

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: 2015MY Legacy, Outback, Impreza and XV Crosstrek Models with Fujitsu-Ten (F10) Navigation System

NUMBER: 15-182-15
DATE: 06/17/15

SUBJECT: Procedures for Updating the Head Unit Operating Software

INTRODUCTION:

This bulletin announces a procedure for updating the navigation / audio unit’s operating system software. The following list of symptoms and related changes provides a brief description of which customer concerns the updates are intended to address. If the reported customer concern is not identified in the following information, performing the update procedure will not address it. It is important to read through and understand this information completely before proceeding.

SYMPTOMS AND CHANGES:

- **Symptom 1:** Audio output is lost after a few minutes when listening to Sirius/XM satellite radio.
Change: Logic update to provide proper Sirius/XM 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 Sirius/XM 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 change to show only one road or interchange name at the same time. *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.

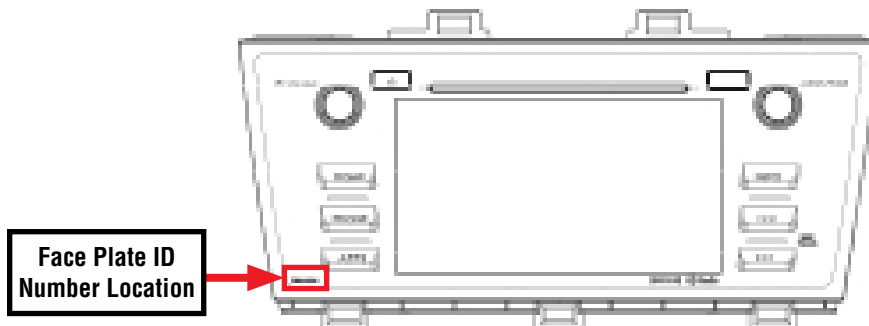
- **Symptom 7:** Navigation function is slow to start when selected.
Change: Logic change to eliminate Navigation system slow-starting condition.
- **Symptom 8:** No map display with key or ignition in “ACC” (accessory) position.
Change: Logic change to allow Navigation system operation in accessory 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 are inoperative with an 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.

The following information provides procedures for verifying the current head unit operating software version number and when required, accessing and installation of the applicable update files. The affected F10 Navigation unit part numbers and Faceplate ID numbers are listed below.

VEHICLE MODEL	HEAD UNIT PART NUMBER	FACE PLATE ID NUMBER
Legacy & Outback	86271AL66A	FB664US
	86271AL64A	FB644US
Impreza & XV Crosstrek	86271FJ630	FM634US



Continued...

COUNTERMEASURE IN PRODUCTION:

The new logic was incorporated into production according to the table below:

FACE PLATE ID NUMBER	STARTING VIN		DATE
	LEGACY	OUTBACK	
FB664US	F3025503	F3237248	9/29/2014
FB644US	F3027006	F3240780	10/6/2014
	IMPREZA	XV CROSSTREK	
FM634US	F*011328	F*248058	N/A

MATERIALS REQUIRED:

2 empty 2GB, USB 2.0 storage devices (flash drives) will be needed to perform these updates. The devices 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.



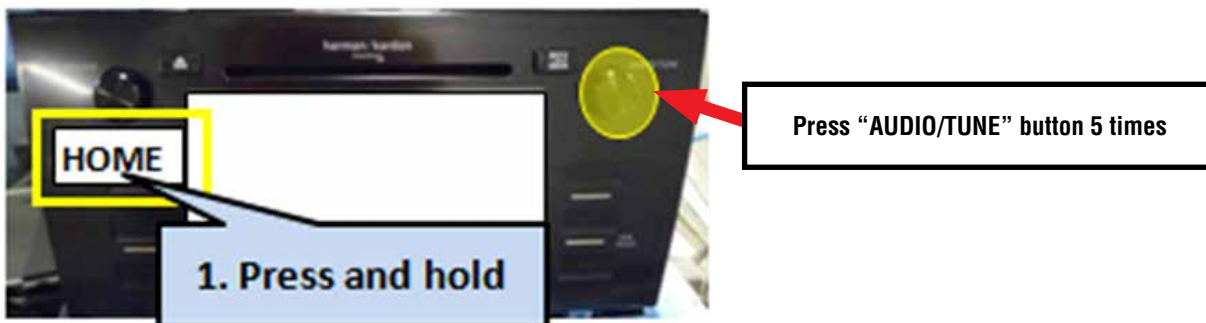
SERVICE PROCEDURE / INFORMATION:

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 Version Check List table shown below. 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**.

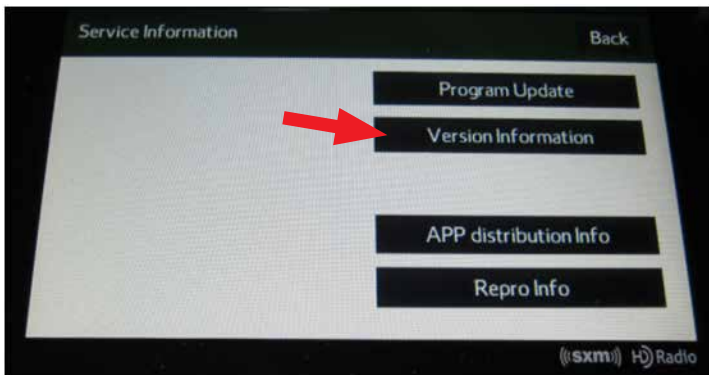
- Switch the unit into “Diagnosis Mode” by pressing and holding the HOME button while pressing the “AUDIO/TUNE” button 5 (five) times.



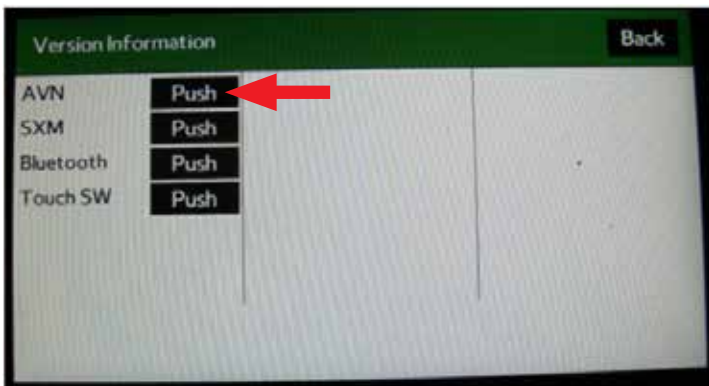
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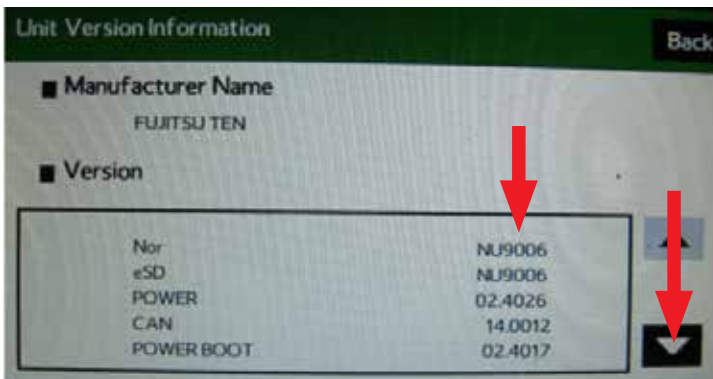
- Press “Service Information”



- Press “Version Information”



- Press “Push” next to AVN



- Verify the current versions according to the “Version Check List” table shown below on page 5. Use the down arrow to scroll to the bottom of the list for complete verification.

Continued...

- If the software version is current (NU9008 for Legacy/ Outback NU9014 or higher for Impreza/ Crosstrek), press and **HOLD** the **HOME** button to exit the Diagnostic Mode to complete the procedure as no updates are necessary. If no updates are necessary then continue your diagnosis of the customer concern. If the Version ID numbers are prior to (lower than) those shown on the table below, proceed with the software update procedure beginning with **Step 3** on page 9.

NOTE: If you determine the updates are necessary, the Version Check procedure will need to be performed again after the update installation to confirm the procedure was successful (**Step 5**, pg. 16).

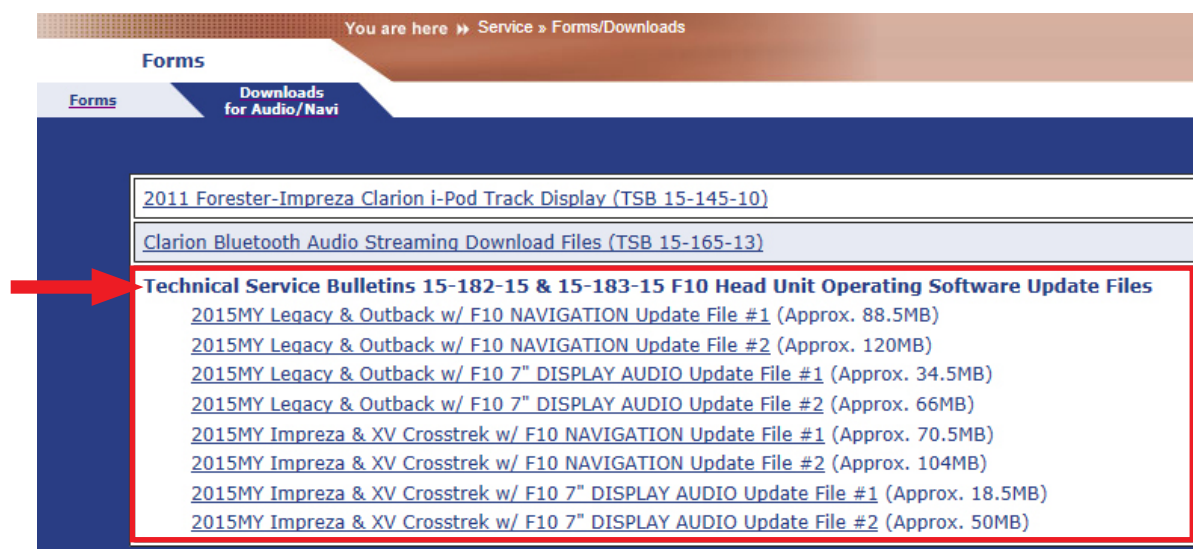
Version Check List

	LEGACY / OUTBACK	IMPREZA / XV CROSSTREK
PRODUCT NUMBER	86271AL64A & 86271AL66A	86271FJ630
NOR	NU9008	NU9104
eSD	NU9008	NU9104
POWER	2.4026	02.4026
CAN	14.0012	n/a
POWER BOOT	2.4017	02.4117
POWER VCL	02.0103	63.0105
DB	NU9008	NU9104

After performing the Version Check procedure, if updates are determined to be necessary, you will need the 2 USB flash drives referenced above 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 following hyperlink:

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



The Subarunet page shown above will display and contains links to the update files **1 & 2** for each model head unit.

NOTE: Do not download any files at this point. The file download procedures are supplied later in this bulletin. The flash drives must be formatted before the files can be downloaded onto them. Proceed to **Step 2** below for the flash drive formatting procedure.

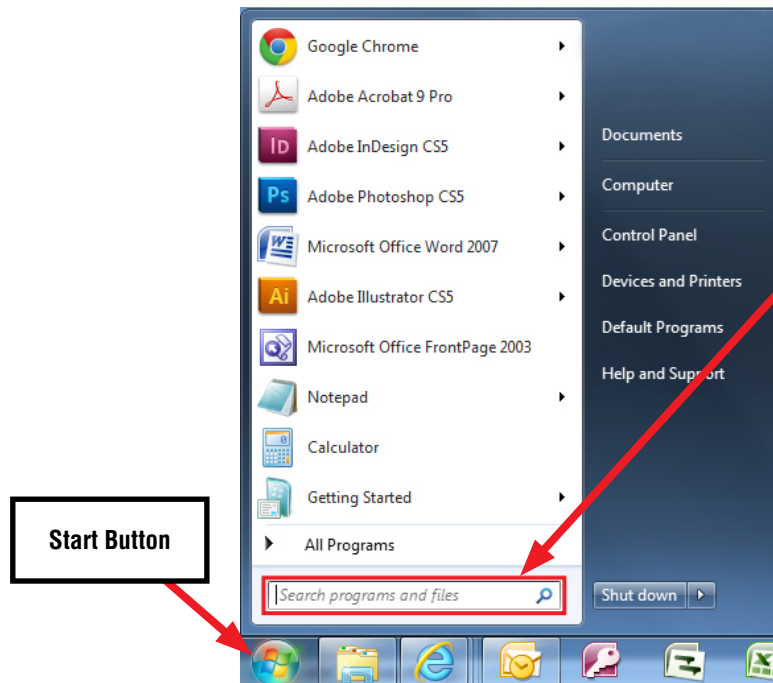
Continued...

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.

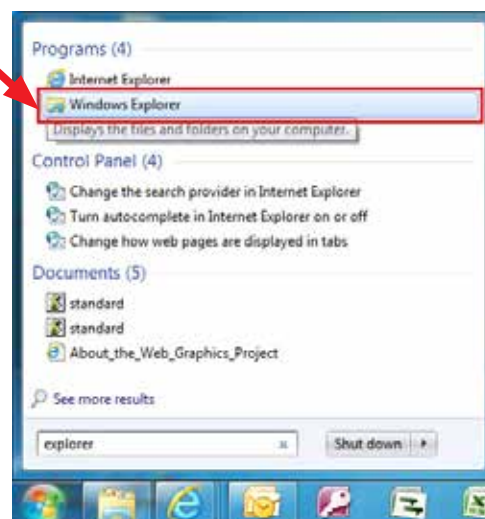
USB Flash Drive Formatting Procedure:

- 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”.



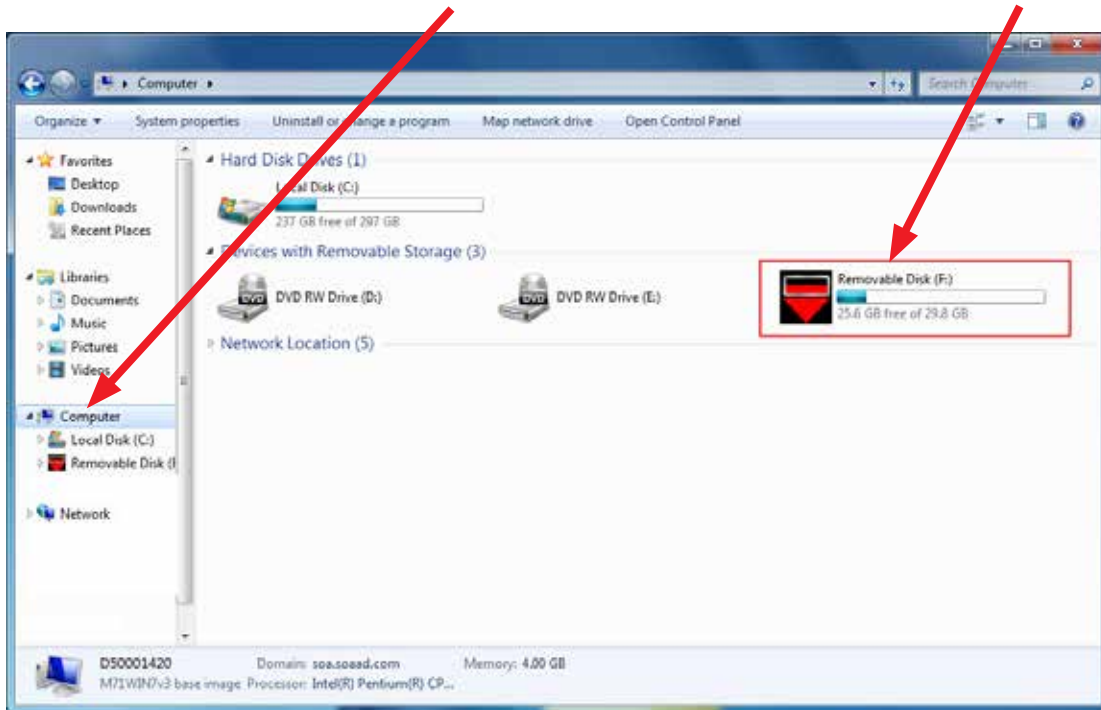
NOTE: On SDS Notebook you may also press the My Documents button on the GUI Home Screen.

- 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.



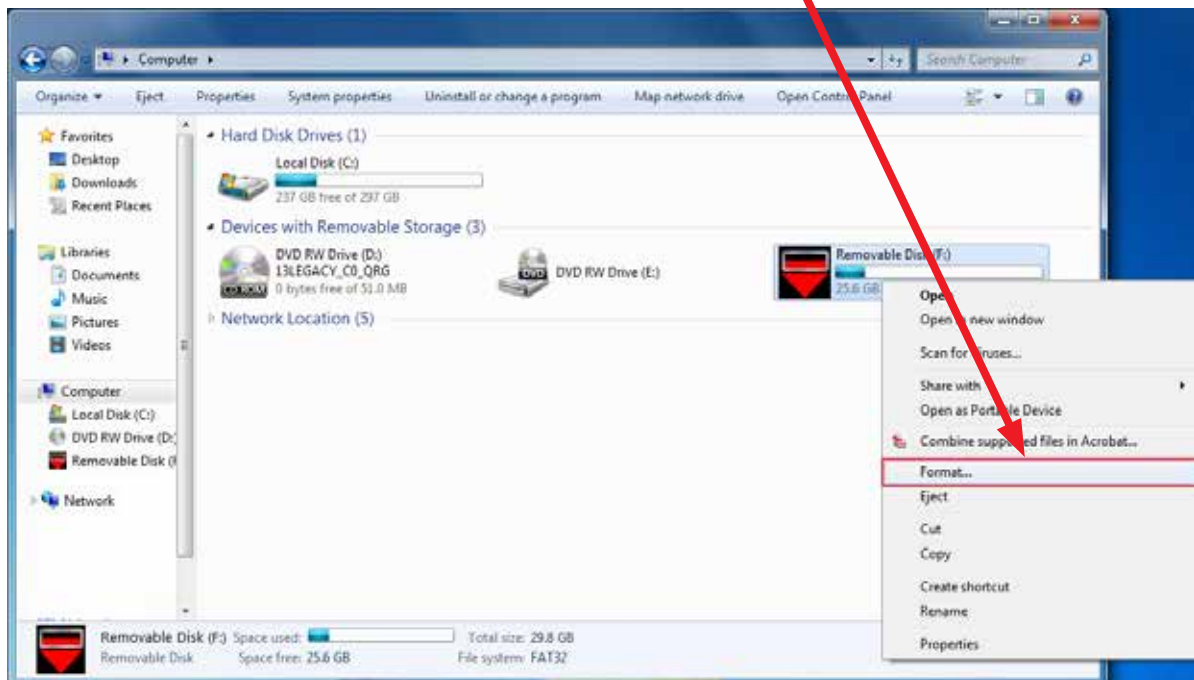
Continued...

- In the next window, choose the **Computer** section on the left. Locate “**Removable Disk**”



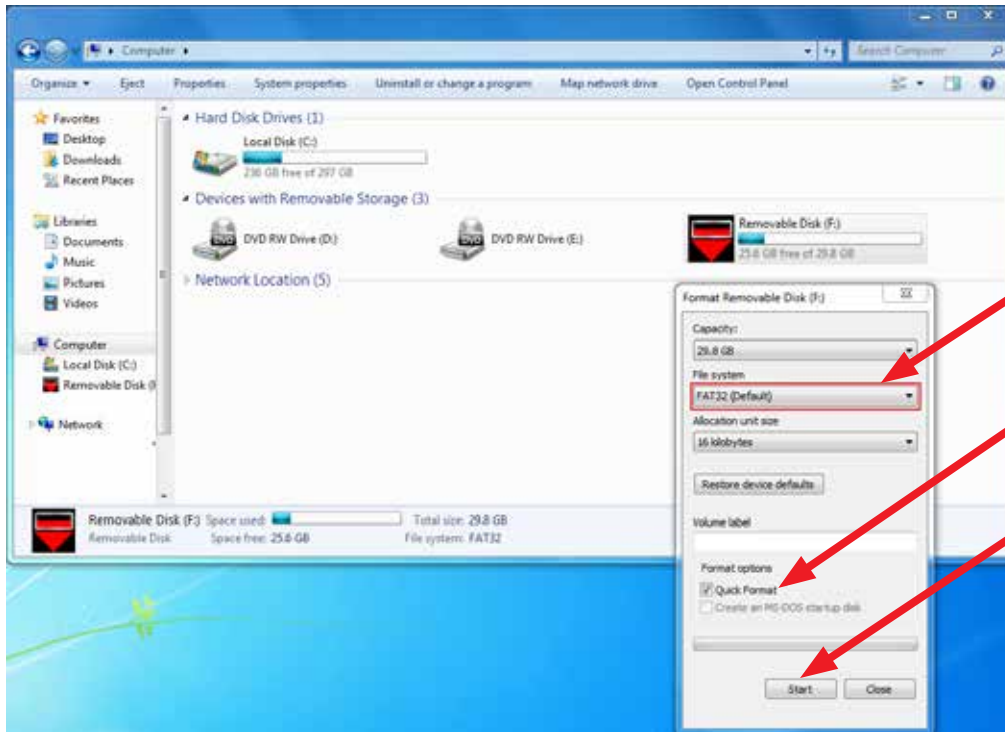
NOTE: Always confirm the device you are formatting is the USB Flash Drive. This drive may have various names assigned to it by the manufacturer of the device and may not reflect the drive name given in this example.

- Right click the picture for “**Removable Disk**” then select “**Format**”.

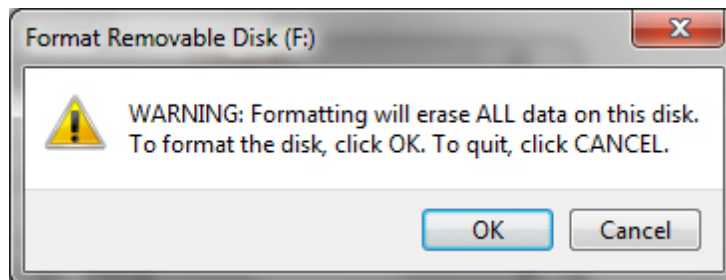


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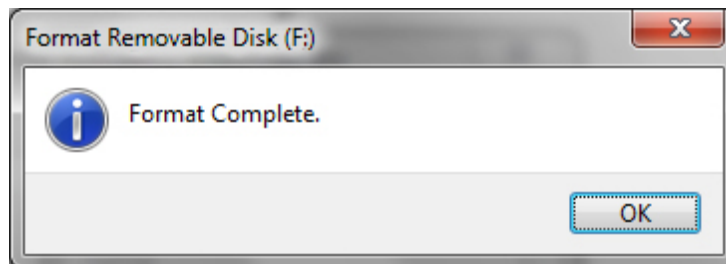
- When the “Format” dialog box appears, make sure that the option labeled “File System” is set to **FAT32** and the **Quick Format** box is checked as well. Then, click the “**Start**” button.



- 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.



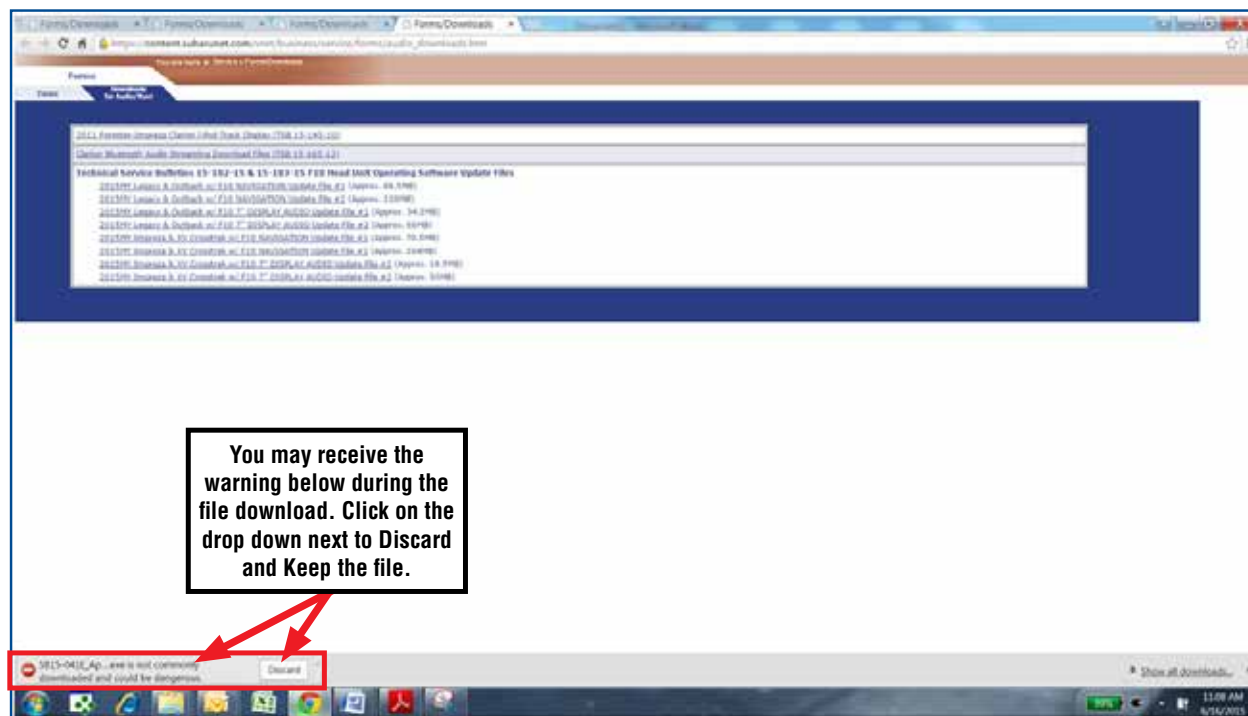
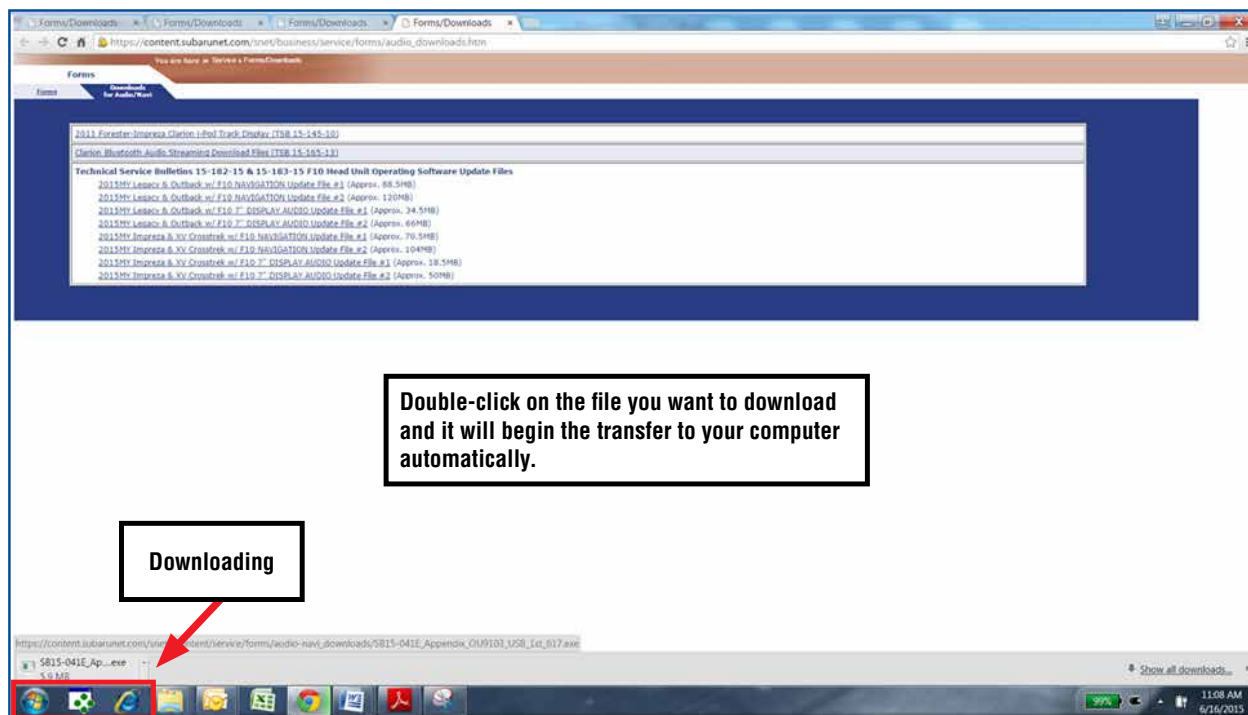
- Repeat the procedure above for the second flash drive.

Continued...

Step 3: File Download Procedure:

Now that the 2 flash drives have been formatted, the two update files must be downloaded, one to each flash drive as shown in the table below. Label the flash drives L/O1 and L/O2 or I/X1 and I/X2 (L/O for Legacy / Outback and I/X for Impreza / XV Crosstrek). Download the files from the Subarunet links (Update file #1 onto drive “1”, Update file #2 onto drive “2”). The updates must be installed in order, drive “1” first followed by drive “2”.

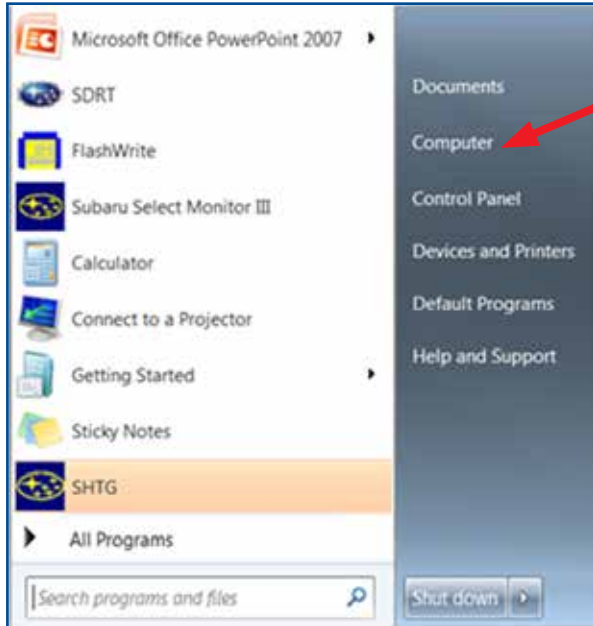
The screenshots below will take you through the steps required to get the selected update file onto your flash drives and ready to use. Update file sizes are quite large and depending on the speed capabilities of the computer you are using, may take some time to complete the download. **PLEASE BE PATIENT!**



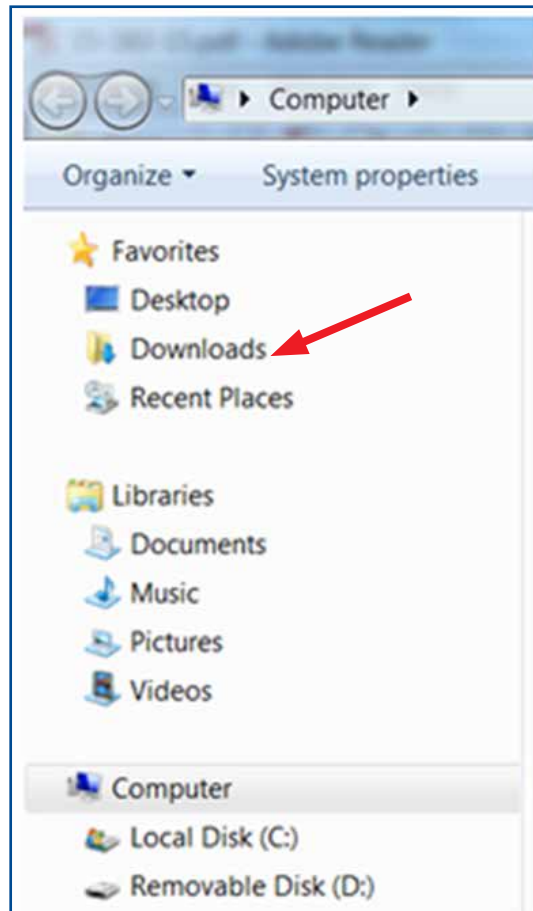
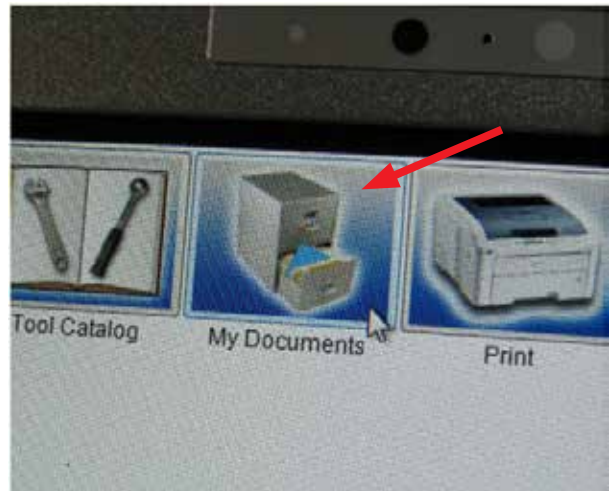
Continued...

Once the download is complete, you will need to locate the file, unzip it then save the unzipped version to your USB flash drive. **NOTE:** If you have not already done so, follow the procedure (**Step 2** starting on page 6) for re-formatting (removing any existing files) your flash drive. 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 Toughbook) then click on “Downloads”.

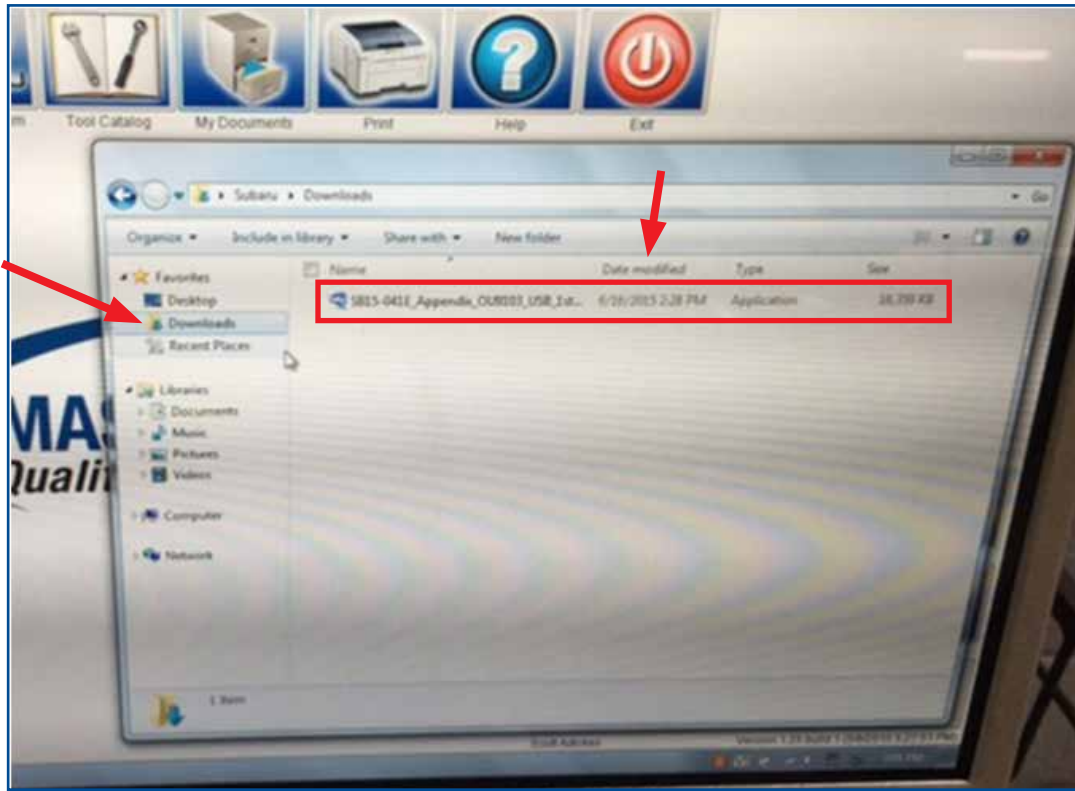


SDS Toughbook screen shot

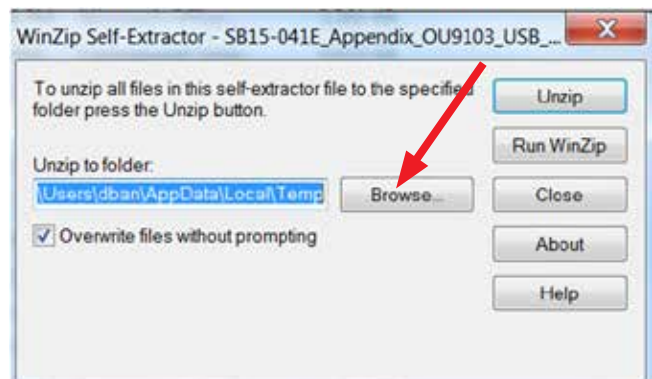
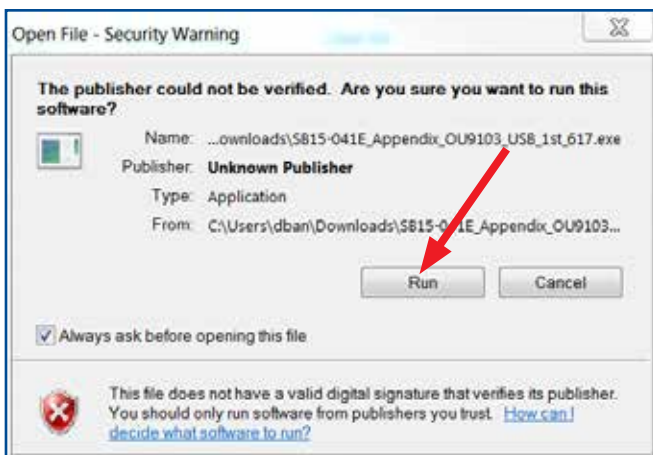


Continued...

- Once your list of downloaded files opens, locate and click on the downloaded file (in this case, “OU9103_USB...” is the update) 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

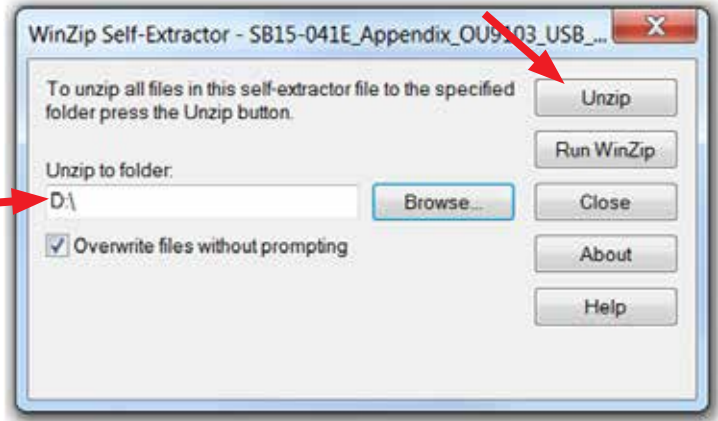
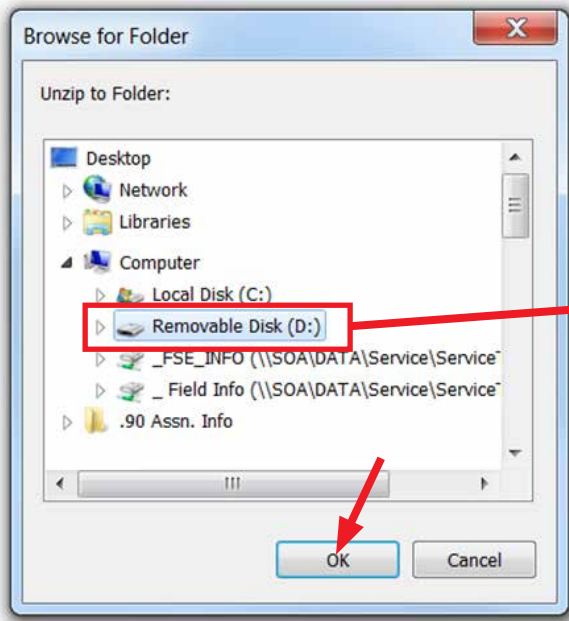


- Double clicking the file will bring up a dialogue box with a security warning, click on “Run” to continue.
- Click on “Browse”

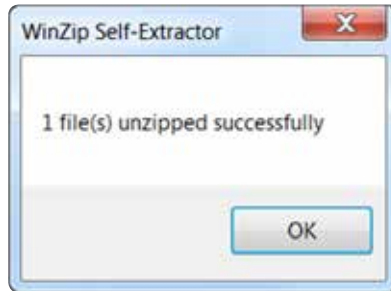


- As shown below, click on “Removable Disk” which is your USB flash drive where you want the unzipped file to be saved. Click “OK” then click on “Unzip”.

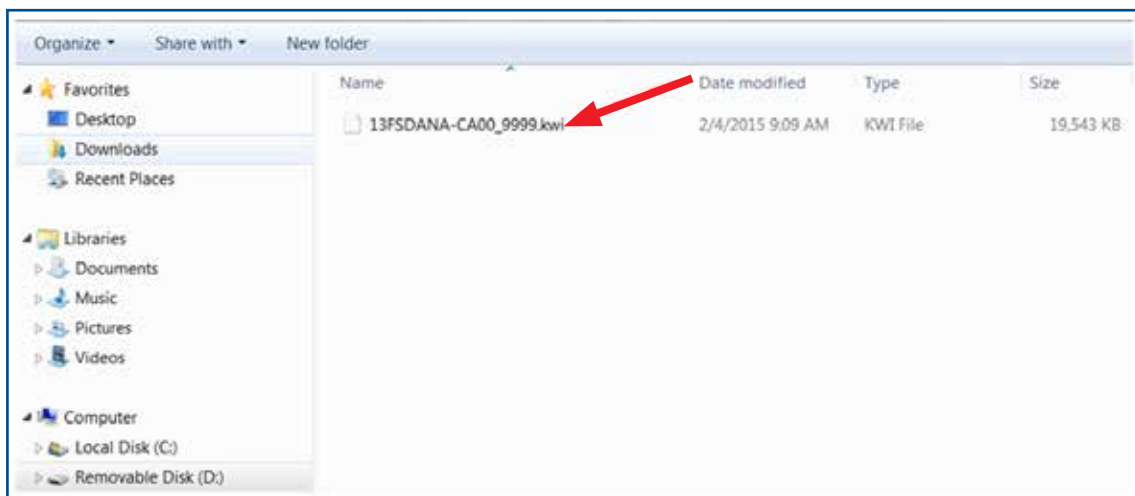
Continued...



The file will unzip and be saved to your flash drive.



- Confirm the file (and flash drive) is ready to use by going back to Start > Computer (or My Documents on the SDS Toughbook) and double clicking on “Removable Disk” to display the drive’s contents as shown in the example below. There should only be **one** file displayed. All of the updates will have a “.kwi” extension at the end of their file name. If OK, proceed with **Step 4: Update Software Installation** below.



REMINDER: there can only be **ONE** file stored on the flash drive or the update procedure will not work. If you see more than one file stored, start over by re-formatting the flash drive again then reloading the update file.

Continued...

IMPORTANT NOTES:

- Do not change the file names after downloading them.
- Do not save any other version update files onto the flash drives.

MODEL	FACE PLATE ID NUMBER	1ST UPDATE SOFTWARE FILE NAME	2ND UPDATE SOFTWARE FILE NAME
Legacy / Outback	FB664US	NU9008_USB_1st.exe	NU9008_USB_2nd.exe
	FB644US		
Impreza / XV Crosstrek	FM634US	NU9104_USB_1st_745.exe	NU9104_USB_2nd.exe

Step 4: Update Software Installation

NOTE: Because of the time it takes to perform these updates, SOA recommends connecting the Midtronics GR8 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature when performing these updates. 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 the Power Supply Mode, and have the vehicle's battery voltage stabilized and ready for updating.

VERY 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 Subaru of America, Inc. (SOA). If the GR8 indicates the vehicle's battery must be charged, charge the battery using the GR8 before proceeding to update the audio unit while using the Power Supply Mode.

Once the GR8 has been connected and Power Supply Mode initiated, insert the Drive "1" into the USB port and follow the steps below to install the Update File #1.

NOTE: Where applicable, record any radio station presets as they will be lost along with any mobile device pairing during this procedure.

Version Update Procedure

- Turn the ignition / key (ACC) "ON".



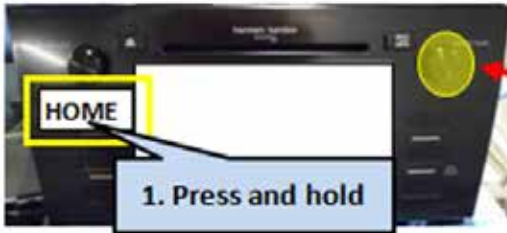
- Press the "AUDIO/TUNE" button.
The Select Audio Source screen will appear.

Continued...



After the flash drive is recognized, the USB icon will illuminate.

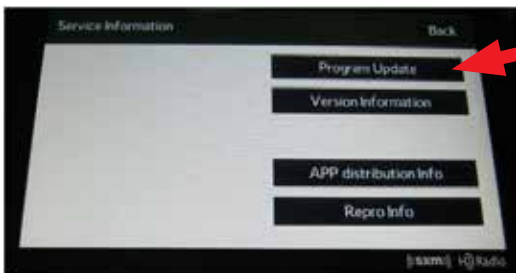
- Once the USB icon is illuminated, switch the unit into “Diagnosis Mode” by pressing and holding the HOME button while pressing the “AUDIO/TUNE” button 5 (five) times.



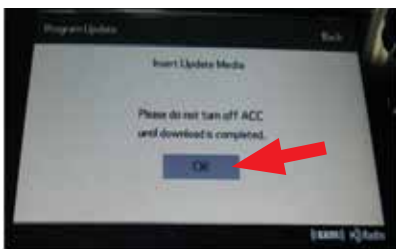
2. Press "AUDIO/TUNE" button 5 times



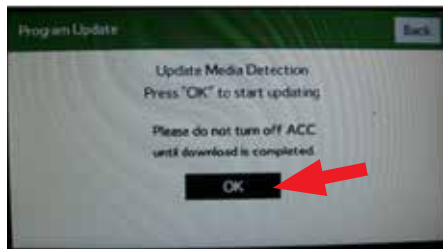
- Press “Service Information”



- Press “Program Update” then follow the sequence shown in the screen shots below



Wait for “OK” to activate
(turn black)



Press “OK”



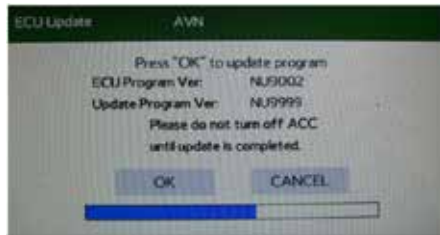
Press “SELECT”

NOTE: The “OK” button will not activate if the wrong software is on the flash drive. Please reload the proper files and start from the beginning of **Step 3**.

Continued...



Press "OK"



Once the updating starts, the status bar will run twice before "OK" illuminates (approximately 5 minutes).



Turn off ACC

If "Update Error" screen is displayed as shown below:

Select "OK".

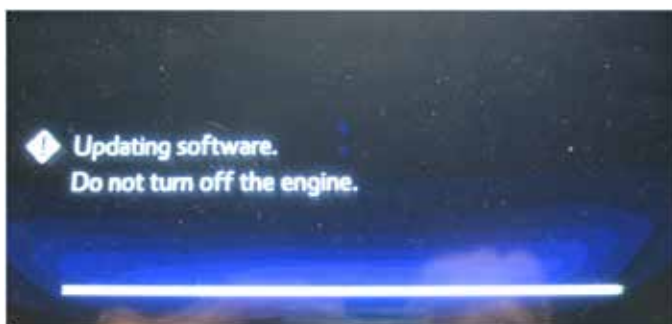
ACC OFF then back ON again

Perform the Version Update again from Step 3.

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 takes about 5 minutes to complete.



When the Software Update completes, the unit will restart automatically. Once the opening screen is displayed, remove the flash drive from the USB port and turn the ACC to off.

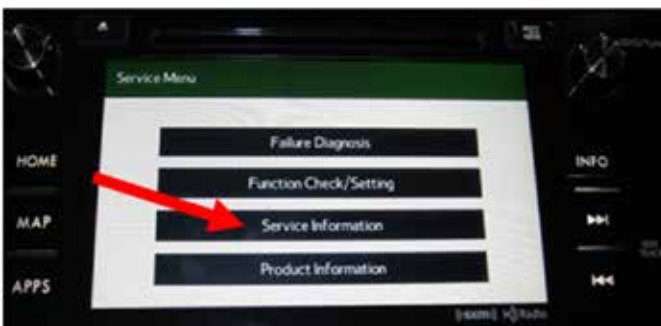
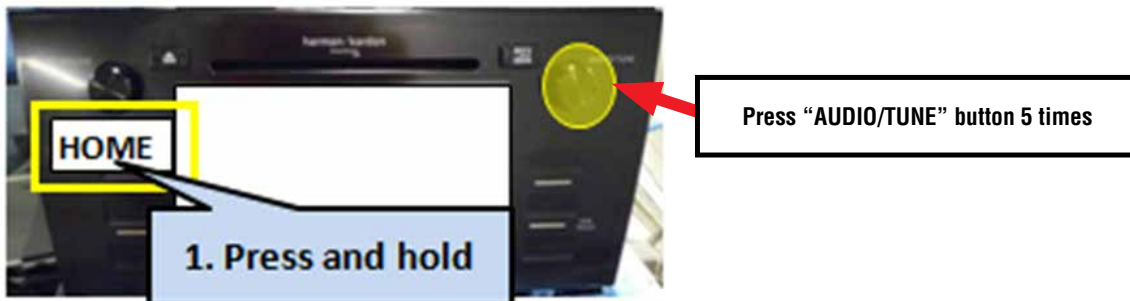
Insert Drive "2" to install the Update File #2 and repeat **Step 4.**

Continued...

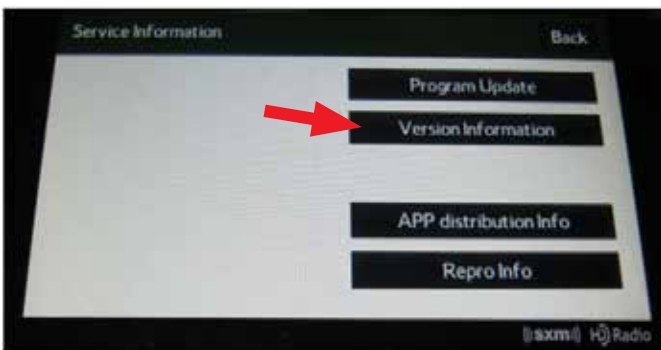
Step 5: Version Check Procedure

As mentioned earlier on page 5, once the update software installations are complete, the Version Check procedure must be performed again to confirm the updates have been installed successfully.

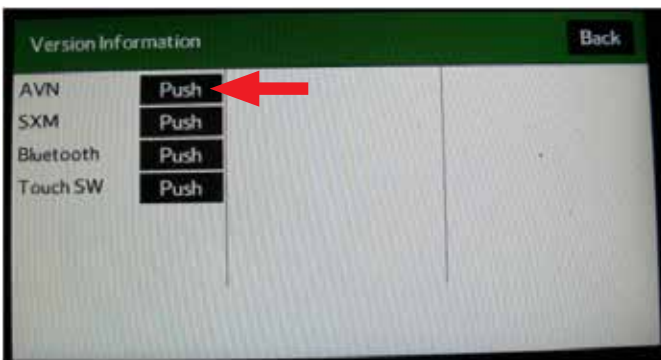
- Switch the unit into “Diagnosis Mode” by pressing and holding the HOME button while pressing the “AUDIO/TUNE” button 5 (five) times.



- Press “Service Information”

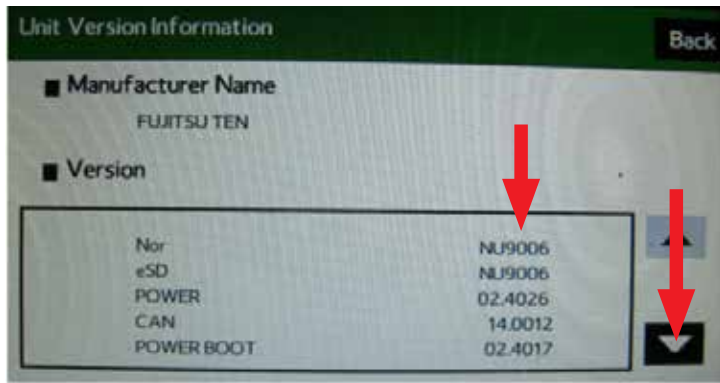


- Press “Version Information”



- Press “Push” next to AVN

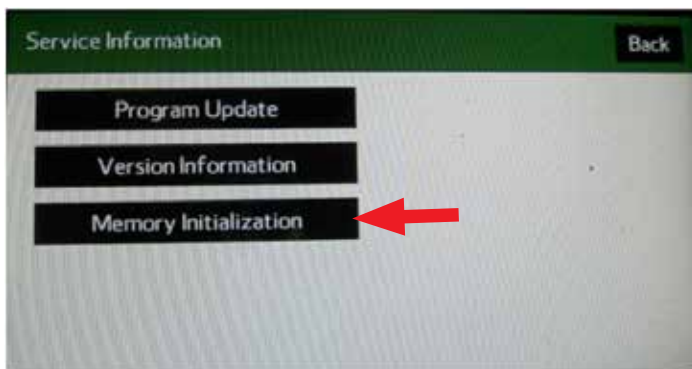
Continued...



- Verify the current versions according to the “Version Check List” table shown on page 5. Use the down arrow to scroll to the bottom of the list for complete verification.

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. After pressing “Back”, the following screen will be displayed:



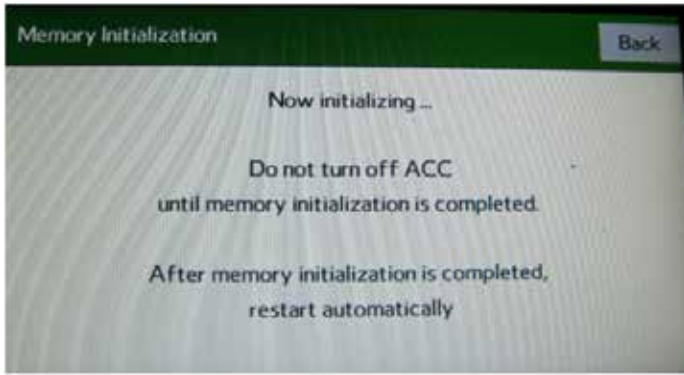
- Press “Memory Initialization”



Press and Hold

- Press and hold the “OK” button until the screen shown below is displayed (5 to 10 seconds).

Continued...



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 with an active Added Security Gold Service Agreement, this repair may be claimed using the following information:

LABOR DESCRIPTION	LABOR OPERATION #	FAIL CODE	LABOR TIME
F10 AUDIO/NAVIGATION HEAD UNIT UPDATE	A031-128	ZOS-48	0.6

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).

REMINDER: 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 refer to STIS for the latest service information before performing any repairs.