

Technical Service Bulletin



90 Driver assist systems various malfunctions (Intersection/side assist, ACC inop when towing, etc.), DTC B200FF9

90 23 92 2063502/6 January 26, 2023. Supersedes Technical Service Bulletin Group 91 number 22-98 dated May 4, 2022, for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, S6, A6 allroad, A7, S7, A8, A8 e quattro, S8, e-tron Sportback, Q7, SQ7, Q8, SQ8, and RS Q8	2020	All	Not Applicable
A6, A6 allroad, S6, A7, A7 e quattro, and S7	2021	000001 – 040551	
RS 6 Avant, and RS 6	2021	900000 – 904242	
A8, A8 e quattro, and S8	2021	000001 - 017455	
Q7, and SQ7	2021	000001 – 022611	
Q8, and SQ8	2021	000001 – 018895	
RS Q8	2021	000001 - 018409	

Condition

REVISION HISTORY		
Revision	Date	Purpose
7	-	Revised Title (corrected Service Number Group)
6	05/04/2022	Revised Service (Clarified use of SD Card / SVM) Revised Required Parts and Tools (Clarified use of SD Card / SVM)
4	01/06/2022	Revised <i>Service</i> (Updated Step 2 C)



Note:



This TSB **does not apply** to DTC(s) B200FF9 in the driver assist systems control module, J1121 (address word 00A5). Please refer to PSS 2061489: *PSS 90 Pre sense malfunction/driver assist systems sporadically inop, DTC B200FF9 is stored in the driver assist module.*

Customer states:

Lane change assist/Intersection assist:

- The lane change assist/intersection assist is sporadically not working. One of the following messages is displayed in the instrument cluster:
 - “Intersection assist: fault. Please contact service.”
 - “Side assist and exit warning system: fault. Please contact service.”
 - “Rear cross-traffic assist: fault. Please contact service.”
 - “Audi pre sense: fault. Please contact service.”

Traffic sign recognition

- The traffic sign based speed limit settings are not permanently stored and are lost with every ignition cycle.

Adaptive Cruise Assist

- Vehicles with steel suspension: ACA disengages/loses calibration when towing a trailer/bike rack.

Workshop findings:

Lane change assist/Intersection assist:

The following DTC may be entered in the front corner radar control modules, J1088/J1089 (address words 00DB/00DC):

- **DTC B200FF9** (Internal malfunction) with symptom code 1311089.

And/or

The following DTC may be entered in the lane change assist control modules J769/J770 (address words 003C/00CF):

- **DTC B200FF9** (Internal Malfunction) with one of the following symptoms codes 1311057, 1311058, 1311059, and/ or 1311060.

Other

- Other customer concerns (see above) may not enter a DTC in the vehicle.

Technical Background

Multiple driver assist features have been optimized. This update will affect the following control modules:

- Driver assist systems control module, J1121 (address word 00A5).
- Adaptive cruise control module, J428 (address word 0013).
- Lane change assist control module, J769/J770 (address words 003C/00CF).
- Front left/front right radar sensor control module for object detection, J1088/J1089 (address words 00DB/00DC).



- Control module for laser distance control, J1122 (address word 00CD).
- Airbag control module, J234 (address word 0015).

Production Solution

New software in production.

Service

Required equipment:

- ODIS Tester.
- SVM code.
- Software update package on SD Card if required (see *Required Parts and Tools* or download the software from MirrorServer using the SD Creator Program).

Time to complete update:

- Approximately 60-120 minutes (includes 50 - 110 minutes for the software update and 10 minutes for the SVM work).

Service work:



Note:

All outstanding campaigns must have been completed prior to running this update. Please familiarize yourself with all steps of this update before proceeding.

If any warning messages are displayed in the instrument cluster, those have to be addressed prior to updating the vehicle as running the update with active instrument cluster warning messages may brick the driver assist control module, J1211 (address word 00A5).

1. Determine the driver assist systems control modules (zFAS), J1121 (address word 00A5) system designation via ODIS (Figure 1):



Address: 00A5 System name: 00A5 - Front Sensor for Driver Assistant Systems Log versions: UDS/ISOTP (Results: 3)

[-] Identification:	
Data source:	Vehicle
Hardware part number:	4N0907107F
Part number:	4KE907107AP
Hardware version number:	H08
Software version number:	0295
Production date:	
Coding:	
Coding:	
Ability to flash:	Unknown
System name:	zFAS Var A
ASAM base version:	BV_FrontSensoDriveAssisSystemeUDS
ASAM 2D/ODX data set:	EV_ZFASAU516
ASAM 2D/ODX data set version:	001007
ASAM/ODX control module version being used:	EV_ZFASAU516_001
Target data container:	4K0909466R
Version of the target data container:	0050
Equipment code:	00 00 00 00 00 00 00 00
System abbreviation:	J1121

Figure 1. zFAS system designation.

2. Select which SD Cards are required according to the system designation read in the prior step:

A. zFAS Var A: No SD Card is required.

B. MY20 Audi e-tron quattro and Audi e-tron sportback: zFAS Var B/C: SD Card P/N: **4N0906961AR** is required.

C. All other vehicles: zFAS Var B/C: USB-C drive P/N: **4N1906961** is required (Using an SD Card as an update medium is possible if the vehicle is equipped with a built-in SD Card reader).

3.  **Note:**

Federal law requires the airbag's Event Data Recorder (EDR) to be backed up prior to running the update in this TSB (required **only** for MY20 Audi e-tron quattro and Audi e-tron Sportback, **skip to Step 4 for all other vehicles**).


- Please have the customer sign the **declaration of consent** available in the attachments of this TSB and upload a picture/scan of it to DOC-IT.
- In ODIS, run the test program "J234 – Technical Service Bulletin (TSB) 2061023" via "Choose self-test" >> 0015 – Airbag – J234 >> 0015 – Technical Service Bulletin (TSB).



- Make sure that the diagnostic session that includes the results from the aforementioned test plan is uploaded to GFF Paperless.
4. Update the peripheral control modules using SVM code **FASISKD5A001** (this update should take between 20 min and 30 min).



Customer information:

- This update includes multiple control modules. Certain customer personalization settings might be reset to factory settings by this update.
 - The dealership/workshop, Audi of America, and/or Audi AG are not liable for third-party modifications, like undocumented retrofits, non-genuine accessories, or any other modification not approved by Audi of America that might be rendered inoperable by this update.
5. Exit the flash context in ODIS. Otherwise, it will not be possible to execute the following steps.
6.  **Tip:** zFAS Var A does not require an SD Card. However, the update step in point 7 must still be performed.
- If the vehicle has **zFAS Var B/C** installed, please insert the SD Card **4N0906961AR** into the SD Card reader (MY20 Audi e-tron quattro and Audi e-tron sportback).

Or

- Insert the USB-C drive **4N1906961** into an USB-C port (all other vehicles) in the vehicle.

For MY20 Audi e-tron quattro and Audi e-tron sportback, please refer to TSB 2056558: *91 MIB2+ Software Update Instructions* for further information.

All other vehicles, please refer to TSB 2060523: *91 MIB3 Software Update Instructions* for further information.

7. Update the zFAS application software using SVM Code **FASISKD5A002** (this update should take about 30 minutes).



Note:

Always start the update out of ODIS. Please do not perform the update via the red engineering menu (method 2) unless you have been given prior approval from TAC.

Step	Vehicle	SD Creator Part number	SVM code
1	MY20 Audi e-tron quattro, Audi e-tron sportback quattro	---	FASISKD5A001
2		4N0906961AR (zFAS B/C)	FASISKD5A002
1		---	FASISKD5A001

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2	A6, A7, A8, Q7, Q8, MY21 Audi e-tron quattro, and Audi e-tron sportback quattro	4N1906961 (zFAS B/C)	FASISKD5A002
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8. Let the vehicle perform a bus sleep cycle:

- Exit the flash context
- Switch the vehicle's ignition off
- Remove the battery charger and diagnostic interface dongle from the vehicle.
- Close the hood, trunk, and all doors, then lock the vehicle.
- Wait approximately six minutes without handling the vehicle.

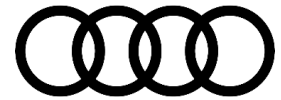
Warranty

Claim Type:	<ul style="list-style-type: none"> • 110 up to 48 Months/50,000 Miles. • G10 for CPO Covered Vehicles – Verify Owner. • If the vehicle is outside any warranty, this Technical Service Bulletin is informational only. 		
Service Number:	9093		
Damage Code:	0039		
Labor Operations:	Software Update (Includes checking for DTCs)	0151 0000	Time stated on the diagnostic protocol (Max 200 TU)
Diagnostic Time:	GFF	No allowance	0 TU
	Road test prior to the service procedure	No allowance	0 TU
	Road test after the service procedure	0121 0004	10 TU
Claim Comment:	As per TSB 2063502/6		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

Required Parts and Tools

Model	SD Card	Quantity
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MY20 Audi e-tron quattro, Audi e-tron sportback quattro	4N0906961AR (zFAS B/C)	01 (Shop tool)
A6, A7, A8, Q7, Q8, MY21 Audi e-tron quattro, and Audi e-tron sportback quattro	4N1906961 (zFAS B/C)	01 (Shop tool)

Additional Information

The following Technical Service Bulletin(s) will be necessary to complete this procedure:

- TSB 2011732, *00 Software Version Management (SVM), operating instructions.*
- TSB 2056558, *91 MIB2+ Software Update Instructions.*
- TSB 2047812, *00 SD Creator: how to set up and use the SD Creator for obtaining vehicle software updates via the MirrorServer.*
- TSB 2060523, *91 MIB3 Software Update Instructions.*
- TSB 2062601, *90 DTC U110100 is stored in the driver assistance systems control module.*

All part and service references provided in this TSB (**2063502**) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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