	GROUP	NUMBER
	BODY ELECTRICAL	**16-BE-005-2**
	DATE	MODEL(S)
Technical Service Bulletin	**AUGUST 2016**	**SONATA (LF), GENESIS (DH), TUCSON (TL), ELANTRA GT (GD), SANTA FE SPORT (AN), SANTA FE (NC), AZERA (HG), VELOSTER (FS), SONATA HYBRID (LF HEV), SONATA PLUG-IN HYBRID (LF PHEV)**

HYUNDAI | NEW THINKING. NEW POSSIBILITIES.

SUBJECT:	NAVIGATION AND DISPLAY AUDIO: APPLE CARPLAY & ANDROID AUTO SOFTWARE UPDATE

This TSB supersedes TSB# 16-BE-005-1 to add additional models to the applicable vehicle list.

★ IMPORTANT

*** Retailed Vehicles only***

Dealers should perform this customer satisfaction promotional update at the request of the retail customer.

DESCRIPTION: This bulletin provides information for new software to update the Navigation and Display Audio system to include the Apple CarPlay and Android Auto feature.

This bulletin describes how to transfer the update software to a storage drive (USB or SD Card) and perform the software installation into the audio system.

Applicable Vehicles:		Navigation (8" touchscreen) and Display Audio (7" touchscreen) equipped only:
	Phase 1 P/N: 98000-AACP**1**	• 2015-2016MY Sonata (LFa) – Non Hybrid • 2015-2016MY Genesis (DH) – Non-DIS • 2016MY Tucson (TL) • 2016MY Elantra GT (GD) • 2017MY Santa Fe Sport (AN) • 2017MY Santa Fe (NC)
	Phase 2 P/N: 98000-AACP**2**	• 2015-2016MY Azera (HG) • 2016MY Veloster (FS) – AVN Only • 2016MY Sonata Hybrid (LF HEV) • 2016MY Sonata Plug-In Hybrid (LF PHEV)

WARRANTY INFORMATION:

OP CODE	OPERATION
N/A	Navigation / Display Audio Software Update

NOTE: Update is non-reimbursible through warranty.

PARTS INFORMATION:

Parts Description	Part	Remarks
Update USB Drive	98000-AACP**1** 98000-AACP**2**	Update USB Drives containing all update softwares
SD Card Reader	A2MDK-1RDP5	An SD card reader is available in the GDS Mobile Kit if there is no built-in SD card reader on the computer.
SD Card **(8" Touchscreen Navigation Vehicles)**		SD card from the vehicle for the following: 1. 2015-2016 Sonata (LFa) 2. 2015-2016 Genesis Sedan (DH) 3. 2016 Tucson (TL) 4. 2015-2016 Azera (HG) 5. 2016 Veloster (FS) 6. 2016 Sonata Hybrid (LF HEV) 7. 2016 Sonata Plug-In Hybrid (LF PHEV)
USB drive **(8" Navigation or 7" Display Audio Touchscreen Vehicles)**		**Empty USB drive:** • USB 2.0 • Supported Format: FAT16/32 • Minimum Free Space: 4 GB

NOTE:
- Two (2) Update USB Drive (Part no. 98000-AACP**1** & 98000-AACP**2**) was sent to each dealership. Additional Update USB Drives can be ordered through the PDC.
- Do not delete the contents in the Update USB Drive.
- Dealer is responsible for providing their own empty USB drive (4GB) for vehicle updating.
- **Computer Operating System requirement**: **Windows 7 or above.**

Navigation and Display Audio Software Version Chart

Model	Model Year	Radio Type	Update Media	File Size (SW Only / SW + Map DB)	Software Version (Android Auto & Apple CarPlay)
Sonata (LFa) Non-Hybrid	2015	Navigation	SD Card	13.5 GB	ST.LF.USA.E507.160415
	2016	Display Audio	USB	1.81 GB	LF.USA.0000.V067.151222
		Navigation	SD Card	2.13 / 13.4 GB	ST.LF16.USA.E507.160414
Sonata Hybrid (LF HEV)	2016	Navigation	SD Card	13.5 GB	ST.LFHEV.NA.E512.160627
Sonata Plug-In Hybrid (LF PHEV)	2016	Navigation	SD Card	13.5 GB	ST.LFPHEV.NA.E512.160627
Genesis Sedan (DH)	2015	Navigation (Non-DIS)	SD Card	13.5 GB	ST.DH.USA.E509.160420
	2016				ST.DH.USA.E509.160420
Tucson (TL)	2016	Navigation	SD Card	13.4 GB	ST.TL.USA.E509.160516
Elantra GT (GD)	2016	Navigation	USB	2.26 GB	ST.GD.USA.E509.160417
Santa Fe Sport (AN)	2017	Display Audio	USB	1.82 GB	AN.USA.0000.V073.160416
		Navigation		2.14 GB	ST.DM2.USA.E509.160417

Model	Model Year	Radio Type	Update Media	File Size (SW Only / SW + Map DB)	Software Version (Android Auto & Apple CarPlay)
Santa Fe (NC)	2017	Display Audio	USB	1.82 GB	NC.USA.0000.V073.160416
		Navigation		2.14 GB	ST.NC2.USA.E509.160417
Azera (HG)	2015	Navigation	SD Card	13.7 GB	ST.HG.NA.E512.160627
	2016				
Veloster (FS)	2016	Navigation	SD Card	13.5 GB	ST.FS.NA.E512.160627

NOTE: Use the above chart to confirm the software version on either the Navigation or Display Audio. If the software version is older than the versions in the chart, proceed with the TSB procedure.

NOTICE

Navigation vehicles listed below will need to use the original SD Map card from the vehicle in order to update the vehicle.
1. **2015-2016 Sonata (LFa)**
2. **2015-2016 Genesis Sedan (DH)**
3. **2016 Tucson (TL)**
4. **2015-2016 Azera (HG)**
5. **2016 Veloster (FS)**
6. **2016 Sonata Hybrid (LF HEV)**
7. **2016 Sonata Plug-In Hybrid (LF PHEV)**

Remove the SD Map card from the vehicle before proceeding to the Update Software File Transfer Procedure section.

Update Software File Transfer Procedure:

1. Insert the Update USB Drive (either 98000AACP**1** or 98000AACP**2**) into the computer USB port then open the drive. The Update USB Drive will contain (2) folders with update software for the eligible vehicles.

NOTICE

- **Operating System Requirement: Windows 7 or above.**
- **An SD card adaptor is available in the GDS Mobile Kit if there is no built-in SD card reader on the computer.**

NOTICE

(2) Different update devices (1. Orig. SD Map Card or 2. Empty USB Drive) are needed to update the respective model, model year, and head units.

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2. For the following vehicles, remove the SD Map card from the vehicle then insert the vehicle SD Map card into the computer SD card reader.

| Navigation equipped (SD Map Card Update): |
|---|
| 1. 2015-2016 Sonata (LFa) |
| 2. 2015-2016 Genesis Sedan (DH) |
| 3. 2016 Tucson (TL) |
| 4. 2015-2016 Azera (HG) |
| 5. 2016 Veloster (FS) |
| 6. 2016 Sonata Hybrid (LF HEV) |
| 7. 2016 Sonata Plug-In Hybrid (LF PHEV) |

NOTICE

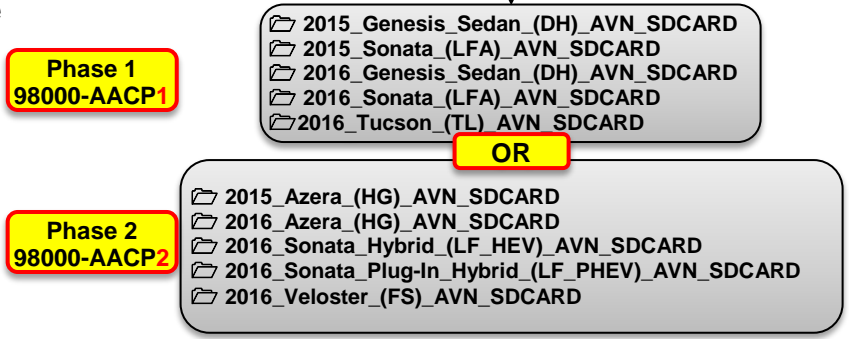**Ensure the SD card is unlocked (not write-protected). The lock slider should be in the up position.**

GDS Mobile Kit SD Card Reader

3. Delete all content in the SD Map card.

SD Map Card — DELETE — EMPTY
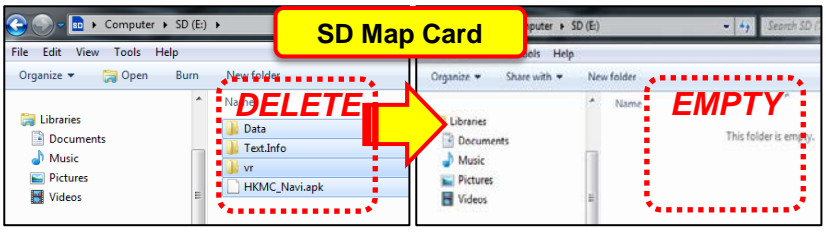
4. In the Update USB Drive, open the SD_Card_Update folder.
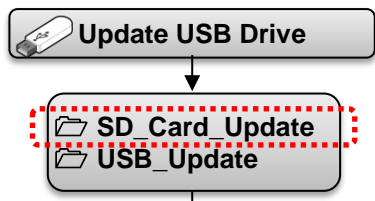
Update USB Drive

SD_Card_Update
USB_Update

5. In the SD_Card_Update folder, open the appropriate ModelYear_Model_HeadUnitType folder.

Phase 1 98000-AACP1

- 2015_Genesis_Sedan_(DH)_AVN_SDCARD
- 2015_Sonata_(LFA)_AVN_SDCARD
- 2016_Genesis_Sedan_(DH)_AVN_SDCARD
- 2016_Sonata_(LFA)_AVN_SDCARD
- 2016_Tucson_(TL)_AVN_SDCARD

OR

Phase 2 98000-AACP2

- 2015_Azera_(HG)_AVN_SDCARD
- 2016_Azera_(HG)_AVN_SDCARD
- 2016_Sonata_Hybrid_(LF_HEV)_AVN_SDCARD
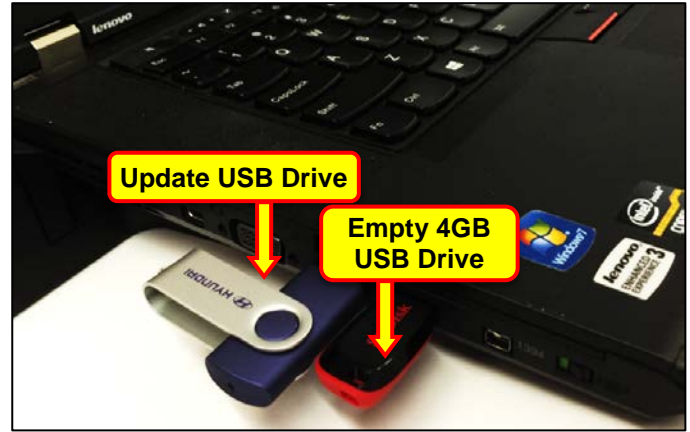- 2016_Sonata_Plug-In_Hybrid_(LF_PHEV)_AVN_SDCARD
- 2016_Veloster_(FS)_AVN_SDCARD

6. Copy and paste the (5) sub-files into the root directory of the SD Map card then proceed to the **Vehicle Update Procedure on page 6.**
    1. Data
   2. Text.Info
    3. Update
    4. vr
    5. HKMC_Navi.apk
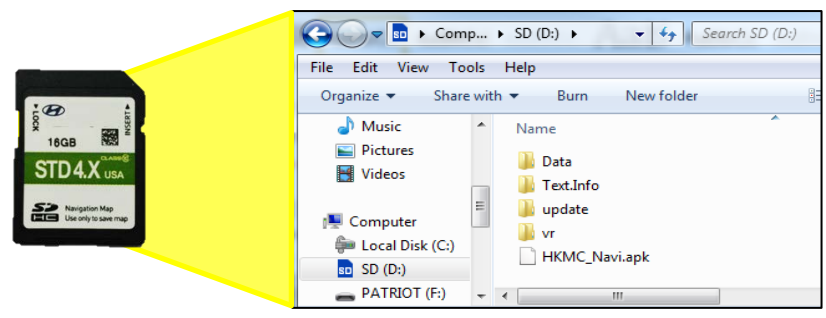
7. For the following vehicles, insert an empty 4GB USB Drive into the computer USB port.

| Navigation or Display Audio equipped (USB Update): |
|---|
| 1. 2016 Elantra GT (GD) – Navigation |
| 2. 2016 Sonata (LFa) – Display Audio |
| 3. 2017 Santa Fe (NC) – Navigation or Display Audio |
| 4. 2017 Santa Fe Sport (AN) – Navigation or Display Audio |

Update USB Drive

Empty 4GB USB Drive

8. In the Update USB Drive, open the USB_Update folder.

Update USB Drive

📁 SD_Card_Update
📁 USB_Update

9. In the USB_Update folder, open the appropriate ModelYear_Model_HeadUnitType folder.

📁 2016_Elantra_GT_(GD)_AVN_USB
📁 2016_Sonata_(LFA)_DAUDIO_USB
📁 2017_Santa_Fe_(NC)_AVN_DAUDIO_USB
📁 2017_Santa_Fe_Sport_(AN)_AVN_DAUDIO_USB

10. Copy and paste the file(s) into the root directory of the empty 4GB USB Drive as shown for the respective model.

Santa Fe & Santa Fe Sport (Navigation & Display Audio)

Sonata (Display Audio)

Elantra GT (Navigation)
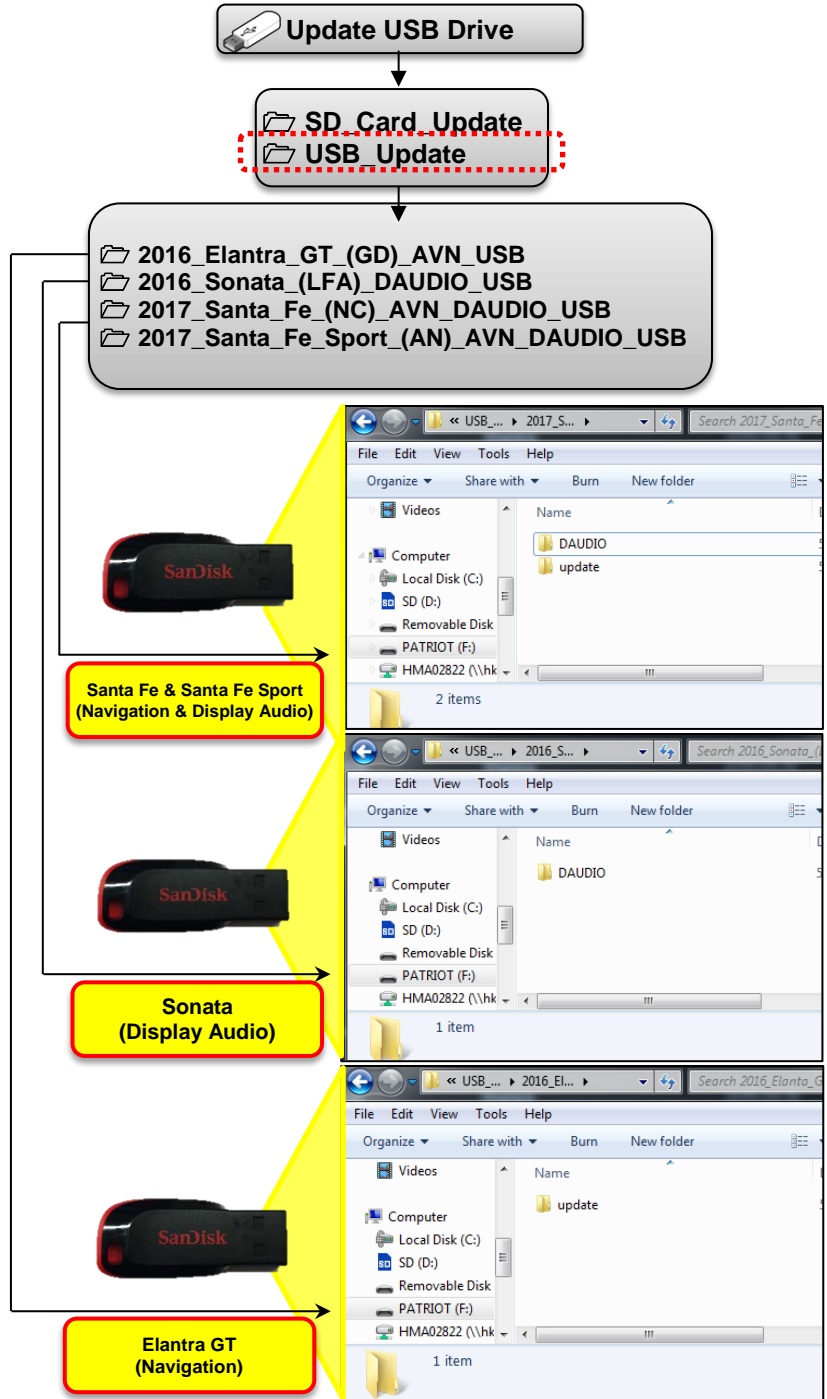
Vehicle Update Procedure:

1. Insert the SD Map card into the vehicle SD Map slot for the following vehicles:
   - 2015-2016 Sonata (LFa) – Navigation only
   - 2015-2016 Genesis Sedan (DH)
   - 2016 Tucson (TL)
   - 2015-2016 Azera (HG)
   - 2016 Veloster (FS)
   - 2016 Sonata Hybrid (LF HEV)
   - 2016 Sonata Plug-In Hyrid (LF PHEV)
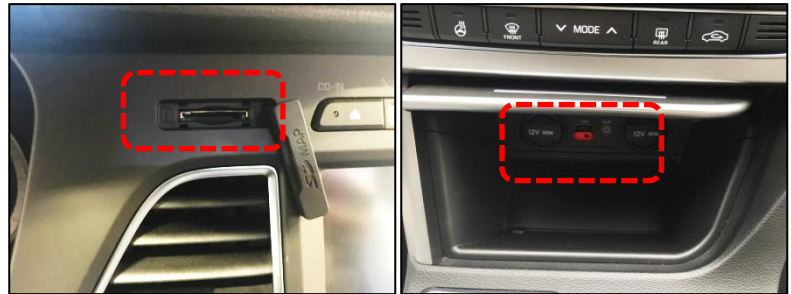
   Insert the USB drive into the vehicle USB port for the following vehicles:
   - 2016 Elantra GT (GD)
   - 2016 Sonata (LFa) – Display Audio only
   - 2017 Santa Fe (NC)
   - 2017 Santa Fe Sport (AN)

2. Start the vehicle by using the key (A), or with the Start Stop Button (B).
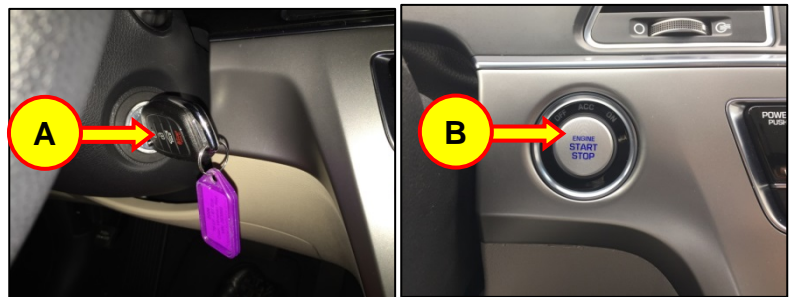

   > **NOTICE**
   >
   > **Park vehicle in a well ventilated area during the update process.**

   > **NOTICE**
   >
   > **To start the vehicle using the Start/Stop Button, depress the brake pedal and push the Start/Stop Button (B).**

   > **NOTICE**
   >
   > **Record the radio presets before initiating the update.**

3. Press the Setup (C) button to enter the Setup menu.

> ### *NOTICE*
>
> **The below pop-up messages may appear if the SD card was updated. Continue through steps 3-6 to initiate the software update.**
> - **'Navigation is currently unavailable. Please check the SD card.' Or**
> - **'Failed to authenticate navigation.'**
>   **pop-up message may appear if the SD card was updated.**

4. Scroll down or swipe left in the Setup menu then touch the "System Info" icon.

Scroll Down Nav	
Swipe Left Display Audio	

5. Touch the "Update" icon at the bottom of the screen to proceed with the software update.

Nav	
Display Audio	
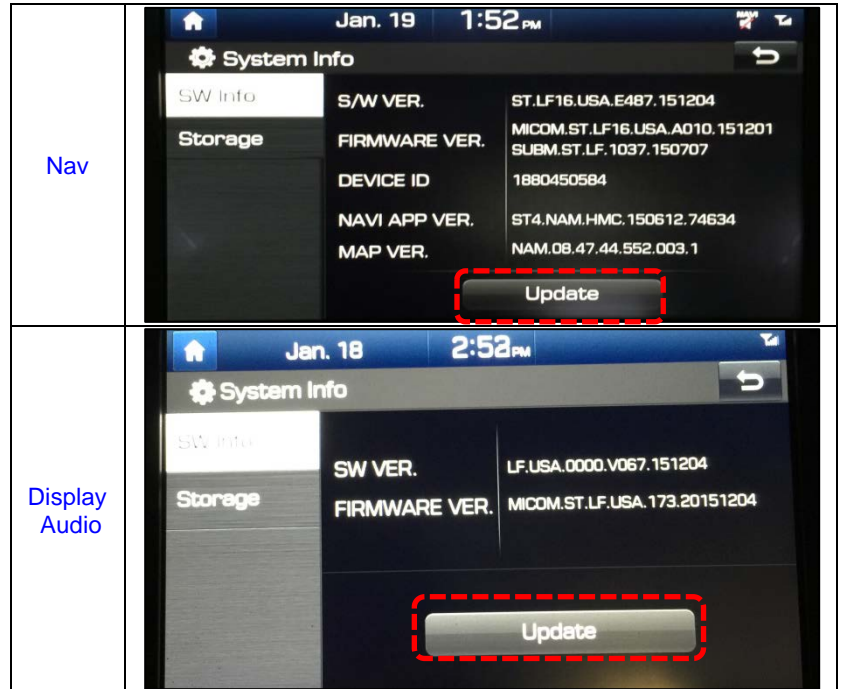
6.   Touch the "OK" icon.

> ### NOTICE
>
> **Do not remove SD card/USB drive or turn off the ignition switch during the update. Otherwise, the update will not complete properly.**

The software will automatically update through 6 steps:

Navigation
0. Checking the update files
1. Copying Files (1/6)
2. a. Preparing System Update (2/6) *(System automatically reboots. Blank screen will momentarily appear.)*
    b. Updating the System
3. Updating Modem (3/6)
4. Updating GPS (4/6)
    a. Updating Monitor** (Azera**)
5. Updating Sub Micom (5/6)
6. Updating Main Micom (6/6)

**Display Audio**
1. Preparing System Update
2. Copying Files
3. a. Preparing System Update *(System automatically reboots. Blank screen will momentarily appear.)*
    b. Updating the System
4. Updating GPS
5. Updating Modem
6. Updating uCom

It will take approximately 20-40 minutes to complete the update process.

> ### NOTICE
>
> **There will be multiple occurrences where the Hyundai logo will appear or display will be black during the update process. This is normal.**
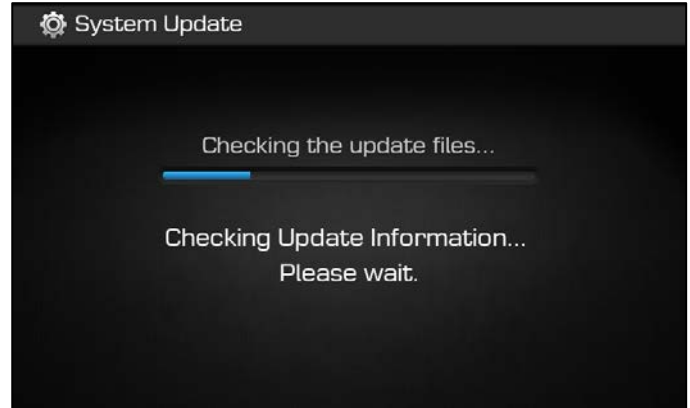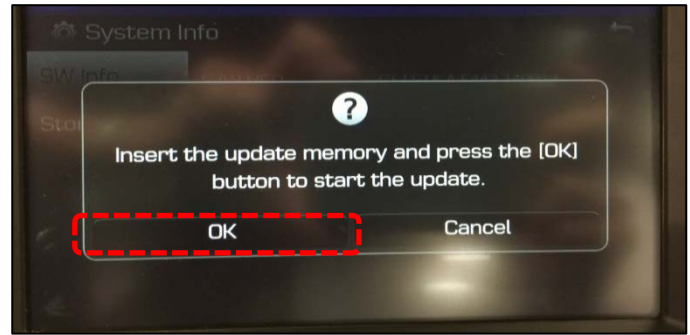
7. The system will reboot automatically after the "Update is complete" message appears.

> ### NOTICE
>
> **The software update is completed after the system reboots and the Disclaimer or the Home screen is displayed.**

> ### NOTICE
>
> **In case the vehicle is turned OFF during the update process, do not remove the SD card. The update will resume after the vehicle is restarted.**
>
> **If update does not resume, return to the "System Info" menu using steps 3-4 and touch the Update icon to initiate the update again.**
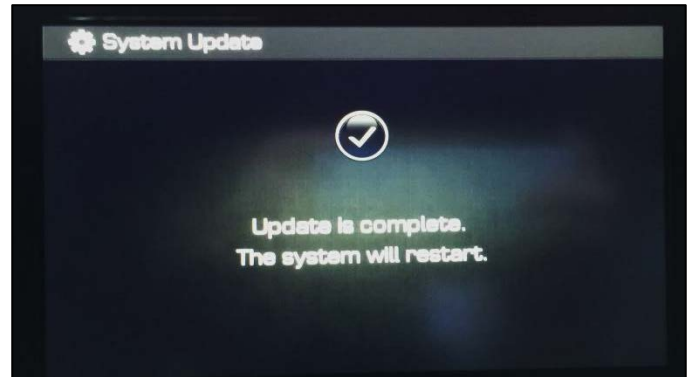
Nav	
Display Audio	

8. Confirm the software version for the model using steps 3-4 and the table listed below.

Nav	
Display Audio	
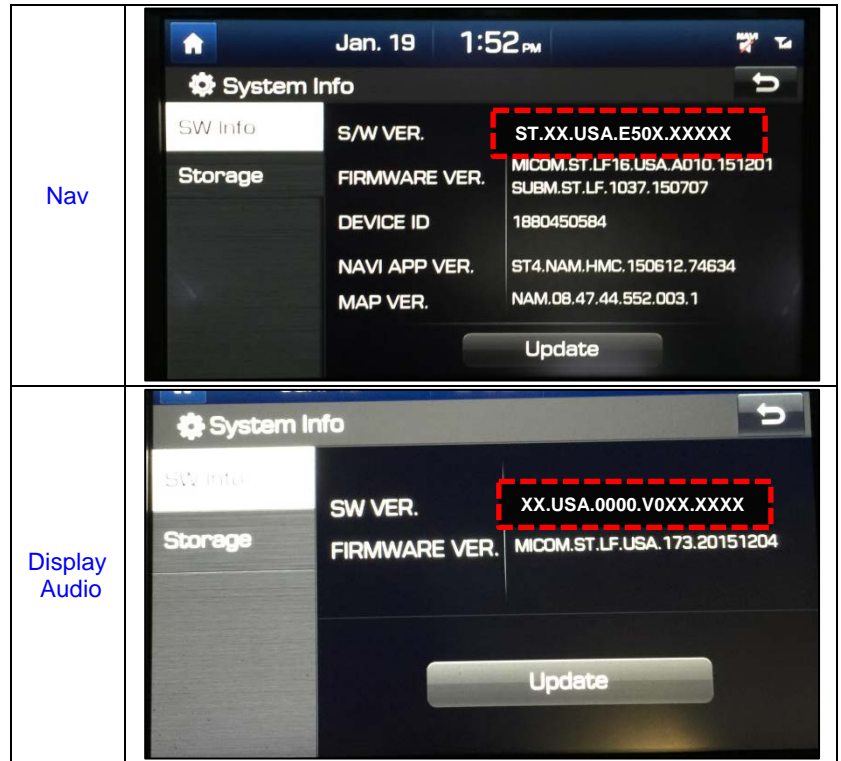
Model	Model Year	Radio Type	Software Version (Android Auto & Apple Carplay)
Sonata (LFa)	2015	Navigation	ST.LF.USA.E507.160415
	2016		ST.LF16.USA.E507.160414
Sonata Hybrid (LF HEV)	2016		ST.LFHEV.NA.E512.160627
Sonata Plug-In Hybrid (LF PHEV)	2016		ST.LFPHEV.NA.E512.160627
Genesis Sedan (DH)	2015		ST.DH.USA.E509.160420
	2016		ST.DH.USA.E509.160420
Tucson (TL)	2016		ST.TL.USA.E509.160516
Elantra GT (GD)	2016		ST.GD.USA.E509.160417
Azera (HG)	2015		ST.HG.NA.E512.160627
	2016		ST.HG.NA.E512.160627
Veloster (FS)	2016		ST.FS.NA.E512.160627
Santa Fe Sport (AN)	2017		ST.DM2.USA.E509.160417
Santa Fe (NC)	2017		ST.NC2.USA.E509.160417
Sonata (LFa)	2016	Display Audio	LF.USA.0000.V067.151222
Santa Fe Sport (AN)	2017		AN.USA.0000.V073.160416
Santa Fe (NC)	2017		NC.USA.0000.V073.160416

9. Touch the 'ᔐ' (Back) icon at the upper right corner of the screen to access the Connectivity settings screen.

Nav	
Display Audio	
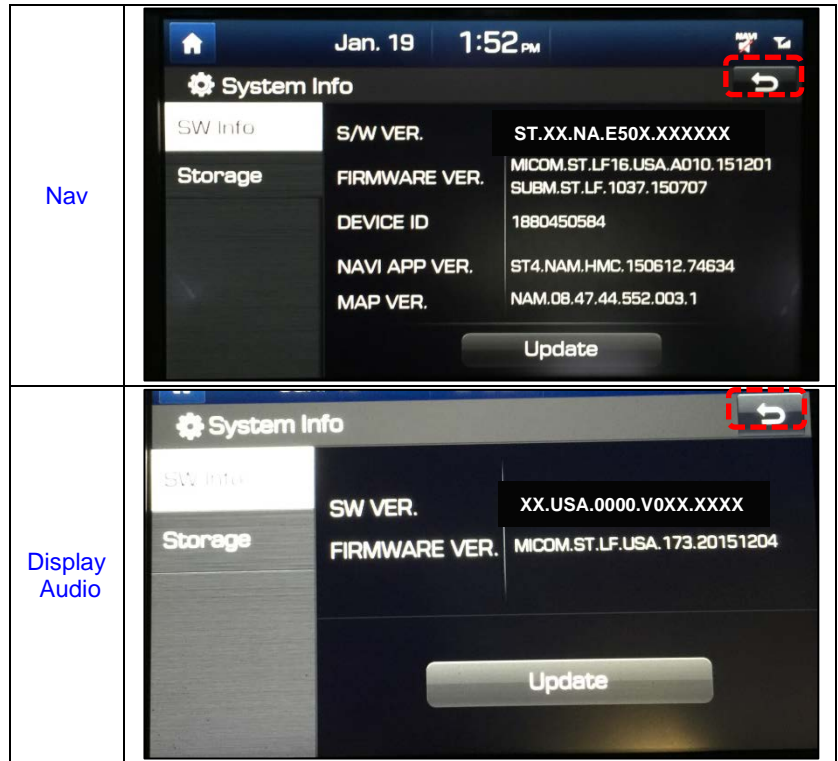
Confirm the Connectivity settings for both Android Auto and Apple CarPlay (iOS) are set to ON (Enabled).

Scroll Down Nav	
Display Audio	
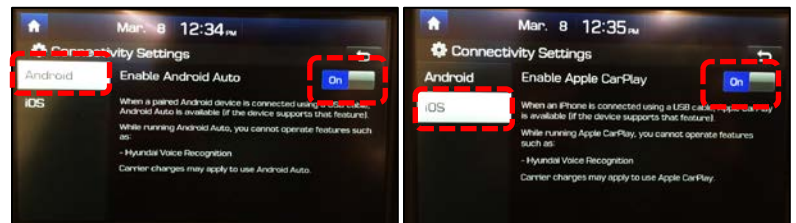
10. Reset the radio presets that were recorded before the update was initiated.

Troubleshooting

Display Message / Error		Reason	Recovery
Error Code	[1XX]	Update file error in Update file check sequence	Re-download SW and try update again.
	[2XX]	Update file error in File Copy sequence	Re-download SW and try update again.
	[3XX]	Update file error in System Update sequence	Re-download SW and try update again.
	[6XX]	Temporarily communication error with Modem module	Press RESET button. Update will resume after system reboots.
	[7XX]	Temporarily communication error with GPS module	Press RESET button. Update will resume after system reboots.
	[13XX]	Temporarily communication error with Sub Micom module	Press RESET button. Update will resume after system reboots.
Navigation is currently unavailable. Please check the SD card.		• SD card does not have the navigation database	• Re-copy and paste the files from the USB Update Drive to the OE SD card then try the update again.
		• SD card is not the OE SD card from the vehicle	• Locate the OE SD card then re-copy and paste the files from the USB Update Drive to the OE SD card and try the update again.
		• SD contains navigation database but there is either no Update file or the system software version may not be compatible with the map database version.	• Perform a manual update (Setup > System Info > System Info >'Press' Update). • Re-copy and paste the files from the USB Update Drive to the OE SD card then try the update again. • If unable to complete the update after performing the above then contact Hyundai Techline.
Failed to authenticate navigation.		SD card is not an authorized SD card	• Locate the OE SD card then re-copy and paste the files from the USB Update Drive to the OE SD card and try the update again. • If unable to complete the update after performing the above then contact Hyundai Techline.
SD Map card is incompatible with this software version. Please insert the correct SD card.		SD Map card is incompatible with navigation software version	• Locate the OE SD card then re-copy and paste the files from the USB Update Drive to the OE SD card and try the update again. • If unable to complete the update after performing the above then contact Hyundai Techline.

Troubleshooting (cont.)

Display Message / Error	Reason	Recovery
Navigation Initialization Unsuccessful. Please check the SD card and try again.	Unable to start the Navigation	Contact Hyundai Techline.
Not compatible with hardware version	SD card is incompatible Note: Affects Sonata (LFa).	Ensure that the correct (Model Year and Model) software is downloaded into the SD card then try the update again. Note: i.e. Inserting a 15MY Sonata (LF) SD card into a 16MY Sonata (LF) will result in this error message.

Reset Button Location

Sonata (LFa/LF HEV/LF PHEV)	Genesis Sedan (DH)	Tucson (TL)
Elantra GT (GD)	**Santa Fe Sport (AN)**	**Santa Fe (NC)**
Azera (HG)	**Veloster (FS)**	