

GM TECHNICAL ASSISTANCE CENTER (TAC)

February Newsletter
February 01, 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

Please use **Bulletin #01-00-89-010N** Comeback Prevention Information and Using Customer Concern Verification Sheets (CCVS).

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).

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.

ENGINE

1) Camshaft Carrier Resealing on All HFV6 Gen2 Engines

RPOs LGW, LGX, LGY, and LGZ

If a HFV6 Gen2 engine has a leak between the head and the camshaft carrier, the heads do not need to come off or replaced. Review SI for Camshaft Carrier Resealing to repair the head/carrier assembly. HEAD REPLACEMENT IS NOT NECESSARY for this process unless there is specific damage to the head or the carrier.

There is not a specific labor time currently; use straight time – the head doesn't need to come off.

Examples: **Document ID: 5646696** (Left side), **Document ID: 5646697** (Right side) LGZ; HFV6 LGX is similar.

2) Diesel Engine Programming on 2020 L5P engine

When following **Bulletin #21-NA-214** on a 2020 L5P Diesel engine, Techline Connect cannot program sequentially so it is imperative that the TCM is programmed first (if needed) and then the ECM. This will keep the vehicle from setting DTC U0101 and/or a reduced power message.

3) Fuel Rail Pressure Sensor On All Vehicles with the L5P Diesel Engine

If DTC P0191 (Fuel Rail Pressure Sensor 1 Performance) is set on the L5P Diesel engine, it is vital to check the freeze frame data. If fuel rail pressure sensors 1 and 2 are close together, and don't match the desired rail pressure – low or high, it is likely a mechanical concern.

If either fuel rail pressure sensor 1 or 2 match the desired rail pressure, but the other is off by an excessive amount, it is likely a sensor, connector, or circuit concern.

ELECTRICAL, CHASSIS AND TRIM

Performance Cars

1) Convertible Water Management Bag

For the 5th gen Camaro convertible, the water management bag has been discontinued and inventory is no longer available. Going forward, when replacement is not an option, refer to **#PI0397B**, which has instructions on how to repair a leaking water management bag using the approved seam sealer method.

2) Remote Keyless Entry Programming

A concern with Remote Keyless Entry transmitter programming on the 2004-2007 Cadillac XLR models is that a newly programmed transmitter (key fob) – programmed by a dealership or the customer – will not function. Keep in mind that a replacement fob cannot be ordered for this vehicle, under any circumstance, without first determining which PN RCDLR is currently in the vehicle.

There are many different PN transmitters that are available for this car, but they will not all program to the same RCDLR. It is imperative to know which PN receiver is in the car BEFORE ordering a new fob. There also is a note in the EPC covering this issue.

3) Automatic Transmission Shift to Park Message

Bulletin #21-NA-245 has been released for the 2016–2020 Camaros with the automatic transmission. The condition involves a possible “Shift to Park” message on the DIC, even when the vehicle’s gear shift lever is already in the Park position. There is a new shifter assembly AND a new jumper harness to install in the vehicle to make the proper repairs.

4) C8 2020 – 2022 Corvette Convertible Top Motor/Module Assemblies

Motor/module assemblies ARE available by themselves for convertible folding tops without the need for an entirely new side rail assembly.

At this time, please use the following list:

PN 85111804 – (K23L) - LH Folding Top Control Module – (Master ECU of the entire folding top system)

PN 85111805 – (K23R) - RH Folding Top Control Module

PN 85111808 – (K223L) - LH Stowage Compartment Control Module

PN 85111809 – (K223R) - RH Stowage Compartment Control Module

5) Heated Seats

The seat heaters on the 2014-2019 Corvette (C7) do not get as hot as the previous C6 seat heaters. There have been a number of concerns on this feature, even after the vehicle has been out of production. As long as the C7 seat heater becomes hot and operates, it is working as designed. Repairs to match the C6 heated seat performance are not necessary.

6) A/C Compressors

2020-2022 Corvette models (C8) may have a seized A/C compressor. For a seized-up A/C compressor, refer to the A/C “Flushing” document in Service Information. There is a detailed description in SI for this issue. First, find out what the contamination is in the system. Is there metal contamination, did the desiccant bag burst, etc. With metal contamination in the system, there is a new chart that lists components that must be replaced in the car vs components that can be reused.

Luxury Cars

1) Service Door Latch Message, No DTCs on 2020 - 2022 Cadillac CT4

Verify that all doors are operating properly and can be opened using the inside and outside door handles. If there are not any issues found, cycle the Child Safety Lock switch, and then recheck operation. If a door will not open, check make sure the terminals are not backed out at the latch or door connectors, and that any circuits are not pinched in the doors.

Cars and Crossovers

1) Steering Column Adjustment Unlocked Message

Any 2021 Acadia, Blazer, Camaro and Malibu models with a DIC message "steering column adjustment unlocked", follow **Bulletin #21-NA-054**. This message is not mentioned in the bulletin, but the software update will resolve the concern.

2) Rear Armrest Cover

2019-2020 Blazer models may have the fabric on the rear armrest pulling loose. Replace the armrest cover. There was a change made to extend the length of the fabric.

3) Steering Column Lock Module Buzzing Sound

2022 XT5 or XT6 models may have a buzzing sound coming from the steering column area each time the vehicle is started. If the vehicle has RPO Y61 or N06, it is equipped with a Steering Column Lock Module (SCLM), which is making the buzzing sound. This is normal and no repairs should be made. Compare to a like vehicle but ensure that it has RPO Y61 or N06; otherwise, the comparison will be to a vehicle without a SCLM and the noise will be nonexistent.

4) Front View Camera Programming

Trailblazer and the Encore GX models may have an inoperative Adaptive Cruise Control or Lane Keep Assist system and DTC B395D (Camera Misaligned) may be set. In most of these cases, the dealer has either replaced the Front View Camera or verified the programming is current.

NOTE: The camera must be SPS configured after an SPS programming event prior to camera learn.

5) Poor Engine Performance in Cold Weather

New 2020-2021 Encore GX and Trailblazer **Bulletin #21-NA-293**: Poor Engine Performance in Extremely Cold Weather Conditions, Charge Air Cooler Icing - Malfunction Indicator Lamp (MIL) Illuminated, DTC P0299, P0234, P0236, P00C7 Set - (Jan. 10, 2022)

6) No Crank, No Start

New 2019-2022 Malibu **Bulletin #21-NA-277**: No Crank, No Start, B2924 00, B3925 00, B3926 00, B3927 00 or P0513 Set - (Jan. 3, 2022)

Trucks

1) A/C Blows Warm Air

New **#PIT5869**: SES MIL / AC Blows Warm Air / Fuse F4DR Open / DTC B1AA3 U3018 U3505 covering all 2021-2022 Full size SUVs (Nov. 29, 2021)

2) Unable to Learn Front View Camera

New **#PIT5874**: Unable to Learn Front View Camera / No GDS2 Communication with Front View Camera Module (GDS Issue) (Dec. 9, 2021)

3) Tail Lights Remain On

New **#PIT5849E**: Taillights Remain on After Passive Locking and/or Dead Battery (Jan. 13, 2022)

4) Vehicles Built with Disabled Features

New **#PIT5883**: Information on Vehicles Built with Heated and Vented Seats Disabled / Heated Steering Wheel Disabled / Front Rear Park Assist Disabled (Jan. 10, 2022)

5) Front/Rear Park Assist

New **#PIT5884**: Service Park Assist Message on Trucks Not Equipped with Front / Rear Park Assist RPO 00Y or 00Z (Jan. 13, 2022)

TRANSMISSION AND DRIVETRAIN

1) Buckle to Drive

The Buckle to Drive feature can prevent shifting out of Park when the driver, and, if applicable, the front passenger, seat belt is not buckled. See Buckle to Drive in the owner's manual. The feature can be turned on or off in the Vehicle Settings. The Buckle to Drive feature will eventually be included on all vehicles, so please keep this in mind before making any transmission repairs.

Here's how Buckle to Drive works: If the seat belt is not fastened and an attempt is made to shift out of Park, there will be a buckle seat belt message in the instrument panel cluster and the vehicle will not engage gear. After about 20 seconds, the vehicle will shift. This is normal if the Buckle to Drive feature is turned on in the Vehicle Settings.

NOTE: If a shopping bag or laptop case is placed on the passenger seat, it may be heavy enough for the system to assume there is a passenger present.

2) DTC P187E on Any Vehicle Equipped with GF9 9Txx Transmission

If the only DTC set is P187E on vehicles equipped with ETRS GF9, 9TXX transmission assemblies, it may be a park servo magnet concern. Replace the valve body assembly only. The solenoid body has no effect on this DTC.

Also, on 2021-2022 Terrain models with DTC P187E with a no-crank condition before and after valve body assembly replacement, or the DTC is no longer present after valve body replacement, but the no crank condition remains, remove the ECM and TCM fuses and leave them out long enough to allow both modules to power down. If there is no change, monitor the TCM to read P/N for the range selected, and ECM range. The ECM most likely will read "in-gear" or "unrecognized". Replace the starter motor under these conditions.

3) Transmission Operating Conditions

Please review the following transmission repair information on any vehicles equipped with 9TXX, GF9, transmission assemblies that may be transmission related.

Bulletin #20-NA-060 – High Pitch Noise Heard When Vehicle is Decelerating

Bulletin #21-NA-038 – Humming Noise Heard Coming from Front End of Vehicle When Driving at Highway Speeds

Bulletin #21-NA-118 - Vibration Type Noise Heard at Highway Speeds or with Engine Speed at 1,300-1,500 RPM

Bulletin #21-NA-181 has been released to cover the no Ninth gear concern

4) ETRS

2021 models equipped with ETRS (electronic transmission range selector) may be setting DTCs P187E, P18AA, and P18AE when selecting Park. The transmission is operating as designed. There has been an updated TCM calibration added to TIS2WEB.

5) Intermittent Shift Flare

On the 6T40 transmission, if starting a TAC case due to **Bulletin #21-NA-041: Intermittent Shift Flare 2-3 or 3-4 While Driving**, ensure the transmission fluid is not distressed, which would indicate an internal transmission concern. Also, confirm the concern is the flare shift(s) cold soak only. Drive and bookmark a session log to confirm the flare(s) is/are after a cold soak start only. If there are any other transmission concerns, repair as needed.

6) DTC P2714

On the VT40 transmission, **#PIP5819** has been released to address DTC P2714. If the DTC does not reset and there is no slip or loss of drive, replace the valve body, NOT the solenoid body.

If the DTC does reset or there is a loss of Forward, yet Reverse is ok, remove and inspect the forward clutch and the pump for damage. If damage is found, replace the unit. If there is not any damage, replace the forward clutch piston and clutches as needed.

7) Allison Transmission Warranty

The MG0 Allison 6-speed transmission assembly can only be serviced under warranty at an Allison Authorized Distributor.

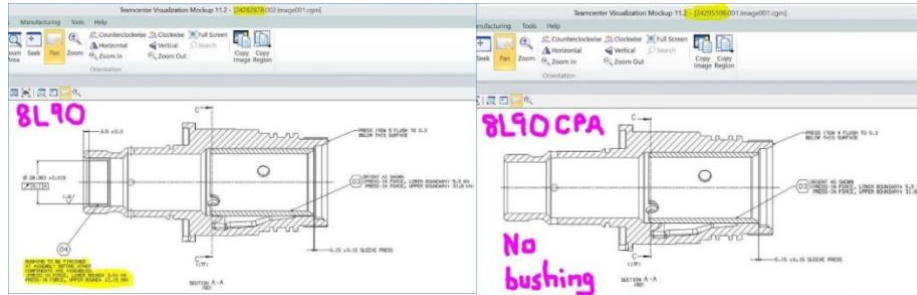
8) Speed Sensors 2020 – 2022 MY Vehicles Equipped with 8LXX Transmission

On the 8LXX transmissions, there are issues with the ISS and the OSS installed in the wrong locations on 2020 and newer models. When performing service, verify sensor location based on wire color from the picture in the repair procedure. Incorrect installation of the sensors will cause higher than normal RPM readings from both sensors.

9) Front Turbine Shaft Bushing All models with an 8L90 Transmission

Not all 8L90 transmissions have a front turbine shaft bushing in the front stator support.

The following information refers to CPA (Centrifugal Pendulum Absorber) torque converters. CPA-type torque converters are not used in the 8L45 transmission. If the transmission does not use a CPA torque converter, the front turbine shaft bushing is used, as shown below

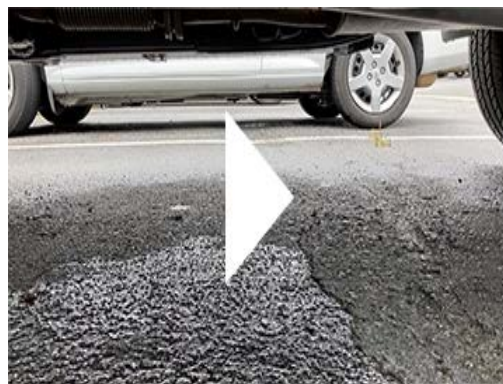


10) TBV Replacement

New **Bulletin #21-NA-199** – TBV Replacement on 6-Speed Transmissions when any repair is being performed. The bulletin has been revised to include more models.

11) 8-Speed Transmission Noise

2021 Colorado 2WD models equipped with the 3.6L LGZ engine and M5T 8-speed transmission may have a whine noise. Placing a hand on the driveshaft may dampen the noise. This is normal noise being transmitted through the driveshaft and no repairs should be attempted. Click below for an example of the sound.



12) 10-Speed Transmission Noise

On 10LXX 10-speed transmissions, remember to include the pump gear and snap ring when repairing a whine noise condition.

13) Thermal Bypass Valve Location on 10LXX Transmission Except on LM2 3.0L Diesel Engine

On 10-speed transmissions, the Thermal Bypass Valve is located in the valve body.

On 10 speed transmissions MQB, behind the LM2 3.0L engine this thermal by-pass valve is located in-line to the cooler.

14) DCT Noise Concerns

For 2020-2022 Corvette (C8) DCT M1L transmission noise-related concerns, such as final drive whine, etc., refer to **Bulletin #21-NA-049** and record Pico files for review by engineering.

INFOTAINMENT AND ONSTAR

1) Contacting TAC for Infotainment Issues

When contacting TAC for assistance with an Infotainment issue, please provide the vehicle's current Radio Software Version. The software version will greatly assist the Infotainment team in determining the best recommendations for the issue.

The Radio Software Version can be found through the Radio Display by selecting: Settings > System > Vehicle Software > About > Build Number. The Radio Software Version can be found within the long Build Number data string and starts with a "V". For example: "V158.2.3". The rest of the Build Number is not needed, just the Version number.

Also include the make, model, and version of the phones connected to the system if that applies to the condition being diagnosed.

2) Rear Seat Infotainment Feature Changes

There is a change in the Rear Seat Information (RSI) system from the 2021 to 2022 T1 SUVs. The features have changed drastically, but the RPO remains the same. Features such as maps, Miracast, and using USB-C to stream to the infotainment screens are no longer available on 2022 models.

HYBRID AND EV

1) 2016 – 2019 Chevrolet Volt Gen 2 BECM

The Gen 2 BECM availability is limited. Some conditions with the BECM may cause DTC P0AFA. Verify that all the cells are the same, and then clear any high-voltage codes.

The communication U-codes for the BECM may set on the test drive while looking for a low cell. If the BECM starts to fail, it may cause DTC P0AFA to set. With continued driving, it sets the communication codes. With this condition, only the BECM is needed. There is not a cell issue.

2) Speed Limited or Reduced Propulsion Message

New **Bulletin #21-NA-259**: Diagnostic Tip on Speed Limited Message or Reduced Propulsion Power Message Displayed on Driver Information Center (DIC) with no DTCs Set. This bulletin replaces #PIC6428 on Volt models.

3) Door Misalignment

New **#PIE0668** Engineering Information – (for Pictures Only) – Front/Rear Side Door Misalignment on 2022 Bolt EV models.

4) High Voltage Contactors

New **Bulletin #21-NA-235**: Malfunction Indicator Lamp (MIL) Illuminated in Driver Information Center (DIC), DTC(s) P0AA1, P0AA4 Set, High Voltage Contactors May Stick. This bulletin replaces **#PIC6375** on 2019 Volt models.

5) HPCM2 Records Inaccurate Data

New **Bulletin #22-NA-001** has been released as a diagnostic aid: The HPCM2 module records inaccurate freeze frame/failure record data on the Bolt EV.

6) All-New Chevrolet Silverado EV

Chevrolet recently introduced the new Silverado EV. The new electric truck has a GM-estimated 400-mile range on a full charge. It produces up to 664 horsepower and more than 780 lb.-ft. of torque in an available max power Wide Open Watts Mode, which provides a GM-estimated 0-60 mph time of less than 4.5 seconds.

Standard DC Fast Charging (up to 350kW) enables approximately 100 miles of range to be added in 10 minutes, based on GM estimates. The truck also offers up to 10.2kW of offboard power and up to 10,000 pounds of maximum trailering, along with up to 1,300 pounds of payload.

DCM AND TAC CASES

1) Closing TAC Cases

When finishing a vehicle with a TAC case, please submit a closing with as much information as possible. By doing so, we can all help each other share as much information as possible to help take care of our customers efficiently. 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.

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 we can reopen the case 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.