#### ATTENTION:

GENERAL MANAGER PARTS MANAGER CLAIMS PERSONNEL SERVICE MANAGER IMPORTANT - All Service Personnel Should Read and Initial in the hoxes provided, right.





# PRODUCT CAMPAIGN BULLETIN

APPLICABILITY: 2018 Model Year Legacy, Outback,

and BRZ Vehicles

Harman Kardon Head Unit FMVSS 111 SUBJECT:

Noncompliance Recall

**NUMBER:** WTZ-85

**DATE:** 01/03/19

NHTSA ID: TBD

## INTRODUCTION:

Subaru of America, Inc. (Subaru) is recalling 2018 model year Legacy, Outback, and BRZ vehicles equipped with a certain combination of head unit hardware and software, due to the possibility of noncompliance with Federal Motor Vehicle Safety Standard (FMVSS) 111 – "Rear Visibility."

## **AFFECTED VEHICLES:**

Vehicles included in this recall are equipped with a high-grade Harman Kardon head unit with navigation, and software version 3. This includes vehicles equipped as such in production, and those that show a warranty history of receiving a software update after the release of version 3.

Model Year	Carline	Affected Units
2018	Legacy	Refer to Vehicle Coverage
2018	Outback	Inquiry for WTZ-85 Recall
2018	BRZ	Applicability

Coverage for all affected vehicles must be confirmed by using the Vehicle Coverage Inquiry function on subarunet.com. This information is now available.

## **DESCRIPTION OF THE ISSUE AND SAFETY RISK:**

Due to a software issue, the head unit memory retrieval and assembly time may exceed the designed time to begin the boot-up cycle. If this occurs, the head unit display will not boot, causing the screen to remain blank. In this condition, while backing the vehicle, the rearview image may not be displayed.

The failure to display the rearview image creates a noncompliance with the requirements of FMVSS 111 – "Rear Visibility," increasing the risk of a crash.

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.

# Subaru of America, Inc. is

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.

ISO 14001 Compliant

#### **DESCRIPTION OF THE REMEDY:**

Subaru Retailers will reprogram the head unit software on affected vehicles at no charge to the customer.

## **RETAILER 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 dealer to deliver a new motor vehicle covered by a recall under a sale or lease until the defect is remedied. Therefore, 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 may be subject to civil penalties of up to \$6,000 per violation (i.e., for each vehicle), as provided in 49 CFR §578.6 and will also be in breach of the Subaru Dealer Agreement.

## **OWNER NOTIFICATION:**

Subaru will notify affected vehicle owners by first class mail, using internal Subaru owner records, this month. Subaru is in the process of acquiring registration data and will notify owners again using that data within the next 60 days. Retailers will be advised when owner renotification begins.

## RETAILER AFFECTED VIN LISTS:

Each Subaru Retailer will receive an affected VIN list from their Zone Office. For the first notification, Retailer assignment will be based on the selling retailer. For the second notification, vehicles will be assigned to Retailers as follows:

- Original vehicle owners are assigned to the original selling Retailer when their current address is within a 100-mile radius of that Retailer.
- If the original selling Retailer is inactive, the VIN has been assigned to the nearest active Retailer.
- For any new owners or when original owners live more than 100 miles from the original selling Retailer, the VIN has been assigned to the nearest active Retailer.

**IMPORTANT:** Retailer affected VIN lists include information for vehicles affected by this recall. This information will enable Retailers to follow up with owners of affected vehicles. The lists contain owners' names and phone numbers obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is unlawful. Accordingly, Retailers are required to limit the use of these lists for the sole purpose of completing this recall.

## **SERVICE PROCEDURE:**

## **Affected Vehicles / Audio Units:**

Model Year	Carline	Audio Unit Part Number
2018	Legacy	86474AL65A
2018	Outback	86474AL66A
2018	BRZ	86271CA660

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

This procedure and the related reprogramming files apply to the following audio / navigation head unit:

	Multimedia System Type	Descriptive Features		
8.0 Inch Audio /		Map Button in Top		
	Navigation System	Row Center		



## **MATERIALS REQUIRED:**

Two (2) 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



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Bulletin Number: WTZ-85; Date: 01/03/19

## **NOTES:**

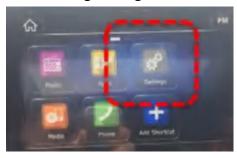
- The USB flash drives can be USB 2.0 or 3.0.
- The USB flash drive MUST be reformatted to NTFS before loading any files to it. NTFS is not the standard format on most USB flash drives.
- The update files are not overly large but, during the reprogramming procedure, the head unit backs up some files 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.

# **NOTE:**

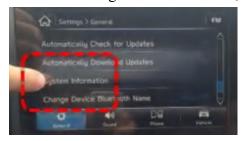
• This new update also includes an enhancement to the map data for Subaru Retailer locations.

**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".



Confirm the current Software Version ID. If the Current Version is Rel\_UO.18.43.20, <u>STOP</u> as this latest update has already been installed. If the Current Version is: Rel1.16.46.20, Rel1.17.08.20, Rel2.17.20.20 or Rel2.17.22.20, continue with the remainder of the update procedure.

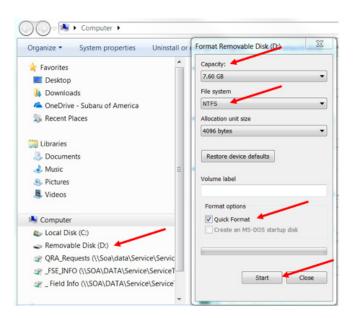


(EXAMPLE photo)

# **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.

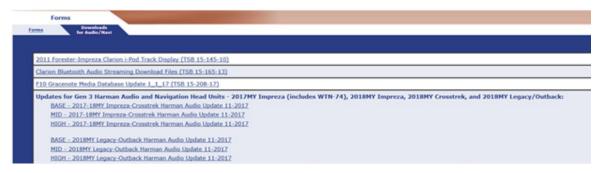


The new reprogramming files are available for download from Subarunet using the normal audio / navigation system file update download procedure: Go to Subarunet, select Service Operations and Technical>>Forms/Downloads>>Downloads for Audio/Navi then click on the applicable Hyperlink to download the file(s) to your system:

"HIGH-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-BRZ-HARMAN AUDIO UPDATE-NOVEMBER 2018"

## **IMPORTANT:**

• If the files are being **downloaded from Subarunet**, they will be .zip files and must be unzipped before they can be used. An EXAMPLE image of the Subarunet links page is provided below.



• If the files were sent directly from Nuspire, they are ready to use and do not need to be unzipped before they can be used.

**Step 3-** Load the downloaded update file onto the USB flash drive:

## **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.

- Insert a USB flash drive (16 GB MINIMUM) to be used for (in this example) updating the BASE head unit into the PC.
- Once the USB flash drive is located and ready for use, proceed to next step.
- From the SDS GUI (Desktop) click / open My Documents.
- Navigate to the USB flash drive (Removable Disk) and double click on it to access the drive.
- Right Click on the drive and select Format.
- Change the File System to **NTFS**.
- Check the box for Quick Format and then press Start. This will erase any existing files.
- When the warning dialog box opens, click "OK".
- Once formatting is complete, click "OK" then click "Close" to exit the format dialog box.

Follow "A" when using files downloaded from Subarunet.

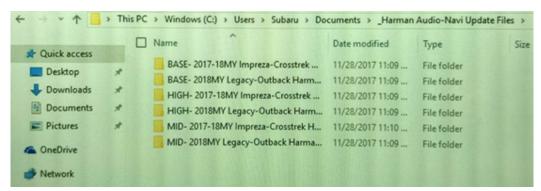
Follow "B" when using the files sent directly to the SDS notebook from Nuspire.

## "A" When using update files downloaded from Subarunet:

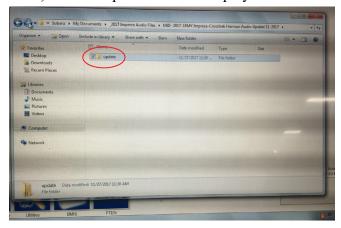
- Go to Downloads.
- Once the files have been downloaded from Subarunet, click on the Downloads folder and then sort by Date Modified to bring the most recent files to the top of the list.
- Open / display the contents of File folder "\_Harman Audio-Navi Update Files".
- Click on "Extract All Files".
- 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 "HIGH-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-BRZ-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.

# "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.
- 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 in the EXAMPLE photos below.



• Double-click on the required file (for this example, select the file entitled "HIGH-17-18 Impreza-18 Crosstrek-18-Legacy-Outback-18-BRZ-HARMAN AUDIO UPDATE-NOVEMBER 2018") 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.
- 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 "WTZ-85" to indicate the head unit it will update (HIGH in this example).

**Step 4- IMPORTANT:** Install the update folder for the head unit being reprogrammed ONLY. Do not install all three update folders onto the same flash drive at the same time.

**NOTE:** Do not copy the entire File folder.



Copy ONLY the File folder named "Update" to the USB flash drive.



- After the download is complete, NEVER change the folder names.
- To avoid confusion, label the flash drive with the file contents (e.g. WTZ-85 / HIGH).
- Confirm there is a folder named "update" on the flash drive.
- 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.

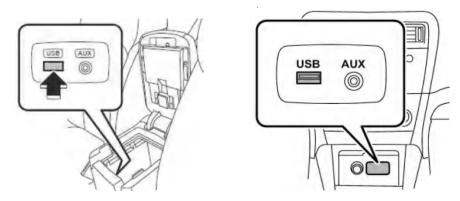
<u>CAUTION:</u> Confirm one final time the head unit you are about to update matches with the USB flash drive you have selected. Attempting to install the incorrect update file will disable the head unit.

# **Step 5-** Update Installation:

**IMPORTANT:** Always record the customer's radio station presets, volume and Driver Profile settings before proceeding further. The customer's radio station presets and volume settings will likely need to be reset once the update and re-boot procedures are completed.



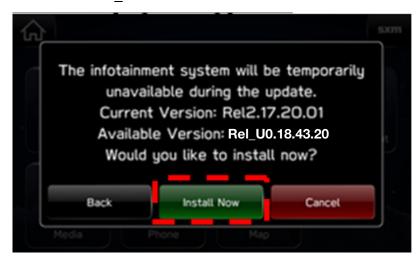
• With the engine idling (or GR8 connected), plug the flash drive into the USB Port.



• 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 **Rel UO.18.43.20**.



• After confirming the Available Version, press "Install Now" to start the reprogramming process.

## **NOTES:**

- The screen will go blank (black) for a brief period after installation begins.
- If a "Do you want to retry" is displayed, press Retry to restart the update.
- The update should take less than 20 minutes to complete.

**IMPORTANT CAUTION:** To avoid possible head unit damage, always confirm the update file on the USB flash drive being used matches the head unit being updated (e.g. a BASE update file is being installed into a BASE head unit). The files are NOT interchangeable between the 3 different audio unit types.

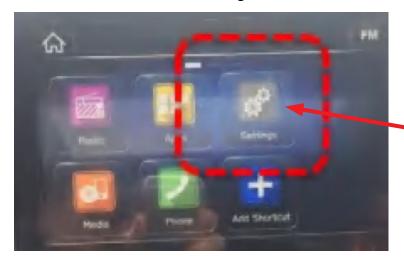
- Do not touch any of the buttons on the head unit while the updating process is taking place.
- If during the updating an error screen is displayed asking "Do you want to Retry", press "Retry" to restart the update.
- Once the updating process is complete, the head unit will reboot automatically.
- After the reboot completes, press the HOME button to 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".

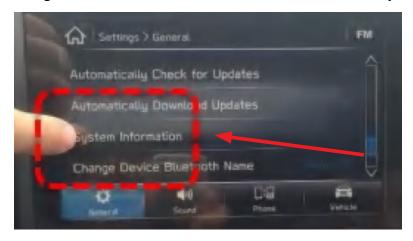
**IMPORTANT:** Wait AT LEAST 3 MINUTES before proceeding to Step 7.

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

- Turn the ignition back ON. The STARLINK screen should be displayed. If the STARLINK screen is not displayed, perform **Step 5** again and be sure to **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 "Rel UO.18.43.20".



• 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.

**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.

- 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 2) cycles. If normal operation is confirmed, press to return to the Home screen and shut the ignition OFF to complete the procedure.

**Step 9-** If lost during the update process, reset the customer's radio station presets, volume and Driver Profile settings 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
WTZ-85 Campaign: HARMAN AUDIO / NAVI UNIT REPROGRAMMING (INCLUDES VERSION ID CHECK AND OPERATIONAL CHECKS)	A128-828	0.4	WTZ-85	RC

**IMPORTANT:** <u>CRITICAL</u> Claim Process Update: When completing the WTZ-85 campaign, the post-update software version number MUST be entered in the Miscellaneous Detail field when submitting the claim.

## **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.

SUBARU.
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Notice to Lessors: Under Federal law the lessor of a vehicle who receives this letter must provide a copy of it to the vehicle lessee(s) within 10 business days from receipt. The lessor must also keep a record of the lessee(s) to whom this letter is sent, the date sent, and the applicable vehicle identification number (VIN). (For the purposes of this section, a lessor means a person or entity that in the last twelve months prior to the date of this notification has been the owner, as referenced on the vehicle's title, of any five or more leased vehicles. A leased vehicle is a vehicle leased to another person for a term of at least four months.)