

#### 97 Fuel gauge does not work

97 19 65 2056234/1 September 23, 2019.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A8	2018 - 2020	All	Not Applicable

### Condition

#### **Customer states:**

• The fuel gauge does not read full after refueling.

#### Or

• The fuel gauge reads empty.

#### Workshop findings:

One or more of the following DTCs is stored as intermittent or static in the comfort system central control module, J393 (address word 0046):

- DTC B103E1A (Fuel gauge sensor 1 Resistance too low).
- DTC B103E1B (Fuel gauge sensor 1 Resistance too high).
- **DTC B10581A** (Fuel gauge sensor 2 Resistance too low).
- DTC B10581B (Fuel gauge sensor 2 Resistance too high).
- DTC B117A1A (Fuel gauge sensor 4 Resistance too low).
- DTC B117A1B (Fuel gauge sensor 4 Resistance too high).

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### **Technical Background**

The wiring of the fuel tank senders can rub through on the service opening for the fuel tank.

If one or more of the above DTCs are stored, open the service cover under the rear seat bench. Inspect the fuel tank wiring harness near the body flange (Figure 1). If the insulation is damaged, repair using the steps below.

If no damage is found, continue with standard diagnosis.



Figure 1. Location to inspect for rub through.

### **Production Solution**

Improved harness routing and addition of abrasion resistant tape in production.

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#### **Service**

- 1. Remove the trim of the fuel pump control unit from the underbody of the vehicle.
- 2. Disconnect all connectors from the tank wiring harness.
- 3. Loosen the harness clip from the retaining strap of the tank so that the wiring harness can be pulled upwards through the service opening (Figure 2).



Figure 2. The arrow points towards the harness clip to be removed.

- 4. Remove the rear seat bench.
- 5. Open the service cover and disconnect the connectors for the fuel pump and the tank senders.
- 6. Carefully pull the wiring harness upwards out of the service opening. After sufficient clearance is gained, repair the damaged wiring harness with crimp connector 000 979 940. Ensure a watertight repair to the harness is made.

**Tip:** The harness clip (Figure 2) has to be removed from the tank to gain enough clearance for the repair. This harness clip does not need to be replaced for the repair however it will need to be refit after the repairs are made.

7. Wrap 20 cm of textile adhesive tape (D 004350A2) around the wiring harness in the area of the body flange.

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 Attach self-adhesive foam pad (443201365B, 100x100x6mm). Cut the pad into two equal sections measuring 50x100mm. Attach one section to the underside of the body flange (Figure 3, A).



*Figure 3, A and 3, B.* Section A and B are attached to the topside of the tank and the bottom side of the body to prevent further rubbing of the harness.

- 9. Attach the other half to the top side of the fuel tank so that the wiring harness will not rub through on any components (Figure 3, B).
- 10. Refit the wiring harness and plug in the connections for the fuel pump and tank sensor.
- 11. Reconnect the cables to the fuel pump control module.
- 12. Secure the wiring harness to the welding stud of the tank strap with the harness clip. Ensure that the wiring harness is at least 1cm away from the tank strap.
- 13. Reassemble the vehicle, however, before closing the service cover check the wiring harness again for correct routing.

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### Warranty

Claim Type:	• 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:	9725			
Damage Code:	0025			
Labor Operations:	Remove and install rear cover	5194 1900	See SRT	
	Remove and install rear seat bench OR Remove and install single rear right seat	7249 1900 Or 7248 1907	See SRT	
	Remove and install rear wiring harness	9725 1999	40 TU	
	Repair wiring loom (depends on number of faulty cables)	9709 41xx	See SRT	
Diagnostic Time:	GFF	0150 0000	Time stated on the diagnostic protocol (Max 100 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 #2056234/1			

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 yo	Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.			
Part Number	Part Description	Quantity		
D 004 350 A2	Textile adhesive tape	20cm needed		

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443 201 365 B	Foam pad	1
000 979 940	Crimp connector	As needed

Tool Number	Tool Description
VAS1978B	Wiring Harness Repair Set
VAS 61XX	ODIS Service with VAS tester

### **Additional Information**

All parts and service references provided in this TSB (2056234) are subject to change and/or removal.

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