



Service Bulletin

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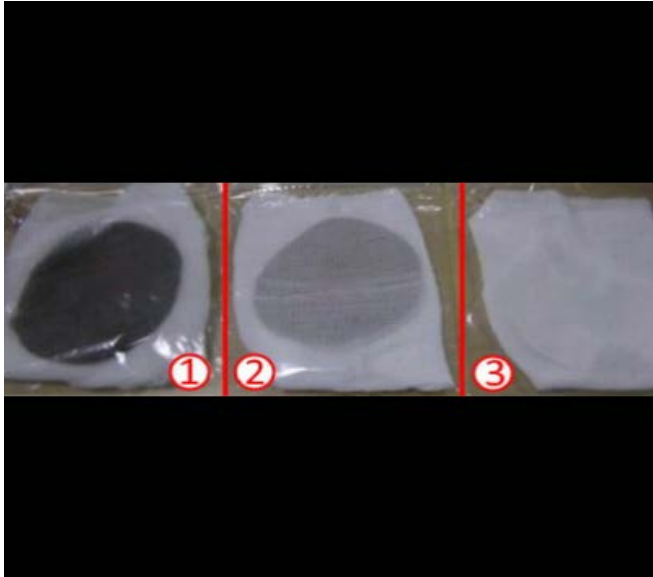
INFORMATION

Subject: Diagnostic Tip for Malfunction Indicator Lamp (MIL) Illuminated, Excessive Smoke from Tail Pipe - DTC P2002, P226D and/or P244A Set

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Passenger Cars and Trucks	2010	2022	—	—	Any diesel powered vehicle with a diesel particulate filter (DPF)	—
GMC							
Holden							

Involved Region or Country	North America, Middle East, Israel, Palestine, Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, GM Korea Company, China, Thailand, Egypt, Other Africa, Australia/New Zealand
Condition	<p>Some customers may comment on the MIL illuminated and/or excessive smoke coming from the tail pipe.</p> <p>The technician may find one or more of the following DTCs set in the Engine Control Module (ECM):</p> <ul style="list-style-type: none"> • P2002 • P226D • P244A
Information	<ul style="list-style-type: none"> • P2002 code will set if the properly functioning system detects a cracked or broken DPF. The exhaust particulate sensor is used to diagnose this failure. This code sets when the ECM detects that the particulate filter has degraded beyond a calibrated threshold. • P226D code will set if the properly functioning system detects that the DPF is missing. The exhaust pressure differential sensor is used to diagnose this failure. This code sets when the ECM detects that the pressure difference over the DPF is less than a set threshold. • P244A code will set if the exhaust pressure differential sensor lines are disconnected or blocked. The code sets when the ECM detects the diesel particulate filter exhaust differential pressure sensor is lower than the minimum threshold. <p>A properly functioning diesel particulate filter should remove most if not all soot particles from the exhaust stream. The following test should NOT be performed immediately after a regeneration because of the reduced filtration efficiency of the DPF without any soot in it. The purpose of this test is to aid in diagnosing a DPF that has failed internally.</p>

Service Procedure



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Note: Assistance may be required to perform the cheese cloth test.

Hold a cheese cloth or equivalent across the opening of the tail pipe. While doing this, have an assistant rev the engine to the rev limiter and back to idle. Repeat this a total of 8 times.

- A failed test will show excessive soot particulates on the cheese cloth or equivalent (1, 2). Refer to the graphic above. These soot particles indicate that the exhaust particulate filter is no longer able to capture all of the soot particles in the exhaust stream and it needs to be replaced.
- A passing test will show no, or very minimal, signs of soot particulates (3). These soot particulates indicate that the exhaust particulate filter is able to capture the soot particles in the exhaust stream and it does not need to be replaced.

If the vehicle sets DTC P2002, P226D or P244A and SI diagnostics lead to DPF replacement, use the cheese cloth test to confirm if the DPF needs to be replaced.

Version	8
Modified	<p>August 31, 2017 – Updated the Model Years.</p> <p>July 23, 2018 – Added 2019 Model Year and additional vehicles.</p> <p>May 07, 2019 – Updated the Subject and Condition for SES Lamp Illuminated and additional DTCs, added Engine RPOs, Information section, updated Exhaust Test procedure and removed Warranty Information.</p> <p>August 26, 2019 – Eliminated Models and Engine RPOs Designations, added 2020 Model Year, added Diesel Engine Statement.</p> <p>June 08, 2020 – Updated Service Procedure section.</p> <p>October 28, 2020 – Added the 2021 Model Year and updated the Involved Region or Country section.</p> <p>January 10, 2022 – Added the 2022 Model Year.</p>

