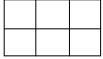
ATTENTION:

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 INFORMATION BULLETIN

APPLICABILITY: 2015-2017MY Legacy and Outback

2015-2016 Impreza 2015-2017 Crosstrek 2016-2018MY Forester 2016-2018MY WRX **NUMBER:** 15-205-16R

SUBARU.

DATE: 11/21/16

REVISED: 08/21/18

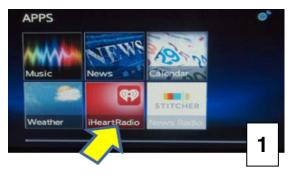
SUBJECT: Reprogramming File Availability to Address

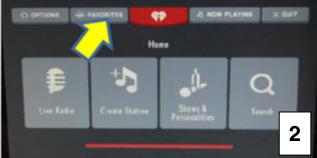
Operational Concerns with "Gen 2.0" and "Gen 2.1" Fujitsu-TEN (F10) Navigation and 7" Display Audio Units

INTRODUCTION:

This bulletin announces new reprogramming file availability and the software installation procedure to address additional operational concerns received from the field and listed below involving "Gen 2" F10 Navigation and Display Audio units with 7" display. The procedure will involve downloading the applicable software update files then loading them onto two flash drives for audio unit installation. It is important to read through and understand this information completely before proceeding. These latest software updates contain new logic to address the following concerns:

- SXM channels higher than 256 cannot be selected using the voice command feature.
- Additional characters appear (in this example, question ??? marks) after entering an e-mail address and password using the software keyboard when attempting to log in to an iHeart radio account as shown in the screen shot sequence below.





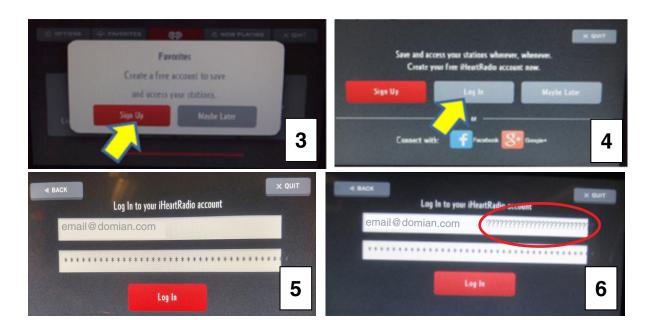
Continued...

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.

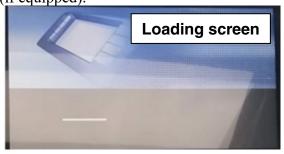
SUBARU OF AMERICA, INC. IS ISO 14001 COMPLIANT

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.



• The Navigation system re-boots from the Loading screen (not the STARLINK screen) when utilizing the remote engine starter (RES) feature (if equipped).





- The Navigation system freezes when rerouting if traffic information is supplied by SXM is used.
- Mirrorlink 1.1 updates
- Enable Mute function for Navigation guidance
- Incomplete display of intersection names in combination meter
- Increased accuracy of the XM Traffic information displayed
- Intermittent delay (approximately 1 minute) in display of map information after initial start-up of Navigation function (2015MY Legacy and Outback only).

VERY IMPORTANT: In addition to updates for above conditions, each of the new files listed in the table below contain ALL of the previous updates for conditions referenced in prior TSBs **15-182-15R**, **15-183-15R** and **15-198-16R** which this TSB replaces. An overview of conditions addressed in the three prior TSBs is provided below.

Symptoms addressed in TSB 15-182-15R and 15-183-15R dated 8/11/2015:

Symptom 1: Audio output is lost after a few minutes when listening to SXM satellite radio. **Change:** Logic update to provide proper SXM satellite radio operation.

Symptom 2: Bluetooth feature becomes inoperative.

Change: Logic update to provide proper Bluetooth feature operation.

Symptom 3: HD Radio "freezes" after a few minutes of play.

Change: Logic update to provide proper SXM satellite radio operation.

Symptom 4: Back-Up Camera "help lines" do not appear.

Change: Logic change to have the assist lines appear 8 seconds from engine start.

Symptom 5: Map location is inconsistent between Navigation display and iPhone when using the iPhone's Google Maps with the phone connected to the USB port in console.

Change: Logic update to show correct vehicle location on iPhone.

Symptom 6: Roads or interchanges have the same name displayed multiple times.

Change: Logic update to show only one road or interchange name at the same time.



Symptom 7: Navigation function is slow to start when selected.

Change: Logic change to eliminate Navigation system slow-starting condition.

Symptom 8: No map display with key or ignition in "ACC" (accessory) position.

Change: Logic change to allow Navigation system operation in accessory ACC mode.

Symptom 9: No voice guidance provided from Navigation system after selecting a route unless the ignition is cycled off and back on again.

Change: Logic change to stop voice guidance "Mute" function from defaulting to "ON".

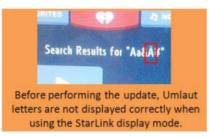
Symptom 10: Steering wheel switch controls inoperative with iPod (MP3) player connected to the USB.

Change: Logic change to allow proper steering wheel (satellite) switch functionality.

Symptom 11: Incorrect Umlaut characters are shown on STARLINK display.

Change: Logic change to allow proper display of Umlaut letters.







Symptom 12: No response from the soft touch keys on display.

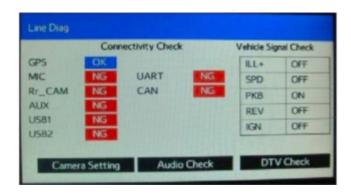
Change: Logic change to improve communication between display and internal CPU.

Symptom 13: Back-Up Camera is displayed with shifter in positions other than Reverse.

Change: Logic change to allow display with shifter in Reverse only.

Symptom 14: "Line Diag" screen is intermittently displayed while driving.

Change: Logic change to prevent display of the "Line Diag" screen.



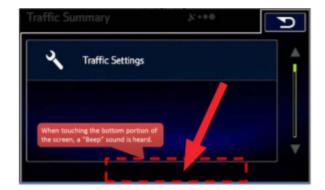
Symptom 15: "LIST" soft touch key is not displayed on Bluetooth Audio screen while using Bluetooth audio feature with an Apple device utilizing iOS8 software version.

Change: Logic change to enhance compatibility with iOS8 software.



Symptom 16: "Beep" sound heard when touching the bottom of the display screen where no function soft touch keys are displayed.

Change: Logic change to eliminate beeping sound from inactive soft touch key screen areas.



Symptom 17: SXM caution message screen is displayed in English even when French language operation settings are selected.

Change: Logic change to make all messages display in the selected operating language.



Symptoms 18-23: The following symptoms are all related to the inability of the software to properly load. One or all of these 5 conditions may occur at the same time.

Change: Logic updates included where applicable to address each of the following conditions:

Symptom 18: Repeated display of the "Loading" screen at initial unit start-up.



Loading Screen

Symptom 19: Bluetooth device pairing failure.

Symptom 20: Inoperative steering wheel (satellite) switches.

Symptom 21: Voice recognition feature inoperative.

Symptom 22: SXM radio feature inoperative.

NOTE: The July 2018 update includes a single enhancement to Gen 2.1 audio units ONLY and contain all previous enhancements along with **Symptom 23** as described below. See the revised update file application table on pg. 7. The July 2018 update does not include any NEW enhancements for these Gen 2.0 equipped models.

Symptom 23: Unable to access SXM source or switch to SXM channels by using the preset buttons on the display.

Symptom and updates outlined in SB 15-198-16R dated 7/8/2016:

- Logic change to provide a " " (underscore) character on the keyboard.
- Logic change to match engine oil maintenance remaining mileage on the maintenance reminder screen to the odometer meter value on the combination meter when mileage unit is set to read in "KM" (kilometers).
- Logic change to insure the Vehicle Mode indicator on the Vehicle Monitor screen matches the actual vehicle status. Example: The wheel indicators on the vehicle monitor screen no longer stay illuminated indicating VDC is "active" after VDC activation is complete.



- Logic change to address improper calculation used by the head unit to determine Average Lifetime Fuel Consumption displayed on the ECO monitor.
- Logic change to address Voice Recognition error when user says "Radio" or "Music".
- Logic change to address the radio (audio) not resuming play automatically after ending a Bluetooth call.
- Logic change to address FM radio station presets resetting to 87.5MHz intermittently when cycling the ignition OFF to ON.
- Logic change to address AM radio station presets resetting to 513KHz intermittently and possible switch from AM to FM if a 513KHz preset is selected.

PRODUCTION CHANGE INFORMATION:

All of the above updates were incorporated into production at various times based on model. For this reason and to reduce confusion, the recommendation is to always perform the Version Check procedure to verify the currently installed software version before attempting to reprogram any audio unit (see **Step 1** on page 8). Compare the result to the updated table shown below. If the current version number is PRIOR to the version number listed in the table, continue with the updating procedure.

2	2015* -	NAVI / DA NAVI	FB644US FB664US FB664UM FB664UM FB685US	Update File #1 Name NU9020_USB_1st.zip	Update File #2 Name NU9020_USB_2nd.zip	Subarunet Link Title 2015MY Legacy & Outback w/ F10 7" NAVI Update File #1- 12-2017
Legacy &		DA	FB664US FB664UM	NU9020_USB_1st.zip	NU9020_USB_2nd.zip	
Legacy &		DA	FB644UM FB664UM	NO9020_05B_1st.zip	NO3050_028_5110.51b	
Legacy &			FB664UM		NU9020_USB_2nd.zip	2015MY Legacy & Outback w/ F10 7" NAVI Update File #2- 12-2017
	2016			OU9019_USB_1st.zip	OU9019_USB_2nd.zip	2015MY Legacy & Outback w/ F10 7" DISPLAY AUDIO Update File #1- 12-2017
	2016	NAVI	FB685US			2015MY Legacy & Outback w/ F10 7" DISPLAY AUDIO Update File #2- 12-2017
	2016	NAVI		NU9312_USB_1st.zip	NU9312_USB_2nd.zip	BE5_MY16_LEG_OUT NAVI Update File #1
	2016		FB695US			BE5_MY16_LEG_OUT NAVI Update File #2
			FB685UM	OU9311_USB_1st.zip	OU9311_USB_2nd.zip	BE5_MY16_LEG_OUT DISPLAY AUDIO Update File #1
		DA	FB695UM			BE5_MY16_LEG_OUT DISPLAY AUDIO Update File #2
	2017	NAVI	FB876US	LONNU9509_1_USB_1st.zip	LONNU9509_1_USB_2nd.zip	BD6_MY17_LEG_OUT NAVI Update File #1
			FB856US			BD6_MY17_LEG_OUT NAVI Update File #2
2		DA	FB856UM	LODAOU9508_1_USB_1st.zip	LODAOU9508_1_USB_2nd.zip	BD6_MY17_LEG_OUT DISPLAY AUDIO Update File #1
			FB876UM			BD6_MY17_LEG_OUT_DISPLAY AUDIO Update File #2
						2015MY Impreza / Crosstrek w/ F10 7" NAVI Update File #1- 3-2018
		NAVI	FM634US FM664UM	NU9114(US)_USB_1st.zip OU9113(US)_USB_1st.zip NU9410_USB_1st.zip	NU9114(US)_USB_2nd.zip OU9113(US)_USB_2nd.zip NU9410_USB_2nd.zip	2015MY Impreza / Crosstrek w/ F10 7" NAVI Update File #2- 3-2018
2	2015*					2015MY Impreza / Crosstrek w/ F10 7" DISPLAY AUDIO Update File #1- 3-2018
		DA				2015MY Impreza / Crosstrek w/ F10 7" DISPLAY AUDIO Update File #2- 3-2018
			FM655UH			MB5_MY16_IMP_CROS NAVI Update File #1
Impreza		NAVI	FM675UH			
& 2	2016					MB5_MY16_IMP_CROS NAVI Update File #2
Crosstrek		DA	FM705UM	0U9409_USB_1st.zip	OU9409_USB_2nd.zip	MB5_MY16_IMP_CROS DISPLAY AUDIO Update File #1
\vdash			FM685UM			MB5_MY16_IMP_CROS DISPLAY AUDIO Update File #2
		NAVI	FM666US	OU9409_USB_1st.zip	ICNNU9509_USB_2nd.zip	MA6_MY17_IMP_CROS NAVI Update File #1
2	2017		FM686US			MA6_MY17_IMP_CROS NAVI Update File #2
		DA	FM685UM			MA6_MY17_IMP_CROS DISPLAY AUDIO Update File #1
				'	'	MA6_MY17_IMP_CROS DISPLAY AUDIO Update File #2
		NAVI	FF667US	NU9914_USB_1st.zip	NU9914_USB_2nd.zip	2016MY Forester w/ F10 7" NAVI Update File #1- 12-2017
2	2016*		FF687US			2016MY Forester w/ F10 7" NAVI Update File #2- 12-2017
		DA	FF667UM	OU9913_USB_1st.zip	OU9913_USB_2nd.zip	2016MY Forester w/ F10 7" DISPLAY AUDIO Update File #1- 12-2017
			FF687UM			2016MY Forester w/ F10 7" DISPLAY AUDIO Update File #2- 12-2017
		NAVI DA	FF868US	NU9410_USB_1st.zip	NU9410_USB_2nd.zip OU9409_USB_2nd.zip	FJ8_MY17_FOR NAVI Update File #1
Forester 2	2017		FF878US	1400 110_00B_10t.21p		FJ8_MY17_FOR NAVI Update File #2
			FF678UM	OU9409_USB_1st.zip		FJ8_MY17_FOR DISPLAY AUDIO Update File #1
L			FF698UM			FJ8_MY17_FOR DISPLAY AUDIO Update File #2
		NAVI	FF629US	NU9609_USB_1st.zip	NU9609_USB_2nd.zip	FH9_MY18_FOR NAVI Update File #1
	2018	IVAVI	FF639US	100000_00b_13t.zip	1400003_00b_211u.zip	FH9_MY18_FOR NAVI Update File #2
'	2010	DA	FF689UM	OU9608_USB_1st.zip	OU9608_USB_2nd.zip	FH9_MY18_FOR DISPLAY AUDIO Update File #1
		DA	FF679UM	003000_00B_13t.zip	003000_00B_ZNd.zip	FH9_MY18_FOR DISPLAY AUDIO Update File #2
		NAVI	FV631US	NU9211_USB_1st.zip	NU9211_USB_2nd.zip	2016MY WRX w/ F10 7" NAVI Update File #1- 12-2017
	2016*	IVAVI	1 100100	14002/1_00D_13t.Zip	14092 i 1_03b_2ilu.zip	2016MY WRX w/ F10 7" NAVI Update File #2- 12-2017
		DA	FV651UM	OU9210_USB_1st.zip	OU9210_USB_2nd.zip	2016MY WRX w/ F10 7" DISPLAY AUDIO Update File #1- 12-2017
						2016MY WRX w/ F10 7" DISPLAY AUDIO Update File #2- 12-2017
	2017	NAVI	FV624US	WNNU9509_USB_1st.zip	WNNU9509_USB_2nd.zip	VJ2_MY17_WRX NAVI Update File #1
WRX &						VJ2_MY17_WRX NAVI Update File #2
WRX STI 2		DA	FV662UM	WDAOU9508_USB_1st.zip	WDAOU9508_USB_2nd.zip	VJ2_MY17_WRX DISPLAY AUDIO Update File #1
			FV672UM			VJ2_MY17_WRX DISPLAY AUDIO Update File #2
	2018	NAVI	FV673US	NU9609_USB_1st.zip	NU9609_USB_2nd.zip	VH3_MY18_WRX NAVI Update File #1
						VH3_MY18_WRX NAVI Update File #2
		D.*	FV843UM	0110000 1105 4 1 1	0110000 1100 0 1 1	VH3_MY18_WRX DISPLAY AUDIO Update File #1
		DA	FV833UM	OU9608_USB_1st.zip	OU9608_USB_2nd.zip	VH3_MY18_WRX DISPLAY AUDIO Update File #2
*The July	v 201	8 unda	ite does r	not include any NFW e	enhancements for thes	se Gen 2.0 equipped models.

NOTE: Software Version Numbers (as referenced in the Service Procedure below) are included in the Update Software File names. Example: NU9017 and OU9106 are Version Numbers.

MATERIALS REQUIRED:

2 empty 2GB, USB 2.0 storage devices (flash drives) will be needed to perform these updates. The drives should be dedicated to storing and transferring these updating files only. They also need to be no more than 4GB in size and contain a FAT32 file format before downloading update files onto them. Do **NOT** use any USB drives which contain or require the use of file management, encryption, file backup or other software to function.

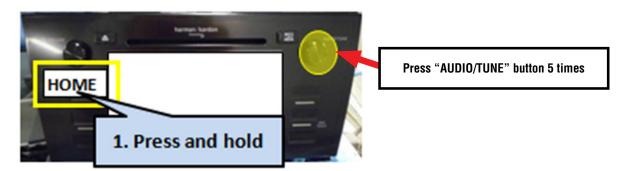


SERVICE PROCEDURE / INFORMATION:

IMPORTANT REMINDER: Read through and understand this procedure **COMPLETELY** before proceeding further.

Step 1: Version Check Procedure

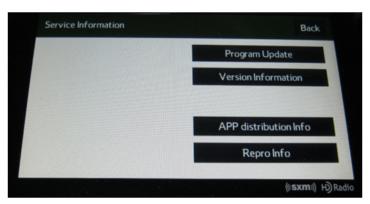
Before proceeding with any updates, the currently installed software version must be determined. If the latest software version (or later) is already installed, no updates are necessary. The Version ID numbers for this procedure are found in the Update File Applicability / Information table shown above. If the Version ID numbers identified during the Version Check procedure are prior to (or lower than) those shown on the table, proceed with the remainder of the software update beginning with **Step 3**.



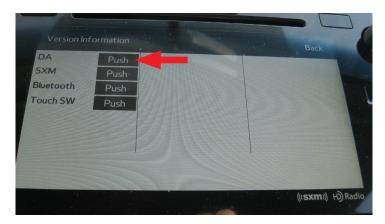
• Switch the unit into "Diagnosis Mode" by pressing and holding the HOME button while pressing the "AUDIO/TUNE" button 5 (five) times.



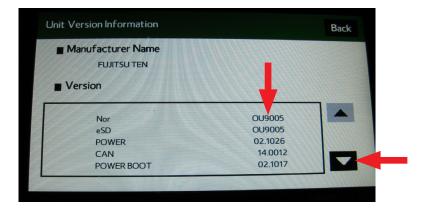
Press "Service Information"



• Press "Version Information"



• Press "Push" next to DA (or AVN for Navigation units)



- Verify the current versions according to the Update File Applicability / Information table shown table shown on page 7. Use the down arrow to scroll to the bottom of the list for complete verification.
- If the software version is current, press and HOLD the HOME button to exit the Diagnostic Mode and complete the procedure as no updates are necessary. If no updates are necessary, continue your diagnosis of the customer concern. If the Version ID numbers are prior to (lower than) those shown in the table above, proceed with **Step 2**, preparing the USB memory (Flash Drives) then **Step 3**, the software update procedure.

NOTE: If updates are necessary, the Version Check procedure will need to be performed again after each update installation to confirm the procedure was successful.

After performing the Version Check procedure, if updates are determined to be necessary, the 2 USB flash drives will be needed to download the Update Files onto. All the F10 update files are accessible for downloading from Subarunet under: Service>>Forms / Downloads>>Downloads for Audio/Navi page then clicking on the applicable hyperlink:

Click Here to Access the Downloads for Audio/Navigation Information on Subarunet



In addition, these files have also been sent to Retailer SDS systems by Nuspire and can be found in My Documents listed as: "F10Software Updates Gen 2.0 and 2.1Audio and Navi Head Units". The Subarunet page shown above will display which contains links to the update files 1 & 2 for each model head unit. Do not download any files at this point. The file download procedures are supplied later in this bulletin. The 2 flash drives must be formatted before the Update Files can be downloaded onto them as outlined in **Step 2** below.

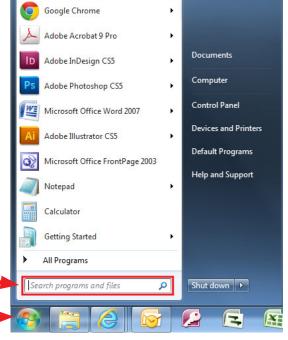
Step 2: Prepare the USB Memory (flash drive)

VERY IMPORTANT: Before attempting to download any data files, confirm the PC and flash drives you are using are not infected with any virus. The flash drives will need to be formatted for FAT32 following the steps below.

USB Flash Drive Formatting Procedure:

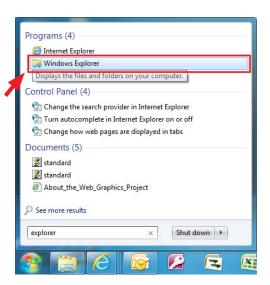
- Install a flash drive into an available USB port on your PC.
- Click **Start** (this is located in the lower left corner of the desktop screen) then, in the **Search programs and files box**, type "explorer".

Start Button

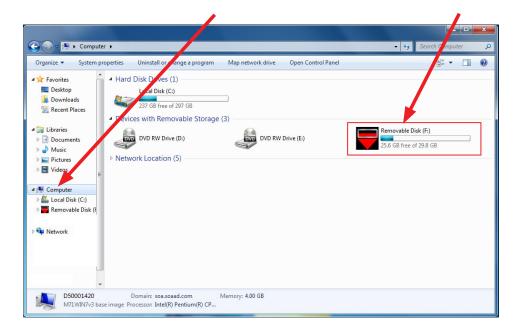


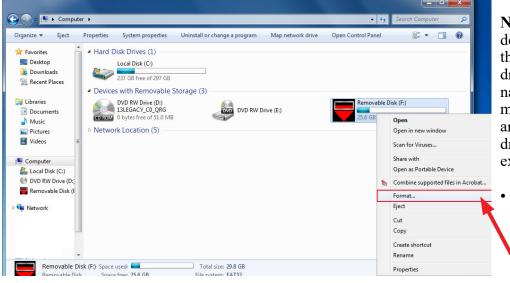
NOTE: On SDS Notebook you may also press the My Documents button on the GUI Home Screen.

• As you type the word "explorer", search results will start to appear. In the results, click on the "Windows Explorer" option under the Programs section.



• In the next window, choose the Computer section on the left. Locate "Removable Disk"

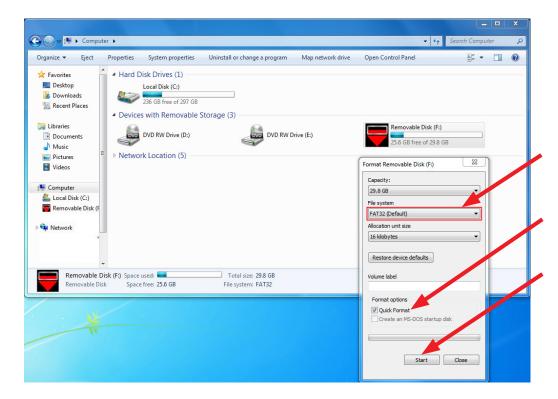




NOTE: Always confirm the device you are formatting is the USB Flash Drive. This drive may have various names assigned to it by the manufacturer of the device and may not reflect the drive name given in this example.

 Right click the picture for "Removable Disk" then select "Format".

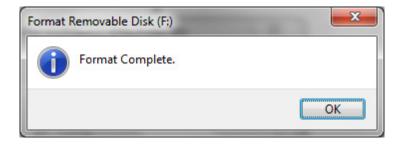
• When the "Format" dialog box appears, make sure that the option labeled "File System" is set to FAT32 and the Quick Format box is checked as well. Then, click the "Start" button.



• Click "OK" when the following window appears.



• The drive will start formatting and display this window when it is finished. Click "OK" to complete the process.



• Repeat the procedure above for the second flash drive

Step 3: File Download Procedures

After formatting the 2 flash drives is complete, the two Update Files must be downloaded from either the Subarnet links or from the My Documents section of the SDS system when using the files sent by Nuspire, one to each flash drive. Label them Drive "1" and Drive "2". The updates must be installed in order, Drive "1" first followed by Drive "2".

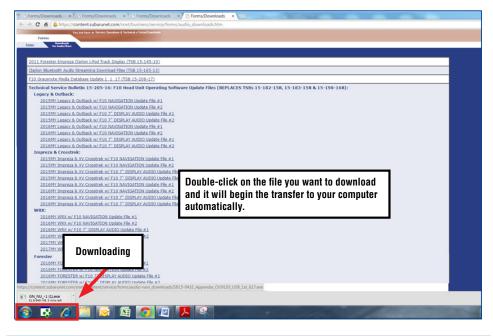
Follow "A" when using files downloaded from Subarunet.

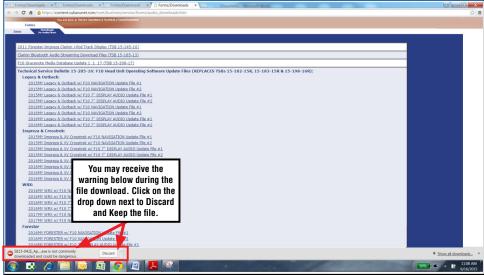
Follow "B" when using the files sent directly to the SDS notebook from Nuspire (page 17).

"A" When using update files downloaded from Subarunet:

NOTE: Update File #1 contains 1 file. Update File #2 contains 3 files. The Subarunet screenshots below will take you through the steps required to get the selected Update Files onto the flash drives and ready to use. Update File sizes are quite large and depending on the speed capabilities of the computer, it may take some time to complete the downloads.

PLEASE BE PATIENT!



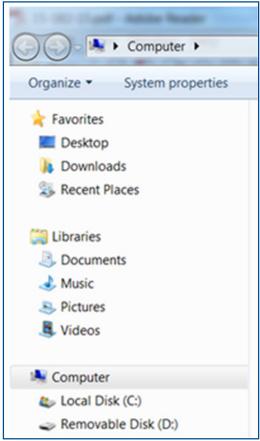


Once the downloads are complete, locate the Update Files (reference the chart on page 7 for the file names) in the Downloads Folder. Once you locate each file, unzip them one at a time to transfer their contents to the appropriate USB flash drive. As an example, update NU9020_USB_1st.zip for a 2015 Legacy would be unzipped to USB #1 and NU9020_USB_2nd.zip would be unzipped to USB #2. **NOTE:** If not already done, follow the procedure (**Step 2**) for formatting (removing any existing files) your flash drives. Plug the "clean" flash drive into your computer.

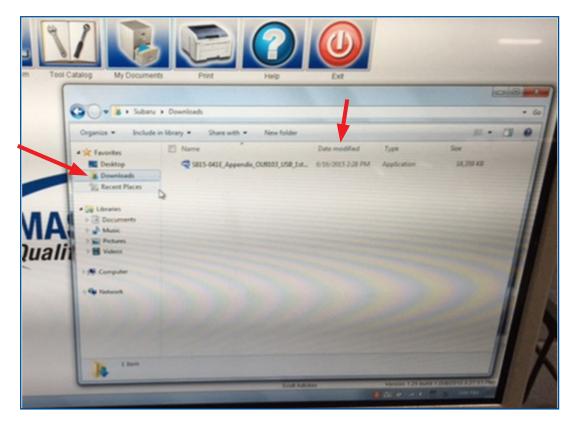
• Go to your Windows Start screen, select "Computer" (or click on My Documents if you are using the SDS notebook) and click on "Downloads".





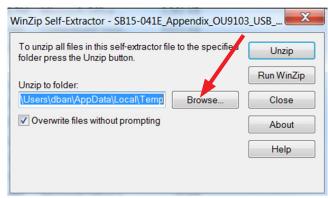


• Once your list of downloaded files opens, locate and click on the downloaded Update Files (in this example, "OU9103_USB...") you are looking for. **TIP:** If you click on Date Modified you can sort the downloaded files by the date they were added which will bring the newest file to the top.

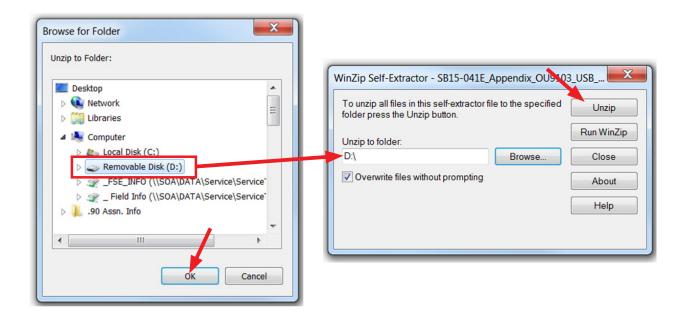


- Double clicking the Update File will bring up a dialogue box with a security warning, click on "Run" to continue.
- Click on "Browse"





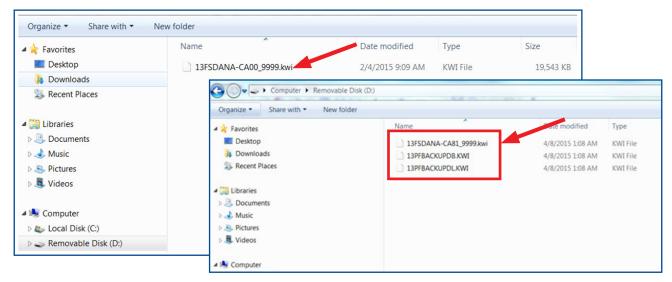
• As shown below, click on "Removable Disk" which is your USB flash drive where you want the unzipped file(s) to be saved. Click "OK" then click on "Unzip".



The Update File will unzip and be saved to your flash drive.



• Confirm the Update File (and flash drive) is ready to use by going back to Start > Computer and double clicking on "Removable Disk" to display the drive's contents as shown in the examples below. All of the files will have a ".kwi" extension at the end of their file name. If OK, proceed with Step 4: Update Software Installation starting on page 18.



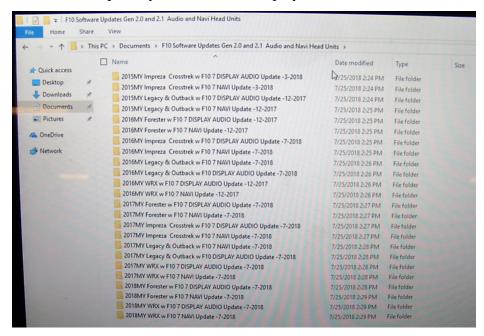
REMINDER: There can only be **ONE** Update File stored on each flash drive or the update procedure will not work. If you see more than one Update File stored, start over by re-formatting the flash drive again and reloading the Update File you are trying to install.

IMPORTANT REMINDERS:

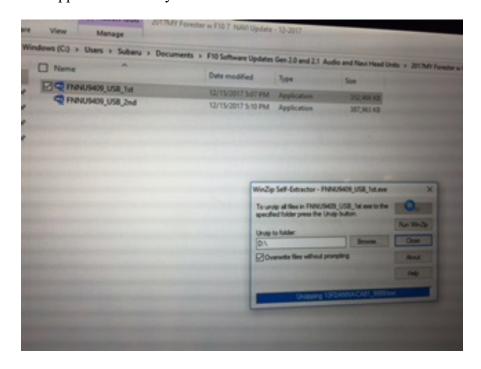
- Do not change the Update File names after downloading them.
- Do not save any other version Update Files onto the flash drives.

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

• From the GUI screen, open My Documents to display the list of available files shown below.



- Insert a "clean" USB flash drive (Drive 1) into the computer being used for the download.
- For these F10 updates, after clicking on the file for the vehicle being updated, 2 files will be displayed as shown below. Like the files downloaded from Subarunet, they too are .zip files and need to be "unzipped" before they can be used.



• Click on the first file (file name ends with _1st). A WinZip Self-Extractor dialog box will appear.

- Click on "Browse" and select the USB flash drive as the destination ("D:\" in this example)
- Click on Unzip.
- When file transfer to the USB flash drive is complete (a "unzipped successfully" box will appear), click on "OK", remove Drive 1 and replace it with Drive 2.
- Repeat the above steps and transfer the contents from the second file (ending with _2nd) to Drive 2.
- Confirm both USB flash drive and files are ready to use by double clicking on each ("D:\" in this example) to display their contents. Drive 1 will have just 1 file while the Drive 2 will have 3.
- Unplug Drive 2 and proceed to **Step 4** below.

Step 4: Update Software Installation

NOTE: Because of the time it takes to perform these updates, Subaru of America, Inc. (SOA) highly recommends connecting the Subaru Midtronics GR8 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Follow the procedure as outlined in document GR8-1100 on STIS for use of the GR8's Power Supply Mode:

- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched **OFF** before setting up for Power Supply Mode.
- Select the correct battery type (Flooded, AGM or AGM Spiral).
- Select the CCA which matches the vehicle's battery (**NOTE:** OE and replacement batteries have different CCA ratings. Always confirm the battery rating before proceeding.)
- If the "Charge Battery" **WARNING** appears, the battery **MUST** be charged before attempting reprogramming.
- **DO NOT** connect the DSTi or SDI until the GR8 Power Supply mode has completed its battery test mode and the Charging Voltage has dropped to a steady 13.5 Volts on the display.
- If the GR8 "beeps" or the Status Light flashes, a diagnostic charge should be performed on the battery before proceeding further.
- Once Power Supply Mode reaches a steady 13.5 volts, connect the DSTi or SDI to the OBD connector and initiate the reprogramming process.
- Amperage will fluctuate based upon the vehicle's demand for power. **NOTE:** If the voltage rises beyond 14V while programming is in process, the procedure will abort. This can indicate a need to test or charge the vehicle battery before any further attempt at programming.

IMPORTANT:

This information is applicable to the Midtronics GR8 Diagnostic Battery Charger **ONLY**. It does not apply to any other brand / type of "generic" battery charger whatsoever. **ONLY** the GR8 and its Power Supply Mode feature has been tested and approved by SOA.

Once the GR8 is connected to the vehicle, **as long as the battery is fully charged**, it takes less than 3 minutes to boot-up the charger, select Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

REMINDER: If the GR8 indicates the vehicle's battery must be charged, charge the battery using the GR8 before proceeding to reprogram the vehicle.

Version Update Procedure



• Turn the ignition / key (ACC) "ON".



Press the "AUDIO/TUNE" button.
 The Select Audio Source screen will appear.



Install Drive "1" (or Drive "2" after successful installation of Drive "1" update is confirmed) into the vehicle's USB port. After the flash drive is recognized, the USB icon will illuminate.

• Once the USB icon is illuminated, switch the unit into "Diagnosis Mode" by pressing and holding the HOME button while pressing the "AUDIO/TUNE" button 5 (five) times.



2. Press "AUDIO/TUNE" button 5 times



• Press "Service Information"



Press "Program Update" then follow the sequence shown in the screen shots on the next page







Wait for "OK" to activate (turn black)

Press "OK"

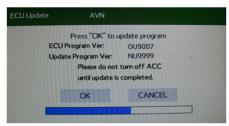
Press "SELECT"

CAUTION: Confirm the intended new version is displayed before clicking Select. **NOTE:** The "**OK**" button will not activate (turn black) if the wrong Update File(s) are on the flash drive. Re-format the flash drive and reload the proper Update Files starting from the beginning of

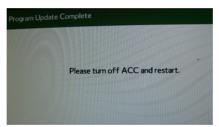
Step 2.



Press "OK"



Once the updating starts, the status bar may need to complete more than once and could take up to about 15 minutes.



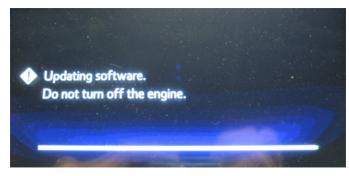
Turn off ACC



If the progress bar stops, please wait 15 minutes. If the progress bar does not change even if after 15 minutes, turn ACC OFF and back ON again then, restart the update procedure from **Step 4.**

IMPORTANT: Do not turn the ACC (ignition / key) off or disconnect the flash drive from the USB port during updating.

- Once the update completes successfully, turn the ACC off,
 WAIT 30 SECONDS then turn it back on again.
- After the unit boots back up, the "Updating software" screen and its status bar will be displayed. This update may take up to 5 minutes to complete.



When the Software Updates complete, the unit will restart automatically. Once the STARLINK opening screen is displayed, remove the flash drive from the USB port and turn the ignition off. **CRITICAL STEP:** Before proceeding further, perform **Step 1** (Version Check Procedure) again to confirm the updated software installation from Drive "1" was successful. When the update is successful, the new software version number will be displayed. If OK, proceed with installation of the Drive "2" update (repeat **Step 4**, Update Software Installation). If the updated versions are not displayed, **Step 4** using Drive "1" must be repeated. Once the software and CAN version updates are confirmed, insert Drive "2" and repeat **Step 4**.

Step 5: Version Check Procedure

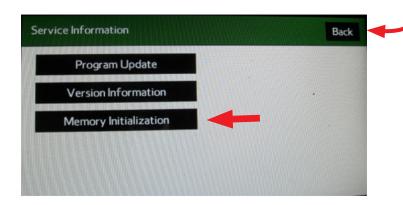
As mentioned earlier, once both update software installations are complete, the Version Check procedure (**Step 1**) must be performed again to confirm all of the updates have been installed successfully.

Step 6: Memory Clear Procedure

After confirming both software updates have been installed successfully, the Memory Clear procedure must be performed to complete the update procedure.

NOTE: All presets will likely be lost and will need to reset after performing this procedure.

After pressing "Back", the following screen will be displayed:

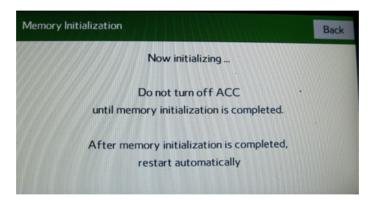


Press "Memory Initialization"



 Press and HOLD the "OK" button until the screen shown below is displayed (5 to 10 seconds).

Press and Hold



This screen will be displayed for about 1 minute while the unit restarts. After restart, the Loading screen and its status bar will be displayed. After the status bar completes, the Main Menu screen will be displayed. To complete the updating procedure, you must go through the series of Initial Setup screens, reset the radio station presets and re-pair any mobile devices (where applicable).

NOTE: After confirming the updates are complete, remove the labels and re-format both flash drives to clear any remaining files so they are ready for use the next time. This reduces the chances of inadvertently combining files the next time the drives are used. It also ensures that every repair receives the very latest software as these files will be updated from time to time whenever a newer version is released.

WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period or covered by a Subaru Added Security Gold plan, this repair may be submitted using the following claim information:

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.

LABOR DESCRIPTION	LABOR	FAIL	LABOR
	OPERATION #	CODE	Time
F10 AUDIO/NAVIGATION HEAD UNIT UPDATE	A031-128	ZQL-48	1.0

NOTE: Up to \$12.00 may be claimed ONE TIME in sublet to cover the cost for the 2 USB Flash Drives (\$6.00 each).

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.

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