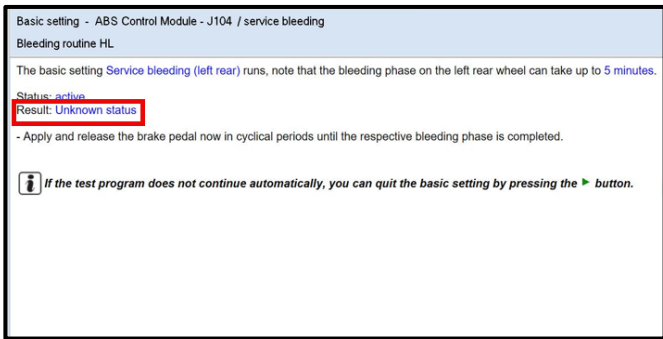
The test plan will automatically continue once the step is completed.

- Proceed to next brake bleeding step once the NX6 brake booster bleeding is complete.




Service bleeding procedure:

- Bleed the brakes per the ELSA repair manual, referencing the *“Bleeding using the Vehicle Diagnostic Tester”* section of the instructions.
 - *Repair manual > Chassis > Brake System > 47 Hydraulic Components > Hydraulic System > Hydraulic System, Bleeding.*
- Select the appropriate test plan in ODIS:
 - Select DA 0003 and open guided functions.
 - Perform the test plan “0003 - Service Bleeding”.
 - Follow all test plan on screen prompts.



⚠ CRITICAL REPAIR STEP



While the service bleeding test plan is running, the “Result” field may show “Unknown status”. This is normal and not a test plan failure.

Do not press the complete/continue button! If used, the test plan will fail.

The test plan will automatically continue once the step is completed.

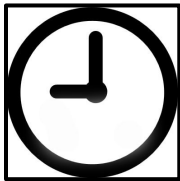
! NOTE


The test plan states to apply and release the brake pedal in cyclical periods. There is not a specified interval or number of times the pedal must be pressed and released. The test plan will continue automatically once the conditions have been satisfied.

- Perform a bus sleep on the vehicle.
- Erase the fault memory by exiting the GFF session.

i TIP


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:			
<ul style="list-style-type: none"> ✓ <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	49A4		
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
	0151 00 10	SEE ELSA	Software update (<i>setup + battery charger</i>)
	0151 00 60	Time stated on diagnostic protocol	Perform Software update
	0150 00 60	Time stated on diagnostic protocol	GFF/Guided functions (<i>perform necessary test plans</i>)
	0150 00 99	10	Bus sleep procedure
	4701 07 50	SEE ELSA	Brake system bleed (<i>initial bleed procedure, claim only once</i>)
	4701 07 70	SEE ELSA	Brake system bleed (<i>additional bleed procedures, can be claimed up to 2 times</i>)
PARTS			
	Quantity	Part Number	Description
	Up to 45.00	B 000750S0	BRAKE FLUID (up to 4.5 L)

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- 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.

Required Parts

Parts Control Type: Free Order	Parts will be managed by Free Order
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Initial Allocation: NO	Please reference the Repair Projection Tool (below) to view your potential VIN population.
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Repair Projection Tool: (right click to open)	
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Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method
01	Up to 4.5 L	SEE ETKA/P.O.C.	BRAKE FLUID	Parts on Command






⚙️ IMPORTANT PARTS INFORMATION
Brake Fluid Ordering Information
Any DOT 4 brake fluid part number listed in Parts on Command can be used.

⚠️ NOTE
Campaign parts should always be ordered as per the parts information in this circular. The ordering system will supersede the part, if applicable.

- Properly store (retain), destroy, or dispose of removed parts in accordance with all state/province and local requirements, unless otherwise indicated and/or requested through the Warranty Parts Portal (WPP) for U.S. and the Part Destruction and Core Disposition Report for Canada.

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Required Special Tools

	<p>Battery Tester/Charger capable of minimum 90 Amp continuous supply</p>		<p>Diagnostic Tester -VAS6150X/VAS6160X- (or equivalent)</p>
	<p>Brake Filling and Bleeding Equipment -VAS6860- (or equivalent)</p>		<p>Brake Bleeding Tool Set -VAS6564- (or equivalent)</p>
	<p>Wrench – Brake Bleeder Set -VAS5519- (or equivalent)</p>		

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.