



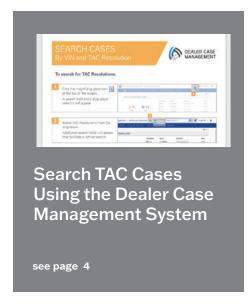






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Infotainment Setup Tips for Using Google built-in
Camshaft Sliding Lobe Pack Binding5
Cooling Fan Speed Too Low Condition 6
Residue on Liftgate Strut is not a Fluid Leak 6
Cradle Brace Mounting Rattle 8



The 2022 Silverado 1500, Tahoe, Suburban, Sierra 1500, Yukon and HUMMER EV feature the new Infotainment 3 Premium system (RPO IOK) with Google built-in compatibility1. Google built-in offers access to popular Google apps and services:

- Google Assistant Talk to Google for hands-free help in the vehicle
- Google Maps Find the best way to get around with Google Maps built-in.
- Google Play Add fun to your drive with Google Play.

Some features of the system may require a service plan or trial, including Google Assistant, Google Maps and Google Play. In order to use the apps in the vehicle, owners must have a service plan subscription with in-vehicle data. For a more personalized experience, owners also can sign in to their Google Account.

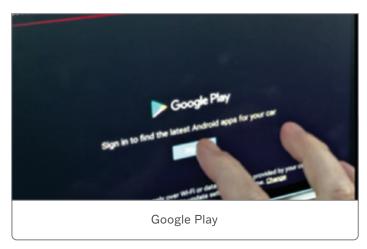
TIP: An owner's GM Account is different from their Google Account. Each account enables different functionalities within the vehicle.

Bulletin #22-NA-096 covers setup information for the IOK infotainment system. Before beginning any diagnosis of system concerns, be sure to fully understand the operation of the Google built-in features. Sharing this information with customers also can help prevent misunderstandings of system operation as well as help reduce the chance of unnecessary repairs.

For example, if connecting a mobile device, always use a trusted, damage-free USB cable. The USB cable provided with the device is recommended. Aftermarket cables may not work properly.

Some of the topics covered in Bulletin #22-NA-096 include:

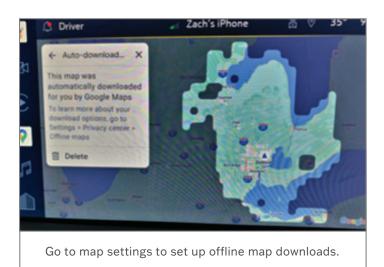
Signing In using the Setup Wizard – The Setup Wizard walks the customer through personalizing the infotainment system (setting up a user profile, Google Account and pairing a Bluetooth phone).



Google Play – Apps optimized for the vehicle can be downloaded on Google Play (similar to apps found on a personal phone). Some third-party apps require a separate account and, in some cases, a paid subscription to access in the vehicle.

Checking for a Data Plan – To determine if a data plan is active, press the voice control button on the steering wheel to talk to Google. If a data plan is not active, Google Assistant will not be available and directions on how to get a data plan will be given.

CONTINUED ON PAGE 3



Downloading Offline Maps – Offline maps are a convenient way to have maps available if in a connectivity dead zone area. Google Maps downloads offline maps automatically for use when not connected to the internet and for making map data available to vehicle features regardless of connectivity. These offline maps are only available when the vehicle has a subscription data plan. Offline maps expire in one year. Go to map settings to set up offline map downloads.



Use Google Assistant to control some vehicle features.

Enabling Google Assistant – With Google Assistant, customers can get things done while keeping their eyes on the road and their hands on the wheel. Select the Settings icon on the Home page to turn on Google Assistant. If the customer's phone is

paired to the vehicle, it may need to be disconnected and then paired again. Once Google Assistant is enabled, customers can talk to Google by simply saying, "Hey Google," or by pressing the voice control button on the steering wheel to get started.



Download the Owner's Manual using the myGMC or myChevrolet app.

Downloading the Owner's Manual – The vehicle's Owner's Manual can be downloaded to the infotainment system by selecting the myGMC or myChevrolet app. Customers cannot sign in to myChevrolet without a data plan. Select the Setting icon > Owner's Manual Details > Install Now to install the Owner's Manual.

Refer to Bulletin #22-NA-096 for additional information.

1 Built-in services are subject to limitations and availability may vary by vehicle, infotainment system, and location. Select service plan required. Certain Google actions and functionality may require account linking. User terms and privacy statements apply.

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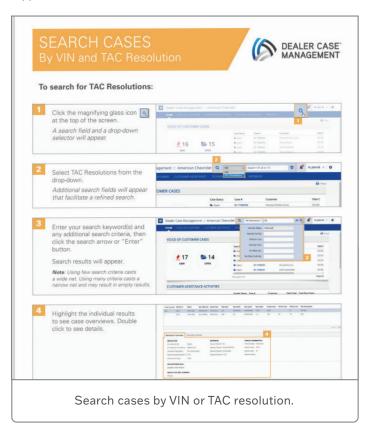
► Thanks to Kristin Clancy

Search TAC Cases Using the Dealer Case Management System

The Dealer Case Management (DCM) system (U.S.) enables dealership technicians to create, update and search GM Technical Assistance Center (TAC) cases to help diagnose tough vehicle conditions more effectively and efficiently. Instead of waiting during a phone call, DCM users average less than 15 minutes for a response on a case. Plus, previous cases can be referenced to provide information about a current vehicle or other cases.

SEARCHING THE DATABASE

When opening a TAC case, run a VIN search on the DCM system to see if a case exists already on the vehicle for the same concern from your dealer or a recent case from other dealers. This will ensure all case information is on the same case from any dealer. If there is a current case, call TAC to have it opened and updated. TAC Case Closing Resolutions are searchable in the DCM Application.



OPENING A CASE

When creating a new case in the DCM system, be sure to reference the case number when calling TAC or following up with additional information in the DCM system. When calling TAC, you will be asked to enter the case number, which enables the TAC advisor to pull up all of the submitted information in the system instead of asking for the information over the phone. With the data already in the system, there is more time to discuss a potential diagnosis and reduce the overall time on the phone.

Before creating a TAC case, the following items should be gathered or procedures should be performed:

- A completed repair order, including VIN, and details about the vehicle condition.
- Current repair order number being used for the repair.
- The total amount of days down and times in for the current concern.
- Understand and attempt to duplicate the concern prior to contacting TAC.
- All details about the vehicle condition and what repairs have been made.
- All DTCs recorded and diagnosed, including all values and measurements, i.e. voltages, resistance, pressures, scan tool values, etc.
- If applicable, include session logs, sound bites and photos to the case.

LAUNCHING THE DCM

To access the DCM, go to the App Center on GlobalConnect. Select Service from the Department drop-down menu and then select Dealer Case Management System & Resources from the list of apps. The DCM launch box will appear. Click the Launch button to open the application. In the application, select the Technical Assistance Center tab and click the "New TAC Case" button at the top of the page.

Camshaft Sliding Lobe Pack Binding

Some low-mileage 2022 Silverado, Sierra and CT4-V models equipped with the 2.7L turbocharged engine (RPO L3B) may have DTC P30BF (Intake Camshaft Profile Sleeve Position Sensor Performance) set in the Engine Control Module and an illuminated Check Engine MIL. The affected engines usually have less than 5,000 miles.

If these conditions are found, the cylinder 1 / 2 sliding lobe pack may be binding on the intake camshaft of the Sliding Cam Valve Lift system.



Sliding Cam Valve Lift

The Sliding Cam Valve Lift system enables the Engine Control Module to change the camshaft lift profile of the intake and exhaust camshafts while the engine is running to enhance performance and efficiency. Each camshaft has two profile sleeves with different height cam lobes and a detent ball and spring under

each sleeve that helps hold the profile sleeve into position. The profile actuator solenoids push out an actuator guide pin into

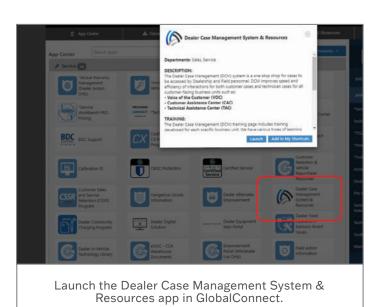


the shifting groove machined into the camshaft lift profile sleeve. When the guide pin engages the sleeve, it causes it to shift axially on the camshaft, causing the unique-sized cam lobes to be placed over the intake and exhaust valves and modify valve lift and duration.

Follow the diagnostics in the appropriate Service Information for DTC P30BF. If the diagnostics are inconclusive, replace the intake camshaft, intake cam actuator and actuator solenoid valve bolt.

Once repairs are completed, clear any DTCs and evaluate engine operation.

▶ Thanks to Robert Halas



For additional information about using the DCM system, there are several training aids available. To view, select the App Resources button included in the DCM launch box on GlobalConnect. Next, from the DCM training main page, select the link to TAC to access specific training materials about using the DCM system for TAC cases.

Thanks to Craig Mutch

Cooling Fan Speed Too Low Condition

While fording a river with the 2022 HUMMER EV pickup, an excessive amount of water may slow or stop the cooling fan from spinning, which may cause DTC P0494 (Cooling Fan Speed Too Low) to set in the Battery Energy Control Module. A Service High Voltage System message may be displayed on the instrument cluster along with an illuminated Service Vehicle Soon MIL.

These conditions do not require replacement of the cooling fan motor or indicate an issue with the high-voltage battery system. After a key cycle or during the same key cycle, if the cooling fan is commanded on again, the condition will no longer be



Excessive water may temporarily affect cooling fan operation.



The cooling fan is part of an assembly at the front of the vehicle.

present since the cooling fan should operate properly without the presence of water.

To verify fan operation, command the fan on using GDS2. The air conditioning condenser, cooling fan and radiator are an assembly at the front of the vehicle. If the fan operates normally, clear the DTC. Do not replace any parts for this condition.

Refer to #PIT5925 for additional information.

► Thanks to Paul Radzwilowicz

Residue on Liftgate Strut is not a Fluid Leak

Residue on the rear liftgate strut of some 2018-2020 Enclave, Traverse; 2020-2022 Acadia, XT5 and XT6 models is not a fluid leak that requires strut replacement. The residue is typically extra padded grease from the boot that is used to help reduce noise from movement of the strut during operation.

In some cases, the residue may be mistaken as a leak of hydraulic fluid that would assist with the pressure of the actuator. The rear liftgate struts on these models do not contain any fluid for their mechanical functionality. The residue on the struts does not affect the operation of the parts. Any extra grease seen on the struts has simply worked its way out due to added pressure on the boot.



Any residue on the struts is not a fluid leak.

► Thanks to Scott Fibranz



A brake squeal condition may be heard on some 2020-2022 Silverado 2500HD/3500HD and Sierra 2500HD/3500HD models. The brake noise may caused by the lining shim friction material used on the brake pads.

To reduce the potential for brake noise, new brake pads are available that use an improved lining friction material that is less susceptible to noise concerns.



Each brake pad has an Inner or Outer label.

Replace the front and rear brake pads with the new pads if there is a brake noise concern. Current parts in inventory are the updated design.

To increase the effectiveness of the new brake pads, a brake burnish should be performed during the test drive after installation to properly prepare the pads to the rotors. Refer to Brake Pad and Rotor Burnishing in the appropriate Service Information.

TIP: If the pads are replaced and the squeal sound is still present, check the orientation of the pads. Each brake pad has an Inner or Outer designation to indicate where it should be installed. If the inboard and outboard pads are installed in the wrong location, it can result in brake noise.



Only the left side of the truck has the wear sensors.

During installation,

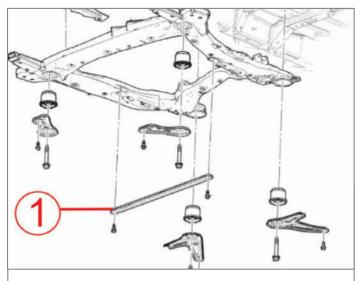
keep in mind that only the left side of the truck has the wear sensors, which are mounted on the inner pad. Refer to Front and Rear Disc Brake Pads Replacement in the appropriate Service Information.

Refer to Bulletin #20-NA-020 for more information and the new brake pad part numbers.

▶ Thanks to Kevin Minor

Cradle Brace Mounting Rattle

A rattle or clunk sound may be heard at the front of the vehicle on some 2017-2023 Acadia; 2018-2023 Traverse; 2019-2023 Blazer; and 2020-2023 XT5 models. The sound may seem to be coming from a strut, control arm or sway bar. It may be possible to duplicate the concern by driving the vehicle over bumps or making turning maneuvers.

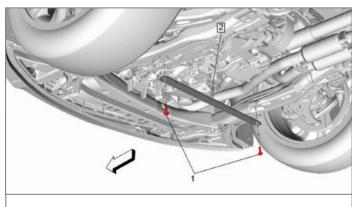


The cradle brace (#1) is a flat bar bolted across the cradle.

The rattle or clunk sound may be the result of a loose, mispositioned or improperly torqued cradle brace. The cradle brace is a flat bar that is bolted across the cradle.

If the rattle or clunk sound is heard, check the position of the cradle brace. To verify the source of the sound, remove the cradle brace and drive the vehicle under conditions that will cause the sound. If the sound is no longer heard while driving with the brace removed, reinstall the brace and torque it to the proper specification.

TIP: Do not simply torque the cradle brace to specification. The cradle brace bolts are torque-to-yield (single use) fasteners. New fasteners must be used when installing the brace. Be sure to remove and reinstall the brace with new torque-to-yield fasteners before torqueing the bolts to specification.



Remove and reinstall the cradle brace.

Refer to #PIT5931 for more information.

► Thanks to David Goodrow



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