

Technical Service Bulletin



91 MMI3G+ GPS navigation location inaccurate or navigation takes a very long time to acquire location

91 15 90 2040406/2 June 5, 2015. Supersedes Technical Service Bulletin Group 91 number 15-87 dated May 18, 2015 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4, A5, A5 Cabriolet, RS 5, RS 5 Cabriolet, Q5, A6, A7, and A8	2013 - 2014	All	MMI3G+
A4	2015	A000001 - A063835 N000001 - N020338	MMI3G+
A5	2015	000001 - 029734	MMI3G+
RS 5	2015	900001 - 900909	MMI3G+
A5 Cabriolet	2015	000001 - 005135	MMI3G+
RS 5 Cabriolet	2015	900001 - 900262	MMI3G+
Q5	2015	000001 - 066126	MMI3G+
A6 & A7	2015	000001 - 031274	MMI3G+
RS 7	2015	900001 - 999999	MMI3G+
A8	2015	000001 - 023803	MMI3G+

Condition

REVISION HISTORY		
Revision	Date	Purpose
2	-	Revised <i>Condition</i> (Added list of affected models) Revised <i>Service</i> (Removed steps) Revised <i>Warranty</i> (Removed labor operation)
1	5/18/2015	Initial publication

- When the vehicle is started, the GPS location or vehicle direction indicated on the MMI navigation map does not match the vehicle's actual location or direction of travel for a long period of time (often as long as 10 minutes):
 - The issue occurs in open sky, with no large buildings obstructing the sky view.
 - The issue is intermittent, but it can occur for long periods of time during a single day.
 - The issue typically happens on very warm days when the HVAC system blower is at a medium to high setting (auto or manual), with air being directed out of the panel vents.
 - When the issue occurs, the GPS navigation system satellite reception shows 0 satellites. Due to the infrequency of the issue, this might not be verifiable. (To view the number of satellites being received, go to *Nav >> Route >> Select Current Position* (first item in list) and scroll up (Figure 1)).
- No DTCs related to the GPS antenna or MMI system are present.
- The vehicle is an A4 (including S4 and allroad variants), A5 (including Cabriolet, S5, and RS 5 variants), A6 (including S6 variant), A7 (including S7/RS 7 variants), A8 (including long wheelbase, S8, or W12 variants) or Q5 (including SQ5 and hybrid variants). Q7 and Q3 vehicles are not affected by this condition.

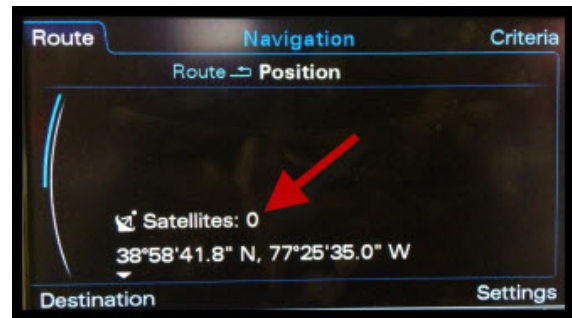


Figure 1. No satellite reception.

Tip: If the sky view is blocked because the vehicle is in a parking structure, below ground, or next to large buildings, it is normal for the GPS location or vehicle direction indicated on the MMI navigation map to not match the vehicle's actual location or direction of travel. The blocked sky view prevents the vehicle from receiving satellites, and the system may be temporarily lost until four satellites can be received. This is a normal condition, and is not related to the condition described above. Replacing the MMI main unit will not change this behavior.

Technical Background

A potential failure in the internal hardware of the MMI main unit can cause the GPS signal to be blocked, even if good reception is available. The failure can happen at start-up or while the vehicle is being driven. The issue typically starts when the vehicle is driven on curvy or circular roads, driven in circles (such as when driven around a parking lot), or driven on or off an expressway.

Production Solution

New hardware and MMI software was introduced in production starting with calendar week 45 of 2014.

Service

1. Update the MMI software using ZUG K0814 (see TSB 2030465: *91 MMI 3G+ Various technical Issues (K0814 ZUG update; supersedes K0715 update)*).



Tip: This update ensures that the MMI control panel (E380) will be able to communicate with the new MMI main unit (J794). If the update is not performed, the MMI control panel button LED lights will flash constantly to indicate a software incompatibility in the MMI main unit.

2. Perform the required SVM feedback according to the instructions in TSB 2030465. The required SVM code is included in the ZUG K0814 update medium.
3. Temporarily install the replacement MMI main unit (infotainment control unit 1), J794 (address word 5F).
4. Check the software level of the original main unit. If the software level shown in the “Setup MMI” screen shows “P0814” or “K0814”, proceed to step 6. (To view this in the car, allow the MMI to initialize then select *Menu >> “Setup MMI” >> “Version information”*).
5. If the software level is less than “0814”, **repeat step 1 only** and proceed to step 6 after the software update is complete. **Do not perform any SVM at this point.**
6. Install the original MMI main unit (J794) in the vehicle, then start Guided Fault Finding (GFF). Perform the replacement test plan for the MMI main unit (infotainment control unit 1), J794 (address word 5F). When asked, indicate that the original main unit is installed. This critical step will allow ODIS to pull all adaptations from the original main unit.
7. When prompted by ODIS, install the replacement MMI main unit (infotainment control unit 1), J794 (address word 5F), and complete the GFF replacement test plan. Ensure that the transfer of adaptations, new coding, new parameterization, component protection removal, and the recovery activation (for navigation activation) are all completed successfully before returning the vehicle to the customer.
8. If the SVM communication fails with a “check hardware” response, and the DTC for “Checking Software Version Management” is in the 5F fault memory, contact the Technical Assistance Center (TAC). If the lights flash after the repair is complete, try a hard reset by pulling the quad lock connector from the main unit while ignition is on and reconnect. If this doesn’t resolve the concern, contact the Technical Assistance Center (TAC) for further assistance.

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Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	9196		
Damage Code:	0040		
Labor Operations:	ECM information display control head replace	9196 55XX	See Elsa
	Update MMI software of original MMI main unit	9196 2599	120 TU
	OR		
	Update MMI software of original main unit and replacement main unit	9196 2699	180 TU
Diagnostic Time:	GFF – Checking and clearing fault codes included in existing labor operations	No allowance	0 TU
	Road test prior to service procedure	0121 0002	10 TU
	Road test after service procedure	0121 0004	10 TU
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
Claim Comment:	As per TSB #2040406/2		

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

For vehicles without Audi connect (9W0, 9ZX or 9ZF):		
Vehicle:	MMI main unit (infotainment control unit 1), J794 (5F):	Update medium:
A4, A5, A5 Cab, Q5	8R1.035.664.G	8R0.906.961.DN
A6, A7	4G0.035.664.H	8R0.906.961.DM
A8	4H0.035.664.M	8R0.906.961.DM

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For vehicles with Audi connect (9ZW):		
Vehicle:	MMI main unit (infotainment control unit 1), J794 (5F):	Update medium:
A4, A5, A5 Cab, Q5	8R1.035.746.G	8R0.906.961.DN
A6, A7	4G0.035.746.H	8R0.906.961.DM
A8	4H0.035.746.J	8R0.906.961.DM

Additional Information

The following Technical Service Bulletin(s) will be necessary to complete this procedure:

- TSB 2030465, *91 MMI 3G+ Various technical Issues (K0814 ZUG update; supersedes K0715 update)*

All parts and service references provided in this TSB (2040406) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.