



Preliminary Information

PIP5748C Particulate Matter Sensor Protection Tube Performance Diagnostic May Set A False DTC P1488

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Chevrolet	Silverado	2020	ALL	ALL	LM2	All
GMC	Sierra	2020	ALL	ALL	LM2	All

Involved Region or Country:	North America
Condition:	The Particulate Matter Sensor Protection Tube Performance diagnostic may falsely fail, causing DTC P1488 to set and command the Malfunction Indicator Lamp (MIL) to illuminate.
Cause:	This condition is currently under investigation by engineering.

Correction:

If the vehicle has set DTC P1488 check to see if the particulate matter sensor is loose in the exhaust pipe. If so, this PI does not apply.

If the sensor is properly torqued and the P1488 has requested the MIL, test the entire exhaust for leaks, and check for proper alignment of the tailpipe assembly to the under-floor SCR (this is a critical angle).

To test for leaks in the exhaust use the Power Smoke diagnostic leak detector (GE-52250 - refer to the latest version of [PIP5684](#)), but there are two important considerations. The smoke from the tester may not get through the DPF, so to test downstream of the DPF, administer the smoke downstream of the DPF. Also, the tailpipe sealing bladder doesn't reach the exhaust cooler so use duct tape around the pipe to seal the cooler holes. Repair any leaks as necessary but pay particular attention to the joint illustrated in the pictures below.

If this joint is leaking the clamp may have bottomed out before applying sufficient clamp load to the joint, or damage may have occurred from misalignment of the joint. Also, misalignment of the joint may contribute to the P1488 setting, even if the joint does not leak.

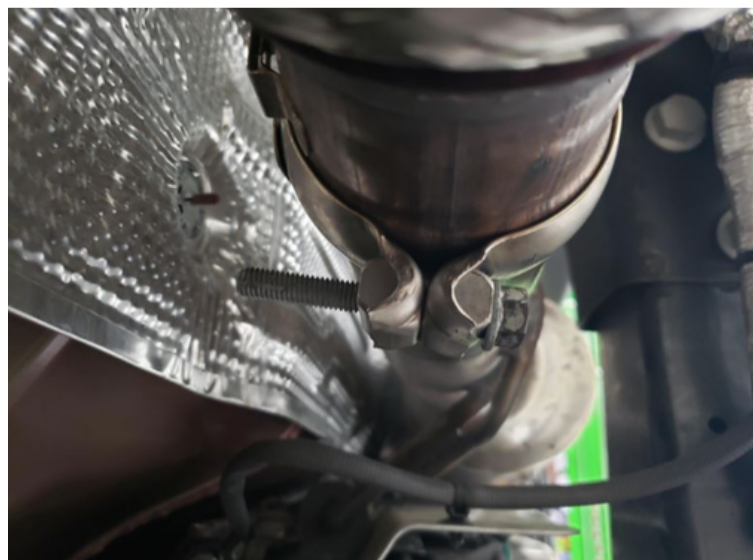
Separate the joint and check the witness marks for proper alignment. If the joint was found to be leaking, also inspect for deformations to either half of the joint and replace the components as necessary. If the clamp was found to be bottomed out, replace the clamp.

Be certain to remove the duct tape from the exhaust cooler.

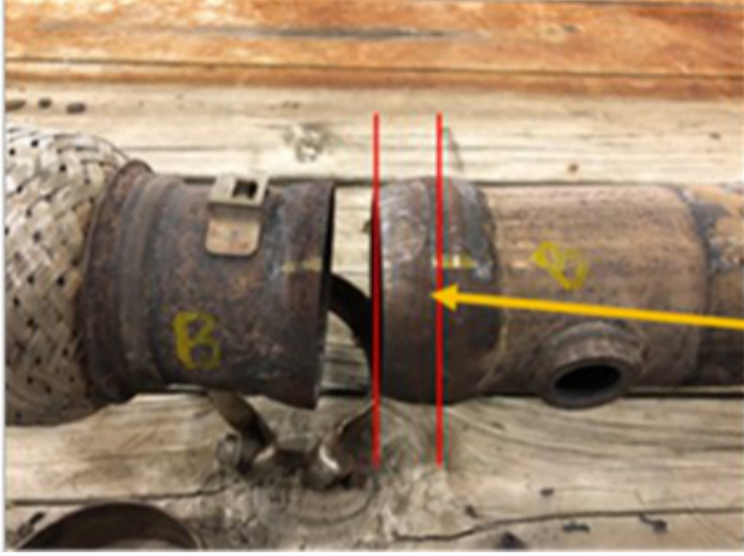
Also replace the particulate matter sensor.

Note: This PI will be updated or replaced by a bulletin as additional information becomes available.

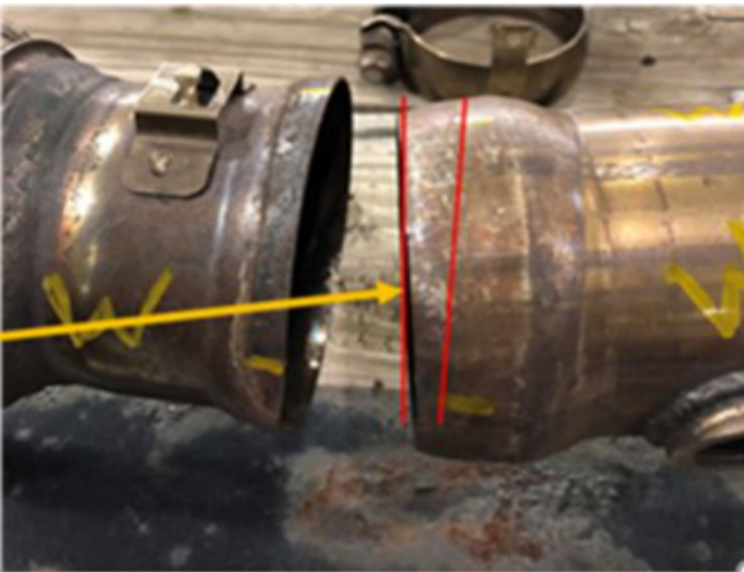
Please ensure you use the special labor operation for this concern.



These witness marks indicate proper alignment



These witness marks indicate improper alignment



Parts Information

Description	Part Number	QTY
Exhaust Clamp	84283544	1

Warranty Information

For vehicles repaired under the Emissions (E,E2) coverage, use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation:	Description:	Labor Time:
4087528	Exhaust Particulate Sensor Replacement	.4 Hours
ADD	Diagnostic Time (includes inspection)	0 - .5 Hours
*This is a unique Labor Operation for Bulletin use only.		

Version History

Version	4
Modified	08/20/2020 - Created on. 09/25/2020 - Updated to include inspecting for an exhaust leak and add pictures. 10/20/2020 - Updated to modify the exhaust pipe sealing procedure. 11/18/2020 - Updated to provide exhaust alignment details



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