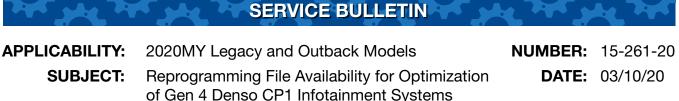
<u>Attention:</u> General Manager Parts Manager Claims Personnel Service Manager		IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right. © 2020 Subaru of A	America, Ir	nc. All righ	ts reserv	ved.			ALITY
	7		•	SERV	ICE	BU	LL	ETIN	



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) and transferring them onto a flash drive for head unit installation.

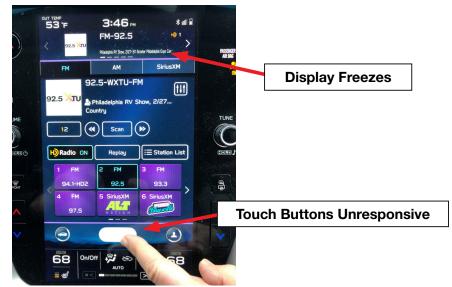
It is VERY IMPORTANT to read and understand this information completely before proceeding.

This software update will address the following conditions:

Symptom #1

The CP1 display and/or center Combination Meter display freezes.

No response from touch screen or voice guidance. After switching the ignition off and opening the driver's door, the system does not recover**.



NOTE** After switching the ignition off and leaving the driver's door open more than 70 seconds, the system *may* recover after switching the ignition back on.

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

SUBARU

DRIVEN® SERVICE

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.

Symptom #2

Delayed response of rear view camera guide lines.

When the rear view camera is activated and the steering wheel is turned, there is a delay before the steering-responsive guide lines respond to the steering wheel input.



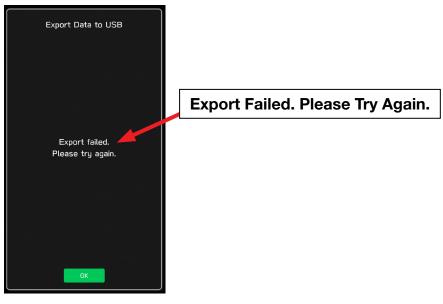
Symptom #3

Fuel consumption display has unnecessary ' Φ ' mark when changing mileage unit to Km.



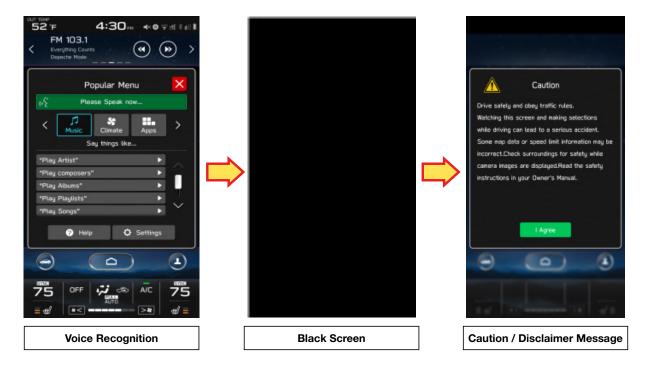
Symptom #4

Diagnostics Recorder Data cannot be exported to the USB memory device. When the diagnostic log data is being downloaded (by selecting: Dealership Menu > Diagnostics Recorder > Export Data to USB), it fails after the progress bar reaches almost 90% with an error message of Export failed. Please try again.



Symptom #5

When using Voice Recognition to search for a 'Nearby POI' (Point of Interest) in Canada with FRENCH language selected, the CP1 display turns black and displays a Caution / disclaimer message.



PART INFORMATION:



Dual 7.0-Inch Display, Base Level Unit

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 **8GB** or more in size and contain a NTFS 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 NTFS. The flash drive is formatted for NTFS. If a recognition problem persists, use a USB flash drive from another manufacturer.

Recommended Flash Drives:

• Kingston[®]: Data Traveler G3, G4, SE9 or the Hyper-X Series



• SanDisk[®]: Cruzer Series, Ultra Flair



• Transcend[®]: JetFlash 300, 600 or 790



• Verbatim[®]: Store 'n' Go



SERVICE PROCEDURE / INFORMATION:

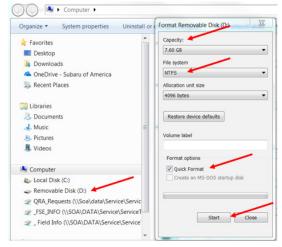
REMINDER: Customer satisfaction and retention starts with performing quality repairs.

STEP 1- 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 ٠ "NTFS"
- Check the "Quick Format" box (if not already • done).
- Click on "Start" to format the USB flash drive.



STEP 2- 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:

	Forms and Do	wnloads				
	Forms	Gen 1	Gen 2/Clarion	Gen 2/Fujitsu 10/Denso 10	Gon 3/Harman	
	Gen 4/Denso	FOTA	Map Updates			
<u>Click Here to Access the</u> <u>Downloads for Audio/Navigation</u> <u>Information on Subarunet</u>	Questionna All Quest Apple Ca Android J Audio Qu Bluetootf General (TSG Data Log Co TSBs and Ti	re Instructions ires: ionaires - Fillab iPlay Concern totu Concern totu Concern totu Concern operation concern operationaire liection DS	ole Form	le Lattice Pattern		
		ownload (TBI				
	BASE-2	20-Legacy-Outb D-Legacy-Outba	back-Denso-CP1 AUDIO ack-Denso-CP1 AUDIO	DUPDATE-FEBRUARY 20 DUPDATE-FEBRUARY 20 DUPDATE-FEBRUARY 20 DUPDATE-FEBRUARY 2	20	

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:

BASE-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-FEBRUARY 2020 MID-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-FEBRUARY 2020 HIGH-20-Legacy-Outback-Denso-CP1 AUDIO UPDATE-FEBRUARY 2020

- Go to Downloads.
- CAUTION: After download is complete, NEVER change the file or folder names.
- Open / display the contents of File folder, for example: "CP1DensoBASE.zip".
- Click on "Extract All Files".

Misc ☐ Documents ☐ I ServiceTechOps Harman FQA ☐ Desktop ☐ Downloads ☐ Extract To	Compressed Folder Tools Pictures Music Extract all					
Quick access	Name ^	Туре	Compressed size	Password Size	Ratio	Date modified
Misc	🖈 📴 Base	File folder				1/13/2020 11:39 A
🖊 Downloads	1					

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

Misc Pictures ServiceTechOps Harman FQA Desktop Downloads Extract To	* *	Extract					
\rightarrow \checkmark \uparrow \square \rightarrow Downloads			^				
🖈 Quick access		Name		Status	Date modified	Туре	Size
Misc	*	CP1Dense	oBASE.zip	2	3/9/2020 9:07 AM	Compressed (zipp	1,033,291 KB
🕹 Downloads	*						
Documents	*						
Pictures	*						×
ServiceTechOps	*	<	Extract Compressed (Zipped	I) Folders			
Harman FQA	*						
			Files will be extracted to this fol sers\dmolda\OneDrive - Suba	u of America\	Desktop\Downloads\CP1	(DensoBASE Brow	56
						Extract	Cancel

• Double-click on the required file (for this example, select the file entitled "BASE").

File Home Share View							
★ Cut ↓	Move Copy to *	Delete Rename	New item ▼ ↑ New folder	Properties	Select none		
Clipboard	Org	anize	New	Open	Select		
→ ✓ ↑ → This PC → Desktop	> Downloads >	CP1DensoBASE					
Downloads	^	Name	^	Status	Date modified	Туре	Size
CP1DensoBASE		Base		2	3/9/2020 9:15 AM	File folder	
Base							
CP1DensoBASE.zip							

• Copy **ONLY** "ALLUPD-NAVI.pkg" then paste (or click / drag) it to the "clean" USB flash drive as listed (Removable Disk) in the directory.

File	Home	Share	e View										
Pin to Quic access	k Copy			Move to •	Copy to •	Delete Rename	New folder	Bew item ▼ Fasy access ▼	Properties	Edit	 Select all Select none y Invert select 		
	CI	ipboard	L		Org	anize		New	C	pen	Select		
$\leftarrow \rightarrow$	个 🔁 > This PC > Desktop > Downloads > CP1DensoBASE > Base												
	Downloa	ds			^	Name	1		Statu	s [Date modified	Туре	Size
	CP1Der	nsoBAS	E			ALLUPD-NA	VI.pkg		C	3	/9/2020 9:16 AM	PKG File	4,237,511 KB
	Base												
	CP1Der	nsoBAS	E.zip										

- To avoid confusion, use a permanent marker to label the flash drive with the file contents (e.g. BASE Denso CP1, MID Denso CP1 or HIGH Denso CP1).
- Go to Step 3.

"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.

	CP1 Aud	lio-Navi Update Files View		
← → • ↑ 📕	> This PC	C → Windows (C:) → Users → Subaru	> Documents > Denso CP1 Audio-I	Navi Update Files >
🖈 Quick access] Name	Date modified Type	Size
Desktop	*	BASE	2/21/2020 1:08 PM File fold	ler
	HIGH		2/21/2020 1:09 PM File fold	ler
Downloads	*	MID	2/21/2020 1:10 PM File fold	ier

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

🛛 🔄 🖛 🛛 BASE					
File Home	Share	View			
← → ~ ↑ 🛄	> This PC	> Windows (C:) > Users > Subaru	> Documents > Denso CP	1 Audio-Navi Update F	iles > BASE
		Name	Date modified	Type	Size
🖈 Quick access					
Desktop	*	ALLUPD-NAVI.pkg	12/23/2019 9:51 PM	PKG File	4,237,511 KB

- Select the file "ALLUPD-NAVI.pkg" and either copy / paste or click / drag it to the USB flash drive.
- Once the folder named "update" is loaded onto the USB flash drive, right click on the drive and select "Eject".
- 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 or MID Denso CP1 and HIGH Denso CP1 USB flash drives as needed using a separate USB drive for each update folder.
- Proceed to **STEP 3** below.

STEP 3- Perform the software update.

1: NOTE: ALWAYS perform Software Version Check Procedure BEFORE attempting to install an update.

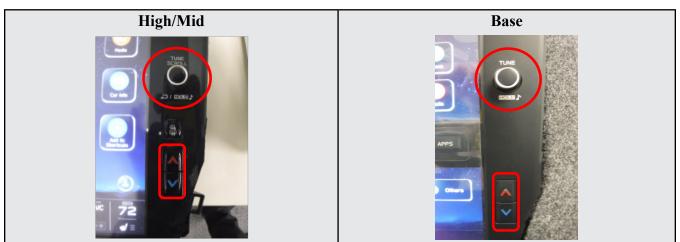
CAUTION:

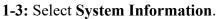
- Do not attempt to install the software immediately following an exchange installation. Let the system restart first and operate for 20 minutes.
- Do not attempt to install the software a second time for 30 minutes following prior software installation.
- Do not attempt to install the software for at least 30 minutes after completing a FOTA update.

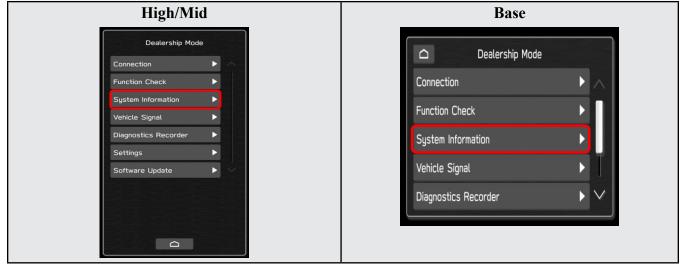
The red text indicates the H/U model information:

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

- 1-1: Start the Engine or connect a battery charger in Power Supply mode.
- **1-2:** 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.







1-4: Select Version Information.

High/Mid	Base
Version Information	System Information Product Information Version Information

1-5: The screen below will be displayed (the version name may be different). Confirm the version and model information match per the tables below then press **<BACK** twice.



Version Table

Model	MSOC Version	[Model	MSOC Version	
High	F11GHM020-501 or 502		Base	F11GBM020-501 or 502	
Mid	F11GMM020-501 or 502	-			

IMPORTANT REMINDER: Perform the update in a well ventilated location if updating with the engine running OR perform the update with the ignition ON and a battery charger connected.

2: Select Software Update from the Dealership Mode menu.

High/Mic	I	Base					
Dealership Mod	e	Dealership Mode					
Connection Function Check		System Information Vehicle Signal Diagnostics Recorder Settings					
System Information		Software Update	•				
Vehicle Signal Diagnostics Recorder							
Settings Software Update							

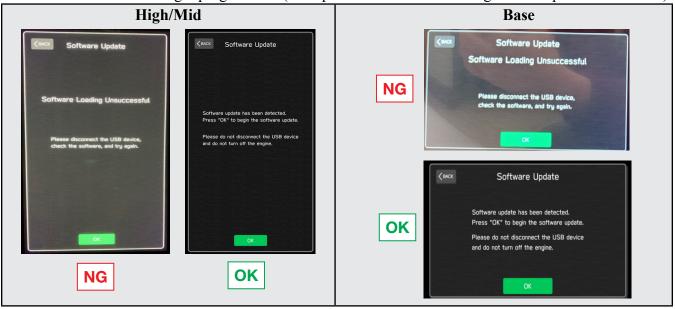
IMPORTANT NOTE: On a RARE occasion, the message "Software update setup is initializing..." may be displayed. Should this occur, proceed to "**Appendix A**" starting on pg. 13 of this bulletin for further instruction.

3: The screen below will be displayed.

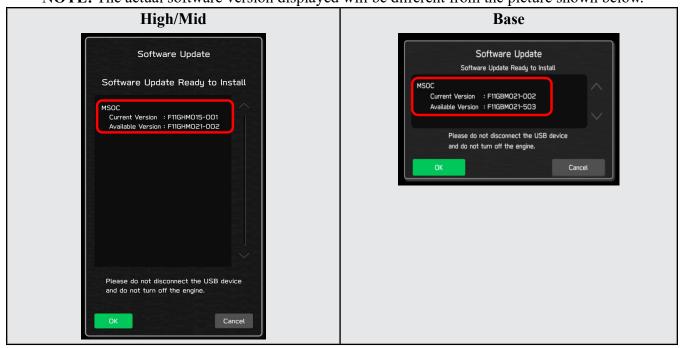
KBACK Software Update	Software Update
	Insert Update Media
Insert Update Media	Software has not been detected. Please make sure a USB device is connected.
Software has not been detected. Please make sure a USB device is connected.	

4: Insert the H/U 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 H/U being reprogrammed (example: Base software is being used to update a Base H/U).



5: 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.



Version Table

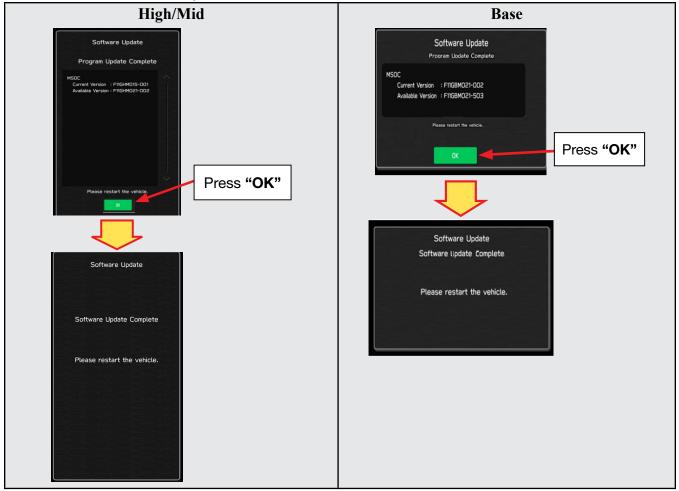
Model	MSOC Version	Available Version	Model	MSOC Version	Available Version
High	F11G <mark>H</mark> M020-501 or 502	F11GHM021-503	Base	F11G <mark>B</mark> M020-501 or 502	F11G <mark>B</mark> M021-503
Mid	F11GMM020-501 or 502	F11GMM021-503			

6: 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.



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



- 8: Select **OK** in the screen above then remove the H/U reprogramming USB from the USB port.
- 9: Turn the Ignition OFF, open the driver's door then close the driver's door.
- 10: Wait for 3 minutes, then turn the ignition ON.
- 11: Go to the Dealership Mode again (see Step 2) and using the tables below, confirm the software update was successful then press <BACK twice.

Version Table

Model	MSOC Version]	Model	MSOC Version
High	F11GHM021-503		Base	F11G <mark>B</mark> M021-503
Mid	F11GMM021-503]		

12: 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:

Labor Description	Labor Operation #	Labor Time	Fail Codes
DENSO CP1- SOFTWARE VERSION CHECK ONLY	A031-178	0.3	ZTG-48 (BASE)
DENSO CP1 SOFTWARE UPDATE-INCLUDES VERSION CHECK	A031-173	0.6	ZTS-48 (MID)
			ZTH-48 (HIGH)

NOTE: Retailers are now permitted to claim up to \$2.00 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.

"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 15 minutes to allow the Software update setup initialization process to complete.



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

High/Mid	Base
Software Update	CEACK Software Update
	Software update setup initialization complete.
Software update setup initialization complete.	Please restart the vehicle.
Please restart the vehicle.	
	ок
ОК	

- 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 3** beginning on pg. 8.

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