



Service Bulletin

PRELIMINARY INFORMATION

Subject: Hard Brake Pedal at Startup or Idling

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

This PI is being revised to update the Warranty Information. Please discard PI0797.

Condition/Concern

In rare cases, a customer or technician may state that the brake pedal is hard to depress with the engine running and vehicle stopped/idling. This condition may be caused by a restriction in the electronic vacuum pump (EVP) vent hose or by a faulty brake booster vacuum switch.

Recommendation/Instructions

With engine off and ignition off, apply or pump the brake pedal three times. This should deplete the vacuum in the brake system. Turn the ignition to run with the engine off. The electronic vacuum pump (EVP) should be heard running at the driver front wheel opening. The pump should run for approximately 10 seconds and then shut off; with a maximum run time of 20 seconds.

Does the EVP run for a maximum of 20 seconds and then shut off?

Yes – Continue to step 1.

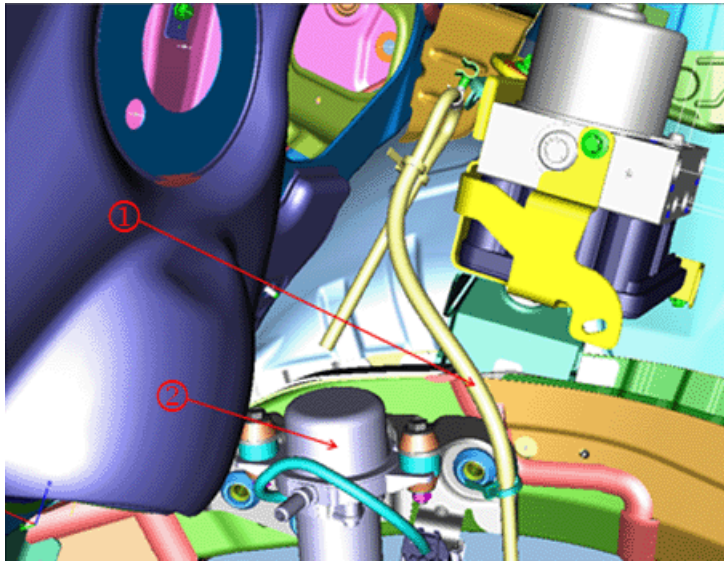
No – Continue to step 2.

Step 1

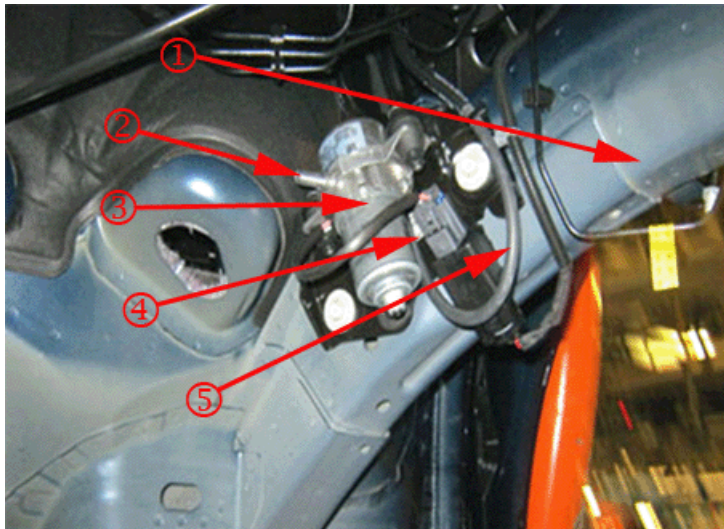
Follow diagnostics for "Brake Pedal Excessive Effort" in SI. If after following "Brake Pedal Excessive Effort" diagnostic does not identify a concern, the brake booster vacuum switch may be intermittently faulty. Replace the brake booster vacuum pipe that contains the switch.

Step 2

If the pump continues to run for more than 20 seconds, disconnect the small rubber hose from the back of the EVP. This EVP vent hose is approximately 9mm in diameter. Once the rubber hose is disconnected the EVP may stop running almost immediately. Connect a vacuum pump to the vent hose and apply vacuum. The hose should not restrict or hold vacuum. If the hose holds vacuum, inspect the routing of the hose as it may be misrouted behind the EVP mounting bracket or into an opening in the frame rail, or trapped under the ABS bracket, etc. The hose should be routed upward and behind the BPMV and to the right of the brake booster. Reroute and secure as needed (refer to the photo for more details).



1. EVP Vent Hose
2. Electronic Vacuum Pump (EVP)



1. Driver Front Wheel Opening
2. Brake Booster Vacuum Hose Outlet
3. Electronic Vacuum Pump (EVP)
4. EVP Connector
5. EVP Vent Hose 9mm

Important: If the pump does not run, check pin 1 at the B19C Brake Booster Vacuum Switch. There should be B+ present on pin 1 with the ignition in run. If there is not, check the schematic in SI for appropriate model year. When the vacuum switch is closed, B+ flows from pin 2 of the vacuum switch to pin 2 of the EVP to close the relay contacts and turn the pump on. The pump motor and internal relay are grounded by circuit 1050 and G120, which is located on the left strut tower.

Parts Information

Part Number	Description
13375241	Pipe, Power Brake Booster Vacuum (includes Switch)

Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
H9772*	Power Brake Booster Vacuum Pipe Diagnostic	0.3 hr
Add	Replace Power Brake Booster Vacuum Pipe	0.2 hr
*This is a unique labor operation for bulletin use only. It will not be published in the Labor Time Guide.		

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



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