SUBARU

QUALITY DRIVEN® SERVICE

PRODUCT CAMPAIGN BULLETIN

APPLICABILITY: 2017MY Impreza	**NUMBER:** WTN-74R
SUBJECT: Reprogramming File Availability to Optimize Rear View Camera Operation on Harman Gen 3 Audio and Navigation Head Units	**DATE:** 02/24/17
	REVISED: 06/08/21
	NHTSA ID: 17V-132

> Subaru of America, Inc. (Subaru) is recalling certain 2017 model year Impreza vehicles with Harman navigation/audio head units to update software affecting the operation of the rear view camera image.

DESCRIPTION OF THE SAFETY RISK

The rear view camera image may not display properly. More specifically, due to a software problem within the infotainment unit, the following may occur:

- During initial boot-up, a memory error might result in a blank screen; or
- If multiple processes occur at the same time, the screen might freeze.

If the rear view camera image is not displayed or the image freezes, it does not provide an additional view of the area behind the vehicle to the driver when the vehicle is in reverse. As a result, there is an increased risk of injury or a crash.

DESCRIPTION OF THE REMEDY

The remedy procedure will be to reprogram the infotainment unit with a software update. 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.

OWNER NOTIFICATION

Notification letters will be sent by first class mail to owners of all potentially affected vehicles. Owner notification will occur during March, 2017. A copy of the letter will be added to the end of this bulletin prior to owner notification.

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AFFECTED VEHICLES

Your Region/Distributor will provide you with a detailed list of affected new unsold inventory units. If you have any of the affected models in inventory, please ensure your sales and service staff are immediately notified that the unit(s) are un-saleable until the recall campaign is completed and the claim is submitted.

Model Years	Models	Production Start Date	Production End Date
2017	Impreza 4D & 5D	09/13/2016	02/20/2017

RETAILER AFFECTED VIN LISTS

Each Subaru retailer will receive an affected VIN list from their Zone Office when owner notification begins. Vehicles will be assigned to retailers in the affected VIN list based on the selling retailer. Retailers are required to limit the use of these lists for the purpose of completion of this safety recall.

SUBARU RETAILER PROGRAM RESPONSIBILITY

Retailers are to promptly perform the applicable service procedures to correct all affected vehicles in their inventory. Additionally, whenever a vehicle subject to this recall is taken into inventory or in for service, necessary steps should be taken to ensure the recall correction has been made before selling or releasing the vehicle.

Any vehicles listed in a recall/campaign that are in the retailer's stock must be:

- Immediately identified.
- Tagged or otherwise marked to prevent their delivery or use prior to inspection and/or repair.
- Repaired in accordance with the repair procedures outlined in this Product Campaign Bulletin.

Please be advised that it is a violation of Federal law for a retailer to deliver a new motor vehicle covered by a recall under a sale or lease until the defect is remedied. In addition, any Authorized Subaru Retailer failing to perform the applicable service procedures to correct all affected vehicles in their inventory prior to the vehicle being placed in service will be in breach of the Subaru Dealer Agreement.

INTRODUCTION:

The following information addresses reprogramming file availability and a software update installation procedure to optimize the rear view camera feature of the new Harman Gen 3 audio and Navigation head units utilized in the new 2017MY Impreza. 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.

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These reprogramming files apply to the following audio / navigation head unit part numbers:

Multimedia System Type	Part Numbers	Descriptive Features
6.5 Inch Display Audio System (Base)	86201FL60A and 61A	No CD slot / Eject Button
8.0 Inch Display Audio System (Mid)	86201FL62A and 63A	Phone Button in Top Row Center
8.0 Inch Audio / Navigation System (High)	86271FL60A	Map Button in Top Row Center
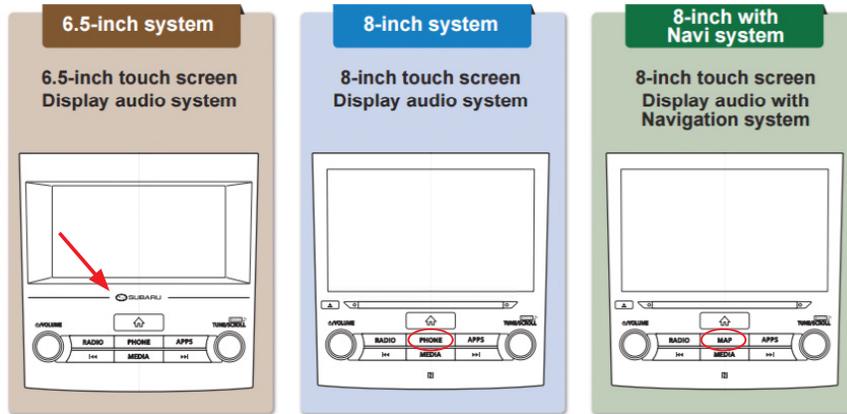
Materials Required:

3- 16GB (MINIMUM) USB 2.0 or 3.0 flash drives which are readily available at most office supply retailers will be needed to perform these updates. There are various types of USB flash drives available from many suppliers. If the head unit does NOT recognize the USB drive during the reprogramming process, it may be that the IC controller type used in the drive is not compatible. In such a case, a different USB drive may be required. For this reason, SanDisk or PNY brand USB drives are not recommended for this procedure. While not all of their products may be compatible, USB flash drives from Kingston, SanDisk, Transcend and Verbatim are suggested products.

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

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NOTES:

- All SOA Pre-Production Vehicles require a "full version" update be installed BEFORE this update can be applied (extremely rare occurrence). Contact your FSE for assistance with any Pre-Production Vehicles.

- The USB flash drive can be USB 2.0 (High Speed USB) or 3.0 (Super Speed USB)

- The USB flash drive **MUST** be reformatted to NTFS before loading any files to it. NTFS is not the standard format on most USB flash drives.

- The update files are not overly large but, during the reprogramming procedure, the head unit backs up some files to the USB drive. For this reason, sufficient USB drive memory size is required, especially for the High / Navigation units.

- The flash drives should be dedicated to storing these reprogramming files only. Do NOT use any flash drive which contains or requires the use of file management, encryption, file backup or other software to function properly.

Symptoms to be Addressed by These Reprogramming Files:

The main purpose of this campaign is to address display screen freeze-up during rear view camera display (when the shifter is in "R"). In addition, the screen may also freeze when either the Subaru STARLINK or Disclaimer Caution / I Agree is displayed.

IMPORTANT: Although the main purpose for this campaign is to address operational concerns involving the rear view camera feature, software is also included in this update for the following other conditions:

1) After switching the vehicle (ACC or IGN) on, the display screen goes black with no audio output and the hard key buttons are illuminated (on solid, or flashing / blinking).

Black/Blank screen

Hard key (button) illuminated, on solid or flashing / blinking

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2) Time of day displayed in the MFD (Multi-Function Display) is incorrect and the arrival time displayed in Navigation units is also incorrect.
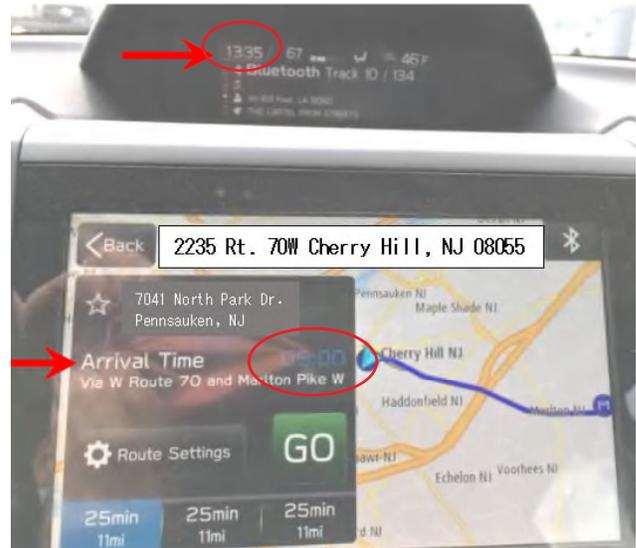
3) The time in the MFD automatically reverts back to a "default" setting, even after setting the time using "Manual" mode.

4) Audio volume goes to maximum automatically after one click of the volume up button on the steering wheel. In some cases, this condition may also occur without input from the operator. Maximum volume is also displayed on the screen.

SERVICE PROCEDURE / INFORMATION:

STEP 1- Verify the currently installed Software Version ID using the following steps:

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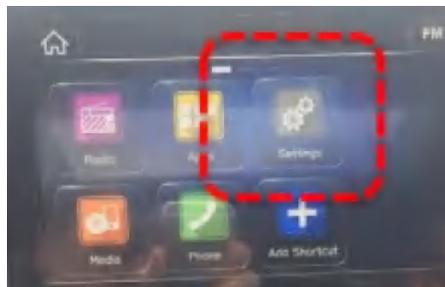
- From the Settings > General screen, scroll down to and then touch "System Information".

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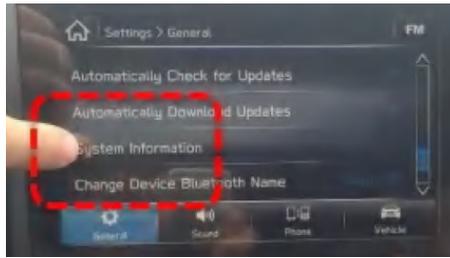
- Confirm the Software Version ID.
  - If the Current Version is **Rel2.17.43.20**, or later per TSB 15-211-17R proceed to **Step 8** (**IMPORTANT: Step 8** contains critical additional checks and procedures required to complete this recall).
  - If the Current Version is prior to **Rel2.17.43.20**, continue to **Step 2**.

NG- Head Unit Must Be Updated, Proceed To Step 2.

OK- Latest Version Installed, Proceed To Step 7.

Refer to TSB **15-211-17R** to see the latest software version information as well as a history of prior updates.

STEP 2- Prepare the USB:

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

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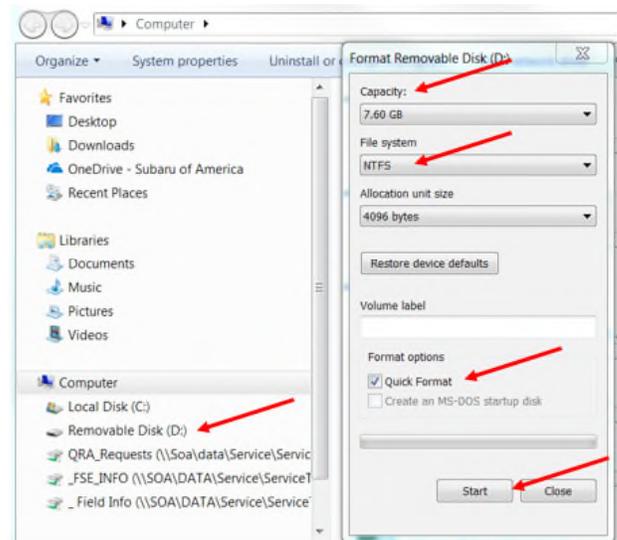
The applicable reprogramming files have been sent directly to retailers by Nuspire in the same way a Select Monitor Update would be pushed out. (see "B" below).

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

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NOTE: This campaign WTN-74R is applicable to 2017MY Impreza only.

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 - 2017-18MY Impreza-Crosstrek Harman Audio Update 11-2017"
"MID - 2017-18MY Impreza-Crosstrek Harman Audio Update 11-2017"
"HIGH - 2017-18MY Impreza-Crosstrek Harman Audio Update 11-2017"

- Go to Downloads.
- 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-2017-18 Impreza- Crosstrek Harman Audio Update 11-2017.
- Click on "Extract All Files".
- From the dialog box, browse to My Documents then click on "Extract".
- Open / display the contents of the 6 related Update File folders.
- Double-click on the required file (for this example, select the file entitled "BASE- 2017-MY Impreza-Crosstrek Harman Audio Update 11-2017").
- 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, MID or HIGH).
- Go to **Step 3.**

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

NOTE: When using the files pushed down to the SDS Notebook by Nuspire, the steps are similar but no file extraction is required as the Nuspire files are not zipped. Navigate to My Documents and open the _Harman Audio-Navi Update Files (**NOTE:** Don't forget to include

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the underscore "_" with no space before Harman...) folder to locate the BASE, MID, or HIGH folder as needed. Open the selected folder and copy the "update" folder ONLY to the USB flash drive for use.

- Go to My Documents on the GUI screen to display the list of available update files shown below.

- 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. It contains the six folders shown here.
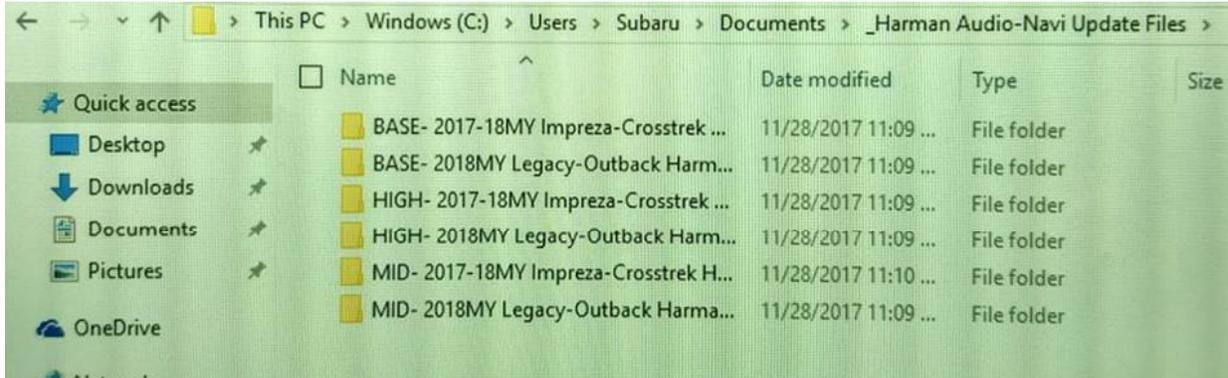
- Double-click on the required file (for this example, select the file entitled "BASE- 2017-18MY Impreza-Crosstrek Harman Audio Update 11-2017") and the update file will display as shown.
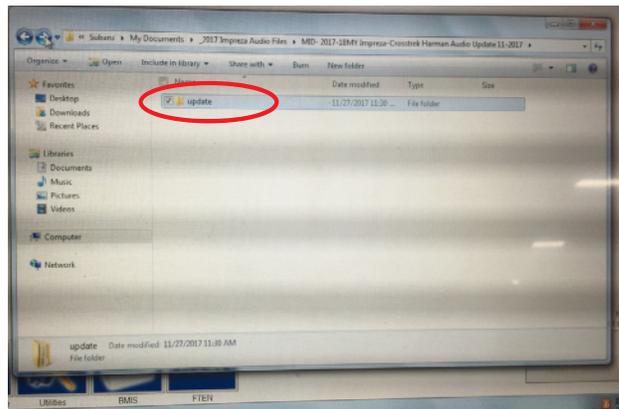
- Click on the Update file and either copy / paste or click / drag it to the USB flash drive.

- **NOTE:** Do not copy the entire "2017MY Impreza…" 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 in this example).

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

STEP 3- Load just the folder named Update onto the USB flash drive for the head unit type (example 2017 Impreza Base) being updated.:

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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 flash drive during the reprogramming process, re-format the flash drive in **FAT32** using above process instead of NTFS as previously specified. If the USB flash drive is still not recognized, use a USB flash drive from different supplier.

STEP 4- IMPORTANT: Confirm the update folder on the USB flash drive is for the head unit being reprogrammed ONLY. Do not install all three update folders onto the same flash drive at the same time.

- 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.
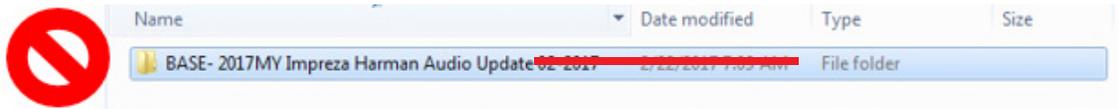
Copy **ONLY** the File folder named "Update" to the USB.

a. After the download is complete, NEVER change the folder names.

b. Confirm there is only a folder named "update" on the flash drive.

CAUTION: Confirm one final time the head unit you are about to update matches the USB flash drive you have selected. Attempting to install the incorrect update file will disable the head unit.

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.

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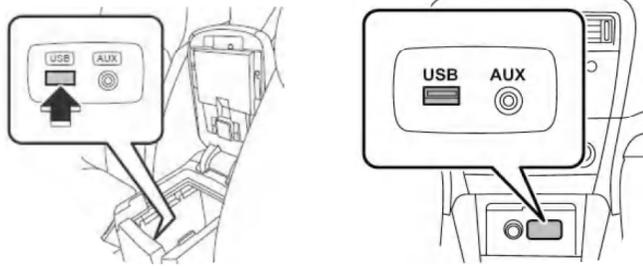
IMPORTANT NOTE: If the head unit does not recognize the USB flash drive during the reprogramming process, this may be due to an incompatible Controller IC in the USB flash drive or it is otherwise incompatible with the head unit. If this occurs, delete all files from the flash drive and re-format it 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.
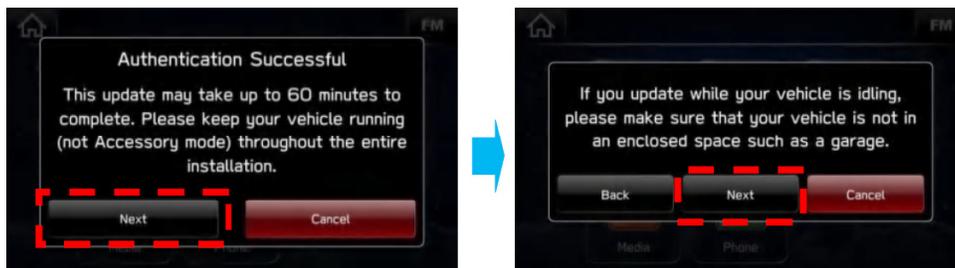
- The current and available software version information will be displayed. The **available** Version I.D should be "**Rel2.17.43.20**". This version number is the same for all three levels of head unit.

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

IMPORTANT NOTES:

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- **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.

- From the HOME screen, touch "Settings".
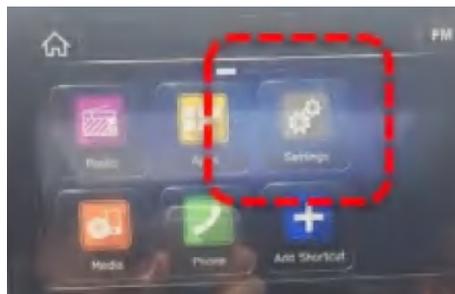
- From the Settings > General screen, scroll down to and then touch "System Information".
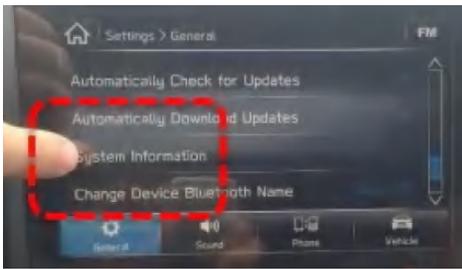
- Confirm Software Version is now "**Rel2.17.43.20**".

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

STEP 8- Operation Check Procedure:

NOTE: These are also known as "Hard" Reboot Procedures- These are **REQUIRED** steps.

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 the and close the Driver's door **WAIT AT LEAST 3 MINUTES** to confirm the unit "times out" or "goes to sleep". This is the "hard" reboot.
4) Perform 1), 2) and 3) above another again (5 cycles total). If normal operation is confirmed, press ⌂ to return to the HOME screen and shut the ignition OFF to complete the procedure.

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.

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.

CLAIM REIMBURSEMENT AND ENTRY PROCEDURES:

Credit to perform this recall will be based on properly completed repair order information. Retailers may submit claims through Subarunet.com.

Labor Description	Labor Operation #	Labor Time	Fail Code	Claim Type
HARMAN AUDIO / NAVI UNIT, VERSION ID & OPERATION CHECKS ONLY	B103-110	0.4	WTN-74	RC
HARMAN AUDIO / NAVI UNIT REPROGRAMMING (INC. OPERATION CHECKS)	C103-118	0.2		

IMPORTANT: CRITICAL Claim Process Update: When completing the WTN-74 campaign, the post-update software version MUST be entered into the Miscellaneous Detail field when submitting the claim. This also applies when completing a post WTN warranty claim for installation of this update.

NOTE: A **ONE-TIME** charge of $50.00 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.