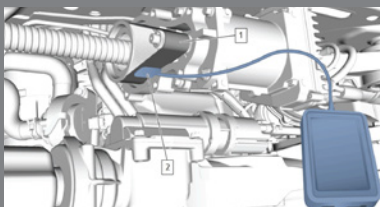


Unable to Learn Tire Pressure Monitor Sensors



New Belt Drive Rack and Pinion Steering Power Pack Replacement

see page 6



Fuel Injection Pump Installation and Diesel Engine Timing

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Unable to Learn Tire Pressure Monitor Sensors

The tire pressure warning lamp may be illuminated and the tire pressure learn for one or both front tires may not be able to be completed on some 2025-2026 Equinox and Terrain models. Tire Pressure Monitor sensor DTCs C1171, C1172, C1173 and/or C1174 also may be set.



The tire pressure learn may not be able to be completed after tire service.

The cause of these conditions may be the connector at the Telematic Control Module (OnStar). The module may have a poor connection due to the wiring pulling on the connector.



Poor connection due to wiring pulling on the connector.

If the sensors cannot be learned using the EL-52545 Tire Pressure Monitor Sensor and RF Diagnostic Tool (preferred method) or EL-50448 Tire Pressure Monitor Sensor Activation Tool (alternative method), do not replace the Tire Pressure Monitor sensors.

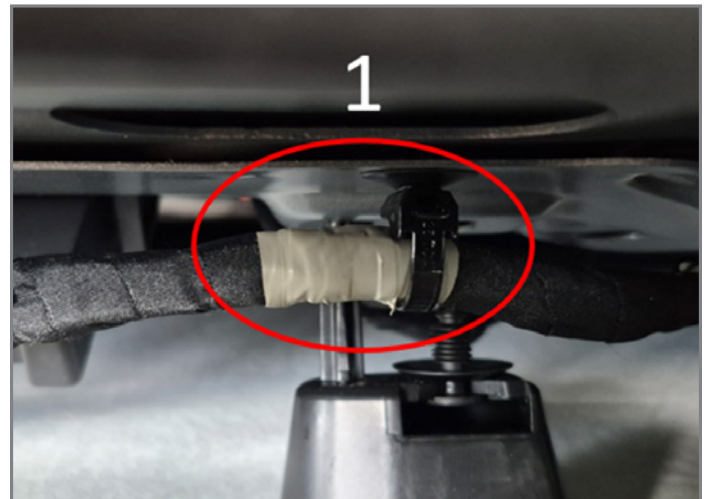
TIP: These conditions also can cause remote key fob-related issues when accompanied by one or more of the DTCs listed above. If there are intermittent key fob issues and TPM codes set, it is possible this procedure will resolve the key fob concerns too.

CONNECTOR TENSION

Begin diagnosis by following the procedures in the appropriate Service Information for each DTC. If the repairs do not correct the issue, inspect the Telematic Control Module connector and lessen the tension on the connector by pulling the wiring through the harness retainers.

To access the Telematic Control Module connector, open the liftgate and gently pull down the headliner at the rear of the vehicle.

At the right-side retainer, move the connector wiring to the left through the wiring retainer until the retainer is on the right end of the harness tape. It may be necessary to remove the retainer from the body hole to work through the harness.



At the right-side retainer, move the connector wiring to the left through the wiring retainer.

CONTINUED ON PAGE 3

My Open Cases List View Issue in CX Connect

The latest CX Connect release (July 2026) includes a number of enhancements and updates.

However, some CX Connect users may experience an issue after the update was installed where they cannot locate their open cases via the My Open Cases list view in CX Connect. IT is aware of this condition and is looking into the issue.

To locate your open cases, select the Dealer Cases list view and sort by Contact Name: The open cases can then be viewed.

We apologize for any inconvenience. An update to address this issue is under development.

► Thanks to John Sauer

Cases

Dealer Cases

16 items • Sorted by Date/Time Opened • Filtered by All cases - Status, Case Record Type • Updated a few seconds ago

Search this list...

Case Number

Date/Time Op...

Status

Type

Intent

Sub Intent

Vehicle

Case ...

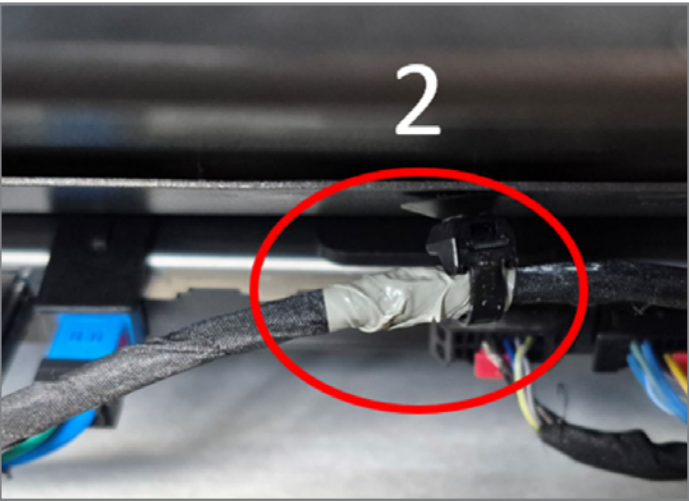
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Contact Name

1	105349831	7/23/2026, 9:50...	New	TCSC	SPS	PROG ERROR ...	JR366459 - 20...	Techline	Ad...	John Sauer
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Locate open cases by selecting Dealer Cases list view and sorting by Contact Name.

TIRE PRESSURE, FROM PAGE 2



At the left-side retainer, move the wiring to the left until the retainer is at the right end of the harness tape.

At the left-side retainer, perform the same procedure, moving the wiring to the left until the retainer is at the right end of the harness tape. Remove the retainer from the body hole if needed. Reinstall the retainers if removed.

Once the wiring is repositioned, confirm that the connector is seated properly and is not being pulled out by the wiring harness tension.

For additional information, including build dates, refer to Bulletin #26-NA-070.

► Thanks to Rob Smith

TCSC Top Issues This Week

The Techline Customer Support Center (TCSC) is available to help dealerships with diagnostic and programming issues related to Techline Connect (TLC) and the Service Programming System (SPS).

TCSC has now released their latest tips to help technicians when using Techline Connect applications. Look for the latest tips on TechLink each week.

To get the most out of Techline Connect, be sure to review the following items before making a call to the TCSC.

The following information covers current issues and trends facing dealerships as of June 24, 2026.

ATTENTION: All U.S. GM Dealerships

Starting August 26, 2026, a case number will be required to contact the Technical Assistance Center (TAC) and Techline (TCSC) teams for phone support. To open and manage a case, please navigate to CX Connect through Global Connect.

**Canadian GM Dealerships are not required to provide a case number at this time.*

WEEKLY ISSUES

1. NEW – N242452130 - Service Update: Fuel Injector Flow Rate - ECM Part Not Listed

When programming the ECM, Techline Connect will ask for "Hardware" in a dropdown menu. When prompted, do not choose the End Model Part Number. Instead, use the Calibration Part Number 1 (also may be called Software Module Part Number 1) found in GDS2 under Identification Information.

2. K299 Audio/Video Interface Rear Module E4393 Programming Error on 2026 T1 SUVs

Users may receive E4393 programming errors when programming the K299 Audio Video Interface Rear Module – Rear Module Delta (Step 2). If you encounter this error when programming, select the Do Not Use – Unsupported Function option for this module to successfully complete programming.

3. Incorrect Radio Listed in EPC for IVD Radio on 2024-2025 Silverado EV

The Electronic Parts Catalog (EPC) is directing dealers to order PN 86295933, which is not a compatible IVD radio with the MY24 and MY25 Silverado EV.

The compatible part number is 86295936. However, there is not any current stock of these parts. GM is working to replenish the stock, but there is not an ETA currently of when these parts will be available.

4. EPC Showing Incorrect Radio Hardware for 2025 Blazer EV with IVD Radio

Users report that the Electronic Parts Catalog (EPC) is directing to an incompatible part for the 2025 Blazer EV with the IVD radio.

PN 85852385 is not compatible with the 2025 Blazer EV. Please order PN 85791702 instead.

GM is working on correcting the EPC to show the correct hardware.

Note: If you are unable to place an order for PN 85791702, please reach out to Service Parts Assistance Center (SPAC).

5. 2021 Tahoe, Suburban, Yukon, Escalade, Corvette, Envision, CT4, CT5 Unable to Complete SDAC – #PIT6507

There is currently a known issue affecting some 2021 vehicles where the SDAC (Serial Data Authentication Configuration) may fail. The radio, IPC, or Telematics (OnStar) modules may be the cause of these failures.

DO NOT REPLACE THE MODULE. This is a known SPS issue and the current workaround is to disconnect the SDGM X3 connector and re-attempt SDAC. Refer to #PIT6507 for more information, including affected vehicles.

Engineering is aware of this concern and working on a permanent resolution.

6. 9G8 (DRL/AHL Disable), SK4 (Engine Idle Timeout), UTQ (Content Theft), BCN (Retail Locking) and 6N6 (Rear Window Disable) Not Yet Available on 2026 Vehicles.

Calibrations for RPOs 9G8, SK4, UTQ, BCN and 6N6 are not yet available for model year 2026 vehicles but are planned to be released. However, there is not currently an ETA

Note: RPO SK4 calibrations are now available for T1 Trucks (Silverado, Sierra). T1 SUV (Tahoe, Suburban, Yukon, Escalade) is still being worked on.

CONTINUED ON PAGE 5

COMMON ISSUES AND HELPFUL INFORMATION

1. 2000-2010 Saturn (Any Model) or Pontiac Solstice Experiencing Issues in Techline Connect

There is currently a known issue with nearly all model year Saturn vehicles and the Pontiac Solstice where various issues may occur in Techline Connect, including E-6223, E-4399 on PCM/BCM, vehicle stuck in Park after programming ECM/TCM modules, or the vehicle thinking it is Manual when it is Automatic. Please reach out to TCSC with any programming issues.

2. 2019-2021 Trax IPC Programming Issue

GM is aware of an issue affecting 2019-2021 Trax models where a replacement IPC may fail with E-4491 and line/op/error indicate (X, B0, 85).

This issue is currently being investigated by Engineering. Please reach out to TCSC if you are experiencing this issue.

3. ECM/Radio/IPC Part Missing from SPS2 Part Dropdown

When performing IPC Graphics programming, Radio USB, or ECM programming, you may be prompted in SPS2 to select "Service Hardware." However, this is misleading.

- For IPC Graphics programming, use the "Boot Software Part Number 1" found in GDS2 under Identification Information.
- For the Radio USB Programming, use the "Calibration Part Number 1" (also may be called "Application Part Number 1") found in GDS2 under Identification Information.
- For the ECM, use the "Calibration Part Number 1" (also may be called "Software Module Part Number 1") found in GDS2 under Identification Information.

4. 2015+ Chevrolet Express SOSM E-4399 Issue and ECM VIN Write Issue

GM is aware of a known issue where programming current/replacement SOSM modules (Left/Right) will cause an E-4399 in SPS2, despite the modules having communication.

Additionally, the VIN may not write on a replacement ECM successful programming events.

Please reach out to TCSC for a VCI to correct either concern.

5. Bulletin #24-NA-098: SPS Best Practices and Programming Error Troubleshooting

Document ID: 6662319 has been published to assist with common programming errors, descriptions and recommended helpful/general troubleshooting for SPS errors. Please refer to this page if you encounter a programming error within SPS2/TLC.

6. E-9111 or E-9113/E-9114 TCM/MCVM Operation Errors

An E-9111 or E-9113/E-9114 error may occur when programming the TCM, or after replacing the transmission assembly/valve body, and entering the TUN/PUN under MCVM Operations in SPS2.

The error is caused by a mismatch in data between the vehicle's TUN/PUN and the TUN/PUN uploaded in the GM database. Please ensure:

- The complete TUN/PUN number is entered.
- The TUN/PUN is in capital letters.
- The number zero (0) is not a letter "O".
- There are not any typos, extra characters, or spaces.

If the TUN/PUN is correct, open a case with TCSC and attach a clear picture of the replacement TUN/PUN in the case, as TCSC will require these to work with Engineering and have the issue addressed.

If you are receiving these errors via programming and the TUN/PUN was not replaced, TCSC may still require the TUN number.

7. Front View Camera Programming or Camera Learn Issues Specific to 2024 Colorado and Canyon (ZR2)

There is currently a known issue with the Front View Camera involving ONLY 2024 Colorado/Canyon built with ZR2 and UHY, and without UWI, UKW, or ULV.

The Front View Camera may fail to program or set loss of communication codes such as DTC U0265. The camera learn also may fail in GDS2 with various errors.

A VCI is required to correct this problem. Please reach out to TCSC for this fix.

HOW TO CONTACT TCSC

- U.S. ONLY: Assistance can be provided by using the CX Connect portal in Global Connect. If additional support is needed once the CX Connect case is created, contact TCSC at 1-800-828-6860. For U.S. only, a case is required for phone support.
- Canada: Contact TCSC at 1-800-828-6860 (English) or 1-800-503-3222 (French).
- All other regions: Contact your regional Technical Assistance team for Global Techline Support.

► Thanks to the Techline team

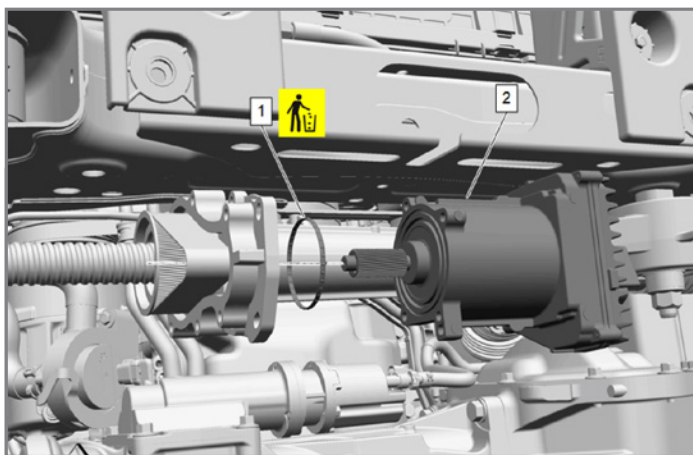
New Belt Drive Rack and Pinion Steering Power Pack Replacement

The belt driven electronic power steering system on the 2020-2026 Silverado 1500 and Sierra 1500 features a belt drive and ball nut mechanism, power pack, torque sensor and a rack and pinion steering gear. The power pack contains the power steering control module, sensors, and the power steering motor.

The power steering control module and motor apply power assist through the belt drive and ball nut mechanism to the steering rack to help reduce the amount of effort needed to steer the vehicle. The power steering control module can detect any malfunctions within the electric power steering system. Any malfunction that disables steering assist will cause the Service Power Steering message to be displayed on the Driver Information Center.

NEW SERVICE PROCEDURE

The power pack can now be replaced as a separate repair procedure, which offers a new way to address several issues with steering performance or possible noise concerns. Replacing only the power pack (motor and module) provides a more cost-effective repair than replacing the entire steering gear. New labor code operations have been released to support the new procedure.



Power steering assist motor

Refer to Power Steering Assist Motor Replacement in the appropriate Service Information.

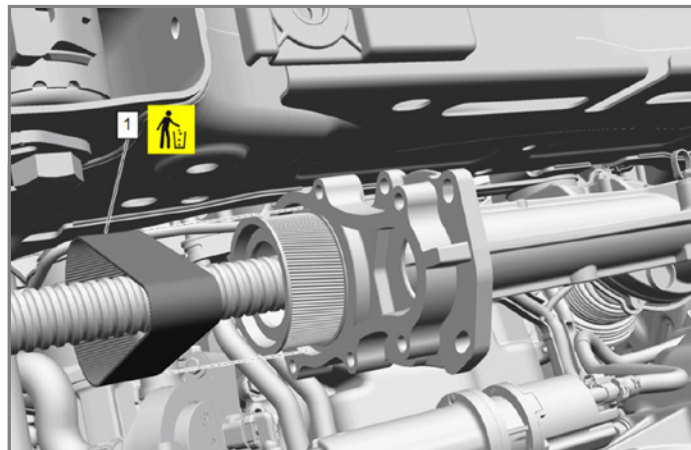
POWER PACK REPLACEMENT

Replacing the power pack requires the use of the J-24319-B Steering Linkage and Tie Rod Puller to remove the right-side steering linkage outer tie rod from the right-side steering knuckle. In addition, the steering gear boot and right-side steering linkage inner tie rod must be removed.

The wiring harness and extension harness should be inspected for any damage. Do not repair the harnesses. If either harness is damaged, the harness must be replaced.

Next, remove the power steering assist motor access cover and the power steering assist motor, or power pack.

Also remove the electric belt drive rack and pinion steering gear belt and discard it.



Electric belt drive rack and pinion steering gear belt

Inspect the steering gear housing and power steering assist motor shaft for signs of water intrusion or corrosion. Replace the entire steering gear if there is any water or corrosion present.

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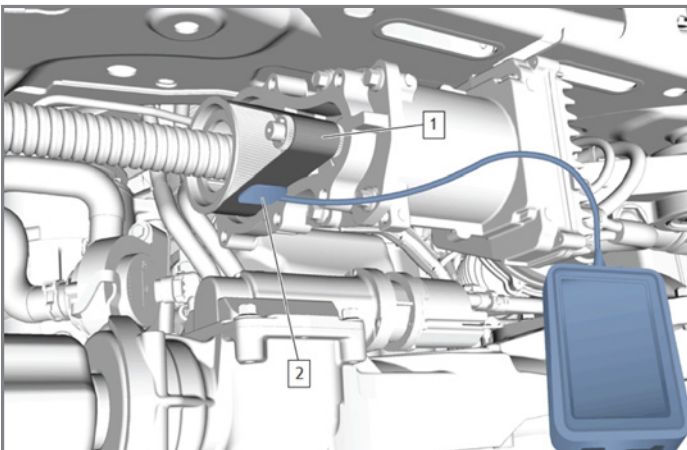
When installing the power steering assist motor, make sure it is not at an angle or misaligned with the electric belt drive rack and pinion steering gear housing. The motor must be completely flush with the steering gear housing with no gaps present. The belt also must be completely installed on the pulley. Any misalignment of the belt on the pulley will damage the belt and the steering gear will need to be replaced.

SETTING BELT TENSION

After installing the new belt on the power steering assist motor pulley, the GE-50576-A Acoustic Belt Tension Tester is used to achieve the proper belt tension.

TIP: If the GE-50576 tester is not available, the CH-51450 PicoScope and accessories PIOTA144 (microphone) and PIOTA145 (sensor cable) can be used to measure the belt tension.

[NOTE: GM Global Tools website states PIOTA144 (microphone) and PIOTA145 (sensor cable) PicoScope accessories are both required as the GM-approved replacement solution for the GE-50576-A. The GE-50576-A tool is discontinued.]



GE-50576-A Acoustic Belt Tension Tester

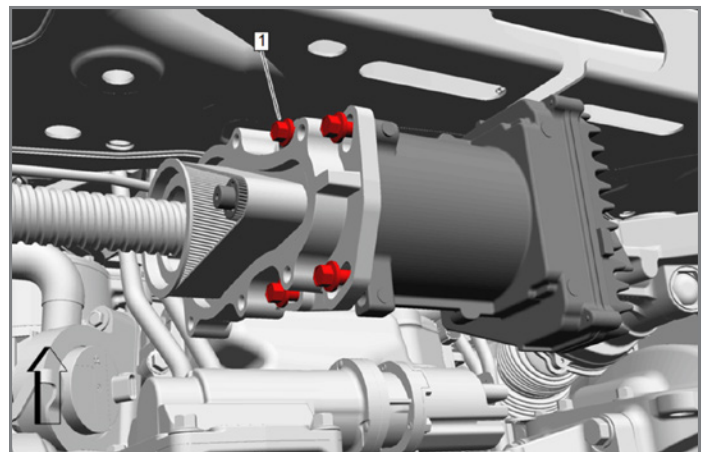
Place the body of the tester on a flat surface or secure it to the electric belt drive rack and pinion steering gear housing. The tester cannot be held by hand while taking measurements. The readings will be inaccurate.

Position the microphone of the tester 6 mm (0.25 in) from the belt.

Use an allen wrench or finger to strum the belt three times to get an average belt tension reading. Strum the belt as close as possible to the center position between the two steering gear pulleys to achieve the most accurate readings. The average belt tension reading should be between 245 Hz– 265 Hz.

If the average reading is above or below the specification, loosen the power steering assist motor pivot bolt and rotate the motor clockwise to increase the tension or counterclockwise to reduce the tension. Increasing the belt tension increases the frequency. Reducing the belt tension reduces the frequency. Tighten the pivot bolt and test the belt tension again three times. Once the correct tension is achieved, tighten the 4 power steering assist motor bolts to specification.

To program the new control module, select K43 Power Steering Control Module on the SPS Supported Controllers screen.



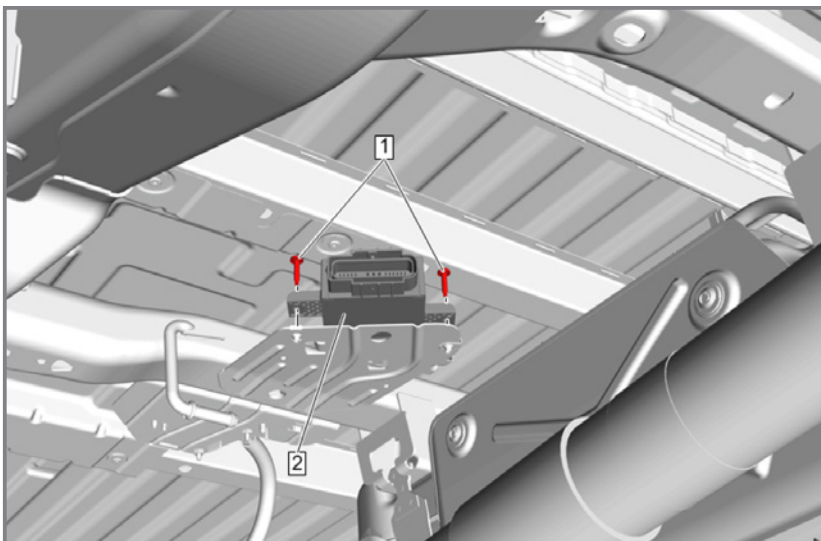
Power steering assist motor pivot bolt (#1)

After completing programming and setup, measure and adjust the front toe as needed. Refer to the Wheel Alignment Specifications in the appropriate Service Information.

TIP: The labor time for the power steering assist motor replacement includes SPS programming. For front toe adjustment, use the applicable labor code to add time to the labor hours.

► Thanks to Brett Holsworth

Fuel Pump Power Control Module Internal Short



Some 2021-2022 Encore; 2021-2023 Tahoe, Suburban, Yukon, Envision, Escalade; 2021-2024 Blazer, Equinox, Express, Malibu, Trax, Acadia, Savana, Terrain, XT4, XT5, XT6; 2022-2023 Traverse, Enclave; 2022-2024 Silverado 1500, Sierra 1500; 2023-2024 Colorado, Canyon, Encore GX; 2024 Trailblazer, Silverado 2500HD/3500HD, Sierra 2500HD/3500HD models and 2021-2023 Camaro models equipped with the 2.0L engine (RPO LTG) may have a crank/no start condition and an illuminated Check Engine MIL. DTC P023F (Fuel Pump Control Circuit) and/or P129F (Fuel Pump Power Control Module Fuel Pump Speed Signal Incorrect) will be set in the Engine Control Module (ECM).

DTCs P102A (Fuel Pump Motor Phase U-V-W Circuits Low), P102B (Fuel Pump Motor Phase U-V-W Circuits High), P1029 (Fuel Pump Motor Phase U-V-W Circuits), U18A2 (Lost Communication with Fuel Pump Driver Control Module) and P0627 (Fuel Pump Enable Circuit) also may be set.

In some cases, affected vehicles may experience rough running, the fuel pump may continue to run after engine shutoff, the engine may not shut off, several electrical items may remain on after engine shutoff, or the engine may shut off but the starter may continue to try and start the engine.

These conditions may be caused by an internal short in the K111 Fuel Pump Driver Control Module (FPDCM)/Fuel Pump Power Control Module.

Repair procedures should include the following:

- The K111 FPDCM should be replaced if these conditions are verified, DTCs P129F and/or P023F are set, and diagnostics do not lead to a cause.
- If DTCs P129F and/or P023F are not set (current or history) and these conditions cannot be verified, follow published diagnostics in the appropriate Service Information.

TIP: Do not replace the FPDCM if it has been replaced as part of a previous repair.

Refer to Fuel Pump Power Control Module Replacement in the appropriate Service Information. After replacing the FPDCM, be sure to perform the Fuel Pump Power Control Module configuration.

TIP: Fuel Pump Power Control Module replacement is covered for 8 years/80,000 miles as part of the vehicle's Federal Emission Warranty Coverage.

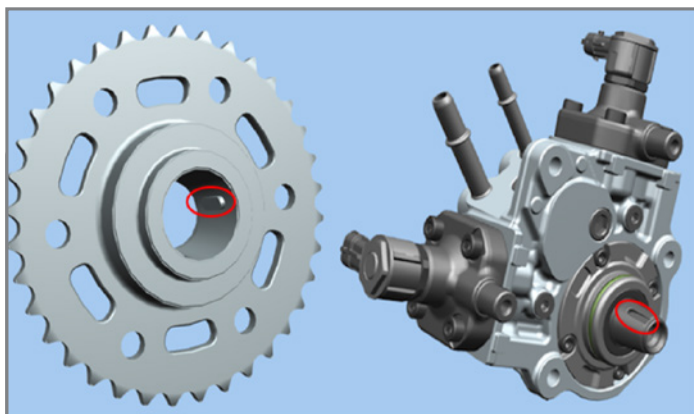
Refer to Bulletin #24-NA-139 for additional information.

► Thanks to David MacGillis

Fuel Injection Pump Installation and Diesel Engine Timing

An engine no start condition may occur or low fuel pressure DTCs may set after replacing the fuel injection pump on some 2019-2026 Silverado 1500, Sierra 1500; and 2021-2026 Tahoe, Suburban and Yukon models equipped with the 3.0L diesel engine (RPO LM2, LZ0). These conditions may be caused by the fuel injection pump not being properly timed to the crankshaft and camshafts of the engine.

The fuel injection pump input shaft on the 3.0L diesel engine has a keyway that aligns with a key in the timing gear. It is critical that the key aligns with the keyway for proper operation of the engine.

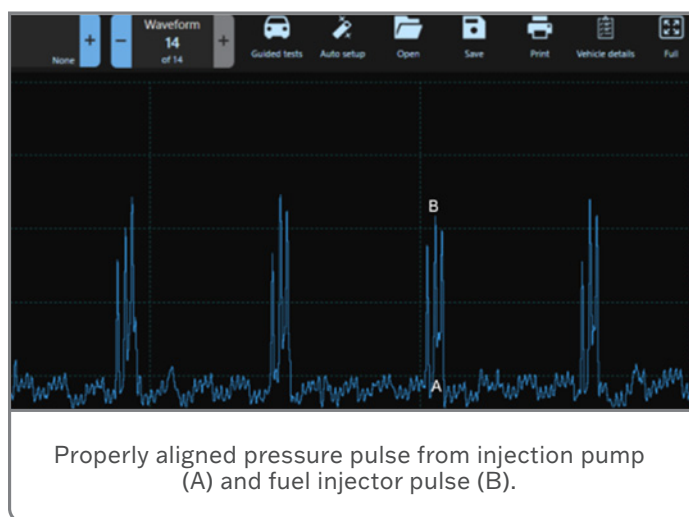


Injection pump input shaft keyway aligns with key in the timing gear.

FUEL INJECTION PUMP OPERATION

The 3.0L diesel engine uses a two-cylinder fuel injection pump. Each cylinder has a fuel regulator that sends fuel into a shared fuel rail. Because of the timing chain gearing between the crankshaft and the fuel injection pump, one pump piston reaches top dead center during each of the engine cylinder's power strokes.

For the engine to run correctly, the fuel pulse from the injection pump must line up the moment the fuel injector opens for the cylinder that is firing. If this timing is off even slightly, the DTCs may set or the engine may not start.



CHECKING TIMING

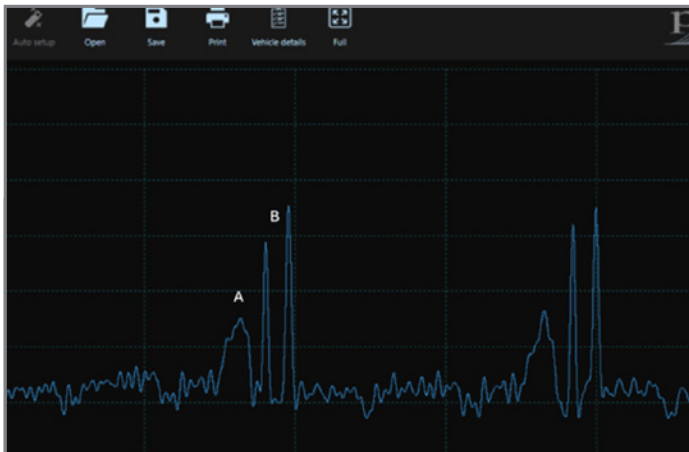
When working on an engine that has low-pressure codes or won't start after replacing the fuel injection pump, check the timing with a PicoScope. To do this, connect the scope to the fuel rail pressure sensor. Look at the pressure pulse from the injection pump and the fuel injector pulse. On a properly timed engine, the injection pump pulse will be aligned with the fuel injector pulse.

On an improperly timed engine, the injection pump pulse will not be aligned with the fuel injector pulse.

INSTALLATION TIPS

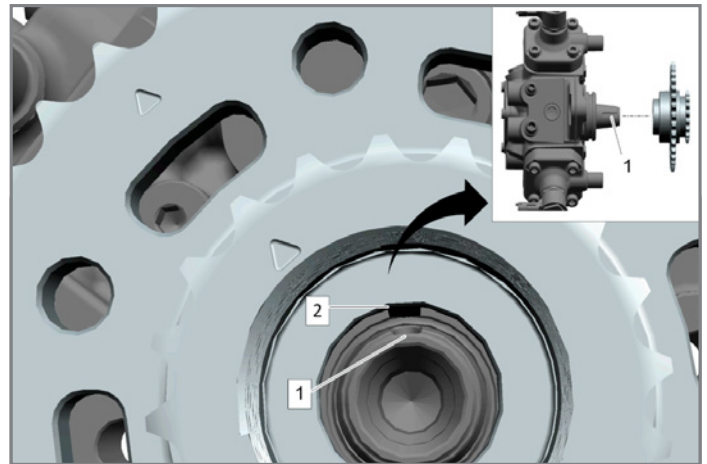
When replacing the injection pump, ensure the keyway on the pump input shaft on the engine aligns with the key in the timing gear.

CONTINUED ON PAGE 9



Improperly timed engine

To aid installation, mark the new fuel pump shaft in the same position as the marks on the old fuel pump to ensure it is timed correctly with the engine timing. Use the marks on the pump shaft and the sprocket to align and install the new fuel injection pump.



Align the marks on the pump shaft and the sprocket to install the fuel pump (#1).

For additional information, refer to Bulletin #26-NA-176.

► Thanks to Larry Yaw

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