



GMC



GM TECHNICAL ASSISTANCE CENTER (TAC)

Dealer Tips and New Information Newsletter

MARCH 23, 2023

“Provide advanced technical repair guidance, resulting in a superior customer experience.”

The following are key TAC Tips as well as information from recent TAC cases to help resolve some known concerns or identify normal conditions on various GM models.

GENERAL

1) FYI: New ASE Test

There is a new ASE Test for **Advanced Driver Assistance Systems** now available – ADAS Specialist Certification test (L4). Thanks to FSE Ryan Matt.

2) Intermittent Concerns

Bulletin #01-00-89-010N has been updated from Comeback Prevention Information and Using Customer Concern Verification Sheets (CCVS) to Guide to Help Reduce Repeat Visits for the Same Customer Concern.

3) Field Product Reports

If any unusual conditions are noticed on a vehicle, please submit a Field Product Report using **Bulletin #02-00-89-002T** Information for Dealers/Technicians on When and How to Submit a Field Product Report (FPR) (U.S. Dealers Only).

Note: This is especially important for new issues not seen previously.

4) Service Information (SI) Feedback

For any issues with Service Information, please submit feedback using the feedback button



" " on the page with an error. This helps us all get better results from our searches.

5) Noise Concerns

For any noise concerns where a TAC case is needed, refer to **#PIP5358A** Vehicle Noise Diagnosis and TAC Requests for Assistance with Noise-Related Complaints. Also, produce a video or sound file to share.

NOTE: Review the file and ensure that it will play back an audio file that can be heard from the PC speakers. The PicoScope will pick up normal noises and make them clearly audible. Make sure the noise that is being diagnosed is on the file. If the noise is not there, move the sensor and record another file until the source area is found.

6) Attaching GDS2 Session Logs and PicoScope Files

#PIP5632F Procedure for Attaching GDS2 Session Logs to Technical Assistance Cases Using Dealer Case Management (DCM) (U.S. Dealers Only) can also be used to enter pictures and sound files or videos into the case when requested by TAC.

ENGINE

1) Engine Replacement Recommendations

The following Service Bulletins are available for recommendations on engine replacement and needed repairs during replacement. **NOT ALL ENGINES NEED REPLACEMENT.**

- **Bulletin #18-NA-073:** Repair Guidelines for Engine Component Wear
- **Bulletin #22-NA-074:** Gasoline Engine Replacement Guidelines after Connecting Rod or Crankshaft Main Bearing Damage – Replace Oil Cooler, Oil Cooler Lines and Oil Tank
- **Bulletin #19-NA-256:** Diagnostic Tips for Knocking, Rattle, Squeak and/or Squeal Type Noise from Engine – Engine Replacement Recommendations for HFV6 Gen 1 and Gen 2
- **Bulletin #00-06-01-026Q:** Engine Replacement After Severe Internal Engine Damage – Replace Intake Manifold

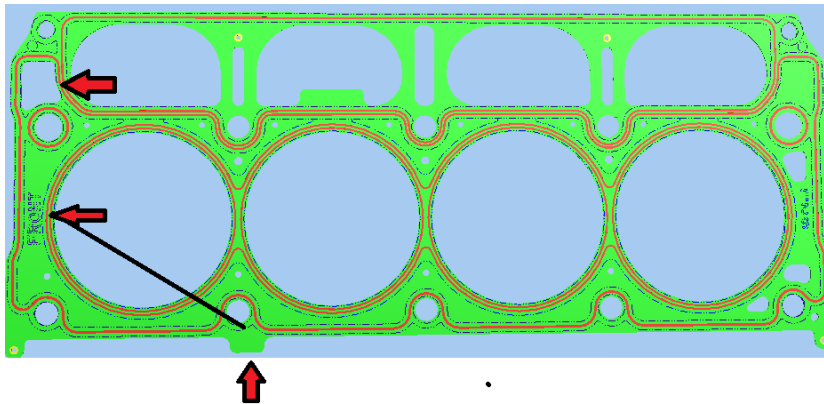
2) Head Gasket Installation

When installing head gasket (P/N 12688943) on a 6.2L GEN5/GEN5+ engine (RPO L86, L87, LT1, LT2, LT4), ensure the head gasket "front" marking and locating tab are in the same position as the original.

Incorrect "front" indicator/orientation show below. Note that the locating tab is 3 cylinders back from the "front" marking; it should be 1 cylinder back from the "front" marking.



Correct "front" indicator location/orientation shown below. The tab is 1 cylinder back from the "front" marking.



If the new gasket is installed by following the incorrect "front" marking, it may lead to a ticking noise/overheating issue.

3) 2024 L5P Diesel Fuel System is Different than Prior Model Years

The parts look identical and can be physically installed but they operate differently. There are different part numbers for 2024 and prior models but they are not fool proof and can be physically installed.

Please watch out for this and do not swap parts from previous L5Ps to the 2024 model year engine and vice versa.

4) #PIP5911 SES Light On – P066A P066C P066E P067A P067C P067E P068C P068E

This PI is now available for the 2024 L5P diesel engine.

TRANSMISSION & DRIVETRAIN

1) 10LXX Transmission Bolt Kit

If a bolt kit is needed without an overhaul kit on 10LXX transmissions, P/N 24298876 is available.

2) 8-Speed Transmission Description and Operation

Following is additional operating information on the GEN 2 8-speed transmission (RPO N8R) available in the 2023 Colorado/Canyon that addresses some possible customer concerns.

Park Clutch Prime – Auxiliary Pump

Concern:

Customers may state they hear sounds from under the vehicle when entering the vehicle.

Purpose:

The auxiliary pump is designed to purge air from the clutch feed lines before vehicle start up.

Benefit:

Removing air from the system ensures the vehicle's first shifts of the drive are smooth.

What the customer will experience:

When the customer unlocks the vehicle (key fob or door-button press) or opens the door, the auxiliary pump turns on. A faint electric pump sound may be heard coming from under the vehicle and a clicking sound. The pump sound typically lasts 8-10 seconds, followed by a short pause, and then another 8-10 seconds of the pump running. Clicking sounds are the result of the clutch plates actuating as the air is purged. These sounds may be more noticeable when parked in a garage or near reflective surfaces.

CLO (Catalytic Converter Light Off)

Concern:

Customers who enter the vehicle and quickly shift the vehicle into gear may notice a harsh garage shift. This condition will be affected by CLO's use of a higher idle on initial startup. If the vehicle is allowed to warm up after the initial start for approximately 90 seconds before shifting into gear, the harsh shift concern will be alleviated.

Purpose:

At a cold engine start, a CLO strategy is activated to facilitate catalyst warm up. Idle speed is increased, multiple fuel injections are used, and spark is retarded to increase exhaust temperature and exhaust flow, which reduces warm up time. CLO is typically activated when startup coolant temperature is below 70°C. Increased idle speed is typically applied for 25-90 seconds depending on the specific engine.

For these conditions, the transmission should be considered operating as designed and no repair attempts should be made.

3) **Transmission Leak Between Transmission and Transfer Case on Sierra 2500/3500 and Silverado 2500/3500 Trucks**

When diagnosing a leak between the transmission and transfer case on the 2500/3500 trucks, the cavity between the transmission and transfer case on a truck with the 10L1000 (MGM, MGU) and 4 wheel drive is by design wet. There is no output seal in the transmission and the input seal to the transfer case keeps fluids from mixing. A leak from the weep hole in the transfer case is either caused by the transfer case input seal or the large O-ring sealing the transmission to the transfer case. Anytime the transfer case is removed for a leak concern and there is no obvious damage to the O-ring, the input seal of the transfer should also be replaced. SEAL INSTALLED depth is critical to avoid a repeat leak. Ensure that the correct seal driver is being used to set the depth.

For MY 2020-2021 second design and MY 2022-2023, use the DT-53018 seal driver, which should be at dealers in Canada and available to U.S. dealers through the Loan Tool Program. The information in **#PIP5810A** can also be used to set the seal to the correct depth and determine first or second design.

TRUCKS & CROSSOVERS

1) **#PIT5987: Whining Noise from Steering**

This PI is now available in SI for 2022 and 2023 MY crossover vehicles.

2) **Bulletin #23-NA-023: After a Remote Start When the Start Button Is Pressed, the Engine May Stall or Will Not Restart**

This bulletin has been released in SI for 2022 – 2023 MY trucks and SUVs.

3) **No Crank Due to Dead Battery/Battery/Draw/Unwanted Alarm**

Some 2021-2023 full-size SUVs may have a low or dead battery, no crank due to a dead battery or an unwanted alarm. These conditions may be caused by high resistance in the glass breakage loop, as shown with a dotted line.

ELECTRIC VEHICLES

1) New Bulletins and PI's for Electric Vehicles

The following Bulletins and PI's have been released for electric vehicles.

- **Bulletin #23-NA-030:** Airbag Light On - DTCs B0014 / B0021 SIAB Harness Connector Contacting Seat Back Foam (New Seat Back Foam), Intermittent Service Airbag System Message, DTCs B0014, B0021
- **Bulletin #22-NA-124:** Bolt EUV with Super Cruise Digital Map Control Module - Outdated Map Data
- **Bulletin #22-NA-005:** Information on Opening/Closure Instructions for DDR (Damaged, Defective, Recalled) High Voltage Battery Dunnage/Container
- **Bulletin #18-NA-050:** Information on Back Up Camera Display Does Not Cover Entire Screen
- **Bulletin #21-NA-116:** Malfunction Indicator Lamp (MIL) Illuminated - Multiple DTCs Set
- **#PIT5988:** Diagnostic Tip - For A/C Codes After Repairs
- **#PIC6495:** Volt Gen 2 Section Replacement – Missing Retainers
- **#PIE0736A:** Engineering Information - Power Tonneau Cover is Inoperable

2) Charging Diagnostic Tips for all Plug-In Vehicles

Plug-in charger starting points:

- What is the concern?
- What charger is being used?
 - a) 120/240 AC
 - b) DCFD
 - c) Home
 - d) Public
- Does the fault occur at all locations?
- What is the light on the vehicle showing when plugged in?
 - a) Green, amber, blue, no light?
 - b) What are the charger lights/message displaying?

- Is there any concern with the charger when plugging in?
- Breaker opening for charger station?
- Is the vehicle detecting the charger?
- What messages are on the instrument cluster?
- Can you hear anything trying to operate?
- Any codes in the vehicle?
- What is the proximity voltage?

Unplugged and plugged in 4.45 drops to 1.45 volts (+- .50)

Pilot voltage: Unplugged and plugged in 0.05 goes to 8-9 volts, and then drops to about 6 volts when charging.

INFOTAINMENT

- 1) **When performing USB programming on vehicles that only have a Type C USB Drive, such as the Cadillac LYRIQ, use only a Type C USB Drive (16GB or 32GB formatted to FAT32).**

DO NOT use a USB to Type C USB Adapter for programming. We have seen cases where using an adapter has caused programming errors.

- 2) **Bulletin #23-NA-034: Radio Software Version Y167 – Multiple Updates for IOK**

This TSB has been released for 2022-2023 trucks and full-size

DCM & TAC CASES

Remember, you can always call TAC to discuss your case if you feel that progress is not being made within the Dealer Case Management (DCM) system.

- 1) **Features of the Dealer Case Management System**

DCM resolution search is now available to dealers. Please review the PDF file below for more information.



DCM Resolution Search.pdf

2) Opening TAC Cases in DCM

When opening a TAC case, run a VIN search 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.

If the case includes several DTCs, submit a session log into the case per the latest version of #PIP5632 to ensure that all codes are included. In addition, on VIP vehicles, include the Network Communication Event Results and Network Communication Status data lists.

3) Closing TAC Cases

When finishing a vehicle with a TAC case, please submit a closing with as much information as possible. This can be done by entering it into the DCM per TAC closing information or by simply calling into TAC and the advisor will submit it for you. By doing so, we can all help each other share as much information as possible to help take care of our customers efficiently. **After September 14, 2022, TAC cases automatically close when the Repair Order of record is closed at the dealership. Send in a closing for anything that is unusual or new.**

Remember: ONE TEAM.

When submitting a case closing, please only submit cases when the vehicle has actually been repaired. If the vehicle is no longer at the dealership or is waiting for parts, the case can be closed unlinked, which becomes unsearchable so that incomplete information is not shared with others.

4) Previous TAC Cases

If you already have a recent TAC case on a vehicle and you find that it is closed, and you would like to update it for the same issue, please call TAC and case can be reopened instead of starting a new case. Reopening the case will help ensure that all relevant information will be in one place for the consultant to best assist with the concern.

5) The Print Button within Dealer Case Management is not Functional

The Print Button within Dealer Case Management no longer works and is scheduled to be removed in the near future.

To print within the system, use the browser print function using CTRL P on the page to be printed. Refer to the job aid now on the DCM resource page for this change.

6) Adding DTCs to a Case

When adding DTCs to a case, please state that module the code was set in. Many codes can be set in several modules and looking in the wrong module diagnostics will lead to incorrect information and testing. Thanks to consultant James Minter.