GM TECHNICAL ASSISTANCE CENTER (TAC)

Dealer Tips and New Information Newsletter

September 16, 2022

"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) **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.**

2) **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). **This is especially important for Action Center or New Product vehicles.**

3) 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.

4) 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.

5) Attaching GDS2 Session Logs and PicoScope Files

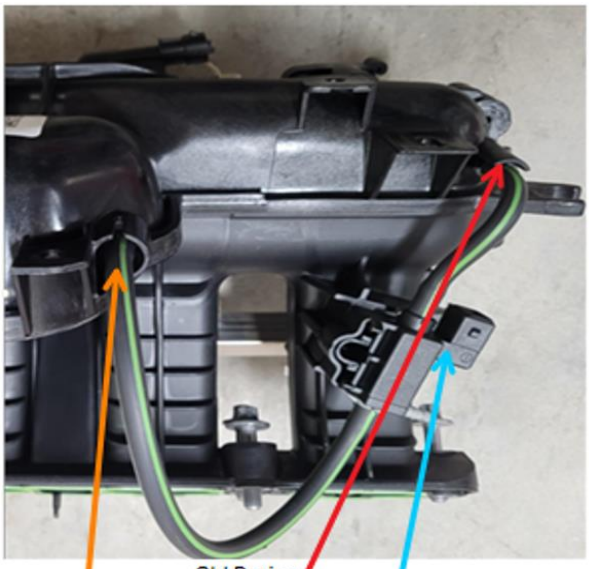
#PIP5632F Procedure for Attaching GDS2 Session Logs to Technical Assistance Cases Using Dealer Case Management (DCM) (U.S. Dealers Only) can also be used to enter pictures and sound files or videos into the case when requested by TAC.

ENGINE

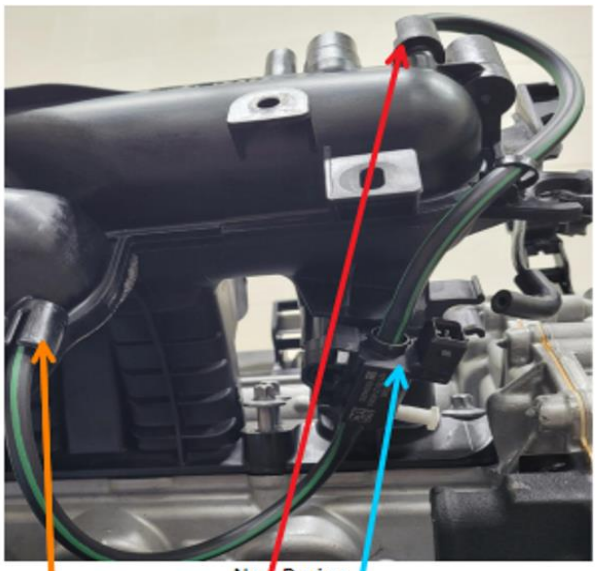
1. FAM 0 Engine (RPO LUV) Intake Manifold Redesign Inspection and Familiarization

New intake with re-designed Intake Positive Pressure Port Position location. Solenoid location is electrical connector forward. Vacuum feed is in the same location.

If the solenoid is found to be loose, review the location of the electrical connector. If the connector is facing the cylinder head, it is installed backwards and will need to be removed and installed correctly.



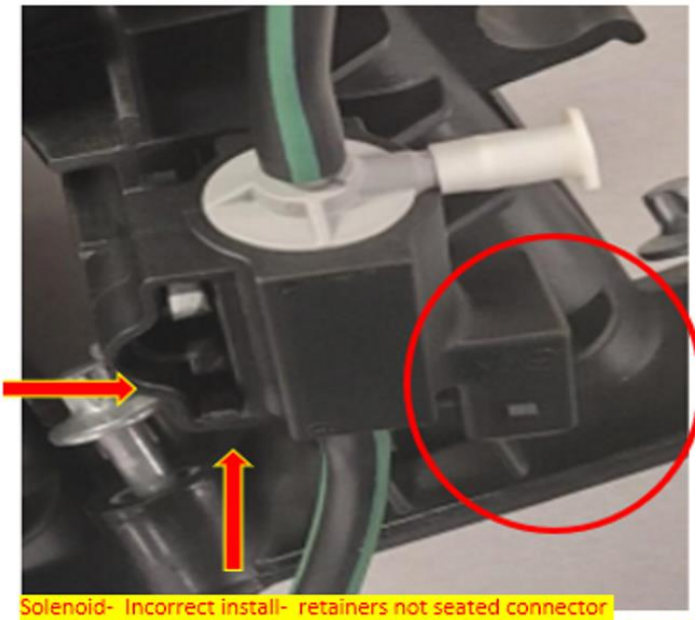
Old Design
Bypass Valve Vacuum
Intake Positive Pressure Port
Solenoid / Electrical connector



New Design
Bypass Valve Vacuum
Intake Positive Pressure Port
Solenoid / Electrical connector

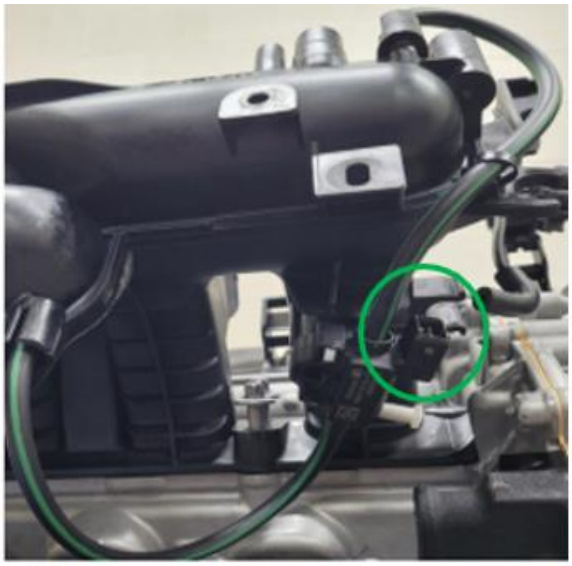
(Above) New Design - incorrect solenoid installation.

Note the electrical receptacle location. Remove and reinstall the lines and solenoid as they are retained to the intake if installed incorrectly. Tabs reversed. The solenoid is keyed and will not be not seated in retainers.

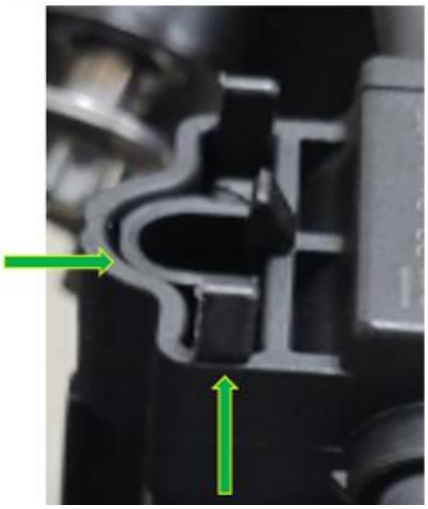


Solenoid- Incorrect install- retainers not seated connector facing cylinder head Keyed section of intake not level with solenoid body

Solenoid connector correct installation retainers latched Keyed section of intake almost even with solenoid



New Design - correct solenoid installation correct connector positioning



Correct and seated

2. **Bulletin #16-NA-129: Information on Crankshaft Balancer Wobble or Vibration Appearance**
   This bulletin was updated in February to include all Gen2 HFV6 engines.

   Crankshaft balancer replacements are still being seen for this concern, but when returned and analyzed, bad parts are not found.

   Please review **#PIE0714** and follow all steps. DO NOT REPLACE THE BALANCER without following all recommendations.

3. **#PIP5869: 5.5L Engine (RPO LT6) Exchange (GMNA Only)**

   This PI covers this engine as an exchange through PQC for the 2023 MY Corvette only.

4. Updated Diagnostic for Diesel Engine (RPO LM2) DTC P2C7A

For DTC P2C7A, please perform the following:

A. Check the induction system leak indication ratio at idle with the EGR closed, and at a wide-open throttle event, at a shift point. (Both should be close to a 1:1 ratio.)

B. Check the reductant injector volume and verify it does not for leak diesel exhaust fluid.

C. Run a regeneration and check for a skewed NOX sensor at the end of the regeneration – all three should be within 50 ppm of each other.

D. Refer to Bulletin #22-NA-168 for direction on finding leaks in the exhaust. The right-front tire and inner fender well will need to be removed to access the front of the exhaust. If the Norma clamp is leaking, it should be corrected and re-tested for additional leaks.

E. Once the leaks are corrected, reset all NOX sensors and perform the fuel injector small quality adjust reset.

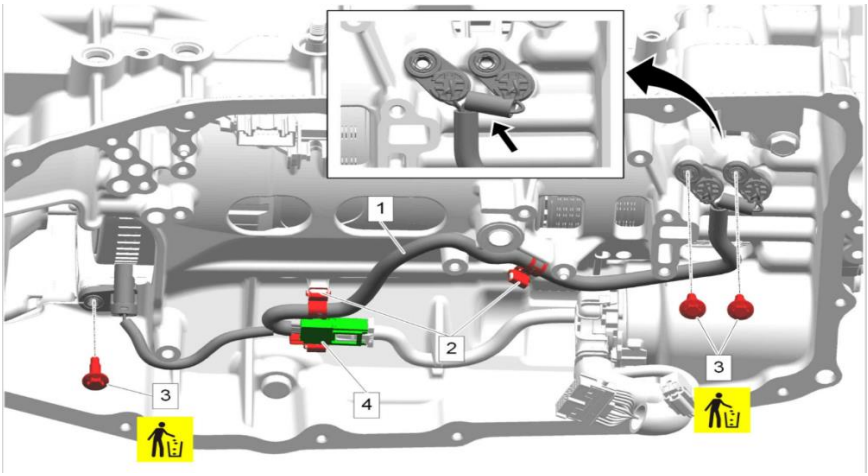
F. Clear codes and test drive on the highway to get the P2C7A to self-test. It will take 20-50 miles for the test to run.

TRANSMISSION AND DRIVETRAIN

1. Wiring Concern on 8LXX Transmissions

For 8LXX speed sensor wiring harnesses, SI shows different wire colors than what will likely be on the actual harness. On an 8L45 transmission, the replacement harness colors may not match what SI shows. However, the colors match up on the schematic for an 8L90 transmission. The same harness is being used in both applications.

When determining intermediate speed sensor and OSS location, do NOT use wire color, which will lead to the assumption that the incorrect harness has been installed. Instead, use the routing of the conduit as shown below.



2. **Bulletin #22-NA-173: Information on Transmission Fluid Leak**

   This bulletin is now available for a transmission leak concern on the 2020–2023 Corvette.

3. **#PIP5621C: GM TAC Support on Vehicle Automatic Transmission Concerns That Can Be Duplicated**

   This PI has been updated to include the 2022 and 2023 MY along with the following note:

   Note: If there is an obvious internal transmission concern that requires internal transmission inspection, i.e., no movement, fluid contamination, slip/flare, etc., and, if possible, prior to transmission assembly removal from the vehicle, obtain session logs to review if the root cause is not isolated after the internal transmission inspection. Follow recommendations as applicable.

4. **10LXX Transmission Harsh Drive Garage Shift with Low Miles, or After Transmission Replacement**

   Vehicles equipped with a 10L60, 10L80, or 10L90 transmission with low mileage or that has had the transmission replaced and exhibit a harsh drive garage shift after the Service Fast Learn and Transmission Adaptive Pressure Reset, attempt the following drive learn procedure:

   Drive the vehicle to operating transmission temperature (between 40 – 80 C) and execute 15 to 20 4-5 upshifts and 4 -3 coast-down shifts. Volume is learned during the upshift and return spring during the downshift. Once those are learned, there is a unique learn for the garage shift.

   Following the upshift/coast downs, perform a series of Park-to-Drive-to-Park garage shifts with about 5 seconds between each shift. This procedure will enable the garage shift to adapt as well.

HYBRID AND EV

1. **Bulletin #22-NA-151: DTC P0BBD Diagnosis and Repair:**

   A solution is now available for Chevrolet Bolt EV & Bolt EUV with DTC P0BBD and a Driver Information Center message showing “Propulsion Power is Reduced. Bulletin #22-NA-151 outlines the diagnosis and solution path for DTC P0BBD.

   Follow the instructions in the bulletin to use GDS2 to look for the affected battery cell number to see if a software solution applies for each repair. Some vehicles will require a battery pack replacement, and some will be repaired with the software only. Be sure to use labor code 5080328 for the diagnosis time, especially if the final repair is to perform an open field action, which does not pay for diagnosis. More information is detailed in Bulletin #22-NA-151. Contact TAC with any questions about this diagnostic code or the bulletin.

DCM AND TAC CASES

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. **Beginning September 14, 2022, TAC cases will close when the Repair Order of record is closed at the dealership.**

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.