



Technical Service Bulletin

91 A3 e-tron smartphone app & web portal vehicle data cannot be updated with error "Vehicle not reachable"

91 17 65 2049406/1 December 7, 2017.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A3	2016 - 2017	All	e-tron

Condition

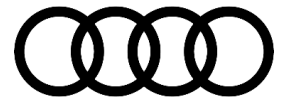
The customer states that the Audi connect services from the A3 e-tron smartphone app or web portal do not work. The message "Vehicle not reachable" appears when refreshing the data or when attempting to update the vehicle charge or HVAC settings (Figure 1).



Figure 1. Error message in e-tron smartphone app.

All e-tron remote features which require the vehicle to send updated data to the Audi connect server via the app or web portal can be affected. Those can include the following:

- Vehicle park position.
- Vehicle door or lighting status.
- Remotely turning on or off auxiliary climate control or setting a timer.
- Remotely turning on or off battery charging or setting a timer.



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Technical Background

The control module for emergency call module and communication unit (OCU), J949 (address word 0075) utilizes a cellular antenna located inside the control module. When the vehicle is parked in an area where the OCU has little or no 3G GSM data reception, the vehicle cannot send or receive data. The emergency call module and communication unit (OCU), J949 (address word 0075) is located behind the instrument cluster in the dash panel (Figure 2). The solution is to provide a connection to an external (outside of the module) antenna to improve the data reception to the OCU.



Figure 2. OCU location (Red).



Tip: The emergency call module and communication unit (OCU), J949 (address word 0075) is only a data communication module in the A3 e-tron. There is no emergency call feature in the A3 e-tron.

Production Solution

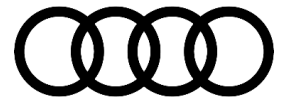
An external cellular antenna was added to the control module for emergency call module and communication unit (OCU), J949 (address word 0075) starting in calendar week 45/16.

Service

This repair involves installing an extra external cellular antenna in the vehicle. The new antenna will either be used by the MMI, PR Code 7UG, or connected directly to the control module for emergency call module and communication unit (OCU), J949 (address word 0075), PR Code 7Q0. It is important to note there are two different possible MMI systems (PR codes 7UG or 7Q0) with two different repair processes.

Required equipment:

- Access to the customer's e-tron app or access to the customer so that the customer can test the e-tron app functionality after completion of repair.
- The attached detailed repair instructions.



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- For PR Code 7UG: Additional antenna with bracket and adapter/extension wires/cables (see *Required Parts and Tools*). Read full *Service* section before ordering parts and attachment “*pr_code_7ug-a3_e-tron_ocu_antenna_v4*”.
- For PR Code 7Q0: Additional antenna with bracket and adapter cable (see *Required Parts and Tools*). See attachment “*pr_code_7q0-a3_e-tron_ocu_antenna_v4*”.



Note:

Vehicles that do not have Audi connect, the repair time and parts required are less than for PR Code 7UG.

- Tools to remove glovebox, cluster, and MMI main unit (see ElsaPro repair manual).
- VAS 6720 Antenna Cable Repair Kit (if you have not used this tool, see Figure 3 at end of the *Service*).

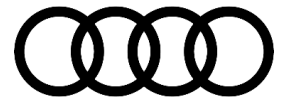
Time to complete update:

- *Repair solution 1 (PR code 7UG)*: Approximately 1.5hrs - 2hrs for repair (depends on instrument cluster type – FPK or Standard), which includes removal and installation times for components.
- *Repair solution 2 (PR code 7Q0)*: Approximately 1 - 1.5hrs for repair which includes removal and installation of the instrument cluster, MMI main unit, and glove compartment.

REPAIR SOLUTION 1 (PR CODE 7UG, VAS 6720 Needed): For vehicles with MMI Navigation plus and Audi connect (reference attached detailed repair instructions titled “*pr_code_7ug-a3_e-tron_ocu_antenna_v4*”).

This repair involves rerouting the existing LTE2 antenna connection at the MMI to the OCU and connecting the new antenna to the MMI main unit. Access to the LTE2 antenna in the bumper is not required.

1. Remove the instrument cluster control module, J285 (address word 0017) to gain access to the OCU.
2. Remove the information electronics control module 1, J794 (address word 005F) (MMI main unit) to gain access to the LTE connectors in the back of the MMI main unit.
3. Remove the glove compartment to gain access behind the dash panel to route the new extension cable.
4. Attach the bracket (8V4 035 596) to the vehicle & snap in the additional antenna (4M0 035 504) into the bracket.
5. Remove one of the spare cables from the double connector cable (000 098 713 A) and modify the straight end of the spare cable to replace the male end with a female end (see attachment “*pr_code_7ug-a3_e-tron_ocu_antenna_v4*”). This step requires the VAS 6720.
6. Disconnect the LTE2 antenna wire from information electronics control module 1, J794 (address word 005F) (MMI main unit).
7. Connect the new antenna to the modified short extension cable and then connect the short adapter cables together. Next connect the 2nd short adapter cable to the back of the information electronics control module 1, J794 (address word 005F) (MMI main unit).



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8. Modify the harness connector end, which was removed from the J794, to add the straight connector (original is a 90 degree bend connector), (see attachment). This step requires the VAS 6720.
9. Route the long extension cable behind the instrument panel and connect the long extension cable to emergency call module and communication unit (OCU), J949 (address word 0075) and connect the other end to the modified harness connector for the LTE antenna. Be sure to wrap cable to existing harnesses to prevent future noise concerns.
10. Reinstall the instrument cluster control module, J285 (address word 0017), information electronics control module 1, J794 (address word 005F), and glove compartment.
11. Check the function of the e-tron app if possible.
12. You may test the e-tron app with the vehicle parked at a location where the existing 3G GSM cellular reception is typically low, or provide the vehicle back to the customer and ask them to verify the repair.

REPAIR SOLUTION 2 (PR CODE 7Q0, VAS 6720 Not Needed): For vehicles with MMI radio and without Audi connect (no LTE antennas) (reference attached detailed repair instructions “pr_code_7q0-a3_e-tron_ocu_antenna_v4”).

This repair involves connecting the new additional antenna directly to the OCU (there are no pre-existing LTE antennas connected to the MMI main unit).

1. Remove the instrument cluster control module, J285 (address word 0017) to gain access to the OCU.
2. Remove the information electronics control module 1, J794 (address word 005F) (MMI main unit) to gain access to the new mounting location for the new antenna and for cable routing.
3. Remove the glove compartment to gain access behind the dash panel to gain access to the new mounting location for the new antenna and for cable routing.
4. Attach the bracket (8V4 035 596) to the vehicle and snap in the additional antenna (4M0 035 504) into the bracket.
5. Connect the new antenna with the short extension cable (000 098 710 A) to the emergency call module and communication unit (OCU), J949 (address word 0075).
6. Remove the violet locking tab from the OCU's double connector cable which was installed by the factory. The connector will be populated with the GPS connection and will also have an open slot.
7. Remove the female 90° degree connector from the short adapter cable (000 098 710 A) and install it on the OCU's double connector cable.
8. Route the long extension cable behind the instrument panel and connect to the short adapter cable which was already connected to the new antenna. Be sure to wrap cable to existing harnesses to prevent future noise concerns.



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9. Connect the short adapter cable, which was connected to the OCU, to the long extension cable (000 098 653) and wrap connection to prevent vibration noises.
10. Reinstall the instrument cluster control module, J285 (address word 0017).
11. Check the function of the e-tron app if possible.
12. You may test the e-tron app with the vehicle parked at a location where the existing 3G GSM cellular reception is typically low, or provide the vehicle back to the customer and ask them to verify the repair.



Tip: The repair procedure for cars without Audi connect should NOT be performed on cars with Audi connect despite the shorter repair time. Cars with Audi connect will benefit greatly from using one of the pre-existing LTE antennas instead of connecting the new antenna directly to the OCU. Despite the use of LTE antennas on the vehicle for this service solution, the OCU will continue to only utilize 3G GSM cellular data connection.

Reference video for VAS 6720 (Figure 3): <https://audi-academy.kzoplatform.com/player/medium/818200463223559289?autoplay=on>.



Figure 3. QR Code for Supporting Video.

Warranty

Claim Type:	• 110 up to 48 months/50,000 miles. • G10 for CPO Covered Vehicles - Verify Owner. • If vehicle is outside any warranty, this Technical Service Bulletin is informational only.
Service Number:	9170
Damage Code:	0040
Labor Operations:	PR Code 7UG + 9S6: MMI Navigation plus with High Color Cluster



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	Instrument cluster remove + reinstall	9025 1900	30 TU
	Glove compartment remove + reinstall	6815 1900	50 TU
	Install antenna including antenna wires	9138 2399	80 TU
	ECM information display control head remove + reinstall	9196 1900	30 TU
	PR Code 7UG + 9S8: MMI Navigation plus with Virtual Cockpit Cluster		
	Instrument cluster remove + reinstall	9025 1910	60 TU
	Glove compartment remove + reinstall	6815 1900	50 TU
	Install antenna including antenna wires	9138 2399	80 TU
	ECM information display control head remove + reinstall	9196 1900	30 TU
	PR Code 7Q0 + 9S6: MMI Radio with High Color Cluster		
	Instrument cluster remove + reinstall	9025 1900	30 TU
	Glove compartment remove + reinstall	6815 1900	50 TU
	Install antenna including antenna wires	9138 2399	50 TU
	ECM information display control head remove + reinstall	9196 1900	30 TU
Diagnostic Time:	GFF	0150 0000	Time stated on diagnostic protocol (Max 50 TU)
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	No allowance	0 TU
Claim Comment:	As per TSB #2049406/1		

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.



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Required Parts and Tools

Part Number	Part Description	Quantity
Required For PR Code 7UG & 7Q0		
4M0 035 504	Antenna (Additional GSM Antenna)	01
8V4 035 596	Antenna bracket	01
000 098 710 A	Adapter antenna cable (short)	01
000 098 653	Antenna cable 2000 mm (long)	01
D 373 125 A2	Textile adhesive tape	As needed
Required For PR Code 7UG Only (with MMI Navigation; Not needed for MMI Radio)		
VAS 6720	Antenna Cable Repair Set	Dealer tool
000 098 713 A	Double Adapter Cable (Double Connector)	01
6Q0 035 575 K	Housing for Antenna Male Connector	01
000 979 911	Antenna Male Terminal Kit	01
6Q0 035 576 K	Housing for Antenna Female Connector	02
000 979 910	Antenna Female Terminal Kit	02

Additional Information

All parts and service references provided in this TSB (2049406) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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