



Service Bulletin

Bulletin No.: 19-NA-114

Date: May, 2019

INFORMATION

Subject: Information on Malfunction Indicator Lamp (MIL) Illuminated - DTC P0171 Set

This Bulletin replaces PIP5197M. Please discard PIP5197M.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Buick	Encore	2013	2019			1.4L (LUJ, LUU, LUV)	
Cadillac	ELR	2014	2017				
Chevrolet	Cruze	2011	2016				
	Sonic	2012	2019				
	Trax	2013	2019				
	Volt	2012	2015				

Involved Region or Country	North America
Condition	Some customers may comment that the MIL is illuminated. Some technicians may find DTC P0171 (Fuel Trim System Lean) or other airflow related codes set in the Engine Control Module (ECM).
Cause	This condition may be caused by a torn positive crankcase ventilation (PCV) Crankcase Pressure Control Diaphragm. ⇒ The PCV crankcase pressure control diaphragm in the PCV valve could be torn, allowing un-metered air to enter the crankcase.
Information	Following the diagnostics in SI for that DTC may lead to the PCV system as a potential source of external airflow. Confirmation of the PCV valve performance must be done before replacing the camshaft cover.

Service Procedure



5335015

Test to confirm a tear in the PCV valve:

1. Remove the engine cover. Refer to *Engine Cover Replacement* in SI.
2. Verify that the engine oil dipstick is fully seated, and the oil fill cap is fully tightened.

3. With the engine running, listen for noise coming from the PCV valve.
 - ⇒ If noise is heard, check to see if the noise gets quieter or disappears with the engine oil dipstick removed.

4. Reinsert the dipstick.

Note: Normal operation of the PCV crankcase pressure control diaphragm could cause a tissue to flutter against the port (smoke would not be continuously drawn into the port). A torn crankcase pressure control diaphragm would cause the tissue to be held against the port (smoke would be continuously drawn in) due to internal engine vacuum leaking through the diaphragm.

5. Check to see if there is vacuum at the PCV vent at the front of the PCV valve by placing a piece of tissue near it.

⇒ The tissue will be sucked against the vent and held if vacuum is present. Smoke can also be used to see if it is drawing into the PCV vent port.

- If the PCV valve is making noise and there is vacuum present at the PCV valve vent, replace the camshaft cover. Refer to *Camshaft Cover Replacement* in SI.
- If the PCV valve does NOT make noise or leak vacuum, the PCV system is not the cause and further diagnostics using SI would be needed.

6. Reinstall the engine cover. Refer to *Engine Cover Replacement* in SI.

Version	1
Modified	Released May 15, 2019