



Service Bulletin

PRELIMINARY INFORMATION

Subject: Vibration During Active Fuel Management V4 Mode Operation 1200 – 1400 Engine RPM

Models: 2014-2015 Chevrolet Silverado
2014-2015 GMC Sierra
Equipped with 4.3L RPO LV3

This PI was superseded to update Parts and Warranty Information. Please discard PIP5228B.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern

Some customers may comment about a vibration that is felt between 1200 – 1400 engine RPM when in active fuel management V4 mode.

A drone or resonance may also accompany this vibration.

The vibration may occur at different vehicle speeds but the engine speed will be in the 1200-1400 RPM range.

This vibration does not occur in V6 mode.

Recommendation/Instructions

The technician should evaluate the vehicle under the conditions the customer duplicates the concern. Once the concern is duplicated, use vibration analysis tool CH 51450-NVH Pico Oscilloscope Diagnostic Kit (w/NVH) to measure the frequency of the vibration. If the measured vibration is not 23 Hertz (HZ), first order engine, use normal vibration diagnostics to isolate the source of the vibration. If the measured vibration is 23 Hertz (HZ), first order engine, install the exhaust damper per the instructions below. If this does not reduce the vibration, follow the three-way catalytic converter and cab mount settling procedures below.

Install Exhaust Damper

Installation of an exhaust damper reduces the exhaust vibrations associated when the engine changes from V6 to V4 mode during AFM (Active Fuel Management). Installation location and position is critical to the performance of the damper.

The damper will be located on the passenger side exhaust pipe, directly above the transmission cross member. It should be located on the inboard side of the exhaust directly in front of the resonator. It should be mounted so that the damper is horizontal with the clamp positioned as shown in the pictures below.

Important: The exhaust clamp should be positioned so that it will not contact the heat shield above or the frame rail below.



Three-Way Catalytic Converter Assembly Settling Procedure

Note: Do NOT replace the three-way catalytic converter assembly unless it is physically damaged.

Loosen the six nuts that fasten the three-way catalytic converter assembly to the exhaust manifolds.

Remove and replace the exhaust muffler clamp that joins the three-way catalytic converter assembly to the pipe of the muffler assembly.

Note: This is a special clamp called a Norma clamp and it must be replaced as it is a one time use clamp.

Reinstall the three-way catalytic converter assembly following the specific tightening sequence and fastener torque specifications found in SI.

Cab Mount Settling Procedure

Warning: When settling the body cushions, do NOT separate the frame from the body more than is necessary. Possible personal injury and

damage to multiple parts may result if you do not follow the guides outlined below:

Intermediate steering shaft—Do not allow the shaft to extend more than 25 mm (1 in).

Fuel tank filler hose—Do not stretch the hose excessively.

Tail/Turn signal lamp wiring/rear lamps junction block—Leave slack in the wires

Park brake cable—Leave slack in the cable.

Body ground straps—Leave slack in the wire.>>>>>

The technician should first loosen the fastener located at the center of each body mount (6 for a regular cab, 8 for crew and double cab).

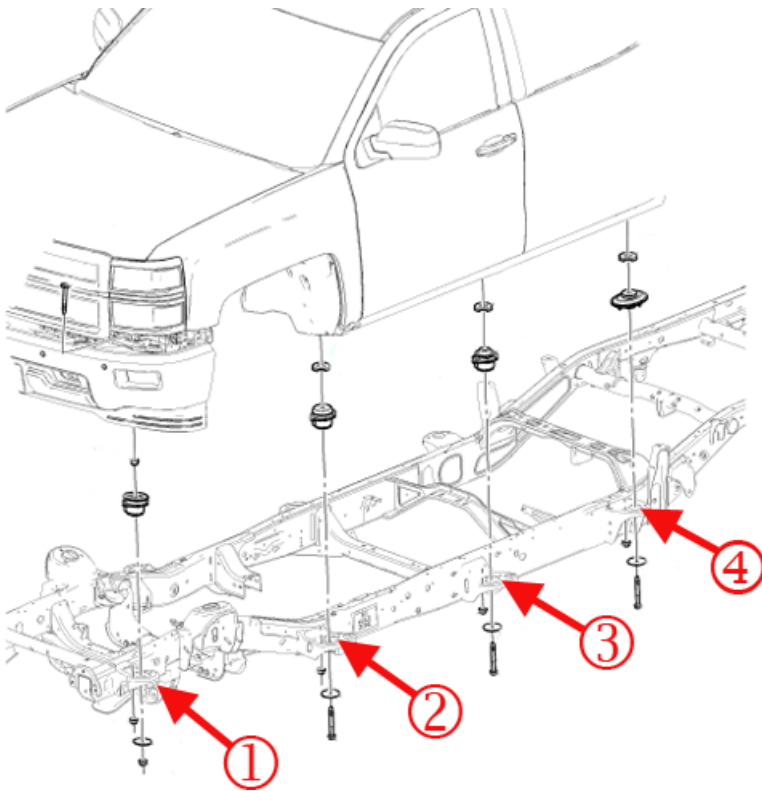
Using a large angled pry bar, lift up the cab body slightly to settle / relax it. Perform this at each mount location one at a time.

Repeat this cab mount settling process twice, to confirm the mounts are settled / relaxed.

Visually verify that the cab to box alignment is correct before re-torquing all mounts to specification found in Service Information, body repair, frame and under body section.

The cab / body mount position locations

The numbers in the picture below indicate the specific mount position. The mounts on the passenger side of the vehicle are identified the same way. This will assist the technician to identify the correct location of each mount so they can be torque to the proper specification.



1 = body mount cushion front

2 = body mount cushion position number 1

3 = body mount cushion position number 2

4 = body mount cushion position number 3

Parts Information

Part Number	Description	Qty
84090482	Exhaust Damper	1
15748648	Exhaust Clamp	1
20779889	Clamp, Exhaust Pipe	1

Warranty Information

Labor Operation	Description	Labor Time
4081288	Diagnosis and Install Exhaust Damper	0.4
4050272	Exhaust System Alignment	Use Published Labor Operation Time
1431160	Body Mount Upper and Lower Cushion Replacement	Use Published Labor Operation Time

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

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.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION