



Service Bulletin

TECHNICAL

Subject: Malfunction Indicator Lamp (MIL) Illuminated, Fuel Tank Hard to Fill, DTCs P0442, P0446, P0455 or P0449 Set

Models: 2011-2013 Chevrolet Silverado
2014 Chevrolet Silverado 1500
2014 Chevrolet Silverado 2500/3500
2015 Chevrolet Silverado
2011-2013 GMC Sierra
2014 GMC Sierra 1500
2014 GMC Sierra 2500/3500
2015 GMC Sierra

Attention: This Bulletin also applies to any of the above models that may be Middle East, Israel and Chile Export vehicles.

Condition

Some customers may comment on the following conditions:

- The malfunction indicator lamp (MIL) is illuminated.
- The fuel tank is hard to fill.

Technicians may find one or more of the following DTCs: P0442, P0446, P0455 or P0449 set as current or in history and there may be evidence of dust or water intrusion at the evaporative emissions (EVAP) canister vent solenoid (CVS) valve.

Cause

The EVAP CVS valve draws fresh air into the EVAP system through a vent attached at the top of the conduit that is secured to the fuel filler pipe. Under certain operating conditions, dirt and dust intrusion into the CVS fresh air intake/venting system may result in restricted air flow.

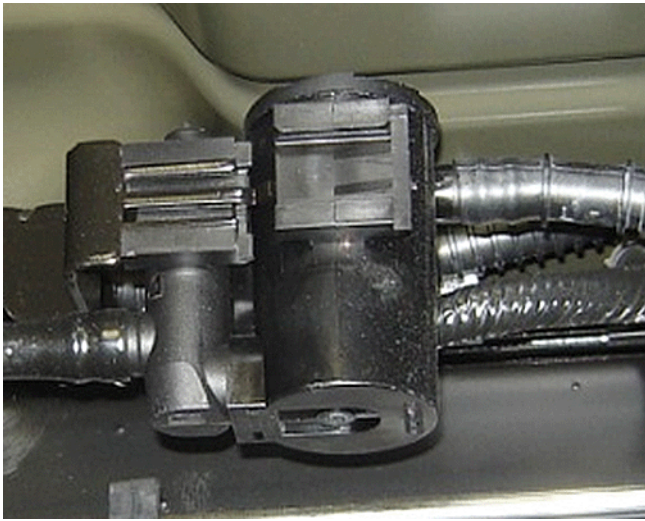
Under certain operating conditions, if water is ingested into the EVAP CVS fresh air intake/venting system, it may reach the CVS valve causing corrosion in the CVS valve and may cause restrictions in the fresh air intake path when the CVS valve is in the closed position.

Ingested water will also collect in the CVS valve cyclonic filter in order to protect the EVAP canister. However if the capacity of the cyclonic filter is exceeded, this may result in water entering the EVAP canister and cause an additional restriction during refueling.

Correction

Note: DO NOT replace the EVAP canister assembly for this concern unless it fails the leak test or it has ingested excessive amounts of dirt, dust or water.

After following the published SI diagnostics and determining that the EVAP CVS valve is the cause of the Malfunction Indicator Lamp (MIL) illumination or the hard to fill symptom, replace the existing EVAP CVS valve assembly with the new revised design assembly.



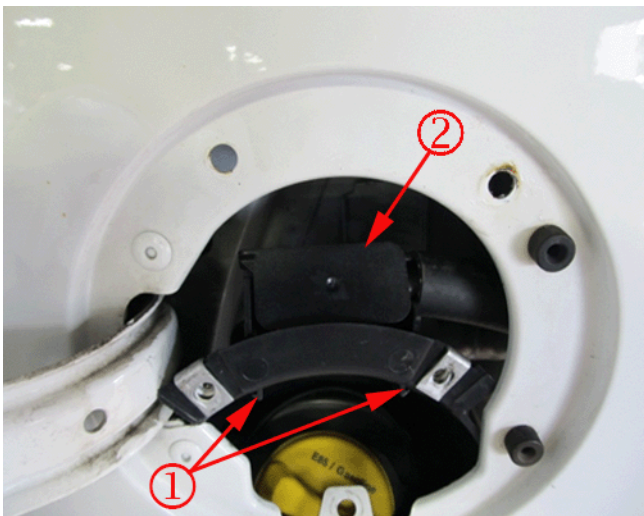
Original design EVAP CVS valve shown above.



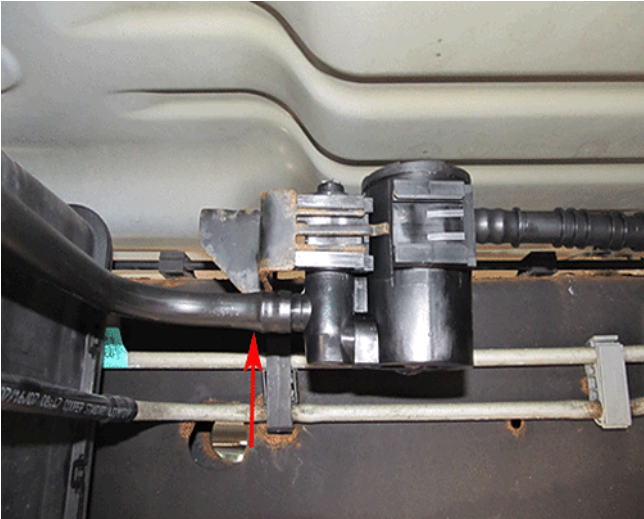
Revised design EVAP CVS valve shown above.

This revised EVAP CVS valve assembly is a sealed unit that is vented through a remote pre-filter mounted atop the fuel filler housing. The revised CVS valve incorporates improved filtering capacity. To ensure correct installation, follow the procedure outlined below:

1. Turn OFF the ignition, and all electrical components, including the scan tool.
Note: DO NOT remove the fuel fill cap in order to prevent any debris from entering the fill pipe.
2. Remove the fuel tank filler pipe housing to body TORX screws and retainer.
3. Reposition the filler housing and pipe to improve access to the EVAP pre-filter located on the top of the fuel filler housing.



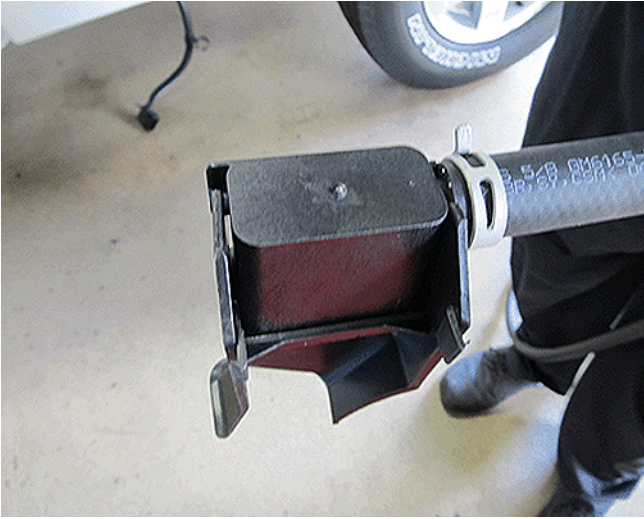
4. Release the tabs (1) securing the EVAP pre-filter housing (2) to the top of the fuel filler housing.
5. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in SI.
6. Disconnect the vehicle chassis wiring harness electrical connector from the CVS valve.
7. Disconnect the CVS valve assembly quick connect fitting from the EVAP canister. Refer to Plastic Collar Quick Connect Fitting Service in SI.
8. Note the routing of the pre-filter hose along the frame rail and fuel fill pipe assembly, then disconnect the filter line clips and remove the filter assembly/line from above the frame rail and fuel filler pipe assembly.



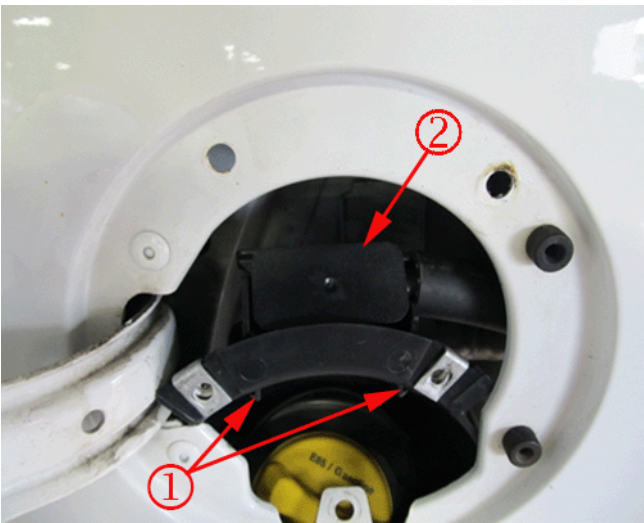
9. Cut off the CVS valve assembly line with quick connect fitting from the CVS valve as shown above.
10. Remove the complete CVS valve and filter assembly/line from the CVS bracket on the vehicle.



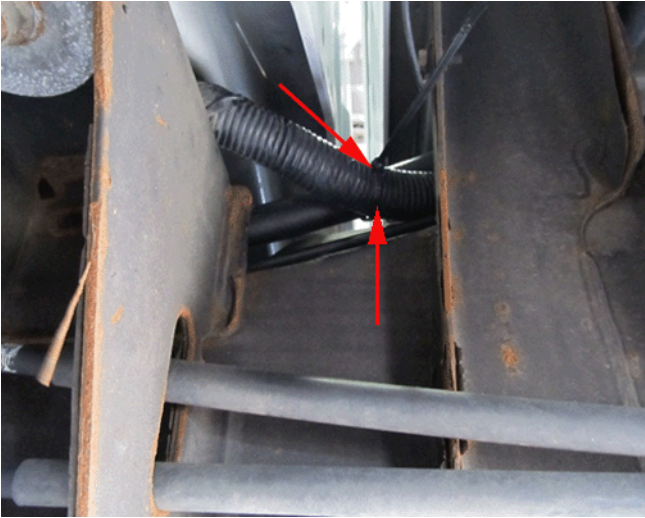
11. Install the cut off the CVS valve assembly line with quick connect fitting to the CVS valve as shown above. Match the approximate angle of the line on the original valve and clamp into place.
12. Install the new CVS valve assembly to the vehicle.
13. Measure the length of the hose on the removed EVAP CVS assembly from the pre-filter to the CVS filter. Allow extra length to ensure there will be no kinks in the heater hose, and cut the needed length of the specified heater hose. The hose will run along the frame rail in the same manner as the original pre-filter hose.

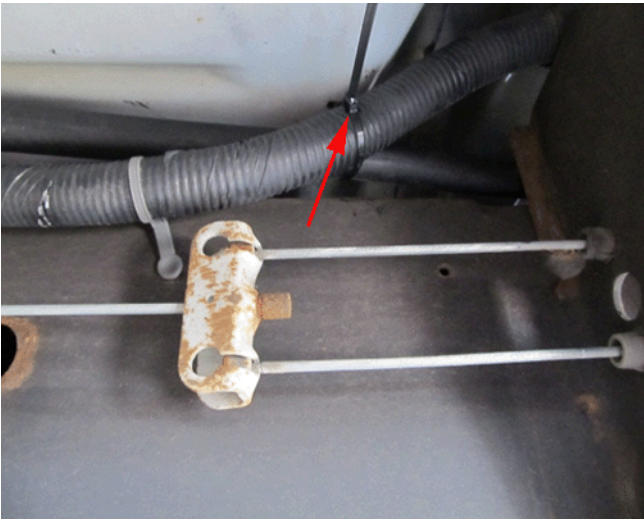


14. Install the new pre-filter and filter housing to one end of the hose and clamp in place.
15. Partially lower vehicle.



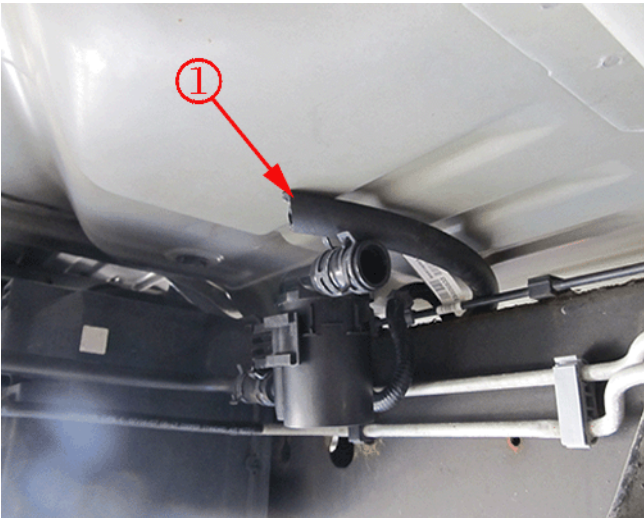
16. Through the fuel tank filler pipe housing opening, install the pre-filter and housing (2) with hose attached to the back of the fuel tank filler pipe housing. Secure the tabs of the filter (1) to the slots in the filler pipe housing.
17. Install the fuel tank filler pipe housing to the body.
18. Raise the vehicle.



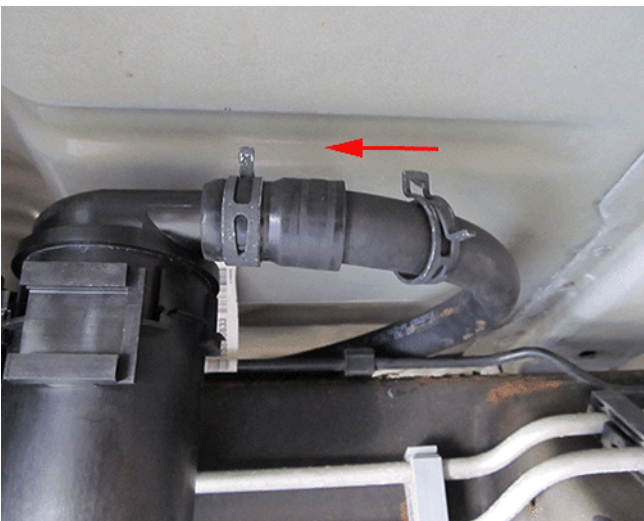


Important: DO NOT make any sharp bends or allow any kinks in the hose when routing the hose.

19. Carefully route the pre-filter hose along the fuel filler pipe and frame rail and over to the CVS valve assembly.
20. Install tie straps along the pre-filter hose to the fuel filler pipe and wiring harness along the frame rail.



21. Trim an excess hose length as needed.



Note: Apply loc-tite 401 or equivalent (SuperGlue, etc.) to the end of the heater hose (1) which will go into the CVS valve rubber coupling.

22. Apply adhesive as indicated and install the hose into the rubber coupling of the CVS valve assembly. Ensure the hose is fully installed and clamp into place.
23. Connect the vehicle chassis wiring harness electrical connector to the CVS valve.

24. Lower the vehicle.

25. Clear any DTCs.

Parts Information

| Part Number | Description | Qty |
|-------------|---|------------|
| 23103351 | FILTER KIT-EVAP EMIS CNSTR (W/ SEAL) | 1 |
| 09438383 | HOSE, FUEL-OIL EVAP 5/8" x 25' (need 3-8 feet from roll per vehicle depending on box and CVS configuration) | Cut Length |
| 12337820 | TIE STRAP (need 4-6 depending on box and CVS configuration) | 4-6 |
| 11609970 | CLAMP | 1 |

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

| Labor Operation | Description | Labor Time |
|-----------------|---|------------|
| 4080898* | Remove and Replace Revised CVS Valve Assembly | 1.1 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 the 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 the information.



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