

**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:** 2022MY BRZ Models **NUMBER:** 15-297-22  
**SUBJECT:** Reprogramming File Availability for Optimization of Gen 4 Denso CP1 Infotainment Systems **DATE:** 07/01/22

**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 2022MY the update contains four (3) 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.**

*Continued...*

## PART INFORMATION:



### 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, please clear the drive and format for **FAT32** instead of **NTFS**. 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



*Continued...*

- 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 2022MY the update contains four (3) 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.

#### SERVICE PROCEDURE / INFORMATION:

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

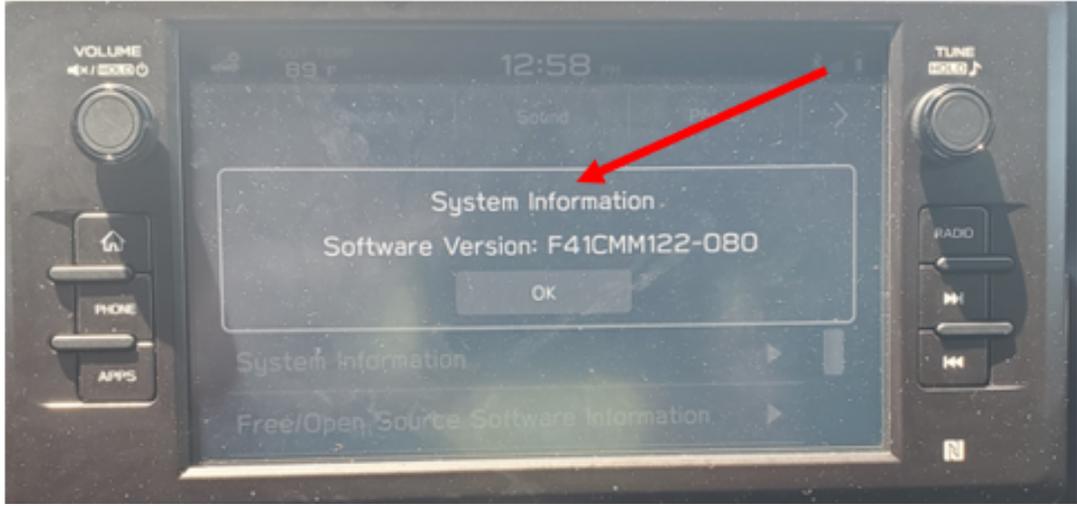
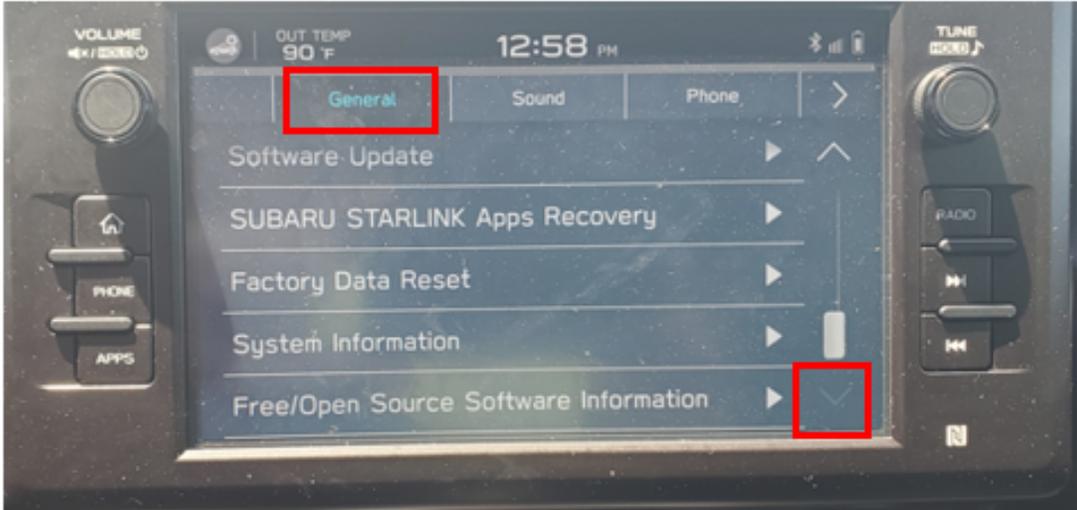
**STEP 1- VERY IMPORTANT:** Before proceeding with the software updating procedure, the currently installed software version ID **MUST** be confirmed by following the steps below:

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



*Continued...*

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:

- F41CMMxxx-xxx

MY	Carline	Trim/Grade	Older Software Versions	Latest Software Version
22MY	BRZ	MID	091-781 101-880	122-080

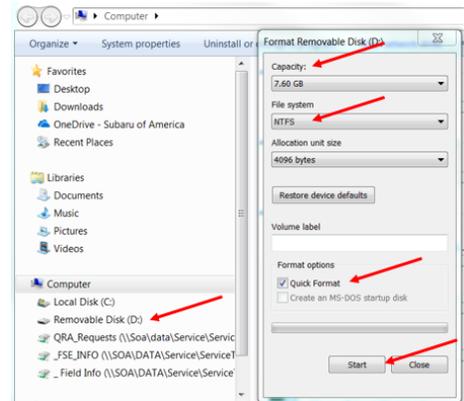
*Continued...*

**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).

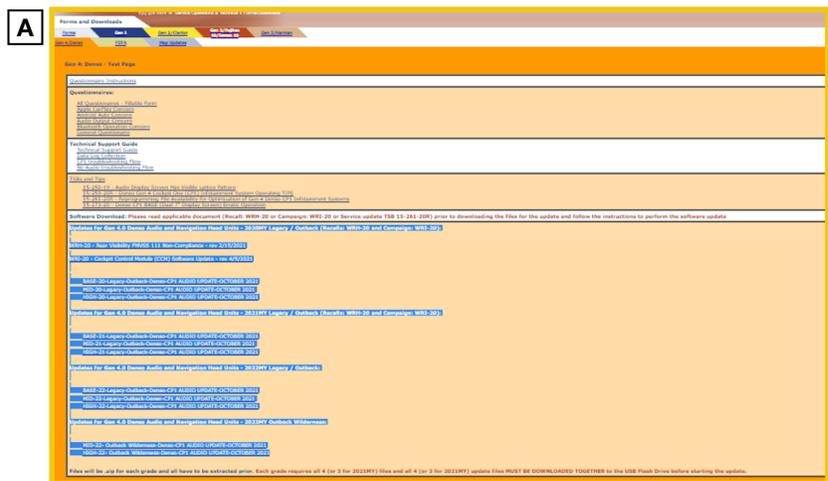
The applicable reprogramming files have also been sent directly to retailers by Nuspire in the same way a Select Monitor Update would be pushed out. (see “B” below).

**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](#)



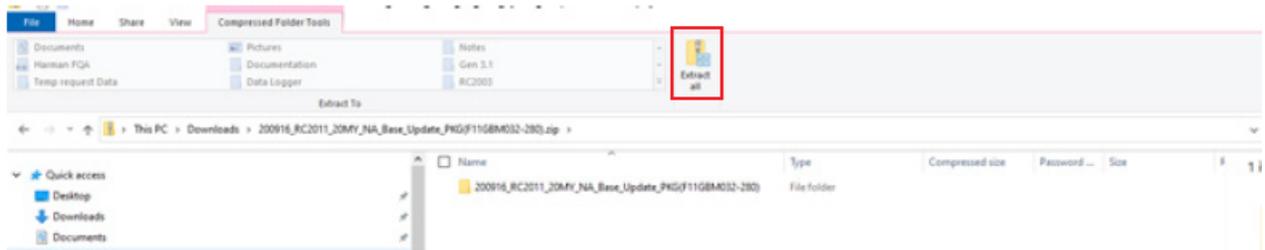
**IMPORTANT:** Files downloaded from Subarunet will be .zip files and must be unzipped before they can be used. Using the normal audio / navigation system file update download procedure: Go to Subarunet, select Service Operations and Technical>>Forms/Downloads>>**Gen 4/Denso** for Audio/ Navi then click 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 - 2022MY BRZ:**

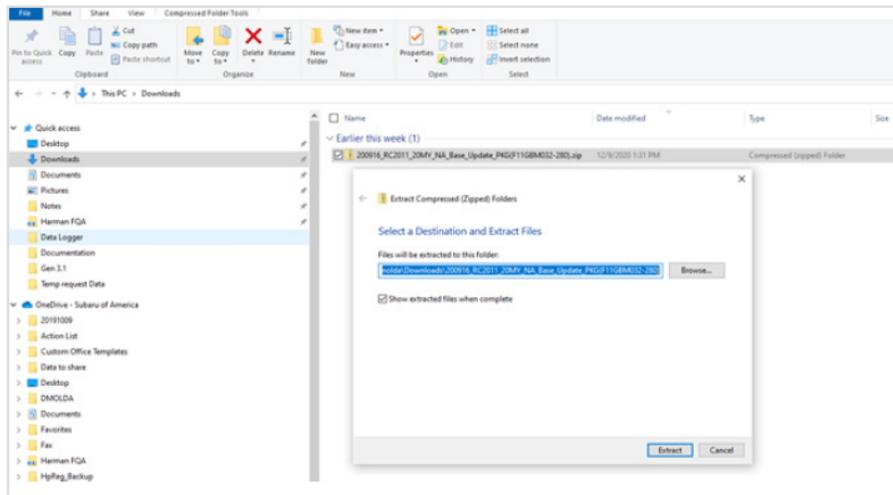
MID-22-BRZ-Denso-CP1 AUDIO UPDATE-June 2022

*Continued...*

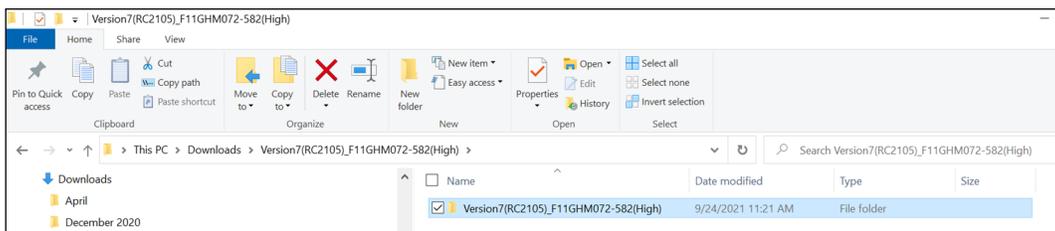
- Go to Downloads.
- **CAUTION:** After download is complete, **NEVER** change the file or folder names.
- Open / display the contents of File folder, for example: “File name TBD”.
- Click on “Extract All Files”.



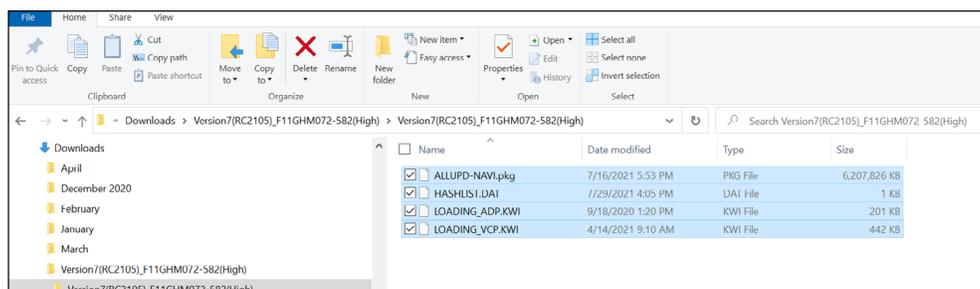
- The screen below will appear to set a destination for the extracted file.



- 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.



*Continued...*

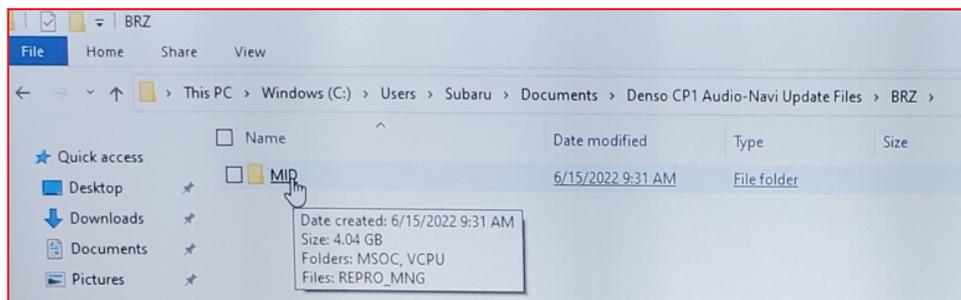
**IMPORTANT NOTE: For 2022MY the update contains four (3) files. When performing an update, the USB must contain the matching number of files and all files must be replaced. ALWAYS use the latest files together as a set.**

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

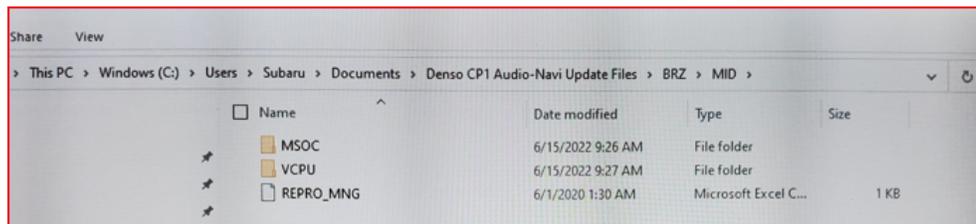
- To avoid confusion, use a permanent marker to label the flash drive with the file contents (e.g. 22MY BRZ CP1).
- Go to **Step 4**.

**“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 the folder is there as shown below, “BRZ 2022”. 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 3 files and either copy / paste or click / drag them to the USB flash drive.

**IMPORTANT NOTE: For 2022MY the update contains four (3) 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.**

- 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 (22MY BRZ Denso CP1 in this example).
- Proceed to **STEP 4** below.

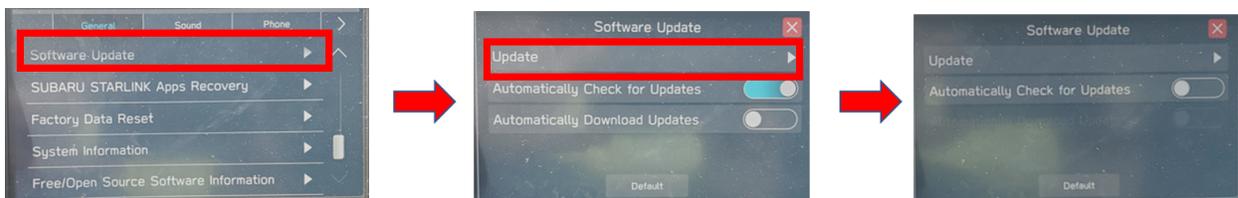
*Continued...*

**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.

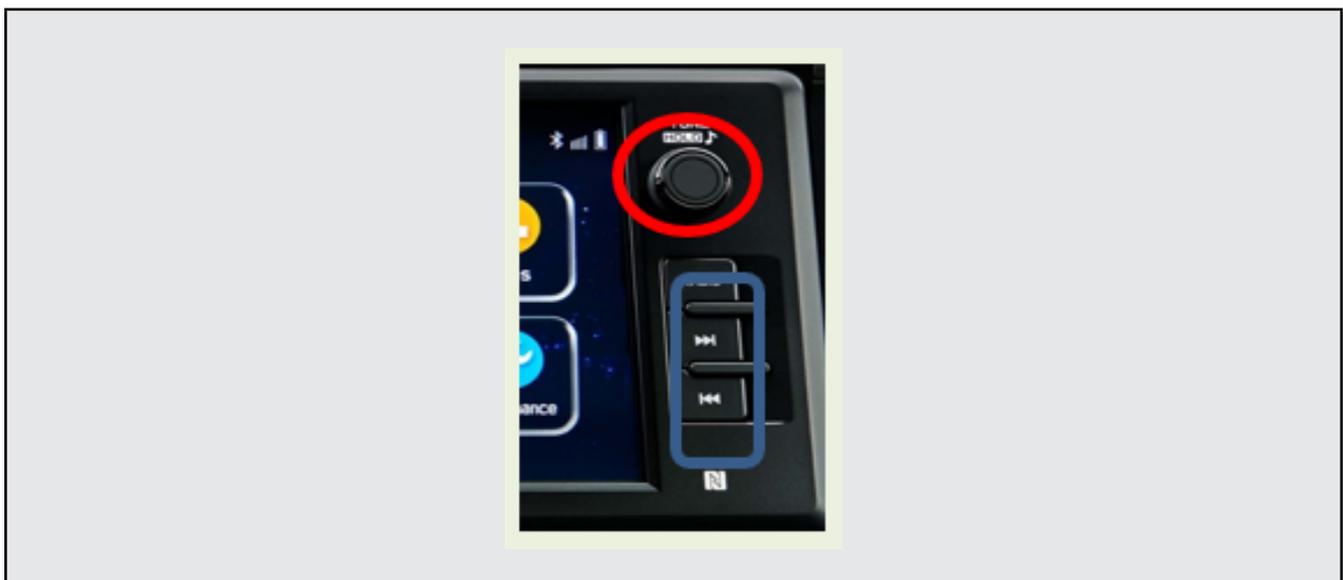
Best practice is to prevent USB software update conflicts with FOTA software update. Please confirm “Automatically Check for Update” setting is turned off following the steps below, prior to starting the software update via USB.



- 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.

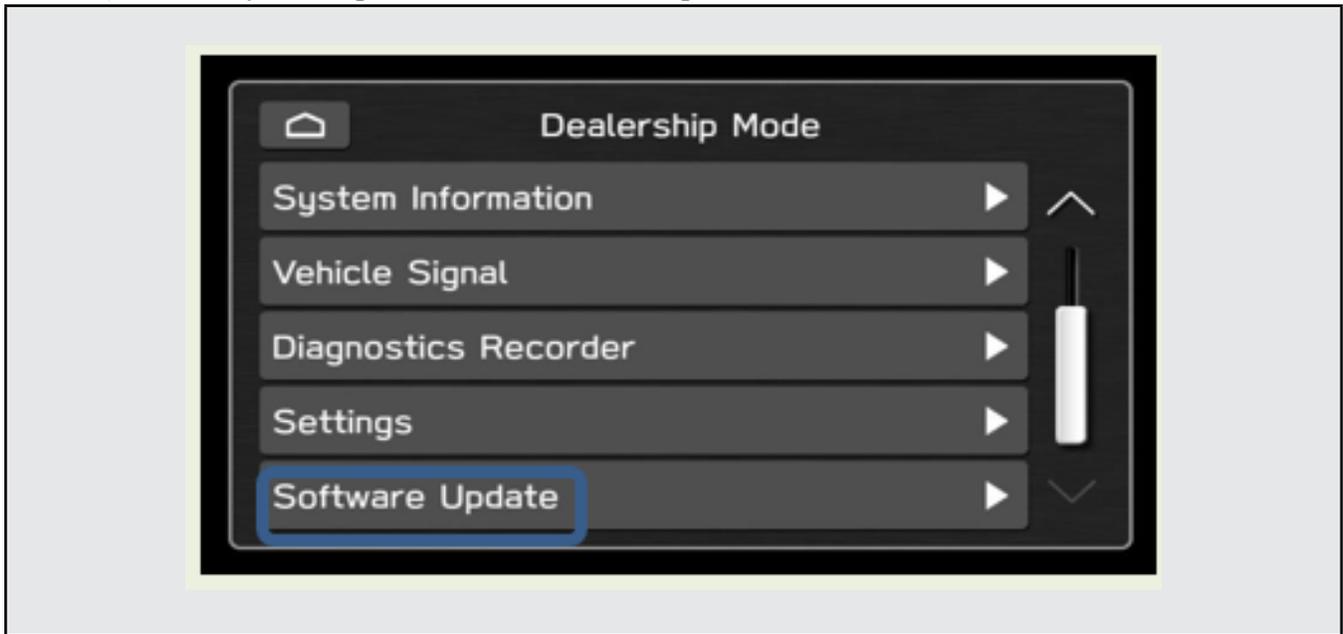
**Check Software Version Before Update**

- 4b) How to check the software version. Push the TUNE knob six times while simultaneously pressing down on both sides of the SEEK switch to display the Dealership Mode Menu.



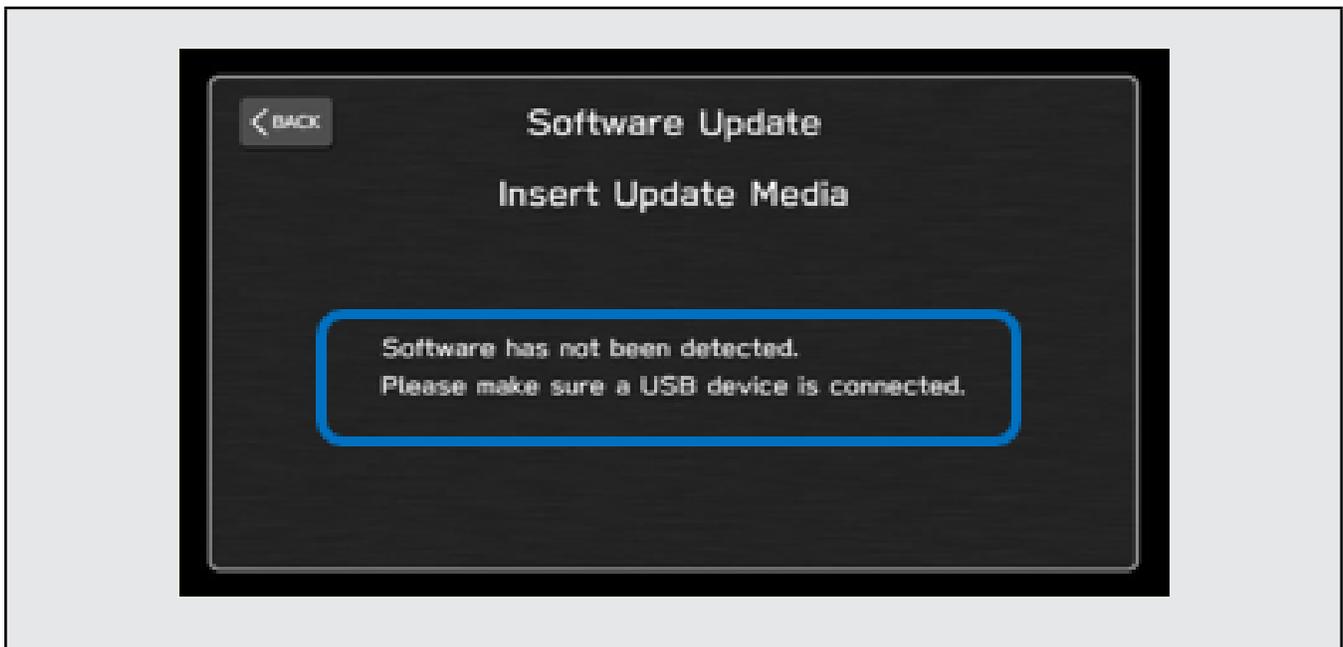
*Continued...*

4c) Select System 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. 15 of this bulletin for further instruction.

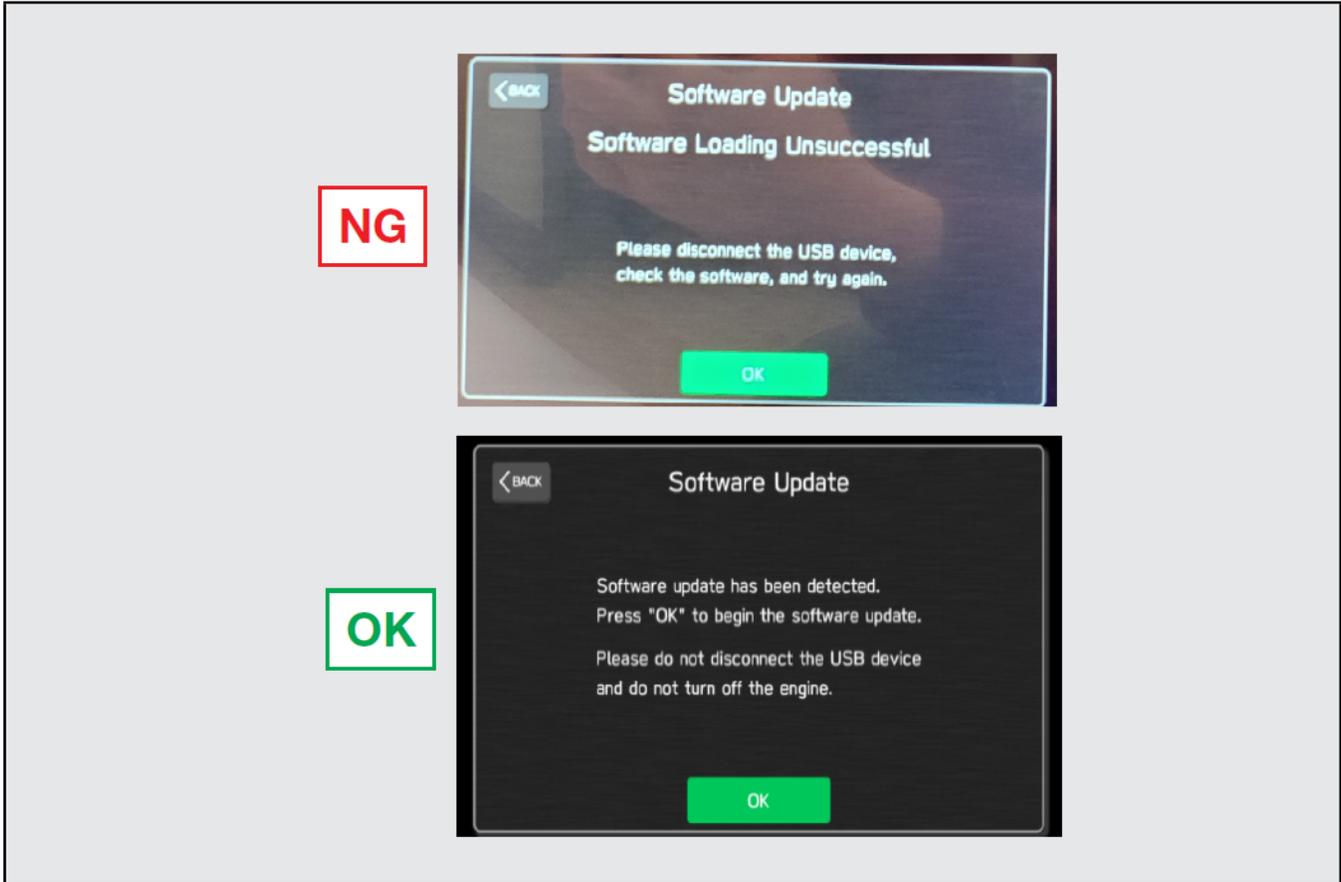
4d) The screen below will be displayed.



*Continued...*

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 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. 16.

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.



*Continued...*

## Software Version Table

22MY

< MSoC >

Current Version

Model	MSOC Version
Mid	F41CMM091-781 or F41CMM101-880

Available Version

Model	MSOC Version
Mid	F41CMM122-080

< DSP >

Current Version

Model	DSP Version
Mid	02.27.08

Available Version

Model	DSP Version
Mid	02.27.08

< VCPU >

Current Version

Model	VCPU Version
Mid	F41CHV081-280

Available Version

Model	VCPU Version
Mid	F41CHV081-280

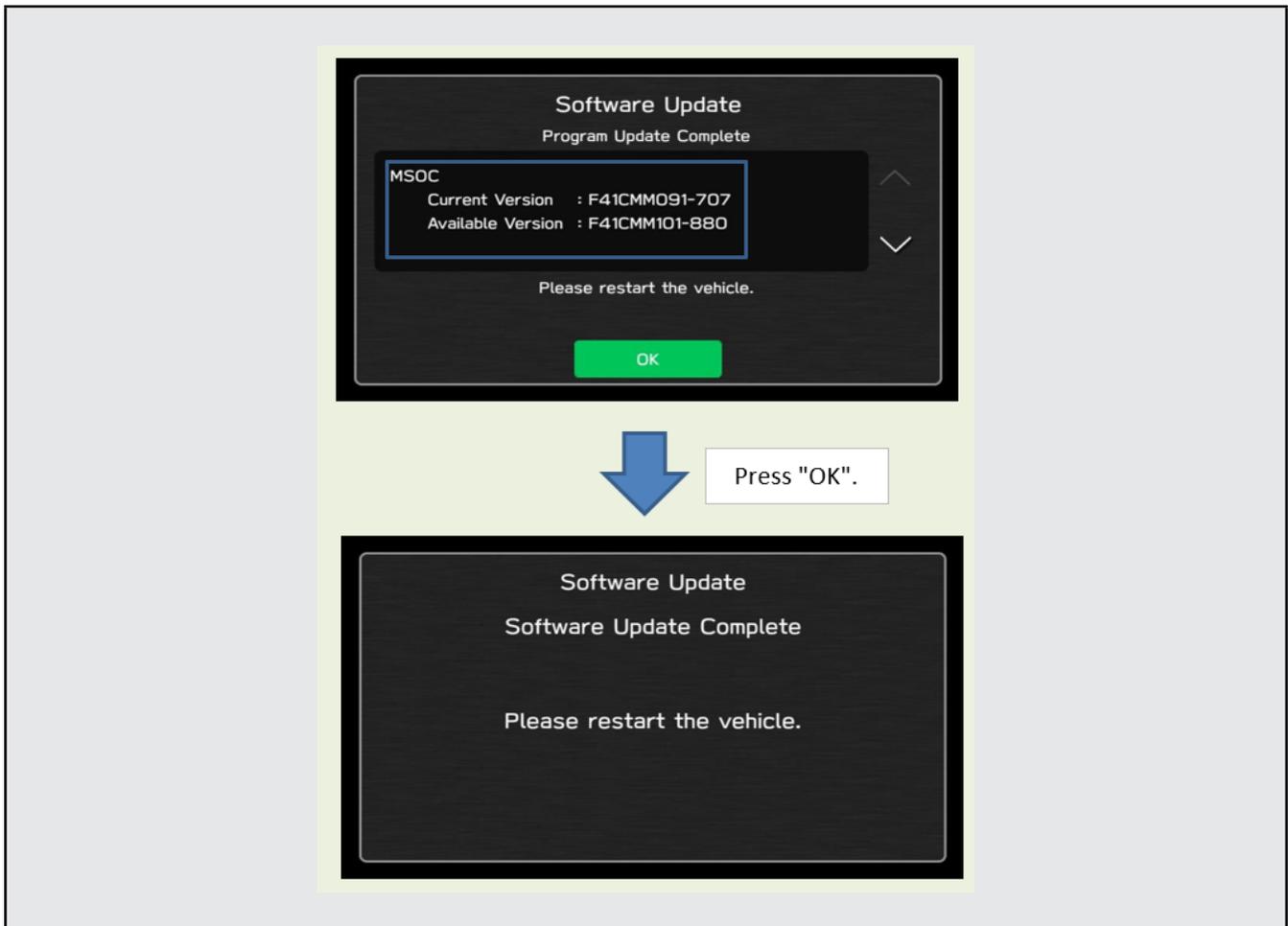
*Continued...*

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).



*Continued...*

**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.

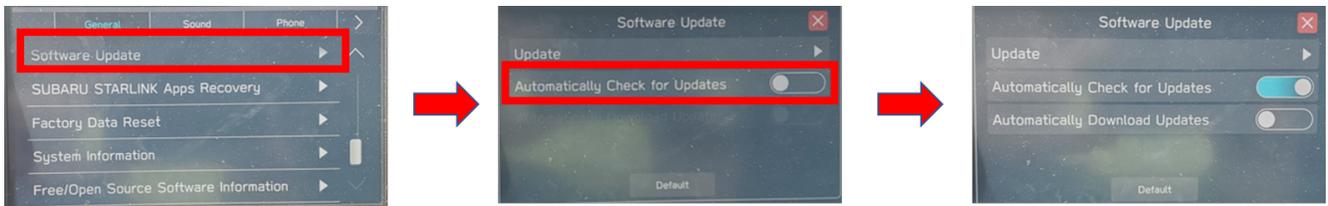
- 4i) Select **OK** in the screen above then remove the H/U reprogramming USB from the USB port.
- 4j) Turn the Ignition OFF, open the driver’s door then close the driver’s door.
- 4k) Wait for **3 minutes**, then turn the ignition ON.
- 4l) Access Dealership Mode following steps provided item **4b**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

**Software Version Table**

Version Table													
22MY	<table border="1"><tr><th>Model</th><th>MSOC Version</th></tr><tr><td>Mid</td><td>F41CMM122-080</td></tr><tr><th>Model</th><th>DSP Version</th></tr><tr><td>Mid</td><td>02.27.08</td></tr><tr><th>Model</th><th>VCPU Version</th></tr><tr><td>Mid</td><td>F41CHV081-280</td></tr></table>	Model	MSOC Version	Mid	F41CMM122-080	Model	DSP Version	Mid	02.27.08	Model	VCPU Version	Mid	F41CHV081-280
Model	MSOC Version												
Mid	F41CMM122-080												
Model	DSP Version												
Mid	02.27.08												
Model	VCPU Version												
Mid	F41CHV081-280												

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.

*Continued...*

## 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:

<b>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</b> 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.	<b>Subaru of America, Inc. is ISO 14001 Compliant</b> ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.
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Labor Description	Labor Operation #	Labor Time	Fail Codes
DENSO CP1 SOFTWARE UPDATE-INCLUDES VERSION CHECK	A031-173	0.5	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 repair

*Continued...*

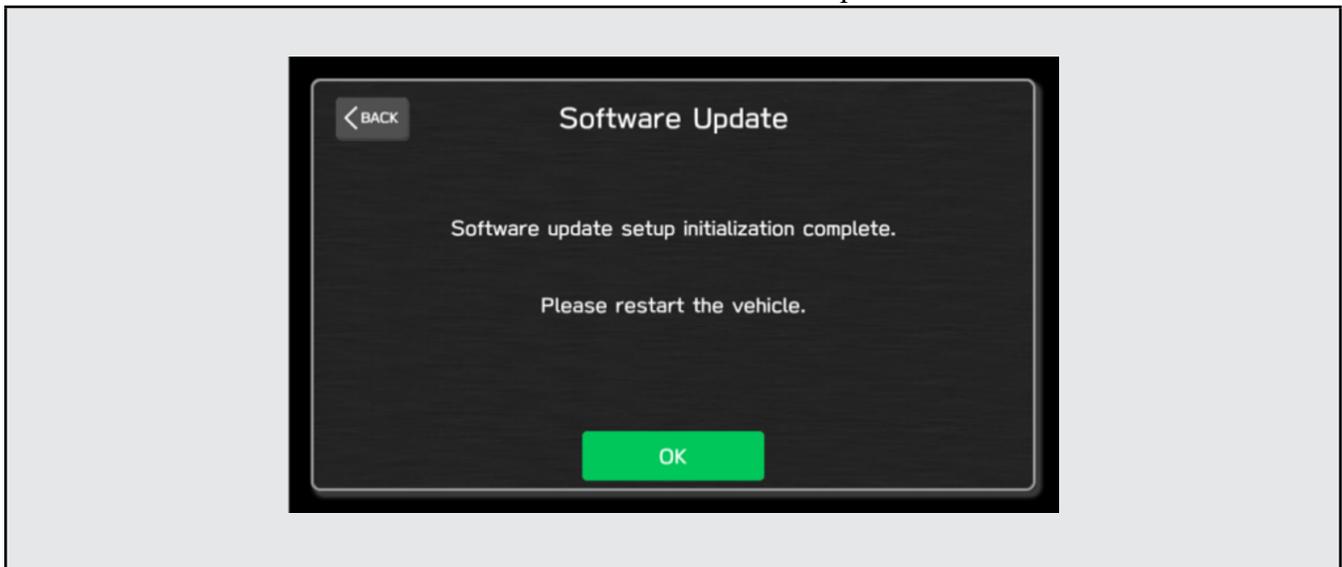
## “APPENDIX A”

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.



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



1. Turn the ignition switch or the engine OFF, open the driver side door and close the door then wait for 3 minutes.
2. Open the driver side door then turn the ignition switch or the engine ON.
3. Go to Dealership Mode diagnostics then select Software Update as in STEP 4c.

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

*Continued...*

## “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, please perform procedures 1-2 to 1-8 before retrying the software update.

### 1-1. Select OK in the screen below



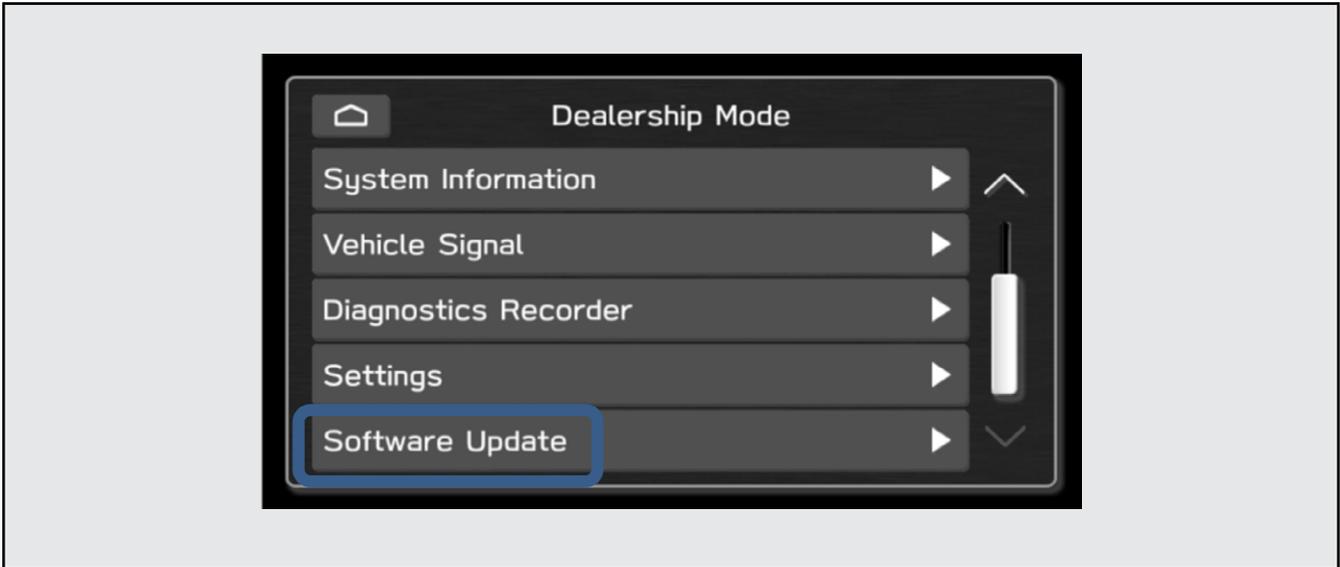
### 1-2. Turn the ignition switch or the engine OFF, and turn it ON again.

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

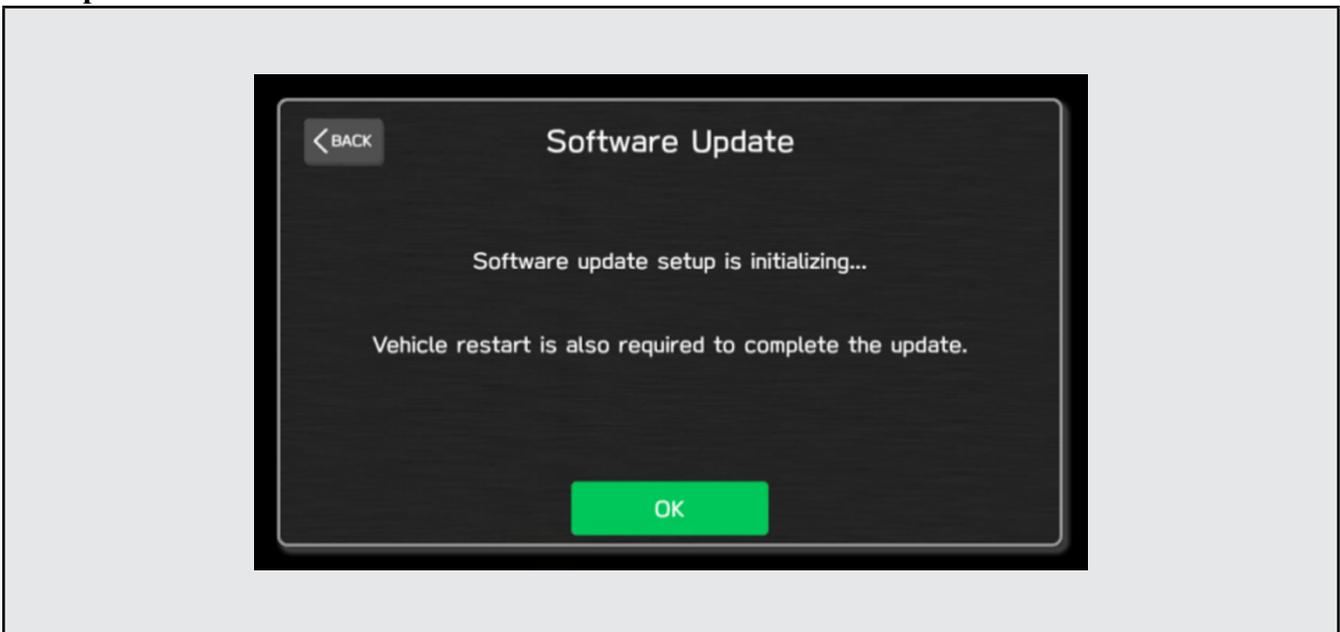


*Continued...*

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

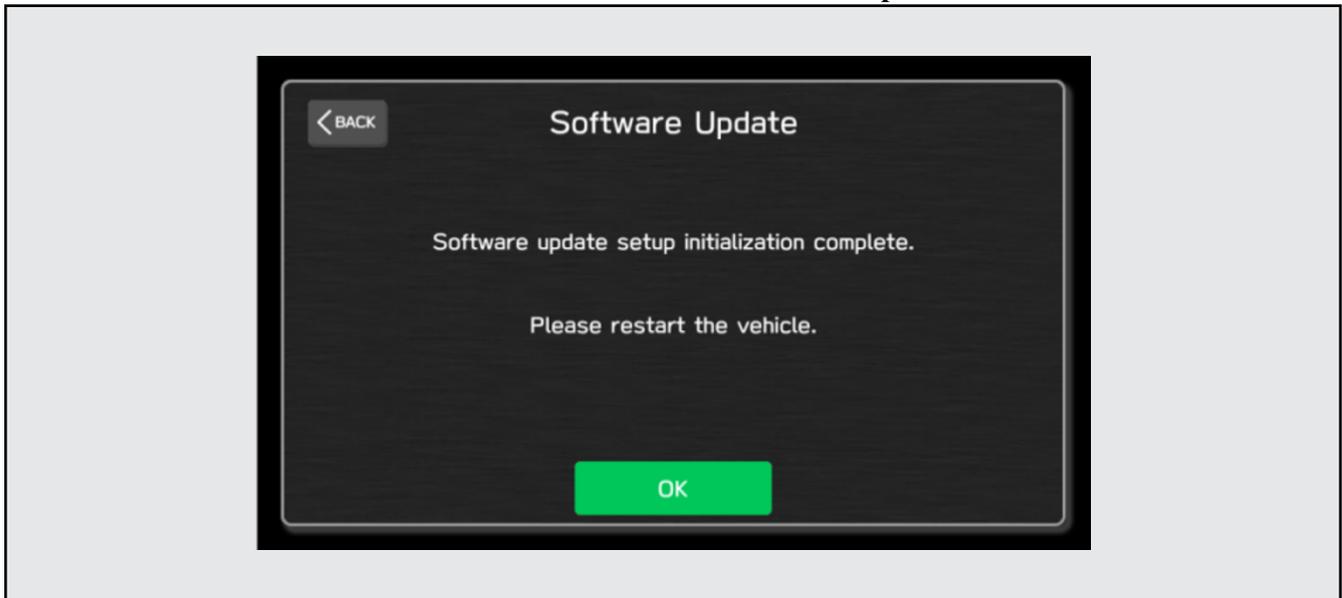


**1-4. When you see the screen below, wait for approx. 15 minutes until the initialization is complete**



*Continued...*

**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.**

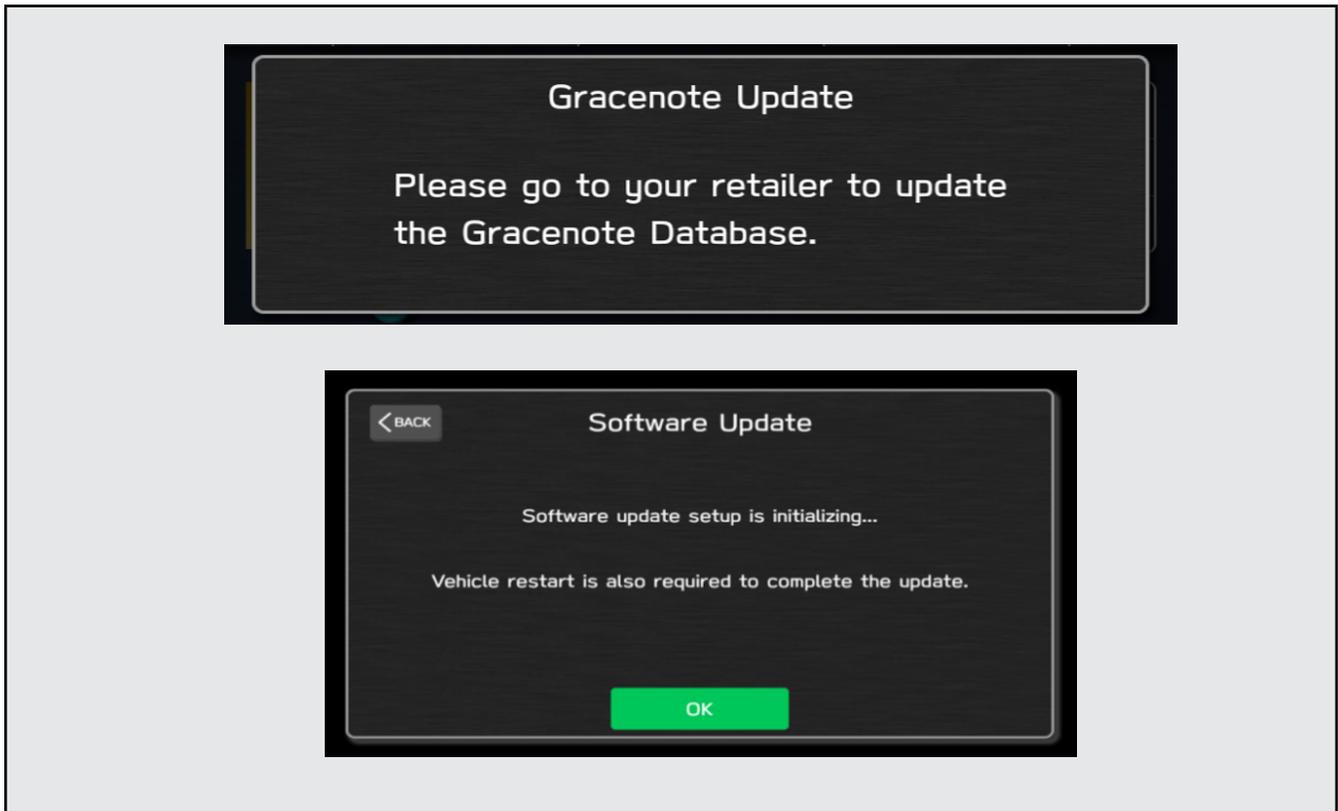
**1-7. Open the driver side door then turn the ignition switch or the engine ON.**

**1-8. Go to Dealership Mode diagnostics then select Software Update as in STEP 4c.**

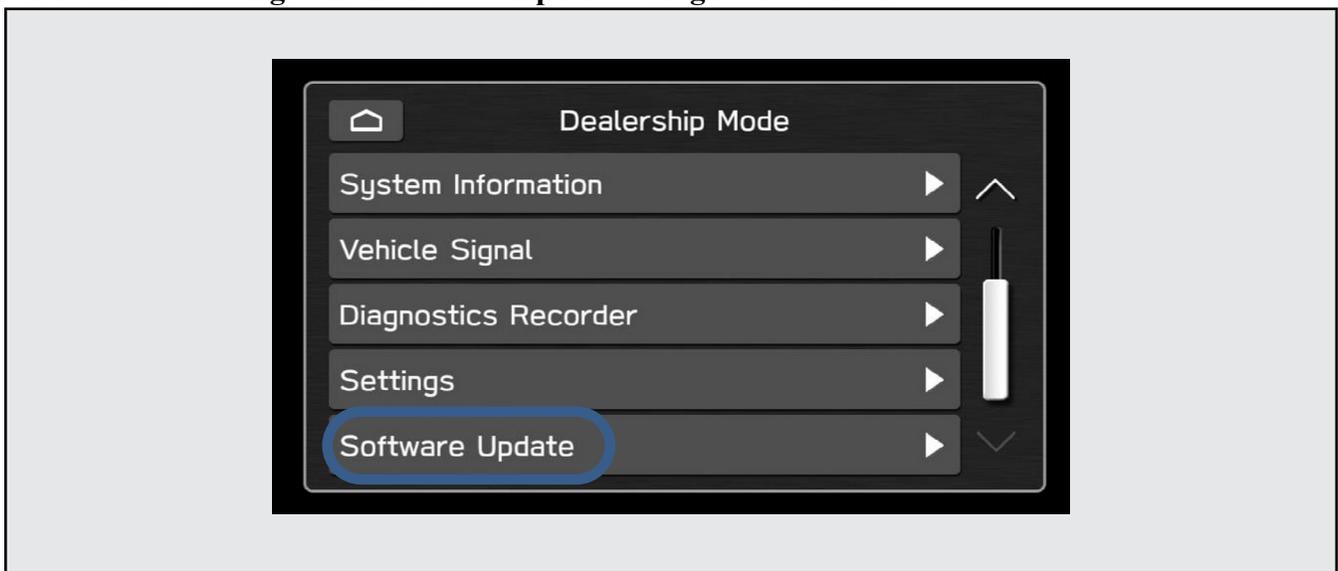
*Continued...*

## “APPENDIX C”

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

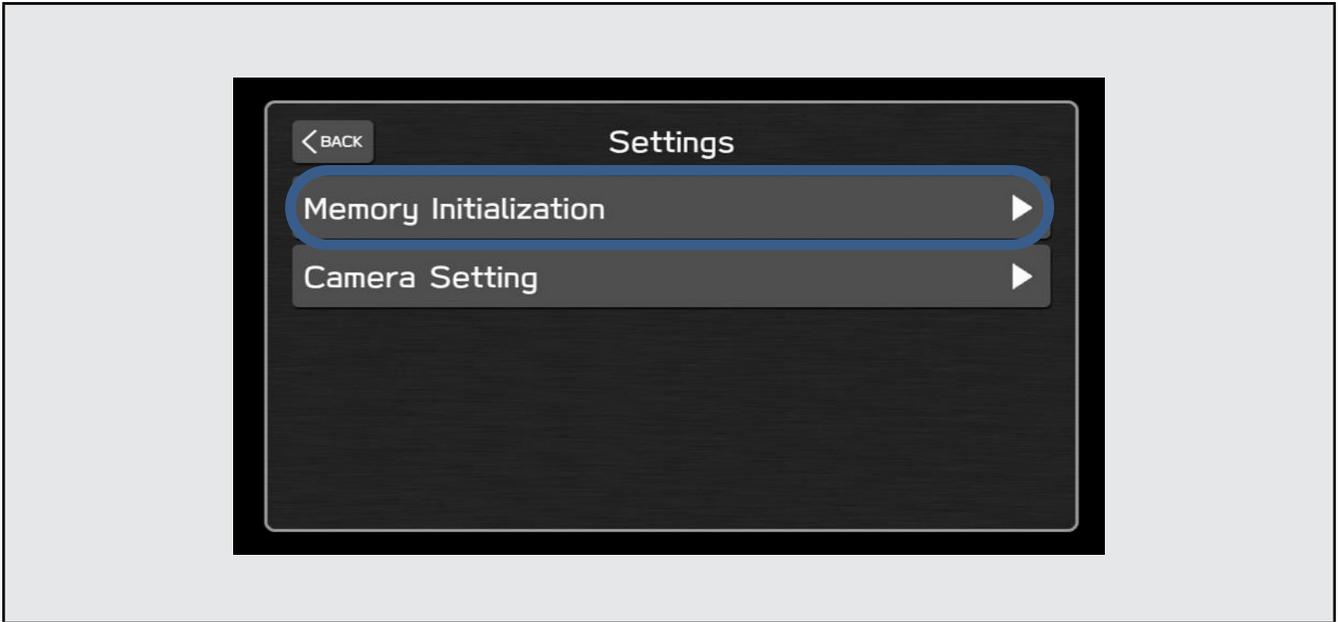


2-1. Select “Settings” in the Dealership Mode diagnostics screen.



*Continued...*

**2-2. Select “Memory Initialization”**



**2-3. Select “OK”**

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



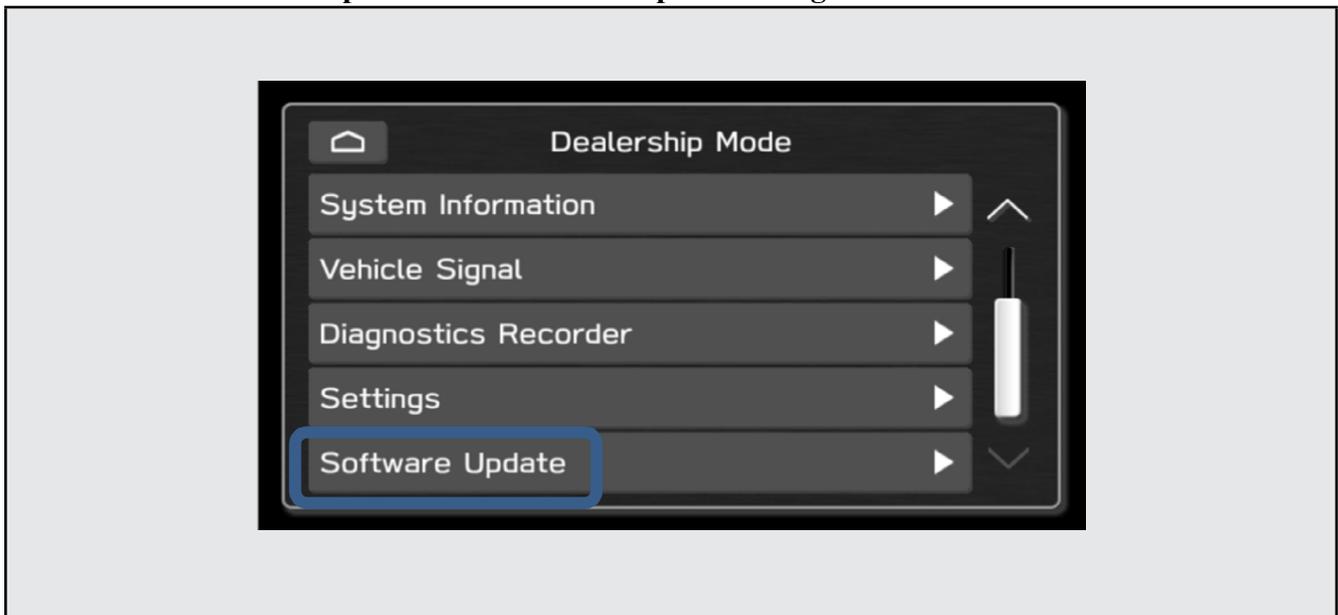
*Continued...*

**2-4. You will see the following screen**



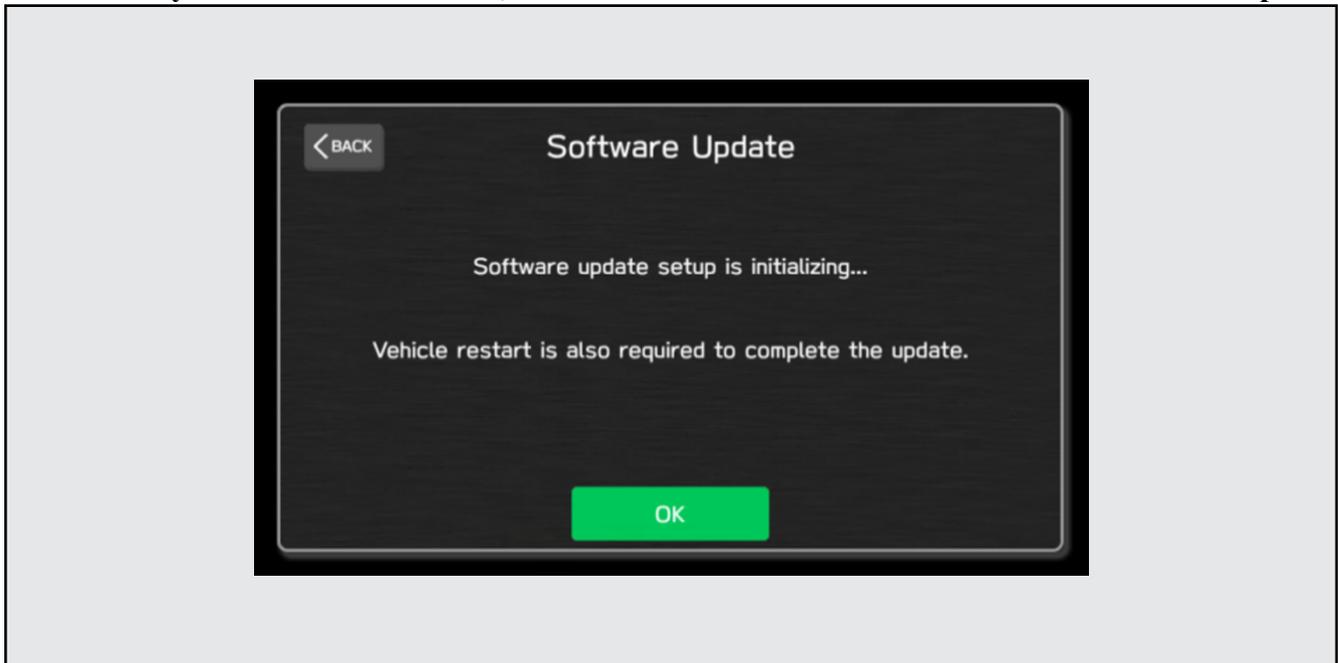
**2-5. After a few seconds, system restarts itself.**

**2-6. Select "Software Update" in the Dealership Mode diagnostics screen.**

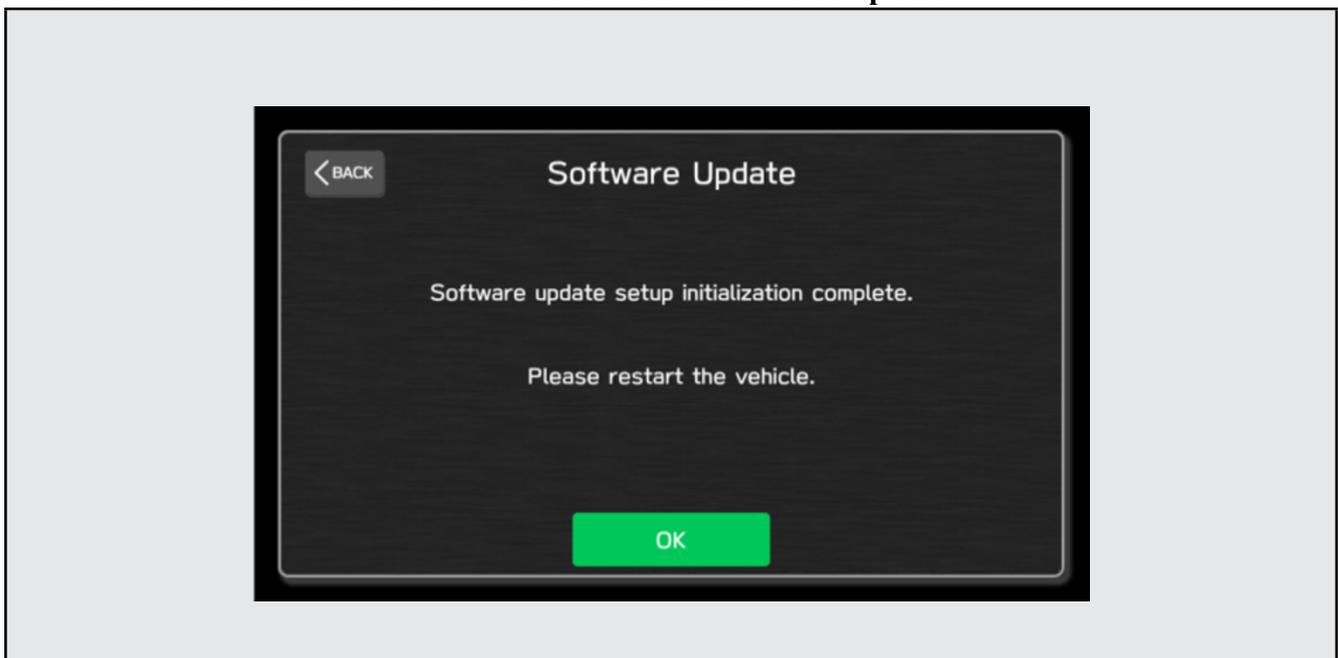


*Continued...*

**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 switch or engine ON.**

**2-11. Go to Dealership Mode diagnostics then select Software Update.**

*Continued...*

## “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	2022	0	10/1/2021	F41CMM091-781 F41CMM101-880	- SOP for 22MY BRZ
1	2022	10	6/30/2022	F41CMM122-080	- See "Conditions Addressed by Update #1" as outlined in "Appendix E" below

*Continued...*

# “APPENDIX E”

## Symptoms Addressed By Update #1:

Number	Symptoms to be Improved:
1	<p><b>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.</b></p> <div data-bbox="386 520 1419 743"> <p><b>FOTA Normal process</b></p> </div> <p><b>However, in rare case, the CCU restarts itself* during installation.</b></p> <div data-bbox="386 856 1419 1138"> <p><b>Linux reset occurs</b></p> <ul style="list-style-type: none"> <li>•Linux reset(CID black screen) may occur during FOTA installation</li> <li>•If Linux reset occurred, CID will be black screen max 30s, after that CID will restart automatically</li> </ul> </div> <p><b>Note*</b> 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.</p> <div data-bbox="734 1289 1068 1810"> </div>

Continued...

**Symptoms Addressed By Update #5:**

Number	Symptoms to be Improved:
2	<p><b>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:</b></p> <ul style="list-style-type: none"> <li>• Loss of Bluetooth or Wi-Fi connection</li> <li>• Application crash during Bluetooth audio streaming</li> <li>• Launching CarPlay or AndroidAuto application, after the smart phone is connected</li> <li>• Removing USB connection between the iPhone’s and CP1 during active CarPlay session</li> <li>• When ACC is turned OFF and ON, while STARLINK CompanionApp map update is being performed</li> <li>• Performing USB map update using Bluetooth connection with a smart phone carrying STARLINK CompanionApp map update data</li> <li>• “Service Appointment Scheduler” application crash due to a communication error between DCM and CCM</li> <li>• Re-inserting USB Flash drive within 2-3 seconds</li> <li>• Removing USB Flash drive while playing back the data from the USB Flash drive</li> <li>• CID display loses images (black screen) and reboots itself after ACC (or Ignition) is turned OFF and ON.</li> </ul>
3	<p><b>No image on CID (Center Information Display) or Black display condition and HVAC function becomes inoperative due to listed below actions:</b></p> <ul style="list-style-type: none"> <li>• Failure to complete CP1 software update via USB port *</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <li>• Performing CP1 software update via USB port using the same software version</li> </ul> <p><b>Note*</b> In case this USB update failure occurs, retry updating according to the instructions in “Appendix B ”</p>
4	Intermittent loss of Bluetooth connection
5	<p>“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 **</p> <p><b>Note**</b> In case this USB update failure occurs, retry updating according to the instructions in “Appendix C”</p>

*Continued...*

Number	Symptoms to be Improved:
6	<p>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.) ***</p> <p><b>Note***</b> In case this USB update failure occurs, retry updating according to the instructions in "Appendix C"</p>
7	<p>CID display loses images (black screen) and reboots itself when a USB is inserted then removed within 2-3 seconds.</p>
8	<p>No operation is accepted in SMX screen and the sound is lost.</p>
9	<p>When a phone call is made using Google voice command while listening to music via AndroidAuto, the sound of AndroidAuto stops after finishing the phone call.</p>
10	<p>Even when &lt;RADIO&gt; &lt;MEDIA&gt; are selected in the Home screen, there is no transition of the screen.</p>