ATTENTION: GENERAL MANAGER PARTS MANAGER	IMPORTANT - All Service Personnel Should Read and Initial in the boxes						SUB	ARU
SERVICE MANAGER	provided, right. © 2020 Subaru of	America, Inc. A	Il rights reserv	ved.		QUALITY	′ DRIVEN®	SERVICE
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APPLICABILITY:	2020MY Legacy and Outback Models	NUMBER:	15-261-20R
SUBJECT:	Reprogramming File Availability for Optimization	DATE:	03/10/20
	of Gen 4 Denso CP1 Infotainment Systems	<b>REVISED:</b>	05/21/20

### **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

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 ' $\Phi$ ' 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)

Continued... Page 3 of 14

### **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<sup>®</sup>: Data Traveler G3, G4, SE9 or the Hyper-X Series



• SanDisk<sup>®</sup>: Cruzer Series, Ultra Flair



• Transcend<sup>®</sup>: JetFlash 300, 600 or 790



• Verbatim<sup>®</sup>: 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 Downloads
	Forms Gen 1 Gen 2/Claricon Gen 3/Harman
	Con 4/Demos EOTA Mag Updates
<u>Click Here to Access the</u> <u>Downloads for Audio/Navigation</u> <u>Information on Subarunet</u>	Gen 4: Denso         Questionnaire Instructions         Questionnaires:         All Questionaires - Fillable Form         Apple CarPlay Concern         Android Auto Concern         Bluetosth Operation Concern         Bluetosth Operation Concern         Bluetosth Operation Concern         Seneral Questionaire         TSG         Data Log Collection         TSBs and Tips         15-250-19 - Audio Display Screen Has Visible Lattice Pattern
	Software Download (TBD)
	Updates for Gen 4.0 Denso Audio and Navigation Head Units – 2020MY Legacy / Outback: 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

**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".

File         Home         Share         View         Compresse           Misc         Documents         E Pictures         ServiceTechOps         Harman FQA         Music           Desktop         Downloads         Documents         Documents         Documents	d Folder Tools Extr	i act II					
Extract Io							
110							
← → × ↑  A This PC → Downloads → C	P1DensoBASE	zip					
A Quick access	<u>^</u> 1	Name	Туре	Compressed size	Password Size	Ratio	Date modified
Misc	*	Base	File folder				1/13/2020 11:39 AM
+ Downloads							

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

Misc     B Documents     ■ Pictures       ServiceTechOps     Harman FQA     Music       Desktop     Downloads     Ø Documents       Extract To       ← ⇒ * ↑     > Downloads	Extract all					
✤ Quick access	Name	^	Status	Date modified	Туре	Size
Misc 📌	CP1Dens	oBASE.zip	2	3/9/2020 9:07 AM	Compressed (zipp	1,033,291 KB
🖶 Downloads 🛛 🖈						
Documents 🖈						
E Pictures 🖈						×
ServiceTechOps	· ~	Extract Compressed (Zipped)	Folders			
Harman FQA 🕺		S				
		Files will be extracted to this fold sers\dmolda\OneDrive - Subaru	er: of America\[		IDensoBASE Brow	i€
					Extract	Cancel

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

File	Home	Share	View										
Ain to Quicl	k Copy	Paste	从 Cut ₩ Copy path I Paste shortcut	Move Co to * t	opy o *	Delete Rename	New	tasy access ▼	Properties	Edit	Select all Select none	tion	
	CI	lipboard			Org	anize		New	C	pen	Select		
$\leftarrow \rightarrow$	· ↑	→ Thi	is PC > Desktop :	Download	ds≯	CP1DensoBASE							
	Downloa	ads			^	Name	/		Statu	s Da	te modified	Туре	Size
	CP1Der	nsoBASE				Base			2	3/9	9/2020 9:15 AM	File folder	
	Base												
	CP1Der	nsoBASE.	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 View								
Pin to Quick access Copy	Paste Cut Paste Paste shorter	Move Copy to v to v	Delete Rename	New item •	Properties	<ul> <li>Select all</li> <li>Select none</li> <li>Invert select</li> </ul>	ion		
c	lipboard	Org	janize	New	Open	Select			
$\leftarrow \rightarrow \cdot \uparrow$	→ This PC → Deskto	p > Downloads >	CP1DensoBASE >	Base					
Downloa	ads	^	Name	^	Status E	ate modified	Туре	Size	
CP1De	nsoBASE		ALLUPD-NA	VI.pkg	<b>2</b> 3	/9/2020 9:16 AM	PKG File	4,237,511 KB	
Base									
CP1De	nsoBASE.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.

File Home Sha	P1 Audio-Navi Update Files ire View		
← → ~ ↑ □,	This PC > Windows (C:) > Users > Suba	aru > Documents > Denso CP1 Audio-Navi U	Ipdate Files >
A Quick access	□ Name	Date modified Type	Size
Desktop	BASE	2/21/2020 1:08 PM File folder	
I Davadarda	HIGH	2/21/2020 1:09 PM File folder	
Uownloads x	MID	2/21/2020 1:10 PM File folder	

- 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 > Window	ws (C:) > Users > Subaru	> Documents > Denso CP	1 Audio-Navi Up	date Files > BASE
Ouick access	^	Date modified	Туре	Size
Desktop 🖈 🗋 ALLUP	D-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/Mid	Base
Dealership Mode	Dealership Mode
	Vehicle Signal
Function Check	Settings
System Information	Software Update
Vehicle Signal	
Diagnostics Recorder	
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.

Hign/Mia	Base
CBACK Software Update	CBACK Software Update
	Insert Update Media
Insert Update Media	Software has not been detected.
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	<b>Available Version</b>	Model	MSOC Version	Available Version
High	F11GHM020-501 or 502	F11GHM021-503	Base	F11GBM020-501 or 502	F11GBM021-503
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.

NOTE: The new Version Number must be entered into the Miscellaneous Detail field at claim entry.

#### **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	0.2	ZTG-48 (BASE)	
DENSO CP1 SOFTWARE UPDATE-INCLUDES VERSION CHECK	A031-173	0.6	ZTS-48 (MID) ZTH-48 (HIGH)	

**REMINDER:** The new Version Number must be entered into the Miscellaneous Detail field at claim entry.

**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	✓■ ✓■ ✓ 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.