Bulletin No.: PIP5416D
Published date: 01/11/2022

Preliminary Information

PIP5416D Instrument Panel Cluster (IPC) Warning Lamps And / Or MIL Are Illuminated Diesel Exhaust Fluid (DEF) Message Displayed Various DTCs Set (Inspect Wiring Harnesses for Chafing).

Product Investigation Review Required

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Colorado	2016 - 2021	All	All	2.8 LWN	All
GMC	Canyon	2016 - 2021	All	All	2.8 LWN	All

Involved Region or Country:	North America
Condition:	Some customers may comment on any of the following conditions: Air conditioning may not cool or may blow hot air. A Driver Information Center (DIC) message is displayed. Instrument Panel Cluster (IPC) warning lamps are illuminated. Erratic or fluctuating engine oil pressure gauge. One or more Diesel Exhaust Fluid (DEF) warning messages are displayed. The Malfunction Indicator Lamp (MIL) is illuminated. The engine may crank but not start. The engine may run rough or misfire. The Service Four Wheel Drive (4WD) message may illuminate.
Cause:	This may be due to chafing of the engine wiring harness, connector terminal concerns or a connector not fully seated.

Correction:

Complete the current SI diagnostic for any symptoms or DTCs found.

Service Procedure:

If the diagnosis does not lead to a resolution or if the symptoms or DTCs are intermittent and cannot be duplicated, check for chafing of the engine wiring harness or connector concerns in the following areas:

Air Conditioning (AC) compressor, AC compressor suction and discharge line manifold, AC line and AC compressor clutch.

Concerns in the area of the AC compressor, lines or suction / discharge pipes may cause:

The Check Engine Light to illuminate.

The Driver Information Center (DIC) may display a reduced power message or service power steering message.

The engine to run rough.

The Service Four Wheel Drive (4WD) Light or Stabilitrak light may illuminate.

A possible extended crank or a crank no start.

The oil pressure gauge may read erratically or read no oil pressure.

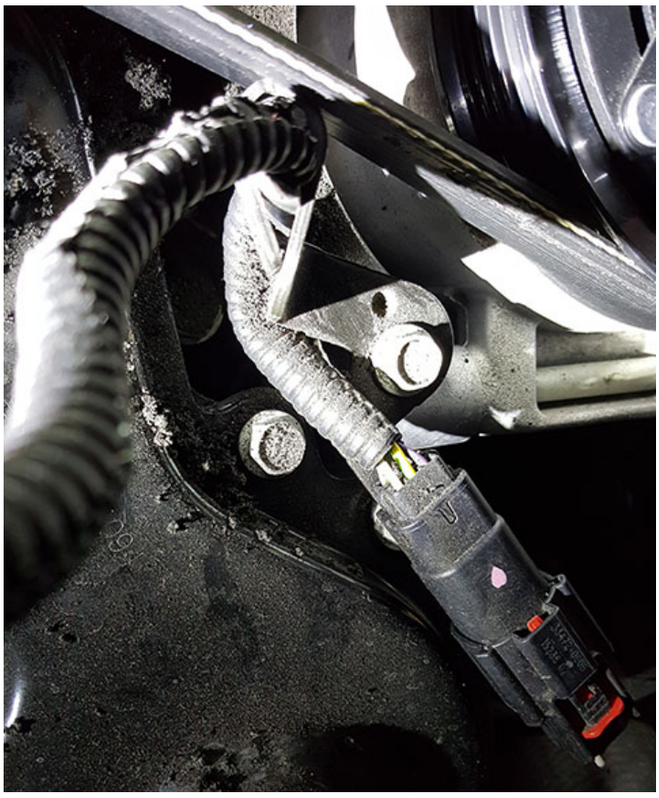
The Air Conditioning (AC) may not cool or blow hot air.

An open fuse in the Underhood Bussed Electrical Center (UBEC)

DTCs associated with chaffing in this area include:

B127E, C0306, C0321, C0398, C0800, P0071, P0072, P0117, P0119, P0340, P0341, P0406, P0483, P0522, P0628, P0641, P06A3, P0700, P20BB, P20BF, P227E, P24B1, U0073, U0077, U0121, U0131, U0140, U0151, U0415, U2099, U0401, U0415 and U0420.

Serpentine Belt. The fan clutch wiring harness support bracket may be out of position allowing the harness to rub on the belt.



Concerns in the area of the serpentine belt may cause:

Various IPC warning lights to illuminate.

A crank no start concern.

The check engine light to illuminate.

The engine may run rough or misfire.

The Service Four Wheel Drive (4WD) light may illuminate.

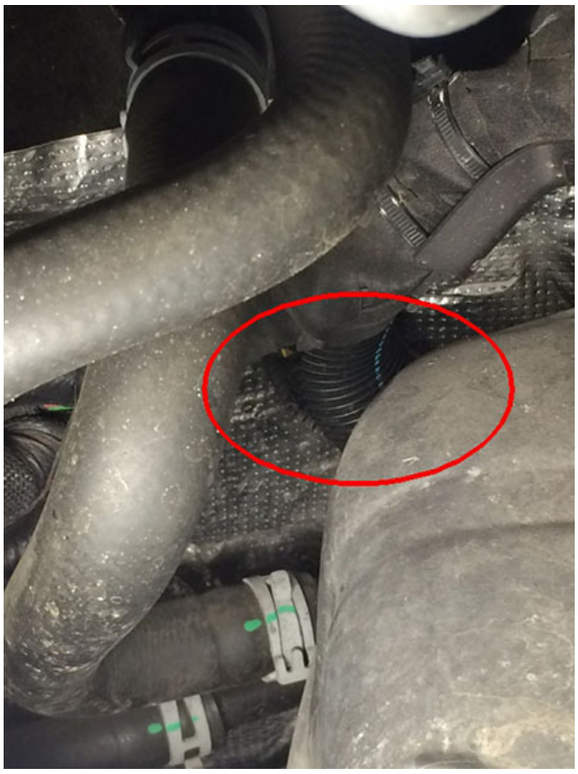
The Stabilitrak light may illuminate.

The Air Conditioning (AC) may not cool or may blow hot air.

DTCs associated with chafing in this area may include:

C0273, P0526, P0480, P0336, P0526, P0641 and P0651.

Right rear of engine. Check for harness damage on the exhaust heat shield as described in the latest version of bulletin 16-NA-081.



Concerns in the area of the right rear of engine / exhaust heat shield may cause:

Various IPC warning lights to illuminate.

The Service Four Wheel Drive (4WD) light may illuminate.

The Stabilitrak light may illuminate.

The check engine light to illuminate.

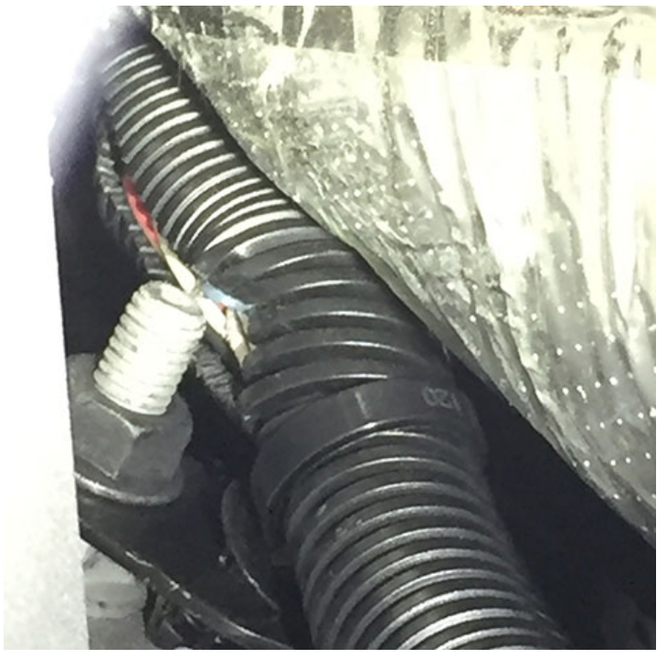
The Driver Information Center (DIC) may display a reduced power message.

An open fuse in the Underhood Bussed Electrical Center (UBEC)

DTCs associated with chafing in this area may include:

B1011, C0306, P0201, P0202, P0203, P0204, P0410, P0575, P062D, P0697, U0073, U0100, U0121, U0140, U0415 and U0420.

Transmission bell housing bolt / stud.



Concerns in the area of the rear of engine / transmission bell housing bolt / stud may cause:

Various IPC warning lights to illuminate.

The Service Four Wheel Drive (4WD) light may illuminate.

The Stabilitrak light may illuminate.

The check engine light to illuminate.

DTCs associated with chaffing in this area may include:

P0201, P0202, P0203, P0204, P0392, P0401, P0420, P062D and U0073.

Coolant pipe and clamp tabs between engine and cowl.

Concerns in the area of the coolant pipe / clamp / clamp tabs between engine and cowl may cause:

Various IPC warning lights to illuminate.

The Service Four Wheel Drive (4WD) light may illuminate.

The Stabilitrak light may illuminate.

The check engine light to illuminate.

DTCs associated with chafing in the area may include:

B1011, P0575, U0073, U0100, U0121, U0140, U0415 and U0420.

Near the brake fluid level switch.

Concerns in the area near the brake fluid level switch may cause:

The service brake light to illuminate.

The DIC may display that the brake fluid is low.

The check engine light to illuminate.

DTCs associated with chafing in this area may include:

C0273 and P0641.

Transfer case encoder motor.

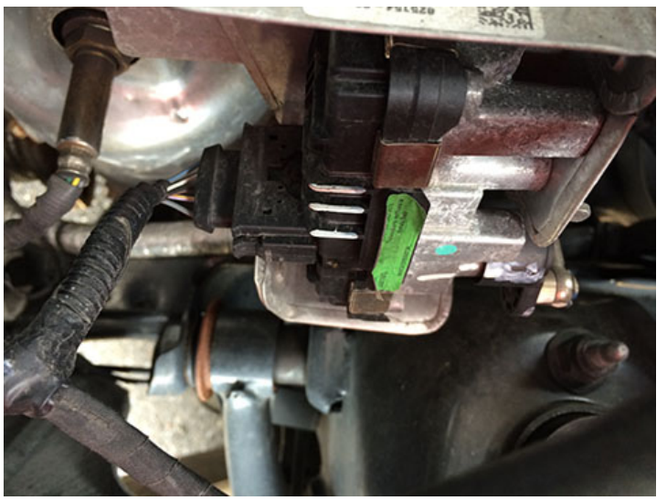
Concerns in the area near the encoder motor on the transfer case may cause:

Various IPC warning lights to illuminate.

DTCs associated with chafing in this area may include:

C0396.

Turbocharger Vane Position Actuator Connector



Concerns with loose terminals or connector not fully seated at the Turbocharger Vane Position Actuator may cause:

The Check Engine Light to illuminate.

The Driver Information Center (DIC) may display a reduced power message.

The vehicle may have a low power concern.

DTCs associated with a loose connector or terminals include:

P0045 or P2599.

Additionally, there may be chafing of the wiring harness on the power steering pump pulley.

If you encounter these scenarios, inspect, repair (as necessary) and route the wiring harness away from these possible chafe points.

Warranty Information

For vehicles repaired under the Powertrain coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation:	Description:	Labor Time:
5480358*	Wiring Repairs Related to PIP5416	Straight Time
* This is a unique labor operation for bulletin use only.		

Version History

Version	5
Modified	08/10/2016 - Created on 08/18/2016 - Added Labor Op and Turbocharger Vane Position Actuator Connector concern. 9/06/2017 - To add 2017 and 2018 model years. 10/17/2018 - To add DTCs 11/09/2020 To add 2019, 2020 and 2021 model years.

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