



Service Bulletin

Bulletin No.: 22-NA-080

Date: July, 2022

TECHNICAL

Subject: Diagnostic Tips for Engine Related Shudder Concerns

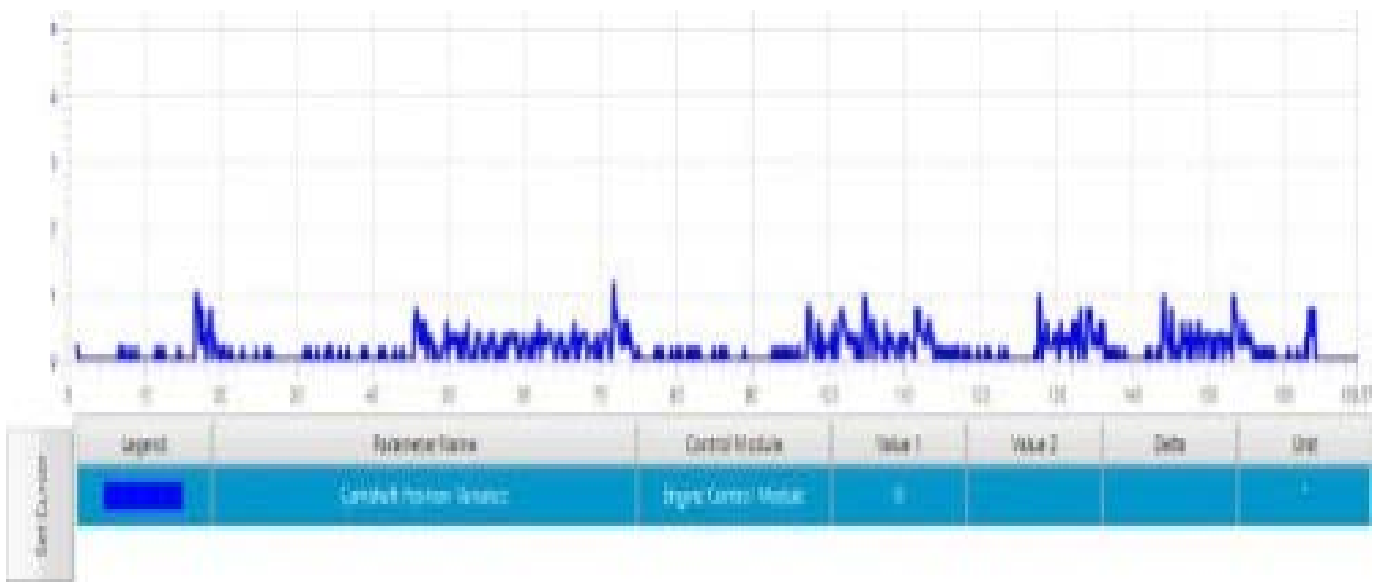
This bulletin replaces PIP5794B. Please discard PIP5794B.

| Brand: | Model: | Model Year: | | Breakpoint Date: | | Engine: | Transmission: |
|-----------|--|-------------|------|------------------|-----|---|---------------|
| | | from | to | from | to | | |
| Cadillac | Escalade Models | 2015 | 2022 | SOP | EOP | 4.3L (LV3), 5.3L (L82, L83, L84) 6.2L (LT1, LT2, LT4, L86, L87), 6.6L (L8T) | |
| | CT5 | 2022 | 2022 | | | | |
| Chevrolet | Camaro | 2016 | 2022 | | | | |
| | Corvette | 2014 | 2022 | | | | |
| | Express | 2021 | 2022 | | | | |
| | Silverado | 2014 | 2018 | | | | |
| | Silverado LD | 2019 | 2019 | | | | |
| | Silverado 1500 (New Model) | 2019 | 2021 | | | | |
| | Silverado 1500 - LTD (RPO J21, VIN Digit 5= W/Y) | 2022 | 2022 | | | | |
| | Silverado 1500 - New (RPO J22, VIN Digit 5= A/D)) | | | | | | |
| | Silverado 2500HD/ 3500HD | 2020 | | | | | |
| | Suburban | 2015 | | | | | |
| Tahoe | | | | | | | |
| GMC | Savana | 2021 | 2022 | | | | |
| | Sierra | 2014 | 2018 | | | | |
| | Sierra Limited | 2019 | 2019 | | | | |
| | Sierra 1500 (New Model) | 2019 | 2021 | | | | |
| | Sierra 1500 - Limited (RPO J21, VIN Digit 5= 8/9)) | 2022 | 2022 | | | | |
| | Sierra 1500 - New (RPO J22, VIN Digit 5 = H/U) | | | | | | |
| | Sierra 2500HD/ 3500HD | 2020 | | | | | |
| | Yukon Models | 2015 | | | | | |

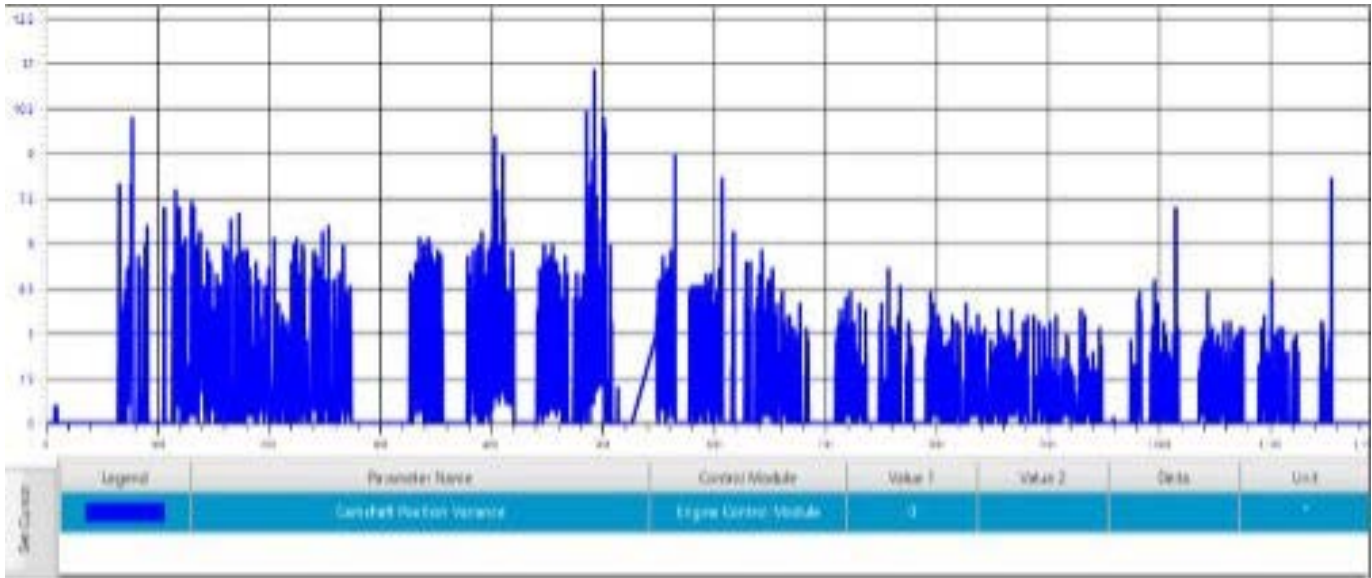
| | |
|-----------------------------------|--|
| Involved Region or Country | North America, Europe, Uzbekistan, Middle East, Iraq, Israel, Palestine, Argentina (Mercosur), Brazil (Mercosur), Bolivia (West), Chile (West), Colombia (West), Ecuador (West), Paraguay (West), Peru (West), Uruguay (West), Venezuela (West), Japan, Cadillac Korea (South Korea), GM Korea Company, China - SGM, Taiwan , Thailand (ASEAN), Singapore, Phiippines, Australia/New Zealand, Egypt, Other Africa, South Africa |
| Condition | Some customers may comment that they feel a Shudder or Surge type feeling when driving at a steady speed. – Some customers may mistake it for a transmission related concern. |
| Cause | This condition may be caused by the camshaft actuator magnet sticking. |
| Correction | If the concern has been determined to be engine related and not being caused by the transmission the following diagnosis may be helpful: – While duplicating the Shudder or Surge concern monitor the data parameter "Camshaft Position Variance" in GDS2. Although target variance is 0 degrees, it is not uncommon to observe variance of up to 3-4 degrees on a properly functioning system. – Any variance exceeding 3-4 degrees could potentially cause a noticeable Shudder or Surge concern. If after diagnosis you confirm that the concern has been isolated to the camshaft actuator system, it is recommended to replace the camshaft actuator magnet and re-evaluate. Refer to <i>Camshaft Position Actuator Magnet Replacement in SI</i> . If the Shudder/Surge is still present after camshaft actuator magnet replacement and camshaft actuator variance is over 4 degrees, refer to GM Service Information for further diagnosis. |

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

Below are line graph examples from GDS2, one showing normal operation of the camshaft actuator system and one that is considered suspect and not operating properly:



Normal operation (variance under 4 degrees)



6029096

Suspect fault in camshaft actuator system (variance over 4 degrees)

Parts Information

Note: Only select the parts that coincide with the repair performed. Replace the part with the P/N outlined in the Electronic Parts Catalog (EPC) in accordance with the vehicle VIN.

| Causal Part | Description | Part Number | Qty |
|-------------|------------------------------|-------------|-----|
| X | MAGNET, CM/ SHF POSN ACTR | 12675031 | 1 |
| | | 12670340 | |

Warranty Information

For vehicles repaired under warranty, use:

| Labor Operation | Description | Labor Time |
|-----------------|-----------------------------------|---|
| 4064870 | Camshaft Position Actuator Magnet | Use the Published Labor Operations Time |
| 4021760 | | |

| | |
|----------|---|
| Version | 2 |
| Modified | Released April 20, 2022 Revised July 21, 2022 - Added 12670340 to Parts Information section. |

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



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