

- 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:** 2017-18MY Impreza  
 2018MY Crosstrek  
 2018MY Legacy and Outback  
 2018MY BRZ\*

**NUMBER:** 15-211-17R

**DATE:** 06/13/17

**REVISED:** 06/26/19

**SUBJECT:** Reprogramming File Availability for Additional Optimization of Harman Gen 3 Audio and Navigation Head Units

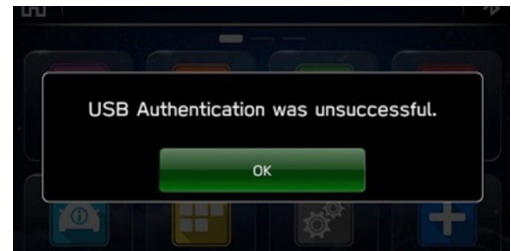
**INTRODUCTION:**

The following information addresses reprogramming file availability and a software update installation procedure to provide optimization to the Harman Gen 3 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.

**CAUTION:** NEVER attempt to install this software on any 2019 MY vehicles as they are equipped with Gen 3.1 Audio/Navigation systems. This update is ONLY for models equipped with Gen 3.0 Audio/Navigation systems. Should an attempt be made to install any of these files into a Gen 3.1 head unit, the authentication error screen to the right will be displayed.



\* **NOTE:** On BRZ models, this update applicable to HIGH / Navigation - equipped head units only.

- If the navigation maps have been recently updated, the newest software may have already been installed at the same time. This may eliminate the need to attempt any further update of the software. ALWAYS check the head unit's software version prior to attempting any new software installation.

<p><b>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</b></p> <p>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.</p>	<p><b>SUBARU OF AMERICA, INC. IS ISO 14001 COMPLIANT</b></p> <p>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.</p>
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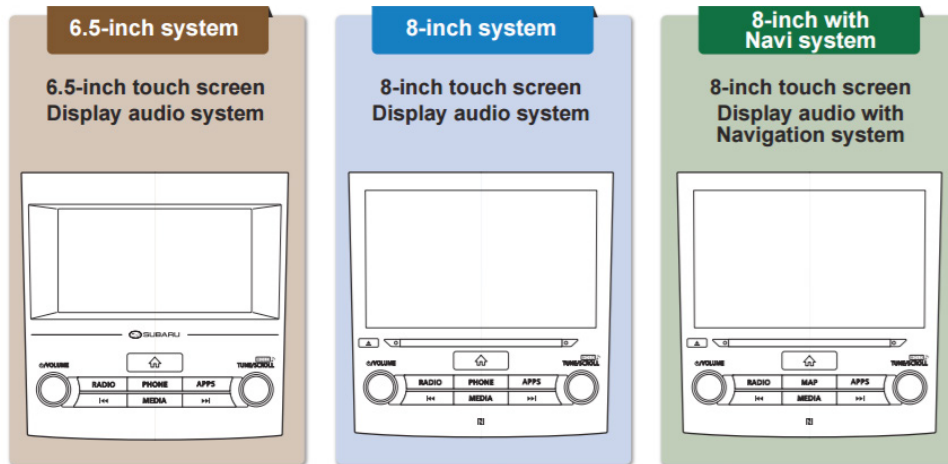
**PRODUCTION CHANGE INFORMATION:**

These latest updates (**June 2019**) apply to the models listed above equipped with Harman Gen 3.0 Audio and Navigation head units only. They include all previous enhancements implemented in all prior software updates INCLUDING the previously released WTN-74R updates. Therefore, if WTN-74R is still open, these latest updates will continue to satisfy the campaign. See the WARRANTY / CLAIM INFORMATION section at the end of this bulletin for further instructions.

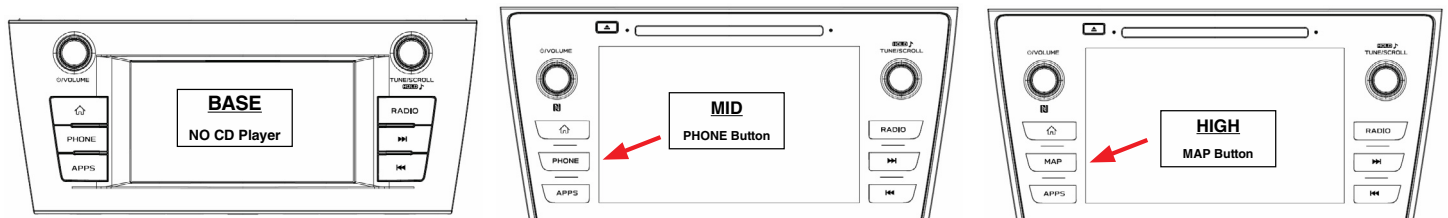
The latest software version (including all available updates) was incorporated into production per the starting VIN table below:

Model	Starting VIN
Legacy	Post Production
Outback	
Impreza 4-Door	
Impreza 5-Door	
Crosstrek	
BRZ	

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



2018MY Legacy and Outback Harman Audio / Navigation system Faceplate images



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## Materials Required:

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.

### 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



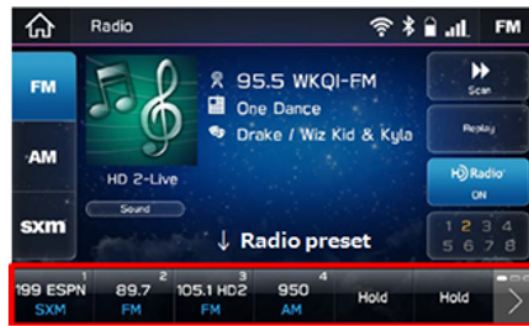
## NOTES:

- The USB flash drives can be USB 2.0 or 3.0.
- 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 drives which contains or requires the use of file management, encryption, file backup or other software to function properly.
- Re-format (see **Step 2**) any prior USBs you may have used for WTN -74R as that version of software must no longer be installed. This update includes all WTN -74R updates.

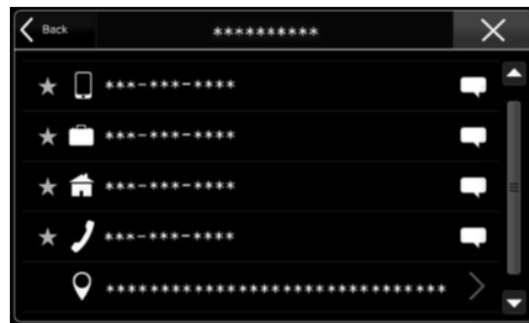
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**The June 2019 software update files include the following new operational enhancements in addition to all of those previously implemented in prior software update releases:**

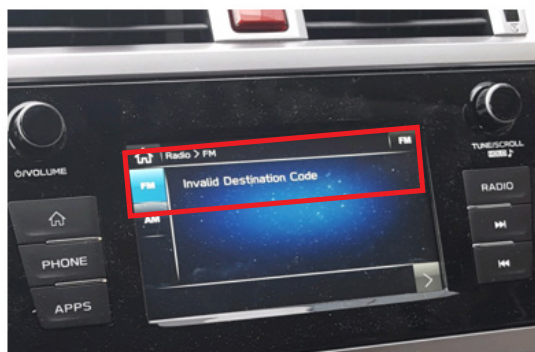
- Update to address some or all AM/FM station presets becoming lost and replaced by “Hold”



- Update to further reduce static or “noise” when listening to AM radio stations
- Update to address Navigation system “Freezing-Up” condition (gray screen / rotating loading circle)
- Update to address loss of downloaded Phone Contact list information



- Update to address music “skipping” concerns when using CarPlay
- Update to correct US State Route name pronunciations
- Update to address Hands-Free feature freezing during boot-up
- Update to address discrepancies between Navigation unit and Multi-Function Display (MFD) and also between the Navigation unit display and actual posted Speed Limit signage  
*\*\* Since municipalities may at any time adjust speed limits of roads or sections of roads, the driver is responsible to adjust their speed according to all posted signage. The speed information supplied is the best available at the time of map production and subject to change.*
- Update to address system freezing when searching for addresses using Voice Recognition
- Update to address music not playing automatically when connecting a USB device
- Update to address display of “Invalid Destination Code” message



- Update to change “Scan” text display to “Tune Scan” when SXM starts to tune channels.

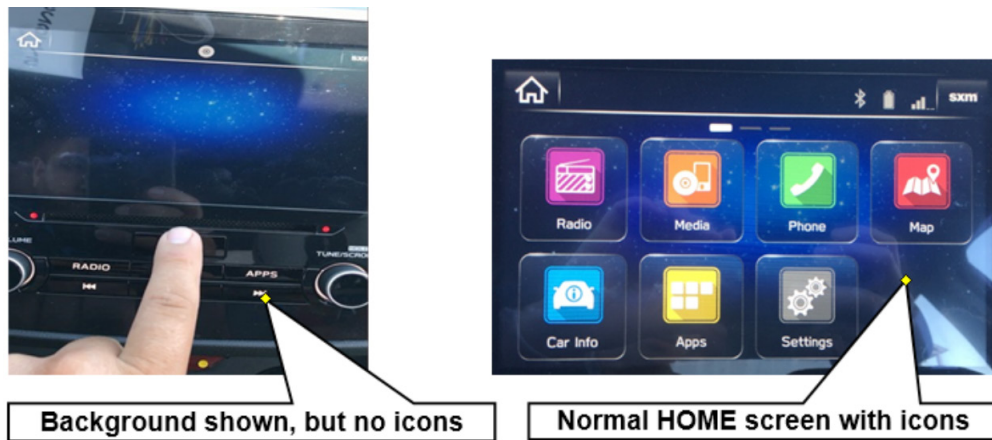
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**The November 2018 software included the following operational enhancements:**

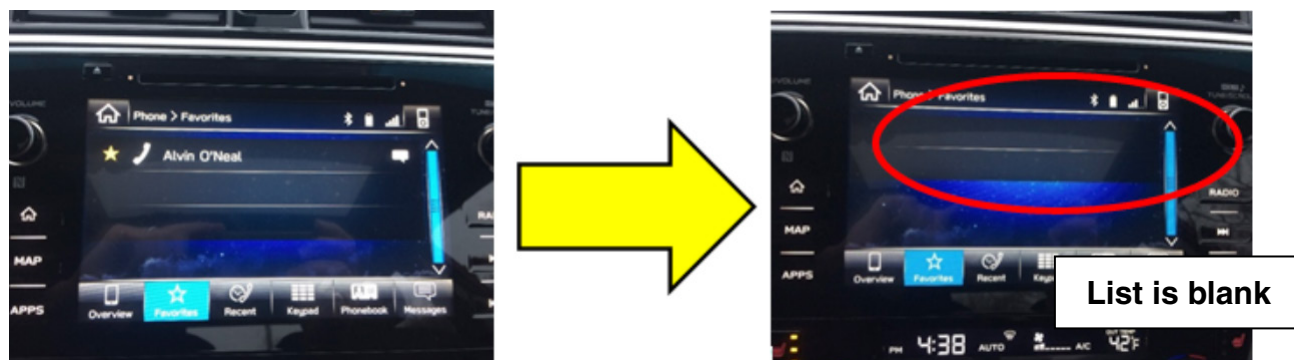
- On 2018MY Legacy / Outback models with Navigation (High) head units, the update corrects a condition where the head unit remains powered even after the ignition is OFF and the driver door is opened.
- Update for a condition where the SXM presets become lost and only “Initializing” appears as shown below.



- Update for condition where only the star field background is displayed (without icons) after the HOME button is pressed.



- Update for a “Pop” or “Crackling“ sound concern when listening to AM radio.
- Update for a concern of the head unit continually resetting itself.
- Update for a concern of after selecting a contact to be a “Favorite” and the “Favorite” list display is blank.



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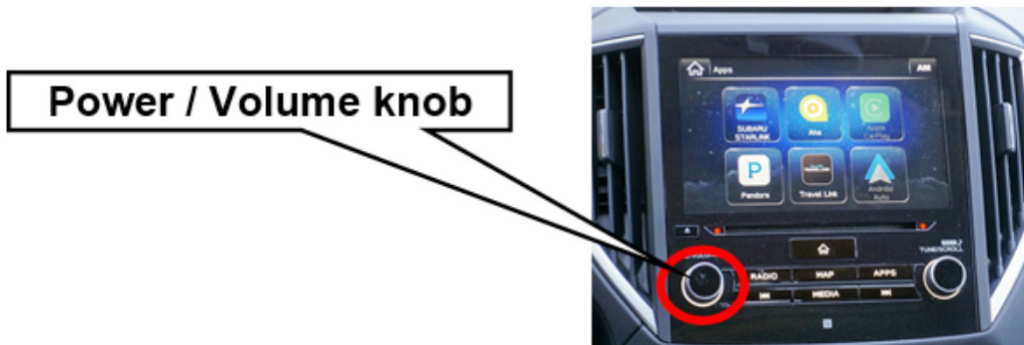
- Operation of the head unit after switching the ignition off and back on has been revised:

**PREVIOUS Version:** The head unit power is turned OFF by pressing the Power/Volume knob for 4 or more seconds. On the next ignition ON, the display remains OFF / black while the audio begins playing automatically. This was the prior characteristic operation.

**NEW Version:** The head unit power is turned OFF by pressing the Power/Volume knob for 4 or more seconds. On the next ignition ON, the display remains OFF / black and the audio will also be OFF until the Power/Volume knob is pressed to turn the head unit back ON.

**NOTE:**

- The Mute function of the Power / Volume knob (a brief press and release of the Power / Volume knob to mute audio output) is unchanged.
- A “system reboot” function is initiated by pressing and holding the Power / Volume button for 10 seconds. This feature was included as part of the previous (11/2017) software update.



- An enhancement of Voice Recognition feature has been made for improved HVAC system interface and recognition of temperatures requested in Fahrenheit instead of Celsius. **EXAMPLE:** “Set temperature to 75.” With the previous version, the system interpreted “75” as degrees Celsius which would have been 167 degrees Fahrenheit and outside system parameters. As a result, there was no response from the HVAC system.

**Additional Symptoms and Enhancements addressed by previous updates and also included in this latest (June 2019) update:**

- 1- No streaming audio; when using the Pandora® app, there is no audio output.



*Continued...*

- 2- “Media is loading” is displayed on the screen but, the media never completes loading.



- 3- The screen freezes when the STARLINK screen is displayed.



The following conditions were addressed in **another** previous software version update and WTN-74R:

- 1- Radio station presets disappear (touch screen buttons return to “Initializing”).

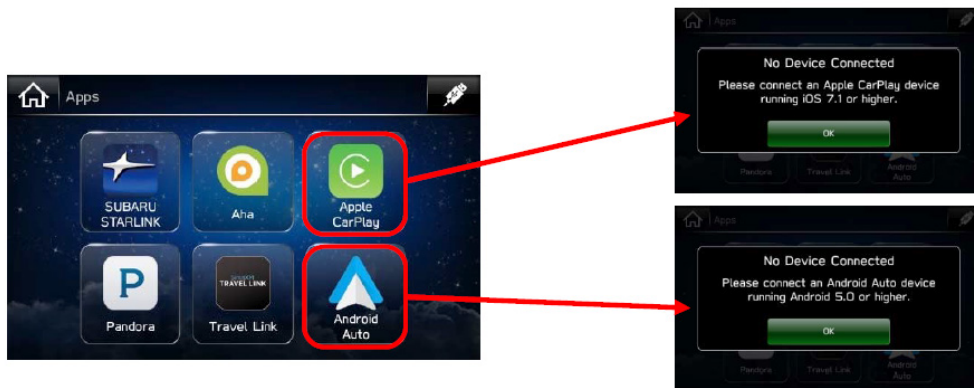


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2- STARLINK “Telematics Service in Progress” screen freezes.



3- Apple Car Play / Android Auto function does not operate (“No Device Connected”).



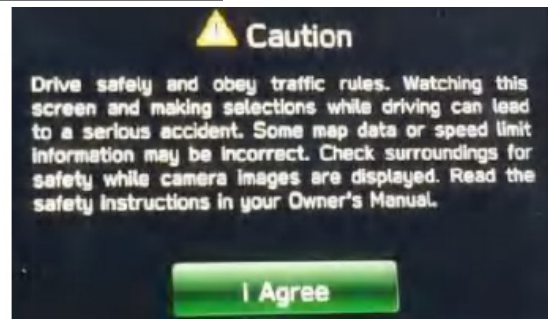
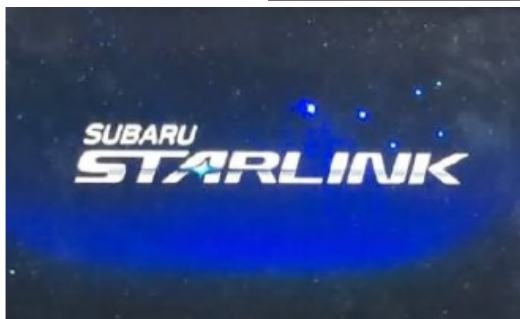
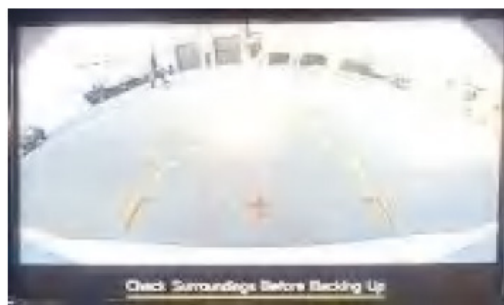
4- The complete guidance route can be displayed.

5- A Longitude and Latitude search feature has been added.

6- A “Beep” notification feature has been added for driving time and rest periods.

7- This latest (November 2018) update also includes a security enhancement.

For reference, the previously released WTN-74R symptoms are also provided below. The main purpose of WTN-74R was to address display screen freeze-up during Back-Up 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 screen is displayed.

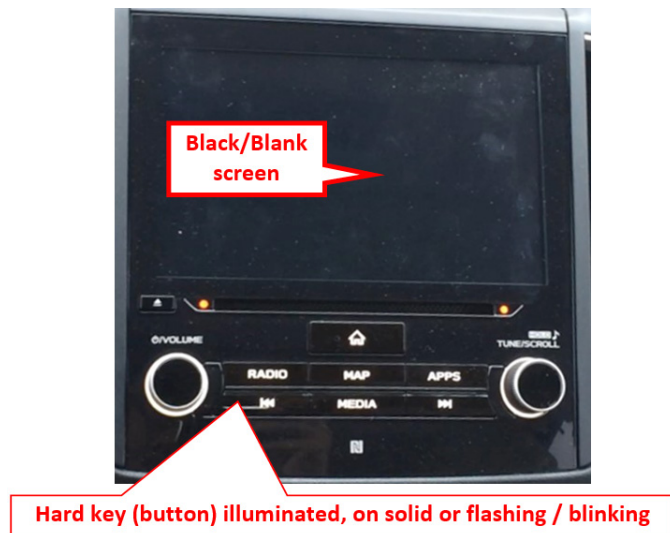


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**The WTN-74R update also addressed these additional operational conditions:**

- 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).



- 2) Time of day displayed in the MFD is incorrect and the arrival time displayed in Navigation unit is also incorrect.



- 3) The time in the MFD automatically reverts 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.



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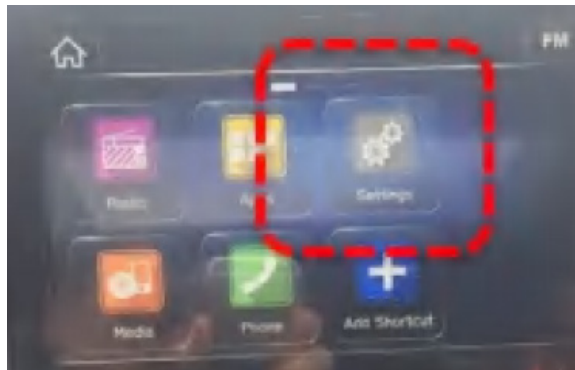
## SERVICE PROCEDURE / INFORMATION:

### Affected Vehicles / Audio Units:

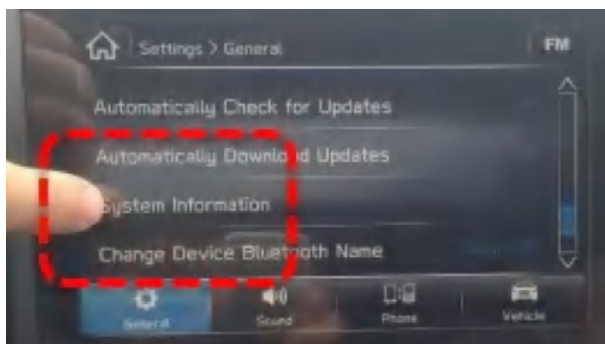
Vehicle Model	Audio Unit Type (High, Mid, Base)	Audio Unit Part Number
2017-18MY Impreza & 2018MY Crosstrek	NAVIGATION (HIGH)	86271FL60A
	8-Inch Display Audio (MID)	86201FL62A
		86201FL63A
	6.5-Inch Display Audio (BASE)	86201FL60A
86201FL61A		
2018MY Legacy / Outback	NAVIGATION (HIGH)	86471AL65A
		86471AL66A
	8-Inch Display Audio (MID)	86431AL65A
86431AL66A		
6.5-Inch Display Audio (BASE)	86431AL61A	
	2018MY BRZ	NAVIGATION (HIGH ONLY)

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

- After starting the engine, from the HOME screen, touch “Settings”.



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



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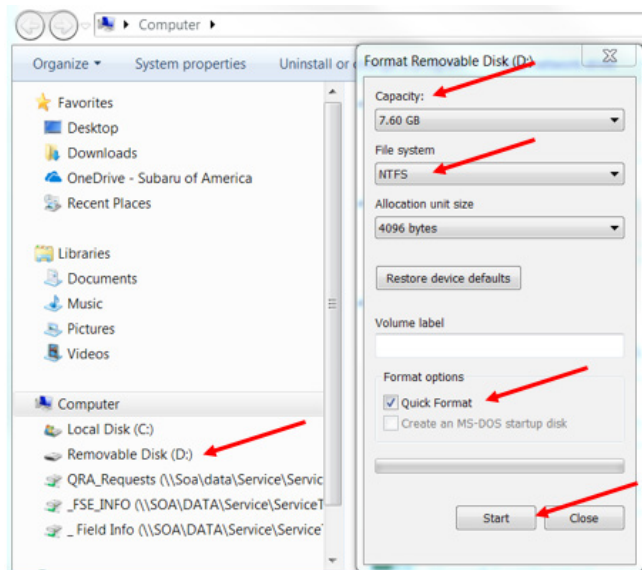
- Confirm the current Software Version ID. If the Current Version is **Rel\_A1.19.12.20**, STOP as this latest update has already been installed.



**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.



**STEP 3-**

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).

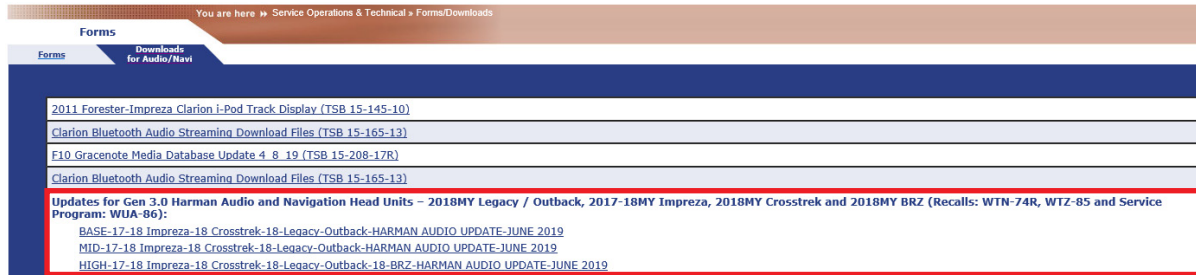
**Follow “A”** when using files downloaded from Subarunet.

**Follow “B”** when using the files sent directly to the SDS notebook from Nuspire.

*Continued...*

## “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/Nav then click on the applicable Hyperlink to download the file(s) to your SDS Notebook or PC:

“BASE-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-HARMAN AUDIO UPDATE-JUNE 2019”

“MID-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-HARMAN AUDIO UPDATE-JUNE 2019”

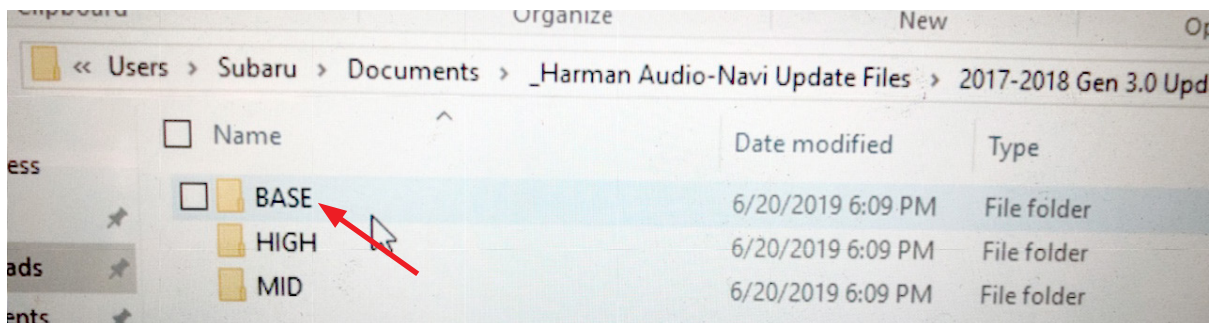
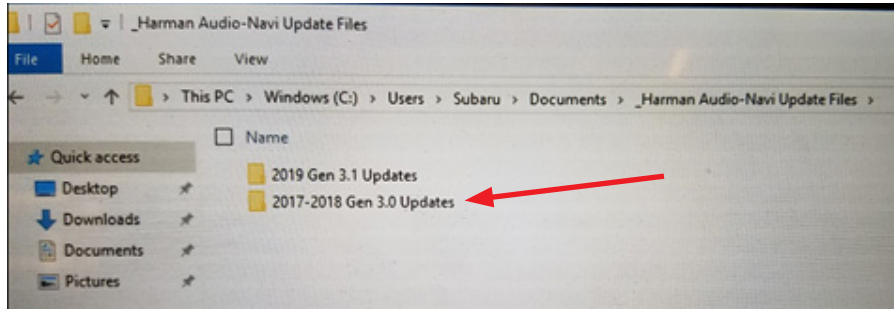
“HIGH-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-BRZ-HARMAN AUDIO UPDATE-JUNE 2019”

- 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-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-HARMAN AUDIO UPDATE-JUNE 2019).
- 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-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-HARMAN AUDIO UPDATE-JUNE 2019”).
- 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 3.0, MID 3.0 or HIGH 3.0).
- Go to **Step 4**.

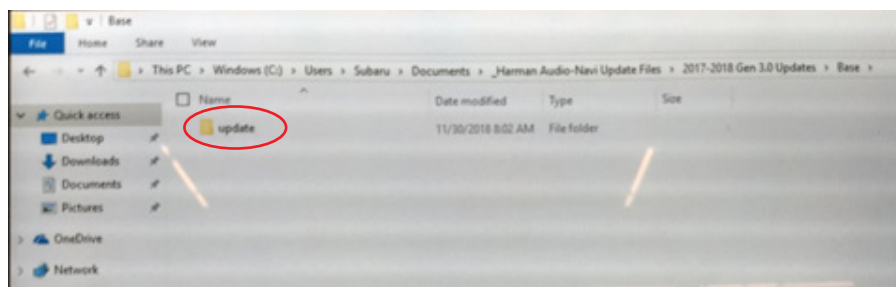
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**“B” When using update files sent directly from Nuspire:**

- 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-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-HARMAN AUDIO UPDATE-JUNE 2019**”) and the update file will display as shown.

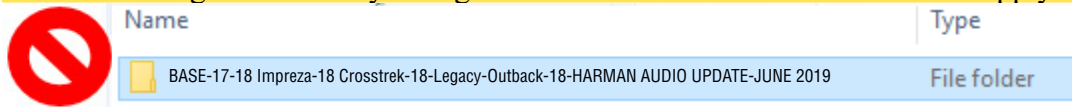


- Select the update folder and either copy / paste or click / drag it to the USB flash drive.
- NOTE:** Do not copy the entire “BASE-17-18 ...” File folder. Copy ONLY the File folder named “update” to the flash drive
- Once the folder named “update” is loaded onto the USB flash drive, right click on 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.

*Continued...*

**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.

- After confirmation, move to the car and either start the engine or connect either the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System or the Subaru Midtronics GR8-1100 Diagnostic Battery Charger to the vehicle and utilize the Power Supply Mode.



Copy ONLY the folder named “update” to the USB.



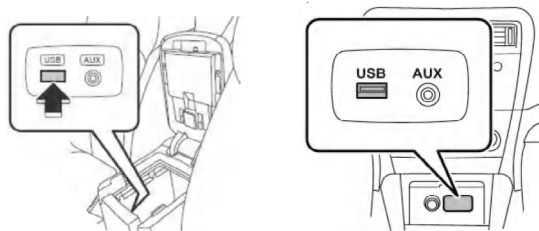
- Never change the folder name from “update”.
- Confirm there is only a folder named “update” on the flash drive.

**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.

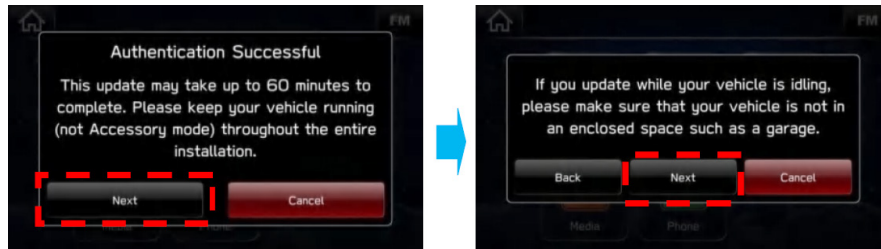
- With the engine idling (or DCA-8000 / GR8-1100 connected), plug the flash drive into the USB Port.



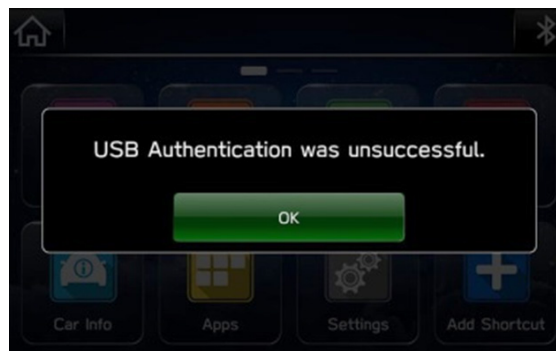
**IMPORTANT NOTE:** If the head unit does not recognize the USB flash drive during the reprogramming process, this may be due to an incompatible Controller IC in the USB flash drive or it is otherwise incompatible with the head unit. If this occurs, delete all files from the flash drive and re-format 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.

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

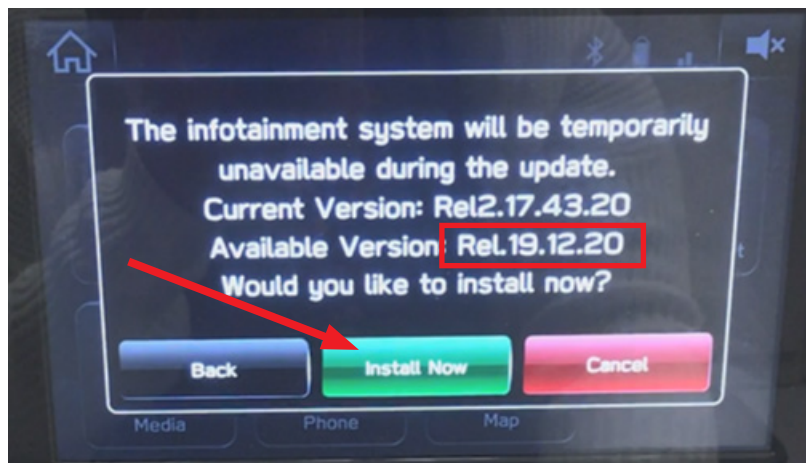


**NOTE:** If an attempt is made to install the wrong “grade” file into the wrong grade head unit (EXAMPLE: “Base” update file into a “Mid” or “High” head unit), the USB Authentication error screen below will be displayed:



- The current and available software version information will be displayed. The Available Version I.D should be **Rel\_A1.19.12.20**.


**NOTE:** The displayed Available Version as shown below does not show the \_U0 after the Rel. This is normal.



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

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**IMPORTANT NOTES:**

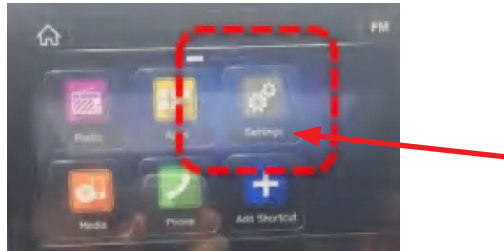
- Do not leave the vehicle once the update begins as ignoring pop-up requests may lead to battery discharge.
- Do not touch any of the buttons on the head unit while the updating process is taking place.
- If during the updating an error screen is displayed asking “Do you want to Retry”, press “Retry” 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”.

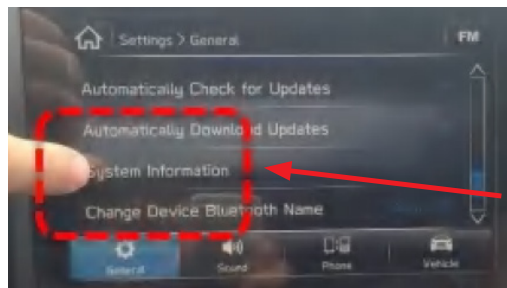
**IMPORTANT:** Wait **AT LEAST 3 MINUTES** before proceeding to **Step 7**.

**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.
- From the HOME screen, touch “Settings”.



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




*Continued...*




- Confirm Software Version is now “**Rel\_A1.19.12.20**”.



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

**STEP 8- CRITICAL:** 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 (**a total of 5 cycles** if completing WTN-74R **OR only 2 cycles** (1 additional cycle to Steps 1 & 2) if WTN was previously completed). 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**. 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.

*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:

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 **New, 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).**	B031-268	0.6		
HARMAN AUDIO/NAVI QUESTIONNAIRE COMPLETION	C101-228	0.3		
WTN-74R <u>OPEN</u> : HARMAN AUDIO / NAVI UNIT, VERSION ID & OPERATION CHECKS ONLY	B103-110	0.4	WTN-74	RC
WTN-74R <u>OPEN</u> : HARMAN AUDIO / NAVI UNIT REPROGRAMMING (INCLUDES OPERATION CHECKS)	C103-118	0.2		

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

**REMINDER:** On BRZ models, this update applicable to HIGH / Navigation - equipped head units only.

## IMPORTANT NOTES:

- Use Operation Number B031-150 or B031-268 for all TSB 15-211-17R -applicable Crosstrek, Legacy, Outback and 2018MY Impreza models along with any 2017MY Impreza models which have already had the WTN74 campaign completed.
- Any remaining 2017MY Impreza models having an OPEN WTN-74 campaign must use the campaign coding FIRST.
- **CRITICAL** Claim Processing Update: When completing this TSB procedure OR a WTN-74R campaign, the post-update software version number **MUST** be entered in the Miscellaneous Detail field when submitting the claim.
- 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.