

Recall Bulletin



PRODUCT SAFETY RECALL

SUBJECT: Brake Vacuum Micro Switch

MODELS: 2011–2012 Chevrolet Cruze Equipped with 1.4L DOHC Turbo Engine (LUJ) and 6T40 FWD Automatic Transmission (MH8)

CONDITION

General Motors has decided that a defect, which relates to motor vehicle safety, exists in **certain** 2011–2012 model year Chevrolet Cruze vehicles equipped with a 1.4L DOHC gasoline turbo engine (LUJ) and a 6T40 FWD automatic transmission (MH8). This engine-transmission combination requires supplemental vacuum under certain operating conditions. An electric vacuum pump provides the supplemental vacuum, and if this is not available due to silicon on the brake vacuum micro switch, brake assist may be intermittently reduced or lost. Reduction or loss of brake assist will require extra pedal force and/or longer distance to bring the vehicle to a stop, increasing the risk of a crash.

CORRECTION

Dealers are to replace brake vacuum micro switch.

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 US and Canadian dealers through the GM GlobalConnect Recall Reports, or sent directly to export dealers. 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

Parts required to complete this recall are to be obtained from General Motors Customer Care and Aftersales (GMCC&A). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

Part Number	Description	Quantity/Vehicle
13460776	Sensor Kit, P/B Boos Vac (Includes P-80 Lubricant)	1

SERVICE PROCEDURE

Note: A clean work bench, cotton swab, shop towel and work gloves are required to complete the service procedure in this bulletin. Ensure the vehicle air conditioning system is off and not in use while performing this service procedure.

1. Remove the new micro switch from the packaging. Do NOT touch hold or squeeze the black boot of the micro switch. Hold the micro switch by the white switch body to avoid damaging the switch.



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- 2. Apply P-80 lubricant to all four sides of the micro switch boot.
- 3. Gently wipe excess lubricant from micro switch boot using clean shop towel.
- 4. Place the micro switch in a safe and clean location of the work bench.
- 5. Ensure the transmission shift lever is in 'P' Park and start the engine.
- 6. Depress the accelerator pedal until the engine reaches 3000 rpm. Perform this step three times.
- 7. Turn the engine off. Do NOT apply the brakes during or after completing this step.
- 8. Exit the vehicle and locate the electric vacuum pump switch.

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Note: Hold the electric vacuum pump switch housing to ensure the assembly is NOT pulled out of the booster.

9. Unplug the electrical connector (1).



Note: Hold the electric vacuum pump switch housing to ensure the assembly is NOT pulled out of the booster.

- 10. Remove the micro switch from the electric vacuum pump housing by grabbing the copper contacts of the micro switch.
- 11. Discard the micro switch.





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12. Inspect the electric vacuum pump switch housing for debris. If required, clean the housing using a cotton swab and clean shop towel.



- 13. Using a flash light, look inside of the micro switch housing to determine if plunger is up or down.
 - If the plunger is down (3), proceed to step 14.
 - If the plunger is up (4), perform steps 5-8 again and then verify the plunger position. The plunger must be down to proceed to step 14.





Note: Hold the micro switch by the switch body to avoid damaging the switch or displacing lubricant on the switch. The switch body has a guide on one side. Align the guide into the groove.



14. Install the new switch into the electric vacuum pump switch housing using a small flat-blade screwdriver and your hand. The switch will produce a "click" noise when installed correctly.

- 15. Install the electrical connector (1). Avoid pushing the micro switch further into the housing when installing the electrical connector.
- 16. Perform Test 1 and 2. Refer to Test 1 and Test 2 in this bulletin.

Test 1

Note: Two technicians are required to perform Test 1 and Test 2.Perform this test in a noisefree environment to properly determine if the electric vacuum pump is cycling on and off. The second technician should listen to electric vacuum pump noise placing their head under the hood from the left front portion of the engine compartment. Repeat steps 1-5 in Test 1 five times to verify electric vacuum pump operation.

- 1. Ensure the engine is not running and the key is in the off position.
- 2. Deplete the booster by fully depressing the brake pedal six times. The brake pedal should feel hard.
- 3. Do NOT apply the brake pedal and turn the key to the ignition on position. For vehicles equipped with a push button ignition switch, press and hold the power button switch up to 10 seconds with your foot off the brake pedal and transmitter in the vehicle. Ensure the engine is off (not running).

Note: The electric vacuum pump should NOT run for more than 12 seconds. In addition, the electric vacuum pump should run no less than 4 seconds.

- 4. Listen for electric vacuum pump noise from the left front portion of the engine compartment.
- 5. Evaluate brake pedal feel. The brake pedal should feel normal after completing the test.

Test 2

Note: Repeat steps 1 and 2 below three times to complete the test. The electric vacuum pump should turn on, run for a few seconds, and then turn off automatically.

- 1. With the ignition in the on position and the engine off (not running), depress the brake pedal slowly until you hear the pump and then release the brake pedal. For vehicles equipped with a push button ignition switch, press and hold the power button switch up to 10 seconds with your foot off the brake pedal and transmitter in the vehicle. Ensure the engine is off (not running). Once the vehicle is in the Run/Start Mode, depress the brake pedal slowly until you hear the pump and then release the brake pedal.
- 2. Listen for electric vacuum pump noise under the hood from the left front portion of the engine compartment. The electric vacuum pump should run for about 3 seconds and then turn off automatically.

17. Determine the results of the tests.

- If the electric vacuum pump passes Test 1 and Test 2, no further action is required.
- If the electric vacuum pump does not pass either one of the tests, the micro switch may have been damaged during installation. Replace the micro switch with a new switch and perform the service procedure in this bulletin again.
- If the electric vacuum pump does not pass Test 1 or 2 after replacing the micro switch for the second time, refer to Brake Booster Pump Motor Malfunction in SI to root cause the condition. Follow diagnostic and repair information in SI. Submit the repair as a ZREG warranty transaction type. This field action bulletin provides repair and labor time information for replacing the micro switch only.

CUSTOMER REIMBURSEMENT - For US

Customer requests for reimbursement of previously paid repairs for the recall condition are to be submitted to the dealer by October 31, 2014, unless otherwise specified by state law. If this is not convenient for the customer, they may mail the completed Customer Reimbursement Request Form and all required documents to the GM Customer Assistance Center.

All reasonable and customary costs to correct the condition described in this bulletin should be considered for reimbursement. Any questions or concerns should be reviewed with your GM representative prior to processing the request.

When a customer requests reimbursement, they must provide the following:

- A completed Customer Reimbursement Request Form. This form is mailed to the customer or can be obtained through GM GlobalConnect.
- The name and address of the person who paid for the repair.
- Paid receipt confirming the amount of the repair expense, a description of the repair, and the person or entity performing the repair.

IMPORTANT: GM requires dealers to approve or deny a reimbursement request within 30 days of receipt. If a reimbursement request is approved, the dealer should immediately issue a check to the customer and submit an appropriate warranty transaction for the incurred expense. If a reimbursement request is denied, the dealer <u>MUST</u> provide the customer with a clear and concise explanation, in writing, as to why the request was denied. The bottom portion of the Customer Reimbursement Request Form may be used for this purpose. If the denial was due to missing documents, the customer can resubmit the request when the missing documents are obtained, as long as it is still within the allowed reimbursement period.

Warranty transactions for customer reimbursement of previously paid repairs are to be submitted as required by GM Global Warranty Management. Additional information can also be found in Warranty Administration Bulletin 11-00-89-004.

CUSTOMER REIMBURSEMENT - For Canada and Export

Customer requests for reimbursement of previously paid repairs to correct the condition described in this bulletin are to be submitted to the dealer prior to or by October 31, 2014.

When a customer requests reimbursement, they must provide the following:

- Proof of ownership at time of repair.
- Original paid receipt confirming the amount of unreimbursed repair expense(s) (including Service Contract deductibles), a description of the repair, and the person or entity performing the repair.

All reasonable and customary costs to correct the condition described in this bulletin should be considered for reimbursement. Any questions or concerns should be reviewed with your GM representative prior to processing the request.

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. All transactions should be submitted as a ZFAT transaction type, unless noted otherwise.

Labor Code	Description	Labor Time	Net Item
9100155	Replace Brake Vacuum Micro Switch	0.4	N/A
	Add: Replace Brake Vacuum Micro Switch a Second Time	0.3	
9100156	Customer Reimbursement Approved	0.2	*
9100157	Customer Reimbursement Denied - For US dealers only	0.1	N/A

Customer reimbursement will close this recall. The service procedure is not required.

* The amount identified in "Net Item" should represent the dollar amount reimbursed to the customer.

CUSTOMER NOTIFICATION – For US and Canada

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

CUSTOMER NOTIFICATION – For Export

Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.

<u>DEALER RECALL RESPONSIBILITY</u> – For US and Export (US States, Territories, and Possessions)

It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

DEALER RECALL RESPONSIBILITY – All

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

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 tools, equipment, safety instructions, and know-how to do a job properly and safely. If a condition is described, <u>DO NOT</u> assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your dealer for information on whether your vehicle may benefit from the information.



We Support Voluntary Technician Certification

October 2013

Dear General Motors Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2011–2012 model year Chevrolet Cruze vehicles equipped with a 1.4L turbo engine and a 6-speed automatic transmission. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

IMPORTANT

- Your vehicle is involved in safety recall 12213.
- Schedule an appointment with your GM dealer.
- This service will be performed for you at **no charge**.

Why is your vehicle being recalled?	This engine-transmission combination requires supplemental vacuum under certain operating conditions. An electric vacuum pump provides the supplemental vacuum, and if this is not available due to silicon on the brake vacuum micro switch, brake assist may be intermittently reduced or lost. Reduction or loss of brake assist will require extra pedal force and/or longer distance to bring the vehicle to a stop, increasing the risk of a crash.	
What will we do?	Your GM dealer will replace the brake vacuum micro switch. This service will be performed for you at no charge . Because of service scheduling requirements, it is likely that your dealer will need your vehicle longer than the actual service correction time of approximately 25 to 45 minutes.	
	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.	
What should you do?	You should contact your GM dealer to arrange a service appointment as soon as possible.	
Did you already pay for this repair?	have paid for repairs for the recall condition, please complete inclosed form and present it to your dealer with all required ments. Working with your dealer will expedite your request, ver, if this is not convenient, you may mail the completed form all required documents to Reimbursement Department, PO Box 0, Detroit, MI 48232-5170. The completed form and required ments must be presented to your dealer or received by the bursement Department by October 31, 2014, unless state law fies a longer reimbursement period. Because you have dy had this condition repaired, you do not need to take your	

vehicle to your dealer for this recall.

Do you have questions? If you have questions or concerns that your dealer is unable to resolve, please contact 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	

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to http://www.safercar.gov. The National Highway Traffic Safety Administration Campaign ID Number for this recall is 13V360.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Jim Moloney General Director, Customer and Relationship Services

Enclosure GM Recall #12213