

97 Fuel gauge does not work

97 20 75 2056234/3 June 12, 2020. Supersedes Technical Service Bulletin Group 97 number 19-67 dated November 19, 2019 for reasons listed below.

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

Condition

REVISION HISTORY		
Revision	Date	Purpose
3	-	Revised header (Added DTC for ECM) Revised Condition (Added DTC for ECM)
2	11/19/2019	Revised Service (Replace cable instead of repair)
1	09/25/2019	Initial publication

Customer states:

• The fuel gauge does not read full after refueling and may be accompanied by a check engine lamp.

Or

• The fuel gauge reads empty.

Workshop findings:

Engine Control Module (ECM):

One or more of the following DTCs is stored as intermittent or static in the engine control module (ECM), J623 (address word 0001):

• DTC U042300 (Invalid Data Received From Instrument Panel Cluster Control Module).

Comfort System Central Control Module:

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).

Technical Background

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



Figure 1. Location to inspect for rub through.

Production Solution

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

Service

If any of the above faults are stored the fuel tank harness will need to be inspected:

1. Open the service cover under the rear seat bench.



- 2. Unplug both connectors on the fuel pump flange.
 - Tools required for the unplugging:
 - Small plug (tank unit) green arrow (Figure 2).
 - Use VAS1978/16 to release the primary lock
 - Use VAS1978/17 to release the secondary lock.
 - Large plug (fuel pump) blue arrow (Figure 2).
 - Use VAS1978/18 to release the primary lock.

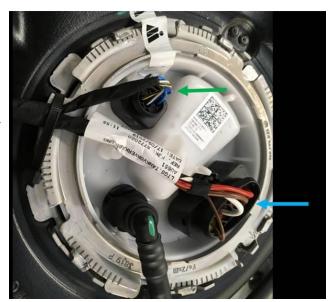


Figure 2. Fuel tank harness connectors to be removed.

- 3. Attach a fish tape, mechanics wire or similar to the old wiring harness.
- 4. Lever out the round clip between the vehicle body and fuel tank highlighted by the red circle in Figure 3.



Figure 3. Clip to be removed from the old or new harness.

- 5. Remove the trim for the fuel pump control module from the right underbody of the vehicle.
- 6. Carefully pull the wiring harness downwards so that the attached fish tape/mechanics wire does not come loose.
- 7. Carefully inspect the wiring harness for damage.



- 8. If any damage is found on the harness, replace the wiring harness and continue with the remaining steps to re-route the new harness.
- 9. If there is no damage found, perform the remaining steps using the existing harness and continue with standard diagnosis.
- 10. Remove the round clip from the wiring harness (red circle in Figure 3.)
- 11. Add an additional wrap to the harness using textile tape **N 105 920 02** between the indicated lines in Figure 4 (approximately 250 mm).



Figure 4. Add additional wrapping between the two red lines, approximately 250mm.

12. Ensure the harness is secure to the fish tape/mechanics wire and carefully route the wiring harness back into place and reconnect the harness to the pump and module.



13. Secure the wiring harness with a cable tie to the retaining ring for the tank unit (Figure 5).

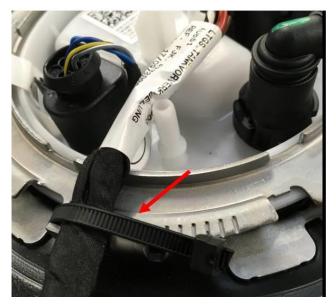


Figure 5. Harness shown secured to tank.

14. Re-assemble the vehicle and clear all faults.



Before closing the service cover, double check the routing of the wiring harness and ensure it will no longer rub on surrounding areas.

Warranty

Claim Type	440 cm to 40 Manths /50 000 Miles		
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 Tecl only. 	nnical Service Bullet	in is informational
Service Number:	9725		
Damage Code:	0025		
Labor Operations:	Remove and install fuel tank cover	5194 1900	See SRT
	Remove and install rear seat bench	7249 1900	
	OR	Or	See SRT
	Remove and install single rear right seat	7248 1907	



	Remove and install rear wiring harness	9725 1999	80 TU
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 #2056234/3		

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
N 10592002	Textile adhesive tape 250 mm needed	.01
4N0971727*	Wiring set for fuel tank (if needed)	See ETKA
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA

Tool Number	Tool Description
VAS1978/16	Release Tool Set - Extraction Tool 16
VAS1978/17	Release Tool Set - Extraction Tool 17
VAS1978/18	Release Tool Set - Extraction Tool 18
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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