



# Preliminary Information

## PIP5794 Diagnostic Tips For Engine Related Shudder Concerns

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	Escalade	2020 - 2021	All	All	5.3L L84, 6.2L L87	All
Chevrolet	Silverado	2019 - 2021	All	All	4.3L LV3 5.3L L82 L84, 6.2L L87	All
Chevrolet	Suburban	2020 - 2021	All	All	5.3L L82/L84, 6.2L L87	All
Chevrolet	Tahoe	2020 - 2021	All	All	5.3L L84, 6.2L L87	All
GMC	Sierra	2019 - 2021	All	All	4.3L LV3 5.3L L82 L84, 6.2L L87	All
GMC	Yukon	2020 - 2021	All	All	5.3L L84, 6.2L L87	All

Involved Region or Country	North America
Condition	Vehicle may exhibit a shudder while driving that may be mistaken for a transmission related concern
Cause	Camshaft Actuator System

Correction:

If the concern has been determined to be engine related and not being caused by the transmission the following may be helpful:

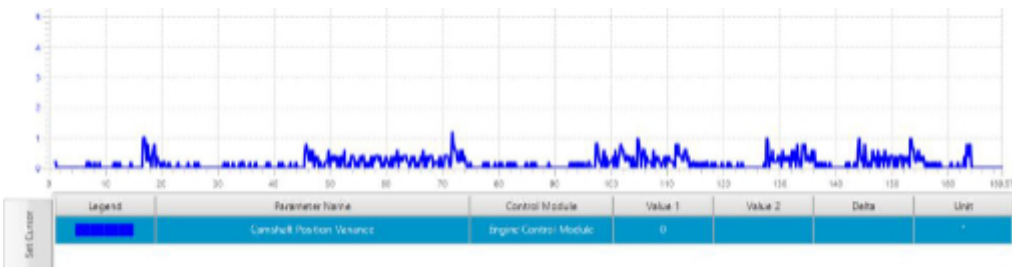
While duplicating the shudder concern monitor the data parameter "Camshaft Position Variance" in GDS2.

Although target variance is 0 degrees, it is not uncommon to observe variance of up to 3-4 degrees on a properly functioning system.

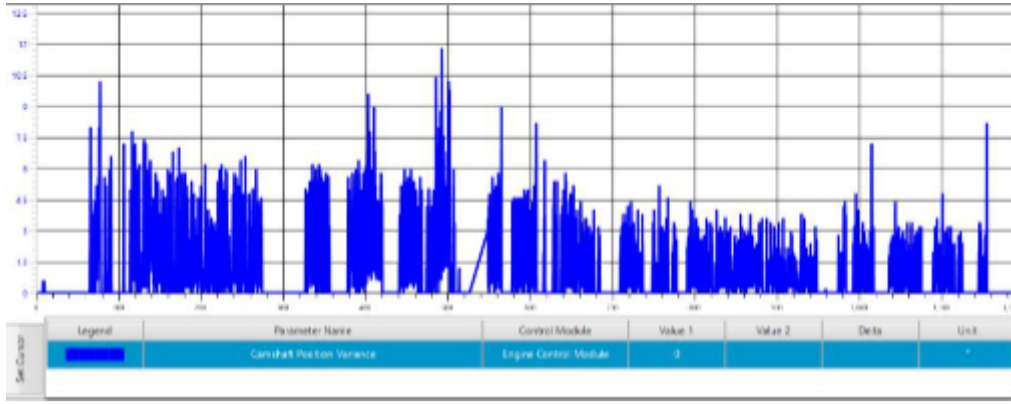
Any variance exceeding 3-4 degrees could potentially cause a noticeable shudder concern and should be diagnosed further (DTCs may or may not be present).

Below are line graphs from GDS2, one showing normal operation of the CMP actuator system and one that is not operating properly.

Normal operation (variance under 4 degrees):



Fault in camshaft actuator system (variance over 4 degrees):



## Version History

Version	1
Modified	03/25/2021 - Created on



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