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:15-205-16RDATE:11/21/16REVISED:12/21/20

SUBJECT: Reprogramming File Availability to Address Operational Concerns with "Gen 2.0" and "Gen 2.1" Fujitsu-TEN (F10) / Denso-TEN (D10) 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:

- Incomplete SXM channel list displayed
- SXM Subscription Update
- Thumbnail images included with phone contacts are not displayed (iPhone only)
- Quick Message is grayed out and cannot be selected for a reply message
- Head Unit does not respond to touch panel (soft key) commands
- Clock display shifts by one hour when daylight saving is set to auto (applicable to 2015MY Legacy / Outback, 2015MY Impreza / Crosstrek, 2016MY Forester and 2016MY WRX/WRX STI models with Gen 2.0 audio units only).

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 along with a Version I.D. reference table is provided in Appendix section beginning on page 19.

PRODUCTION CHANGE INFORMATION:

(See Step 1 on page 3). Compare the result to the updated table shown below. If the current version

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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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number is PRIOR to the version	on number listed in the table	e, continue with the updating procedure.

	Model	NAVI	Faceplate ID	Update Softw	vare File Name	
Model	Year	/ DA	Number	Update File #1 Name	Update File #2 Name	Subarunet Link Title
			FB644US		NU0022 USB and eve	MY15_LEG_OUT NAVI #1
	2015	NAVI	FB664US	NU9022_USB_1st.exe	NU9022_USB_2nd.exe	MY15_LEG_OUT NAVI #2
	2015	DA	FB644UM		OUIO021 USB 2nd ava	MY15_LEG_OUT DISPLAY AUDIO #1
		DA	FB664UM	OU9021_USB_1st.exe	0U9021_USB_2nd.exe	MY15_LEG_OUT DISPLAY AUDIO #2
			FB685US		NUO214 UCD and sup	MY16_LEG_OUT NAVI #1
Legacy	0010	NAVI	FB695US	NU9314_USB_1st.exe	NU9314_USB_2nd.exe	MY16_LEG_OUT NAVI #2
& Outback	2016		FB685UM			MY16_LEG_OUT DISPLAY AUDIO #1
		DA	FB695UM	OU9313_USB_1st.exe	0U9313_USB_2nd.exe	MY16_LEG_OUT DISPLAY AUDIO #2
			FB876US			MY17_LEG_OUT NAVI #1
		NAVI	FB856US	C_NU9511_USB_1st.exe	C_NU9511_USB_2nd.exe	MY17_LEG_OUT NAVI #2
	2017		FB856UM			MY17_LEG_OUT DISPLAY AUDIO #1
		DA	FB876UM	C_OU9510_USB_1st.exe	C_0U9510_USB_2nd.exe	MY17_LEG_OUT DISPLAY AUDIO #2
						MY15_IMP_CROS NAVI #1
		NAVI	FM634US	NU9116(US)_USB_1st.exe	NU9116(US)_USB_2nd.exe	MY15_IMP_CROS NAVI #2
	2015					MY15_IMP_CROS DISPLAY AUDIO #1
		DA	FM664UM	OU9115(US)_USB_1st.exe	OU9115(US)_USB_2nd.exe	MY15_IMP_CROS DISPLAY AUDIO #2
			FM655UH			MY16_IMP_CROS NAVI #1
Impreza & Crosstrek	2016	NAVI	FM675UH	NU9412_USB_1st.exe	NU9412_USB_2nd.exe	MY16_IMP_CROS NAVI #2
			FM705UM			MY16_IMP_CROS DISPLAY AUDIO #1
		DA	FM685UM	OU9411_USB_1st.exe	OU9411_USB_2nd.exe	MY16_IMP_CROS DISPLAY AUDIO #2
			FM666US			MY17_IMP_CROS NAVI #1
		NAVI	FM686US	NU9511_USB_1st.exe	NU9511_USB_2nd.exe	MY17_IMP_CROS NAVI #2
	2017		FM685UM			MY17_IMP_CROS DISPLAY AUDIO #1
		DA	FM705UM	OU9411_USB_1st.exe	OU9411_USB_2nd.exe	MY17_IMP_CROS DISPLAY AUDIO #2
			FF667US			MY16_FOR NAVI #1
		NAVI	FF687US	NU9916_USB_1st.exe	NU9916_USB_2nd.exe	MY16_FOR NAVI #2
	2016		FF667UM			MY16_FOR DISPLAY AUDIO #1
		DA	FF687UM	OU9915_USB_1st.exe	OU9915_USB_2nd.exe	MY16_FOR DISPLAY AUDIO #2
			FF868US			MY17_FOR NAVI #1
_		NAVI	FF878US	NU9412_USB_1st.exe	NU9412_USB_2nd.exe	MY17_FOR NAVI #2
Forester	2017		FF678UM			MY17_FOR DISPLAY AUDIO #1
		DA	FF698UM	OU9411_USB_1st.exe	OU9411_USB_2nd.exe	MY17_FOR DISPLAY AUDIO #2
			FF629US			MY18_FOR NAVI #1
	0010	NAVI	FF639US	NU9611_USB_1st.exe	NU9611_USB_2nd.exe	MY18_FOR NAVI #2
	2018		FF689UM			MY18_FOR DISPLAY AUDIO #1
		DA	FF679UM	OU9610_USB_1st.exe	0U9610_USB_2nd.exe	MY18_FOR DISPLAY AUDIO #2
			5/60100		NUO010 UCD and sup	MY16_WRX NAVI #1
	0010	NAVI	FV631US	NU9213_USB_1st.exe	NU9213_USB_2nd.exe	MY16_WRX NAVI #2
	2016		D/OC411M			MY16_WRX DISPLAY AUDIO #1
		DA	FV651UM	OU9212_USB_1st.exe	OU9212_USB_2nd.exe	MY16_WRX DISPLAY AUDIO #2
			51/640116		NUOS11 UCD and sup	MY17_WRX NAVI #1
WRX &	2017	NAVI	FV642US	NU9511_USB_1st.exe	NU9511_USB_2nd.exe	MY17_WRX NAVI #2
WRX STI	2017	DA	FV662UM		OUD510 USP and ava	MY17_WRX DISPLAY AUDIO #1
		DA	FV672UM	OU9510_USB_1st.exe	OU9510_USB_2nd.exe	MY17_WRX DISPLAY AUDIO #2
			EVICTORIO			MY18_WRX NAVI #1
	2010	NAVI	FV673US	NU9611_USB_1st.exe	NU9611_USB_2nd.exe	MY18_WRX NAVI #2
	2018	DA	FV843UM		OUR610 USP and ava	MY18_WRX DISPLAY AUDIO #1
		DA	FV833UM	OU9610_USB_1st.exe	OU9610_USB_2nd.exe	MY18_WRX DISPLAY AUDIO #2

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.



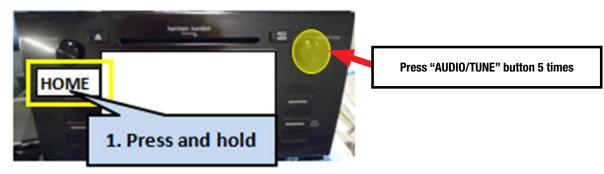
SERVICE PROCEDURE / INFORMATION:

IMPORTANT REMINDERS:

- Read through and understand this procedure COMPLETELY before proceeding further.
- When installing an exchange head unit, the Version Check procedure below MUST be performed to confirm the replacement has the latest software version installed. If it does not, proceed with the remainder of this Service Procedure.

Step 1: Version Check Procedure

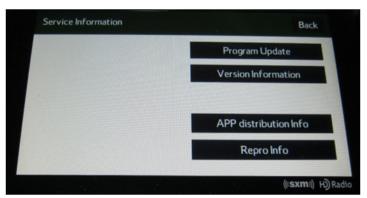
Before proceeding with any updates, the currently installed software version must be determined. If the latest software version (or later) is already installed, no updates are necessary. The Version ID numbers for this procedure are found in the Update File Applicability / Information table shown above. 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**.



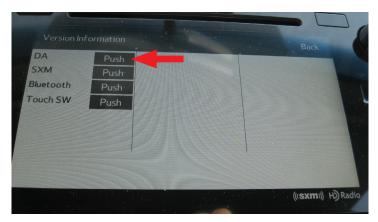
• Switch the unit into "Diagnosis Mode" by pressing and holding the HOME button while pressing the "AUDIO/TUNE" button 5 (five) times.



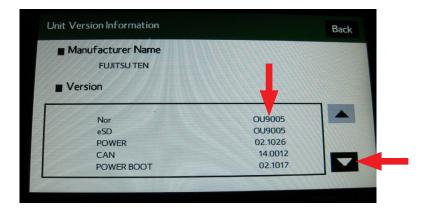
• Press "Service Information"



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 Operations & Technical>>Forms / Downloads>>Gen2/Fujitsu10/Denso10 for Audio/Navi page then clicking on the applicable hyperlink:

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

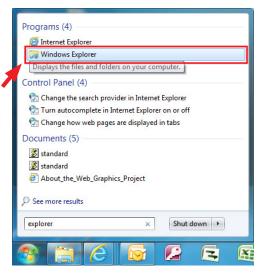
You are here » Service Operations & Technical » Forms/Downloads
Forms and Downloads
Forms Gen 1 Gen 2/Clarion Gen 3/Furthu Gen 3/Harman
Gen 4/Denso FOTA Map Updates
Gen 2: Fuiitsu 10/Denso 10
Questionnaire
TSBs
15-177-14R "Gen 2 and Gen 2.1 Operating Tips"
15-197-16 "Check SD Memory Card" Message on Clarion "Gen 2" Display Audio (Without Navigation) Head Units"
TSGs
Gen 2.0 & 2.1 Micro SD Navigation (AVN) Display Audio (DA)
Data Log Collection
Software Download
15-205-16R "Reprogramming File Availability to Address Operational Concerns with "Gen 2.0" and "Gen 2.1" Fujitsu-TEN (F10) / Denso-TEN (D10) Navigation and 7" Display Audio Units"
Technical Service Bulletin 15-205-16R: F10/D10 Head Unit Operating Software Update Files (REPLACES TSBs 15-182-15R, 15-183-15R & 15-198-16R):
Legacy & Outback:
BF4 MY15 LEG OUT NAVI #1
BF4 MY15 LEG OUT NAVI #2
BF4 MY15 LEG OUT DISPLAY AUDIO #1
BF4 MY15 LEG OUT DISPLAY AUDIO #2
BE5 MY16 LEG OUT NAVI #1
BE5 MY16 LEG OUT NAVI #2

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) Google Chrome Adobe Acrobat 9 Pro Document: **VERY IMPORTANT:** Before attempting to download any data ID Adobe InDesign CS5 files, confirm the PC and flash drives you are using are not infected Ps Adobe Photoshop CS5 Control Pane with any virus. The flash drives will need to be formatted for WE Microsoft Office Word 2007 FAT32 following the steps below. Devices and Pri Adobe Illustrator CS5 Default Program Microsoft Office FrontPage 2003 Ø **USB Flash Drive Formatting Procedure:** Help and Suppor Notepad Install a flash drive into an available USB port on your PC. Calculator Click Start (this is located in the lower left corner of the • Getting Started desktop screen) then, in the Search programs and files All Programs box, type "explorer". Search progra 9 Shut down 🕨 E Start Button

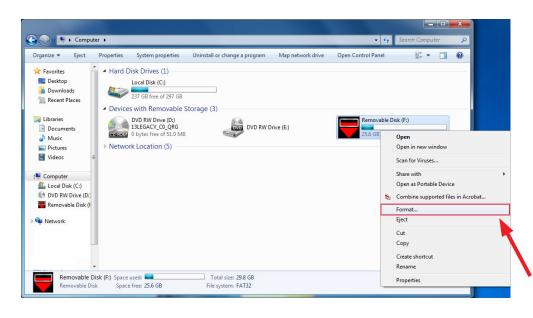
NOTE: On SDS Notebook you may also press the My Documents button on the GUI Home Screen.

• 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"

Organize System properties Uninstall or mange a program Map network drive Open Control Panel Favorites Image: A Hard Disk Deves (1) Image: A Hard Disk Deves (1)	
 ■ Desktop Downloads © Downloads Wetwerk ■ Disk (C:) 237 GB free of 297 GB 237 GB free of 297 GB 237 GB free of 297 GB DVD RW Drive (D:) DVD RW Drive (D:) DVD RW Drive (D:) DVD RW Drive (E:) Network Location (5) Network 	Removable Disk (F:) 25.6 GB free of 29.8 GB



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".

Continued...

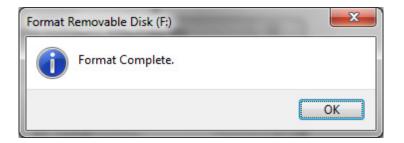
• When the "Format" dialog box appears, make sure that the option labeled "File System" is set to **FAT32** and the **Quick Format** box is checked as well. Then, click the "**Start**" button.

							X
🕽 🔵 🗢 🌉 🕨 Compi	uter 🕨				√ 4 ₂	Search Computer	٩
Organize 👻 Eject	Properties	System properties	Uninstall or change a program	Map network drive	Open Control Panel	₩ - ▼	0
Favorites Desktop Downloads Downloads Recent Places Documents Music Pictures Videos Computer Local Disk (C:) Removable Disk (F	 Device Device Device Device Netwo 	Disk Drives (1) Local Disk (C) 236 GB free of 297 GB s with Removable S DVD RW Drive (D:) rk Location (5)	itorage (3)	rive (E:)	Removable Disk (F:) 25.6 GB free of 29.8 G Format Removable Disk (F:) Capacity: (29.8 GB File system FAT32 (Default) Allocation unit size 16 kilobytes Restore device defaults		
Removable Removable D	Disk (F:) Space lisk Space	used: 💻 e free: 25.6 GB	Total size: 29.8 GB File system: FAT32		Volume label		
1 Tr					Format options V Quick Format Create an MS-DOS startup d Start	lisk Close	

• Click "**OK**" when the following window appears.

Format	Removable Disk (F:)
	WARNING: Formatting will erase ALL data on this disk. To format the disk, click OK. To quit, click CANCEL.
	OK Cancel

• 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".

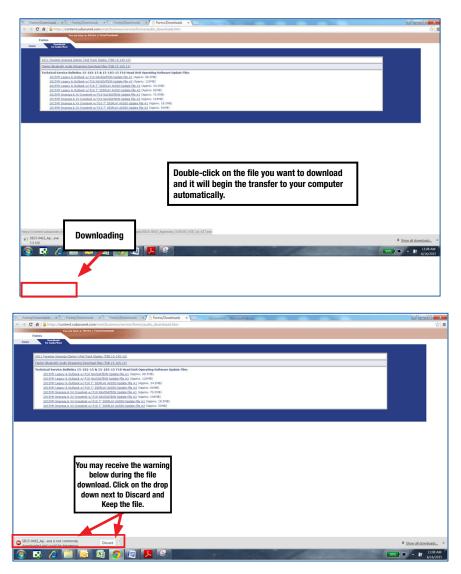
Follow "A" when using files downloaded from Subarunet.

Follow "B" when using the files sent directly to the SDS notebook from Nuspire (page 12).

"A" When using update files downloaded from Subarunet:

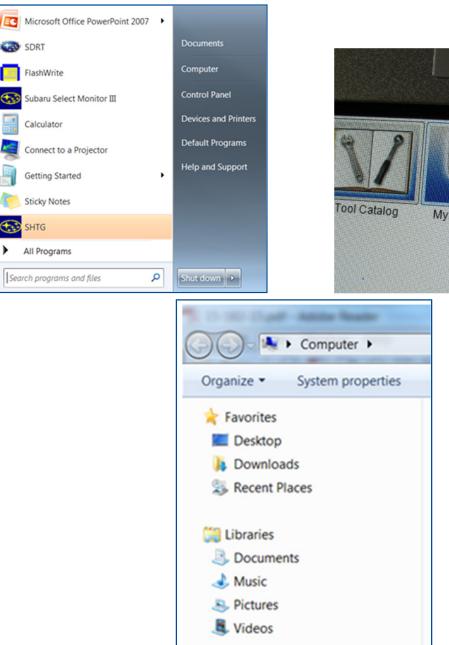
NOTE: Update File #1 contains 1 file. Update File #2 contains 3 files. The Subarunet screenshots below will take you through the steps required to get the selected Update Files onto the flash drives and ready to use. Update File sizes are quite large and depending on the speed capabilities of the computer,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

PLEASE BE PATIENT!



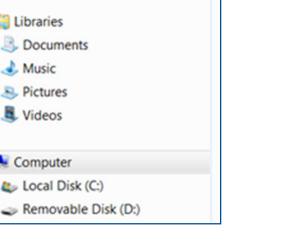
Once the downloads are complete, locate the Update Files (reference the chart on page 7 for the file names) in the Downloads Folder. Once you locate each file, unzip them one at a time to transfer their contents to the appropriate USB flash drive. As an example, update NU9020 USB 1st.zip for a 2015 Legacy 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".



Computer

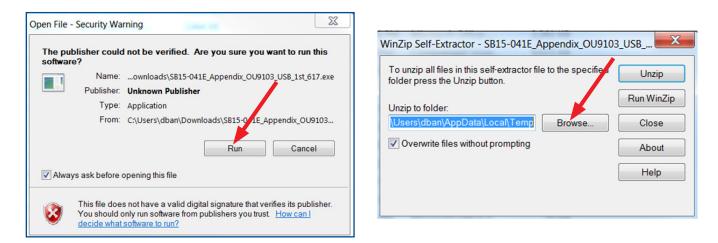




• Once your list of downloaded files opens, locate and click on the downloaded Update Files (in this example, "OU9103_USB...") you are looking for. **TIP:** If you click on Date Modified you can sort the downloaded files by the date they were added which will bring the newest file to the top.

Downloads Ibrary = Share with = New folder			
brary . Share with . New folder			
			51 · CI
Name Name	Date modified	Тури	Sev
2 5815-041E_Appendix_OU9103_U58_1st	6/26/2015 2-28 PM	Application	14,759 KB
			The state of the s
			Concernance of the local division of the loc
			1
			and the second second
			1
			P
	SI35-0412, Appendix, CU9203, USB, 1xt.	SE35-GELE, Appenda, OLBERS, USR, Sa 6/26/2015/2/30 FM	C 323-0432 Appendia 0.02203 USB Jul. 6/16/2015 2.33 PM Application

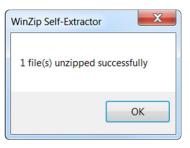
- Double clicking the Update File will bring up a dialogue box with a security warning, click on "Run" to continue.
- Click on "Browse"



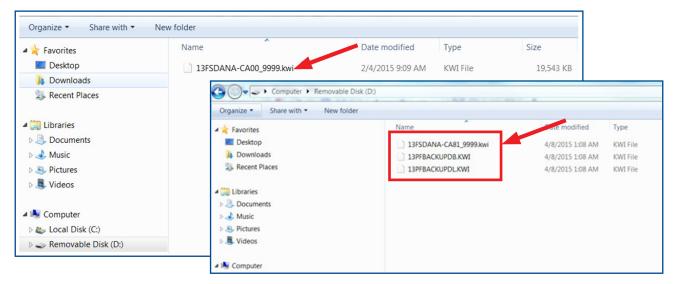
• As shown below, click on "Removable Disk" which is your USB flash drive where you want the unzipped file(s) to be saved. Click "OK" then click on "Unzip".

Browse for Folder	
Unzip to Folder: Desktop Network Computer Computer E Computer E Computer E E Computer E Computer E Computer E Computer E Computer E Computer E Computer Computer E Computer Compute	WinZip Self-Extractor - SB15-041E_Appendix_OU9_03_USB To unzip all files in this self-extractor file to the specified folder press the Unzip button. Unzip Unzip to folder. Run WinZip D:\ Browse Close Image: Overwrite files without prompting About

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.

* * 🚺 >	This PC	Windows (C:) > Users > Subaru > Documents > F10 Software	Updates Gen 2.0 and	2.1 Audio and Navi	Head Units >
Quick access		Name	Date modified	Туре	Size
Quick access		2018MY WRX w F10 7 NAVI Update -12-2018	1/11/2019 3:05 PM	File folder	
OneDrive		2018MY WRX w F10 7 DISPLAY AUDIO Update -12-2018	1/11/2019 3:05 PM	File folder	
		2018MY Forester w F10 7 NAVI Update -12-2018	1/11/2019 3:05 PM	File folder	
Network		2018MY Forester w F10 7 DISPLAY AUDIO Update -12-2018	1/11/2019 3:05 PM	File folder	
		2017MY WRX w F10 7 NAVI Update -12-2018	1/11/2019 2:47 PM	File folder	
		2017MY WRX w F10 7 DISPLAY AUDIO Update -12-2018	1/11/2019 2:47 PM	File folder	
		2017MY Legacy & Outback w F10 DISPLAY AUDIO Update -12-2018	1/11/2019 2:47 PM	File folder	
		2017MY Legacy & Outback w F10 Dispect r Adolo Opdate -12-2018	1/11/2019 2:47 PM	File folder	
		2017MY Impreza Crosstrek w F10 7 NAVI Update -12-2018	1/11/2019 2:35 PM	File folder	
		2017MY Impreza Crosstrek w F10 7 DISPLAY AUDIO Update -12-2	1/11/2019 2:33 PM	File folder	
		2017MY Forester w F10 7 NAVI Update -12-2018	1/11/2019 2:34 PM	File foldes	
		2017MY Forester w F10 7 DISPLAY AUDIO Update -12-2018	1/11/2019 2-34 PM	File folder	
		2016MY WRX w F10 7 NAVI Update -12-2018	1/11/2019 2-22 PM	File folder	
		2016MY WRX w F10 7 DISPLAY AUDIO Update -12-2018	1/11/2019 2:22 PM	File folder	
		2016MY Legacy & Outback w F10 DISPLAY AUDIO Update -12-20	1/11/2019 2:22 PM	File folder	
		2016MY Legacy & Outback w F10 7 NAVI Update -12-2018	1/11/2019 221 PM	File folder	
		2016MY Impreza Crosstrek w F10 7 NAVI Update +12-2018	1/11/2019 2:09 PM	File folder	
		2016MY Impreza Crosstrek w F10 7 DISPLAY AUDIO Update -12-2	1/11/2019 2:09 PM	File folder	
		2016MY Forester w F10 7 NAVI Update -12-2018	1/11/2019 2:09 PM	File folder	
		2016MY Forester w F10 7 DISPLAY AUDIO Update -12-2018	1/11/2019 2:08 PM	File folder	
		2015MY Legacy & Outback w F10 7 NAVI Update -12-2018	1/11/2019 1:57 PM	Filefolder	
		2015MY Legacy & Outback w F10 7 DISPLAY AUDIO Update -12	1/11/2019 156 PM	File folder	
		2015MY Impreza Crosstrek w F10 7 NAVI Update -12-2018	1/11/2019 1:56 PM	File folder	

- 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.

	Windows (Cr) > Users > Subaru > Docu	ments > F10 Software Update	Gen 2.0 and 2.1 A	dio and have read	Units + 2010MT F	orester witter reason opposite. The same	~
A Quick access	Name ^	Date modified	Туре	Size			
	NUNGIO_USB_1st	12/27/2018 4:07 PM	Application	353,053 KB			
ConeDrive	Q NU9610_USB_2nd	12/27/2018 4:07 PM	Application	388,457 KB			
Network							
		us-T-	Self-Extractor - NU	MAN NED for me	×		
		and the second second second			-		
		Tour	ap all files in NU9610_ ed folder press the Un	US8_1st exe to the op button.	Unaip		
		line	to folder:		Run WinZp		
			AN AppCatallocal	Browse	Close		
			erwrite files without pro	mpting	About		
					Help		

- 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:

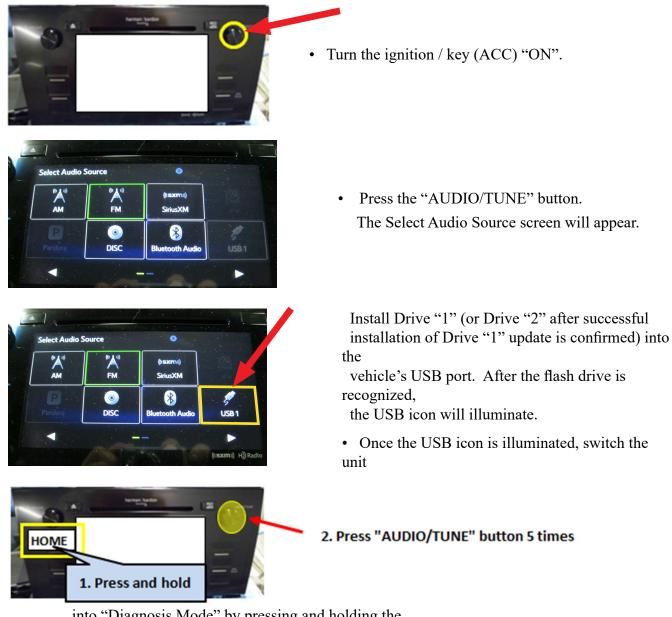
- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched **OFF** before setting up for Power Supply Mode.
- Select the correct battery type (Flooded, AGM or AGM Spiral).
- Select the CCA which matches the vehicle's battery (**NOTE:** OE and replacement 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.

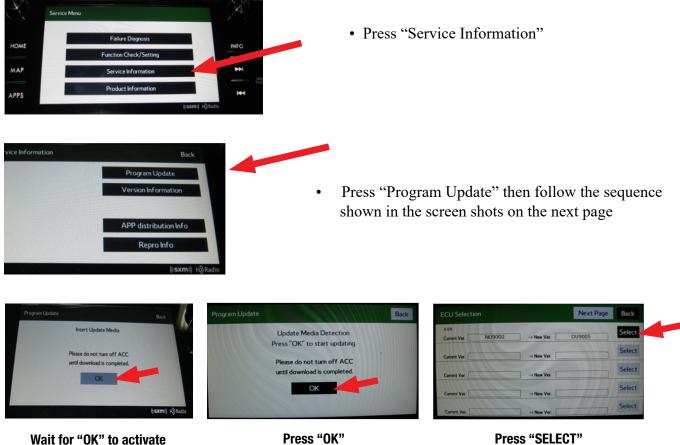
Once the GR8 is connected to the vehicle, **as long as the battery is fully charged**, it takes less than 3 minutes to boot-up the charger, select Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

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

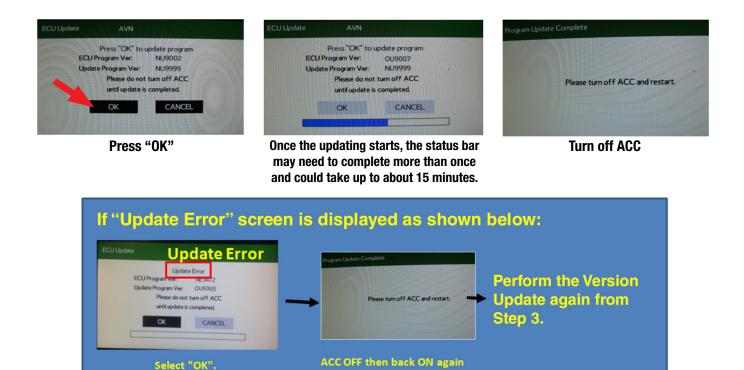
into "Diagnosis Mode" by pressing and holding the HOME button while pressing the "AUDIO/TUNE" button 5 (five) times.



Wait for "OK" to activate (turn black)

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**.



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**.

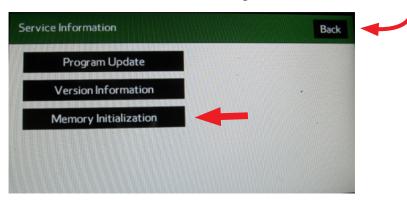
IMPORTANT: Do not turn the ACC (ignition / key) off or disconnect the flash drive from the USB port during updating.

- Once the update completes successfully, turn the ACC off.
- CRITICAL: WAIT AT LEAST 60 SECONDS. If the ignition is turned back on before waiting AT LEAST 60 SECONDS, the data may be corrupted and the unit damaged.
- Updating software. Do not turn off the engine.
- 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.

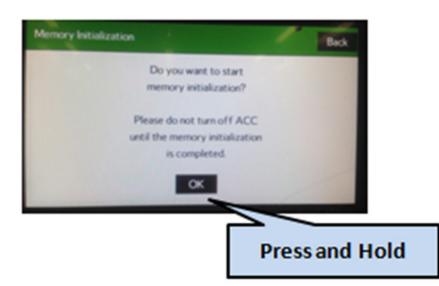
Step 6: Memory Clear Procedure

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

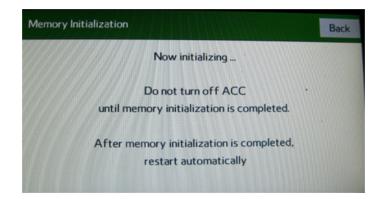
complete the update procedure.

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).



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.

APPENDIX

VERY IMPORTANT: In addition to updates for conditions listed on page 1, each of the new files listed in the table on page 2 contain ALL the previous updates for conditions referenced in prior TSBs 15-182-15R, 15-183-15R and 15-198-16R which this TSB replaces. Please read and understand the following BEFORE installing a software update unnecessarily.

- 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. Instead, refer to the Technical Support Guide, applicable Service Manual, other related Service Bulletin or Tech TIPS to help diagnose this "new" condition. At the same time, always be sure to **complete** the Fujitsu 10 / Denso 10 Questionnaire located in the Forms/Downloads area of Subarunet > Service Operations & Technical section under Exchange Forms to record all details related to the condition as part of repair documentation and to have available should escalation be necessary. If after following the available diagnostics in the Service Manual and Technical Support Guide the condition cannot be resolved, contact Techline with all troubleshooting results, along with a completed questionnaire and videos and/or photos of the condition.
- 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.

The table below provides a history of all previous version ID numbers along with reference to the corresponding TSB number and it's release date. Each update section below lists the specific conditions addressed.

Model	Model Year	"NAVI / DA"	15-182-15 (6/16/15)	15-183-15 (6/16/15)	15-198-15 (5/2/16)	15-205-16R (11/21/16)	15-205-16R (3/21/17)	15-205-16R (1/3/18)	15-205-16R (8/21/18)	15-205-16R (2/27/20)
	2015	NAVI	NU9008		NU9015	NU9014	NU9017	NU9020	NU9020	NU9021
	2015	DA		OU9007	OU9014	OU9013	OU9016	OU9019	OU9019	<mark>OU9020</mark>
Legacy/	2016	NAVI			NU9308	NU9307	NU9309	NU9311	NU9312	NU9313
Outback	2010	DA			OU9307		OU9309	OU9310	OU9311	<mark>OU9312</mark>
	2017	NAVI						NU9508	NU9509	NU9510
	2017	DA						OU9507	OU9508	<mark>OU9509</mark>
Impreza/	2015	NAVI	NU9104		NU9110	NU9109	NU9111	NU9114	NU9114	NU9115
		DA		OU9103	OU9109	OU9108	OU9109	OU9113	OU9113	OU9114
	2016	NAVI			NU9406	NU9405	NU9407	NU9409	NU9410	NU9411
Crosstrek	2016	DA			OU9405		OU9405	OU9408	OU9409	<mark>OU9410</mark>
	2017	NAVI						NU9508	NU9509	NU9510
	2017	DA						OU9408	OU9409	<mark>OU9410</mark>
	2016	NAVI			NU9910	NU9909	NU9911	NU9914	NU9914	NU9915
	2016	DA			OU9909	OU9908	OU9909	OU9913	OU9913	<mark>OU9914</mark>
Forester	2017	NAVI					NU9407	NU9409	NU9410	NU9411
Forester	2017	DA						OU9408	OU9409	<mark>OU9410</mark>
	2018	NAVI						NU9608	NU9609	NU9610
	2018	DA							OU9608	<mark>OU9609</mark>
	2016	NAVI			NU9207	NU9206	NU9208	NU9211	NU9211	NU9212
	2010	DA			OU9207	OU9206	OU9207	OU9210	OU9210	<mark>0U9211</mark>
WBX	2017	NAVI					NU9606	NU9508	NU9509	NU9510
	2017	DA						OU9507	OU9508	<mark>OU9509</mark>
	2018	NAVI						NU9608	NU9609	NU9610
	2010	DA							OU9608	<mark>OU9609</mark>
Conditio with Up	ns addre date Nur		Update (1)	Update (2)	Update (3)	Update (4)	Update (5)	Update (6)	Update (7)	Update (8)

Update (1) TSB No. 15-182-15, originally released 6/16/2015 for NAVIGATION (HIGH) Units ONLY

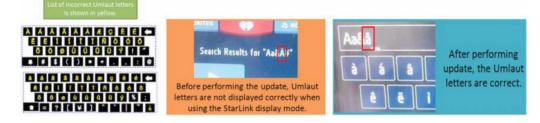
Update ID: NU9008 (2015MY Leg / Obk) or NU9104 (2015MY Imp / Crosstrek). See table provided on page 19 for complete listing by model / model year / head unit type.

Conditions addressed with these update files:

- Audio output is lost after a few minutes when listening to Sirius/XM satellite radio.
- Bluetooth feature becomes inoperative.
- HD Radio "freezes" after a few minutes of play.
- Back-Up Camera "help lines" do not appear.
- 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.
- Roads or interchanges have the same name displayed multiple times.



- Navigation function is slow to start when selected.
- No map display with key or ignition in "ACC" (accessory) position.
- No voice guidance provided from Navigation system after selecting a route unless the ignition is cycled off and back on again.
- Steering wheel switch controls are inoperative with an iPod (MP3) player connected to the USB.
- Incorrect Umlaut characters are shown on StarLink display.



- No response from the soft touch keys on display.
- Back-Up Camera is displayed when shifter is in positions other than Reverse.
- "Line Diag" screen is displayed intermittently while driving.

	Conne	ectivity Chec	k	Vehicle Signal Check		
GPS	OK .			ILL+	OFF	
MIC	NG	UART	NG	SPD	OFF	
Rr_CAM	NG	CAN	NG	PKB	ON	
AUX	NG			REV	OFF	
USB1 USB2	NG			IGN	OFF	

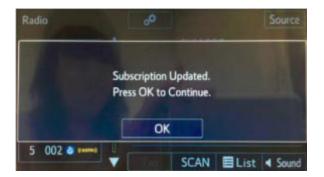
• "LIST" soft touch key is not displayed on Bluetooth Audio screen while using Bluetooth audio feature with an Apple device utilizing iOS8 software version.



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



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



- 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:
 - o Repeated display of the "Loading" screen at initial unit start-up



- Bluetooth device pairing failure
- Inoperative steering wheel (satellite) switches
- Voice recognition feature inoperative
- SXM radio feature inoperative.

CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

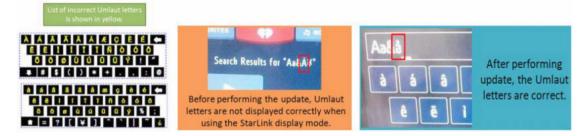
If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.

Update (2) TSB No. 15-183-15, originally released 6/16/2015 for DISPLAY AUDIO (BASE and MID) Units ONLY

Update ID: **OU9007** (**2015MY** Leg / Obk) or **OU9103** (**2015MY** Imp / Crosstrek). See table provided on page 19 for complete listing by model / model year / head unit type.

Conditions addressed with these update files:

- Audio output is lost after a few minutes when listening to Sirius/XM satellite radio.
- Bluetooth feature becomes inoperative.
- HD Radio "freezes" after a few minutes of play.
- Back-Up Camera "help lines" do not appear.
- Incorrect Umlaut characters are shown on StarLink display.



• No response from the soft touch keys on display.

CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.

Update (3) TSB No. 15-198-15, originally released 5/2/2016 for DISPLAY AUDIO (BASE and MID) and NAVIGATION (High) Head Units

Update IDs: See table provided on page 19 for complete listing by model / model year / head unit type.

Conditions addressed with these update files:

- Logic change to provide a "_" (underscore) character on the keyboard.
- Logic change to match the 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".
- 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 a Bluetooth call is ended.
- 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.

CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.

Update (4) TSB No. 15-205-16R, originally released 11/21/2016 for DISPLAY AUDIO (BASE and MID) and NAVIGATION (High) Head Units

NOTES:

- 15-205-16R is the CURRENT TSB to use when performing D-10 head unit updates.
- IMPORTANT: The table below represents a group of update files not specifically released in its own revision to TSB 15-205-16R but were later combined with the revised version dated 3/31/2017.

Update IDs: See table provided on page 19 for complete listing by model / model year / head unit type.

Conditions addressed with these update files:

- Mirrorlink version 1.1 updates
- Navigation guidance MUTE function enabled.

CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.

Update (5) TSB No. 15-205-16R, originally released 3/31/2017 for DISPLAY AUDIO (BASE and MID) and NAVIGATION (High) Head Units

Update IDs: See table provided on page 19 for complete listing by model / model year / head unit type.

Conditions addressed with these update files:

- Intersection names displayed on the Combination Meter may be incomplete
- XM Traffic information may be inaccurate
- On 2015MY Legacy / Outback, there may be an intermittent delay of up to 1 minute before the Map is displayed after starting the Navigation system.

CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.

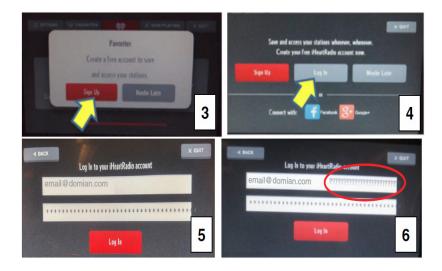
Update (6) TSB No. 15-205-16R, originally released 1/3/2018 for DISPLAY AUDIO (BASE and MID) and NAVIGATION (High) Head Units

Update IDs: See table provided on page 19 for complete listing by model / model year / head unit type.

Conditions addressed with these update files:

- SXM Channel numbers higher than 256 cannot be set using voice recognition.
- Characters may appear garbled to the right of the input characters when entering an e-mail address or password using the software keyboard within the iHeart Radio app.





- The Navigation system freezes when re-routing while using traffic information supplied by SXM.
- The Navigation system re-boots from the Loading screen when utilizing the remote engine starter (RES) feature (if equipped).



CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.

Update (7) TSB No. 15-205-16R, originally released 8/21/2018 for DISPLAY AUDIO (BASE and MID) and NAVIGATION (High) Head Units

Update IDs: See table provided on page 19 for complete listing by model / model year / head unit type.

Condition addressed with these update files:

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

Update (8) TSB No. 15-205-16R, originally released 2/27/2020 for DISPLAY AUDIO (BASE and MID) and NAVIGATION (High) Head Units

Update IDs: See table provided on page 19 for complete listing by model / model year / head unit type.

Condition addressed with these update files:

- Incomplete SXM channel list displayed
- Thumbnail images included with phone contacts are not displayed (iPhone only)
- Quick Message is grayed out and cannot be selected for a reply message
- Head Unit does not respond to touch panel (soft key) commands

• Clock display shifts by one hour when daylight saving is set to auto (applicable to 2015MY Legacy / Outback, 2015MY Impreza /Crosstrek, 2016MY Forester and 2016MY WRX/WRX STI models with Gen 2.0 audio units only).

CAUTION: This countermeasure is only applicable to Gen 2.1 and later. (Not applicable to Gen 2.0.)

CRITICAL NOTE: If the software version for the head unit being diagnosed is the one listed above or later, the enhancements for the above listed conditions are already incorporated. Application of the latest software will not correct similar condition(s). Follow regular diagnosis as outlined at the start of this appendix.

If the software version for the head unit is earlier the one listed above, and the condition is listed, then application of the latest software should resolve it.