Technical Service Bulletin

91 SOS warning displayed in instrument cluster, DTCs B105313 and B153313 stored in the data bus diagnostic interface

91 19 55 2054630/1 April 25, 2019.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4	2016	All	With connected gateway
A4	2017	N000001 - N043557 Or A000001 - 128700	With connected gateway
A5	2018	000001 - 018466	With connected gateway
Q5	2018	000001 - 040274	With connected gateway

Condition

Customer states:

- Yellow warning lamp for the SOS system (Figure 1) is shown in the instrument cluster with the message “Emergency call function: malfunction! Restricted functionality. Please contact Service”.

Figure 1. *Yellow warning lamp.*

Workshop findings:

One of the following DTCs is stored in the data bus on board diagnostic interface, J533 (address word 0019):

- **DTC B105313** (GSM antenna Open circuit).
- **DTC B153313** (GSM antenna 2 Open circuit).

Technical Background

Poor contact at one of the coaxial wiring’s FAKRA connections between data bus on board diagnostic interface, J533 (address word 0019) and one of the external antenna’s for emergency call services.

Production Solution

Improved FAKRA connector.

Technical Service Bulletin

Service

Overview	
	Tip: The location of the antenna, gateway, and connections vary by model. Be sure to consult the applicable wiring diagram and installation locations for the vehicle you are working on.
	Tip: Certain vehicles may have more than one external GSM antenna. Be sure to identify the antenna circuit which applies to the DTC found in the data bus on board diagnostic interface, J533 (address word 0019).
	Tip: When utilizing the VAS 6720 to perform a repair, ensure that the new connection is not under tension. The cable may need to be extended utilizing the VAS 6720 to avoid placing tension on the replaced FAKRA connector.
	Tip: The information in the manual for the VAS 6720 regarding the ban of repairs on the emergency call aerial wiring does not apply to repairs instructed by a TSB

DTC Reference Table

DTC	Measured Value Diagnostic Address 0019	Cable Position (Figure 1)	Vehicle PR-Codes
B105313 GSM antenna Open circuit	Antenna for telephone status 0x24E2	A	IW3 IW5 + 4GR IW5 + 4GY
B153313 GSM antenna 2 Open circuit	Status of antenna 2 for phone 0x1836	B	IW3 IW5

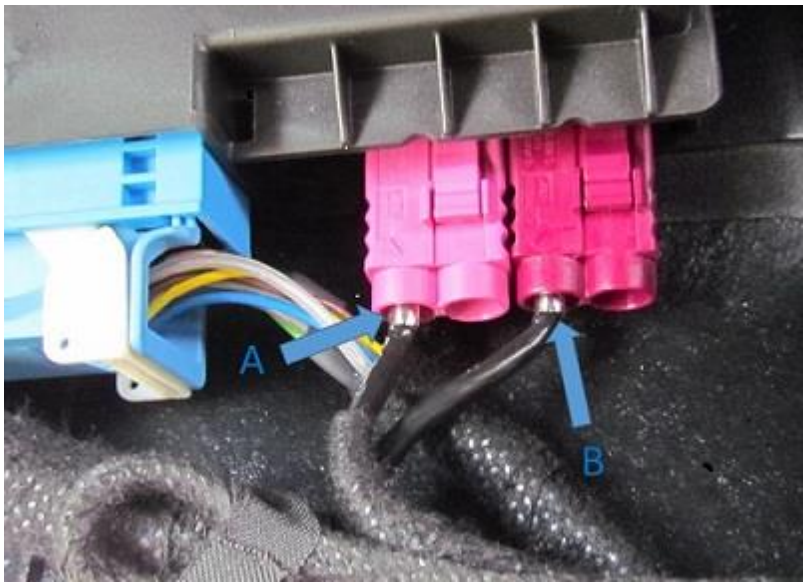

Figure 1. *GSM antenna location reference at the data bus on board diagnostic interface, J533 (address word 0019).*

Section 1:

Inspect connection at the data bus on board diagnostic interface, J533 (address word 0019)

1. Perform a visual inspection of the cable and connector.

   Replace the contact utilizing the VAS 6720 if:

   - There is tension on the cable. The cable should have some slack.
   - The pin is bent or cracked.
   - The cable is bent or damaged.
   - The connector is not fully connected.

2. Perform a function check of the cable connector:
   - View the applicable measured value from the overview table above.
   - Lightly pull, or push the applicable coaxial cable along its respective X, Y, and Z axis (Figure 2).
   - As the fault detection is not real time, hold the cable in each position for 5 seconds and observe the measured value (Figure 3).

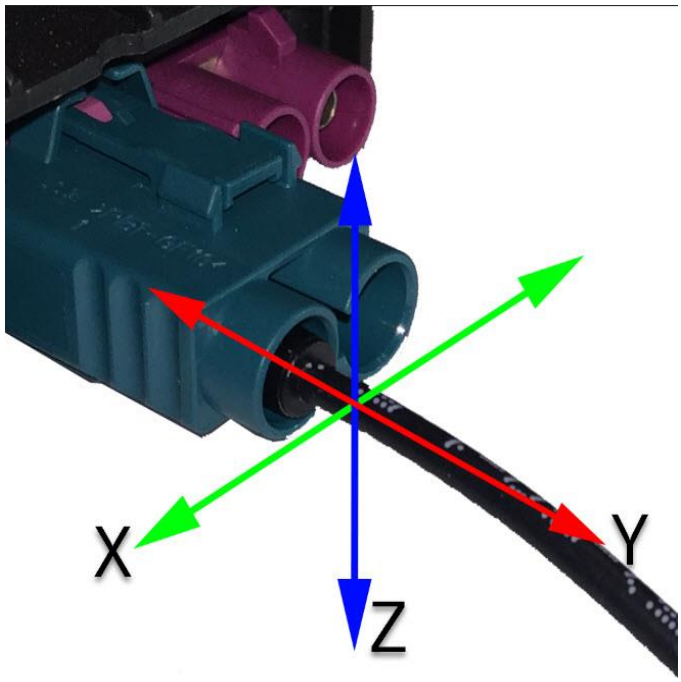

Figure 2. *Coaxial cable X, Y, and Z axis.*

3. If a fault is detected during step 2 ("Open Circuit"), replace the contact on the wire harness at the data bus on board diagnostic interface, J533 (address word 0019) utilizing the VAS 6720.

   If no fault is detected, continue to the next section.

Measured values - Display measured values

0019 - Gateway (UDS / ISOTP / 8W6907468 / 2079 / H10 / EV_CGateCONTIAU491 / 002040)

Name	Value	Value
[IDE02067]_Antenna for telephone status		
Connection to antenna	Electrical OK	Open circuit
Antenna current	0 mA	0 mA
Reception level antenna 1	-85.45 %	-91.35 %

Figure 3. *ODIS Measured Values for the external antenna for emergency call services.*

Section 2:

Inspect the connector at the Coupling Point in Interior, Center (TIM)

4. Locate and gain access to the T2dkx and T2dk FAKRA connectors, located inside the TIM Coupling Point.
   Consult the applicable wiring diagram and repair manual for the vehicle you are working on.
5. Perform a visual inspection of the cable and connector at and between T2dkx and T2dx.
   Replace **both** contacts utilizing the VAS 6720 if:
   - There is tension on the cable. The cable should have some slack.
   - The pin is bent or cracked.
   - The cable is bent or damaged.
   - The connector is not fully connected.
6. Perform a function check of the cable connector:
   - View the applicable measured value from the overview table above.
   - Lightly pull, or push each side of the applicable coaxial cable along its respective X, Y, and Z axis.

   As the fault detection is not real time, hold the cable in each position for 5 seconds and observe the measured value (Figure 3).
7. If a fault is detected during step 6 (“Open Circuit”), replace the contacts of both the T2dkx and T2dx connectors utilizing the VAS 6720.
   If no fault is detected, continue to the next section.

Section 3:

Perform Coax Overlay

Tip: Vehicle Dashboard must be removed to complete repair. Consult the applicable repair manual for the vehicle you are working on.

8. If no fault was found in Section 1, and no fault was found in Section 2:
   Replace the coax wire from the applicable emergency call module antenna to the data bus on board diagnostic interface, J533 (address word 0019).
9. Utilize the VAS 6720 to build a single coax wire from the emergency call module to the data bus on board diagnostic interface, J533 (address word 0019).
   - **Do not** split the new wire at the TIM connection between T2dkx and T2dk.

- Route the new wire along with the existing harness.
- Ensure that there are no sharp bends.
- Ensure there is no tension on the new contacts.

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:	9128		
Damage Code:	0023		
Labor Operations:	**Section 1:**		
	Remove and install rear seat bench	7249 1900	See SRT
	Check cables on data bus diagnostic interface	9035 0199	10 TU
	Repair wiring loom (Depends on the number of new contacts)	9709 41XX	See SRT
	Include If Section 2 Performed:		
	Remove and install center console	6817 1900	See SRT
	Check central wiring harness (central socket box connector)	9709 0199	10 TU
	Include If Section 3 Performed:		
	Modify wiring harness (route new cables)	9709 3399	Account the repair according to time used. The performed work must be clearly recorded.

	A4, A5, and A5 Sportback:		
	Remove and install dash panel	7018 1999	330 TU
	Q5::		
	Remove and install dash panel	7018 1999	340 TU
	A5 Cabriolet:		
	Remove and install dash panel	7018 1999	390 TU
Diagnostic Time:	GFF – **Section 1**	0150 0000	Time stated on 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 #2054630/1		

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 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
000979911	Male connector for aerial line	02 (Max) as needed
000979910	Female connector for aerial line	02 (Max) as needed
6Q0035576K	Connector housing for antenna-bush-plug	02 (Max) as needed
6Q0035575K	Connector housing for antenna-stud-plug	02 (Max) as needed
6Q0035608K	Connector housing for antenna-bush-plug	01 (Max) as needed

000979900	Aerial line	

Tool Number	Tool Description
VAS 6720	Antenna (Aerial) Cable Repair Set

Additional Information

All parts and service references provided in this TSB (2054630) are subject to change and/or removal.