



Recall Bulletin



PRODUCT SAFETY RECALL

SUBJECT: Loss of Power Brake Assist in Extreme Cold Weather

MODELS: 2009-2010 Pontiac Vibe
With 1.8L Engine (RPO LAY)
Registered in Canada, Alaska, Colorado, Idaho, Illinois, Iowa, Kansas,
Maine, Michigan, Minnesota, Montana, Nebraska, Nevada, New
Hampshire, New York, North Dakota, South Dakota, Vermont, Wisconsin,
Wyoming

This Safety Recall involves 2009 and certain 2010 model year Pontiac Vibe vehicles equipped with a 1.8L engine, and registered in areas with extreme cold temperatures (see areas listed above). 2009 and certain 2010 model year Pontiac Vibe vehicles equipped with a 1.8L engine that are registered outside of these extreme cold areas are covered under Customer Advisory 09222.

CONDITION

General Motors has decided that a defect, which relates to motor vehicle safety, exists in **certain** 2009-2010 model year Pontiac Vibe vehicles equipped with a 1.8L engine (RPO LAY), and registered in Canada, Alaska, Colorado, Idaho, Illinois, Iowa, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New York, North Dakota, South Dakota, Vermont, Wisconsin, and Wyoming. On some of these vehicles, the extreme cold temperatures (-31°C/-22°F) may freeze condensation on the brake vacuum intake manifold suction port. This could result in a loss of power brake assist, and greater brake pedal force and a longer distance may be required to stop the vehicle. If stopping distance is limited, a crash could occur without prior warning.

CORRECTION

Dealers are to modify the brake vacuum line.

VEHICLES INVOLVED

Involved are **certain** 2009-2010 model year Pontiac Vibe vehicles equipped with a 1.8L engine (RPO LAY), and registered in Canada, Alaska, Colorado, Idaho, Illinois, Iowa, Kansas, Maine, Michigan, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New York, North Dakota, South Dakota, Vermont, Wisconsin, and Wyoming and built within these VIN breakpoints:

Year	Division	Model	From	Through
2009	Pontiac	Vibe	9Z400007	9Z478598
2010	Pontiac	Vibe	AZ400001	AZ416129

Important: Dealers are to confirm vehicle eligibility prior to beginning repairs by using GMVIS (dealers using WINS) or Investigate Vehicle History (dealers using GWM). Not all vehicles within the above breakpoints may be involved.

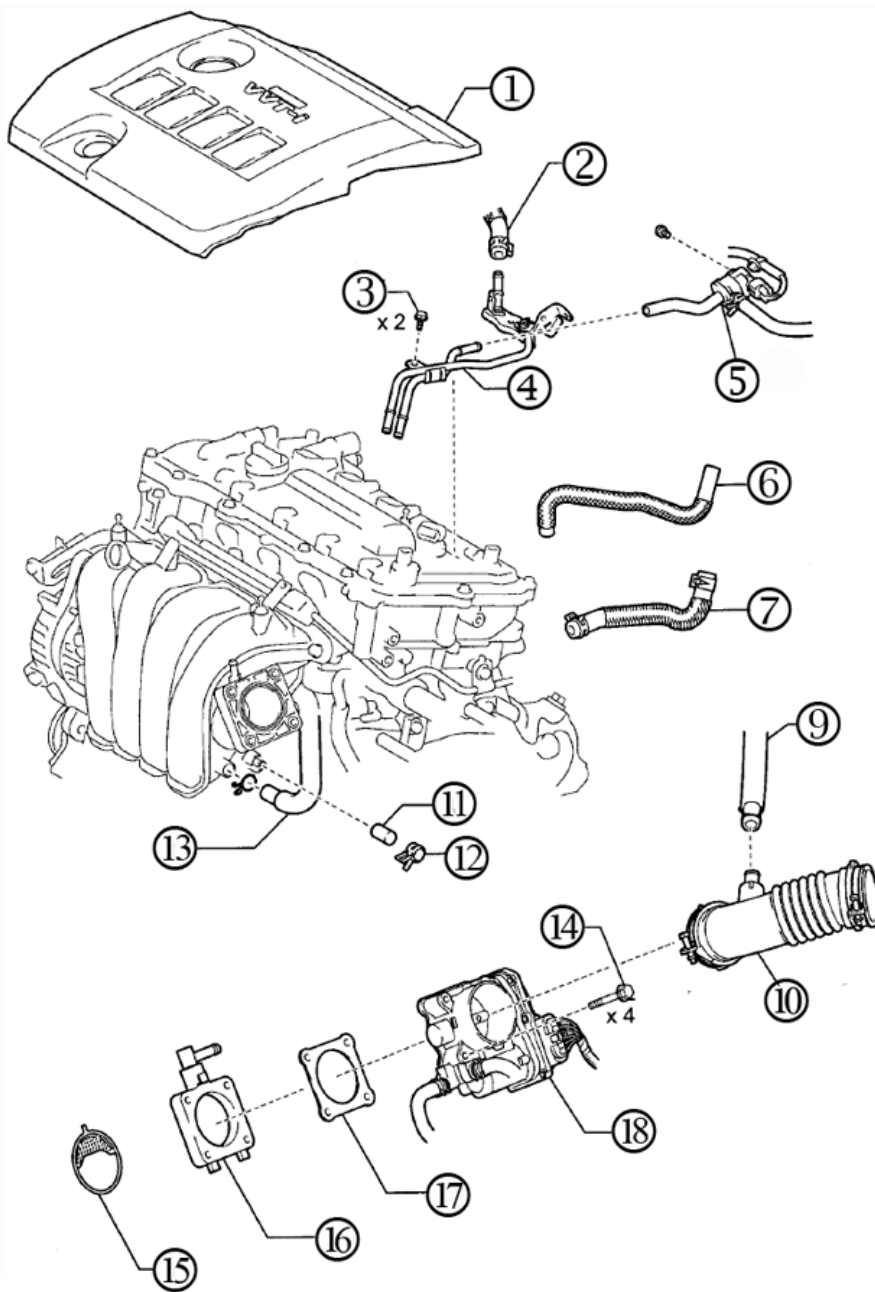
For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been prepared and will be provided through the GM GlobalConnect Recall Reports. Dealers will not have a report available if they have 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.

PARTS INFORMATION

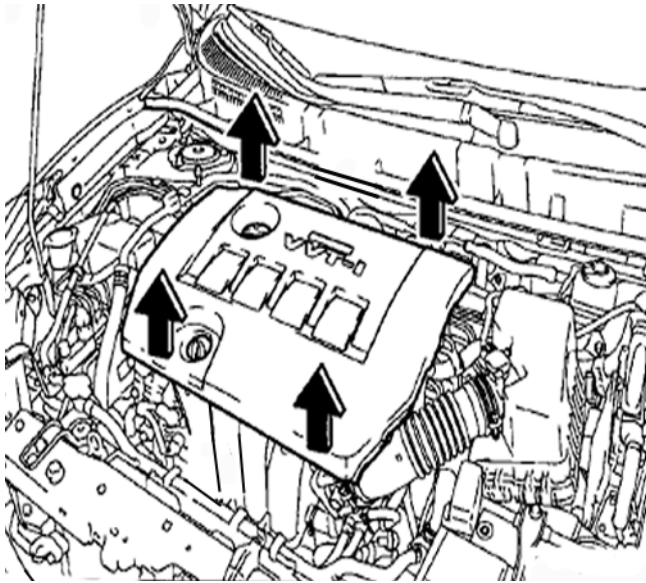
Parts required to complete this recall are to be obtained from General Motors Service and Parts Operations (GMSPO). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered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

Part Number	Description	Quantity/Vehicle
19205281	Attachment Kit, Throt Body	1

SERVICE PROCEDURE**Parts Overview**

2327233

(1) No. 2 Cylinder Head Cover (2) Union-to-Connector Tube Hose (3) Fasteners (4) Air Tube (5) Duty Vacuum Switching Valve (6) No.1 Fuel Vapor Feed Hose (7) No. 1 Vacuum Transmitting Hose (9) No. 2 Ventilation Hose (10) No. 1 Air Cleaner Hose (11) Plug (12) Clip (13) Ventilation Hose (14) Bolts (15) Throttle Body Gasket (16) Intake Air Connector Assembly (17) Diesel Throttle Body Gasket (18) Throttle Body Assembly

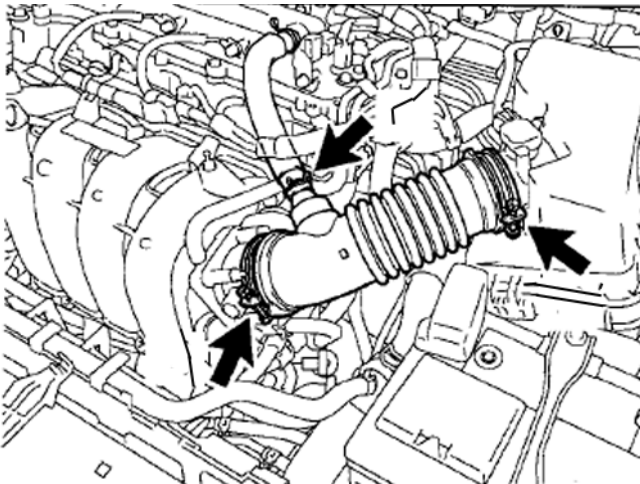


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1. Remove the No. 2 cylinder head cover.

Caution: Lifting both the front and rear sides up at once will damage the cover.

- 1.1. Place both hands on the back of the cover, lift up the cover, and remove the two clips on the back.
- 1.2. Place both hands on the front of the cover, remove the two clips on the front, and then remove the cylinder head cover.

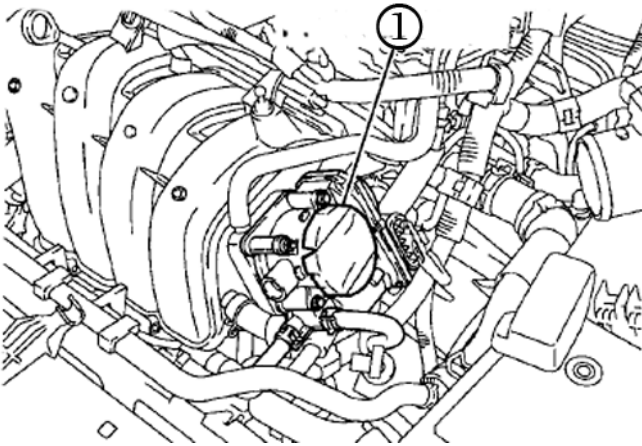


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2. Remove the No. 1 air cleaner hose.

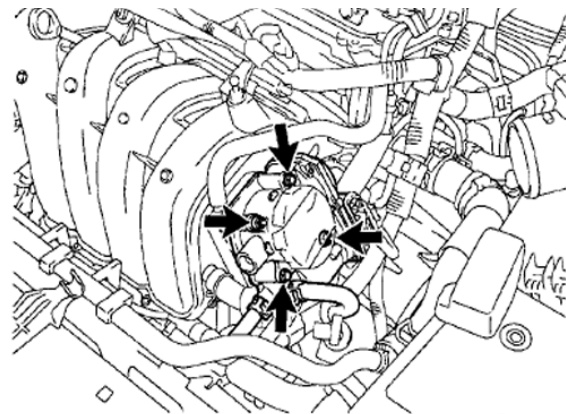
Note: Be sure to remove the clip to prevent it from falling out.

- 2.1. Separate the ventilation hose and remove the clip.
- 2.2. Loosen the two hose clamps and remove the No. 1 air cleaner hose.

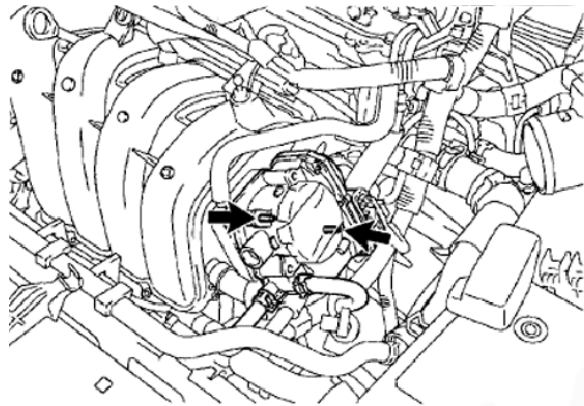


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- 2.3. Place protective tape (1) over the throttle body assembly opening to prevent foreign objects from entering it.



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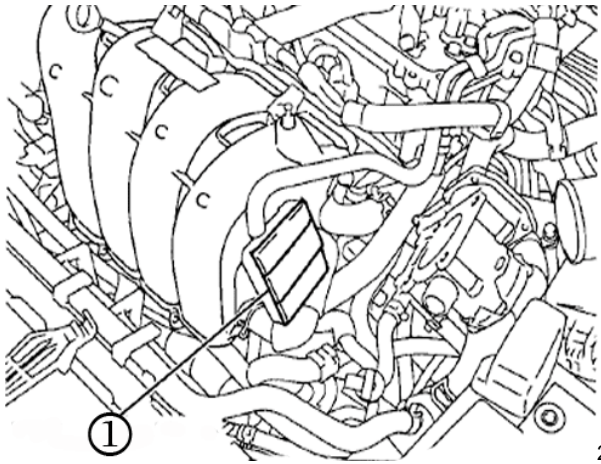


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3. Remove the throttle body assembly.

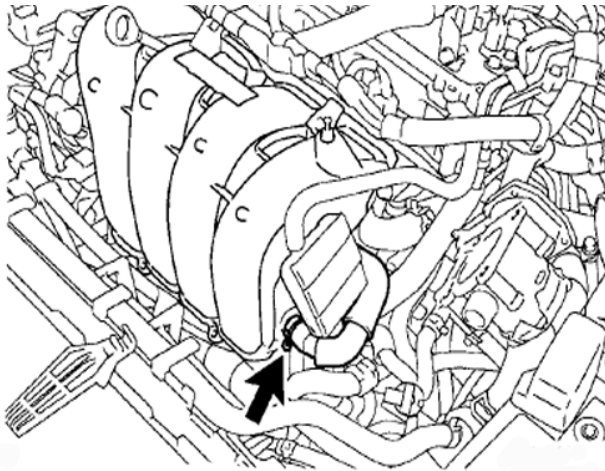
Note: Dispose of the removed stud bolts. Do not disconnect the connector and water bypass hoses for the throttle body assembly.

- 3.1. Remove the two bolts and two nuts.
- 3.2. Remove the throttle body gasket from the intake manifold.



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3.3. Place protective tape (1) over the intake manifold opening to prevent foreign objects from entering it.

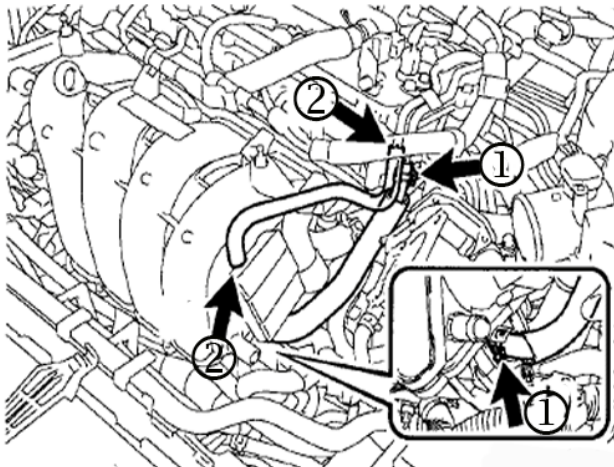


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4. Remove the air tube.

Note: Be sure to remove the clip to prevent it from falling out.

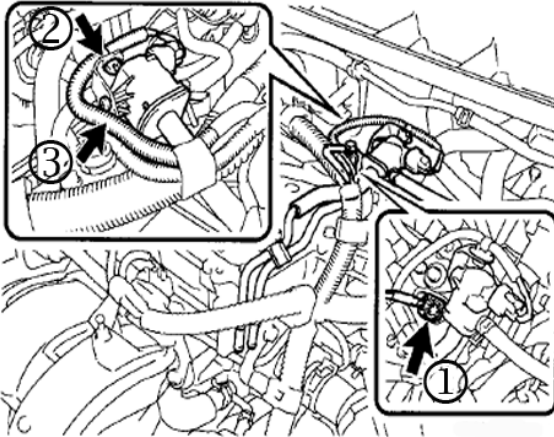
4.1. Separate the ventilation hose and remove the clip.



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4.2. Remove the No. 1 vacuum transmitting hose (1) and 2 clips. Discard the hose and clips.

- 4.3. Remove the No. 1 fuel vapor feed hose (2). Discard the hose.

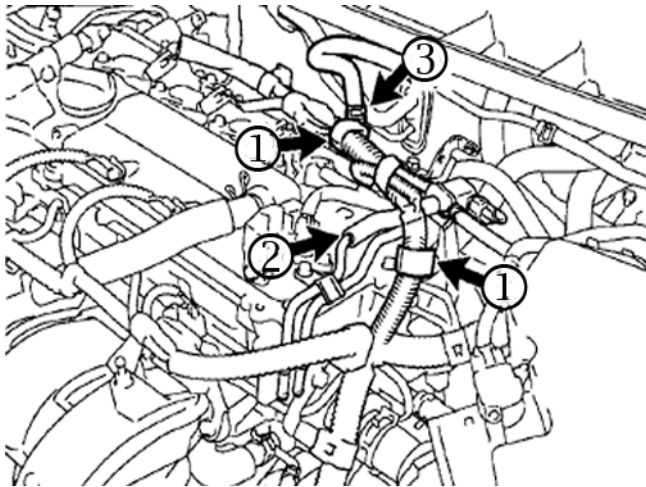


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- 4.4. Disconnect the crank position sensor connector (1).
4.5. Separate the wire harness clamp (2).

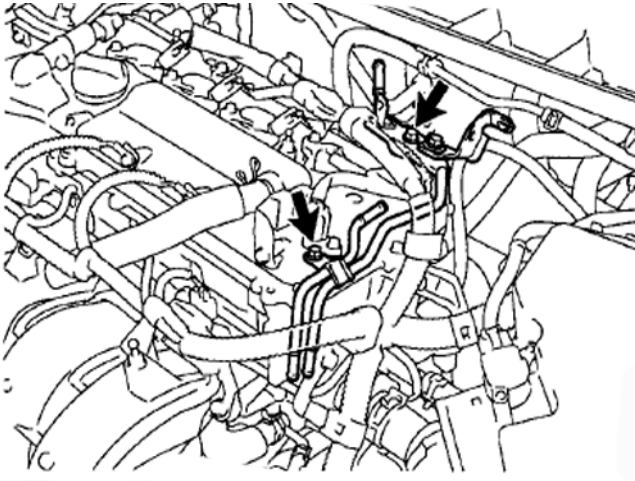
Note: If the screw connecting the duty vacuum switching valve to the bracket cannot be removed, remove the duty vacuum switching valve by removing the bolt on the bracket.

- 4.6. Remove the screw (3).



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- 4.7. Disconnect the two wire harness clamps (1).
4.8. Separate the duty vacuum switching valve with fuel vapor feed hose (2).
4.9. Separate the union to connector tube hose (3).

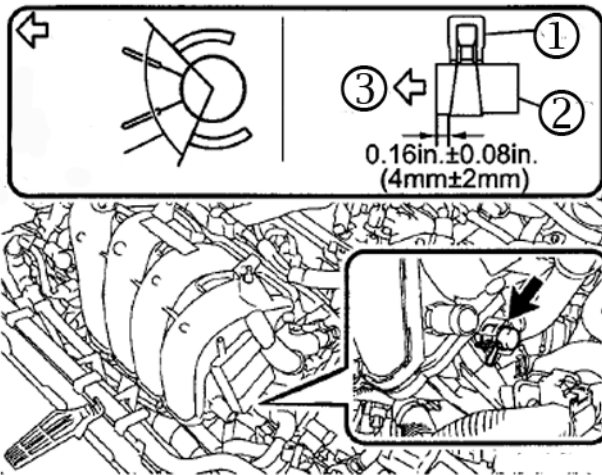


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4.10. Remove the two bolts.

Note: Do not damage the crank position sensor and wire harness when removing the air tube.

4.11. Remove the air tube while ensuring that the tube does not come in contact with the crank position sensor and wire harness. Discard the air tube.

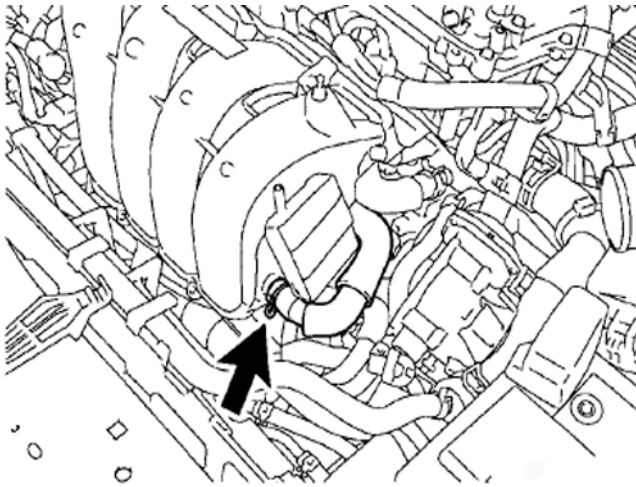


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5. Install the NEW plug (2).

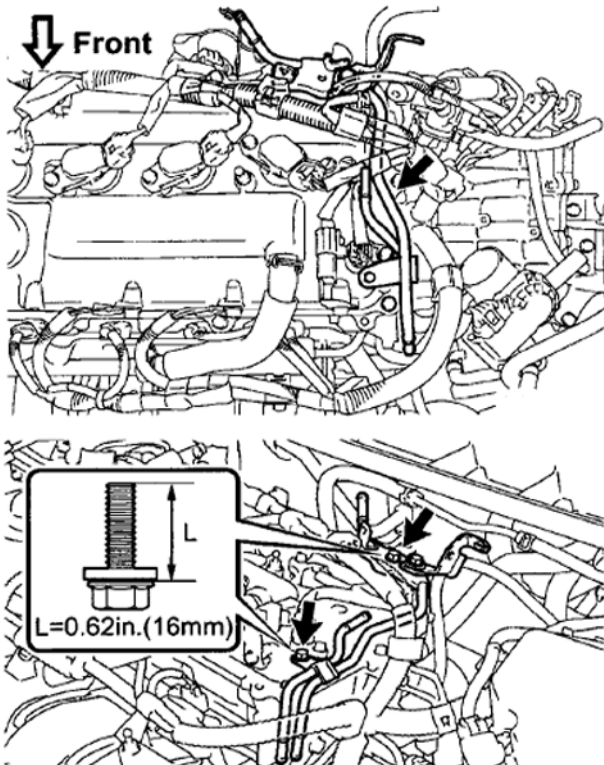
5.1. Install a NEW plug (2) to the intake manifold's No. 1 vacuum transmitting hose connection point (3).

5.2. Install a NEW clip (1) as shown in the illustration.



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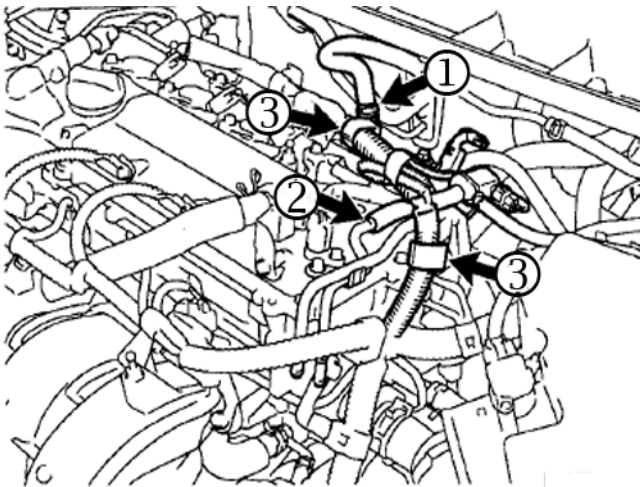
- 6. Connect the ventilation hose.
 - 6.1. Connect the ventilation hose with the clip.



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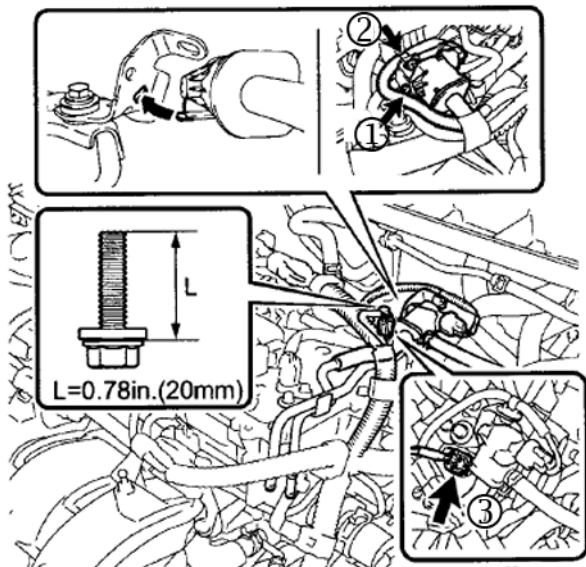
- 7. Install the air tube.
 - Note:** Set the air tube underneath the wire harness as shown in the illustration. When installing the air tube, ensure that the wire harness does not pitch the air tube.
 - 7.1. Temporarily install the NEW air tube.

Note: If the bracket for the duty vacuum switching valve was removed along with it, do not mistake the air tube bolt, which is 16 mm (0.62 in) in length, for the bracket bolt 20 mm, which is (0.78 in) in length. Install the 2 bolts. Tighten to 10 N·m (89 lb in).



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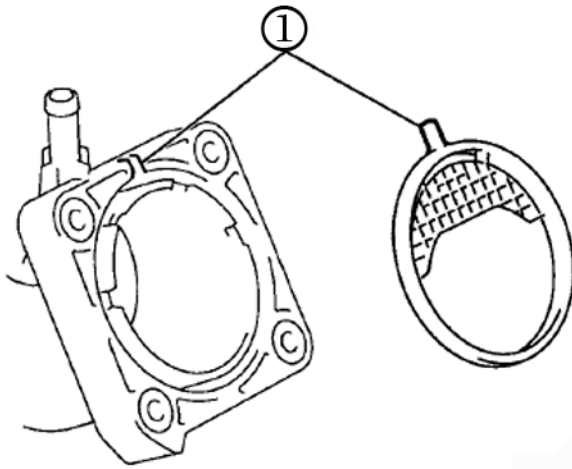
- 7.2. Connect the union-to-connector tube hose (1).
- 7.3. Connect the duty vacuum switching valve with the fuel vapor feed hose (2).
- 7.4. Connect the two wire harness clamps (3).



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Note: If the bracket for the duty vacuum switching valve was removed along with it, remove the new bracket connected to the new air tube, and install the duty vacuum switching valve to the air tube. Tighten to 5.9Nm (52 lb in).

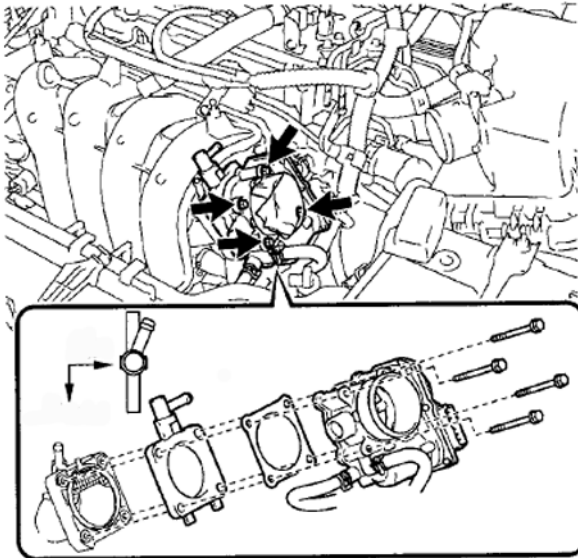
- 7.5. Install the vacuum switching valve with the screw (1).
- 7.6. Connect the wire harness clamp (2).
- 7.7. Connect the crank position sensor connector (3).
8. Install the throttle body assembly.
 - 8.1. Remove the protective tape.



2327254

(1) Align

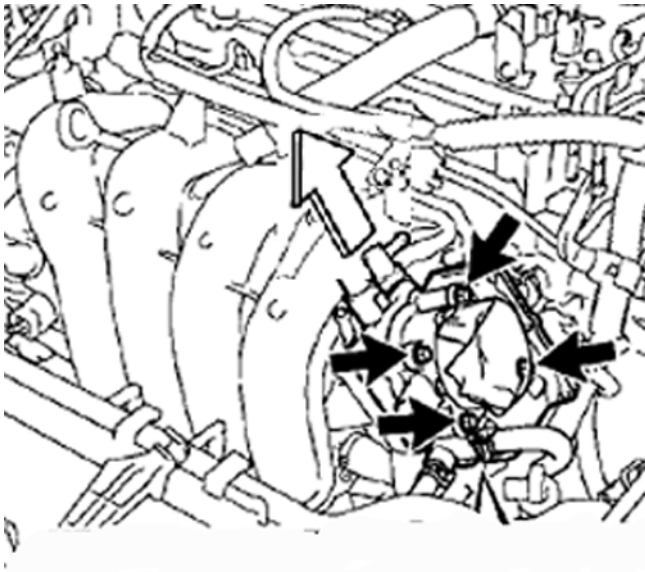
8.2. Install the NEW throttle body gasket.



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8.3. In the order shown, install a NEW intake air connector, NEW gasket, and then provisionally install the intake manifold with 4 NEW bolts.

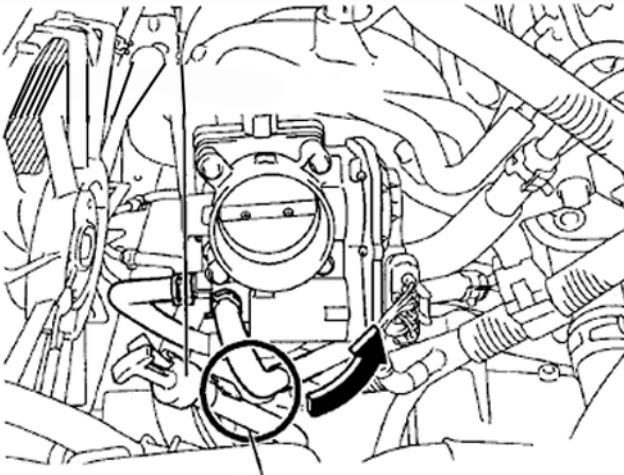
8.4. Verify that the gasket has been properly installed.



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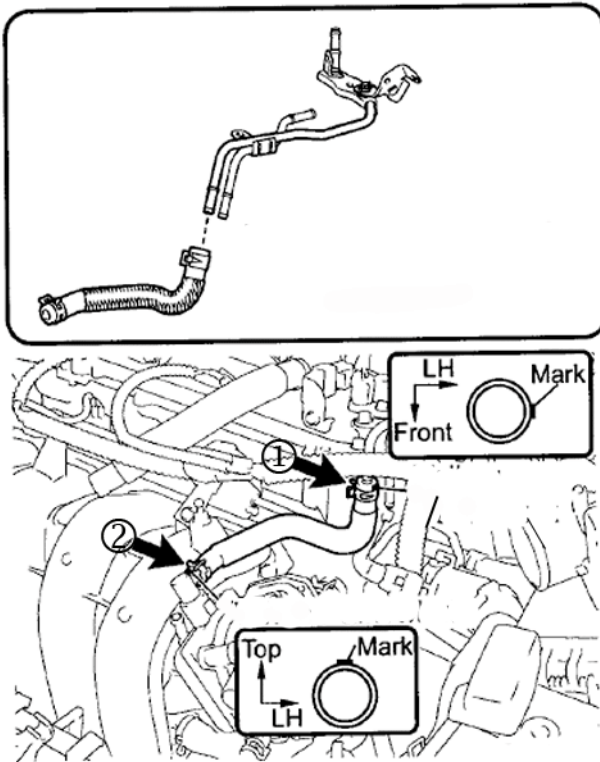
Note: To ensure a tight seal with the gasket, pull up on the intake air connector as illustrated.

8.5. While pulling up the intake air connector, tighten the 4 bolts to 10 N·m (89 lb in).



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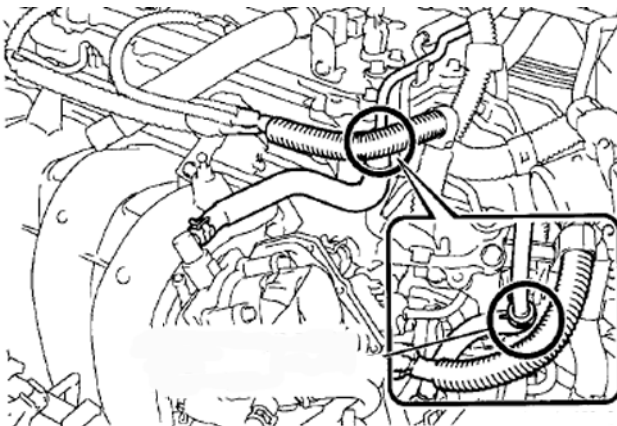
9. Inspect the water hose clearance (for automatic transmission vehicles only).
 - 9.1. If after installing the throttle, the water bypass hose interferes with the transmission oil filler tube or if the space between the water hose and transmission oil filler tube is small, twist the water hose as needed to create at least 5 mm (0.20 in) or more of space.



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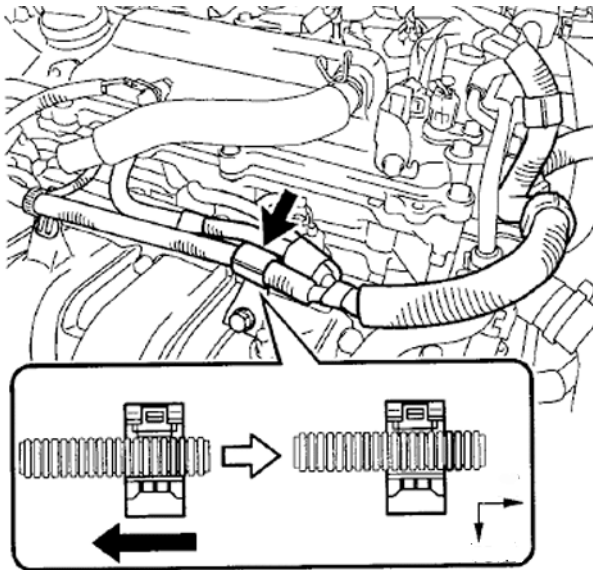
10. Install the No.1 vacuum transmitting hose.

- 10.1. With a NEW clip, install the NEW No. 1 vacuum transmitting hose to the air tube so that its **yellow** paint mark (1) faces outward.
- 10.2. With a NEW clip, install the NEW No. 1 vacuum transmitting hose to the intake air connector so that its **white** paint mark (2) faces upward.



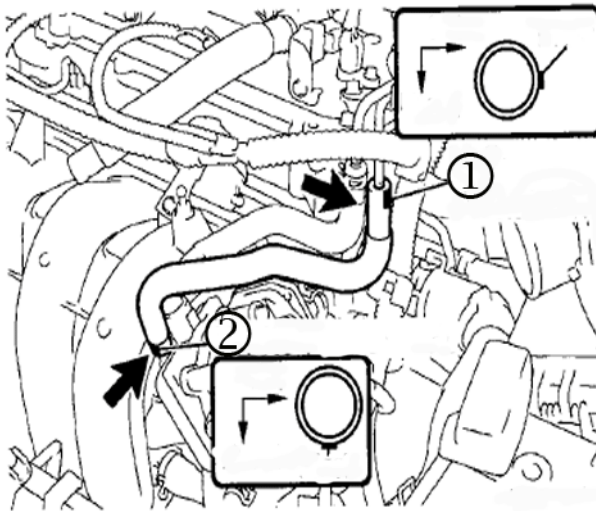
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- 10.3. If the space between the No. 1 vacuum transmitting hose and wire harness is less than 5 mm (0.20 in), follow the steps given below and adjust the wire harness to create more space.



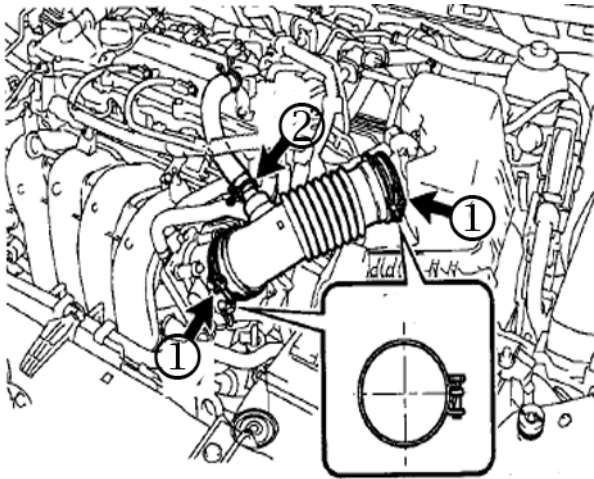
2327260

- 10.4 Separate the indicated bracket.
- 10.5 Open the clamp, slide the hose about 1 to 2 ribs towards the left side of the vehicle and close the clamp.
- 10.6 Reconnect the bracket to the intake manifold, check; check the spacing.



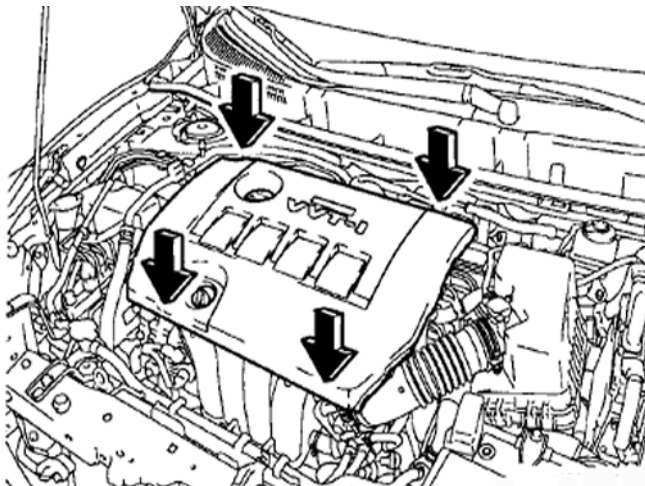
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11. Install the No. 1 fuel vapor feed hose.
 - 11.1. Install the NEW No. 1 fuel vapor feed hose to the air tube so that its **yellow** paint mark (1) faces outward.
 - 11.2. Install the NEW No. 1 fuel vapor feed hose to the intake air connector so that its **white** paint mark (2) faces front.



2327262

12. Install the No.1 air cleaner hose.
 - 12.1. Install the No.1 air cleaner hose with the two hose clamps (1).
 - 12.2. Connect the ventilation hose with the clip (2).
13. Verify installation.
 - 13.1. Check the installation of all parts that were replaced or removed and then reinstalled.



2327263

14. Install the No. 2 cylinder head cover.

Note: Ensure that the clips are firmly in place. Pushing in the clips with too much force or hitting the heads of the clips may damage the clip.

 - 14.1. Snap in two clips to the back of the cover and two clips to the front of the cover to install the cylinder head cover.
15. Check for diagnostic trouble codes (DTCs).
 - 15.1. Connect the Tech 2®.

Note: If DTCs are displayed, verify the DTC and freeze frame data and record. Perform repairs as necessary.

15.2. Check DTCs.

16. Test drive.

16.1. Test drive the vehicle. Inspect for any problems in the warning lights, drivability, etc.

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.

CLAIM INFORMATION

1. Submit a claim using the table below.
2. Courtesy Transportation - For dealers using WINS, submit using normal labor code; for dealers using GWM – submit as Net Item under the repair labor code.

Labor Code	Description	Labor Time
V2139	Intake Manifold and Throttle Body Modification	0.9

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.

DEALER RECALL RESPONSIBILITY – For US and Export (US States, Territories, and Possessions)

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 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.

