Bulletin No.: PI0874

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# Service Bulletin

# PRELIMINARY INFORMATION

**Subject:** Malfunction Indicator Lamp (MIL) On, DTC P0454 Set

**Models:** 2013 Cadillac ATS
Built Prior to VIN Breakpoint D0113911

## Condition/Concern

Some customers may comment on the malfunction indicator lamp (MIL) being on. Upon inspection, a technician may find DTC P0454 set.

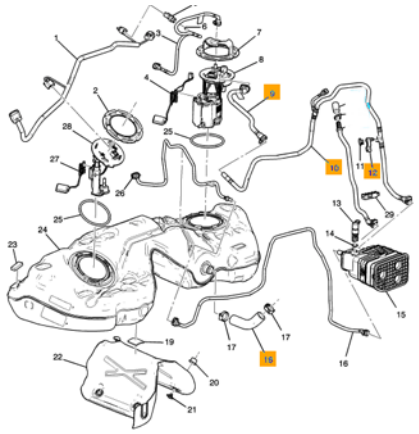
This condition may be caused by fuel in the fuel tank vent line. A small amount of fuel can enter the vapor lines when refueling and during vehicles maneuvers. If the small evaporative emission leak test runs when there is enough fuel in the fuel tank vent line, fuel trapped in a low area of the fu tank vent line can block the vapor communication between the fuel tank and the fuel tank vapor pressure sensor (located on the fuel line). With enough pressure or vacuum difference across the fuel-blocked section, vapor can bubble through the trapped fuel and cause the sensor to change abruptly, which the sensor diagnostic interprets as a malfunction of the sensor.

## Recommendation/Instructions

There is a redesigned fuel tank vent valve hose and a fuel tank vent hose, which have a more gradual transition in the low area, preventing the lim amount of fuel from blocking the vapor communication between the fuel tank and the fuel tank pressure sensor before it is vaporized through canis purge.

Replace both the fuel tank vent valve hose and fuel tank vent hose with the redesigned hoses following the repair procedure below:

1. Drain the fuel tank. Refer to Fuel Tank Draining in SI.
2. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in SI.
3. Remove the left and right side rear air deflectors. Refer to Underbody Rear Air Deflector-Left Side and Underbody Rear Air Deflector-Right Side in SI.
4. Remove right rear wheelhouse panel liner. Refer to Rear Wheelhouse Panel Liner Replacement in SI.
5. Remove the zip tie straps attaching the fuel tank vent hose to the fuel tank filler pipe.
6. Support the fuel tank with a suitable jack.
7. Remove the left and right fuel tank straps.



8. Remove the fuel fill pipe hose (18) from the fuel tank inlet check valve.
9. Disconnect the connector for fuel tank pressure sensor (12).
10. Disconnect the fuel tank vent hose (10) from the canister and fuel tank vent valve hose (9). Refer to Plastic Collar Quick Connect Fitting Service.
11. Lower the fuel tank sufficiently to access the fuel tank vent valve hose connection to the fuel tank fuel pump.
12. Disconnect the fuel tank vent valve hose (9) from the fuel tank fuel pump.
13. Install the redesigned fuel tank vent valve hose (9) to the fuel tank fuel pump.
14. Install the redesigned fuel tank vent hose (10) to the canister and fuel tank vent valve hose (9).
15. Reconnect the connector for the fuel tank pressure sensor (12).
16. Install the filler pipe hose (18) and tighten the hose clamps (17).
17. Install the left and right fuel tank straps.

    **Tighten:** Tighten fuel tank strap bolts to 20♦Y (15♦lb♦ft).
18. Zip tie strap the fuel tank vent hose to the fuel tank filler pipe.
19. Install the right wheelhouse panel liner.
20. Install the left and right side rear air deflectors.
21. Clear all DTCs.

## Parts Information

| Part Number | Description |
|---|---|
| 23105084 | Fuel Tank Vent Hose |
| 23105386 | Fuel Pipe Vent Hose |

## Warranty Information

For vehicles repaired under warranty, use:

| Labor Operation | Description | Labor Time |
|---|---|---|
| J7954* | Fuel Tank Vent Valve Hose and Fuel Tank Vent Hose Replacement | 1.3 hrs |
| *This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide. | | |

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have th equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from information.

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