ATTENITION.							
<u>ATTENTION:</u>	IMPORTANT - AII						
GENERAL MANAGER	Service Personnel						
PARTS MANAGER	Should Read and						
CLAIMS PERSONNEL	Initial in the boxes provided, right.						
SERVICE MANAGER	© 2020 Subaru of	\merica	Inc /	\II riahta	rocoru	har	



DATE: 03/10/20

SERVICE BULLETIN

APPLICABILITY: 2020-22MY Legacy and Outback Models NUMBER: 15-261-20R

SUBJECT: Reprogramming File Availability for Optimization

of Gen 4 Denso CP1 Infotainment Systems REVISED: 04/22/22

INTRODUCTION:

The following information announces reprogramming file availability and provides a software update installation procedure to optimize the new Gen 4 Denso CP1 Audio and Navigation head units utilized in the models listed above. As in previous models, the procedure will involve either downloading the software update files from Subarunet or using those sent directly from Nuspire to the SDS Notebook and transferring them onto a USB flash drive for head unit installation.

It is **VERY IMPORTANT** to read and understand this information completely before proceeding.

CAUTION: VEHICLE SERVICE PERFORMED BY UNTRAINED PERSONAL COULD RESULT IN THE EQUIPMENT DAMAGE OR EVEN SERIOUS INJURY.

Service Bulletin is intended for use by trained technicians ONLY. It informs technicians of conditions, which may occur in some vehicles or provides information, which could assist with proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely.

A time line chart along with a complete list of all the conditions addressed and enhancements included in this and previous Denso software updates are provided in "Appendix D" and "Appendix E" located at the end of this bulletin.

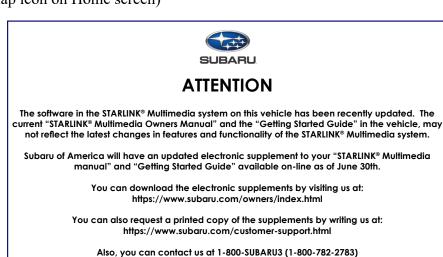
IMPORTANT NOTE: For 2020-22MY the update contains four (4) files. When performing an update, the USB must contain the matching number of files and all files must be replaced. ALWAYS use the latest files together as a set.

NEVER reuse or combine files from a prior update with a newer version.

NEW: Be aware that Wilderness Edition has a separate and unique update version. Never attempt to put a Wilderness edition update in an Outback or an Outback update in a Wilderness edition.

PART INFORMATION:

NOTE: High Level unit is equipped with Navigation option (Map icon on Home screen)





Materials Required:

An empty, USB 2.0 or 3.0 storage device (flash drive) will be needed to perform the update procedure. The device should be dedicated to storing and transferring these updating files only. It must be a minimum of **16GB** or more in size and contain a <u>NTFS</u> file format before downloading the update files onto it. Be sure to locate and re-format any existing USB drives used for updating audio units. They must be fully cleared before adding these new update files to them.

IMPORTANT NOTES:

- NEVER change the update file names after downloading them.
- **NEVER** save any other files on the same flash drive.

There are various types of USB flash drive available from many suppliers. If the head unit does NOT recognize the USB drive during the reprogramming process due to Controller IC type of USB drive or Compatibility with the head unit, confirm the flash drive format is <u>NTFS</u>. The flash drive must be formatted for <u>NTFS</u>. If a recognition problem persists, use a USB flash drive from another manufacturer.

Kingston[®]:

DataTraveler G3 Series DataTraveler 100 G3 DT100G3
DataTraveler SE9 Series DataTraveler SE9 G2 3.0 DTSE9G2
Digital Data Traveler 3.0 USB Flash Drive - Violet DTIG4



SanDisk[®]:

Ultra Series SDCZ48-064G-J57 Cruzer Blade Series Cruzer Glide Series CZ60 SDCZ60-064G-B35



• Transcend®: JetFlash 790 Series TS64GJF790KBE



• PNY®:

Retract USB 3.0 Flash Drive, black (P-FD64GTRTC-GE)



Silicon Power®:
 2 Pack USB 3.0/3.1 Gen1 USB Flash Drive Blaze B02



IMPORTANT NOTE: For 2020-22MY the update contains four (4) files. When performing an update, the USB must contain the matching number of files and all files must be replaced. ALWAYS use the latest files together as a set.

NEVER reuse or combine files from a prior update with a newer version.

NEW: Be aware that Wilderness Edition has a separate and unique update version. Never attempt to put a Wilderness edition update in an Outback or an Outback update in a Wilderness edition.

SERVICE PROCEDURE / INFORMATION:

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

STEP 1- VERY IMPORTANT: Before proceeding with the software updating procedure, the currently installed software version ID **MUST** be confirmed by following the steps below:

1a) After starting the engine and system boot-up completes, from the HOME screen, touch the **Settings** button.



1b) Press the **General** button. Use the down arrow to scroll to **System Information** then press to display the System Information / Version information.





The examples below identify the head unit model and the last 6 digits signify the software version number. Examples:

- F11GHMxxx-xxx (High model software)
- F11GMMxxx-xxx (Mid model software)
- F11GBMxxx-xxx (Base model software)

If on a Legacy and Outback, the software version number

	F11GHMxxx-xxx(High model software)
20MY Model	F11GMMxxx-xxx(Mid model software)
	F11GBMxxx-xxx(Base model software)
	F31BHMxxx-xxx(High model software)
21MY Model	F31BMMxxx-xxx(Mid model software)
	F31BBMxxx-xxx(Base model software)
	FB1SHMxxx-xxx(High model software)
22MY Model	FB1SMMxxx-xxx(Mid model software)
	FB1SBMxxx-xxx(Base model software)
WILDERNESS	F51XHMxxx-xxx(High model software)
WILDERNESS	F51XMMxxx-xxx(Mid model software)

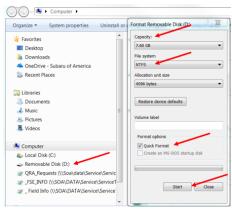
MY	Carline	Trim/Grade	Older Software Versions	Latest Software Version		
		BASE	020-501 020-502 021-503 022-504 032-280 072-582 112-680	122-780		
20MY	Outback/ Legacy	MID	020-501 020-502 020-704 021-503 021-704 022-504 042-380 072-582 112-680	122-780		
	HIGH	020-501 020-502 020-704 021-503 021-704 022-504 042-380 072-582 112-680	122-780			
		BASE	008-500 030-880 071-182 111-280	121-380		
21MY	Outback/ Legacy	MID	008-500 040-980 071-182 <mark>111-280</mark>	121-380		
				HIGH	008-500 040-980 071-182 <mark>111-280</mark>	121-380
		BASE	060-781 070-882 <mark>110-980</mark>	121-080		
22MY	Outback/ Legacy	MID	060-781 070-882 <mark>110-980</mark>	121-080		
		HIGH	060-781 070-882 <mark>110-980</mark>	121-080		
22MY	Outhook	MID	060-981 071-082 111-180	121-080		
Wilderness Outback	Ouwack	HIGH	060-981 071-082 <mark>111-180</mark>	121-080		

STEP 2- Prepare the USB:

CAUTION: Do not use any USB flash drive which utilizes file organizing software or an operating system.

VERY IMPORTANT: Before attempting to download any data files, confirm the PC and flash drive being used is not infected with any virus. The flash drive MUST be formatted for **NTFS**.

- Make sure the USB flash drive contains no other files.
- Right click on the corresponding "Removable Disk".
- Select "Format".
- From the File System drop-down menu, select "NTFS"
- Check the "Quick Format" box (if not already done).
- Click on "Start" to format the USB flash drive.



STEP 3- Download the Update Files to the USB:

The files are available for download on Subarunet (see "A" below).

The applicable reprogramming files have also been sent directly to retailers by Nuspire in the same way a Select Monitor Update would be pushed out. (see "B" below).

Follow "A" when using files downloaded from Subarunet.

Follow "B" when using the files sent directly to the SDS notebook from Nuspire.

"A" When using update files downloaded from Subarunet:

Click Here to Access the Downloads for Audio/Navigation Information on Subarunet



IMPORTANT: Files downloaded from Subarunet will be .zip files and must be unzipped before they can be used. Using the normal audio / navigation system file update download procedure: Go to Subarunet, select Service Operations and Technical>>Forms/Downloads>>**Gen 4/Denso** for Audio/Navi then click on the applicable Hyperlink to download the file(s) to your SDS Notebook or PC:

Updates for Gen 4.0 Denso Audio and Navigation Head Units - 2020MY Legacy / Outback:

BASE-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022 MID-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

HIGH-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

Updates for Gen 4.0 Denso Audio and Navigation Head Units - 2021MY Legacy / Outback:

BASE-21-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

MID-21-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

HIGH-21-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

Updates for Gen 4.0 Denso Audio and Navigation Head Units - 2022MY Legacy / Outback:

BASE-22-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

MID-22-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

HIGH-22-Legacy-Outback-Denso-CP1 AUDIO UPDATE-April 2022

Updates for Gen 4.0 Denso Audio and Navigation Head Units - 2022MY Outback Wilderness:

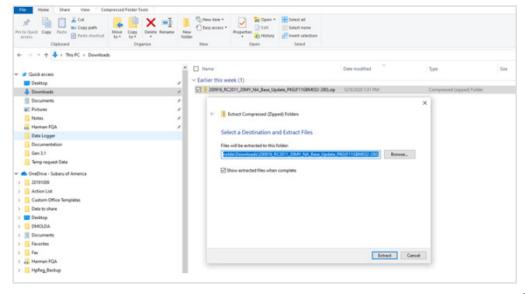
MID-22-Outback Wilderness-Denso-CP1 AUDIO UPDATE-April 2022

HIGH-22-Outback Wilderness-Denso-CP1 AUDIO UPDATE-April 2022

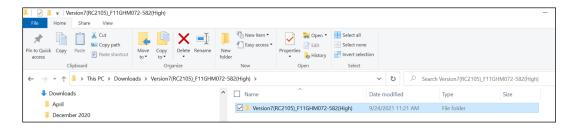
- Go to Downloads.
- CAUTION: After download is complete, NEVER change the file or folder names.
- Open / display the contents of File folder, for example: "File name TBD".
- Click on "Extract All Files".



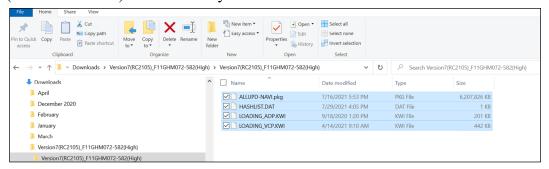
• The screen below will appear to set a destination for the extracted file.



• Double-click on the required folder (for this example, used folder titled "Version7(RC2105)_F11GHM072-582(High)").



• Copy all files then paste (or click / drag) it to the "clean" USB flash drive as listed (Removable Disk) in the directory.



IMPORTANT NOTE: For 2020-22MY the update contains four (4) files. When performing an update, the USB must contain the matching number of files and all files must be replaced. ALWAYS use the latest files together as a set.

NEVER reuse or combine files from a prior update with a newer version.

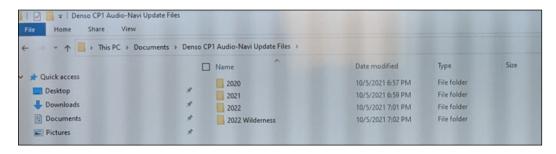
NEW: Be aware that Wilderness Edition has a separate and unique update version. Never attempt to put a Wilderness edition update in an Outback or an Outback update in a Wilderness edition.

- To avoid confusion, use a permanent marker to label the flash drive with the file contents (e.g. BASE Denso CP1 2020MY, MID Denso CP1 2020MY or HIGH Denso CP1 2020MY).
- Go to Step 4.

"B" When using update files sent directly from Nuspire:

• Go to My Documents on the GUI screen click on the folder "Denso CP1 Audio-Navi Update Files" to display the list of available update files shown below.

IMPORTANT: Always confirm there are four folders as shown below, "2020", "2021", "2022"and "2022 Wilderness". If not, the SDS notebook hasn't been updated with the latest release. Please contact Nuspire to request they resend the update."



- CAUTION: After download is complete, NEVER change the file or folder names.
- Double-click on the required folder (for this example, select the file entitled "BASE") and the update file will display as shown.



• Select all 4 files and either copy / paste or click / drag them to the USB flash drive.

IMPORTANT NOTE: For 2020-22MY the update contains four (4) files. When performing an update, the USB must contain the matching number of files and all files must be replaced. ALWAYS use the latest files together as a set.

NEVER reuse or combine files from a prior update with a newer version.

NEW: Be aware that Wilderness Edition has a separate and unique update version. Never attempt to put a Wilderness edition update in an Outback or an Outback update in a Wilderness edition.

• Once all files have been loaded onto the USB flash drive, right click on the drive and select "Eject".

CAUTION: NEVER change the file names.

- Remove the USB flash drive after the prompt appears that says "Safe to Remove Hardware".
- Mark the USB to indicate the head unit it will update (BASE Denso CP1 in this example).
- Repeat the above steps to create the BASE Denso CP1 or MID Denso CP1 or HIGH Denso CP1 USB flash drives as needed using a separate USB drive for each update folder.
- Proceed to **STEP 4** below.

STEP 4- Perform the software update.

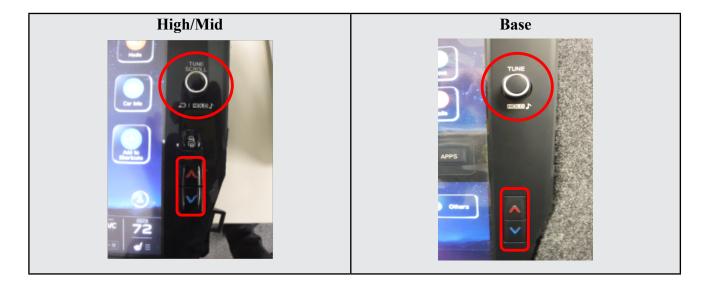
CAUTIONS:

- **NEVER** attempt to install the software immediately following an exchange module installation.
 - Let the system restart first and operate for 20 minutes.
- **NEVER** attempt to install the software a second time for 30 minutes following a previously unsuccessful software installation.
- **NEVER** attempt to install the software for at least 30 minutes after completing a FOTA update.

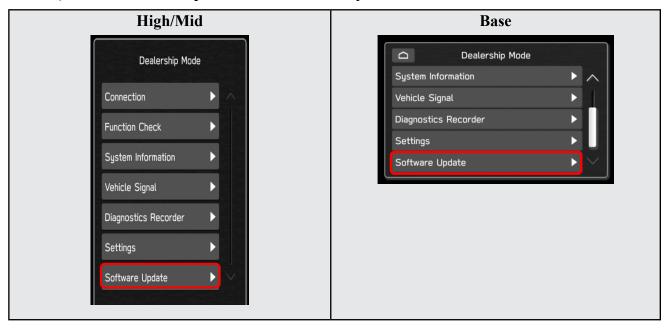
Best practice is to prevent USB software update conflicts with FOTA software update. Please confirm "Automatically Check for Update" setting is turned off following the steps below, prior to starting the software update via USB.



- **4a)** Perform the update in a well ventilated location if updating with the engine running OR with the ignition ON and a battery charger connected.
- **4b)** PRESS and HOLD the RIGHT-side temperature control buttons (both up and down) and press the Tune / Scroll knob 6 times then release all to display the Dealership Mode Menu.

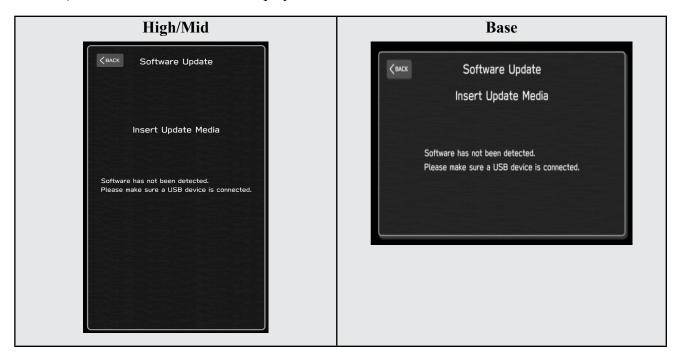


4c) Select Software Update from the Dealership Mode menu.



IMPORTANT NOTE: On a RARE occasion, the message "Software update setup is initializing..." may be displayed. Should this occur, proceed to "**Appendix A**" starting on pg. 20 of this bulletin for further instruction.

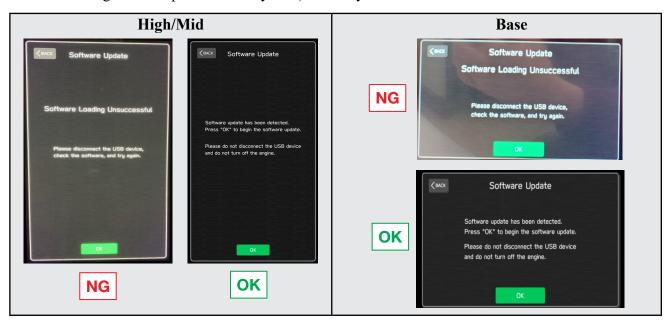
4d) The screen below will be displayed.



4e) Insert reprogramming USB into the USB port and press OK.

NOTE: If after plugging in the USB, the screen displays a Software Loading

Unsuccessful message, confirm the USB device has been properly formatted and the the software on the device matches the system being reprogrammed (example: Base software is being used to update a Base system) and retry.

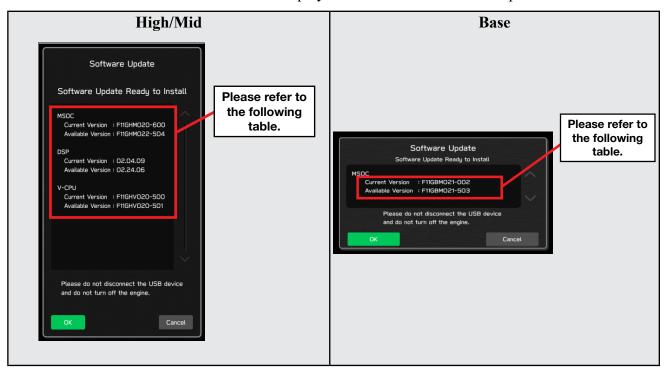


If you get the message Software Update Incomplete as shown below, please don't replace the hardware but retry updating the software according to the instructions in "Appendix B" on pg. 21.

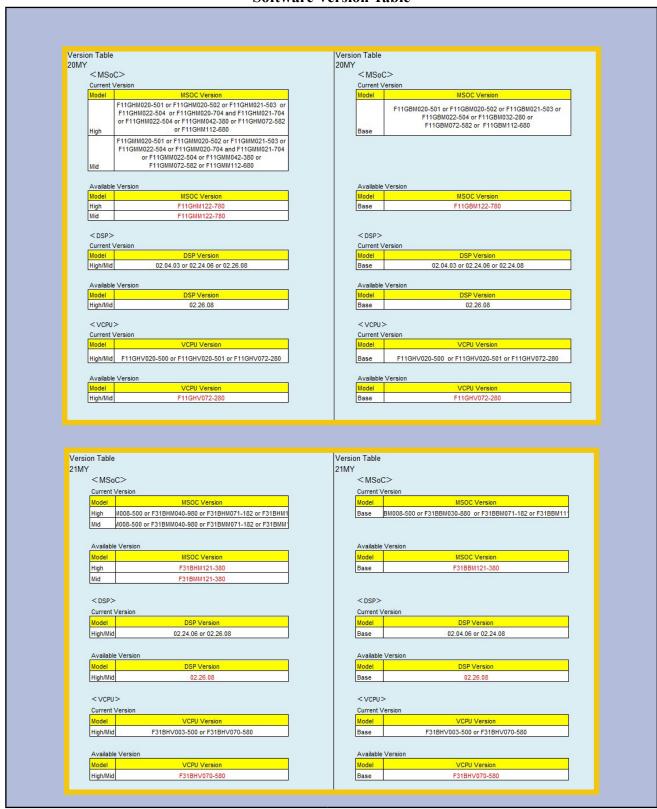


4f) The screen below will be displayed. Press OK to start the software update.

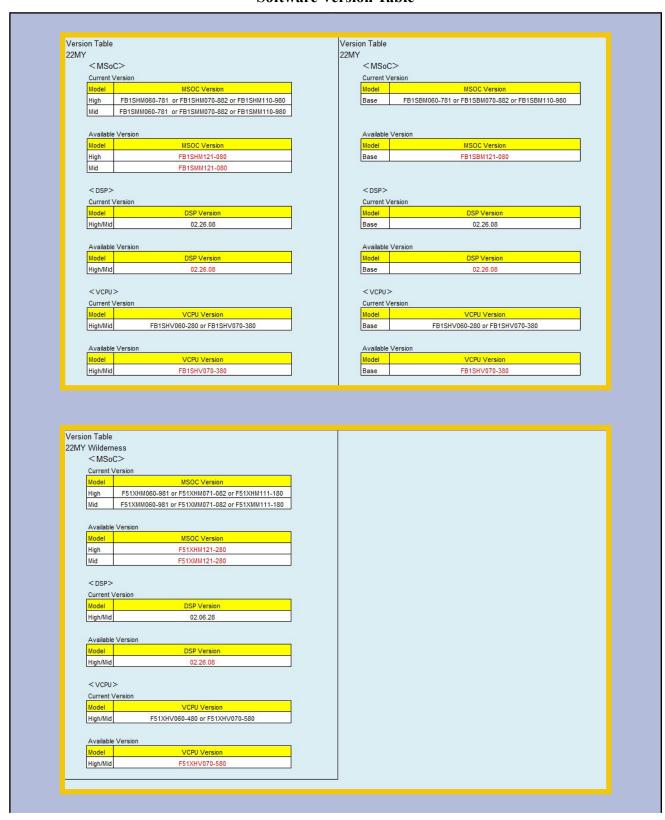
NOTE: The actual software version displayed will be different from the picture shown below.



Software Version Table

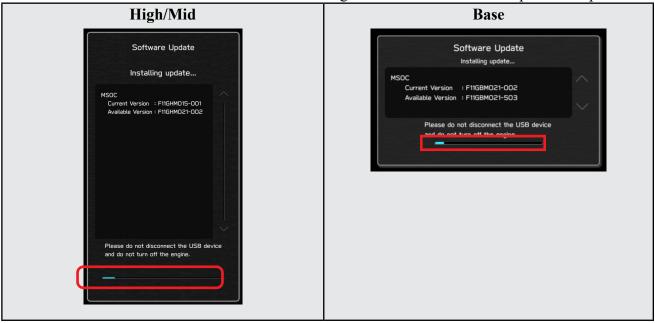


Software Version Table

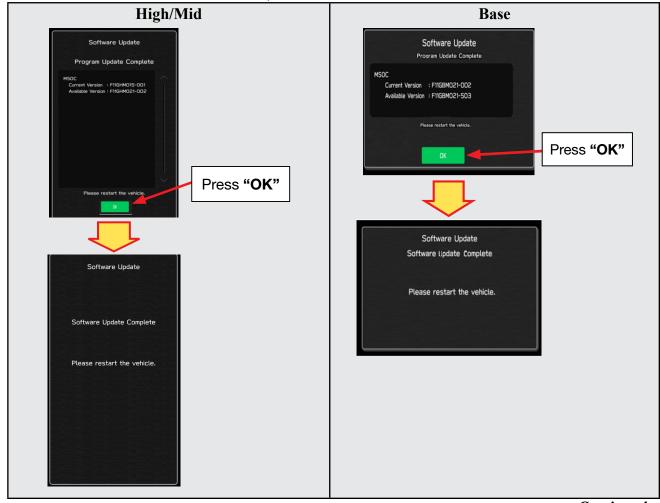


4g) Once the update begins, the screen below will be displayed with a progress bar. It takes about 15 to 20 minutes for the update to complete.

VERY IMPORTANT: NEVER turn off the ignition while the software update is in process.



4h) When the software update is complete, the following screen will be displayed (the actual software version will be different).



IMPORTANT NOTE:

On a rare occasions a "Software Update Incomplete" message may appear in this step which occurs due to a bug in the software update procedure. Proceed to Step 4i below to confirm the software version has been updated to the latest version.

- 4i) Select **OK** in the screen above then remove the H/U reprogramming USB from the USB port.
- 4j) Turn the Ignition OFF, open the driver's door then close the driver's door.
- **4k)** Wait for **3 minutes**, then turn the ignition ON.
- 4l) Access Dealership Mode following steps provided item 4b and using the tables below, confirm the software update completed successfully.

NOTE: The new Software Version number must be entered when prompted at claim entry.

Version Table Version Table Model 20MY MSOC Version Model MSOC Version F11GBM122-780 High F11GHM122-780 Base Mid F11GMM122-780 **DSP Version** Model DSP Version Base 02.26.08 High/Mid 02.26.08 VCPU Version Model VCPU Version F11GHV072-280 Model Base High/Mid F11GHV072-280 Version Table Version Table Model MSOC Version Model MSOC Version F31BHM121-380 Base F31BBM121-380 High Mid F31BMM121-380 Model DSP Version Model DSP Version Base 02.26.08 High/Mid 02.26.08 VCPU Version F31BHV070-580 Model Base High/Mid F31BHV070-580 Version Table Version Table MSOC Version 22MY Nodel MSOC Version FB1SHM121-080 High Base FB1SBM121-080 FB1SMM121-080 Mid DSP Version Model Model DSP Version Base 02.26.08 VCPU Version High/Mid 02.26.08 Base FB1SHV070-380 High/Mid FB1SHV070-380 Version Table 22MY MSOC Version F51XHM121-280 High Mid F51XMM121-280 DSP Version Model High/Mid 02.26.08 F51XHV070-580

Software Version Table

4m) Enable the setting "Automatically Check for Updates" as shown in the steps below.



4n) Turn the ignition OFF, open the driver's door then close the driver's door to complete the procedure.

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:

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.

Labor Description	Labor Operation #	Labor Time	Fail Codes
DENSO CP1 SOFTWARE UPDATE-INCLUDES VERSION CHECK	A031-173	1.0	ZTZ-48 (BASE, MID, HIGH)

REMINDER: The new Software Version number must be entered when prompted at claim entry.

NOTE: Retailers are now permitted to claim up to \$5.00 per claim in Sublet to help offset the cost of replacement USB drives. Repeated re-formatting of the USB drives used for reprogramming can compromise their ability to operate properly. Over time, hardware connections can loosen and stored data files can become corrupted. Retailers are responsible for replacing any worn or otherwise inoperable USB drives as needed. This compensation is intended to help defray those costs.

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.

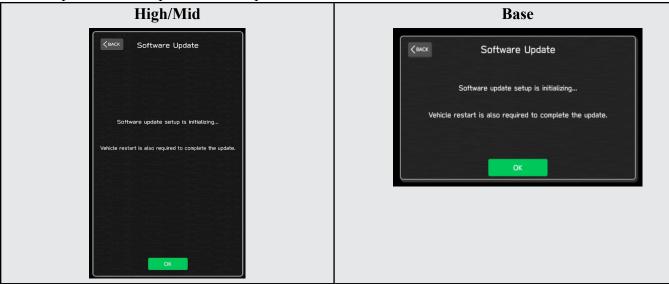
Continued...

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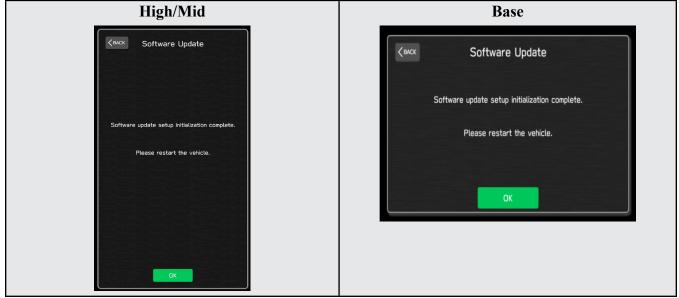
"APPENDIX A"

Follow this procedure in the RARE case of "**Software update setup is initializing...**" message is displayed:

• If the screen shown below appears, **WAIT** for approximately 30 minutes or as long as necessary (waiting for longer than 60 minutes might indicate system malfunction). In that case please perform recovery according to the instructions in "Appendix B" to allow the Software update setup initialization process to complete.



The screens shown below will be displayed when the process completes.



- 1. Turn the ignition OFF, open the driver's door, close the driver's door and WAIT for 3 or more minutes before proceeding further.
- 2. Open the driver's door again and either turn the ignition ON (if a charger is connected) or start the engine.
- **3.** Go to Dealership Mode menu again (PRESS and HOLD the RIGHT-side temperature control buttons (both up and down) and press the Tune / Scroll knob 6 times then release all to display the Dealership Mode) and select Software Update as in **STEP 4c** beginning on pg. 11.

IMPORTANT NOTE: If this procedure is required, contact Techline as additional action may be necessary.

"APPENDIX B"

In case of retrying the software update after the first attempt of update fails.

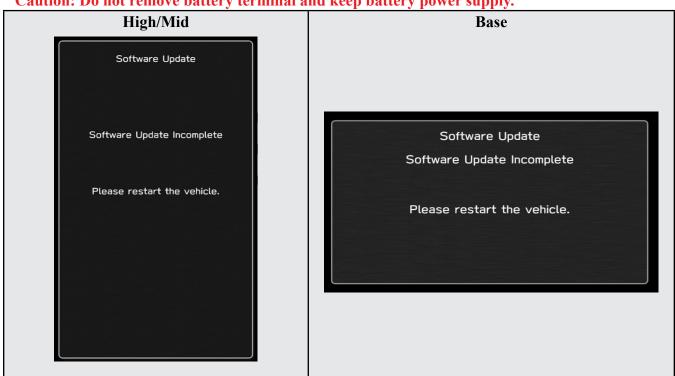
• If the first attempt of update fails with the message below, follow the steps described below 1-2 to 1-8 before retrying the software update.

1-1. Select OK in the screen below

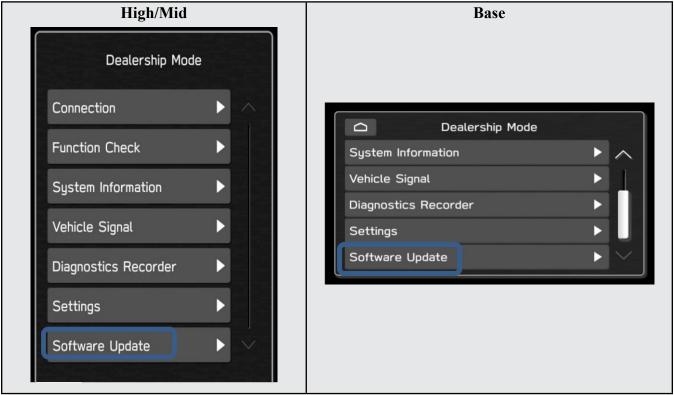


1-2. Turn the ignition switch or the engine OFF, and turn it ON again.

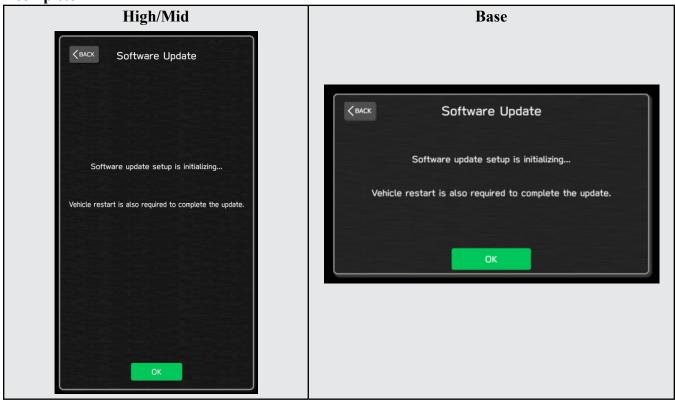
Caution: Do not remove battery terminal and keep battery power supply.



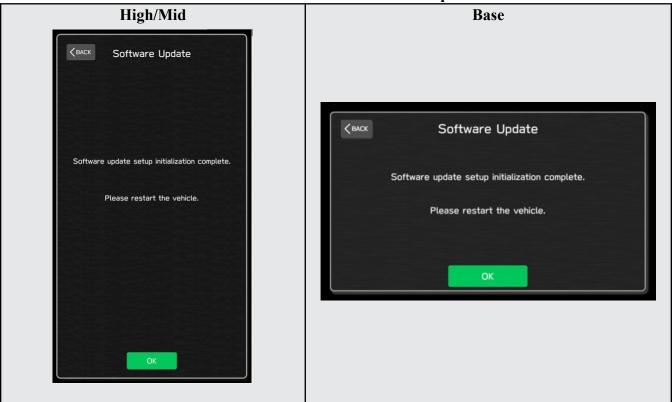
1-3. Select Software Update in the Dealership Mode diagnostics screen.



1-4. When you see the screen below, wait for approx. 15 minutes until the initialization is complete



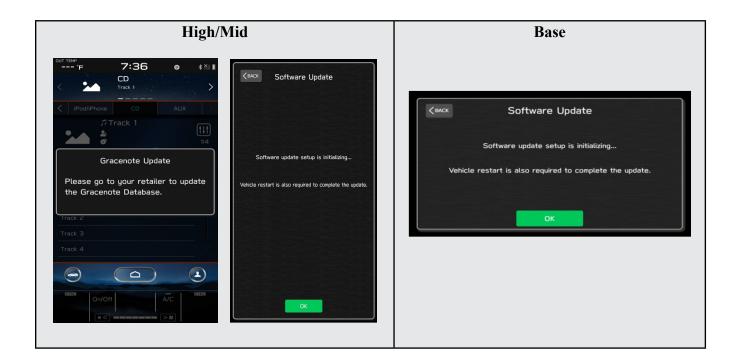
1-5. You will see the screen below when the initialization is complete.



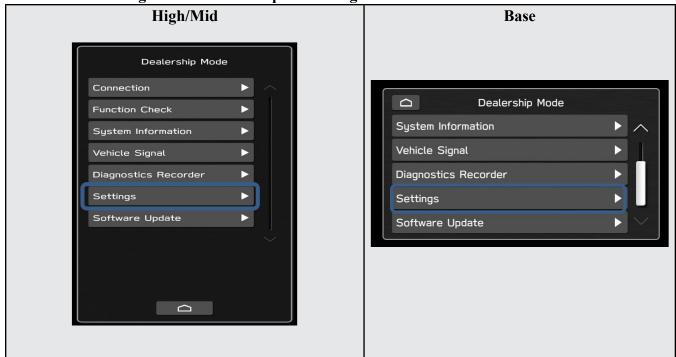
- 1-6. Turn the ignition switch or the engine OFF, open the driver side door and close the door then wait for 3 minutes.
- 1-7. Open the driver side door then turn the ignition switch or the engine ON.
- 1-8. Go to Dealership Mode menu again (PRESS and HOLD the RIGHT-side temperature control buttons (both up and down) and press the Tune / Scroll knob 6 times then release all to display the Dealership Mode) and select Software Update as in STEP 4c beginning on pg. 11.

"APPENDIX C"

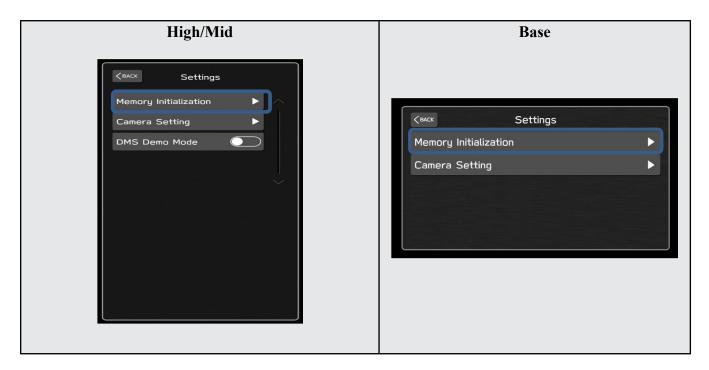
In case the Gracenote update popup screen appears or software initializing screen does not go away for more than 20 minutes, please perform steps 2-1 to 2-11.



2-1. Select "Settings" in the Dealership Mode diagnostics screen.

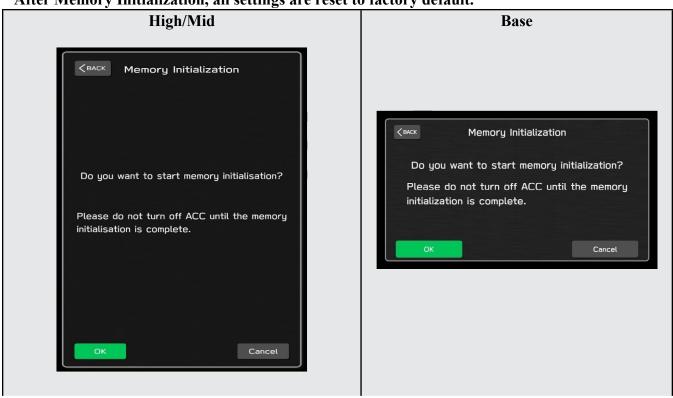


2-2. Select "Memory Initialization"

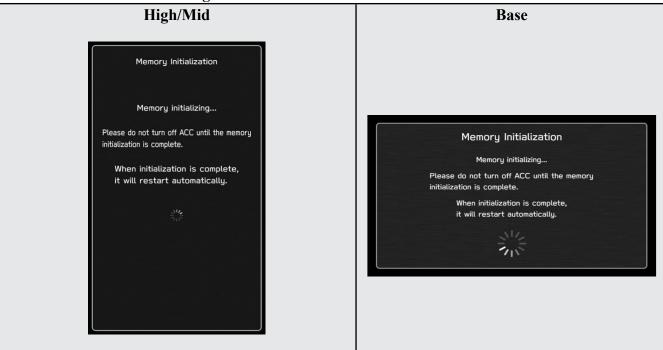


2-3. Select "OK"

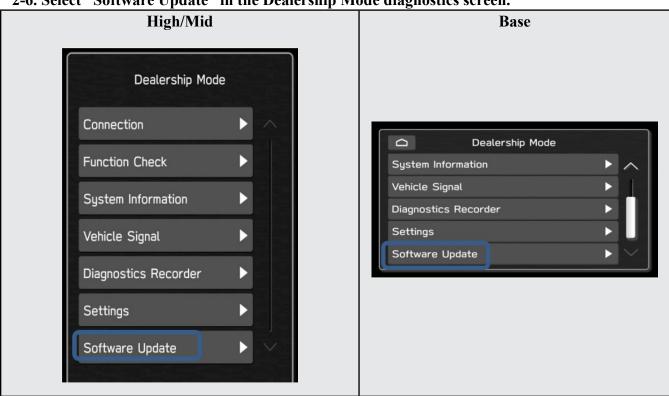
After Memory Initialization, all settings are reset to factory default.



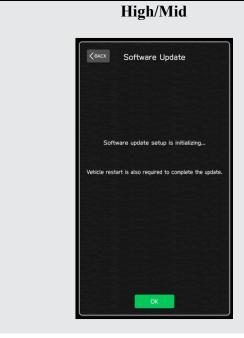
2-4. You will see the following screen

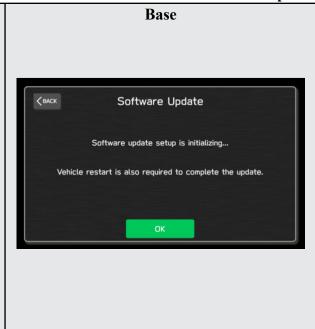


- 2-5. After a few seconds, system restarts itself.
- 2-6. Select "Software Update" in the Dealership Mode diagnostics screen.

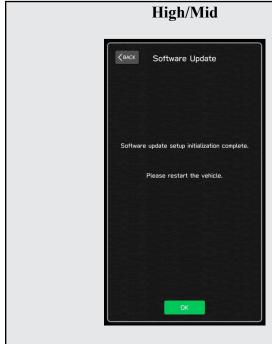


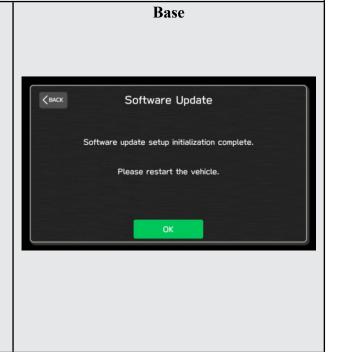
2-7. When you see the screen below, wait for about 15 minutes until the initialization is complete





2-8. You will see the screen below when the initialization is complete.





- 2-9. Turn the ignition switch or engine OFF, open the driver side door and close the door then wait for 3 minutes.
- 2-10. Open the driver side door then turn the ignition swatch or engine ON.
- 2-11. Go to Dealership Mode menu again (PRESS and HOLD the RIGHT-side temperature control buttons (both up and down) and press the Tune / Scroll knob 6 times then release all to display the Dealership Mode) and select Software Update as in STEP 4c beginning on pg. 11.

"APPENDIX D"

Denso Gen 4 Software Update Timeline (TSB Number: 15-261-20)

Update #	Model Year:	Version	Release Date:	NEW Software Version ID #:	Conditions Addressed:
0	2020	0	9/1/2019	F11GHM020-501/502 (High model software) F11GMM020-501/502 (Mid model software) F11GBM020-501/502 (Base model software)	- Start of Production for 20MY Outback/Legacy
1	2020	RC1912	2/24/2020	F11GHM021-503 (High model software) F11GMM021-503 (Mid model software) F11GBM0021-503 (Base model software)	- See "Conditions Addressed by Update #1" as outlined in "Appendix C" below.
2	2020	RC2003	6/24/2020	F11GHM022-504 (High model software) F11GMM022-504 (Mid model software) F11GBM022-504 (Base model software)	See "Conditions Addressed by Update #2" as outlined in "Appendix C" below.
3	2020 2021	RC2011	12/14/2020	F11GHM042-380 (High model software) F11GMM042-380 (Mid model software) F11GBM032-280 (Base model software) F31BHM040-980 (High model software) F31BMM040-980 (Mid model software) F31BBM030-880 (Base model software)	See "Conditions Addressed by Update #3" as outlined in "Appendix C" below
4	2020 2021 2022 2022 Wilderness	RC2105	10/15/2021	F11GHM072-582 (High model software) F11GMM072-582 (Mid model software) F11GBM072-582 (Base model software) F31BHM071-182 (High model software) F31BMM071-182 (Mid model software) F31BBM071-182 (Base model software) FB1SHM070-882 (High model software) FB1SHM070-882 (Mid model software) FB1SBM070-882 (Base model software) F51XHM071-082 (High model software) F51XHM071-082 (Mid model software)	See "Conditions Addressed by Update #4" as outlined in "Appendix C" below
5	2020 2021 2022 2022 Wilderness	RC2111	1/28/202	F11GHM112-680 (High model software) F11GMM112-680 (Mid model software) F11GBM112-680 (Base model software) F31BHM111-280 (High model software) F31BMM111-280 (Mid model software) F31BBM111-280 (Base model software) FB1SHM110-980 (High model software) FB1SHM110-980 (Mid model software) FB1SBM110-980 (Base model software) FB1SHM110-980 (Base model software) F51XHM111-180 (High model software) F51XHM111-180 (Mid model software)	See "Conditions Addressed by Update #5" as outlined in "Appendix E" below Continued

	2020			F11GHM122-780 (High model software) F11GMM122-780 (Mid model software) F11GBM122-780 (Base model software)	See "Conditions Addressed by Update #6" as outlined in "Appendix E" below
	2021			F31BHM121-380 (High model software) F31BMM121-380 (Mid model software) F31BBM121-380 (Base model software)	
6	<mark>2022</mark>	RC2202	<mark>4/22/2022</mark>	FB1SHM121-080 (High model software) FB1SMM121-080 (Mid model software) FB1SBM121-080 (Base model software)	
	2022 Wilderness			F51XHM121-280 (High model software) F51XMM121-280 (Mid model software)	

"APPENDIX E"

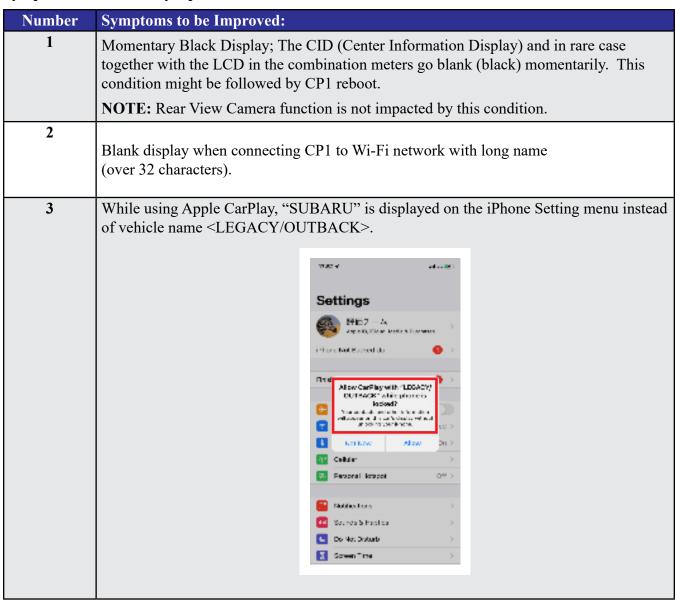
Symptoms Addressed By Update #5:

Number **Symptoms to be Improved:** 1 System restarts itself during FOTA (Firmware Over The Air) update. FOTA operation is conducted in two processes: downloading (from the server to the Cockpit Control Unit via Wi-Fi) and installation (inside the Cockpit Control Unit). During the FOTA operation, after the new software has been downloaded to the Cockpit Control Unit (CCU) customer is to push "Install Now" on the Center **Information Display (CID) to start installation of the software.** FOTA Normal process However, in rare case, the CCU restarts itself* during installation. Linux reset occurs after that CID will restart automatically **Note*** Even if this symptom occurs, after approximately 2 minutes, the system resumes, and the CID comes back to the below screen. Customer can then push the "Install Now" to proceed with the installation. 2:18 -

Number	Symptoms to be Improved:
2	No image on CID (Center Information Display) or Black display condition followed by CP1 reboot resulting from CCU (Cockpit Control Unit) internal communication error or due to listed below actions:
	CP1 forced reboot is performed by pressing the "Vol" button continuously or by performing factory reset operation
	Loss of Bluetooth or Wi-Fi connection
	Application crash during Bluetooth audio streaming
	Launching CarPlay or Android Auto application, after the smart phone is connected
	Removing USB connection between the iPhone's and CP1 during active CarPlay session
	STARLINK application crash
	Performing USB map update using Bluetooth connection with a smart phone carrying STARLINK Companion App map update data
	When ACC is turned OFF and ON, while STARLINK Companion App map update is being performed
	Navigation application crash
	"Service Appointment Scheduler" application crash due to a communication error between DCM and CCM
	Re-inserting USB Flash drive within 2-3 seconds
	Removing USB Flash drive while playing back the data from the USB Flash drive
	CID display loses images (black screen) and reboots itself after ACC (or Ignition) is turned OFF and ON.
3	No image on CID (Center Information Display) or Black display condition and HVAC function becomes inoperative due to listed below actions:
	Failure to complete CP1 software update via USB port *
	• After the failure, Ignition Switch is turned off and on then an initializing process is started with "Software update setup is initialing" message on the display, which requires about 15minutes to complete. During this message is displayed, power supply of CCM is cut off like disconnecting battery terminals.
	Performing CP1 software update via USB port using the same software version
	Note* In case this USB update failure occurs, retry updating according to the instructions in "Appendix B"
4	Intermittent loss of Bluetooth connection

Number	Symptoms to be Improved:
5	"Software update setup is initializing" message displayed for an extended period of time (over 30minutes), after a follow-up attempt for CP1 software update via USB port is performed to recover a failure ** Note** In case this USB update failure occurs, retry updating according to the instructions in "Appendix C"
6	Pop-up message "Please go to your retailer to update the Gracenote Database" appears every time CP1 system is rebooted due to interruption of CP1 software update via USB port (ACC OFF or BATT power remove etc.) *** Note*** In case this USB update failure occurs, retry updating according to the instructions in "Appendix C"

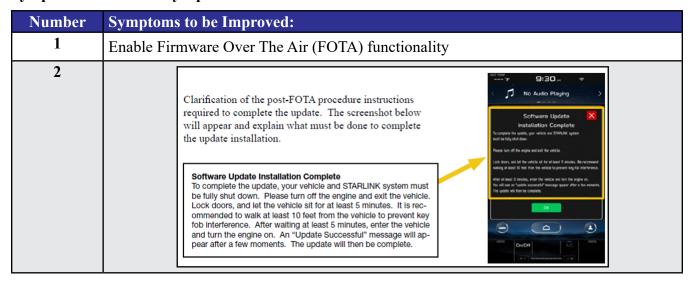
Symptoms Addressed By Update #4:



Number	Symptoms to be Improved:	
4	Vehicle Setting Icon in <home> menu is grayed out.</home>	
	Menu list in the "Car" tab in the Setting Menu is not displayed.	
	No Austral Playing No Aus	
5	CarPlay stopped working after hanging up a hands-free phone call.	
6	CID shows multiple images simultaneously.	
	VOLIME 1	
7	CID shows multiple images simultaneously.	
8	CID freezes/locks after startup. NOTE: Rear View Camera function is not impacted by this condition.	
9	Move (push ▲ ▼ repeatedly) and Select in Map list, then freeze and restart itself.	
10	The CID (Center Information Display) freezes/locks during Wi-Fi configuration	
11	Map freezes while Navigation guidance is being provided.	
12	Navigation operation restarts while driving.	
13	Reboot in Factory diag. mode, when removing USB drive or changing to other USB drive.	
14	CP1 system and combination meter reboot again following a forced reboot, when smart phone connected via USB port.	
15	CP1 system reboots following ignition OFF and ON	
16	Switching to Navigation demo mode after CP1 reboots during Bluetooth pairing	
17	CP1 system reboots, while selecting or using Map feature to configure the driving route	

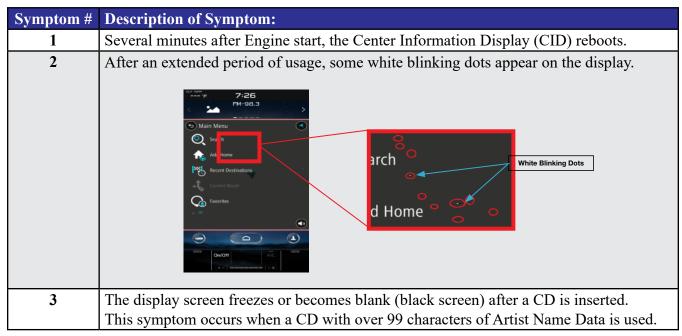
Number	Symptoms to be Improved:
	Android Auto does not function. "Android Auto is Disconnected" is displayed with Launch Error message.
19	CarPlay does not function with USB connection.
20	Sound is muted after hanging up a hands-free phone call.
21	Ring tones and the voice from the other end on the hands-free phone call cannot be heard
22	No sound in SXM, following low or dead battery.
23	Navigation guidance directions are not spoken.
	When iPhone phone book transfer fails, system repeats Bluetooth disconnection and connection.
25	<media> button does not function in <home> menu.</home></media>
26	Vehicle location is not displayed correctly in Navigation screen.
27	Radio station moves unexpectedly due to momentary flick or brush of the touch screen.
	Temperature setting cannot be controlled by Voice Recognition in Canadian (C*) specification.
29	Preset outline is not shown following station selection using steering switch
30	Others. Improvement in button design & location and Icon display pattern, etc.

Symptoms Addressed By Update #3:

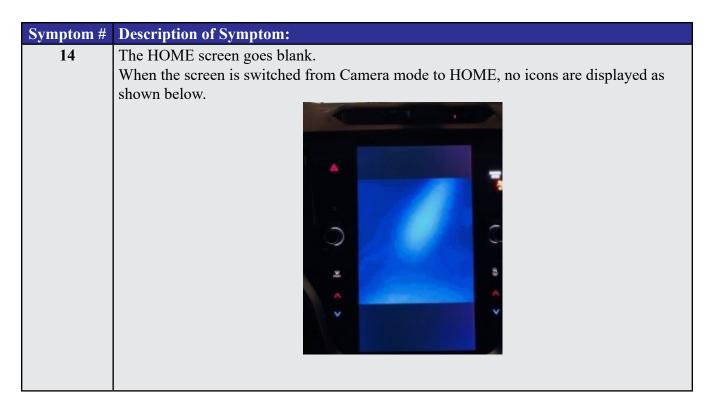


Number	Symptoms to be Improved:		
3	Currently, the microphone level indication is incorrected. More microphone level indication inform		
4	A reduced (low) volume (-6db) concern during handsfree conversation when using CarPlay has been addressed to make the volume level consistent.		
5	Voice recognition (VR) has been enhanced to impre (e.g. YES).	ove recognition of short words	
6	The program has been corrected to prevent repeated mediately after activation of Android Auto.	d rebooting and system freeze-up im-	
7	Eliminate CP1 MOTA update error message "Some able to install any map updates. Contact your deale	ē ;	
8	The Auto Stop-Start On/Off function button has beel layer of the system for easier use. A screenshot of his below. High and Mid grade	<u> </u>	
	SUBARU Settings Apple CarPlay STARLINK Settings Apple CarPlay Apple CarPlay To provide the provide	Vehicle Control Speed Assistance Others Off Auto StartStop AIC STATE AIC STATE AIC STATE STATE STATE AIC STATE S	

Symptoms Addressed By Update #2:

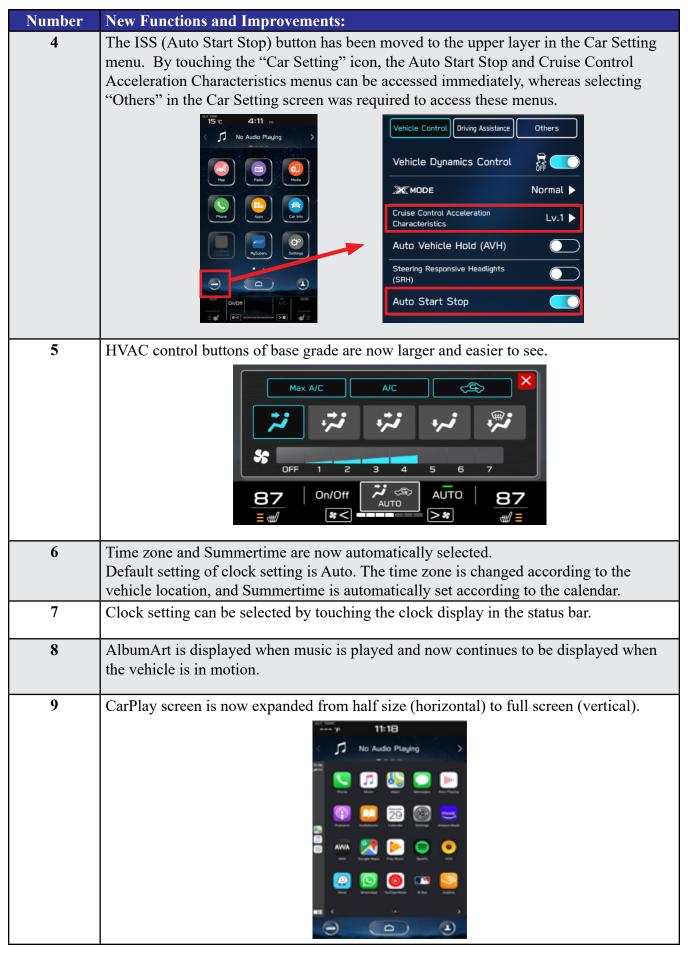


Symptom #	Description of Symptom:
4	CID reboots. In a case where the system was shut down with SXM selected as the audio source, the CID reboots after the next start up.
5	SXM does not resume playing instantly. In a case where the system was shut down with SXM selected as the audio source, SXM takes more than 20 seconds to resume play after the opening screen is displayed (when it normally only takes approximately 5 seconds.)
6	Radio station does not resume playing (no audio output). In a case where the system was shut down with Radio being selected as the audio source, audio output does not resume at the next start up. Once the audio source is changed to SXM, SXM plays normally but, if the source is changed back to the Radio, audio does not return and the radio display is also lost.
7	Customer-selected Equalizer settings are lost. Equalizer returns to the default settings after ignition switch is turned OFF and back ON. Sound Customization Equalizer Balance/Fader Vocal Inage Control Bass Mid Treble Reset Reset
8	The media source cannot be changed. Even if <radio> or <media> is selected, the media source does not change. In addition, Voice Recognition stops functioning at the same time. This condition occurs when the volume setting is continuously changed while the CID is booting.</media></radio>
9	In a case where the system was shut down while the Navigation map screen was being displayed, the display goes blank (black screen) soon after the Disclaimer screen is displayed after restarting.
10	CID reboots repeatedly after setting a destination using the Navigation system.
11	CID reboots while using the Pandora application via CarPlay.
12	Bluetooth connection cannot be reestablished when using certain smart phones. When using Android Auto on certain smartphones, a Bluetooth connection cannot be reestablished automatically once it has been disconnected.
13	CarPlay connection cannot be established. When connecting an iPhone via USB, "CarPlay Unavailable" is displayed and CarPlay does work.

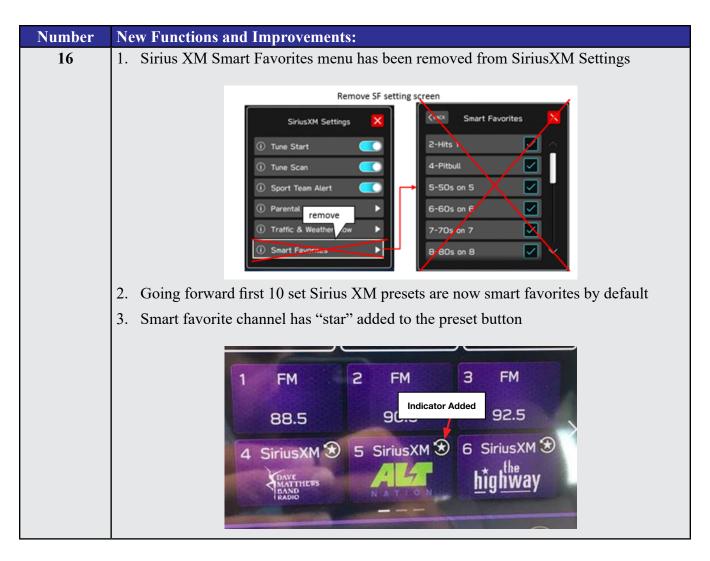


List of New Functions and Enhancements Included in Update #2:

Number	New Functions and Improvements:
1	The previously selected customized map orientation setting is memorized even after ignition OFF / ON. If the customer changes the map orientation setting, the change is automatically retained.
2	Pin display of POI is now available.
3	 In the 2D and 3D HU display mode, the vehicle position icon on the Navigation map is easier to identify: Icon size increased from 7mm to 9mm. Icon color has been changed to Dark Blue. Icon position (when using route guidance) stays at the same position as when not using route guidance. Icon has been re-positioned 9mm higher on the display.



Number	New Functions and Improvements:
10	When using CarPlay or Android Auto, a "CarPlay" or "Android Auto" tab will now appear on the Media tab bar. By selecting this tab, music data and metadata can be browsed.
11	When using route guidance with CarPlay navigation, <turn by="" turn=""> descriptions will be displayed both in the Information bar of CID and in the MID located in the center of the combination meter.</turn>
12	By touching the new CarPlay button located at the top of the CID, the CarPlay menu can be accessed easily. 12:12 AM Ple CarPlay is connected. Bluetooth USB Apple CarPlay
13	In a case where the system is shut down while is CarPlay connected, the system automatically resumes the connection at the next start up.
14	<siri> Voice Recognition function is ready to use faster than with previous version.</siri>
15	Gracenote Media Database updated to November 2019.



Conditions Addressed By Update #1:

