

**ATTENTION:**

- GENERAL MANAGER
- PARTS MANAGER
- CLAIMS PERSONNEL
- SERVICE MANAGER

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.


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QUALITY DRIVEN® SERVICE

**SERVICE INFORMATION BULLETIN**

**APPLICABILITY:** All Models 2019MY to Current with Gen 2 Telematics **NUMBER:** 15-264-20R  
**SUBJECT:** WiFi Hotspot: Diagnostic TIPS and Helpful Hints **DATE:** 06/22/20  
**REVISED:** 07/14/20

**INTRODUCTION:**

The intent of this Service Information Bulletin is to provide Technicians and staff members who interact with the Telematics system insight to help address questions regarding operation of the WiFi Hotspot feature.

**SERVICE PROCEDURE / INFORMATION:**

**VERY IMPORTANT: Any Technician or other retailer personnel who, despite service documentation and training to the contrary, performs a DCM swap on a subscribed vehicle should NEVER release that vehicle back to the customer until after confirming the proper operation of the Telematics system. If the issue is first discovered only after the vehicle has been released to the customer, then the retailer MUST contact the customer immediately to inform the customer the ACN/AACN feature may not be functioning properly, and that the vehicle must be returned for inspection as soon as possible.**

**REMINDER:** Customer satisfaction and retention starts with performing quality repairs.

The WiFi Hotspot is an available feature on all vehicles equipped with Gen2 Telematics. However, when a customer decides to activate the service, they enter into a direct contract with AT&T, and not SOA. As a result, questions or concerns regarding WiFi Hotspot functionality, performance, or account management (including billing) may require the customer to contact AT&T directly. That said, as outlined in this bulletin, there is still an important role for both SOA and its retailers to play in helping customers diagnose the source of WiFi Hotspot performance concerns.

All Hardware and function of the Wifi Hotspot is located within the Data Control Module. Smartphones or other WiFi connected devices connect directly to an internal WiFi antenna within the DCM. The Infotainment head unit plays no part other than acting as the access terminal to configure the network profile of the WiFi portion of the DCM.

**CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.**

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

**Subaru of America, Inc. is ISO 14001 Compliant**

ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

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When determined necessary, DCM replacement on a WiFi Hotspot activated vehicle completes exactly like any other DCM replacement as outlined in STIS. Once the vehicle has successfully completed the COMM CHECK, the Telematics subscription, as well as the WiFi hotspot subscription should automatically provision to the new DCM.

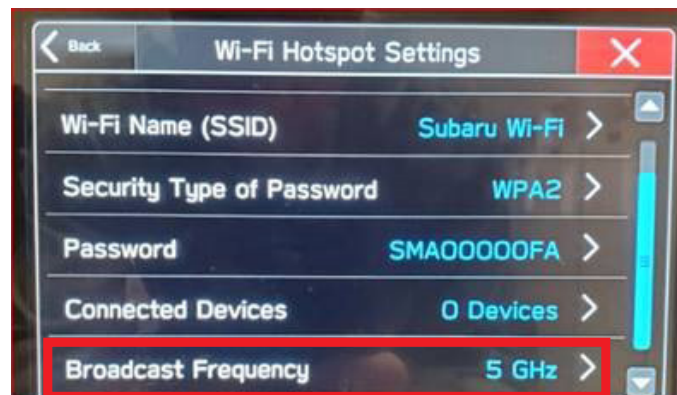
There have been rare reported cases of the COMM CHECK or Provisioning step failing initially. Due to multiple subscriptions having to be verified and provisioned, a time out condition may be experienced which may require additional steps to take place in order to complete the DCM replacement procedure.

### **Best Practices:**

The following information provides Technicians some “best practices” to use when addressing WIFI Hotspot related concerns along with helpful diagnostic tips. This information is not meant to replace the STIS diagnostic trouble trees for diagnosing vehicle concerns with WiFi Hotspot, but to be used in addition to STIS, TSBs, TechTIPS, FSE and Techline contact support.

Confirmation of the customer’s concern while using different devices of different manufacture as well as different network providers are essential parts of a thorough diagnosis. For example: if the customer’s smartphone is Android-based and used on network provider “ABC”, it does not mean the same concern will occur with a different brand of Android smartphone on network provider “ABC”, nor does it mean the results will be identical using the same brand of Android smartphone on a different network provider “XYZ”. Each device manufacturer customizes the operating system of their devices as well as each network provider. For this reason, differences in observed behaviors between different device brands and different network providers are possible. What the customer feels is a condition with their device may be a valid concern, a problem with their device or in some cases, a normal operating characteristic.

It is also important to duplicate the condition on both WiFi Hotspot broadcast frequencies, 2.4GHz and 5GHz (when equipped). Customers are often unaware the broadcast frequency is configurable on certain Subaru vehicles because during set-up, the user must scroll down to see where the choice can be made.



**TIP:** An easy test is, after verifying the concern, change the selected broadcast frequency and recheck to see if the concern persists. When the condition can only be confirmed on one frequency, it is an indicator of a compatibility and / or configuration issue with the device. The WiFi Hotspot network in a vehicle is similar to a home network as both are susceptible to performance issues caused by network interference. Because the WiFi Hotspot network is mobile, the surrounding environment constantly changes. Ensuring the customer concern is present on both broadcast frequencies will help eliminate environmental and surrounding network interference as a contributing factor.

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Before proceeding with any diagnosis, verify the status of the LED located between the SOS and iButtons. **TIP:** A vehicle can have a WiFi Hotspot subscription **without** being subscribed to STARLINK Telematics. In this case, it would be normal to not see any illuminated Telematics LED(s). If the vehicle is subscribed to STARLINK, confirm the Green LED is illuminated. Any other LED illumination would indicate a vehicle fault which must be addressed prior to WiFi Hotspot diagnosis. Because the LEDs do not illuminate unless the vehicle is subscribed to STARLINK, Technicians should inspect for any stored Telematics -related DTCs using the SSSM4. **If any DTCs are found, they MUST be addressed prior to proceeding further with any WiFi Hotspot diagnosis.**

While the SSM4 is connected, verify the PID “Signal Strength” is reading above 26%. Any value less than 26% is an indicator of poor signal strength which will impact WiFi Hotspot performance. **TIP:** To further verify the DCM can connect to the AT&T WiFi network, attempt to use the Service Appointment Scheduler feature. As detailed in the March 2019 issue of TechTIPS, the WiFi Hotspot and Service Appointment Scheduler use the same AT&T network anchor point (APN). Success using the Service Appointment Scheduler could indicate something other than the DCM may be the root source of the concern such as an issue with the customer’s device or their WiFi Hotspot account’s validity.

Once LED operation and Signal Strength PID has been confirmed and the customer concern persists:

1. Use the Service Appointment Scheduler in accordance with March 2019 TechTIPS to help determine root cause.
2. Perform a capacitive discharge for at least 15 minutes. This ensures both the DCM and infotainment head unit reboot and complete a fresh communication synchronization of the two devices.
3. Confirm the customer concern persists after Step 2 above.
4. If equipped with multiple broadcast frequencies, set up the WiFi Hotspot to use the frequency which has not already been tested (2.4GHz or 5GHz) to duplicate the concern.
5. Confirm the customer concern still exists using the other broadcast frequency.
6. Try connecting to and using the WiFi Hotspot with the Technician’s known good device.

Should the customer concern still be present, the Technician should contact Techline for additional support. A Techline team member will verify if there are any back-end operational concerns preventing proper operation prior to DCM replacement:

1. If the DCM was replaced as root cause of inoperative WiFi Hotspot:
  - a. Make sure the back-up battery (BUB) has been transferred to the new DCM
  - b. Make sure a successful COMM Check has been performed
  - c. Make sure there are no Telematics DTCs present
  - d. Verify the signal Strength PID is 26% or greater
  - e. Verify the Subscription Status PID is appropriately indicating Subscribed or Unsubscribed.
2. Customer Concern has been confirmed on multiple devices. Make notes to inform Techline of results.
3. Customer concern has been confirmed on both broadcast frequencies (if equipped). Make notes to inform Techline of results.

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4. WiFi Name (SSID) has been changed to a simple test name to confirm customer concern is still present connecting to different network name. Make notes to inform Techline of results.
5. WiFi Password has been changed to a simple test password to confirm the customer concern is still present when using a different password. Make notes to inform Techline of results.
6. Provide Techline with a 10 seconds data stream of all Telematics data PIDs.
7. Provide Techline with a clear picture of the DCM label.

**IMPORTANT NOTE:**

Despite not having a business relationship with AT&T where SOA can directly advocate for customers regarding the WiFi Hotspot, SOA is committed to constantly improving the customer experience. To address any customer concerns with the WiFi Hotspot, customers should be encouraged to contact the Customer Advocacy Department to have their concern documented. Retailer Technicians having direct knowledge and/or experience with the customer concern should document and report the condition and related information via the QMR process. This information is reviewed during regularly scheduled meetings held with SOA suppliers to help enhance the Subaru customer experience.

**IMPORTANT REMINDERS:**

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.