



Service Bulletin

File in Section: -

Bulletin No.: PI0740B

Date: March, 2014

PRELIMINARY INFORMATION

Subject: Engine Coolant Odor inside Vehicle Passenger Compartment

Models: 2011-2012 Chevrolet Cruze
Equipped with 1.4L Engine (RPO LUJ)

This PI has been revised to add information under Condition/Concern and Step #4 to the Recommendation/Instructions. Please discard PI0740A.

Condition/Concern

Some customers may comment that they smell an engine coolant type odor inside of the vehicle passenger compartment.

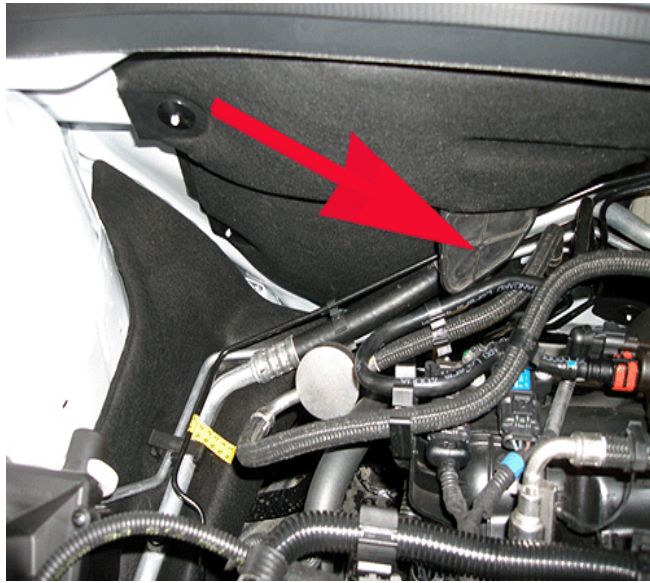
This odor may be caused by coolant vapor collecting under the hood. This vapor may be coming from the coolant reservoir overflow and entering the passenger compartment through small gaps in the hood to plenum seal.

The odor may also be caused by the grease used during the assembly of the HVAC case. Refer to the latest version of PI0935 for diagnosis.

Recommendation/Instructions

Use the following steps to check for cooling system leaks and install additional hood seals and a coolant reservoir overflow drain tube.

1. Add Coolant System Tracer Dye, P/N 89022219 (in Canada, 89022220), to the coolant and run the engine through at least one thermal cycle (run to operating temperature then allow it to cool down). If any external leaks are found, repair as necessary following SI diagnostic and repair procedures.
2. After the engine has cooled down, pressure test the cooling system. Refer to Cooling System Leak Testing in SI. Inspect for external coolant leaks or traces of dye around the water pump seal/bolts, thermostat housing, heater core or the coolant surge tank areas. Refer to the latest version of PI1041: Information on Water Pump Replacement for acceptable water pump coolant seepage description.
3. If any leaks are found, particularly inside the vehicle, ensure that all coolant has been cleaned/removed. This is an important step to ensure the odor is eliminated from the vehicle cabin. Coolant can accumulate in the lower areas of the HVAC housing.



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4. Inspect the plenum drain and ensure there is no foreign debris caught in the drain (leaves/twigs/pine tree needles) holding the cover open.



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Clear any debris from the drain assembly (shown with cover removed).



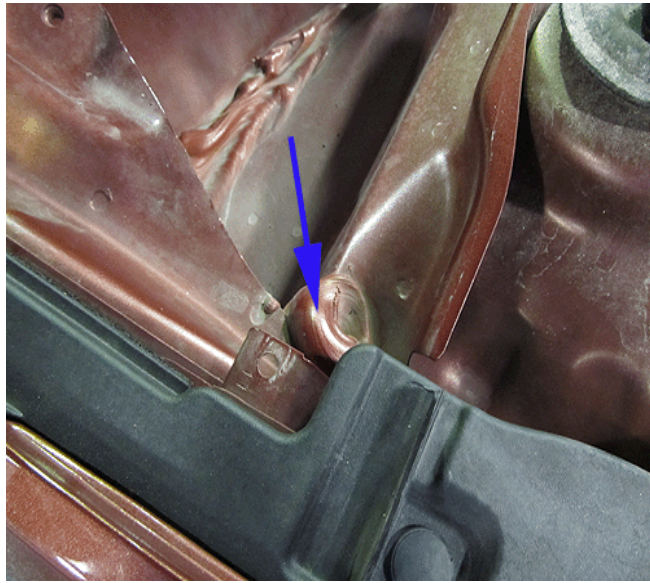
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5. Inspect the front of dash seals (particularly around heater core inlet) and inspect the hood to cowl seal for gaps/poor sealing. Repair as required.
6. Install left and right hood seals as follows:
 - 6.1. Remove the air inlet grille. Refer to Air Inlet Grille Panel Replacement in SI.



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- 6.2. Clean the mounting areas with a general purpose adhesive cleaner.



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Note: It may be necessary to trim the excess body sealer in the plenum area to allow the seal to fit correctly.



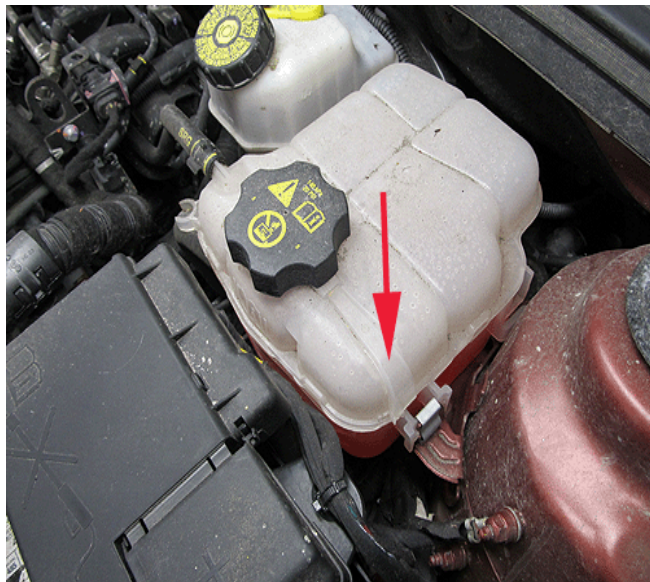
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6.3. Install the right side hood seal, P/N 95486182, as shown. Ensure the gap is sealed.



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- 6.4. Install the left side hood seal, P/N 95486181, as shown. Ensure the gap is sealed.
7. Use the following steps to install a coolant reservoir drain tube:



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Warning: If the coolant inside the coolant reservoir is hot, do not proceed until it cools down.

7.1. Remove the coolant reservoir vent cap/cover.



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7.2. Clean any coolant residue from the fill neck area of the reservoir.



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Ensure all traces of coolant are cleaned from the filler neck.

7.3. Clean the vent opening and make sure it is dry before moving to the next step.

7.4. Prepare a 40 inch long section of locally sourced 0.375 in. OD and 0.167 in. ID drain hose.



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- 7.5. Stretch a small amount of butyl ribbon sealer, such as *3M® Window Weld Ribbon Sealer, Part # 08612 or the equivalent, into a thin ribbon about 25 mm (1.0 in) in length as shown.



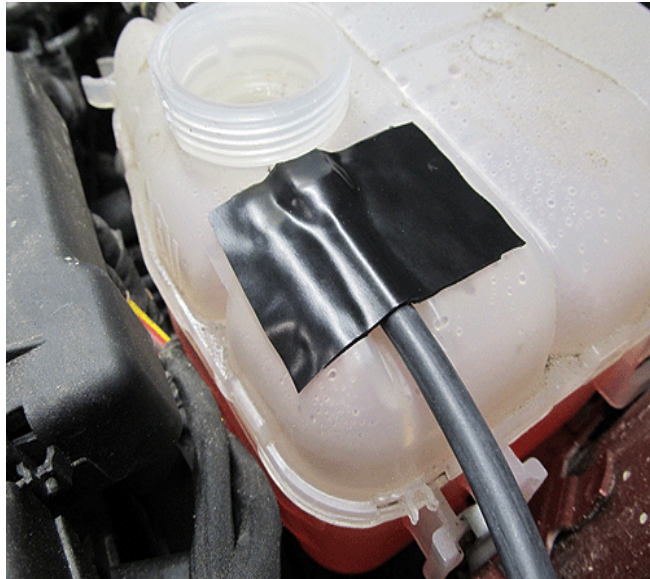
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- 7.6. Wrap the butyl around the end of the hose as shown. Use care to not plug the end of the hose.



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- 7.7. Insert the hose into the reservoir cavity as shown. Ensure the hose is fully inserted into the cavity and contacting the filler neck.



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- 7.8. Using a 40 mm (1.5 in) long section of *3M® Scotch Brand Electrical Moisture Sealer part # 06147 or the equivalent, secure the hose to the top of the reservoir as shown.

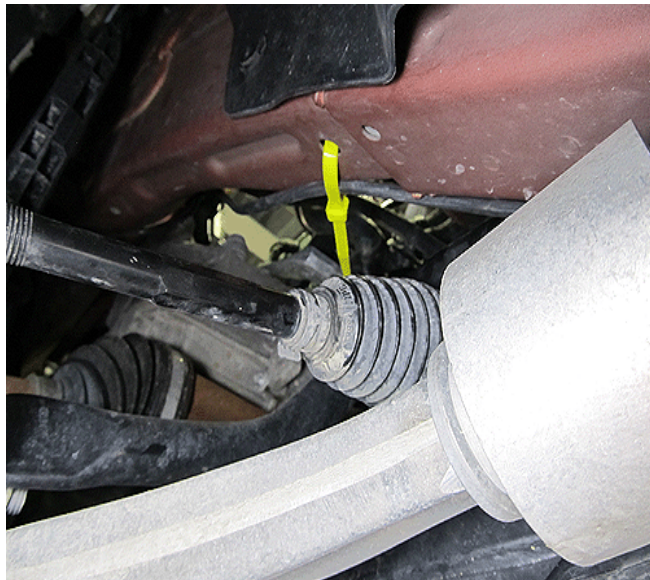
Note: Yellow wire ties are used in the following photos to better illustrate their location.

- 7.9. Route the hose down from the reservoir, along the driver side frame rail and between the control arm bracket and the frame rail. Using black wire ties, secure the drain hose as shown.



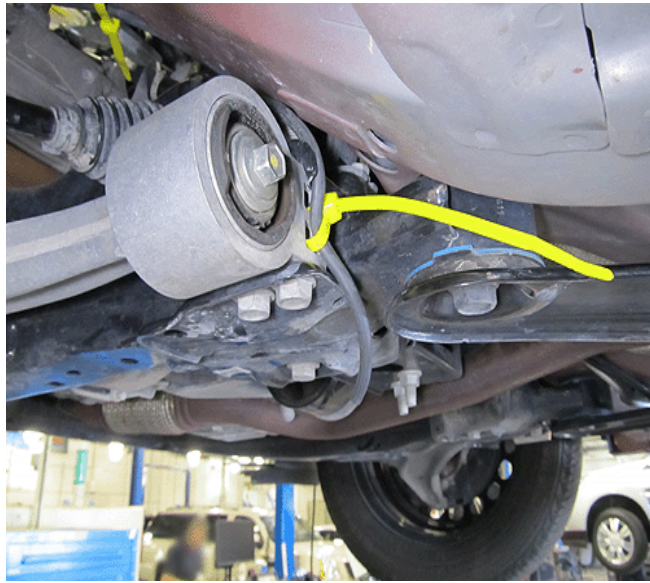
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– Locate the first wire tie to the bracket directly below the coolant reservoir.



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– Locate the second wire tie along the driver side frame rail as shown.



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– Locate the third wire tie through the control arm mount as shown.

7.10. Ensure the hose does not come into contact with any moving or excessively hot components and that it drains underneath the vehicle. Also, ensure that the tube does not vent at or near the exhaust system.

7.11. Trim the end of the hose as required.

*We believe this source and their products to be reliable. There may be additional manufacturers of such products/materials. General Motors does not endorse, indicate any preference for or assume any responsibility for the products or material from this firm or for any such items that may be available from other sources.

Parts Information

*For purchasing information, contact: www.shop3m.com.

Part Number	Description
08612I	*3M® Window Weld Ribbon Sealer
06147	*3M® Scotch Brand Electrical Moisture Sealer
95486182	Right Hood Seal
95486181	Left Hood Seal
89022219 (in Canada, 89022220)	Coolant System Tracer Dye

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
4080028*	Dye and Pressure Check Cooling System For Leaks, Install Revised Hood Seals And Coolant Reservoir Drain Hose	1.4 hrs
*This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.		