



# Service Bulletin



## SERVICE UPDATE

**SUBJECT:** Service Update for Inventory Vehicles Only  
Bent Piston Oil Squirters  
Expires September 30, 2014

**MODELS:** 2014 Chevrolet Silverado  
2014 GMC Sierra  
Equipped with 5.3L V8 Engine (RPO L83) or 4.3L V6 Engine (RPO LV3)

This bulletin has been revised to include GM Product Quality Center (PQC) information and additional engine oil part numbers. Please discard all copies of bulletin 13290.

An analysis of engine build data revealed that there could be a build concern that could cause drivability issues with the engines originally installed in these vehicles. To ensure the highest quality and best ownership experience for our customers, these engines need to be replaced prior to vehicle delivery. In the interest of full disclosure, dealer must inform the customer of the engine repair before the customer purchases the vehicle. Some states also have laws or regulations requiring disclosure. A written acknowledgement of this pre-delivery repair from the customer is strongly recommended.

### PURPOSE

This bulletin provides a service procedure to inspect and, if necessary, replace the engine assembly on certain 2014 model year Chevrolet Silverado and GMC Sierra vehicles equipped with a 5.3L V8 engine (RPO L83) or a 4.3L V6 engine (RPO LV3). These vehicles may have been assembled with bent piston oil squirters. If the squirter is bent out-of-position, the connecting rod may hit the squirter during engine operation, creating a high frequency noise. The knock sensor may respond to that noise, retarding spark, impairing engine performance and transmission shift quality.

**This service procedure should be completed on involved vehicles currently in dealership inventory as soon as possible but no later than September 30, 2014, at which time this bulletin will expire.**

VEHICLES INVOLVED

All involved vehicles are identified by VIN in the Global Warranty Management System – Investigate Vehicle History Application. Dealership technicians 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.

Additionally, a list of involved vehicles currently in dealer inventory is available on the “Service Update Bulletin Information” link under the “Service” tab in GM GlobalConnect (US) or attached to the GlobalConnect message (Canada) used to release this bulletin.

PART INFORMATION

Replacement engines will be shipped directly to dealers at no charge from the involved engine assembly plants. Dealers should call the GM Product Quality Center (PQC) at 1-866-654-7654 to order a replacement engine. Dealers must reference “SUB 13290” to initiate the ordering process. **Do not order from General Motors Customer Care and Aftersales (GMCCA).**

Additional parts required to complete this service update are to be obtained from 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.

Part Number	Description	Quantity/Vehicle
12346290 - US	Engine Coolant	2
19293000 - US	Engine Oil (4.3L V6)	6
19259487 - US	Engine Oil (5.3L V8)	9
10953464 - CA	Engine Coolant	2
19286321 - CA	Engine Oil (4.3L V6)	6
19259784 - CA	Engine Oil (5.3L V8)	9
89017525	Engine Oil Filter	1

SERVICE PROCEDURE**Engine Inspection**

1. Use the GDS diagnostic tool to determine if there is an excessive amount of timing retard on one or two cylinders of the engine. Excessive timing retard may be caused by the connecting rod contacting one of the piston squirters, which will cause a noise that is detectable by the engine knock sensors.

1.1 Configure GDS2.

1.2 Select “Ignition Timing” Data List.

1.3 Select “Ignition Timing Retard” Data List.

1.4 Select and “Lock” the following Parameters in the Diagnostic Data Display tab.

- “Knock Retard”
- “Cylinder xx Knock Detected”

- Add all cylinders up through the maximum number of cylinders per RPO (L83 8-cyl, LV3 6 Cyl).
  - “Ignition Timing”
  - “Engine Speed”
2. Warm engine up to normal operating temperature.
  3. Document active or History P-Codes.
  4. Clear diagnostic trouble codes (DTCs).
  5. Select an appropriate location to perform a brake torque maneuver.
  6. Press and hold the traction control button for 1-2 seconds to disable the traction control system.
  7. Press firmly on the brake and put transmission in Drive.
  8. Start GDS recording.
  9. Continue to press firmly on brake pedal and slowly apply the accelerator pedal until the engine speed is at 2000 rpm.
  10. Continue to hold 2000 rpm for 15 seconds. Observe “Knock Retard” and “Cylinder xx Knock Detected” on GDS screen. Note any engine roughness, misfire, exhaust tone shifts or decreases in power as the engine rpm climbs above 1400 rpm.
  11. After 15 seconds, release the accelerator pedal, put in Park and allow the engine to return to idle. Stop data recording.

**Note:** Fault code P2160 or P02161 might set during the test and can be disregarded.

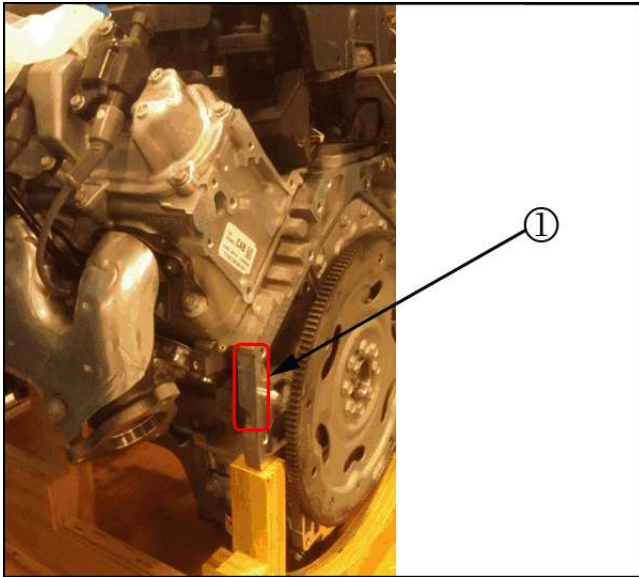
12. Document active or History P-Codes.
13. Clear all diagnostic trouble codes (DTCs).
14. Key-off, End of Test.

### **Data Evaluation**

1. Configure GDS.
  - 1.1 In the “Home” screen, select “Stored Data” and select the vehicle’s stored data file.
  - 1.2 Select the “Review” tab and check the “show locked parameters” icon.
  - 1.3 Select “Graphical Data Display” tab.
2. Review the parameter “Knock Retard”.
  - If “Knock Retard” is greater than or equal to 8 degrees for more than 2.5 consecutive seconds, replace the engine. Refer to the Engine Replacement section of this bulletin.

- If any notable engine roughness, misfire, exhaust tone shift or decreasing power is observed above 1400 rpm, replace the engine. Refer to the Engine Replacement section of this bulletin.
- If the Fast Spark retard is less than 8 degrees throughout the test and there is no notable roughness or misfire, then the vehicle has passed the inspection. No further action is required.

## Engine Replacement



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**Note:** A VIN derivative is required to be permanently engraved on the new engine prior to installation. Refer to the illustration above for VIN engraving location point. VIN derivatives must be formatted as indicated below (# = last eight characters of the VIN).

Chevrolet Silverado (Fort Wayne): 1T\*C#####B

GMC Sierra (Fort Wayne): 1T\*T#####B

Chevrolet Silverado (Silao): 1K\*C#####B

GMC Sierra (Silao): 1K\*T#####B

Dealers will be allowed to purchase one engraving tool and attachment as described below.

Name: Dremel Engraver Tool

Manufacturer: Dremel

Model: DRE29001, or equivalent

Attachment: Diamond Point #9929

1. Remove the engine from the vehicle. Refer to *Engine Replacement 5.3 L (L83)* or *Engine Replacement 4.3L (LV3)* in SI.
2. Install a new engine in the vehicle. Refer to *Engine Replacement 5.3 L (L83)* or *Engine Replacement 4.3L (LV3)* in SI.

**WARRANTY TRANSACTION INFORMATION**

Submit a transaction using the table below. All transactions should be submitted as a ZFAT transaction type, unless noted otherwise.

<b>Labor Code</b>	<b>Description</b>	<b>Labor Time</b>	<b>Net Item</b>
9100150	Inspect Engine	0.5	---
9100151	Inspect and Replace Engine	12.4	\$400.00*
Cost of Engraving Tool and Attachment (Only One Per Dealership Allowed)			**

\* Engine exchange allowance. Dealer must provide all required information including the Engine Unit Number (EUN) of the new engine.

\*\* Submit the actual cost of the engraving tool and attachment, not to exceed \$50.00.

**DEALER PROGRAM RESPONSIBILITY**

Dealers must take the steps necessary to ensure that the service update correction has been made to all involved vehicles in dealer inventory before selling or dealer-trading the vehicle, but no later than September 30, 2014.



GM CUSTOMER CARE AND AFTERSALES  
DCS3049  
URGENT - DISTRIBUTE IMMEDIATELY

Date: September 20, 2013

Subject: 13290A – Service Update Bulletin  
Bent Piston Oil Squirters  
Part Information Section Updated

Models: 2014 Chevrolet Silverado  
2014 GMC Sierra  
Equipped with 5.3L V8 Engine (L83) or 4.3L V6 Engine (LV3)

To: All Chevrolet and GMC Dealers

Attention: General Manager, Service Advisor, Service Manager, Parts and  
Service Director, Parts Manager, New Vehicle Sales Manager,  
and Warranty Administrator

This bulletin has been revised to include GM Product Quality Center (PQC) information and additional engine oil part numbers. A copy of the new bulletin is attached. Please discard all copies of bulletin 13290.

END OF MESSAGE  
GM CUSTOMER CARE AND AFTERSALES