



Preliminary Information

PIP5628C Misfire Template

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
All	All	2000 - 2021	All	All	All	All

Involved Region or Country	North America
Condition	A vehicle may come in with a misfire and DTCs P0300 - P0308 and/or P050D set.
Cause	Engine misfire.

Correction:

If you determine it is necessary to call TAC for a misfire or P0300 - P0308 and/or P050D concern. Please provide the following Misfire template information, when contacting TAC, to allow our agents to better assist you in fixing the concern right the first time.

Misfire template

What Previous repair attempts have been performed?

Follow SI diagnostic and/or related TSB's/PIs for the concern.

What codes are set ? (Please record ALL DTC's)

What cylinder or cylinders are misfiring?

Can the misfires be felt? If not felt remove the **accessory drive** belt if possible and evaluate.

Can the misfire be duplicated?

When does the engine misfire?

- Hot or cold
- Idle or off idle
- Intermittent or not
- Under a load
- What are the weather conditions when the concern happened?

Diagnostic for misfires

1. Spark (Electronic ignition system diagnosis)
2. Fuel injector balance test (record the results)
3. Check for a possible fuel quality issue (especially if there is an issue of cold engine hard start and/ or an engine misfire on all cylinders).
4. Check the supply ignition voltage to the ignition module/coil assemblies, and also to the fuel injectors
5. Complete a Compression test, static and running (record the results) For a fast check do a **relative** compression test using the PICO tool reference doc ID 5421026 (for gas engine's place it in clear flood mode)
6. Complete a Cylinder leakage test if needed (record the results)
7. Note the fuel trims. (rich or lean)

8. Complete a Spark plug inspection (inspect for anything abnormal)

Did you swap components from the misfiring cylinder to known good locations?

Have you completed a crankshaft variation learn?

Have you checked for any abnormal engine noise possibly related to the misfire?

Follow SI diagnostics and/or related TSB's/PIs for applicable noises located at the upper or lower engine.

Is the misfire on an AFM cylinder?

Inspect for and verify rocker arm movement (V8/V6 push rod engines)

Some of the information above may not be applicable to all models.

Be sure to capture a GDS2 session log of the engine misfire.

Version History

Version	4
Modified	02/18/2019 - Created on 02/05/2020 - Updated Model Year. 05/20/2020 - Update corrective action 10/08/2020 - Update to add 2021 MY



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