



# Service Bulletin

Bulletin No.: PIE0502

Date: February, 2019

## ENGINEERING INFORMATION

**Subject:** Engineering Information – Navigation SD Card Error Message OR USB Functionality Investigation

**Attention:** Proceed with this EI ONLY if the customer has commented about this concern AND the PIE number is listed in the Global Warranty Management / Investigate History link (GWM/IVH). If the customer has not commented about this condition or the EI does not show in GWM/IVH, disregard the PI and proceed with diagnostics found in published service information. THIS IS NOT A RECALL — refer to the latest version of Service Bulletin 04-00-89-053 for more details on the use of Engineering Information bulletins.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	LaCrosse	2019	2019				
	Regal						
Chevrolet	Colorado						
	Equinox						
	Silverado 1500 (New Model)						
GMC	Canyon						
	Terrain						
	Sierra 1500 (New Model)						

Involved Region or Country	North America
Additional Options (RPO's)	Equipped with one of the following RPOs: <ul style="list-style-type: none"><li>• RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, MID SD NAV CAPABLE (IOS)</li><li>• RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, PREMIUM SD NAV (IOT)</li><li>• RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, MID SD NAV (IOU)</li><li>• RADIO-INFOTAINMENT SYSTEM - 3.X LOW HMI, MIDDLE LEVEL CONNECTIVITY 3.X (IOR)</li></ul>
Condition	<b>Important:</b> If the customer did not bring their vehicle in for this concern, <b>DO NOT</b> proceed with this EI. Some customers may comment on a navigation error message, intermittently or consistently, that appears on the radio display or instrument cluster while navigation is being used. A customer could also report a navigation error message on the instrument cluster when navigation is not in use. Additionally, a customer may note that their USB devices are not working properly. This could include Android Auto/Apple CarPlay, USB sticks with media, or similar devices connected via USB not functioning as expected.
Cause	GM Engineering is attempting to determine the root cause of the above condition. Engineering has a need to gather information on vehicles PRIOR to repair that may exhibit this condition. As a result, this information will be used to "root cause" the customer's concern and develop/validate a field fix.

## Correction

If you encounter a vehicle with the above concern, perform the following steps and contact the engineers listed below with your findings.

### For IOS, IOU, and IOT Equipped Vehicles ONLY

Navigation SD Card Error Message:

Capture a photo of the error message and document the following:

- Is the error message present in the cluster, radio, or both?
- Is the problem duplicated across sleep cycles? (Y/N)
- Is the problem intermittent? (Y/N)
- Does the problem occur at the start of ignition cycle or after use?
- Check for and list any DTCs

Launch Navigation – Can you see the map? (Y/N)

- If Map is shown, is the picture distorted? (Y/N)

Check USB/SD Card Reader – Is SD Card installed and seated fully? (Y/N)

- Begin with SD Card Hub that has the SD card Reader
  - Test media playback using a USB flash drive in USB/SD Reader – Does this function? (Y/N)
  - Test for device charging on USB/SD Reader – Does the device charge? (Y/N)
  - Test for Android Auto and Apple CarPlay Functionality on USB/SD Reader – Does either function? (Y/N)
  - Test media playback from SD Card – Does this function? (Y/N)
- If first USB test fails, then complete the same testing on the non-SD Card Reader Hub
  - Test media playback using a USB flash drive in USB Hub– Does this function? (Y/N)
  - Test for device charging on USB Hub – Does the device charge? (Y/N)
  - Test for Android Auto and Apple CarPlay Functionality on USB Hub – Does either function? (Y/N)
- If SD Card Reader Hub is inoperative and non-SD Card Reader Hub works, then check wiring between USB modules
  - Remove both USB hubs from respective locations.
  - Disconnect X3 connector at the hubs.
  - Connect USB 2.0 mini-b male to mini-b male test cable to the hubs.
- If Intermediate cable is good, test the following
  - Connect SD Card Reader USB Hub to Non-SD Card Reader Hub harness.
  - Re Check for functionality.
- If USB functionality is good, check the following:
  - IGN OFF – Remove SD Card, inspect terminals for fretting. Problem still present? (Y/N)
  - IGN OFF – Check SD Card read/write switch position - Is it in the up (nearest to the card terminals) position? (Y/N)
  - Insert SD card until fully seated – Re Check functionality – Did functionality resume? (Y/N)

### For IOR Equipped Vehicles ONLY

Do you have issues with USB functionality (Apple CarPlay/Android Auto/Media Streaming)?

- Is the problem duplicated across sleep cycles? (Y/N)
  - Is the problem intermittent? (Y/N)
  - Does the problem occur at the start of ignition cycle or after use?
  - Check for and list any DTCs
- First, test the upstream USB Hub
  - Test media playback using a USB flash drive in the USB Hub– Does this function? (Y/N)
  - Test for device charging on the USB Hub – Does the device charge? (Y/N)
  - Test for Android Auto and Apple CarPlay functionality on the USB Hub – Does either function? (Y/N)
- If equipped, test the downstream USB Hub
  - Test media playback using a USB flash drive in the USB Hub– Does this function? (Y/N)
  - Test for device charging on the USB Hub – Does the device charge? (Y/N)
  - Test for Android Auto and Apple CarPlay functionality on the USB Hub – Does either function? (Y/N)

- If equipped, check cables between USB modules
  - Remove both USB hubs from respective locations.
  - Disconnect X3 connector at hubs.
  - Connect USB 2.0 mini-b male to mini-b male test cable to hubs.
- If vehicle has single hub configuration, test the cable between hub and Radio.
  - Remove the USB hub from location.
  - Disconnect X2 connector at hub.
  - Connect USB 2.0 mini-b male to mini-b male test cable to Radio.

## Contact Information

Engineer Name	Phone Number
Brett Roof	(586) 435-4974
Greg Lindemann	(313) 720-4924

Please include the following information if leaving a message:

- Technician name
- Dealer name and phone number
- Complete VIN and repair order (R.O) number

On the repair order, document the date and time the call was placed (even if the engineer was not reached).

If engineering is unable to return the call within one hour, proceed with diagnosis and repair based on information found in SI.

## Warranty Information

If engineer was contacted or required information was provided, use:

Labor Operation	Description	Labor Time
2886118*	Navigation SD Card Error Message OR USB Functionality Investigation	0.5 hr
*This is a unique Labor Operation for Bulletin use only.		