

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 BULLETIN

APPLICABILITY: 2017-**20MY** Impreza
 2018-**20MY** Crosstrek
 2018-19MY Legacy and Outback
 2019-**20MY** WRX and WRX STI
 2019-**20MY** Ascent
 2018-**20MY** BRZ
 2019-**20MY** Forester

NUMBER: 15-230-18R

DATE: 08/21/18

REVISED: 11/15/19

SUBJECT: Harman Audio / Infotainment: Troubleshooting Bluetooth® Functionality Concerns

INTRODUCTION:

This bulletin provides troubleshooting steps to follow when diagnosing customer concerns involving Bluetooth (BT) functionality. Please start by completing the Harman Investigation Guide Questionnaire as it gathers important details which will help with diagnosis and will be required should the condition not be resolved by this troubleshooting. While completing the questionnaire, follow the question flow based on the customer concern. Answer each related question noting the results to each in detail while performing the diagnostics. Review the entire bulletin before beginning in order to understand the flow for the listed concern. Please apply the information captured in the checklist to the Harman Investigation Guide Questionnaire. If the concern you have is not listed, check the Service Manual “Infotainment (Diagnostics) - Diagnostics with Phenomena” section as a starting point.

SERVICE PROCEDURE / INFORMATION:

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

- 1) Always confirm the condition as reported by the customer.
- 2) Visit the Subaru Technology page on the Subaru.com website to verify smart phone compatibility. (<https://www.subaru.com/engineering/technology.html>)

Bluetooth Features	Compatible
Phone Pairing	Yes
Hands Free Dialing	Yes
Receive A Call	Yes
Call Transfer*	Yes
Call Hangup	Yes
Call Waiting	Yes
Automatic Reconnection	Yes
Phonebook Download (single contact)	No

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

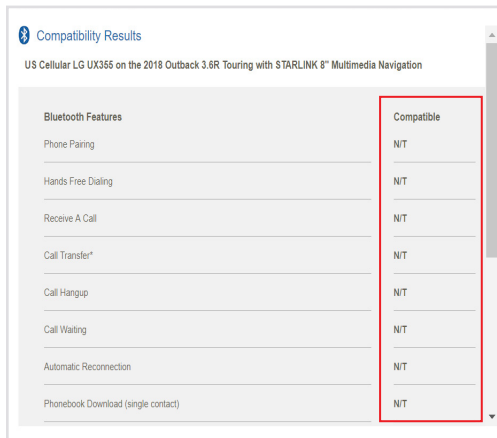
Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, 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.

As shown in the image above, the iPhone 8 may have an issue with Phonebook Download (single contact) and SMS send functions (not shown). When the customer reports a condition involving those features, STOP as there is no further Head Unit (HU) troubleshooting required. The issue is linked directly to their smart phone's compatibility. There are some cases where a particular smart phone's compatibility has not been fully or at all tested.

For those smart phones, BT functionality operation could be unreliable. These cases are not an indication of a Head Unit (HU) malfunction. See the example shown in the image below.



- 3) It is also recommended to verify the customer's phone setup is not causing BT related issues.
 - a. For any kind of car connection issue, it is important to make sure that the “***Do Not Disturb***” feature is turned OFF. Some customers have not been able to shut off the “Do Not Disturb” feature while connected to their vehicles. By default, this setting is set to manual and must be activated before enabled.

TIP: It may be easier to disconnect and remove all Bluetooth device settings before upgrading the device then, start over from scratch. This may save significant time in troubleshooting.

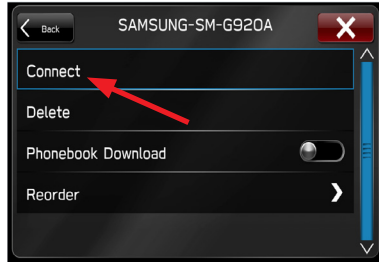
- b. Can the condition be duplicated? If so, please provide the steps necessary to reproduce and if possible, a video showing the steps and concern. It is important to know if the BT connection is not made at start up or if the connection is lost at some other point during operation.
 - i. If the BT connection drops during operation, confirm the device is in the paired device list located under Settings > Phone. See image below.



- ii. Verify the head unit is still listed as a paired device on the phone.

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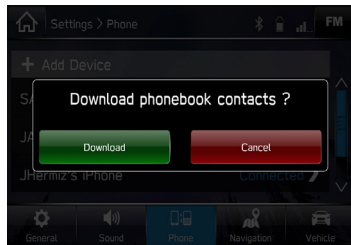
- iii. If the device is not listed, try to manually reconnect through the phone settings menu: Settings > Phone > Select the paired phone and select Connect.



- iv. If the condition is still present, try confirming it with a similar model phone (capture phone model and OS version).
- v. Follow the Service Manual basic diagnostic procedure for **“BLUETOOTH CONNECTION CANNOT BE ESTABLISHED”**.

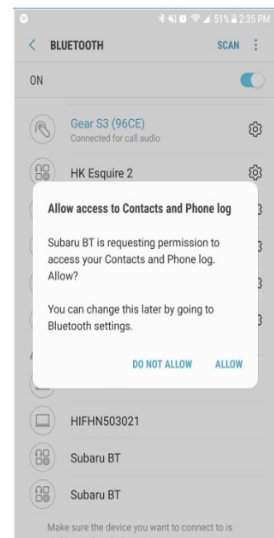
4) This section addresses concerns with Bluetooth Phonebook or SMS synchronization as referenced in 2) above.

- a. Confirm the phonebook / SMS access request was granted when phone was paired to the HU. When the pairing procedure is performed and the device is connected, the phone may prompt the user to accept access for phonebook. The HU will prompt to initiate phonebook download. Accept this pop up by pressing “Download”.



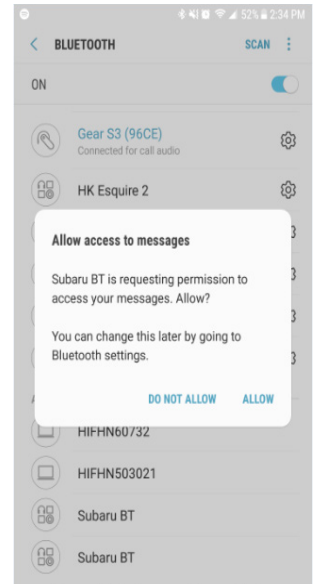
- b. Phone behavior may differ between models and OS versions and between Android phones (i) and Apple iPhones (ii):
 - i. Android phone

- 1. Android phone will prompt user on the phone for phonebook access as shown to the right.



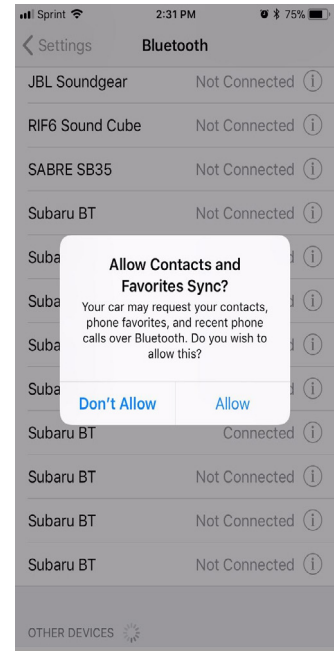
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2. Also, in the case of Android phones, a second pop-up will appear requesting access to SMS messages.

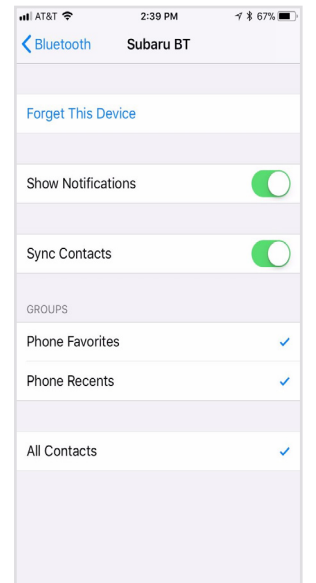


ii. Apple iPhone:

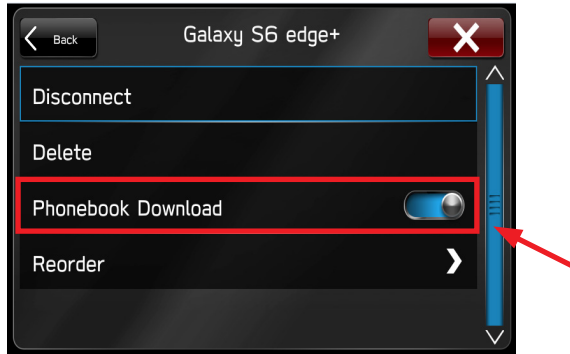
1. The iPhone will download the phonebook after pressing “Download” on HU if the Sync Contacts option is enabled. **NOTE:** Some versions of iOS will prompt the user for phonebook access as shown to the right.



2. For iPhones, after pairing is complete, access must be enabled on the phone for SMS. To do this, go to Settings > Bluetooth > Select the paired HU labeled “Subaru BT” and make sure both Sync Contacts and Show Notifications are enabled.

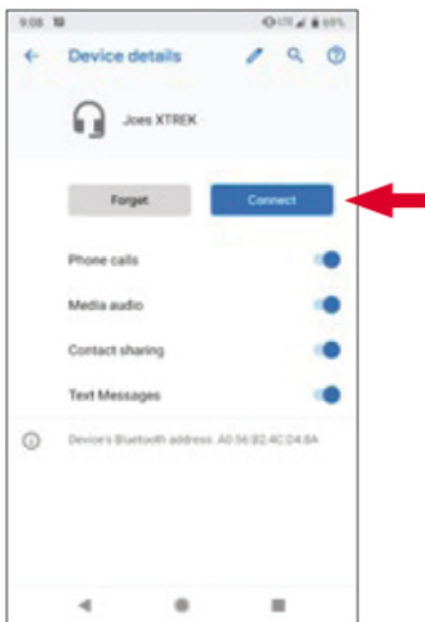


3. Once enabled, the iPhone must be disconnected then reconnected for the changes to apply for SMS download ONLY. See section 5a “How to Pair an Apple Device”.
- c. If the device is already paired and connected, confirm the Phonebook Download option is enabled. To do this go to Settings > Phone, select the paired phone and enable Phonebook Download as shown below.



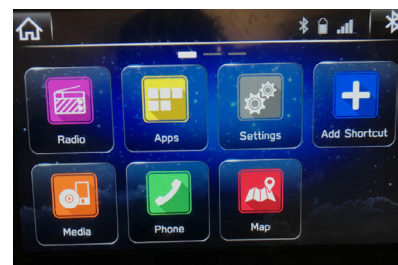
NOTE: The device may still require performing Steps a. and b. above after enabling Phonebook Download on the HU.

If the phonebook or messages can still not be accessed, go back to the phones Bluetooth settings and select the gear (Settings) icon next to your vehicle’s device name. Ensure all settings are enabled.



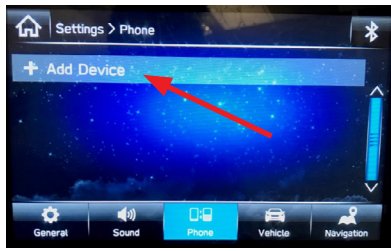
- 5) This section will help to assure Android and Apple phones are properly paired.
 - a. How to pair an Apple device:

- i. Go to Settings on the vehicle infotainment icon screen.
- ii. Select “Phone”

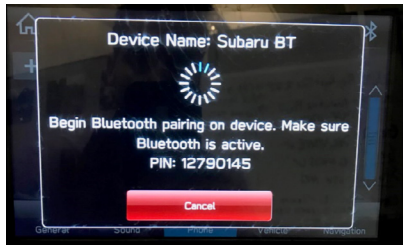


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iii. Select “Add Device”



iv. This screen will be displayed when pairing mode is in progress. Make note of the “Device Name:” (Subaru BT).

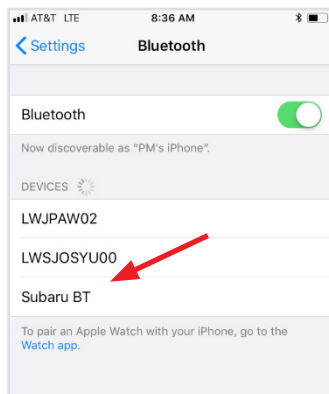


v. On the iOS/Apple device, go to settings. Location on home screen will vary.

vi. Select “Bluetooth”



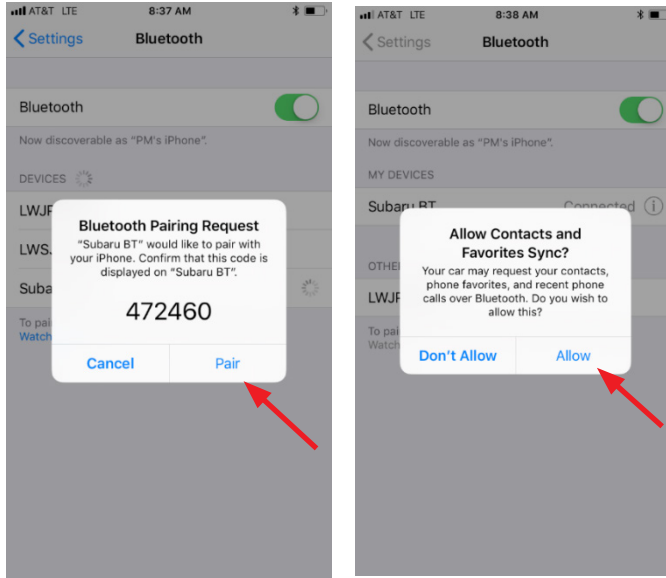
vii. Select “Subaru BT” or whatever the device name is from step iv.



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viii. Select “Pair”

ix. Select Allow to “Allow Contacts and Favorites to Sync?”

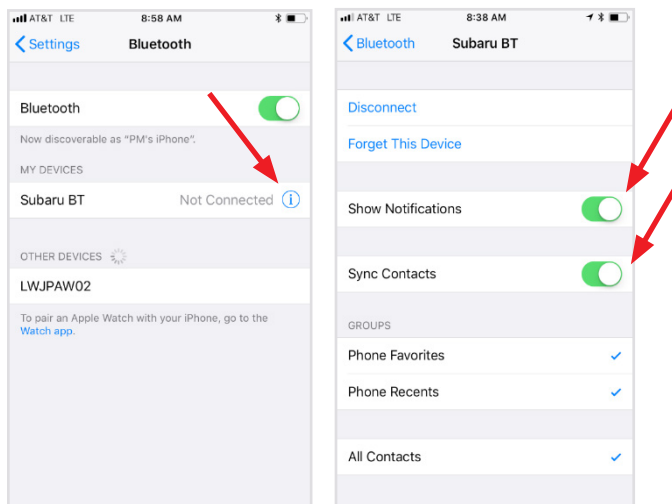


x. On the vehicle screen, select “Download” phonebook contacts.



xi. On the iOS/Apple device, the vehicle’s Bluetooth should now be listed under Bluetooth settings. Select the blue “i” next to the device name (Subaru BT).

xii. Confirm “Show Notifications” and “Sync Contacts” are enabled.

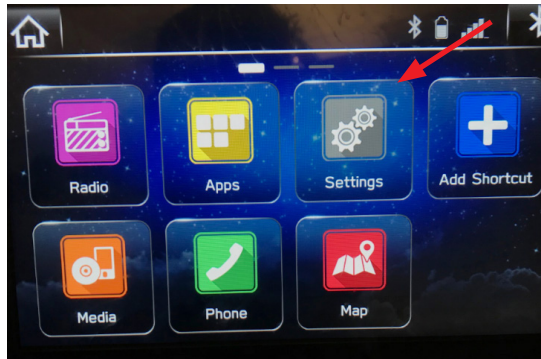


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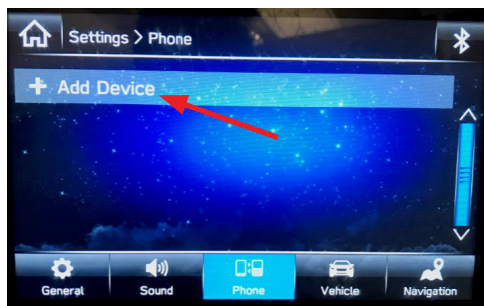
- xiii. At this point, the iOS/Apple device is paired. The vehicle may need to be restarted to fully complete the pairing process so messaging and other features work correctly.
- xiv. If smartphones are not connecting with the HU via Bluetooth, try it again after removing all the connection history from the phone. This may help the smartphone and HU “find each other” easier when performing the Bluetooth connection process.

b. How to pair Android Device:

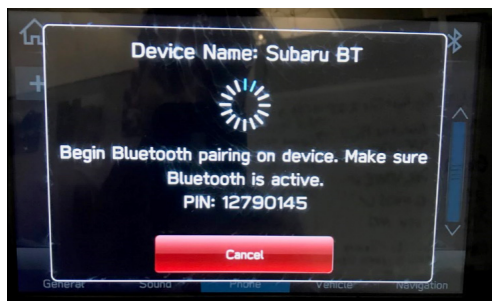
- i. Go to Settings on the vehicle infotainment icon screen.



- ii. Go to the “Phone” page
- iii. Select “Add Device”



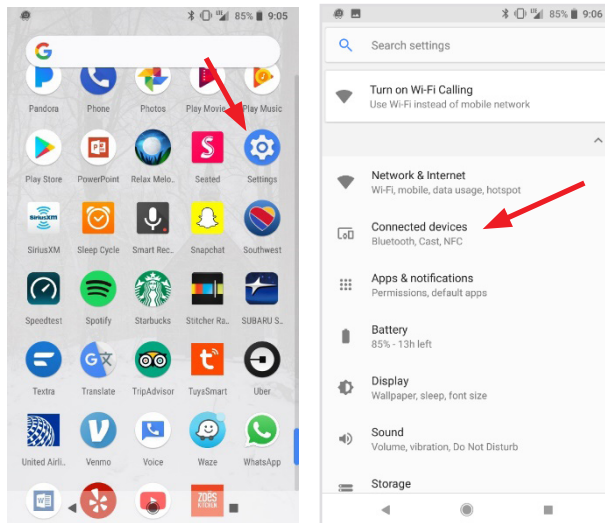
- iv. This screen will be displayed when pairing mode is in progress. Make note of the “Device Name:” (Subaru BT).



- v. On the Android device, go to Settings. This step will vary by Android device. Settings can always be found under Apps. On newer Android devices, Apps is opened by swiping UP from the bottom of the screen.

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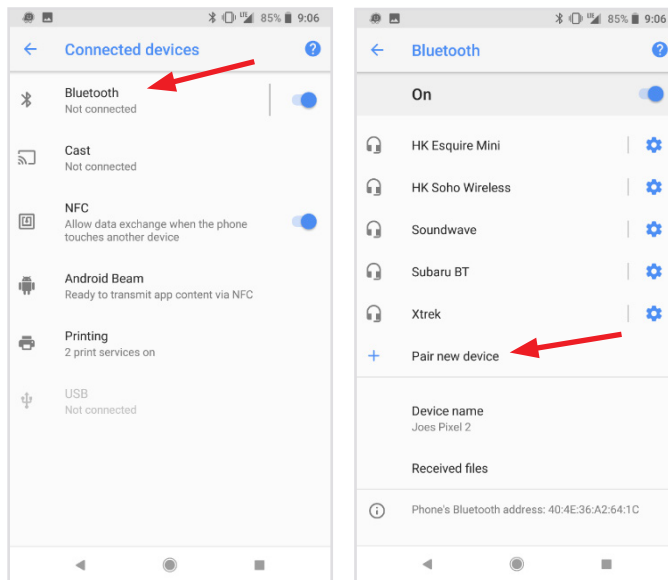
vi. Select “Connected devices” or “connections”.



vii. Select “Bluetooth”

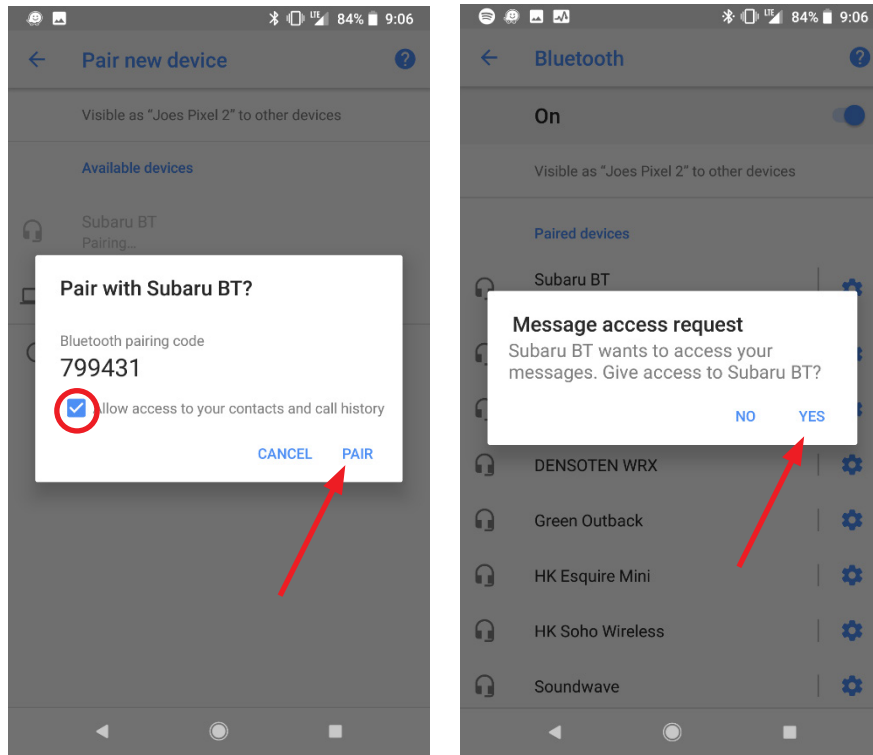
viii. At this step, either select “Pair new device” or, the phone will already begin showing nearby devices to add.

ix. Select “Subaru BT” or whatever the device name is from step 4.



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- x. Select “PAIR” and ensure “Allow access to your contacts and call history” are enabled (checked).
- xi. Select “YES” to the Message access request” pop up.



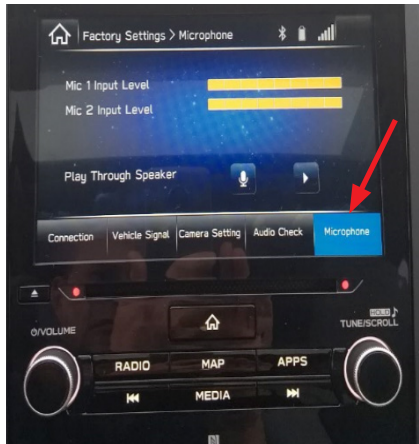
- xii. On the vehicle screen, select “Download” phonebook contacts.



- xiii. At this point, the Android phone should be paired and ready to use.
- xiv. If smartphones are not connecting with the HU via Bluetooth, try it again after removing all the connection history from the phone. This may help the smartphone and HU to “find each other” easier when performing the Bluetooth connection process.

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- 6) This section addresses concerns with BT call handling.
 - a. Capture the steps required to reproduce the concern. If possible, record a video showing the steps and the condition. Please note the model, OS version, and service carrier of the customer's phone.
 - b. For concerns regarding holding calls and / or swapping calls (call waiting), please note CDMA networks do not support this functionality. Some phones may have the ability to perform these actions internally but in general, CDMA carriers (such as Sprint or Verizon) do not support these features.
 - c. For concerns related to the audio quality, verify microphone operation. See figure below for **Line Diag** display of Microphone check.



- d. Follow the Service Manual basic diagnostic procedure for SOUND DOES NOT COME OUT FROM THE SPEAKER. See image below for **Line Diag** display of Audio Check.



- e. If the concern persists, swap a known good HU into the problem vehicle. If component swap addressed concern, request exchange for the suspect component.

IMPORTANT CAUTION: Always disconnect the Telematics Data Communication Module (DCM) BEFORE any swapping of head units. **DCMs must NEVER be swapped or the customer's services will not function and DCM replacement may be required to resolve.**

- 7) If the above diagnostics and procedures do not resolve the customer's concern with Bluetooth functionality, complete a fresh Harman Investigation Guide Questionnaire documenting the customer's concern and the results of each diagnostic step in this bulletin. If possible, capture a video of the condition then contact the SOA Techline to review the next steps. Techline will request you send the completed questionnaire, step-by-step bulletin test results and any videos of the condition.

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BLUETOOTH® FUNCTIONALITY CONCERN CHECKLIST

Repair Order Date: _____

Vehicle Identification Number (VIN): _____

1. Condition confirmed as reported by the customer? NO: YES:

Concern details: _____

Phone details: Make _____ Model _____ OS _____

Carrier _____

2. Is the phone compatible? NO: YES:

3a. Is the phone listed among paired devices on the head unit display? NO: YES:

3b. Is the vehicle listed among paired devices on the phone? NO: YES:

3c. Head Unit software version: _____

4. If applicable, is Phonebook Download enabled on the head unit? NO: YES:

5a. If applicable, perform **Line Diag** test: NO: YES:

5b. Microphone test passed? NO: YES:

5c. Speaker test passed? NO: YES:

5d. Tested using a like vehicle? NO: YES:

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WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period or covered by an active Subaru Added Security Gold plan, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Labor Time	Fail Code	H/U Type
HARMAN BLUETOOTH FUNCTION NOT COMPATIBLE	A850-803	0.3	ZRQ-43	Base, Mid & High
HARMAN BLUETOOTH TROUBLESHOOTING	A850-805	0.8		

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.