

Technical Service Bulletin



91 Apple CarPlay or Android Auto complaints (blank MMI screen, no audio, does not connect, etc.)

91 16 42 2044024/1 May 6, 2016.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4	2017 - 2019	All	Audi smartphone interface
Q7	2017 - 2019	All	Audi smartphone interface

Condition

The customer may experience any of the following static or sporadic issues with the Audi smartphone interface (ASI) system:

- The MMI screen is blank after the phone is connected to the USB port.
- The MMI screen freezes when Apple CarPlay or Android Auto is used.
- Apple CarPlay or Android Auto does not automatically start when the phone is connected to the USB port.
- The MMI sporadically displays an “Unlock Phone” message to allow ASI to be used.
- The left thumbwheel button on the steering wheel cannot be used to start or end a phone call.

Technical Background

The Audi smartphone interface (ASI) was introduced to the MIB2 MMI system in model year 2017 Q7 and A4 vehicles. MIB2 MMI includes two different systems: the MIB2 High Scale without Audi connect and the MIB2 High Navigation system with Audi connect. As with the older Audi music interface (AMI) system, the user experience can vary (different features and functions) based on the customer's device type and device firmware connected to the USB ports in the vehicle.

Apple CarPlay (Figure 1) Minimum Requirements

Device: Lightning-capable iPhones, starting with the iPhone 5 and including all new versions of the iPhone (iPads are not supported).

Device Firmware: CarPlay is built into Apple's iOS, so having the latest update is recommended because constant improvements in usability and stability are introduced with updates to iOS. There are significant stability improvements with the latest iOS firmware when compared to the early versions of iOS 8.X, which also supported CarPlay.

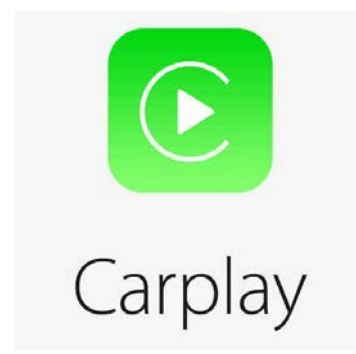


Figure 1. Apple CarPlay icon.

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Android Auto (Figure 2) Minimum Requirements

Device: Any Android Device with a USB connection and support for the official Google Play Store. Amazon Fire and other Android phones using a proprietary operating system that doesn't natively come with Google Services are not supported.

Device Firmware: Android 5.0 Lollipop or higher is required, along with the Android Auto app. Android 4.0 KitKat and lower are not supported. Unlike CarPlay, the official Android Auto app must be separately downloaded from the Google Play store.

Phones that are rooted and have a "Custom ROM" installed are not officially supported. Phones where the Android Auto app is "side-loaded" by means outside of the Google Play store are not supported.



Figure 1. Android Auto icon.

Production Solution

Not applicable.

Service

Before proceeding, note that ASI (Audi smartphone interface) = Apple CarPlay or Android Auto.

Issue: The MMI screen goes blank after the phone is connected to the USB port, and ASI does not function until the phone is disconnected from and reconnected to the USB port.

Cause: A known MMI software startup concern with iOS 9.X can cause this issue. If the customer's phone is connected before the car is started, the issue can occur. Typically, the process can be repeated if the phone is first connected to the USB port, then the vehicle is started within 1-2 seconds after the phone is connected. The condition can be sporadic.

Solution: Ask the customer to connect the phone after the car is started and the transmission is still in the park position. Inform the customer a software solution is not available at this time, and sign the customer up for Pending Service Solution (PSS) 2044130: PSS 91 MMI screen goes blank after iPhone is connected to USB port. After the customer is signed up for the PSS, the dealer will be notified when the solution is available.

Issue: The MMI screen freezes when Apple CarPlay or Android Auto is used.

Cause: When the phone freezes or when a background app hangs, it can cause Android Auto to hang (particularly if the app is supported in Android Auto).

Solution: Ask the customer to uninstall all non-essential apps and restart the phone. Repeat until the issue is resolved.

Issue: Android Auto does not automatically start when the phone is connected to the USB port.

Cause: Some Android devices (including Samsung Galaxy/Note devices) require the USB MTP mode to be manually enabled after the device is connected to the USB port. This is a fault of the device firmware.

Solution: Ask the customer to manually enable USB MTP mode after connecting the device to the USB port of the vehicle.

- For most Android devices, this can be done from the notifications window from the top swipe-down menu (Figure 3).
- Find the USB notification that indicates “Connected for Charging”.
- Select this notification to bring up the USB connection options.
- Select the mode that connects as “MTP – Media Transport Protocol” (Figure 4).

Unfortunately, this process will need to be done each time the phone is connected to the vehicle or each time the vehicle is restarted with the phone connected to the USB port. Ask the customer to report the concern to the device manufacturer.

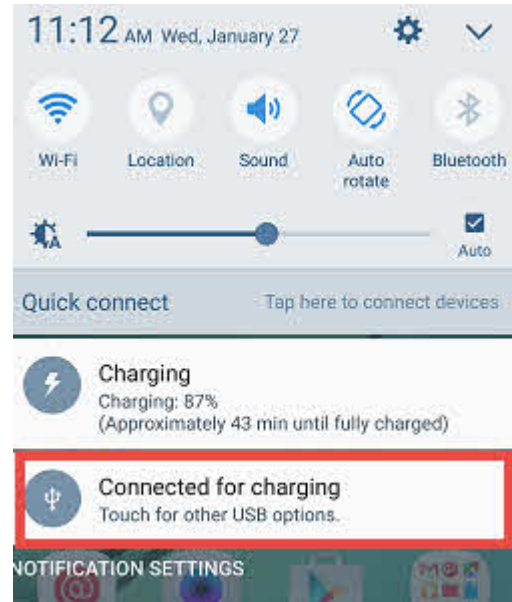


Figure 3. USB options in notification window.



Figure 4. Media Device (MTP) Selection

Issue: Apple CarPlay does not automatically start when the phone is connected to the USB port.

Cause: Some versions of iOS have known software bugs that can cause the phone to freeze. If CarPlay does not start, ask the customer to check the phone by unlocking the phone to confirm that the top of the screen is blue and shows the CarPlay icon.

Solution: If the phone is not in a valid state with CarPlay running, ask the customer to force a restart by holding down the home and sleep/power buttons simultaneously (Figure 5) for at least ten seconds until the Apple Logo appears. This will close any misbehaving apps that may prevent the phone from being restarted using the normal shutdown method. The customer may want to consider uninstalling all non-essential apps.



Figure 5. Force iOS reset.

Issue: The MMI sporadically displays an “Unlock Phone” message to allow ASI to be used.

Cause: When a new iPhone is first connected to the ASI, iOS provides a popup notification window to ask the user to allow the Audi MMI to use the iPhone while the screen is locked (Figure 6). It is easy to miss this notification window, especially if the phone is already unlocked when it is connected. If the customer does not allow CarPlay to access the phone while it is locked, the warning message will appear in the MMI every time the phone is connected (Figure 7). The customer may subsequently unlock the iPhone using the Touch ID/fingerprint sensor every time without knowing there is an option to remove this step.

Solution: Ask the customer to enable the Audi MMI to access CarPlay with the phone screen locked. To change this setting on the iPhone, go to *Settings*>>*General*>>*CarPlay*>>*Audi MMI*. Select the “(i)” next to “Audi MMI”, then select “Allow CarPlay while locked” (Figure 9).

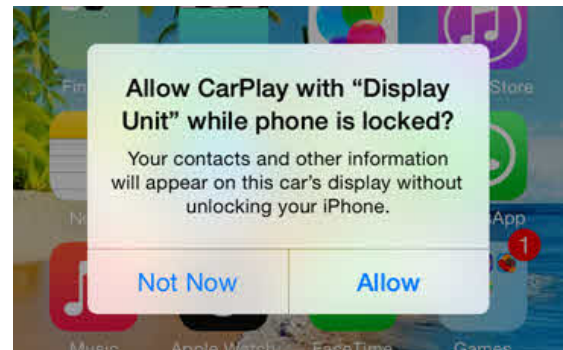


Figure 6. Allow CarPlay when screen is locked

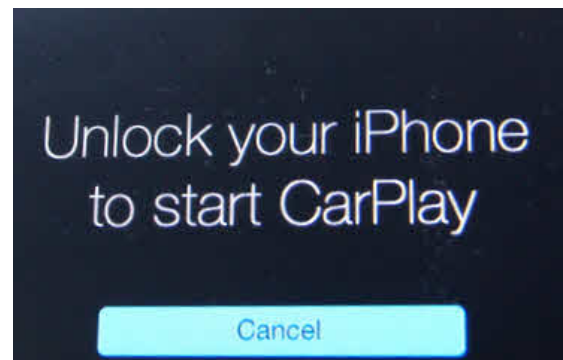


Figure 7. Unlock iPhone message in MMI

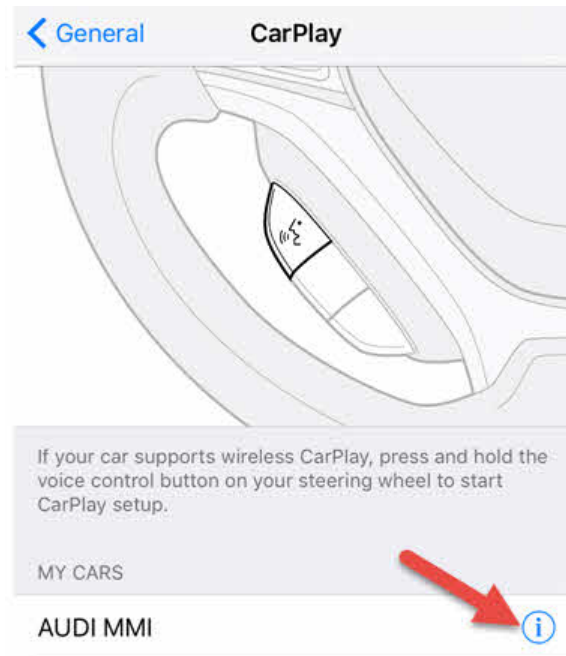


Figure 8. AUDI MMI CarPlay Settings

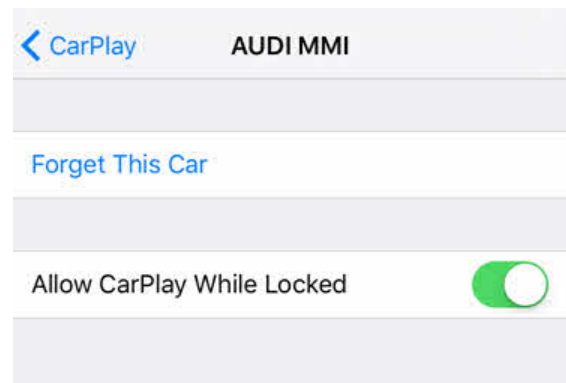


Figure 9. Setting to “Allow CarPlay While Locked”

Issue: The left thumbwheel button on the steering wheel cannot be used to start or end a phone call.

Cause: When the Audi Smartphone Interface is being used, all phone controls are handled directly within CarPlay/Android Auto. The left thumbwheel button on the steering wheel does not start or end calls.

Warranty

This TSB is informational only and not applicable to any Audi warranty.

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Additional Information

All parts and service references provided in this TSB (2044024) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.