



# Service Bulletin

File in Section: -

Bulletin No.: PI0814D

Date: April, 2014

## PRELIMINARY INFORMATION

**Subject:** Steering Shudder (Vibration) During Slow Speed Maneuvers

**Models:** 2010-2015 Chevrolet Equinox  
2010-2015 GMC Terrain  
Equipped with Engine RPO LF1, LFW or LFX

This PI has been revised to add the 2014 and 2015 model years and update a generator part number. Please discard PI0814C.

### Condition/Concern

Some customers may comment they are experiencing a steering vibration, felt through the steering wheel and vehicle structure, combined with a moan type noise. This condition is most noticed during low speed parking lot maneuvers or when the vehicle is stationary and the steering wheel is turned.

This condition may be caused by engine firing pulsations being transmitted into the steering system.

### Recommendation/Instructions for Vehicles Built Prior to January 7, 2013 (VIN Breakpoint D6250139)

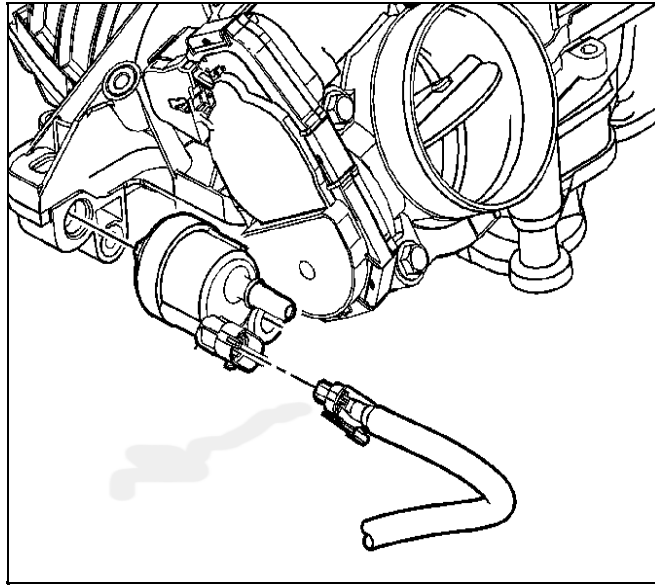
**Important:** The following repair will make noticeable improvements to the shudder (vibration) condition. However, in most cases it will not completely eliminate a common hydraulic power steering system noise.

This condition can be corrected by replacing the following components: power steering gear inlet hose assembly, generator (alternator) assembly and the emission evaporative hose. The revised power steering hose assembly is longer and provides a dampening quality. The revised generator has an isolation pulley and the revised evaporative hose is designed to clear the revised power steering hose.

**Important:** When the revised components (hoses) are installed, they must not have contact with the underbody or components. Use care to position the hoses to prevent any contact with other components.

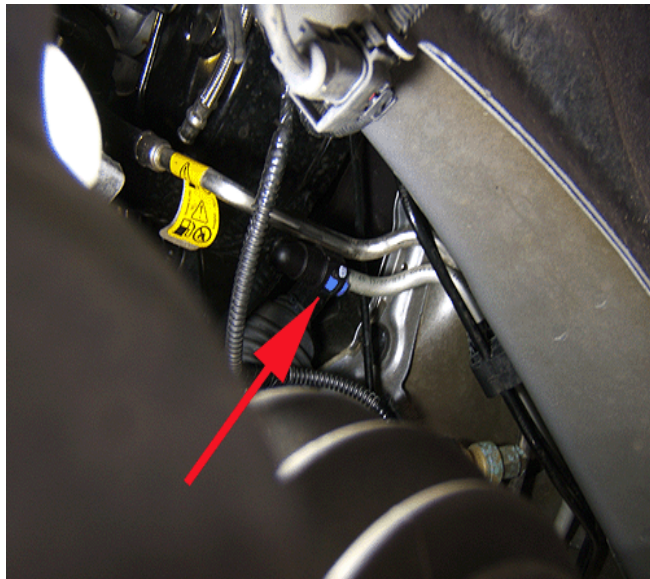
Use the following steps to install the revised components.

1. Install the revised generator. Refer to Generator Replacement in SI.
2. Install the revised power steering inlet hose. Refer to Power Steering Gear Inlet Pipe/Hose Replacement in SI. Leave the intake manifold cover off.
3. Install the revised evaporative emission canister purge hose assembly as follows:



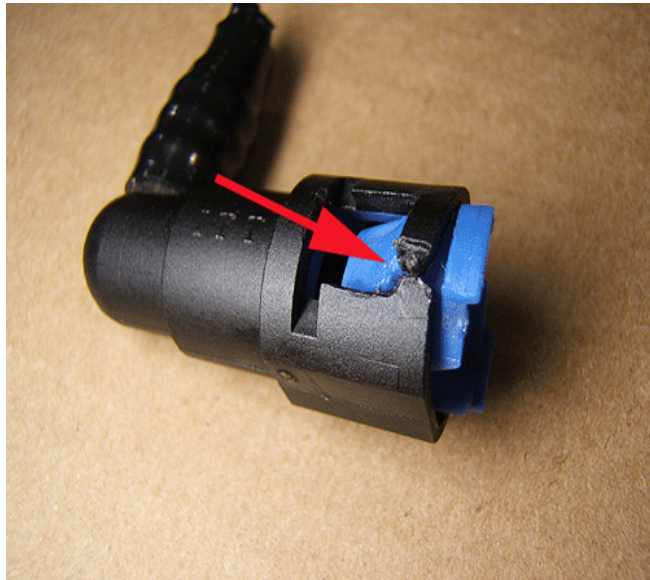
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3.1. Disconnect the hose from the evaporative emission canister purge solenoid valve located by the base of the throttle body.



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3.2. Disconnect the hose from the chassis to canister evaporative emission line.

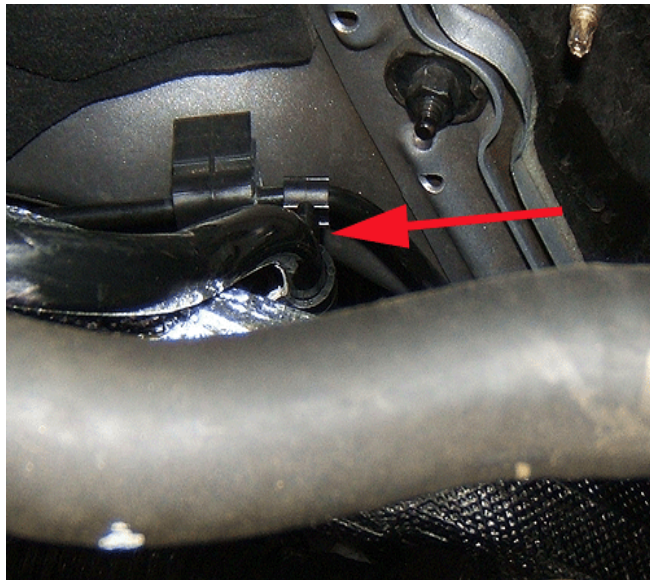


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It may be necessary to cut the plastic connector on the hose if the blue plastic retention collar cannot be released. A new connector is part of the new hose assembly.

3.3. Remove the existing hose and install the new hose assembly.

Route the new hose in a way that avoids contact with chassis and body components. Connect both ends of the hose.



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4. Install the clip as shown, connecting the new evaporative emission canister purge hose assembly to the black metal cross car brake pipe.
5. Inspect the new evaporative emission canister purge hose assembly and the revised power steering inlet hose to ensure no components are coming into contact with the new hose assemblies. If contact is present, loosen and reposition the new hose.
6. Fill and bleed the power steering system. Verify the fluid level. Repeat the bleed procedure, if necessary. Refer to Power Steering System Bleeding in SI.
7. Reinstall the intake manifold cover.

Road test the vehicle and verify the condition is corrected. After the road test, inspect the components as described in step #5 above.

### **Recommendation/Instructions for Vehicles Built After January 7, 2013 (VIN Breakpoint D6250139)**

**Important:** The following repair will make noticeable improvements to the shudder (vibration) condition. However, in most cases it will not completely eliminate a common hydraulic power steering system noise.

This condition can be corrected by replacing the following components: power steering gear inlet hose assembly and generator (alternator) assembly. The revised power steering hose assembly is longer and provides a dampening quality. The revised generator has an isolation pulley.

**Important:** When the revised power steering inlet hose is installed, it must not have contact with the underbody or components. Use care to position the hose to prevent any contact with other components.

Use the following steps to install the revised components.

1. Install the revised generator. Refer to Generator Replacement in SI.
2. Install the revised power steering inlet hose. Refer to Power Steering Gear Inlet Pipe/Hose Replacement in SI. Leave the intake manifold cover off.
3. Fill and bleed the power steering system. Verify the fluid level. Repeat the bleed procedure, if necessary. Refer to Power Steering System Bleeding in SI.
4. Reinstall the intake manifold cover.

Road test the vehicle and verify the condition is corrected.

## Parts Information

**Important:** Please order these parts only as needed. Due to a limited supply of parts available, DO NOT order for dealer stock.

Part Number	Description
22922927	Hose Asm. - Power Steering Gear Inlet
22923419	Hose Asm. - Evaporative Emission Canister Purge (For Vehicles Built Prior to January 7, 2013 (VIN Breakpoint D6250139)
11562557	Clip/Clamp (For Vehicles Built Prior to January 7, 2013 (VIN Breakpoint D6250139)
22962097	Generator Assembly (MY 2010-2012)
22988006	Generator Assembly (MY 2013)

## Warranty Information

For vehicles repaired under warranty, use:

Labor Operation	Description	Labor Time
7480028*	Install Revised Generator, Power Steering Gear Inlet Hose And Evap. Hose To Correct Steering Wheel Shudder during Low Speed Maneuvers	3.2 hrs
*This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.		