



Recall Bulletin



PRODUCT EMISSION RECALL

SUBJECT: Knock Sensor Wiring Harness Connections Reversed

MODELS: 2013 Chevrolet Malibu
Equipped with 2.5L Engine (LCV)

CONDITION

General Motors has decided to conduct a Voluntary Emission Recall involving **certain** 2013 Chevrolet Malibu vehicles, equipped with a 2.5L engine (LCV). The wiring harness connections for the knock sensors may be reversed. This could cause too much or too little spark advance, causing pre-ignition or reduced engine performance and fuel economy.

CORRECTION

Dealers are to rework the wiring harness.

VEHICLES INVOLVED

All involved vehicles are identified by Vehicle Identification Number on the Investigate Vehicle History screen in GM Global Warranty Management system. Dealership service personnel should always check this site to confirm vehicle involvement prior to beginning any required inspections and/or repairs. It is important to routinely use this tool to verify eligibility because not all similar vehicles may be involved regardless of description or option content.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been prepared and will be provided to dealers through the GM GlobalConnect Recall Reports. Dealers will not have a report available if they have no involved vehicles currently assigned.

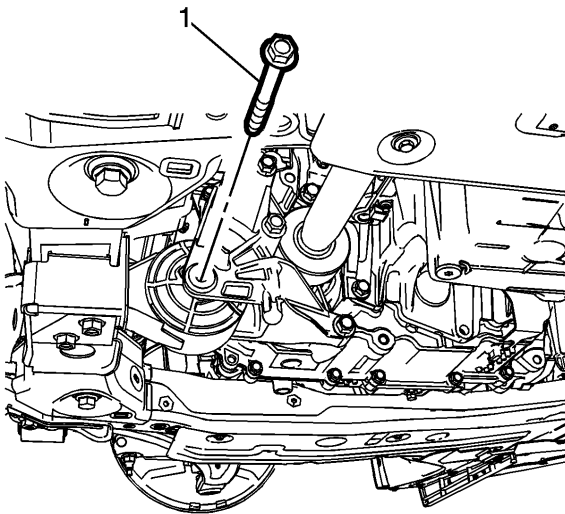
The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

PART INFORMATION

No parts are required for this recall.

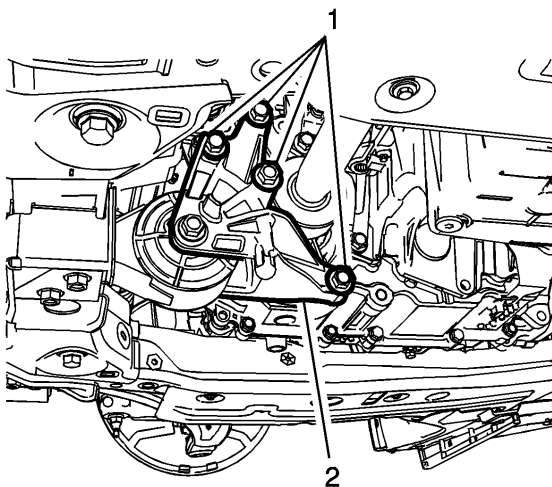
SERVICE PROCEDURE

1. Disconnect the negative battery cable. Refer to *Battery Negative Cable Disconnection and Connection* in SI.
2. Raise and properly support the vehicle.
3. If the vehicle is equipped with California PZEV (partial zero emission vehicle) emission (RPO NU6), remove the secondary air injection pump.
 - 3.1 Using a suitable jack stand, support the rear of the powertrain.



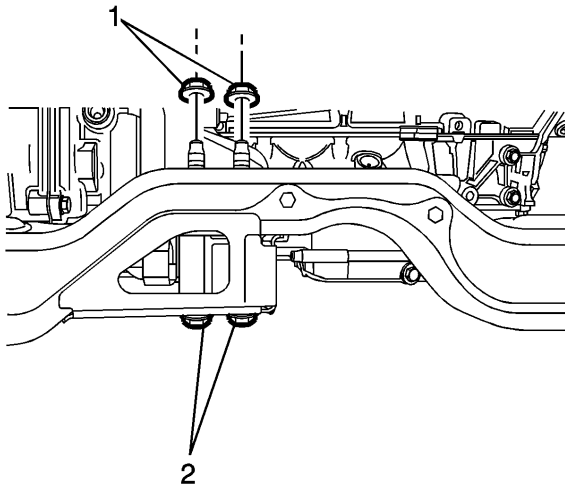
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- 3.2 Loosen the rear transmission mount to bracket through bolt (1).



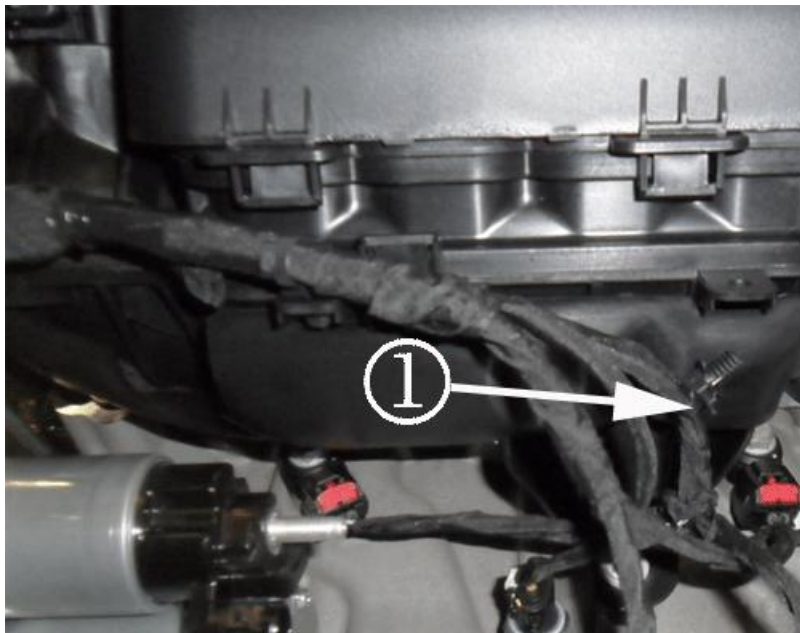
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- 3.3 Remove the four rear transmission mount bracket bolts (1).



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- 3.4 Remove the rear transmission mount to frame bolts (1, 2), then remove the mount and bracket from the vehicle.
- 3.5 Disconnect the secondary air injection feed tube.
- 3.6 Disconnect the secondary air injection pump inlet hose.
- 3.7 Disconnect the electrical wiring harness connector.
- 3.8 Remove the secondary air injection pump mounting bolts.
- 3.9 Remove the secondary air injection pump from the vehicle.



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4. Remove the engine wiring harness retainer (1) from the intake manifold.
5. Disconnect the LH knock sensor connector. For identification purposes, add white marking tape to the harness just behind the connector body.
6. Disconnect the RH knock sensor connector.

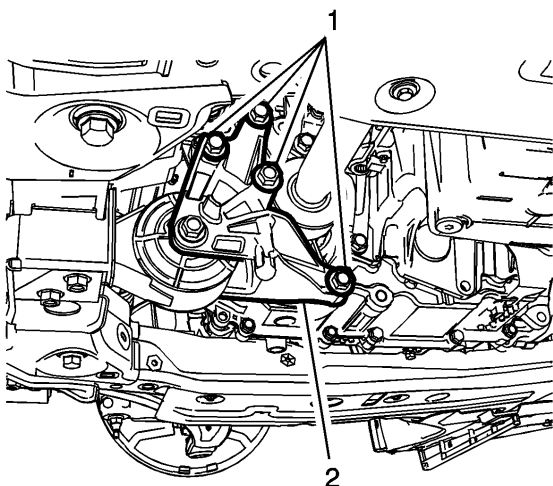
7. To provide additional harness length to allow the connector to reach the other sensor, open the wiring harness by removing tape from the branch of the RH knock sensor, as necessary. Use a sewing seam ripper, available from sewing supply stores, in order to cut open the harness in order to avoid wire insulation damage.

Note: The wiring harness lead that was previously connected to the knock sensor 1 (RH) will now be connected to knock sensor 2 (LH). The lead that previously connected to knock sensor 2 (LH) will now be connected to knock sensor 1 (RH). When the connector swap is completed, the knock sensor wire colors will be as follows:

- Knock Sensor 1 (RH, generator side) – Violet/Gray & Black/Yellow
- Knock Sensor 2 (LH, starter side) – White/Gray & Black/Gray

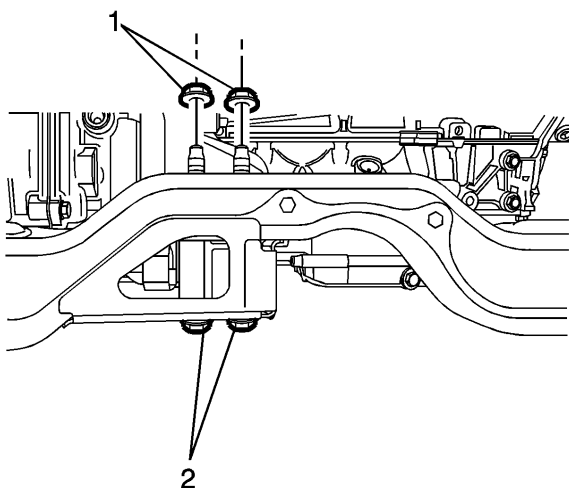


8. Connect the electrical connectors to both sensors.
9. If the vehicle is equipped with California PZEV emission (RPO NU6), reinstall the secondary air injection pump.
 - 9.1 Install the secondary air injection pump mounting bolts and tighten to 58 Nm (43 lb ft).
 - 9.2 Connect the electrical wiring harness connector.
 - 9.3 Connect the secondary air injection pump inlet hose.
 - 9.4 Connect the secondary air injection feed tube.



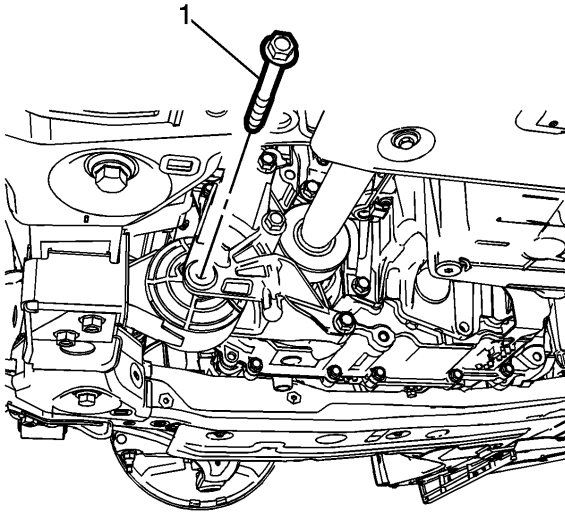
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9.5 Install the four rear transmission mount bracket to transmission bolts (1) and tighten to 100 Nm (74 lb ft).



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9.6 Install the two rear transmission mount to frame bolts (1, 2) and tighten to 110 Nm (81 lb ft).



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- 9.7 Tighten the transmission mount to bracket through bolt (1) to 105 Nm (77 lb ft).
- 9.8 Remove the jack stand.
10. Lower the vehicle.
11. Connect the negative battery cable. Refer to *Battery Negative Cable Disconnection and Connection* in SI.
12. **CALIFORNIA, CONNECTICUT, MARYLAND, MASSACHUSETTS, MAINE, OREGON, VERMONT, & WASHINGTON VEHICLES ONLY:** Install a Recall Identification Label. Also, for California vehicles complete a "Proof of Correction" certificate upon recall completion.

RECALL IDENTIFICATION LABEL California/Connecticut/Maryland/Massachusetts/Maine/Oregon/Vermont/Washington Vehicles Only

Place a Recall Identification Label on each vehicle corrected in accordance with the instructions outlined in this Product Recall Bulletin. Each label provides a space to include the recall number and the five-digit dealer code of the dealer performing the recall service. This information may be inserted with a ballpoint pen.

Put the Recall Identification Label on a clean and dry surface of the radiator core support in an area that will be visible to people servicing the vehicle.

When installing the Recall Identification Label, be sure to pull the tab to allow adhesion of the clear protective covering. Additional Recall Identification Labels for US dealers can be obtained from Dealer Support Materials by ordering on the web from DWD Store, www.gmglobalconnect.com, and then click on the DWD Store link. Request Item Number S-1015 when ordering.



COURTESY TRANSPORTATION – For US and Canada

The General Motors Courtesy Transportation program is intended to minimize customer inconvenience when a vehicle requires a repair that is covered by the New Vehicle Limited Warranties. The availability of courtesy transportation to customers whose vehicles are within the warranty coverage period and involved in a product program is very important in maintaining customer satisfaction. Dealers are to ensure that these customers understand that shuttle service or some other form of courtesy transportation is available and will be provided at no charge. Dealers should refer to the General Motors Service Policies and Procedures Manual for Courtesy Transportation guidelines.

WARRANTY TRANSACTION INFORMATION

Submit a transaction using the table below.

Labor Code	Description	Labor Time
V2714	Reverse Knock Sensor Connectors	
	- Vehicles without California PZEV Emissions (NU6)	0.3
	- Vehicles with California PZEV Emissions (NU6)	0.8

CUSTOMER NOTIFICATION

General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

In order to ensure full protection under the emission warranty, and the right to participate in future recalls, the customer notification letter recommends that customers have their vehicles serviced as soon as possible. It also advises that failure to do so could legally be determined to be lack of proper maintenance. The vehicle may fail a state or local emission inspection test if the recall work is not completed.

DEALER RECALL RESPONSIBILITY

All unsold new vehicles in dealers' possession and subject to this recall must be held and inspected/repaired per the service procedure of this recall bulletin before customers take possession of these vehicles.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.

*****THE FOLLOWING 2 PARAGRAPHS ARE NOT FOR CANADA OR EXPORT*****

When a California emissions recall is completed by a GM dealer, the dealer must provide the vehicle owner a "Proof of Correction Certificate" which the owner may need to present to the California Department Of Motor Vehicles (DMV) when renewing their vehicle registration. Without this correction certificate, the owner may be unable to renew their vehicle registration.

Additional Certificates can be obtained, at no charge, from Dealer Support Materials by ordering on the web from the DWD Store, www.gmdealerworld.com, and then click on the DWD Store link; request GM Item Number 1825 when ordering.



January 2013

Dear General Motors Customer:

This notice is sent to inform you that General Motors is conducting a voluntary emission recall that includes your vehicle.

Reason For This Recall: The wiring harness connections for the knock sensors may be reversed. This could cause too much or too little spark advance, causing pre-ignition or reduced engine performance and fuel economy.

What Will Be Done: Your GM dealer will rework the wiring harness to correct this condition. This service will be performed for you at **no charge**.

What You Should Do: Please contact your GM dealer as soon as possible to arrange a service date. Instructions for making this correction have been sent to your dealer. Please ask your dealer if you wish to know how much time will be needed to schedule, process, and repair your vehicle.

If you have any questions or need any assistance, just contact your dealer or the appropriate Customer Assistance Center at the number listed below.

Division	Number	Text Telephones (TTY)
Chevrolet	1-800-222-1020	1-800-833-2438
Guam	65-6267-1752	
Puerto Rico – English	1-800-496-9992	
Puerto Rico – Español	1-800-496-9993	
Virgin Islands	1-800-496-9994	

Courtesy Transportation: If your vehicle is within the New Vehicle Limited Warranty, your dealer may provide you with shuttle service or some other form of courtesy transportation while your vehicle is at the dealership for this repair. Please refer to your Owner Manual and your dealer for details on Courtesy Transportation.

Emission Law Information: In order to ensure your full protection under the emission warranty made applicable to your vehicle by state and federal law, and your right to participate in future recalls, it is recommended that you have your vehicle serviced as soon as possible. Failure to do so could legally be determined to be lack of proper maintenance of your vehicle. Also, your vehicle may fail a state or local emission inspection if this recall is not accomplished.

IMPORTANT MESSAGE FOR CALIFORNIA RESIDENTS

The California Air Resources Board (CARB) requires vehicle emission recalls be completed prior to California registration renewal. Uncorrected emission recalls will result in the inability to renew your California vehicle registration.

At the time of emission recall completion, your California dealer will issue a "Proof of Correction Certificate". Keep this certificate and, if required, present it to the Department of Motor Vehicles when renewing your California registration as proof of recall completion.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your continued satisfaction with our products.

Jim Moloney
General Director,
Customer and Relationship Services

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