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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SUBARU

QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: All 2019MY Vehicles

NUMBER: 15-236-18

SUBJECT: Reprogramming File Availability for Optimization of Harman Gen 3.1 Audio and Navigation Head Units

DATE: 12/04/18

INTRODUCTION:

The following information addresses reprogramming file availability and a software update installation procedure to provide optimization to the new Harman Gen 3.1 Audio and Navigation head units utilized in the models as listed above. 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 to understand all changes from prior releases before proceeding.

IMPORTANT NOTES:

- If a vehicle presents with a current blank or black screen condition, request an exchange unit.
- Be sure to locate and re-format any existing USB drives used for updating Harman audio units in order to fully clear them before adding these new files to them.

PRODUCTION CHANGE INFORMATION:

These updates (November 2018) apply to the models listed above equipped with Harman Gen 3.1 Audio and Navigation head units only.

The latest software version (including all available updates) was incorporated into production per the starting VIN table to the right:

Model	Starting VIN
Legacy	TBD
Outback	TBD
Impreza 4-Door	TBD
Impreza 5-Door	TBD
Crosstrek	TBD
BRZ	TBD
Forester	TBD
Ascent	TBD

Continued...

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.

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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.

PART INFORMATION:

Multimedia System Type	Descriptive Features
6.5 Inch Display Audio System (Base)	No CD slot / Eject Button
6.5 Inch Display Audio System (Base +)	Equipped with CD Player and Eject Button
8.0 Inch Display Audio System (Mid)	Phone Button
8.0 Inch Audio / Navigation System (High)	Map Button but no Phone Button

Reference photos of each head unit faceplate are supplied below:

BASE

BASE +
Uses **MID**
update file

MID

HIGH

Continued...

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 NTFS file format before downloading the update files onto it.

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, clear the file and re-format the flash drive for "FAT32" as outlined below in **Step 2** instead of "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

Continued...

SERVICE PROCEDURE / INFORMATION:

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

These update files include operational enhancements to address the following two (2) customer concerns:

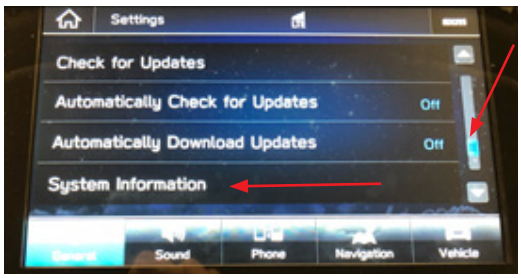
1)- Station presets are lost. The touch button reads "Hold".

2)- The update also includes a security enhancement.

Step 1- Software Version Confirmation From the HOME screen, touch **"Settings"**.

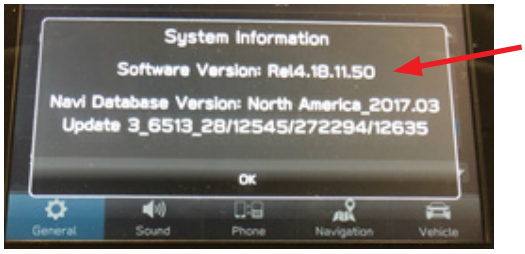
After starting the engine, from the HOME screen, touch "Settings".

- From the Settings screen, scroll down to and then touch **"System Information"**.

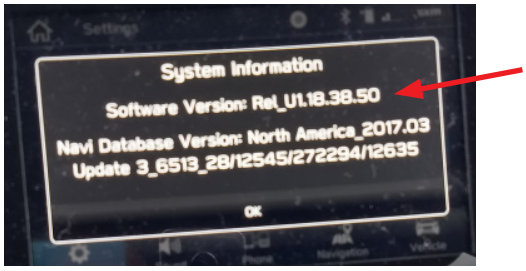


Continued...

- The currently installed software version will be displayed. If the Software Version is **Rel4.18.25.50** (or before) proceed to **Step 2**. This version number is the same for all 4 levels of head unit.



VERY IMPORTANT: If the Current Version is **Rel_U1.18.38.50, <u>STOP</u>** as the latest version is already installed. Proceed directly to **Step 5**.

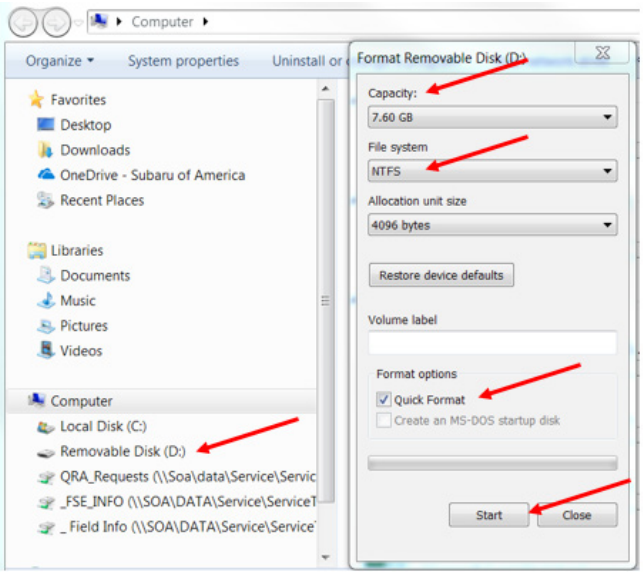


STEP 2- Prepare the USB:

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.



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STEP 3- Download the Update Files to the USB:

VERY IMPORTANT: When updating a "Base +" head unit, the "MID" update files must be used.

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

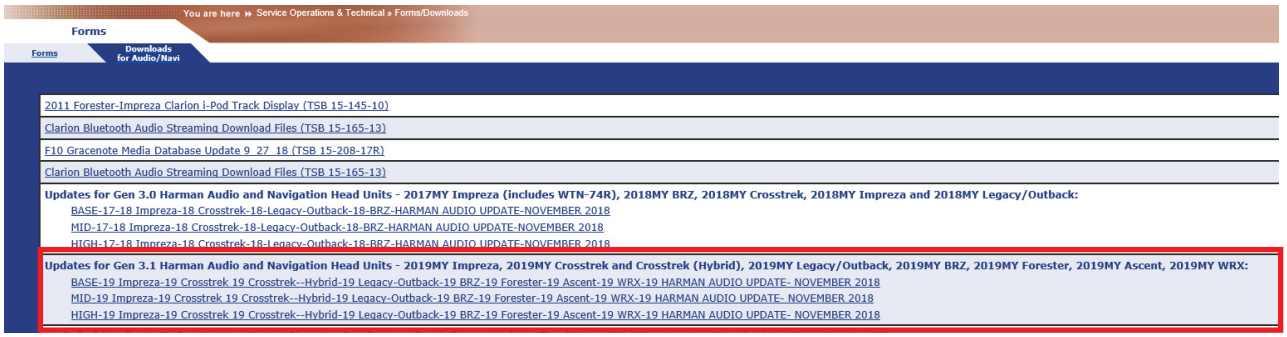
The applicable reprogramming files have also been sent directly to retailers by Nuspire in the same way a Select Monitor Update would be pushed out. (see **"B"** below).

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>>Downloads for Audio/Navi then click on the applicable Hyperlink to download the file(s) to your SDS Notebook or PC:

BASE-19 Impreza-19 Crosstrek 19 Crosstrek--Hybrid-19 Legacy-Outback-19 BRZ-19 Forester-19 Ascent-19 WRX-19 HARMAN AUDIO UPDATE- NOVEMBER 2018

MID-19 Impreza-19 Crosstrek 19 Crosstrek--Hybrid-19 Legacy-Outback-19 BRZ-19 Forester-19 Ascent-19 WRX-19 HARMAN AUDIO UPDATE- NOVEMBER 2018

HIGH-19 Impreza-19 Crosstrek 19 Crosstrek--Hybrid-19 Legacy-Outback-19 BRZ-19 Forester-19 Ascent-19 WRX-19 HARMAN AUDIO UPDATE- NOVEMBER 2018

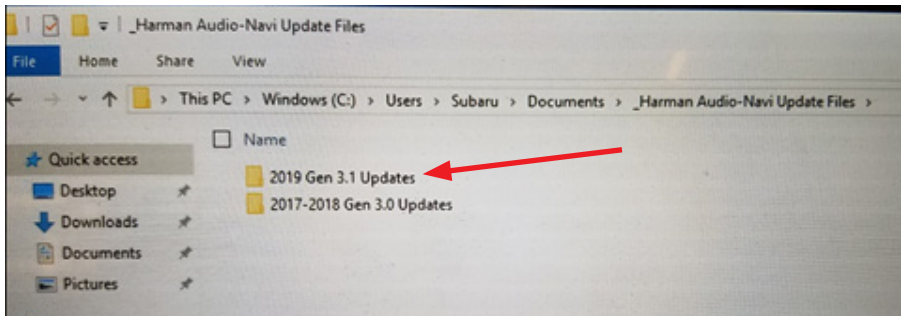
- Go to Downloads.
- **CAUTION:** After download is complete, **NEVER** change the file or folder names.
- Once the files have been downloaded from Subarunet, click on the Downloads folder and then sort by Date Modified to bring the most recent files to the top of the list.
- Open / display the contents of File folder, for example (BASE-19 Impreza-19 Crosstrek 19 Crosstrek--Hybrid-19 Legacy-Outback-19 BRZ-19 Forester-19 Ascent-19 WRX-19 HARMAN AUDIO UPDATE- NOVEMBER 2018).

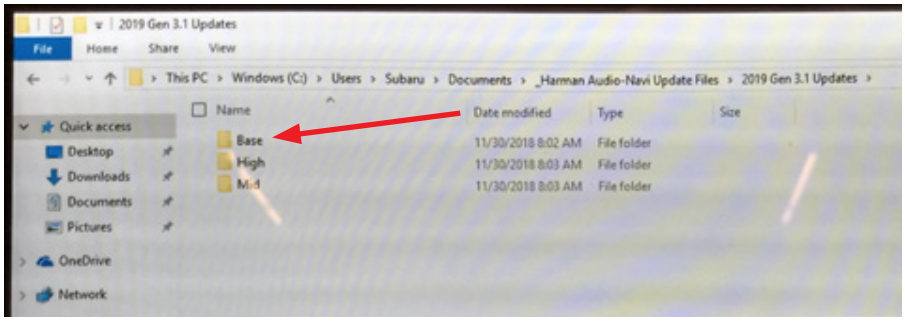
Continued...

- Click on “Extract All Files”.
- From the dialog box, browse to My Documents then click on “Extract”.
- Double-click on the required file (for this example, select the file entitled “BASE-19 Impreza-19 Crosstrek 19 Crosstrek--Hybrid-19 Legacy-Outback-19 BRZ-19 Forester-19 Ascent-19 WRX-19 HARMAN AUDIO UPDATE- NOVEMBER 2018”).
- Copy **ONLY** the “update” folder then paste (or click / drag) it to the “clean” USB flash drive as listed (Removable Disk) in the directory.
- To avoid confusion, label the flash drive with the file contents (e.g. BASE 3.1, MID 3.1 or HIGH 3.1).
- Go to **Step 4.**

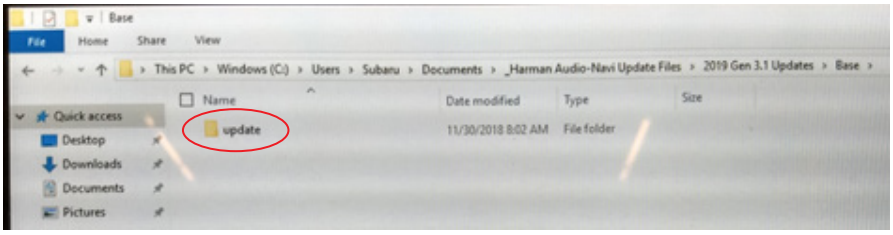
“B” When using update files sent directly from Nuspire:

- Go to My Documents on the GUI screen to display the list of available update files shown below.
- **CAUTION:** After download is complete, **NEVER** change the file or folder names.
- Sort by Date Modified to bring the most recent files to the top of the list. The folder is named: _Harman Audio-Navi Update Files.





- Double-click on the required file (for this example, select the file entitled “BASE-19 Impreza-19 Crosstrek 19 Crosstrek--Hybrid-19 Legacy-Outback-19 BRZ-19 Forester-19 Ascent-19 WRX-19 HARMAN AUDIO UPDATE- NOVEMBER 2018”) and the update file will display as shown.



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- Select the update folder and either copy / paste or click / drag it to the USB flash drive.

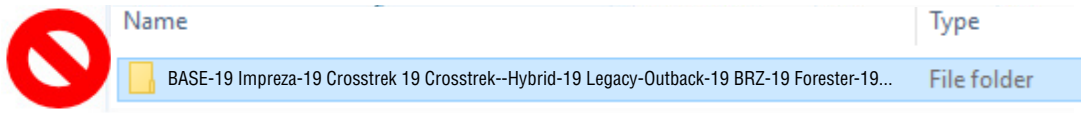
NOTE: Do not copy the entire "BASE-19…" File folder. Copy ONLY the File folder named "update" to the flash drive

- 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 3.1 in this example).
- Repeat the above steps to create the MID 3.1 and HIGH 3.1 USB flash drives as needed using a separate USB drive for each update folder.

STEP 4- IMPORTANT: Confirm the update folder on the USB flash drive is for the head unit being reprogrammed ONLY. **NEVER** install multiple update folders onto the same flash drive at the same time.

IMPORTANT REMINDER: When updating a "Base +" head unit, the "MID 3.1" update files must be used.

- After confirmation, move to the car and either start the engine or follow the procedure as outlined in document GR8-1100 on STIS for use of the GR8's Power Supply Mode.



Copy **ONLY** the folder named "update" to the USB.

- Never change the folder name from "update".
- Confirm there is only a folder named "update" on the flash drive.

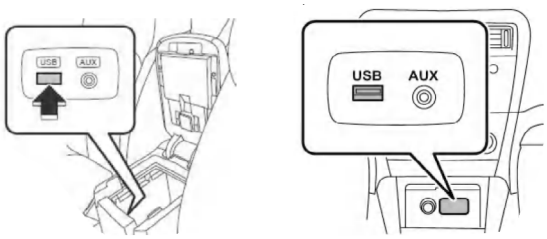
<u>CAUTION:</u> Confirm one final time the head unit you are about to update matches the update file selected. <u>Attempting to install the incorrect update file will disable the head unit</u>.

Continued...

STEP 5- Update Installation:

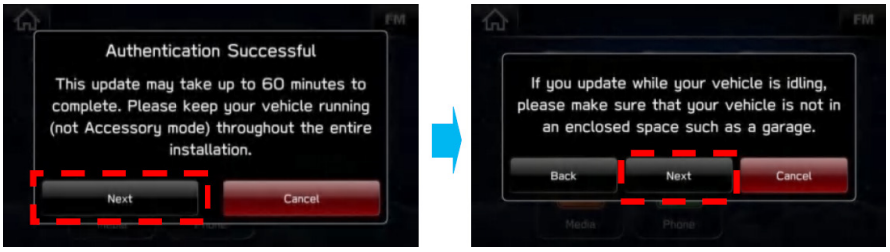
IMPORTANT: Always record the customer's radio station presets and navigation favorites (where applicable) before proceeding further as they will most likely need to be reset once the update and re-boot procedures are completed. In addition, some customizable system settings may need to be reset as they may return to the default setting during the update.

- With the engine idling (or GR8 connected), plug the flash drive into the USB Port.

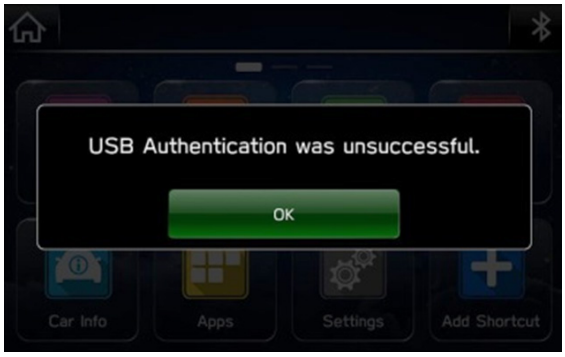


IMPORTANT NOTE: If the head unit does not recognize the USB flash drive during the reprogramming process, this may be due to an incompatible Controller IC in the USB flash drive or it is otherwise incompatible with the head unit. If this occurs, delete all files from the flash drive and re-format it to "FAT32", instead of "NTFS" and reload the appropriate "update" folder to the USB flash drive. If the USB flash drive is still not recognized, please discontinue the use of that drive and instead use a USB flash drive from a different manufacturer.

- After the unit "authenticates" the USB flash drive, press "Next" and after the second screen is displayed, press "Next" again.



NOTE: If an attempt is made to install the wrong "grade" file into the wrong grade head unit (EXAMPLE: "Base" update file into a "Mid" or "High" head unit), the USB Authentication error screen below will be displayed:



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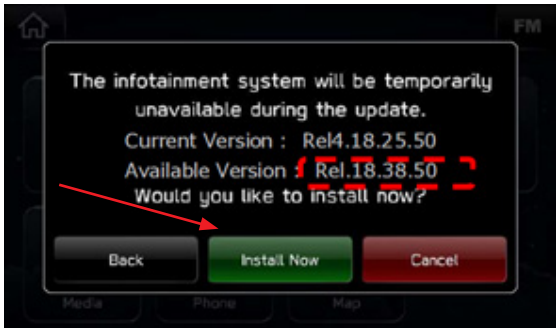
- The current and available software version information will be displayed. The Available Version I.D should be **Rel.18.38.50**.



- After confirming the Available Version, press "Install Now" to start the reprogramming process. <u>The screen will go blank (black) for a brief period after installation begins.</u>
- Each of the updates (Base, Mid and High) should take less than 10 minutes to install.

IMPORTANT NOTES:

- Do not leave the vehicle once the update begins as ignoring pop-up requests may lead to battery discharge.
- Do not touch any of the buttons on the head unit while the updating process is taking place.
- If during the updating an error screen is displayed asking "Do you want to Retry", press "Retry" to restart the update.
- Once the updating process is complete, the head unit will perform a "soft" reboot. (**NOTE:** several "hard" reboots are required to fully install the update. This procedure is covered in **Step 6** below.)
- **CRITICAL STEP:** After the reboot process completes, press the HOME button to return to the HOME screen. (**NOTE:** If the "install message" is displayed asking if you want to start the update process again, press "Cancel", press the HOME button again and return to the HOME screen.)

STEP 6- Turn the ignition OFF, open and close the driver's door then remove the flash drive from the USB port. If an error screen is displayed asking "Do you want to Retry", press "Cancel".

IMPORTANT: Wait **AT LEAST 3 MINUTES** before proceeding to **Step 7**.

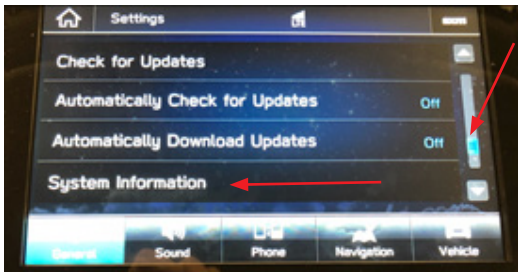
STEP 7- Verify the newly-installed Software Version ID using the following steps:

- Turn the ignition back ON. Confirm the "SUBARU STARLINK" screen is displayed. If "SUBARU STARLINK" screen is NOT displayed on the first screen, system did not fully enter "sleep mode" and reboot properly. Perform **Step 6** again and wait **AT LEAST 3 MINUTES** before proceeding.
- In some cases, the radio presets may not appear initially.

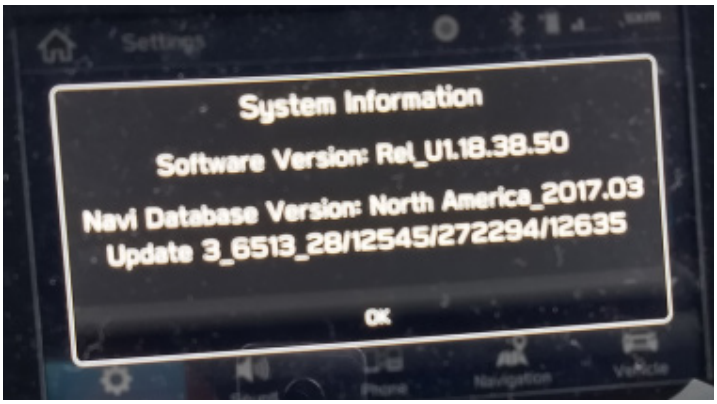
Continued...

- From the HOME screen, touch “Settings”.

- From the Settings > General screen, scroll down to and then touch “System Information”.



- Confirm Software Version is now “**Rel_U1.18.38.50**”.



- Press ⌂ (Home) to return to the Home screen and shut the engine OFF. Open and close the driver’s door.

STEP 8- <u>CRITICAL</u>: Operation Check and Full Re-Boot Procedure:

1) Turn the ignition back ON (ACC) and confirm normal system operation.
2) Confirm the Home screen is displayed.
3) Turn the ignition OFF, open and close the driver’s door then **WAIT AT LEAST 3 MINUTES** to confirm the unit “times out” or “goes to sleep”.
4) Perform 1), 2) and 3) above again **twice.** If normal operation is confirmed, press ⌂ to return to the Home screen and shut the ignition OFF to complete the procedure.

Continued...

IMPORTANT: If during this procedure, the screen goes blank (black) and the STARLINK screen does not appear, the head unit must be replaced. THIS SHOULD BE A VERY RARE OCCURRENCE. Contact SOA Techline should this condition occur.

STEP 9- If lost during the update process, reset the customer's radio station presets, navigation favorites (where applicable) and if necessary, reset the clock 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 Code
PRE-CUSTOMER DELIVERY HARMAN AUDIO/NAVI UNIT REPROGRAMMING*	A031-368	0.4	ZSG-48

*Use this claim coding whenever installing the most recent software update on a **N*ew, Un-Registered, In-Stock vehicle without a customer complaint or reported concern prior to retail delivery for Customer Satisfaction ONLY.***

Labor Description	Labor Operation #	Labor Time	Fail Code	Claim Type
HARMAN AUDIO/NAVI VERSION ID & OPERATION CHECKS ONLY **	B031-150	0.4	ZTA-48	WC
HARMAN AUDIO / NAVI UNIT REPROGRAMMING (INCLUDES VERSION ID CHECK AND OPERATIONAL CHECKS).**	B031-168	0.6		
HARMAN AUDIO/NAVI QUESTIONNAIRE COMPLETION	C101-228	0.3		

Use this coding when installing the most recent software update ***with a customer complaint or reported concern* as documented on a signed Repair Order.

IMPORTANT NOTES:

- **CRITICAL** Claim Processing Update: When completing this TSB procedure the post-update software version number MUST be entered in the Miscellaneous Detail field when submitting the claim.
- A ONE-TIME charge of $30.00 can be claimed in sublet to cover the cost of the USB flash drives.

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.