

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: 2019-23MY Impreza
 2019-23MY Crosstrek (Including Hybrid Model)
 2019-24MY Forester
 2019MY Legacy/ Outback
 2019-21MY WRX
 2019-21MY WRX STI
 2019-21MY BRZ- Navigation -equipped ONLY
 2019-22MY Ascent

NUMBER: 15-236-18R

DATE: 12/04/18

REVISED: 07/09/24

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

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. These files do **NOT** include Map Update data. It is **VERY IMPORTANT** to read and understand this information completely to understand all changes from prior releases before proceeding.

A time line chart along with a complete list of all the conditions addressed by this and previous Harman 3.1 and Gen 3.1α software updates is provided in “Appendix A” located at the end of this bulletin.

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.
- On BRZ models, this update applicable to HIGH / Navigation-equipped head units only.
- If a Map update is pending, please follow the instructions posted on Subarunet: Service Operations & Technical > Forms/Downloads > Navigation System Map Updates and select the applicable link.

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 Compliant

ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

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PRODUCTION CHANGE INFORMATION:

These updates (December 2020) apply to the models listed above equipped with Harman Gen 3.1 and Gen 3.1α 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

**HIGH / Navigation - equipped head units only*

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 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



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SERVICE PROCEDURE / INFORMATION:

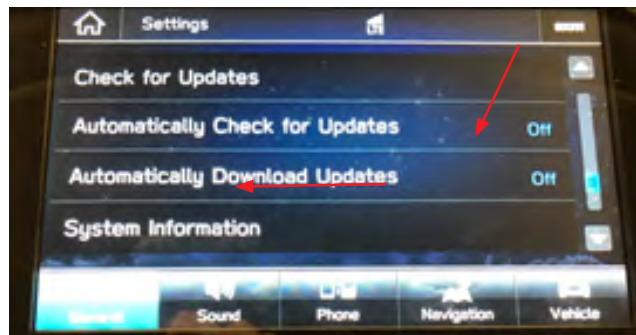
REMINDER: Customer satisfaction and retention starts with performing quality repairs.

Step 1- Software Version Confirmation From the HOME screen, touch “Settings”.

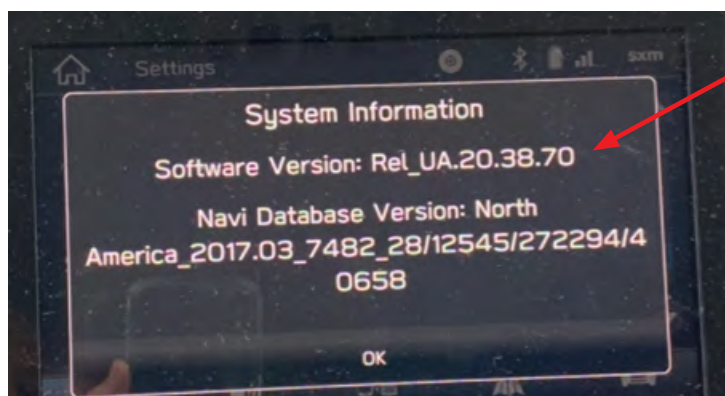
After starting the engine, from the HOME screen, touch “Settings”.



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



- The currently installed software version will be displayed. If the Software Version is **NOT REL_UK.23.16.70, REL_UK.23.42.70 or REL_UM.24.08.70**, proceed to **Step 2**.



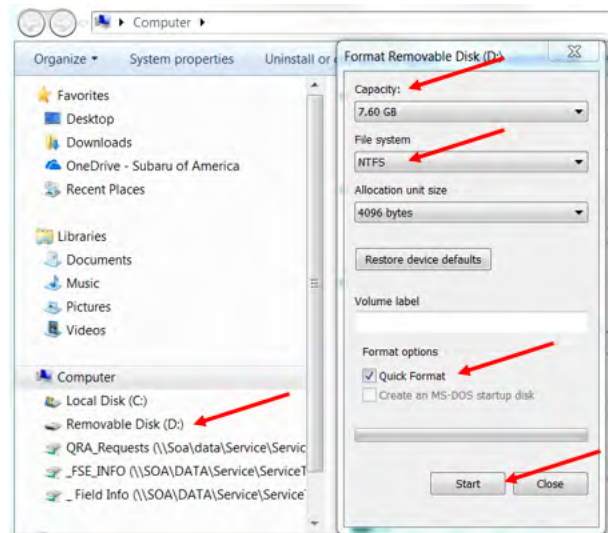
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STEP 2- Prepare the USB:

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

VERY IMPORTANT: Before attempting to download any data files, confirm the PC and flash drive being used is not infected with any virus. The flash drive **MUST** be formatted for NTFS .

- Make sure the USB flash drive contains no other files.
- Right click on the corresponding “Removable Disk”.
- Select “Format”.
- From the File System drop-down menu, select “NTFS”
- Check the “Quick Format” box (if not already done).
- Click on “Start” to format the USB flash drive.



STEP 3- Download the Update Files to the USB:

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.

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“A” When using update files downloaded from Subarunet:

[Click Here to Access the Downloads for Audio/Navigation Information on Subarunet](#)



IMPORTANT: Files downloaded from Subarunet will be .zip files and must be unzipped before they can be used. Using the normal audio / navigation system file update download procedure: Go to Subarunet, select Service Operations and Technical>>Forms/Downloads>>**Gen 3/Harman** for Audio/Nav then click on the applicable Hyperlink to download the file(s) to the SDS Notebook or PC:

BASE-2019- Impreza-23 Crosstrek-23 Crosstrek--Hybrid-23 Legacy-Outback-19 Forester-24 Ascent-22 WRX-21 BRZ-20 HARMAN AUDIO UPDATE- DECEMBER 2023

BASE PLUS or MID-2019 - Impreza-23 Crosstrek-23 Crosstrek--Hybrid-23 Legacy-Outback-19 Forester-24 Ascent-22 WRX-21 BRZ-20 HARMAN AUDIO UPDATE- DECEMBER 2023

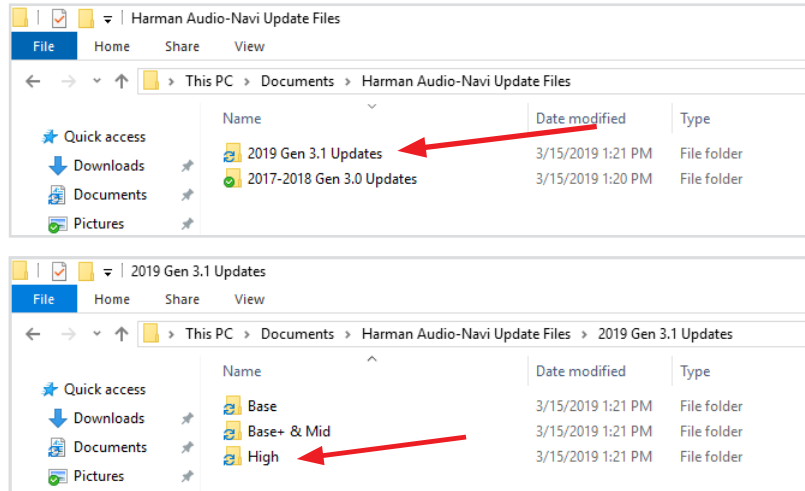
HIGH-2019- Impreza-23 Crosstrek-23 Crosstrek--Hybrid-23 Legacy-Outback-19 Forester-24 Ascent-22 WRX-21 BRZ-20 HARMAN AUDIO UPDATE- DECEMBER 2023

- 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 (HIGH - 2019-20 Impreza_Crosstrek_Crosstrek Hybrid_BRZ_Forester_Ascent_WRX & 2019 Legacy-Outback HARMAN AUDIO UPDATE - DECEMBER 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 “HIGH - 2019-20 Impreza_Crosstrek_Crosstrek Hybrid_BRZ_Forester_Ascent_WRX & 2019 Legacy-Outback HARMAN AUDIO UPDATE - DECEMBER 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 each flash drive with the file contents (e.g. BASE 3.1, BASE PLUS or MID 3.1 or HIGH 3.1).
- Go to **Step 4**.

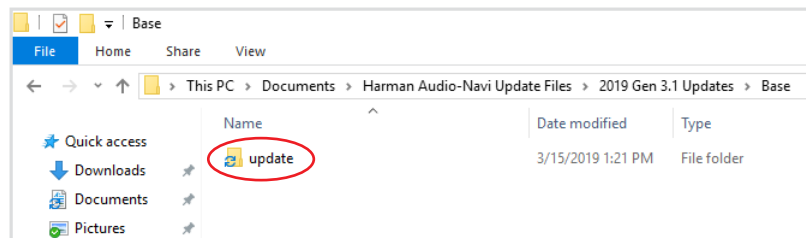
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“B” When using update files sent directly from Nuspire:

- 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 “HIGH - 2019-20 Impreza_Crosstrek_Crosstrek Hybrid_BRZ_Forester_Ascent_WRX & 2019 Legacy-Outback HARMAN AUDIO UPDATE - DECEMBER 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 “HIGH-20...” File folder. Copy ONLY the File folder named “update” to the flash drive

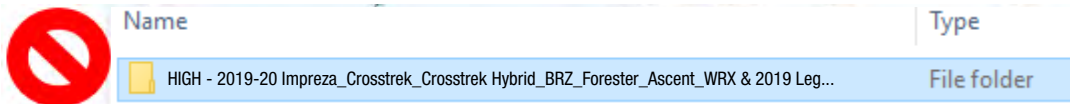
- Once the folder named “update” is loaded onto the USB flash drive, right click on the drive and select “Eject”.
- Remove the USB flash drive after the prompt appears that says “Safe to Remove Hardware”.
- Mark the USB to indicate the head unit it will update (HIGH 3.1 in this example).
- Repeat the above steps to create the BASE PLUS or 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 “BASE PLUS or MID 3.1” update files must be used.

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- 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.



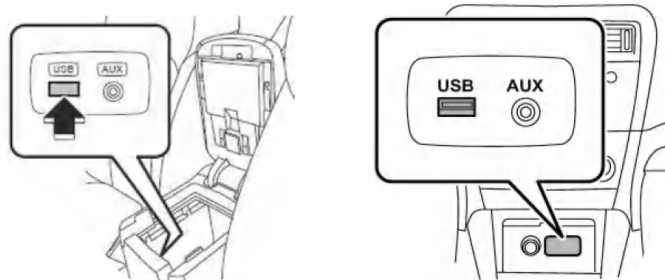
- Never change the folder name from “update”.
- Confirm there is only a folder named “update” on the flash drive.

CAUTION: Confirm one final time the head unit you are about to update matches the update file 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.

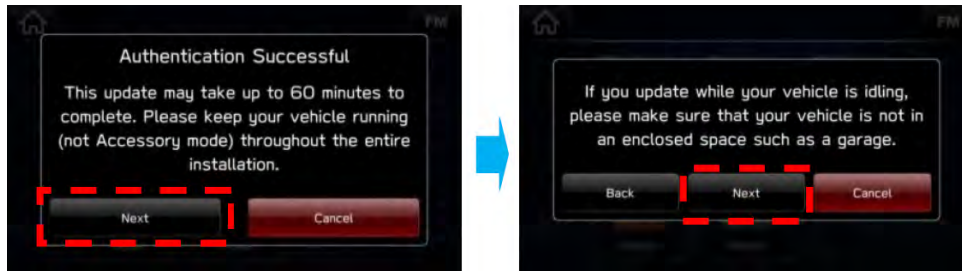
- With the engine idling (or GR8 connected), plug the flash drive into the USB Port.



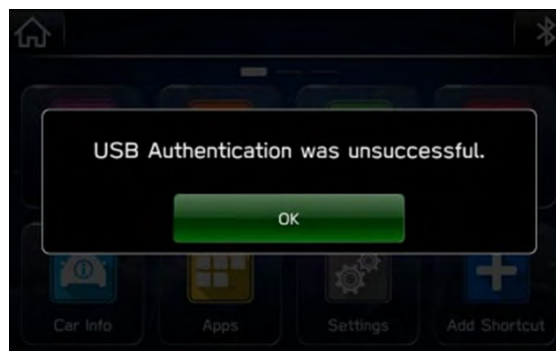
IMPORTANT NOTE: If the head unit does not recognize the USB flash drive during the reprogramming process, this may be due to an incompatible Controller IC in the USB flash drive or it is otherwise incompatible with the head unit. If this occurs, delete all files from the flash drive and re-format it 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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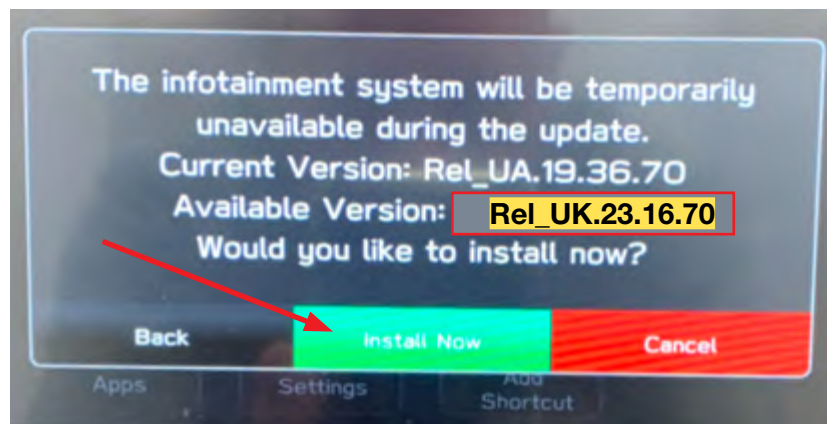
- After the unit “authenticates” the USB flash drive, press “Next” and after the second screen is displayed, press “Next” again.



NOTE: If an attempt is made to install the wrong “grade” file into the wrong grade head unit (EXAMPLE: “Base” update file into a “Base Plus or 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_UK.23.16.70**.



- 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”.

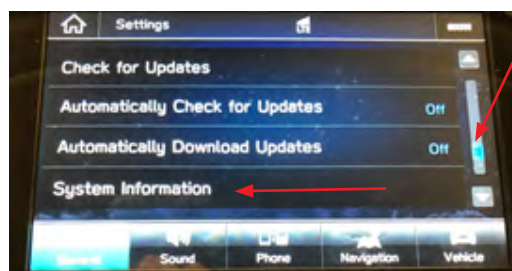
IMPORTANT: Wait **AT LEAST 3 MINUTES** before proceeding to **Step 7**.

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”.

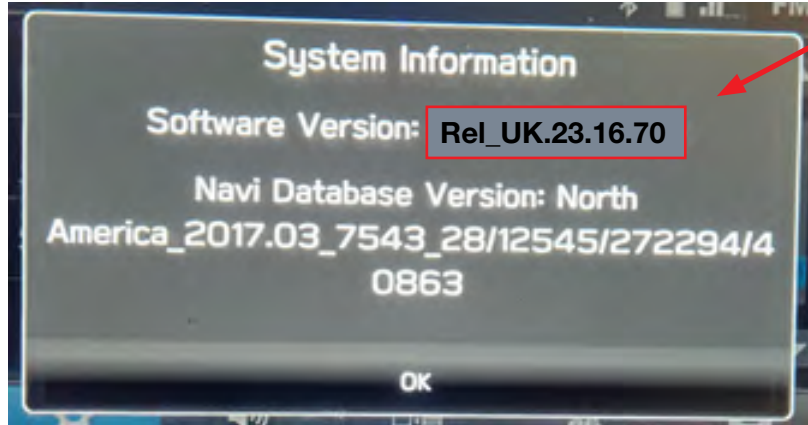



- From the Settings > General screen, scroll down to and then touch “System Information”.




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- Confirm Software Version is now “Rel_UK.23.16.70”.



- 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 **twice**. 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.

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.**

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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:

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

- If the vehicle’s audio / navigation head unit already contains the software version listed in the information below (or a later one) and is experiencing a **similar** condition as described here, installing the most current software **will most likely not** resolve it. In that case, do not attempt a software update. Please complete a Harman Questionnaire on this new condition and follow the applicable Harman diagnostic Service Bulletin for the condition and/or follow the related Service Manual diagnosis procedures.
- If the condition is as described below and the software version is **prior to** the software version referenced as correcting this condition, then **it is** appropriate to apply the latest software update as found in this bulletin as it will most likely resolve the condition.

Conditions Addressed By Update #9:

- 1) Error message appears and Android Auto does not start when connected via USB cable
- 2) No response to the operation on Android Auto screen
- 3) Screen freezes while using Android Auto
- 4) When an IGN cycle is performed while using Android Auto, the registered phonebook is grayed out and phonebook favorites disappear
- 5) CarPlay widget is displayed on the taskbar when CarPlay is launched, but the CarPlay icon is not displayed on the Home screen
- 6) Expansion of data storage for MOTA (data size limit per region for MOTA is extended from 2 GB to 2.3 GB)
- 7) Unable to play News on Google Assist

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Conditions Addressed By Update #8:

- 1) Message “DCM FOTA In Progress” is displayed following IGN-ON
- 2) Loss of Bluetooth pairing or difficulty connecting
- 3) Music played via Bluetooth device is lost (skipped or interrupted), when Apple Watch is being connected
- 4) If multiple phones (phone A and phone B) are connected via Bluetooth and phone A is playing music while phone B’s registration is deleted, than phone A’s registration can’t be deleted
- 5) Android Auto does not launch
- 6) When playing music with Android Auto, the sound or volume control is lost
- 7) Android Auto does not launch automatically using Android phone connected prior to stopping CarPlay operation due to iPhone disconnection
- 8) CarPlay does not launch, after iPhone is connected
- 9) Clock setting changes on its own, when the time is set in manual mode
- 10) License confirmation logic improvement in Map Update process
- 11) USB Hub (AUX USB port) Reset function. *

* Please also follow TSB 15-314-23 to confirm proper hardware is installed

Conditions Addressed By Update #7 (#6 was production running change not available via USB or FOTA update):

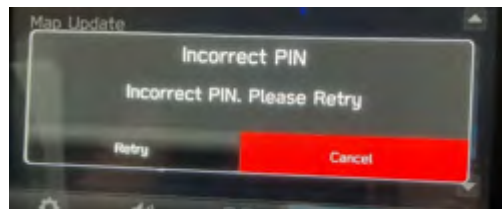
- 1) No Audio when HK AMP is installed (added fail-safe function to reset the external Harman Kardon amplifier in case of no sound failure)
- 2) Volume setting becomes inoperative
- 3) Buzzing Noise following Head Unit reboot (CarPlay is reset with noise)
- 4) Head Unit is stuck in phone mode following completion of the call
- 5) Multiple audio sources are playing simultaneously
- 6) Noise (random interruption) on AM radio
- 7) Bluetooth handsfree call disconnect using iPhone
- 8) Re-route search in Faster Route mode does not work
- 9) <Request code> is not shown completely in the pop-up menu for Paid Map License Renewal
- 10) Voice recognition address search does not work in some states in Mexico

Conditions Addressed By Update #5:

- 1) Radio station information does not appear.
- 2) For 19MY NAVI models, map data update over the air (MOTA) service becomes more flexible, i.e., the MOTA is available using a mobile phone with the STARLINK App installed. See **NOTE 1** below.
- 3) If over 1000 addresses are stored in Phonebook, some part of Phonebook cannot be downloaded to the Head Unit.

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- 4) When reading out SMS (Short Message Service or text message) in CarPlay, the reading voice breaks up or words are or incorrectly pronounced.
- 5) On push-button start models, the word “key fob” is deleted from the note that appears when the operation setting of Rear Gate Unlock Button is selected. (Rear Gate equipped models only.)
- 6) When the iPhone is disconnected while it is playing music through CarPlay, the music source is no longer selected automatically (instead of automatically changing to RADIO.) See **NOTE 2** below.
- 7) When an iPhone (CarPlay allowed) is connected using USB, the system moves to CarPlay screen no matter what is set in the <Auto Show Connected Device> menu in Setting. The Setting menu of <Auto Show Connected Device> is applicable only on Android Auto. See **NOTE 3** below.
- 8) Repair Facility POI icons are now shown on the NAVI map display. See **NOTE 4** below.
- 9) Activation Code Not Accepted by Navigation System when updating Map Data



NOTE 1: Introduction of map data update (MOTA) using STARLINK App on 19MY NAVI models.

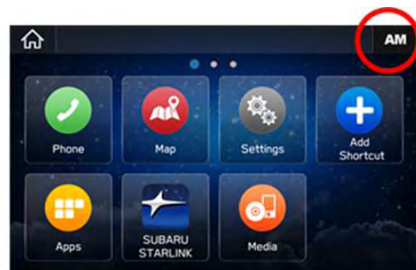
- a) For 20MY models, this function was incorporated at the start of production.
- b) MOTA is not guaranteed with all mobile phones/devices.
- c) The STARLINK app needs to be installed to the mobile phone/device first.
- d) When conducting MOTA via mobile phone, a packet fee may be charged depending on the mobile provider communication contract.
- e) An iPhone can be connected either with Bluetooth or USB. Android can be connected with Bluetooth only. If the map data exceeds 50MB, a Wi-Fi connection is recommended rather than using a mobile phone (cellular data connection). The Bluetooth connection may take a long time to download the map data from the mobile phone to the Head Unit. The size of the map data can be confirmed in the Head Unit screen.

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On Ver. 6.0 and before:



Music playing via iPhone in CarPlay.



After disconnecting, the music source changes to Radio automatically.



Music playing via iPhone in CarPlay.



After disconnecting, no music source is selected automatically.

If a source of music other than CarPlay has been playing when the iPhone is disconnected, the music source remains same (it is not turned off.)

NOTE 3: When using a USB connection with iPhone (CarPlay active), move to CarPlay screen.

On Ver. 6.0 and before:

Setting in <Auto Show Connected Device>

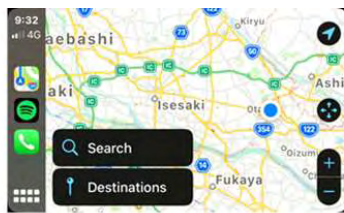
ON: The CarPlay screen is displayed.

OFF: The CarPlay icon is displayed but the CarPlay screen is not displayed.

In a case where the iPhone was disconnected while playing music then reconnected while it is playing music, the system moves to CarPlay screen no matter what is set in <Auto Show Connected Device> in Setting (depending on iOS version of the iPhone.)

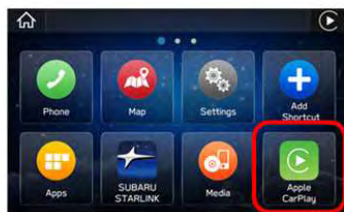


On



Move to CarPlay.

Off



Move to HOME and CarPlay icon is displayed.

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On Ver. 7.0:

The <Auto Show Connected Device> is no longer available for CarPlay. The Setting menu shows only <Android Auto> to access the <Auto Show Connected Device> selection menu. If an iPhone with active CarPlay is connected, the Head Unit always moves to the CarPlay screen.

To go back to the HOME screen, touch the SUBARU button in the CarPlay screen or press a hard button <HOME> or <RADIO>.

To stop the automatic move to CarPlay screen, change the setting of on the iPhone;

iPhone menu, Settings > Screen Time > Content & Privacy Restrictions (button must be moved to ON if not already on) > Allowed Apps > CarPlay > Turn CarPlay OFF (iOS 12 and later).

With this setting, if the iPhone is connected with USB, it is recognized as an iPod so music can be selected and played from the Apple Music Library.

NOTE: When an iPhone is connected as an iPod:

As an iPod, only the Apple Music Library can be played. Other music sources like Spotify, Amazon As an iPod, only the Apple Music Library can be played. Other music sources like Spotify, Amazon Music etc. cannot be played. Spotify, Amazon Music etc. CAN be played when CarPlay is active on the iPhone or the iPhone is connected via Bluetooth Audio.

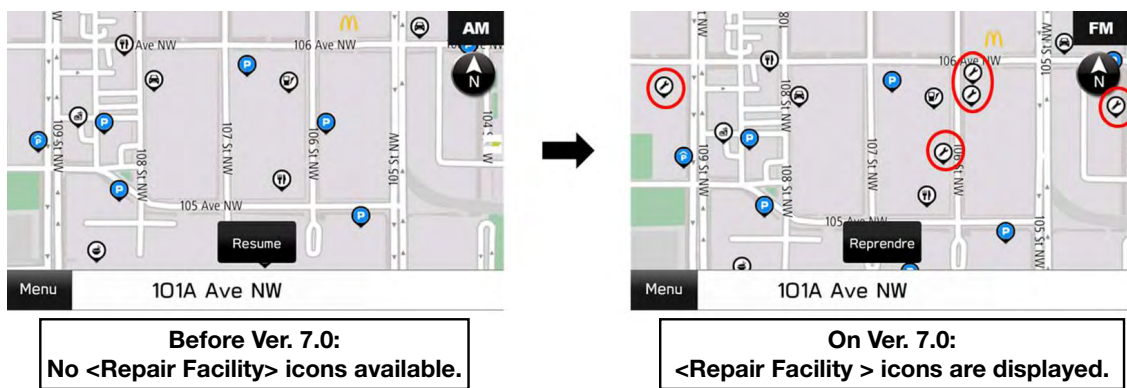
When an iPhone is connected via USB as an iPod to the Head Unit, the Bluetooth Audio connection cannot be established because the USB connection has priority but, even in this condition, the Bluetooth handsfree function can be used.



NOTE 4: Displaying Repair Facility POI icons:

<Repair Facility> Icons can be displayed in the NAVI Map.

<Repair Facility> Icons can be turned On or OFF by going to: Settings > Navigation > POI Icons.



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Conditions Addressed By Update #4:

- 1) Navigation Route Calculation takes too much time.
- 2) SXM Preset Program List is lost.
- 3) Enhanced CD (e-CD) does not play.
- 4) Voice recognition (VR) does not operate correctly.
- 5) When the ignition switch is turned on, music in USB memory goes back to track #1.
- 6) Phonebook cannot be downloaded from a connected smart phone.
- 7) When the ignition switch is turned on, a message of 'Invalid Destination Code' is displayed.
- 8) When using voice recognition for route searching, the state name is recognized wrong.
- 9) When MOTA (Map update Over The Air) is conducted, the map display goes blank (white) temporarily. In case the customer terminates the MOTA when in this condition, the map stays blank (white). See **NOTE 1** below.
- 10) Hands Free conversation volume not loud enough compared to the audio volume (unfavorable balance). See **NOTE 2** below.
- 11) Added function for SXM Weather Alert setup. See **NOTE 3** below.

NOTE 1: The MOTA operation is performed in two steps, i.e., Downloading (download the map data to the H/U via Wi-Fi) and Overwriting (replace the map data to new one inside the H/U.) Before updating the software to Ver. 6, the map screen turns blank (white) during the Downloading process until it is completed. If the customer stops (by turning off the H/U,) during the Downloading process, the map display will stay in blank condition. The MOTA operation can be restarted even in this condition. After the Ver. 6 software is installed, the map does not turn to blank (white) during Downloading. However, the map still turns to blank (white) during the Overwriting process, which is a normal operating characteristic.

NOTE 2: To meet with customer expectations, Ver. 6 software will increase the Hands-Free conversation volume by 6dB against the base audio volume. Customers will now be able to hear Hands Free conversation volume which used to be at audio volume level 30 at level 22 after installing this update. If the customer prefers the original Hands-Free conversation volume setting, it can be manually adjusted by following: Home >> Settings >> Sound Tab >> Phone Volume >> then lowering the volume 6 - 8 steps.

The base audio volume setting chosen at the Factory Data Reset is at level 22 compared to the previous setting, which is level 30. (This means customers will no longer have to adjust the base audio volume to get comfortable Hands-Free conversation volume.)

NOTE 3: Added function for SXM Weather Alert is only applicable to HIGH grade head unit.

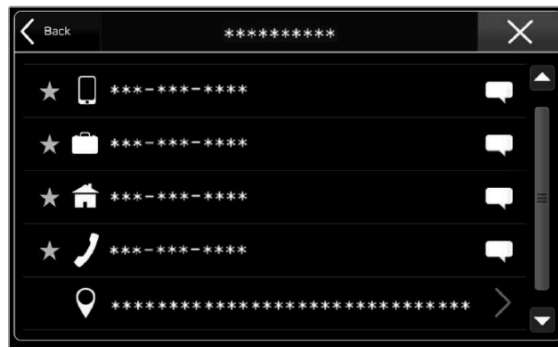
Conditions Addressed By Update #3:

- 1) Steering wheel satellite switches (other than volume control) and head unit hard buttons (other than volume control) may become inoperative at times.
- 2) For Crosstrek Hybrid, the charging scheduler function has been eliminated.

Continued...

Conditions Addressed By Update #2:

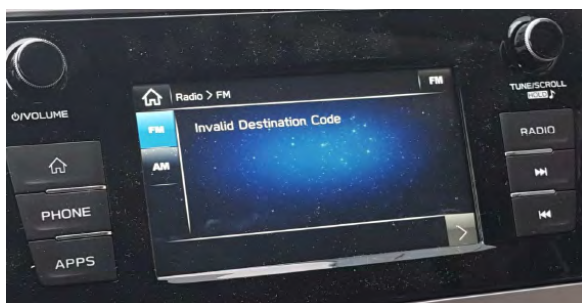
- 1) AM/FM radio station presets are lost.
- 2) Favorite Phone Contacts list is lost.



<Scan> previously displayed on SXM screen was changed to <Tune Scan> (a.k.a. SEEK).



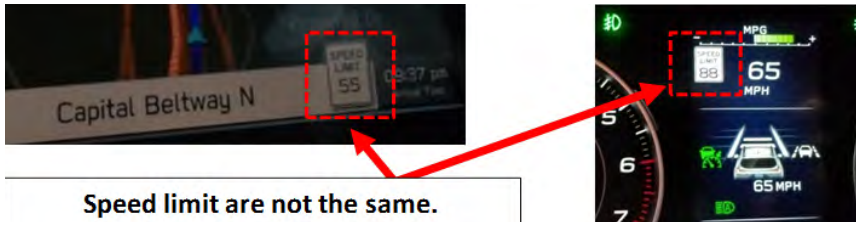
- 3) US State names corrected when using voice guidance.
- 4) Correction made for Pop / Crackling-type sound when using AM radio.
- 5) Navigation system freezes during loading / start-up.
- 6) Music skips/cuts out while using Apple CarPlay.
- 7) Hands-free feature freezes intermittently while loading.
- 8) Navigation system freezes after entering a particular address using Voice Recognition.
NOTE: All other functions are not affected.
- 9) The voice guidance volume no longer changes After Ignition Off/On. Once the Voice Guidance has been muted, the system retains that setting even after switching the ignition Off/On.
- 10) Invalid Destination Code message appears on the display while listening to the radio.



- 11) Spanish version FOTA (Firmware Over The Air) translation corrected.

Continued...

- 12) Mismatch of Speed Limit between Navigation display and the Speed Limit displayed in the Combination Meter Multi-Function Display (MFD).



Conditions Addressed In Prior Update #1:

- 1) Station presets are lost. Touch buttons read “Hold”. (Applicable for software versions Rel_4.18.25.50 (or before)). Included in software version Rel_U1.18.38.50.



- 2) A security enhancement was included in the November 2018 update. (Applicable for software versions Rel_4.18.25.50 (or before)). Included in software version Rel_U1.18.38.50.

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.

“Appendix A”

The following time line and symptom list represents conditions addressed by all previous Harman 3.1 updates including the most current version as described in this bulletin.

Harman Gen 3.1 Software Update Chronology (*TSB Number: 15-236-18R*)

Update #	Release Date:	NEW Version ID #:	Map Update Software ID #	Conditions Addressed:
0	7/1/2018	Rel4.18.11.50 Rel4.18.20.50 Rel_U1.18.20.60	Rel_U0.18.30.20**	
1	12/5/2018	Rel_U1.18.38.50	n/a	<ul style="list-style-type: none"> - Station presets are lost - Addition of the security enhancement
2	3/18/2019	Rel_UA.19.01.70	Rel_UD.19.17.70**	<p>Revised 15-236-18R, INCLUDES update #1 above and addresses these additional conditions:</p> <ul style="list-style-type: none"> - AM/FM radio station presets are lost. - Favorite Phone Contacts list is lost. - <Scan> previously displayed on SXM screen was changed to <Tune Scan> (a.k.a. SEEK). - US State names corrected when using voice guidance. - Correction made for Pop / Crackling-type sound when using AM radio. - Navigation system freezes during loading / start-up. - Music skips/cuts out while using Apple CarPlay. - Hands-free feature freezes intermittently while loading. - Navigation system freezes after entering a particular address using Voice Recognition. - The voice guidance volume no longer changes After Ignition Off/On. Once the Voice Guidance has been muted, the system retains that setting even after switching the ignition Off/On. - Invalid Destination Code message appears on the display while listening to the radio. - Spanish version FOTA (Firmware Over The Air) translation corrected. - Mismatch of Speed Limit between Navigation display and the Speed Limit displayed in the Combination Meter Multi-Function Display (MFD).
3	8/16/2019	Rel_UE.19.22.70	Rel_UE.19.25.70**	<p>Revised 15-236-18R, INCLUDES updates #1 & #2 above and addresses these additional conditions:</p> <ul style="list-style-type: none"> - The steering wheel satellite controls for the audio/ navigation system (other than volume control) and the audio/ navigation head unit hard buttons (other than volume control) may become inoperative intermittently. - The setting for scheduling charging will terminate (Only Crosstrek Hybrid).

**** NOTE:** These Map Update Software I.D. numbers contain the same functional updates as the corresponding New Version I.D. numbers.

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Update #	Release Date:	NEW Version ID #:	Map Update Software ID #	Conditions Addressed:
4	12/18/19	Rel_UA.19.36.70	Rel_UA.19.42.70** Rel_UF.20.28.70**	<p>Revised 15-236-18R, INCLUDES updates #1, #2 and #3 above and addresses these additional conditions:</p> <ul style="list-style-type: none"> - Navigation Route Calculation takes too much time. - SXM Preset Program List is lost. - Enhanced CD (e-CD) does not play. - Voice recognition (VR) does not operate correctly. - When the ignition switch is turned on, music in USB memory goes back to track #1. - Phonebook cannot be downloaded from a connected smart phone. - When the ignition switch is turned on, a message of 'Invalid Destination Code' is displayed. - When using voice recognition for route searching, the state name is recognized wrong. - When MOTA (Map update Over The Air) is conducted, the map display goes blank (white) temporarily. In case the customer terminates the MOTA when in this condition, the map stays blank (white). See NOTE 1 below. - Hands Free conversation volume not loud enough compared to the audio volume (unfavorable balance). See NOTE 2 below. - Added function for SXM Weather Alert setup. See NOTE 3 below.
5	12/21/2020	Rel_UA.20.38.70	Rel_UA.20.41.70 Rel_UH.21.13.70 Rel_UA.21.41.70** Rel_UA.22.05.45**	<p>Revised 15-236-18R, INCLUDES updates #1 - #4 above and addresses these additional conditions:</p> <ul style="list-style-type: none"> - Radio station information does not appear. - Activation Code Not Accepted by Navigation System when updating Map Data - For 19MY NAVI models, the map data update over the air (MOTA) is available using a mobile phone with the STARLINK App installed. For 20MY models, this function was incorporated at the start of production. - If of over 1000 addresses are stored in Phonebook, some part of Phonebook cannot be downloaded to the Head Unit. - When reading out SMS (Short Message Service or text message) in CarPlay, the voice breaks up or words are incorrectly pronounced. - On push-button start models, the word "key fob" is deleted from the note that appears when the operation setting of Rear Gate Unlock Button is selected. (Rear Gate equipped models only.) - When the iPhone is disconnected while playing music through the CarPlay function, the music source is no longer selected automatically (instead of automatically changing to RADIO.) - When an iPhone (CarPlay allowed) is connected using USB, the system moves to CarPlay screen no matter what is set in the <Auto Show Connected Device> menu in Setting. The Setting menu of <Auto Show Connected Device> is applicable only on Android Auto. - Repair Facility POI Icons are now shown on the NAVI map display. See 2-1-4 for details.

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Update #	Release Date:	NEW Version ID #:	Map Update Software ID #	Conditions Addressed:
6	7/27/2021	Rel_UH.20.52.70	Rel_UA.21.41.70** Rel_UA.22.05.45**	<p>Revised 15-236-18R, INCLUDES updates #1 - #4 above and addresses these additional conditions:</p> <ul style="list-style-type: none"> - Minor hardware (GPS module supplier) change on SBR / SIA production line. <p>NOTE:</p> <ol style="list-style-type: none"> 1. The new version software is installed ONLY at the production line, and NOT released as USB or FOTA update. 2. The Navi Head Unit part number does not change due to this software update. 3. The functionality of the Head Unit is not affected by this software update. 4. The above change will be implemented to production line from the beginning of April 2021 production at SIA and the end of April 2021 production at SBR.
7	8/12/2022	Rel_UG.22.13.70	Rel_UG.22.39.70**	<p>Revised 15-236-18R, INCLUDES updates #1 - #6 above and addresses these additional conditions:</p> <ol style="list-style-type: none"> 1) No Audio when HK AMP is installed (added fail-safe function to reset the external Harman Kardon amplifier in case of no sound failure) 2) Volume setting becomes inoperative 3) Buzzing Noise following Head Unit reboot (CarPlay is reset with noise) 4) Head Unit is stuck in phone mode following completion of the call 5) Multiple audio sources are playing simultaneously 6) Noise (random interruption) on AM radio 7) Bluetooth handsfree call disconnect using iPhone 8) Re-route search in Faster Route mode does not work 9) <Request code> is not shown completely in the pop-up menu for Paid Map License Renewal 10) Voice recognition address search does not work in some states in Mexico

Continued...

Update #	Release Date:	NEW Version ID #:	Map Update Software ID #	Conditions Addressed:
8	5/10/2023	Rel_UK.22.49.70	Rel_UL.23.13.70 **	<p>Revised 15-236-18R, INCLUDES updates #1 - #7 above and addresses these additional conditions:</p> <ol style="list-style-type: none"> 1) Message “DCM FOTA In Progress” is displayed following IGN-ON 2) Loss of Bluetooth pairing or difficulty connecting 3) Music played via Bluetooth device is lost (skipped or interrupted), when Apple Watch is being connected 4) If multiple phones (phone A and phone B) are connected via Bluetooth and phone A is playing music while phone B's registration is deleted, than phone A's registration can't be deleted 5) Android Auto does not launch 6) When playing music with Android Auto, the sound or volume control is lost 7) Android Auto does not launch automatically using Android phone connected prior to stopping CarPlay operation due to iPhone disconnection 8) CarPlay does not launch, after iPhone is connected 9) Clock setting changes on its own, when the time is set in manual mode 10) License confirmation logic improvement in Map Update process 11) USB Hub (AUX USB port) Reset function. Please follow TSB 15-314-23 as well to confirm proper hardware is installed* * Please follow TSB 15-314-23 to confirm proper hardware is installed
9	12/15/2023	Rel_UK.23.16.70	Rel_UK.23.42.70** Rel_UM.24.08.70**	<p>Revised 15-236-18R, INCLUDES updates #1 - #8 above and addresses these additional conditions:</p> <ol style="list-style-type: none"> 1) Error message appears and Android Auto does not start when connected via USB cable 2) No response to the operation on Android Auto screen 3) Screen freezes while using Android Auto 4) When an IGN cycle is performed while using Android Auto, the registered phonebook is grayed out and phonebook favorites disappear 5) CarPlay widget is displayed on the taskbar when CarPlay is launched, but the CarPlay icon is not displayed on the Home screen 6) Expansion of data storage for MOTa (data size limit per region for MOTa is extended from 2 GB to 2.3 GB) 7) Unable to play News on Google Assist

Continued...

**** NOTE:** These Map Update Software I.D. numbers contain the same functional updates as the corresponding New Version I.D. numbers.

NOTE 1: The MOTA operation is performed in two steps, i.e., Downloading (download the map data to the H/U via Wi-Fi) and Overwriting (replace the map data to new one inside the H/U.) Before updating the software to Ver. 6, the map screen turns blank (white) during the Downloading process until it is completed. If the customer stops (by turning off the H/U,) during the Downloading process, the map display will stay in blank condition. The MOTA operation can be restarted even in this condition. After the Ver. 6 software is installed, the map does not turn to blank (white) during Downloading. However, the map still turns to blank (white) during the Overwriting process, which is a normal operating characteristic.

NOTE 2: To meet with customer expectations, Ver. 6 software will increase the Hands-Free conversation volume by 6dB against the base audio volume. Customers will now be able to hear Hands Free conversation volume which used to be at audio volume level 30 at level 22 after installing this update. If the customer prefers the original Hands-Free conversation volume setting, it can be manually adjusted by following: Home >> Settings >> Sound Tab >> Phone Volume >> then lowering the volume 6 - 8 steps.

The base audio volume setting chosen at the Factory Data Reset is at level 22 compared to the previous setting, which is level 30. (This means customers will no longer have to adjust the base audio volume to get comfortable Hands-Free conversation volume.)

NOTE 3: Added function for SXM Weather Alert is only applicable to HIGH grade head unit.