

Technical Service Bulletin

Topic	20 EPC Light on: Fuel level sender DTC entry B10581B, B103E1B resistance too high
Market area	United States 444 Volkswagen of America, Inc. (6444)
Brand	Audi
Transaction No.	2070211/5
Level	EH
Status	Released for publishing
Release date	Oct 14, 2025

New customer code

Object of complaint	Complaint type	Position
engine -> fuel supply -> fuel supply line (low pressure)	component, automotive fluids -> damaged	rear
information, navigation, communication, entertainment -> malfunction display symbols -> emissions control malfunction display	functionality -> activates	
information, navigation, communication, entertainment -> malfunction display symbols -> emissions control malfunction display	functionality -> activates without cause	
information, navigation, communication, entertainment -> malfunction display symbols -> emissions control system malfunction display	functionality -> does not switch off/disconnect	
information, navigation, communication, entertainment -> malfunction display symbols -> emissions control malfunction display	functionality -> does not switch off/disconnect	
information, navigation, communication, entertainment -> malfunction display symbols -> emissions control system malfunction display	functionality -> activates	
information, navigation, communication, entertainment -> malfunction display symbols -> emissions control system malfunction display	functionality -> activates without cause	
information, navigation, communication, entertainment -> malfunction display symbols	functionality	

New workshop code

Object of complaint	Complaint type	Position
engine -> fuel supply -> fuel level sensor	electrical -> resistance too high	
engine -> fuel supply -> fuel level sensor	electrical -> short circuit to ground	
engine -> fuel supply -> fuel level sensor	electrical -> short circuit to positive	

Vehicle data

A6, A7, Q7, Q8

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4A*	2021	A		*	*	*
4A*	2022	A		*	*	*

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4A*	2023	A		*	*	*
4K*	2021	A		*	*	*
4K*	2022	A		*	*	*
4K*	2023	A		*	*	*
4M*	2021	A		*	*	*
4M*	2022	A		*	*	*
4M*	2023	A		*	*	*

PR numbers

PR numbers
? :with 9S8
? :or ? :with 9S9
? :or ? :with 7J3

Control units

Diagnostic address	Software part number	Software version	Hardware part number	Hardware version
0017 - Instrument cluster	*	0115	*	*
0017 - Instrument cluster	*	0117	*	*
0017 - Instrument cluster	*	0022	*	*
0017 - Instrument cluster	*	0053	*	*
0017 - Instrument cluster	*	0119	*	*
0017 - Instrument cluster	*	0058	*	*
0017 - Instrument cluster	*	0111	*	*
0017 - Instrument cluster	*	0118	*	*
0017 - Instrument cluster	*	0116	*	*
0017 - Instrument cluster	*	0063	*	*
0017 - Instrument cluster	*	0107	*	*
0017 - Instrument cluster	*	0060	*	*
0017 - Instrument cluster	*	0056	*	*
0017 - Instrument cluster	*	0055	*	*
0017 - Instrument cluster	*	0059	*	*

A6, A7, Q7, and Q8

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4A*	2019	A		*	*	*
4A*	2020	A		*	*	*
4K*	2019	A		*	*	*
4K*	2020	A		*	*	*
4M*	2017	A		*	*	*
4M*	2018	A		*	*	*

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4M*	2019	A		*	*	*
4M*	2020	A		*	*	*

A6, A7, Q7, and Q8

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4A*	2024	A		*	*	*
4A*	2025	A		*	*	*
4K*	2024	A		*	*	*
4K*	2025	A		*	*	*
4M*	2024	A		*	*	*
4M*	2025	A		*	*	*

PR numbers

PR numbers
?:with 9S8
?:or ?::with 9S9
?:or ?::with 7J3

Control units

Diagnostic address	Software part number	Software version	Hardware part number	Hardware version
0017 - Instrument cluster	*	0262	*	*
0017 - Instrument cluster	*	0321	*	*
0017 - Instrument cluster	*	0260	*	*
0017 - Instrument cluster	*	0265	*	*
0017 - Instrument cluster	*	0264	*	*
0017 - Instrument cluster	*	0357	*	*
0017 - Instrument cluster	*	0320	*	*
0017 - Instrument cluster	*	0356	*	*
0017 - Instrument cluster	*	0261	*	*
0017 - Instrument cluster	*	0266	*	*

Documents

Document name
master.xml



Connection offline

Technical Service Bulletin

Transaction No.: **2070211/5**

20 EPC Light on: Fuel level sender DTC entry B10581B, B103E1B resistance too high

Release date: Oct 14, 2025

Condition

REVISION HISTORY		
Revision	Date	Purpose
5	-	Revised header (Updated Software versions)
4	06/27/2025	Revised header (Updated Models/Model Years) Revised <i>Service</i> (Revised repair directions)
3	04/24/2025	Revised <i>Service</i> (Updated Software table)

Customer states:

An EPC warning and a fuel system warning are displayed in the instrument cluster.

Workshop findings:

The following DTC is stored in the Comfort System Central Control Module, J393 (address word 0046):

- **B10581B** Fuel level sensor 2 Resistance too high with symptom number 65698.

or

- **B103E1B** Fuel level sensor 1 Resistance too high with symptom number 65694.

Technical Background

Hardware issue (Deposits building up on fuel gauge sender).

Production Solution

Optimized software latency/ debounce time CW 50/2023.

Production change SVM 46A033:

Audi A6, A7:

4K8.909.501.BC [0005] -> Change included, implemented in production from week 50/23 onward.

Audi Q7:

4M0.909.501BB [0009] -> Change included, implemented in production from week 48/23 onward.

4M0.909.501BD [0011] -> Change included, implemented in production from week 29/24 onward.

Q8:

4M8.909.501BC [0009] -> Change included, implemented in production from week 50/23 onward.

4M8.909.501BD [0006] -> Change included, implemented in production from week 50/23 onward.

4M8.909.501BE [0011] -> Change included, implemented in production from week 32/24 onward.

Service

1. Follow all instructions in TSB 2011732: *00 Software Version Management (SVM), operating instructions* and TSB 2047812: *00 MC: how to set up and use the FMC for obtaining vehicle software updates (SD Creator decommissioned)*.

2. Update the J393 (0046) using the SVM action code as listed in the table below, if necessary:

Vehicles from model years 2017-2020

Issue with tank sender 1: Please run SVM code **46A033** and then check the complaint again. If the complaint has not been remedied, please replace tank sender 1.

Issue with tank sender 2: Please run SVM code **46A033** and then check the complaint again. If the complaint has not been remedied, please replace the tank and tank sender 1.

Vehicles from model year 2021

Model year 2021 will receive the software via recall 90VC.

Vehicles from model years 2022-2023

Applies to vehicles with high-voltage components:

To prevent the high-voltage battery from charging during the software update, the high-voltage charging cable on vehicles with high-voltage components must be unplugged BEFORE the SVM code is entered. Please note that charging the high-voltage battery during a software update can cause damage to the high-voltage components.

Issue with tank sender 1: Please use SVM code **46A033**. Also check the software version for the Audi virtual cockpit (diagnostic address 0017) before running the second update.

Vehicles with software **0107, 0111, 0115, 0116, 0117, 0118 or 0119** in the Audi virtual cockpit (diagnostic address 0017) Update the Audi virtual cockpit to software version **0122** using SVM code **17A053**.

For this purpose, order the USB stick with part number **8W6 906 961 AF** in advance or download the software onto a USB stick that complies with the USB 2.0 specification.

Start the update on the workshop tester by selecting "flash" and entering the specified SVM code. When the following (or similar) appears while you are running the program: "... please insert update medium with the following part number...", insert the USB stick into a USB port in the vehicle which is suitable for data transmission.

If the message "...Hold the vehicle key to the transponder..." is shown, place the vehicle key so that it makes full surface contact against the marking provided in the center console until the Audi virtual cockpit shows that the update process has started, and keep the key in this position until the update process is completed. Check the complaint again. If the complaint has not been remedied, please replace **tank sender 1**.

Issue with tank sender 2: Please use SVM code **46A033**. Also check the software version for the Audi virtual cockpit (diagnostic address 0017) before running the second update.

For vehicles with software **0107, 0111, 0115, 0116, 0117, 0118 or 0119** in the Audi virtual cockpit (diagnostic address 0017) Update the Audi virtual cockpit to software version **0122** using SVM code **17A053**.

For this purpose, order the USB stick with part number **8W6 906 961 AF** in advance or download the software onto a USB stick that complies with the USB 2.0 specification.

Start the update on the workshop tester by selecting "flash" and entering the specified SVM code. When the following (or similar) appears while you are running the program: "... please insert update medium with the following part number...", insert the USB stick into a USB port in the vehicle which is suitable for data transmission.

If the message "...Hold the vehicle key to the transponder..." is shown, place the vehicle key so that it makes full surface contact against the marking provided in the center console until the Audi virtual cockpit shows that the update process has started, and keep the key in this position until the update process is completed.

Check the complaint again. If the complaint has not been remedied, please replace the **tank and tank sender 1**.

Vehicles from model years 2024

Issue with tank sender 1: Please run SVM code **46A033**

For Vehicles with software 0260, 0261, 0262, 0264, 0265 or 0266 in the Audi virtual cockpit (diagnostic address 0017)

Update the Audi virtual cockpit to software version 0268 using SVM code 17A053.

Use the FMC (Flash Media Creator) and part number 8W6 906 961 AG to download the software onto a USB stick that complies with the USB 2.0 specification.

Start the update on the workshop tester by selecting ' flash ' and entering the specified SVM code. When the following (or similar) appears while you are running the program: ". . . please insert update medium with the following part number, insert the USB stick into a USB port in the vehicle which is suitable for data transmission.

If the message ". Hold the vehicle key to the transponder. (or similar) subsequently appears while the program is running, place the vehicle key so that it makes full surface contact against the marking provided in the center console until the Audi virtual cockpit shows that the update process has started, and keep the key in this position until the update process is completed.

Check the complaint again. If the complaint has not been remedied, please **replace tank sender 1**.

Issue with tank sender 2: Please run SVM code **46A033**.

For Vehicles with software 0260, 0261, 0262, 0264, 0265 or 0266 in the Audi virtual cockpit (diagnostic address 0017). Update the Audi virtual cockpit to software version 0268 using SVM code 17A053.

Use the FMC (flash media creator) and part number 8W6 906 961 AG to download the software onto a USB stick that complies with the USB 2.0 specification.

Start the update on the workshop tester by selecting ' flash ' and entering the specified SVM code. When the following (or similar) appears while you are running the program: ". . . please insert update medium with the following part number, insert the USB stick into a USB port in the vehicle which is suitable for data transmission.

If the message ". Hold the vehicle key to the transponder. (or similar) subsequently appears while the program is running, place the vehicle key so that it makes full surface contact against the marking provided in the center

console until the Audi virtual cockpit shows that the update process has started, and keep the key in this position until the update process is completed.

Check the complaint again. If the complaint has not been remedied, please replace **tank and tank sender 1**.

Vehicles from model years 2025

Vehicle with software 032, 0321, 0356 or 0357 in the Audi Virtual Cockpit (diagnostic address 0017). Update the Audi virtual cockpit to software version 0358 using SVM code 17A053.

Use the FMC (flash media creator) and part number 8W6 906 961 AH to download the software onto a USB stick that complies with the USB 2.0 specification.

Start the update on the workshop tester by selecting 'flash ' and entering the specified SVM code. When the following (or similar) appears while you are running the program: ". . . please insert update medium with the following part number, insert the USB stick into a USB port in the vehicle which is suitable for data transmission.

If the message ". Hold the vehicle key to the transponder. (or similar) subsequently appears while the program is running, place the vehicle key so that it makes full surface contact against the marking provided in the center console until the Audi virtual cockpit shows that the update process has started, and keep the key in this position until the update process is completed.

Upload all relevant GFF logs to GFF paperless. There should not be an event memory entry (resistance too high) for tank sender 1 or 2 that was logged at the same time (e.g. in cases where the concern occurs after the software update).

Attach the event memory log. There should not be an event memory entry (resistance too high (for tank sender 1 that was logged at the same time.

Warranty

Claim Type:	If the vehicle is outside of any warranty, this Technical Service Bulletin is informational only.		
Service Number:	2010		
Damage Code:	0010		
Labor Operations:	<u>Only software update performed</u>		
	Software update	0151 0010	See SRT with associated operations
	Software update	01510 0060	Labor according to the diagnostic log
	<u>Software update and tank sender replacement</u>		
	Remove and install fuel gauge sender	2015 19xx	See SRT with associated operations
	Software update	0151 0060	Labor according to the diagnostic log
	<u>Software update and tank replacement</u>		

Claim Comment:	Replace fuel tank	2010 55XX	See SRT with associated operations
	Remove and install fuel guage sender	2015 19xx	See SRT with associated operations
	Software update	0151 0060	Labor according to the diagnostic log
	As per TSB 2070211/5		

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

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.		
Part Number	Part Description	Quantity
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA
See ETKA	Fuel level sender 1 (If needed)	01
See ETKA	Fuel tank (If needed)	01

Additional Information

All parts and service references provided in this TSB (**2070211**) are subject to change and/or removal.

©2025 Audi of America, Inc. All rights reserved. The information contained in this document is based on the latest information available at the time of printing and is subject to the copyright and other intellectual property rights of Audi of America, Inc., its affiliated companies, and its licensors. All rights are reserved to make changes at any time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, nor may these materials be modified or reposted to other sites without the prior expressed written permission of the publisher.