



Technical Service Bulletin

91 Bluetooth call distorted audio or black screen for Apple CarPlay after using backup camera

91 20 82 2046294/4 July 10, 2020. Supersedes Technical Service Bulletin Group 91 number 17-16 dated March 17, 2017 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4	2017	All	MMI Radio Plus

Condition

REVISION HISTORY		
Revision	Date	Purpose
4	-	Revised <i>Condition</i> (Added Tip not to perform on 91U7 vehicles)
3	03/17/2017	Revised <i>Condition</i> (Added video clip URL and QR code)
2	03/02/2017	Revised <i>Service</i> (Added automated ODIS update process)

Customer states that they have one or both of the following concerns:

- When using Bluetooth hands-free calling the caller hears distorted audio from the driver that can be described as a “robotic or electronic sound”. To hear two examples of the distorted audio during a Bluetooth call, see the video located at: <https://audi-external.kzoplatform.com:443/swf/player/336> (Figure 1).



Figure 1. QR code for an example of the clicking noise.

- When trying to use Apple CarPlay the screen is blank only after using the backup camera. This issue occurs immediately after exiting the camera image by driving forward or by manually pressing the parking aid button to deactivate the backup camera image

Additionally, the following must be true:

- The vehicle is equipped with MMI Radio plus (PR code 7UH).



Technical Service Bulletin



Tip: Do not run this update on vehicles that have already had campaign 91U7 performed on them. In those cases, this update will fail and the resolution will not be covered by warranty!



Note:

The vehicle was built before CW22 of 2016. All cars built after should not be updated because possible damage can occur.

Technical Background

These are known software concerns which only exist on 2017 A4 vehicles which were built with the base MMI system that does not have navigation nor an internal jukebox hard drive. This MMI system is called MIB2 High Scale (or MMI Radio Plus). The concern was resolved in vehicles built after CW22/16 with SW0110 or service SW0118 or higher.

How to reproduce the Bluetooth hands-free call concern:

1. Pair phone to the MMI.
2. Allow the phone book to sync to the MMI.
3. Initiate a call using the MMI.
4. Ask the caller if your voice sounds distorted or electronic.

How to reproduce the CarPlay blank screen concern:

1. Let the vehicle bus go to sleep (MMI must be completely asleep and not initialized).
2. Disconnect ODIS, roll up the windows, and lock the car for 3-5 minutes.
3. Once asleep, unlock and start the vehicle.
4. Connect an iPhone to the MMI using USB slot 1.
5. Allow CarPlay to load and show in the MMI display.
6. Shift the car into reverse or push the parking aid button to activate the rear camera.
7. Shift the car into drive and drive off or manually turn off the parking aid using the button.
8. At this point, the MMI screen will go black if the customer's car is affected. The audio playing from CarPlay will continue, but the MMI screen will go black.
9. To fix the concern disconnect and reconnect the iPhone from the USB.

Production Solution

Software improvement introduced into series production.



Technical Service Bulletin

Service

The service solution is to update the MMI software to SW0118 to fix the Bluetooth call and CarPlay blank screen concern when coming out of reverse only for MMI Radio plus.



Note:

If the MMI software is SW0061 then this update can possibly remove the Speech Dialog System (VR) feature. Please test the Voice Recognition/Speech Dialog System after performing the update. If the VR/SDS feature is no longer available, a message of "Please wait" is seen after pressing the button on the steering wheel, then contact the Audi Technician's helpline. If the MMI hardware has been replaced, first perform the GFF replacement test plan before proceeding with this update.

Required equipment:

- ODIS Tester
- MIB2 High Scale Software Update on SD Card (See required parts & tools information table below)
- SVM code MI2HSNAR130 (also listed in steps below)
- Software update instructions (audi_mib_two_high_scale_software_update_instructions.pdf)

Time to complete update:

- Approximately 90 minutes (includes SW update and SVM work)

Repair procedure:

1. Verify the customer's MMI requires the software update by going to the *Main Menu >> Settings >> Left drawer option >> Version Information* (Figure 2).



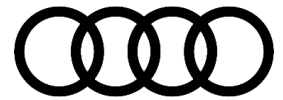
Note:

Software versions 0061 & 0081 are only the versions that can be updated. If the MMI is at level 0110, 0116, or 0118, then this TSB does not apply. Cars built after CW22/16 have SW0110 and these vehicles are NOT compatible with this software. Updating a car with SW0110 can damage the MMI.



Figure 2. MMI Version Information

2. Obtain the SD card from the parts department (see parts and tools table below).
3. Connect a charger or battery maintainer to the vehicle that capable of maintaining the vehicle voltage at the appropriate levels (check the current capacity of the maintainer). Turn off all unnecessary battery consumers, such as LED DRL's, HVAC blower, radio volume mute, etc.).



Technical Service Bulletin

- Follow the steps listed in the attached document "audi_mib_two_high_scale_software_update_instructions.pdf" to complete the update process.
For MIB2 systems there are now two methods for performing software updates. It is no longer required to manually enter the Red Engineering Update menu. MIB2 software updates are now controlled by the SVM code in ODIS. Using this process the update is fully automated.
If there is an outage with SVM, the old method is still available to use, but not preferred.
Method 1: (Preferred method) Using ODIS Flash, enter the SVM code **MI2HSNAR130** into ODIS and follow the instructions in ODIS to start the update process (see attached document "audi_mib_two_high_scale_software_update_instructions.pdf").
Method 2: (To be used only if SVM server issues occur) Enter the red engineering update menu, insert SD card, perform MMI update, and then perform the SVM documentation feedback (see attached document "audi_mib_two_high_scale_software_update_instructions.pdf").
- Only if Method 2 was used, perform the SVM feedback documentation of the information electronics control module 1, J794 (address word 005F – MMI) with SVM using the SVM code **MI2HSNAR130**. To access SVM, within ODIS start *GFF >> Diagnosis >> Special functions >> Software Version Management >> SVM code input*.
- Test the functionality of CarPlay and Bluetooth hands-free call after the update using the steps listed in the Technical Background. It is important to remember to allow the car to go to sleep before performing the test.
- Test the functionality of Voice Recognition after the update is completed. If the concern is not resolved or if VR becomes disabled then please contact Audi Technician's helpline (TAC).

Warranty

Claim Type:	<ul style="list-style-type: none"> 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:	9196		
Damage Code:	0039		
Labor Operations:	Method 1: Automated update using ODIS		
	Check control unit & Test Functionality	9196 0199	10 TU
	OR		
	Method 2: Manual update due to SVM server issues		



Technical Service Bulletin

	Program infotainment control unit & Test Functionality	9196 0299	100 TU
Diagnostic Time:	Method 1: Automated update using ODIS		
	GFF	0150 0000	Time stated on the diagnostic protocol (Max 175 TU)
	OR		
	Method 2: Manual update due to SVM server issues		
	GFF	0150 0000	Time stated on the diagnostic protocol (Max 75 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 #2046294/4		

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

Part Number	Part Description	Quantity
4M0906961AG	MIB2 High Scale Software Update SD card	1 per dealer (Shop tool)

Additional Information

All parts and service references provided in this TSB (2046294) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

©2020 Audi of America, Inc. All rights reserved. Information contained in this document is based on the latest information available at the time of printing and is subject to the copyright and other intellectual property rights of Audi of America, Inc., its affiliated companies and its licensors. All rights are reserved to make changes at any



Technical Service Bulletin

time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, nor may these materials be modified or reposted to other sites without the prior expressed written permission of the publisher.