



# Recall Bulletin

## PRODUCT SAFETY RECALL

**SUBJECT:** Compressed Natural Gas (CNG) High Pressure Regulator

**MODELS:** 2014 Chevrolet Express  
Dedicated CNG Vans (RPO LC8&FHZ&UFP&UFM)  
Equipped with Rear Air Conditioning and Heating (RPO C69&C36)

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.

All involved vehicles that are in dealer inventory must be held and not delivered to customers, dealer traded, or used for demonstration purposes until the repair contained in this bulletin has been performed on the vehicle.

### CONDITION

General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2014 model year Chevrolet Express dedicated compressed natural gas (CNG) vans (RPO LC8&FHZ&UFP&UFM) equipped with rear air conditioning and heating (RPO C69&C36). Some of these vehicles may have a CNG high pressure regulator that leaks natural gas into the atmosphere. This could cause an explosion or a fire if an ignition source is present.

**If a leak is suspected, the customer should not start the engine or drive the vehicle. The customer should immediately contact their dealer to have the vehicle towed and repaired.**

### CORRECTION

Dealers are to replace the CNG high pressure regulator.

### 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.

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 (GMCCA). 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.

**Note:** There are only 16 vehicles involved in this recall.

Part Number	Description	Quantity/Vehicle
23326350	Regulator Kit, CNG High Press	1
23326351	Cover-CNG TK	1
Obtain Locally	Parker O-Lube, P/N 884-4 (4 oz. tube), Petroleum Jelly, or Equivalent	As Needed (Submit as Net Item)
Obtain Locally	Swagelok Snoop® or Equivalent Liquid Leak Detector	As Needed (Submit as Net Item)

### SERVICE PROCEDURE

**Note:** Prior to performing this repair, please review GM GlobalConnect Message G\_0000197735 and ensure the vehicle has the new fuel filler door label, glove box hang tag and Owner Manual insert. If any of these items are missing, please follow the instructions provided in the message.

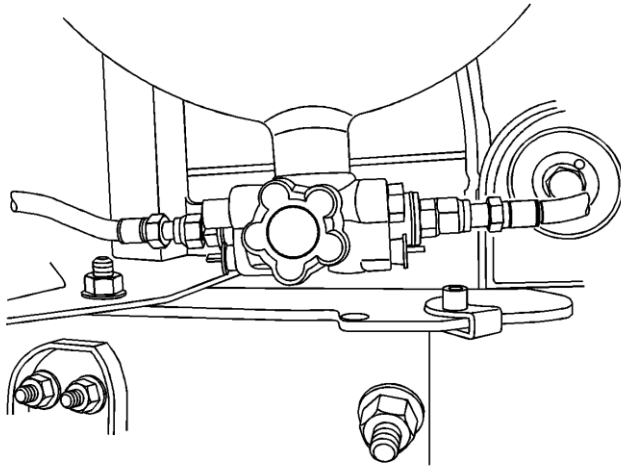
#### **Special Tools**

J45878 CNG Leak Detector, Robinair TIF8800X CNG Leak Detector or equivalent.

**Warning:** Natural gas is highly flammable. In order to reduce the risk of fire and personal injury, keep sparks, flames, and smoking materials away from the vehicle while you perform the Compressed Natural Gas (CNG) fuel system service.

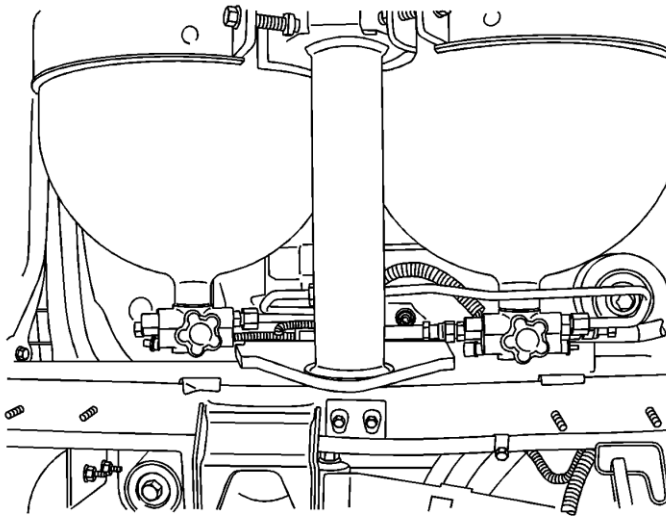
**Warning:** The Compressed Natural Gas (CNG) system operates at pressures up to 24820 kpa (3600 psi). Relieve the CNG fuel system pressure before servicing CNG fuel system components in order to reduce the risk of fire and personal injury.

1. Raise and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.
2. Remove the midship tank cover. Refer to *CNG Tank Cover Replacement – Midship Tank* in SI.
3. Discard the midship tank cover.
4. Remove the aft tank cover. Refer to *CNG Tank Cover Replacement - Aft Tank* in SI.



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5. Close the manual shutoff valve for the midship tank.



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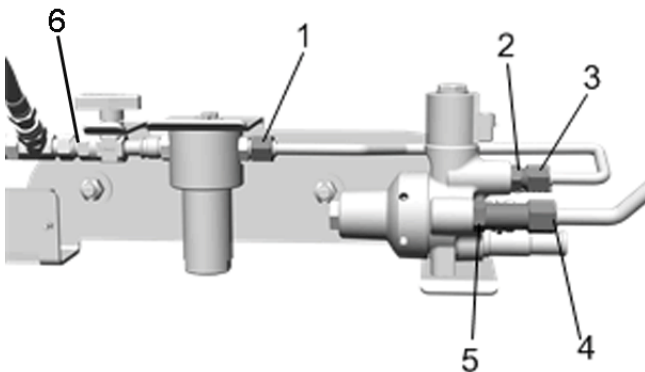
6. Close both manual shutoff valves for the aft axle tanks.
7. Once the mid ship and aft tank valves are closed, lower the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI
8. Turn the ignition on.
9. Let the vehicle run until the CNG fuel lines are completely bled.
10. When the vehicle stalls, turn the ignition off.
11. Disconnect the negative battery cable. Refer to *Battery Negative Cable Disconnection and Connection* in SI.
12. Raise and support the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.



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**Note:** Cut and remove the tie straps at the harness connections. Take a picture of the harness routing and tie strap location points (1) to aid in the routing and installation of the harness in step 37. One tie strap is located just to the right of all the connectors and just to the left of the  $\frac{1}{4}$  turn valve. The second tie strap is located just to the right of the filter and the third tie strap is above the regulator.

13. Disconnect the electrical connections to the regulator pressure sensor and lockoff solenoid. Inspect the wiring harness connectors for corrosion, and replace as needed.



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**Note:** Use care to prevent dirt and contaminants from entering open ports and lines.

**Note:** Use care to avoid damage to the regulator pressure sensor while removing/installing fittings and pipes.

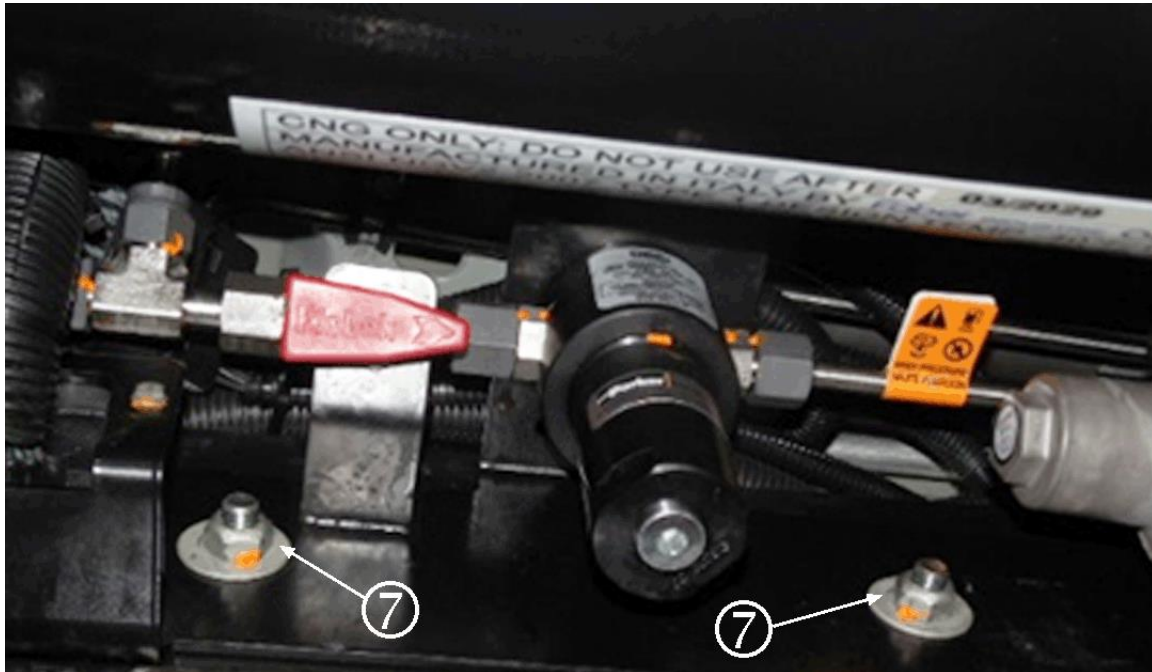
14. Carefully loosen the low pressure regulator pipe tube nut (4) from the HPR line fitting to relieve the residual pressure. The low pressure pipe is routed to the front of the vehicle.

15. Disconnect the low pressure regulator pipe (4) from the HPR pipe fitting, and discard the O-ring.



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16. Disconnect the tee fitting (6).
17. Disconnect the CNG control module electrical connections. Refer to *CNG Control Module Replacement* in SI.



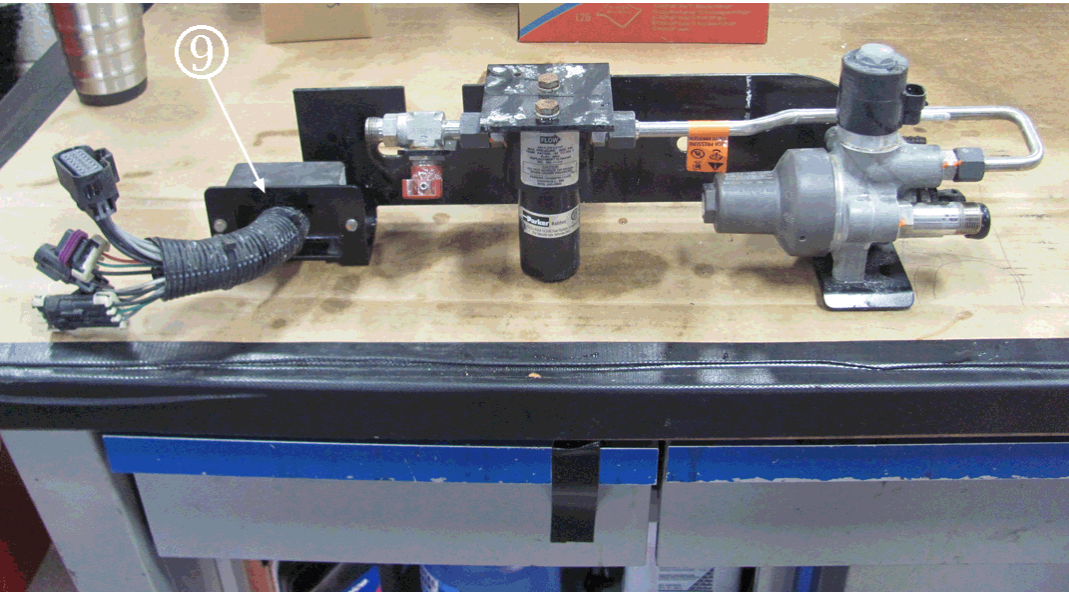
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**New regulator and bracket assembly shown. Production regulator and bracket are similar.**

**Note:** The bracket assembly is attached to the frame with two studs on a stud bar. The studs may recess into the frame if the bracket assembly is not removed carefully.

18. Remove the regulator bracket assembly by loosening and removing both nuts and washers (7) from the studs that secure the bracket to the frame.
19. Discard the washers and nuts (7).
20. Mark the coolant lines to make sure the lines are reinstalled on the proper ports of the HPR.
21. Install coolant pinch-off tools on the coolant lines to the HPR and place a drain pan under the HPR assembly.

22. Disconnect the coolant lines from the HPR.



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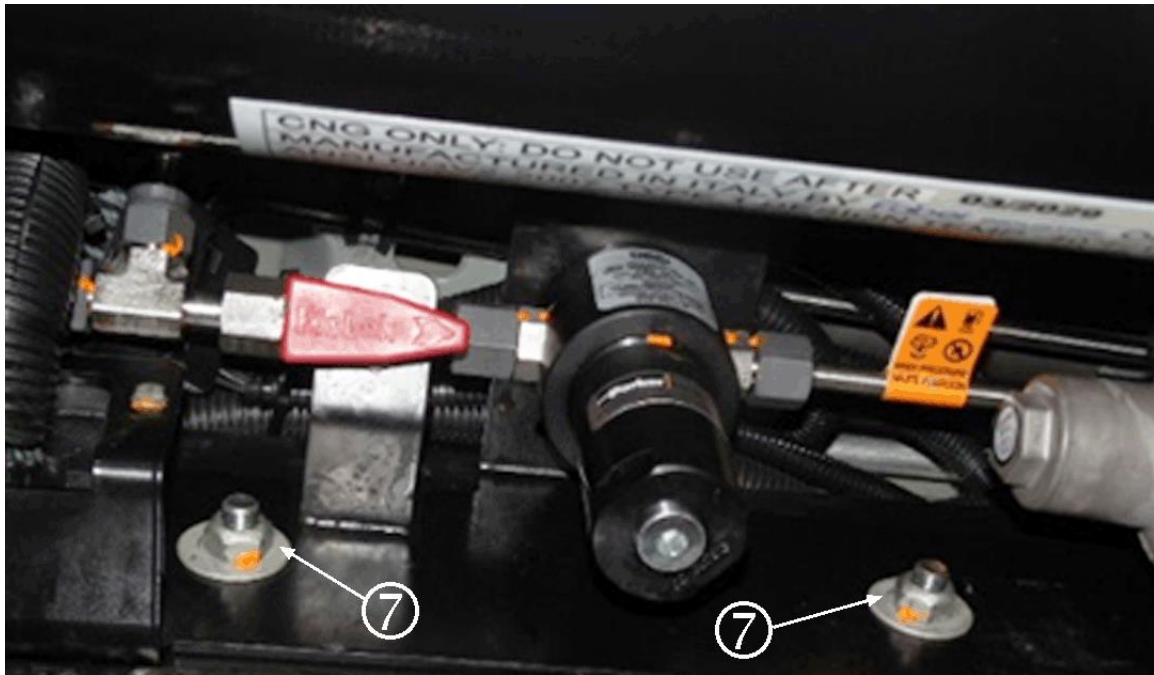
**CNG control module (9) installed on the new regulator and bracket assembly.**

23. Place the removed regulator and bracket assembly on a work bench.
24. Remove the CNG control module (9) from the old regulator and bracket assembly. Refer to *CNG Control Module Replacement* in SI.
25. Discard the old regulator and bracket assembly.
26. Install the CNG control module (9) onto the new regulator and bracket assembly. Refer to *CNG Control Module Replacement* in SI.



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27. Record the 10-digit serial number of the *new* CNG High Pressure Regulator on the vehicle repair order in the comments section. This is important because the serial number *must* be entered when submitting the warranty transaction. Failure to do so may result in the transaction being debited. Refer to the call-out in the photograph above for the location of the 10-digit serial number.
28. Connect the coolant lines to the original port locations on the HPR, and remove the coolant pinch-off tools.



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29. Install the new regulator and bracket assembly onto the chassis. Secure the new regulator and bracket assembly onto the studs with the new nuts and washers (7) included in the kit.
30. Tighten the new regulator and bracket assembly nuts (7) to **40 Nm (30 lb ft)**.
31. Connect the CNG control module electrical connections. Refer to *CNG Control Module Replacement* in SI

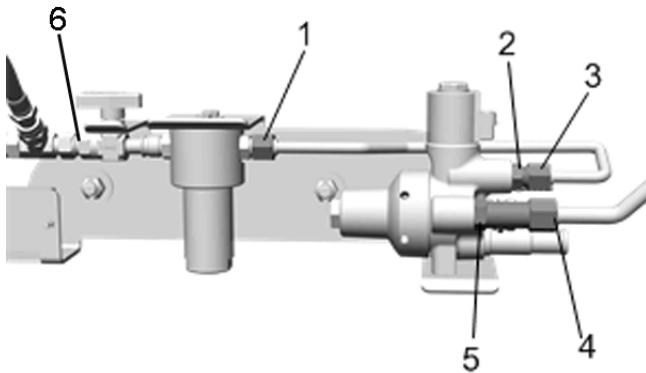
**Note:** Use care to avoid damage to the regulator pressure sensor while removing/installing fittings and pipes.

**Note:** The high pressure regulator comes equipped with a vent cap on the pressure relief tube. This cap prevents contaminants from entering the regulator and should NOT be removed.



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32. Connect tee fitting (6) to the  $\frac{1}{4}$  turn valve.
33. Tighten tee fitting to **25 Nm (18 lb ft)**.



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34. Connect the low pressure fuel pipe (4) to the HPR.
35. Make sure the fuel pipe is not in contact with the frame or other components.
36. Tighten the low pressure fuel pipe tube nut (4) to **45 Nm (33 lb ft)** while holding the fitting with a wrench.



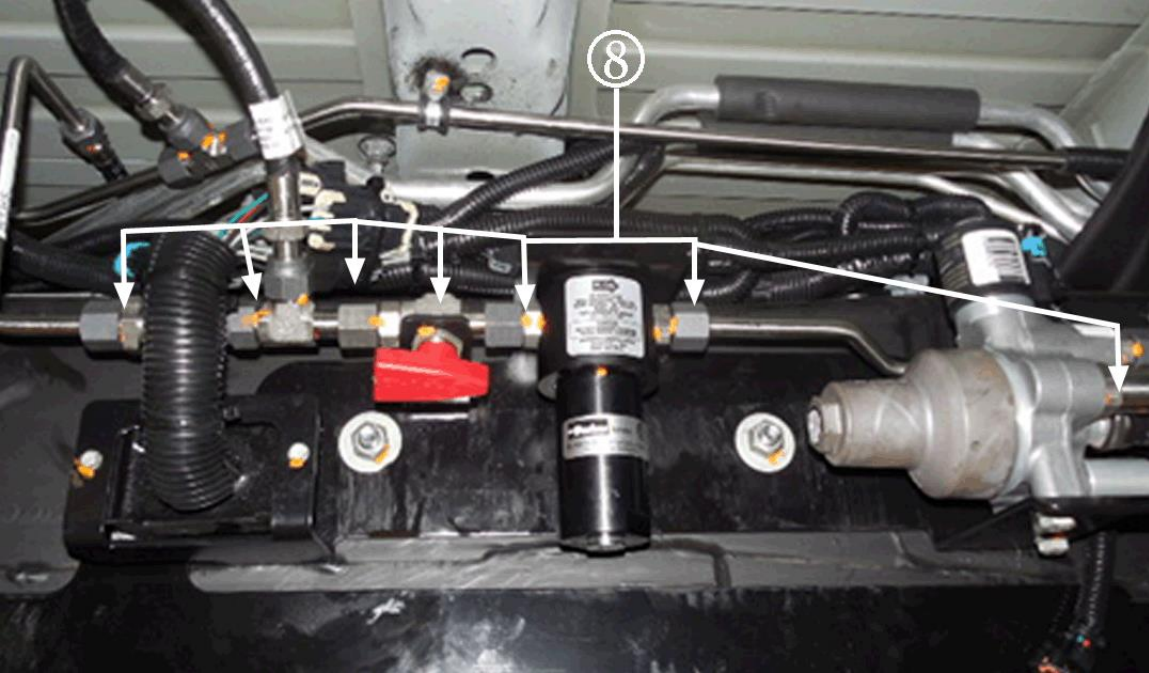
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**Note:** Secure the harness connectors with a tie strap. Bundle the rest of the harness on top of the chassis rail. Secure the harness to the rear chassis harness with two additional tie straps. Install one tie strap to the right of all the connectors and just to the left of the ¼ turn valve. Install the second tie strap to the right of the filter. Install the third tie strap above the regulator.

37. Connect the electrical connections to the regulator pressure sensor and lockoff solenoid.
38. Open ¼ turn valve.
39. Open the manual shutoff valve for the midship tank.
40. Open both manual shutoff valves for the aft axle tanks.

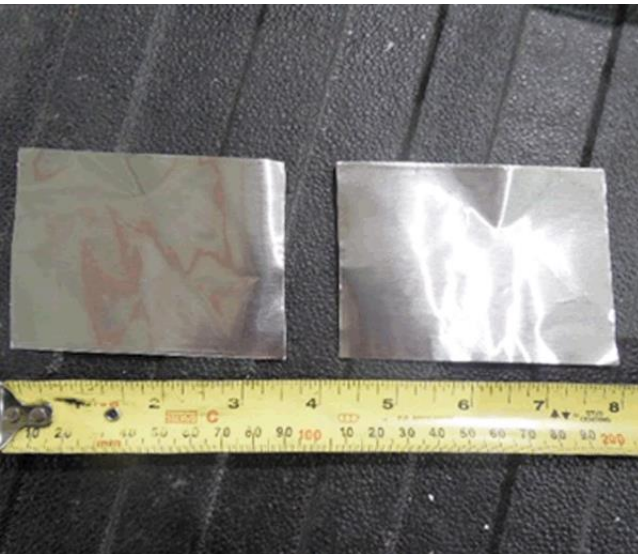


41. Lower the vehicle.
42. Install the negative battery cable. Refer to *Battery Negative Cable Disconnection and Connection* in SI.
43. Add coolant if necessary. Refer to *Cooling System Draining and Filling* in SI.
44. Start the engine and leave it running.



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45. Raise the vehicle and inspect for CNG leaks at the serviced fittings (8) with *J-45878* CNG Leak Detector or an equivalent commercially available combustible gas detector. In addition, all serviced fittings should be inspected using a liquid leak detector solution.
46. Inspect for coolant leaks at the serviced connections and correct as necessary.
47. Attach heat tape to the new midship tank cover.



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- 47.1 Cut the heat tape in half. Each piece of tape will be approximately 89 mm (3.5 in) long.



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47.2 Peel and discard the heat tape backing material and apply one half of the cut heat tape over the PRD vent opening on the inside of the mid ship tank shield as shown. Make sure the tape is centered and covers the opening.



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47.3 Peel and discard the heat tape backing material and apply one half of the cut heat tape over the same PRD vent opening on the outside of the mid ship tank shield as shown. Make sure the tape is centered and covers the opening completely.



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- 47.4 Cut slits in both the length and width of the PRD opening in the heat tape as shown. This is to allow the PRD to vent outside the shield.
48. Install the new midship tank cover. Refer to *CNG Tank Cover Replacement - Midship Tank* in SI.
49. Install the aft tank cover. Refer to *CNG Tank Cover Replacement - Aft Tank* in SI.
50. Lower the vehicle. Refer to *Lifting and Jacking the Vehicle* in SI.
51. FOR CALIFORNIA VEHICLES ONLY: Install a Recall Identification Label and complete a "Proof of Correction" certificate upon recall completion.

#### RECALL IDENTIFICATION LABEL – California 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](http://www.gmglobalconnect.com), and then click on the DWD Store link. Request Item Number S-1015 when ordering.



## CUSTOMER REIMBURSEMENT

Customer requests for reimbursement of previously paid repairs for the recall condition are to be submitted to the dealer by February 28, 2016, 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 MUST 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.

## COURTESY TRANSPORTATION

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.

**Note:** To avoid having to "H" route the customer reimbursement transaction for approval, it must be submitted prior to the repair transaction.

Labor Code	Description	Labor Time	Net Item
9101258	Replace CNG High Pressure Regulator *	2.3	**
9101259	Customer Reimbursement Approved	0.2	***
9101260	Customer Reimbursement Denied - For U.S. dealers only	0.1	N/A

**Note:** Customer reimbursement will not close this recall. The service procedure must also be performed on the vehicle.

- \* The serial number of the new CNG high pressure regulator, which was recorded in the comments section on the vehicle repair order, must be entered when submitting the warranty transaction. Failure to do so may result in the transaction being debited.
- \*\* The amount identified in "Net Item" should represent the sum total of the lube and leak detector needed to perform the required repairs, not to exceed \$2.00 USD.
- \*\*\* The amount identified in "Net Item" should represent the dollar amount reimbursed to the customer.

CUSTOMER NOTIFICATION

General Motors will notify customers of this recall on their vehicle.

DEALER RECALL RESPONSIBILITY

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 U.S. 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 U.S. National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

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. 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.

