

Subject: Engineering Information – Malfunction Indicator Lamp (MIL) Illuminated, DTC P0496 Set

Attention: Proceed with this EI ONLY if the customer has commented about this concern AND the PIE number is listed in the Global Warranty Management / Investigate History link (GWM/IVH). If the customer has not commented about this condition or the EI does not show in GWM/IVH, disregard the PI and proceed with diagnostics found in published service information. THIS IS NOT A RECALL — refer to the latest version of Service Bulletin 04-00-89-053 for more details on the use of Engineering Information bulletins.

This EI is has been revised to update the Correction. Please discard PIE0521.

| Brand: | Model: | Model Year: | | VIN: | | Engine: | Transmission: |
|----------|--------|-------------|------|------|----|------------|---------------|
| | | from | to | from | to | | |
| Cadillac | XT4 | 2019 | 2019 | | | 2.0L (LSY) | |

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| Involved Region or Country | North America |
| Condition | Important: If the customer did not bring their vehicle in for this concern, DO NOT proceed with this EI. Some customers may comment on the malfunction indicator lamp (MIL) illuminated. Technicians may find DTC P0496 set. |
| Cause | GM Engineering is attempting to determine the root cause of the above condition. Engineering has a need to gather information on vehicles PRIOR to repair that may exhibit this condition. As a result, this information will be used to "root cause" the customer's concern and develop/validate a field fix. |

Correction

If you encounter a vehicle with the above concern, perform the following and contact the engineers listed below with your findings.

Perform SI Circuit / System Verification diagnostics first. If nothing is found, perform the following service procedure for air leak checks.

1. Remove the air cleaner outlet resonator. Refer to *Air Cleaner Outlet Resonator Replacement* in SI.
2. Remove the air cleaner outlet intermediate duct. Refer to *Air Cleaner Outlet Intermediate Duct Replacement* in SI.
3. Remove the turbocharger outlet duct connector. Refer to *Turbocharger Outlet Duct Connector Replacement* in SI.

Verify the following conditions DO NOT exist:

1. G58 Evaporative Emission Purge Pump — Incorrect connection / Leaking / Visible Damage
2. Q12 Evaporative Emission Purge Solenoid Valve — Incorrect connection / Incorrect installation / Leaking / Visible Damage
3. Evaporative Emission Canister Purge Tube — Cracked / Disconnected / Incorrect connection / Leaking / Loose / Visible Damage

Note: If a leak is found at any step during diagnosis, call the engineer before continuing.

You can use SI for directions to hook up the Evaporative Emission System Tester (EEST) or separate the purge tube from the purge pump.

1. Smoke test system from the purge pump inlet to the purge valve.
2. Install the fitting J41413-311 supplied with the EEST.
3. Turn the smoke machine on.
4. Look for a leak in the purge pump body (internal O-ring).

Note: If a leak is found at any step during diagnosis, call the engineer before continuing. If NO, go to the next step.

Look for a leak at pump to tube connector (O-ring).

Note: If a leak is found at any step during diagnosis, call the engineer before continuing. If NO, go to the next step.

Look for a leak at the purge tube to T-fitting.

Note: If a leak is found at any step during diagnosis, call the engineer before continuing. If NO, go to the next step.

Look for a leak between the purge valve and adaptor.

Important: If a leak is found coming from the valve into the adaptor, **DO NOT SEPARATE**, and call the engineer before continuing. If NO, go to the next step.

Look for an internal valve leak past the valve O-ring into the adaptor. **DO NOT REMOVE** the valve from the adaptor.

Important: If a leak is found coming from the valve into the adaptor, **DO NOT SEPARATE**, and call the engineer before continuing.

Contact Information

| Engineer Name | Phone Number |
|---------------|--------------|
| Ken Swartz | 248-431-9641 |
| Dan Smith | 248-343-7037 |

Please include the following information if leaving a message:

- Technician name
- Dealer name and phone number
- Complete VIN and repair order (R.O) number

On the repair order, document the date and time the call was placed (even if the engineer was not reached).

If engineering is unable to return the call within one hour, proceed with diagnosis and repair based on information found in SI.

Warranty Information

If engineer was contacted or required information was provided, use:

| Labor Operation | Description | Labor Time |
|--|---|------------|
| 4086938* | Engineering Information – Malfunction Indicator Lamp (MIL) Illuminated, DTC P0496 Set | 0.6 hr |
| *This is a unique Labor Operation for Bulletin use only. | | |

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| Version | 2 |
| Modified | Released April 26, 2019 July 24, 2019 – Updated the Correction. |