



Service Bulletin

Bulletin No.: 20-NA-179

Date: October, 2020

TECHNICAL

Subject: Malfunction Indicator Lamp (MIL) Illuminated – DTCs P0521 and/or P06DD Set

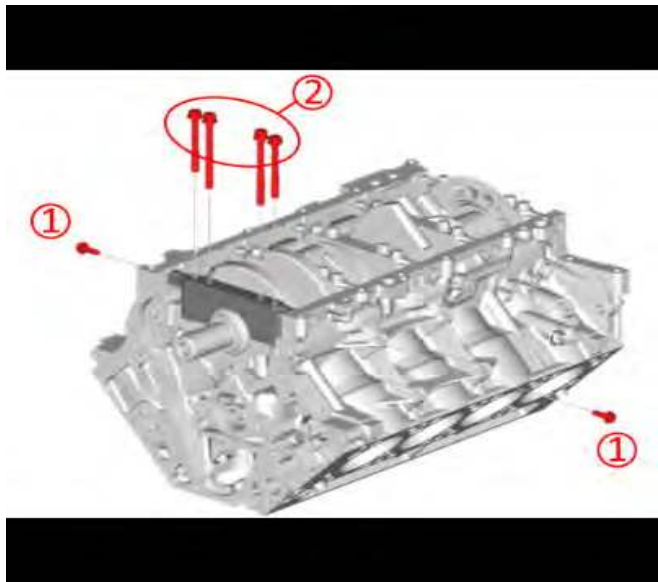
Brand:	Model:	Model Year:		VIN Breakpoint:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Corvette	2020	2020	SORP	September 10, 2020	6.2L (LT2)	—

Involved Region or Country	North America
Condition	Some customers may comment that the MIL is illuminated. Some customers may also comment that the MIL will illuminate and then shut off. Some technicians may find one or more of the following DTCs set in the Engine Control Module (ECM): " P0521: Engine Oil Pressure Sensor Performance " P06DD: Engine Oil Pressure Control Valve Performance
Cause	This condition may be caused by an unseated engine oil pressure control valve (OCV).
Correction	The diagram shows two components. On the left, labeled with a red circled '1', is a redesigned oil pressure control valve retainer clip. On the right, labeled with a red circled '2', is the engine oil pressure control valve (OCV). Both components are shown in a cross-sectional view, highlighting their internal structure and the points of contact. Note: If a vehicle comes in with one of these DTCs, follow SI for both DTCs to ensure there is not an electrical fault or other hardware concern. After diagnosis has been performed and no issues are found electrically, then it will be necessary to remove the engine oil pan and inspect for a unseated engine oil pressure control valve, which is mounted on the bottom of the engine oil pump. If P0521 and P06DD DTCs are present, then a redesigned oil pressure control valve retainer clip (1) may be necessary. Refer to the Service Procedure section below.

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Service Procedure

1. Remove the engine oil pan. Refer to Oil Pan Replacement in SI.



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Note: The generator may need to be repositioned to gain access to the main cap side bolts.

2. Remove the main cap side bolts (1).

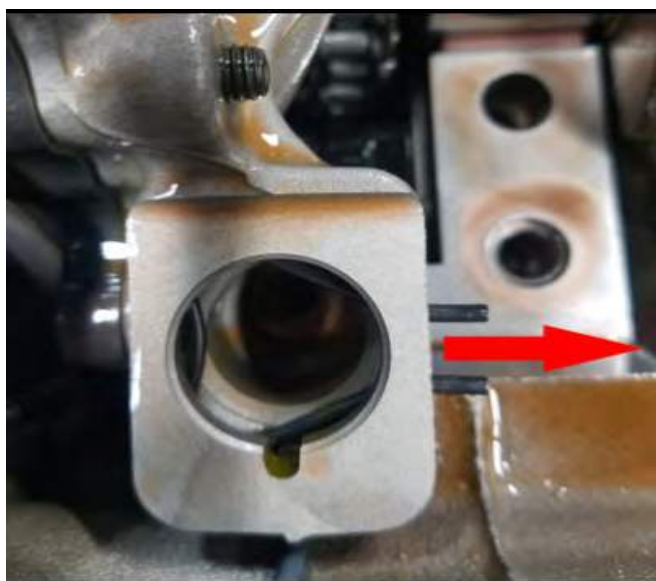
Important: When removing the main bearing cap be careful not to damage the main bearing or journal surface of the crankshaft. Please set the main bearing cap in a safe place so no debris or damage could occur.

3. Remove and discard the bolts (2) that secure the #1 main bearing cap.



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4. Inspect the OCV:
" If you find this oil pressure control valve dislodged (1), it will be necessary to install a redesigned oil control valve retainer.
5. Disconnect the oil pressure control valve electrical connector and position aside.



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Note: Remove the existing oil pressure control valve retainer by pulling towards the rear and discard. You will be installing a newly designed retainer during installation.

6. Push in the retainer and remove the oil pressure control valve and set aside.
7. Once the retainer is removed, inspect the oil pressure control valve for any signs of damage and ensure the O-ring is not cut.
 - ⇒ Apply a small amount of clean engine oil to the pressure control valve and reinstall ensuring it is seated correctly.



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Important: Do not use any tools to tap the pressure control valve into place. Only install the pressure control valve by pushing on the body of the valve by hand.

8. Install the new retainer from the front of engine towards the rear as shown in the graphic above.



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9. When the retainer is installed, there should be about 2 to 3 mm of clearance between the retainer and the oil pump body as shown above.
 - ⇒ Ensure the pressure control valve and retainer are correctly installed.
10. Ensure the cap and bearing are VERY CLEAN and apply assembly lube prior to installation.
11. Install the front main bearing cap with new bolts.

Tighten
Tighten the bolts to specifications. Refer to Fastener Specifications in SI.
12. If removed, install the generator.
13. Install the engine oil pan. Refer to Oil Pan Replacement in SI.

Parts Information

Important: **The Oil Pump Control Valve (OCV) Retainer can be obtained from the Warranty Parts Center (WPC) using the TSP Dealer Request Form located on Global Connect<Service Department<Service Forms Application<General Information tab<TSP Dealer Request Form. Instructions for submitting are on the form. Request WPC857.

Causal Part	Description	Part Number	Qty
X	RETAINER, O/ PMP FLOW CONT SOL VLV	Request WPC857**	1
N/A	BOLT, RR CRADLE BR (M14X2X105)	11561495	2
N/A	BOLT, RR CRADLE BR (M10X1.5X115)	11547752	4
N/A	BOLT, RR SUSP CRADLE FRT (M14x99.21)	11602517	2
N/A	SEAL, OIL PAN HIGH PRESS PORT	12621086	4
N/A	GASKET, OIL PAN (SMALL GASKET)	55577121	1
N/A	Seal, OIL PAN FRT	12695698	1
N/A	BOLT, CR/ SHF BALR	11548720	1
N/A	BOLT, CR/SHF BRG CAP (M10X2X96)	11548076	2
N/A	BOLT, CR/SHF BRG CAP (M10X2X82)	11548075	2
N/A	BOLT, CR/SHF BRG CAP (M8X1.25X25)	11546565	2
N/A	Oil, Engine	Refer to EPC	Refer to SI

Warranty Information

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

Labor Operation	Description	Labor Time
4087538*	OCV Retainer Clip Replacement	10.7 hrs
*This is a unique Labor Operation for bulletin use only.		

Version	1
Modified	Released October 23, 2020

