



Service Bulletin

Bulletin No.: 19-NA-100

Date: June, 2019

TECHNICAL

Subject: Radio Software Version 22.8 Over-the-Air Update

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	ATS	2018	2019				
	CTS						
	XTS						
GMC	Terrain	2018	2018				

Involved Region or Country	North America
Additional Options (RPOs)	Equipped with Infotainment System IOS, IOT or IOU
Condition	<p>Some customers may comment on software issues. A continuous improvement software update is being released with updates made on the following areas: navigation, Bluetooth, DIC display and general system improvements. This update includes over 120 improvements, most notable ones include:</p> <ul style="list-style-type: none"> • Greyed out Favorites • DIC Speed Limit sign may be stuck on a value, have no value or is blank, or the unit of measurement (KPH/MPH) may flash. • The navigation radio may display a message of "Navigation Service Has Expired" or "Navigation services is going to expire in XX days" every ignition cycle. • Device Not Connected message when device is connected via USB or Bluetooth. • Bluetooth audio is not consistent. • Bottom status/icon bar is gone until Home button is pressed. • Radio is not connected back to last external device after an ignition cycle. • When no phone is paired and customer only uses OnStar hands free calling, the phone Contacts are deleted after every ignition cycle.
Cause	The cause of the condition may be software anomalies.
Correction	<p>A new radio software update, 22.8, is being released for vehicles equipped with Infotainment system RPO IOS, IOT or IOU, in addition to providing general robustness and stability enhancements.</p> <p>This update can occur remotely through in-vehicle prompts from the radio display. However, some customers may decline the vehicle update or the update may be unsuccessful. Along with the vehicles mentioned above, vehicles in unconnected markets and fleet customers will need the dealer to reprogram the radio with the new software package.</p>

Service Procedure

Important: If the remote vehicle update has been downloaded or installed, DO NOT install the update via USB. DO NOT attempt to complete the programming event without reading Determining Where to Start – Checking for Update Status first to avoid programming failures or module lockup conditions.

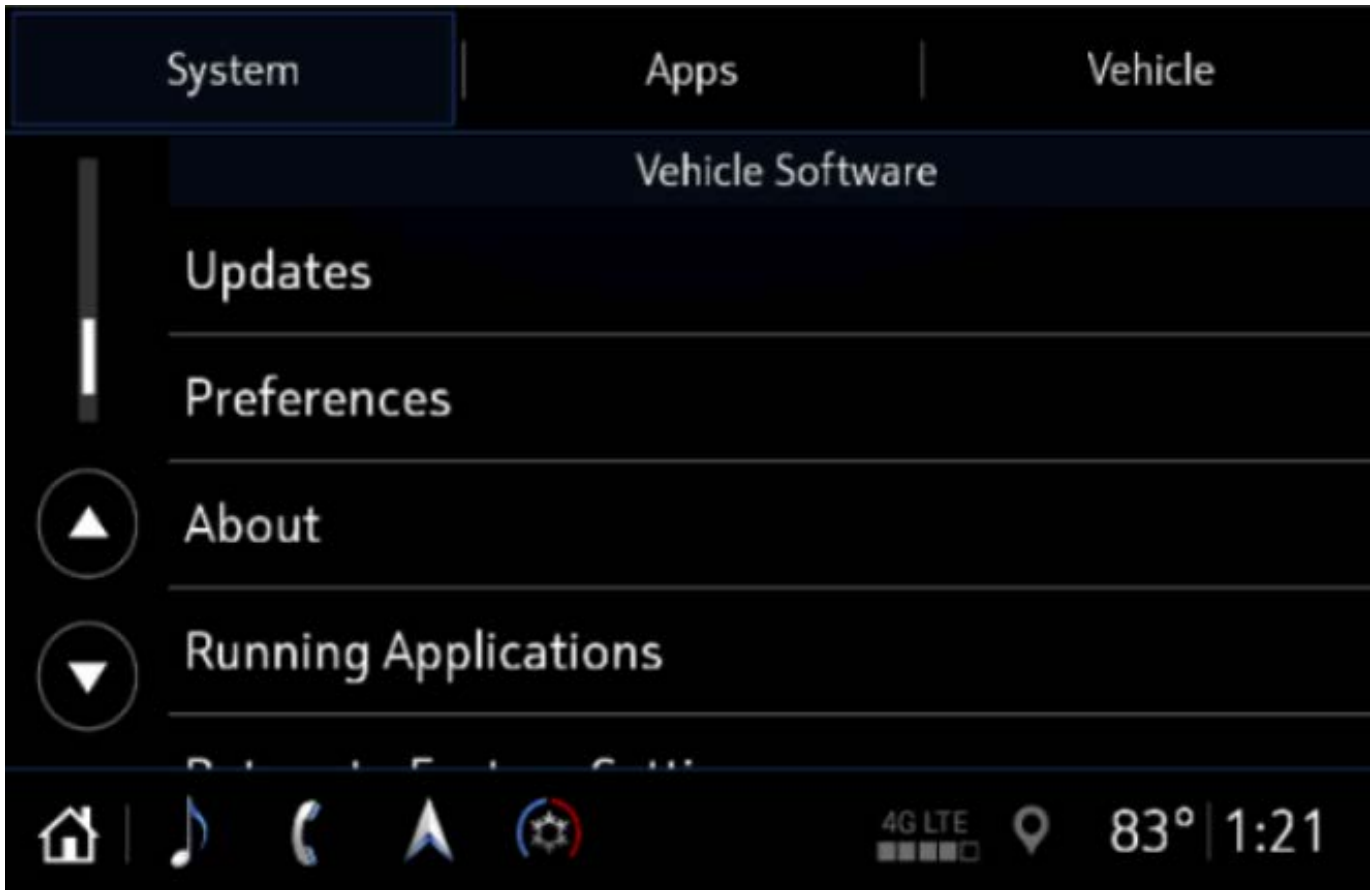
The update procedure in this bulletin includes the following four sections:

- Determining Where to Start – Checking for Update Status
- Update Procedure Using Remote Vehicle Update
- Update Procedure Using TIS2WEB (USB Download)
- Troubleshooting

Important: DO NOT attempt to complete the programming event without reading Determining Where to Start – Checking for Update Status first to avoid programming failures or module lockup conditions.

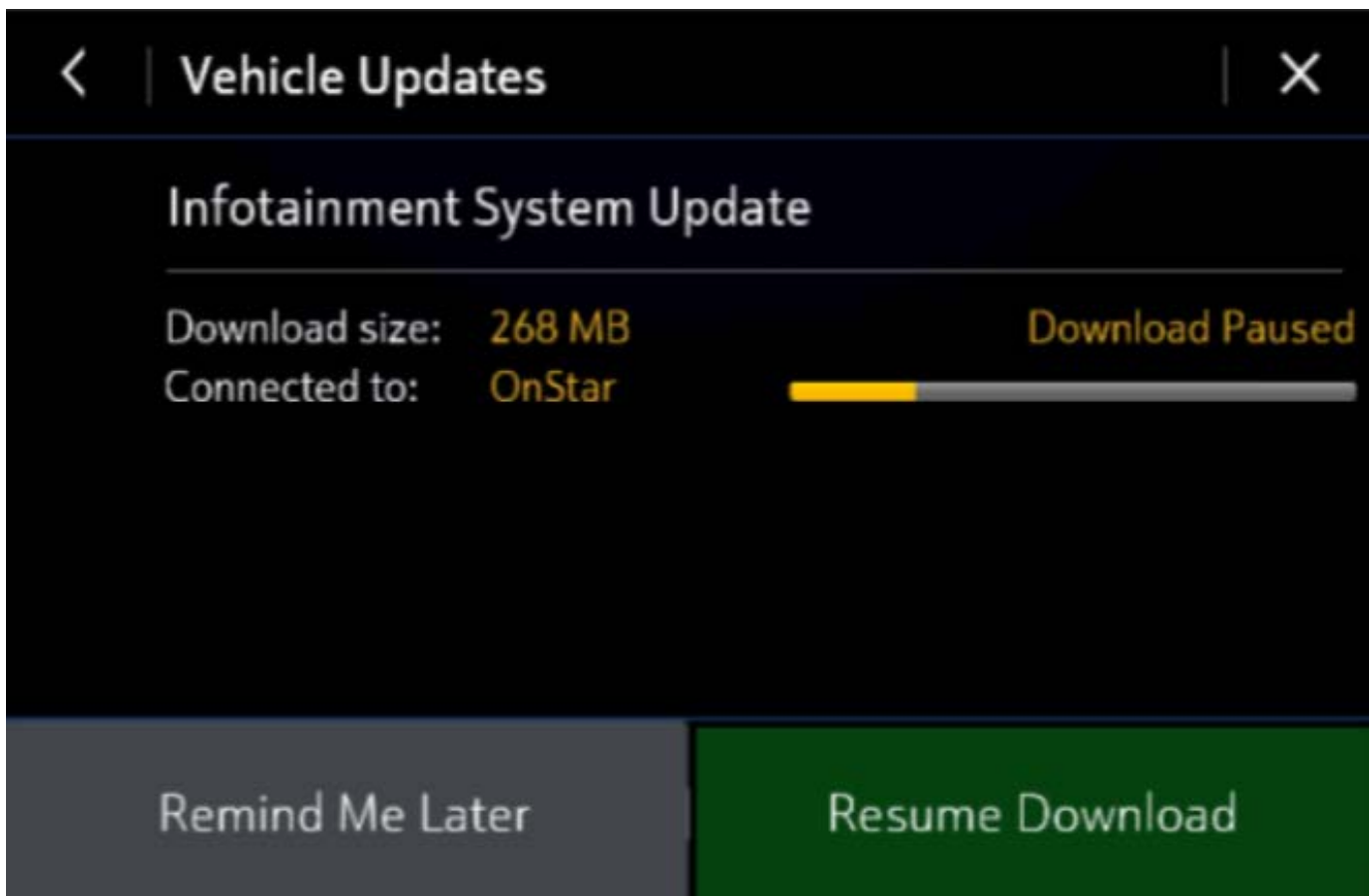
Determining Where to Start – Checking for Update Status

The process used for this update is dependent on the status of the software on the module and if the module already has a remote install package downloaded. To verify if an update package is already on the vehicle, open “Settings” and then scroll to “Updates” on the radio screen. If an update is shown under the “Updates” screen, proceed to the Update Procedure Using Remote Vehicle Update section of this document.



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If no update is shown (see “No Updates Available” image in next section), go to the “About” screen and verify the build number (i.e. 20.9, 20.10, 20.11, 21.17x, etc.). If the build number is less than 22.8, proceed with the software update following the **Update Procedure Using TIS2WEB (USB Download)** section of this document.



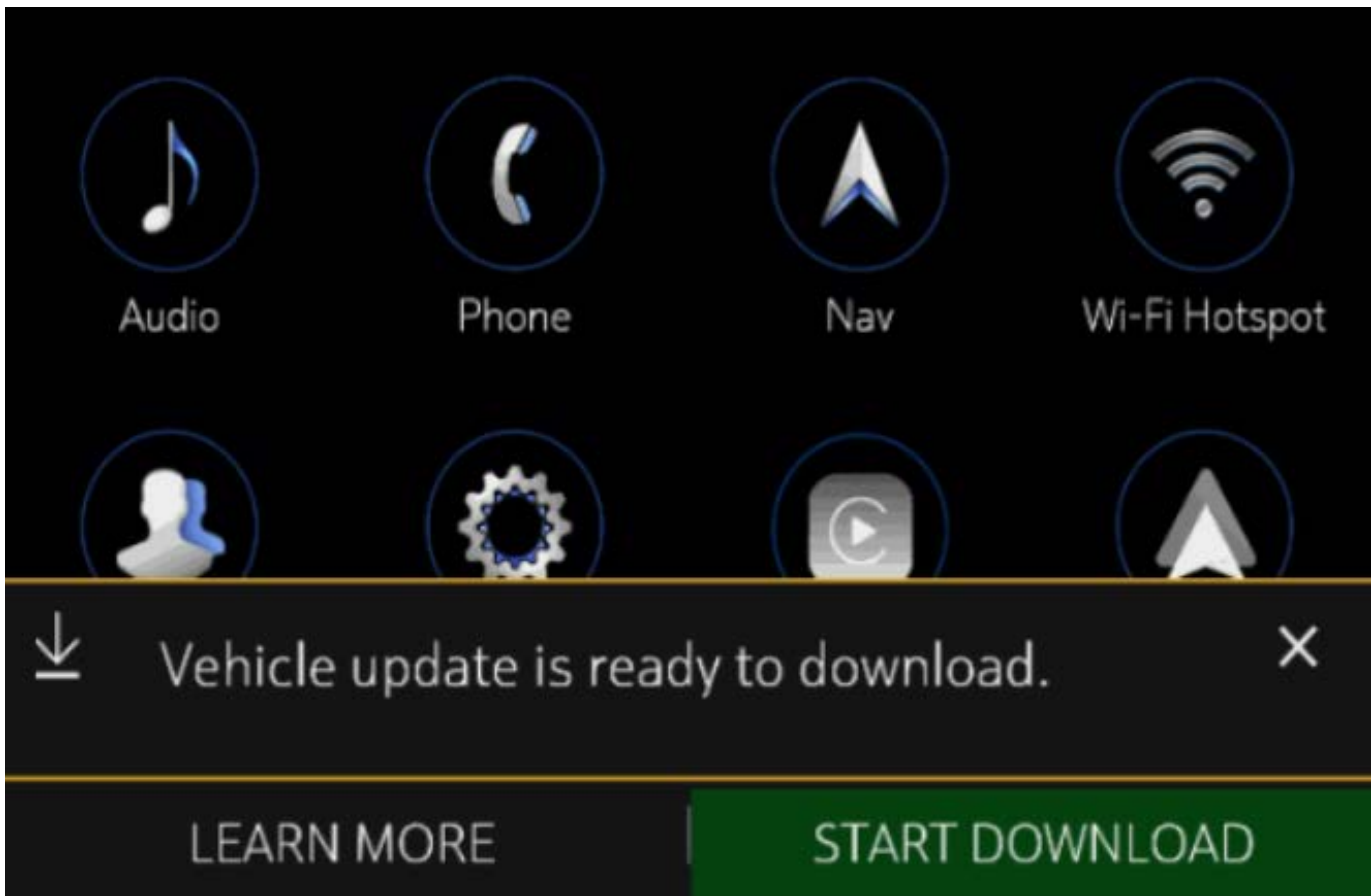
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Caution: If Vehicle Update screen shows “Infotainment System Update” (such as the screen above) do not use TIS2WEB or insert a USB stick. Use of the USB stick when the Remote Update has already been downloaded, installed, or paused during installation could result in program failures or module lockup condition. The update should be completed using the Remote Vehicle Update procedure, following prompts on the infotainment screen. Refer to Update Procedure Using Remote Vehicle Update after reading the remaining information in this section if the Remote Update has already been downloaded to the radio.

- If the remote vehicle update CANNOT be completed, the radio must be updated through SPS via USB. Refer to Update Procedure Using TIS2WEB (USB Download) in this bulletin.

Update Procedure Using Remote Vehicle Update

1. If a remote package is on the system, you may see the below pop up.
 - If the remote vehicle update has not been downloaded, select “Start Download”, wait for the download to complete and then follow the prompts to complete installation.



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2. If no "Start Download" or "Install Now" pop up is displayed, navigate to "Settings" -> "Updates." If there is a remote package on the system, it will display "Install Now" Or "Start Download." If the screen below is shown, then there is no remote update package on the system. Navigate to Settings -> About to verify the software version. If the build number is not 22.8 or greater, update via USB.



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Important: During installation, the vehicle will be disabled and cannot be driven. Features like door locks, windows and chimes may not work. If you leave the vehicle, DO NOT lock occupants inside.

Note: Download may pause due to cellular connection speed. If the download pauses, click resume to continue. If the download takes longer than 30 minutes, see the *Troubleshooting* section in this bulletin.

3. Once the remote vehicle update has completed, verify the following operations: Select "Settings", scroll down and select "Updates." If no updates are available, verify software build is at 22.8 or greater in "Settings" -> About screen. If confirmed, no further action is required.
 - 3.1. At ignition on, verify that the radio displays the proper brand splash animation.
 - If the incorrect splash animation is shown (e.g. Cadillac logo in a GMC vehicle) proceed to step 2.3.
 - If the correct splash animation is shown proceed to step 3.2.
 - 3.2. Verify audio plays and that audible warning chimes function correctly.
 - If the audio is muted or chimes are not operating as expected proceed to step 3.3.
 - If the audio and chimes are operating as expected, no further action is required.
 - 3.3. Determine the software version now in the radio by selecting Home> Settings> About> Build Number. It should be 22.8 or greater.
 - If 22.8 or greater, reprogram the radio using SPS programming. Refer to the appropriate *A11 Radio: Programming and Setup (IOS/IOU/IOT/IOR)* document in SI.
 - If less than 22.8 reprogram the radio using USB and SPS programming events. Refer to the appropriate *A11 Radio: Programming and Setup (IOS/IOU/IOT/IOR)* document in SI.

Update Procedure Using TIS2WEB (USB Download)

Caution: If the Same Calibration/Software Warning is noted on the SPS Controller screen, do NOT attempt to program the module. No further action is required.

Caution: Do not use TIS2WEB or insert a USB stick if a Remote Update has been downloaded to the radio. Use of the USB stick when the Remote Update has already been downloaded, installed, or paused during installation could result in program failures or module lockup condition.

Note: Carefully read and follow the instructions below.

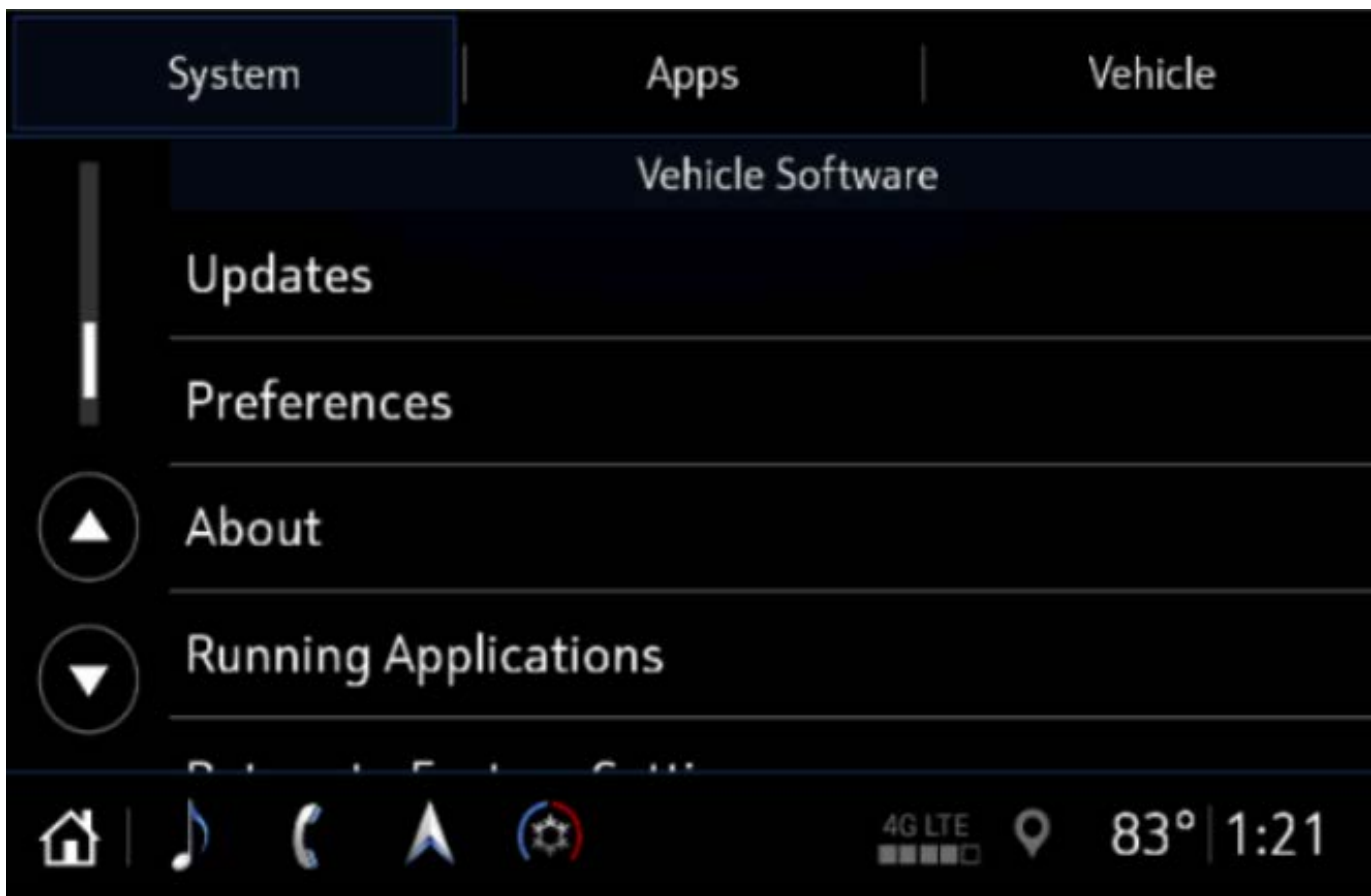
- DO NOT attempt to order the calibration number from GM Customer Care and Aftersales. The calibration numbers required for this update procedure are programmed into control modules via a Multiple Diagnostic Interface (MDI) with the calibration update. If you cannot access the calibration, call the Techline Customer Support Center and it will be provided.
- DO NOT program a control module unless directed to by a service procedure or a service bulletin. If the control module is not properly configured with the correct calibration software, the control module will not control all the vehicle features properly.
- Ensure the programming tool is equipped with the latest software and is securely connected to the data link connector. If there is an interruption during programming, programming failure or control module damage may occur.

- Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect a fully charged 12 V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.
- Turn OFF or disable systems that may put a load on the vehicles battery such as; interior lights, exterior lights (including daytime running lights), HVAC, radio, etc.
- During the programming procedure, follow the SPS prompts for the correct ignition switch position.
- Refer to Radio Programming and Setup for additional information on programming.

Important: For every vehicle that needs to be updated through USB, be sure to download the files through TIS2WEB on a USB drive each time for each vehicle. DO NOT use the same files downloaded from a previous vehicle. Use a USB 3.0 drive formatted to FAT32 with a minimum size of 4 gigabytes, however, 16 gigabytes is preferable.

Important: Before downloading the USB update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD the files wirelessly.

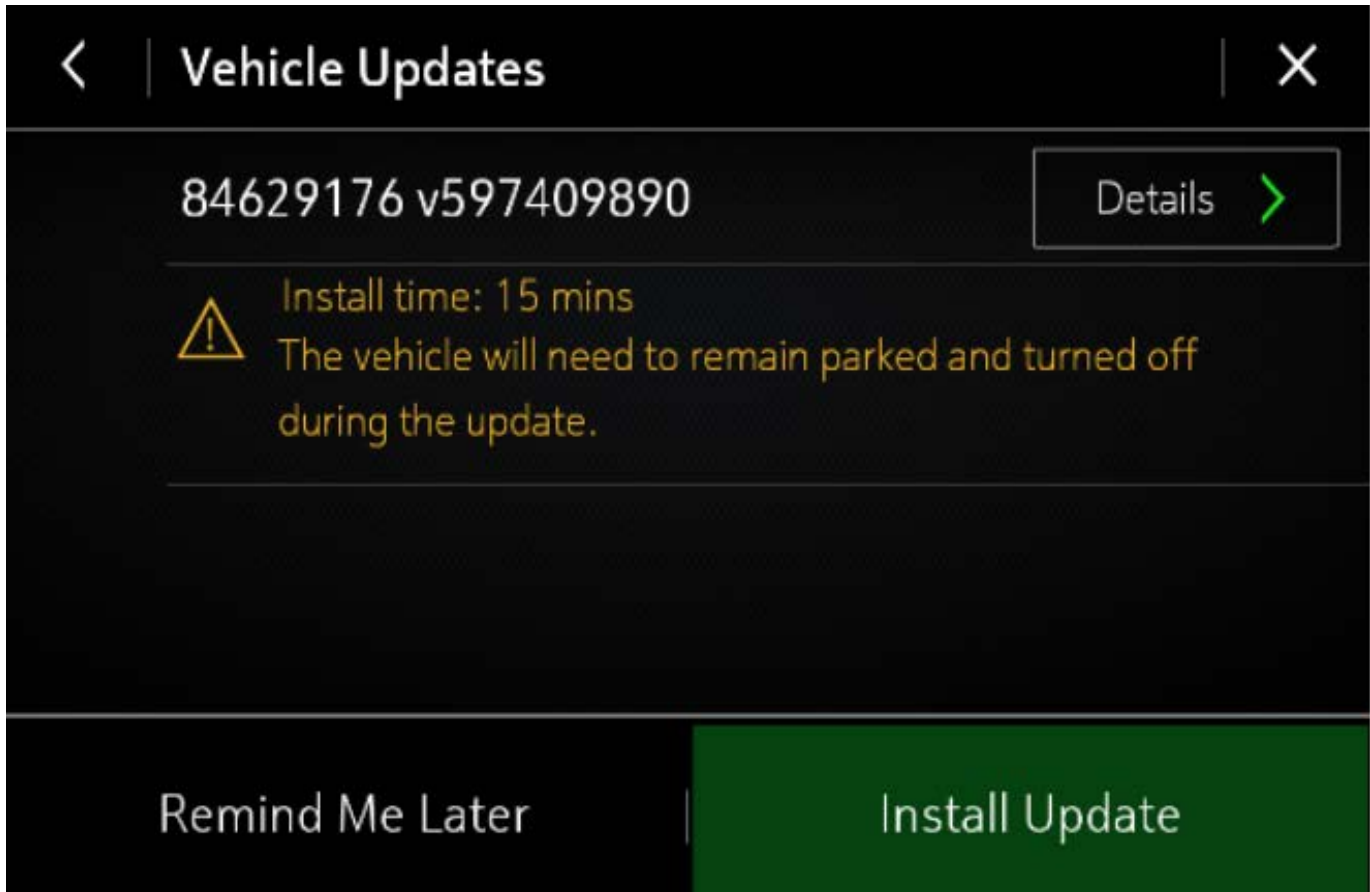
1. Start SPS, select Radio – USB File Transfer and follow the on-screen instructions.
2. Record the SPS Warranty Claim Code on the job card for warranty transaction submission.



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3. Insert the USB into the vehicle while in Park. On the radio screen, select "Settings," "Updates" or select "Learn More" on pop up after USB insertion.
4. Confirm the part number with image below.
5. Follow on screen prompts to complete the update.
6. Once the remote vehicle update has completed, verify the following operations:
 - 6.1. At ignition on, verify that the radio displays the proper brand splash animation.
 - If the incorrect splash animation is shown (e.g. Cadillac logo in a GMC vehicle) proceed to step 6.3.
 - If the correct splash animation is shown proceed to step 6.2.
 - 6.2. Verify audio plays and that audible warning chimes function correctly.
 - If the audio is muted or chimes are not operating as expected proceed to step 6.3.
 - If the audio and chimes are operating as expected, no further action is required.
 - 6.3. Determine the software version now in the radio by selecting Home> Settings> About> Build Number. It should be 22.8 or greater.
 - If 22.8 or greater, reprogram the radio using SPS programming. Refer to the appropriate A11 Radio: Programming and Setup (IOS/ IOU/IOT/IOR) document in SI.
 - If less than 22.8 reprogram the radio using USB and SPS programming events. Refer to the appropriate A11 Radio: Programming and Setup (IOS/IOU/IOT/IOR) document in SI.

Important: During USB programming, be sure to keep the vehicle doors closed.



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- Clear DTCs after programming is complete. Clearing powertrain DTCs will set the Inspection/Maintenance (I/M) system status indicators to NO.

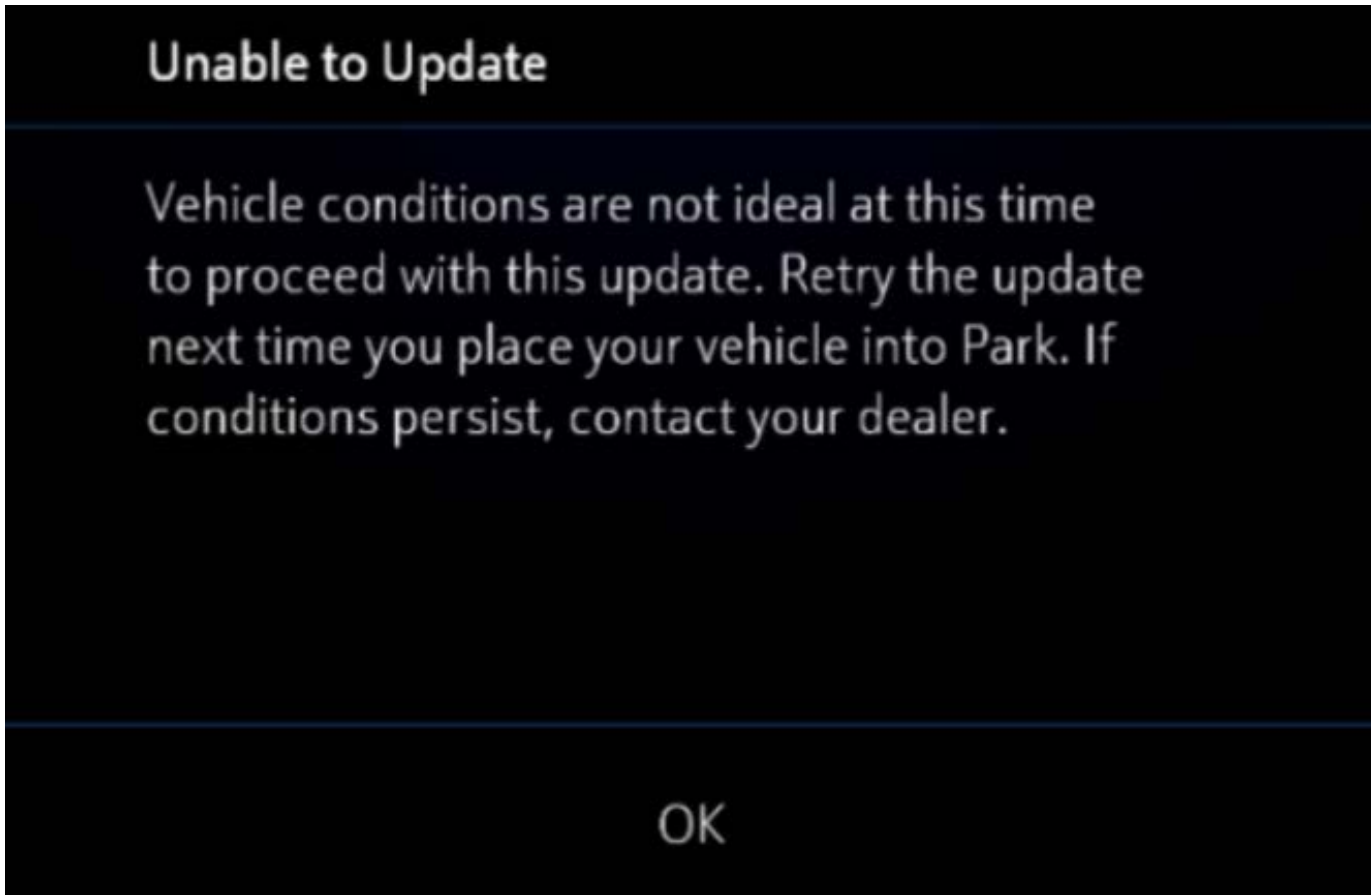
Troubleshooting

Important: When downloading USB update files, be sure the computer is connected to the internet through a network cable (hardwired). DO NOT DOWNLOAD the files wirelessly.

Important: If having issues with the USB drives, try using a different brand. The USB drive should be USB 3.0.

Important: It is normal operation of the Over-the-Air (OTA) update process for a radio to remain on for 30 seconds after ignition is turned off and retained accessory power (RAP) has been disabled. The radio will return to normal power down operations, i.e. off when RAP is disabled, once the OTA update has been installed.

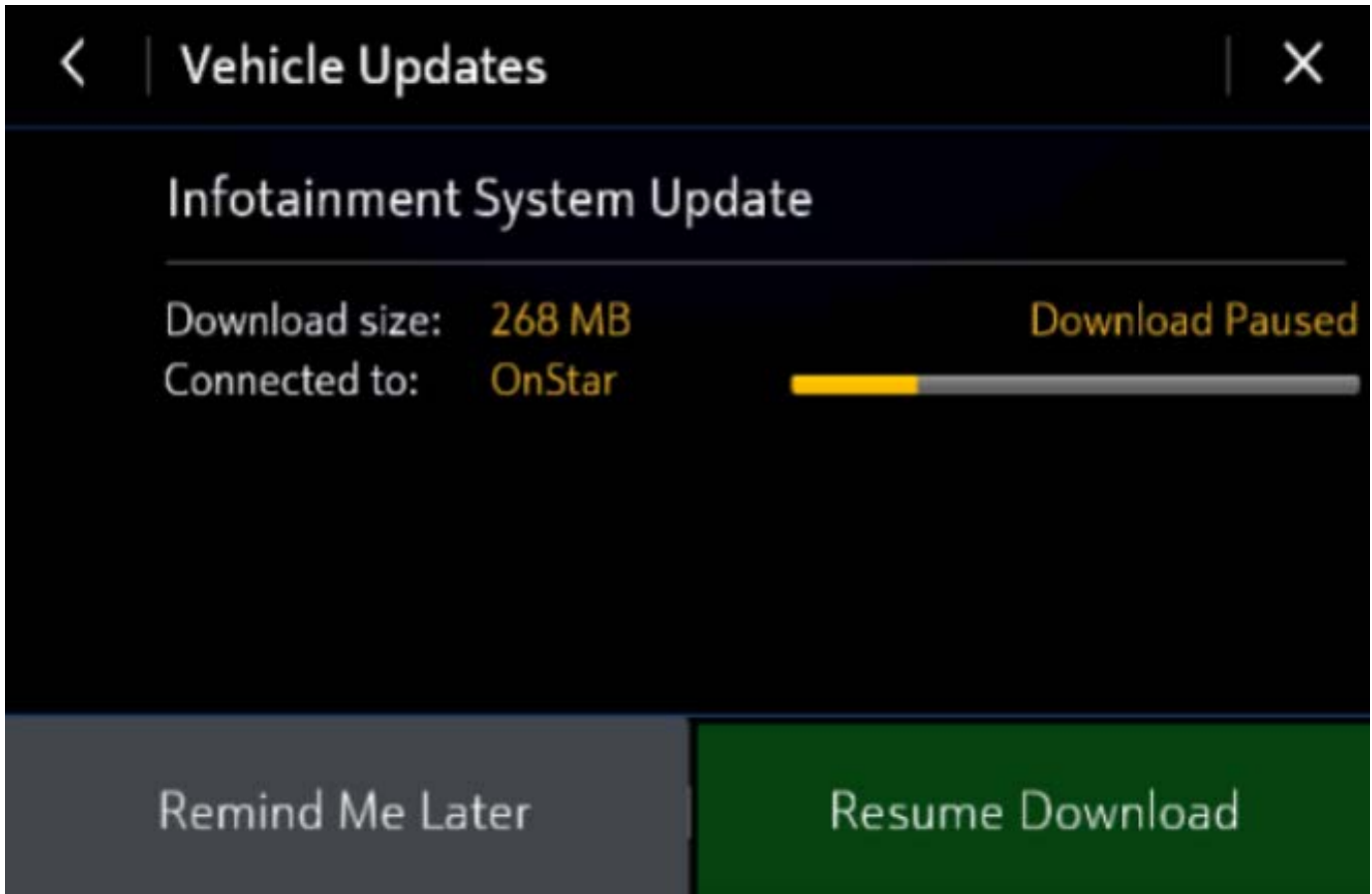
Scenario 1: Vehicle conditions are not ideal



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If the above screen is shown, download the update through TIS2Web and perform USB update. Upon USB insertion while vehicle is running, the "Install Now" pop up will be presented. Ensure the vehicle battery is being maintained (using EL-49642 or battery maintainer) while performing this update.

Scenario 2: Consistently Paused Download



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If the above screen is shown and resuming the download repeatedly fails, a USB update will need to be performed. Turn the vehicle on, return to the home screen, and insert USB stick (see previous section). A pop up should be shown to "Install Now." Click "Install Now", verify the part number is correct and follow on screen prompts.

Scenario 3: Update Failed. Return to dealer screen

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1. If the above screen is shown, download the update through TIS2Web and insert USB stick into the radio **twice** (USB stick is not recognized on first insertion). A blue progress bar should come on the screen and update will proceed. If this screen above is shown when trying to update the radio through USB, reformat to FAT32 on your PC, and then try to download the update through TIS2WEB again.
2. After selecting USB File Transfer, if you are prompted by TIS2Web to select a software PN, then follow the on-screen instruction to attempt to gather the software PN from the A11 Radio using GDS2 scan tool. If GDS2 indicates the radio is not communicating, go back to TIS2Web, select A11 Radio, and select "Per Bulletin **19-NA-100** " to complete the USB File Transfer programming event.
3. If the screen above is shown again, contact the GM Technical Assistance Center (TAC) at 1-800-828-6860 for assistance.

Parts Information

No parts are required for this repair.

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
9104434*	Remote Vehicle Update: TIS2WEB/USB Download Not Required	0.3 hr
9104377**	Radio Module Reprogramming with SPS/USB	0.3 hr

*A Warranty Claim Code is not required for this transaction.

**To avoid warranty transaction rejections, the SPS Warranty Claim Code must be entered when submitting this transaction. When more than one Warranty Claim Code is generated for a control module programming event, it is required to document all Warranty Claim Codes in the Correction field on the Job Card. Dealers must only enter one code in the "SPS Warranty Claim Code" field on the transaction, otherwise the transaction will reject.

Warranty Claim Code Information Retrieval

If the SPS Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:

- Open TIS on the computer used to program the vehicle.
- Select and start SPS.
- Select Settings.
- Select the Warranty Claim Code tab.

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Version	1
Modified	Released May 30, 2019

