2016 - 2019 Cadillac CTS-V: GM TechLink: Engine Oil Overfill May Lead to Engine Vibration

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An engine vibration condition may occur when the vehicle is stationary or accelerating from a stop on some 2014-2018 Silverado, Sierra; 2015-2020 Escalade, Tahoe, Suburban, Yukon; 2016 - 2019 Cadillac CTS-V; 2016-2020 Camaro; 2018-2020 Express, Savana; 2019 Silverado LD, Sierra Limited; and 2019-2020 Silverado and Sierra models.

The vibration may be due to an overfilled engine crankcase on the following engines: 4.3L V6 (RPO LV1, LV3); 5.3L V8 (RPO L82, L83, L84); 6.2L V8 (RPOs LT1, LT4, L86, L87). (Fig. 11) It may be found that the engine oil was recently changed.



Fig. 11

If there is an engine vibration concern, check the engine oil level. Refer to the vehicle's Owner's Manual for details on correctly checking the engine oil level (Fig. 12) and the engine oil crankcase capacity.

V6 Engine



V8 Engines



Fig. 12

A vibration caused by a crankcase overfilled with engine oil will typically display Engine 1 (E1) as the dominant vibration when monitoring the vibration using the CH-51450 PicoScope automotive oscilloscope.

After confirming the engine crankcase is overfilled, determine if the crankcase is overfilled with engine oil or is contaminated by an outside substance such as fuel or engine coolant.

If the engine was overfilled only with engine oil, adjust the oil level and check engine operation. It's possible that the engine was simply overfilled during an oil change or other maintenance service.

If the engine overfill was the result of contamination, diagnose the source of the contamination and make repairs as needed.

- Thanks to Tim Lightfoot

Online URL:

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