

Safety Recall Code: 20DN

Subject

Fuel Level Sender

Release Date

February 08, 2023

Affected Vehicles

Country	Beginning Model Year	Ending Model Year	Vehicle	Vehicle Count
USA	2020	2021	A6 ALLROAD	1,714
USA	2019	2021	A6 SEDAN	30,351
USA	2019	2021	A7	8,295
USA	2021	2021	RS6 AVANT	1,501
USA	2021	2021	RS7	1,353
USA	2020	2021	S6 SEDAN	1,459
USA	2020	2021	S7	1,116
CAN	2020	2021	A6 ALLROAD	187
CAN	2019	2021	A6 SEDAN	1,078
CAN	2019	2021	A7	1,017
CAN	2021	2021	RS6 AVANT	465
CAN	2021	2021	RS7	226
CAN	2020	2021	S6 SEDAN	117
CAN	2020	2021	S7	126

Check Campaigns/Actions screen in Elsa on the day of repair to verify that a VIN qualifies for repair under this action. Elsa is the <u>only</u> valid campaign inquiry & verification source.

- ✓ Campaign status must show "open."
- ✓ If Elsa shows other open action(s), inform your customer so that the work can also be completed at the same time the vehicle is in the workshop for this campaign.

Problem Description

Due to tolerance deviations, the distance between the fuel level sender and a ventilation pipe in the tank may be too small. As a result, the fuel level sender may get stuck on the ventilation pipe which will lead to a drop in the fuel level not being detected and therefore to an incorrect fuel level and remaining range being displayed in the instrument cluster. This may cause the vehicle to run out of fuel even though the indicator shows that there is still fuel in the tank. Inaccurate fuel indication may lead to an engine stall due to fuel starvation, increasing the risk of a crash.

Corrective Action

In order to create a sufficient distance between the fuel level sender and the ventilation pipe, a sensor with tighter geometric tolerances will be installed within the fuel tank.

Precautions

If the recall condition is present in the vehicle, the driver may notice an implausible remaining range since the last refueling or an implausible stagnation of the fuel gauge. Should this occur, customers are advised to contact their authorized Audi dealer without delay to have the vehicle inspected.

Code Visibility

On or about March 18, 2022, the campaign code was applied to affected vehicles.

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Owner Notification

Owner notification will take place in February 2023. Owner letter examples are included in this bulletin for your reference.

Additional Information

Please alert everyone in your dealership about this action, including Sales, Service, Parts and Accounting personnel. Contact Warranty if you have any questions.

IMPORTANT REMINDER ON VEHICLES AFFECTED BY SAFETY & COMPLIANCE RECALLS

<u>New Vehicles in Dealer Inventory:</u> It is a violation of federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied. By law, dealers must correct, prior to delivery for sale or lease, any vehicle that fails to comply with an applicable Federal Motor Vehicle Safety Standard or that contains a defect relating to motor vehicle safety.

<u>Pre-Owned Vehicles in Dealer Inventory:</u> Dealers should not deliver any pre-owned vehicles in their inventory which are involved in a safety or compliance recall until the defect has been remedied.

Dealers must ensure that every affected inventory vehicle has this campaign completed <u>before</u> delivery to consumers.

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Parts Information

Parts Control Type:	Parts will be managed with a weekly Upper Order Limit. Please see Parts On
Upper Order Limit	Command (POC) for your Upper Order Limit quantity.

Initial Allocation: YES	Dealers will be sent an initial allocation prior to customer notification. If no initial allocation was received, please reference the Repair Projection Tool (below) to view your potential VIN population.
	your potential vity population.

Repair Projection Tool: (right click to open)	Q
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Criteria	Quantity	Part Number	P.O.C. Part Description	Ordering Method
	1	4K0-919-047	SENDER	UOL
02	1	1J0-919-133-B	WASHER	UOL
	3	5G0-886-373	GROMMET	UOL

! NOTE

The specified part numbers reflect the status at the start of this action. Interim updates made in ETKA can cause a listed part number to become unavailable. In this case, the new part number specified in ETKA should be used.

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Claim Entry Instructions

The labor times listed here may differ from the labor operations and labor times listed in ELSA.

After campaign 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:

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

Service Number	20DN		
Damage Code	0099		
Parts Vendor Code	002		
Claim Type	Sold vehicle: 7		
	Unsold vehicle:	7 90	
Causal Indicator	Mark SENDER*	as causal part	
Vehicle Wash/Loaner	Do not claim wa	ash/loaner under this act	ion
Criteria I.D.	02		
	Remove rear seat bench. Remove fuel delivery unit. Replace fuel level sender		
	LABOR		
	Labor Op Time Units Description		Description
	2066 19 00	100	Electric fuel pump remove+reinstall
	2015 19 50	10	Fuel gauge sender remove+reinstall
	9310 83 50	SEE ELSA	Disable HV system (if equipped with 48V system)
	0151 00 00	Time stated on diagnostic protocol	GFF Operations (if necessary)
	PARTS		
	Quantity Part Number Description		Description
	1.00	4K0919047	SENDER*
	1.00	1J0919133B	WASHER
	3.00	5G0886373	GROMMET

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Customer Letter Example (USA)

<MONTH YEAR>

<CUSTOMER NAME> <CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <MODEL YEAR> <BRAND> <CARLINE>, <VIN>

NHTSA: 22V155

Subject: Safety Recall 20DN - Fuel Level Sender

Dear Audi Owner.

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act. Audi has decided that a defect, which relates to motor vehicle safety, exists in certain 2019-2021 model year Audi vehicles. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?

Due to tolerance deviations, the distance between the fuel level sender and a ventilation pipe in the tank may be too small. As a result, the fuel level sender may get stuck on the ventilation pipe which will lead to a drop in the fuel level not being detected and therefore to an incorrect fuel level and remaining range being displayed in the instrument cluster. This may cause the vehicle to run out of fuel even though the indicator shows that there is still fuel in the tank. Inaccurate fuel indication may lead to an engine stall due to fuel starvation, increasing the risk of a crash.

What will we do?

In order to correct this defect and create a sufficient distance between the fuel level sender and the ventilation pipe, your Audi dealer will install a sensor with tighter geometric tolerances into the fuel tank. This work will take about two hours to complete and will be performed for you free of charge. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

What should you do?

Please contact your authorized Audi dealer without delay to schedule this recall work. For your convenience, you can also visit www.audiusa.com and click on the "Find a Dealer" link to locate a dealer near you and schedule this work.

If possible, please ensure the fuel level in your vehicle is less than one-quarter of a tank when you arrive at the dealership for this repair.

take

Precautions you should If the recall condition is present in the vehicle, the driver may notice an implausible remaining range since the last refueling or an implausible stagnation of the fuel gauge. Should this occur, customers are advised to contact their authorized Audi dealer without delay to have the vehicle inspected.

Lease vehicles and address changes

If you are the lessor and registered owner of the vehicle identified in this action, the law requires you to forward this letter immediately via first-class mail to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle, please fill out the enclosed prepaid Owner Reply card and mail it to us so we can update our records.

Reimbursement of **Expenses**

If you have previously paid for repairs relating to the condition described in this letter, the enclosed form explains how to request reimbursement. We would be pleased to review your reimbursement request.

Can we assist you further?

If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Experience at 1-800-253-2834 or via our "Contact Us" page at www.audiusa.com.

Checking your vehicle for open Recalls and **Service Campaigns**

To check your vehicle's eligibility for repair under this or any other recall/service campaign, please visit the Recall/Service Campaign Lookup tool at www.audiusa.com and enter your Vehicle Identification Number (VIN).

If you still cannot obtain satisfaction, you may file a complaint with: The Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, DC 20590; or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to http://www.safercar.gov.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Audi Customer Protection

Customer Letter Example (Canada)

<MONTH YEAR>

<CUSTOMER NAME>

<CUSTOMER ADDRESS>

<CUSTOMER CITY STATE ZIPCODE>

This notice applies to your vehicle: <MODEL YEAR> <BRAND> <CARLINE>, <VIN>

Transport Canada Recall: 2022-114

Subject: Safety Recall 20DN - Fuel Level Sender

Dear Audi Owner,

This notice is sent to you in accordance with the requirements of the *Motor Vehicle Safety Act*. This is to inform you that your vehicle may contain a defect that could affect the safety of a person. Our records show that you are the owner of a vehicle affected by this action.

What is the issue?

Due to tolerance deviations, the distance between the fuel level sender and a ventilation pipe in the tank may be too small. As a result, the fuel level sender may get stuck on the ventilation pipe which will lead to a drop in the fuel level not being detected and therefore to an incorrect fuel level and remaining range being displayed in the instrument cluster. This may cause the vehicle to run out of fuel even though the indicator shows that there is still fuel in the tank. Inaccurate fuel indication may lead to an engine stall due to fuel starvation, increasing the risk of a crash.

What will we do?

In order to correct this defect and create a sufficient distance between the fuel level sender and the ventilation pipe, your Audi dealer will install a sensor with tighter geometric tolerances into the fuel tank. This work will take about two hours to complete and will be performed for you free of charge. Please keep in mind that your dealer may need additional time for the preparation of the repair, as well as to accommodate their daily workshop schedule.

What should you do? Please contact your authorized Audi dealer without delay to schedule this recall work.

If possible, please ensure the fuel level in your vehicle is less than one-quarter of a tank when you arrive at the dealership for this repair.

Precautions you should take

If the recall condition is present in the vehicle, the driver may notice an implausible remaining range since the last refueling or an implausible stagnation of the fuel gauge. Should this occur, customers are advised to contact their authorized Audi dealer without delay to have the vehicle inspected.

Lease vehicles and address changes

If you are the lessor and registered owner of the vehicle identified in this letter, you shall forward this letter (and any subsequent notice, if applicable) to the lessee within ten (10) days of receipt. If you have changed your address or sold the vehicle identified in this letter, please fill out the enclosed prepaid Owner Reply Card and mail it to us so we can update our records.

Reimbursement of **Expenses**

If you have previously paid for repairs relating to the condition described in this letter, the enclosed form explains how to request reimbursement. We would be pleased to review your reimbursement request.

Can we assist you further?

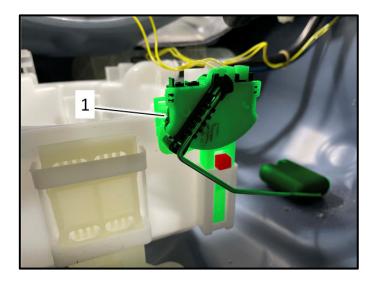
If your authorized Audi dealer fails or is unable to complete this work free of charge within a reasonable time, please contact Audi Customer Relations Monday through Friday from 8AM to 8PM EST at 1-800-822-2834 or via our "Contact Audi Canada" page at www.audi.ca.

We apologize for any inconvenience this matter may cause; however we are taking this action to help ensure your safety and continued satisfaction with your vehicle.

Sincerely,

Audi Customer Protection

Repair Overview



Replace fuel level sender

! NOTE

- These repair instructions may differ from the labor operations and labor times listed in ELSA.
- 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.
- This procedure must be read in its entirety prior to performing the repair.
- Due to variations in vehicle equipment and options, the steps/illustrations in this work procedure may not identically match all affected vehicles.
- Diagnosis and repair of pre-existing conditions in the vehicle are not covered under this action.
- When working during extreme temperatures, it is recommended that the vehicle be allowed to acclimate inside the shop to avoid temperature-related component damage/breakage.

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Required Tools



Wrench - Fuel Sending Unit -T10202-



Fuel Extracting Device
-VAS5190A(or equivalent)



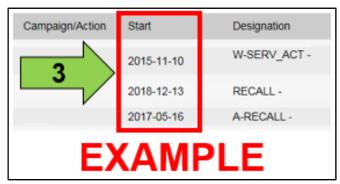
Adapter
-VAS5190/4(or equivalent)

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Section A - Check for Previous Repair





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



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.



open, they must be performed in order of the Start date <arrow 3>. The oldest should be performed first.

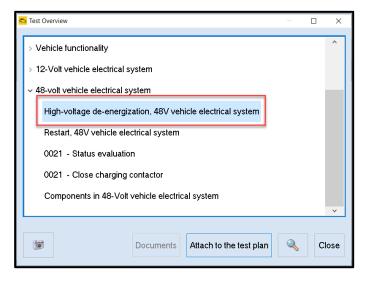
- All Safety Recalls must be completed prior to completing this campaign.
- Proceed to Section B.

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Section B - Repair Procedure





Drain fuel tank (if necessary):

- Check the vehicle fuel level displayed on the instrument cluster.
- Record the vehicle fuel level on the repair order



If the fuel level in the vehicle is at or below 1/4 tank, then it is possible to perform all operations in this bulletin without extracting any fuel.

 See ELSA Repair Manual: Repair Manual > Engine > 20 Fuel Supply > Fuel Tank > Fuel Tank, Draining

A CAUTION

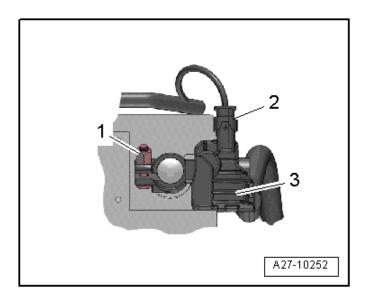
The fuel filler cap must be removed before draining the fuel tank.

De-energize 48V system (if equipped):

- Select test plan "High-voltage de-energization, 48V vehicle electrical system."
- Follow the ODIS test plan steps.

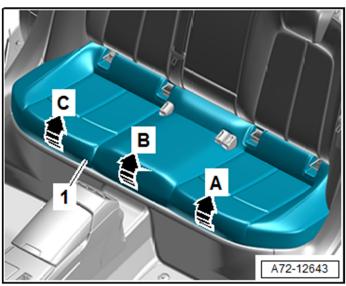
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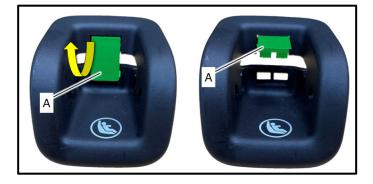
Disconnect 12V battery:

 See ELSA Repair Manual: Repair manual > Electrical System > Electrical Equipment > 27 Battery, Starter, Generator, Cruise Control > Battery, Disconnecting and Connecting



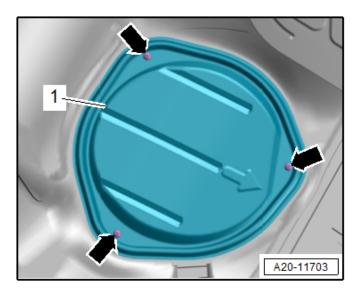
Remove rear bench seat:

- Move the front seats all the way forward into the highest position.
- See ELSA Repair Manual: Repair manual > Body > Seats > 72 Seat Frames > Rear Seats > Rear Bench Seat, Removing and Installing



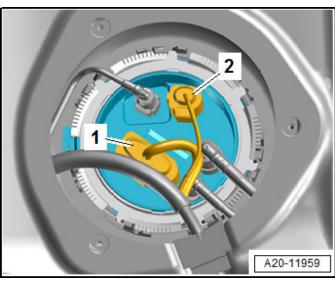
• When removing the child seat anchor covers, flap <A> will have to be unlocked as shown.

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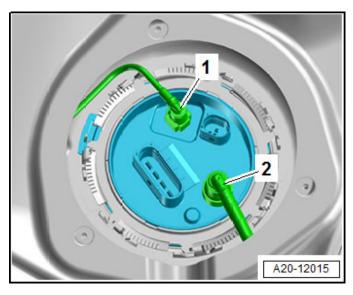
Remove cover for fuel delivery unit:

- Fold the insulation mat over the sealing flange cover to the side. Separate it at the perforations if necessary.
- Remove the bolts <arrows> and the sealing flange cover <1>.



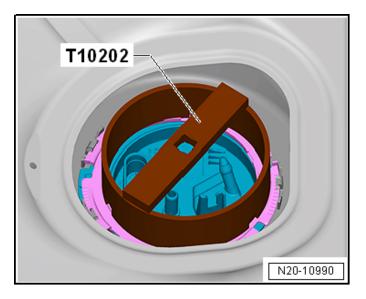
Disconnect electrical connectors:

Unlock and disconnect the connectors <1 and
 2> on the sealing flange.



- Disconnect fuel line <2>.
- To disconnect the fuel line coupling, first press down on the connector, then press the release button, then remove the coupling upward.

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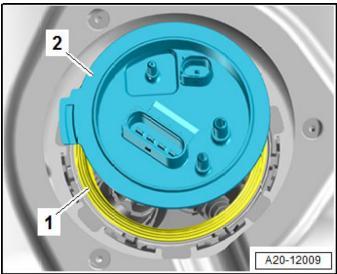
Remove locking ring:

A CAUTION

Risk of leaking fuel

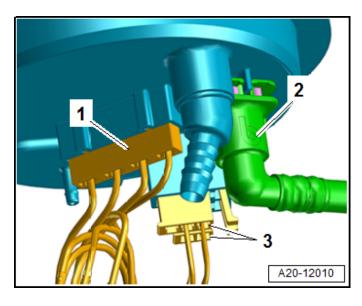
The fuel tank may only be a maximum of 1/4 full when removing the fuel delivery unit.

 Remove the locking ring using the Wrench -Fuel Sending Unit -T10202-.



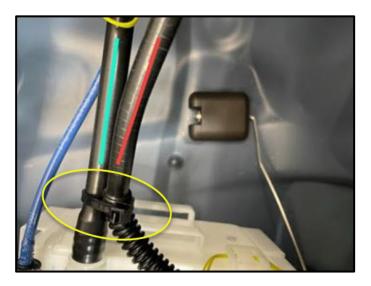
Remove sealing flange:

- Pull the sealing flange <2> just slightly out of the opening in the fuel tank and remove the gasket <1>.
- Carefully pull the sealing flange with the fuel lines out of the fuel tank opening.



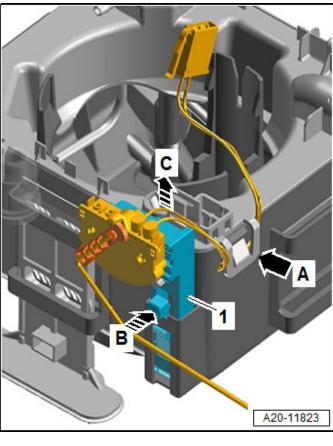
- Disconnect the connectors <1 and 3> on the bottom of the sealing flange by unlocking the connector safety catch.
- Disconnect the fuel line <2>.

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Remove tie wrap (if installed):

- A tie wrap <circle> may have been installed around the suction jet supply and vent lines during a previous repair.
- Check for the presence of this tie wrap. If this tie wrap is installed, it must be removed and discarded.



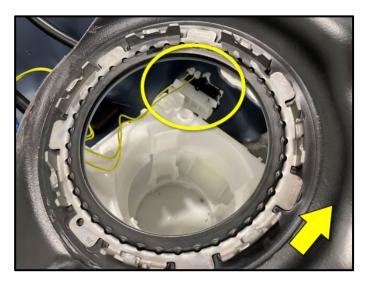
Remove fuel level sender:



Contrary to the Repair Manual, the fuel level sender can be removed without removing the fuel delivery unit.

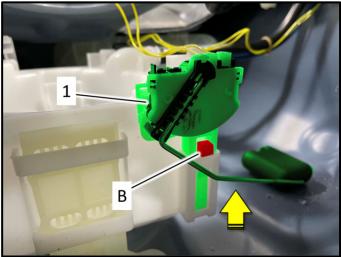
- Reach through the installation opening in the fuel tank and free up the wire for the Fuel Level Sender at the baffle housing <arrow A>.
- Reach through the installation opening in the fuel tank, release the catch in direction of <arrow B> and at the same time, remove the fuel gauge <1> from the mount on the baffle housing in direction of <arrow C>.
- Carefully remove the fuel level sender from the fuel tank opening.

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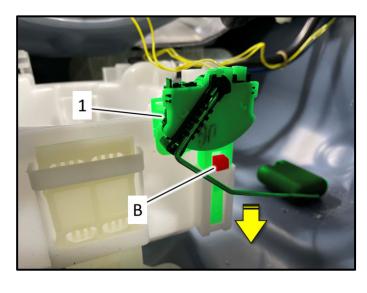


! NOTE

Fuel level sender denoted by the <circle>.
Arrow denotes direction of vehicle travel.
Fuel delivery unit shown removed for clarity.



- Alternate view of removing fuel level sender.
- Press catch and remove fuel level sender
 1> in direction of <arrow>.

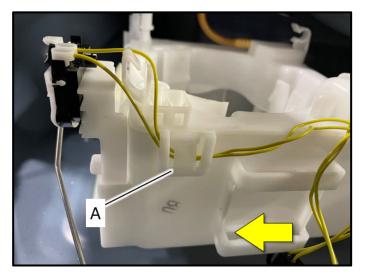


Replacing fuel level sender:

Part Number	Part Description
4K0-919-047	Fuel level sender

- Install the new fuel level sender in the reverse order of removal and note the following:
 - o Take care so the sender arm is not bent.
 - Press the fuel level sender <1> in place until the catch fully engages.

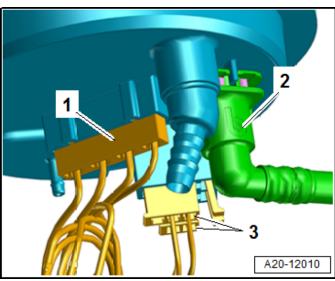
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 Ensure the fuel level sender wiring is secured under the clip <A> as shown.

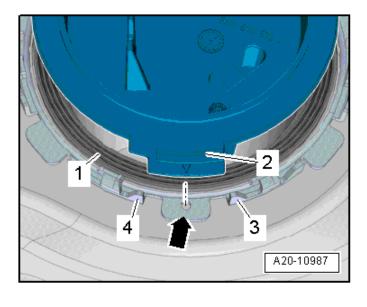
U NOTE

Arrow denotes direction of vehicle travel. Fuel delivery unit shown removed for clarity.



Reinstall sealing flange:

- Connect the connectors <1 and 3> on the bottom of the sealing flange and make sure they are secure.
- Insert the fuel line <2> until it audibly latches to the sealing flange.

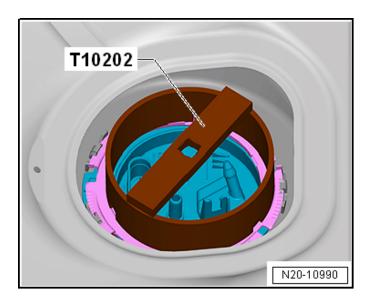


Replace seal <1>.

Part Number	Part Description
1J0-919-133-B	Seal

- Seal <1> must be dry when installing.
- When inserting the sealing flange, the seal must not be damaged or crushed.
- Bring the sealing flange into its installation position.
- The tab <2> on the sealing flange must face the hole <arrow> on the mount and rest between the tabs <3 and 4> on the fuel tank.

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- Firmly press on the sealing flange, position the locking ring and tighten using the Wrench -Fuel Sending Unit -T10202-.
 - o Torque locking ring to 110 Nm.
- Attach the fuel lines until they engage audibly.
- Connect the connectors and make sure they are secure.

Refill fuel:

- Ensure that at least five liters of fuel are in the fuel tank.
- As a best practice the fuel tank should be filled with the same amount of fuel that was removed.

A WARNING

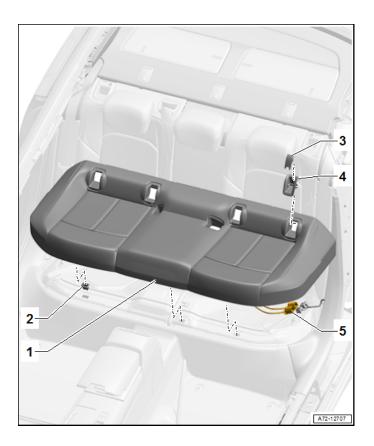
Risk of the fuel tank exploding when starting the fuel pump.

Severe injuries and burns are possible.

After installing a new or completely empty fuel tank, immediately fill with at least 5 liters of fuel.

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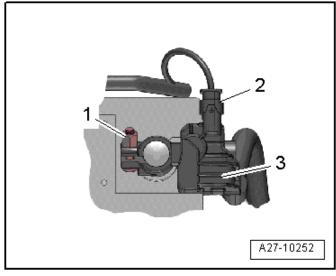
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Reinstall the bench seat:

- Installation is the reverse order of removal.
- Replace the seat grommets <2>.

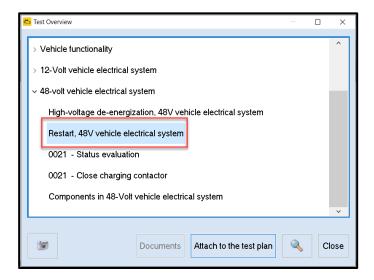
Part Number	Part Description
5G0-886-373	Seat grommet



Reconnect 12V battery:

 See ELSA Repair Manual: Repair manual > Electrical System > Electrical Equipment > 27 Battery, Starter, Generator, Cruise Control > Battery, Disconnecting and Connecting

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Restart 48V HV system (if equipped):

- Select test plan, "Restart, 48V vehicle electrical system."
- Follow the ODIS test plan steps.
- Send Diagnostic log to GFF Paperless upon exiting ODIS.

Final steps:

- · Cycle ignition on and off a few times.
- Start vehicle and confirm fuel level is reading correctly.

Proceed to Section C

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Section C - Campaign Completion Stamp

I certify that this campaign has been performed in strict accordance with the applicable Audi repair procedure.		
SAGA Code:		
Technician:		
Date:		

Item#: AUD4927ENG

-OR-

Je certifie que cette campagne de rappel a été exécutée suivant les strictes directives de réparation d'Audi	
Code de SAGA:	
Technicien:	
Date:	

Item # AUD4927FRE

Once the campaign has been completed, the technician should stamp the repair order.

- Stamps are available for ordering through the Compliance Label Ordering Portal.
- Proceed to Section D

Section D - Parts Return/Disposal

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.

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 Audi dealer. ©2023 Audi of America, Inc. and Audi Canada. All Rights Reserved.

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